

# MAGPIE run analysis

Aperture Science Enrichment Center

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<b>45 Fish</b>	<b>1342</b>
<b>46 Forage</b>	<b>1345</b>
<b>47 Forest products</b>	<b>1348</b>
<b>48 Livestock products</b>	<b>1350</b>
48.1 Dairy . . . . .	1355
48.2 Eggs . . . . .	1358
48.3 Monogastric meat . . . . .	1361
48.4 Poultry meat . . . . .	1364
48.5 Ruminant meat . . . . .	1367
<b>49 Pasture</b>	<b>1370</b>
<b>50 Secondary products</b>	<b>1373</b>
50.1 Alcoholic beverages . . . . .	1378
50.2 Brans . . . . .	1381
50.3 Cotton lint . . . . .	1384
50.4 Distillers grains . . . . .	1387
50.5 Ethanol . . . . .	1390
50.6 Molasses . . . . .	1393
50.7 Oilcakes . . . . .	1396
50.8 Oils . . . . .	1399
50.9 Sugar . . . . .	1402
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<b>51 Landuse Intensity Indicator Tau</b>	<b>1405</b>
<b>52 Yield</b>	<b>1410</b>
52.1 Crops . . . . .	1416
52.1.1 Cereals . . . . .	1419
52.1.2 Cereals—Maize . . . . .	1422
52.1.3 Cereals—Rice . . . . .	1425
52.1.4 Cereals—Temperate cereals . . . . .	1428
52.1.5 Cereals—Tropical cereals . . . . .	1431
52.1.6 Oil crops . . . . .	1434
52.1.7 Oil crops—Cotton seed . . . . .	1437
52.1.8 Oil crops—Groundnuts . . . . .	1440
52.1.9 Oil crops—Oilpalms . . . . .	1443
52.1.10 Oil crops—Other oil crops (incl rapeseed) . . . . .	1446
52.1.11 Oil crops—Soybean . . . . .	1449
52.1.12 Oil crops—Sunflower . . . . .	1452
52.1.13 Other crops . . . . .	1455
52.1.14 Other crops—Fruits Vegetables Nuts . . . . .	1458
52.1.15 Other crops—Potatoes . . . . .	1461
52.1.16 Other crops—Pulses . . . . .	1464
52.1.17 Other crops—Tropical roots . . . . .	1467
52.1.18 Sugar crops . . . . .	1470
52.1.19 Sugar crops—Sugar beet . . . . .	1473
52.1.20 Sugar crops—Sugar cane . . . . .	1476
52.2 Forage . . . . .	1479
52.3 Pasture . . . . .	1482
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54.1.1 Cropland Soils . . . . .	1492
54.1.2 Noncropland Soils . . . . .	1497
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55.1 Cropland . . . . .	1509
55.1.1 Area actually irrigated . . . . .	1513
55.1.2 Area equipped for irrigation . . . . .	1517
55.1.3 Bioenergy crops . . . . .	1521
55.1.4 Crops . . . . .	1524
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55.1.6 Crops—Cereals—Maize . . . . .	1530
55.1.7 Crops—Cereals—Rice . . . . .	1533
55.1.8 Crops—Cereals—Temperate cereals . . . . .	1536
55.1.9 Crops—Cereals—Tropical cereals . . . . .	1539
55.1.10 Crops—Oil crops . . . . .	1542
55.1.11 Crops—Oil crops—Cotton seed . . . . .	1545
55.1.12 Crops—Oil crops—Groundnuts . . . . .	1548
55.1.13 Crops—Oil crops—Oilpalms . . . . .	1551
55.1.14 Crops—Oil crops—Other oil crops (incl rapeseed) . . . . .	1554
55.1.15 Crops—Oil crops—Soybean . . . . .	1557
55.1.16 Crops—Oil crops—Sunflower . . . . .	1560
55.1.17 Crops—Other crops . . . . .	1563
55.1.18 Crops—Other crops—Fruits Vegetables Nuts . . . . .	1566
55.1.19 Crops—Other crops—Potatoes . . . . .	1569
55.1.20 Crops—Other crops—Pulses . . . . .	1572
55.1.21 Crops—Other crops—Tropical roots . . . . .	1575
55.1.22 Crops—Sugar crops . . . . .	1578
55.1.23 Crops—Sugar crops—Sugar beet . . . . .	1581
55.1.24 Crops—Sugar crops—Sugar cane . . . . .	1584
55.1.25 Forage . . . . .	1587
55.2 Forest . . . . .	1592
55.2.1 Managed Forest . . . . .	1596
55.2.2 Natural Forest . . . . .	1599
55.2.3 Natural Forest—Primary Forest . . . . .	1602
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55.3 Other Land . . . . .	1608
55.4 Pastures and Rangelands . . . . .	1612
55.5 Urban Area . . . . .	1616
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56.1 Cropland . . . . .	1622
56.2 Forest . . . . .	1628
56.2.1 Managed Forest . . . . .	1632
56.2.2 Natural Forest . . . . .	1635
56.2.3 Natural Forest—Primary Forest . . . . .	1638
56.2.4 Natural Forest—Secondary Forest . . . . .	1641
56.3 Other Land . . . . .	1644
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57.1.1 Balance . . . . .	1652
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57.1.6 Inputs—Ash from Burned Crop Residues . . . . .	1667
57.1.7 Inputs—Atmospheric Deposition . . . . .	1670
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57.1.9 Inputs—Biological Fixation Symbiotic Crops . . . . .	1678
57.1.10 Inputs—Fertilizer . . . . .	1683
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57.1.13 Inputs—Seed . . . . .	1696
57.1.14 Withdrawals . . . . .	1699
57.1.15 Withdrawals—Aboveground Crop Residues . . . . .	1702
57.1.16 Withdrawals—Belowground Crop Residues . . . . .	1705
57.1.17 Withdrawals—Harvested Crops . . . . .	1708
57.2 Manure . . . . .	1717
57.2.1 Dairy . . . . .	1720
57.2.2 Eggs . . . . .	1724
57.2.3 Manure Collected As Fuel . . . . .	1728
57.2.4 Manure From Grazing . . . . .	1731
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57.2.6 Manure In Confinements . . . . .	1737
57.2.7 Monogastric meat . . . . .	1740
57.2.8 Poultry meat . . . . .	1744
57.2.9 Ruminant meat . . . . .	1748
57.3 Pasture Budget . . . . .	1752
57.3.1 Balance . . . . .	1752
57.3.2 Balance—Nutrient Surplus . . . . .	1755
57.3.3 Inputs . . . . .	1758
57.3.4 Inputs—Atmospheric Deposition . . . . .	1761
57.3.5 Inputs—Biological Fixation Freelifving Microorganisms . . . . .	1764
57.3.6 Inputs—Fertilizer . . . . .	1767
57.3.7 Inputs—Manure From Grazing . . . . .	1770
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59.1 Crops . . . . .	1788
59.1.1 Cereals . . . . .	1791
59.1.2 Cereals—Maize . . . . .	1794
59.1.3 Cereals—Rice . . . . .	1797
59.1.4 Cereals—Temperate cereals . . . . .	1800
59.1.5 Cereals—Tropical cereals . . . . .	1803
59.1.6 Oil crops . . . . .	1806
59.1.7 Oil crops—Cotton seed . . . . .	1809
59.1.8 Oil crops—Groundnuts . . . . .	1812
59.1.9 Oil crops—Other oil crops (incl rapeseed) . . . . .	1815
59.1.10 Oil crops—Soybean . . . . .	1818
59.1.11 Oil crops—Sunflower . . . . .	1821
59.1.12 Other crops . . . . .	1824
59.1.13 Other crops—Fruits Vegetables Nuts . . . . .	1827
59.1.14 Other crops—Potatoes . . . . .	1830
59.1.15 Other crops—Pulses . . . . .	1833
59.1.16 Other crops—Tropical roots . . . . .	1836
59.1.17 Sugar crops . . . . .	1839
59.1.18 Sugar crops—Sugar beet . . . . .	1842
59.1.19 Sugar crops—Sugar cane . . . . .	1845
59.2 Fish . . . . .	1848
59.3 Livestock products . . . . .	1851
59.3.1 Dairy . . . . .	1854

59.3.2	Eggs . . . . .	1857
59.3.3	Monogastric meat . . . . .	1860
59.3.4	Poultry meat . . . . .	1863
59.3.5	Ruminant meat . . . . .	1866
59.4	Secondary products . . . . .	1869
59.4.1	Alcoholic beverages . . . . .	1872
59.4.2	Brans . . . . .	1875
59.4.3	Cotton lint . . . . .	1878
59.4.4	Molasses . . . . .	1881
59.4.5	Oilcakes . . . . .	1884
59.4.6	Oils . . . . .	1887
59.4.7	Sugar . . . . .	1890
<b>60</b>	<b>Self-sufficiency</b>	<b>1893</b>
60.1	Crops . . . . .	1893
60.1.1	Cereals . . . . .	1893
60.1.2	Cereals—Maize . . . . .	1896
60.1.3	Cereals—Rice . . . . .	1899
60.1.4	Cereals—Temperate cereals . . . . .	1902
60.1.5	Cereals—Tropical cereals . . . . .	1905
60.1.6	Other crops . . . . .	1908
60.1.7	Other crops—Fruits Vegetables Nuts . . . . .	1911
60.1.8	Other crops—Potatoes . . . . .	1914
60.1.9	Other crops—Pulses . . . . .	1917
60.1.10	Other crops—Tropical roots . . . . .	1920
60.1.11	Sugar crops . . . . .	1923
60.1.12	Sugar crops—Sugar beet . . . . .	1926
60.1.13	Sugar crops—Sugar cane . . . . .	1929
60.2	Fish . . . . .	1932
60.3	Livestock products . . . . .	1935
60.3.1	Dairy . . . . .	1938
60.3.2	Eggs . . . . .	1941
60.3.3	Monogastric meat . . . . .	1944
60.3.4	Poultry meat . . . . .	1947
60.3.5	Ruminant meat . . . . .	1950
60.4	Secondary products . . . . .	1953
60.4.1	Alcoholic beverages . . . . .	1953
60.4.2	Brans . . . . .	1956
60.4.3	Cotton lint . . . . .	1959
60.4.4	Distillers grains . . . . .	1962
60.4.5	Ethanol . . . . .	1965
60.4.6	Molasses . . . . .	1968
60.4.7	Oilcakes . . . . .	1971
60.4.8	Oils . . . . .	1974
60.4.9	Sugar . . . . .	1977
<b>XVI</b>	<b>Trade Value</b>	<b>1980</b>
<b>61</b>	<b>Exports</b>	<b>1980</b>
<b>62</b>	<b>Imports</b>	<b>1980</b>
<b>63</b>	<b>Net-Exports</b>	<b>1980</b>
<b>XVII</b>	<b>Statistics</b>	<b>1981</b>



64 Traffic Lights

64.1 Total . . . . . 1981

64.2 Trend . . . . . 1981

64.3 Overlap . . . . . 1981

64.4 Level . . . . . 1981

65 Ignored data

1982

66 Non-Matching Data

66.1 Model outputs . . . . . 1985

66.2 Validation data . . . . . 1989

XVIII Run Information

2001

67 Calibration

67.1 Yield calibration factors . . . . . 2001

67.2 Land use change in 1995 (reshuffling) . . . . . 2001

68 Model settings

68.1 Code settings . . . . . 2001

68.2 Dataset . . . . . 2003

68.3 R Information . . . . . 2004

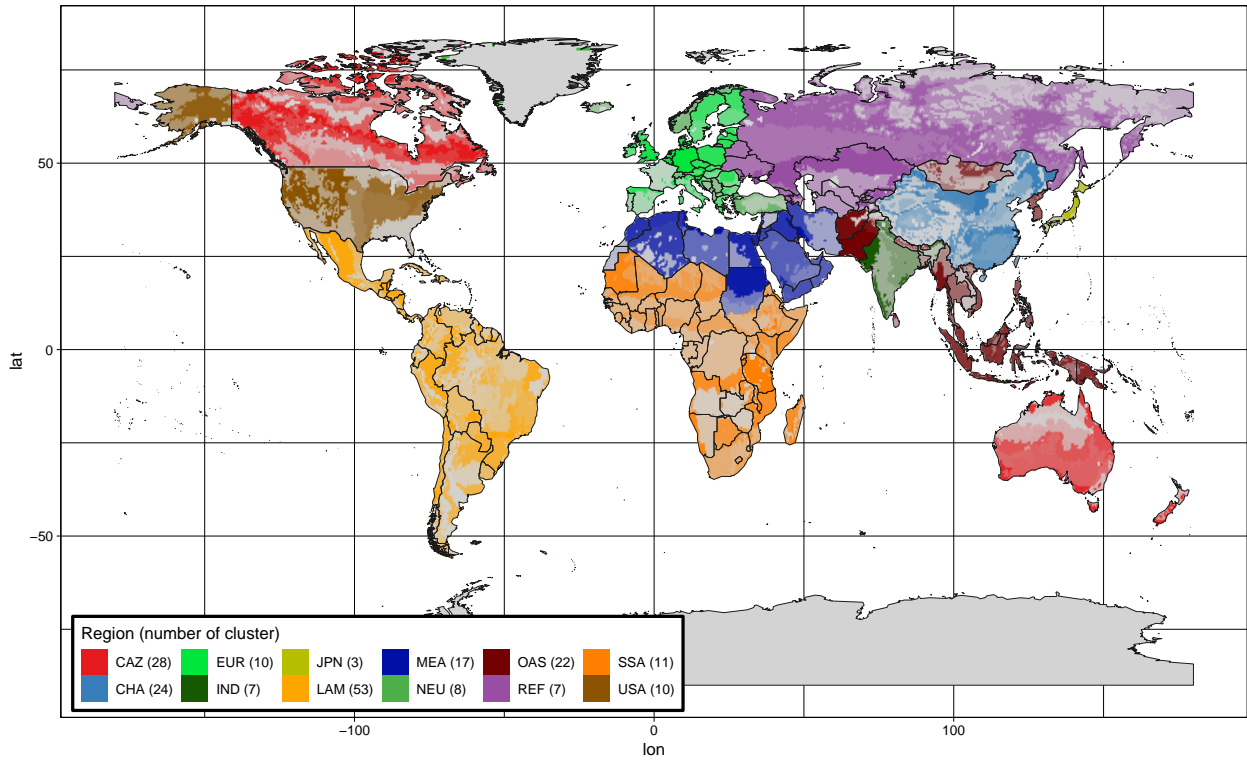
69 Runtime information

2014

Part I

Basics

0.1 World regions



## 0.2 Modelstat

Table 1: main

	GLO
y1995	2.00
y2000	2.00
y2005	2.00
y2010	2.00
y2015	2.00
y2020	2.00
y2025	2.00
y2030	2.00
y2035	2.00
y2040	2.00
y2045	2.00
y2050	2.00
y2055	2.00
y2060	2.00
y2070	2.00
y2080	2.00
y2090	2.00
y2100	2.00

## 0.3 Food Modelstat

Table 2: main

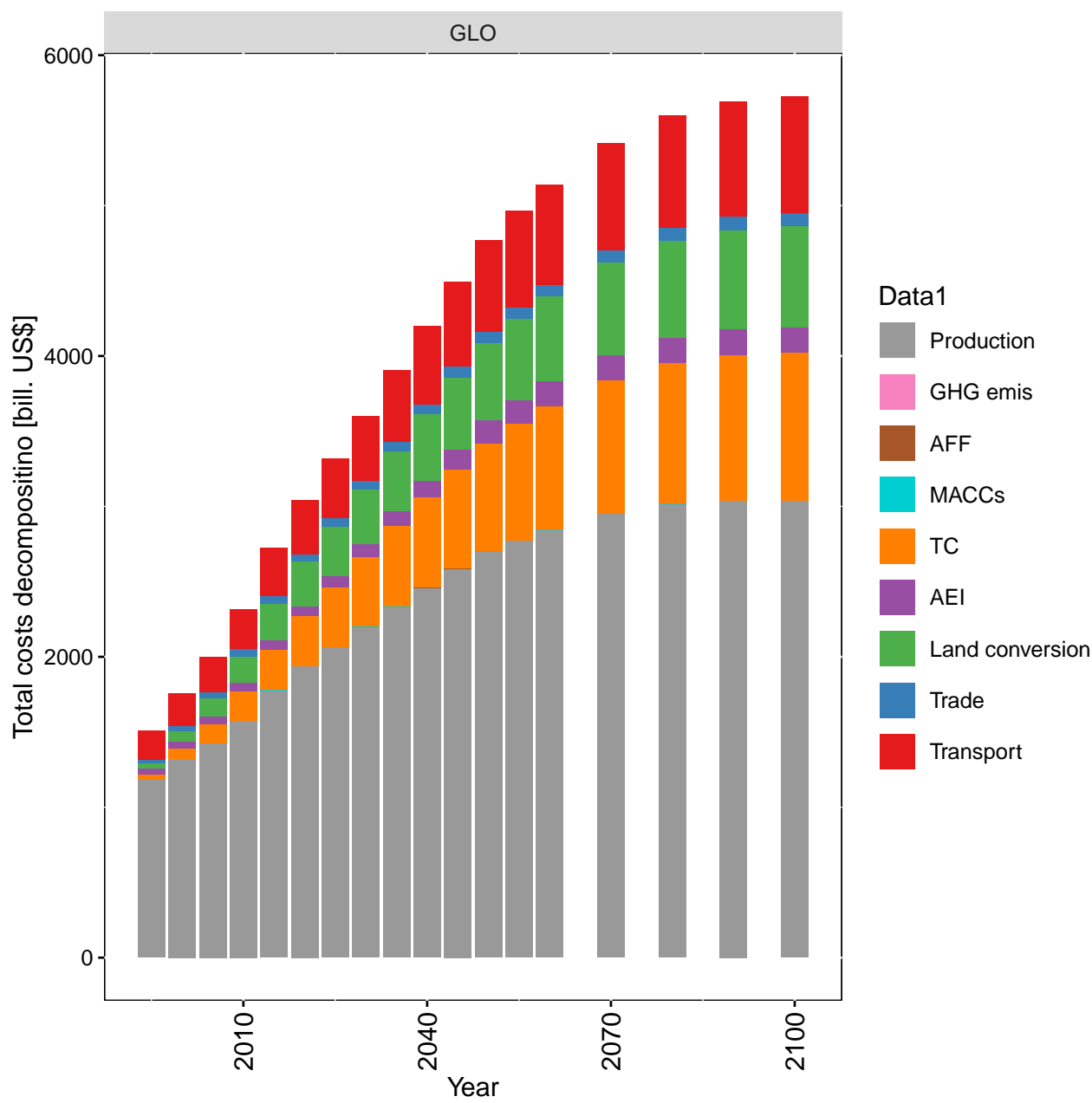
	convergence (limit = 0.005)	iterations (limit = 5)
y1995	0.45	1.00
y2000	0.16	1.00
y2005	0.05	1.00
y2010	0.03	1.00
y2015	0.00	3.00
y2020	0.00	2.00
y2025	0.00	3.00
y2030	0.00	2.00
y2035	0.00	2.00
y2040	0.00	2.00
y2045	0.00	2.00
y2050	0.00	2.00
y2055	0.00	2.00
y2060	0.00	2.00
y2070	0.00	2.00
y2080	0.00	2.00
y2090	0.00	2.00
y2100	0.00	1.00

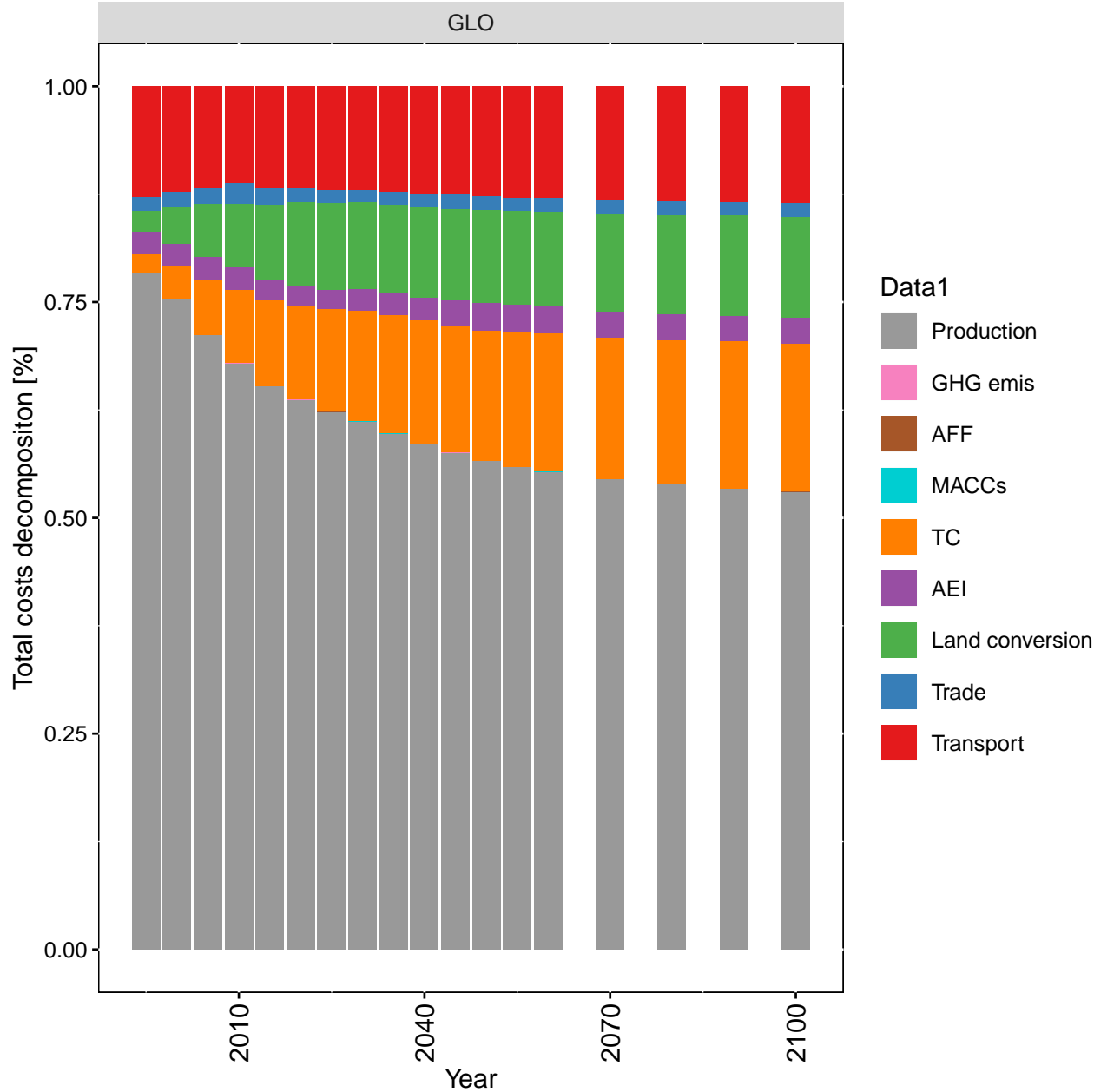
## 0.4 Goal function value

Table 3: Global costs (billion USD)

	GLO
y1995	1816.37
y2000	2079.26
y2005	2377.19
y2010	2751.44
y2015	3262.15
y2020	3662.42
y2025	4014.92
y2030	4373.35
y2035	4744.64
y2040	5094.96
y2045	5433.34
y2050	5752.93
y2055	5981.79
y2060	6186.48
y2070	6508.60
y2080	6720.11
y2090	6819.19
y2100	6854.22

0.4.1 Total costs decomposition





## Part II

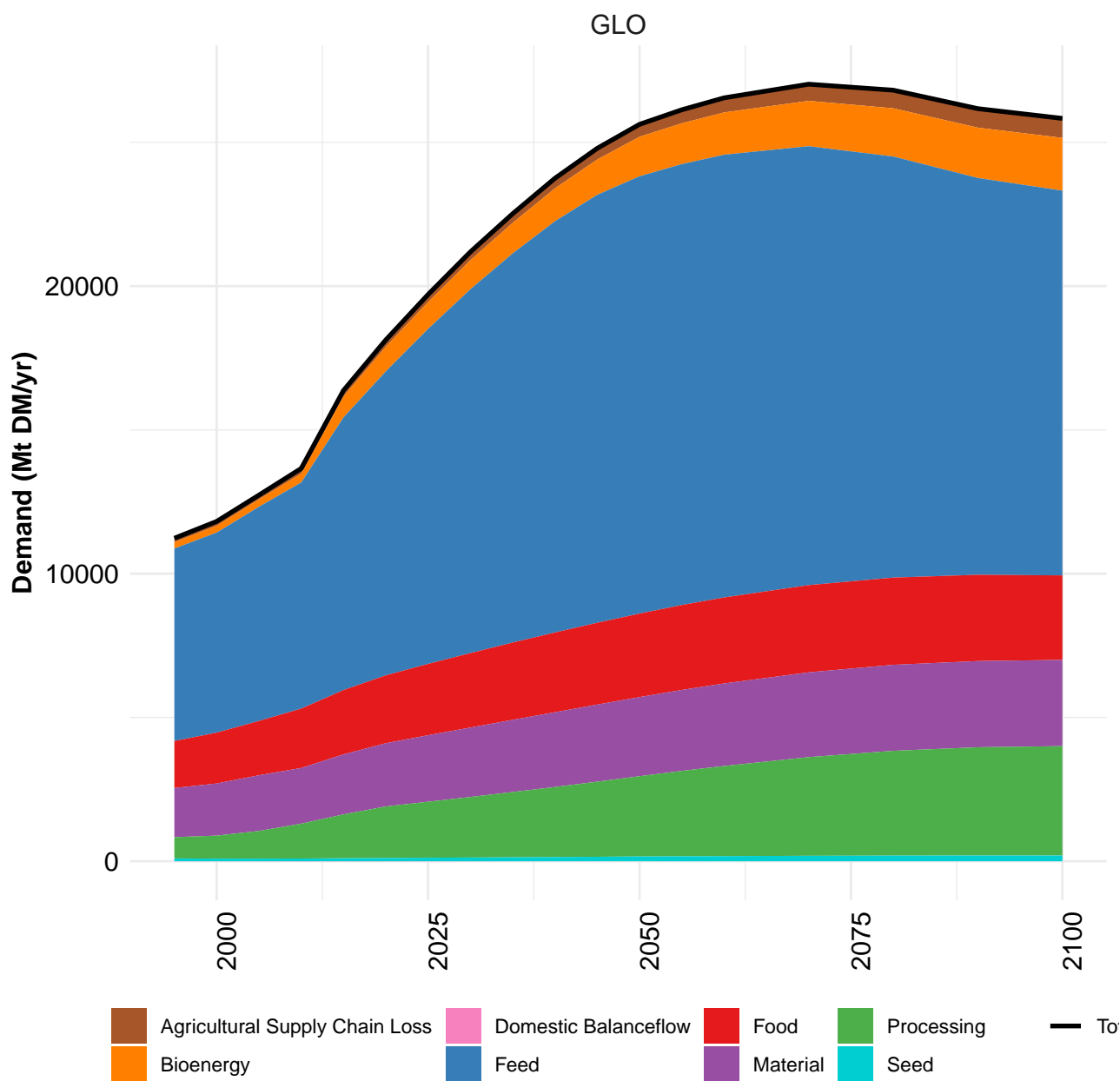
# Costs

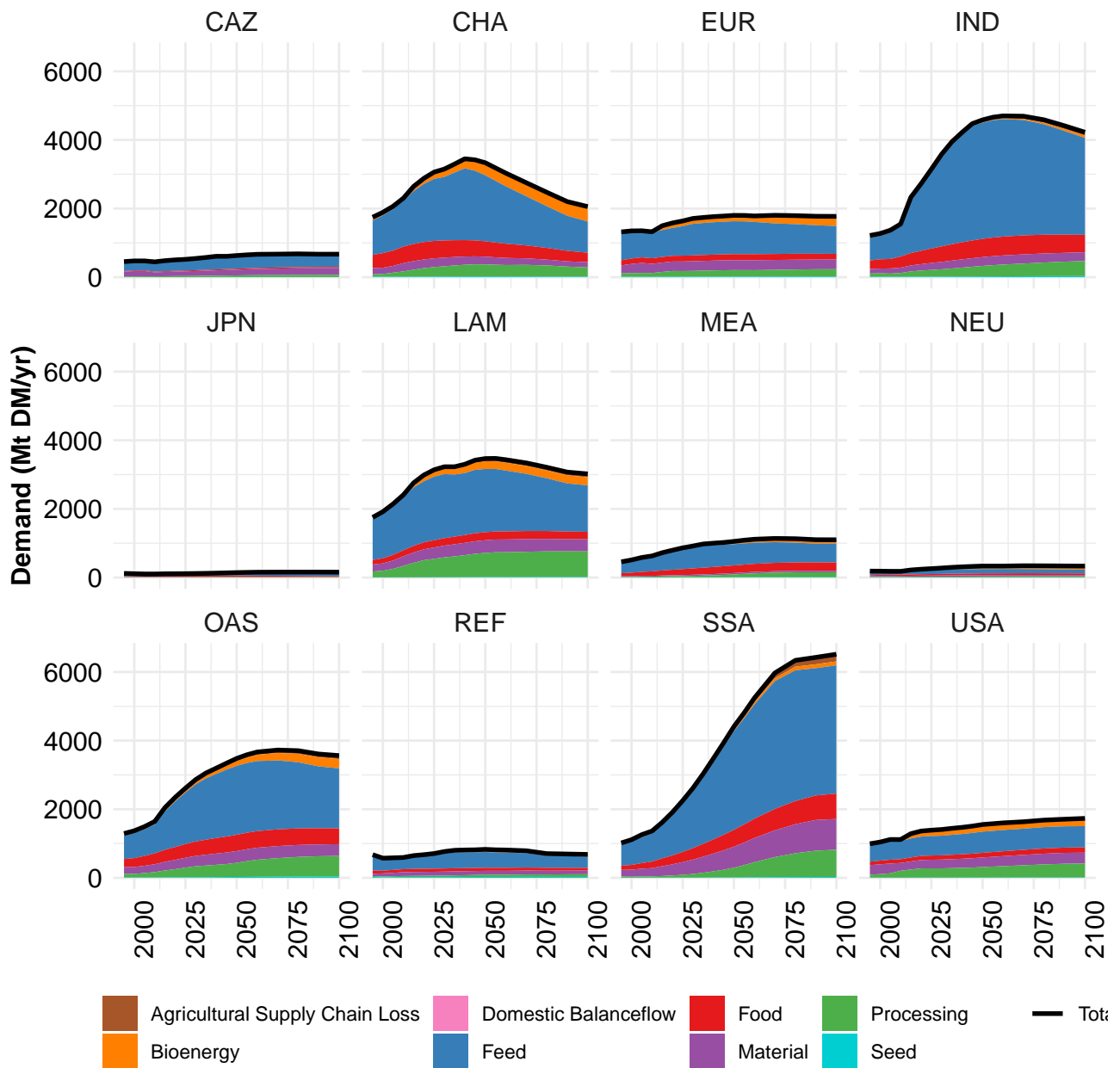
### 1 MainSolve

### 2 MainSolve w/o GHG Emissions

Part III

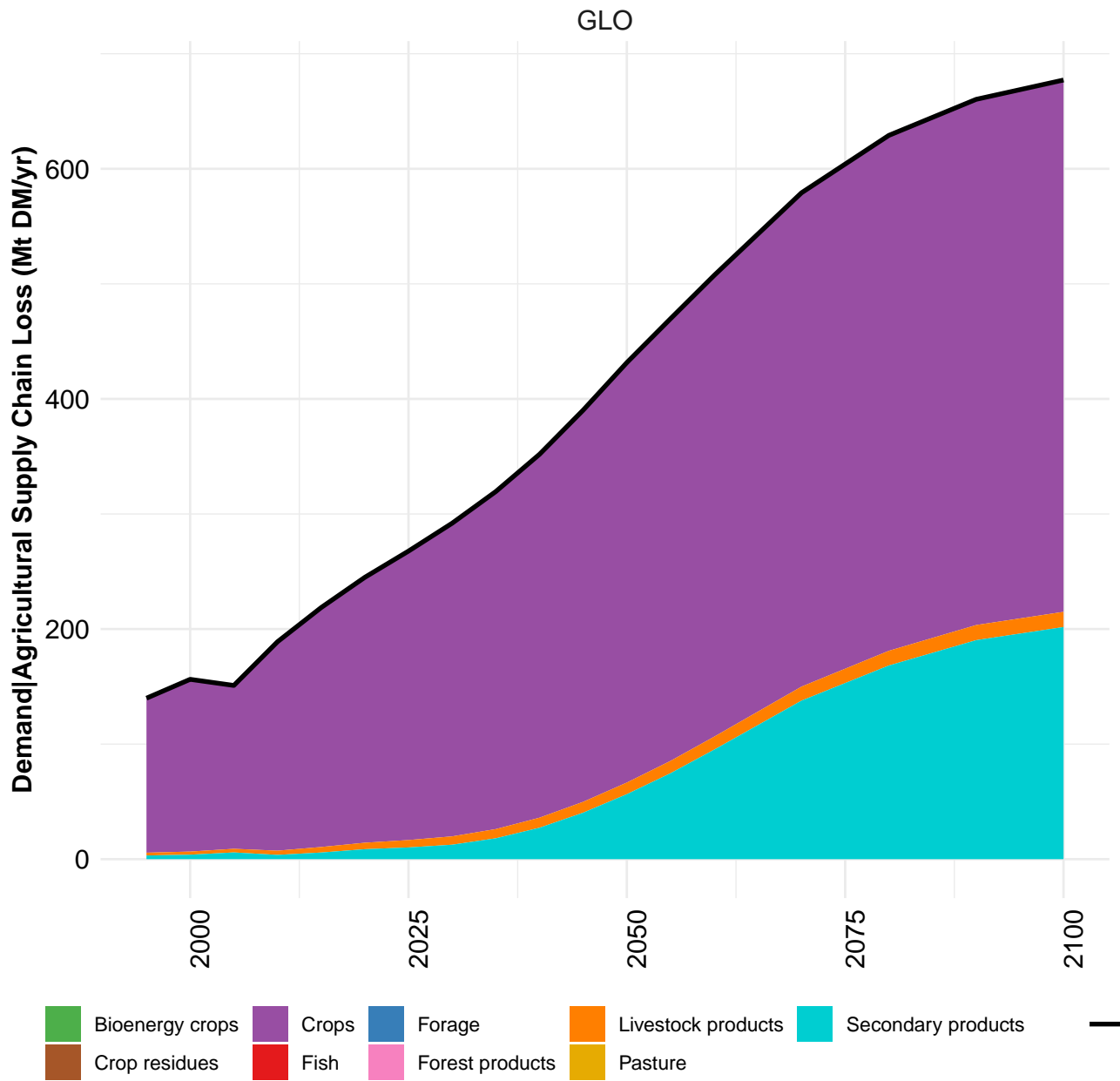
# Demand

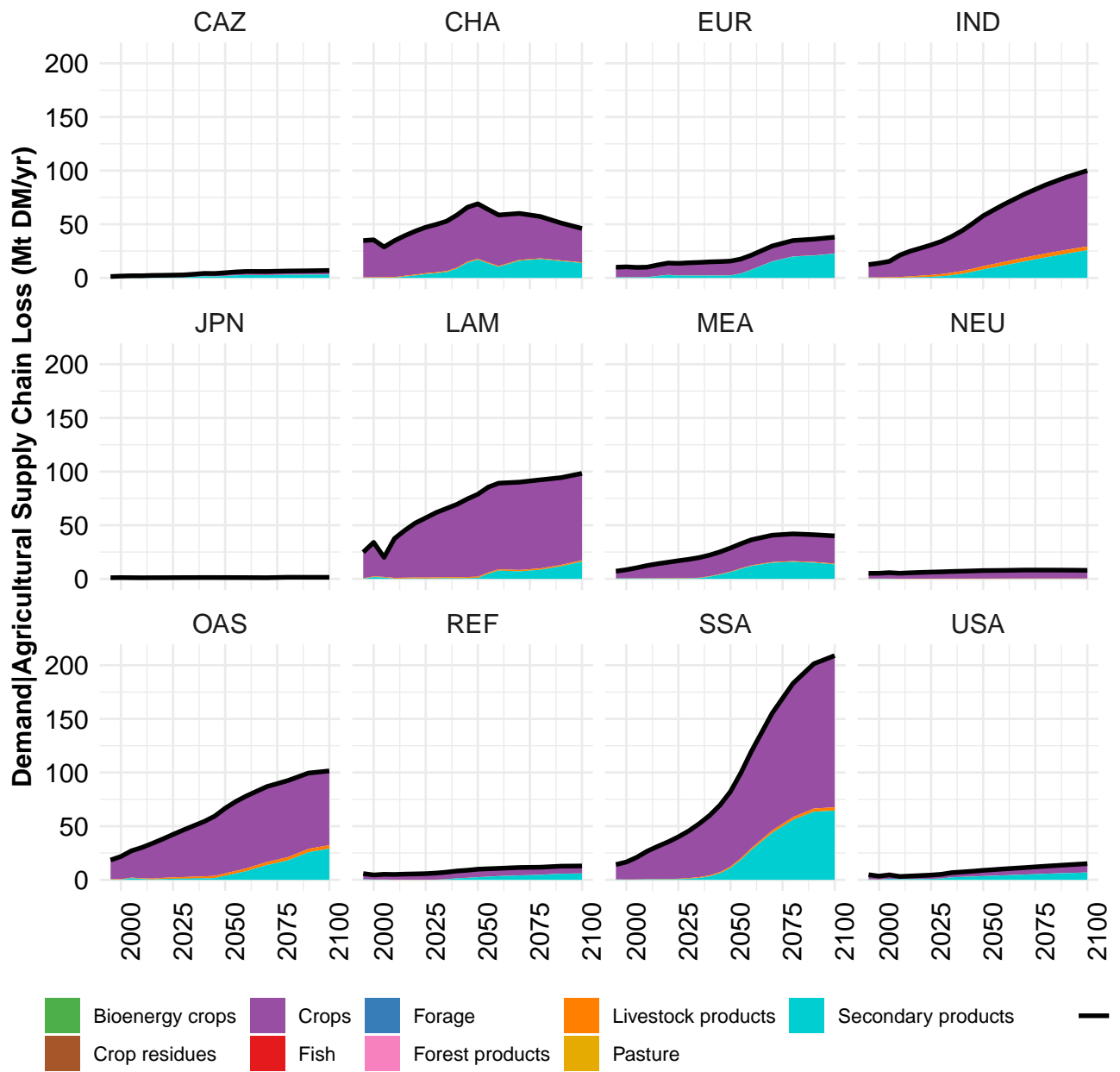




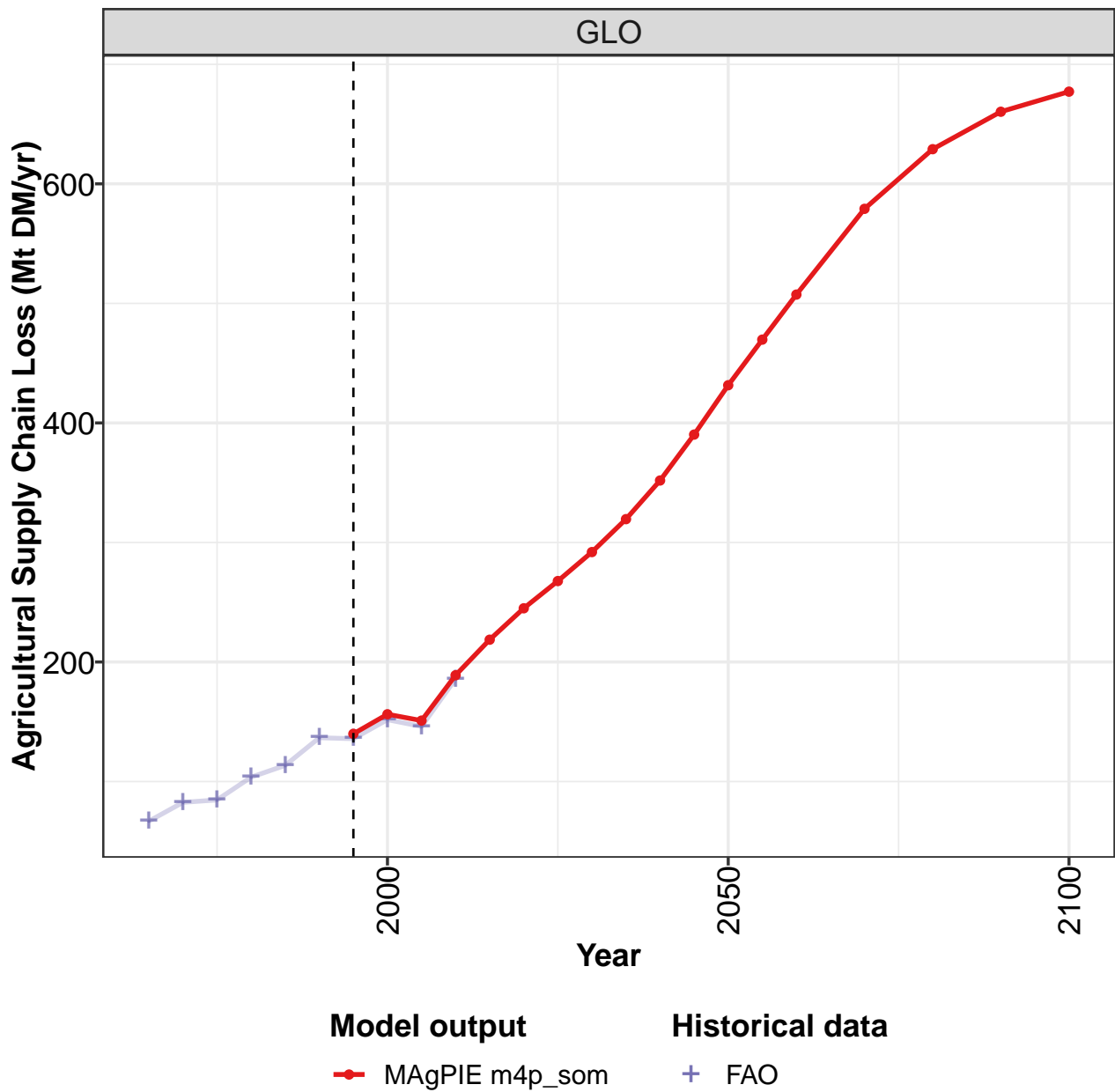


### 3 Agricultural Supply Chain Loss





## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

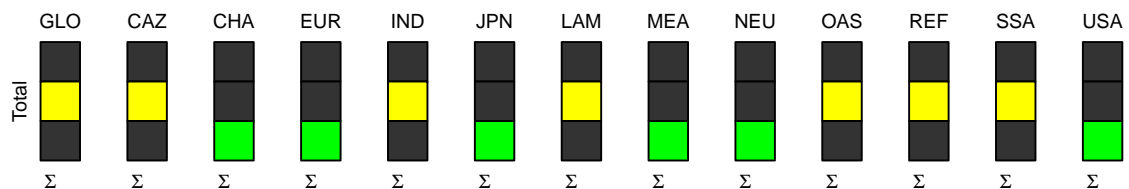
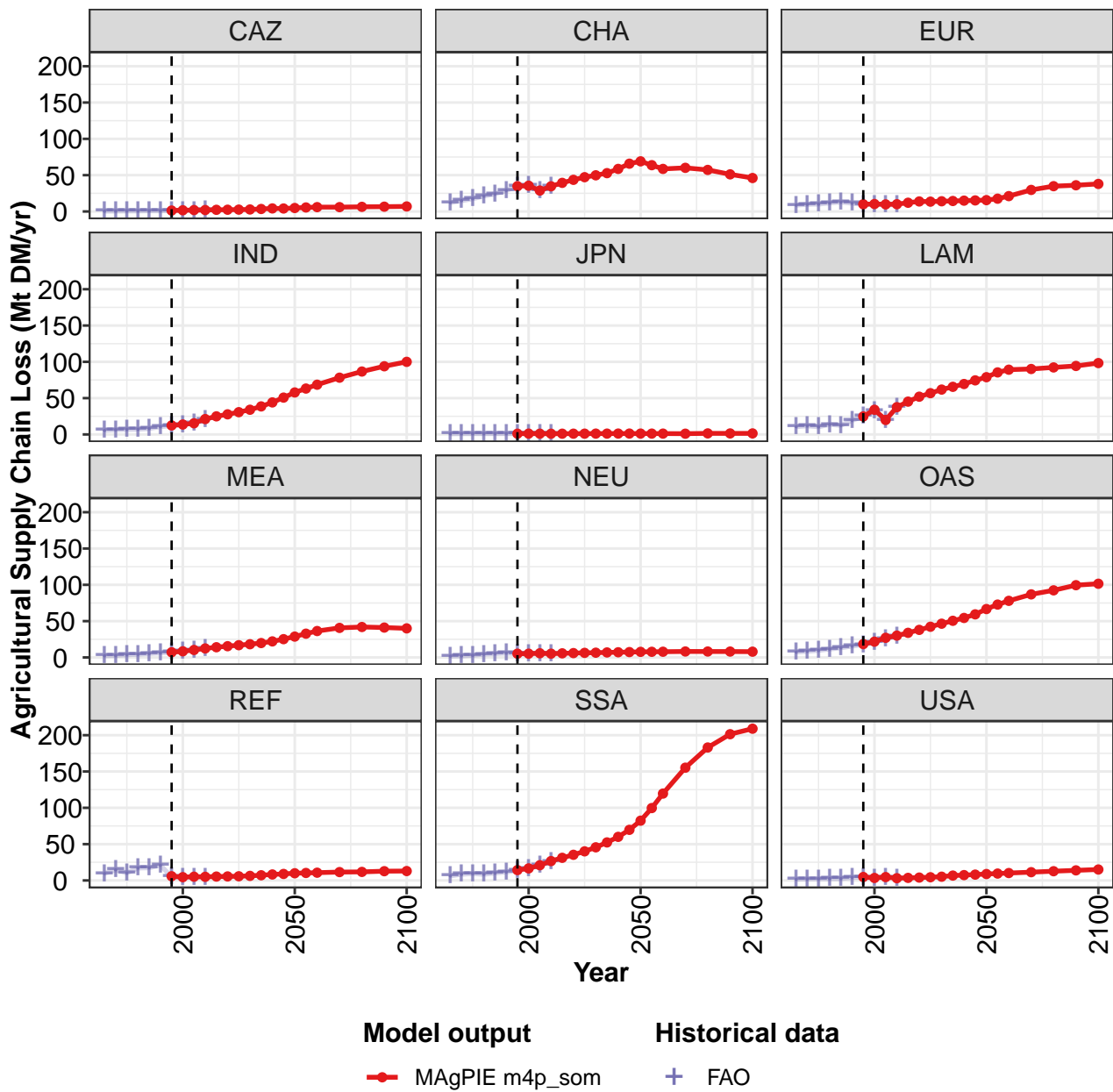


Figure 1: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	140	156	151	189	219	245	268	292	320	352	390
CAZ	1	2	2	2	2	2	3	3	3	4	4
CHA	35	35	29	35	39	44	47	50	53	59	66
EUR	10	10	10	10	12	14	14	14	14	15	15
IND	12	14	15	21	25	28	31	34	39	44	51
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	25	34	20	38	45	52	57	62	66	69	74
MEA	7	8	10	12	14	15	17	18	20	22	25
NEU	5	5	6	5	6	6	6	7	7	7	7
OAS	18	22	27	30	34	38	42	46	50	54	59
REF	6	5	5	5	5	6	6	6	7	8	9
SSA	14	17	21	27	31	35	40	46	52	60	70
USA	5	3	5	3	4	4	4	5	7	7	8

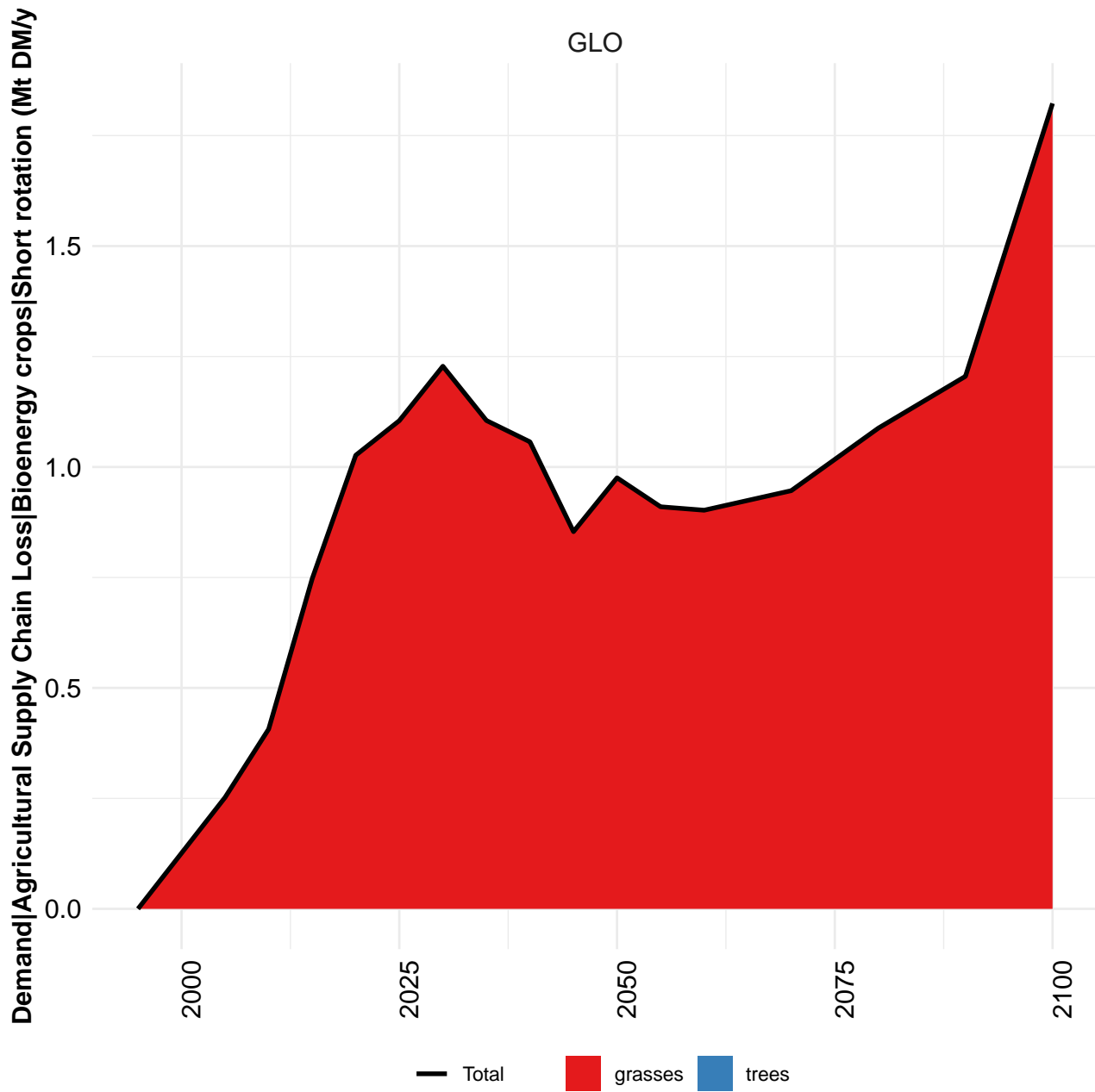
Table 4: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss (Mt DM/yr) [PART 1/2]

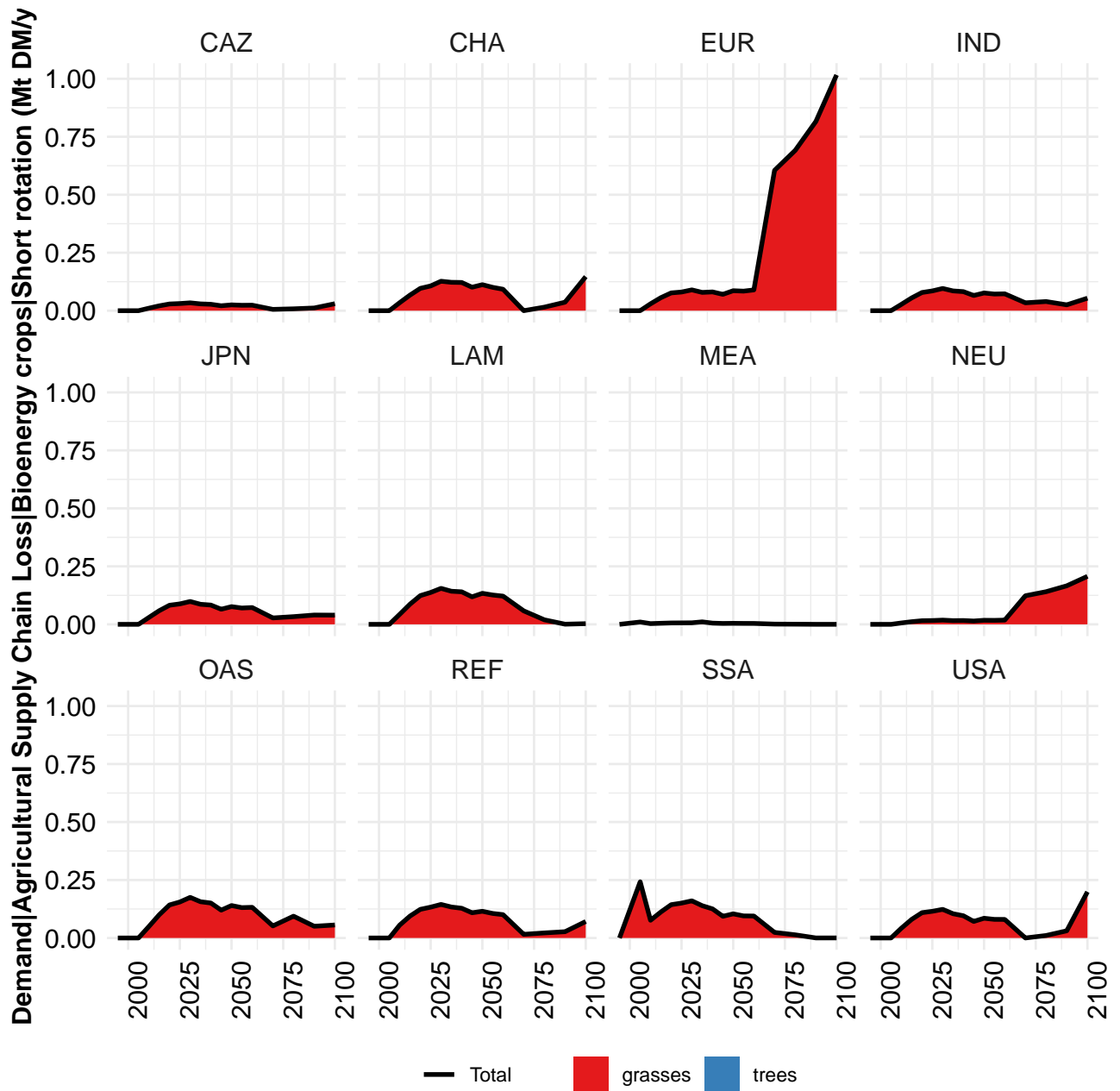
	2050	2055	2060	2070	2080	2090	2100
GLO	432	470	507	579	629	660	677
CAZ	5	6	6	6	6	7	7
CHA	69	64	59	60	57	51	46
EUR	16	18	21	30	35	36	38
IND	58	63	69	78	87	94	100
JPN	1	1	1	1	1	1	1
LAM	79	85	89	90	92	94	98
MEA	29	33	36	41	42	41	40
NEU	8	8	8	8	8	8	8
OAS	67	73	78	87	92	100	102
REF	10	10	11	12	12	13	13
SSA	82	100	120	155	183	201	209
USA	9	9	10	11	13	14	15

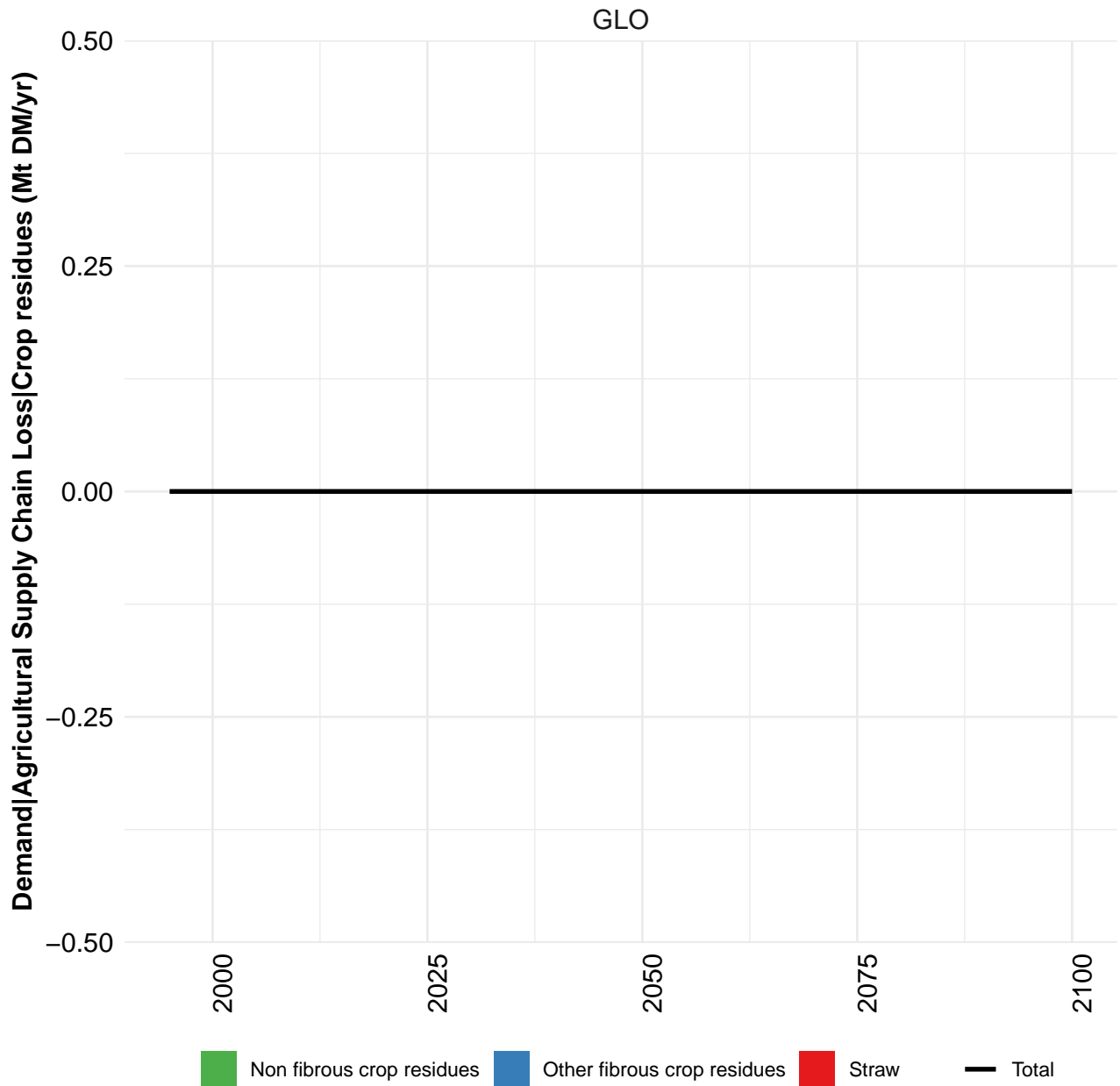
Table 5: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	67	83	85	104	113	137	136	152	146	186
CAZ	0	1	1	1	1	1	1	1	1	2
CHA	12	15	17	21	24	29	35	35	29	35
EUR	9	10	10	12	13	11	9	10	9	9
IND	6	6	7	7	8	11	12	14	15	21
JPN	1	1	1	1	1	1	1	1	1	1
LAM	11	12	10	14	12	19	25	32	19	37
MEA	2	3	4	4	5	6	7	8	10	12
NEU	2	2	3	4	5	6	5	5	6	5
OAS	7	9	10	11	13	16	18	21	25	29
REF	9	15	10	17	17	21	5	4	5	5
SSA	6	8	9	8	10	12	14	16	21	26
USA	2	2	2	2	2	4	5	3	5	3

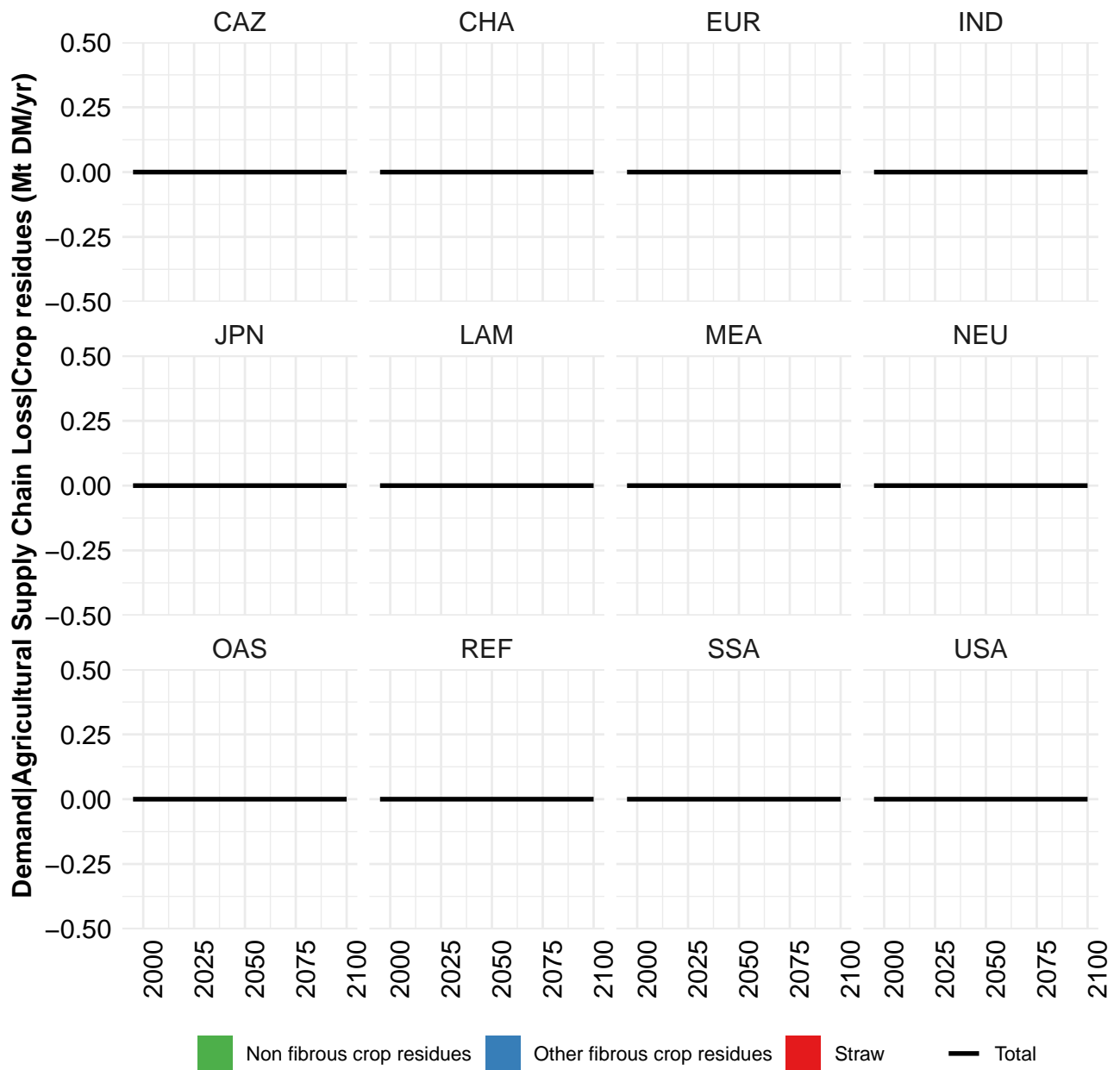
Table 6: FAO — Demand—Agricultural Supply Chain Loss (Mt DM/yr)

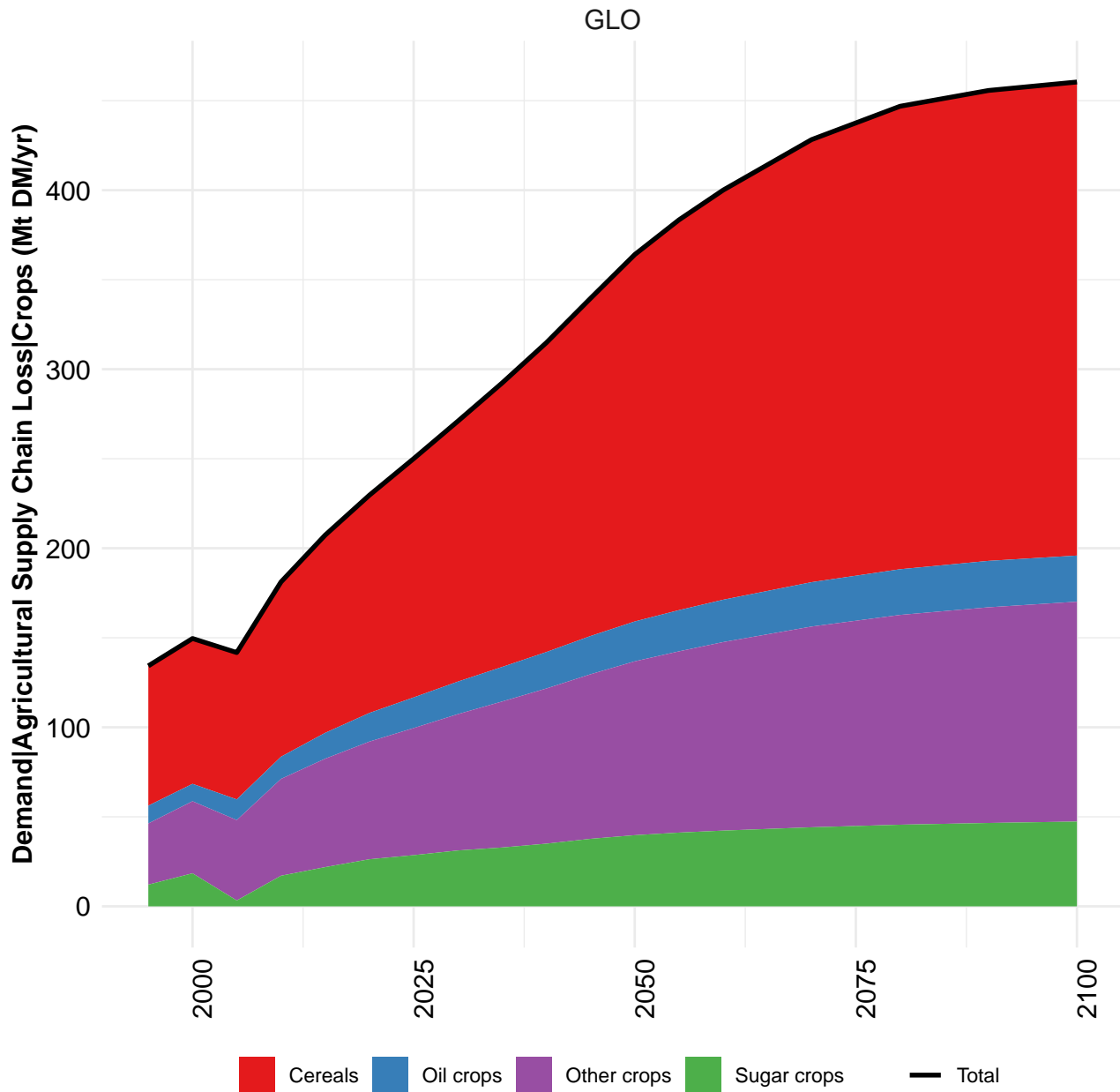


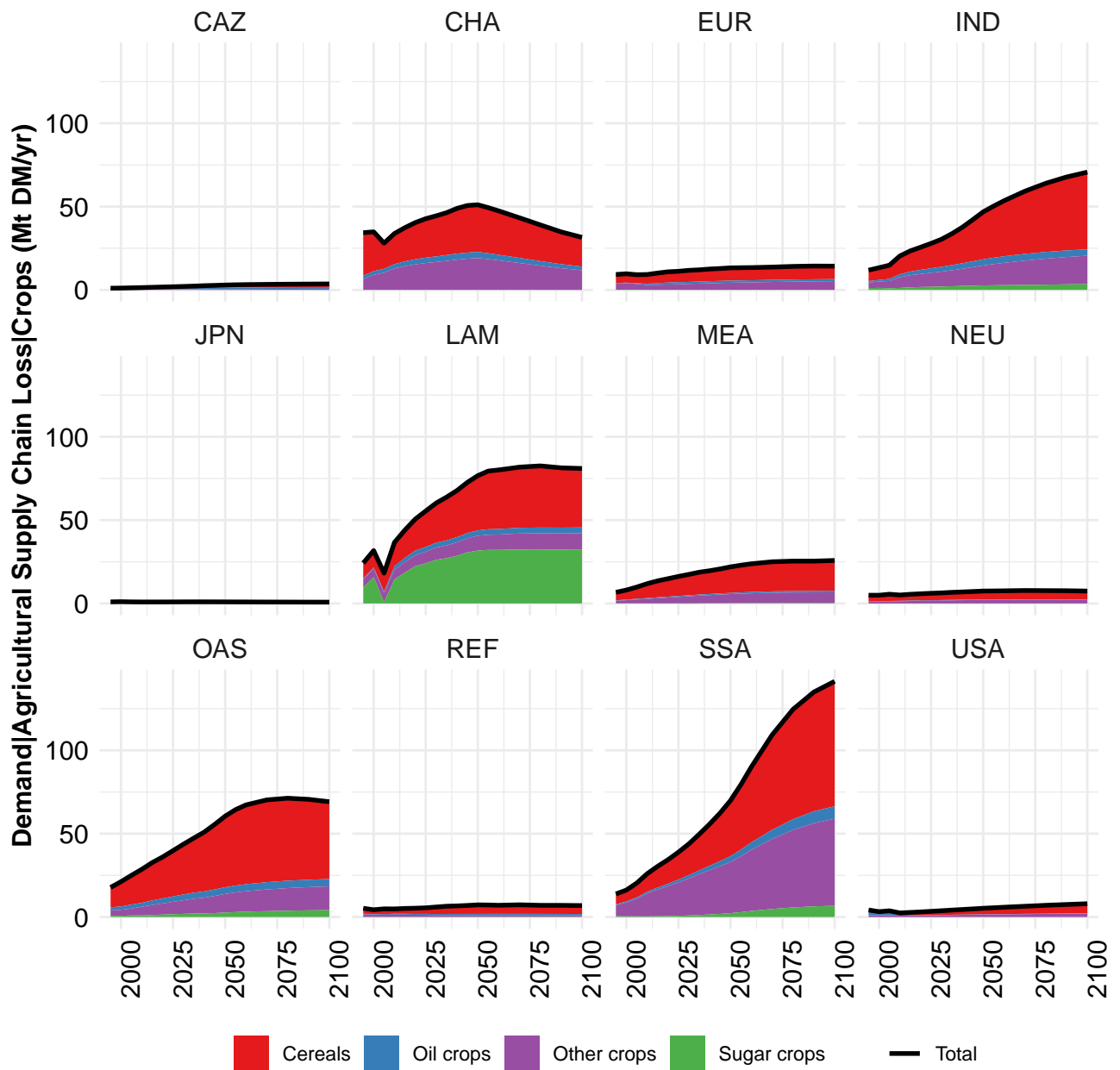






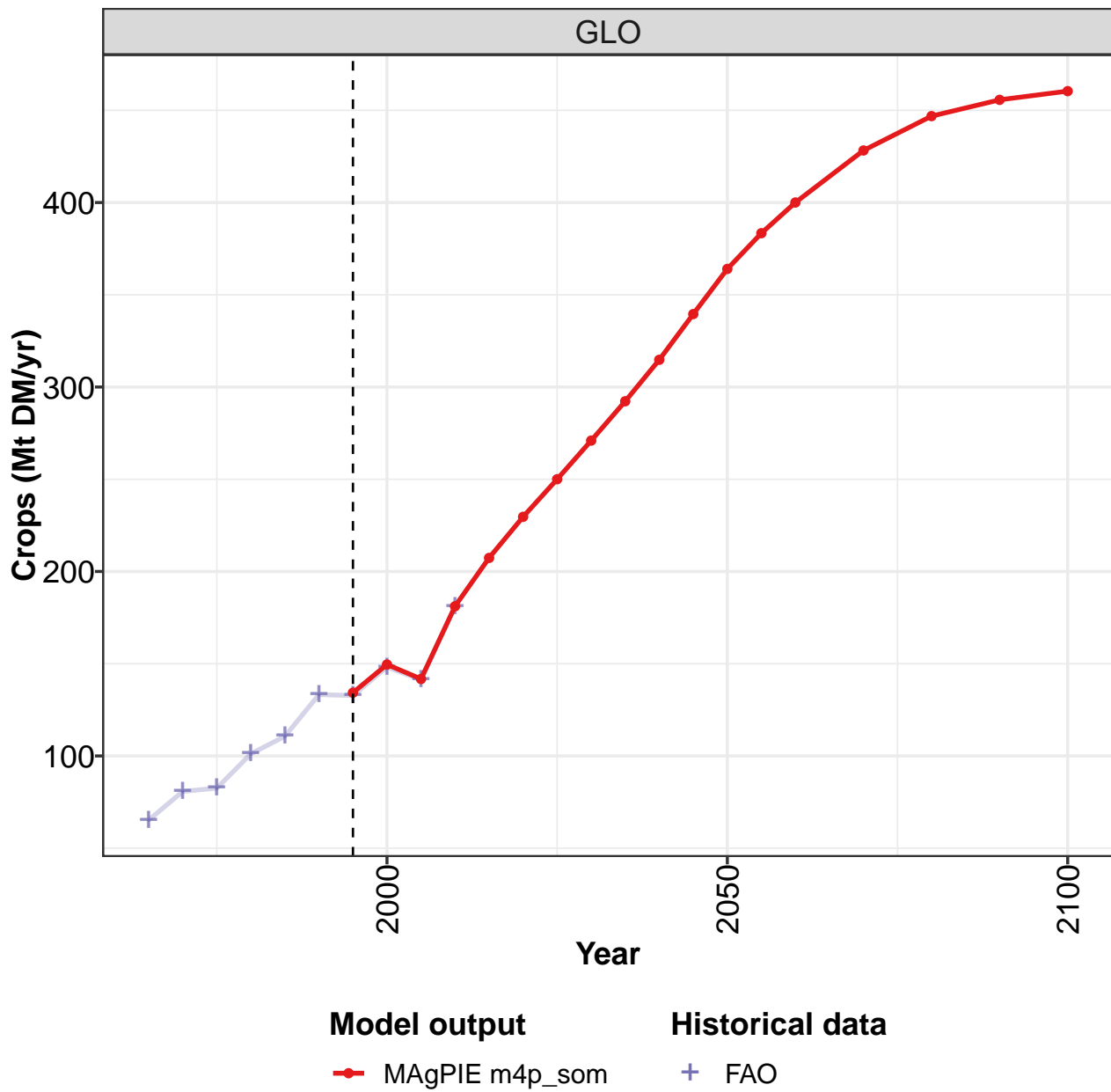






## 3.1 Crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

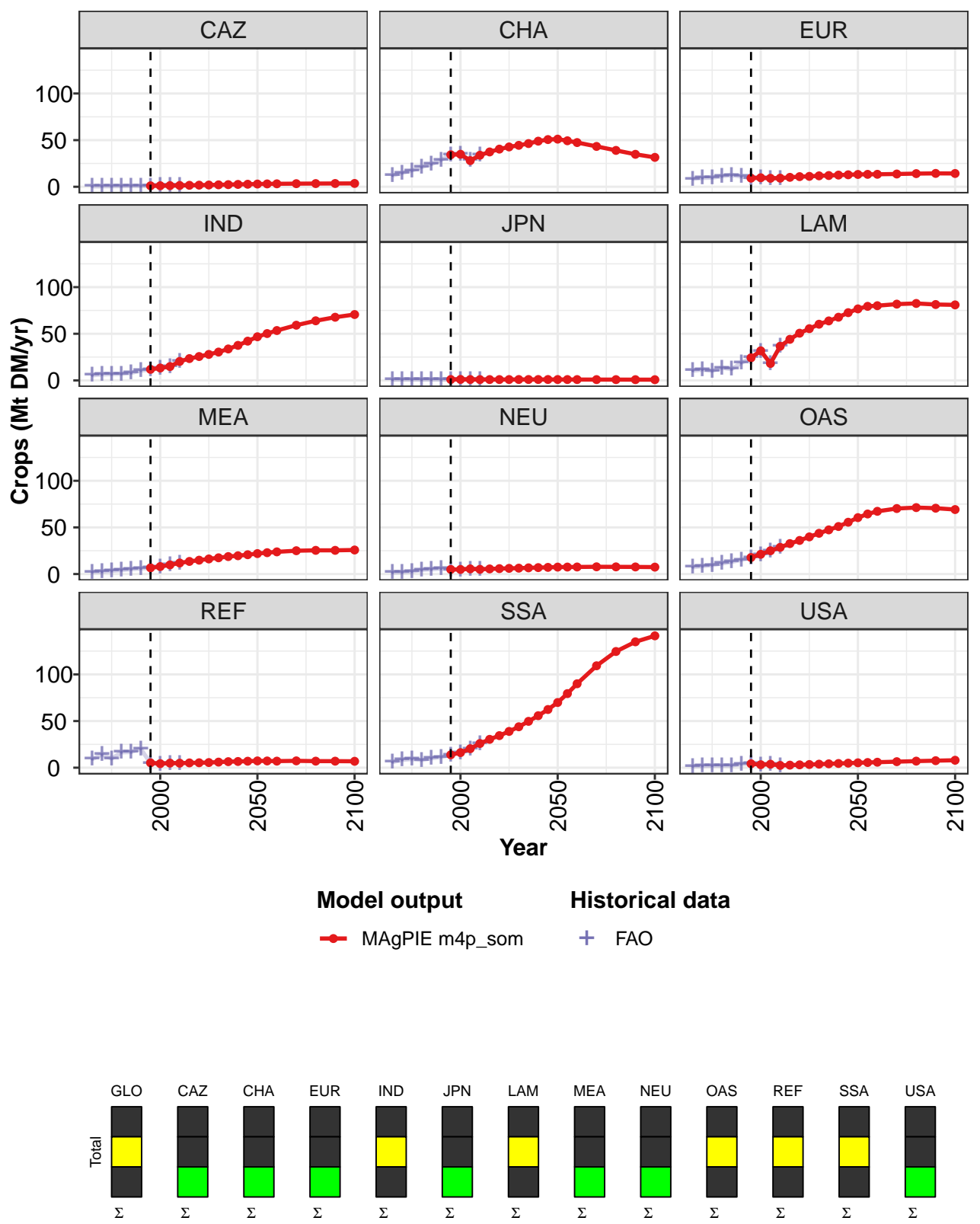


Figure 2: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	134	150	142	181	207	230	250	271	292	315	340
CAZ	1	1	1	1	2	2	2	2	2	3	3
CHA	34	35	28	34	37	40	43	44	46	49	51
EUR	9	10	9	9	10	11	11	12	12	13	13
IND	12	13	15	20	23	26	28	30	34	38	42
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	24	32	18	37	44	51	55	60	64	68	73
MEA	7	8	10	12	14	15	16	17	19	20	21
NEU	5	5	6	5	6	6	6	6	7	7	7
OAS	18	21	25	29	33	36	40	44	47	51	56
REF	5	4	5	5	5	5	6	6	6	7	7
SSA	14	16	20	26	30	34	39	44	50	56	62
USA	4	3	4	2	3	3	3	4	4	5	5

Table 7: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	364	383	400	428	447	456	460
CAZ	3	3	3	3	3	4	4
CHA	51	49	47	43	39	35	32
EUR	13	13	13	14	14	14	14
IND	47	50	53	59	64	68	71
JPN	1	1	1	1	1	1	1
LAM	77	79	80	82	83	81	81
MEA	22	23	24	25	25	25	26
NEU	7	8	8	8	8	8	7
OAS	60	64	67	70	71	71	69
REF	7	7	7	7	7	7	7
SSA	70	79	90	109	125	135	141
USA	5	6	6	6	7	8	8

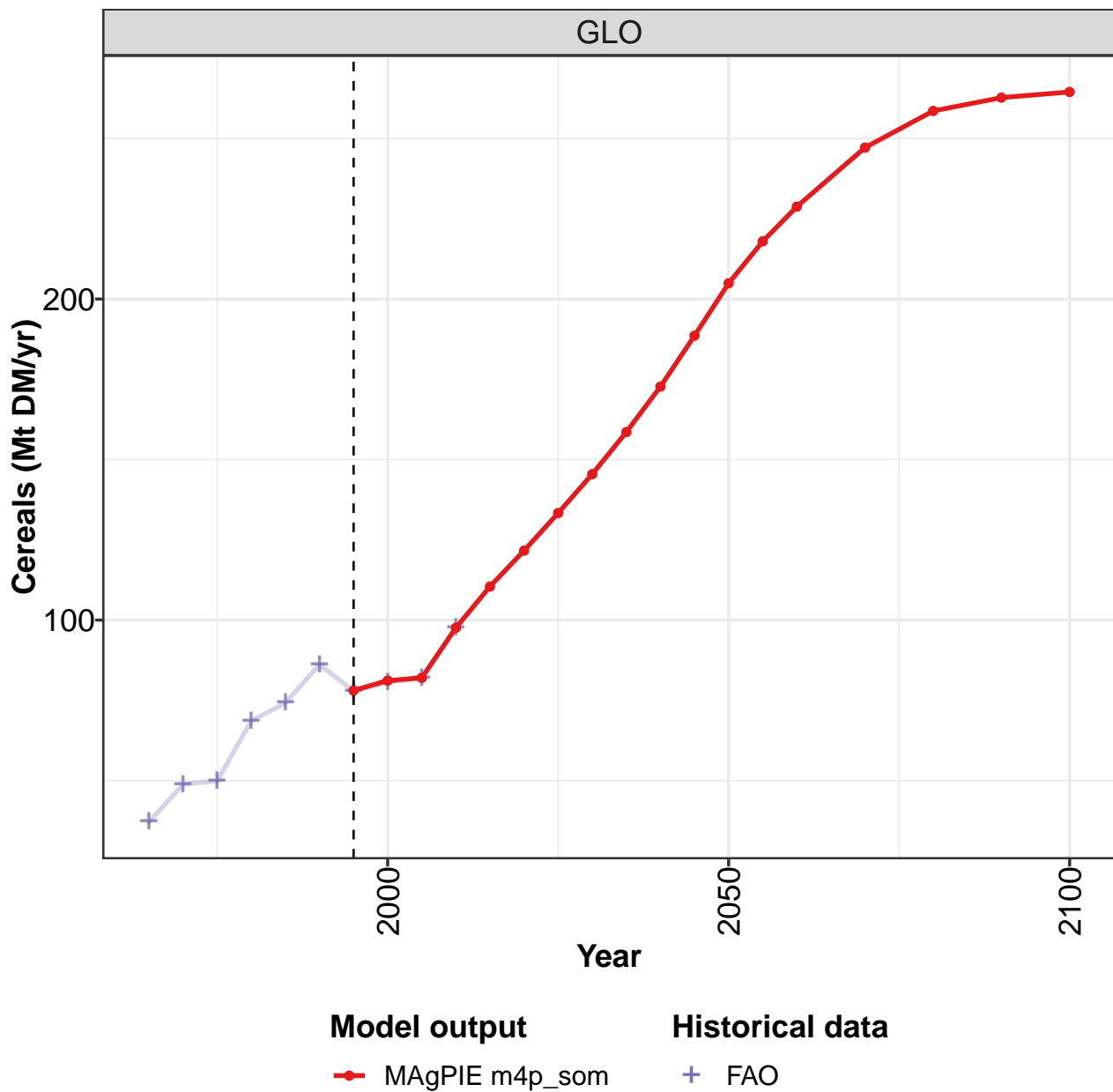
Table 8: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	65	81	83	101	111	133	133	148	141	181
CAZ	0	0	1	1	1	1	1	1	1	1
CHA	12	15	17	21	24	29	34	35	28	34
EUR	8	9	10	11	12	11	9	9	9	9
IND	5	6	7	7	8	10	12	13	15	20
JPN	1	1	1	1	1	1	1	1	1	1
LAM	10	12	10	13	12	19	24	32	18	36
MEA	2	3	3	4	5	6	7	8	10	12
NEU	2	2	3	4	5	6	5	5	5	5
OAS	7	8	10	11	13	15	17	21	25	29
REF	9	14	10	16	17	20	5	4	5	5
SSA	6	8	9	8	10	11	14	16	20	26
USA	2	2	2	2	2	4	4	3	4	2

Table 9: FAO — Demand—Agricultural Supply Chain Loss—Crops (Mt DM/yr)

## 3.1.1 Cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

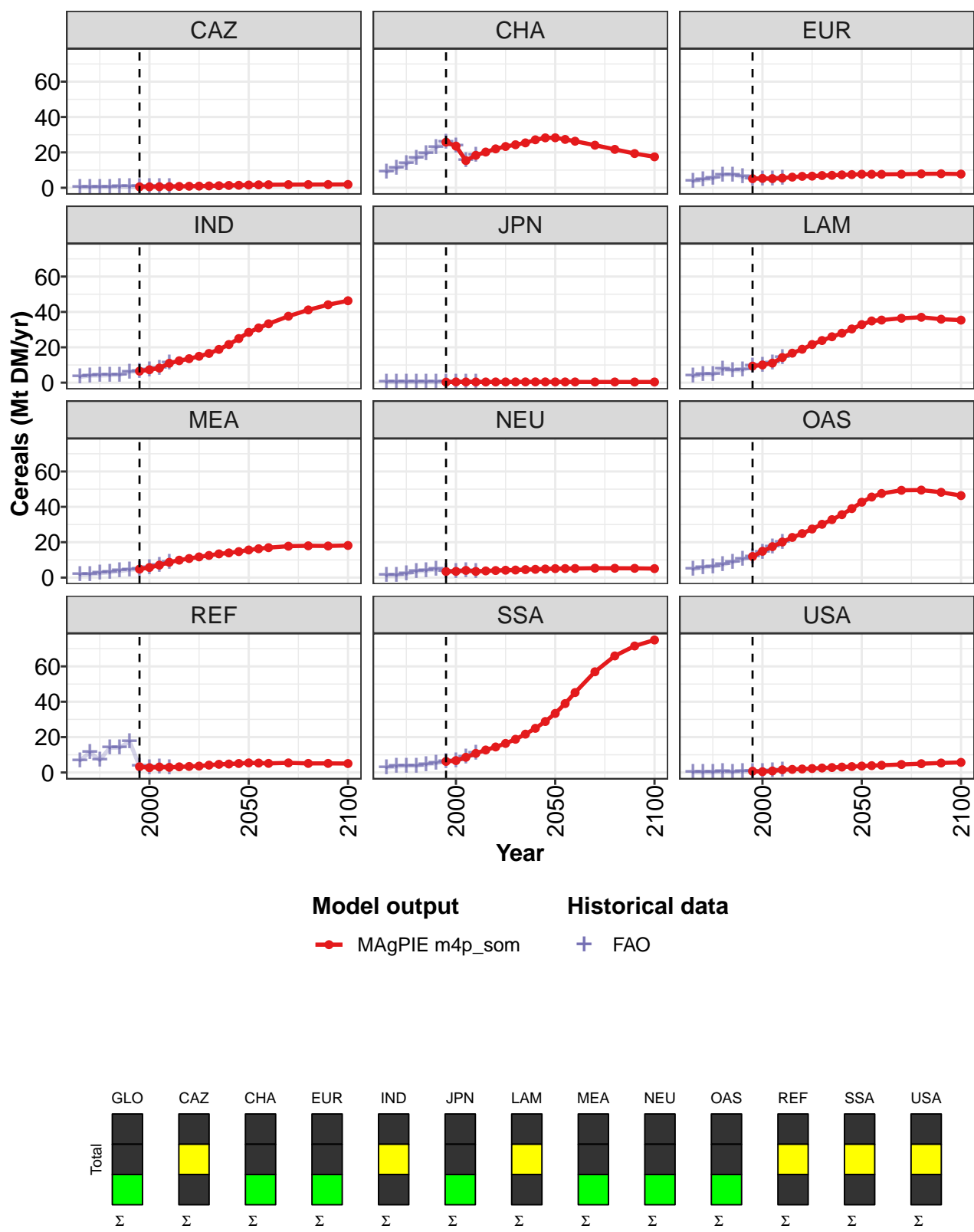


Figure 3: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Cereals (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	78	81	82	98	110	122	133	145	159	173	189
CAZ	1	1	1	1	1	1	1	1	1	1	1
CHA	26	24	15	18	20	22	23	24	25	27	28
EUR	5	5	5	5	6	6	7	7	7	7	7
IND	7	7	8	11	12	14	15	17	19	22	25
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	9	10	11	14	17	19	22	24	26	28	30
MEA	5	6	7	9	10	11	12	13	13	14	15
NEU	3	4	4	3	4	4	4	4	5	5	5
OAS	12	15	18	20	23	25	27	30	33	36	39
REF	3	3	3	3	3	3	4	4	5	5	5
SSA	6	7	9	11	13	14	16	19	22	25	29
USA	1	0	1	2	2	2	2	3	3	3	3

Table 10: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Cereals (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	205	218	229	247	259	263	264
CAZ	2	2	2	2	2	2	2
CHA	28	27	26	24	22	19	17
EUR	8	8	8	8	8	8	8
IND	28	31	33	38	41	44	46
JPN	0	0	0	0	0	0	0
LAM	33	35	35	36	37	36	35
MEA	16	16	17	18	18	18	18
NEU	5	5	5	5	5	5	5
OAS	43	46	48	49	49	48	46
REF	5	5	5	5	5	5	5
SSA	33	39	45	57	66	72	75
USA	4	4	4	5	5	5	6

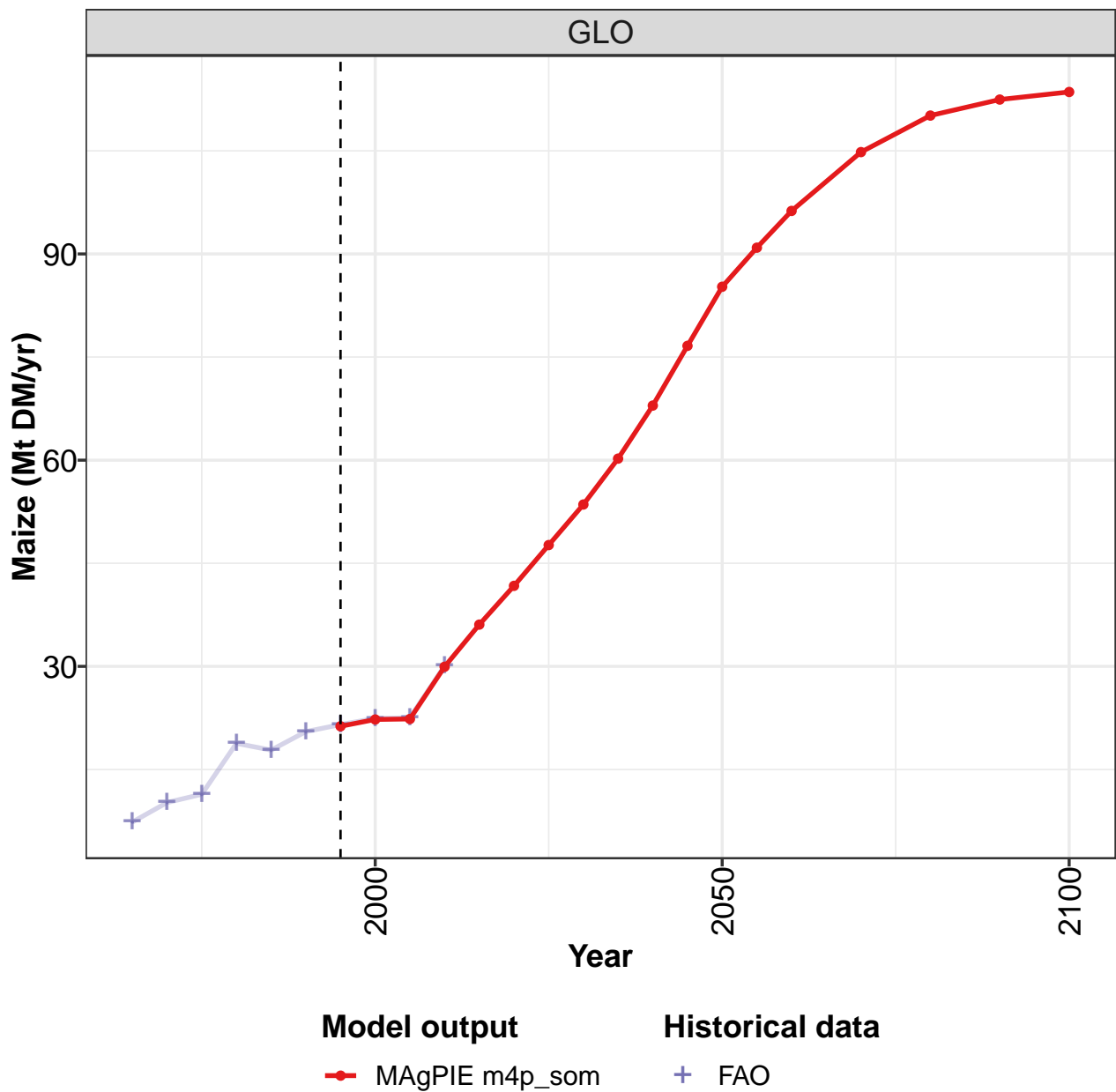
Table 11: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Cereals (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	37.1	48.8	49.9	68.6	74.2	86.1	77.9	80.6	81.9	97.7
CAZ	0.2	0.3	0.4	0.4	0.6	0.5	0.5	0.6	0.7	0.7
CHA	9.0	11.1	13.5	16.9	19.3	22.9	26.0	23.7	15.5	18.5
EUR	3.6	4.6	5.3	7.3	7.4	6.2	5.0	5.1	5.0	5.3
IND	3.3	4.0	4.1	4.2	4.4	6.2	6.5	7.3	8.3	11.0
JPN	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
LAM	3.6	4.8	4.6	7.6	7.0	7.1	9.3	10.0	11.2	14.2
MEA	1.6	1.9	2.4	3.0	3.7	4.4	4.9	5.7	7.0	8.7
NEU	1.1	1.3	2.1	3.5	3.9	4.7	3.4	3.4	4.0	3.5
OAS	4.7	5.7	6.3	7.3	8.8	10.3	11.6	14.5	17.3	20.2
REF	6.8	11.4	7.0	14.0	14.1	17.6	3.4	2.8	3.1	2.9
SSA	2.8	3.4	3.8	3.8	4.5	5.3	6.2	6.7	8.6	10.8
USA	0.1	0.1	0.1	0.3	0.1	0.7	0.7	0.5	0.9	1.6

Table 12: FAO — Demand—Agricultural Supply Chain Loss—Crops—Cereals (Mt DM/yr)

## 3.1.2 Cereals—Maize

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

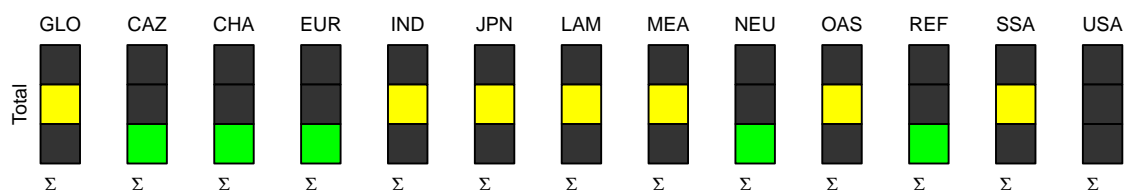
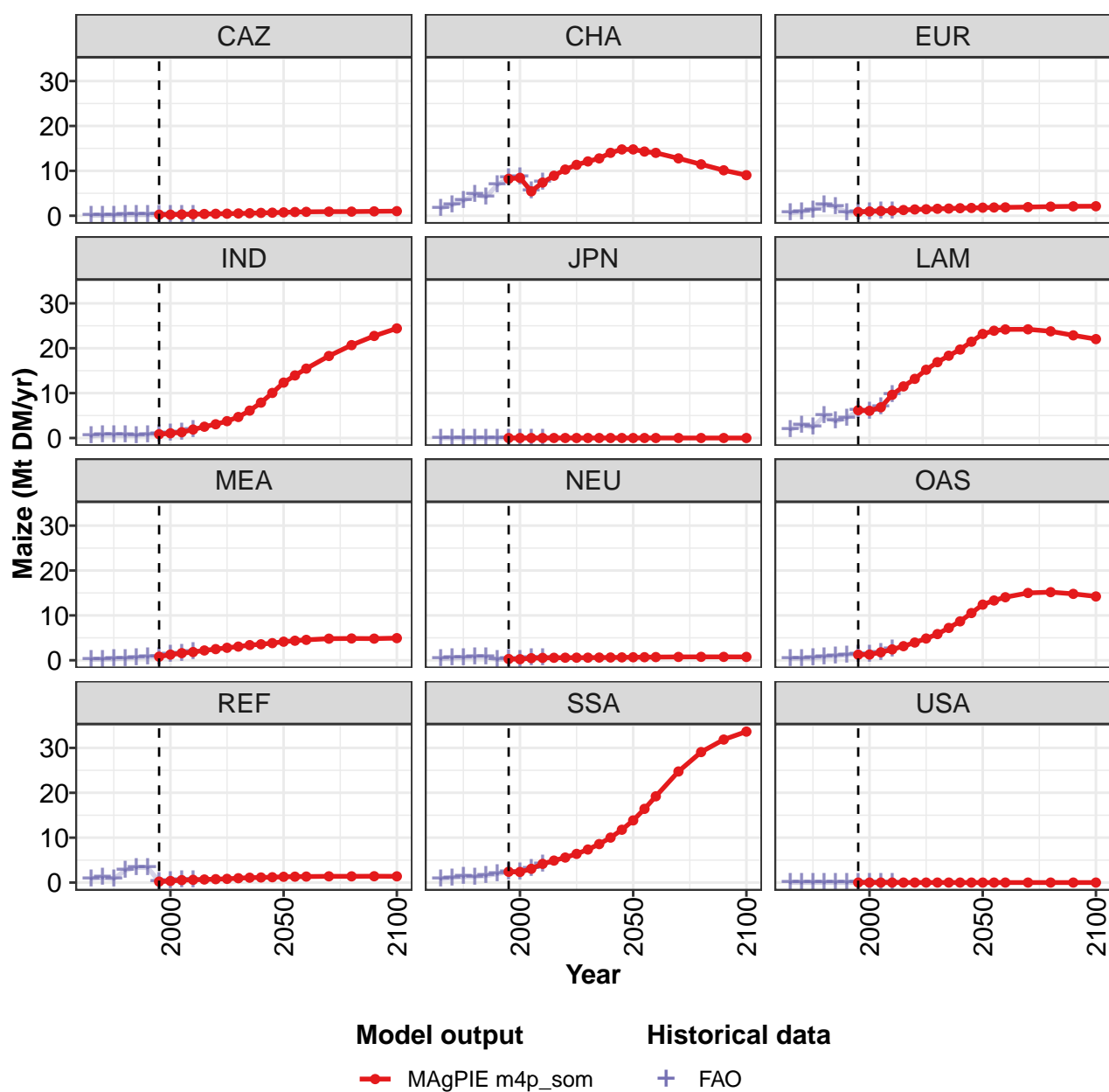


Figure 4: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Maize (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	21	22	22	30	36	42	48	54	60	68	77
CAZ	0	0	0	0	0	0	0	1	1	1	1
CHA	8	8	5	7	9	10	11	12	13	14	15
EUR	1	1	1	1	1	1	1	2	2	2	2
IND	1	1	1	2	3	3	4	5	6	8	10
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	6	6	7	10	12	13	15	17	18	20	21
MEA	1	1	2	2	2	2	3	3	3	4	4
NEU	0	0	0	1	1	1	1	1	1	1	1
OAS	1	1	2	2	3	4	5	6	7	9	11
REF	0	0	1	1	1	1	1	1	1	1	1
SSA	2	2	3	4	5	6	6	7	9	10	12
USA	0	0	0	0	0	0	0	0	0	0	0

Table 13: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Maize (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	85	91	96	105	110	112	114
CAZ	1	1	1	1	1	1	1
CHA	15	14	14	13	11	10	9
EUR	2	2	2	2	2	2	2
IND	12	14	15	18	21	23	24
JPN	0	0	0	0	0	0	0
LAM	23	24	24	24	24	23	22
MEA	4	4	5	5	5	5	5
NEU	1	1	1	1	1	1	1
OAS	12	13	14	15	15	15	14
REF	1	1	1	1	1	1	1
SSA	14	16	19	25	29	32	34
USA	0	0	0	0	0	0	0

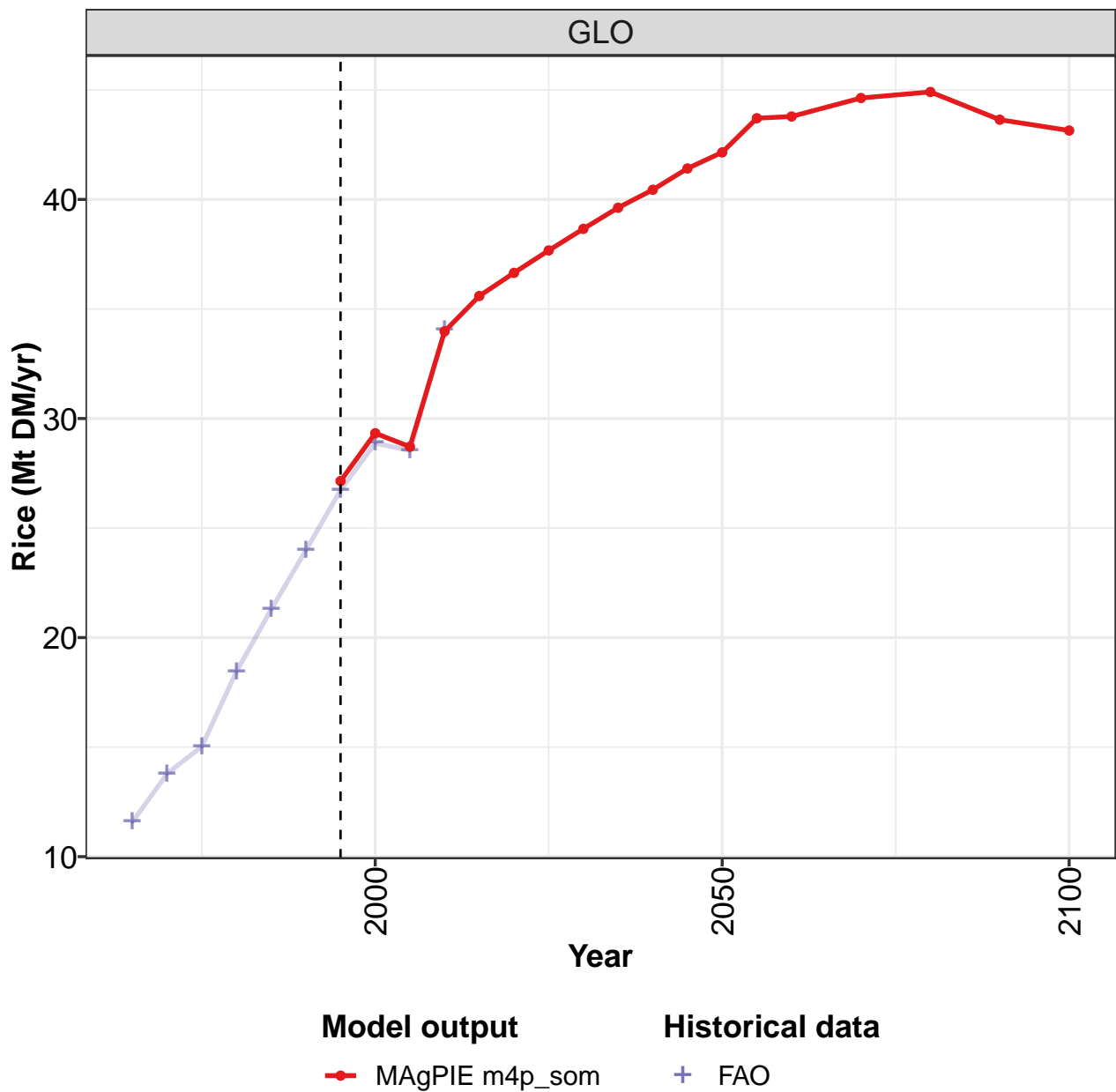
Table 14: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Maize (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	7.3	10.2	11.4	18.8	17.8	20.5	21.5	22.4	22.5	30.1
CAZ	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.4
CHA	1.7	2.4	3.4	4.7	4.2	6.9	8.4	8.6	5.5	7.5
EUR	0.6	0.9	1.3	2.5	2.0	0.7	0.8	0.9	1.0	1.1
IND	0.4	0.7	0.6	0.6	0.6	0.8	0.8	1.1	1.3	1.9
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.9	2.8	2.4	4.9	3.7	4.5	6.1	6.0	6.9	9.6
MEA	0.2	0.2	0.3	0.4	0.6	0.7	0.8	1.2	1.5	1.9
NEU	0.3	0.5	0.6	0.7	0.7	0.2	0.4	0.3	0.5	0.5
OAS	0.4	0.4	0.5	0.7	0.9	1.2	1.3	1.4	1.8	2.5
REF	0.9	1.1	0.8	2.7	3.3	3.3	0.2	0.4	0.6	0.6
SSA	0.8	1.1	1.3	1.3	1.5	1.9	2.4	2.4	3.1	4.2
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 15: FAO — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Maize (Mt DM/yr)

## 3.1.3 Cereals—Rice

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

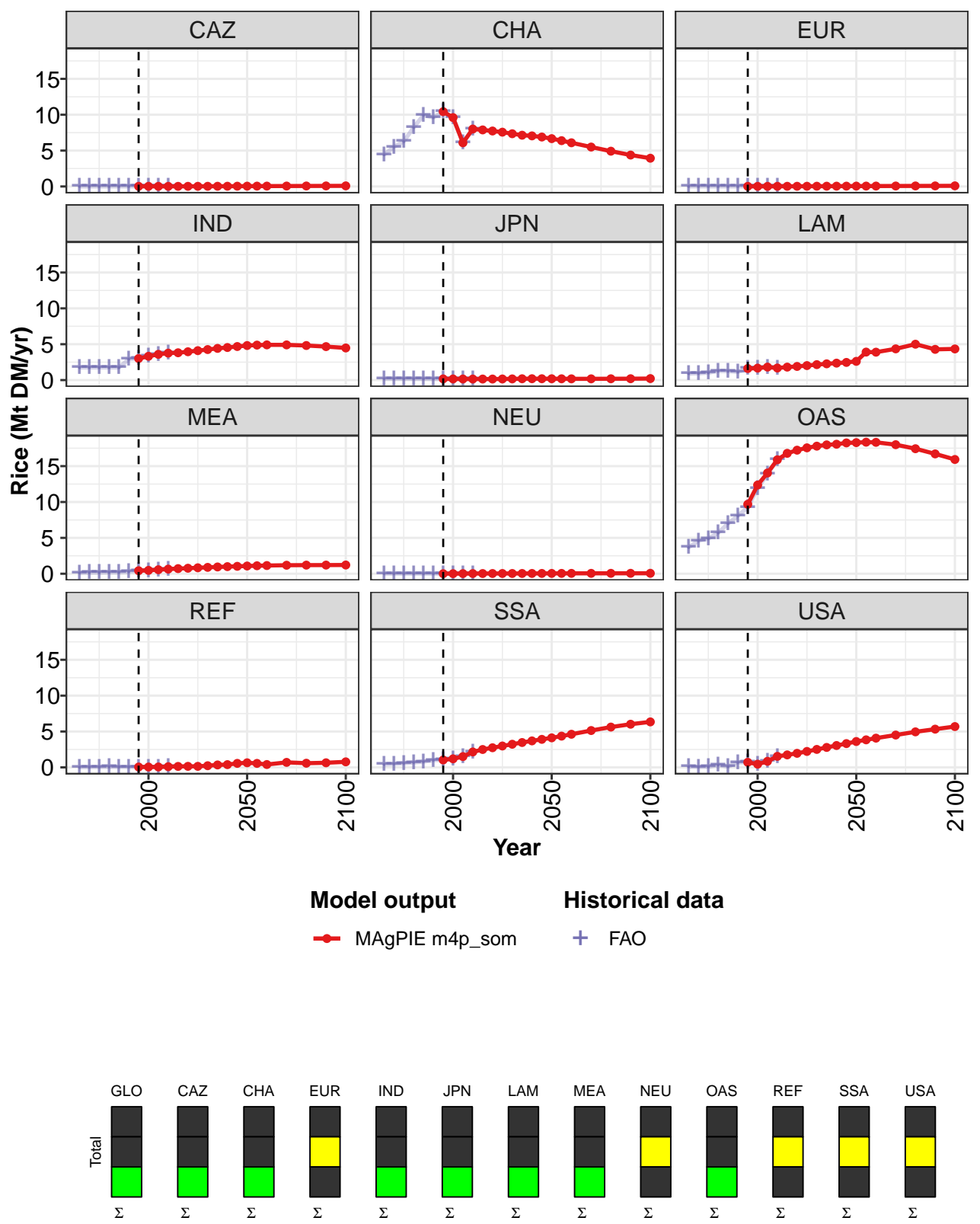


Figure 5: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Rice (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	27.1	29.3	28.7	34.0	35.6	36.6	37.7	38.7	39.6	40.4	41.4
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	10.4	9.6	6.1	8.0	7.9	7.7	7.6	7.3	7.1	7.1	6.9
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	3.0	3.3	3.6	3.8	3.8	4.0	4.1	4.3	4.4	4.5	4.7
JPN	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
LAM	1.6	1.7	1.8	1.7	1.8	1.9	2.0	2.2	2.3	2.4	2.5
MEA	0.4	0.5	0.6	0.6	0.7	0.8	0.8	0.9	0.9	1.0	1.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	9.7	12.4	14.0	15.9	16.8	17.2	17.6	17.8	18.0	18.1	18.2
REF	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.6
SSA	1.0	1.2	1.5	2.1	2.5	2.7	3.0	3.2	3.5	3.7	3.9
USA	0.7	0.4	0.8	1.5	1.7	2.0	2.2	2.5	2.8	3.0	3.3

Table 16: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Rice (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	42.1	43.7	43.8	44.6	44.9	43.6	43.1
CAZ	0.0	0.0	0.1	0.1	0.1	0.1	0.1
CHA	6.7	6.4	6.1	5.5	4.9	4.4	3.9
EUR	0.0	0.1	0.1	0.1	0.1	0.1	0.1
IND	4.8	4.9	4.9	4.9	4.8	4.7	4.5
JPN	0.2	0.2	0.2	0.2	0.2	0.2	0.2
LAM	2.6	3.9	3.9	4.4	5.0	4.3	4.3
MEA	1.1	1.1	1.1	1.2	1.2	1.2	1.2
NEU	0.0	0.0	0.1	0.1	0.1	0.1	0.1
OAS	18.3	18.3	18.3	18.0	17.4	16.7	15.9
REF	0.6	0.6	0.4	0.7	0.6	0.6	0.8
SSA	4.1	4.4	4.6	5.1	5.6	6.0	6.3
USA	3.6	3.8	4.1	4.5	5.0	5.3	5.7

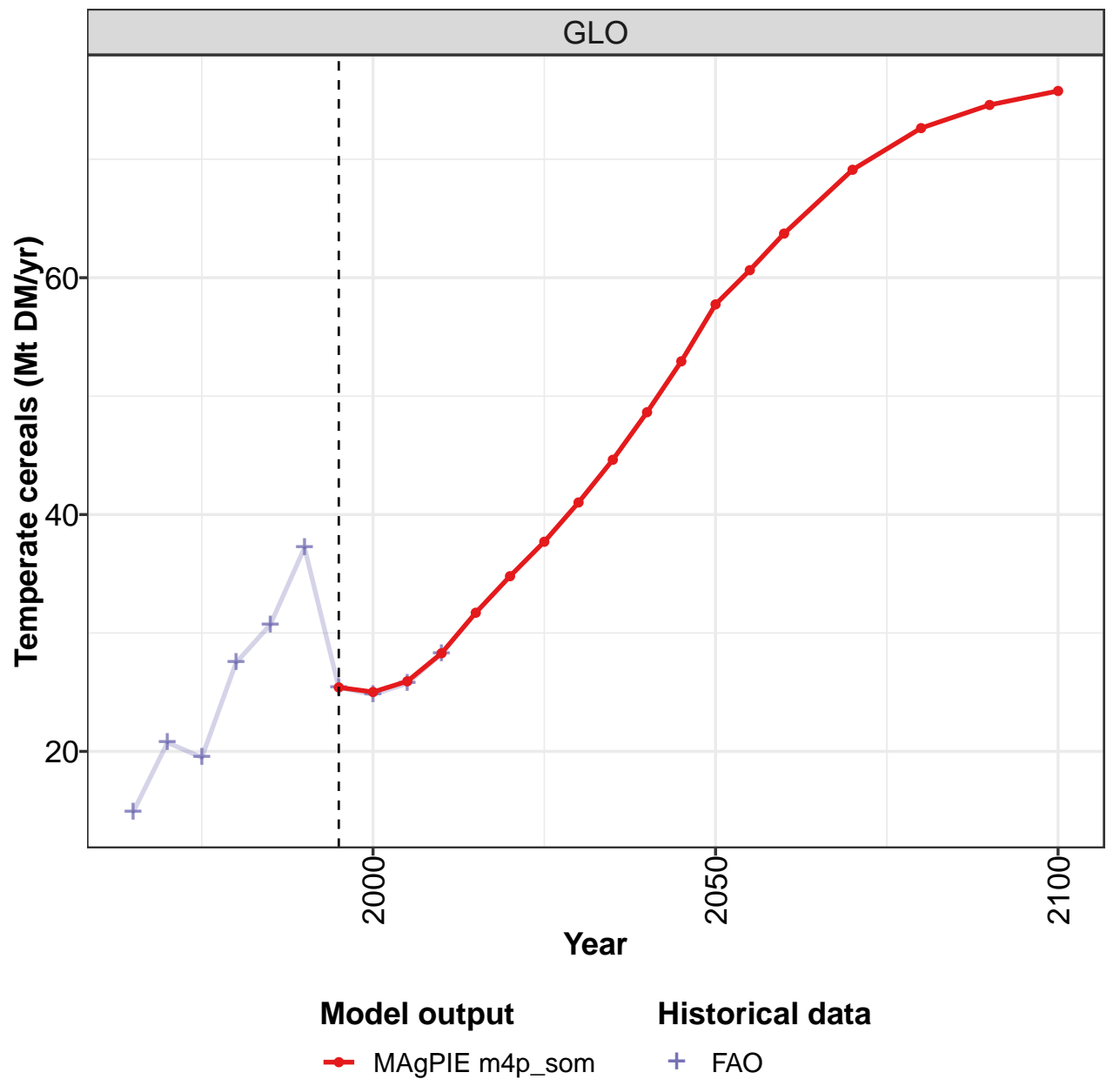
Table 17: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Rice (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	11.6	13.8	15.0	18.4	21.3	24.0	26.7	28.9	28.5	34.0
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	4.4	5.5	6.3	8.2	9.9	9.6	10.4	9.6	6.1	8.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	1.7	1.7	1.7	1.7	1.7	2.9	3.0	3.3	3.6	3.8
JPN	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
LAM	0.9	0.9	1.0	1.3	1.2	1.1	1.6	1.7	1.8	1.7
MEA	0.1	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.6	0.6
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	3.7	4.6	4.9	5.7	7.0	8.1	9.3	11.9	13.8	15.9
REF	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
SSA	0.4	0.5	0.6	0.7	0.8	1.0	1.0	1.2	1.5	2.2
USA	0.1	0.1	0.1	0.3	0.1	0.7	0.7	0.4	0.8	1.5

Table 18: FAO — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Rice (Mt DM/yr)

3.1.4
Cereals—Temperate cereals

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

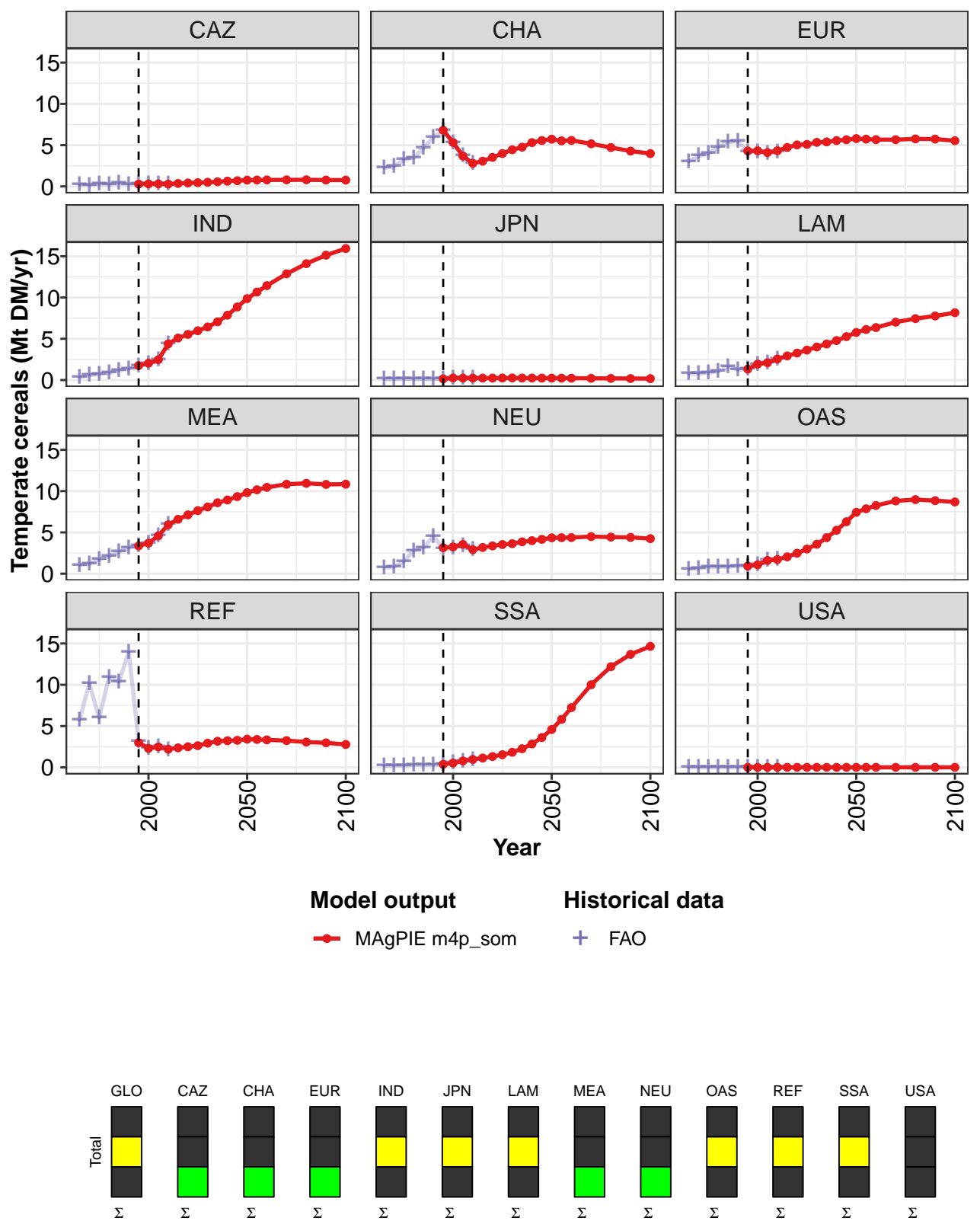


Figure 6: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Temperate cereals (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	25.4	25.0	25.9	28.3	31.7	34.8	37.7	41.0	44.6	48.6	52.9
CAZ	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7
CHA	6.8	5.3	3.7	2.8	3.1	3.5	4.0	4.4	4.8	5.3	5.6
EUR	4.3	4.3	4.1	4.3	4.7	5.0	5.1	5.3	5.4	5.6	5.7
IND	1.8	2.0	2.5	4.4	5.1	5.5	6.0	6.4	7.1	7.9	8.9
JPN	0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2
LAM	1.3	1.9	2.1	2.5	2.9	3.3	3.6	4.0	4.4	4.8	5.3
MEA	3.4	3.7	4.6	5.9	6.6	7.1	7.6	8.1	8.6	8.9	9.3
NEU	3.1	3.2	3.6	2.9	3.2	3.4	3.5	3.6	3.9	4.0	4.2
OAS	0.9	1.1	1.6	1.7	2.0	2.5	3.0	3.6	4.4	5.3	6.3
REF	3.0	2.3	2.5	2.2	2.4	2.5	2.6	2.9	3.2	3.2	3.3
SSA	0.4	0.5	0.8	1.0	1.1	1.3	1.5	1.8	2.3	2.8	3.6
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 19: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	57.7	60.6	63.7	69.1	72.6	74.6	75.8
CAZ	0.8	0.8	0.8	0.8	0.8	0.8	0.8
CHA	5.7	5.5	5.6	5.2	4.7	4.3	4.0
EUR	5.8	5.7	5.7	5.7	5.8	5.7	5.5
IND	9.9	10.7	11.4	12.9	14.1	15.1	15.9
JPN	0.2	0.2	0.2	0.2	0.2	0.2	0.2
LAM	5.8	6.1	6.4	7.0	7.4	7.8	8.2
MEA	9.8	10.2	10.5	10.8	10.9	10.8	10.8
NEU	4.3	4.4	4.4	4.5	4.4	4.4	4.3
OAS	7.4	7.9	8.3	8.8	9.0	8.8	8.7
REF	3.4	3.4	3.3	3.2	3.1	3.0	2.8
SSA	4.6	5.8	7.2	10.0	12.2	13.7	14.7
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

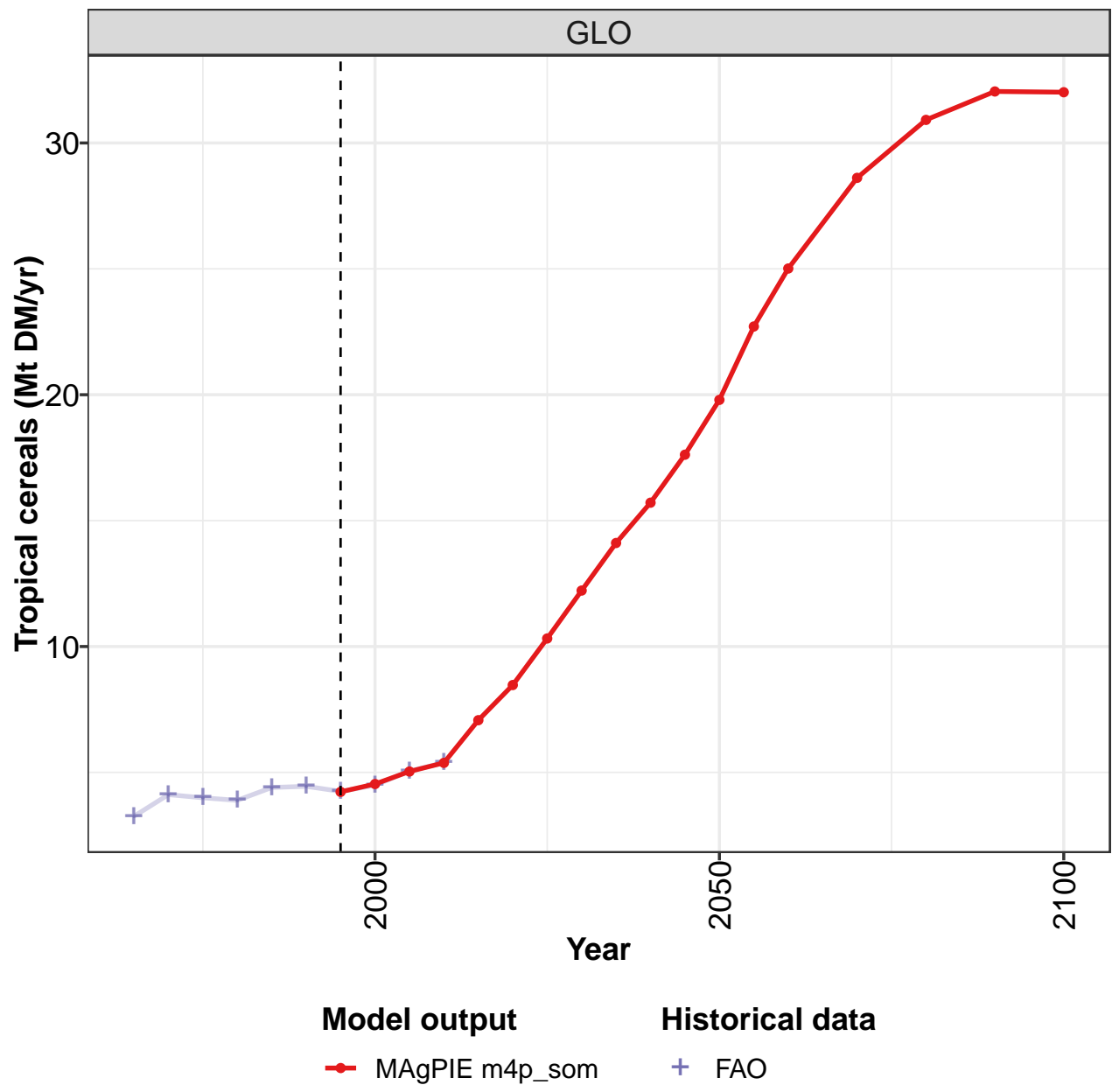
Table 20: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	14.9	20.7	19.5	27.5	30.7	37.2	25.4	24.8	25.7	28.2
CAZ	0.2	0.2	0.3	0.2	0.4	0.3	0.3	0.3	0.4	0.3
CHA	2.3	2.4	3.2	3.5	4.6	5.9	6.8	5.3	3.7	2.8
EUR	3.0	3.7	4.0	4.8	5.4	5.4	4.2	4.2	4.0	4.2
IND	0.4	0.6	0.7	0.9	1.2	1.3	1.8	2.0	2.5	4.4
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.2
LAM	0.8	0.8	0.9	1.1	1.6	1.2	1.3	1.9	2.1	2.6
MEA	1.0	1.2	1.7	2.1	2.7	3.1	3.4	3.7	4.6	6.0
NEU	0.8	0.8	1.5	2.8	3.2	4.5	3.0	3.1	3.4	2.9
OAS	0.5	0.6	0.8	0.8	0.8	0.9	0.9	1.1	1.6	1.7
REF	5.7	10.1	6.0	10.9	10.4	13.9	3.1	2.3	2.5	2.2
SSA	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.5	0.8	1.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 21: FAO — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Temperate cereals (Mt DM/yr)

3.1.5 Cereals—Tropical cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

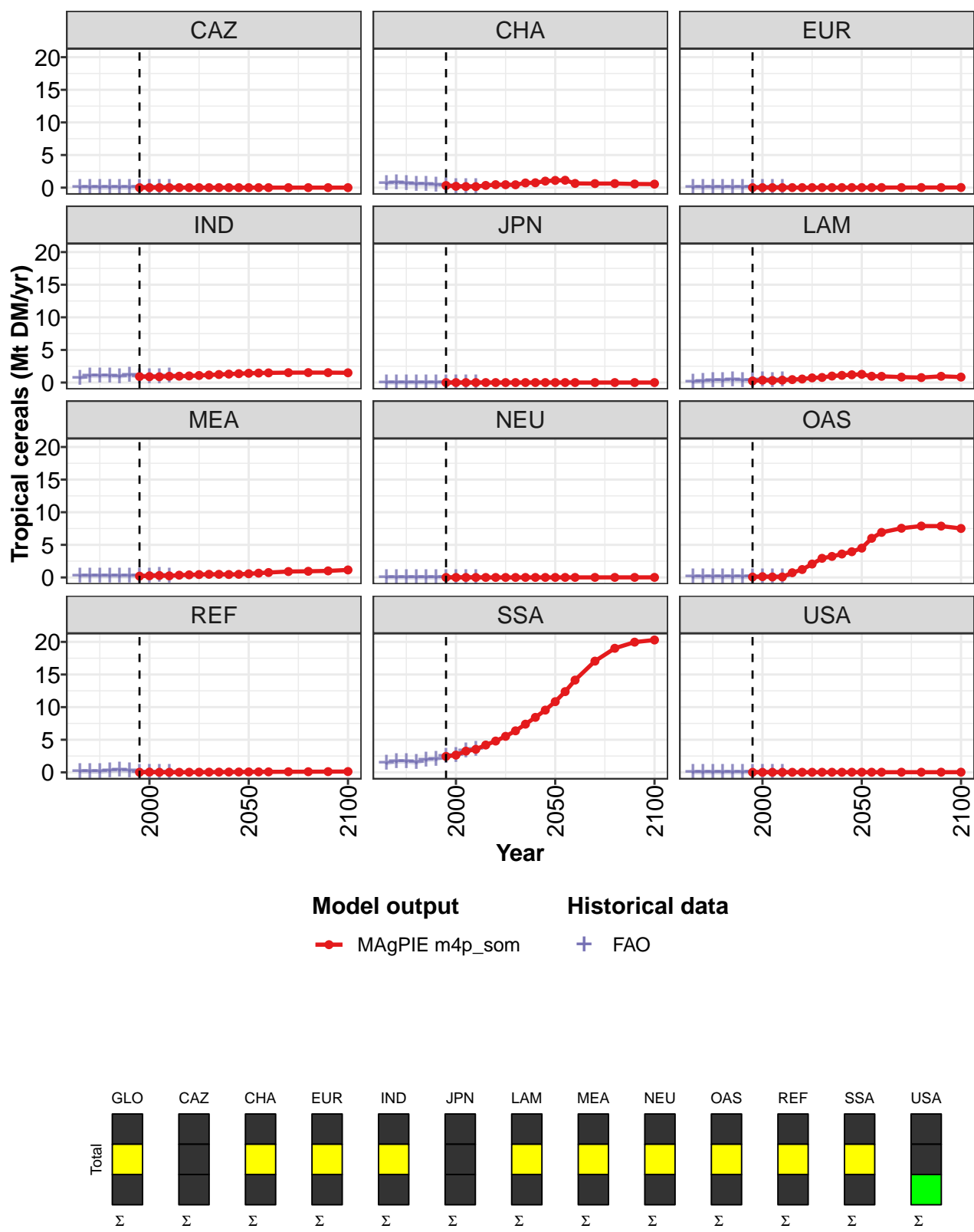


Figure 7: MAGPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Tropical cereals (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	4.2	4.5	5.0	5.4	7.1	8.5	10.3	12.2	14.1	15.7	17.6
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.3	0.2	0.2	0.2	0.3	0.5	0.4	0.4	0.7	0.7	1.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.9	0.9	0.9	1.0	1.0	1.0	1.1	1.2	1.2	1.3	1.4
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.2	0.4	0.3	0.4	0.5	0.5	0.7	0.8	1.0	1.1	1.2
MEA	0.2	0.3	0.3	0.2	0.4	0.4	0.4	0.5	0.5	0.5	0.5
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.1	0.1	0.1	0.1	0.7	1.2	2.1	2.9	3.2	3.6	3.9
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
SSA	2.4	2.6	3.3	3.5	4.2	4.8	5.5	6.4	7.4	8.4	9.5
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 22: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	19.8	22.7	25.0	28.6	30.9	32.0	32.0
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	1.1	1.1	0.6	0.6	0.6	0.6	0.5
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	1.4	1.5	1.5	1.5	1.5	1.5	1.5
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.3	1.0	1.0	0.8	0.8	1.0	0.8
MEA	0.6	0.7	0.8	0.9	0.9	1.0	1.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	4.5	6.0	6.9	7.5	7.9	7.9	7.5
REF	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SSA	10.8	12.4	14.1	17.0	19.0	20.0	20.3
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

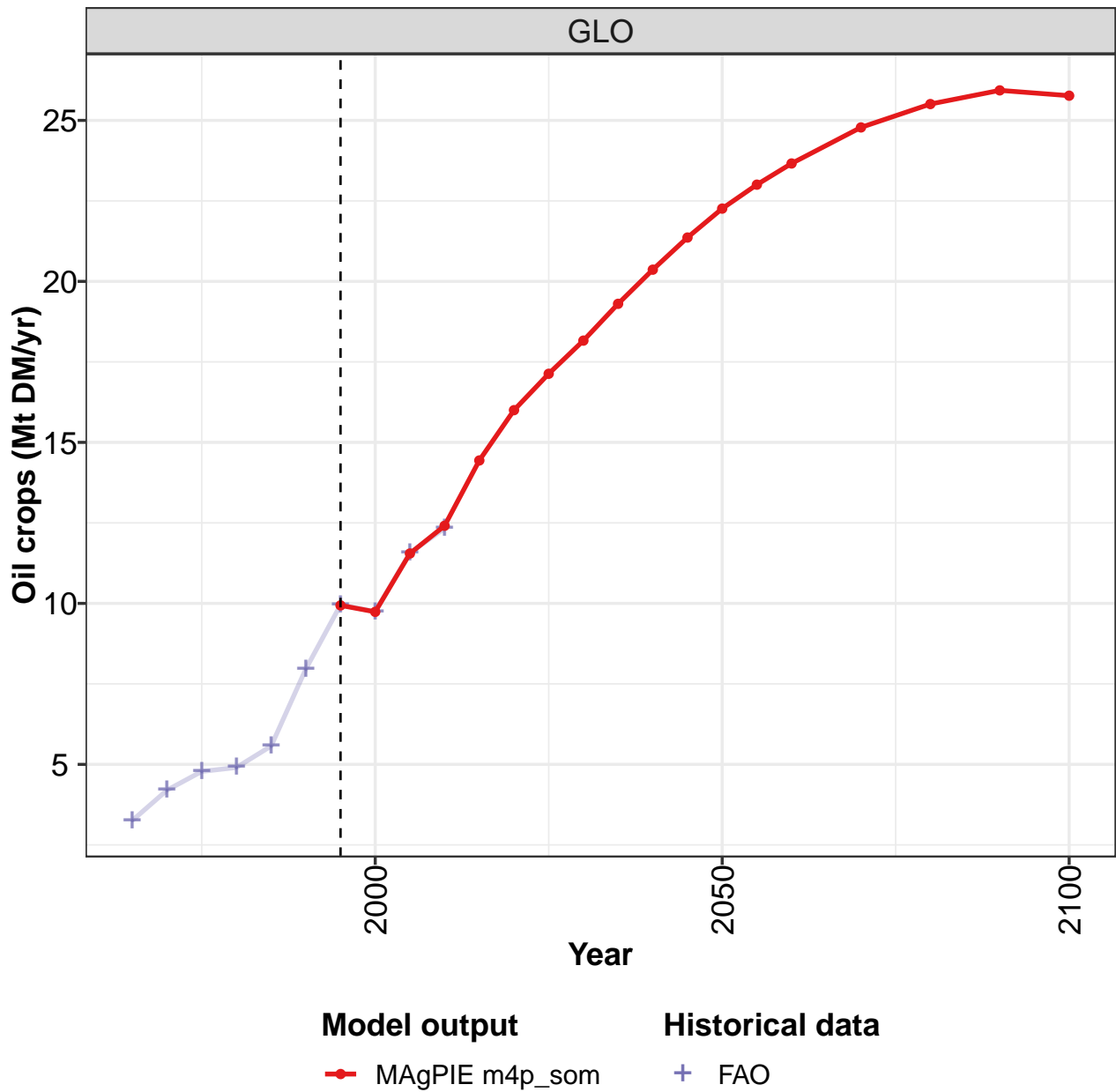
Table 23: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3.26	4.12	3.99	3.89	4.40	4.45	4.25	4.49	5.05	5.39
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.61	0.78	0.63	0.53	0.52	0.42	0.32	0.20	0.17	0.16
EUR	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.00
IND	0.72	1.02	0.99	1.01	0.93	1.15	0.92	0.89	0.89	0.97
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.07	0.17	0.27	0.30	0.42	0.31	0.27	0.39	0.32	0.37
MEA	0.25	0.27	0.27	0.25	0.23	0.26	0.20	0.23	0.30	0.25
NEU	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.05	0.06	0.06	0.05	0.07	0.06	0.06	0.07	0.07	0.08
REF	0.16	0.15	0.10	0.26	0.33	0.25	0.02	0.03	0.02	0.01
SSA	1.39	1.66	1.66	1.49	1.90	1.99	2.44	2.65	3.27	3.54
USA	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01

Table 24: FAO — Demand—Agricultural Supply Chain Loss—Crops—Cereals—Tropical cereals (Mt DM/yr)

## 3.1.6 Oil crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

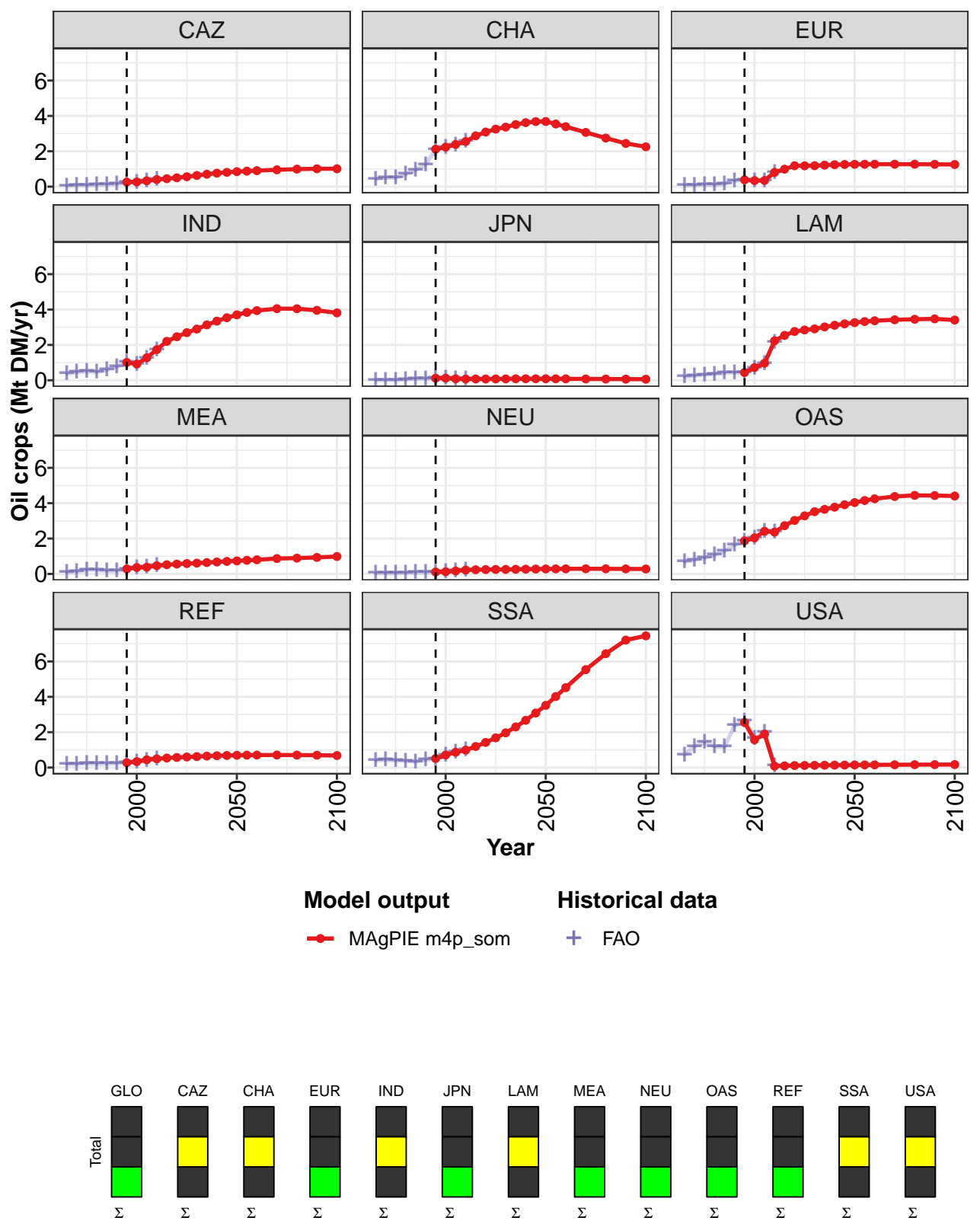


Figure 8: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Oil crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	9.9	9.7	11.5	12.4	14.4	16.0	17.1	18.2	19.3	20.4	21.4
CAZ	0.3	0.3	0.3	0.4	0.4	0.5	0.6	0.6	0.7	0.8	0.8
CHA	2.1	2.2	2.4	2.6	2.9	3.1	3.3	3.4	3.5	3.6	3.7
EUR	0.4	0.3	0.3	0.8	1.0	1.2	1.2	1.2	1.2	1.2	1.3
IND	1.0	0.9	1.3	1.7	2.2	2.5	2.7	2.9	3.1	3.3	3.5
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.4	0.7	1.0	2.2	2.5	2.8	2.8	2.9	3.0	3.1	3.2
MEA	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.7
NEU	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
OAS	1.9	2.0	2.4	2.4	2.7	3.0	3.3	3.5	3.7	3.8	3.9
REF	0.3	0.3	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.7
SSA	0.5	0.7	0.9	1.0	1.2	1.4	1.7	2.0	2.3	2.7	3.1
USA	2.6	1.6	1.9	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Table 25: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Oil crops (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	22.3	23.0	23.7	24.8	25.5	25.9	25.8
CAZ	0.8	0.9	0.9	1.0	1.0	1.0	1.0
CHA	3.7	3.5	3.4	3.1	2.7	2.4	2.3
EUR	1.3	1.3	1.3	1.3	1.3	1.3	1.3
IND	3.7	3.8	3.9	4.1	4.0	4.0	3.8
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	3.3	3.3	3.4	3.4	3.4	3.5	3.4
MEA	0.7	0.8	0.8	0.9	0.9	0.9	1.0
NEU	0.3	0.3	0.3	0.3	0.3	0.3	0.3
OAS	4.0	4.2	4.2	4.4	4.4	4.4	4.4
REF	0.7	0.7	0.7	0.7	0.7	0.7	0.7
SSA	3.5	4.0	4.5	5.5	6.4	7.2	7.4
USA	0.1	0.1	0.2	0.2	0.2	0.2	0.2

Table 26: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Oil crops (Mt DM/yr)  
[PART 2/2]

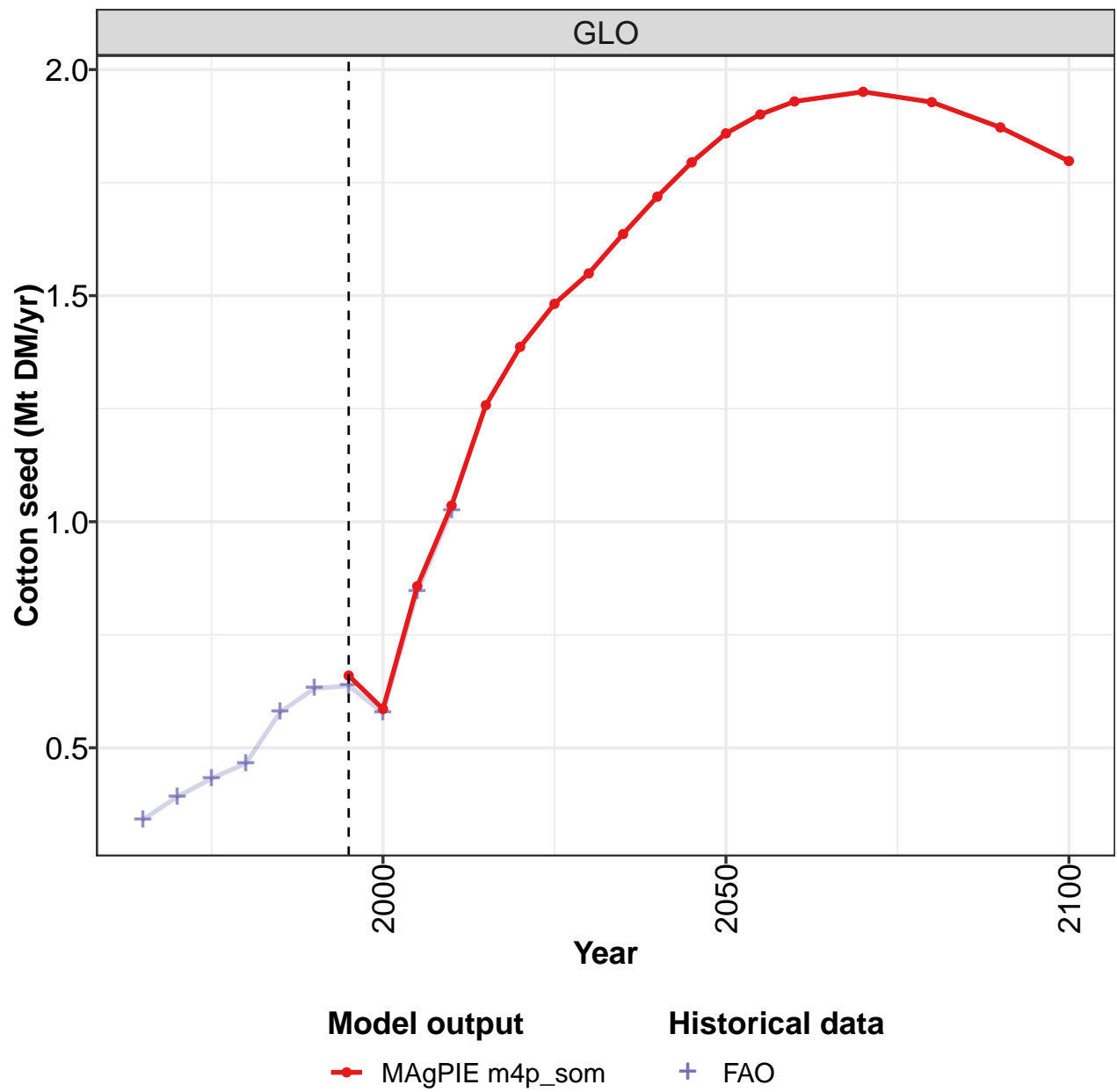
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3.3	4.2	4.8	4.9	5.6	8.0	10.0	9.7	11.6	12.3
CAZ	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.4
CHA	0.4	0.5	0.5	0.7	0.9	1.3	2.1	2.2	2.4	2.6
EUR	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.3	0.3	0.8
IND	0.4	0.5	0.5	0.5	0.6	0.8	1.0	0.9	1.3	1.7
JPN	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.7	1.0	2.1
MEA	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.5
NEU	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2
OAS	0.7	0.8	0.9	1.1	1.3	1.6	1.9	2.0	2.4	2.4
REF	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.5
SSA	0.4	0.4	0.4	0.4	0.3	0.4	0.5	0.7	0.9	1.0
USA	0.7	1.2	1.4	1.2	1.2	2.4	2.7	1.7	2.0	0.1

Table 27: FAO — Demand—Agricultural Supply Chain Loss—Crops—Oil crops (Mt DM/yr)



3.1.7
Oil crops—Cotton seed

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

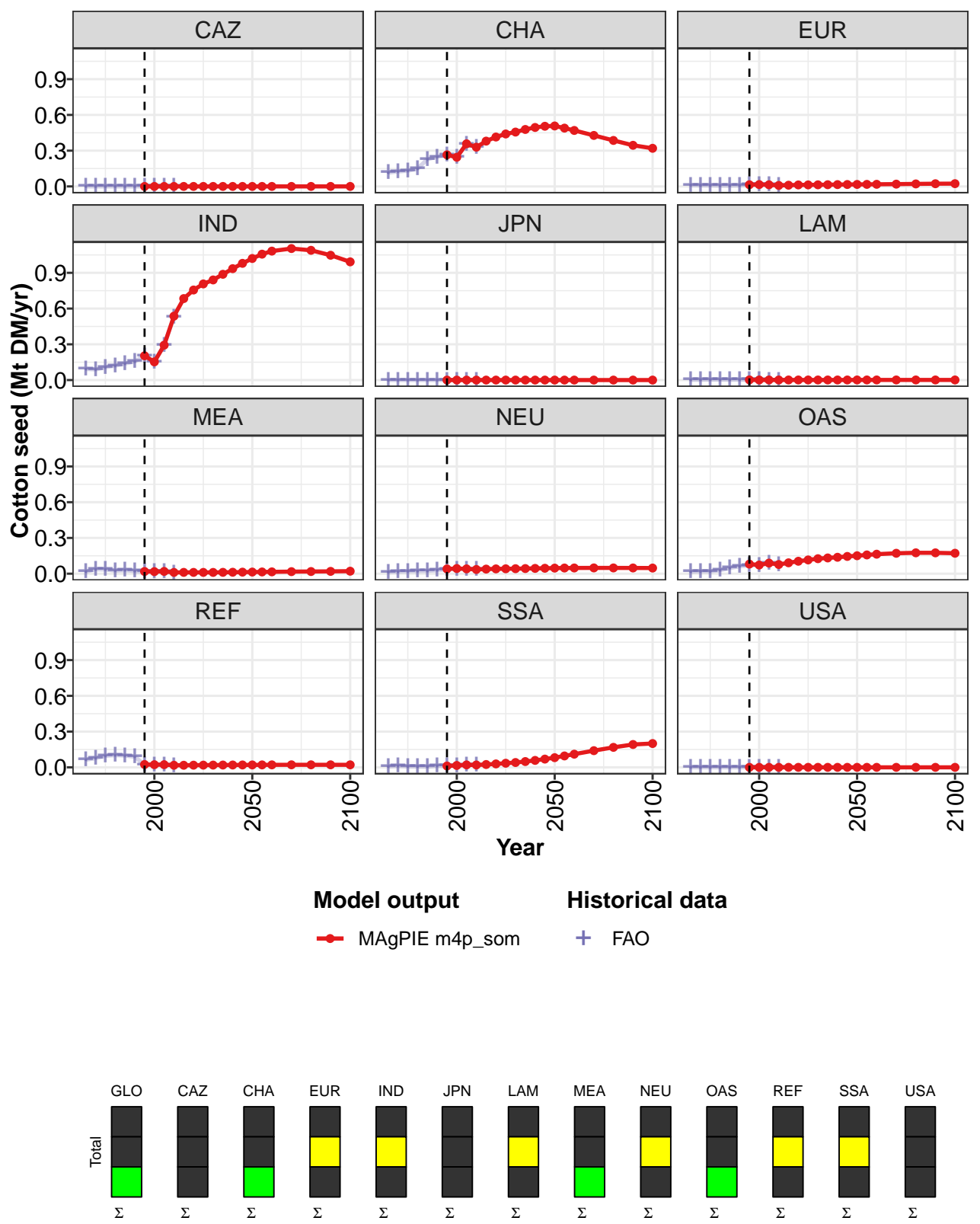


Figure 9: MAGPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Cotton seed (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.66	0.59	0.86	1.04	1.26	1.39	1.48	1.55	1.64	1.72	1.79
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.27	0.24	0.36	0.33	0.38	0.41	0.44	0.46	0.48	0.49	0.50
EUR	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
IND	0.20	0.15	0.29	0.54	0.68	0.76	0.81	0.84	0.89	0.93	0.98
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NEU	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05
OAS	0.08	0.07	0.09	0.08	0.09	0.10	0.12	0.13	0.13	0.14	0.15
REF	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
SSA	0.01	0.02	0.02	0.02	0.02	0.03	0.03	0.04	0.05	0.06	0.07
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 28: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.86	1.90	1.93	1.95	1.93	1.87	1.80
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.51	0.49	0.47	0.43	0.39	0.35	0.32
EUR	0.02	0.02	0.02	0.02	0.02	0.02	0.02
IND	1.02	1.06	1.08	1.10	1.09	1.05	0.99
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.01	0.01	0.02	0.02	0.02	0.02	0.02
NEU	0.05	0.05	0.05	0.05	0.05	0.05	0.05
OAS	0.15	0.16	0.16	0.17	0.18	0.18	0.17
REF	0.02	0.02	0.02	0.02	0.02	0.02	0.02
SSA	0.08	0.10	0.11	0.14	0.17	0.19	0.20
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00

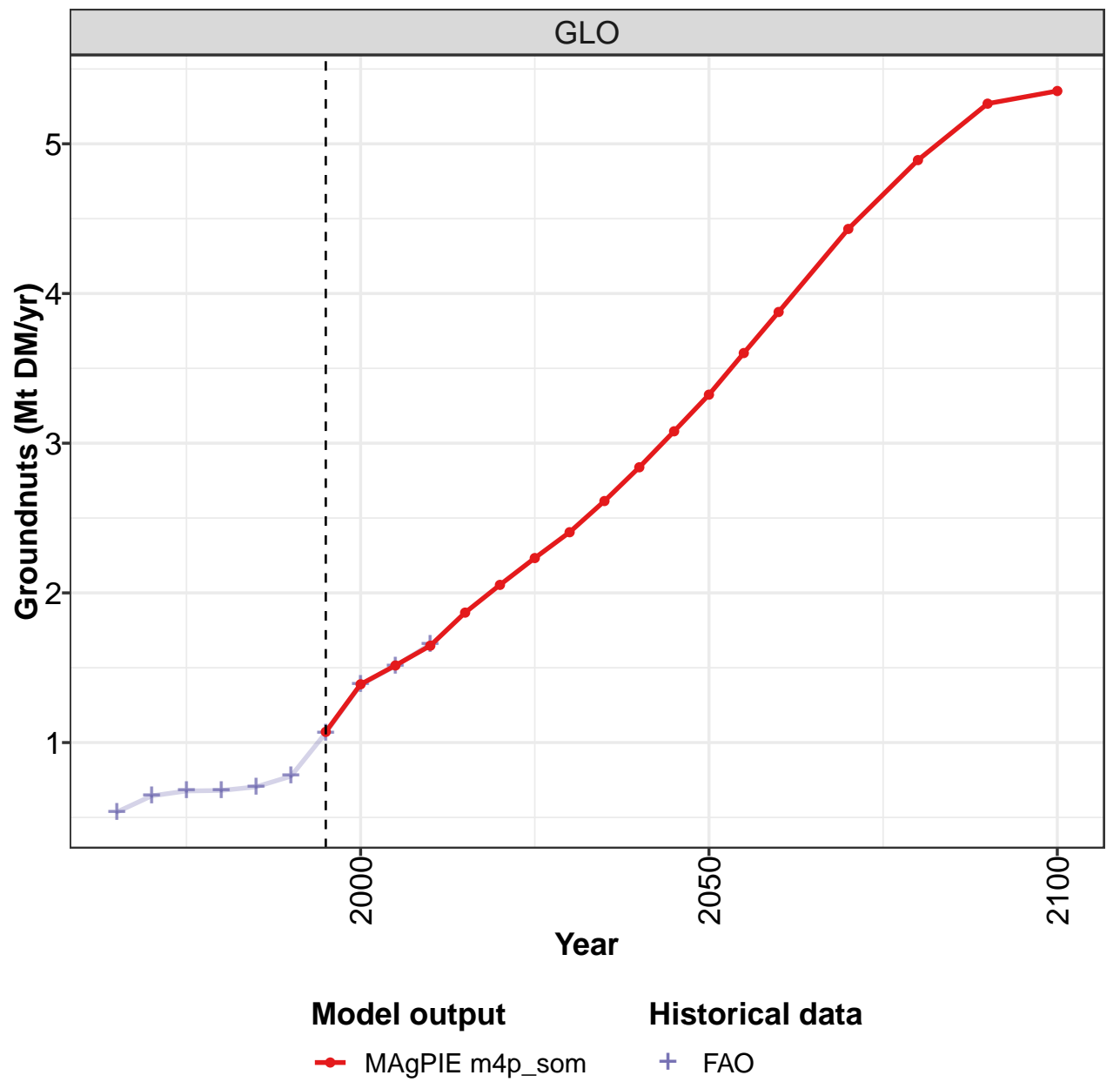
Table 29: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.34	0.39	0.43	0.47	0.58	0.63	0.64	0.58	0.85	1.02
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.12	0.13	0.13	0.15	0.23	0.25	0.26	0.24	0.36	0.33
EUR	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01
IND	0.09	0.09	0.11	0.12	0.14	0.16	0.20	0.15	0.29	0.53
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.02	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.01
NEU	0.01	0.02	0.02	0.02	0.02	0.03	0.04	0.04	0.04	0.04
OAS	0.02	0.02	0.02	0.03	0.05	0.06	0.07	0.07	0.09	0.08
REF	0.06	0.08	0.10	0.10	0.10	0.09	0.02	0.02	0.02	0.02
SSA	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 30: FAO — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Cotton seed (Mt DM/yr)

3.1.8 Oil crops—Groundnuts

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
 replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

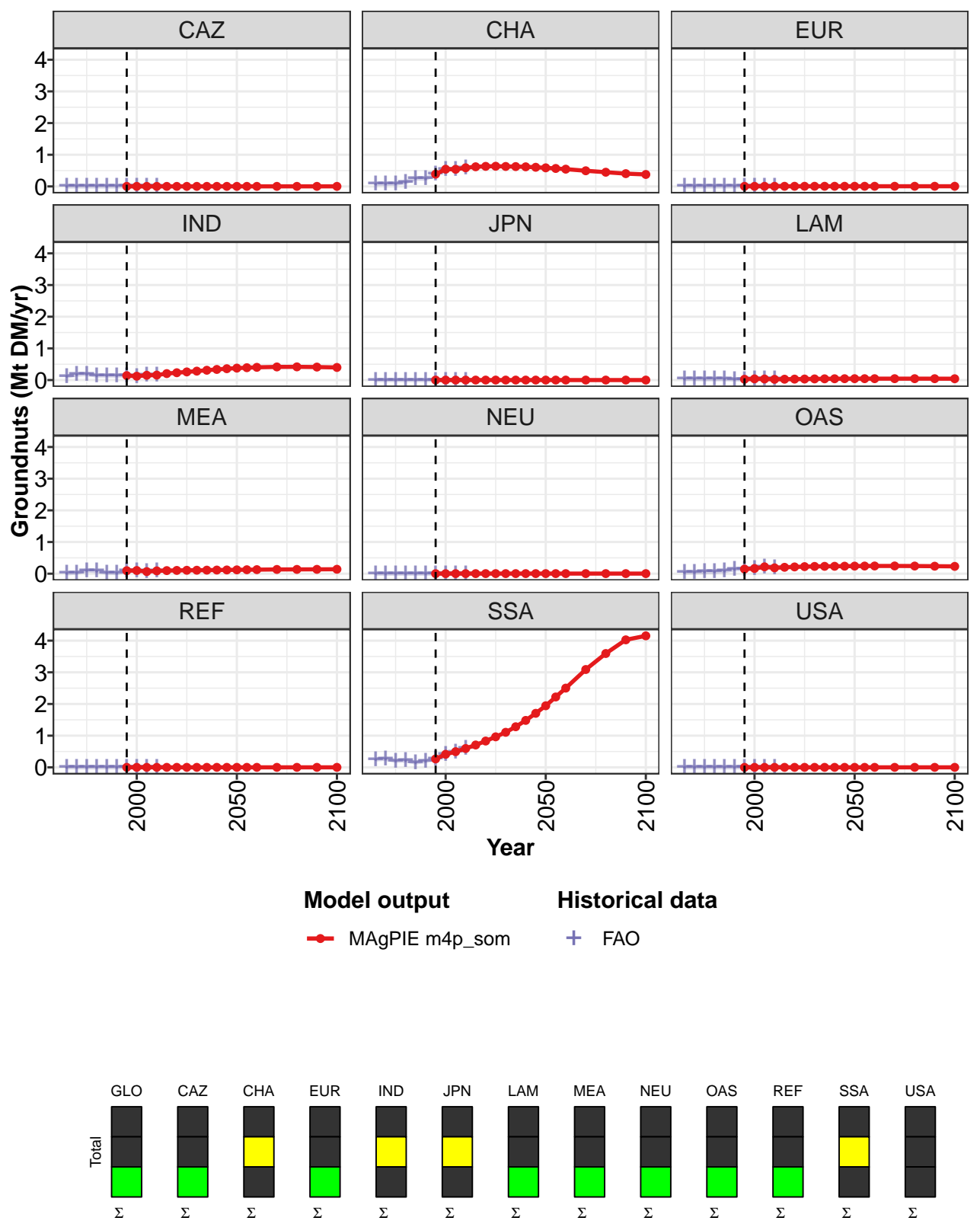


Figure 10: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Groundnuts (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.07	1.39	1.52	1.65	1.87	2.05	2.23	2.41	2.61	2.84	3.08
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.39	0.54	0.54	0.59	0.62	0.63	0.64	0.63	0.63	0.62	0.60
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
IND	0.14	0.12	0.15	0.16	0.20	0.23	0.26	0.28	0.31	0.34	0.36
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.03	0.04	0.03	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.04
MEA	0.10	0.10	0.07	0.09	0.10	0.10	0.11	0.11	0.11	0.12	0.12
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.15	0.17	0.22	0.19	0.20	0.21	0.22	0.23	0.23	0.23	0.24
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.27	0.41	0.49	0.59	0.71	0.83	0.96	1.11	1.28	1.48	1.71
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 31: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	3.32	3.60	3.88	4.43	4.89	5.27	5.35
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.59	0.57	0.55	0.49	0.45	0.40	0.38
EUR	0.01	0.01	0.01	0.01	0.01	0.01	0.01
IND	0.38	0.39	0.40	0.41	0.42	0.41	0.40
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.04	0.04	0.04	0.04	0.04	0.04	0.04
MEA	0.12	0.13	0.13	0.13	0.14	0.14	0.14
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.24	0.24	0.24	0.24	0.24	0.24	0.23
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	1.94	2.22	2.50	3.09	3.59	4.03	4.15
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00

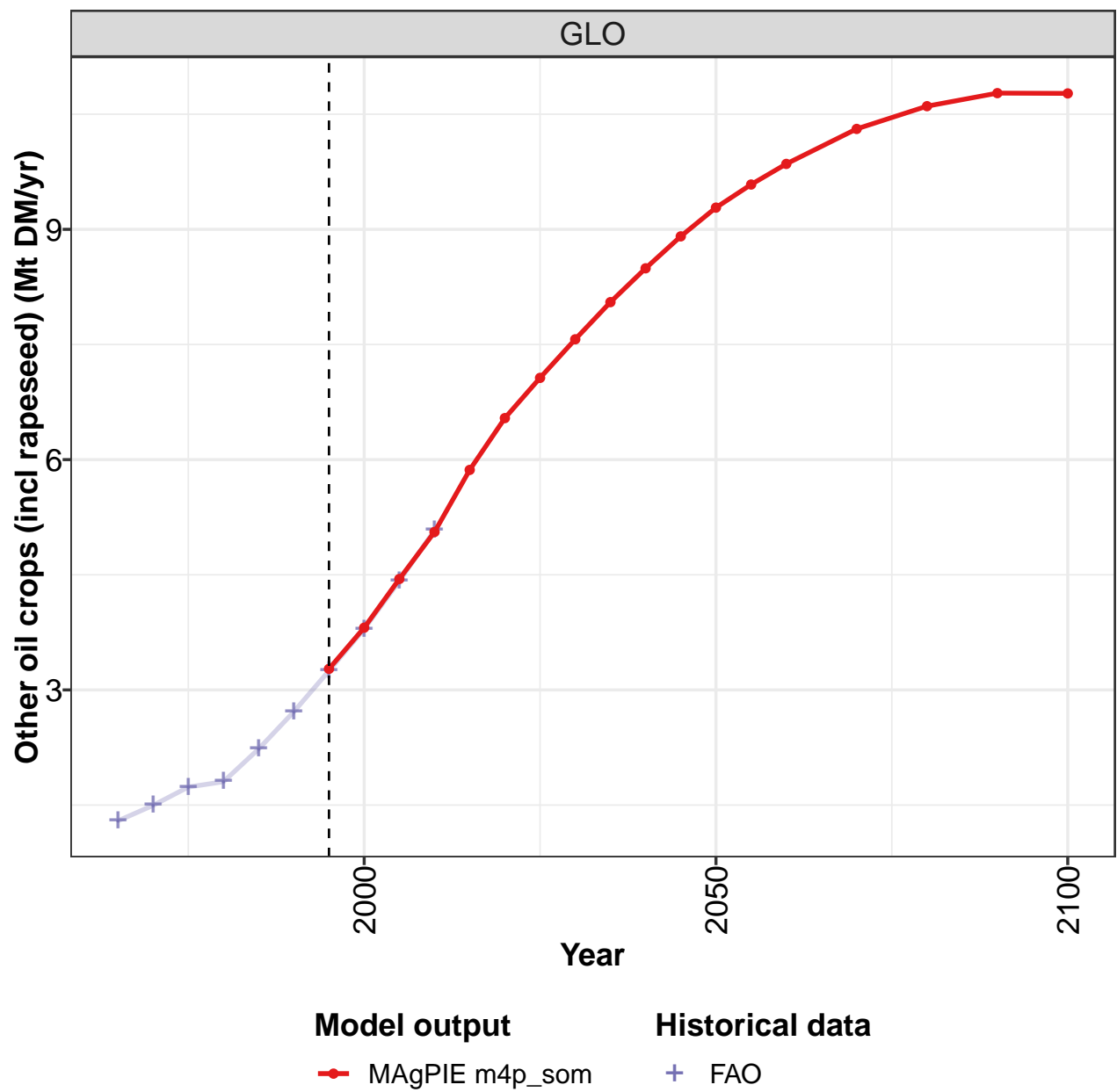
Table 32: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.54	0.64	0.68	0.68	0.70	0.78	1.07	1.39	1.51	1.66
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.07	0.08	0.09	0.14	0.25	0.24	0.39	0.54	0.54	0.59
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.12	0.17	0.19	0.14	0.14	0.14	0.14	0.12	0.15	0.16
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.04	0.03	0.04
MEA	0.01	0.03	0.10	0.08	0.03	0.02	0.09	0.10	0.07	0.09
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.04	0.05	0.06	0.06	0.08	0.14	0.15	0.17	0.22	0.19
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.25	0.27	0.20	0.22	0.15	0.20	0.26	0.41	0.49	0.59
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 33: FAO — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Groundnuts (Mt DM/yr)

3.1.9 Oil crops—Other oil crops (incl rapeseed)

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

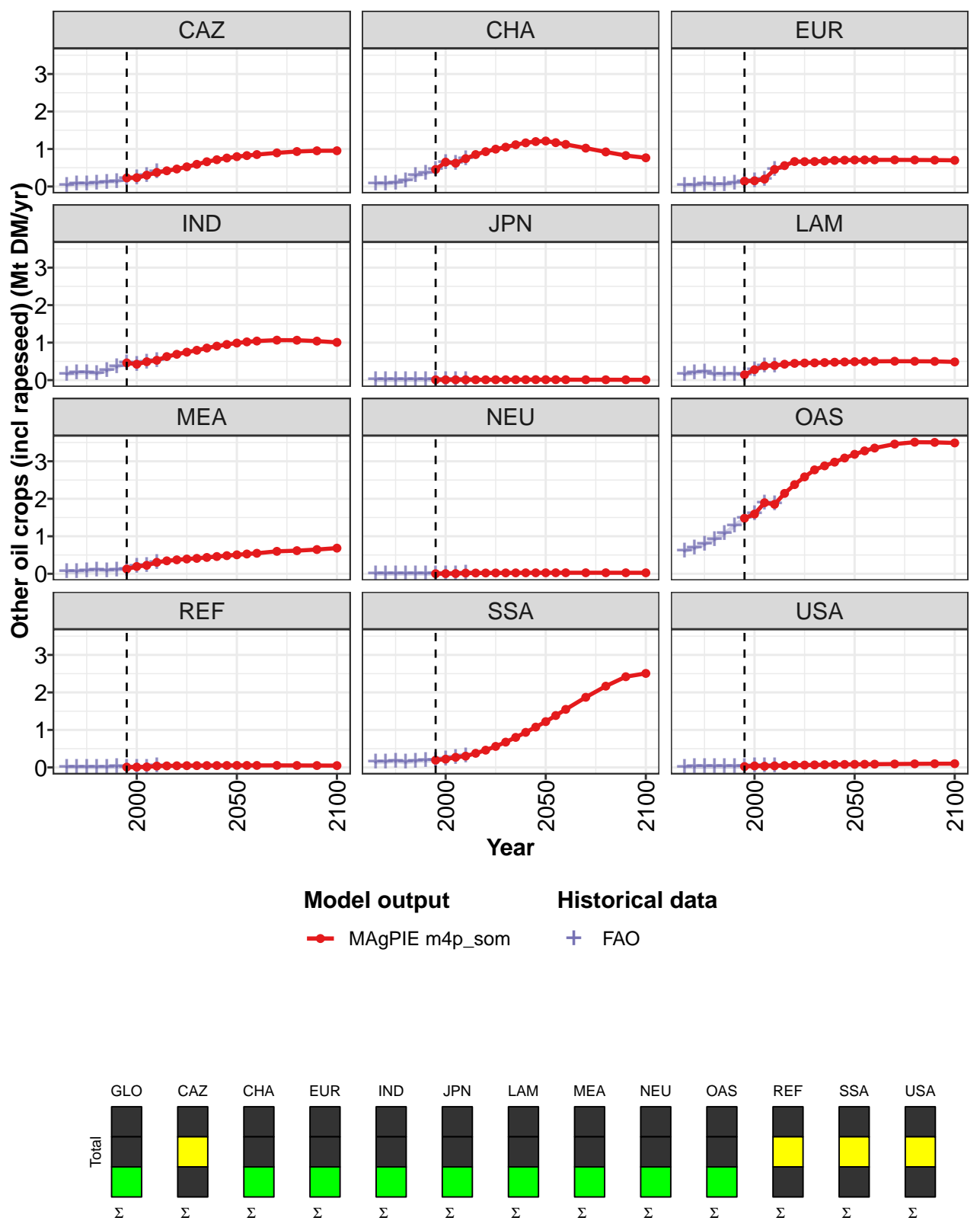


Figure 11: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	3.3	3.8	4.4	5.1	5.9	6.5	7.1	7.6	8.1	8.5	8.9
CAZ	0.2	0.2	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.8
CHA	0.5	0.7	0.6	0.7	0.9	0.9	1.0	1.0	1.1	1.2	1.2
EUR	0.1	0.2	0.2	0.5	0.6	0.7	0.7	0.7	0.7	0.7	0.7
IND	0.5	0.4	0.5	0.5	0.6	0.7	0.7	0.8	0.9	0.9	1.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.1	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5
MEA	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.5	1.6	1.9	1.9	2.1	2.4	2.6	2.8	2.9	3.0	3.1
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
SSA	0.2	0.2	0.3	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.1
USA	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Table 34: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	9.3	9.6	9.9	10.3	10.6	10.8	10.8
CAZ	0.8	0.8	0.9	0.9	0.9	1.0	1.0
CHA	1.2	1.2	1.1	1.0	0.9	0.8	0.8
EUR	0.7	0.7	0.7	0.7	0.7	0.7	0.7
IND	1.0	1.0	1.0	1.1	1.1	1.0	1.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.5	0.5	0.5	0.5	0.5	0.5	0.5
MEA	0.5	0.5	0.5	0.6	0.6	0.6	0.7
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	3.2	3.3	3.4	3.5	3.5	3.5	3.5
REF	0.1	0.1	0.1	0.1	0.1	0.1	0.0
SSA	1.2	1.4	1.5	1.9	2.2	2.4	2.5
USA	0.1	0.1	0.1	0.1	0.1	0.1	0.1

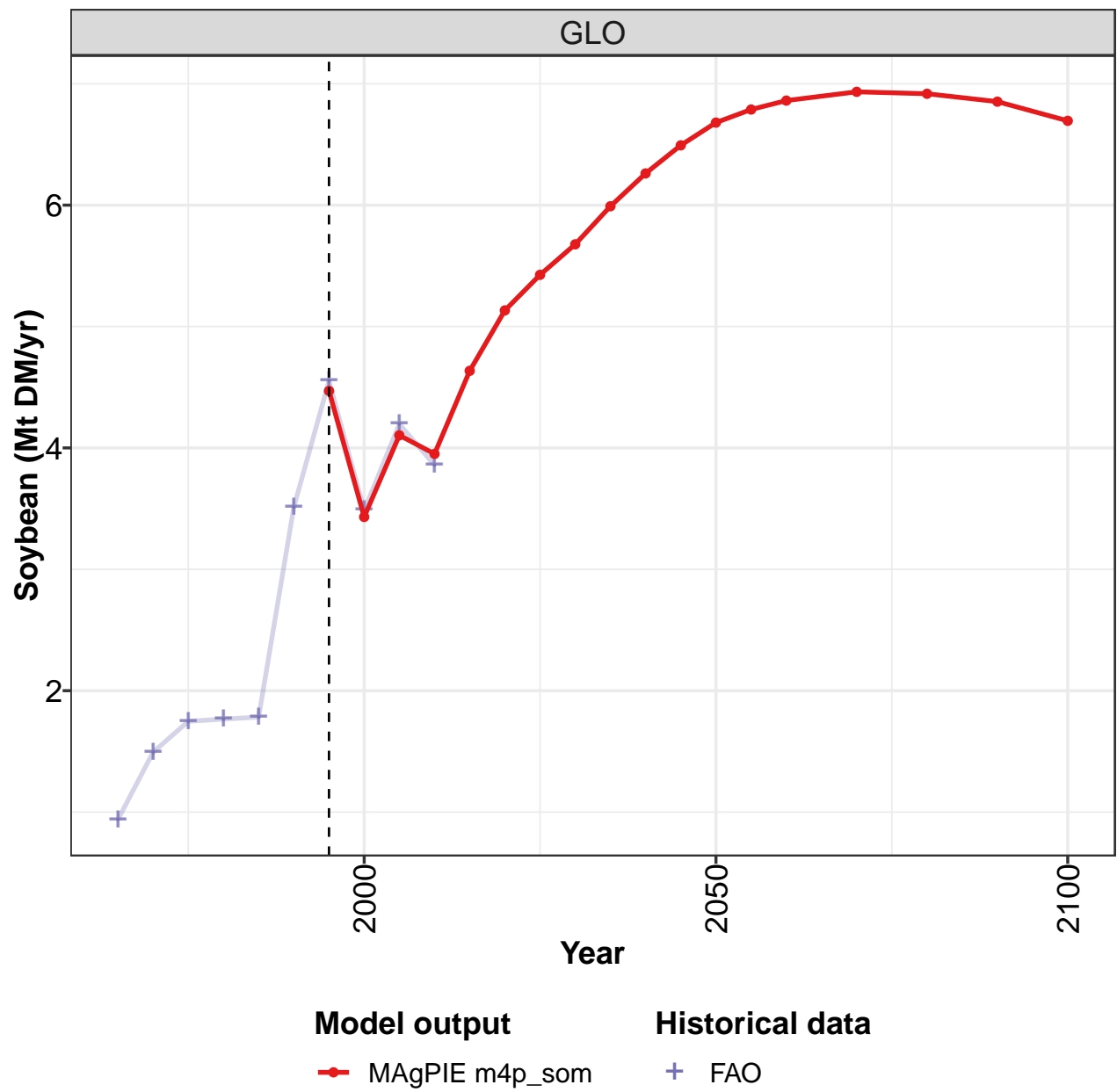
Table 35: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.29	1.50	1.73	1.80	2.23	2.72	3.25	3.79	4.42	5.08
CAZ	0.03	0.08	0.06	0.09	0.12	0.13	0.21	0.23	0.29	0.40
CHA	0.08	0.08	0.10	0.15	0.29	0.35	0.45	0.65	0.62	0.74
EUR	0.03	0.04	0.08	0.04	0.06	0.10	0.14	0.15	0.19	0.45
IND	0.16	0.19	0.21	0.18	0.25	0.35	0.46	0.42	0.49	0.53
JPN	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
LAM	0.15	0.19	0.23	0.15	0.15	0.17	0.14	0.27	0.38	0.38
MEA	0.06	0.05	0.08	0.10	0.08	0.11	0.13	0.19	0.22	0.31
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02
OAS	0.61	0.69	0.79	0.92	1.07	1.28	1.48	1.59	1.89	1.87
REF	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.04
SSA	0.14	0.15	0.17	0.14	0.17	0.18	0.19	0.22	0.27	0.30
USA	0.01	0.01	0.02	0.02	0.02	0.03	0.02	0.04	0.04	0.04

Table 36: FAO — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

3.1.10
Oil crops—Soybean

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

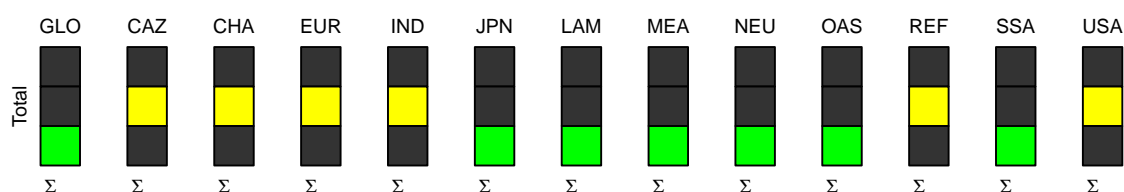
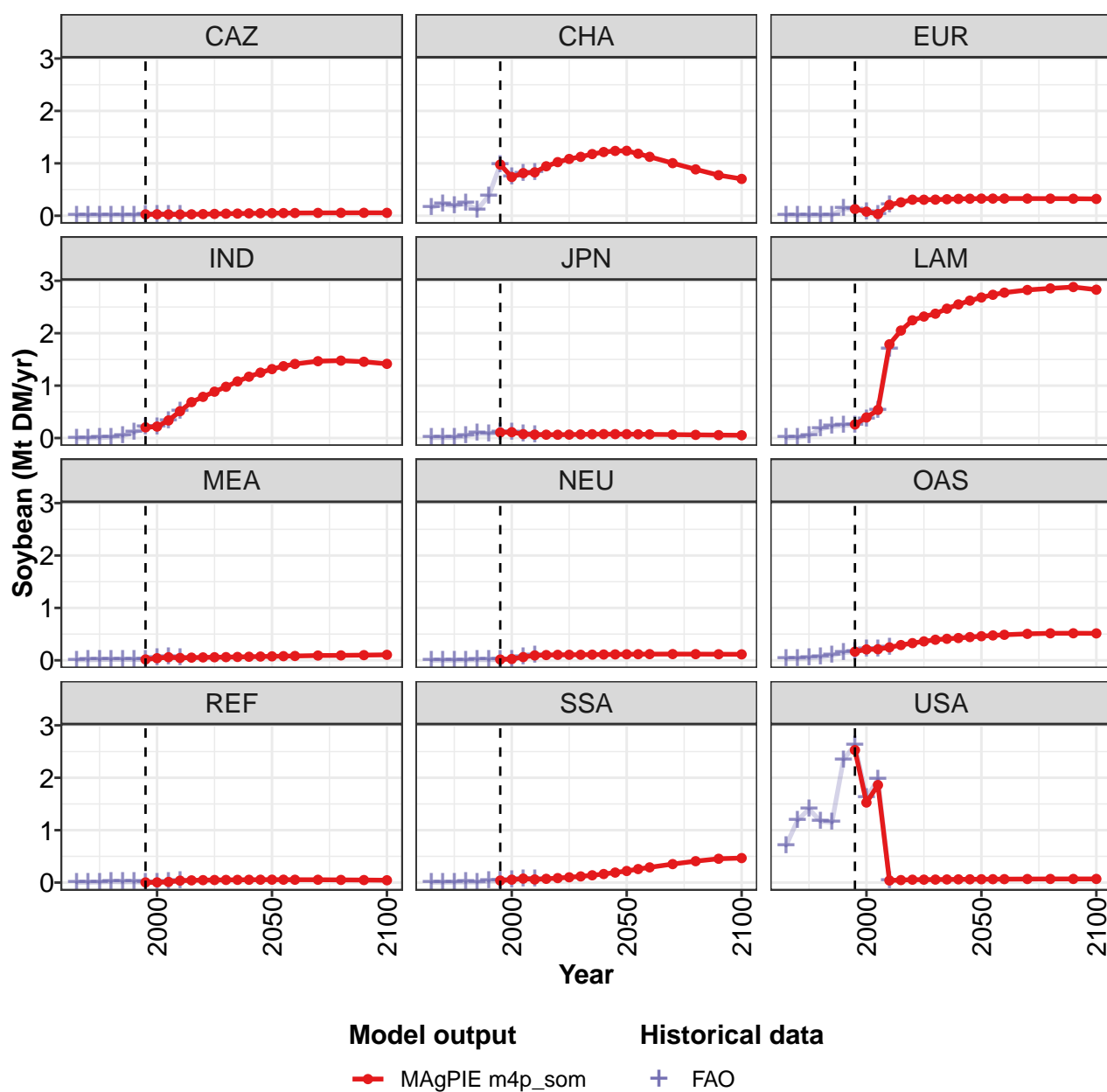


Figure 12: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Soybean (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	4.47	3.43	4.10	3.95	4.64	5.13	5.43	5.68	5.99	6.26	6.49
CAZ	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.05	0.05
CHA	0.98	0.74	0.81	0.83	0.94	1.02	1.08	1.12	1.18	1.22	1.24
EUR	0.13	0.08	0.03	0.21	0.26	0.31	0.31	0.31	0.32	0.32	0.33
IND	0.20	0.22	0.34	0.51	0.69	0.79	0.88	0.98	1.08	1.17	1.25
JPN	0.11	0.11	0.07	0.07	0.06	0.06	0.07	0.07	0.07	0.07	0.07
LAM	0.26	0.39	0.54	1.79	2.05	2.25	2.32	2.37	2.47	2.55	2.62
MEA	0.02	0.04	0.06	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.07
NEU	0.01	0.03	0.06	0.09	0.10	0.10	0.11	0.11	0.11	0.11	0.11
OAS	0.17	0.21	0.21	0.25	0.29	0.33	0.36	0.39	0.41	0.43	0.44
REF	0.00	0.00	0.01	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05
SSA	0.04	0.06	0.08	0.06	0.07	0.09	0.10	0.12	0.14	0.16	0.19
USA	2.53	1.53	1.86	0.04	0.05	0.06	0.06	0.06	0.06	0.06	0.06

Table 37: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Soybean (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	6.68	6.79	6.86	6.93	6.92	6.85	6.69
CAZ	0.05	0.05	0.05	0.05	0.06	0.06	0.06
CHA	1.24	1.18	1.12	1.00	0.89	0.77	0.70
EUR	0.33	0.33	0.33	0.33	0.33	0.33	0.32
IND	1.32	1.37	1.41	1.47	1.48	1.46	1.42
JPN	0.07	0.07	0.07	0.07	0.06	0.06	0.05
LAM	2.68	2.73	2.77	2.83	2.86	2.88	2.83
MEA	0.08	0.08	0.08	0.09	0.09	0.10	0.11
NEU	0.12	0.12	0.12	0.12	0.12	0.12	0.11
OAS	0.46	0.47	0.49	0.51	0.51	0.52	0.51
REF	0.06	0.06	0.05	0.05	0.05	0.05	0.04
SSA	0.22	0.26	0.29	0.35	0.41	0.45	0.47
USA	0.06	0.07	0.07	0.07	0.07	0.07	0.07

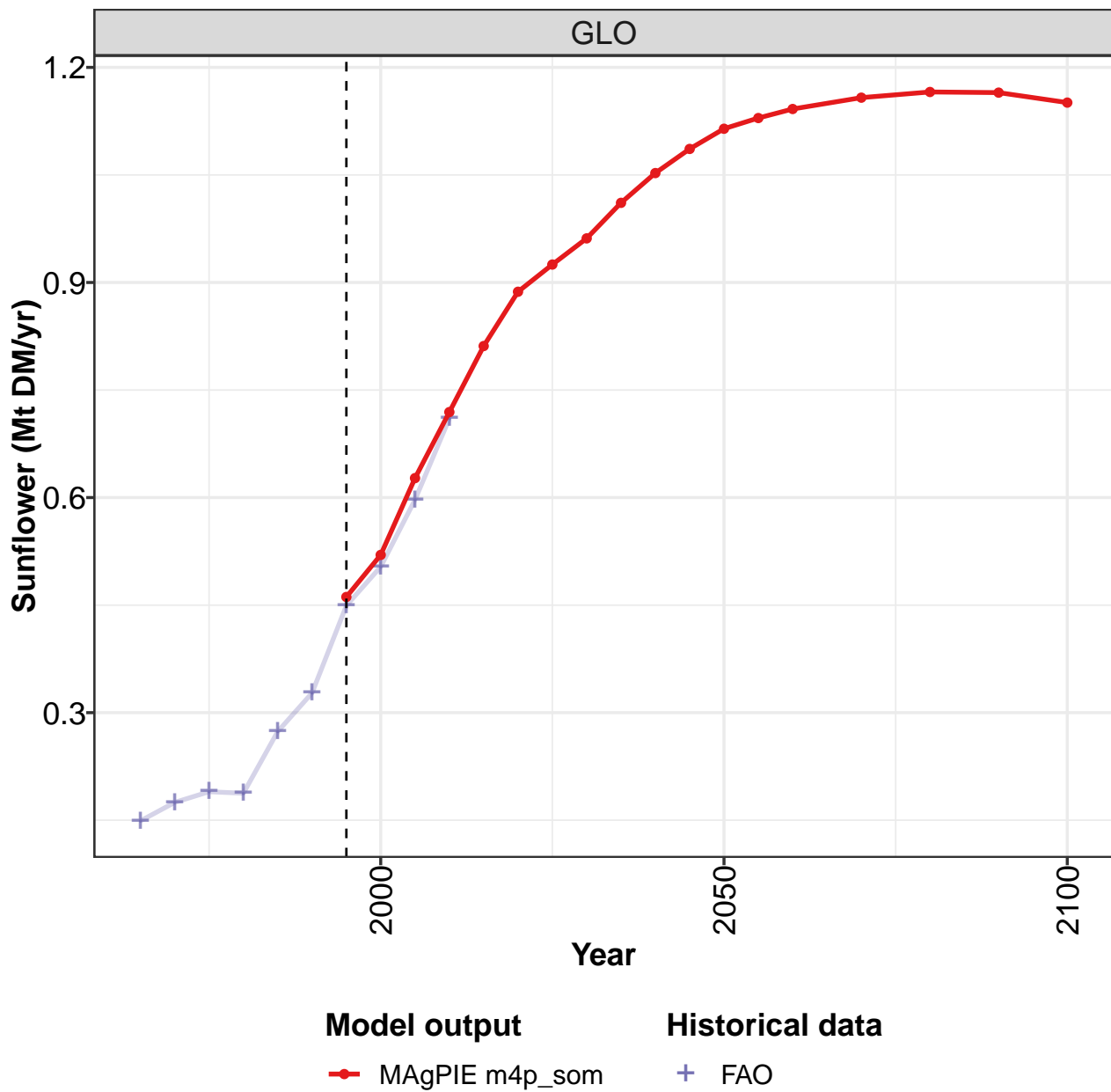
Table 38: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Soybean (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.94	1.49	1.75	1.77	1.78	3.51	4.55	3.49	4.20	3.86
CAZ	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.03	0.03	0.03
CHA	0.16	0.22	0.19	0.23	0.12	0.38	0.97	0.74	0.81	0.83
EUR	0.01	0.01	0.01	0.01	0.01	0.13	0.13	0.08	0.03	0.20
IND	0.00	0.00	0.00	0.02	0.04	0.10	0.20	0.22	0.33	0.51
JPN	0.01	0.01	0.01	0.04	0.09	0.08	0.11	0.11	0.07	0.06
LAM	0.00	0.01	0.05	0.17	0.22	0.24	0.25	0.37	0.53	1.70
MEA	0.01	0.01	0.01	0.02	0.02	0.01	0.02	0.04	0.06	0.05
NEU	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.06	0.09
OAS	0.03	0.04	0.04	0.06	0.09	0.15	0.17	0.21	0.21	0.25
REF	0.00	0.01	0.01	0.02	0.01	0.01	0.00	0.00	0.01	0.04
SSA	0.01	0.01	0.01	0.01	0.01	0.03	0.04	0.06	0.08	0.06
USA	0.70	1.18	1.40	1.17	1.15	2.34	2.63	1.61	1.97	0.04

Table 39: FAO — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Soybean (Mt DM/yr)

## 3.1.11 Oil crops—Sunflower

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

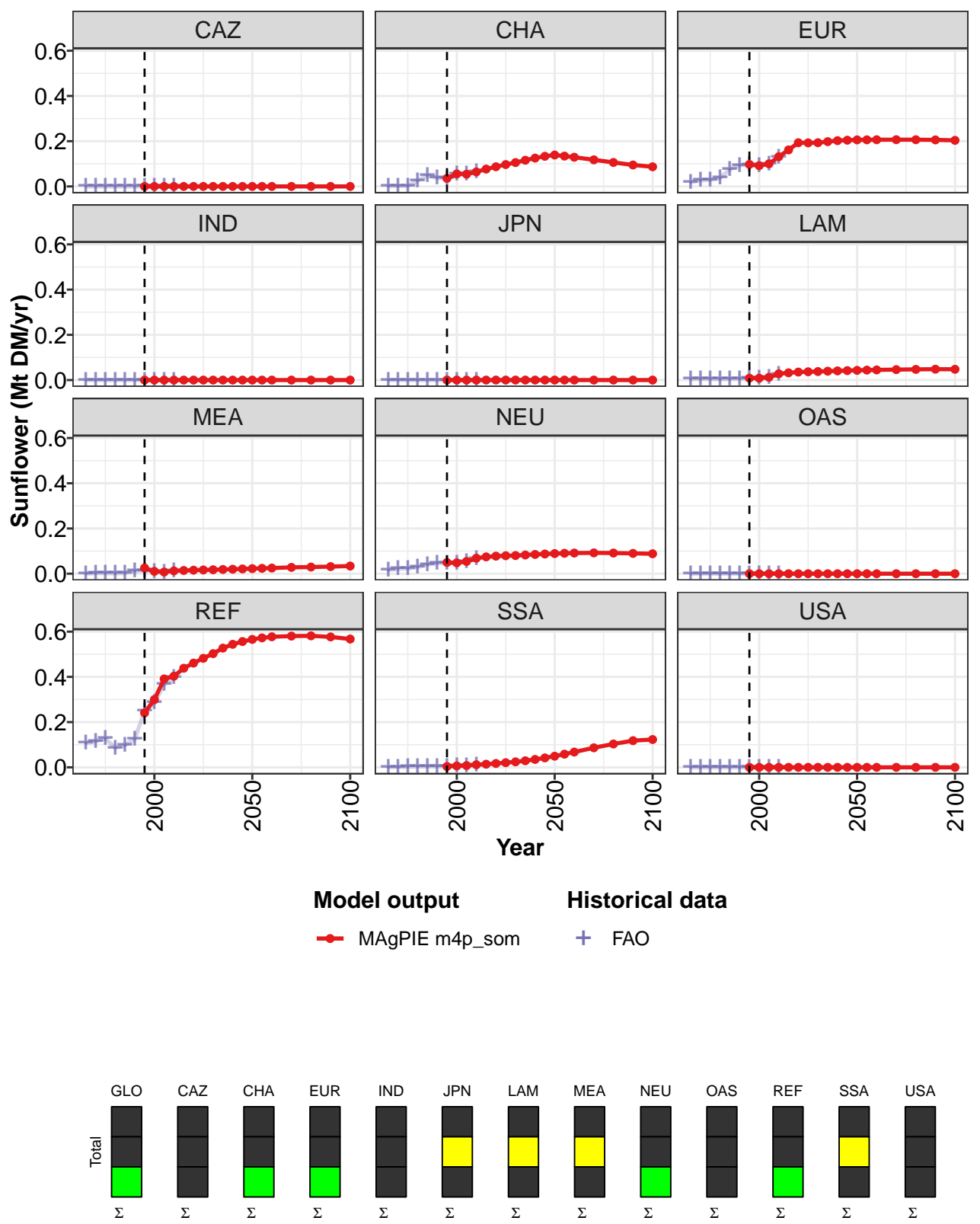


Figure 13: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Sunflower (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.46	0.52	0.63	0.72	0.81	0.89	0.93	0.96	1.01	1.05	1.09
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.04	0.06	0.05	0.06	0.08	0.09	0.10	0.11	0.12	0.13	0.13
EUR	0.10	0.09	0.10	0.13	0.16	0.19	0.19	0.19	0.20	0.20	0.20
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.01	0.01	0.01	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04
MEA	0.03	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02
NEU	0.05	0.05	0.05	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.09
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.24	0.30	0.39	0.40	0.44	0.46	0.48	0.50	0.53	0.54	0.56
SSA	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.04	0.04
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 40: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.11	1.13	1.14	1.16	1.17	1.16	1.15
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.14	0.13	0.13	0.12	0.11	0.09	0.09
EUR	0.21	0.21	0.21	0.21	0.21	0.21	0.20
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.04	0.04	0.04	0.05	0.05	0.05	0.05
MEA	0.02	0.02	0.02	0.03	0.03	0.03	0.03
NEU	0.09	0.09	0.09	0.09	0.09	0.09	0.09
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.57	0.57	0.58	0.58	0.58	0.58	0.57
SSA	0.05	0.06	0.07	0.09	0.10	0.12	0.12
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00

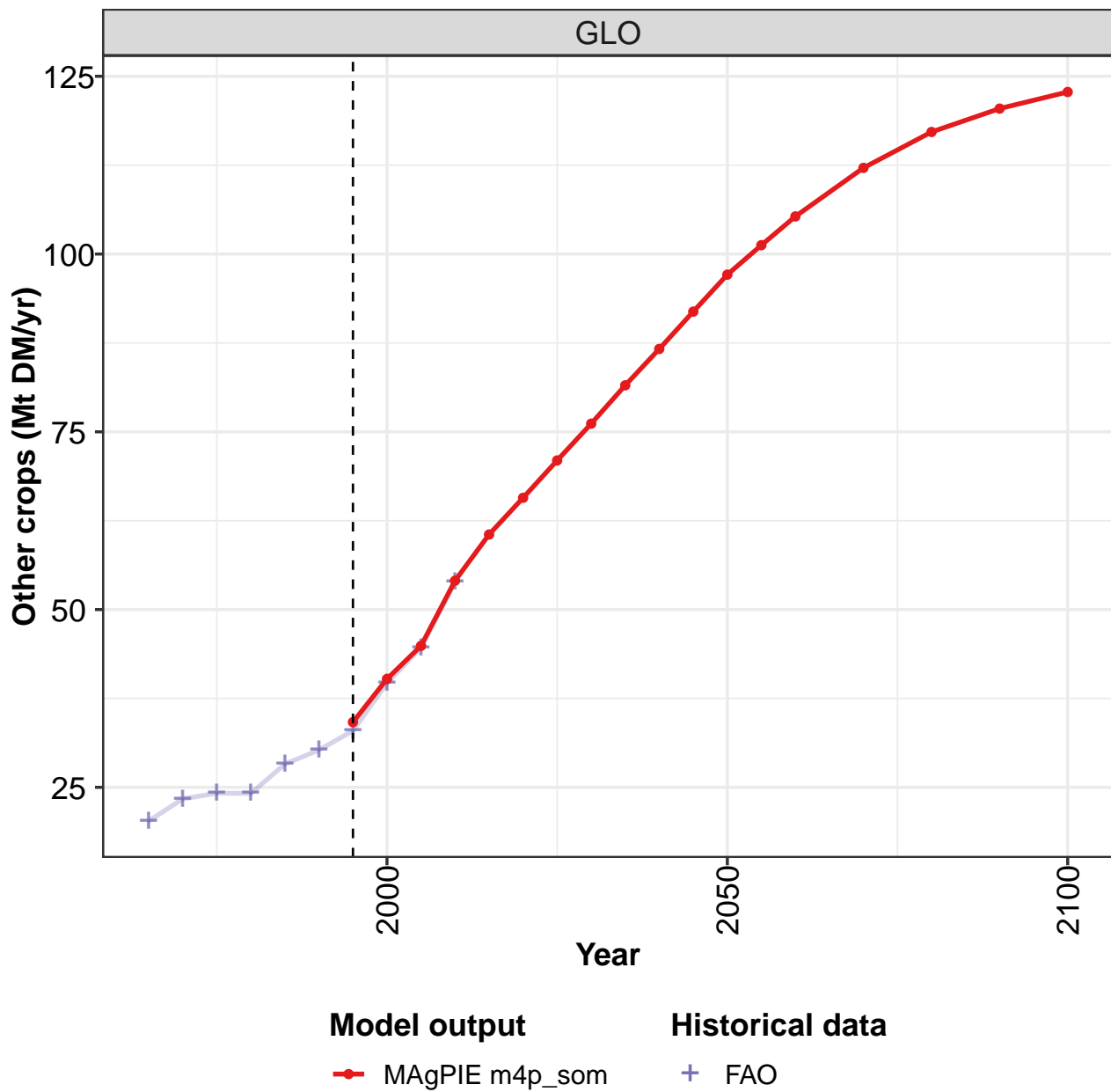
Table 41: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.149	0.175	0.190	0.188	0.274	0.328	0.449	0.503	0.597	0.710
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.002	0.002	0.002	0.025	0.048	0.037	0.035	0.055	0.054	0.064
EUR	0.018	0.027	0.028	0.038	0.075	0.094	0.096	0.092	0.098	0.129
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.005	0.006	0.005	0.004	0.005	0.006	0.008	0.008	0.012	0.026
MEA	0.000	0.003	0.002	0.002	0.003	0.012	0.013	0.010	0.007	0.013
NEU	0.016	0.022	0.022	0.029	0.040	0.047	0.045	0.047	0.052	0.068
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.107	0.114	0.127	0.086	0.098	0.126	0.248	0.285	0.366	0.398
SSA	0.001	0.001	0.002	0.004	0.004	0.005	0.004	0.006	0.008	0.011
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 42: FAO — Demand—Agricultural Supply Chain Loss—Crops—Oil crops—Sunflower (Mt DM/yr)

## 3.1.12 Other crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

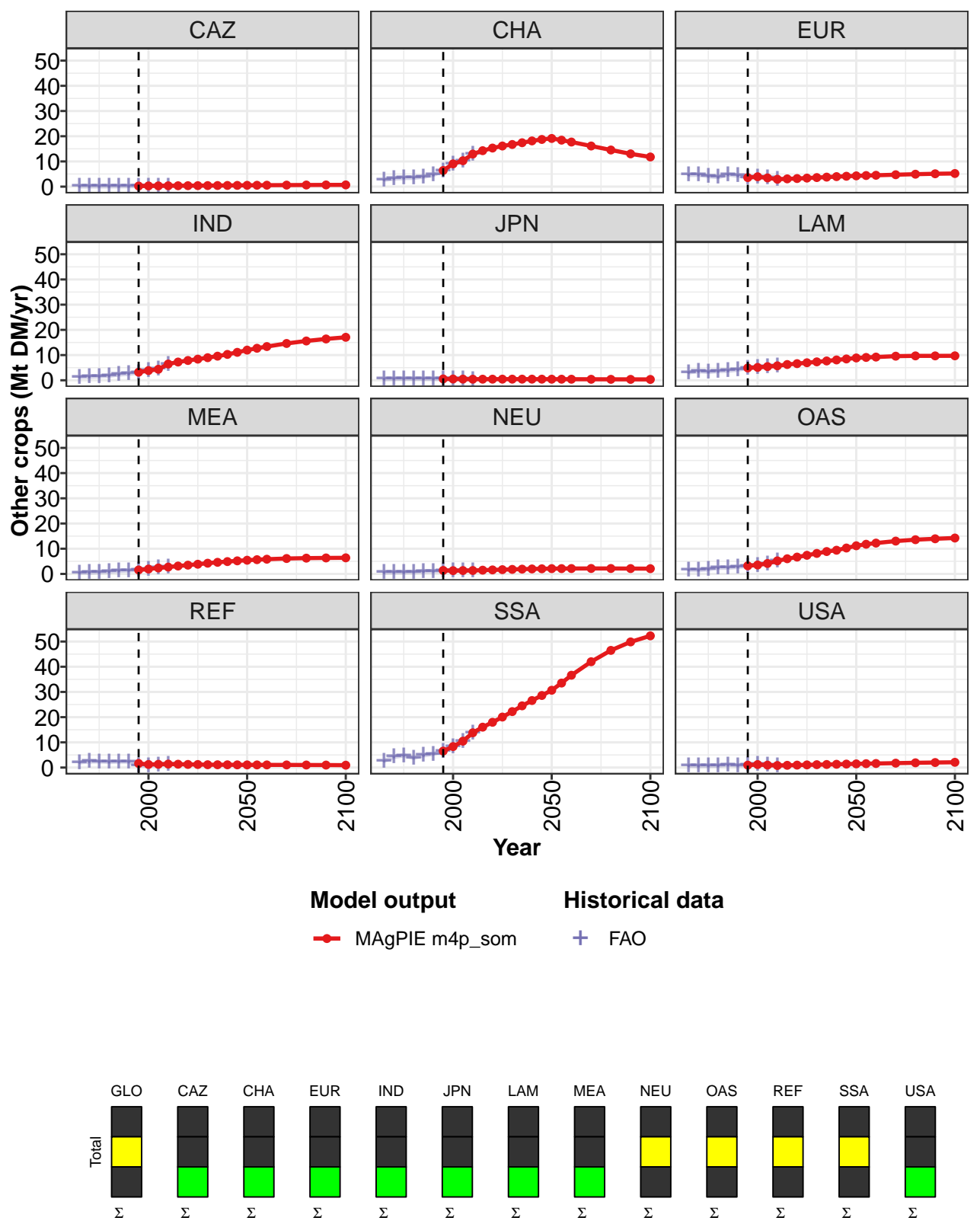


Figure 14: MAGPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Other crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	34	40	45	54	61	66	71	76	82	87	92
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	6	9	10	13	14	15	16	17	17	18	19
EUR	4	4	3	3	3	3	3	4	4	4	4
IND	3	4	4	6	7	8	8	9	10	10	11
JPN	1	1	0	0	0	0	0	0	0	0	0
LAM	5	5	5	6	6	7	7	7	8	8	8
MEA	2	2	2	3	3	3	4	4	5	5	5
NEU	1	1	1	1	1	2	2	2	2	2	2
OAS	3	4	4	5	6	7	7	8	9	9	10
REF	2	1	1	1	1	1	1	1	1	1	1
SSA	7	8	10	14	16	18	20	22	24	27	29
USA	1	1	1	1	1	1	1	1	1	1	1

Table 43: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Other crops (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	97	101	105	112	117	120	123
CAZ	1	1	1	1	1	1	1
CHA	19	18	18	16	15	13	12
EUR	4	4	5	5	5	5	5
IND	12	13	13	15	16	16	17
JPN	0	0	0	0	0	0	0
LAM	9	9	9	10	10	10	10
MEA	5	6	6	6	6	6	6
NEU	2	2	2	2	2	2	2
OAS	11	12	12	13	14	14	14
REF	1	1	1	1	1	1	1
SSA	31	34	37	42	46	50	52
USA	1	2	2	2	2	2	2

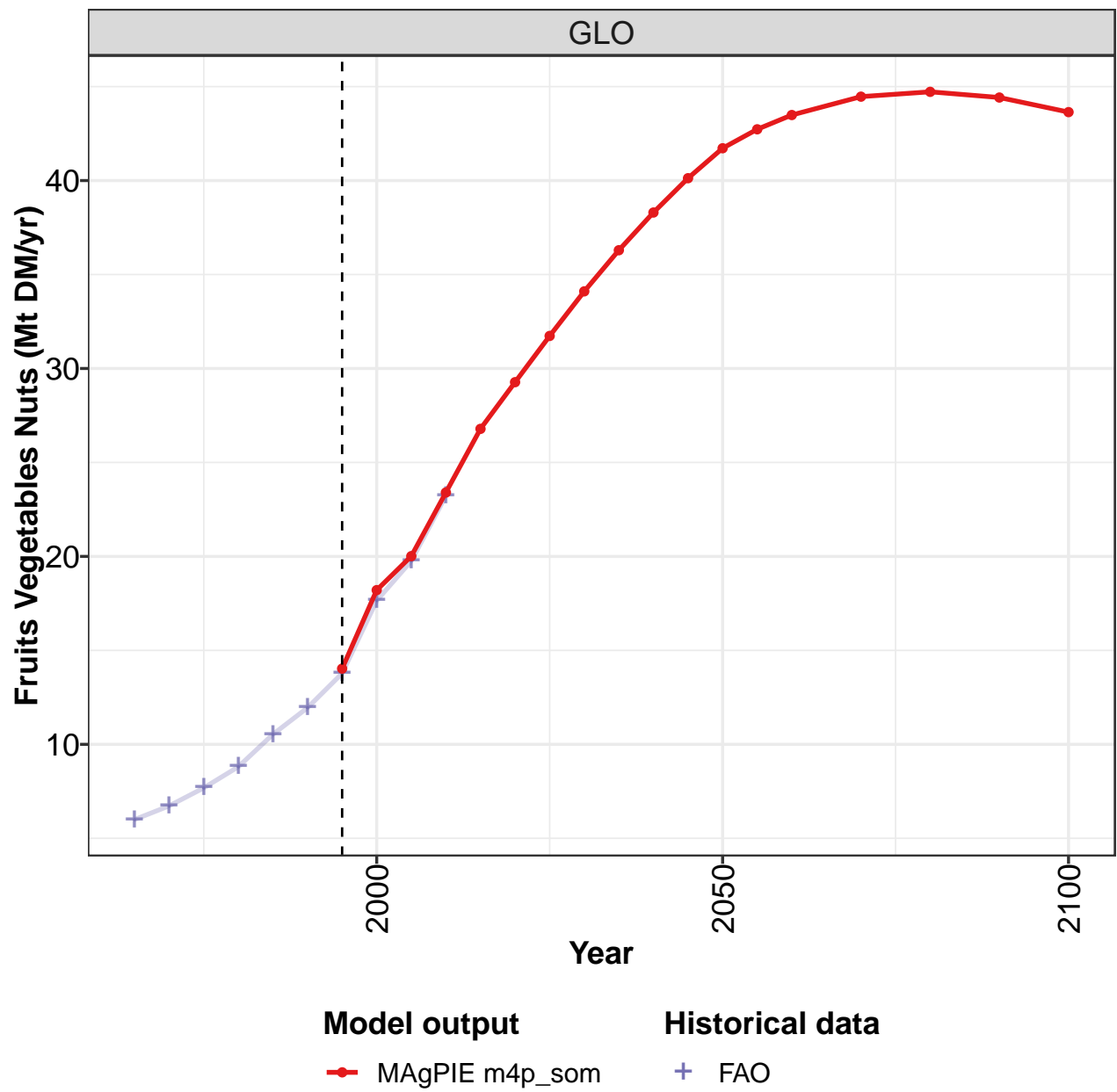
Table 44: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Other crops (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	20.3	23.4	24.2	24.2	28.3	30.2	33.0	39.7	44.6	53.8
CAZ	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3
CHA	2.7	3.2	3.4	3.5	3.9	4.6	6.4	9.0	10.3	12.9
EUR	4.6	4.7	4.1	3.7	4.8	4.3	3.6	3.9	3.4	2.9
IND	1.3	1.4	1.6	1.8	2.3	2.6	3.0	3.9	4.4	6.5
JPN	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.4
LAM	3.1	3.6	3.3	3.6	3.8	4.2	4.8	5.1	5.4	5.7
MEA	0.5	0.5	0.7	0.9	1.2	1.4	1.6	1.9	2.4	2.7
NEU	0.6	0.6	0.7	0.8	1.0	1.1	1.2	1.3	1.3	1.4
OAS	1.6	1.5	1.8	2.4	2.4	2.8	3.2	3.5	4.1	5.2
REF	2.1	2.4	2.4	2.2	2.3	2.3	0.9	0.7	1.1	1.2
SSA	2.6	4.2	4.8	3.8	4.8	5.4	6.5	8.3	10.5	13.8
USA	0.7	0.6	0.7	0.7	1.1	0.9	1.0	1.2	1.0	0.8

Table 45: FAO — Demand—Agricultural Supply Chain Loss—Crops—Other crops (Mt DM/yr)

3.1.13
Other crops—Fruits Vegetables Nuts

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

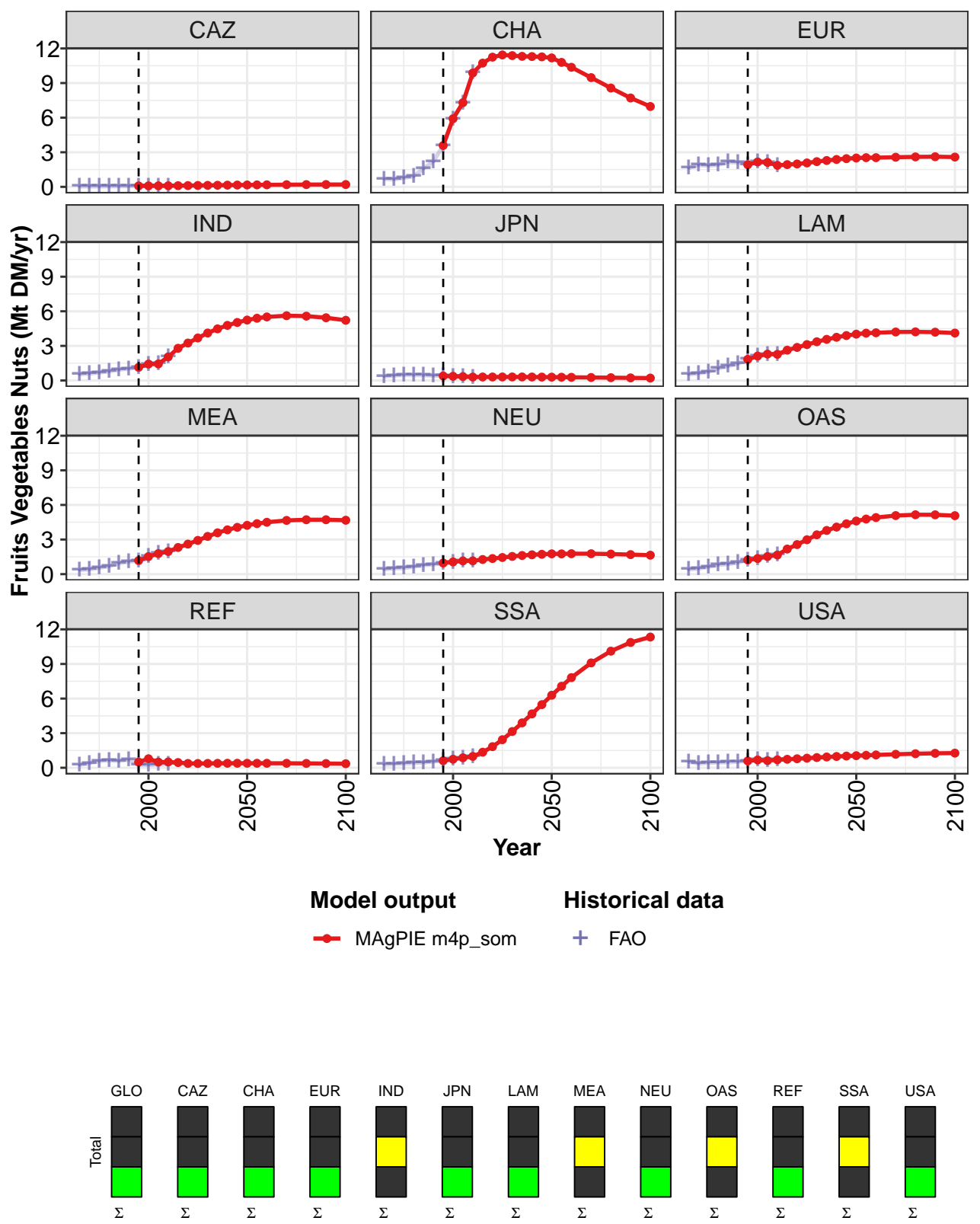


Figure 15: MAGPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	14.0	18.2	20.0	23.4	26.8	29.3	31.7	34.1	36.3	38.3	40.1
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
CHA	3.6	5.9	7.3	9.9	10.7	11.2	11.4	11.4	11.3	11.3	11.3
EUR	1.9	2.2	2.1	1.9	1.9	2.0	2.1	2.2	2.3	2.4	2.4
IND	1.1	1.4	1.4	2.0	2.8	3.2	3.7	4.1	4.5	4.8	5.0
JPN	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
LAM	1.8	2.1	2.3	2.3	2.6	2.9	3.1	3.4	3.6	3.7	3.9
MEA	1.2	1.5	1.8	2.0	2.3	2.6	2.9	3.3	3.6	3.8	4.1
NEU	1.0	1.1	1.1	1.2	1.3	1.4	1.4	1.5	1.6	1.7	1.7
OAS	1.2	1.4	1.5	1.7	2.2	2.6	3.0	3.4	3.8	4.1	4.4
REF	0.5	0.8	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4
SSA	0.6	0.7	0.9	1.0	1.4	1.8	2.4	3.1	3.9	4.7	5.5
USA	0.6	0.7	0.6	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.0

Table 46: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	41.7	42.7	43.5	44.5	44.7	44.4	43.6
CAZ	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CHA	11.2	10.8	10.4	9.5	8.6	7.7	7.0
EUR	2.5	2.5	2.5	2.6	2.6	2.6	2.6
IND	5.2	5.4	5.5	5.6	5.6	5.4	5.2
JPN	0.3	0.3	0.3	0.3	0.2	0.2	0.2
LAM	4.0	4.1	4.1	4.2	4.2	4.2	4.1
MEA	4.2	4.4	4.5	4.7	4.7	4.7	4.7
NEU	1.8	1.8	1.8	1.8	1.7	1.7	1.6
OAS	4.6	4.8	4.9	5.1	5.1	5.1	5.1
REF	0.4	0.4	0.4	0.4	0.4	0.4	0.4
SSA	6.3	7.1	7.8	9.1	10.1	10.9	11.3
USA	1.1	1.1	1.1	1.2	1.2	1.3	1.3

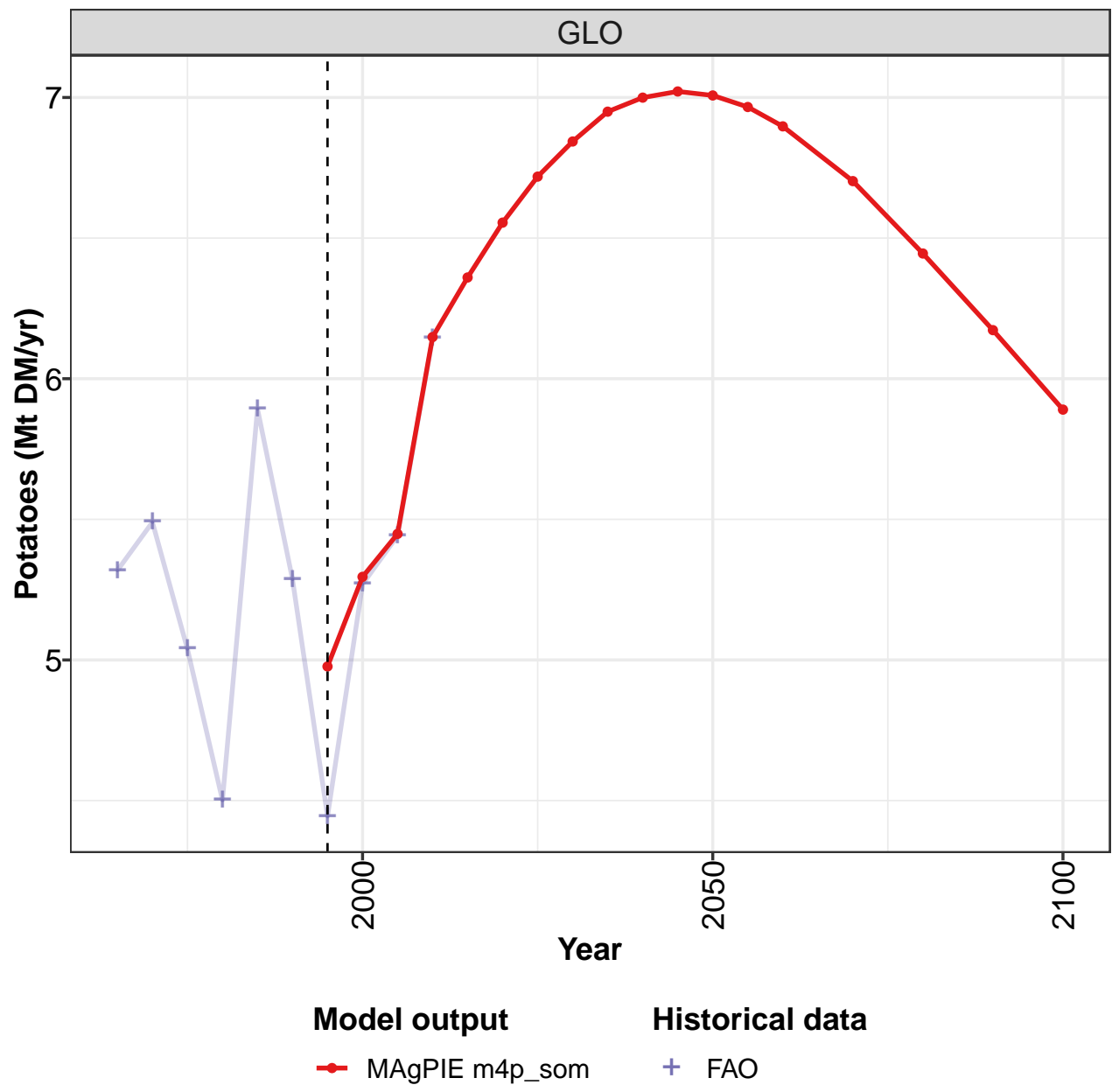
Table 47: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	6.0	6.7	7.7	8.8	10.5	11.9	13.8	17.6	19.8	23.2
CAZ	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	0.7	0.7	0.8	0.9	1.6	2.2	3.6	5.9	7.3	9.9
EUR	1.6	1.9	1.8	1.9	2.1	2.1	1.9	2.2	2.1	1.9
IND	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.4	1.4	2.0
JPN	0.3	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.3
LAM	0.5	0.6	0.8	1.0	1.2	1.5	1.8	2.1	2.3	2.3
MEA	0.4	0.4	0.6	0.7	0.9	1.1	1.2	1.5	1.8	2.0
NEU	0.4	0.5	0.5	0.6	0.8	0.8	0.9	1.1	1.1	1.2
OAS	0.4	0.5	0.6	0.8	0.9	1.0	1.2	1.4	1.5	1.7
REF	0.2	0.4	0.6	0.6	0.6	0.7	0.3	0.2	0.3	0.3
SSA	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.9	1.0
USA	0.5	0.4	0.4	0.5	0.5	0.5	0.6	0.7	0.6	0.7

Table 48: FAO — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

3.1.14 Other crops—Potatoes

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

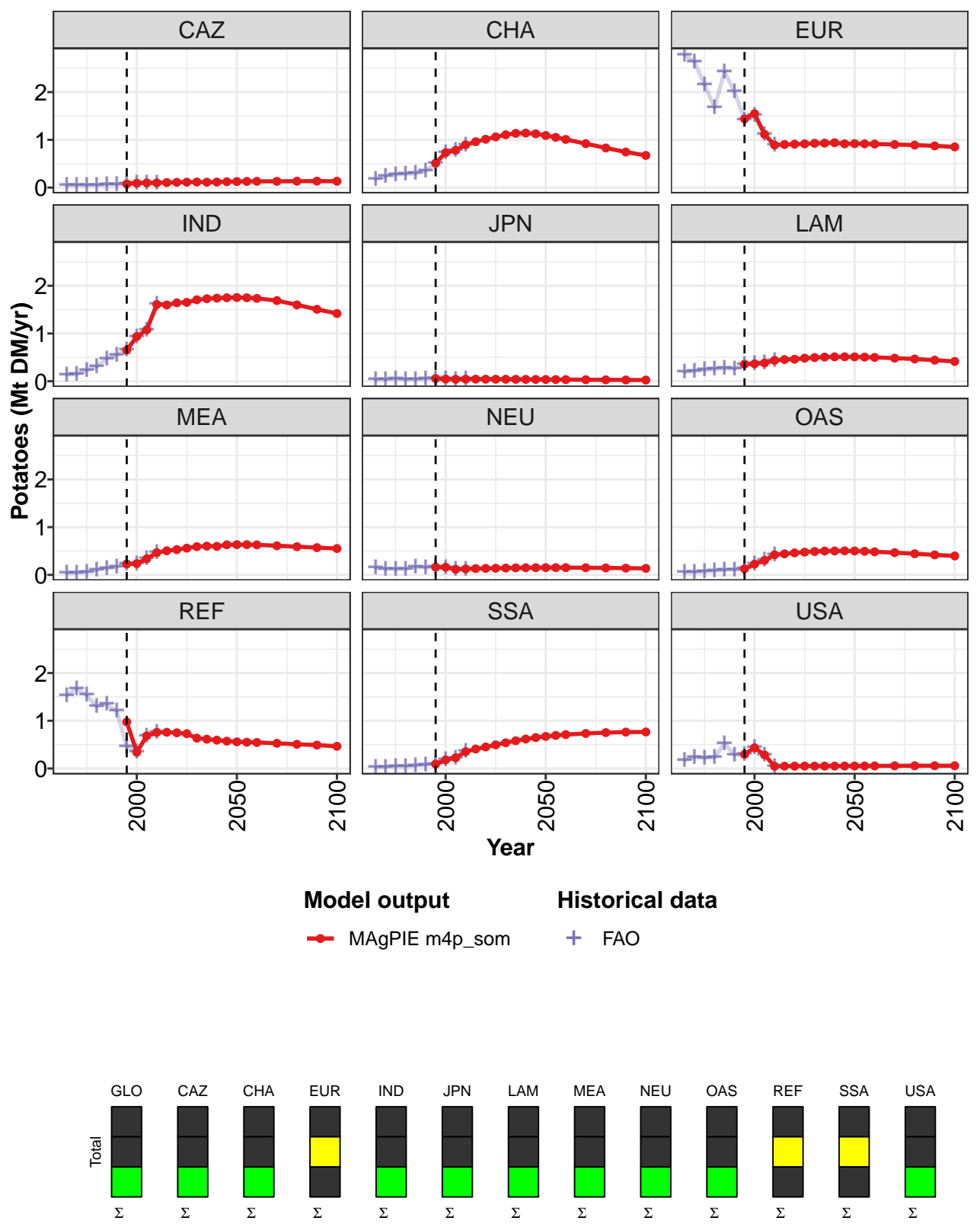


Figure 16: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Potatoes (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	4.98	5.30	5.45	6.15	6.36	6.56	6.72	6.84	6.95	7.00	7.02
CAZ	0.08	0.09	0.10	0.10	0.11	0.11	0.11	0.12	0.11	0.12	0.12
CHA	0.51	0.73	0.78	0.90	0.96	1.01	1.06	1.11	1.14	1.14	1.13
EUR	1.44	1.55	1.12	0.89	0.90	0.91	0.92	0.93	0.93	0.94	0.92
IND	0.65	0.94	1.08	1.61	1.60	1.64	1.65	1.71	1.73	1.74	1.75
JPN	0.06	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
LAM	0.36	0.37	0.38	0.44	0.45	0.46	0.48	0.50	0.51	0.51	0.51
MEA	0.23	0.24	0.34	0.47	0.51	0.53	0.56	0.59	0.60	0.60	0.63
NEU	0.16	0.16	0.12	0.12	0.13	0.14	0.14	0.14	0.15	0.15	0.15
OAS	0.13	0.23	0.31	0.42	0.44	0.46	0.48	0.49	0.50	0.50	0.50
REF	0.98	0.34	0.68	0.76	0.76	0.75	0.73	0.64	0.61	0.59	0.57
SSA	0.09	0.18	0.23	0.35	0.41	0.45	0.50	0.54	0.58	0.62	0.65
USA	0.30	0.43	0.28	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05

Table 49: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Potatoes (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	7.01	6.97	6.90	6.70	6.45	6.17	5.89
CAZ	0.13	0.13	0.13	0.13	0.13	0.14	0.13
CHA	1.09	1.05	1.01	0.92	0.83	0.75	0.67
EUR	0.92	0.92	0.91	0.90	0.89	0.87	0.85
IND	1.75	1.75	1.74	1.69	1.60	1.51	1.42
JPN	0.04	0.04	0.03	0.03	0.03	0.03	0.02
LAM	0.51	0.51	0.50	0.48	0.47	0.44	0.41
MEA	0.63	0.63	0.63	0.61	0.59	0.57	0.55
NEU	0.15	0.15	0.15	0.15	0.15	0.14	0.14
OAS	0.50	0.49	0.48	0.47	0.44	0.42	0.40
REF	0.56	0.55	0.55	0.53	0.51	0.49	0.47
SSA	0.67	0.69	0.71	0.73	0.75	0.76	0.77
USA	0.05	0.05	0.05	0.06	0.06	0.06	0.06

Table 50: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Potatoes (Mt DM/yr) [PART 2/2]

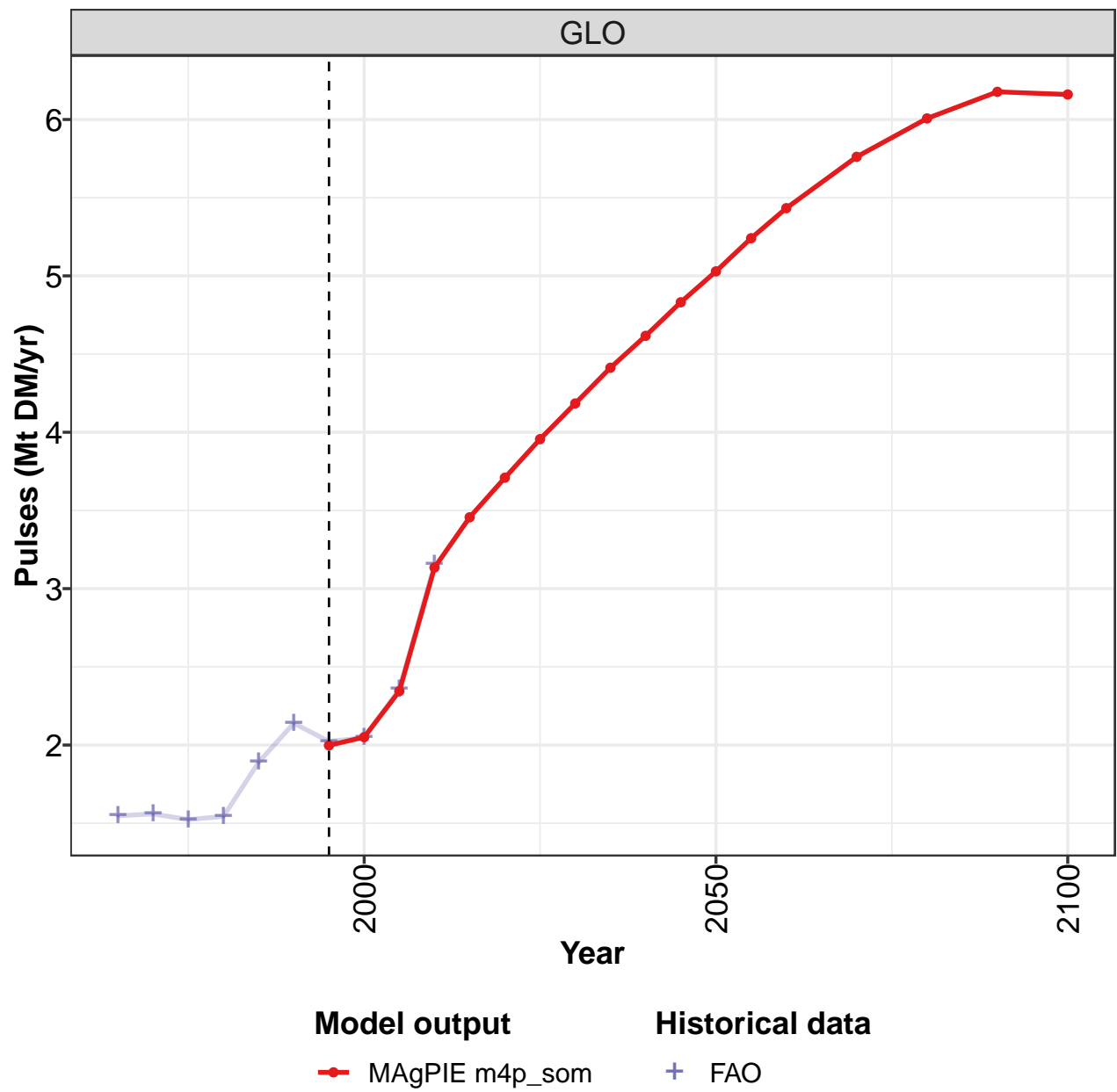
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	5.32	5.49	5.04	4.50	5.89	5.29	4.44	5.27	5.44	6.14
CAZ	0.04	0.05	0.05	0.05	0.06	0.06	0.08	0.09	0.10	0.10
CHA	0.18	0.24	0.28	0.29	0.30	0.35	0.51	0.73	0.78	0.90
EUR	2.78	2.64	2.15	1.68	2.43	2.01	1.42	1.52	1.11	0.89
IND	0.14	0.15	0.23	0.31	0.47	0.55	0.65	0.94	1.08	1.61
JPN	0.03	0.03	0.05	0.04	0.04	0.05	0.06	0.05	0.04	0.04
LAM	0.19	0.22	0.24	0.25	0.27	0.26	0.36	0.36	0.38	0.44
MEA	0.04	0.04	0.06	0.11	0.14	0.17	0.23	0.24	0.34	0.46
NEU	0.15	0.12	0.12	0.12	0.16	0.15	0.16	0.16	0.12	0.12
OAS	0.05	0.06	0.07	0.08	0.10	0.11	0.13	0.23	0.31	0.42
REF	1.53	1.67	1.53	1.30	1.34	1.20	0.46	0.34	0.68	0.76
SSA	0.02	0.03	0.04	0.05	0.06	0.08	0.09	0.18	0.22	0.35
USA	0.17	0.24	0.22	0.23	0.53	0.28	0.30	0.44	0.29	0.05

Table 51: FAO — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Potatoes (Mt DM/yr)



3.1.15
Other crops—Pulses

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

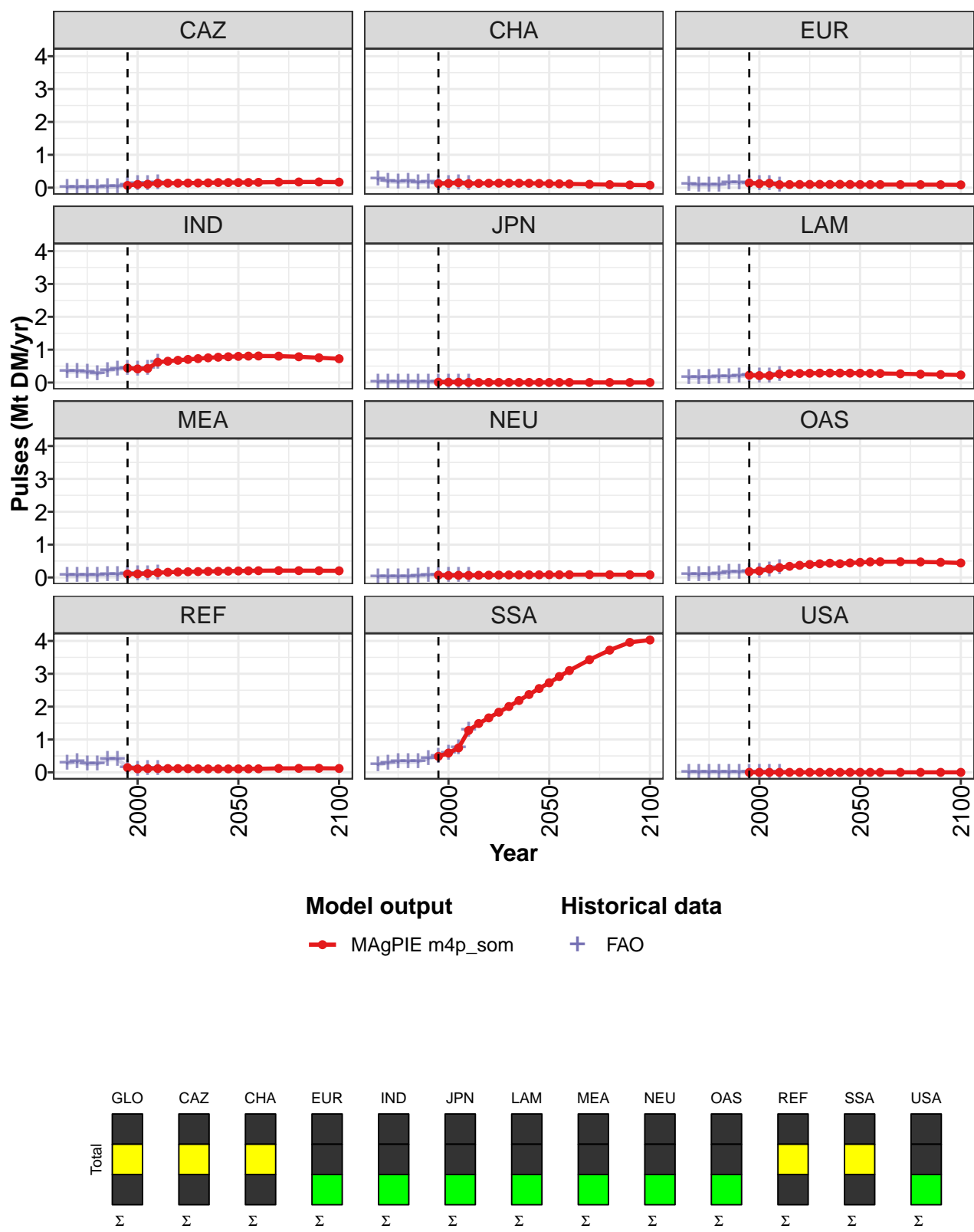


Figure 17: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Pulses (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	2.00	2.05	2.34	3.14	3.46	3.71	3.96	4.18	4.41	4.62	4.83
CAZ	0.07	0.10	0.10	0.14	0.14	0.14	0.14	0.14	0.15	0.16	0.16
CHA	0.12	0.13	0.15	0.12	0.13	0.13	0.14	0.14	0.14	0.13	0.13
EUR	0.14	0.12	0.13	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10
IND	0.44	0.42	0.43	0.62	0.65	0.68	0.70	0.73	0.75	0.77	0.79
JPN	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.22	0.21	0.21	0.26	0.27	0.28	0.28	0.29	0.29	0.29	0.29
MEA	0.11	0.11	0.12	0.15	0.16	0.17	0.17	0.18	0.18	0.19	0.19
NEU	0.07	0.06	0.07	0.06	0.07	0.07	0.07	0.08	0.08	0.08	0.08
OAS	0.18	0.20	0.26	0.30	0.34	0.37	0.40	0.42	0.43	0.42	0.44
REF	0.14	0.11	0.12	0.11	0.12	0.12	0.11	0.11	0.11	0.11	0.11
SSA	0.49	0.59	0.74	1.28	1.49	1.66	1.83	2.00	2.19	2.37	2.55
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 52: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Pulses (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	5.03	5.24	5.43	5.76	6.01	6.18	6.16
CAZ	0.16	0.16	0.16	0.17	0.17	0.17	0.17
CHA	0.12	0.12	0.11	0.10	0.09	0.08	0.07
EUR	0.10	0.09	0.09	0.09	0.09	0.09	0.09
IND	0.80	0.80	0.81	0.80	0.78	0.75	0.72
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.28	0.28	0.28	0.27	0.26	0.24	0.23
MEA	0.20	0.20	0.21	0.21	0.21	0.21	0.20
NEU	0.08	0.08	0.08	0.09	0.08	0.08	0.08
OAS	0.46	0.47	0.48	0.48	0.47	0.46	0.44
REF	0.11	0.11	0.11	0.12	0.12	0.12	0.12
SSA	2.73	2.92	3.10	3.43	3.72	3.96	4.03
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00

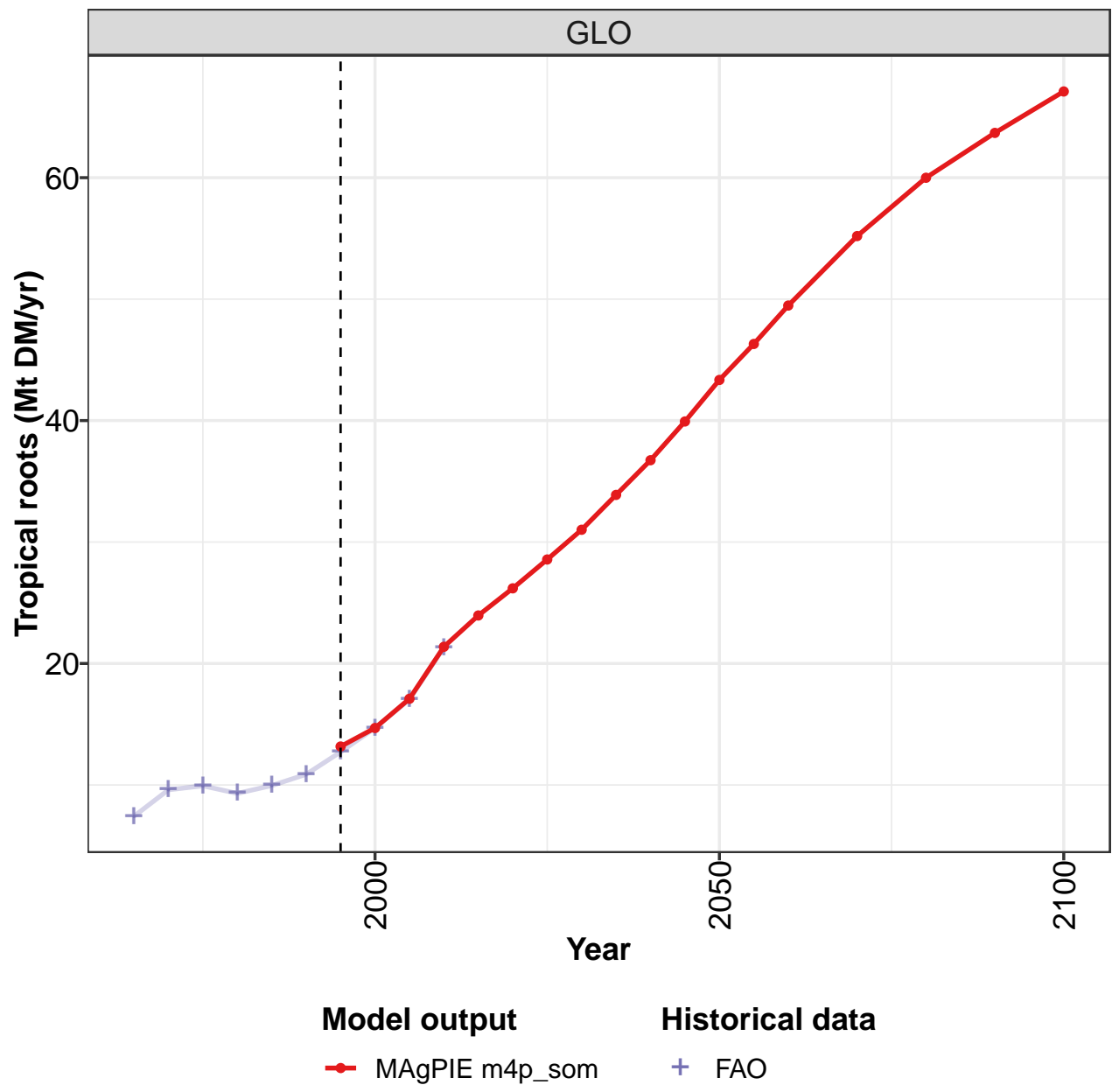
Table 53: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Pulses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.55	1.56	1.52	1.54	1.89	2.14	2.02	2.05	2.36	3.15
CAZ	0.00	0.00	0.01	0.01	0.02	0.04	0.09	0.12	0.13	0.14
CHA	0.26	0.19	0.17	0.19	0.16	0.17	0.12	0.13	0.15	0.12
EUR	0.10	0.09	0.09	0.09	0.15	0.14	0.14	0.12	0.13	0.09
IND	0.33	0.34	0.31	0.27	0.36	0.42	0.44	0.42	0.43	0.62
JPN	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
LAM	0.14	0.15	0.16	0.18	0.18	0.19	0.22	0.21	0.21	0.26
MEA	0.07	0.06	0.07	0.06	0.08	0.09	0.11	0.11	0.12	0.15
NEU	0.02	0.02	0.02	0.03	0.05	0.07	0.07	0.06	0.07	0.06
OAS	0.08	0.08	0.10	0.11	0.15	0.17	0.17	0.17	0.23	0.30
REF	0.28	0.32	0.26	0.26	0.39	0.41	0.15	0.11	0.12	0.12
SSA	0.24	0.29	0.32	0.32	0.33	0.43	0.49	0.59	0.76	1.29
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 54: FAO — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Pulses (Mt DM/yr)

3.1.16 Other crops—Tropical roots

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

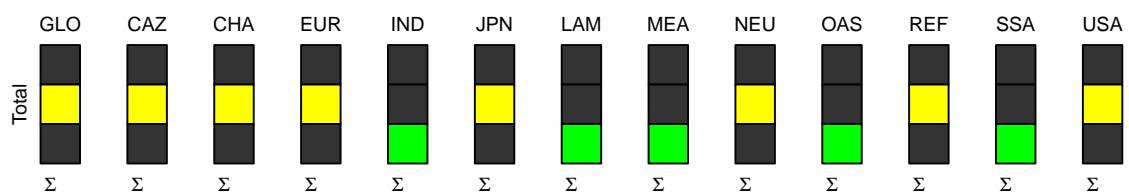
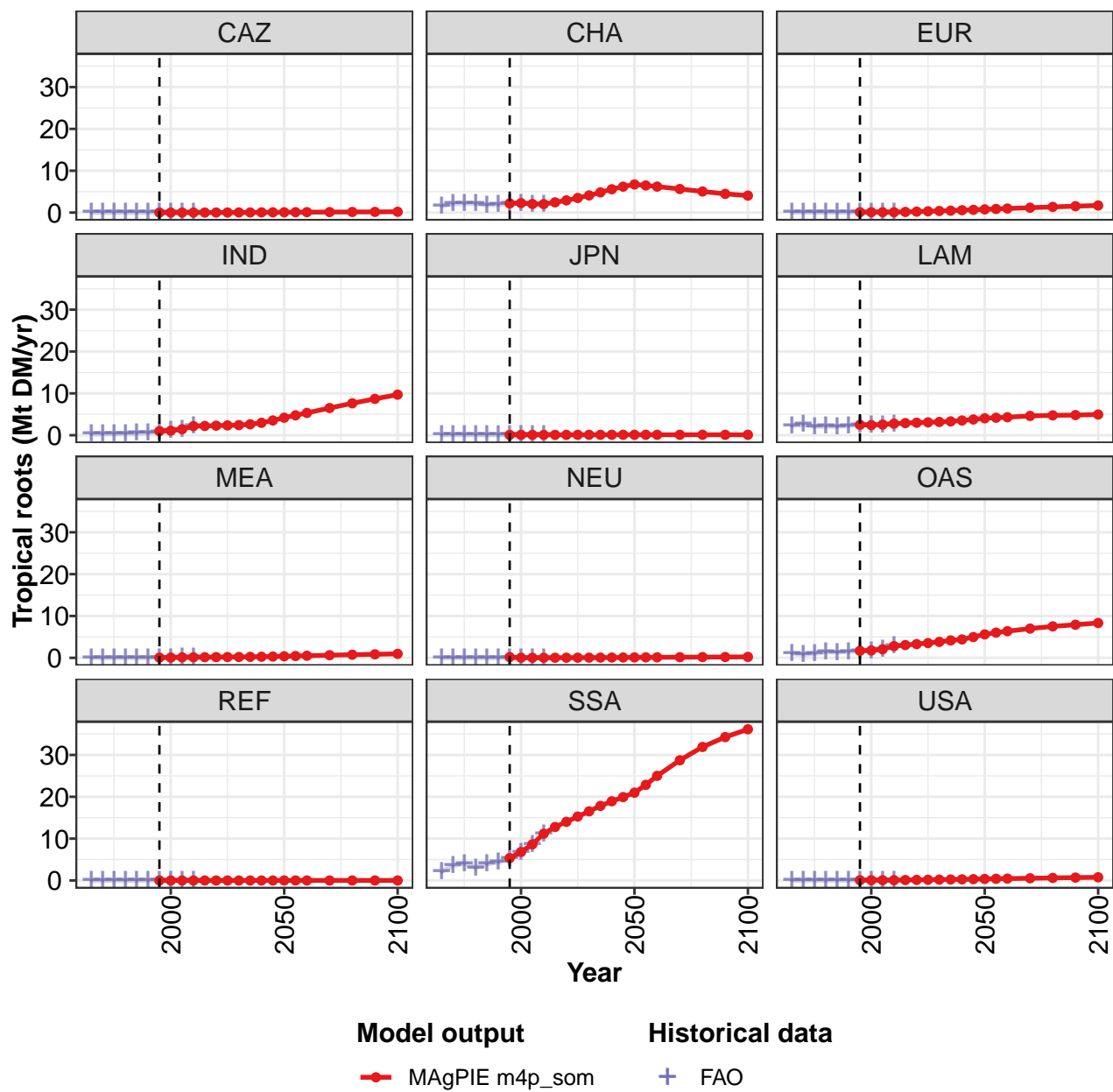


Figure 18: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Tropical roots (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	13.2	14.7	17.1	21.4	24.0	26.2	28.6	31.0	33.9	36.7	39.9
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
CHA	2.2	2.3	2.1	2.0	2.4	2.9	3.5	4.1	4.8	5.6	6.2
EUR	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.5	0.6	0.7
IND	1.0	1.1	1.4	2.2	2.2	2.3	2.3	2.4	2.6	3.0	3.5
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	2.5	2.4	2.5	2.8	2.9	3.0	3.1	3.2	3.3	3.5	3.8
MEA	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3
NEU	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
OAS	1.7	1.8	2.1	2.8	3.1	3.3	3.5	3.8	4.2	4.4	5.0
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	5.3	6.8	8.6	11.2	12.8	14.0	15.3	16.5	17.8	18.9	19.9
USA	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3

Table 55: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	43.3	46.3	49.5	55.2	60.0	63.7	67.1
CAZ	0.1	0.1	0.1	0.1	0.1	0.2	0.2
CHA	6.7	6.5	6.2	5.6	5.0	4.5	4.1
EUR	0.8	0.9	1.0	1.2	1.4	1.5	1.7
IND	4.2	4.7	5.3	6.5	7.6	8.7	9.7
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	4.0	4.2	4.3	4.6	4.7	4.8	4.9
MEA	0.4	0.4	0.5	0.6	0.8	0.8	1.0
NEU	0.1	0.1	0.1	0.2	0.2	0.2	0.2
OAS	5.6	6.0	6.4	7.0	7.5	7.9	8.3
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	21.0	22.9	25.0	28.7	31.9	34.3	36.1
USA	0.4	0.4	0.4	0.5	0.6	0.7	0.8

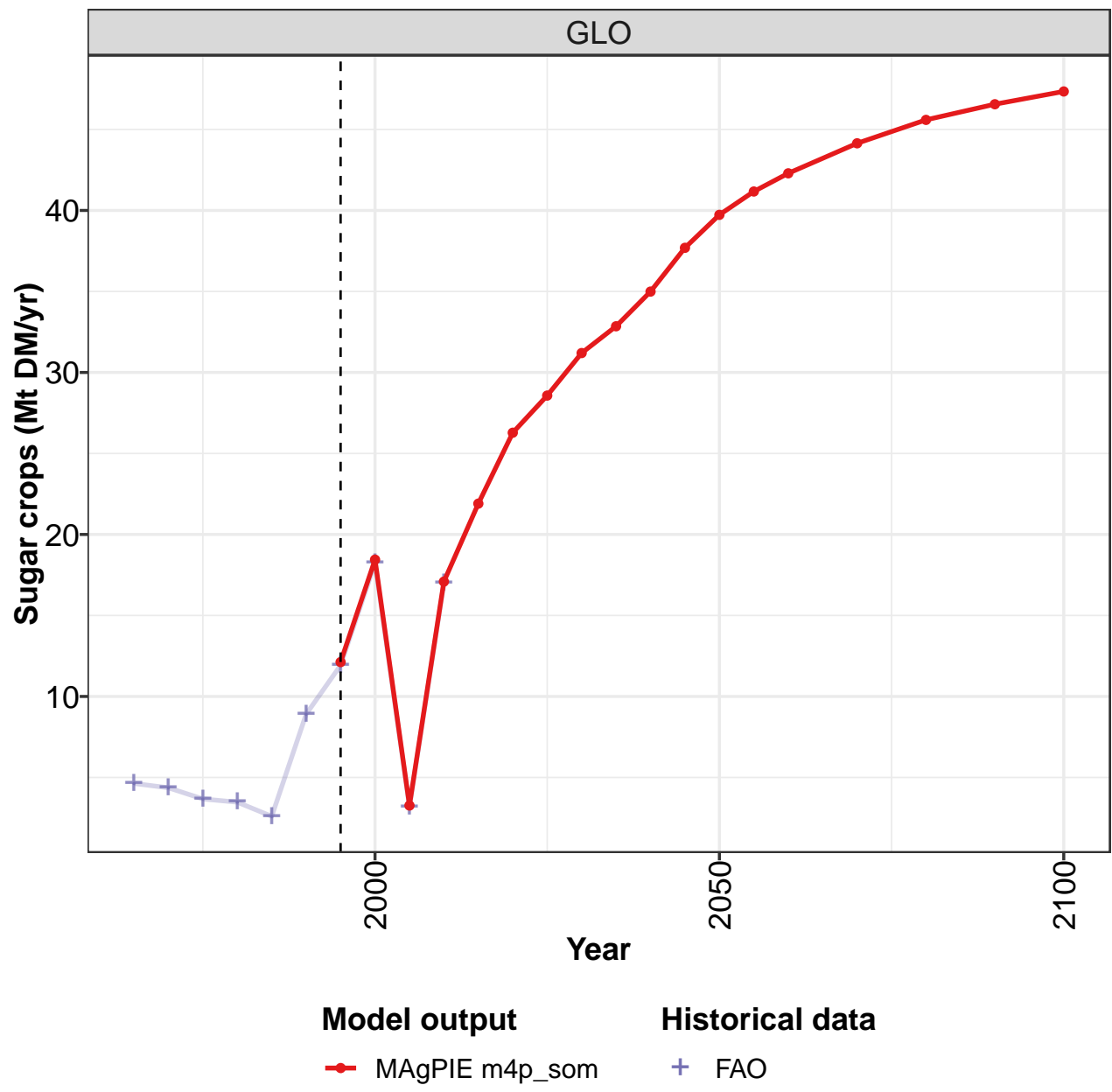
Table 56: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	7.4	9.6	9.9	9.3	9.9	10.9	12.7	14.7	17.0	21.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	1.6	2.1	2.2	2.1	1.9	1.9	2.2	2.3	2.0	2.0
EUR	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
IND	0.3	0.3	0.4	0.4	0.5	0.6	0.8	1.1	1.4	2.2
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	2.3	2.6	2.1	2.1	2.1	2.3	2.4	2.4	2.5	2.7
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.0	0.8	1.0	1.4	1.3	1.5	1.7	1.7	2.0	2.8
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	2.1	3.6	4.1	3.0	4.0	4.4	5.3	6.8	8.6	11.2
USA	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1

Table 57: FAO — Demand—Agricultural Supply Chain Loss—Crops—Other crops—Tropical roots (Mt DM/yr)

3.1.17 Sugar crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

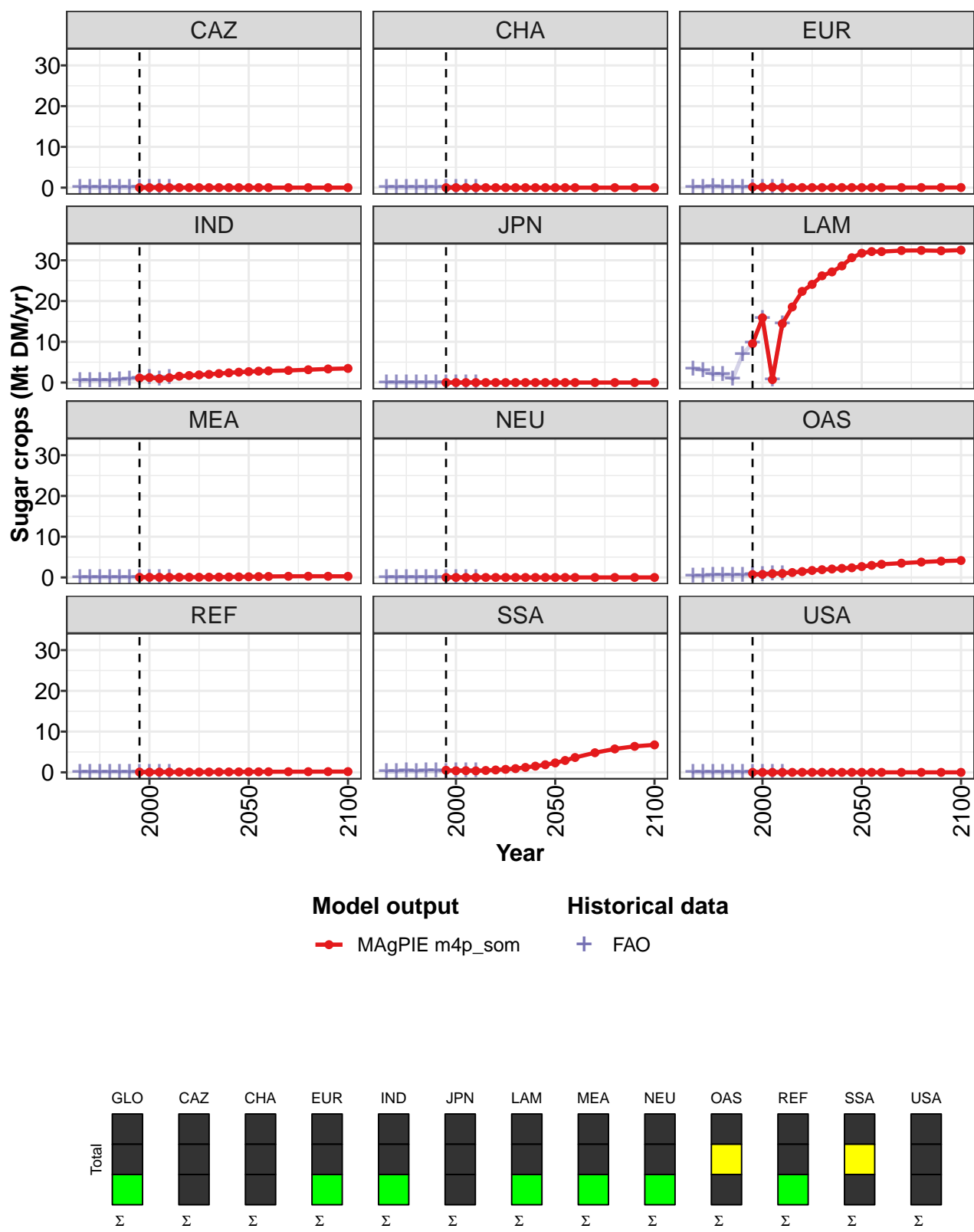


Figure 19: MAGPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Sugar crops (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	12.1	18.4	3.3	17.1	21.9	26.3	28.6	31.2	32.9	35.0	37.7
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	1.1	1.2	1.0	1.2	1.6	1.7	1.9	2.0	2.2	2.4	2.5
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	9.5	15.9	0.7	14.4	18.5	22.4	24.1	26.2	27.2	28.6	30.6
MEA	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.7	0.8	0.9	1.0	1.2	1.5	1.7	1.9	2.1	2.2	2.4
REF	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SSA	0.5	0.4	0.4	0.4	0.5	0.6	0.7	0.9	1.2	1.5	1.9
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 58: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Sugar crops (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	39.7	41.2	42.3	44.1	45.6	46.6	47.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	2.7	2.8	2.9	3.0	3.1	3.3	3.5
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	31.7	32.1	32.1	32.4	32.4	32.3	32.5
MEA	0.2	0.2	0.2	0.3	0.3	0.3	0.3
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	2.7	3.0	3.2	3.5	3.8	4.0	4.2
REF	0.1	0.1	0.1	0.2	0.2	0.2	0.2
SSA	2.3	2.9	3.6	4.8	5.7	6.4	6.7
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

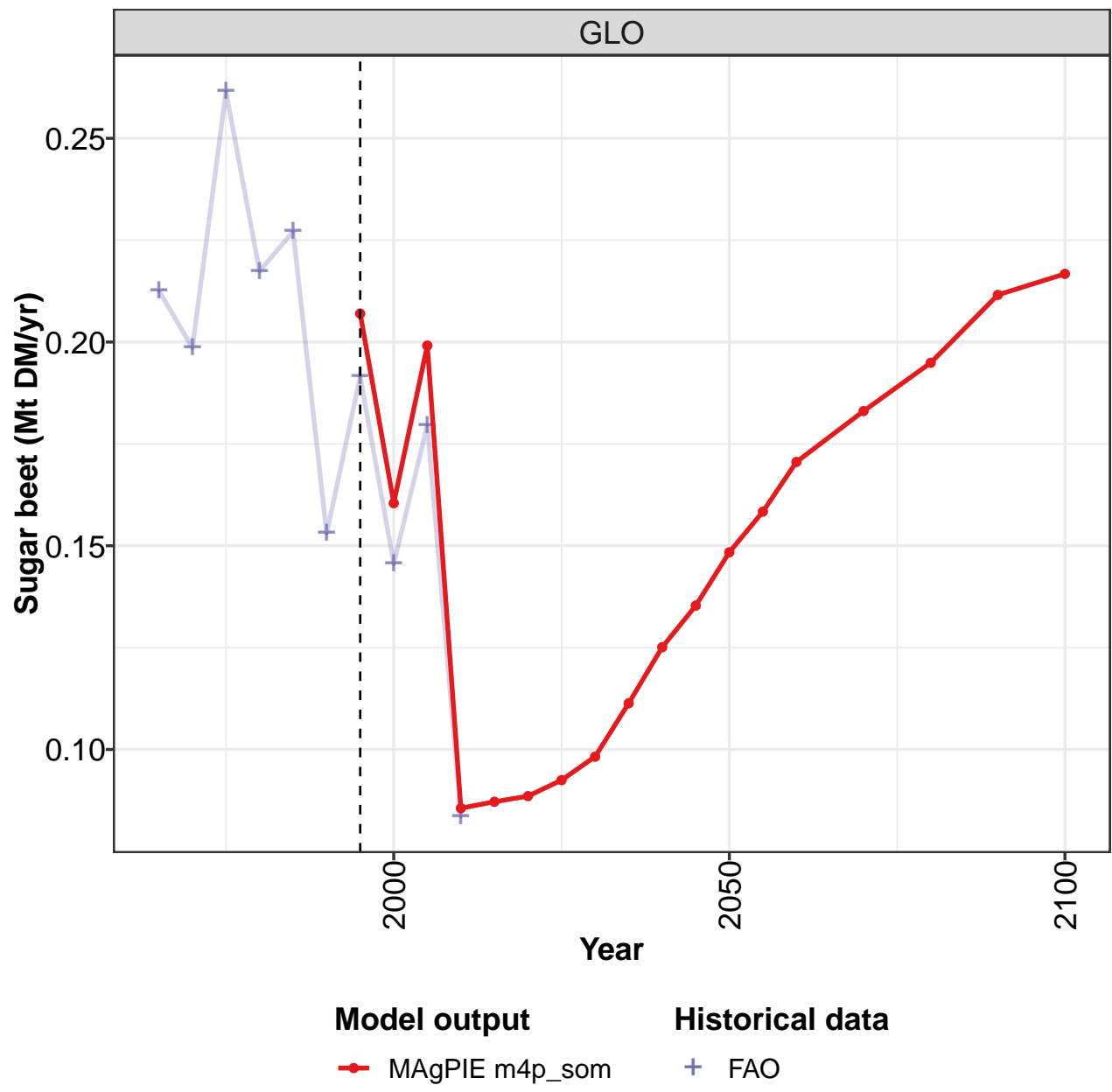
Table 59: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Sugar crops (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4.6	4.4	3.7	3.5	2.6	8.9	11.9	18.2	3.2	17.0
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0
IND	0.5	0.5	0.6	0.5	0.7	0.9	1.1	1.2	1.0	1.2
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	3.4	3.0	2.0	2.0	0.9	7.0	9.7	15.7	0.7	14.4
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.3	0.4	0.5	0.5	0.5	0.5	0.6	0.8	0.8	0.9
REF	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
SSA	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 60: FAO — Demand—Agricultural Supply Chain Loss—Crops—Sugar crops (Mt DM/yr)

3.1.18 Sugar crops—Sugar beet

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

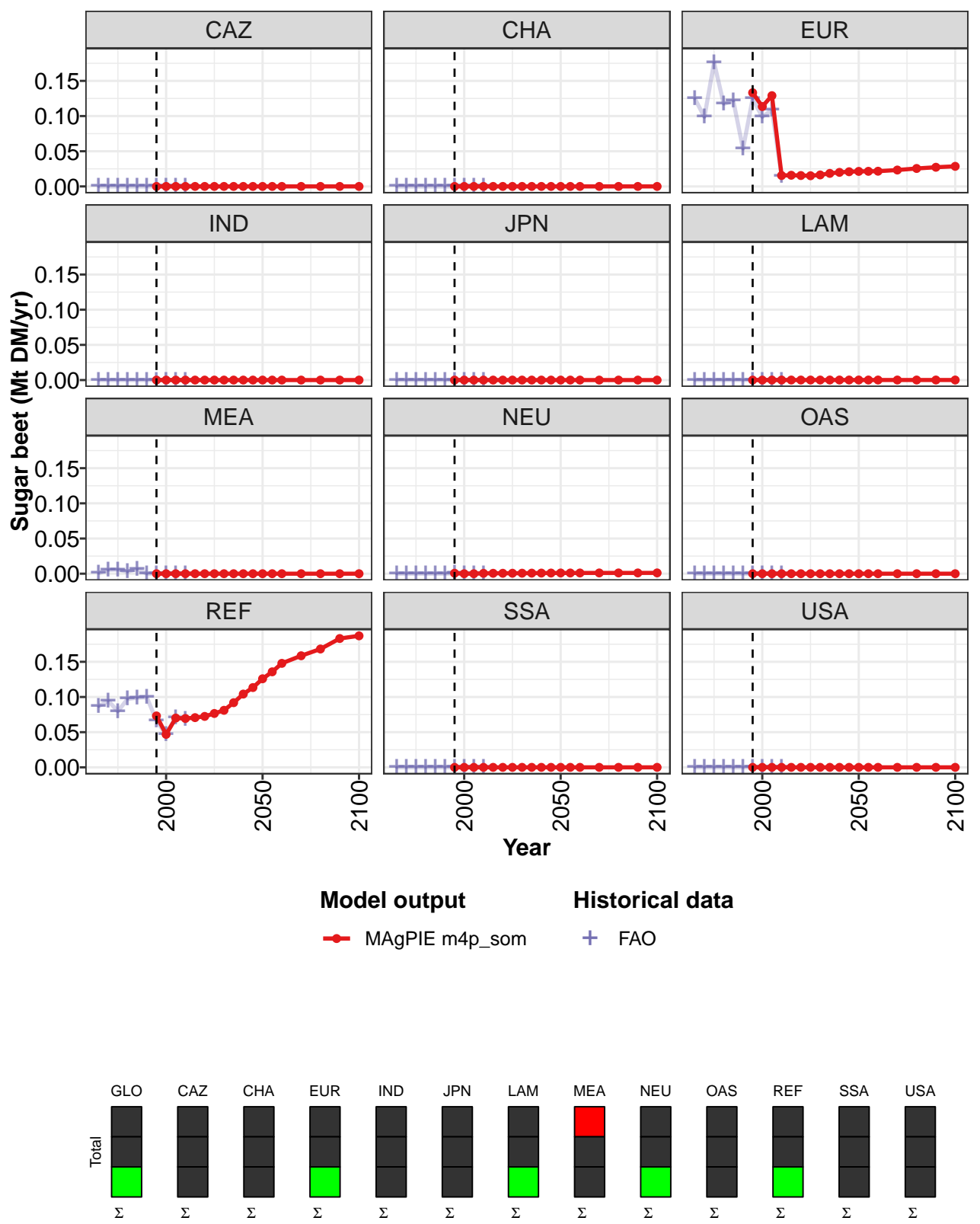


Figure 20: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Sugar crops—Sugar beet (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.207	0.160	0.199	0.086	0.087	0.089	0.092	0.098	0.111	0.125	0.135
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.133	0.114	0.129	0.016	0.016	0.015	0.015	0.016	0.019	0.020	0.021
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.001	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.073	0.047	0.070	0.069	0.071	0.072	0.077	0.081	0.092	0.104	0.113
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 61: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.148	0.158	0.171	0.183	0.195	0.212	0.217
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.021	0.021	0.022	0.023	0.026	0.027	0.029
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.001	0.001	0.001	0.001	0.001	0.001	0.001
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.126	0.136	0.148	0.159	0.168	0.183	0.187
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000

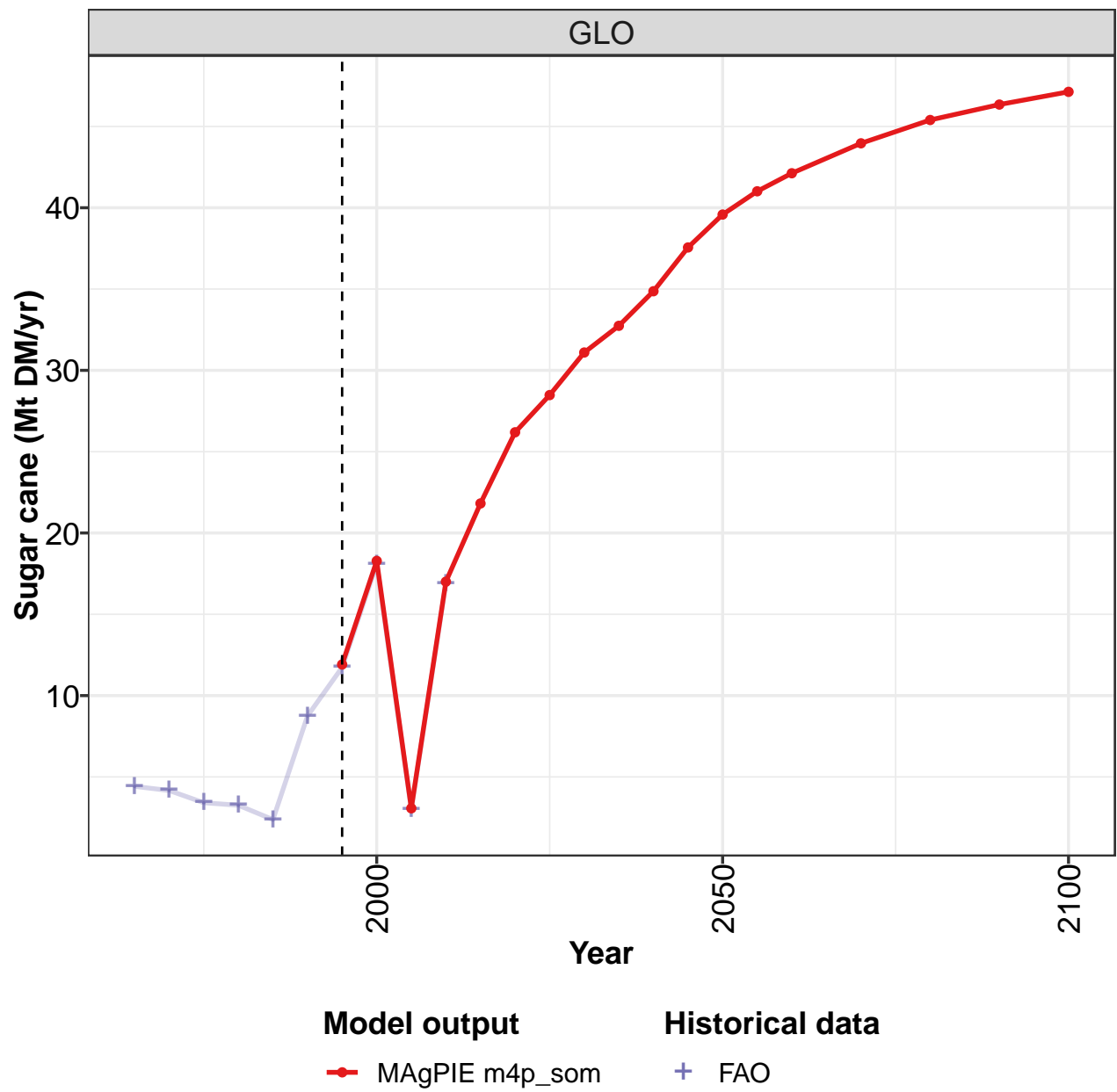
Table 62: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.213	0.199	0.262	0.217	0.227	0.153	0.192	0.146	0.180	0.084
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.125	0.099	0.176	0.117	0.121	0.053	0.125	0.099	0.109	0.015
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.001	0.005	0.006	0.003	0.007	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.087	0.095	0.080	0.097	0.099	0.100	0.066	0.047	0.071	0.069
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 63: FAO — Demand—Agricultural Supply Chain Loss—Crops—Sugar crops—Sugar beet (Mt DM/yr)

3.1.19
Sugar crops—Sugar cane

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

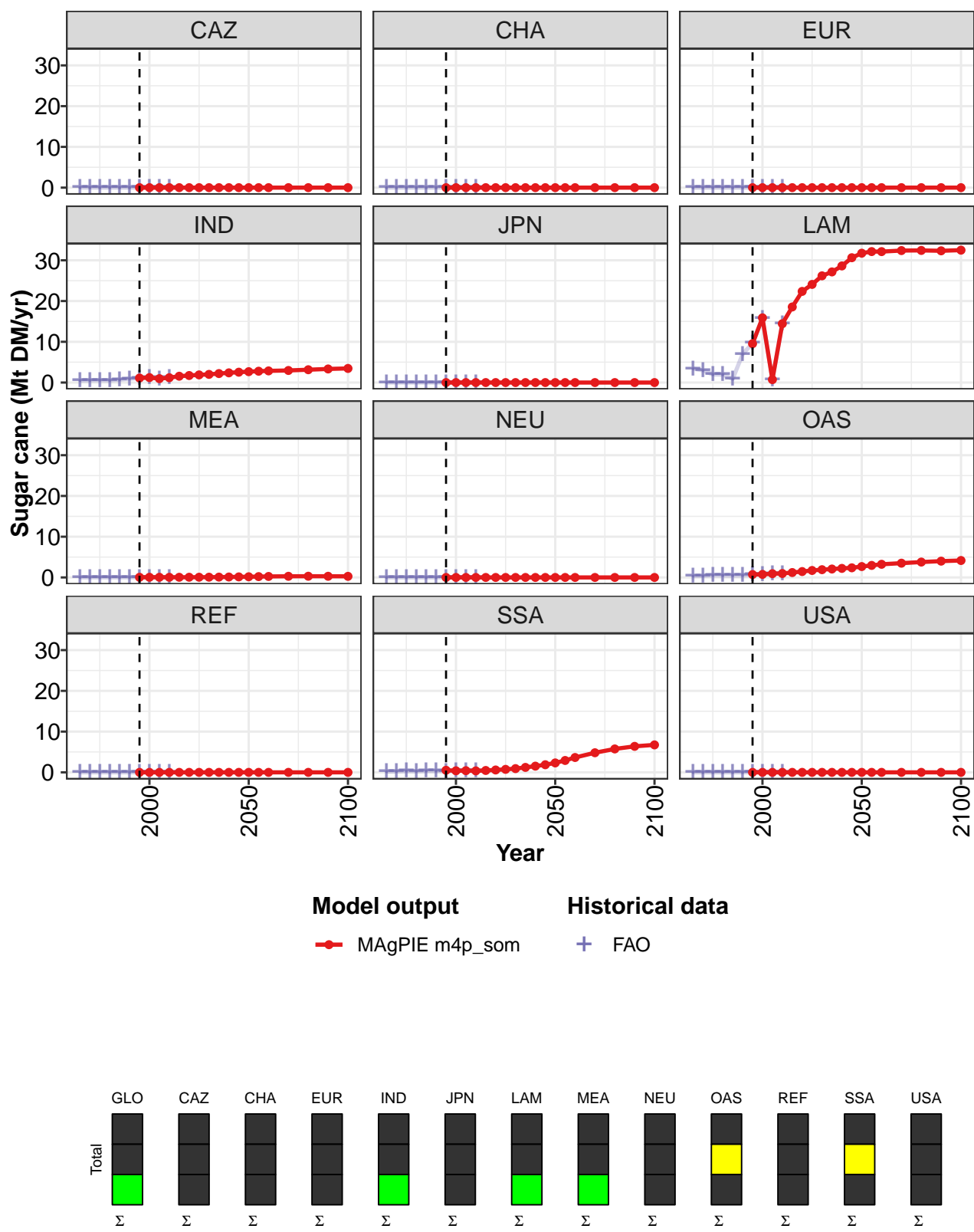


Figure 21: MAGPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Sugar crops—Sugar cane (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	11.9	18.3	3.1	17.0	21.8	26.2	28.5	31.1	32.7	34.9	37.6
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	1.1	1.2	1.0	1.2	1.6	1.7	1.9	2.0	2.2	2.4	2.5
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	9.5	15.9	0.7	14.4	18.5	22.4	24.1	26.2	27.2	28.6	30.6
MEA	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.7	0.8	0.9	1.0	1.2	1.5	1.7	1.9	2.1	2.2	2.4
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.5	0.4	0.4	0.4	0.5	0.6	0.7	0.9	1.2	1.5	1.9
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

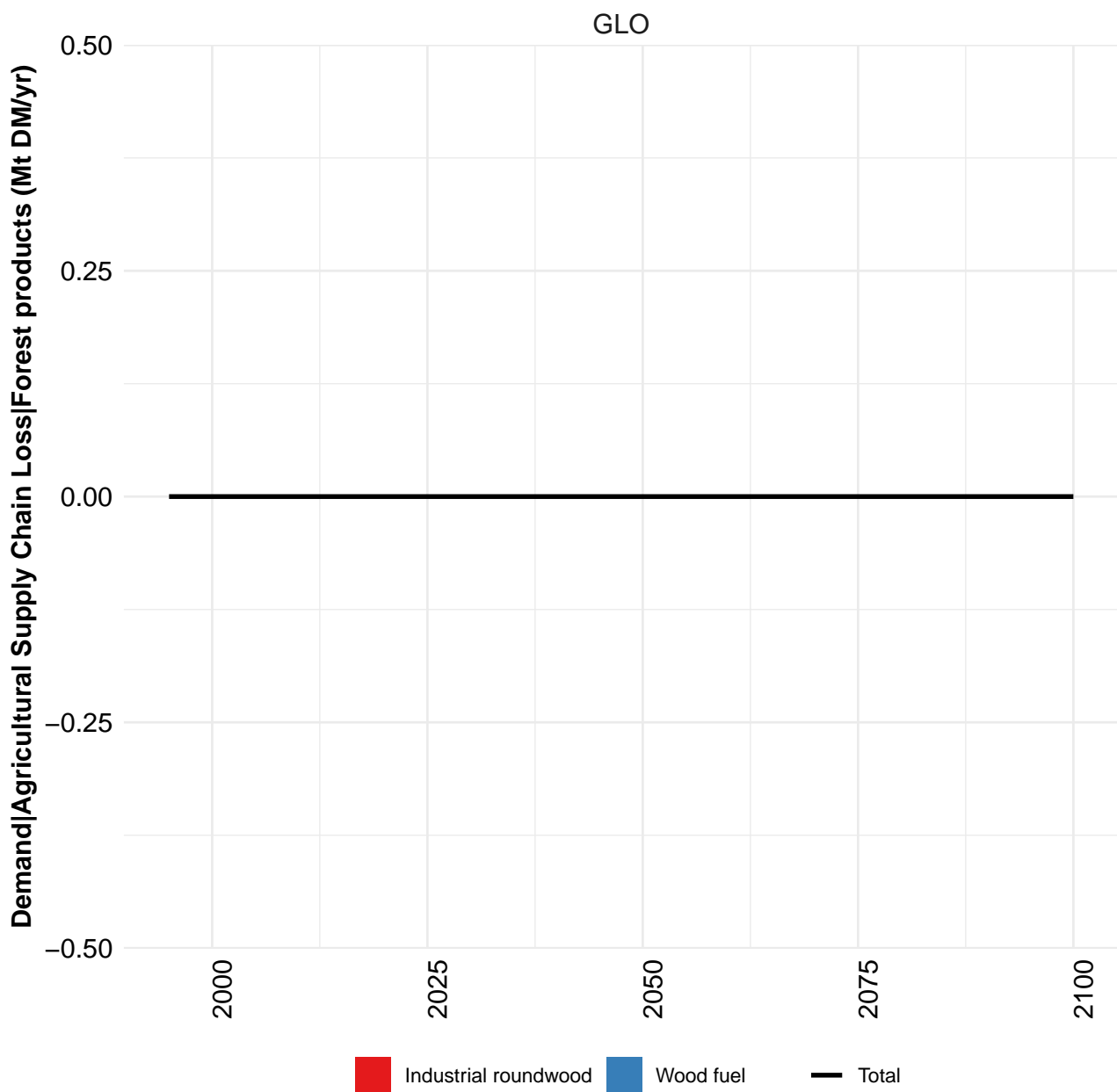
Table 64: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	39.6	41.0	42.1	44.0	45.4	46.3	47.1
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	2.7	2.8	2.9	3.0	3.1	3.3	3.5
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	31.7	32.1	32.1	32.4	32.4	32.3	32.5
MEA	0.2	0.2	0.2	0.3	0.3	0.3	0.3
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	2.7	3.0	3.2	3.5	3.8	4.0	4.2
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	2.3	2.9	3.6	4.8	5.7	6.4	6.7
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

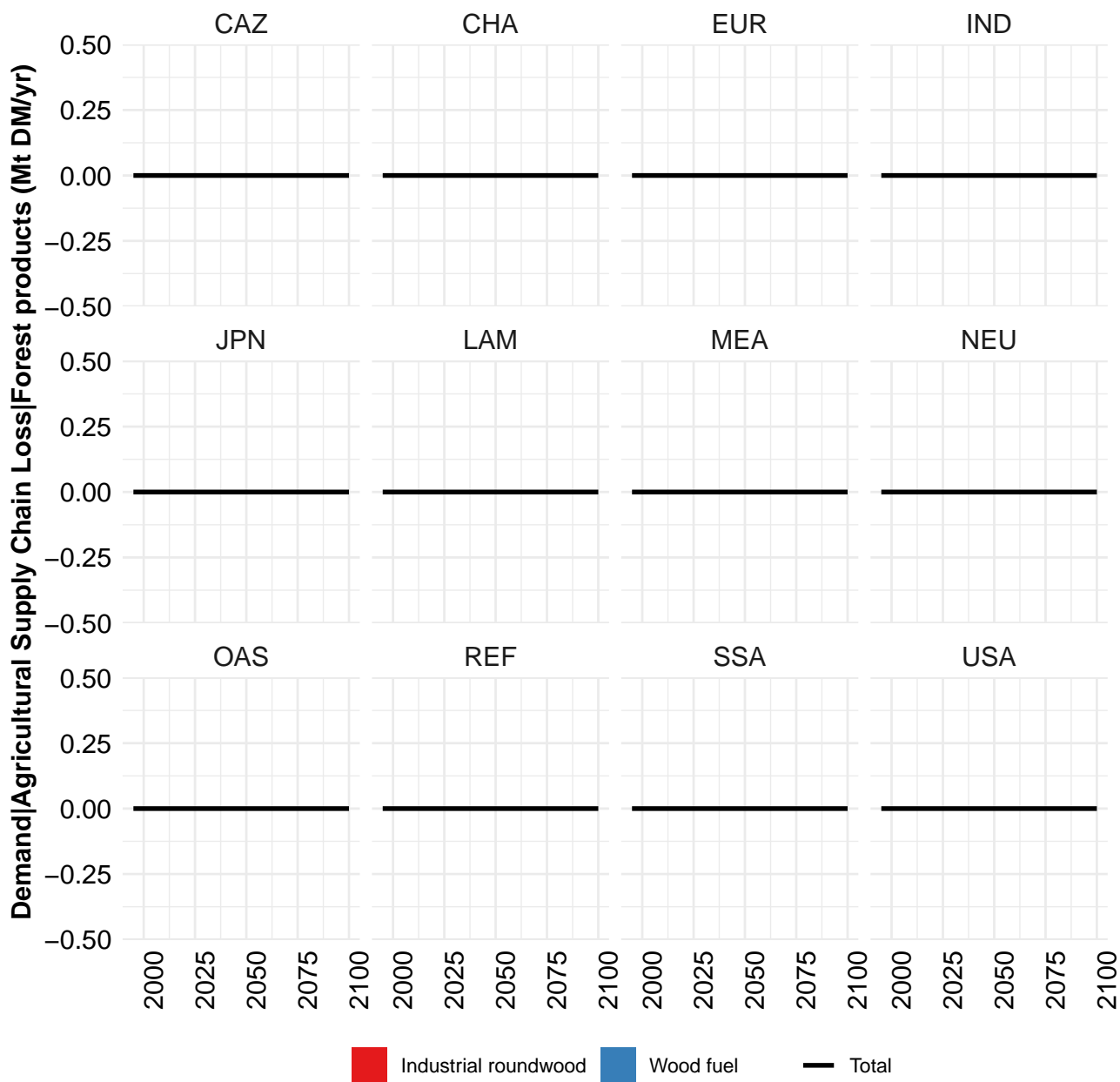
Table 65: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 2/2]

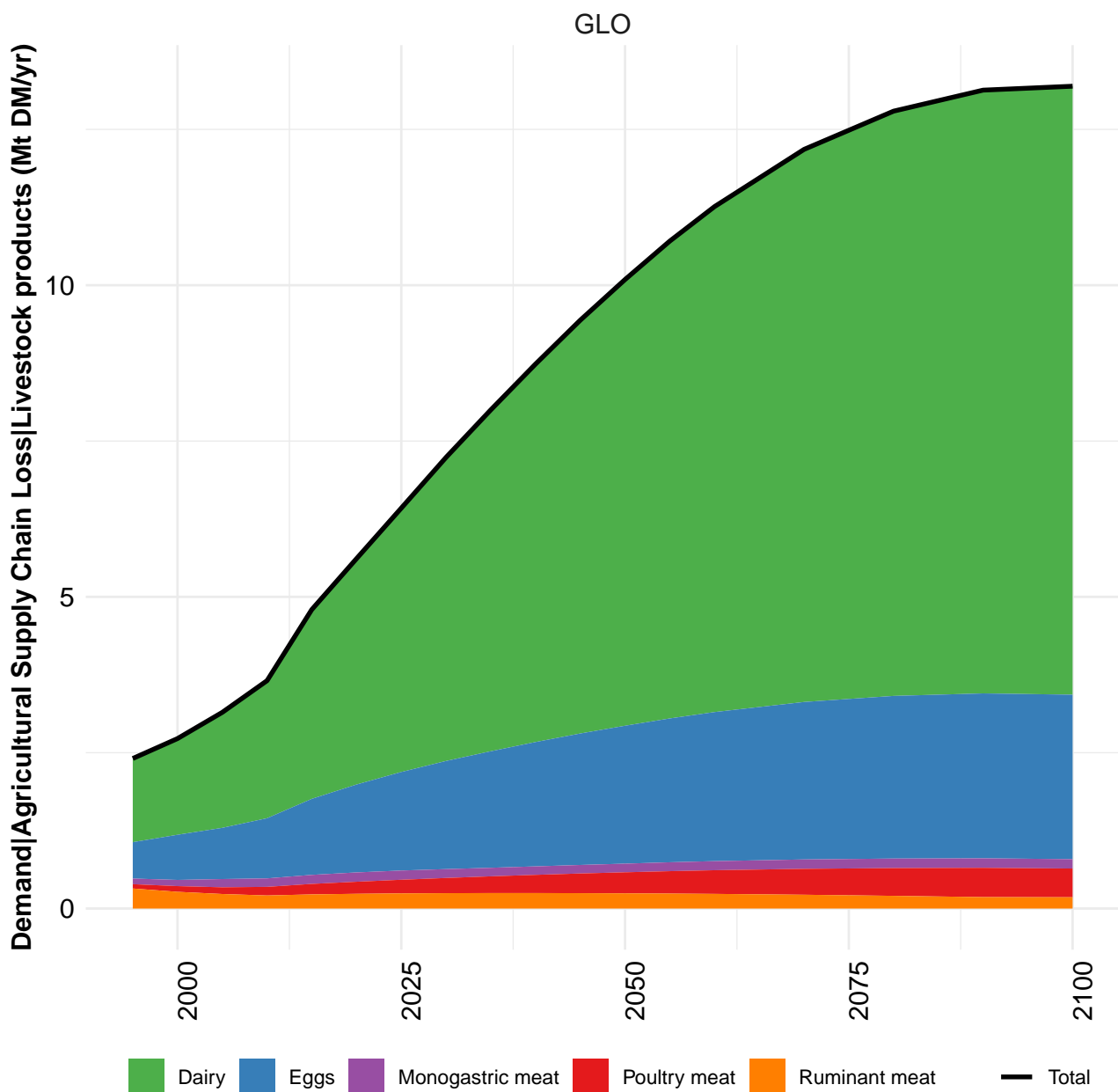
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4.4	4.2	3.4	3.3	2.4	8.8	11.7	18.1	3.0	16.9
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.5	0.5	0.6	0.5	0.7	0.9	1.1	1.2	1.0	1.2
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	3.4	3.0	2.0	2.0	0.9	7.0	9.7	15.7	0.7	14.4
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.3	0.4	0.5	0.5	0.5	0.5	0.6	0.8	0.8	0.9
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

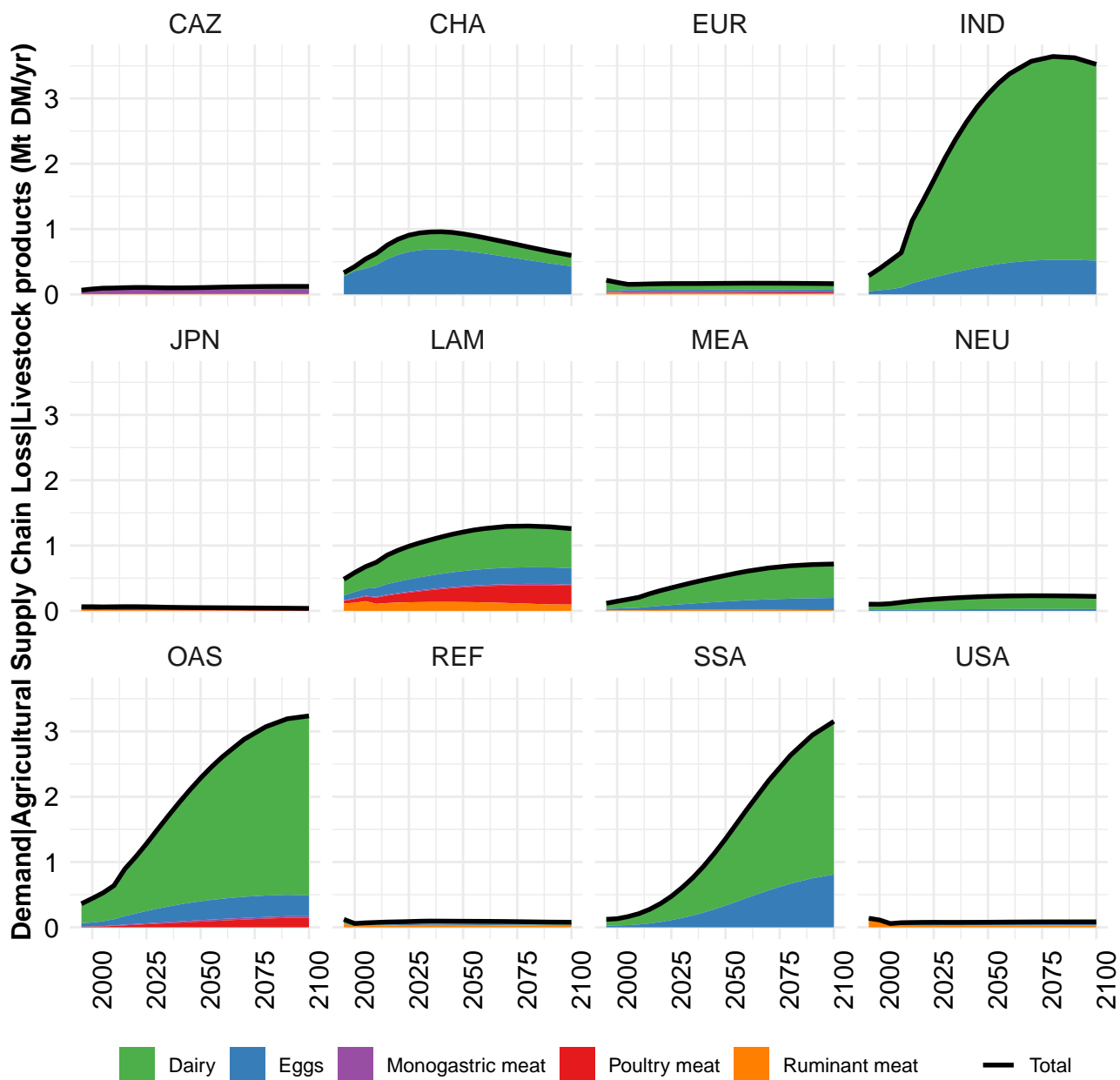
Table 66: FAO — Demand—Agricultural Supply Chain Loss—Crops—Sugar crops—Sugar cane (Mt DM/yr)





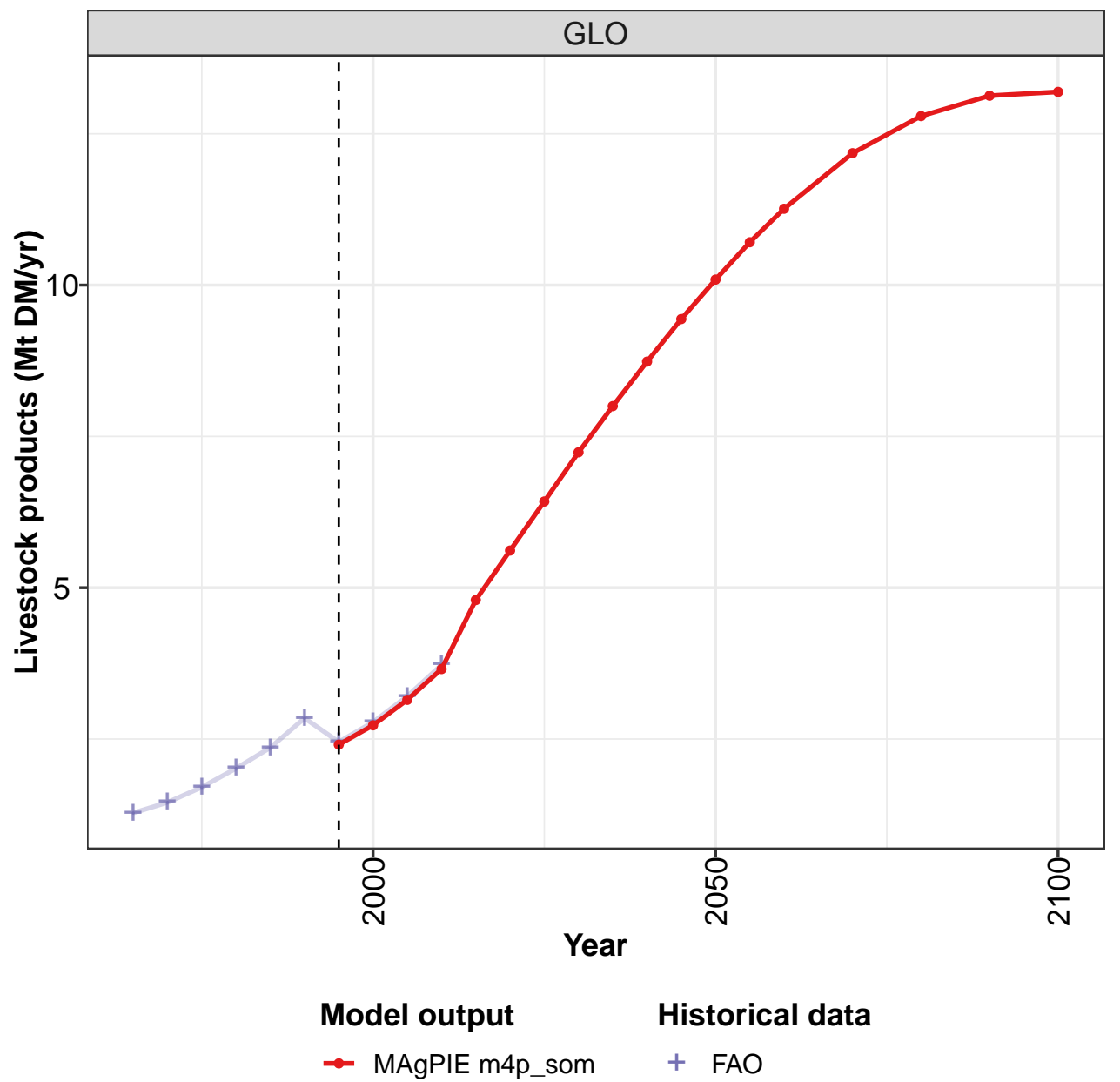






3.2 Livestock products

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

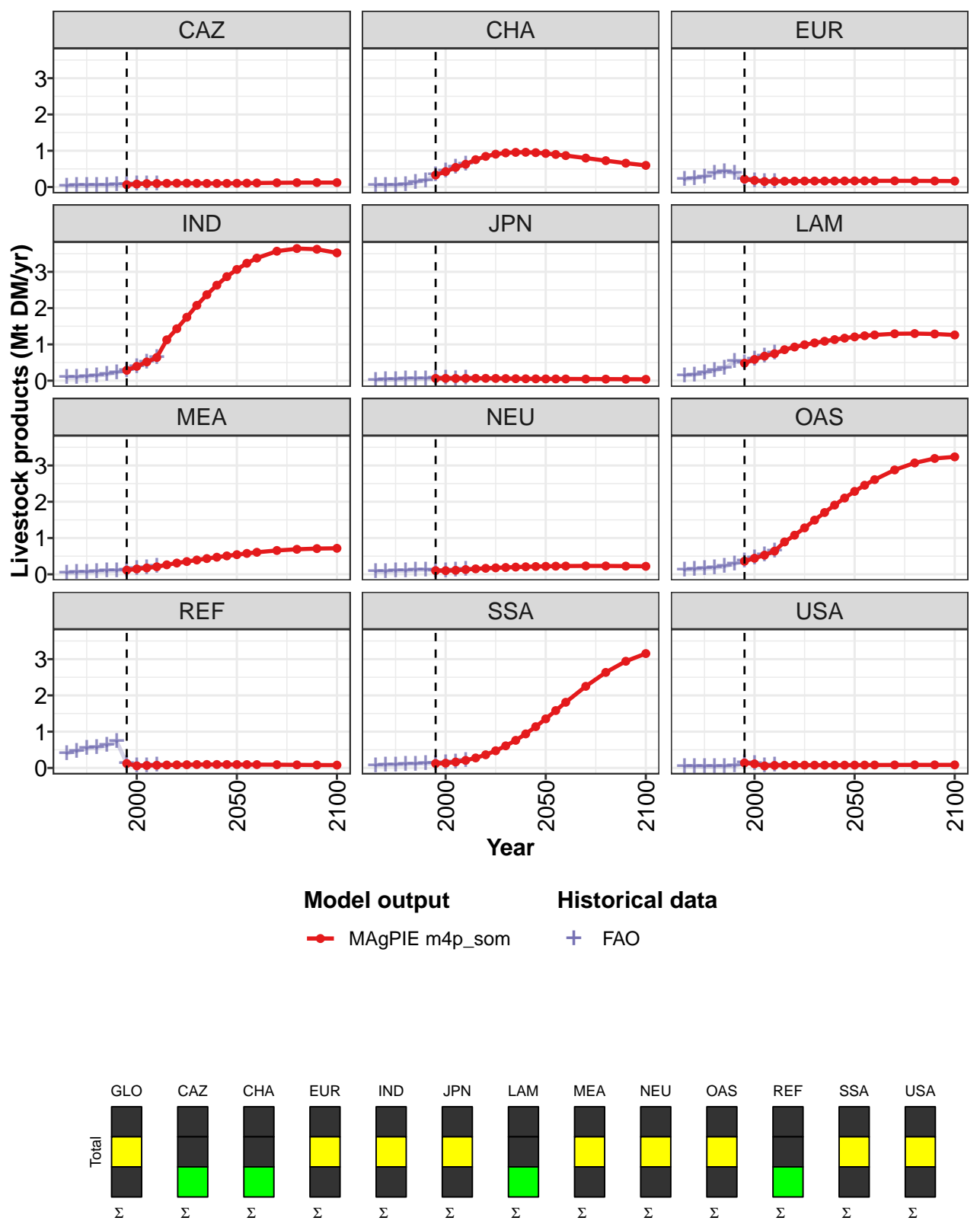


Figure 22: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Livestock products (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	2.4	2.7	3.1	3.7	4.8	5.6	6.4	7.2	8.0	8.7	9.4
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	0.3	0.4	0.5	0.6	0.8	0.8	0.9	0.9	1.0	1.0	0.9
EUR	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
IND	0.3	0.4	0.5	0.6	1.1	1.4	1.7	2.1	2.4	2.6	2.9
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.5	0.6	0.7	0.7	0.9	0.9	1.0	1.0	1.1	1.1	1.2
MEA	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.5	0.5
NEU	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	0.4	0.4	0.5	0.6	0.9	1.1	1.3	1.5	1.7	1.9	2.1
REF	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SSA	0.1	0.1	0.2	0.2	0.3	0.4	0.5	0.6	0.8	0.9	1.1
USA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Table 67: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Livestock products (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	10.1	10.7	11.3	12.2	12.8	13.1	13.2
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	0.9	0.9	0.9	0.8	0.7	0.7	0.6
EUR	0.2	0.2	0.2	0.2	0.2	0.2	0.2
IND	3.1	3.2	3.4	3.6	3.6	3.6	3.5
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.2	1.2	1.3	1.3	1.3	1.3	1.3
MEA	0.5	0.6	0.6	0.7	0.7	0.7	0.7
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	2.3	2.5	2.6	2.9	3.1	3.2	3.2
REF	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SSA	1.4	1.6	1.8	2.2	2.6	2.9	3.2
USA	0.1	0.1	0.1	0.1	0.1	0.1	0.1

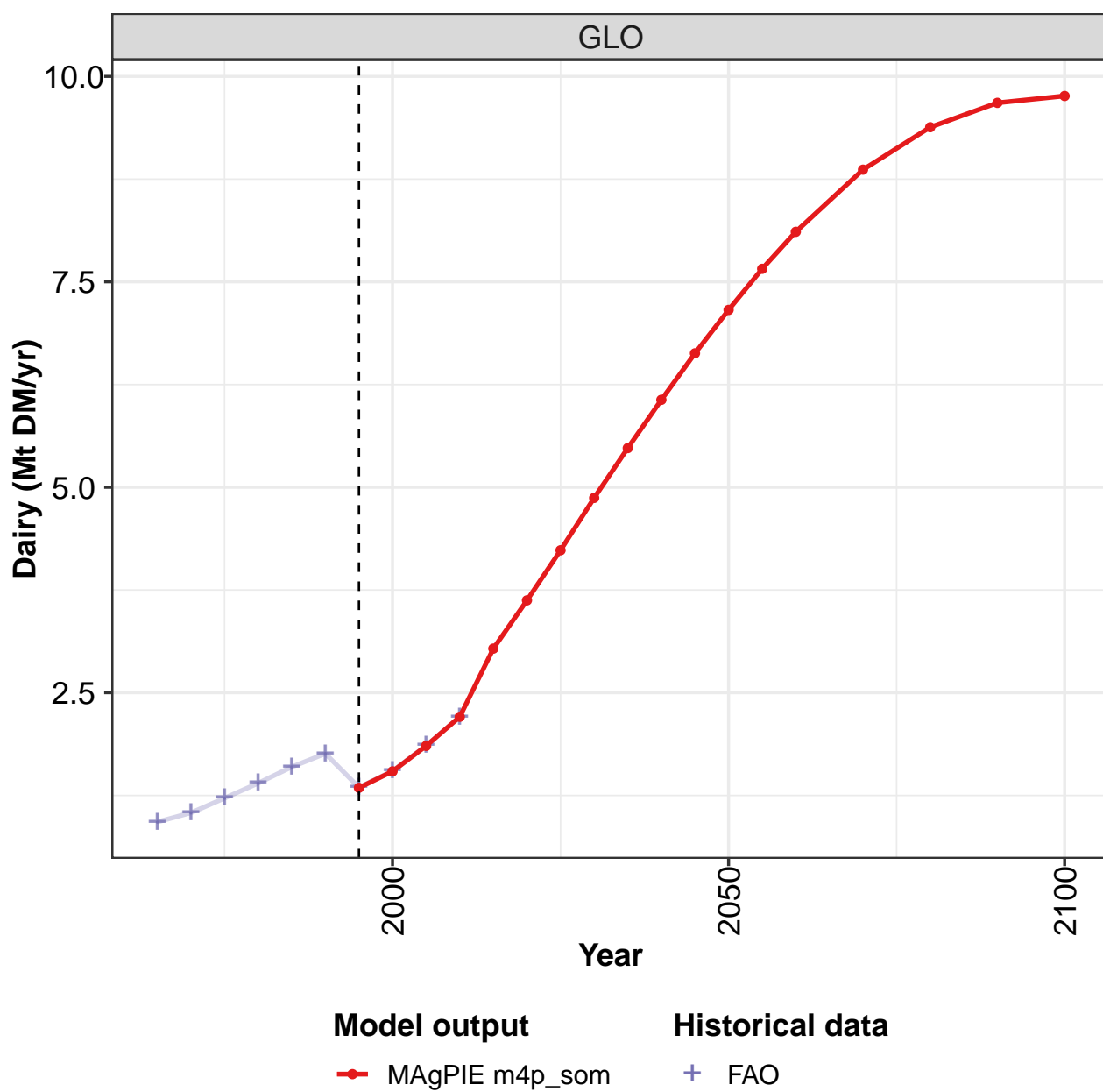
Table 68: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Livestock products (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.28	1.45	1.70	2.01	2.36	2.84	2.45	2.78	3.21	3.72
CAZ	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.08	0.10	0.10
CHA	0.04	0.04	0.05	0.07	0.13	0.18	0.34	0.44	0.55	0.64
EUR	0.21	0.24	0.28	0.38	0.42	0.38	0.22	0.18	0.15	0.16
IND	0.08	0.09	0.11	0.14	0.17	0.23	0.29	0.40	0.52	0.64
JPN	0.02	0.03	0.03	0.04	0.05	0.06	0.06	0.06	0.06	0.06
LAM	0.14	0.16	0.21	0.28	0.34	0.52	0.49	0.60	0.69	0.76
MEA	0.04	0.05	0.06	0.08	0.09	0.10	0.12	0.15	0.18	0.21
NEU	0.08	0.07	0.10	0.10	0.11	0.12	0.10	0.10	0.11	0.13
OAS	0.12	0.13	0.15	0.18	0.22	0.29	0.37	0.45	0.54	0.65
REF	0.41	0.46	0.54	0.56	0.62	0.73	0.13	0.06	0.07	0.08
SSA	0.07	0.08	0.09	0.10	0.11	0.13	0.13	0.14	0.17	0.21
USA	0.05	0.05	0.04	0.04	0.05	0.06	0.14	0.12	0.06	0.08

Table 69: FAO — Demand—Agricultural Supply Chain Loss—Livestock products (Mt DM/yr)

## 3.2.1 Dairy

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

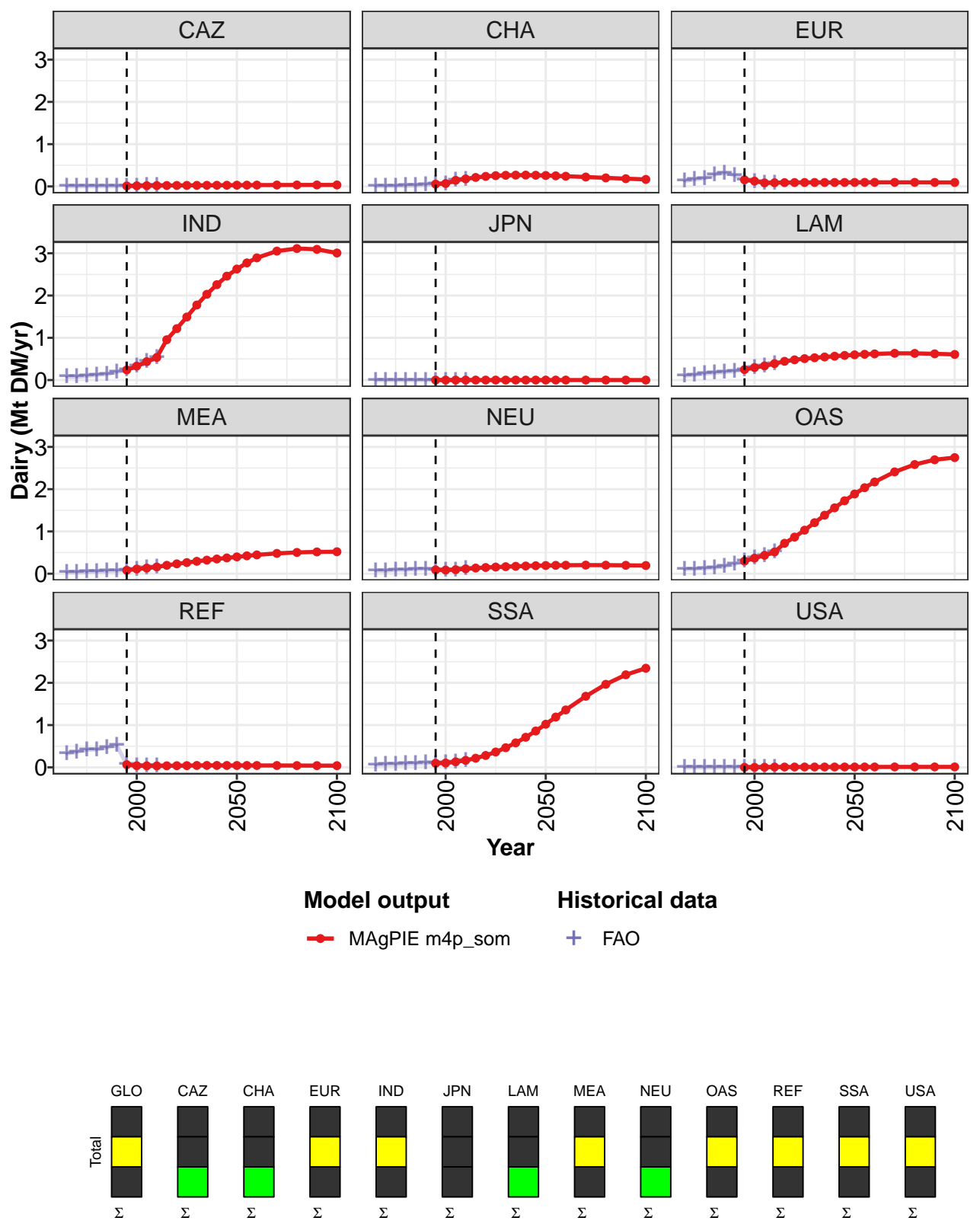


Figure 23: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Livestock products—Dairy (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.34	1.54	1.85	2.21	3.04	3.62	4.23	4.87	5.48	6.06	6.63
CAZ	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03
CHA	0.06	0.07	0.14	0.18	0.21	0.24	0.25	0.26	0.27	0.27	0.26
EUR	0.16	0.13	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
IND	0.24	0.33	0.44	0.53	0.95	1.22	1.49	1.78	2.03	2.26	2.46
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.25	0.30	0.34	0.39	0.44	0.48	0.51	0.53	0.55	0.56	0.58
MEA	0.08	0.11	0.13	0.16	0.20	0.23	0.26	0.29	0.32	0.35	0.37
NEU	0.09	0.09	0.10	0.12	0.13	0.15	0.16	0.17	0.18	0.18	0.19
OAS	0.30	0.37	0.44	0.52	0.72	0.87	1.03	1.21	1.38	1.56	1.73
REF	0.06	0.04	0.04	0.03	0.04	0.04	0.04	0.04	0.05	0.05	0.04
SSA	0.10	0.10	0.13	0.17	0.22	0.28	0.36	0.46	0.58	0.71	0.86
USA	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

Table 70: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Livestock products—Dairy (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	7.16	7.66	8.11	8.87	9.38	9.68	9.76
CAZ	0.03	0.03	0.03	0.03	0.03	0.03	0.03
CHA	0.26	0.25	0.24	0.22	0.20	0.18	0.17
EUR	0.10	0.10	0.10	0.10	0.10	0.09	0.09
IND	2.63	2.77	2.89	3.05	3.11	3.09	3.01
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.60	0.61	0.62	0.63	0.63	0.62	0.61
MEA	0.40	0.42	0.45	0.48	0.50	0.52	0.52
NEU	0.19	0.20	0.20	0.20	0.20	0.20	0.19
OAS	1.89	2.03	2.17	2.41	2.58	2.70	2.75
REF	0.04	0.04	0.04	0.04	0.04	0.04	0.04
SSA	1.02	1.19	1.36	1.68	1.96	2.19	2.34
USA	0.01	0.01	0.01	0.01	0.01	0.01	0.01

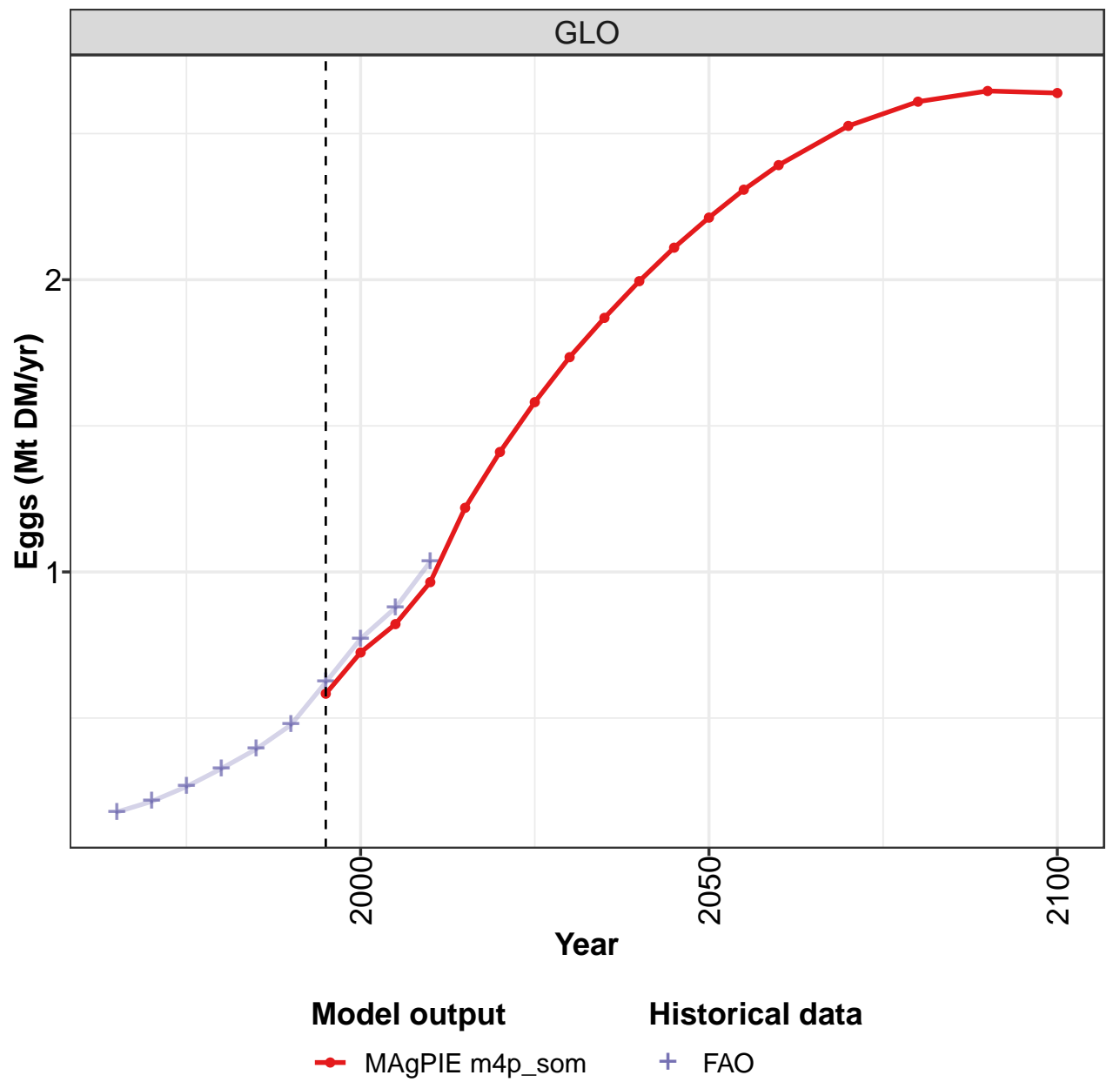
Table 71: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Livestock products—Dairy (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.93	1.04	1.22	1.40	1.60	1.76	1.35	1.55	1.86	2.21
CAZ	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
CHA	0.01	0.01	0.02	0.02	0.03	0.04	0.06	0.07	0.14	0.18
EUR	0.13	0.16	0.19	0.28	0.32	0.27	0.15	0.12	0.08	0.09
IND	0.08	0.08	0.10	0.12	0.14	0.19	0.24	0.33	0.44	0.53
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.10	0.12	0.15	0.17	0.19	0.21	0.25	0.30	0.34	0.39
MEA	0.03	0.04	0.05	0.06	0.06	0.07	0.08	0.11	0.14	0.16
NEU	0.08	0.07	0.09	0.09	0.10	0.11	0.09	0.09	0.10	0.12
OAS	0.10	0.11	0.13	0.14	0.17	0.23	0.30	0.37	0.44	0.52
REF	0.33	0.36	0.41	0.42	0.47	0.52	0.07	0.04	0.04	0.03
SSA	0.06	0.07	0.07	0.08	0.09	0.10	0.10	0.10	0.13	0.17
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01

Table 72: FAO — Demand—Agricultural Supply Chain Loss—Livestock products—Dairy (Mt DM/yr)

3.2.2 Eggs

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
 replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

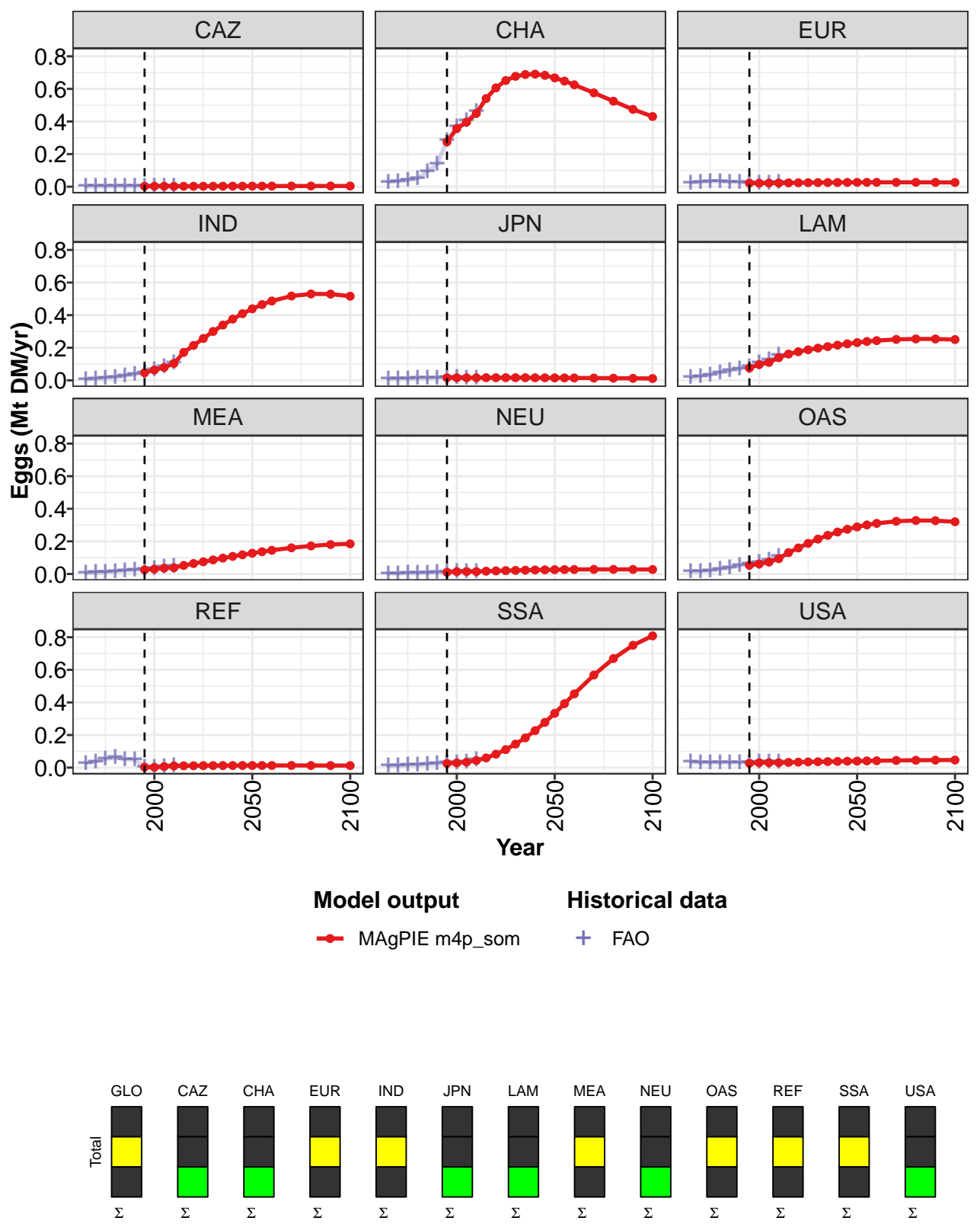


Figure 24: MAGPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Livestock products—Eggs (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.58	0.72	0.82	0.97	1.22	1.41	1.58	1.73	1.87	2.00	2.11
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.28	0.36	0.40	0.45	0.54	0.61	0.65	0.68	0.69	0.69	0.68
EUR	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03
IND	0.05	0.06	0.08	0.10	0.17	0.21	0.26	0.30	0.34	0.38	0.41
JPN	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
LAM	0.08	0.10	0.11	0.14	0.16	0.18	0.19	0.20	0.21	0.22	0.22
MEA	0.03	0.03	0.04	0.04	0.05	0.06	0.07	0.09	0.10	0.11	0.12
NEU	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.03
OAS	0.05	0.06	0.07	0.09	0.13	0.16	0.19	0.21	0.24	0.26	0.27
REF	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
SSA	0.03	0.03	0.03	0.04	0.06	0.08	0.11	0.14	0.18	0.23	0.28
USA	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04

Table 73: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Livestock products—Eggs (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	2.21	2.31	2.39	2.53	2.61	2.65	2.64
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.67	0.65	0.63	0.58	0.52	0.47	0.43
EUR	0.03	0.03	0.03	0.03	0.03	0.03	0.03
IND	0.44	0.47	0.49	0.52	0.53	0.53	0.52
JPN	0.02	0.02	0.01	0.01	0.01	0.01	0.01
LAM	0.23	0.24	0.24	0.25	0.25	0.25	0.25
MEA	0.13	0.14	0.15	0.16	0.17	0.18	0.18
NEU	0.03	0.03	0.03	0.03	0.03	0.03	0.03
OAS	0.29	0.30	0.31	0.32	0.33	0.33	0.32
REF	0.01	0.01	0.01	0.01	0.01	0.01	0.01
SSA	0.33	0.39	0.45	0.57	0.67	0.75	0.81
USA	0.04	0.04	0.04	0.04	0.05	0.05	0.05

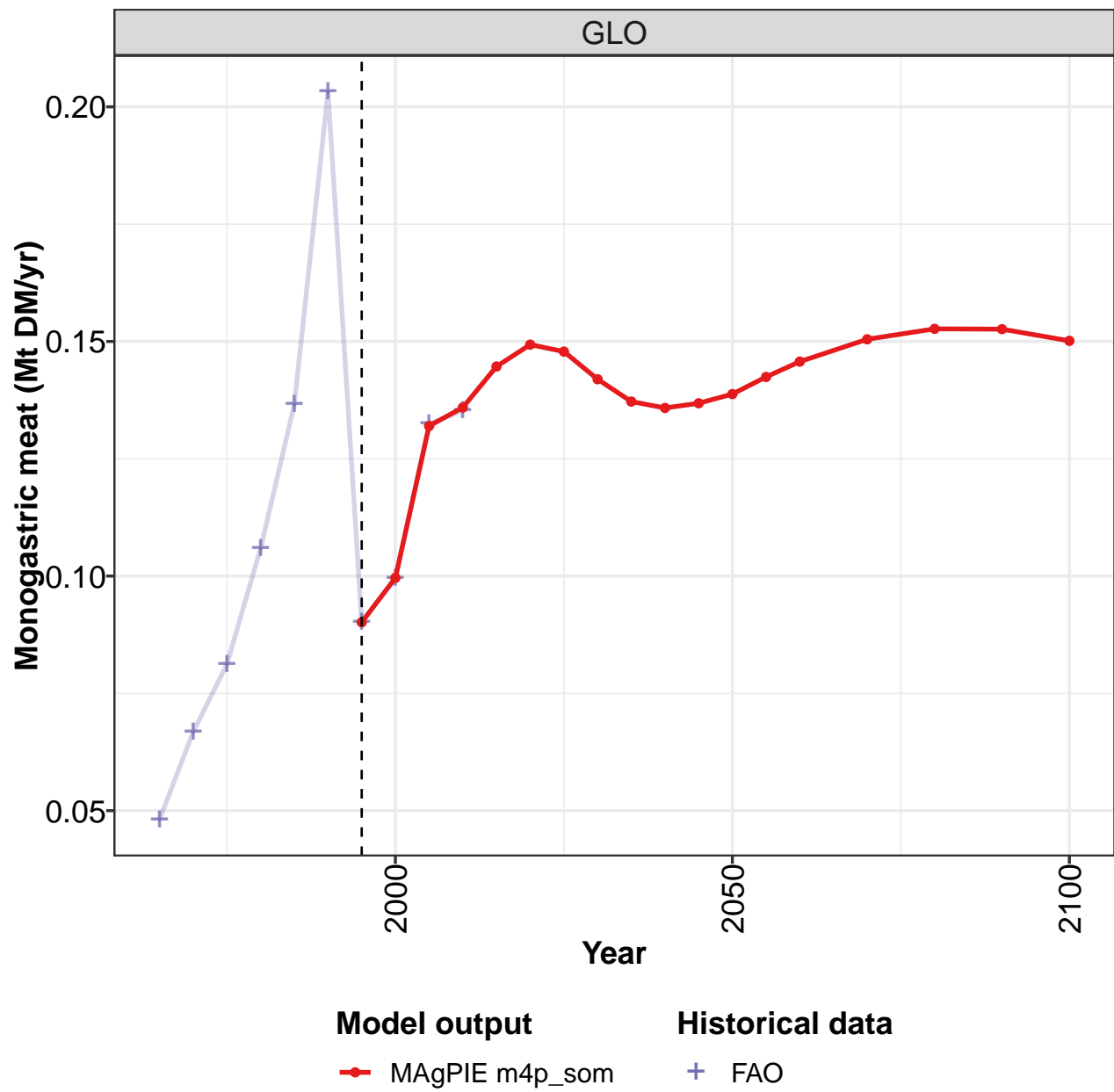
Table 74: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Livestock products—Eggs (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.18	0.21	0.27	0.33	0.39	0.48	0.62	0.77	0.88	1.04
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.03	0.03	0.04	0.05	0.09	0.14	0.28	0.37	0.41	0.46
EUR	0.02	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02
IND	0.01	0.01	0.01	0.02	0.03	0.04	0.05	0.07	0.08	0.11
JPN	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
LAM	0.02	0.02	0.03	0.05	0.06	0.07	0.08	0.11	0.12	0.16
MEA	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04	0.05
NEU	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.02
OAS	0.01	0.02	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.11
REF	0.03	0.04	0.05	0.06	0.05	0.05	0.00	0.00	0.01	0.01
SSA	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04	0.05
USA	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04

Table 75: FAO — Demand—Agricultural Supply Chain Loss—Livestock products—Eggs (Mt DM/yr)

3.2.3 Monogastric meat

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

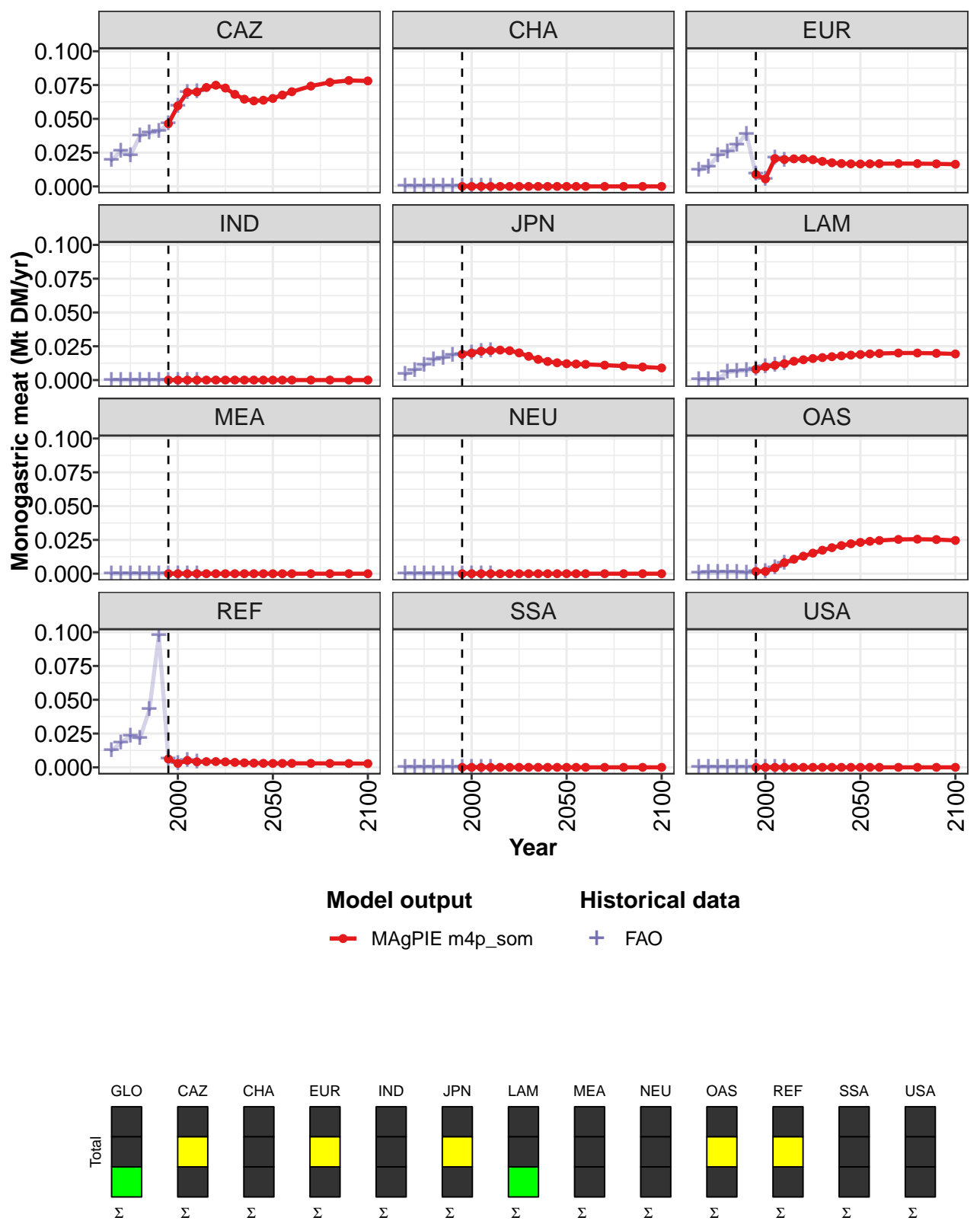


Figure 25: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Livestock products—Monogastric meat (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.090	0.100	0.132	0.136	0.145	0.149	0.148	0.142	0.137	0.136	0.137
CAZ	0.046	0.060	0.070	0.070	0.073	0.075	0.073	0.068	0.065	0.063	0.064
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.009	0.006	0.021	0.020	0.020	0.020	0.020	0.019	0.018	0.017	0.017
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.019	0.020	0.021	0.022	0.022	0.022	0.020	0.018	0.015	0.014	0.013
LAM	0.008	0.010	0.011	0.012	0.014	0.015	0.016	0.017	0.017	0.018	0.018
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.002	0.002	0.004	0.008	0.011	0.013	0.015	0.017	0.019	0.021	0.022
REF	0.006	0.003	0.005	0.004	0.004	0.004	0.004	0.004	0.003	0.003	0.003
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 76: MAGPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Livestock products—Monogastric meat (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.139	0.142	0.146	0.150	0.153	0.153	0.150
CAZ	0.065	0.068	0.070	0.074	0.077	0.078	0.078
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.017	0.017	0.017	0.017	0.017	0.017	0.016
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.012	0.012	0.012	0.011	0.010	0.010	0.009
LAM	0.019	0.019	0.020	0.020	0.020	0.020	0.019
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.023	0.024	0.025	0.025	0.026	0.025	0.025
REF	0.003	0.003	0.003	0.003	0.003	0.003	0.003
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000

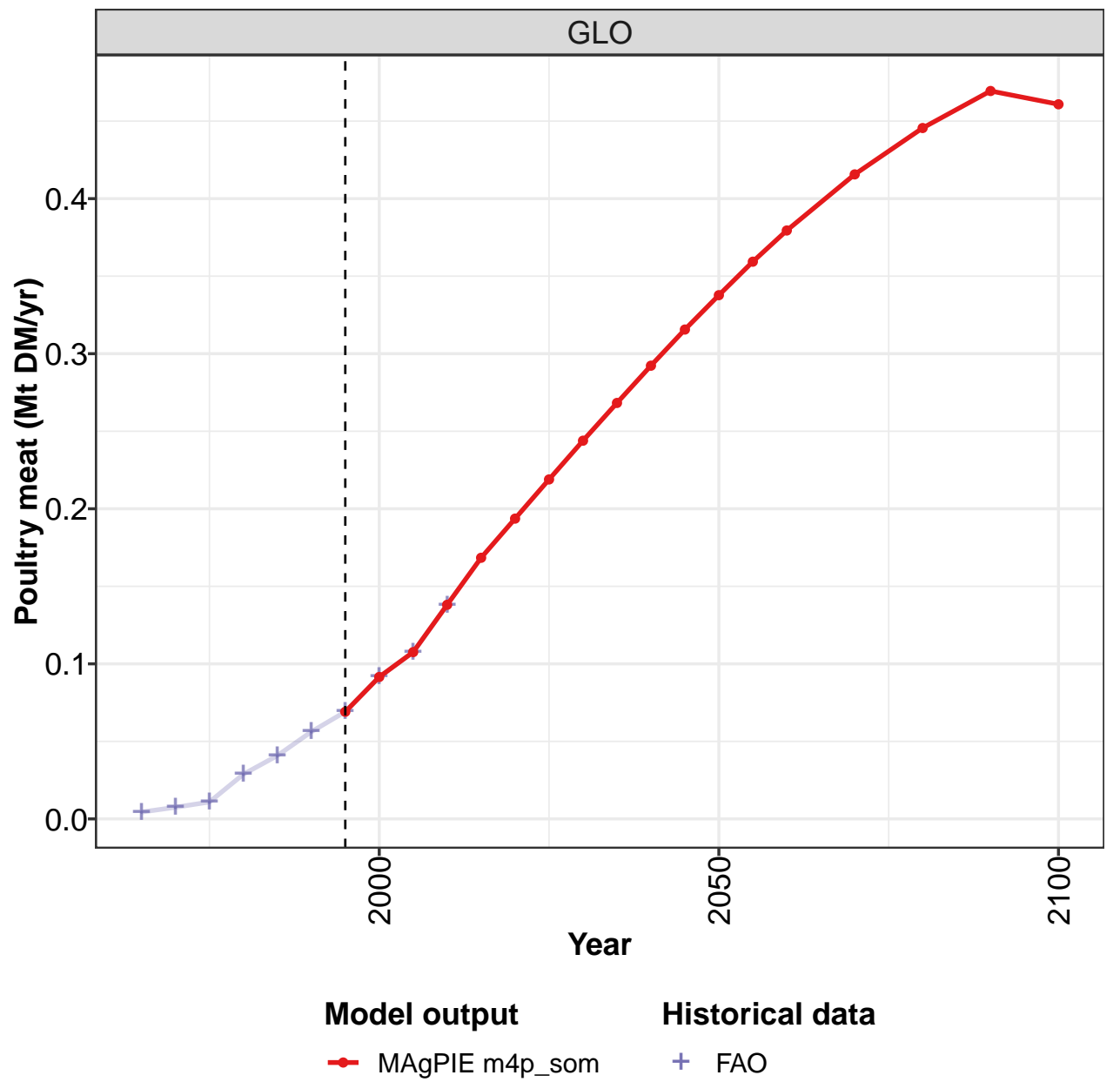
Table 77: MAGPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Livestock products—Monogastric meat (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.048	0.067	0.081	0.106	0.137	0.203	0.090	0.100	0.132	0.135
CAZ	0.019	0.026	0.023	0.037	0.040	0.041	0.046	0.060	0.070	0.070
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.012	0.014	0.023	0.025	0.031	0.039	0.009	0.005	0.021	0.020
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.004	0.007	0.011	0.015	0.016	0.019	0.019	0.020	0.021	0.022
LAM	0.000	0.000	0.001	0.006	0.006	0.007	0.008	0.010	0.011	0.012
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.004	0.008
REF	0.012	0.018	0.023	0.021	0.043	0.097	0.006	0.003	0.005	0.004
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 78: FAO — Demand—Agricultural Supply Chain Loss—Livestock products—Monogastric meat (Mt DM/yr)

3.2.4
Poultry meat

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

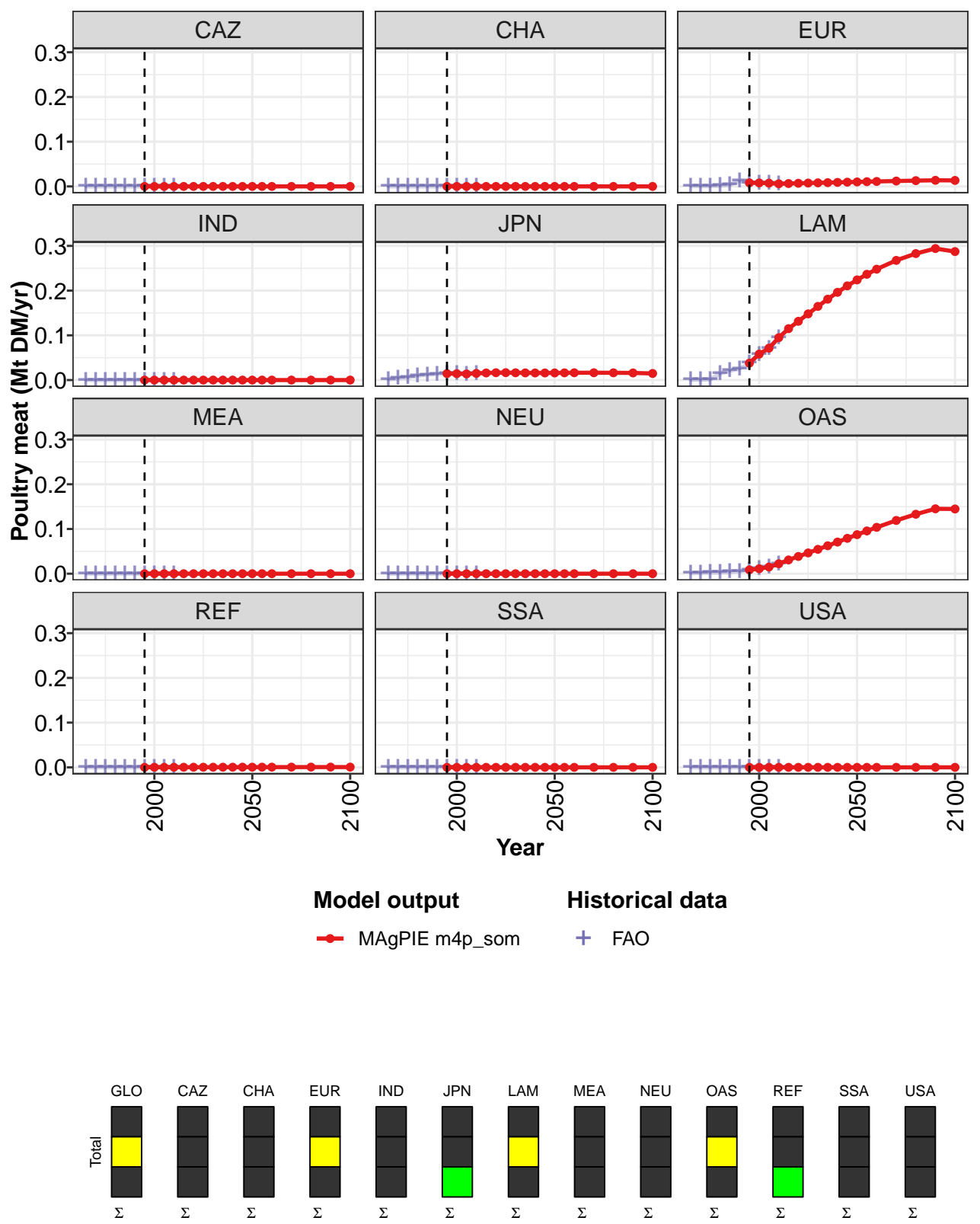


Figure 26: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Livestock products—Poultry meat (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.069	0.092	0.108	0.138	0.168	0.194	0.219	0.244	0.268	0.292	0.316
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.008	0.008	0.007	0.006	0.007	0.007	0.008	0.008	0.008	0.009	0.010
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.014	0.014	0.014	0.015	0.016	0.016	0.017	0.016	0.016	0.016	0.016
LAM	0.038	0.058	0.071	0.095	0.115	0.131	0.148	0.165	0.181	0.196	0.211
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.009	0.011	0.015	0.022	0.031	0.039	0.046	0.054	0.062	0.071	0.079
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 79: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Livestock products—Poultry meat (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.338	0.359	0.379	0.416	0.446	0.469	0.461
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.010	0.011	0.011	0.012	0.013	0.014	0.013
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.016	0.016	0.016	0.016	0.016	0.016	0.015
LAM	0.224	0.237	0.248	0.268	0.283	0.294	0.287
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.087	0.096	0.104	0.119	0.133	0.145	0.145
REF	0.000	0.000	0.000	0.001	0.001	0.001	0.001
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000

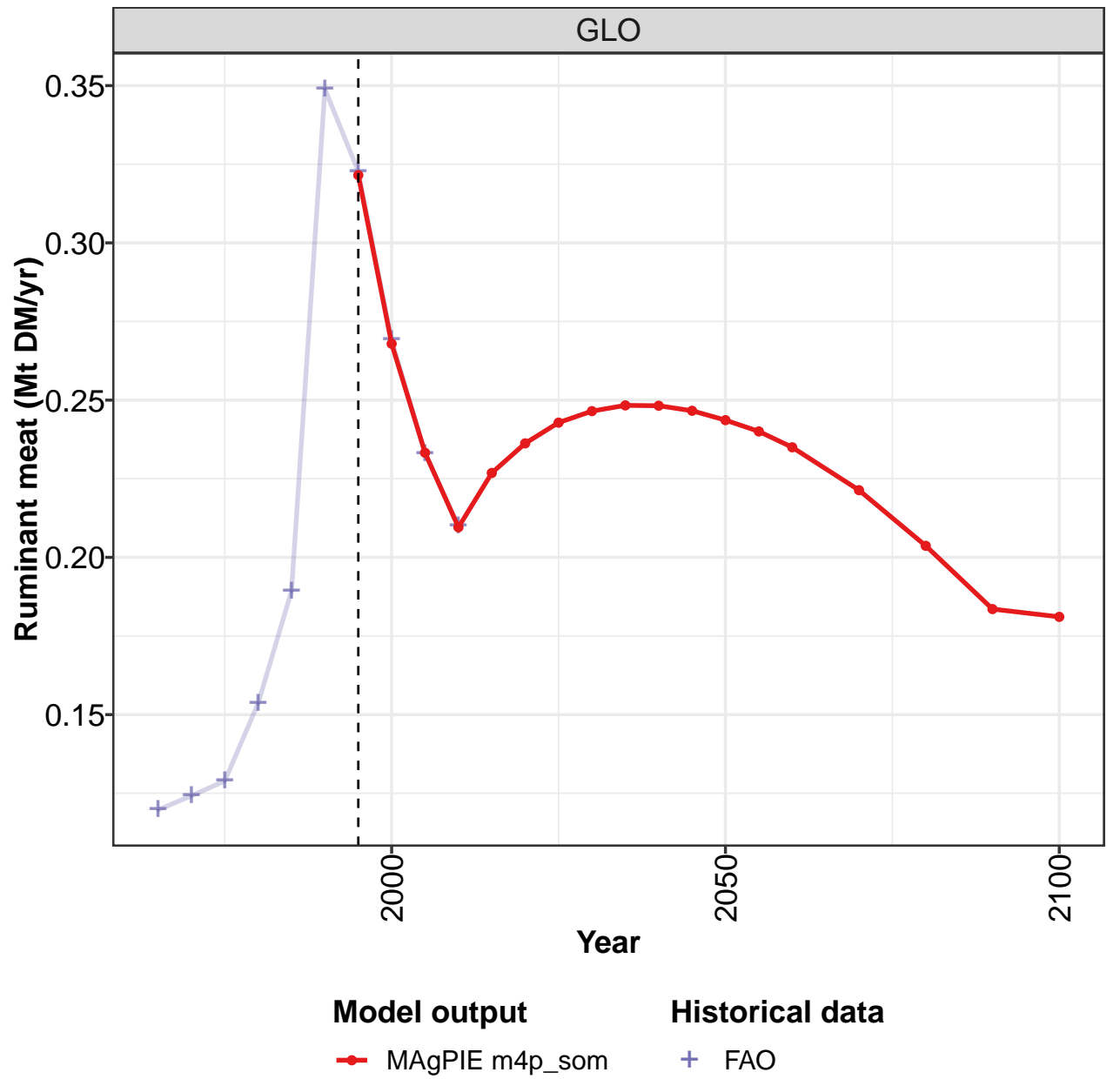
Table 80: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Livestock products—Poultry meat (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.004	0.007	0.011	0.029	0.041	0.056	0.069	0.091	0.108	0.138
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.001	0.001	0.001	0.002	0.004	0.012	0.008	0.008	0.007	0.006
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.002	0.004	0.006	0.010	0.012	0.014	0.015	0.014	0.014	0.015
LAM	0.001	0.001	0.002	0.014	0.021	0.025	0.038	0.058	0.071	0.095
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.001	0.002	0.003	0.003	0.004	0.005	0.009	0.011	0.015	0.022
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 81: FAO — Demand—Agricultural Supply Chain Loss—Livestock products—Poultry meat (Mt DM/yr)

3.2.5 Ruminant meat

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
 replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

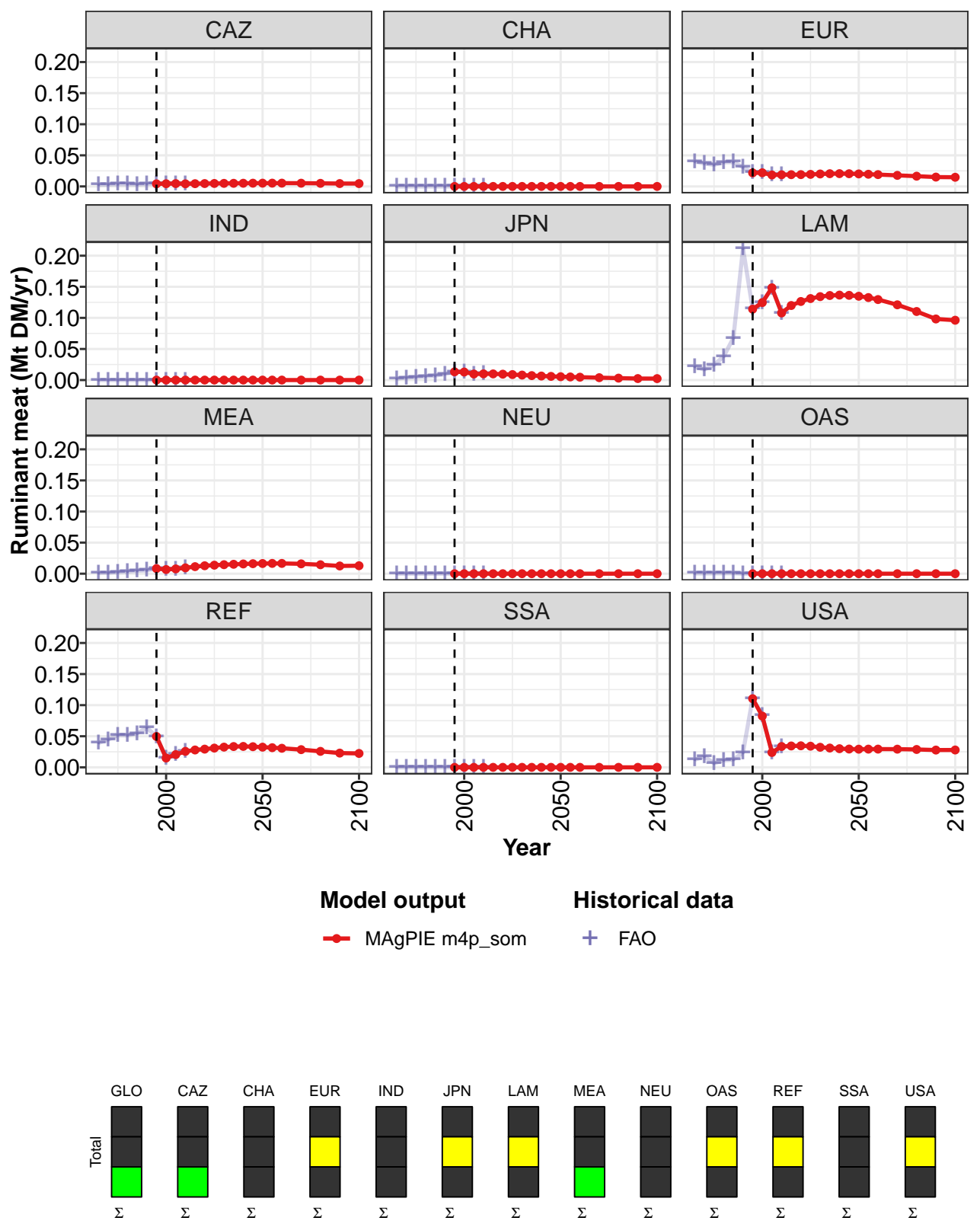


Figure 27: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Livestock products—Ruminant meat (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.322	0.268	0.233	0.210	0.227	0.236	0.243	0.247	0.248	0.248	0.247
CAZ	0.004	0.004	0.005	0.004	0.004	0.005	0.005	0.005	0.005	0.005	0.005
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.022	0.022	0.018	0.019	0.019	0.019	0.019	0.020	0.020	0.021	0.020
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.013	0.013	0.010	0.010	0.010	0.009	0.009	0.008	0.007	0.006	0.006
LAM	0.114	0.125	0.148	0.108	0.120	0.126	0.131	0.134	0.136	0.137	0.136
MEA	0.008	0.007	0.008	0.009	0.011	0.013	0.014	0.015	0.015	0.016	0.016
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.050	0.015	0.021	0.026	0.028	0.029	0.031	0.033	0.033	0.034	0.033
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.110	0.082	0.024	0.034	0.034	0.035	0.034	0.032	0.031	0.030	0.029

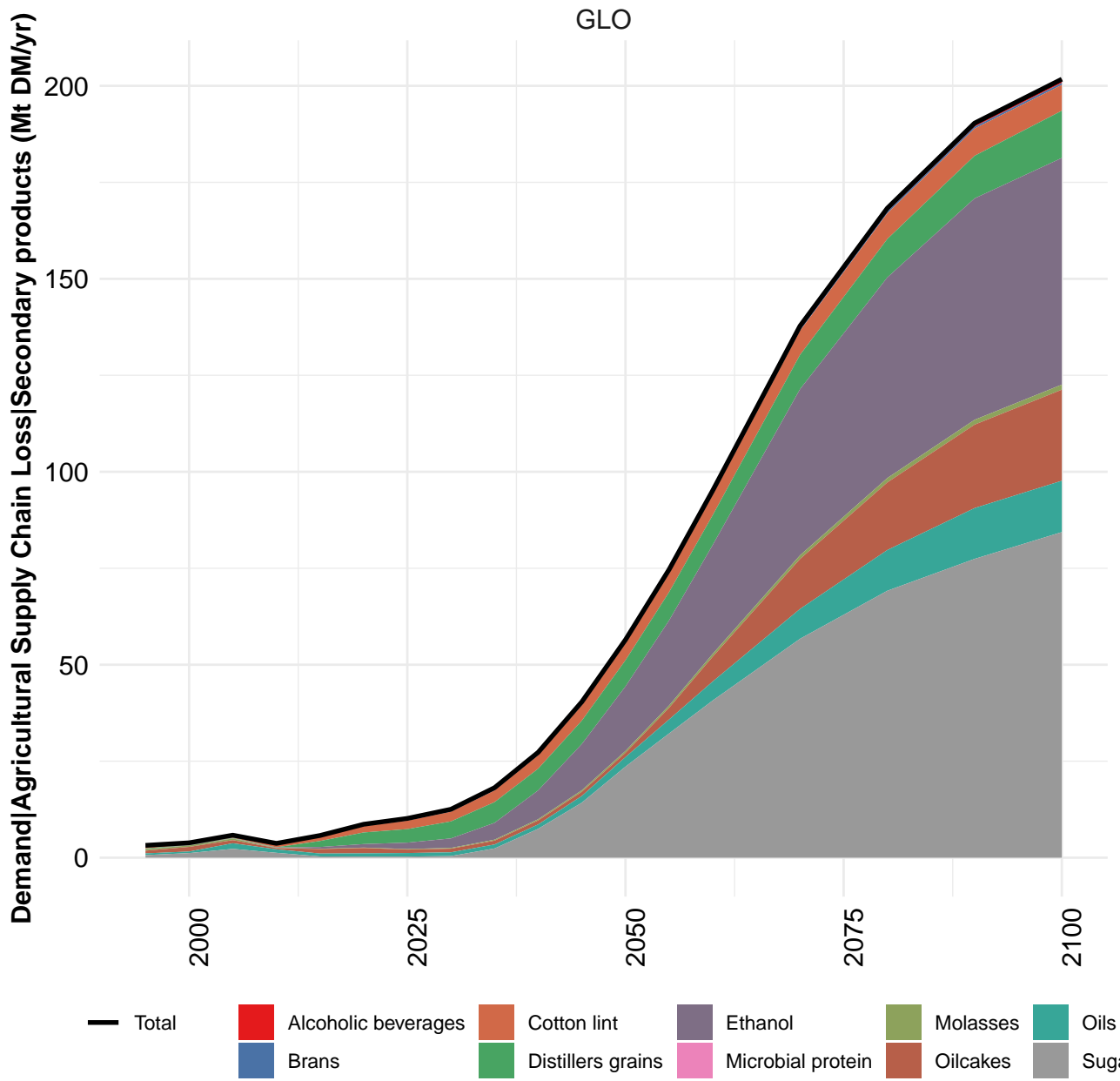
Table 82: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Livestock products—Ruminant meat (Mt DM/yr) [PART 1/2]

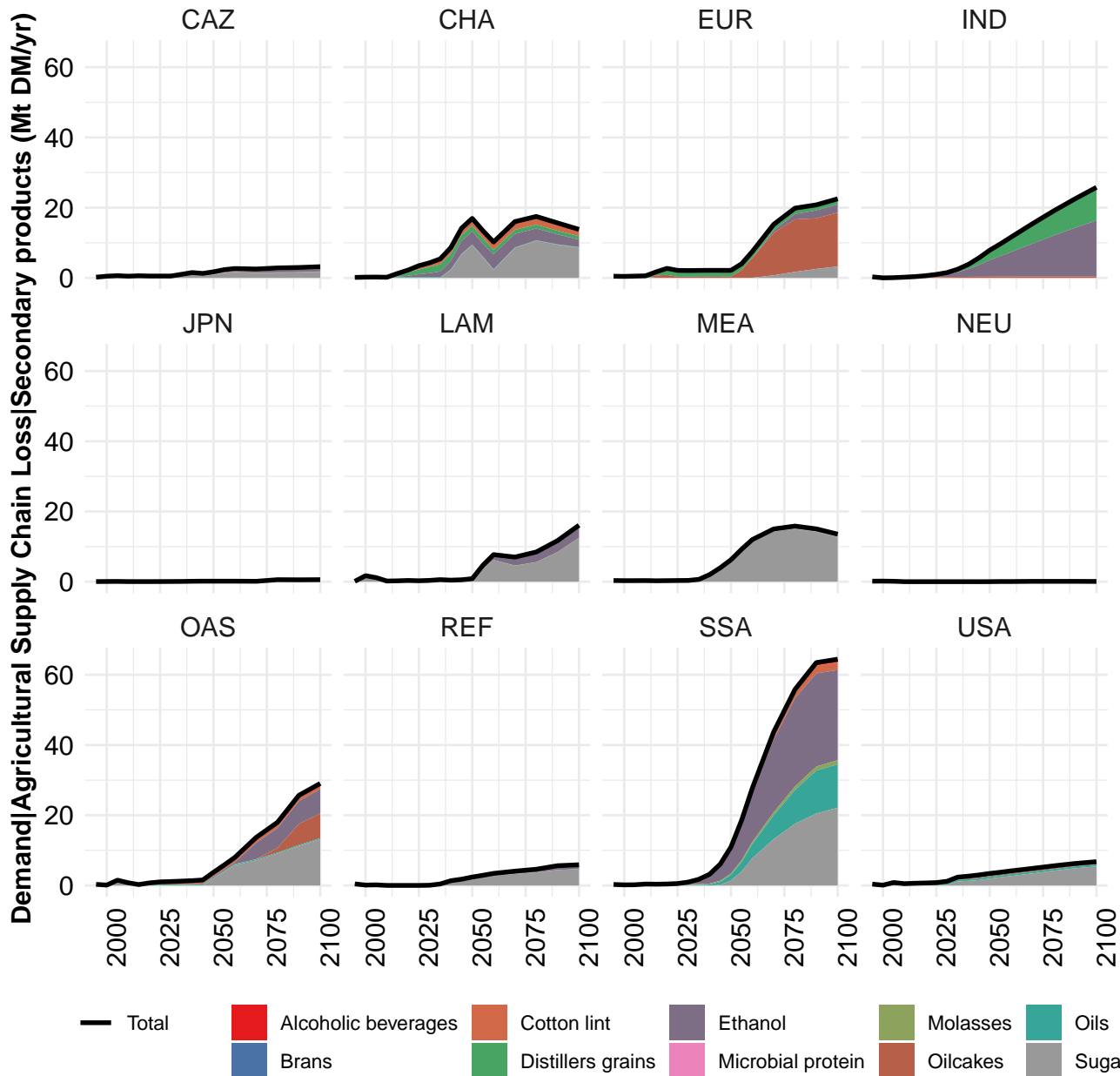
	2050	2055	2060	2070	2080	2090	2100
GLO	0.244	0.240	0.235	0.221	0.204	0.184	0.181
CAZ	0.005	0.005	0.005	0.005	0.005	0.005	0.005
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.020	0.020	0.019	0.018	0.016	0.015	0.015
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.005	0.005	0.005	0.004	0.003	0.002	0.002
LAM	0.135	0.133	0.129	0.121	0.110	0.098	0.096
MEA	0.016	0.017	0.017	0.016	0.014	0.012	0.013
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.032	0.032	0.031	0.028	0.026	0.023	0.022
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.029	0.029	0.029	0.029	0.029	0.028	0.028

Table 83: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Livestock products—Ruminant meat (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.120	0.124	0.129	0.154	0.189	0.349	0.323	0.269	0.233	0.210
CAZ	0.003	0.003	0.004	0.004	0.003	0.004	0.004	0.004	0.005	0.004
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.040	0.037	0.035	0.039	0.039	0.031	0.022	0.022	0.018	0.019
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.002	0.004	0.005	0.006	0.007	0.010	0.013	0.013	0.010	0.010
LAM	0.021	0.017	0.024	0.038	0.068	0.211	0.115	0.125	0.148	0.108
MEA	0.001	0.001	0.003	0.003	0.005	0.005	0.008	0.007	0.008	0.009
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000
REF	0.039	0.044	0.052	0.051	0.055	0.064	0.050	0.015	0.021	0.026
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.012	0.017	0.006	0.011	0.012	0.024	0.111	0.083	0.024	0.034

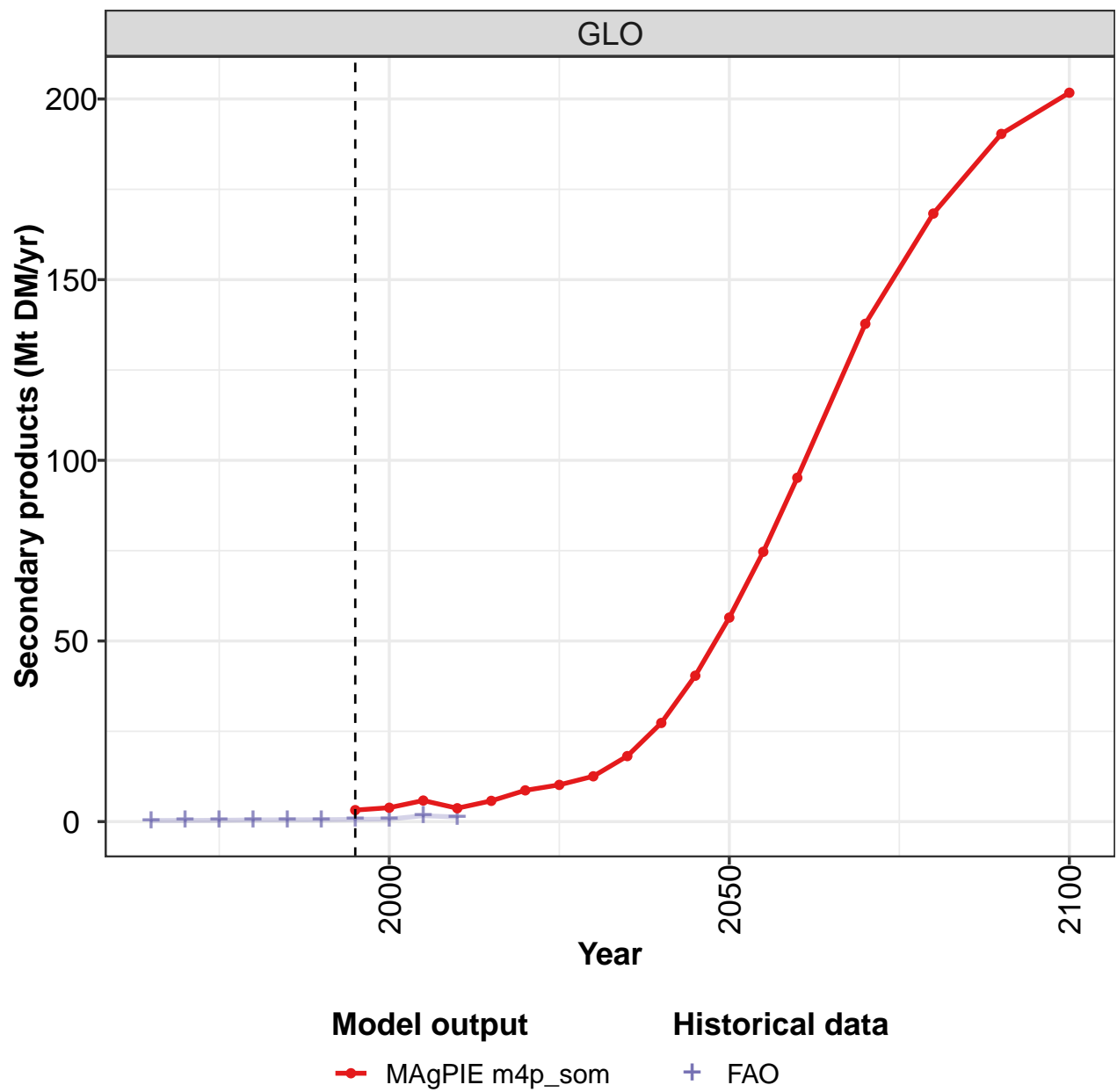
Table 84: FAO — Demand—Agricultural Supply Chain Loss—Livestock products—Ruminant meat (Mt DM/yr)





3.3 Secondary products

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

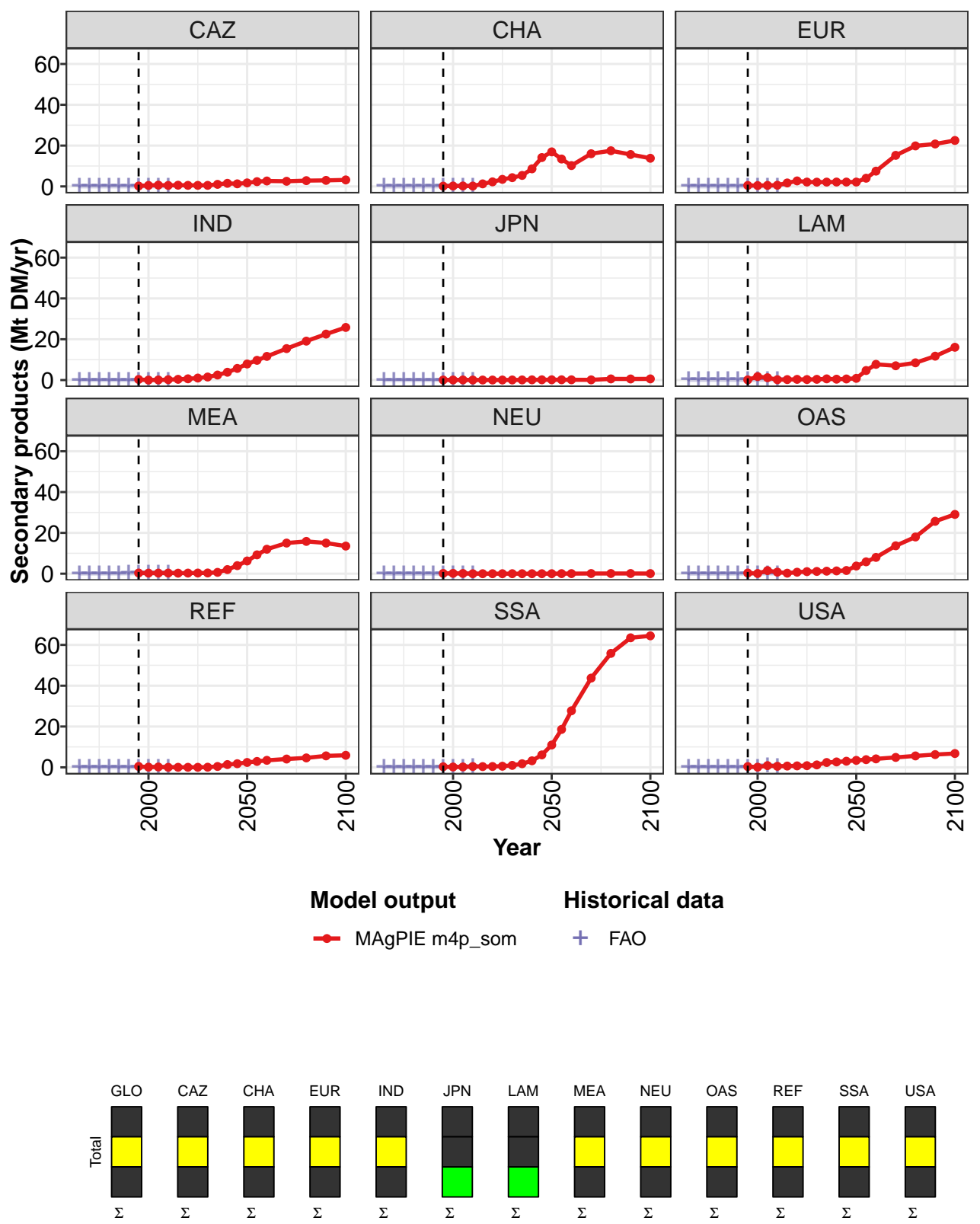


Figure 28: MAGPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Secondary products (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	3	4	6	4	6	9	10	13	18	27	40
CAZ	0	0	1	0	1	1	1	1	1	2	1
CHA	0	0	0	0	1	2	3	4	5	9	14
EUR	0	0	1	1	2	3	2	2	2	2	2
IND	0	0	0	0	0	1	1	2	2	4	6
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	0	2	1	0	0	0	0	0	1	0	1
MEA	0	0	0	0	0	0	0	0	1	2	4
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	0	2	1	0	1	1	1	1	1	2
REF	0	0	0	0	0	0	0	0	0	1	2
SSA	0	0	0	0	0	0	1	1	2	3	6
USA	0	0	1	1	1	1	1	1	2	3	3

Table 85: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Secondary products (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	56	75	95	138	168	190	202
CAZ	2	2	3	3	3	3	3
CHA	17	13	10	16	17	16	14
EUR	2	4	7	15	20	21	23
IND	8	10	12	15	19	23	26
JPN	0	0	0	0	1	1	1
LAM	1	5	8	7	8	12	16
MEA	6	9	12	15	16	15	14
NEU	0	0	0	0	0	0	0
OAS	4	6	8	14	18	26	29
REF	2	3	3	4	5	6	6
SSA	11	19	28	44	56	63	64
USA	3	4	4	5	6	6	7

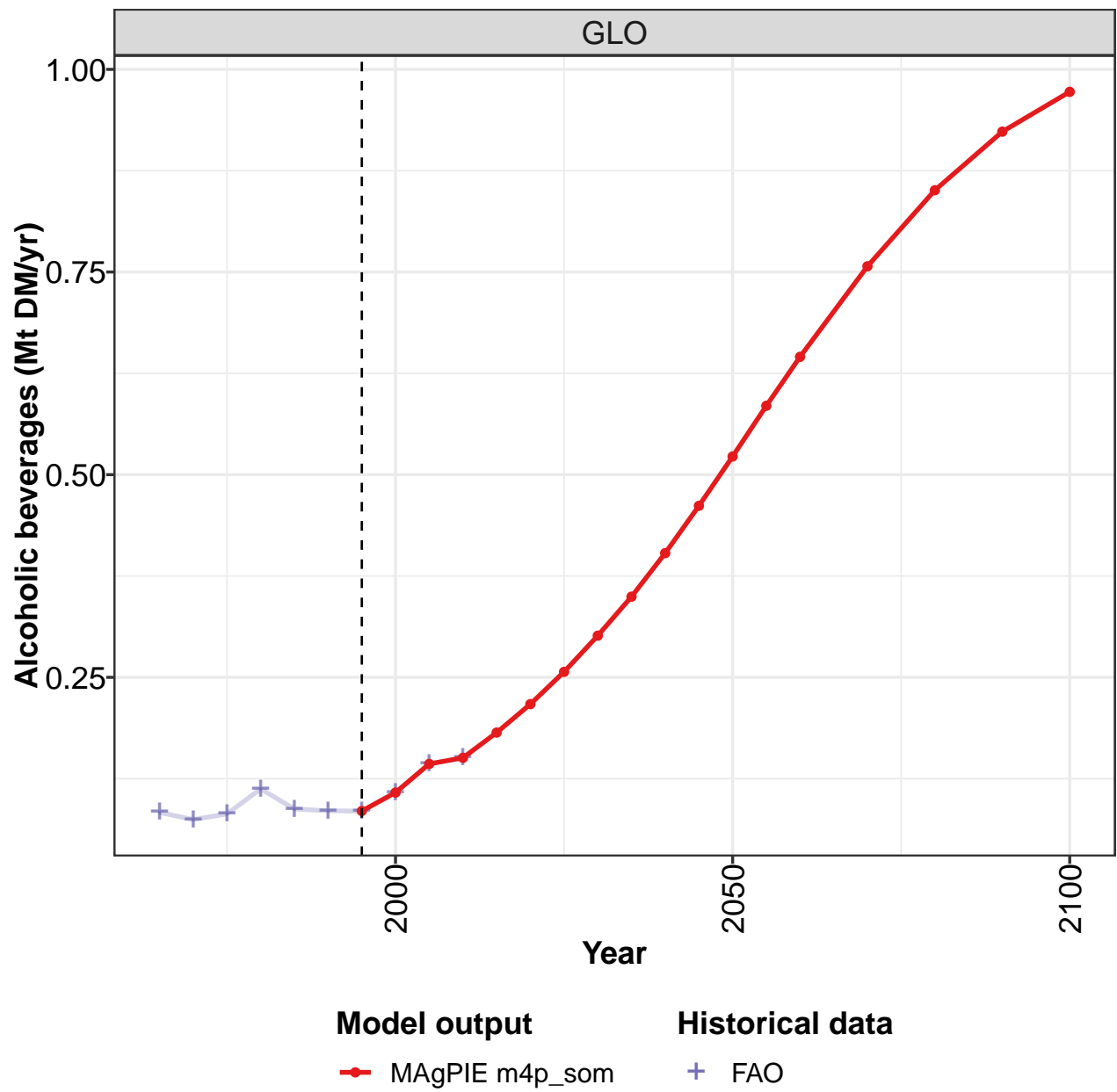
Table 86: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Secondary products (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.31	0.35	0.38	0.48	0.50	0.53	0.63	0.71	1.63	1.28
CAZ	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.04	0.04
CHA	0.00	0.00	0.00	0.00	0.01	0.03	0.03	0.04	0.10	0.12
EUR	0.07	0.04	0.03	0.05	0.04	0.05	0.03	0.03	0.04	0.03
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
LAM	0.06	0.07	0.09	0.09	0.07	0.06	0.07	0.09	0.11	0.14
MEA	0.05	0.06	0.08	0.10	0.11	0.16	0.20	0.22	0.21	0.22
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.01	0.02	0.03	0.04	0.05	0.07	0.10	0.13
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.01
SSA	0.06	0.07	0.08	0.10	0.10	0.10	0.11	0.13	0.19	0.23
USA	0.04	0.05	0.03	0.07	0.11	0.05	0.06	0.06	0.81	0.34

Table 87: FAO — Demand—Agricultural Supply Chain Loss—Secondary products (Mt DM/yr)

3.3.1
Alcoholic beverages

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

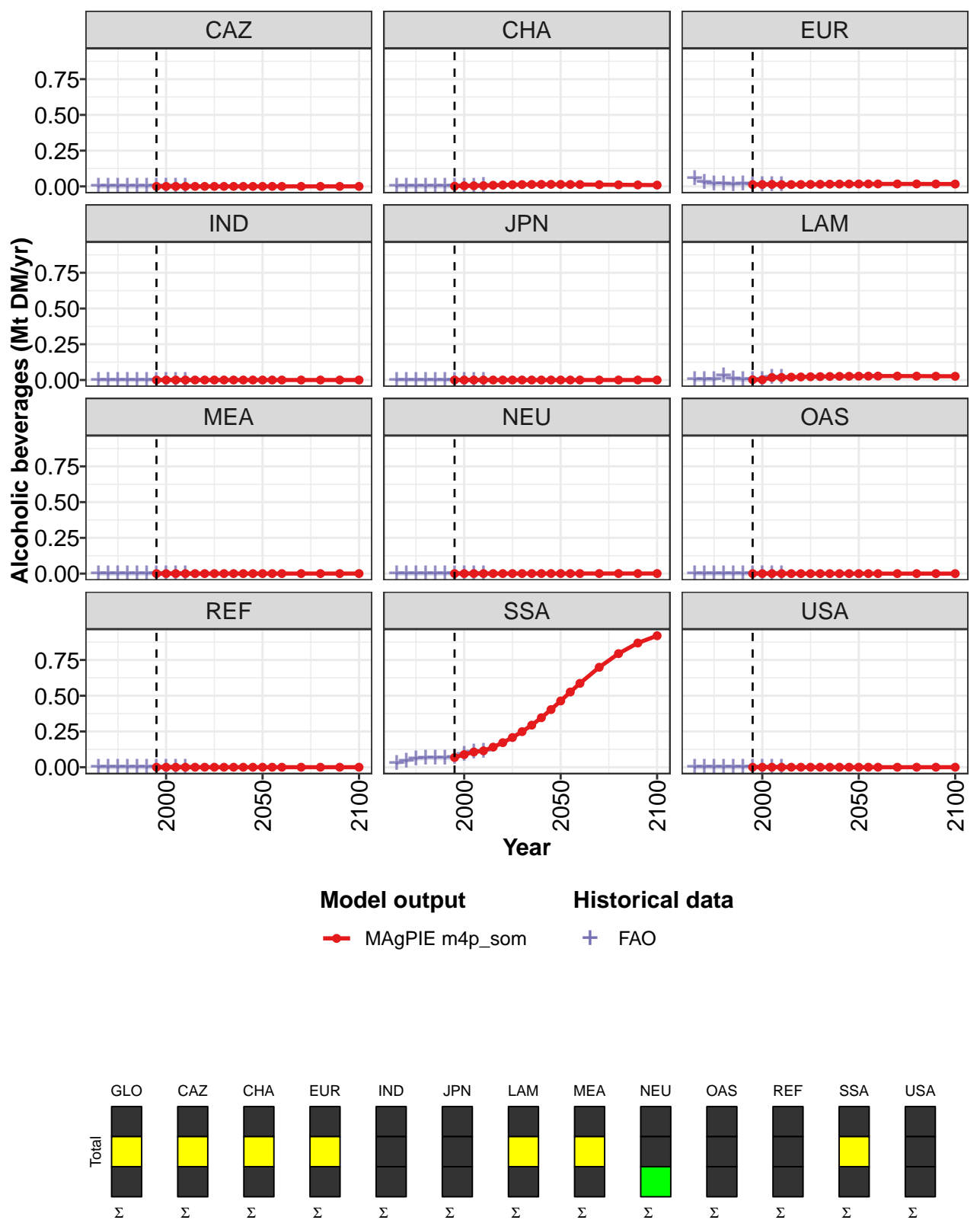


Figure 29: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Secondary products—Alcoholic beverages (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.085	0.108	0.143	0.151	0.182	0.217	0.257	0.301	0.350	0.403	0.462
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.002	0.004	0.005	0.005	0.008	0.010	0.012	0.013	0.014	0.014	0.014
EUR	0.013	0.013	0.014	0.012	0.013	0.013	0.014	0.015	0.016	0.016	0.017
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.002	0.002	0.018	0.018	0.020	0.021	0.023	0.024	0.025	0.026	0.026
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.068	0.088	0.107	0.115	0.141	0.172	0.208	0.249	0.294	0.346	0.403
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 88: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Secondary products—Alcoholic beverages (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.522	0.585	0.645	0.757	0.851	0.923	0.972
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.014	0.014	0.013	0.012	0.011	0.010	0.009
EUR	0.017	0.017	0.017	0.017	0.017	0.017	0.016
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.027	0.027	0.028	0.028	0.027	0.027	0.026
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.001	0.001	0.001	0.001	0.001	0.001	0.001
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.464	0.526	0.587	0.699	0.795	0.869	0.920
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000

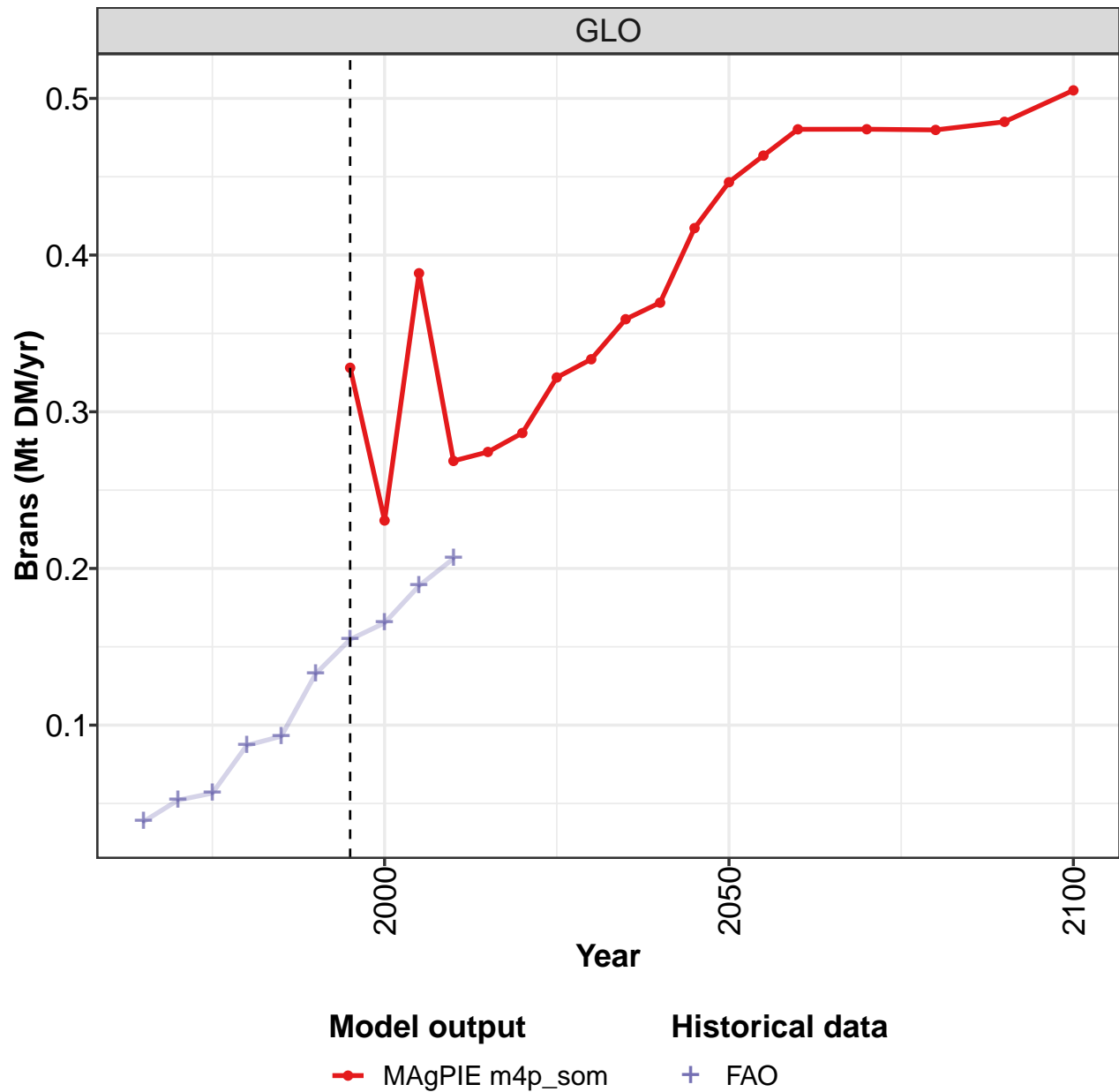
Table 89: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Secondary products—Alcoholic beverages (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.083	0.074	0.082	0.112	0.087	0.085	0.085	0.108	0.143	0.150
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.004	0.005	0.005
EUR	0.054	0.027	0.017	0.019	0.015	0.019	0.013	0.014	0.014	0.013
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.002	0.003	0.004	0.029	0.007	0.001	0.002	0.002	0.018	0.018
MEA	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.026	0.044	0.060	0.064	0.065	0.063	0.068	0.088	0.107	0.115
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 90: FAO — Demand—Agricultural Supply Chain Loss—Secondary products—Alcoholic beverages (Mt DM/yr)

3.3.2 Brans

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

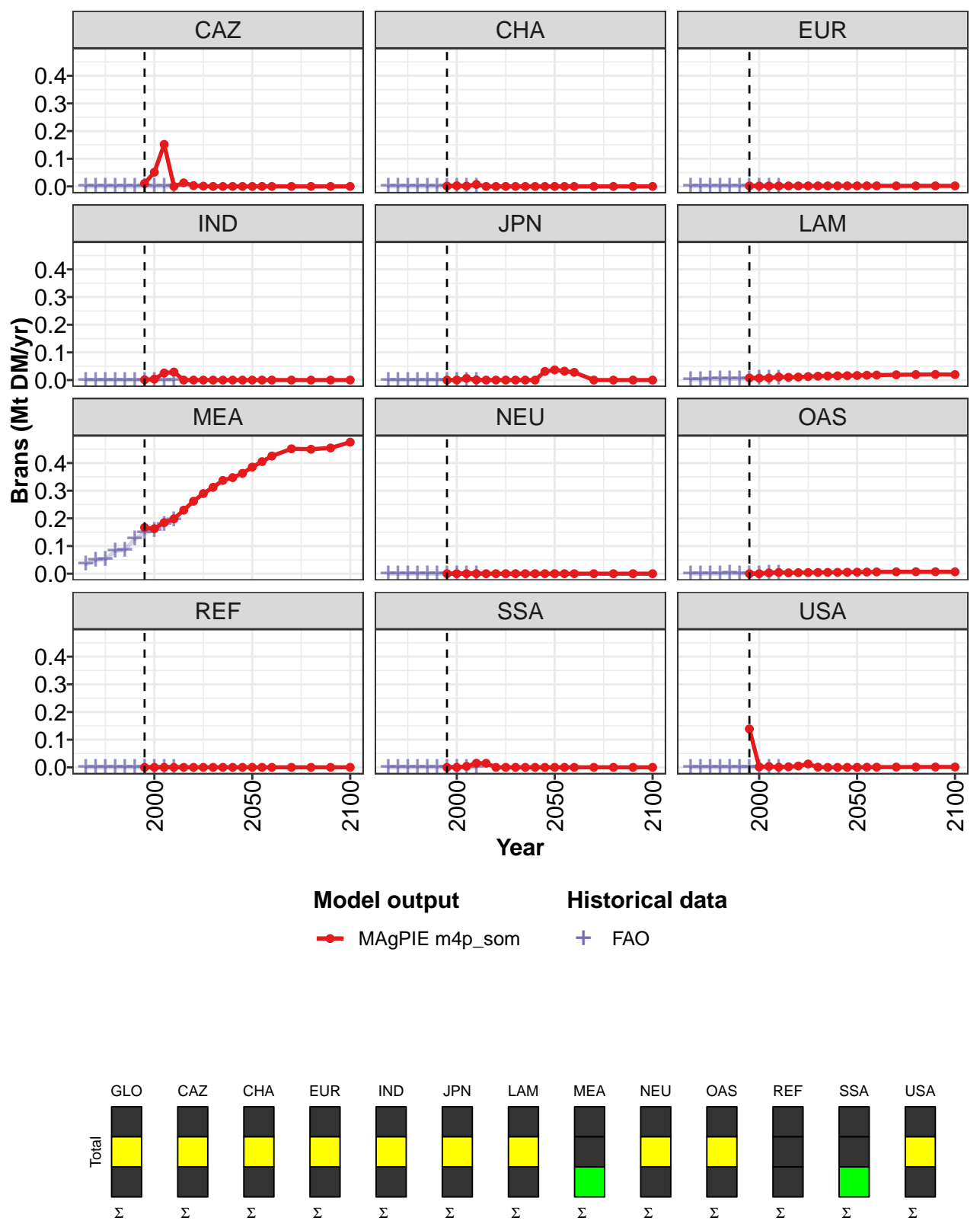


Figure 30: MAGPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Secondary products—Brans (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.328	0.231	0.388	0.269	0.274	0.286	0.322	0.334	0.359	0.370	0.417
CAZ	0.011	0.051	0.152	0.000	0.013	0.003	0.001	0.000	0.000	0.000	0.000
CHA	0.001	0.003	0.001	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
IND	0.001	0.004	0.026	0.029	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.031
LAM	0.008	0.007	0.007	0.011	0.010	0.011	0.013	0.014	0.015	0.015	0.016
MEA	0.167	0.163	0.185	0.198	0.230	0.262	0.290	0.312	0.337	0.347	0.363
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.003	0.005	0.003	0.004	0.004	0.005	0.005	0.005	0.005
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.004	0.015	0.015	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.139	0.002	0.003	0.001	0.002	0.005	0.012	0.001	0.000	0.000	0.000

Table 91: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Secondary products—Brans (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.447	0.463	0.480	0.480	0.480	0.485	0.505
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.002	0.002	0.002	0.002	0.002	0.002	0.002
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.037	0.032	0.028	0.000	0.000	0.000	0.000
LAM	0.016	0.017	0.018	0.019	0.020	0.020	0.020
MEA	0.385	0.405	0.425	0.451	0.450	0.454	0.475
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.006	0.006	0.006	0.007	0.007	0.007	0.007
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.001	0.001	0.001	0.001	0.001

Table 92: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Secondary products—Brans (Mt DM/yr) [PART 2/2]

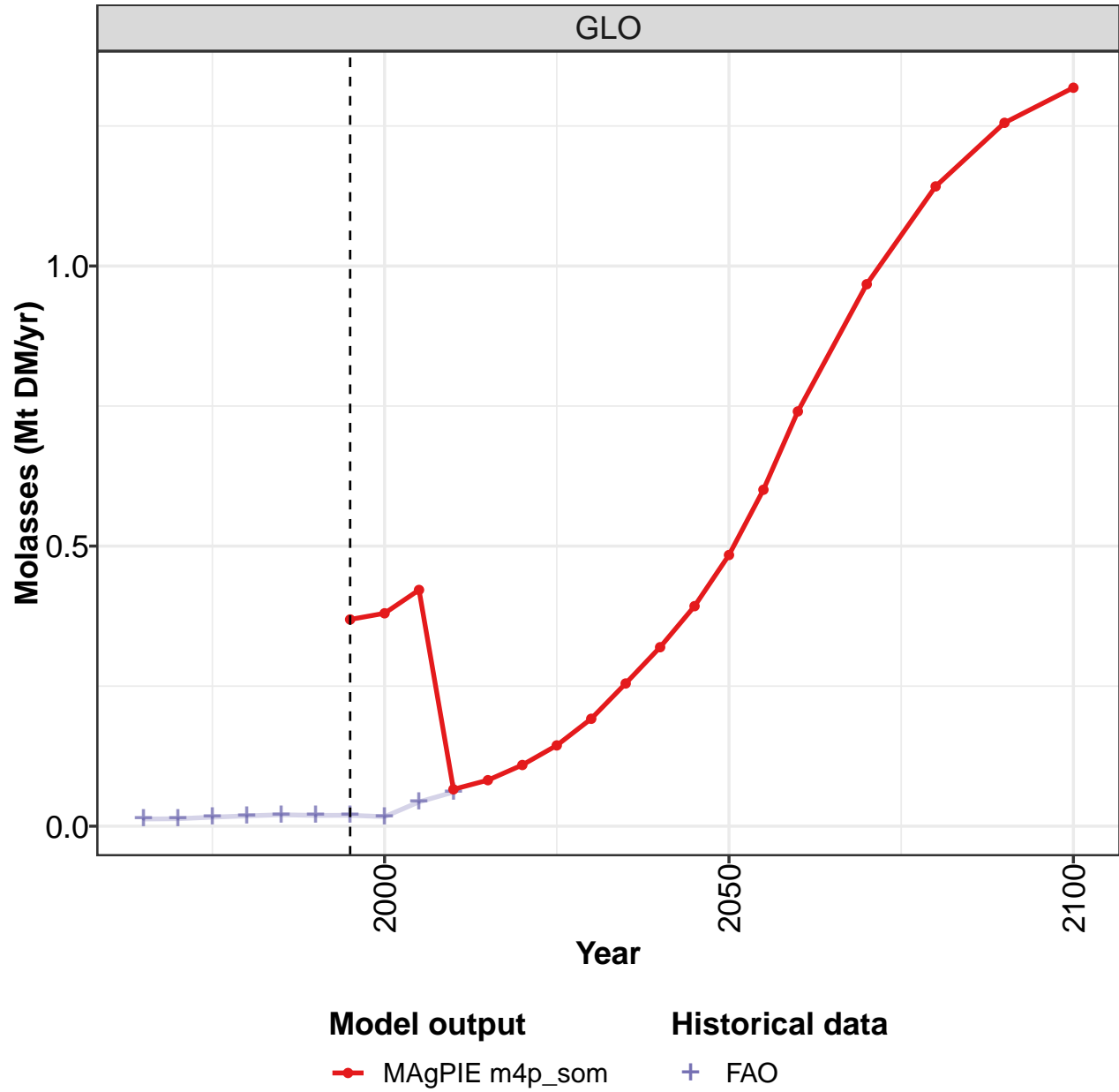
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.038	0.052	0.057	0.087	0.093	0.133	0.155	0.165	0.189	0.206
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.002	0.003	0.004	0.004	0.004	0.005	0.006	0.007	0.007	0.009
MEA	0.035	0.048	0.052	0.082	0.086	0.126	0.147	0.157	0.178	0.194
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.001	0.000	0.001	0.001	0.002	0.001	0.001	0.001	0.002	0.003
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 93: FAO — Demand—Agricultural Supply Chain Loss—Secondary products—Brans (Mt DM/yr)



3.3.3 Molasses

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

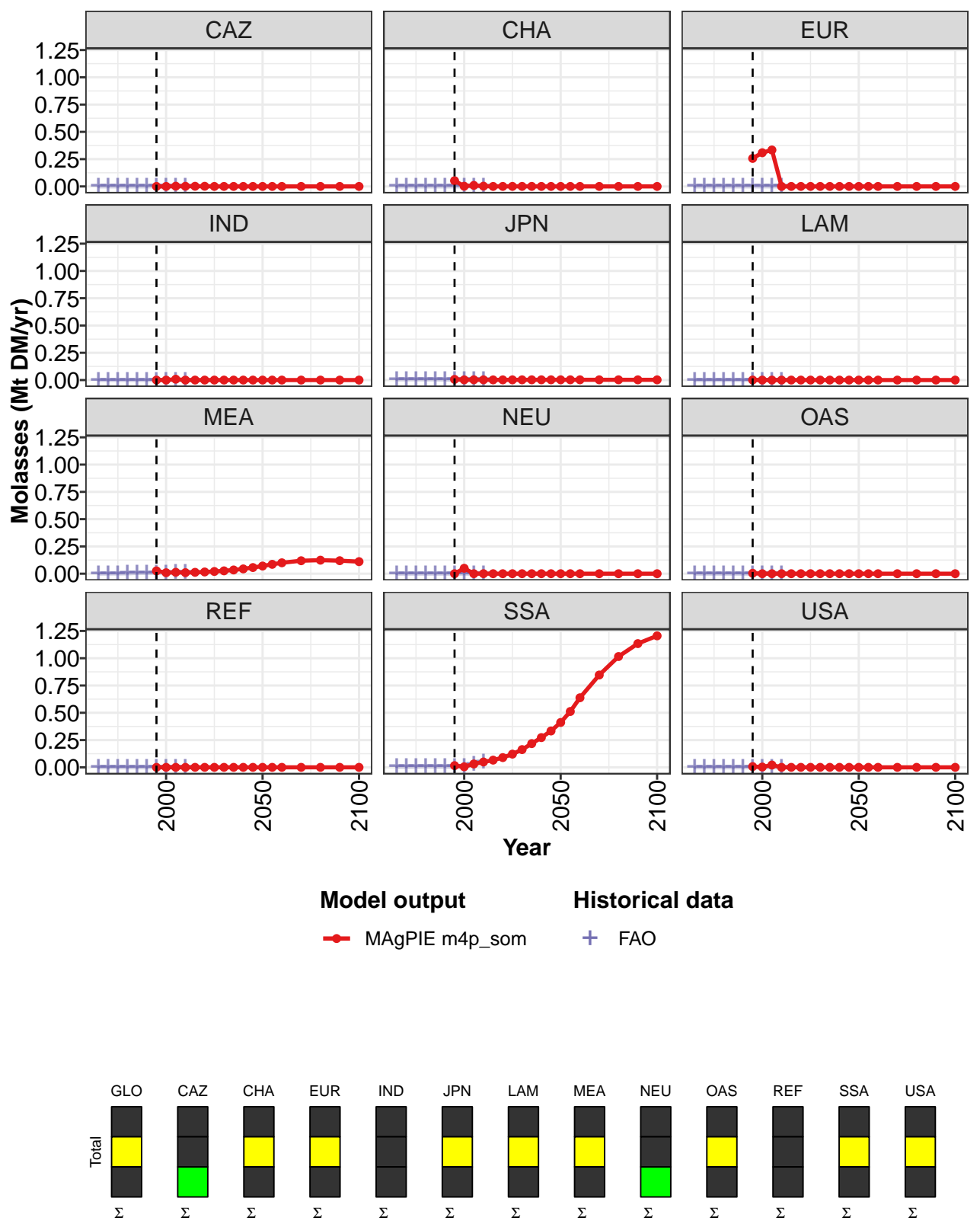


Figure 31: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Secondary products—Molasses (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.37	0.38	0.42	0.07	0.08	0.11	0.14	0.19	0.25	0.32	0.39
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.05	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.26	0.31	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.03	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.06
NEU	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.02	0.01	0.03	0.05	0.07	0.09	0.12	0.16	0.22	0.27	0.33
USA	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 94: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Secondary products—Molasses (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.48	0.60	0.74	0.97	1.14	1.26	1.32
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.07	0.09	0.10	0.12	0.12	0.12	0.11
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.41	0.51	0.64	0.85	1.02	1.13	1.21
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00

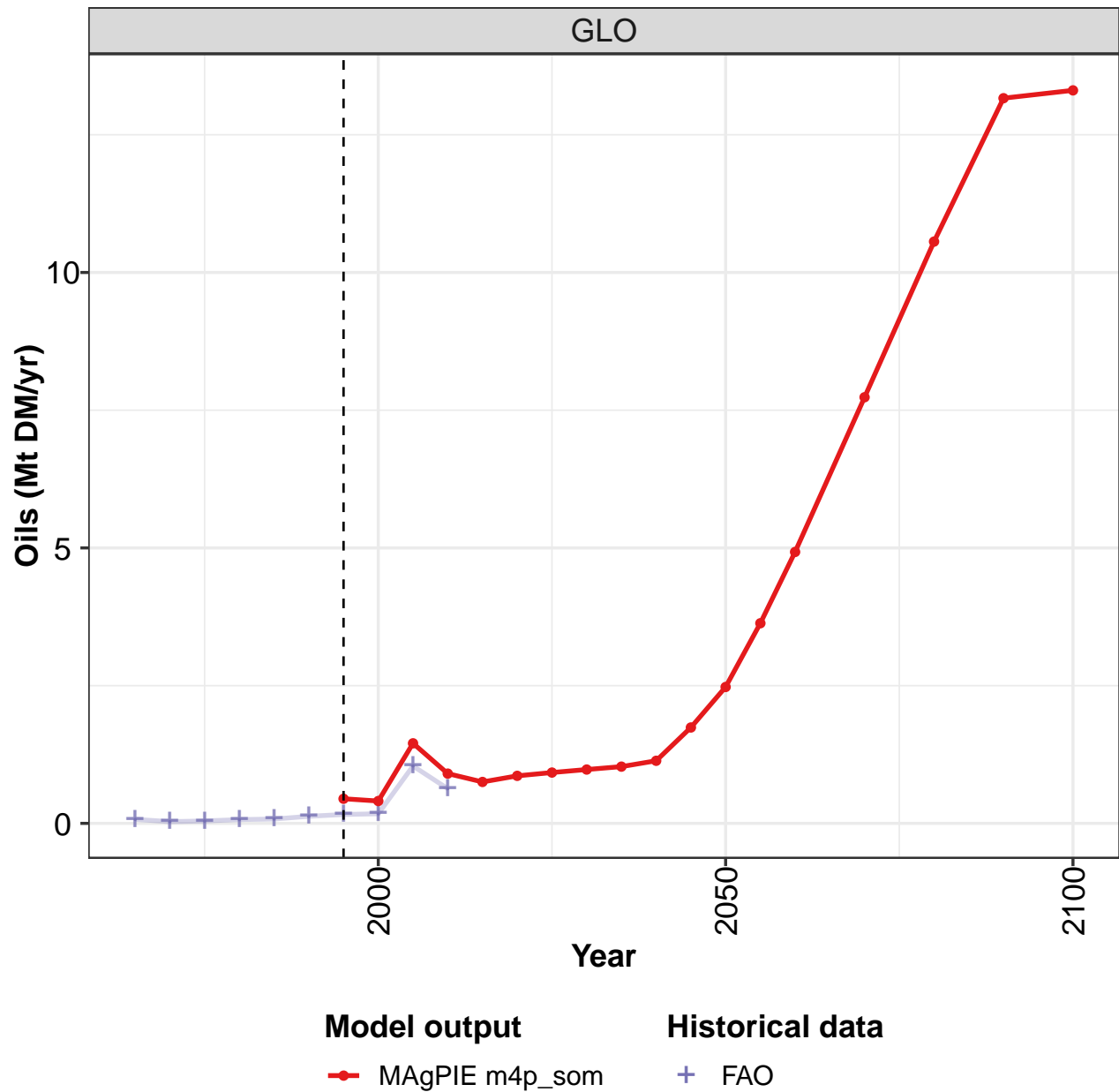
Table 95: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Secondary products—Molasses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0128	0.0133	0.0161	0.0184	0.0204	0.0192	0.0195	0.0169	0.0433	0.0608
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0063	0.0071	0.0073	0.0069	0.0069	0.0045	0.0037	0.0022	0.0020	0.0016
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0002	0.0010	0.0017	0.0028	0.0066	0.0075	0.0087	0.0094	0.0107	0.0098
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0062	0.0051	0.0072	0.0087	0.0069	0.0071	0.0071	0.0054	0.0306	0.0494
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 96: FAO — Demand—Agricultural Supply Chain Loss—Secondary products—Molasses (Mt DM/yr)

3.3.4 Oils

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

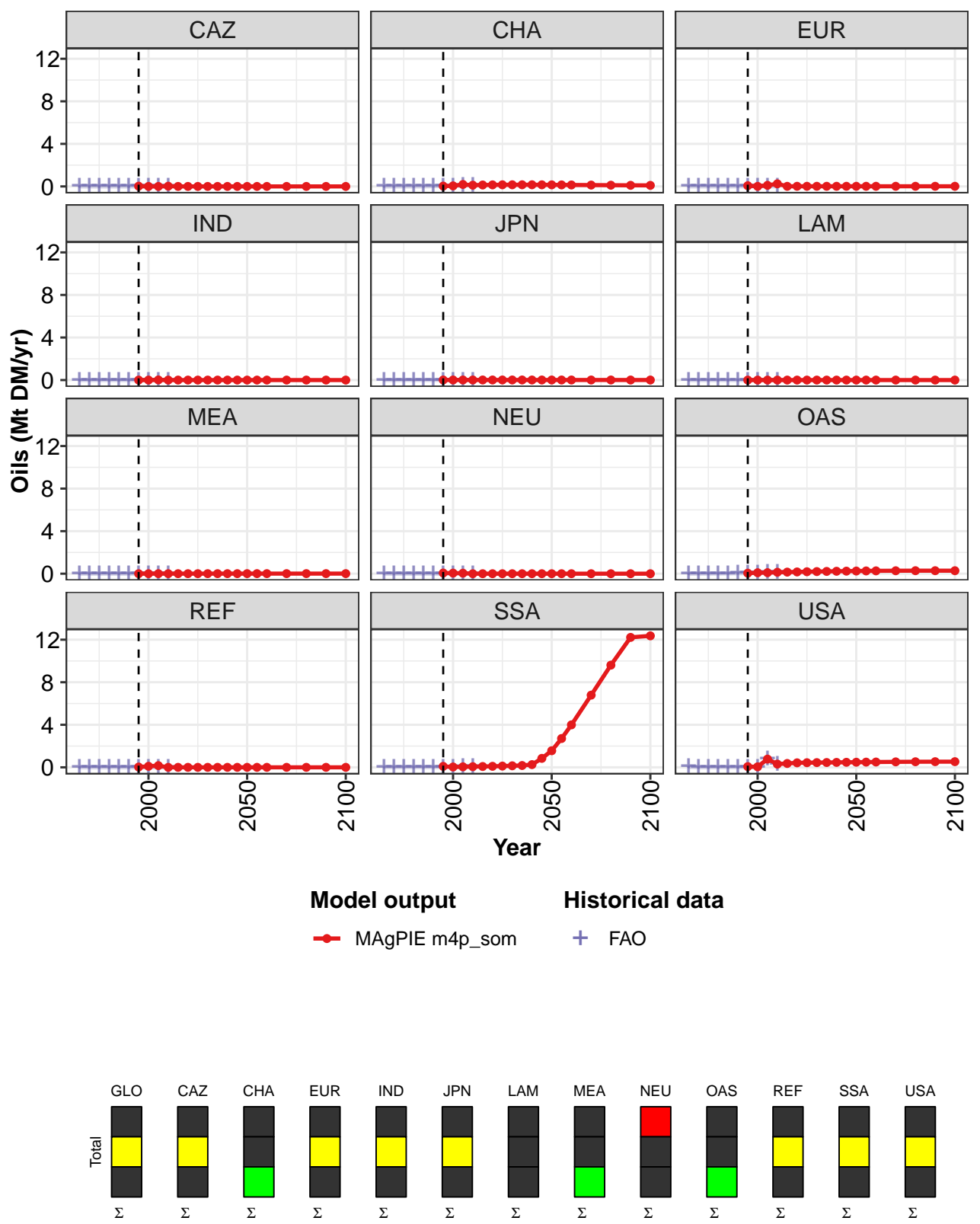


Figure 32: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Secondary products—Oils (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.4	0.4	1.5	0.9	0.8	0.9	0.9	1.0	1.0	1.1	1.7
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
EUR	0.1	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
REF	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.8
USA	0.1	0.1	0.8	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5

Table 97: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Secondary products—Oils (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	2.5	3.6	4.9	7.7	10.6	13.2	13.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.1	0.1	0.1	0.1	0.1	0.1
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.3	0.3	0.3	0.3	0.3	0.3	0.3
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	1.6	2.7	4.0	6.8	9.6	12.2	12.4
USA	0.5	0.5	0.5	0.5	0.5	0.5	0.5

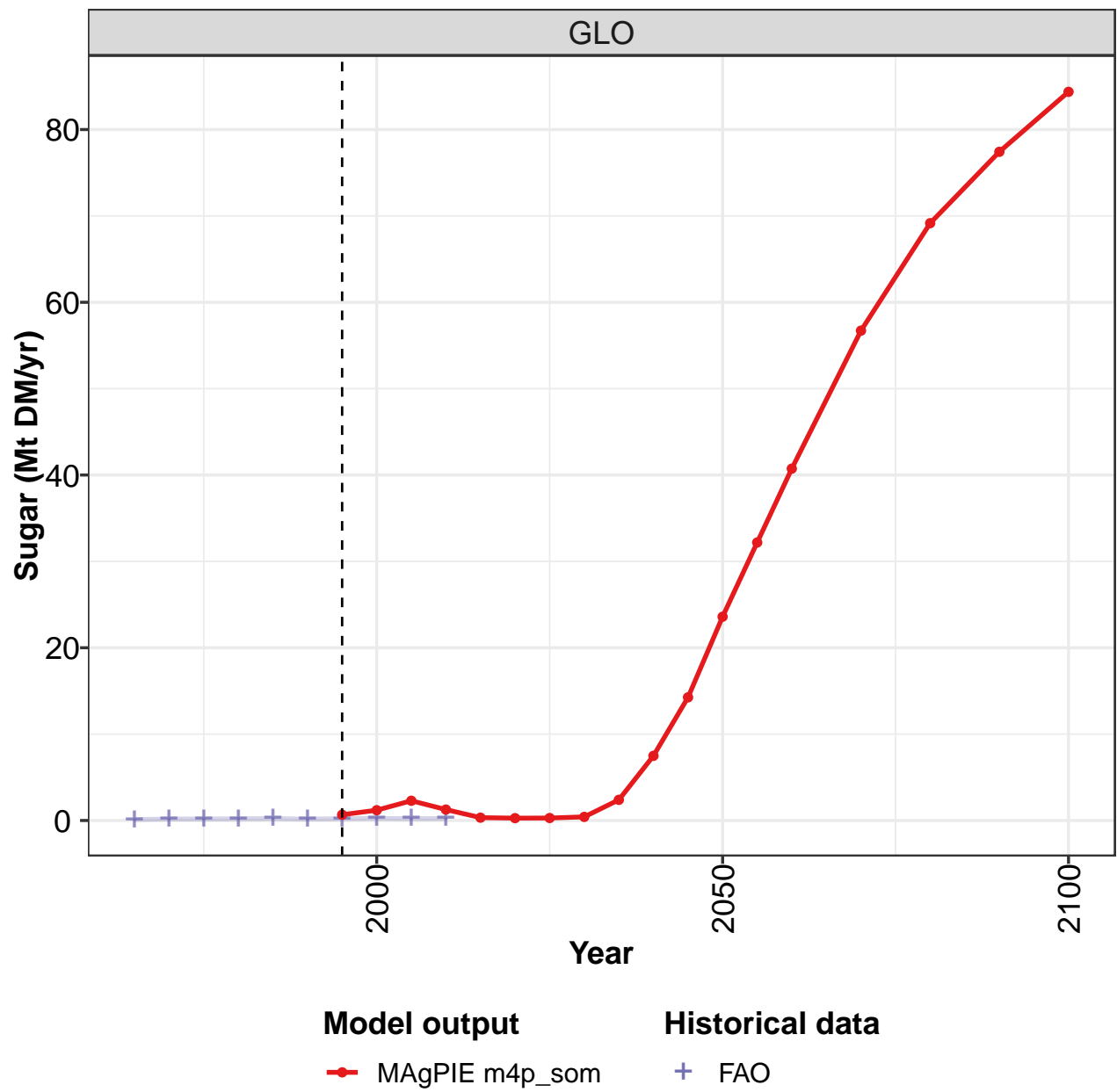
Table 98: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Secondary products—Oils (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.07	0.03	0.04	0.07	0.08	0.13	0.16	0.17	1.04	0.63
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.01	0.03	0.03	0.03	0.09	0.12
EUR	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.01	0.02	0.03	0.04	0.05	0.07	0.10	0.12
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.05	0.06
USA	0.04	0.00	0.01	0.01	0.01	0.01	0.03	0.02	0.77	0.30

Table 99: FAO — Demand—Agricultural Supply Chain Loss—Secondary products—Oils (Mt DM/yr)

3.3.5 Sugar

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

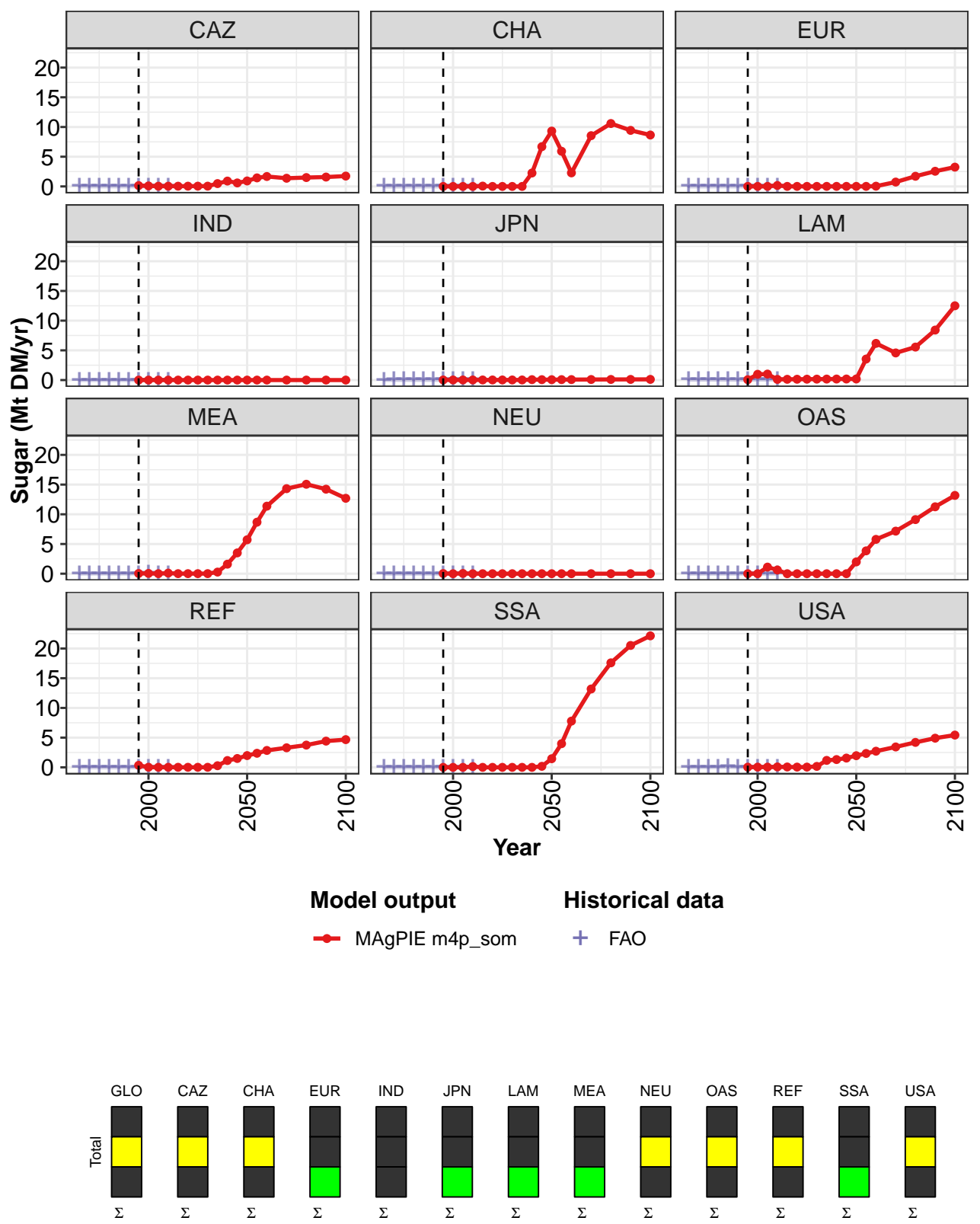


Figure 33: MAGPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Secondary products—Sugar (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.7	1.2	2.3	1.3	0.3	0.3	0.3	0.4	2.4	7.5	14.3
CAZ	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.9	0.6
CHA	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	2.3	6.7
EUR	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
LAM	0.1	1.0	1.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
MEA	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.3	1.6	3.5
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.0	0.0	1.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REF	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.1	1.5
SSA	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2
USA	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.2	1.2	1.3	1.6

Table 100: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Secondary products—Sugar (Mt DM/yr) [PART 1/2]

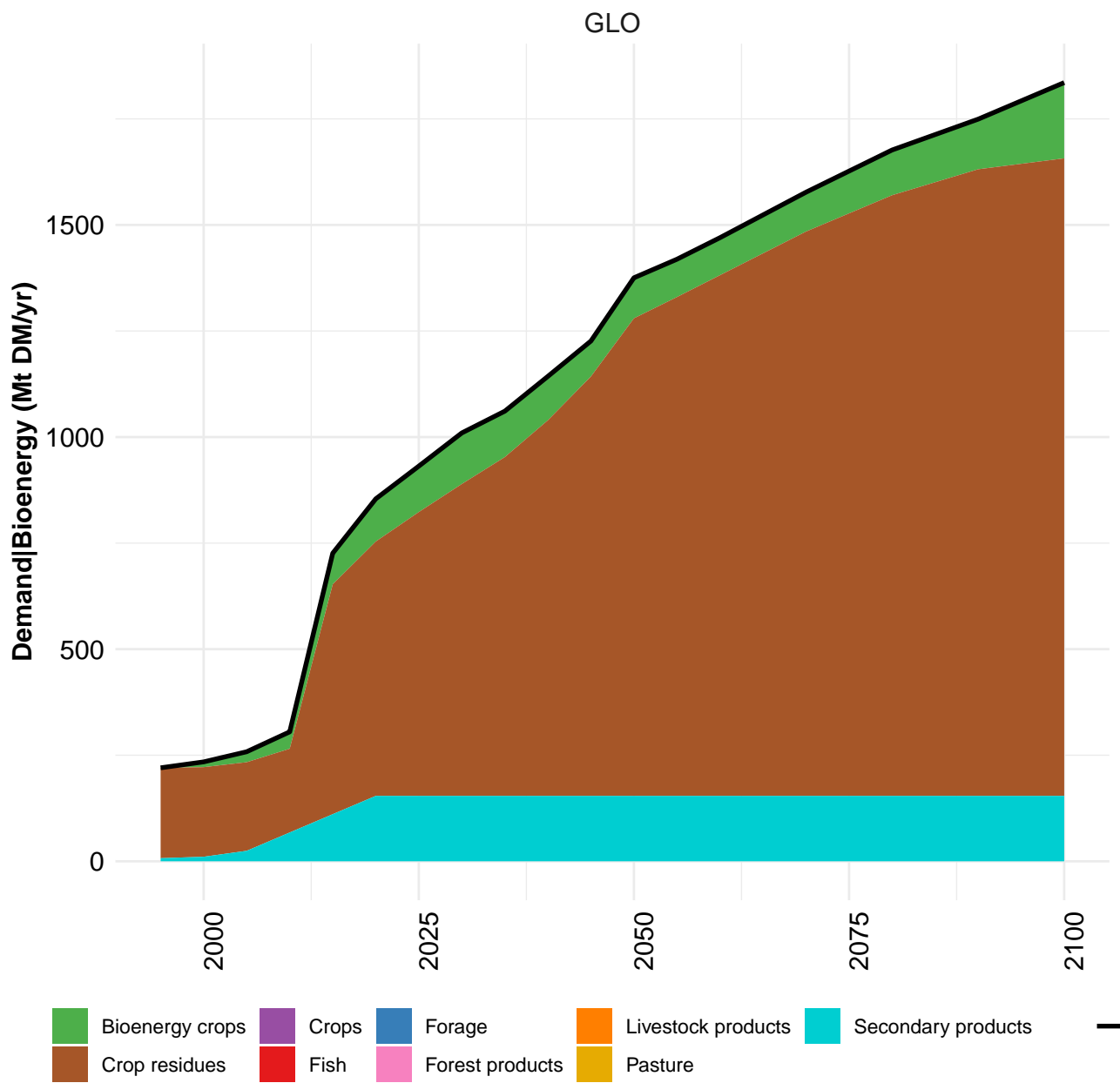
	2050	2055	2060	2070	2080	2090	2100
GLO	23.6	32.2	40.7	56.7	69.2	77.4	84.4
CAZ	0.9	1.4	1.7	1.4	1.5	1.6	1.7
CHA	9.3	5.9	2.3	8.5	10.6	9.4	8.7
EUR	0.0	0.0	0.0	0.7	1.7	2.6	3.2
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.2	3.5	6.2	4.6	5.6	8.4	12.5
MEA	5.7	8.7	11.4	14.3	15.1	14.2	12.7
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	2.0	3.8	5.8	7.2	9.1	11.3	13.2
REF	2.0	2.4	2.8	3.3	3.7	4.4	4.7
SSA	1.5	4.0	7.8	13.2	17.6	20.5	22.1
USA	2.0	2.3	2.7	3.4	4.2	4.9	5.4

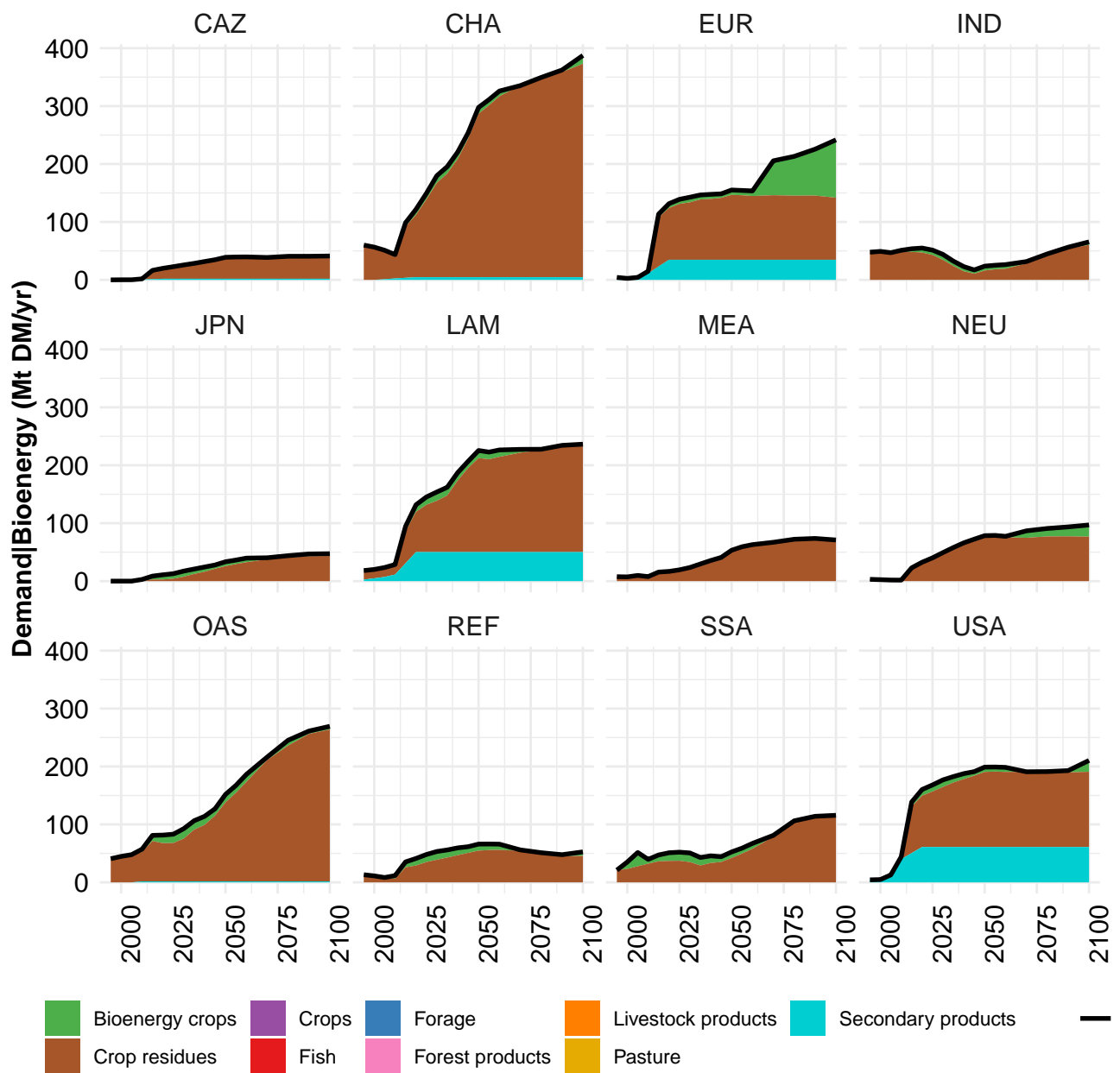
Table 101: MAgPIE m4p\_som — Demand—Agricultural Supply Chain Loss—Secondary products—Sugar (Mt DM/yr) [PART 2/2]

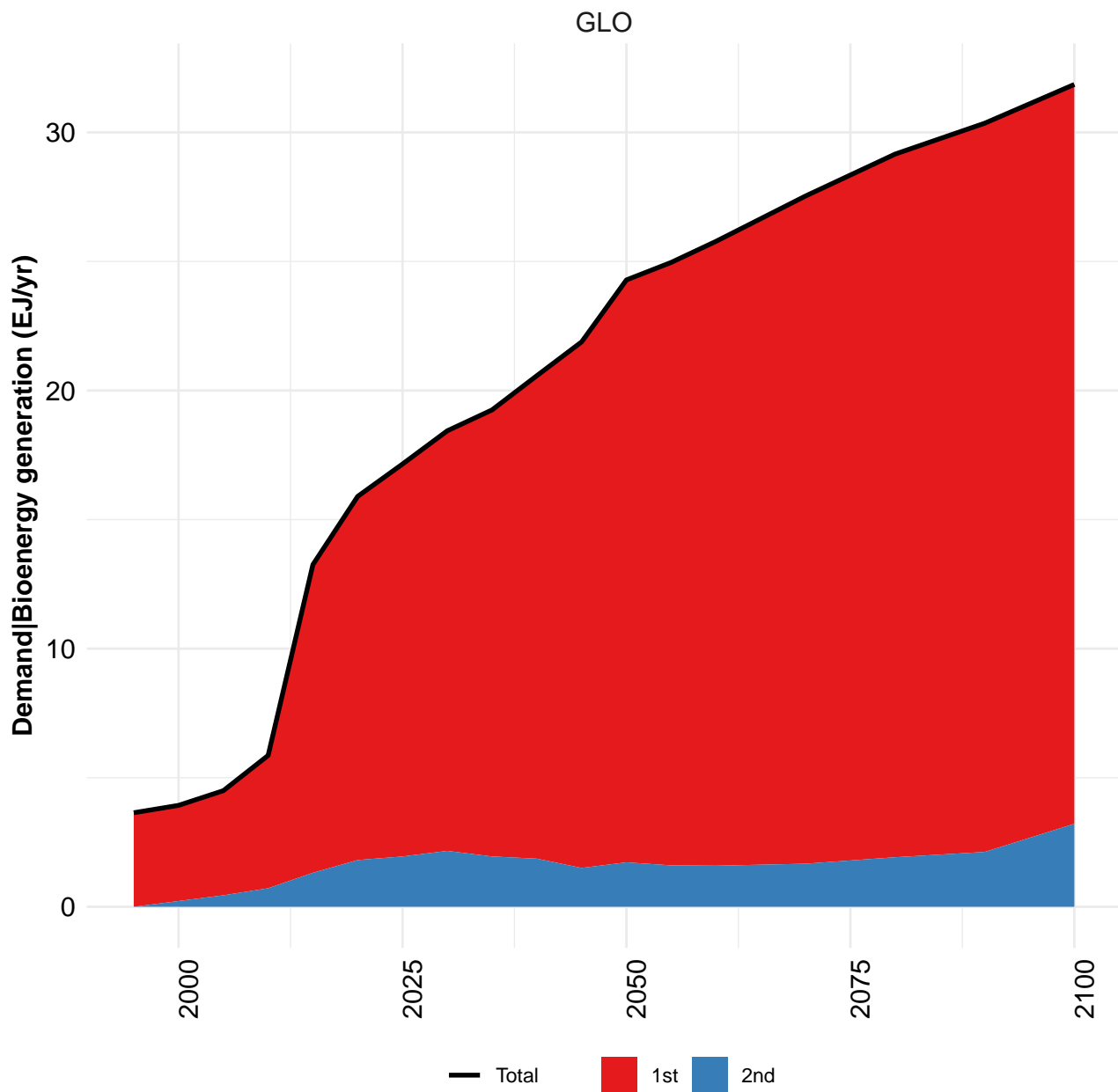
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.104	0.174	0.180	0.196	0.225	0.164	0.208	0.244	0.214	0.230
CAZ	0.014	0.021	0.016	0.021	0.017	0.017	0.020	0.033	0.035	0.038
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000
EUR	0.007	0.008	0.011	0.022	0.018	0.014	0.008	0.009	0.010	0.007
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.014	0.022	0.021	0.020	0.020	0.020	0.018	0.019	0.019	0.018
LAM	0.057	0.060	0.083	0.054	0.056	0.055	0.064	0.085	0.089	0.110
MEA	0.011	0.014	0.021	0.015	0.016	0.021	0.042	0.049	0.012	0.008
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.021	0.008	0.010	0.008
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.049	0.029	0.064	0.100	0.038	0.035	0.040	0.040	0.040

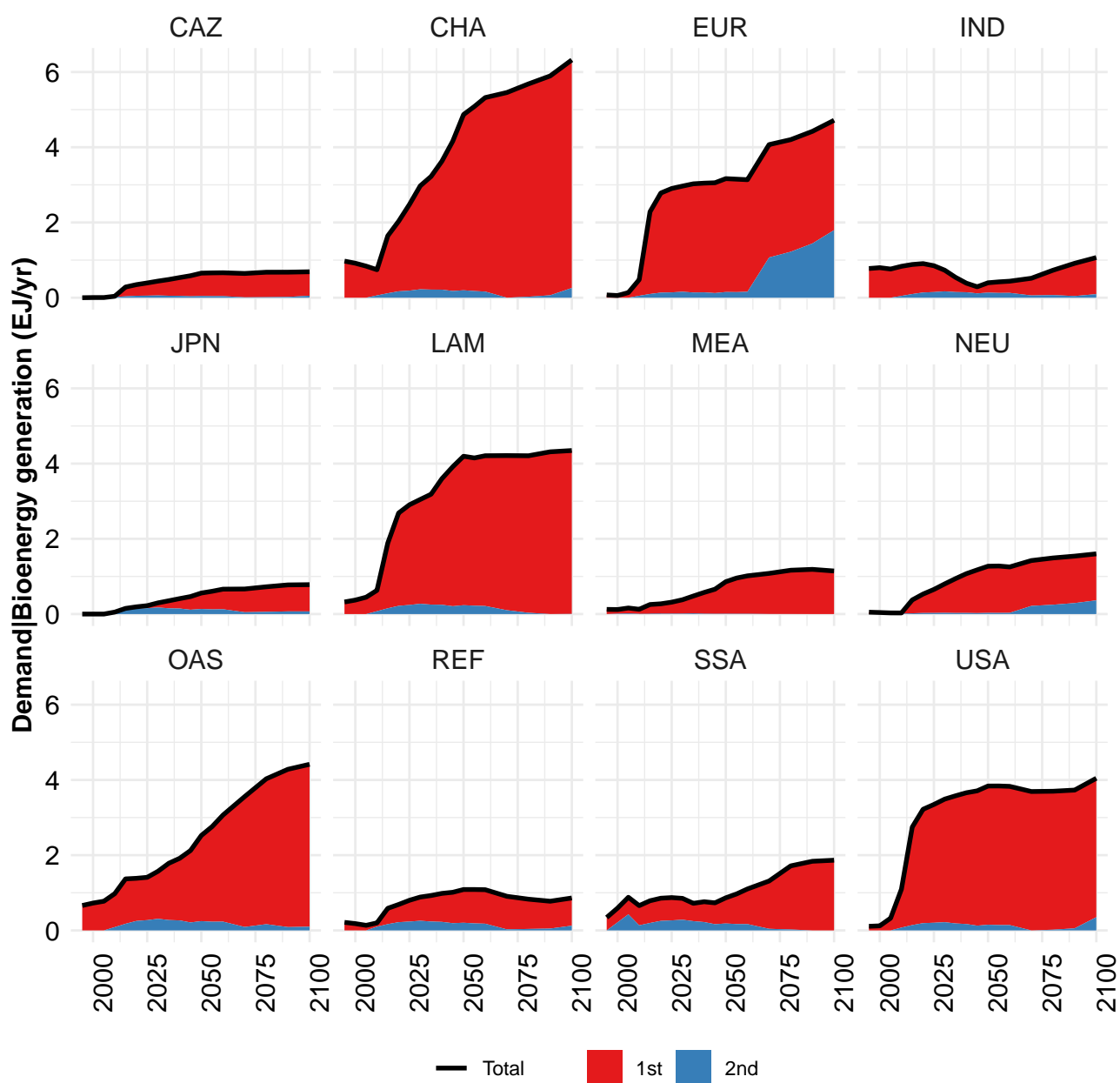
Table 102: FAO — Demand—Agricultural Supply Chain Loss—Secondary products—Sugar (Mt DM/yr)

## 4 Bioenergy

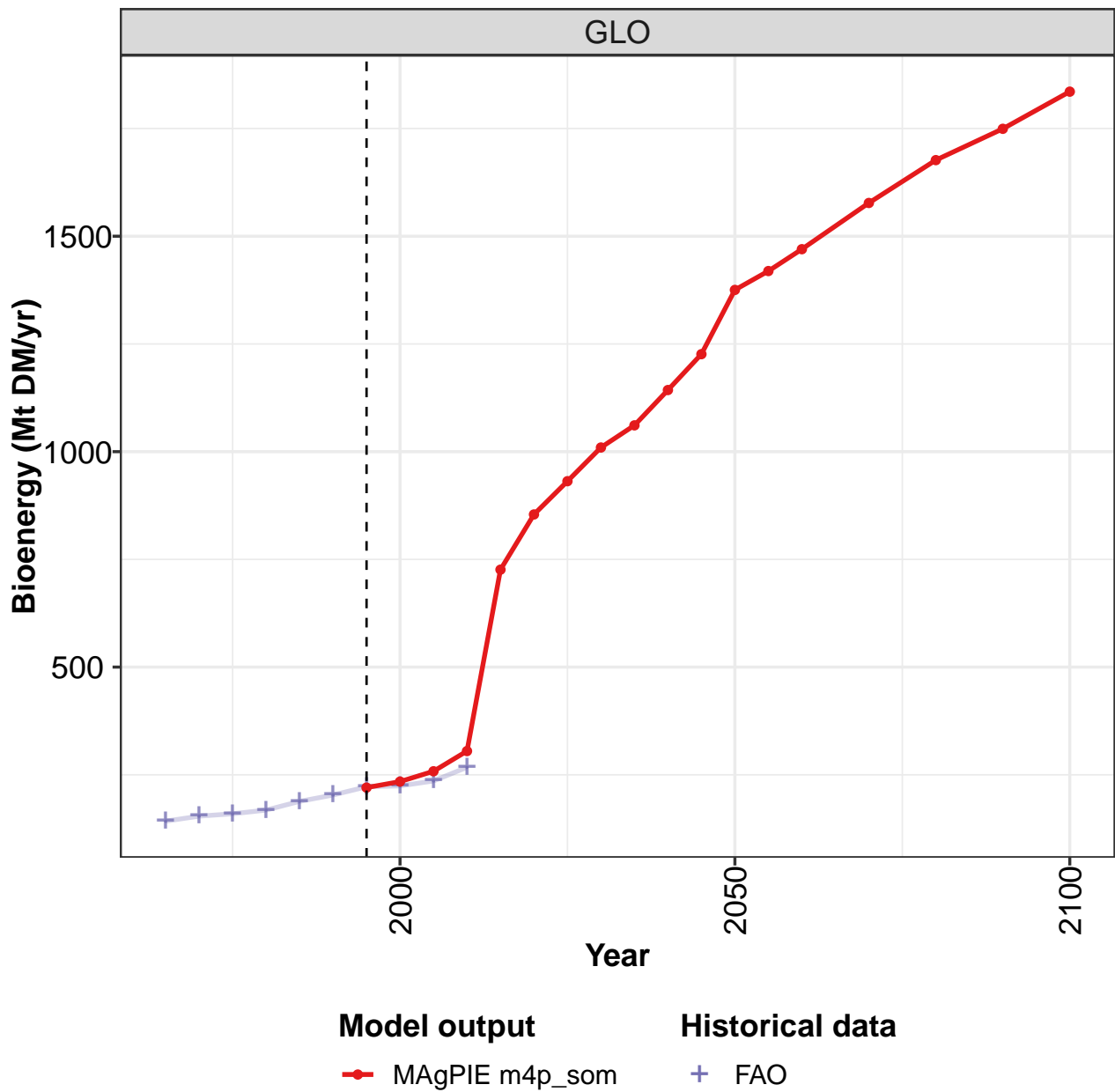








## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

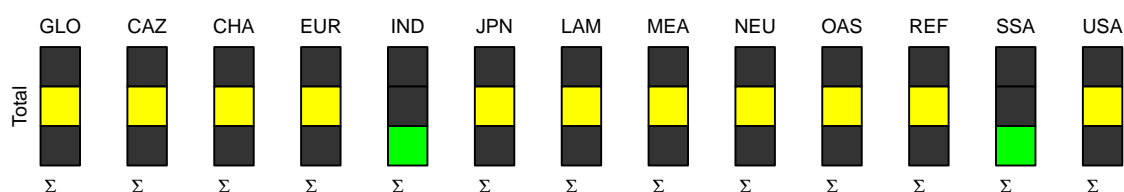
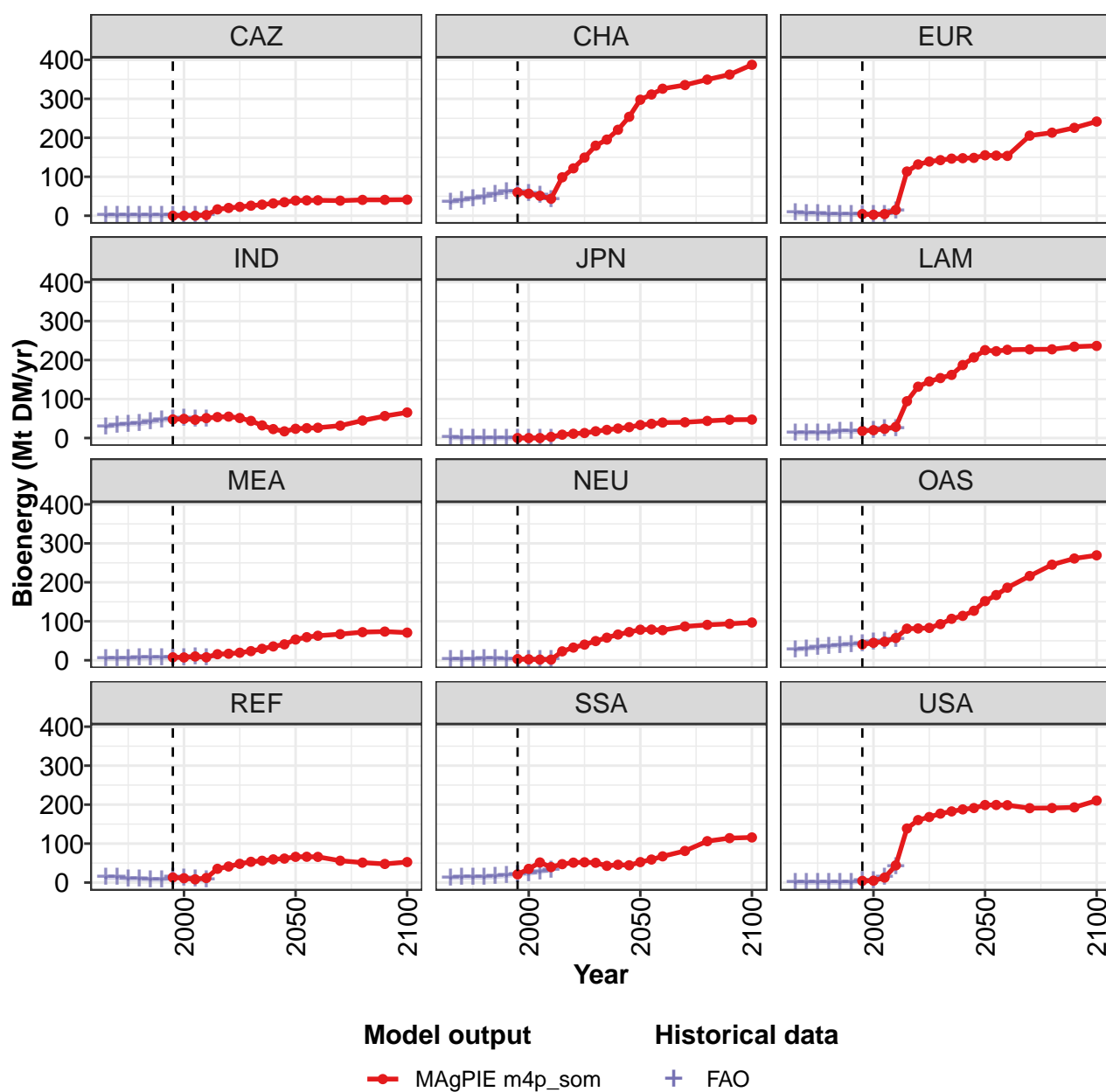


Figure 34: MAgPIE m4p\_som — Demand—Bioenergy (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	220	234	258	305	726	854	931	1010	1061	1143	1226
CAZ	0	0	0	2	16	20	23	26	28	32	35
CHA	60	57	51	44	99	122	149	180	195	221	254
EUR	4	3	4	15	113	132	139	143	147	148	148
IND	48	49	47	51	54	55	51	44	32	23	17
JPN	0	0	0	3	9	11	13	17	21	24	28
LAM	18	20	24	29	94	132	145	154	162	187	207
MEA	8	7	10	8	16	17	19	23	30	36	41
NEU	3	2	2	2	23	33	40	49	58	66	72
OAS	41	45	48	57	81	82	83	93	106	114	127
REF	13	11	8	12	35	41	48	53	56	60	62
SSA	21	35	52	40	47	51	52	51	43	46	44
USA	4	5	13	44	139	160	168	177	183	188	191

Table 103: MAgPIE m4p\_som — Demand—Bioenergy (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1375	1419	1470	1577	1677	1749	1836
CAZ	39	39	40	39	41	41	41
CHA	298	311	326	335	349	362	387
EUR	155	154	154	206	213	226	242
IND	24	25	26	32	45	56	66
JPN	33	36	40	40	44	47	47
LAM	225	223	226	227	228	234	236
MEA	53	59	63	67	72	74	71
NEU	78	79	77	87	91	94	97
OAS	152	167	186	216	245	261	269
REF	66	66	66	56	51	48	53
SSA	53	59	67	81	106	114	116
USA	199	199	198	191	191	193	210

Table 104: MAgPIE m4p\_som — Demand—Bioenergy (Mt DM/yr) [PART 2/2]

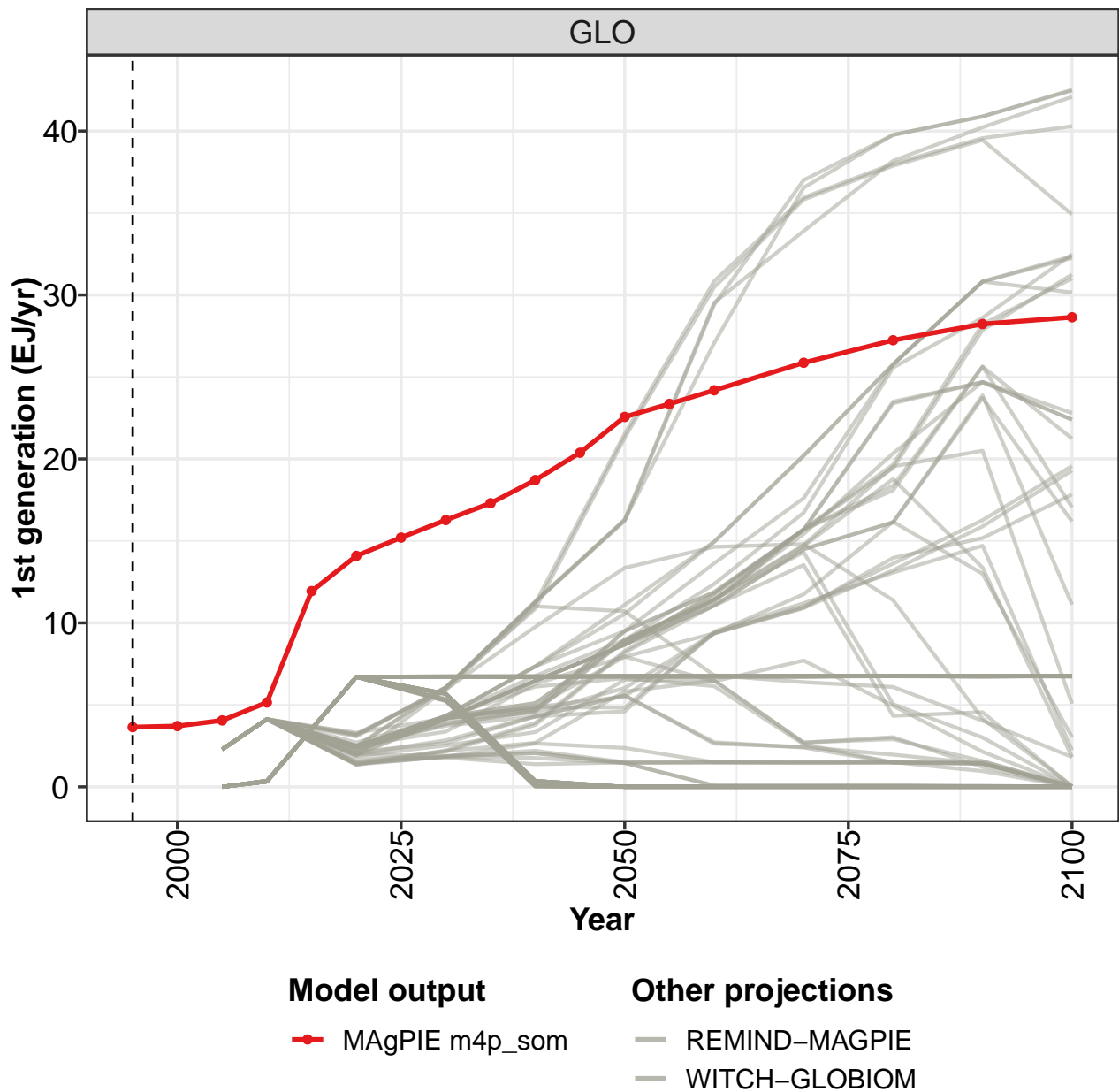
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	142	154	160	168	188	203	222	224	236	268
CAZ	0	0	0	0	0	0	0	0	0	1
CHA	35	39	44	48	55	62	61	57	52	40
EUR	7	5	4	4	3	4	4	3	4	12
IND	29	33	35	36	41	45	49	50	48	49
JPN	1	0	0	0	0	0	0	0	0	0
LAM	12	13	13	13	18	16	18	20	23	24
MEA	5	5	5	6	6	7	8	7	9	7
NEU	3	3	3	3	3	3	3	2	2	1
OAS	27	30	32	35	39	40	42	46	50	54
REF	13	13	9	10	8	8	13	11	8	6
SSA	12	13	13	13	15	18	21	23	28	32
USA	0	0	0	0	0	0	4	5	13	40

Table 105: FAO — Demand—Bioenergy (Mt DM/yr)



## 4.1 1st generation

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

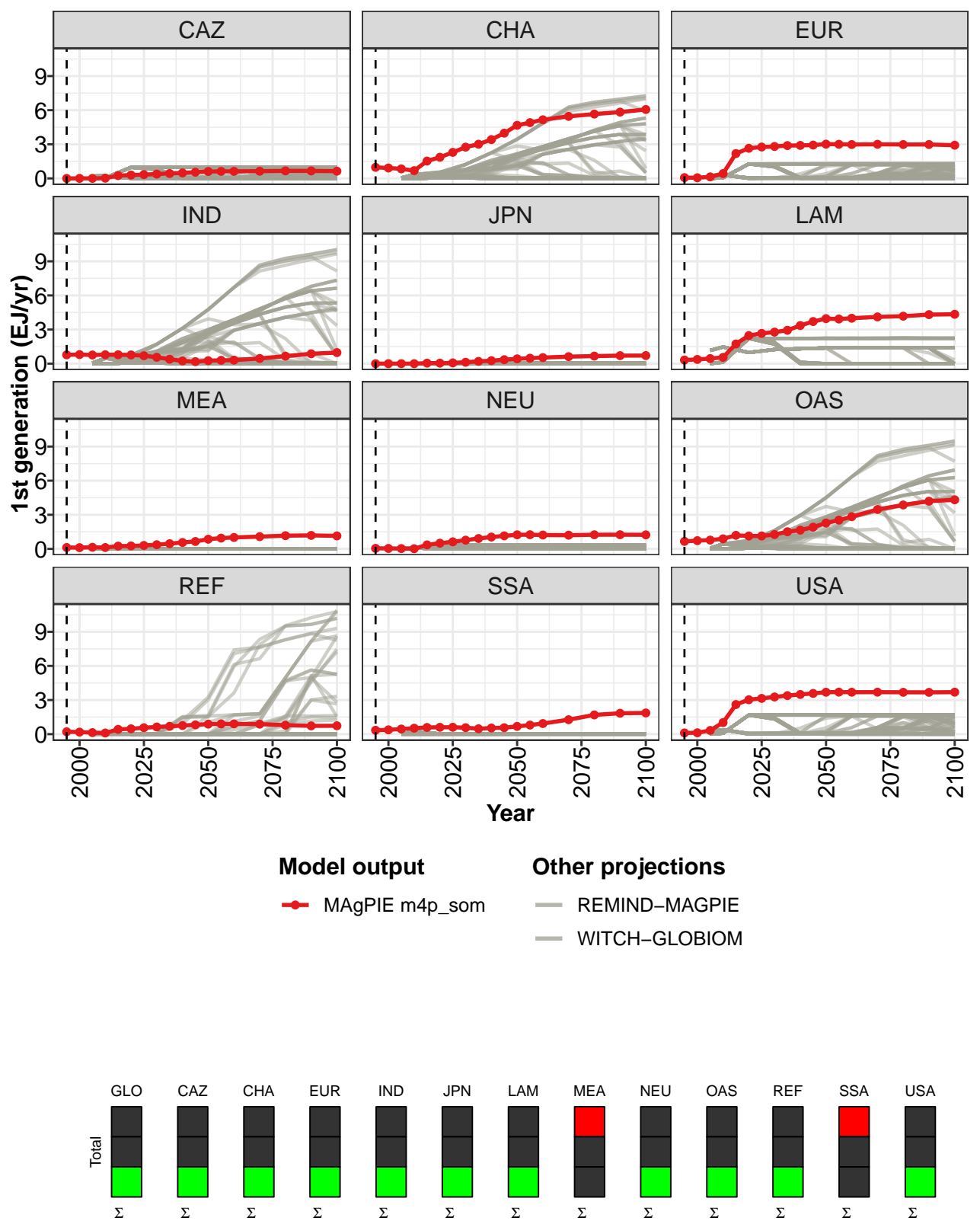


Figure 35: MAgPIE m4p\_som — Demand—Bioenergy—1st generation (EJ/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	3.6	3.7	4.1	5.1	11.9	14.1	15.2	16.3	17.3	18.7	20.4
CAZ	0.0	0.0	0.0	0.0	0.2	0.3	0.3	0.4	0.4	0.5	0.5
CHA	1.0	0.9	0.8	0.7	1.5	1.9	2.3	2.8	3.0	3.4	4.0
EUR	0.1	0.1	0.1	0.4	2.2	2.6	2.8	2.8	2.9	2.9	2.9
IND	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.6	0.4	0.2	0.2
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.3
LAM	0.3	0.4	0.4	0.6	1.7	2.5	2.7	2.8	2.9	3.4	3.7
MEA	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.4	0.5	0.6	0.7
NEU	0.0	0.0	0.0	0.0	0.4	0.5	0.6	0.8	0.9	1.0	1.1
OAS	0.7	0.7	0.8	0.9	1.2	1.1	1.1	1.3	1.5	1.7	1.9
REF	0.2	0.2	0.1	0.1	0.4	0.5	0.6	0.6	0.7	0.8	0.8
SSA	0.3	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.6
USA	0.1	0.1	0.3	1.0	2.6	3.0	3.1	3.3	3.4	3.5	3.6

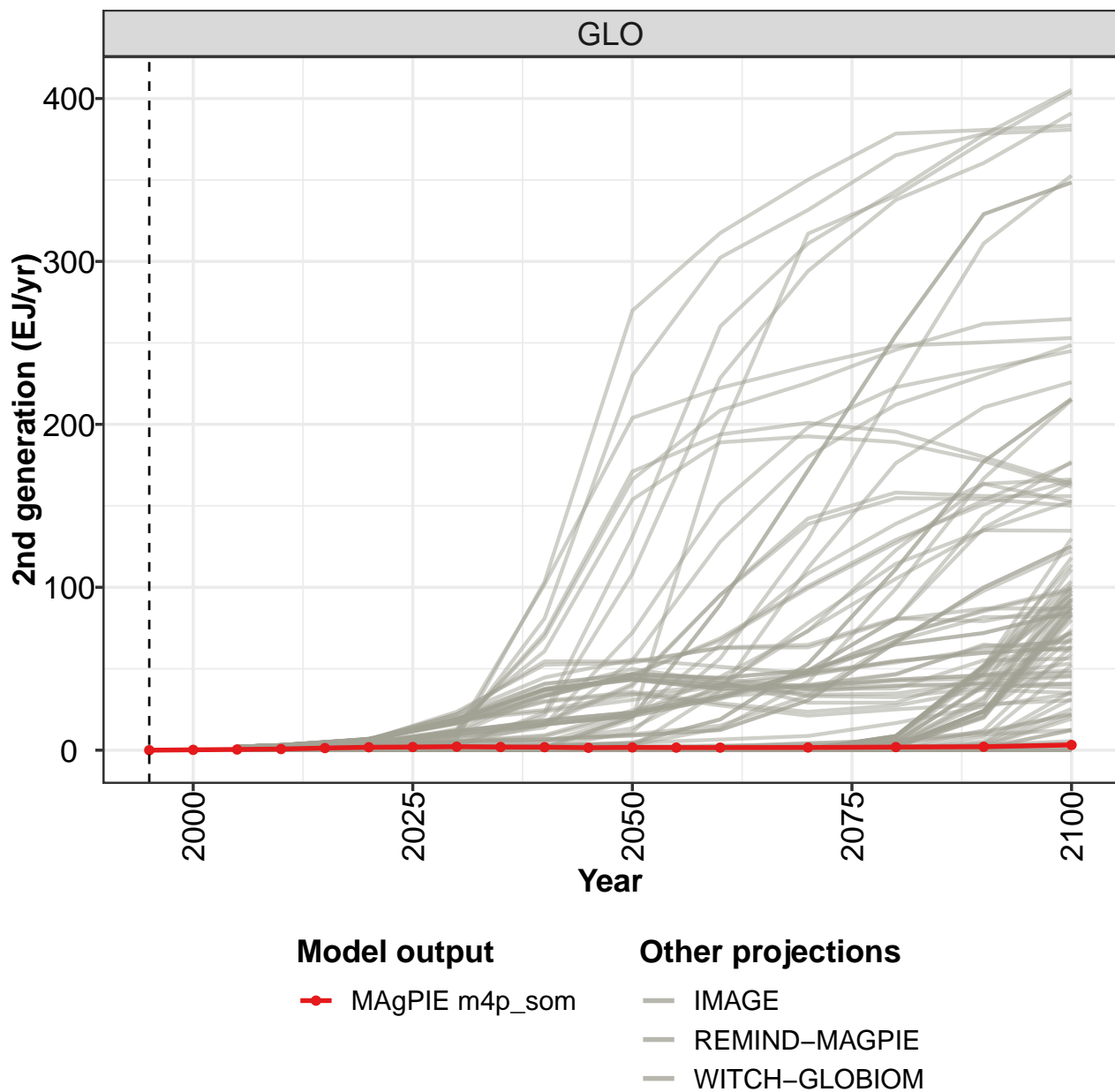
Table 106: MAgPIE m4p\_som — Demand—Bioenergy—1st generation (EJ/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	22.6	23.4	24.2	25.9	27.2	28.2	28.6
CAZ	0.6	0.6	0.6	0.6	0.7	0.7	0.6
CHA	4.7	4.9	5.2	5.5	5.7	5.8	6.1
EUR	3.0	3.0	3.0	3.0	3.0	3.0	2.9
IND	0.3	0.3	0.3	0.5	0.7	0.9	1.0
JPN	0.4	0.5	0.5	0.6	0.7	0.7	0.7
LAM	4.0	3.9	4.0	4.1	4.2	4.3	4.3
MEA	0.9	1.0	1.0	1.1	1.2	1.2	1.1
NEU	1.2	1.2	1.2	1.2	1.2	1.2	1.2
OAS	2.3	2.5	2.8	3.5	3.9	4.2	4.3
REF	0.9	0.9	0.9	0.9	0.8	0.7	0.7
SSA	0.7	0.8	0.9	1.3	1.7	1.8	1.9
USA	3.7	3.7	3.7	3.7	3.7	3.7	3.7

Table 107: MAgPIE m4p\_som — Demand—Bioenergy—1st generation (EJ/yr) [PART 2/2]

## 4.2 2nd generation

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

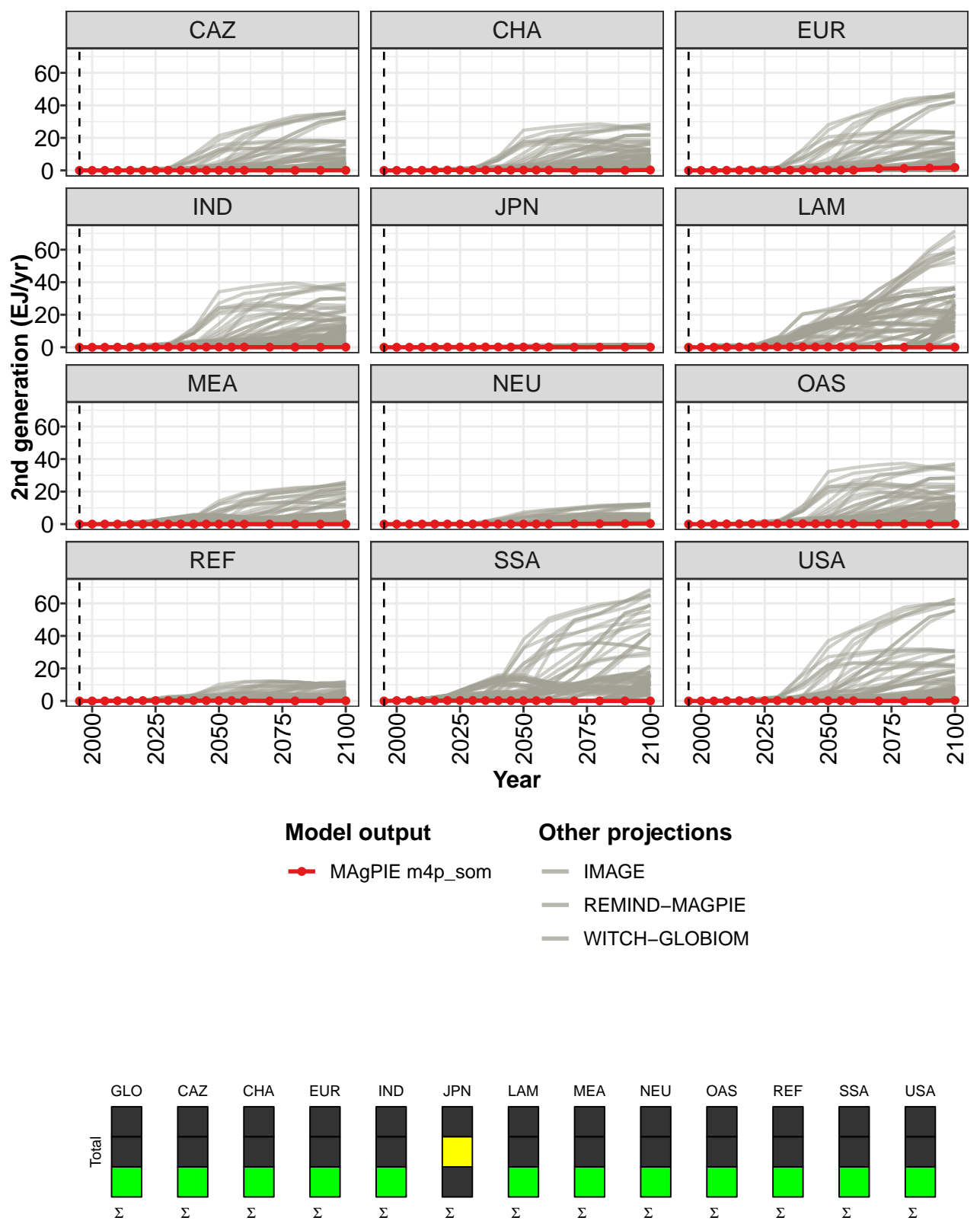


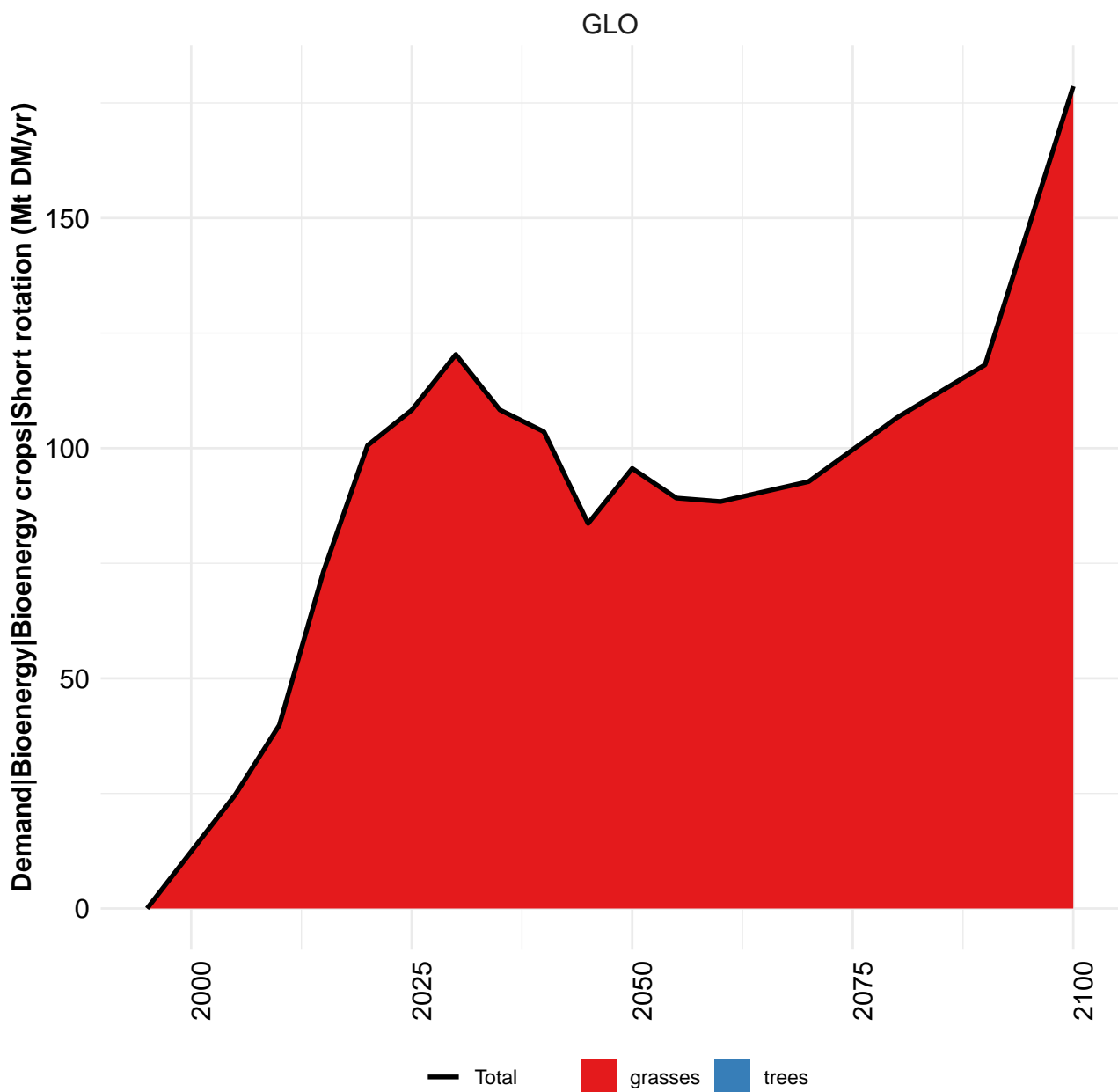
Figure 36: MAgPIE m4p\_som — Demand—Bioenergy—2nd generation (EJ/yr)

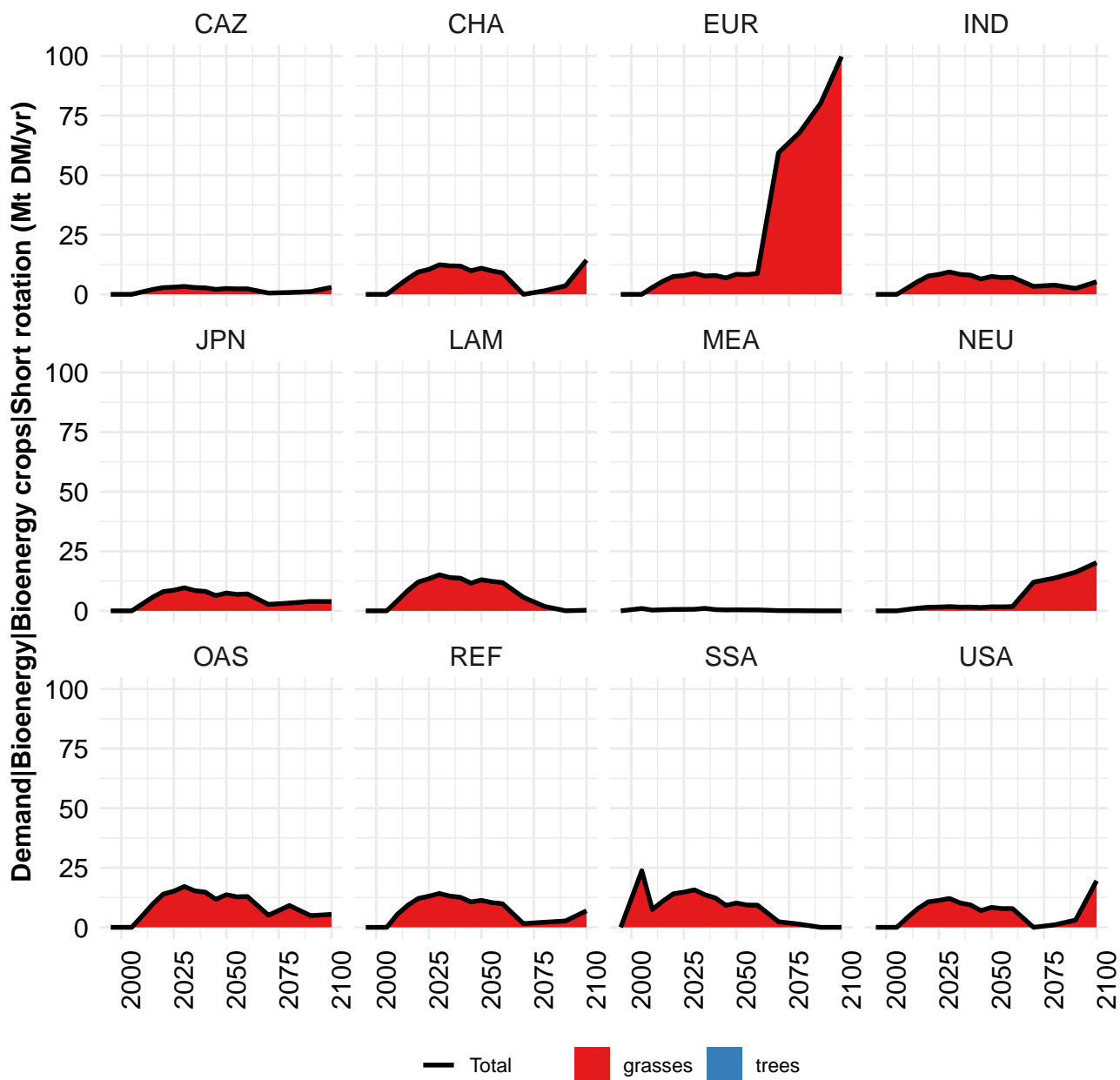
	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.00	0.22	0.45	0.72	1.32	1.81	1.95	2.17	1.95	1.86	1.51
CAZ	0.00	0.00	0.00	0.02	0.04	0.05	0.05	0.06	0.05	0.05	0.04
CHA	0.00	0.00	0.00	0.06	0.12	0.17	0.19	0.22	0.22	0.21	0.18
EUR	0.00	0.00	0.00	0.05	0.10	0.14	0.14	0.16	0.14	0.14	0.12
IND	0.00	0.00	0.00	0.05	0.10	0.14	0.15	0.17	0.15	0.15	0.12
JPN	0.00	0.00	0.00	0.05	0.10	0.15	0.16	0.17	0.15	0.15	0.12
LAM	0.00	0.00	0.00	0.08	0.15	0.22	0.24	0.27	0.25	0.25	0.21
MEA	0.00	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01
NEU	0.00	0.00	0.00	0.01	0.02	0.03	0.03	0.03	0.03	0.03	0.03
OAS	0.00	0.00	0.00	0.09	0.18	0.25	0.27	0.31	0.28	0.27	0.21
REF	0.00	0.00	0.00	0.10	0.17	0.22	0.23	0.26	0.24	0.23	0.19
SSA	0.00	0.21	0.43	0.13	0.20	0.25	0.27	0.28	0.25	0.22	0.17
USA	0.00	0.00	0.00	0.07	0.14	0.19	0.20	0.22	0.18	0.17	0.13

Table 108: MAgPIE m4p\_som — Demand—Bioenergy—2nd generation (EJ/yr) [PART 1/2]

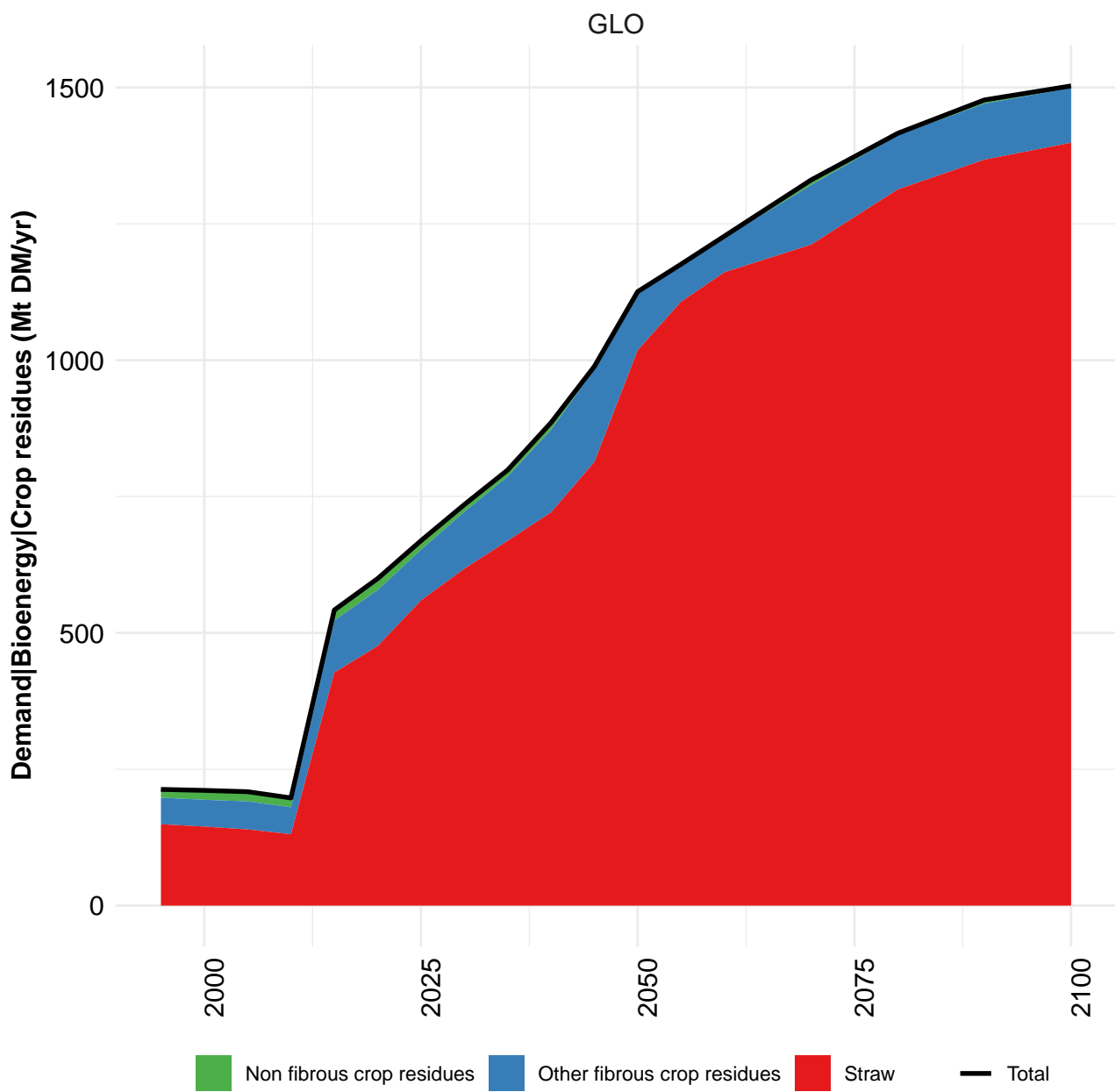
	2050	2055	2060	2070	2080	2090	2100
GLO	1.72	1.61	1.59	1.67	1.92	2.13	3.22
CAZ	0.04	0.04	0.04	0.01	0.01	0.02	0.05
CHA	0.20	0.18	0.16	0.00	0.03	0.06	0.26
EUR	0.15	0.15	0.16	1.07	1.22	1.44	1.80
IND	0.14	0.13	0.13	0.06	0.07	0.04	0.10
JPN	0.13	0.12	0.13	0.05	0.06	0.07	0.07
LAM	0.24	0.22	0.21	0.10	0.03	0.00	0.00
MEA	0.01	0.01	0.01	0.00	0.00	0.00	0.00
NEU	0.03	0.03	0.03	0.22	0.25	0.29	0.36
OAS	0.25	0.23	0.23	0.09	0.16	0.09	0.10
REF	0.20	0.19	0.18	0.03	0.04	0.05	0.12
SSA	0.18	0.17	0.17	0.04	0.02	0.00	0.00
USA	0.15	0.14	0.14	0.00	0.02	0.05	0.35

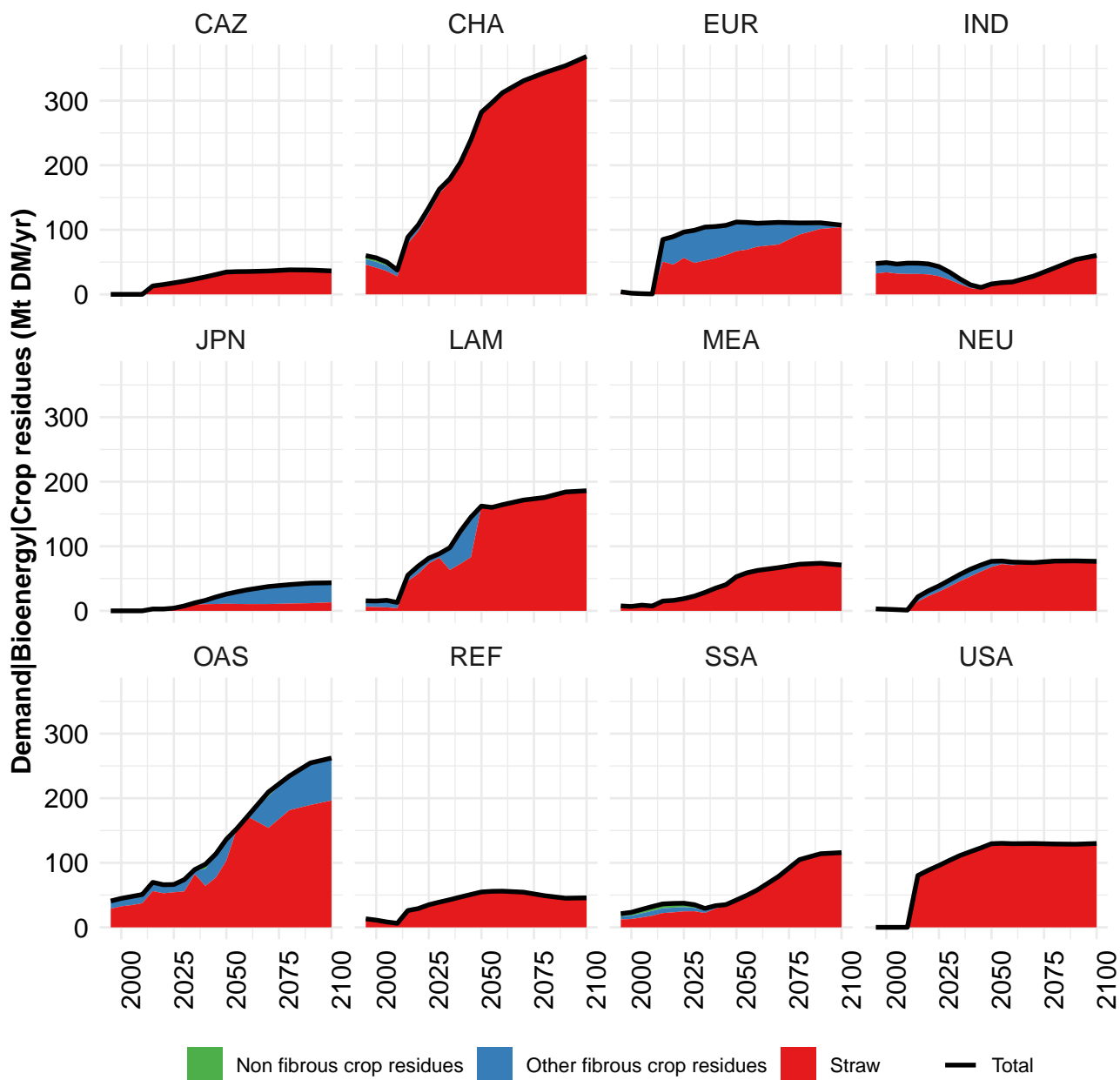
Table 109: MAgPIE m4p\_som — Demand—Bioenergy—2nd generation (EJ/yr) [PART 2/2]





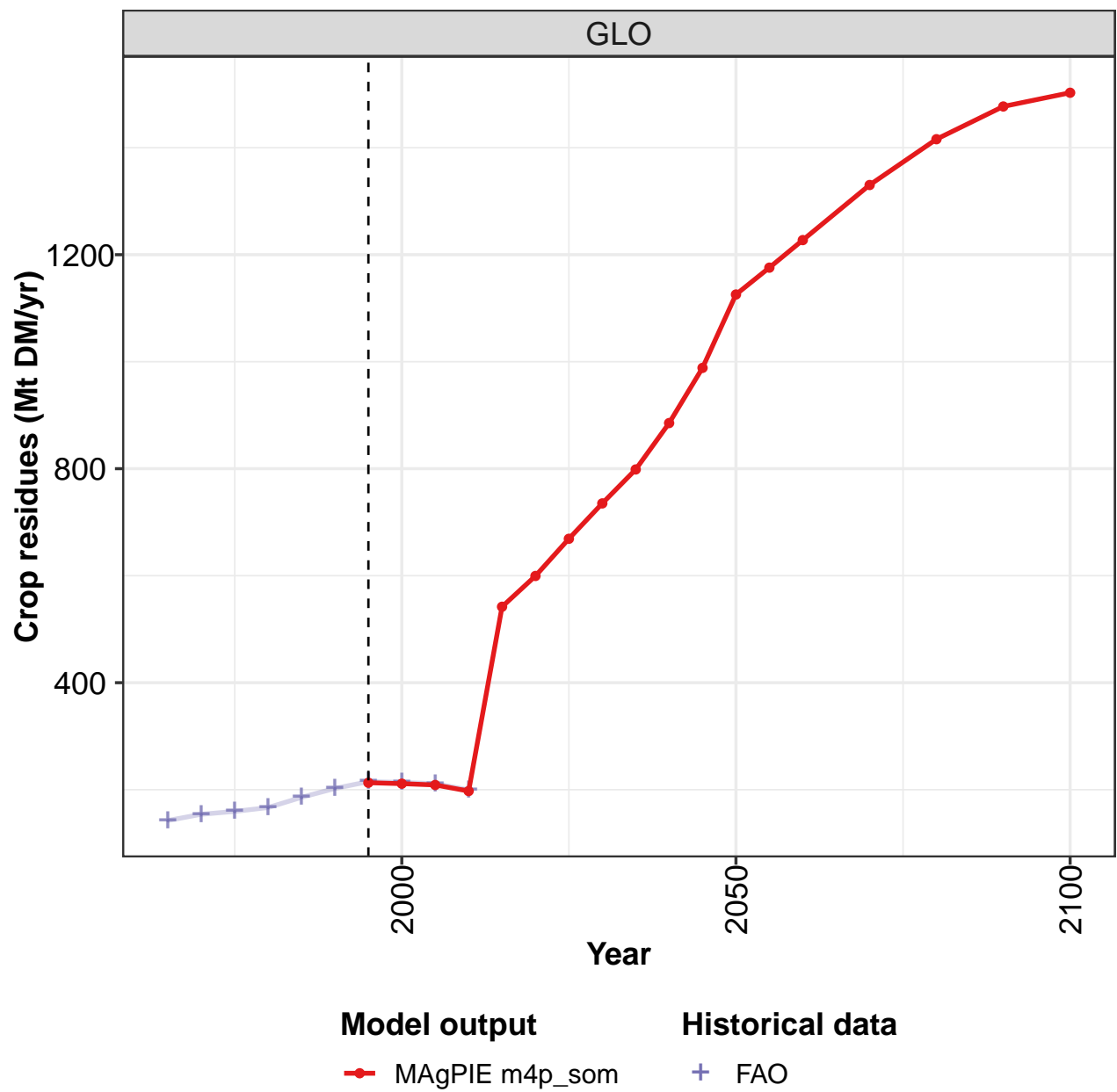






4.3 Crop residues

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

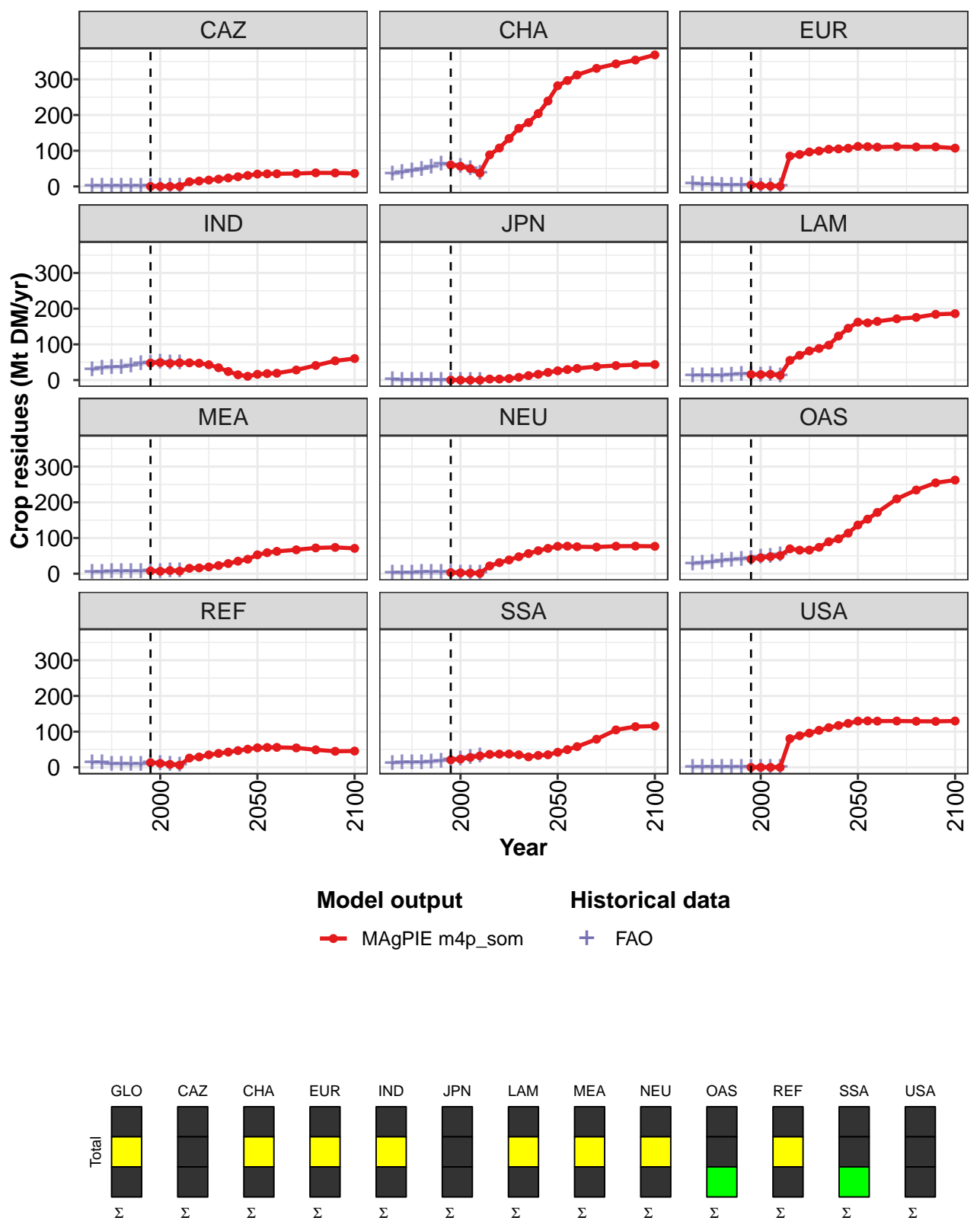


Figure 37: MAgPIE m4p\_som — Demand—Bioenergy—Crop residues (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	213	211	209	197	542	600	669	735	799	885	988
CAZ	0	0	0	0	13	15	18	20	24	27	31
CHA	60	57	50	38	88	108	134	163	179	204	239
EUR	4	2	1	1	85	89	97	99	104	105	107
IND	48	49	47	48	48	47	43	34	24	15	11
JPN	0	0	0	0	3	3	4	8	12	16	21
LAM	16	15	16	13	55	69	82	89	98	123	145
MEA	8	7	9	7	15	16	19	23	29	35	41
NEU	3	2	2	1	22	31	39	47	56	64	71
OAS	41	45	48	51	70	66	66	74	89	98	114
REF	13	11	8	6	26	29	35	39	43	47	51
SSA	21	23	28	32	36	37	37	35	29	33	35
USA	0	0	0	0	80	88	96	104	111	117	123

Table 110: MAgPIE m4p\_som — Demand—Bioenergy—Crop residues (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1126	1176	1227	1330	1416	1477	1503
CAZ	35	35	35	36	38	38	36
CHA	282	297	312	331	343	354	368
EUR	112	111	110	111	111	111	107
IND	16	18	19	28	41	54	60
JPN	26	29	33	38	41	43	43
LAM	162	160	164	172	176	184	186
MEA	53	59	63	67	72	74	71
NEU	77	77	76	75	77	77	77
OAS	136	153	172	210	234	255	262
REF	55	56	56	54	49	45	46
SSA	42	50	58	79	105	114	116
USA	130	130	130	130	129	129	130

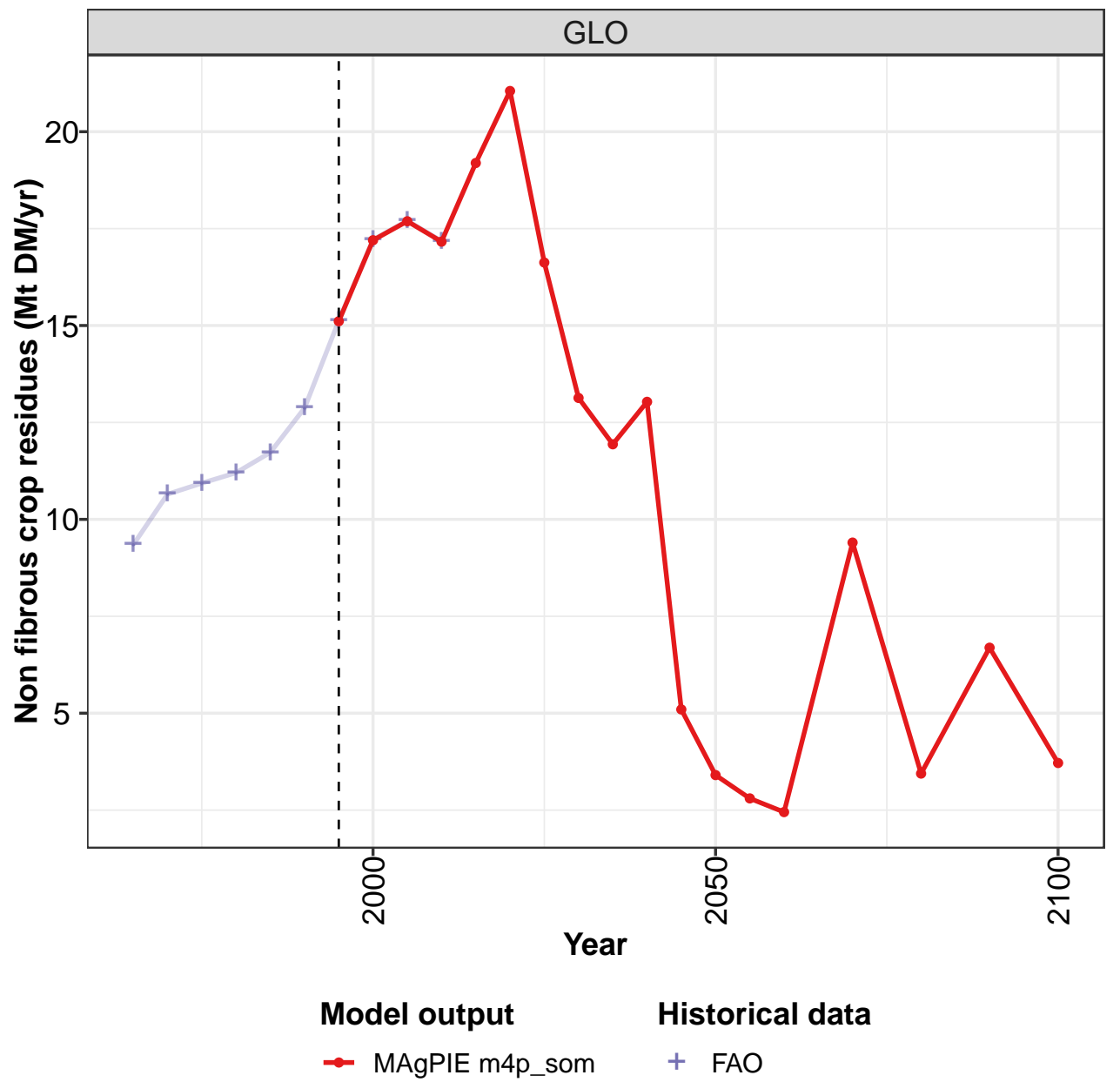
Table 111: MAgPIE m4p\_som — Demand—Bioenergy—Crop residues (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	142	154	159	167	186	202	215	214	211	200
CAZ	0	0	0	0	0	0	0	0	0	0
CHA	35	39	44	48	55	62	61	57	50	38
EUR	7	5	4	4	3	4	4	2	1	1
IND	29	33	35	36	41	45	49	50	48	49
JPN	1	0	0	0	0	0	0	0	0	0
LAM	12	13	12	12	15	16	15	15	16	13
MEA	5	5	5	6	6	7	8	7	9	7
NEU	3	3	3	3	3	3	3	2	2	1
OAS	27	30	32	35	39	40	42	46	49	53
REF	13	13	9	10	8	8	13	11	8	6
SSA	12	13	13	13	15	18	21	23	28	32
USA	0	0	0	0	0	0	0	0	0	0

Table 112: FAO — Demand—Bioenergy—Crop residues (Mt DM/yr)

4.3.1 Non fibrous crop residues

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

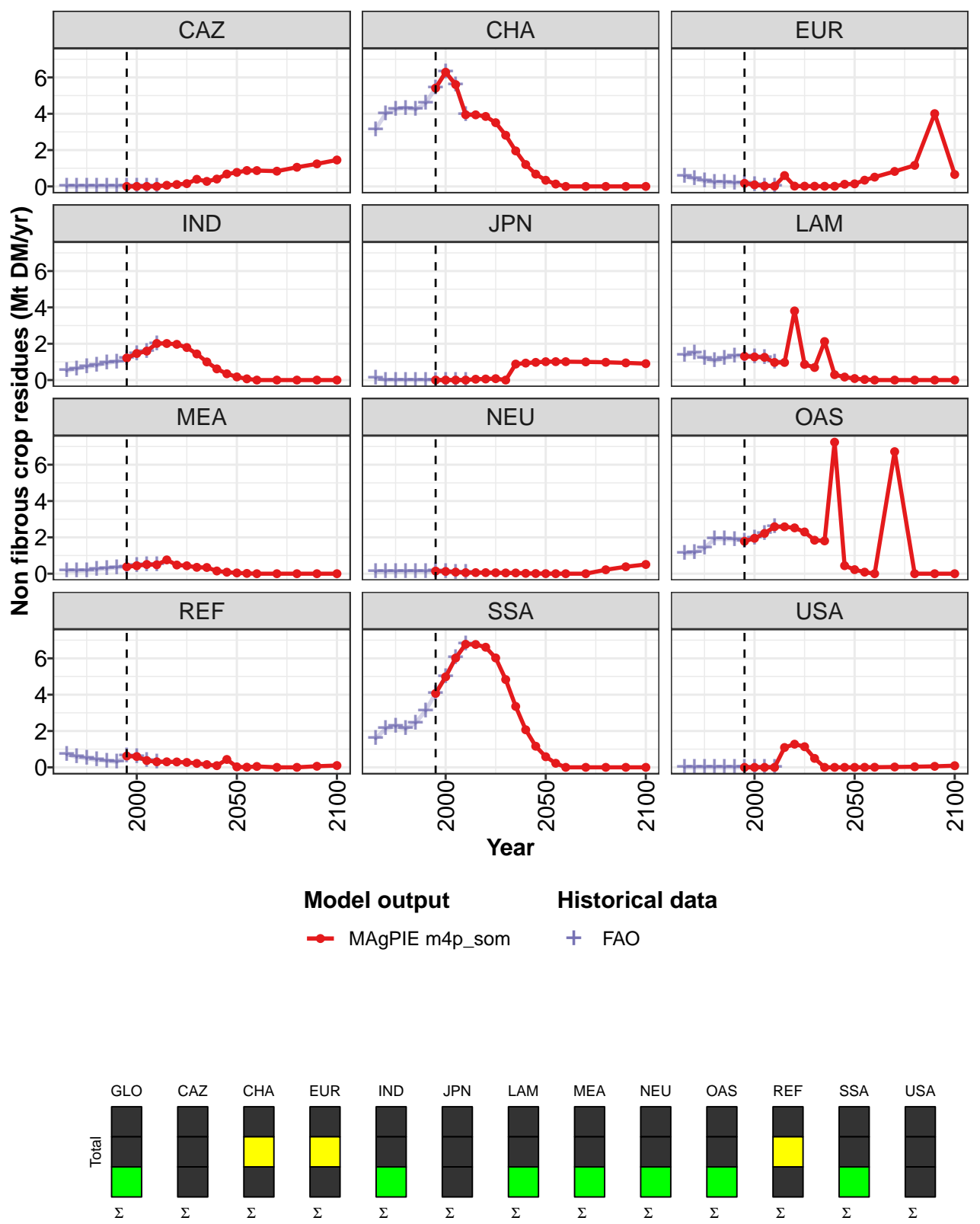


Figure 38: MAGPIE m4p\_som — Demand—Bioenergy—Crop residues—Non fibrous crop residues (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	15.1	17.2	17.7	17.2	19.2	21.1	16.6	13.1	11.9	13.0	5.1
CAZ	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.4	0.3	0.4	0.7
CHA	5.4	6.3	5.6	3.9	3.9	3.9	3.5	2.8	2.0	1.2	0.7
EUR	0.2	0.1	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.1
IND	1.2	1.5	1.6	2.0	2.0	2.0	1.8	1.4	1.0	0.6	0.3
JPN	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.9	0.9	1.0
LAM	1.3	1.3	1.3	1.0	1.0	3.8	0.9	0.7	2.1	0.3	0.2
MEA	0.4	0.4	0.5	0.5	0.8	0.5	0.4	0.4	0.3	0.2	0.1
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
OAS	1.8	1.9	2.2	2.6	2.6	2.5	2.3	1.8	1.8	7.2	0.4
REF	0.6	0.6	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.4
SSA	4.1	5.0	6.0	6.8	6.8	6.6	6.0	4.8	3.4	2.1	1.2
USA	0.0	0.0	0.0	0.0	1.1	1.3	1.1	0.5	0.0	0.0	0.0

Table 113: MAgPIE m4p\_som — Demand—Bioenergy—Crop residues—Non fibrous crop residues (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	3.4	2.8	2.4	9.4	3.4	6.7	3.7
CAZ	0.8	0.9	0.9	0.8	1.1	1.2	1.5
CHA	0.3	0.1	0.0	0.0	0.0	0.0	0.0
EUR	0.1	0.3	0.5	0.8	1.2	4.0	0.7
IND	0.2	0.1	0.0	0.0	0.0	0.0	0.0
JPN	1.0	1.0	1.0	1.0	1.0	0.9	0.9
LAM	0.1	0.0	0.0	0.0	0.0	0.0	0.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.2	0.4	0.5
OAS	0.2	0.1	0.0	6.7	0.0	0.0	0.0
REF	0.0	0.0	0.0	0.0	0.0	0.1	0.1
SSA	0.6	0.2	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.1	0.1

Table 114: MAgPIE m4p\_som — Demand—Bioenergy—Crop residues—Non fibrous crop residues (Mt DM/yr)  
[PART 2/2]

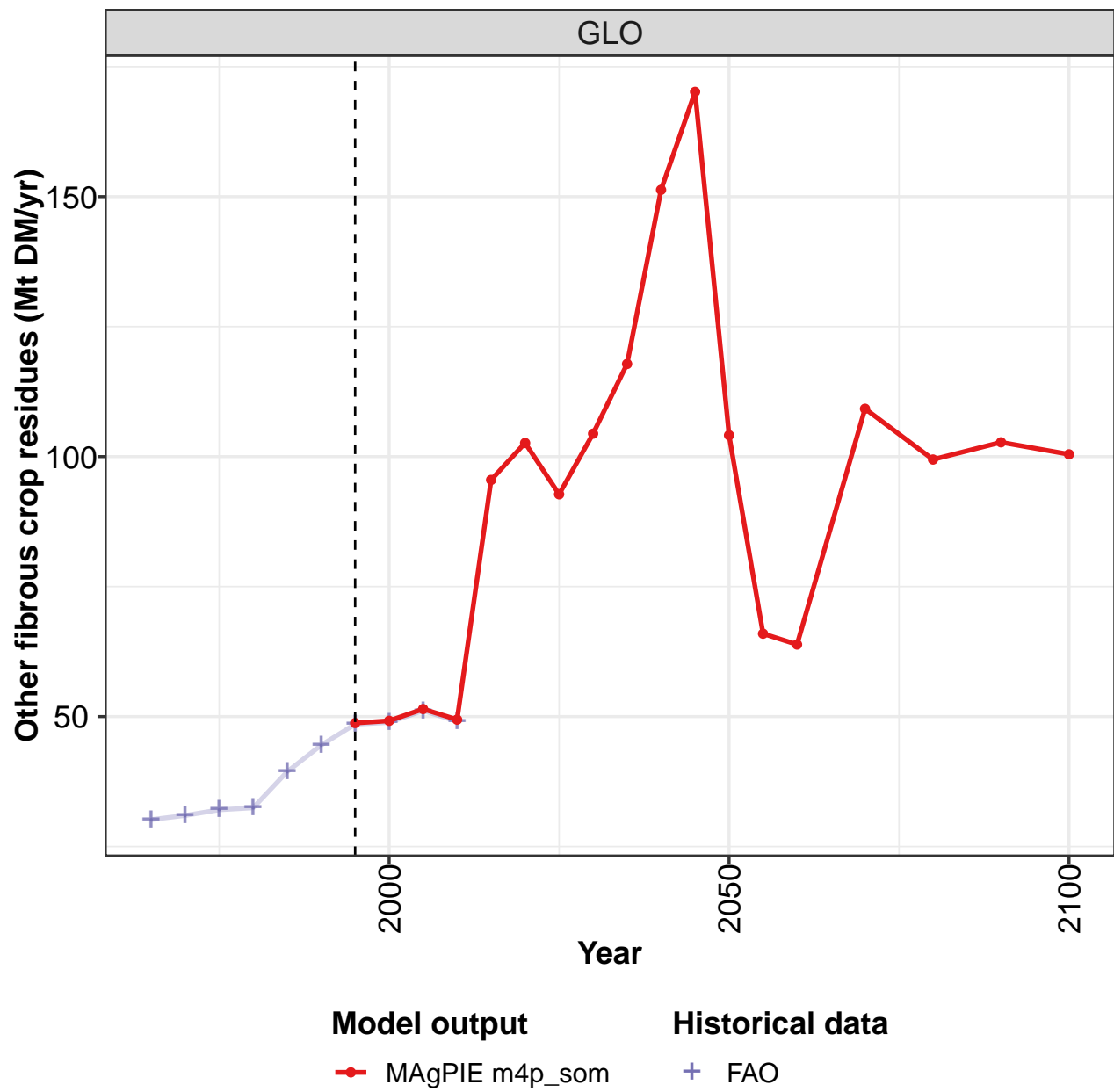
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	9.3	10.6	10.9	11.2	11.7	12.9	15.1	17.2	17.7	17.2
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	3.1	4.0	4.3	4.3	4.2	4.6	5.4	6.3	5.6	3.9
EUR	0.6	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.0	0.0
IND	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.5	1.6	2.0
JPN	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.4	1.5	1.2	1.1	1.2	1.3	1.3	1.3	1.3	1.0
MEA	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	1.1	1.2	1.4	1.9	1.9	1.9	1.8	2.0	2.2	2.6
REF	0.7	0.6	0.5	0.4	0.4	0.3	0.6	0.6	0.4	0.3
SSA	1.6	2.1	2.3	2.1	2.4	3.1	4.1	5.0	6.0	6.8
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 115: FAO — Demand—Bioenergy—Crop residues—Non fibrous crop residues (Mt DM/yr)



4.3.2 Other fibrous crop residues

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

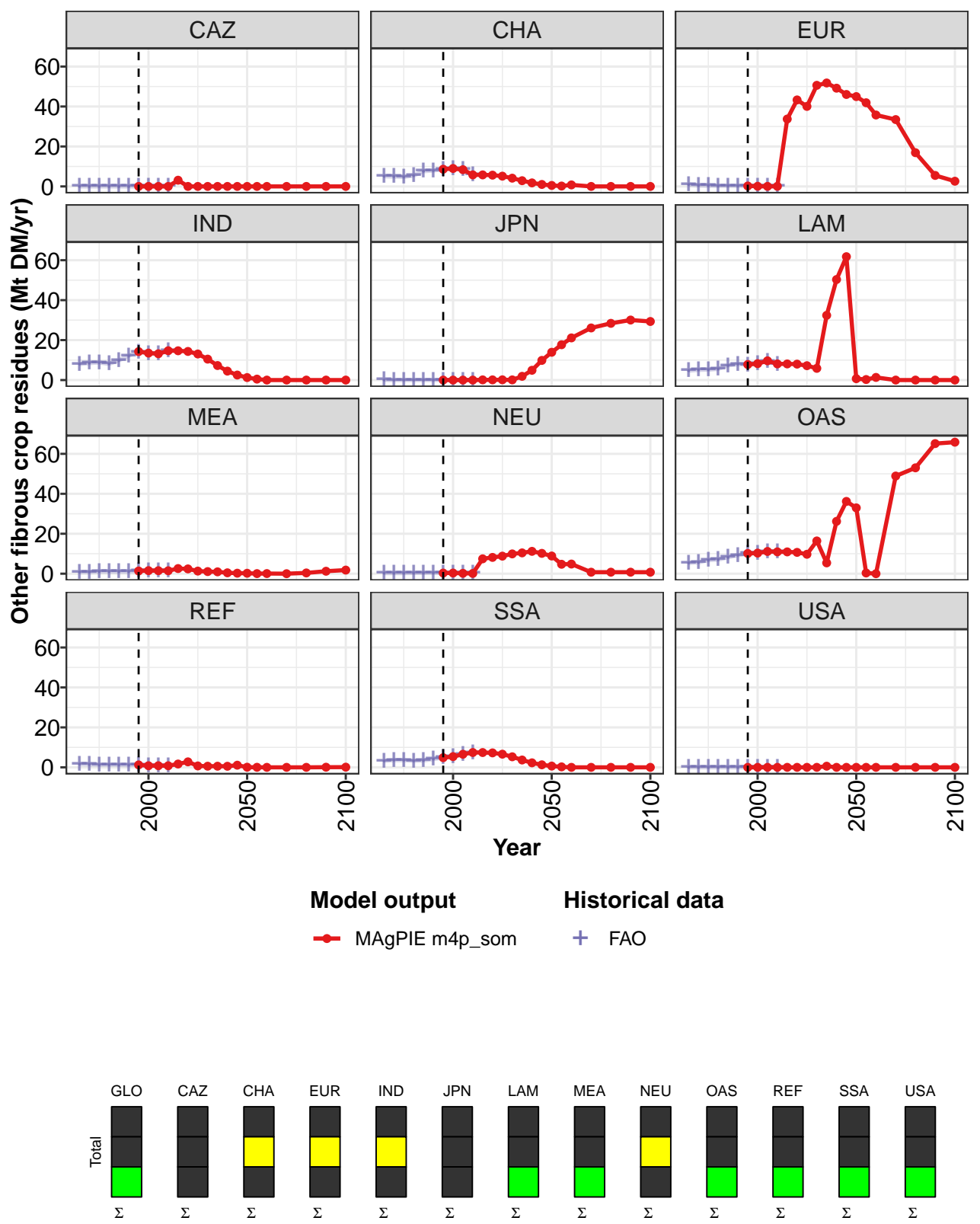


Figure 39: MAgPIE m4p\_som — Demand—Bioenergy—Crop residues—Other fibrous crop residues (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	49	49	51	49	96	103	93	104	118	151	170
CAZ	0	0	0	0	3	0	0	0	0	0	0
CHA	9	9	8	6	6	6	5	4	3	2	1
EUR	0	0	0	0	34	43	40	51	52	49	46
IND	14	14	13	15	15	14	13	10	7	4	3
JPN	0	0	0	0	0	0	0	0	2	5	10
LAM	8	8	10	8	8	8	7	6	32	50	62
MEA	1	2	2	1	3	2	1	1	1	0	0
NEU	0	0	0	0	7	8	9	10	10	11	10
OAS	10	10	11	11	11	11	10	16	5	26	36
REF	1	1	1	1	2	3	1	1	1	1	1
SSA	5	5	7	7	7	7	7	5	4	2	1
USA	0	0	0	0	0	0	0	0	1	0	0

Table 116: MAgPIE m4p\_som — Demand—Bioenergy—Crop residues—Other fibrous crop residues (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	104	66	64	109	99	103	100
CAZ	0	0	0	0	0	0	0
CHA	0	0	1	0	0	0	0
EUR	45	42	36	33	17	6	3
IND	1	0	0	0	0	0	0
JPN	14	18	21	26	28	30	29
LAM	1	0	1	0	0	0	0
MEA	0	0	0	0	0	1	2
NEU	9	5	5	1	1	1	1
OAS	33	0	0	49	53	65	66
REF	0	0	0	0	0	0	0
SSA	1	0	0	0	0	0	0
USA	0	0	0	0	0	0	0

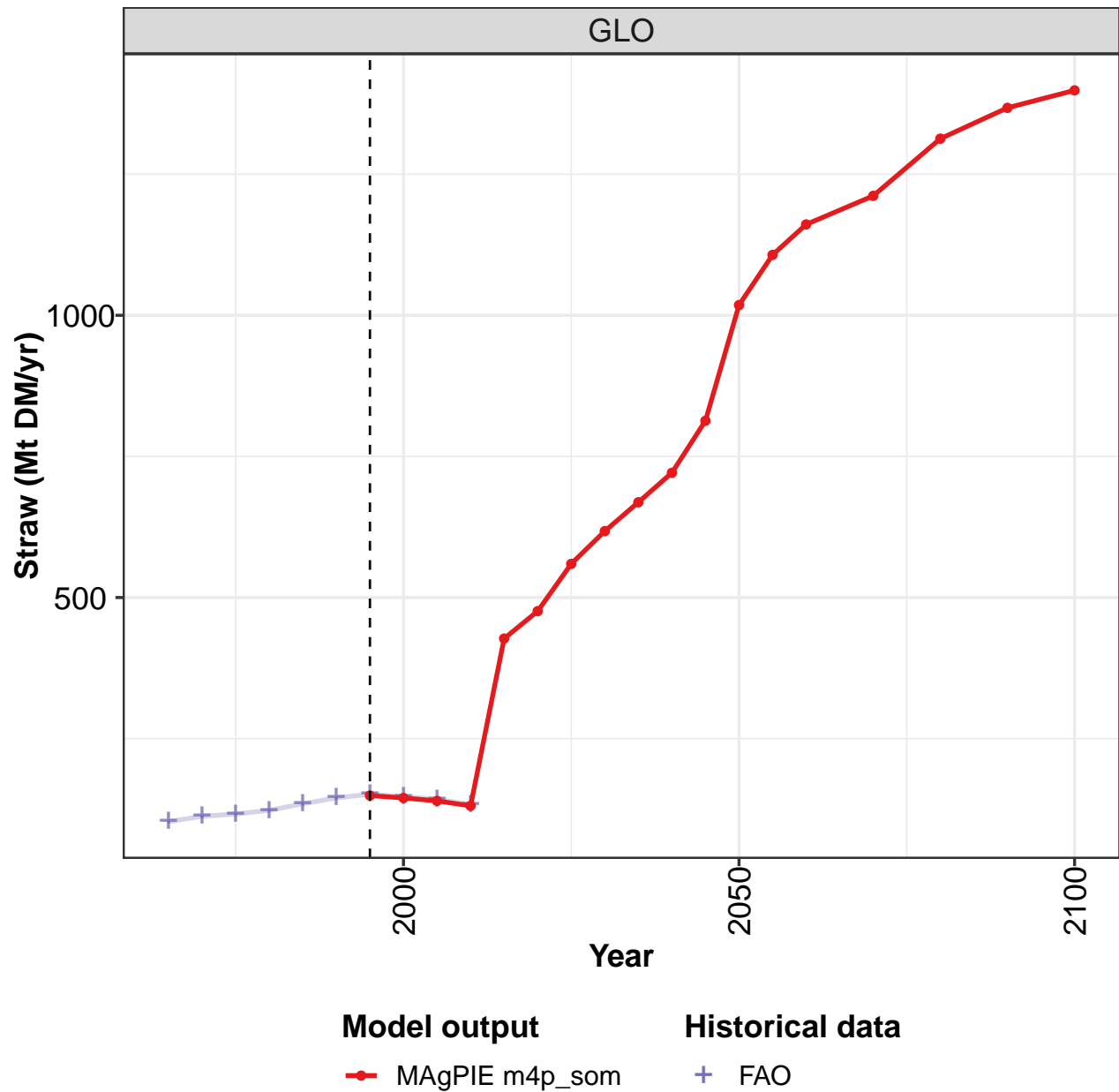
Table 117: MAgPIE m4p\_som — Demand—Bioenergy—Crop residues—Other fibrous crop residues (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	30.2	31.0	32.1	32.4	39.4	44.5	48.5	48.9	51.1	49.1
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	5.1	4.9	4.7	5.4	7.6	7.9	8.6	9.0	8.4	5.8
EUR	0.9	0.5	0.4	0.3	0.3	0.3	0.2	0.1	0.0	0.1
IND	8.0	8.5	8.8	8.1	9.9	12.2	14.1	13.4	13.1	14.6
JPN	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	4.7	5.1	5.2	5.6	7.3	8.0	7.7	8.1	9.5	8.0
MEA	0.8	0.9	1.1	1.1	1.1	1.1	1.4	1.6	1.5	1.5
NEU	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.4	0.2	0.1
OAS	5.4	5.7	6.8	7.1	8.2	9.3	10.1	10.2	11.1	10.9
REF	1.6	1.4	1.2	1.3	1.2	1.1	1.3	0.9	0.9	0.8
SSA	3.2	3.6	3.6	3.3	3.5	4.1	4.8	5.4	6.5	7.4
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 118: FAO — Demand—Bioenergy—Crop residues—Other fibrous crop residues (Mt DM/yr)

4.3.3 Straw

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

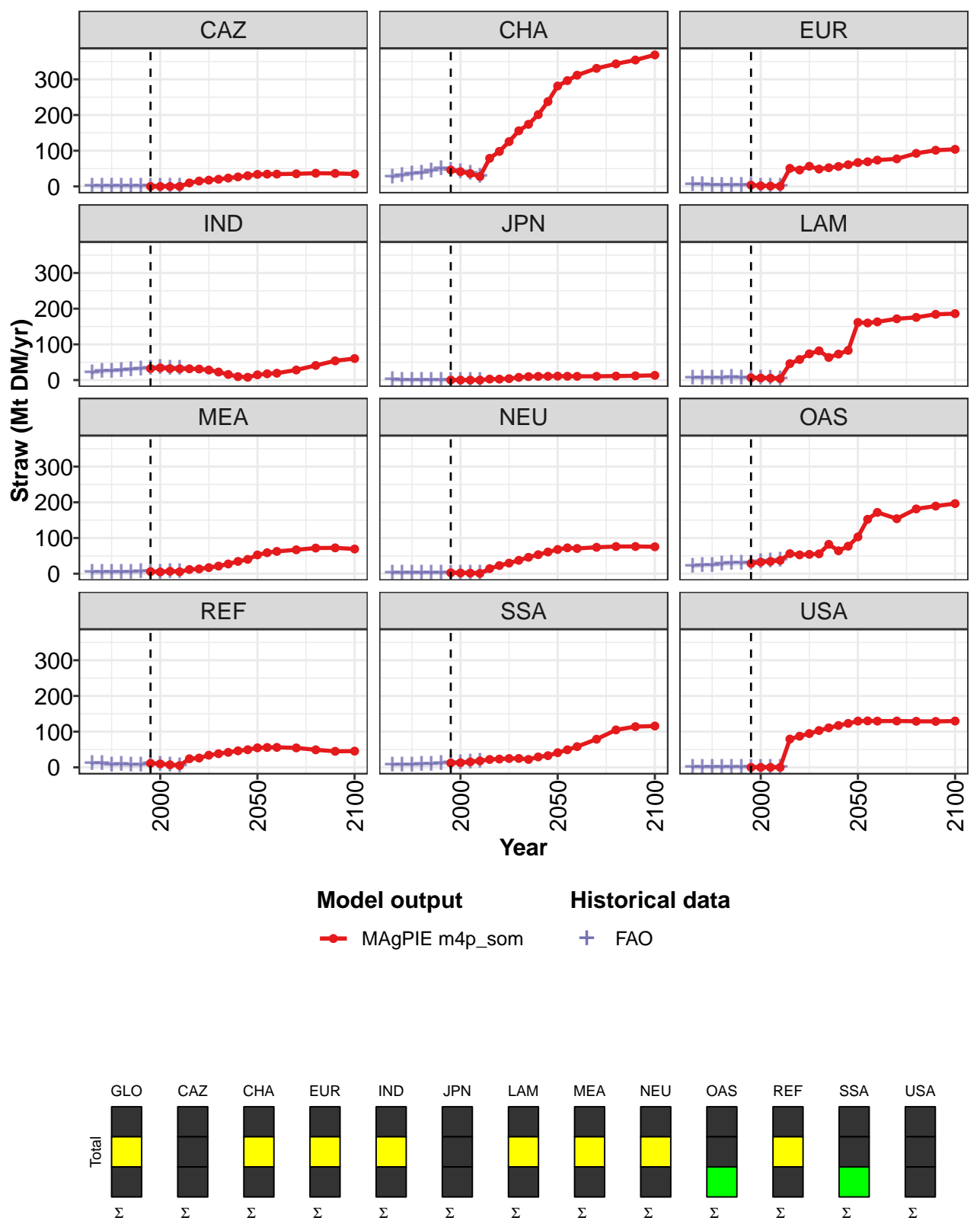


Figure 40: MAGPIE m4p\_som — Demand—Bioenergy—Crop residues—Straw (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	149	145	140	131	427	476	560	618	669	721	813
CAZ	0	0	0	0	10	15	18	20	23	27	30
CHA	46	41	36	28	79	98	126	156	174	201	238
EUR	4	2	1	1	51	46	56	49	52	56	61
IND	32	34	32	32	32	31	28	23	16	10	8
JPN	0	0	0	0	3	3	4	8	10	10	11
LAM	6	6	5	4	46	58	74	82	63	73	83
MEA	6	5	7	5	12	13	17	21	27	34	40
NEU	3	2	2	1	14	23	30	38	46	53	61
OAS	29	33	34	37	56	53	54	56	82	64	77
REF	11	10	7	5	24	26	34	38	42	46	49
SSA	12	13	15	18	22	23	25	25	22	29	33
USA	0	0	0	0	79	87	95	103	111	117	123

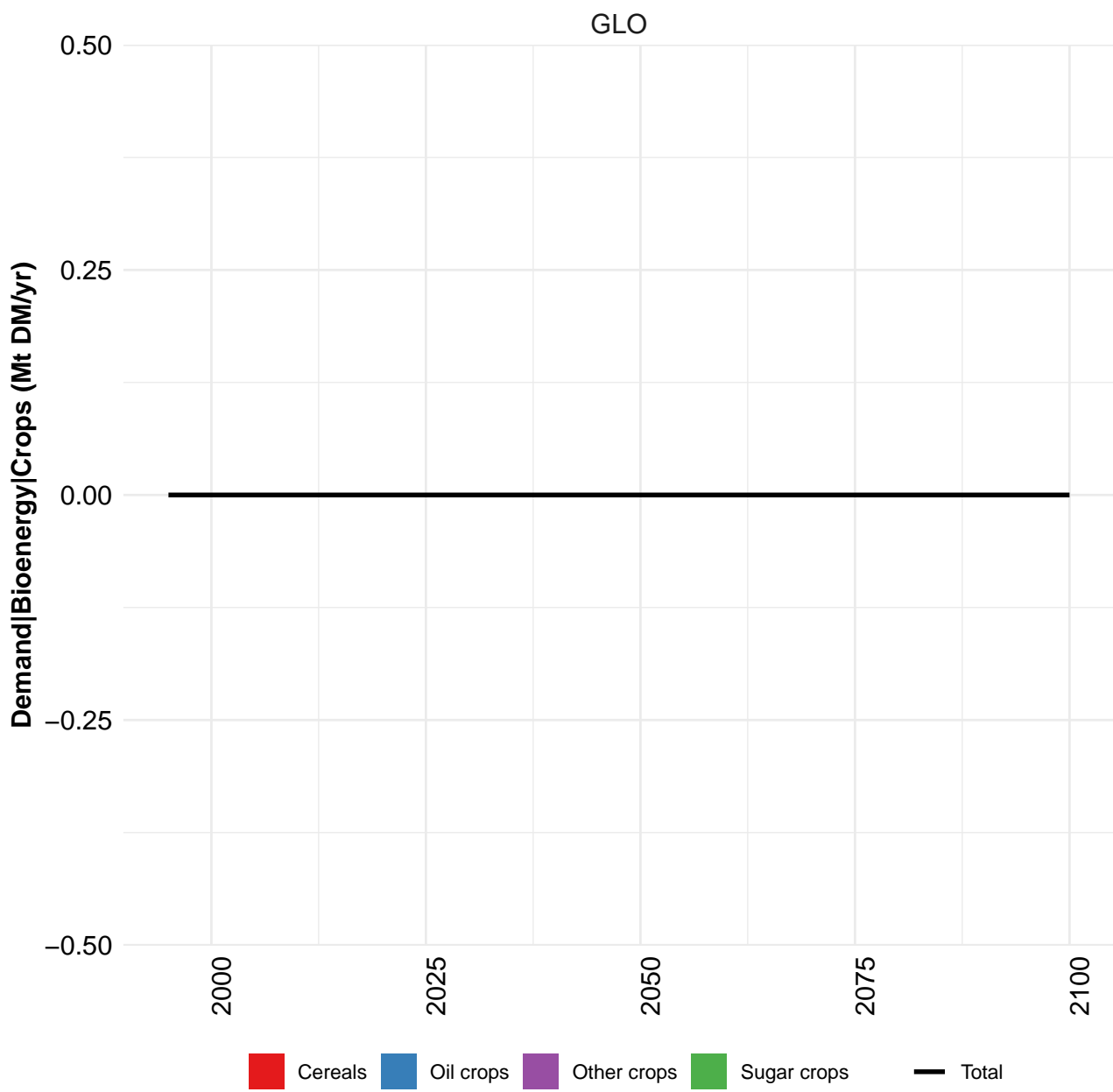
Table 119: MAgPIE m4p\_som — Demand—Bioenergy—Crop residues—Straw (Mt DM/yr) [PART 1/2]

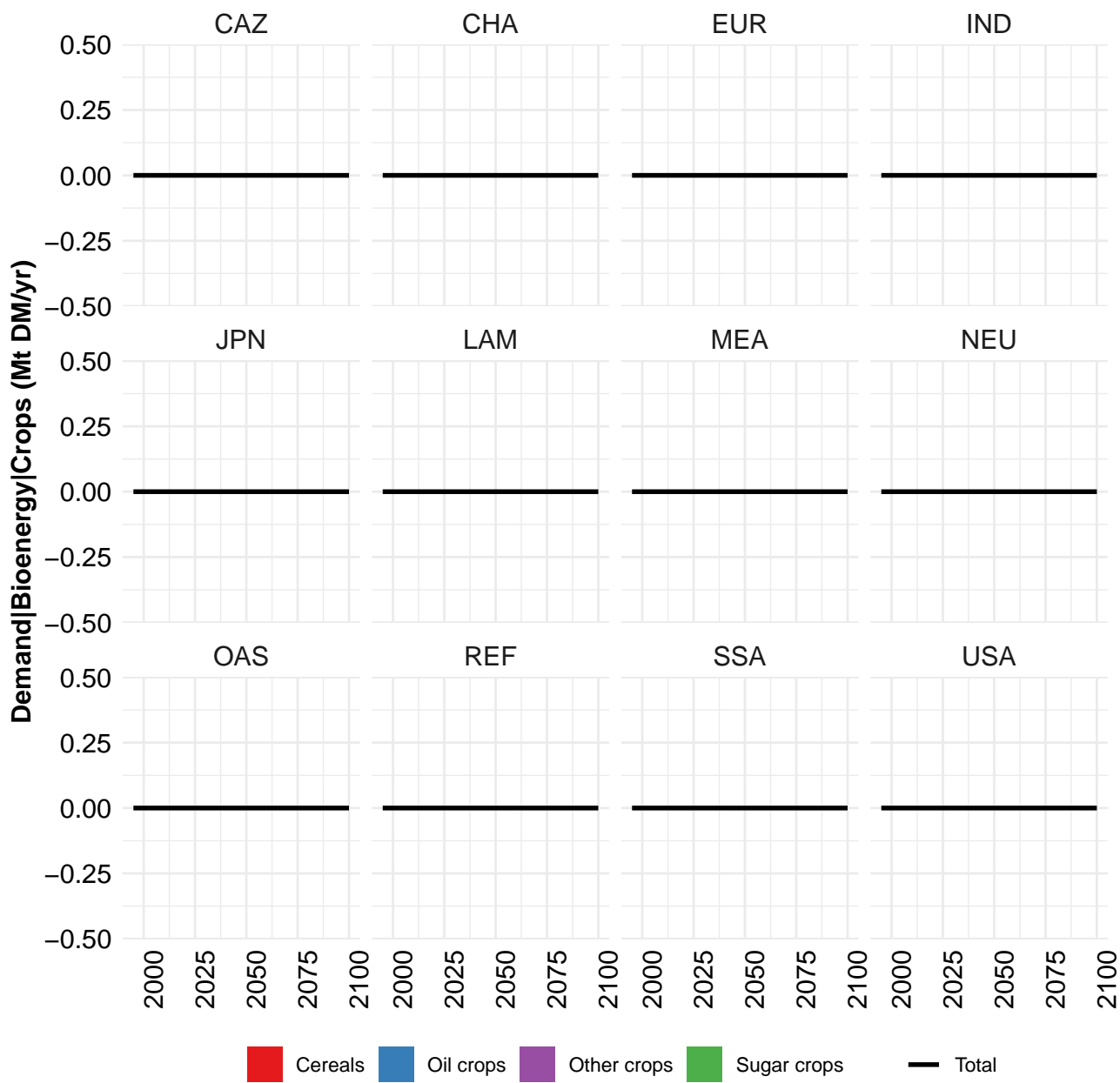
	2050	2055	2060	2070	2080	2090	2100
GLO	1018	1107	1161	1212	1313	1368	1399
CAZ	34	34	35	35	37	36	35
CHA	281	296	312	331	343	354	368
EUR	67	69	74	77	93	101	104
IND	15	18	19	28	41	54	60
JPN	11	11	10	11	11	12	13
LAM	161	160	163	172	176	184	186
MEA	53	59	63	67	72	72	69
NEU	68	72	71	74	76	76	75
OAS	103	152	172	154	181	190	196
REF	55	56	56	54	49	45	45
SSA	41	49	58	79	105	114	116
USA	130	130	130	130	129	129	130

Table 120: MAgPIE m4p\_som — Demand—Bioenergy—Crop residues—Straw (Mt DM/yr) [PART 2/2]

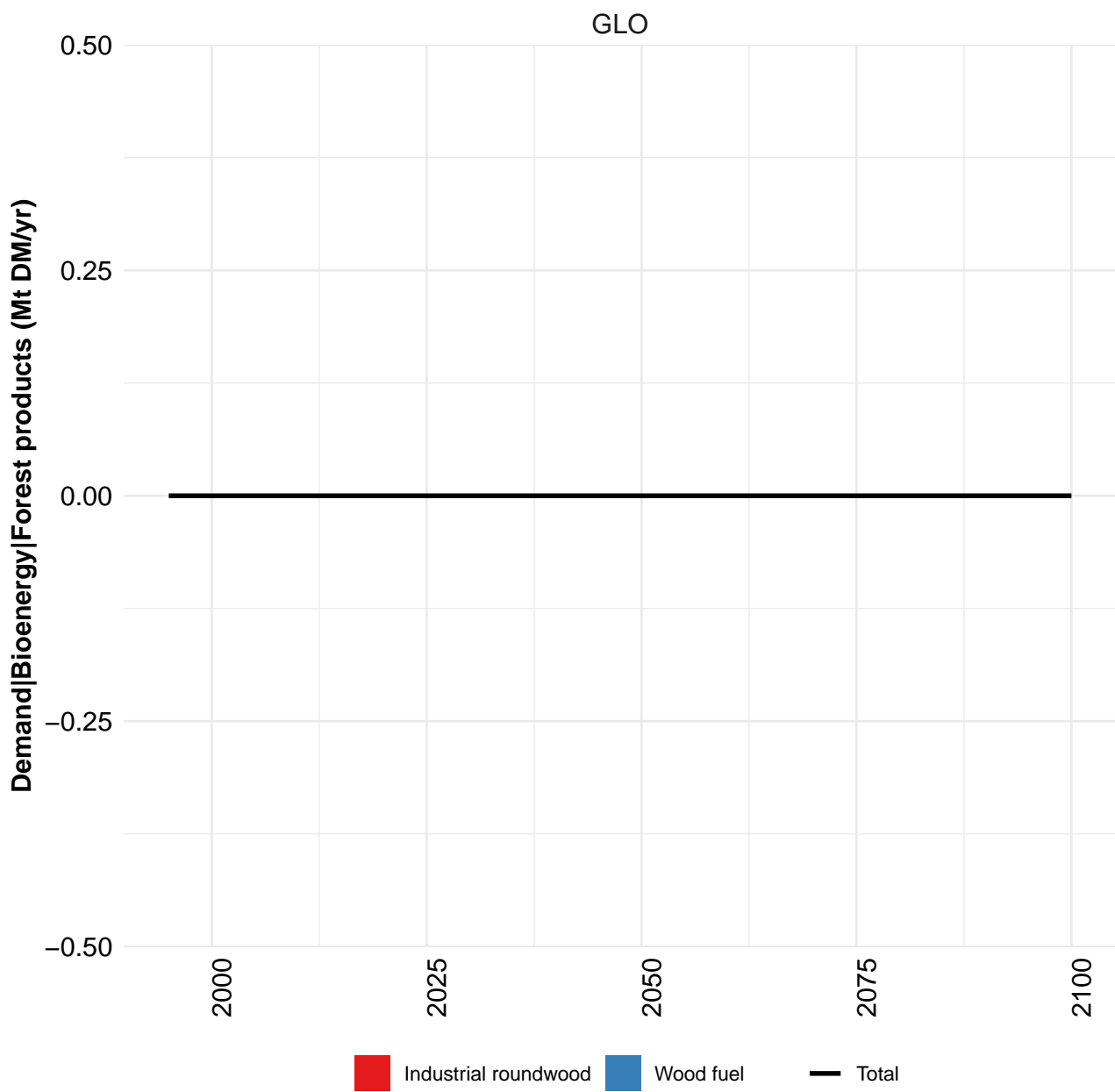
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	103	112	116	123	135	145	151	148	142	133
CAZ	0	0	0	0	0	0	0	0	0	0
CHA	26	30	35	38	43	49	47	42	36	28
EUR	6	4	4	3	3	3	3	2	1	1
IND	20	24	26	27	30	32	33	35	33	32
JPN	1	0	0	0	0	0	0	0	0	0
LAM	6	6	6	5	7	6	6	6	5	4
MEA	4	4	4	4	5	5	6	5	7	5
NEU	2	2	3	3	3	2	3	2	2	1
OAS	21	23	24	26	29	29	30	34	36	39
REF	10	11	7	8	6	6	11	9	7	5
SSA	7	8	8	8	9	11	12	13	15	18
USA	0	0	0	0	0	0	0	0	0	0

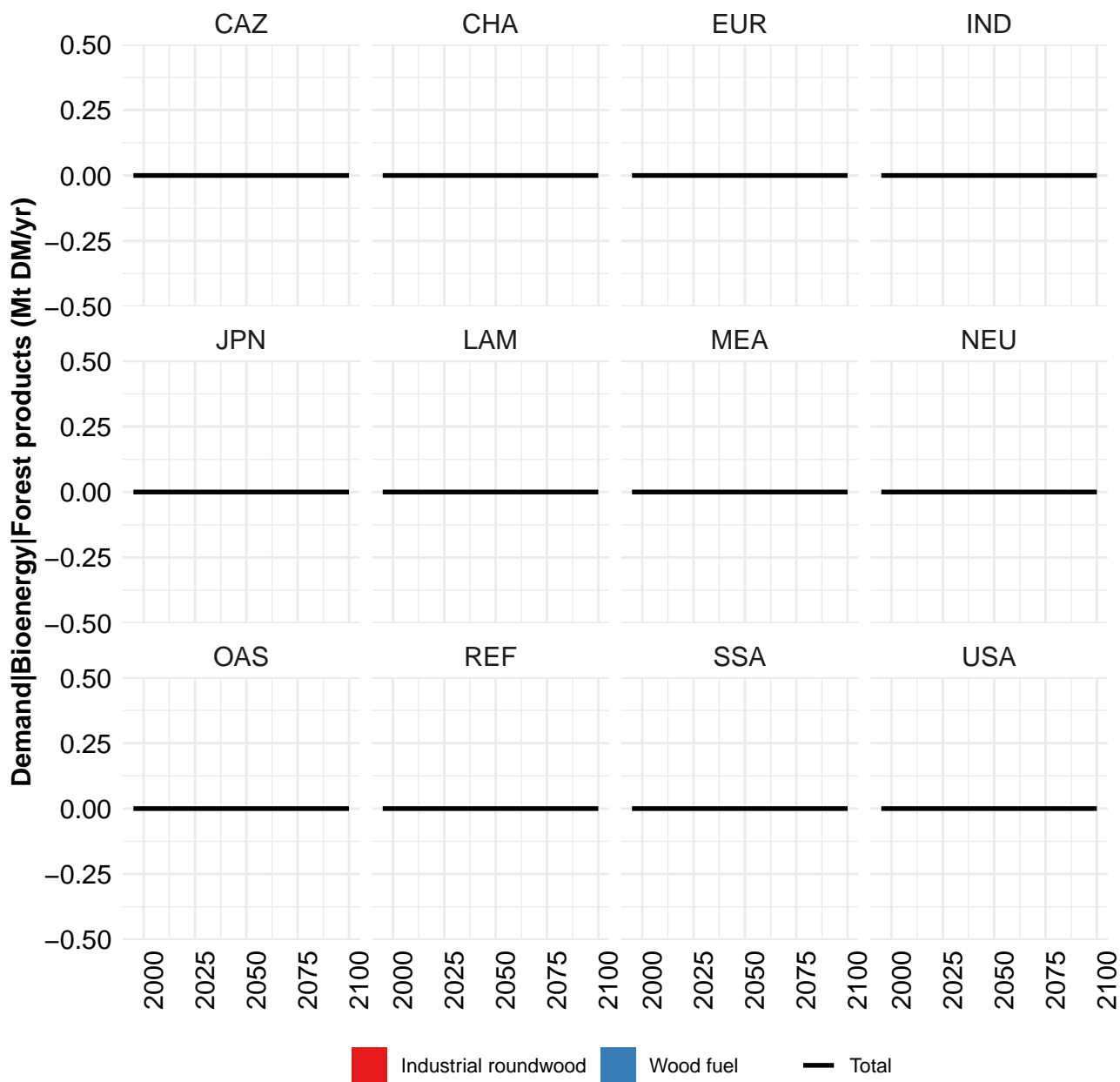
Table 121: FAO — Demand—Bioenergy—Crop residues—Straw (Mt DM/yr)

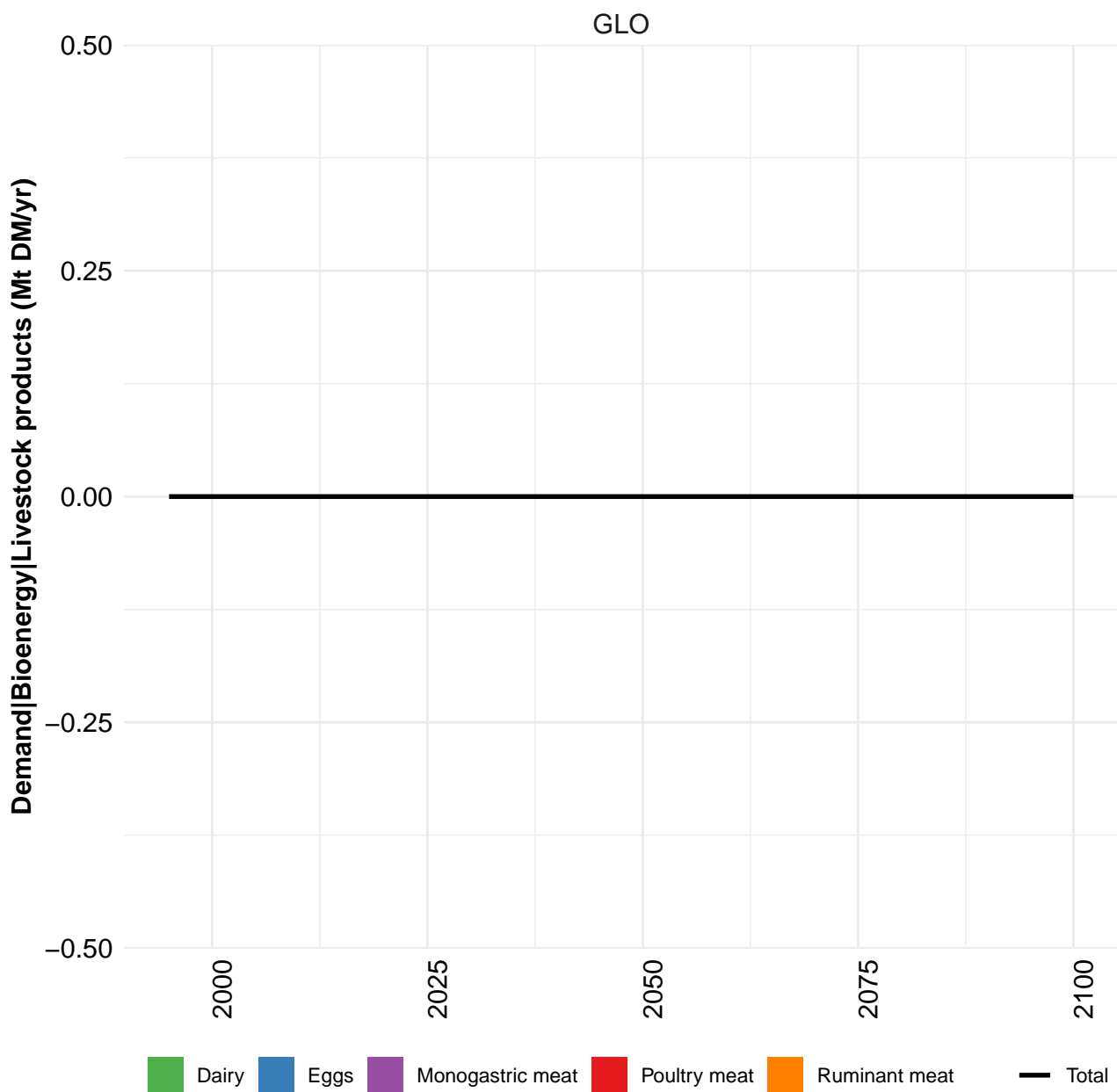


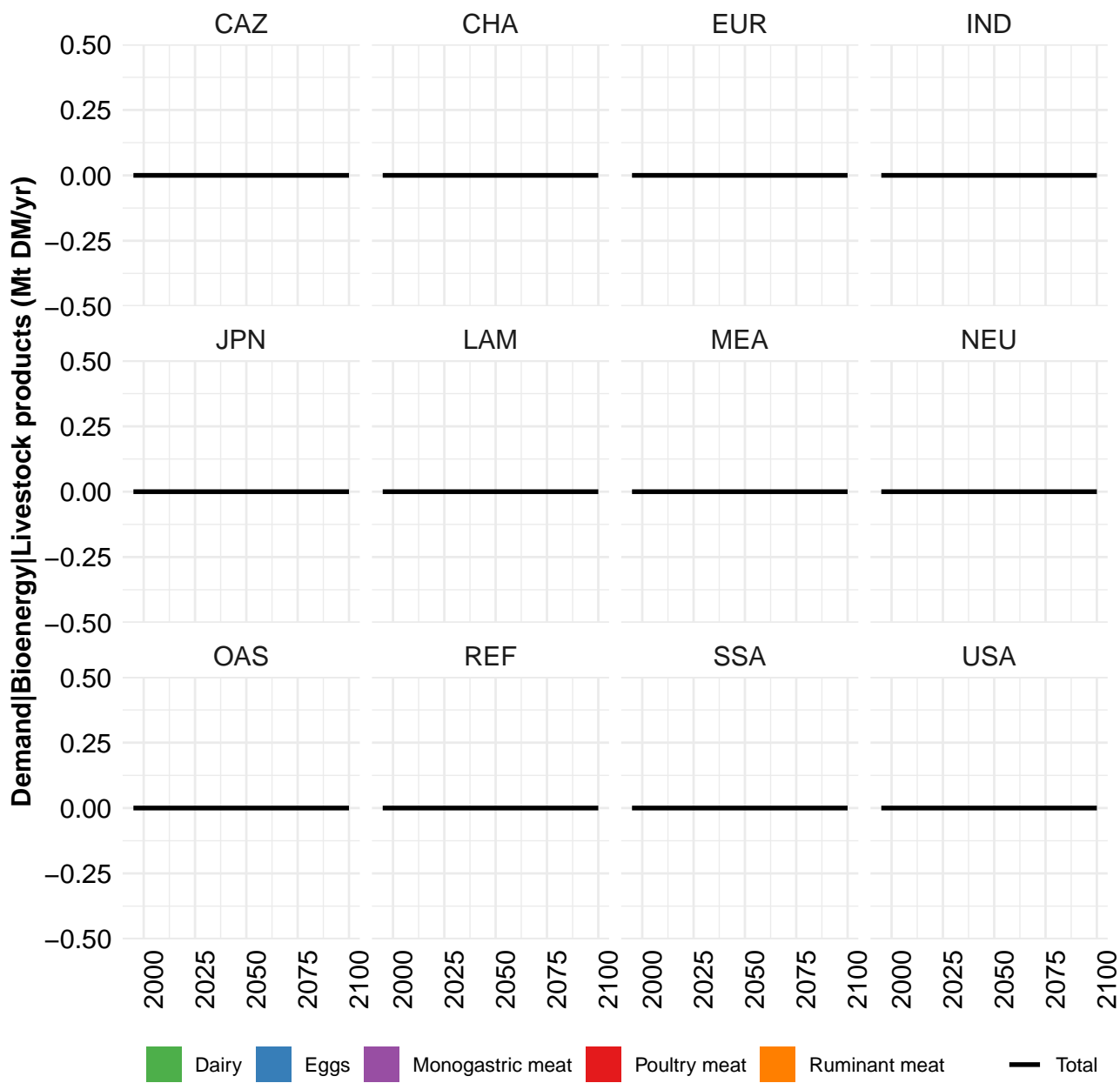


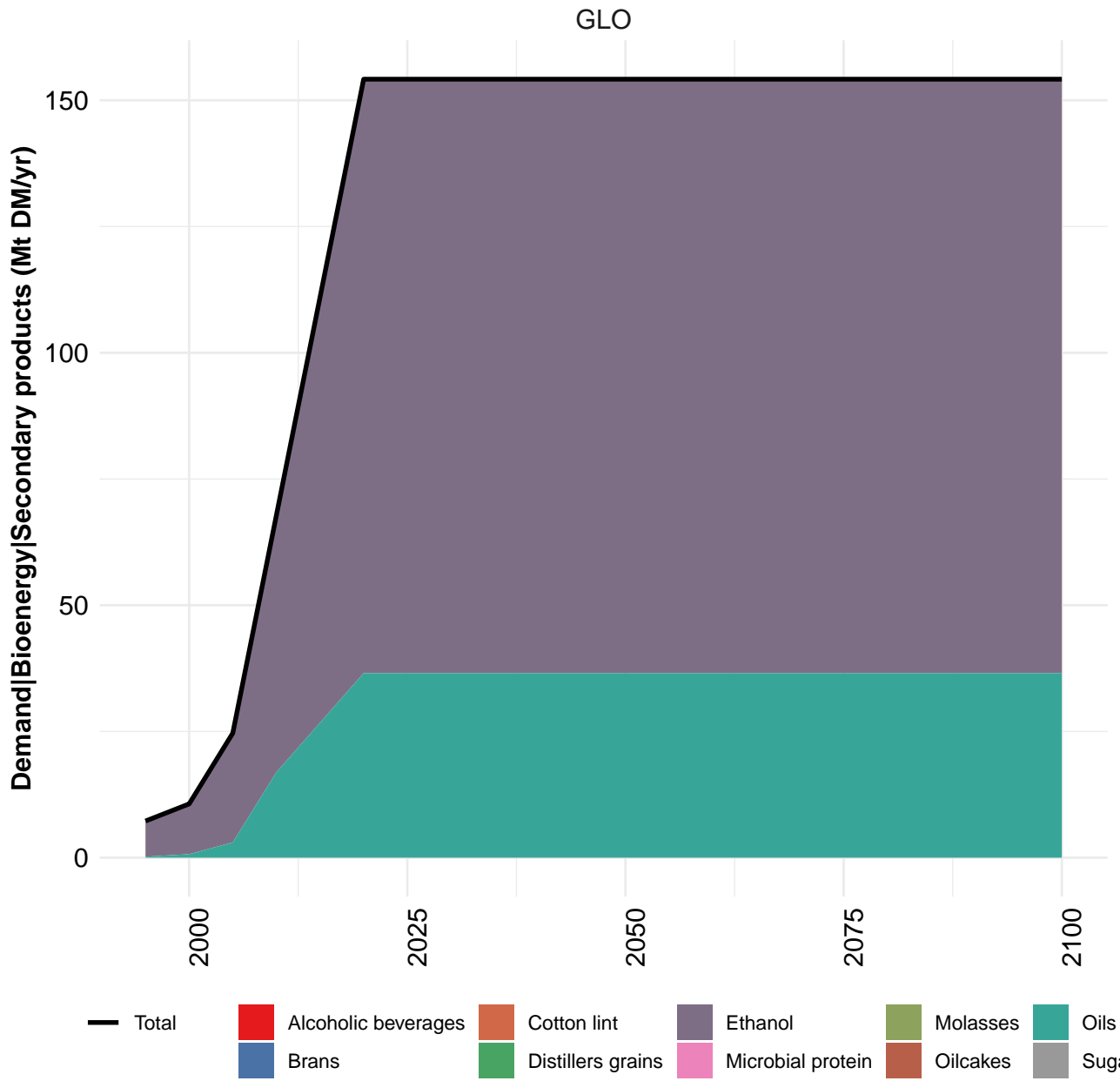


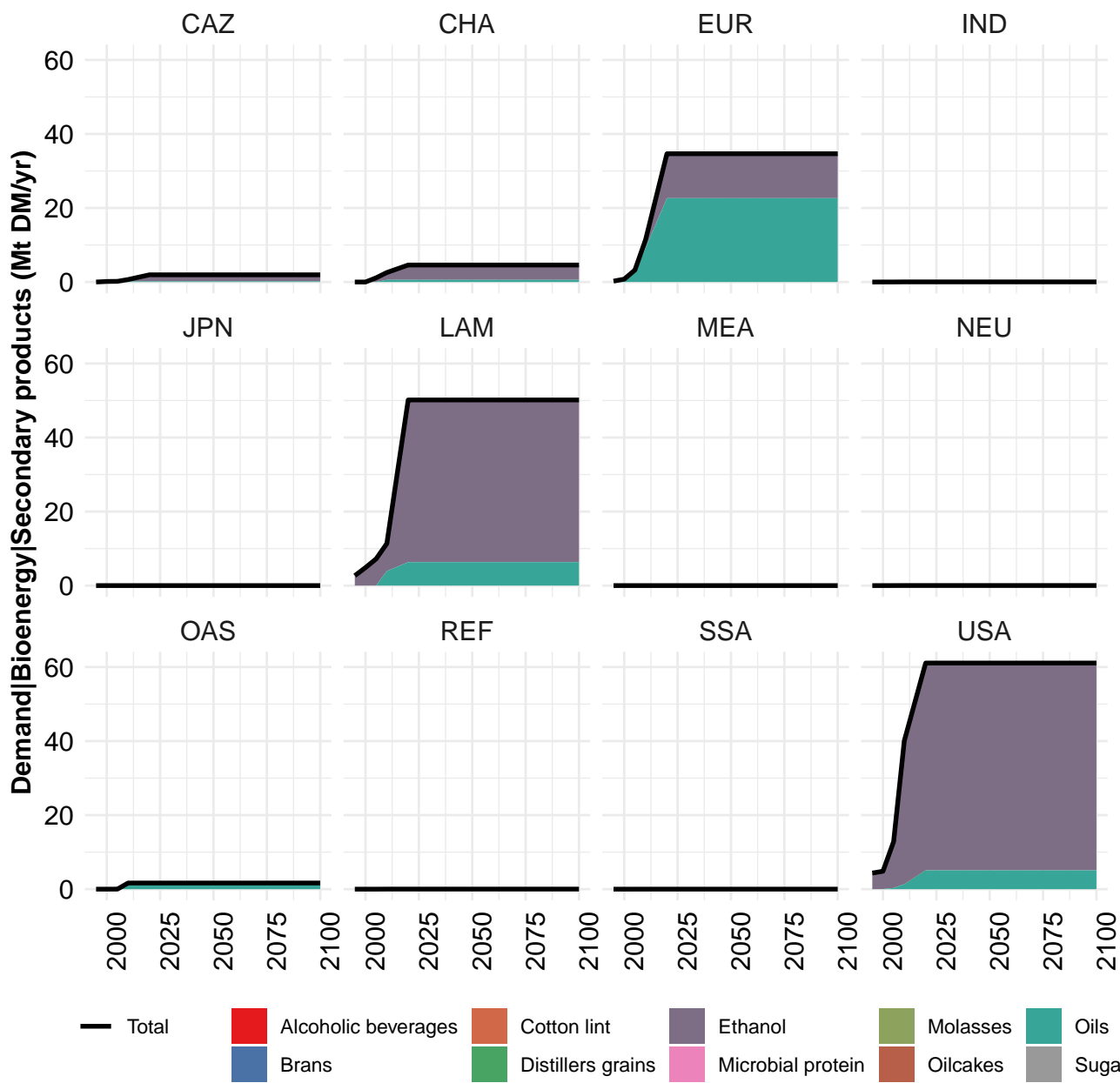






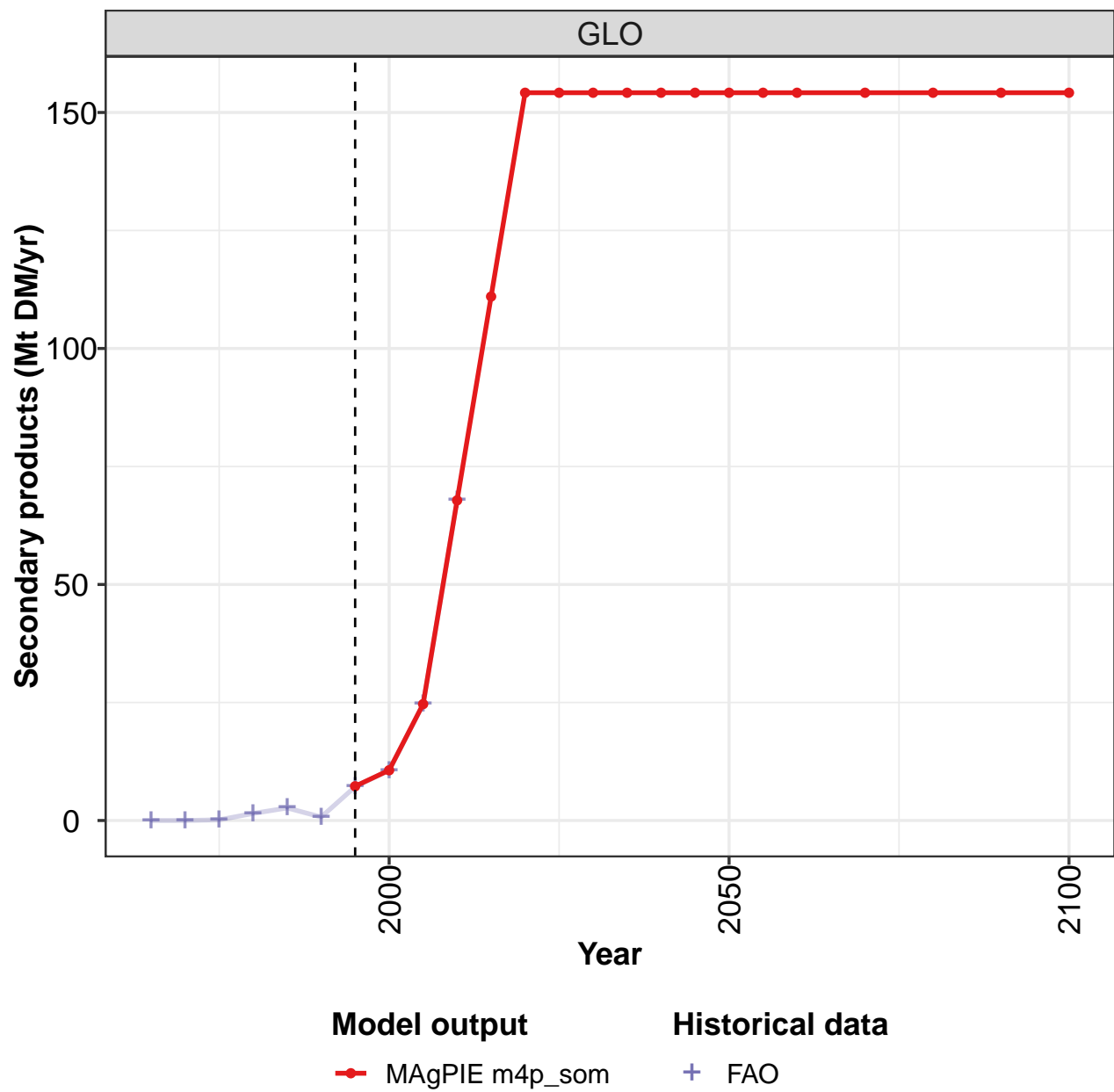






4.4 Secondary products

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

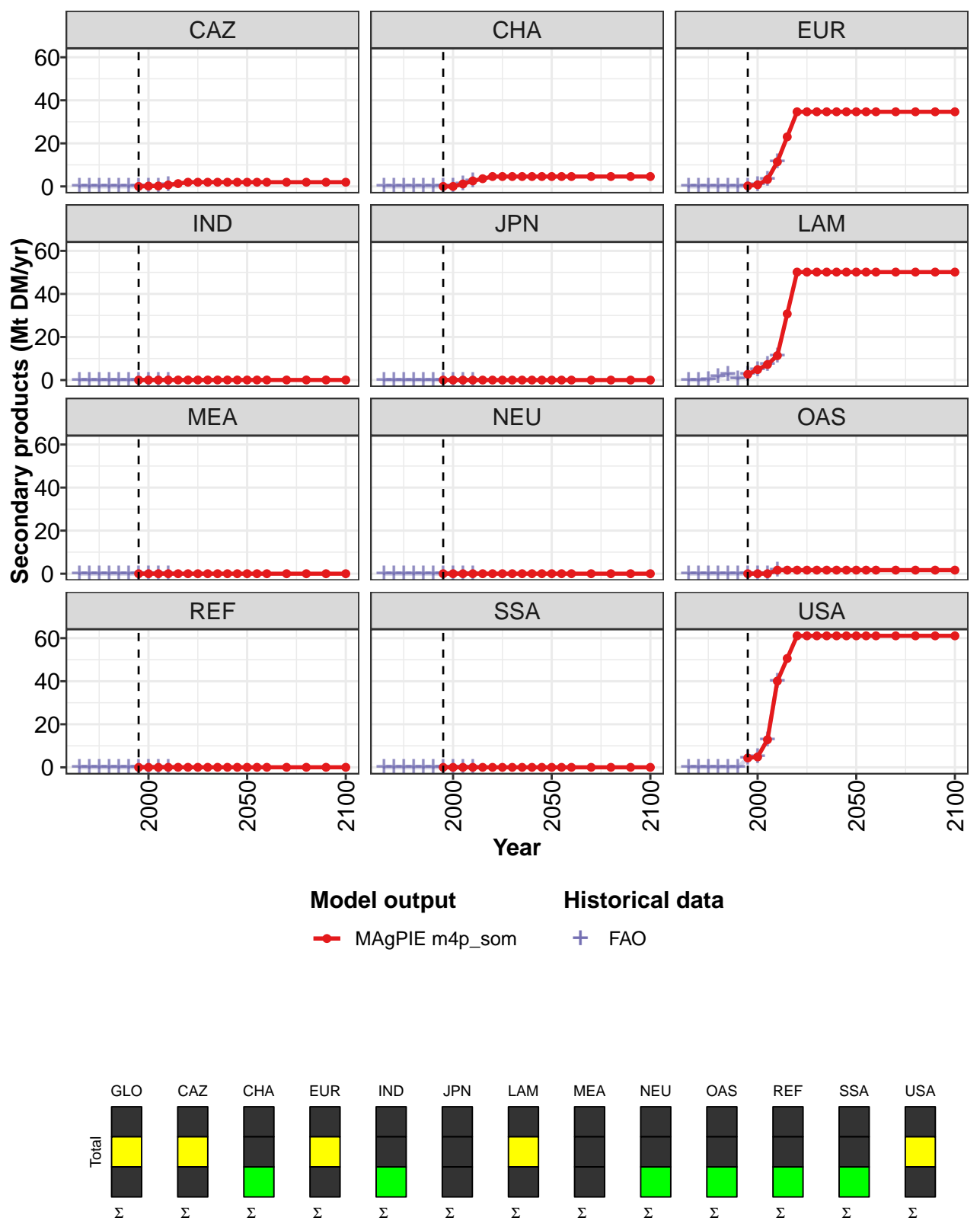


Figure 41: MAgPIE m4p\_som — Demand—Bioenergy—Secondary products (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	7	11	25	68	111	154	154	154	154	154	154
CAZ	0	0	0	1	1	2	2	2	2	2	2
CHA	0	0	1	3	4	5	5	5	5	5	5
EUR	0	1	3	11	23	35	35	35	35	35	35
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	3	5	7	11	31	50	50	50	50	50	50
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	0	0	2	2	2	2	2	2	2	2
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	4	5	13	40	51	61	61	61	61	61	61

Table 122: MAgPIE m4p\_som — Demand—Bioenergy—Secondary products (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	154	154	154	154	154	154	154
CAZ	2	2	2	2	2	2	2
CHA	5	5	5	5	5	5	5
EUR	35	35	35	35	35	35	35
IND	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0
LAM	50	50	50	50	50	50	50
MEA	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0
OAS	2	2	2	2	2	2	2
REF	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0
USA	61	61	61	61	61	61	61

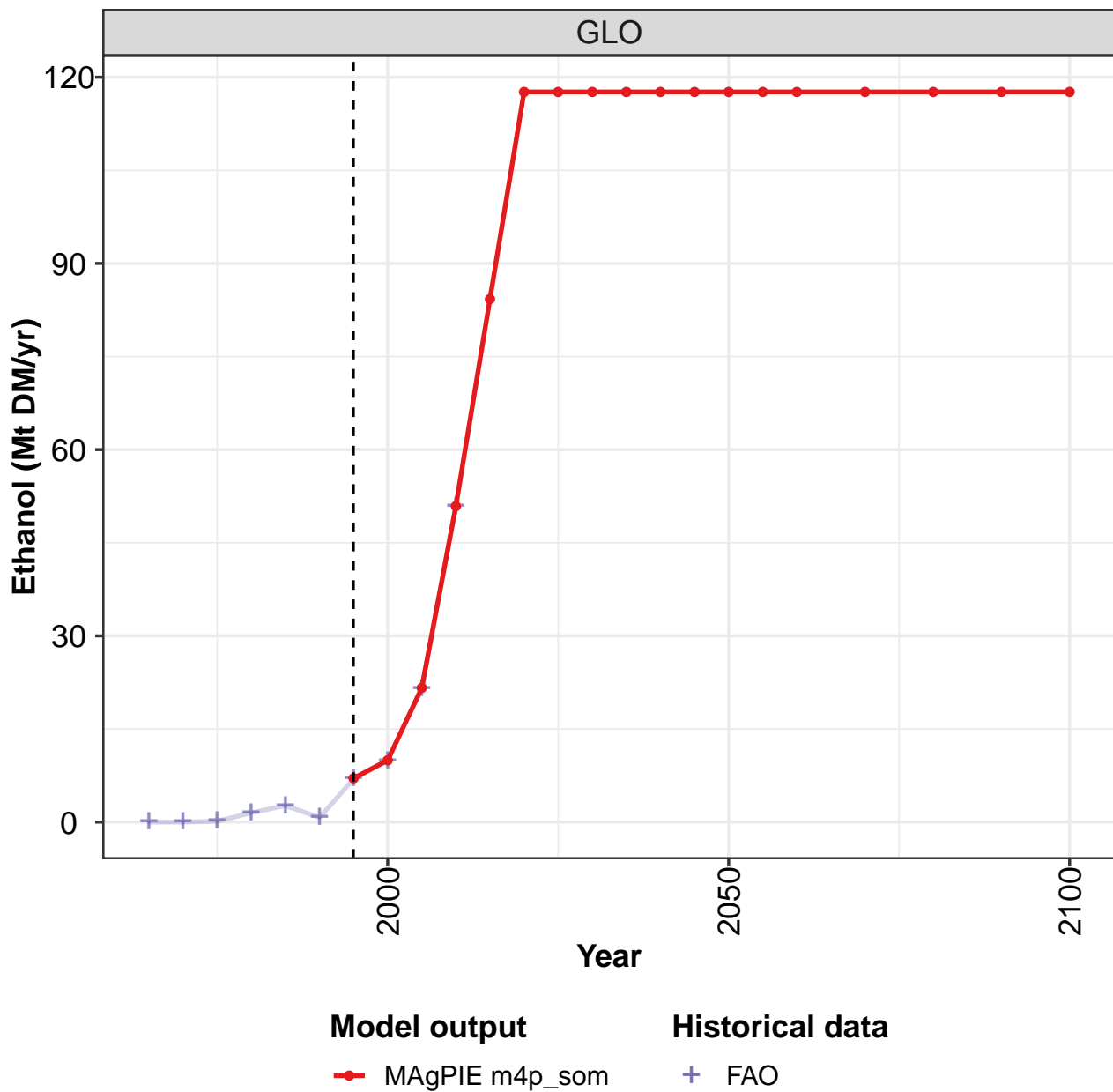
Table 123: MAgPIE m4p\_som — Demand—Bioenergy—Secondary products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0	0.0	0.1	1.5	2.7	0.7	7.2	10.6	24.6	67.8
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.7
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.6
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8	3.2	11.4
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.0	0.1	1.5	2.7	0.7	2.6	4.8	7.2	11.4
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	4.3	4.8	12.8	40.1

Table 124: FAO — Demand—Bioenergy—Secondary products (Mt DM/yr)

## 4.4.1 Ethanol

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

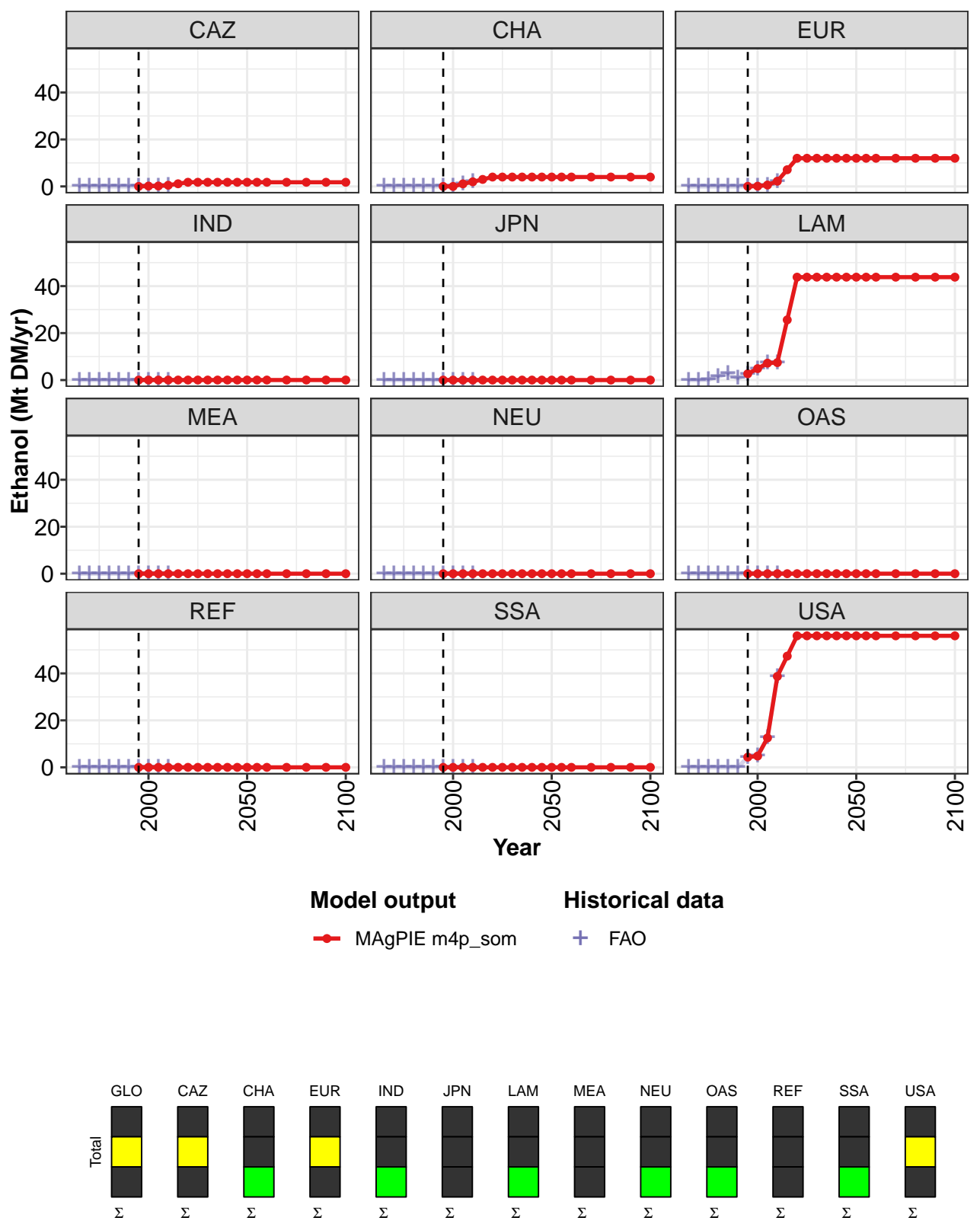


Figure 42: MAGPIE m4p\_som — Demand—Bioenergy—Secondary products—Ethanol (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	7	10	22	51	84	118	118	118	118	118	118
CAZ	0	0	0	1	1	2	2	2	2	2	2
CHA	0	0	1	2	3	4	4	4	4	4	4
EUR	0	0	1	2	7	12	12	12	12	12	12
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	3	5	7	7	26	44	44	44	44	44	44
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	4	5	13	39	47	56	56	56	56	56	56

Table 125: MAgPIE m4p\_som — Demand—Bioenergy—Secondary products—Ethanol (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	118	118	118	118	118	118	118
CAZ	2	2	2	2	2	2	2
CHA	4	4	4	4	4	4	4
EUR	12	12	12	12	12	12	12
IND	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0
LAM	44	44	44	44	44	44	44
MEA	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0
OAS	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0
USA	56	56	56	56	56	56	56

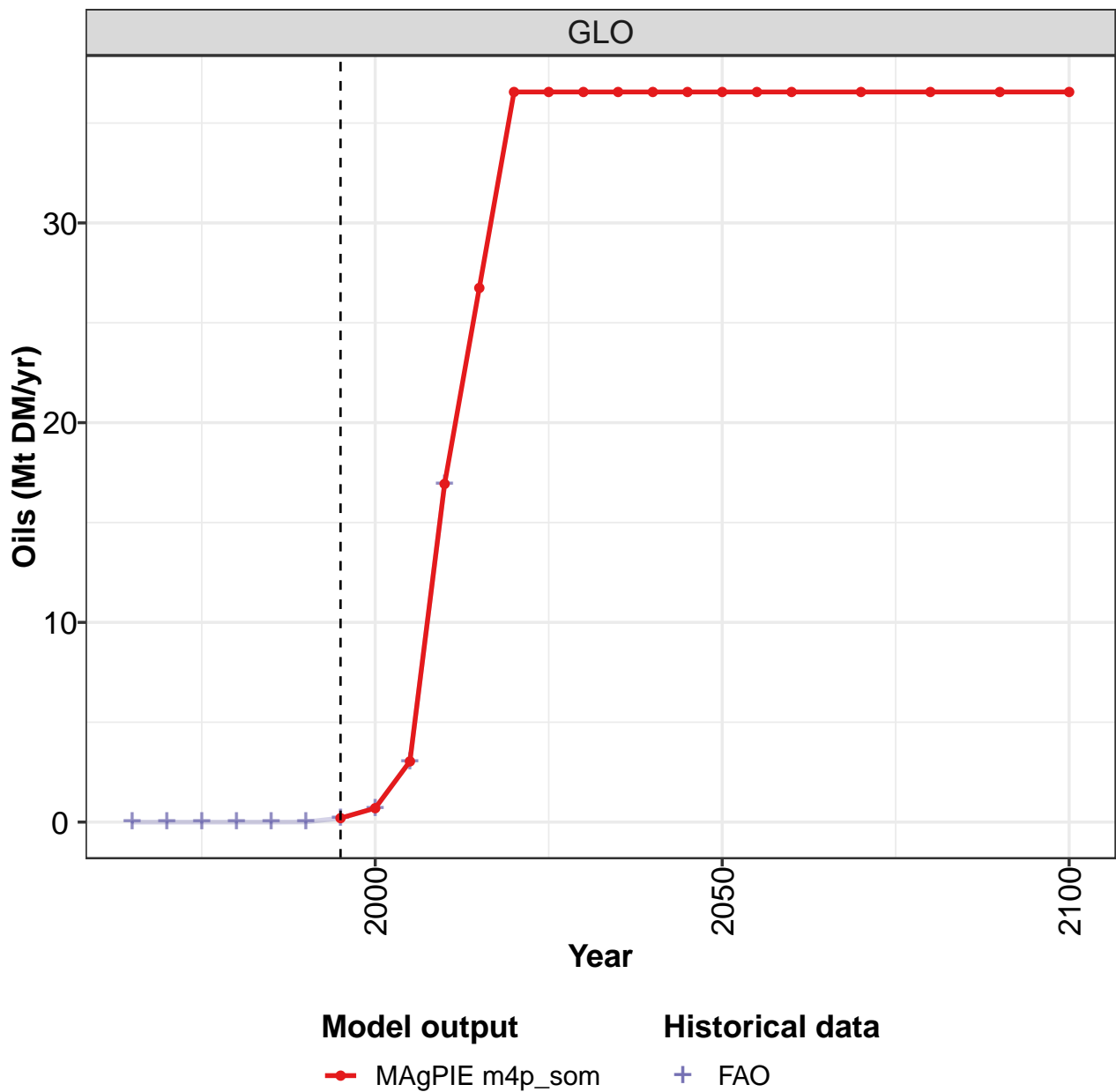
Table 126: MAgPIE m4p\_som — Demand—Bioenergy—Secondary products—Ethanol (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0	0.0	0.1	1.5	2.7	0.7	7.0	9.9	21.6	50.9
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.5
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6	2.2
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.0	0.1	1.5	2.7	0.7	2.6	4.8	7.2	7.4
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	4.3	4.8	12.5	38.7

Table 127: FAO — Demand—Bioenergy—Secondary products—Ethanol (Mt DM/yr)

## 4.4.2 Oils

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

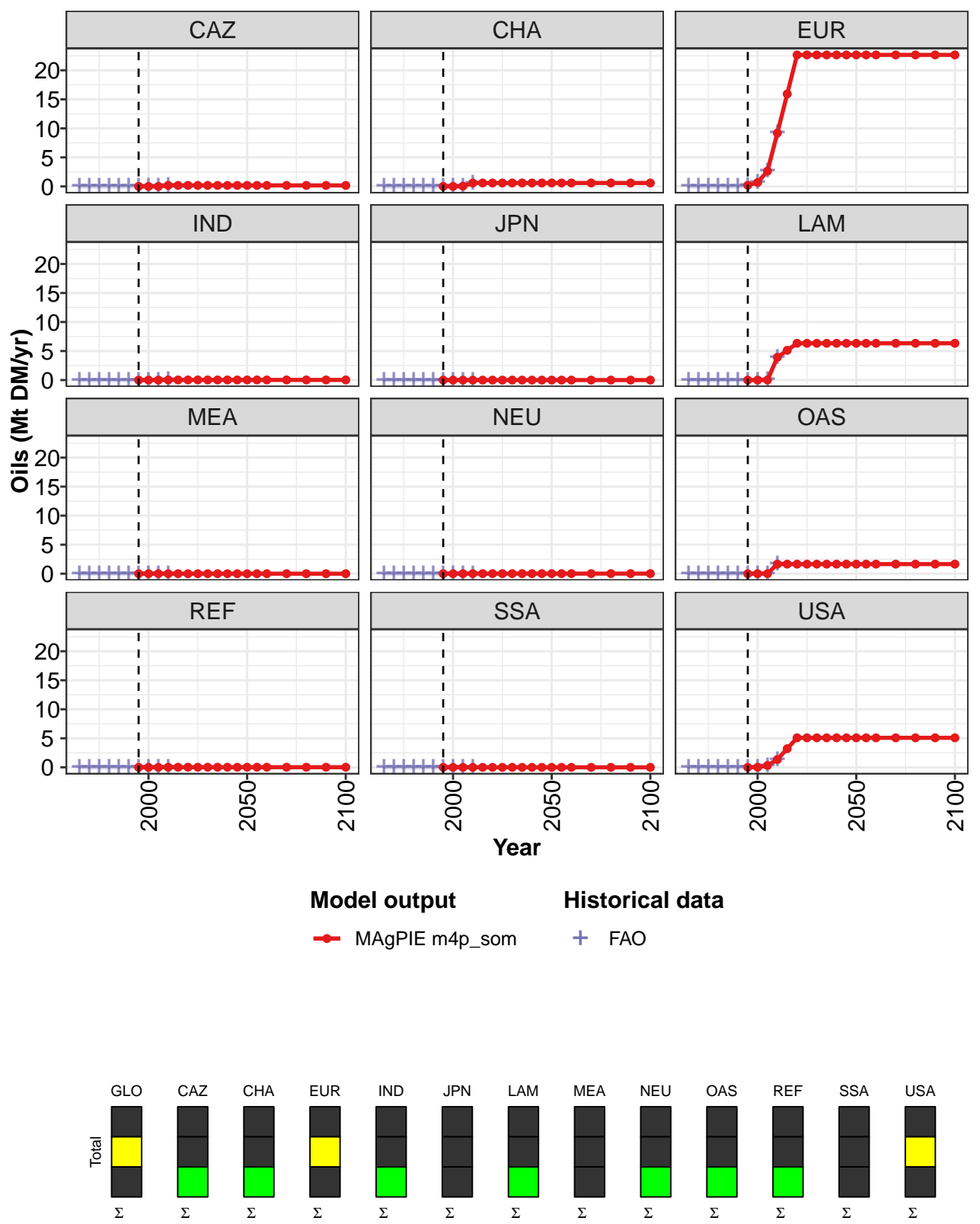


Figure 43: MAgPIE m4p\_som — Demand—Bioenergy—Secondary products—Oils (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.2	0.7	3.0	16.9	26.7	36.6	36.6	36.6	36.6	36.6	36.6
CAZ	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CHA	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
EUR	0.2	0.7	2.6	9.2	15.9	22.7	22.7	22.7	22.7	22.7	22.7
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.0	0.0	3.9	5.1	6.3	6.3	6.3	6.3	6.3	6.3
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.0	0.0	0.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.3	1.3	3.2	5.1	5.1	5.1	5.1	5.1	5.1

Table 128: MAgPIE m4p\_som — Demand—Bioenergy—Secondary products—Oils (Mt DM/yr) [PART 1/2]

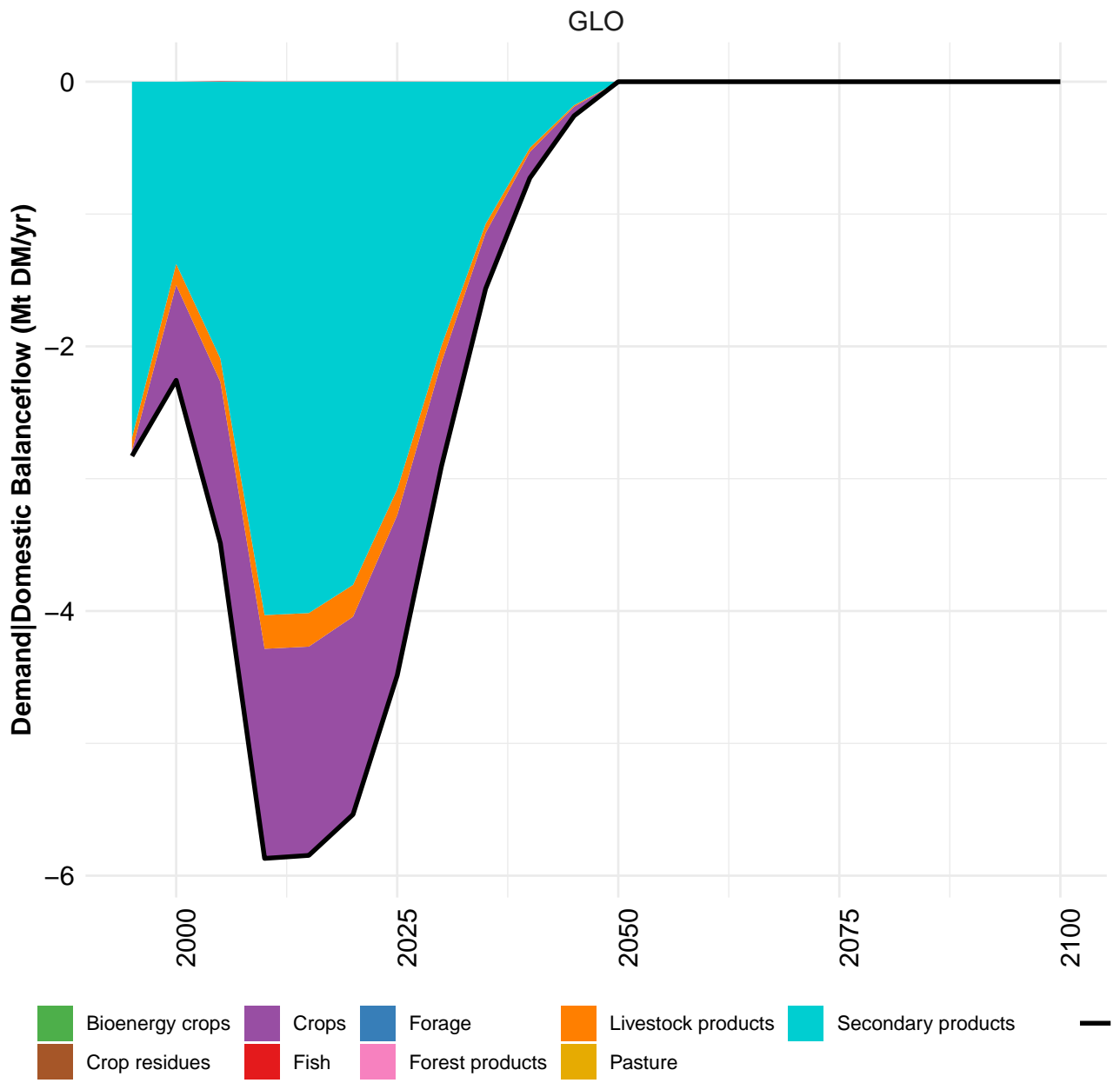
	2050	2055	2060	2070	2080	2090	2100
GLO	36.6	36.6	36.6	36.6	36.6	36.6	36.6
CAZ	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CHA	0.6	0.6	0.6	0.6	0.6	0.6	0.6
EUR	22.7	22.7	22.7	22.7	22.7	22.7	22.7
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	6.3	6.3	6.3	6.3	6.3	6.3	6.3
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.7	1.7	1.7	1.7	1.7	1.7	1.7
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	5.1	5.1	5.1	5.1	5.1	5.1	5.1

Table 129: MAgPIE m4p\_som — Demand—Bioenergy—Secondary products—Oils (Mt DM/yr) [PART 2/2]

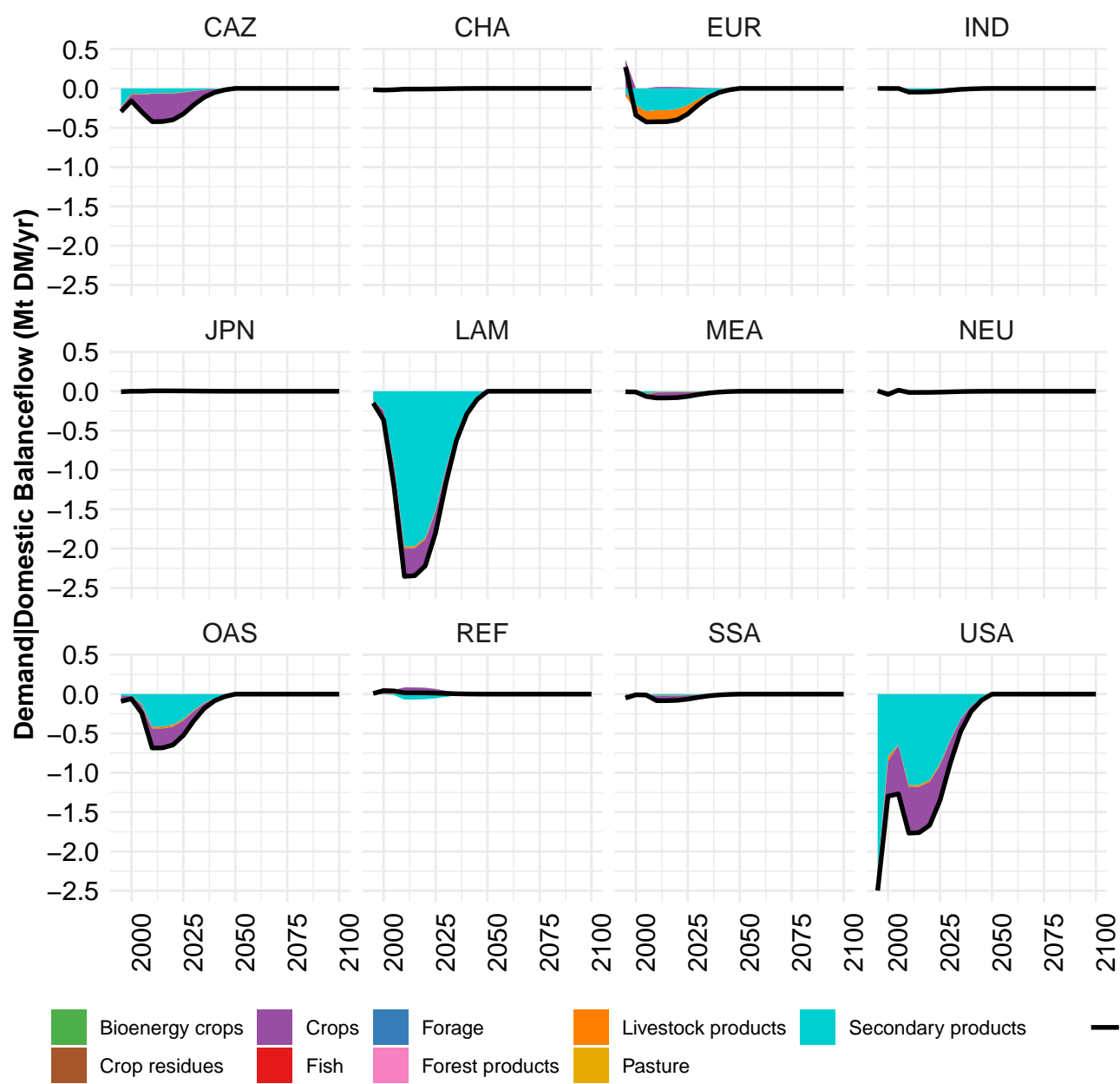
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7	3.0	16.9
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7	2.6	9.2
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.3

Table 130: FAO — Demand—Bioenergy—Secondary products—Oils (Mt DM/yr)

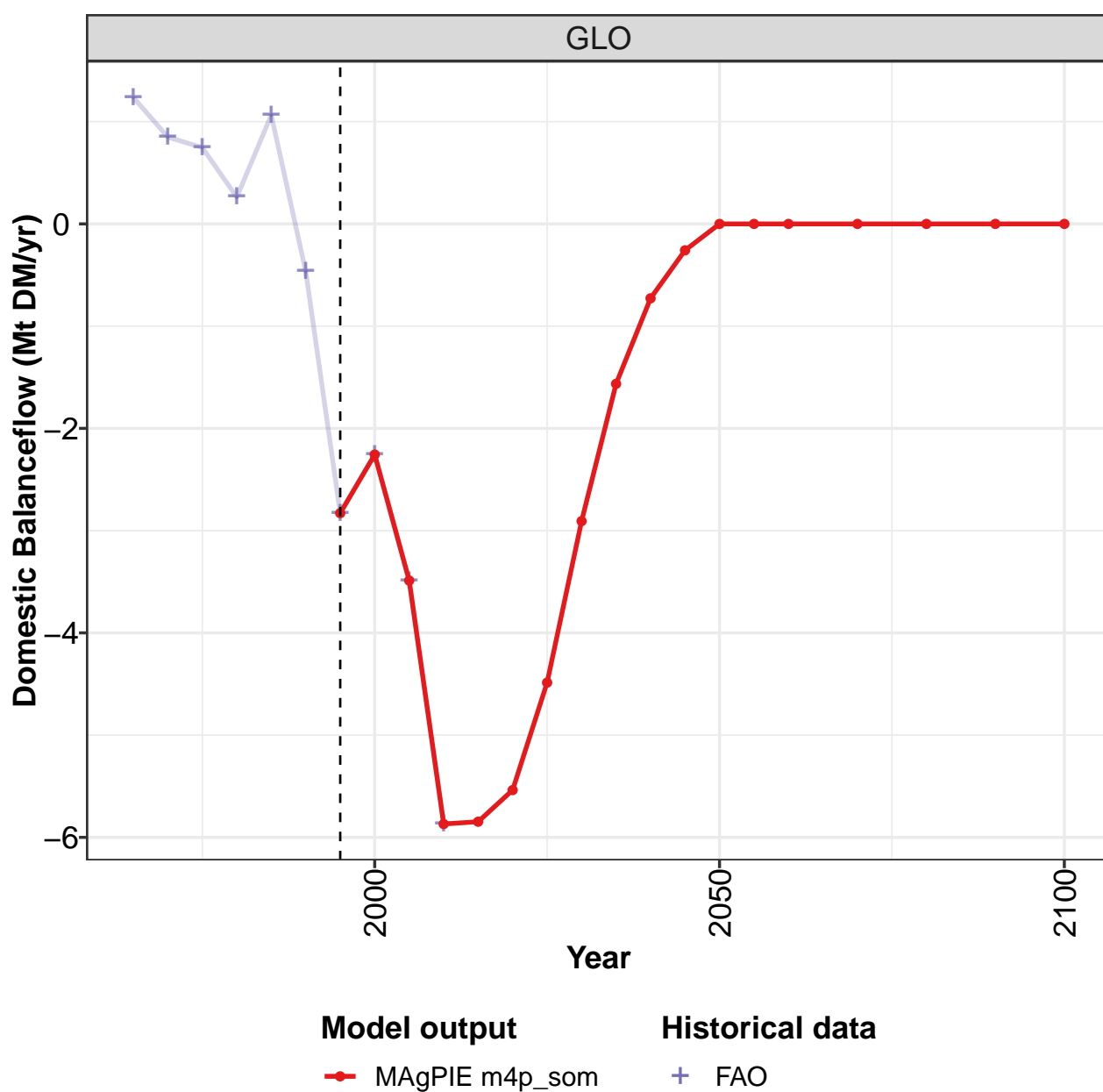
5 Domestic Balanceflow







## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

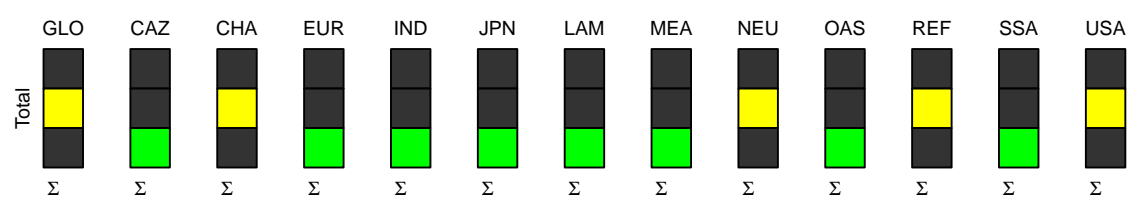
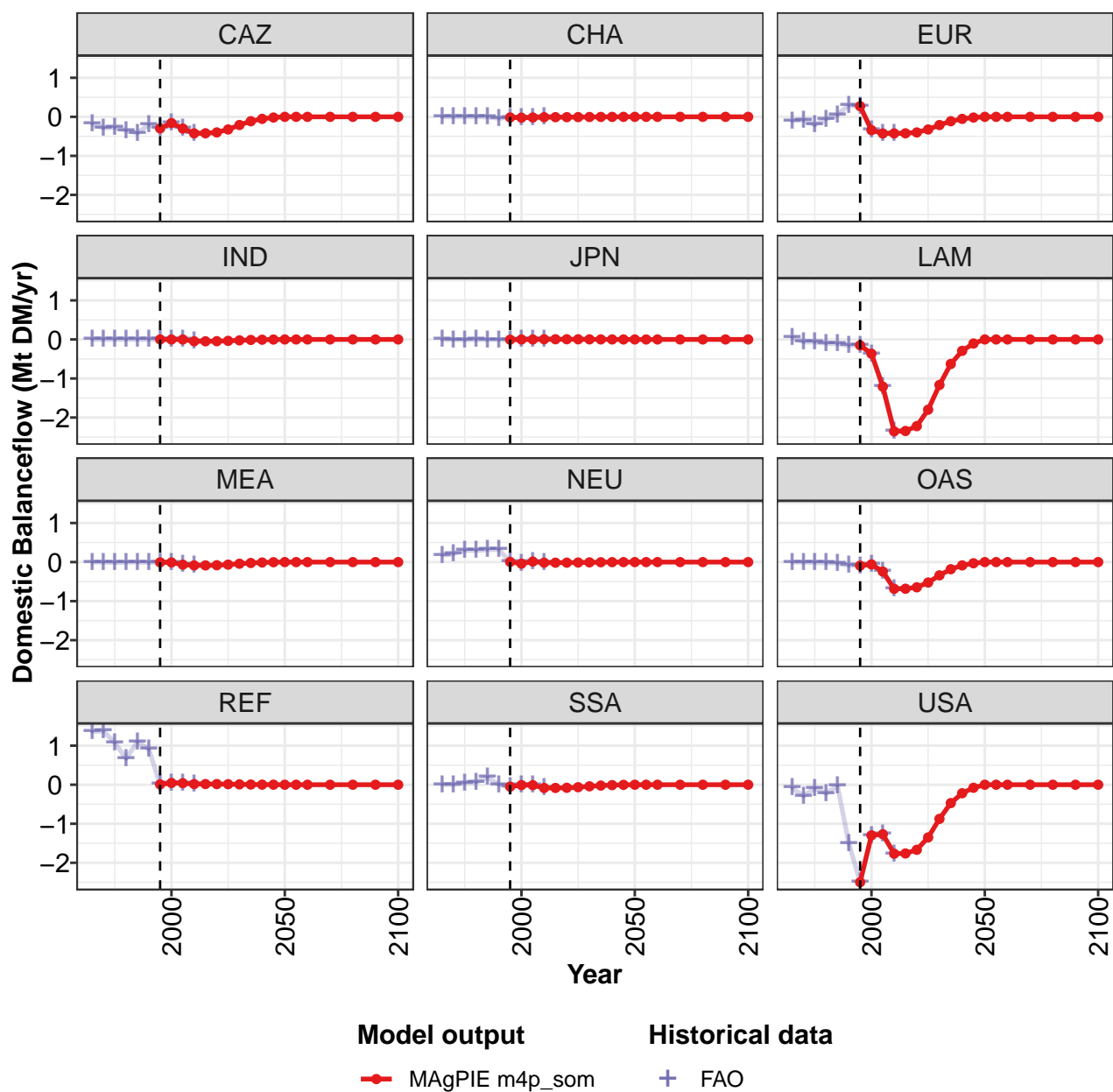


Figure 44: MAgPIE m4p\_som — Demand—Domestic Balanceflow (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-2.829	-2.256	-3.488	-5.870	-5.847	-5.538	-4.486	-2.907	-1.564	-0.728	-0.258
CAZ	-0.296	-0.159	-0.300	-0.423	-0.421	-0.399	-0.324	-0.210	-0.113	-0.052	-0.019
CHA	-0.017	-0.021	-0.018	-0.009	-0.009	-0.009	-0.007	-0.004	-0.002	-0.001	-0.000
EUR	0.272	-0.341	-0.427	-0.424	-0.423	-0.400	-0.324	-0.210	-0.113	-0.053	-0.019
IND	0.000	-0.001	-0.001	-0.047	-0.047	-0.044	-0.036	-0.023	-0.013	-0.006	-0.002
JPN	-0.006	-0.000	-0.000	0.005	0.005	0.005	0.004	0.003	0.002	0.001	0.000
LAM	-0.150	-0.365	-1.209	-2.354	-2.345	-2.220	-1.799	-1.166	-0.627	-0.291	-0.104
MEA	-0.006	-0.009	-0.066	-0.085	-0.085	-0.081	-0.065	-0.042	-0.023	-0.011	-0.004
NEU	0.005	-0.040	0.014	-0.015	-0.015	-0.014	-0.011	-0.007	-0.004	-0.002	-0.001
OAS	-0.092	-0.059	-0.242	-0.685	-0.682	-0.646	-0.524	-0.339	-0.183	-0.085	-0.030
REF	0.008	0.045	0.040	0.017	0.017	0.016	0.013	0.009	0.005	0.002	0.001
SSA	-0.050	-0.009	-0.011	-0.083	-0.083	-0.078	-0.064	-0.041	-0.022	-0.010	-0.004
USA	-2.498	-1.297	-1.269	-1.767	-1.760	-1.667	-1.350	-0.875	-0.471	-0.219	-0.078

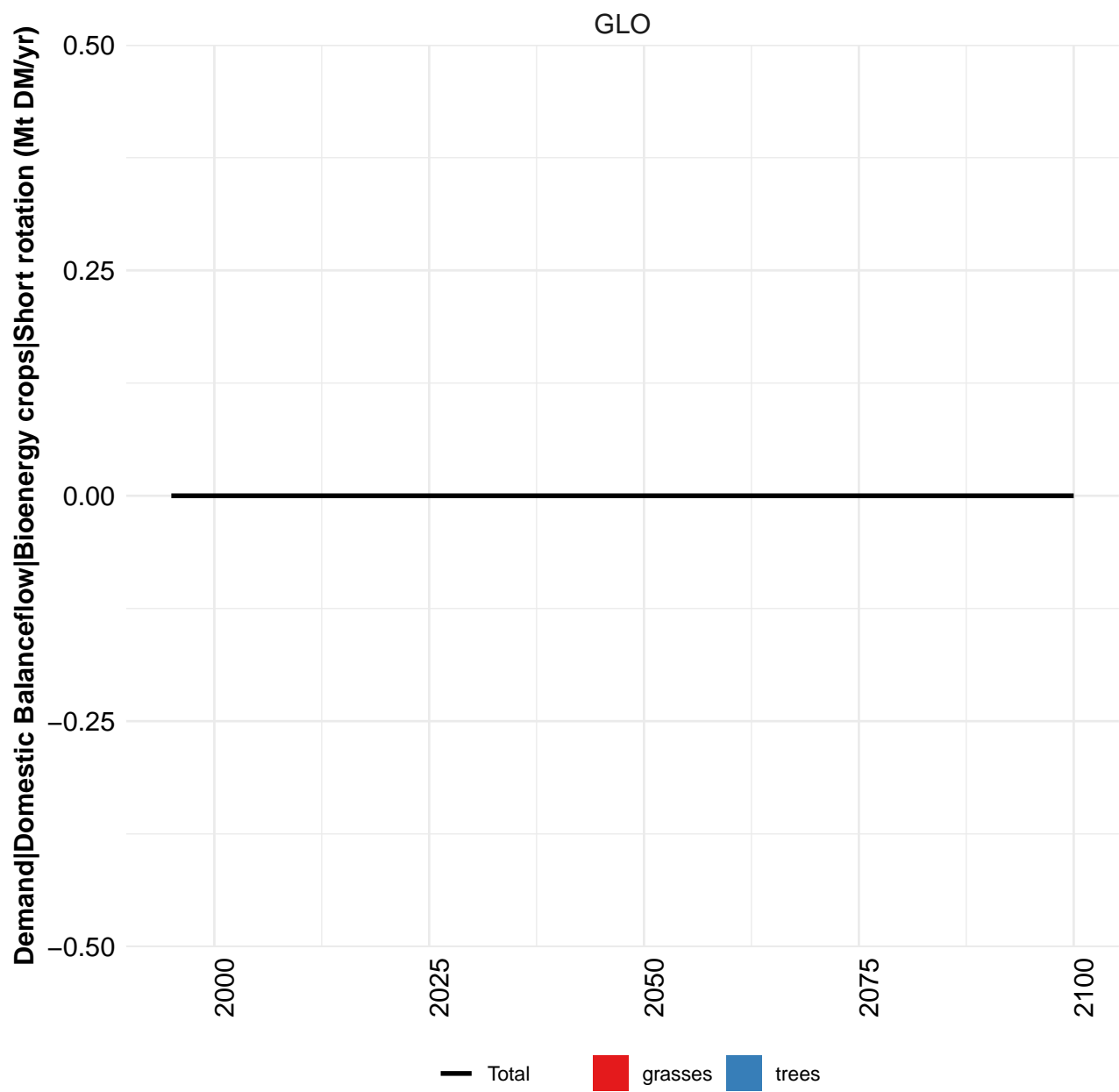
Table 131: MAgPIE m4p\_som — Demand—Domestic Balanceflow (Mt DM/yr) [PART 1/2]

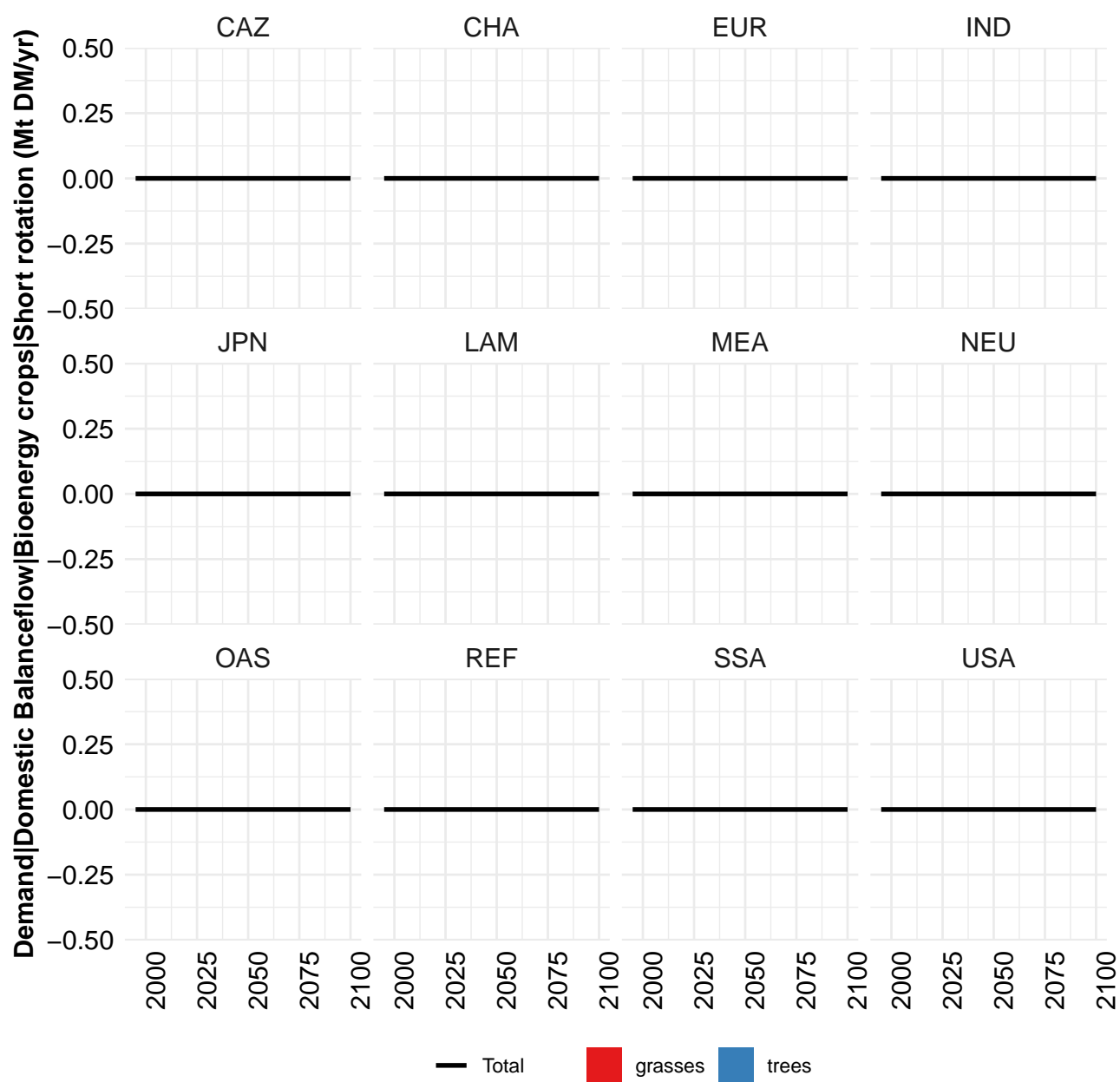
	2050	2055	2060	2070	2080	2090	2100
GLO	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.000	0.000	0.000	0.000	0.000	0.000	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000

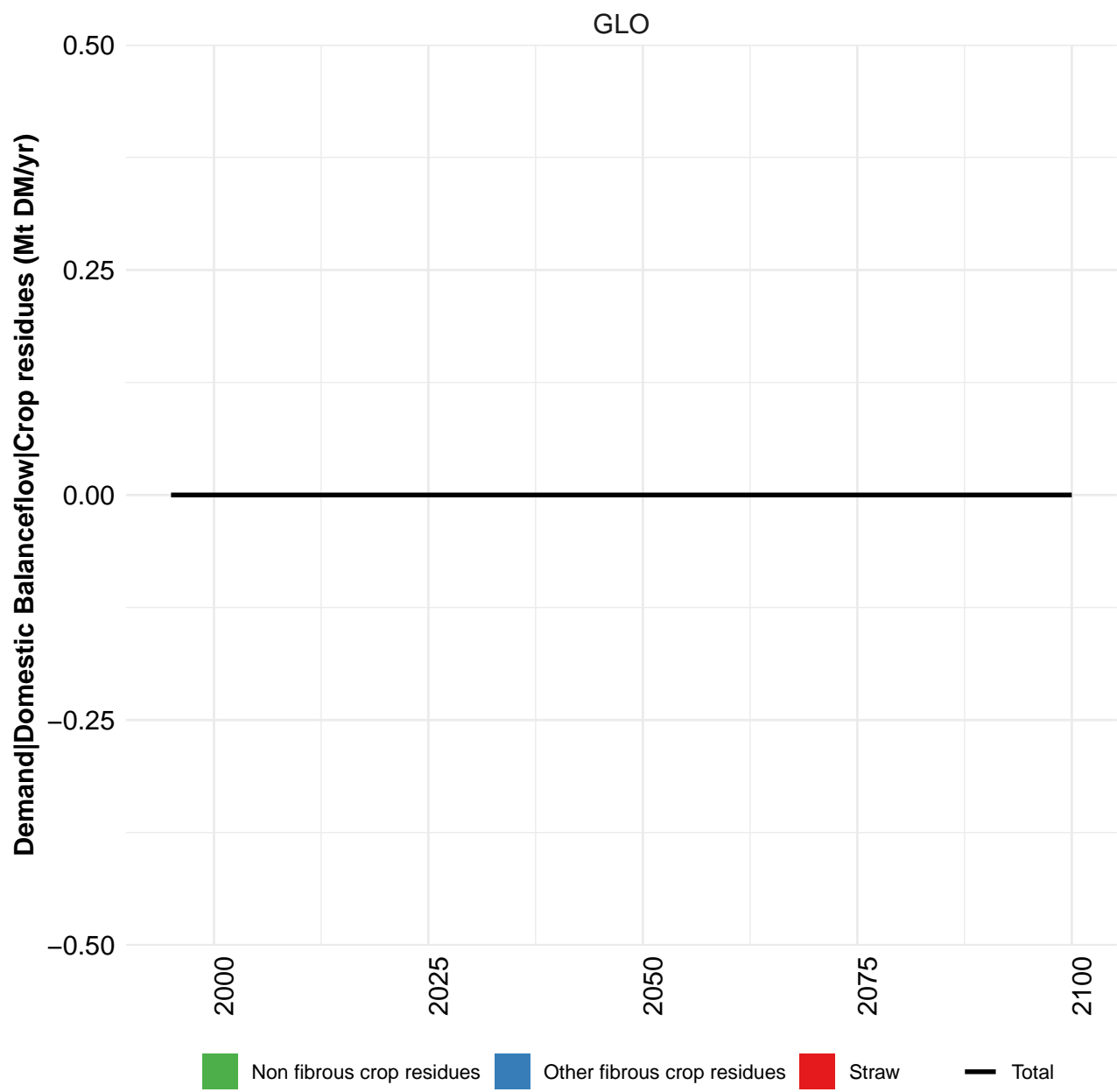
Table 132: MAgPIE m4p\_som — Demand—Domestic Balanceflow (Mt DM/yr) [PART 2/2]

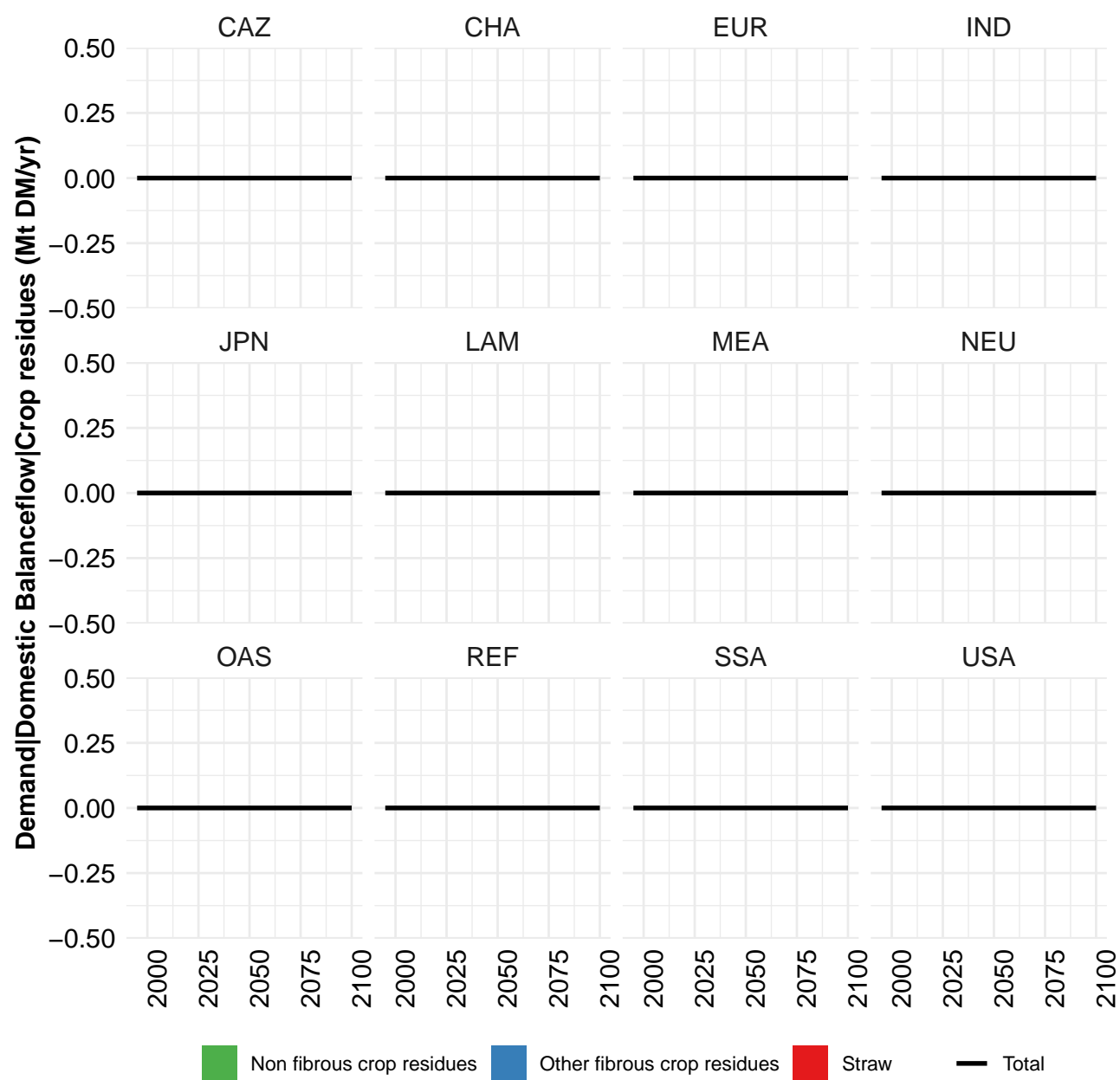
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.24	0.85	0.75	0.26	1.06	-0.47	-2.83	-2.26	-3.49	-5.87
CAZ	-0.17	-0.29	-0.27	-0.35	-0.42	-0.20	-0.30	-0.16	-0.30	-0.42
CHA	-0.00	-0.00	-0.00	-0.00	-0.00	-0.04	-0.02	-0.02	-0.02	-0.01
EUR	-0.10	-0.08	-0.21	-0.06	0.05	0.30	0.27	-0.34	-0.43	-0.42
IND	0.00	0.00	-0.00	-0.00	-0.00	0.00	0.00	-0.00	-0.00	-0.05
JPN	-0.00	-0.01	-0.01	-0.00	-0.01	-0.01	-0.01	-0.00	-0.00	0.01
LAM	0.06	-0.06	-0.07	-0.10	-0.12	-0.15	-0.15	-0.36	-1.21	-2.35
MEA	-0.00	-0.00	-0.02	-0.01	-0.00	-0.01	-0.01	-0.01	-0.07	-0.09
NEU	0.18	0.21	0.30	0.29	0.32	0.32	0.01	-0.04	0.01	-0.01
OAS	-0.00	-0.00	-0.01	-0.02	-0.03	-0.09	-0.09	-0.06	-0.24	-0.69
REF	1.36	1.38	1.07	0.67	1.10	0.91	0.01	0.04	0.04	0.02
SSA	0.00	0.00	0.05	0.06	0.19	0.00	-0.05	-0.01	-0.01	-0.08
USA	-0.08	-0.29	-0.09	-0.22	-0.03	-1.50	-2.50	-1.30	-1.27	-1.77

Table 133: FAO — Demand—Domestic Balanceflow (Mt DM/yr)

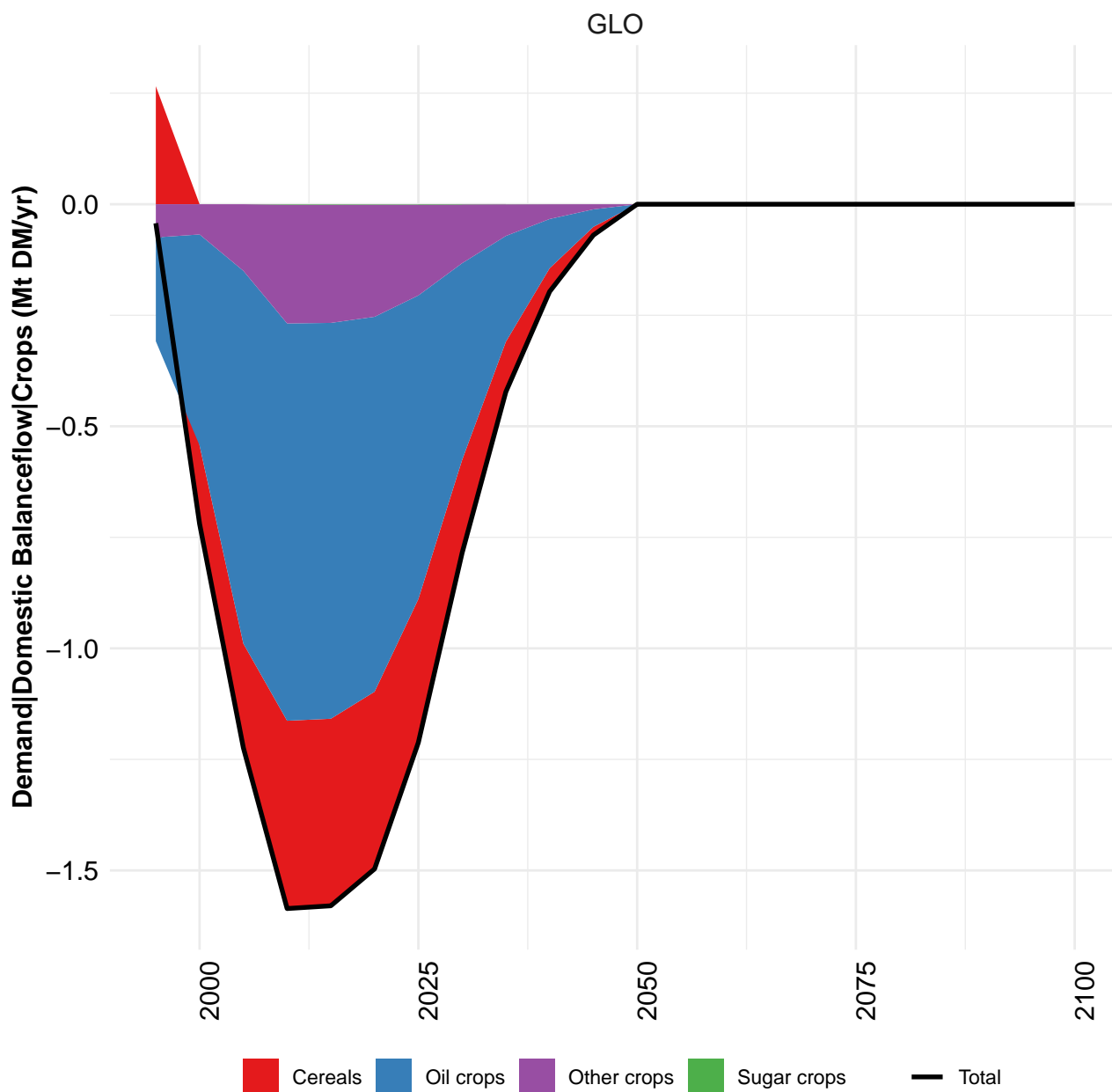


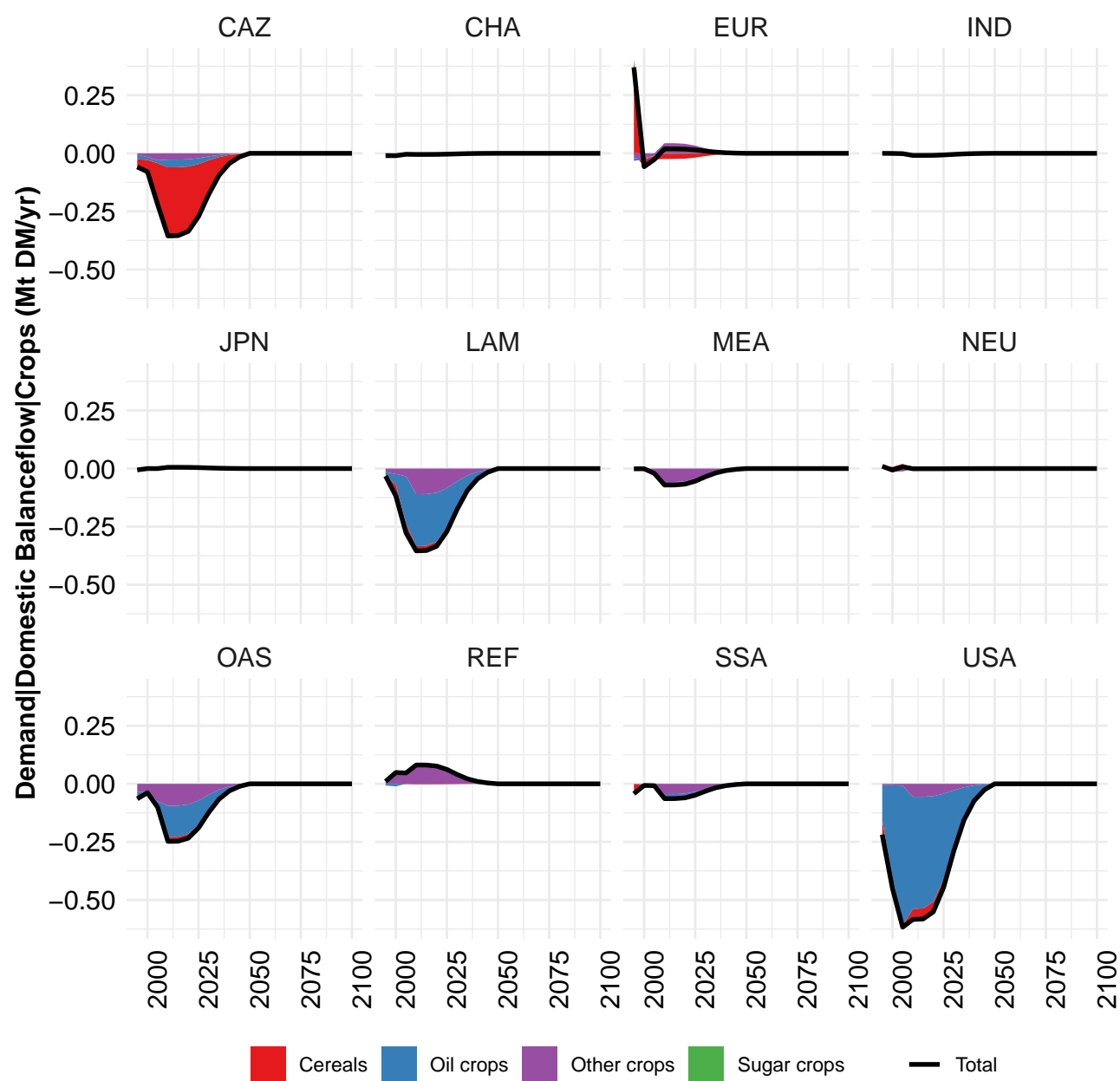






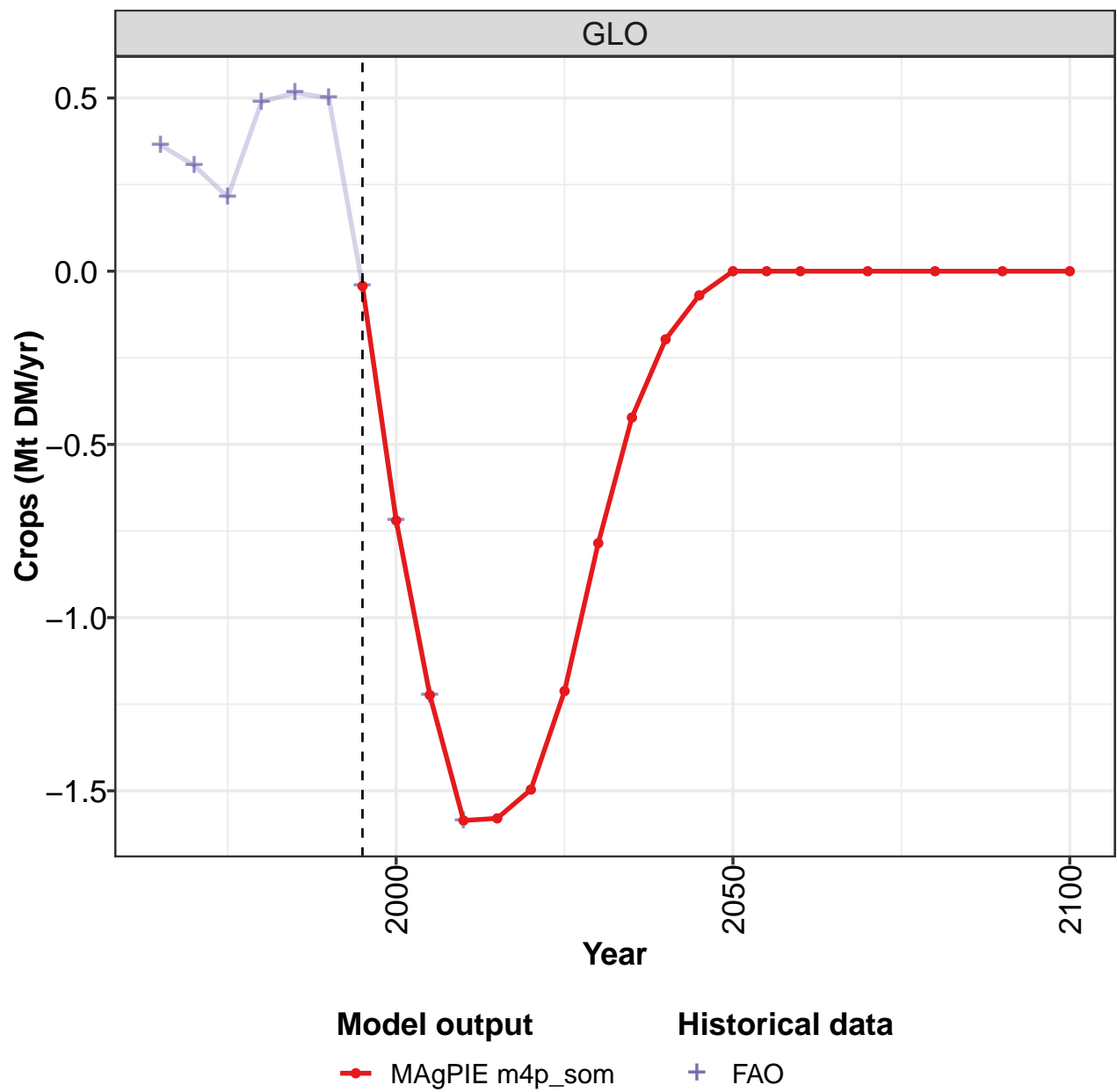






5.1 Crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

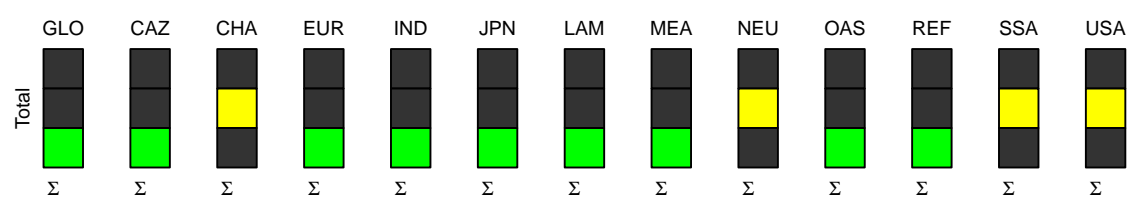
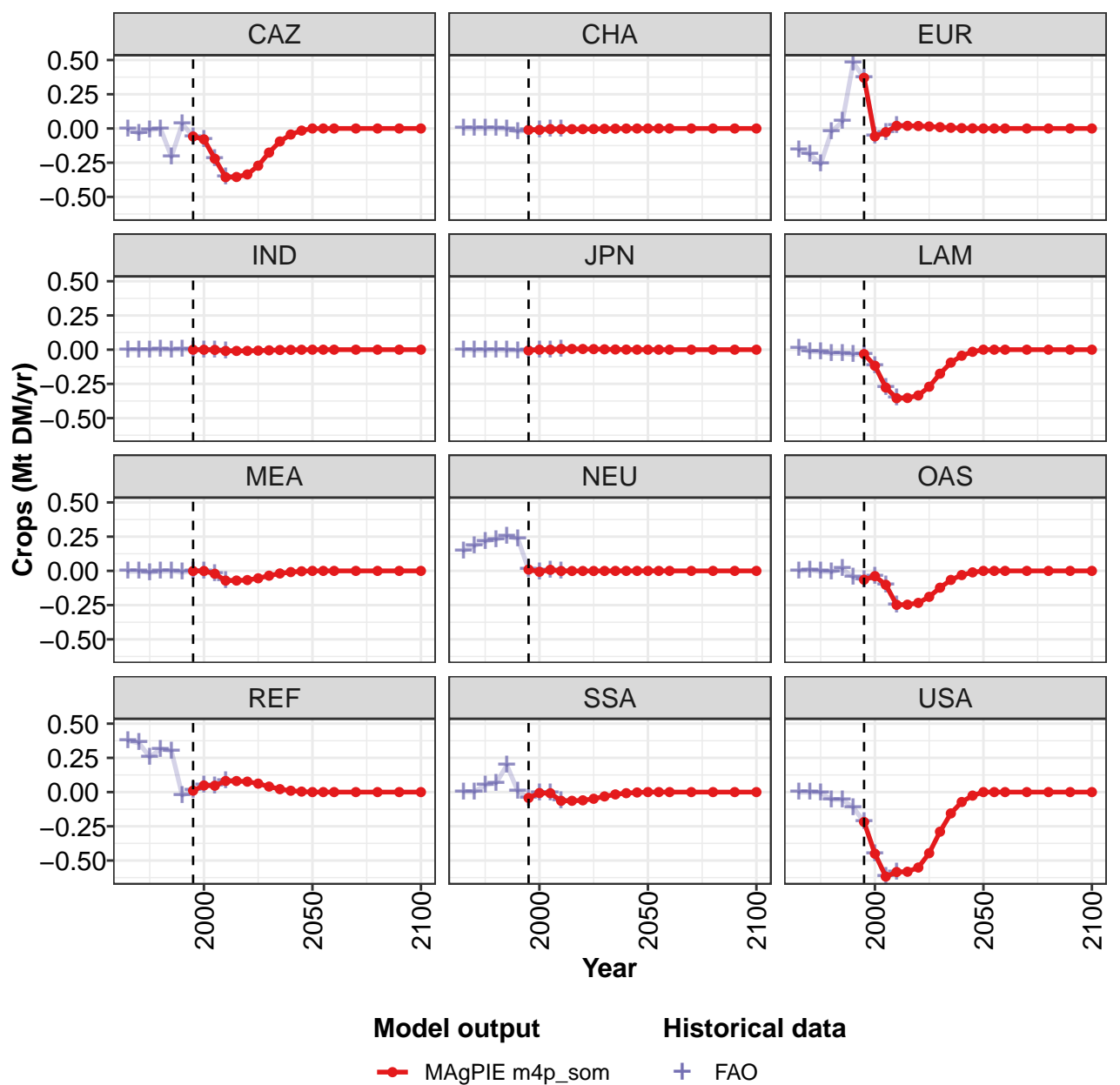


Figure 45: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-0.043	-0.720	-1.224	-1.586	-1.580	-1.496	-1.212	-0.785	-0.422	-0.197	-0.070
CAZ	-0.059	-0.080	-0.221	-0.356	-0.354	-0.336	-0.272	-0.176	-0.095	-0.044	-0.016
CHA	-0.010	-0.010	-0.004	-0.005	-0.005	-0.005	-0.004	-0.002	-0.001	-0.001	-0.000
EUR	0.370	-0.058	-0.027	0.019	0.019	0.018	0.015	0.010	0.005	0.002	0.001
IND	-0.000	-0.001	-0.002	-0.009	-0.009	-0.009	-0.007	-0.005	-0.002	-0.001	-0.000
JPN	-0.006	0.000	0.000	0.005	0.005	0.005	0.004	0.003	0.002	0.001	0.000
LAM	-0.032	-0.117	-0.277	-0.354	-0.353	-0.334	-0.271	-0.176	-0.094	-0.044	-0.016
MEA	-0.001	-0.001	-0.021	-0.071	-0.071	-0.067	-0.054	-0.035	-0.019	-0.009	-0.003
NEU	0.010	-0.006	0.008	-0.001	-0.001	-0.001	-0.001	-0.000	-0.000	-0.000	0.000
OAS	-0.065	-0.038	-0.102	-0.248	-0.247	-0.234	-0.190	-0.123	-0.066	-0.031	-0.011
REF	0.010	0.048	0.047	0.081	0.081	0.076	0.062	0.040	0.021	0.010	0.004
SSA	-0.043	-0.007	-0.008	-0.064	-0.064	-0.060	-0.049	-0.032	-0.017	-0.008	-0.003
USA	-0.218	-0.450	-0.617	-0.584	-0.582	-0.551	-0.446	-0.289	-0.156	-0.072	-0.026

Table 134: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.000	0.000	0.000	0.000	0.000	0.000	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000

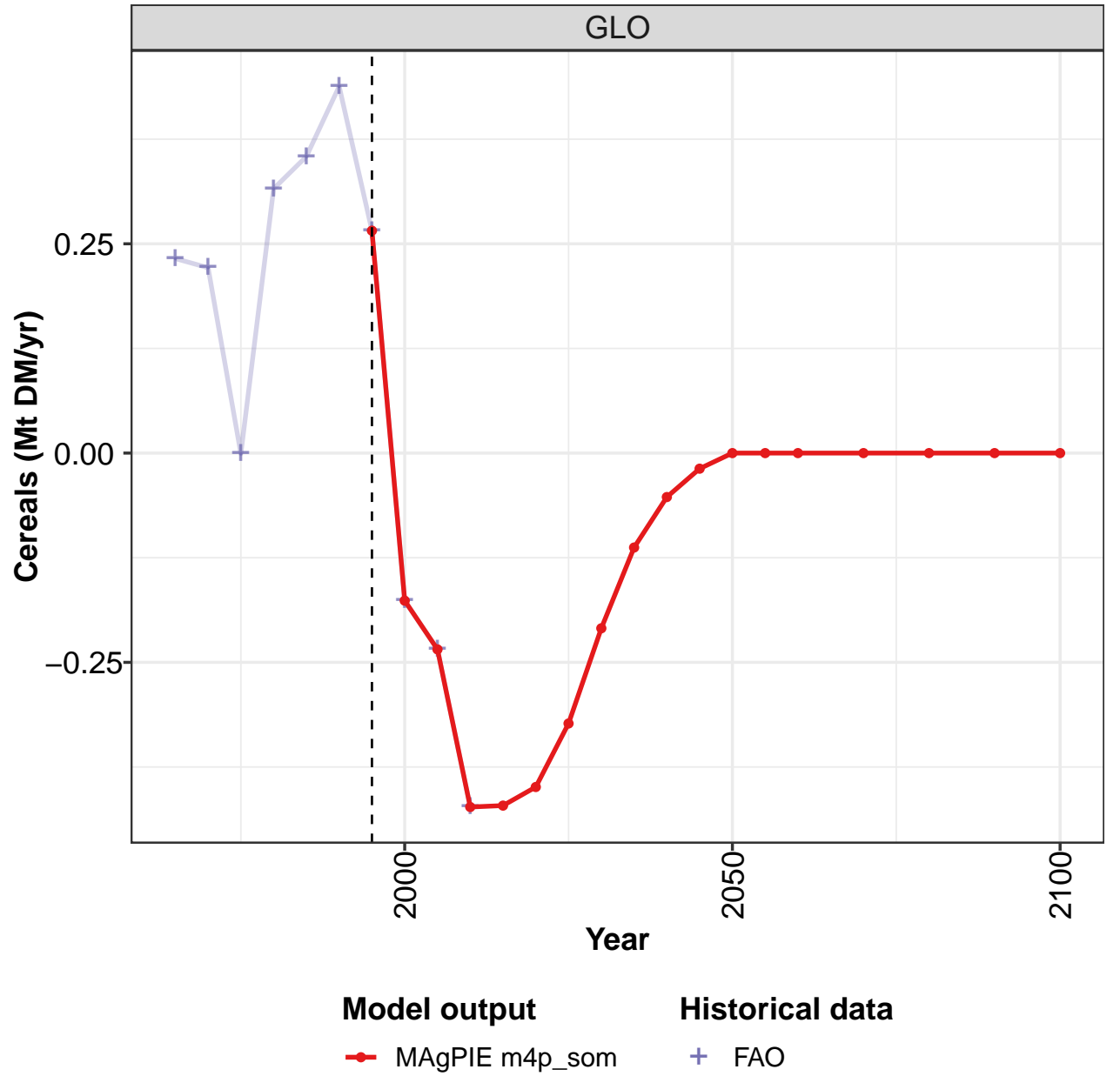
Table 135: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.364	0.305	0.214	0.489	0.515	0.500	-0.043	-0.720	-1.224	-1.586
CAZ	-0.007	-0.035	-0.010	-0.001	-0.206	0.033	-0.059	-0.079	-0.221	-0.356
CHA	-0.001	0.000	-0.000	-0.000	-0.004	-0.022	-0.010	-0.010	-0.004	-0.005
EUR	-0.158	-0.189	-0.260	-0.022	0.050	0.480	0.370	-0.058	-0.027	0.019
IND	0.000	0.000	-0.000	0.000	0.000	0.001	-0.000	-0.001	-0.002	-0.009
JPN	0.000	-0.004	-0.004	-0.003	-0.005	-0.006	-0.006	0.000	0.000	0.005
LAM	0.012	-0.014	-0.017	-0.028	-0.028	-0.036	-0.032	-0.117	-0.277	-0.354
MEA	-0.004	-0.003	-0.011	-0.003	-0.001	-0.011	-0.001	-0.001	-0.021	-0.071
NEU	0.146	0.183	0.216	0.230	0.252	0.236	0.010	-0.006	0.008	-0.001
OAS	-0.001	0.006	-0.004	-0.008	0.015	-0.048	-0.065	-0.039	-0.102	-0.248
REF	0.375	0.359	0.256	0.315	0.301	-0.024	0.010	0.048	0.047	0.081
SSA	0.003	0.002	0.052	0.065	0.197	0.008	-0.043	-0.007	-0.008	-0.064
USA	-0.001	-0.000	-0.004	-0.055	-0.055	-0.111	-0.218	-0.450	-0.617	-0.584

Table 136: FAO — Demand—Domestic Balanceflow—Crops (Mt DM/yr)

5.1.1
Cereals

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

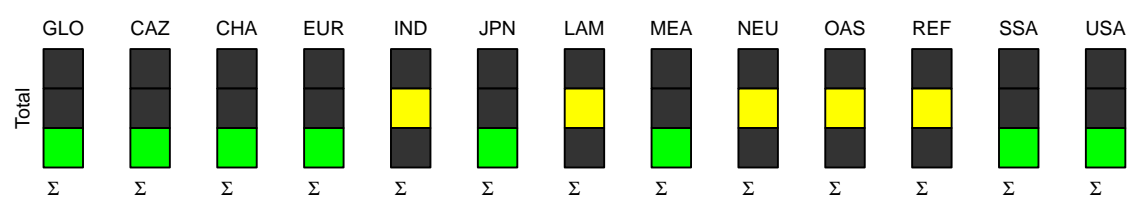
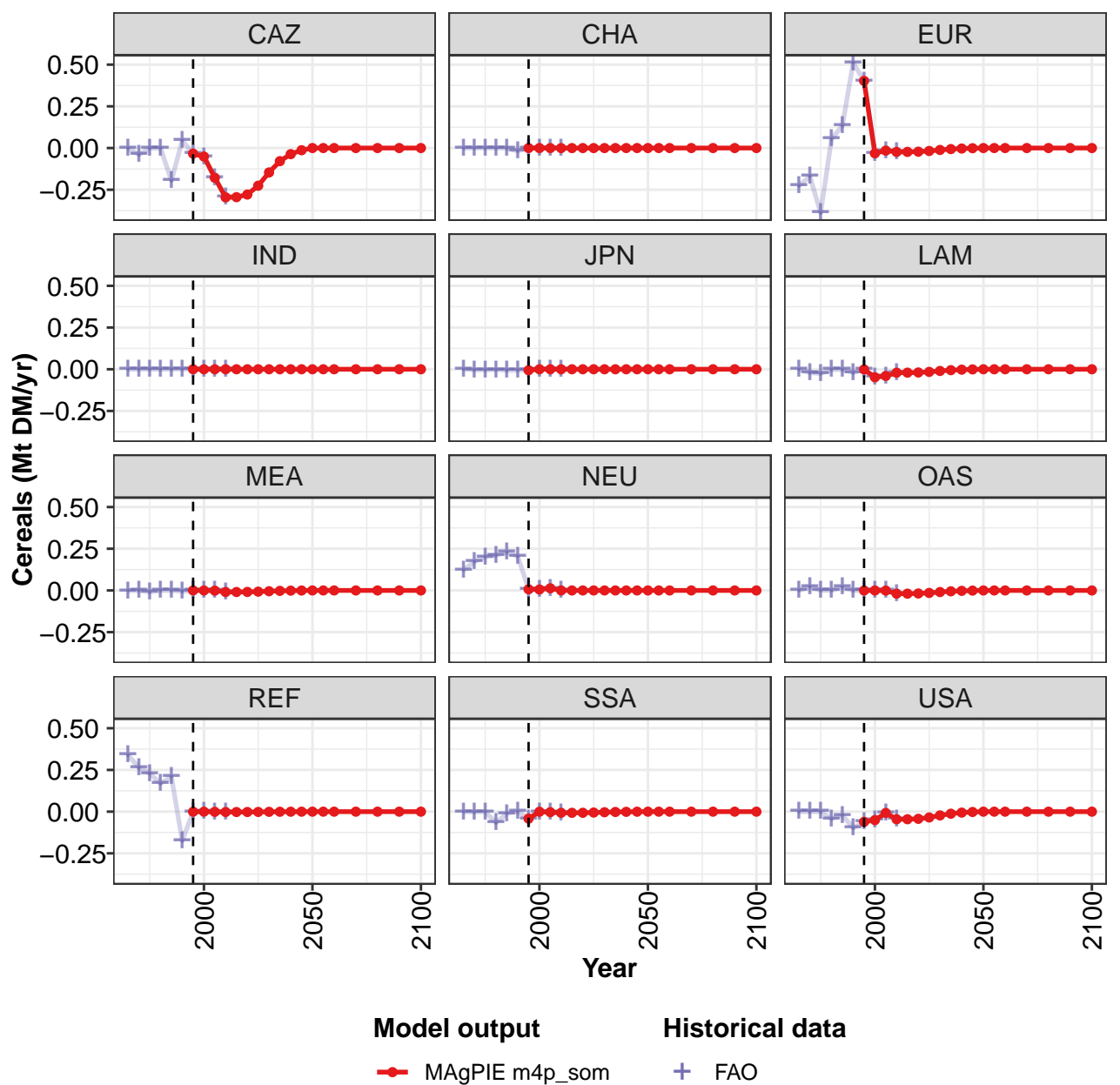


Figure 46: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Cereals (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.266	-0.176	-0.234	-0.423	-0.421	-0.399	-0.323	-0.209	-0.113	-0.052	-0.019
CAZ	-0.033	-0.051	-0.178	-0.295	-0.294	-0.279	-0.226	-0.146	-0.079	-0.037	-0.013
CHA	0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	0.000	0.000
EUR	0.403	-0.032	-0.015	-0.023	-0.023	-0.022	-0.018	-0.011	-0.006	-0.003	-0.001
IND	0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	0.000	0.000	0.000
JPN	-0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	-0.001	-0.048	-0.040	-0.021	-0.020	-0.019	-0.016	-0.010	-0.005	-0.003	-0.001
MEA	0.000	-0.000	-0.001	-0.009	-0.009	-0.009	-0.007	-0.005	-0.003	-0.001	-0.000
NEU	0.007	0.006	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	-0.000	0.000	-0.001	-0.019	-0.019	-0.018	-0.015	-0.010	-0.005	-0.002	-0.001
REF	-0.001	0.000	-0.001	-0.002	-0.002	-0.002	-0.002	-0.001	-0.001	-0.000	-0.000
SSA	-0.042	-0.001	-0.003	-0.007	-0.007	-0.007	-0.005	-0.003	-0.002	-0.001	-0.000
USA	-0.061	-0.051	-0.008	-0.045	-0.045	-0.043	-0.035	-0.023	-0.012	-0.006	-0.002

Table 137: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Cereals (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.000	0.000	0.000	0.000	0.000	0.000	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 138: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Cereals (Mt DM/yr) [PART 2/2]

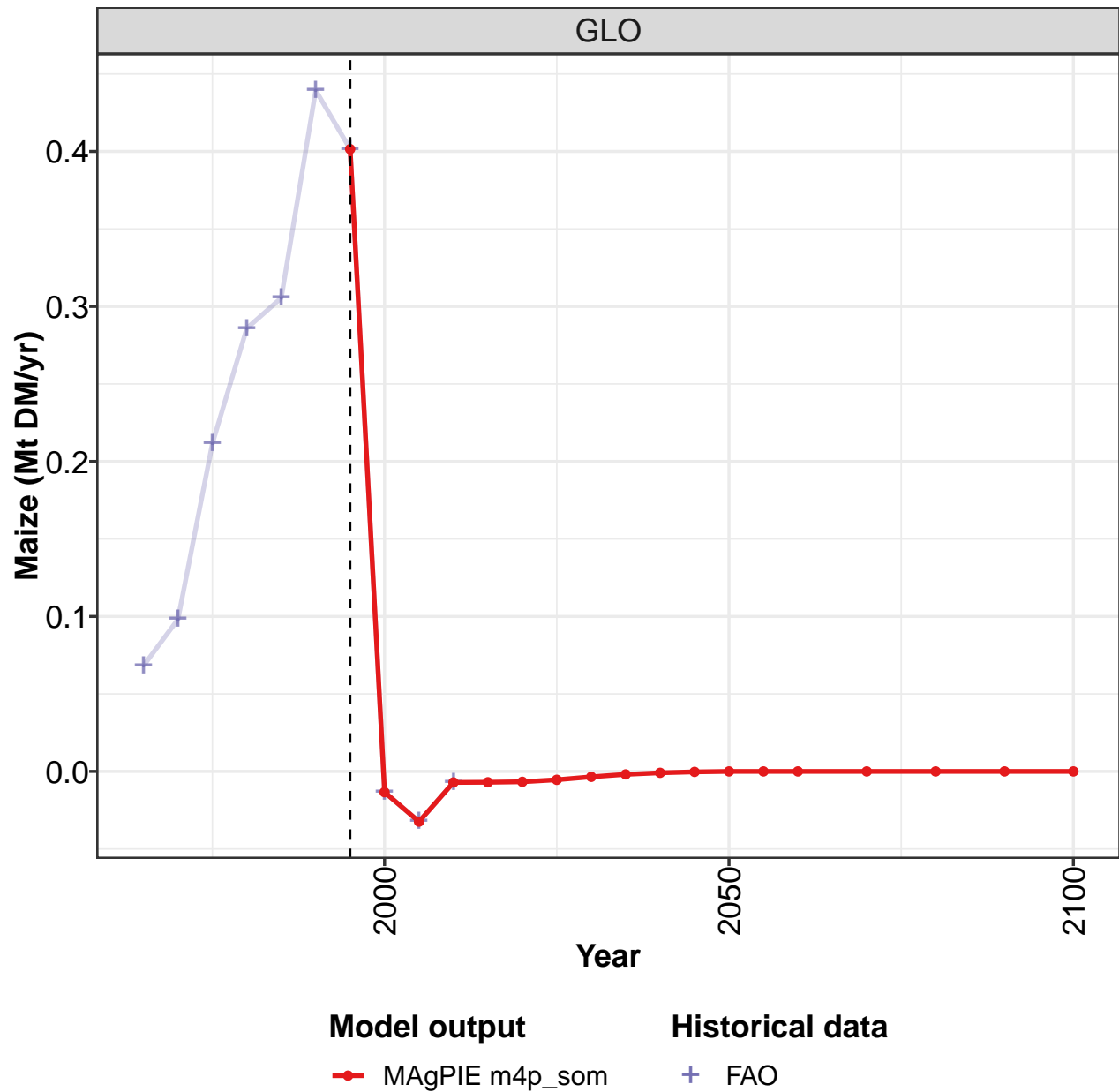
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.232	0.221	-0.001	0.316	0.354	0.438	0.266	-0.176	-0.234	-0.423
CAZ	0.000	-0.040	-0.001	-0.000	-0.195	0.045	-0.033	-0.051	-0.178	-0.295
CHA	0.000	0.000	0.000	0.000	-0.001	-0.018	0.000	-0.000	0.000	-0.000
EUR	-0.227	-0.169	-0.389	0.054	0.134	0.511	0.403	-0.031	-0.015	-0.023
IND	0.000	0.000	0.000	0.000	0.000	0.001	0.000	-0.000	-0.000	-0.000
JPN	0.000	-0.004	-0.005	-0.003	-0.007	-0.006	-0.006	0.000	0.000	0.000
LAM	-0.000	-0.021	-0.026	-0.003	-0.002	-0.021	-0.001	-0.048	-0.040	-0.021
MEA	-0.002	-0.000	-0.010	-0.001	-0.000	-0.005	0.000	-0.000	-0.001	-0.009
NEU	0.122	0.172	0.201	0.211	0.229	0.205	0.007	0.006	0.013	0.000
OAS	0.000	0.022	0.001	0.000	0.021	-0.000	-0.000	0.000	-0.001	-0.019
REF	0.340	0.265	0.229	0.168	0.209	-0.175	-0.001	0.000	-0.001	-0.002
SSA	-0.000	-0.003	-0.000	-0.067	-0.011	0.000	-0.042	-0.001	-0.003	-0.007
USA	0.000	0.000	0.000	-0.043	-0.021	-0.098	-0.061	-0.051	-0.008	-0.045

Table 139: FAO — Demand—Domestic Balanceflow—Crops—Cereals (Mt DM/yr)



5.1.2 Cereals—Maize

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

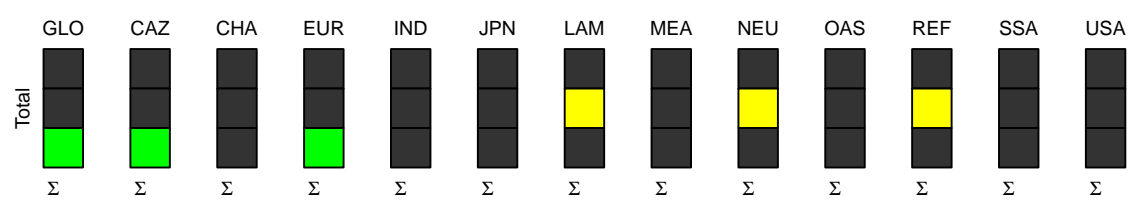
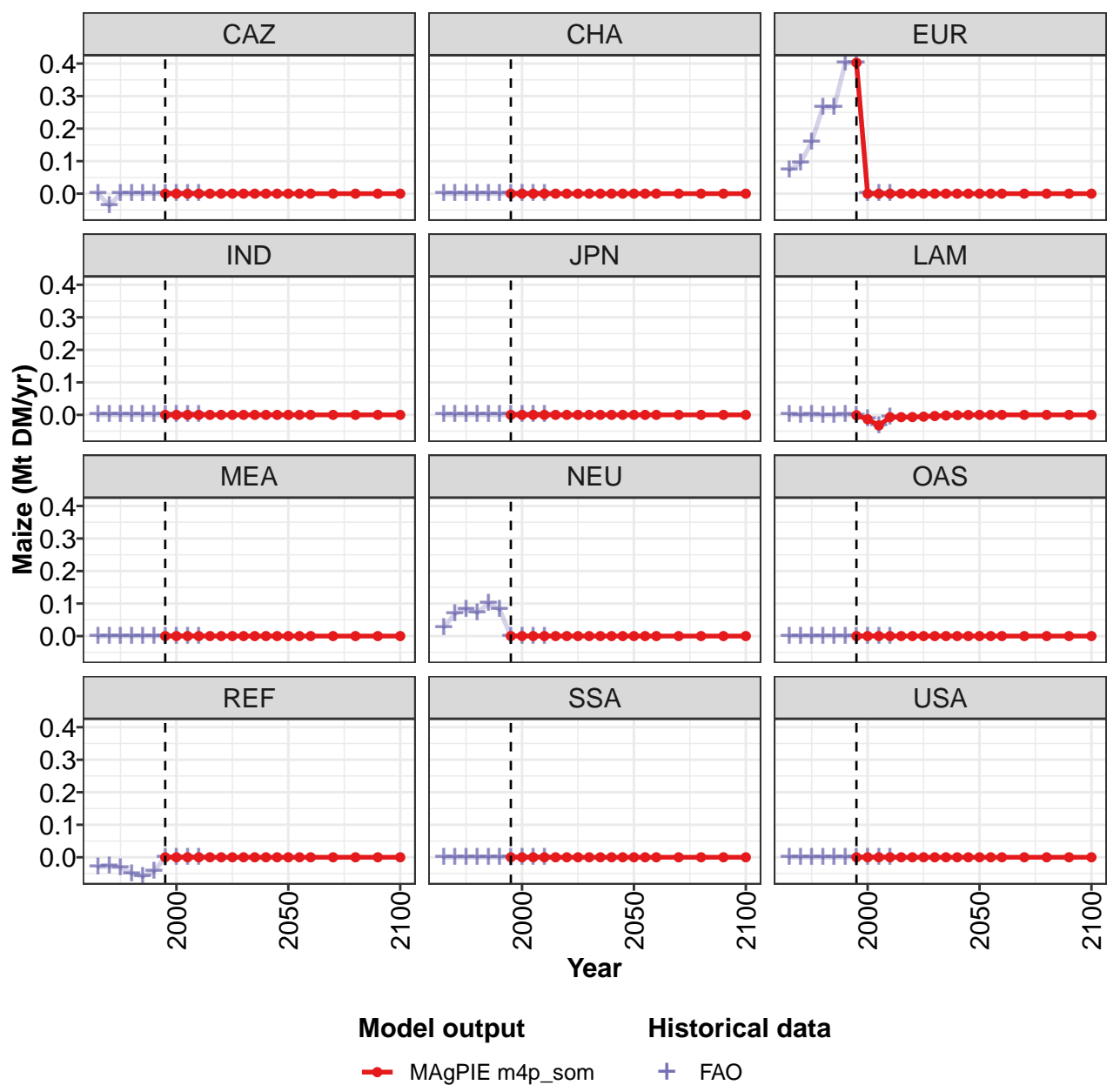


Figure 47: MAGPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Cereals—Maize (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.402	-0.013	-0.032	-0.007	-0.007	-0.007	-0.005	-0.004	-0.002	-0.001	-0.000
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.403	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	-0.001	-0.013	-0.032	-0.007	-0.007	-0.007	-0.005	-0.004	-0.002	-0.001	-0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 140: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Cereals—Maize (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.000	0.000	0.000	0.000	0.000	0.000	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000

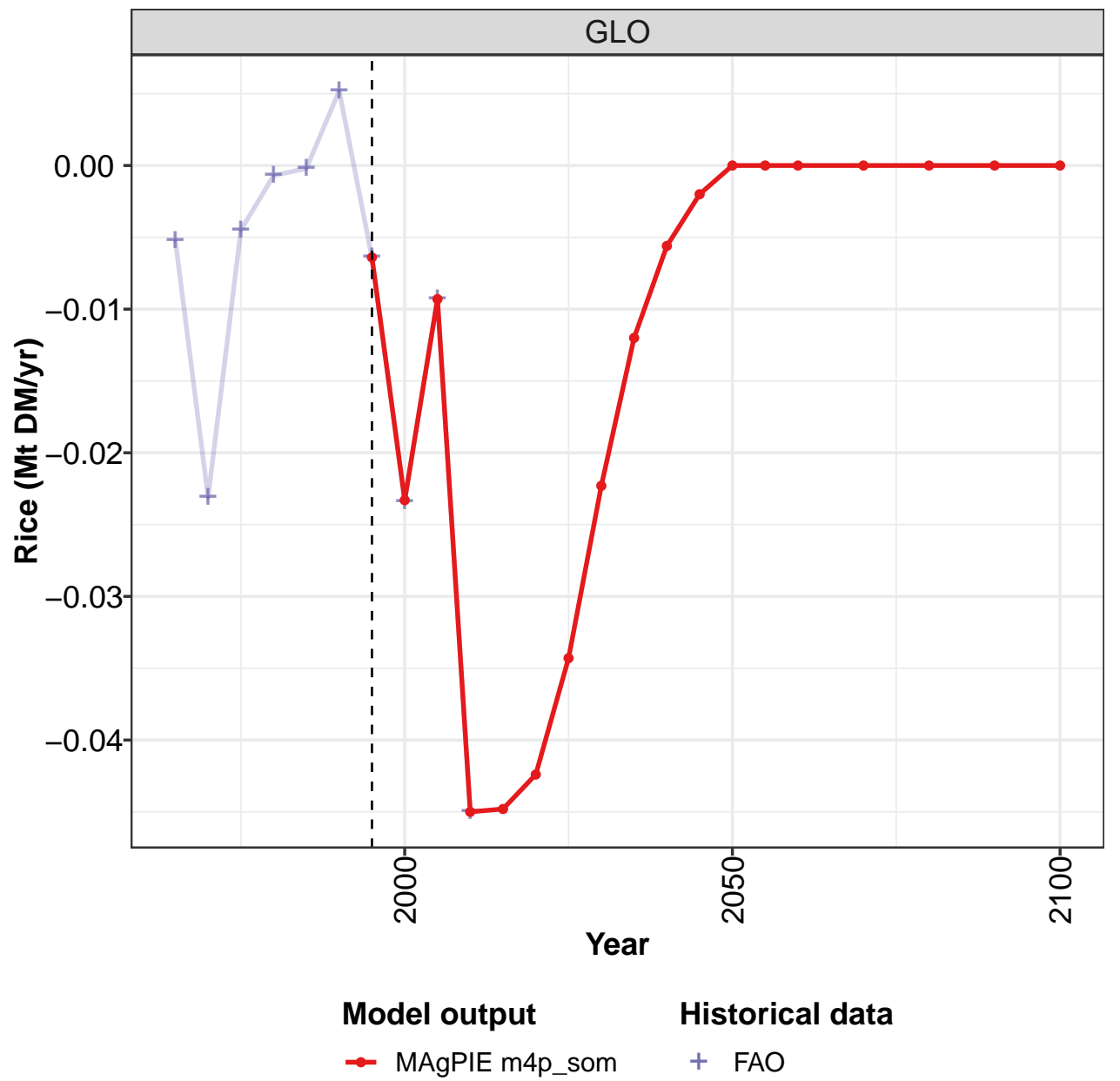
Table 141: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Cereals—Maize (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.068	0.098	0.212	0.286	0.305	0.439	0.402	-0.013	-0.032	-0.007
CAZ	0.000	-0.037	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.073	0.095	0.159	0.265	0.266	0.401	0.403	0.000	0.000	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	-0.000	0.000	-0.001	-0.001	0.000	-0.001	-0.013	-0.032	-0.007
MEA	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.027	0.068	0.083	0.072	0.100	0.081	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	-0.030	-0.028	-0.031	-0.050	-0.059	-0.043	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 142: FAO — Demand—Domestic Balanceflow—Crops—Cereals—Maize (Mt DM/yr)

5.1.3
Cereals—Rice

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
 replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

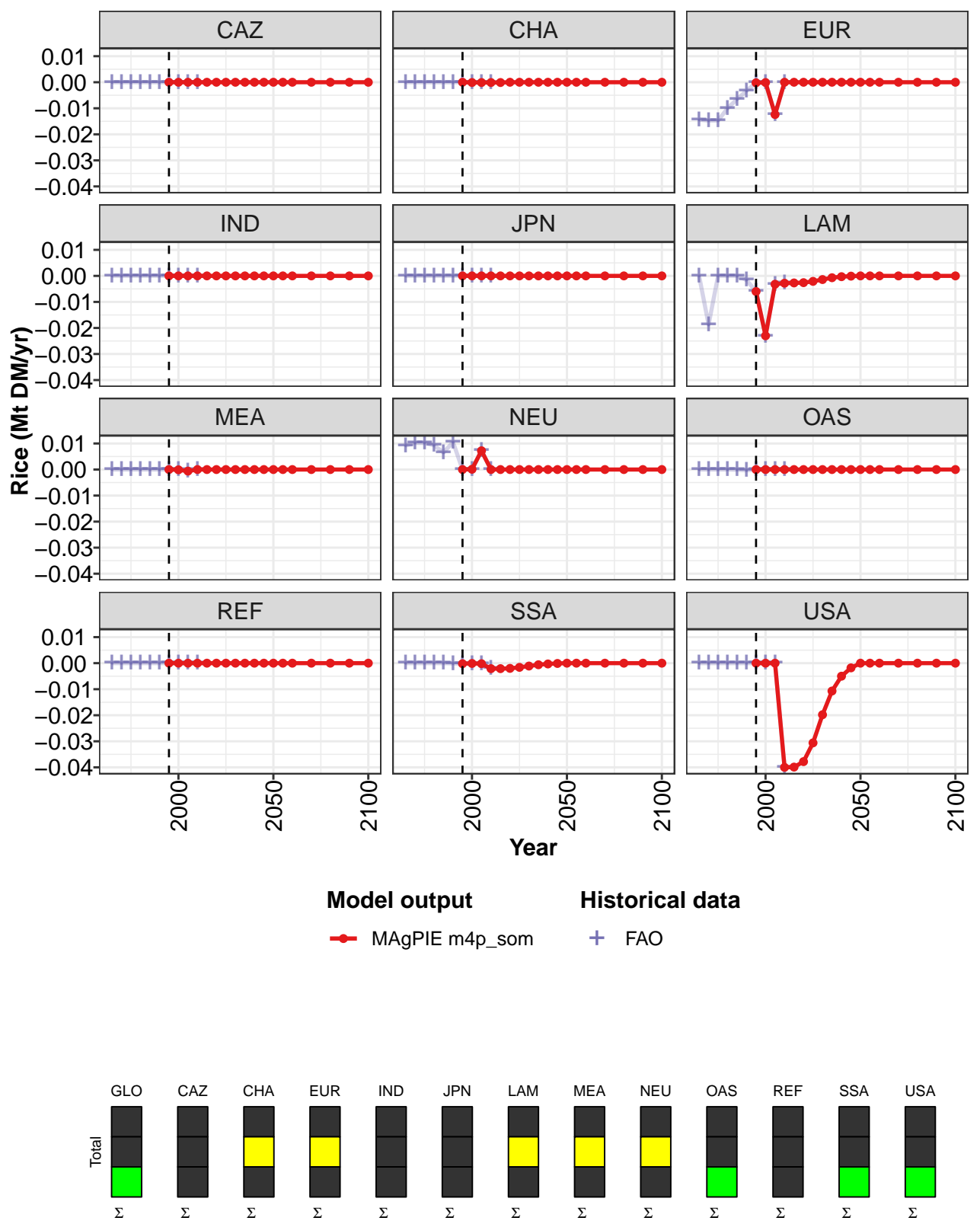


Figure 48: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Cereals—Rice (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-0.00640	-0.02330	-0.00930	-0.04500	-0.04480	-0.04240	-0.03430	-0.02230	-0.01200	-0.00560	-0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	-0.00010	-0.00010	-0.00010	-0.00010	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	-0.00020	-0.00010	-0.01240	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	-0.00600	-0.02300	-0.00320	-0.00280	-0.00270	-0.00260	-0.00210	-0.00140	-0.00070	-0.00030	-0.00000
MEA	0.00000	-0.00010	-0.00060	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00010	0.00720	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	-0.00020	-0.00010	-0.00020	-0.00210	-0.00210	-0.00200	-0.00160	-0.00110	-0.00060	-0.00030	-0.00000
USA	0.00000	0.00000	0.00000	-0.04000	-0.03990	-0.03780	-0.03060	-0.01980	-0.01070	-0.00500	-0.00000

Table 143: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Cereals—Rice (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

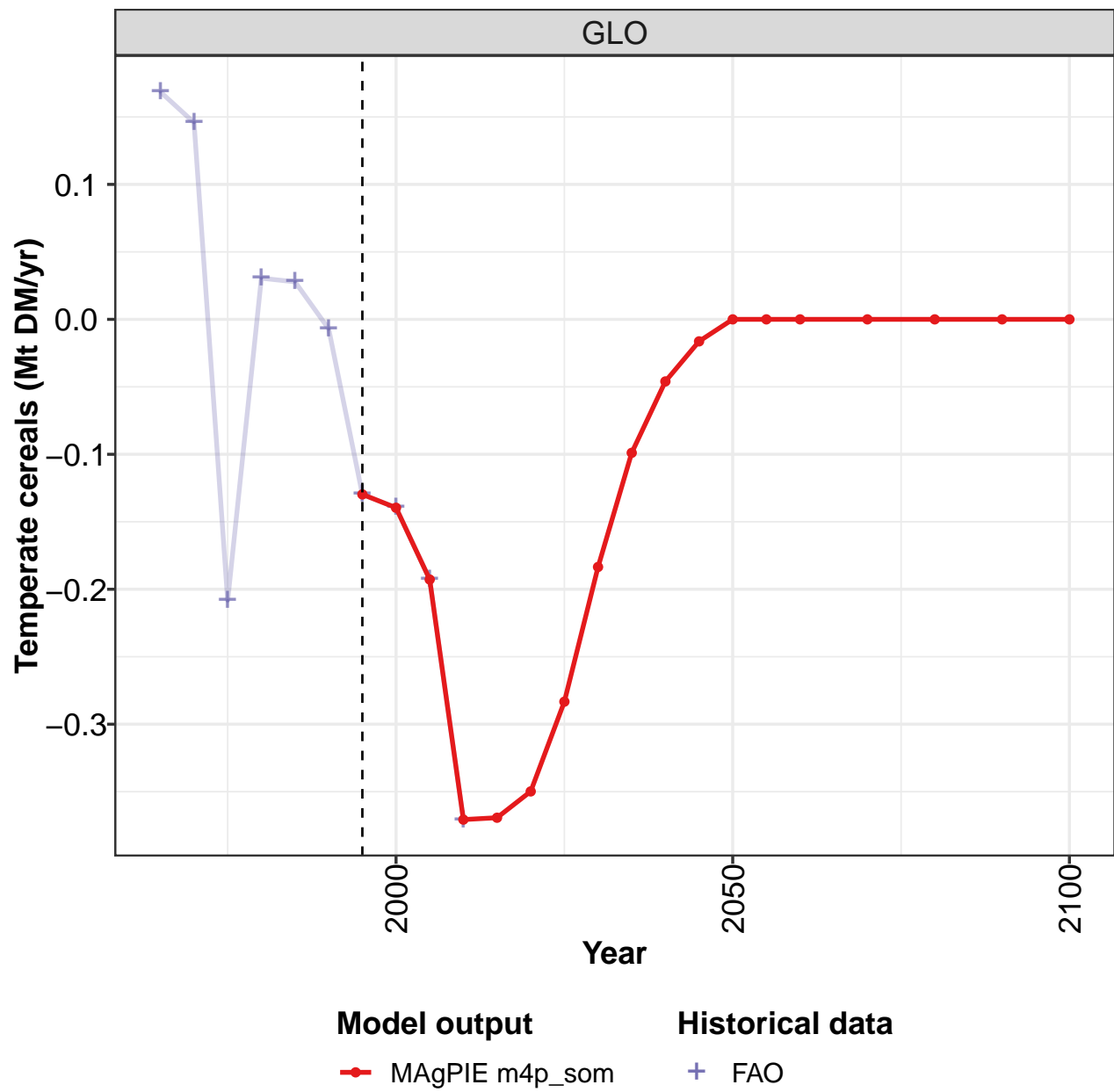
Table 144: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Cereals—Rice (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-0.0052	-0.0231	-0.0045	-0.0007	-0.0002	0.0052	-0.0064	-0.0234	-0.0093	-0.0450
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0001	-0.0001
EUR	-0.0144	-0.0147	-0.0147	-0.0100	-0.0065	-0.0033	-0.0002	-0.0001	-0.0124	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	-0.0187	0.0000	0.0000	0.0000	-0.0016	-0.0060	-0.0230	-0.0032	-0.0028
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0006	0.0000
NEU	0.0092	0.0102	0.0102	0.0093	0.0065	0.0105	0.0000	0.0001	0.0072	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0003	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0002	-0.0001	-0.0002	-0.0021
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0400

Table 145: FAO — Demand—Domestic Balanceflow—Crops—Cereals—Rice (Mt DM/yr)

5.1.4 Cereals—Temperate cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

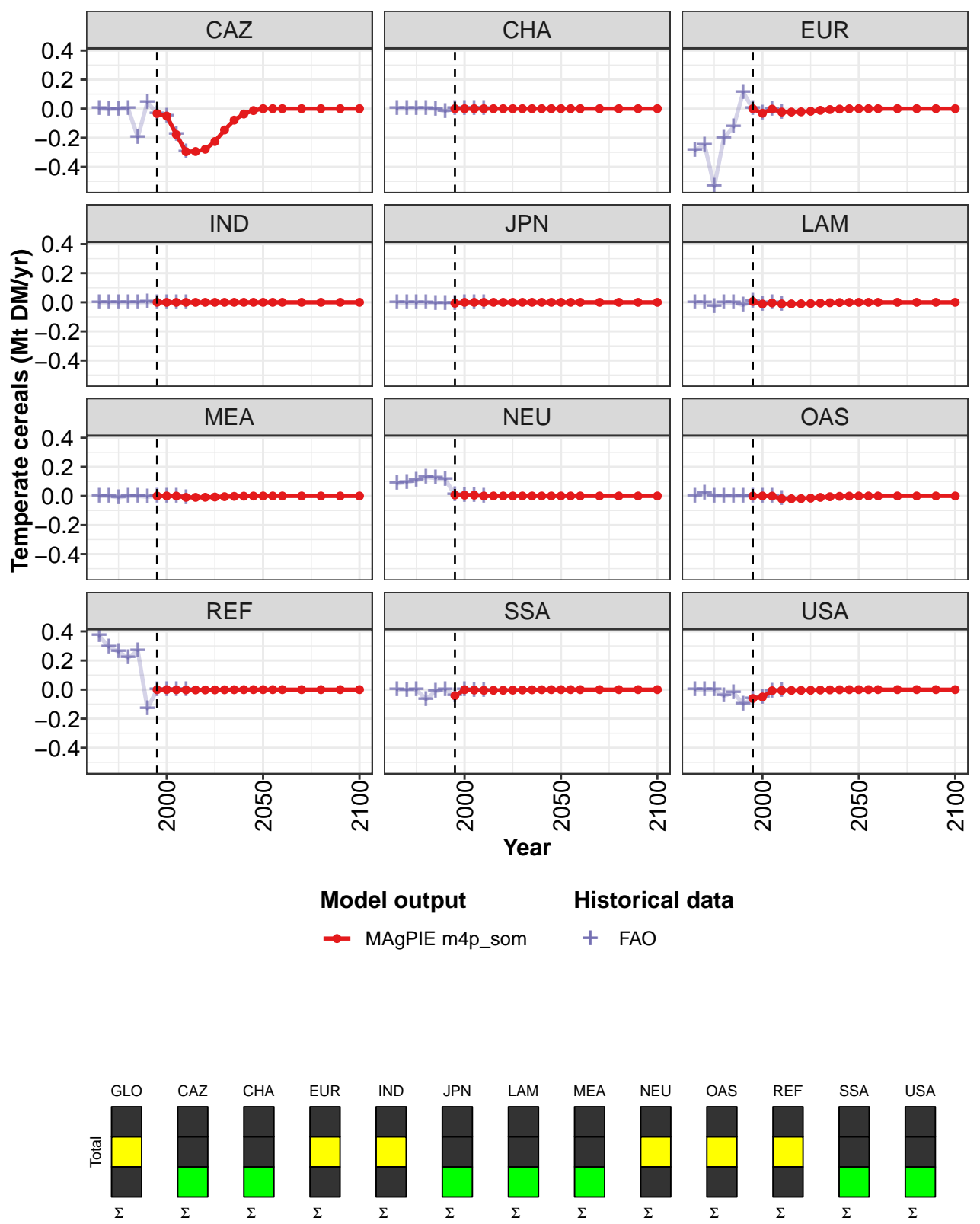


Figure 49: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Cereals—Temperate cereals (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-0.12970	-0.13960	-0.19280	-0.37070	-0.36930	-0.34980	-0.28330	-0.18350	-0.09890	-0.04600	-0.00000
CAZ	-0.03320	-0.05090	-0.17820	-0.29550	-0.29440	-0.27880	-0.22580	-0.14630	-0.07870	-0.03660	-0.00000
CHA	0.00000	-0.00010	0.00000	-0.00020	-0.00020	-0.00020	-0.00020	-0.00010	-0.00010	0.00000	0.00000
EUR	0.00000	-0.03140	-0.00290	-0.02310	-0.02300	-0.02180	-0.01760	-0.01140	-0.00620	-0.00290	-0.00000
IND	0.00000	-0.00020	-0.00020	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010	0.00000	0.00000	0.00000
JPN	-0.00590	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00610	-0.01170	-0.00450	-0.01080	-0.01070	-0.01010	-0.00820	-0.00530	-0.00290	-0.00130	-0.00000
MEA	0.00000	0.00000	-0.00040	-0.00930	-0.00930	-0.00880	-0.00710	-0.00460	-0.00250	-0.00120	-0.00000
NEU	0.00690	0.00570	0.00570	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	-0.00040	0.00000	-0.00060	-0.01930	-0.01920	-0.01820	-0.01480	-0.00960	-0.00510	-0.00240	-0.00000
REF	-0.00050	0.00000	-0.00110	-0.00210	-0.00210	-0.00200	-0.00160	-0.00100	-0.00060	-0.00030	-0.00000
SSA	-0.04160	-0.00040	-0.00290	-0.00480	-0.00480	-0.00460	-0.00370	-0.00240	-0.00130	-0.00060	-0.00000
USA	-0.06110	-0.05060	-0.00770	-0.00550	-0.00550	-0.00520	-0.00420	-0.00270	-0.00150	-0.00070	-0.00000

Table 146: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

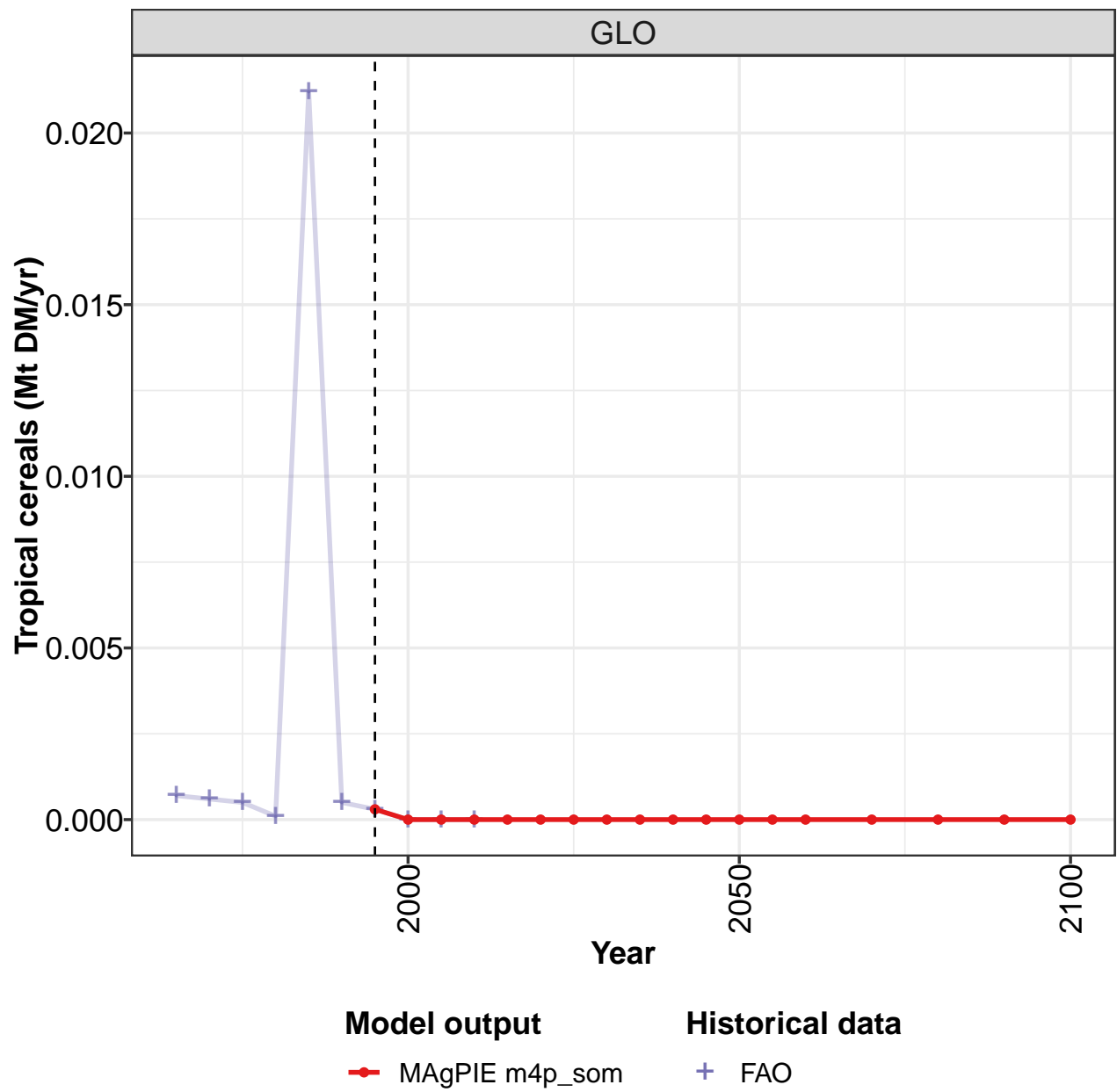
Table 147: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.169	0.146	-0.208	0.030	0.028	-0.007	-0.130	-0.140	-0.193	-0.371
CAZ	0.000	-0.004	-0.001	-0.000	-0.195	0.045	-0.033	-0.051	-0.178	-0.295
CHA	0.000	0.000	0.000	0.000	-0.001	-0.018	0.000	-0.000	0.000	-0.000
EUR	-0.286	-0.250	-0.534	-0.202	-0.126	0.113	0.000	-0.031	-0.003	-0.023
IND	0.000	0.000	0.000	0.000	0.000	0.001	0.000	-0.000	-0.000	-0.000
JPN	0.000	-0.004	-0.005	-0.003	-0.007	-0.006	-0.006	0.000	0.000	0.000
LAM	-0.001	-0.002	-0.026	-0.001	-0.002	-0.019	0.006	-0.012	-0.004	-0.011
MEA	-0.000	-0.000	-0.010	-0.001	-0.000	-0.005	0.000	0.000	-0.000	-0.009
NEU	0.086	0.094	0.107	0.130	0.122	0.113	0.007	0.006	0.006	0.000
OAS	0.000	0.022	0.001	0.000	-0.000	0.000	-0.000	0.000	-0.001	-0.019
REF	0.370	0.293	0.260	0.218	0.269	-0.132	-0.001	0.000	-0.001	-0.002
SSA	-0.000	-0.003	-0.000	-0.067	-0.011	0.000	-0.042	-0.000	-0.003	-0.005
USA	0.000	0.000	0.000	-0.043	-0.021	-0.098	-0.061	-0.051	-0.008	-0.005

Table 148: FAO — Demand—Domestic Balanceflow—Crops—Cereals—Temperate cereals (Mt DM/yr)

5.1.5
Cereals—Tropical cereals

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

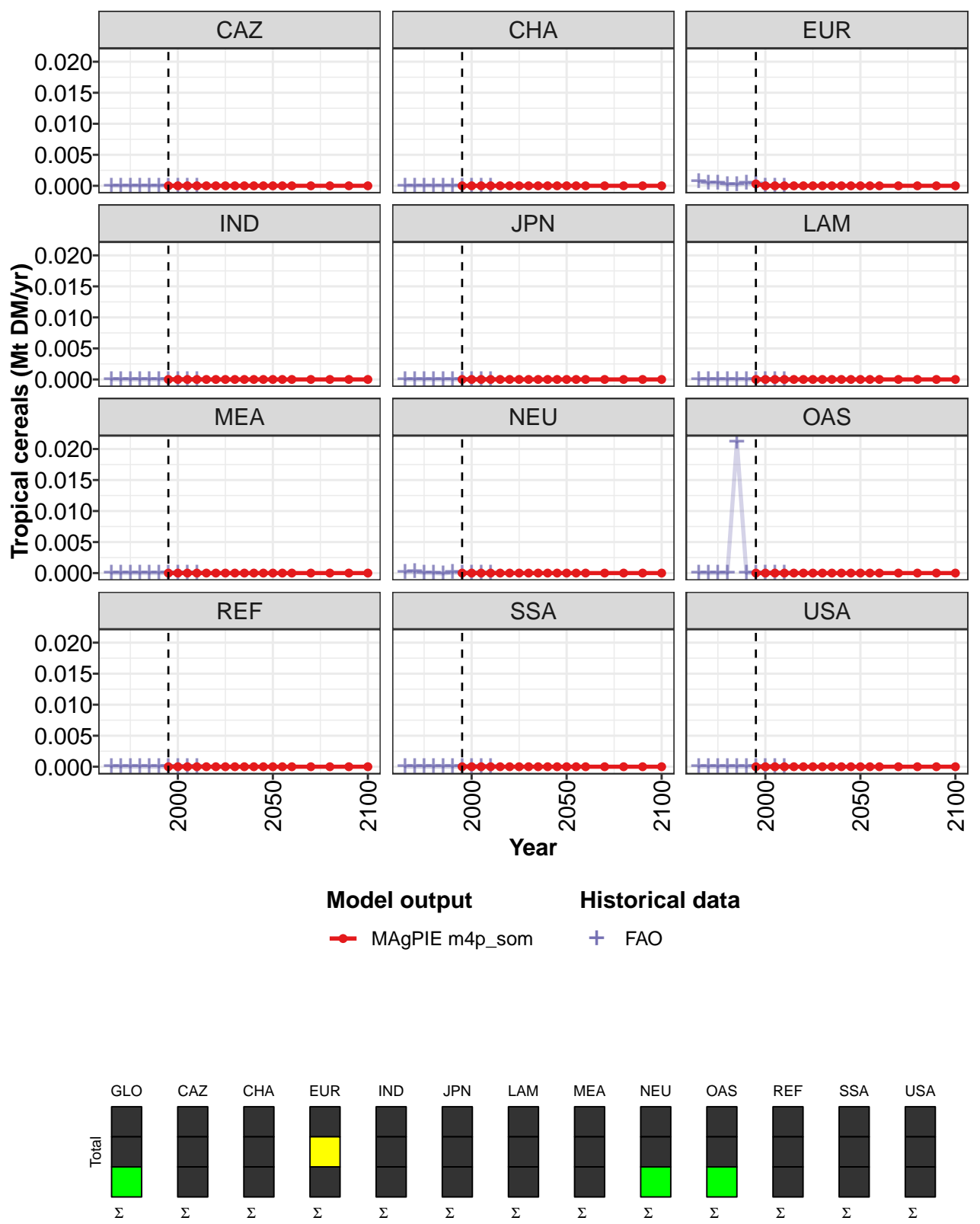


Figure 50: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Cereals—Tropical cereals (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040
GLO	0.000300	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
CAZ	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
CHA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
EUR	0.000300	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
IND	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
JPN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
LAM	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
MEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
NEU	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
OAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
REF	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
SSA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
USA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Table 149: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
CAZ	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
CHA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
EUR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
IND	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
JPN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
LAM	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
MEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
NEU	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
OAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
REF	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
SSA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
USA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

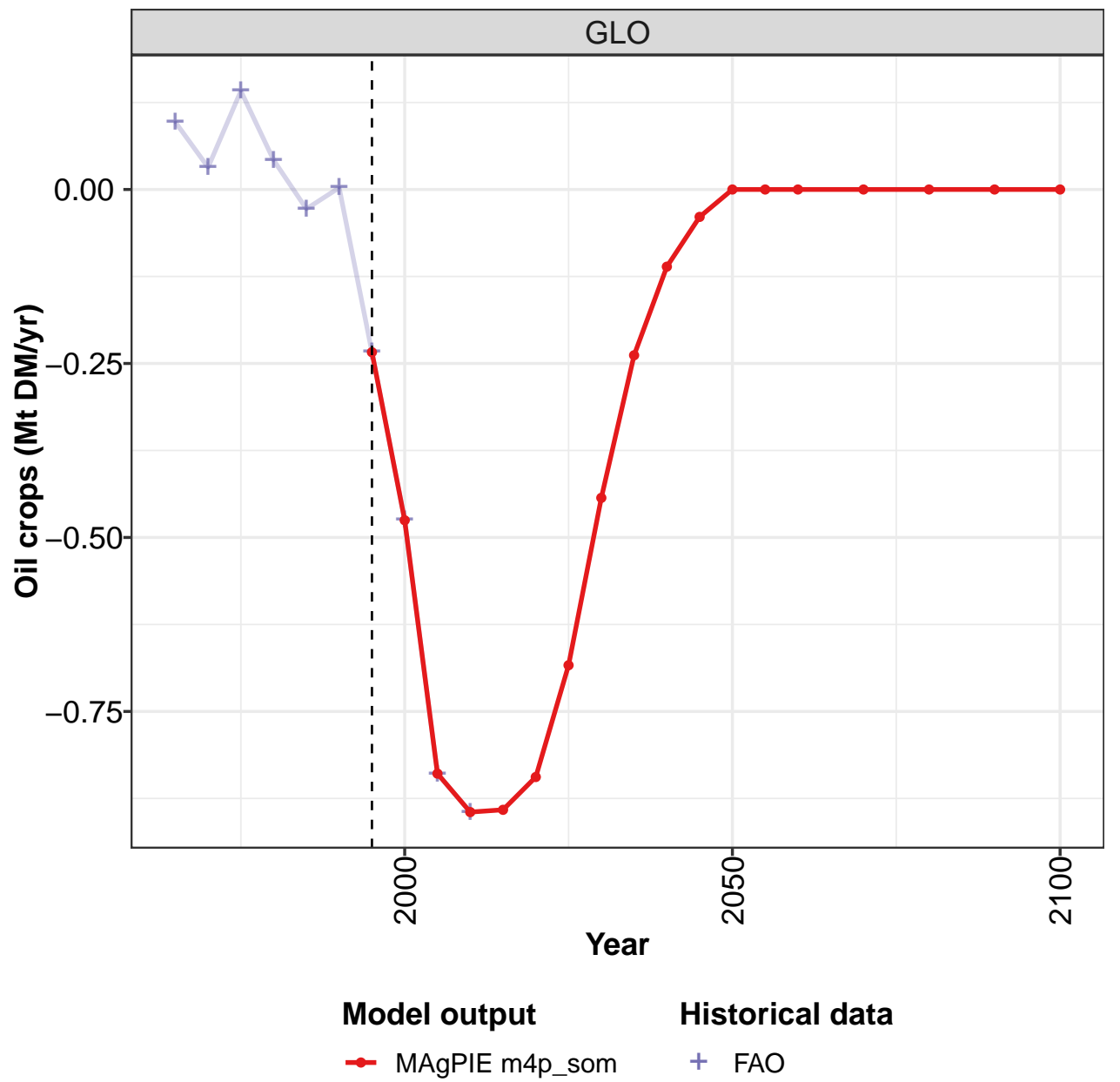
Table 150: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0007	0.0006	0.0005	0.0001	0.0212	0.0005	0.0003	0.0000	0.0000	0.0000
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0007	0.0004	0.0005	0.0002	0.0002	0.0004	0.0003	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0001	0.0002	0.0000	0.0000	-0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0211	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 151: FAO — Demand—Domestic Balanceflow—Crops—Cereals—Tropical cereals (Mt DM/yr)

5.1.6
Oil crops

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

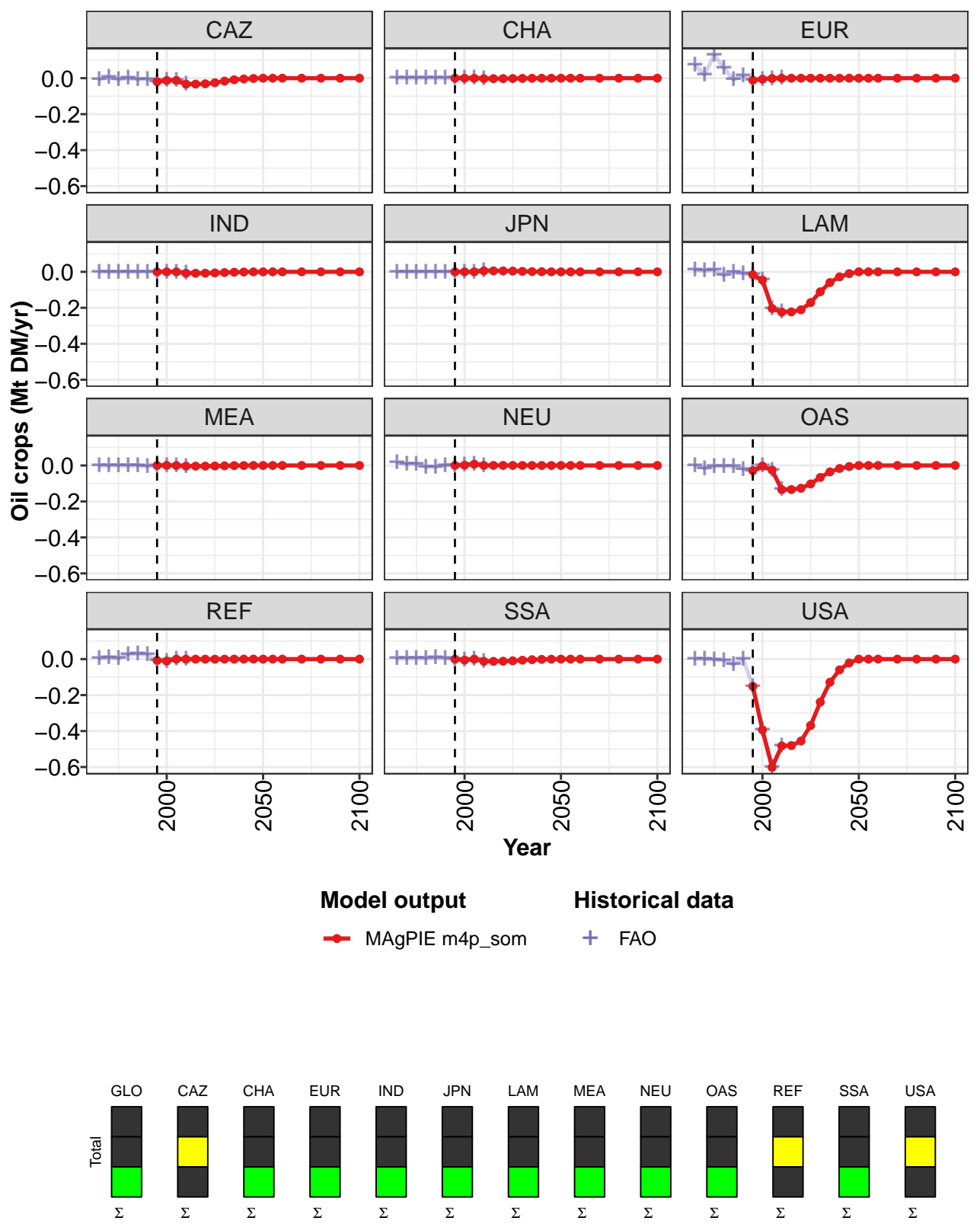


Figure 51: MAGPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Oil crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-0.23380	-0.47530	-0.83930	-0.89460	-0.89130	-0.84420	-0.68360	-0.44310	-0.23820	-0.11090	-0.03090
CAZ	-0.01950	-0.01280	-0.01270	-0.03300	-0.03290	-0.03120	-0.02530	-0.01640	-0.00880	-0.00410	-0.00190
CHA	0.00000	-0.00010	-0.00040	-0.00240	-0.00240	-0.00230	-0.00180	-0.00120	-0.00060	-0.00030	-0.00010
EUR	-0.01110	-0.00550	-0.00160	-0.00010	-0.00010	-0.00010	0.00000	-0.00000	-0.00000	-0.00010	0.00000
IND	0.00000	0.00000	0.00000	-0.00780	-0.00780	-0.00740	-0.00600	-0.00390	-0.00210	-0.00100	-0.00040
JPN	0.00000	0.00000	0.00000	0.00540	0.00540	0.00510	0.00420	0.00270	0.00150	0.00070	0.00030
LAM	-0.01590	-0.04570	-0.20370	-0.22370	-0.22290	-0.21100	-0.17090	-0.11090	-0.05960	-0.02780	-0.01390
MEA	-0.00010	0.00030	-0.00040	-0.00360	-0.00360	-0.00350	-0.00280	-0.00180	-0.00090	-0.00040	-0.00010
NEU	0.00040	0.00170	0.00700	0.00030	0.00030	0.00030	0.00020	0.00020	0.00010	0.00000	0.00000
OAS	-0.02880	-0.00300	-0.02550	-0.13430	-0.13380	-0.12670	-0.10270	-0.06650	-0.03580	-0.01660	-0.00830
REF	-0.00730	-0.01080	-0.00010	-0.00040	-0.00040	-0.00040	-0.00030	-0.00010	-0.00010	0.00000	0.00000
SSA	-0.00020	-0.00580	-0.00020	-0.01240	-0.01230	-0.01170	-0.00940	-0.00620	-0.00330	-0.00150	-0.00070
USA	-0.15130	-0.39360	-0.60170	-0.48260	-0.48080	-0.45530	-0.36880	-0.23900	-0.12860	-0.05980	-0.03090

Table 152: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Oil crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

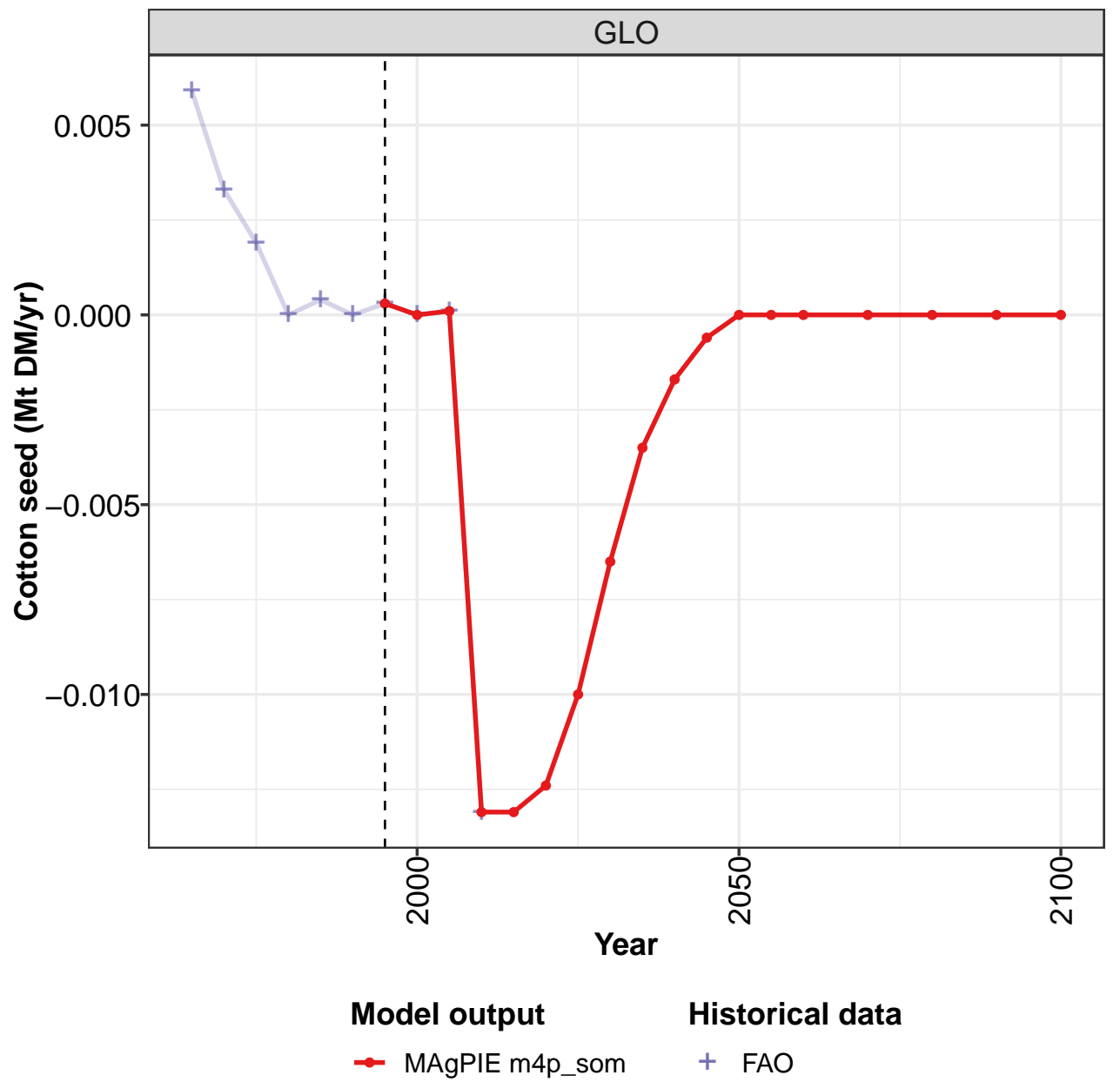
Table 153: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Oil crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.097	0.032	0.141	0.042	-0.028	0.003	-0.234	-0.475	-0.840	-0.895
CAZ	-0.007	0.005	-0.008	0.000	-0.007	-0.005	-0.019	-0.013	-0.013	-0.033
CHA	-0.001	0.000	0.000	0.000	-0.000	0.000	0.000	-0.000	-0.000	-0.002
EUR	0.074	0.019	0.129	0.056	-0.009	0.013	-0.011	-0.005	-0.002	-0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.008
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005
LAM	0.010	0.006	0.009	-0.021	-0.002	-0.009	-0.016	-0.046	-0.204	-0.224
MEA	0.000	-0.002	-0.000	-0.002	-0.000	-0.004	-0.000	0.000	-0.000	-0.004
NEU	0.015	0.007	0.009	-0.009	-0.008	0.000	0.000	0.002	0.007	0.000
OAS	-0.001	-0.016	-0.005	-0.004	-0.006	-0.021	-0.029	-0.003	-0.025	-0.134
REF	0.003	0.008	0.004	0.025	0.028	0.024	-0.007	-0.011	-0.000	-0.000
SSA	0.003	0.005	0.005	0.004	0.007	0.005	-0.000	-0.006	-0.000	-0.012
USA	0.000	0.000	-0.003	-0.007	-0.030	0.000	-0.151	-0.394	-0.602	-0.483

Table 154: FAO — Demand—Domestic Balanceflow—Crops—Oil crops (Mt DM/yr)

5.1.7 Oil crops—Cotton seed

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

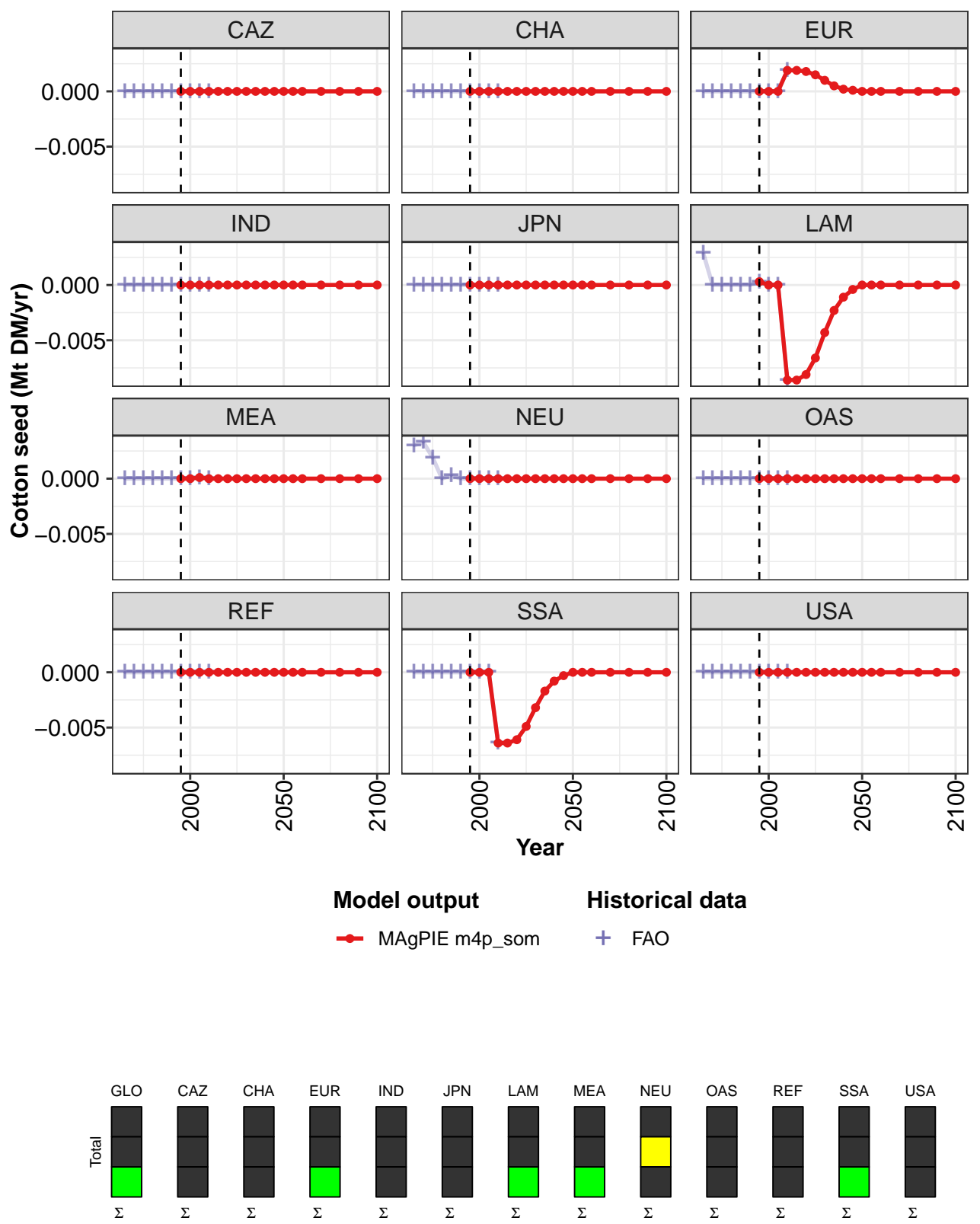


Figure 52: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Oil crops—Cotton seed (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.00030	0.00000	0.00010	-0.01310	-0.01310	-0.01240	-0.01000	-0.00650	-0.00350	-0.00170	-0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00190	0.00190	0.00180	0.00150	0.00100	0.00050	0.00020	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00030	0.00000	0.00000	-0.00860	-0.00860	-0.00810	-0.00660	-0.00430	-0.00230	-0.00110	-0.00000
MEA	0.00000	0.00000	0.00010	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	-0.00640	-0.00640	-0.00610	-0.00490	-0.00320	-0.00170	-0.00080	-0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 155: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

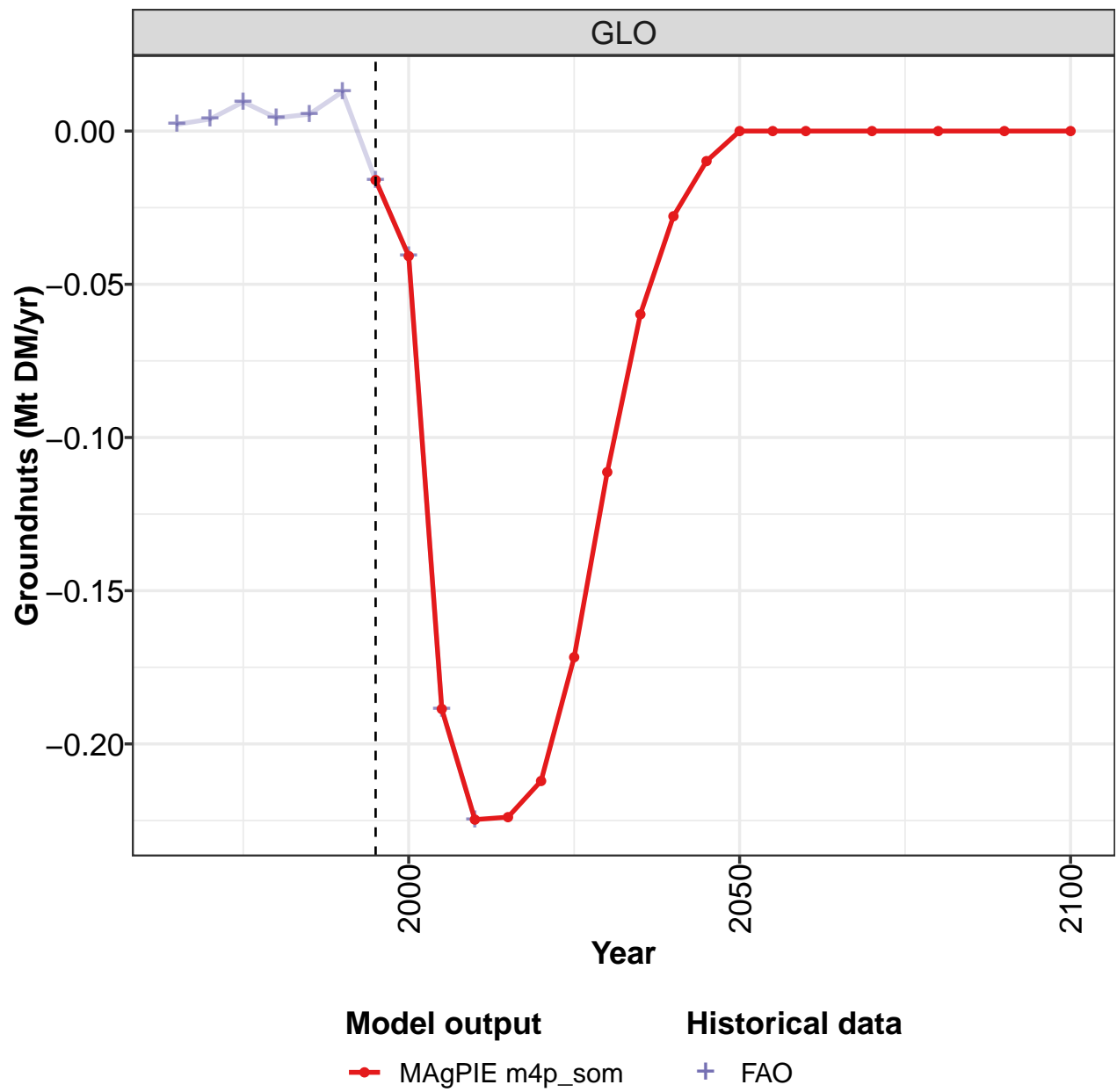
Table 156: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00590	0.00330	0.00190	0.00000	0.00040	0.00000	0.00030	0.00000	0.00010	-0.01310
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00190
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00290	0.00000	0.00000	0.00000	0.00000	0.00000	0.00030	0.00000	0.00000	-0.00860
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00010	0.00000
NEU	0.00300	0.00330	0.00190	0.00000	0.00030	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00640
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 157: FAO — Demand—Domestic Balanceflow—Crops—Oil crops—Cotton seed (Mt DM/yr)

5.1.8 Oil crops—Groundnuts

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

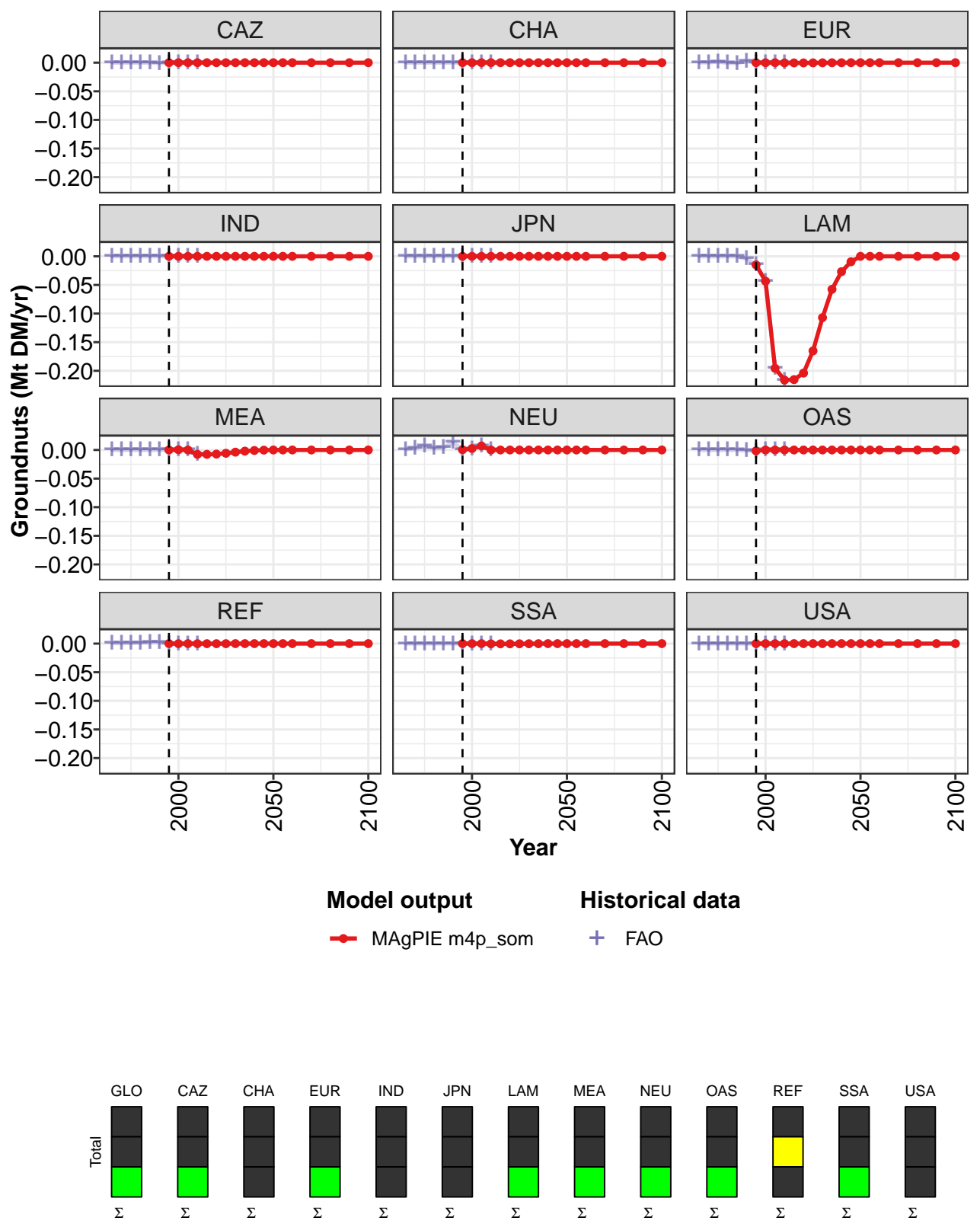


Figure 53: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Oil crops—Groundnuts (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-0.01600	-0.04080	-0.18860	-0.22470	-0.22390	-0.21210	-0.17170	-0.11130	-0.05980	-0.02780	-0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	-0.00010	0.00000	-0.00040	-0.00040	-0.00040	-0.00030	-0.00020	-0.00010	-0.00010	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	-0.01490	-0.04350	-0.19560	-0.21620	-0.21540	-0.20400	-0.16520	-0.10710	-0.05760	-0.02680	-0.00000
MEA	0.00000	0.00040	0.00000	-0.00760	-0.00760	-0.00720	-0.00580	-0.00380	-0.00200	-0.00090	-0.00000
NEU	0.00040	0.00250	0.00700	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	-0.00150	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	-0.00010	0.00000	-0.00010	-0.00010	-0.00010	-0.00010	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	-0.00040	-0.00040	-0.00040	-0.00030	-0.00020	-0.00010	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 158: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

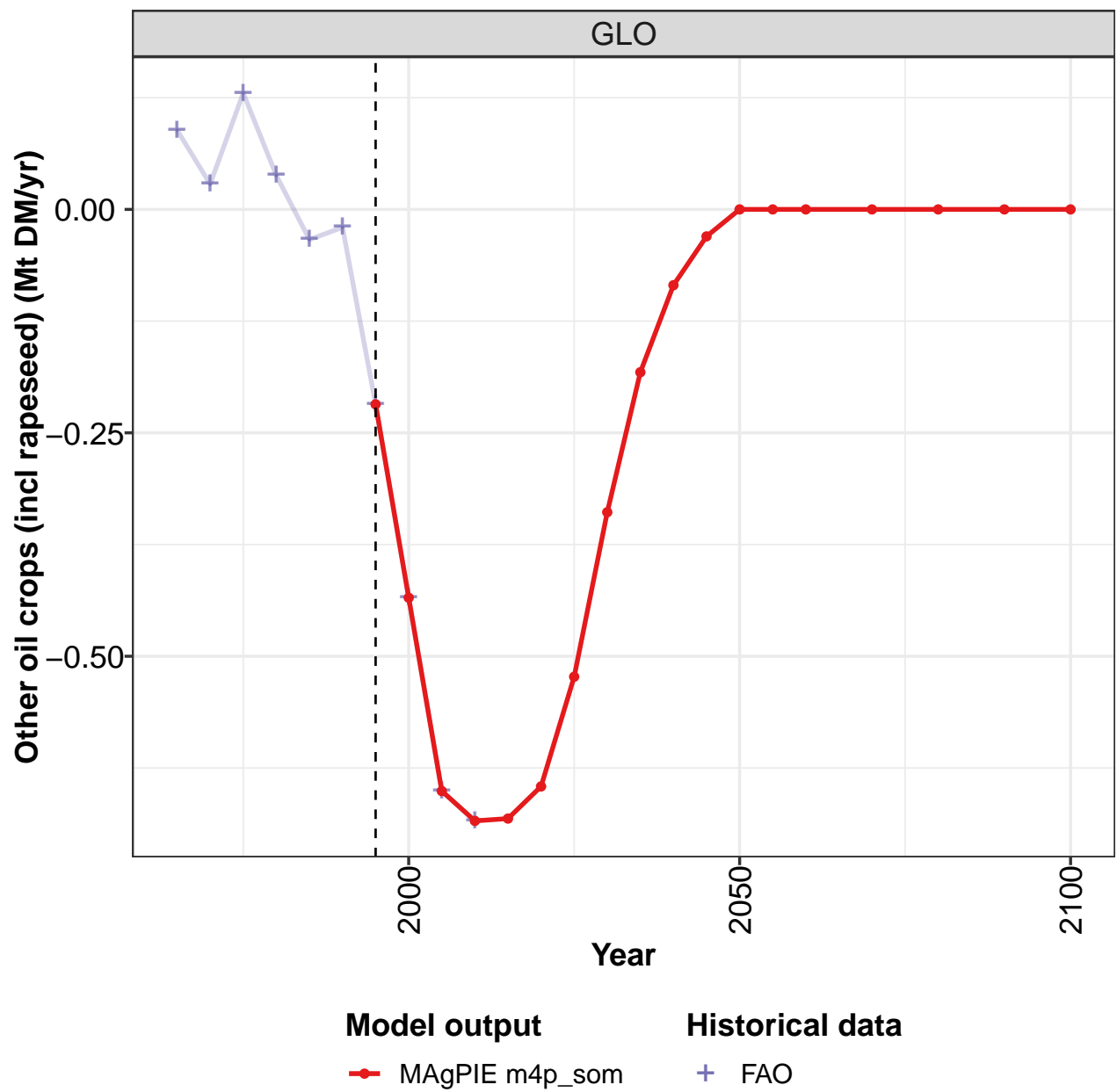
Table 159: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0022	0.0039	0.0095	0.0043	0.0055	0.0128	-0.0160	-0.0408	-0.1887	-0.2247
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0008	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0003	0.0005	0.0018	-0.0003	-0.0008	0.0030	0.0000	-0.0001	0.0000	-0.0004
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0044	-0.0149	-0.0435	-0.1956	-0.2162
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0004	0.0000	-0.0076
NEU	0.0012	0.0028	0.0068	0.0031	0.0039	0.0136	0.0004	0.0025	0.0070	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0010	-0.0015	0.0000	0.0000	0.0000
REF	0.0007	0.0006	0.0009	0.0015	0.0024	0.0023	0.0000	-0.0001	0.0000	-0.0001
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0004
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 160: FAO — Demand—Domestic Balanceflow—Crops—Oil crops—Groundnuts (Mt DM/yr)

5.1.9
Oil crops—Other oil crops (incl rapeseed)

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

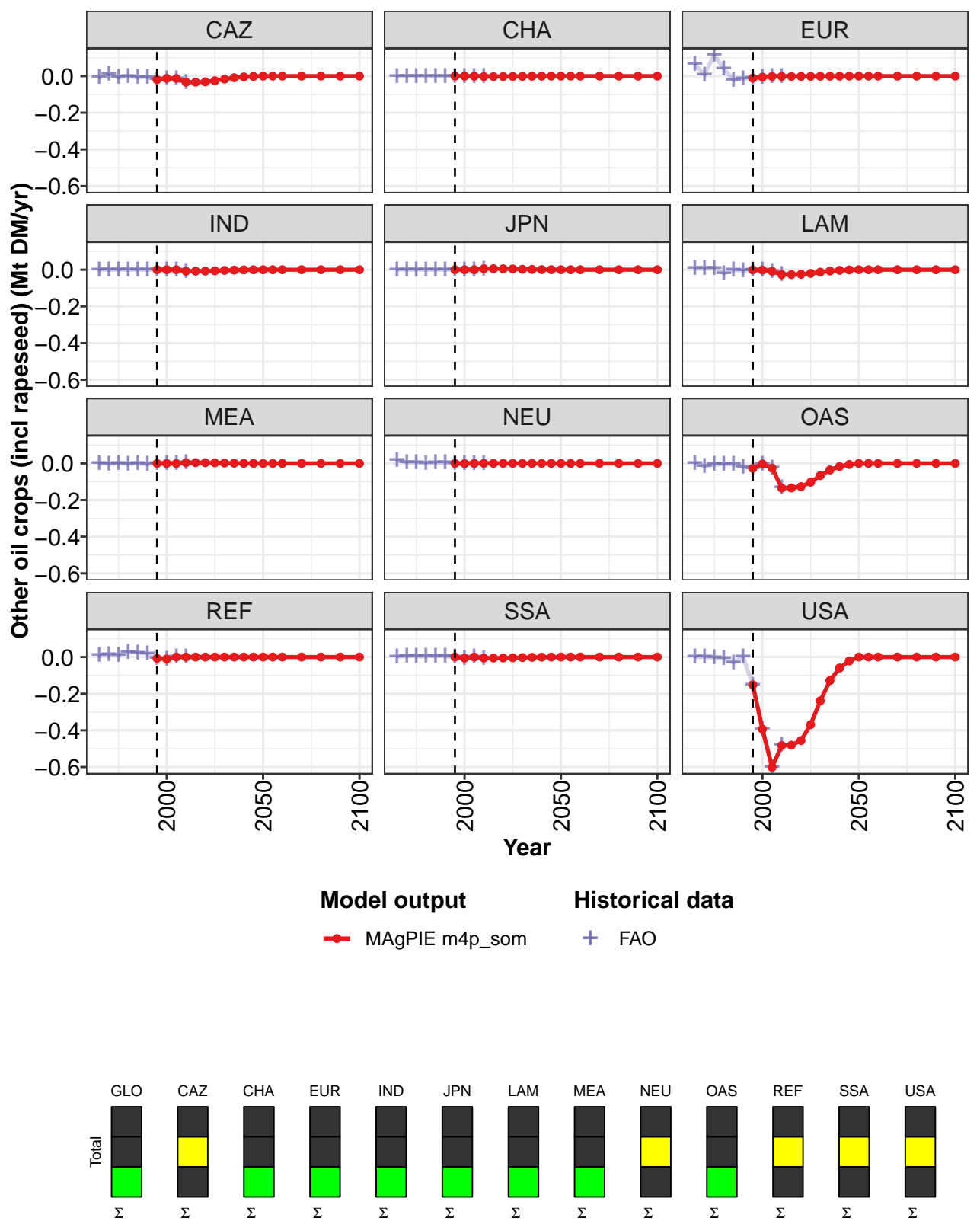


Figure 54: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-0.21810	-0.43450	-0.65080	-0.68420	-0.68160	-0.64560	-0.52290	-0.33880	-0.18220	-0.08480	-0.03480
CAZ	-0.01950	-0.01280	-0.01270	-0.03300	-0.03290	-0.03120	-0.02530	-0.01640	-0.00880	-0.00410	-0.00190
CHA	0.00000	-0.00010	-0.00040	-0.00240	-0.00240	-0.00230	-0.00180	-0.00120	-0.00060	-0.00030	-0.00010
EUR	-0.01110	-0.00540	-0.00160	-0.00160	-0.00160	-0.00150	-0.00120	-0.00080	-0.00040	-0.00020	-0.00010
IND	0.00000	0.00000	0.00000	-0.00780	-0.00780	-0.00740	-0.00600	-0.00390	-0.00210	-0.00100	-0.00050
JPN	0.00000	0.00000	0.00000	0.00540	0.00540	0.00510	0.00420	0.00270	0.00150	0.00070	0.00030
LAM	-0.00130	-0.00220	-0.00810	-0.02630	-0.02620	-0.02480	-0.02010	-0.01300	-0.00700	-0.00330	-0.00160
MEA	-0.00010	-0.00010	-0.00050	0.00400	0.00400	0.00370	0.00300	0.00200	0.00110	0.00050	0.00020
NEU	0.00000	-0.00080	0.00000	0.00030	0.00030	0.00030	0.00020	0.00020	0.00010	0.00000	0.00000
OAS	-0.02730	-0.00300	-0.02550	-0.13430	-0.13380	-0.12670	-0.10270	-0.06650	-0.03580	-0.01660	-0.00830
REF	-0.00730	-0.01070	-0.00010	-0.00030	-0.00030	-0.00030	-0.00020	-0.00010	-0.00010	0.00000	0.00000
SSA	-0.00020	-0.00580	-0.00020	-0.00560	-0.00550	-0.00520	-0.00420	-0.00280	-0.00150	-0.00070	-0.00030
USA	-0.15130	-0.39360	-0.60170	-0.48260	-0.48080	-0.45530	-0.36880	-0.23900	-0.12860	-0.05980	-0.02990

Table 161: MAgPIE m4p.som — Demand—Domestic Balanceflow—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 162: MAgPIE m4p.som — Demand—Domestic Balanceflow—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 2/2]

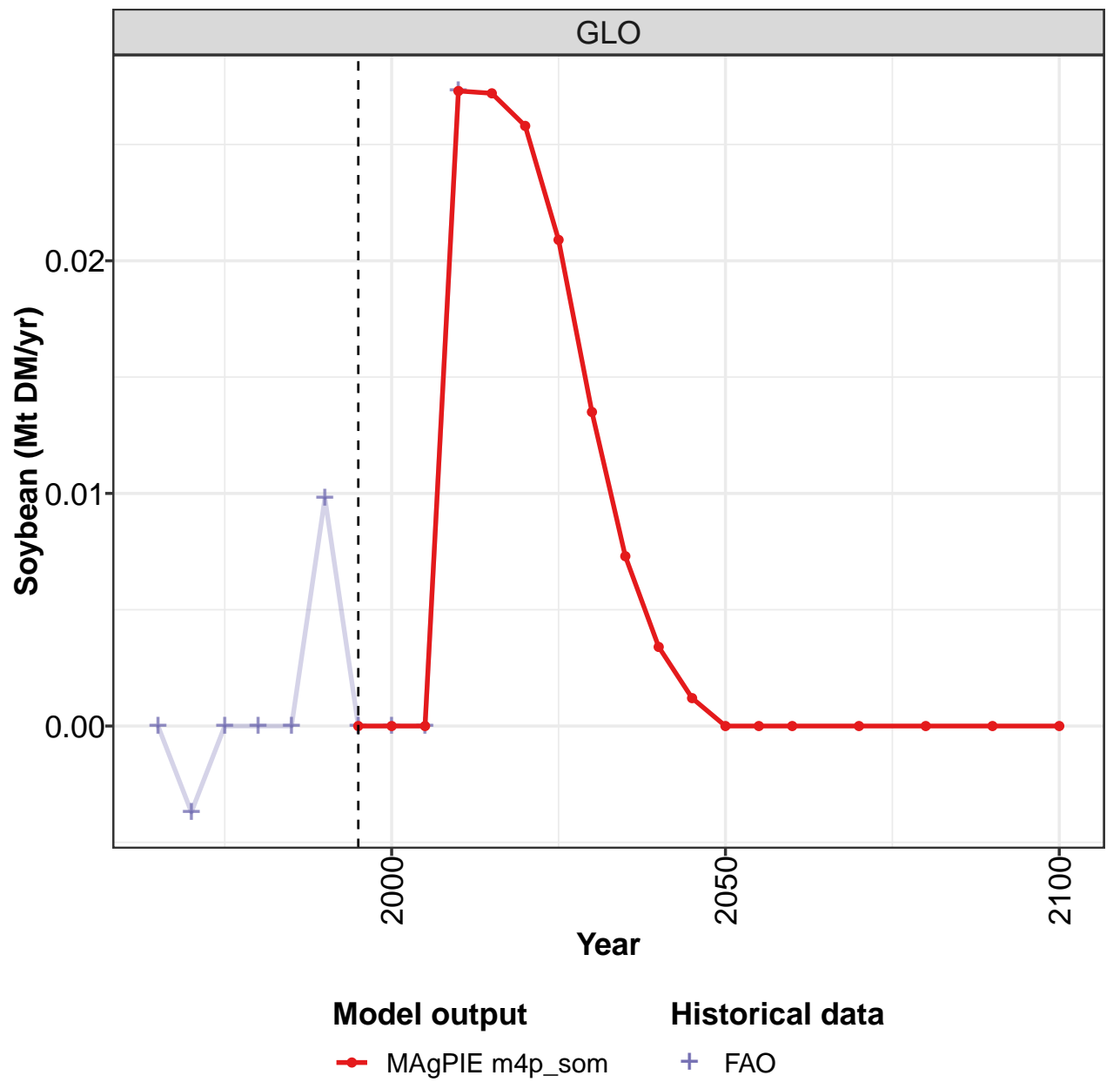
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.089	0.028	0.130	0.038	-0.034	-0.020	-0.218	-0.434	-0.651	-0.684
CAZ	-0.007	0.009	-0.008	0.000	-0.007	-0.004	-0.019	-0.013	-0.013	-0.033
CHA	-0.001	0.000	0.000	-0.000	-0.000	0.000	0.000	-0.000	-0.000	-0.002
EUR	0.063	0.009	0.116	0.040	-0.021	-0.015	-0.011	-0.005	-0.002	-0.002
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.008
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005
LAM	0.007	0.006	0.009	-0.021	-0.002	-0.005	-0.001	-0.002	-0.008	-0.026
MEA	0.000	-0.002	-0.000	-0.002	-0.000	-0.004	-0.000	-0.000	-0.001	0.004
NEU	0.017	0.006	0.006	0.001	0.003	0.005	0.000	-0.001	0.000	0.000
OAS	-0.001	-0.016	-0.005	-0.004	-0.006	-0.020	-0.027	-0.003	-0.025	-0.134
REF	0.007	0.013	0.010	0.028	0.024	0.018	-0.007	-0.011	-0.000	-0.000
SSA	0.003	0.005	0.005	0.004	0.007	0.005	-0.000	-0.006	-0.000	-0.006
USA	0.000	0.000	-0.003	-0.007	-0.030	0.000	-0.151	-0.394	-0.602	-0.483

Table 163: FAO — Demand—Domestic Balanceflow—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)



5.1.10
Oil crops—Soybean

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

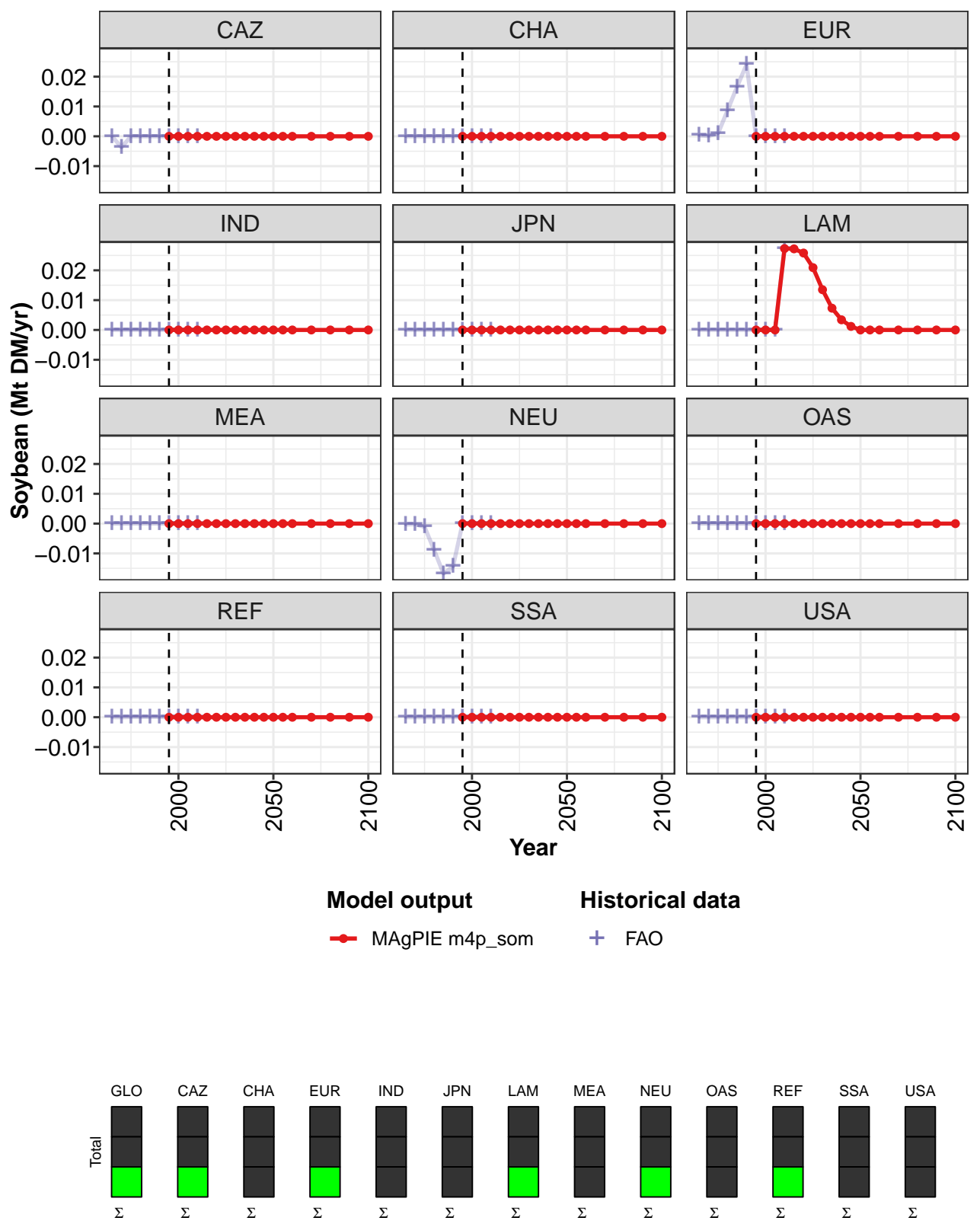


Figure 55: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Oil crops—Soybean (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.0000	0.0000	0.0000	0.0273	0.0272	0.0258	0.0209	0.0135	0.0073	0.0034	0.0012
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0273	0.0272	0.0258	0.0209	0.0135	0.0073	0.0034	0.0012
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 164: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Oil crops—Soybean (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

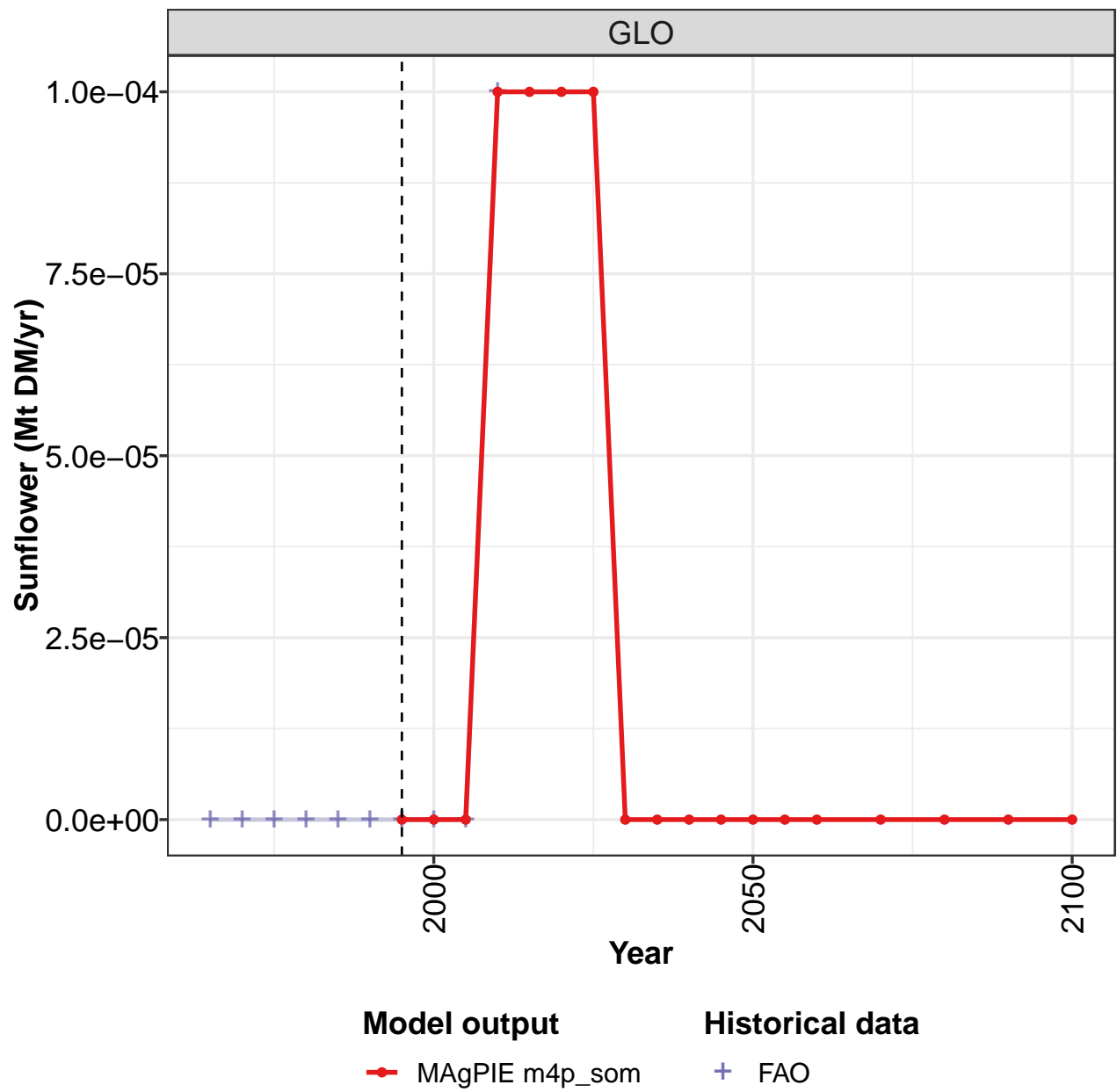
Table 165: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Oil crops—Soybean (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0000	-0.0037	0.0000	0.0000	0.0000	0.0098	0.0000	0.0000	0.0000	0.0273
CAZ	0.0000	-0.0037	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0003	0.0001	0.0010	0.0087	0.0166	0.0241	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0273
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	-0.0003	-0.0002	-0.0011	-0.0088	-0.0168	-0.0144	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 166: FAO — Demand—Domestic Balanceflow—Crops—Oil crops—Soybean (Mt DM/yr)

5.1.11
Oil crops—Sunflower

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

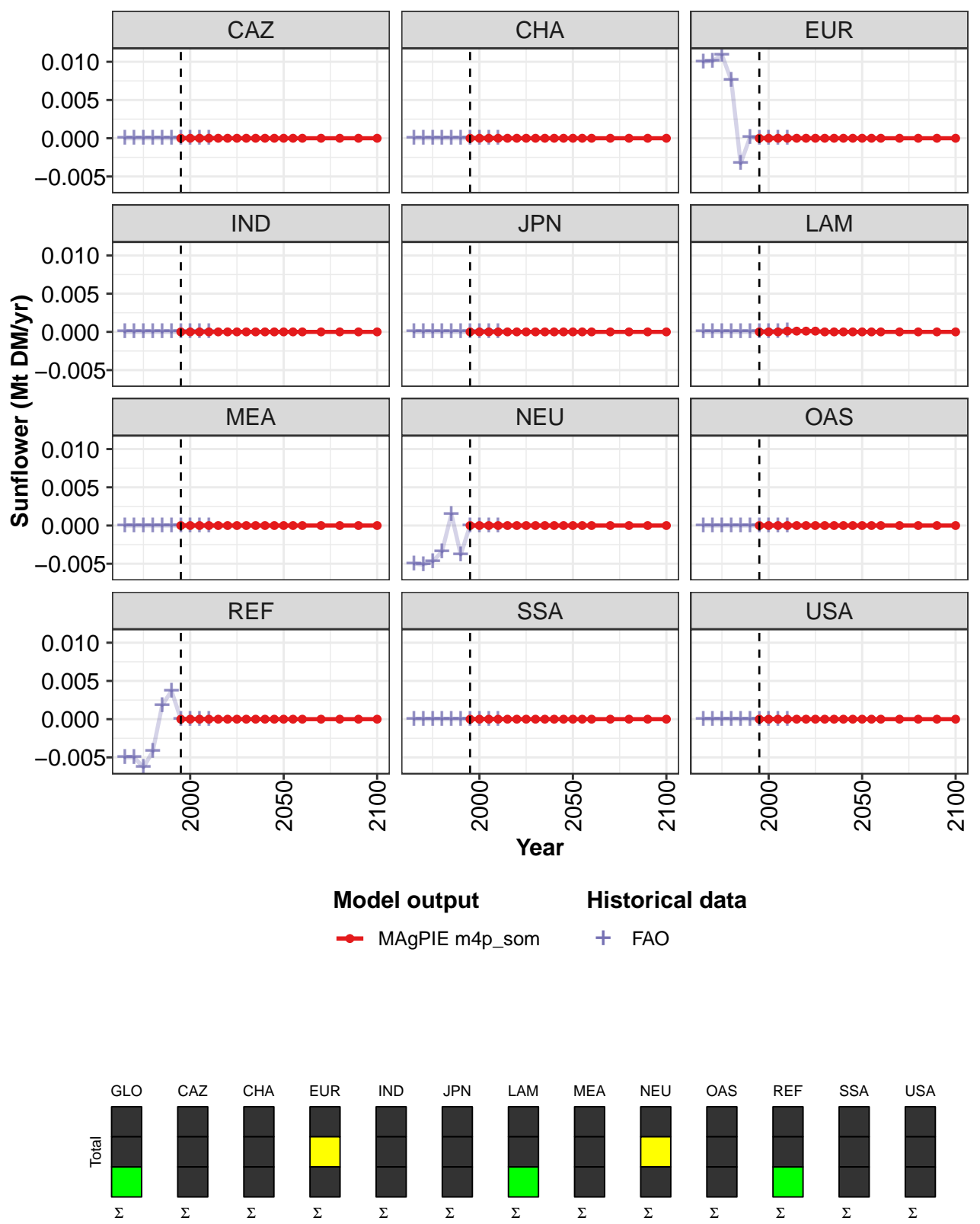


Figure 56: MAGPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Oil crops—Sunflower (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	
GLO	0.0000000	0.0000000	0.0000000	0.0001000	0.0001000	0.0001000	0.0001000	0.0000000	0.0000000	0.
CAZ	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.
CHA	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.
EUR	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.
IND	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.
JPN	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.
LAM	0.0000000	0.0000000	0.0000000	0.0001000	0.0001000	0.0001000	0.0001000	0.0000000	0.0000000	0.
MEA	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.
NEU	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.
OAS	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.
REF	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.
SSA	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.
USA	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.

Table 167: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Oil crops—Sunflower (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
CAZ	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
CHA	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
EUR	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
IND	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
JPN	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
LAM	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
MEA	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
NEU	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
OAS	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
REF	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
SSA	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
USA	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

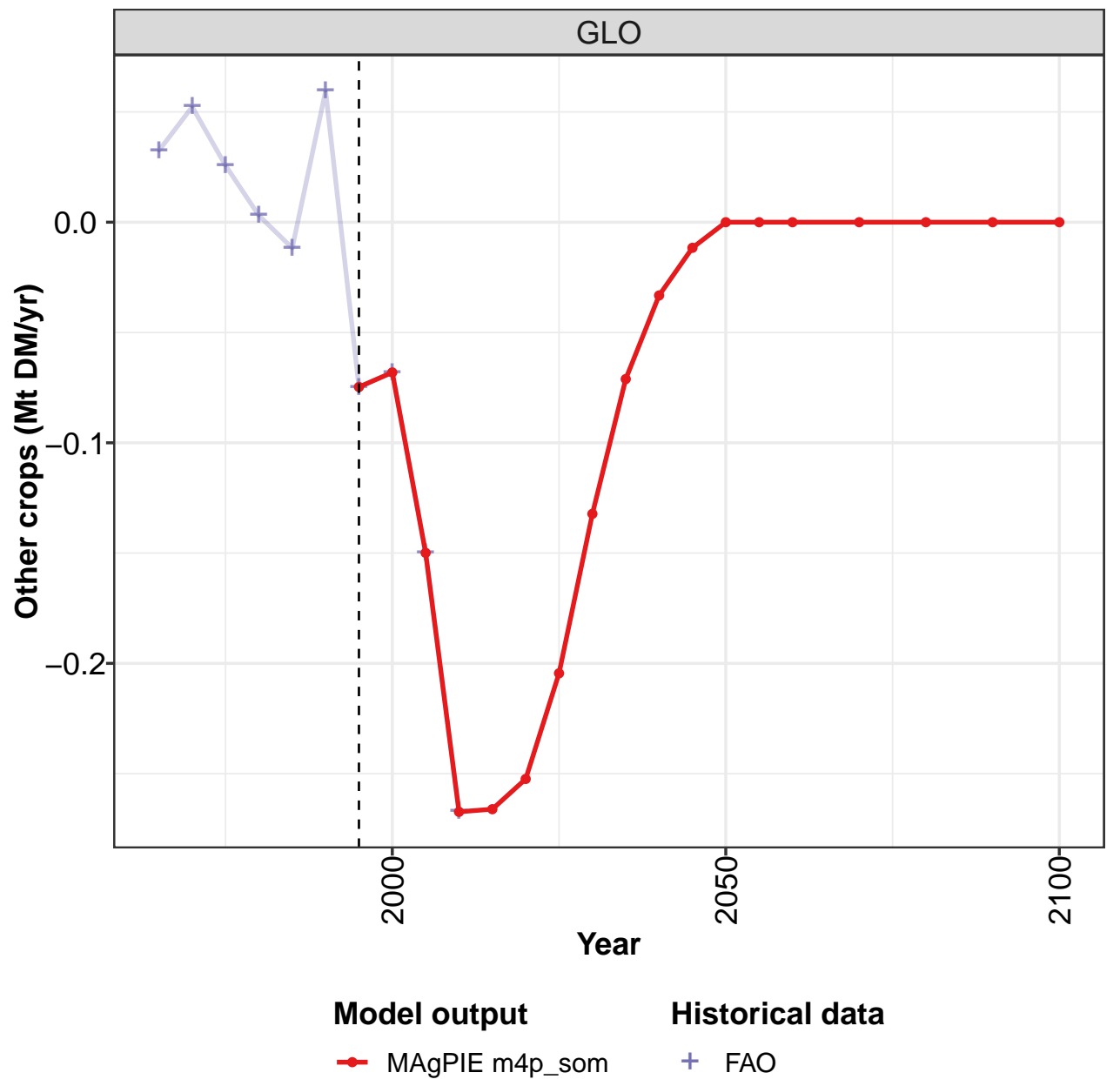
Table 168: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Oil crops—Sunflower (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0100	0.0101	0.0109	0.0076	-0.0033	0.0001	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	-0.0050	-0.0051	-0.0047	-0.0034	0.0015	-0.0038	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	-0.0050	-0.0050	-0.0063	-0.0042	0.0018	0.0037	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 169: FAO — Demand—Domestic Balanceflow—Crops—Oil crops—Sunflower (Mt DM/yr)

5.1.12
Other crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

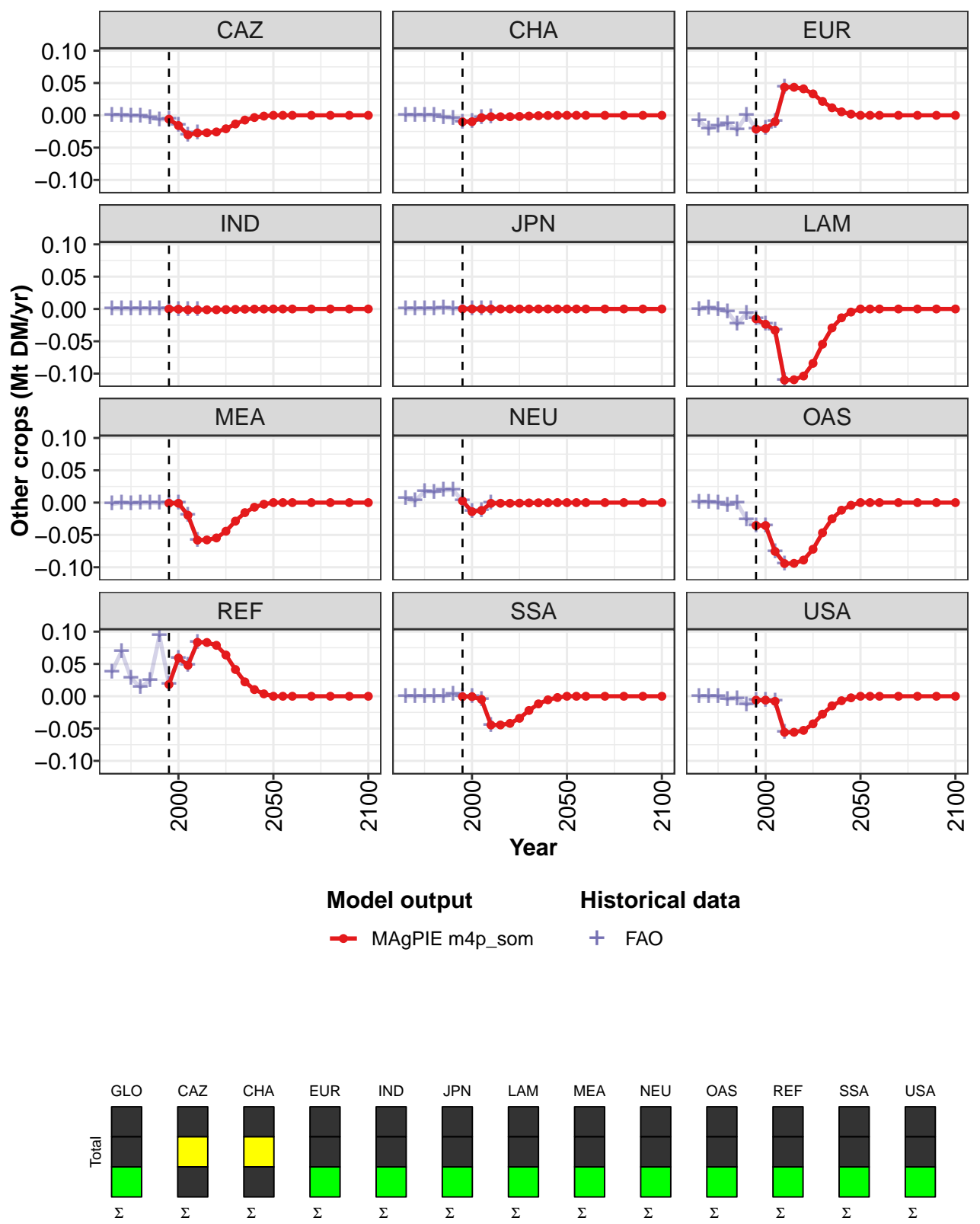


Figure 57: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Other crops (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-0.0747	-0.0681	-0.1499	-0.2673	-0.2661	-0.2524	-0.2045	-0.1322	-0.0711	-0.0332	-0.0116
CAZ	-0.0059	-0.0158	-0.0302	-0.0272	-0.0270	-0.0257	-0.0208	-0.0134	-0.0073	-0.0034	-0.0012
CHA	-0.0100	-0.0099	-0.0036	-0.0022	-0.0022	-0.0021	-0.0017	-0.0011	-0.0006	-0.0003	-0.0001
EUR	-0.0213	-0.0206	-0.0099	0.0435	0.0434	0.0410	0.0332	0.0216	0.0117	0.0054	0.0019
IND	-0.0001	-0.0003	-0.0013	-0.0012	-0.0012	-0.0012	-0.0009	-0.0006	-0.0003	-0.0002	-0.0001
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	-0.0153	-0.0236	-0.0330	-0.1100	-0.1095	-0.1038	-0.0841	-0.0545	-0.0293	-0.0137	-0.0048
MEA	-0.0009	-0.0010	-0.0195	-0.0580	-0.0577	-0.0547	-0.0443	-0.0287	-0.0155	-0.0071	-0.0025
NEU	0.0026	-0.0140	-0.0121	-0.0011	-0.0010	-0.0010	-0.0008	-0.0005	-0.0003	-0.0001	0.0000
OAS	-0.0354	-0.0355	-0.0755	-0.0943	-0.0940	-0.0889	-0.0721	-0.0467	-0.0251	-0.0117	-0.0041
REF	0.0182	0.0592	0.0479	0.0835	0.0832	0.0788	0.0638	0.0414	0.0222	0.0103	0.0037
SSA	-0.0006	-0.0006	-0.0049	-0.0445	-0.0444	-0.0420	-0.0341	-0.0220	-0.0118	-0.0055	-0.0020
USA	-0.0060	-0.0060	-0.0078	-0.0558	-0.0557	-0.0528	-0.0427	-0.0277	-0.0148	-0.0069	-0.0024

Table 170: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Other crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

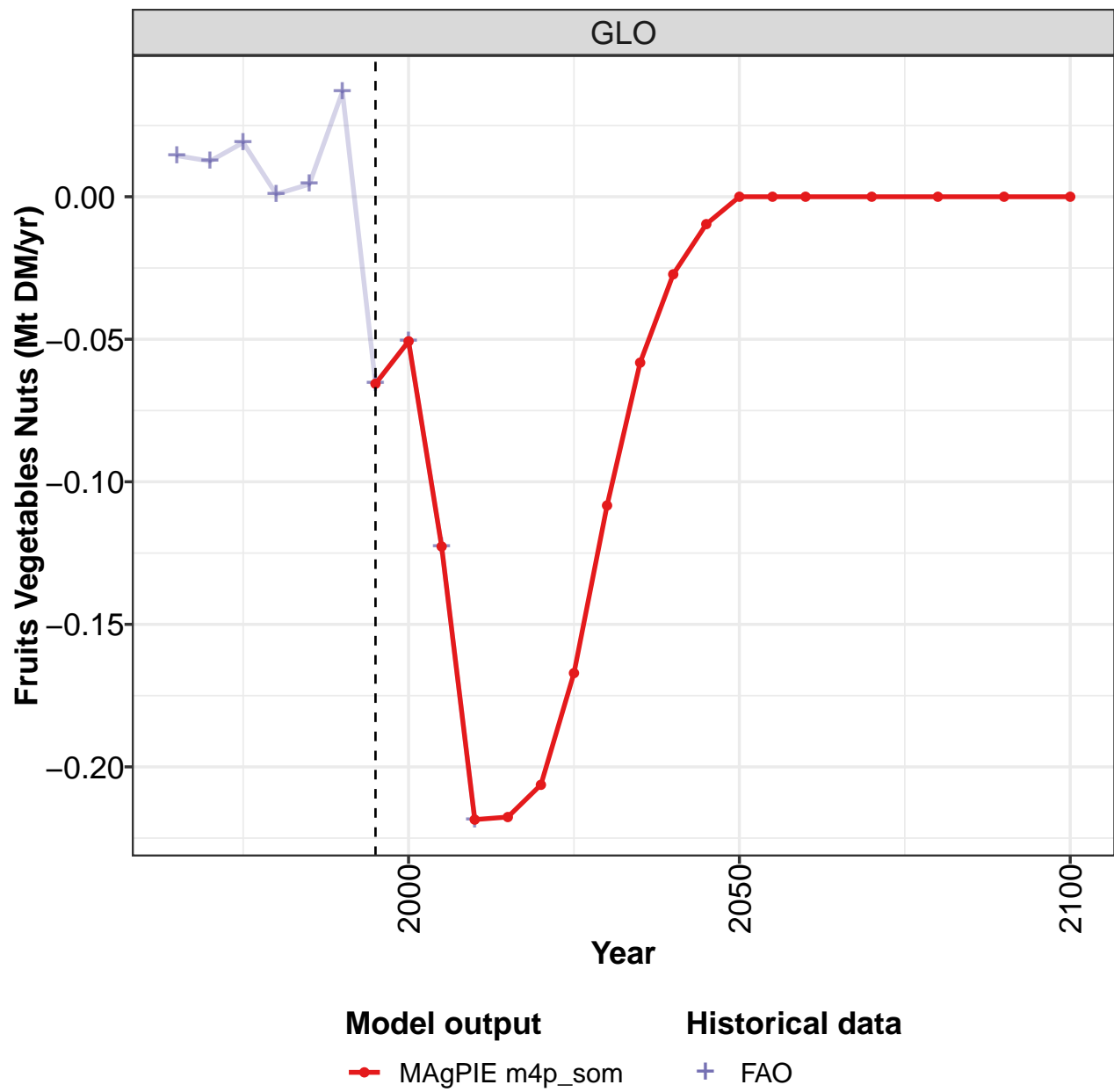
Table 171: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Other crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0324	0.0523	0.0257	0.0030	-0.0117	0.0595	-0.0748	-0.0681	-0.1500	-0.2672
CAZ	0.0000	-0.0003	-0.0008	-0.0011	-0.0037	-0.0064	-0.0060	-0.0157	-0.0303	-0.0272
CHA	0.0000	0.0000	-0.0002	-0.0001	-0.0029	-0.0042	-0.0100	-0.0099	-0.0036	-0.0022
EUR	-0.0086	-0.0206	-0.0163	-0.0130	-0.0226	0.0004	-0.0213	-0.0205	-0.0099	0.0435
IND	0.0000	0.0000	-0.0001	0.0003	0.0000	-0.0002	-0.0001	-0.0003	-0.0013	-0.0012
JPN	0.0000	0.0000	0.0004	0.0004	0.0018	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	-0.0008	0.0012	-0.0005	-0.0046	-0.0237	-0.0062	-0.0153	-0.0236	-0.0330	-0.1099
MEA	-0.0023	-0.0002	-0.0013	-0.0011	-0.0006	-0.0008	-0.0009	-0.0010	-0.0196	-0.0580
NEU	0.0064	0.0026	0.0173	0.0164	0.0189	0.0196	0.0025	-0.0140	-0.0122	-0.0010
OAS	0.0002	0.0007	-0.0002	-0.0036	-0.0002	-0.0263	-0.0355	-0.0355	-0.0754	-0.0943
REF	0.0380	0.0693	0.0281	0.0138	0.0247	0.0935	0.0182	0.0591	0.0479	0.0835
SSA	0.0000	0.0000	-0.0001	0.0001	0.0000	0.0029	-0.0005	-0.0007	-0.0049	-0.0445
USA	-0.0006	-0.0004	-0.0004	-0.0045	-0.0034	-0.0129	-0.0060	-0.0060	-0.0078	-0.0559

Table 172: FAO — Demand—Domestic Balanceflow—Crops—Other crops (Mt DM/yr)

5.1.13 Other crops—Fruits Vegetables Nuts

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

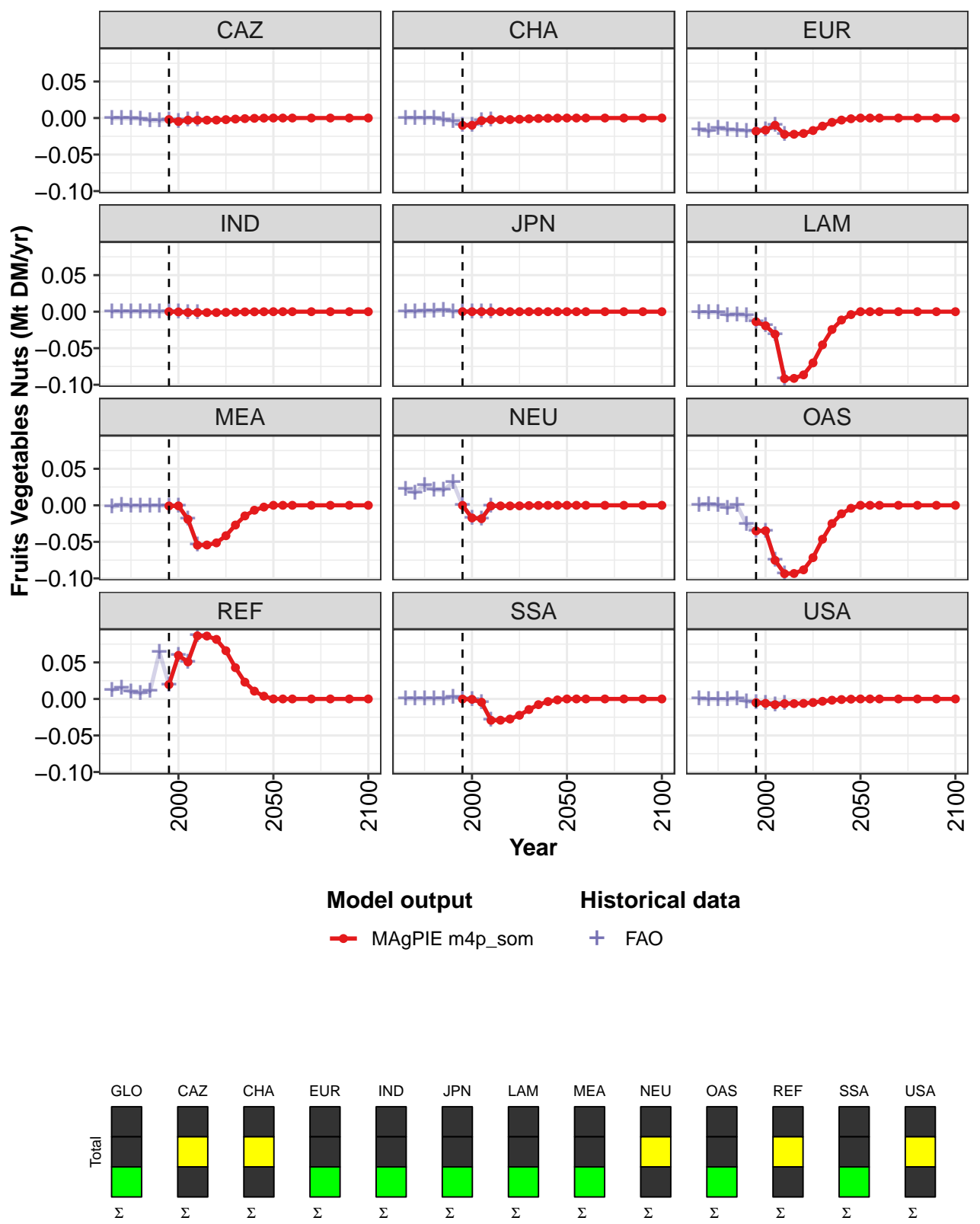


Figure 58: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-0.0656	-0.0507	-0.1227	-0.2185	-0.2176	-0.2063	-0.1671	-0.1083	-0.0582	-0.0272	-0.0096
CAZ	-0.0021	-0.0048	-0.0028	-0.0029	-0.0029	-0.0028	-0.0022	-0.0014	-0.0008	-0.0004	-0.0001
CHA	-0.0100	-0.0099	-0.0036	-0.0022	-0.0022	-0.0021	-0.0017	-0.0011	-0.0006	-0.0003	-0.0001
EUR	-0.0180	-0.0165	-0.0099	-0.0223	-0.0222	-0.0211	-0.0171	-0.0111	-0.0059	-0.0028	-0.0010
IND	-0.0001	-0.0003	-0.0011	-0.0012	-0.0012	-0.0012	-0.0009	-0.0006	-0.0003	-0.0002	-0.0001
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	-0.0137	-0.0193	-0.0309	-0.0917	-0.0913	-0.0865	-0.0701	-0.0454	-0.0244	-0.0114	-0.0040
MEA	-0.0009	-0.0008	-0.0192	-0.0545	-0.0543	-0.0514	-0.0416	-0.0270	-0.0145	-0.0067	-0.0024
NEU	-0.0001	-0.0173	-0.0183	-0.0009	-0.0008	-0.0008	-0.0007	-0.0004	-0.0002	-0.0001	0.0000
OAS	-0.0350	-0.0349	-0.0753	-0.0936	-0.0933	-0.0883	-0.0716	-0.0464	-0.0250	-0.0116	-0.0041
REF	0.0196	0.0596	0.0507	0.0864	0.0861	0.0815	0.0660	0.0428	0.0230	0.0107	0.0038
SSA	-0.0002	-0.0005	-0.0045	-0.0292	-0.0291	-0.0275	-0.0223	-0.0145	-0.0078	-0.0036	-0.0013
USA	-0.0051	-0.0060	-0.0078	-0.0064	-0.0064	-0.0061	-0.0049	-0.0032	-0.0017	-0.0008	-0.0003

Table 173: MAGPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

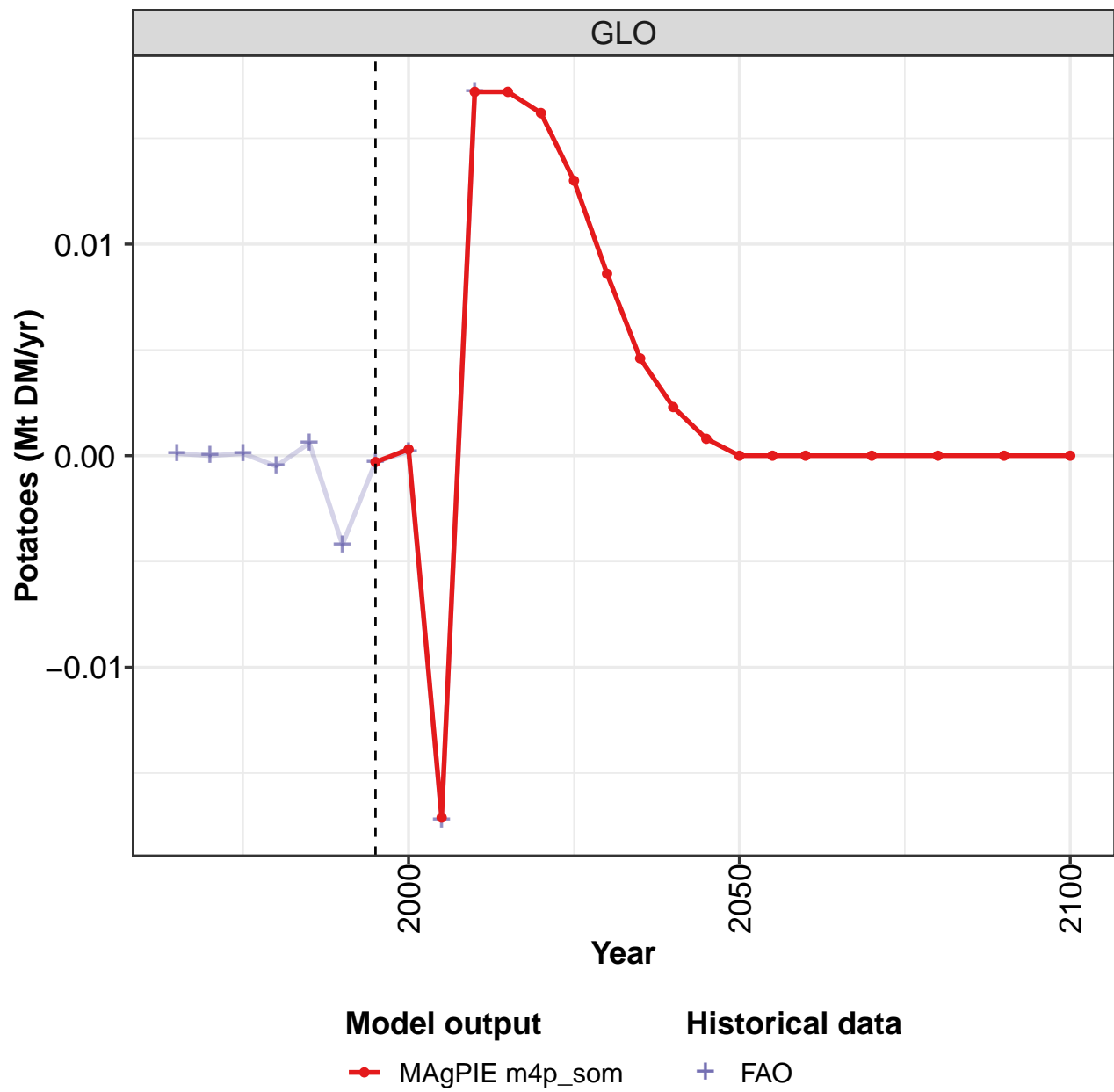
Table 174: MAGPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0144	0.0125	0.0190	0.0009	0.0044	0.0368	-0.0656	-0.0508	-0.1227	-0.2185
CAZ	-0.0006	-0.0003	-0.0008	-0.0011	-0.0036	-0.0038	-0.0021	-0.0048	-0.0028	-0.0029
CHA	0.0000	0.0000	-0.0002	-0.0001	-0.0028	-0.0042	-0.0100	-0.0099	-0.0036	-0.0022
EUR	-0.0159	-0.0182	-0.0140	-0.0164	-0.0167	-0.0178	-0.0180	-0.0165	-0.0099	-0.0223
IND	0.0000	0.0000	-0.0001	0.0000	0.0000	-0.0002	-0.0001	-0.0003	-0.0011	-0.0012
JPN	0.0000	0.0000	0.0004	0.0004	0.0018	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	-0.0009	-0.0012	-0.0009	-0.0049	-0.0043	-0.0055	-0.0137	-0.0193	-0.0309	-0.0917
MEA	-0.0023	-0.0002	-0.0014	-0.0011	-0.0006	-0.0005	-0.0009	-0.0008	-0.0192	-0.0545
NEU	0.0222	0.0170	0.0275	0.0210	0.0206	0.0313	-0.0001	-0.0173	-0.0183	-0.0009
OAS	0.0002	0.0007	-0.0002	-0.0036	-0.0002	-0.0262	-0.0350	-0.0349	-0.0753	-0.0936
REF	0.0119	0.0151	0.0093	0.0075	0.0103	0.0642	0.0196	0.0596	0.0507	0.0864
SSA	0.0000	0.0000	-0.0001	0.0001	0.0000	0.0029	-0.0002	-0.0005	-0.0045	-0.0292
USA	-0.0002	-0.0004	-0.0004	-0.0009	0.0000	-0.0035	-0.0051	-0.0060	-0.0078	-0.0064

Table 175: FAO — Demand—Domestic Balanceflow—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

5.1.14 Other crops—Potatoes

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

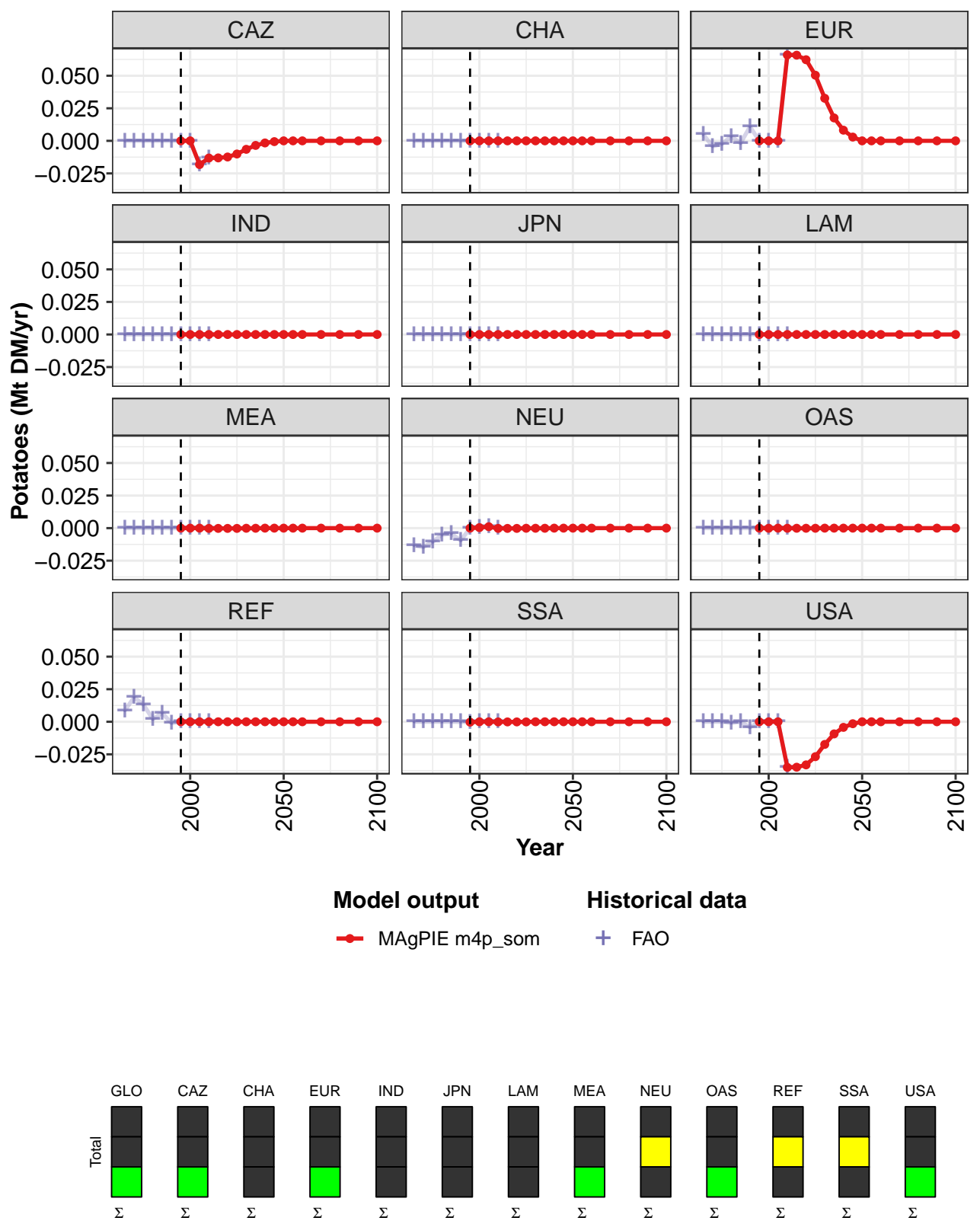


Figure 59: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Other crops—Potatoes (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-0.0003	0.0003	-0.0171	0.0172	0.0172	0.0162	0.0130	0.0086	0.0046	0.0023	0.0008
CAZ	0.0000	0.0000	-0.0182	-0.0132	-0.0131	-0.0124	-0.0101	-0.0065	-0.0035	-0.0016	-0.0006
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0660	0.0658	0.0623	0.0504	0.0327	0.0176	0.0082	0.0029
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	-0.0002	-0.0002	-0.0002	-0.0002	-0.0001	-0.0001	0.0000	0.0000
NEU	0.0000	0.0004	0.0011	-0.0002	-0.0002	-0.0002	-0.0001	-0.0001	-0.0001	0.0000	0.0000
OAS	0.0000	-0.0001	0.0000	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	-0.0003	0.0000	0.0000	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	-0.0350	-0.0349	-0.0331	-0.0268	-0.0174	-0.0093	-0.0043	-0.0015

Table 176: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Other crops—Potatoes (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

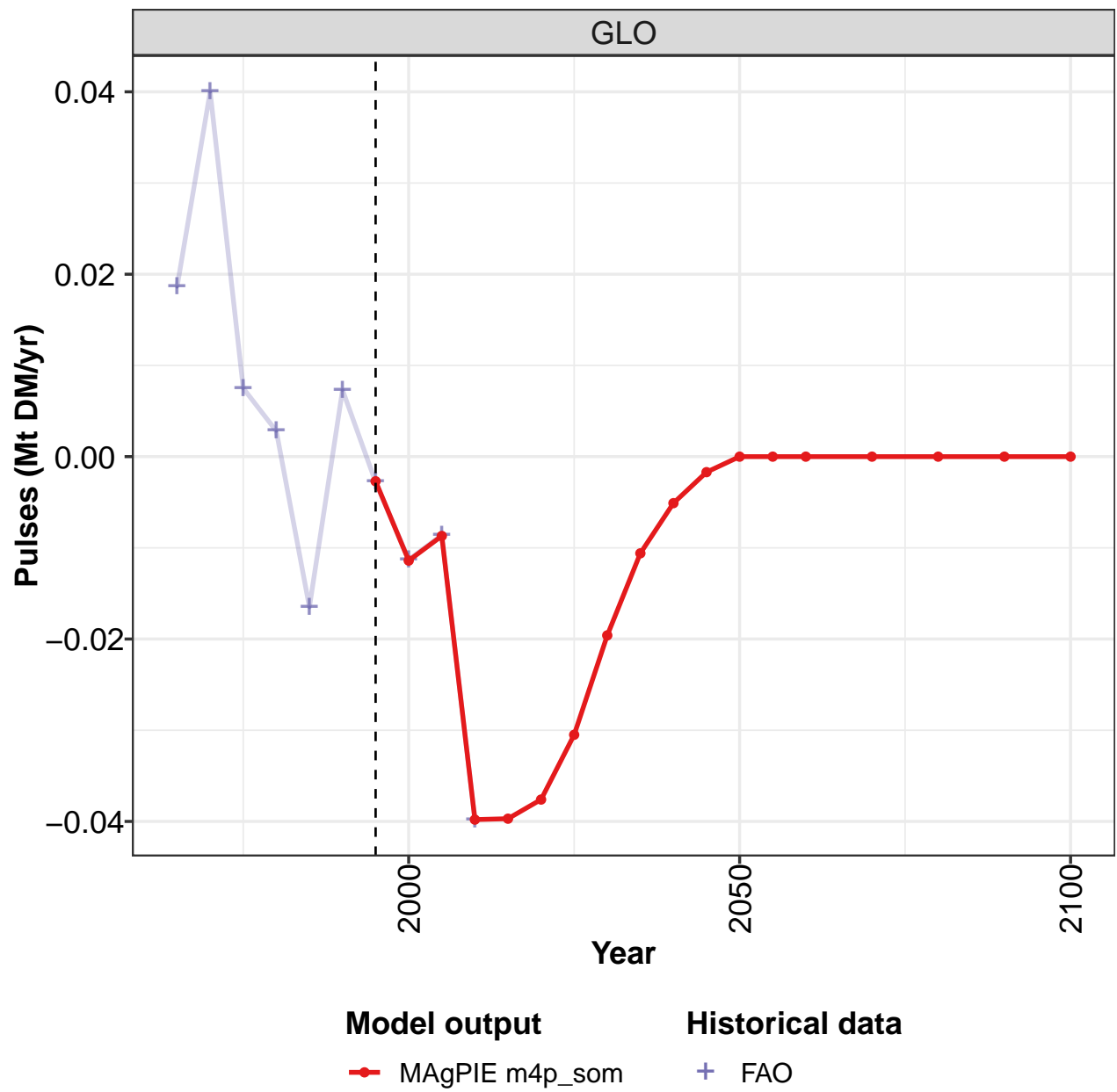
Table 177: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Other crops—Potatoes (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0001	0.0000	0.0001	-0.0005	0.0006	-0.0042	-0.0003	0.0002	-0.0172	0.0172
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0182	-0.0132
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0049	-0.0042	-0.0024	0.0034	-0.0018	0.0109	0.0000	0.0000	0.0000	0.0660
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	0.0000	0.0000	0.0000	-0.0002
NEU	-0.0133	-0.0146	-0.0106	-0.0050	-0.0043	-0.0095	0.0000	0.0004	0.0011	-0.0002
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	0.0000	-0.0001
REF	0.0085	0.0188	0.0131	0.0020	0.0068	-0.0011	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0003	0.0000	0.0000	-0.0001
USA	0.0000	0.0000	0.0000	-0.0009	0.0000	-0.0043	0.0000	0.0000	0.0000	-0.0350

Table 178: FAO — Demand—Domestic Balanceflow—Crops—Other crops—Potatoes (Mt DM/yr)

5.1.15
Other crops—Pulses

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

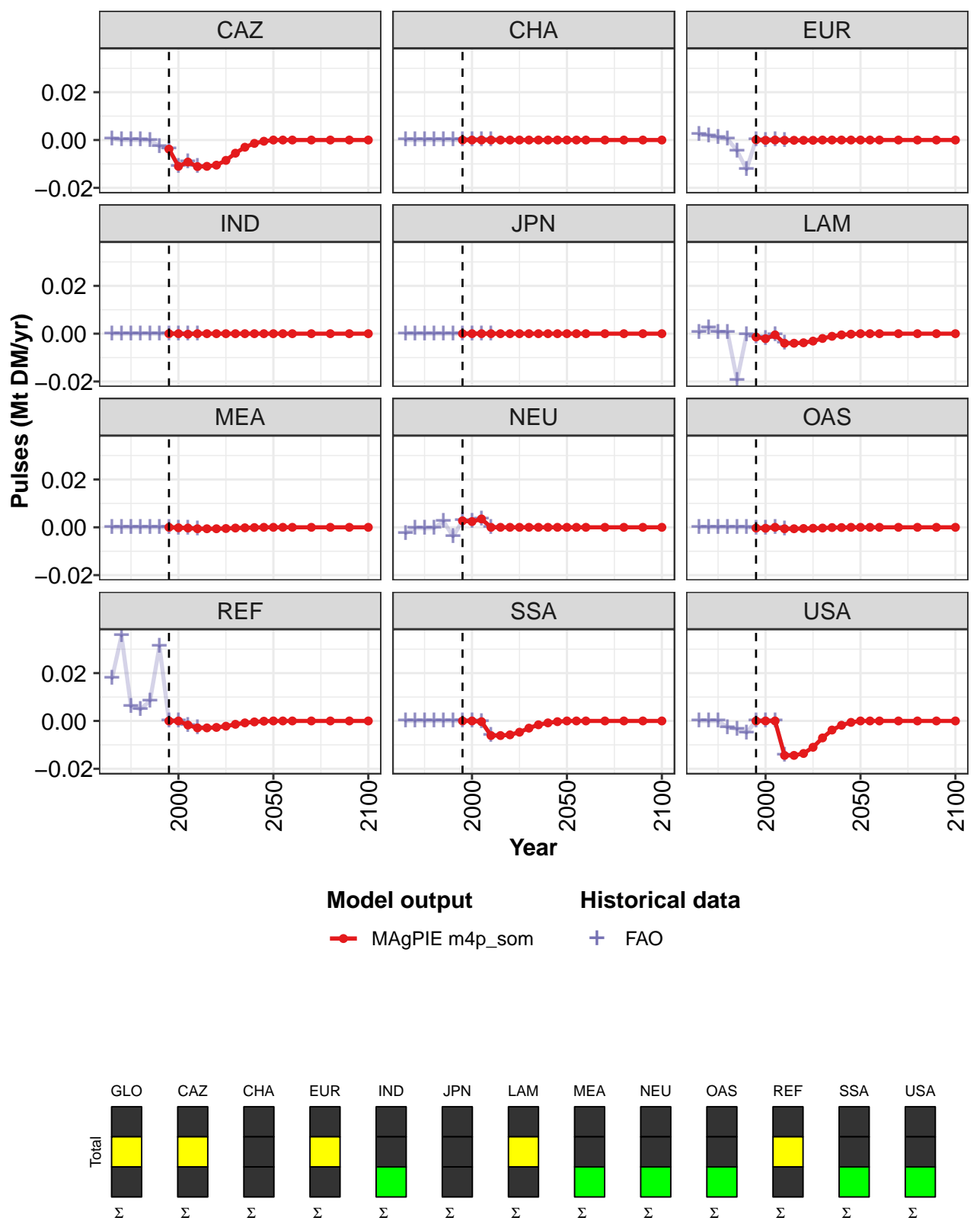


Figure 60: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Other crops—Pulses (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-0.00270	-0.01140	-0.00870	-0.03980	-0.03970	-0.03760	-0.03050	-0.01960	-0.01060	-0.00510	-0.00000
CAZ	-0.00380	-0.01100	-0.00920	-0.01110	-0.01100	-0.01050	-0.00850	-0.00550	-0.00300	-0.00140	-0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00010	-0.00010	0.00000	-0.00010	-0.00010	-0.00010	-0.00010	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	-0.00020	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	-0.00140	-0.00210	-0.00050	-0.00400	-0.00400	-0.00380	-0.00310	-0.00200	-0.00110	-0.00050	-0.00000
MEA	0.00000	-0.00020	-0.00030	-0.00060	-0.00060	-0.00060	-0.00050	-0.00030	-0.00020	-0.00010	0.00000
NEU	0.00270	0.00240	0.00350	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	-0.00030	-0.00040	0.00000	-0.00060	-0.00060	-0.00050	-0.00040	-0.00030	-0.00010	-0.00010	0.00000
REF	0.00000	0.00000	-0.00170	-0.00290	-0.00290	-0.00270	-0.00220	-0.00140	-0.00080	-0.00040	-0.00000
SSA	0.00000	0.00000	-0.00030	-0.00610	-0.00610	-0.00580	-0.00470	-0.00300	-0.00160	-0.00080	-0.00000
USA	0.00000	0.00000	0.00000	-0.01440	-0.01440	-0.01360	-0.01100	-0.00710	-0.00380	-0.00180	-0.00000

Table 179: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Other crops—Pulses (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

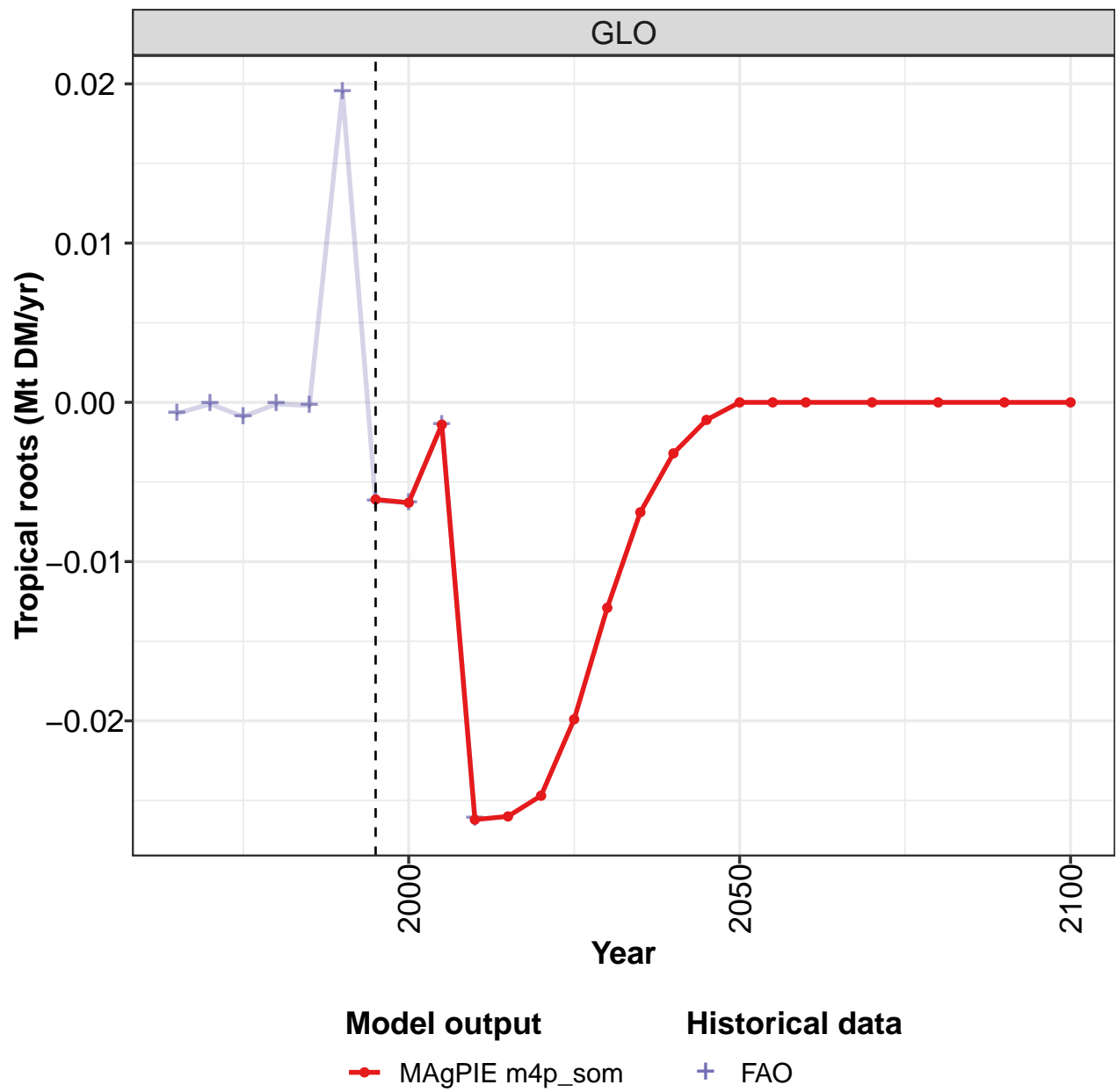
Table 180: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Other crops—Pulses (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0186	0.0400	0.0075	0.0028	-0.0165	0.0073	-0.0028	-0.0113	-0.0086	-0.0398
CAZ	0.0006	0.0000	0.0000	0.0000	-0.0001	-0.0026	-0.0038	-0.0110	-0.0092	-0.0111
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0023	0.0019	0.0010	0.0004	-0.0045	-0.0123	0.0001	-0.0001	0.0000	-0.0001
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0002	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0005	0.0026	0.0007	0.0005	-0.0194	-0.0003	-0.0014	-0.0021	-0.0005	-0.0040
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0002	-0.0003	-0.0006
NEU	-0.0025	-0.0002	-0.0004	-0.0003	0.0025	-0.0038	0.0027	0.0024	0.0035	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0003	-0.0004	0.0000	-0.0006
REF	0.0178	0.0356	0.0061	0.0049	0.0084	0.0312	0.0000	0.0000	-0.0017	-0.0029
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0003	-0.0061
USA	0.0000	0.0000	0.0000	-0.0027	-0.0034	-0.0049	0.0000	0.0000	0.0000	-0.0144

Table 181: FAO — Demand—Domestic Balanceflow—Crops—Other crops—Pulses (Mt DM/yr)

5.1.16
Other crops—Tropical roots

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

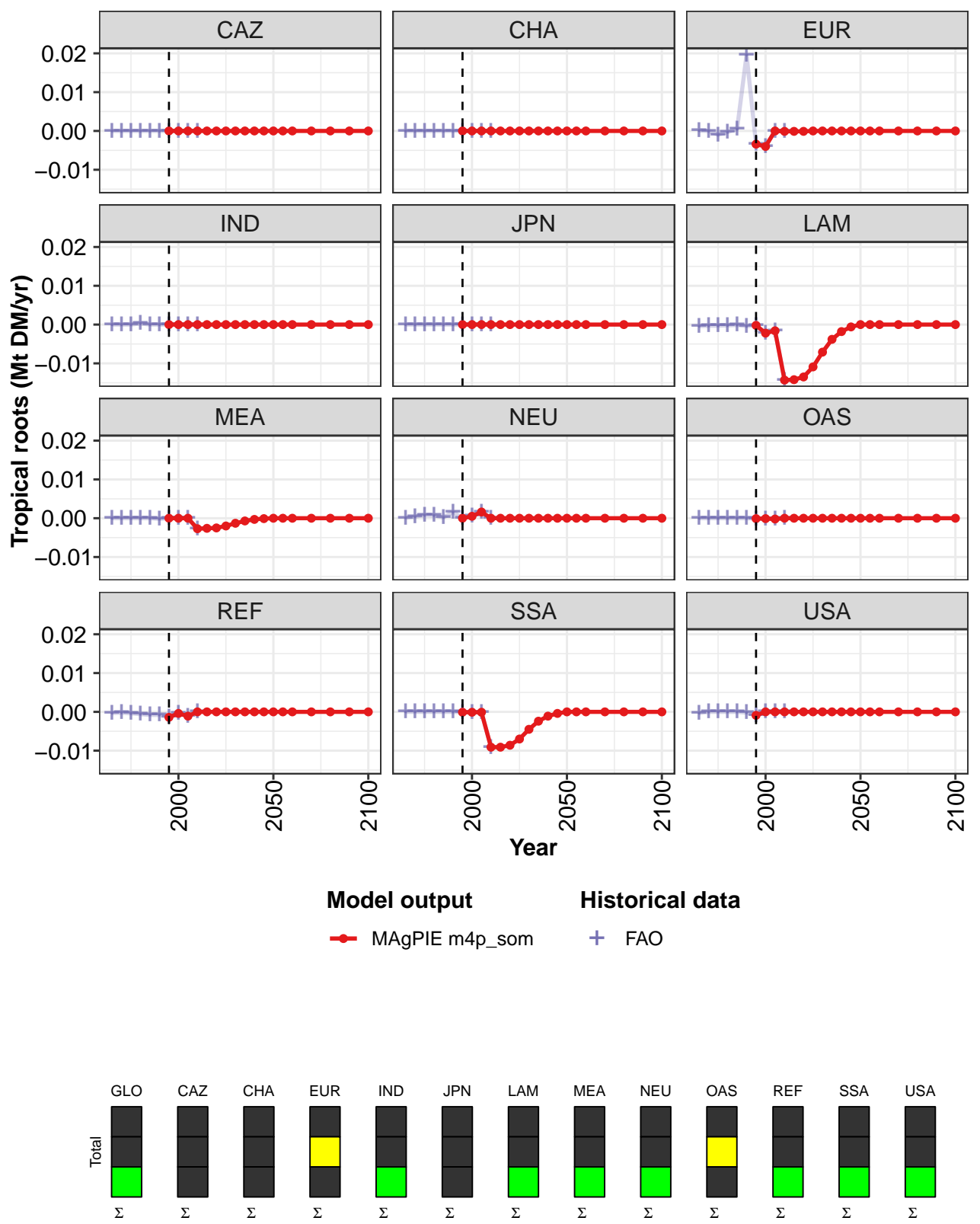


Figure 61: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Other crops—Tropical roots (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-0.00610	-0.00630	-0.00140	-0.02620	-0.02600	-0.02470	-0.01990	-0.01290	-0.00690	-0.00320	-0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	-0.00340	-0.00400	0.00000	-0.00010	-0.00010	-0.00010	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	-0.00020	-0.00220	-0.00160	-0.01430	-0.01420	-0.01350	-0.01090	-0.00710	-0.00380	-0.00180	-0.00000
MEA	0.00000	0.00000	0.00000	-0.00270	-0.00260	-0.00250	-0.00200	-0.00130	-0.00070	-0.00030	-0.00000
NEU	0.00000	0.00050	0.00160	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	-0.00010	-0.00010	-0.00020	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	-0.00140	-0.00040	-0.00110	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	-0.00010	-0.00010	-0.00010	-0.00910	-0.00910	-0.00860	-0.00700	-0.00450	-0.00240	-0.00110	-0.00000
USA	-0.00090	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 182: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

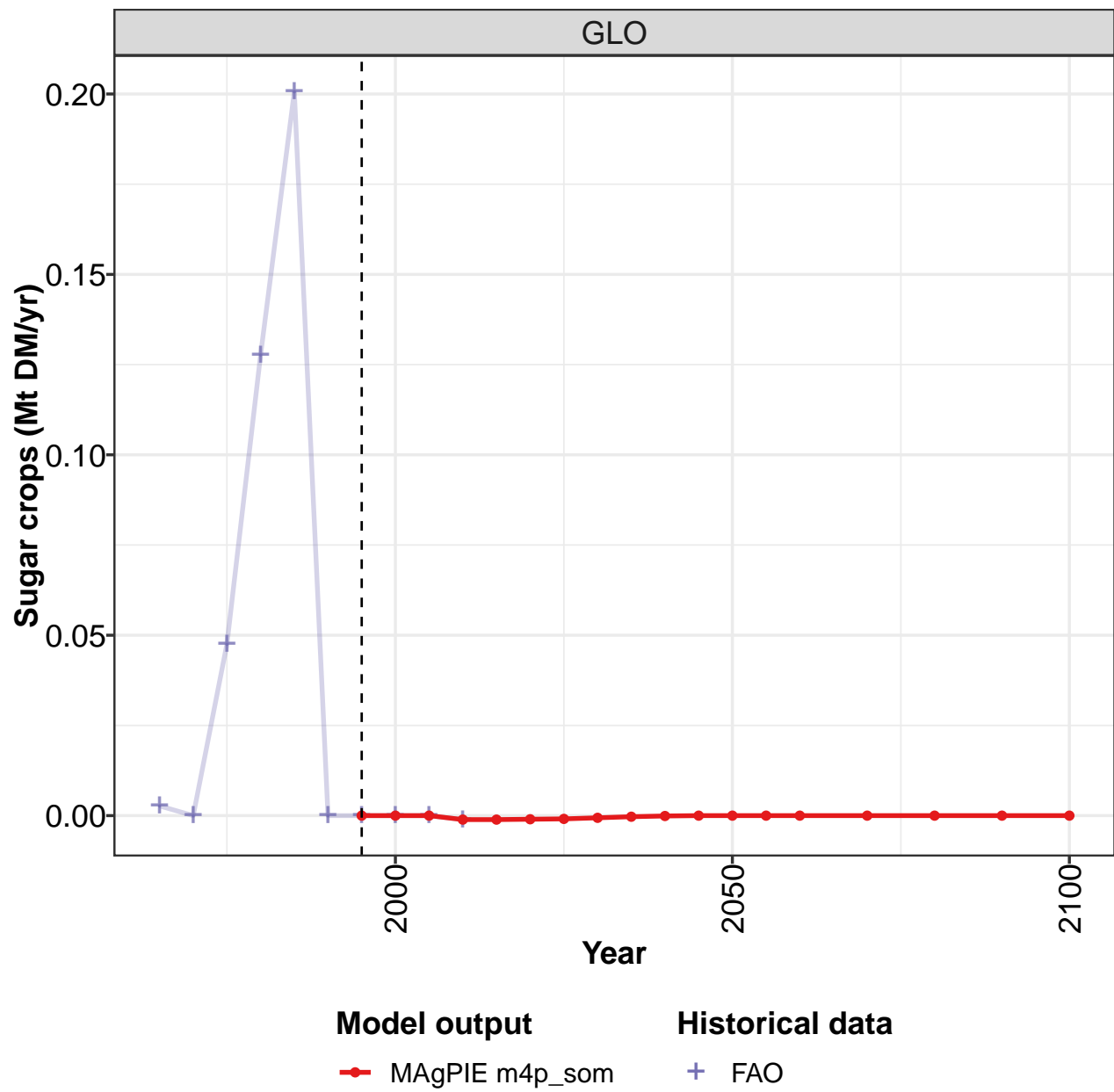
Table 183: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-0.0007	-0.0001	-0.0009	-0.0001	-0.0002	0.0195	-0.0062	-0.0063	-0.0014	-0.0261
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0001	0.0000	-0.0010	-0.0003	0.0005	0.0196	-0.0034	-0.0040	0.0000	-0.0001
IND	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	-0.0004	-0.0003	-0.0003	-0.0002	-0.0001	-0.0004	-0.0002	-0.0022	-0.0016	-0.0143
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0002	0.0000	0.0000	0.0000	-0.0027
NEU	0.0001	0.0004	0.0008	0.0007	0.0002	0.0016	0.0000	0.0005	0.0016	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0001	-0.0002	0.0000
REF	-0.0003	-0.0002	-0.0004	-0.0006	-0.0008	-0.0008	-0.0014	-0.0004	-0.0011	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0001	-0.0001	-0.0091
USA	-0.0003	0.0000	0.0000	0.0000	0.0000	-0.0002	-0.0009	0.0000	0.0000	0.0000

Table 184: FAO — Demand—Domestic Balanceflow—Crops—Other crops—Tropical roots (Mt DM/yr)

5.1.17 Sugar crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

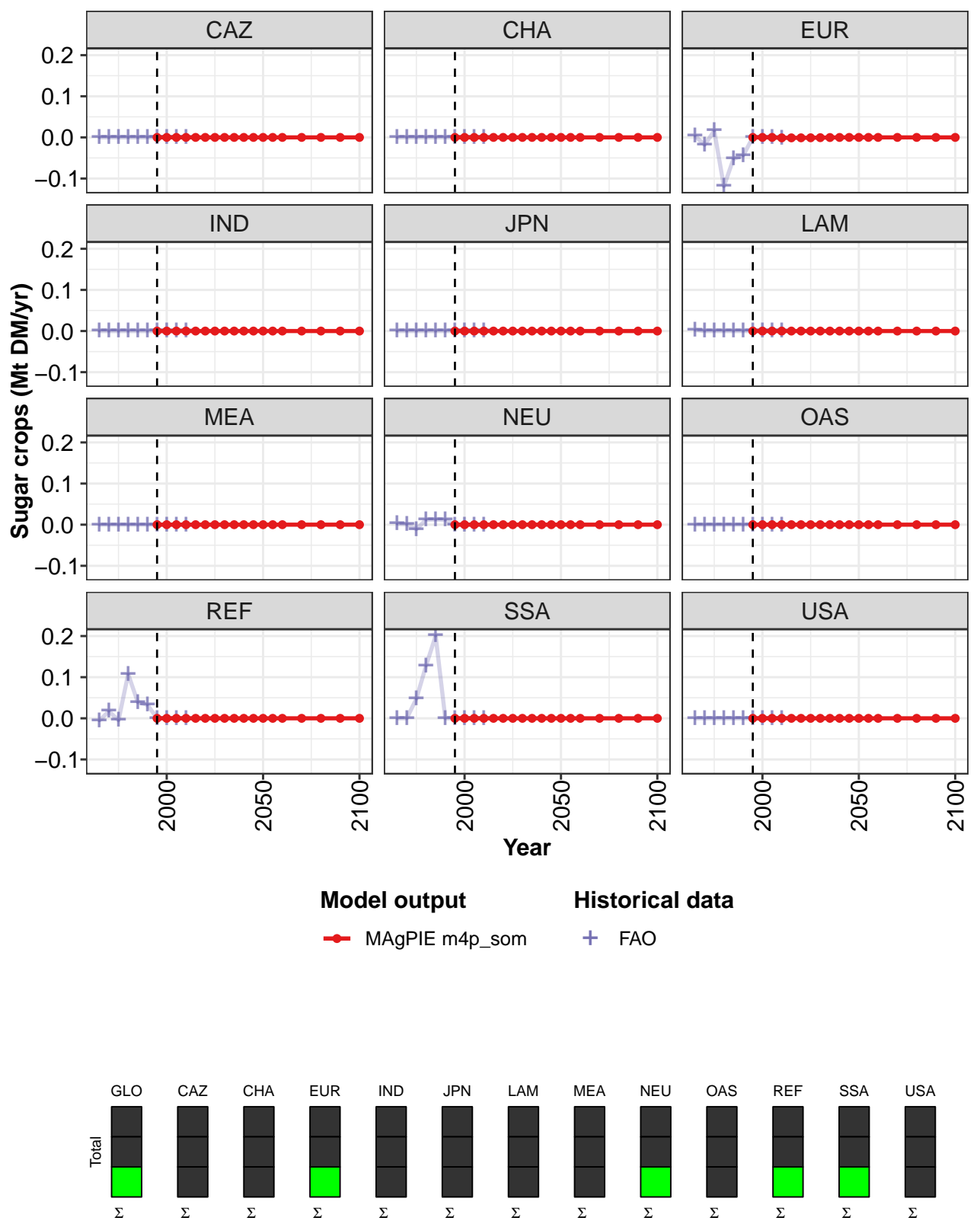


Figure 62: MAGPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Sugar crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	0	0	-0	-0	-0	-0	-0	-0	-0	0
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	0	0	0	-0	-0	-0	-0	-0	-0	-0	0
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	0	0	0	0	0	0	0	0	0	0	0
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0

Table 185: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Sugar crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0	0	0	0	0	0	0
CAZ	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0
LAM	0	0	0	0	0	0	0
MEA	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0
OAS	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0

Table 186: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Sugar crops (Mt DM/yr) [PART 2/2]

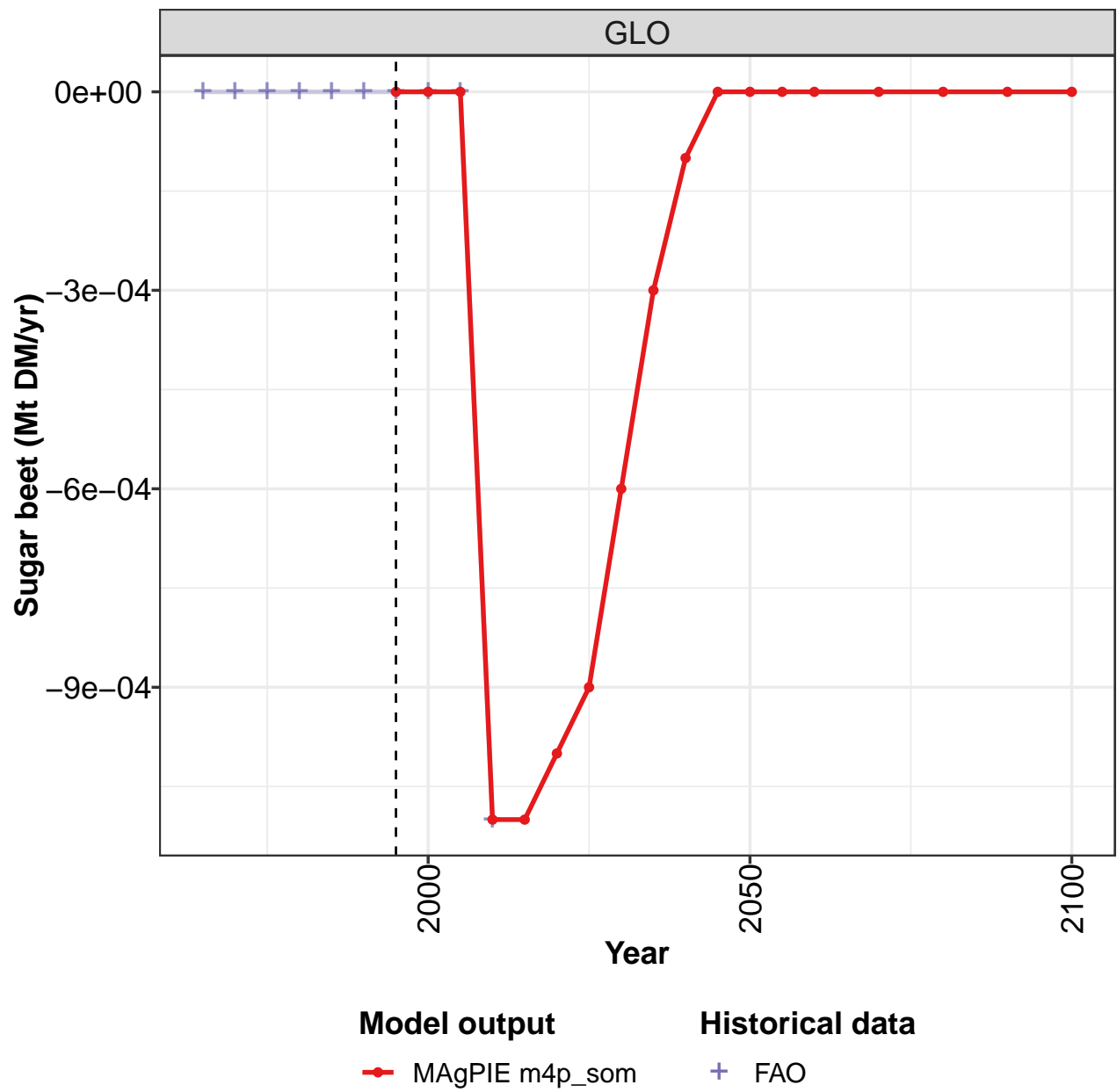
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.003	0.000	0.048	0.128	0.201	0.000	0.000	0.000	0.000	-0.001
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.004	-0.018	0.016	-0.119	-0.052	-0.044	0.000	0.000	0.000	-0.001
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.002	0.001	-0.011	0.012	0.013	0.011	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	-0.006	0.017	-0.005	0.107	0.039	0.033	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.048	0.128	0.201	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 187: FAO — Demand—Domestic Balanceflow—Crops—Sugar crops (Mt DM/yr)



5.1.18
Sugar crops—Sugar beet

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

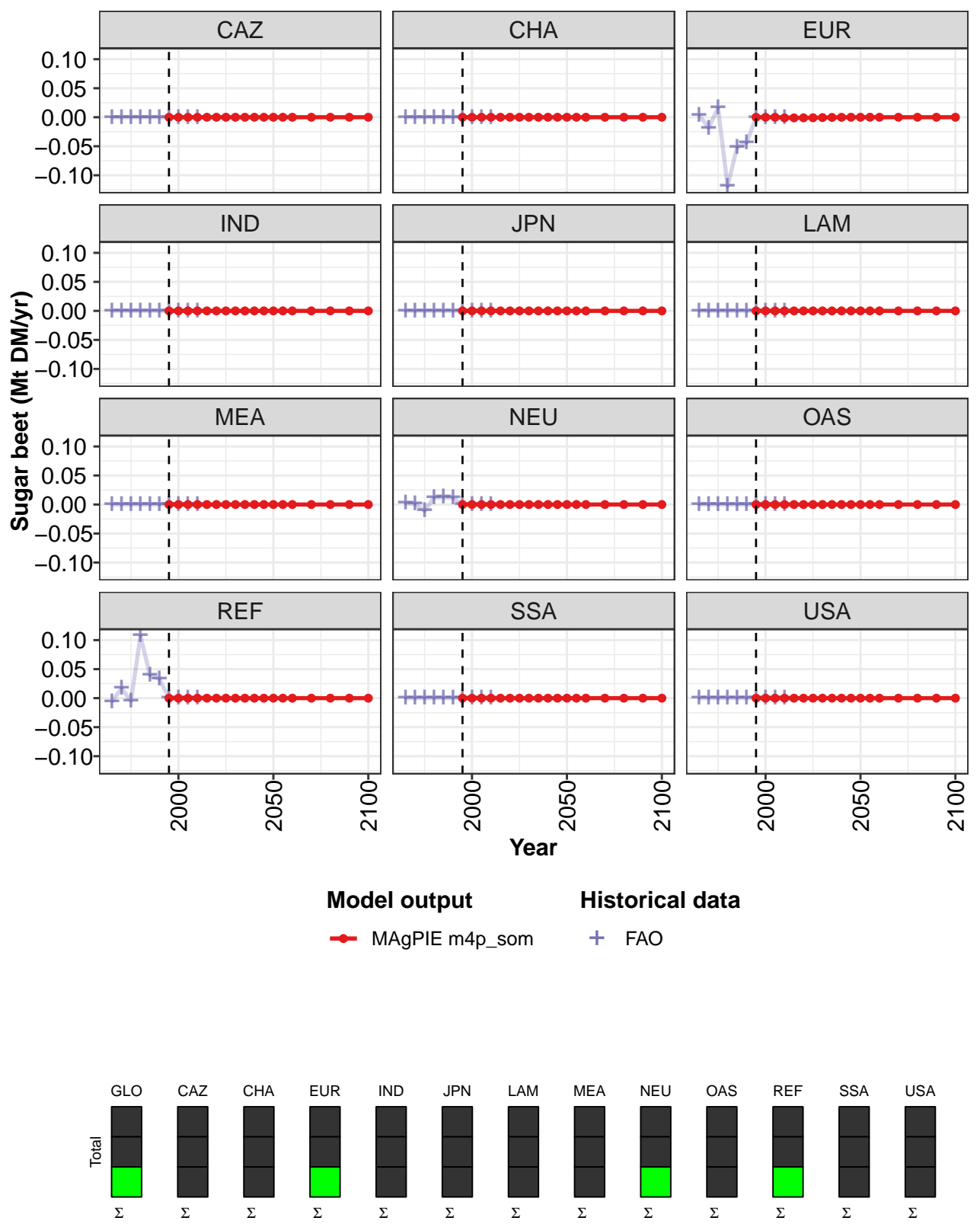


Figure 63: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Sugar crops—Sugar beet (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	0	0	-0	-0	-0	-0	-0	-0	-0	0
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	0	0	0	-0	-0	-0	-0	-0	-0	-0	0
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	0	0	0	0	0	0	0	0	0	0	0
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0

Table 188: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0	0	0	0	0	0	0
CAZ	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0
LAM	0	0	0	0	0	0	0
MEA	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0
OAS	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0

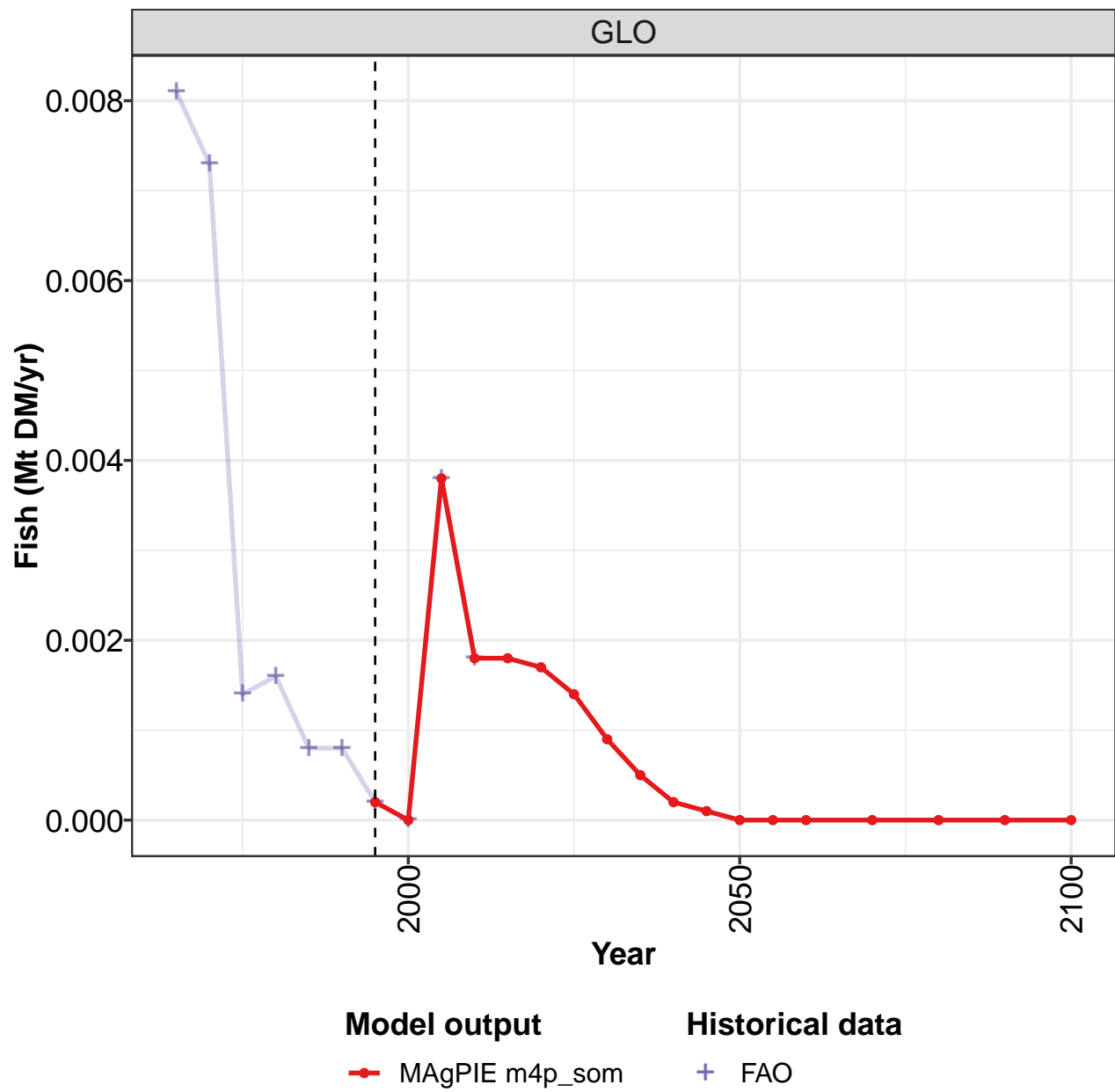
Table 189: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.001
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.004	-0.018	0.016	-0.119	-0.052	-0.044	0.000	0.000	0.000	-0.001
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.002	0.001	-0.011	0.012	0.013	0.011	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	-0.006	0.017	-0.005	0.107	0.039	0.033	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 190: FAO — Demand—Domestic Balanceflow—Crops—Sugar crops—Sugar beet (Mt DM/yr)

5.2 Fish

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

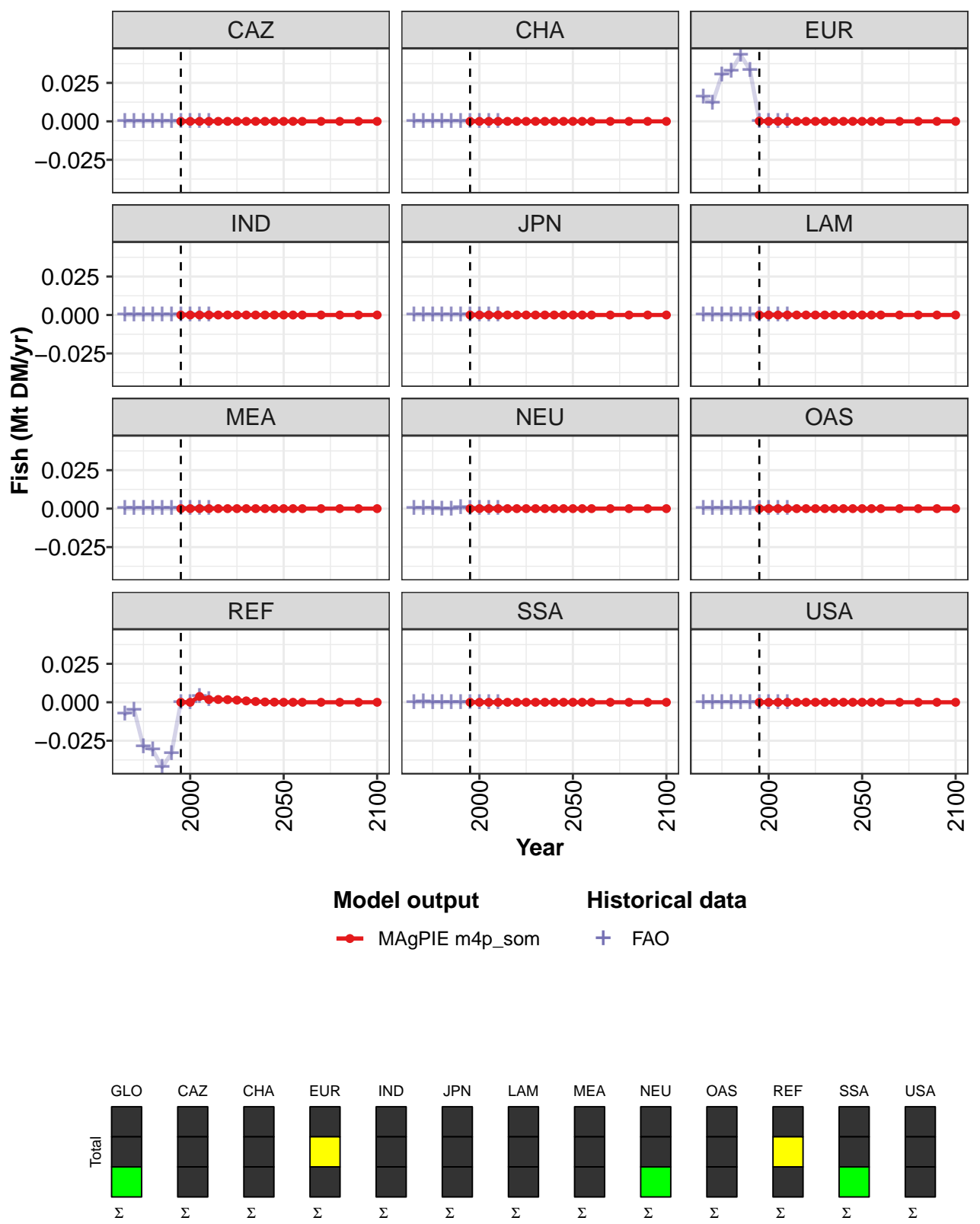


Figure 64: MAGPIE m4p\_som — Demand—Domestic Balanceflow—Fish (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.00020	0.00000	0.00380	0.00180	0.00180	0.00170	0.00140	0.00090	0.00050	0.00020	0.00010
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00020	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00380	0.00180	0.00180	0.00170	0.00140	0.00090	0.00050	0.00020	0.00010
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

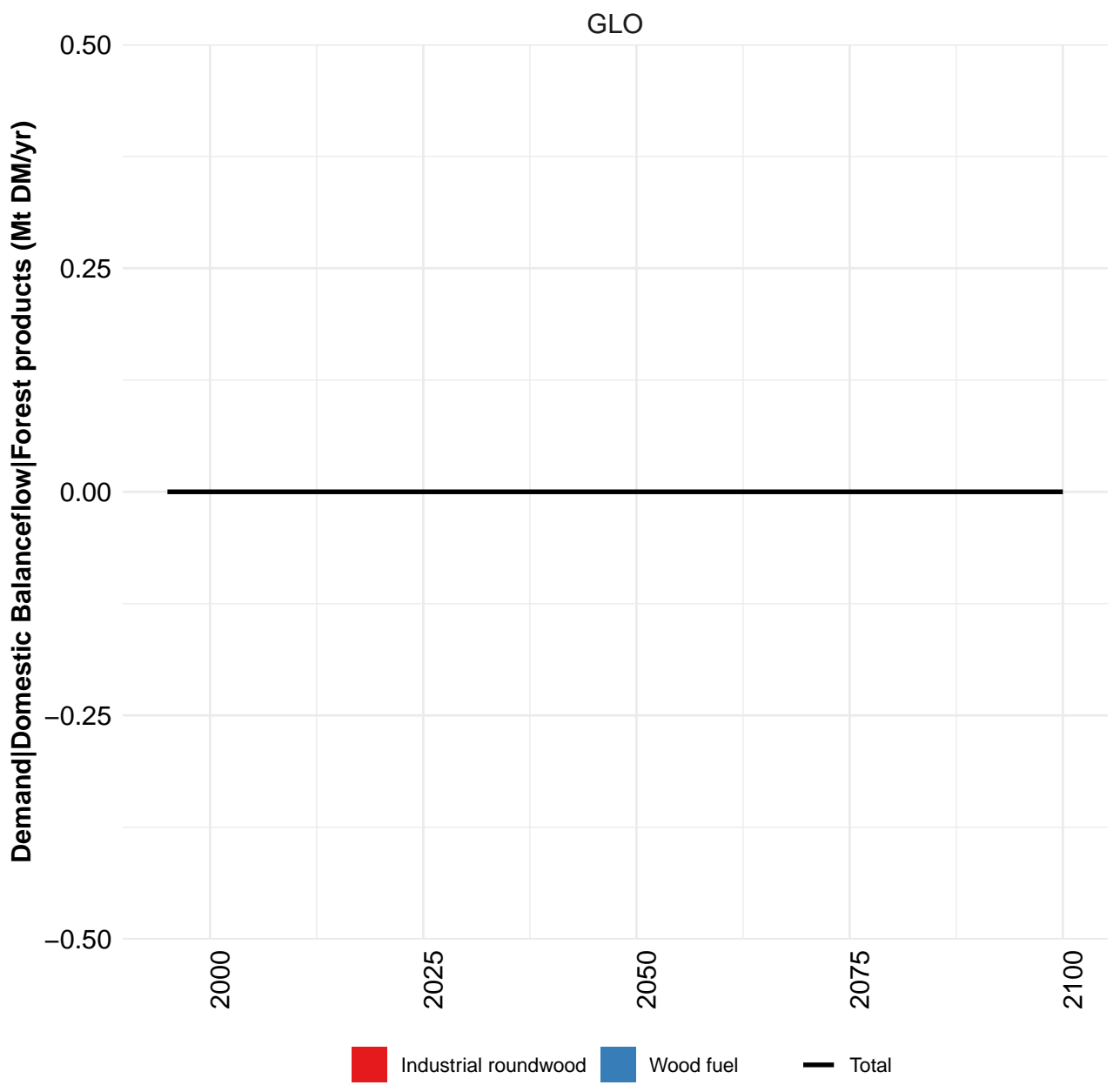
Table 191: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Fish (Mt DM/yr) [PART 1/2]

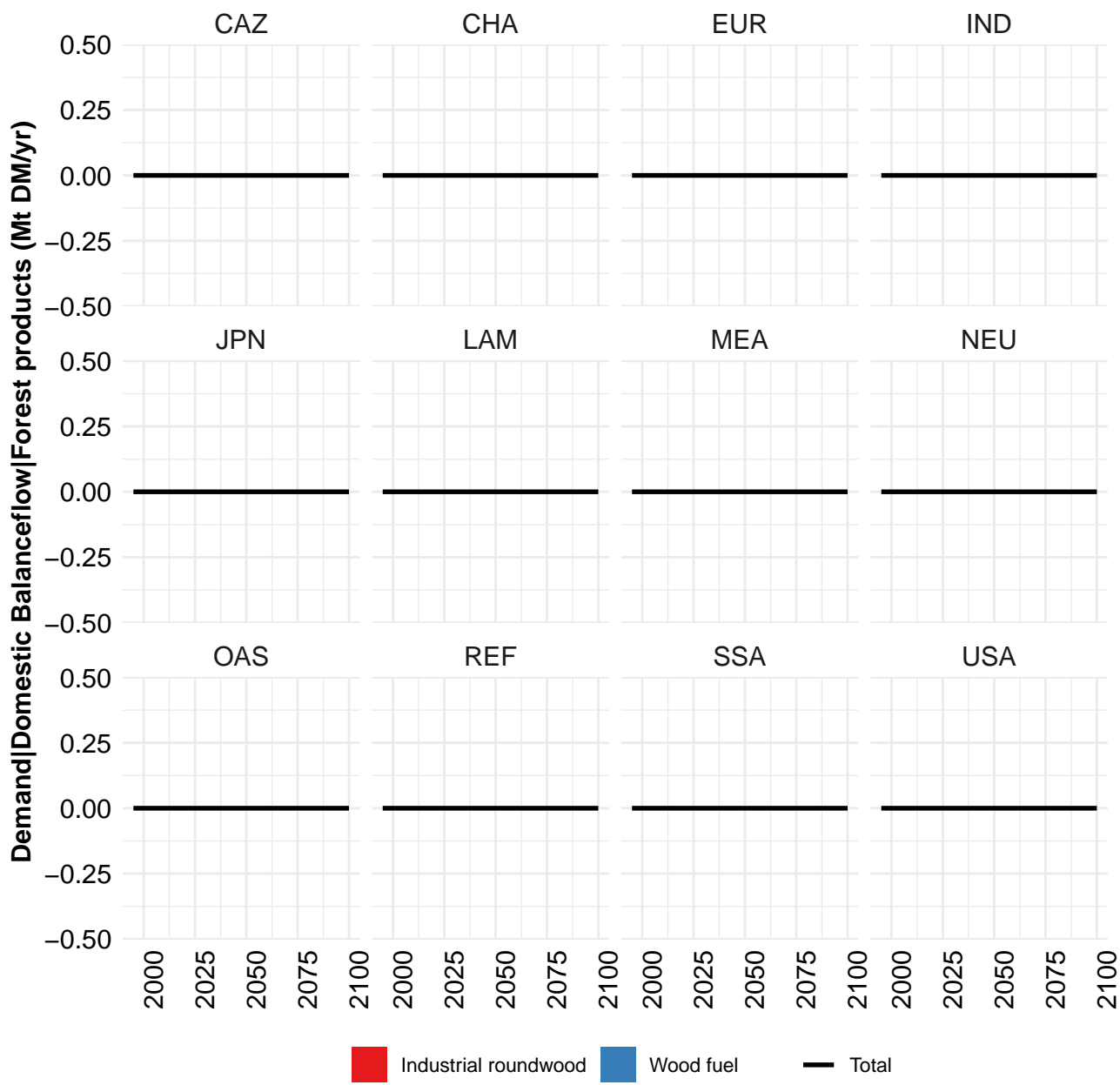
	2050	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 192: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Fish (Mt DM/yr) [PART 2/2]

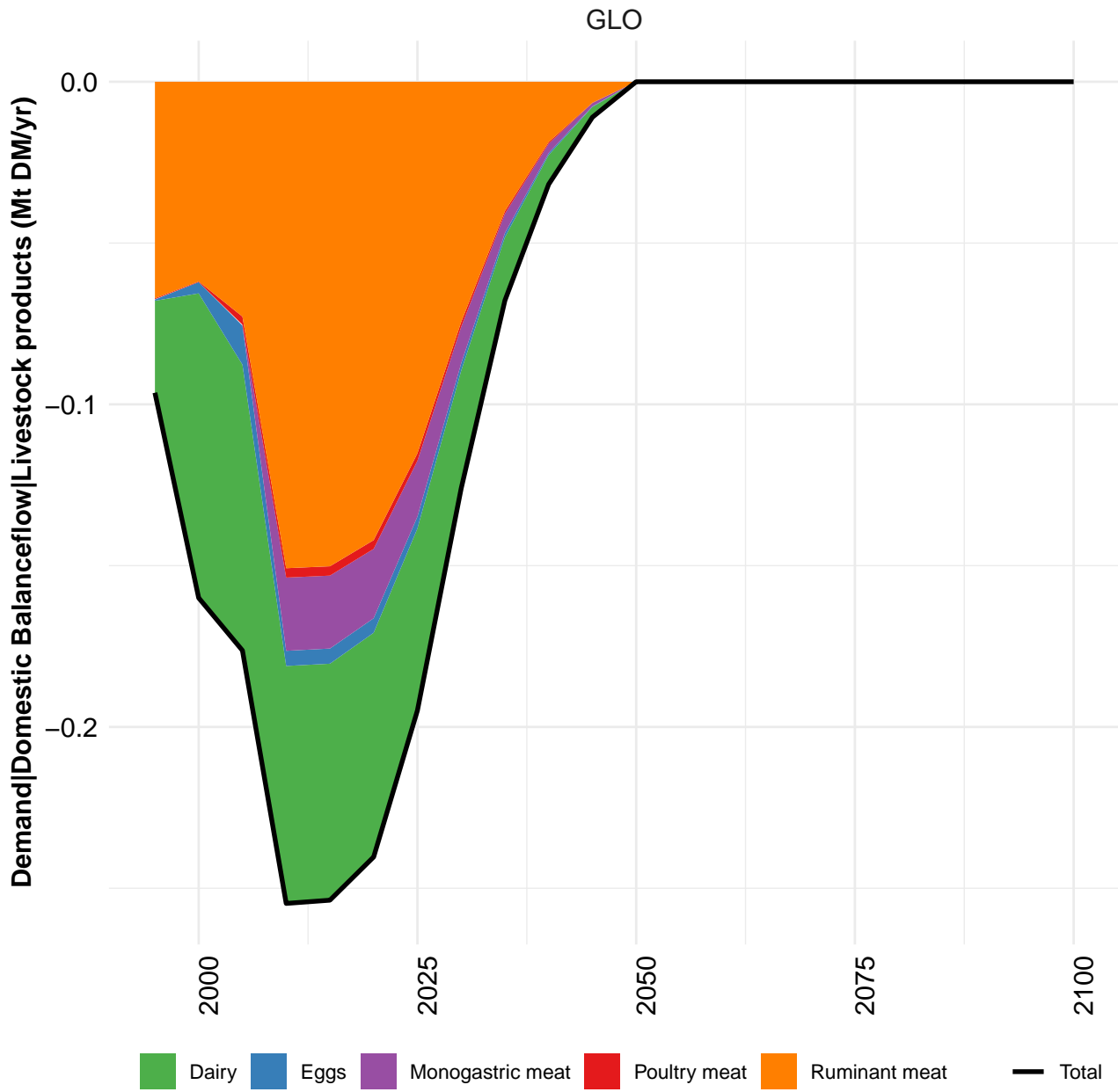
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0081	0.0073	0.0014	0.0016	0.0008	0.0008	0.0002	0.0000	0.0038	0.0018
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0157	0.0120	0.0303	0.0328	0.0432	0.0334	0.0002	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0002	0.0001	0.0000	-0.0001	-0.0001	0.0005	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	-0.0078	-0.0050	-0.0288	-0.0311	-0.0423	-0.0331	0.0000	0.0000	0.0038	0.0018
SSA	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

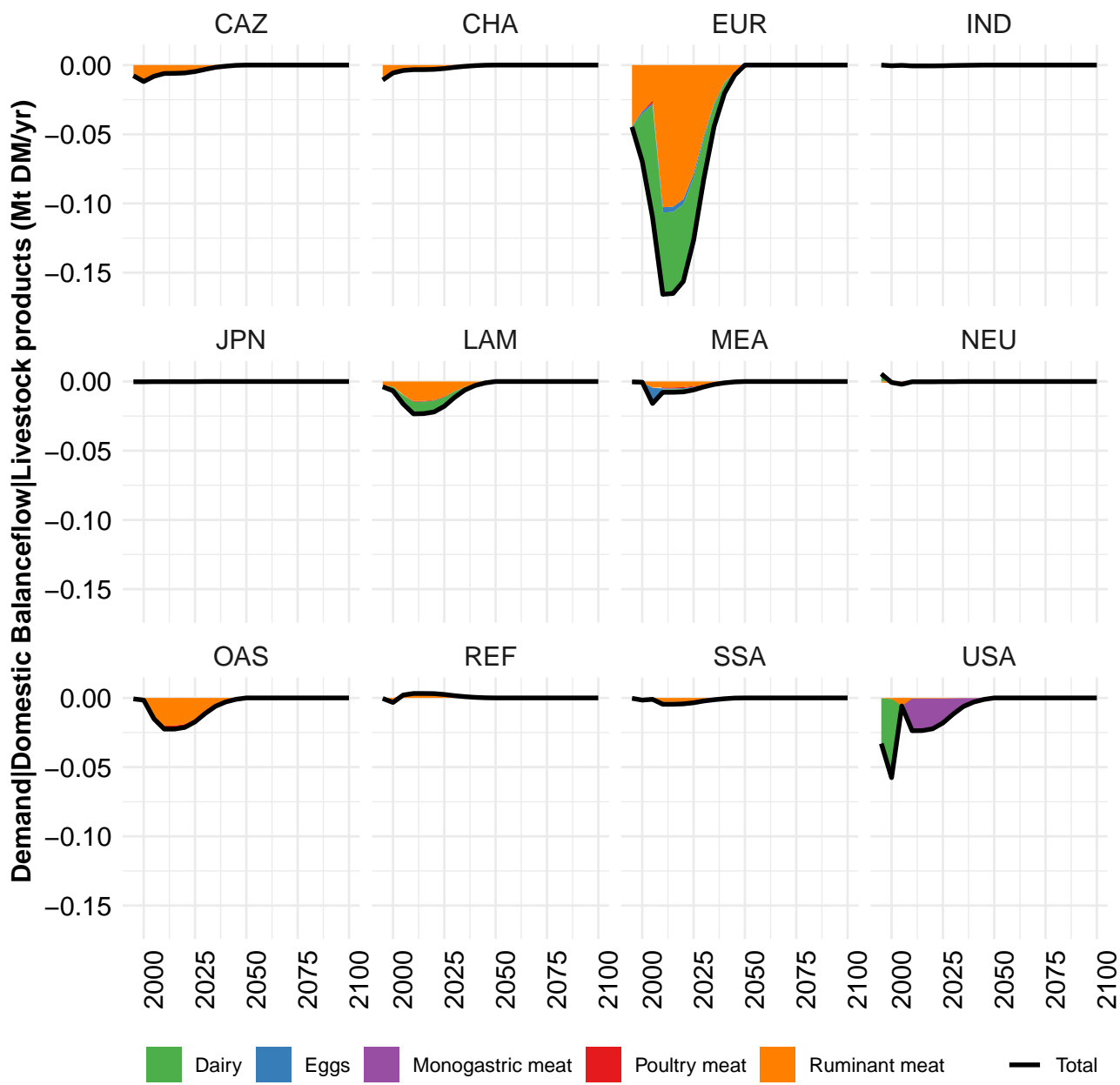
Table 193: FAO — Demand—Domestic Balanceflow—Fish (Mt DM/yr)





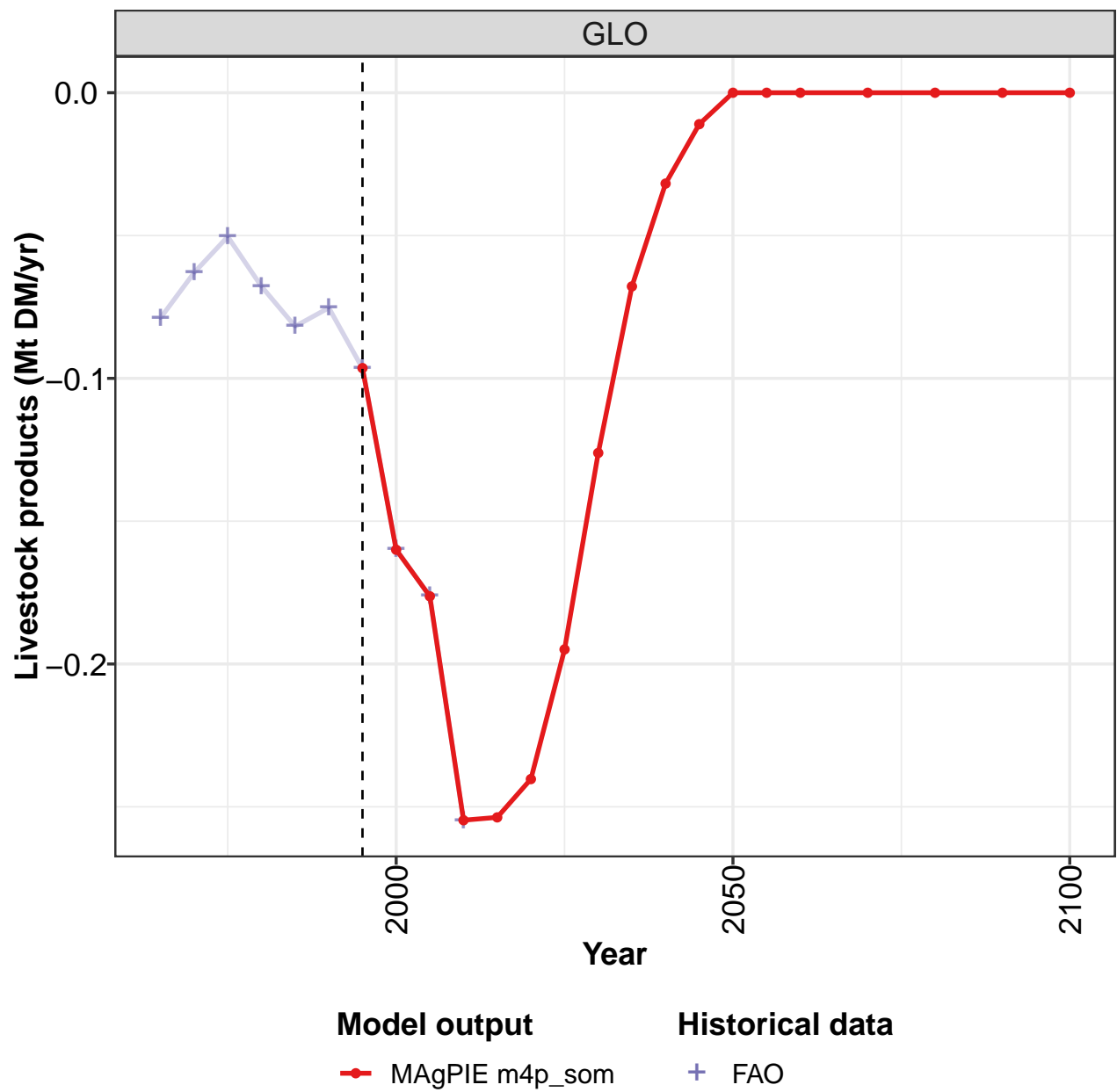






5.3 Livestock products

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

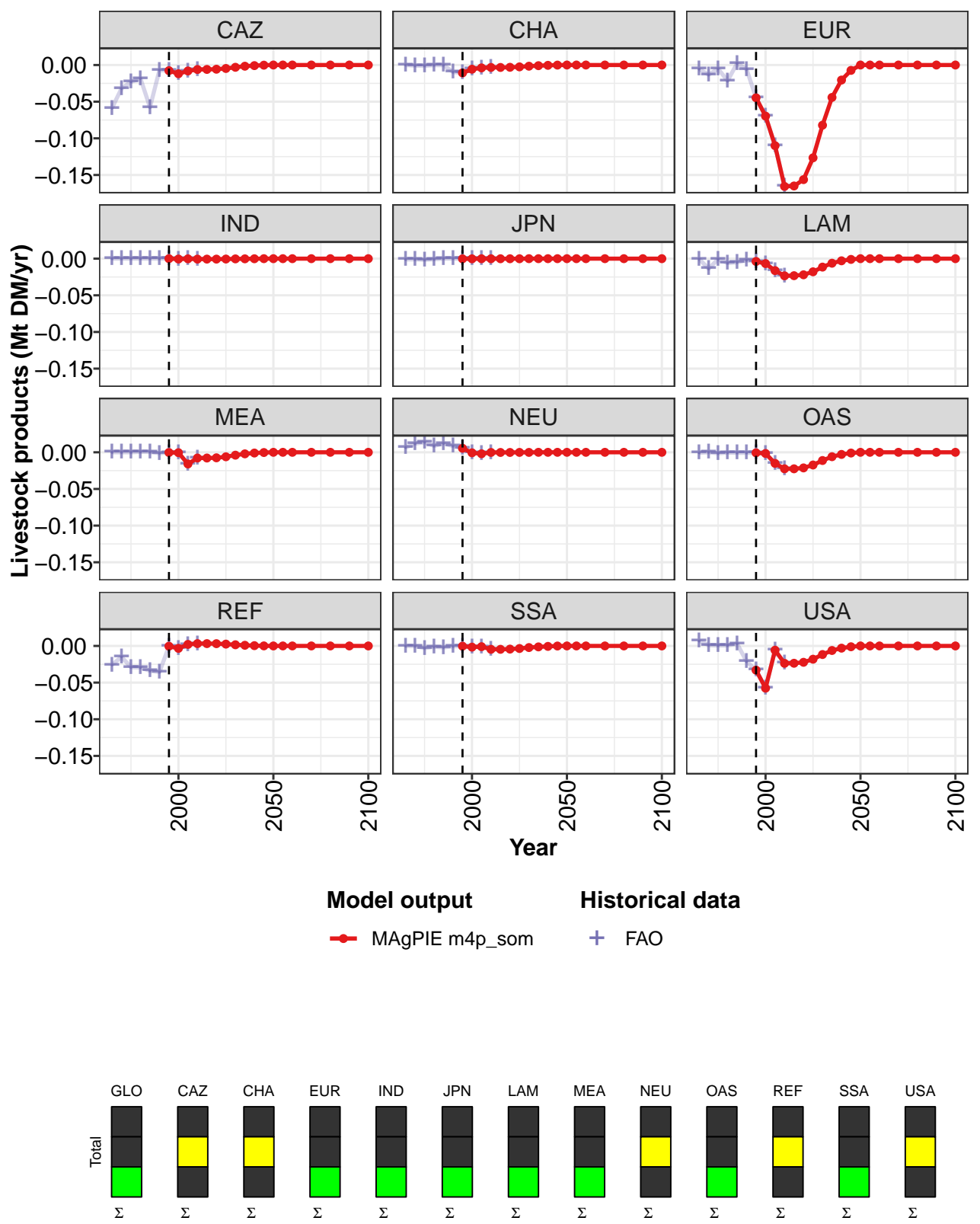


Figure 65: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Livestock products (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-0.09640	-0.16000	-0.17630	-0.25470	-0.25370	-0.24030	-0.19490	-0.12610	-0.06780	-0.03180	-0.00000
CAZ	-0.00770	-0.01190	-0.00810	-0.00610	-0.00600	-0.00570	-0.00470	-0.00310	-0.00160	-0.00080	-0.00000
CHA	-0.01080	-0.00570	-0.00390	-0.00330	-0.00330	-0.00310	-0.00250	-0.00160	-0.00090	-0.00040	-0.00000
EUR	-0.04470	-0.06970	-0.11000	-0.16560	-0.16500	-0.15630	-0.12660	-0.08210	-0.04420	-0.02050	-0.00000
IND	0.00000	-0.00050	-0.00020	-0.00060	-0.00060	-0.00060	-0.00050	-0.00030	-0.00020	-0.00010	0.00000
JPN	-0.00020	-0.00020	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010	0.00000	0.00000	0.00000	0.00000
LAM	-0.00380	-0.00670	-0.01630	-0.02340	-0.02320	-0.02200	-0.01790	-0.01150	-0.00620	-0.00290	-0.00000
MEA	-0.00030	-0.00050	-0.01590	-0.00780	-0.00780	-0.00750	-0.00610	-0.00390	-0.00210	-0.00100	-0.00000
NEU	0.00550	-0.00070	-0.00200	-0.00020	-0.00020	-0.00020	-0.00010	-0.00010	0.00000	0.00000	0.00000
OAS	-0.00070	-0.00160	-0.01510	-0.02250	-0.02250	-0.02130	-0.01730	-0.01120	-0.00600	-0.00290	-0.00000
REF	-0.00040	-0.00330	0.00210	0.00320	0.00320	0.00310	0.00250	0.00160	0.00090	0.00040	0.00000
SSA	-0.00030	-0.00160	-0.00100	-0.00460	-0.00460	-0.00430	-0.00350	-0.00220	-0.00130	-0.00060	-0.00000
USA	-0.03300	-0.05760	-0.00580	-0.02370	-0.02360	-0.02230	-0.01810	-0.01170	-0.00620	-0.00300	-0.00000

Table 194: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Livestock products (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

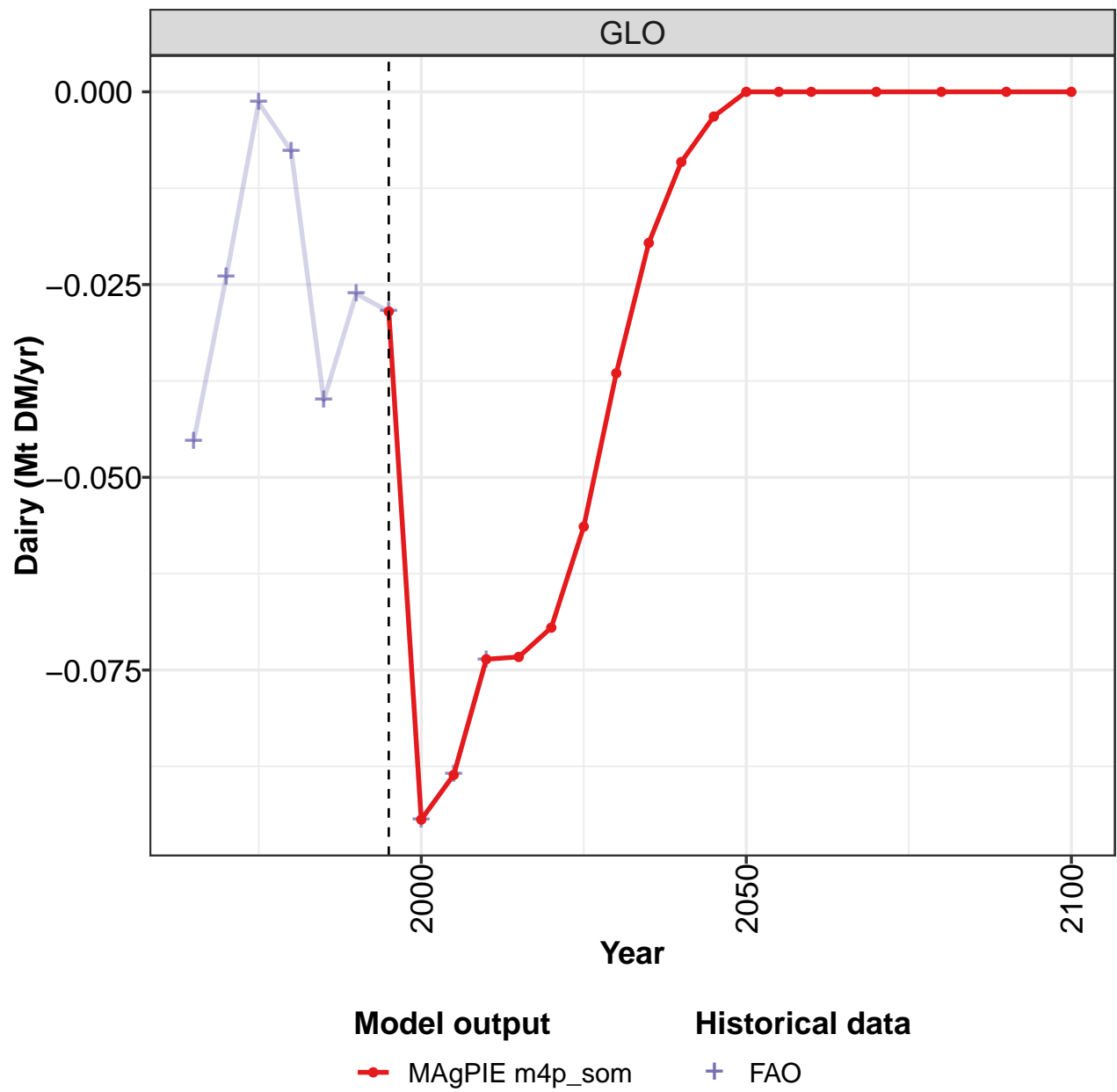
Table 195: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Livestock products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-0.0789	-0.0630	-0.0504	-0.0678	-0.0818	-0.0753	-0.0965	-0.1599	-0.1763	-0.2548
CAZ	-0.0588	-0.0320	-0.0230	-0.0183	-0.0577	-0.0069	-0.0077	-0.0119	-0.0080	-0.0061
CHA	0.0000	-0.0009	-0.0011	-0.0002	-0.0002	-0.0096	-0.0108	-0.0057	-0.0038	-0.0033
EUR	-0.0055	-0.0133	-0.0051	-0.0215	0.0023	-0.0058	-0.0448	-0.0696	-0.1100	-0.1656
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0005	-0.0001	-0.0006
JPN	-0.0010	-0.0010	-0.0017	-0.0009	0.0000	0.0001	-0.0002	-0.0002	-0.0001	-0.0001
LAM	-0.0003	-0.0137	-0.0008	-0.0060	-0.0050	-0.0023	-0.0038	-0.0067	-0.0163	-0.0234
MEA	0.0000	0.0000	0.0000	0.0006	0.0004	-0.0012	-0.0002	-0.0005	-0.0160	-0.0079
NEU	0.0065	0.0117	0.0138	0.0086	0.0122	0.0084	0.0055	-0.0007	-0.0020	-0.0002
OAS	-0.0007	0.0000	-0.0013	-0.0004	-0.0008	-0.0008	-0.0008	-0.0015	-0.0151	-0.0226
REF	-0.0258	-0.0149	-0.0290	-0.0294	-0.0340	-0.0356	-0.0005	-0.0033	0.0021	0.0032
SSA	-0.0001	-0.0001	-0.0029	-0.0012	-0.0020	-0.0005	-0.0003	-0.0016	-0.0009	-0.0046
USA	0.0068	0.0011	0.0007	0.0008	0.0030	-0.0211	-0.0330	-0.0575	-0.0058	-0.0236

Table 196: FAO — Demand—Domestic Balanceflow—Livestock products (Mt DM/yr)

5.3.1
Dairy

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

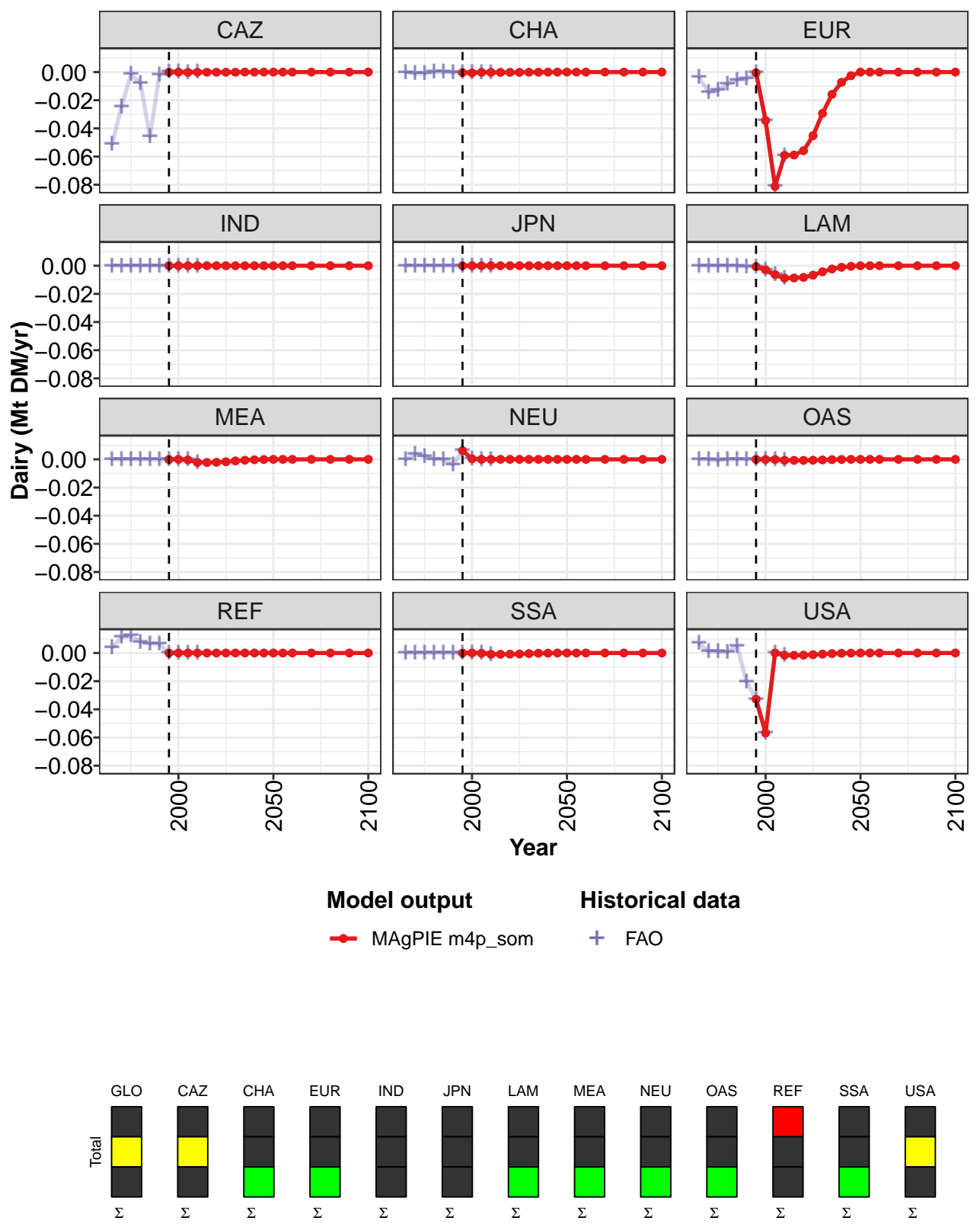


Figure 66: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Livestock products—Dairy (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-0.02850	-0.09440	-0.08860	-0.07360	-0.07330	-0.06950	-0.05640	-0.03650	-0.01960	-0.00910	-0.00000
CAZ	-0.00010	0.00000	-0.00020	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010	0.00000	0.00000	0.00000
CHA	-0.00040	-0.00060	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00010	-0.00010	0.00000	0.00000
EUR	-0.00050	-0.03440	-0.08120	-0.05910	-0.05890	-0.05580	-0.04520	-0.02930	-0.01580	-0.00730	-0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	-0.00070	-0.00290	-0.00630	-0.00880	-0.00870	-0.00830	-0.00670	-0.00430	-0.00230	-0.00110	-0.00000
MEA	-0.00010	0.00000	-0.00040	-0.00220	-0.00220	-0.00210	-0.00170	-0.00110	-0.00060	-0.00030	-0.00000
NEU	0.00620	0.00040	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	-0.00010	-0.00010	-0.00070	-0.00070	-0.00070	-0.00060	-0.00040	-0.00020	-0.00010	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	-0.00010	0.00000	-0.00020	-0.00090	-0.00090	-0.00080	-0.00070	-0.00040	-0.00020	-0.00010	0.00000
USA	-0.03280	-0.05680	0.00000	-0.00160	-0.00160	-0.00150	-0.00120	-0.00080	-0.00040	-0.00020	-0.00000

Table 197: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Livestock products—Dairy (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 198: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Livestock products—Dairy (Mt DM/yr)  
[PART 2/2]

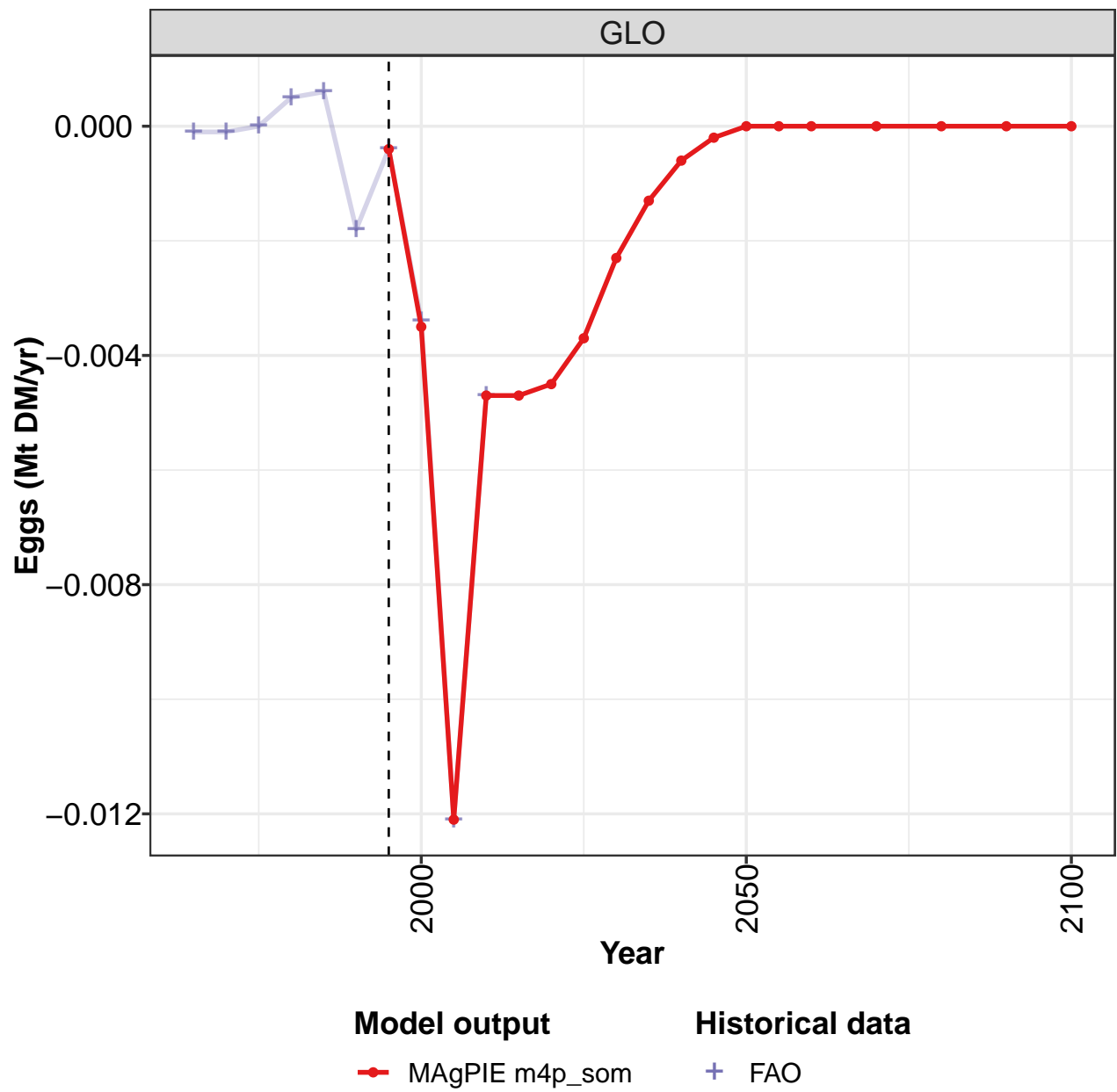
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-0.0453	-0.0240	-0.0014	-0.0077	-0.0400	-0.0262	-0.0285	-0.0944	-0.0885	-0.0737
CAZ	-0.0514	-0.0246	-0.0017	-0.0079	-0.0457	-0.0020	-0.0001	0.0000	-0.0002	-0.0001
CHA	-0.0003	-0.0011	-0.0010	0.0000	0.0000	-0.0003	-0.0004	-0.0006	-0.0002	-0.0002
EUR	-0.0039	-0.0144	-0.0130	-0.0085	-0.0056	-0.0048	-0.0005	-0.0344	-0.0812	-0.0591
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0006	-0.0007	-0.0029	-0.0063	-0.0088
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0004	-0.0001	0.0000	-0.0004	-0.0022
NEU	-0.0002	0.0038	0.0022	0.0001	-0.0001	-0.0038	0.0062	0.0004	0.0000	0.0000
OAS	0.0000	0.0000	-0.0009	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0001	-0.0007
REF	0.0037	0.0111	0.0122	0.0078	0.0065	0.0063	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0001	0.0000	-0.0002	-0.0009
USA	0.0068	0.0012	0.0009	0.0008	0.0049	-0.0205	-0.0328	-0.0568	0.0000	-0.0016

Table 199: FAO — Demand—Domestic Balanceflow—Livestock products—Dairy (Mt DM/yr)



5.3.2
Eggs

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

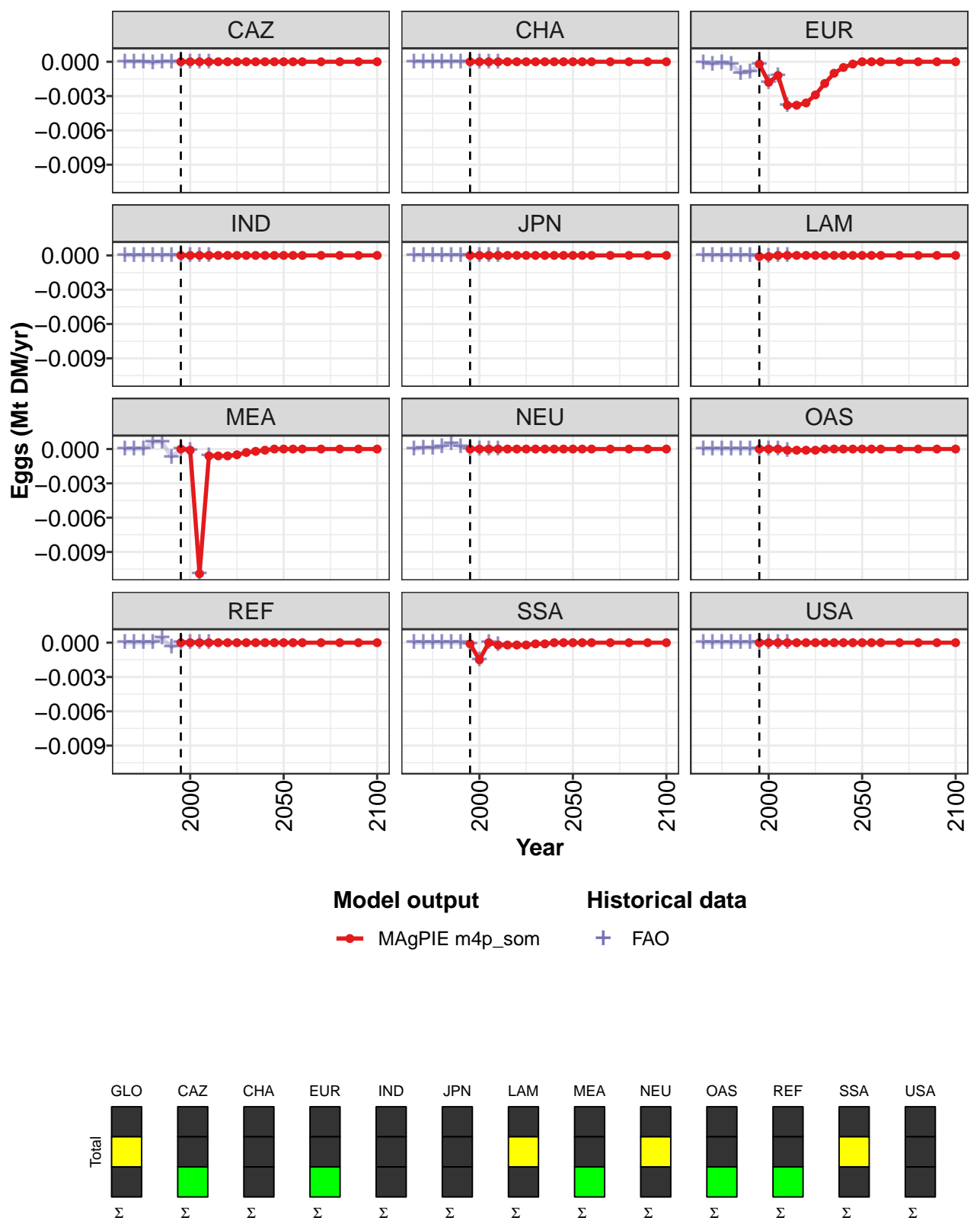


Figure 67: MAGPIE m4p\_som — Demand—Domestic Balanceflow—Livestock products—Eggs (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	-0	-0	0	0	0	0	0	0	0	0	0
MEA	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	0	0	-0	-0	-0	-0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	-0	-0	0	-0	-0	-0	-0	-0	-0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0

Table 200: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Livestock products—Eggs (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0	0	0	0	0	0	0
CAZ	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0
LAM	0	0	0	0	0	0	0
MEA	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0
OAS	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0

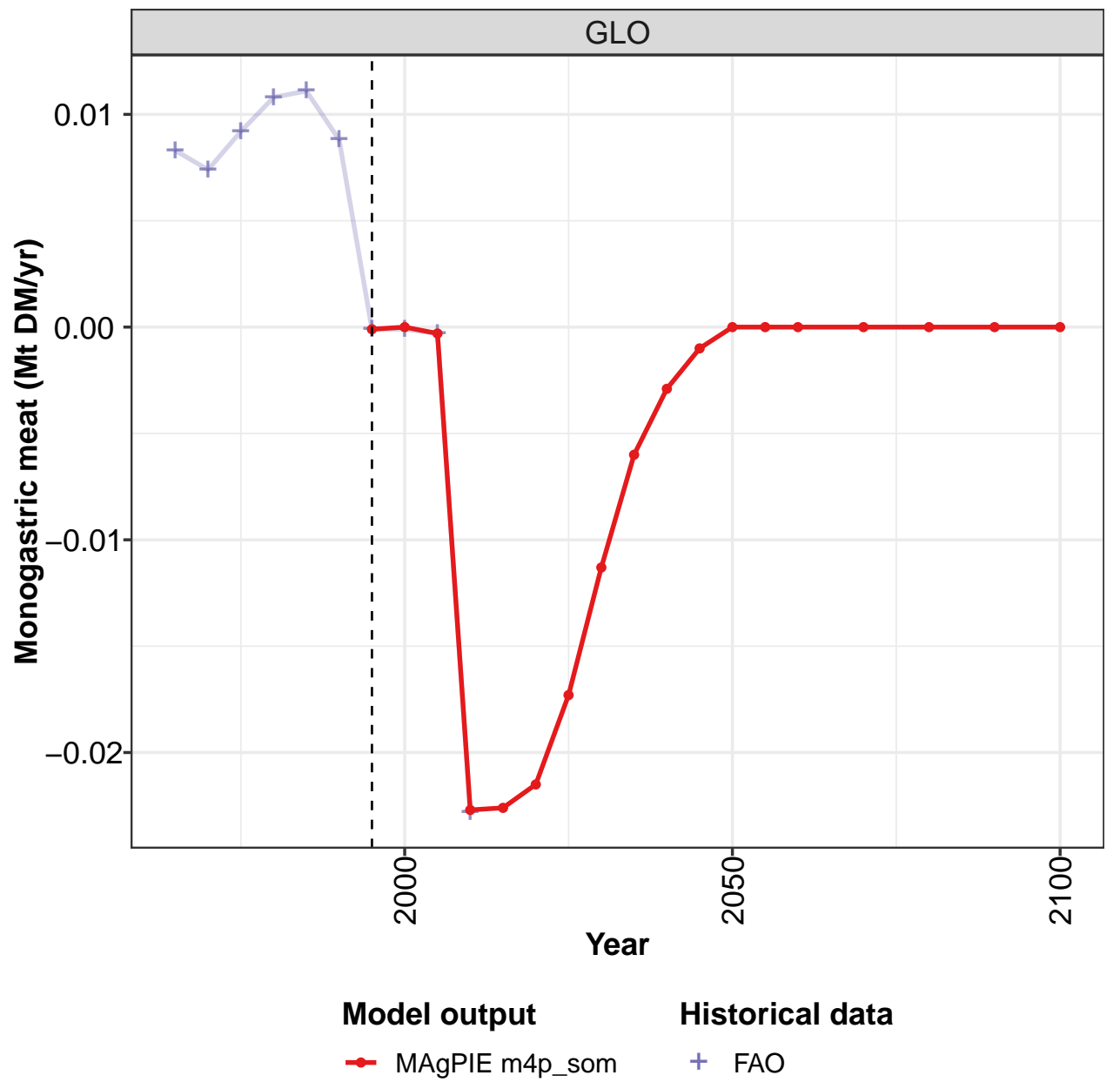
Table 201: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Livestock products—Eggs (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	
GLO	-0.000100	-0.000100	0.000000	0.000500	0.000600	-0.001800	-0.000400	-0.003400	-0.012100	-0.00
CAZ	0.000000	0.000000	0.000000	-0.000100	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
CHA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
EUR	-0.000100	-0.000200	-0.000100	-0.000200	-0.001000	-0.000900	-0.000200	-0.001800	-0.001200	-0.00
IND	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
JPN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
LAM	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-0.000100	-0.000100	0.000000	0.00
MEA	0.000000	0.000000	0.000000	0.000600	0.000600	-0.000700	0.000000	-0.000100	-0.010900	-0.00
NEU	0.000000	0.000100	0.000100	0.000200	0.000500	0.000200	0.000000	0.000000	0.000000	0.00
OAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-0.00
REF	0.000000	0.000000	0.000000	0.000000	0.000400	-0.000400	0.000000	0.000000	0.000000	0.00
SSA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-0.000100	-0.001500	0.000000	-0.00
USA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00

Table 202: FAO — Demand—Domestic Balanceflow—Livestock products—Eggs (Mt DM/yr)

5.3.3 Monogastric meat

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

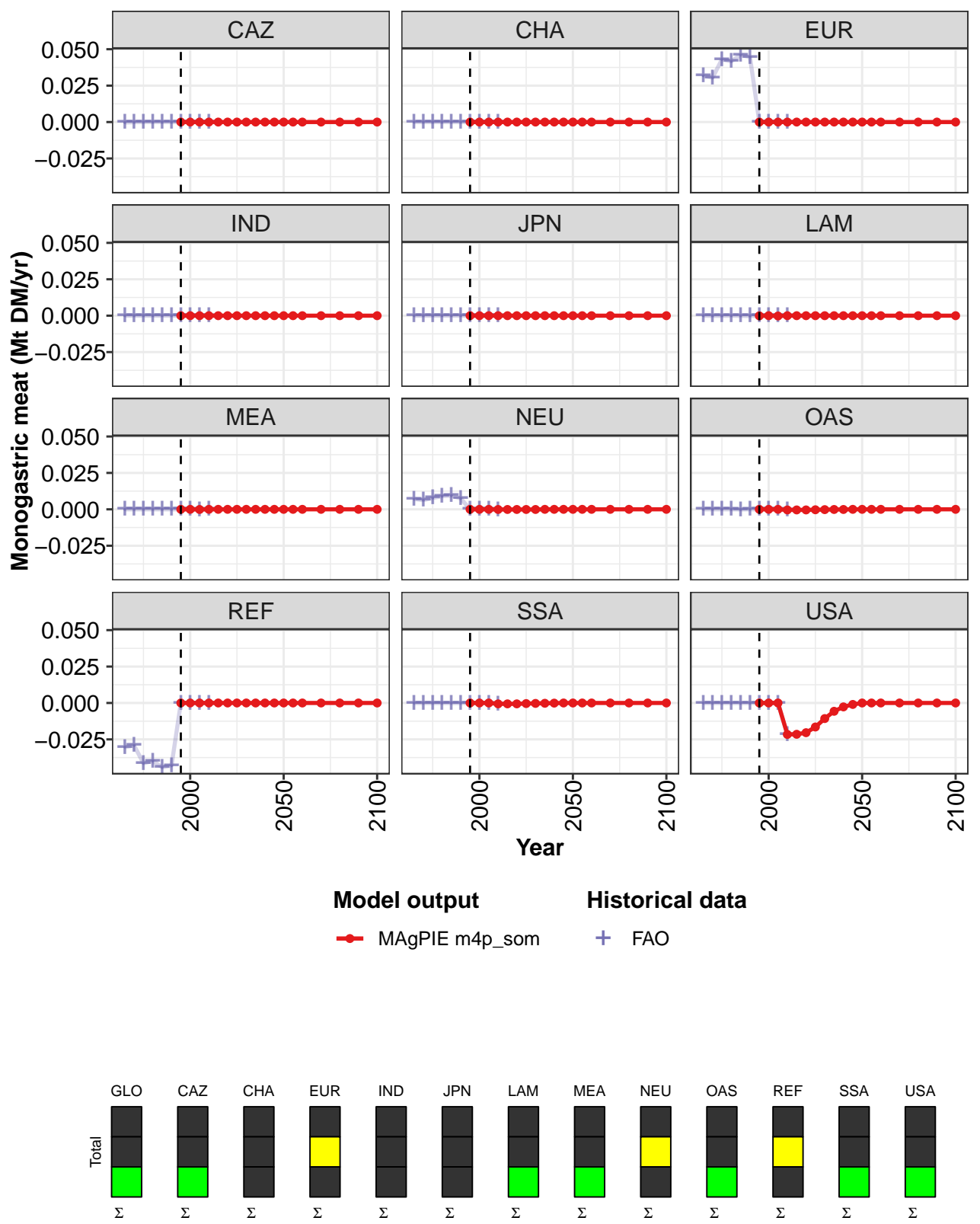


Figure 68: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Livestock products—Monogastric meat (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	-0	0	-0	0	0	0	0	0	0	0	0
MEA	0	0	-0	0	0	0	0	0	0	0	0
NEU	0	0	0	-0	-0	-0	-0	-0	0	0	0
OAS	0	0	0	-0	-0	-0	-0	-0	-0	-0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	-0	-0	-0	-0	-0	-0	-0	0
USA	0	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Table 203: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Livestock products—Monogastric meat (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0	0	0	0	0	0	0
CAZ	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0
LAM	0	0	0	0	0	0	0
MEA	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0
OAS	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0

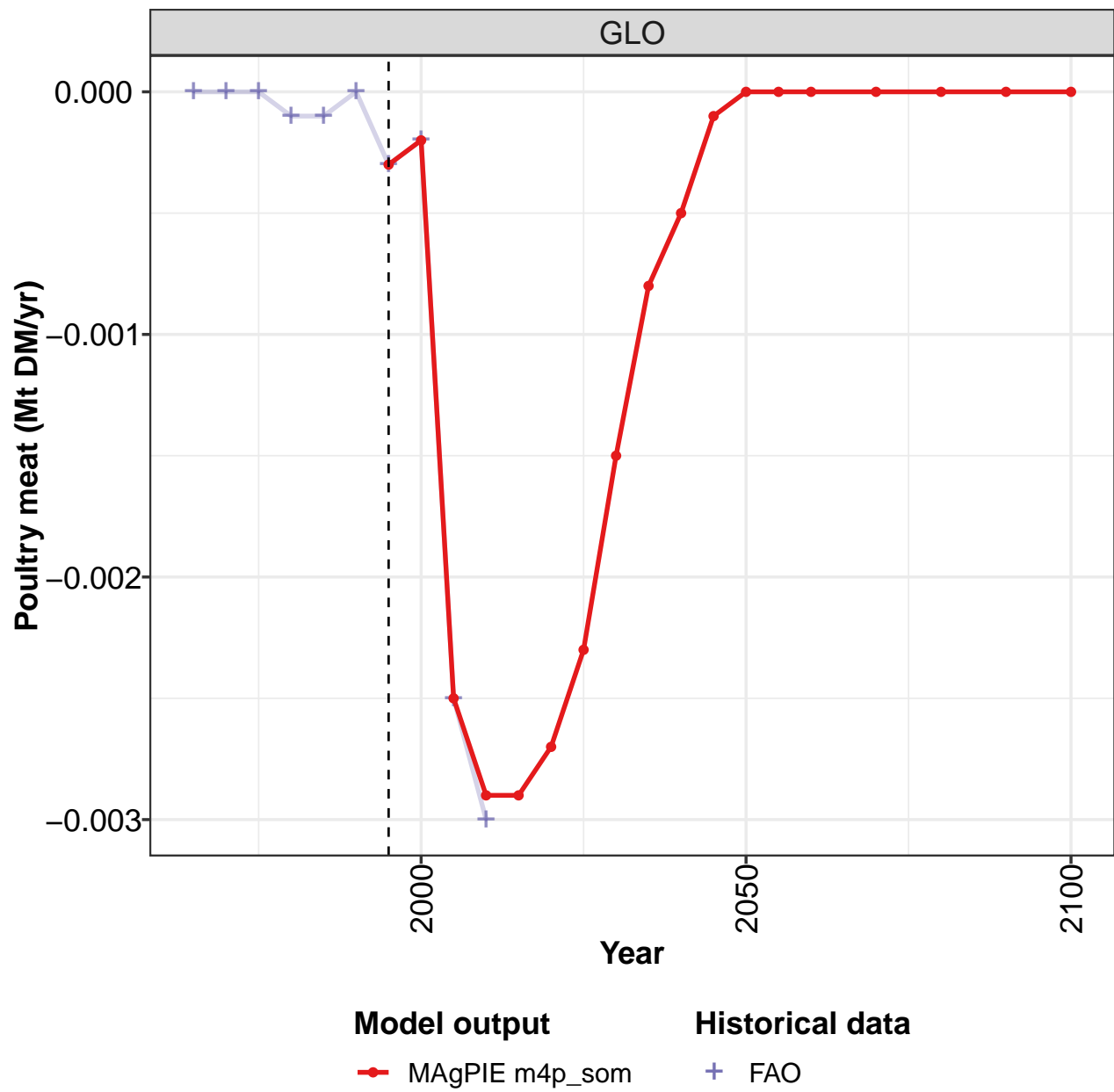
Table 204: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Livestock products—Monogastric meat (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0083	0.0074	0.0092	0.0108	0.0111	0.0088	-0.0001	-0.0001	-0.0003	-0.0228
CAZ	-0.0003	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0318	0.0305	0.0430	0.0417	0.0461	0.0446	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	-0.0001	-0.0001	0.0000	-0.0001	-0.0002	-0.0001	0.0000	-0.0002	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	0.0000
NEU	0.0071	0.0063	0.0078	0.0090	0.0094	0.0075	0.0000	0.0000	0.0000	-0.0001
OAS	0.0000	0.0000	0.0000	0.0000	-0.0001	0.0000	0.0000	0.0000	0.0000	-0.0004
REF	-0.0303	-0.0292	-0.0414	-0.0398	-0.0442	-0.0430	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0006
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0216

Table 205: FAO — Demand—Domestic Balanceflow—Livestock products—Monogastric meat (Mt DM/yr)

5.3.4 Poultry meat

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

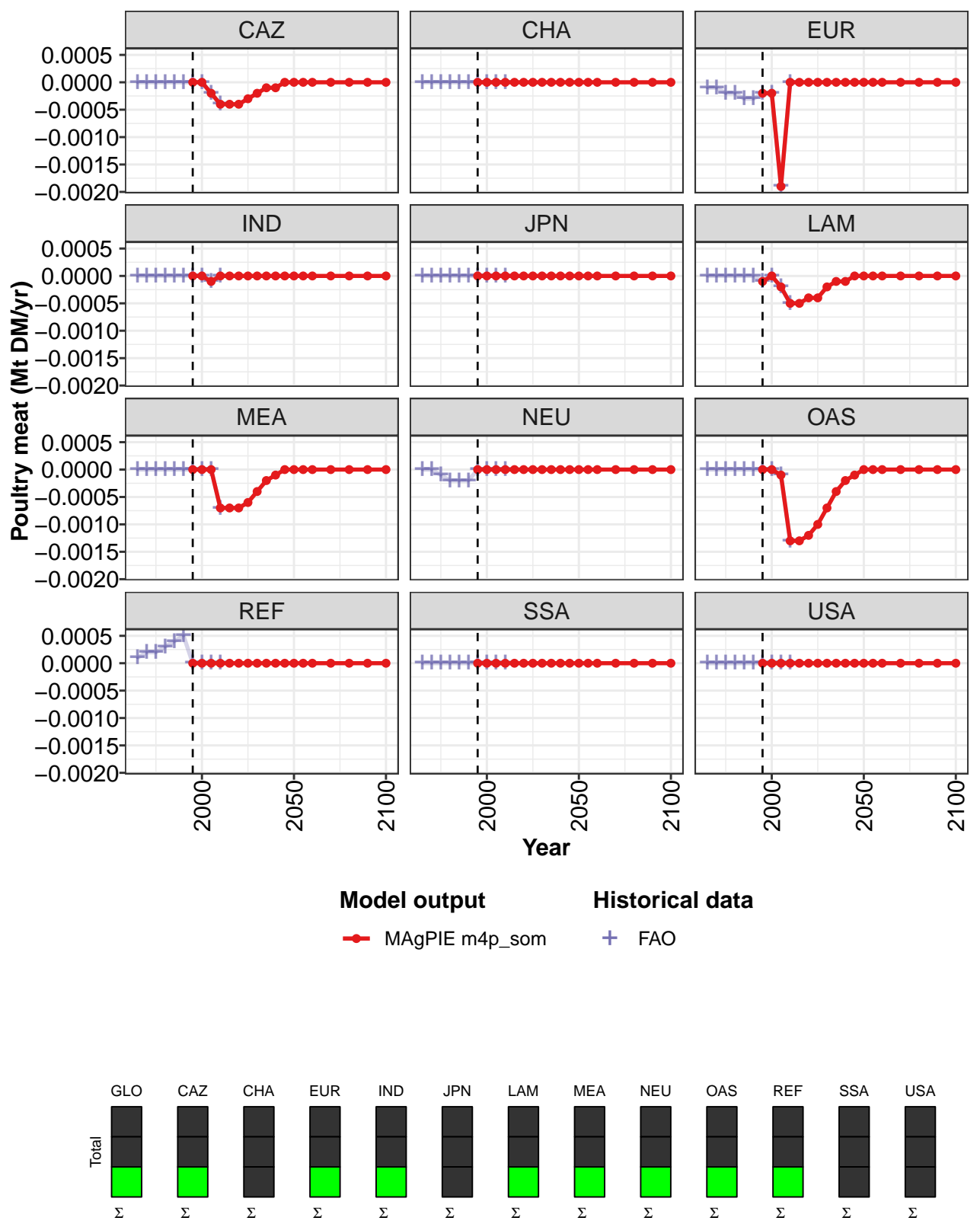


Figure 69: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Livestock products—Poultry meat (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
CAZ	0	0	-0	-0	-0	-0	-0	-0	-0	-0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	-0	-0	-0	0	0	0	0	0	0	0	0
IND	0	0	-0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	0
MEA	0	0	0	-0	-0	-0	-0	-0	-0	-0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0

Table 206: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Livestock products—Poultry meat (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0	0	0	0	0	0	0
CAZ	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0
LAM	0	0	0	0	0	0	0
MEA	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0
OAS	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0

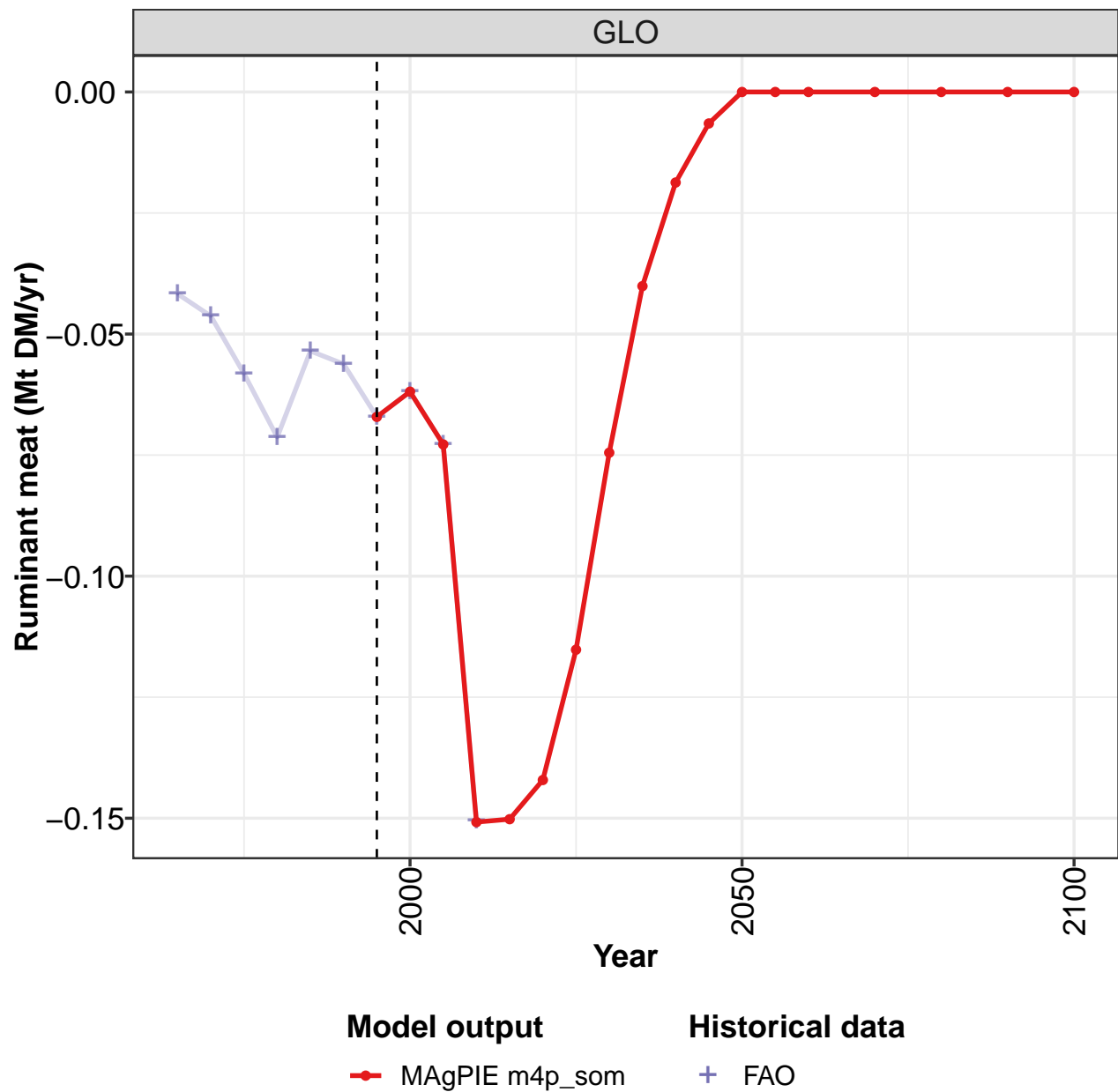
Table 207: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Livestock products—Poultry meat (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	
GLO	0.000000	0.000000	0.000000	-0.000100	-0.000100	0.000000	-0.000300	-0.000200	-0.002500	-0.00
CAZ	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-0.000200	-0.00
CHA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
EUR	-0.000100	-0.000100	-0.000200	-0.000200	-0.000300	-0.000300	-0.000200	-0.000200	-0.001900	0.00
IND	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-0.000100	0.00
JPN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
LAM	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-0.000100	0.000000	-0.000200	-0.00
MEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-0.00
NEU	0.000000	0.000000	-0.000100	-0.000200	-0.000200	-0.000200	0.000000	0.000000	0.000000	0.00
OAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-0.000100	-0.00
REF	0.000100	0.000200	0.000200	0.000300	0.000400	0.000500	0.000000	0.000000	0.000000	0.00
SSA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
USA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00

Table 208: FAO — Demand—Domestic Balanceflow—Livestock products—Poultry meat (Mt DM/yr)

5.3.5 Ruminant meat

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

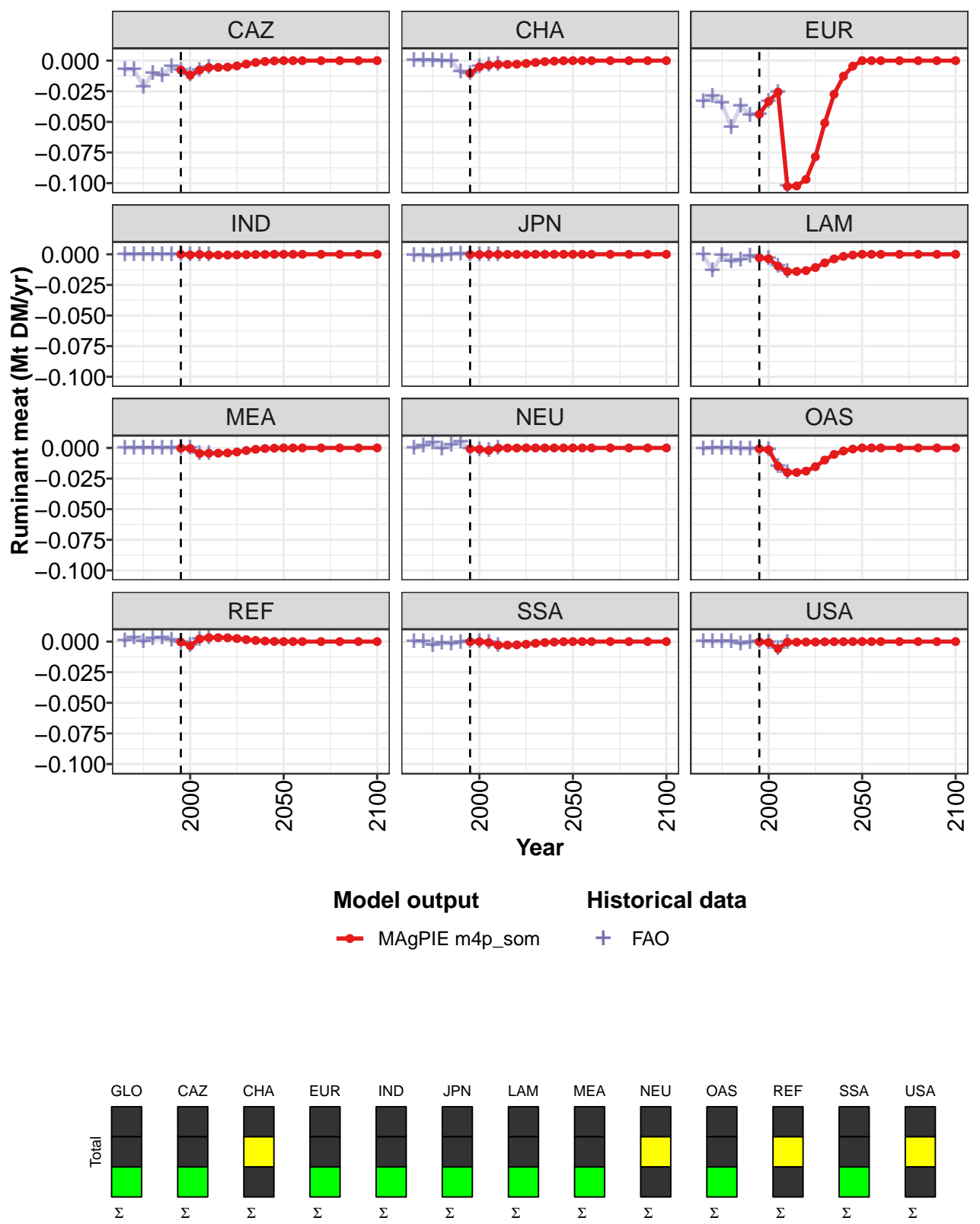


Figure 70: MAGPIE m4p\_som — Demand—Domestic Balanceflow—Livestock products—Ruminant meat (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-0.06710	-0.06190	-0.07280	-0.15080	-0.15020	-0.14210	-0.11520	-0.07450	-0.04010	-0.01870	-0.00000
CAZ	-0.00760	-0.01190	-0.00770	-0.00560	-0.00550	-0.00520	-0.00430	-0.00280	-0.00150	-0.00070	-0.00000
CHA	-0.01040	-0.00510	-0.00370	-0.00310	-0.00310	-0.00290	-0.00230	-0.00150	-0.00080	-0.00040	-0.00000
EUR	-0.04380	-0.03330	-0.02570	-0.10270	-0.10230	-0.09690	-0.07850	-0.05090	-0.02740	-0.01270	-0.00000
IND	0.00000	-0.00050	-0.00010	-0.00060	-0.00060	-0.00060	-0.00050	-0.00030	-0.00020	-0.00010	0.00000
JPN	-0.00020	-0.00020	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010	0.00000	0.00000	0.00000	0.00000
LAM	-0.00280	-0.00370	-0.00960	-0.01410	-0.01400	-0.01330	-0.01080	-0.00700	-0.00380	-0.00170	-0.00000
MEA	-0.00020	-0.00040	-0.00450	-0.00430	-0.00430	-0.00410	-0.00330	-0.00210	-0.00110	-0.00050	-0.00000
NEU	-0.00070	-0.00110	-0.00200	-0.00010	-0.00010	-0.00010	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	-0.00070	-0.00150	-0.01490	-0.02000	-0.02000	-0.01890	-0.01530	-0.00990	-0.00530	-0.00250	-0.00000
REF	-0.00040	-0.00330	0.00210	0.00320	0.00320	0.00310	0.00250	0.00160	0.00090	0.00040	0.00000
SSA	-0.00010	-0.00010	-0.00080	-0.00290	-0.00290	-0.00270	-0.00220	-0.00140	-0.00080	-0.00040	-0.00000
USA	-0.00020	-0.00080	-0.00580	-0.00050	-0.00050	-0.00040	-0.00040	-0.00020	-0.00010	-0.00010	0.00000

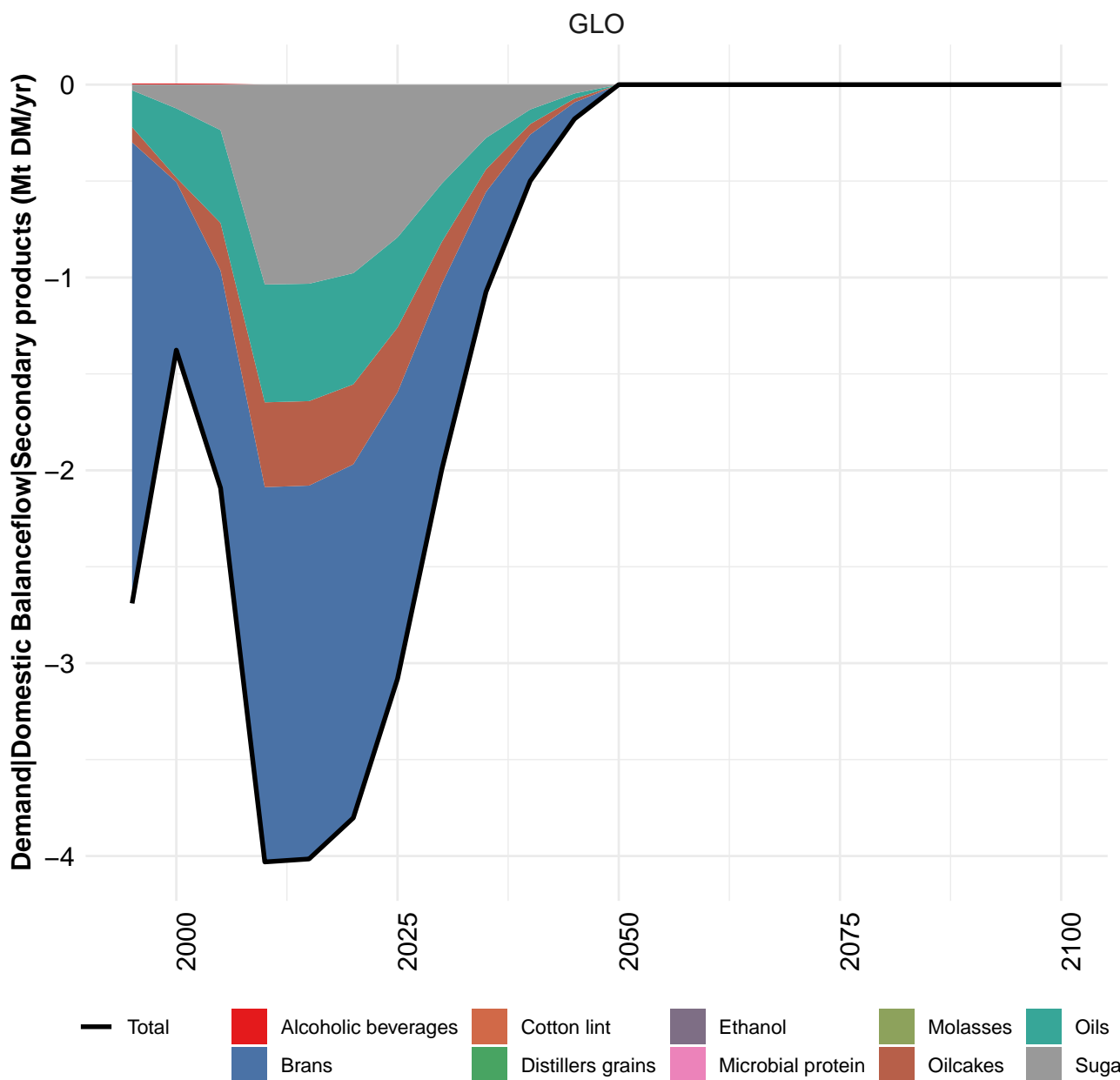
Table 209: MAGPIE m4p\_som — Demand—Domestic Balanceflow—Livestock products—Ruminant meat (Mt DM/yr) [PART 1/2]

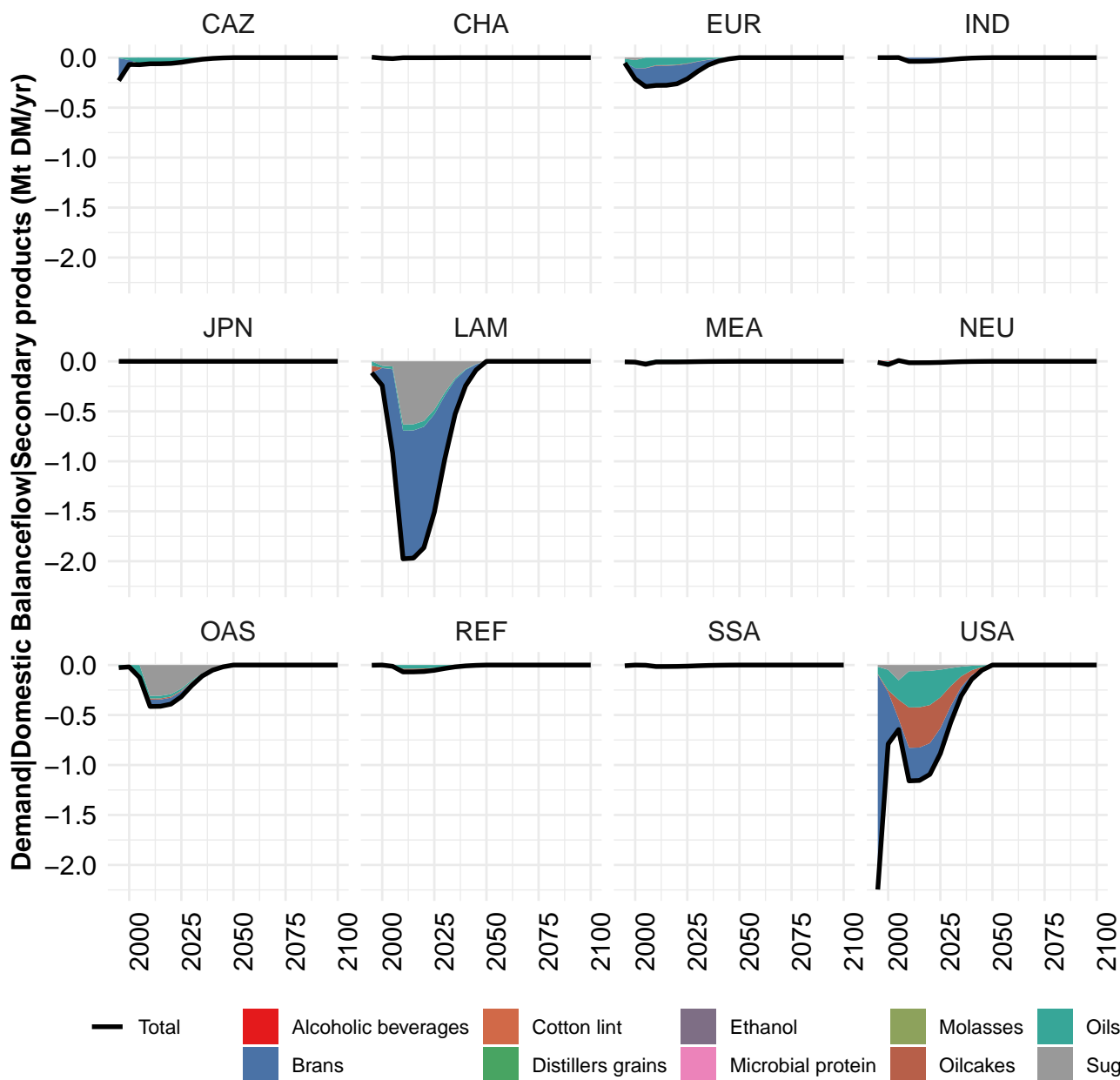
	2050	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 210: MAGPIE m4p\_som — Demand—Domestic Balanceflow—Livestock products—Ruminant meat (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-0.04170	-0.04630	-0.05820	-0.07130	-0.05350	-0.05620	-0.06710	-0.06190	-0.07280	-0.15060
CAZ	-0.00720	-0.00730	-0.02130	-0.01030	-0.01210	-0.00490	-0.00760	-0.01190	-0.00770	-0.00560
CHA	0.00030	0.00020	0.00000	-0.00020	-0.00020	-0.00940	-0.01040	-0.00510	-0.00370	-0.00310
EUR	-0.03310	-0.02900	-0.03490	-0.05430	-0.03700	-0.04440	-0.04380	-0.03330	-0.02570	-0.10270
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00050	-0.00010	-0.00060
JPN	-0.00100	-0.00100	-0.00170	-0.00090	0.00000	0.00020	-0.00020	-0.00020	-0.00010	-0.00010
LAM	-0.00030	-0.01360	-0.00070	-0.00600	-0.00490	-0.00140	-0.00280	-0.00370	-0.00960	-0.01410
MEA	0.00000	0.00000	0.00000	0.00000	-0.00020	-0.00010	-0.00020	-0.00040	-0.00450	-0.00430
NEU	-0.00040	0.00150	0.00390	-0.00050	0.00260	0.00470	-0.00070	-0.00110	-0.00200	-0.00010
OAS	-0.00070	0.00000	-0.00040	-0.00040	-0.00070	-0.00080	-0.00070	-0.00150	-0.01490	-0.02000
REF	0.00080	0.00300	0.00000	0.00230	0.00290	0.00100	-0.00040	-0.00330	0.00210	0.00320
SSA	-0.00010	-0.00010	-0.00290	-0.00120	-0.00200	-0.00040	-0.00010	-0.00010	-0.00080	-0.00290
USA	0.00000	-0.00010	-0.00020	0.00000	-0.00190	-0.00070	-0.00020	-0.00080	-0.00580	-0.00050

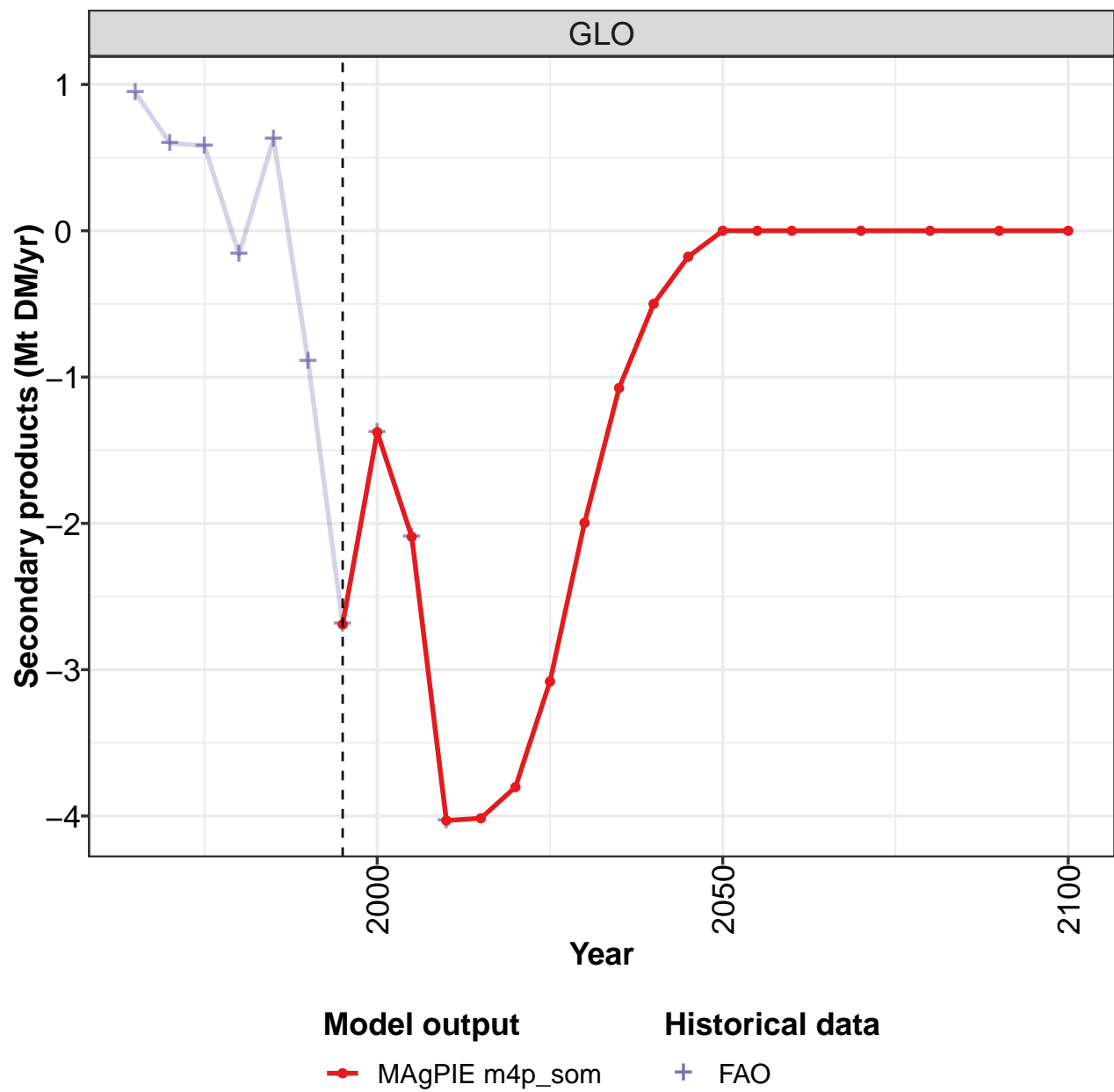
Table 211: FAO — Demand—Domestic Balanceflow—Livestock products—Ruminant meat (Mt DM/yr)





5.4 Secondary products

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

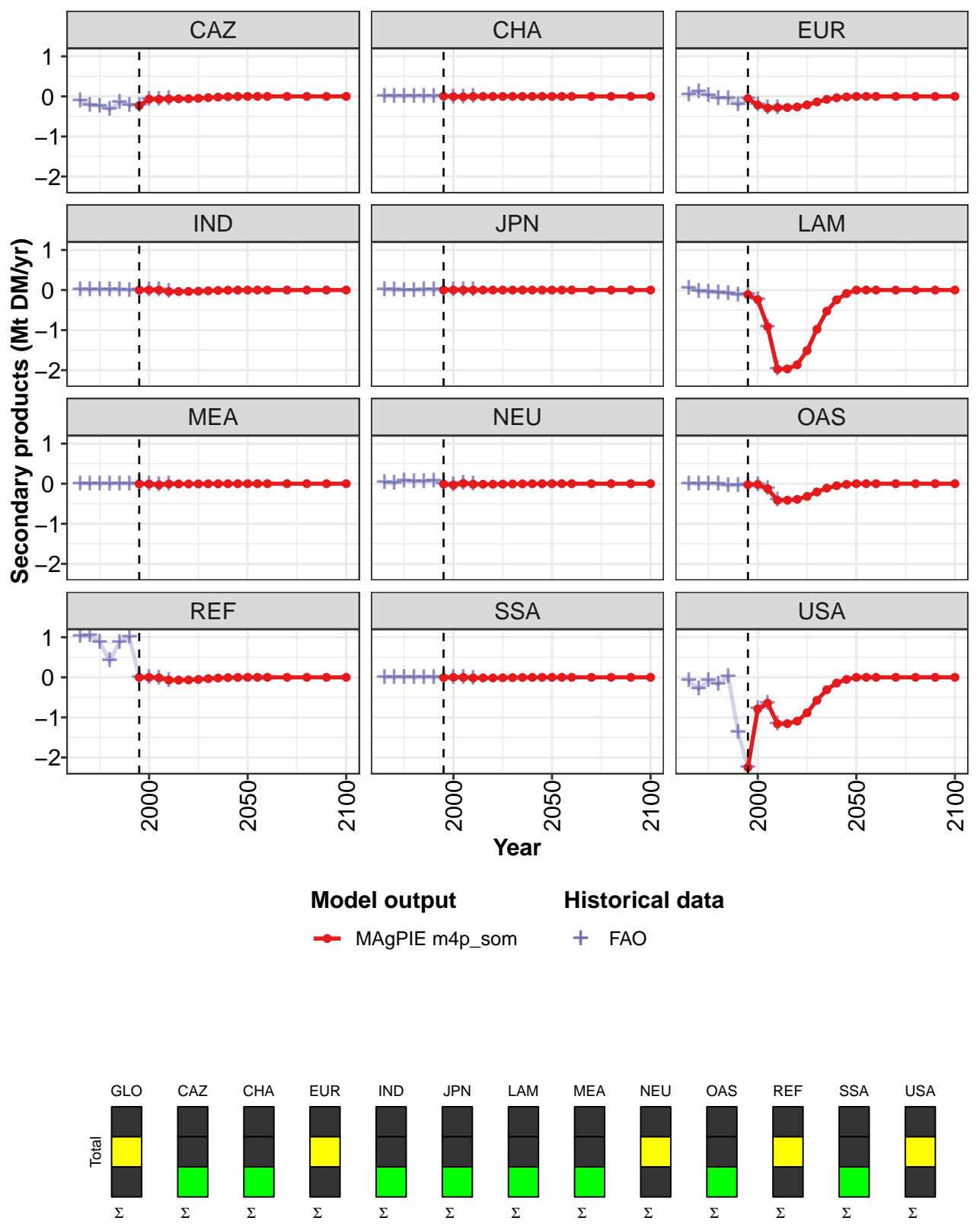


Figure 71: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Secondary products (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-2.69000	-1.37650	-2.09200	-4.03080	-4.01540	-3.80250	-3.08080	-1.99630	-1.07450	-0.49940	-0.17000
CAZ	-0.23000	-0.06780	-0.07080	-0.06140	-0.06120	-0.05790	-0.04700	-0.03050	-0.01640	-0.00760	-0.00000
CHA	0.00420	-0.00550	-0.00960	-0.00090	-0.00090	-0.00090	-0.00070	-0.00050	-0.00020	-0.00020	0.00000
EUR	-0.05380	-0.21390	-0.28980	-0.27780	-0.27670	-0.26200	-0.21240	-0.13760	-0.07410	-0.03440	-0.01000
IND	0.00010	-0.00020	0.00090	-0.03720	-0.03710	-0.03510	-0.02850	-0.01850	-0.00990	-0.00460	-0.00000
JPN	0.00000	0.00000	-0.00010	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	-0.11360	-0.24080	-0.91570	-1.97580	-1.96850	-1.86410	-1.51020	-0.97860	-0.52670	-0.24460	-0.08000
MEA	-0.00520	-0.00770	-0.02940	-0.00630	-0.00620	-0.00600	-0.00480	-0.00310	-0.00180	-0.00080	-0.00000
NEU	-0.01010	-0.03280	0.00840	-0.01400	-0.01390	-0.01320	-0.01070	-0.00690	-0.00370	-0.00180	-0.00000
OAS	-0.02640	-0.01880	-0.12560	-0.41450	-0.41280	-0.39090	-0.31680	-0.20530	-0.11060	-0.05130	-0.01000
REF	-0.00200	0.00000	-0.01260	-0.06900	-0.06870	-0.06510	-0.05280	-0.03410	-0.01830	-0.00860	-0.00000
SSA	-0.00700	-0.00010	-0.00200	-0.01480	-0.01460	-0.01380	-0.01120	-0.00720	-0.00390	-0.00190	-0.00000
USA	-2.24620	-0.78890	-0.64570	-1.15910	-1.15480	-1.09350	-0.88570	-0.57400	-0.30890	-0.14360	-0.03000

Table 212: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Secondary products (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

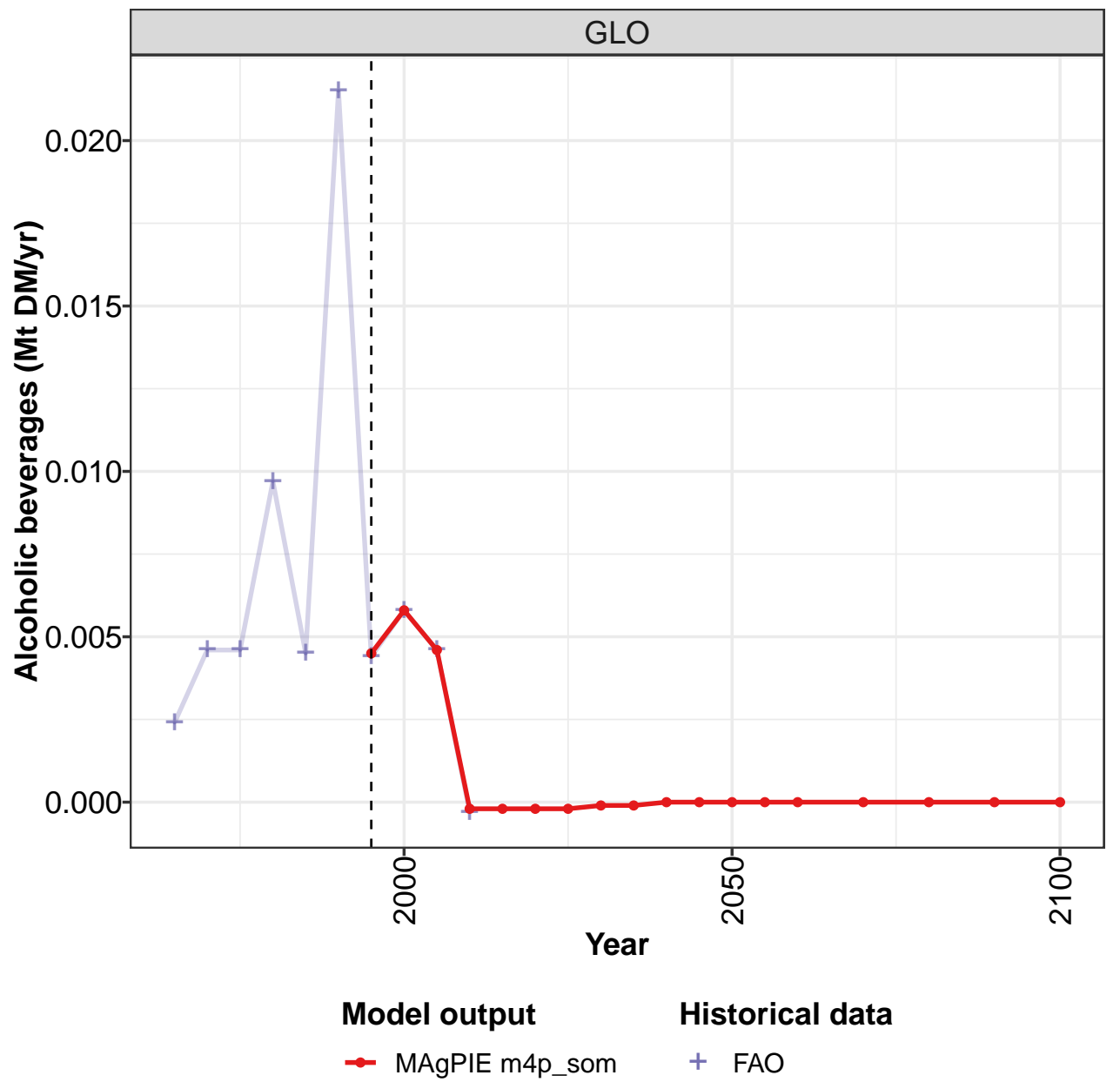
Table 213: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Secondary products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.94	0.60	0.58	-0.16	0.63	-0.89	-2.69	-1.38	-2.09	-4.03
CAZ	-0.10	-0.22	-0.24	-0.33	-0.15	-0.22	-0.23	-0.07	-0.07	-0.06
CHA	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	-0.01	-0.01	-0.00
EUR	0.04	0.11	0.02	-0.04	-0.04	-0.21	-0.05	-0.21	-0.29	-0.28
IND	0.00	0.00	-0.00	-0.00	-0.00	-0.00	0.00	-0.00	0.00	-0.04
JPN	-0.00	-0.00	-0.00	-0.00	0.00	0.00	0.00	0.00	-0.00	0.00
LAM	0.05	-0.04	-0.05	-0.07	-0.08	-0.12	-0.11	-0.24	-0.92	-1.98
MEA	0.00	-0.00	-0.00	-0.00	0.00	-0.00	-0.01	-0.01	-0.03	-0.01
NEU	0.03	0.01	0.07	0.06	0.05	0.08	-0.01	-0.03	0.01	-0.01
OAS	-0.00	-0.01	-0.01	-0.01	-0.05	-0.04	-0.03	-0.02	-0.13	-0.41
REF	1.02	1.04	0.88	0.41	0.88	1.00	-0.00	-0.00	-0.01	-0.07
SSA	0.00	0.00	-0.00	-0.00	-0.00	-0.01	-0.01	-0.00	-0.00	-0.01
USA	-0.09	-0.29	-0.08	-0.17	0.03	-1.37	-2.25	-0.79	-0.65	-1.16

Table 214: FAO — Demand—Domestic Balanceflow—Secondary products (Mt DM/yr)

5.4.1
Alcoholic beverages

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

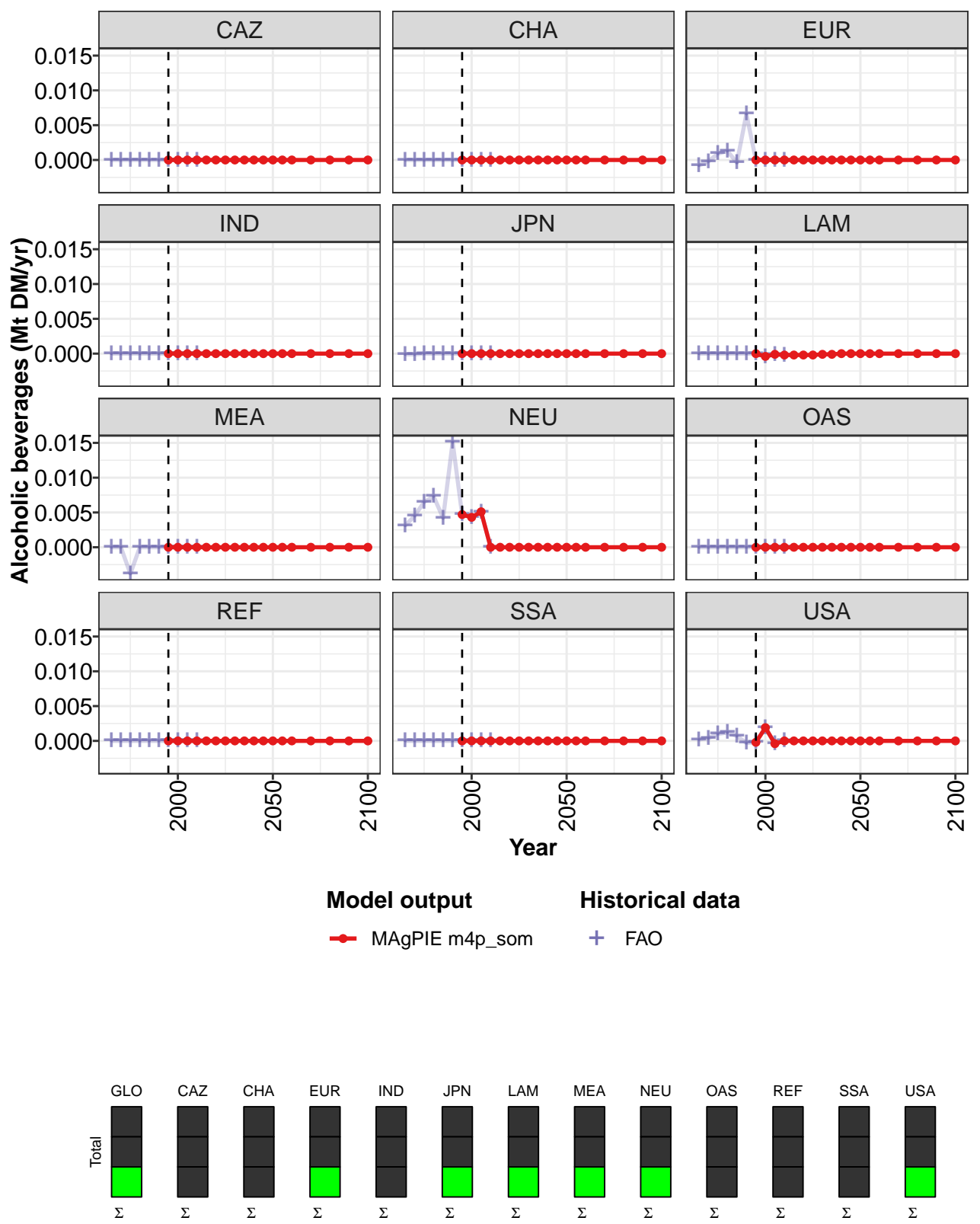


Figure 72: MAGPIE m4p\_som — Demand—Domestic Balanceflow—Secondary products—Alcoholic beverages (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.00450	0.00580	0.00460	-0.00020	-0.00020	-0.00020	-0.00020	-0.00010	-0.00010	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	-0.00040	-0.00010	-0.00020	-0.00020	-0.00020	-0.00020	-0.00010	-0.00010	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00470	0.00430	0.00510	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	-0.00020	0.00190	-0.00040	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 215: MAGPIE m4p\_som — Demand—Domestic Balanceflow—Secondary products—Alcoholic beverages (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

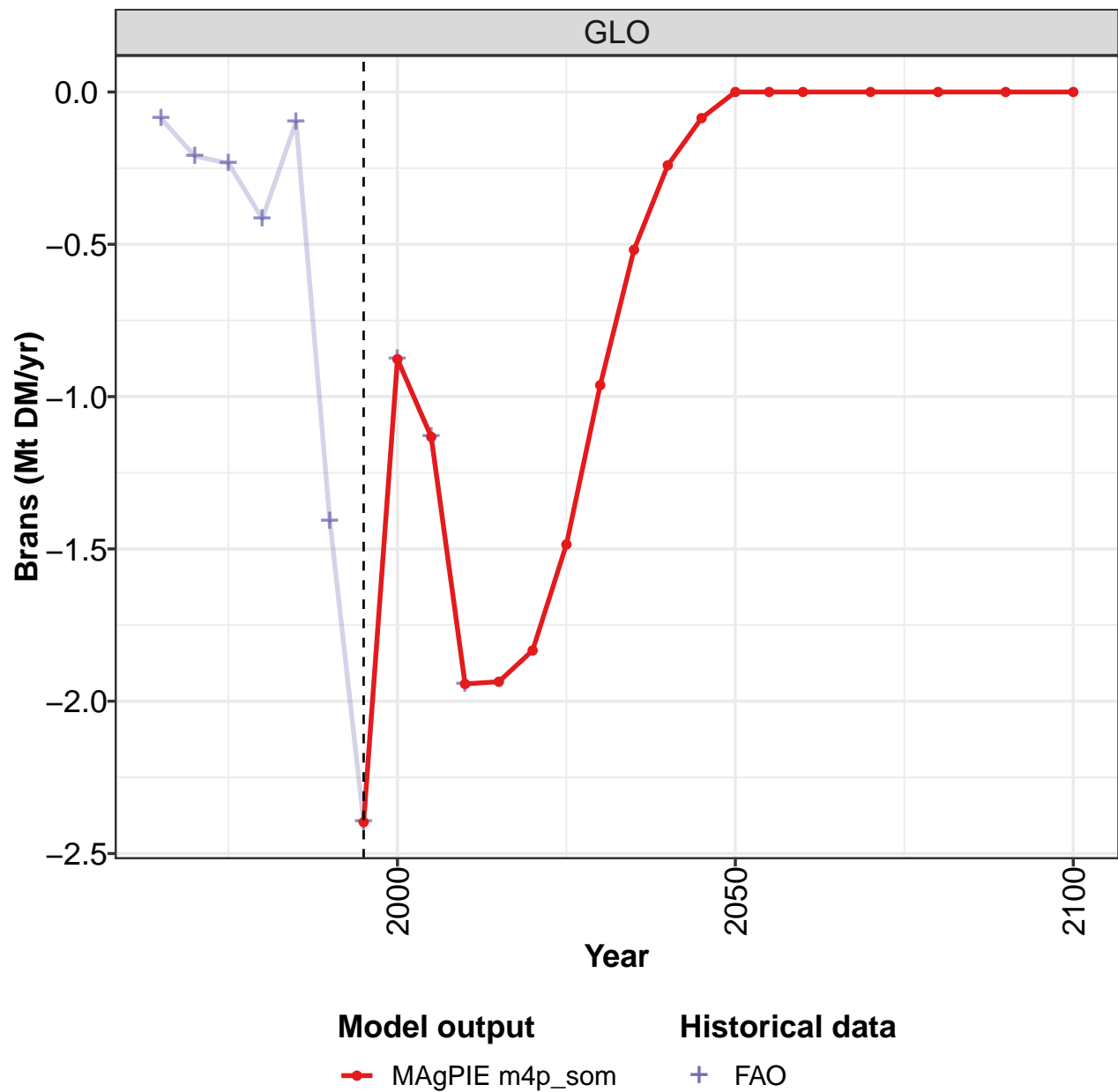
Table 216: MAGPIE m4p\_som — Demand—Domestic Balanceflow—Secondary products—Alcoholic beverages (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0024	0.0046	0.0046	0.0097	0.0045	0.0215	0.0044	0.0058	0.0046	-0.0003
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	-0.0008	-0.0002	0.0009	0.0013	-0.0004	0.0066	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0004	-0.0001	-0.0002
MEA	0.0000	0.0000	-0.0038	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0031	0.0045	0.0065	0.0073	0.0042	0.0151	0.0047	0.0043	0.0051	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0002	0.0004	0.0010	0.0012	0.0007	-0.0003	-0.0002	0.0019	-0.0004	0.0000

Table 217: FAO — Demand—Domestic Balanceflow—Secondary products—Alcoholic beverages (Mt DM/yr)

5.4.2 Brans

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

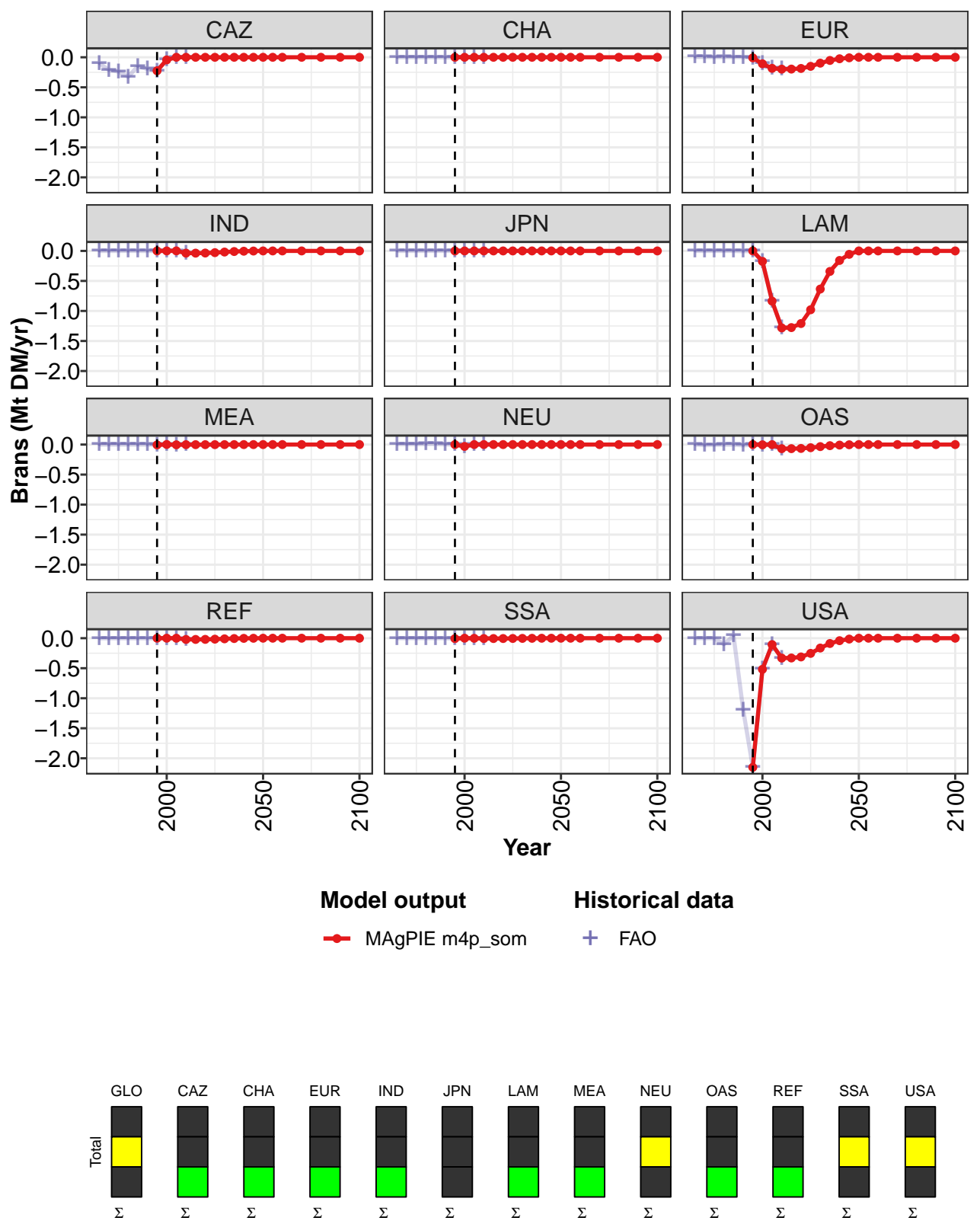


Figure 73: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Secondary products—Brans (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-2.39680	-0.87720	-1.13240	-1.94330	-1.93590	-1.83330	-1.48540	-0.96250	-0.51800	-0.24070	-0.03000
CAZ	-0.22410	-0.04330	0.00000	-0.00030	-0.00030	-0.00030	-0.00030	-0.00020	-0.00010	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	-0.00900	-0.10850	-0.18400	-0.19730	-0.19650	-0.18610	-0.15080	-0.09770	-0.05260	-0.02440	-0.00000
IND	0.00010	0.00010	0.00100	-0.03710	-0.03700	-0.03500	-0.02840	-0.01840	-0.00990	-0.00460	-0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	-0.00040	-0.17390	-0.83620	-1.28170	-1.27690	-1.20920	-0.97960	-0.63480	-0.34160	-0.15870	-0.03000
MEA	-0.00580	0.00130	-0.00360	-0.00140	-0.00140	-0.00140	-0.00110	-0.00070	-0.00040	-0.00020	-0.00000
NEU	0.00000	-0.03080	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	-0.00380	-0.00120	-0.06850	-0.06820	-0.06460	-0.05240	-0.03390	-0.01830	-0.00850	-0.00000
REF	0.00000	0.00000	-0.00020	-0.02060	-0.02050	-0.01940	-0.01580	-0.01020	-0.00550	-0.00260	-0.00000
SSA	-0.00690	0.00000	-0.00180	-0.00570	-0.00560	-0.00530	-0.00430	-0.00280	-0.00150	-0.00070	-0.00000
USA	-2.15070	-0.51830	-0.10640	-0.33070	-0.32950	-0.31200	-0.25270	-0.16380	-0.08810	-0.04100	-0.00000

Table 218: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Secondary products—Brans (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

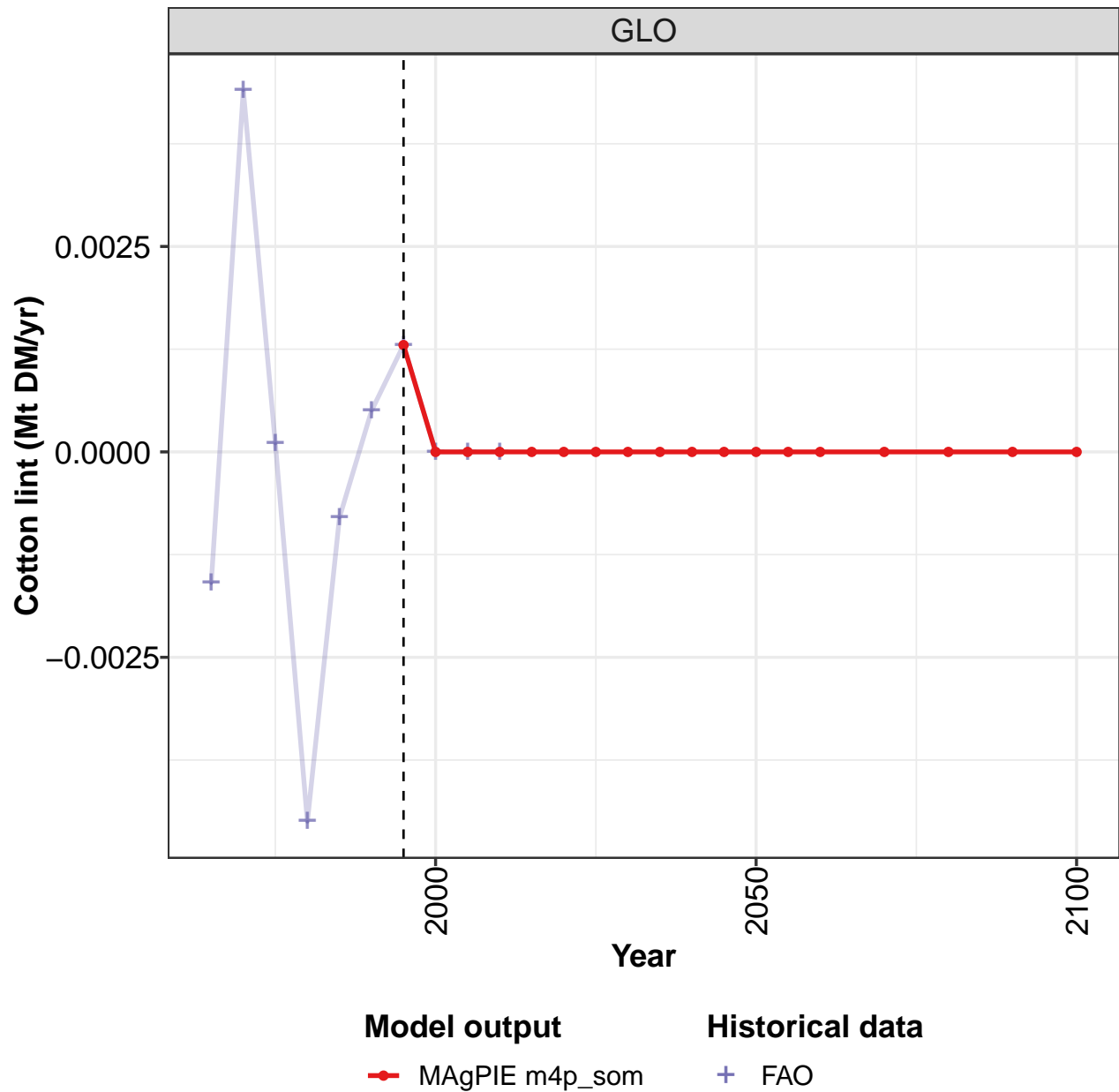
Table 219: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Secondary products—Brans (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-0.0867	-0.2104	-0.2342	-0.4157	-0.0979	-1.4087	-2.3967	-0.8771	-1.1324	-1.9433
CAZ	-0.0994	-0.2118	-0.2376	-0.3255	-0.1498	-0.1954	-0.2241	-0.0433	0.0000	-0.0003
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0044	0.0000	0.0000	0.0000	0.0000
EUR	0.0050	0.0047	0.0022	0.0044	0.0042	0.0026	-0.0090	-0.1085	-0.1840	-0.1973
IND	0.0000	0.0000	0.0000	0.0008	-0.0003	-0.0011	0.0001	0.0001	0.0010	-0.0371
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0050	-0.0004	-0.1739	-0.8362	-1.2817
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0058	0.0013	-0.0036	-0.0014
NEU	0.0095	0.0085	0.0087	0.0106	0.0114	0.0036	0.0000	-0.0308	0.0000	0.0000
OAS	0.0000	-0.0098	-0.0059	-0.0018	-0.0014	-0.0136	0.0000	-0.0038	-0.0012	-0.0685
REF	-0.0019	-0.0019	-0.0016	-0.0015	-0.0016	-0.0019	0.0000	0.0000	-0.0002	-0.0206
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0069	0.0000	-0.0018	-0.0057
USA	0.0000	0.0000	0.0000	-0.1026	0.0396	-1.1936	-2.1507	-0.5183	-0.1064	-0.3307

Table 220: FAO — Demand—Domestic Balanceflow—Secondary products—Brans (Mt DM/yr)

5.4.3 Cotton lint

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

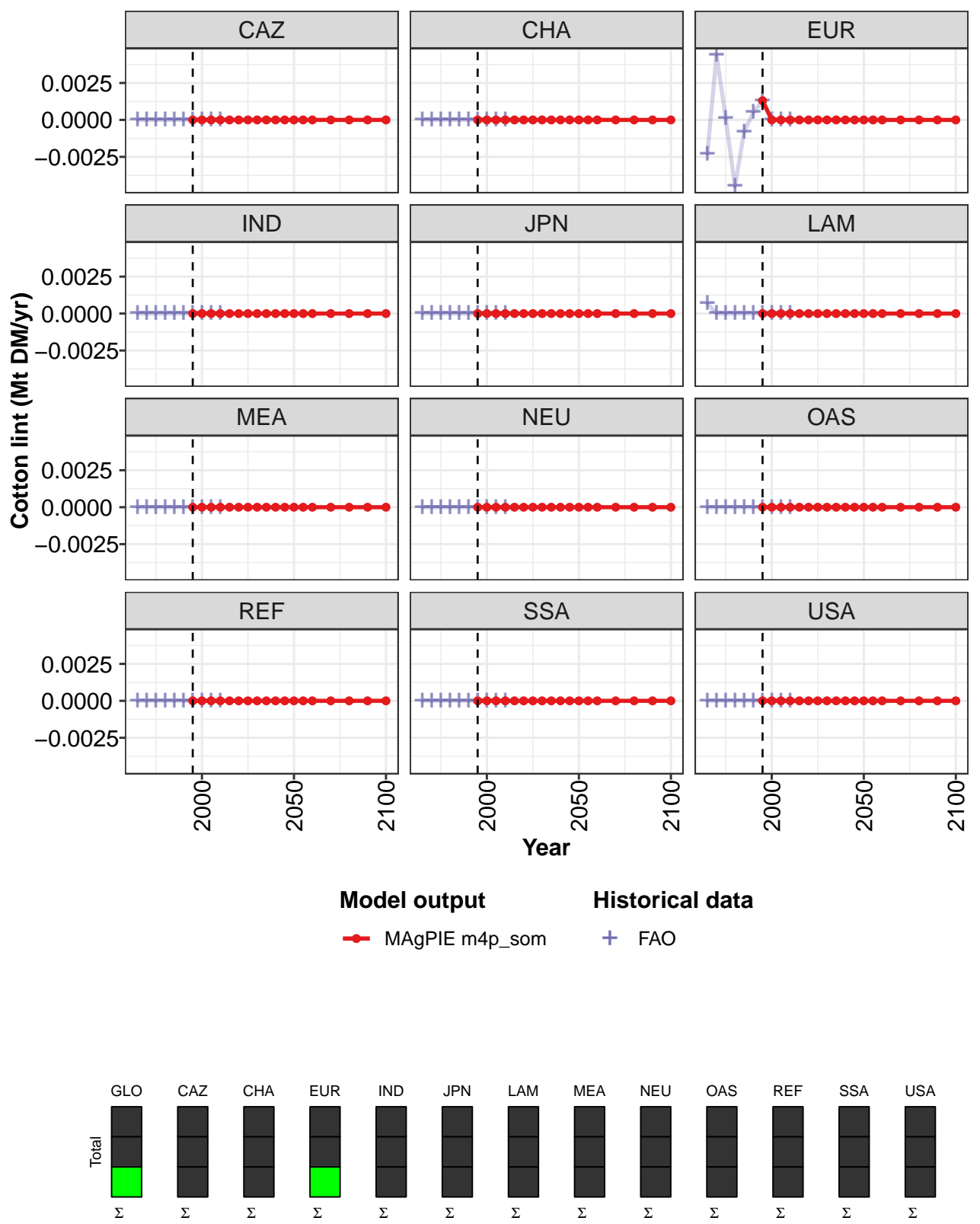


Figure 74: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Secondary products—Cotton lint (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.00130	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00130	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 221: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Secondary products—Cotton lint (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

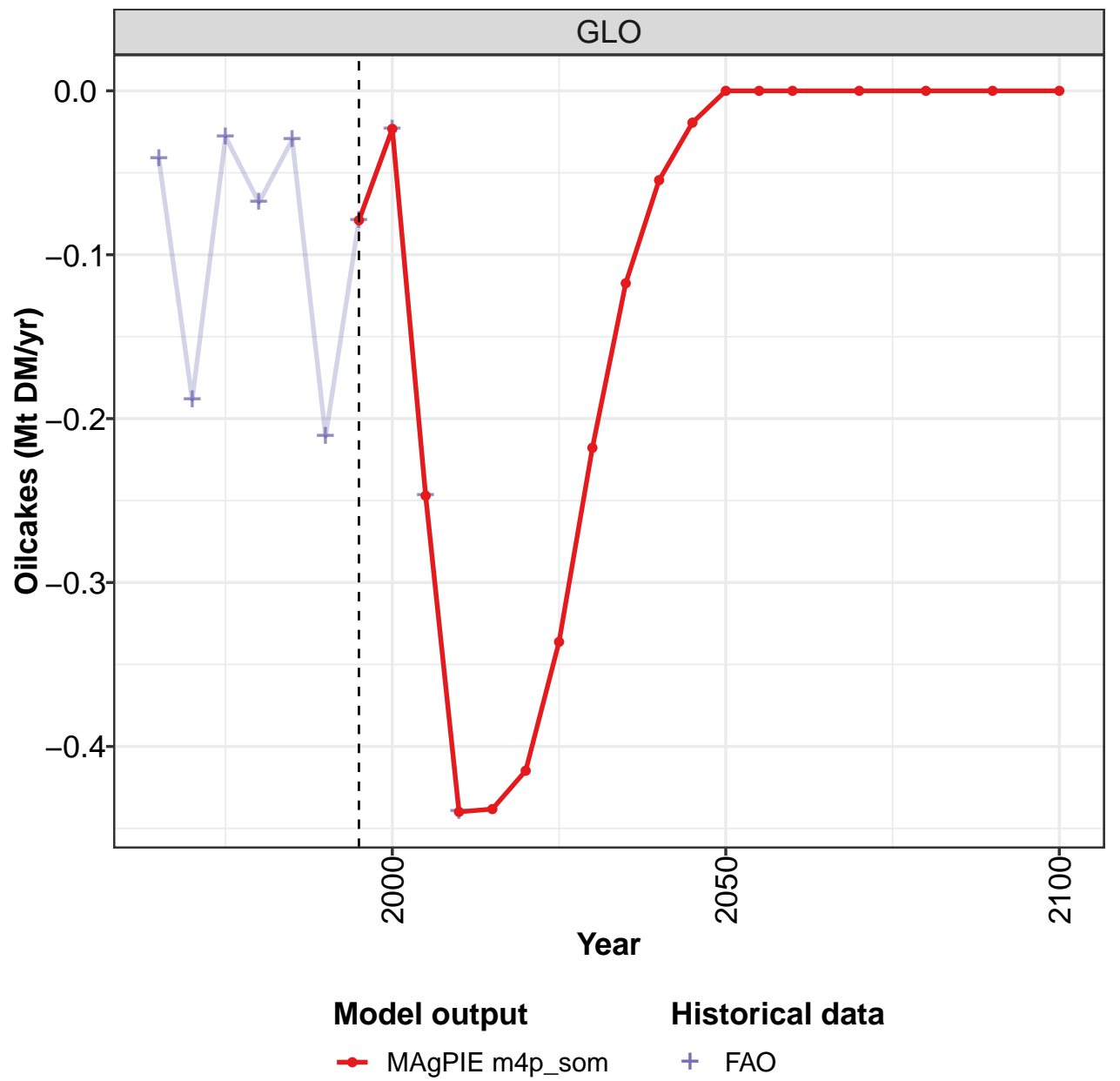
Table 222: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Secondary products—Cotton lint (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-0.00160	0.00440	0.00010	-0.00450	-0.00080	0.00050	0.00130	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	-0.00230	0.00440	0.00010	-0.00450	-0.00080	0.00050	0.00130	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00070	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 223: FAO — Demand—Domestic Balanceflow—Secondary products—Cotton lint (Mt DM/yr)

5.4.4 Oilcakes

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

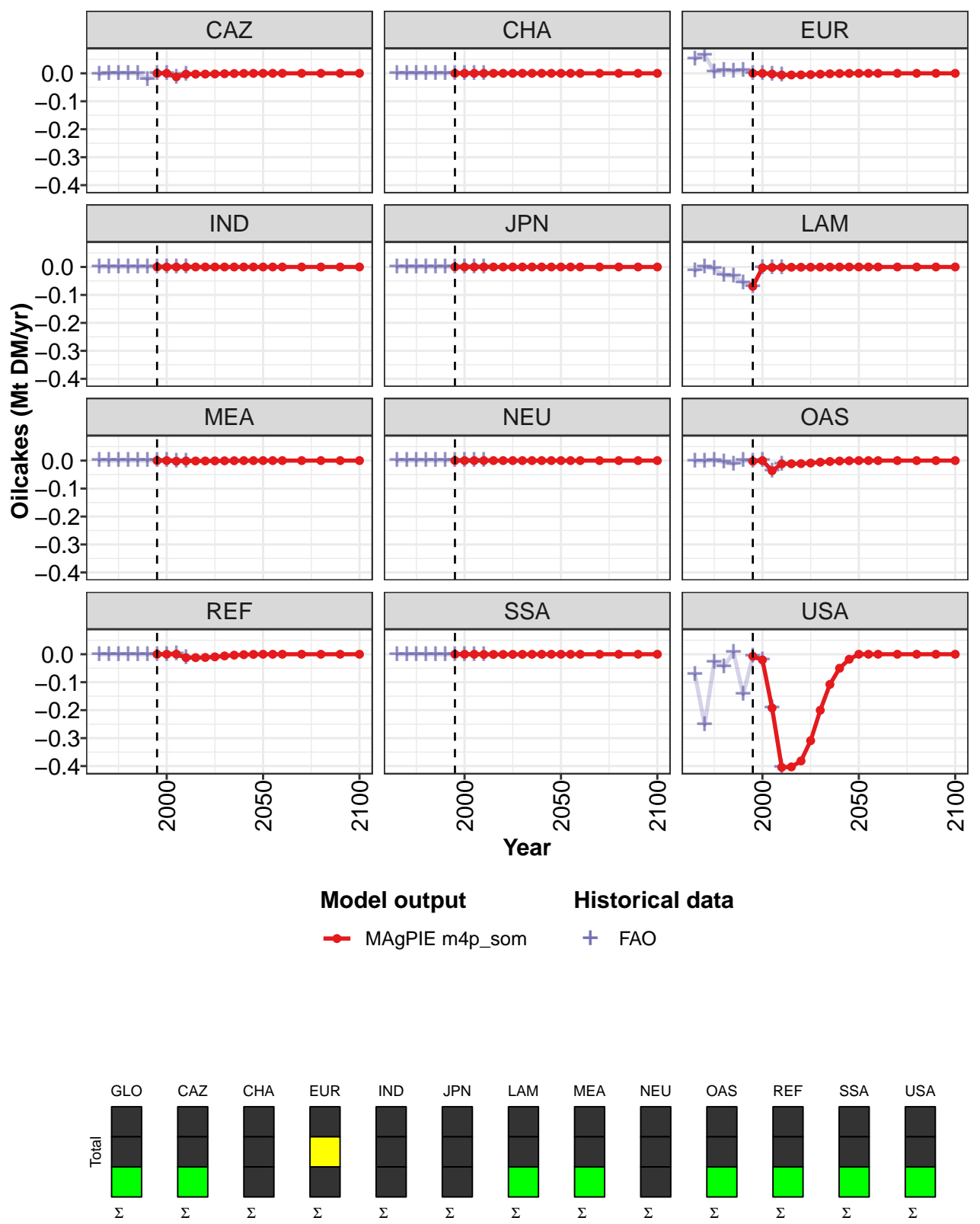


Figure 75: MAGPIE m4p\_som — Demand—Domestic Balanceflow—Secondary products—Oilcakes (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	
GLO	-0.079000	-0.023200	-0.247000	-0.439900	-0.438200	-0.414800	-0.336200	-0.217800	-0.117400	-0.05
CAZ	0.000000	0.000000	-0.012600	-0.002900	-0.002900	-0.002700	-0.002200	-0.001400	-0.000800	-0.00
CHA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
EUR	0.000000	-0.000200	-0.002500	-0.005800	-0.005800	-0.005500	-0.004500	-0.002900	-0.001600	-0.00
IND	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
JPN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
LAM	-0.069400	-0.002800	-0.001800	-0.001000	-0.001000	-0.000900	-0.000800	-0.000500	-0.000300	-0.00
MEA	0.000000	0.000000	-0.002200	-0.001300	-0.001300	-0.001200	-0.001000	-0.000700	-0.000400	-0.00
NEU	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00
OAS	-0.002400	0.000000	-0.036200	-0.011500	-0.011400	-0.010800	-0.008800	-0.005700	-0.003100	-0.00
REF	0.000000	0.000000	0.000500	-0.012200	-0.012100	-0.011500	-0.009300	-0.006000	-0.003200	-0.00
SSA	0.000000	0.000000	-0.000100	-0.000700	-0.000700	-0.000600	-0.000500	-0.000300	-0.000200	-0.00
USA	-0.007200	-0.020200	-0.192100	-0.404500	-0.403000	-0.381600	-0.309100	-0.200300	-0.107800	-0.05

Table 224: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Secondary products—Oilcakes (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
CAZ	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
CHA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
EUR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
IND	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
JPN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
LAM	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
MEA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
NEU	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
OAS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
REF	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
SSA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
USA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

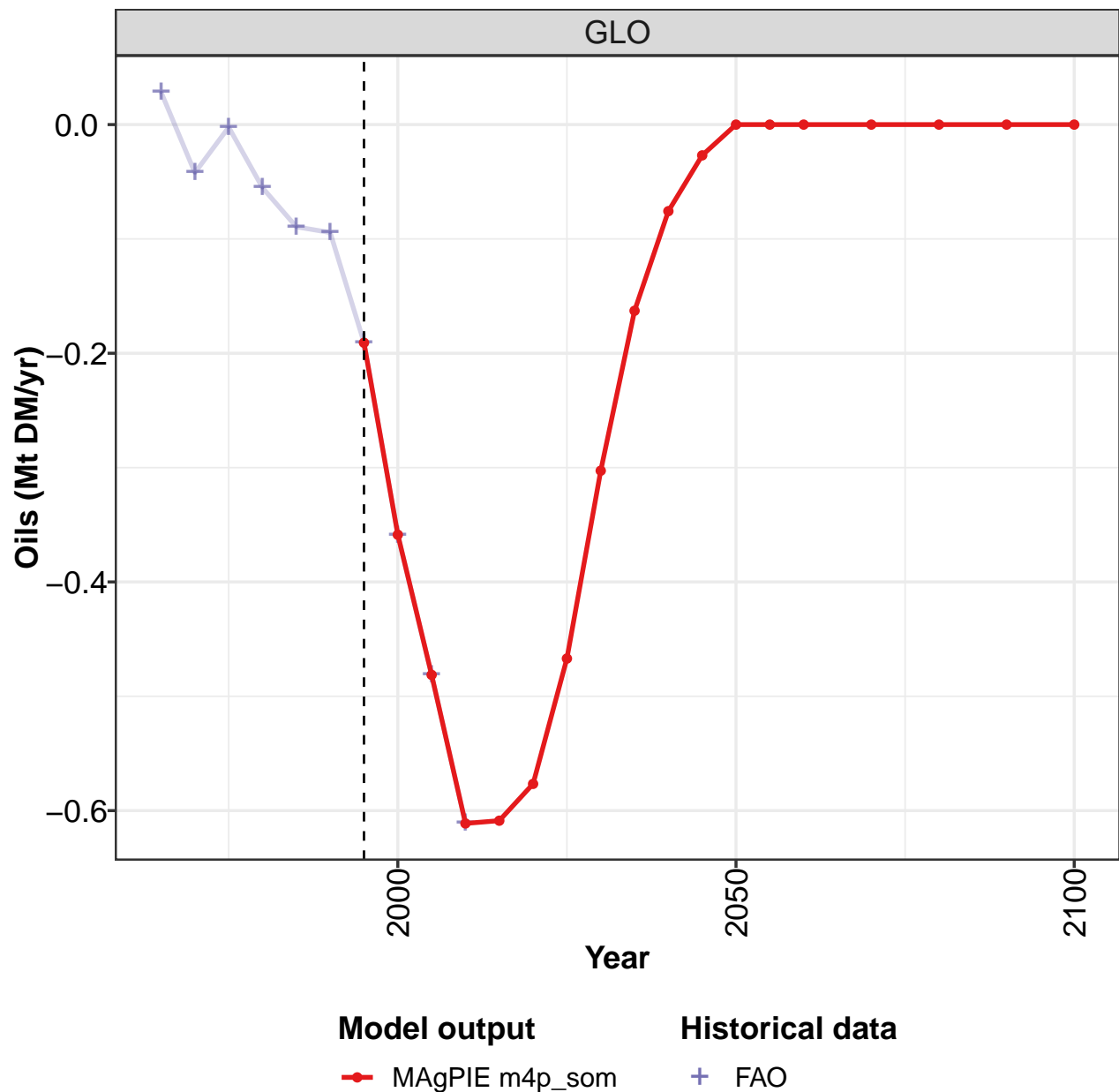
Table 225: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Secondary products—Oilcakes (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-0.0413	-0.1884	-0.0281	-0.0681	-0.0298	-0.2108	-0.0790	-0.0231	-0.2469	-0.4398
CAZ	-0.0030	0.0000	0.0000	0.0000	0.0000	-0.0211	0.0000	0.0000	-0.0126	-0.0029
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0509	0.0659	0.0060	0.0112	0.0088	0.0110	0.0000	-0.0002	-0.0025	-0.0058
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	-0.0138	0.0000	-0.0062	-0.0305	-0.0318	-0.0558	-0.0694	-0.0028	-0.0018	-0.0010
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0022	-0.0013
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	-0.0026	-0.0026	0.0000	-0.0054	-0.0127	0.0000	-0.0024	0.0000	-0.0362	-0.0115
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0005	-0.0122
SSA	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0011	0.0000	0.0000	-0.0001	-0.0007
USA	-0.0729	-0.2518	-0.0279	-0.0434	0.0061	-0.1438	-0.0072	-0.0202	-0.1921	-0.4045

Table 226: FAO — Demand—Domestic Balanceflow—Secondary products—Oilcakes (Mt DM/yr)

5.4.5 Oils

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

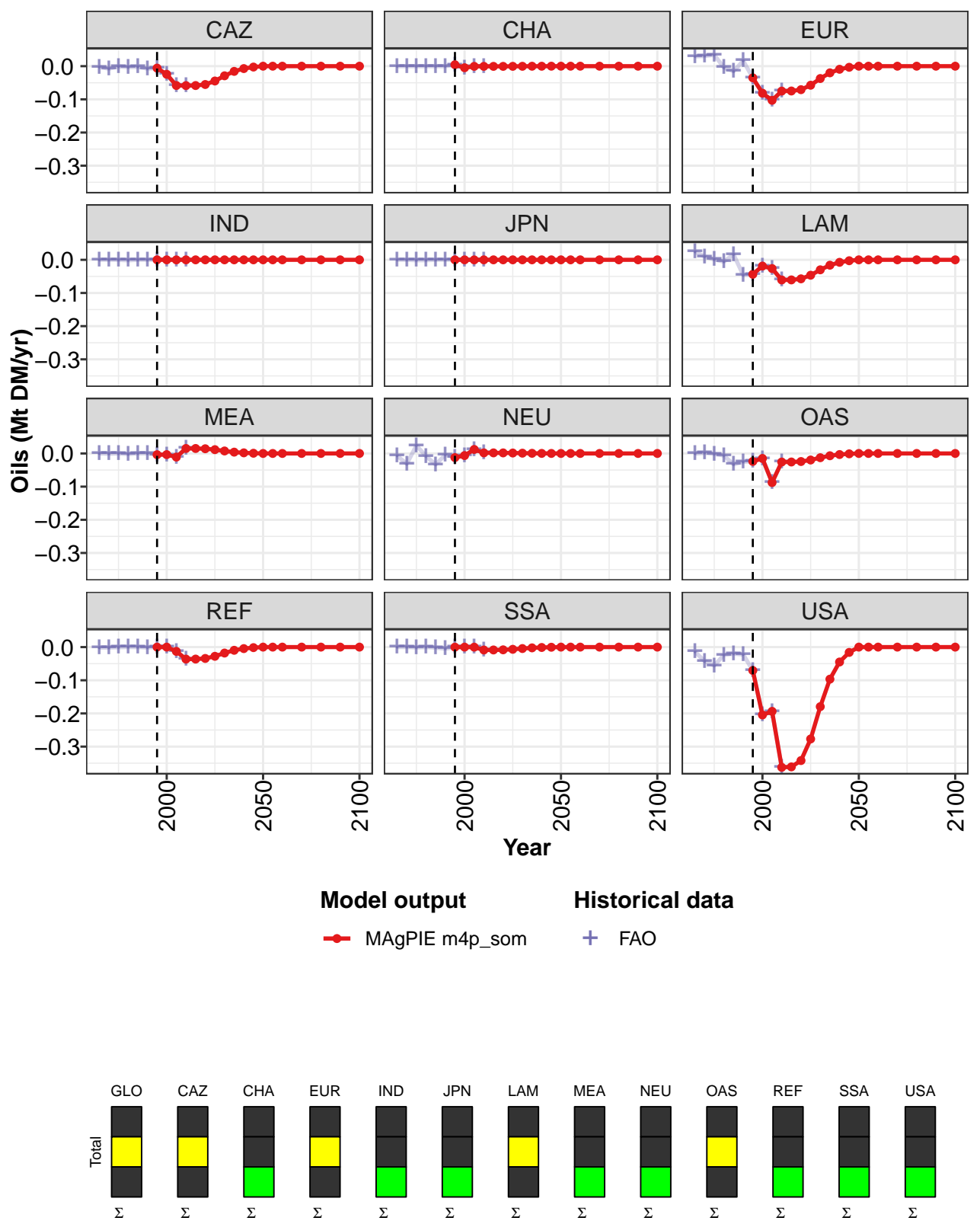


Figure 76: MAGPIE m4p\_som — Demand—Domestic Balanceflow—Secondary products—Oils (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-0.1908	-0.3587	-0.4813	-0.6112	-0.6088	-0.5766	-0.4670	-0.3027	-0.1628	-0.0757	-0.0269
CAZ	-0.0058	-0.0245	-0.0582	-0.0585	-0.0583	-0.0552	-0.0447	-0.0290	-0.0156	-0.0072	-0.0026
CHA	0.0044	-0.0047	-0.0005	-0.0005	-0.0005	-0.0005	-0.0004	-0.0003	-0.0001	-0.0001	0.0000
EUR	-0.0351	-0.0814	-0.1029	-0.0751	-0.0748	-0.0708	-0.0574	-0.0372	-0.0200	-0.0093	-0.0033
IND	0.0000	0.0000	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	-0.0436	-0.0188	-0.0263	-0.0607	-0.0605	-0.0573	-0.0464	-0.0301	-0.0162	-0.0075	-0.0027
MEA	-0.0037	-0.0035	-0.0109	0.0150	0.0150	0.0142	0.0115	0.0075	0.0040	0.0019	0.0007
NEU	-0.0124	-0.0063	0.0121	0.0018	0.0018	0.0017	0.0014	0.0009	0.0005	0.0002	0.0001
OAS	-0.0240	-0.0150	-0.0877	-0.0258	-0.0257	-0.0243	-0.0197	-0.0128	-0.0069	-0.0032	-0.0011
REF	0.0000	0.0000	-0.0129	-0.0362	-0.0361	-0.0342	-0.0277	-0.0179	-0.0096	-0.0045	-0.0016
SSA	-0.0001	0.0000	-0.0001	-0.0087	-0.0086	-0.0082	-0.0066	-0.0043	-0.0023	-0.0011	-0.0004
USA	-0.0705	-0.2045	-0.1937	-0.3625	-0.3611	-0.3420	-0.2770	-0.1795	-0.0966	-0.0449	-0.0160

Table 227: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Secondary products—Oils (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 228: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Secondary products—Oils (Mt DM/yr)  
[PART 2/2]

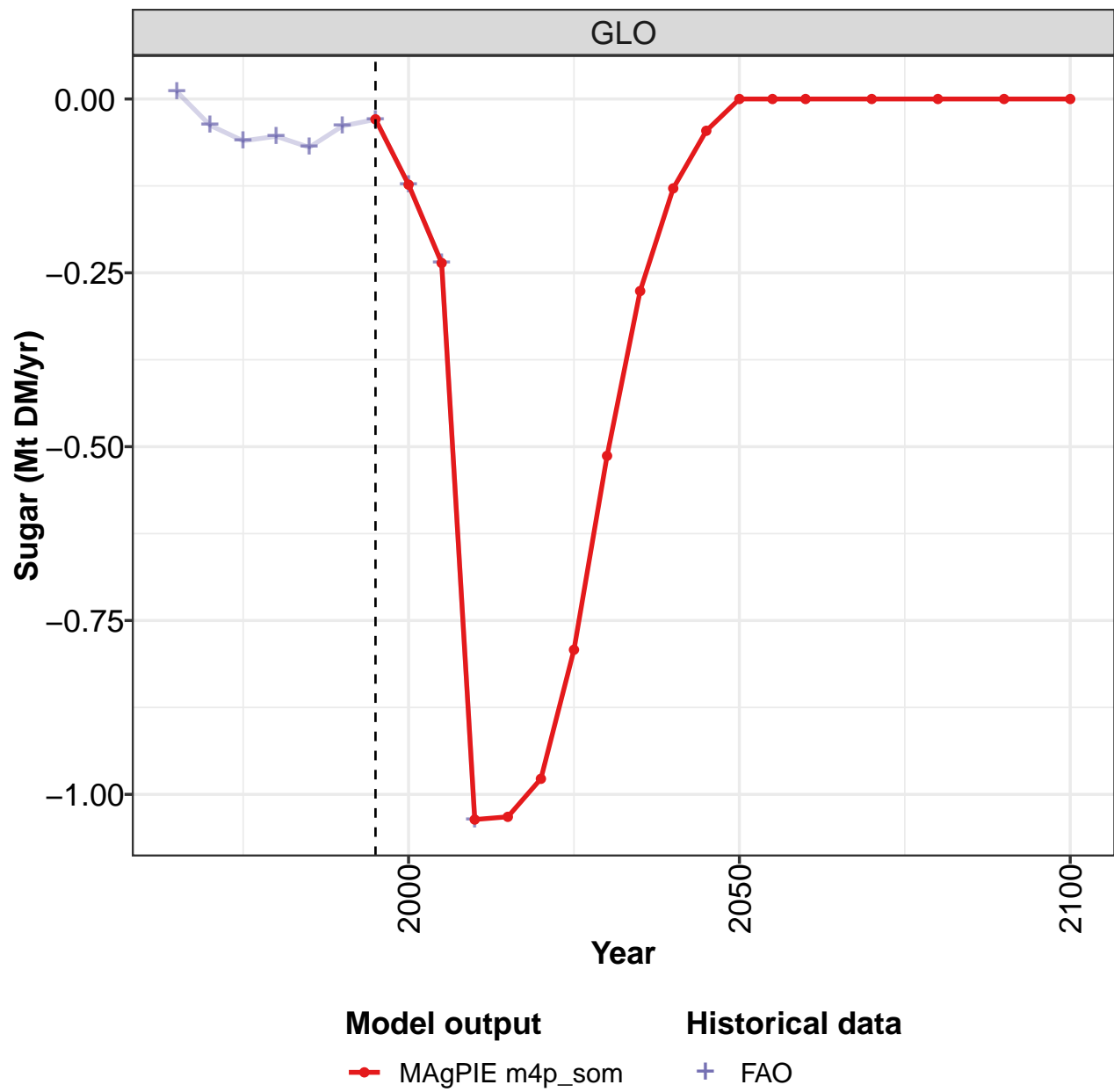
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0284	-0.0421	-0.0023	-0.0553	-0.0894	-0.0944	-0.1906	-0.3589	-0.4814	-0.6111
CAZ	-0.0023	-0.0076	-0.0009	-0.0028	-0.0020	-0.0074	-0.0058	-0.0245	-0.0582	-0.0585
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	0.0044	-0.0047	-0.0005	-0.0005
EUR	0.0296	0.0307	0.0340	-0.0043	-0.0156	0.0163	-0.0351	-0.0814	-0.1029	-0.0751
IND	0.0000	0.0000	-0.0002	-0.0015	0.0000	0.0000	0.0000	0.0000	-0.0001	0.0000
JPN	0.0000	0.0000	-0.0013	-0.0012	0.0000	0.0000	0.0000	0.0000	-0.0001	0.0000
LAM	0.0245	0.0095	0.0012	-0.0055	0.0163	-0.0459	-0.0436	-0.0188	-0.0263	-0.0607
MEA	0.0001	-0.0010	0.0000	-0.0021	0.0003	0.0004	-0.0037	-0.0035	-0.0109	0.0150
NEU	-0.0067	-0.0316	0.0241	-0.0081	-0.0336	-0.0039	-0.0124	-0.0063	0.0121	0.0018
OAS	-0.0006	0.0018	-0.0014	-0.0063	-0.0330	-0.0253	-0.0240	-0.0150	-0.0877	-0.0258
REF	-0.0018	-0.0016	-0.0006	0.0002	-0.0001	-0.0014	0.0000	0.0000	-0.0129	-0.0362
SSA	0.0000	0.0000	-0.0013	-0.0001	-0.0017	-0.0049	-0.0001	0.0000	-0.0001	-0.0087
USA	-0.0143	-0.0423	-0.0559	-0.0236	-0.0199	-0.0223	-0.0705	-0.2045	-0.1937	-0.3625

Table 229: FAO — Demand—Domestic Balanceflow—Secondary products—Oils (Mt DM/yr)



5.4.6 Sugar

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

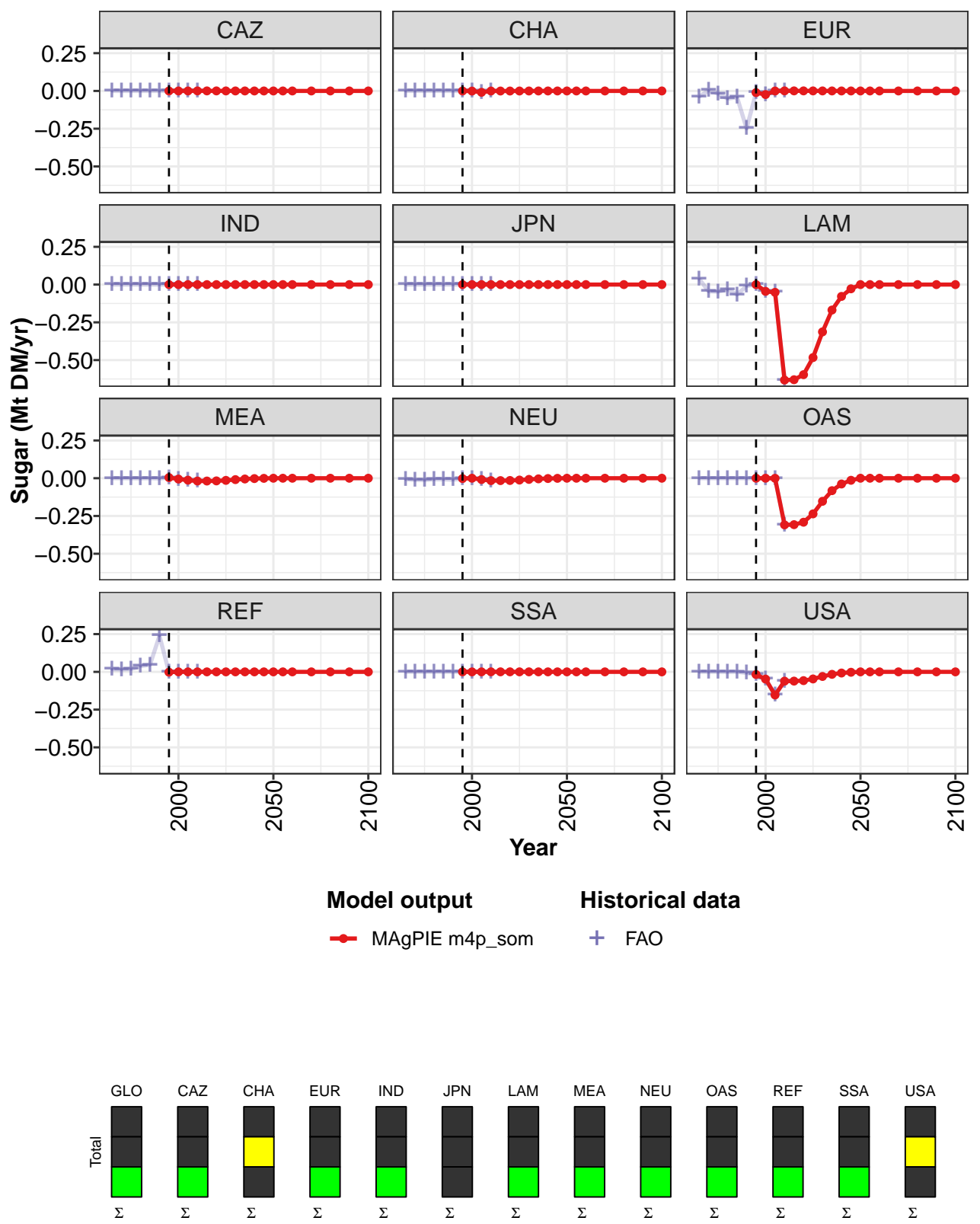


Figure 77: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Secondary products—Sugar (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-0.02920	-0.12320	-0.23590	-1.03620	-1.03230	-0.97760	-0.79200	-0.51320	-0.27620	-0.12850	-0.02850
CAZ	-0.00010	0.00000	0.00000	0.00030	0.00030	0.00030	0.00020	0.00010	0.00010	0.00000	0.00000
CHA	-0.00020	-0.00080	-0.00910	-0.00040	-0.00040	-0.00040	-0.00030	-0.00020	-0.00010	-0.00010	0.00000
EUR	-0.01100	-0.02380	-0.00040	0.00040	0.00040	0.00040	0.00030	0.00020	0.00010	0.00000	0.00000
IND	0.00000	-0.00030	0.00000	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	-0.00020	-0.04490	-0.05130	-0.63220	-0.62990	-0.59650	-0.48320	-0.31310	-0.16850	-0.07830	-0.02850
MEA	0.00430	-0.00550	-0.01270	-0.01860	-0.01850	-0.01760	-0.01420	-0.00920	-0.00500	-0.00230	-0.00000
NEU	-0.00240	0.00000	-0.00880	-0.01580	-0.01570	-0.01490	-0.01210	-0.00780	-0.00420	-0.00200	-0.00000
OAS	0.00000	0.00000	-0.00050	-0.30870	-0.30750	-0.29120	-0.23590	-0.15290	-0.08230	-0.03820	-0.02850
REF	-0.00200	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	-0.00010	0.00000	0.00030	0.00030	0.00030	0.00020	0.00020	0.00010	0.00000	0.00000
USA	-0.01760	-0.04780	-0.15310	-0.06140	-0.06120	-0.05790	-0.04690	-0.03040	-0.01640	-0.00760	-0.00000

Table 230: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Secondary products—Sugar (Mt DM/yr)  
[PART 1/2]

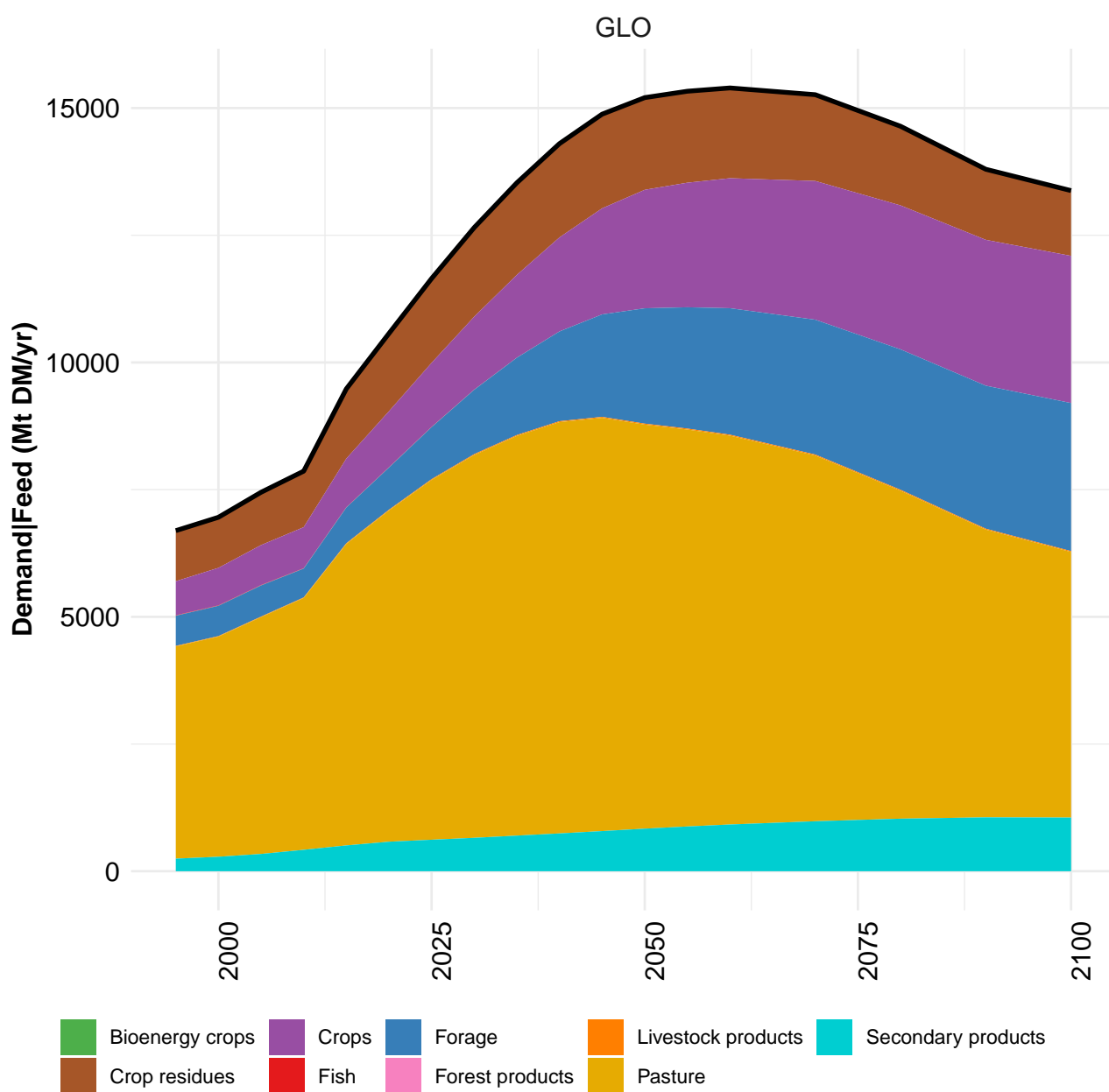
	2050	2055	2060	2070	2080	2090	2100
GLO	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

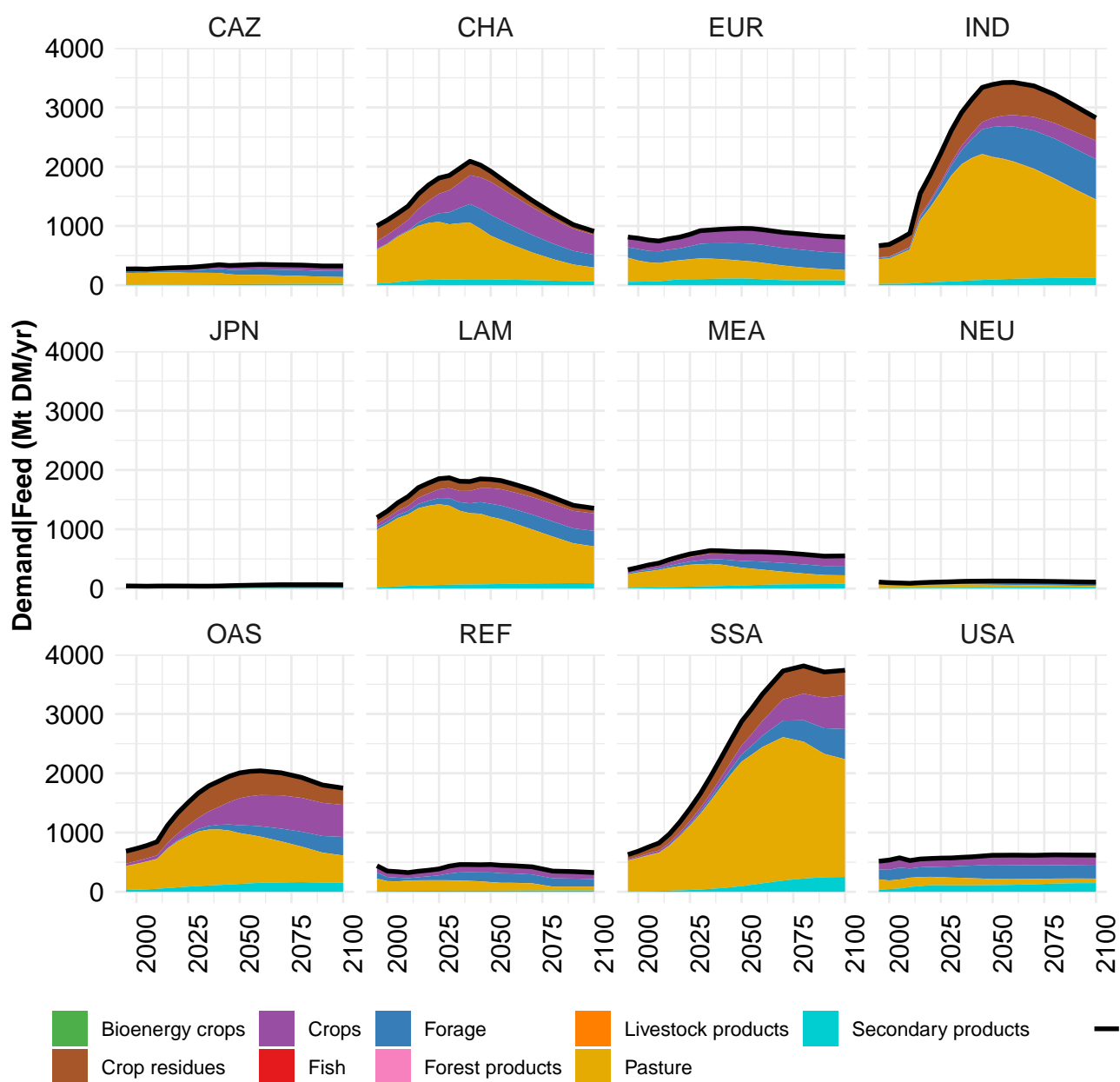
Table 231: MAgPIE m4p\_som — Demand—Domestic Balanceflow—Secondary products—Sugar (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.010	-0.038	-0.060	-0.054	-0.070	-0.039	-0.029	-0.123	-0.236	-1.036
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	-0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	-0.000	-0.000	-0.001	-0.009	-0.000
EUR	-0.038	0.003	-0.018	-0.051	-0.042	-0.249	-0.011	-0.024	-0.000	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.000	0.000	-0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.038	-0.045	-0.047	-0.032	-0.067	-0.010	-0.000	-0.045	-0.051	-0.632
MEA	0.000	-0.000	-0.001	-0.001	0.000	-0.002	0.004	-0.005	-0.013	-0.019
NEU	-0.006	-0.011	-0.013	-0.007	-0.007	-0.010	-0.002	0.000	-0.009	-0.016
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.001	-0.309
REF	0.017	0.016	0.018	0.038	0.046	0.239	-0.002	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.000	0.000	0.000
USA	0.000	0.000	0.000	-0.001	0.000	-0.007	-0.018	-0.048	-0.153	-0.061

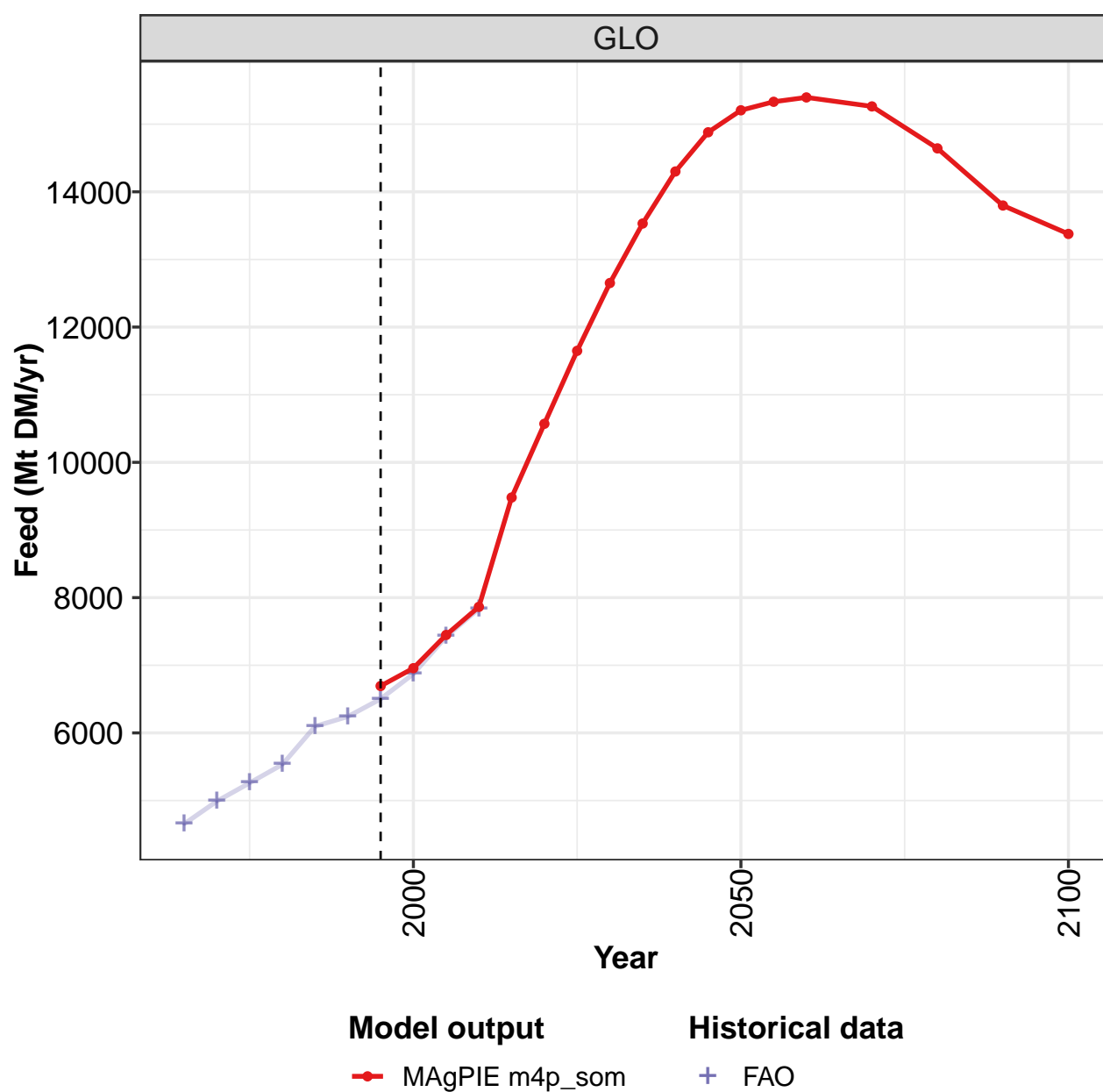
Table 232: FAO — Demand—Domestic Balanceflow—Secondary products—Sugar (Mt DM/yr)

## 6 Feed





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

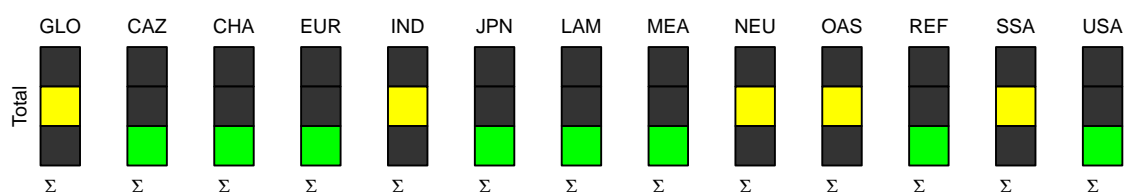
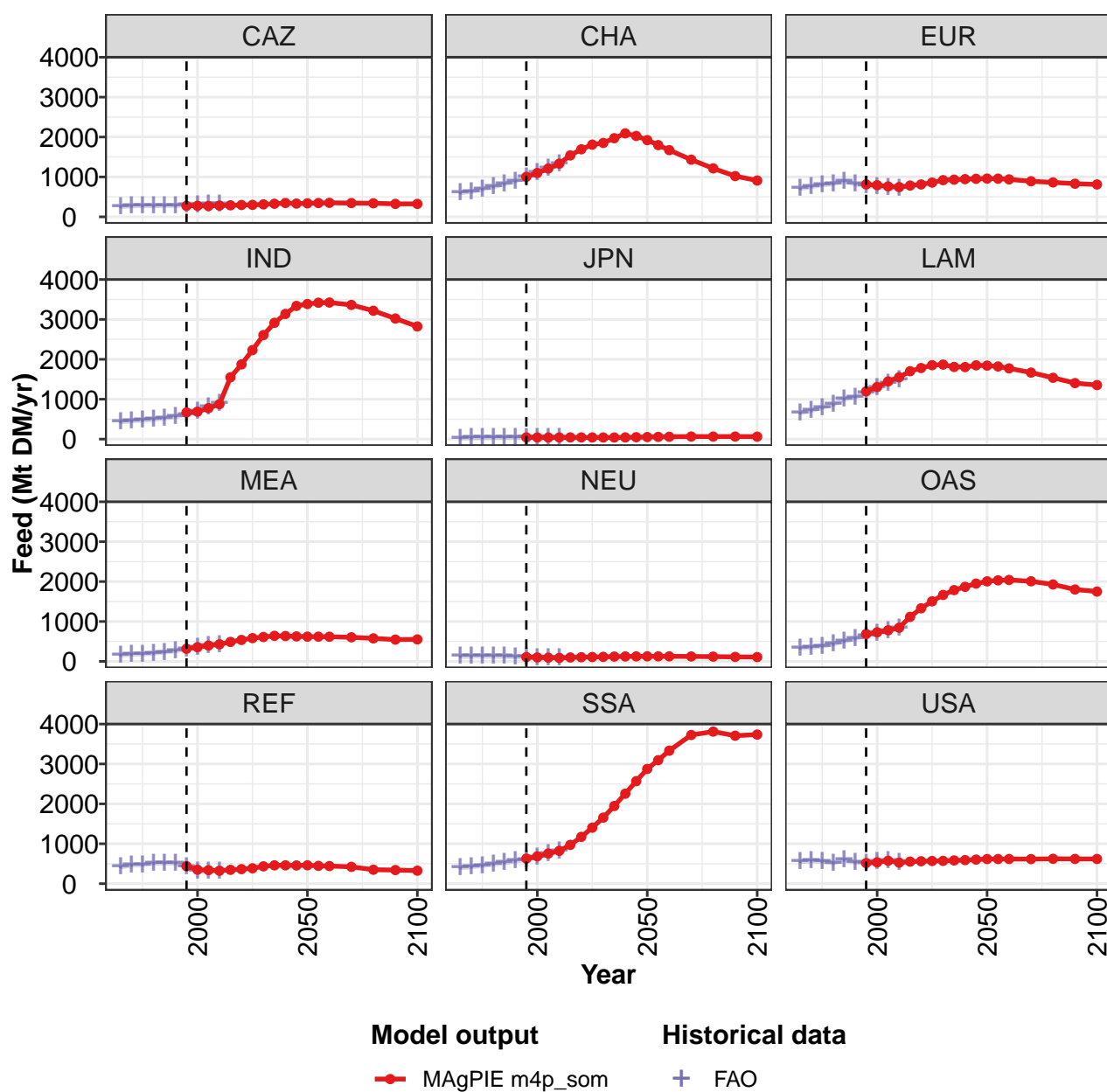


Figure 78: MAgPIE m4p\_som — Demand—Feed (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	6694	6957	7448	7863	9481	10570	11649	12651	13531	14301	14880
CAZ	275	276	272	282	289	297	299	313	328	347	333
CHA	1003	1099	1213	1333	1540	1693	1809	1852	1971	2092	2028
EUR	813	793	762	746	784	812	859	920	932	945	953
IND	667	688	776	876	1549	1873	2231	2607	2914	3137	3338
JPN	44	42	40	42	43	43	42	41	41	43	48
LAM	1197	1305	1445	1550	1701	1781	1853	1868	1809	1806	1849
MEA	317	355	397	428	488	538	583	611	640	636	626
NEU	109	99	94	88	98	105	110	114	121	124	125
OAS	685	729	780	844	1116	1331	1505	1666	1786	1868	1950
REF	439	350	339	324	347	364	386	434	460	459	456
SSA	628	685	756	822	972	1173	1403	1655	1946	2255	2569
USA	516	535	573	527	553	562	569	571	582	590	604

Table 233: MAgPIE m4p\_som — Demand—Feed (Mt DM/yr) [PART 1/2]

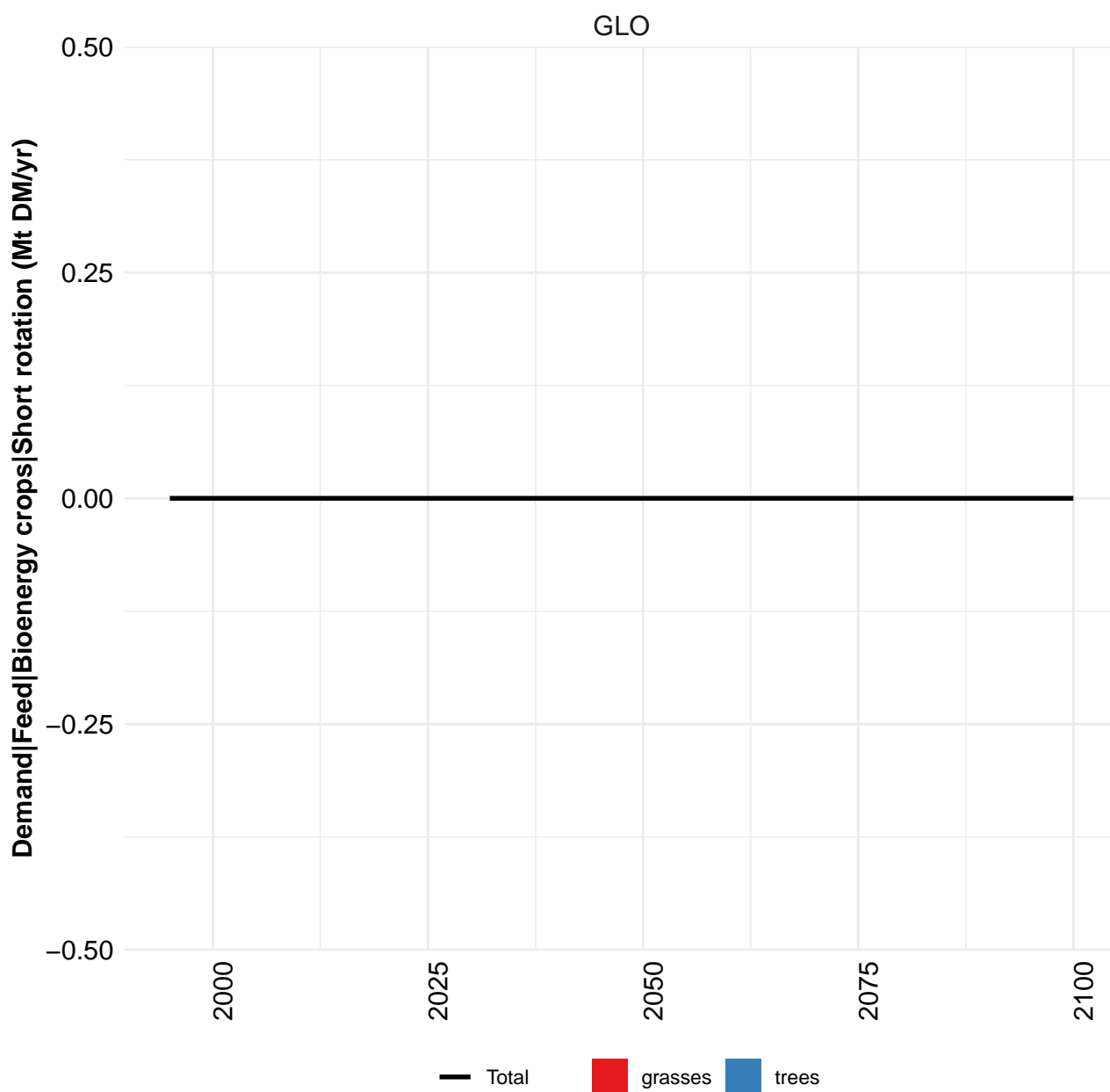
	2050	2055	2060	2070	2080	2090	2100
GLO	15205	15331	15395	15263	14642	13797	13377
CAZ	339	346	352	345	340	325	324
CHA	1923	1798	1673	1433	1214	1021	910
EUR	959	956	938	892	863	830	812
IND	3386	3418	3423	3363	3217	3022	2824
JPN	52	56	59	64	64	64	62
LAM	1842	1821	1773	1668	1537	1404	1354
MEA	619	620	618	604	577	546	551
NEU	127	126	126	123	119	113	108
OAS	2006	2032	2041	2008	1928	1802	1750
REF	461	446	441	422	349	341	325
SSA	2875	3095	3332	3726	3811	3708	3737
USA	617	617	619	616	624	620	619

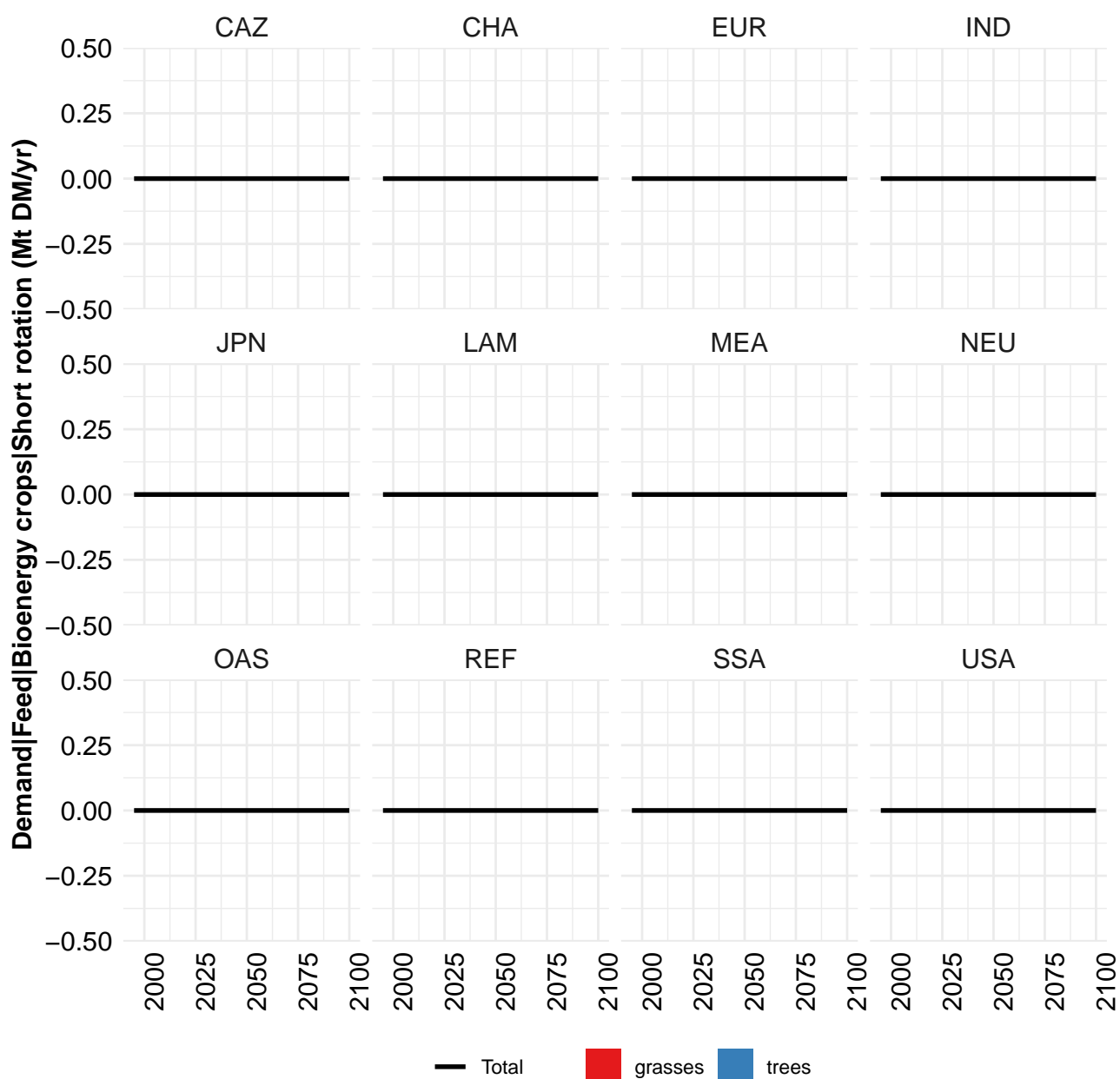
Table 234: MAgPIE m4p\_som — Demand—Feed (Mt DM/yr) [PART 2/2]

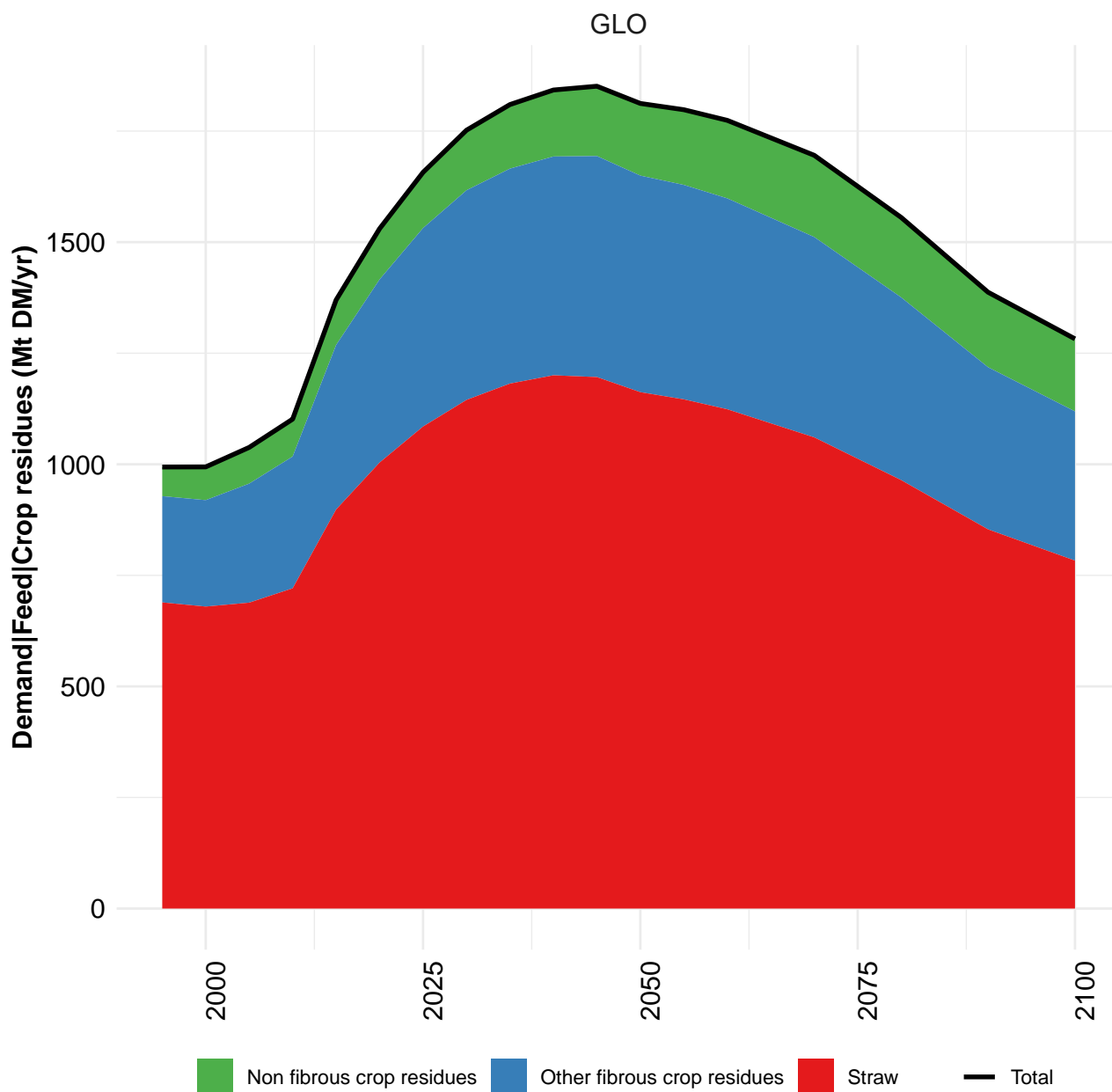
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4653	4990	5260	5533	6096	6242	6502	6872	7424	7836
CAZ	254	270	279	273	283	285	292	304	313	312
CHA	600	638	690	751	824	899	997	1101	1210	1332
EUR	706	757	800	831	902	821	779	756	733	723
IND	432	457	473	493	526	567	615	691	802	903
JPN	28	34	37	44	47	47	45	42	40	42
LAM	657	717	793	865	1008	1057	1168	1288	1402	1490
MEA	156	175	185	201	233	265	312	357	404	428
NEU	124	128	131	126	125	112	103	94	92	87
OAS	333	355	385	432	508	574	648	698	773	845
REF	417	464	473	510	518	513	425	321	322	311
SSA	396	421	453	487	527	568	610	669	753	820
USA	550	576	561	519	597	535	509	549	579	544

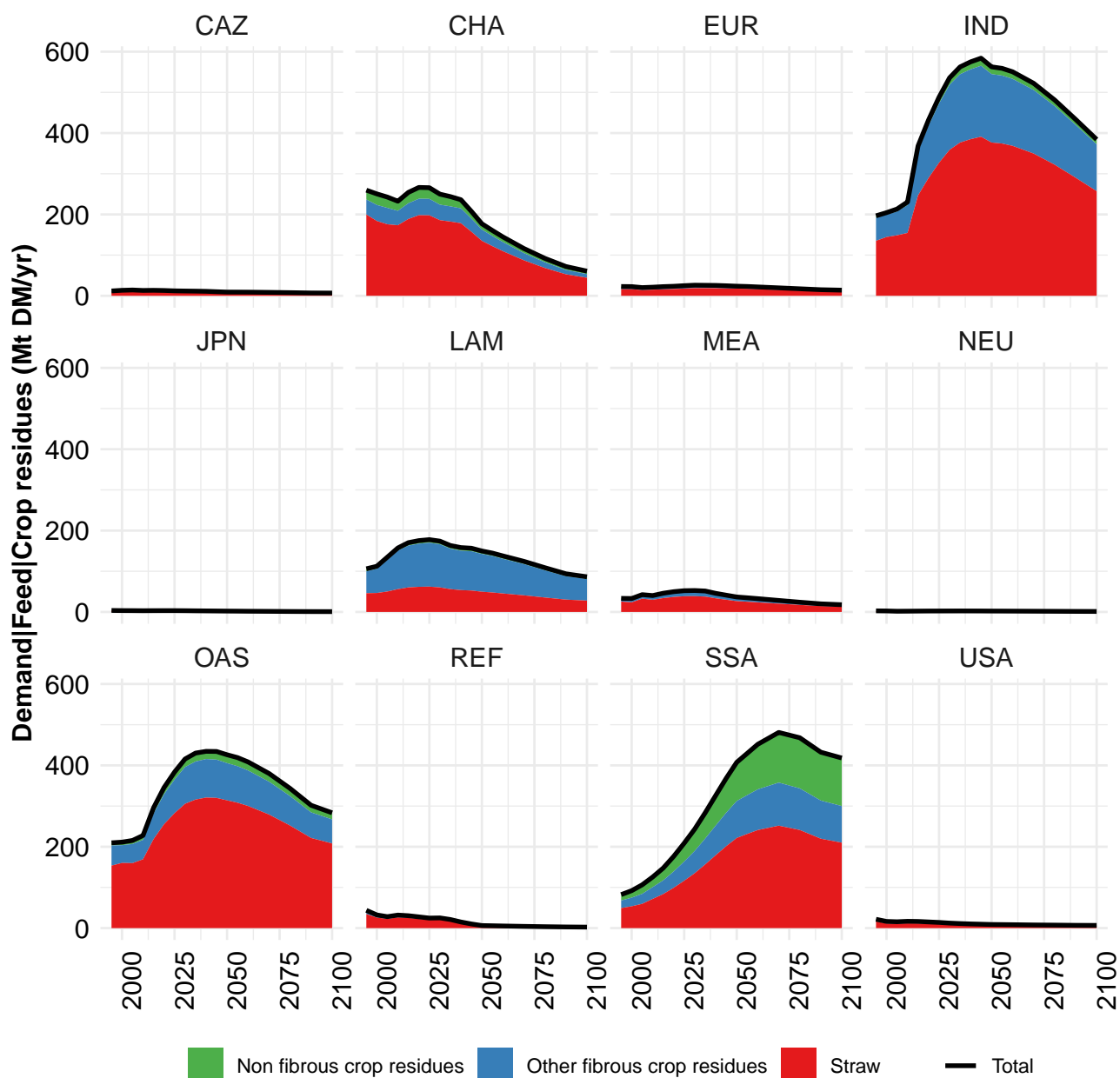
Table 235: FAO — Demand—Feed (Mt DM/yr)





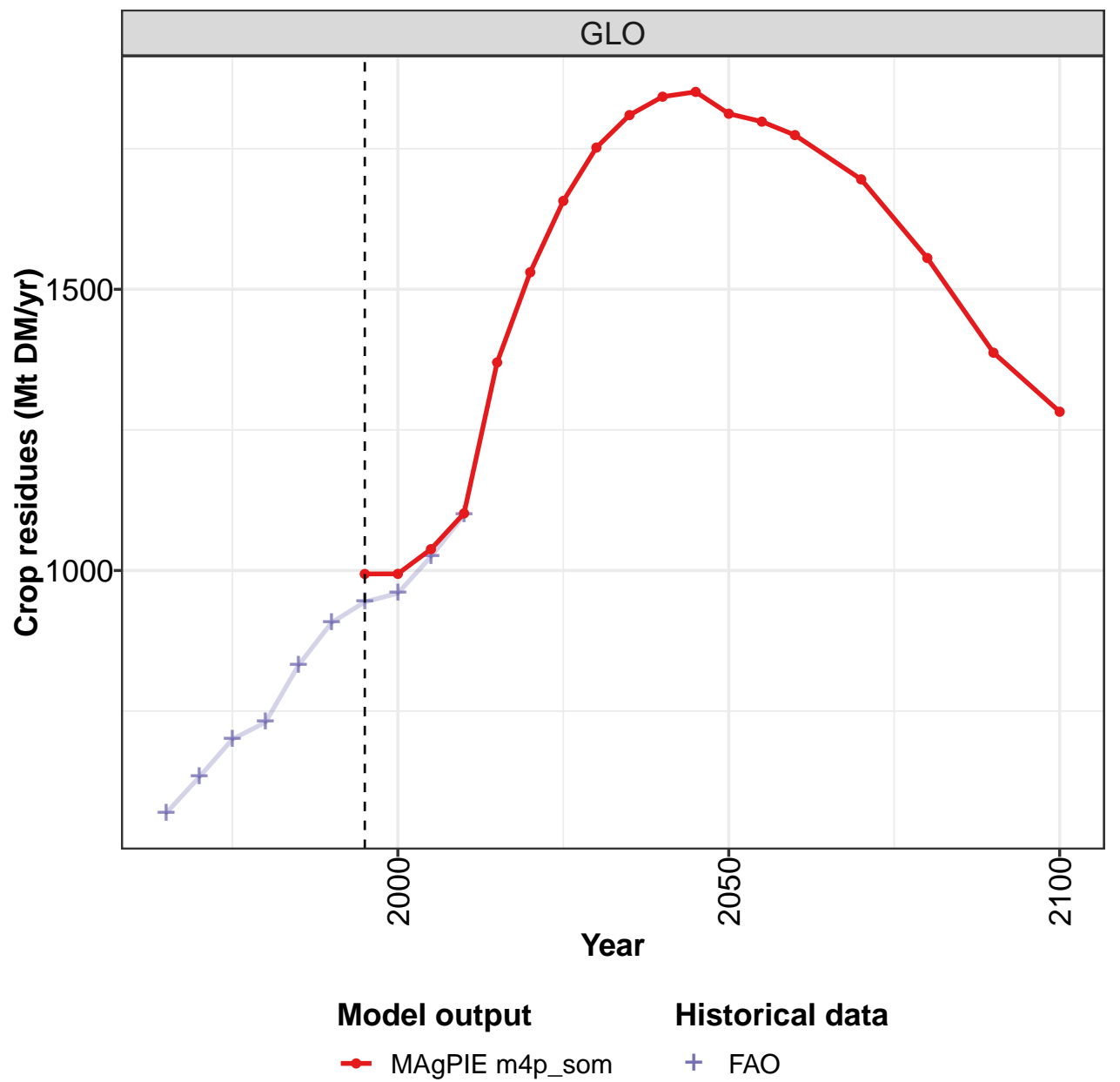






6.1 Crop residues

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

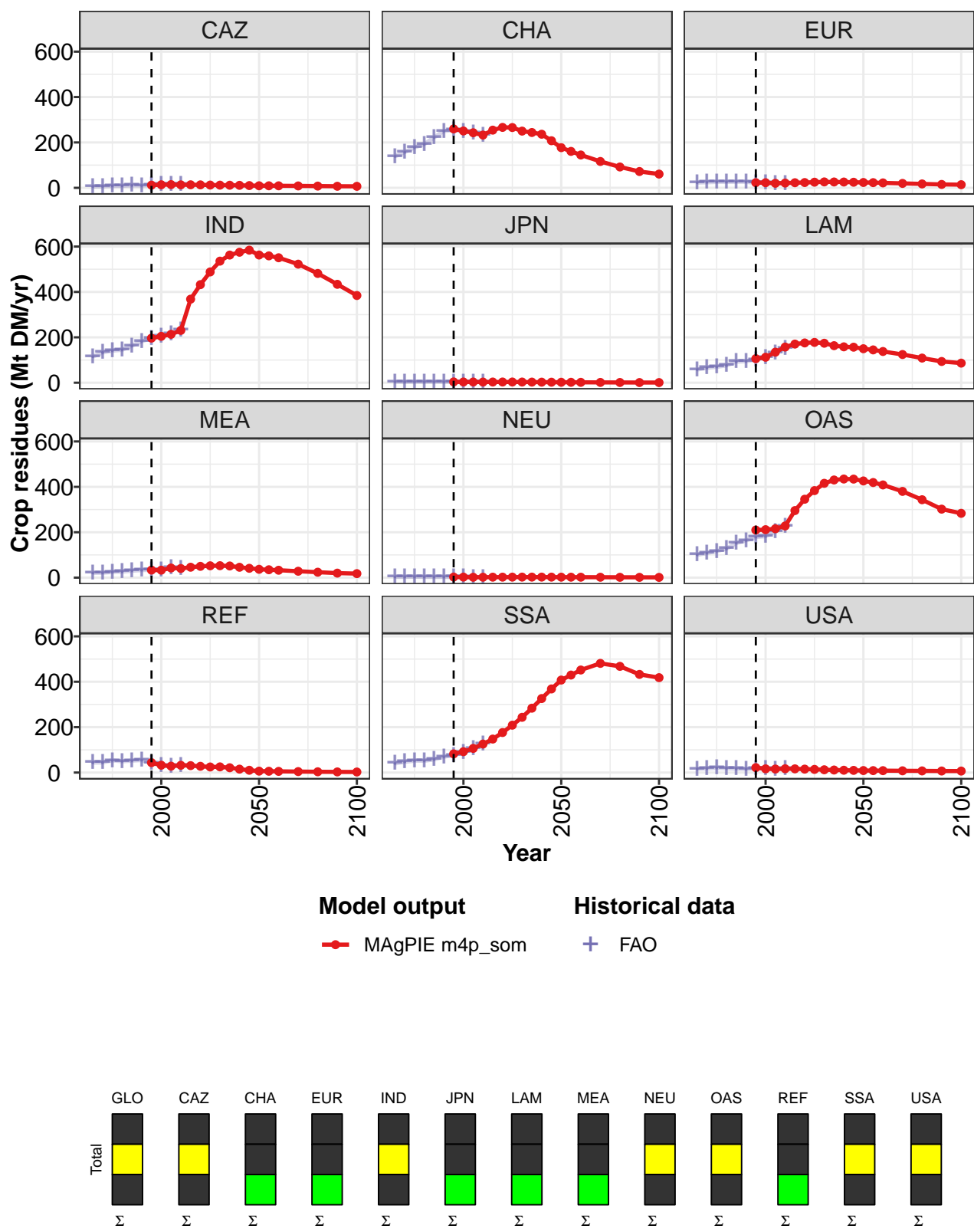


Figure 79: MAgPIE m4p\_som — Demand—Feed—Crop residues (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	994	994	1038	1102	1370	1530	1657	1752	1810	1842	1851
CAZ	12	13	14	13	13	13	12	12	11	11	10
CHA	260	251	243	233	254	266	266	250	244	236	208
EUR	23	23	20	21	23	23	25	26	26	26	25
IND	197	204	213	231	368	432	488	536	563	575	584
JPN	4	3	3	3	3	3	3	3	3	3	2
LAM	106	112	135	157	170	175	178	174	163	158	157
MEA	33	33	42	40	46	50	52	53	51	46	41
NEU	3	2	2	2	2	2	2	2	2	2	2
OAS	210	211	215	228	296	346	383	416	430	434	434
REF	44	32	28	32	30	28	25	25	21	15	10
SSA	82	92	106	126	148	176	209	243	284	326	368
USA	22	16	16	17	16	15	14	12	11	10	10

Table 236: MAgPIE m4p\_som — Demand—Feed—Crop residues (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1812	1798	1774	1695	1556	1387	1282
CAZ	9	9	9	8	8	7	7
CHA	177	161	145	116	92	72	61
EUR	24	23	22	20	17	15	14
IND	563	559	551	522	481	434	384
JPN	2	2	2	1	1	1	1
LAM	150	145	138	124	109	94	86
MEA	37	35	33	28	24	20	18
NEU	2	2	2	2	2	1	1
OAS	426	419	408	380	343	302	283
REF	6	6	5	4	3	3	2
SSA	408	430	452	481	468	432	418
USA	9	9	8	8	7	7	7

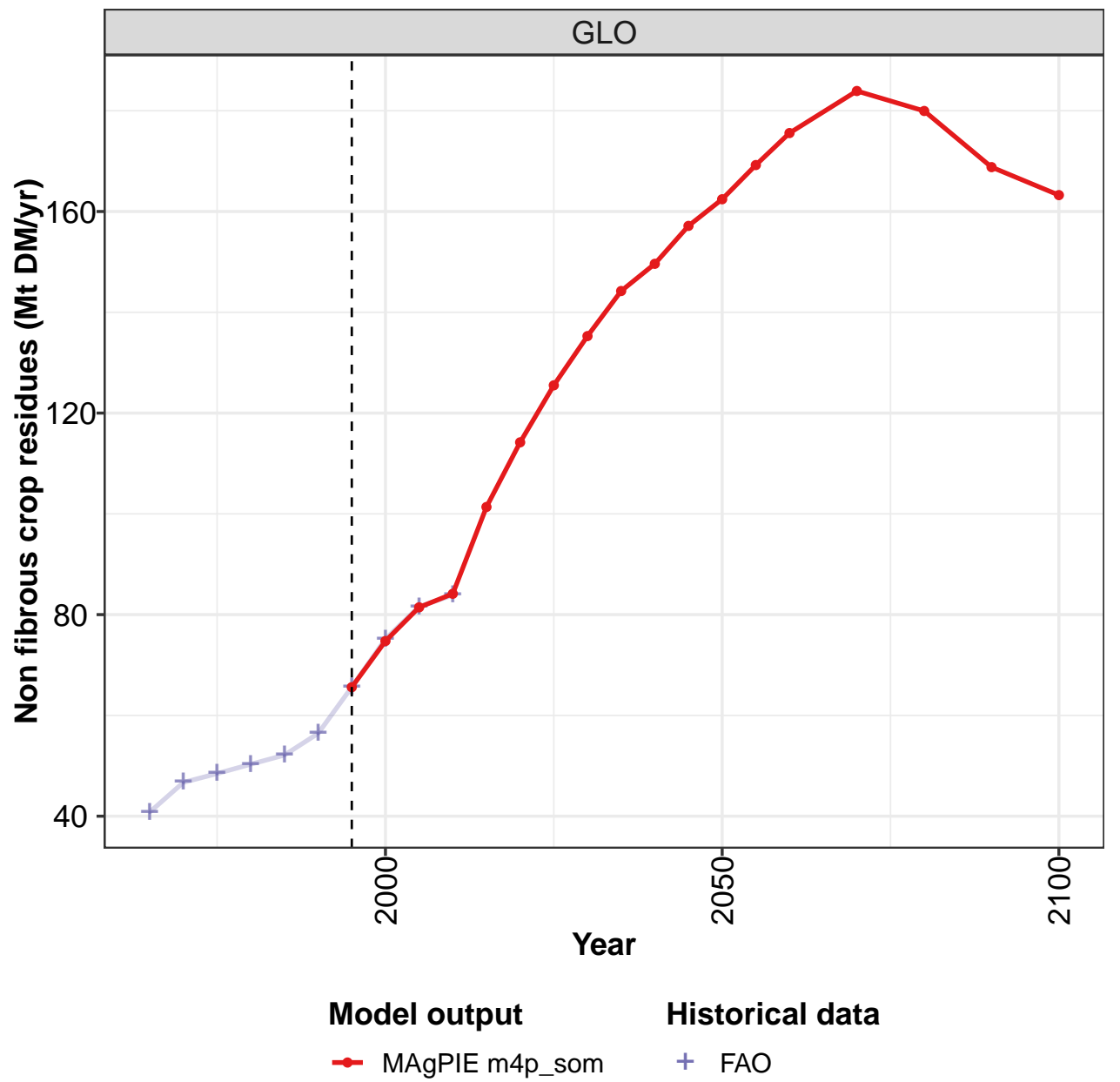
Table 237: MAgPIE m4p\_som — Demand—Feed—Crop residues (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	569	633	700	730	832	907	944	959	1025	1099
CAZ	6	7	9	9	11	10	12	16	17	15
CHA	139	157	178	193	222	250	255	249	241	232
EUR	23	24	26	26	26	26	22	21	19	20
IND	115	133	141	145	163	183	197	205	216	233
JPN	4	4	4	4	4	4	4	3	3	3
LAM	58	66	70	76	93	95	102	110	131	152
MEA	21	21	25	26	30	33	35	33	43	40
NEU	3	3	4	3	3	3	3	2	2	2
OAS	100	108	117	128	152	164	179	182	203	227
REF	44	44	53	50	52	55	42	31	27	32
SSA	40	47	52	52	58	69	77	89	106	125
USA	16	18	20	19	17	15	18	17	16	17

Table 238: FAO — Demand—Feed—Crop residues (Mt DM/yr)

6.1.1 Non fibrous crop residues

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

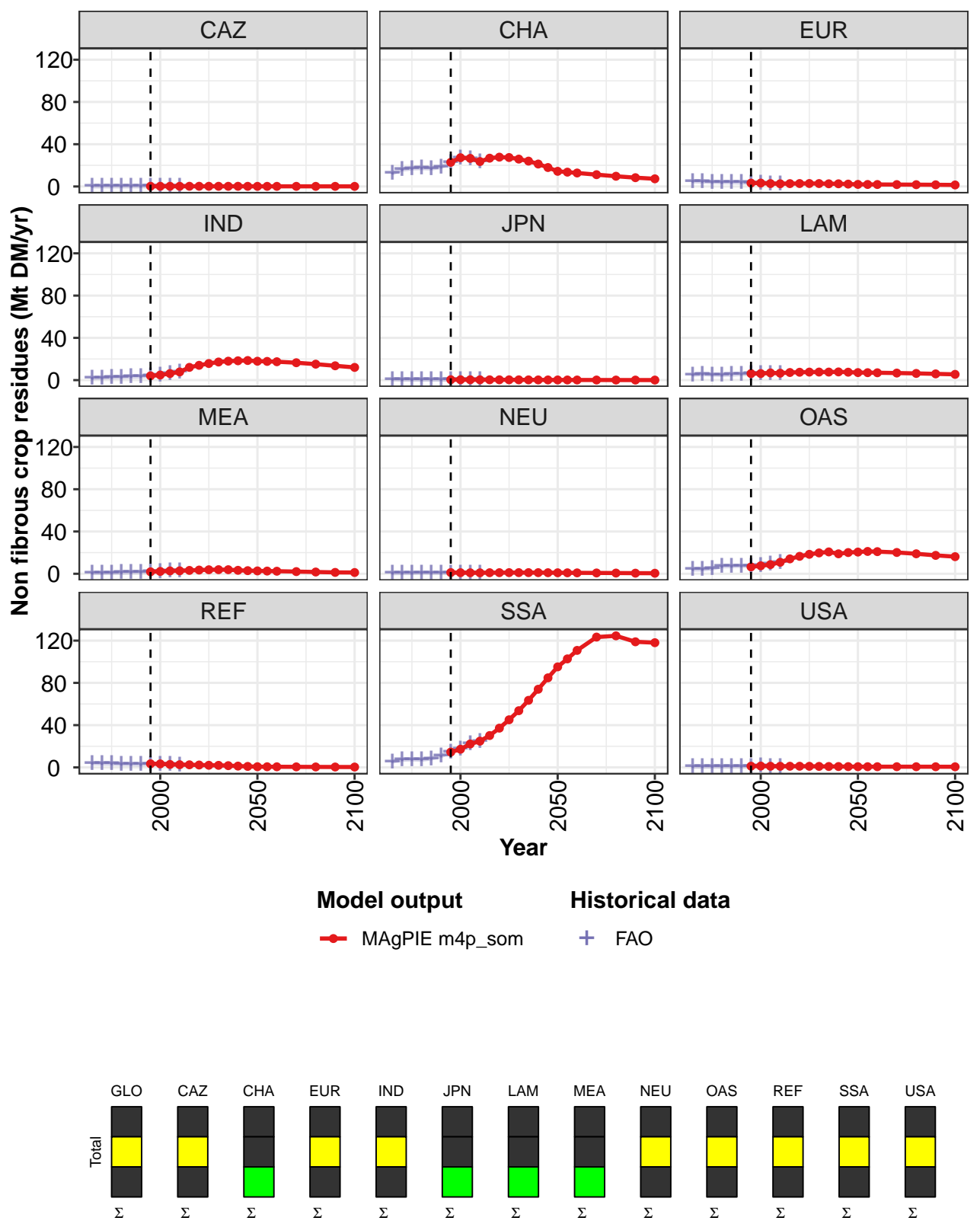


Figure 80: MAgPIE m4p\_som — Demand—Feed—Crop residues—Non fibrous crop residues (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	66	75	81	84	101	114	126	135	144	150	157
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	23	27	27	24	27	28	27	26	24	21	18
EUR	3	3	3	3	3	3	3	3	3	3	2
IND	4	5	6	8	12	14	16	17	18	18	19
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	6	6	7	7	7	7	8	8	8	8	8
MEA	2	2	3	3	3	4	4	4	4	3	3
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	7	8	9	11	14	17	18	20	21	19	20
REF	3	3	3	3	2	2	2	2	2	1	1
SSA	15	17	22	25	30	37	45	54	63	74	85
USA	1	1	1	1	1	1	1	1	1	1	1

Table 239: MAgPIE m4p\_som — Demand—Feed—Crop residues—Non fibrous crop residues (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	162	169	176	184	180	169	163
CAZ	0	0	0	0	0	0	0
CHA	14	14	13	11	10	8	7
EUR	2	2	2	2	2	2	1
IND	18	18	17	16	15	14	12
JPN	0	0	0	0	0	0	0
LAM	7	7	7	7	6	6	5
MEA	3	3	2	2	2	1	1
NEU	1	1	1	1	1	1	1
OAS	21	21	21	20	19	17	16
REF	1	1	1	1	0	0	0
SSA	95	103	111	123	125	119	118
USA	1	1	1	1	1	1	1

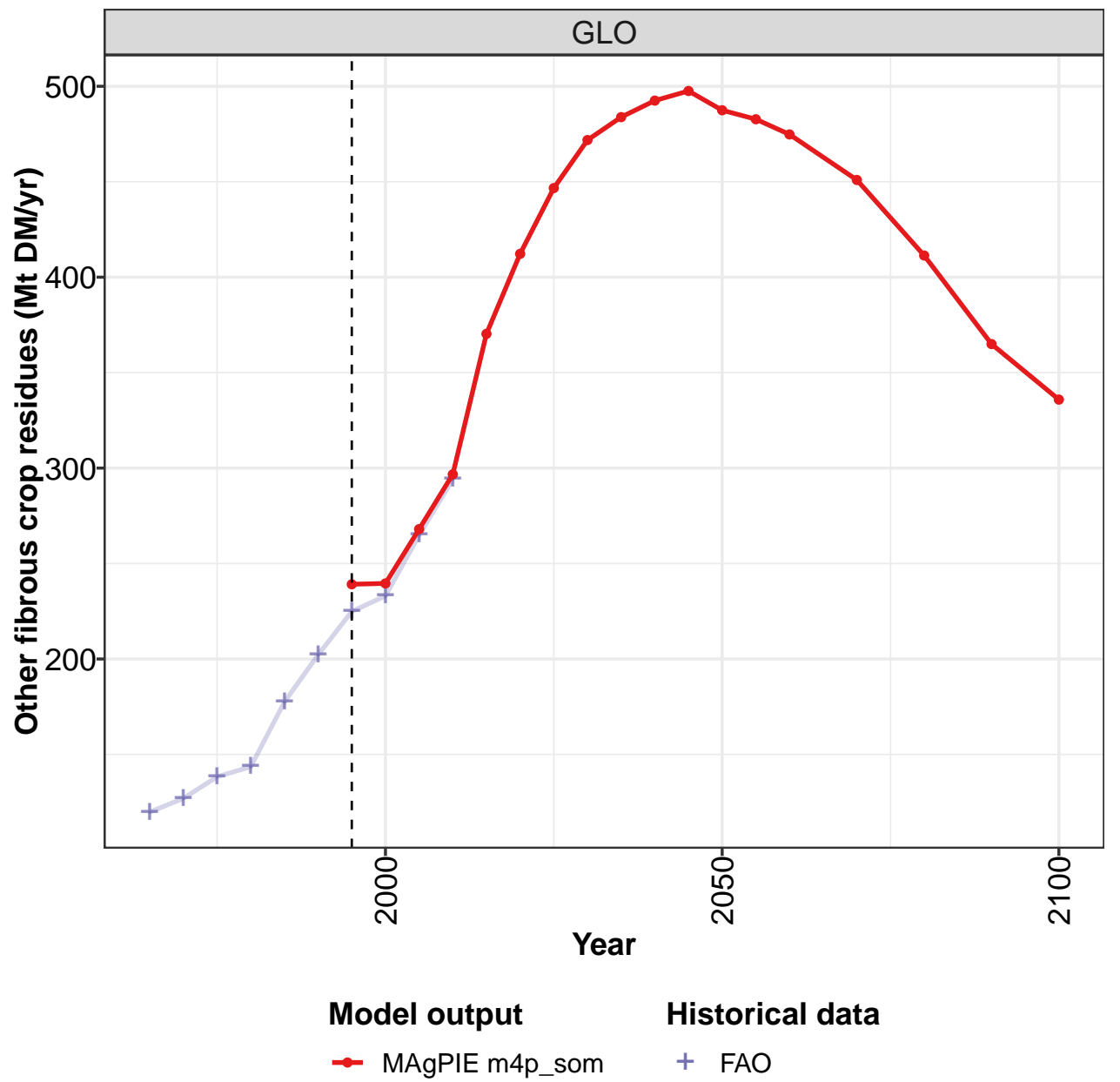
Table 240: MAgPIE m4p\_som — Demand—Feed—Crop residues—Non fibrous crop residues (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	40.8	46.7	48.5	50.3	52.1	56.4	65.6	75.2	81.6	83.9
CAZ	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
CHA	12.5	16.0	17.1	17.4	17.0	18.4	22.5	27.1	26.5	23.6
EUR	4.9	4.7	4.2	3.9	4.0	3.7	3.3	3.3	2.7	2.5
IND	1.8	2.3	2.6	2.9	3.3	3.5	4.1	4.9	6.3	7.9
JPN	0.8	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.3
LAM	5.1	5.7	5.2	4.9	5.3	5.7	6.0	6.1	6.6	6.2
MEA	0.7	0.7	0.9	1.2	1.5	1.7	1.9	2.3	2.7	2.8
NEU	0.6	0.7	0.7	1.0	0.9	0.9	0.9	0.9	0.9	0.9
OAS	4.1	4.1	5.1	7.0	7.2	7.5	7.2	7.9	9.0	10.9
REF	3.9	3.7	3.5	3.2	3.0	2.7	3.3	3.3	3.0	2.6
SSA	5.5	7.3	7.6	7.3	8.4	10.7	14.6	17.7	22.2	24.8
USA	0.8	0.8	0.9	1.0	1.0	1.0	1.2	1.3	1.1	1.1

Table 241: FAO — Demand—Feed—Crop residues—Non fibrous crop residues (Mt DM/yr)

6.1.2 Other fibrous crop residues

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

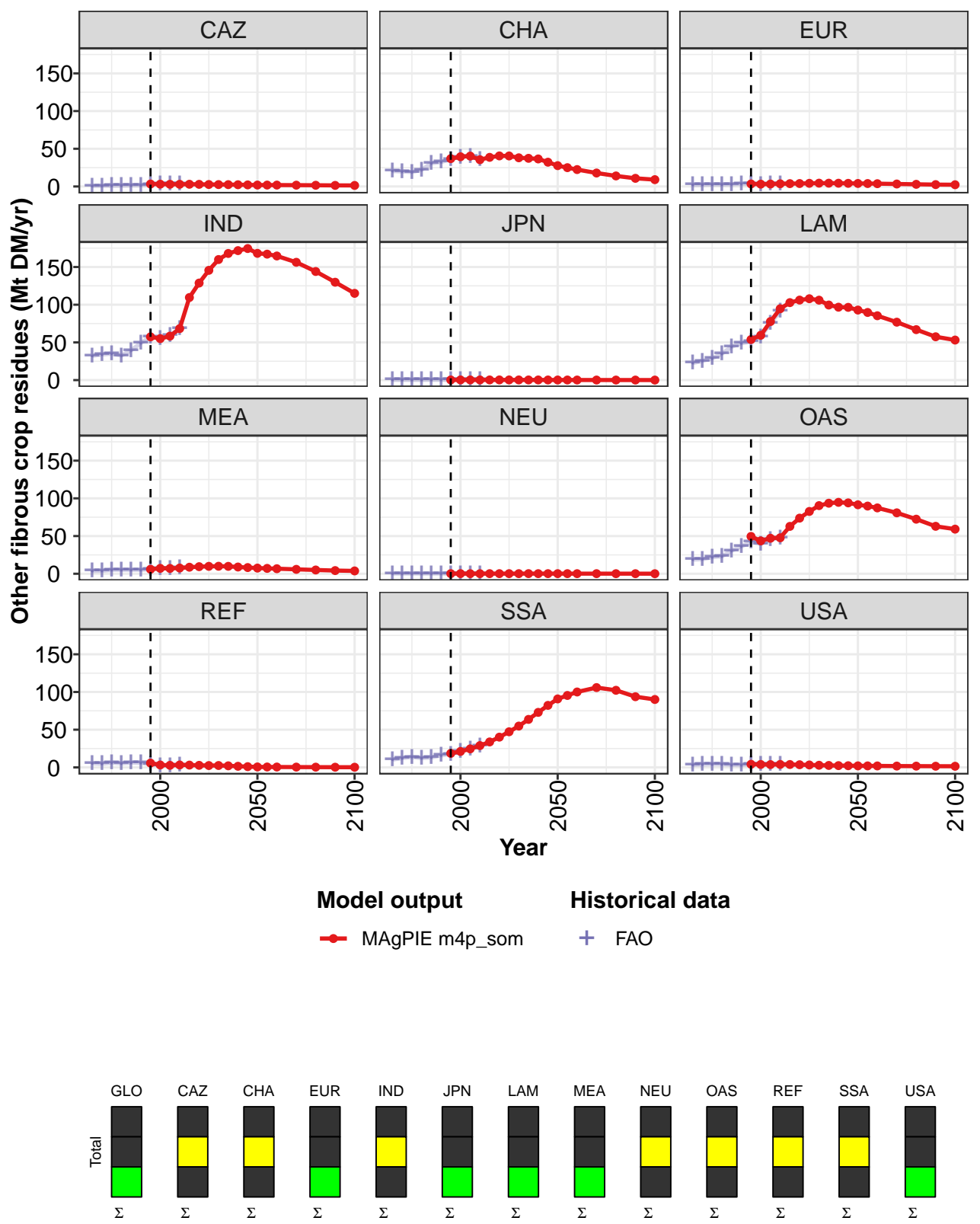


Figure 81: MAgPIE m4p\_som — Demand—Feed—Crop residues—Other fibrous crop residues (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	239	240	268	297	370	412	447	472	484	493	498
CAZ	3	3	3	3	3	3	3	3	2	2	2
CHA	37	39	40	35	39	41	40	38	37	37	32
EUR	3	3	3	4	4	4	4	4	4	4	4
IND	57	55	58	68	110	129	146	160	168	172	174
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	54	59	78	95	103	106	108	106	100	97	97
MEA	6	7	7	8	9	9	10	10	10	9	8
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	50	44	47	48	63	74	83	90	94	95	94
REF	6	3	3	3	3	3	2	3	2	1	1
SSA	19	21	25	29	34	40	47	55	64	73	82
USA	4	4	4	4	4	4	3	3	3	2	2

Table 242: MAgPIE m4p\_som — Demand—Feed—Crop residues—Other fibrous crop residues (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	487	483	475	451	411	365	336
CAZ	2	2	2	2	2	1	1
CHA	28	25	22	18	14	11	9
EUR	4	4	4	3	3	2	2
IND	168	167	165	156	144	130	115
JPN	0	0	0	0	0	0	0
LAM	93	90	85	77	67	57	53
MEA	8	7	7	6	5	4	4
NEU	0	0	0	0	0	0	0
OAS	92	90	87	81	72	63	59
REF	1	1	0	0	0	0	0
SSA	91	95	100	106	102	94	90
USA	2	2	2	2	2	2	2

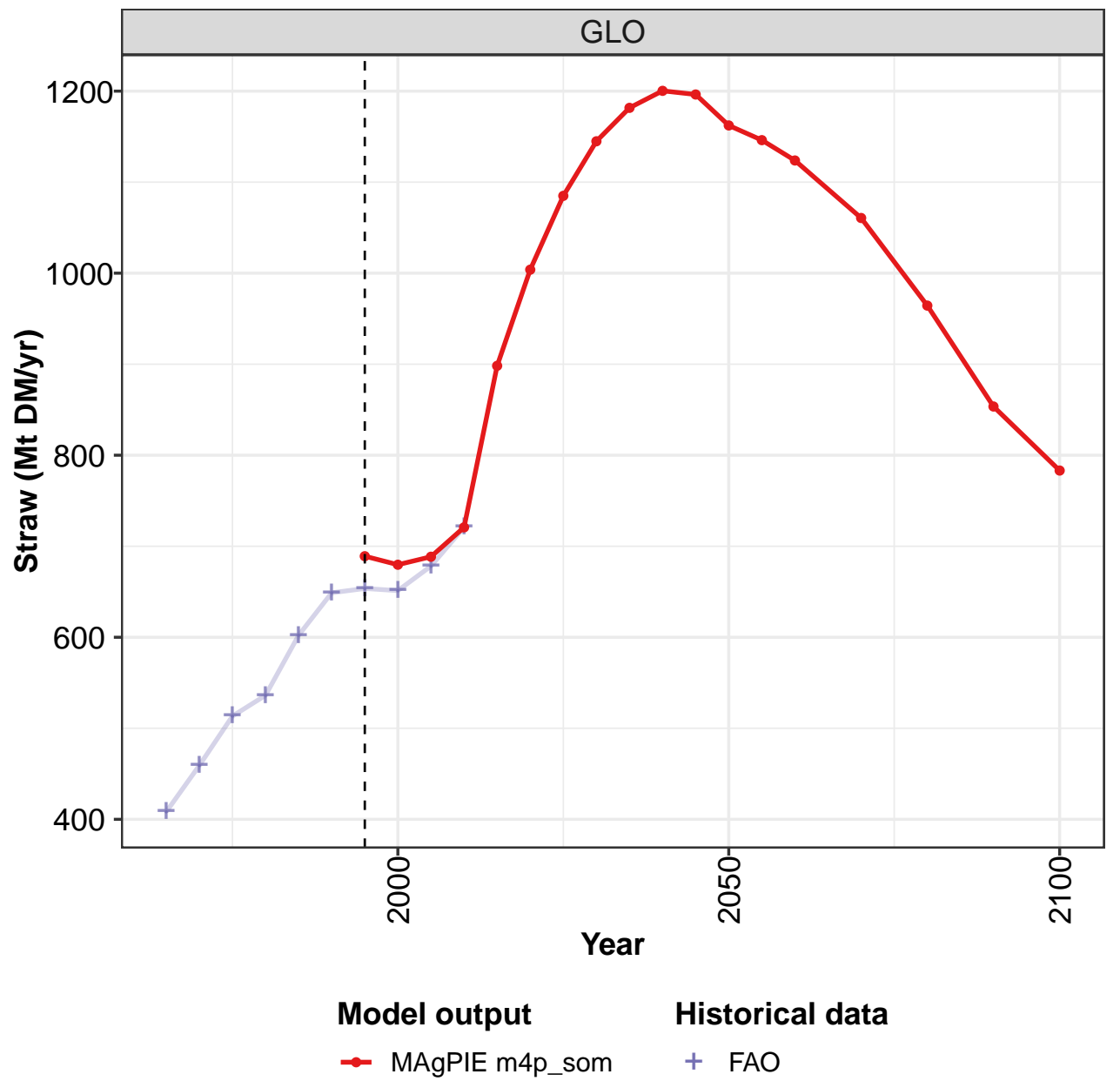
Table 243: MAgPIE m4p\_som — Demand—Feed—Crop residues—Other fibrous crop residues (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	120	127	138	144	177	202	225	233	265	294
CAZ	1	1	1	1	2	2	3	4	4	3
CHA	20	20	19	22	31	32	36	39	40	35
EUR	2	2	3	3	3	3	3	3	3	3
IND	32	34	35	32	39	49	57	55	59	69
JPN	0	0	0	0	0	0	0	0	0	0
LAM	23	25	29	35	44	49	51	57	75	91
MEA	4	4	5	5	5	5	6	7	7	8
NEU	0	0	0	0	0	0	0	0	0	0
OAS	19	19	22	23	30	36	42	40	45	48
REF	5	5	6	5	6	6	4	3	2	3
SSA	10	12	14	12	13	16	18	21	25	29
USA	3	4	4	4	3	3	4	4	4	4

Table 244: FAO — Demand—Feed—Crop residues—Other fibrous crop residues (Mt DM/yr)

6.1.3 Straw

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

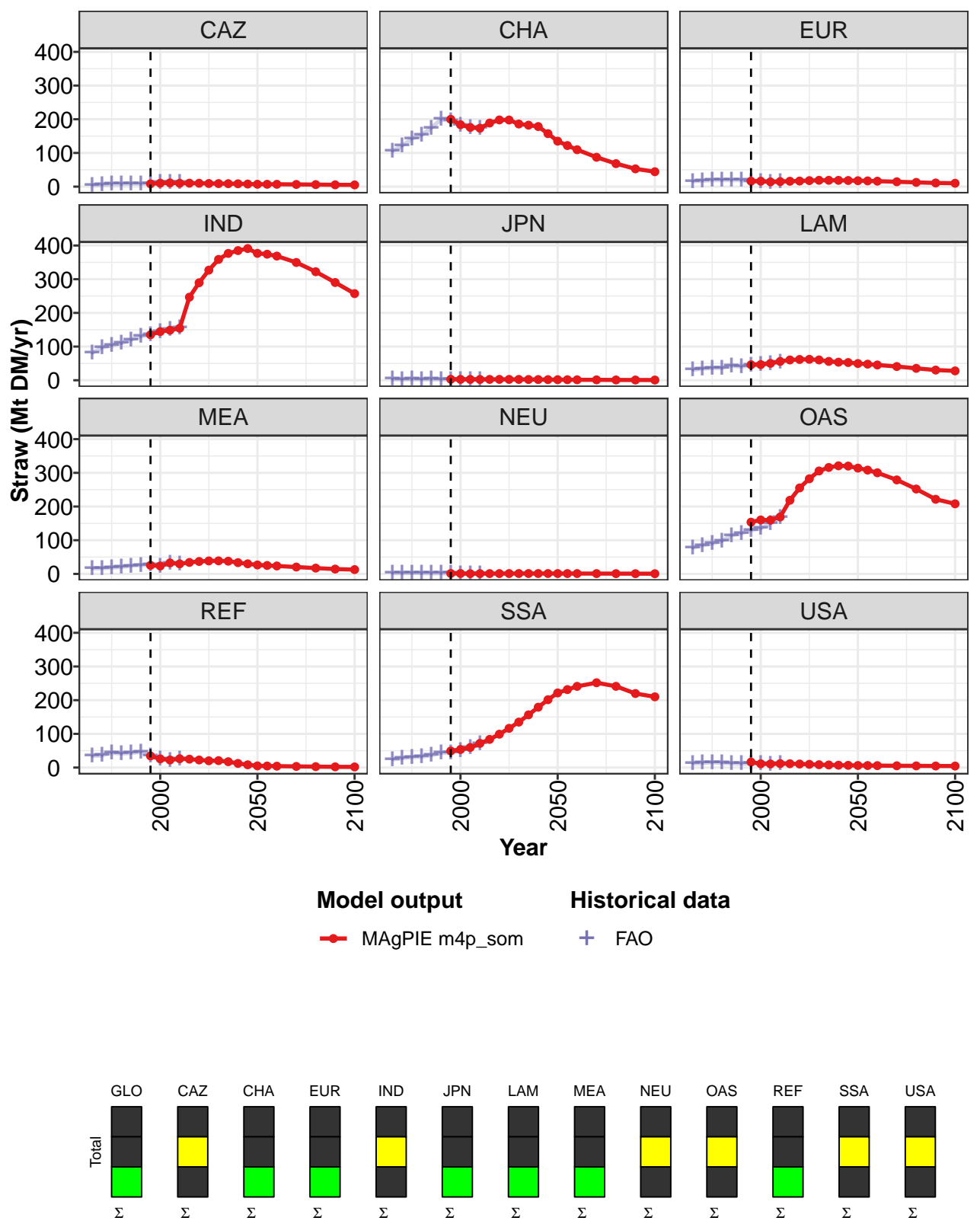


Figure 82: MAgPIE m4p\_som — Demand—Feed—Crop residues—Straw (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	689	680	688	721	898	1004	1085	1145	1182	1200	1196
CAZ	8	10	11	10	10	10	9	9	9	8	8
CHA	200	184	176	173	189	198	198	186	182	178	157
EUR	16	16	14	15	16	17	18	19	19	19	18
IND	135	144	149	154	247	289	327	359	377	385	391
JPN	3	3	3	2	3	3	3	3	2	2	2
LAM	46	47	50	56	60	62	62	60	56	54	53
MEA	26	24	33	30	34	37	39	39	38	34	30
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	154	160	160	169	219	255	282	306	316	321	320
REF	35	26	23	26	25	23	20	21	17	12	8
SSA	49	54	60	72	84	99	116	135	156	179	201
USA	16	11	11	12	11	11	10	8	8	7	7

Table 245: MAgPIE m4p\_som — Demand—Feed—Crop residues—Straw (Mt DM/yr) [PART 1/2]

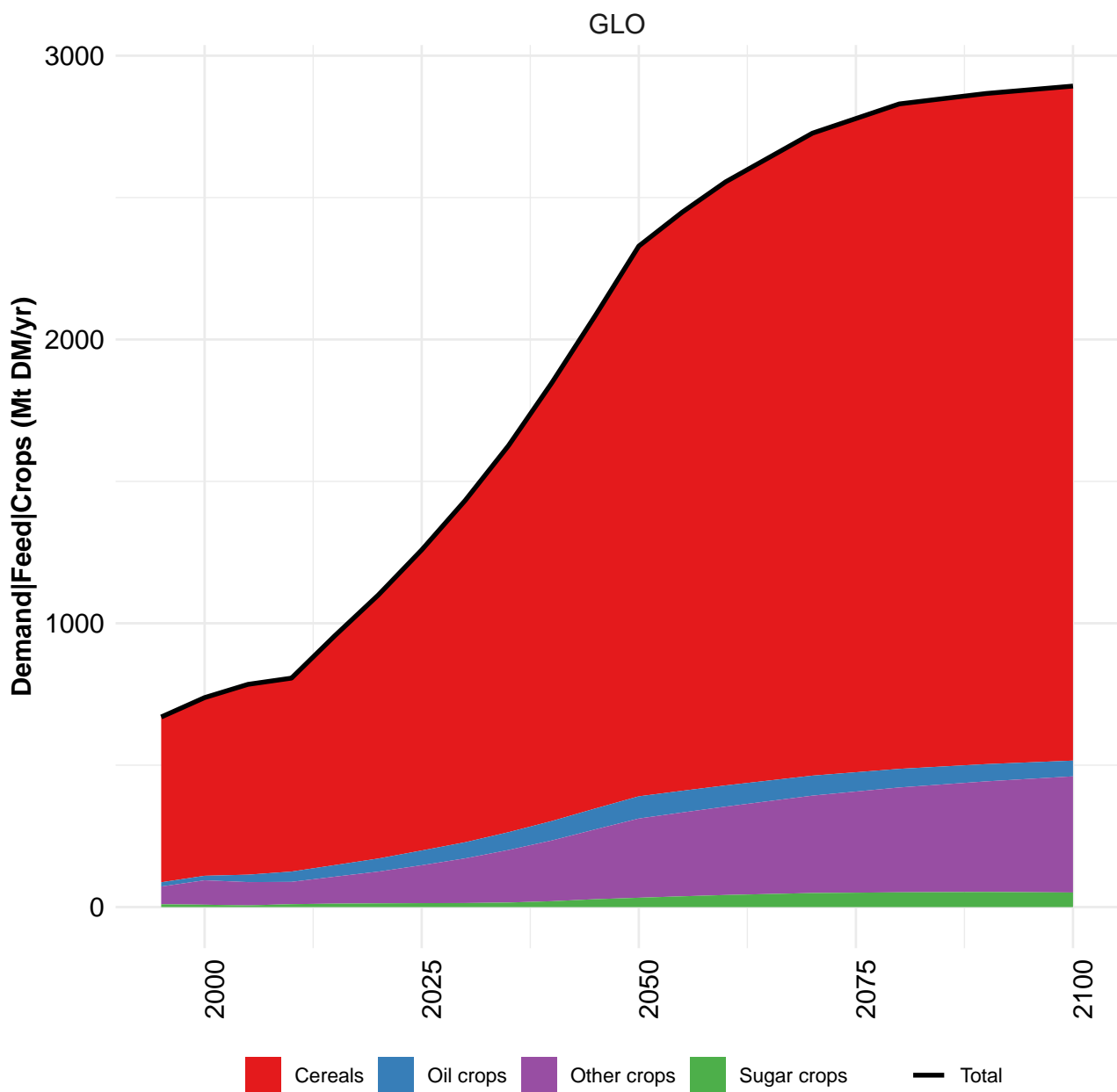
	2050	2055	2060	2070	2080	2090	2100
GLO	1162	1146	1124	1061	964	854	783
CAZ	7	7	7	7	6	5	5
CHA	135	122	110	87	68	53	44
EUR	18	17	16	14	13	11	10
IND	377	374	369	350	322	290	257
JPN	2	2	1	1	1	1	1
LAM	50	48	45	41	35	30	28
MEA	27	25	24	20	17	14	13
NEU	1	1	1	1	1	1	1
OAS	314	308	300	279	252	221	208
REF	5	5	4	3	3	2	2
SSA	222	231	241	252	241	220	210
USA	6	6	6	5	5	5	5

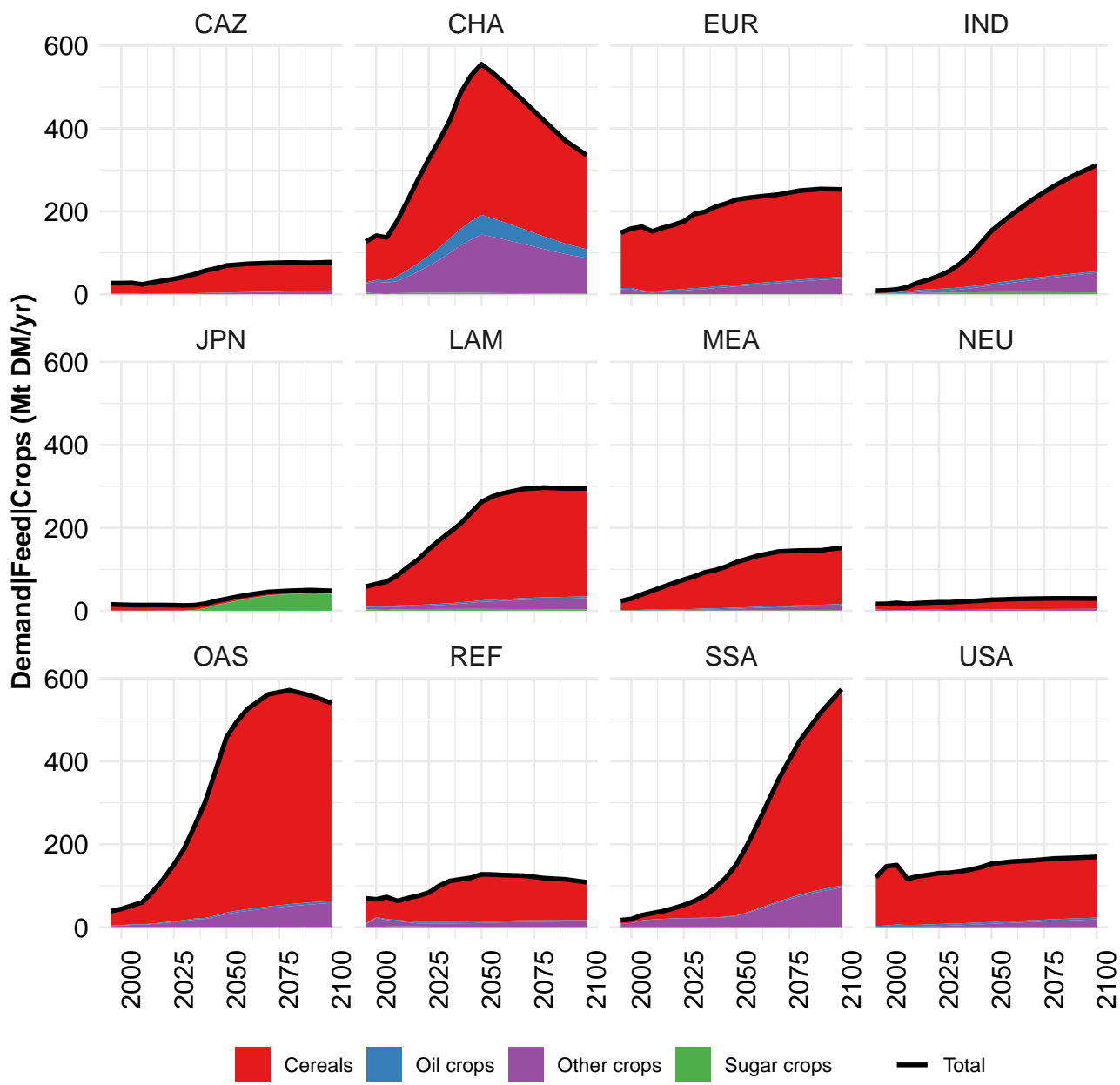
Table 246: MAgPIE m4p\_som — Demand—Feed—Crop residues—Straw (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	408	459	513	536	602	649	654	651	678	721
CAZ	5	6	7	7	9	8	9	12	14	12
CHA	106	121	142	153	174	199	196	183	175	173
EUR	16	17	19	19	19	19	15	15	14	15
IND	81	97	104	110	120	130	135	145	151	156
JPN	3	3	4	3	3	3	3	3	3	2
LAM	31	34	36	36	43	40	45	47	49	54
MEA	16	17	19	20	24	26	27	24	33	30
NEU	2	2	3	2	2	2	1	1	1	1
OAS	78	85	90	98	114	120	130	135	149	169
REF	34	36	44	41	43	46	34	25	22	26
SSA	24	27	31	32	36	43	45	51	59	72
USA	12	13	15	14	13	11	13	12	11	12

Table 247: FAO — Demand—Feed—Crop residues—Straw (Mt DM/yr)

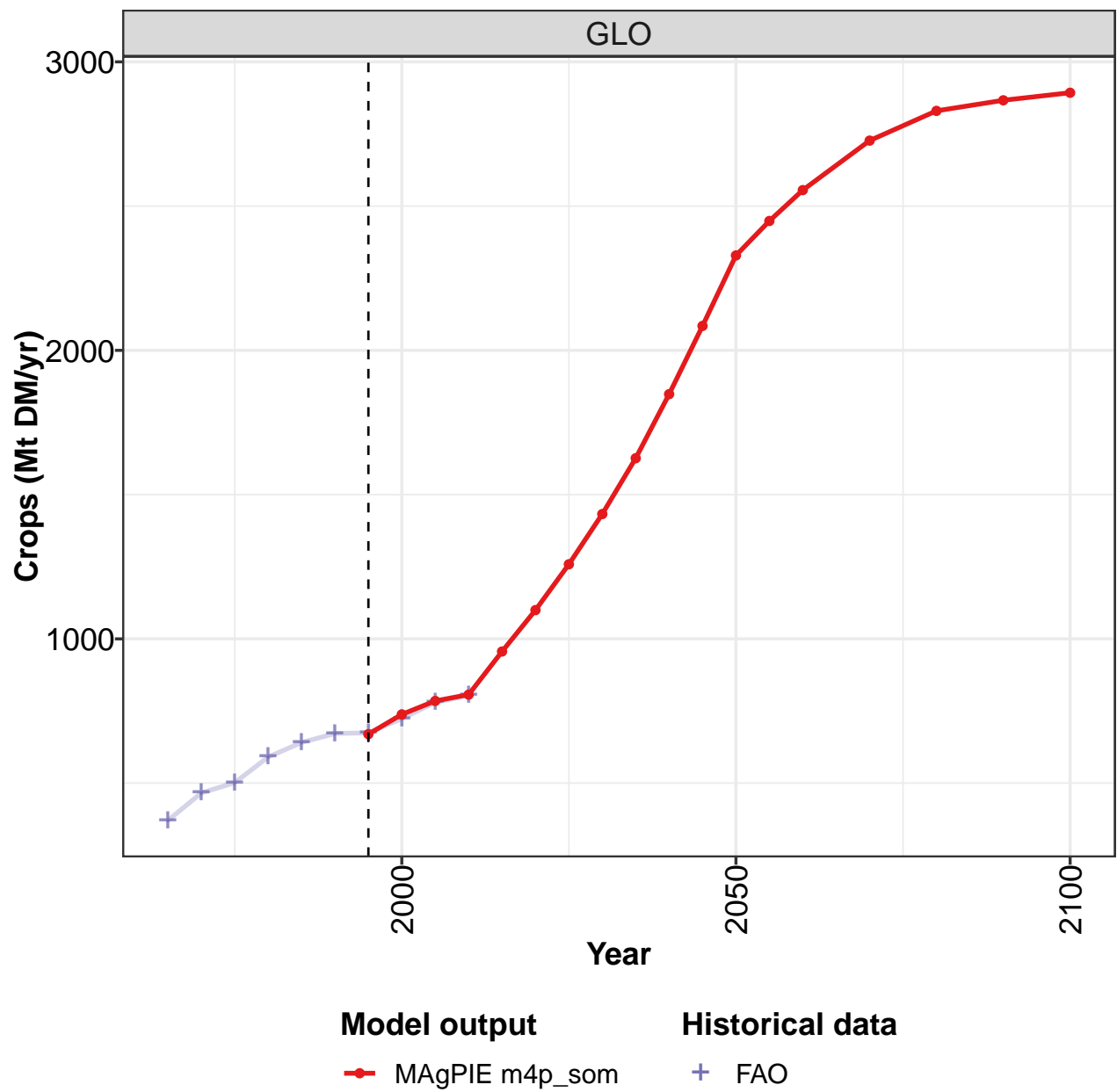






6.2
Crops

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

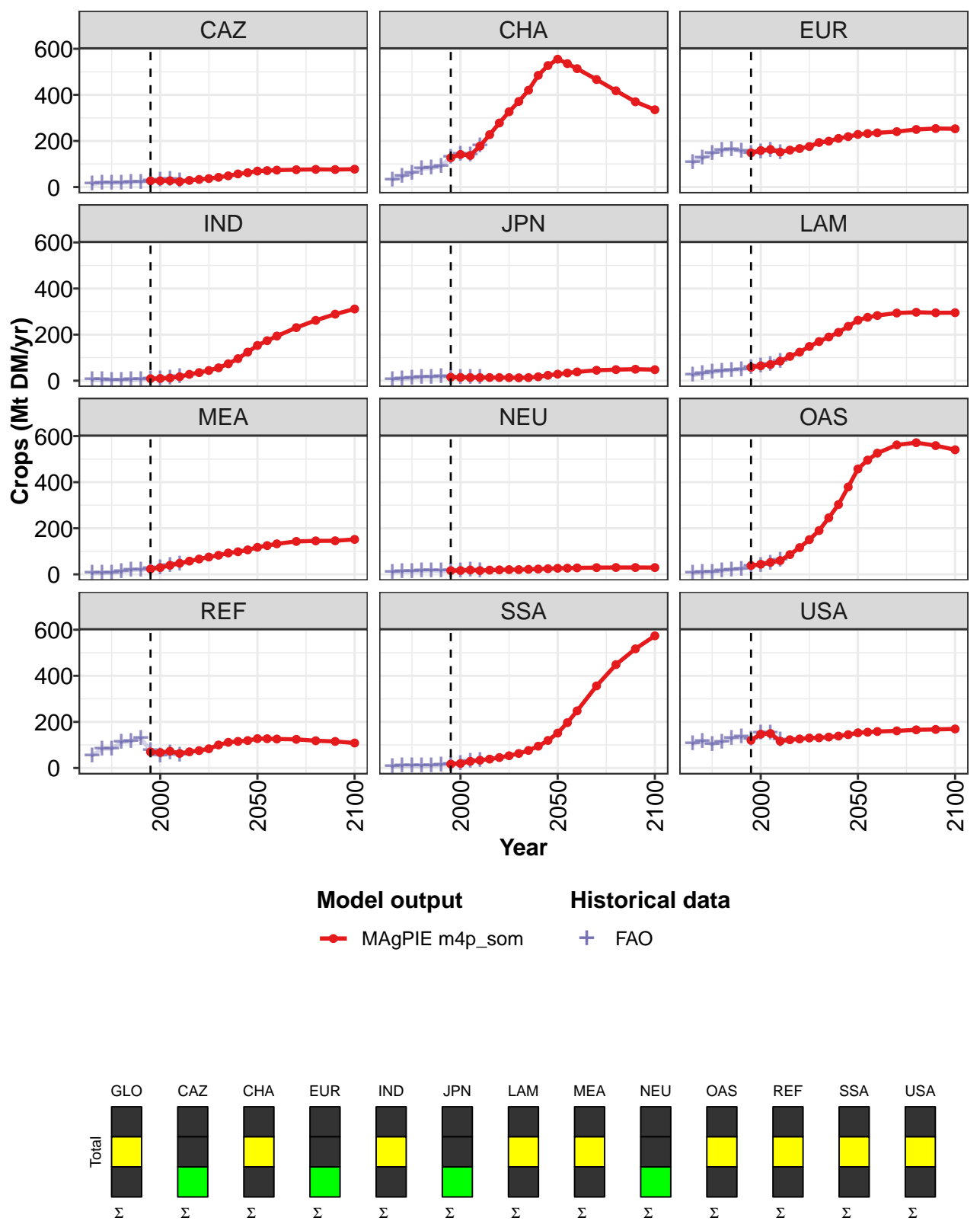


Figure 83: MAgPIE m4p\_som — Demand—Feed—Crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	670	738	785	807	956	1100	1259	1433	1626	1848	2085
CAZ	27	27	28	24	29	33	37	42	49	57	62
CHA	127	141	137	177	227	278	327	371	420	485	527
EUR	149	158	163	152	160	167	176	194	199	211	219
IND	9	10	12	17	28	35	44	56	74	96	124
JPN	15	14	14	14	14	14	13	13	13	17	24
LAM	58	65	70	85	105	124	149	170	190	210	236
MEA	23	29	39	48	57	66	75	83	93	98	106
NEU	16	17	19	16	18	19	20	20	22	23	25
OAS	38	44	52	60	86	116	151	190	245	303	379
REF	70	67	73	63	70	75	83	100	111	115	119
SSA	17	19	29	34	39	45	53	63	76	95	119
USA	120	147	150	116	123	126	130	131	134	139	145

Table 248: MAgPIE m4p\_som — Demand—Feed—Crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	2329	2449	2555	2727	2830	2867	2893
CAZ	69	71	74	75	77	76	78
CHA	555	536	514	467	418	370	336
EUR	228	232	235	241	250	254	253
IND	153	174	194	230	262	289	311
JPN	28	34	38	45	48	50	48
LAM	262	275	283	294	297	295	295
MEA	117	125	132	143	145	146	152
NEU	26	27	28	29	30	30	29
OAS	457	496	526	562	571	559	540
REF	127	127	126	124	118	115	108
SSA	152	197	248	356	449	517	573
USA	153	155	158	161	166	167	169

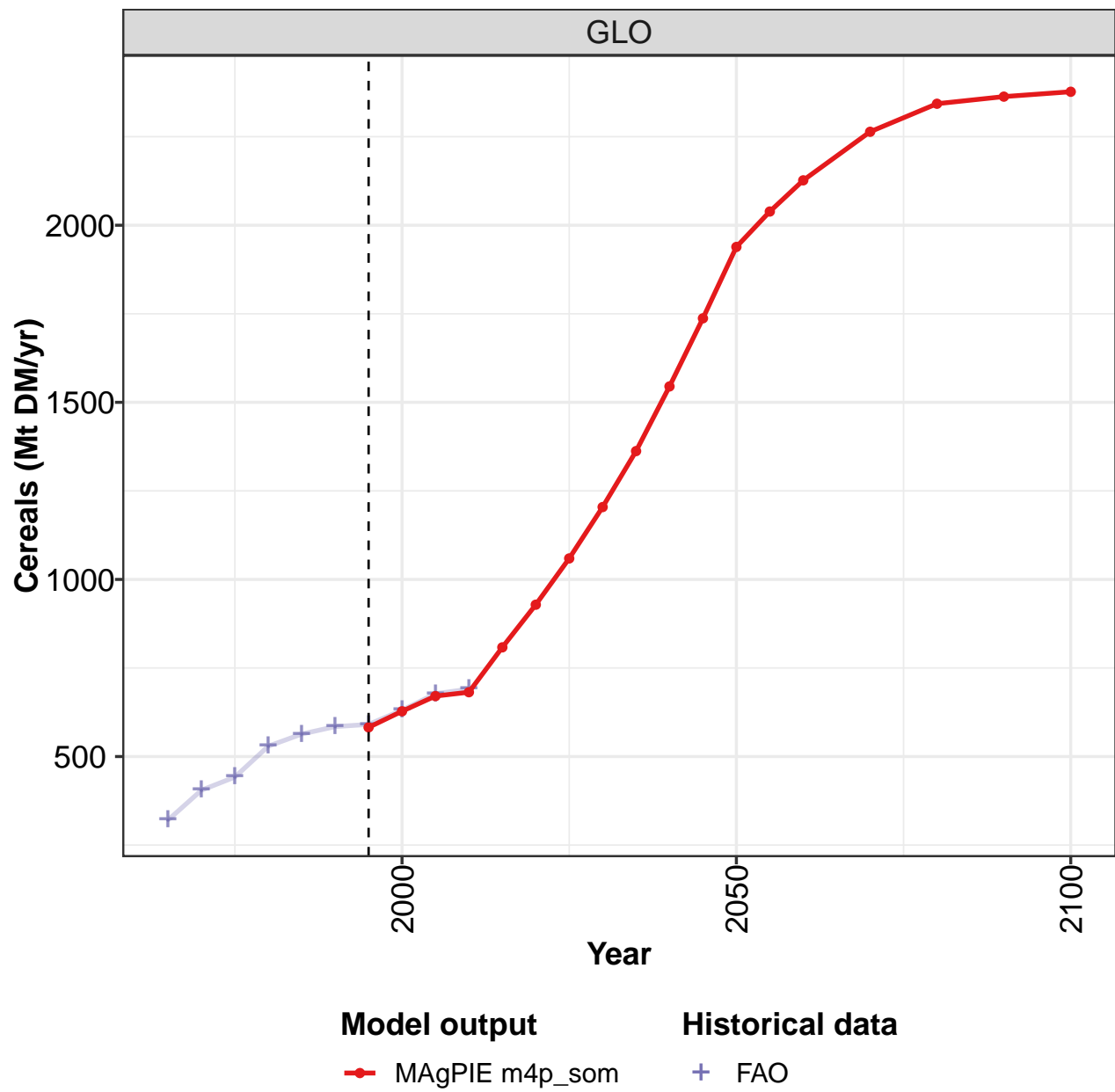
Table 249: MAgPIE m4p\_som — Demand—Feed—Crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	370	466	502	590	641	672	674	723	780	804
CAZ	13	18	18	18	20	22	28	30	33	27
CHA	32	46	60	80	82	90	129	143	139	179
EUR	108	125	146	158	164	155	146	154	159	148
IND	3	3	3	3	3	6	9	10	12	18
JPN	6	9	11	15	16	17	15	14	14	14
LAM	23	30	37	43	45	49	58	65	71	84
MEA	4	5	7	11	18	20	24	29	37	47
NEU	10	12	13	15	17	14	15	16	19	16
OAS	6	8	11	16	20	24	34	40	50	61
REF	54	84	84	111	116	128	76	53	64	56
SSA	5	9	9	8	10	13	17	20	29	34
USA	105	116	103	113	128	134	124	151	153	120

Table 250: FAO — Demand—Feed—Crops (Mt DM/yr)

6.2.1 Cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

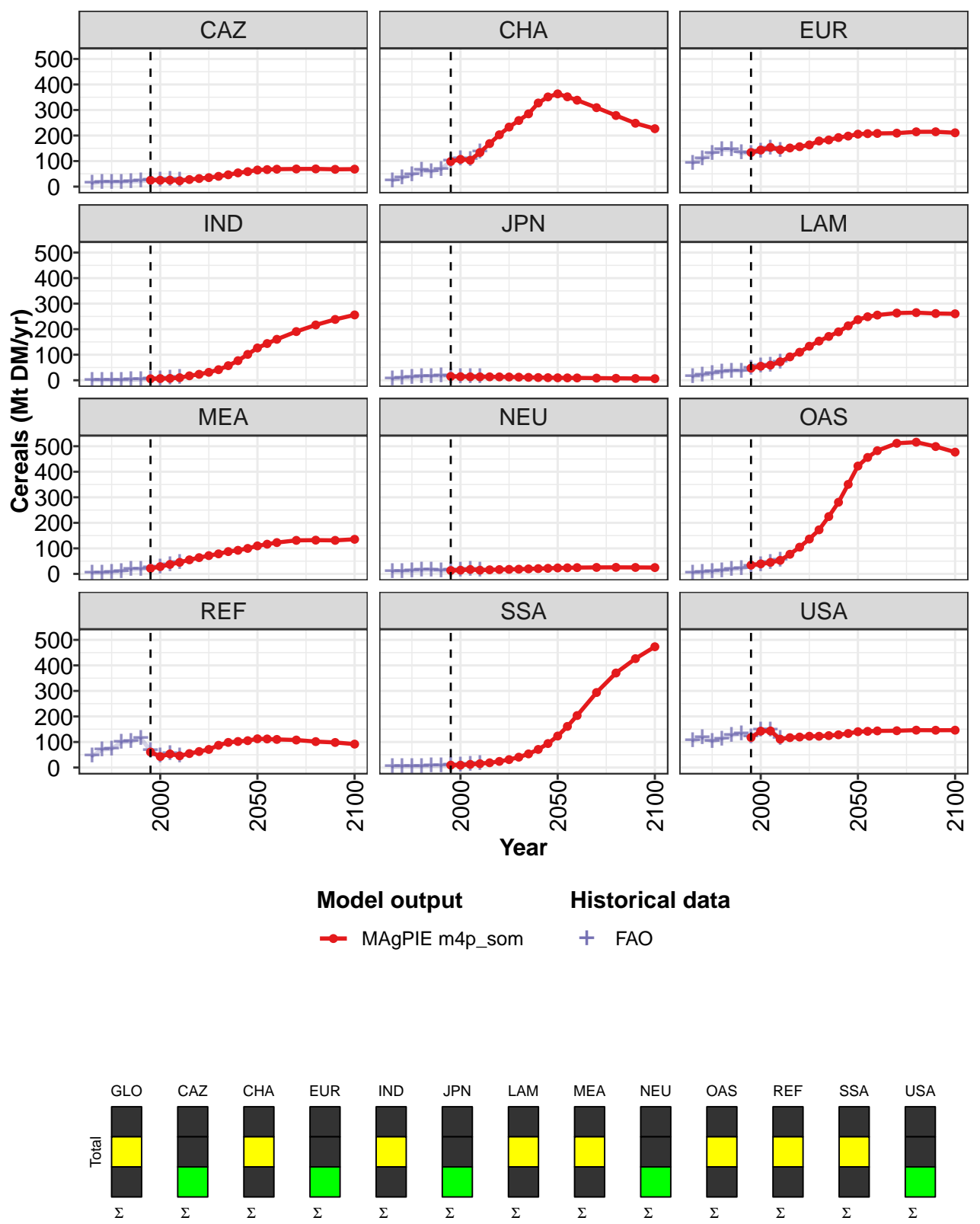


Figure 84: MAgPIE m4p\_som — Demand—Feed—Crops—Cereals (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	582	628	671	682	808	929	1059	1204	1362	1545	1737
CAZ	25	25	25	23	28	32	35	40	46	54	59
CHA	98	107	103	134	169	203	233	259	285	327	351
EUR	134	143	154	144	151	156	163	179	183	192	198
IND	6	7	7	10	17	23	31	41	57	77	101
JPN	15	14	14	13	13	13	13	12	11	11	10
LAM	47	55	59	72	92	110	133	153	172	190	213
MEA	22	28	37	45	55	64	72	78	87	92	100
NEU	13	15	17	15	16	17	18	18	20	21	22
OAS	34	39	45	53	77	105	136	173	225	281	351
REF	61	43	53	46	55	63	71	87	98	102	105
SSA	9	9	12	15	19	24	31	41	53	71	94
USA	118	143	143	111	117	119	123	123	125	128	133

Table 251: MAgPIE m4p\_som — Demand—Feed—Crops—Cereals (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1939	2039	2127	2264	2343	2363	2377
CAZ	65	67	68	69	69	68	68
CHA	363	352	338	309	278	248	227
EUR	205	207	208	209	215	215	211
IND	127	144	160	191	217	238	256
JPN	10	9	9	8	8	7	6
LAM	237	249	255	263	265	261	260
MEA	110	116	123	131	132	131	136
NEU	23	24	25	25	26	25	25
OAS	422	456	483	512	516	499	477
REF	113	112	110	108	102	98	92
SSA	123	161	204	294	370	426	473
USA	140	142	143	144	146	146	146

Table 252: MAgPIE m4p\_som — Demand—Feed—Crops—Cereals (Mt DM/yr) [PART 2/2]

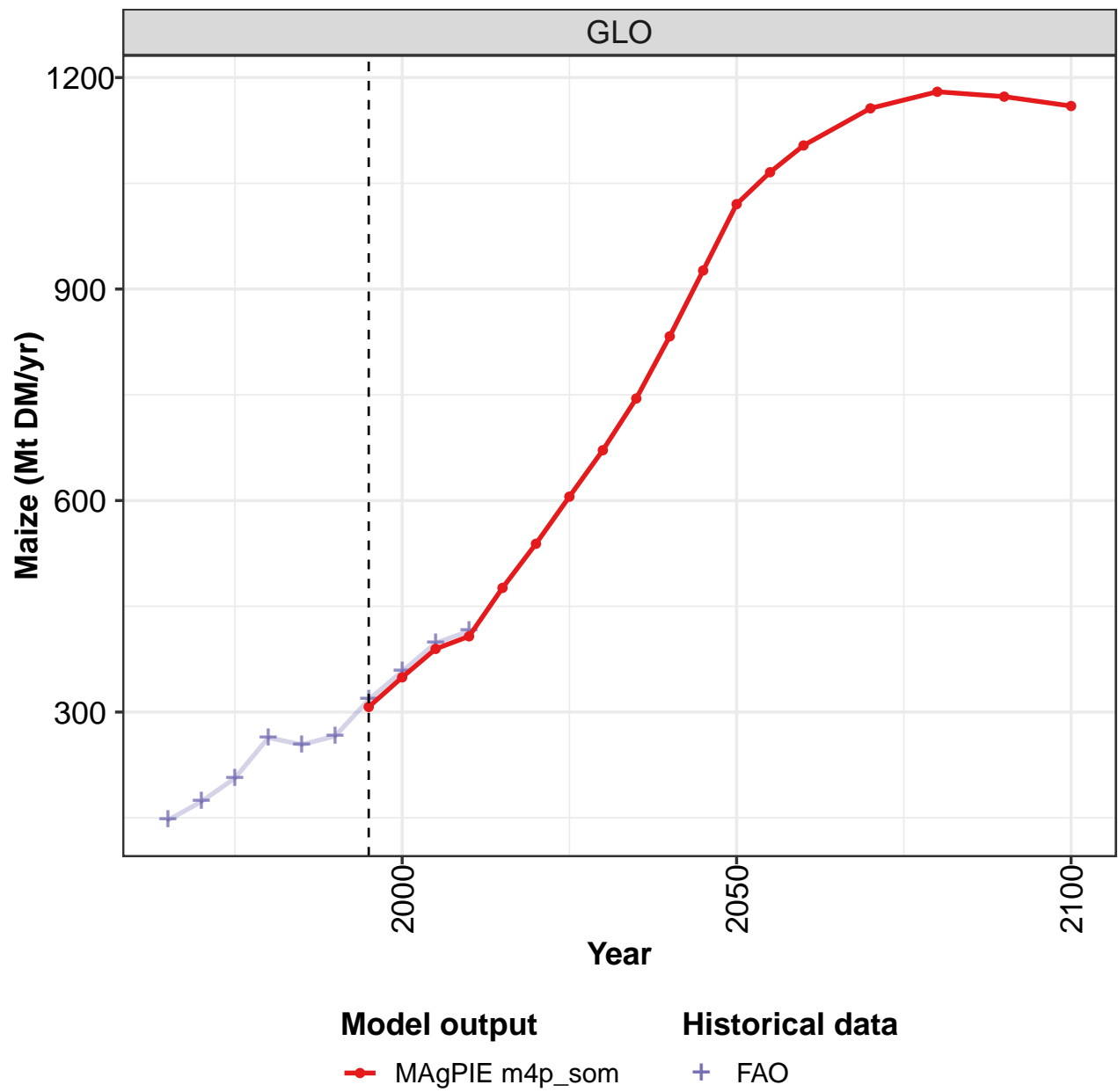
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	321	405	442	529	563	585	591	631	677	690
CAZ	13	18	17	18	20	21	25	27	30	26
CHA	24	34	47	63	60	68	100	108	105	136
EUR	93	109	131	144	144	132	131	139	150	141
IND	1	1	1	1	1	3	6	7	7	10
JPN	5	9	11	15	16	16	15	14	14	13
LAM	14	20	26	33	37	37	48	56	61	72
MEA	4	5	7	11	17	19	23	28	37	46
NEU	9	11	12	14	16	13	14	14	17	15
OAS	5	7	9	13	18	21	31	36	44	54
REF	45	71	73	99	102	114	67	45	53	46
SSA	3	5	5	5	7	8	9	10	13	15
USA	105	116	103	112	126	132	121	147	147	116

Table 253: FAO — Demand—Feed—Crops—Cereals (Mt DM/yr)



6.2.2
Cereals—Maize

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

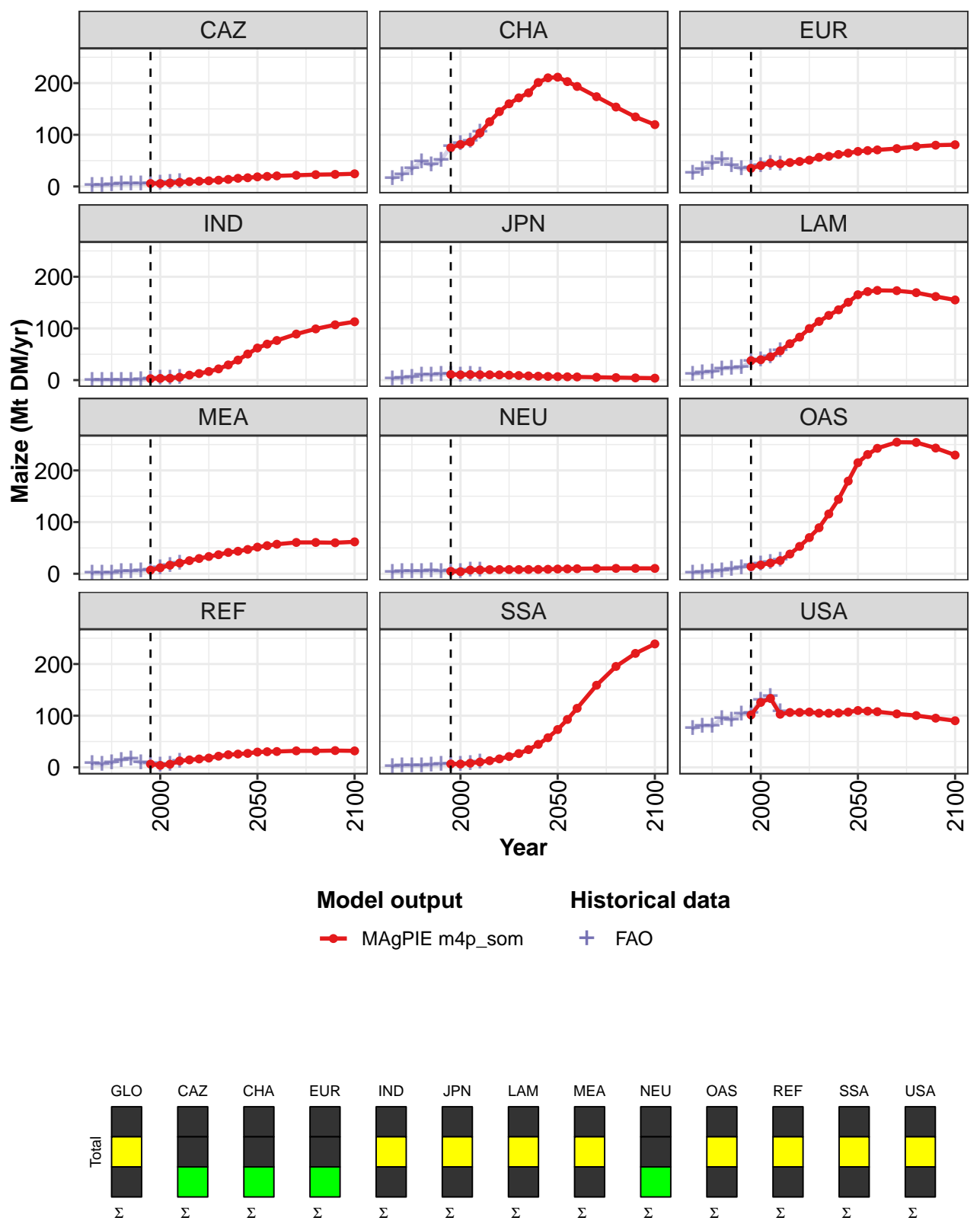


Figure 85: MAgPIE m4p\_som — Demand—Feed—Crops—Cereals—Maize (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	307	349	390	407	476	539	606	671	745	833	926
CAZ	6	6	7	8	9	10	11	12	14	16	17
CHA	75	81	86	104	125	145	160	172	181	201	210
EUR	35	41	45	44	46	48	51	56	58	62	65
IND	3	3	4	6	10	13	17	22	29	39	50
JPN	11	10	11	10	10	10	10	9	8	8	7
LAM	38	39	45	57	70	83	100	113	125	136	151
MEA	7	12	17	21	25	29	33	37	41	44	47
NEU	5	4	7	7	8	8	8	8	8	8	9
OAS	14	17	21	26	38	53	70	89	116	144	179
REF	6	4	6	13	15	16	18	22	24	26	27
SSA	7	6	8	10	13	16	21	27	34	45	57
USA	102	126	134	103	106	106	107	105	105	105	107

Table 254: MAgPIE m4p.som — Demand—Feed—Crops—Cereals—Maize (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1020	1066	1104	1156	1180	1173	1160
CAZ	19	19	20	22	23	23	25
CHA	212	203	194	174	154	135	120
EUR	68	69	71	73	77	80	81
IND	62	70	77	89	99	107	113
JPN	7	6	6	6	5	4	4
LAM	165	171	174	173	169	162	155
MEA	52	54	57	61	61	60	62
NEU	9	9	10	10	10	10	10
OAS	215	231	243	255	254	243	230
REF	30	30	31	32	32	33	32
SSA	73	93	114	159	195	221	239
USA	110	109	108	104	100	95	90

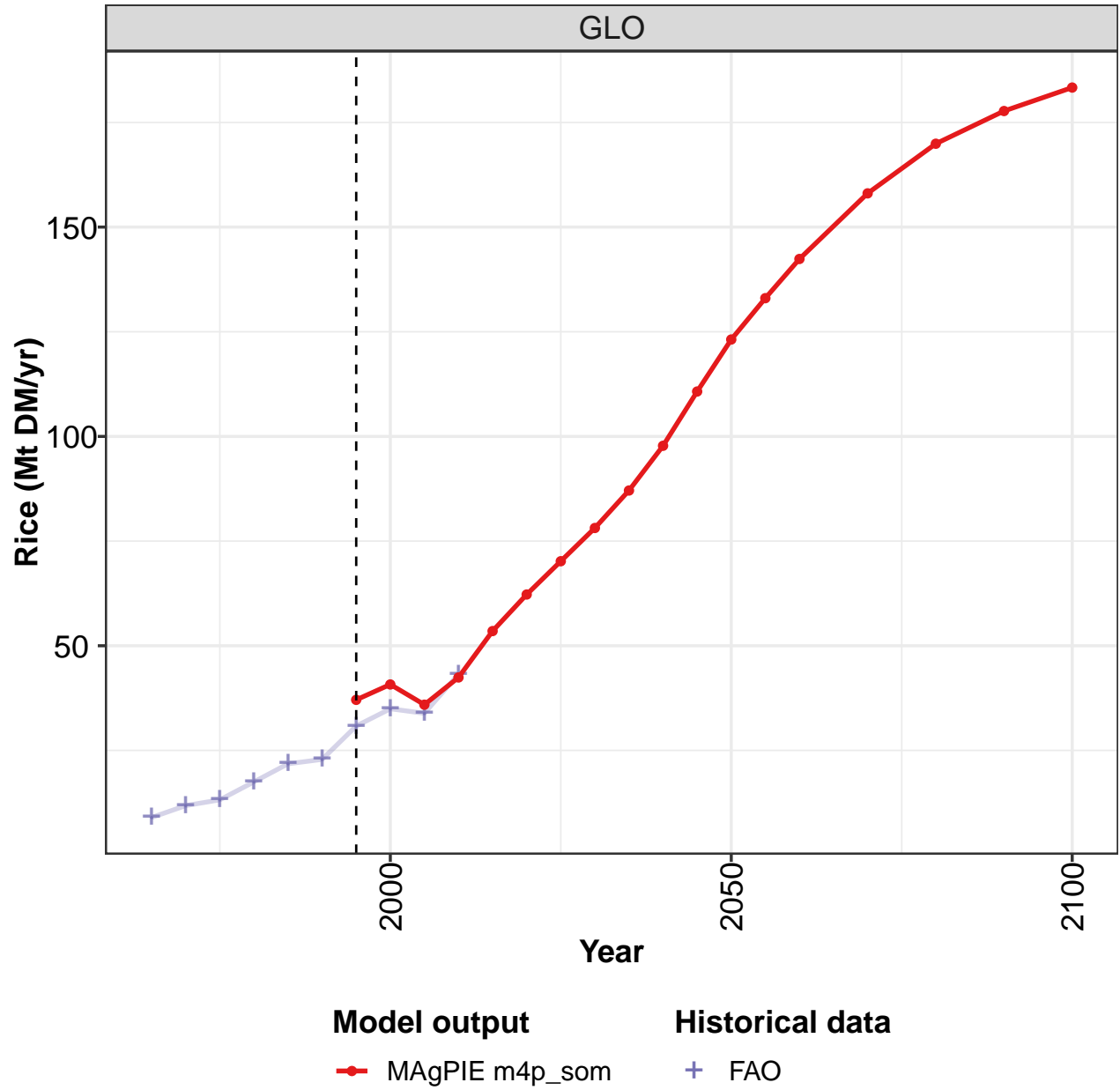
Table 255: MAgPIE m4p.som — Demand—Feed—Crops—Cereals—Maize (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	147	173	206	264	254	266	318	358	398	415
CAZ	1	2	3	5	5	5	6	6	8	9
CHA	16	23	34	48	41	51	77	83	88	105
EUR	26	34	45	52	41	34	36	40	45	43
IND	0	0	0	0	0	1	3	3	4	6
JPN	3	4	6	9	10	11	11	10	11	10
LAM	11	14	16	22	23	24	37	39	46	57
MEA	1	1	1	4	5	6	7	11	16	21
NEU	3	4	5	5	6	5	6	4	8	8
OAS	2	3	4	6	9	12	16	19	22	26
REF	7	5	9	14	17	9	7	4	6	13
SSA	2	3	4	4	5	6	7	6	8	11
USA	75	80	80	95	92	103	105	130	137	107

Table 256: FAO — Demand—Feed—Crops—Cereals—Maize (Mt DM/yr)

6.2.3
Cereals—Rice

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

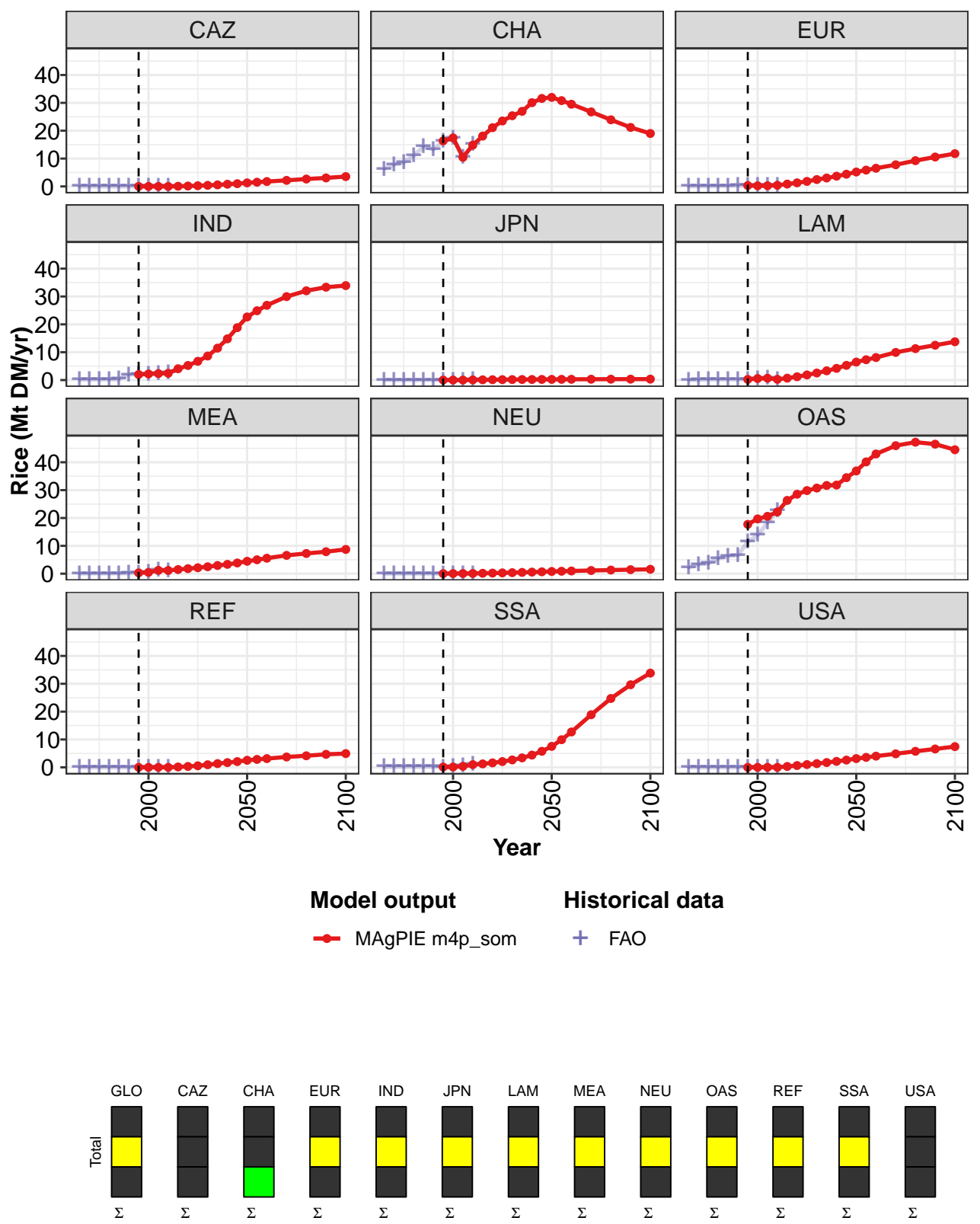


Figure 86: MAgPIE m4p\_som — Demand—Feed—Crops—Cereals—Rice (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	37	41	36	42	54	62	70	78	87	98	111
CAZ	0	0	0	0	0	0	0	0	1	1	1
CHA	16	17	10	15	18	21	23	25	27	30	32
EUR	0	0	0	0	1	1	2	2	3	4	4
IND	2	2	2	2	4	5	7	9	11	15	19
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	0	1	1	0	1	1	2	3	3	4	5
MEA	0	0	1	1	1	2	2	2	3	3	4
NEU	0	0	0	0	0	0	0	0	0	1	1
OAS	18	20	21	22	26	29	30	31	32	32	34
REF	0	0	0	0	0	0	1	1	1	2	2
SSA	0	0	0	1	1	2	2	3	3	4	6
USA	0	0	0	0	0	1	1	1	2	2	3

Table 257: MAgPIE m4p\_som — Demand—Feed—Crops—Cereals—Rice (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	123	133	142	158	170	178	183
CAZ	1	2	2	2	3	3	4
CHA	32	31	30	27	24	21	19
EUR	5	6	7	8	9	11	12
IND	23	25	27	30	32	33	34
JPN	0	0	0	0	0	0	0
LAM	6	7	8	10	11	13	14
MEA	4	5	6	7	7	8	9
NEU	1	1	1	1	1	1	2
OAS	37	40	43	46	47	47	45
REF	3	3	3	4	4	5	5
SSA	8	10	13	19	25	30	34
USA	3	4	4	5	6	7	7

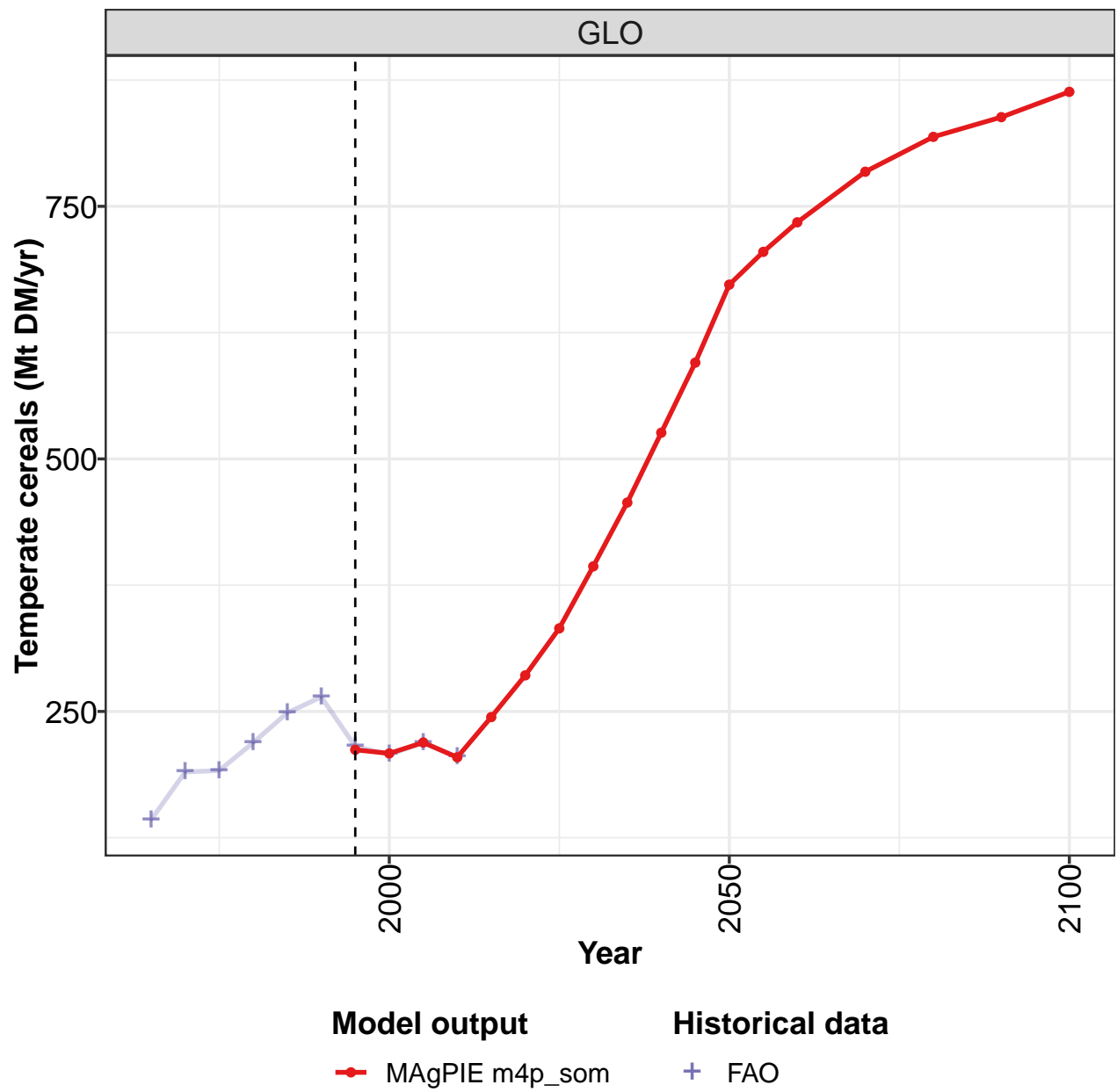
Table 258: MAgPIE m4p\_som — Demand—Feed—Crops—Cereals—Rice (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	9.0	11.8	13.2	17.5	21.8	22.9	30.8	34.9	33.9	43.2
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	6.3	7.8	8.6	11.0	14.3	13.3	16.2	17.4	10.5	15.1
EUR	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.4
IND	0.2	0.2	0.3	0.3	0.3	1.9	2.0	2.2	2.4	2.5
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
LAM	0.0	0.1	0.3	0.2	0.3	0.3	0.3	0.5	0.6	0.3
MEA	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.5	1.2	1.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
OAS	2.2	3.3	3.7	5.5	6.4	6.6	11.5	13.8	18.3	22.7
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.4	1.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 259: FAO — Demand—Feed—Crops—Cereals—Rice (Mt DM/yr)

6.2.4
Cereals—Temperate cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

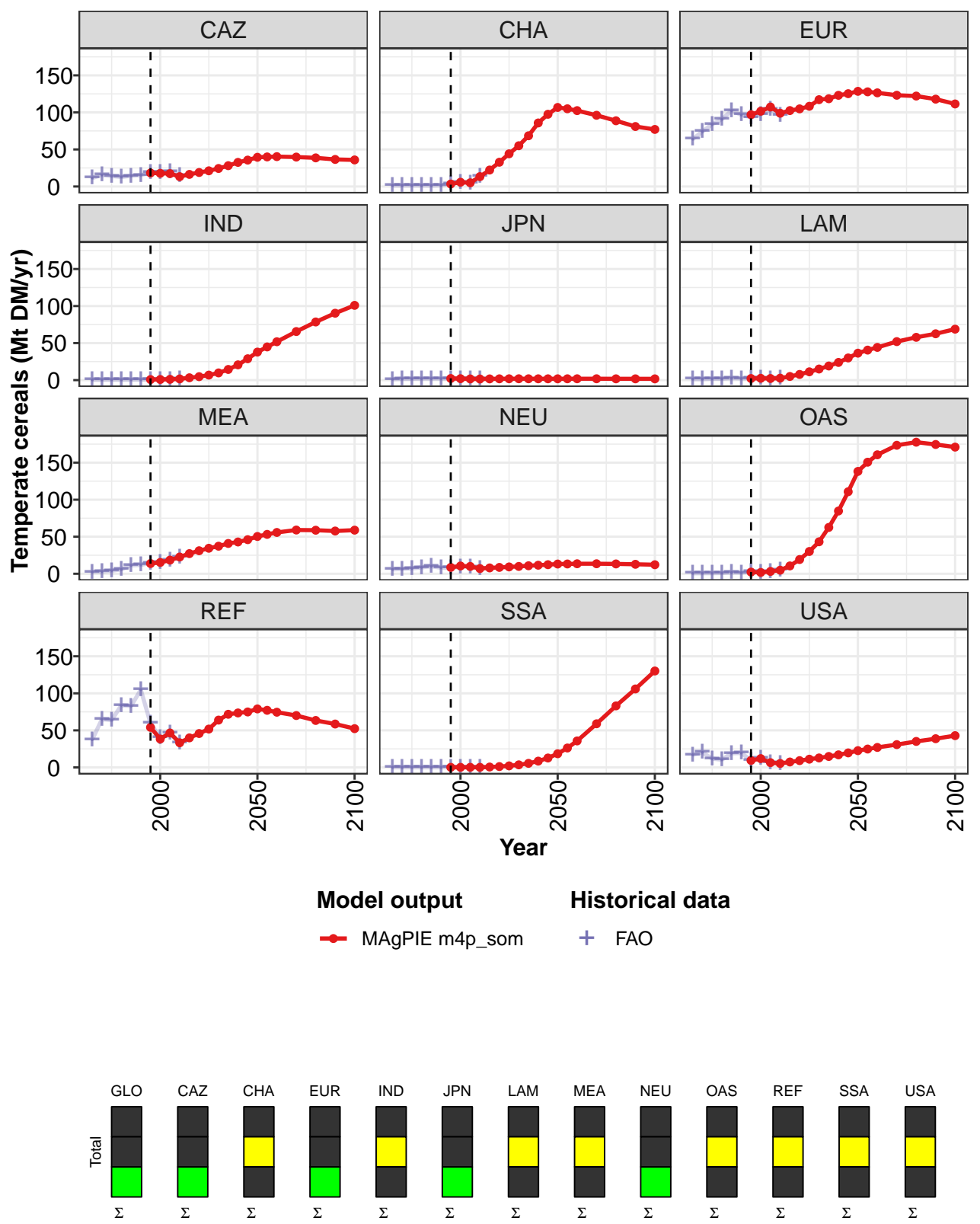


Figure 87: MAgPIE m4p\_som — Demand—Feed—Crops—Cereals—Temperate cereals (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	212	208	219	205	244	286	332	394	457	526	595
CAZ	18	18	17	13	16	19	21	24	28	33	36
CHA	3	6	5	13	22	33	44	55	68	86	98
EUR	97	102	107	99	103	105	108	117	118	123	125
IND	1	1	1	2	3	5	7	10	14	21	29
JPN	2	2	2	2	2	2	2	2	2	2	2
LAM	2	2	2	3	5	8	11	15	19	24	30
MEA	14	15	18	23	27	31	34	37	41	43	46
NEU	9	11	10	7	8	9	9	10	11	12	12
OAS	2	2	3	5	11	19	30	43	63	85	111
REF	54	38	46	33	40	46	52	64	72	74	75
SSA	0	0	0	0	1	1	2	3	6	8	13
USA	9	12	6	5	7	9	11	13	15	17	20

Table 260: MAgPIE m4p\_som — Demand—Feed—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	672	705	734	784	819	838	863
CAZ	39	40	40	40	39	37	36
CHA	107	105	102	96	89	81	77
EUR	128	128	126	123	122	118	111
IND	38	45	52	66	79	90	101
JPN	2	2	2	2	2	2	2
LAM	36	41	44	52	58	63	69
MEA	50	53	56	59	59	58	59
NEU	13	13	14	14	13	13	12
OAS	138	151	161	173	178	175	171
REF	79	77	75	70	63	59	52
SSA	18	26	36	59	83	106	130
USA	23	25	27	31	35	39	43

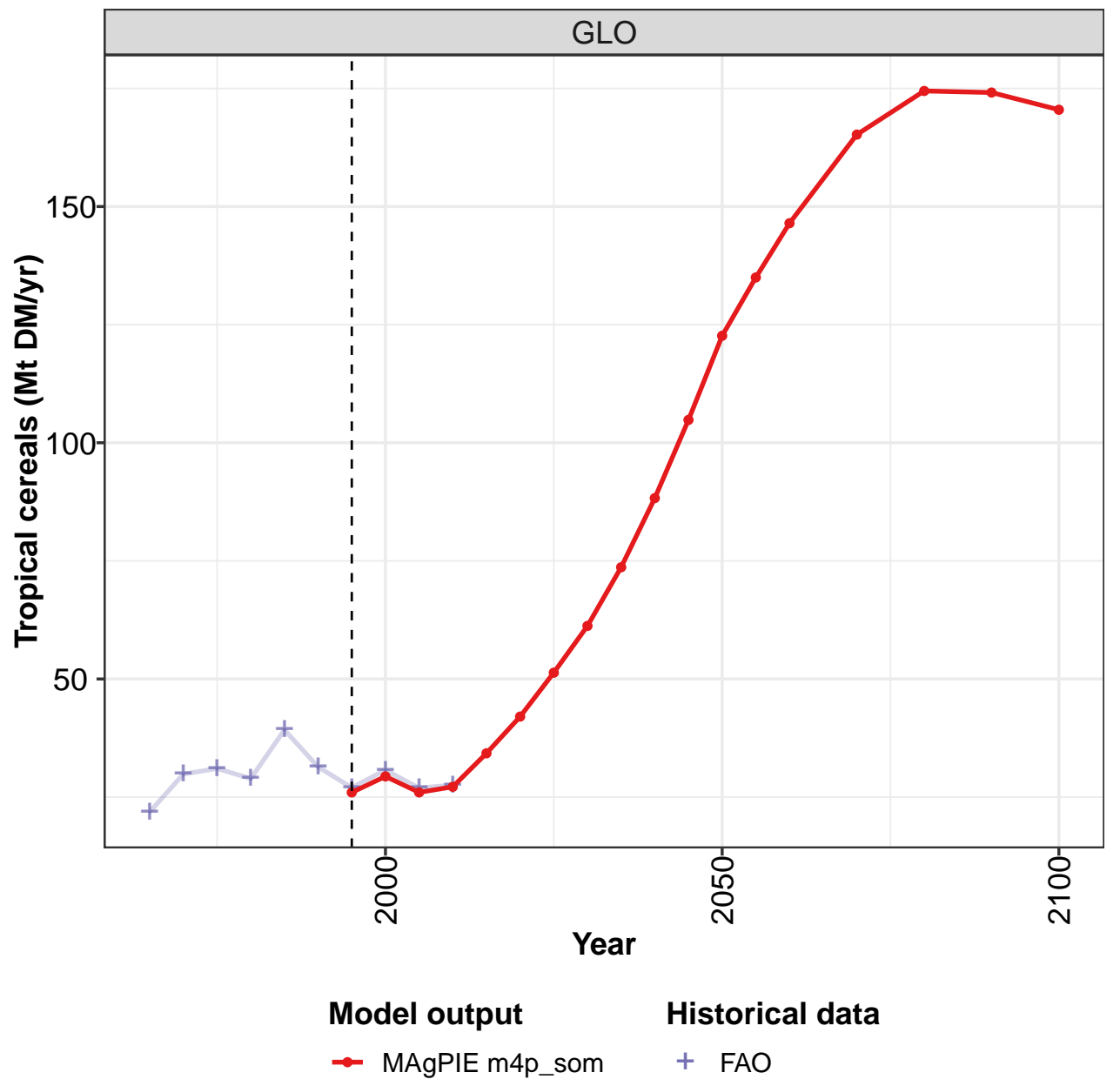
Table 261: MAgPIE m4p\_som — Demand—Feed—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	143	190	191	219	249	264	215	207	219	205
CAZ	11	16	14	13	14	15	19	19	21	15
CHA	1	1	1	1	1	2	3	6	5	14
EUR	64	74	84	91	102	97	93	97	104	96
IND	0	0	1	0	1	1	1	1	1	2
JPN	1	2	2	2	2	2	2	2	2	2
LAM	1	1	2	2	3	2	2	3	2	3
MEA	2	3	4	6	11	12	15	15	18	23
NEU	6	6	7	9	10	8	8	10	9	7
OAS	1	1	1	1	2	1	3	2	3	5
REF	37	65	64	84	83	105	59	40	46	33
SSA	0	0	0	0	0	0	0	0	0	0
USA	17	20	12	10	19	19	10	12	7	6

Table 262: FAO — Demand—Feed—Crops—Cereals—Temperate cereals (Mt DM/yr)

6.2.5
Cereals—Tropical cereals

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

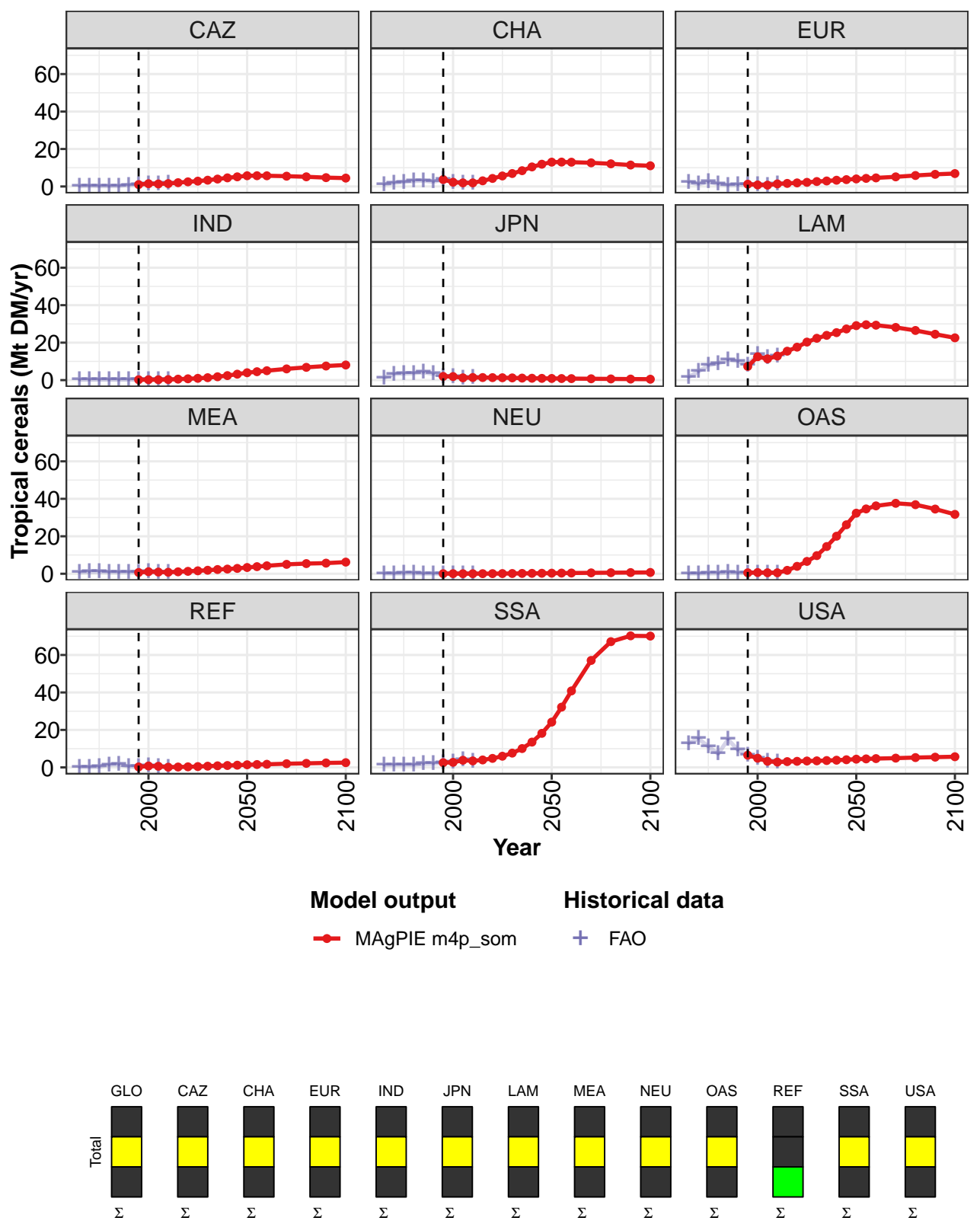


Figure 88: MAGPIE m4p\_som — Demand—Feed—Crops—Cereals—Tropical cereals (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	26	29	26	27	34	42	51	61	74	88	105
CAZ	1	1	1	2	2	2	3	3	4	5	5
CHA	4	2	2	2	3	4	6	7	8	10	12
EUR	1	1	1	1	2	2	2	3	3	3	4
IND	0	0	0	0	1	1	1	1	2	2	3
JPN	2	2	1	1	1	1	1	1	1	1	1
LAM	7	12	11	13	15	18	20	22	24	25	27
MEA	1	1	1	1	1	1	2	2	2	3	3
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	1	1	1	1	2	4	7	10	15	20	26
REF	0	1	1	0	0	0	0	1	1	1	1
SSA	3	3	4	3	4	5	6	8	10	14	18
USA	6	5	3	3	3	3	3	4	4	4	4

Table 263: MAgPIE m4p\_som — Demand—Feed—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	123	135	146	165	174	174	170
CAZ	6	6	6	5	5	5	4
CHA	13	13	13	13	12	11	11
EUR	4	4	5	5	6	6	7
IND	4	4	5	6	7	8	8
JPN	1	1	1	1	1	1	0
LAM	29	30	29	28	27	24	23
MEA	3	4	4	5	5	6	6
NEU	0	0	0	0	1	1	1
OAS	32	35	36	38	37	35	32
REF	1	2	2	2	2	2	3
SSA	24	32	41	57	67	70	70
USA	4	5	5	5	5	5	6

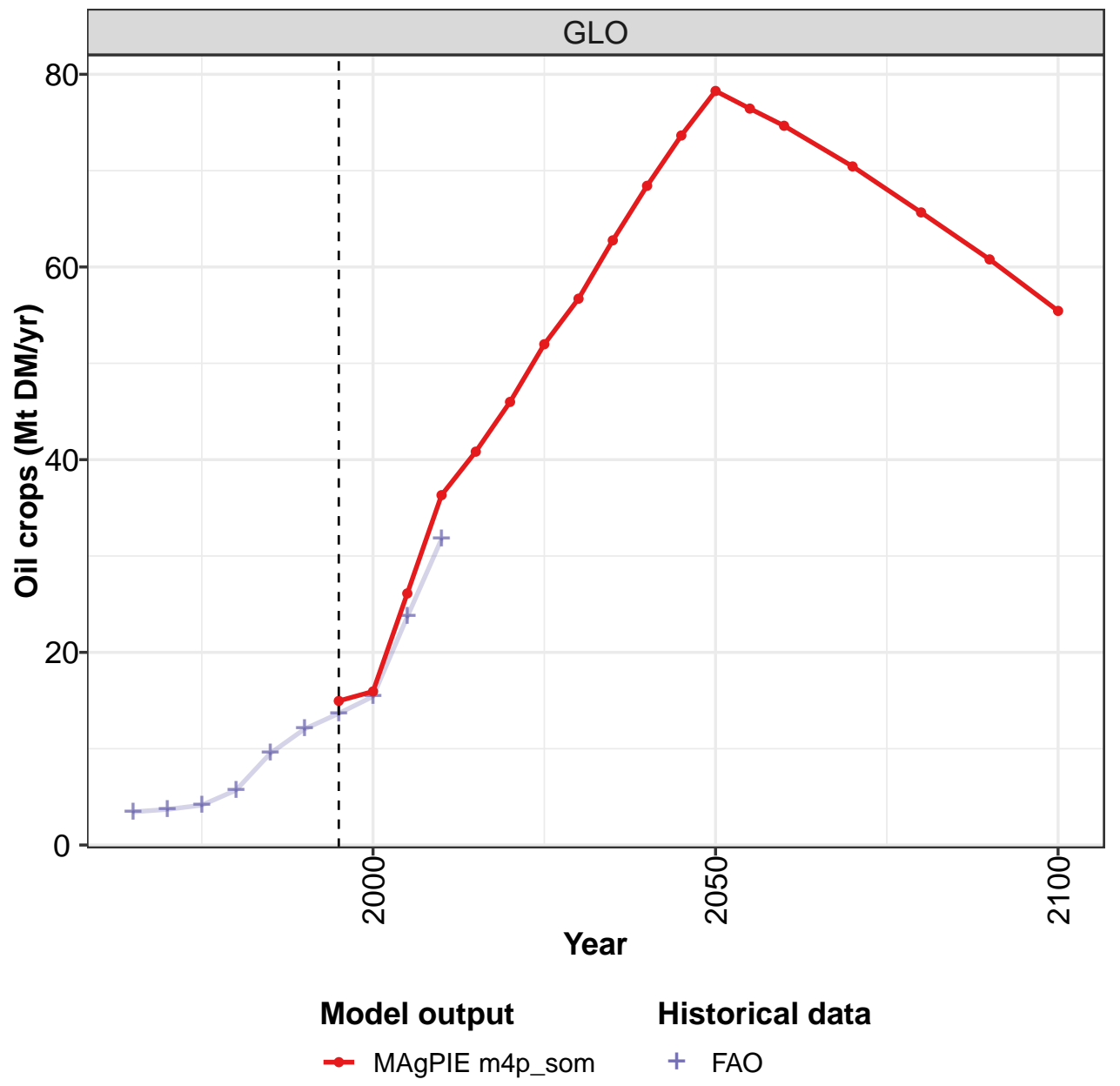
Table 264: MAgPIE m4p\_som — Demand—Feed—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	21.9	29.9	31.0	28.9	39.2	31.4	27.0	30.7	26.9	27.6
CAZ	0.1	0.4	0.2	0.2	0.3	0.8	1.1	1.6	1.6	1.7
CHA	1.1	1.9	2.4	2.9	3.1	2.5	3.7	2.3	2.0	2.0
EUR	2.3	1.3	2.4	1.4	0.8	1.0	1.1	0.8	0.7	1.3
IND	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3
JPN	1.3	3.3	3.5	3.7	4.2	3.3	2.0	1.9	1.2	1.4
LAM	1.7	4.6	7.9	9.0	10.8	10.1	8.2	13.6	11.9	12.8
MEA	0.8	1.0	1.1	0.9	0.8	1.0	0.7	1.1	0.9	0.8
NEU	0.1	0.1	0.2	0.3	0.1	0.1	0.0	0.1	0.0	0.0
OAS	0.1	0.1	0.2	0.2	0.6	0.4	0.4	0.5	0.5	0.5
REF	0.2	0.2	0.3	1.4	1.5	0.6	0.3	0.8	0.6	0.1
SSA	1.2	1.4	1.4	1.3	1.9	2.0	2.5	2.8	4.0	3.5
USA	12.8	15.4	11.1	7.3	14.9	9.3	6.7	5.1	3.3	3.0

Table 265: FAO — Demand—Feed—Crops—Cereals—Tropical cereals (Mt DM/yr)

6.2.6
Oil crops

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
 replace the existing scale.

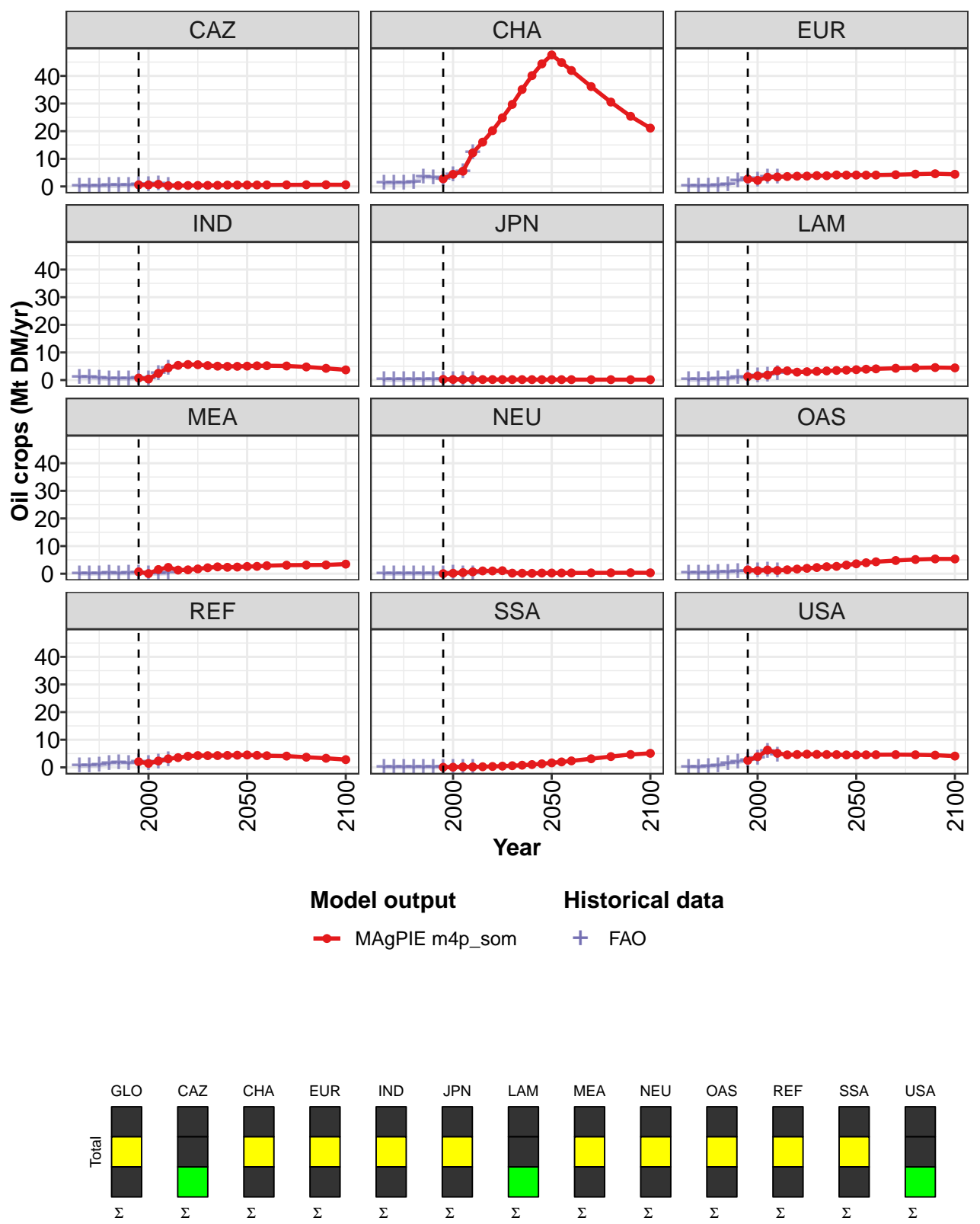


Figure 89: MAGPIE m4p\_som — Demand—Feed—Crops—Oil crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	15.0	15.9	26.1	36.3	40.8	46.0	52.0	56.7	62.8	68.4	73.6
CAZ	0.6	0.6	0.8	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5
CHA	2.8	4.4	5.5	12.2	16.0	20.2	24.8	29.7	35.1	40.1	44.4
EUR	2.7	2.2	3.4	3.4	3.6	3.7	3.7	3.9	3.9	4.1	4.1
IND	0.7	0.4	2.4	4.4	5.3	5.6	5.6	5.2	5.0	5.0	5.0
JPN	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
LAM	1.3	1.5	1.8	3.4	3.4	2.9	3.0	3.2	3.3	3.5	3.6
MEA	0.7	0.1	1.5	2.3	1.3	1.4	1.7	2.2	2.5	2.3	2.4
NEU	0.0	0.2	0.4	0.7	1.0	1.0	1.1	0.2	0.2	0.1	0.2
OAS	1.4	1.1	1.4	1.2	1.4	1.7	2.0	2.2	2.5	2.7	3.1
REF	2.0	1.4	2.3	3.1	3.5	4.0	4.3	4.2	4.3	4.3	4.4
SSA	0.0	0.1	0.2	0.2	0.2	0.3	0.4	0.6	0.8	1.0	1.3
USA	2.5	3.8	6.2	5.1	4.5	4.6	4.8	4.7	4.6	4.6	4.5

Table 266: MAgPIE m4p\_som — Demand—Feed—Crops—Oil crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	78.3	76.4	74.7	70.4	65.7	60.8	55.4
CAZ	0.5	0.5	0.5	0.6	0.6	0.6	0.6
CHA	47.6	44.9	42.0	36.1	30.5	25.4	21.1
EUR	4.1	4.1	4.1	4.2	4.5	4.6	4.4
IND	5.0	5.2	5.2	5.1	4.8	4.3	3.7
JPN	0.2	0.2	0.2	0.2	0.2	0.2	0.1
LAM	3.8	3.9	4.1	4.3	4.4	4.5	4.4
MEA	2.6	2.7	2.9	3.1	3.1	3.2	3.5
NEU	0.2	0.3	0.3	0.3	0.3	0.3	0.3
OAS	3.6	4.0	4.3	4.8	5.1	5.4	5.3
REF	4.5	4.3	4.2	4.1	3.7	3.3	2.8
SSA	1.6	2.0	2.3	3.1	3.9	4.6	5.1
USA	4.5	4.5	4.6	4.6	4.6	4.4	4.1

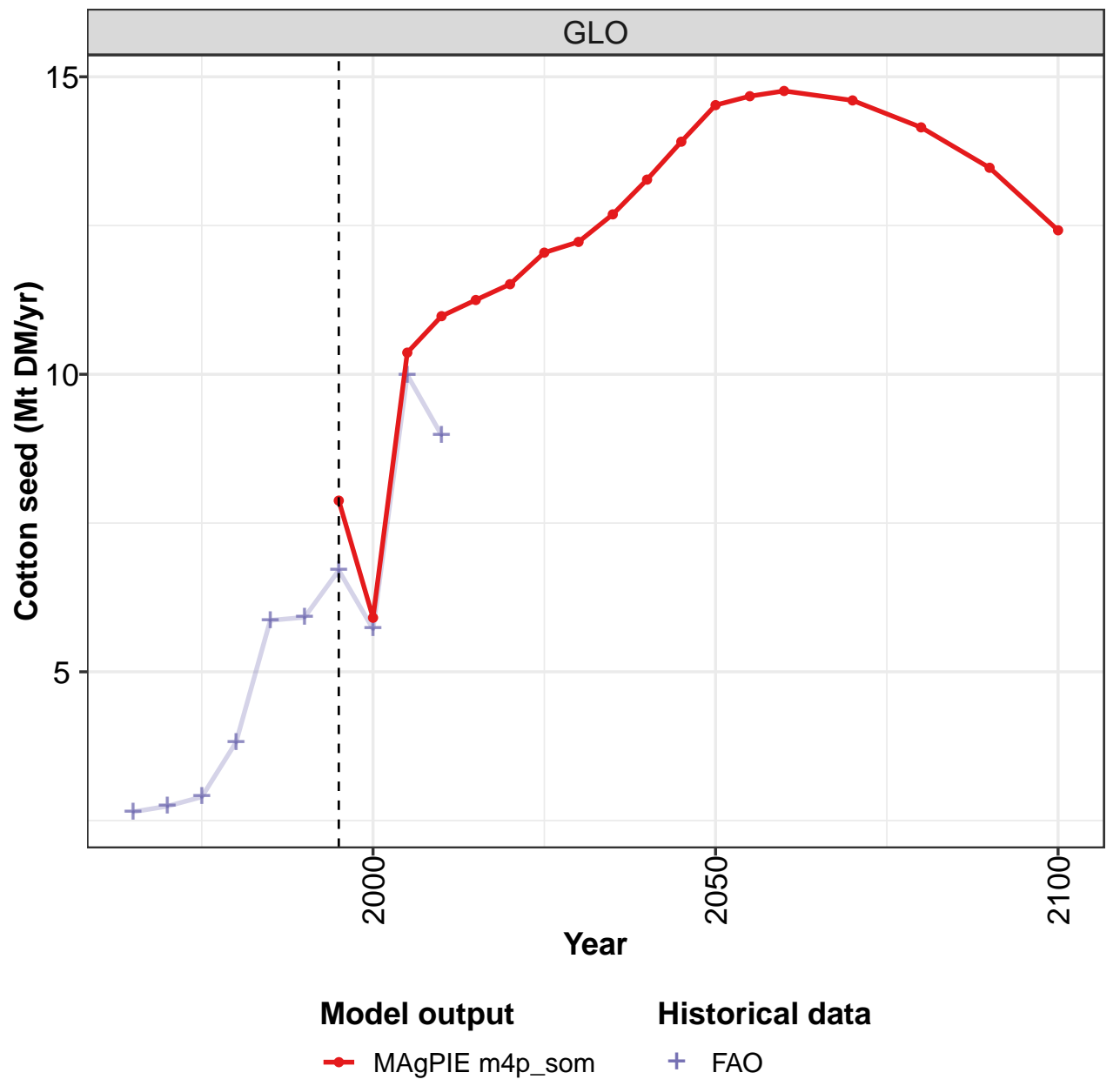
Table 267: MAgPIE m4p\_som — Demand—Feed—Crops—Oil crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3.4	3.7	4.1	5.7	9.5	12.0	13.7	15.4	23.7	31.8
CAZ	0.1	0.1	0.2	0.3	0.3	0.5	0.6	0.6	0.9	0.3
CHA	1.1	1.3	1.3	1.5	3.4	3.2	2.7	4.4	5.5	12.2
EUR	0.1	0.2	0.2	0.3	0.7	2.1	2.7	2.2	3.3	3.4
IND	1.0	0.9	0.7	0.5	0.5	0.6	0.7	0.4	2.5	4.3
JPN	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
LAM	0.1	0.1	0.2	0.4	0.6	1.0	0.9	1.6	1.9	2.5
MEA	0.0	0.0	0.1	0.2	0.1	0.2	0.2	0.0	0.0	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1
OAS	0.2	0.3	0.3	0.4	0.6	0.8	0.9	1.0	1.3	1.1
REF	0.5	0.7	0.7	1.3	1.6	1.4	2.0	1.3	1.9	2.9
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2
USA	0.1	0.0	0.4	0.7	1.5	1.9	2.6	3.4	5.9	4.4

Table 268: FAO — Demand—Feed—Crops—Oil crops (Mt DM/yr)

6.2.7
Oil crops—Cotton seed

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

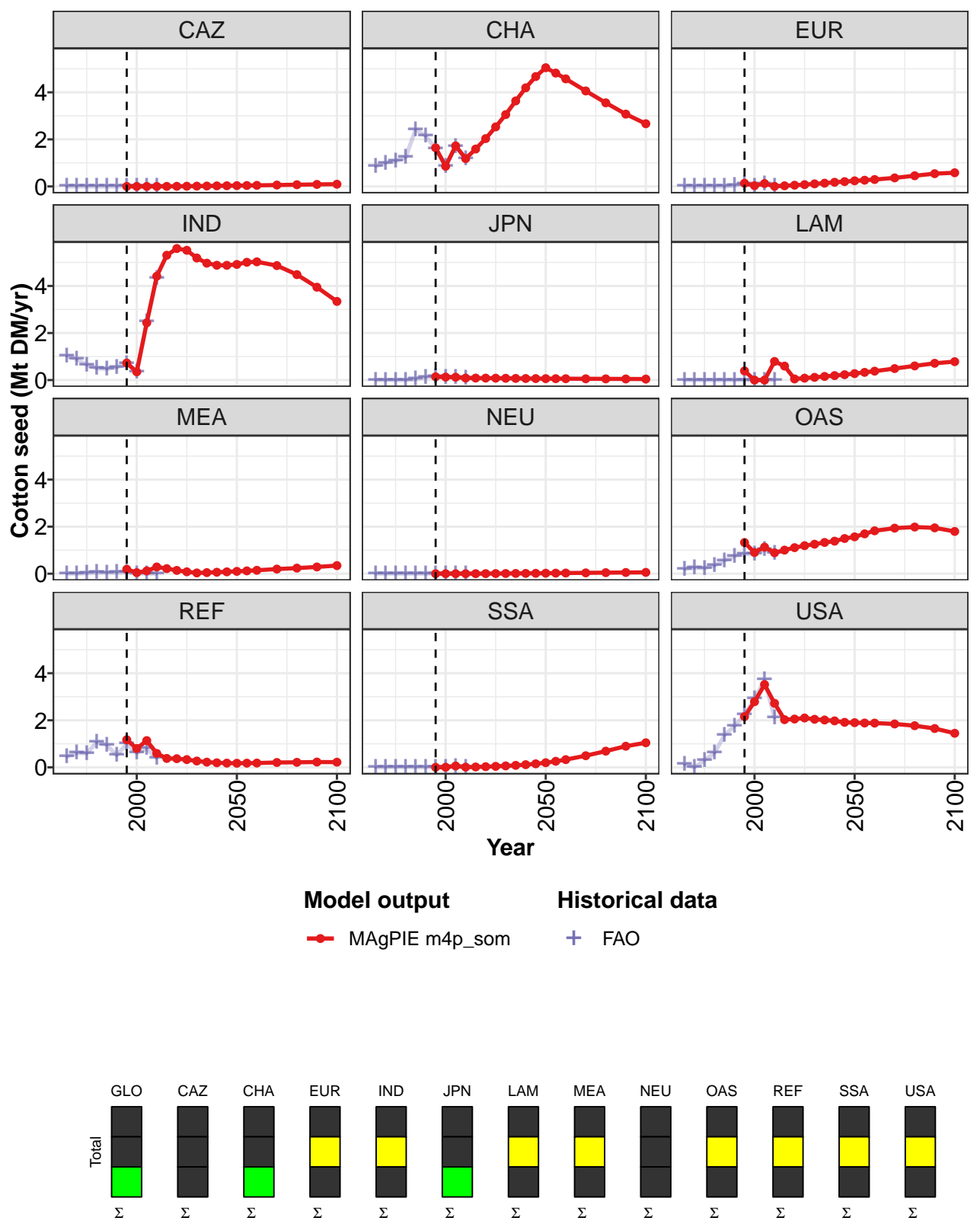


Figure 90: MAGPIE m4p\_som — Demand—Feed—Crops—Oil crops—Cotton seed (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	7.9	5.9	10.4	11.0	11.2	11.5	12.0	12.2	12.7	13.3	13.9
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	1.6	0.9	1.7	1.2	1.6	2.0	2.5	3.1	3.6	4.2	4.7
EUR	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2
IND	0.7	0.3	2.4	4.4	5.3	5.6	5.5	5.2	5.0	4.9	4.9
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.4	0.0	0.0	0.8	0.6	0.0	0.1	0.1	0.2	0.2	0.2
MEA	0.2	0.0	0.1	0.3	0.2	0.1	0.1	0.0	0.0	0.1	0.1
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.3	0.9	1.1	0.9	1.0	1.1	1.2	1.3	1.3	1.4	1.5
REF	1.2	0.8	1.1	0.6	0.4	0.4	0.3	0.3	0.2	0.2	0.2
SSA	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2
USA	2.2	2.8	3.5	2.7	2.0	2.1	2.1	2.0	2.0	2.0	1.9

Table 269: MAgPIE m4p\_som — Demand—Feed—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	14.5	14.7	14.8	14.6	14.2	13.5	12.4
CAZ	0.0	0.0	0.0	0.1	0.1	0.1	0.1
CHA	5.0	4.8	4.6	4.1	3.6	3.1	2.7
EUR	0.2	0.3	0.3	0.4	0.5	0.5	0.6
IND	4.9	5.0	5.0	4.9	4.5	3.9	3.3
JPN	0.1	0.1	0.1	0.1	0.1	0.0	0.0
LAM	0.3	0.3	0.4	0.5	0.6	0.7	0.8
MEA	0.1	0.1	0.1	0.2	0.2	0.3	0.3
NEU	0.0	0.0	0.0	0.0	0.0	0.1	0.1
OAS	1.6	1.7	1.8	1.9	2.0	1.9	1.8
REF	0.2	0.2	0.2	0.2	0.2	0.2	0.2
SSA	0.2	0.3	0.3	0.5	0.7	0.9	1.0
USA	1.9	1.9	1.9	1.8	1.8	1.7	1.4

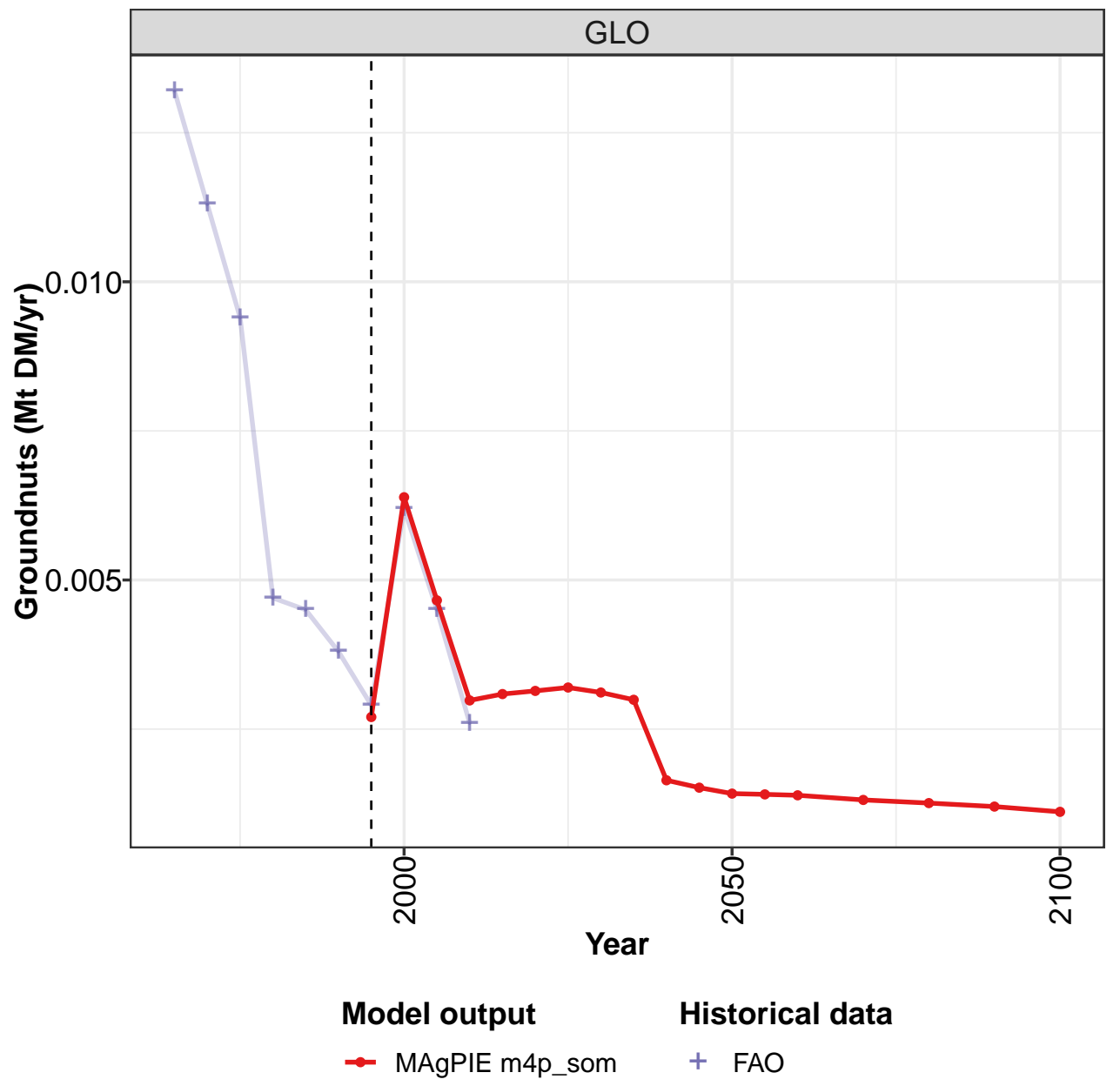
Table 270: MAgPIE m4p\_som — Demand—Feed—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.65	2.74	2.90	3.82	5.87	5.92	6.71	5.72	9.99	8.98
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.85	1.00	1.08	1.23	2.42	2.14	1.61	0.85	1.71	1.18
EUR	0.00	0.00	0.00	0.01	0.00	0.04	0.12	0.02	0.12	0.01
IND	1.03	0.89	0.64	0.50	0.47	0.53	0.71	0.35	2.47	4.33
JPN	0.00	0.00	0.00	0.00	0.04	0.12	0.14	0.13	0.12	0.09
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.02	0.05	0.04	0.05	0.06	0.01	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.19	0.25	0.24	0.35	0.56	0.75	0.83	0.84	1.02	0.86
REF	0.45	0.60	0.60	1.06	0.95	0.51	1.00	0.60	0.81	0.38
SSA	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.03	0.01
USA	0.12	0.00	0.31	0.61	1.37	1.76	2.23	2.91	3.71	2.11

Table 271: FAO — Demand—Feed—Crops—Oil crops—Cotton seed (Mt DM/yr)

6.2.8
Oil crops—Groundnuts

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

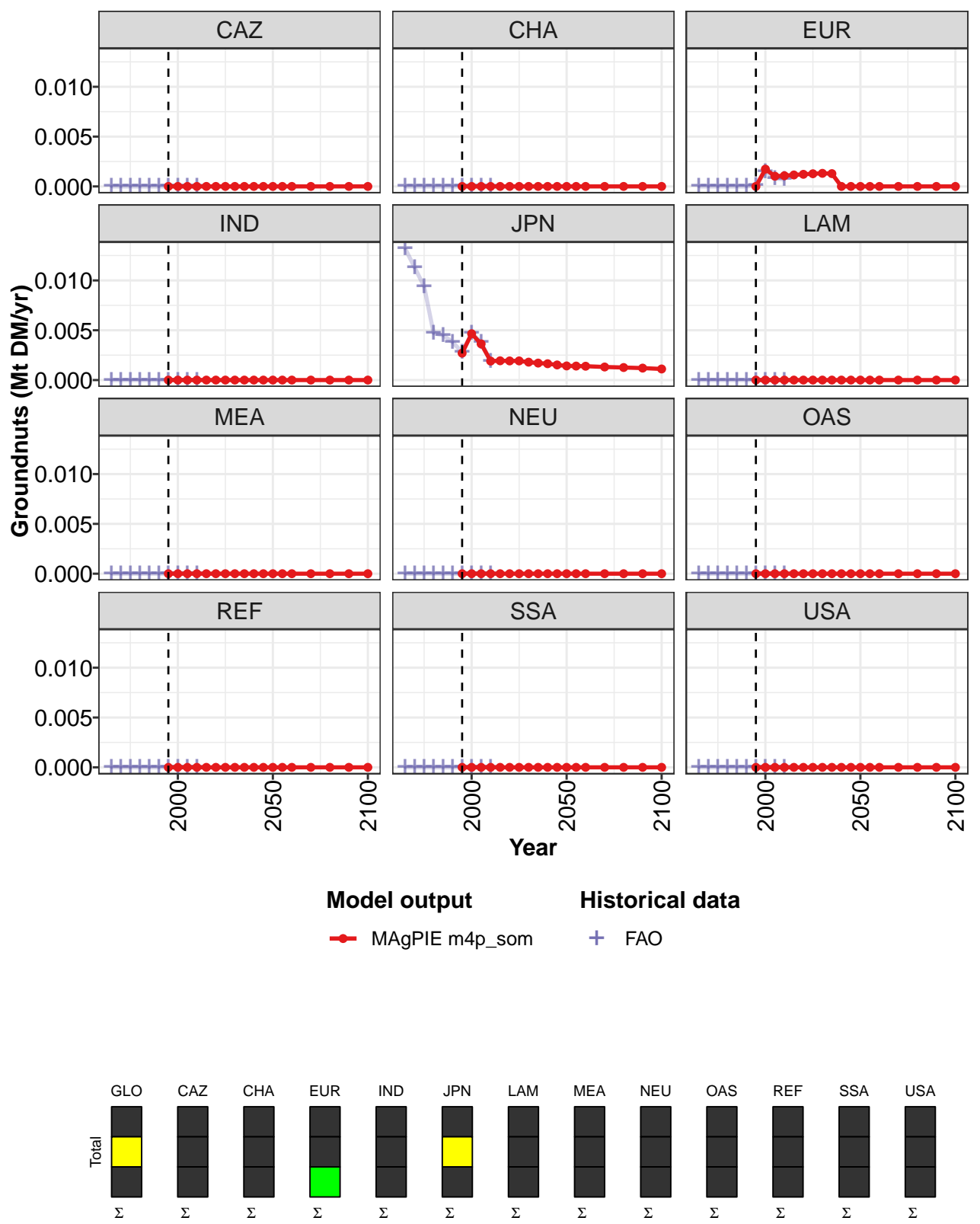


Figure 91: MAgPIE m4p\_som — Demand—Feed—Crops—Oil crops—Groundnuts (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.00270	0.00639	0.00466	0.00298	0.00309	0.00314	0.00320	0.00311	0.00299	0.00164	0.00152
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00174	0.00103	0.00107	0.00115	0.00122	0.00127	0.00132	0.00128	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00270	0.00465	0.00363	0.00191	0.00194	0.00192	0.00192	0.00180	0.00171	0.00164	0.00152
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 272: MAgPIE m4p\_som — Demand—Feed—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00142	0.00141	0.00139	0.00131	0.00126	0.00120	0.00111
CAZ	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CHA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
EUR	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
IND	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
JPN	0.00142	0.00141	0.00139	0.00131	0.00126	0.00120	0.00111
LAM	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
MEA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NEU	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
OAS	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
REF	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
USA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

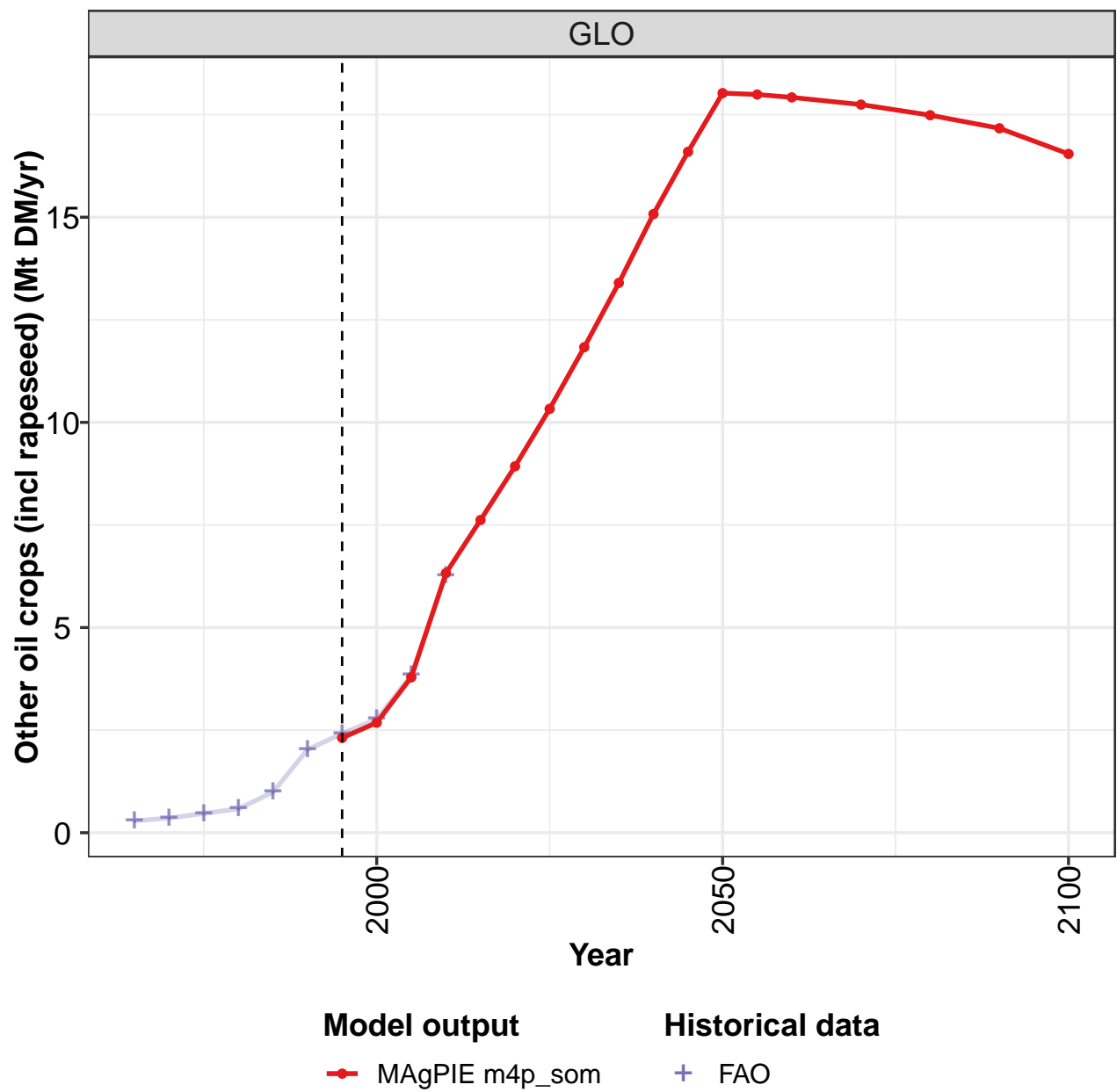
Table 273: MAgPIE m4p\_som — Demand—Feed—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0132	0.0113	0.0094	0.0047	0.0045	0.0038	0.0029	0.0062	0.0045	0.0026
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0015	0.0008	0.0007
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0132	0.0113	0.0094	0.0047	0.0045	0.0038	0.0028	0.0047	0.0038	0.0019
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 274: FAO — Demand—Feed—Crops—Oil crops—Groundnuts (Mt DM/yr)

6.2.9
Oil crops—Other oil crops (incl rapeseed)

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
 replace the existing scale.

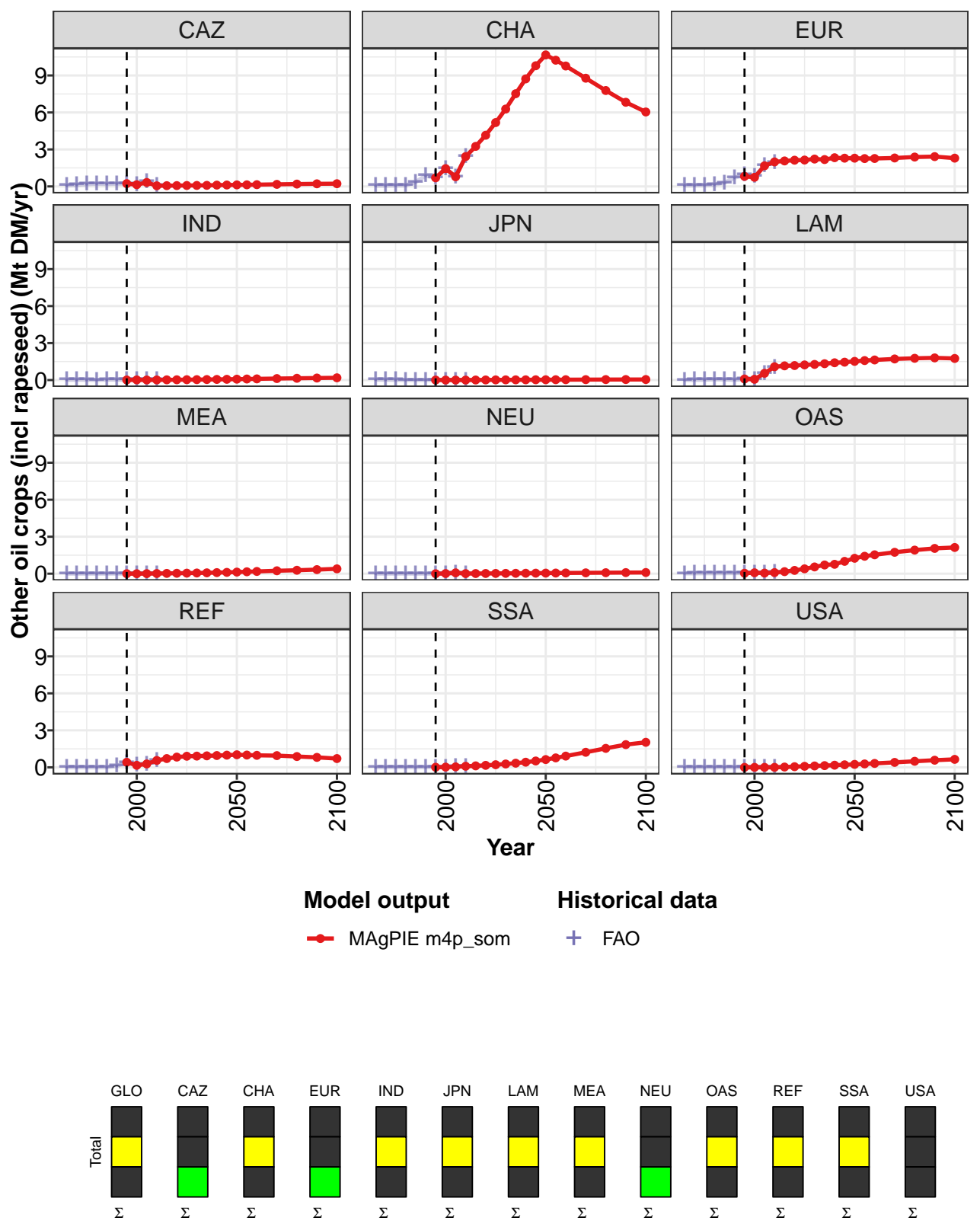


Figure 92: MAgPIE m4p\_som — Demand—Feed—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	2.3	2.7	3.8	6.3	7.6	8.9	10.3	11.8	13.4	15.1	16.6
CAZ	0.2	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	0.7	1.4	0.8	2.4	3.2	4.2	5.2	6.3	7.5	8.7	9.8
EUR	0.8	0.7	1.7	2.0	2.1	2.1	2.1	2.2	2.2	2.3	2.3
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.1	0.1	0.6	1.1	1.2	1.2	1.2	1.3	1.3	1.4	1.5
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
NEU	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.0	0.1	0.1	0.1	0.2	0.3	0.4	0.5	0.7	0.8	1.0
REF	0.4	0.2	0.3	0.6	0.7	0.8	0.9	0.9	0.9	1.0	1.0
SSA	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.5
USA	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2

Table 275: MAgPIE m4p\_som — Demand—Feed—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	18.0	18.0	17.9	17.7	17.5	17.2	16.5
CAZ	0.1	0.1	0.1	0.2	0.2	0.2	0.2
CHA	10.7	10.2	9.8	8.8	7.8	6.8	6.0
EUR	2.3	2.3	2.3	2.3	2.4	2.4	2.3
IND	0.1	0.1	0.1	0.1	0.1	0.2	0.2
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.5	1.6	1.6	1.7	1.8	1.8	1.8
MEA	0.1	0.2	0.2	0.2	0.3	0.3	0.4
NEU	0.0	0.1	0.1	0.1	0.1	0.1	0.1
OAS	1.3	1.4	1.5	1.7	1.9	2.1	2.1
REF	1.0	1.0	1.0	1.0	0.9	0.8	0.7
SSA	0.6	0.8	0.9	1.2	1.5	1.8	2.0
USA	0.2	0.3	0.3	0.4	0.5	0.6	0.6

Table 276: MAgPIE m4p\_som — Demand—Feed—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 2/2]

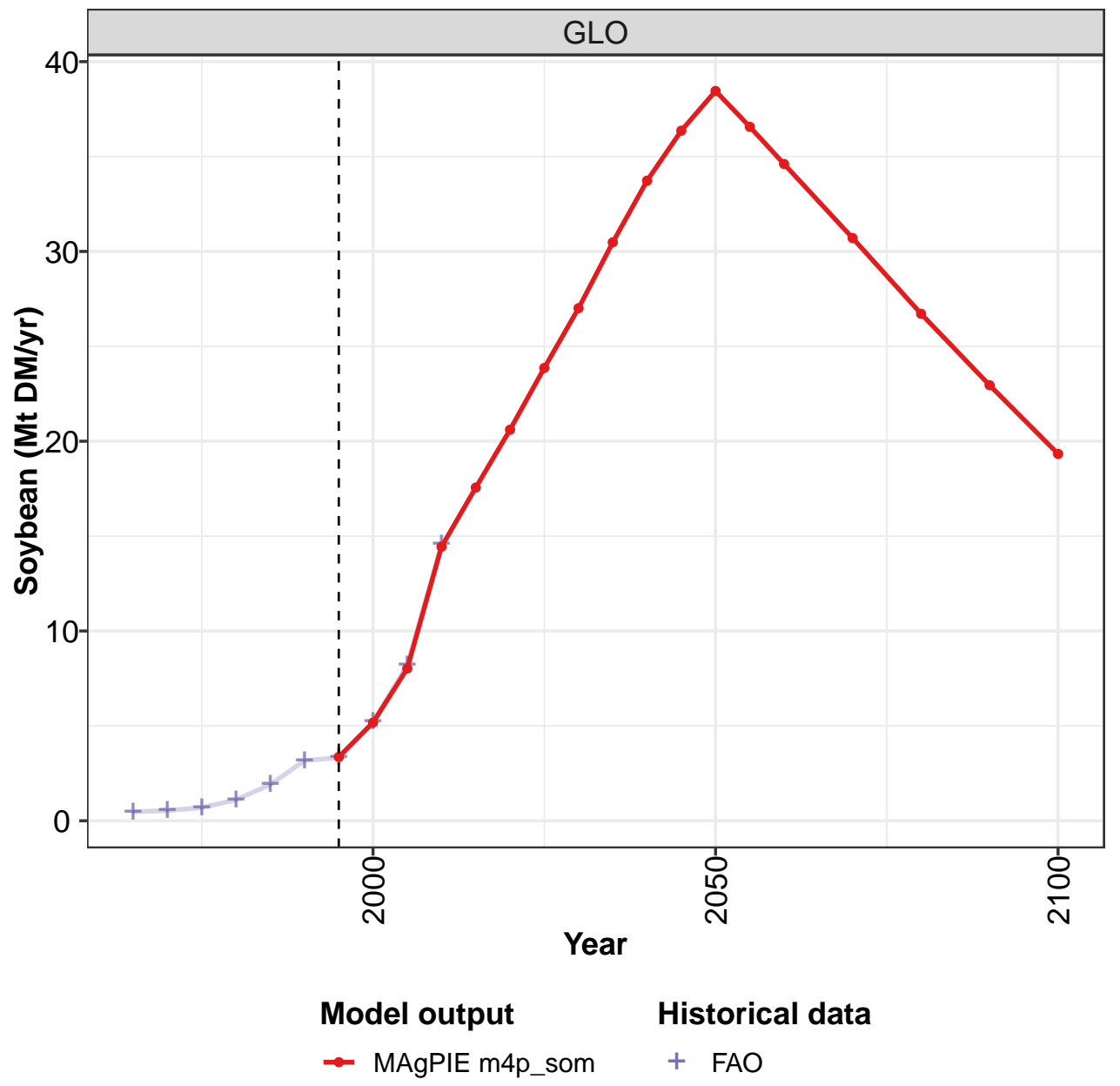
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.29	0.36	0.47	0.58	0.99	2.03	2.42	2.77	3.84	6.27
CAZ	0.08	0.12	0.18	0.22	0.20	0.22	0.24	0.16	0.38	0.06
CHA	0.06	0.06	0.08	0.08	0.36	0.87	0.70	1.44	0.78	2.42
EUR	0.08	0.09	0.11	0.15	0.30	0.71	0.93	0.81	1.69	1.95
IND	0.01	0.02	0.02	0.01	0.03	0.03	0.01	0.02	0.01	0.01
JPN	0.03	0.02	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.01	0.03	0.07	0.05	0.01	0.09	0.06	0.54	1.04
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02
NEU	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.05	0.01
OAS	0.02	0.03	0.04	0.04	0.04	0.05	0.04	0.08	0.06	0.09
REF	0.00	0.00	0.00	0.00	0.00	0.11	0.39	0.16	0.28	0.57
SSA	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.02	0.05	0.09
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 277: FAO — Demand—Feed—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)



6.2.10
Oil crops—Soybean

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

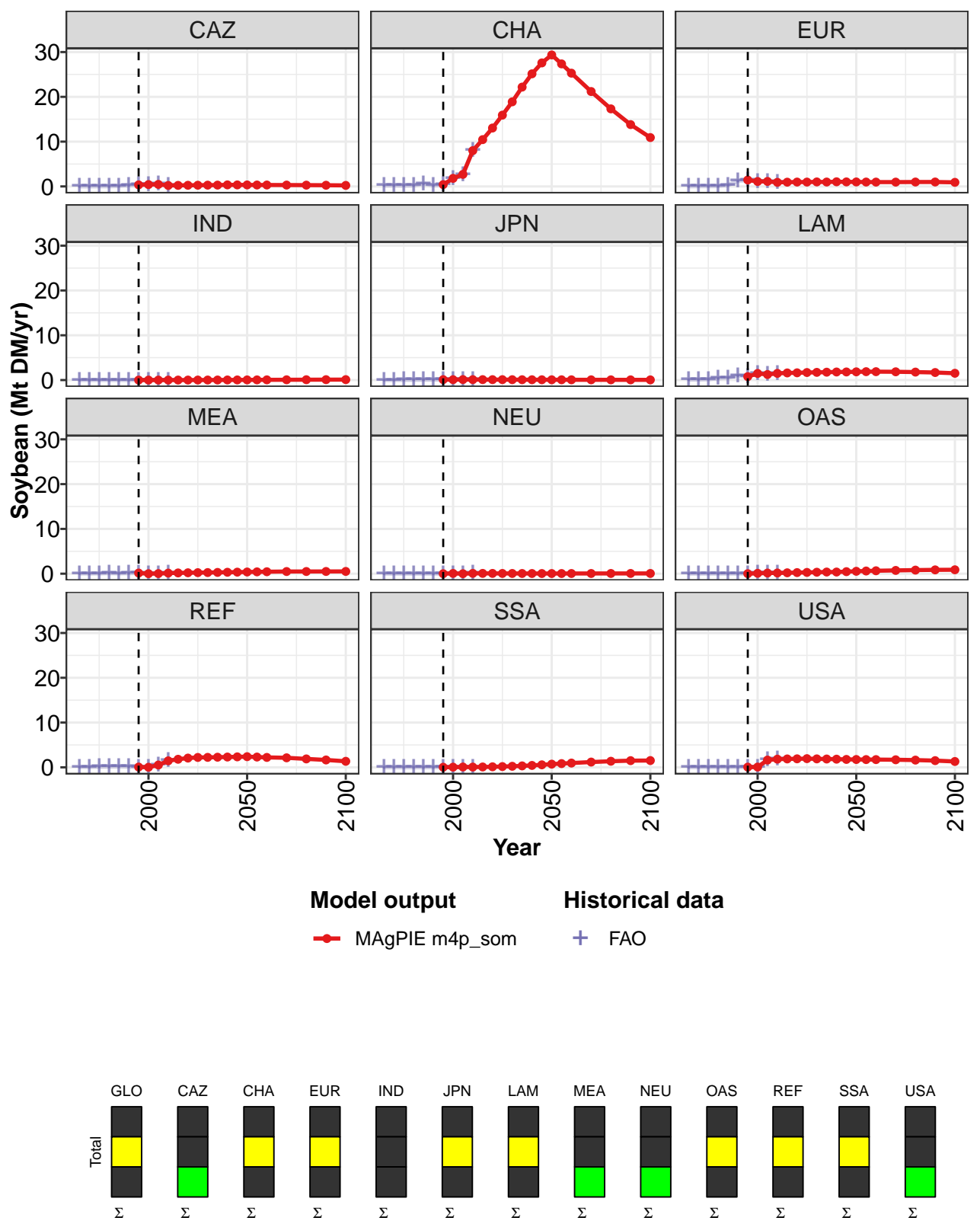


Figure 93: MAgPIE m4p\_som — Demand—Feed—Crops—Oil crops—Soybean (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	3.4	5.2	8.0	14.4	17.6	20.6	23.9	27.0	30.5	33.7	36.4
CAZ	0.3	0.4	0.5	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
CHA	0.4	1.8	2.7	8.0	10.5	13.0	15.9	18.9	22.2	25.1	27.6
EUR	1.4	1.1	1.1	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.8	1.5	1.2	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.8
MEA	0.2	0.0	0.0	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3
NEU	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
OAS	0.0	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.5
REF	0.1	0.0	0.5	1.5	1.8	2.1	2.2	2.2	2.3	2.3	2.3
SSA	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.6
USA	0.1	0.1	1.6	1.8	1.9	1.9	1.9	1.9	1.9	1.8	1.8

Table 278: MAgPIE m4p\_som — Demand—Feed—Crops—Oil crops—Soybean (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	38.5	36.6	34.6	30.7	26.7	23.0	19.3
CAZ	0.3	0.3	0.3	0.3	0.3	0.3	0.2
CHA	29.4	27.4	25.3	21.2	17.3	13.8	10.9
EUR	1.0	1.0	1.0	1.0	1.0	1.0	0.9
IND	0.0	0.0	0.1	0.1	0.1	0.1	0.1
JPN	0.1	0.1	0.1	0.1	0.1	0.0	0.0
LAM	1.8	1.9	1.9	1.8	1.8	1.7	1.5
MEA	0.4	0.4	0.4	0.5	0.5	0.5	0.5
NEU	0.0	0.0	0.0	0.0	0.1	0.1	0.1
OAS	0.5	0.6	0.7	0.7	0.8	0.9	0.9
REF	2.4	2.3	2.2	2.1	1.9	1.7	1.3
SSA	0.7	0.8	1.0	1.2	1.4	1.5	1.5
USA	1.8	1.7	1.7	1.7	1.6	1.5	1.3

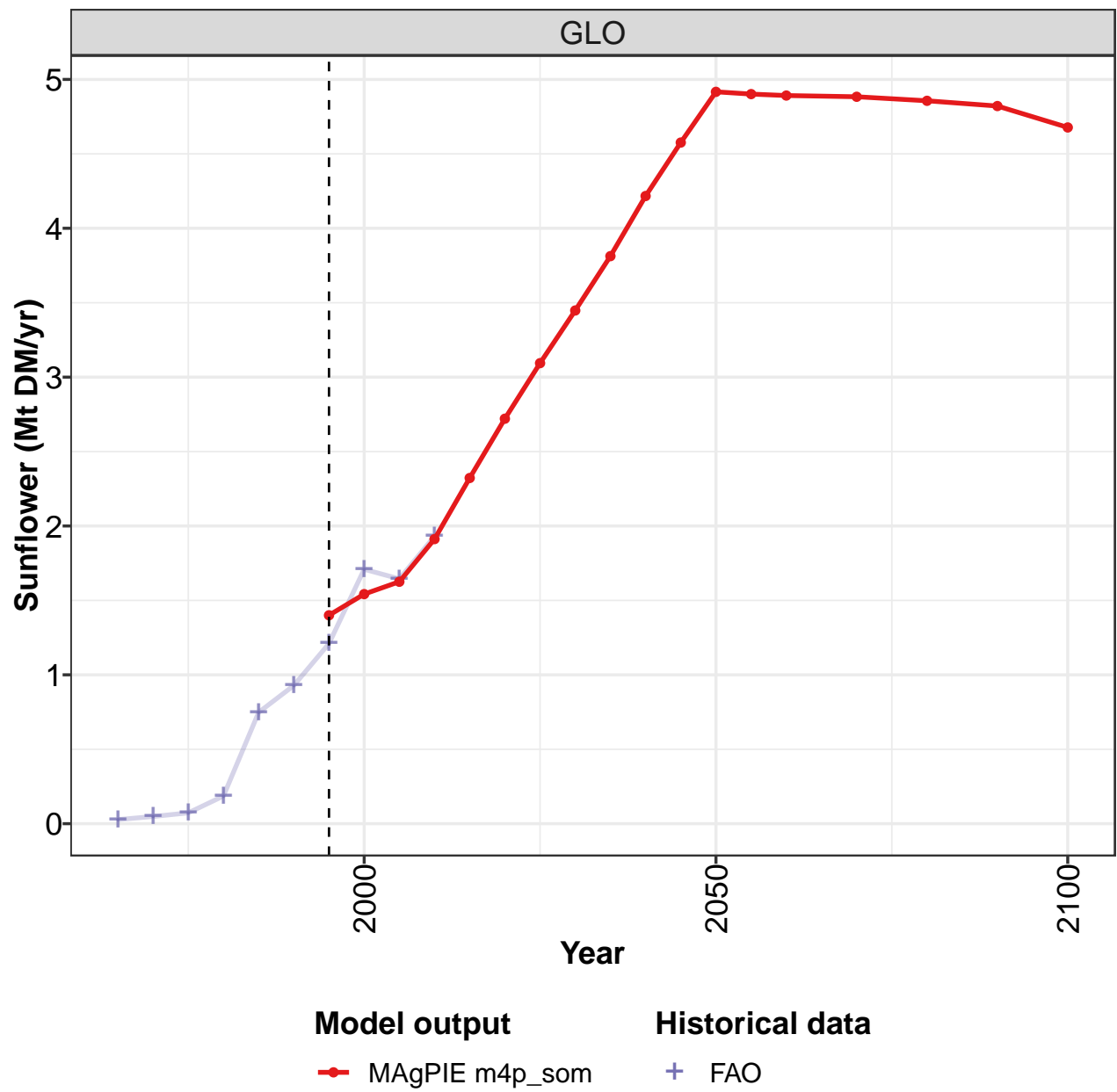
Table 279: MAgPIE m4p\_som — Demand—Feed—Crops—Oil crops—Soybean (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.5	0.5	0.7	1.1	1.9	3.2	3.3	5.2	8.2	14.6
CAZ	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.5	0.5	0.2
CHA	0.2	0.2	0.2	0.2	0.6	0.2	0.4	1.8	2.7	8.0
EUR	0.0	0.1	0.1	0.1	0.3	1.2	1.4	1.1	1.1	0.9
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.1	0.1	0.2	0.4	0.5	1.0	0.8	1.5	1.4	1.5
MEA	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.0	0.0	0.1
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
OAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2
REF	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.0	0.5	1.5
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.7	2.0

Table 280: FAO — Demand—Feed—Crops—Oil crops—Soybean (Mt DM/yr)

6.2.11
Oil crops—Sunflower

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

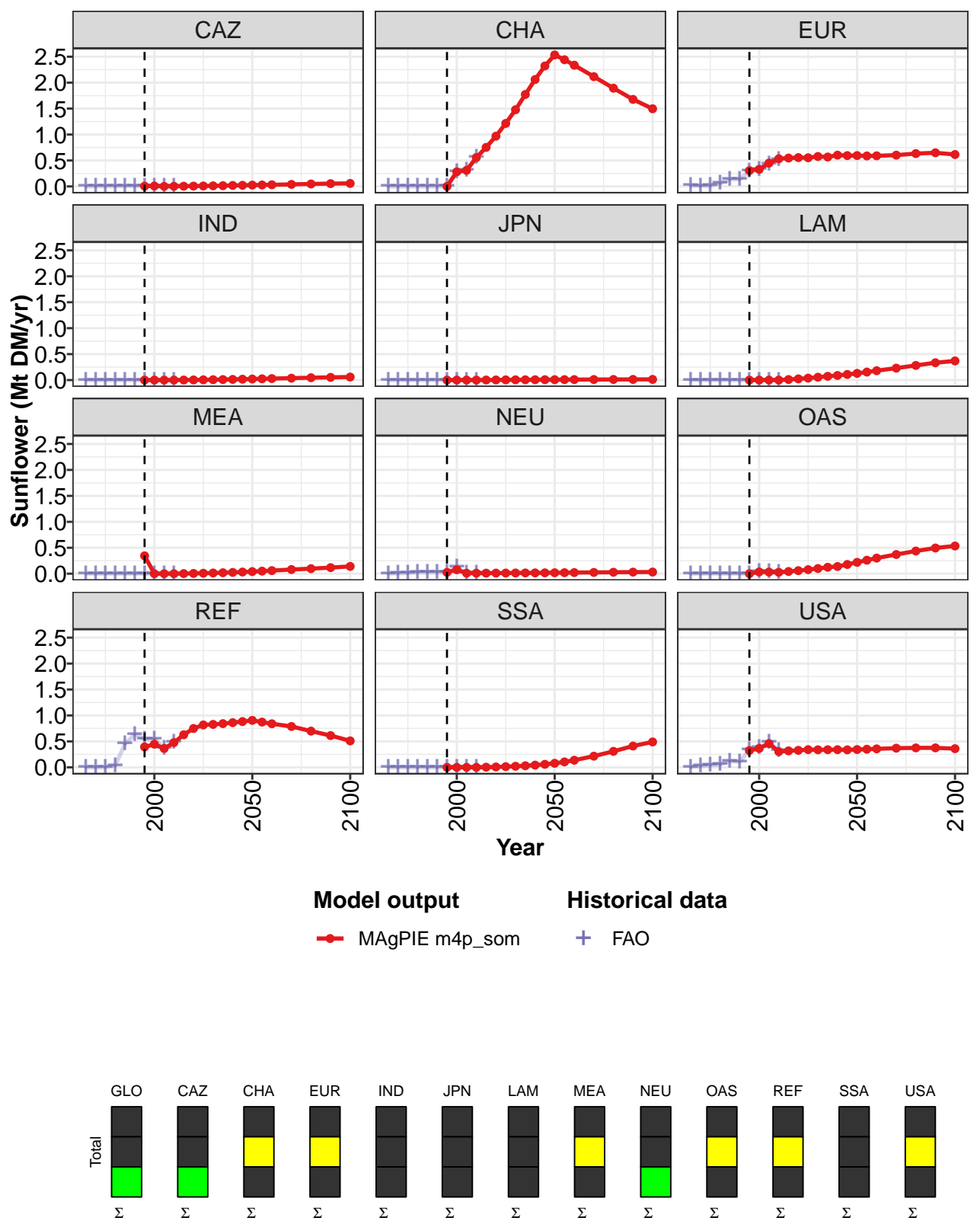


Figure 94: MAGPIE m4p\_som — Demand—Feed—Crops—Oil crops—Sunflower (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.40	1.54	1.63	1.91	2.32	2.72	3.09	3.45	3.81	4.22	4.58
CAZ	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02
CHA	0.00	0.28	0.31	0.56	0.75	0.97	1.21	1.48	1.77	2.06	2.32
EUR	0.31	0.33	0.45	0.53	0.55	0.56	0.55	0.58	0.57	0.60	0.59
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
LAM	0.00	0.00	0.00	0.00	0.01	0.02	0.04	0.05	0.07	0.09	0.11
MEA	0.35	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.03	0.03
NEU	0.03	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
OAS	0.00	0.03	0.03	0.03	0.04	0.06	0.08	0.10	0.12	0.14	0.18
REF	0.39	0.45	0.36	0.48	0.63	0.75	0.82	0.83	0.84	0.86	0.88
SSA	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.03	0.04	0.06
USA	0.32	0.36	0.46	0.30	0.32	0.33	0.34	0.34	0.34	0.34	0.34

Table 281: MAgPIE m4p\_som — Demand—Feed—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	4.92	4.90	4.89	4.88	4.86	4.82	4.68
CAZ	0.03	0.03	0.03	0.04	0.05	0.05	0.06
CHA	2.53	2.44	2.34	2.12	1.89	1.68	1.50
EUR	0.59	0.59	0.59	0.60	0.63	0.65	0.61
IND	0.02	0.02	0.03	0.04	0.05	0.05	0.06
JPN	0.01	0.01	0.01	0.01	0.01	0.01	0.01
LAM	0.13	0.15	0.18	0.23	0.28	0.33	0.37
MEA	0.04	0.05	0.06	0.08	0.10	0.12	0.14
NEU	0.02	0.02	0.02	0.03	0.03	0.03	0.03
OAS	0.22	0.26	0.30	0.37	0.44	0.50	0.53
REF	0.91	0.87	0.84	0.79	0.70	0.61	0.51
SSA	0.08	0.11	0.14	0.22	0.31	0.41	0.49
USA	0.34	0.35	0.36	0.37	0.38	0.38	0.36

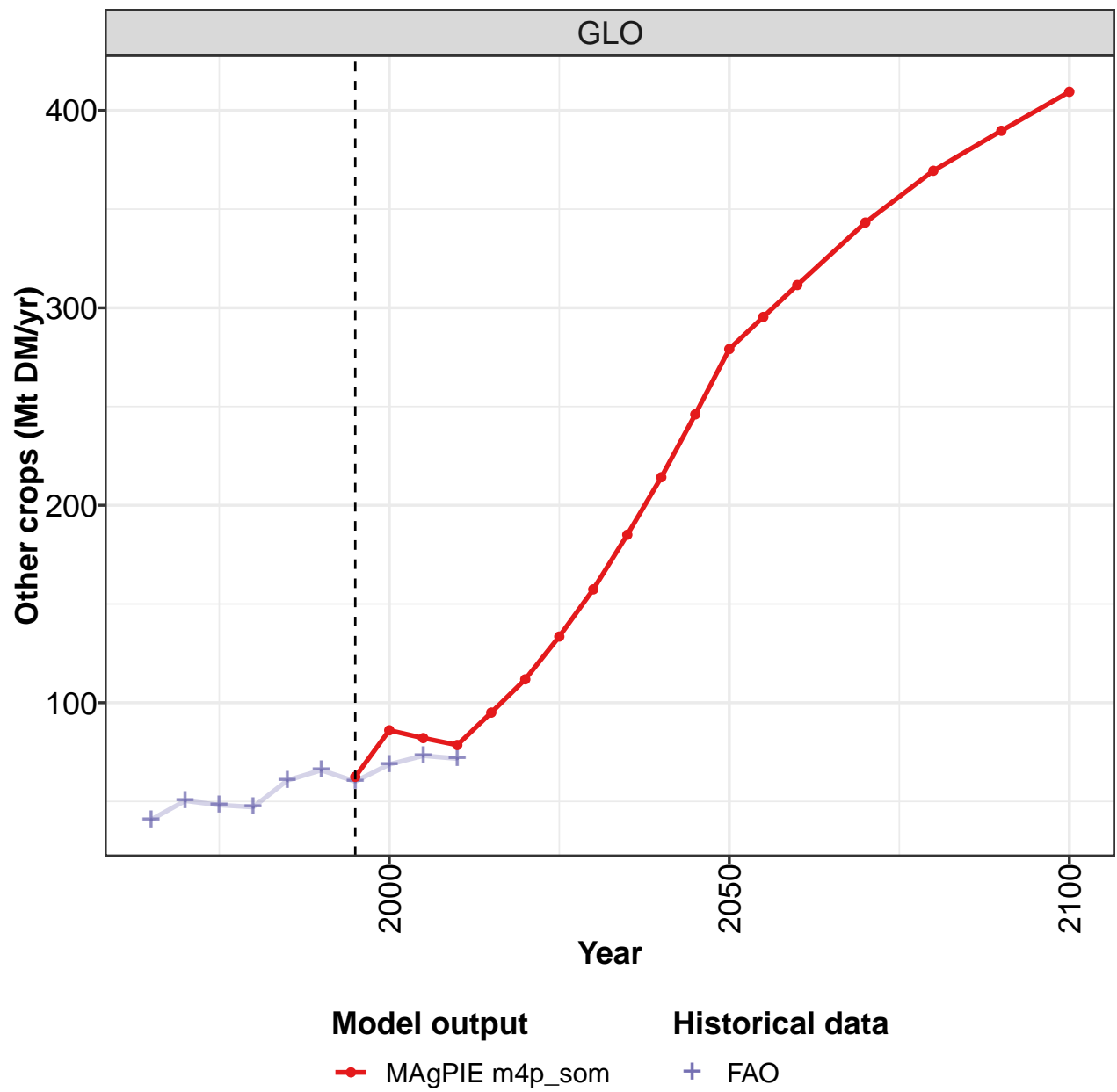
Table 282: MAgPIE m4p\_som — Demand—Feed—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.03	0.05	0.07	0.19	0.75	0.93	1.21	1.71	1.64	1.93
CAZ	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.31	0.56
EUR	0.02	0.01	0.01	0.06	0.14	0.14	0.29	0.32	0.43	0.52
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.01	0.01	0.03	0.03	0.03	0.03	0.12	0.02	0.01
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.04	0.03
REF	0.00	0.00	0.00	0.04	0.45	0.64	0.54	0.54	0.37	0.48
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.01	0.02	0.04	0.05	0.12	0.11	0.33	0.38	0.48	0.33

Table 283: FAO — Demand—Feed—Crops—Oil crops—Sunflower (Mt DM/yr)

6.2.12
Other crops

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

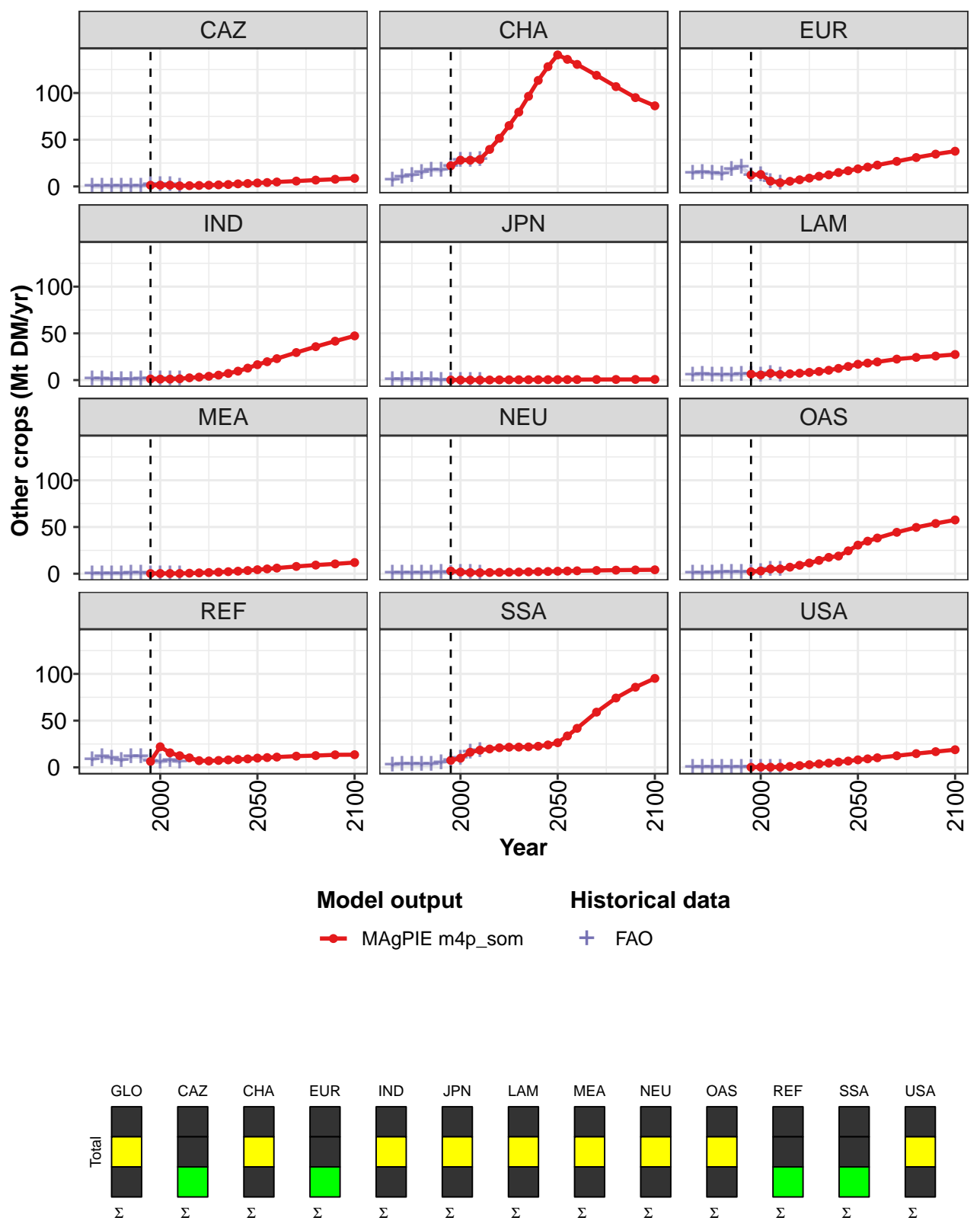


Figure 95: MAgPIE m4p\_som — Demand—Feed—Crops—Other crops (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	62	86	82	79	95	112	134	157	185	214	246
CAZ	1	1	1	1	1	1	1	2	2	3	3
CHA	22	28	28	29	40	52	65	80	96	113	128
EUR	12	13	6	4	6	7	9	11	12	15	17
IND	1	1	1	1	2	3	4	5	7	10	13
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	6	5	7	6	7	7	8	9	11	12	15
MEA	0	0	0	0	1	1	1	2	2	3	3
NEU	3	2	1	1	1	1	2	2	2	2	2
OAS	2	3	5	5	7	9	11	14	17	19	24
REF	6	22	16	12	10	7	7	7	8	8	9
SSA	8	10	16	18	20	21	22	22	22	23	24
USA	0	0	0	0	1	2	3	4	5	6	7

Table 284: MAgPIE m4p\_som — Demand—Feed—Crops—Other crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	279	295	312	343	369	390	409
CAZ	4	4	5	6	7	8	9
CHA	141	136	131	119	107	95	86
EUR	19	21	23	27	31	35	38
IND	16	20	23	29	36	42	47
JPN	0	1	1	1	1	1	1
LAM	17	18	19	22	24	26	27
MEA	4	5	6	8	9	11	12
NEU	3	3	3	3	4	4	4
OAS	31	35	38	44	50	54	58
REF	10	10	11	12	13	13	14
SSA	26	34	42	59	74	86	95
USA	8	9	10	12	15	17	19

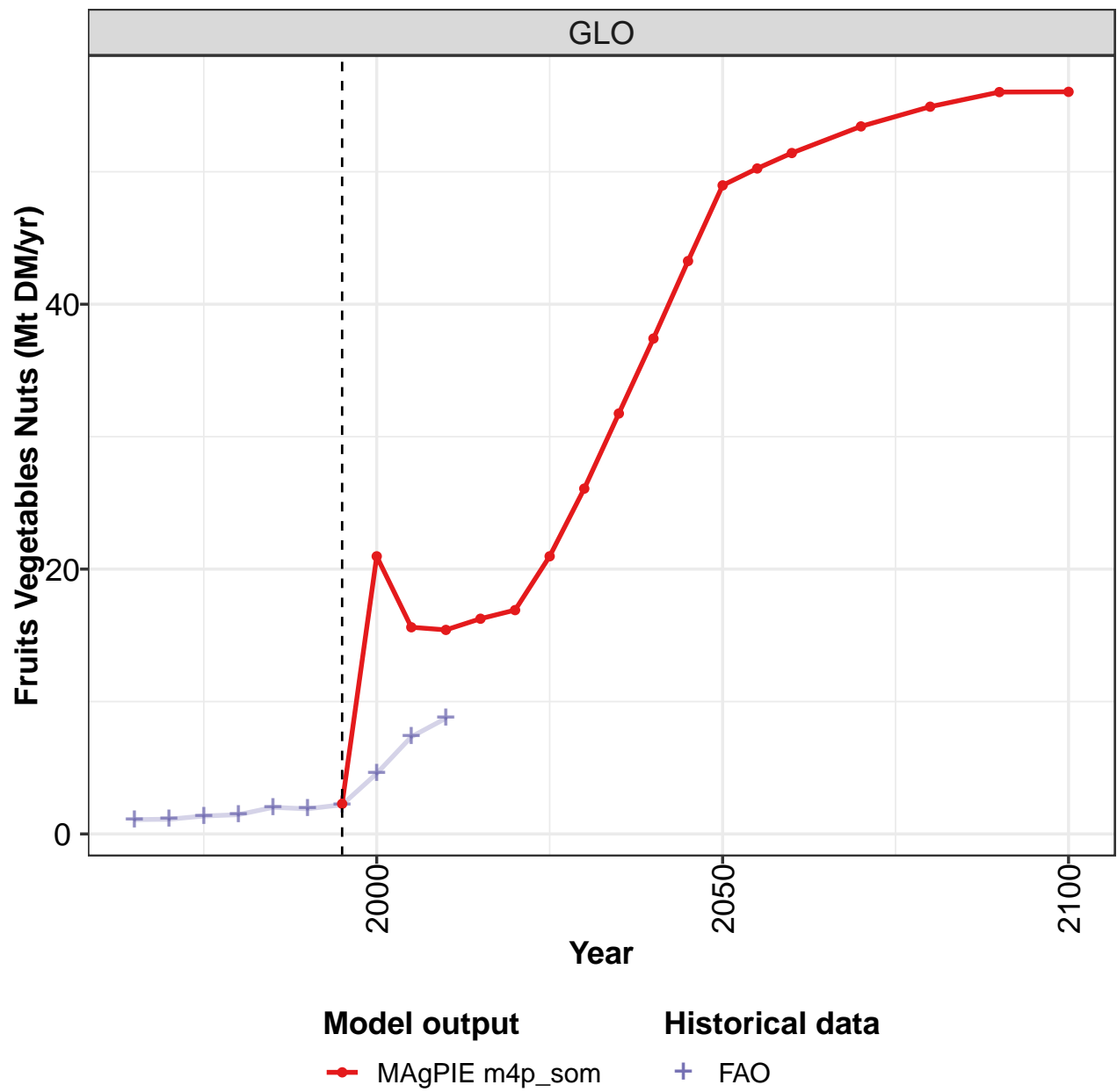
Table 285: MAgPIE m4p\_som — Demand—Feed—Crops—Other crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	40.8	50.4	48.2	47.2	60.6	65.8	60.1	68.8	73.2	71.7
CAZ	0.0	0.0	0.0	0.1	0.2	0.3	1.8	1.7	1.8	0.7
CHA	6.8	10.4	11.9	14.7	17.6	17.1	21.6	27.9	27.9	28.9
EUR	14.4	15.2	14.1	13.1	18.5	20.9	12.1	12.6	5.6	3.9
IND	1.0	1.0	0.8	0.7	0.9	1.0	1.2	1.1	1.1	1.4
JPN	0.6	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0
LAM	5.4	6.4	5.7	5.3	5.4	6.0	6.0	5.5	6.9	5.7
MEA	0.1	0.1	0.3	0.2	0.4	0.5	0.3	0.3	0.3	0.3
NEU	0.8	0.8	0.7	0.8	1.0	1.4	1.1	1.2	1.2	1.1
OAS	0.8	0.7	1.1	1.7	1.6	1.7	1.9	2.4	4.4	5.2
REF	8.2	11.4	9.6	7.4	11.6	11.5	6.3	5.7	7.6	5.8
SSA	2.3	3.8	3.6	3.0	3.2	5.1	7.6	9.9	16.2	18.4
USA	0.3	0.1	0.1	0.1	0.1	0.3	0.1	0.3	0.2	0.2

Table 286: FAO — Demand—Feed—Crops—Other crops (Mt DM/yr)

6.2.13
Other crops—Fruits Vegetables Nuts

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

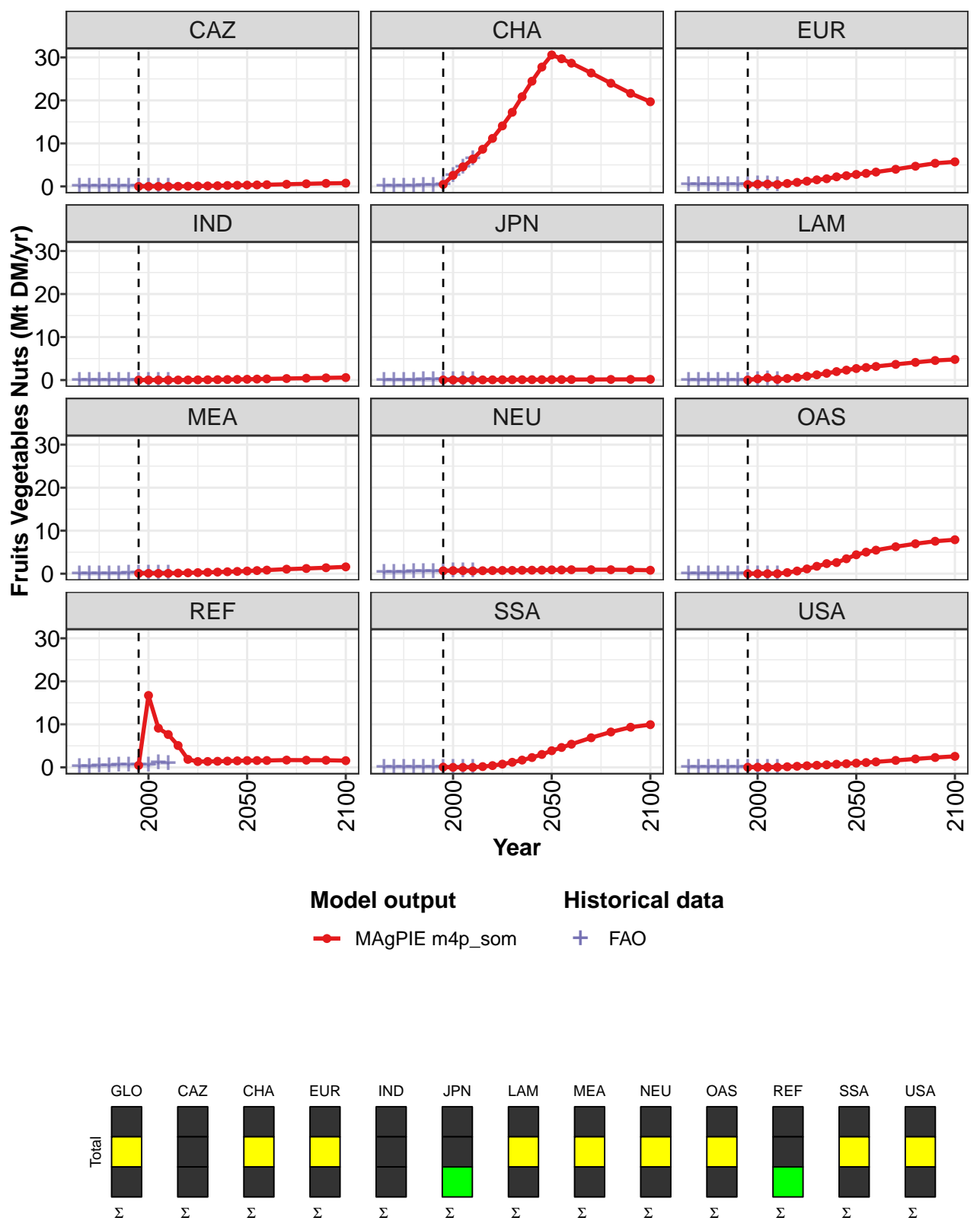


Figure 96: MAgPIE m4p\_som — Demand—Feed—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	2.3	21.0	15.6	15.4	16.3	16.9	21.0	26.1	31.7	37.4	43.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3
CHA	0.5	2.6	4.6	6.4	8.6	11.2	14.1	17.2	20.9	24.5	27.8
EUR	0.4	0.5	0.5	0.5	0.7	0.9	1.2	1.5	1.8	2.2	2.5
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2
JPN	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.0	0.3	0.6	0.2	0.4	0.6	0.9	1.2	1.6	2.0	2.3
MEA	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.4	0.5	0.5
NEU	0.7	0.7	0.7	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8
OAS	0.0	0.0	0.0	0.0	0.3	0.6	1.1	1.7	2.3	2.6	3.5
REF	0.5	16.7	9.1	7.6	5.1	1.9	1.3	1.4	1.4	1.5	1.5
SSA	0.1	0.0	0.0	0.0	0.2	0.4	0.7	1.2	1.7	2.3	3.0
USA	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.5	0.6	0.7	0.8

Table 287: MAgPIE m4p\_som — Demand—Feed—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	49.0	50.3	51.4	53.4	54.9	56.0	56.0
CAZ	0.3	0.3	0.4	0.5	0.6	0.7	0.8
CHA	30.6	29.7	28.7	26.4	24.0	21.6	19.7
EUR	2.8	3.0	3.3	4.0	4.7	5.4	5.7
IND	0.2	0.2	0.3	0.4	0.4	0.5	0.6
JPN	0.1	0.1	0.1	0.1	0.1	0.2	0.2
LAM	2.7	2.9	3.2	3.6	4.1	4.5	4.8
MEA	0.6	0.7	0.8	1.1	1.2	1.4	1.6
NEU	0.9	0.9	0.9	0.9	0.9	0.9	0.8
OAS	4.4	5.0	5.5	6.3	7.0	7.5	7.9
REF	1.6	1.6	1.6	1.7	1.7	1.7	1.6
SSA	3.9	4.6	5.4	6.9	8.2	9.3	9.9
USA	1.0	1.1	1.3	1.6	2.0	2.3	2.6

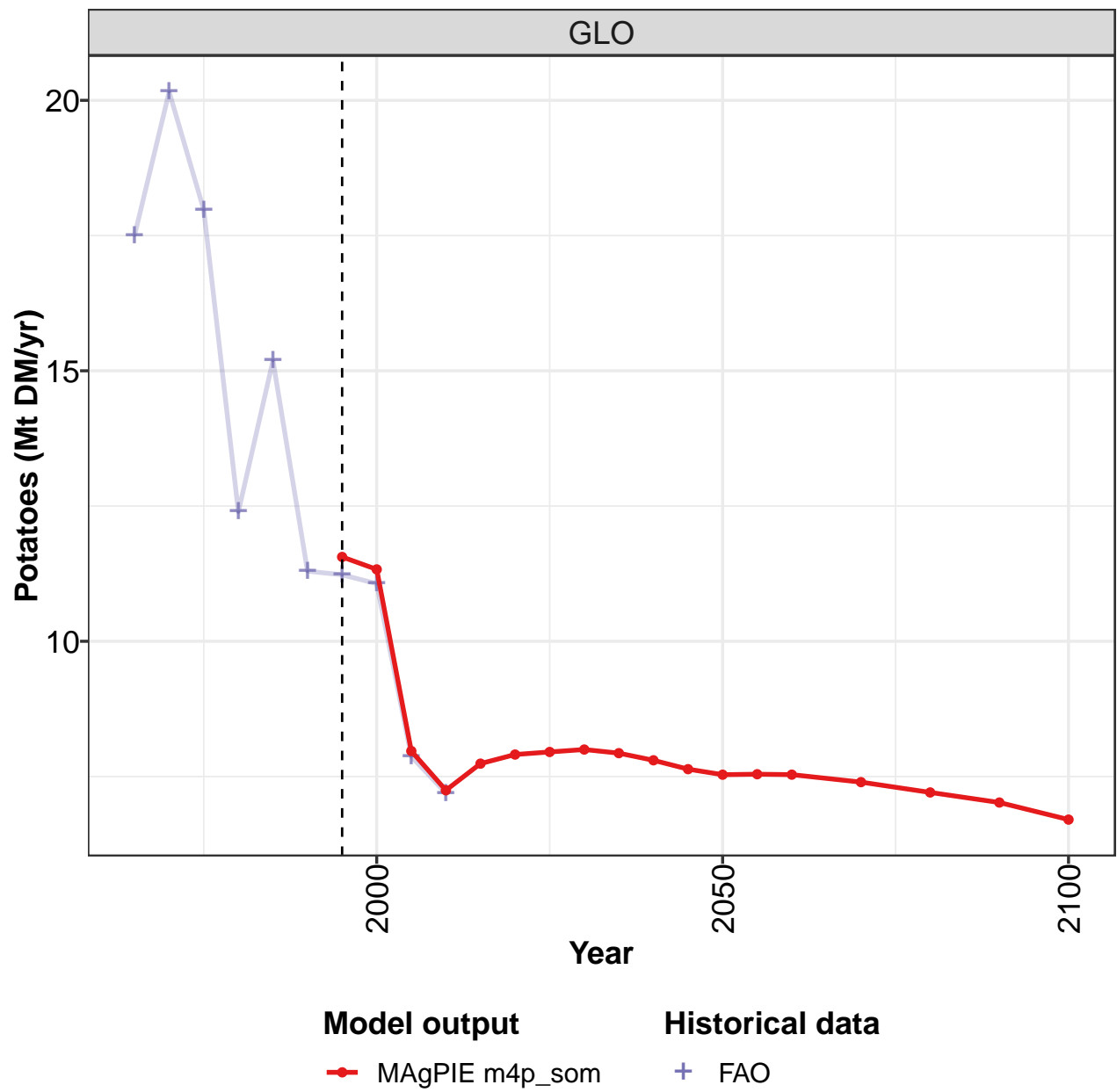
Table 288: MAgPIE m4p\_som — Demand—Feed—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.08	1.11	1.36	1.46	2.01	1.90	2.21	4.57	7.33	8.74
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.13	0.11	0.13	0.14	0.24	0.26	0.45	2.56	4.52	6.38
EUR	0.44	0.43	0.49	0.41	0.51	0.40	0.44	0.52	0.53	0.44
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.01	0.01	0.02	0.02	0.04	0.05	0.04	0.03	0.03	0.03
LAM	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.16	0.35	0.14
MEA	0.01	0.01	0.03	0.04	0.05	0.09	0.11	0.10	0.08	0.09
NEU	0.28	0.32	0.36	0.44	0.54	0.55	0.59	0.66	0.69	0.64
OAS	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
REF	0.18	0.20	0.29	0.35	0.58	0.50	0.50	0.47	1.08	0.97
SSA	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
USA	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.04

Table 289: FAO — Demand—Feed—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

6.2.14
Other crops—Potatoes

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
 replace the existing scale.

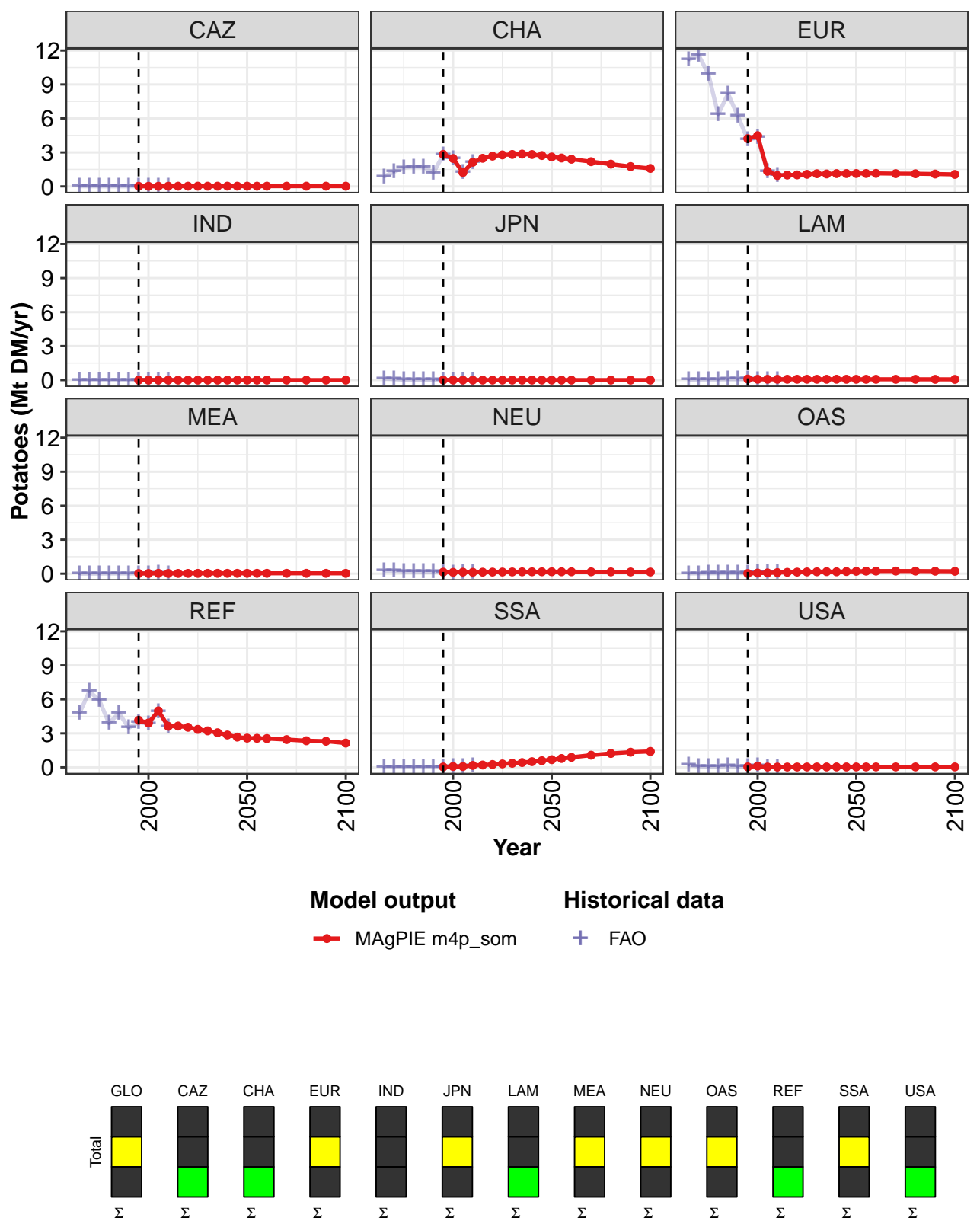


Figure 97: MAGPIE m4p\_som — Demand—Feed—Crops—Other crops—Potatoes (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	11.6	11.3	8.0	7.2	7.7	7.9	8.0	8.0	7.9	7.8	7.6
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	2.8	2.5	1.2	2.1	2.5	2.7	2.8	2.8	2.8	2.8	2.7
EUR	4.2	4.5	1.3	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
OAS	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
REF	4.2	3.9	5.0	3.6	3.6	3.5	3.3	3.2	3.1	2.9	2.7
SSA	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.6
USA	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 290: MAgPIE m4p\_som — Demand—Feed—Crops—Other crops—Potatoes (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	7.5	7.5	7.5	7.4	7.2	7.0	6.7
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	2.6	2.5	2.4	2.2	2.0	1.8	1.6
EUR	1.1	1.1	1.1	1.1	1.1	1.1	1.1
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.1	0.1	0.1	0.1	0.1	0.1	0.1
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.1
OAS	0.2	0.2	0.2	0.2	0.2	0.2	0.2
REF	2.6	2.6	2.5	2.5	2.3	2.3	2.1
SSA	0.7	0.8	0.9	1.1	1.2	1.3	1.4
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

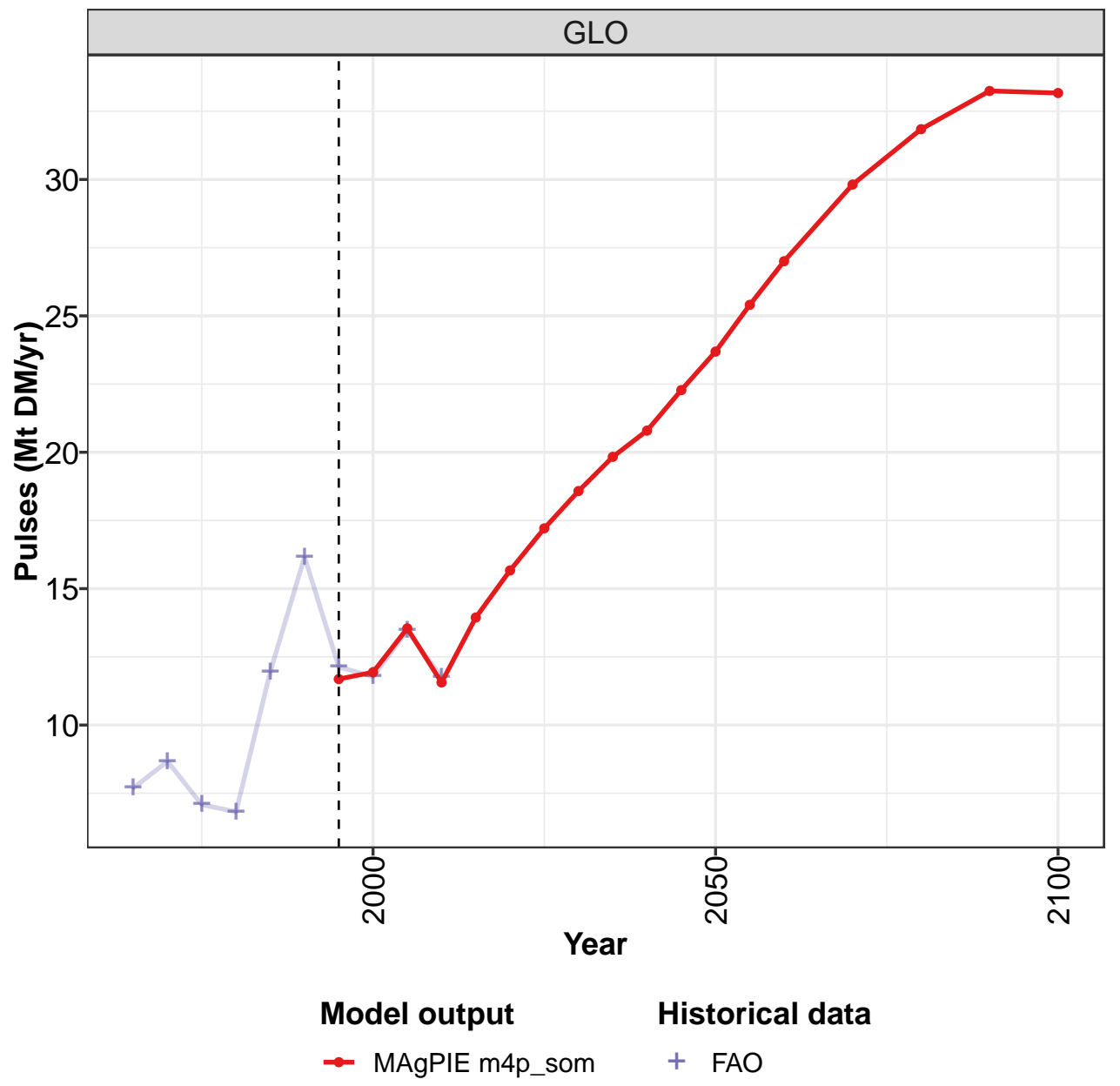
Table 291: MAgPIE m4p\_som — Demand—Feed—Crops—Other crops—Potatoes (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	17.5	20.2	18.0	12.4	15.2	11.3	11.2	11.1	7.9	7.2
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.9	1.3	1.7	1.7	1.7	1.2	2.8	2.4	1.2	2.1
EUR	11.2	11.6	9.9	6.4	8.2	6.2	4.1	4.3	1.3	0.9
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
OAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
REF	4.8	6.7	5.9	3.9	4.8	3.5	4.0	3.8	4.9	3.6
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2
USA	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0

Table 292: FAO — Demand—Feed—Crops—Other crops—Potatoes (Mt DM/yr)

6.2.15
Other crops—Pulses

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

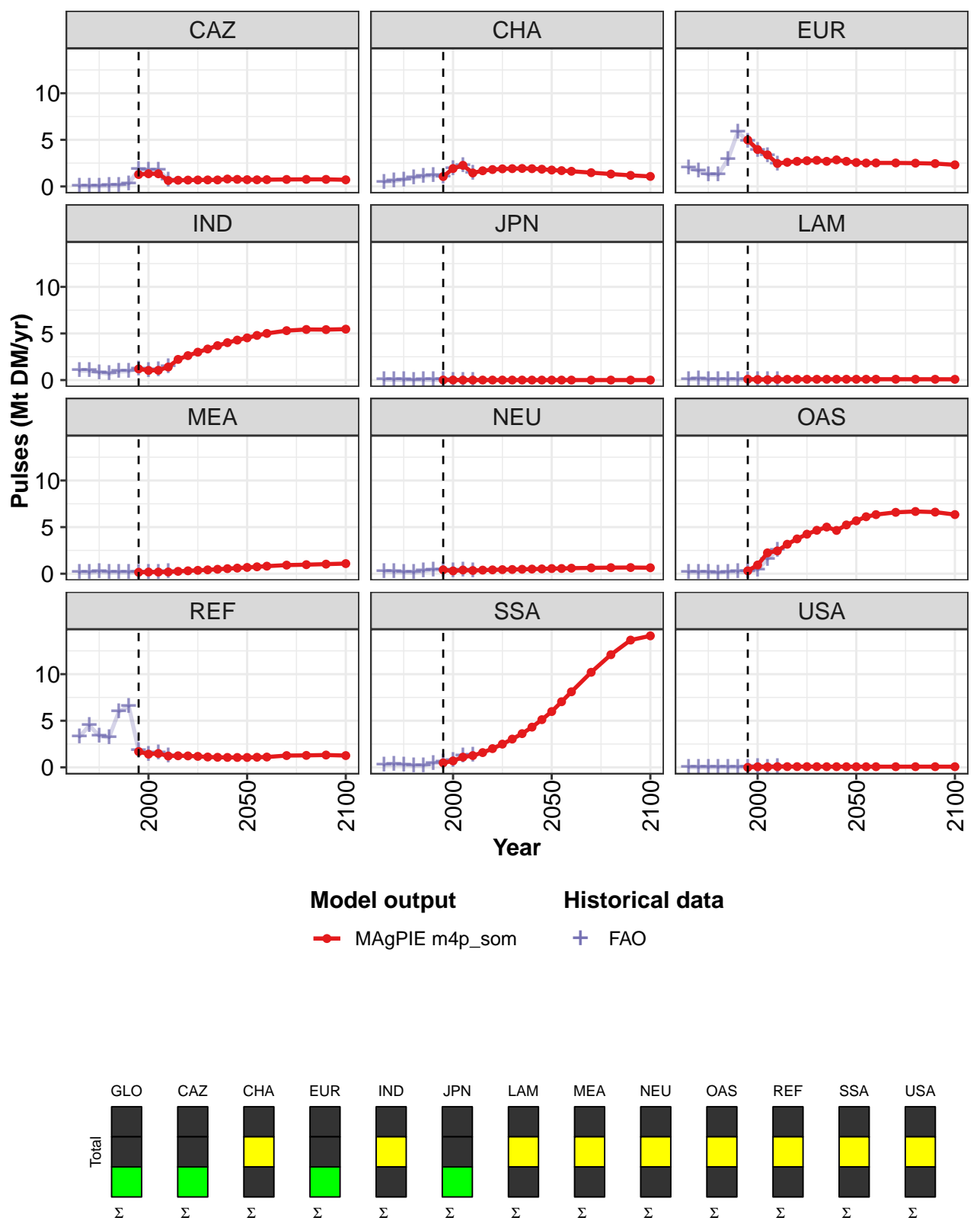


Figure 98: MAGPIE m4p\_som — Demand—Feed—Crops—Other crops—Pulses (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	11.7	11.9	13.5	11.6	13.9	15.7	17.2	18.6	19.8	20.8	22.3
CAZ	1.3	1.4	1.4	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.8
CHA	1.1	1.9	2.3	1.4	1.7	1.8	1.9	1.9	1.9	1.9	1.8
EUR	5.0	4.0	3.4	2.5	2.6	2.7	2.8	2.8	2.7	2.8	2.7
IND	1.2	1.0	1.0	1.4	2.2	2.6	3.0	3.3	3.7	4.0	4.3
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
MEA	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.6
NEU	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5
OAS	0.3	0.9	2.2	2.4	3.2	3.7	4.2	4.7	5.0	4.6	5.2
REF	1.7	1.4	1.5	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1
SSA	0.5	0.7	1.1	1.3	1.6	2.0	2.5	3.0	3.6	4.3	5.1
USA	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Table 293: MAgPIE m4p\_som — Demand—Feed—Crops—Other crops—Pulses (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	23.7	25.4	27.0	29.8	31.8	33.2	33.2
CAZ	0.7	0.7	0.7	0.7	0.8	0.8	0.7
CHA	1.8	1.7	1.6	1.5	1.3	1.2	1.1
EUR	2.6	2.5	2.5	2.5	2.5	2.5	2.3
IND	4.5	4.8	5.0	5.3	5.4	5.4	5.5
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.1	0.1	0.1	0.1	0.1	0.1	0.1
MEA	0.7	0.7	0.8	0.9	1.0	1.0	1.1
NEU	0.6	0.6	0.6	0.6	0.7	0.7	0.6
OAS	5.7	6.1	6.3	6.6	6.7	6.6	6.3
REF	1.1	1.1	1.1	1.3	1.3	1.3	1.3
SSA	6.0	7.0	8.1	10.2	12.1	13.7	14.1
USA	0.1	0.1	0.1	0.1	0.1	0.1	0.1

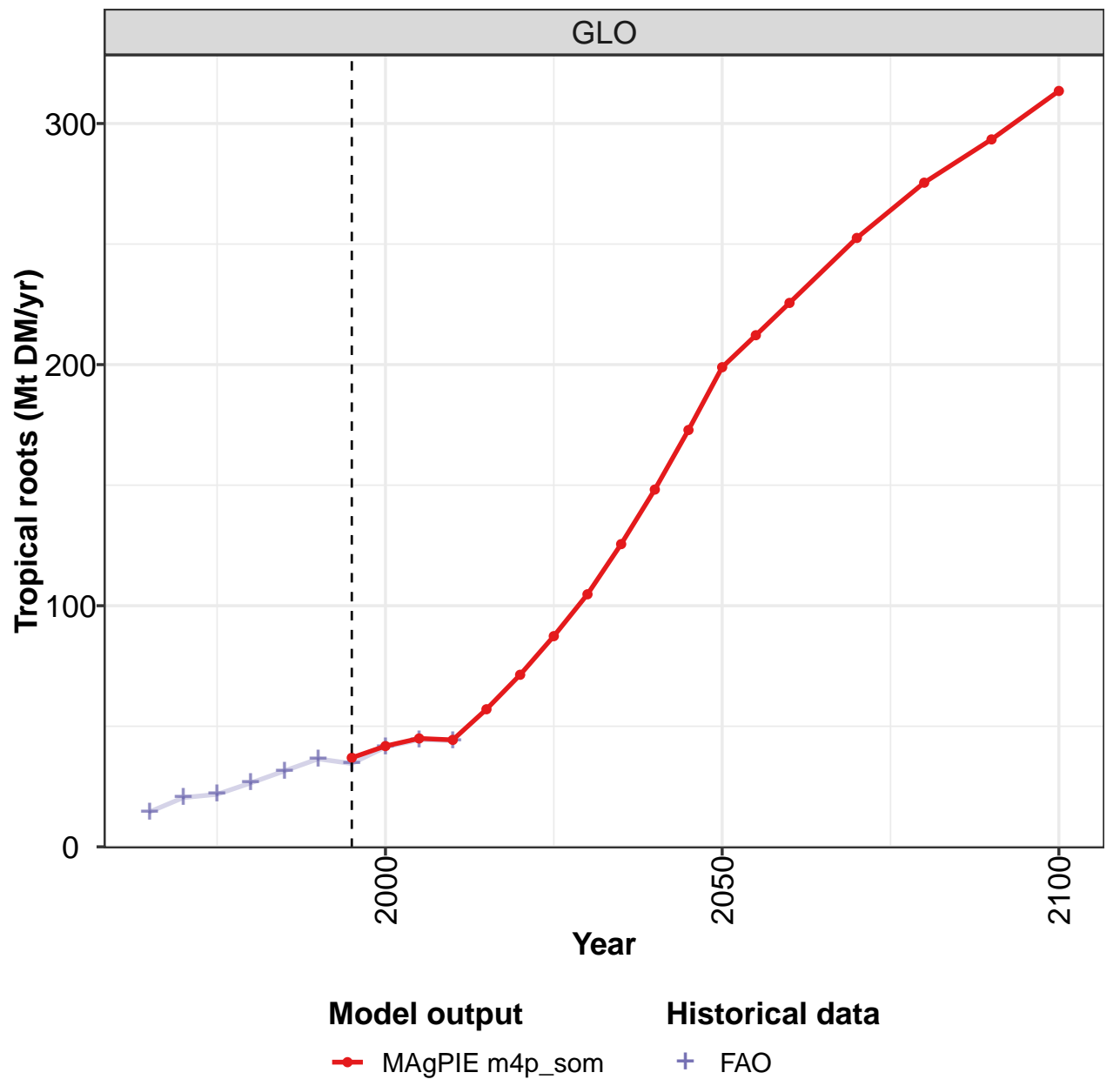
Table 294: MAgPIE m4p\_som — Demand—Feed—Crops—Other crops—Pulses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	7.7	8.7	7.1	6.8	12.0	16.2	12.1	11.8	13.5	11.7
CAZ	0.0	0.0	0.0	0.1	0.1	0.3	1.8	1.7	1.8	0.7
CHA	0.5	0.6	0.7	1.0	1.1	1.2	1.0	1.9	2.3	1.4
EUR	2.0	1.7	1.3	1.3	2.9	5.9	4.8	3.9	3.3	2.4
IND	1.0	1.0	0.8	0.7	0.9	1.0	1.2	1.1	1.1	1.4
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.1
MEA	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.3	0.2	0.2	0.1	0.3	0.4	0.4	0.3	0.4	0.3
OAS	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.4	1.6	2.5
REF	3.3	4.5	3.4	3.2	6.0	6.6	1.8	1.4	1.6	1.2
SSA	0.2	0.3	0.3	0.2	0.2	0.4	0.6	0.7	1.2	1.3
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1

Table 295: FAO — Demand—Feed—Crops—Other crops—Pulses (Mt DM/yr)

6.2.16
Other crops—Tropical roots

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

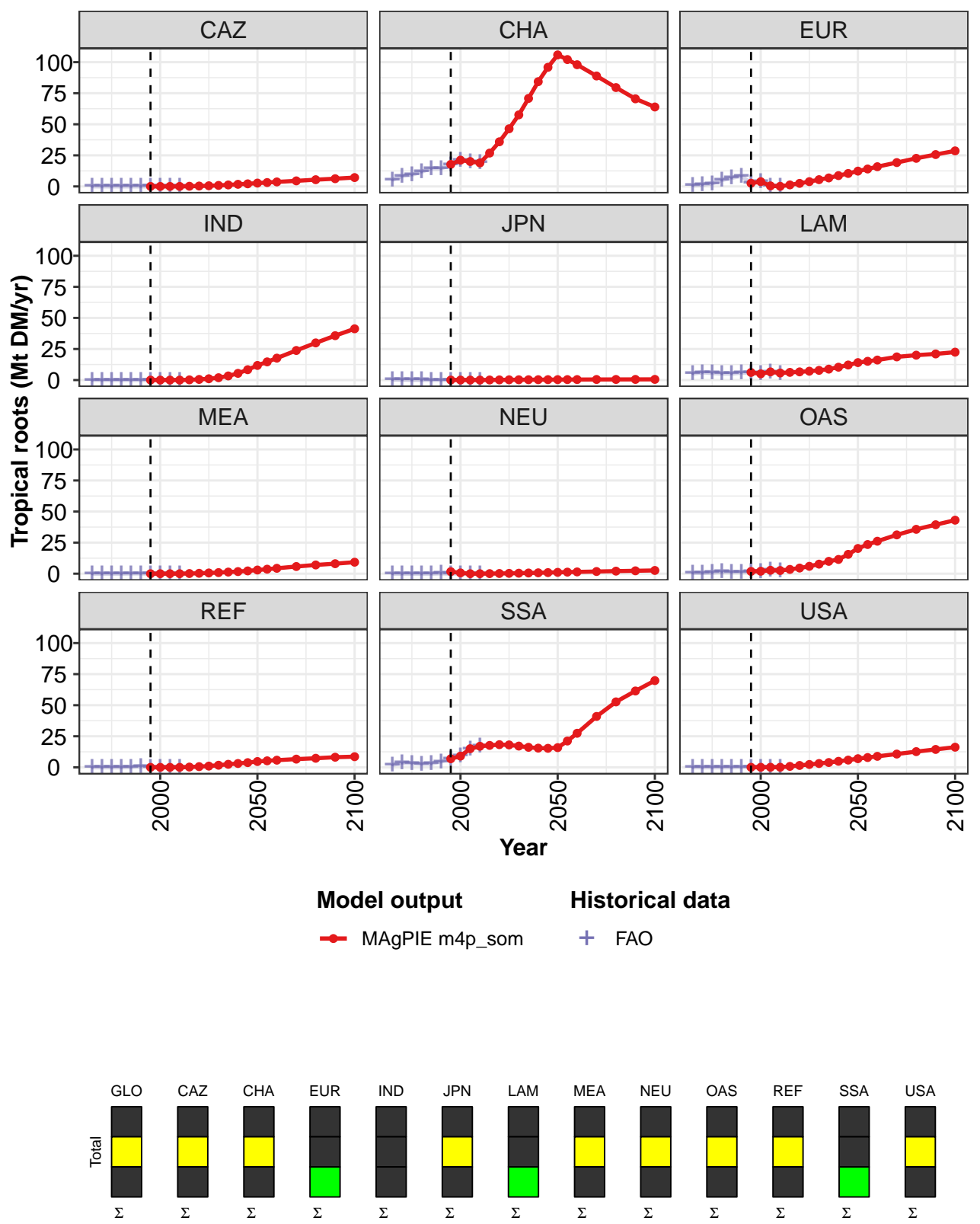


Figure 99: MAgPIE m4p\_som — Demand—Feed—Crops—Other crops—Tropical roots (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	37	42	45	44	57	71	87	105	126	148	173
CAZ	0	0	0	0	0	0	1	1	1	2	2
CHA	18	21	20	19	27	36	46	58	71	84	96
EUR	3	4	0	0	1	2	4	5	7	9	10
IND	0	0	0	0	0	1	1	2	3	5	8
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	6	5	7	6	6	7	7	8	9	10	12
MEA	0	0	0	0	0	0	1	1	1	2	2
NEU	2	1	0	0	0	0	0	0	1	1	1
OAS	2	2	3	3	3	5	6	8	10	11	16
REF	0	0	0	0	0	1	1	2	2	3	4
SSA	7	9	15	17	18	18	18	17	16	15	15
USA	0	0	0	0	1	2	2	3	4	5	6

Table 296: MAgPIE m4p\_som — Demand—Feed—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	199	212	226	253	275	293	314
CAZ	3	3	4	4	5	6	7
CHA	106	102	98	89	80	70	64
EUR	12	14	16	19	23	26	29
IND	12	15	18	24	30	36	41
JPN	0	0	0	0	1	1	1
LAM	14	15	16	19	20	21	22
MEA	3	4	4	6	7	8	9
NEU	1	1	1	2	2	2	3
OAS	20	23	26	31	36	39	43
REF	5	5	6	7	7	8	9
SSA	16	21	27	41	53	61	70
USA	7	8	9	11	13	14	16

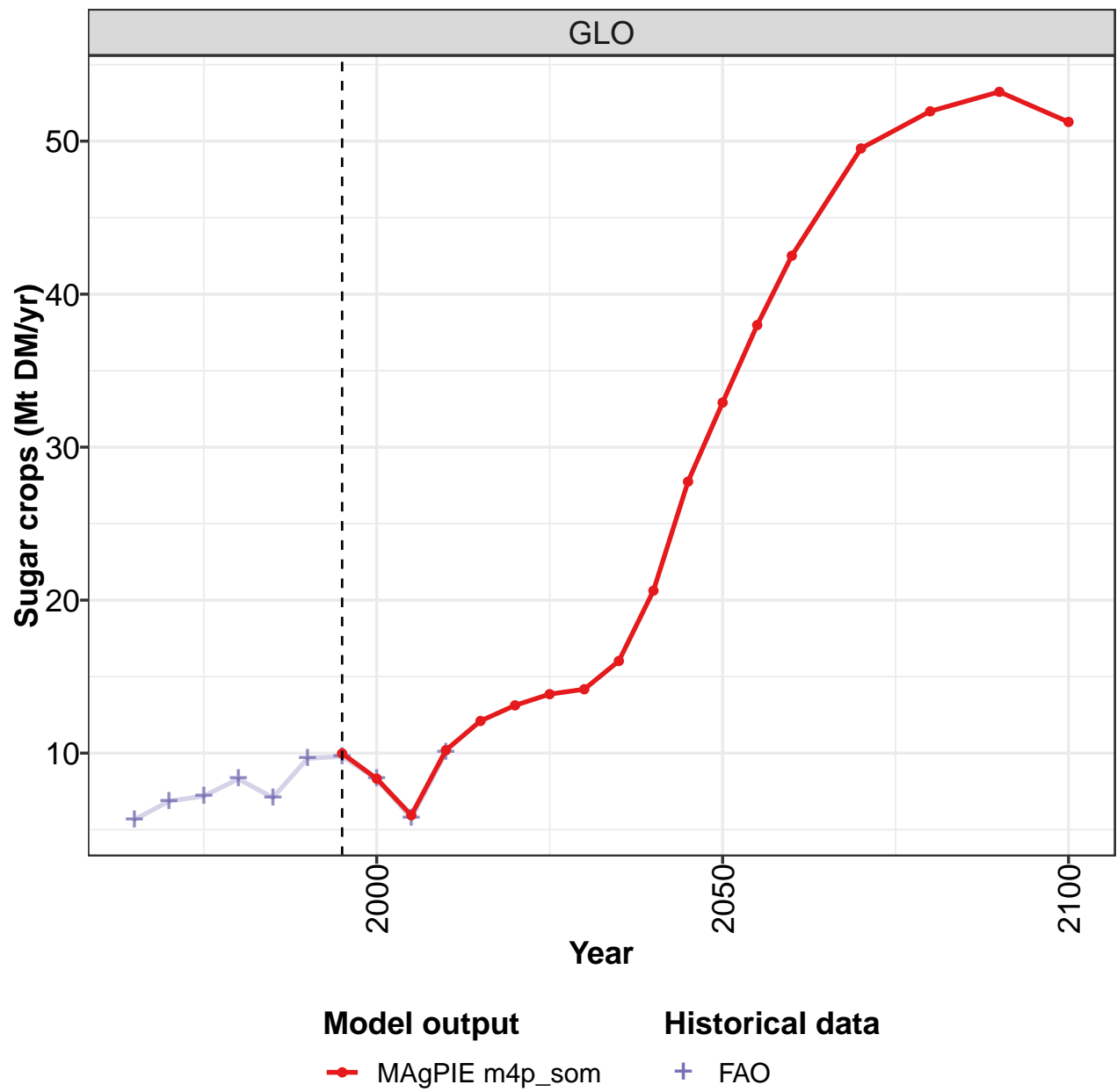
Table 297: MAgPIE m4p\_som — Demand—Feed—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	14.5	20.4	21.8	26.5	31.5	36.5	34.5	41.4	44.5	44.0
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	5.3	8.4	9.4	11.8	14.6	14.4	17.4	21.0	19.9	19.0
EUR	0.8	1.5	2.4	5.1	6.9	8.5	2.7	3.9	0.4	0.1
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.4	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
LAM	5.2	6.2	5.6	5.2	5.2	5.9	5.8	5.3	6.5	5.4
MEA	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0
OAS	0.6	0.6	0.9	1.5	1.4	1.4	1.6	1.9	2.7	2.6
REF	0.0	0.0	0.0	0.0	0.2	1.0	0.0	0.0	0.0	0.0
SSA	2.0	3.4	3.3	2.8	3.0	4.6	7.0	9.1	14.9	16.9
USA	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.1	0.1

Table 298: FAO — Demand—Feed—Crops—Other crops—Tropical roots (Mt DM/yr)

6.2.17
Sugar crops

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

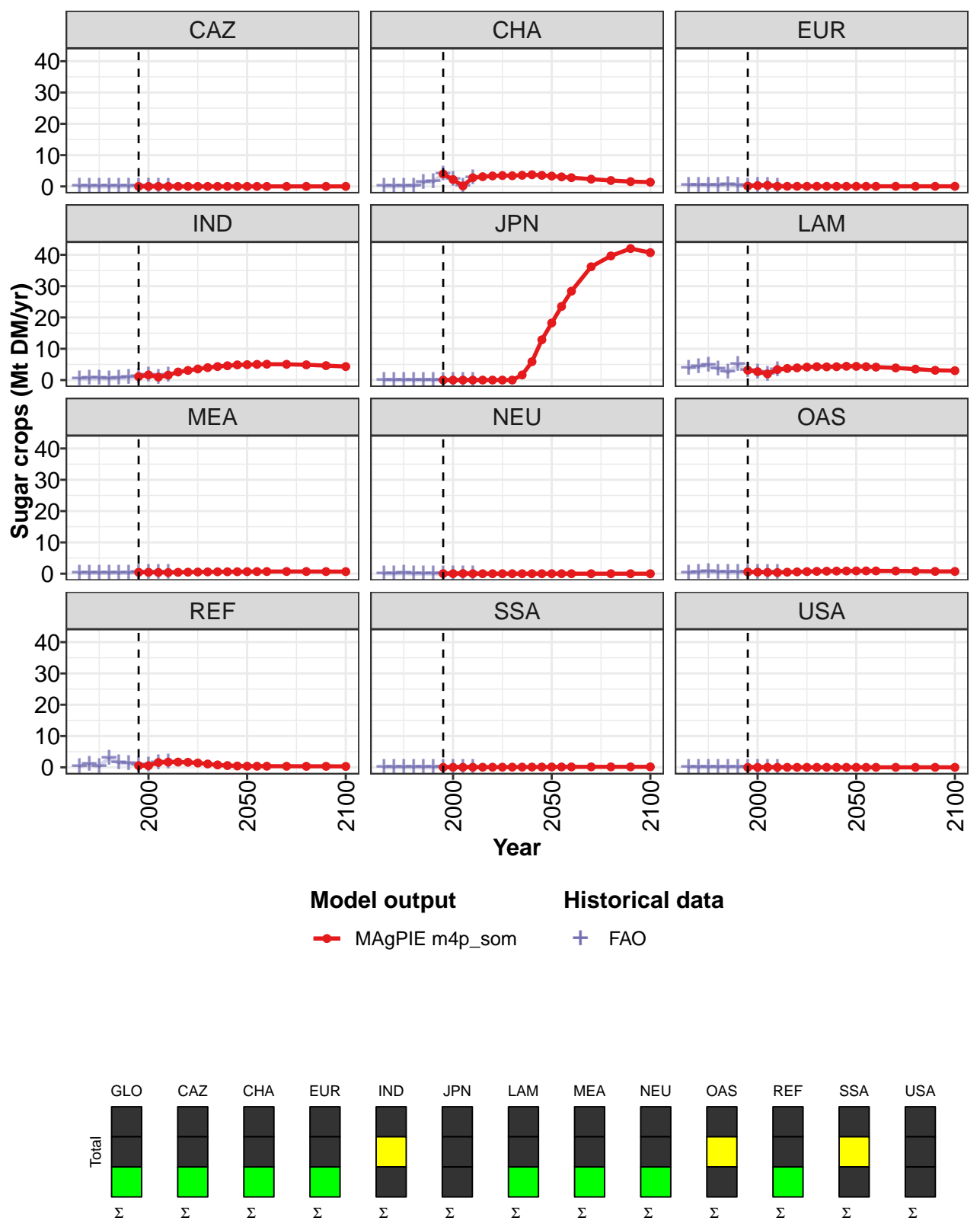


Figure 100: MAGPIE m4p\_som — Demand—Feed—Crops—Sugar crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	10.0	8.3	5.9	10.2	12.1	13.1	13.9	14.2	16.0	20.6	27.7
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	4.0	2.2	0.2	2.8	3.1	3.3	3.5	3.4	3.6	3.7	3.5
EUR	0.1	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	1.1	1.6	1.0	1.6	2.6	3.1	3.5	4.0	4.3	4.6	4.9
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	5.9	12.8
LAM	3.2	2.7	2.0	3.3	3.7	3.9	4.1	4.3	4.2	4.3	4.4
MEA	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.6
NEU	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.6	0.5	0.4	0.4	0.5	0.6	0.7	0.8	0.8	0.8	0.9
REF	0.5	0.5	1.6	1.7	1.7	1.6	1.4	1.1	0.8	0.6	0.4
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 299: MAgPIE m4p\_som — Demand—Feed—Crops—Sugar crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	32.9	38.0	42.5	49.5	52.0	53.2	51.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	3.3	3.0	2.8	2.3	1.9	1.5	1.4
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	4.9	5.0	5.1	5.0	4.9	4.6	4.3
JPN	18.2	23.5	28.4	36.2	39.7	42.0	40.7
LAM	4.4	4.3	4.1	3.9	3.5	3.1	3.0
MEA	0.7	0.7	0.7	0.7	0.7	0.7	0.7
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.9	0.9	0.9	0.9	0.8	0.7	0.7
REF	0.4	0.4	0.4	0.3	0.3	0.3	0.3
SSA	0.1	0.1	0.1	0.2	0.2	0.2	0.2
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 300: MAgPIE m4p\_som — Demand—Feed—Crops—Sugar crops (Mt DM/yr) [PART 2/2]

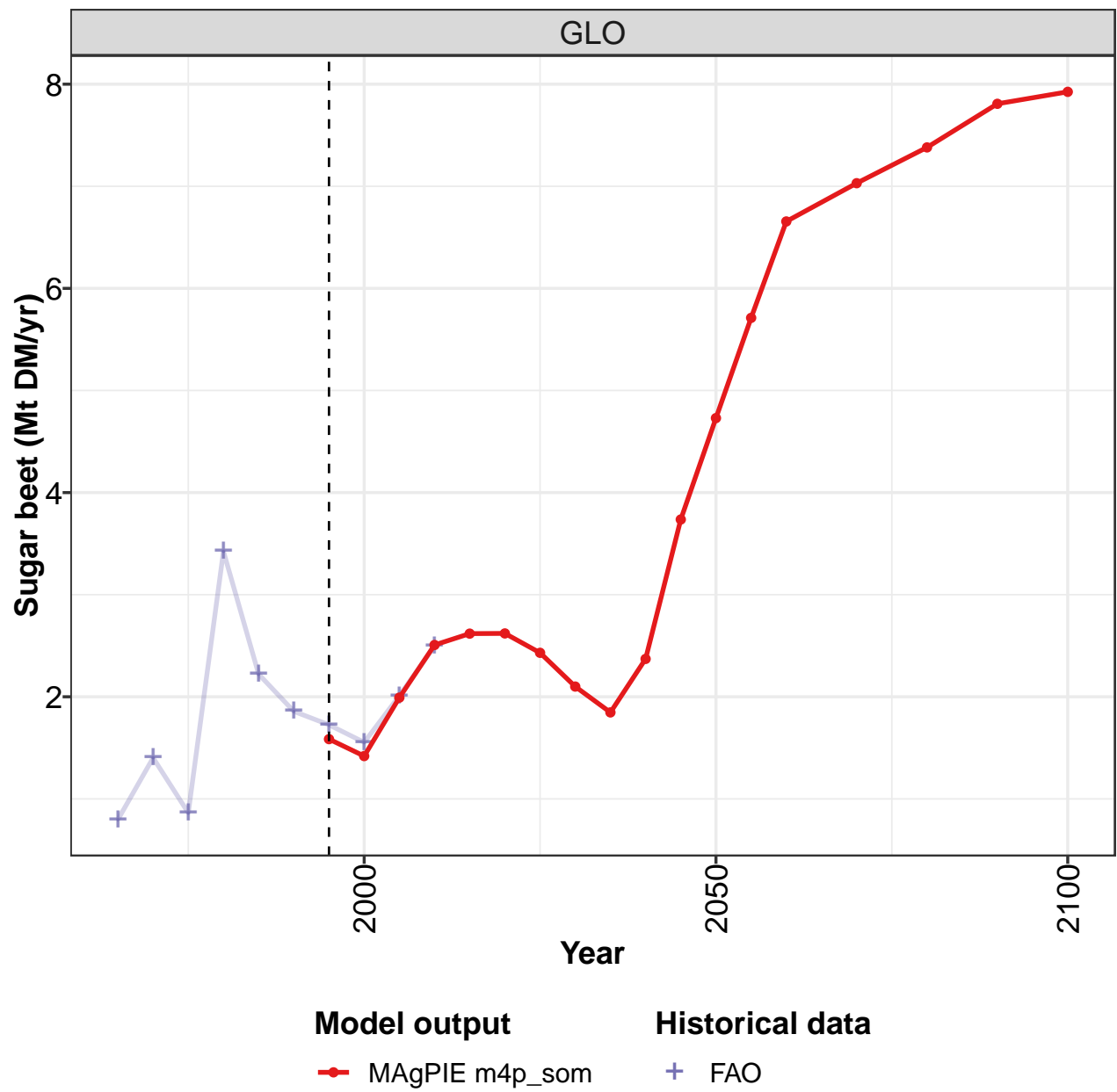
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	5.7	6.9	7.2	8.3	7.1	9.7	9.8	8.3	5.7	10.0
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.0	0.1	0.2	1.3	1.5	3.9	2.2	0.2	2.8
EUR	0.4	0.4	0.4	0.3	0.6	0.3	0.1	0.3	0.4	0.0
IND	0.5	0.5	0.6	0.5	0.7	0.9	1.1	1.6	1.0	1.6
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	3.8	4.2	4.8	3.6	2.5	4.9	3.1	2.6	1.8	3.2
MEA	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.4
NEU	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0
OAS	0.3	0.4	0.6	0.5	0.4	0.4	0.5	0.5	0.5	0.4
REF	0.3	0.9	0.3	2.9	1.4	1.3	0.7	0.7	1.6	1.7
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 301: FAO — Demand—Feed—Crops—Sugar crops (Mt DM/yr)



6.2.18
Sugar crops—Sugar beet

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

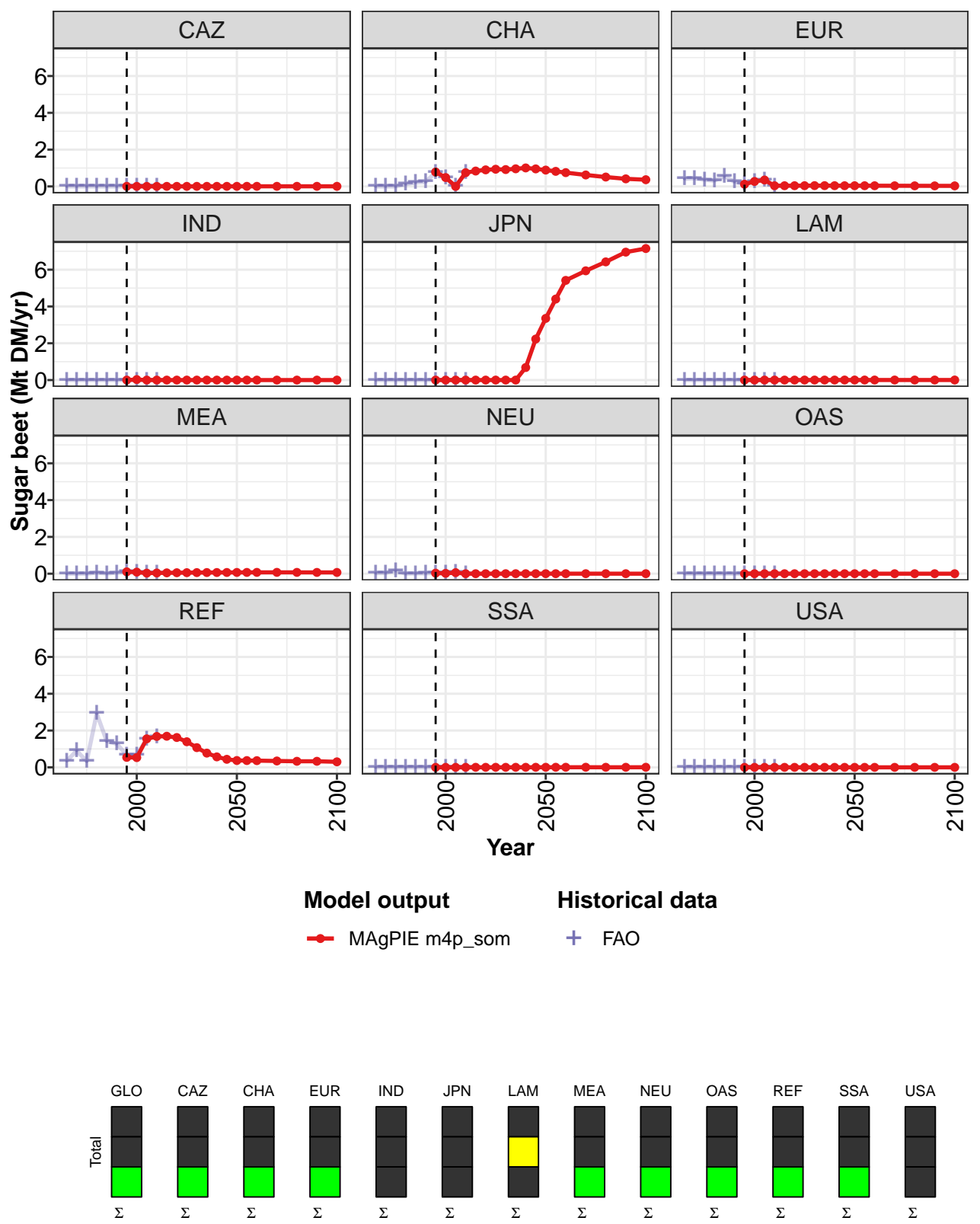


Figure 101: MAgPIE m4p\_som — Demand—Feed—Crops—Sugar crops—Sugar beet (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.59	1.42	1.99	2.51	2.62	2.62	2.43	2.10	1.85	2.37	3.74
CAZ	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.78	0.48	0.00	0.75	0.84	0.90	0.93	0.92	0.96	1.01	0.95
EUR	0.12	0.27	0.35	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
IND	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	2.23
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.10	0.09	0.03	0.04	0.05	0.05	0.06	0.06	0.06	0.06	0.07
NEU	0.03	0.02	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.54	0.53	1.55	1.68	1.69	1.62	1.39	1.07	0.77	0.57	0.44
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 302: MAgPIE m4p\_som — Demand—Feed—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	4.73	5.71	6.66	7.03	7.38	7.81	7.92
CAZ	0.00	0.00	0.01	0.01	0.01	0.01	0.01
CHA	0.89	0.82	0.75	0.62	0.51	0.41	0.36
EUR	0.04	0.04	0.04	0.04	0.03	0.03	0.03
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	3.35	4.40	5.42	5.94	6.42	6.95	7.15
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.07	0.07	0.07	0.07	0.07	0.07	0.07
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.37	0.37	0.36	0.35	0.33	0.33	0.30
SSA	0.00	0.00	0.00	0.01	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00

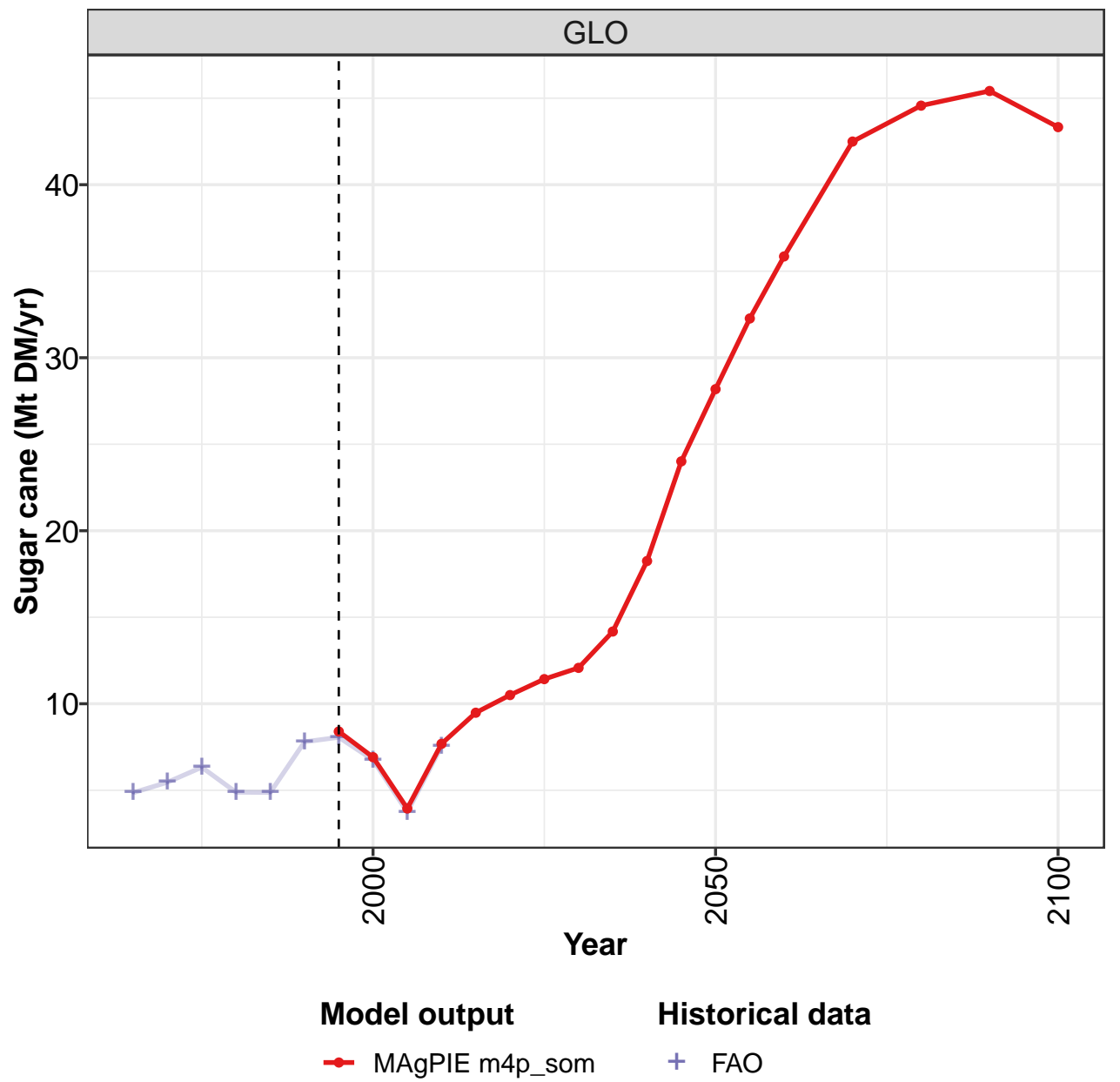
Table 303: MAgPIE m4p\_som — Demand—Feed—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.80	1.40	0.86	3.42	2.22	1.86	1.73	1.55	2.01	2.50
CAZ	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.12	0.22	0.24	0.76	0.48	0.00	0.74
EUR	0.41	0.44	0.36	0.31	0.56	0.25	0.12	0.28	0.35	0.04
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.06	0.01	0.05	0.12	0.09	0.03	0.04
NEU	0.03	0.05	0.17	0.00	0.02	0.02	0.04	0.03	0.07	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.34	0.90	0.33	2.92	1.42	1.28	0.67	0.67	1.55	1.67
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 304: FAO — Demand—Feed—Crops—Sugar crops—Sugar beet (Mt DM/yr)

6.2.19
Sugar crops—Sugar cane

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

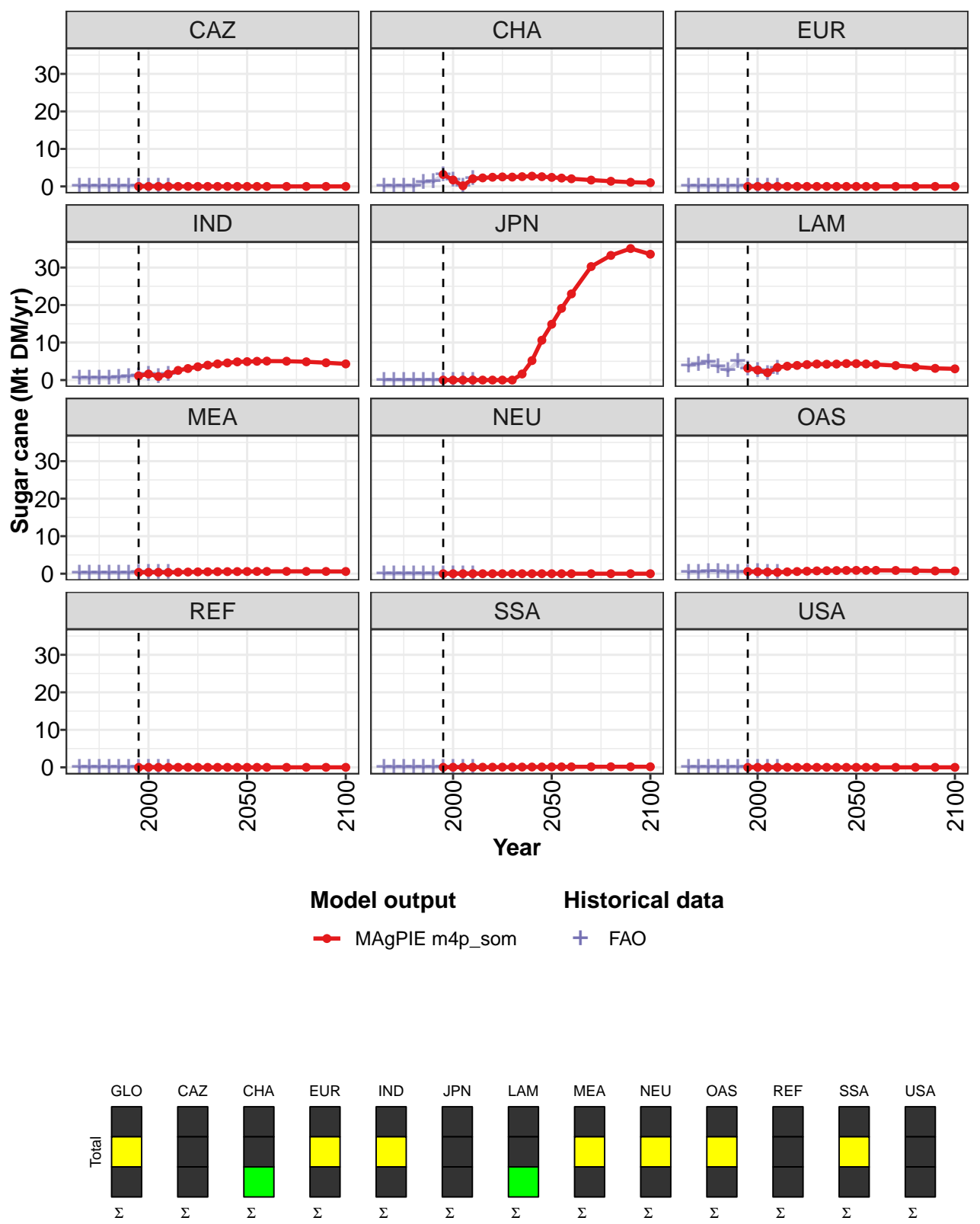


Figure 102: MAGPIE m4p\_som — Demand—Feed—Crops—Sugar crops—Sugar cane (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	8.4	6.9	3.9	7.7	9.5	10.5	11.4	12.1	14.2	18.3	24.0
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	3.2	1.7	0.2	2.0	2.3	2.4	2.5	2.5	2.6	2.7	2.6
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	1.1	1.6	1.0	1.6	2.6	3.1	3.5	4.0	4.3	4.6	4.9
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	5.2	10.6
LAM	3.2	2.7	2.0	3.3	3.7	3.9	4.1	4.3	4.2	4.3	4.4
MEA	0.4	0.4	0.4	0.3	0.4	0.4	0.5	0.5	0.5	0.6	0.6
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.6	0.5	0.4	0.4	0.5	0.6	0.7	0.8	0.8	0.8	0.9
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 305: MAgPIE m4p\_som — Demand—Feed—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	28.2	32.3	35.9	42.5	44.6	45.4	43.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	2.4	2.2	2.0	1.7	1.4	1.1	1.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	4.9	5.0	5.1	5.0	4.9	4.6	4.3
JPN	14.9	19.1	23.0	30.3	33.2	35.1	33.6
LAM	4.4	4.3	4.1	3.9	3.5	3.1	3.0
MEA	0.6	0.6	0.6	0.6	0.6	0.6	0.6
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.9	0.9	0.9	0.9	0.8	0.7	0.7
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.1	0.1	0.1	0.1	0.2	0.2	0.2
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

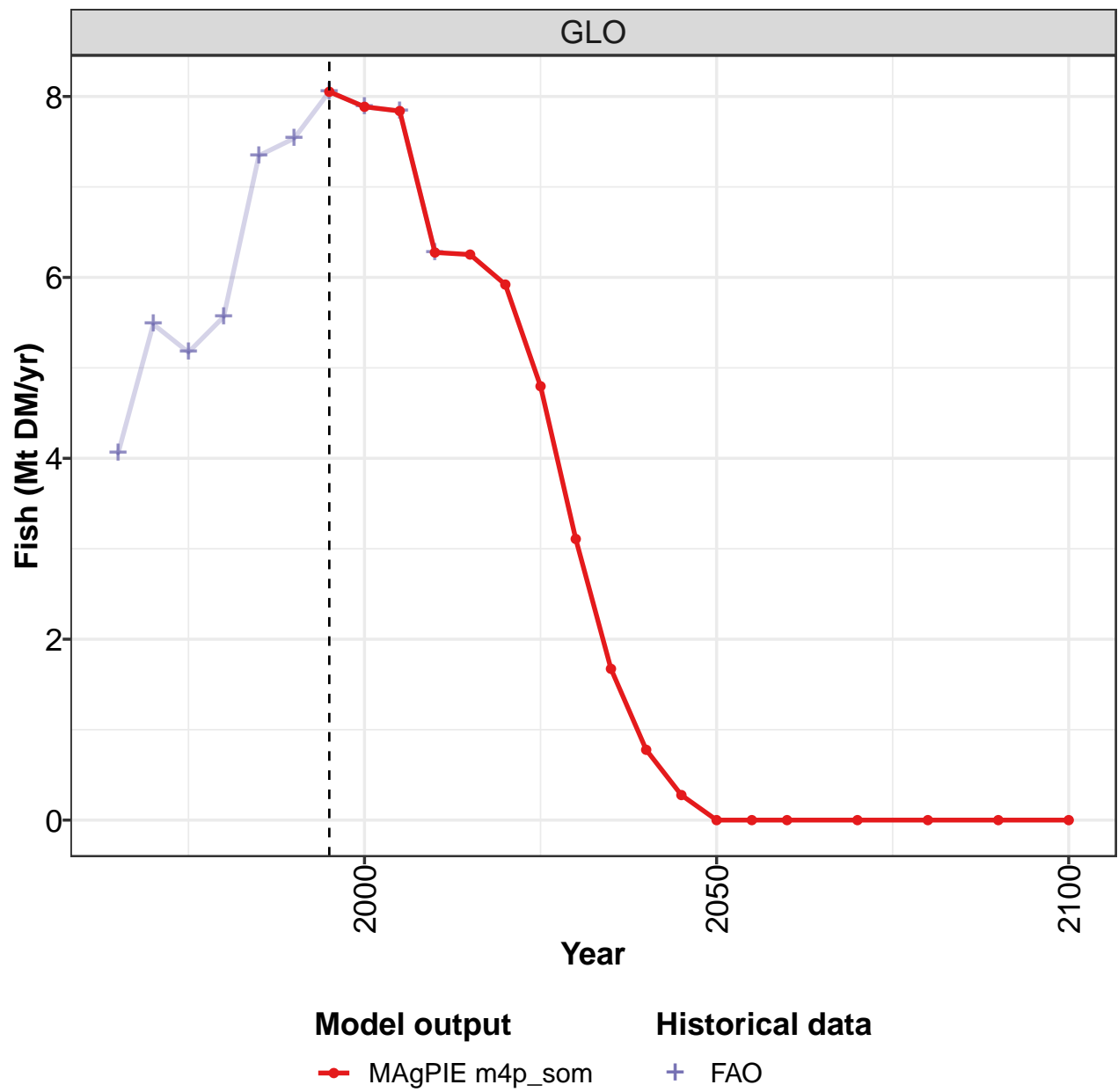
Table 306: MAgPIE m4p\_som — Demand—Feed—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4.86	5.46	6.33	4.89	4.87	7.80	8.06	6.75	3.74	7.55
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.05	0.04	0.10	0.06	1.09	1.28	3.11	1.71	0.17	2.02
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.49	0.55	0.58	0.52	0.69	0.91	1.12	1.62	0.96	1.58
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	3.83	4.25	4.82	3.62	2.48	4.92	3.06	2.56	1.77	3.20
MEA	0.17	0.22	0.23	0.19	0.21	0.24	0.30	0.34	0.35	0.34
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.30	0.39	0.58	0.49	0.38	0.43	0.46	0.49	0.45	0.37
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.03
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 307: FAO — Demand—Feed—Crops—Sugar crops—Sugar cane (Mt DM/yr)

6.3 Fish

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

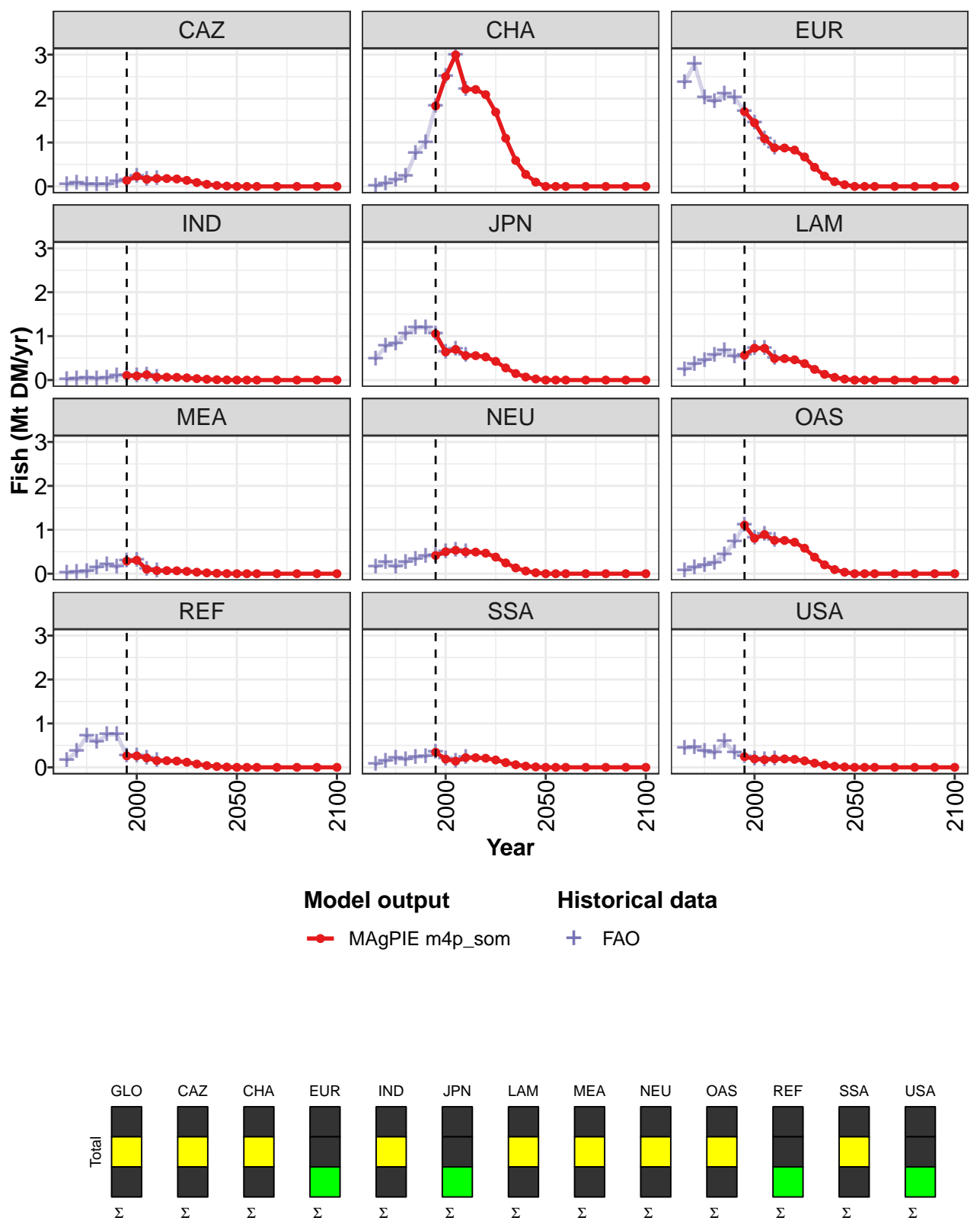


Figure 103: MAgPIE m4p\_som — Demand—Feed—Fish (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	8.05	7.89	7.84	6.28	6.25	5.92	4.80	3.11	1.67	0.78	0.28
CAZ	0.14	0.23	0.16	0.18	0.18	0.17	0.14	0.09	0.05	0.02	0.01
CHA	1.83	2.50	2.99	2.21	2.21	2.09	1.69	1.10	0.59	0.27	0.10
EUR	1.70	1.45	1.09	0.88	0.87	0.83	0.67	0.43	0.23	0.11	0.04
IND	0.11	0.09	0.12	0.07	0.07	0.06	0.05	0.03	0.02	0.01	0.00
JPN	1.05	0.64	0.70	0.56	0.56	0.53	0.43	0.28	0.15	0.07	0.02
LAM	0.56	0.73	0.72	0.49	0.49	0.46	0.37	0.24	0.13	0.06	0.02
MEA	0.29	0.31	0.10	0.07	0.07	0.07	0.05	0.03	0.02	0.01	0.00
NEU	0.41	0.50	0.53	0.50	0.49	0.47	0.38	0.25	0.13	0.06	0.02
OAS	1.11	0.80	0.89	0.76	0.76	0.72	0.58	0.38	0.20	0.09	0.03
REF	0.26	0.26	0.21	0.15	0.15	0.14	0.12	0.07	0.04	0.02	0.01
SSA	0.34	0.19	0.14	0.22	0.22	0.21	0.17	0.11	0.06	0.03	0.01
USA	0.24	0.19	0.18	0.19	0.19	0.18	0.15	0.10	0.05	0.02	0.01

Table 308: MAgPIE m4p.som — Demand—Feed—Fish (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00

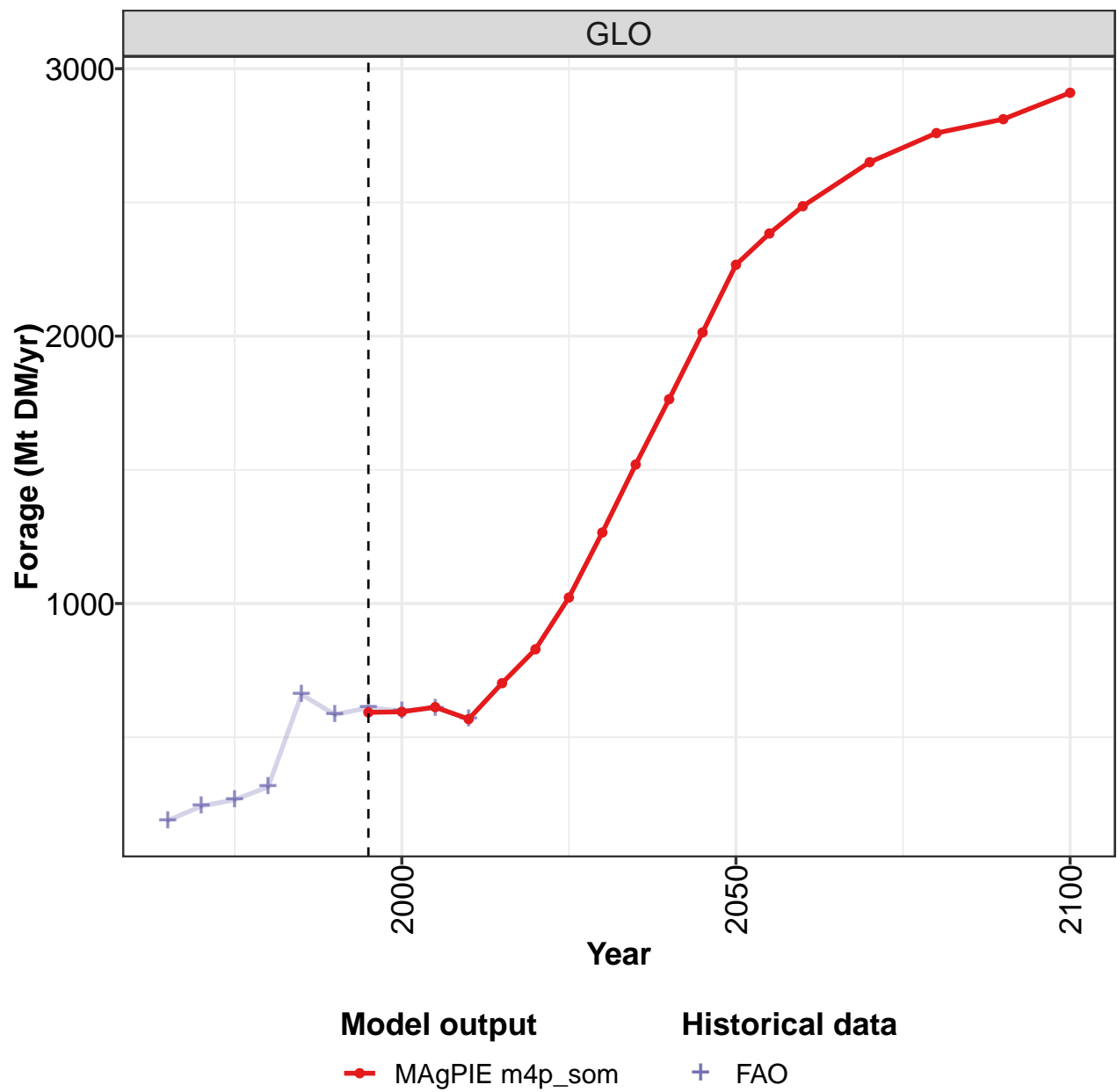
Table 309: MAgPIE m4p.som — Demand—Feed—Fish (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4.05	5.48	5.17	5.56	7.35	7.54	8.05	7.89	7.84	6.28
CAZ	0.05	0.07	0.05	0.03	0.04	0.10	0.14	0.23	0.16	0.18
CHA	0.01	0.07	0.14	0.22	0.75	1.00	1.83	2.50	2.99	2.21
EUR	2.37	2.79	2.01	1.93	2.10	2.03	1.70	1.45	1.09	0.88
IND	0.01	0.03	0.04	0.03	0.05	0.09	0.11	0.09	0.12	0.07
JPN	0.48	0.77	0.82	1.05	1.19	1.19	1.05	0.64	0.70	0.56
LAM	0.24	0.36	0.44	0.56	0.68	0.53	0.56	0.73	0.72	0.49
MEA	0.02	0.04	0.05	0.14	0.20	0.15	0.29	0.31	0.10	0.07
NEU	0.15	0.27	0.16	0.26	0.33	0.39	0.41	0.50	0.53	0.50
OAS	0.08	0.14	0.19	0.24	0.44	0.72	1.11	0.80	0.89	0.76
REF	0.16	0.36	0.71	0.57	0.74	0.75	0.26	0.26	0.21	0.15
SSA	0.06	0.14	0.20	0.18	0.23	0.25	0.34	0.19	0.14	0.22
USA	0.43	0.45	0.36	0.33	0.59	0.33	0.24	0.19	0.18	0.19

Table 310: FAO — Demand—Feed—Fish (Mt DM/yr)

6.4 Forage

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

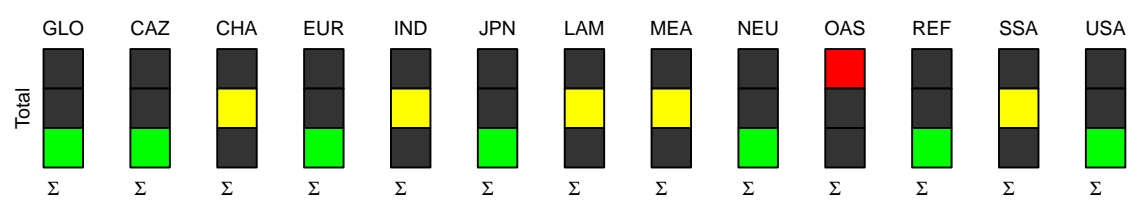
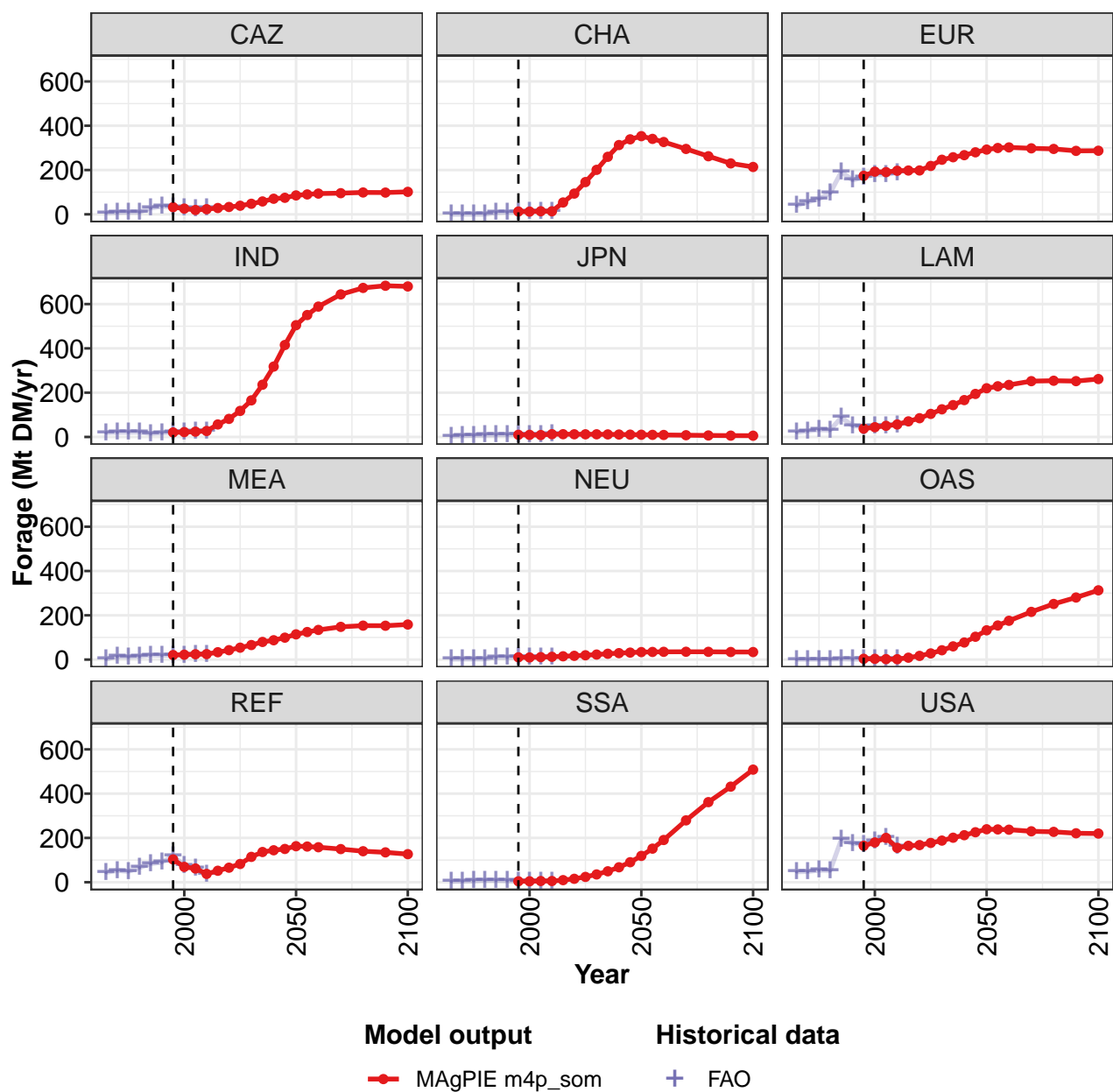


Figure 104: MAgPIE m4p\_som — Demand—Feed—Forage (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	593	595	613	568	702	829	1022	1266	1520	1764	2014
CAZ	32	26	20	23	29	33	39	48	58	70	75
CHA	13	12	14	14	54	94	146	201	260	313	339
EUR	174	193	191	197	198	198	219	247	258	267	280
IND	20	22	24	27	57	82	118	165	236	318	415
JPN	10	10	9	13	12	12	12	12	12	11	11
LAM	37	44	50	56	71	85	104	125	144	167	194
MEA	21	22	24	25	33	43	54	66	80	87	99
NEU	10	10	11	13	15	17	20	23	26	29	32
OAS	4	3	2	2	9	17	28	42	60	77	103
REF	103	69	62	38	52	66	82	115	136	144	150
SSA	4	4	5	5	10	16	24	35	49	67	90
USA	165	180	200	155	164	168	178	188	201	212	226

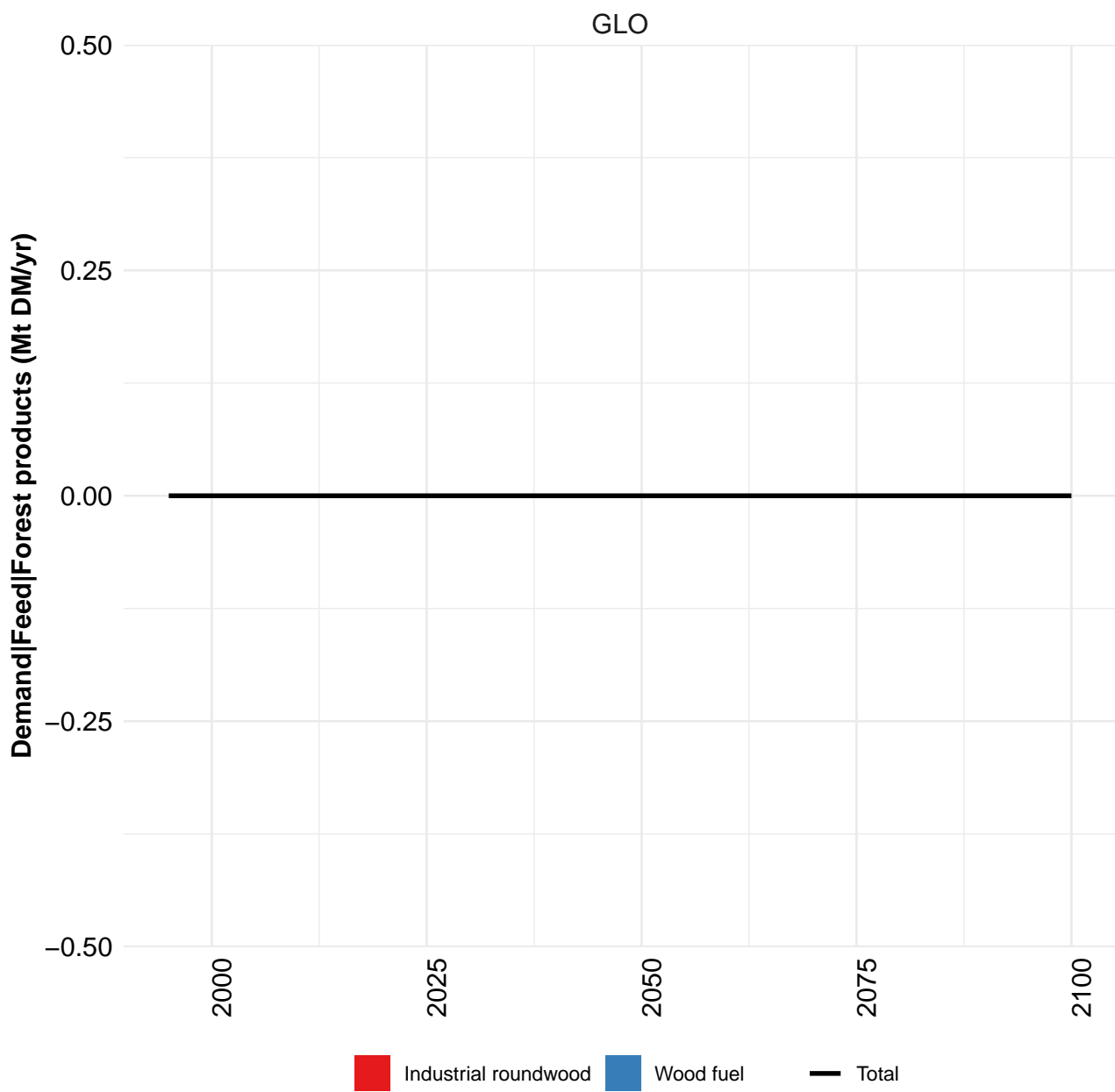
Table 311: MAgPIE m4p\_som — Demand—Feed—Forage (Mt DM/yr) [PART 1/2]

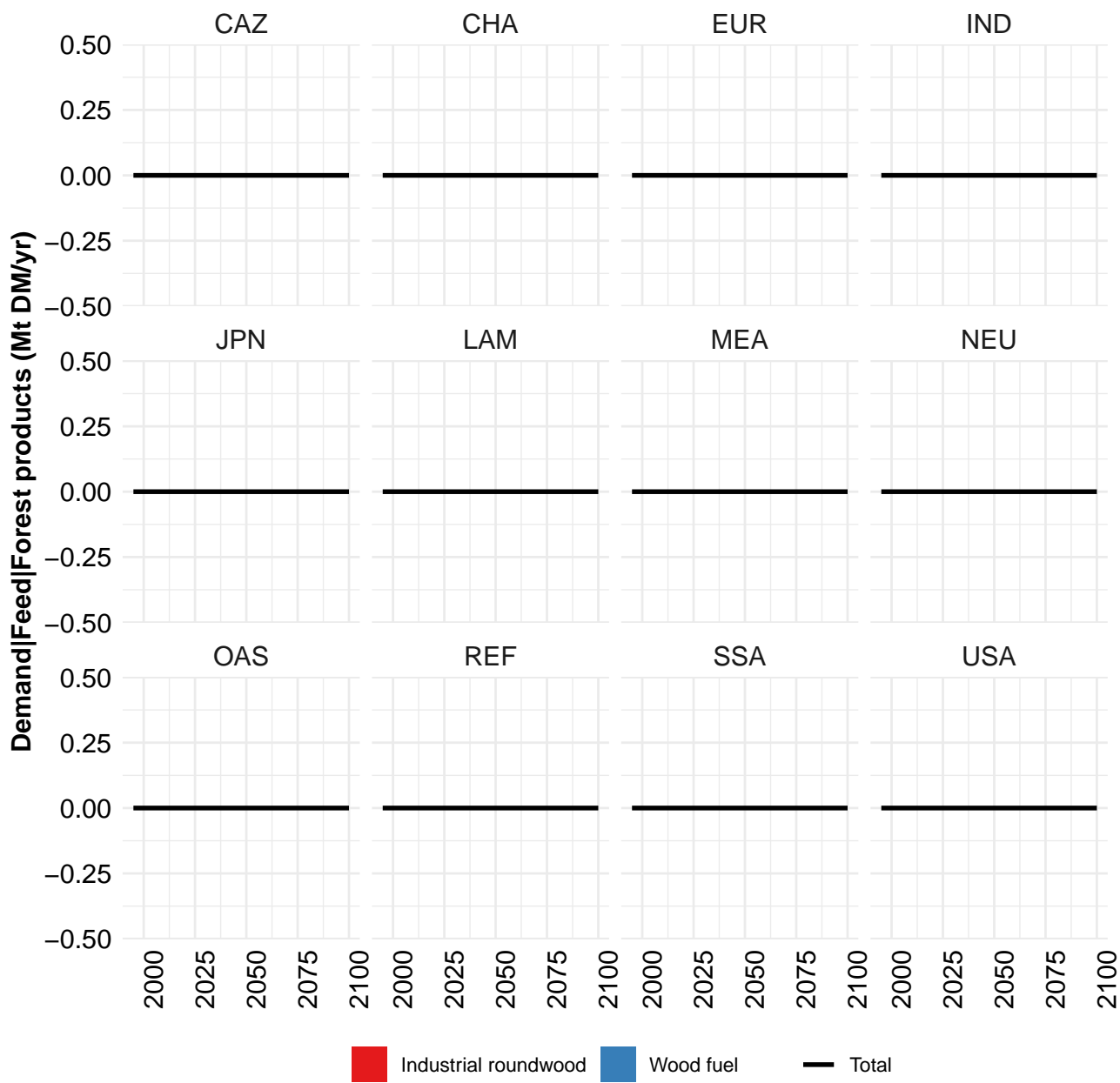
	2050	2055	2060	2070	2080	2090	2100
GLO	2267	2384	2486	2650	2759	2811	2910
CAZ	85	90	94	96	99	98	102
CHA	353	341	327	295	262	230	214
EUR	292	300	302	298	295	287	287
IND	505	551	589	644	673	683	680
JPN	10	10	9	8	7	6	6
LAM	220	229	235	252	254	252	262
MEA	114	125	134	148	153	153	158
NEU	34	35	35	35	35	34	34
OAS	132	154	175	215	251	280	313
REF	163	161	158	150	140	135	127
SSA	119	152	191	279	362	432	508
USA	239	238	237	230	227	221	220

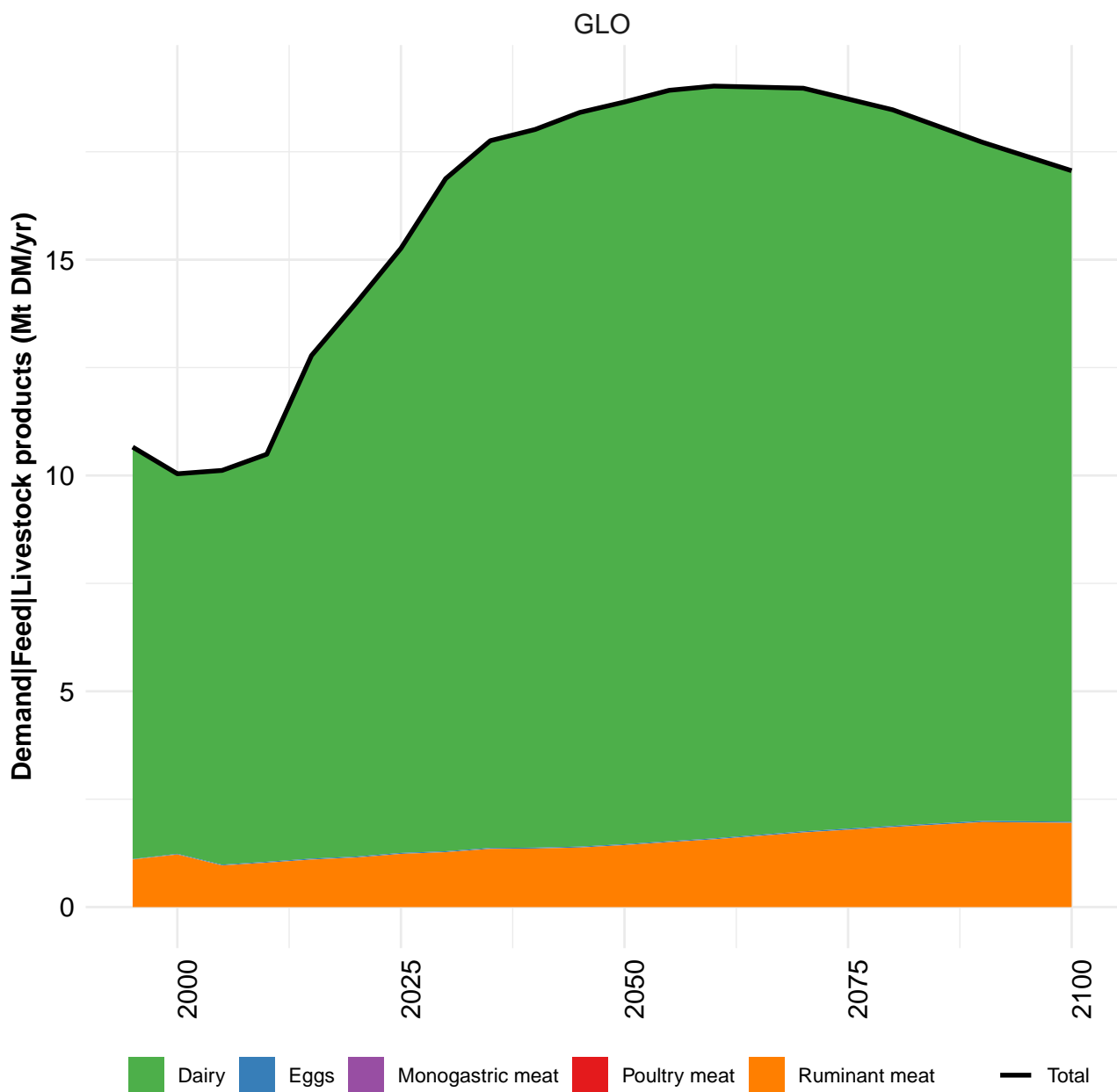
Table 312: MAgPIE m4p\_som — Demand—Feed—Forage (Mt DM/yr) [PART 2/2]

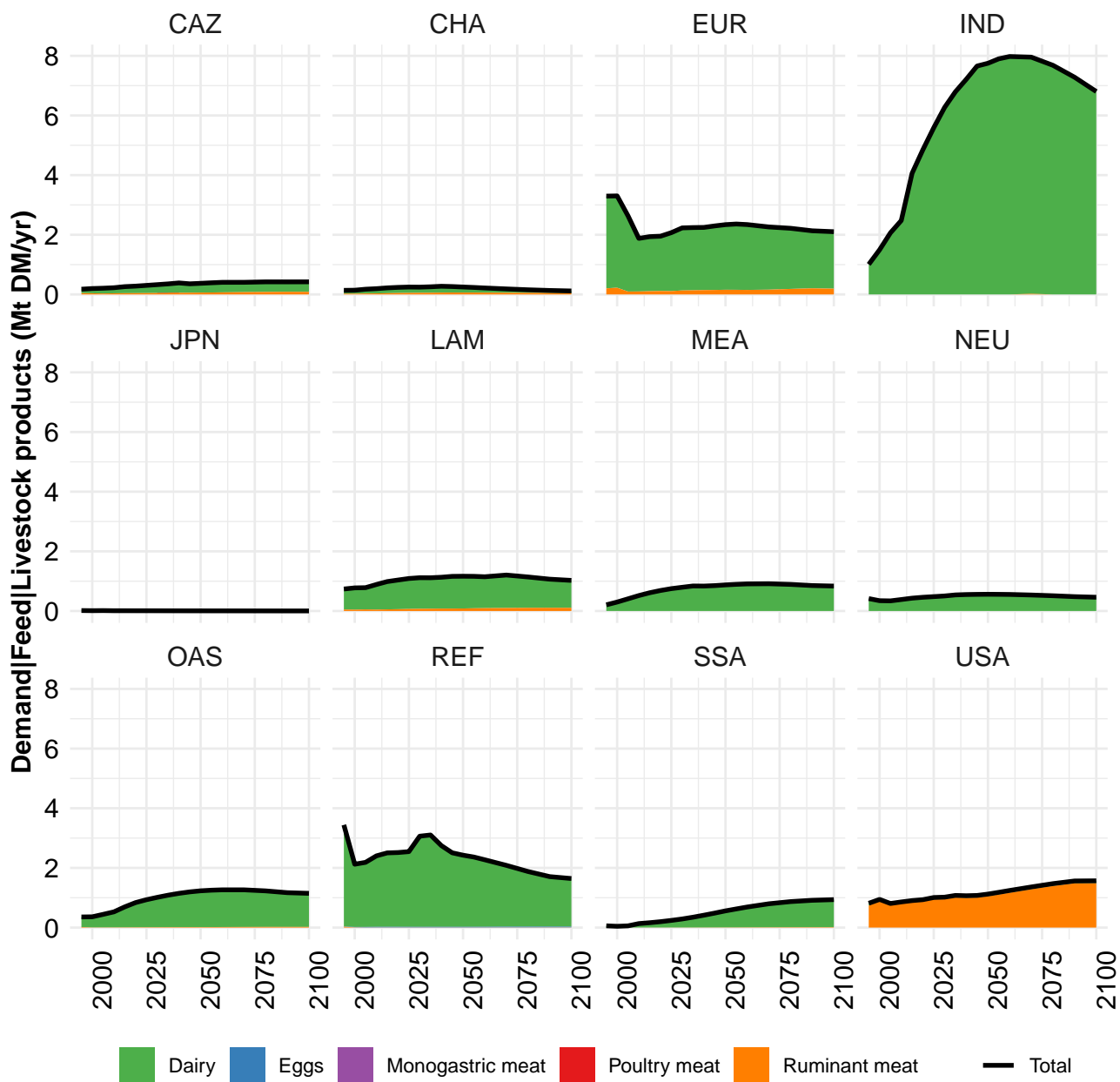
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	189	242	266	314	660	584	611	598	609	570
CAZ	7	9	10	10	28	36	32	30	26	29
CHA	0	0	0	0	8	10	11	12	13	14
EUR	39	56	70	96	192	155	167	178	179	189
IND	19	21	21	22	15	18	20	22	25	28
JPN	3	6	7	9	10	10	10	9	9	13
LAM	21	27	33	31	88	51	46	50	51	54
MEA	2	14	13	15	21	19	20	21	23	25
NEU	2	2	3	3	10	11	11	10	12	13
OAS	1	1	1	1	3	2	2	2	2	2
REF	44	53	49	66	83	90	119	75	63	37
SSA	4	5	6	9	9	7	5	5	5	5
USA	47	48	54	53	192	175	170	185	201	162

Table 313: FAO — Demand—Feed—Forage (Mt DM/yr)





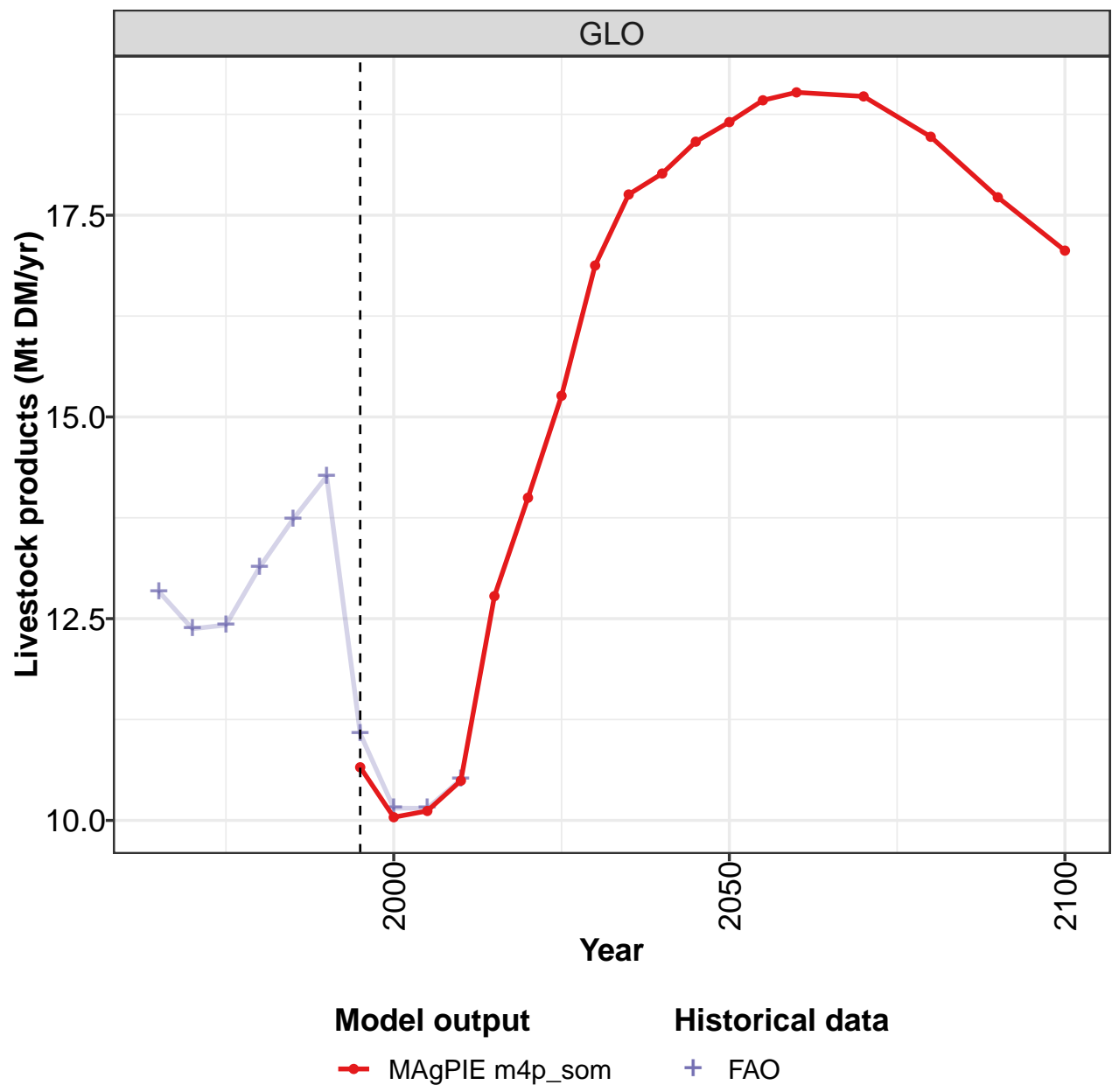






6.5 Livestock products

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

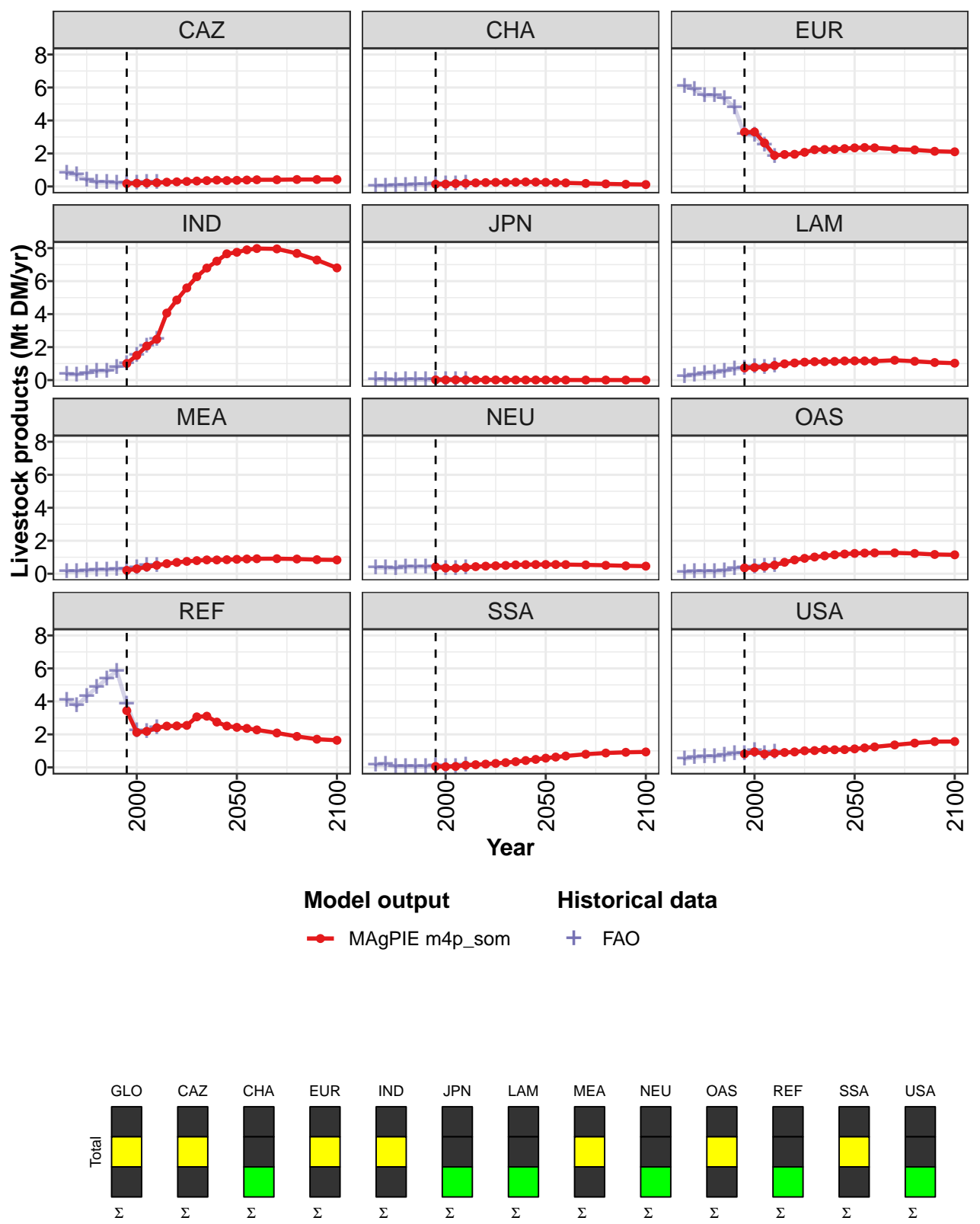


Figure 105: MAgPIE m4p\_som — Demand—Feed—Livestock products (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	10.7	10.0	10.1	10.5	12.8	14.0	15.3	16.9	17.8	18.0	18.4
CAZ	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4
CHA	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
EUR	3.3	3.3	2.6	1.9	1.9	2.0	2.1	2.2	2.2	2.2	2.3
IND	1.0	1.5	2.1	2.5	4.1	4.9	5.6	6.3	6.8	7.2	7.7
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.7	0.8	0.8	0.9	1.0	1.0	1.1	1.1	1.1	1.1	1.2
MEA	0.2	0.3	0.4	0.5	0.6	0.7	0.7	0.8	0.8	0.8	0.9
NEU	0.4	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6
OAS	0.4	0.4	0.4	0.5	0.7	0.8	0.9	1.0	1.1	1.1	1.2
REF	3.4	2.1	2.2	2.4	2.5	2.5	2.5	3.1	3.1	2.7	2.5
SSA	0.1	0.0	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.5
USA	0.8	0.9	0.8	0.9	0.9	0.9	1.0	1.0	1.1	1.1	1.1

Table 314: MAgPIE m4p\_som — Demand—Feed—Livestock products (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	18.7	18.9	19.0	19.0	18.5	17.7	17.1
CAZ	0.4	0.4	0.4	0.4	0.4	0.4	0.4
CHA	0.2	0.2	0.2	0.2	0.2	0.1	0.1
EUR	2.3	2.4	2.3	2.3	2.2	2.1	2.1
IND	7.8	7.9	8.0	8.0	7.7	7.3	6.8
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.2	1.2	1.1	1.2	1.1	1.1	1.0
MEA	0.9	0.9	0.9	0.9	0.9	0.9	0.8
NEU	0.6	0.6	0.6	0.5	0.5	0.5	0.5
OAS	1.2	1.3	1.3	1.3	1.2	1.2	1.1
REF	2.4	2.4	2.3	2.1	1.9	1.7	1.6
SSA	0.6	0.6	0.7	0.8	0.9	0.9	0.9
USA	1.1	1.2	1.2	1.4	1.5	1.6	1.6

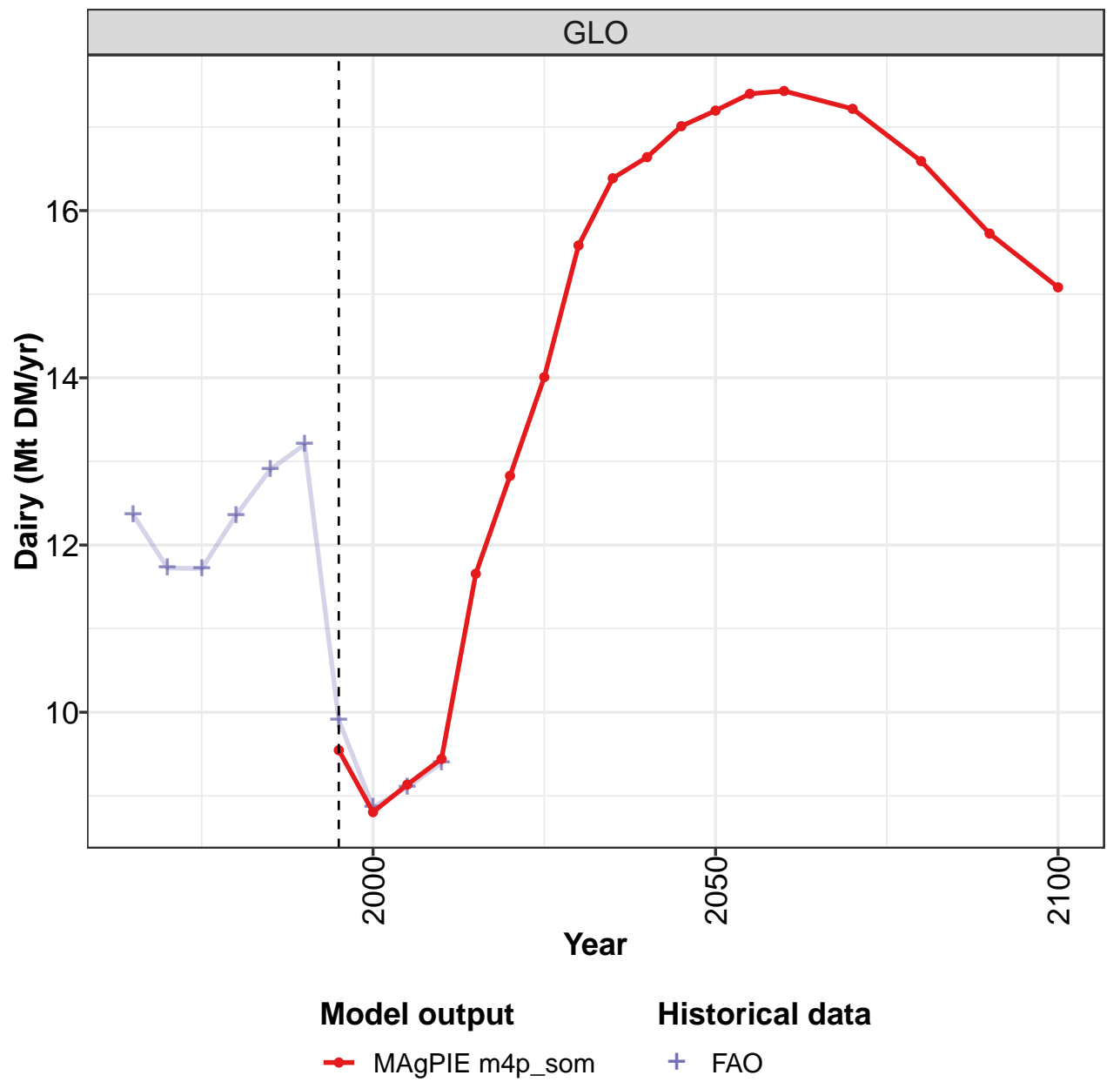
Table 315: MAgPIE m4p\_som — Demand—Feed—Livestock products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	12.8	12.4	12.4	13.1	13.7	14.3	11.1	10.2	10.1	10.5
CAZ	0.8	0.7	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.3
CHA	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
EUR	6.1	5.9	5.5	5.5	5.3	4.8	3.1	3.1	2.5	1.8
IND	0.3	0.3	0.4	0.5	0.5	0.8	1.0	1.5	2.1	2.5
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.2	0.3	0.4	0.4	0.5	0.7	0.7	0.8	0.8	0.9
MEA	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.5
NEU	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.4
OAS	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.4	0.5	0.5
REF	4.1	3.7	4.3	4.8	5.4	5.8	3.8	2.2	2.2	2.4
SSA	0.1	0.2	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1
USA	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1.0	0.9	0.9

Table 316: FAO — Demand—Feed—Livestock products (Mt DM/yr)

6.5.1
Dairy

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

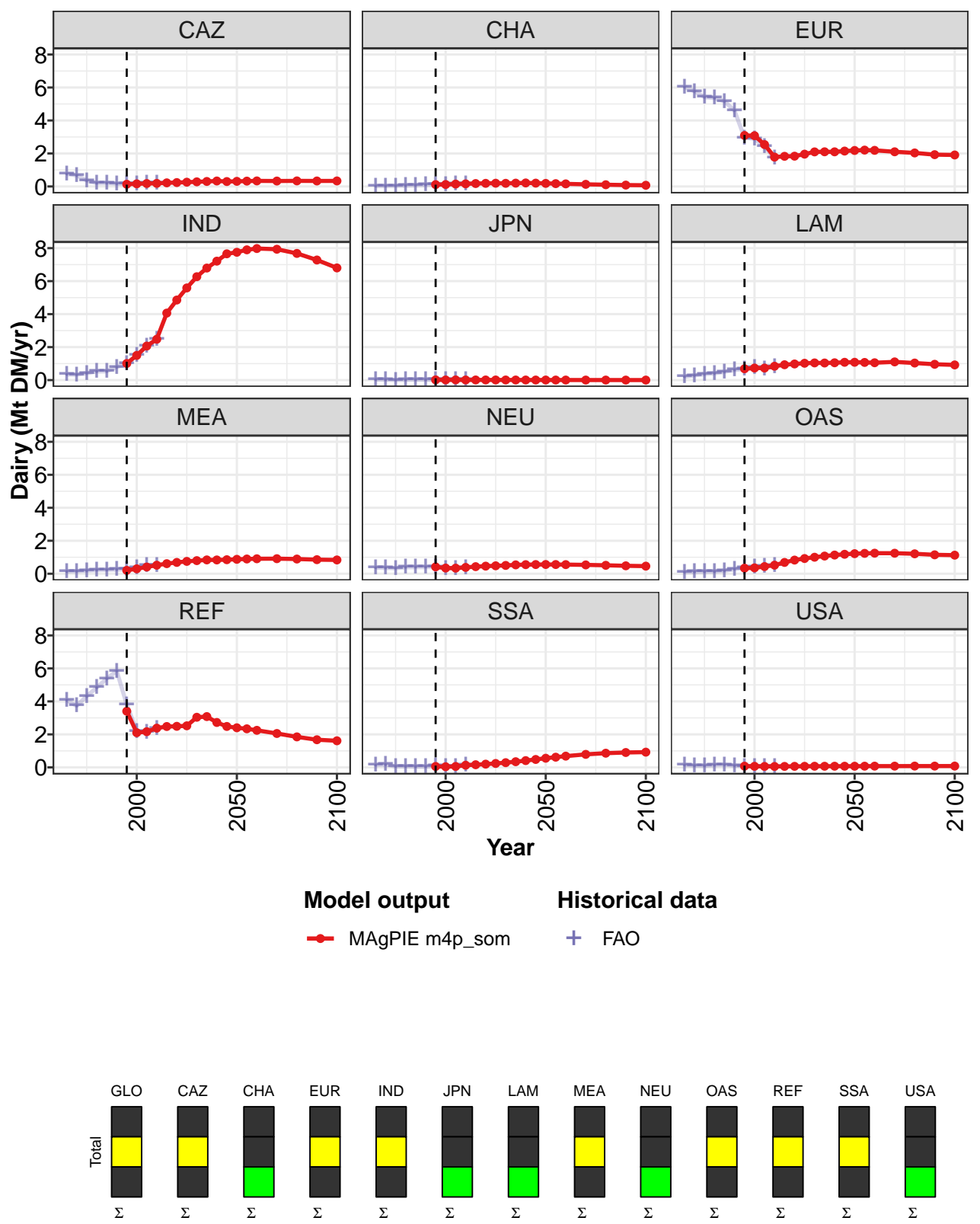


Figure 106: MAgPIE m4p\_som — Demand—Feed—Livestock products—Dairy (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	9.5	8.8	9.1	9.4	11.7	12.8	14.0	15.6	16.4	16.6	17.0
CAZ	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
CHA	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
EUR	3.1	3.1	2.5	1.8	1.8	1.8	2.0	2.1	2.1	2.1	2.1
IND	1.0	1.5	2.1	2.5	4.1	4.9	5.6	6.3	6.8	7.2	7.7
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.7	0.7	0.7	0.8	0.9	1.0	1.0	1.0	1.0	1.1	1.1
MEA	0.2	0.3	0.4	0.5	0.6	0.7	0.7	0.8	0.8	0.8	0.9
NEU	0.4	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6
OAS	0.3	0.4	0.4	0.5	0.7	0.8	0.9	1.0	1.1	1.1	1.2
REF	3.4	2.1	2.2	2.4	2.5	2.5	2.5	3.0	3.1	2.7	2.5
SSA	0.1	0.0	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.5
USA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Table 317: MAgPIE m4p\_som — Demand—Feed—Livestock products—Dairy (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	17.2	17.4	17.4	17.2	16.6	15.7	15.1
CAZ	0.3	0.3	0.3	0.3	0.3	0.3	0.3
CHA	0.2	0.2	0.2	0.1	0.1	0.1	0.1
EUR	2.2	2.2	2.2	2.1	2.0	1.9	1.9
IND	7.8	7.9	8.0	7.9	7.7	7.3	6.8
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.1	1.1	1.1	1.1	1.0	1.0	0.9
MEA	0.9	0.9	0.9	0.9	0.9	0.9	0.8
NEU	0.6	0.6	0.6	0.5	0.5	0.5	0.5
OAS	1.2	1.2	1.2	1.2	1.2	1.1	1.1
REF	2.4	2.3	2.2	2.1	1.8	1.7	1.6
SSA	0.6	0.6	0.7	0.8	0.9	0.9	0.9
USA	0.1	0.1	0.1	0.1	0.1	0.1	0.1

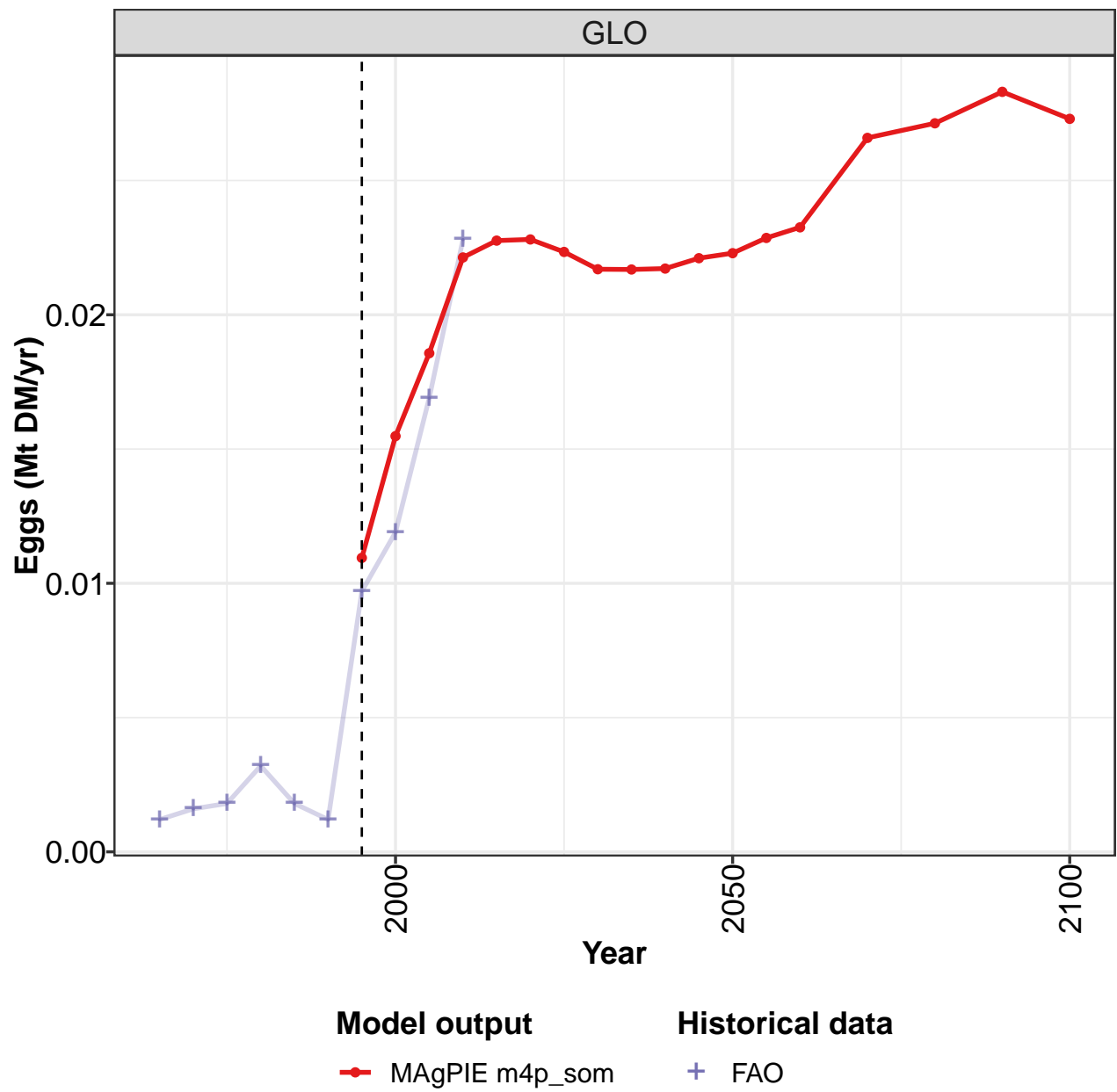
Table 318: MAgPIE m4p\_som — Demand—Feed—Livestock products—Dairy (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	12.4	11.7	11.7	12.4	12.9	13.2	9.9	8.9	9.1	9.4
CAZ	0.8	0.7	0.4	0.2	0.2	0.2	0.1	0.2	0.2	0.2
CHA	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2
EUR	6.0	5.8	5.4	5.4	5.2	4.6	3.0	2.9	2.4	1.7
IND	0.3	0.3	0.4	0.5	0.5	0.8	1.0	1.5	2.1	2.5
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.2	0.3	0.4	0.4	0.5	0.6	0.7	0.7	0.7	0.8
MEA	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.5
NEU	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.4
OAS	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.4	0.4	0.5
REF	4.1	3.7	4.3	4.8	5.4	5.8	3.8	2.2	2.2	2.4
SSA	0.1	0.2	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1
USA	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1

Table 319: FAO — Demand—Feed—Livestock products—Dairy (Mt DM/yr)

6.5.2
Eggs

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

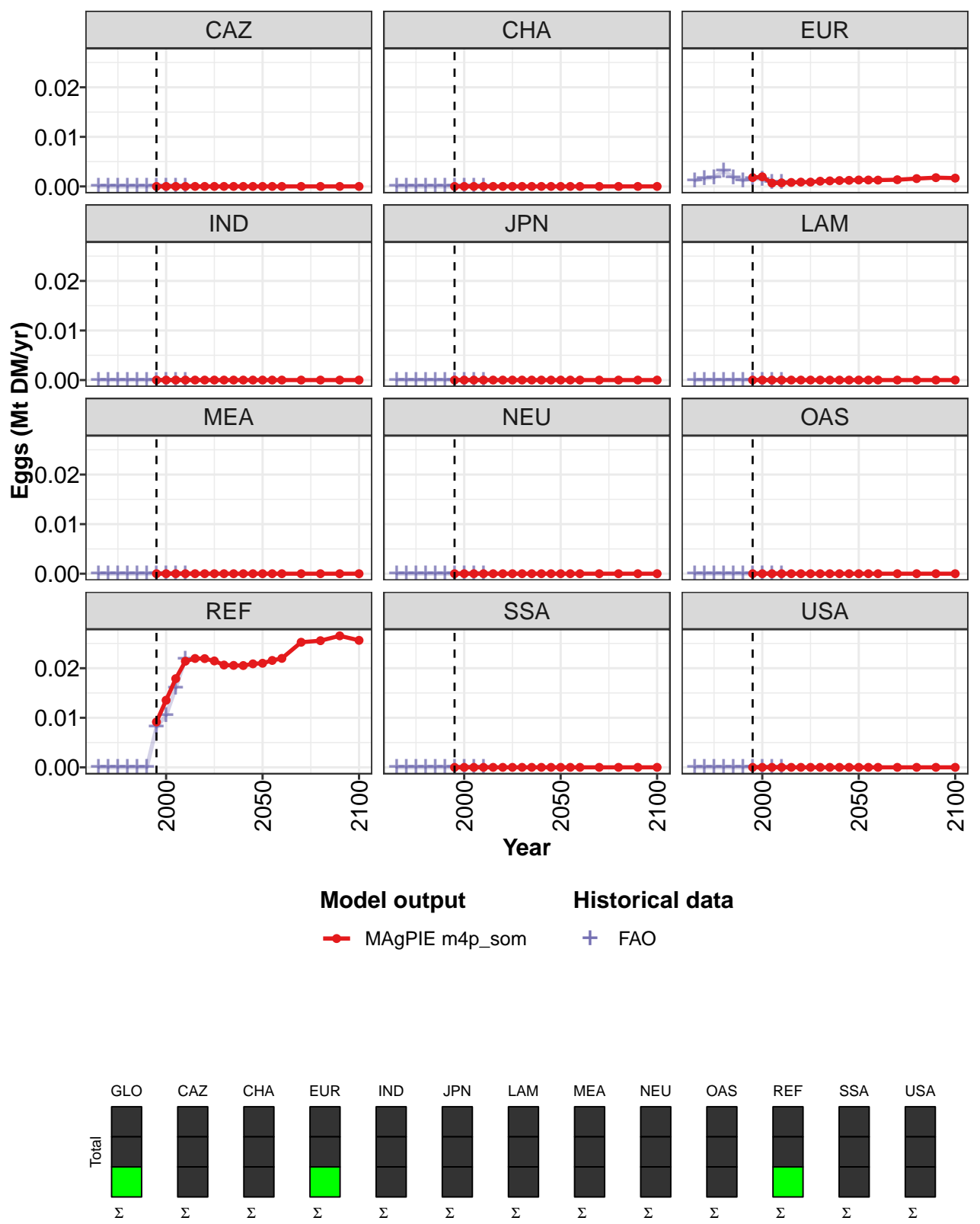


Figure 107: MAgPIE m4p\_som — Demand—Feed—Livestock products—Eggs (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.0109	0.0155	0.0186	0.0221	0.0228	0.0228	0.0223	0.0217	0.0217	0.0217	0.0221
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0018	0.0019	0.0007	0.0007	0.0008	0.0009	0.0009	0.0011	0.0011	0.0012	0.0012
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0092	0.0135	0.0179	0.0214	0.0220	0.0219	0.0215	0.0206	0.0206	0.0205	0.0209
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 320: MAgPIE m4p\_som — Demand—Feed—Livestock products—Eggs (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0223	0.0229	0.0233	0.0266	0.0271	0.0283	0.0273
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0013	0.0013	0.0013	0.0013	0.0016	0.0018	0.0017
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0210	0.0216	0.0220	0.0252	0.0256	0.0265	0.0256
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

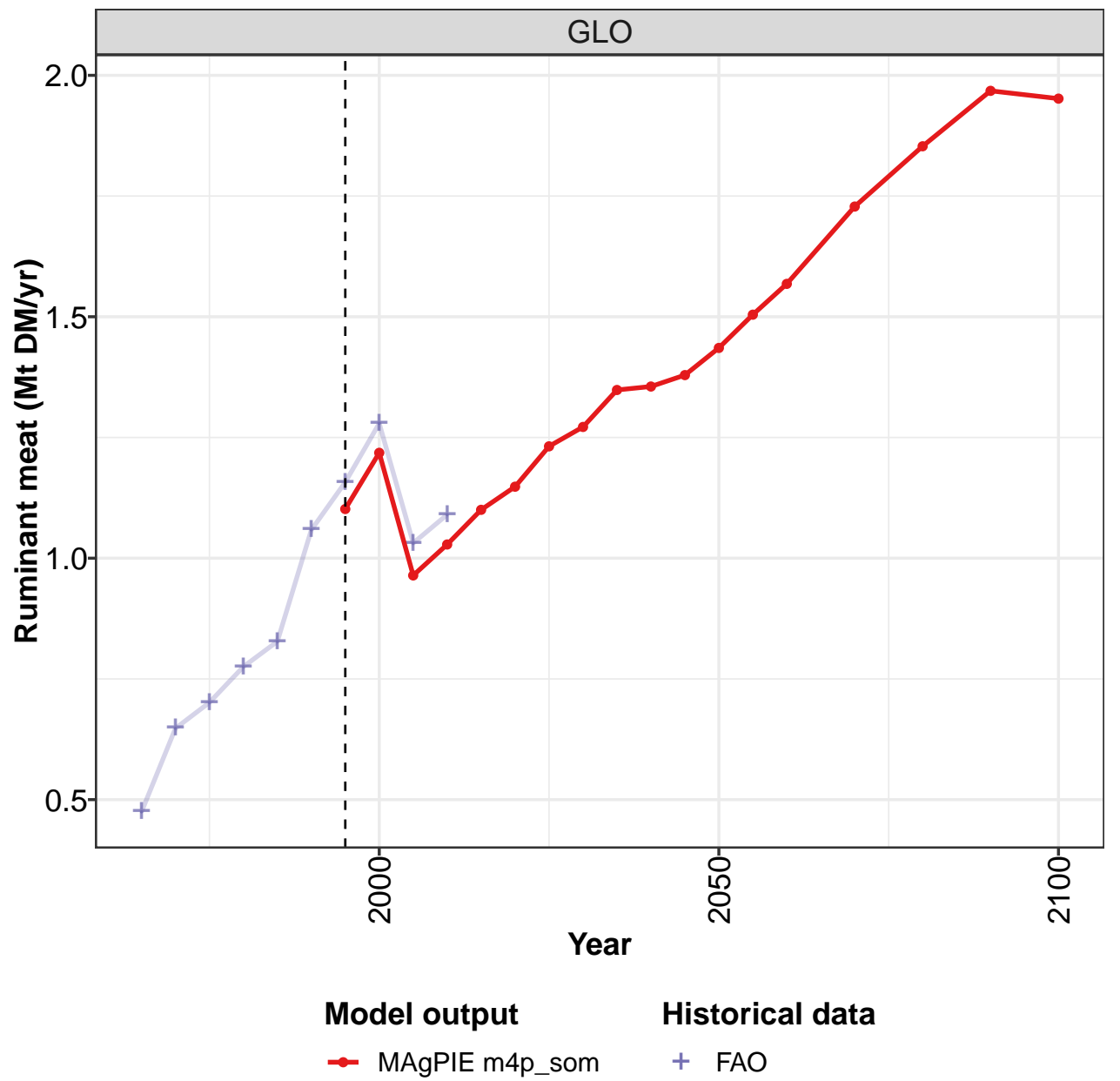
Table 321: MAgPIE m4p\_som — Demand—Feed—Livestock products—Eggs (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0012	0.0016	0.0018	0.0032	0.0018	0.0012	0.0097	0.0119	0.0169	0.0228
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0012	0.0016	0.0018	0.0032	0.0018	0.0012	0.0016	0.0014	0.0009	0.0008
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0081	0.0105	0.0160	0.0219
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 322: FAO — Demand—Feed—Livestock products—Eggs (Mt DM/yr)

6.5.3 Ruminant meat

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

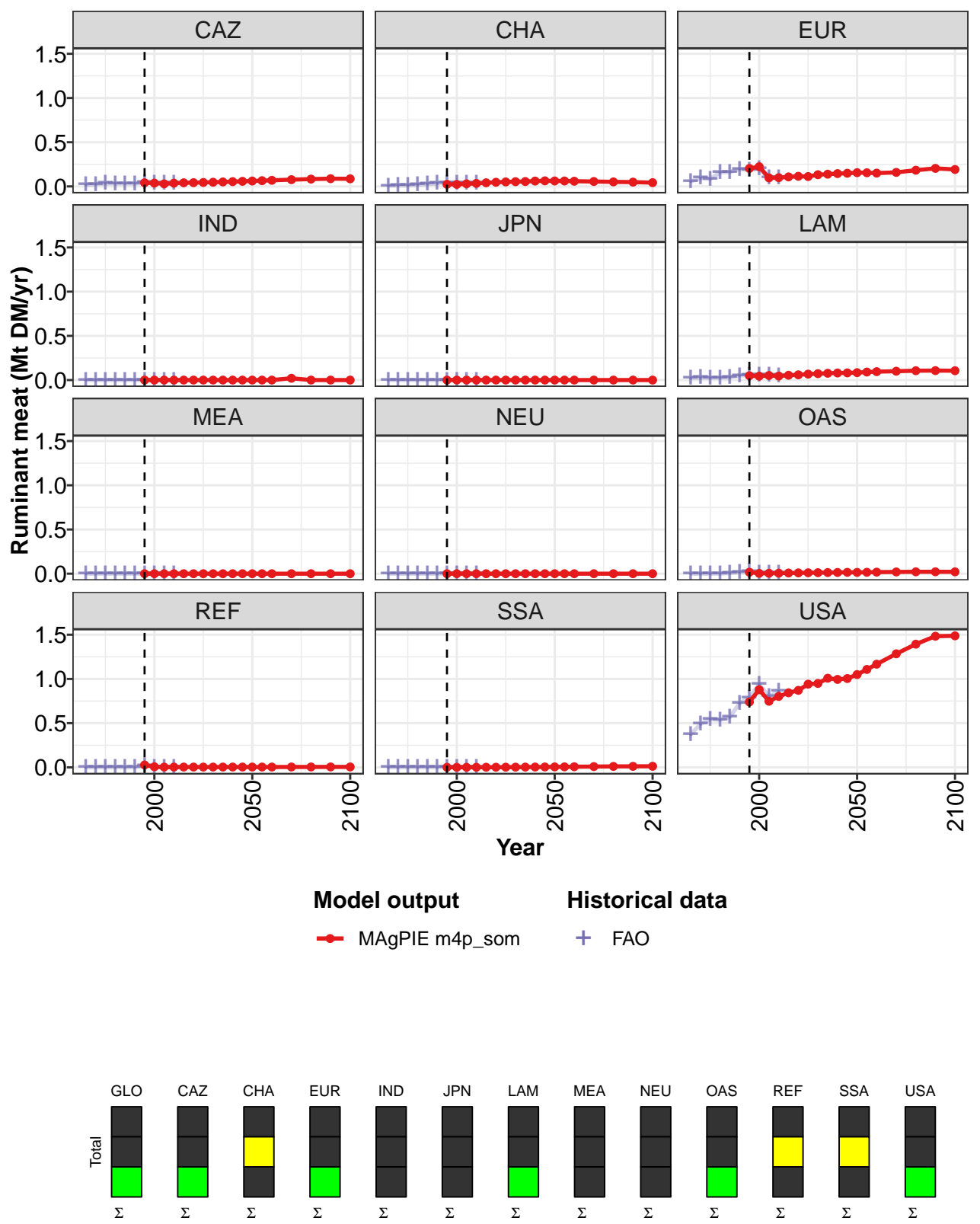


Figure 108: MAgPIE m4p\_som — Demand—Feed—Livestock products—Ruminant meat (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.10	1.22	0.96	1.03	1.10	1.15	1.23	1.27	1.35	1.36	1.38
CAZ	0.04	0.04	0.03	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.06
CHA	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.05	0.06	0.06	0.06
EUR	0.20	0.22	0.10	0.10	0.11	0.11	0.11	0.13	0.14	0.15	0.15
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.05	0.04	0.05	0.05	0.05	0.06	0.07	0.07	0.08	0.08	0.08
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.02	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02
REF	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.74	0.88	0.75	0.80	0.84	0.87	0.94	0.95	1.01	0.99	1.00

Table 323: MAgPIE m4p\_som — Demand—Feed—Livestock products—Ruminant meat (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.44	1.50	1.57	1.73	1.85	1.97	1.95
CAZ	0.06	0.07	0.07	0.08	0.08	0.09	0.09
CHA	0.06	0.06	0.06	0.06	0.05	0.05	0.04
EUR	0.16	0.15	0.15	0.16	0.18	0.20	0.19
IND	0.00	0.00	0.00	0.02	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.08	0.09	0.10	0.10	0.11	0.11	0.11
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.01	0.02	0.02	0.02	0.02	0.02	0.02
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.01	0.01	0.01	0.01	0.01	0.01	0.01
USA	1.05	1.11	1.17	1.28	1.39	1.48	1.49

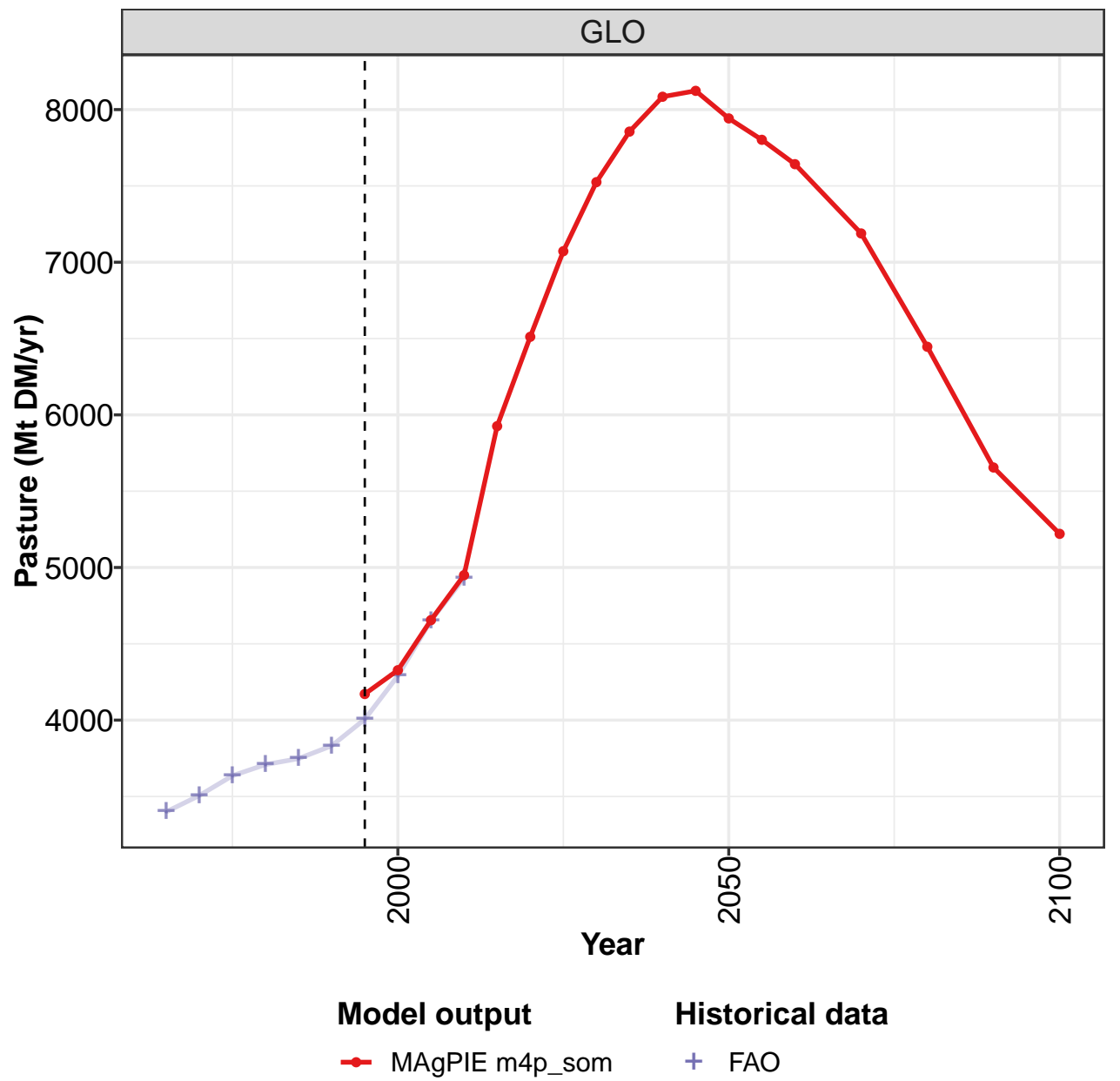
Table 324: MAgPIE m4p\_som — Demand—Feed—Livestock products—Ruminant meat (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.47	0.65	0.70	0.78	0.83	1.06	1.16	1.28	1.03	1.09
CAZ	0.02	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04
CHA	0.01	0.01	0.01	0.02	0.03	0.03	0.04	0.03	0.04	0.03
EUR	0.05	0.09	0.08	0.16	0.16	0.20	0.19	0.20	0.10	0.10
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.02	0.03	0.03	0.03	0.03	0.05	0.05	0.05	0.05	0.05
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.01	0.01	0.01
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.00
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.37	0.49	0.55	0.54	0.57	0.73	0.79	0.94	0.80	0.86

Table 325: FAO — Demand—Feed—Livestock products—Ruminant meat (Mt DM/yr)

6.6 Pasture

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

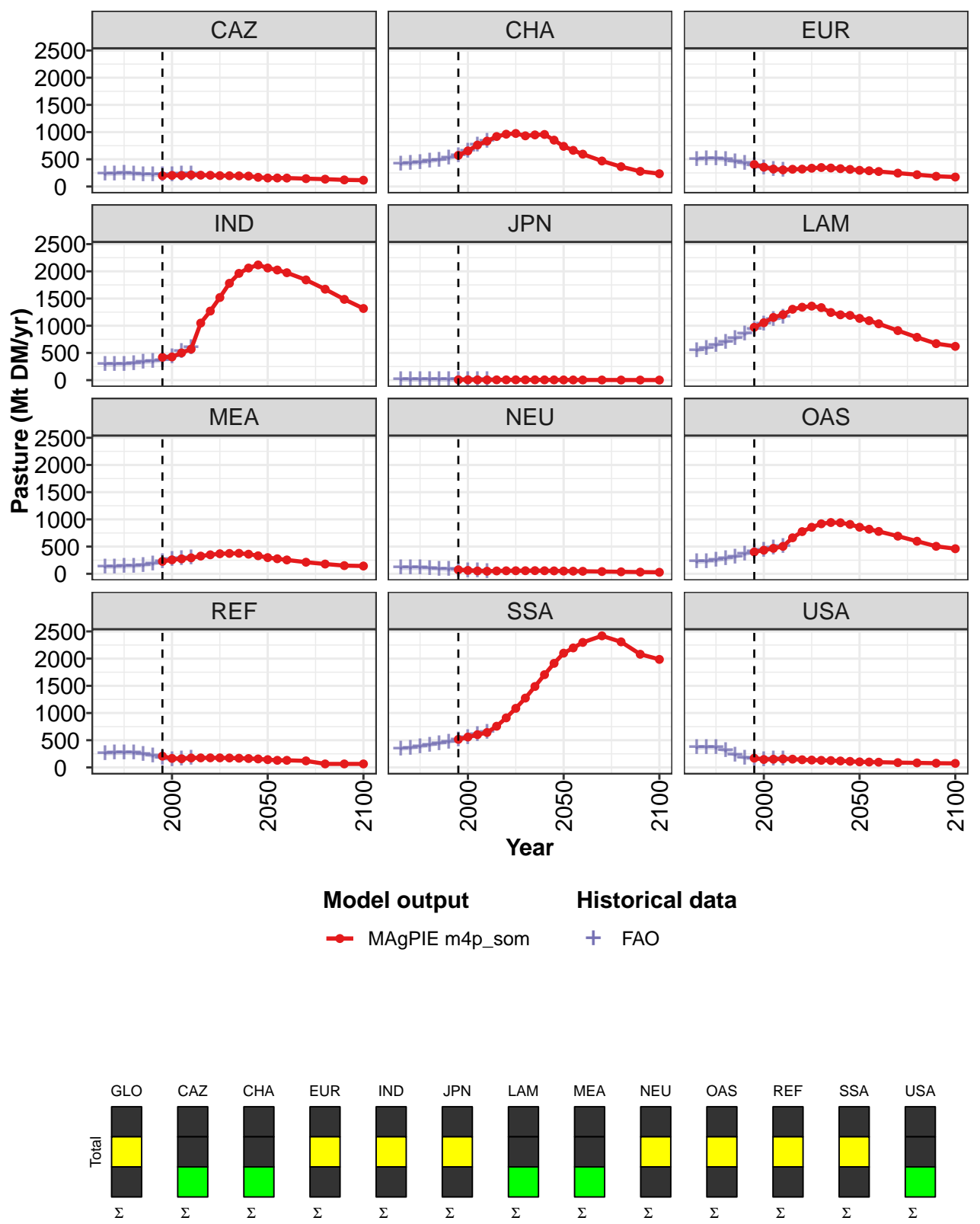


Figure 109: MAgPIE m4p\_som — Demand—Feed—Pasture (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	4171	4327	4655	4950	5926	6511	7072	7525	7856	8084	8123
CAZ	199	204	204	213	208	206	200	198	196	192	169
CHA	573	655	762	835	919	961	975	931	949	957	853
EUR	404	355	321	306	317	320	336	349	340	328	315
IND	420	427	501	570	1049	1270	1519	1781	1963	2061	2118
JPN	7	7	6	5	5	6	6	6	5	5	5
LAM	972	1056	1153	1204	1303	1341	1361	1333	1244	1200	1191
MEA	228	257	274	294	325	349	369	374	376	360	331
NEU	73	62	53	47	52	55	56	56	58	56	53
OAS	401	434	468	504	662	775	855	919	942	938	908
REF	207	166	160	174	175	176	176	174	170	164	156
SSA	516	559	603	642	757	911	1086	1274	1488	1705	1913
USA	170	146	151	156	152	141	135	130	126	119	112

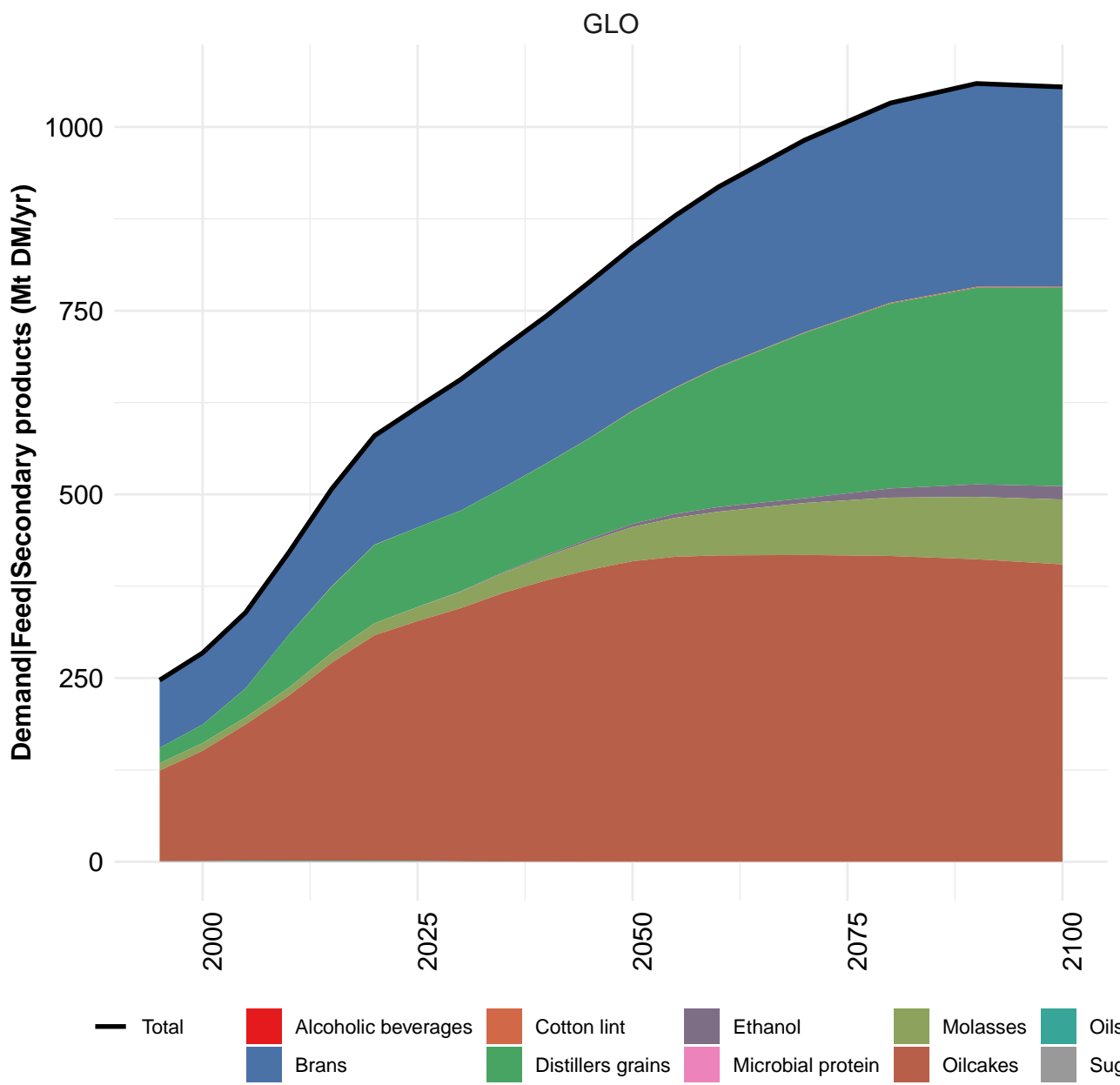
Table 326: MAgPIE m4p\_som — Demand—Feed—Pasture (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	7942	7802	7643	7189	6446	5655	5220
CAZ	157	157	155	145	135	121	116
CHA	738	665	595	469	364	279	235
EUR	298	290	276	246	217	188	174
IND	2061	2025	1974	1842	1672	1485	1317
JPN	4	4	3	3	2	2	2
LAM	1135	1093	1036	911	787	671	621
MEA	297	276	255	213	179	150	143
NEU	50	48	46	41	36	31	28
OAS	856	819	778	691	598	505	461
REF	143	131	131	120	64	64	64
SSA	2100	2197	2298	2419	2307	2080	1986
USA	102	99	96	88	83	77	75

Table 327: MAgPIE m4p\_som — Demand—Feed—Pasture (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3399	3506	3636	3709	3748	3832	4006	4290	4653	4931
CAZ	225	234	239	233	220	212	215	223	229	231
CHA	414	422	438	463	490	521	572	657	760	832
EUR	499	509	510	491	457	421	381	339	309	296
IND	287	288	295	311	328	342	367	429	522	594
JPN	10	10	9	9	8	8	7	7	6	5
LAM	548	586	643	702	765	845	939	1034	1113	1157
MEA	127	130	136	142	156	183	222	260	284	294
NEU	105	107	107	101	89	78	68	59	51	47
OAS	218	228	246	273	313	360	402	438	475	503
REF	260	266	270	265	246	213	173	148	152	168
SSA	344	357	381	412	443	471	502	546	600	640
USA	362	371	361	307	230	177	157	149	152	162

Table 328: FAO — Demand—Feed—Pasture (Mt DM/yr)

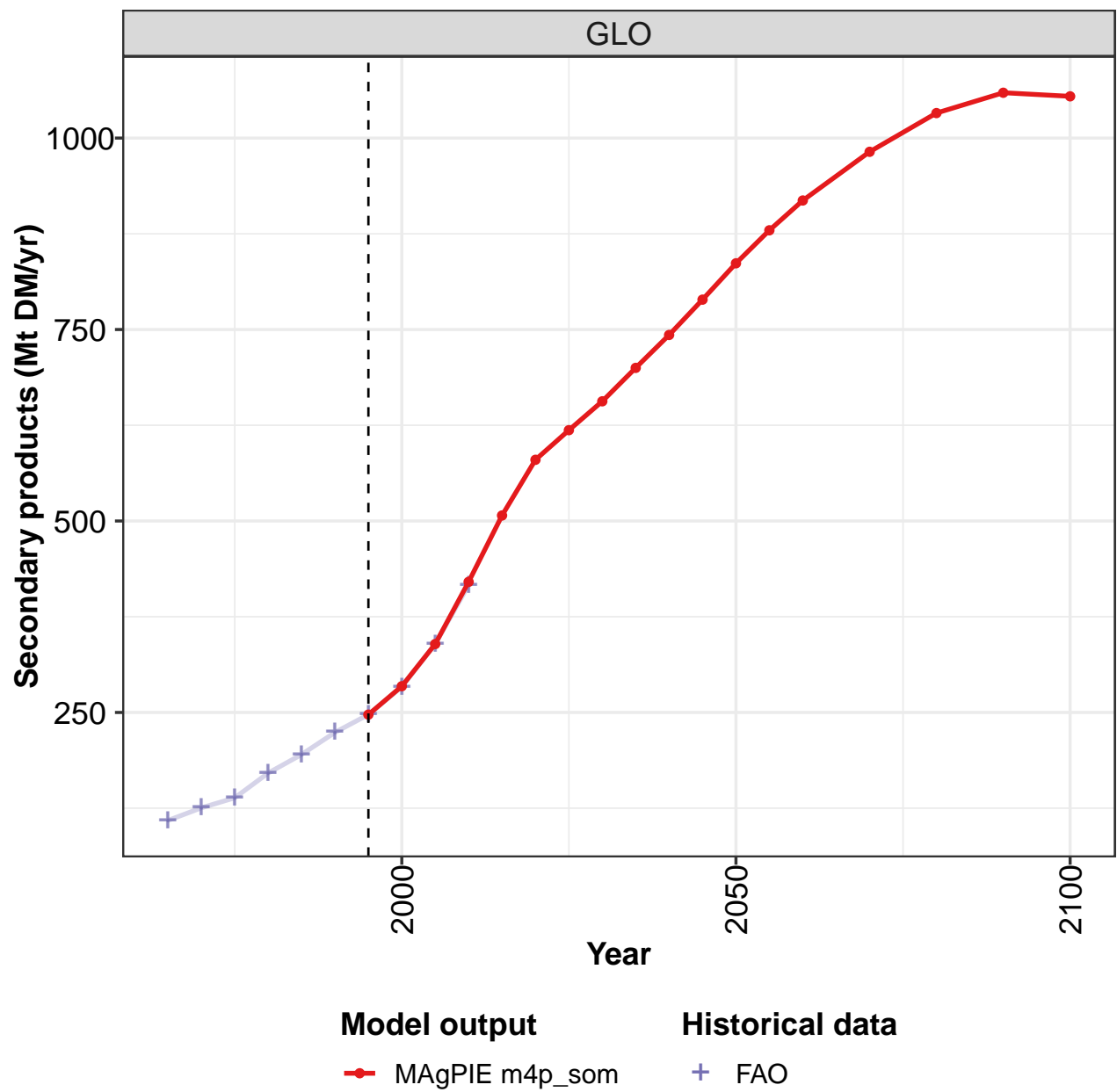






6.7 Secondary products

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

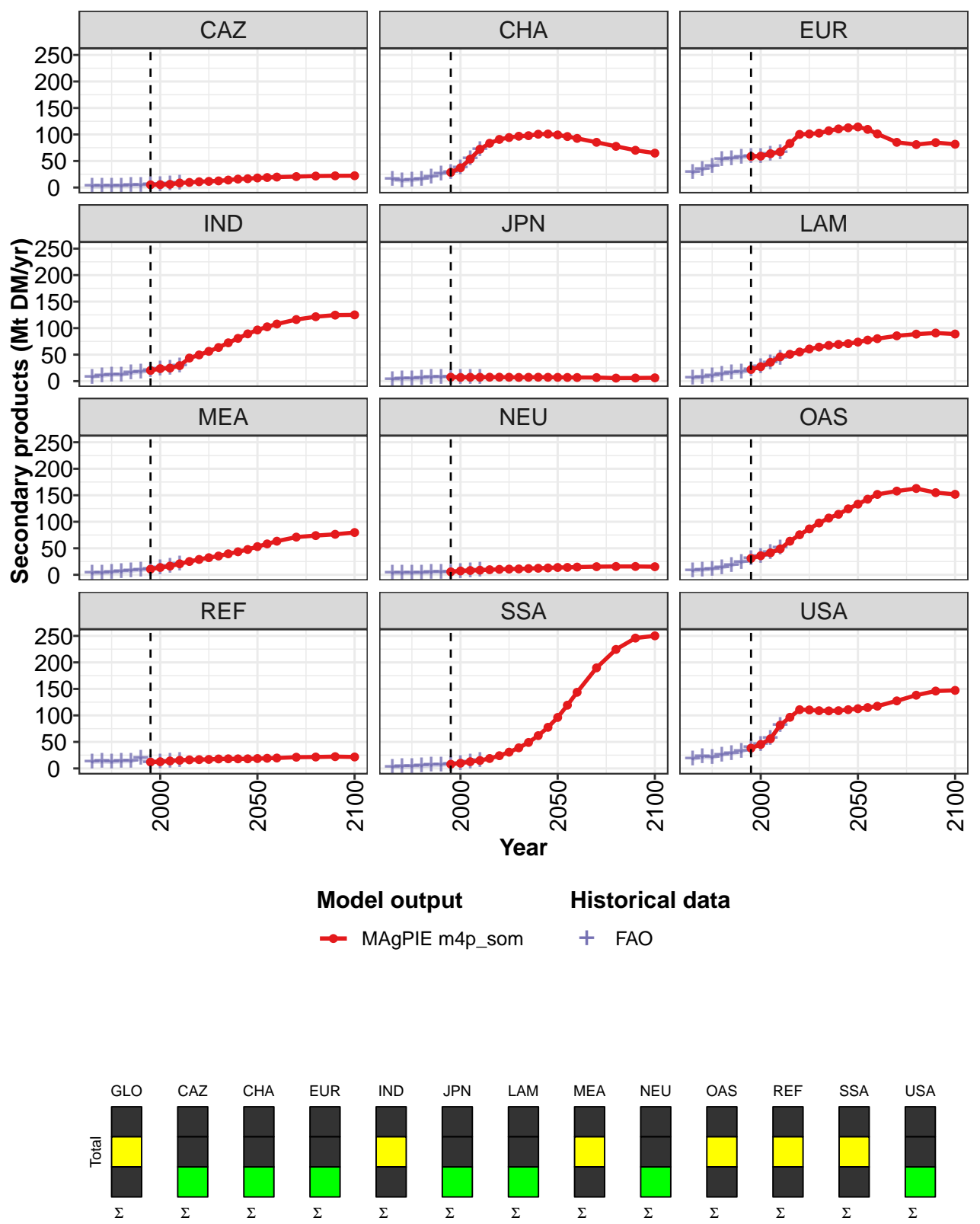


Figure 110: MAgPIE m4p\_som — Demand—Feed—Secondary products (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	247	284	339	421	507	580	619	656	700	743	789
CAZ	5	5	6	9	10	11	12	12	14	16	17
CHA	29	37	54	72	83	91	94	97	98	101	101
EUR	59	59	64	67	83	100	101	103	107	110	113
IND	20	24	25	29	44	49	56	63	72	81	89
JPN	7	7	7	7	7	8	7	7	7	7	7
LAM	22	27	36	46	51	55	61	64	67	69	71
MEA	11	14	16	21	25	29	32	35	40	43	48
NEU	6	7	8	9	10	10	11	11	12	12	13
OAS	31	36	41	49	63	75	87	98	107	114	124
REF	12	13	14	15	16	17	17	18	18	18	18
SSA	8	10	13	15	19	24	31	39	49	62	78
USA	38	45	56	82	96	111	110	109	109	109	111

Table 329: MAgPIE m4p\_som — Demand—Feed—Secondary products (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	836	880	919	982	1033	1059	1055
CAZ	18	19	20	21	22	22	22
CHA	99	96	93	85	78	70	65
EUR	114	110	101	85	81	85	82
IND	96	102	108	116	122	125	125
JPN	7	7	7	7	6	6	6
LAM	74	77	80	85	89	91	89
MEA	53	58	63	71	74	76	80
NEU	14	14	15	15	16	16	15
OAS	133	143	152	158	163	155	152
REF	19	19	20	21	22	22	22
SSA	96	119	144	190	224	246	250
USA	113	115	117	127	138	146	147

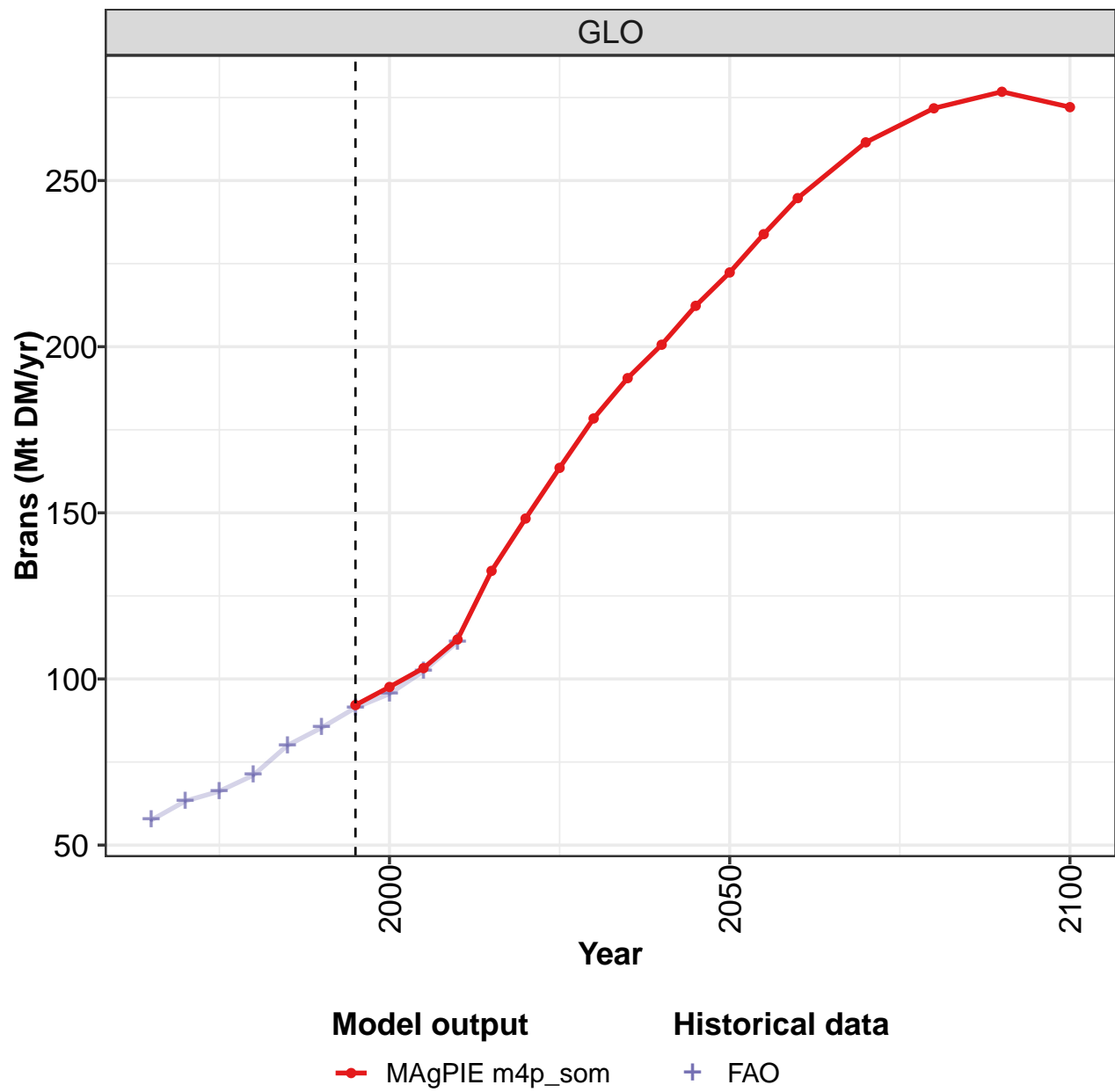
Table 330: MAgPIE m4p\_som — Demand—Feed—Secondary products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	109	125	139	171	195	224	247	283	339	416
CAZ	2	2	3	3	4	4	5	6	7	9
CHA	15	13	14	16	20	26	29	38	54	72
EUR	28	34	40	53	55	57	58	59	62	66
IND	8	10	12	12	15	18	20	23	25	29
JPN	4	5	5	6	7	7	7	7	7	7
LAM	6	7	10	13	16	17	22	27	35	43
MEA	3	3	5	6	8	9	11	14	16	21
NEU	3	3	3	4	4	5	5	7	8	9
OAS	7	9	11	14	18	24	31	35	42	50
REF	12	13	12	13	14	19	11	12	14	15
SSA	3	3	4	5	6	7	8	10	13	15
USA	18	22	20	26	29	32	39	46	57	81

Table 331: FAO — Demand—Feed—Secondary products (Mt DM/yr)

6.7.1 Brans

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

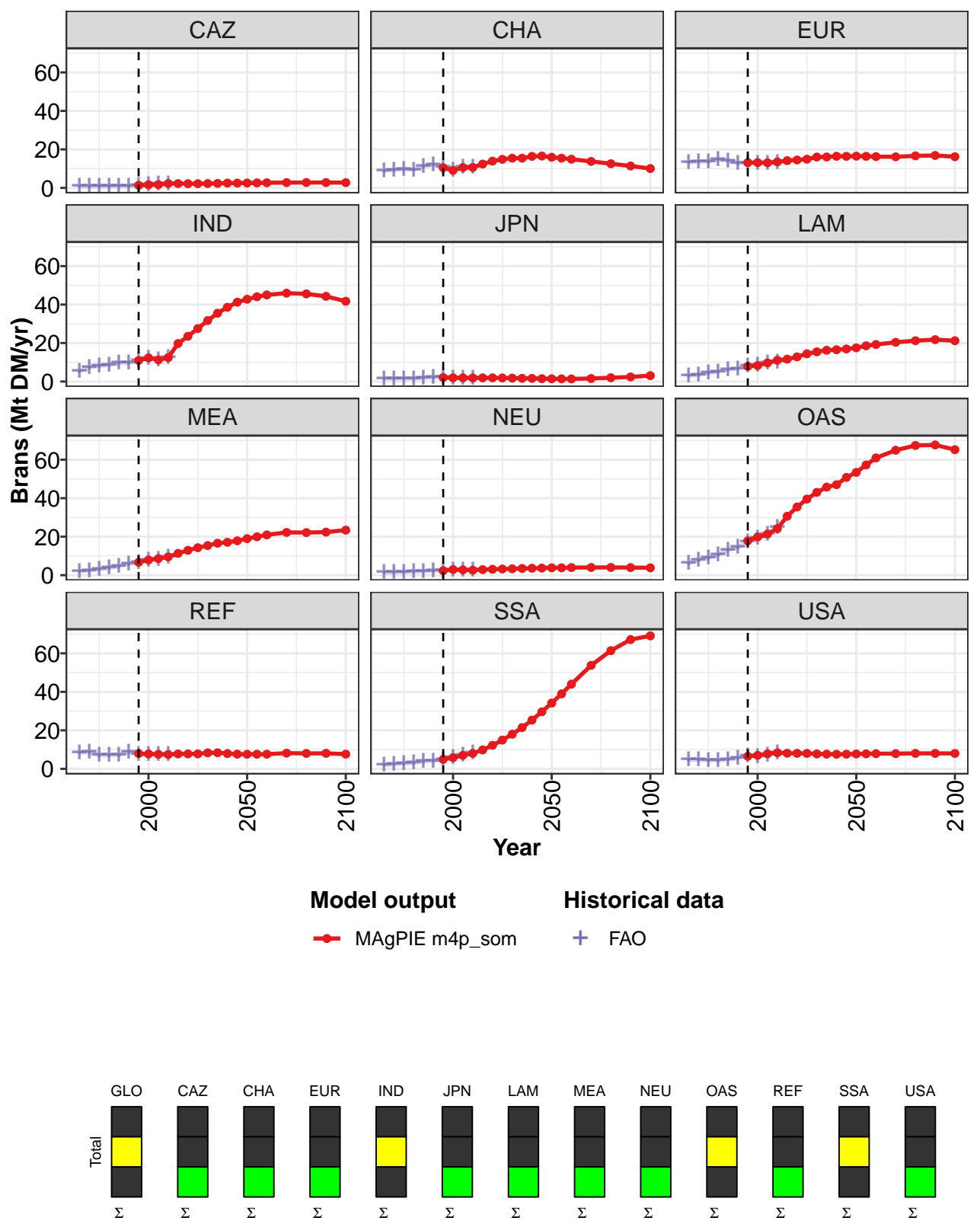


Figure 111: MAGPIE m4p\_som — Demand—Feed—Secondary products—Brans (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	92	98	103	112	133	148	164	178	191	201	212
CAZ	1	2	2	2	2	2	2	2	2	2	2
CHA	11	9	11	11	12	14	15	15	15	16	17
EUR	13	13	13	14	14	15	15	16	16	16	16
IND	11	12	11	12	20	24	28	32	36	39	41
JPN	2	2	2	2	2	2	2	2	2	2	1
LAM	8	8	10	11	12	13	14	15	16	17	17
MEA	7	8	9	10	11	13	14	15	17	17	18
NEU	2	3	3	3	3	3	3	3	3	4	4
OAS	18	20	21	24	31	35	40	43	46	47	51
REF	8	8	8	7	8	8	8	8	8	8	8
SSA	5	6	7	8	10	12	15	18	21	25	30
USA	7	7	8	8	8	8	8	8	8	8	8

Table 332: MAgPIE m4p\_som — Demand—Feed—Secondary products—Brans (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	222	234	245	262	272	277	272
CAZ	3	3	3	3	3	3	3
CHA	16	15	15	14	13	11	10
EUR	16	16	16	16	17	17	16
IND	43	44	45	46	46	44	42
JPN	1	1	1	2	2	2	3
LAM	18	19	19	20	21	22	21
MEA	19	20	21	22	22	22	23
NEU	4	4	4	4	4	4	4
OAS	53	57	61	65	67	68	65
REF	8	8	8	8	8	8	8
SSA	34	39	44	54	61	67	69
USA	8	8	8	8	8	8	8

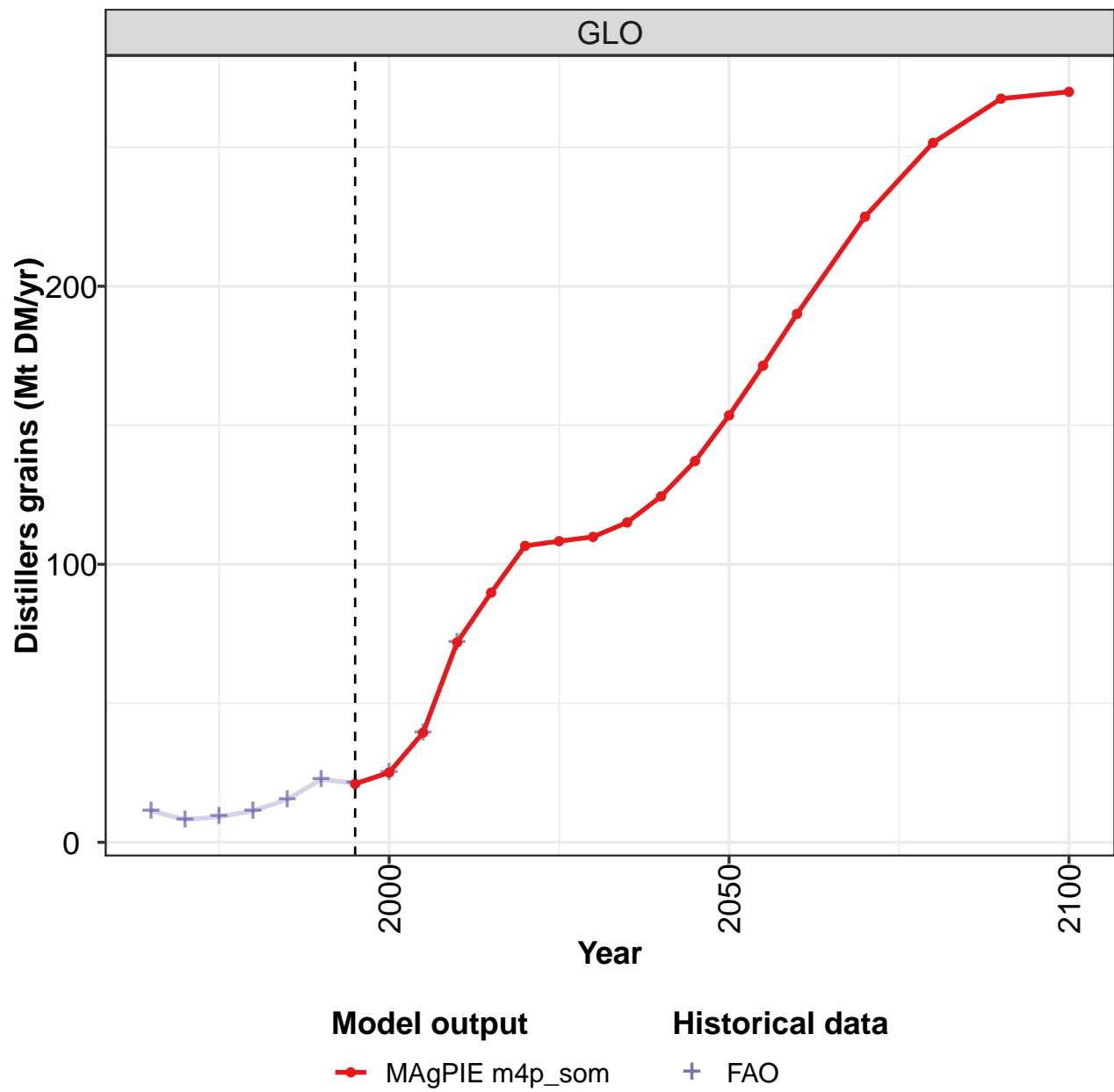
Table 333: MAgPIE m4p\_som — Demand—Feed—Secondary products—Brans (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	58	63	66	71	80	85	91	96	102	111
CAZ	1	1	1	1	1	1	1	2	2	2
CHA	9	9	10	9	11	12	11	9	11	11
EUR	13	14	14	15	14	13	13	13	13	13
IND	5	7	8	9	10	10	11	12	11	12
JPN	2	2	2	2	2	2	2	2	2	2
LAM	3	3	4	5	6	7	8	8	10	10
MEA	2	2	3	4	5	6	7	8	8	10
NEU	1	1	2	2	2	2	2	3	3	3
OAS	6	8	9	11	13	14	17	19	21	25
REF	9	9	7	7	7	9	7	7	7	7
SSA	2	2	3	3	4	4	5	6	7	8
USA	5	5	4	4	5	6	7	6	7	8

Table 334: FAO — Demand—Feed—Secondary products—Brans (Mt DM/yr)

6.7.2 Distillers grains

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

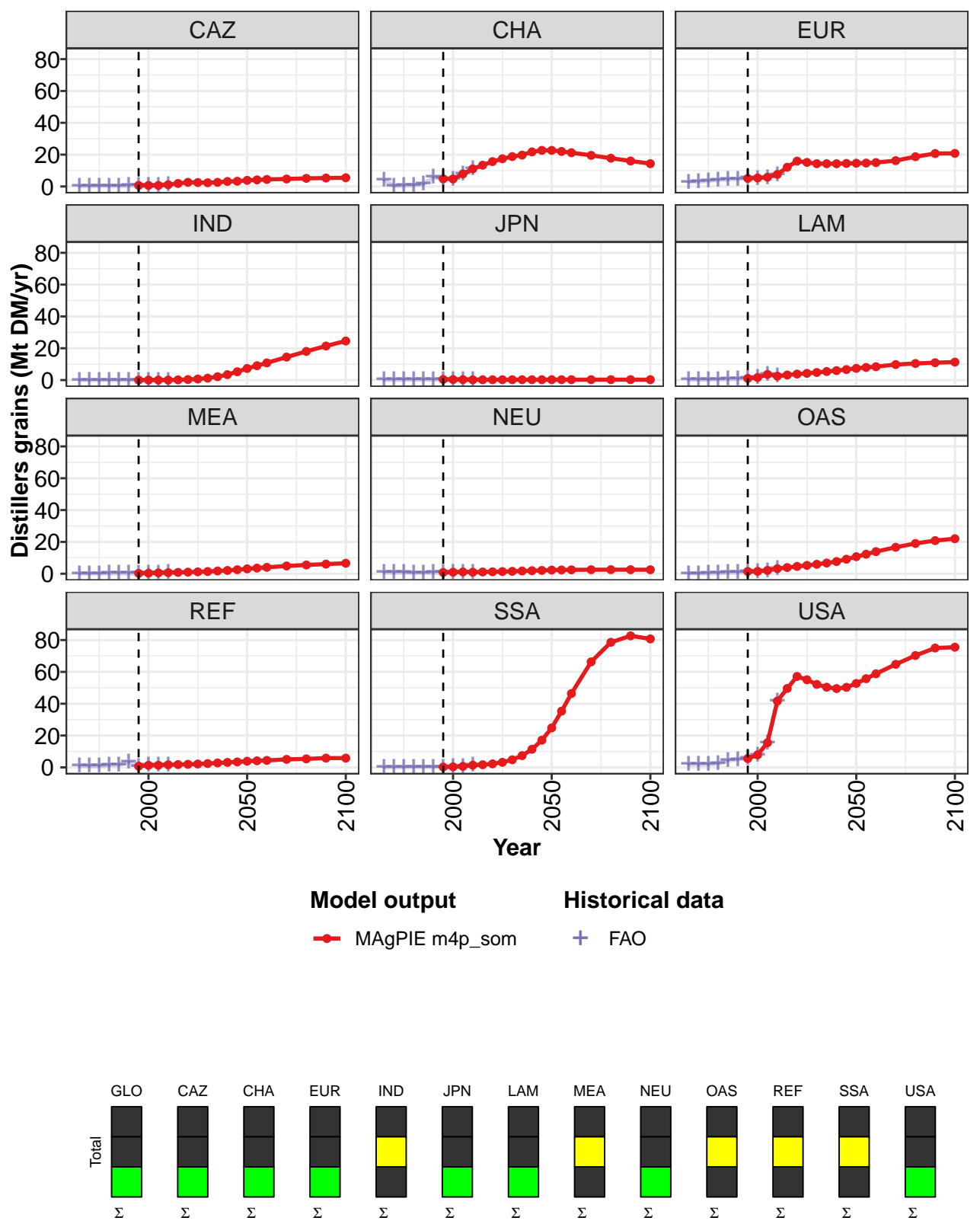


Figure 112: MAgPIE m4p\_som — Demand—Feed—Secondary products—Distillers grains (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	21	25	39	72	90	107	108	110	115	124	137
CAZ	1	1	1	1	2	3	2	2	3	3	3
CHA	5	5	8	11	13	16	17	19	20	22	23
EUR	5	5	6	8	12	16	15	14	14	14	14
IND	0	0	0	0	0	0	1	1	2	3	5
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	1	2	4	2	3	4	4	5	5	6	7
MEA	0	0	1	1	1	1	1	1	2	2	3
NEU	1	1	1	1	1	1	1	2	2	2	2
OAS	1	2	2	3	4	5	5	6	7	8	9
REF	1	1	1	2	2	2	2	2	3	3	3
SSA	0	0	1	1	2	2	3	5	7	11	17
USA	6	8	15	42	50	57	55	52	50	50	50

Table 335: MAgPIE m4p\_som — Demand—Feed—Secondary products—Distillers grains (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	154	171	190	225	252	267	270
CAZ	4	4	4	5	5	5	5
CHA	23	22	21	20	18	16	14
EUR	15	15	15	16	19	21	21
IND	7	9	11	14	18	21	25
JPN	0	0	0	0	0	0	0
LAM	7	8	8	10	10	11	11
MEA	3	4	4	5	6	6	7
NEU	2	2	2	3	3	3	3
OAS	11	12	14	17	19	21	22
REF	4	4	4	5	5	6	6
SSA	25	35	46	66	79	83	81
USA	53	56	59	65	70	75	76

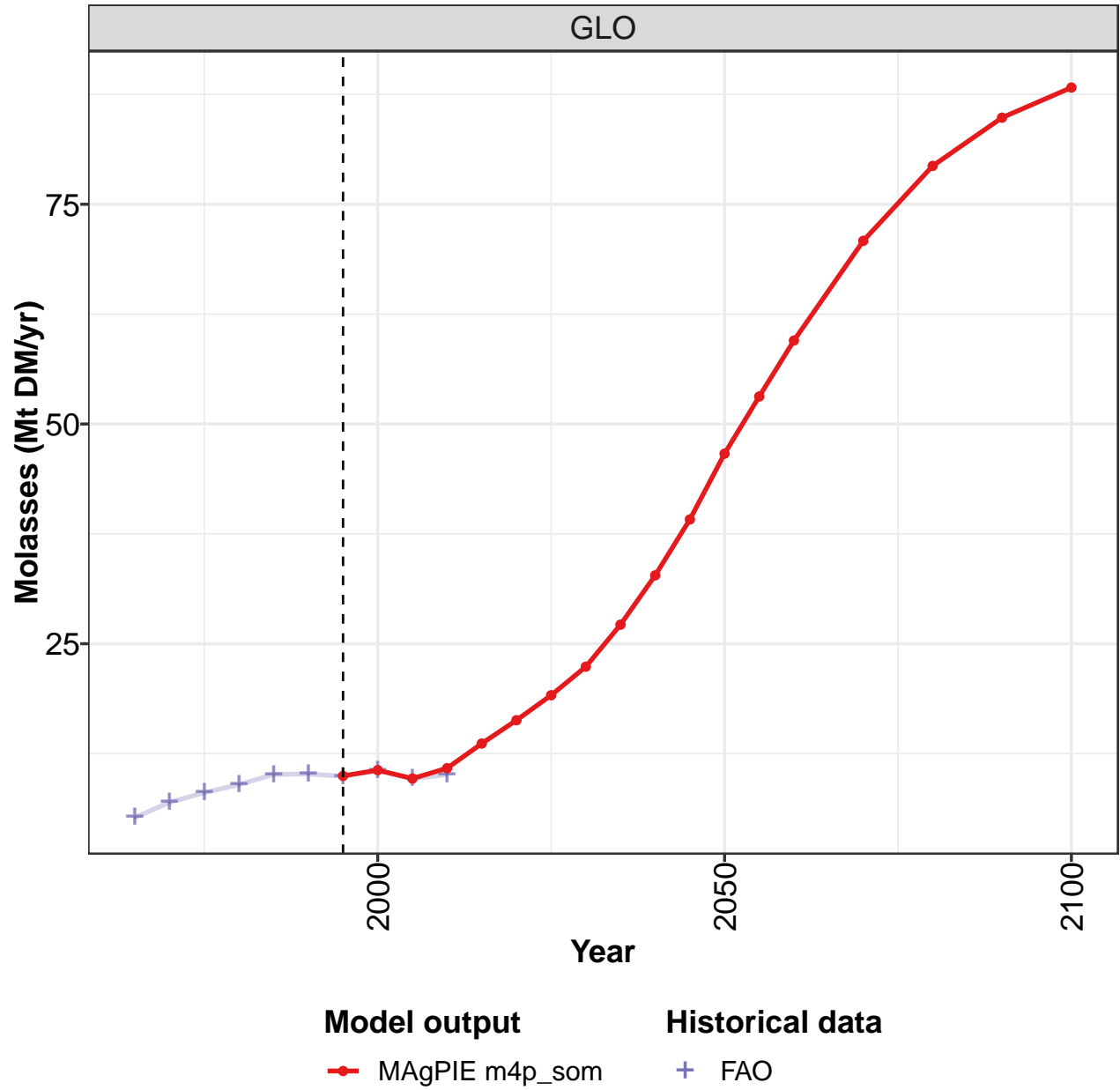
Table 336: MAgPIE m4p\_som — Demand—Feed—Secondary products—Distillers grains (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	11.3	8.2	9.2	11.3	15.4	22.6	21.3	25.0	39.3	71.8
CAZ	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.8	0.7	1.1
CHA	4.0	0.4	0.6	0.8	1.6	5.7	4.8	4.7	7.9	11.1
EUR	2.8	3.0	3.5	4.0	4.3	4.7	5.3	5.2	5.7	7.4
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.3	0.3	0.2
LAM	0.3	0.3	0.4	0.5	0.6	0.9	1.1	1.7	3.6	2.5
MEA	0.0	0.1	0.1	0.2	0.3	0.2	0.3	0.4	0.5	0.7
NEU	0.9	0.8	0.9	0.6	0.6	0.7	0.8	0.9	1.1	1.0
OAS	0.1	0.2	0.2	0.4	0.8	1.0	1.4	1.5	2.1	3.2
REF	0.8	0.8	0.9	1.3	1.7	3.2	0.7	1.3	1.3	1.6
SSA	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.3	0.6	1.4
USA	1.8	1.8	1.9	2.3	4.3	5.0	5.6	7.9	15.5	41.7

Table 337: FAO — Demand—Feed—Secondary products—Distillers grains (Mt DM/yr)

6.7.3
Molasses

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

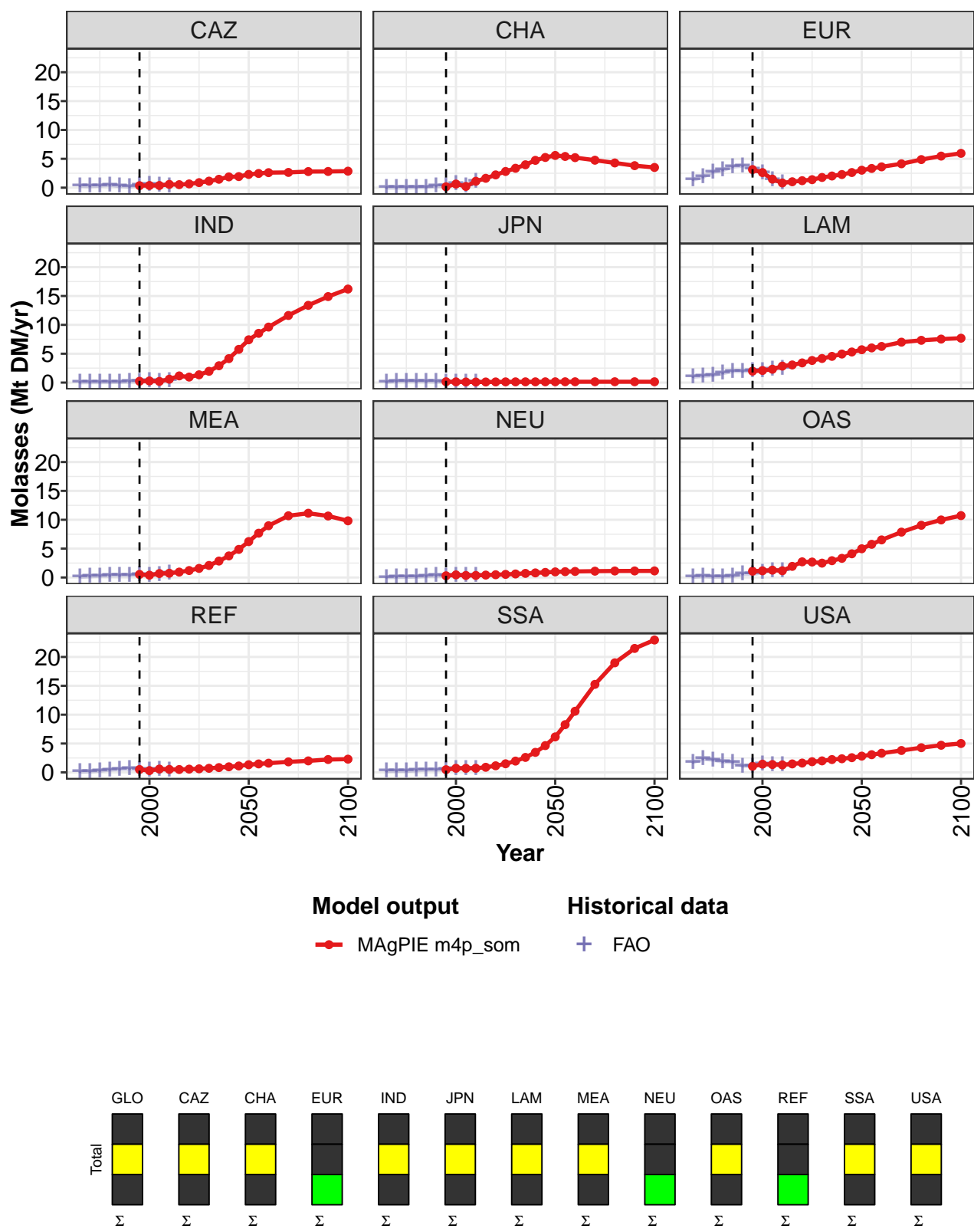


Figure 113: MAgPIE m4p\_som — Demand—Feed—Secondary products—Molasses (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	10.0	10.6	9.7	10.8	13.6	16.3	19.1	22.4	27.2	32.8	39.1
CAZ	0.3	0.4	0.4	0.6	0.5	0.7	0.9	1.1	1.5	1.9	1.9
CHA	0.2	0.6	0.2	1.1	1.6	2.2	2.8	3.4	4.0	4.7	5.2
EUR	3.1	2.6	1.5	0.8	1.0	1.2	1.4	1.8	2.0	2.3	2.6
IND	0.2	0.3	0.2	0.6	1.2	1.0	1.3	2.0	2.9	4.2	5.8
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	2.0	2.1	2.3	2.9	3.1	3.4	3.8	4.2	4.5	4.9	5.3
MEA	0.5	0.4	0.7	0.7	0.9	1.2	1.6	2.1	2.8	3.7	4.9
NEU	0.3	0.5	0.4	0.4	0.4	0.5	0.5	0.6	0.7	0.8	0.9
OAS	1.1	1.2	1.3	1.2	1.9	2.7	2.7	2.5	2.9	3.3	4.1
REF	0.5	0.3	0.6	0.5	0.5	0.6	0.6	0.7	0.8	1.0	1.1
SSA	0.5	0.7	0.7	0.7	0.9	1.1	1.5	2.0	2.6	3.5	4.6
USA	1.1	1.4	1.4	1.3	1.5	1.6	1.9	2.0	2.2	2.4	2.5

Table 338: MAgPIE m4p\_som — Demand—Feed—Secondary products—Molasses (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	46.6	53.1	59.5	70.8	79.4	84.9	88.3
CAZ	2.3	2.5	2.6	2.6	2.8	2.8	2.9
CHA	5.6	5.4	5.2	4.8	4.3	3.8	3.5
EUR	3.0	3.3	3.6	4.1	4.9	5.5	6.0
IND	7.4	8.5	9.6	11.6	13.4	14.9	16.2
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	5.7	6.0	6.3	7.0	7.3	7.5	7.7
MEA	6.2	7.7	9.0	10.7	11.1	10.7	9.8
NEU	1.0	1.0	1.0	1.1	1.1	1.1	1.1
OAS	5.0	5.8	6.5	7.9	9.0	10.0	10.7
REF	1.3	1.5	1.6	1.8	2.0	2.2	2.3
SSA	6.2	8.3	10.6	15.3	19.0	21.5	22.9
USA	2.8	3.1	3.3	3.8	4.3	4.7	5.0

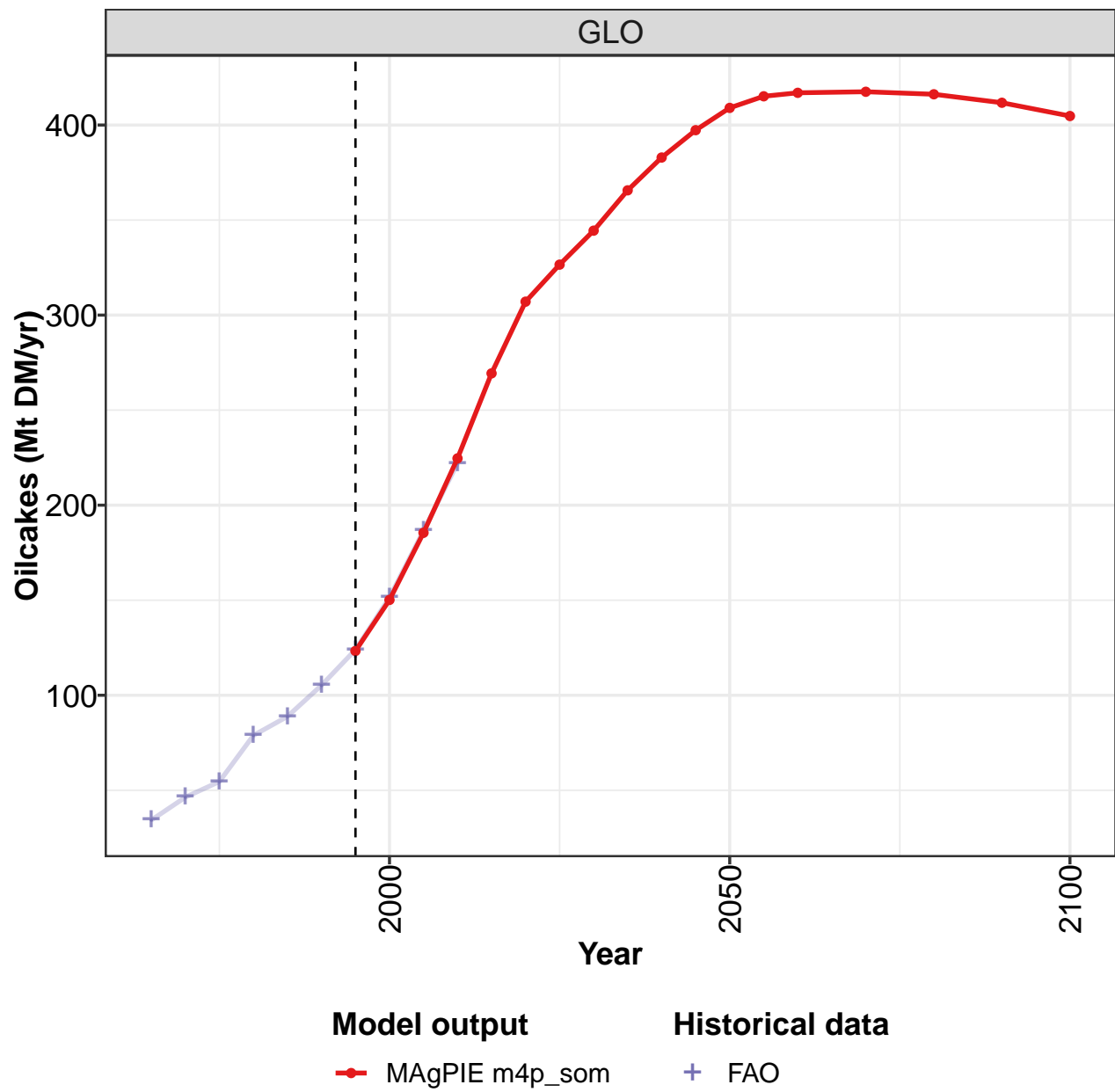
Table 339: MAgPIE m4p\_som — Demand—Feed—Secondary products—Molasses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	5.2	7.0	8.1	9.0	10.1	10.2	9.9	10.6	9.6	10.1
CAZ	0.3	0.3	0.4	0.5	0.3	0.2	0.4	0.5	0.5	0.4
CHA	0.0	0.0	0.0	0.1	0.1	0.3	0.3	0.7	0.3	1.1
EUR	1.4	1.9	2.8	3.1	3.7	3.8	3.2	2.6	1.4	0.8
IND	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.3
JPN	0.1	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1
LAM	1.0	1.2	1.3	1.6	2.0	2.0	2.1	2.2	2.4	2.5
MEA	0.1	0.2	0.3	0.3	0.4	0.4	0.5	0.4	0.5	0.7
NEU	0.0	0.1	0.1	0.2	0.3	0.3	0.3	0.4	0.3	0.4
OAS	0.1	0.2	0.1	0.2	0.3	0.6	0.6	0.9	1.3	1.2
REF	0.1	0.2	0.3	0.5	0.6	0.6	0.5	0.4	0.5	0.4
SSA	0.2	0.3	0.3	0.4	0.5	0.5	0.5	0.7	0.7	0.7
USA	1.8	2.4	2.2	1.9	1.8	1.1	1.1	1.4	1.4	1.4

Table 340: FAO — Demand—Feed—Secondary products—Molasses (Mt DM/yr)

6.7.4 Oilcakes

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

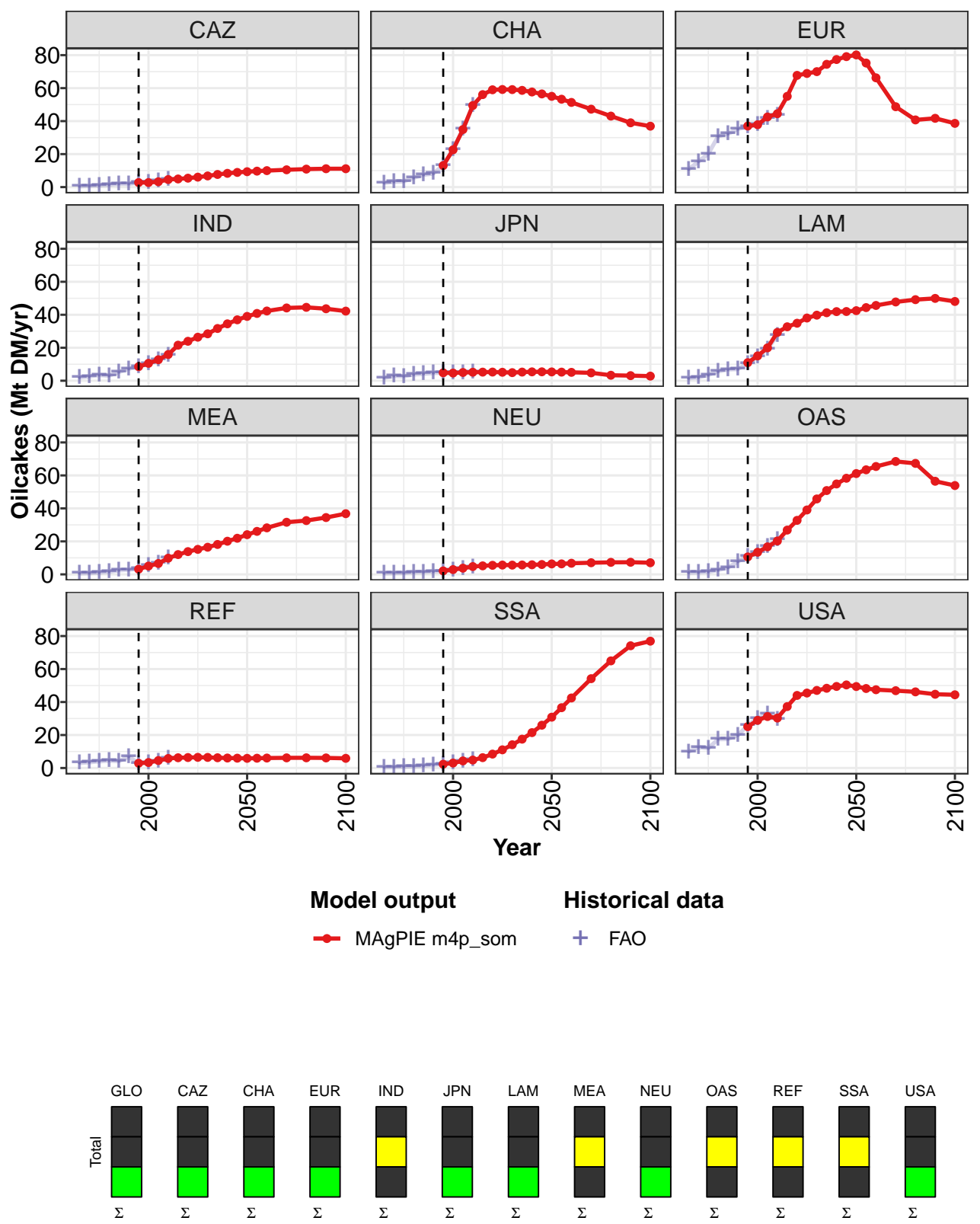


Figure 114: MAGPIE m4p\_som — Demand—Feed—Secondary products—Oilcakes (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	123	150	185	225	269	307	327	344	366	383	397
CAZ	3	3	3	5	5	5	6	7	8	8	9
CHA	13	23	35	49	56	59	59	59	59	58	56
EUR	37	38	43	45	55	68	69	70	74	77	79
IND	9	11	13	16	22	24	26	28	32	35	37
JPN	5	5	5	5	5	5	5	5	5	5	5
LAM	11	15	20	29	33	35	38	40	41	42	42
MEA	3	5	7	10	12	14	15	16	18	20	22
NEU	2	3	4	5	5	5	6	6	6	6	6
OAS	11	13	17	20	27	33	39	46	51	55	58
REF	3	3	5	6	6	6	6	6	6	6	6
SSA	2	3	4	5	6	8	11	14	18	21	26
USA	25	29	31	30	37	44	45	47	48	49	50

Table 341: MAgPIE m4p\_som — Demand—Feed—Secondary products—Oilcakes (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	409	415	417	418	416	412	405
CAZ	9	10	10	10	11	11	11
CHA	55	53	51	47	43	39	37
EUR	80	75	66	49	41	42	39
IND	39	41	42	44	45	44	42
JPN	5	5	5	5	3	3	3
LAM	42	44	46	48	49	50	48
MEA	24	26	28	32	33	34	37
NEU	6	6	7	7	7	7	7
OAS	61	63	65	68	67	56	54
REF	6	6	6	6	6	6	6
SSA	31	37	42	54	65	74	77
USA	49	48	47	47	46	45	44

Table 342: MAgPIE m4p\_som — Demand—Feed—Secondary products—Oilcakes (Mt DM/yr) [PART 2/2]

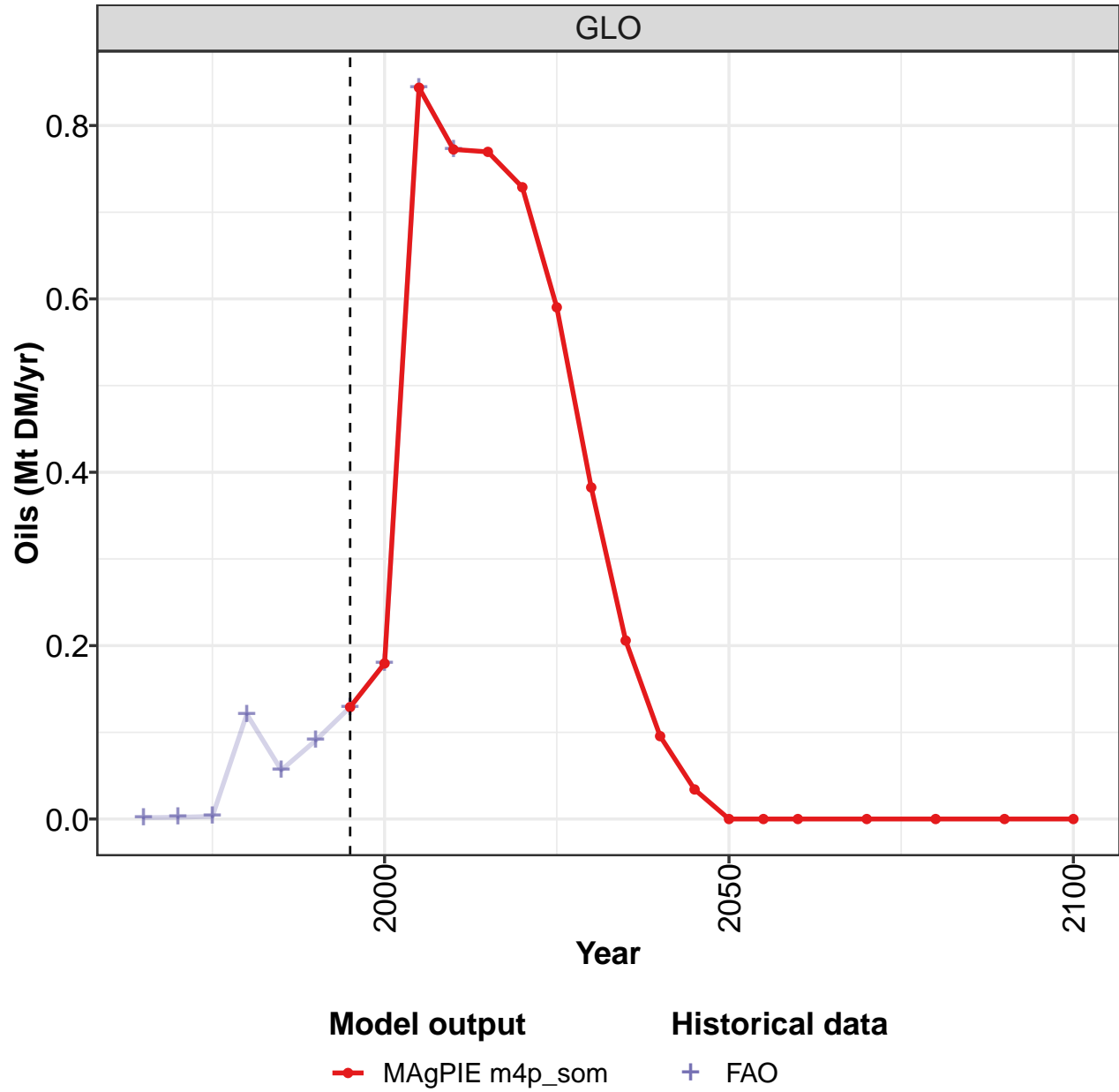
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	34	46	55	79	89	105	124	151	187	222
CAZ	0	1	1	1	2	2	3	3	4	5
CHA	2	3	3	6	7	8	13	23	35	49
EUR	11	15	20	31	32	35	37	38	42	44
IND	2	3	3	3	5	7	9	10	13	16
JPN	2	3	3	4	4	5	5	5	5	5
LAM	1	2	3	6	7	7	10	15	19	27
MEA	1	1	1	2	2	3	3	5	7	10
NEU	1	1	1	1	1	2	2	3	4	5
OAS	1	1	2	3	4	8	11	13	17	21
REF	3	3	4	4	4	7	3	3	4	6
SSA	0	1	1	1	1	2	2	3	4	5
USA	10	13	12	17	18	20	26	30	33	30

Table 343: FAO — Demand—Feed—Secondary products—Oilcakes (Mt DM/yr)



6.7.5 Oils

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

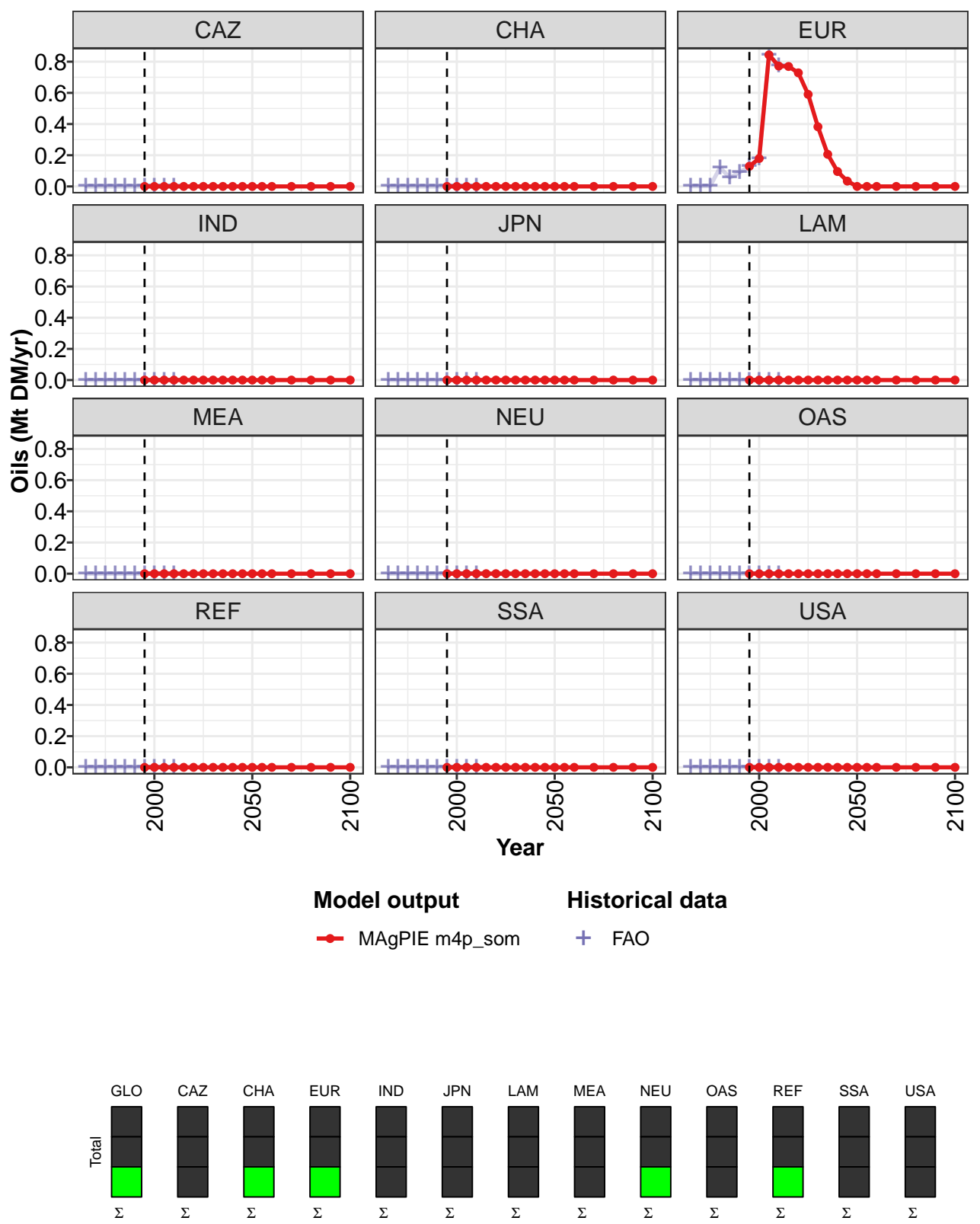


Figure 115: MAgPIE m4p\_som — Demand—Feed—Secondary products—Oils (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.129	0.179	0.844	0.772	0.770	0.729	0.590	0.383	0.206	0.096	0.034
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.129	0.179	0.844	0.772	0.769	0.729	0.590	0.382	0.206	0.096	0.034
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 344: MAgPIE m4p\_som — Demand—Feed—Secondary products—Oils (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.000	0.000	0.000	0.000	0.000	0.000	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000

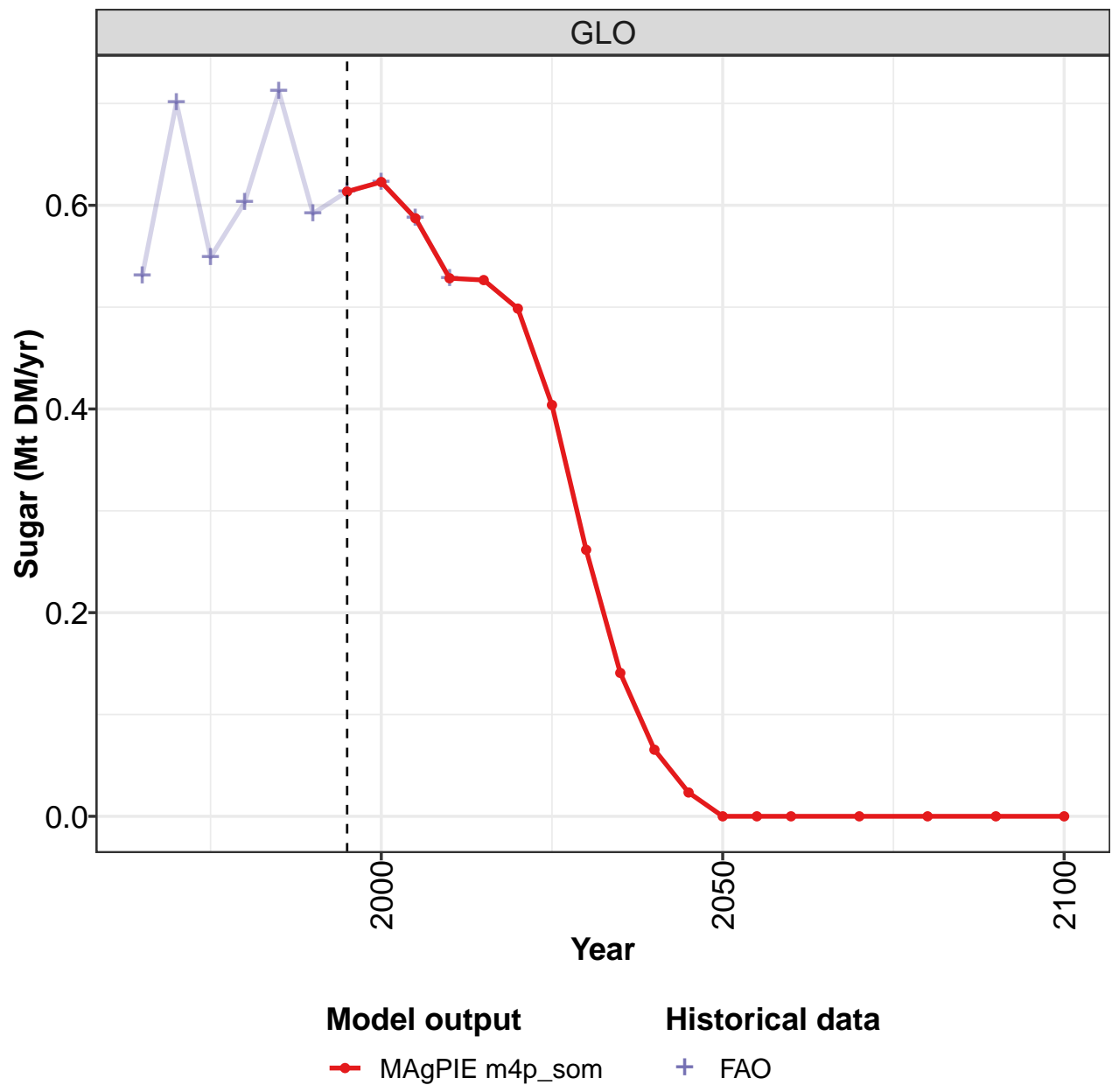
Table 345: MAgPIE m4p\_som — Demand—Feed—Secondary products—Oils (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.002	0.002	0.003	0.121	0.056	0.091	0.129	0.179	0.844	0.772
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.002	0.002	0.003	0.120	0.056	0.091	0.129	0.179	0.844	0.772
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 346: FAO — Demand—Feed—Secondary products—Oils (Mt DM/yr)

6.7.6 Sugar

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



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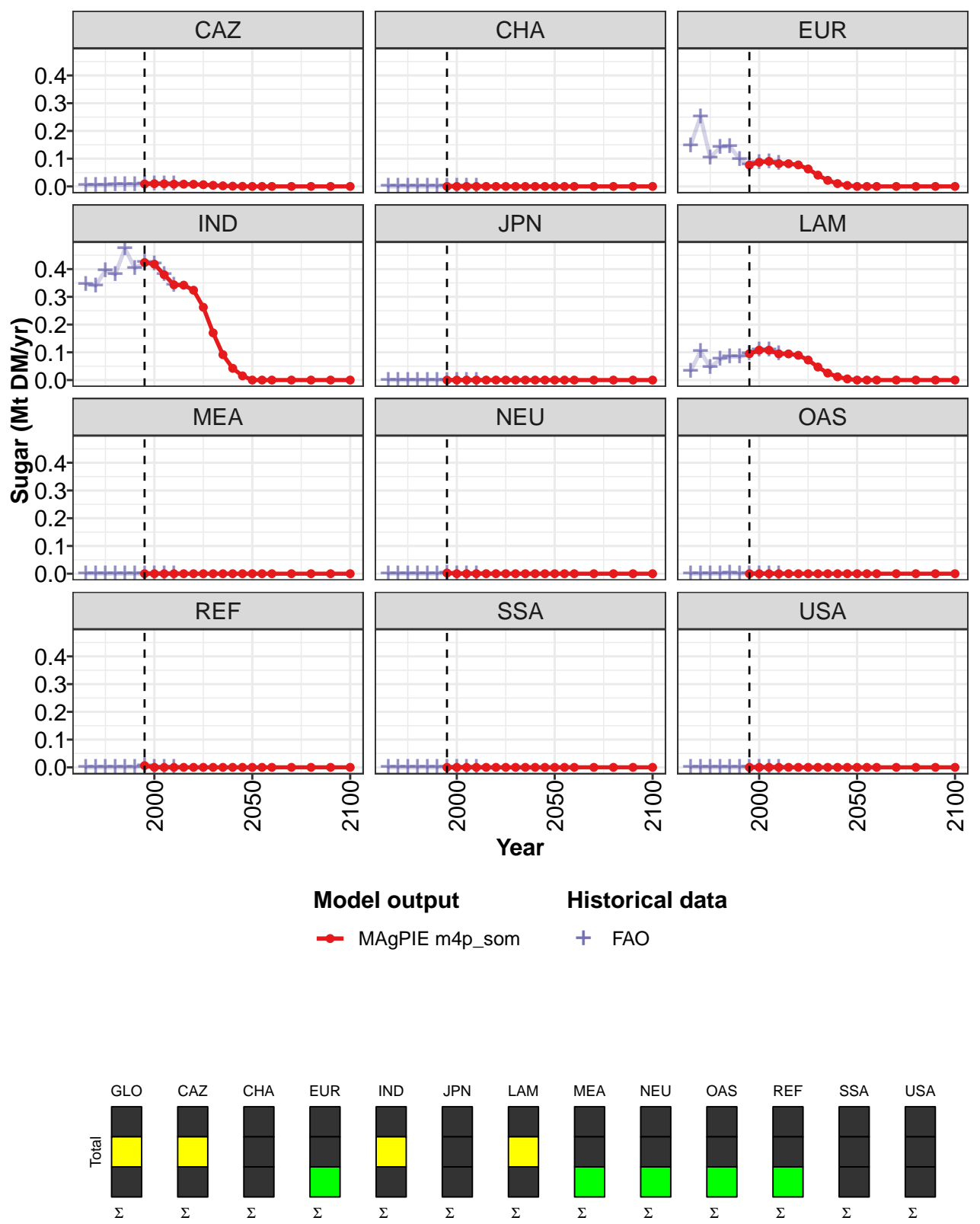


Figure 116: MAGPIE m4p\_som — Demand—Feed—Secondary products—Sugar (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.613	0.623	0.587	0.528	0.527	0.499	0.404	0.262	0.141	0.065	0.023
CAZ	0.009	0.010	0.009	0.008	0.008	0.008	0.006	0.004	0.002	0.001	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.077	0.087	0.090	0.082	0.082	0.078	0.063	0.041	0.022	0.010	0.004
IND	0.424	0.418	0.380	0.343	0.342	0.324	0.262	0.170	0.091	0.043	0.015
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.095	0.108	0.108	0.095	0.094	0.089	0.072	0.047	0.025	0.012	0.004
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 347: MAgPIE m4p\_som — Demand—Feed—Secondary products—Sugar (Mt DM/yr) [PART 1/2]

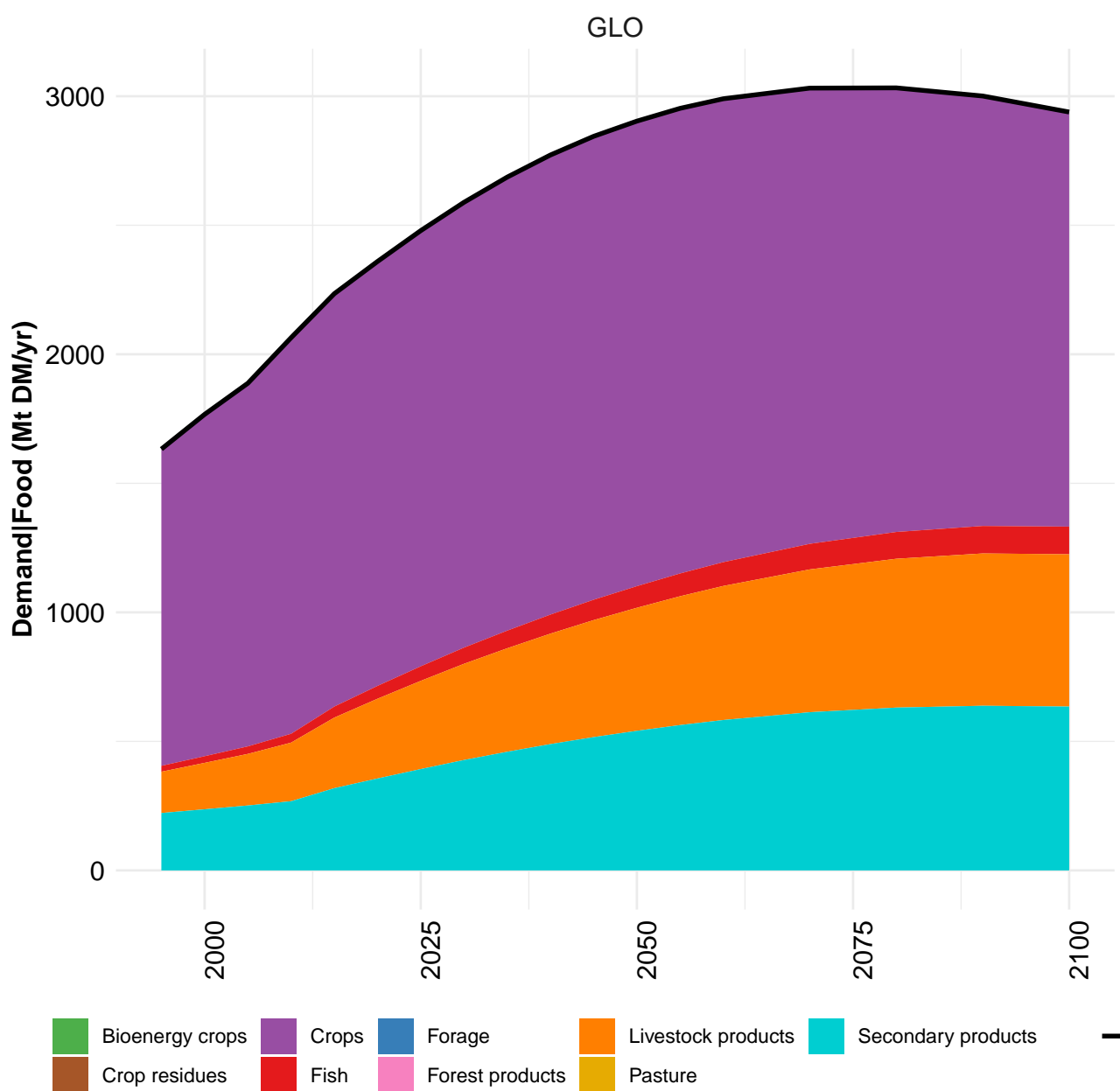
	2050	2055	2060	2070	2080	2090	2100
GLO	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.000	0.000	0.000	0.000	0.000	0.000	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000

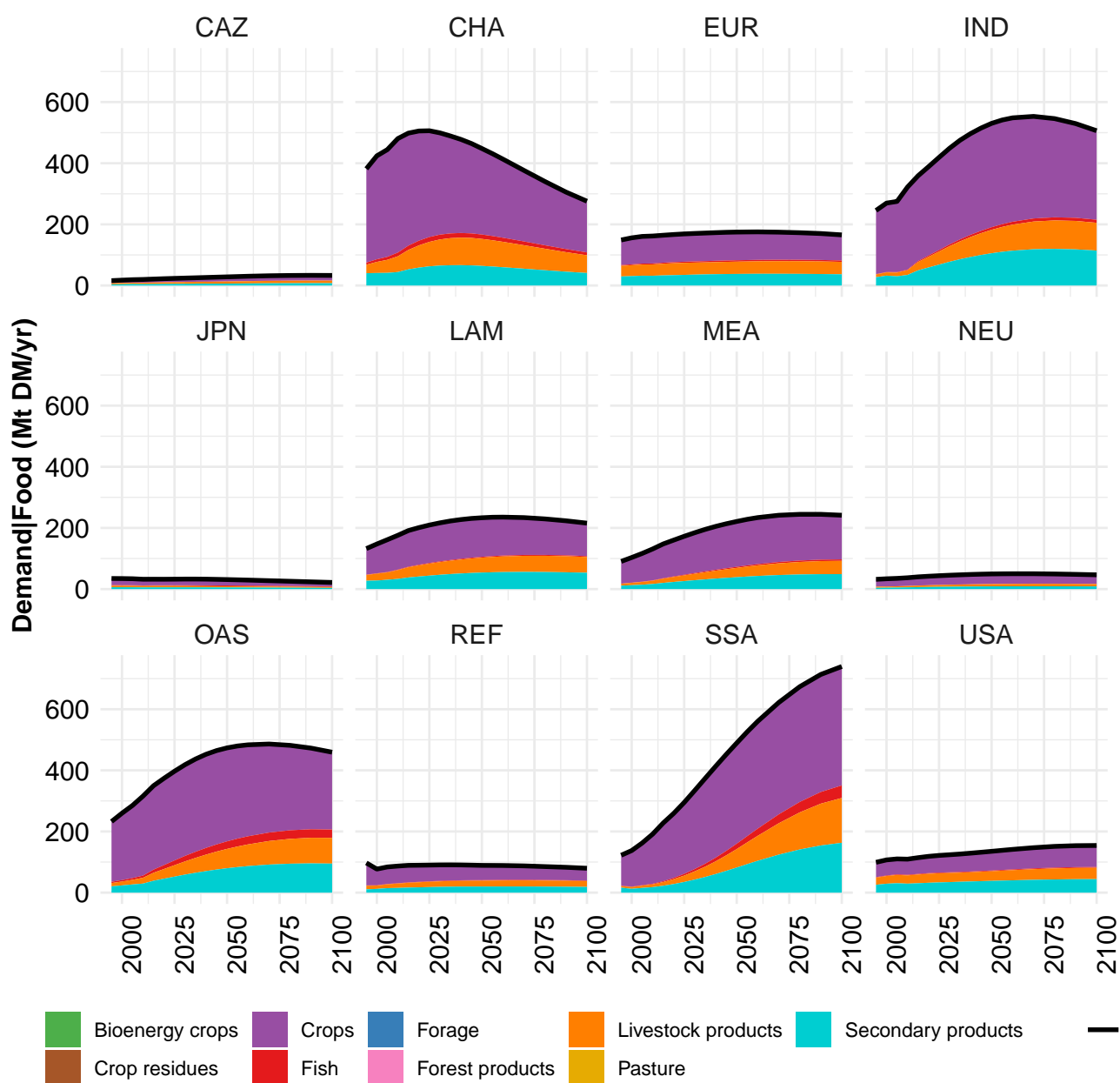
Table 348: MAgPIE m4p\_som — Demand—Feed—Secondary products—Sugar (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.531	0.701	0.549	0.603	0.712	0.592	0.614	0.623	0.587	0.528
CAZ	0.004	0.005	0.005	0.006	0.006	0.007	0.009	0.010	0.009	0.008
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.147	0.252	0.103	0.141	0.145	0.098	0.077	0.087	0.090	0.082
IND	0.346	0.340	0.395	0.381	0.474	0.404	0.424	0.418	0.380	0.343
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.033	0.103	0.045	0.075	0.085	0.083	0.095	0.108	0.108	0.095
MEA	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 349: FAO — Demand—Feed—Secondary products—Sugar (Mt DM/yr)

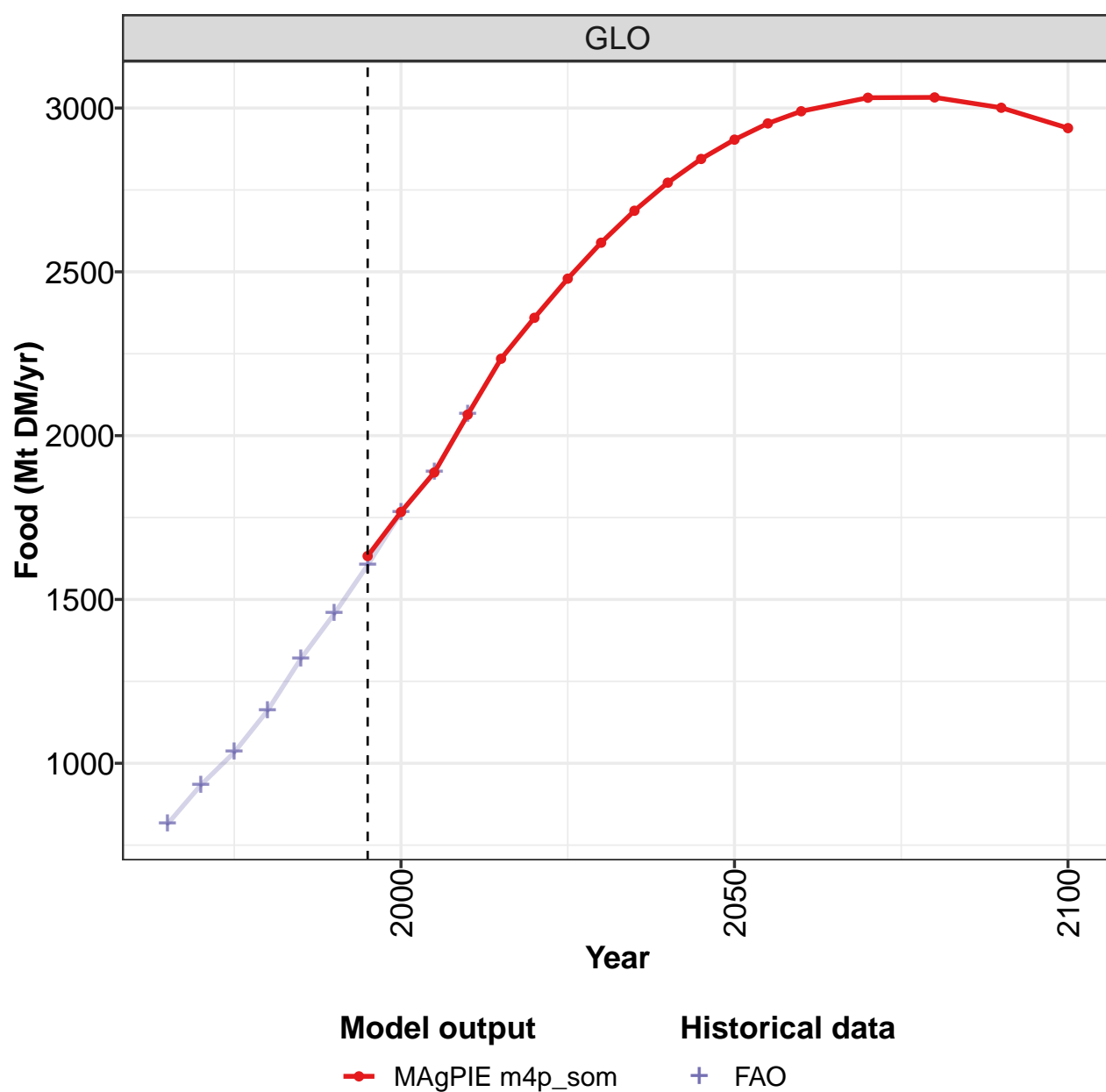
## 7 Food







## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

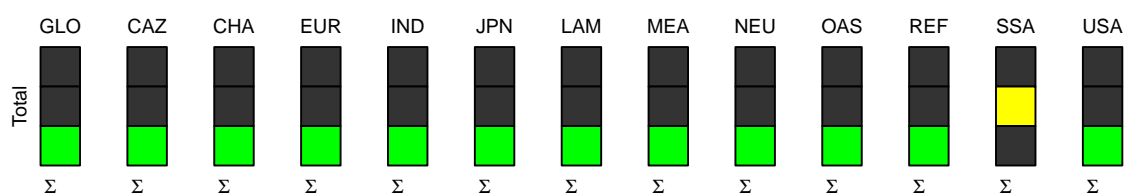
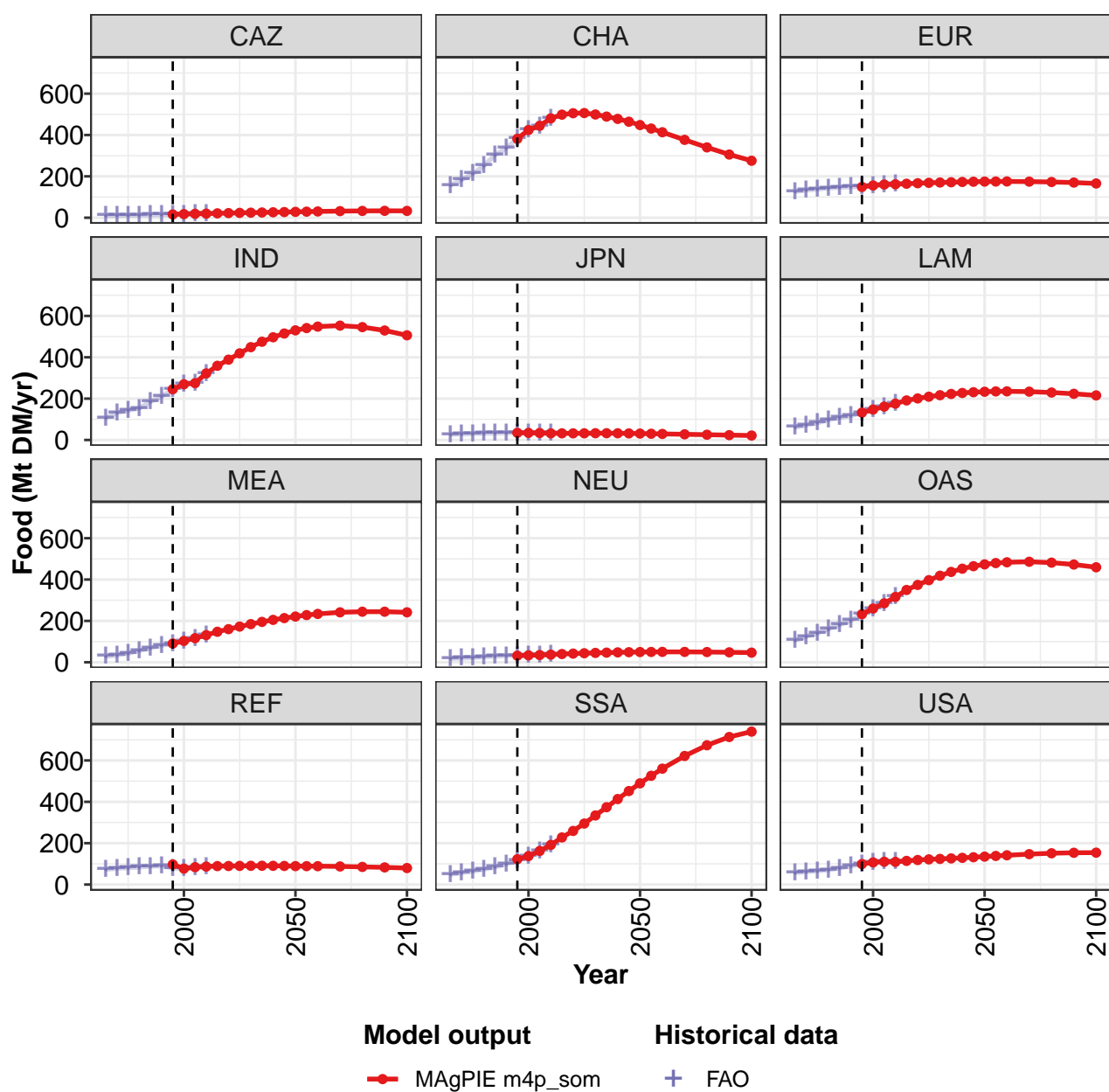


Figure 117: MAgPIE m4p\_som — Demand—Food (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1633	1767	1888	2064	2235	2360	2479	2589	2687	2772	2845
CAZ	16	18	19	20	21	22	23	24	25	26	27
CHA	382	424	444	481	498	505	506	499	489	478	464
EUR	149	156	161	162	164	167	169	170	172	173	174
IND	245	270	275	322	359	388	419	449	475	497	515
JPN	35	34	34	32	32	32	32	33	33	32	32
LAM	132	147	162	176	191	201	209	217	223	227	231
MEA	90	103	117	131	148	160	173	184	195	205	214
NEU	32	34	35	37	40	42	44	45	47	48	49
OAS	233	260	285	316	350	374	397	419	437	453	465
REF	97	77	84	87	89	90	90	91	91	91	90
SSA	122	138	162	192	228	259	295	334	374	413	452
USA	99	107	110	109	114	119	122	124	126	129	132

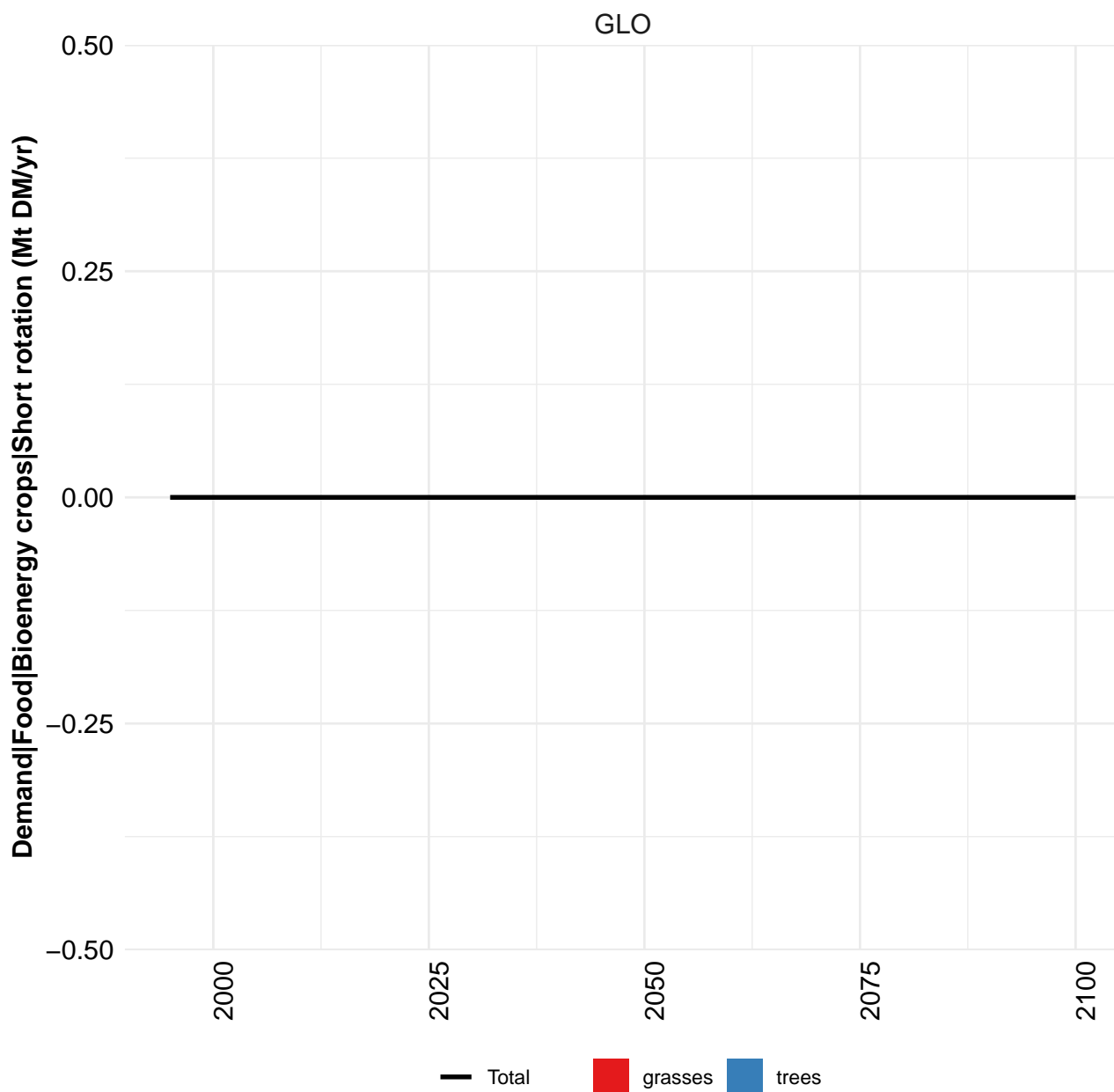
Table 350: MAgPIE m4p\_som — Demand—Food (Mt DM/yr) [PART 1/2]

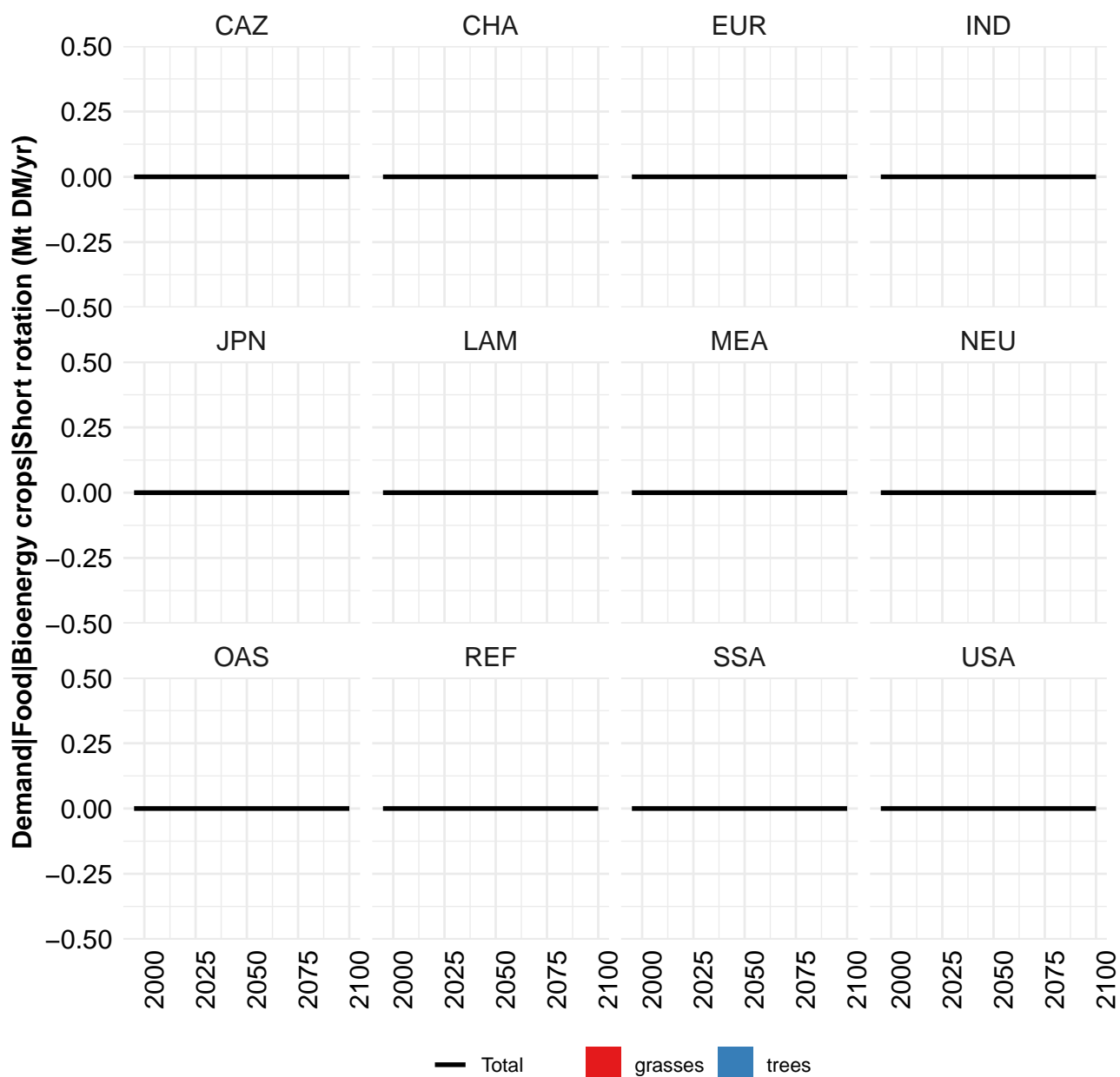
	2050	2055	2060	2070	2080	2090	2100
GLO	2904	2953	2990	3031	3032	3001	2939
CAZ	28	29	30	32	33	33	33
CHA	448	431	413	377	340	306	276
EUR	175	175	175	175	173	170	166
IND	530	541	548	553	546	530	506
JPN	31	30	29	27	26	24	22
LAM	233	235	235	234	230	223	216
MEA	221	228	234	241	244	245	242
NEU	50	50	50	50	49	48	47
OAS	473	480	483	486	482	473	459
REF	89	89	89	88	85	83	80
SSA	489	526	560	622	674	714	740
USA	135	138	141	147	151	154	154

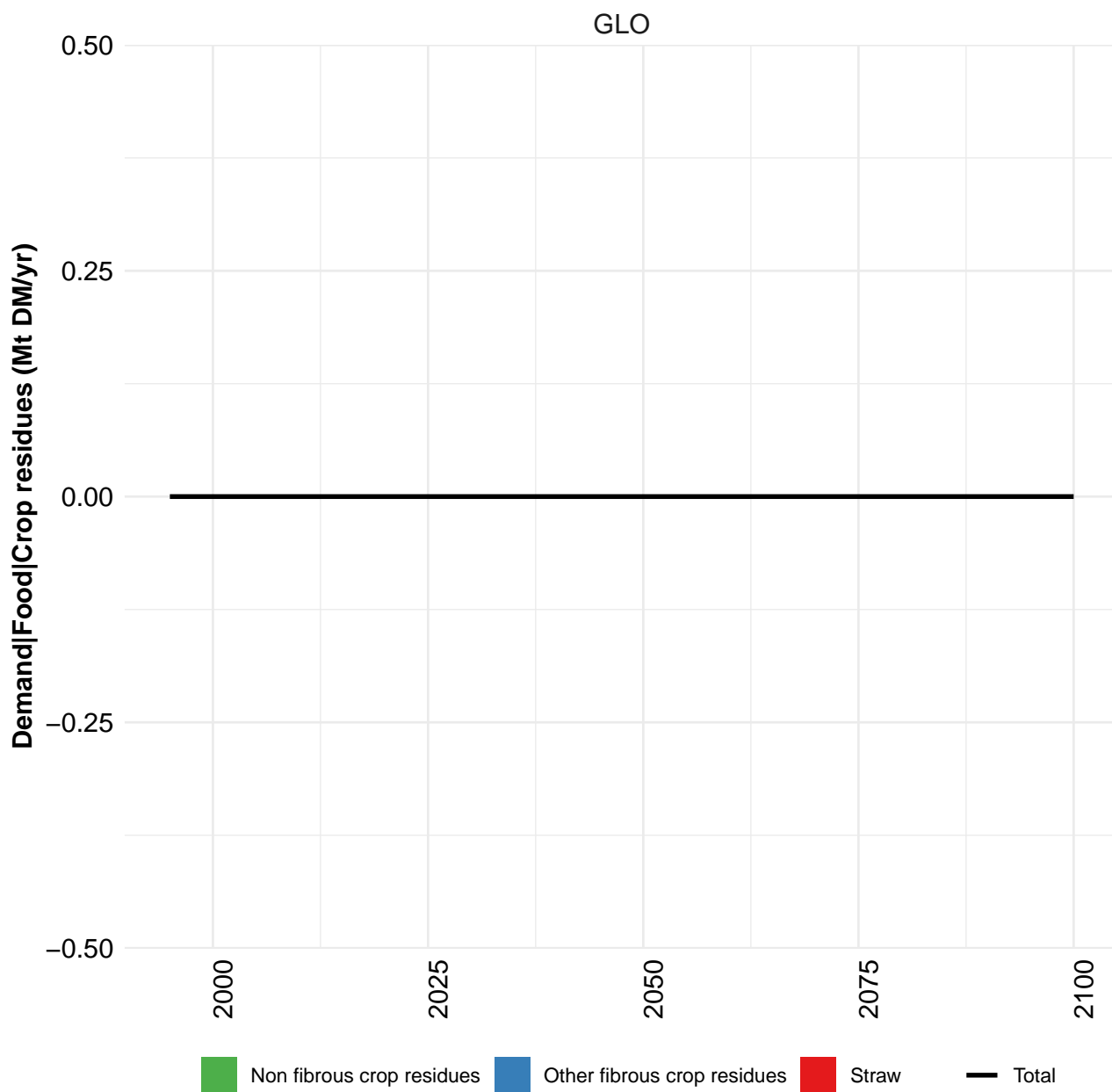
Table 351: MAgPIE m4p\_som — Demand—Food (Mt DM/yr) [PART 2/2]

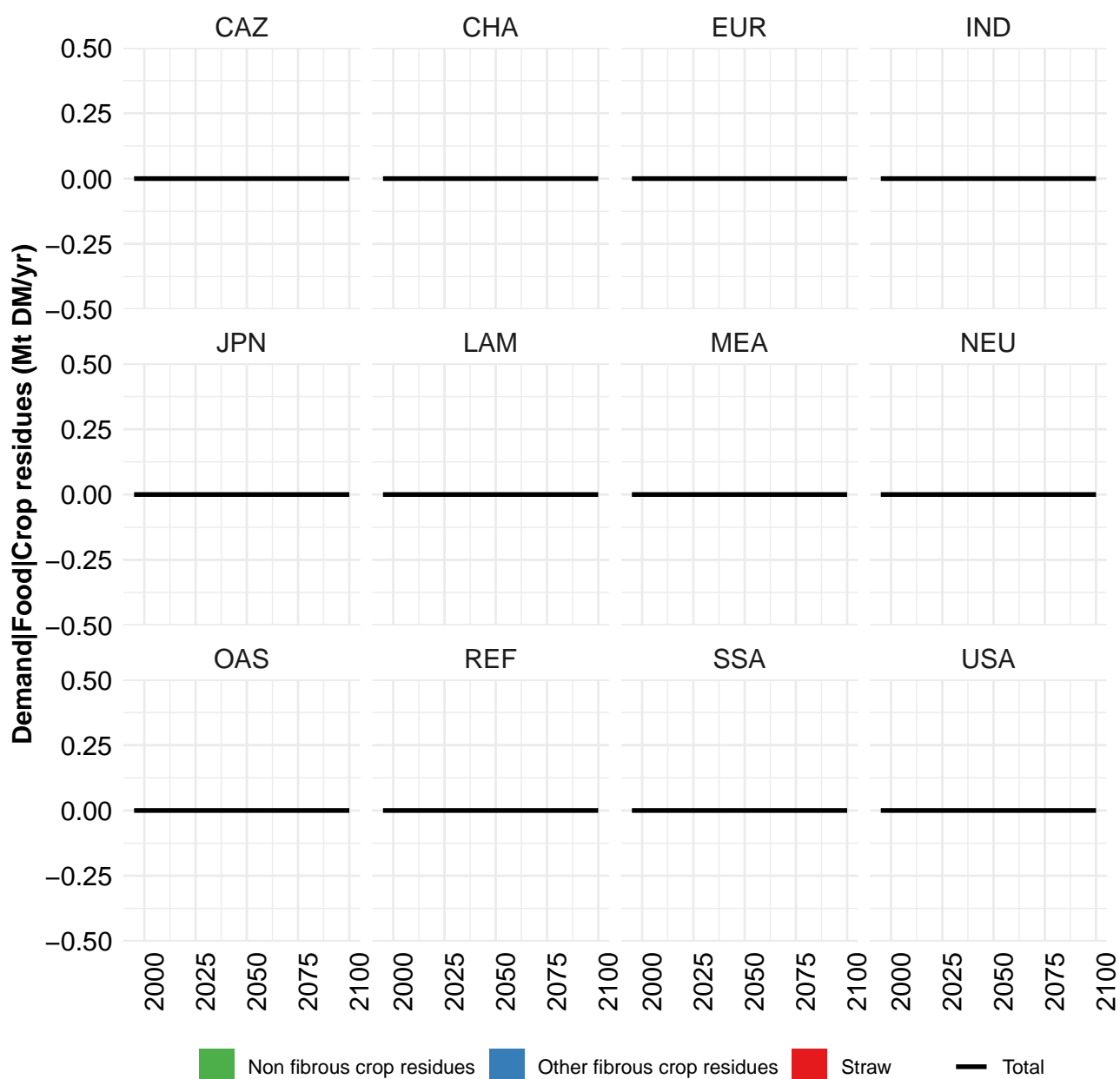
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	815	934	1033	1161	1319	1456	1605	1765	1888	2064
CAZ	10	11	12	12	13	14	16	17	19	20
CHA	156	183	212	251	303	336	381	424	444	481
EUR	126	133	137	143	147	149	149	156	161	162
IND	107	131	143	154	185	211	243	268	275	322
JPN	26	29	30	32	34	35	35	34	34	32
LAM	61	72	83	98	108	117	132	147	162	176
MEA	28	34	43	56	69	81	90	103	117	131
NEU	18	20	22	26	29	32	32	34	35	37
OAS	105	124	141	160	181	202	232	260	285	316
REF	73	78	81	84	87	91	78	77	84	87
SSA	49	57	64	74	84	99	117	138	162	191
USA	56	62	65	71	80	89	99	107	110	110

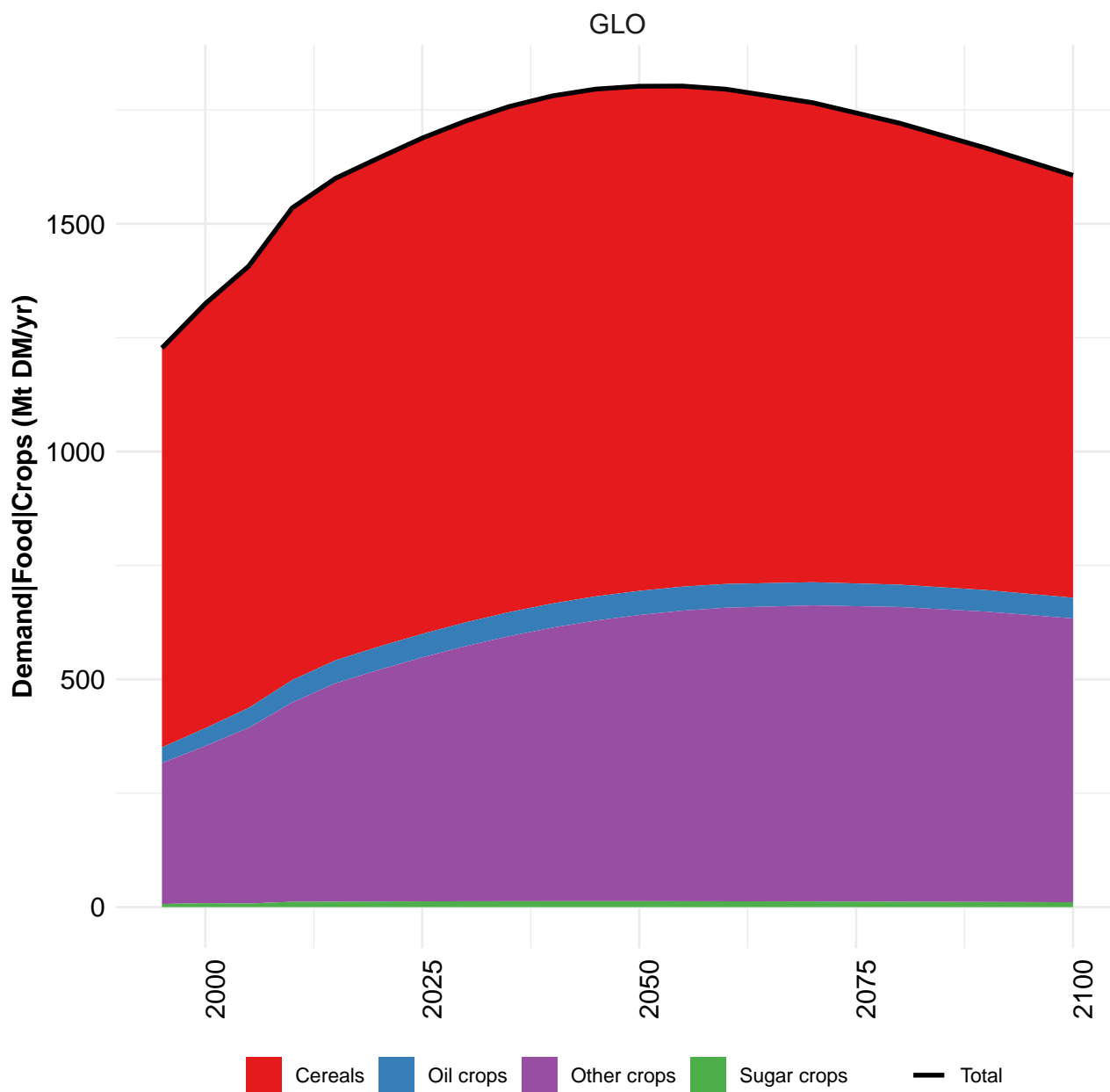
Table 352: FAO — Demand—Food (Mt DM/yr)



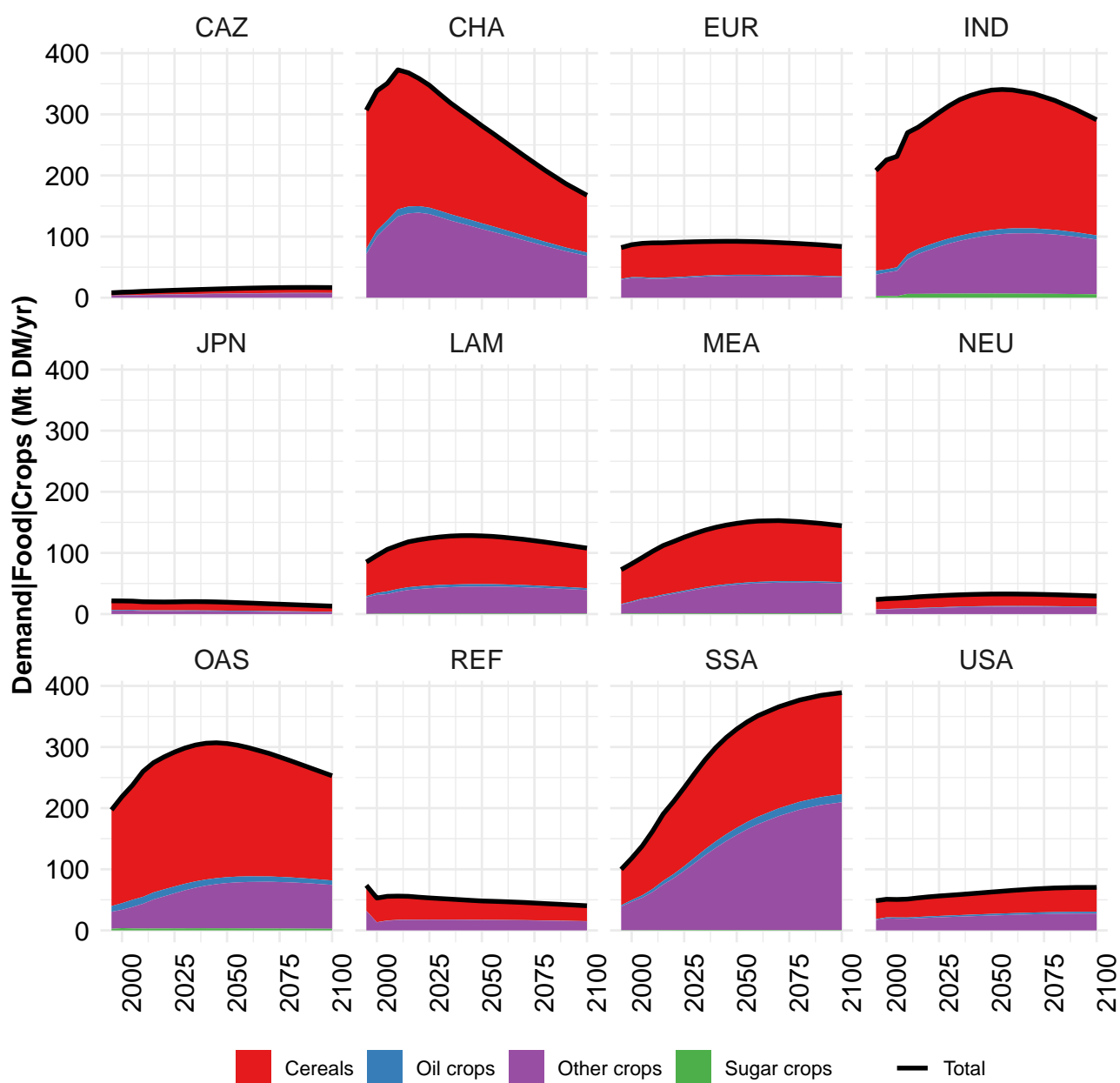






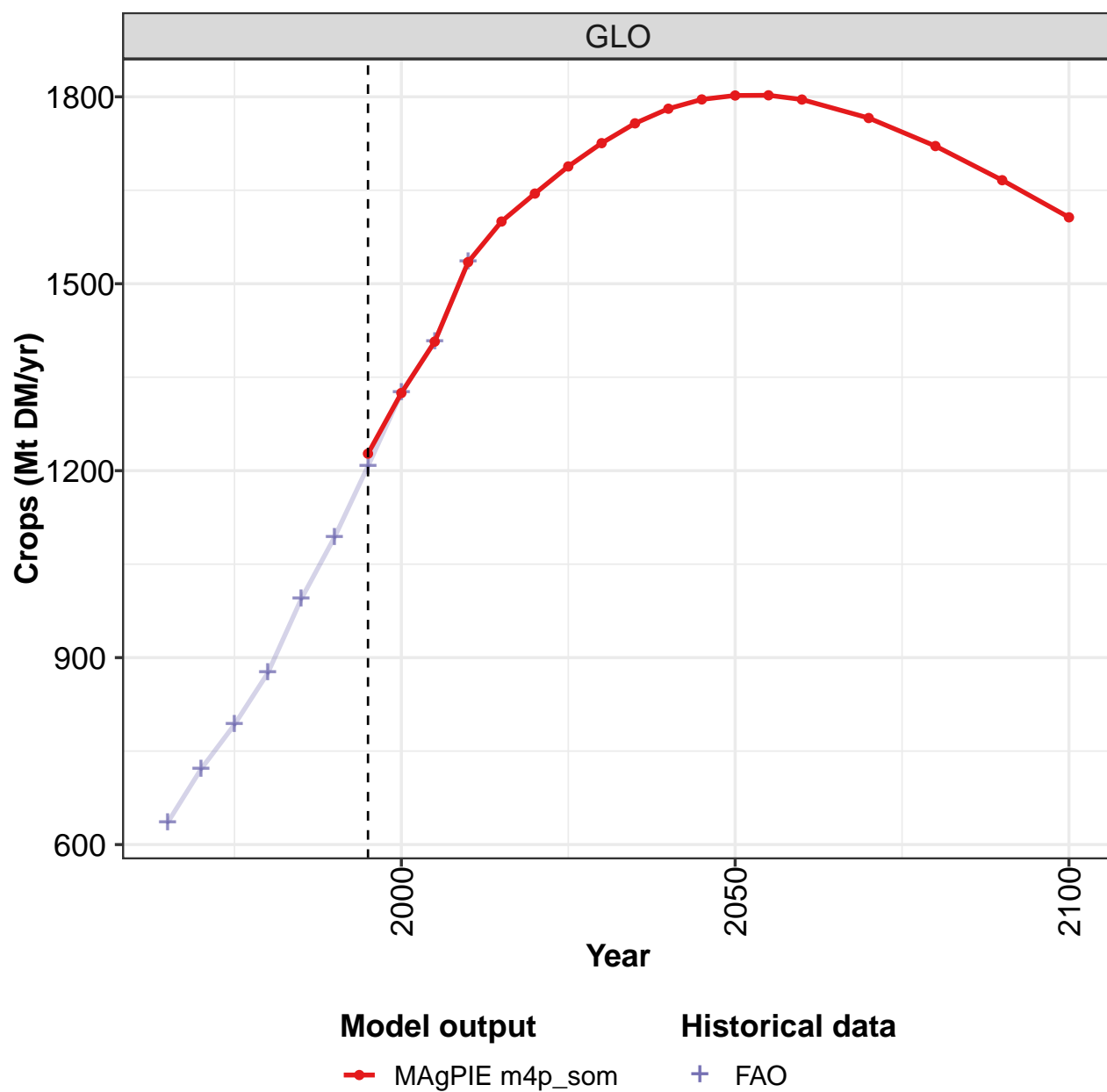






## 7.1 Crops

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

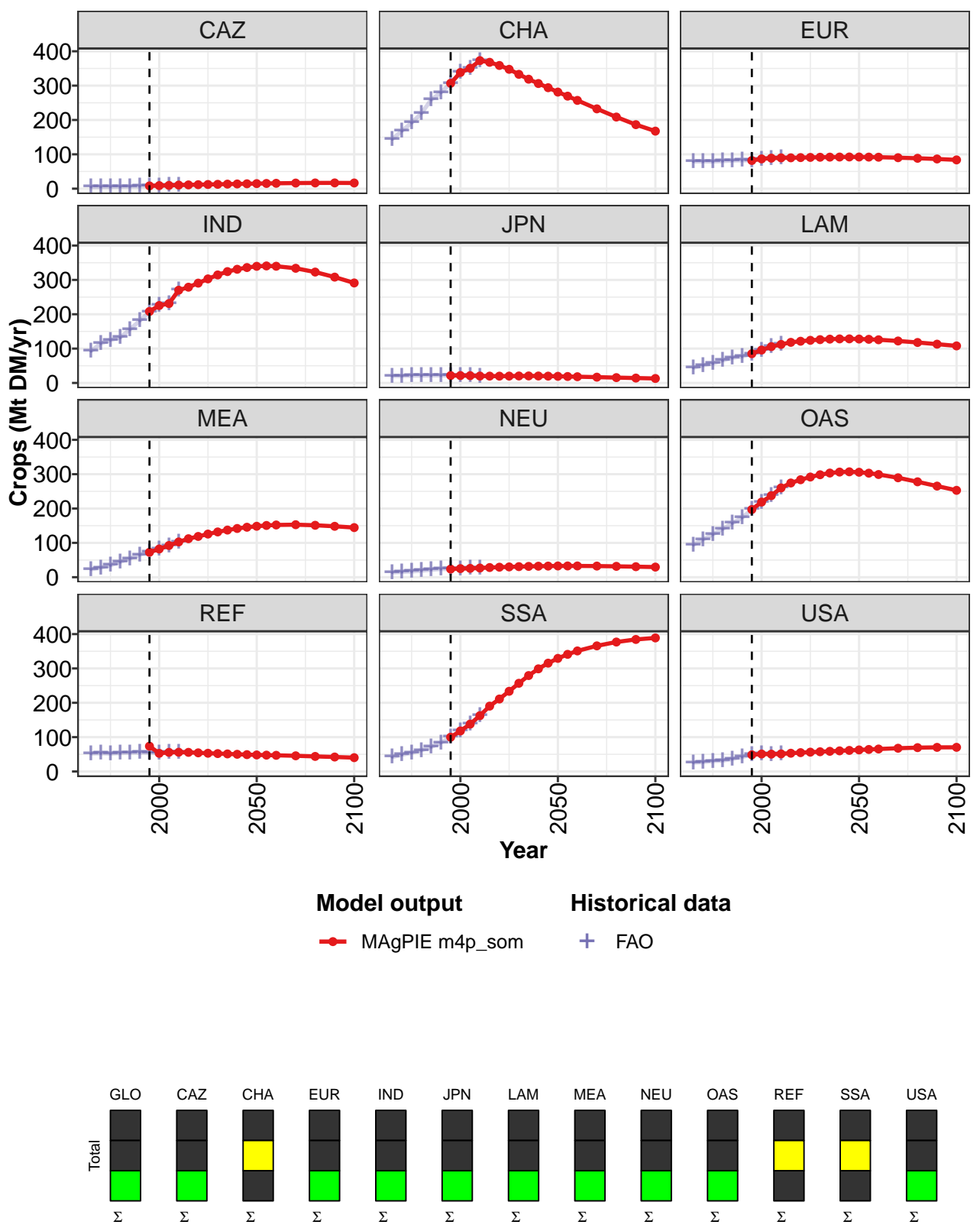


Figure 118: MAgPIE m4p\_som — Demand—Food—Crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1227	1325	1407	1535	1600	1645	1688	1726	1757	1781	1796
CAZ	8	9	10	10	11	12	12	13	13	14	14
CHA	307	338	351	373	368	359	348	333	319	306	294
EUR	82	87	89	90	90	90	91	92	92	92	92
IND	208	225	231	270	279	291	303	315	324	331	336
JPN	22	21	21	20	20	20	20	20	20	20	20
LAM	85	96	106	112	118	121	124	126	128	128	128
MEA	73	82	92	103	112	119	126	132	137	142	146
NEU	24	25	26	27	28	29	30	31	31	32	32
OAS	197	219	238	260	274	284	292	298	303	306	307
REF	74	53	56	56	56	54	53	52	51	50	49
SSA	100	118	138	163	190	211	234	257	279	299	316
USA	49	51	51	51	53	55	56	57	59	60	61

Table 353: MAgPIE m4p\_som — Demand—Food—Crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1802	1802	1796	1766	1721	1666	1607
CAZ	15	15	16	16	17	17	17
CHA	281	269	257	232	209	186	168
EUR	92	92	92	90	89	86	84
IND	340	341	340	334	323	308	291
JPN	19	19	18	17	16	14	13
LAM	128	127	126	122	118	113	108
MEA	148	151	152	153	151	148	145
NEU	33	33	33	32	32	31	30
OAS	306	303	299	290	278	265	253
REF	48	48	47	46	44	42	40
SSA	329	341	351	366	377	384	389
USA	63	64	65	68	69	70	70

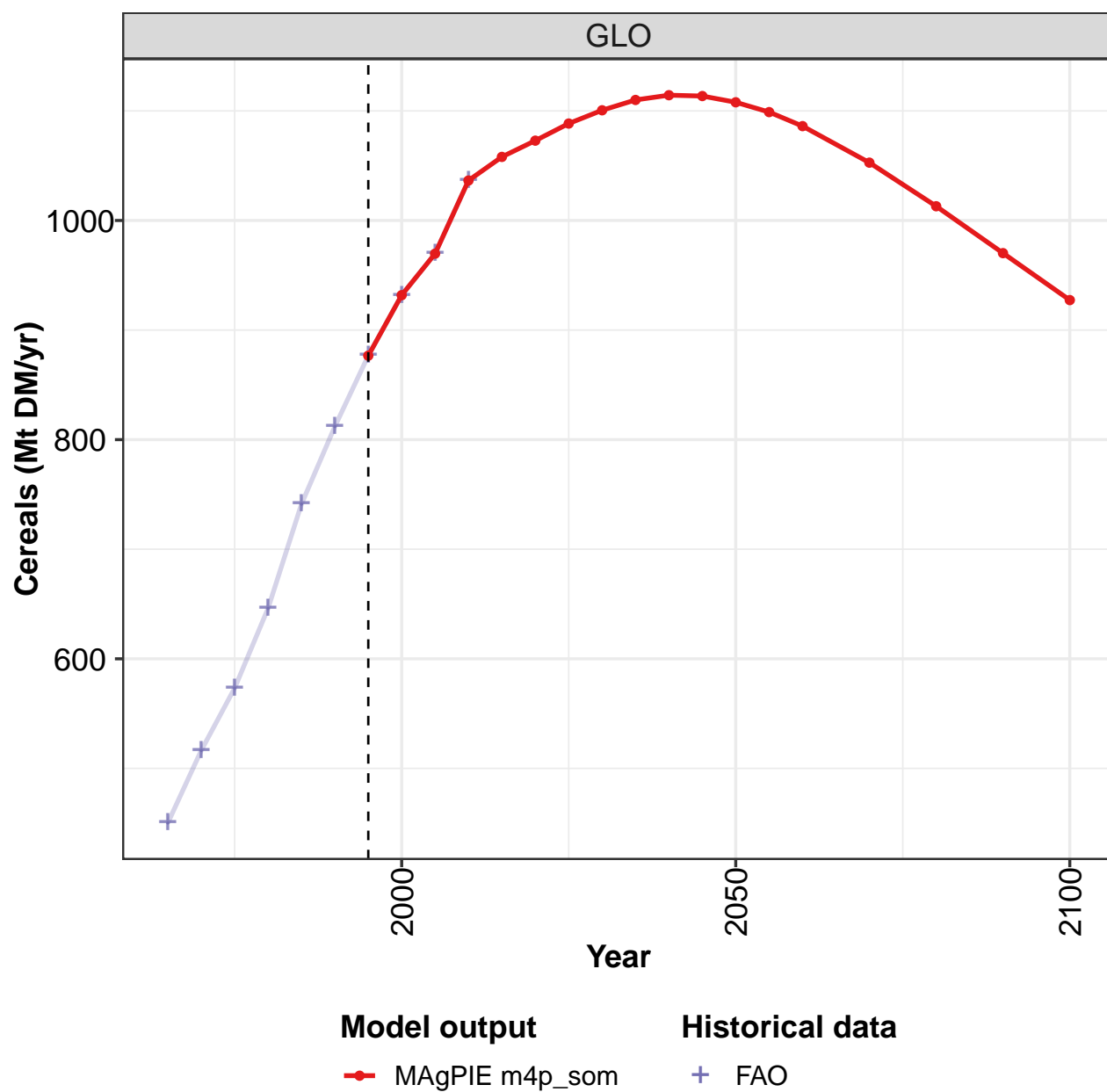
Table 354: MAgPIE m4p\_som — Demand—Food—Crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	635	721	793	875	994	1093	1207	1325	1407	1535
CAZ	5	5	5	6	7	7	8	9	10	10
CHA	144	168	192	219	259	280	307	338	351	373
EUR	79	79	79	80	82	82	82	87	89	90
IND	92	115	125	132	156	181	207	225	231	270
JPN	20	20	21	21	22	22	22	21	21	20
LAM	44	51	57	65	73	77	85	96	106	112
MEA	23	28	35	45	55	65	73	82	92	103
NEU	14	15	17	19	22	24	24	25	26	27
OAS	94	110	125	140	157	173	197	219	238	260
REF	52	53	52	54	55	55	55	53	56	56
SSA	42	49	54	62	71	84	100	118	138	162
USA	26	27	30	32	36	42	49	51	51	51

Table 355: FAO — Demand—Food—Crops (Mt DM/yr)

## 7.1.1 Cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

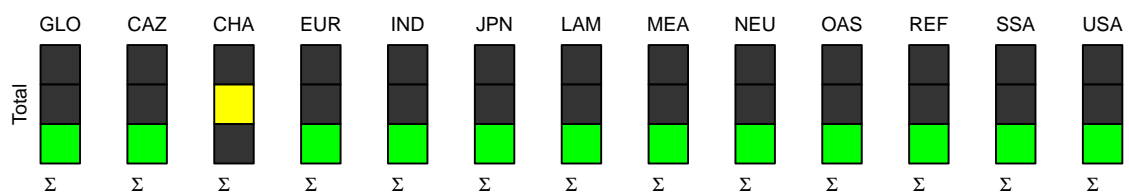
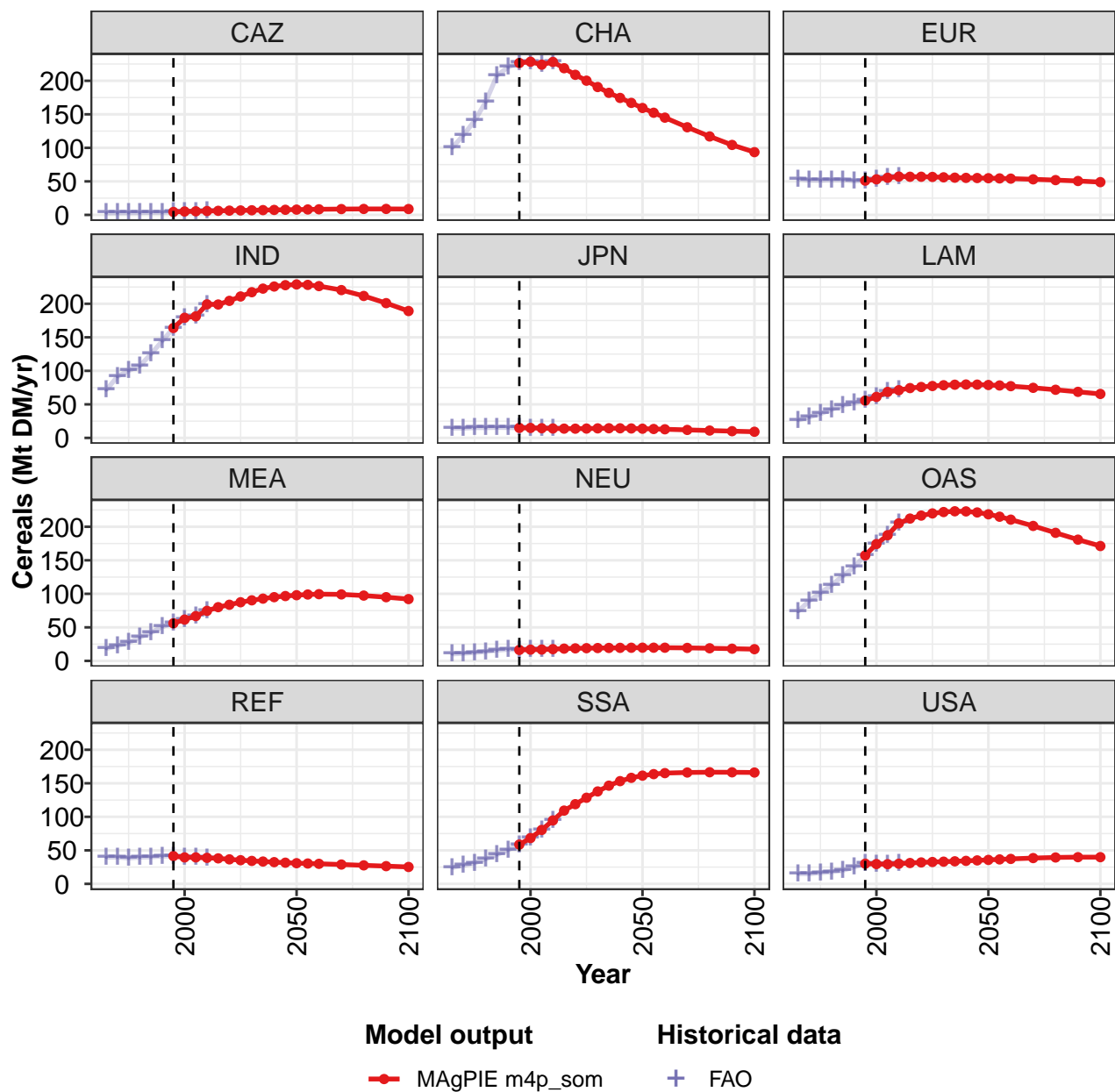


Figure 119: MAgPIE m4p\_som — Demand—Food—Crops—Cereals (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	877	932	970	1036	1058	1073	1088	1101	1110	1114	1114
CAZ	4	5	5	6	6	6	7	7	7	7	8
CHA	227	228	224	228	219	209	200	191	182	174	167
EUR	51	53	55	57	57	57	57	56	56	55	55
IND	164	179	181	199	199	204	211	217	223	226	228
JPN	15	15	14	14	14	14	14	14	14	14	14
LAM	56	61	69	71	74	76	77	79	79	80	79
MEA	56	62	67	75	80	84	87	90	93	95	97
NEU	16	17	17	18	18	19	19	19	19	19	20
OAS	157	174	187	205	212	217	220	222	223	223	221
REF	41	40	40	39	38	37	35	34	33	32	32
SSA	59	68	80	95	109	119	128	138	146	153	158
USA	30	30	29	30	31	32	33	33	34	34	35

Table 356: MAgPIE m4p\_som — Demand—Food—Crops—Cereals (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1108	1099	1086	1053	1013	970	927
CAZ	8	8	8	9	9	9	9
CHA	159	152	145	131	117	104	94
EUR	55	54	54	53	52	51	49
IND	229	228	226	220	212	201	189
JPN	14	13	13	12	11	10	9
LAM	79	78	77	75	72	69	66
MEA	98	99	99	99	97	95	92
NEU	20	20	20	19	19	18	18
OAS	219	215	211	201	191	181	171
REF	31	30	30	29	28	26	25
SSA	161	164	165	166	166	166	166
USA	36	36	37	38	39	40	40

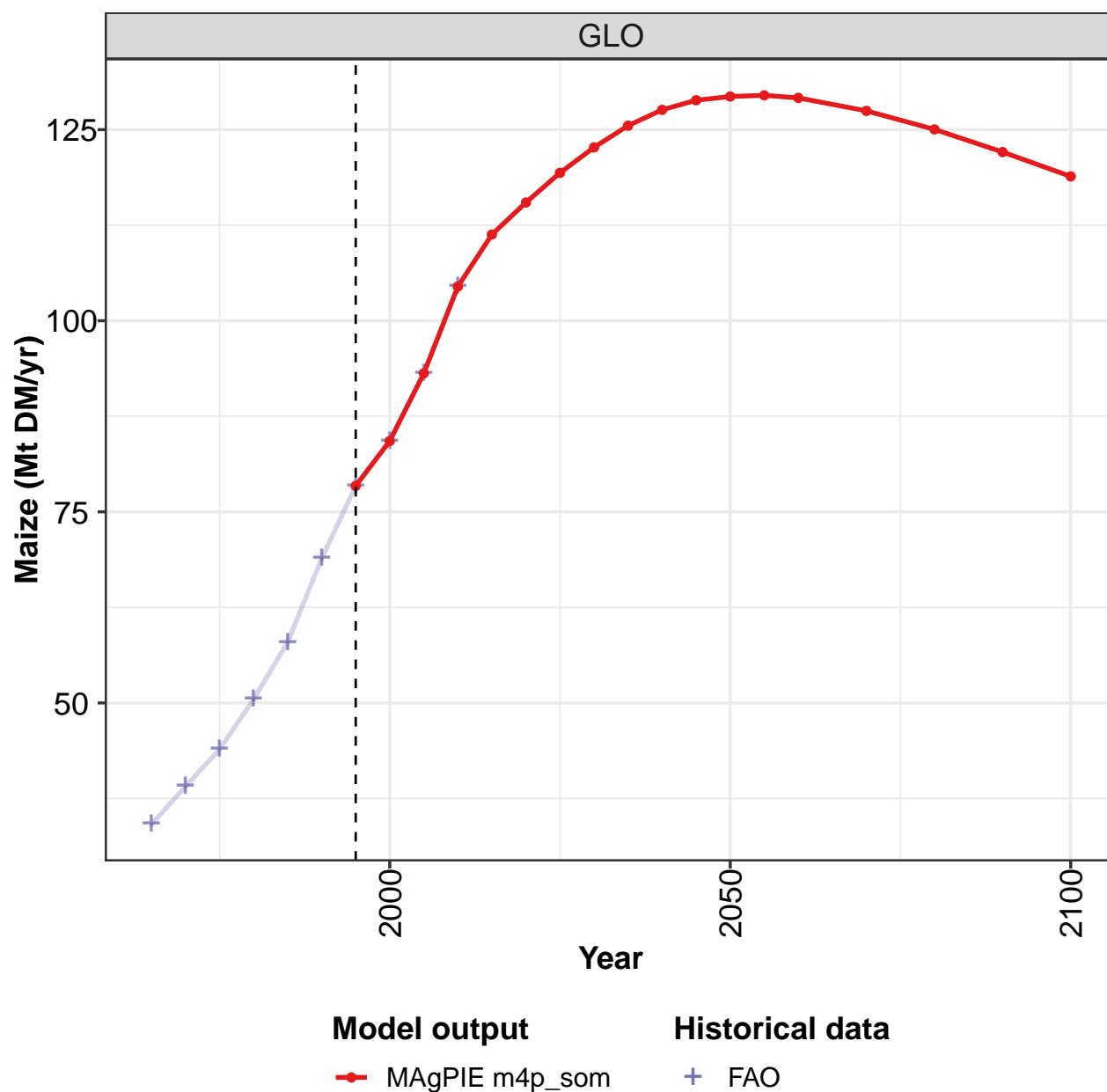
Table 357: MAgPIE m4p\_som — Demand—Food—Crops—Cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	450	516	573	646	741	812	877	932	970	1037
CAZ	3	3	3	3	4	4	4	5	5	6
CHA	100	119	140	169	208	220	227	228	224	228
EUR	54	52	52	52	52	51	51	53	55	57
IND	71	91	100	107	125	144	164	179	181	199
JPN	15	14	15	15	15	15	15	15	14	14
LAM	26	31	36	42	48	52	56	61	69	71
MEA	18	22	27	35	42	51	56	62	67	75
NEU	10	11	12	14	16	17	16	17	17	18
OAS	74	90	101	113	127	140	157	174	187	205
REF	40	40	38	40	40	41	41	40	39	39
SSA	24	28	31	37	44	51	59	68	80	95
USA	15	15	17	18	20	25	30	30	29	30

Table 358: FAO — Demand—Food—Crops—Cereals (Mt DM/yr)

## 7.1.2 Cereals—Maize

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

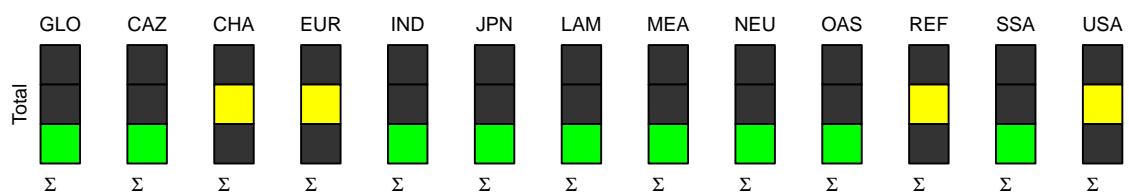
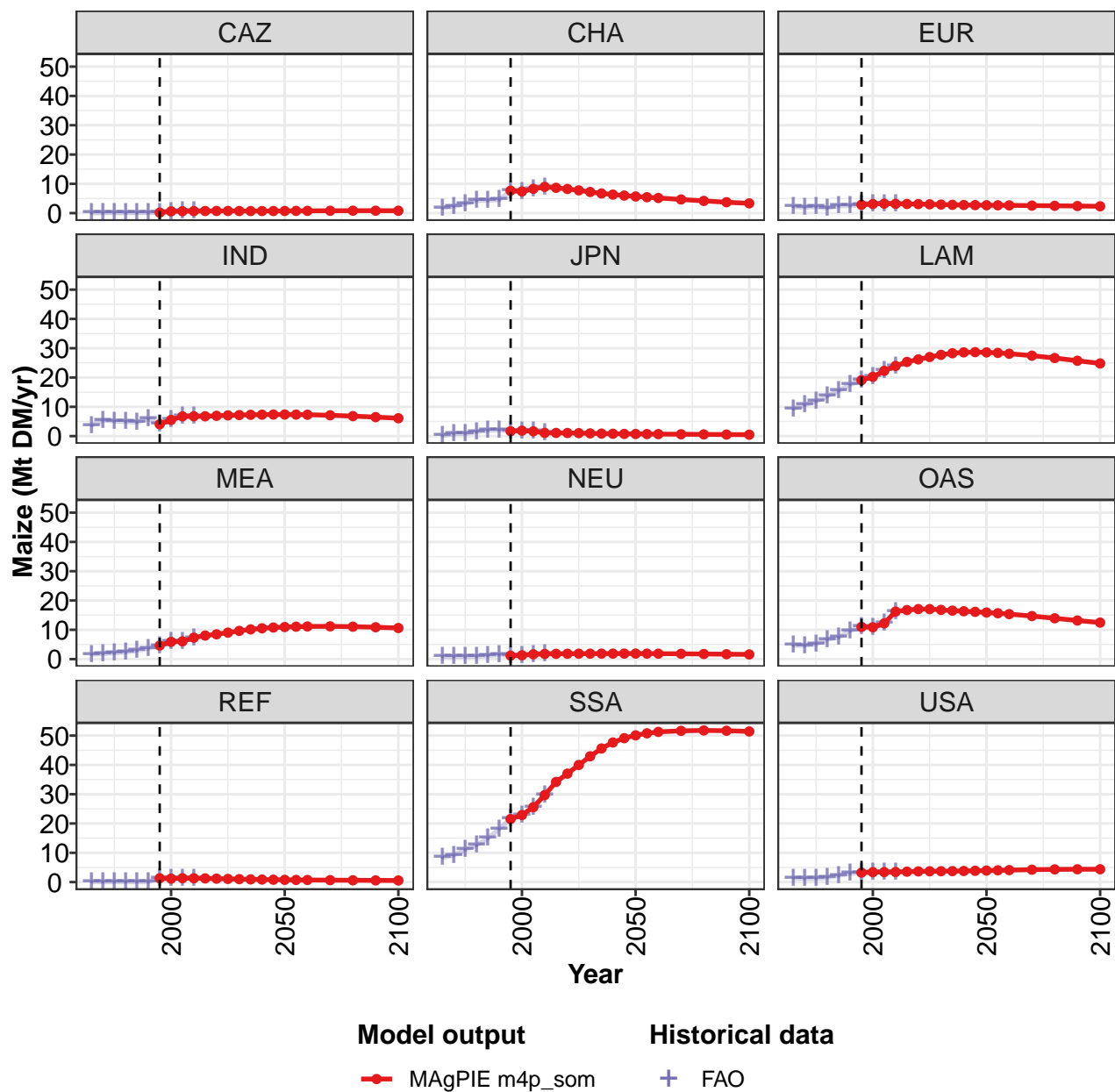


Figure 120: MAgPIE m4p\_som — Demand—Food—Crops—Cereals—Maize (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	78	84	93	104	111	115	119	123	126	128	129
CAZ	0	1	1	1	1	1	1	1	1	1	1
CHA	8	7	8	9	9	8	8	7	7	6	6
EUR	3	3	3	3	3	3	3	3	3	3	3
IND	4	6	7	7	7	7	7	7	7	7	7
JPN	2	2	2	1	1	1	1	1	1	1	1
LAM	19	20	22	24	25	26	27	28	28	29	29
MEA	5	6	6	7	8	8	9	10	10	11	11
NEU	1	1	2	2	2	2	2	2	2	2	2
OAS	11	11	12	16	17	17	17	17	17	16	16
REF	1	1	1	1	1	1	1	1	1	1	1
SSA	22	23	26	30	34	37	40	43	46	48	49
USA	3	3	3	3	4	4	4	4	4	4	4

Table 359: MAgPIE m4p\_som — Demand—Food—Crops—Cereals—Maize (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	129	129	129	127	125	122	119
CAZ	1	1	1	1	1	1	1
CHA	6	5	5	5	4	4	3
EUR	3	3	3	3	2	2	2
IND	7	7	7	7	7	6	6
JPN	1	1	1	1	1	1	0
LAM	29	28	28	27	27	26	25
MEA	11	11	11	11	11	11	11
NEU	2	2	2	2	2	2	2
OAS	16	16	15	15	14	13	12
REF	1	1	1	1	1	1	1
SSA	50	51	51	52	52	52	51
USA	4	4	4	4	4	4	4

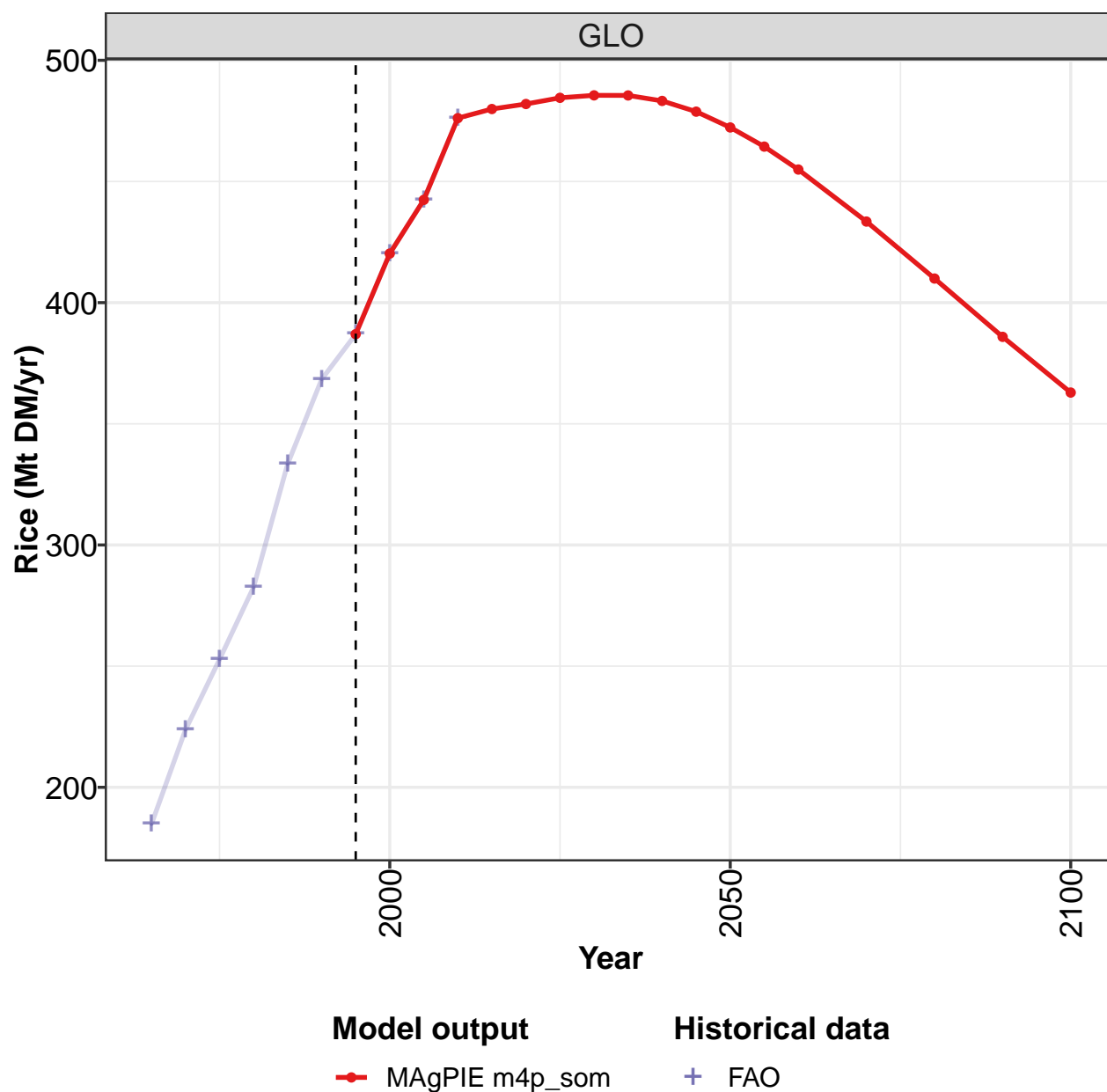
Table 360: MAgPIE m4p\_som — Demand—Food—Crops—Cereals—Maize (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	34	39	44	50	58	69	78	84	93	104
CAZ	0	0	0	0	0	0	0	1	1	1
CHA	2	2	3	4	4	5	8	7	8	9
EUR	2	2	2	2	2	3	3	3	3	3
IND	4	5	5	5	5	6	4	6	7	7
JPN	0	1	1	1	2	2	2	2	2	1
LAM	9	11	12	14	16	18	19	20	22	24
MEA	2	2	2	2	3	4	5	6	6	7
NEU	1	1	1	1	1	1	1	1	2	2
OAS	5	5	5	7	7	10	11	11	12	16
REF	0	0	0	0	0	0	1	1	1	1
SSA	8	9	11	13	15	18	22	23	26	30
USA	1	1	1	2	2	3	3	3	3	3

Table 361: FAO — Demand—Food—Crops—Cereals—Maize (Mt DM/yr)

## 7.1.3 Cereals—Rice

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

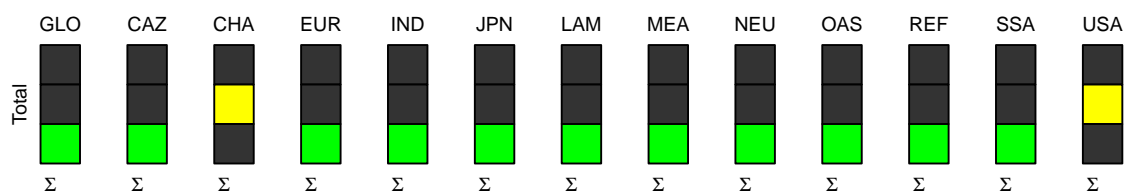
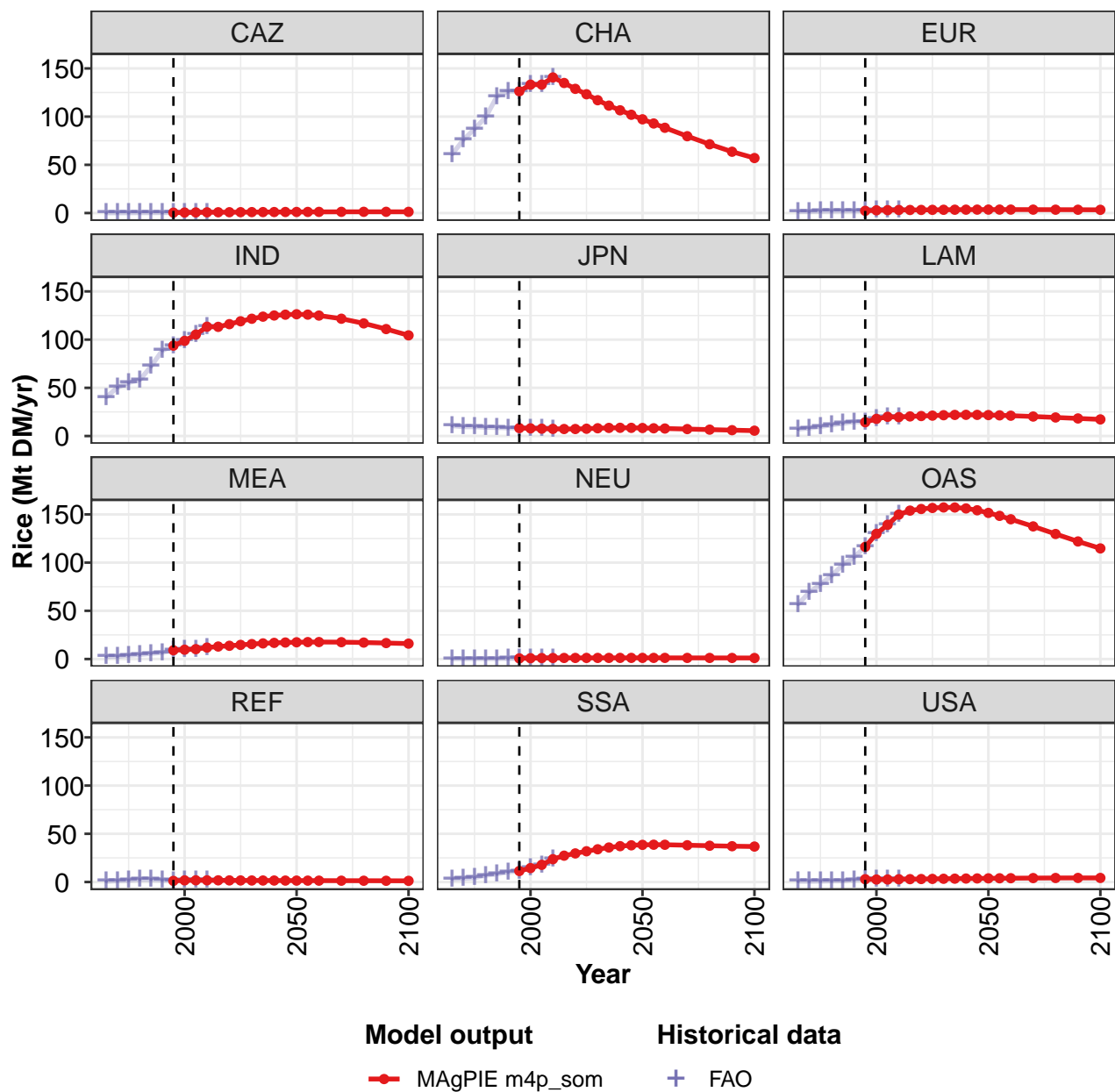


Figure 121: MAGPIE m4p\_som — Demand—Food—Crops—Cereals—Rice (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	387	420	442	476	480	482	485	486	485	483	479
CAZ	0	1	1	1	1	1	1	1	1	1	1
CHA	126	133	133	141	135	129	123	117	111	107	102
EUR	2	3	3	3	3	3	3	3	3	4	4
IND	94	99	105	113	113	116	119	122	124	125	126
JPN	8	8	8	7	7	7	8	8	8	9	8
LAM	14	18	20	20	20	21	21	22	22	22	22
MEA	9	10	10	12	13	14	15	16	16	17	17
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	116	130	139	150	154	156	157	157	157	156	154
REF	1	2	2	2	2	2	2	2	2	2	1
SSA	11	14	18	24	27	30	32	34	36	37	38
USA	3	3	3	3	3	3	3	3	4	4	4

Table 362: MAgPIE m4p\_som — Demand—Food—Crops—Cereals—Rice (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	472	464	455	433	410	386	363
CAZ	1	1	1	1	1	1	1
CHA	97	93	88	80	71	64	57
EUR	4	4	4	4	4	3	3
IND	126	126	125	122	117	111	104
JPN	8	8	8	7	7	6	6
LAM	22	21	21	20	19	18	17
MEA	17	18	18	17	17	17	16
NEU	1	1	1	1	1	1	1
OAS	152	148	145	138	130	122	115
REF	1	1	1	1	1	1	1
SSA	39	39	39	38	38	37	37
USA	4	4	4	4	4	4	4

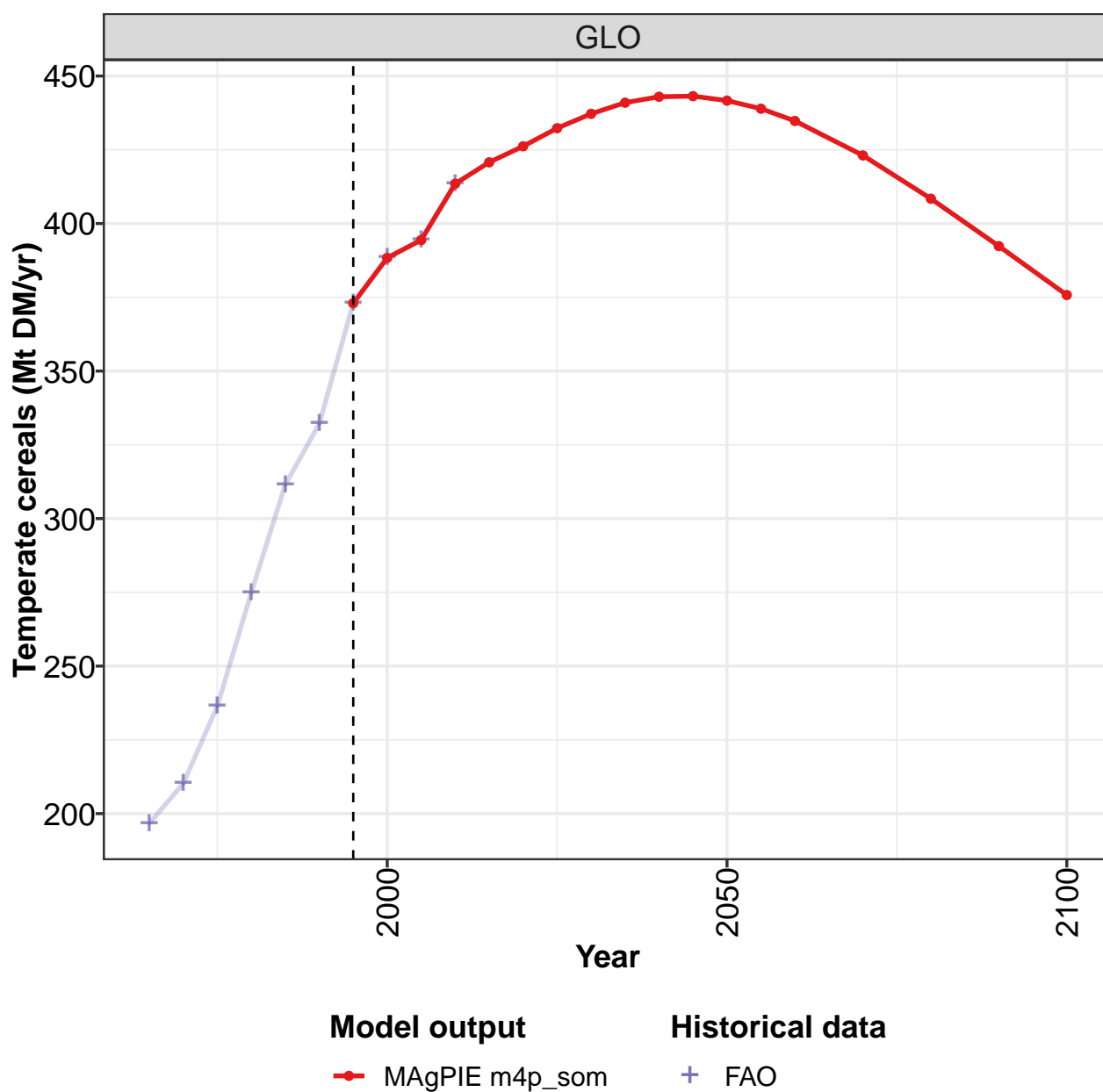
Table 363: MAgPIE m4p\_som — Demand—Food—Crops—Cereals—Rice (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	185	224	253	283	333	368	387	420	442	476
CAZ	0	0	0	0	0	0	0	1	1	1
CHA	61	76	87	99	121	126	126	133	133	141
EUR	2	2	2	2	2	2	2	3	3	3
IND	40	50	55	58	72	89	94	99	105	113
JPN	11	10	10	9	9	8	8	8	8	7
LAM	7	8	10	11	13	15	14	18	20	20
MEA	2	3	4	5	6	7	9	10	10	12
NEU	0	0	0	0	0	1	1	1	1	1
OAS	57	69	77	87	98	106	116	130	139	150
REF	1	1	2	3	3	2	1	2	2	2
SSA	3	4	4	7	8	10	11	14	18	24
USA	1	1	1	1	1	2	3	3	3	3

Table 364: FAO — Demand—Food—Crops—Cereals—Rice (Mt DM/yr)

## 7.1.4 Cereals—Temperate cereals

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

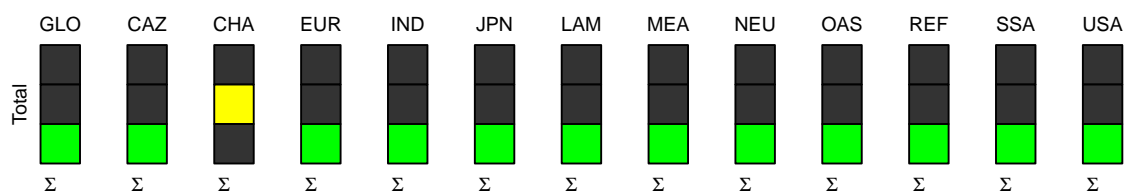
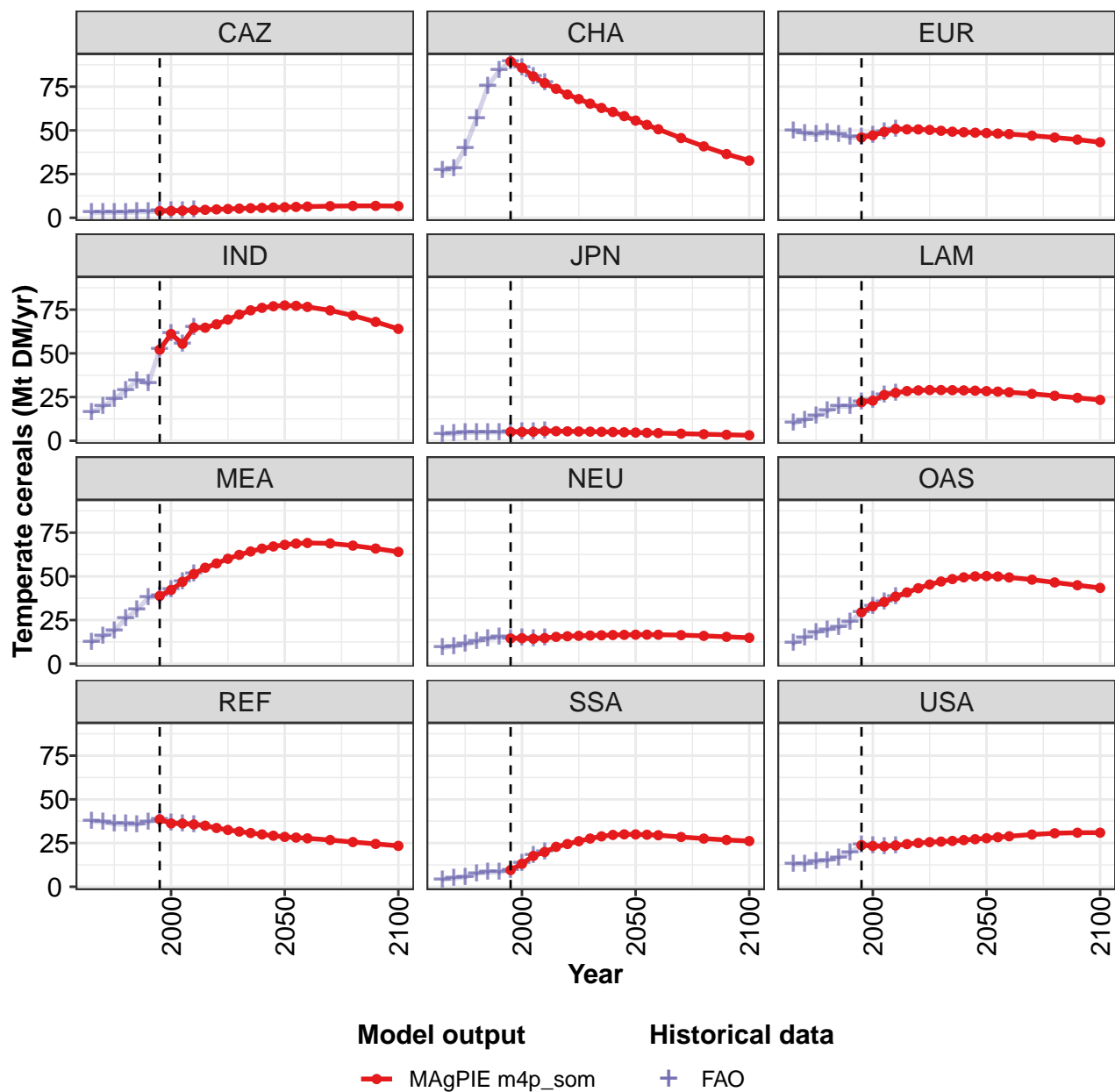


Figure 122: MAgPIE m4p\_som — Demand—Food—Crops—Cereals—Temperate cereals (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	373	388	394	413	421	426	432	437	441	443	443
CAZ	4	4	4	4	5	5	5	5	5	6	6
CHA	89	86	81	77	74	71	68	65	63	61	58
EUR	46	47	49	51	51	51	50	50	49	49	49
IND	52	61	55	65	65	67	69	72	75	76	77
JPN	5	5	5	6	5	5	5	5	5	5	5
LAM	22	23	26	27	28	29	29	29	29	29	29
MEA	39	42	47	51	55	57	60	62	64	66	67
NEU	14	15	14	15	15	16	16	16	16	16	17
OAS	29	33	35	38	41	43	45	47	48	49	50
REF	39	36	36	36	35	34	32	32	31	30	29
SSA	10	13	18	20	23	24	26	28	29	30	30
USA	24	23	23	24	24	25	26	26	26	27	27

Table 365: MAgPIE m4p.som — Demand—Food—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	442	439	435	423	408	392	376
CAZ	6	6	6	7	7	7	7
CHA	56	53	51	46	41	36	33
EUR	48	48	48	47	46	45	43
IND	77	77	77	75	72	68	64
JPN	5	5	4	4	4	3	3
LAM	28	28	28	27	26	25	23
MEA	68	69	69	69	68	66	64
NEU	17	17	17	16	16	15	15
OAS	50	50	49	48	47	45	43
REF	29	28	28	27	26	25	23
SSA	30	30	29	28	28	27	26
USA	28	28	29	30	31	31	31

Table 366: MAgPIE m4p.som — Demand—Food—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 2/2]

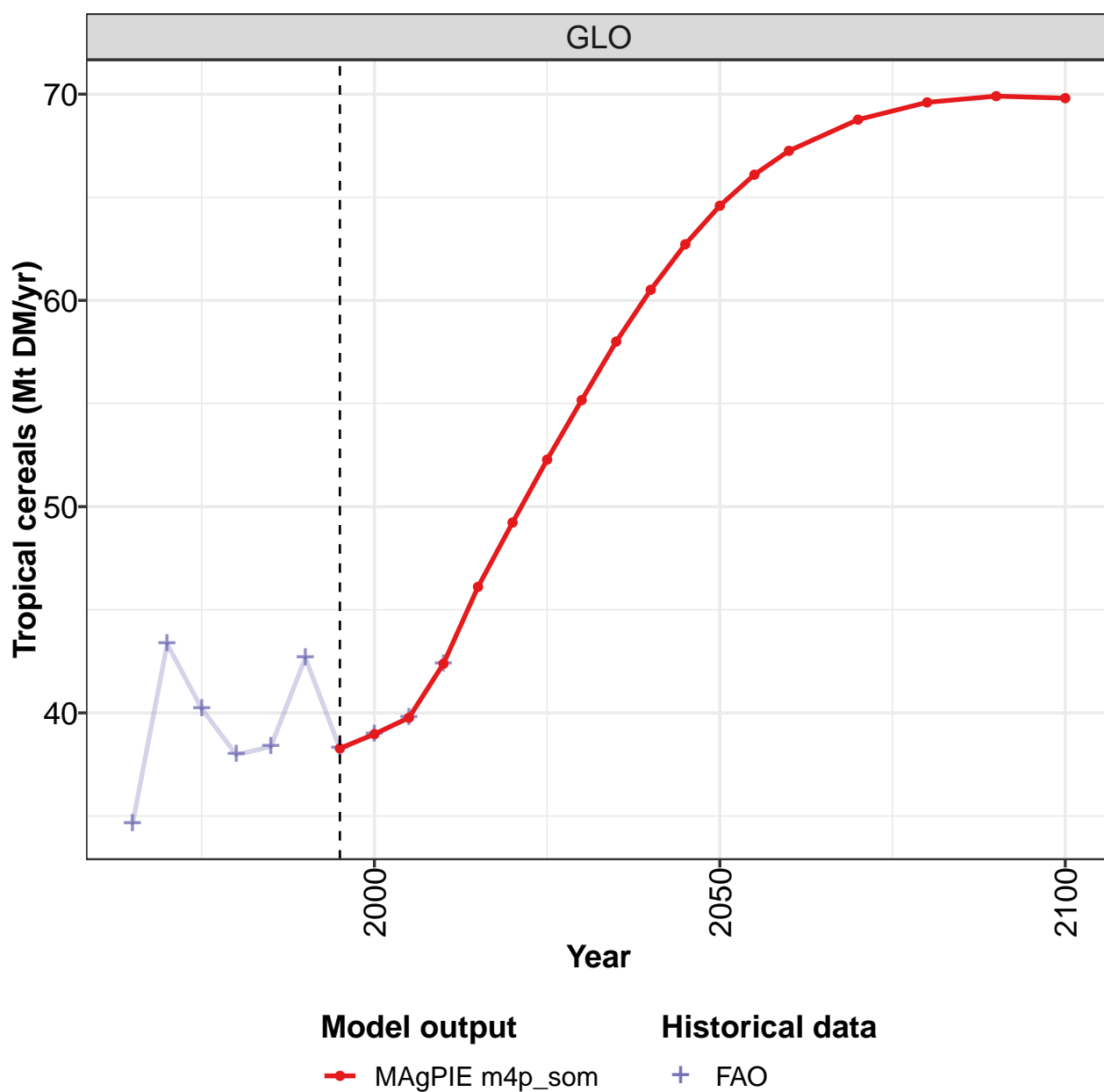
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	197	210	236	275	312	332	373	388	394	414
CAZ	3	3	3	3	3	3	4	4	4	4
CHA	27	28	40	57	75	84	89	86	81	77
EUR	50	48	48	49	48	46	46	47	49	51
IND	16	20	24	29	34	33	52	61	55	65
JPN	4	4	5	5	5	5	5	5	5	6
LAM	10	12	14	17	20	19	22	23	26	27
MEA	12	16	19	26	31	38	39	42	47	51
NEU	9	10	11	13	14	15	14	15	14	15
OAS	11	15	18	19	21	24	29	33	35	38
REF	37	37	36	36	36	37	39	36	36	36
SSA	4	5	5	8	8	8	10	13	18	20
USA	13	13	14	15	17	20	24	23	23	24

Table 367: FAO — Demand—Food—Crops—Cereals—Temperate cereals (Mt DM/yr)



## 7.1.5 Cereals—Tropical cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

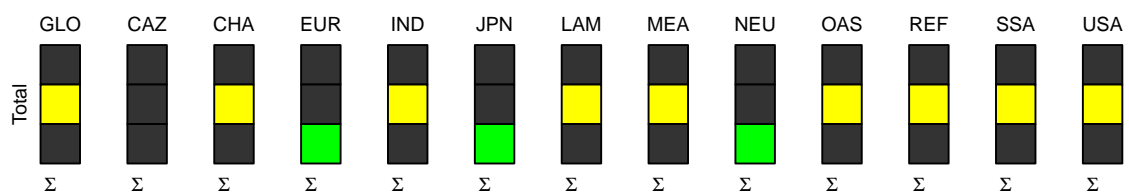
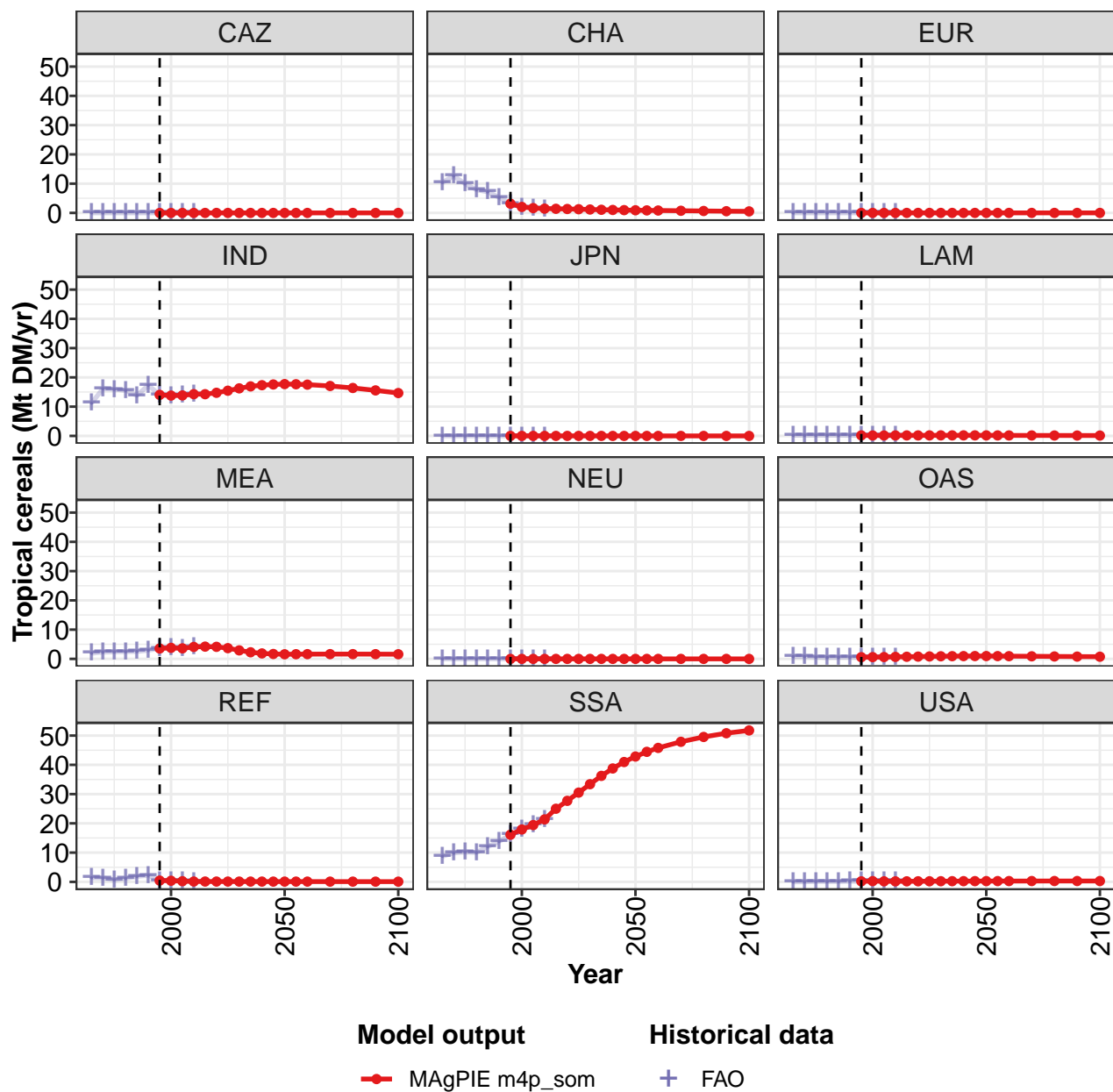


Figure 123: MAGPIE m4p\_som — Demand—Food—Crops—Cereals—Tropical cereals (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	38.3	39.0	39.8	42.4	46.1	49.2	52.3	55.2	58.0	60.5	62.7
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	3.2	2.0	1.7	1.5	1.4	1.3	1.3	1.2	1.1	1.0	1.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	14.0	13.8	13.8	14.3	14.3	14.7	15.5	16.3	16.9	17.3	17.6
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
MEA	3.6	3.8	3.6	4.1	4.2	4.1	3.7	2.9	2.3	1.9	1.7
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.0
REF	0.4	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SSA	16.1	17.9	19.4	21.4	25.0	27.7	30.5	33.4	36.2	38.8	41.0
USA	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3

Table 368: MAgPIE m4p\_som — Demand—Food—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	64.6	66.1	67.3	68.8	69.6	69.9	69.8
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.9	0.9	0.8	0.7	0.7	0.6	0.5
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	17.7	17.7	17.5	17.1	16.4	15.6	14.6
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.2	0.2	0.2	0.2	0.1	0.1	0.1
MEA	1.6	1.6	1.6	1.6	1.6	1.6	1.6
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.0	1.0	0.9	0.9	0.8	0.8	0.8
REF	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SSA	42.9	44.4	45.8	47.9	49.5	50.8	51.8
USA	0.3	0.3	0.3	0.3	0.3	0.3	0.3

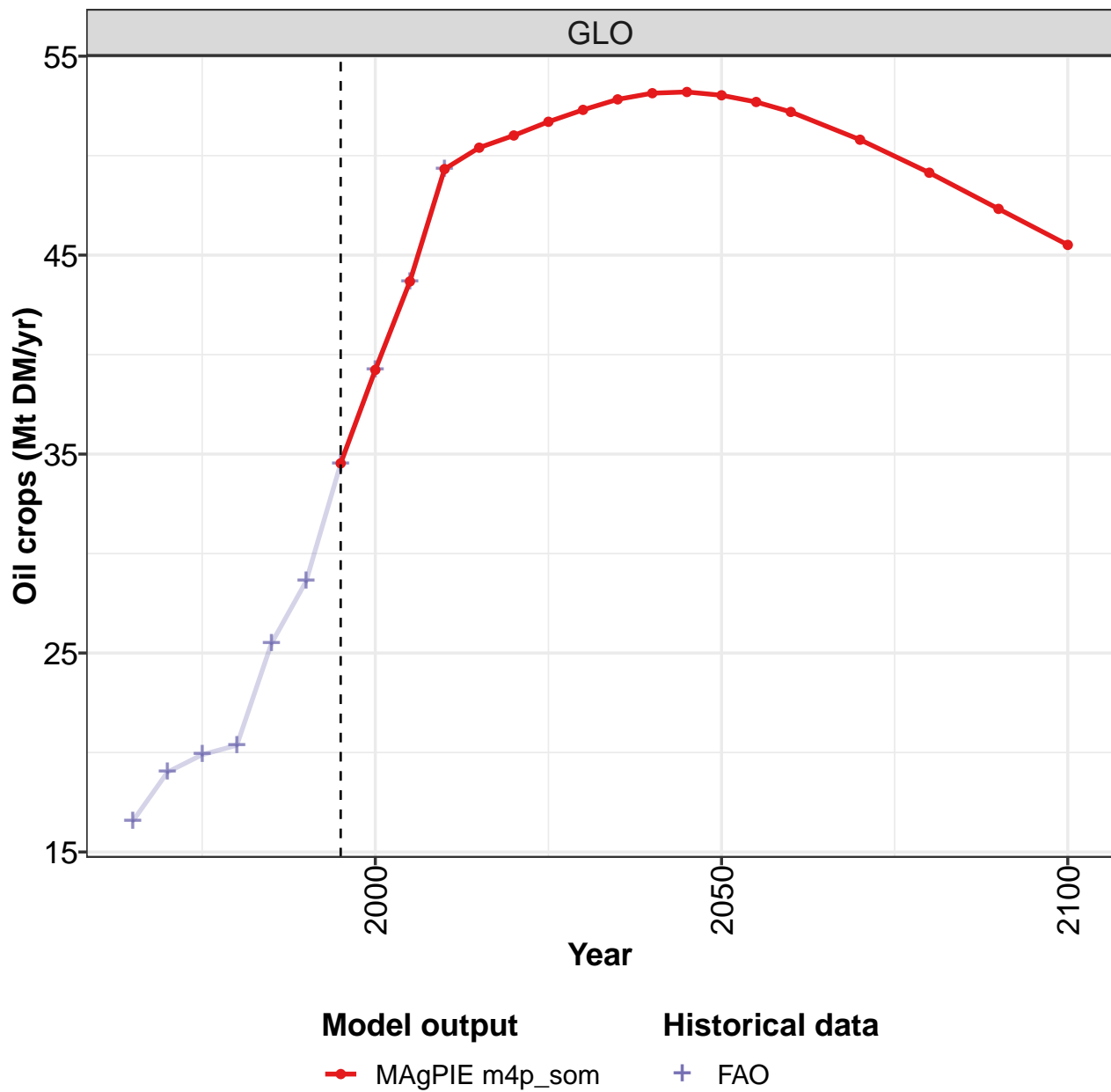
Table 369: MAgPIE m4p\_som — Demand—Food—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	34.6	43.3	40.2	38.0	38.4	42.7	38.3	39.0	39.8	42.4
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	10.4	12.6	10.0	7.9	7.2	5.3	3.2	2.0	1.7	1.5
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	11.2	16.1	15.9	15.6	13.8	17.3	14.0	13.8	13.8	14.3
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
MEA	1.9	2.3	2.4	2.5	2.5	3.0	3.6	3.8	3.6	4.1
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.8	0.8	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.7
REF	1.4	1.3	0.7	1.2	1.9	2.2	0.4	0.4	0.2	0.1
SSA	8.7	9.9	10.2	10.0	12.1	13.8	16.1	17.9	19.4	21.4
USA	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2

Table 370: FAO — Demand—Food—Crops—Cereals—Tropical cereals (Mt DM/yr)

## 7.1.6 Oil crops

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

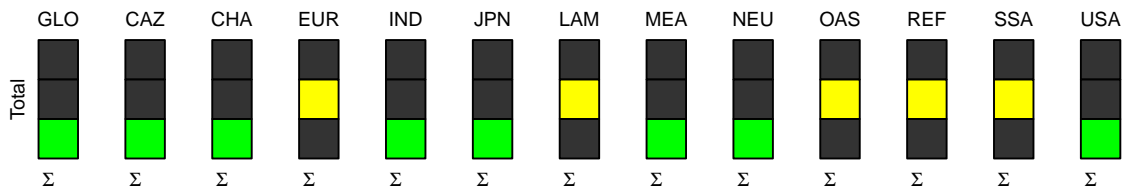
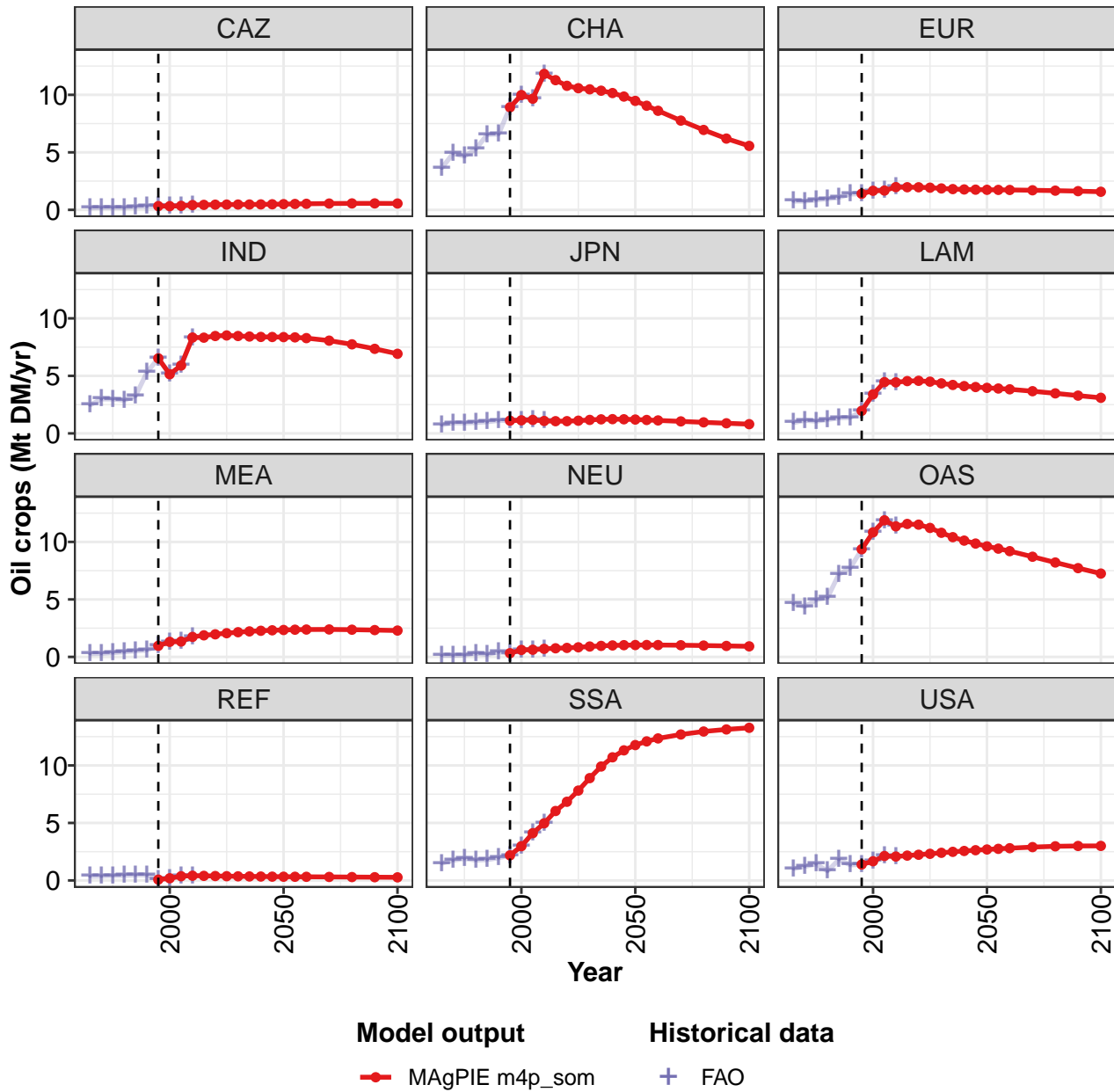


Figure 124: MAgPIE m4p\_som — Demand—Food—Crops—Oil crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	34.5	39.2	43.7	49.3	50.4	51.0	51.7	52.3	52.8	53.1	53.2
CAZ	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
CHA	8.9	10.0	9.7	11.8	11.3	10.8	10.6	10.5	10.4	10.2	9.9
EUR	1.4	1.7	1.7	2.0	2.0	2.0	1.9	1.9	1.8	1.8	1.8
IND	6.5	5.1	5.9	8.3	8.3	8.5	8.5	8.5	8.4	8.4	8.4
JPN	1.1	1.1	1.2	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2
LAM	2.0	3.4	4.5	4.4	4.5	4.6	4.5	4.3	4.2	4.1	4.0
MEA	1.0	1.3	1.3	1.7	1.9	2.0	2.1	2.1	2.2	2.3	2.3
NEU	0.3	0.6	0.6	0.7	0.8	0.8	0.8	0.9	1.0	1.0	1.0
OAS	9.4	10.8	11.9	11.4	11.6	11.5	11.2	10.8	10.4	10.1	9.9
REF	0.1	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
SSA	2.2	3.0	4.1	5.0	6.0	6.8	7.8	8.9	9.9	10.7	11.3
USA	1.4	1.7	2.1	2.1	2.2	2.2	2.3	2.4	2.5	2.6	2.6

Table 371: MAGPIE m4p\_som — Demand—Food—Crops—Oil crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	53.0	52.7	52.2	50.8	49.1	47.3	45.5
CAZ	0.5	0.5	0.5	0.5	0.6	0.6	0.6
CHA	9.5	9.1	8.6	7.8	6.9	6.2	5.6
EUR	1.7	1.7	1.7	1.7	1.7	1.6	1.6
IND	8.4	8.3	8.3	8.1	7.7	7.4	6.9
JPN	1.2	1.2	1.1	1.0	1.0	0.9	0.8
LAM	4.0	3.9	3.8	3.7	3.5	3.3	3.1
MEA	2.3	2.4	2.4	2.4	2.4	2.3	2.3
NEU	1.0	1.0	1.0	1.0	1.0	1.0	0.9
OAS	9.6	9.4	9.2	8.7	8.2	7.7	7.2
REF	0.3	0.3	0.3	0.3	0.3	0.3	0.3
SSA	11.8	12.1	12.3	12.7	12.9	13.1	13.3
USA	2.7	2.7	2.8	2.9	3.0	3.0	3.0

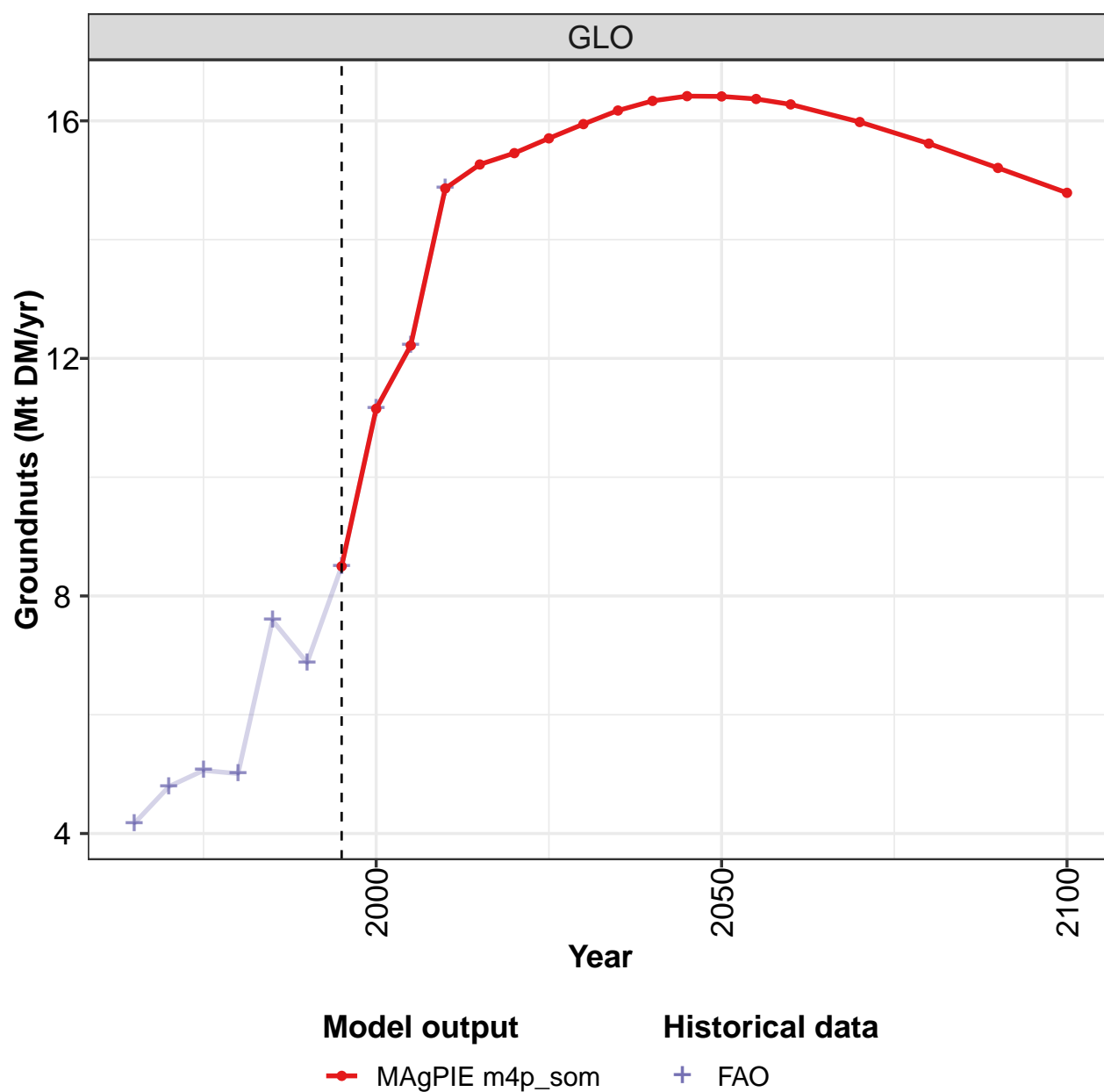
Table 372: MAGPIE m4p\_som — Demand—Food—Crops—Oil crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	16.6	19.0	19.9	20.4	25.5	28.6	34.5	39.2	43.7	49.3
CAZ	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4
CHA	3.6	4.9	4.7	5.3	6.5	6.6	8.9	10.0	9.7	11.8
EUR	0.8	0.8	0.9	1.0	1.1	1.4	1.4	1.7	1.7	2.0
IND	2.5	3.0	3.0	2.9	3.2	5.3	6.5	5.1	5.9	8.3
JPN	0.7	0.9	0.9	0.9	1.0	1.1	1.1	1.1	1.2	1.1
LAM	0.9	1.1	1.1	1.2	1.3	1.4	2.0	3.4	4.5	4.4
MEA	0.3	0.3	0.4	0.4	0.5	0.6	1.0	1.3	1.3	1.7
NEU	0.1	0.1	0.2	0.3	0.2	0.4	0.3	0.6	0.6	0.7
OAS	4.6	4.4	5.0	5.1	7.2	7.7	9.3	10.8	11.9	11.4
REF	0.4	0.4	0.4	0.4	0.5	0.5	0.1	0.2	0.4	0.4
SSA	1.5	1.8	1.9	1.8	1.8	2.0	2.2	3.0	4.1	5.0
USA	1.0	1.2	1.4	0.8	1.8	1.3	1.4	1.7	2.1	2.1

Table 373: FAO — Demand—Food—Crops—Oil crops (Mt DM/yr)

## 7.1.7 Oil crops—Groundnuts

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

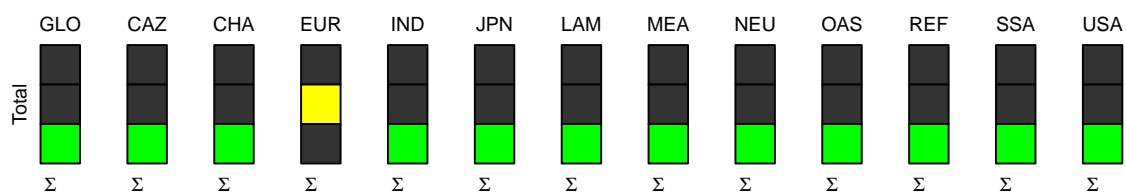
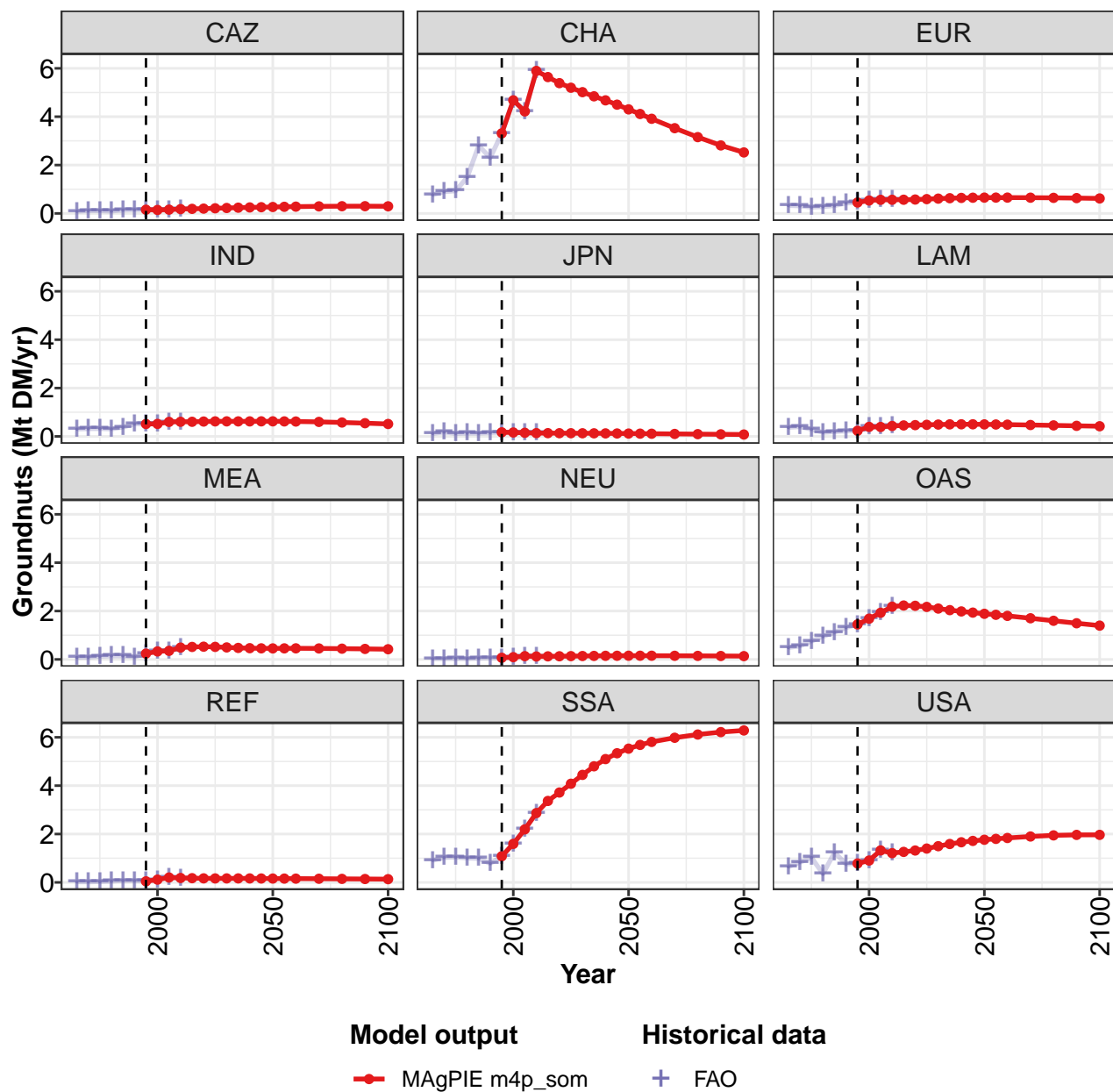


Figure 125: MAgPIE m4p\_som — Demand—Food—Crops—Oil crops—Groundnuts (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	8.5	11.2	12.2	14.9	15.3	15.5	15.7	15.9	16.2	16.3	16.4
CAZ	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
CHA	3.3	4.7	4.2	5.9	5.6	5.4	5.2	5.0	4.8	4.7	4.5
EUR	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
IND	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
JPN	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.2	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
MEA	0.2	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
OAS	1.4	1.7	1.9	2.2	2.2	2.2	2.2	2.1	2.0	2.0	1.9
REF	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
SSA	1.1	1.6	2.2	2.9	3.4	3.7	4.1	4.4	4.8	5.1	5.3
USA	0.8	0.9	1.3	1.2	1.3	1.3	1.4	1.5	1.6	1.7	1.7

Table 374: MAgPIE m4p.som — Demand—Food—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	16.4	16.4	16.3	16.0	15.6	15.2	14.8
CAZ	0.3	0.3	0.3	0.3	0.3	0.3	0.3
CHA	4.3	4.1	3.9	3.5	3.2	2.8	2.5
EUR	0.7	0.7	0.7	0.7	0.6	0.6	0.6
IND	0.6	0.6	0.6	0.6	0.6	0.5	0.5
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.5	0.5	0.5	0.5	0.5	0.4	0.4
MEA	0.5	0.5	0.5	0.5	0.4	0.4	0.4
NEU	0.2	0.2	0.2	0.2	0.1	0.1	0.1
OAS	1.9	1.8	1.8	1.7	1.6	1.5	1.4
REF	0.2	0.2	0.2	0.2	0.1	0.1	0.1
SSA	5.5	5.7	5.8	6.0	6.1	6.2	6.3
USA	1.8	1.8	1.8	1.9	1.9	2.0	2.0

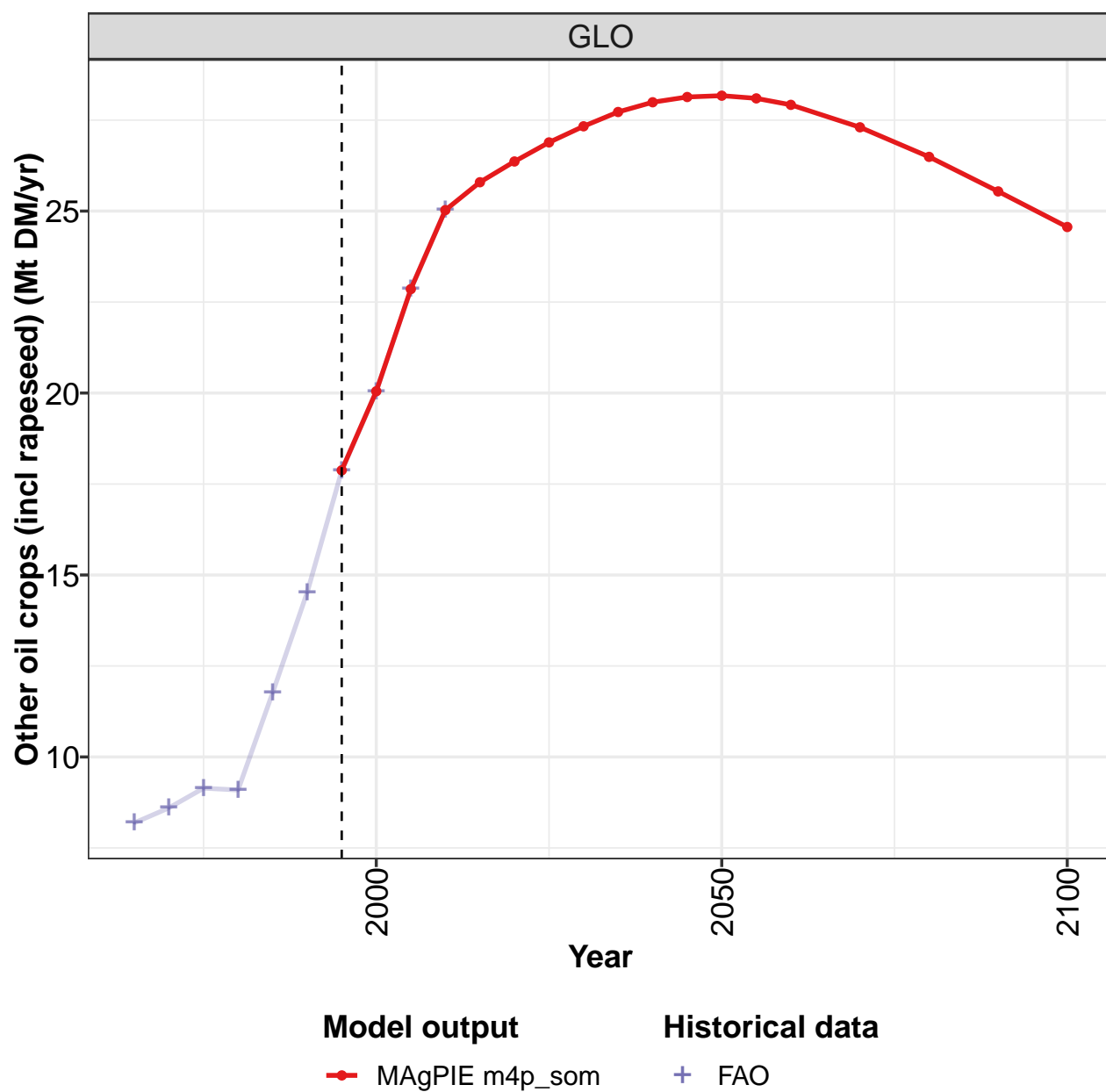
Table 375: MAgPIE m4p.som — Demand—Food—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4.2	4.8	5.1	5.0	7.6	6.9	8.5	11.2	12.2	14.9
CAZ	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2
CHA	0.8	0.9	0.9	1.5	2.8	2.3	3.3	4.7	4.2	5.9
EUR	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.6
IND	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.5	0.6	0.6
JPN	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1
LAM	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.4	0.4	0.4
MEA	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.5
NEU	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
OAS	0.5	0.6	0.8	0.9	1.1	1.3	1.4	1.7	1.9	2.2
REF	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.2	0.2
SSA	0.9	1.0	1.0	1.0	1.0	0.8	1.1	1.6	2.2	2.9
USA	0.6	0.8	1.0	0.4	1.2	0.8	0.8	0.9	1.3	1.2

Table 376: FAO — Demand—Food—Crops—Oil crops—Groundnuts (Mt DM/yr)

## 7.1.8 Oil crops—Other oil crops (incl rapeseed)

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

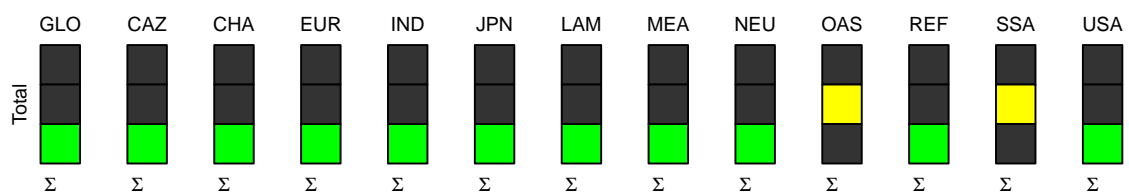
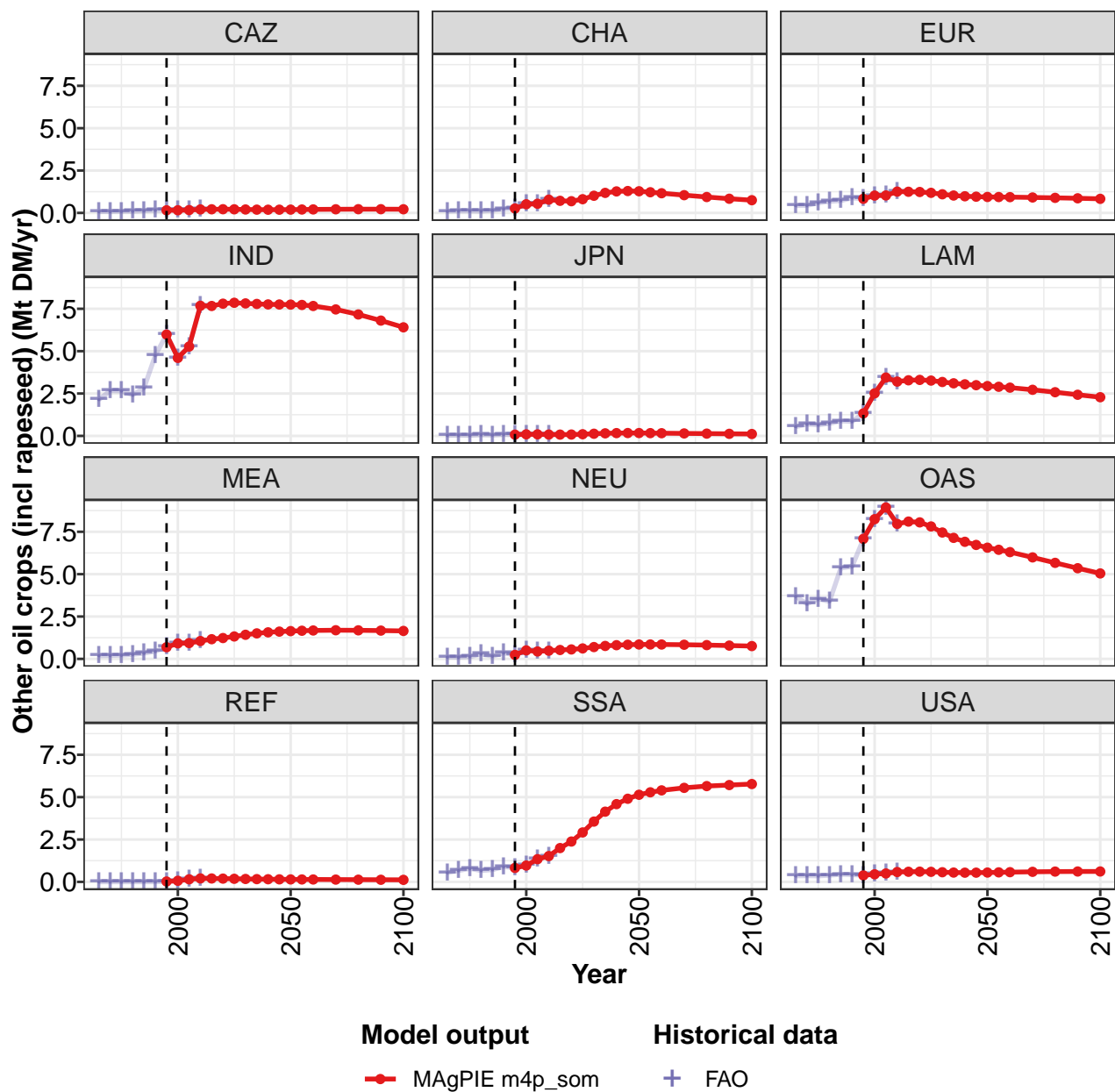


Figure 126: MAgPIE m4p\_som — Demand—Food—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	17.9	20.0	22.9	25.0	25.8	26.4	26.9	27.3	27.7	28.0	28.1
CAZ	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CHA	0.3	0.5	0.5	0.8	0.7	0.7	0.8	1.0	1.2	1.3	1.3
EUR	0.8	1.0	1.0	1.3	1.2	1.2	1.2	1.1	1.0	1.0	1.0
IND	6.0	4.6	5.3	7.7	7.7	7.8	7.9	7.8	7.8	7.8	7.8
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
LAM	1.3	2.5	3.4	3.2	3.3	3.3	3.3	3.2	3.1	3.0	3.0
MEA	0.7	0.9	0.9	1.1	1.2	1.2	1.3	1.4	1.5	1.6	1.6
NEU	0.2	0.5	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.8
OAS	7.1	8.2	8.9	8.0	8.1	8.1	7.8	7.5	7.1	6.9	6.7
REF	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
SSA	0.8	1.0	1.3	1.5	2.0	2.4	2.9	3.6	4.1	4.6	4.9
USA	0.4	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5

Table 377: MAgPIE m4p\_som — Demand—Food—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	28.2	28.1	27.9	27.3	26.5	25.5	24.6
CAZ	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CHA	1.3	1.2	1.2	1.0	0.9	0.8	0.8
EUR	0.9	0.9	0.9	0.9	0.9	0.9	0.8
IND	7.7	7.7	7.7	7.5	7.2	6.8	6.4
JPN	0.2	0.2	0.2	0.1	0.1	0.1	0.1
LAM	2.9	2.9	2.8	2.7	2.6	2.4	2.3
MEA	1.6	1.7	1.7	1.7	1.7	1.7	1.6
NEU	0.9	0.9	0.8	0.8	0.8	0.8	0.8
OAS	6.6	6.4	6.3	6.0	5.7	5.4	5.0
REF	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SSA	5.1	5.3	5.4	5.5	5.7	5.7	5.8
USA	0.6	0.6	0.6	0.6	0.6	0.6	0.6

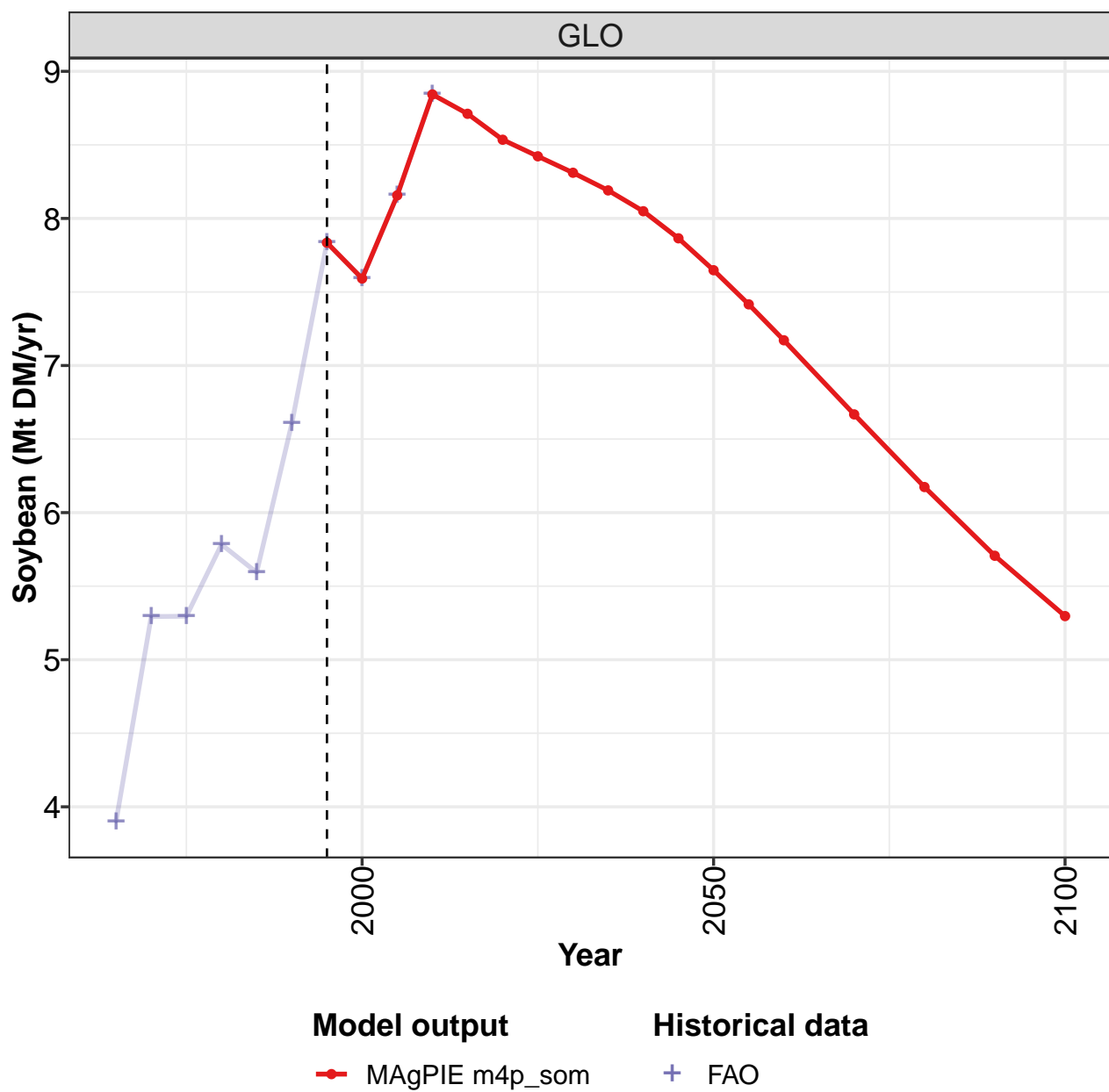
Table 378: MAgPIE m4p\_som — Demand—Food—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	8.2	8.6	9.1	9.1	11.8	14.5	17.9	20.0	22.9	25.0
CAZ	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
CHA	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.5	0.5	0.8
EUR	0.4	0.4	0.6	0.7	0.7	0.9	0.8	1.0	1.0	1.3
IND	2.1	2.7	2.6	2.4	2.8	4.7	6.0	4.6	5.3	7.7
JPN	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.5	0.7	0.6	0.7	0.9	0.8	1.3	2.5	3.4	3.2
MEA	0.2	0.2	0.2	0.3	0.3	0.4	0.7	0.9	0.9	1.1
NEU	0.1	0.1	0.1	0.3	0.2	0.3	0.2	0.5	0.4	0.5
OAS	3.7	3.2	3.5	3.4	5.4	5.5	7.1	8.2	8.9	8.0
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2
SSA	0.5	0.7	0.8	0.7	0.7	0.9	0.8	1.0	1.3	1.5
USA	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.6

Table 379: FAO — Demand—Food—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

## 7.1.9 Oil crops—Soybean

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

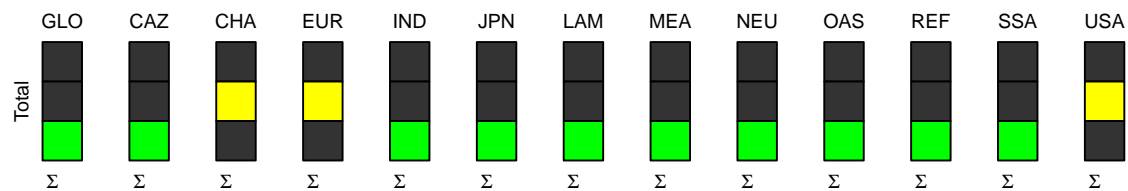
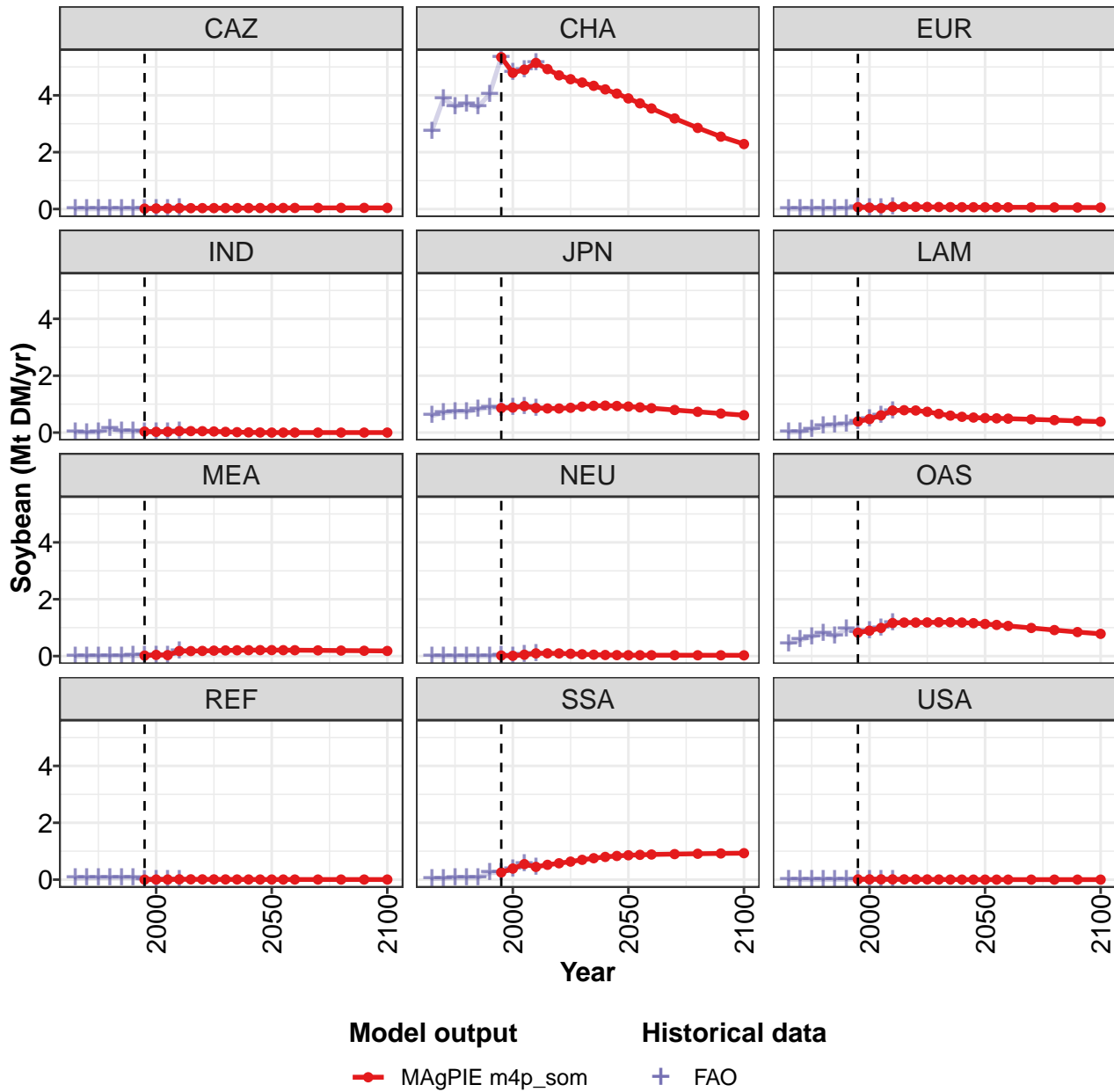


Figure 127: MAgPIE m4p\_som — Demand—Food—Crops—Oil crops—Soybean (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	7.83	7.59	8.16	8.84	8.71	8.53	8.42	8.31	8.19	8.05	7.86
CAZ	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04
CHA	5.34	4.79	4.90	5.14	4.92	4.70	4.57	4.45	4.33	4.21	4.06
EUR	0.07	0.05	0.03	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.06
IND	0.03	0.02	0.03	0.05	0.05	0.05	0.04	0.03	0.01	0.01	0.00
JPN	0.86	0.88	0.93	0.86	0.85	0.85	0.87	0.91	0.94	0.95	0.94
LAM	0.39	0.47	0.61	0.78	0.79	0.78	0.73	0.66	0.60	0.55	0.53
MEA	0.02	0.04	0.03	0.18	0.18	0.18	0.19	0.20	0.20	0.21	0.21
NEU	0.02	0.01	0.05	0.10	0.10	0.09	0.08	0.06	0.05	0.04	0.03
OAS	0.83	0.89	0.99	1.16	1.18	1.18	1.18	1.19	1.19	1.18	1.16
REF	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
SSA	0.25	0.39	0.54	0.45	0.52	0.57	0.63	0.70	0.75	0.80	0.83
USA	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00

Table 380: MAgPIE m4p\_som — Demand—Food—Crops—Oil crops—Soybean (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	7.65	7.42	7.17	6.67	6.17	5.71	5.30
CAZ	0.04	0.04	0.04	0.04	0.04	0.04	0.04
CHA	3.89	3.72	3.54	3.19	2.85	2.55	2.29
EUR	0.06	0.06	0.06	0.06	0.06	0.05	0.05
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.92	0.89	0.86	0.79	0.73	0.67	0.61
LAM	0.51	0.50	0.49	0.47	0.44	0.41	0.38
MEA	0.21	0.21	0.21	0.20	0.19	0.19	0.18
NEU	0.03	0.03	0.03	0.03	0.03	0.03	0.03
OAS	1.13	1.10	1.06	0.99	0.92	0.85	0.78
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.86	0.87	0.88	0.90	0.91	0.92	0.93
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00

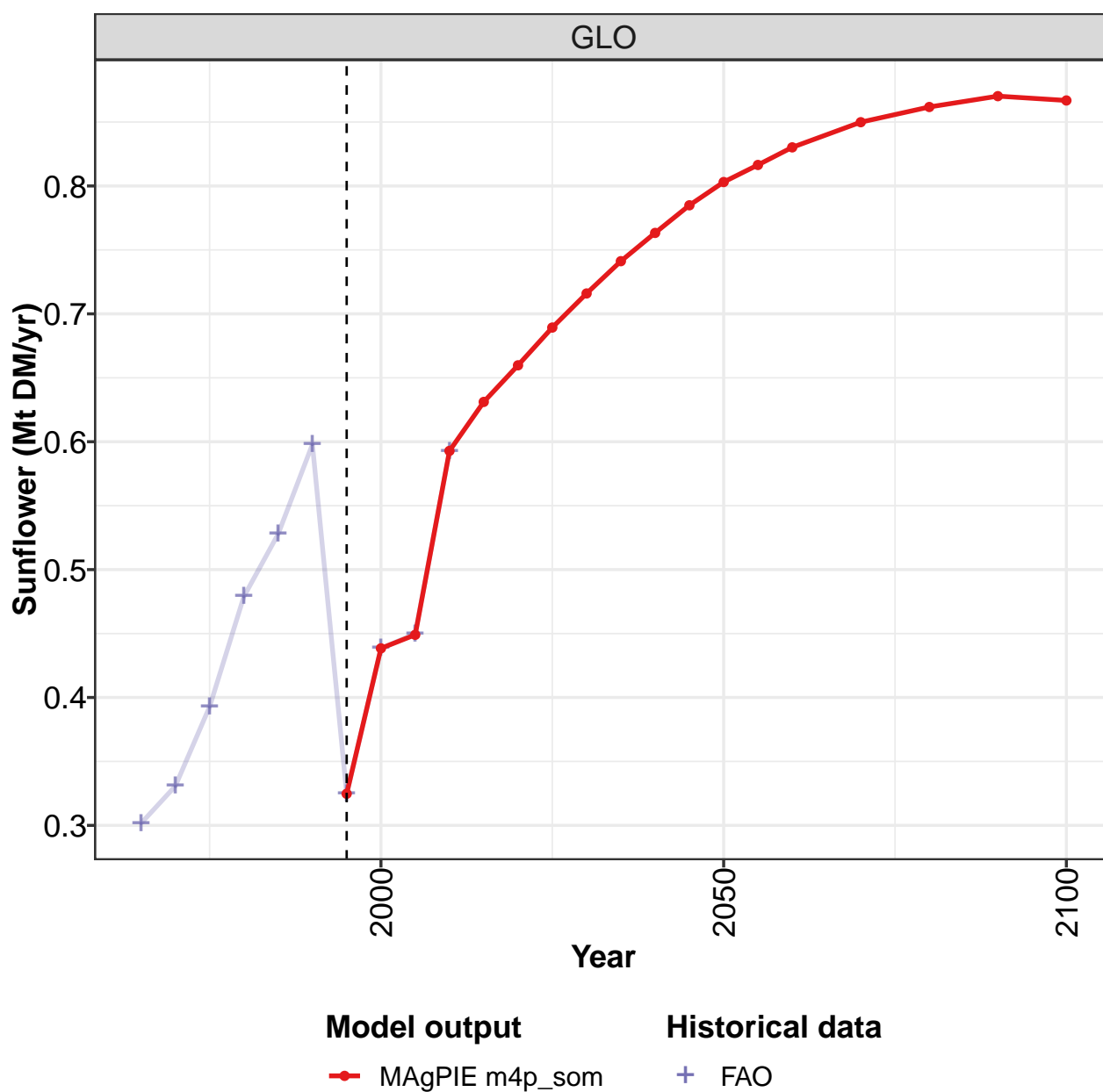
Table 381: MAgPIE m4p\_som — Demand—Food—Crops—Oil crops—Soybean (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3.90	5.29	5.30	5.78	5.59	6.61	7.83	7.59	8.16	8.84
CAZ	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.03
CHA	2.75	3.89	3.61	3.70	3.59	4.05	5.34	4.79	4.90	5.14
EUR	0.00	0.00	0.00	0.00	0.00	0.03	0.07	0.05	0.03	0.08
IND	0.01	0.00	0.01	0.15	0.04	0.04	0.03	0.02	0.03	0.05
JPN	0.59	0.69	0.74	0.73	0.82	0.89	0.86	0.88	0.93	0.86
LAM	0.01	0.03	0.11	0.23	0.26	0.29	0.39	0.47	0.61	0.78
MEA	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.04	0.03	0.18
NEU	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.01	0.05	0.10
OAS	0.44	0.57	0.68	0.81	0.70	0.96	0.83	0.89	0.99	1.16
REF	0.05	0.06	0.07	0.07	0.08	0.08	0.00	0.00	0.00	0.01
SSA	0.03	0.05	0.07	0.07	0.07	0.24	0.25	0.39	0.54	0.45
USA	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01

Table 382: FAO — Demand—Food—Crops—Oil crops—Soybean (Mt DM/yr)

## 7.1.10 Oil crops—Sunflower

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

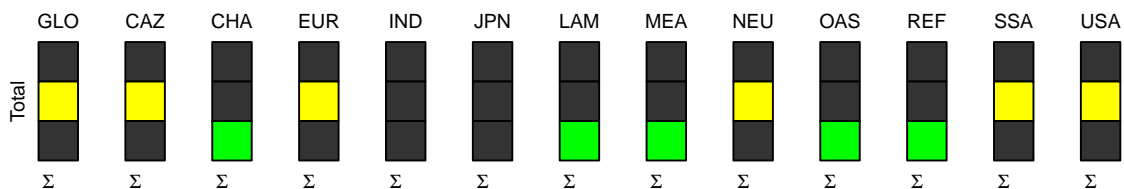
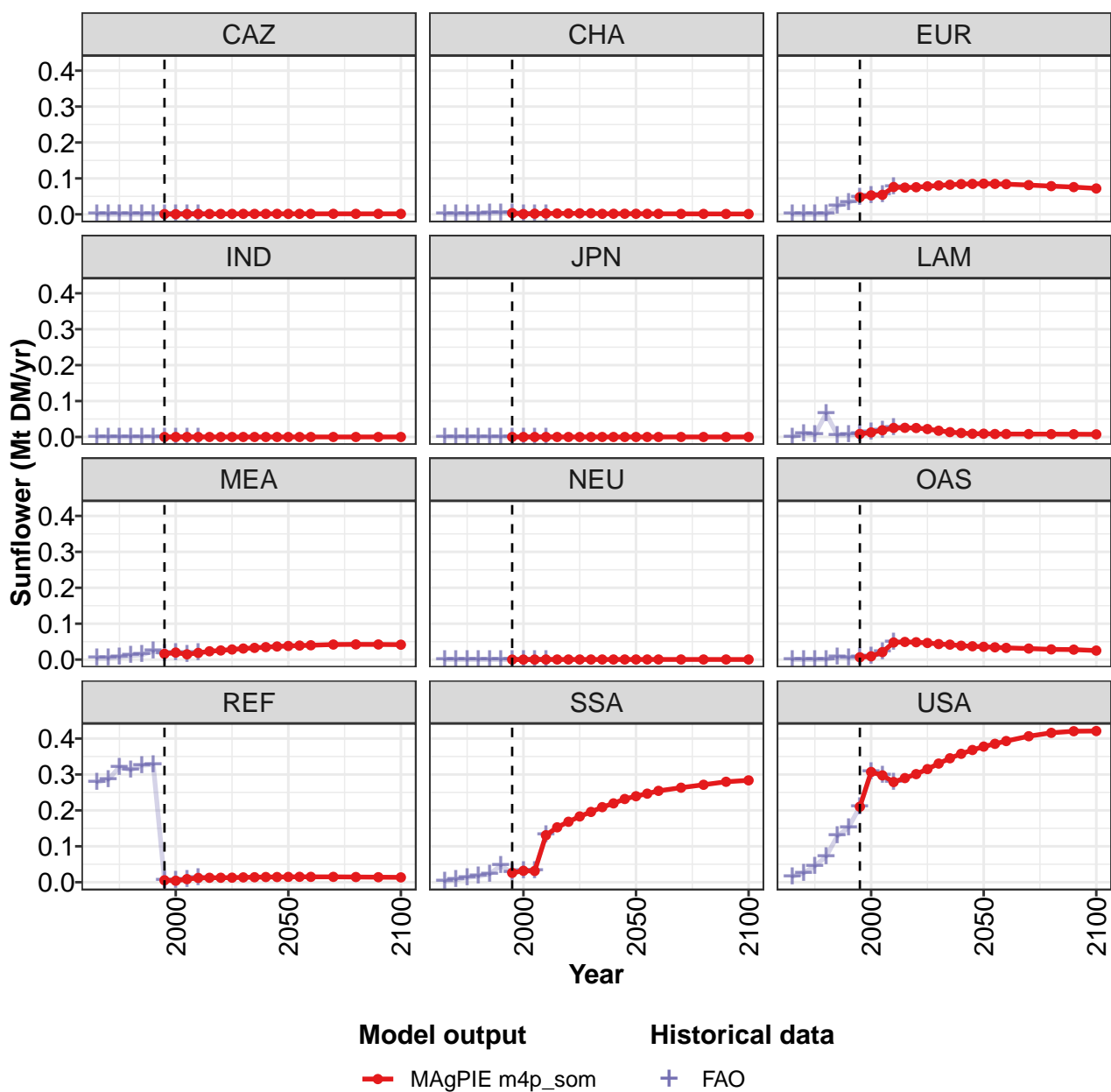


Figure 128: MAgPIE m4p\_som — Demand—Food—Crops—Oil crops—Sunflower (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.325	0.438	0.449	0.593	0.631	0.660	0.689	0.716	0.741	0.763	0.785
CAZ	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
CHA	0.003	0.001	0.002	0.002	0.002	0.002	0.003	0.003	0.001	0.002	0.002
EUR	0.048	0.053	0.054	0.076	0.074	0.075	0.078	0.080	0.082	0.084	0.085
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.008	0.013	0.019	0.025	0.025	0.025	0.022	0.017	0.014	0.011	0.009
MEA	0.016	0.020	0.015	0.019	0.023	0.025	0.028	0.031	0.033	0.035	0.037
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.007	0.009	0.021	0.048	0.049	0.048	0.046	0.043	0.042	0.039	0.037
REF	0.005	0.004	0.009	0.012	0.012	0.012	0.013	0.014	0.014	0.014	0.014
SSA	0.026	0.032	0.031	0.131	0.153	0.168	0.183	0.196	0.209	0.220	0.232
USA	0.210	0.307	0.298	0.279	0.290	0.301	0.315	0.330	0.345	0.358	0.368

Table 383: MAgPIE m4p\_som — Demand—Food—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.803	0.816	0.830	0.850	0.862	0.870	0.867
CAZ	0.001	0.001	0.001	0.001	0.001	0.001	0.001
CHA	0.002	0.002	0.001	0.001	0.001	0.001	0.001
EUR	0.085	0.085	0.084	0.081	0.078	0.076	0.072
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.009	0.008	0.008	0.008	0.008	0.008	0.007
MEA	0.038	0.039	0.040	0.042	0.042	0.042	0.042
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.036	0.034	0.033	0.031	0.028	0.028	0.025
REF	0.015	0.015	0.015	0.015	0.015	0.014	0.013
SSA	0.239	0.247	0.254	0.263	0.271	0.280	0.284
USA	0.378	0.385	0.393	0.407	0.416	0.420	0.421

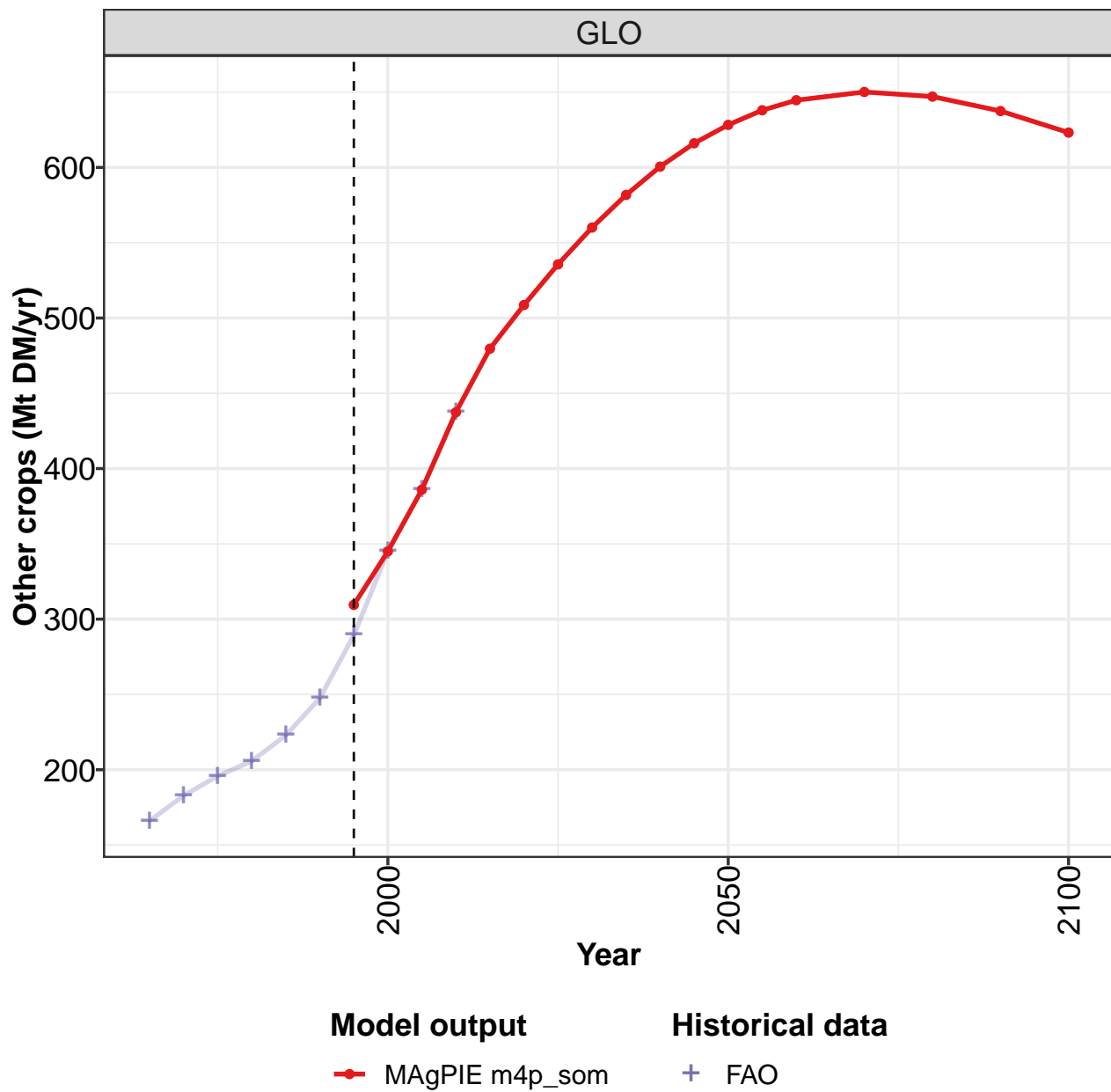
Table 384: MAgPIE m4p\_som — Demand—Food—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.302	0.331	0.393	0.479	0.528	0.598	0.325	0.438	0.450	0.592
CAZ	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001
CHA	0.000	0.000	0.000	0.001	0.003	0.004	0.003	0.001	0.001	0.002
EUR	0.000	0.000	0.000	0.000	0.023	0.033	0.048	0.053	0.054	0.076
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.009	0.006	0.065	0.005	0.005	0.008	0.013	0.019	0.025
MEA	0.004	0.004	0.007	0.011	0.013	0.023	0.016	0.020	0.015	0.019
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.001	0.007	0.005	0.007	0.009	0.021	0.047
REF	0.279	0.285	0.321	0.312	0.326	0.328	0.005	0.004	0.009	0.012
SSA	0.003	0.006	0.013	0.017	0.022	0.047	0.026	0.032	0.032	0.131
USA	0.016	0.026	0.045	0.072	0.128	0.152	0.210	0.307	0.298	0.279

Table 385: FAO — Demand—Food—Crops—Oil crops—Sunflower (Mt DM/yr)

## 7.1.11 Other crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

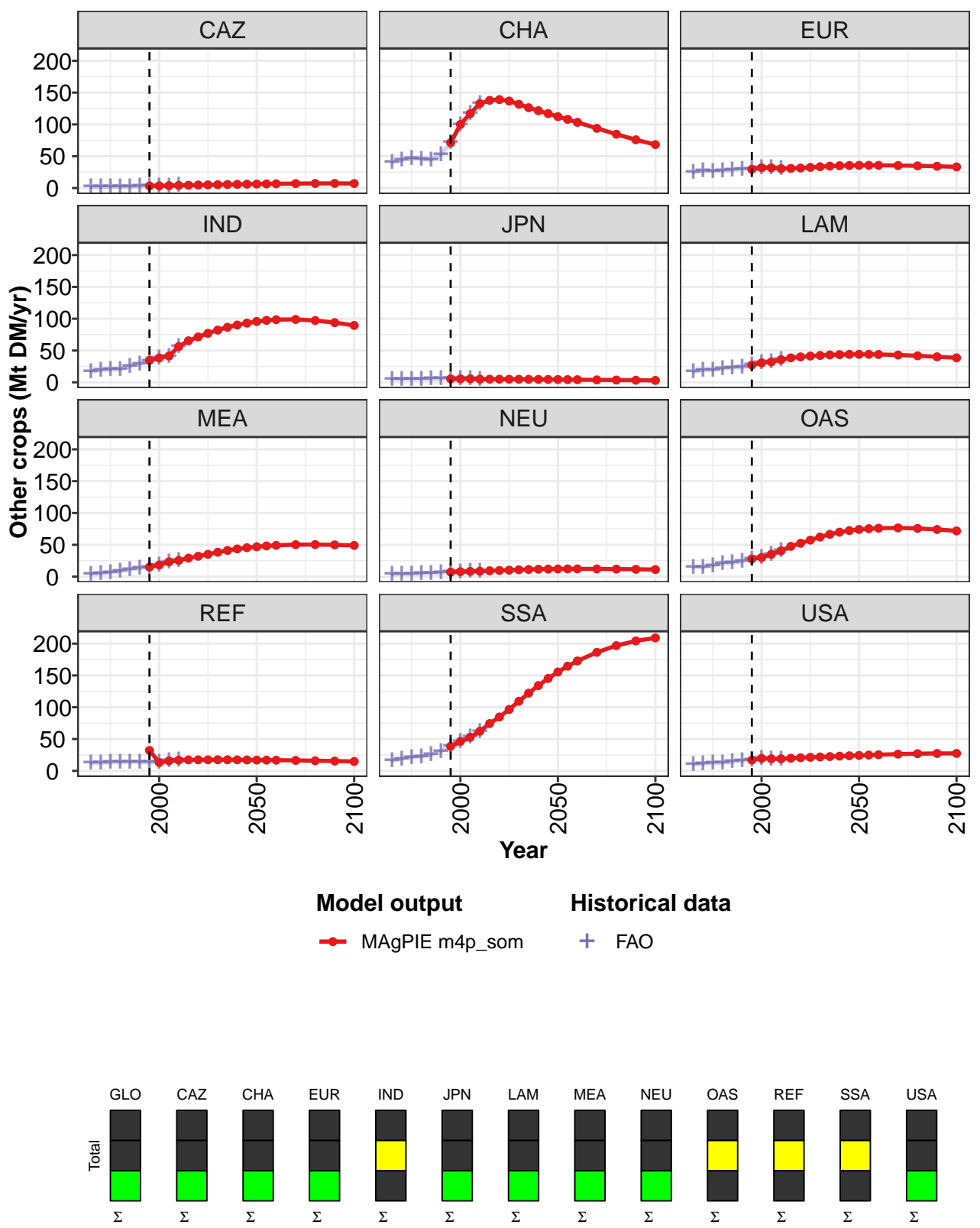


Figure 129: MAgPIE m4p\_som — Demand—Food—Crops—Other crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	309	345	386	437	480	509	536	560	582	601	616
CAZ	3	4	4	4	4	5	5	5	6	6	6
CHA	71	100	117	133	138	139	137	132	126	122	117
EUR	29	32	32	31	31	32	32	34	34	35	36
IND	35	38	41	56	65	71	77	82	87	90	93
JPN	6	5	6	5	5	5	5	5	5	5	5
LAM	27	31	32	36	38	40	41	42	43	44	44
MEA	15	18	23	25	29	32	35	38	41	44	45
NEU	7	8	8	9	9	10	10	11	11	12	12
OAS	28	30	35	41	48	52	57	62	66	70	72
REF	32	13	16	17	17	17	17	17	17	17	17
SSA	39	46	53	62	74	85	97	109	122	134	145
USA	17	20	19	19	20	21	21	22	23	23	24

Table 386: MAgPIE m4p\_som — Demand—Food—Crops—Other crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	628	638	645	650	647	637	623
CAZ	6	7	7	7	7	7	7
CHA	112	108	103	94	85	76	68
EUR	36	36	36	35	35	34	33
IND	96	97	98	99	97	94	89
JPN	4	4	4	4	4	3	3
LAM	44	44	44	43	42	40	39
MEA	47	48	49	50	50	50	49
NEU	12	12	12	12	12	12	11
OAS	74	75	76	77	76	74	72
REF	17	17	17	16	16	15	15
SSA	155	165	173	186	197	204	209
USA	24	25	25	26	27	27	27

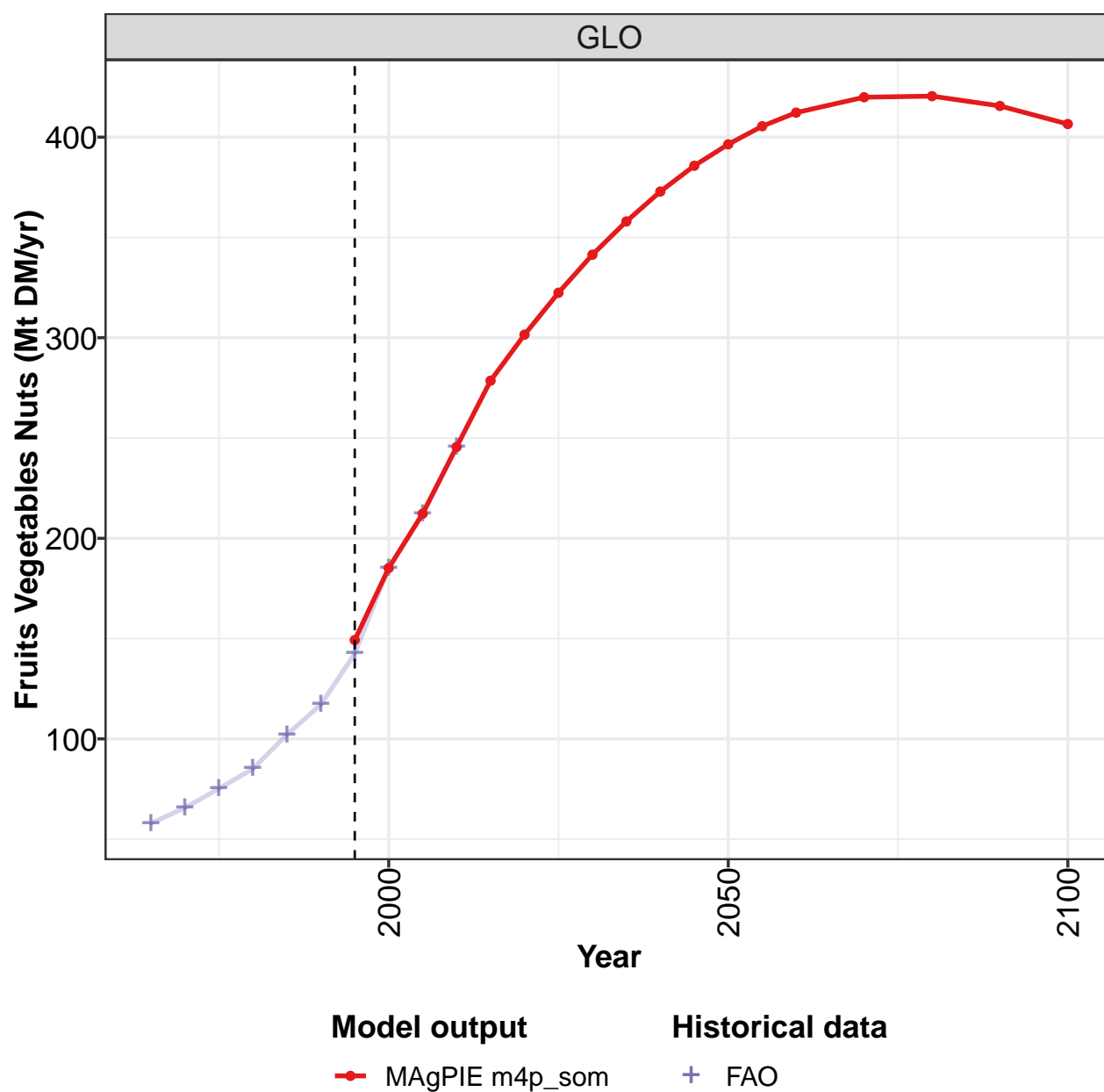
Table 387: MAgPIE m4p\_som — Demand—Food—Crops—Other crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	166	183	196	206	223	247	289	345	386	437
CAZ	2	2	2	2	3	3	3	4	4	4
CHA	40	44	47	45	45	53	71	100	117	133
EUR	25	27	27	27	28	30	30	32	32	31
IND	17	19	20	20	26	29	34	38	41	56
JPN	5	5	5	5	5	5	6	5	6	5
LAM	17	19	19	22	23	23	27	31	32	36
MEA	4	5	7	9	12	13	15	18	23	25
NEU	3	4	4	5	6	6	7	8	8	9
OAS	15	15	17	21	22	24	28	30	35	41
REF	12	13	13	14	14	13	13	13	16	17
SSA	16	19	21	23	25	31	39	46	53	62
USA	10	11	12	13	14	16	17	20	19	19

Table 388: FAO — Demand—Food—Crops—Other crops (Mt DM/yr)

## 7.1.12 Other crops—Fruits Vegetables Nuts

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

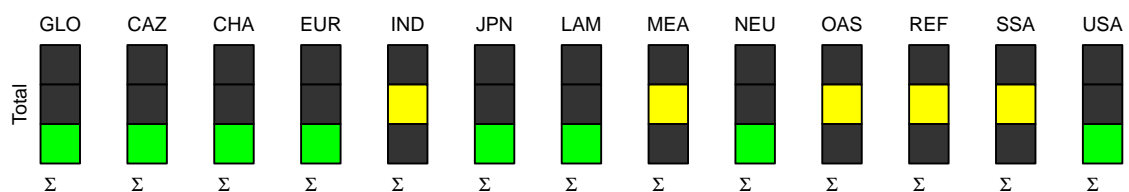
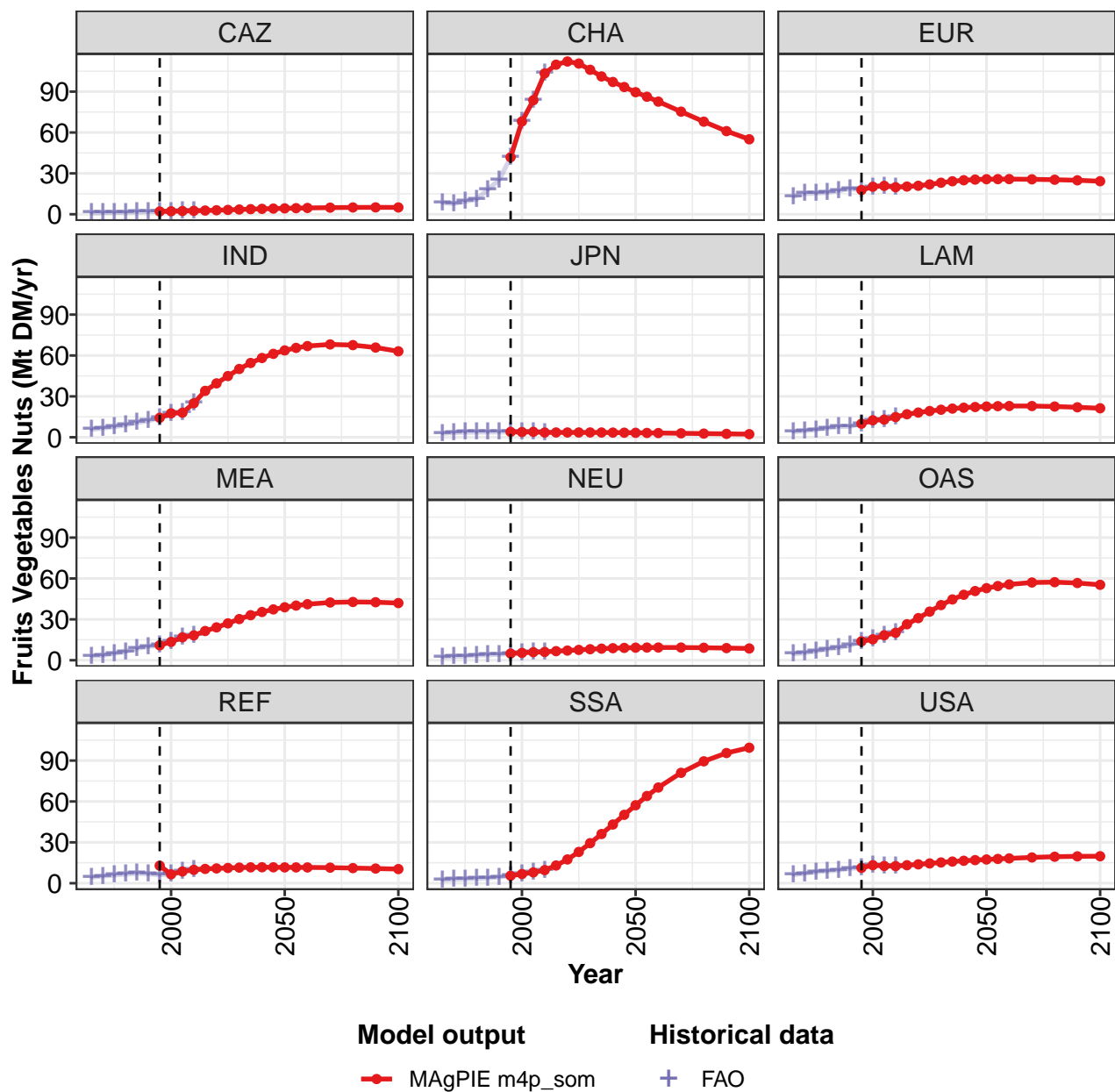


Figure 130: MAgPIE m4p\_som — Demand—Food—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	149	185	212	246	279	302	322	341	358	373	386
CAZ	2	2	2	3	3	3	3	3	4	4	4
CHA	42	68	84	103	110	112	111	106	101	97	93
EUR	18	20	21	20	20	21	22	23	24	25	25
IND	14	18	18	25	34	40	45	50	55	58	61
JPN	4	4	4	3	4	4	4	4	3	3	3
LAM	10	12	13	15	17	18	19	20	21	22	22
MEA	11	13	17	18	21	24	27	30	33	35	37
NEU	5	5	6	6	7	7	8	8	9	9	9
OAS	14	15	18	20	26	31	36	40	45	48	51
REF	13	7	9	10	11	11	11	11	12	12	12
SSA	6	7	8	10	13	17	23	29	36	43	50
USA	11	13	13	13	13	14	15	15	16	16	17

Table 389: MAgPIE m4p\_som — Demand—Food—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	396	405	412	420	420	416	407
CAZ	4	4	5	5	5	5	5
CHA	90	86	83	75	68	61	55
EUR	26	26	26	26	25	25	24
IND	64	66	67	68	68	66	63
JPN	3	3	3	3	3	2	2
LAM	23	23	23	23	23	22	21
MEA	39	40	41	42	43	43	42
NEU	9	9	9	9	9	9	9
OAS	53	54	56	57	57	57	55
REF	12	12	12	11	11	11	10
SSA	57	64	70	81	89	96	99
USA	17	18	18	19	19	20	20

Table 390: MAgPIE m4p\_som — Demand—Food—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)  
[PART 2/2]

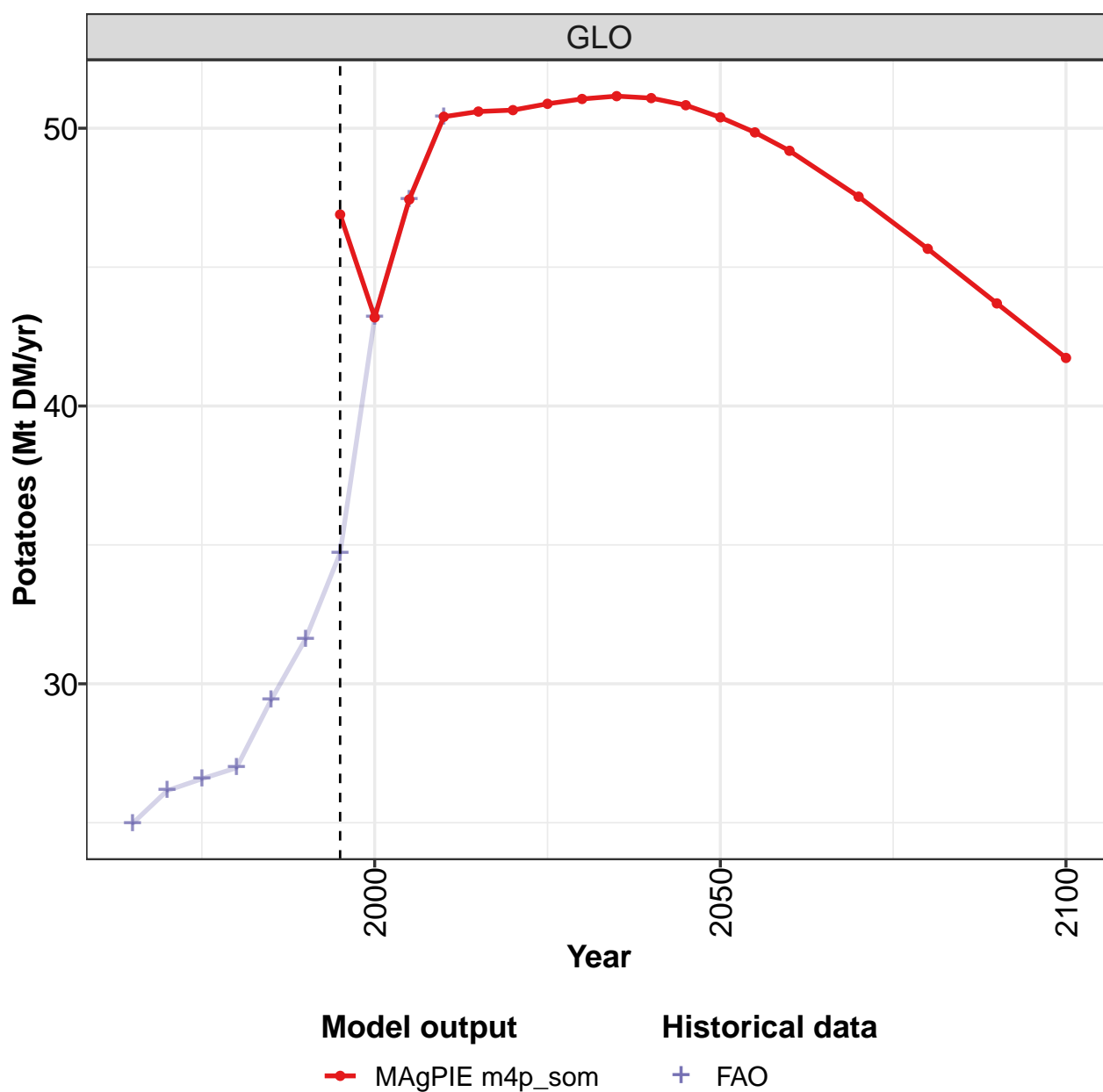
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	58	66	75	85	102	117	143	185	212	246
CAZ	1	1	1	1	2	2	2	2	2	3
CHA	8	8	9	11	18	25	42	68	84	103
EUR	13	15	15	16	17	19	18	20	21	20
IND	6	7	8	9	11	12	14	18	18	25
JPN	3	3	4	4	4	4	4	4	4	3
LAM	4	5	6	7	8	8	10	12	13	15
MEA	3	4	5	6	9	10	11	13	17	18
NEU	2	3	3	4	4	4	5	5	6	6
OAS	5	5	7	8	9	11	14	15	18	20
REF	4	5	6	7	7	7	6	7	9	10
SSA	2	3	3	3	4	5	6	7	8	10
USA	6	7	8	9	10	11	11	13	13	13

Table 391: FAO — Demand—Food—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)



## 7.1.13 Other crops—Potatoes

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

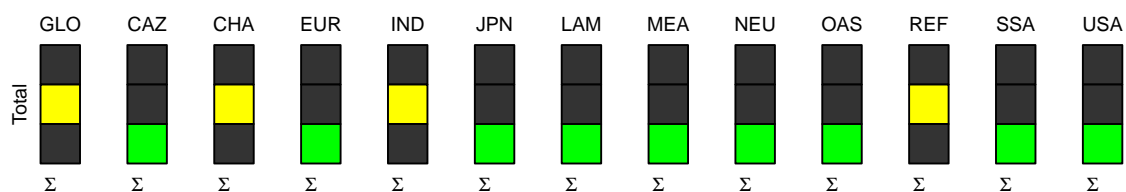
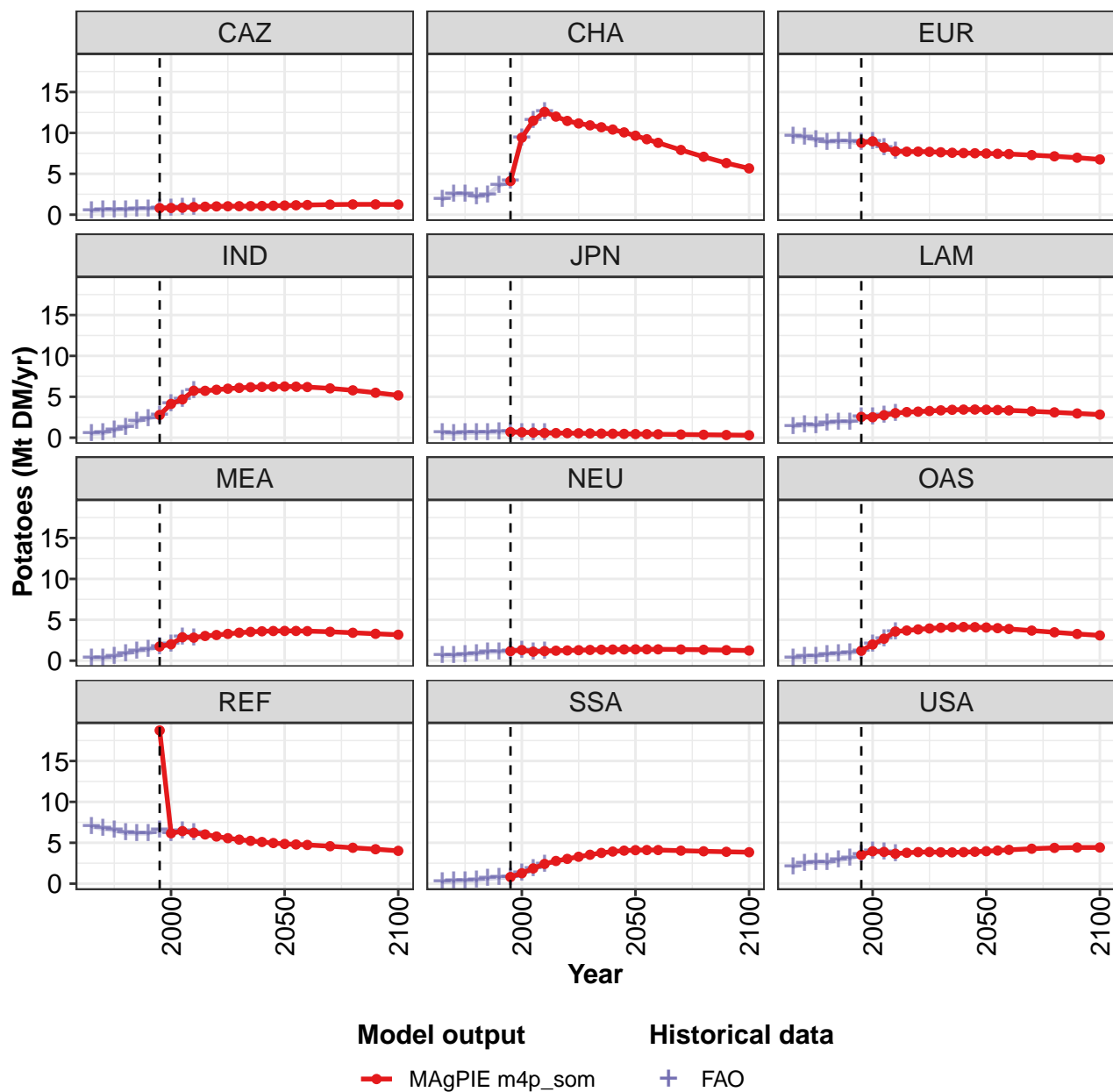


Figure 131: MAgPIE m4p\_som — Demand—Food—Crops—Other crops—Potatoes (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	46.9	43.2	47.4	50.4	50.6	50.7	50.9	51.1	51.2	51.1	50.8
CAZ	0.8	0.8	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.1	1.1
CHA	4.1	9.4	11.5	12.6	12.0	11.5	11.2	10.9	10.7	10.4	10.1
EUR	8.8	9.0	8.2	7.8	7.7	7.7	7.7	7.6	7.6	7.5	7.5
IND	2.8	4.1	4.7	5.7	5.7	5.9	6.0	6.1	6.2	6.2	6.2
JPN	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5
LAM	2.5	2.5	2.7	3.0	3.1	3.2	3.3	3.3	3.4	3.4	3.4
MEA	1.7	2.0	2.9	2.8	3.0	3.1	3.3	3.4	3.5	3.6	3.6
NEU	1.2	1.3	1.1	1.2	1.2	1.2	1.3	1.3	1.3	1.4	1.4
OAS	1.2	2.0	2.7	3.6	3.7	3.8	3.9	4.0	4.1	4.1	4.1
REF	18.7	6.2	6.4	6.2	6.0	5.8	5.6	5.4	5.2	5.1	5.0
SSA	0.8	1.3	1.9	2.4	2.8	3.0	3.3	3.5	3.8	3.9	4.0
USA	3.5	4.0	3.9	3.7	3.8	3.9	3.9	3.8	3.8	3.9	3.9

Table 392: MAgPIE m4p\_som — Demand—Food—Crops—Other crops—Potatoes (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	50.4	49.9	49.2	47.5	45.7	43.7	41.7
CAZ	1.1	1.2	1.2	1.2	1.3	1.3	1.2
CHA	9.7	9.2	8.8	7.9	7.1	6.3	5.7
EUR	7.5	7.5	7.4	7.3	7.1	7.0	6.8
IND	6.3	6.2	6.2	6.0	5.8	5.5	5.2
JPN	0.4	0.4	0.4	0.4	0.4	0.3	0.3
LAM	3.4	3.4	3.3	3.2	3.1	3.0	2.8
MEA	3.6	3.6	3.6	3.5	3.4	3.3	3.2
NEU	1.4	1.4	1.4	1.4	1.3	1.3	1.2
OAS	4.1	4.0	3.9	3.7	3.5	3.3	3.1
REF	4.9	4.8	4.7	4.6	4.4	4.2	4.0
SSA	4.1	4.1	4.1	4.0	4.0	3.9	3.8
USA	4.0	4.1	4.1	4.3	4.4	4.4	4.4

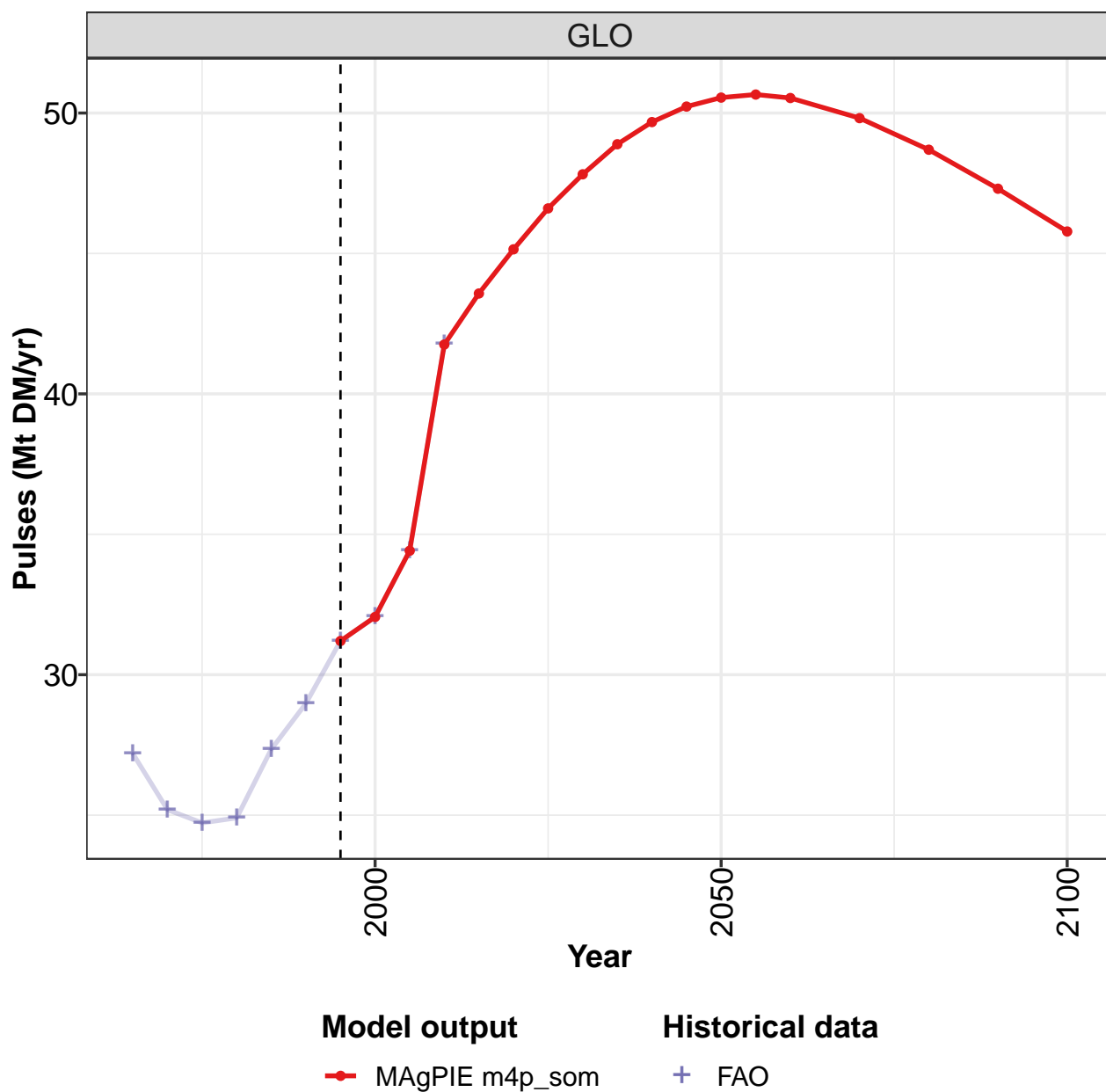
Table 393: MAgPIE m4p\_som — Demand—Food—Crops—Other crops—Potatoes (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	25.0	26.2	26.6	27.0	29.4	31.6	34.7	43.2	47.4	50.4
CAZ	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	0.9
CHA	1.9	2.5	2.5	2.2	2.4	3.6	4.1	9.4	11.5	12.6
EUR	9.6	9.5	9.1	8.9	9.0	8.9	8.8	9.0	8.2	7.8
IND	0.5	0.6	0.9	1.3	2.0	2.4	2.8	4.1	4.7	5.7
JPN	0.6	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.6
LAM	1.4	1.6	1.5	1.8	1.9	1.9	2.5	2.5	2.7	3.0
MEA	0.3	0.3	0.5	0.9	1.2	1.4	1.7	2.0	2.9	2.8
NEU	0.6	0.6	0.8	0.8	1.0	1.1	1.2	1.3	1.1	1.2
OAS	0.4	0.5	0.6	0.8	0.8	1.0	1.2	2.0	2.7	3.6
REF	7.0	6.7	6.5	6.2	6.2	6.2	6.5	6.2	6.4	6.2
SSA	0.2	0.3	0.4	0.4	0.6	0.7	0.8	1.3	1.9	2.4
USA	2.1	2.5	2.6	2.5	2.9	3.1	3.5	4.0	3.9	3.7

Table 394: FAO — Demand—Food—Crops—Other crops—Potatoes (Mt DM/yr)

## 7.1.14 Other crops—Pulses

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

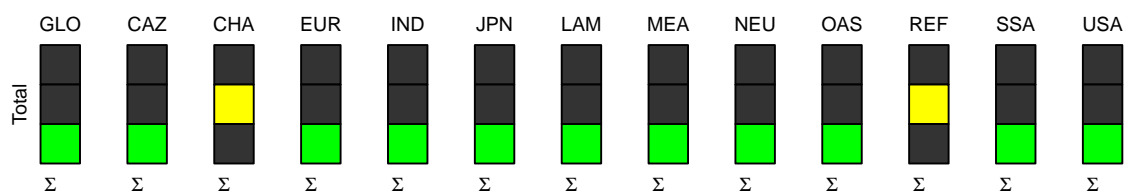
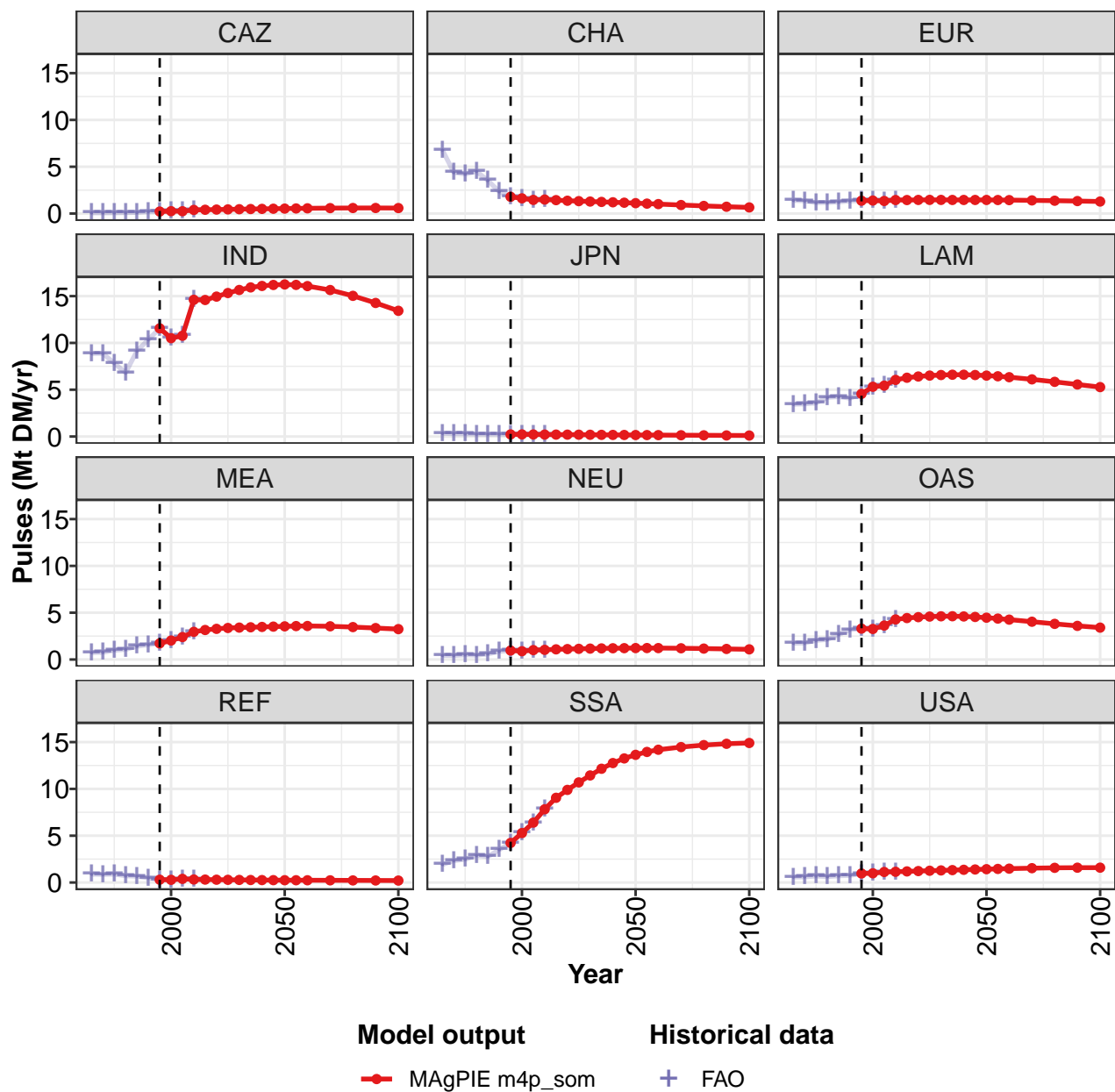


Figure 132: MAgPIE m4p\_som — Demand—Food—Crops—Other crops—Pulses (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	31.2	32.1	34.4	41.8	43.6	45.1	46.6	47.8	48.9	49.7	50.2
CAZ	0.2	0.3	0.2	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
CHA	1.8	1.6	1.5	1.5	1.4	1.4	1.3	1.3	1.2	1.2	1.2
EUR	1.4	1.4	1.3	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5
IND	11.6	10.5	10.8	14.6	14.6	14.9	15.3	15.7	15.9	16.1	16.2
JPN	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
LAM	4.6	5.3	5.4	6.1	6.3	6.4	6.5	6.6	6.6	6.6	6.6
MEA	1.7	2.0	2.4	3.0	3.2	3.3	3.4	3.4	3.4	3.5	3.5
NEU	1.0	0.9	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.2	1.2
OAS	3.3	3.3	3.6	4.3	4.4	4.5	4.6	4.6	4.6	4.6	4.5
REF	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
SSA	4.2	5.3	6.4	7.8	9.1	9.9	10.7	11.4	12.2	12.8	13.3
USA	1.0	1.0	1.1	1.1	1.2	1.2	1.3	1.3	1.3	1.4	1.4

Table 395: MAgPIE m4p\_som — Demand—Food—Crops—Other crops—Pulses (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	50.5	50.7	50.5	49.8	48.7	47.3	45.8
CAZ	0.5	0.5	0.6	0.6	0.6	0.6	0.6
CHA	1.1	1.1	1.0	0.9	0.8	0.7	0.7
EUR	1.5	1.4	1.4	1.4	1.4	1.3	1.3
IND	16.2	16.2	16.1	15.7	15.0	14.3	13.4
JPN	0.2	0.2	0.2	0.1	0.1	0.1	0.1
LAM	6.5	6.4	6.3	6.1	5.8	5.6	5.3
MEA	3.5	3.6	3.6	3.5	3.5	3.4	3.2
NEU	1.2	1.2	1.2	1.2	1.2	1.1	1.1
OAS	4.5	4.4	4.3	4.0	3.8	3.6	3.4
REF	0.2	0.2	0.2	0.2	0.2	0.2	0.2
SSA	13.6	14.0	14.2	14.5	14.7	14.8	14.9
USA	1.4	1.5	1.5	1.5	1.6	1.6	1.6

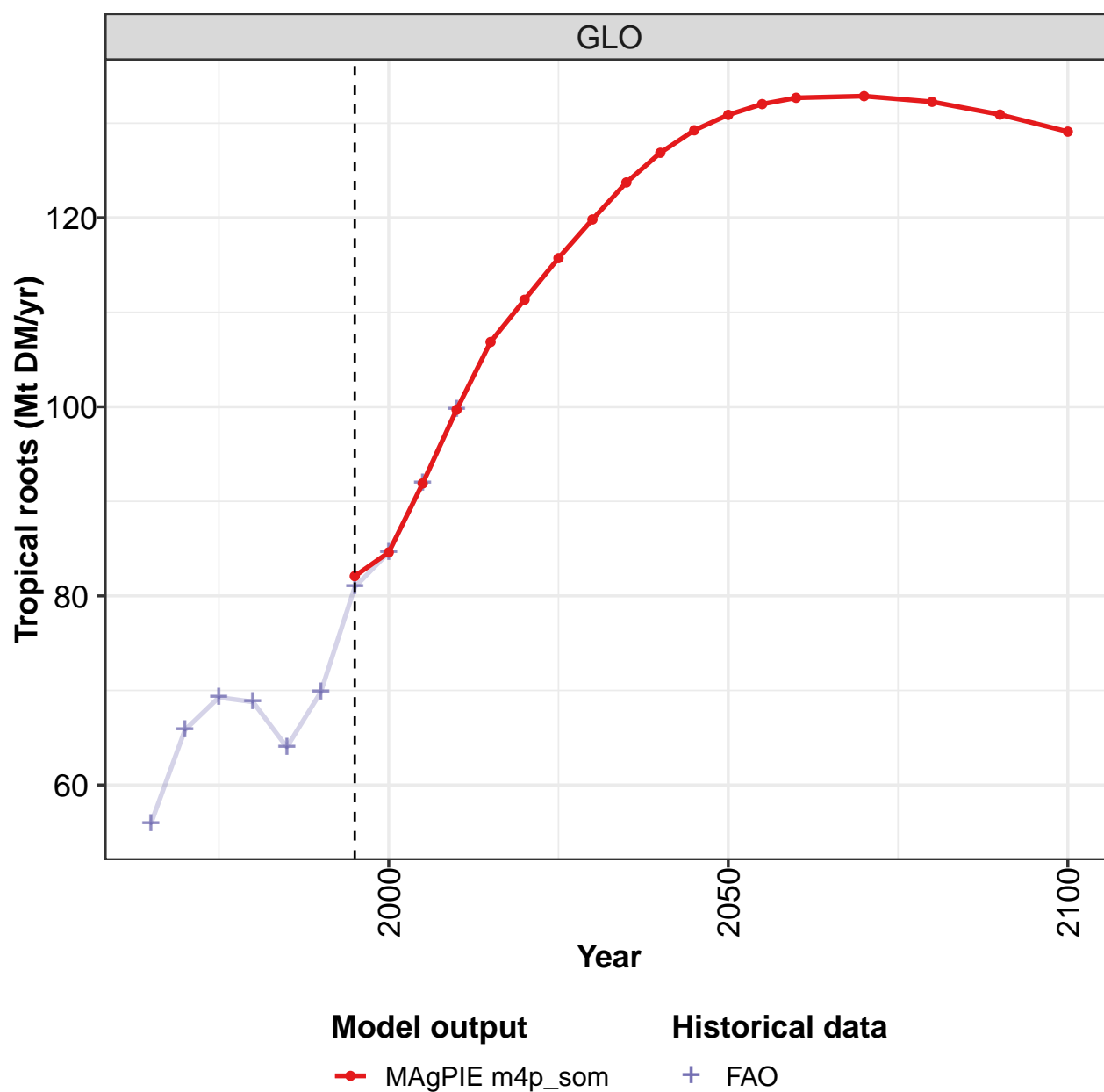
Table 396: MAgPIE m4p\_som — Demand—Food—Crops—Other crops—Pulses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	27.2	25.2	24.7	24.9	27.3	29.0	31.2	32.1	34.4	41.8
CAZ	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.4
CHA	6.8	4.4	4.2	4.5	3.5	2.3	1.8	1.6	1.5	1.5
EUR	1.4	1.4	1.2	1.2	1.2	1.4	1.4	1.4	1.3	1.4
IND	8.9	8.9	7.8	6.8	9.1	10.3	11.6	10.5	10.8	14.6
JPN	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2
LAM	3.4	3.5	3.6	4.2	4.3	4.1	4.6	5.3	5.4	6.1
MEA	0.7	0.8	1.0	1.1	1.4	1.6	1.7	2.0	2.4	3.0
NEU	0.4	0.4	0.5	0.5	0.6	0.9	1.0	0.9	1.0	1.0
OAS	1.7	1.8	2.0	2.1	2.7	3.2	3.3	3.3	3.6	4.3
REF	0.9	0.8	0.9	0.7	0.7	0.5	0.3	0.3	0.4	0.3
SSA	1.9	2.3	2.5	2.9	2.8	3.5	4.2	5.3	6.4	7.8
USA	0.6	0.6	0.7	0.6	0.7	0.8	1.0	1.0	1.1	1.1

Table 397: FAO — Demand—Food—Crops—Other crops—Pulses (Mt DM/yr)

## 7.1.15 Other crops—Tropical roots

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

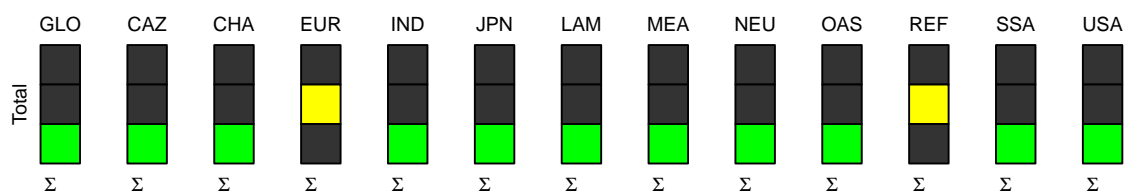
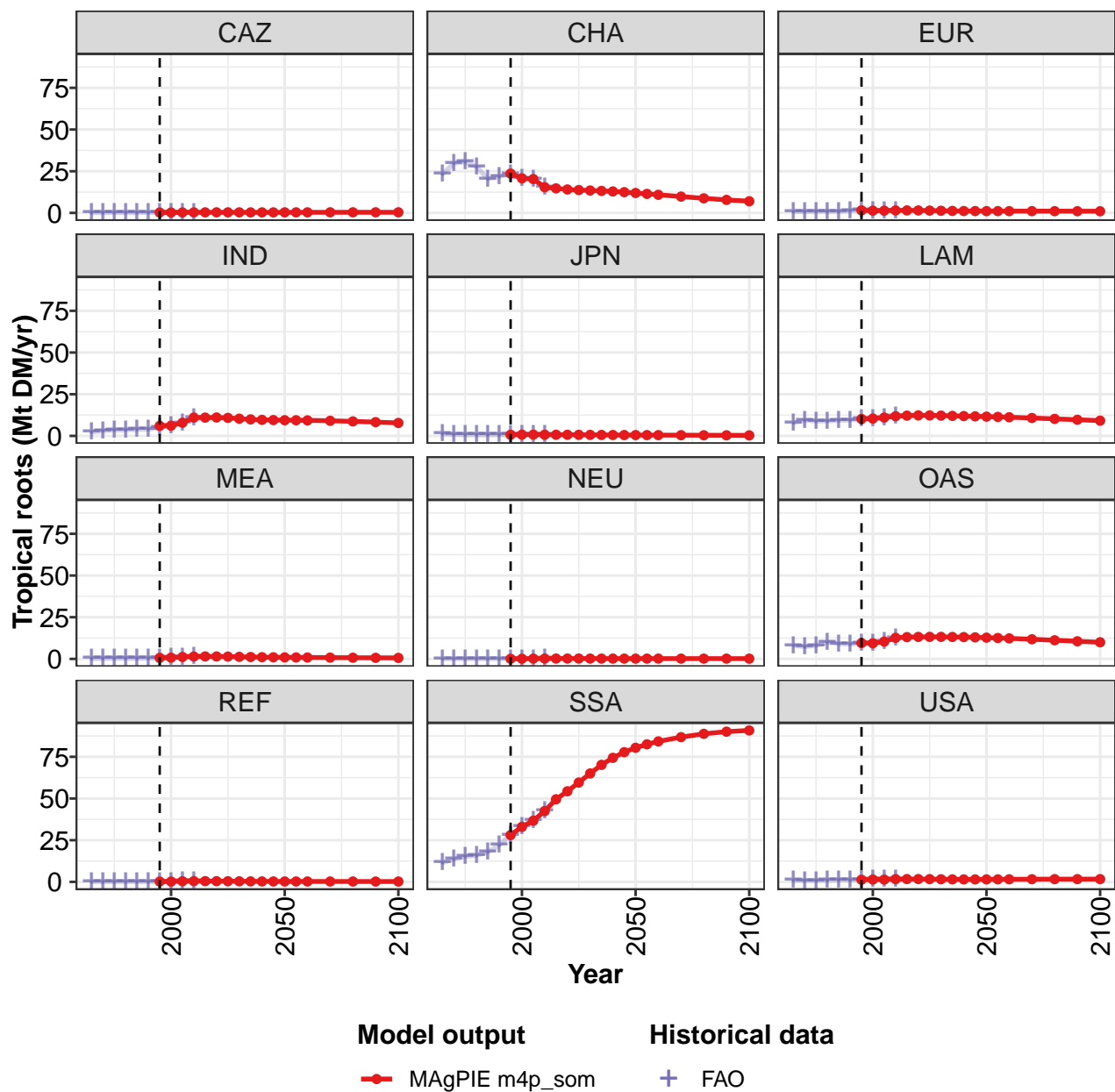


Figure 133: MAgPIE m4p\_som — Demand—Food—Crops—Other crops—Tropical roots (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	82	85	92	100	107	111	116	120	124	127	129
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	24	21	20	15	15	14	14	13	13	13	12
EUR	2	1	1	2	2	1	1	1	1	1	1
IND	6	6	8	11	11	11	11	10	10	10	9
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	10	10	11	12	12	12	12	12	12	12	12
MEA	1	1	1	1	1	1	1	1	1	1	1
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	10	9	10	13	13	13	13	13	13	13	13
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	28	33	37	42	50	54	60	65	70	74	78
USA	1	1	1	2	2	2	2	2	2	1	1

Table 398: MAgPIE m4p\_som — Demand—Food—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	131	132	133	133	132	131	129
CAZ	0	0	0	0	0	0	0
CHA	12	11	11	10	9	8	7
EUR	1	1	1	1	1	1	1
IND	9	9	9	9	9	8	8
JPN	1	0	0	0	0	0	0
LAM	12	11	11	11	10	10	9
MEA	1	1	1	1	1	1	1
NEU	0	0	0	0	0	0	0
OAS	13	13	12	12	11	11	10
REF	0	0	0	0	0	0	0
SSA	80	82	84	87	89	90	91
USA	1	2	2	2	2	2	2

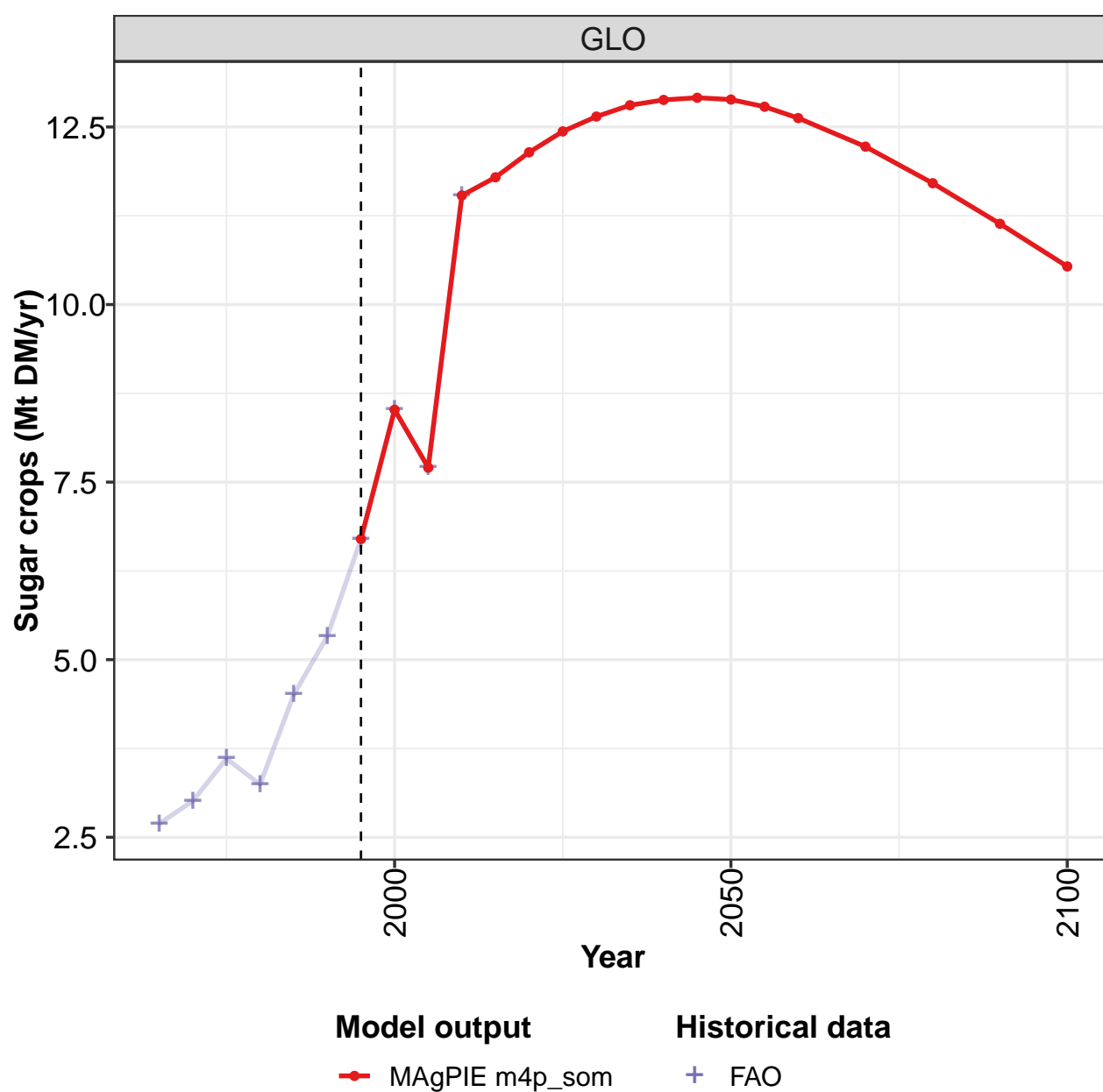
Table 399: MAgPIE m4p\_som — Demand—Food—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	55.9	65.8	69.3	68.8	64.0	69.8	80.9	84.6	91.9	99.7
CAZ	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3
CHA	23.2	29.7	30.7	27.7	20.5	21.7	23.6	20.8	20.3	15.4
EUR	0.8	0.8	0.9	0.9	0.9	1.3	1.6	1.4	1.4	1.5
IND	2.2	3.0	3.5	3.5	3.8	3.9	5.0	6.1	7.9	11.0
JPN	1.3	0.9	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.7
LAM	7.7	9.4	8.8	8.9	9.3	9.5	10.2	10.4	11.0	11.8
MEA	0.2	0.2	0.3	0.3	0.3	0.4	0.6	0.8	1.2	1.4
NEU	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.2
OAS	8.1	7.3	8.0	9.9	9.1	8.8	9.5	9.4	10.4	12.7
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.4	0.5
SSA	11.4	13.7	15.3	15.8	18.0	22.1	28.1	33.0	36.7	42.5
USA	0.9	0.8	0.8	0.9	1.2	1.1	1.3	1.4	1.4	1.6

Table 400: FAO — Demand—Food—Crops—Other crops—Tropical roots (Mt DM/yr)

## 7.1.16 Sugar crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

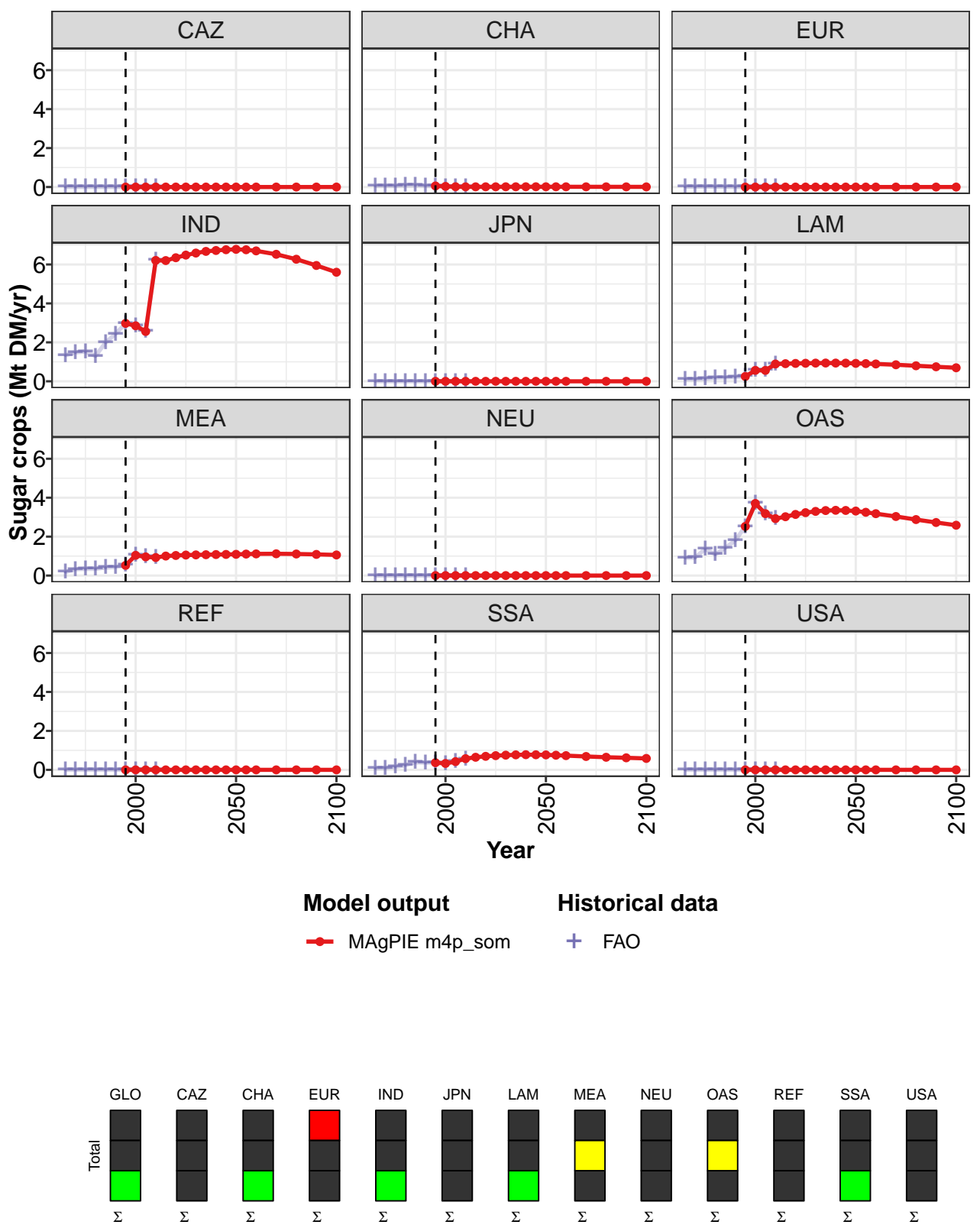


Figure 134: MAGPIE m4p\_som — Demand—Food—Crops—Sugar crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	6.7	8.5	7.7	11.5	11.8	12.1	12.4	12.6	12.8	12.9	12.9
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	3.0	2.9	2.6	6.2	6.2	6.3	6.5	6.6	6.7	6.7	6.8
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.2	0.6	0.6	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
MEA	0.5	1.0	1.0	0.9	1.0	1.0	1.1	1.1	1.1	1.1	1.1
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	2.5	3.7	3.2	2.9	3.0	3.1	3.2	3.3	3.3	3.4	3.3
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.4	0.3	0.4	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.8
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 401: MAgPIE m4p\_som — Demand—Food—Crops—Sugar crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	12.9	12.8	12.6	12.2	11.7	11.1	10.5
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	6.8	6.8	6.7	6.5	6.3	5.9	5.6
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.9	0.9	0.9	0.8	0.8	0.7	0.7
MEA	1.1	1.1	1.1	1.1	1.1	1.1	1.1
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	3.3	3.3	3.2	3.0	2.9	2.7	2.6
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.8	0.8	0.7	0.7	0.6	0.6	0.6
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

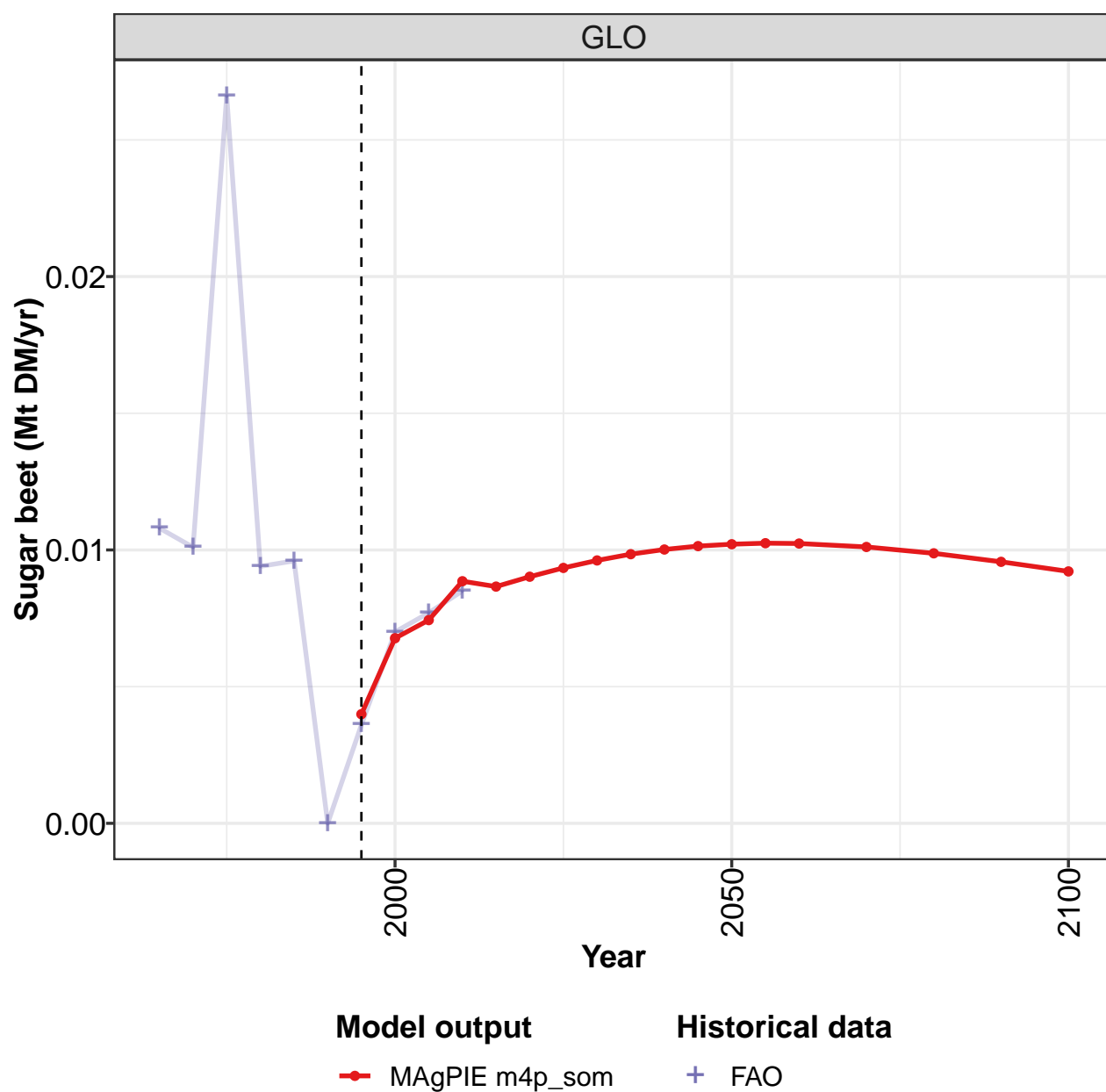
Table 402: MAgPIE m4p\_som — Demand—Food—Crops—Sugar crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.7	3.0	3.6	3.2	4.5	5.3	6.7	8.5	7.7	11.5
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	1.3	1.5	1.5	1.3	2.0	2.4	3.0	2.9	2.6	6.2
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.6	0.6	0.9
MEA	0.2	0.3	0.3	0.3	0.4	0.4	0.5	1.0	1.0	0.9
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.9	0.9	1.4	1.1	1.4	1.8	2.5	3.7	3.2	2.9
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.1	0.1	0.2	0.2	0.4	0.4	0.4	0.3	0.4	0.6
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 403: FAO — Demand—Food—Crops—Sugar crops (Mt DM/yr)

## 7.1.17 Sugar crops—Sugar beet

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

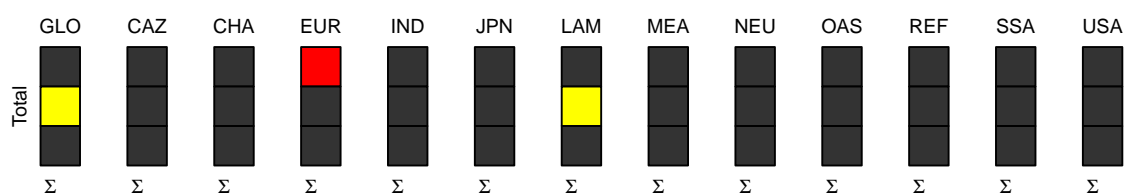
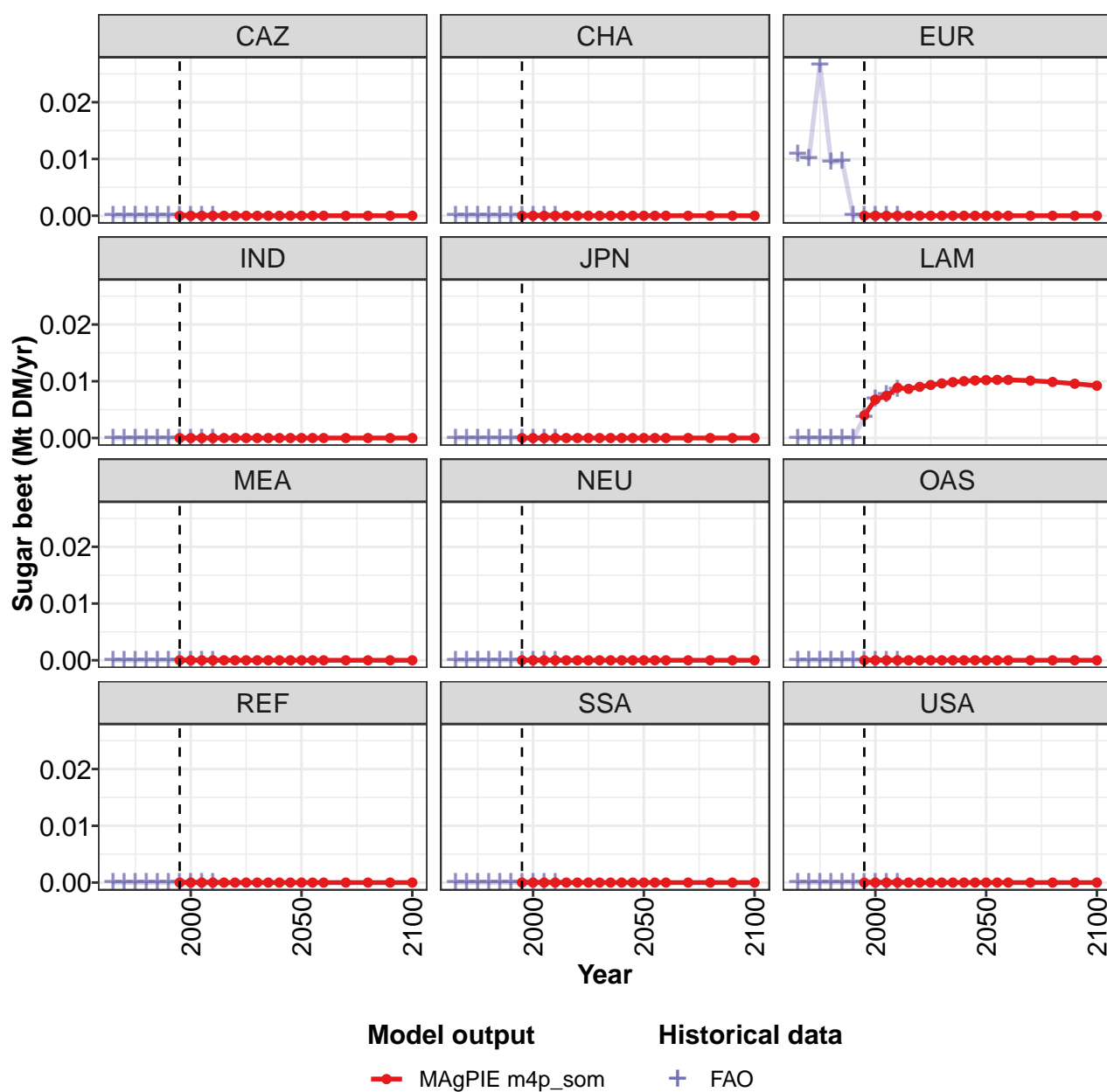


Figure 135: MAGPIE m4p\_som — Demand—Food—Crops—Sugar crops—Sugar beet (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.0040	0.0068	0.0074	0.0089	0.0087	0.0090	0.0093	0.0096	0.0098	0.0100	0.0101
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0040	0.0068	0.0074	0.0089	0.0087	0.0090	0.0093	0.0096	0.0098	0.0100	0.0101
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 404: MAgPIE m4p\_som — Demand—Food—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0102	0.0102	0.0102	0.0101	0.0099	0.0096	0.0092
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0102	0.0102	0.0102	0.0101	0.0099	0.0096	0.0092
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

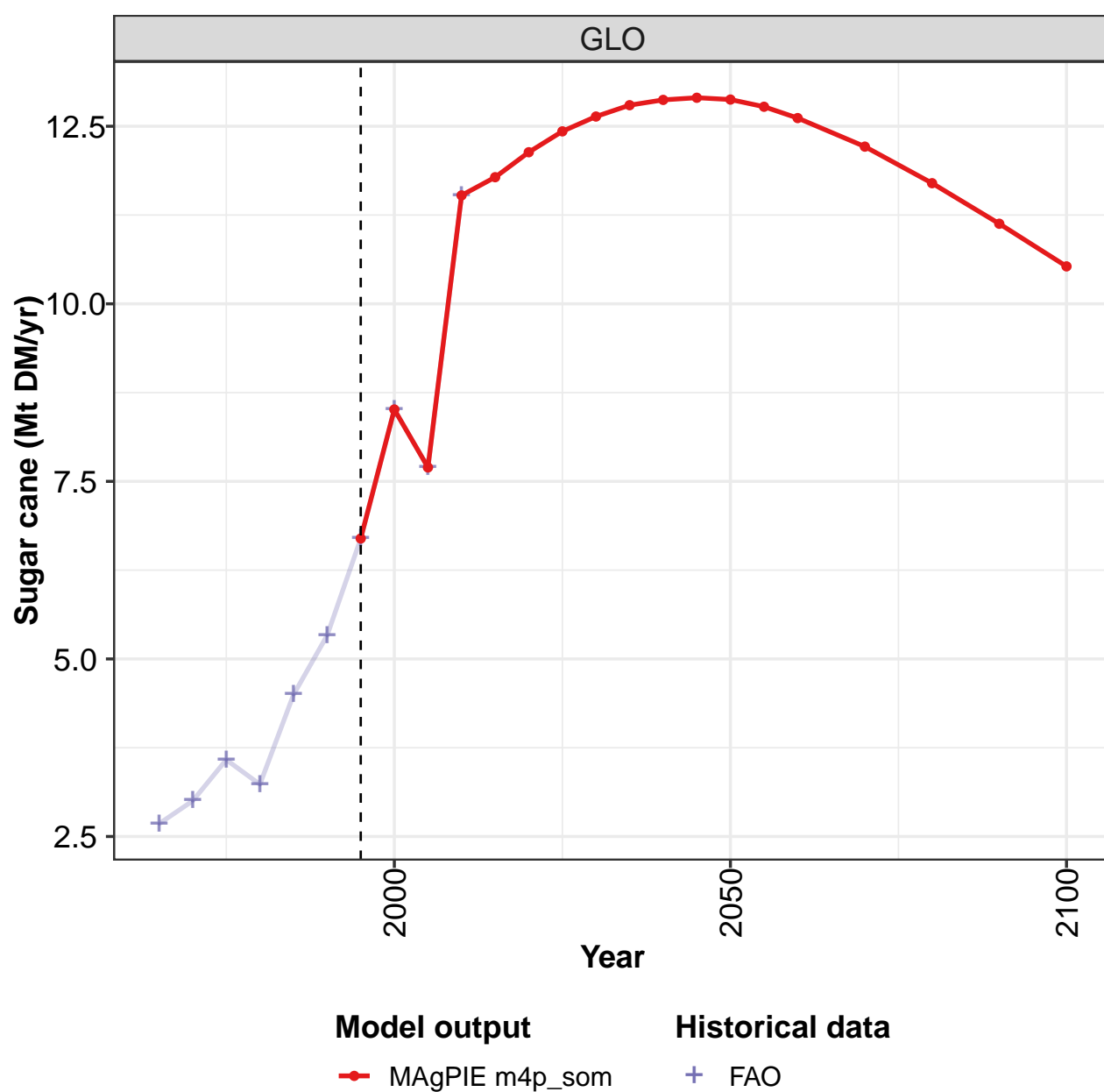
Table 405: MAgPIE m4p\_som — Demand—Food—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0108	0.0101	0.0266	0.0094	0.0096	0.0000	0.0036	0.0070	0.0077	0.0085
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0108	0.0101	0.0266	0.0094	0.0096	0.0000	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0036	0.0069	0.0077	0.0085
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 406: FAO — Demand—Food—Crops—Sugar crops—Sugar beet (Mt DM/yr)

## 7.1.18 Sugar crops—Sugar cane

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*







	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	6.7	8.5	7.7	11.5	11.8	12.1	12.4	12.6	12.8	12.9	12.9
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	3.0	2.9	2.6	6.2	6.2	6.3	6.5	6.6	6.7	6.7	6.8
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.2	0.6	0.6	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
MEA	0.5	1.0	1.0	0.9	1.0	1.0	1.1	1.1	1.1	1.1	1.1
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	2.5	3.7	3.2	2.9	3.0	3.1	3.2	3.3	3.3	3.4	3.3
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.4	0.3	0.4	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.8
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 407: MAgPIE m4p\_som — Demand—Food—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	12.9	12.8	12.6	12.2	11.7	11.1	10.5
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	6.8	6.8	6.7	6.5	6.3	5.9	5.6
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.9	0.9	0.9	0.8	0.8	0.7	0.7
MEA	1.1	1.1	1.1	1.1	1.1	1.1	1.1
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	3.3	3.3	3.2	3.0	2.9	2.7	2.6
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.8	0.8	0.7	0.7	0.6	0.6	0.6
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

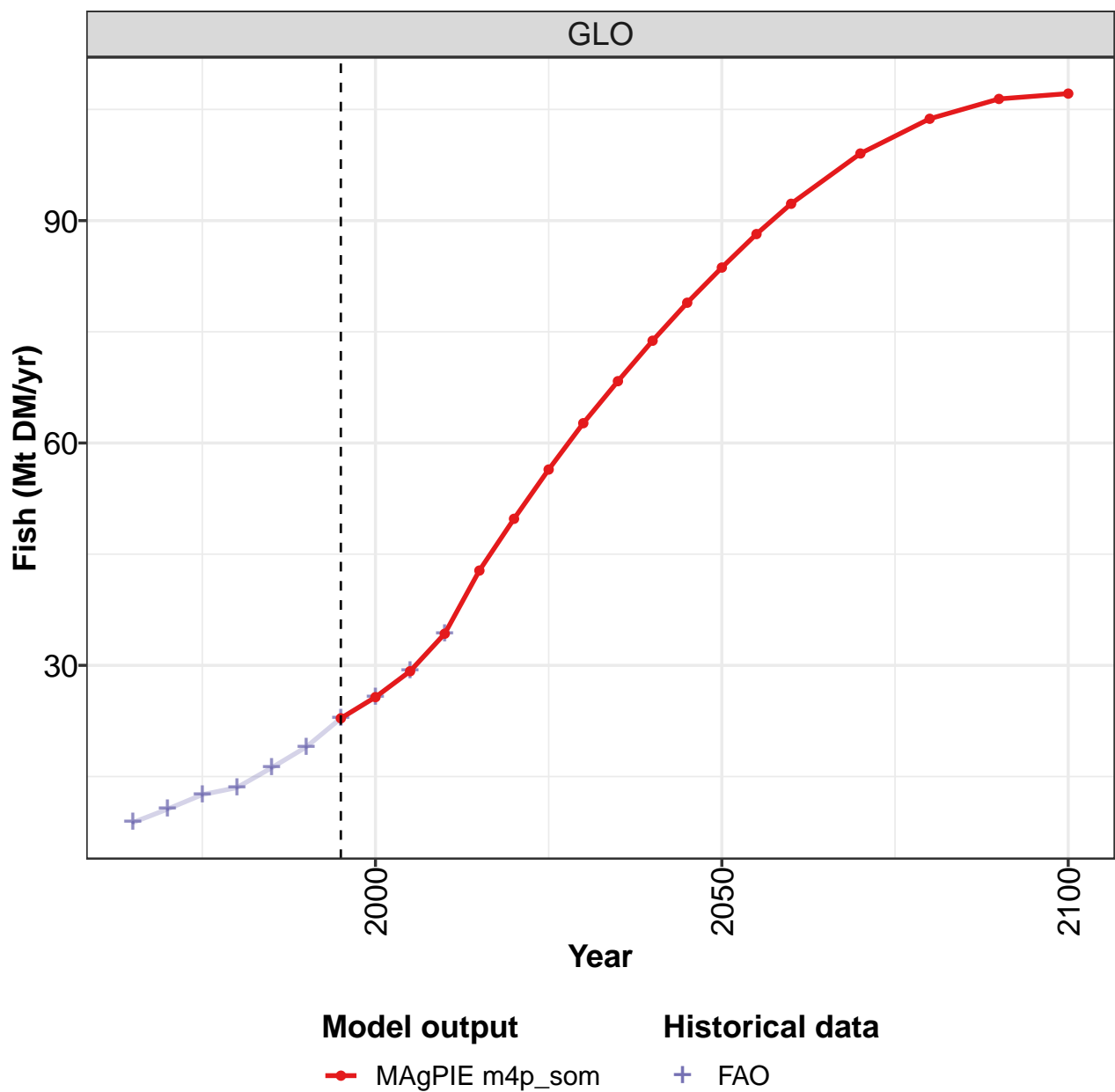
Table 408: MAgPIE m4p\_som — Demand—Food—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.7	3.0	3.6	3.2	4.5	5.3	6.7	8.5	7.7	11.5
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	1.3	1.5	1.5	1.3	2.0	2.4	3.0	2.9	2.6	6.2
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.6	0.6	0.9
MEA	0.2	0.3	0.3	0.3	0.4	0.4	0.5	1.0	1.0	0.9
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.9	0.9	1.4	1.1	1.4	1.8	2.5	3.7	3.2	2.9
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.1	0.1	0.2	0.2	0.4	0.4	0.4	0.3	0.4	0.6
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 409: FAO — Demand—Food—Crops—Sugar crops—Sugar cane (Mt DM/yr)

## 7.2 Fish

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

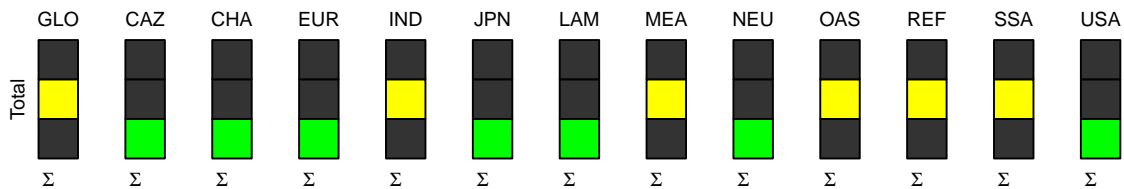
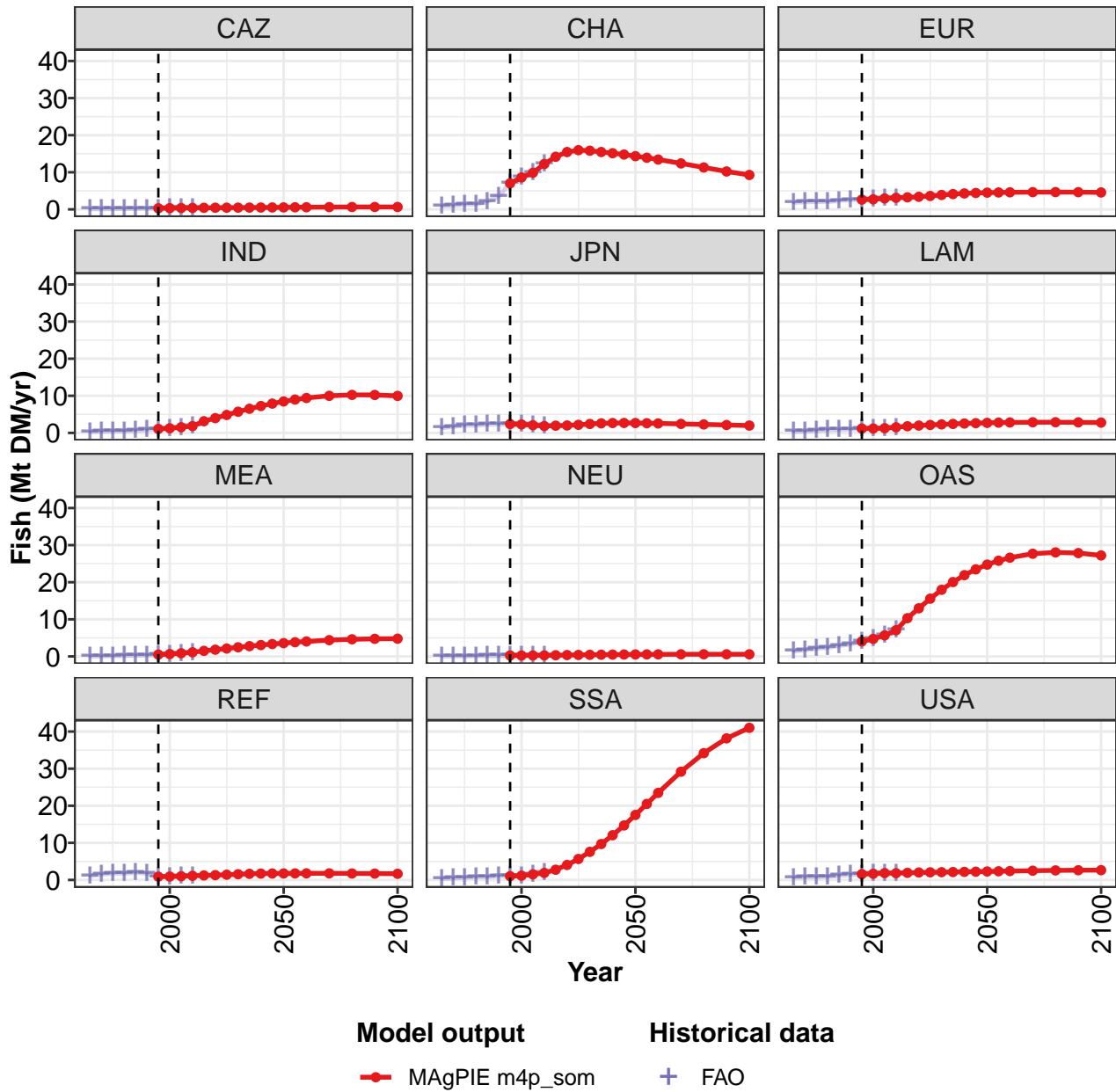


Figure 137: MAgPIE m4p\_som — Demand—Food—Fish (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	23	26	29	34	43	50	56	63	68	74	79
CAZ	0	0	0	0	0	0	0	0	0	1	1
CHA	7	9	10	12	14	15	16	16	15	15	15
EUR	3	3	3	3	3	3	4	4	4	4	4
IND	1	1	2	2	3	4	5	6	7	7	8
JPN	2	2	2	2	2	2	2	2	3	3	3
LAM	1	1	1	2	2	2	2	2	2	3	3
MEA	0	1	1	1	1	2	2	2	3	3	3
NEU	0	0	0	0	0	0	0	0	0	0	1
OAS	4	5	6	7	10	13	16	18	20	22	23
REF	1	1	1	1	1	1	1	2	2	2	2
SSA	1	1	2	2	3	4	6	8	10	12	15
USA	2	2	2	2	2	2	2	2	2	2	2

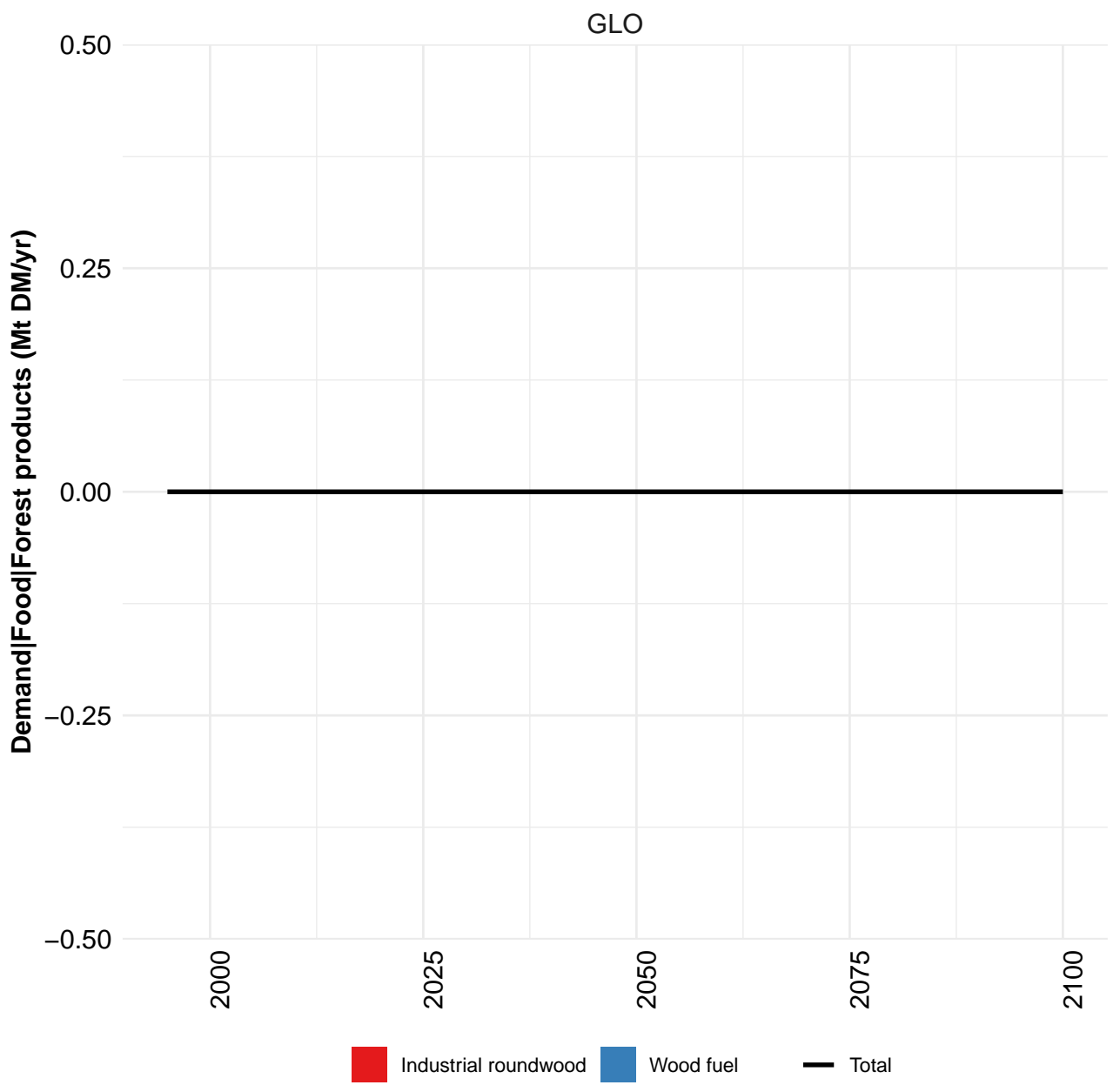
Table 410: MAgPIE m4p\_som — Demand—Food—Fish (Mt DM/yr) [PART 1/2]

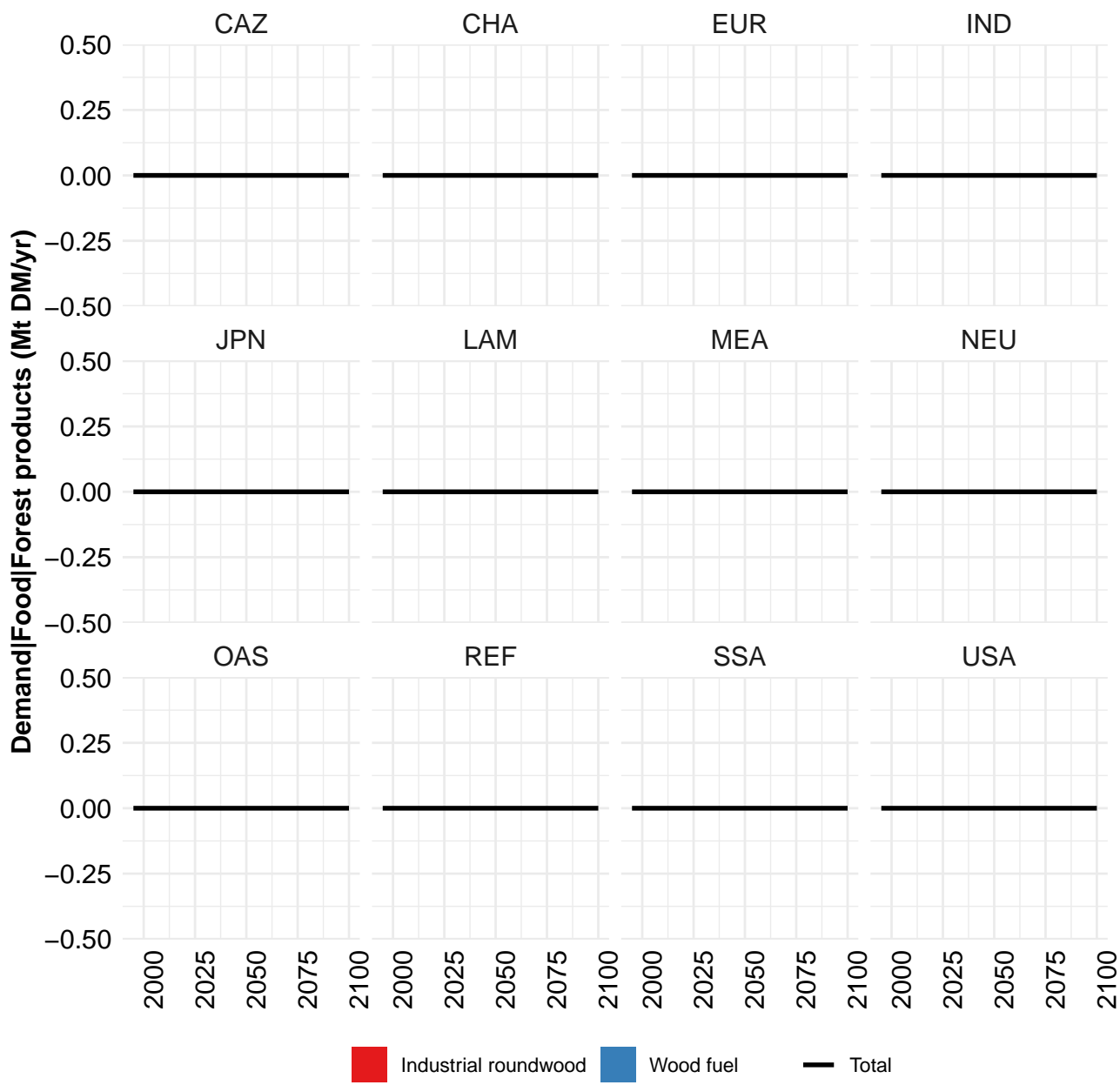
	2050	2055	2060	2070	2080	2090	2100
GLO	84	88	92	99	104	106	107
CAZ	1	1	1	1	1	1	1
CHA	14	14	13	12	11	10	9
EUR	5	5	5	5	5	5	5
IND	8	9	9	10	10	10	10
JPN	3	3	3	2	2	2	2
LAM	3	3	3	3	3	3	3
MEA	4	4	4	4	5	5	5
NEU	1	1	1	1	1	1	1
OAS	25	26	27	28	28	28	27
REF	2	2	2	2	2	2	2
SSA	18	20	23	29	34	38	41
USA	2	2	2	2	3	3	3

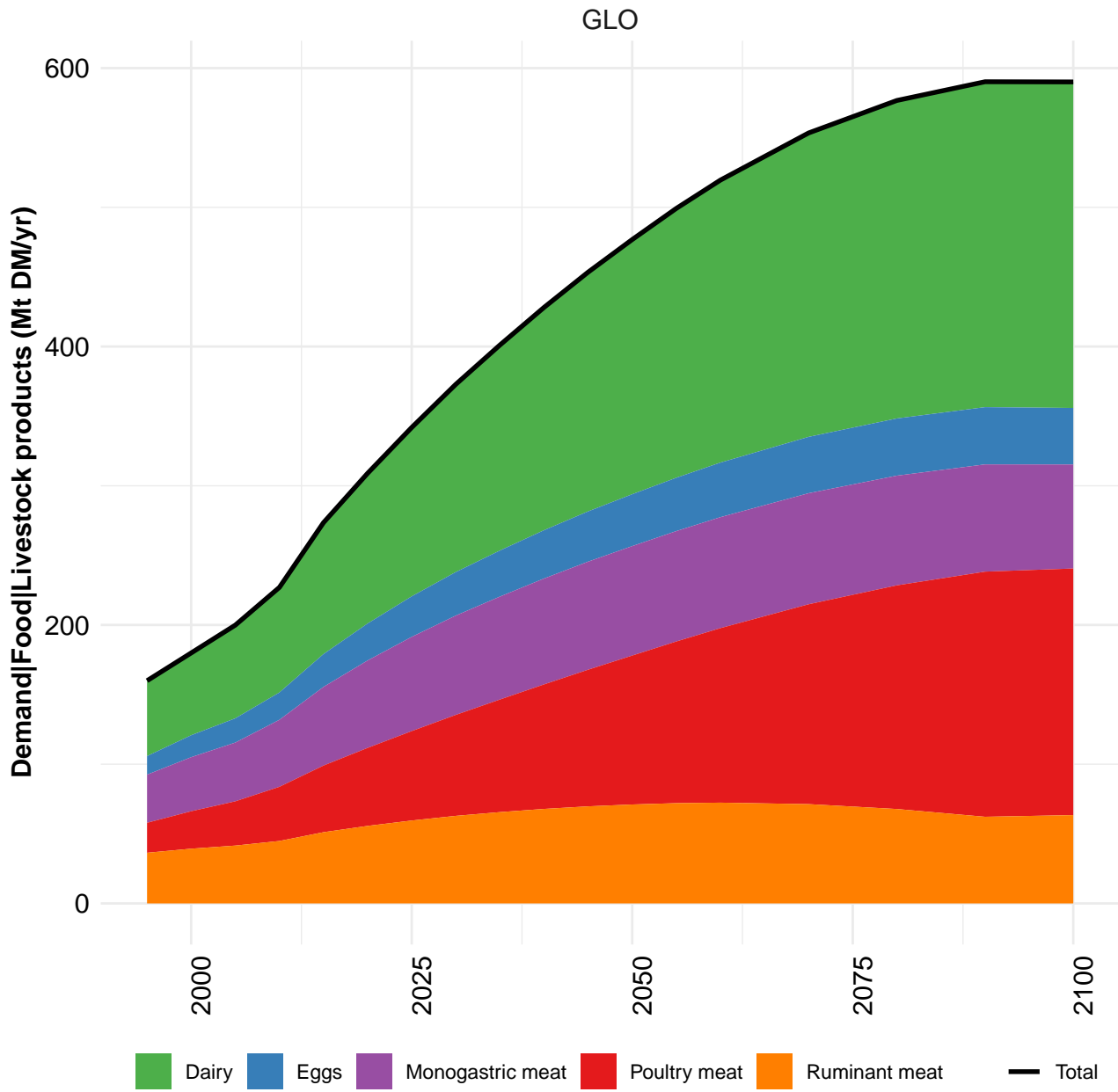
Table 411: MAgPIE m4p\_som — Demand—Food—Fish (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	8.8	10.6	12.6	13.5	16.2	19.0	22.9	25.7	29.2	34.3
CAZ	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4
CHA	1.0	1.0	1.4	1.4	2.1	3.6	7.0	8.6	9.9	12.2
EUR	1.9	2.0	2.1	2.1	2.4	2.6	2.6	2.7	3.0	3.1
IND	0.3	0.4	0.5	0.6	0.7	0.9	1.1	1.2	1.5	1.8
JPN	1.4	1.7	2.0	2.1	2.3	2.4	2.4	2.3	2.1	1.8
LAM	0.4	0.5	0.6	0.9	0.9	1.1	1.2	1.2	1.3	1.5
MEA	0.1	0.1	0.2	0.2	0.3	0.4	0.5	0.6	0.9	1.1
NEU	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.3	0.3
OAS	1.4	1.7	2.1	2.4	3.0	3.3	4.0	4.7	5.7	7.1
REF	1.1	1.5	1.8	1.8	2.1	1.8	0.9	0.9	1.0	1.1
SSA	0.4	0.5	0.7	0.8	0.8	1.1	1.0	1.2	1.5	1.9
USA	0.7	0.8	0.8	0.9	1.2	1.4	1.6	1.7	1.9	1.8

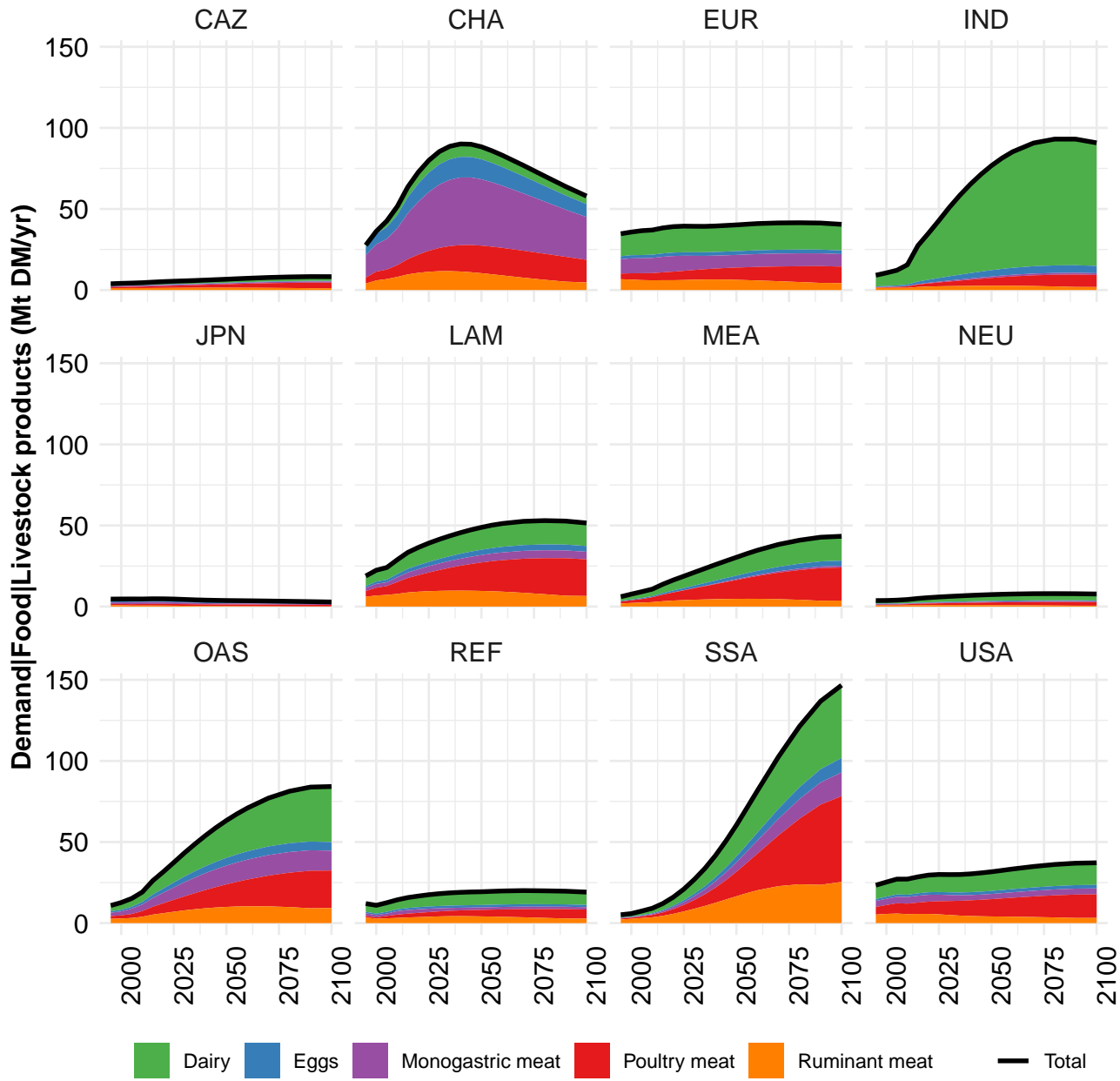
Table 412: FAO — Demand—Food—Fish (Mt DM/yr)





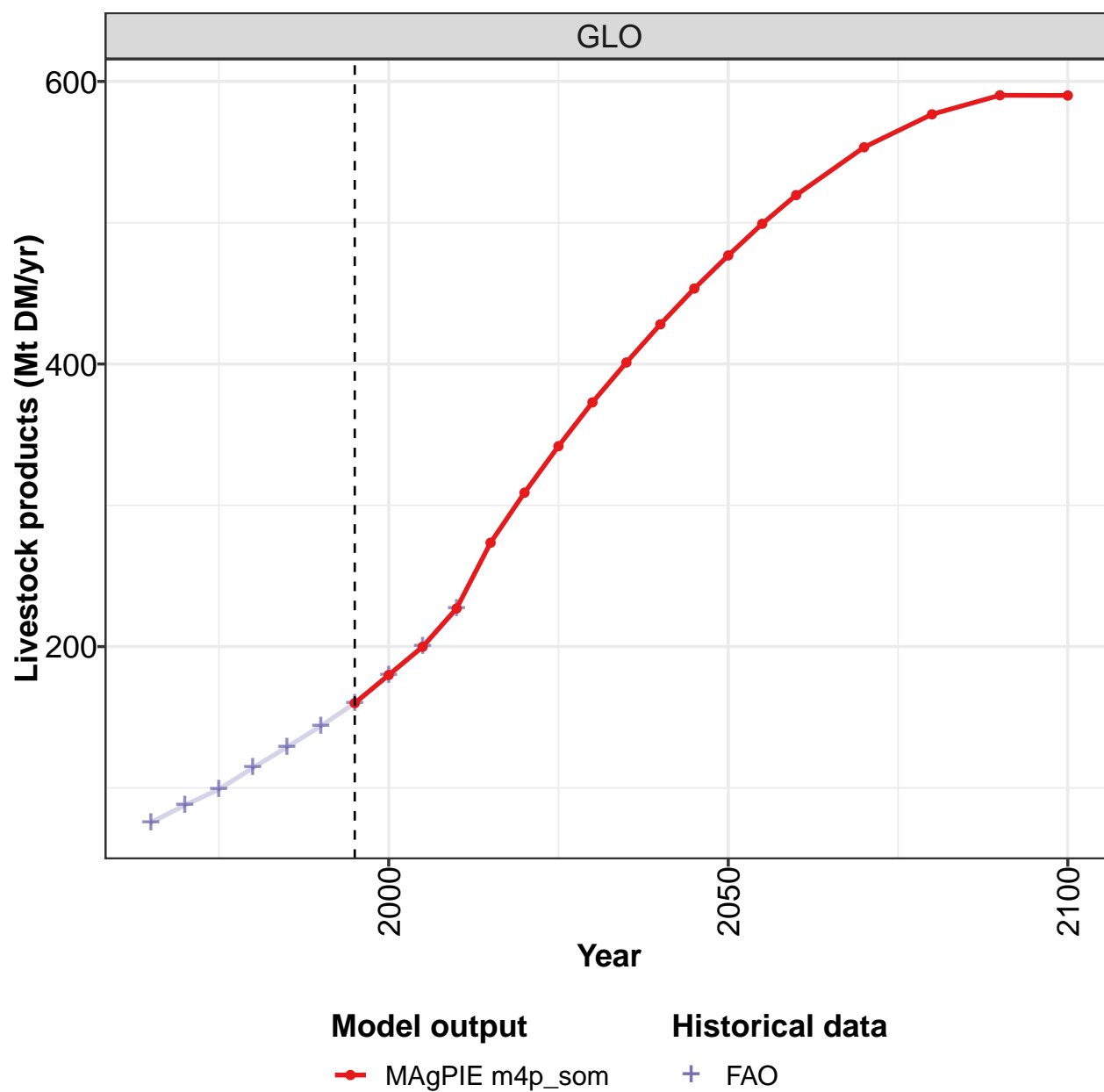






## 7.3 Livestock products

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

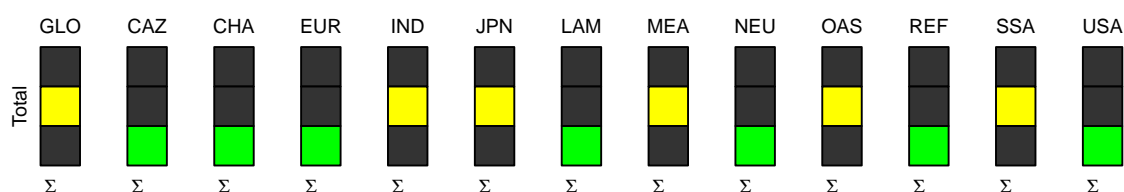
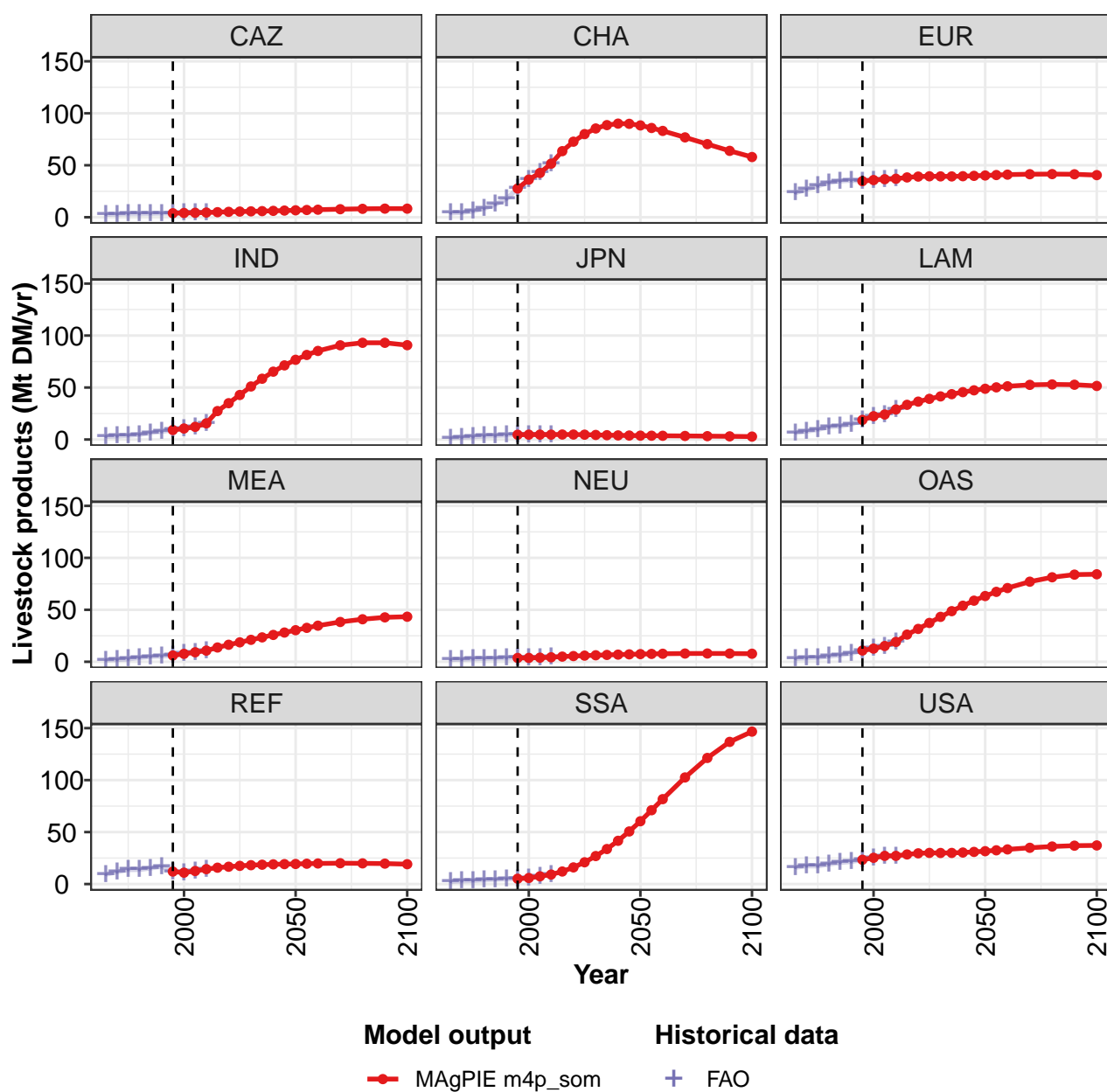


Figure 138: MAgPIE m4p\_som — Demand—Food—Livestock products (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	160	180	200	227	274	309	342	373	401	428	453
CAZ	4	4	4	5	5	5	5	6	6	6	6
CHA	28	36	43	52	64	73	80	85	89	90	90
EUR	35	36	37	37	38	39	39	39	39	39	40
IND	9	11	12	16	27	35	43	51	58	65	71
JPN	5	5	5	5	5	5	5	4	4	4	4
LAM	19	22	24	29	33	36	39	41	44	46	47
MEA	6	8	9	11	14	16	19	21	23	26	28
NEU	4	4	4	4	5	6	6	6	7	7	7
OAS	11	13	15	19	26	32	37	43	49	54	59
REF	12	11	13	14	16	17	17	18	19	19	19
SSA	5	6	7	9	12	16	21	27	34	42	51
USA	23	25	27	27	28	30	30	30	30	30	31

Table 413: MAgPIE m4p\_som — Demand—Food—Livestock products (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	477	499	520	553	577	590	590
CAZ	7	7	7	8	8	8	8
CHA	88	86	83	77	70	64	58
EUR	40	41	41	41	41	41	41
IND	77	81	85	91	93	93	91
JPN	4	4	4	3	3	3	3
LAM	49	50	51	53	53	53	52
MEA	30	33	35	38	41	43	43
NEU	7	8	8	8	8	8	8
OAS	63	67	71	77	81	84	84
REF	19	20	20	20	20	20	19
SSA	60	71	82	103	121	137	147
USA	32	32	33	35	36	37	37

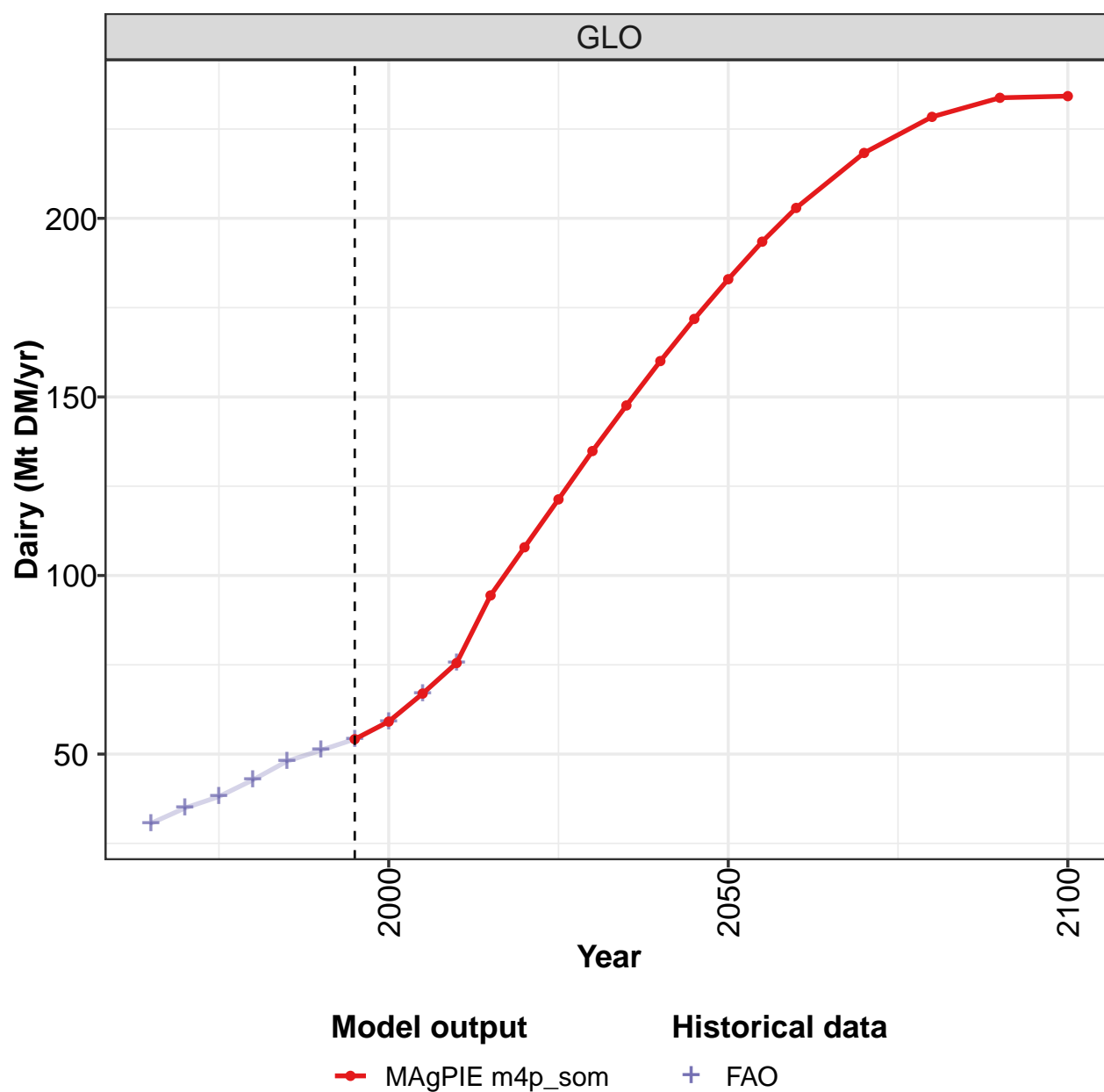
Table 414: MAgPIE m4p\_som — Demand—Food—Livestock products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	76	88	99	114	129	144	160	180	200	227
CAZ	3	3	3	3	3	4	4	4	4	5
CHA	4	4	6	8	12	18	28	36	43	52
EUR	23	27	30	33	35	35	35	36	37	37
IND	3	3	4	5	7	8	9	11	12	16
JPN	1	2	3	3	4	4	5	5	5	5
LAM	6	8	10	12	13	15	19	22	24	29
MEA	2	2	3	4	5	5	6	8	9	11
NEU	2	2	3	3	3	4	4	4	4	4
OAS	3	4	4	5	6	8	11	13	15	19
REF	9	12	14	14	15	17	12	11	13	14
SSA	2	3	3	4	4	5	5	6	7	9
USA	16	17	17	19	21	22	23	25	27	27

Table 415: FAO — Demand—Food—Livestock products (Mt DM/yr)

## 7.3.1 Dairy

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

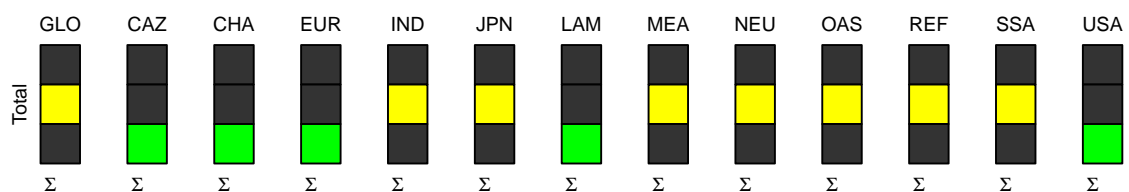
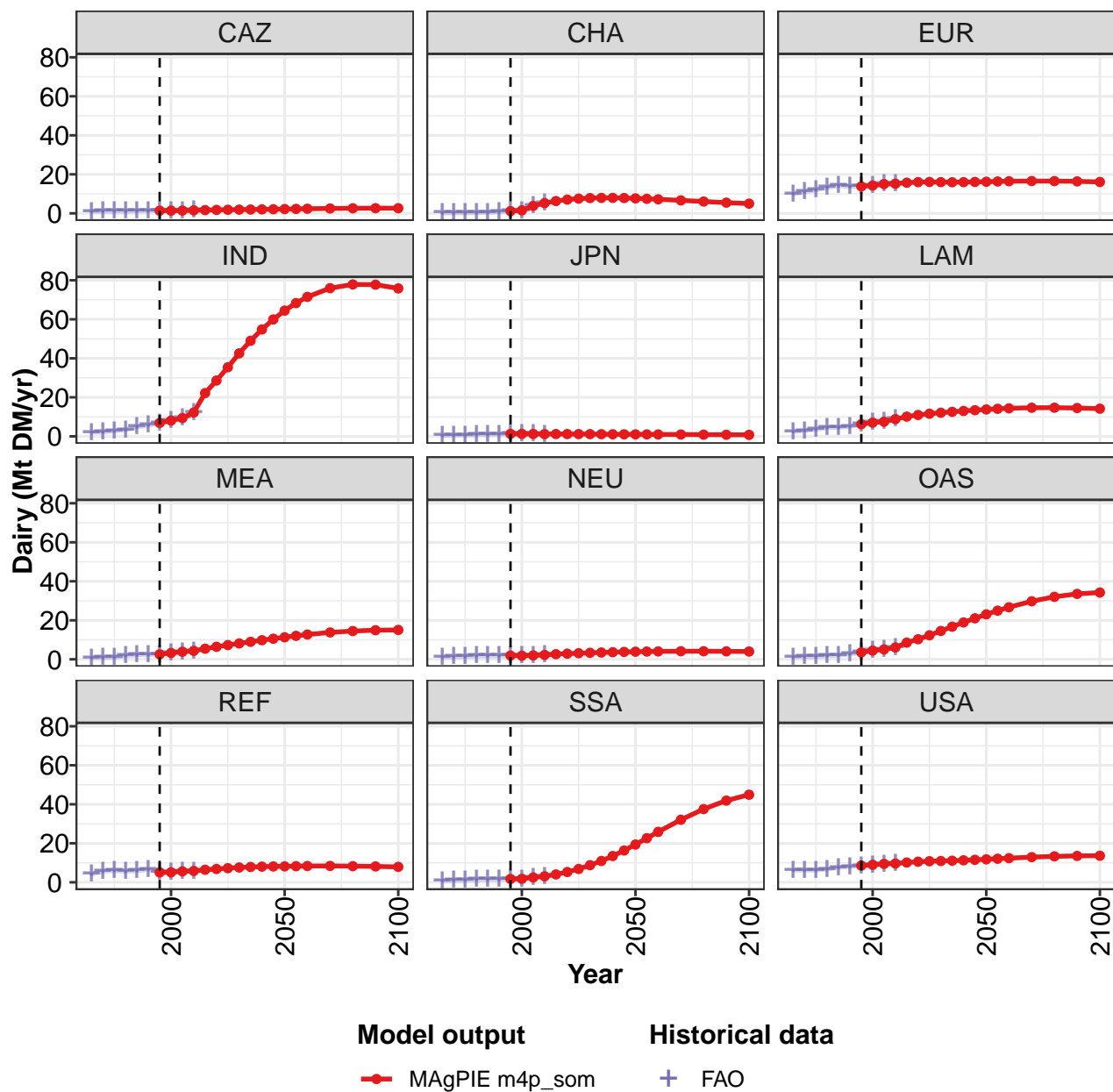


Figure 139: MAgPIE m4p\_som — Demand—Food—Livestock products—Dairy (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	54	59	67	75	94	108	121	135	148	160	172
CAZ	1	1	1	2	2	2	2	2	2	2	2
CHA	1	2	4	5	6	7	8	8	8	8	8
EUR	14	14	15	15	16	16	16	16	16	16	16
IND	7	8	9	12	22	29	35	43	49	55	60
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	6	7	8	9	10	11	12	12	13	13	13
MEA	3	3	4	4	5	6	7	8	9	10	11
NEU	2	2	2	2	3	3	3	3	3	4	4
OAS	4	4	5	6	9	10	12	15	17	19	21
REF	5	5	6	6	6	7	7	8	8	8	8
SSA	2	2	3	3	4	5	7	9	11	13	16
USA	9	9	9	10	10	11	11	11	11	11	12

Table 416: MAgPIE m4p\_som — Demand—Food—Livestock products—Dairy (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	183	193	203	218	228	234	234
CAZ	2	2	2	3	3	3	3
CHA	8	7	7	7	6	5	5
EUR	16	16	16	17	17	16	16
IND	64	68	72	76	78	78	76
JPN	1	1	1	1	1	1	1
LAM	14	14	14	15	15	15	14
MEA	11	12	13	14	14	15	15
NEU	4	4	4	4	4	4	4
OAS	23	25	27	30	32	34	34
REF	8	8	8	8	8	8	8
SSA	19	23	26	32	38	42	45
USA	12	12	12	13	13	14	14

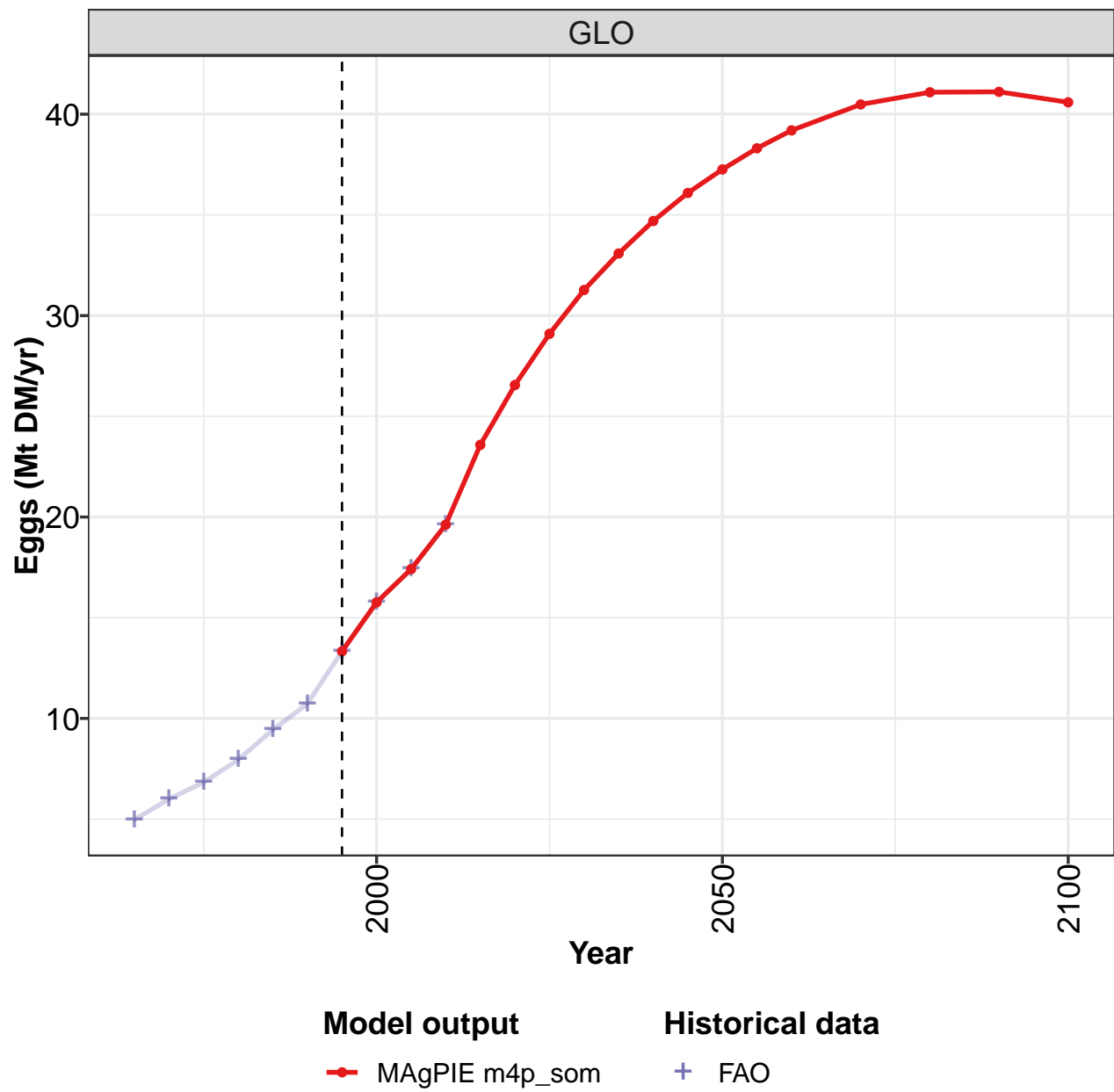
Table 417: MAgPIE m4p\_som — Demand—Food—Livestock products—Dairy (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	30.6	34.9	38.1	42.8	48.0	51.1	54.2	59.1	67.0	75.5
CAZ	1.0	1.1	1.1	1.1	1.2	1.4	1.4	1.4	1.4	1.6
CHA	0.2	0.2	0.3	0.4	0.6	0.9	1.2	1.5	3.8	5.3
EUR	10.0	11.1	12.0	13.2	14.3	13.7	13.8	14.3	15.0	15.2
IND	2.0	2.2	2.7	3.3	4.8	5.7	6.9	8.1	9.4	12.2
JPN	0.5	0.7	0.7	1.0	1.1	1.2	1.3	1.3	1.2	1.1
LAM	2.4	2.9	3.6	4.5	4.6	5.0	6.2	7.0	7.5	8.8
MEA	0.8	0.9	1.2	1.8	2.3	2.4	2.6	3.3	3.9	4.3
NEU	1.2	1.3	1.5	1.8	1.8	1.8	1.9	1.8	2.0	2.3
OAS	1.2	1.4	1.5	1.9	2.1	2.7	3.5	4.5	5.1	6.1
REF	4.1	5.7	6.1	5.7	6.0	6.7	5.1	5.1	5.6	5.8
SSA	0.9	1.0	1.2	1.4	1.5	1.6	1.7	1.8	2.5	3.1
USA	6.3	6.3	6.3	6.8	7.6	8.0	8.6	9.0	9.5	9.6

Table 418: FAO — Demand—Food—Livestock products—Dairy (Mt DM/yr)

7.3.2 Eggs

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

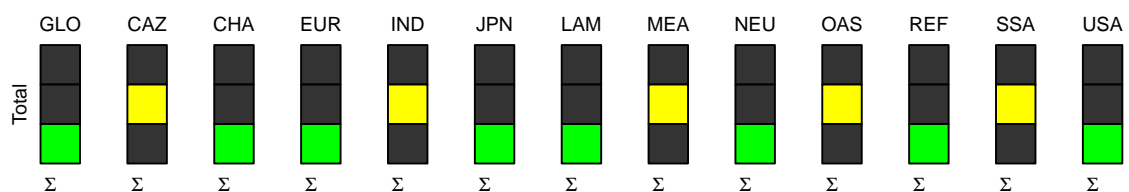
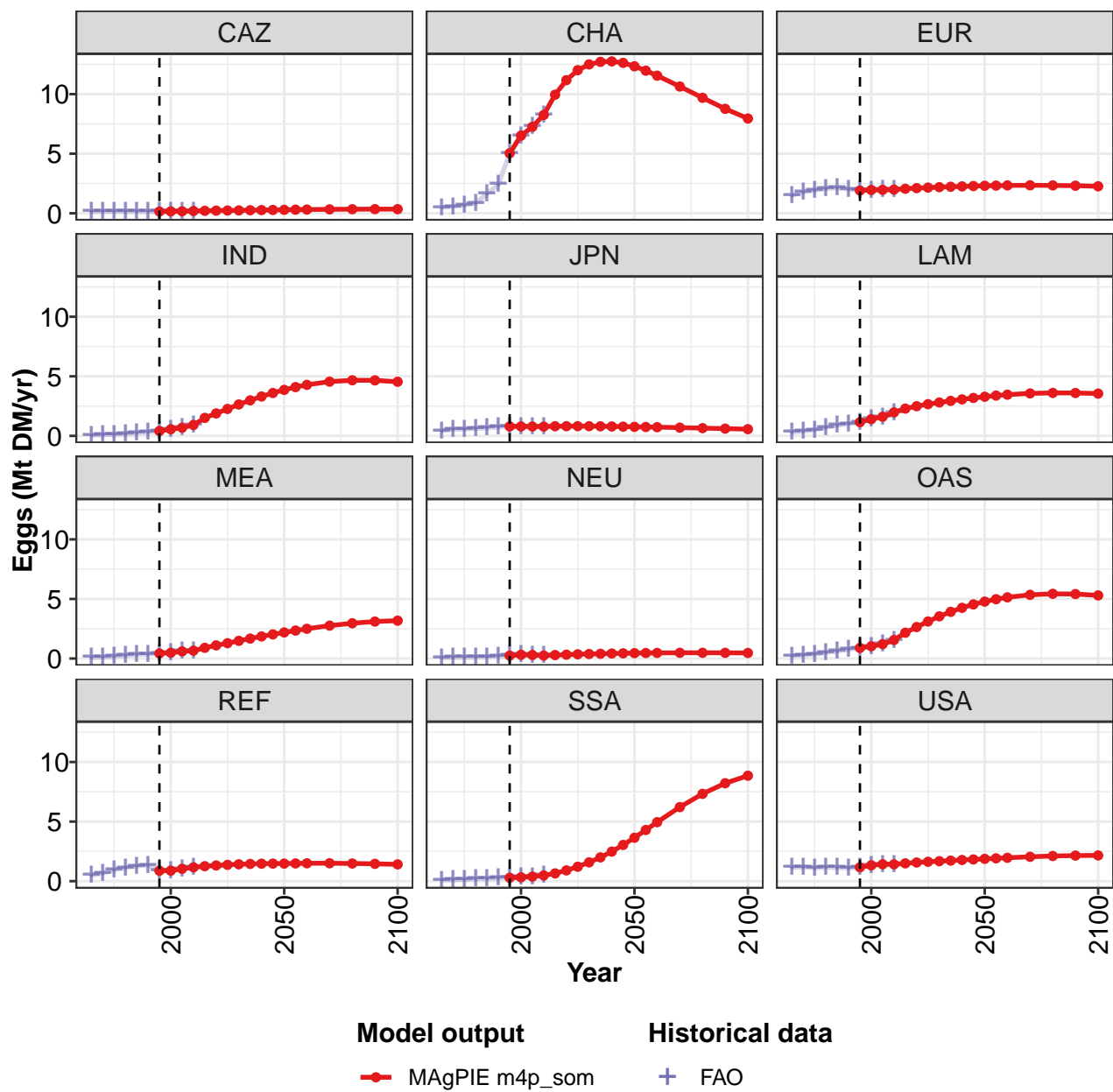


Figure 140: MAgPIE m4p\_som — Demand—Food—Livestock products—Eggs (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	13.3	15.8	17.4	19.6	23.6	26.6	29.1	31.3	33.1	34.7	36.1
CAZ	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
CHA	5.0	6.5	7.3	8.3	9.9	11.2	12.0	12.5	12.7	12.7	12.6
EUR	1.9	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.2	2.3	2.3
IND	0.4	0.6	0.7	0.9	1.5	1.9	2.3	2.6	3.0	3.3	3.6
JPN	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
LAM	1.2	1.4	1.6	2.0	2.3	2.5	2.7	2.8	2.9	3.1	3.2
MEA	0.4	0.5	0.6	0.7	0.9	1.1	1.3	1.5	1.7	1.9	2.0
NEU	0.2	0.3	0.3	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4
OAS	0.9	1.0	1.2	1.6	2.2	2.6	3.1	3.5	3.9	4.3	4.5
REF	0.9	0.9	1.0	1.2	1.3	1.3	1.4	1.4	1.4	1.5	1.5
SSA	0.3	0.3	0.4	0.5	0.7	0.9	1.2	1.6	2.0	2.5	3.0
USA	1.2	1.3	1.4	1.4	1.5	1.6	1.6	1.7	1.7	1.8	1.8

Table 419: MAgPIE m4p.som — Demand—Food—Livestock products—Eggs (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	37.3	38.3	39.2	40.5	41.1	41.1	40.6
CAZ	0.3	0.3	0.3	0.3	0.3	0.3	0.3
CHA	12.3	12.0	11.6	10.6	9.7	8.8	7.9
EUR	2.3	2.3	2.3	2.3	2.3	2.3	2.3
IND	3.9	4.1	4.3	4.6	4.7	4.7	4.5
JPN	0.8	0.7	0.7	0.7	0.7	0.6	0.6
LAM	3.3	3.4	3.5	3.6	3.6	3.6	3.6
MEA	2.2	2.3	2.5	2.8	3.0	3.1	3.2
NEU	0.5	0.5	0.5	0.5	0.5	0.5	0.5
OAS	4.8	5.0	5.1	5.3	5.4	5.4	5.3
REF	1.5	1.5	1.5	1.5	1.5	1.5	1.4
SSA	3.6	4.3	5.0	6.2	7.3	8.2	8.9
USA	1.9	1.9	2.0	2.0	2.1	2.1	2.2

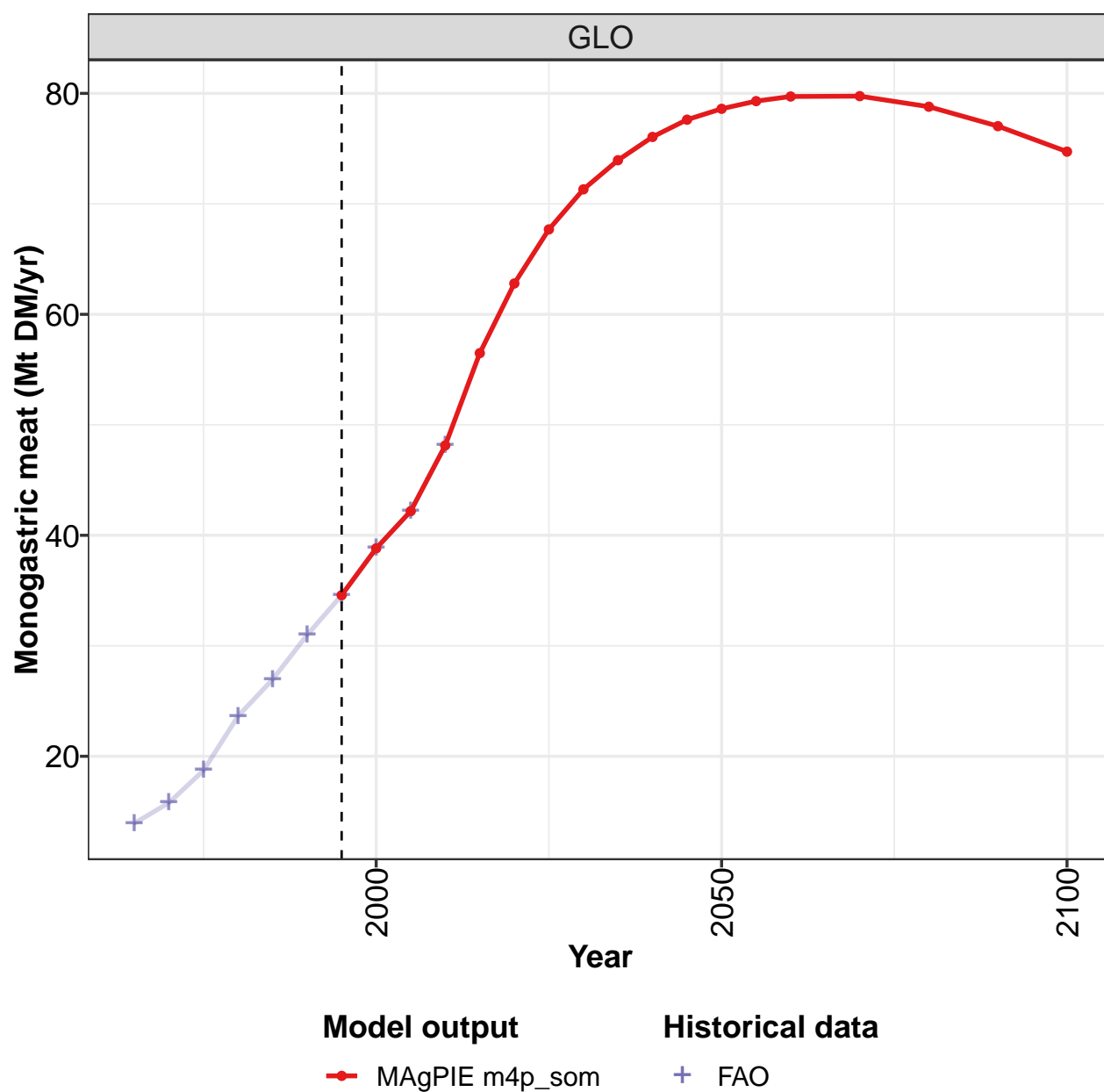
Table 420: MAgPIE m4p.som — Demand—Food—Livestock products—Eggs (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	5.0	6.0	6.8	8.0	9.4	10.7	13.3	15.8	17.4	19.6
CAZ	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2
CHA	0.5	0.6	0.7	0.9	1.6	2.4	5.0	6.5	7.3	8.3
EUR	1.5	1.8	1.9	2.1	2.1	2.0	1.9	2.0	2.0	2.0
IND	0.1	0.1	0.1	0.2	0.3	0.3	0.4	0.6	0.7	0.9
JPN	0.4	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.8
LAM	0.3	0.4	0.5	0.7	0.9	1.0	1.2	1.4	1.6	2.0
MEA	0.1	0.1	0.2	0.3	0.3	0.4	0.4	0.5	0.6	0.7
NEU	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.2
OAS	0.2	0.3	0.4	0.5	0.6	0.8	0.9	1.0	1.2	1.6
REF	0.5	0.7	0.9	1.1	1.3	1.3	0.9	0.9	1.0	1.2
SSA	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.5
USA	1.1	1.2	1.1	1.2	1.1	1.1	1.2	1.3	1.4	1.4

Table 421: FAO — Demand—Food—Livestock products—Eggs (Mt DM/yr)

## 7.3.3 Monogastric meat

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

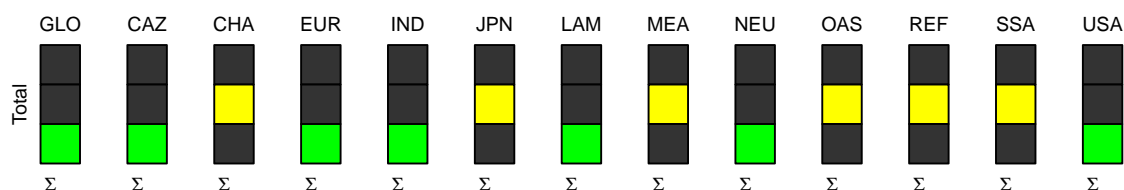
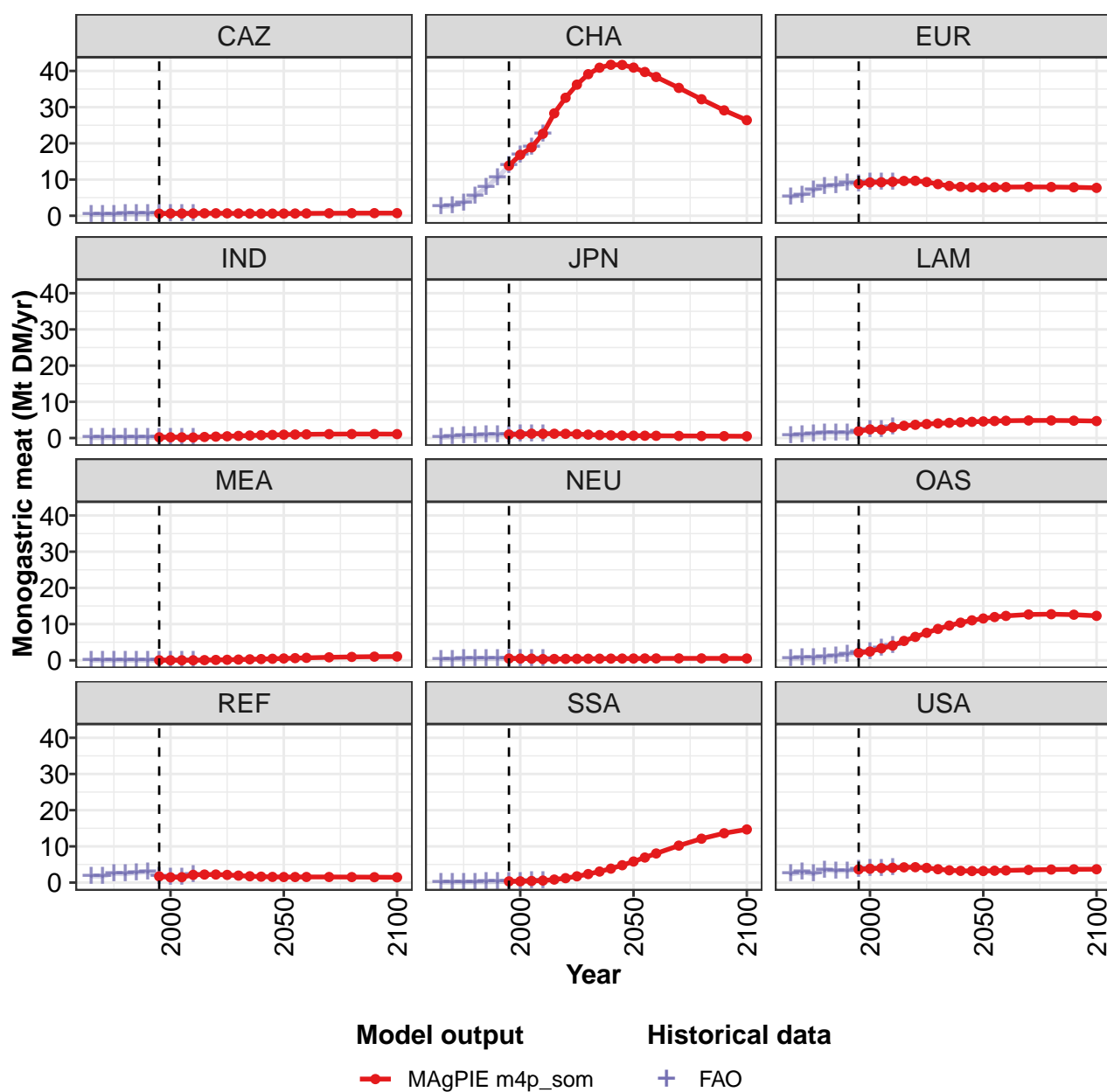


Figure 141: MAGPIE m4p\_som — Demand—Food—Livestock products—Monogastric meat (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	34.6	38.8	42.2	48.1	56.5	62.8	67.7	71.3	73.9	76.1	77.6
CAZ	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.6
CHA	13.8	16.8	18.9	22.7	28.3	32.6	36.2	39.1	40.9	41.7	41.7
EUR	8.8	9.2	9.3	9.4	9.6	9.7	9.3	8.7	8.2	8.0	7.9
IND	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
JPN	1.0	1.0	1.2	1.2	1.2	1.2	1.1	0.9	0.8	0.7	0.7
LAM	1.9	2.4	2.3	2.9	3.4	3.6	3.9	4.0	4.2	4.3	4.5
MEA	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.3	0.4
NEU	0.5	0.5	0.5	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5
OAS	2.1	2.4	3.3	4.1	5.4	6.5	7.6	8.7	9.6	10.4	11.0
REF	1.7	1.5	1.5	2.1	2.2	2.2	2.1	1.9	1.7	1.6	1.6
SSA	0.3	0.3	0.4	0.6	0.8	1.2	1.7	2.4	3.0	3.9	4.8
USA	3.7	3.8	4.0	4.1	4.2	4.2	4.1	3.7	3.4	3.2	3.2

Table 422: MAgPIE m4p\_som — Demand—Food—Livestock products—Monogastric meat (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	78.6	79.3	79.7	79.7	78.8	77.0	74.7
CAZ	0.6	0.6	0.6	0.7	0.7	0.7	0.7
CHA	40.9	39.7	38.3	35.3	32.2	29.1	26.4
EUR	7.8	7.9	7.9	8.0	7.9	7.9	7.7
IND	0.9	1.0	1.0	1.1	1.1	1.1	1.1
JPN	0.6	0.6	0.6	0.6	0.6	0.5	0.5
LAM	4.6	4.7	4.8	4.9	4.9	4.8	4.7
MEA	0.5	0.6	0.7	0.8	0.9	1.0	1.0
NEU	0.5	0.5	0.5	0.5	0.5	0.5	0.5
OAS	11.6	11.9	12.3	12.7	12.7	12.6	12.3
REF	1.5	1.5	1.5	1.5	1.5	1.5	1.4
SSA	5.8	6.9	8.0	10.2	12.1	13.6	14.7
USA	3.2	3.3	3.4	3.5	3.6	3.7	3.7

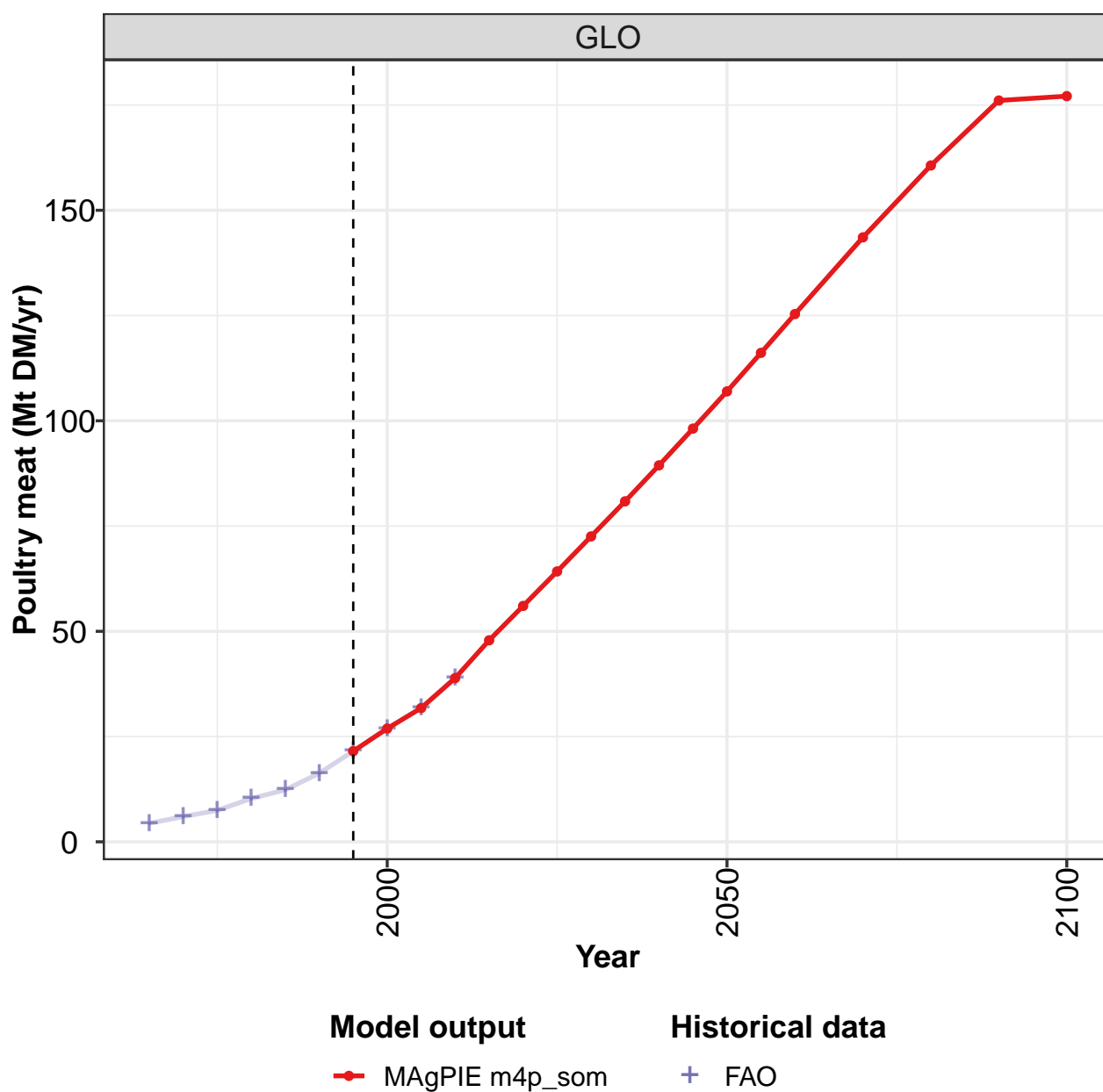
Table 423: MAgPIE m4p\_som — Demand—Food—Livestock products—Monogastric meat (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	13.9	15.8	18.7	23.6	26.9	31.0	34.6	38.8	42.2	48.1
CAZ	0.3	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6
CHA	2.5	2.7	3.6	5.5	7.9	10.6	13.8	16.8	18.9	22.7
EUR	5.1	5.7	7.0	8.1	8.4	8.9	8.8	9.2	9.2	9.4
IND	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
JPN	0.2	0.3	0.5	0.7	0.8	0.9	1.0	1.0	1.2	1.2
LAM	0.7	0.9	1.1	1.4	1.4	1.3	1.9	2.4	2.3	2.9
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.3
OAS	0.5	0.6	0.6	0.8	1.2	1.6	2.1	2.4	3.3	4.1
REF	1.8	1.8	2.5	2.4	2.8	3.0	1.7	1.5	1.5	2.1
SSA	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.4	0.4	0.6
USA	2.4	2.8	2.4	3.4	3.2	3.3	3.7	3.8	4.0	4.1

Table 424: FAO — Demand—Food—Livestock products—Monogastric meat (Mt DM/yr)

## 7.3.4 Poultry meat

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

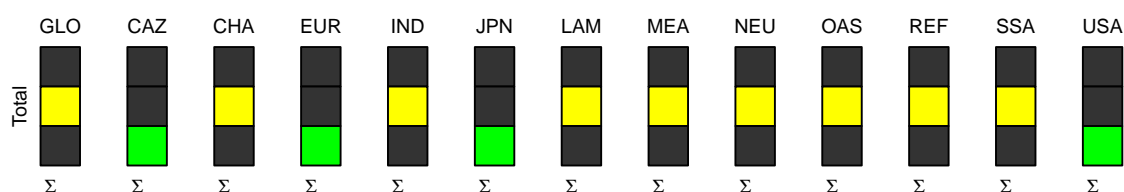
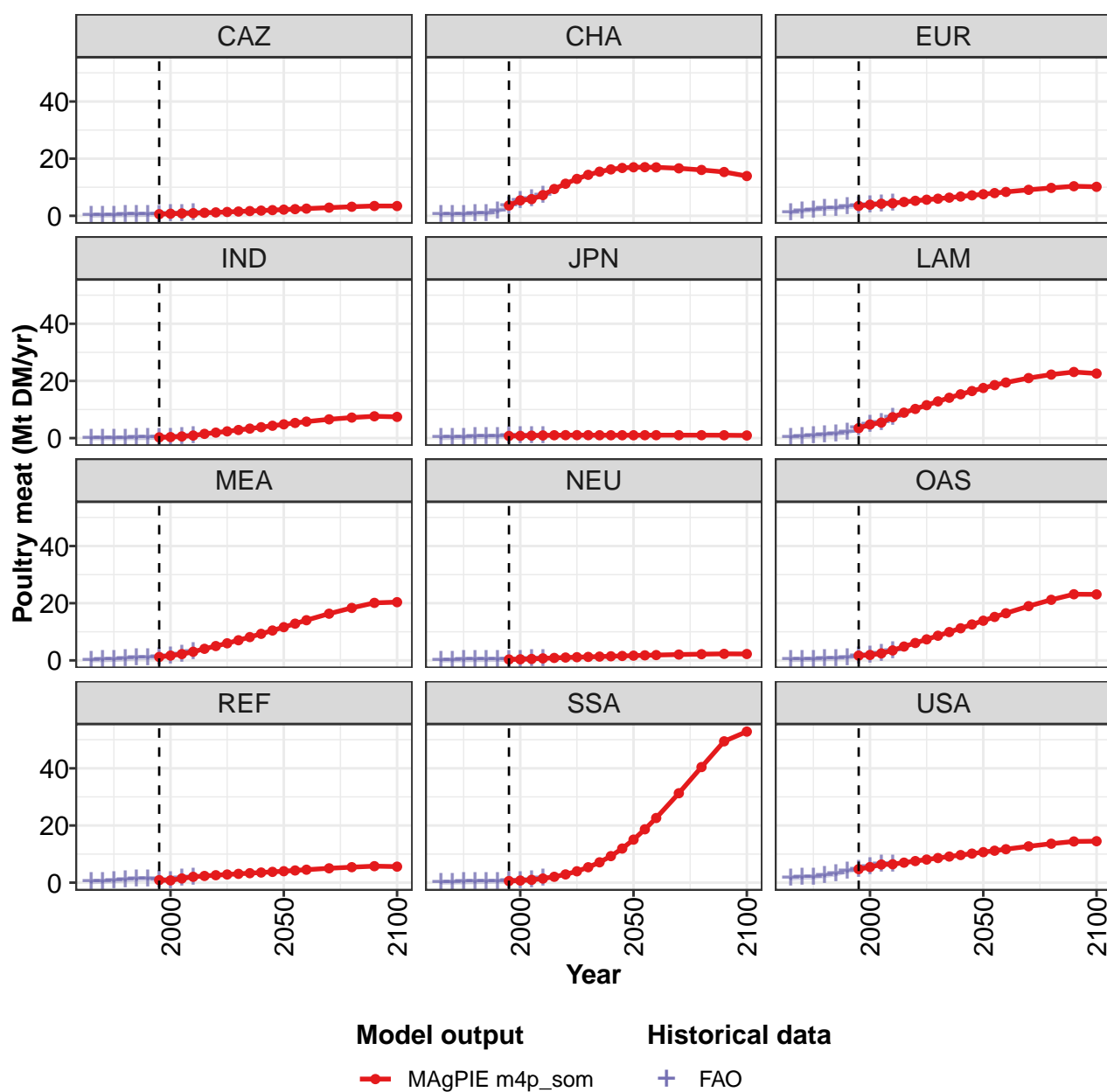


Figure 142: MAgPIE m4p\_som — Demand—Food—Livestock products—Poultry meat (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	22	27	32	39	48	56	64	73	81	89	98
CAZ	1	1	1	1	1	1	1	2	2	2	2
CHA	4	5	6	7	9	11	13	14	15	16	17
EUR	3	4	4	4	5	5	6	6	6	7	7
IND	0	0	1	1	1	2	2	3	3	4	4
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	3	5	5	7	9	10	12	13	14	15	16
MEA	1	2	2	3	4	5	6	7	8	9	10
NEU	0	0	1	1	1	1	1	1	1	1	2
OAS	2	2	2	3	5	6	7	9	10	11	13
REF	1	1	1	2	2	3	3	3	3	4	4
SSA	1	1	1	1	2	3	4	5	7	9	12
USA	5	5	6	6	7	8	8	9	9	10	10

Table 425: MAgPIE m4p\_som — Demand—Food—Livestock products—Poultry meat (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	107	116	125	144	161	176	177
CAZ	2	2	3	3	3	3	3
CHA	17	17	17	17	16	15	14
EUR	8	8	8	9	10	10	10
IND	5	5	6	7	7	8	7
JPN	1	1	1	1	1	1	1
LAM	18	19	19	21	22	23	23
MEA	12	13	14	16	18	20	20
NEU	2	2	2	2	2	2	2
OAS	14	15	16	19	21	23	23
REF	4	4	5	5	5	6	6
SSA	15	19	23	31	40	49	53
USA	11	11	12	13	14	14	15

Table 426: MAgPIE m4p\_som — Demand—Food—Livestock products—Poultry meat (Mt DM/yr) [PART 2/2]

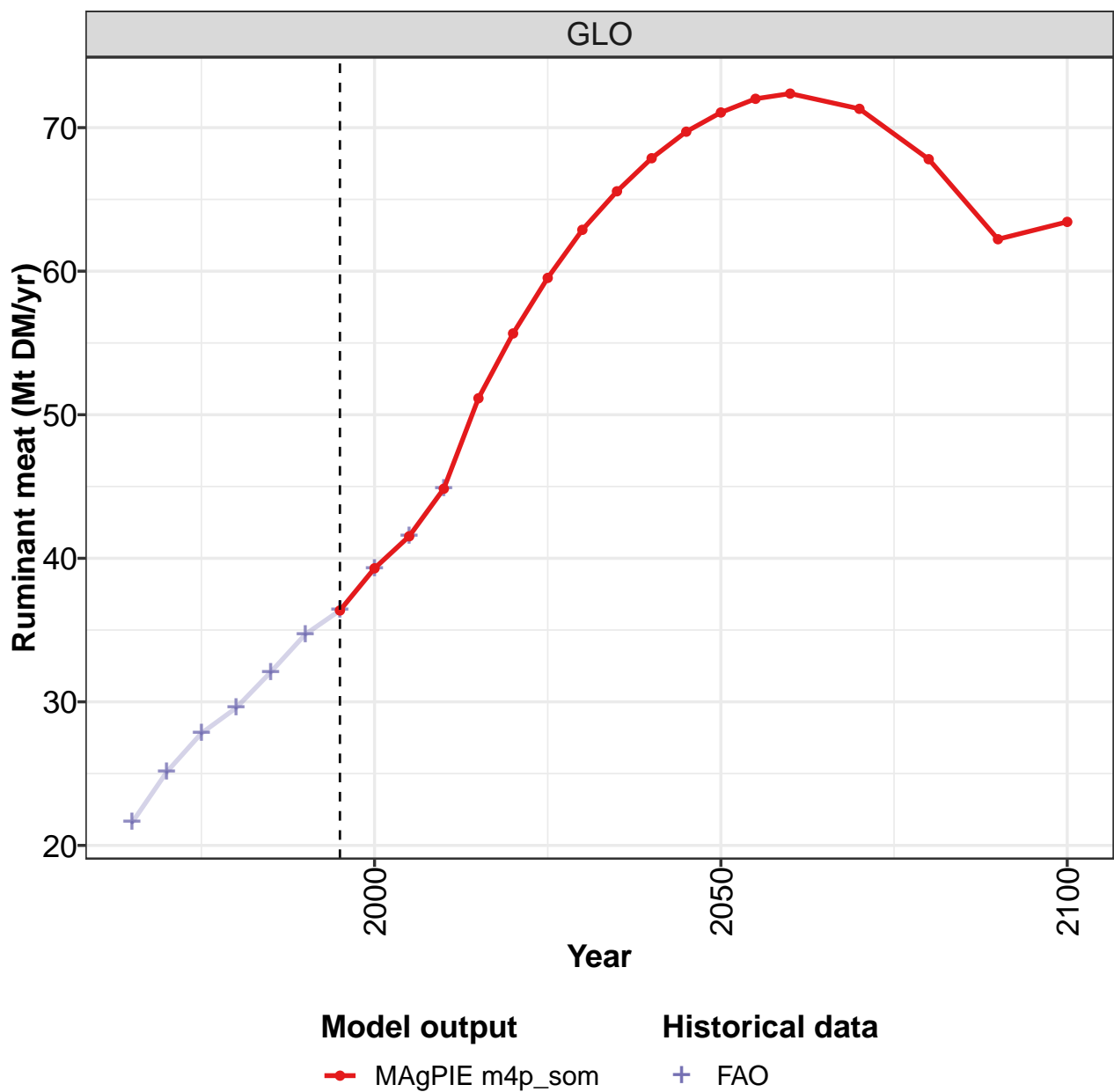
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4.4	6.0	7.5	10.3	12.3	16.3	21.5	26.9	31.8	38.9
CAZ	0.2	0.2	0.3	0.4	0.4	0.5	0.6	0.7	0.8	0.9
CHA	0.3	0.4	0.5	0.7	0.8	1.6	3.6	5.4	5.8	7.3
EUR	1.2	1.6	2.1	2.5	2.7	3.1	3.5	3.9	4.2	4.4
IND	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.6	0.9
JPN	0.1	0.2	0.3	0.5	0.6	0.7	0.7	0.8	0.9	0.9
LAM	0.3	0.5	0.8	1.2	1.4	2.0	3.5	4.8	5.4	7.3
MEA	0.1	0.2	0.3	0.5	0.8	0.9	1.2	1.7	2.2	3.0
NEU	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.5	0.7
OAS	0.2	0.3	0.4	0.5	0.7	1.0	1.7	1.9	2.4	3.5
REF	0.3	0.4	0.6	0.9	1.2	1.4	0.9	0.8	1.5	2.0
SSA	0.1	0.2	0.2	0.3	0.4	0.5	0.6	0.7	1.0	1.4
USA	1.5	1.8	1.9	2.5	3.0	4.1	4.7	5.5	6.4	6.4

Table 427: FAO — Demand—Food—Livestock products—Poultry meat (Mt DM/yr)



## 7.3.5 Ruminant meat

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

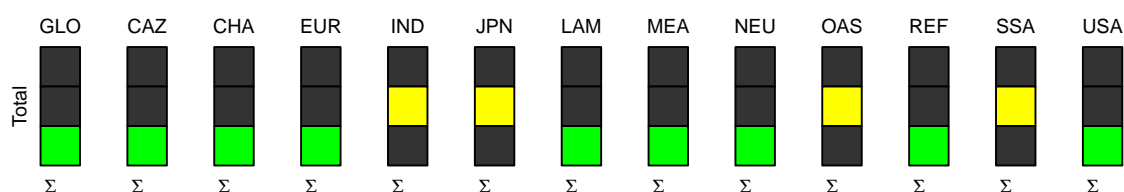
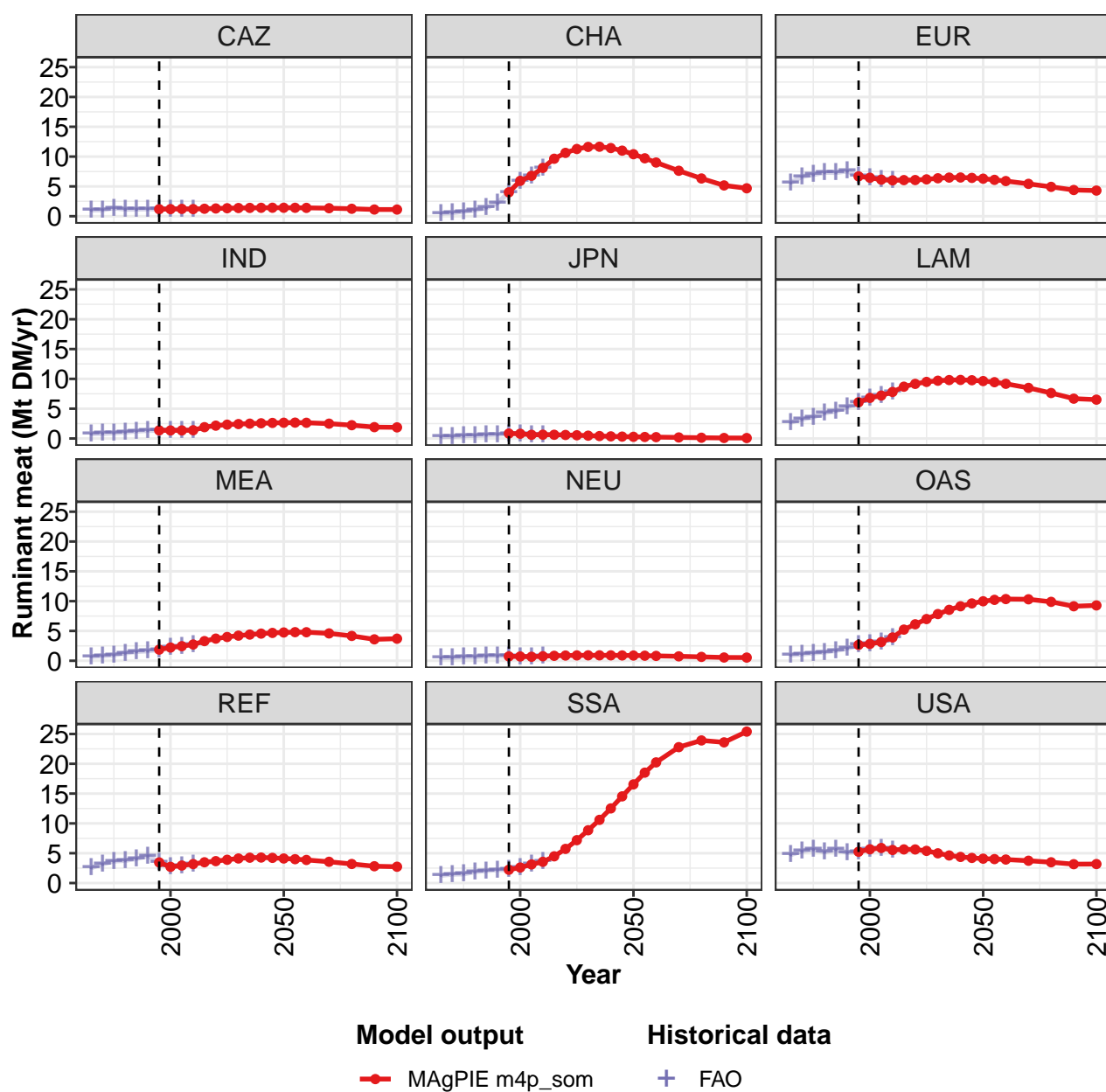


Figure 143: MAgPIE m4p\_som — Demand—Food—Livestock products—Ruminant meat (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	36.4	39.3	41.5	44.8	51.1	55.7	59.5	62.9	65.6	67.9	69.7
CAZ	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.4
CHA	4.0	5.9	6.8	8.1	9.6	10.6	11.3	11.6	11.7	11.4	11.0
EUR	6.7	6.5	6.1	6.0	6.1	6.1	6.2	6.4	6.5	6.5	6.4
IND	1.4	1.3	1.4	1.4	1.9	2.2	2.3	2.4	2.5	2.6	2.6
JPN	0.8	0.8	0.6	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.3
LAM	6.1	6.8	7.2	7.8	8.7	9.2	9.5	9.7	9.8	9.8	9.8
MEA	1.9	2.2	2.4	2.7	3.3	3.7	4.0	4.2	4.4	4.6	4.7
NEU	0.7	0.7	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9
OAS	2.7	2.8	3.1	3.9	5.2	6.1	7.0	7.8	8.5	9.1	9.6
REF	3.5	2.7	2.9	3.2	3.5	3.7	3.9	4.1	4.3	4.3	4.2
SSA	2.2	2.6	3.1	3.6	4.5	5.7	7.2	8.9	10.6	12.5	14.5
USA	5.3	5.7	5.9	5.5	5.6	5.6	5.4	5.0	4.6	4.4	4.2

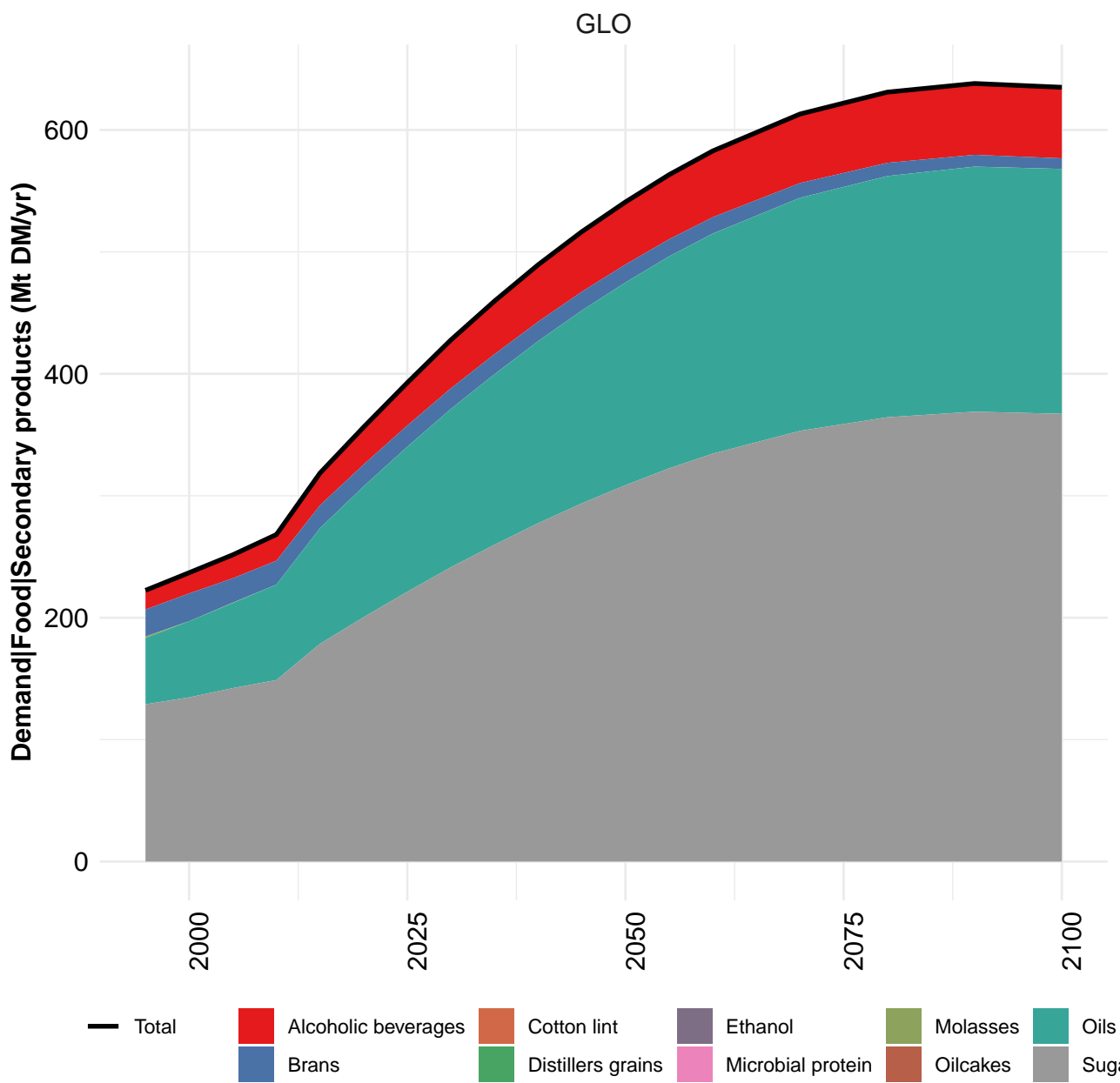
Table 428: MAgPIE m4p\_som — Demand—Food—Livestock products—Ruminant meat (Mt DM/yr) [PART 1/2]

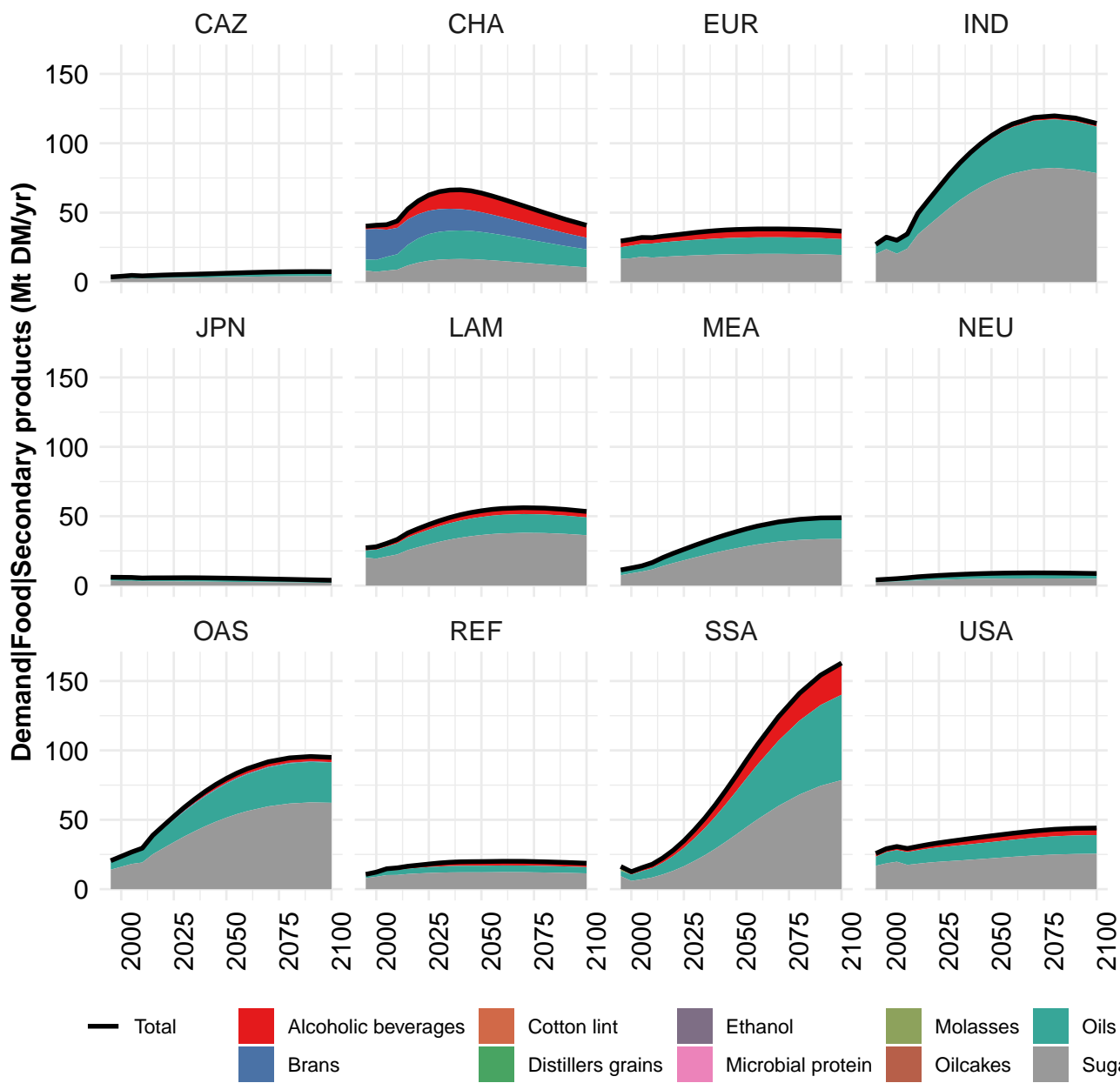
	2050	2055	2060	2070	2080	2090	2100
GLO	71.1	72.0	72.4	71.3	67.8	62.2	63.4
CAZ	1.4	1.4	1.4	1.3	1.3	1.1	1.1
CHA	10.4	9.7	9.0	7.6	6.3	5.2	4.7
EUR	6.3	6.1	5.9	5.4	4.9	4.4	4.3
IND	2.6	2.7	2.6	2.5	2.2	1.9	1.9
JPN	0.3	0.3	0.2	0.2	0.1	0.1	0.1
LAM	9.6	9.4	9.2	8.5	7.6	6.7	6.5
MEA	4.7	4.8	4.8	4.6	4.2	3.6	3.7
NEU	0.9	0.9	0.8	0.7	0.7	0.5	0.5
OAS	10.0	10.2	10.3	10.3	9.9	9.1	9.3
REF	4.1	4.0	3.9	3.6	3.2	2.8	2.7
SSA	16.6	18.5	20.2	22.8	23.9	23.6	25.4
USA	4.1	4.0	3.9	3.7	3.5	3.2	3.2

Table 429: MAgPIE m4p\_som — Demand—Food—Livestock products—Ruminant meat (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	21.6	25.1	27.8	29.6	32.1	34.7	36.4	39.3	41.5	44.8
CAZ	1.0	1.1	1.4	1.2	1.2	1.2	1.2	1.2	1.2	1.2
CHA	0.5	0.6	0.8	1.0	1.4	2.2	4.0	5.9	6.8	8.1
EUR	5.6	6.6	7.0	7.4	7.3	7.6	6.7	6.5	6.1	6.0
IND	0.8	0.8	0.9	1.0	1.2	1.3	1.4	1.3	1.4	1.4
JPN	0.3	0.3	0.4	0.5	0.6	0.7	0.8	0.8	0.6	0.6
LAM	2.7	3.2	3.6	4.2	4.6	5.3	6.1	6.8	7.2	7.8
MEA	0.7	0.8	1.0	1.3	1.5	1.6	1.9	2.2	2.4	2.7
NEU	0.5	0.5	0.6	0.6	0.8	0.8	0.7	0.7	0.7	0.8
OAS	1.0	1.1	1.3	1.4	1.7	2.1	2.7	2.8	3.1	3.9
REF	2.6	3.2	3.7	3.8	4.1	4.5	3.5	2.7	2.9	3.2
SSA	1.3	1.5	1.5	1.9	2.1	2.2	2.2	2.6	3.1	3.6
USA	4.7	5.3	5.6	5.2	5.6	5.1	5.3	5.7	5.9	5.5

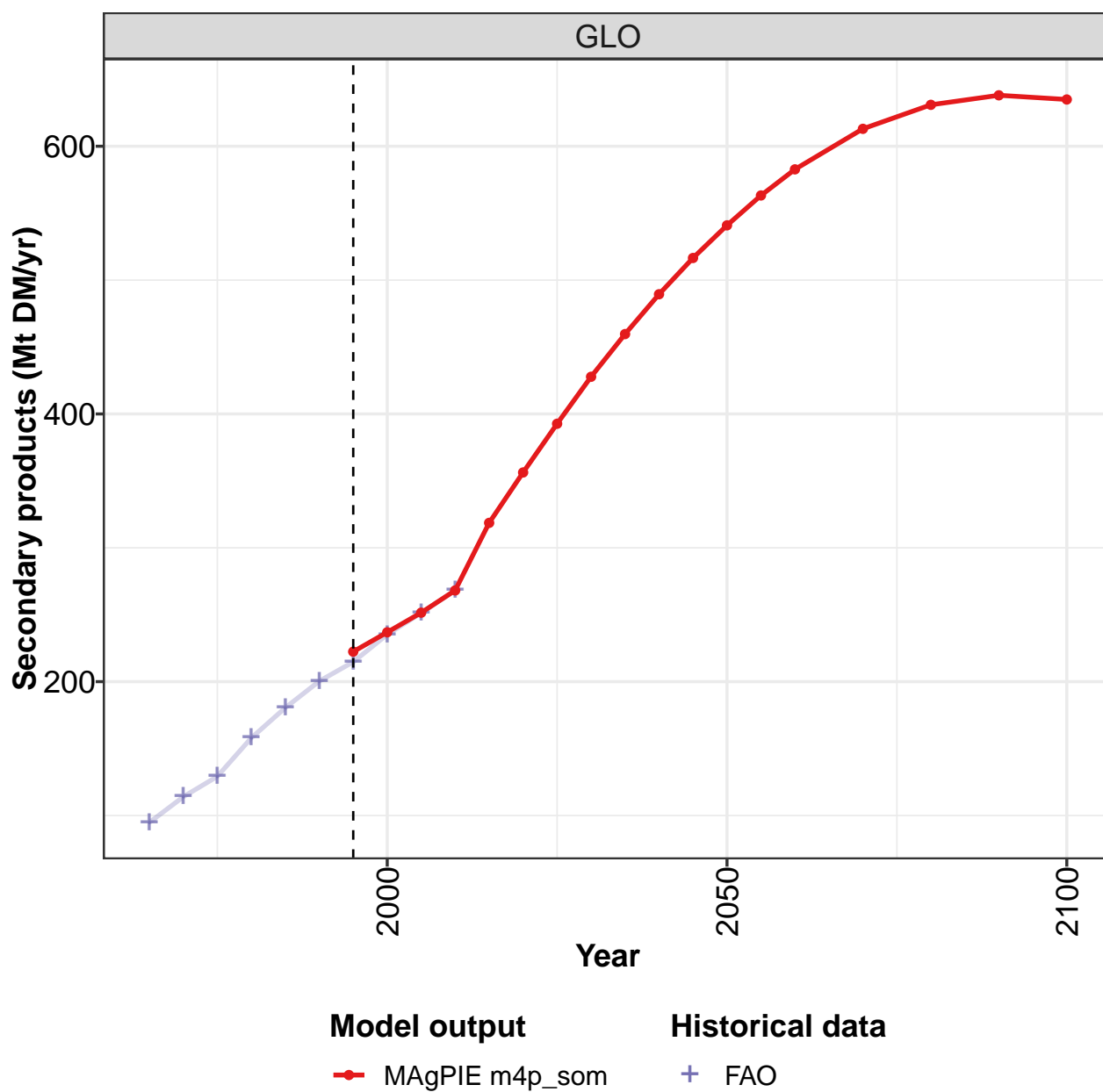
Table 430: FAO — Demand—Food—Livestock products—Ruminant meat (Mt DM/yr)





## 7.4 Secondary products

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

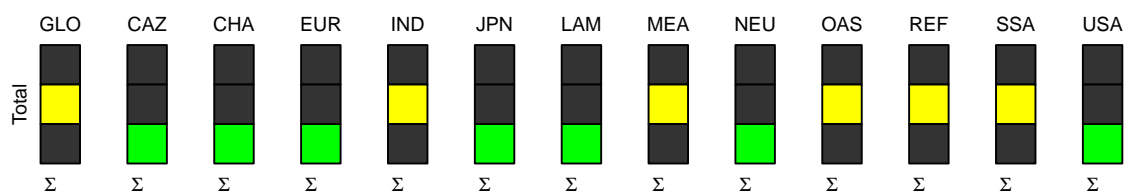
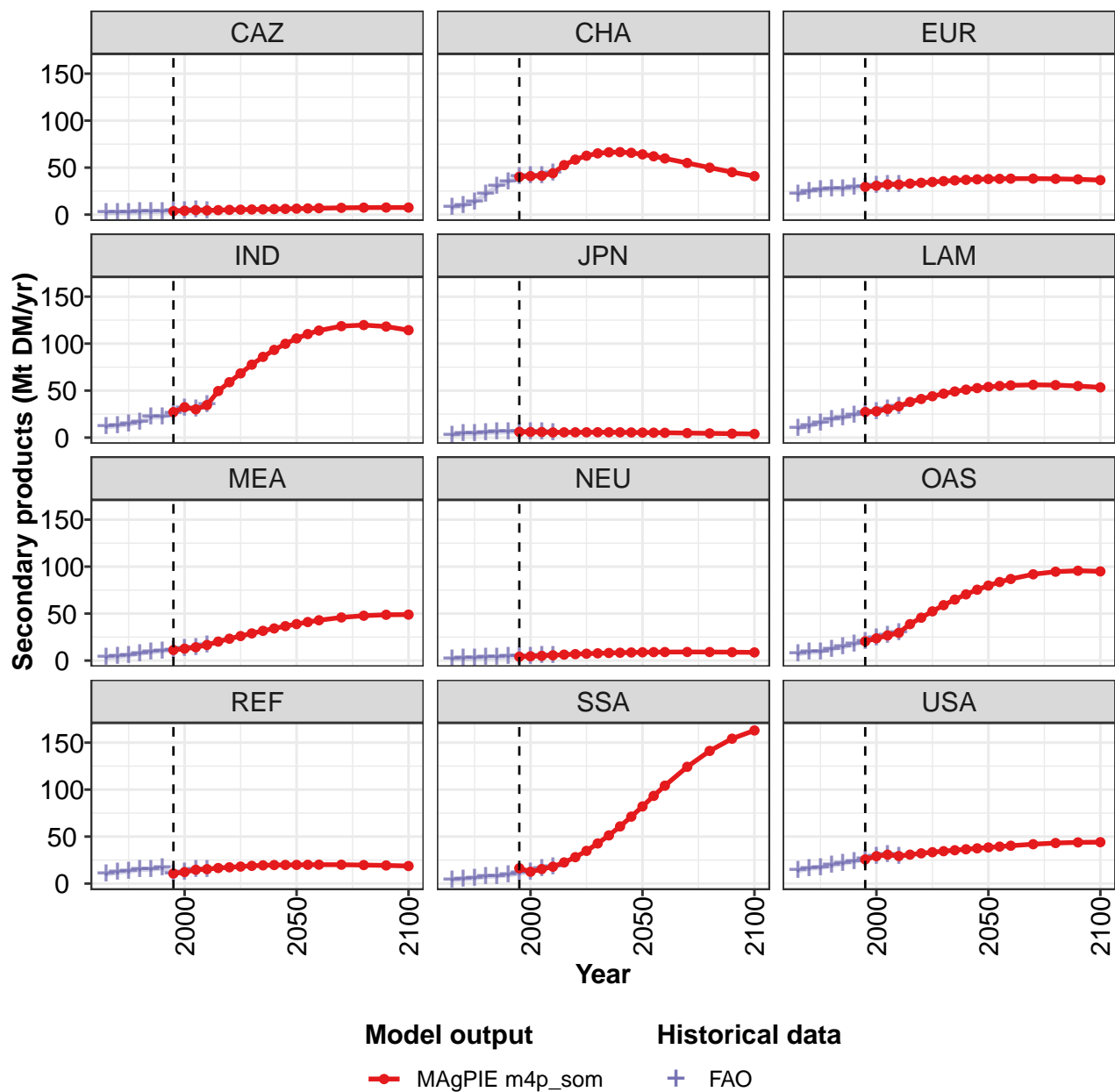


Figure 144: MAgPIE m4p\_som — Demand—Food—Secondary products (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	222	237	252	268	319	356	393	428	460	489	517
CAZ	4	4	5	4	5	5	5	5	6	6	6
CHA	40	41	41	44	53	59	63	65	66	66	66
EUR	30	31	32	32	33	34	35	36	36	37	38
IND	27	32	30	35	50	59	68	78	86	93	100
JPN	6	6	6	5	6	6	6	6	6	6	5
LAM	27	28	30	33	38	41	44	47	49	51	53
MEA	11	13	14	17	20	23	26	29	32	34	37
NEU	4	5	5	6	6	7	7	8	8	8	9
OAS	21	24	27	30	39	46	52	59	65	70	75
REF	11	12	15	15	17	17	18	19	19	20	20
SSA	16	13	15	18	22	28	35	43	51	61	71
USA	26	29	31	29	31	32	33	34	35	37	37

Table 431: MAgPIE m4p\_som — Demand—Food—Secondary products (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	541	563	583	613	631	638	635
CAZ	6	7	7	7	7	8	7
CHA	64	62	60	55	50	45	41
EUR	38	38	38	38	38	38	37
IND	105	110	114	119	120	118	114
JPN	5	5	5	5	4	4	4
LAM	54	55	56	56	56	55	53
MEA	39	41	43	46	48	49	49
NEU	9	9	9	9	9	9	9
OAS	80	84	87	92	95	96	95
REF	20	20	20	20	20	19	19
SSA	82	93	104	124	141	154	163
USA	38	39	40	42	43	44	44

Table 432: MAgPIE m4p\_som — Demand—Food—Secondary products (Mt DM/yr) [PART 2/2]

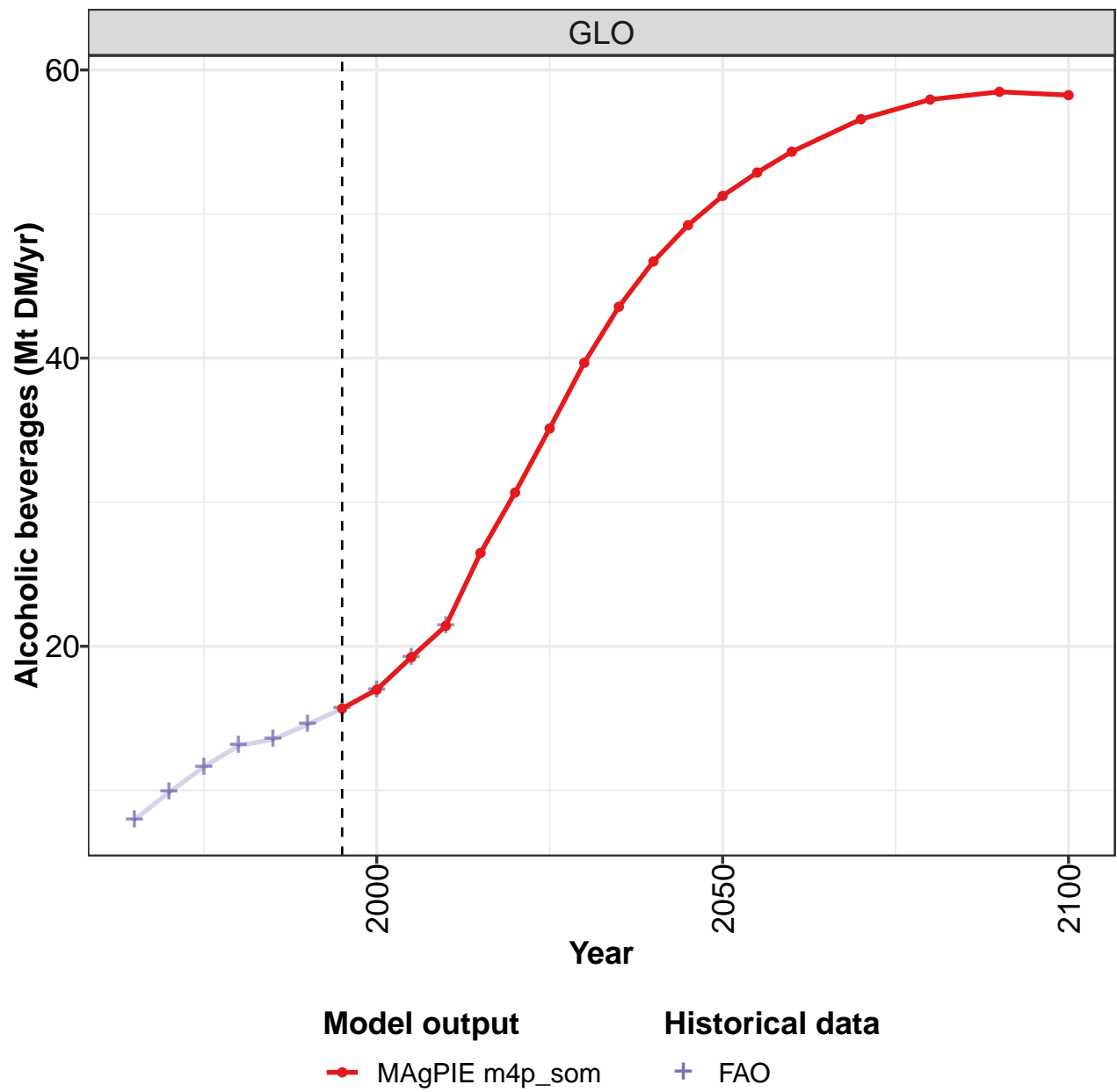
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	95	114	129	158	180	200	215	235	251	268
CAZ	2	2	3	3	3	3	4	4	5	4
CHA	7	10	13	22	30	35	40	41	41	44
EUR	22	25	26	28	28	29	30	31	32	32
IND	11	13	14	16	22	22	26	31	30	35
JPN	3	4	4	5	6	6	6	6	6	5
LAM	10	12	16	20	21	24	27	28	30	33
MEA	3	4	5	8	9	10	11	13	14	17
NEU	2	2	3	3	3	4	4	5	5	6
OAS	7	9	9	12	15	17	21	24	27	30
REF	10	12	13	15	15	16	11	12	15	15
SSA	4	5	6	7	8	9	11	13	15	18
USA	14	16	17	19	21	24	26	29	31	29

Table 433: FAO — Demand—Food—Secondary products (Mt DM/yr)



7.4.1
Alcoholic beverages

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

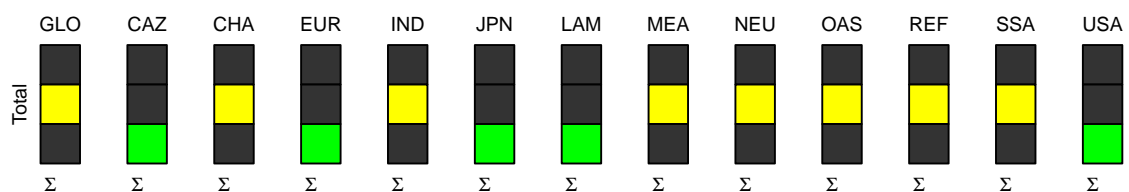
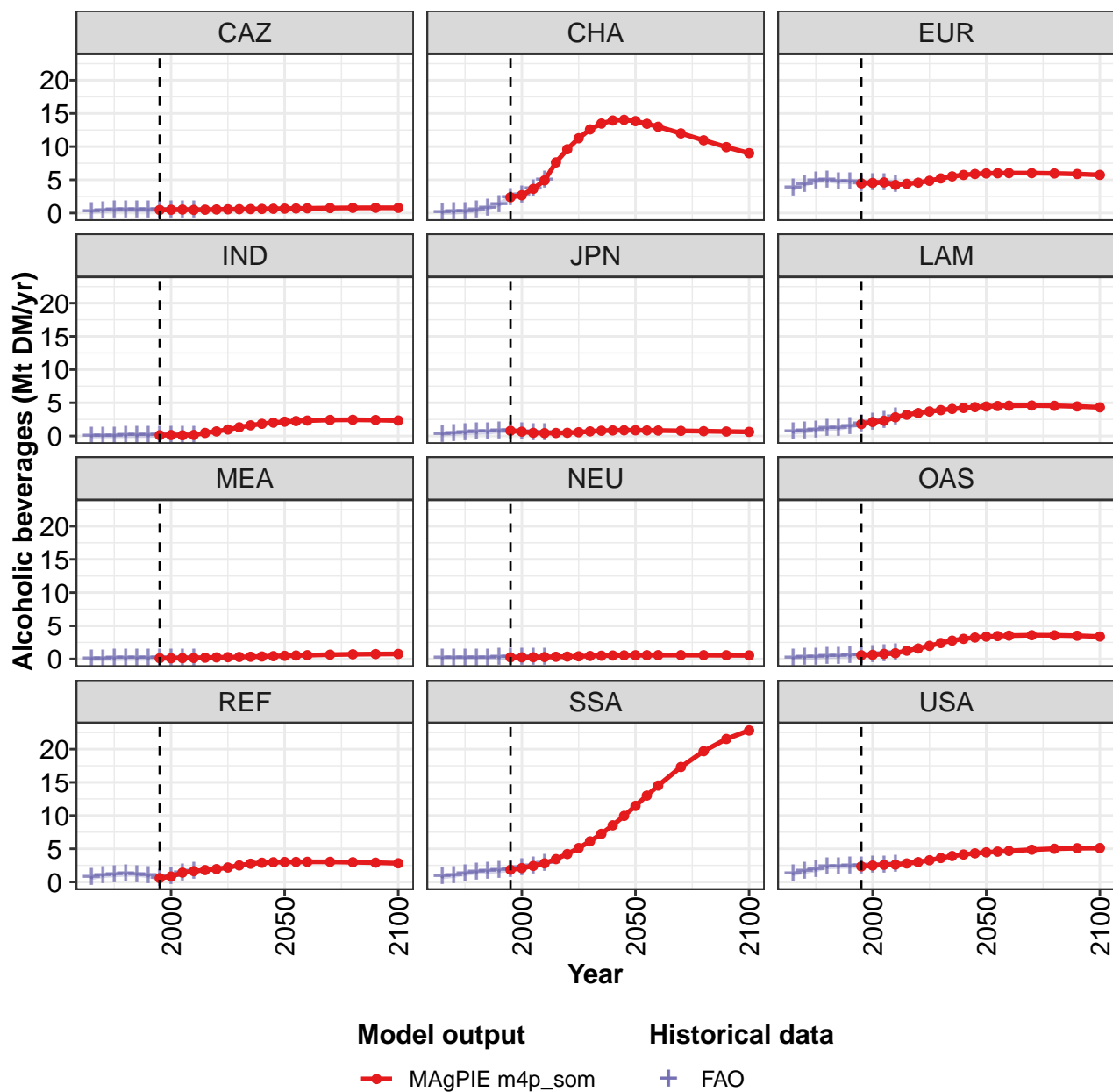


Figure 145: MAgPIE m4p\_som — Demand—Food—Secondary products—Alcoholic beverages (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	15.7	17.0	19.2	21.4	26.5	30.7	35.1	39.7	43.6	46.7	49.2
CAZ	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6
CHA	2.4	2.7	3.6	4.9	7.6	9.6	11.3	12.6	13.5	13.9	14.0
EUR	4.5	4.5	4.6	4.2	4.4	4.6	4.9	5.2	5.5	5.7	5.9
IND	0.1	0.1	0.1	0.2	0.5	0.7	1.0	1.3	1.6	1.8	2.0
JPN	0.8	0.6	0.5	0.4	0.5	0.5	0.6	0.7	0.8	0.8	0.9
LAM	1.8	2.1	2.3	2.8	3.2	3.5	3.7	3.9	4.1	4.2	4.3
MEA	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4
NEU	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.5
OAS	0.6	0.6	0.8	0.9	1.3	1.6	2.0	2.4	2.8	3.0	3.2
REF	0.6	0.8	1.4	1.6	1.8	1.9	2.2	2.5	2.7	2.9	3.0
SSA	1.8	2.1	2.4	2.8	3.4	4.2	5.1	6.1	7.2	8.5	10.0
USA	2.3	2.5	2.6	2.6	2.8	3.0	3.3	3.6	3.9	4.1	4.3

Table 434: MAgPIE m4p\_som — Demand—Food—Secondary products—Alcoholic beverages (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	51.3	52.9	54.3	56.6	57.9	58.5	58.3
CAZ	0.7	0.7	0.7	0.7	0.8	0.8	0.8
CHA	13.8	13.4	13.0	12.0	10.9	9.9	9.0
EUR	6.0	6.0	6.0	6.0	6.0	5.9	5.7
IND	2.2	2.3	2.3	2.4	2.5	2.4	2.3
JPN	0.9	0.8	0.8	0.8	0.7	0.7	0.6
LAM	4.4	4.5	4.6	4.6	4.6	4.5	4.3
MEA	0.5	0.5	0.6	0.7	0.7	0.7	0.8
NEU	0.6	0.6	0.6	0.6	0.6	0.6	0.5
OAS	3.4	3.5	3.5	3.6	3.6	3.5	3.4
REF	3.0	3.0	3.0	3.0	3.0	2.9	2.8
SSA	11.5	13.0	14.5	17.3	19.7	21.5	22.8
USA	4.5	4.6	4.7	4.9	5.0	5.1	5.1

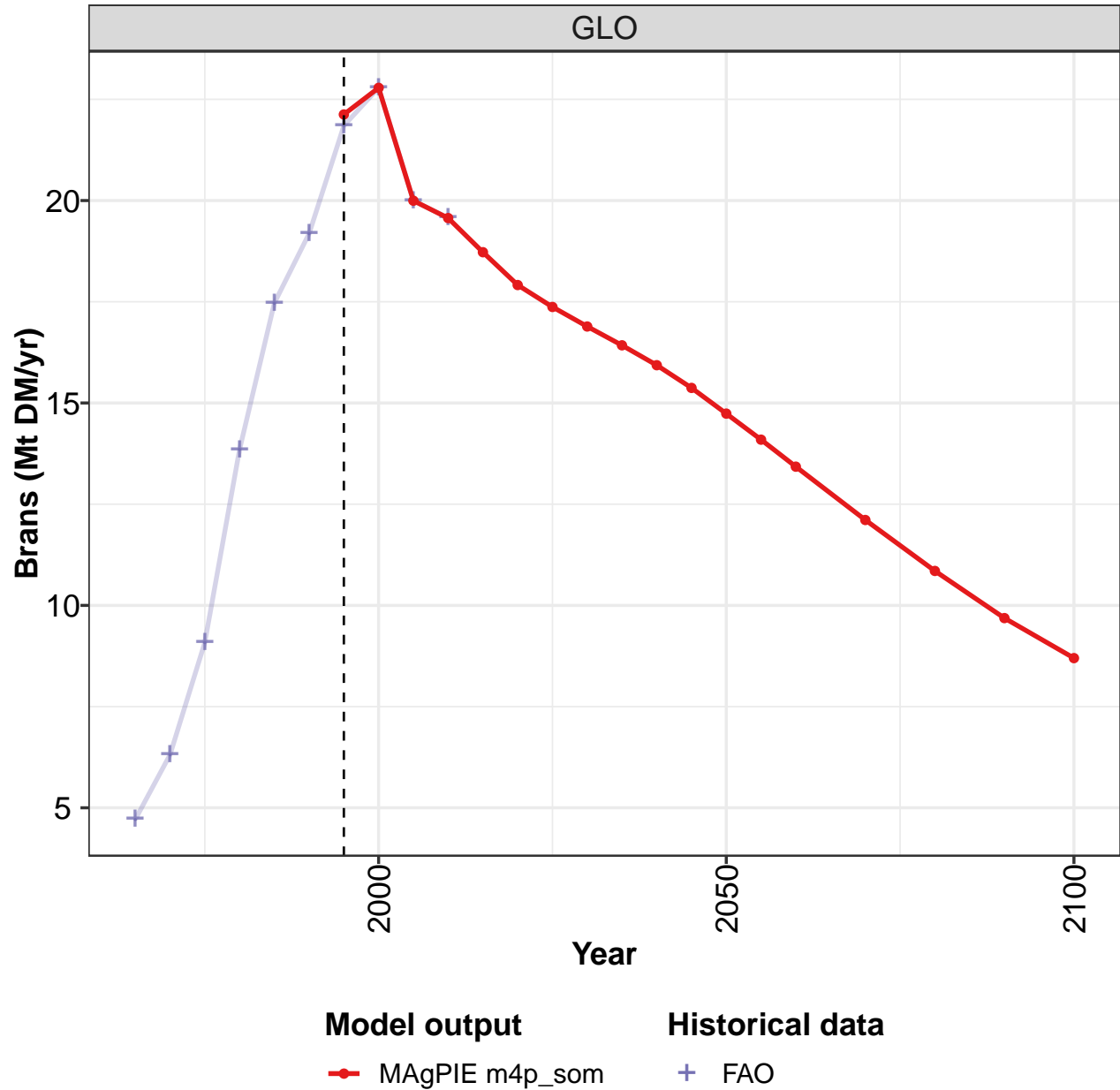
Table 435: MAgPIE m4p\_som — Demand—Food—Secondary products—Alcoholic beverages (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	8.0	9.9	11.6	13.1	13.5	14.6	15.7	17.0	19.2	21.4
CAZ	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
CHA	0.1	0.1	0.2	0.4	0.8	1.3	2.4	2.7	3.6	4.9
EUR	3.7	4.3	4.8	4.9	4.7	4.7	4.5	4.5	4.6	4.2
IND	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
JPN	0.3	0.4	0.5	0.6	0.6	0.8	0.8	0.7	0.5	0.4
LAM	0.6	0.7	0.9	1.1	1.2	1.5	1.8	2.1	2.3	2.8
MEA	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
NEU	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
OAS	0.1	0.2	0.3	0.4	0.4	0.5	0.6	0.6	0.8	0.9
REF	0.7	0.9	1.1	1.2	1.1	0.9	0.6	0.8	1.4	1.6
SSA	0.8	1.0	1.2	1.5	1.6	1.7	1.8	2.1	2.4	2.8
USA	1.2	1.6	1.8	2.3	2.3	2.4	2.3	2.5	2.6	2.6

Table 436: FAO — Demand—Food—Secondary products—Alcoholic beverages (Mt DM/yr)

7.4.2 Brans

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
 replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

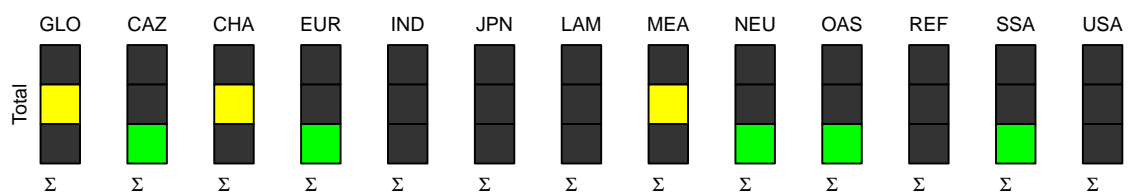
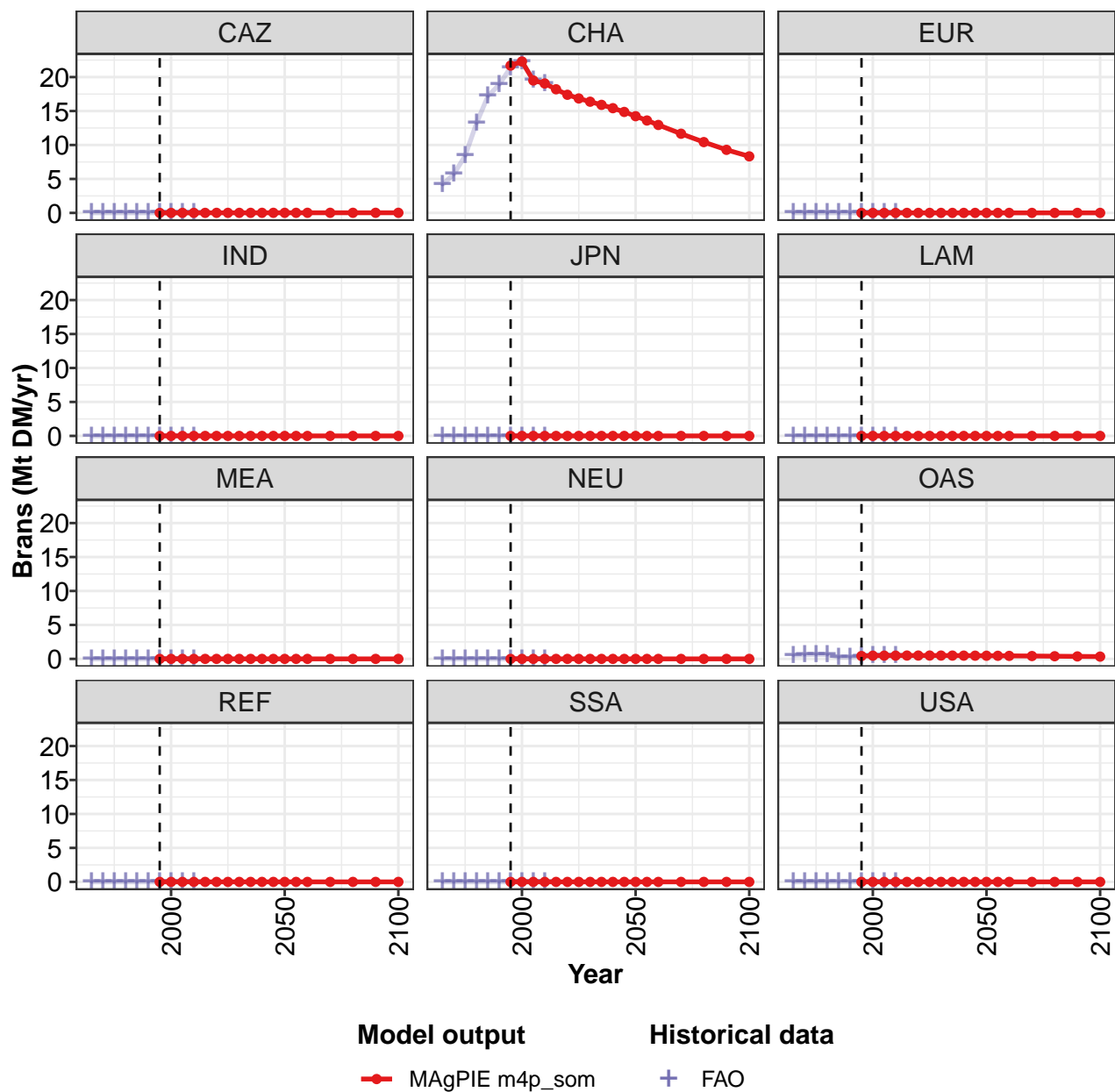


Figure 146: MAgPIE m4p\_som — Demand—Food—Secondary products—Brans (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	22.1	22.8	20.0	19.6	18.7	17.9	17.4	16.9	16.4	15.9	15.4
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	21.7	22.3	19.5	19.1	18.2	17.4	16.9	16.4	15.9	15.4	14.9
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 437: MAgPIE m4p\_som — Demand—Food—Secondary products—Brans (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	14.7	14.1	13.4	12.1	10.9	9.7	8.7
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	14.2	13.6	13.0	11.7	10.4	9.3	8.3
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.5	0.5	0.4	0.4	0.4	0.4	0.3
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

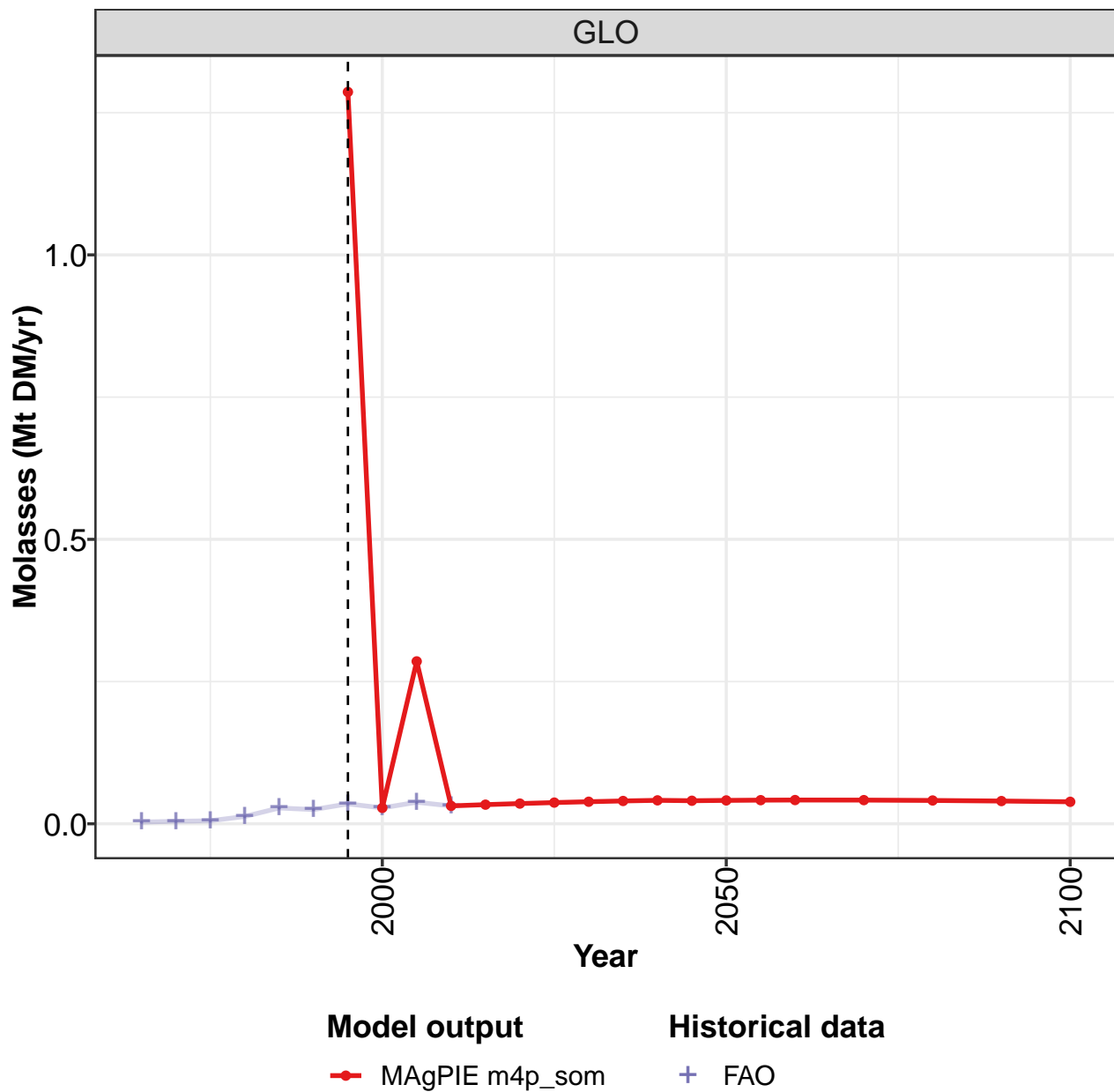
Table 438: MAgPIE m4p\_som — Demand—Food—Secondary products—Brans (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4.7	6.3	9.1	13.9	17.5	19.2	21.8	22.8	20.0	19.6
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	4.2	5.7	8.4	13.2	17.2	18.9	21.4	22.3	19.5	19.1
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.5	0.6	0.7	0.6	0.3	0.3	0.4	0.5	0.5	0.5
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 439: FAO — Demand—Food—Secondary products—Brans (Mt DM/yr)

## 7.4.3 Molasses

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

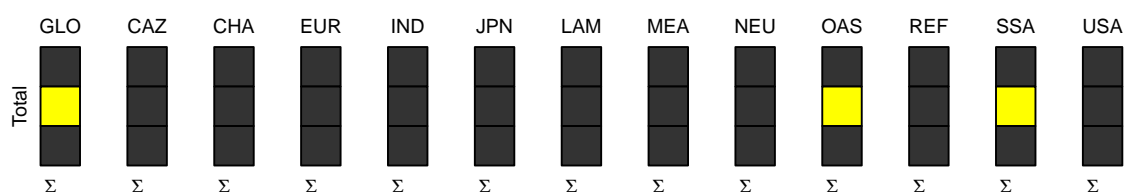
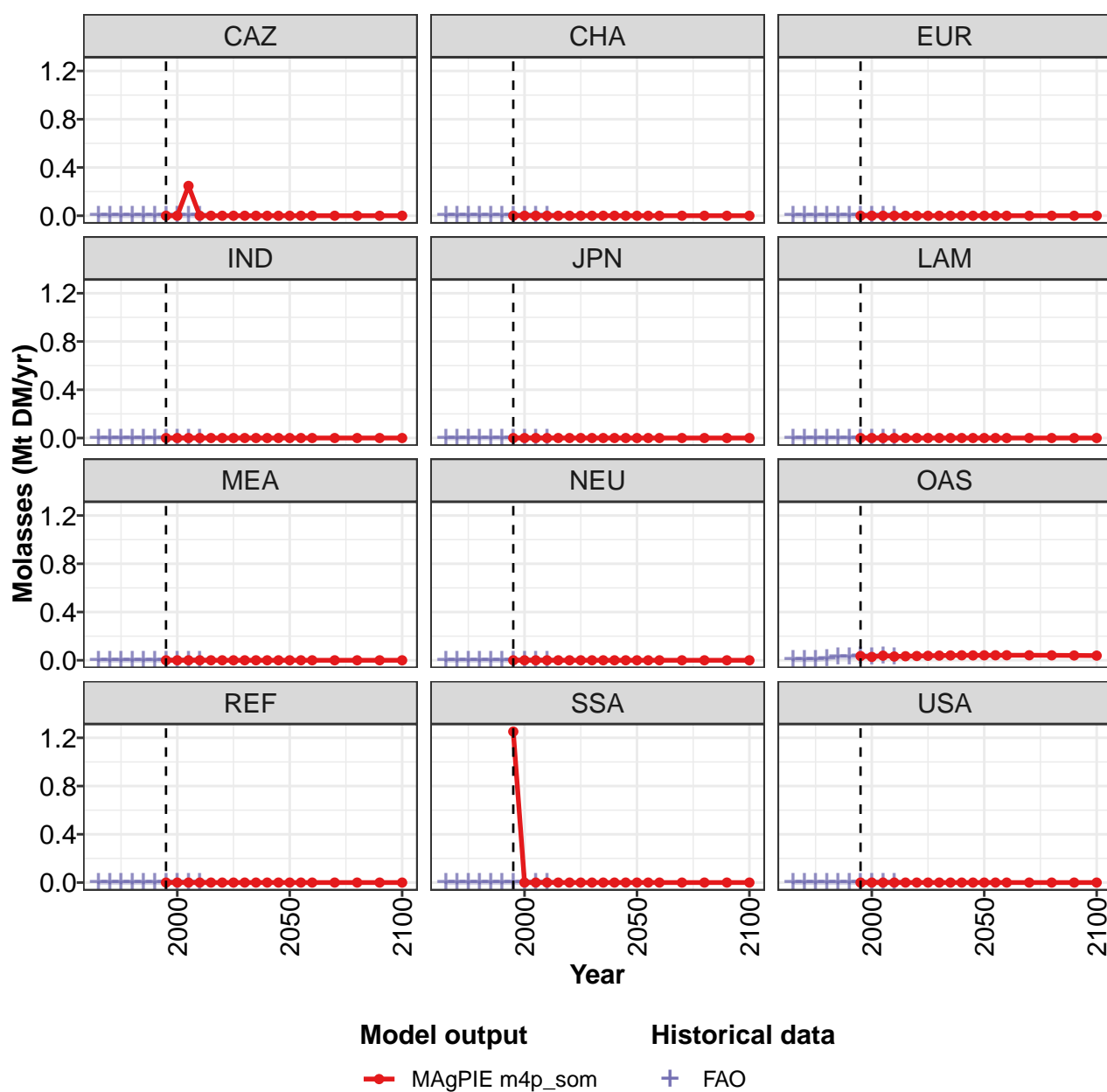


Figure 147: MAgPIE m4p\_som — Demand—Food—Secondary products—Molasses (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.29	0.03	0.29	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04
CAZ	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.03	0.03	0.04	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	1.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 440: MAgPIE m4p\_som — Demand—Food—Secondary products—Molasses (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.04	0.04	0.04	0.04	0.04	0.04	0.04
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.04	0.04	0.04	0.04	0.04	0.04	0.04
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00

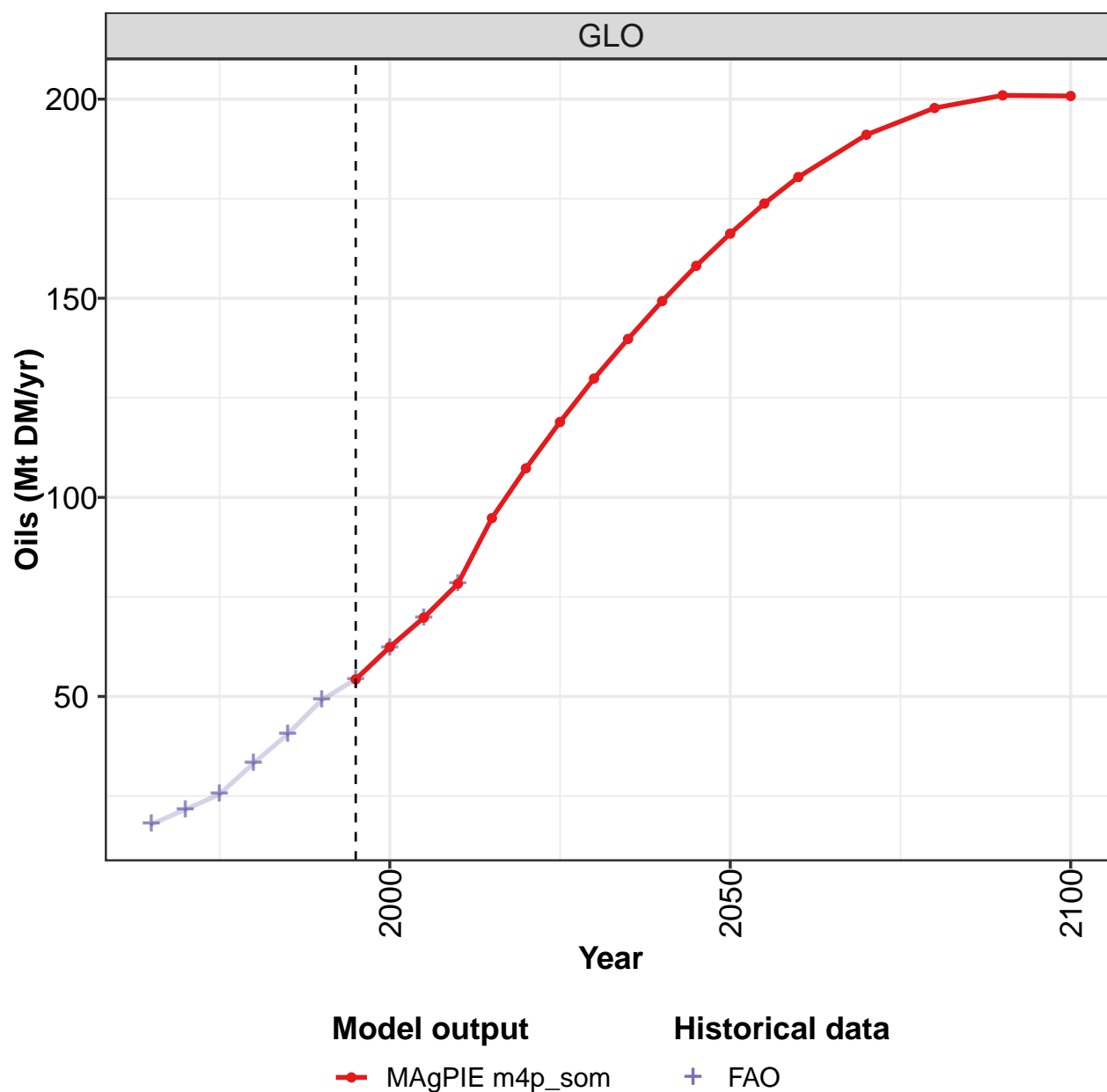
Table 441: MAgPIE m4p\_som — Demand—Food—Secondary products—Molasses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0030	0.0044	0.0053	0.0129	0.0278	0.0250	0.0351	0.0279	0.0379	0.0314
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0030	0.0044	0.0053	0.0129	0.0278	0.0250	0.0351	0.0279	0.0379	0.0314
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 442: FAO — Demand—Food—Secondary products—Molasses (Mt DM/yr)

## 7.4.4 Oils

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

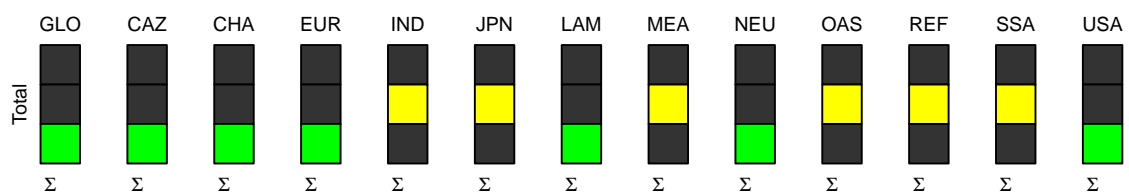
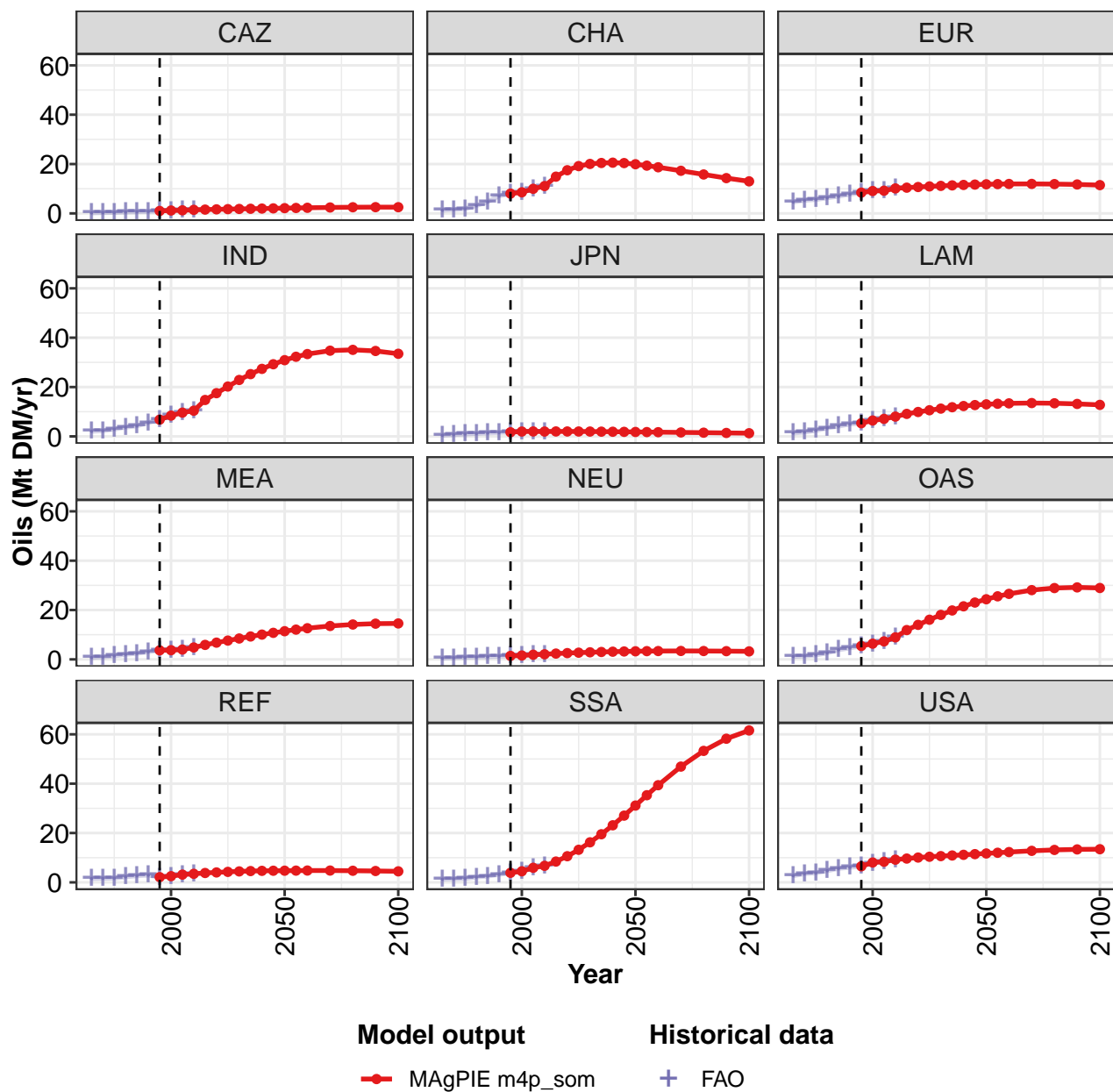


Figure 148: MAgPIE m4p\_som — Demand—Food—Secondary products—Oils (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	54	62	70	78	95	107	119	130	140	149	158
CAZ	1	1	1	1	2	2	2	2	2	2	2
CHA	8	9	10	11	15	17	19	20	20	21	20
EUR	8	9	9	10	10	11	11	11	11	12	12
IND	7	8	10	10	15	18	20	23	25	27	29
JPN	2	2	2	2	2	2	2	2	2	2	2
LAM	5	6	7	8	9	10	11	11	12	12	13
MEA	4	4	4	5	6	7	8	8	9	10	11
NEU	1	2	2	2	2	3	3	3	3	3	3
OAS	5	6	7	9	12	14	16	18	20	22	23
REF	2	3	3	3	4	4	4	4	5	5	5
SSA	4	5	6	7	8	11	13	16	20	23	27
USA	7	8	8	9	10	10	10	11	11	11	11

Table 443: MAgPIE m4p.som — Demand—Food—Secondary products—Oils (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	166	174	180	191	198	201	201
CAZ	2	2	2	2	2	3	3
CHA	20	19	19	17	16	14	13
EUR	12	12	12	12	12	12	11
IND	31	32	33	35	35	35	33
JPN	2	2	2	2	2	1	1
LAM	13	13	13	14	13	13	13
MEA	11	12	13	14	14	14	15
NEU	3	3	3	3	3	3	3
OAS	24	26	27	28	29	29	29
REF	5	5	5	5	5	5	4
SSA	31	35	39	47	53	58	62
USA	12	12	12	13	13	13	13

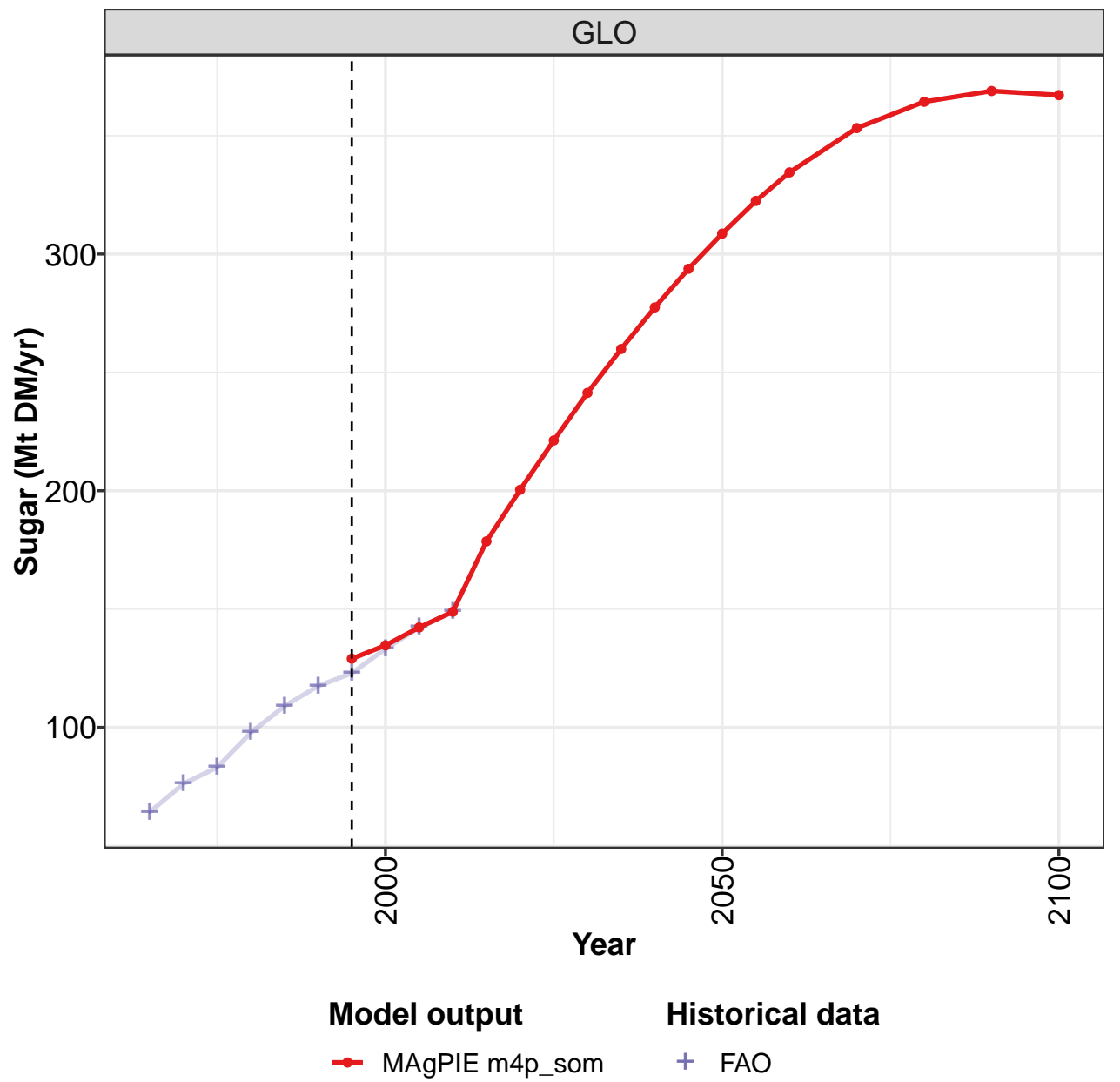
Table 444: MAgPIE m4p.som — Demand—Food—Secondary products—Oils (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	17.9	21.6	25.4	33.2	40.5	49.1	54.3	62.2	69.8	78.3
CAZ	0.2	0.3	0.4	0.5	0.7	0.8	1.0	1.2	1.3	1.4
CHA	1.3	1.6	1.9	3.2	4.7	7.1	8.0	8.6	10.0	11.1
EUR	4.6	5.3	5.6	6.3	7.0	7.8	8.4	9.1	9.2	10.1
IND	2.1	2.3	3.0	3.8	4.3	5.6	6.8	8.4	9.6	10.4
JPN	0.5	0.7	1.0	1.2	1.4	1.6	1.7	2.0	2.0	2.0
LAM	1.3	1.7	2.4	3.4	4.2	5.0	5.3	6.4	7.1	8.0
MEA	0.8	1.0	1.4	2.1	2.4	3.1	3.7	3.7	4.0	4.8
NEU	0.5	0.7	0.8	1.0	1.1	1.3	1.4	1.6	1.9	2.1
OAS	1.2	1.4	1.8	2.6	3.9	4.7	5.4	6.3	7.3	8.9
REF	1.6	1.6	1.7	2.2	2.7	2.9	2.1	2.5	3.1	3.5
SSA	1.3	1.4	1.6	2.2	2.5	3.2	3.9	4.5	5.9	6.7
USA	2.7	3.5	3.9	4.7	5.7	6.1	6.5	7.9	8.4	9.2

Table 445: FAO — Demand—Food—Secondary products—Oils (Mt DM/yr)

7.4.5
Sugar

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

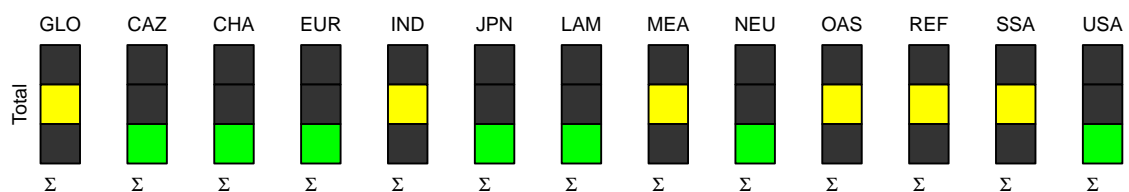
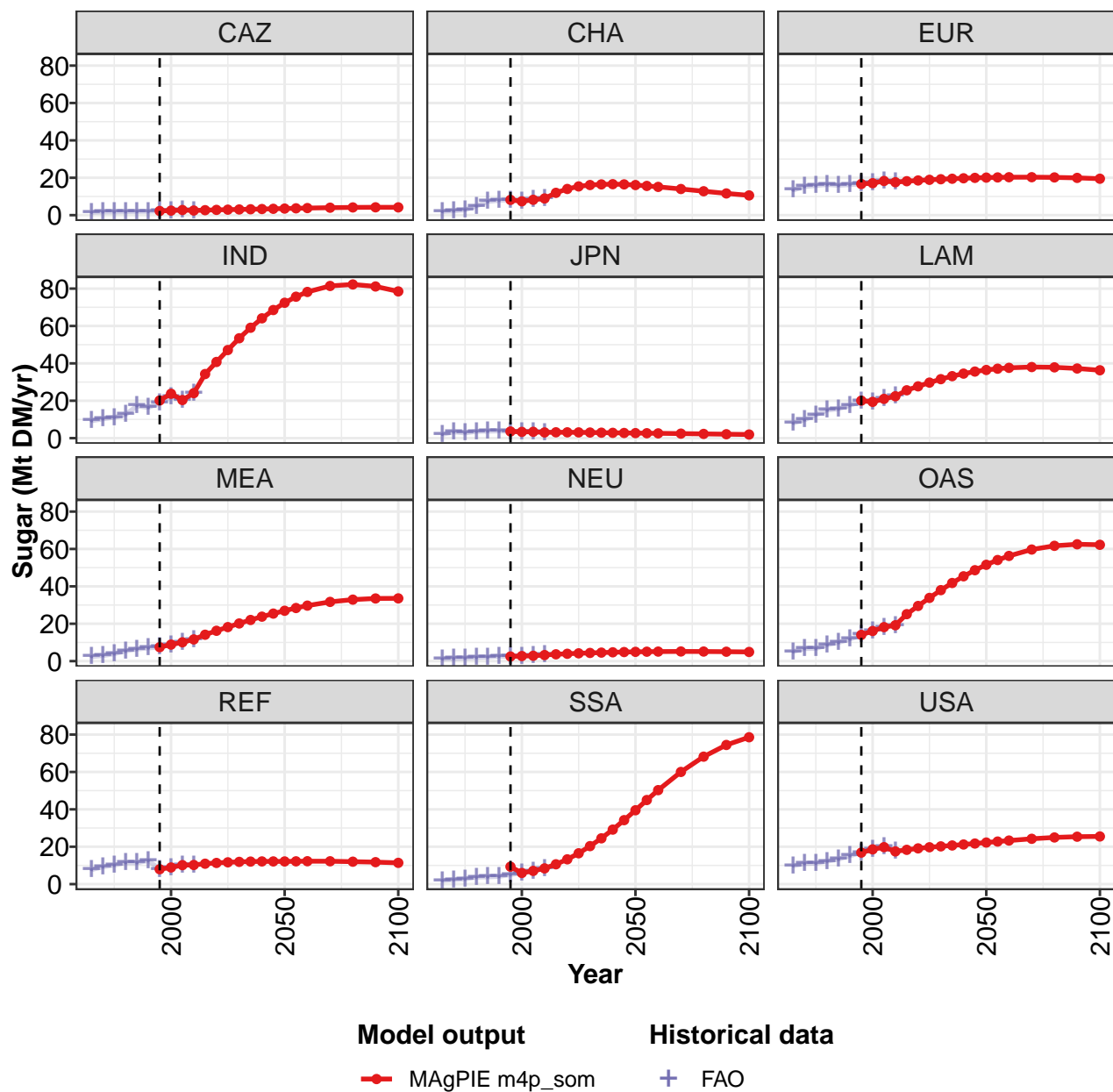


Figure 149: MAGPIE m4p\_som — Demand—Food—Secondary products—Sugar (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	129	135	142	149	179	200	221	241	260	277	294
CAZ	2	2	3	2	3	3	3	3	3	3	3
CHA	8	7	8	9	12	14	15	16	16	17	16
EUR	17	17	18	18	18	19	19	19	19	20	20
IND	20	24	20	24	34	41	47	53	59	64	69
JPN	4	3	3	3	3	3	3	3	3	3	3
LAM	20	19	21	22	26	28	30	32	33	35	36
MEA	7	9	10	12	14	16	18	20	22	24	25
NEU	2	3	3	3	4	4	4	4	5	5	5
OAS	14	16	18	19	25	30	34	38	42	45	49
REF	8	9	10	10	11	11	12	12	12	12	12
SSA	9	6	7	8	11	13	16	20	24	29	34
USA	17	19	20	17	18	19	20	20	21	21	22

Table 446: MAgPIE m4p\_som — Demand—Food—Secondary products—Sugar (Mt DM/yr) [PART 1/2]

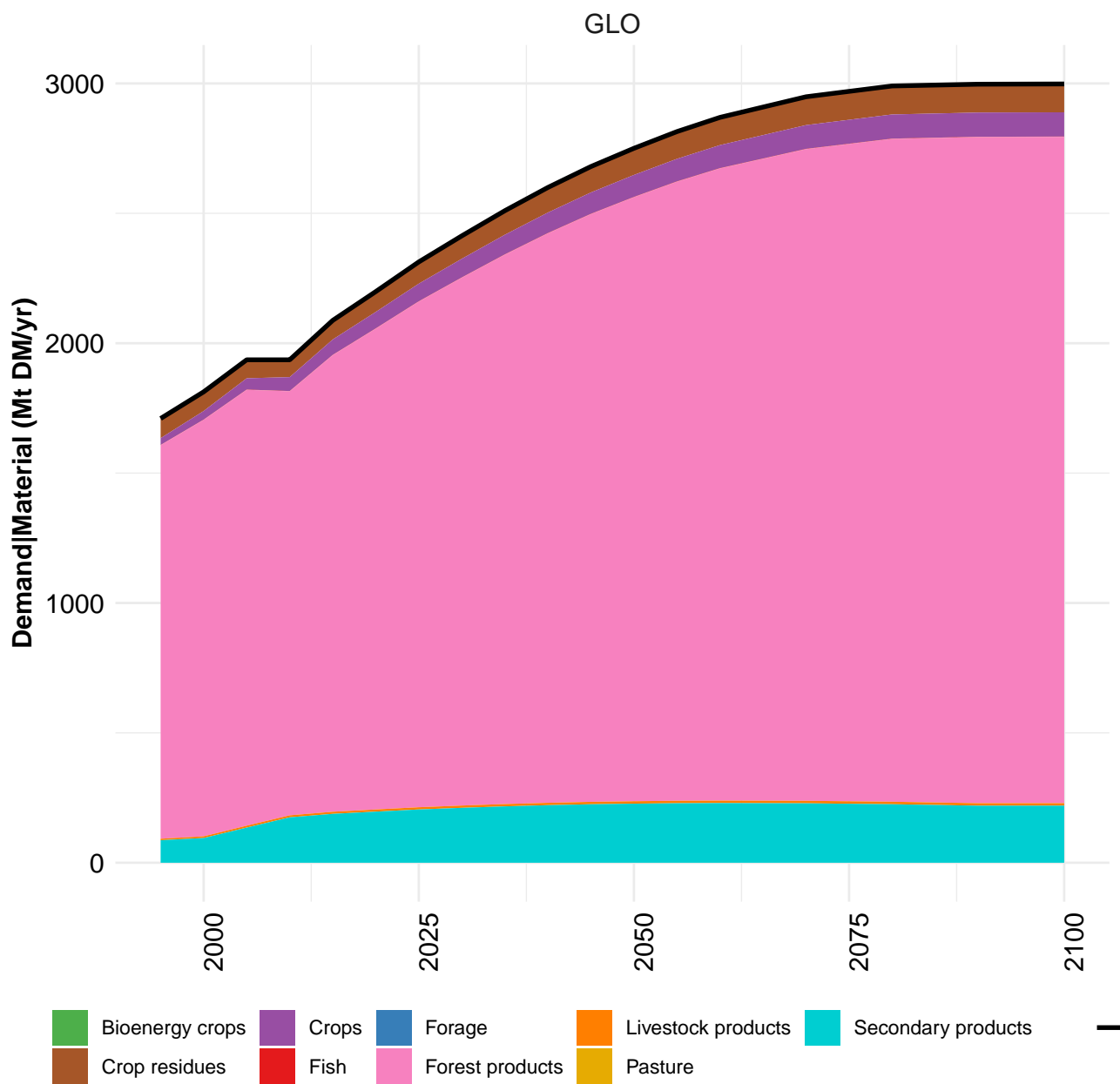
	2050	2055	2060	2070	2080	2090	2100
GLO	309	322	335	353	364	369	367
CAZ	4	4	4	4	4	4	4
CHA	16	16	15	14	13	12	11
EUR	20	20	20	20	20	20	19
IND	72	76	78	81	82	81	78
JPN	3	3	3	2	2	2	2
LAM	36	37	38	38	38	37	36
MEA	27	28	30	32	33	34	34
NEU	5	5	5	5	5	5	5
OAS	52	54	56	60	62	63	62
REF	12	12	12	12	12	12	11
SSA	40	45	50	60	68	74	79
USA	22	23	23	24	25	25	26

Table 447: MAgPIE m4p\_som — Demand—Food—Secondary products—Sugar (Mt DM/yr) [PART 2/2]

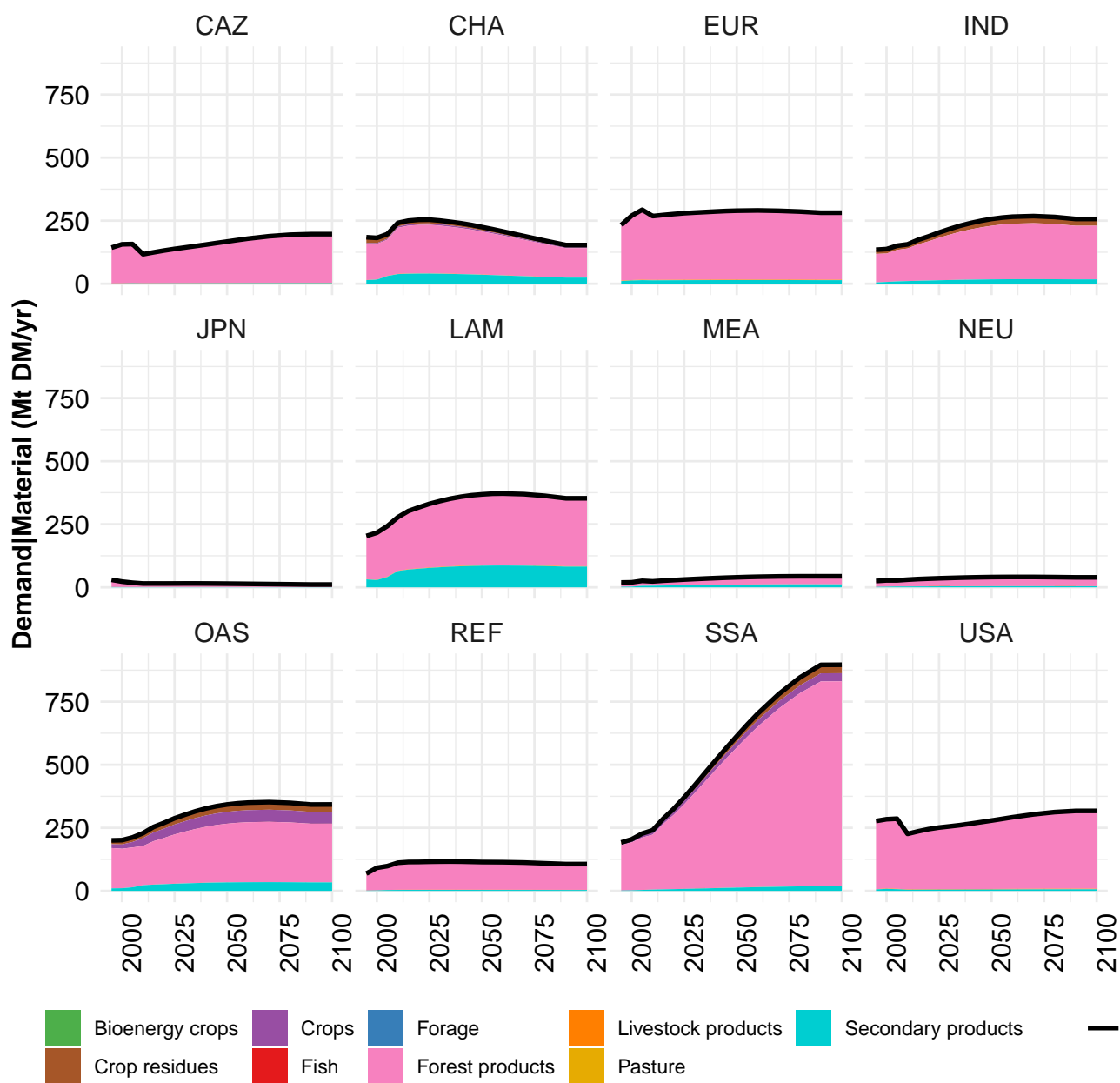
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	64	76	83	98	109	117	123	133	142	149
CAZ	2	2	2	2	2	2	2	2	3	2
CHA	2	2	3	5	7	8	8	7	8	9
EUR	13	15	16	16	16	16	17	17	18	18
IND	9	10	11	13	17	16	19	22	20	24
JPN	2	3	3	4	4	4	4	3	3	3
LAM	8	10	12	15	16	18	20	19	21	22
MEA	2	3	4	5	6	7	7	9	10	12
NEU	1	1	2	2	2	3	2	3	3	3
OAS	5	7	7	9	10	12	14	16	18	19
REF	8	9	10	11	11	13	8	9	10	10
SSA	2	2	3	4	4	4	5	6	7	8
USA	10	11	11	12	13	15	17	19	20	17

Table 448: FAO — Demand—Food—Secondary products—Sugar (Mt DM/yr)

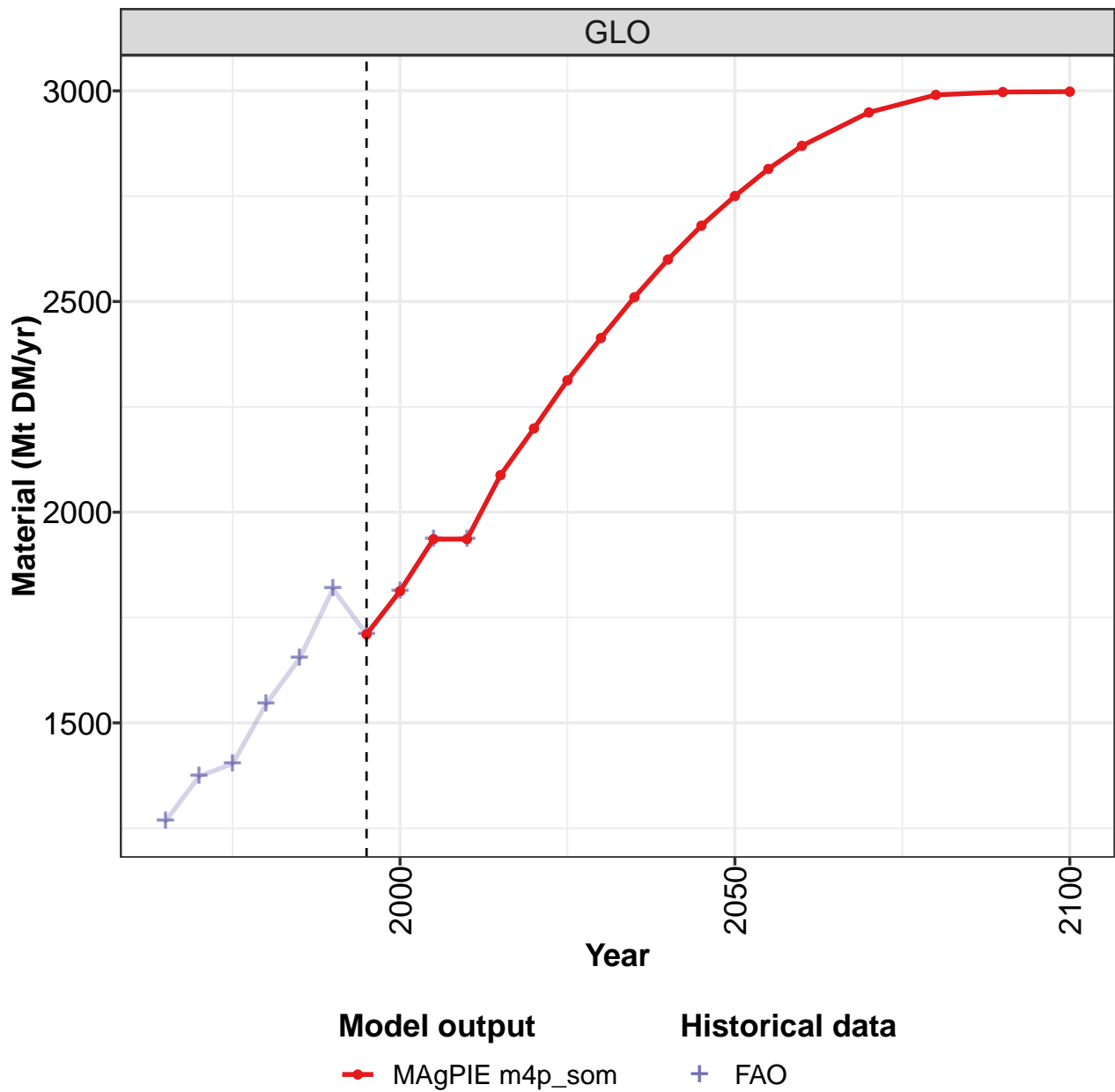
## 8 Material







## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

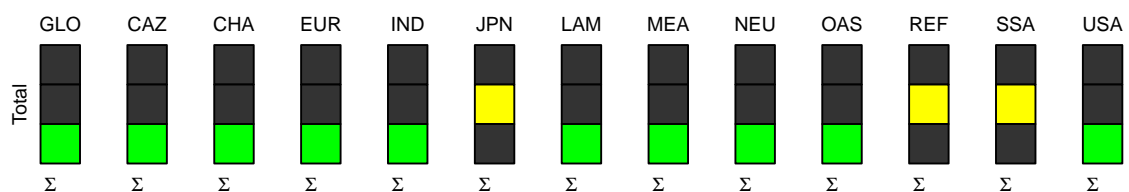
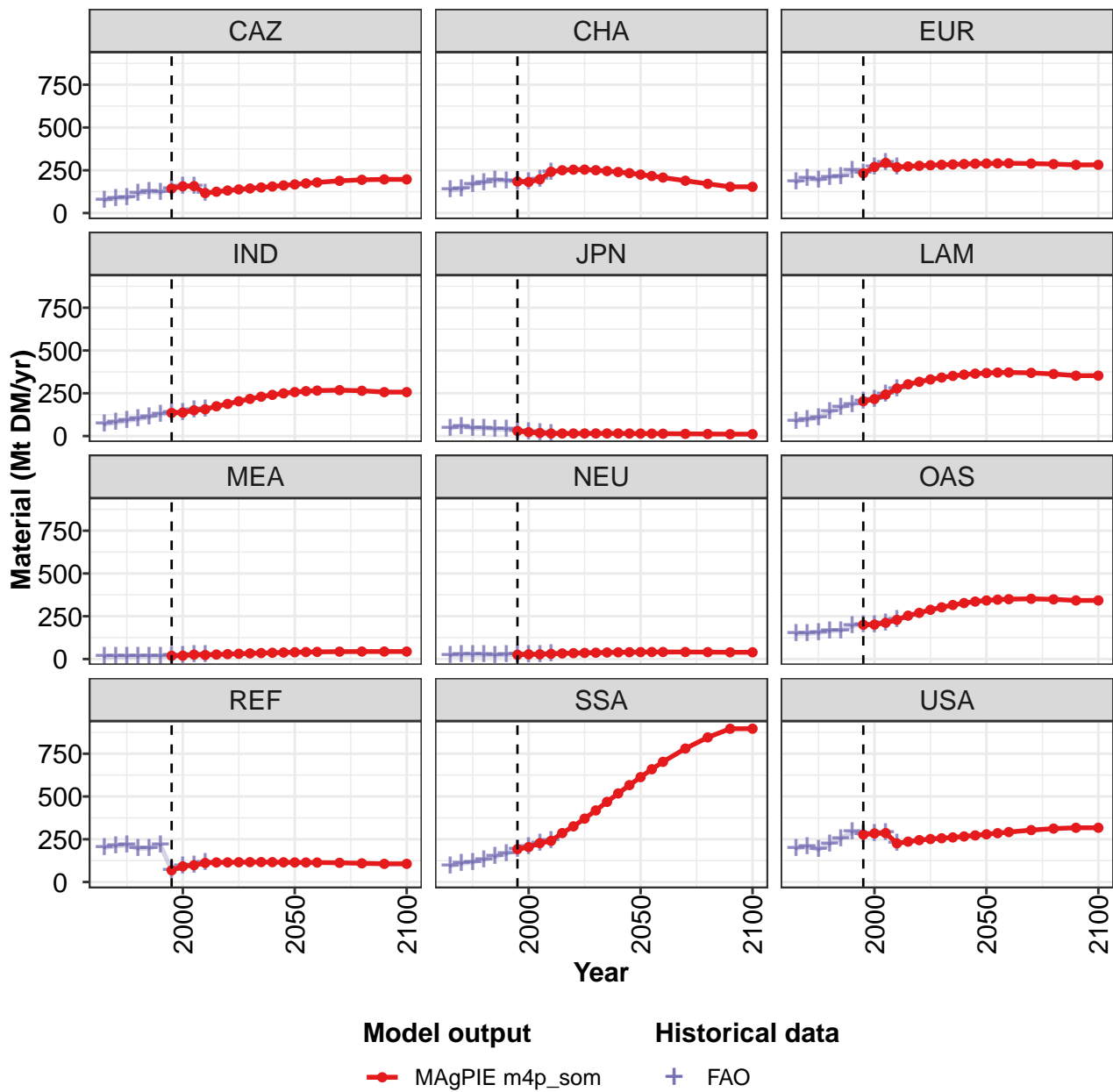


Figure 150: MAgPIE m4p\_som — Demand—Material (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1710	1813	1936	1936	2088	2199	2313	2413	2510	2600	2680
CAZ	143	156	157	117	125	132	138	144	149	155	161
CHA	184	182	197	241	250	254	254	251	245	240	233
EUR	233	270	293	268	272	276	280	282	284	286	288
IND	135	137	151	156	174	188	203	217	230	241	249
JPN	30	23	18	15	15	15	15	15	15	15	15
LAM	203	216	243	278	302	317	331	342	351	359	365
MEA	19	20	26	23	26	29	31	33	35	37	38
NEU	25	27	28	30	33	34	36	37	38	39	40
OAS	200	201	212	229	253	270	288	302	316	327	336
REF	69	91	98	112	114	115	116	116	116	116	115
SSA	192	204	227	241	286	325	370	419	468	518	566
USA	277	284	286	226	236	245	251	256	261	266	273

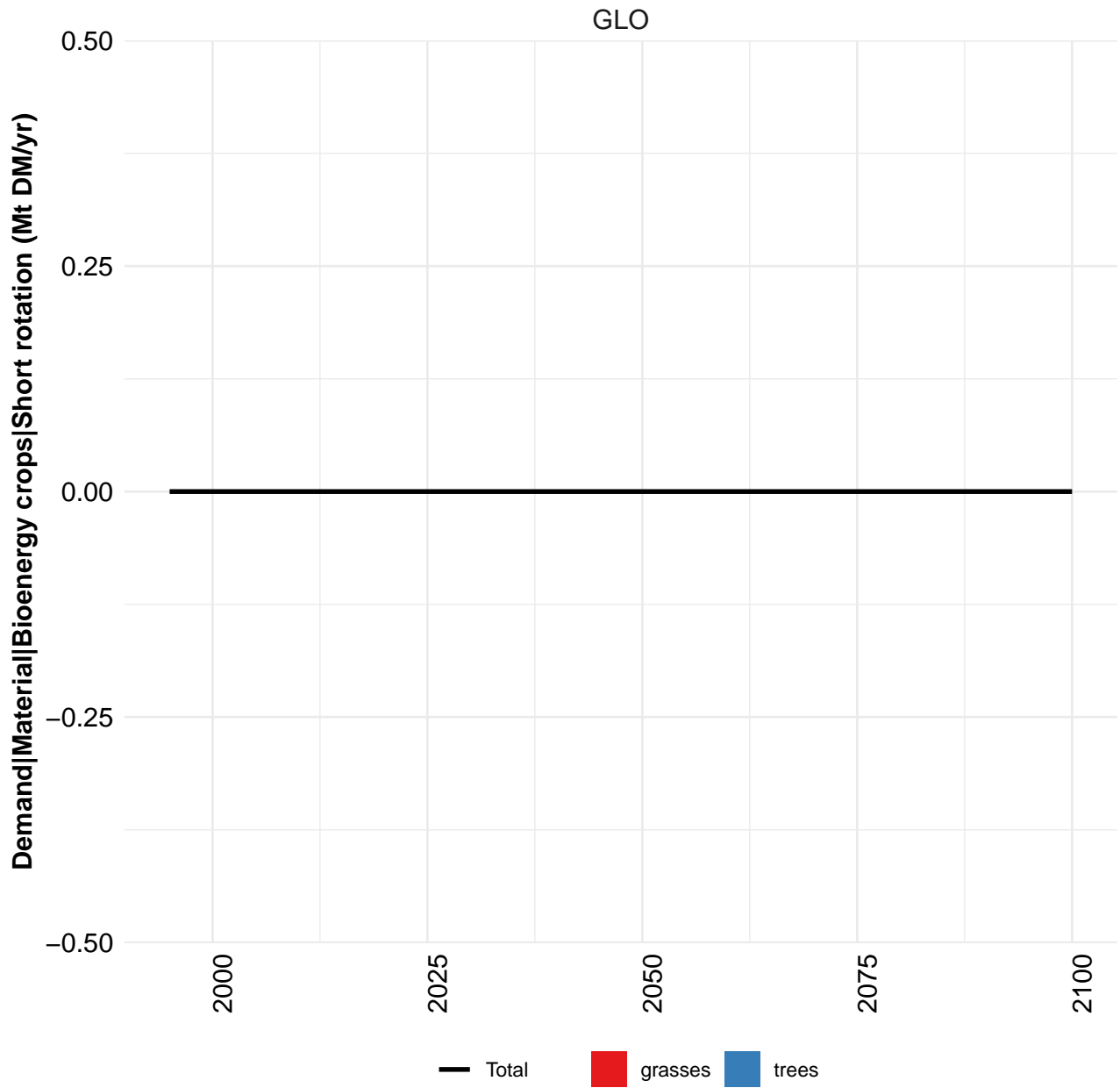
Table 449: MAgPIE m4p.som — Demand—Material (Mt DM/yr) [PART 1/2]

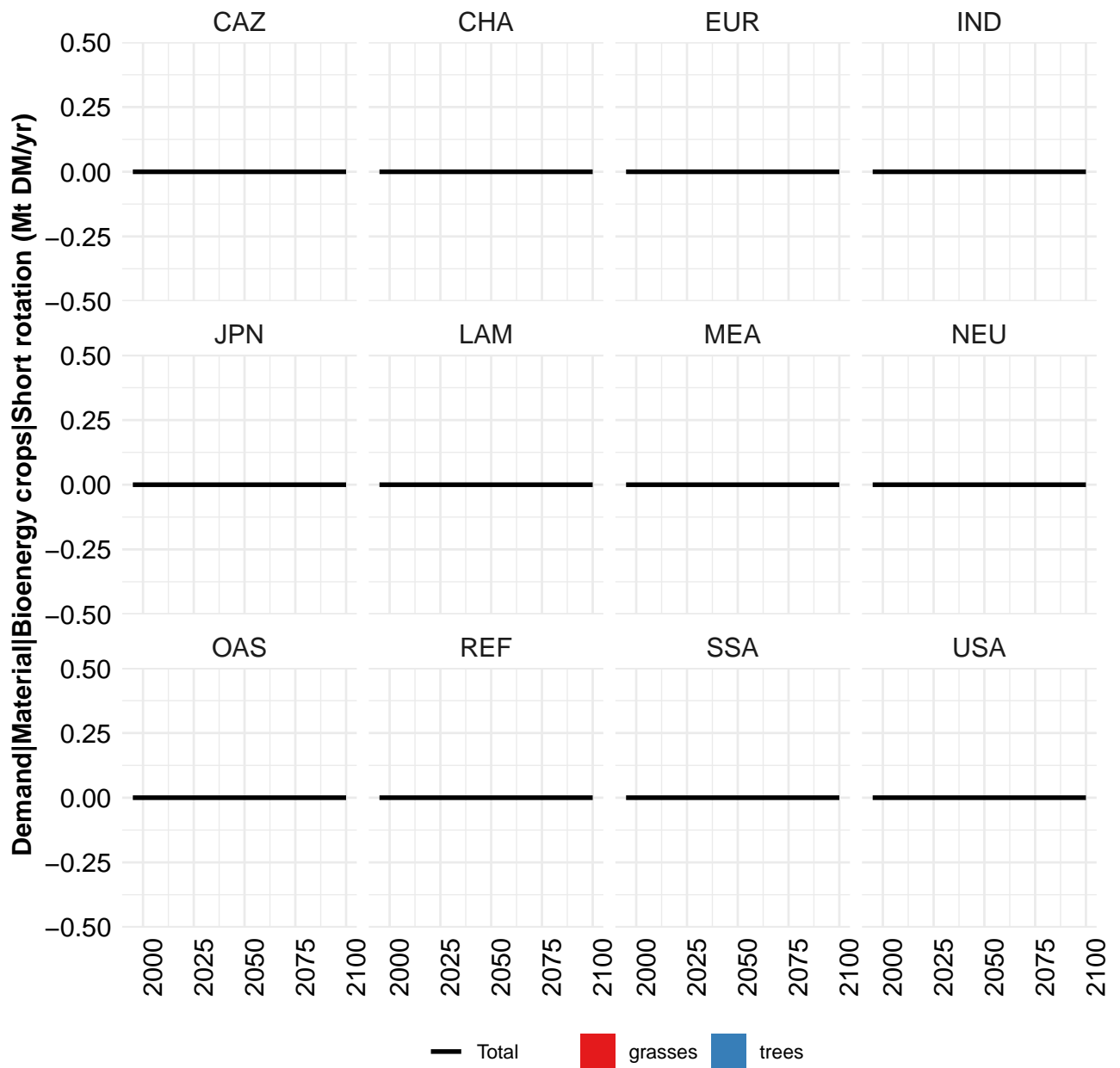
	2050	2055	2060	2070	2080	2090	2100
GLO	2750	2815	2869	2949	2990	2997	2998
CAZ	167	173	179	188	194	197	197
CHA	225	216	207	189	171	153	153
EUR	290	290	291	289	286	282	282
IND	257	262	266	268	265	257	257
JPN	15	14	14	13	12	11	11
LAM	368	371	372	369	363	353	353
MEA	40	41	42	43	44	44	44
NEU	41	41	41	41	40	39	39
OAS	343	347	350	352	349	342	343
REF	114	114	114	112	109	106	106
SSA	613	659	703	780	845	896	896
USA	279	285	292	303	312	317	317

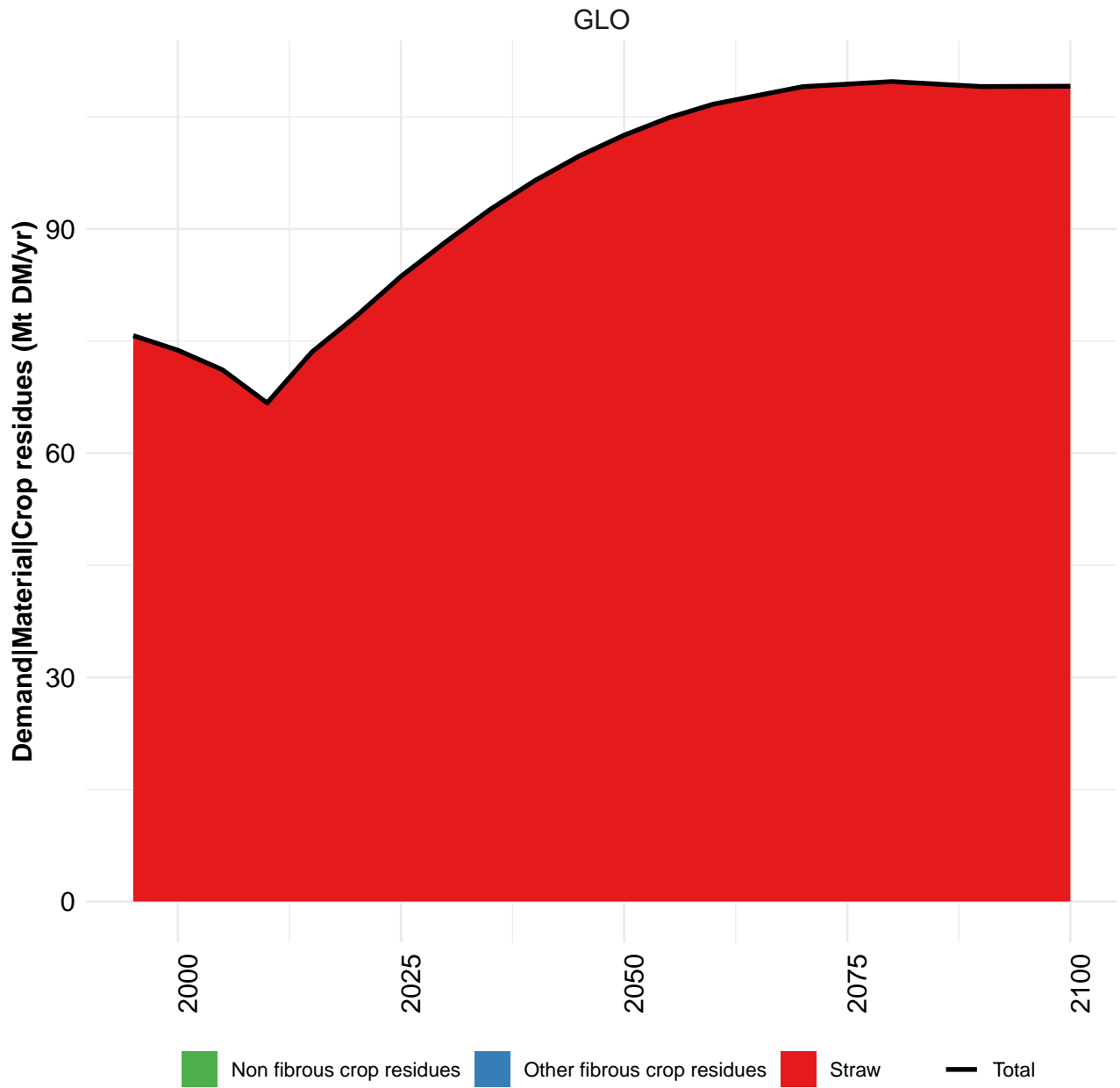
Table 450: MAgPIE m4p.som — Demand—Material (Mt DM/yr) [PART 2/2]

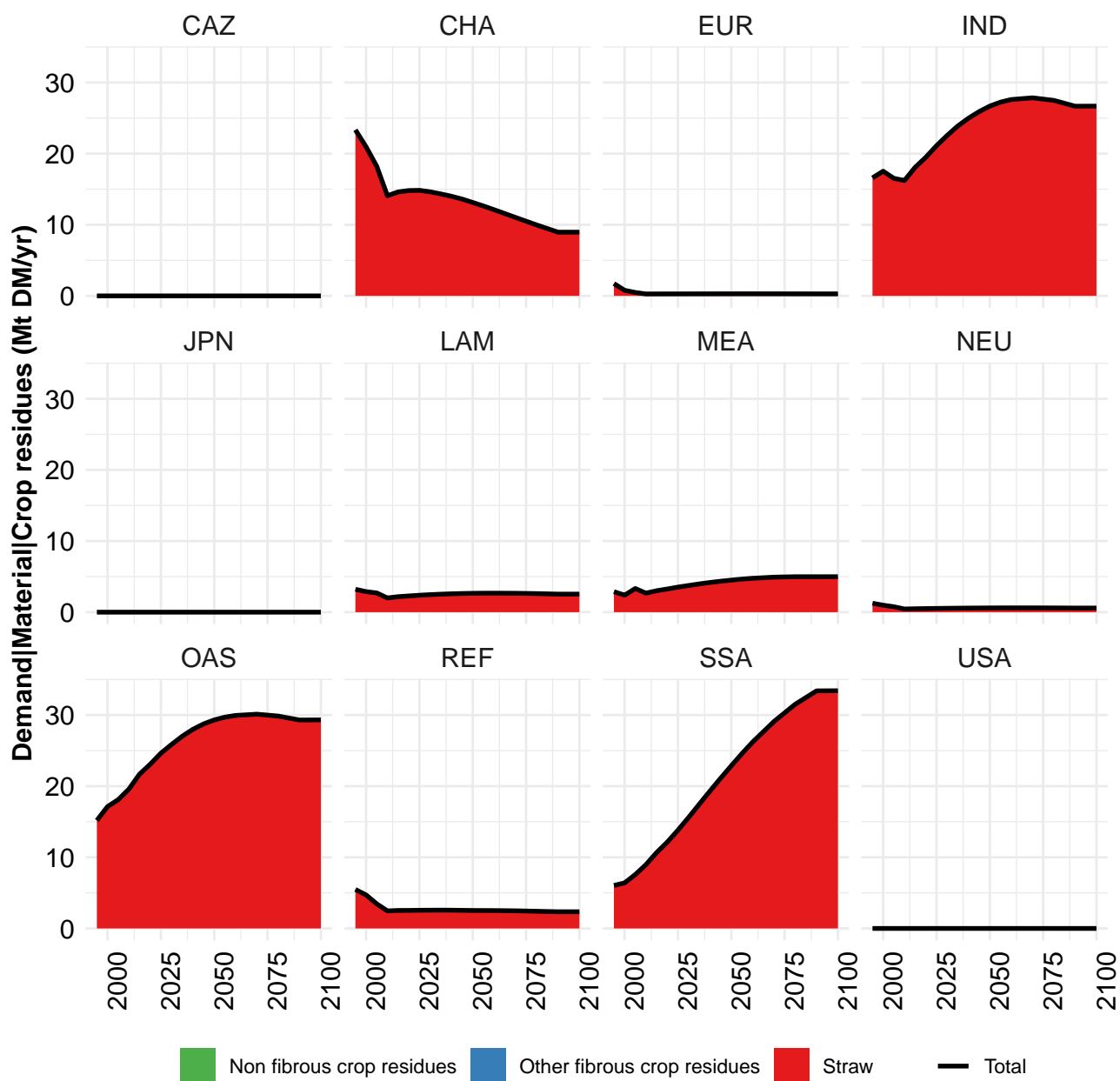
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1267	1373	1403	1544	1653	1818	1710	1813	1936	1936
CAZ	75	87	88	115	124	121	143	156	157	117
CHA	134	140	168	179	191	189	184	182	197	241
EUR	182	202	192	210	213	248	233	270	293	268
IND	68	79	89	99	111	128	135	137	151	156
JPN	46	57	46	47	41	38	30	23	18	15
LAM	88	97	107	141	166	184	203	216	243	278
MEA	13	14	14	16	17	16	19	20	26	23
NEU	21	24	23	23	22	24	25	27	28	30
OAS	147	149	153	164	167	194	200	201	212	229
REF	202	210	216	195	198	216	69	91	98	112
SSA	94	108	116	130	147	166	192	204	227	241
USA	196	207	190	224	254	292	277	284	286	226

Table 451: FAO — Demand—Material (Mt DM/yr)





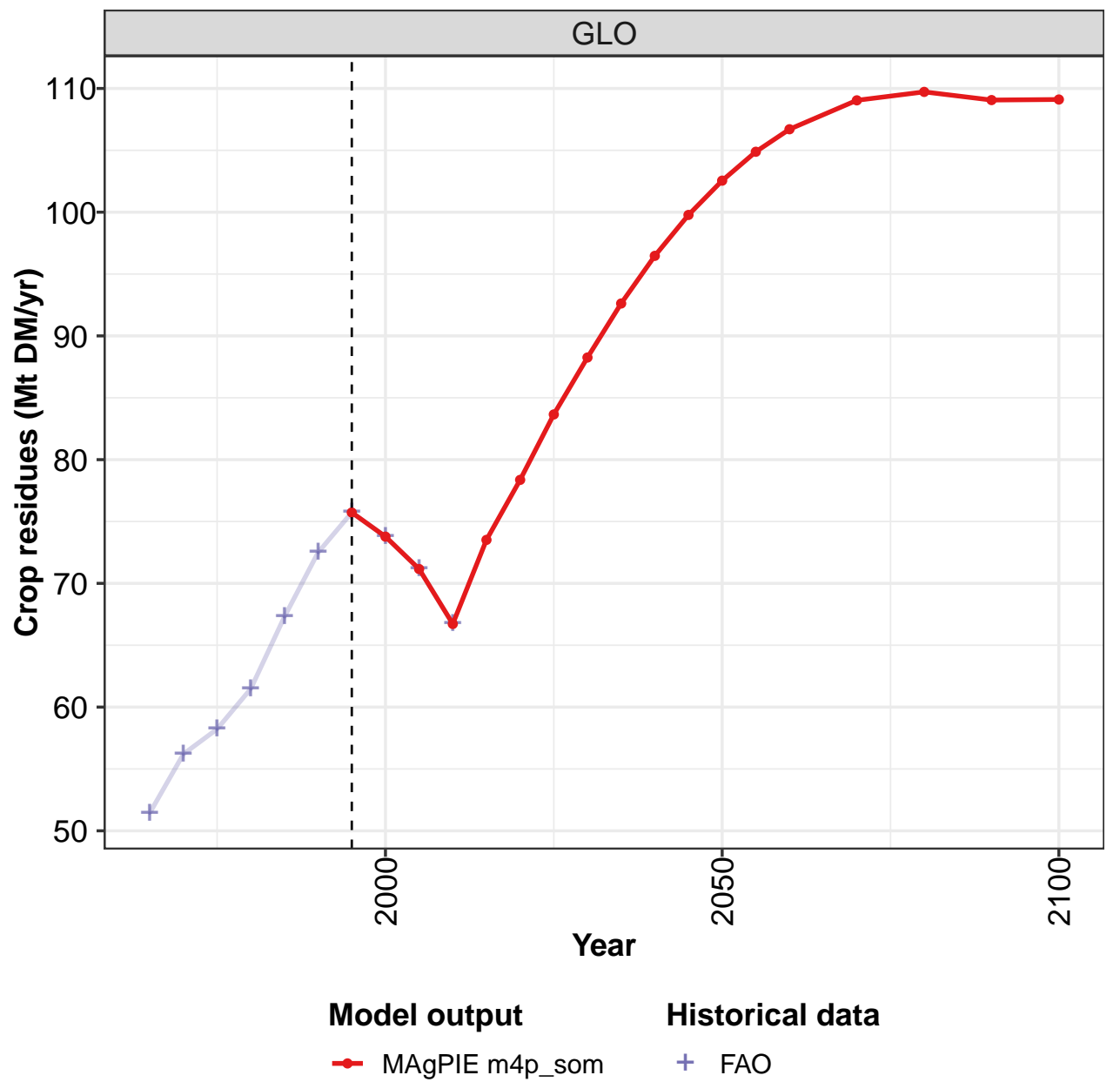






8.1 Crop residues

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

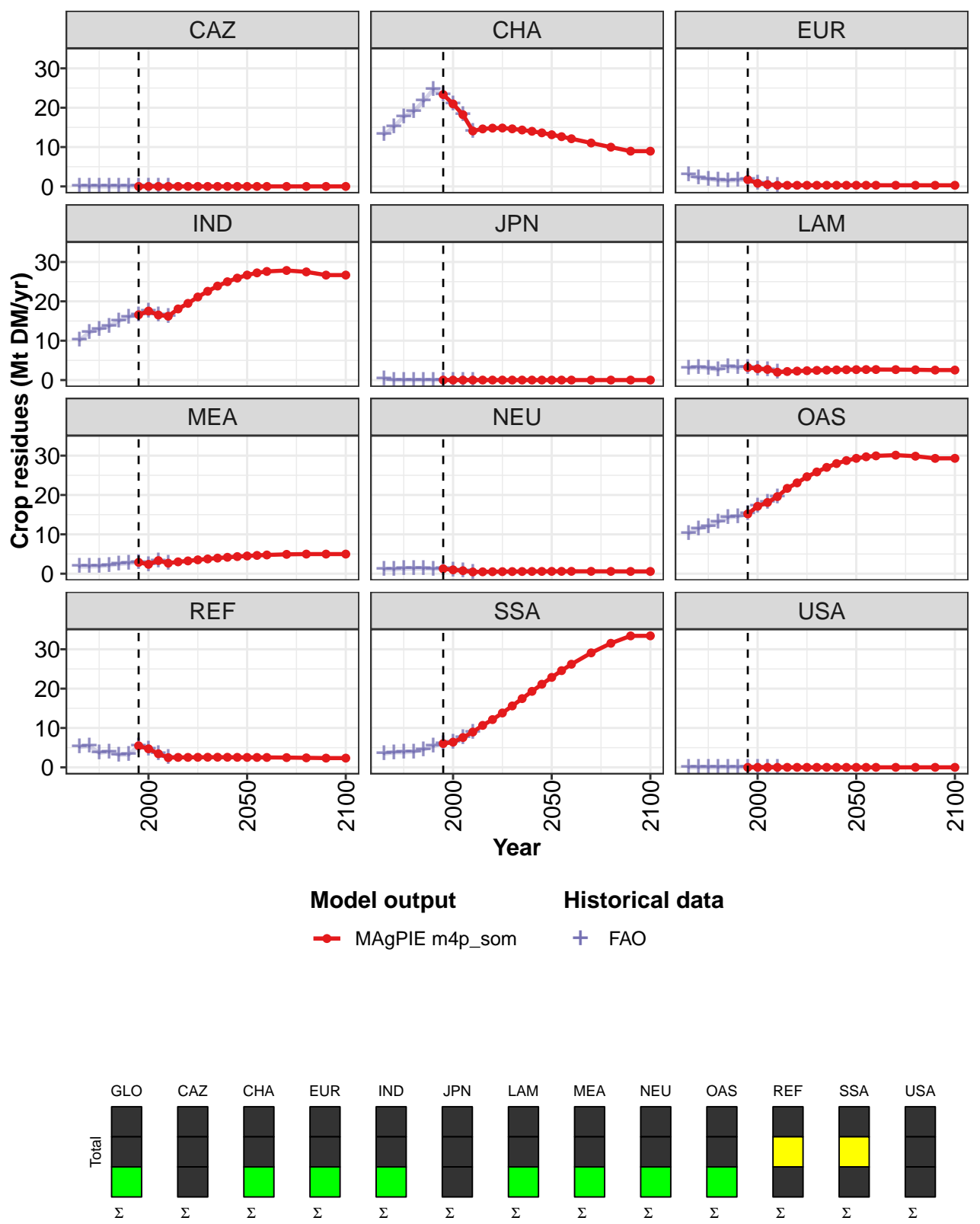


Figure 151: MAGPIE m4p\_som — Demand—Material—Crop residues (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	76	74	71	67	74	78	84	88	93	96	100
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	23	21	18	14	15	15	15	15	14	14	14
EUR	2	1	0	0	0	0	0	0	0	0	0
IND	17	18	17	16	18	19	21	23	24	25	26
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	3	3	3	2	2	2	2	2	3	3	3
MEA	3	2	3	3	3	3	4	4	4	4	4
NEU	1	1	1	0	0	1	1	1	1	1	1
OAS	15	17	18	20	22	23	25	26	27	28	29
REF	5	5	3	2	3	3	3	3	3	3	3
SSA	6	6	8	9	11	12	14	16	17	19	21
USA	0	0	0	0	0	0	0	0	0	0	0

Table 452: MAgPIE m4p\_som — Demand—Material—Crop residues (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	103	105	107	109	110	109	109
CAZ	0	0	0	0	0	0	0
CHA	13	13	12	11	10	9	9
EUR	0	0	0	0	0	0	0
IND	27	27	28	28	27	27	27
JPN	0	0	0	0	0	0	0
LAM	3	3	3	3	3	3	3
MEA	5	5	5	5	5	5	5
NEU	1	1	1	1	1	1	1
OAS	29	30	30	30	30	29	29
REF	3	3	3	2	2	2	2
SSA	23	25	26	29	32	33	33
USA	0	0	0	0	0	0	0

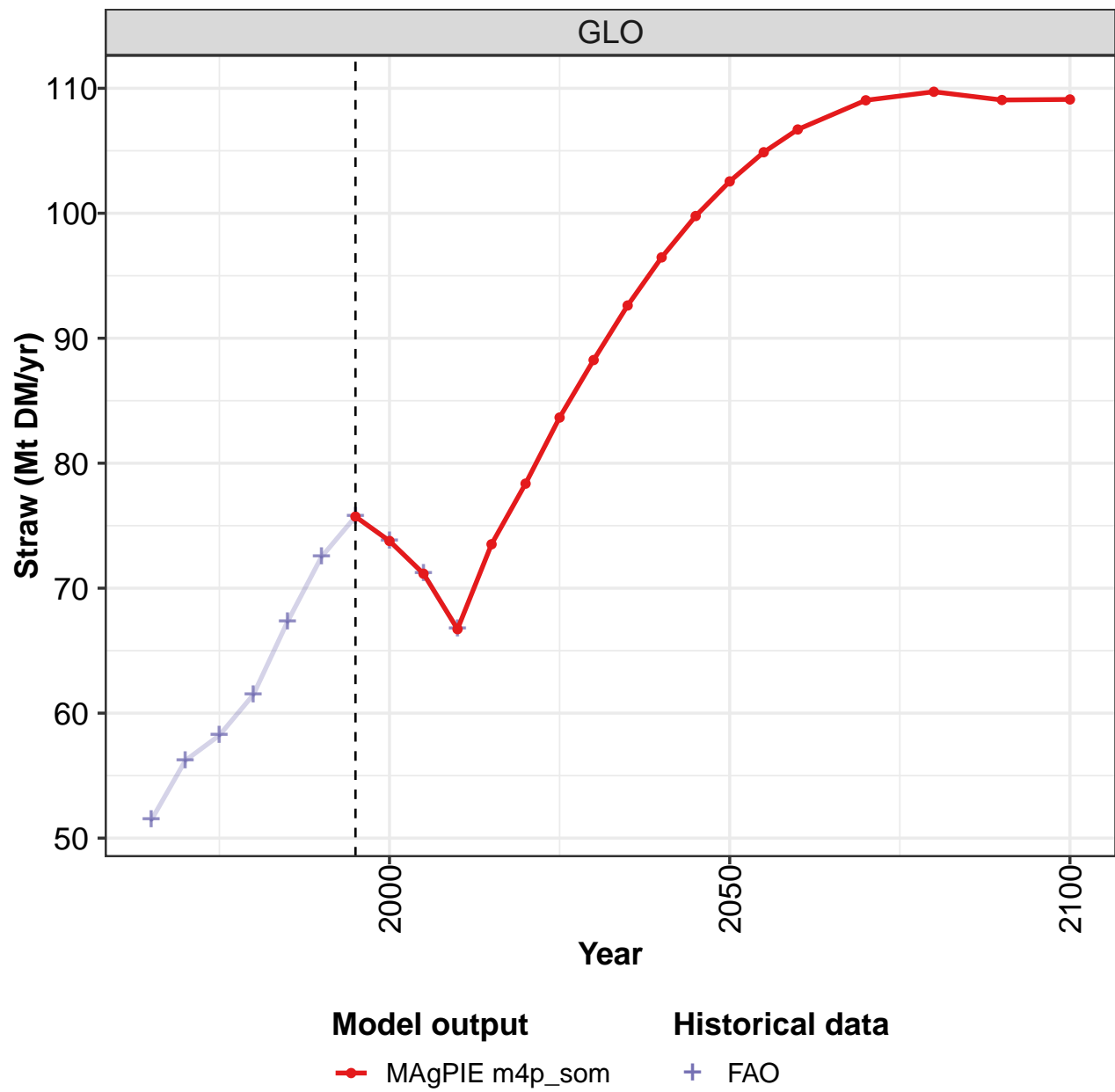
Table 453: MAgPIE m4p\_som — Demand—Material—Crop residues (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	51.4	56.2	58.2	61.5	67.3	72.5	75.7	73.8	71.2	66.7
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	13.2	15.1	17.7	19.1	21.7	24.7	23.3	21.0	18.2	14.1
EUR	2.9	2.1	1.9	1.5	1.5	1.6	1.7	0.8	0.5	0.3
IND	10.1	12.1	12.9	13.7	15.0	16.1	16.6	17.5	16.5	16.2
JPN	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	3.1	3.2	3.0	2.6	3.4	3.1	3.2	2.9	2.7	2.0
MEA	1.8	1.8	1.9	2.1	2.5	2.6	2.9	2.4	3.3	2.7
NEU	1.1	1.1	1.3	1.3	1.3	1.2	1.3	1.0	0.8	0.4
OAS	10.3	11.5	12.1	13.2	14.3	14.6	15.2	17.1	18.1	19.6
REF	5.2	5.4	3.7	4.0	3.2	3.2	5.5	4.7	3.5	2.5
SSA	3.5	3.8	3.8	4.0	4.5	5.4	6.0	6.4	7.6	9.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 454: FAO — Demand—Material—Crop residues (Mt DM/yr)

8.1.1 Straw

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

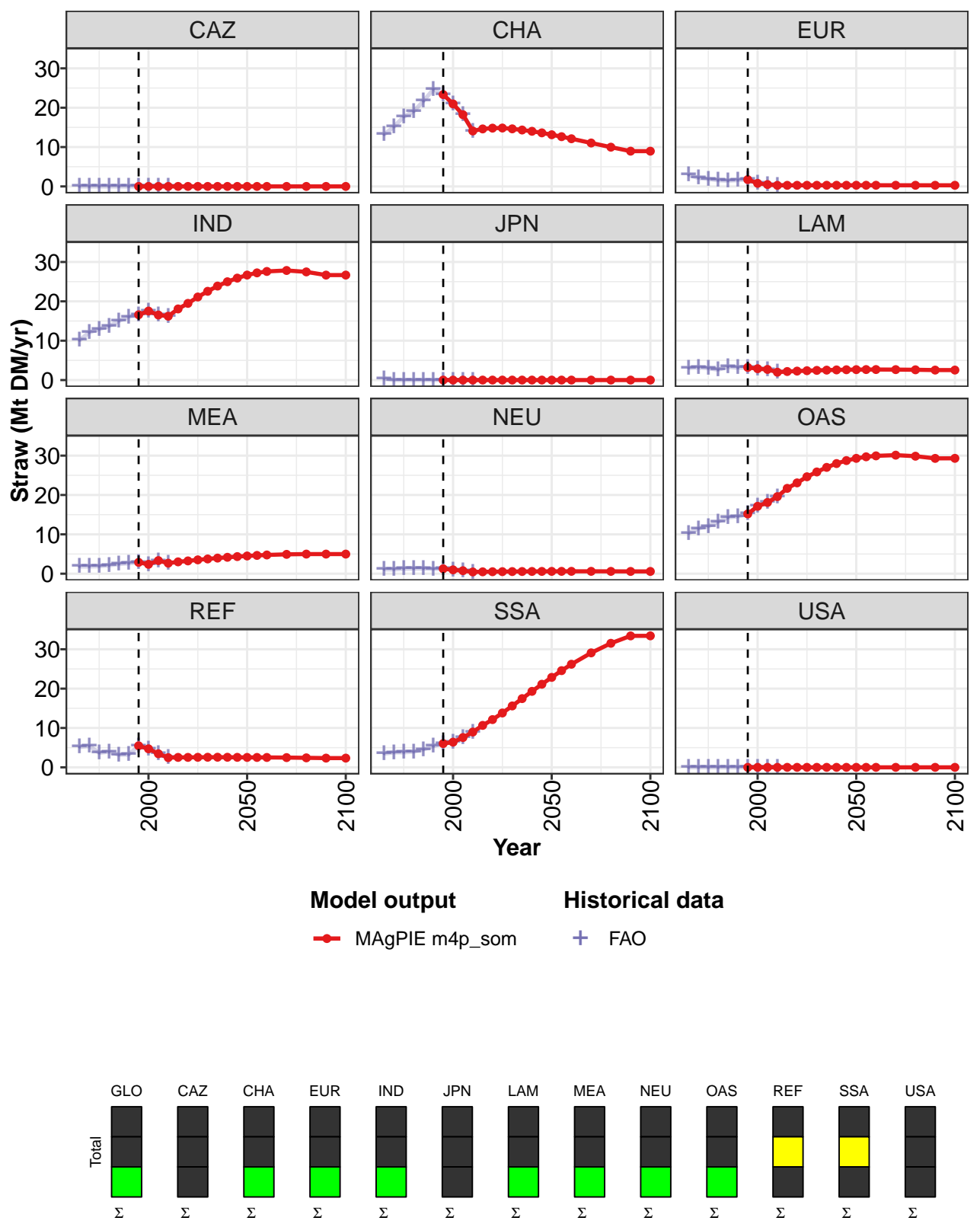


Figure 152: MAgPIE m4p\_som — Demand—Material—Crop residues—Straw (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	76	74	71	67	74	78	84	88	93	96	100
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	23	21	18	14	15	15	15	15	14	14	14
EUR	2	1	0	0	0	0	0	0	0	0	0
IND	17	18	17	16	18	19	21	23	24	25	26
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	3	3	3	2	2	2	2	2	3	3	3
MEA	3	2	3	3	3	3	4	4	4	4	4
NEU	1	1	1	0	0	1	1	1	1	1	1
OAS	15	17	18	20	22	23	25	26	27	28	29
REF	5	5	3	2	3	3	3	3	3	3	3
SSA	6	6	8	9	11	12	14	16	17	19	21
USA	0	0	0	0	0	0	0	0	0	0	0

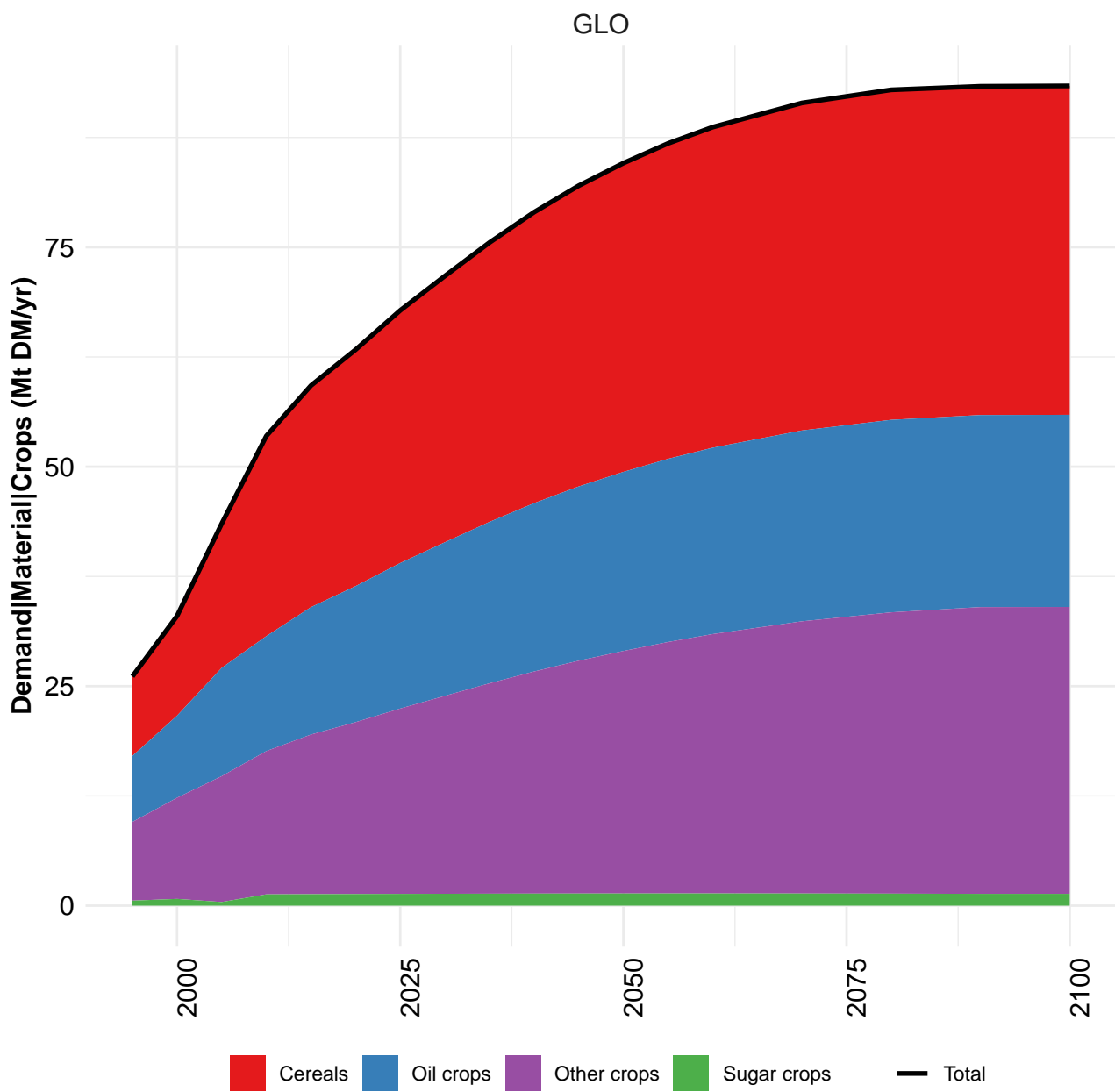
Table 455: MAgPIE m4p\_som — Demand—Material—Crop residues—Straw (Mt DM/yr) [PART 1/2]

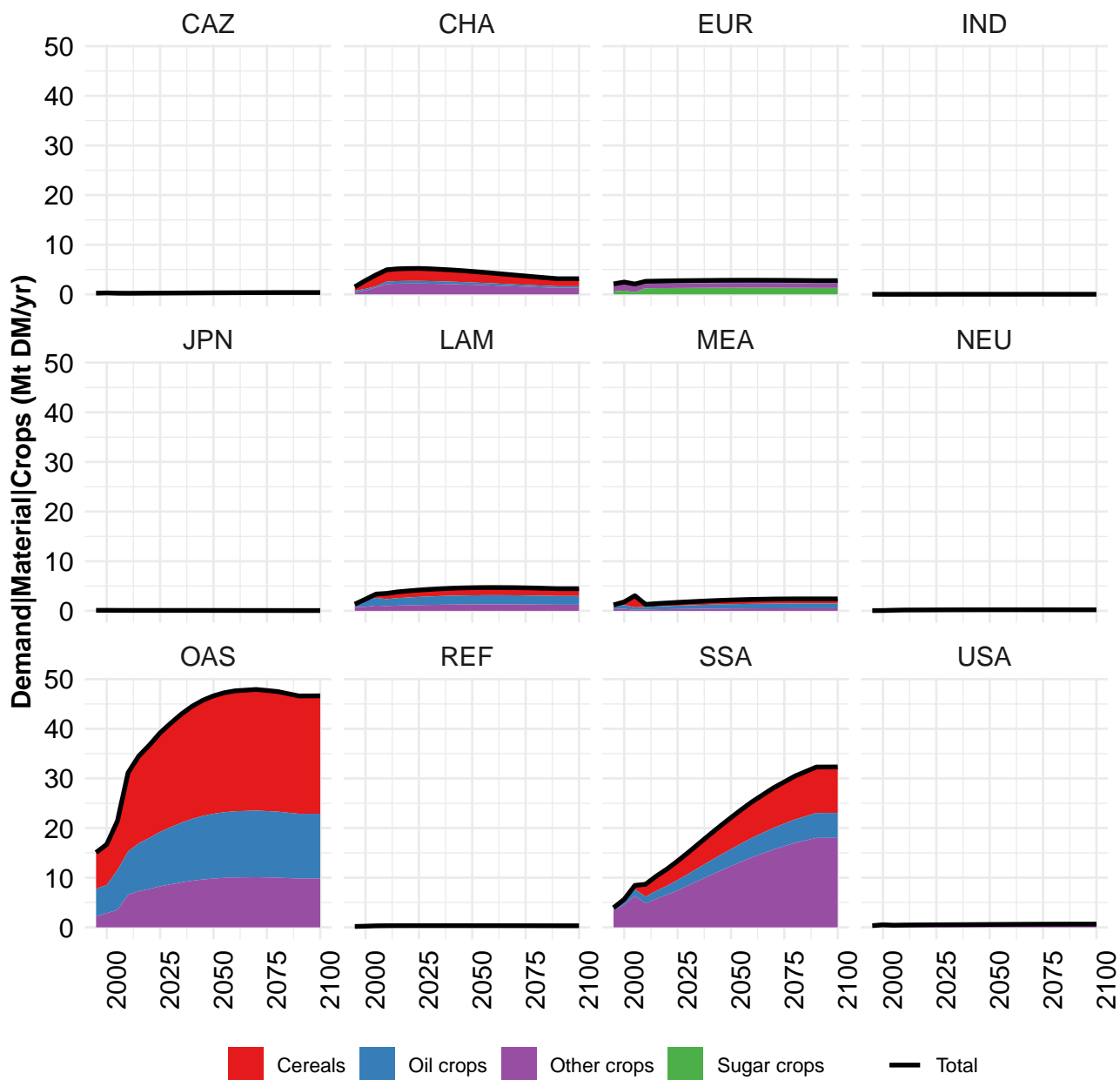
	2050	2055	2060	2070	2080	2090	2100
GLO	103	105	107	109	110	109	109
CAZ	0	0	0	0	0	0	0
CHA	13	13	12	11	10	9	9
EUR	0	0	0	0	0	0	0
IND	27	27	28	28	27	27	27
JPN	0	0	0	0	0	0	0
LAM	3	3	3	3	3	3	3
MEA	5	5	5	5	5	5	5
NEU	1	1	1	1	1	1	1
OAS	29	30	30	30	30	29	29
REF	3	3	3	2	2	2	2
SSA	23	25	26	29	32	33	33
USA	0	0	0	0	0	0	0

Table 456: MAgPIE m4p\_som — Demand—Material—Crop residues—Straw (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	51.4	56.2	58.2	61.5	67.3	72.5	75.7	73.8	71.2	66.7
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	13.2	15.1	17.7	19.1	21.7	24.7	23.3	21.0	18.2	14.1
EUR	2.9	2.1	1.9	1.5	1.5	1.6	1.7	0.8	0.5	0.3
IND	10.1	12.1	12.9	13.7	15.0	16.1	16.6	17.5	16.5	16.2
JPN	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	3.1	3.2	3.0	2.6	3.4	3.1	3.2	2.9	2.7	2.0
MEA	1.8	1.8	1.9	2.1	2.5	2.6	2.9	2.4	3.3	2.7
NEU	1.1	1.1	1.3	1.3	1.3	1.2	1.3	1.0	0.8	0.4
OAS	10.3	11.5	12.1	13.2	14.3	14.6	15.2	17.1	18.1	19.6
REF	5.2	5.4	3.7	4.0	3.2	3.2	5.5	4.7	3.5	2.5
SSA	3.5	3.8	3.8	4.0	4.5	5.4	6.0	6.4	7.6	9.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 457: FAO — Demand—Material—Crop residues—Straw (Mt DM/yr)

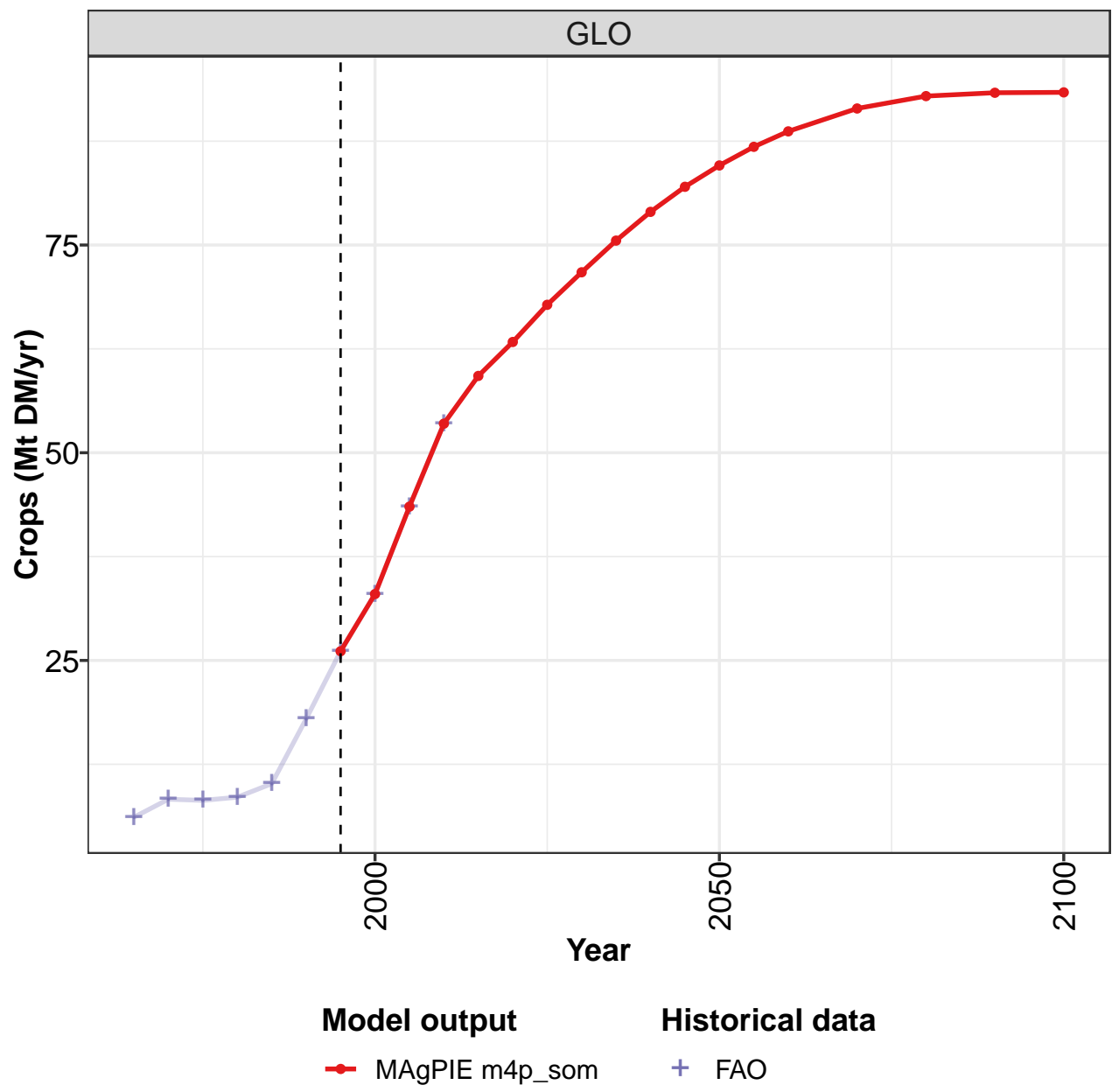






8.2 Crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

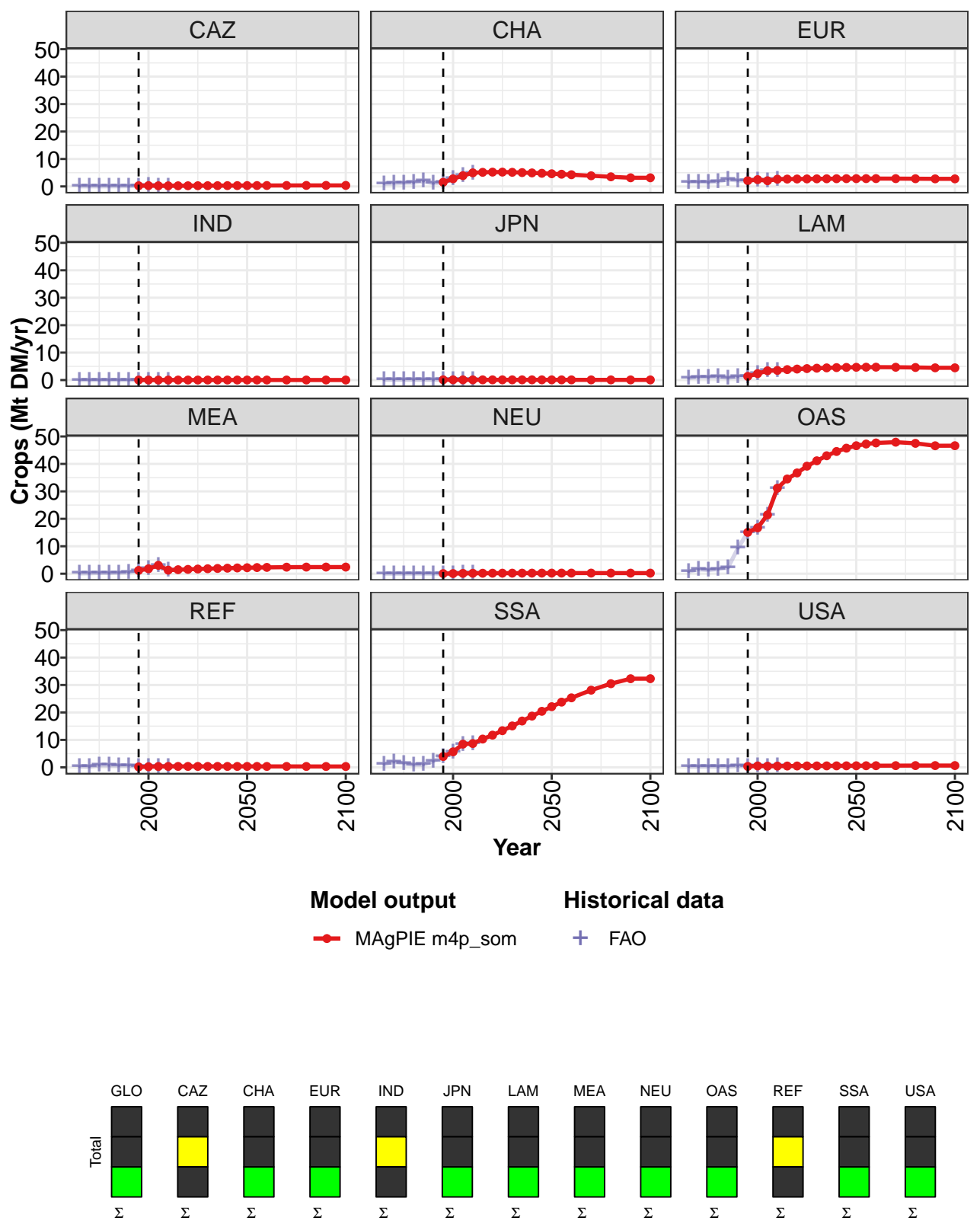


Figure 153: MAgPIE m4p\_som — Demand—Material—Crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	26.1	33.0	43.5	53.5	59.2	63.3	67.8	71.7	75.5	79.0	82.0
CAZ	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
CHA	1.5	2.8	3.9	5.0	5.1	5.2	5.2	5.1	5.0	4.9	4.8
EUR	2.1	2.5	2.1	2.6	2.7	2.7	2.7	2.8	2.8	2.8	2.8
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	1.3	2.4	3.4	3.5	3.8	4.0	4.2	4.3	4.4	4.5	4.6
MEA	1.2	1.8	3.1	1.3	1.5	1.6	1.7	1.8	1.9	2.0	2.1
NEU	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	15.1	16.7	21.4	31.2	34.5	36.7	39.2	41.1	43.0	44.5	45.7
REF	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
SSA	3.9	5.6	8.5	8.7	10.3	11.7	13.4	15.1	16.9	18.7	20.4
USA	0.3	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6

Table 458: MAgPIE m4p.som — Demand—Material—Crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	84.6	86.8	88.7	91.4	92.9	93.3	93.4
CAZ	0.3	0.3	0.3	0.4	0.4	0.4	0.4
CHA	4.6	4.4	4.3	3.9	3.5	3.2	3.2
EUR	2.8	2.8	2.9	2.8	2.8	2.8	2.8
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	4.7	4.7	4.7	4.7	4.6	4.5	4.5
MEA	2.2	2.3	2.3	2.4	2.4	2.4	2.4
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	46.6	47.3	47.6	47.9	47.5	46.6	46.6
REF	0.3	0.3	0.3	0.3	0.3	0.3	0.3
SSA	22.1	23.8	25.3	28.1	30.5	32.3	32.3
USA	0.6	0.6	0.6	0.6	0.6	0.7	0.7

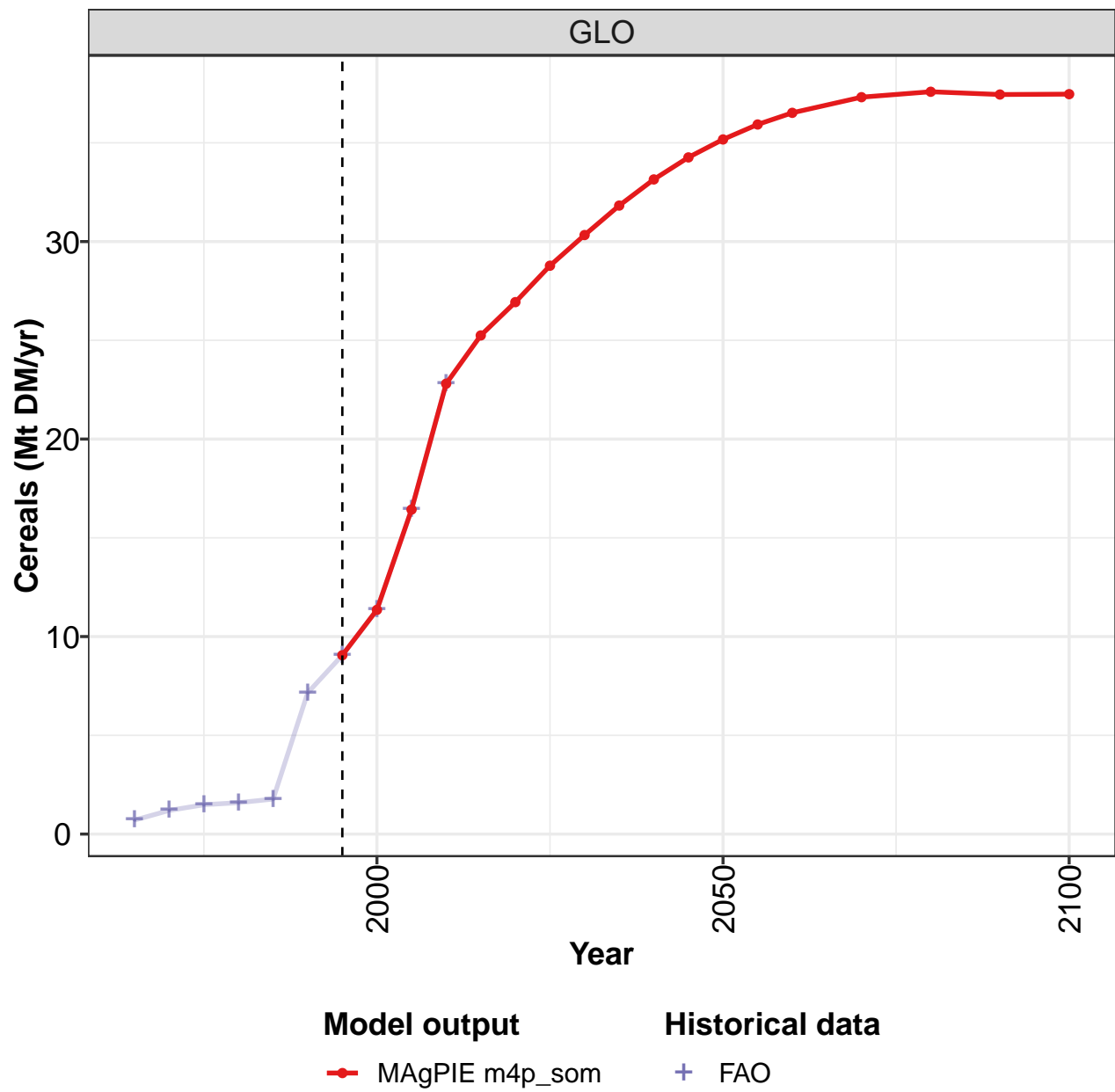
Table 459: MAgPIE m4p.som — Demand—Material—Crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	6.1	8.3	8.2	8.5	10.2	18.0	26.1	33.0	43.5	53.5
CAZ	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.2	0.2
CHA	1.0	1.1	1.3	1.4	1.9	1.1	1.5	2.8	3.9	5.0
EUR	1.5	1.6	1.5	1.8	2.5	2.1	2.1	2.5	2.1	2.6
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.7	1.1	1.0	1.2	0.8	1.2	1.3	2.4	3.4	3.5
MEA	0.1	0.1	0.3	0.3	0.4	0.5	1.2	1.8	3.1	1.3
NEU	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.2
OAS	0.8	1.6	1.3	1.7	2.2	9.3	15.1	16.7	21.4	31.2
REF	0.3	0.3	0.7	0.7	0.7	0.7	0.2	0.2	0.3	0.3
SSA	1.2	2.0	1.5	1.0	1.0	2.3	3.9	5.6	8.5	8.7
USA	0.3	0.3	0.4	0.3	0.3	0.6	0.3	0.5	0.4	0.5

Table 460: FAO — Demand—Material—Crops (Mt DM/yr)

8.2.1 Cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

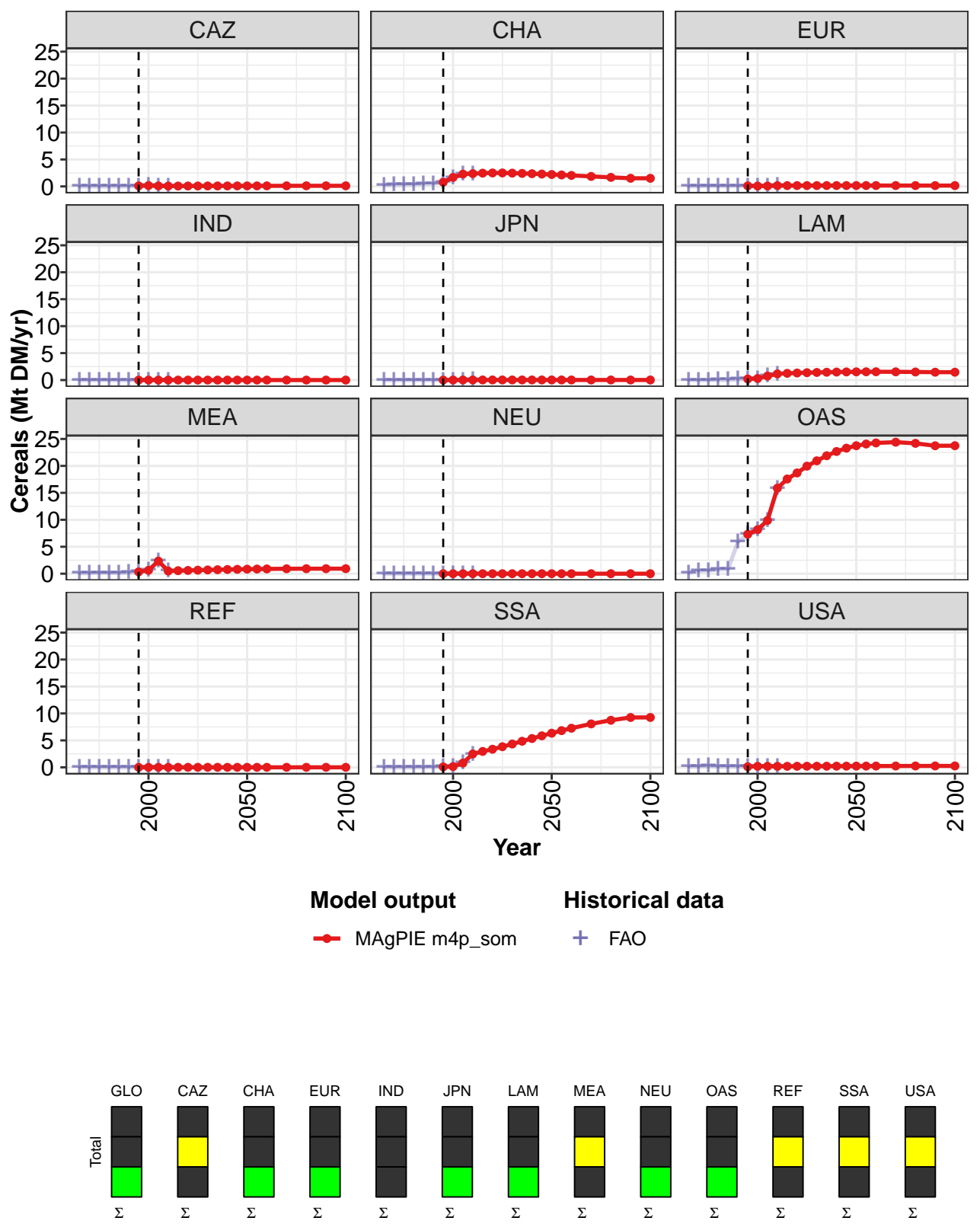


Figure 154: MAGPIE m4p\_som — Demand—Material—Crops—Cereals (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	9.1	11.4	16.4	22.8	25.2	26.9	28.8	30.3	31.8	33.1	34.3
CAZ	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	0.8	1.7	2.3	2.4	2.5	2.5	2.5	2.5	2.4	2.4	2.3
EUR	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.2	0.3	0.7	1.1	1.3	1.3	1.4	1.4	1.5	1.5	1.5
MEA	0.3	0.6	2.3	0.5	0.6	0.6	0.7	0.7	0.7	0.8	0.8
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	7.3	8.2	9.9	15.9	17.6	18.7	20.0	20.9	21.9	22.7	23.3
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.1	0.1	0.8	2.5	3.0	3.4	3.8	4.3	4.8	5.4	5.9
USA	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

Table 461: MAgPIE m4p\_som — Demand—Material—Crops—Cereals (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	35.2	35.9	36.5	37.3	37.6	37.4	37.5
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	2.2	2.1	2.0	1.9	1.7	1.5	1.5
EUR	0.2	0.2	0.2	0.2	0.2	0.2	0.2
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.5	1.5	1.5	1.5	1.5	1.5	1.5
MEA	0.8	0.9	0.9	0.9	0.9	0.9	0.9
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	23.7	24.1	24.3	24.4	24.2	23.7	23.7
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	6.3	6.8	7.3	8.1	8.7	9.3	9.3
USA	0.2	0.2	0.2	0.2	0.3	0.3	0.3

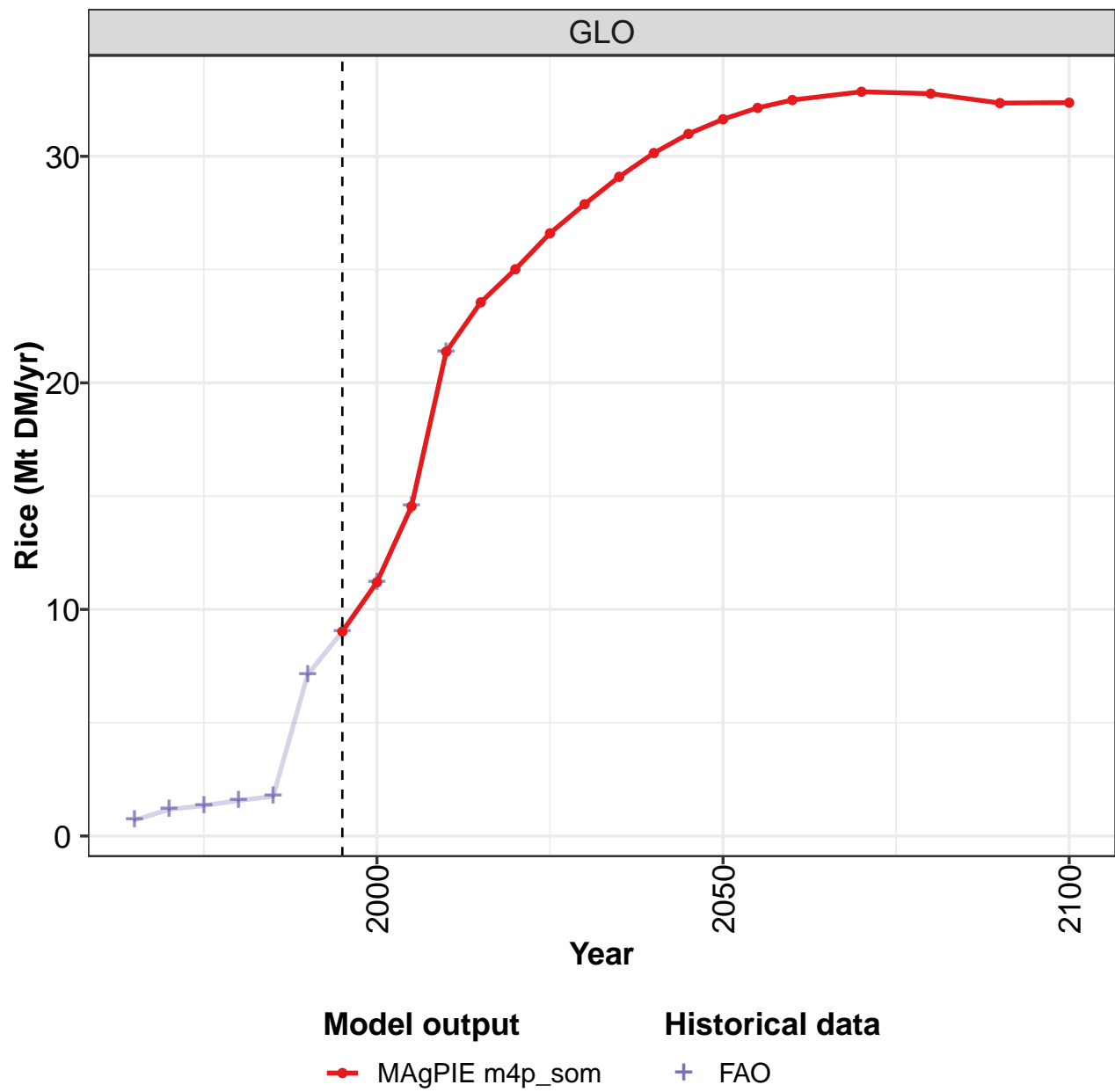
Table 462: MAgPIE m4p\_som — Demand—Material—Crops—Cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.7	1.2	1.5	1.6	1.8	7.2	9.1	11.4	16.4	22.8
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1
CHA	0.3	0.3	0.4	0.4	0.5	0.5	0.8	1.7	2.3	2.4
EUR	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.3	0.7	1.1
MEA	0.1	0.1	0.2	0.2	0.1	0.2	0.3	0.6	2.3	0.5
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.2	0.5	0.6	0.8	0.8	5.9	7.3	8.2	9.9	15.9
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.8	2.5
USA	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2

Table 463: FAO — Demand—Material—Crops—Cereals (Mt DM/yr)

8.2.2 Cereals—Rice

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

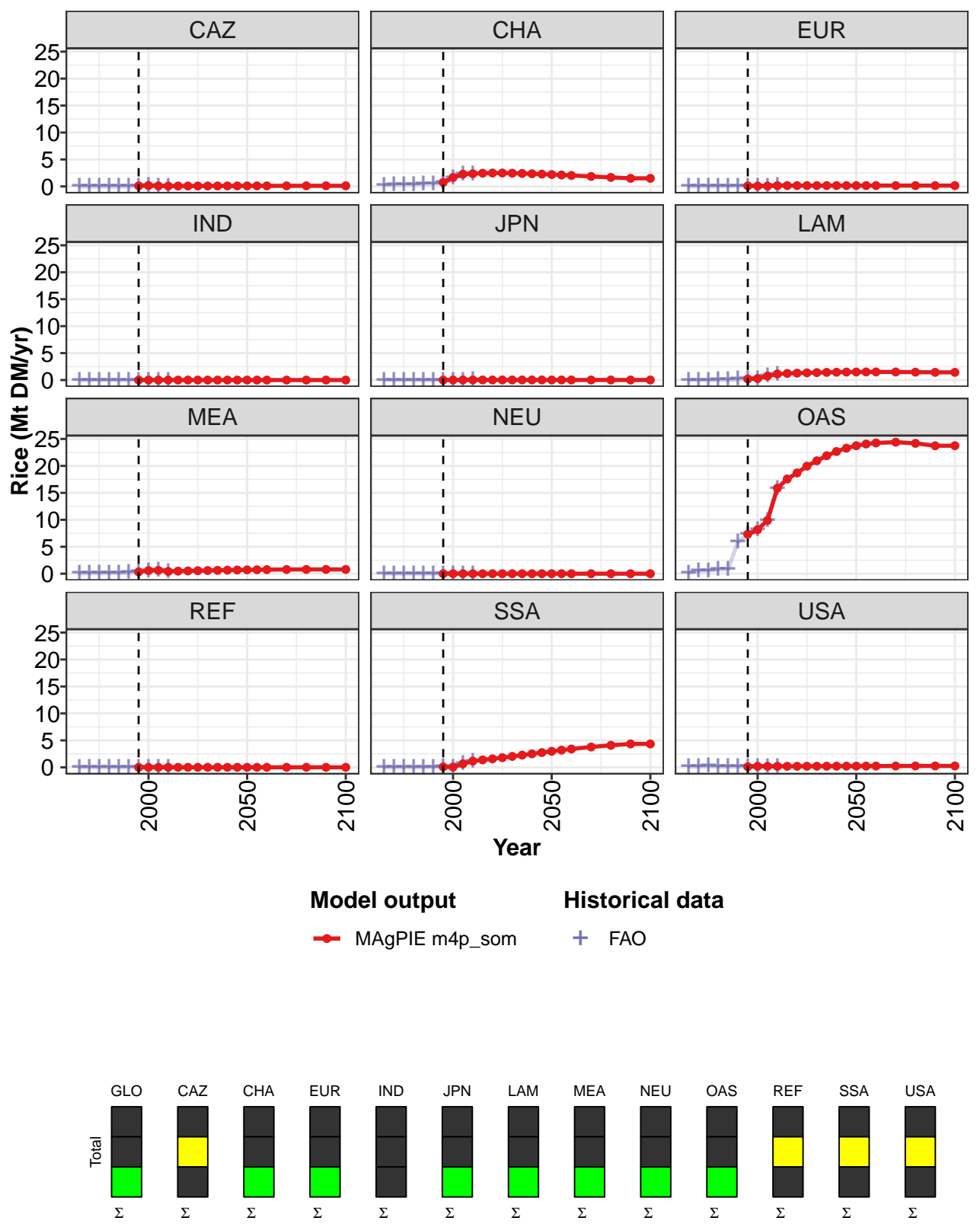


Figure 155: MAgPIE m4p\_som — Demand—Material—Crops—Cereals—Rice (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	9.0	11.2	14.6	21.4	23.6	25.0	26.6	27.9	29.1	30.1	31.0
CAZ	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	0.8	1.7	2.3	2.4	2.5	2.5	2.5	2.5	2.4	2.4	2.3
EUR	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.2	0.3	0.7	1.1	1.2	1.3	1.3	1.4	1.4	1.5	1.5
MEA	0.3	0.6	0.6	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	7.3	8.2	9.9	15.9	17.6	18.7	20.0	20.9	21.9	22.7	23.3
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.1	0.1	0.7	1.2	1.4	1.6	1.8	2.0	2.3	2.5	2.7
USA	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

Table 464: MAgPIE m4p\_som — Demand—Material—Crops—Cereals—Rice (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	31.6	32.1	32.5	32.9	32.8	32.4	32.4
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	2.2	2.1	2.0	1.9	1.7	1.5	1.5
EUR	0.2	0.2	0.2	0.2	0.2	0.2	0.2
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.5	1.5	1.5	1.5	1.5	1.4	1.4
MEA	0.7	0.7	0.8	0.8	0.8	0.8	0.8
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	23.7	24.1	24.3	24.4	24.2	23.7	23.7
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	3.0	3.2	3.4	3.8	4.1	4.3	4.3
USA	0.2	0.2	0.2	0.2	0.3	0.3	0.3

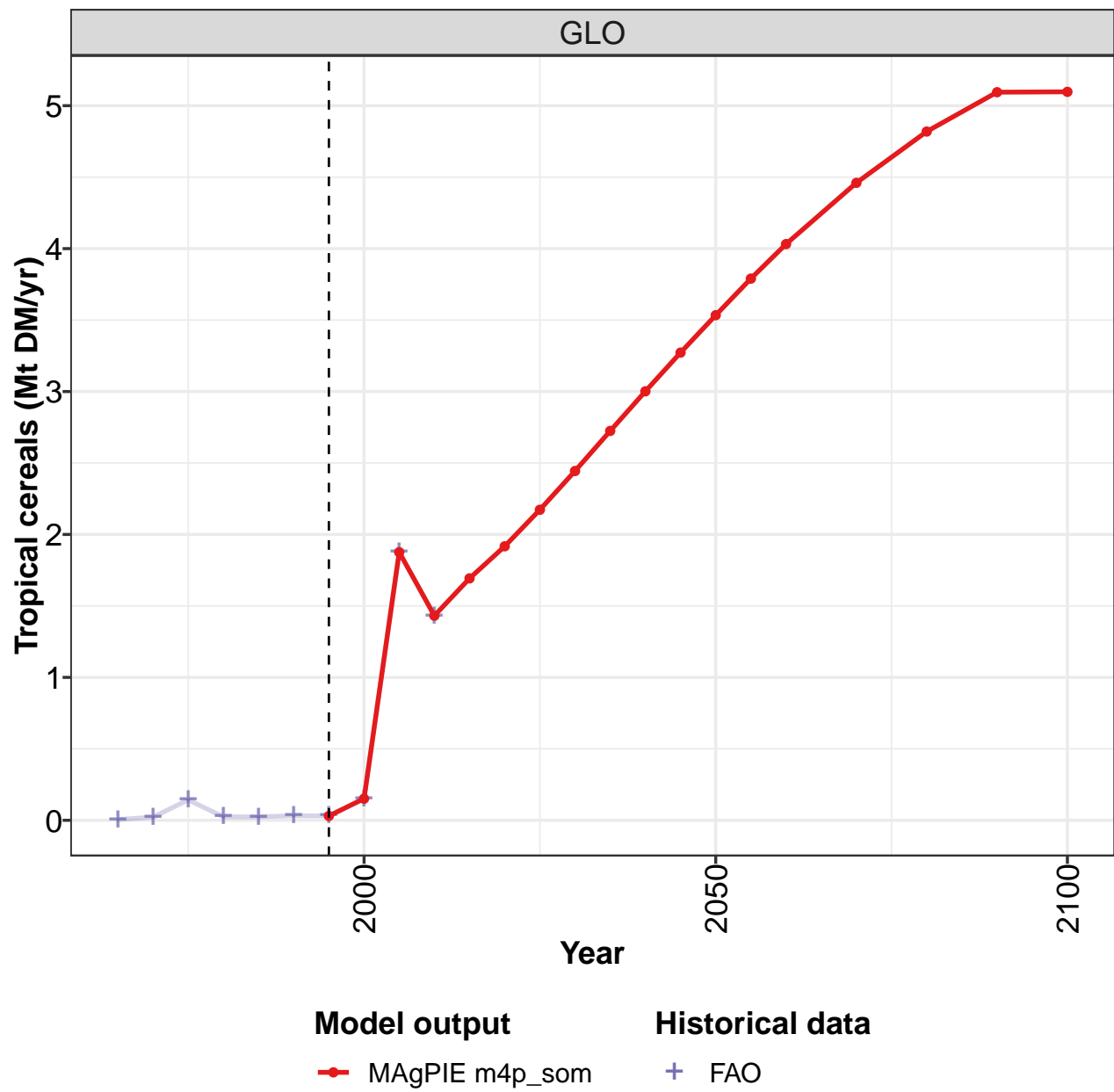
Table 465: MAgPIE m4p\_som — Demand—Material—Crops—Cereals—Rice (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.7	1.2	1.3	1.6	1.7	7.1	9.0	11.2	14.6	21.4
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1
CHA	0.3	0.3	0.3	0.4	0.5	0.5	0.8	1.7	2.3	2.4
EUR	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.3	0.7	1.1
MEA	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.6	0.6	0.4
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.2	0.5	0.6	0.8	0.8	5.9	7.3	8.2	9.9	15.9
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.7	1.2
USA	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2

Table 466: FAO — Demand—Material—Crops—Cereals—Rice (Mt DM/yr)

8.2.3   Cereals—Tropical cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

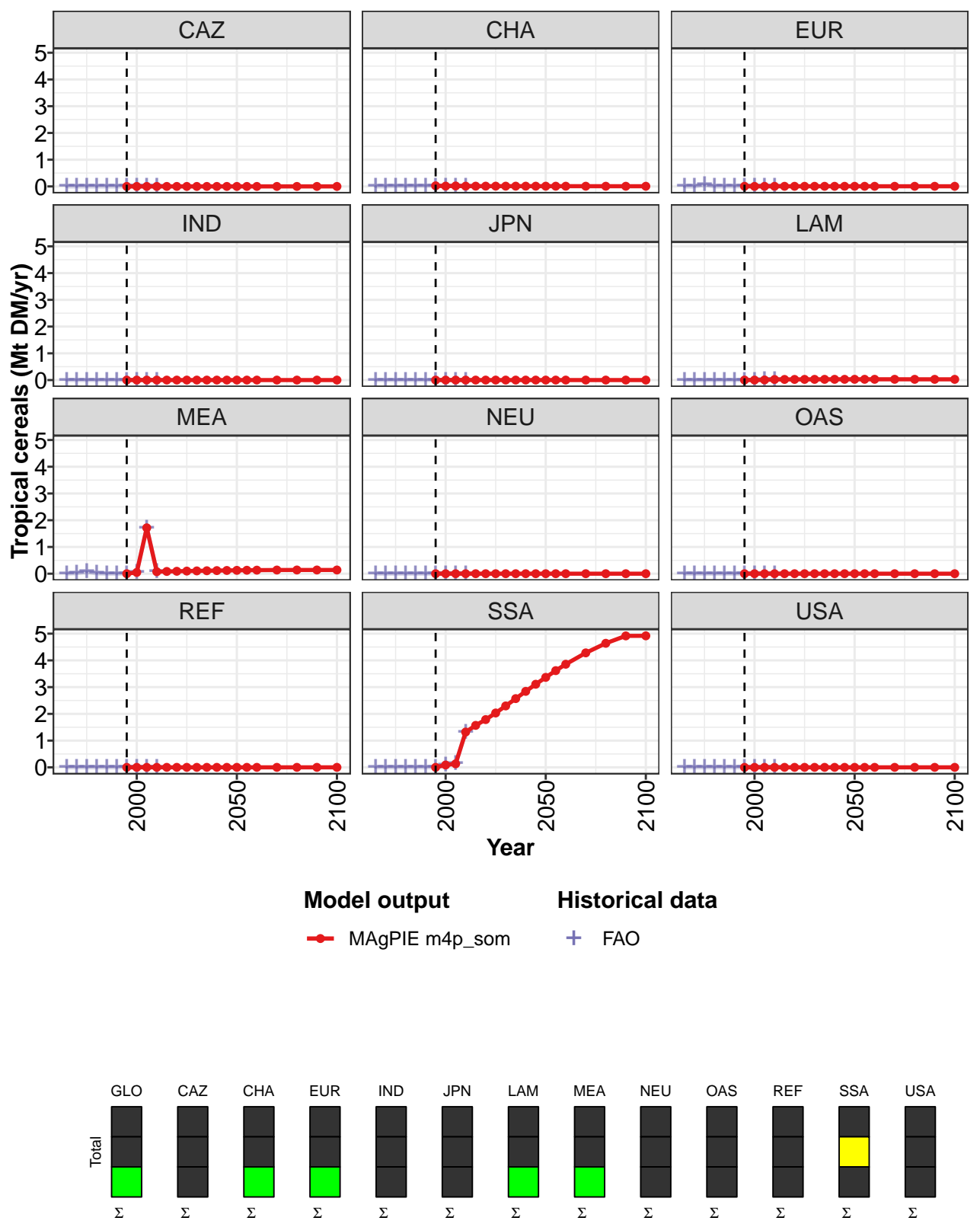


Figure 156: MAgPIE m4p\_som — Demand—Material—Crops—Cereals—Tropical cereals (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.03	0.15	1.88	1.43	1.69	1.92	2.17	2.44	2.72	3.00	3.27
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
EUR	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.01	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03
MEA	0.00	0.05	1.72	0.07	0.08	0.09	0.10	0.10	0.11	0.12	0.12
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.09	0.13	1.32	1.57	1.79	2.03	2.30	2.57	2.84	3.11
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 467: MAgPIE m4p\_som — Demand—Material—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	3.53	3.79	4.03	4.46	4.82	5.09	5.10
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.01	0.01	0.01	0.01	0.01	0.01	0.01
EUR	0.01	0.01	0.01	0.01	0.01	0.01	0.01
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.03	0.03	0.03	0.03	0.03	0.03	0.03
MEA	0.13	0.13	0.13	0.14	0.14	0.14	0.14
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	3.36	3.62	3.86	4.28	4.64	4.92	4.92
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00

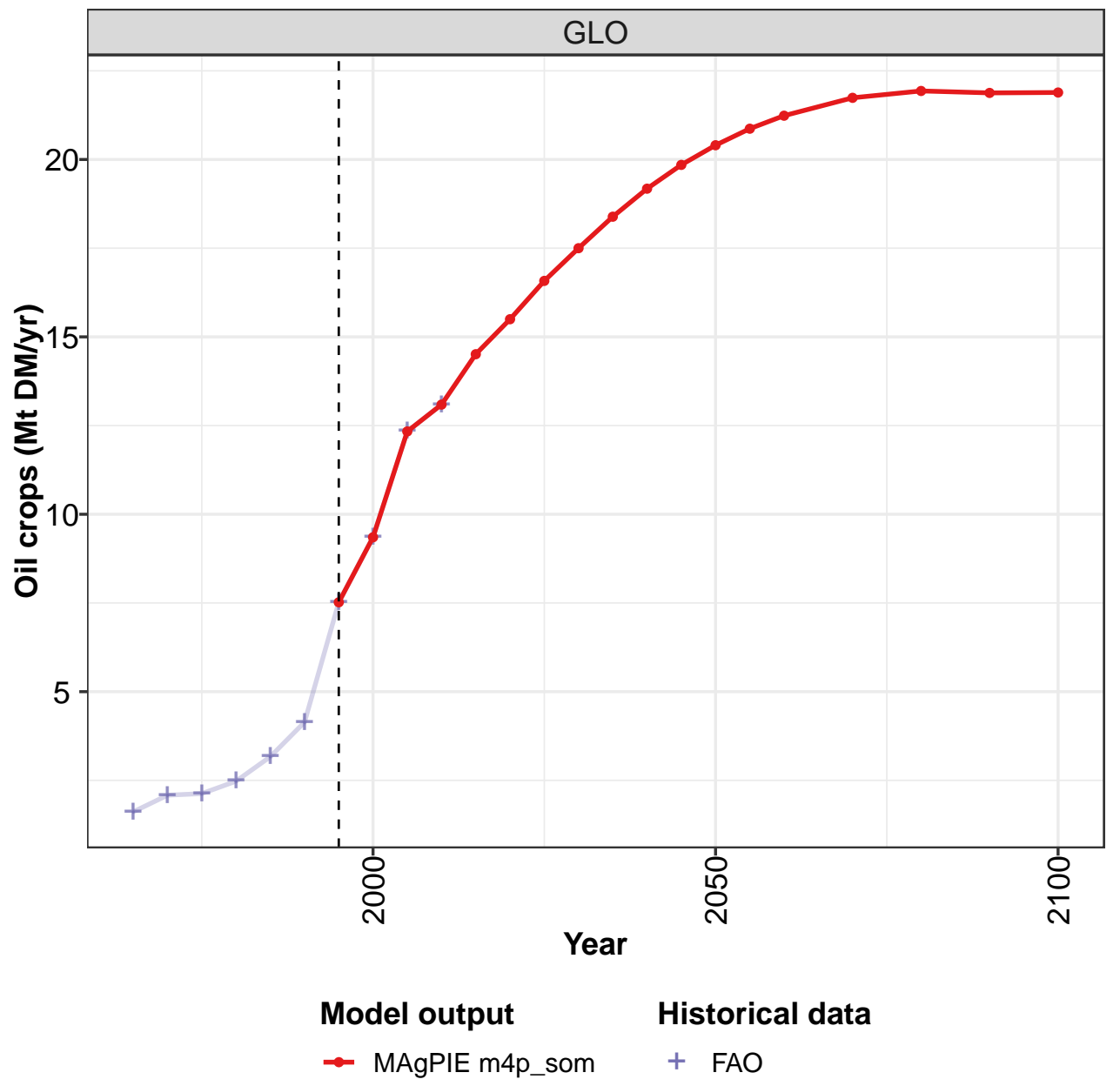
Table 468: MAgPIE m4p\_som — Demand—Material—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.02	0.14	0.02	0.02	0.03	0.03	0.15	1.88	1.43
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.02	0.01	0.02	0.03	0.02	0.01	0.02	0.01
EUR	0.00	0.00	0.06	0.00	0.00	0.01	0.01	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02
MEA	0.00	0.02	0.07	0.01	0.00	0.00	0.00	0.05	1.72	0.07
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.13	1.32
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 469: FAO — Demand—Material—Crops—Cereals—Tropical cereals (Mt DM/yr)

8.2.4
Oil crops

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

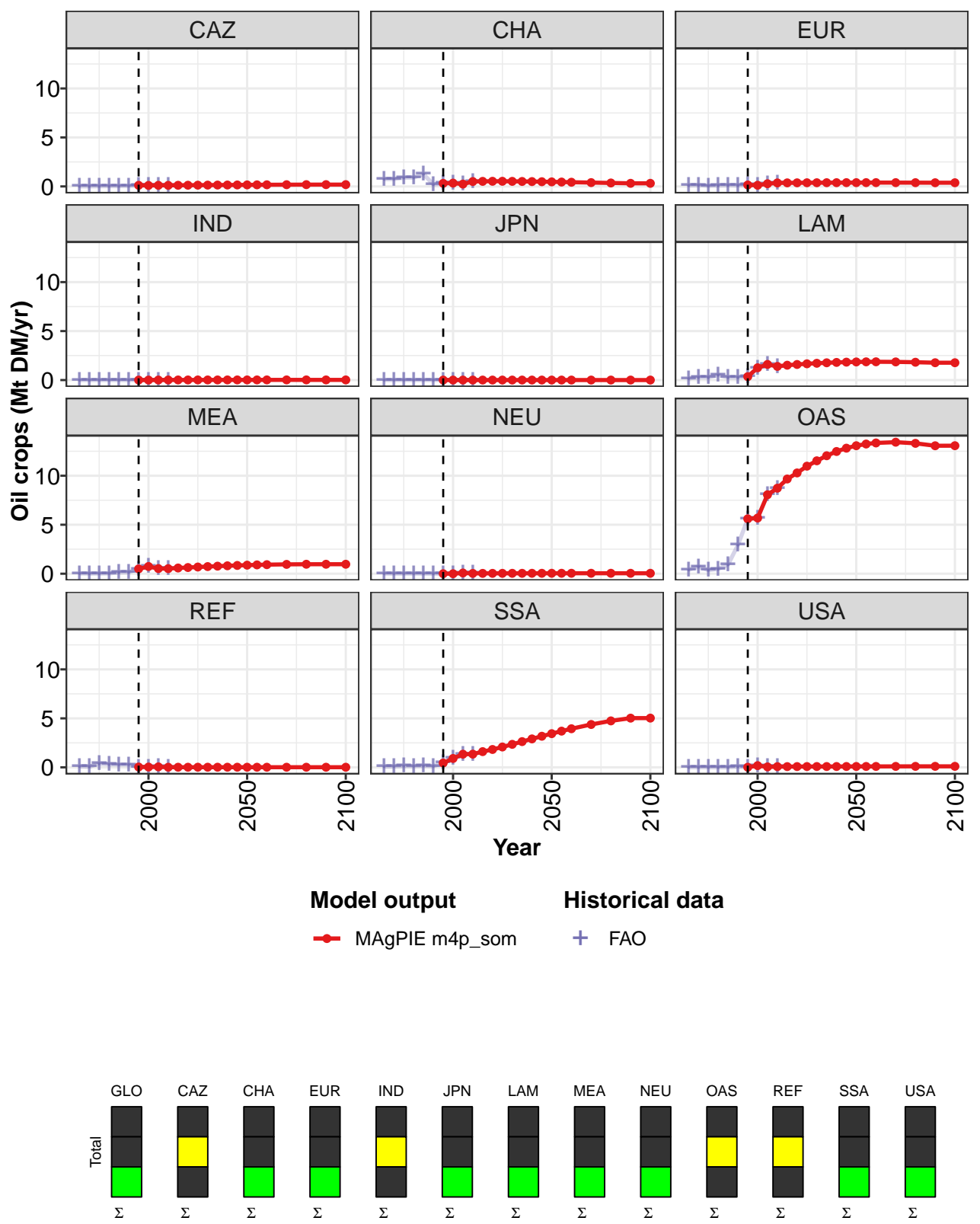


Figure 157: MAgPIE m4p\_som — Demand—Material—Crops—Oil crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	7.5	9.4	12.3	13.1	14.5	15.5	16.6	17.5	18.4	19.2	19.8
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
CHA	0.3	0.3	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
EUR	0.2	0.1	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.4	1.3	1.6	1.4	1.5	1.6	1.7	1.7	1.8	1.8	1.8
MEA	0.5	0.7	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.8
NEU	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	5.6	5.7	8.1	8.7	9.7	10.3	11.0	11.5	12.0	12.5	12.8
REF	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.4	0.9	1.3	1.3	1.6	1.8	2.1	2.3	2.6	2.9	3.2
USA	0.0	0.2	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Table 470: MAgPIE m4p\_som — Demand—Material—Crops—Oil crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	20.4	20.9	21.2	21.7	21.9	21.9	21.9
CAZ	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CHA	0.5	0.4	0.4	0.4	0.4	0.3	0.3
EUR	0.4	0.4	0.4	0.4	0.4	0.4	0.4
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.8	1.9	1.9	1.9	1.8	1.8	1.8
MEA	0.9	0.9	0.9	1.0	1.0	1.0	1.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	13.1	13.2	13.3	13.4	13.3	13.1	13.1
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	3.4	3.7	3.9	4.4	4.7	5.0	5.0
USA	0.1	0.1	0.1	0.1	0.1	0.1	0.1

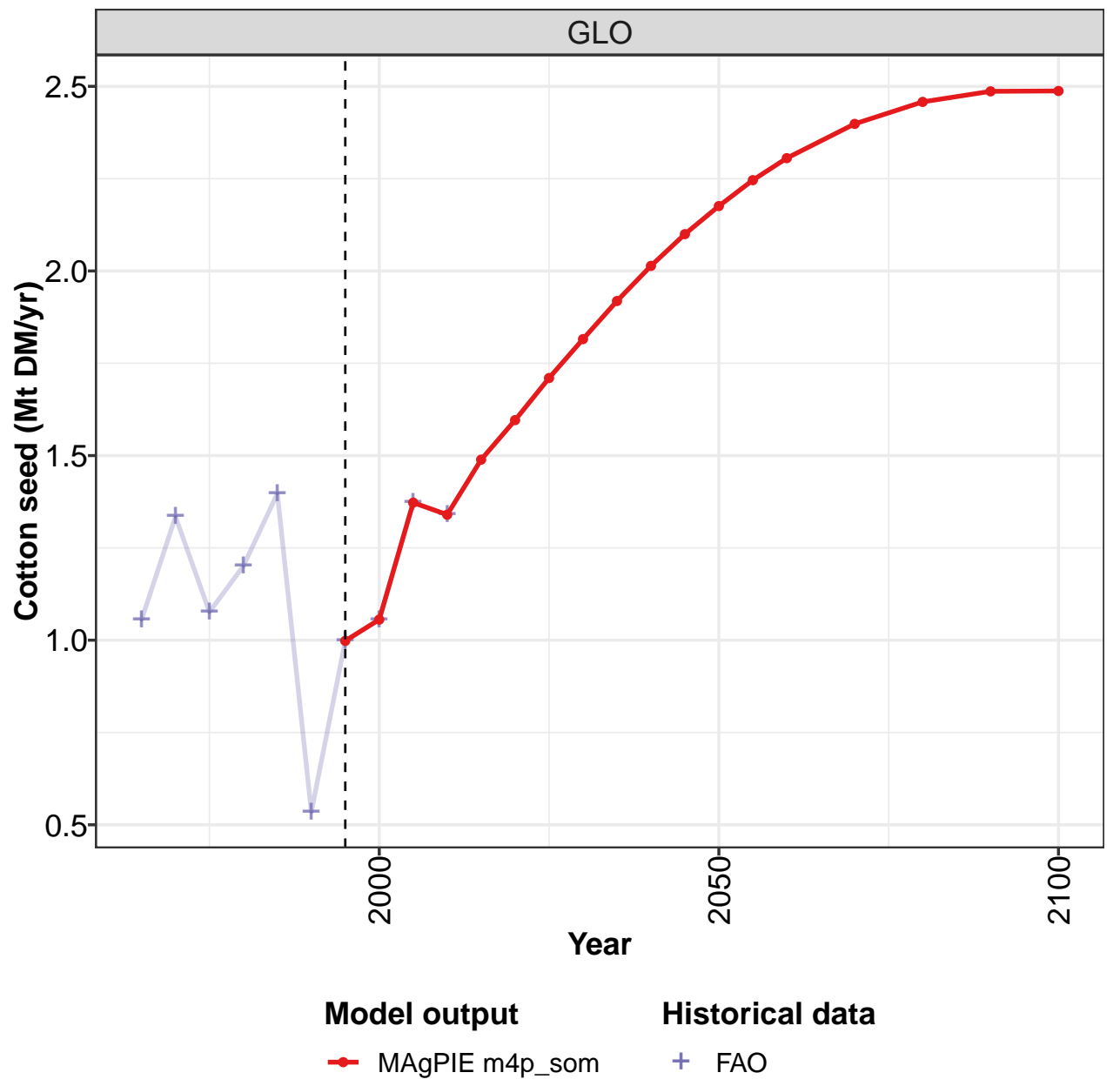
Table 471: MAgPIE m4p\_som — Demand—Material—Crops—Oil crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.6	2.1	2.1	2.5	3.2	4.1	7.5	9.4	12.3	13.1
CAZ	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
CHA	0.7	0.8	0.9	0.9	1.3	0.2	0.3	0.3	0.2	0.5
EUR	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.3	0.4
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.2	0.3	0.3	0.5	0.3	0.3	0.4	1.3	1.6	1.4
MEA	0.0	0.0	0.0	0.0	0.1	0.2	0.5	0.7	0.5	0.5
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
OAS	0.4	0.7	0.4	0.5	0.9	2.9	5.6	5.7	8.1	8.7
REF	0.1	0.1	0.4	0.3	0.3	0.3	0.0	0.0	0.1	0.0
SSA	0.1	0.1	0.1	0.1	0.2	0.1	0.4	0.9	1.3	1.3
USA	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.1

Table 472: FAO — Demand—Material—Crops—Oil crops (Mt DM/yr)

8.2.5
Oil crops—Cotton seed

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

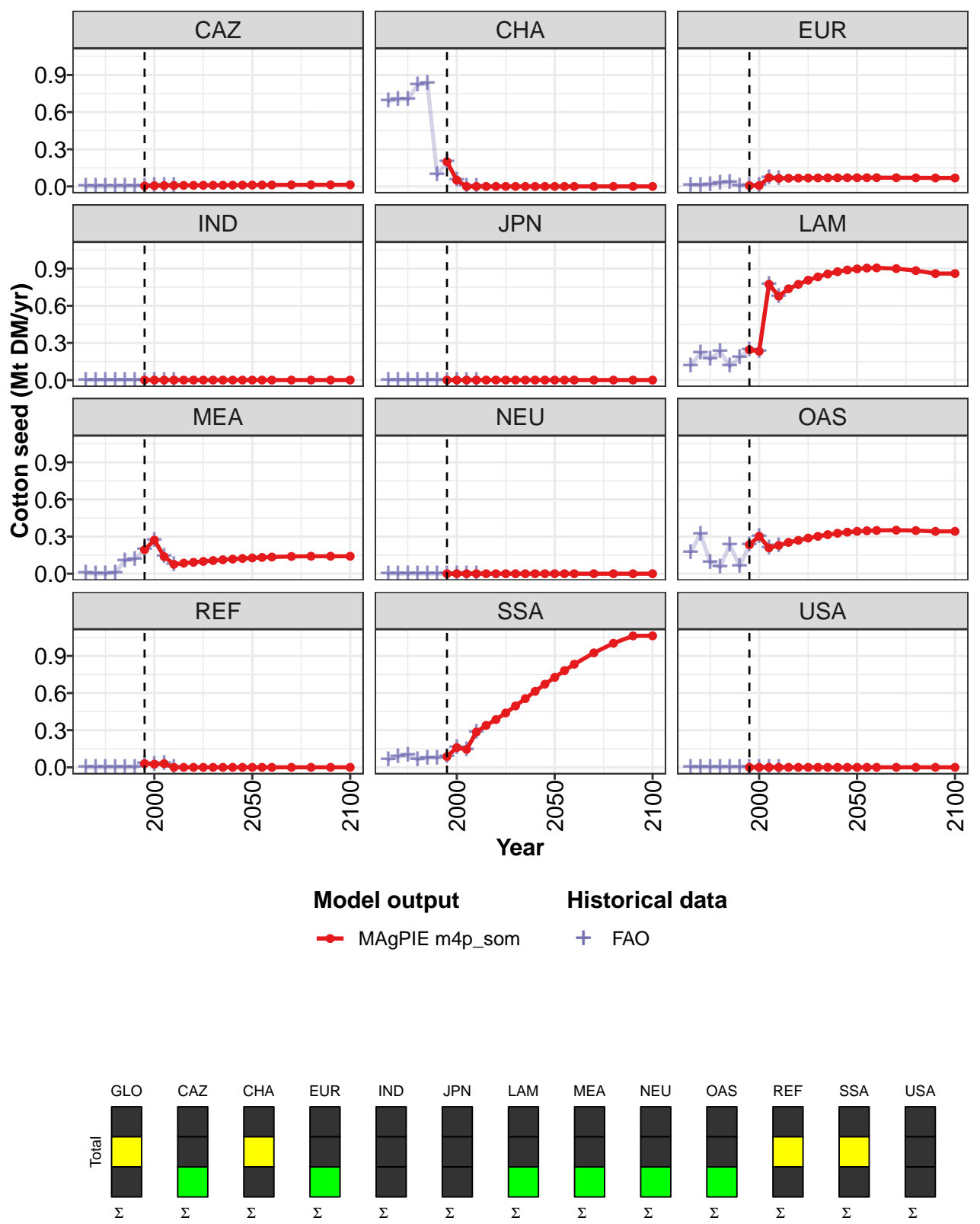


Figure 158: MAGPIE m4p\_som — Demand—Material—Crops—Oil crops—Cotton seed (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.00	1.06	1.37	1.34	1.49	1.60	1.71	1.82	1.92	2.01	2.10
CAZ	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
CHA	0.20	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.01	0.01	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.24	0.23	0.77	0.68	0.74	0.77	0.81	0.83	0.86	0.88	0.89
MEA	0.19	0.27	0.14	0.08	0.09	0.09	0.10	0.11	0.11	0.12	0.12
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.23	0.30	0.21	0.23	0.25	0.27	0.29	0.30	0.32	0.33	0.34
REF	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.09	0.16	0.14	0.29	0.34	0.39	0.44	0.50	0.56	0.61	0.67
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 473: MAgPIE m4p\_som — Demand—Material—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	2.18	2.25	2.31	2.40	2.46	2.49	2.49
CAZ	0.01	0.01	0.01	0.01	0.01	0.01	0.01
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.07	0.07	0.07	0.07	0.07	0.07	0.07
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.90	0.90	0.91	0.90	0.88	0.86	0.86
MEA	0.13	0.13	0.13	0.14	0.14	0.14	0.14
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.34	0.35	0.35	0.35	0.35	0.34	0.34
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.73	0.78	0.83	0.92	1.00	1.06	1.06
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00

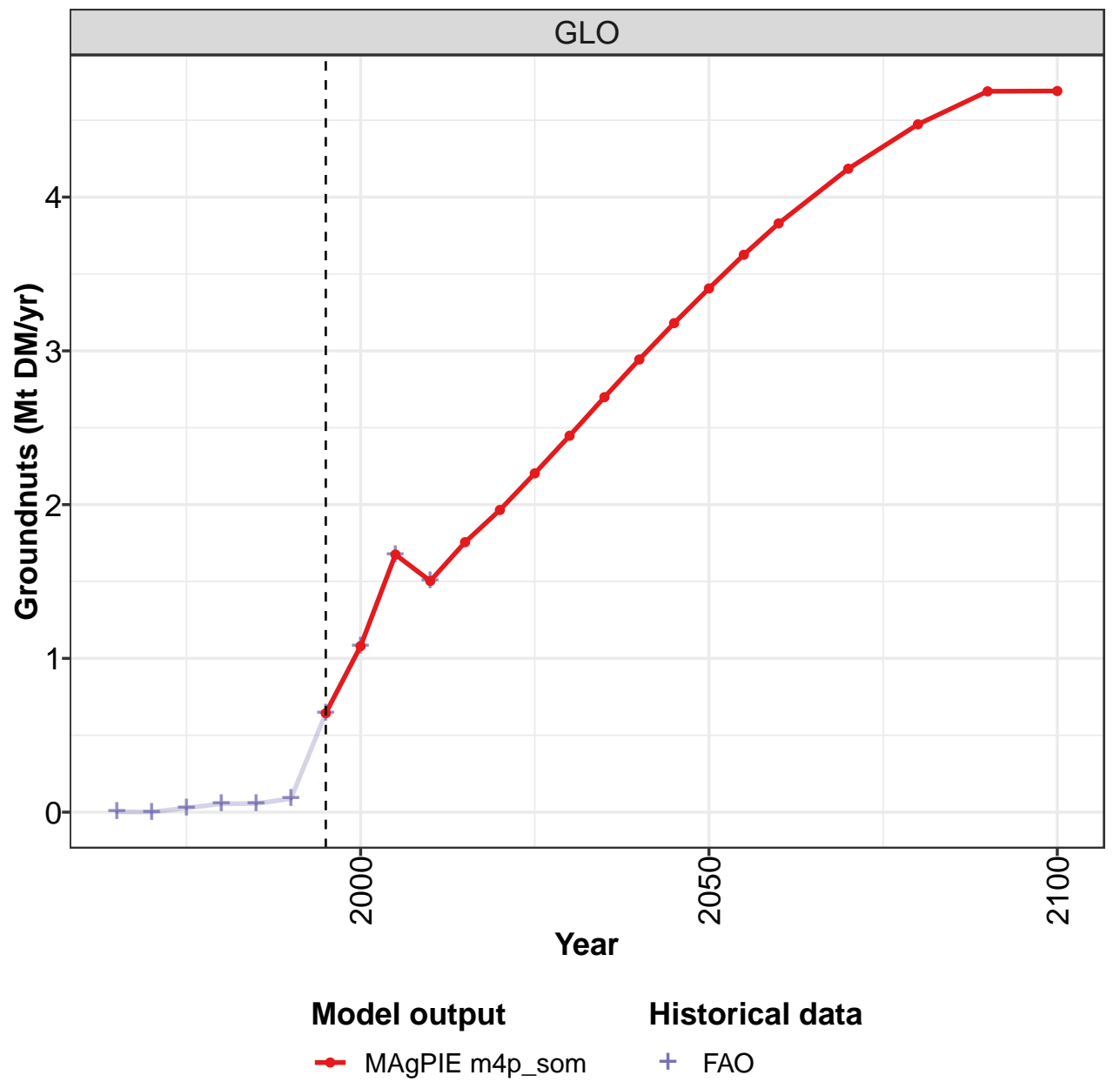
Table 474: MAgPIE m4p\_som — Demand—Material—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.05	1.33	1.08	1.20	1.40	0.54	1.00	1.06	1.37	1.34
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
CHA	0.69	0.70	0.70	0.82	0.83	0.09	0.20	0.05	0.00	0.00
EUR	0.01	0.01	0.01	0.03	0.04	0.00	0.01	0.01	0.07	0.07
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.12	0.22	0.17	0.23	0.11	0.18	0.24	0.23	0.77	0.68
MEA	0.00	0.00	0.00	0.01	0.11	0.12	0.19	0.27	0.14	0.08
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.17	0.32	0.09	0.05	0.23	0.06	0.23	0.30	0.21	0.23
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.00
SSA	0.06	0.09	0.10	0.06	0.08	0.08	0.09	0.16	0.14	0.29
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 475: FAO — Demand—Material—Crops—Oil crops—Cotton seed (Mt DM/yr)

8.2.6 Oil crops—Groundnuts

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

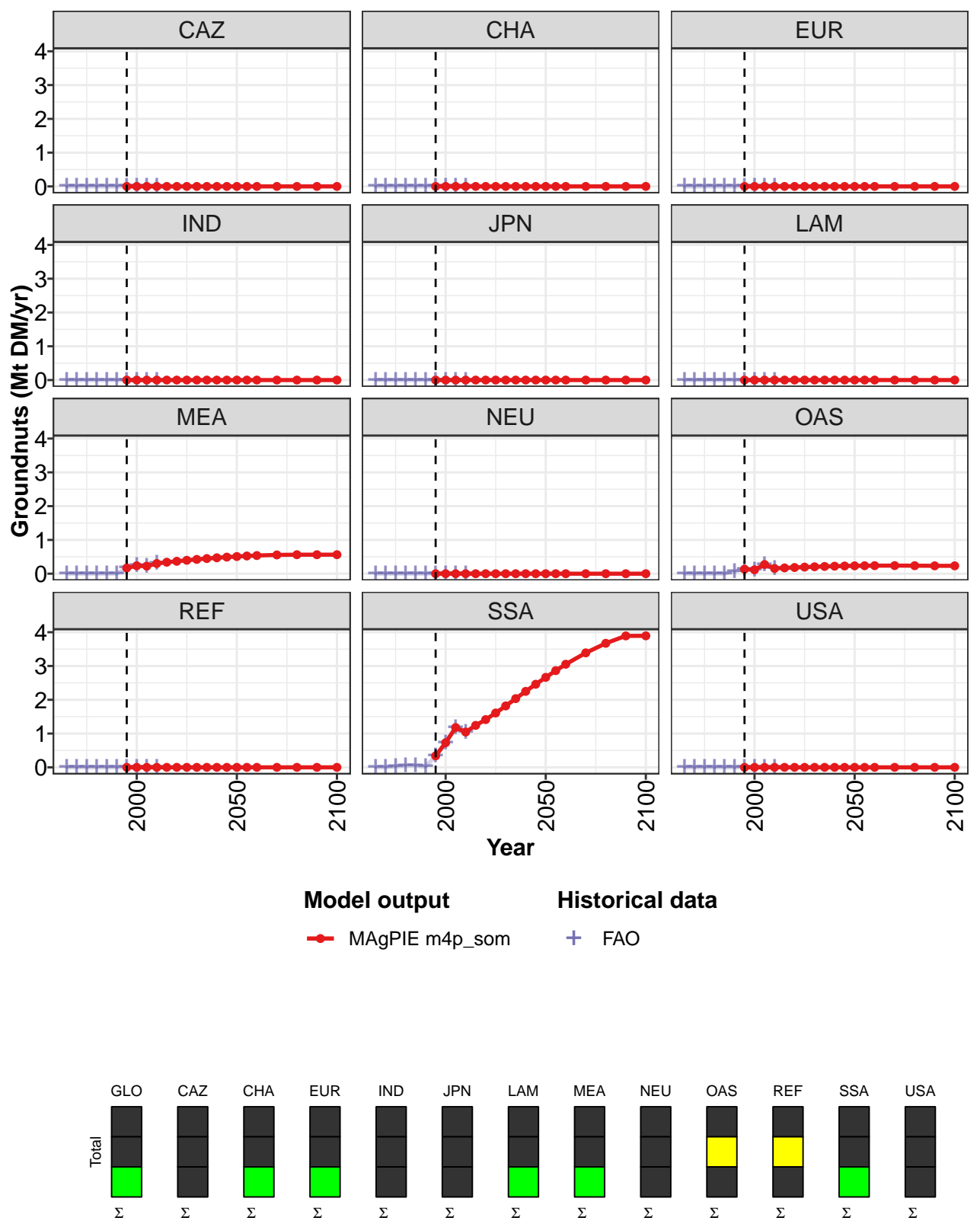


Figure 159: MAgPIE m4p\_som — Demand—Material—Crops—Oil crops—Groundnuts (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.64	1.08	1.68	1.50	1.76	1.97	2.20	2.45	2.70	2.94	3.18
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.17	0.24	0.22	0.30	0.34	0.37	0.40	0.42	0.45	0.47	0.49
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.13	0.12	0.27	0.16	0.17	0.18	0.20	0.21	0.21	0.22	0.23
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.34	0.73	1.18	1.04	1.24	1.41	1.61	1.82	2.03	2.25	2.46
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 476: MAgPIE m4p\_som — Demand—Material—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	3.41	3.62	3.83	4.18	4.47	4.69	4.69
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.51	0.52	0.54	0.56	0.56	0.56	0.56
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.23	0.24	0.24	0.24	0.24	0.23	0.23
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	2.66	2.86	3.05	3.39	3.67	3.89	3.89
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00

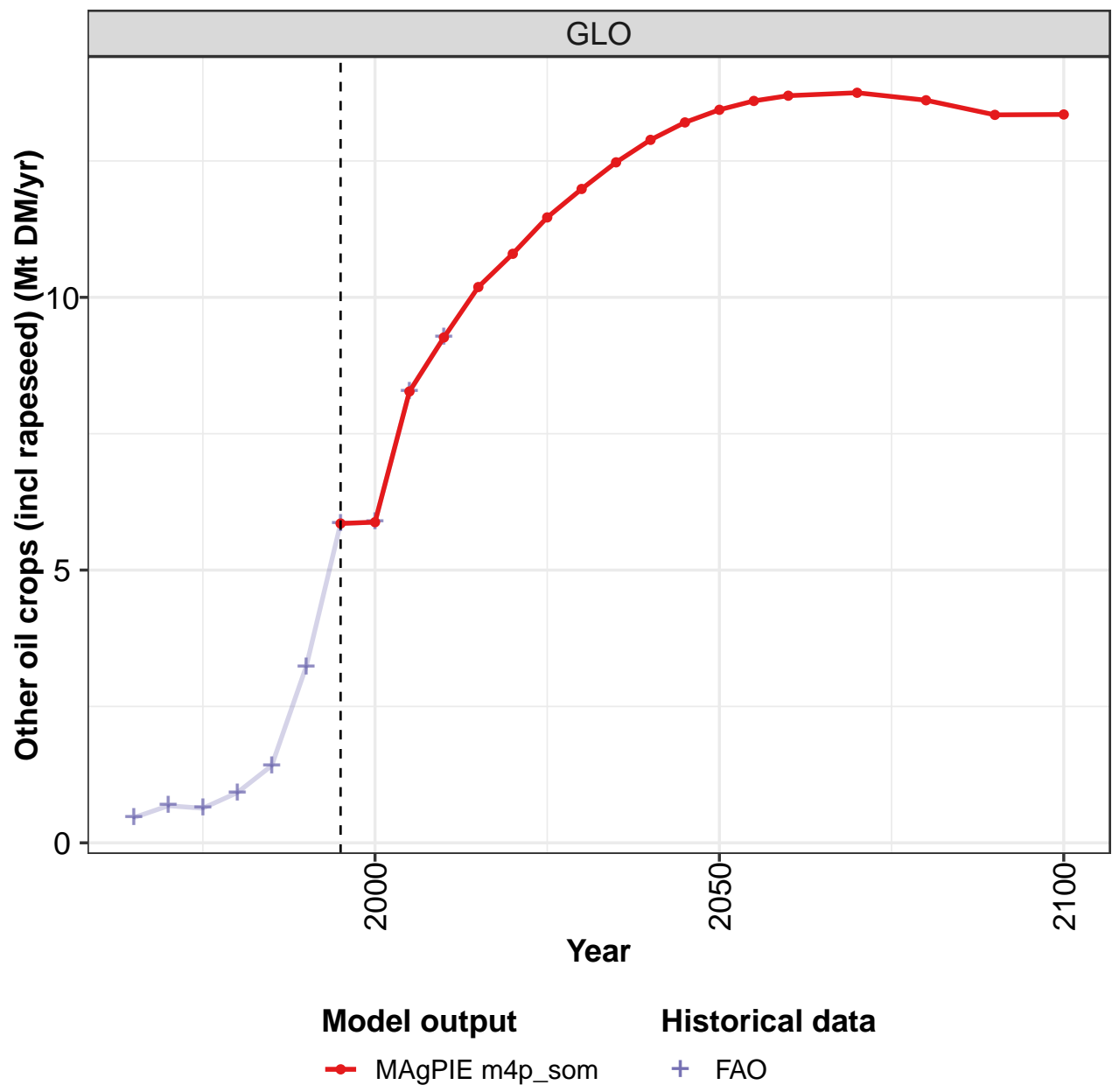
Table 477: MAgPIE m4p\_som — Demand—Material—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.03	0.05	0.06	0.09	0.64	1.08	1.68	1.50
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.24	0.22	0.30
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.07	0.13	0.12	0.27	0.16
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.03	0.05	0.05	0.02	0.34	0.73	1.18	1.04
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 478: FAO — Demand—Material—Crops—Oil crops—Groundnuts (Mt DM/yr)

8.2.7 Oil crops—Other oil crops (incl rapeseed)

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

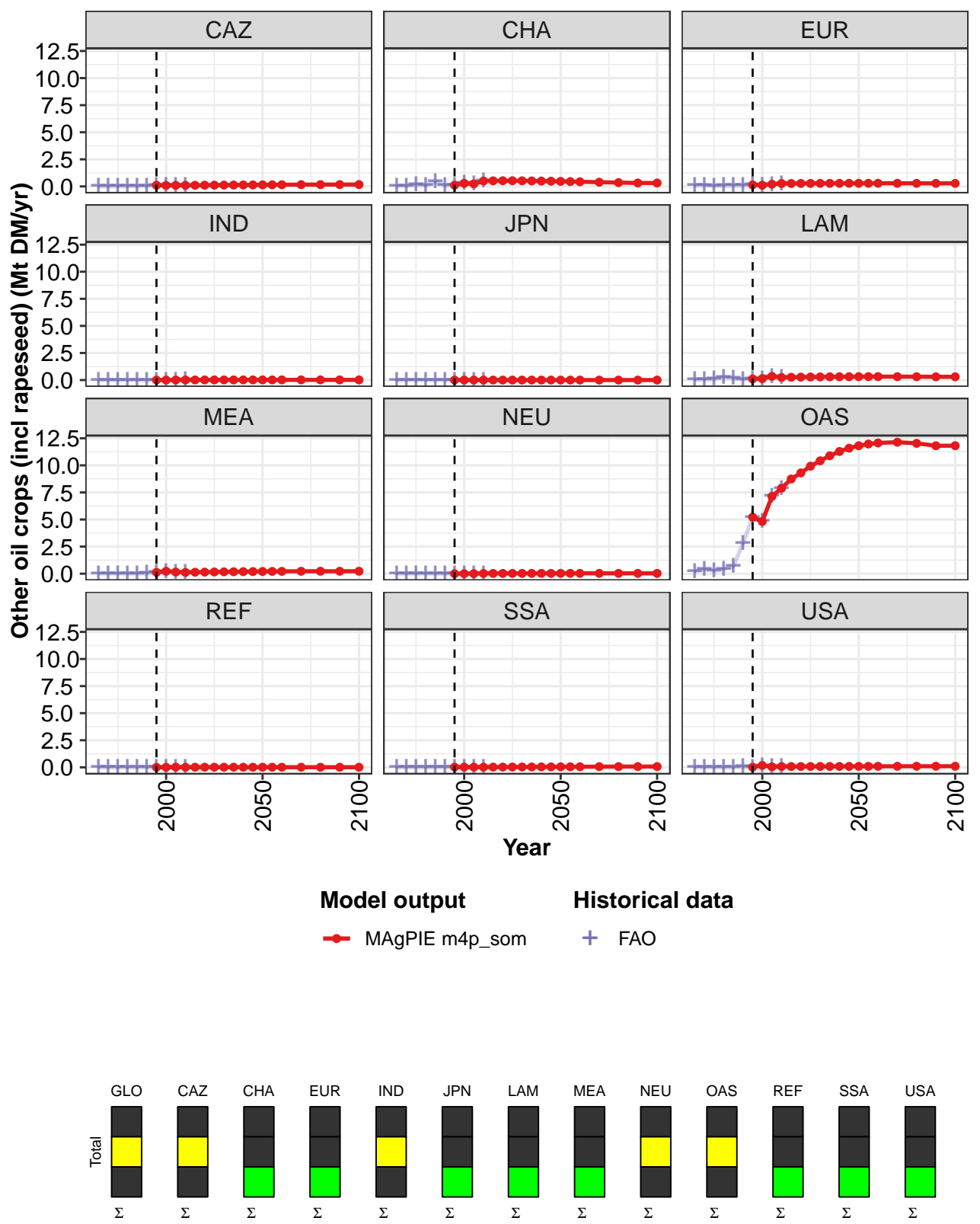


Figure 160: MAgPIE m4p\_som — Demand—Material—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	5.9	5.9	8.3	9.3	10.2	10.8	11.5	12.0	12.5	12.9	13.2
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	0.1	0.3	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
EUR	0.1	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.1	0.1	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
MEA	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	5.2	4.8	7.1	7.9	8.7	9.3	9.9	10.4	10.9	11.3	11.6
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.2	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Table 479: MAGPIE m4p\_som — Demand—Material—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	13.4	13.6	13.7	13.8	13.6	13.3	13.4
CAZ	0.1	0.2	0.2	0.2	0.2	0.2	0.2
CHA	0.5	0.4	0.4	0.4	0.4	0.3	0.3
EUR	0.3	0.3	0.3	0.3	0.3	0.3	0.3
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.3	0.3	0.3	0.3	0.3	0.3	0.3
MEA	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	11.8	12.0	12.1	12.1	12.0	11.8	11.8
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.1	0.1	0.1	0.1	0.1	0.1
USA	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Table 480: MAGPIE m4p\_som — Demand—Material—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 2/2]

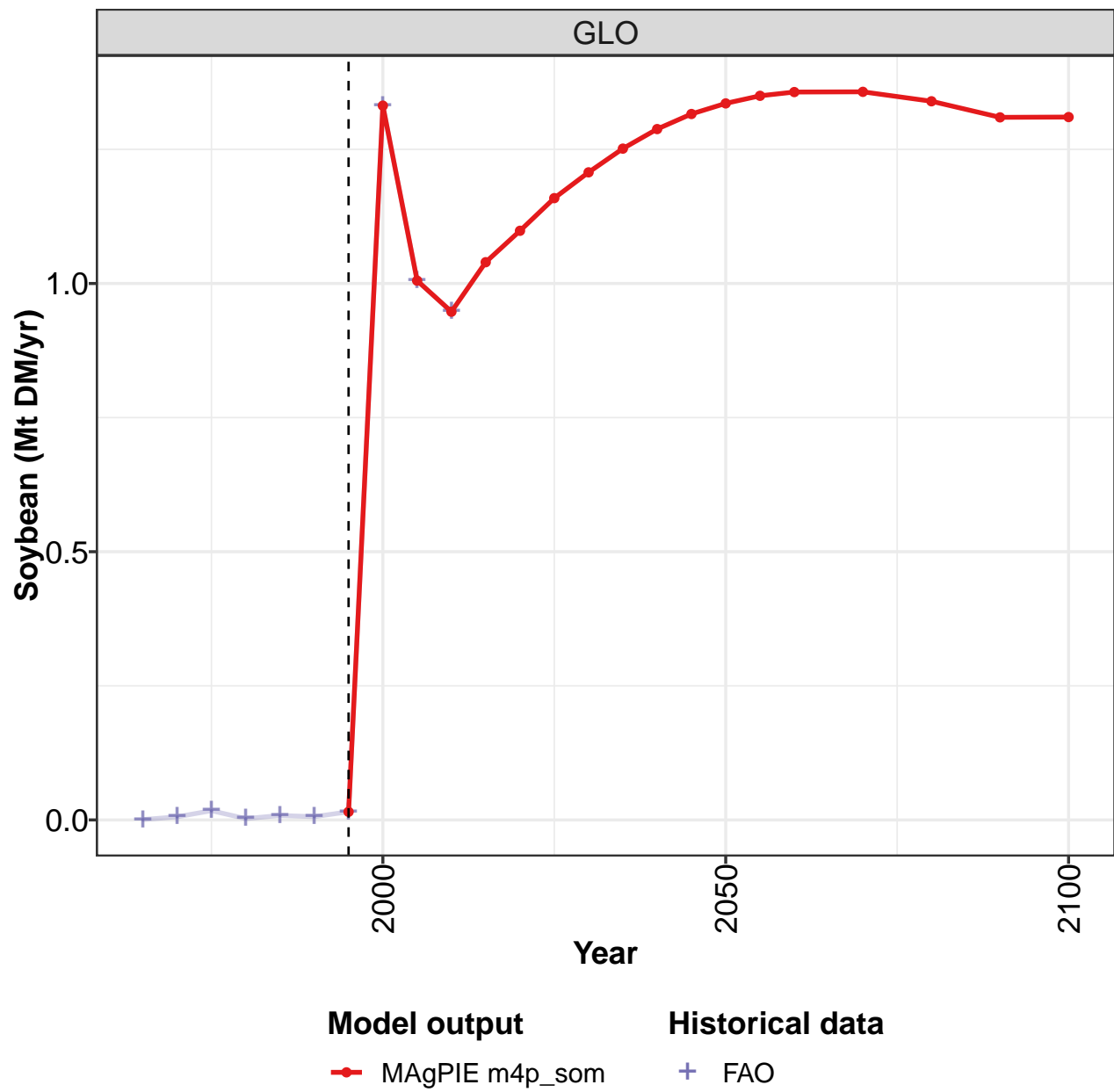
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.46	0.68	0.63	0.92	1.42	3.23	5.85	5.88	8.28	9.26
CAZ	0.01	0.01	0.02	0.03	0.03	0.05	0.11	0.10	0.10	0.10
CHA	0.05	0.06	0.18	0.08	0.42	0.10	0.11	0.29	0.24	0.50
EUR	0.09	0.12	0.04	0.06	0.09	0.10	0.14	0.11	0.20	0.27
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.04	0.06	0.09	0.28	0.15	0.08	0.11	0.13	0.34	0.24
MEA	0.02	0.01	0.01	0.02	0.02	0.03	0.12	0.22	0.15	0.12
NEU	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.02
OAS	0.22	0.40	0.26	0.43	0.68	2.78	5.22	4.82	7.13	7.89
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.01
SSA	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
USA	0.00	0.00	0.00	0.00	0.00	0.06	0.01	0.18	0.05	0.07

Table 481: FAO — Demand—Material—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)



8.2.8   Oil crops—Soybean

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

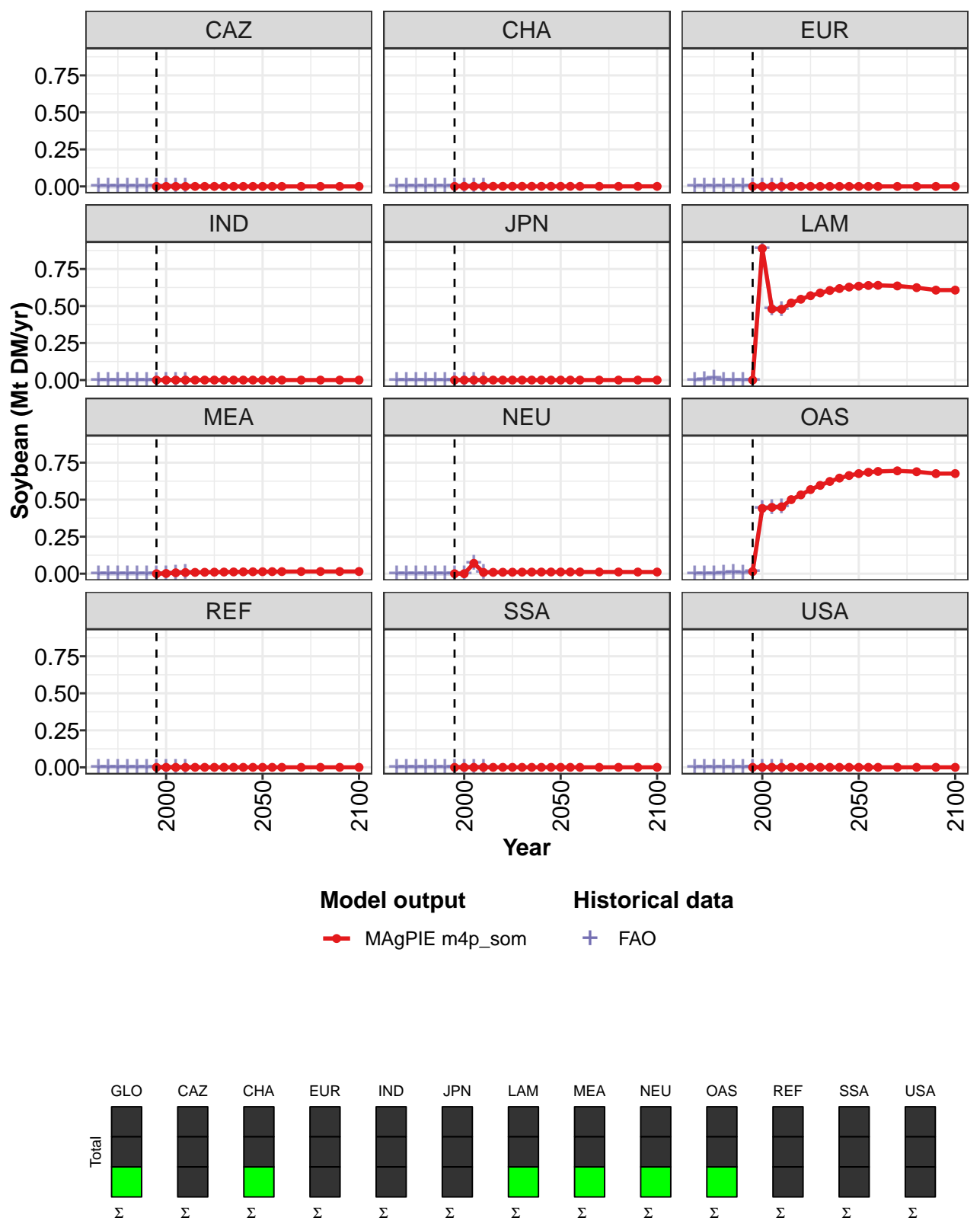


Figure 161: MAgPIE m4p\_som — Demand—Material—Crops—Oil crops—Soybean (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.02	1.33	1.01	0.95	1.04	1.10	1.16	1.21	1.25	1.29	1.32
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.89	0.48	0.48	0.52	0.55	0.57	0.59	0.60	0.62	0.63
MEA	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NEU	0.00	0.00	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
OAS	0.01	0.44	0.45	0.45	0.50	0.53	0.57	0.60	0.62	0.65	0.66
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 482: MAgPIE m4p.som — Demand—Material—Crops—Oil crops—Soybean (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.34	1.35	1.36	1.36	1.34	1.31	1.31
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.63	0.64	0.64	0.64	0.62	0.61	0.61
MEA	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NEU	0.01	0.01	0.01	0.01	0.01	0.01	0.01
OAS	0.68	0.69	0.69	0.69	0.69	0.68	0.68
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00

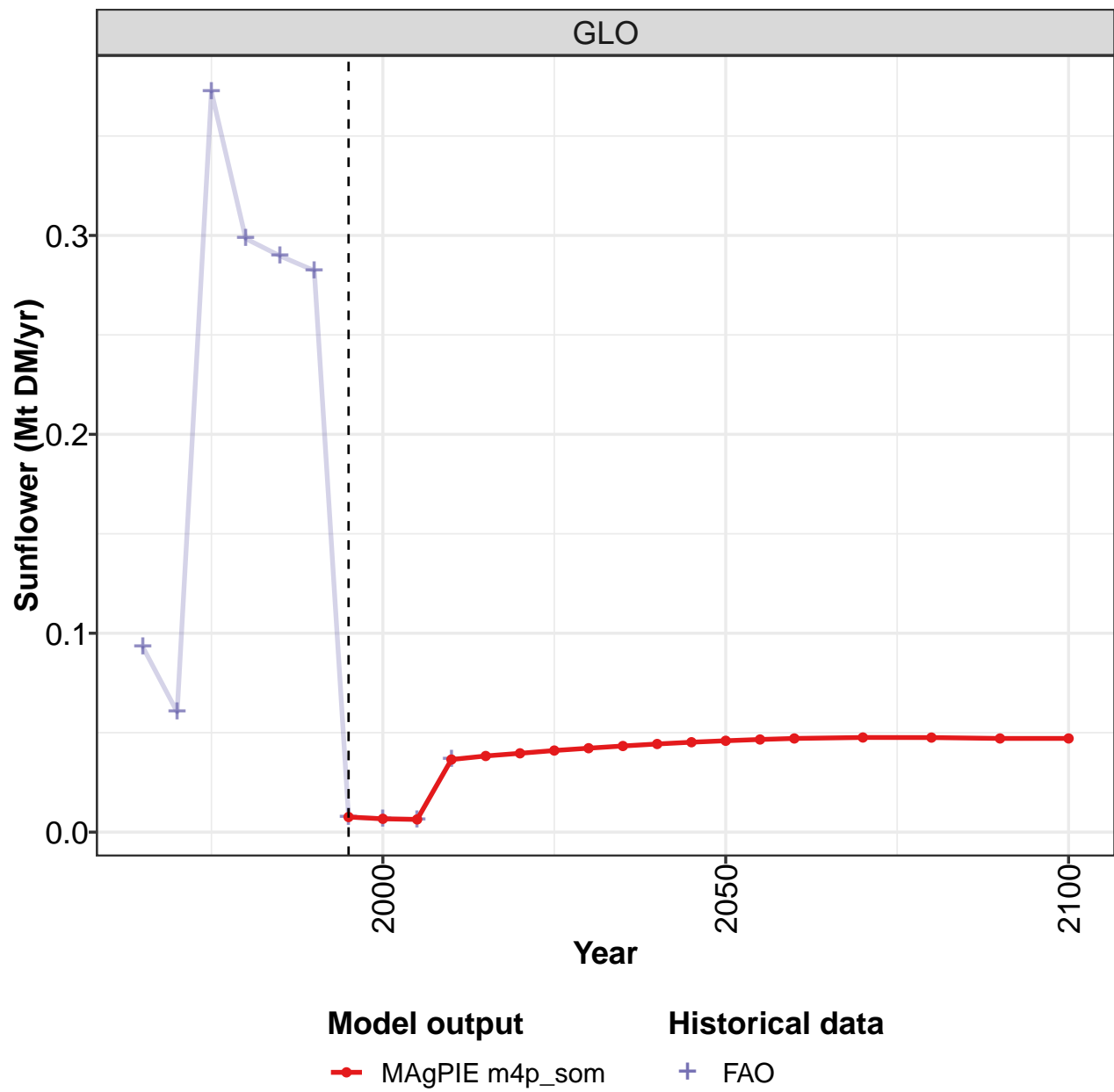
Table 483: MAgPIE m4p.som — Demand—Material—Crops—Oil crops—Soybean (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.01	0.02	0.00	0.01	0.01	0.02	1.33	1.01	0.95
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.89	0.48	0.48
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.01
OAS	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.44	0.45	0.45
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 484: FAO — Demand—Material—Crops—Oil crops—Soybean (Mt DM/yr)

8.2.9 Oil crops—Sunflower

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

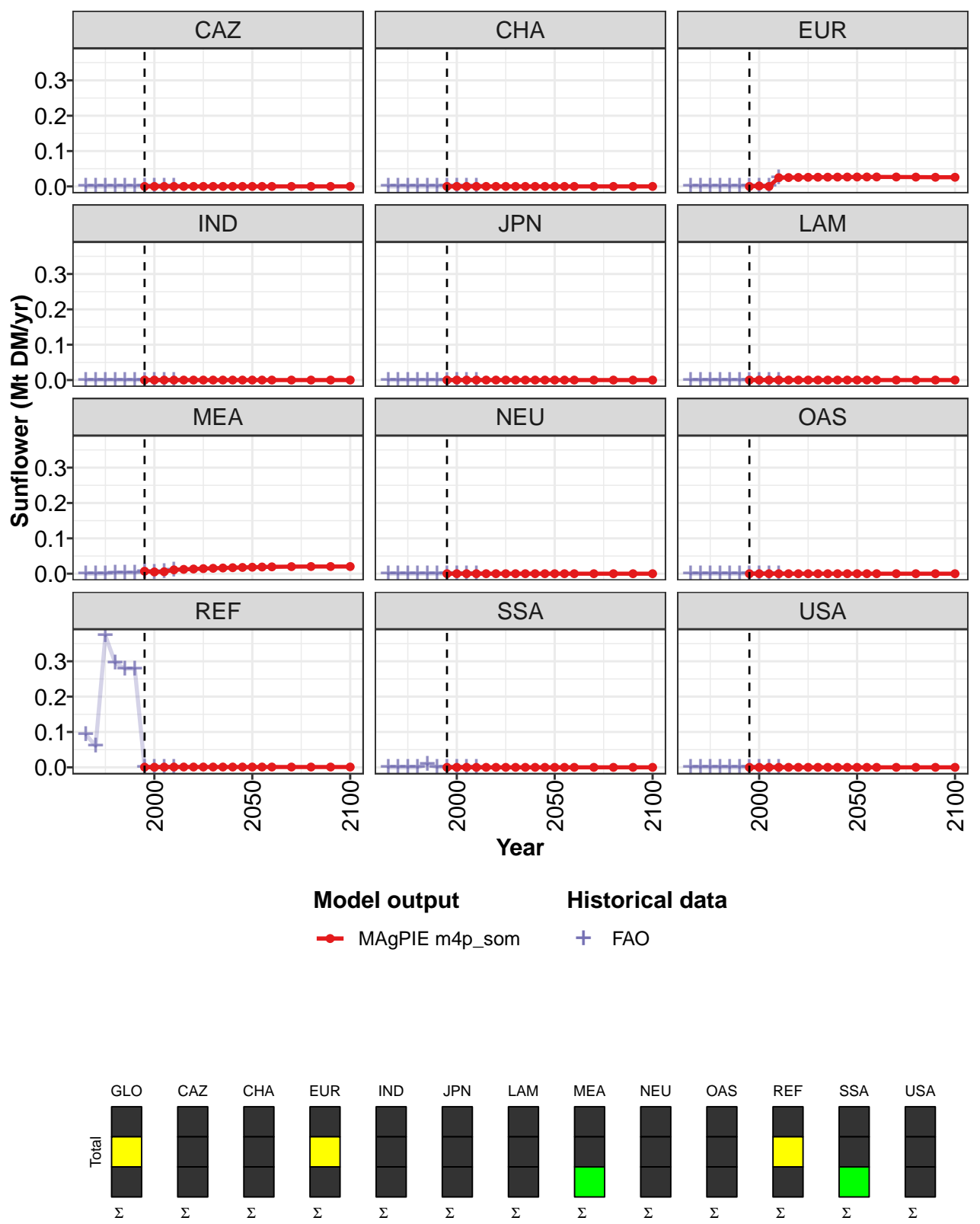


Figure 162: MAGPIE m4p\_som — Demand—Material—Crops—Oil crops—Sunflower (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.0076	0.0067	0.0064	0.0365	0.0383	0.0396	0.0410	0.0422	0.0433	0.0443	0.0452
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0000	0.0013	0.0000	0.0247	0.0251	0.0254	0.0258	0.0260	0.0262	0.0264	0.0266
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0070	0.0050	0.0056	0.0109	0.0123	0.0133	0.0143	0.0153	0.0162	0.0170	0.0177
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0006	0.0004	0.0007	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009
SSA	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 485: MAgPIE m4p\_som — Demand—Material—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0459	0.0466	0.0471	0.0476	0.0475	0.0471	0.0471
CAZ	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0267	0.0267	0.0268	0.0266	0.0264	0.0259	0.0259
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MEA	0.0183	0.0189	0.0194	0.0200	0.0203	0.0203	0.0203
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
REF	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

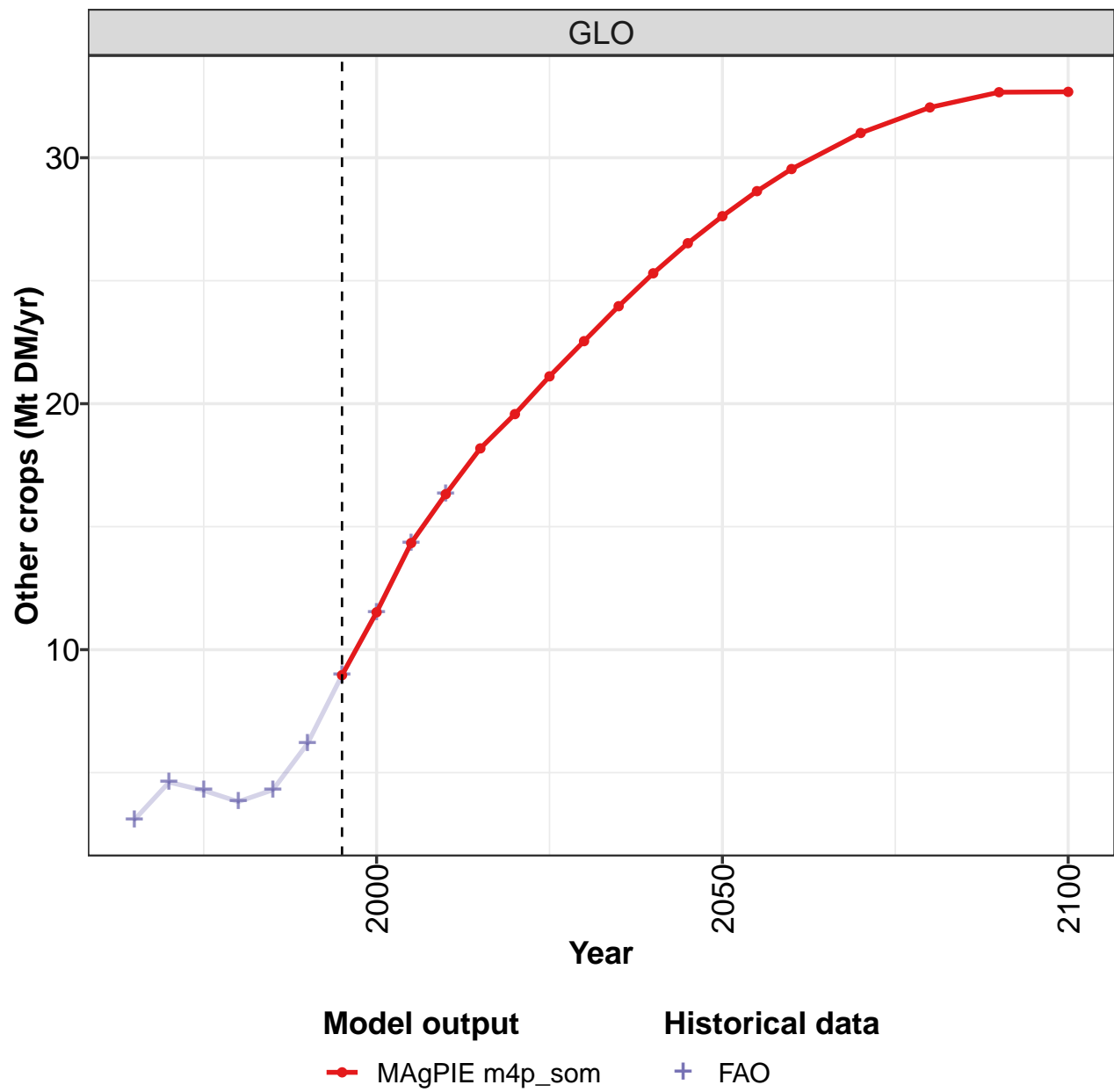
Table 486: MAgPIE m4p\_som — Demand—Material—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.093	0.060	0.372	0.298	0.290	0.282	0.008	0.007	0.006	0.037
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.025
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.003	0.003	0.003	0.007	0.005	0.006	0.011
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.093	0.060	0.372	0.296	0.279	0.279	0.001	0.000	0.001	0.001
SSA	0.000	0.000	0.000	0.000	0.008	0.001	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 487: FAO — Demand—Material—Crops—Oil crops—Sunflower (Mt DM/yr)

8.2.10 Other crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

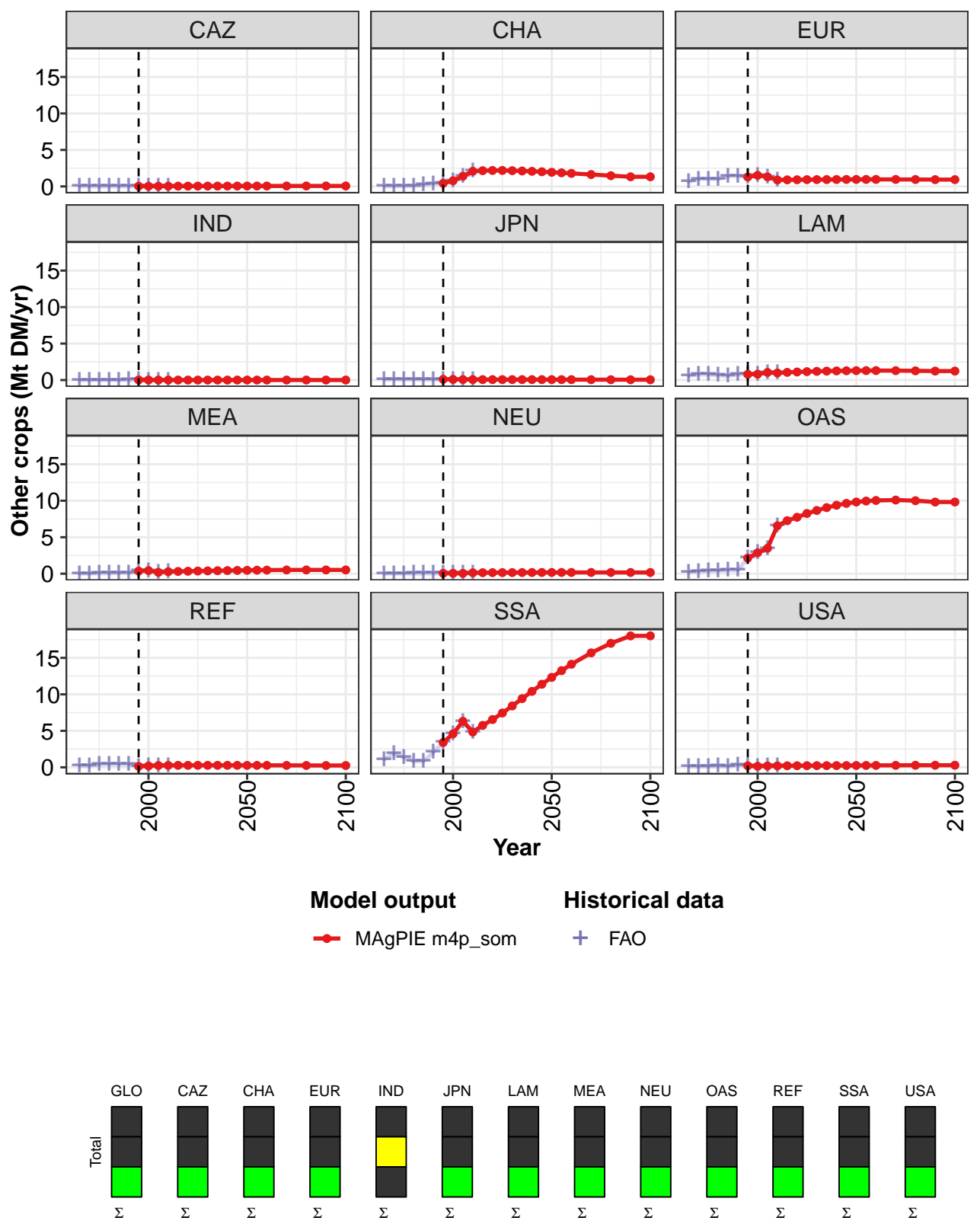


Figure 163: MAgPIE m4p\_som — Demand—Material—Crops—Other crops (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	9.0	11.5	14.3	16.3	18.2	19.6	21.1	22.5	24.0	25.3	26.5
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
CHA	0.4	0.8	1.4	2.1	2.2	2.2	2.2	2.2	2.1	2.1	2.0
EUR	1.3	1.5	1.3	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.8	0.8	1.0	1.0	1.1	1.1	1.2	1.2	1.2	1.3	1.3
MEA	0.4	0.4	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
OAS	2.1	2.9	3.5	6.6	7.3	7.7	8.3	8.7	9.1	9.4	9.6
REF	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
SSA	3.4	4.6	6.3	4.8	5.8	6.5	7.4	8.4	9.4	10.4	11.4
USA	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

Table 488: MAgPIE m4p\_som — Demand—Material—Crops—Other crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	27.6	28.6	29.5	31.0	32.0	32.7	32.7
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	1.9	1.9	1.8	1.6	1.5	1.3	1.3
EUR	1.0	1.0	1.0	1.0	0.9	0.9	0.9
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.1	0.1	0.1	0.1	0.1	0.0	0.0
LAM	1.3	1.3	1.3	1.3	1.3	1.2	1.2
MEA	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	9.8	10.0	10.0	10.1	10.0	9.8	9.8
REF	0.3	0.3	0.3	0.3	0.3	0.3	0.3
SSA	12.3	13.3	14.1	15.7	17.0	18.0	18.0
USA	0.3	0.3	0.3	0.3	0.3	0.3	0.3

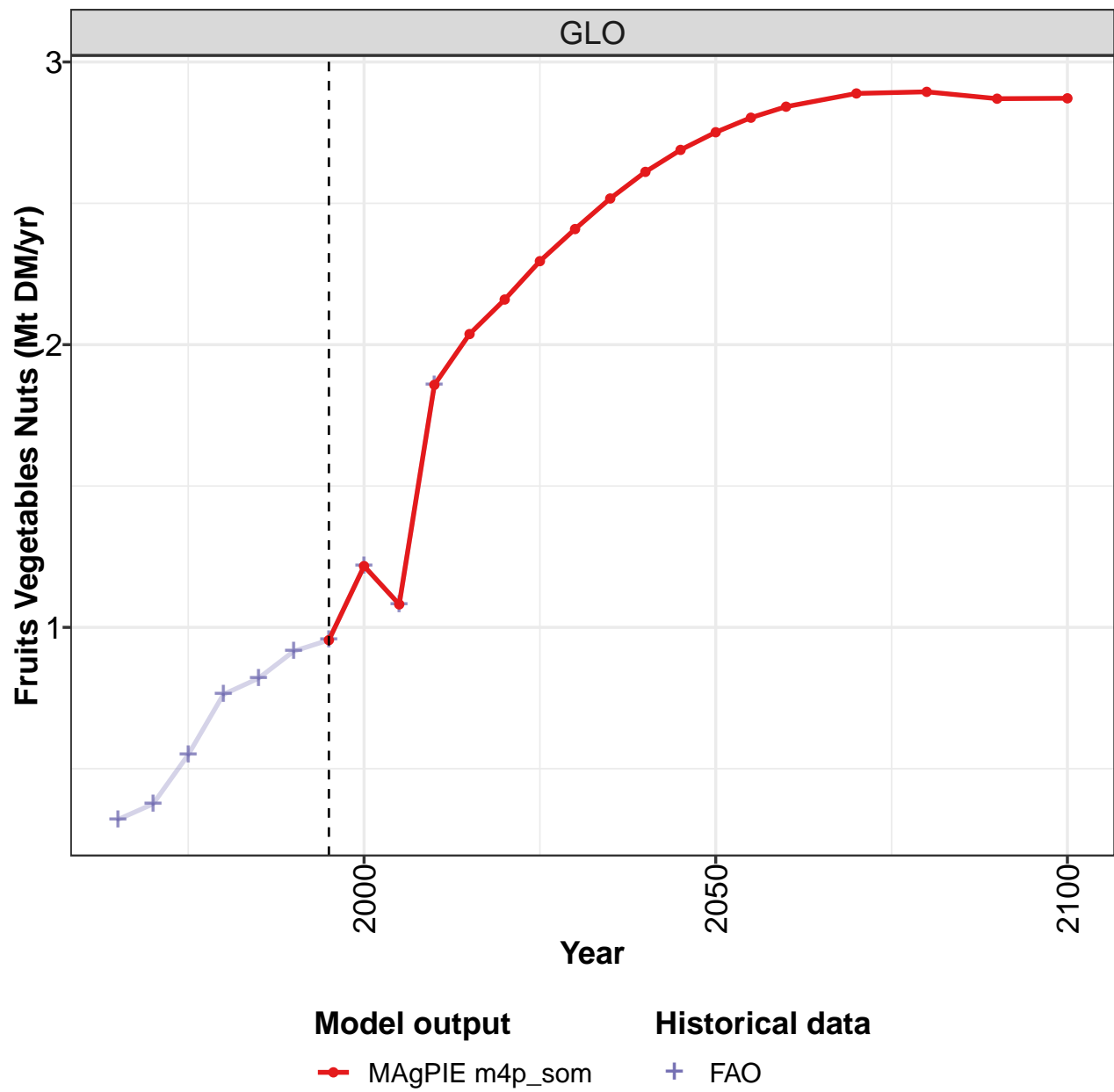
Table 489: MAgPIE m4p\_som — Demand—Material—Crops—Other crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3.1	4.6	4.3	3.8	4.3	6.2	9.0	11.5	14.3	16.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.1	0.2	0.4	0.4	0.8	1.4	2.1
EUR	0.7	1.0	1.0	1.0	1.4	1.4	1.3	1.5	1.3	0.9
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.6	0.8	0.8	0.6	0.6	0.8	0.8	0.8	1.0	1.0
MEA	0.0	0.0	0.1	0.1	0.1	0.1	0.4	0.4	0.2	0.3
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
OAS	0.2	0.3	0.4	0.4	0.5	0.5	2.1	2.9	3.5	6.6
REF	0.2	0.2	0.4	0.4	0.4	0.4	0.1	0.2	0.2	0.3
SSA	1.1	1.9	1.4	0.8	0.8	2.1	3.4	4.6	6.3	4.8
USA	0.1	0.1	0.1	0.2	0.1	0.3	0.2	0.1	0.2	0.2

Table 490: FAO — Demand—Material—Crops—Other crops (Mt DM/yr)

8.2.11    Other crops—Fruits Vegetables Nuts

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

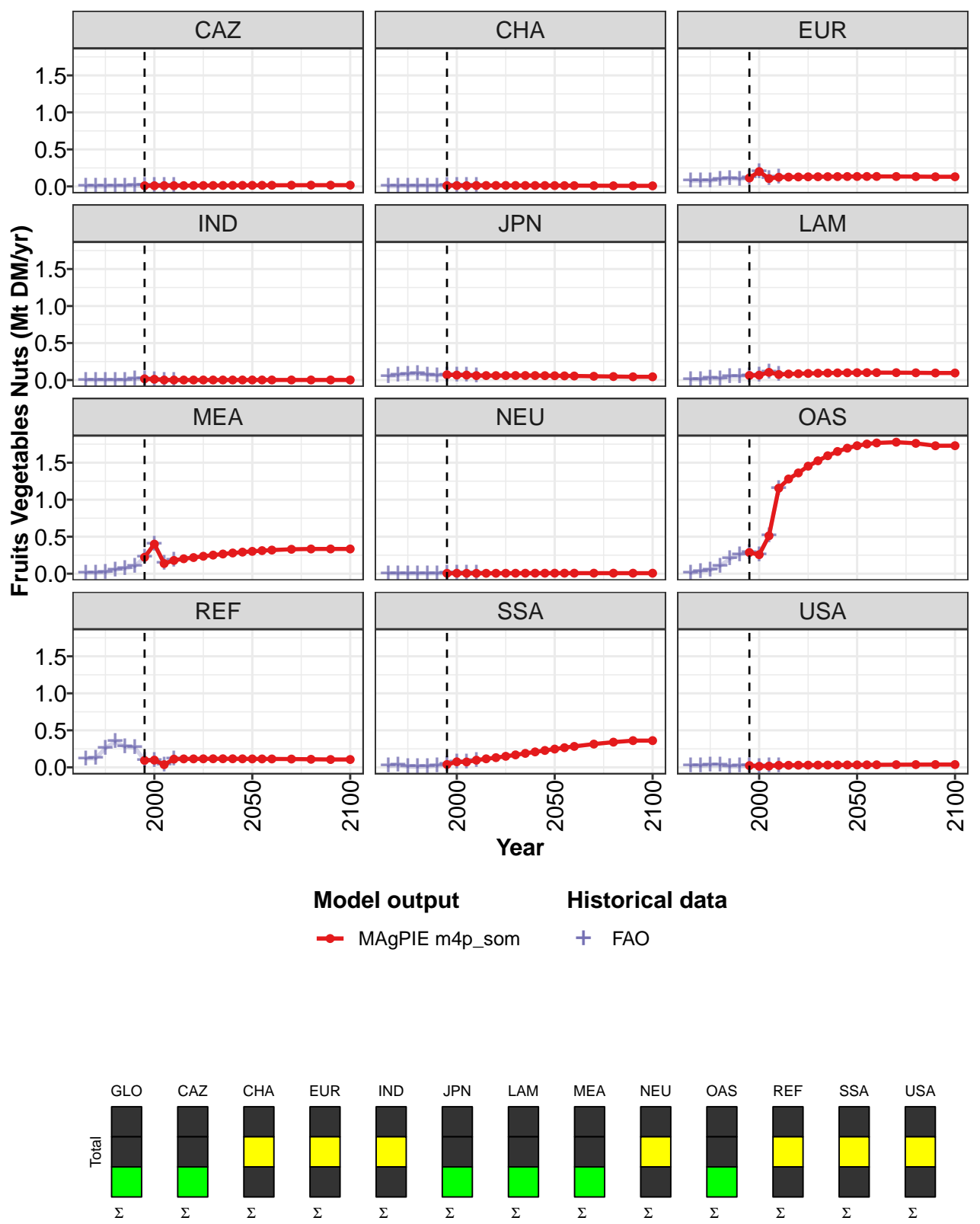


Figure 164: MAGPIE m4p\_som — Demand—Material—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.95	1.22	1.08	1.86	2.04	2.16	2.30	2.41	2.52	2.61	2.69
CAZ	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
CHA	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
EUR	0.11	0.20	0.11	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13
IND	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
LAM	0.06	0.07	0.10	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.10
MEA	0.22	0.40	0.14	0.18	0.20	0.22	0.24	0.25	0.27	0.28	0.29
NEU	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
OAS	0.29	0.26	0.51	1.16	1.28	1.36	1.45	1.53	1.59	1.65	1.70
REF	0.09	0.10	0.04	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.11
SSA	0.04	0.07	0.07	0.10	0.12	0.13	0.15	0.17	0.19	0.21	0.23
USA	0.02	0.01	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03

Table 491: MAgPIE m4p\_som — Demand—Material—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	2.75	2.80	2.84	2.89	2.89	2.87	2.87
CAZ	0.01	0.02	0.02	0.02	0.02	0.02	0.02
CHA	0.01	0.01	0.01	0.01	0.01	0.01	0.01
EUR	0.13	0.13	0.13	0.13	0.13	0.13	0.13
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.06	0.06	0.06	0.05	0.05	0.04	0.04
LAM	0.10	0.10	0.10	0.10	0.10	0.10	0.10
MEA	0.30	0.31	0.32	0.33	0.33	0.33	0.33
NEU	0.01	0.01	0.01	0.01	0.01	0.01	0.01
OAS	1.73	1.75	1.77	1.78	1.76	1.73	1.73
REF	0.11	0.11	0.11	0.11	0.11	0.11	0.11
SSA	0.25	0.27	0.28	0.31	0.34	0.36	0.36
USA	0.03	0.03	0.03	0.04	0.04	0.04	0.04

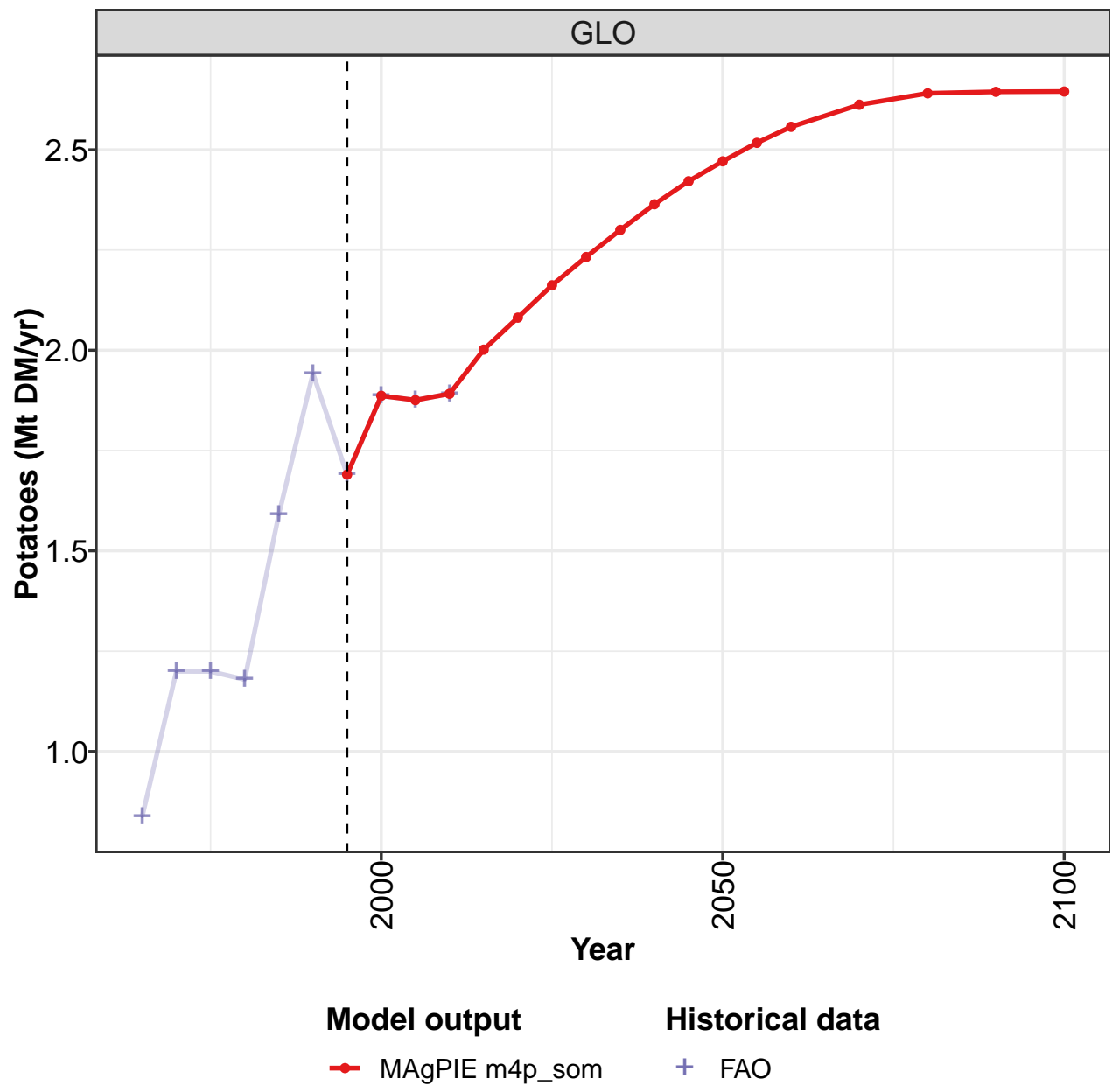
Table 492: MAgPIE m4p\_som — Demand—Material—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.32	0.38	0.55	0.76	0.82	0.92	0.96	1.22	1.08	1.86
CAZ	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
CHA	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
EUR	0.07	0.08	0.08	0.10	0.11	0.10	0.11	0.20	0.11	0.12
IND	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.01	0.00	0.00
JPN	0.05	0.06	0.08	0.09	0.07	0.06	0.07	0.07	0.07	0.06
LAM	0.01	0.01	0.02	0.02	0.05	0.05	0.06	0.07	0.10	0.08
MEA	0.01	0.01	0.02	0.05	0.07	0.10	0.22	0.40	0.14	0.18
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
OAS	0.01	0.03	0.05	0.11	0.20	0.26	0.29	0.26	0.51	1.16
REF	0.12	0.12	0.26	0.35	0.28	0.27	0.09	0.10	0.04	0.11
SSA	0.02	0.03	0.01	0.01	0.01	0.02	0.04	0.07	0.07	0.10
USA	0.02	0.02	0.03	0.03	0.01	0.02	0.02	0.01	0.02	0.03

Table 493: FAO — Demand—Material—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

8.2.12 Other crops—Potatoes

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

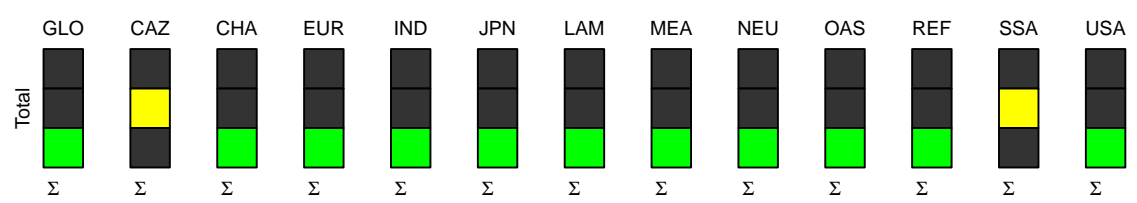
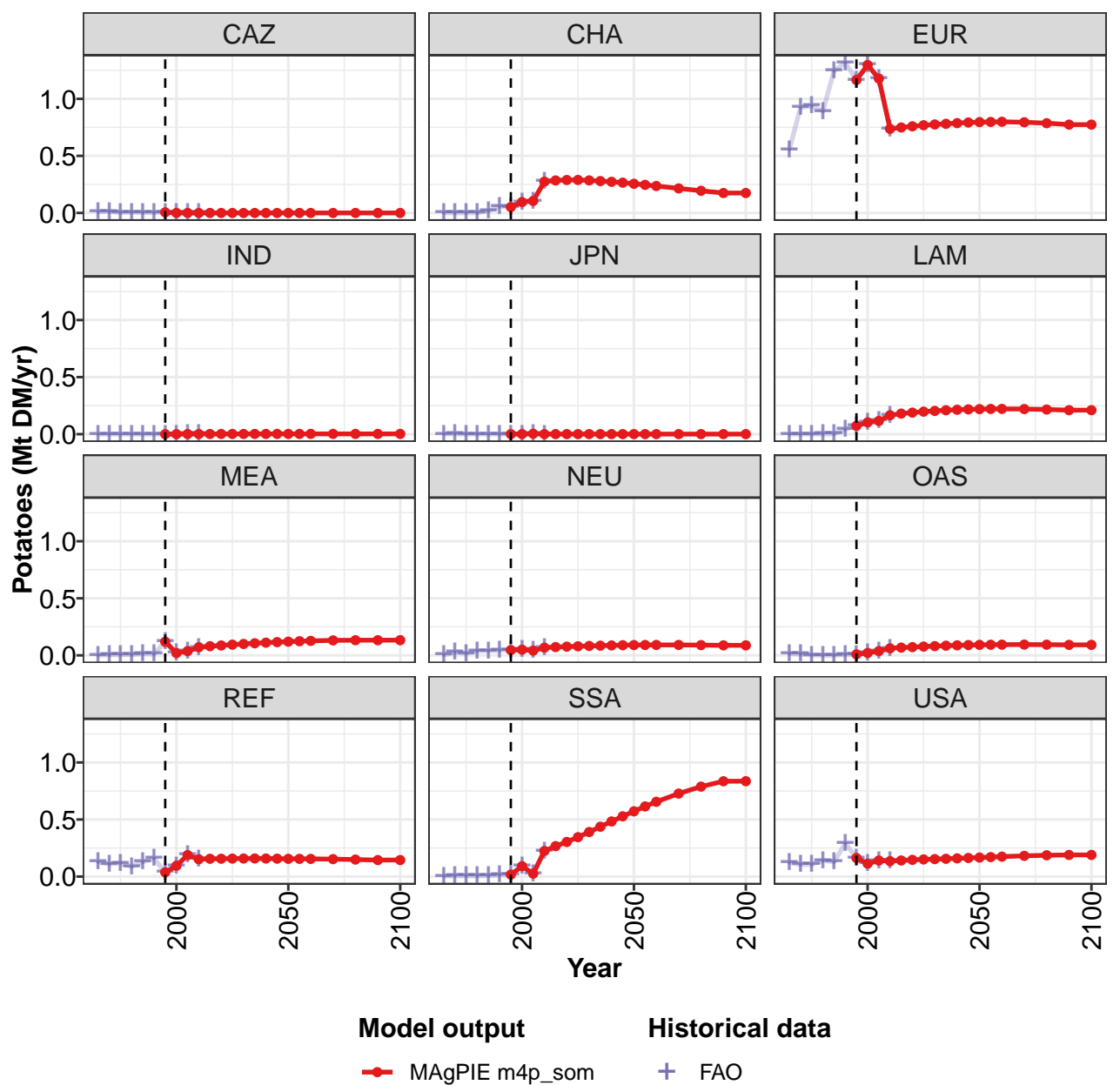


Figure 165: MAgPIE m4p\_som — Demand—Material—Crops—Other crops—Potatoes (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.69	1.89	1.88	1.89	2.00	2.08	2.16	2.23	2.30	2.36	2.42
CAZ	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.05	0.10	0.11	0.27	0.28	0.29	0.29	0.29	0.28	0.27	0.27
EUR	1.17	1.30	1.18	0.74	0.75	0.76	0.77	0.78	0.78	0.79	0.79
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.07	0.10	0.12	0.17	0.18	0.19	0.20	0.20	0.21	0.21	0.22
MEA	0.12	0.02	0.04	0.07	0.08	0.09	0.09	0.10	0.11	0.11	0.12
NEU	0.05	0.05	0.04	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.09
OAS	0.01	0.02	0.04	0.06	0.07	0.07	0.08	0.08	0.08	0.09	0.09
REF	0.04	0.09	0.19	0.15	0.16	0.16	0.16	0.16	0.16	0.16	0.16
SSA	0.02	0.09	0.03	0.22	0.27	0.30	0.35	0.39	0.44	0.48	0.53
USA	0.16	0.11	0.14	0.14	0.14	0.15	0.15	0.15	0.16	0.16	0.16

Table 494: MAgPIE m4p\_som — Demand—Material—Crops—Other crops—Potatoes (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	2.47	2.52	2.56	2.61	2.64	2.64	2.65
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.26	0.25	0.24	0.22	0.19	0.17	0.17
EUR	0.80	0.80	0.80	0.79	0.79	0.77	0.77
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.22	0.22	0.22	0.22	0.22	0.21	0.21
MEA	0.12	0.12	0.13	0.13	0.13	0.13	0.13
NEU	0.09	0.09	0.09	0.09	0.09	0.09	0.09
OAS	0.09	0.09	0.09	0.09	0.09	0.09	0.09
REF	0.16	0.16	0.16	0.15	0.15	0.14	0.14
SSA	0.57	0.61	0.66	0.73	0.79	0.84	0.84
USA	0.17	0.17	0.17	0.18	0.19	0.19	0.19

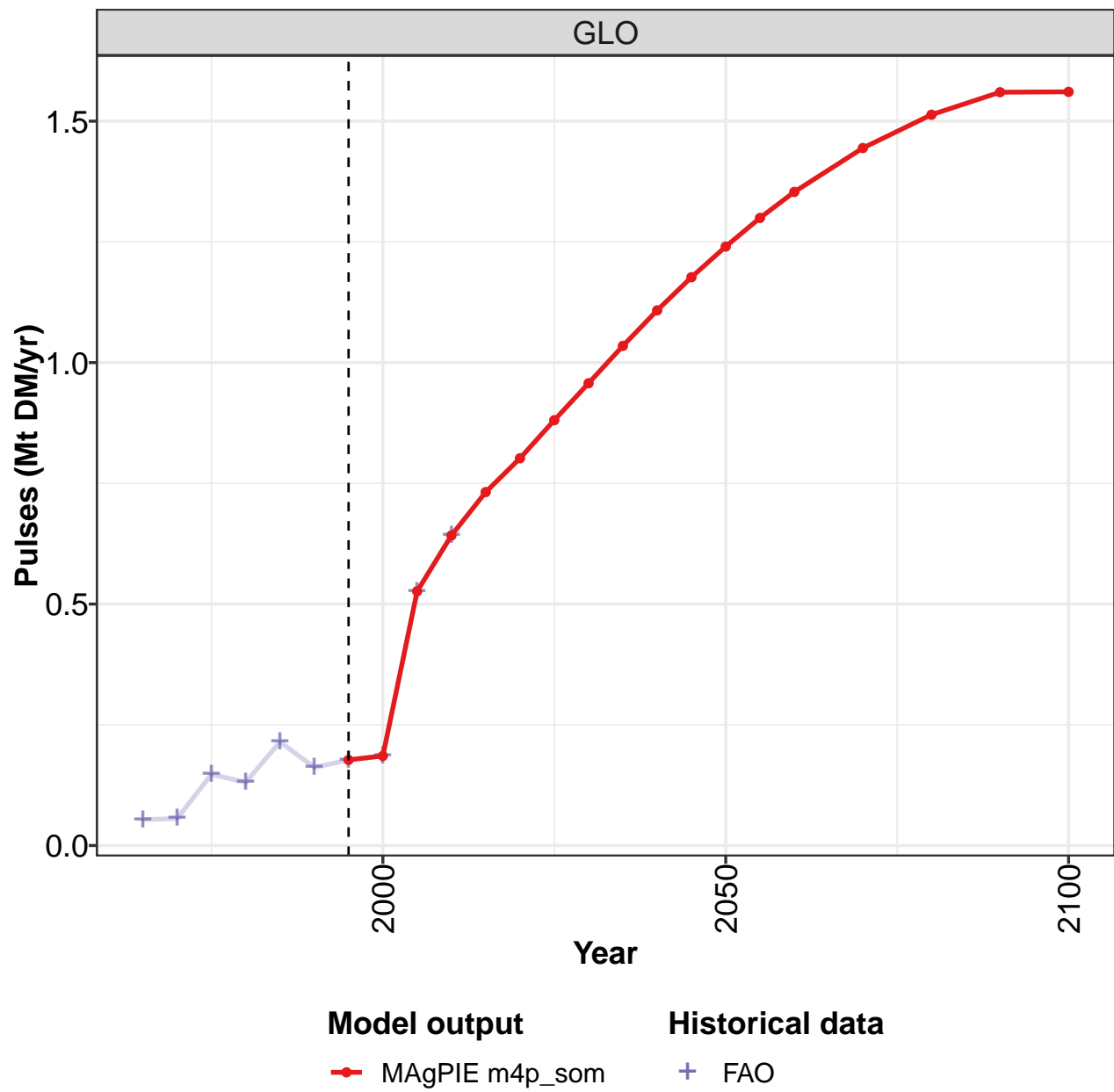
Table 495: MAgPIE m4p\_som — Demand—Material—Crops—Other crops—Potatoes (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.84	1.20	1.20	1.18	1.59	1.94	1.69	1.89	1.88	1.89
CAZ	0.01	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.02	0.06	0.05	0.10	0.11	0.27
EUR	0.55	0.92	0.94	0.89	1.25	1.32	1.17	1.30	1.18	0.74
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.04	0.07	0.10	0.12	0.17
MEA	0.00	0.00	0.01	0.01	0.02	0.01	0.12	0.02	0.04	0.07
NEU	0.00	0.03	0.02	0.04	0.04	0.04	0.05	0.05	0.04	0.07
OAS	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.02	0.04	0.06
REF	0.13	0.11	0.12	0.09	0.13	0.16	0.04	0.09	0.19	0.15
SSA	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.09	0.03	0.22
USA	0.12	0.10	0.11	0.14	0.13	0.29	0.16	0.11	0.14	0.14

Table 496: FAO — Demand—Material—Crops—Other crops—Potatoes (Mt DM/yr)

8.2.13   Other crops—Pulses

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

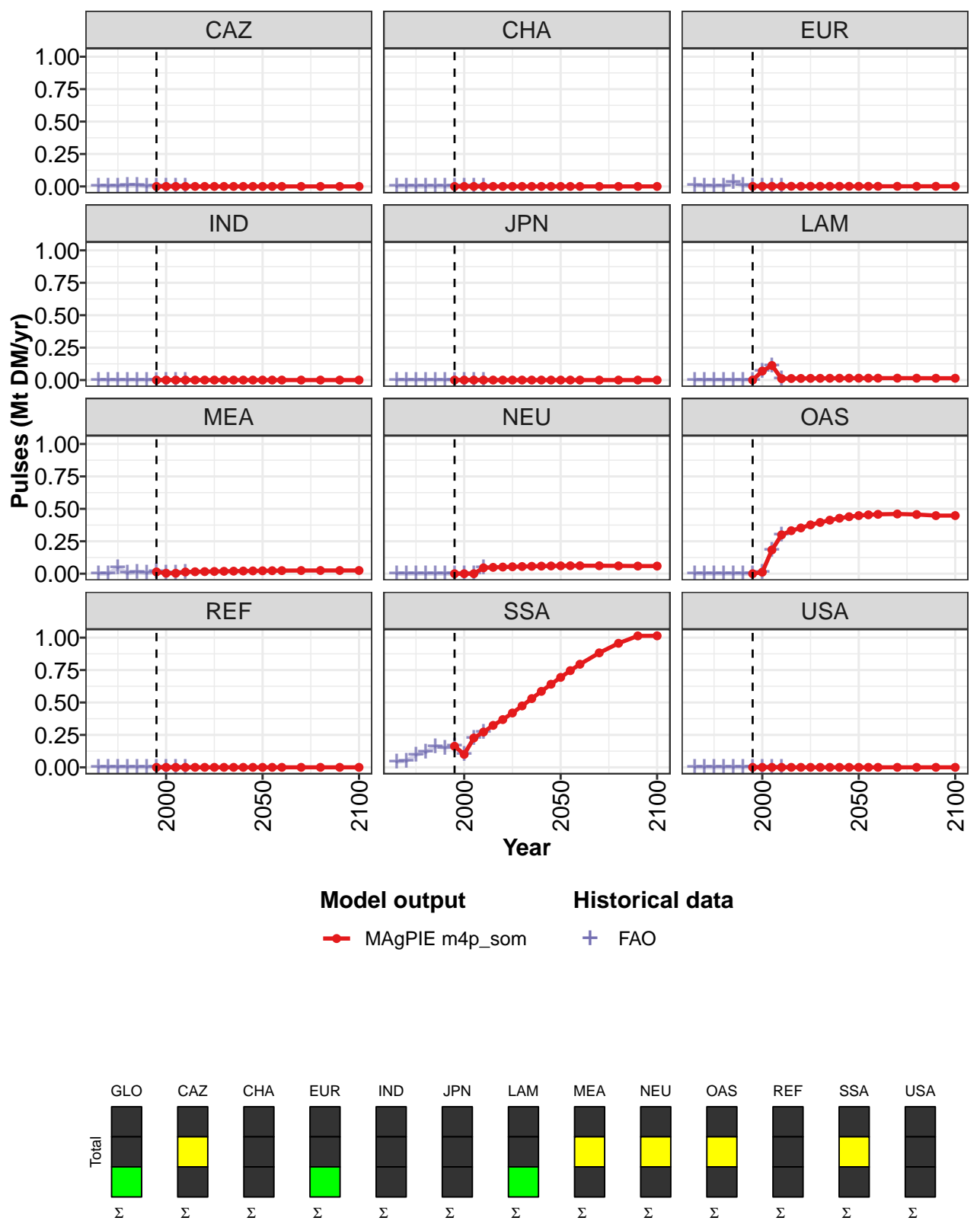


Figure 166: MAgPIE m4p\_som — Demand—Material—Crops—Other crops—Pulses (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.18	0.19	0.53	0.64	0.73	0.80	0.88	0.96	1.03	1.11	1.18
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.07	0.11	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
MEA	0.01	0.00	0.00	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02
NEU	0.00	0.00	0.00	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06
OAS	0.00	0.01	0.18	0.30	0.33	0.35	0.38	0.40	0.41	0.43	0.44
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.16	0.10	0.23	0.27	0.32	0.37	0.42	0.47	0.53	0.59	0.64
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 497: MAgPIE m4p\_som — Demand—Material—Crops—Other crops—Pulses (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.24	1.30	1.35	1.44	1.51	1.56	1.56
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.01	0.01	0.01	0.01	0.01	0.01	0.01
MEA	0.02	0.02	0.02	0.02	0.02	0.02	0.02
NEU	0.06	0.06	0.06	0.06	0.06	0.06	0.06
OAS	0.45	0.45	0.46	0.46	0.46	0.45	0.45
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.69	0.75	0.79	0.88	0.96	1.01	1.01
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00

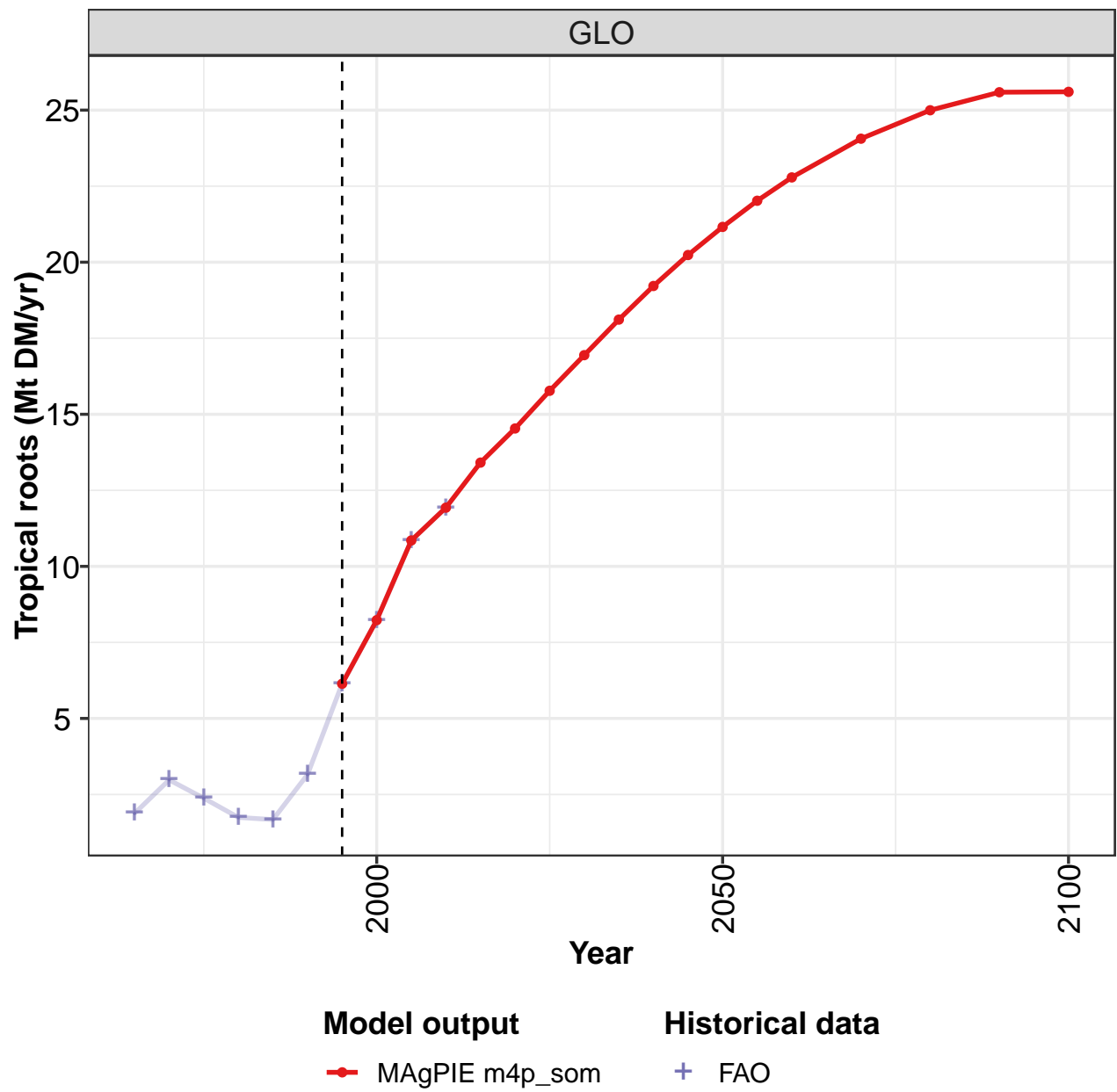
Table 498: MAgPIE m4p\_som — Demand—Material—Crops—Other crops—Pulses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.054	0.056	0.147	0.131	0.215	0.162	0.177	0.186	0.526	0.642
CAZ	0.004	0.003	0.004	0.006	0.009	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.007	0.004	0.002	0.005	0.031	0.006	0.001	0.001	0.001	0.001
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.069	0.112	0.011
MEA	0.000	0.000	0.046	0.003	0.012	0.004	0.014	0.004	0.004	0.013
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.045
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.012	0.183	0.299
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.043	0.049	0.096	0.117	0.162	0.150	0.163	0.100	0.226	0.272
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 499: FAO — Demand—Material—Crops—Other crops—Pulses (Mt DM/yr)

8.2.14 Other crops—Tropical roots

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

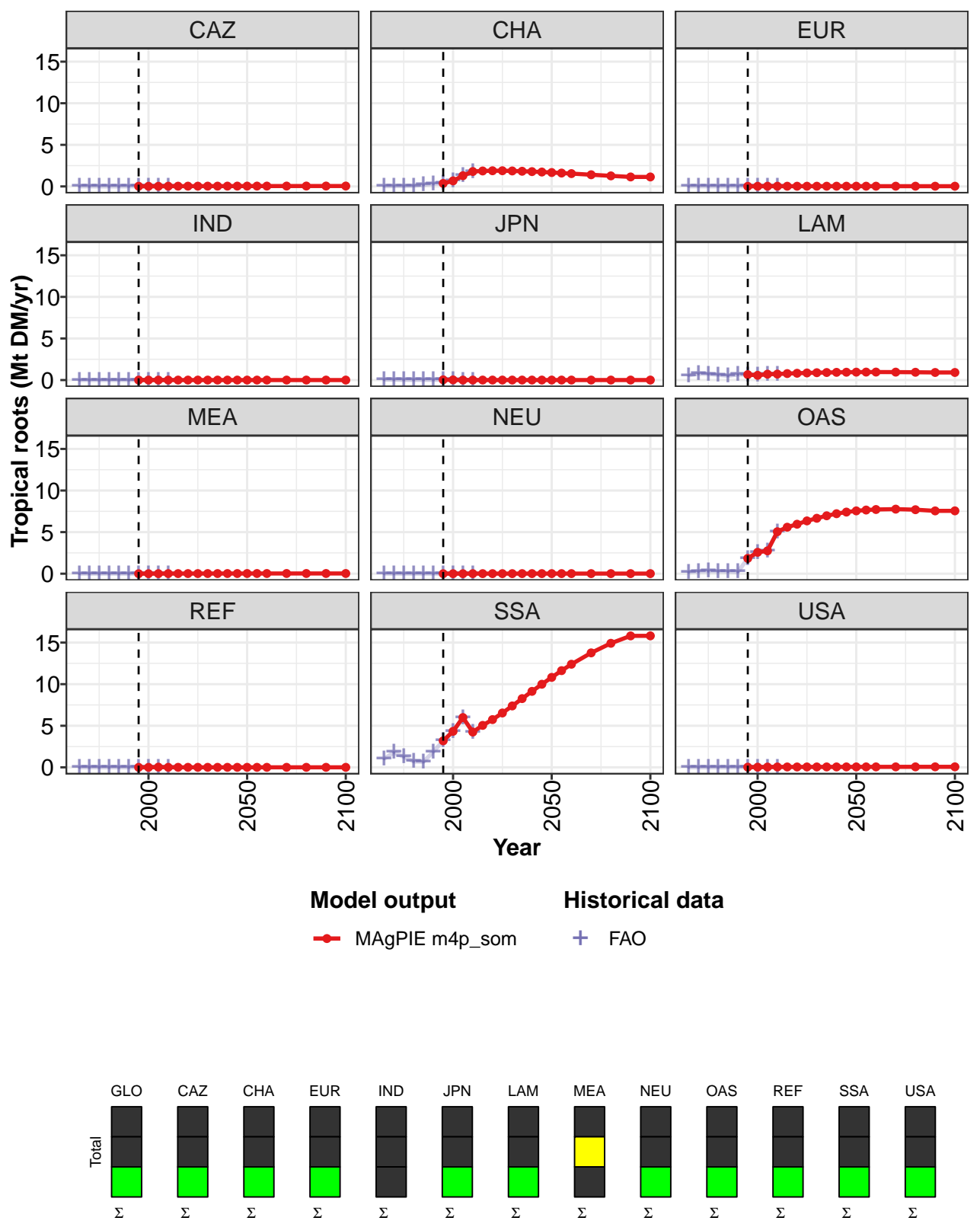


Figure 167: MAgPIE m4p\_som — Demand—Material—Crops—Other crops—Tropical roots (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	6.1	8.2	10.9	11.9	13.4	14.5	15.8	16.9	18.1	19.2	20.2
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.4	0.7	1.3	1.8	1.9	1.9	1.9	1.9	1.8	1.8	1.7
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.7	0.6	0.7	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.8	2.6	2.7	5.0	5.6	5.9	6.3	6.7	7.0	7.2	7.4
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	3.2	4.3	6.0	4.2	5.0	5.7	6.5	7.4	8.3	9.1	10.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1

Table 500: MAGPIE m4p\_som — Demand—Material—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	21.2	22.0	22.8	24.1	25.0	25.6	25.6
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	1.7	1.6	1.5	1.4	1.3	1.1	1.1
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.0	1.0	1.0	1.0	0.9	0.9	0.9
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	7.6	7.7	7.7	7.8	7.7	7.6	7.6
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	10.8	11.6	12.4	13.8	14.9	15.8	15.8
USA	0.1	0.1	0.1	0.1	0.1	0.1	0.1

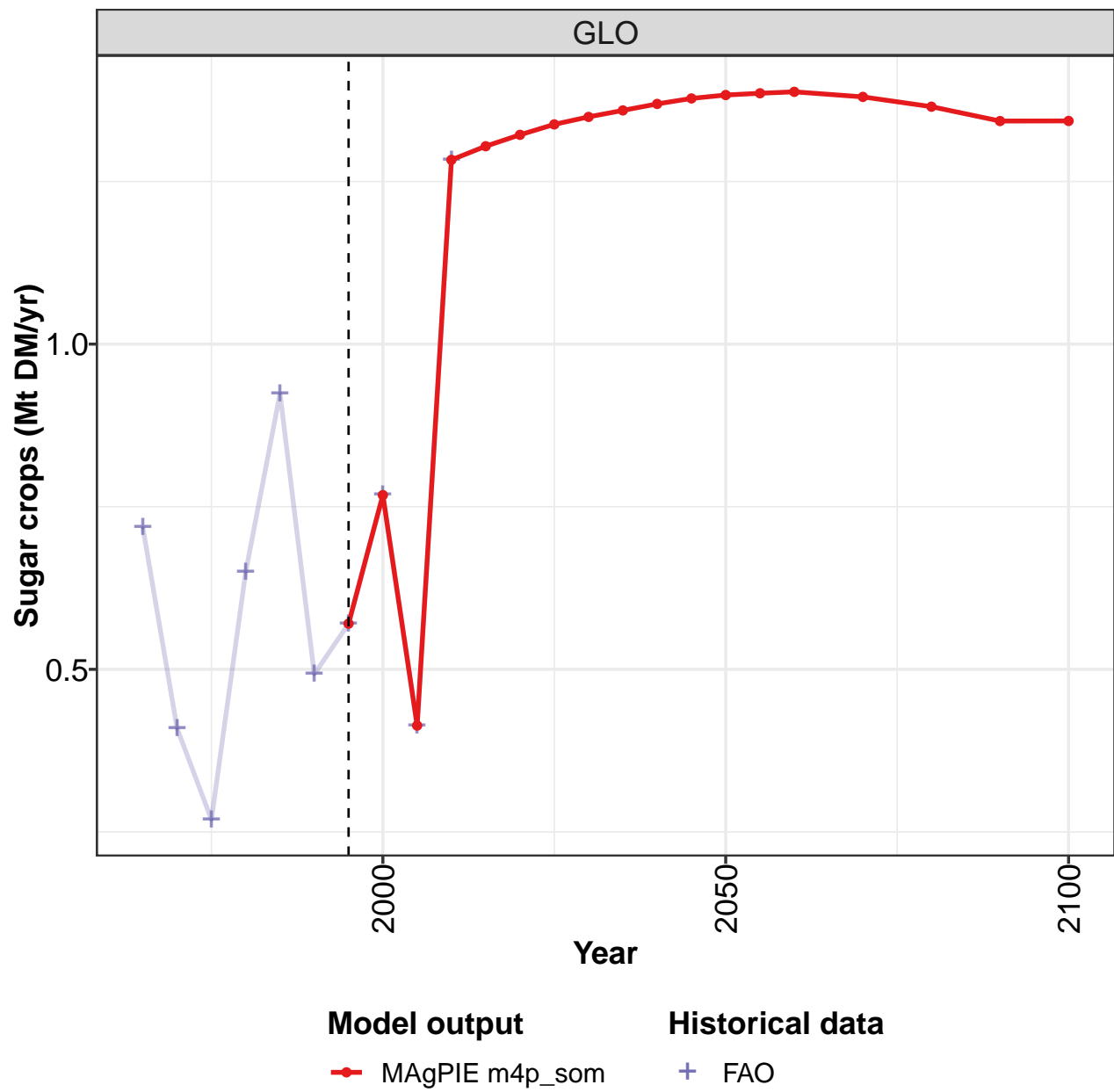
Table 501: MAGPIE m4p\_som — Demand—Material—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.9	3.0	2.4	1.7	1.7	3.2	6.1	8.2	10.9	11.9
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.7	1.3	1.8
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.6	0.8	0.7	0.6	0.5	0.7	0.7	0.6	0.7	0.7
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.2	0.3	0.3	0.3	0.3	0.2	1.8	2.6	2.7	5.0
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	1.0	1.8	1.3	0.7	0.7	1.9	3.2	4.3	6.0	4.2
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 502: FAO — Demand—Material—Crops—Other crops—Tropical roots (Mt DM/yr)

8.2.15   Sugar crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

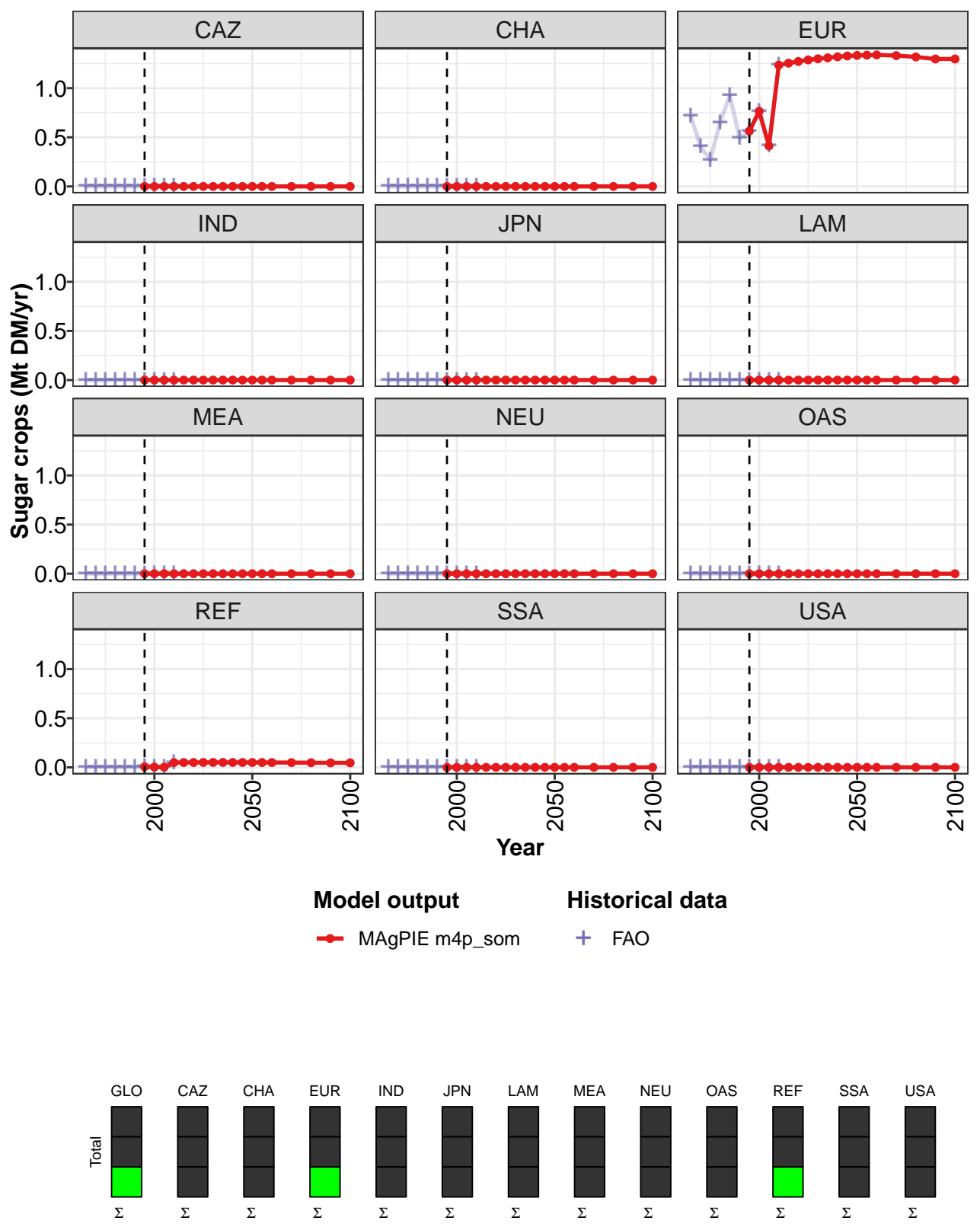


Figure 168: MAgPIE m4p\_som — Demand—Material—Crops—Sugar crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.57	0.77	0.41	1.28	1.30	1.32	1.34	1.35	1.36	1.37	1.38
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.56	0.77	0.41	1.24	1.25	1.27	1.29	1.30	1.31	1.32	1.33
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.01	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 503: MAgPIE m4p\_som — Demand—Material—Crops—Sugar crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.38	1.39	1.39	1.38	1.36	1.34	1.34
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	1.33	1.34	1.34	1.33	1.32	1.30	1.30
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.05	0.05	0.05	0.05	0.05	0.05	0.05
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 504: MAgPIE m4p\_som — Demand—Material—Crops—Sugar crops (Mt DM/yr) [PART 2/2]

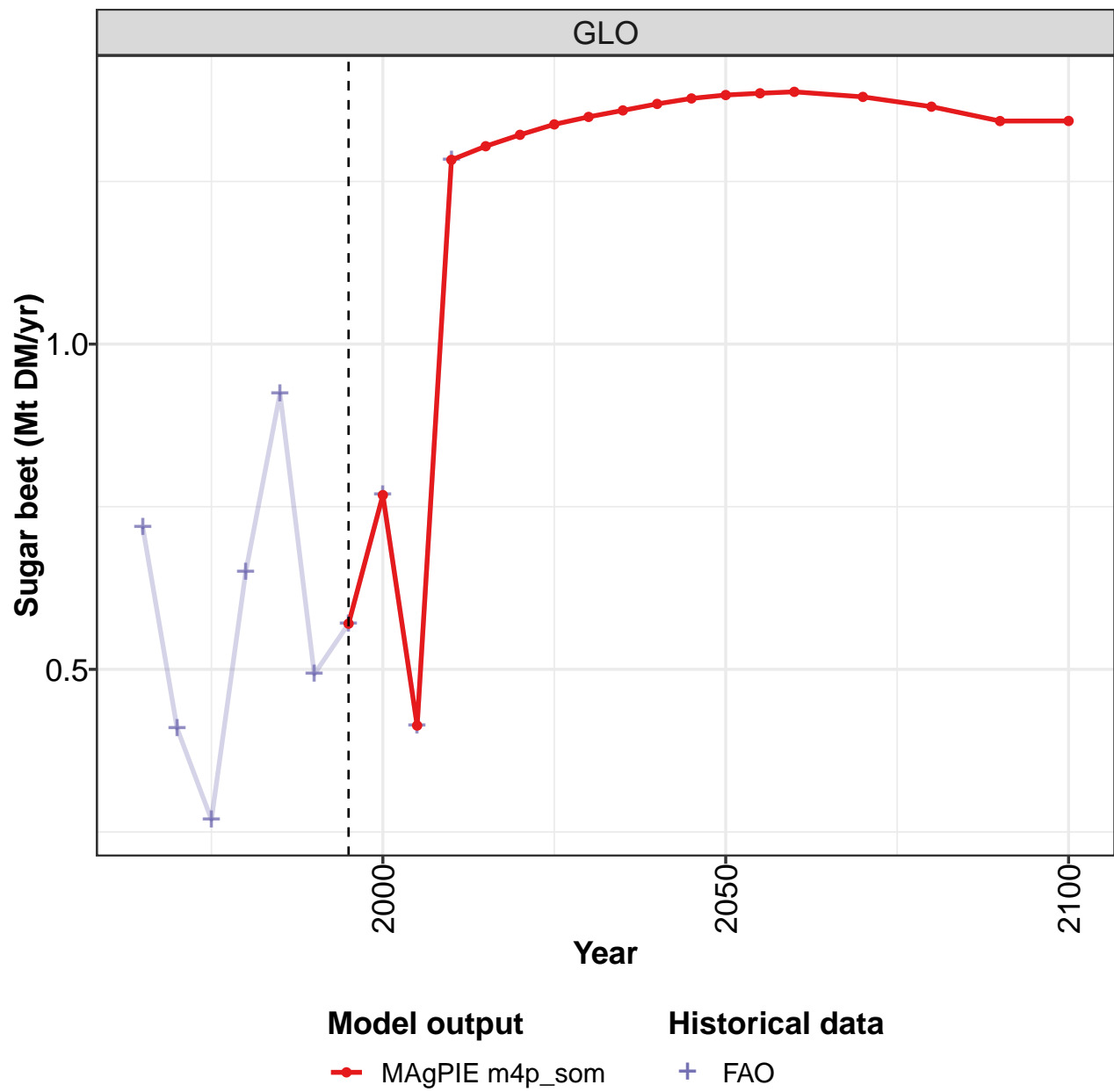
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.72	0.41	0.27	0.65	0.92	0.49	0.57	0.77	0.41	1.28
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.72	0.41	0.27	0.65	0.92	0.49	0.56	0.77	0.41	1.24
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.05
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 505: FAO — Demand—Material—Crops—Sugar crops (Mt DM/yr)



8.2.16 Sugar crops—Sugar beet

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

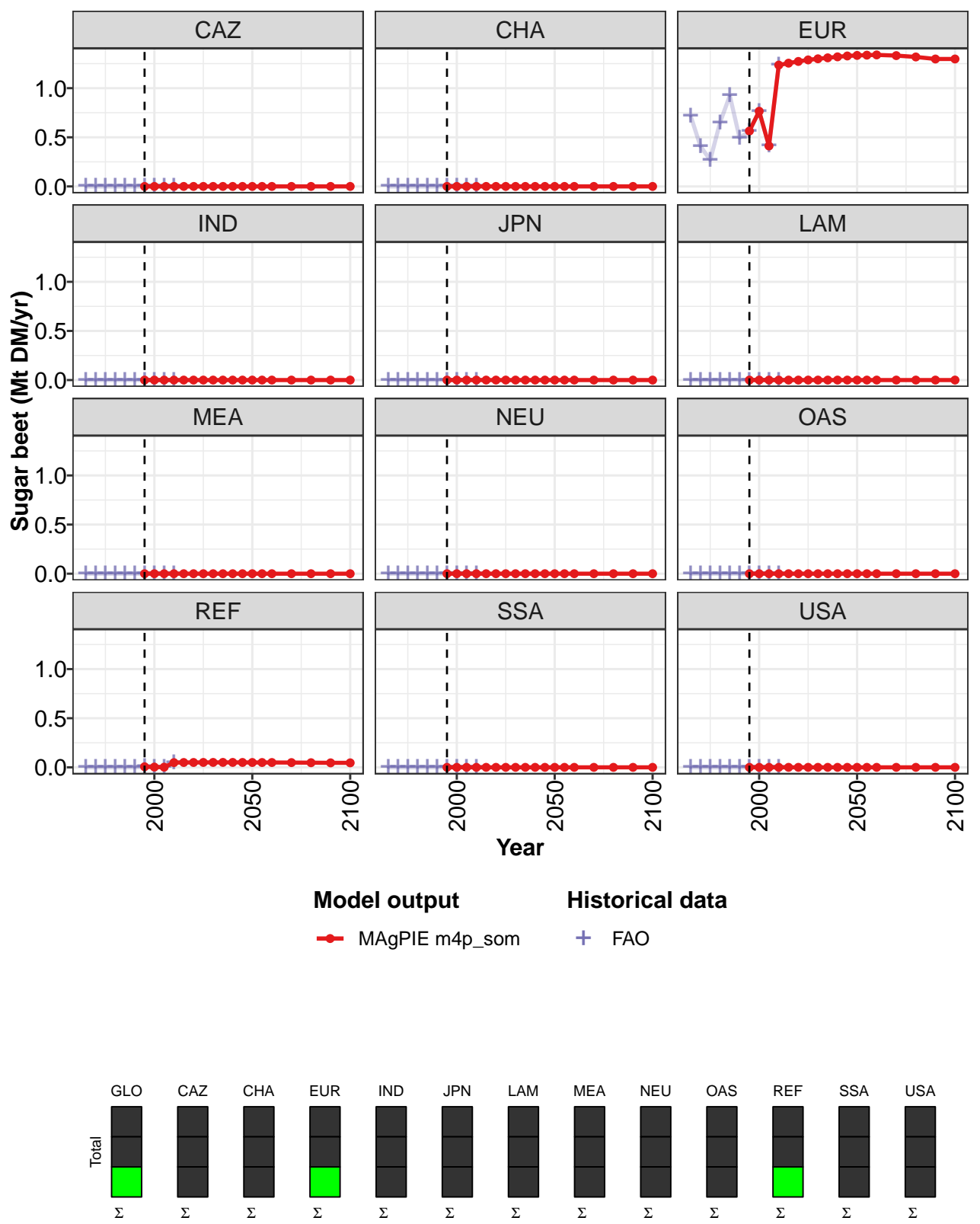


Figure 169: MAgPIE m4p\_som — Demand—Material—Crops—Sugar crops—Sugar beet (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.57	0.77	0.41	1.28	1.30	1.32	1.34	1.35	1.36	1.37	1.38
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.56	0.77	0.41	1.24	1.25	1.27	1.29	1.30	1.31	1.32	1.33
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.01	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 506: MAgPIE m4p\_som — Demand—Material—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.38	1.39	1.39	1.38	1.36	1.34	1.34
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	1.33	1.34	1.34	1.33	1.32	1.30	1.30
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.05	0.05	0.05	0.05	0.05	0.05	0.05
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00

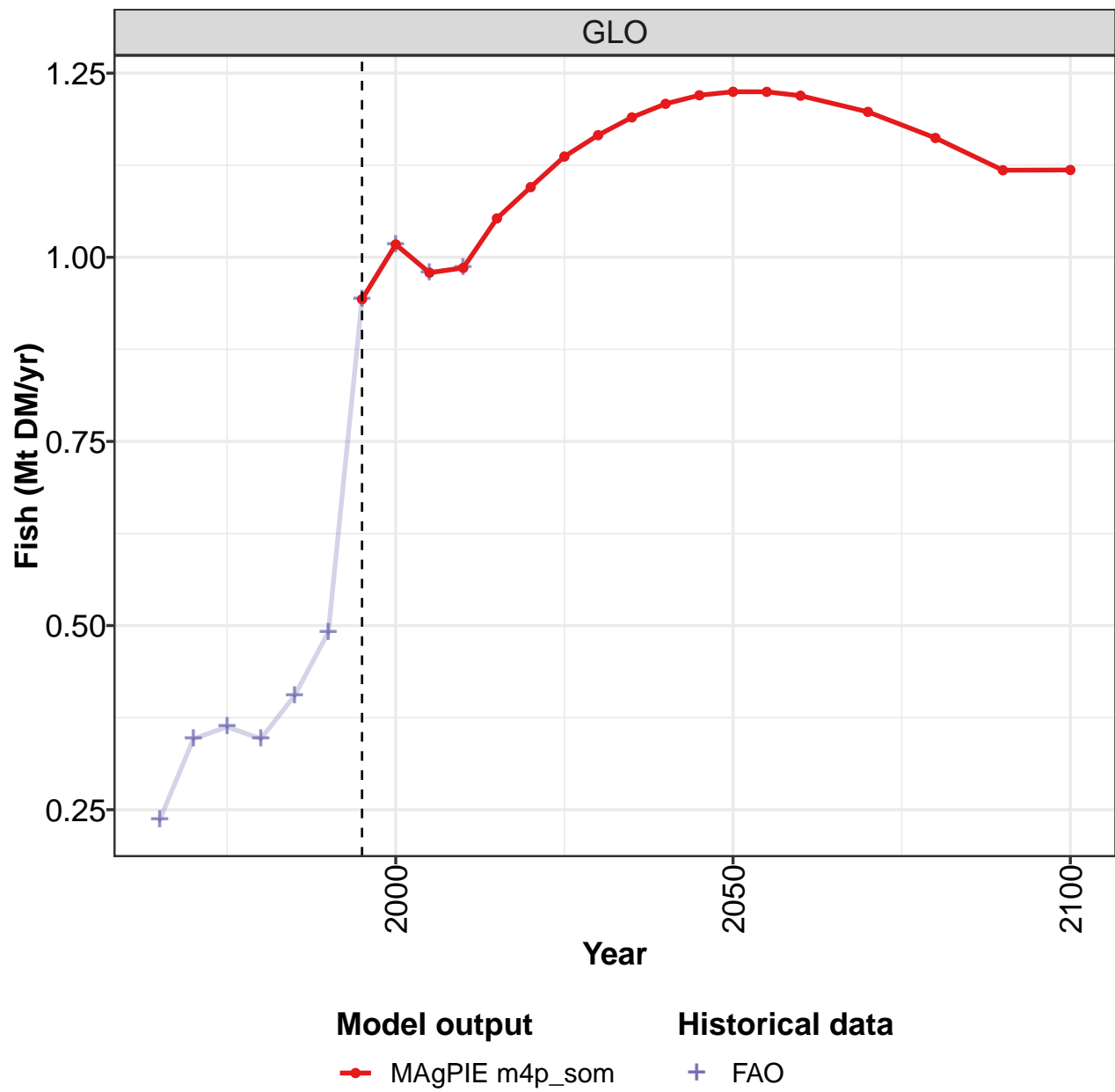
Table 507: MAgPIE m4p\_som — Demand—Material—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.72	0.41	0.27	0.65	0.92	0.49	0.57	0.77	0.41	1.28
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.72	0.41	0.27	0.65	0.92	0.49	0.56	0.77	0.41	1.24
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.05
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 508: FAO — Demand—Material—Crops—Sugar crops—Sugar beet (Mt DM/yr)

8.3 Fish

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

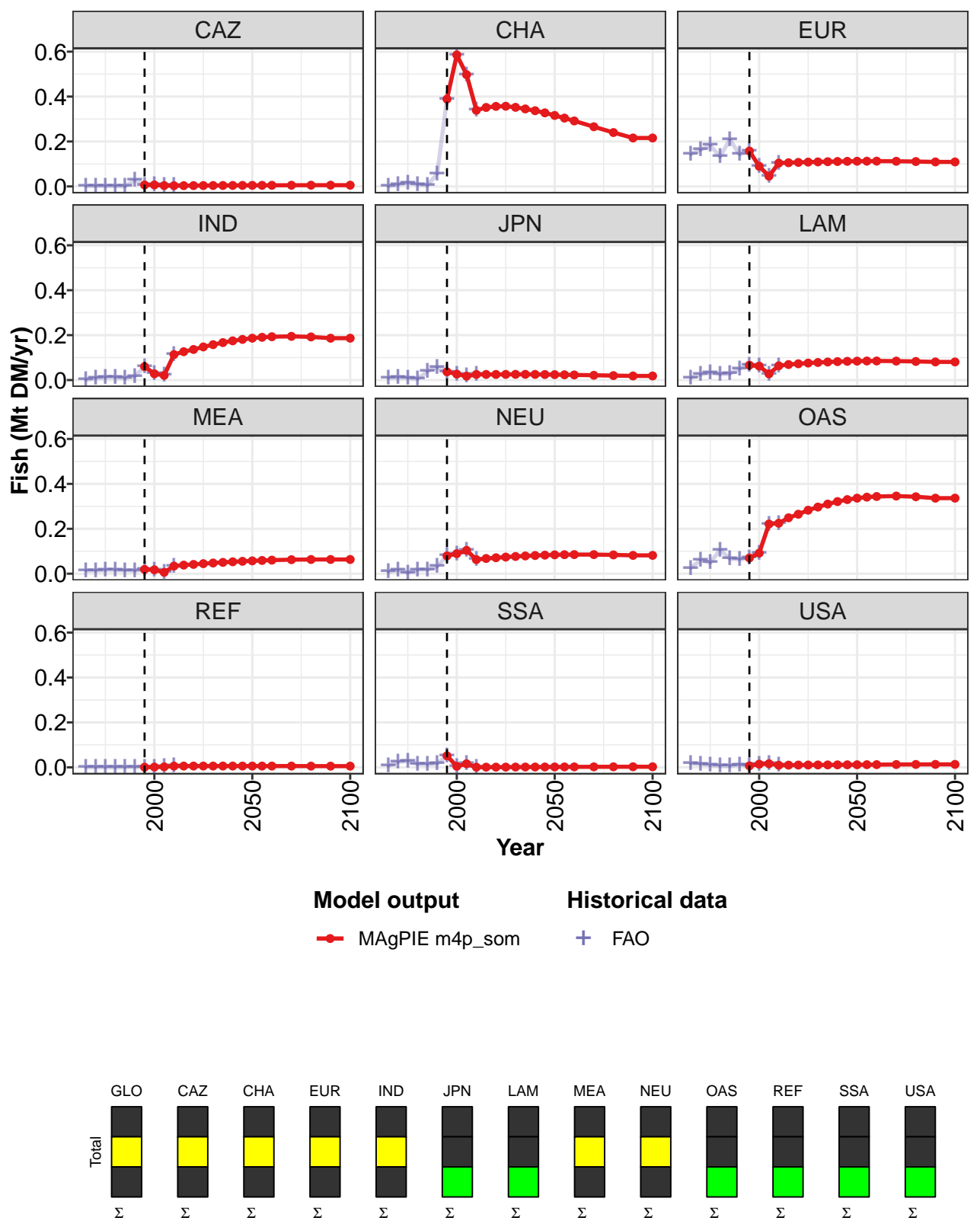


Figure 170: MAGPIE m4p\_som — Demand—Material—Fish (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.94	1.02	0.98	0.99	1.05	1.10	1.14	1.17	1.19	1.21	1.22
CAZ	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.39	0.59	0.50	0.34	0.35	0.36	0.36	0.35	0.35	0.34	0.33
EUR	0.16	0.09	0.05	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11
IND	0.06	0.03	0.02	0.11	0.13	0.14	0.15	0.16	0.17	0.17	0.18
JPN	0.04	0.03	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02
LAM	0.07	0.06	0.03	0.06	0.07	0.07	0.08	0.08	0.08	0.08	0.08
MEA	0.02	0.02	0.01	0.03	0.04	0.04	0.04	0.05	0.05	0.05	0.06
NEU	0.08	0.09	0.10	0.06	0.07	0.07	0.07	0.08	0.08	0.08	0.08
OAS	0.07	0.09	0.22	0.22	0.25	0.26	0.28	0.30	0.31	0.32	0.33
REF	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
SSA	0.05	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

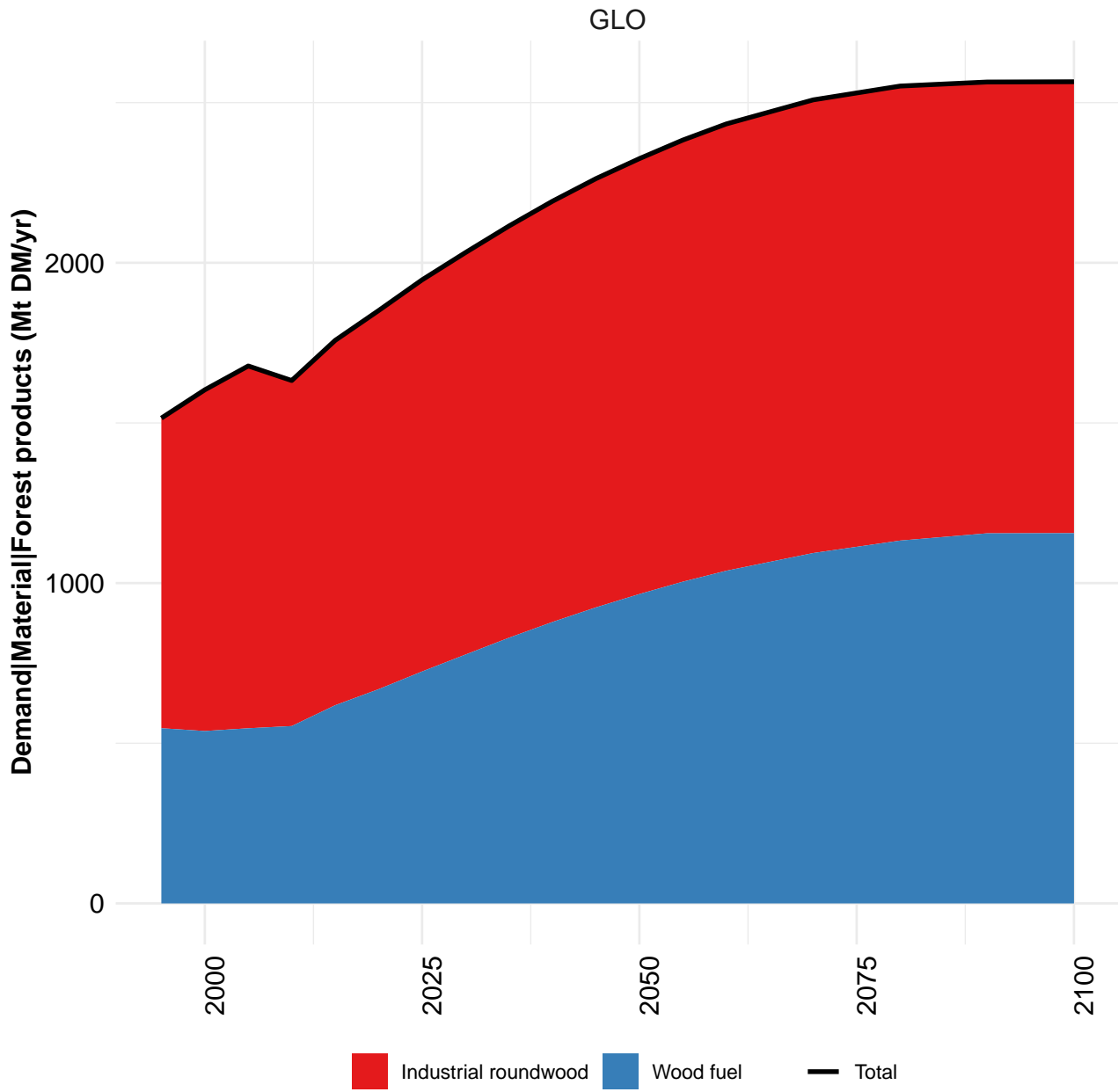
Table 509: MAgPIE m4p\_som — Demand—Material—Fish (Mt DM/yr) [PART 1/2]

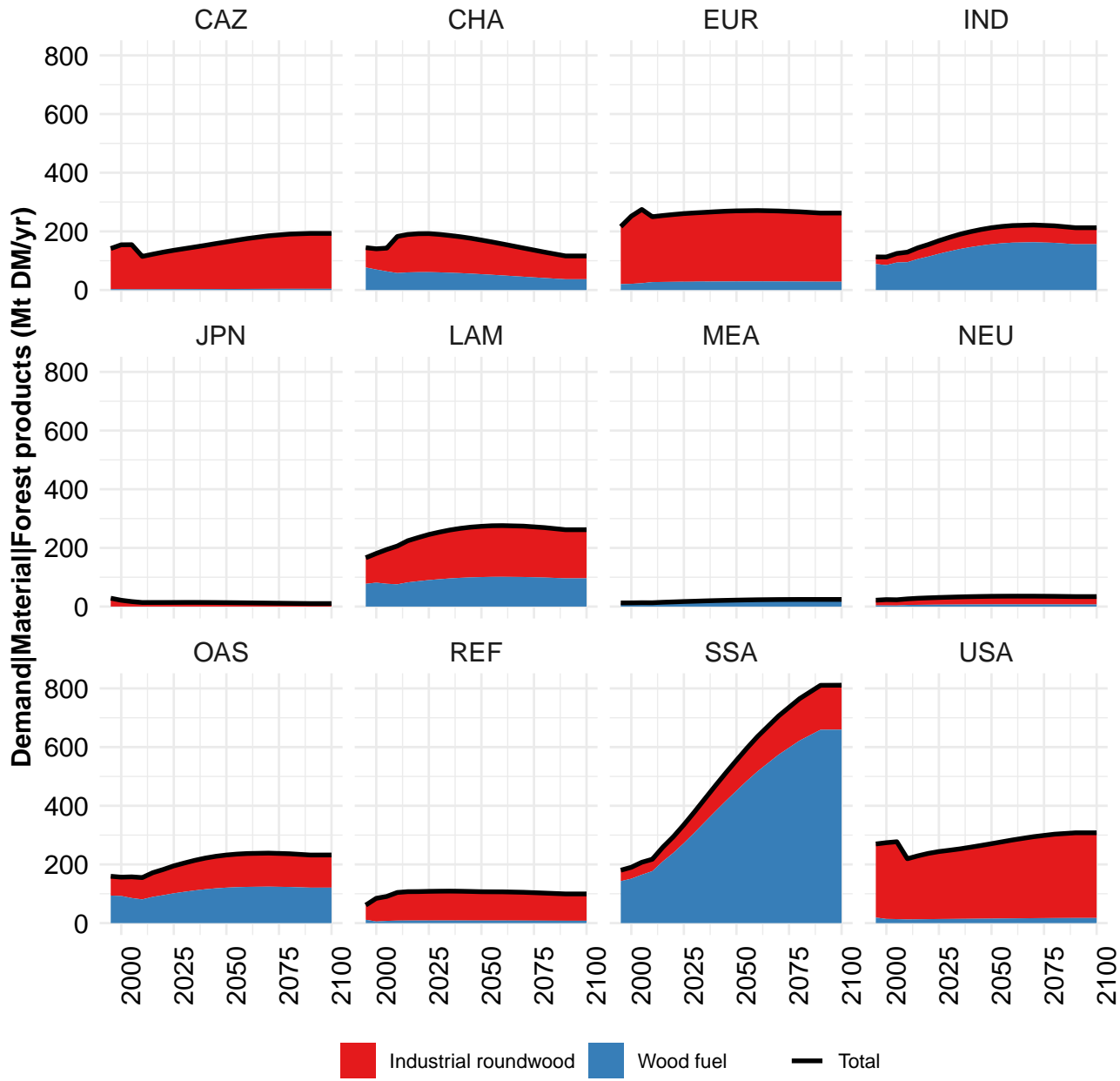
	2050	2055	2060	2070	2080	2090	2100
GLO	1.22	1.22	1.22	1.20	1.16	1.12	1.12
CAZ	0.00	0.00	0.01	0.01	0.01	0.01	0.01
CHA	0.32	0.30	0.29	0.27	0.24	0.22	0.22
EUR	0.11	0.11	0.11	0.11	0.11	0.11	0.11
IND	0.19	0.19	0.19	0.19	0.19	0.19	0.19
JPN	0.02	0.02	0.02	0.02	0.02	0.02	0.02
LAM	0.08	0.08	0.09	0.08	0.08	0.08	0.08
MEA	0.06	0.06	0.06	0.06	0.06	0.06	0.06
NEU	0.08	0.08	0.09	0.09	0.08	0.08	0.08
OAS	0.34	0.34	0.34	0.35	0.34	0.34	0.34
REF	0.01	0.01	0.01	0.01	0.01	0.01	0.01
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.01	0.01	0.01	0.01	0.01	0.01	0.01

Table 510: MAgPIE m4p\_som — Demand—Material—Fish (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.24	0.35	0.36	0.35	0.40	0.49	0.94	1.02	0.98	0.99
CAZ	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.01	0.00	0.00
CHA	0.00	0.01	0.02	0.01	0.00	0.06	0.39	0.59	0.50	0.34
EUR	0.14	0.16	0.18	0.13	0.21	0.14	0.16	0.09	0.05	0.10
IND	0.00	0.01	0.01	0.01	0.01	0.02	0.06	0.03	0.02	0.11
JPN	0.01	0.01	0.01	0.01	0.04	0.06	0.04	0.03	0.02	0.03
LAM	0.01	0.02	0.03	0.03	0.03	0.05	0.07	0.06	0.03	0.06
MEA	0.01	0.01	0.02	0.02	0.01	0.01	0.02	0.02	0.01	0.03
NEU	0.01	0.02	0.00	0.02	0.02	0.03	0.08	0.09	0.10	0.06
OAS	0.02	0.06	0.05	0.11	0.07	0.06	0.07	0.09	0.22	0.22
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
SSA	0.01	0.02	0.03	0.01	0.01	0.02	0.05	0.00	0.02	0.00
USA	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01

Table 511: FAO — Demand—Material—Fish (Mt DM/yr)

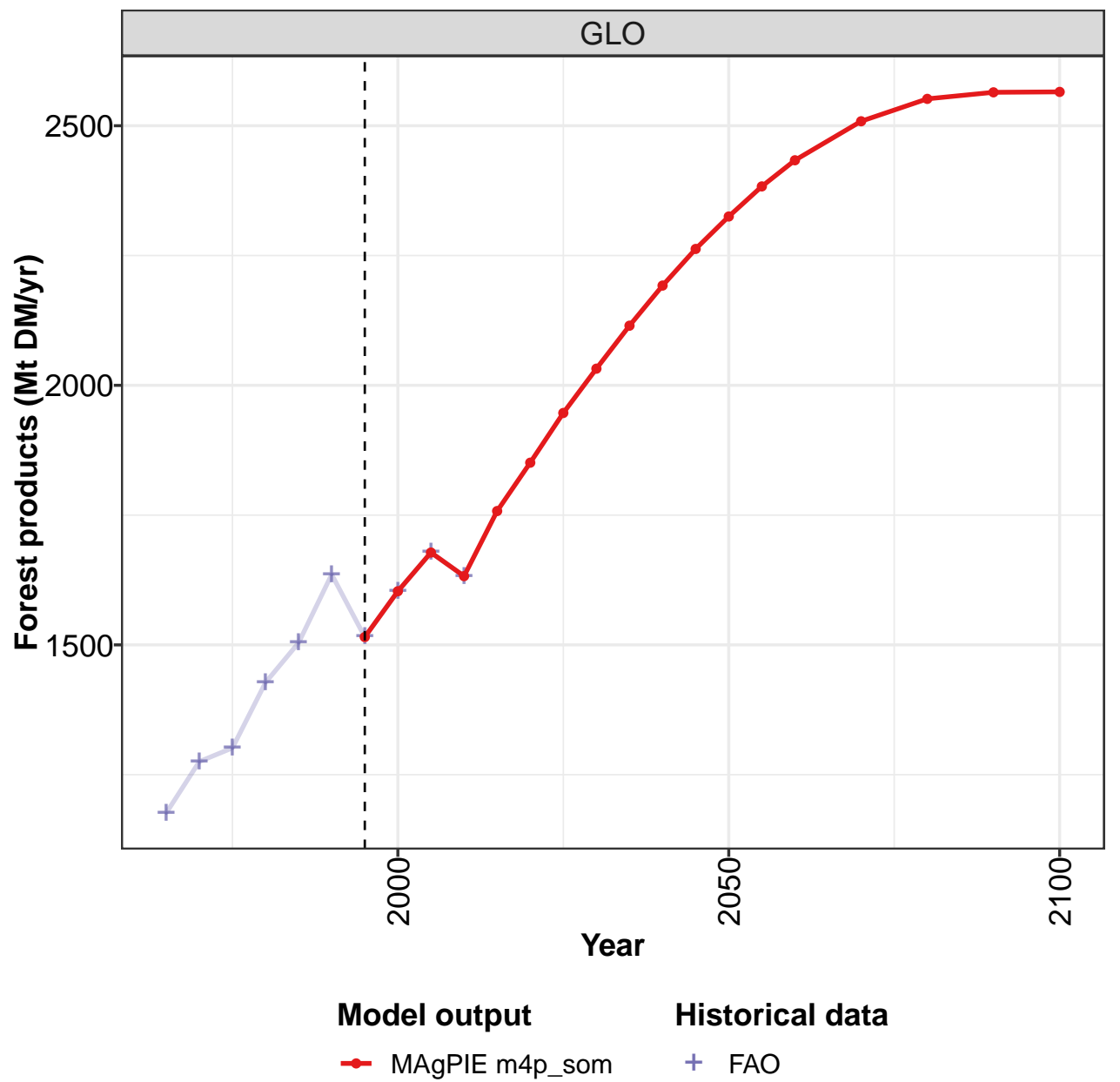






8.4 Forest products

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

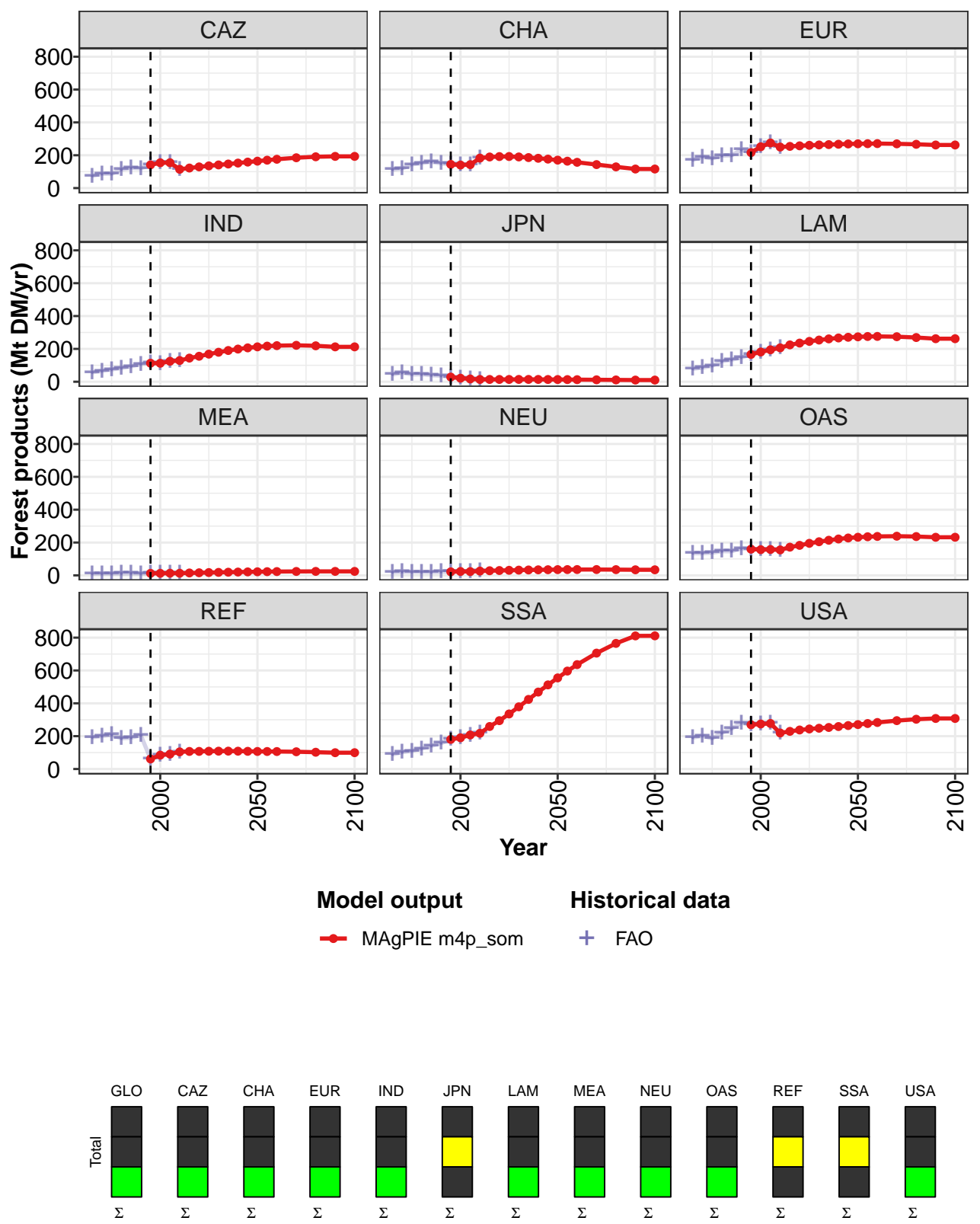


Figure 171: MAgPIE m4p\_som — Demand—Material—Forest products (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1515	1603	1678	1632	1758	1851	1947	2032	2115	2192	2263
CAZ	142	154	155	115	122	129	135	141	147	152	158
CHA	144	141	143	183	189	192	192	190	186	182	177
EUR	216	252	275	250	254	257	261	263	265	267	269
IND	113	113	125	129	144	155	168	180	190	199	206
JPN	28	22	17	14	14	14	14	14	14	14	14
LAM	166	181	194	206	224	235	246	254	261	267	271
MEA	13	13	13	13	15	16	17	18	19	20	21
NEU	22	24	23	26	28	30	31	32	33	34	34
OAS	160	157	158	155	172	183	195	205	214	222	228
REF	61	84	91	104	107	107	108	109	109	109	108
SSA	180	190	207	218	259	294	335	379	424	469	512
USA	270	274	277	219	229	238	244	248	253	259	265

Table 512: MAgPIE m4p\_som — Demand—Material—Forest products (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	2325	2383	2434	2509	2552	2564	2565
CAZ	164	170	176	185	191	193	193
CHA	170	164	157	143	129	116	116
EUR	270	270	271	269	267	263	263
IND	212	217	220	222	219	212	212
JPN	13	13	13	12	11	10	10
LAM	274	275	276	274	269	262	262
MEA	22	23	23	24	24	24	24
NEU	35	35	36	35	35	34	34
OAS	232	235	237	239	236	232	232
REF	107	107	107	105	102	99	99
SSA	555	596	636	706	765	811	811
USA	271	277	283	295	303	308	308

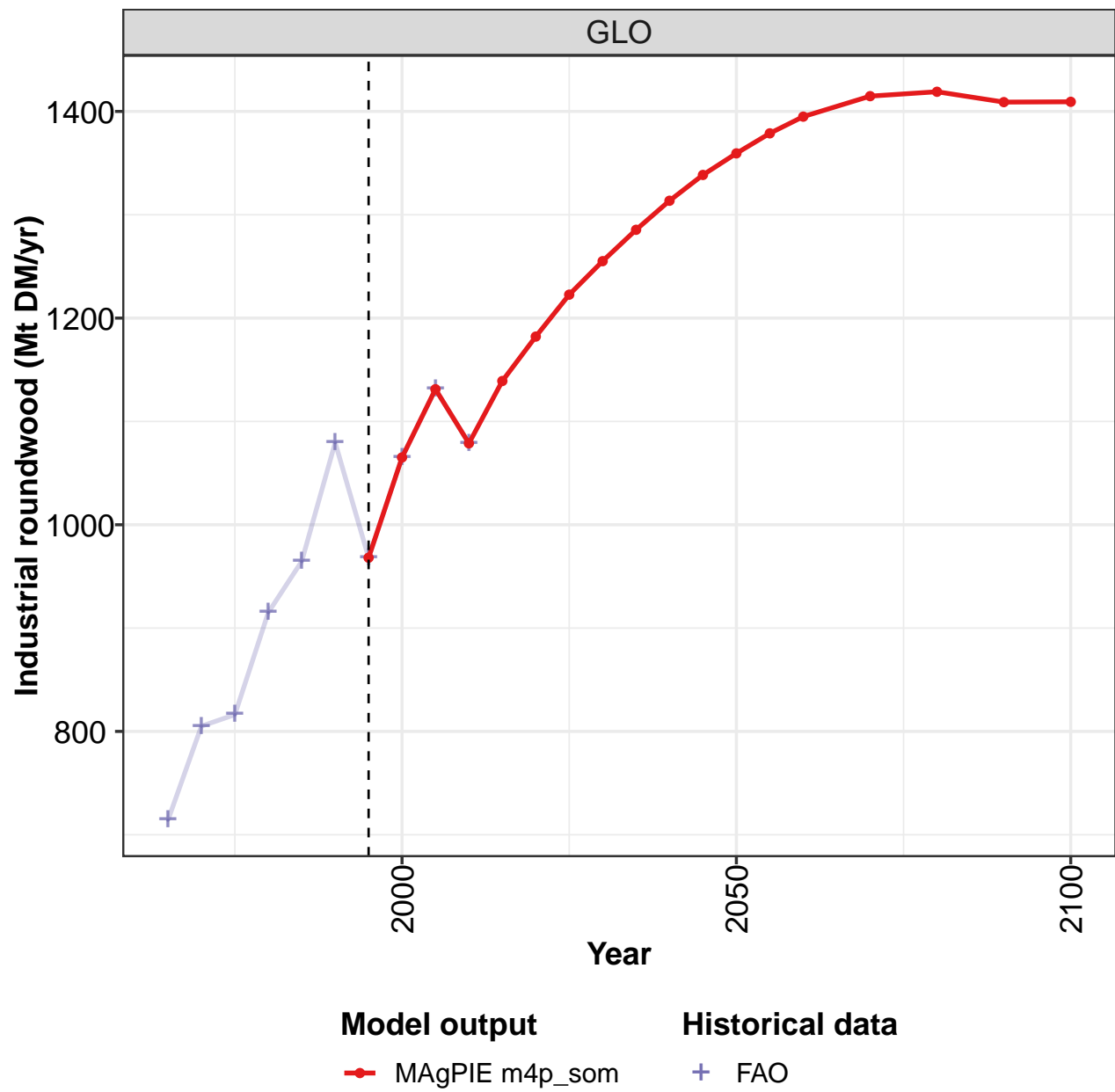
Table 513: MAgPIE m4p\_som — Demand—Material—Forest products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1176	1275	1301	1427	1504	1636	1515	1603	1678	1632
CAZ	74	86	87	114	123	120	142	154	155	115
CHA	113	119	144	152	160	150	144	141	143	183
EUR	171	191	180	197	199	233	216	252	275	250
IND	57	66	75	84	94	108	113	113	125	129
JPN	44	55	44	45	39	36	28	22	17	14
LAM	78	86	97	124	134	148	166	181	194	206
MEA	11	11	11	12	13	11	13	13	13	13
NEU	19	22	21	21	20	21	22	24	23	26
OAS	135	135	138	147	146	164	160	157	158	155
REF	193	201	208	187	190	206	61	84	91	104
SSA	89	102	110	124	141	157	180	190	207	218
USA	191	202	186	220	245	282	270	274	277	219

Table 514: FAO — Demand—Material—Forest products (Mt DM/yr)

8.4.1 Industrial roundwood

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

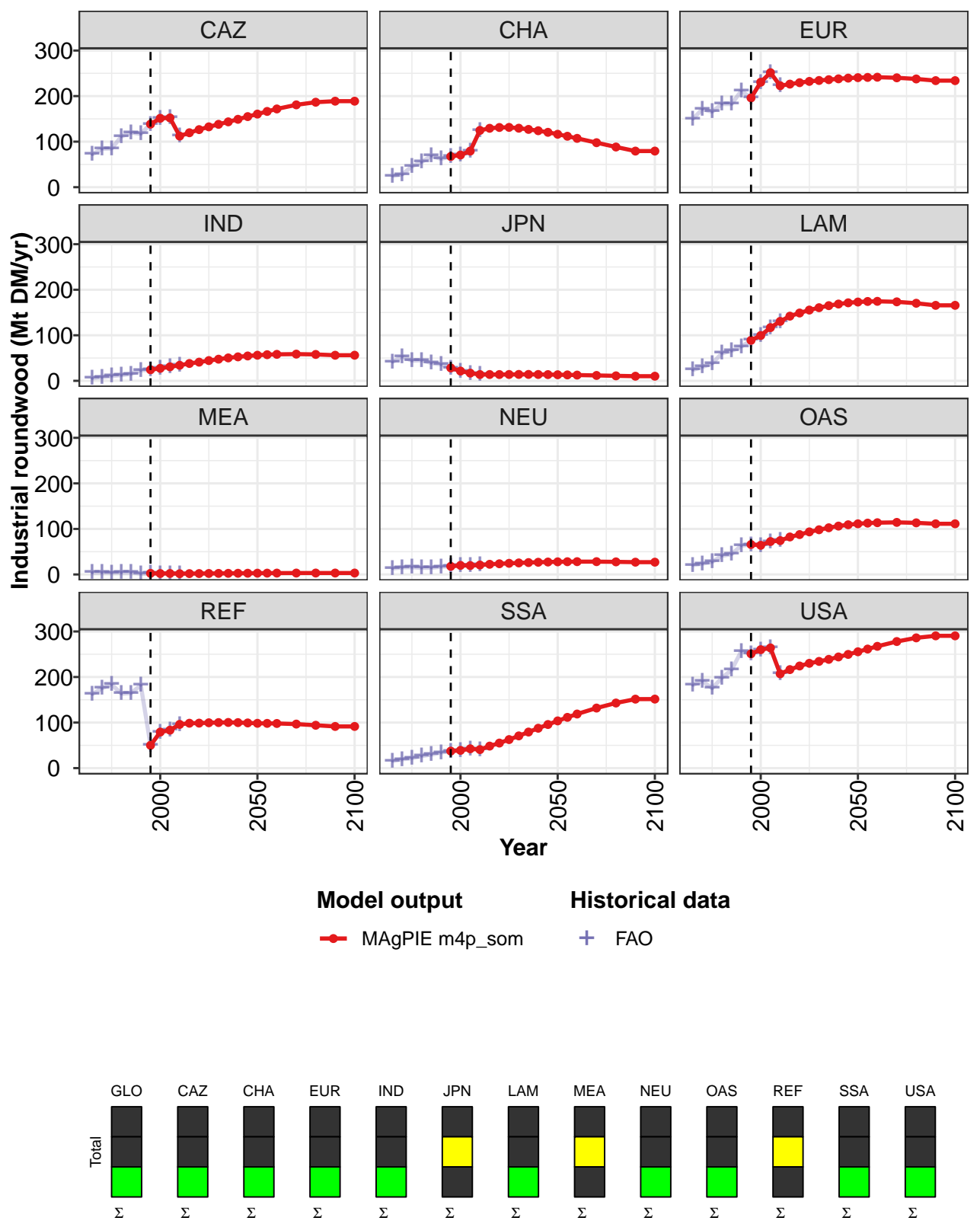


Figure 172: MAgPIE m4p\_som — Demand—Material—Forest products—Industrial roundwood (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	968	1065	1131	1079	1139	1182	1223	1255	1285	1314	1339
CAZ	138	151	152	112	120	126	133	138	143	149	155
CHA	67	71	79	125	129	131	131	130	127	124	121
EUR	196	230	251	223	226	229	232	234	236	238	240
IND	24	27	31	34	38	41	44	48	50	53	55
JPN	28	21	17	14	14	14	14	14	14	14	14
LAM	89	99	117	131	142	149	155	161	165	169	171
MEA	3	2	2	2	2	2	2	2	3	3	3
NEU	18	20	20	21	22	24	25	25	26	27	27
OAS	66	64	72	74	82	88	94	98	103	106	109
REF	50	79	83	96	99	99	100	100	100	100	99
SSA	37	39	42	41	48	55	63	71	79	88	96
USA	251	260	264	207	216	224	230	234	239	244	250

Table 515: MAgPIE m4p\_som — Demand—Material—Forest products—Industrial roundwood (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1359	1379	1395	1415	1419	1409	1409
CAZ	161	166	172	181	187	189	189
CHA	116	112	107	98	88	79	79
EUR	241	241	241	240	238	234	234
IND	56	57	58	59	58	56	56
JPN	13	13	13	12	11	10	10
LAM	173	174	175	173	170	166	166
MEA	3	3	3	3	3	3	3
NEU	28	28	28	28	28	27	27
OAS	111	113	114	114	113	111	111
REF	98	98	98	97	94	91	92
SSA	104	111	119	132	143	151	152
USA	255	261	267	278	286	290	290

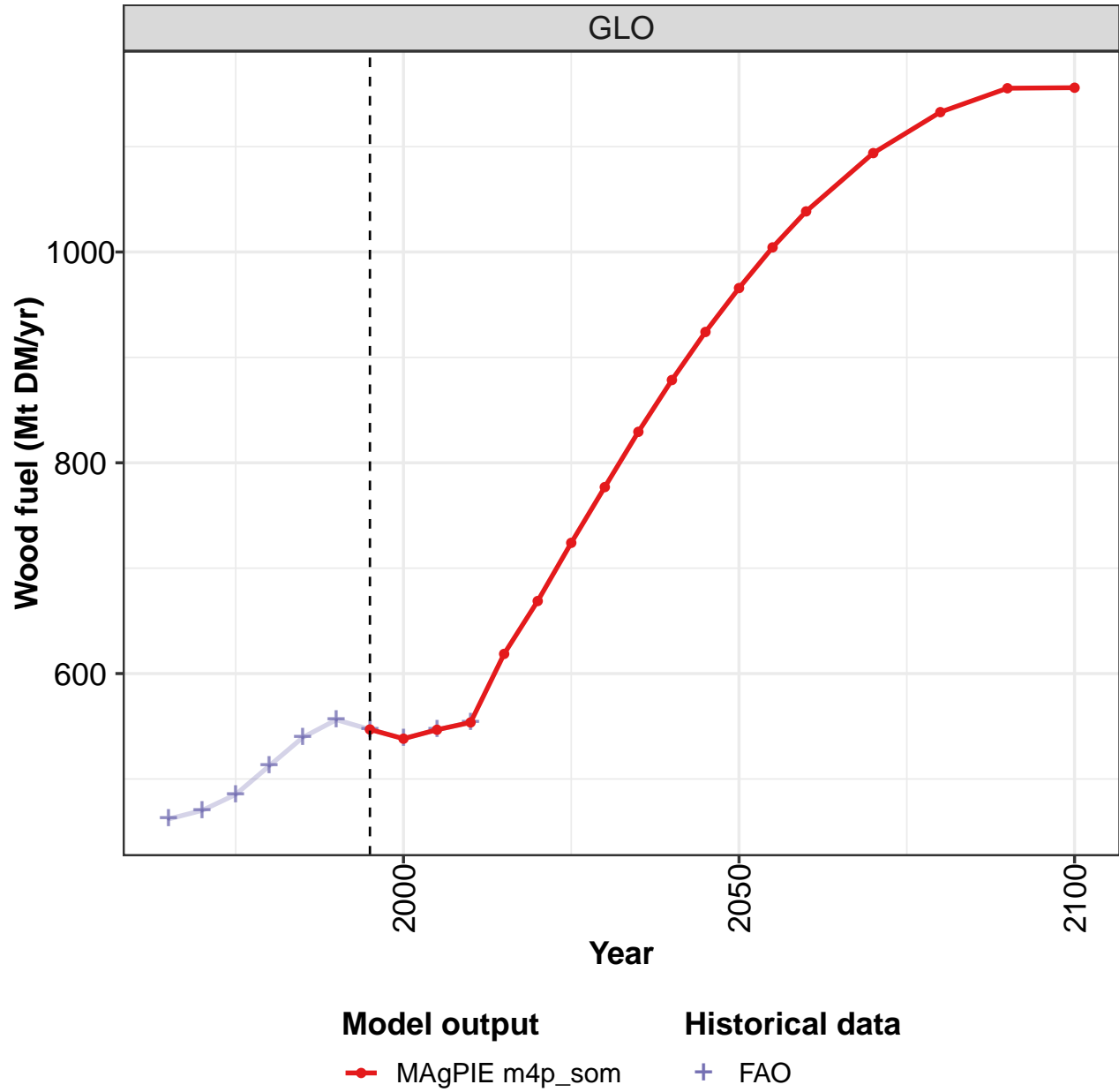
Table 516: MAgPIE m4p\_som — Demand—Material—Forest products—Industrial roundwood (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	714	805	816	915	965	1079	968	1065	1131	1079
CAZ	72	84	85	111	120	117	138	151	152	112
CHA	25	28	46	55	69	62	67	71	79	125
EUR	150	171	166	183	183	212	196	230	251	223
IND	5	8	10	12	15	23	24	27	31	34
JPN	41	54	44	45	39	36	28	21	17	14
LAM	24	31	38	60	66	75	89	99	117	131
MEA	4	4	4	4	5	2	3	2	2	2
NEU	13	15	16	14	15	17	18	20	20	21
OAS	21	24	28	41	45	63	66	64	72	74
REF	162	175	184	163	165	182	50	79	83	96
SSA	15	19	22	26	30	34	37	39	42	41
USA	182	191	175	198	215	257	251	260	264	207

Table 517: FAO — Demand—Material—Forest products—Industrial roundwood (Mt DM/yr)

8.4.2 Wood fuel

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

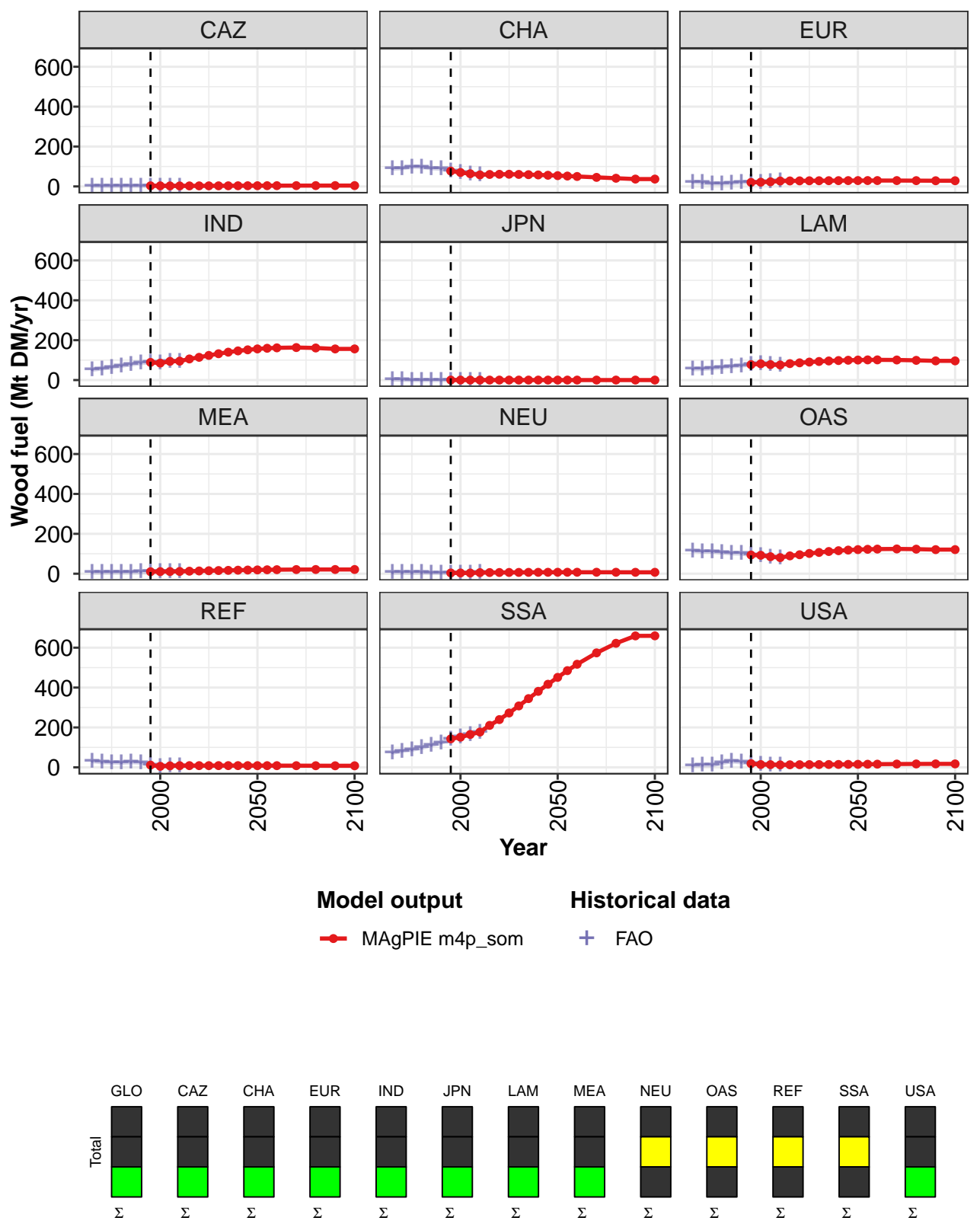


Figure 173: MAgPIE m4p\_som — Demand—Material—Forest products—Wood fuel (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	547	538	547	554	619	669	724	777	829	879	924
CAZ	3	3	3	2	3	3	3	3	3	3	3
CHA	77	70	64	58	60	61	61	60	59	58	56
EUR	20	21	23	27	28	28	28	29	29	29	29
IND	89	85	94	95	106	114	124	132	140	146	152
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	77	82	78	76	82	86	90	93	96	98	99
MEA	10	10	11	11	13	14	15	16	17	18	18
NEU	4	4	4	5	6	6	6	7	7	7	7
OAS	94	92	85	81	89	95	102	107	111	115	119
REF	11	5	7	8	9	9	9	9	9	9	9
SSA	143	151	165	177	210	239	273	308	345	381	417
USA	19	14	13	12	13	13	14	14	14	15	15

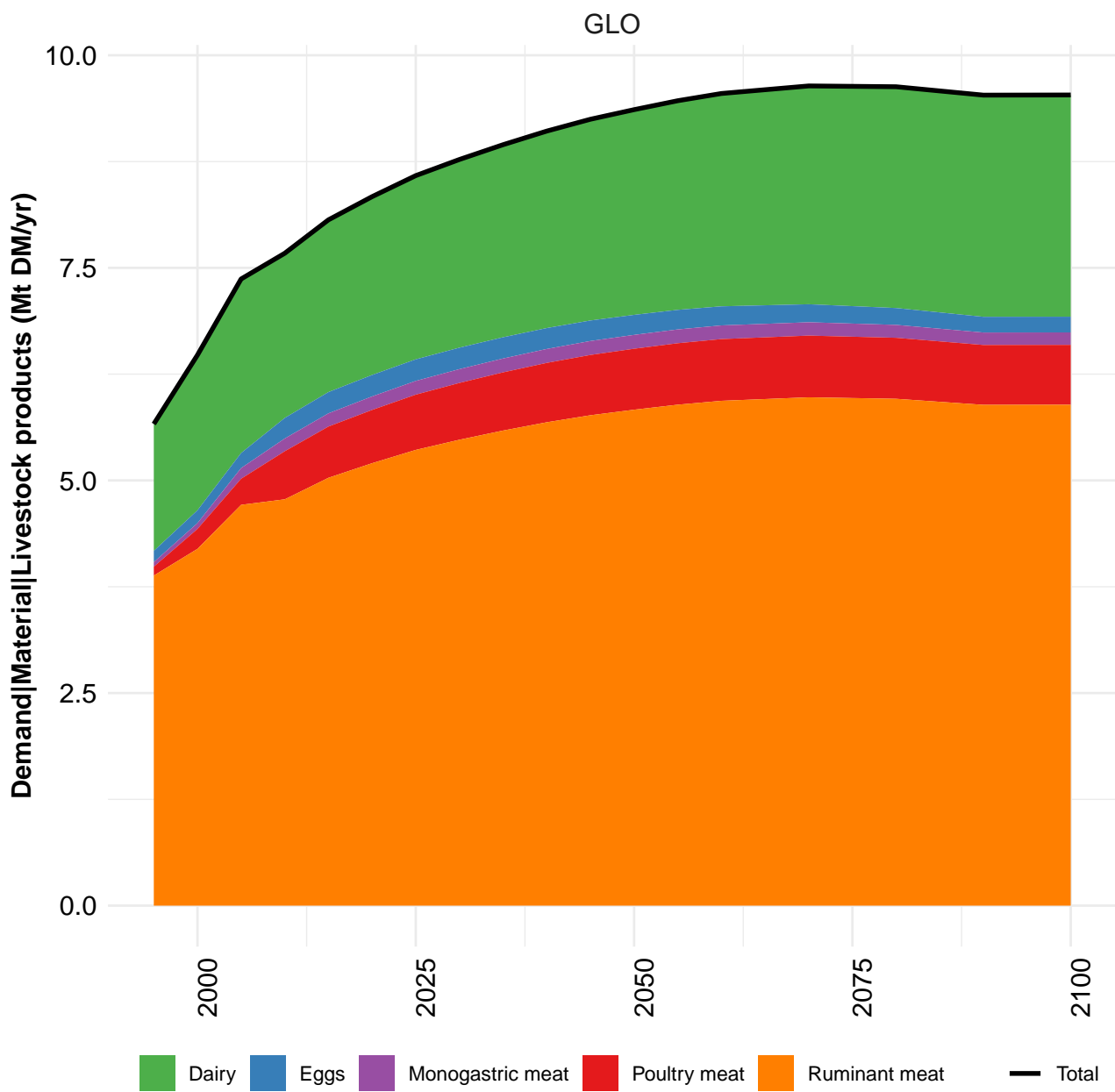
Table 518: MAgPIE m4p\_som — Demand—Material—Forest products—Wood fuel (Mt DM/yr) [PART 1/2]

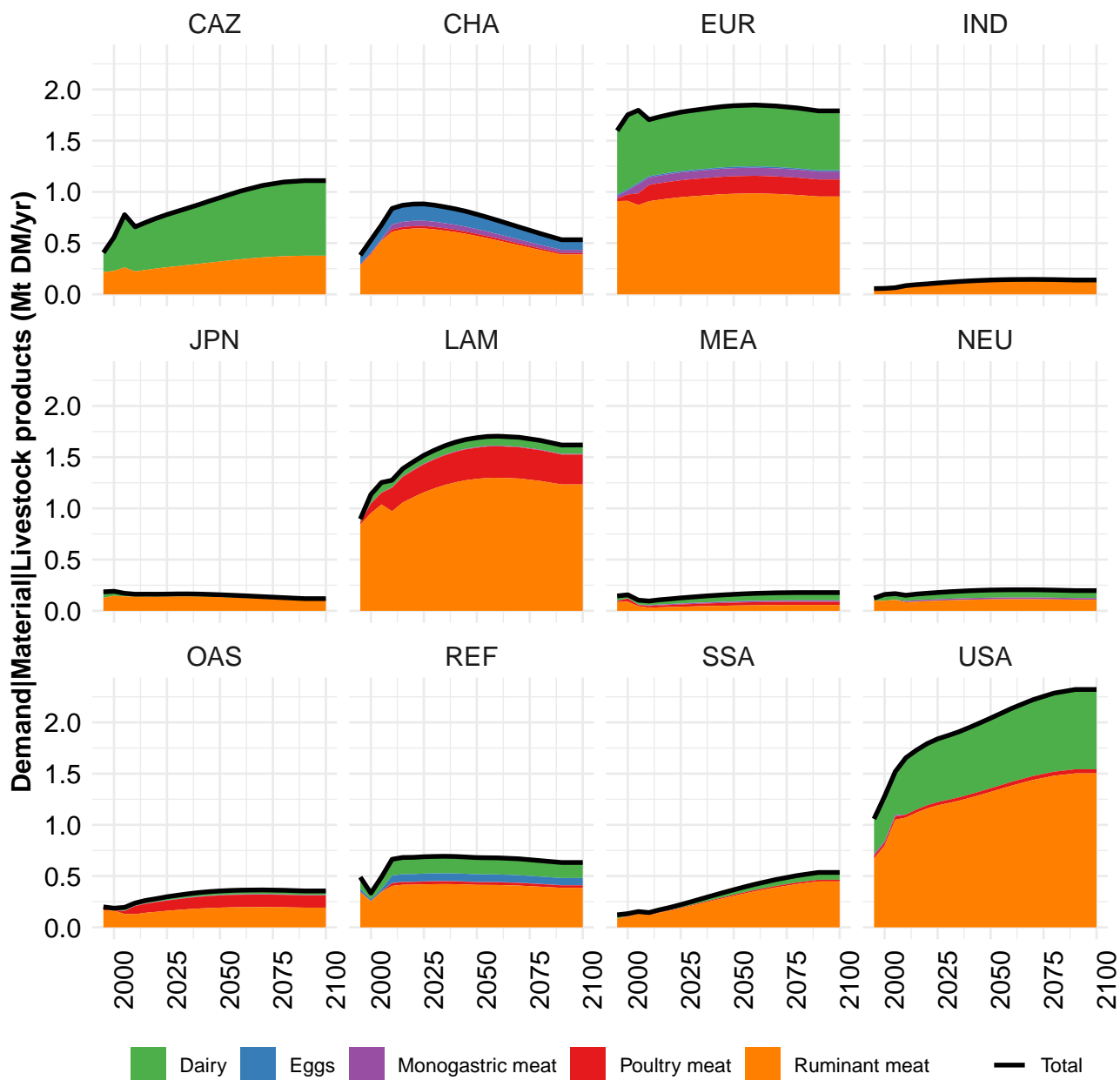
	2050	2055	2060	2070	2080	2090	2100
GLO	966	1004	1039	1094	1133	1155	1156
CAZ	4	4	4	4	4	4	4
CHA	54	52	50	45	41	37	37
EUR	29	29	29	29	29	29	29
IND	156	159	162	163	161	156	156
JPN	0	0	0	0	0	0	0
LAM	100	101	101	101	99	96	96
MEA	19	20	20	21	21	21	21
NEU	7	7	7	7	7	7	7
OAS	121	122	123	124	123	121	121
REF	9	9	8	8	8	8	8
SSA	451	485	517	574	622	659	659
USA	15	16	16	17	17	17	17

Table 519: MAgPIE m4p\_som — Demand—Material—Forest products—Wood fuel (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	462	470	485	512	539	556	547	538	547	554
CAZ	3	2	2	2	3	3	3	3	3	2
CHA	88	91	98	97	91	88	77	70	64	58
EUR	22	19	15	15	17	21	20	21	23	27
IND	52	58	64	71	79	85	89	85	94	95
JPN	3	1	0	0	0	0	0	0	0	0
LAM	54	55	59	64	68	72	77	82	78	76
MEA	7	7	7	8	8	9	10	10	11	11
NEU	6	6	5	7	5	5	4	4	4	5
OAS	114	111	111	106	102	101	94	92	85	81
REF	31	25	24	23	26	24	11	5	7	8
SSA	73	82	88	98	111	123	143	151	165	177
USA	9	11	11	22	30	25	19	14	13	12

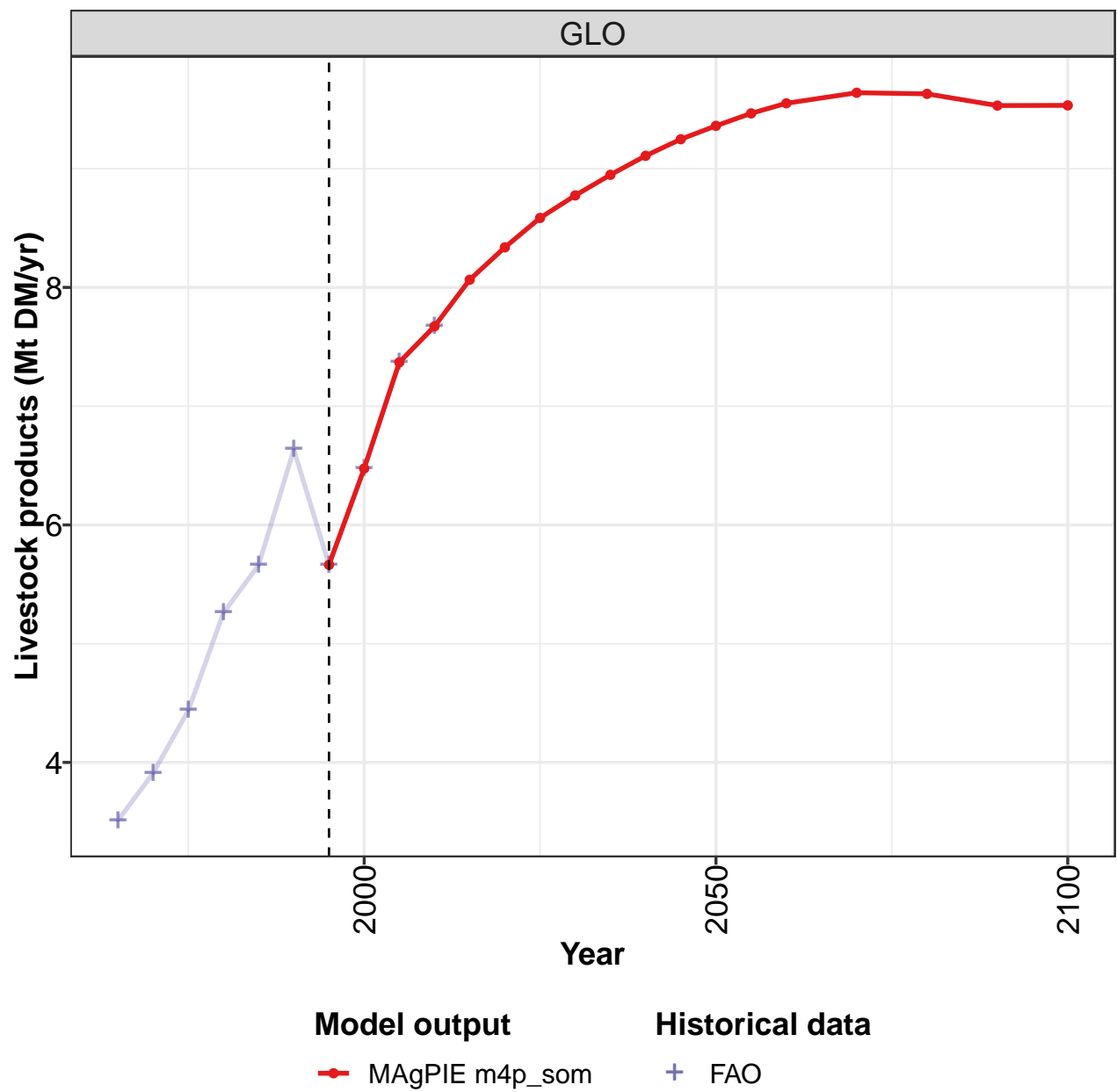
Table 520: FAO — Demand—Material—Forest products—Wood fuel (Mt DM/yr)





8.5 Livestock products

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

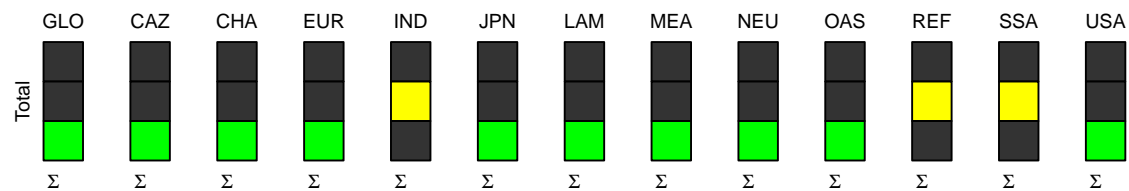
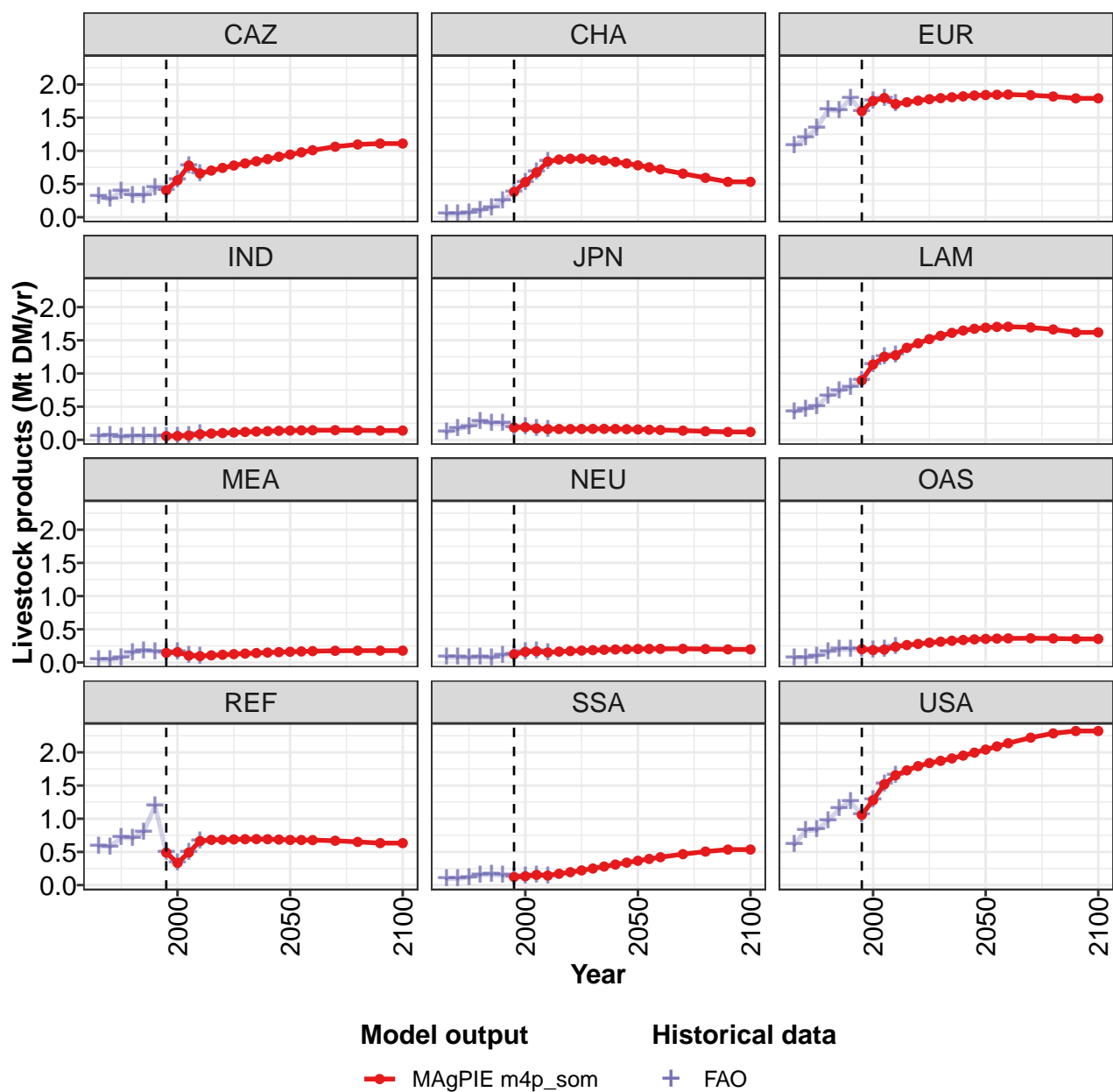


Figure 174: MAGPIE m4p\_som — Demand—Material—Livestock products (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	5.66	6.47	7.37	7.67	8.06	8.34	8.59	8.77	8.95	9.11	9.25
CAZ	0.41	0.56	0.78	0.66	0.70	0.74	0.78	0.81	0.84	0.88	0.91
CHA	0.38	0.53	0.68	0.84	0.87	0.88	0.88	0.87	0.85	0.83	0.81
EUR	1.60	1.75	1.80	1.71	1.73	1.76	1.78	1.79	1.81	1.82	1.83
IND	0.06	0.06	0.07	0.09	0.09	0.10	0.11	0.12	0.13	0.13	0.14
JPN	0.19	0.19	0.17	0.16	0.16	0.16	0.16	0.17	0.17	0.16	0.16
LAM	0.90	1.14	1.25	1.27	1.39	1.45	1.52	1.57	1.61	1.65	1.67
MEA	0.15	0.16	0.10	0.10	0.11	0.12	0.13	0.13	0.14	0.15	0.16
NEU	0.12	0.16	0.17	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.20
OAS	0.20	0.19	0.19	0.24	0.26	0.28	0.30	0.31	0.33	0.34	0.35
REF	0.49	0.33	0.49	0.66	0.68	0.68	0.69	0.69	0.69	0.69	0.69
SSA	0.12	0.13	0.15	0.14	0.17	0.19	0.22	0.25	0.28	0.31	0.34
USA	1.06	1.28	1.52	1.65	1.73	1.79	1.84	1.87	1.91	1.95	2.00

Table 521: MAgPIE m4p\_som — Demand—Material—Livestock products (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	9.36	9.47	9.55	9.64	9.63	9.53	9.53
CAZ	0.94	0.98	1.01	1.06	1.10	1.11	1.11
CHA	0.78	0.75	0.72	0.66	0.59	0.53	0.53
EUR	1.84	1.85	1.85	1.84	1.82	1.79	1.79
IND	0.14	0.14	0.14	0.15	0.14	0.14	0.14
JPN	0.16	0.15	0.15	0.14	0.13	0.12	0.12
LAM	1.69	1.70	1.70	1.69	1.66	1.62	1.62
MEA	0.16	0.17	0.17	0.18	0.18	0.18	0.18
NEU	0.20	0.20	0.21	0.21	0.20	0.20	0.20
OAS	0.36	0.36	0.36	0.36	0.36	0.35	0.36
REF	0.68	0.68	0.68	0.67	0.65	0.63	0.63
SSA	0.37	0.39	0.42	0.47	0.51	0.54	0.54
USA	2.04	2.09	2.14	2.22	2.29	2.32	2.32

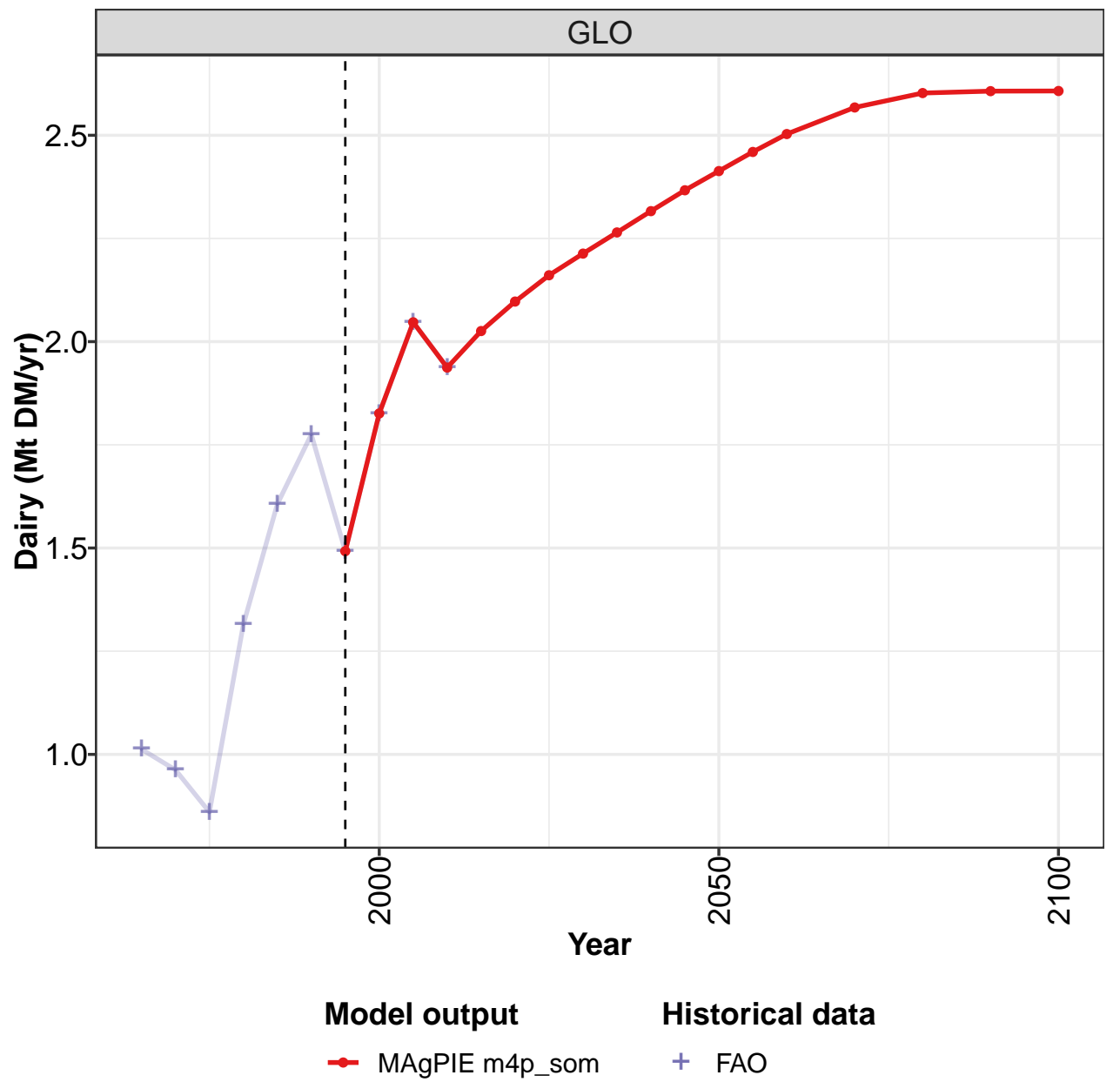
Table 522: MAgPIE m4p\_som — Demand—Material—Livestock products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3.51	3.91	4.44	5.26	5.66	6.63	5.66	6.47	7.37	7.67
CAZ	0.31	0.27	0.40	0.33	0.33	0.44	0.41	0.56	0.78	0.66
CHA	0.05	0.05	0.06	0.10	0.14	0.25	0.38	0.53	0.68	0.84
EUR	1.08	1.19	1.34	1.62	1.60	1.79	1.60	1.75	1.80	1.71
IND	0.06	0.07	0.04	0.06	0.05	0.06	0.06	0.06	0.07	0.09
JPN	0.11	0.16	0.20	0.28	0.25	0.24	0.19	0.19	0.17	0.16
LAM	0.42	0.47	0.50	0.66	0.73	0.79	0.90	1.14	1.25	1.27
MEA	0.04	0.04	0.07	0.15	0.18	0.16	0.15	0.16	0.10	0.10
NEU	0.08	0.07	0.07	0.08	0.07	0.11	0.12	0.16	0.17	0.15
OAS	0.07	0.07	0.10	0.16	0.20	0.20	0.20	0.19	0.19	0.24
REF	0.59	0.58	0.72	0.71	0.80	1.20	0.49	0.33	0.49	0.66
SSA	0.09	0.10	0.11	0.16	0.16	0.14	0.12	0.13	0.15	0.14
USA	0.61	0.82	0.83	0.97	1.15	1.26	1.06	1.28	1.52	1.65

Table 523: FAO — Demand—Material—Livestock products (Mt DM/yr)

8.5.1
Dairy

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

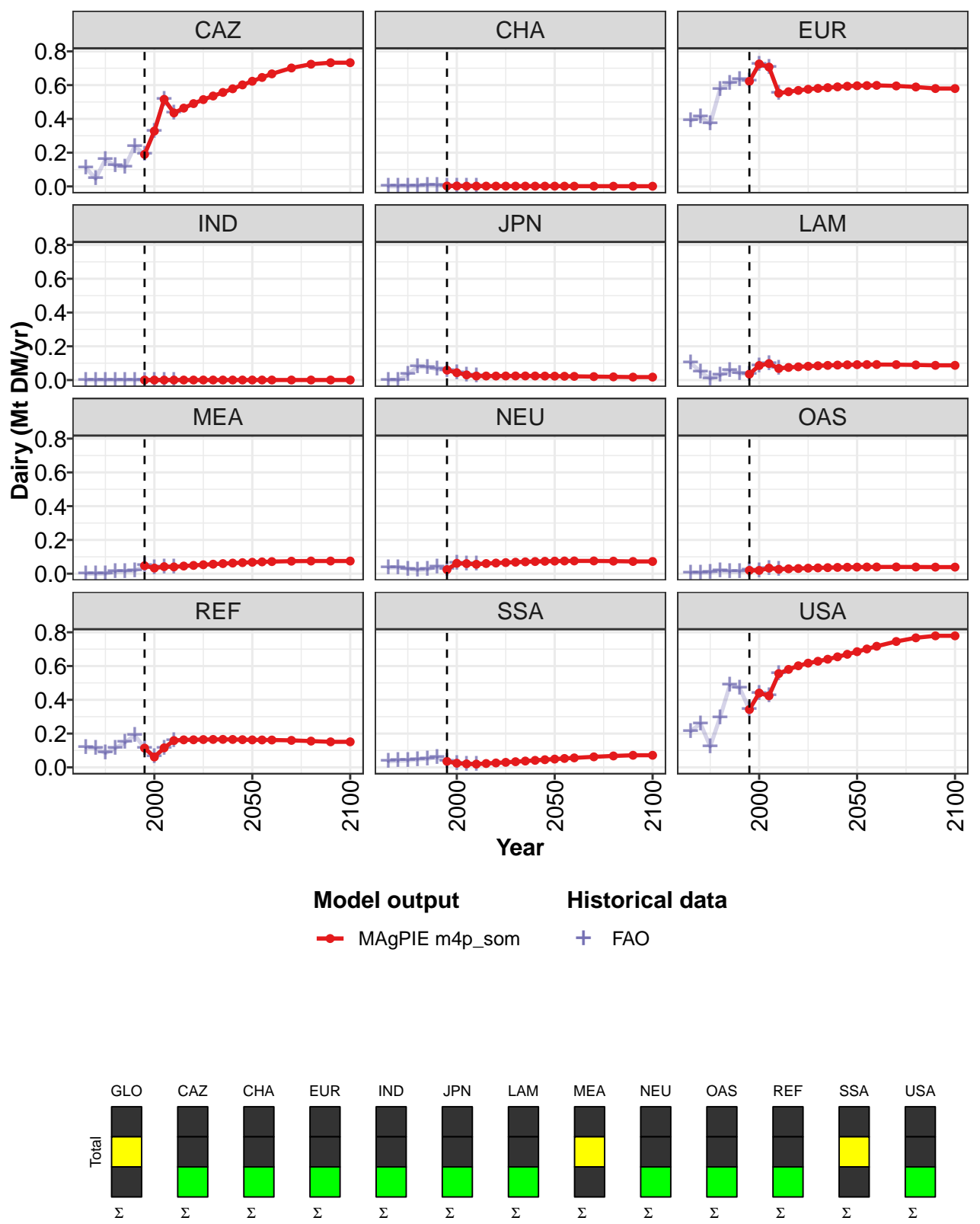


Figure 175: MAgPIE m4p\_som — Demand—Material—Livestock products—Dairy (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.49	1.83	2.05	1.94	2.03	2.10	2.16	2.21	2.26	2.32	2.37
CAZ	0.19	0.33	0.52	0.44	0.46	0.49	0.51	0.54	0.56	0.58	0.60
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.62	0.73	0.71	0.55	0.56	0.57	0.58	0.58	0.59	0.59	0.59
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.06	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
LAM	0.04	0.09	0.10	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.09
MEA	0.05	0.03	0.04	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.07
NEU	0.02	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07
OAS	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04
REF	0.11	0.06	0.12	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.16
SSA	0.04	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.05
USA	0.34	0.44	0.42	0.56	0.58	0.60	0.62	0.63	0.64	0.65	0.67

Table 524: MAgPIE m4p\_som — Demand—Material—Livestock products—Dairy (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	2.41	2.46	2.50	2.57	2.60	2.61	2.61
CAZ	0.62	0.65	0.67	0.70	0.72	0.73	0.73
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.60	0.60	0.60	0.60	0.59	0.58	0.58
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.02	0.02	0.02	0.02	0.02	0.02	0.02
LAM	0.09	0.09	0.09	0.09	0.09	0.09	0.09
MEA	0.07	0.07	0.07	0.07	0.08	0.08	0.08
NEU	0.07	0.08	0.08	0.08	0.07	0.07	0.07
OAS	0.04	0.04	0.04	0.04	0.04	0.04	0.04
REF	0.16	0.16	0.16	0.16	0.16	0.15	0.15
SSA	0.05	0.05	0.06	0.06	0.07	0.07	0.07
USA	0.69	0.70	0.72	0.75	0.77	0.78	0.78

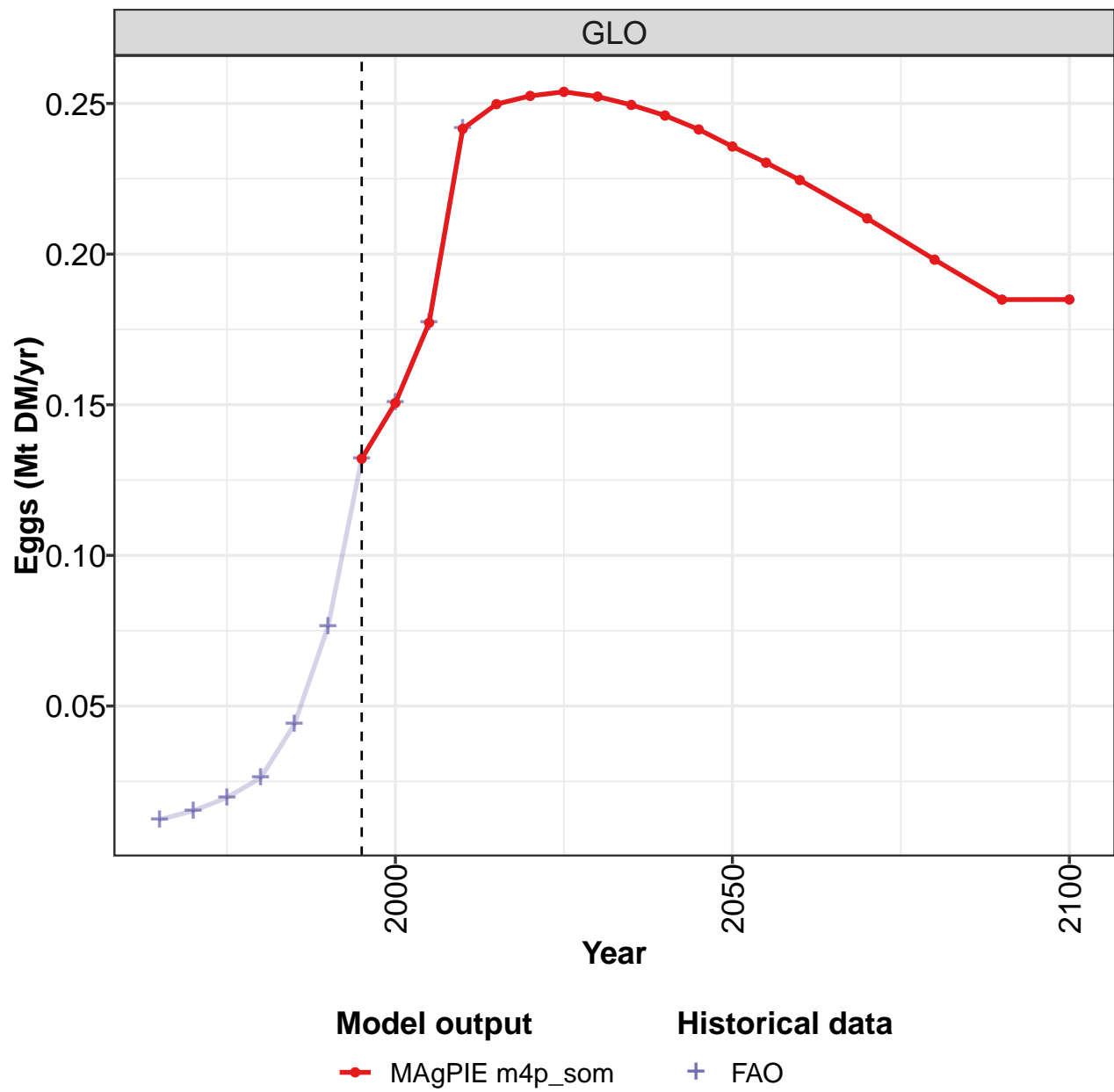
Table 525: MAgPIE m4p\_som — Demand—Material—Livestock products—Dairy (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.01	0.96	0.86	1.32	1.61	1.77	1.49	1.83	2.05	1.94
CAZ	0.11	0.05	0.16	0.12	0.12	0.24	0.19	0.33	0.52	0.44
CHA	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00
EUR	0.39	0.41	0.37	0.58	0.61	0.63	0.62	0.73	0.71	0.55
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.03	0.08	0.08	0.06	0.06	0.04	0.03	0.02
LAM	0.10	0.05	0.01	0.03	0.06	0.04	0.04	0.09	0.10	0.07
MEA	0.00	0.00	0.00	0.01	0.01	0.02	0.05	0.03	0.04	0.04
NEU	0.04	0.04	0.03	0.02	0.03	0.04	0.02	0.06	0.06	0.06
OAS	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.02	0.03	0.03
REF	0.12	0.11	0.08	0.11	0.15	0.19	0.11	0.06	0.12	0.16
SSA	0.04	0.04	0.04	0.05	0.05	0.06	0.04	0.02	0.02	0.02
USA	0.21	0.26	0.12	0.30	0.49	0.47	0.34	0.44	0.42	0.56

Table 526: FAO — Demand—Material—Livestock products—Dairy (Mt DM/yr)

8.5.2 Eggs

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

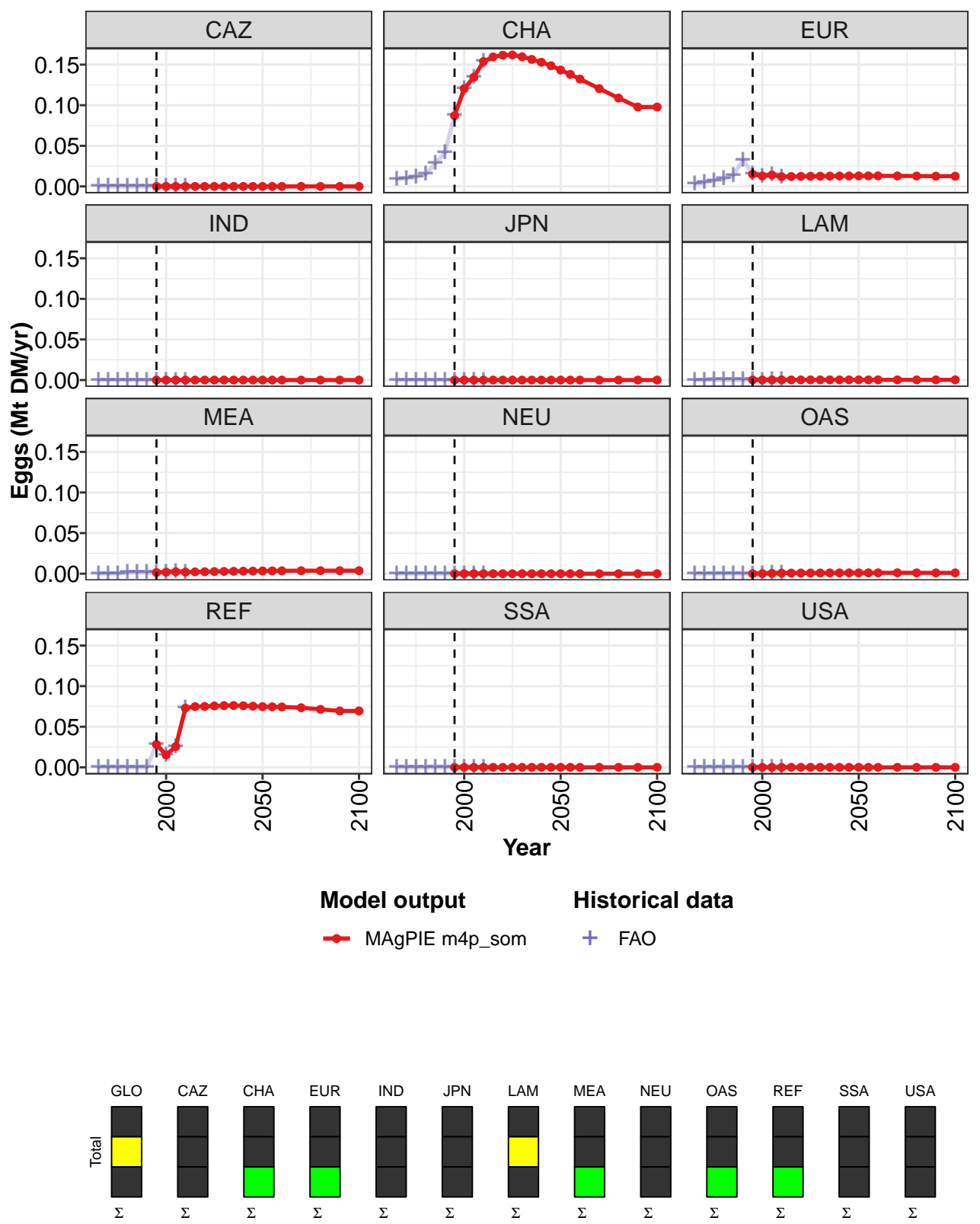


Figure 176: MAgPIE m4p\_som — Demand—Material—Livestock products—Eggs (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.132	0.151	0.177	0.242	0.250	0.253	0.254	0.252	0.250	0.246	0.241
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.087	0.120	0.135	0.154	0.160	0.162	0.162	0.160	0.156	0.153	0.149
EUR	0.015	0.013	0.014	0.012	0.012	0.012	0.013	0.013	0.013	0.013	0.013
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.003
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
REF	0.028	0.015	0.026	0.073	0.075	0.075	0.076	0.076	0.076	0.076	0.075
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 527: MAgPIE m4p\_som — Demand—Material—Livestock products—Eggs (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.236	0.230	0.225	0.212	0.198	0.185	0.185
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.143	0.138	0.132	0.120	0.109	0.098	0.098
EUR	0.013	0.013	0.013	0.013	0.013	0.013	0.013
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.003	0.003	0.004	0.004	0.004	0.004	0.004
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.001	0.001	0.001	0.001	0.001	0.001	0.001
REF	0.075	0.075	0.074	0.073	0.071	0.069	0.069
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000

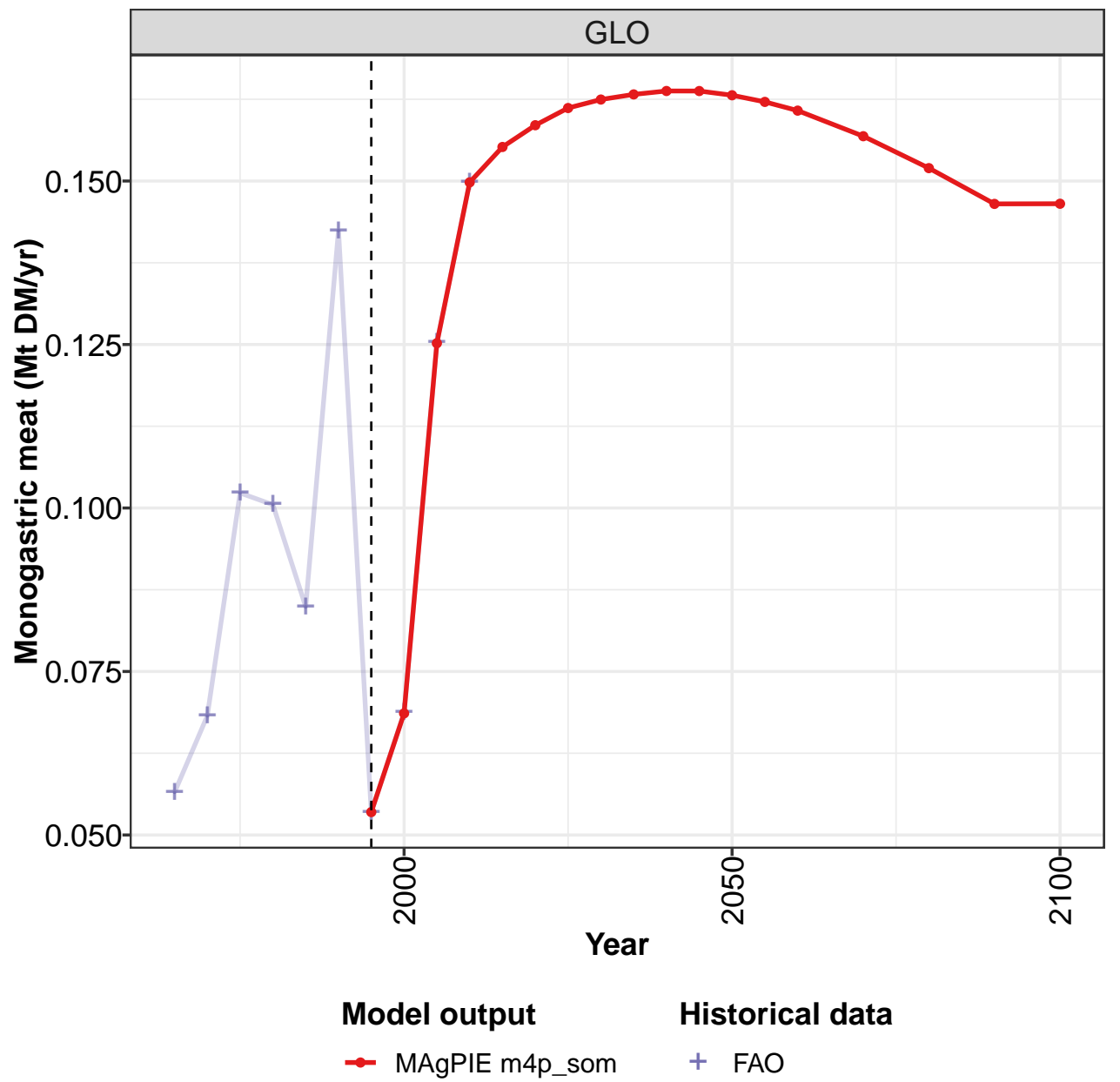
Table 528: MAgPIE m4p\_som — Demand—Material—Livestock products—Eggs (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.012	0.015	0.020	0.026	0.044	0.076	0.132	0.151	0.177	0.242
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.009	0.010	0.012	0.015	0.028	0.042	0.087	0.120	0.135	0.154
EUR	0.003	0.005	0.007	0.009	0.014	0.033	0.015	0.013	0.014	0.012
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEA	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002	0.002	0.002
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.028	0.015	0.026	0.073
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 529: FAO — Demand—Material—Livestock products—Eggs (Mt DM/yr)

8.5.3
Monogastric meat

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

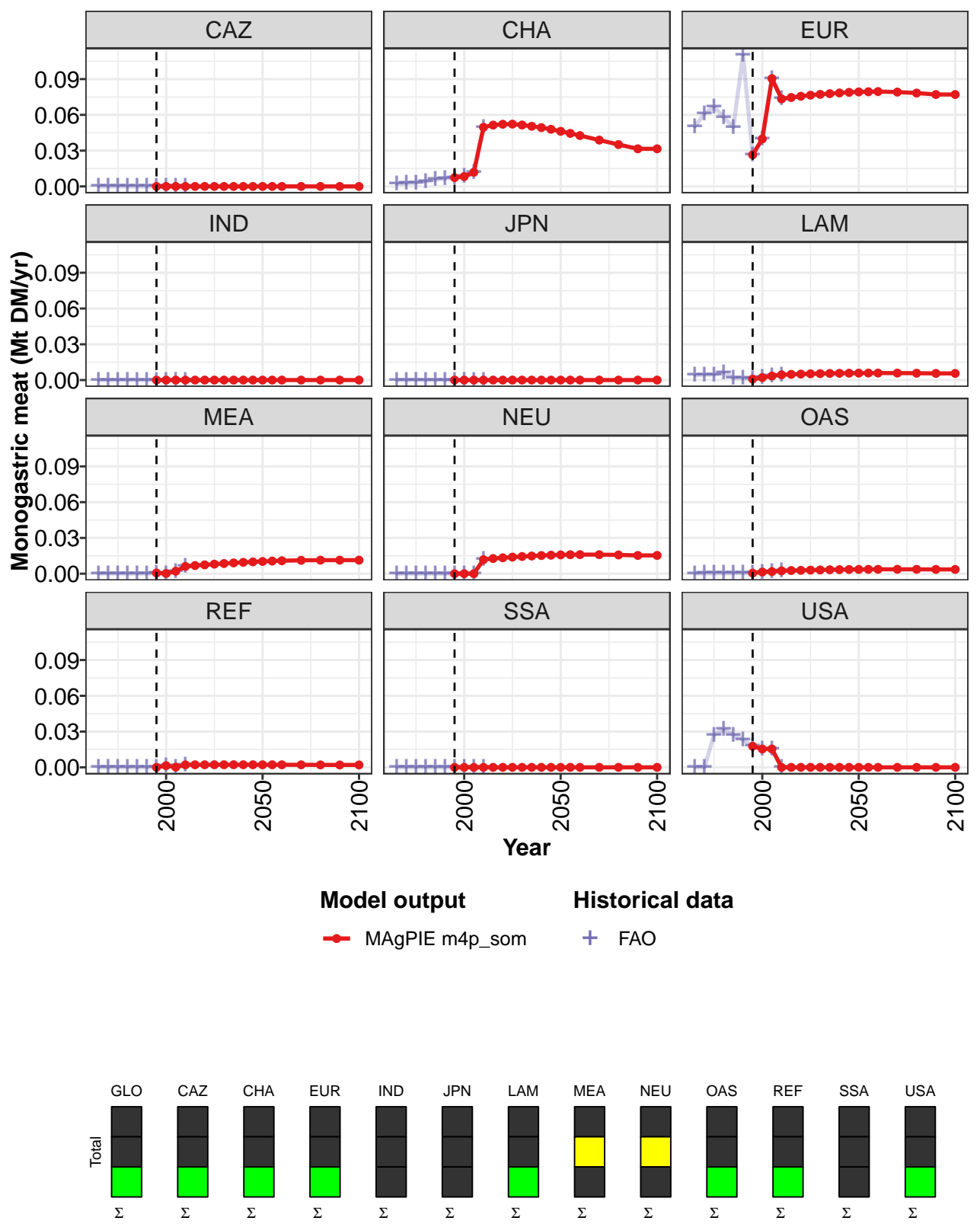


Figure 177: MAgPIE m4p\_som — Demand—Material—Livestock products—Monogastric meat (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.053	0.069	0.125	0.150	0.155	0.159	0.161	0.162	0.163	0.164	0.164
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.007	0.008	0.012	0.050	0.051	0.052	0.052	0.052	0.050	0.049	0.048
EUR	0.026	0.040	0.090	0.073	0.075	0.076	0.077	0.077	0.078	0.078	0.079
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.001	0.002	0.003	0.004	0.005	0.005	0.005	0.005	0.006	0.006	0.006
MEA	0.001	0.000	0.002	0.006	0.007	0.007	0.008	0.009	0.009	0.010	0.010
NEU	0.000	0.000	0.000	0.012	0.013	0.013	0.014	0.014	0.015	0.015	0.016
OAS	0.001	0.001	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.004
REF	0.000	0.001	0.000	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.018	0.015	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 530: MAgPIE m4p\_som — Demand—Material—Livestock products—Monogastric meat (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.163	0.162	0.161	0.157	0.152	0.147	0.147
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.046	0.045	0.043	0.039	0.035	0.032	0.032
EUR	0.079	0.079	0.080	0.079	0.078	0.077	0.077
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.006	0.006	0.006	0.006	0.006	0.006	0.006
MEA	0.010	0.011	0.011	0.011	0.011	0.011	0.011
NEU	0.016	0.016	0.016	0.016	0.016	0.015	0.015
OAS	0.004	0.004	0.004	0.004	0.004	0.004	0.004
REF	0.002	0.002	0.002	0.002	0.002	0.002	0.002
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000

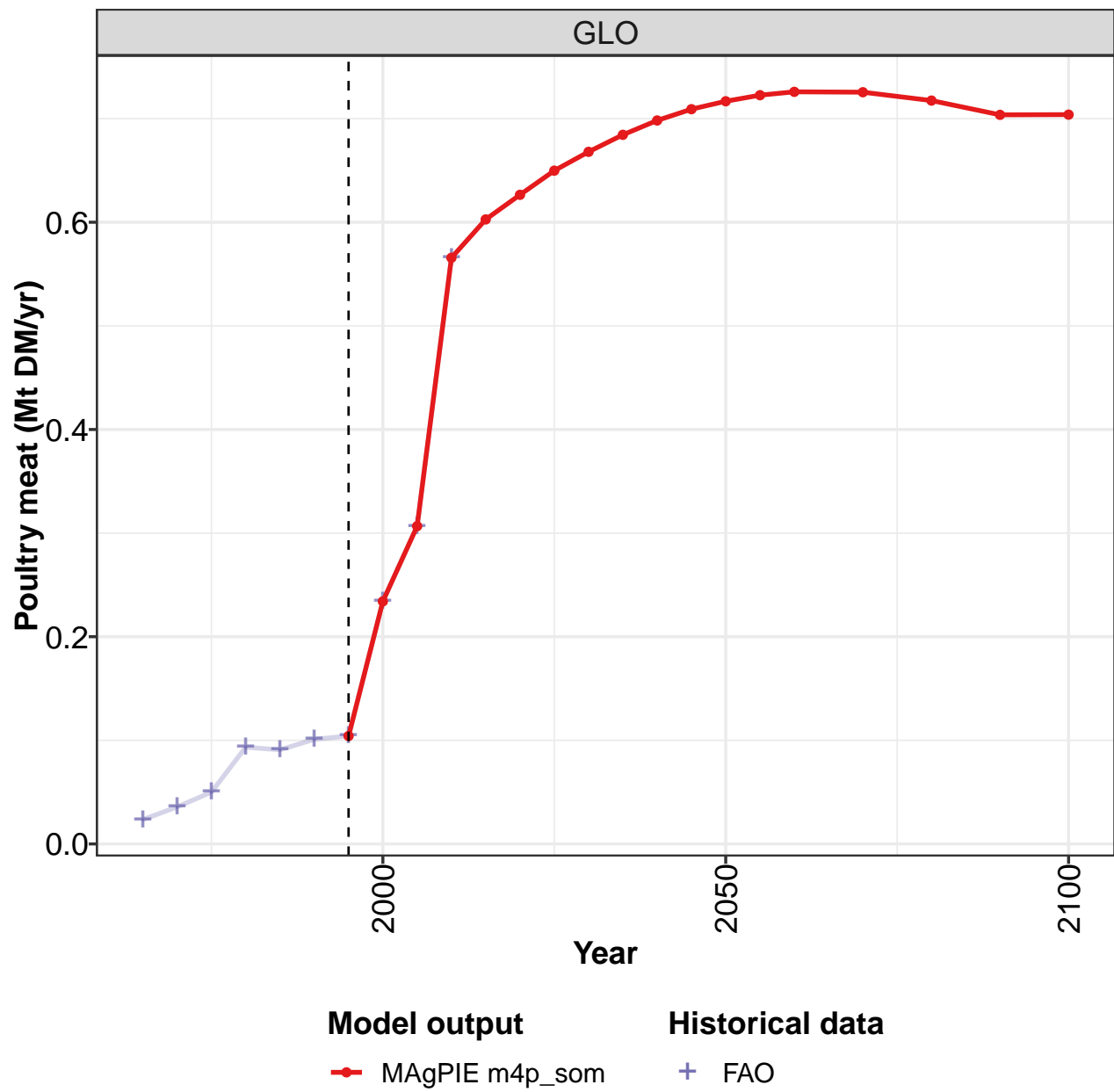
Table 531: MAgPIE m4p\_som — Demand—Material—Livestock products—Monogastric meat (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.057	0.068	0.102	0.101	0.085	0.142	0.053	0.069	0.125	0.150
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.002	0.003	0.003	0.004	0.006	0.007	0.007	0.008	0.012	0.050
EUR	0.050	0.061	0.067	0.058	0.050	0.110	0.026	0.040	0.090	0.073
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.004	0.004	0.004	0.006	0.002	0.002	0.001	0.002	0.003	0.004
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.002	0.006
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.012
OAS	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.002	0.002
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.002
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.027	0.032	0.027	0.023	0.018	0.015	0.015	0.000

Table 532: FAO — Demand—Material—Livestock products—Monogastric meat (Mt DM/yr)

8.5.4 Poultry meat

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

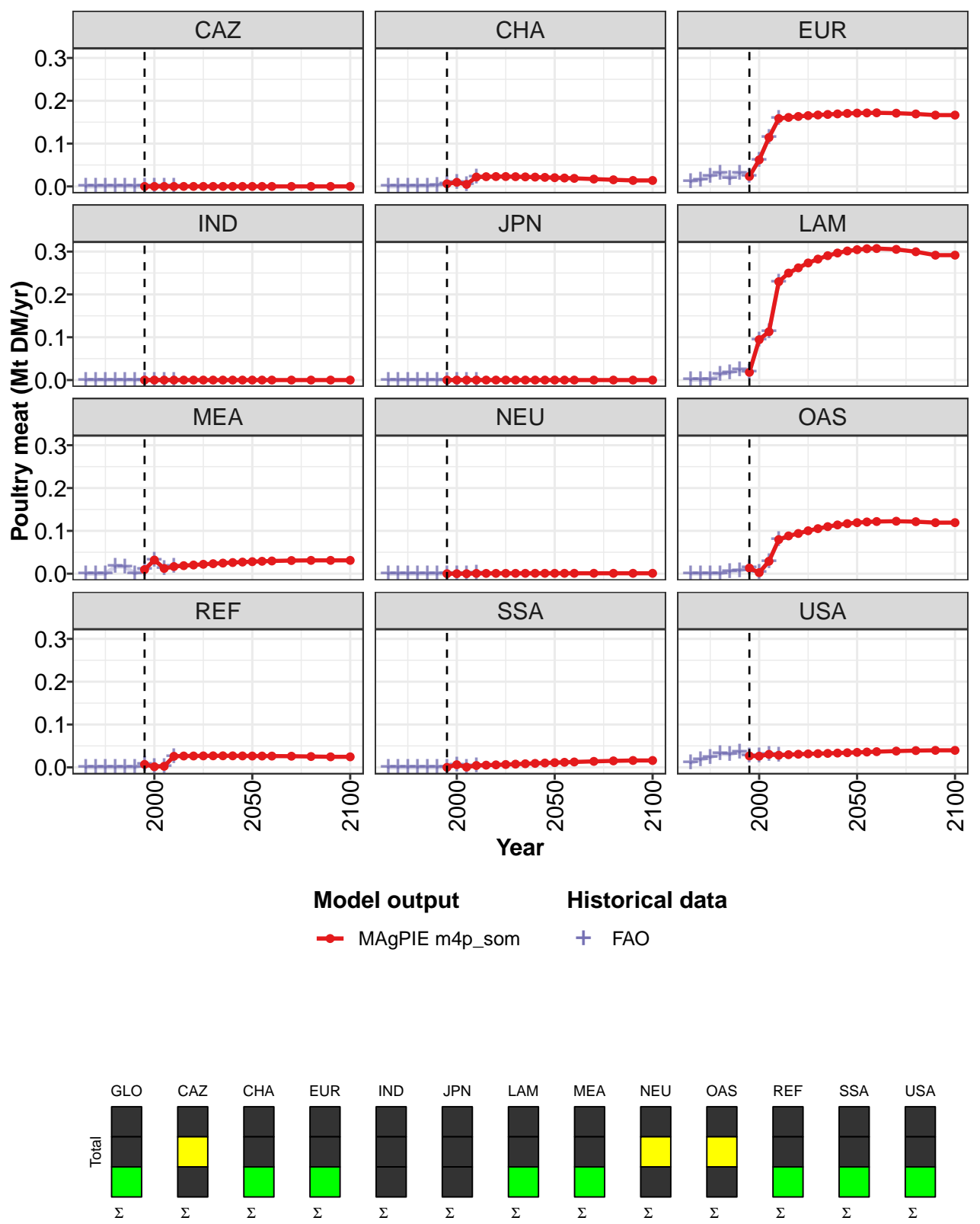


Figure 178: MAGPIE m4p\_som — Demand—Material—Livestock products—Poultry meat (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.104	0.234	0.307	0.566	0.603	0.626	0.650	0.668	0.684	0.698	0.709
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.006	0.010	0.005	0.022	0.023	0.023	0.023	0.023	0.022	0.022	0.021
EUR	0.023	0.062	0.114	0.159	0.161	0.163	0.165	0.167	0.168	0.169	0.171
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.018	0.094	0.113	0.230	0.250	0.262	0.273	0.283	0.290	0.297	0.301
MEA	0.010	0.032	0.012	0.017	0.019	0.020	0.022	0.023	0.025	0.026	0.027
NEU	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
OAS	0.013	0.003	0.029	0.080	0.088	0.094	0.100	0.105	0.110	0.114	0.117
REF	0.007	0.002	0.003	0.026	0.026	0.027	0.027	0.027	0.027	0.027	0.027
SSA	0.000	0.006	0.001	0.004	0.005	0.006	0.007	0.007	0.008	0.009	0.010
USA	0.027	0.026	0.030	0.028	0.030	0.031	0.031	0.032	0.033	0.033	0.034

Table 533: MAgPIE m4p\_som — Demand—Material—Livestock products—Poultry meat (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.717	0.723	0.726	0.725	0.717	0.704	0.704
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.020	0.020	0.019	0.017	0.015	0.014	0.014
EUR	0.171	0.172	0.172	0.171	0.169	0.167	0.167
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.304	0.307	0.307	0.305	0.300	0.292	0.292
MEA	0.028	0.029	0.030	0.031	0.031	0.031	0.031
NEU	0.001	0.001	0.001	0.001	0.001	0.001	0.001
OAS	0.119	0.121	0.122	0.123	0.121	0.119	0.119
REF	0.026	0.026	0.026	0.026	0.025	0.025	0.025
SSA	0.011	0.012	0.013	0.014	0.015	0.016	0.016
USA	0.035	0.036	0.037	0.038	0.039	0.040	0.040

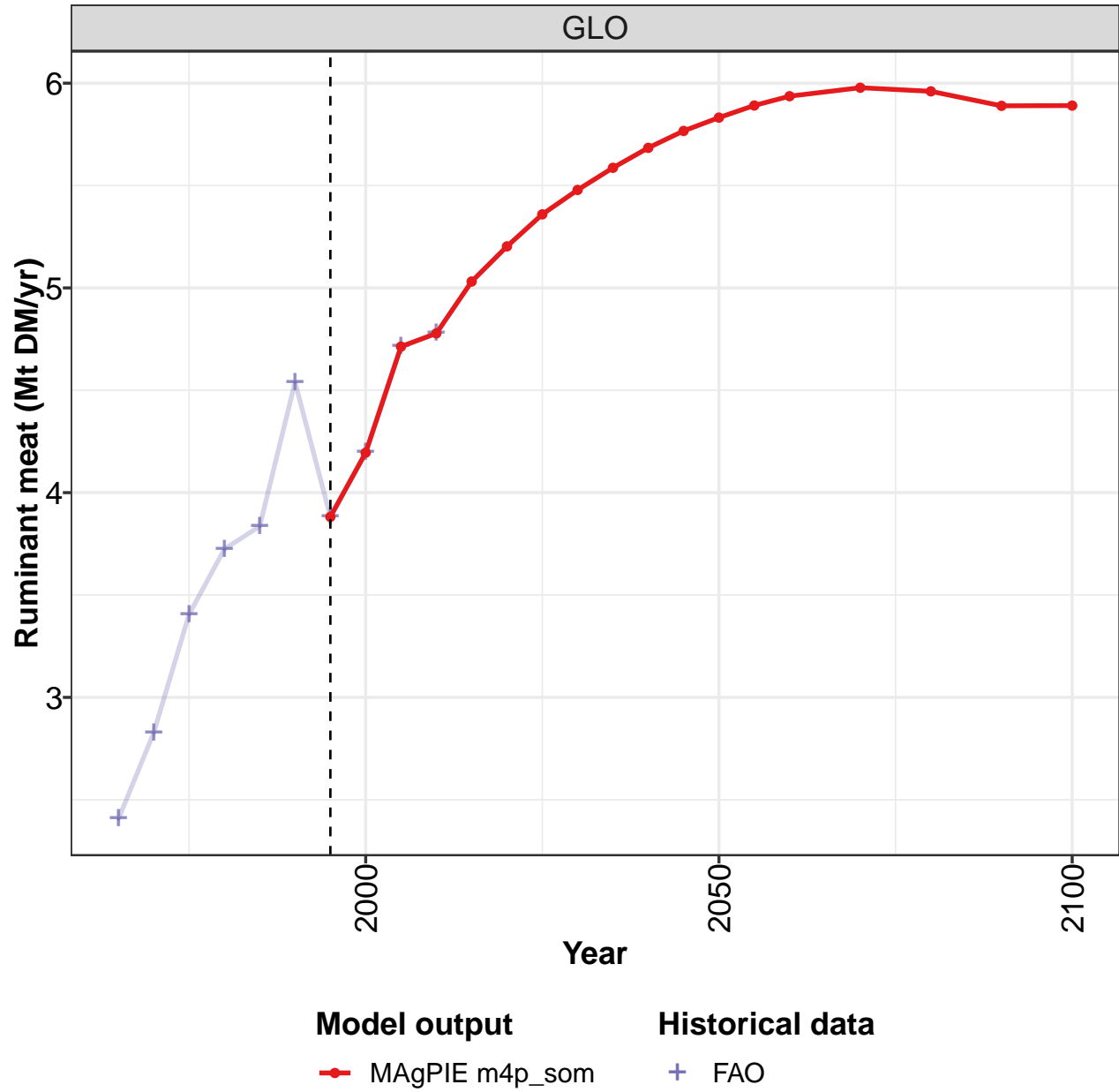
Table 534: MAgPIE m4p\_som — Demand—Material—Livestock products—Poultry meat (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.024	0.036	0.050	0.093	0.091	0.101	0.104	0.234	0.307	0.566
CAZ	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.001	0.001	0.001	0.001	0.002	0.006	0.010	0.005	0.022
EUR	0.012	0.015	0.024	0.030	0.019	0.031	0.023	0.062	0.114	0.159
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.001	0.001	0.001	0.013	0.017	0.024	0.018	0.094	0.113	0.230
MEA	0.000	0.000	0.000	0.017	0.017	0.001	0.010	0.032	0.012	0.017
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
OAS	0.000	0.000	0.000	0.000	0.005	0.007	0.013	0.003	0.029	0.080
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.002	0.003	0.026
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.001	0.004
USA	0.011	0.018	0.023	0.032	0.031	0.036	0.027	0.026	0.030	0.028

Table 535: FAO — Demand—Material—Livestock products—Poultry meat (Mt DM/yr)

8.5.5 Ruminant meat

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

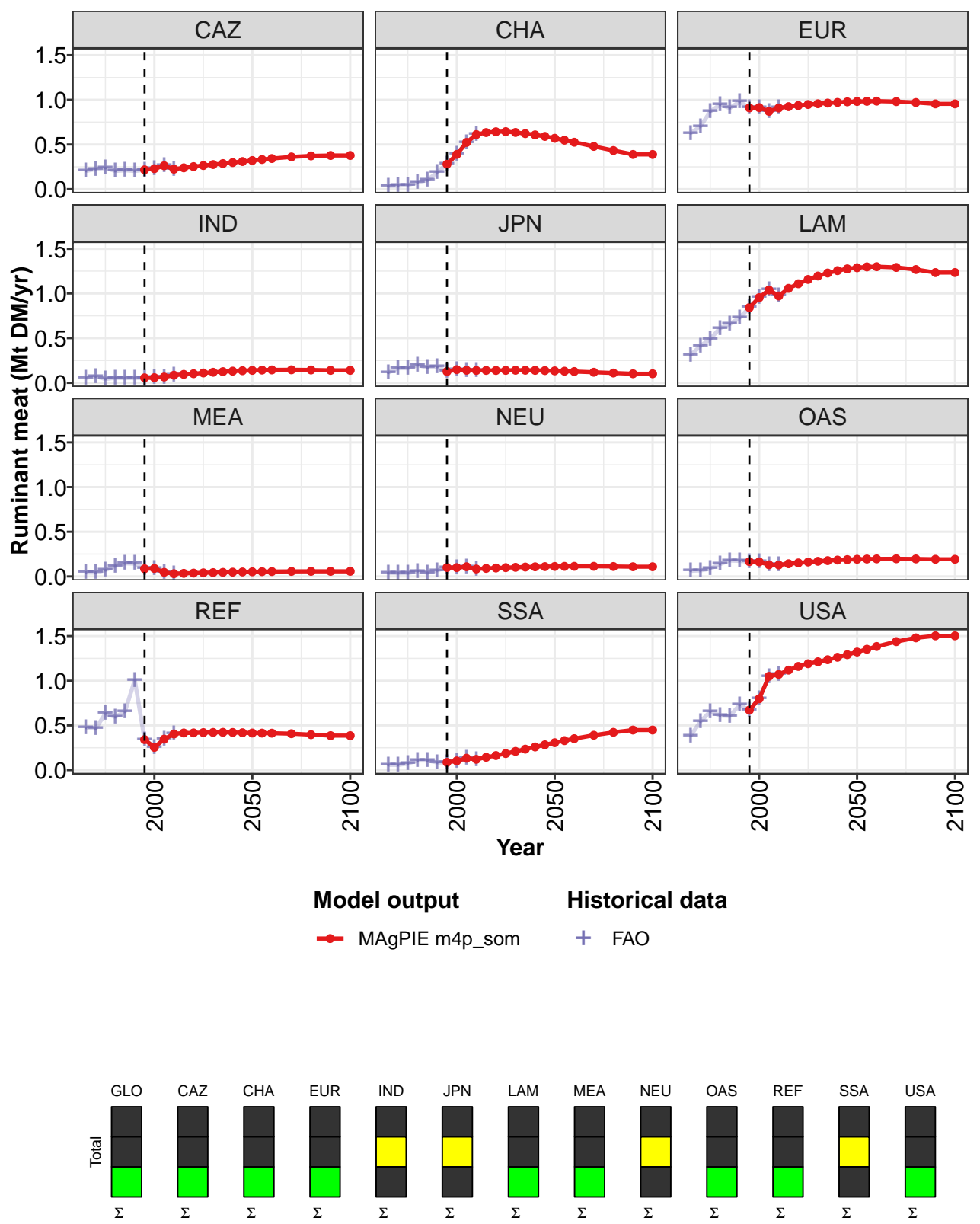


Figure 179: MAGPIE m4p\_som — Demand—Material—Livestock products—Ruminant meat (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	3.88	4.20	4.71	4.78	5.03	5.20	5.36	5.48	5.59	5.68	5.77
CAZ	0.22	0.23	0.26	0.22	0.24	0.25	0.26	0.28	0.29	0.30	0.31
CHA	0.28	0.39	0.52	0.61	0.63	0.64	0.64	0.63	0.62	0.61	0.59
EUR	0.91	0.91	0.87	0.91	0.92	0.94	0.95	0.96	0.96	0.97	0.98
IND	0.06	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.13	0.14
JPN	0.13	0.15	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
LAM	0.84	0.95	1.04	0.97	1.06	1.11	1.16	1.20	1.23	1.26	1.28
MEA	0.09	0.09	0.05	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.05
NEU	0.10	0.10	0.11	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.11
OAS	0.17	0.16	0.13	0.13	0.14	0.15	0.16	0.17	0.18	0.18	0.19
REF	0.34	0.25	0.35	0.40	0.42	0.42	0.42	0.42	0.42	0.42	0.42
SSA	0.09	0.10	0.13	0.12	0.14	0.16	0.19	0.21	0.23	0.26	0.28
USA	0.67	0.80	1.05	1.07	1.12	1.16	1.19	1.21	1.24	1.26	1.29

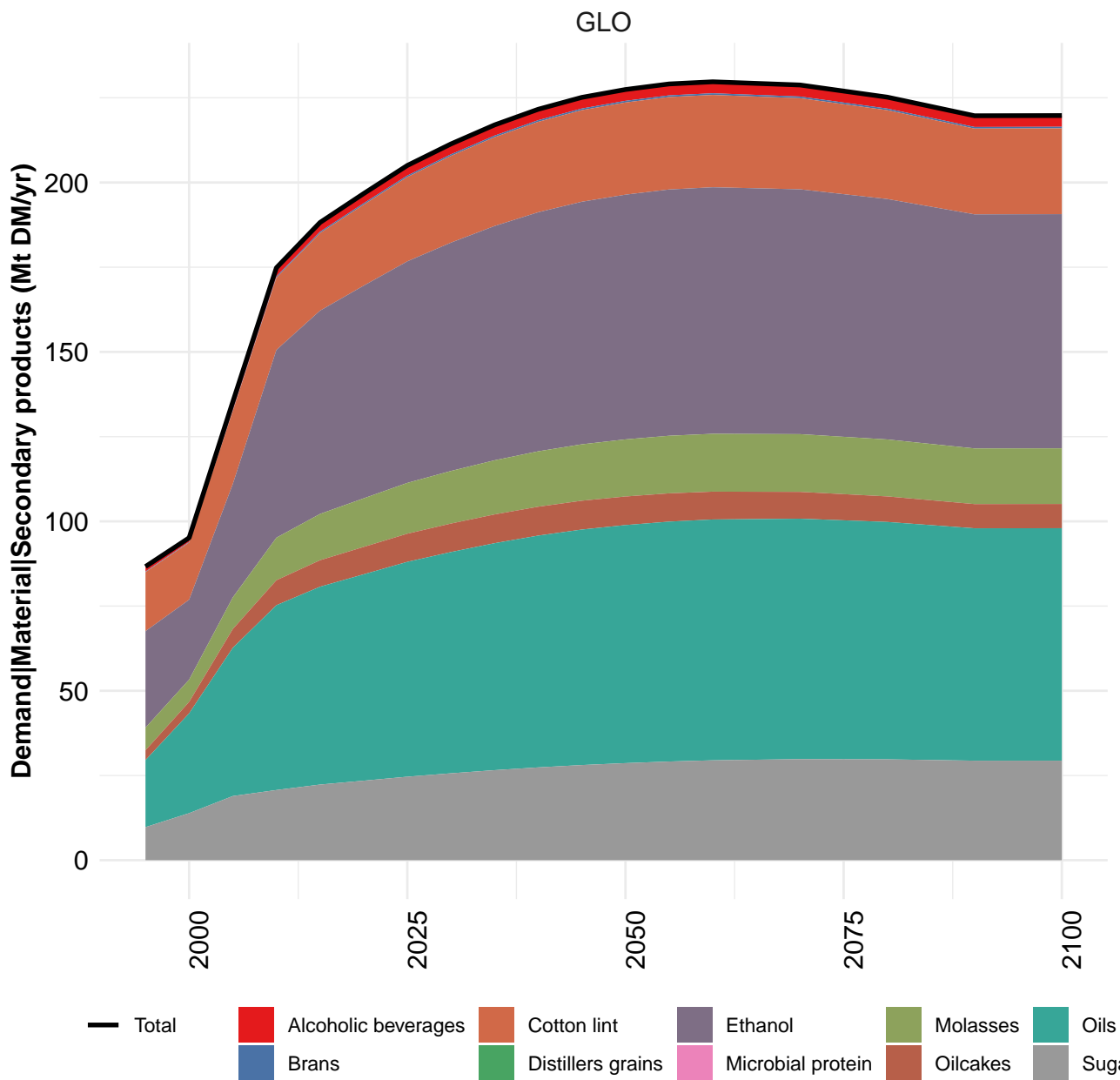
Table 536: MAgPIE m4p\_som — Demand—Material—Livestock products—Ruminant meat (Mt DM/yr)  
[PART 1/2]

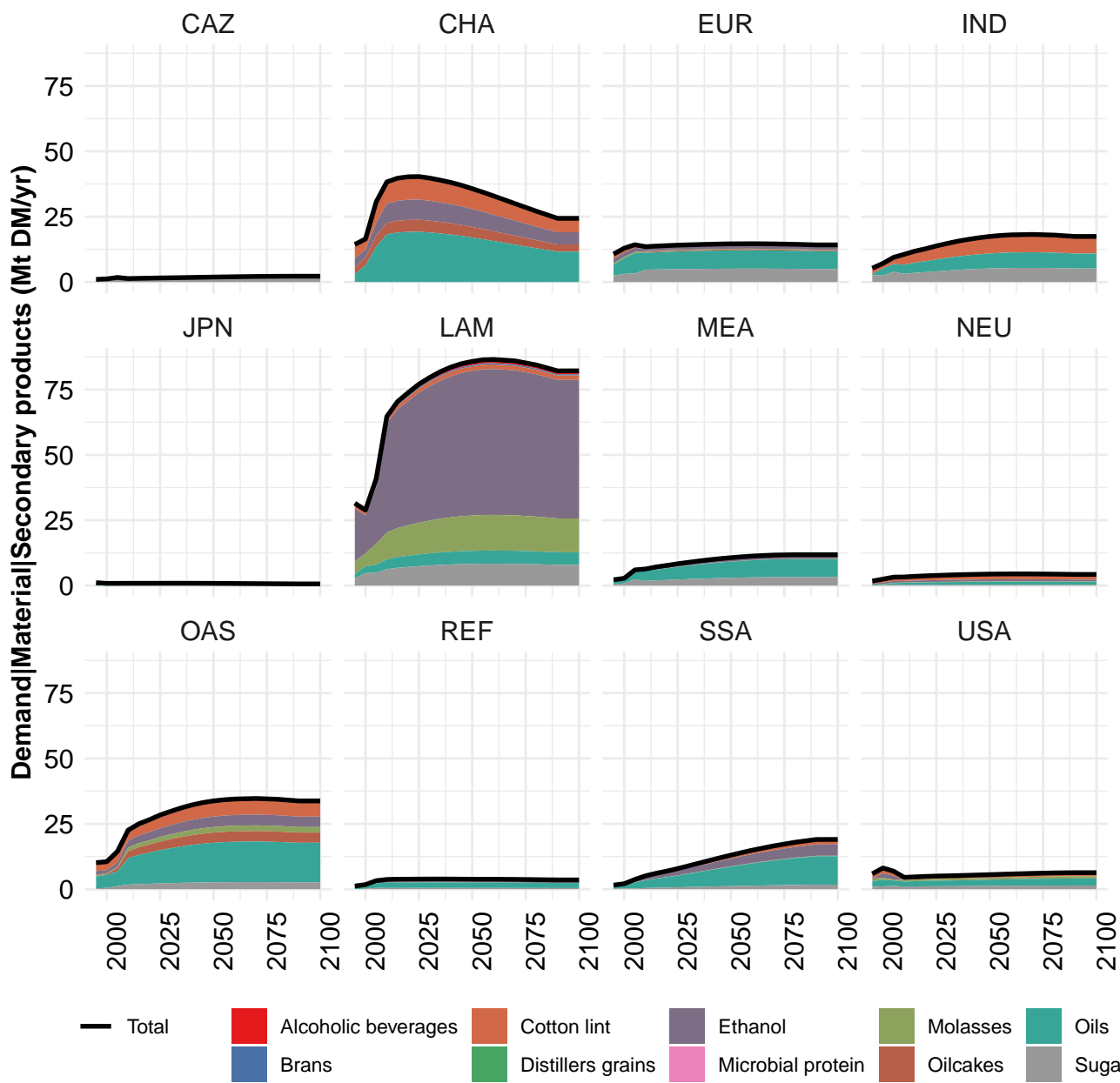
	2050	2055	2060	2070	2080	2090	2100
GLO	5.83	5.89	5.94	5.98	5.96	5.89	5.89
CAZ	0.32	0.33	0.34	0.36	0.37	0.38	0.38
CHA	0.57	0.55	0.53	0.48	0.43	0.39	0.39
EUR	0.98	0.98	0.99	0.98	0.97	0.95	0.95
IND	0.14	0.14	0.14	0.15	0.14	0.14	0.14
JPN	0.13	0.13	0.13	0.12	0.11	0.10	0.10
LAM	1.29	1.30	1.30	1.29	1.27	1.23	1.23
MEA	0.05	0.05	0.05	0.06	0.06	0.06	0.06
NEU	0.11	0.11	0.11	0.11	0.11	0.11	0.11
OAS	0.19	0.19	0.20	0.20	0.20	0.19	0.19
REF	0.41	0.41	0.41	0.41	0.40	0.39	0.39
SSA	0.31	0.33	0.35	0.39	0.42	0.45	0.45
USA	1.32	1.35	1.38	1.44	1.48	1.50	1.50

Table 537: MAgPIE m4p\_som — Demand—Material—Livestock products—Ruminant meat (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.41	2.83	3.41	3.72	3.84	4.54	3.88	4.20	4.71	4.78
CAZ	0.20	0.23	0.24	0.20	0.21	0.20	0.22	0.23	0.26	0.22
CHA	0.04	0.04	0.05	0.08	0.10	0.19	0.28	0.39	0.52	0.61
EUR	0.63	0.70	0.87	0.95	0.91	0.98	0.91	0.91	0.87	0.91
IND	0.06	0.07	0.04	0.06	0.05	0.06	0.06	0.06	0.07	0.08
JPN	0.11	0.16	0.16	0.20	0.17	0.18	0.13	0.15	0.14	0.14
LAM	0.31	0.41	0.49	0.61	0.66	0.73	0.84	0.95	1.04	0.97
MEA	0.04	0.04	0.07	0.12	0.15	0.14	0.09	0.09	0.05	0.03
NEU	0.04	0.04	0.04	0.06	0.04	0.07	0.10	0.10	0.11	0.08
OAS	0.06	0.07	0.09	0.14	0.18	0.17	0.17	0.16	0.13	0.13
REF	0.47	0.46	0.63	0.60	0.66	1.01	0.34	0.25	0.35	0.40
SSA	0.06	0.06	0.07	0.11	0.11	0.09	0.09	0.10	0.13	0.12
USA	0.38	0.54	0.66	0.61	0.61	0.73	0.67	0.80	1.05	1.07

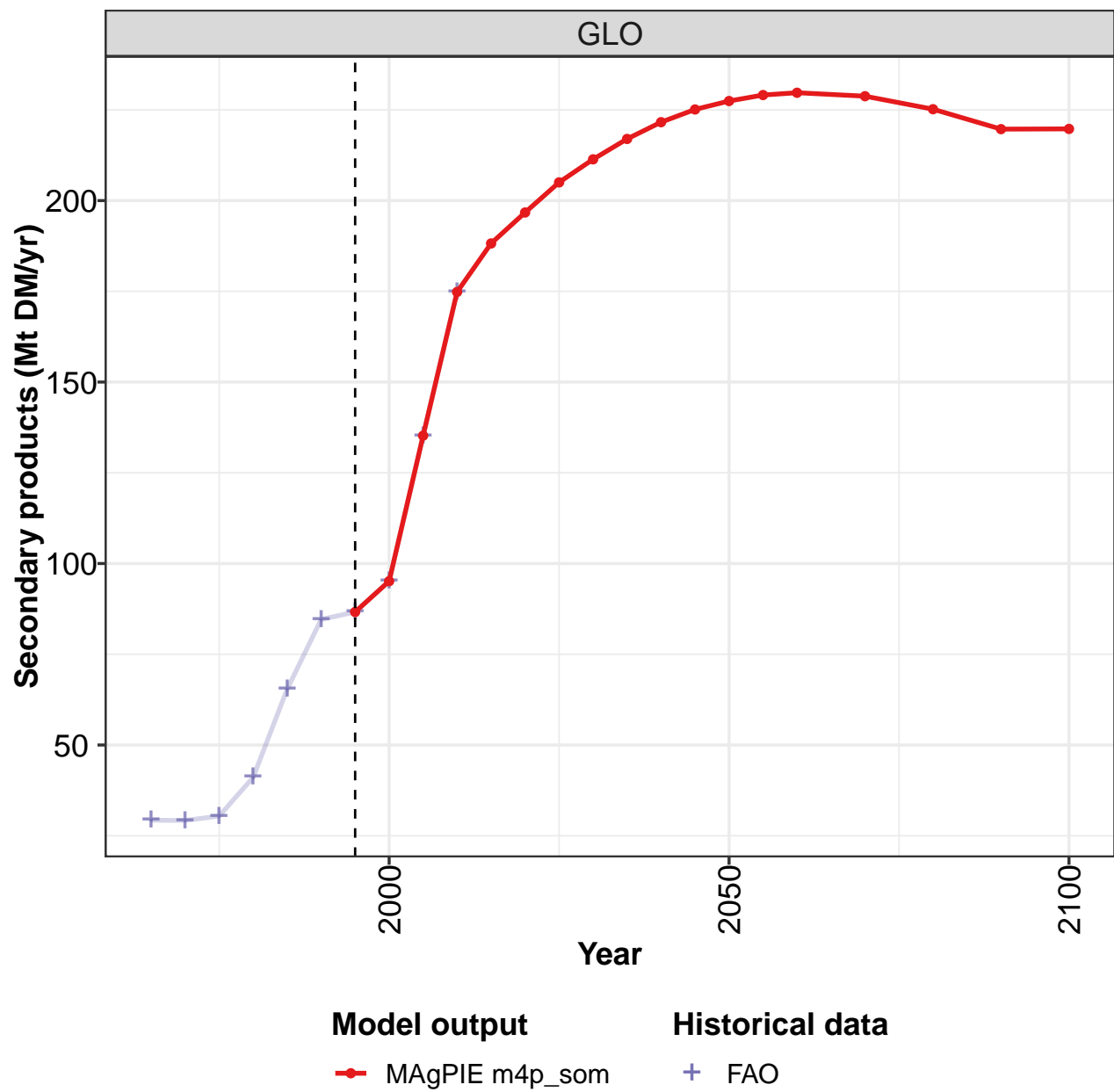
Table 538: FAO — Demand—Material—Livestock products—Ruminant meat (Mt DM/yr)





8.6 Secondary products

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

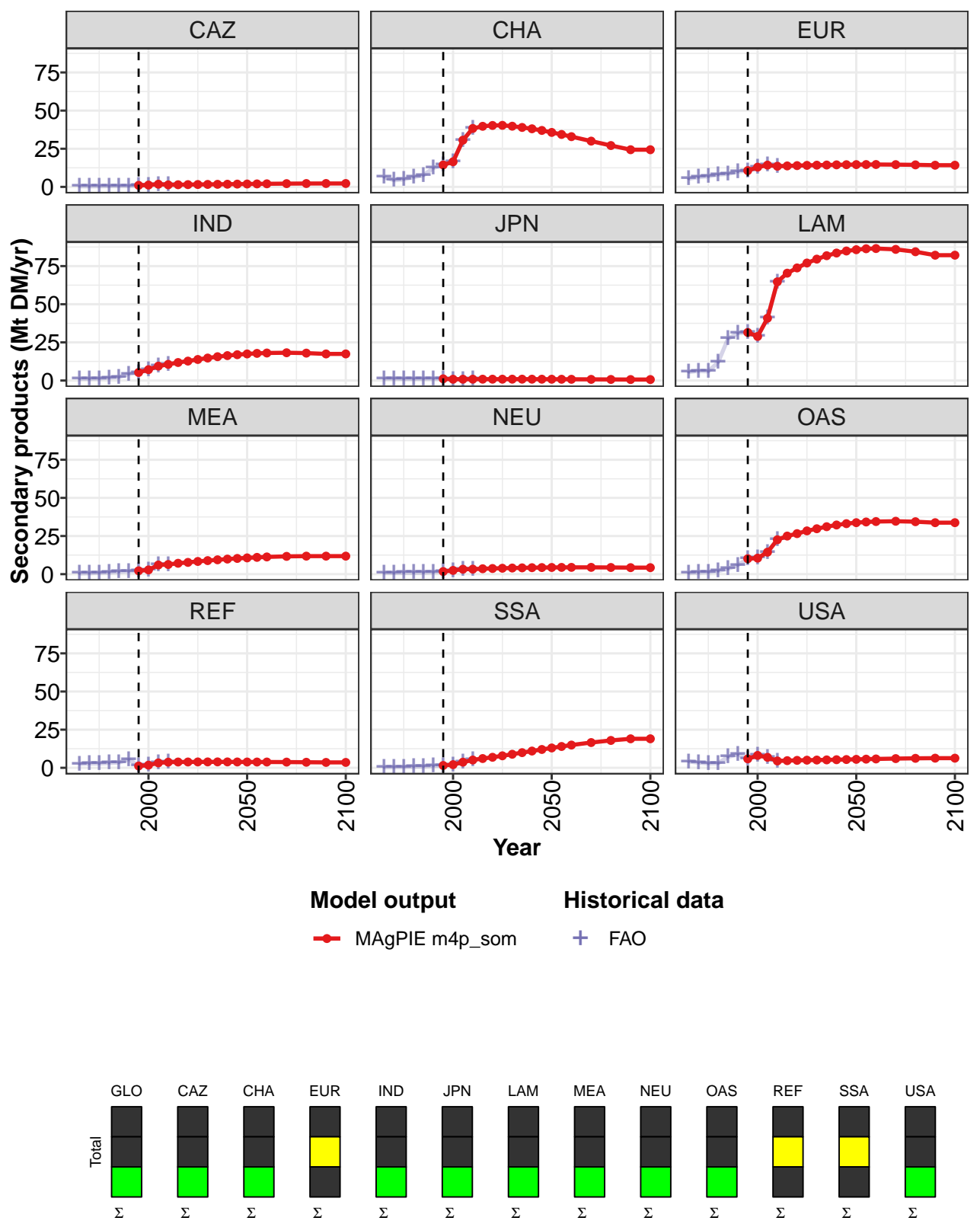


Figure 180: MAgPIE m4p\_som — Demand—Material—Secondary products (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	87	95	135	175	188	197	205	211	217	222	225
CAZ	1	1	2	1	1	1	2	2	2	2	2
CHA	14	16	31	38	40	40	40	40	39	38	37
EUR	11	13	14	14	14	14	14	14	14	14	15
IND	5	7	9	11	12	13	14	15	16	16	17
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	32	29	41	65	70	74	77	80	82	84	85
MEA	2	3	6	6	7	8	8	9	9	10	10
NEU	2	2	3	3	4	4	4	4	4	4	4
OAS	10	11	14	23	25	27	28	30	31	32	33
REF	1	2	3	4	4	4	4	4	4	4	4
SSA	2	2	4	5	6	7	8	9	10	11	12
USA	6	8	7	4	5	5	5	5	5	5	5

Table 539: MAgPIE m4p\_som — Demand—Material—Secondary products (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	227	229	230	229	225	220	220
CAZ	2	2	2	2	2	2	2
CHA	36	34	33	30	27	24	24
EUR	15	15	15	15	14	14	14
IND	17	18	18	18	18	17	17
JPN	1	1	1	1	1	1	1
LAM	86	86	87	86	84	82	82
MEA	11	11	11	12	12	12	12
NEU	4	4	4	4	4	4	4
OAS	34	34	34	35	34	34	34
REF	4	4	4	4	4	4	4
SSA	13	14	15	17	18	19	19
USA	6	6	6	6	6	6	6

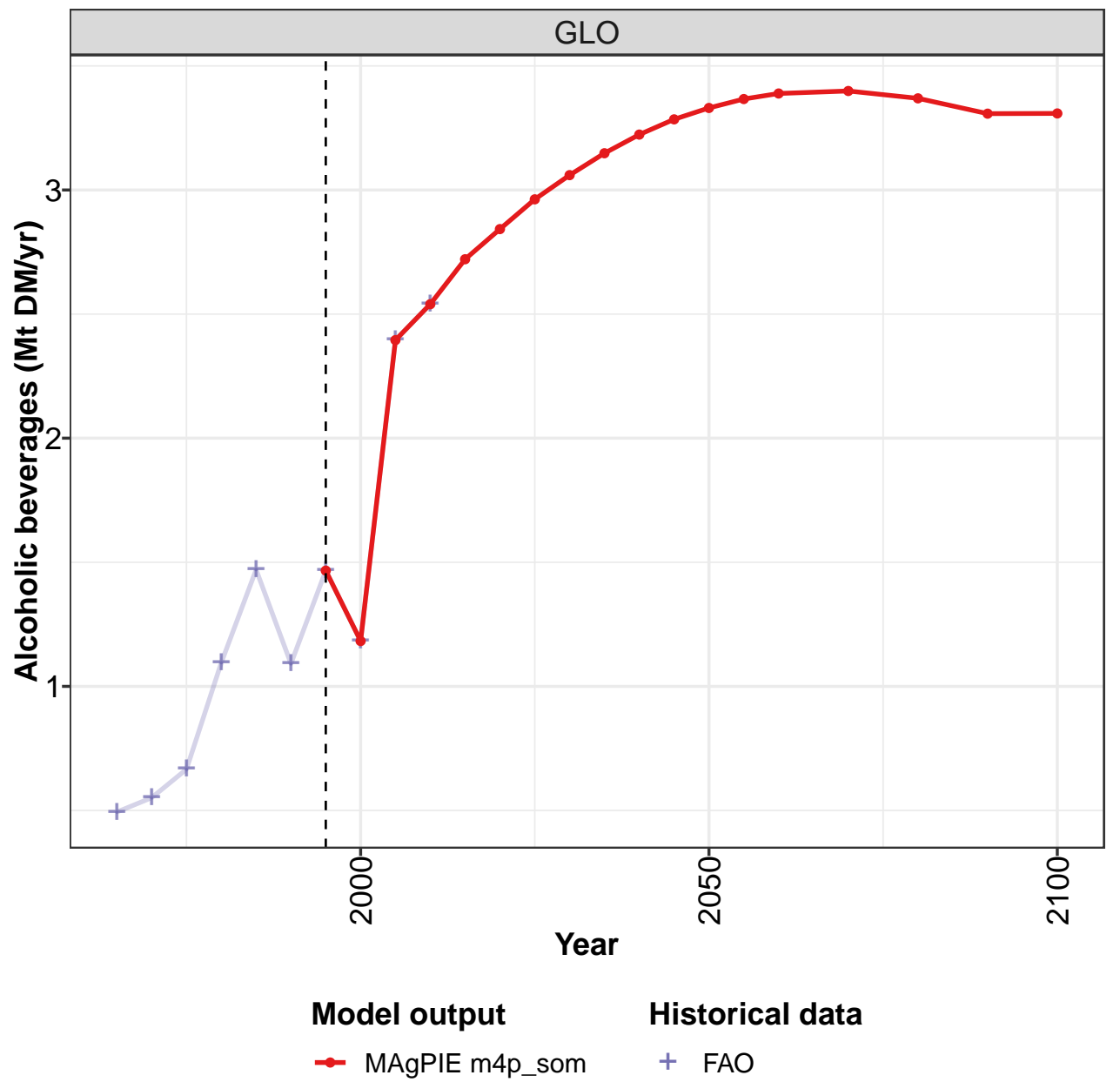
Table 540: MAgPIE m4p\_som — Demand—Material—Secondary products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	29	29	30	41	65	85	87	95	135	175
CAZ	0	0	0	1	1	1	1	1	2	1
CHA	6	4	5	6	8	12	14	16	31	38
EUR	5	6	7	8	9	10	11	13	14	14
IND	1	1	1	2	2	4	5	7	9	11
JPN	1	1	1	1	1	1	1	1	1	1
LAM	6	6	6	12	27	31	32	29	41	65
MEA	1	1	1	1	2	2	2	3	6	6
NEU	1	1	1	1	1	1	2	2	3	3
OAS	1	1	1	2	4	6	10	11	14	23
REF	3	3	3	3	3	6	1	2	3	4
SSA	0	1	1	1	1	1	2	2	4	5
USA	4	3	3	3	7	9	6	8	7	4

Table 541: FAO — Demand—Material—Secondary products (Mt DM/yr)

8.6.1 Alcoholic beverages

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

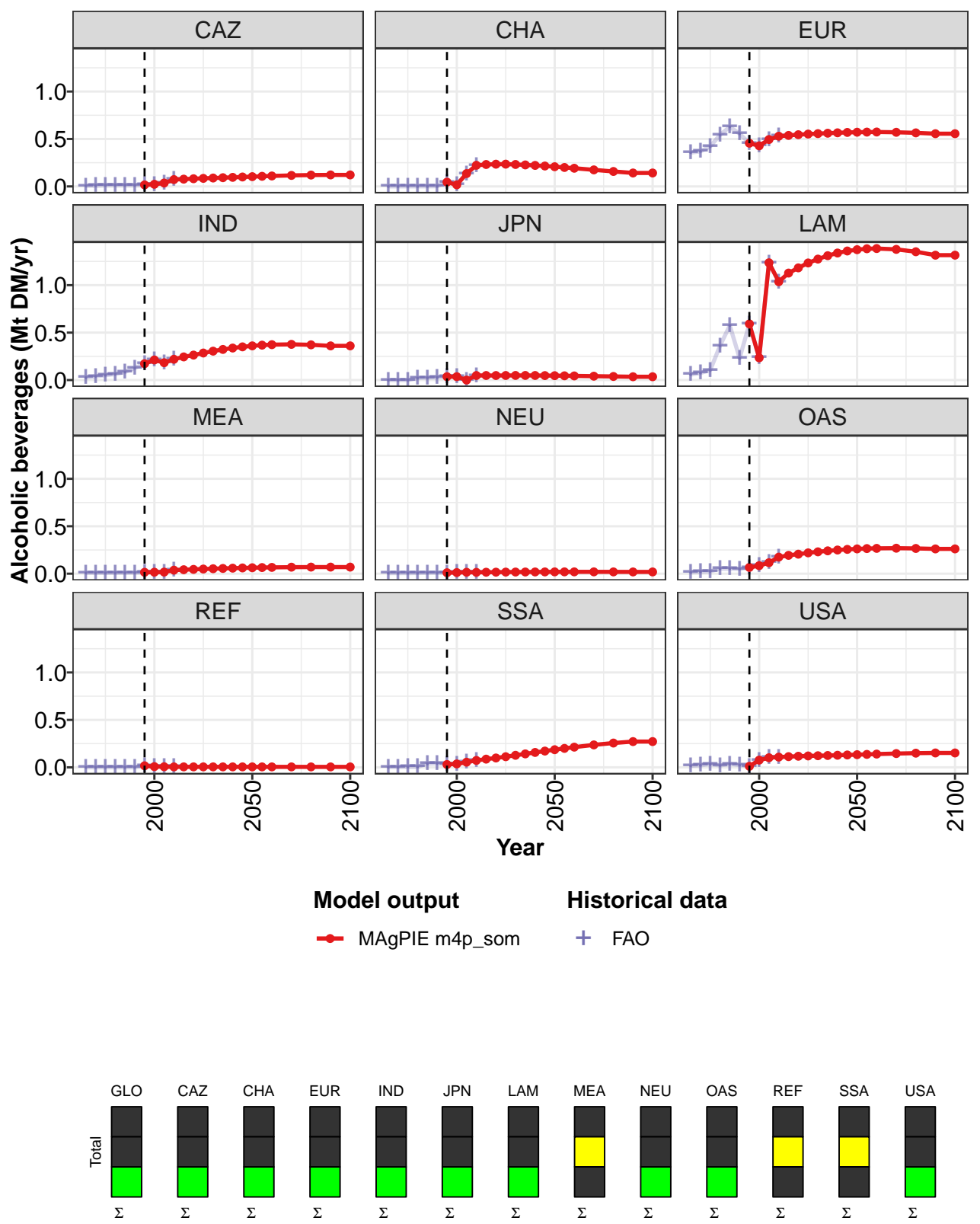


Figure 181: MAgPIE m4p\_som — Demand—Material—Secondary products—Alcoholic beverages (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.47	1.18	2.40	2.54	2.72	2.84	2.96	3.06	3.15	3.22	3.28
CAZ	0.02	0.02	0.04	0.07	0.08	0.08	0.09	0.09	0.09	0.10	0.10
CHA	0.05	0.02	0.14	0.22	0.23	0.23	0.23	0.23	0.23	0.22	0.22
EUR	0.46	0.43	0.49	0.53	0.54	0.55	0.55	0.56	0.56	0.57	0.57
IND	0.17	0.21	0.18	0.22	0.24	0.26	0.29	0.30	0.32	0.34	0.35
JPN	0.04	0.04	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
LAM	0.59	0.23	1.24	1.04	1.13	1.18	1.23	1.27	1.31	1.34	1.36
MEA	0.01	0.02	0.02	0.04	0.04	0.05	0.05	0.05	0.06	0.06	0.06
NEU	0.01	0.01	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02
OAS	0.07	0.08	0.12	0.17	0.19	0.21	0.22	0.23	0.24	0.25	0.26
REF	0.02	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
SSA	0.03	0.04	0.05	0.07	0.09	0.10	0.11	0.13	0.14	0.16	0.17
USA	0.01	0.08	0.10	0.11	0.11	0.12	0.12	0.12	0.12	0.13	0.13

Table 542: MAgPIE m4p\_som — Demand—Material—Secondary products—Alcoholic beverages (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	3.33	3.37	3.39	3.40	3.37	3.31	3.31
CAZ	0.10	0.11	0.11	0.12	0.12	0.12	0.12
CHA	0.21	0.20	0.19	0.17	0.16	0.14	0.14
EUR	0.57	0.57	0.57	0.57	0.56	0.56	0.56
IND	0.36	0.37	0.37	0.38	0.37	0.36	0.36
JPN	0.05	0.04	0.04	0.04	0.04	0.04	0.04
LAM	1.37	1.38	1.39	1.38	1.35	1.32	1.32
MEA	0.06	0.06	0.07	0.07	0.07	0.07	0.07
NEU	0.02	0.02	0.02	0.02	0.02	0.02	0.02
OAS	0.26	0.26	0.27	0.27	0.27	0.26	0.26
REF	0.01	0.01	0.01	0.00	0.00	0.00	0.00
SSA	0.19	0.20	0.21	0.24	0.26	0.27	0.27
USA	0.13	0.14	0.14	0.15	0.15	0.15	0.15

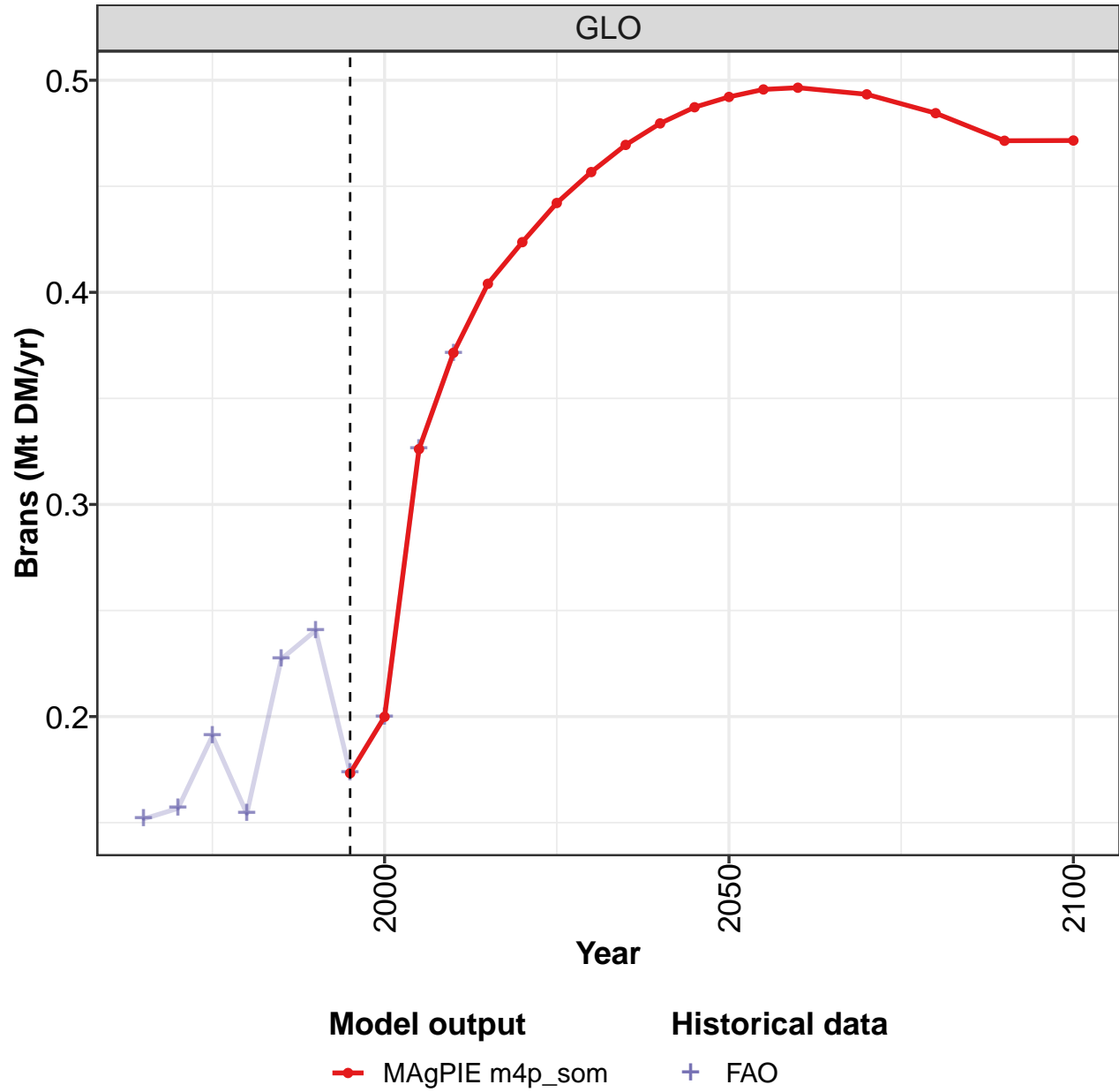
Table 543: MAgPIE m4p\_som — Demand—Material—Secondary products—Alcoholic beverages (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.49	0.55	0.67	1.09	1.47	1.09	1.47	1.18	2.40	2.54
CAZ	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.04	0.07
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.02	0.14	0.22
EUR	0.36	0.37	0.42	0.54	0.63	0.56	0.46	0.43	0.49	0.53
IND	0.03	0.04	0.05	0.06	0.08	0.13	0.17	0.21	0.18	0.22
JPN	0.00	0.00	0.00	0.02	0.02	0.03	0.04	0.04	0.00	0.05
LAM	0.06	0.07	0.10	0.36	0.57	0.23	0.59	0.23	1.24	1.04
MEA	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.04
NEU	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01
OAS	0.01	0.02	0.03	0.05	0.05	0.05	0.07	0.08	0.12	0.17
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.00
SSA	0.00	0.00	0.00	0.01	0.04	0.04	0.03	0.04	0.05	0.07
USA	0.02	0.02	0.03	0.02	0.03	0.02	0.01	0.08	0.10	0.11

Table 544: FAO — Demand—Material—Secondary products—Alcoholic beverages (Mt DM/yr)

8.6.2 Brans

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

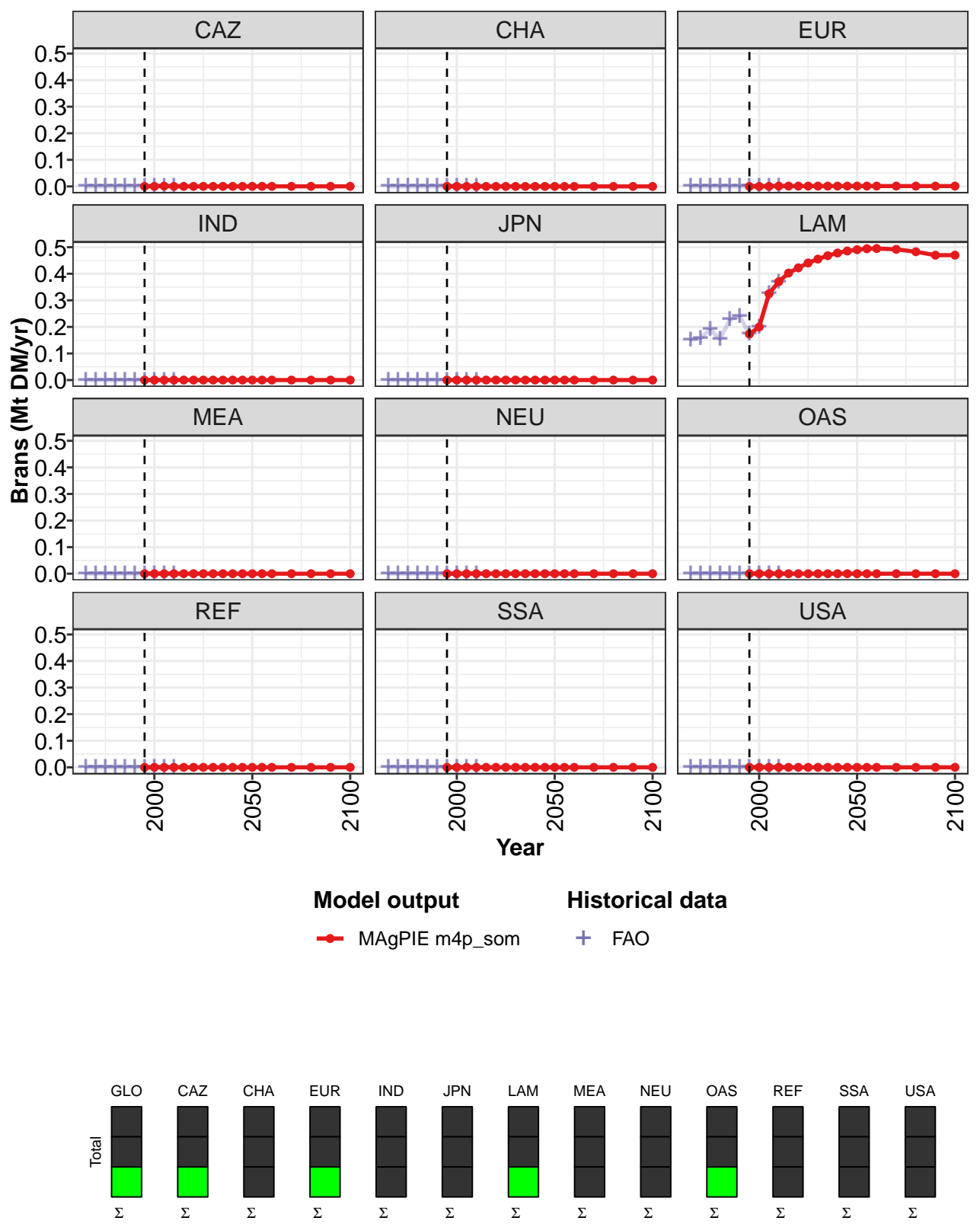


Figure 182: MAgPIE m4p\_som — Demand—Material—Secondary products—Brans (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.173	0.200	0.326	0.371	0.404	0.424	0.442	0.457	0.470	0.480	0.487
CAZ	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.173	0.200	0.325	0.370	0.403	0.422	0.441	0.455	0.468	0.478	0.486
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 545: MAgPIE m4p\_som — Demand—Material—Secondary products—Brans (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.492	0.496	0.496	0.493	0.484	0.471	0.472
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.001	0.001	0.001	0.001	0.001	0.001	0.001
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.491	0.494	0.495	0.492	0.483	0.470	0.470
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 546: MAgPIE m4p\_som — Demand—Material—Secondary products—Brans (Mt DM/yr) [PART 2/2]

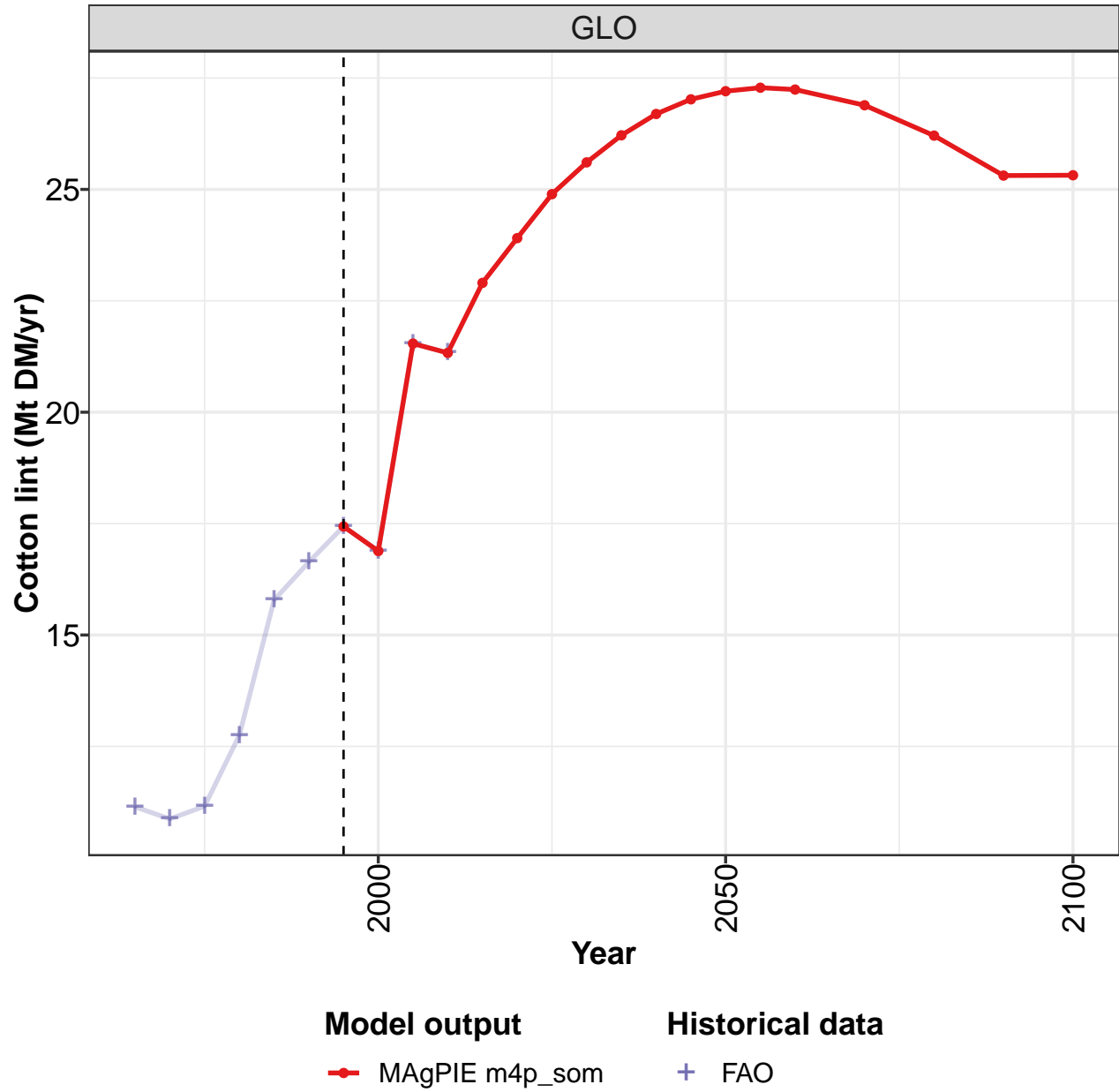
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.152	0.157	0.191	0.154	0.227	0.241	0.173	0.200	0.326	0.371
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.152	0.157	0.191	0.154	0.227	0.240	0.173	0.200	0.325	0.370
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 547: FAO — Demand—Material—Secondary products—Brans (Mt DM/yr)



8.6.3 Cotton lint

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

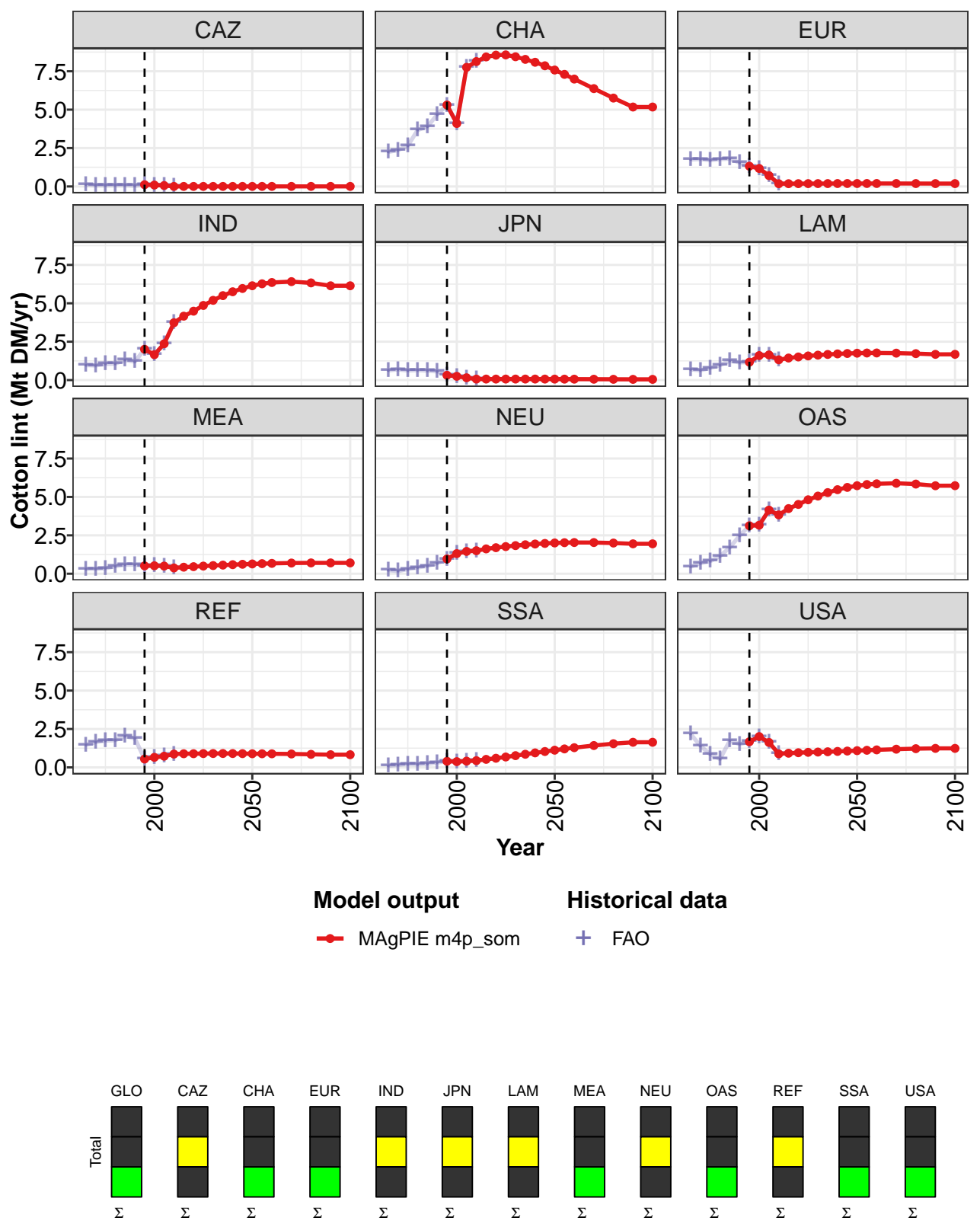


Figure 183: MAgPIE m4p\_som — Demand—Material—Secondary products—Cotton lint (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	17.4	16.9	21.5	21.3	22.9	23.9	24.9	25.6	26.2	26.7	27.0
CAZ	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	5.3	4.1	7.8	8.1	8.4	8.5	8.6	8.4	8.3	8.1	7.9
EUR	1.3	1.2	0.7	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
IND	2.0	1.7	2.4	3.7	4.2	4.5	4.9	5.2	5.5	5.8	6.0
JPN	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	1.2	1.6	1.6	1.3	1.4	1.5	1.6	1.6	1.7	1.7	1.7
MEA	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6
NEU	1.0	1.3	1.5	1.5	1.6	1.7	1.8	1.8	1.9	1.9	2.0
OAS	3.1	3.2	4.1	3.8	4.2	4.5	4.8	5.1	5.3	5.5	5.6
REF	0.5	0.7	0.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
SSA	0.4	0.4	0.4	0.4	0.5	0.6	0.7	0.8	0.9	0.9	1.0
USA	1.7	2.0	1.6	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.1

Table 548: MAgPIE m4p\_som — Demand—Material—Secondary products—Cotton lint (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	27.2	27.3	27.2	26.9	26.2	25.3	25.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	7.6	7.3	7.0	6.4	5.8	5.2	5.2
EUR	0.2	0.2	0.2	0.2	0.2	0.2	0.2
IND	6.1	6.3	6.4	6.4	6.3	6.1	6.1
JPN	0.1	0.1	0.1	0.1	0.1	0.0	0.0
LAM	1.8	1.8	1.8	1.8	1.7	1.7	1.7
MEA	0.6	0.7	0.7	0.7	0.7	0.7	0.7
NEU	2.0	2.0	2.0	2.0	2.0	1.9	1.9
OAS	5.7	5.8	5.9	5.9	5.8	5.7	5.7
REF	0.9	0.9	0.9	0.9	0.8	0.8	0.8
SSA	1.1	1.2	1.3	1.4	1.5	1.6	1.6
USA	1.1	1.1	1.1	1.2	1.2	1.2	1.2

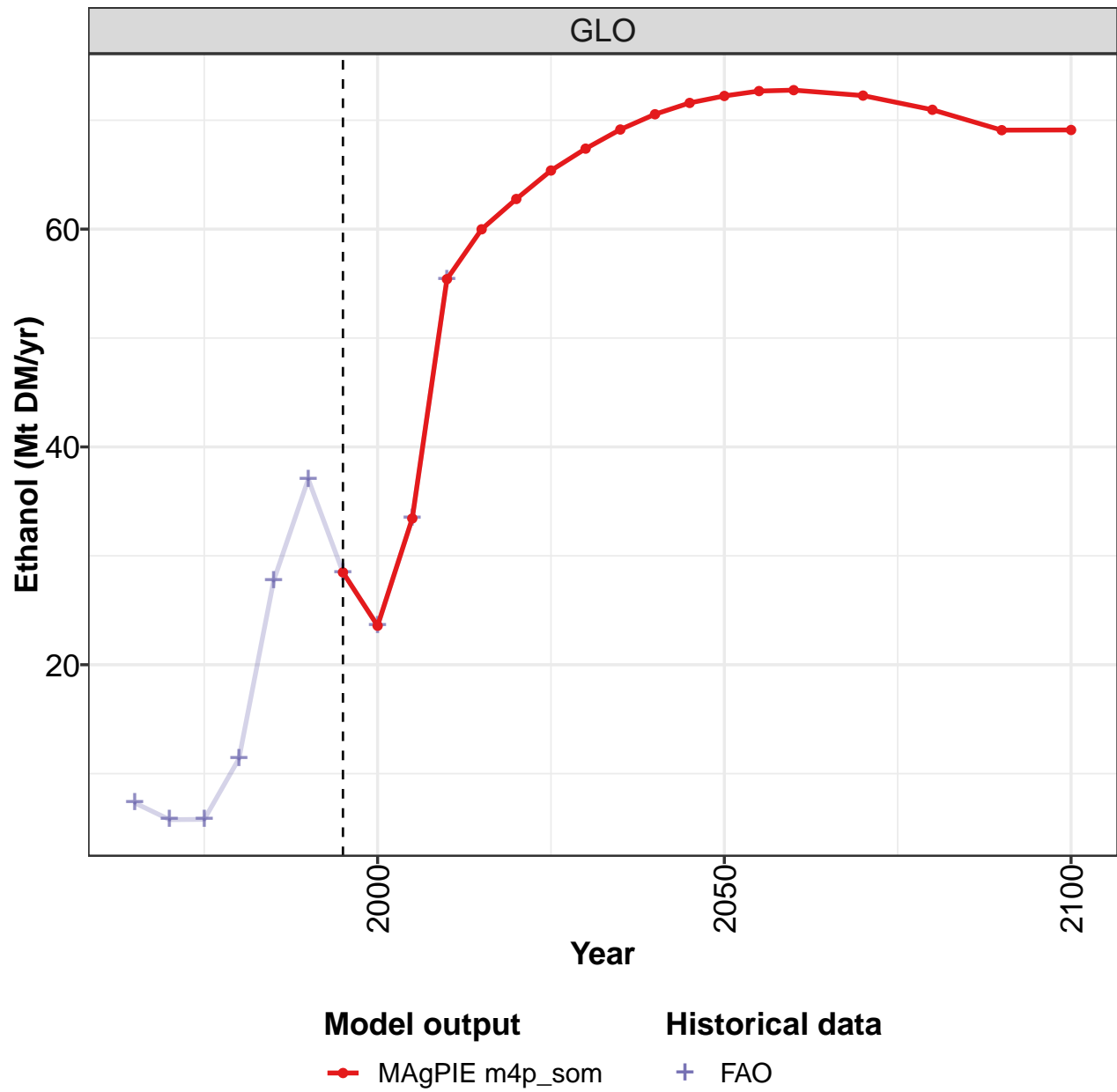
Table 549: MAgPIE m4p\_som — Demand—Material—Secondary products—Cotton lint (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	11.1	10.9	11.2	12.8	15.8	16.6	17.4	16.9	21.5	21.3
CAZ	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
CHA	2.2	2.4	2.6	3.7	3.9	4.7	5.3	4.1	7.8	8.1
EUR	1.8	1.8	1.7	1.8	1.8	1.5	1.3	1.2	0.7	0.2
IND	1.0	0.9	1.1	1.1	1.3	1.2	2.0	1.7	2.4	3.7
JPN	0.6	0.7	0.6	0.6	0.6	0.6	0.3	0.2	0.2	0.1
LAM	0.7	0.6	0.8	1.0	1.3	1.1	1.2	1.6	1.6	1.3
MEA	0.3	0.3	0.4	0.5	0.6	0.6	0.5	0.5	0.5	0.4
NEU	0.2	0.2	0.3	0.4	0.5	0.7	1.0	1.3	1.5	1.5
OAS	0.5	0.7	0.8	1.1	1.7	2.5	3.1	3.2	4.1	3.8
REF	1.5	1.6	1.7	1.8	2.0	1.9	0.5	0.7	0.7	0.9
SSA	0.1	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.4
USA	2.2	1.4	0.9	0.5	1.7	1.5	1.7	2.0	1.6	0.9

Table 550: FAO — Demand—Material—Secondary products—Cotton lint (Mt DM/yr)

8.6.4 Ethanol

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

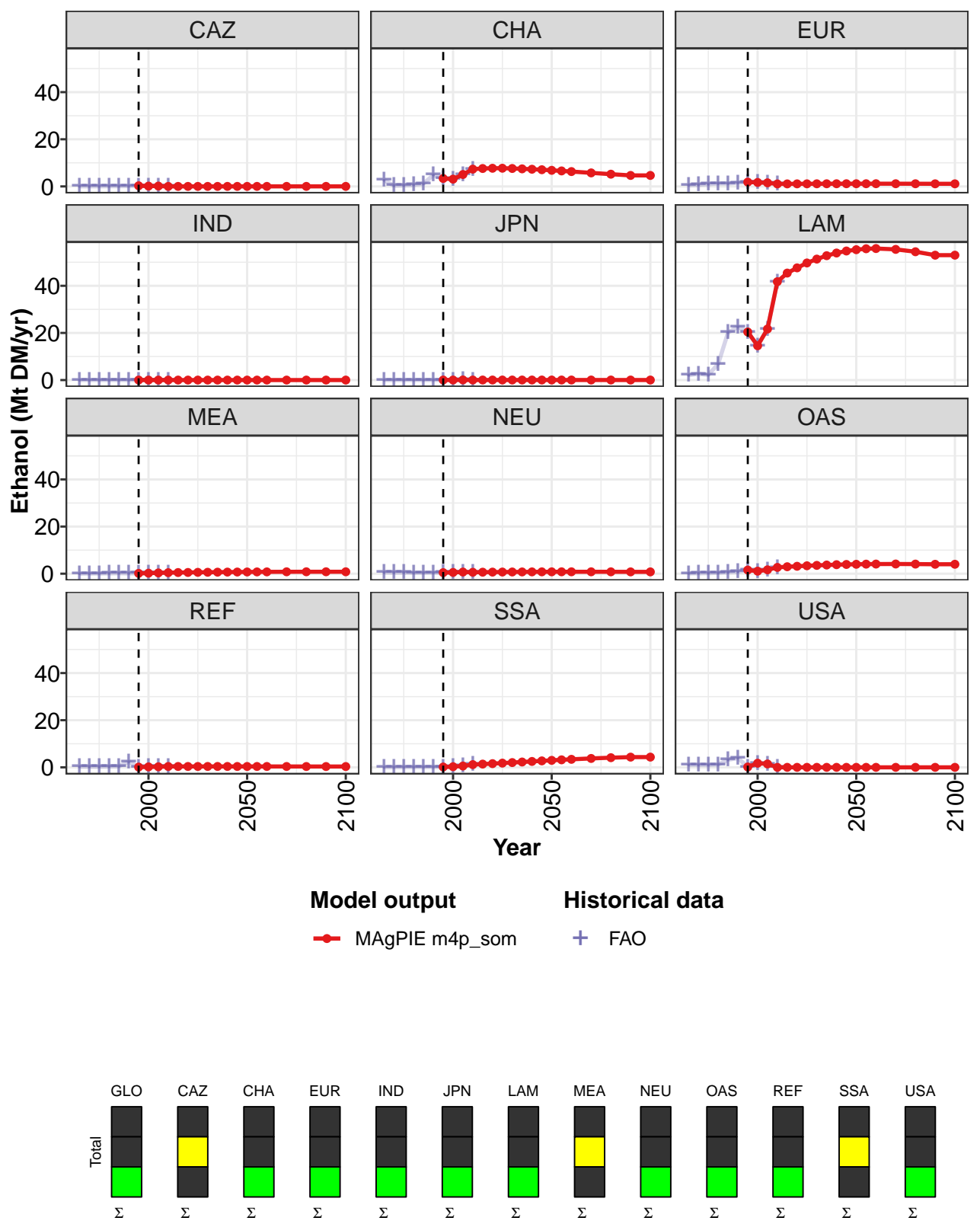


Figure 184: MAGPIE m4p\_som — Demand—Material—Secondary products—Ethanol (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	28.5	23.6	33.4	55.4	60.0	62.8	65.4	67.4	69.1	70.5	71.6
CAZ	0.3	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	3.4	3.1	5.1	7.3	7.6	7.7	7.7	7.6	7.5	7.3	7.1
EUR	1.8	1.7	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	20.4	14.6	21.7	41.7	45.4	47.6	49.7	51.3	52.8	53.9	54.8
MEA	0.2	0.2	0.3	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.7
NEU	0.5	0.5	0.7	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8
OAS	1.6	1.1	1.7	2.7	3.0	3.2	3.4	3.5	3.7	3.8	3.9
REF	0.1	0.2	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
SSA	0.1	0.3	0.6	1.2	1.4	1.6	1.8	2.0	2.3	2.5	2.7
USA	0.2	1.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 551: MAgPIE m4p\_som — Demand—Material—Secondary products—Ethanol (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	72.2	72.7	72.8	72.3	71.0	69.1	69.1
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	6.8	6.6	6.3	5.7	5.2	4.7	4.7
EUR	1.1	1.2	1.2	1.1	1.1	1.1	1.1
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	55.3	55.7	55.8	55.5	54.5	53.0	53.0
MEA	0.7	0.8	0.8	0.8	0.8	0.8	0.8
NEU	0.8	0.8	0.8	0.8	0.8	0.8	0.8
OAS	4.0	4.1	4.1	4.1	4.1	4.0	4.0
REF	0.4	0.4	0.4	0.4	0.4	0.3	0.3
SSA	3.0	3.2	3.4	3.8	4.1	4.3	4.3
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

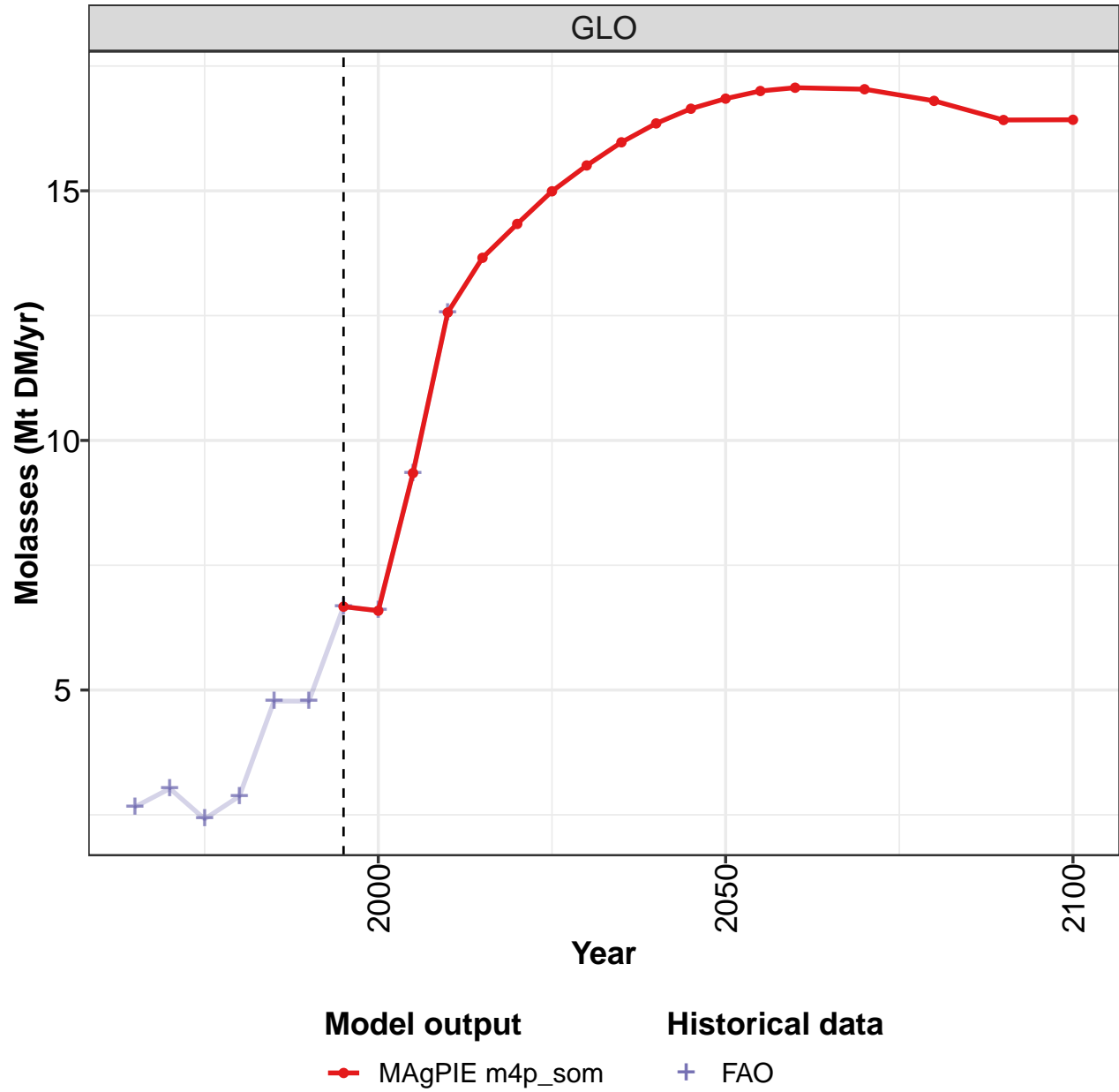
Table 552: MAgPIE m4p\_som — Demand—Material—Secondary products—Ethanol (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	7.3	5.8	5.8	11.4	27.7	37.0	28.5	23.6	33.4	55.4
CAZ	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.1	0.2	0.0
CHA	2.6	0.3	0.5	0.7	1.2	4.8	3.4	3.1	5.1	7.3
EUR	0.5	0.7	1.0	1.2	1.2	1.5	1.8	1.7	1.5	1.1
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
LAM	2.1	2.6	2.2	6.8	20.2	22.6	20.4	14.6	21.7	41.7
MEA	0.0	0.0	0.1	0.1	0.2	0.1	0.2	0.2	0.3	0.4
NEU	0.6	0.5	0.5	0.3	0.4	0.4	0.5	0.5	0.7	0.6
OAS	0.1	0.2	0.2	0.3	0.6	0.9	1.6	1.1	1.7	2.7
REF	0.3	0.3	0.3	0.4	0.5	2.4	0.1	0.2	0.2	0.4
SSA	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.3	0.6	1.2
USA	1.0	1.0	1.0	1.2	3.2	4.0	0.2	1.8	1.4	0.0

Table 553: FAO — Demand—Material—Secondary products—Ethanol (Mt DM/yr)

8.6.5 Molasses

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

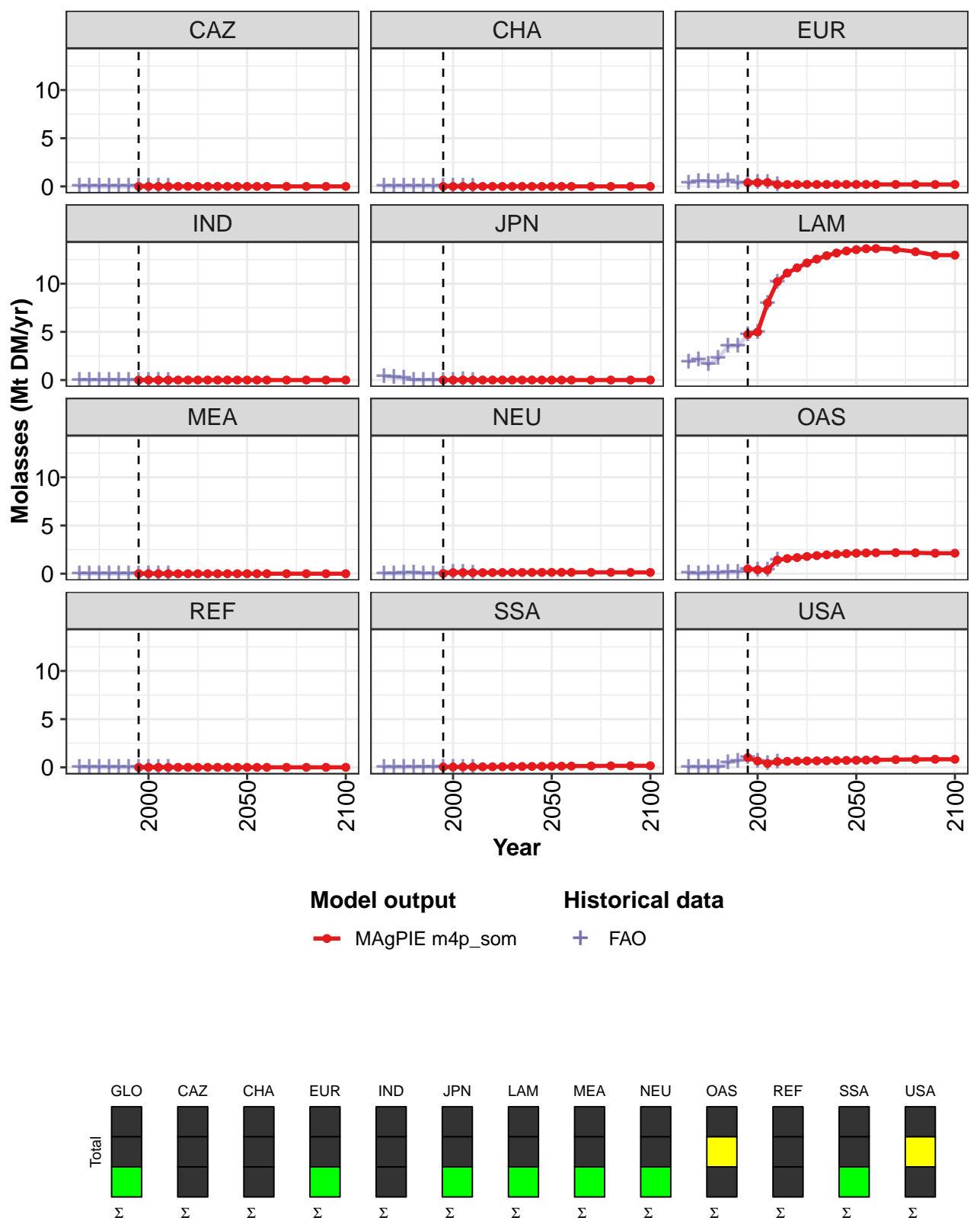


Figure 185: MAgPIE m4p\_som — Demand—Material—Secondary products—Molasses (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	6.7	6.6	9.3	12.6	13.7	14.3	15.0	15.5	16.0	16.4	16.6
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	4.7	5.0	8.0	10.2	11.1	11.6	12.1	12.6	12.9	13.2	13.4
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	0.5	0.4	0.4	1.4	1.6	1.7	1.8	1.9	2.0	2.0	2.1
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
USA	1.0	0.7	0.4	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7

Table 554: MAgPIE m4p\_som — Demand—Material—Secondary products—Molasses (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	16.8	17.0	17.1	17.0	16.8	16.4	16.4
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.2	0.2	0.2	0.2	0.2	0.2	0.2
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	13.5	13.6	13.6	13.6	13.3	13.0	13.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	2.1	2.2	2.2	2.2	2.2	2.1	2.1
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.1	0.1	0.1	0.1	0.2	0.2	0.2
USA	0.7	0.8	0.8	0.8	0.8	0.8	0.8

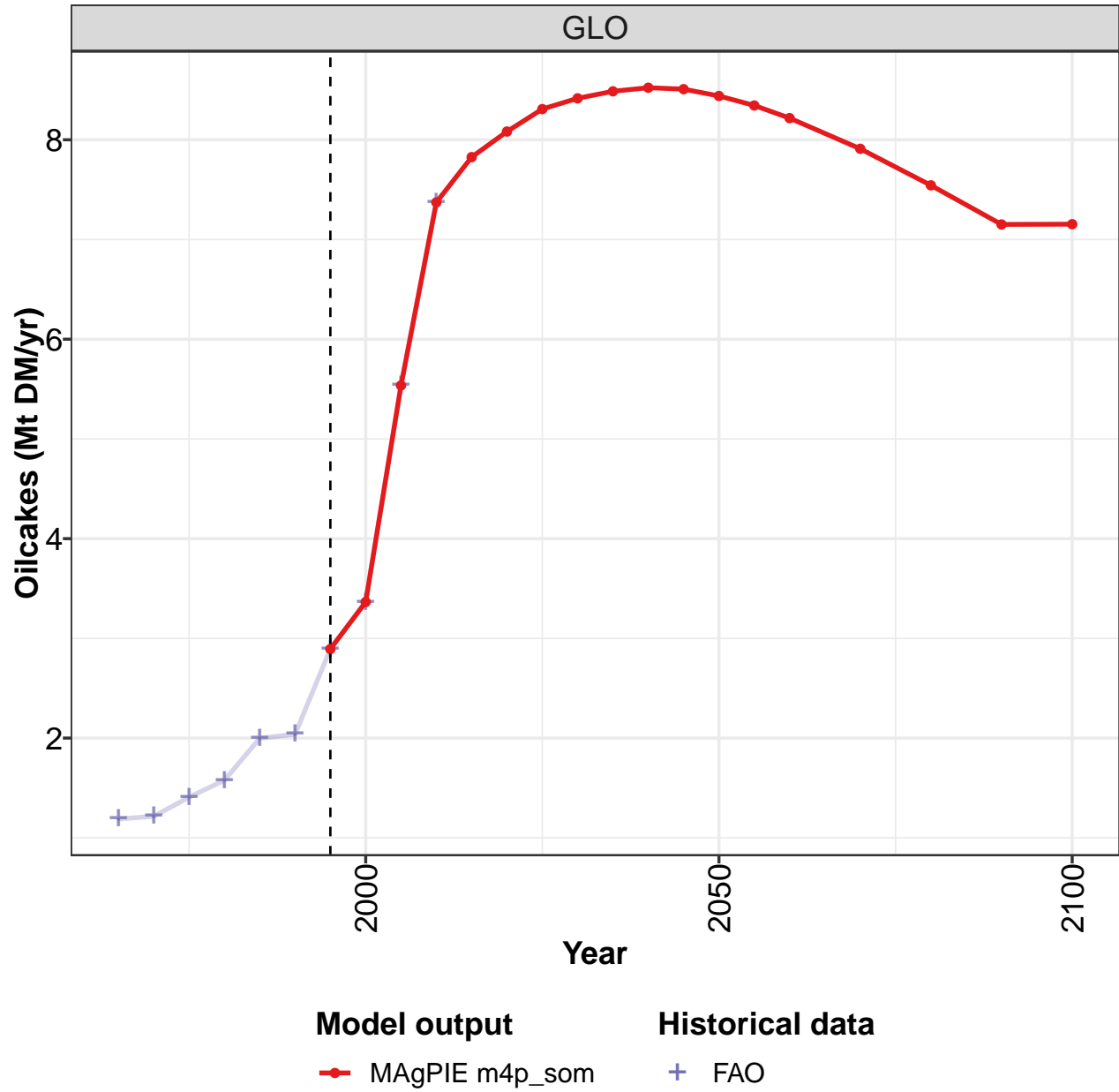
Table 555: MAgPIE m4p\_som — Demand—Material—Secondary products—Molasses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.7	3.0	2.4	2.9	4.8	4.8	6.7	6.6	9.3	12.6
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.3	0.5	0.5	0.5	0.6	0.4	0.4	0.4	0.4	0.2
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.4	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.9	2.1	1.6	2.3	3.5	3.5	4.7	5.0	8.0	10.2
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1
OAS	0.0	0.0	0.0	0.1	0.1	0.2	0.5	0.4	0.4	1.4
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.5	0.7	1.0	0.7	0.4	0.6

Table 556: FAO — Demand—Material—Secondary products—Molasses (Mt DM/yr)

8.6.6 Oilcakes

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

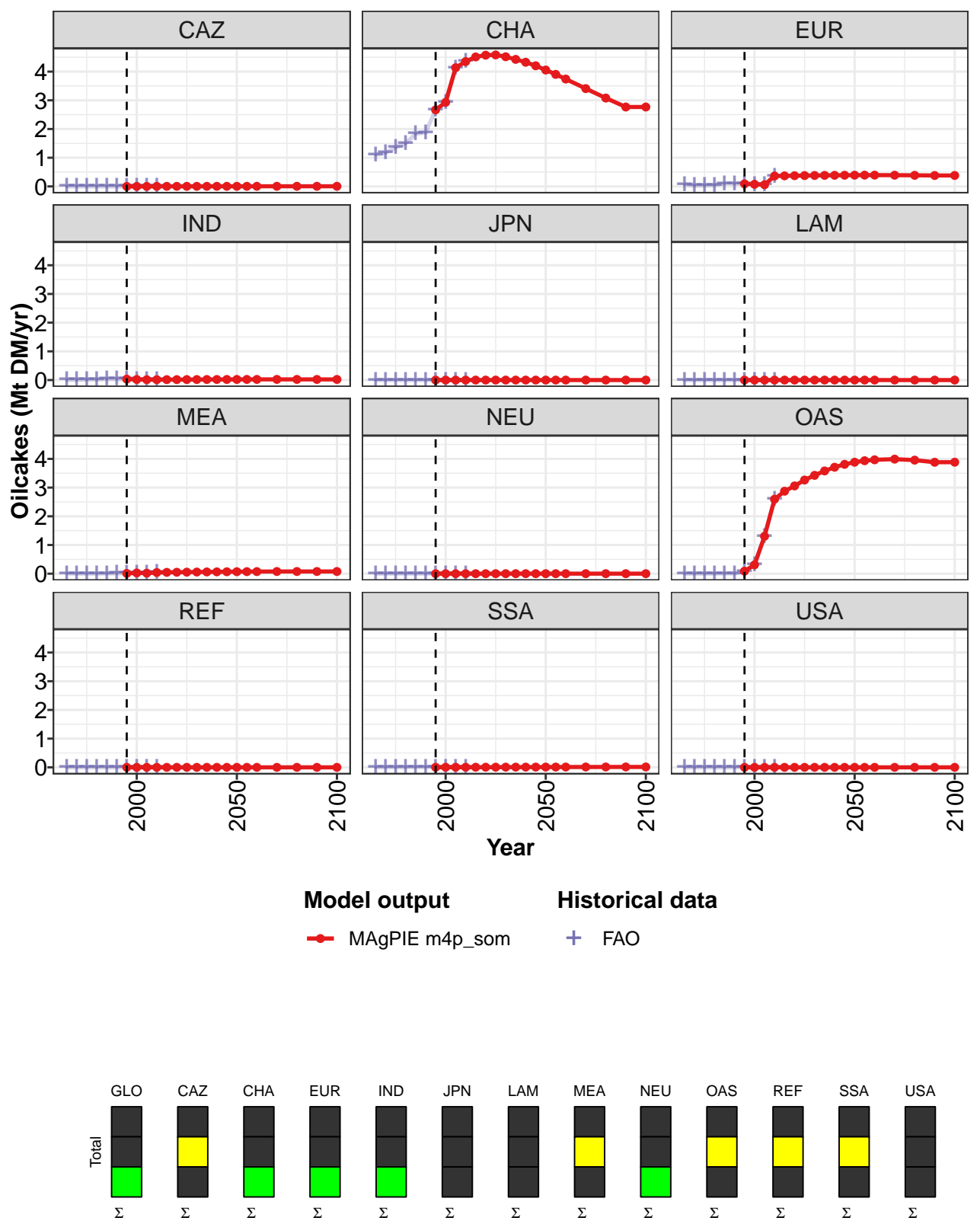


Figure 186: MAgPIE m4p\_som — Demand—Material—Secondary products—Oilcakes (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	2.89	3.36	5.54	7.37	7.83	8.08	8.31	8.42	8.49	8.52	8.51
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	2.67	2.93	4.14	4.35	4.51	4.57	4.58	4.52	4.43	4.33	4.20
EUR	0.09	0.07	0.06	0.36	0.37	0.37	0.38	0.38	0.38	0.39	0.39
IND	0.03	0.02	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.01	0.03	0.02	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.07
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.09	0.31	1.30	2.60	2.87	3.06	3.26	3.43	3.58	3.71	3.81
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 557: MAgPIE m4p\_som — Demand—Material—Secondary products—Oilcakes (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	8.44	8.34	8.22	7.91	7.54	7.15	7.15
CAZ	0.00	0.00	0.00	0.00	0.00	0.01	0.01
CHA	4.06	3.90	3.74	3.41	3.08	2.77	2.77
EUR	0.39	0.39	0.39	0.39	0.39	0.38	0.38
IND	0.02	0.02	0.02	0.02	0.02	0.02	0.02
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.07	0.07	0.07	0.08	0.08	0.08	0.08
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	3.88	3.94	3.97	3.99	3.96	3.88	3.89
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.01	0.01	0.01	0.01	0.01	0.01	0.01
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00

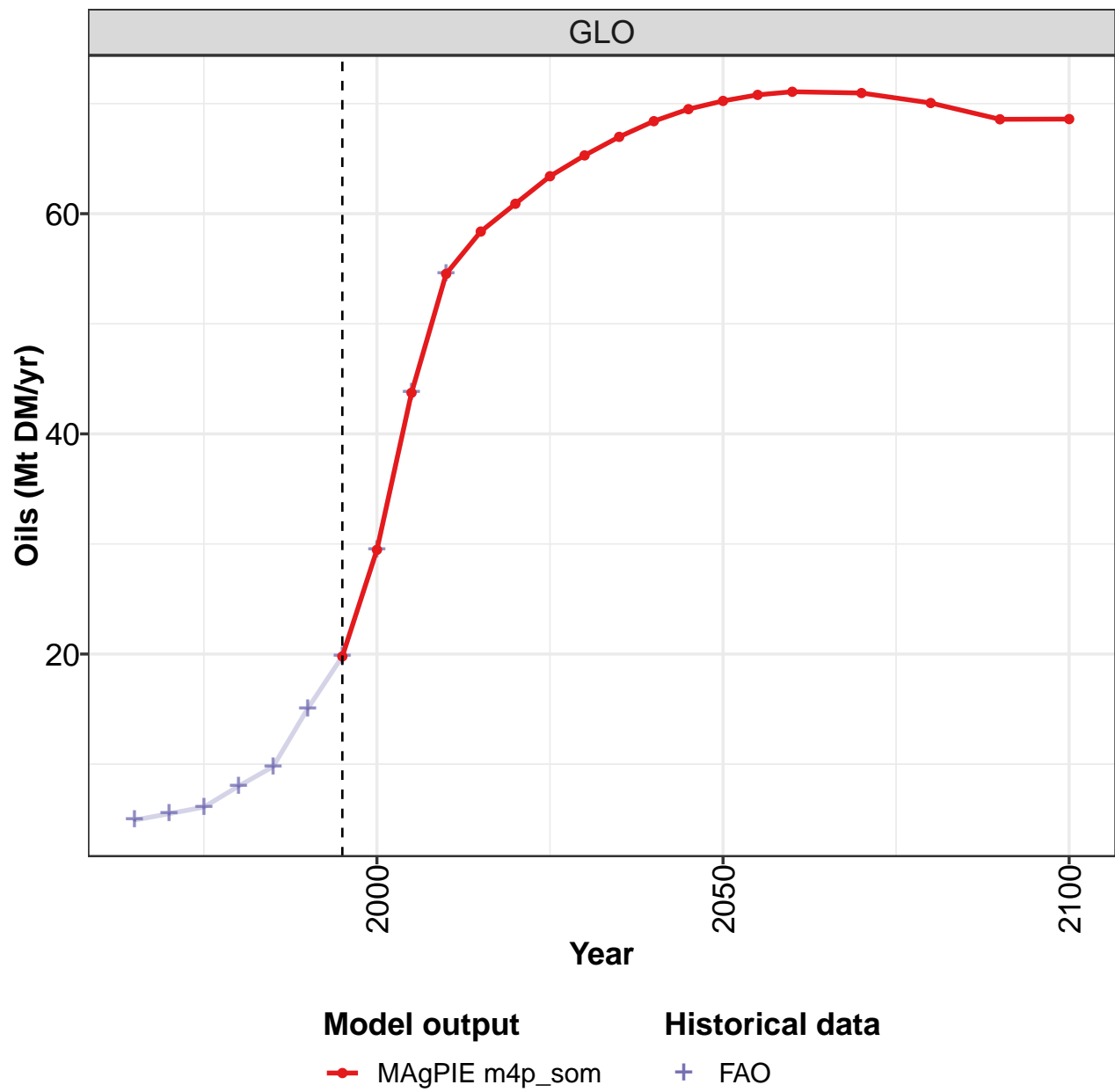
Table 558: MAgPIE m4p\_som — Demand—Material—Secondary products—Oilcakes (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.19	1.22	1.41	1.58	2.00	2.04	2.89	3.36	5.54	7.37
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	1.11	1.17	1.35	1.50	1.83	1.88	2.67	2.93	4.14	4.35
EUR	0.07	0.03	0.04	0.05	0.10	0.10	0.09	0.07	0.06	0.36
IND	0.00	0.01	0.02	0.02	0.04	0.04	0.03	0.02	0.01	0.01
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.03	0.02	0.04
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.01	0.01	0.09	0.31	1.30	2.60
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 559: FAO — Demand—Material—Secondary products—Oilcakes (Mt DM/yr)

8.6.7 Oils

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

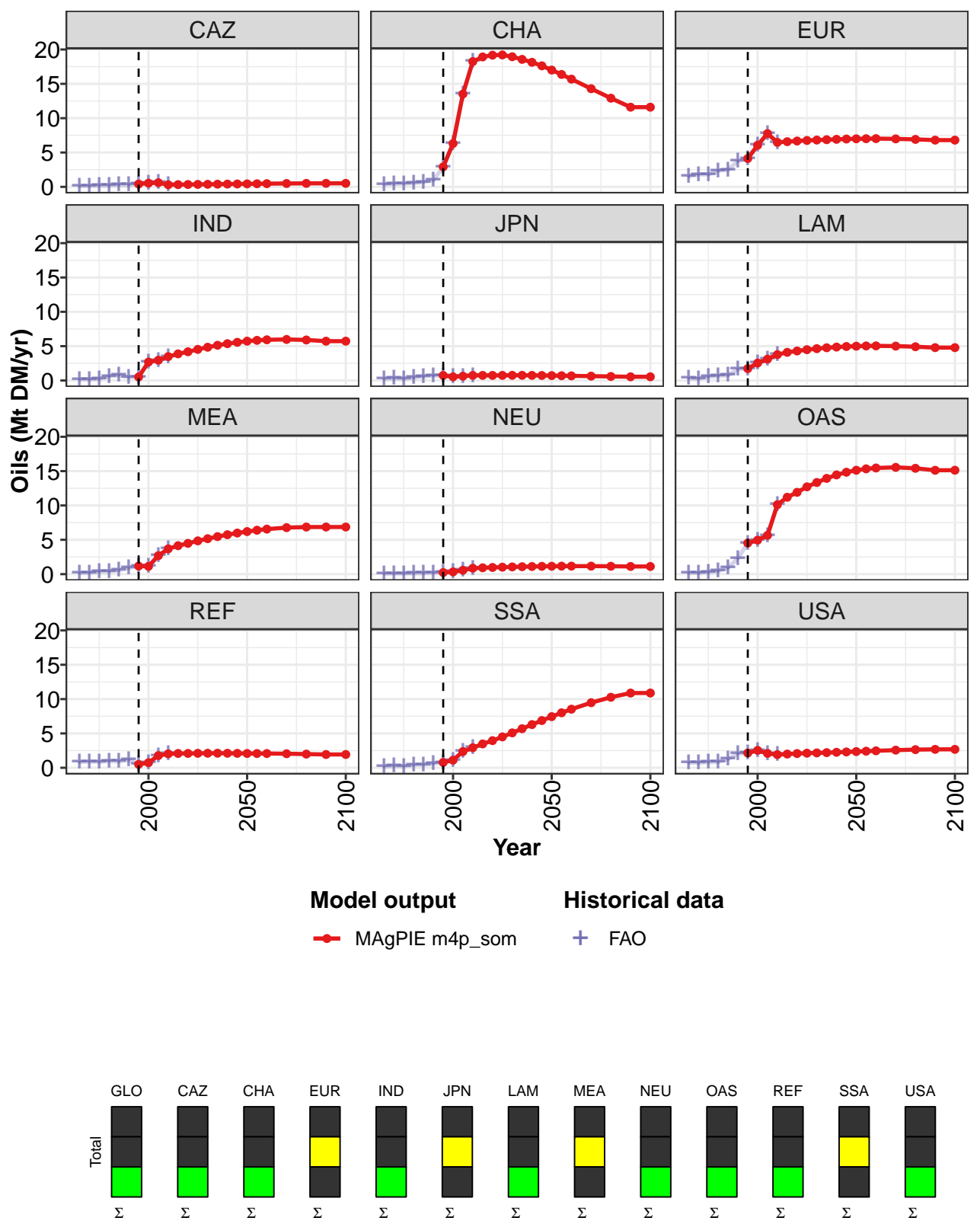


Figure 187: MAgPIE m4p\_som — Demand—Material—Secondary products—Oils (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	19.8	29.5	43.7	54.5	58.4	60.9	63.4	65.3	67.0	68.4	69.5
CAZ	0.4	0.5	0.6	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
CHA	2.9	6.3	13.5	18.2	18.9	19.2	19.2	18.9	18.6	18.1	17.6
EUR	4.1	6.1	7.8	6.5	6.6	6.7	6.8	6.8	6.9	6.9	7.0
IND	0.5	2.7	3.0	3.5	3.9	4.2	4.5	4.8	5.1	5.4	5.6
JPN	0.7	0.5	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.7
LAM	1.7	2.5	3.1	3.8	4.1	4.3	4.5	4.6	4.8	4.9	4.9
MEA	1.2	1.1	2.7	3.7	4.1	4.5	4.8	5.2	5.5	5.7	6.0
NEU	0.2	0.3	0.6	0.9	0.9	1.0	1.0	1.1	1.1	1.1	1.1
OAS	4.5	5.0	5.6	10.1	11.2	11.9	12.7	13.3	13.9	14.4	14.8
REF	0.5	0.7	1.8	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1
SSA	0.8	1.1	2.4	2.9	3.5	4.0	4.5	5.1	5.7	6.3	6.9
USA	2.1	2.5	2.1	1.9	2.0	2.1	2.1	2.2	2.2	2.3	2.3

Table 560: MAgPIE m4p\_som — Demand—Material—Secondary products—Oils (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	70.2	70.8	71.1	71.0	70.1	68.6	68.6
CAZ	0.4	0.5	0.5	0.5	0.5	0.5	0.5
CHA	17.0	16.4	15.7	14.3	12.9	11.6	11.6
EUR	7.0	7.0	7.0	7.0	6.9	6.8	6.8
IND	5.7	5.8	5.9	6.0	5.9	5.7	5.7
JPN	0.7	0.7	0.7	0.6	0.6	0.5	0.5
LAM	5.0	5.0	5.0	5.0	4.9	4.8	4.8
MEA	6.2	6.4	6.6	6.8	6.9	6.9	6.9
NEU	1.2	1.2	1.2	1.2	1.1	1.1	1.1
OAS	15.1	15.3	15.5	15.5	15.4	15.1	15.1
REF	2.1	2.1	2.1	2.0	2.0	1.9	1.9
SSA	7.4	8.0	8.5	9.5	10.3	10.9	10.9
USA	2.4	2.4	2.5	2.6	2.6	2.7	2.7

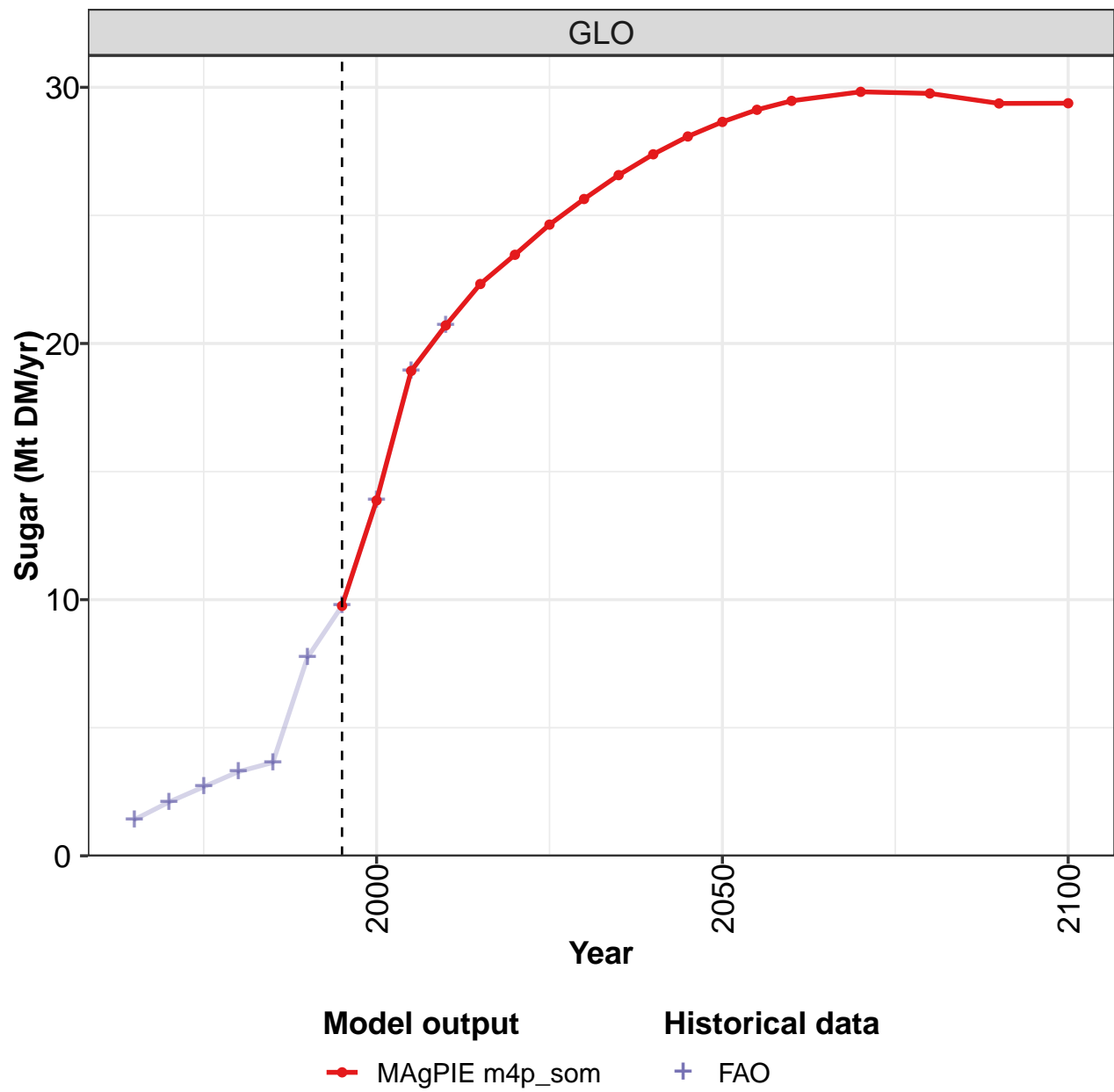
Table 561: MAgPIE m4p\_som — Demand—Material—Secondary products—Oils (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4.9	5.5	6.1	8.0	9.8	15.0	19.8	29.5	43.7	54.5
CAZ	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.5	0.6	0.3
CHA	0.4	0.4	0.5	0.6	0.7	1.0	2.9	6.3	13.5	18.2
EUR	1.5	1.8	1.8	2.3	2.5	3.7	4.1	6.1	7.8	6.5
IND	0.2	0.2	0.2	0.6	0.8	0.5	0.5	2.7	3.0	3.5
JPN	0.2	0.3	0.3	0.4	0.6	0.7	0.7	0.5	0.6	0.7
LAM	0.3	0.3	0.5	0.7	0.7	1.6	1.7	2.5	3.1	3.8
MEA	0.2	0.2	0.4	0.4	0.6	0.9	1.2	1.1	2.7	3.7
NEU	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.6	0.9
OAS	0.2	0.2	0.3	0.4	0.9	2.3	4.5	5.0	5.6	10.1
REF	0.8	0.9	0.8	1.0	0.9	1.2	0.5	0.7	1.8	2.0
SSA	0.2	0.3	0.2	0.4	0.4	0.6	0.8	1.1	2.4	2.9
USA	0.7	0.7	0.8	0.8	1.3	2.1	2.1	2.5	2.1	1.9

Table 562: FAO — Demand—Material—Secondary products—Oils (Mt DM/yr)

8.6.8 Sugar

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

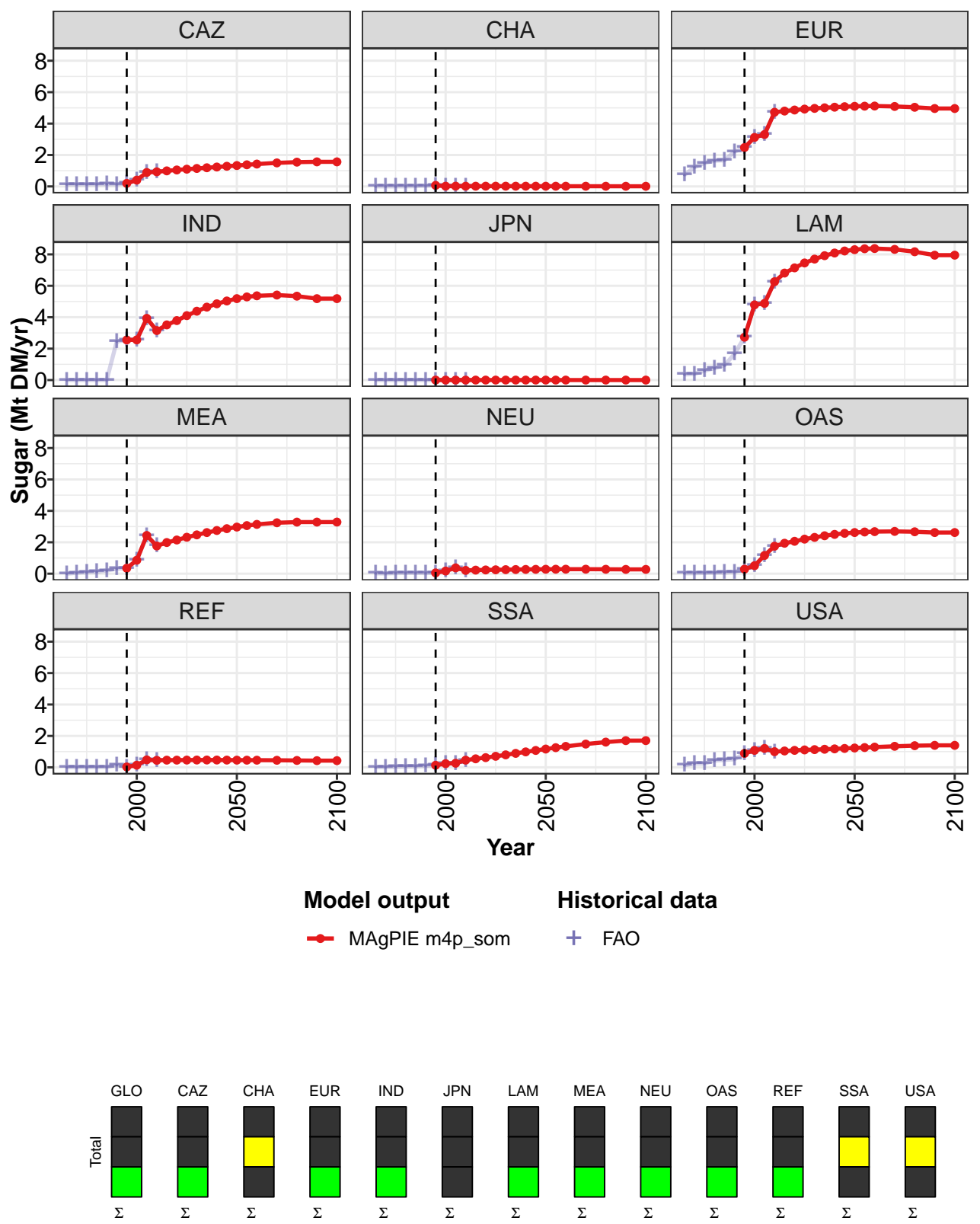


Figure 188: MAgPIE m4p\_som — Demand—Material—Secondary products—Sugar (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	9.8	13.9	18.9	20.7	22.3	23.5	24.6	25.6	26.6	27.4	28.1
CAZ	0.2	0.4	0.9	0.9	1.0	1.0	1.1	1.1	1.2	1.2	1.3
CHA	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	2.5	3.1	3.3	4.7	4.8	4.9	4.9	5.0	5.0	5.0	5.1
IND	2.6	2.6	3.9	3.2	3.5	3.8	4.1	4.4	4.6	4.9	5.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	2.7	4.8	4.9	6.3	6.8	7.1	7.5	7.7	7.9	8.1	8.2
MEA	0.3	0.9	2.4	1.8	2.0	2.1	2.3	2.5	2.6	2.8	2.9
NEU	0.1	0.2	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
OAS	0.3	0.5	1.2	1.8	1.9	2.1	2.2	2.3	2.4	2.5	2.6
REF	0.0	0.1	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
SSA	0.1	0.2	0.3	0.5	0.5	0.6	0.7	0.8	0.9	1.0	1.1
USA	0.9	1.1	1.2	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.2

Table 563: MAgPIE m4p.som — Demand—Material—Secondary products—Sugar (Mt DM/yr) [PART 1/2]

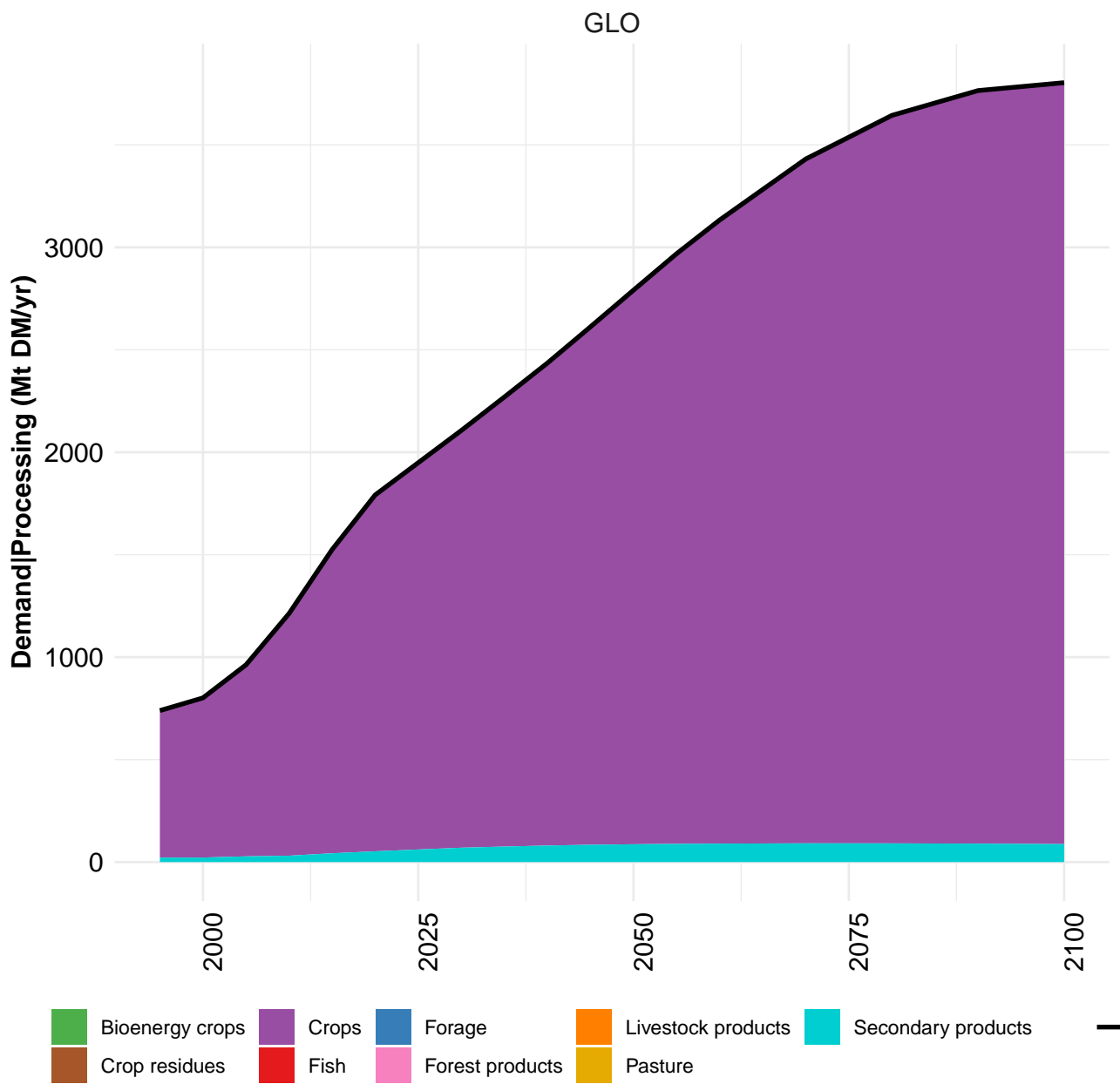
	2050	2055	2060	2070	2080	2090	2100
GLO	28.7	29.1	29.5	29.8	29.8	29.4	29.4
CAZ	1.3	1.4	1.4	1.5	1.5	1.6	1.6
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	5.1	5.1	5.1	5.1	5.0	5.0	5.0
IND	5.2	5.3	5.4	5.4	5.3	5.2	5.2
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	8.3	8.4	8.4	8.3	8.2	7.9	8.0
MEA	3.0	3.1	3.1	3.2	3.3	3.3	3.3
NEU	0.3	0.3	0.3	0.3	0.3	0.3	0.3
OAS	2.6	2.7	2.7	2.7	2.7	2.6	2.6
REF	0.5	0.5	0.5	0.5	0.4	0.4	0.4
SSA	1.2	1.3	1.3	1.5	1.6	1.7	1.7
USA	1.2	1.3	1.3	1.3	1.4	1.4	1.4

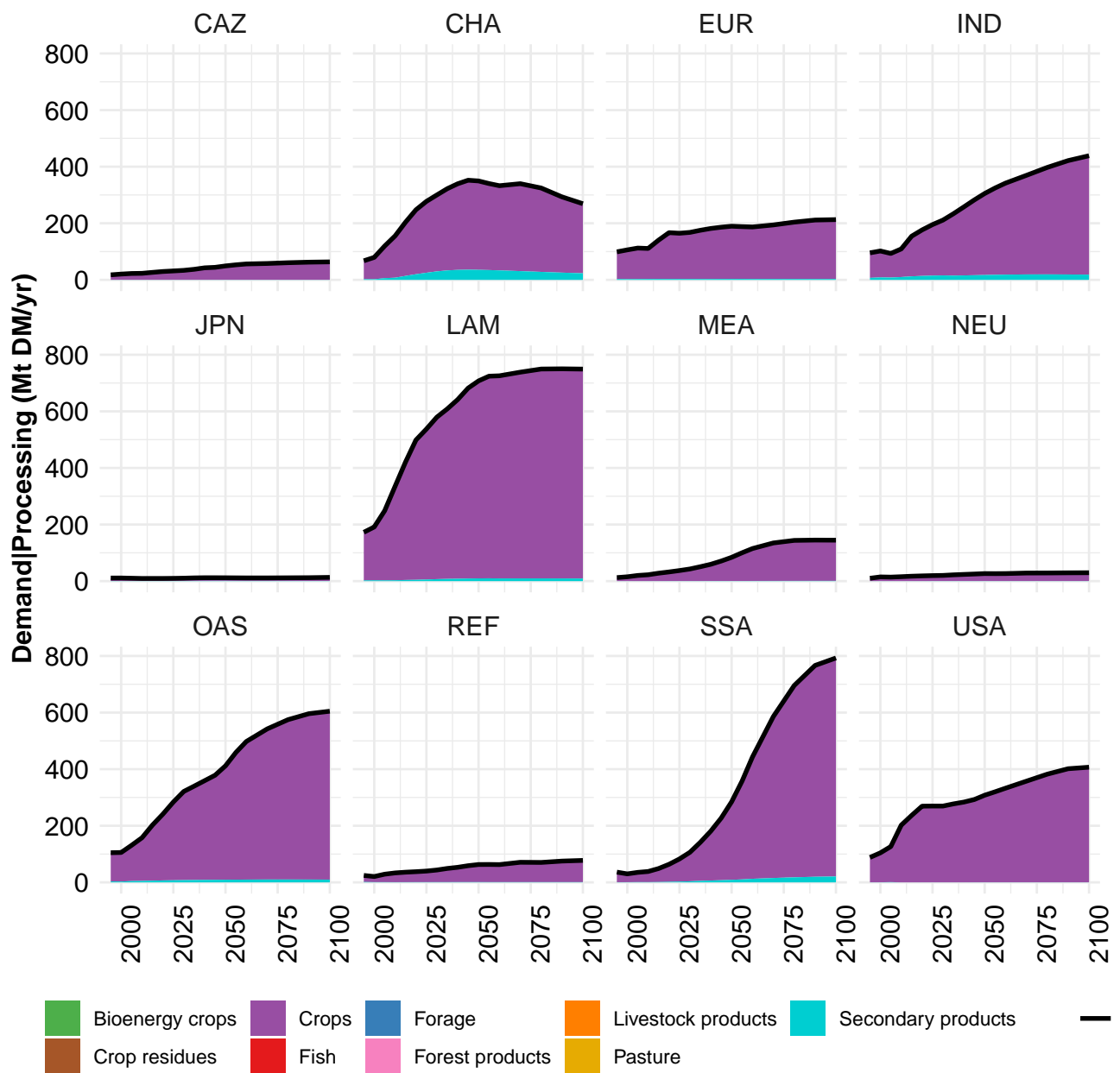
Table 564: MAgPIE m4p.som — Demand—Material—Secondary products—Sugar (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.4	2.1	2.7	3.3	3.6	7.7	9.8	13.9	18.9	20.7
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.9	0.9
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
EUR	0.7	1.2	1.5	1.6	1.7	2.2	2.5	3.1	3.3	4.7
IND	0.0	0.0	0.0	0.0	0.0	2.5	2.6	2.6	3.9	3.2
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.4	0.4	0.6	0.8	0.9	1.7	2.7	4.8	4.9	6.3
MEA	0.0	0.1	0.1	0.1	0.2	0.3	0.3	0.9	2.4	1.8
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.2
OAS	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.5	1.2	1.8
REF	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.5	0.4
SSA	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.5
USA	0.1	0.2	0.2	0.4	0.5	0.5	0.9	1.1	1.2	1.0

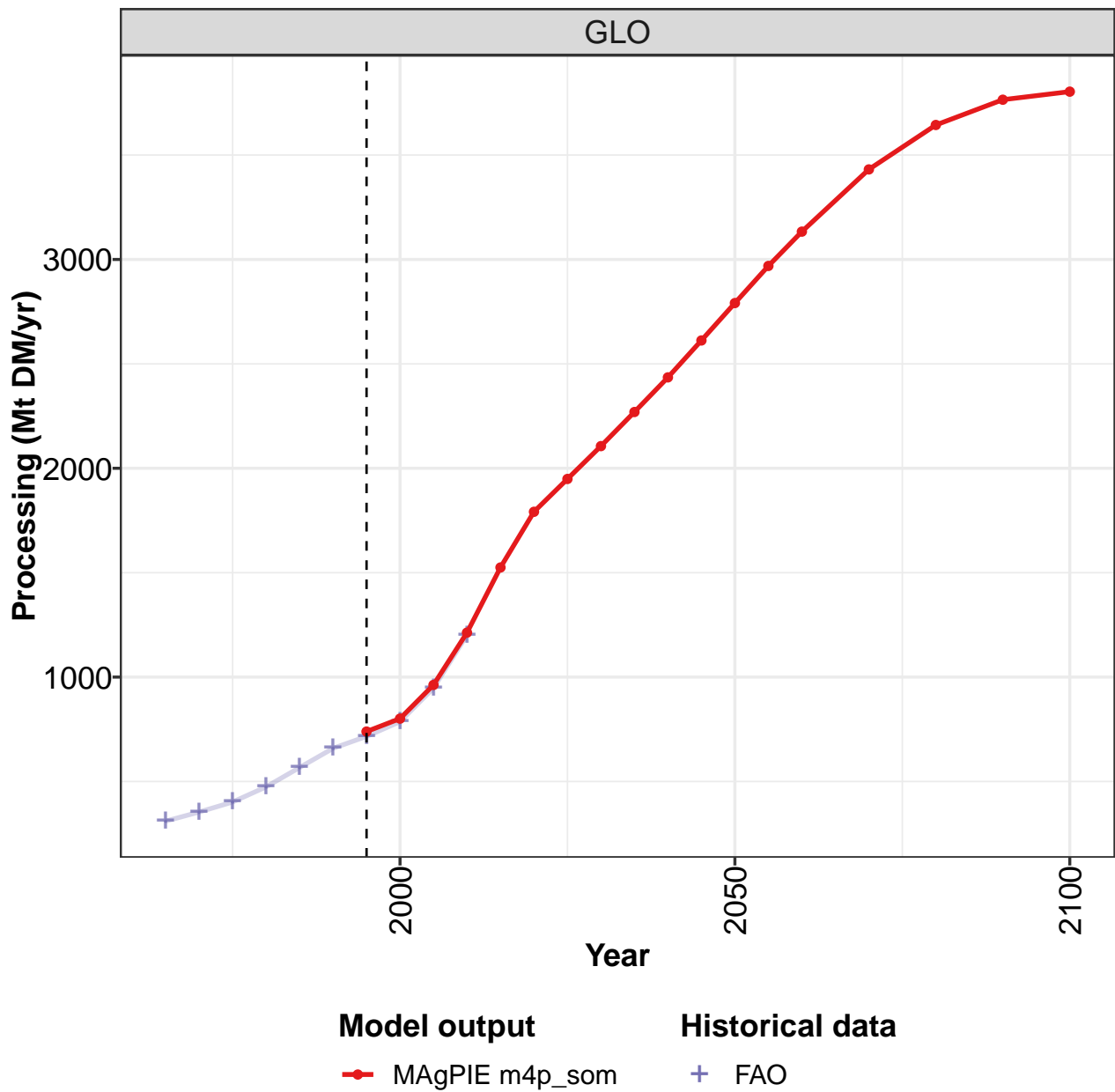
Table 565: FAO — Demand—Material—Secondary products—Sugar (Mt DM/yr)

## 9 Processing





## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

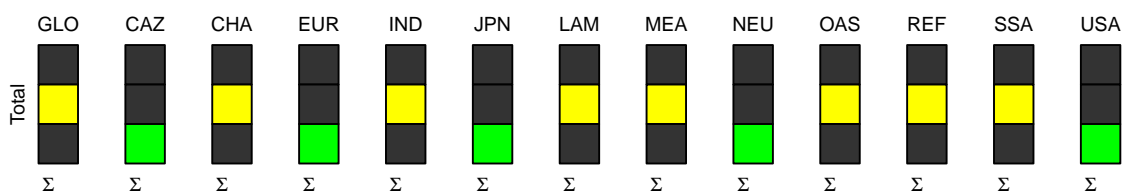
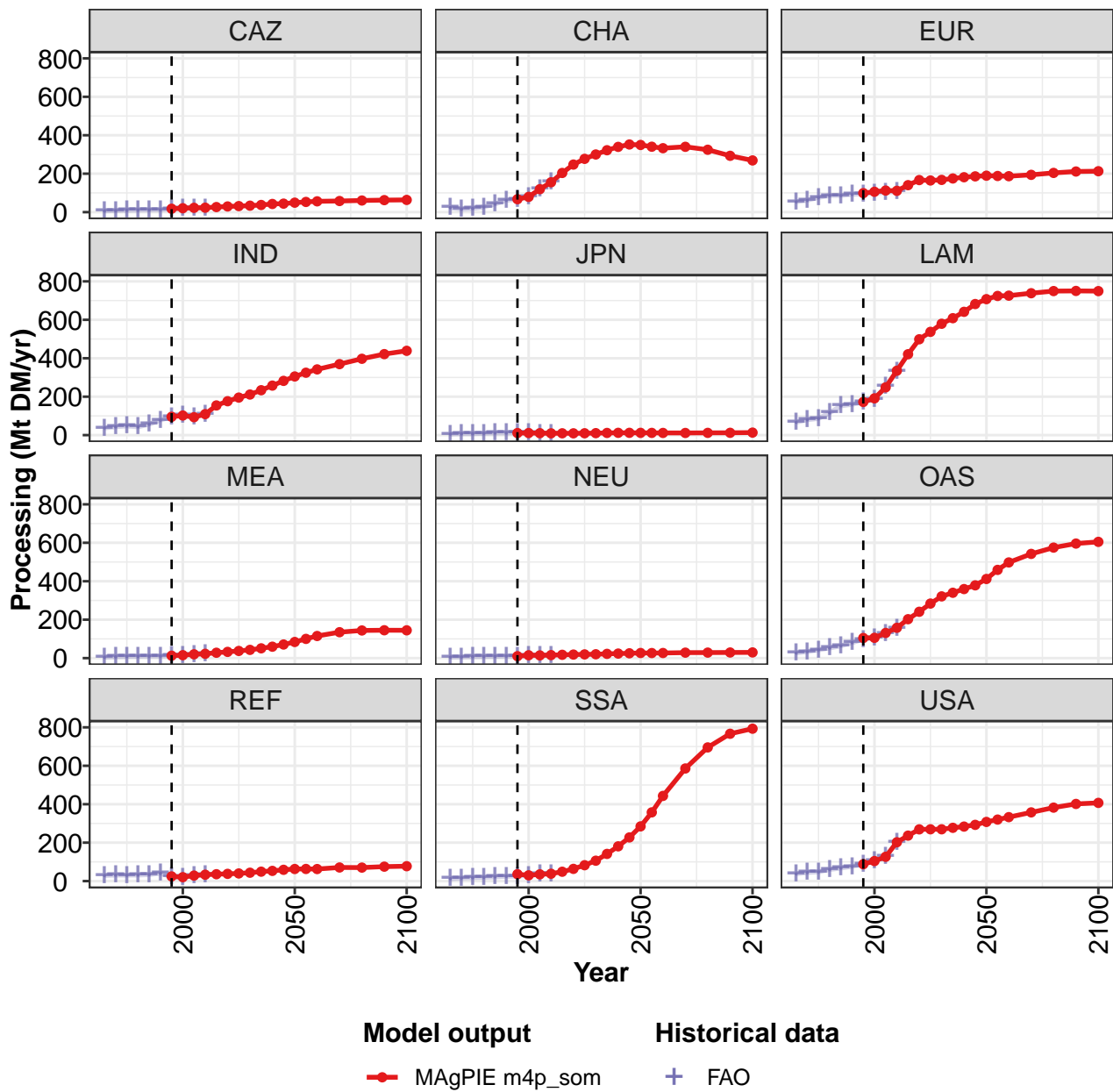


Figure 189: MAgPIE m4p\_som — Demand—Processing (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	739	801	963	1213	1525	1792	1949	2106	2269	2435	2612
CAZ	18	20	23	23	26	30	31	34	37	43	44
CHA	67	79	120	155	204	248	277	300	322	340	352
EUR	99	106	112	111	140	167	165	168	175	182	186
IND	96	102	93	109	154	177	195	211	234	258	282
JPN	11	11	10	9	10	9	10	10	11	12	12
LAM	173	191	249	335	421	499	537	579	608	642	682
MEA	12	15	20	23	28	32	37	43	51	59	71
NEU	10	15	14	16	17	19	19	20	22	24	25
OAS	105	106	131	158	202	241	284	321	340	359	379
REF	24	21	29	33	36	38	40	44	49	53	59
SSA	36	30	35	38	49	64	83	106	142	181	227
USA	88	104	127	202	237	269	270	270	277	284	293

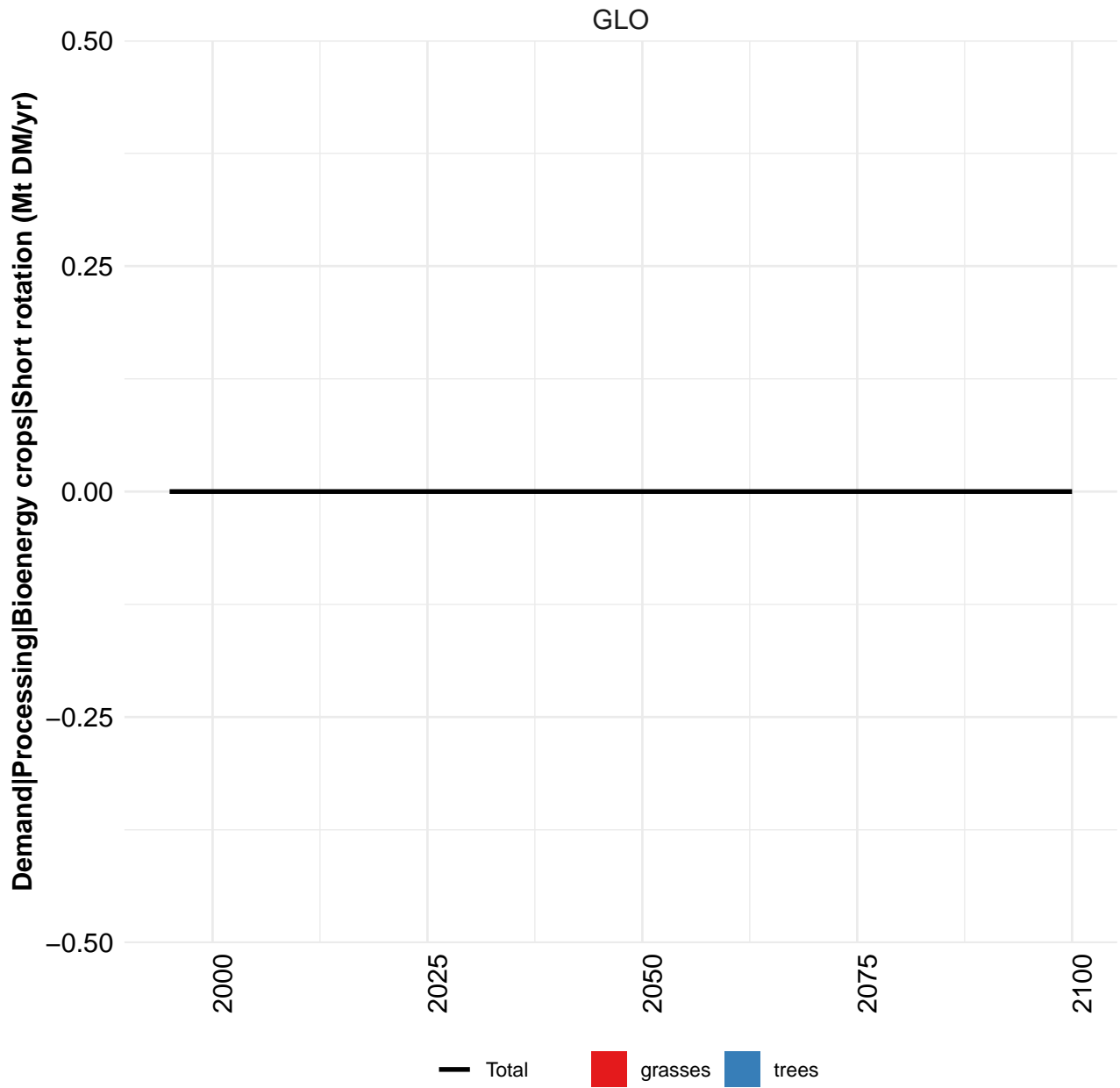
Table 566: MAgPIE m4p\_som — Demand—Processing (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	2791	2969	3133	3431	3644	3765	3804
CAZ	49	53	56	58	61	63	64
CHA	350	340	333	340	325	293	269
EUR	190	188	187	194	204	211	213
IND	305	325	342	369	397	422	439
JPN	12	12	11	11	12	12	13
LAM	707	724	726	738	749	750	749
MEA	84	100	115	135	144	145	145
NEU	27	26	27	29	29	29	30
OAS	412	459	498	542	575	596	605
REF	63	63	63	71	70	75	78
SSA	285	358	443	586	696	767	793
USA	308	320	333	358	382	402	407

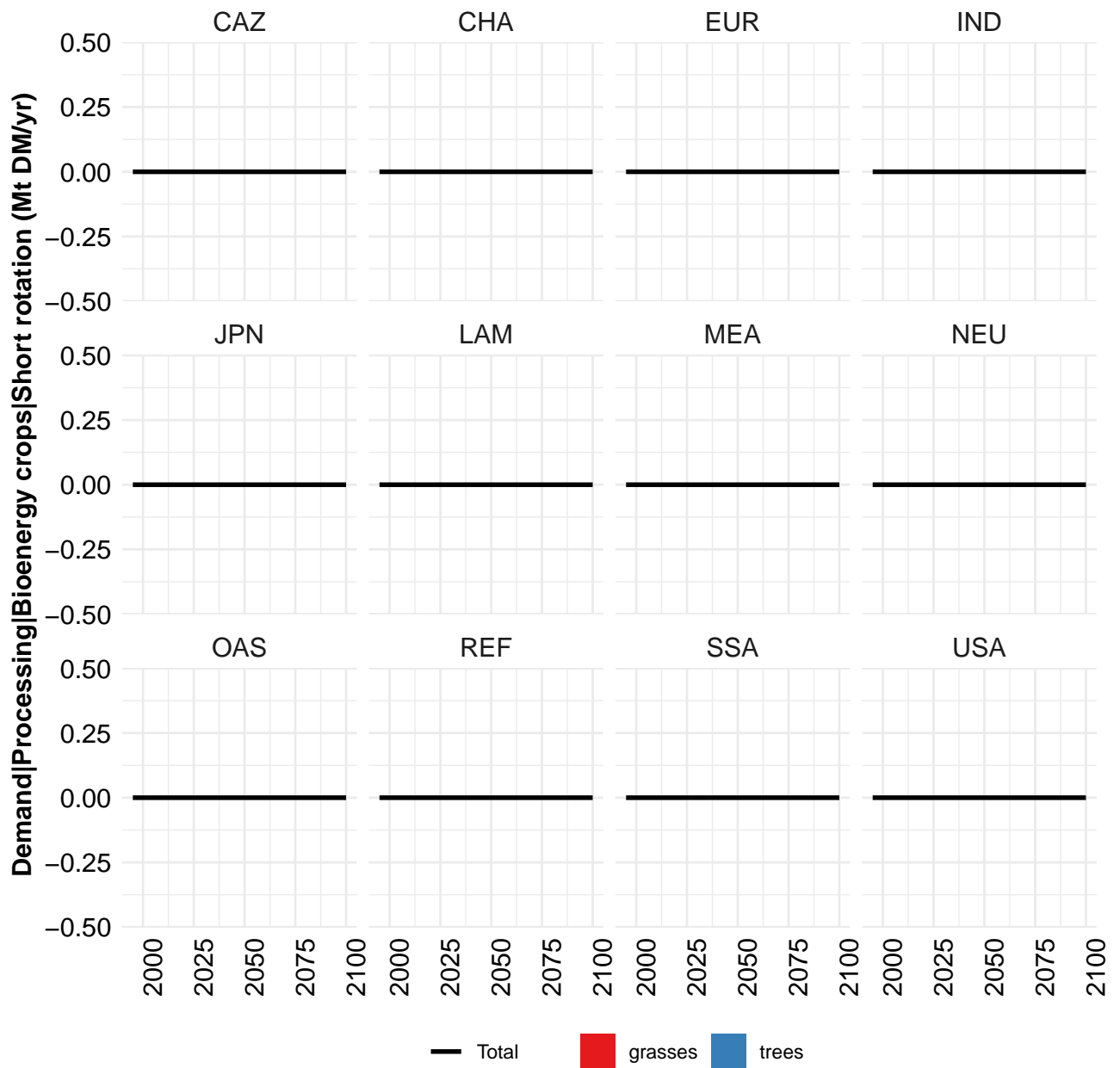
Table 567: MAgPIE m4p\_som — Demand—Processing (Mt DM/yr) [PART 2/2]

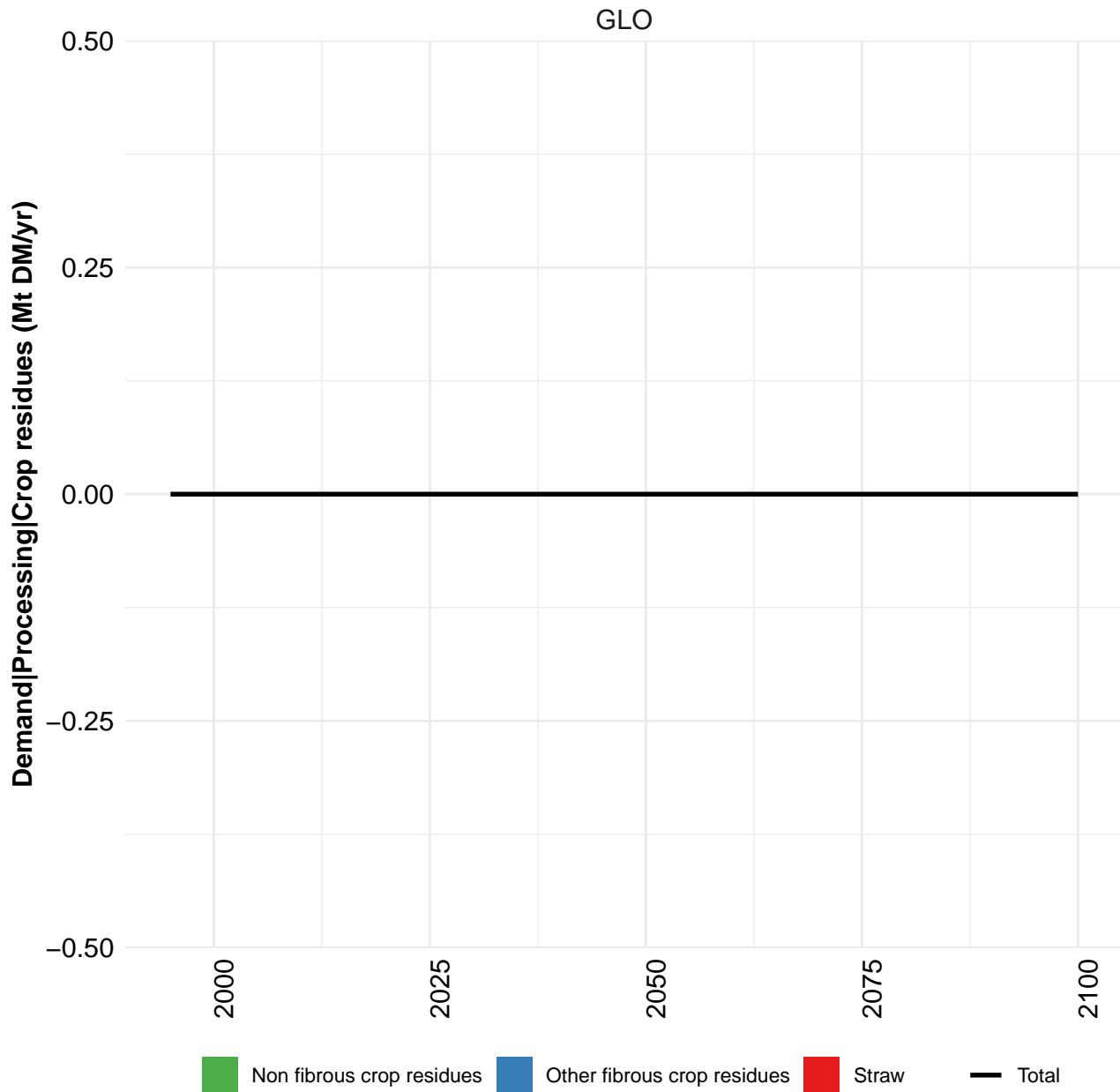
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	310	354	402	474	567	659	716	786	948	1201
CAZ	6	8	10	11	12	12	17	20	20	21
CHA	23	16	19	27	42	62	67	79	119	156
EUR	54	62	77	86	87	93	95	99	103	108
IND	38	43	47	43	57	78	96	102	93	109
JPN	5	7	7	9	11	11	11	11	10	9
LAM	67	80	86	116	152	160	173	186	253	331
MEA	5	7	9	9	11	11	12	15	19	22
NEU	5	6	7	8	9	11	9	13	13	16
OAS	27	34	43	52	64	80	98	105	126	156
REF	29	31	30	31	34	41	22	19	28	33
SSA	12	16	18	20	22	25	25	30	35	38
USA	38	45	48	60	68	76	89	107	129	204

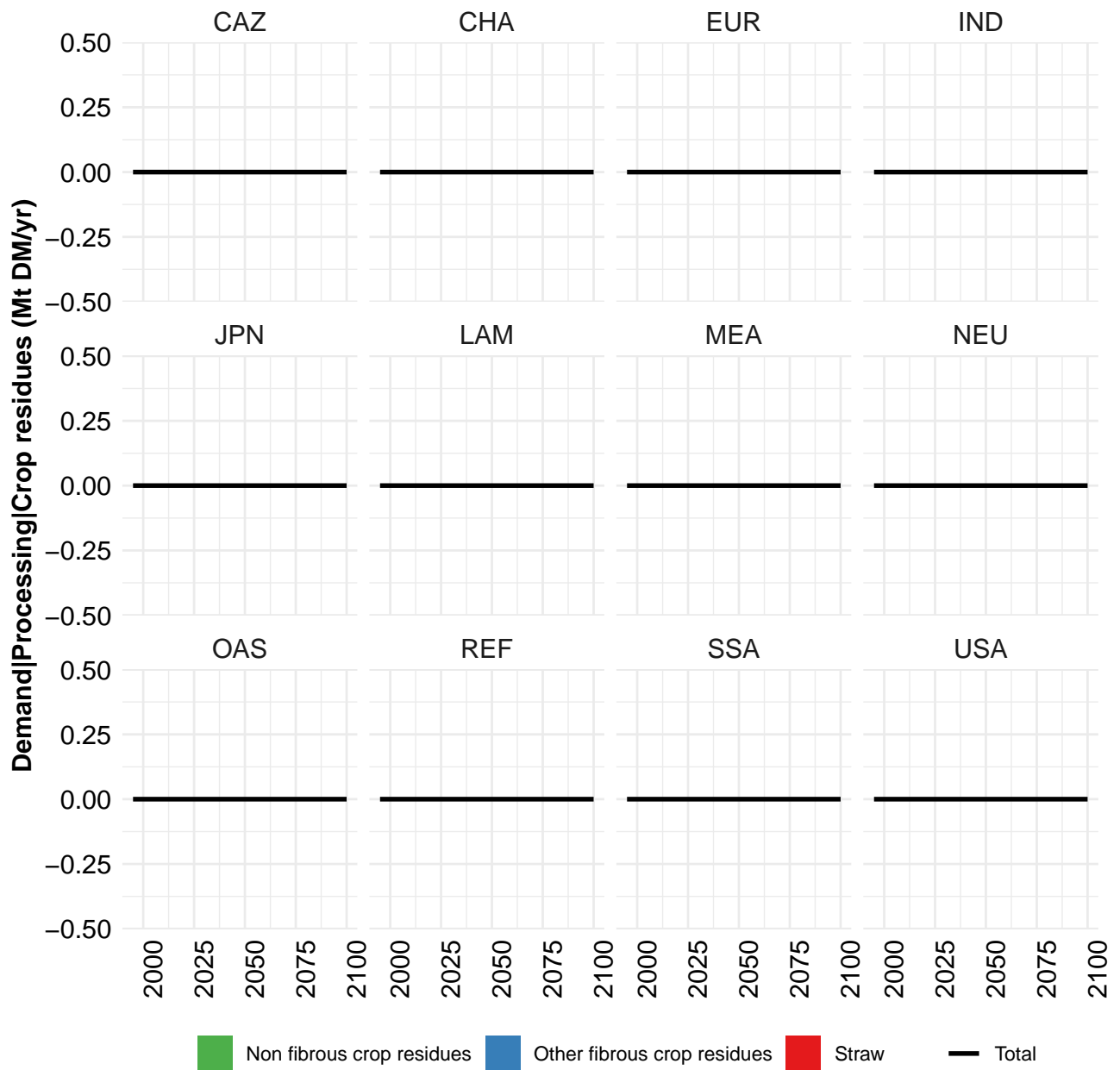
Table 568: FAO — Demand—Processing (Mt DM/yr)

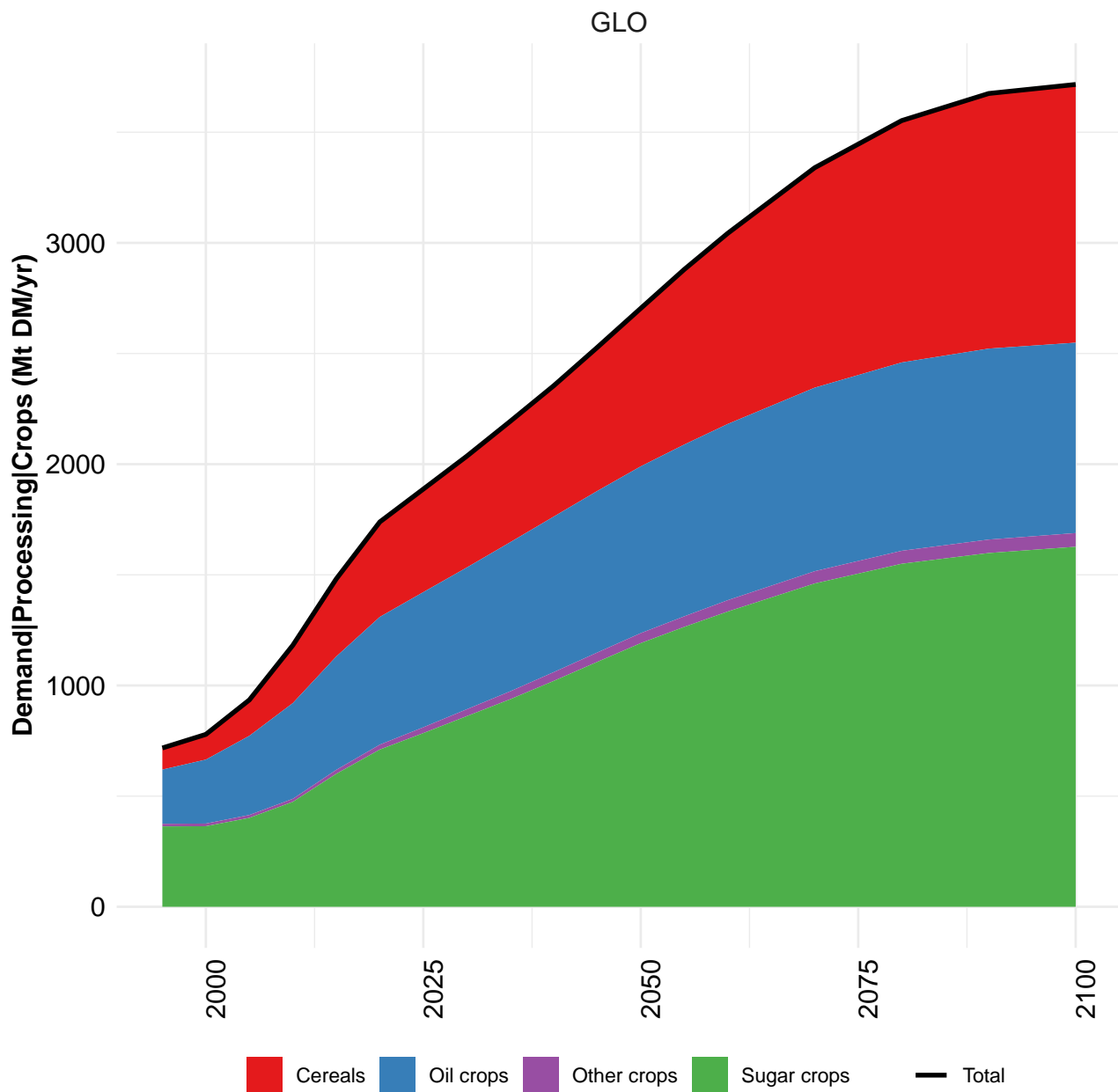


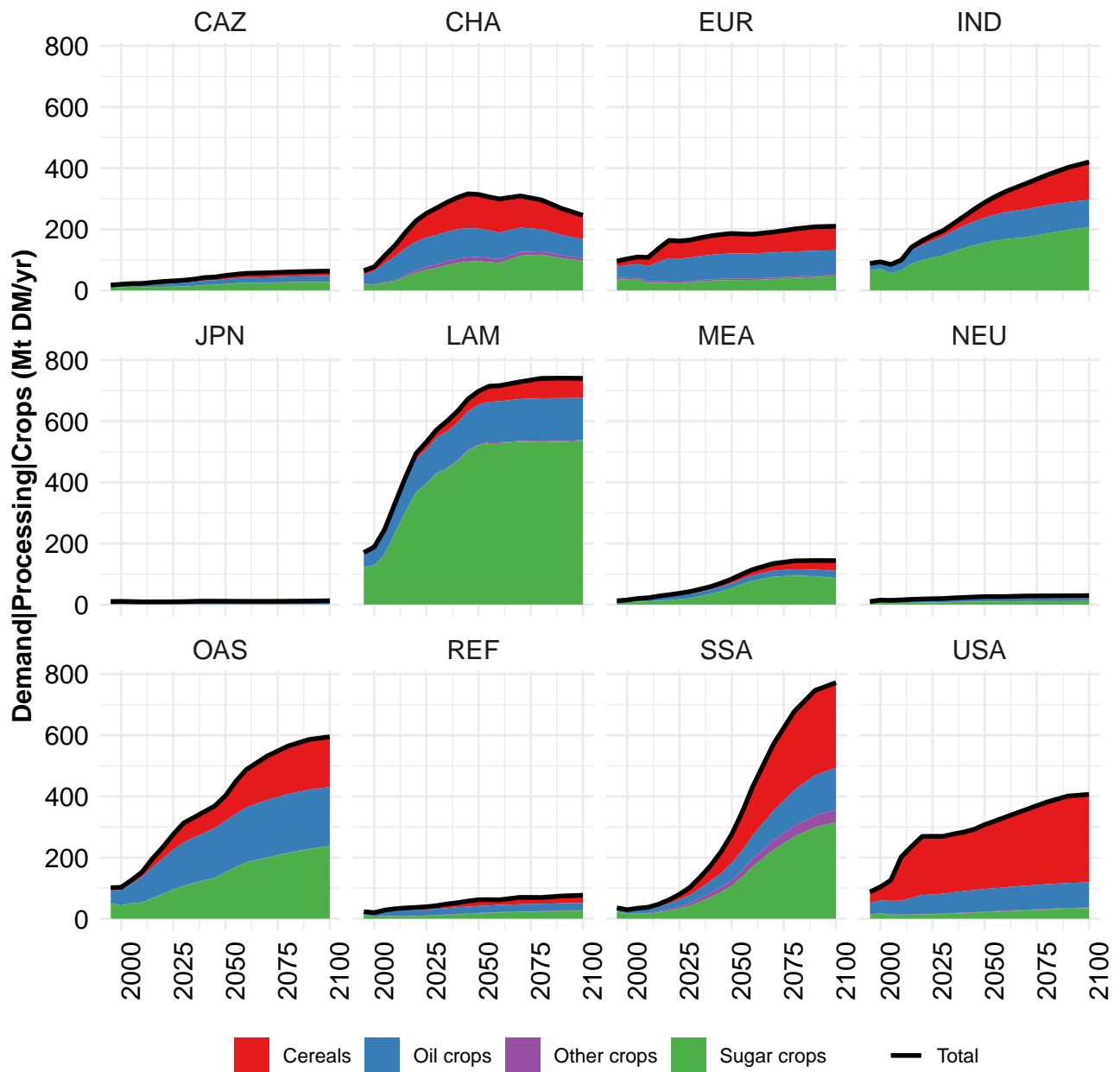






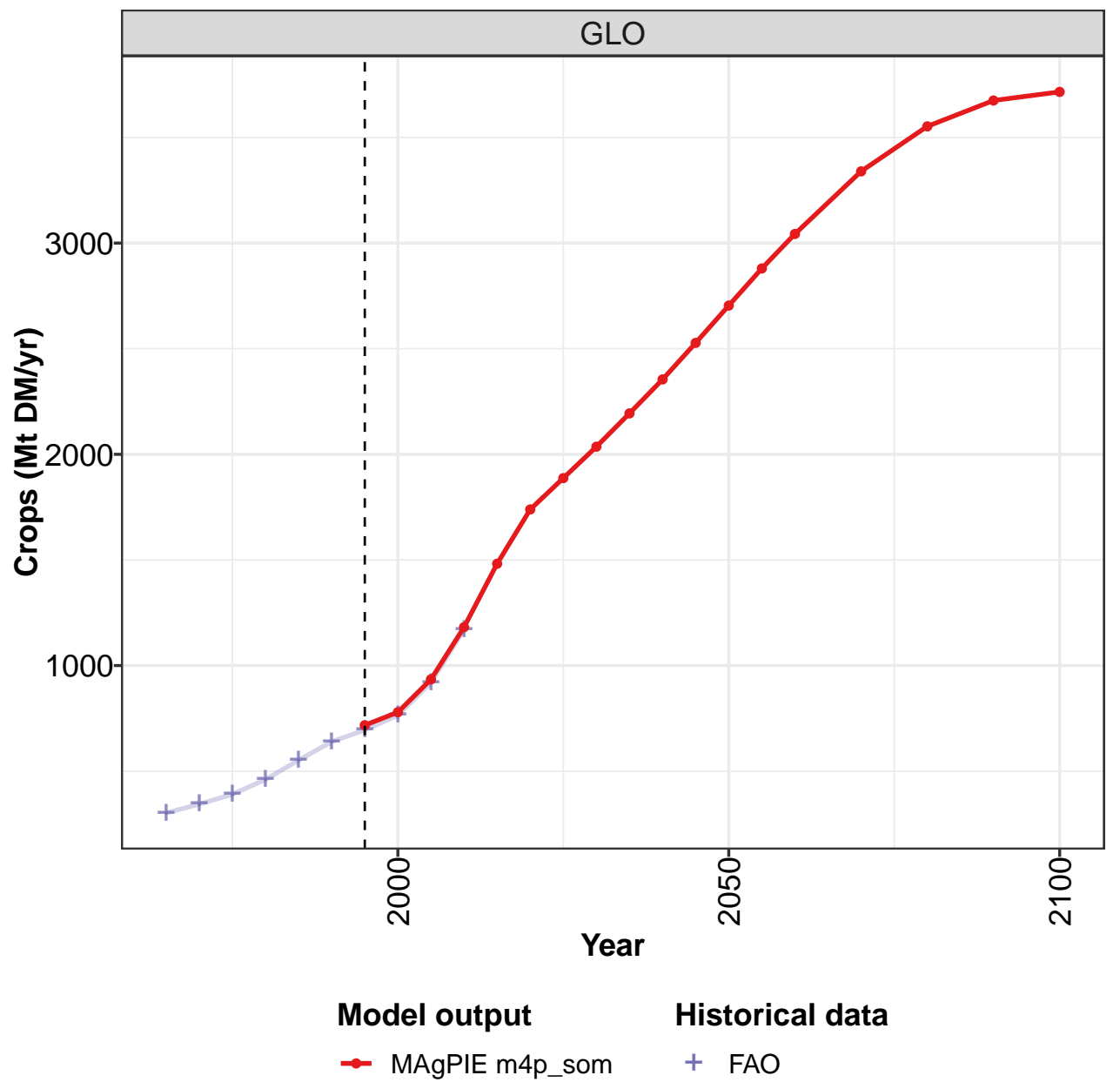






9.1 Crops

```
## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.
```



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

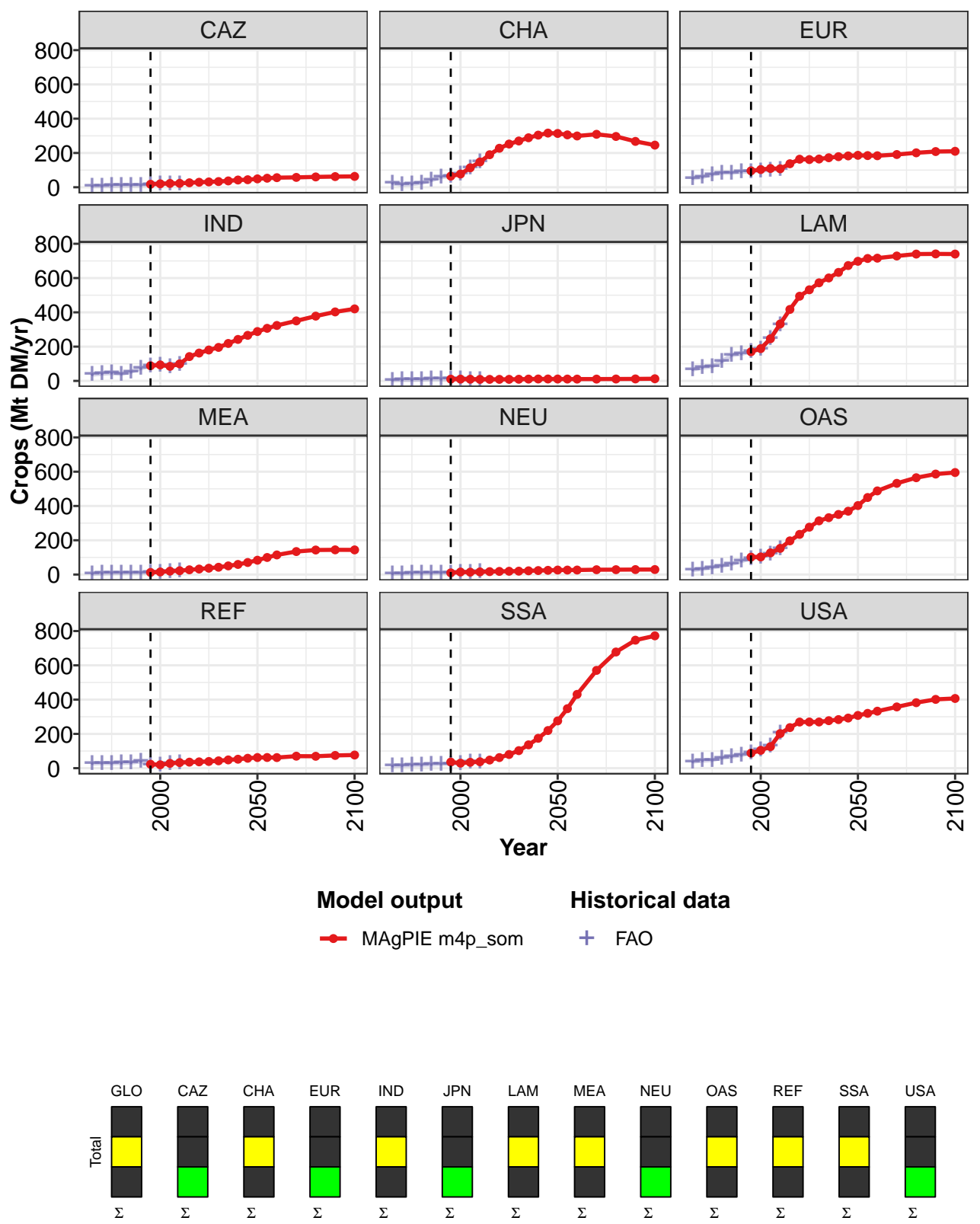


Figure 190: MAgPIE m4p\_som — Demand—Processing—Crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	717	779	935	1182	1482	1739	1887	2036	2194	2355	2528
CAZ	18	20	22	23	26	29	31	33	37	42	44
CHA	65	77	113	148	190	228	252	270	289	304	316
EUR	96	103	110	108	137	164	162	165	172	179	183
IND	88	93	85	99	142	163	180	195	219	242	266
JPN	10	11	10	9	9	9	9	10	11	11	11
LAM	170	189	246	332	417	494	532	572	601	633	673
MEA	12	15	20	22	28	32	37	43	51	59	70
NEU	10	15	14	15	17	18	19	20	22	23	25
OAS	101	103	126	153	196	234	276	313	332	351	370
REF	23	20	28	33	35	37	39	43	48	52	58
SSA	36	29	34	38	48	62	80	102	136	174	220
USA	88	104	126	202	237	269	270	270	277	284	292

Table 569: MAgPIE m4p\_som — Demand—Processing—Crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	2704	2880	3043	3340	3553	3675	3716
CAZ	49	53	56	58	60	62	63
CHA	314	306	299	309	296	268	246
EUR	186	185	184	191	201	208	210
IND	288	307	323	350	378	402	420
JPN	11	11	11	11	11	12	13
LAM	698	714	716	729	740	741	740
MEA	84	100	114	134	143	144	144
NEU	26	26	26	28	28	29	29
OAS	402	450	488	532	565	586	595
REF	62	62	62	70	70	74	77
SSA	276	347	431	571	678	747	772
USA	308	320	333	357	382	401	407

Table 570: MAgPIE m4p\_som — Demand—Processing—Crops (Mt DM/yr) [PART 2/2]

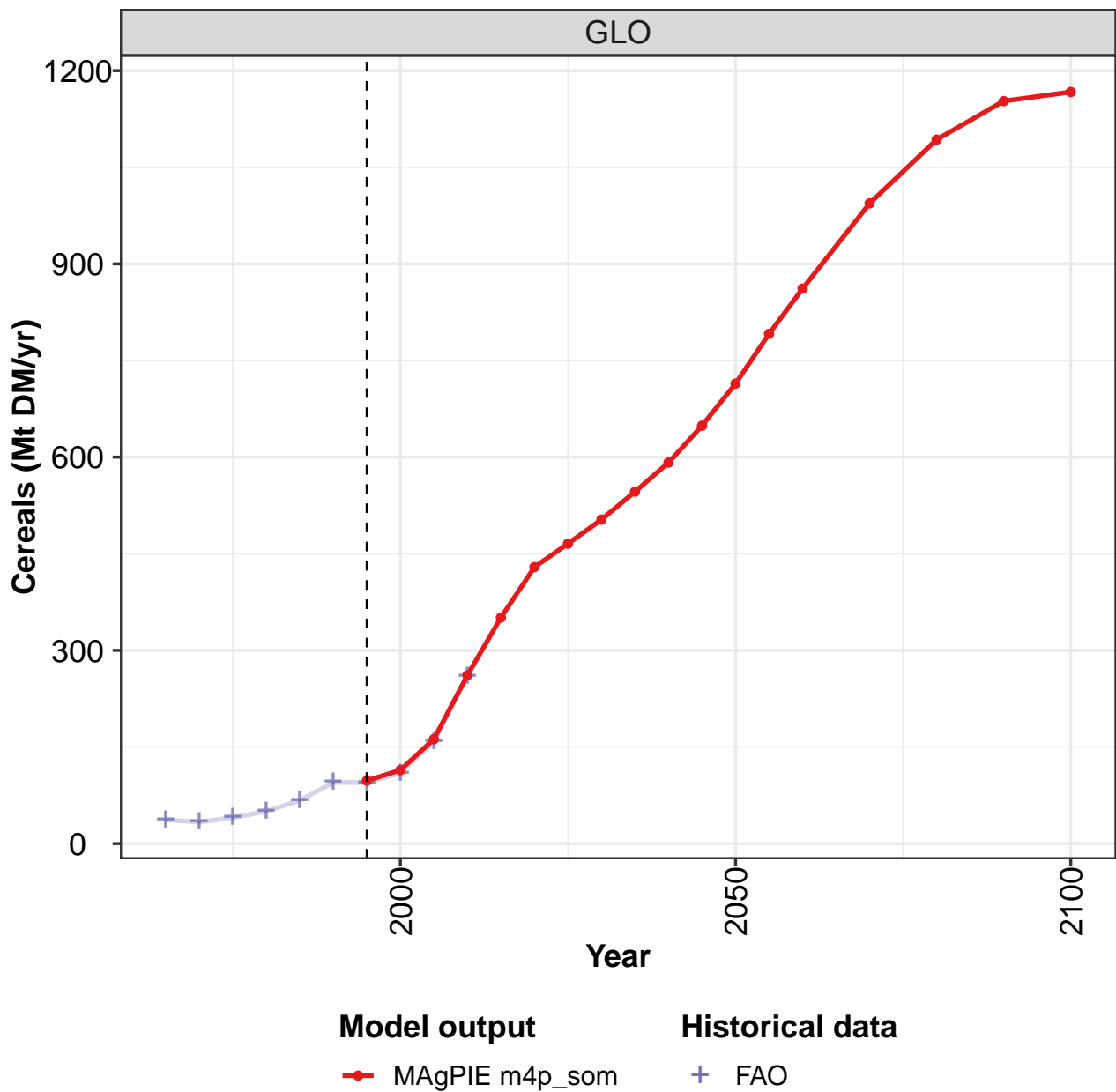
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	302	344	390	460	552	640	694	764	920	1170
CAZ	6	8	9	11	12	12	17	19	20	21
CHA	23	15	18	26	40	59	65	77	113	148
EUR	52	60	75	84	84	90	92	97	100	105
IND	37	42	46	41	53	72	89	93	85	99
JPN	5	6	6	8	10	10	10	11	10	9
LAM	66	79	85	114	150	158	170	184	250	328
MEA	5	7	9	9	10	11	12	14	19	22
NEU	5	6	7	8	9	11	9	13	13	15
OAS	25	32	41	50	62	78	95	102	121	151
REF	28	30	29	30	32	39	21	19	27	32
SSA	12	16	18	19	21	24	25	29	34	37
USA	38	44	47	60	68	76	89	106	128	204

Table 571: FAO — Demand—Processing—Crops (Mt DM/yr)



## 9.1.1 Cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

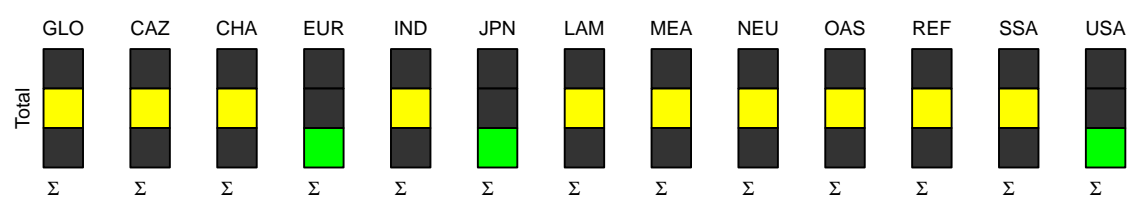
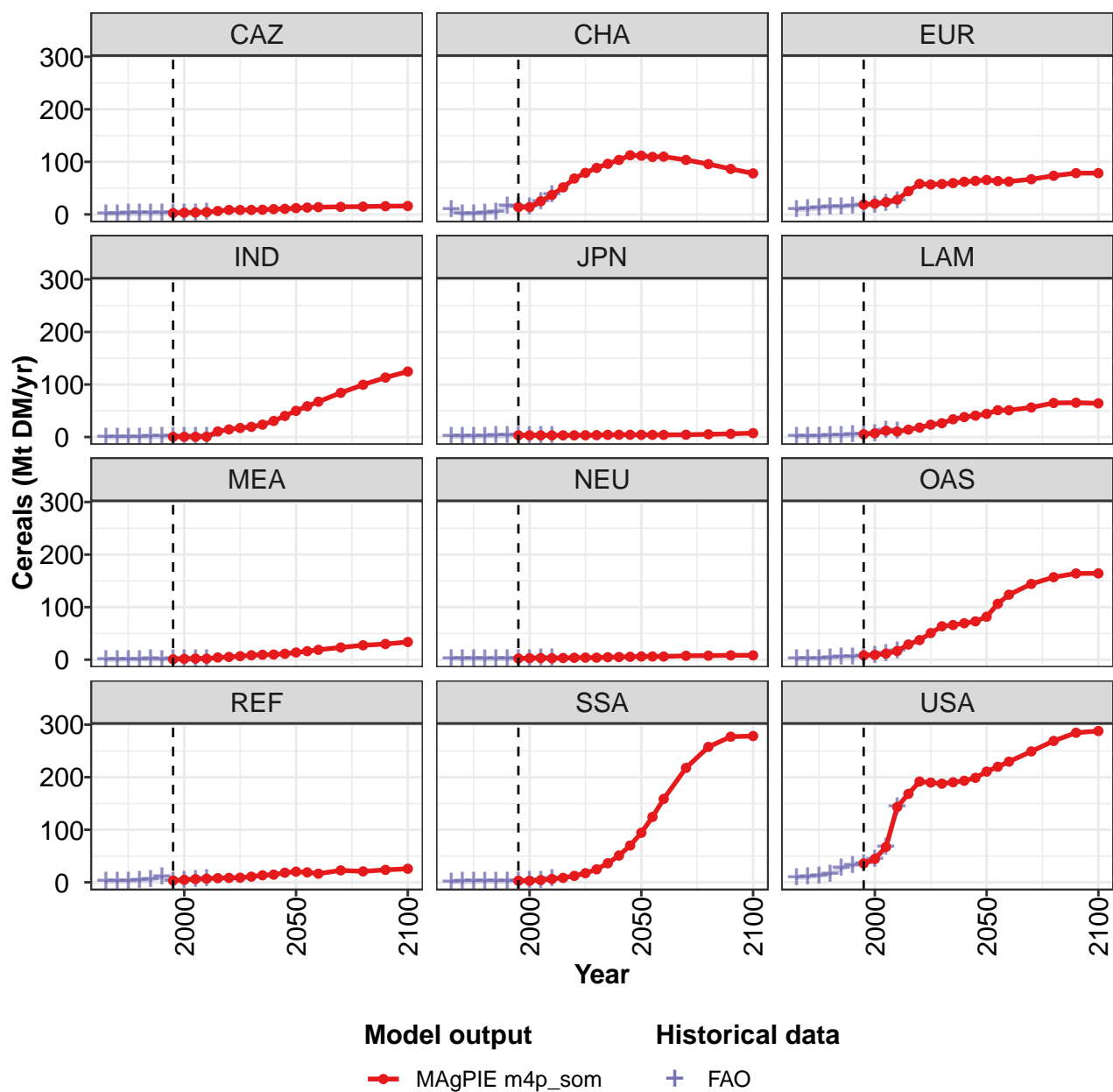


Figure 191: MAgPIE m4p\_som — Demand—Processing—Crops—Cereals (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	98	114	162	261	351	429	466	503	546	592	649
CAZ	3	3	4	4	6	8	8	9	9	10	11
CHA	14	14	25	37	51	68	79	88	96	104	113
EUR	19	20	23	28	44	58	57	58	60	62	64
IND	0	1	1	1	11	15	17	19	24	31	40
JPN	3	3	3	3	3	3	3	4	4	4	4
LAM	5	7	12	10	14	18	23	26	34	38	41
MEA	1	2	2	2	4	5	7	8	9	10	11
NEU	2	3	3	3	3	4	4	4	5	5	6
OAS	8	9	12	17	29	37	51	64	66	69	73
REF	3	5	6	7	8	8	9	11	13	15	18
SSA	3	3	4	6	8	12	17	25	36	51	70
USA	36	44	67	143	168	192	190	188	190	193	199

Table 572: MAgPIE m4p\_som — Demand—Processing—Crops—Cereals (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	714	791	862	994	1093	1153	1167
CAZ	12	13	14	14	15	16	16
CHA	112	109	110	104	96	87	78
EUR	66	63	63	67	74	79	79
IND	50	59	67	84	99	113	125
JPN	4	4	4	4	5	6	7
LAM	44	51	51	56	65	65	64
MEA	14	16	19	23	27	30	34
NEU	6	6	6	7	8	8	8
OAS	82	106	124	144	157	164	164
REF	20	19	16	23	21	24	26
SSA	94	124	159	218	258	277	278
USA	211	220	230	249	269	285	288

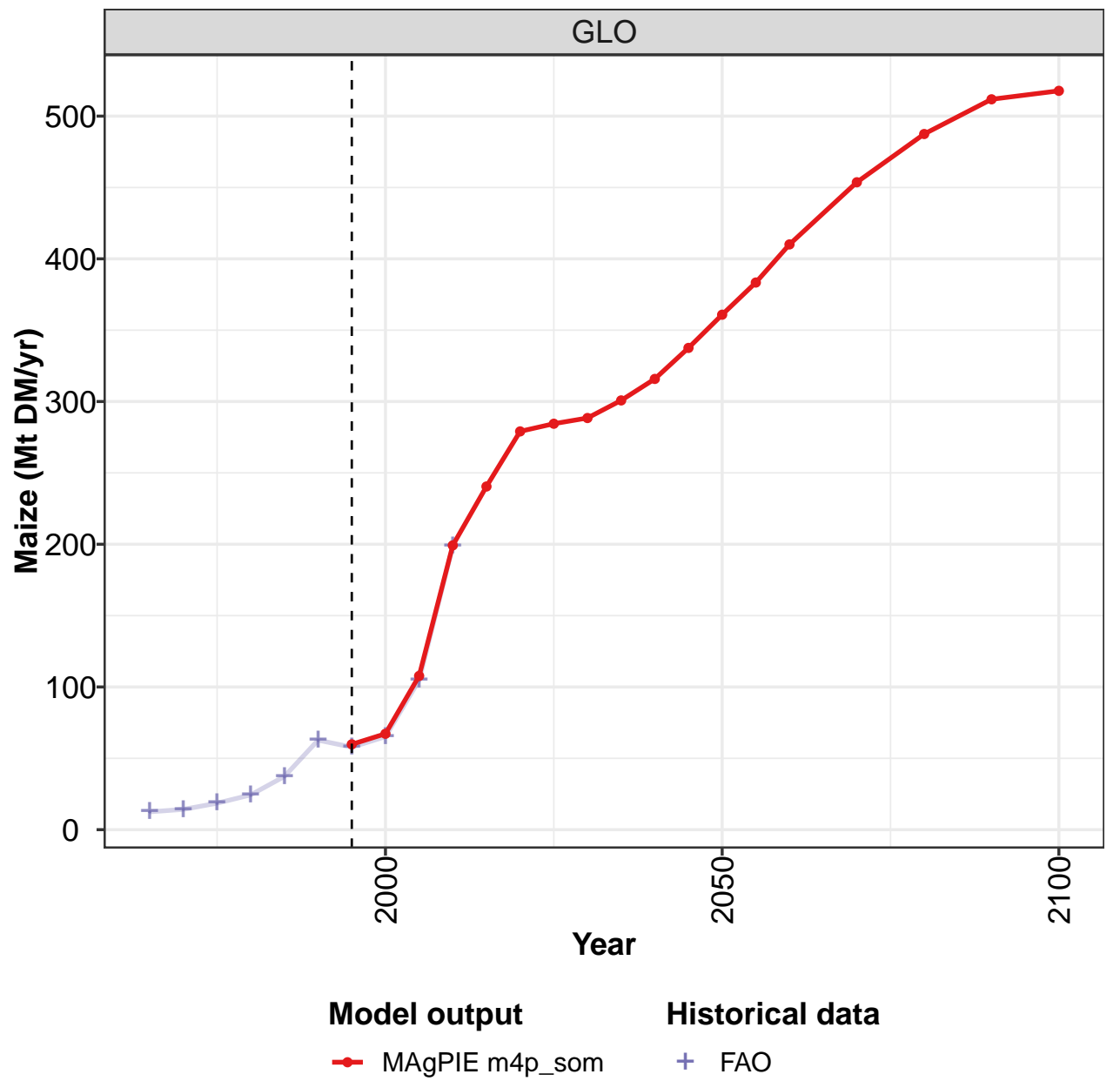
Table 573: MAgPIE m4p\_som — Demand—Processing—Crops—Cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	37	33	40	50	67	95	95	109	158	260
CAZ	1	2	2	2	2	2	3	3	3	4
CHA	9	1	2	2	4	17	14	14	25	37
EUR	8	10	12	13	14	16	18	18	21	26
IND	0	0	0	0	0	0	0	1	1	1
JPN	1	1	1	2	2	3	3	3	3	3
LAM	1	1	2	2	3	4	5	7	12	11
MEA	0	0	0	1	1	1	1	1	2	2
NEU	2	2	2	1	2	2	2	2	3	3
OAS	1	2	2	4	5	6	7	8	11	16
REF	2	2	2	4	5	10	2	4	6	7
SSA	1	1	2	2	2	2	3	3	4	6
USA	9	10	13	16	27	32	36	44	67	144

Table 574: FAO — Demand—Processing—Crops—Cereals (Mt DM/yr)

9.1.2 Cereals—Maize

```
## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.
```



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

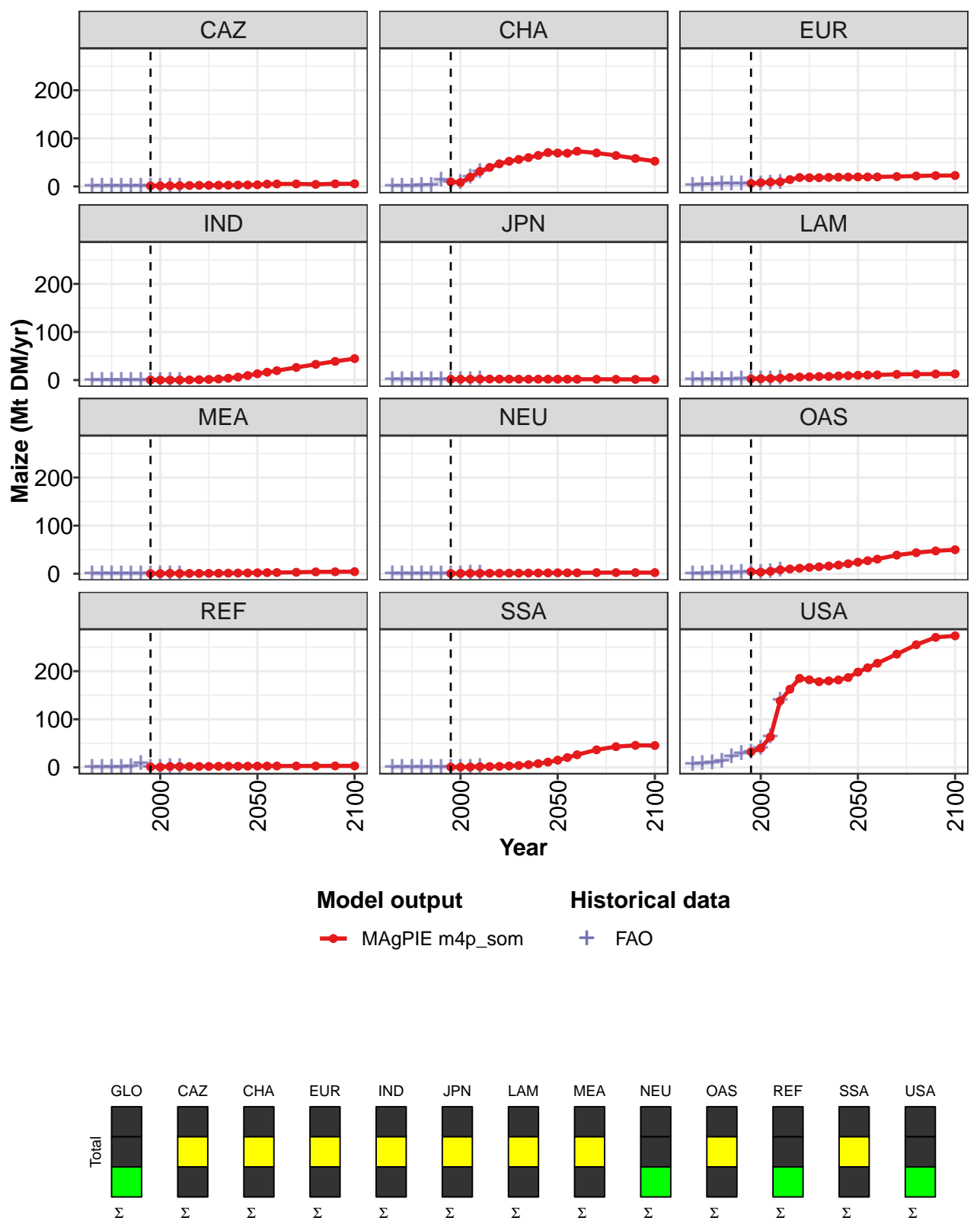


Figure 192: MAgPIE m4p\_som — Demand—Processing—Crops—Cereals—Maize (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	60	67	108	199	240	279	284	288	301	316	338
CAZ	1	1	2	2	2	2	2	2	3	3	3
CHA	9	8	19	31	39	47	52	56	60	65	70
EUR	6	8	9	10	14	19	18	18	19	19	20
IND	0	0	0	0	0	1	1	2	4	6	9
JPN	2	2	2	2	2	2	2	2	2	2	2
LAM	2	3	3	4	5	6	7	7	8	9	9
MEA	0	0	1	0	1	1	1	1	1	1	2
NEU	0	1	1	1	1	1	1	1	1	2	2
OAS	4	3	5	8	10	11	13	14	16	18	21
REF	1	0	2	2	2	2	2	2	2	2	2
SSA	1	1	1	1	2	2	3	4	5	8	11
USA	32	40	63	138	162	185	182	178	180	182	187

Table 575: MAgPIE m4p\_som — Demand—Processing—Crops—Cereals—Maize (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	361	383	410	454	487	512	518
CAZ	3	5	5	5	4	5	6
CHA	69	69	73	70	64	58	52
EUR	20	20	20	21	22	23	23
IND	13	16	20	26	33	39	45
JPN	2	2	2	2	2	1	1
LAM	10	10	11	12	12	13	13
MEA	2	2	2	3	4	4	4
NEU	2	2	2	2	2	2	2
OAS	24	27	30	39	44	47	50
REF	3	3	3	3	3	3	3
SSA	15	20	26	36	43	46	45
USA	198	207	216	235	255	270	274

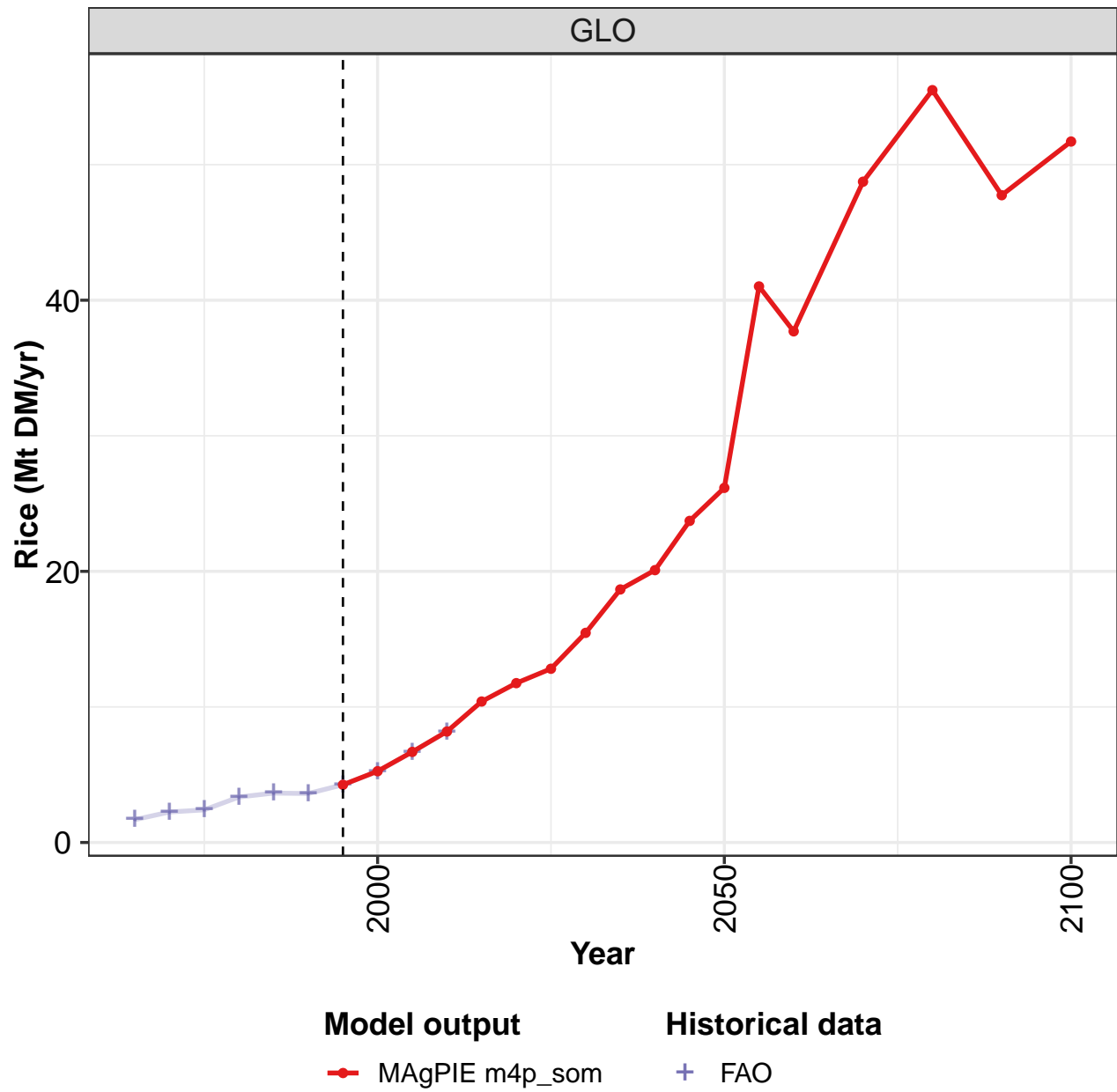
Table 576: MAgPIE m4p\_som — Demand—Processing—Crops—Cereals—Maize (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	12	14	19	24	37	63	58	65	105	198
CAZ	0	1	1	1	1	1	1	1	1	1
CHA	1	1	1	2	3	14	9	8	19	31
EUR	2	3	4	5	5	5	6	6	7	8
IND	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	1	1	1	2	2	2	2
LAM	0	0	1	1	1	2	3	3	3	4
MEA	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	1	1	1
OAS	0	1	1	1	2	3	4	3	5	8
REF	0	0	0	1	1	8	0	0	2	2
SSA	0	0	0	0	0	0	0	1	1	1
USA	7	7	10	12	23	28	32	40	63	139

Table 577: FAO — Demand—Processing—Crops—Cereals—Maize (Mt DM/yr)

9.1.3
Cereals—Rice

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

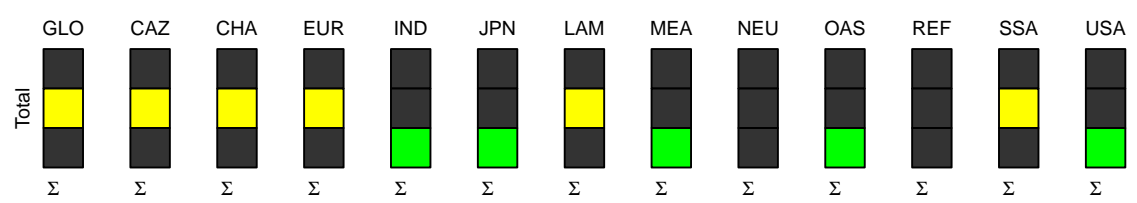
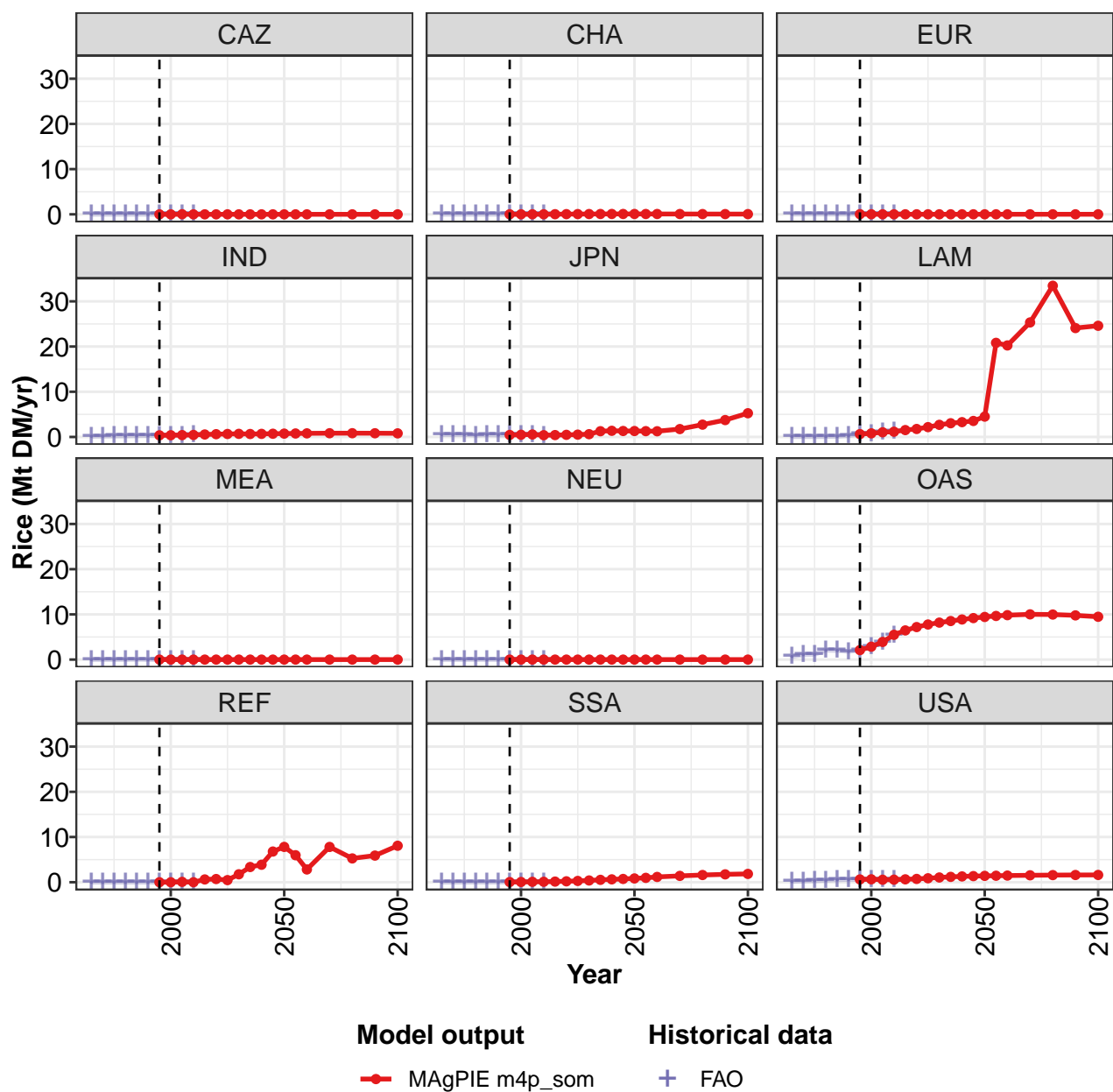


Figure 193: MAGPIE m4p\_som — Demand—Processing—Crops—Cereals—Rice (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	4.3	5.3	6.7	8.2	10.4	11.8	12.8	15.5	18.7	20.1	23.7
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.4	0.4	0.4	0.4	0.6	0.6	0.7	0.7	0.7	0.7	0.7
JPN	0.4	0.5	0.6	0.4	0.4	0.5	0.5	0.6	1.3	1.4	1.3
LAM	0.6	0.8	1.0	1.2	1.5	1.8	2.2	2.7	3.0	3.3	3.5
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	2.1	2.9	3.9	5.5	6.5	7.2	7.8	8.2	8.5	8.9	9.2
REF	0.0	0.0	0.1	0.0	0.6	0.7	0.5	1.8	3.4	3.9	6.8
SSA	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.5	0.6	0.7
USA	0.6	0.6	0.6	0.6	0.6	0.7	0.9	1.1	1.2	1.3	1.4

Table 578: MAgPIE m4p\_som — Demand—Processing—Crops—Cereals—Rice (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	26.2	41.0	37.7	48.7	55.5	47.7	51.7
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.1	0.1	0.1	0.1	0.1	0.1
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.7	0.8	0.8	0.8	0.8	0.8	0.8
JPN	1.3	1.3	1.3	1.7	2.7	3.7	5.3
LAM	4.5	20.8	20.2	25.3	33.5	24.1	24.6
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	9.4	9.7	9.8	10.0	10.0	9.8	9.5
REF	7.8	6.0	2.8	7.8	5.3	5.9	8.1
SSA	0.8	1.0	1.2	1.4	1.6	1.7	1.8
USA	1.4	1.4	1.5	1.5	1.6	1.6	1.6

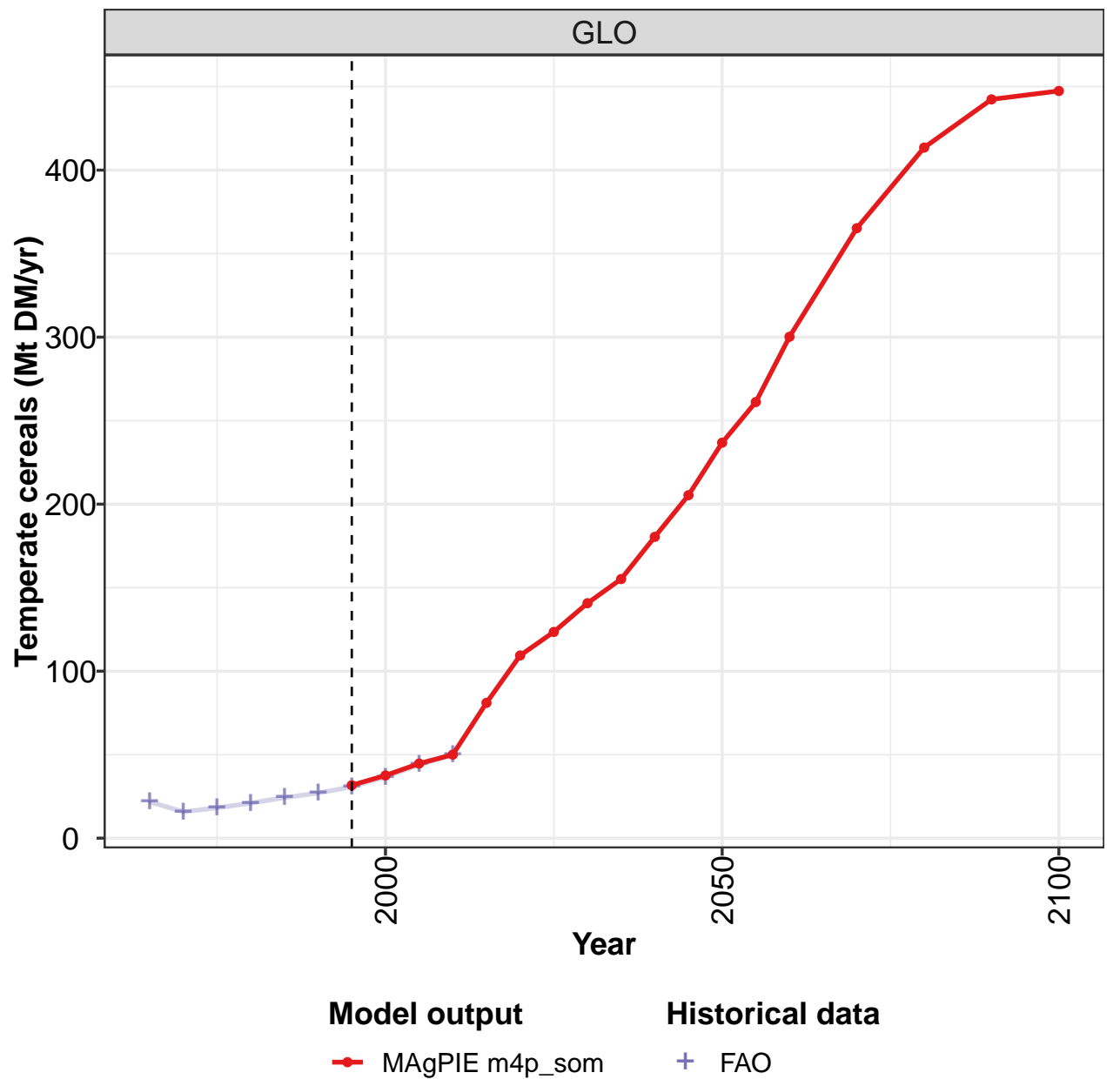
Table 579: MAgPIE m4p\_som — Demand—Processing—Crops—Cereals—Rice (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.68	2.25	2.40	3.35	3.64	3.61	4.26	5.24	6.68	8.17
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00
CHA	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.02
EUR	0.05	0.06	0.06	0.06	0.07	0.05	0.04	0.02	0.01	0.01
IND	0.15	0.19	0.23	0.24	0.29	0.34	0.36	0.38	0.41	0.45
JPN	0.54	0.52	0.55	0.41	0.49	0.44	0.44	0.49	0.55	0.39
LAM	0.08	0.09	0.06	0.10	0.16	0.31	0.63	0.78	1.09	1.22
MEA	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.68	1.11	1.16	2.08	2.02	1.82	2.11	2.85	3.93	5.40
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.00	0.02	0.01	0.03	0.04	0.05	0.08	0.10
USA	0.17	0.28	0.33	0.44	0.56	0.62	0.62	0.65	0.55	0.57

Table 580: FAO — Demand—Processing—Crops—Cereals—Rice (Mt DM/yr)

9.1.4
Cereals—Temperate cereals

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

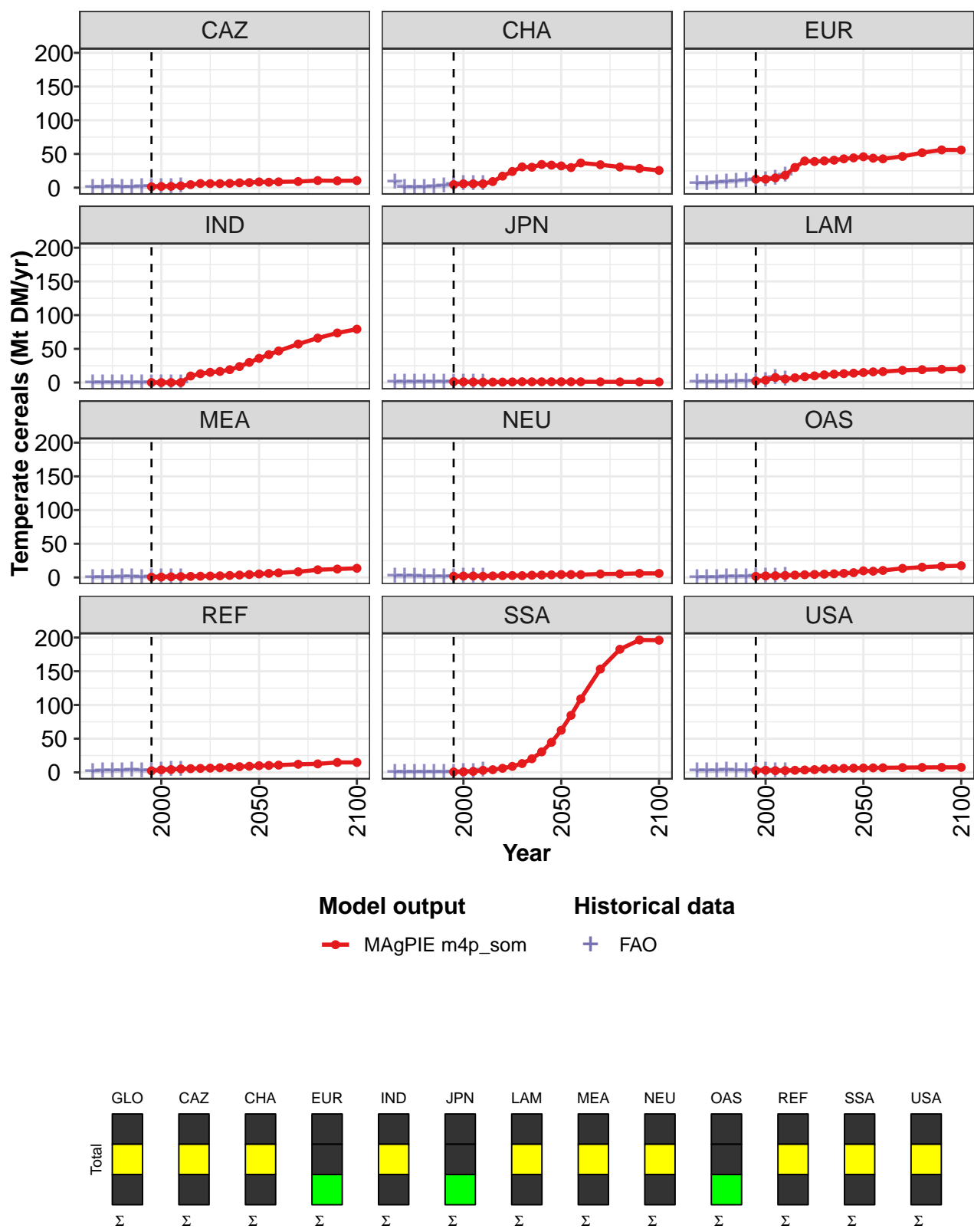


Figure 194: MAgPIE m4p\_som — Demand—Processing—Crops—Cereals—Temperate cereals (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	32	38	45	50	81	109	123	141	155	180	205
CAZ	1	2	2	3	4	6	6	6	6	7	8
CHA	5	6	6	6	9	17	24	31	30	34	33
EUR	13	13	14	18	30	40	39	40	41	43	44
IND	0	0	0	0	10	13	15	16	19	24	30
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	2	4	8	5	7	9	10	11	12	13	14
MEA	1	1	1	1	2	2	2	2	3	4	4
NEU	2	2	2	2	2	3	3	3	3	4	4
OAS	2	2	3	3	4	4	4	5	5	6	7
REF	2	4	4	5	6	6	6	7	8	8	9
SSA	1	1	1	3	4	6	9	13	20	30	45
USA	3	3	3	3	3	4	4	5	6	6	6

Table 581: MAgPIE m4p\_som — Demand—Processing—Crops—Cereals—Temperate cereals (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	237	261	300	365	414	442	447
CAZ	9	8	9	9	11	10	10
CHA	32	30	37	34	31	28	26
EUR	46	44	43	46	52	56	56
IND	36	41	47	57	66	74	79
JPN	1	1	1	1	1	1	1
LAM	15	16	16	18	19	20	20
MEA	5	6	7	8	11	12	14
NEU	4	4	4	5	5	6	6
OAS	10	9	10	13	15	17	17
REF	10	10	11	12	13	15	15
SSA	62	85	109	153	183	196	196
USA	7	7	7	7	7	7	7

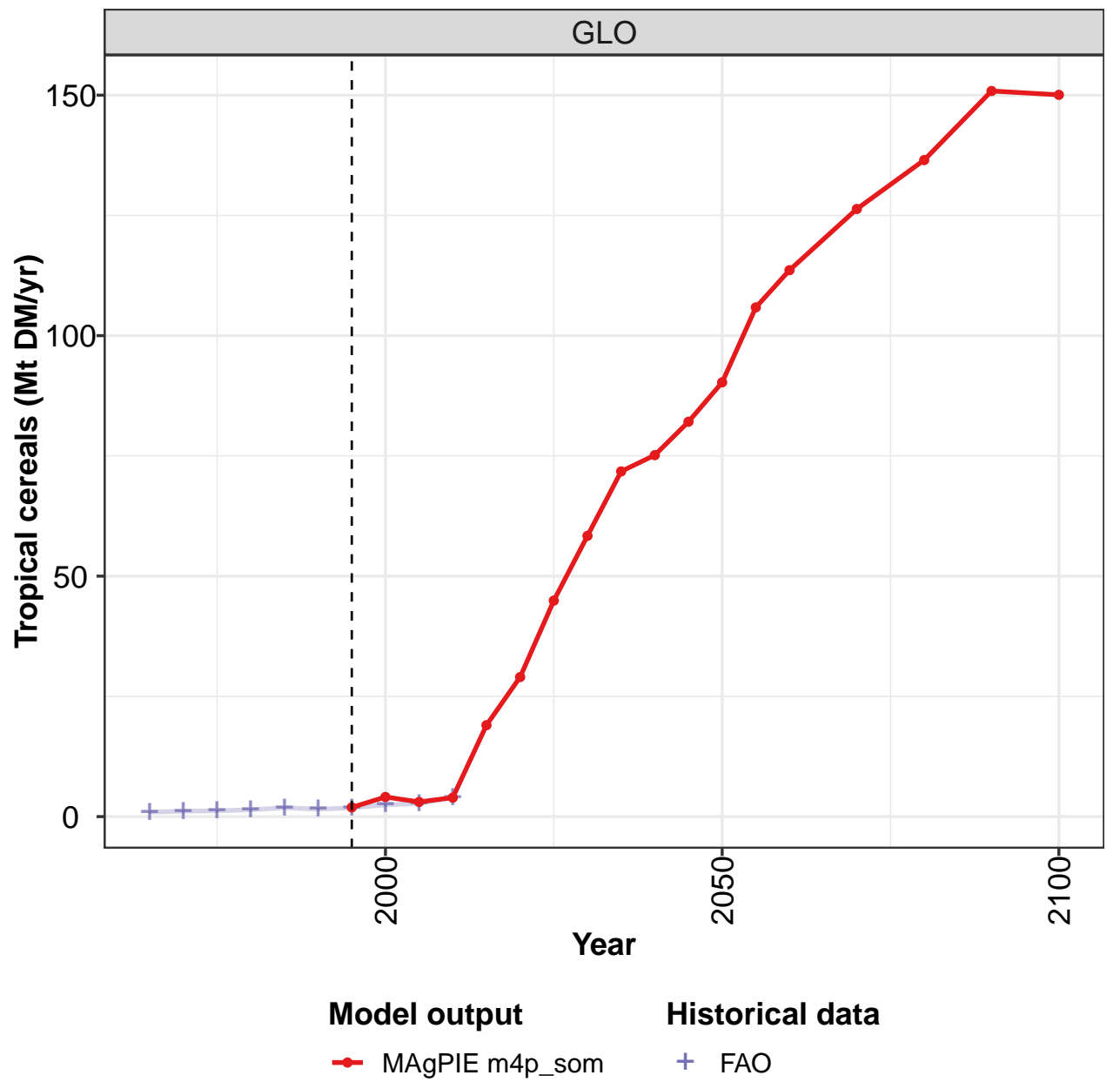
Table 582: MAgPIE m4p\_som — Demand—Processing—Crops—Cereals—Temperate cereals (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	21.8	15.8	18.1	21.0	24.3	27.0	30.8	36.6	44.0	49.8
CAZ	0.7	0.9	1.1	1.0	1.0	1.2	1.4	1.8	1.8	2.7
CHA	8.0	0.3	0.4	0.7	1.5	2.5	4.5	5.7	5.7	5.8
EUR	6.0	6.7	7.8	8.3	9.2	11.2	12.3	12.3	14.2	18.1
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
JPN	0.4	0.5	0.7	1.0	1.0	1.1	1.2	1.0	0.9	0.6
LAM	0.7	0.9	0.9	1.3	1.4	1.9	2.2	3.5	7.7	5.3
MEA	0.1	0.2	0.3	0.5	0.7	0.4	0.5	0.6	1.0	1.3
NEU	2.0	1.8	1.8	1.2	1.2	1.4	1.6	1.7	2.0	1.9
OAS	0.1	0.2	0.2	0.5	1.1	1.3	1.7	2.3	2.6	3.0
REF	1.7	1.9	2.0	2.9	3.6	2.6	2.1	3.8	4.1	5.2
SSA	0.2	0.3	0.4	0.6	0.7	0.6	0.6	0.8	1.4	3.0
USA	1.9	2.2	2.5	3.1	2.7	2.7	2.7	3.1	2.5	2.7

Table 583: FAO — Demand—Processing—Crops—Cereals—Temperate cereals (Mt DM/yr)

9.1.5
Cereals—Tropical cereals

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



Figure 195: MAGPIE m4p\_som — Demand—Processing—Crops—Cereals—Tropical cereals (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	2	4	3	4	19	29	45	58	72	75	82
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	3	4	3	1	6	5	9
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	0	0	0	0	0	1	5	5	11	13	14
MEA	0	1	0	0	2	3	4	5	5	5	5
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	1	0	0	9	15	25	36	36	36	36
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	2	1	2	2	3	4	5	7	10	12	14
USA	0	1	1	2	2	2	3	3	4	4	4

Table 584: MAgPIE m4p\_som — Demand—Processing—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	90	106	114	126	137	151	150
CAZ	0	0	0	0	0	0	0
CHA	10	10	0	0	1	0	0
EUR	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0
LAM	15	4	4	1	0	9	7
MEA	7	8	10	12	12	13	16
NEU	0	0	0	0	0	0	0
OAS	38	60	73	82	88	90	87
REF	0	0	0	0	0	0	0
SSA	16	18	22	27	30	33	35
USA	5	5	5	5	5	5	5

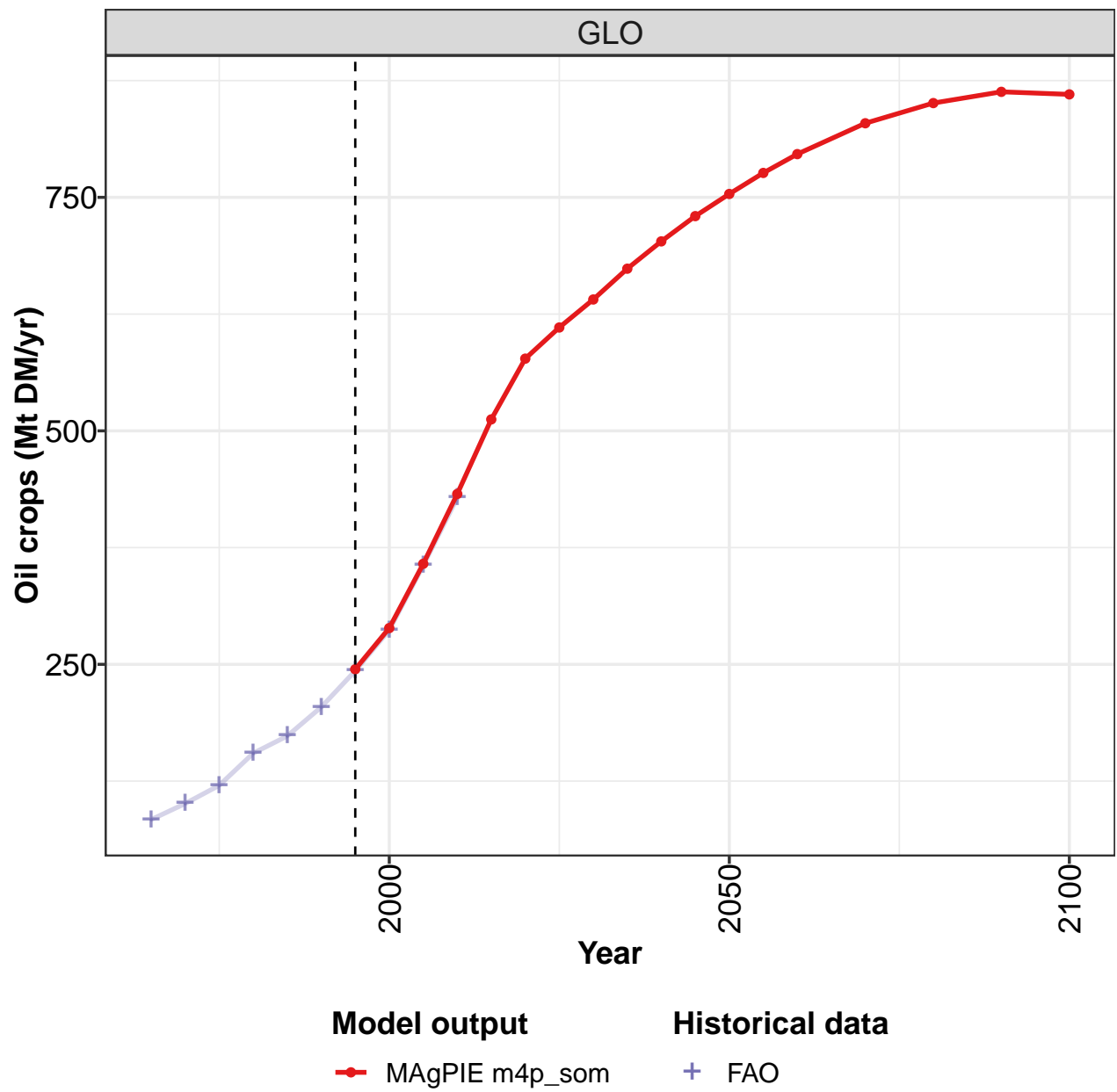
Table 585: MAgPIE m4p\_som — Demand—Processing—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.94	1.13	1.21	1.42	1.86	1.55	1.84	2.44	2.76	3.94
CAZ	0.03	0.05	0.06	0.11	0.05	0.07	0.03	0.04	0.04	0.04
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.03	0.05	0.06	0.07	0.09	0.10	0.13	0.13	0.12	0.15
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.81	0.94	1.02	1.14	1.23	1.25	1.49	1.44	1.77	1.88
USA	0.07	0.08	0.06	0.09	0.48	0.12	0.19	0.83	0.83	1.88

Table 586: FAO — Demand—Processing—Crops—Cereals—Tropical cereals (Mt DM/yr)

9.1.6
Oil crops

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

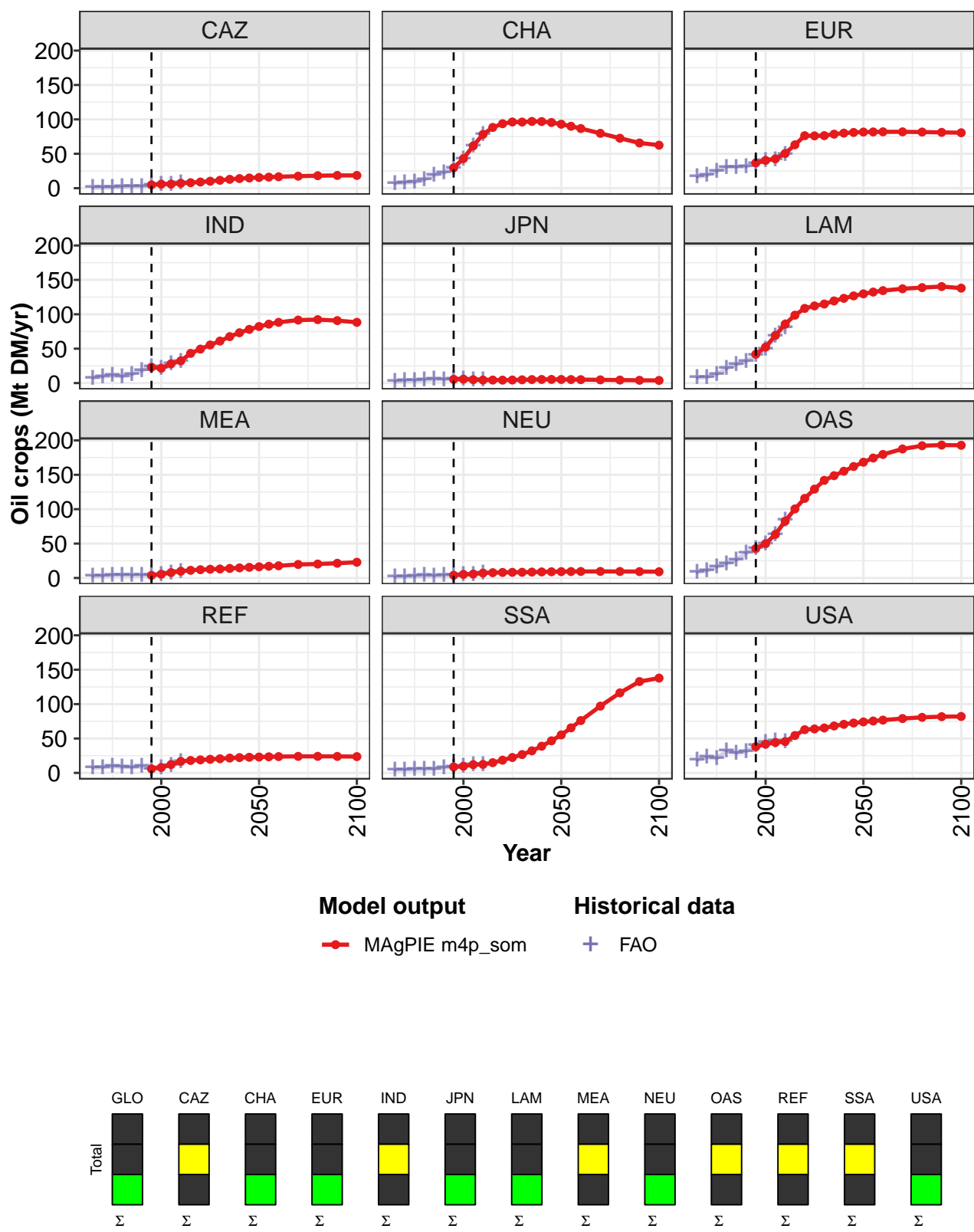


Figure 196: MAgPIE m4p\_som — Demand—Processing—Crops—Oil crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	245	289	358	432	512	577	611	641	674	703	730
CAZ	5	6	6	7	8	9	10	11	13	14	15
CHA	30	43	61	78	88	94	96	96	97	97	95
EUR	37	40	43	51	63	76	76	76	79	80	81
IND	23	22	28	32	43	49	55	61	68	73	78
JPN	5	6	5	4	4	4	4	5	5	5	5
LAM	42	52	69	86	99	109	112	115	119	123	127
MEA	4	5	8	10	11	12	13	13	14	15	16
NEU	4	5	6	7	8	8	8	8	9	9	9
OAS	43	50	63	83	100	116	129	142	149	155	162
REF	6	8	12	17	18	19	20	21	22	22	23
SSA	9	10	12	12	15	18	22	27	32	39	47
USA	38	42	44	45	54	63	64	65	68	71	73

Table 587: MAgPIE m4p\_som — Demand—Processing—Crops—Oil crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	754	776	796	829	851	863	860
CAZ	16	16	17	17	18	19	19
CHA	93	90	87	80	73	66	62
EUR	82	82	82	82	82	81	81
IND	82	86	88	92	92	91	88
JPN	5	5	5	5	4	4	4
LAM	130	132	134	137	139	140	138
MEA	16	17	18	20	20	21	23
NEU	9	9	9	10	9	9	9
OAS	168	174	180	188	192	193	193
REF	23	23	24	24	24	24	24
SSA	55	66	76	97	116	133	138
USA	74	75	77	79	81	82	82

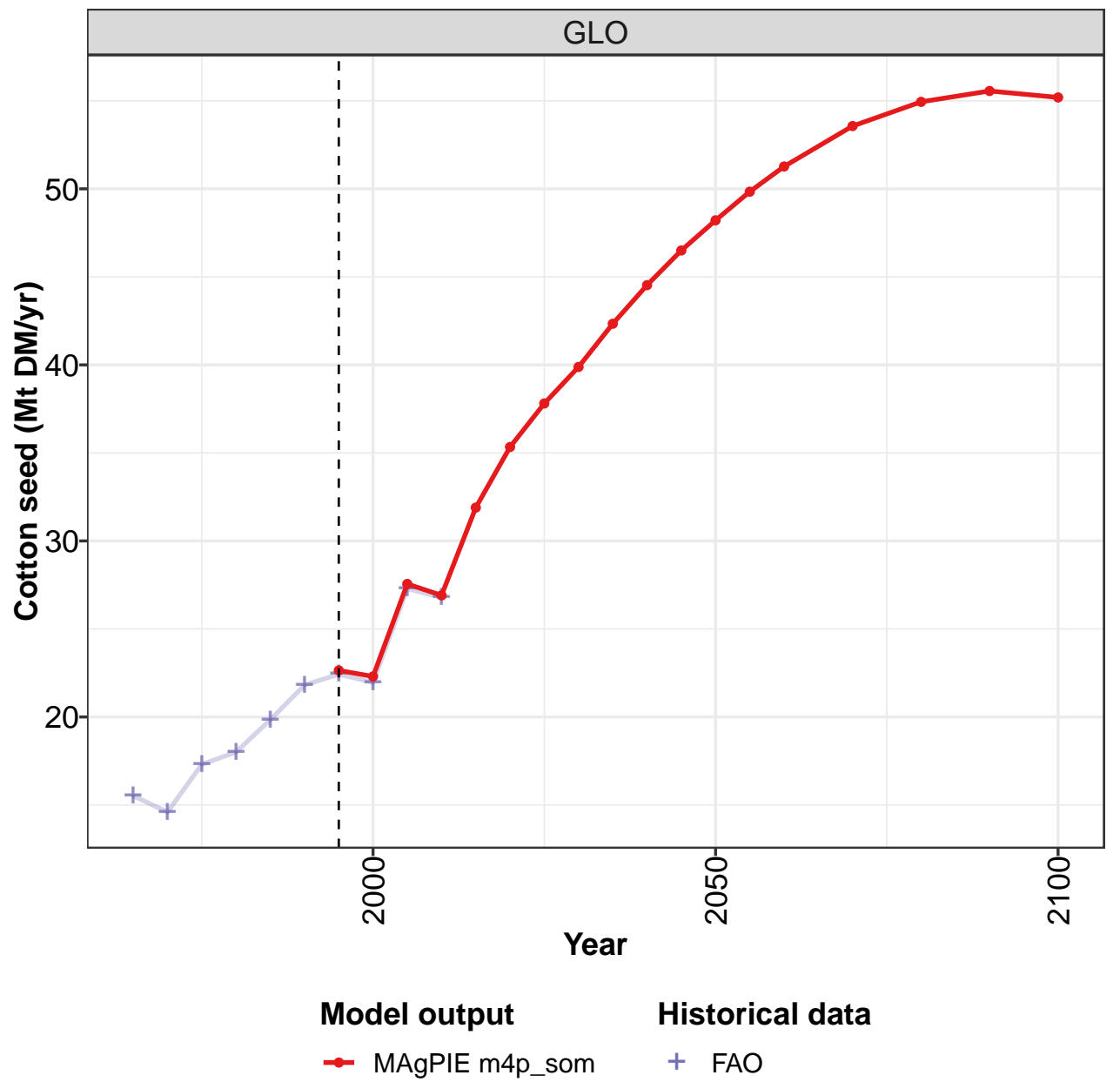
Table 588: MAgPIE m4p\_som — Demand—Processing—Crops—Oil crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	84	101	120	155	173	204	243	287	356	428
CAZ	1	1	1	2	3	3	4	5	6	8
CHA	7	8	9	12	19	22	29	43	61	78
EUR	16	19	25	31	31	31	36	41	42	50
IND	8	9	11	10	13	18	23	22	28	32
JPN	2	4	4	5	5	5	5	6	5	4
LAM	8	9	13	21	27	32	41	49	68	81
MEA	3	3	4	4	3	4	4	5	8	10
NEU	2	2	2	3	3	4	4	5	6	7
OAS	8	11	16	21	26	36	43	50	63	84
REF	7	8	9	9	8	10	6	7	11	16
SSA	4	5	5	5	6	8	8	10	12	12
USA	18	23	21	32	29	31	40	44	47	46

Table 589: FAO — Demand—Processing—Crops—Oil crops (Mt DM/yr)

9.1.7 Oil crops—Cotton seed

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

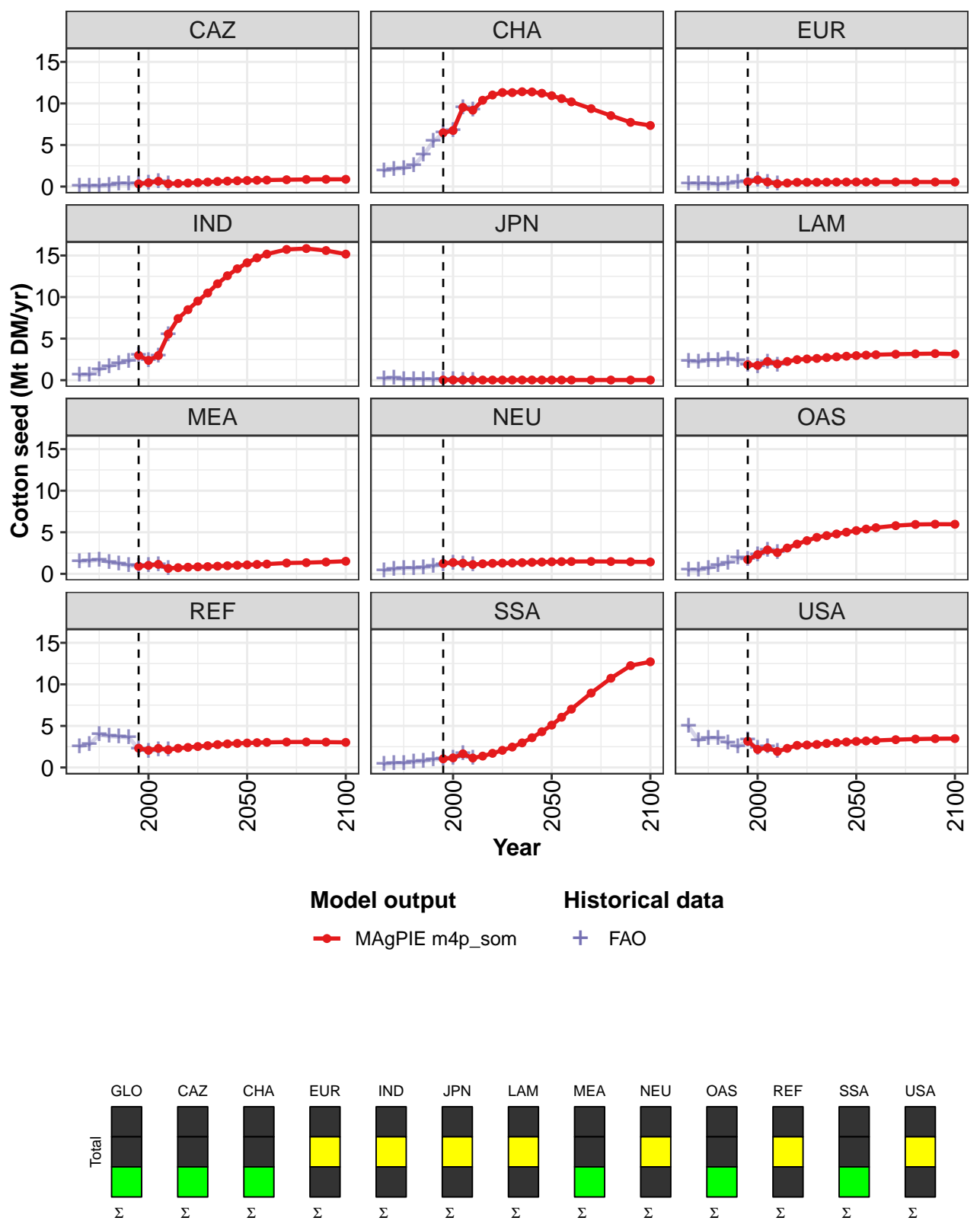


Figure 197: MAgPIE m4p\_som — Demand—Processing—Crops—Oil crops—Cotton seed (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	22.6	22.3	27.6	26.9	31.9	35.3	37.8	39.9	42.3	44.5	46.5
CAZ	0.3	0.5	0.6	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.7
CHA	6.5	6.7	9.5	9.2	10.4	11.0	11.3	11.3	11.4	11.4	11.2
EUR	0.6	0.8	0.5	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5
IND	3.0	2.4	3.0	5.5	7.4	8.5	9.5	10.5	11.6	12.6	13.4
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.9	1.8	2.3	2.0	2.2	2.5	2.6	2.6	2.7	2.8	2.9
MEA	0.9	1.0	1.1	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.0
NEU	1.2	1.4	1.3	1.1	1.2	1.3	1.3	1.3	1.3	1.4	1.4
OAS	1.7	2.3	2.9	2.6	3.1	3.6	4.0	4.4	4.6	4.8	5.0
REF	2.3	2.1	2.3	2.1	2.3	2.4	2.5	2.6	2.7	2.8	2.9
SSA	1.0	1.2	1.6	1.1	1.4	1.7	2.1	2.5	3.0	3.6	4.3
USA	3.2	2.2	2.4	1.9	2.3	2.7	2.7	2.8	2.9	3.0	3.1

Table 590: MAgPIE m4p\_som — Demand—Processing—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	48.2	49.8	51.3	53.6	54.9	55.6	55.2
CAZ	0.7	0.8	0.8	0.8	0.9	0.9	0.9
CHA	10.9	10.6	10.2	9.4	8.5	7.7	7.3
EUR	0.5	0.5	0.5	0.5	0.5	0.5	0.5
IND	14.1	14.7	15.2	15.7	15.8	15.6	15.2
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	3.0	3.0	3.1	3.1	3.2	3.2	3.1
MEA	1.1	1.1	1.2	1.3	1.3	1.4	1.5
NEU	1.4	1.5	1.5	1.5	1.5	1.5	1.4
OAS	5.2	5.4	5.6	5.8	5.9	6.0	6.0
REF	2.9	3.0	3.0	3.1	3.1	3.1	3.0
SSA	5.1	6.0	7.0	9.0	10.7	12.3	12.7
USA	3.1	3.2	3.2	3.3	3.4	3.5	3.5

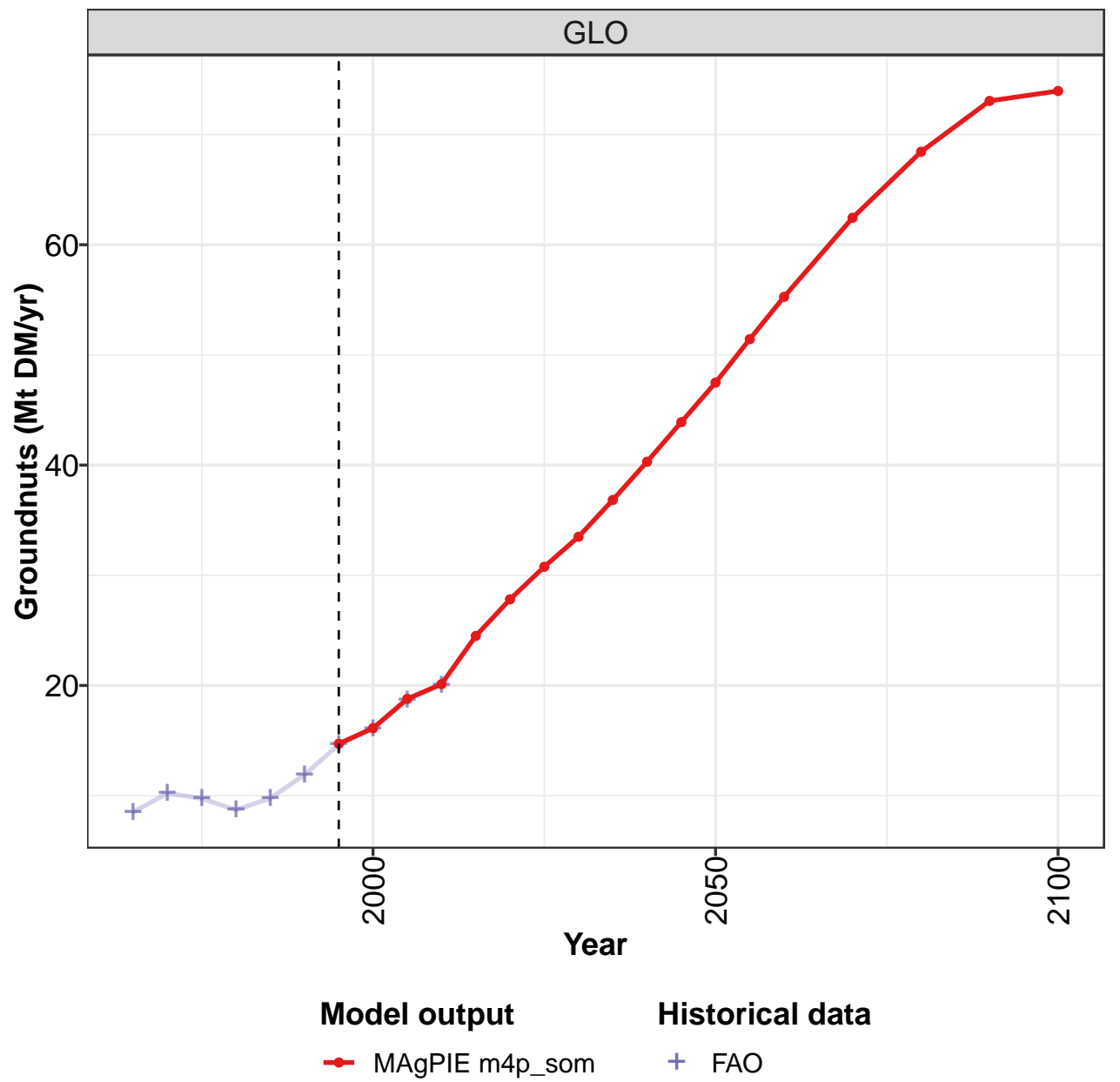
Table 591: MAgPIE m4p\_som — Demand—Processing—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	15.5	14.6	17.3	18.0	19.8	21.8	22.4	22.0	27.3	26.8
CAZ	0.0	0.0	0.0	0.1	0.4	0.3	0.3	0.4	0.6	0.4
CHA	1.9	2.1	2.2	2.5	3.8	5.4	6.4	6.7	9.5	9.2
EUR	0.4	0.3	0.4	0.3	0.3	0.5	0.6	0.8	0.5	0.3
IND	0.6	0.7	1.3	1.6	2.0	2.3	3.0	2.4	2.9	5.5
JPN	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
LAM	2.2	2.2	2.4	2.4	2.6	2.4	1.8	1.7	2.2	1.8
MEA	1.5	1.6	1.7	1.4	1.2	1.0	0.9	1.0	1.1	0.7
NEU	0.4	0.5	0.7	0.7	0.7	0.9	1.1	1.3	1.2	1.1
OAS	0.4	0.4	0.7	1.0	1.3	1.9	1.7	2.3	2.9	2.6
REF	2.5	2.7	3.9	3.8	3.7	3.6	2.2	1.9	2.1	2.1
SSA	0.4	0.5	0.5	0.6	0.7	1.0	1.0	1.1	1.6	1.1
USA	4.9	3.3	3.5	3.5	2.9	2.5	3.3	2.3	2.5	1.9

Table 592: FAO — Demand—Processing—Crops—Oil crops—Cotton seed (Mt DM/yr)

9.1.8 Oil crops—Groundnuts

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

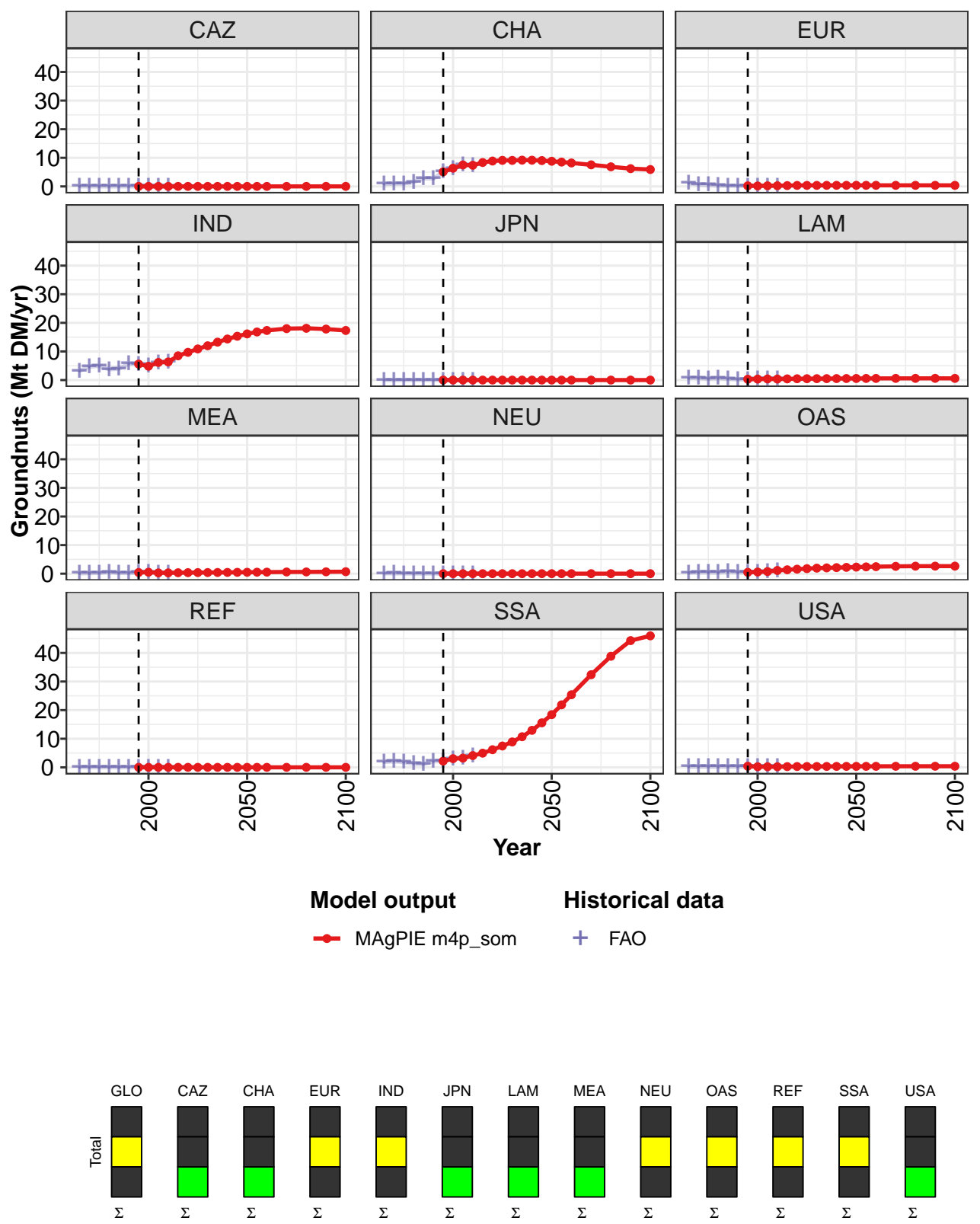


Figure 198: MAgPIE m4p\_som — Demand—Processing—Crops—Oil crops—Groundnuts (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	14.7	16.1	18.8	20.1	24.5	27.8	30.8	33.5	36.8	40.3	43.9
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	5.1	6.4	7.5	7.4	8.4	8.9	9.1	9.1	9.2	9.2	9.0
EUR	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.4
IND	5.6	4.8	6.2	6.3	8.5	9.7	10.9	12.0	13.3	14.4	15.3
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
MEA	0.4	0.5	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.5	0.6	0.7	1.1	1.4	1.6	1.8	1.9	2.0	2.1	2.2
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	2.2	3.0	3.2	4.1	5.0	6.2	7.5	8.9	10.7	12.9	15.6
USA	0.4	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3

Table 593: MAgPIE m4p\_som — Demand—Processing—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	47.5	51.4	55.3	62.4	68.4	73.0	74.0
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	8.8	8.5	8.2	7.5	6.9	6.2	5.9
EUR	0.4	0.4	0.4	0.4	0.4	0.4	0.4
IND	16.1	16.8	17.3	18.0	18.1	17.8	17.3
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.6	0.6	0.6	0.6	0.6	0.6	0.6
MEA	0.5	0.5	0.5	0.6	0.6	0.7	0.7
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	2.3	2.4	2.5	2.6	2.6	2.6	2.6
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	18.4	21.9	25.4	32.4	38.8	44.3	46.0
USA	0.3	0.4	0.4	0.4	0.4	0.4	0.4

Table 594: MAgPIE m4p\_som — Demand—Processing—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 2/2]

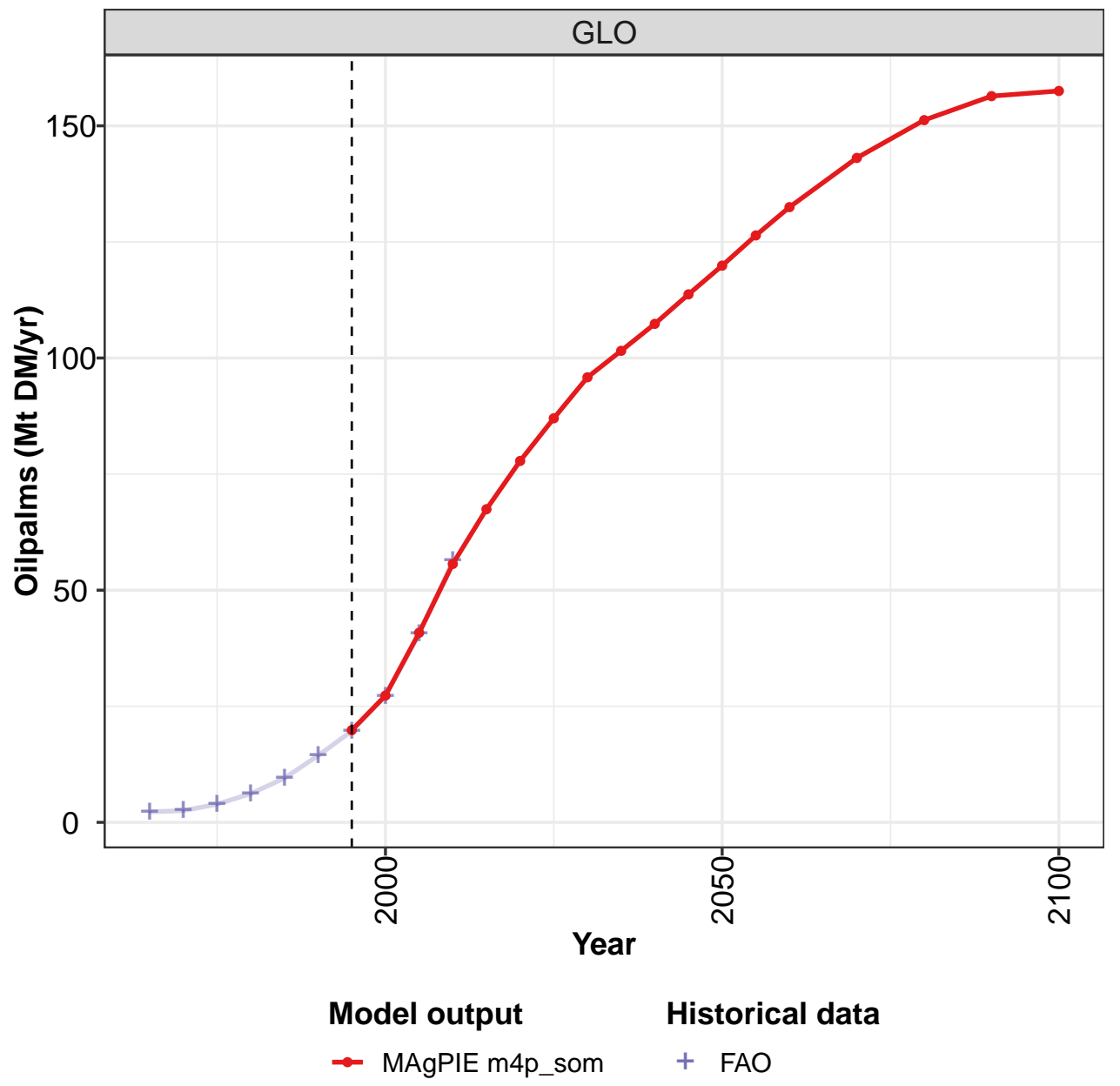
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	8.5	10.2	9.7	8.7	9.8	11.9	14.6	16.1	18.7	20.1
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.8	1.0	1.0	1.5	2.8	2.7	5.1	6.3	7.5	7.4
EUR	1.1	0.7	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2
IND	3.2	4.7	4.9	3.8	3.9	5.7	5.6	4.8	6.1	6.3
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.7	0.8	0.4	0.7	0.5	0.2	0.3	0.3	0.4	0.3
MEA	0.1	0.2	0.2	0.5	0.2	0.2	0.4	0.5	0.3	0.3
NEU	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.3	0.4	0.5	0.4	0.7	0.5	0.5	0.6	0.7	1.1
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	1.8	2.1	1.8	1.3	1.1	2.1	2.1	3.0	3.2	4.1
USA	0.2	0.2	0.3	0.2	0.3	0.3	0.4	0.2	0.2	0.2

Table 595: FAO — Demand—Processing—Crops—Oil crops—Groundnuts (Mt DM/yr)



9.1.9
Oil crops—Oilpalms

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

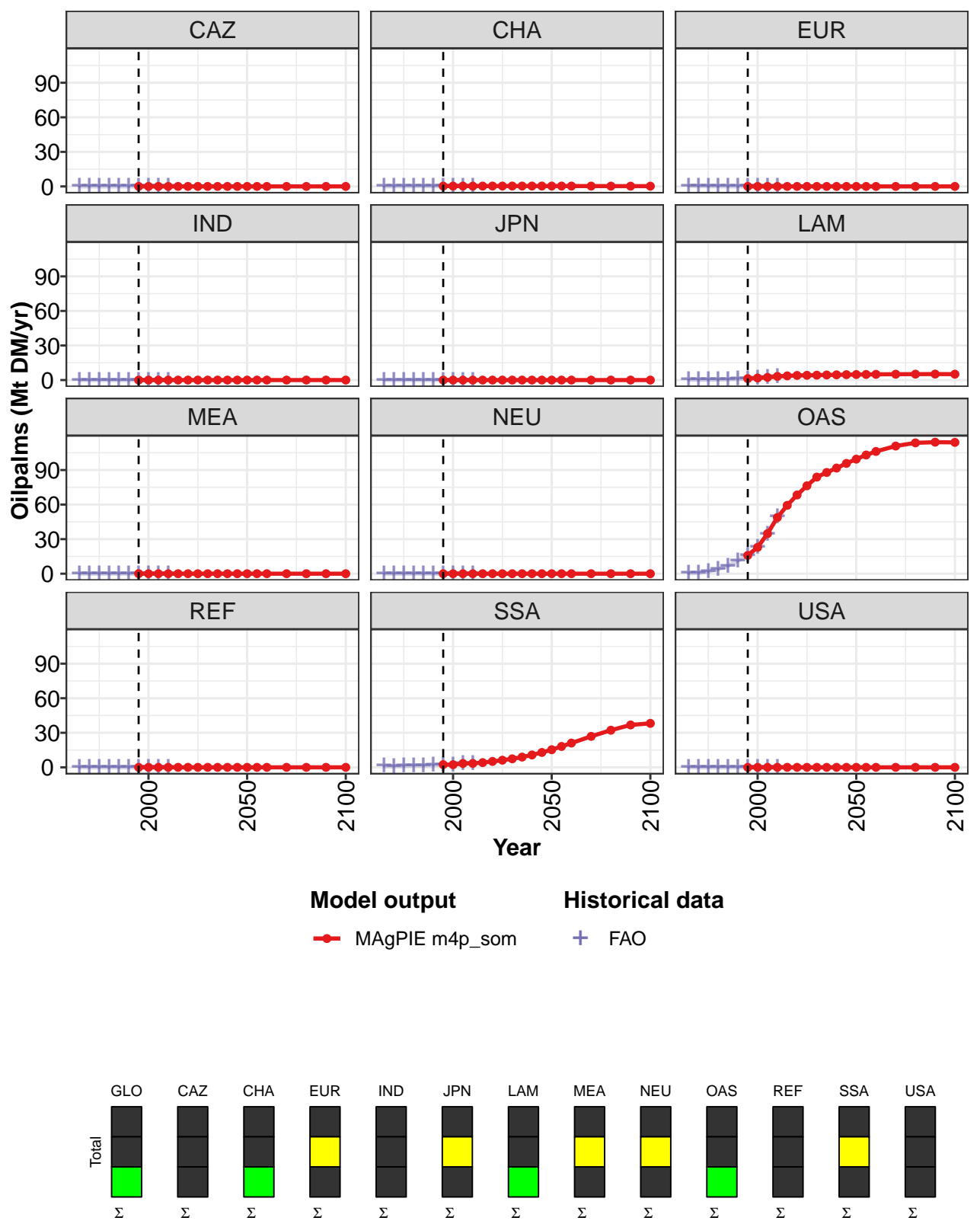


Figure 199: MAgPIE m4p\_som — Demand—Processing—Crops—Oil crops—Oilpalms (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	20	27	41	56	67	78	87	96	102	107	114
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	1	2	2	3	4	4	4	4	4	5	5
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	16	23	35	49	59	68	76	84	88	92	96
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	2	2	3	3	4	5	6	7	9	11	13
USA	0	0	0	0	0	0	0	0	0	0	0

Table 596: MAgPIE m4p\_som — Demand—Processing—Crops—Oil crops—Oilpalms (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	120	126	132	143	151	156	158
CAZ	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0
LAM	5	5	5	5	5	5	5
MEA	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0
OAS	99	103	106	111	114	114	114
REF	0	0	0	0	0	0	0
SSA	15	18	21	27	32	37	38
USA	0	0	0	0	0	0	0

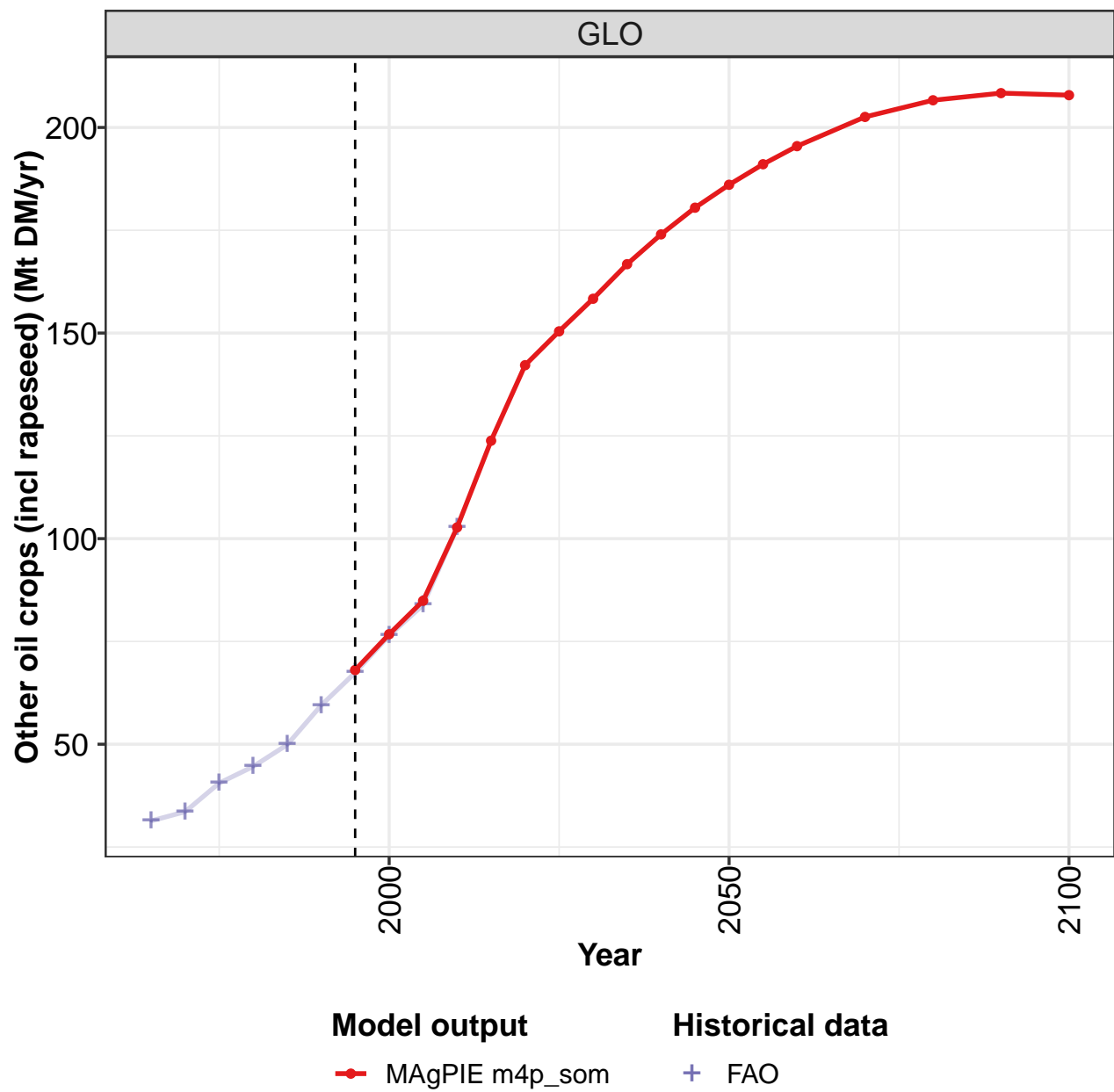
Table 597: MAgPIE m4p\_som — Demand—Processing—Crops—Oil crops—Oilpalms (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.3	2.5	3.9	6.2	9.5	14.4	19.7	27.2	40.6	56.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.1	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3
EUR	0.6	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.2	0.3	0.3	0.4	0.7	1.0	1.2	1.7	2.3	3.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.3	0.7	1.9	3.9	6.9	11.2	15.9	23.0	34.6	49.6
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	1.1	1.0	1.2	1.5	1.6	1.9	2.3	2.3	3.4	3.4
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 598: FAO — Demand—Processing—Crops—Oil crops—Oilpalms (Mt DM/yr)

9.1.10
Oil crops—Other oil crops (incl rapeseed)

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

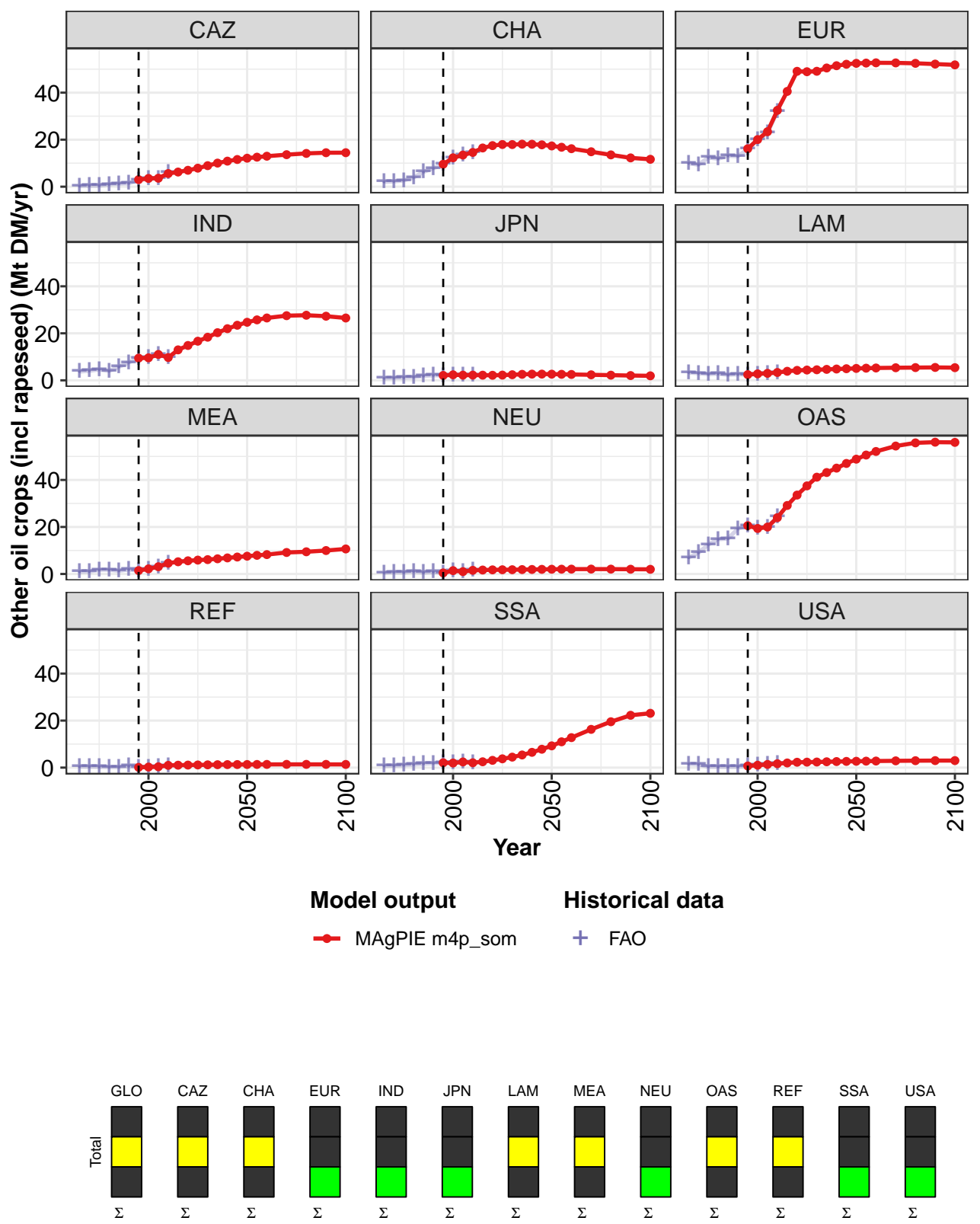


Figure 200: MAgPIE m4p\_som — Demand—Processing—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	68	77	85	103	124	142	150	158	167	174	180
CAZ	3	4	4	6	6	7	8	9	10	11	12
CHA	10	12	13	15	16	17	18	18	18	18	18
EUR	16	20	23	32	41	49	49	49	50	51	52
IND	9	10	11	10	13	15	17	18	20	22	23
JPN	2	2	2	2	2	2	2	2	3	3	3
LAM	2	3	3	3	4	4	4	4	5	5	5
MEA	1	2	3	5	5	6	6	6	6	7	7
NEU	0	1	1	2	2	2	2	2	2	2	2
OAS	21	19	20	24	29	34	37	41	43	45	47
REF	0	0	0	1	1	1	1	1	1	1	1
SSA	2	2	2	2	2	3	4	4	5	7	8
USA	1	1	1	2	2	2	2	2	2	3	3

Table 599: MAgPIE m4p\_som — Demand—Processing—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	186	191	195	203	207	208	208
CAZ	12	13	13	14	14	14	14
CHA	17	17	16	15	14	12	12
EUR	52	53	53	53	52	52	52
IND	25	26	27	28	28	27	27
JPN	3	3	3	2	2	2	2
LAM	5	5	5	5	5	5	5
MEA	8	8	8	9	9	10	11
NEU	2	2	2	2	2	2	2
OAS	49	51	52	54	56	56	56
REF	1	1	1	1	1	1	1
SSA	9	11	13	16	20	22	23
USA	3	3	3	3	3	3	3

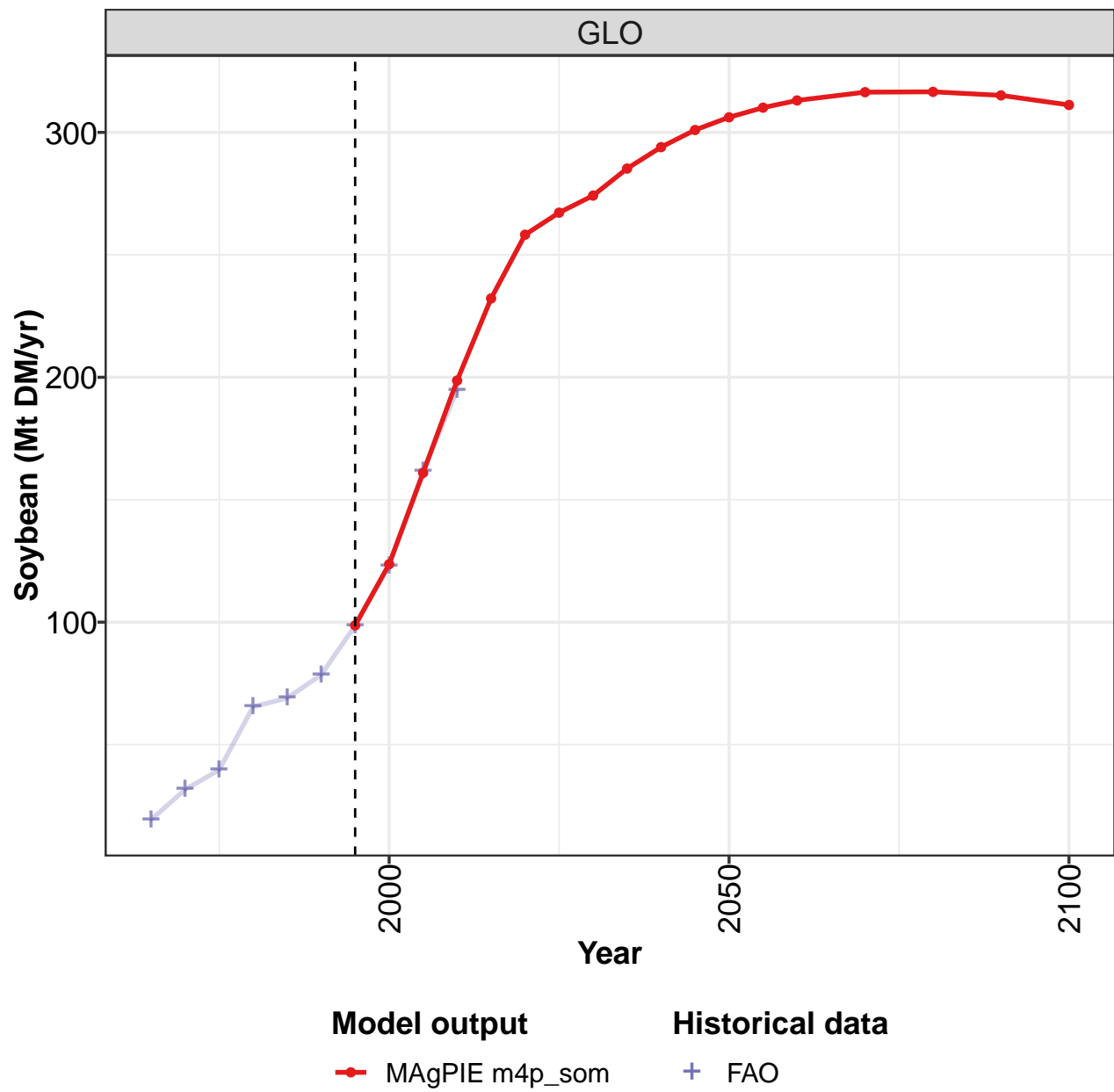
Table 600: MAgPIE m4p\_som — Demand—Processing—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	31	34	41	45	50	59	67	76	84	103
CAZ	0	0	0	1	1	1	3	3	3	6
CHA	2	2	3	4	6	8	9	12	13	15
EUR	10	9	12	12	13	13	16	20	23	32
IND	4	4	5	4	6	8	9	10	11	10
JPN	1	1	1	1	2	2	2	2	2	2
LAM	3	3	3	3	2	3	2	3	3	3
MEA	1	1	2	2	1	2	1	2	3	5
NEU	1	1	1	1	1	1	0	1	1	2
OAS	7	9	12	15	15	19	21	19	20	24
REF	0	0	0	0	0	1	0	0	0	1
SSA	1	1	1	1	2	2	2	2	2	2
USA	2	1	0	0	0	0	1	1	1	2

Table 601: FAO — Demand—Processing—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

9.1.11 Oil crops—Soybean

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

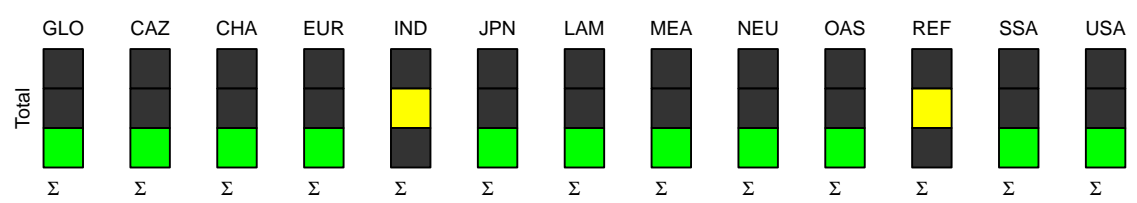
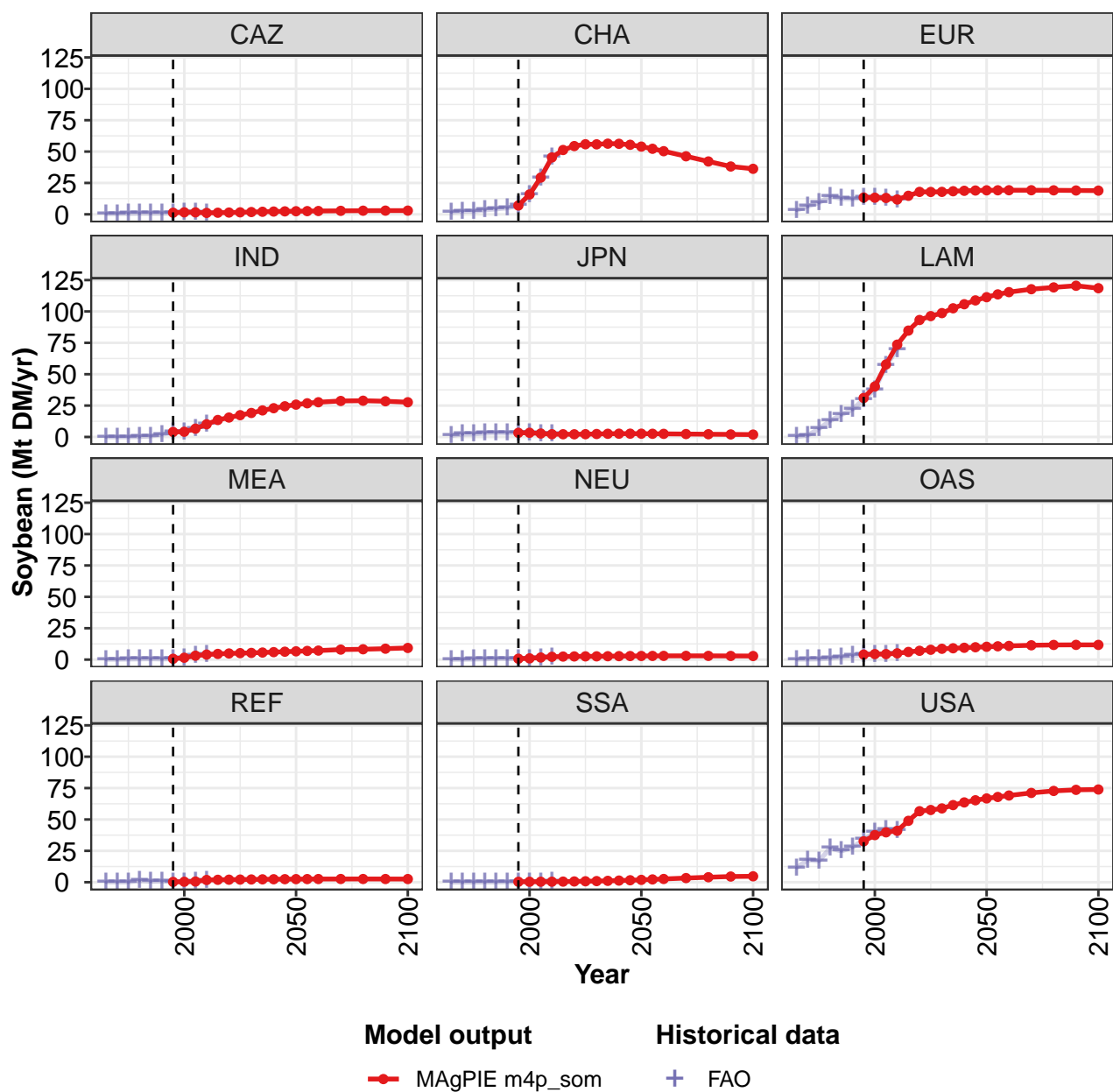


Figure 201: MAgPIE m4p\_som — Demand—Processing—Crops—Oil crops—Soybean (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	99	124	161	199	232	258	267	274	285	294	301
CAZ	1	2	2	1	1	1	2	2	2	2	2
CHA	7	16	29	45	51	54	56	56	56	56	55
EUR	13	13	13	12	15	18	18	18	18	19	19
IND	4	4	7	10	14	15	17	19	21	23	24
JPN	3	3	3	2	2	2	2	2	3	3	3
LAM	31	40	58	74	85	93	96	99	103	106	109
MEA	1	1	3	4	5	5	5	5	6	6	6
NEU	1	1	2	2	2	3	3	3	3	3	3
OAS	4	4	4	5	6	7	8	9	9	9	10
REF	0	0	1	2	2	2	2	2	2	2	2
SSA	0	0	0	0	1	1	1	1	1	1	2
USA	33	38	40	41	49	57	58	59	61	64	65

Table 602: MAgPIE m4p\_som — Demand—Processing—Crops—Oil crops—Soybean (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	306	310	313	316	317	315	311
CAZ	2	3	3	3	3	3	3
CHA	54	52	50	46	42	38	36
EUR	19	19	19	19	19	19	19
IND	26	27	28	29	29	28	28
JPN	3	3	2	2	2	2	2
LAM	111	114	115	118	119	120	119
MEA	7	7	7	8	8	9	9
NEU	3	3	3	3	3	3	3
OAS	10	11	11	11	12	12	12
REF	2	3	3	3	3	3	3
SSA	2	2	3	3	4	5	5
USA	67	68	69	71	73	74	74

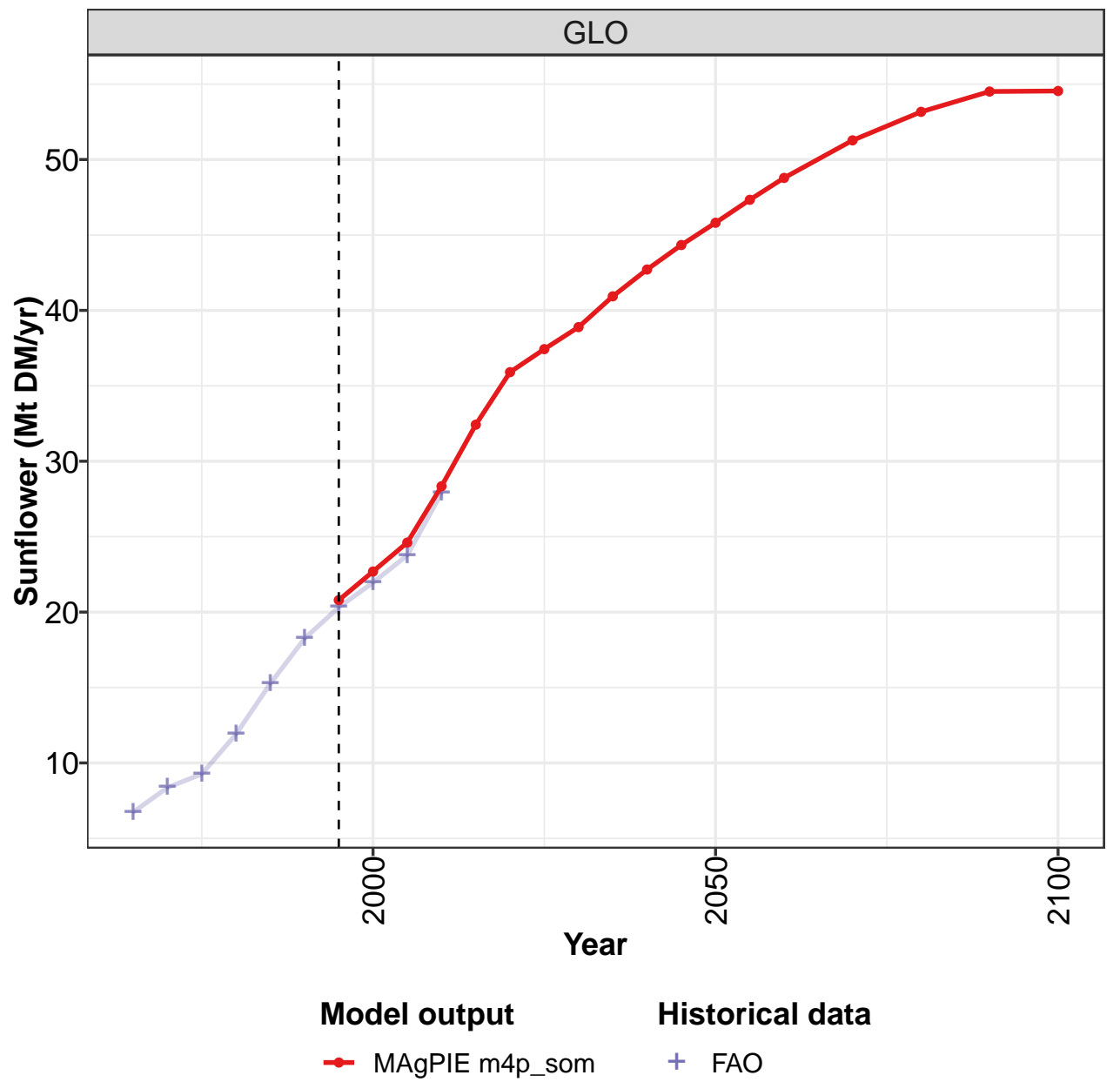
Table 603: MAgPIE m4p\_som — Demand—Processing—Crops—Oil crops—Soybean (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	19	32	40	65	69	78	99	123	162	195
CAZ	0	1	1	1	1	1	1	2	2	1
CHA	2	2	3	3	4	5	7	16	29	45
EUR	3	6	9	14	13	12	13	13	13	12
IND	0	0	0	0	1	2	4	4	7	10
JPN	1	2	2	3	3	3	3	3	3	2
LAM	0	1	7	13	18	22	30	38	57	70
MEA	0	0	0	0	1	0	1	1	3	4
NEU	0	0	0	1	1	1	1	1	2	2
OAS	0	0	0	1	2	3	4	4	4	5
REF	0	0	0	1	1	1	0	0	1	2
SSA	0	0	0	0	0	0	0	0	0	0
USA	12	18	17	27	25	28	34	40	42	41

Table 604: FAO — Demand—Processing—Crops—Oil crops—Soybean (Mt DM/yr)

9.1.12 Oil crops—Sunflower

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

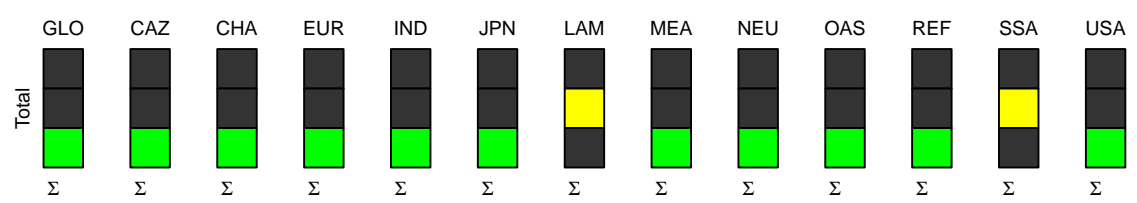
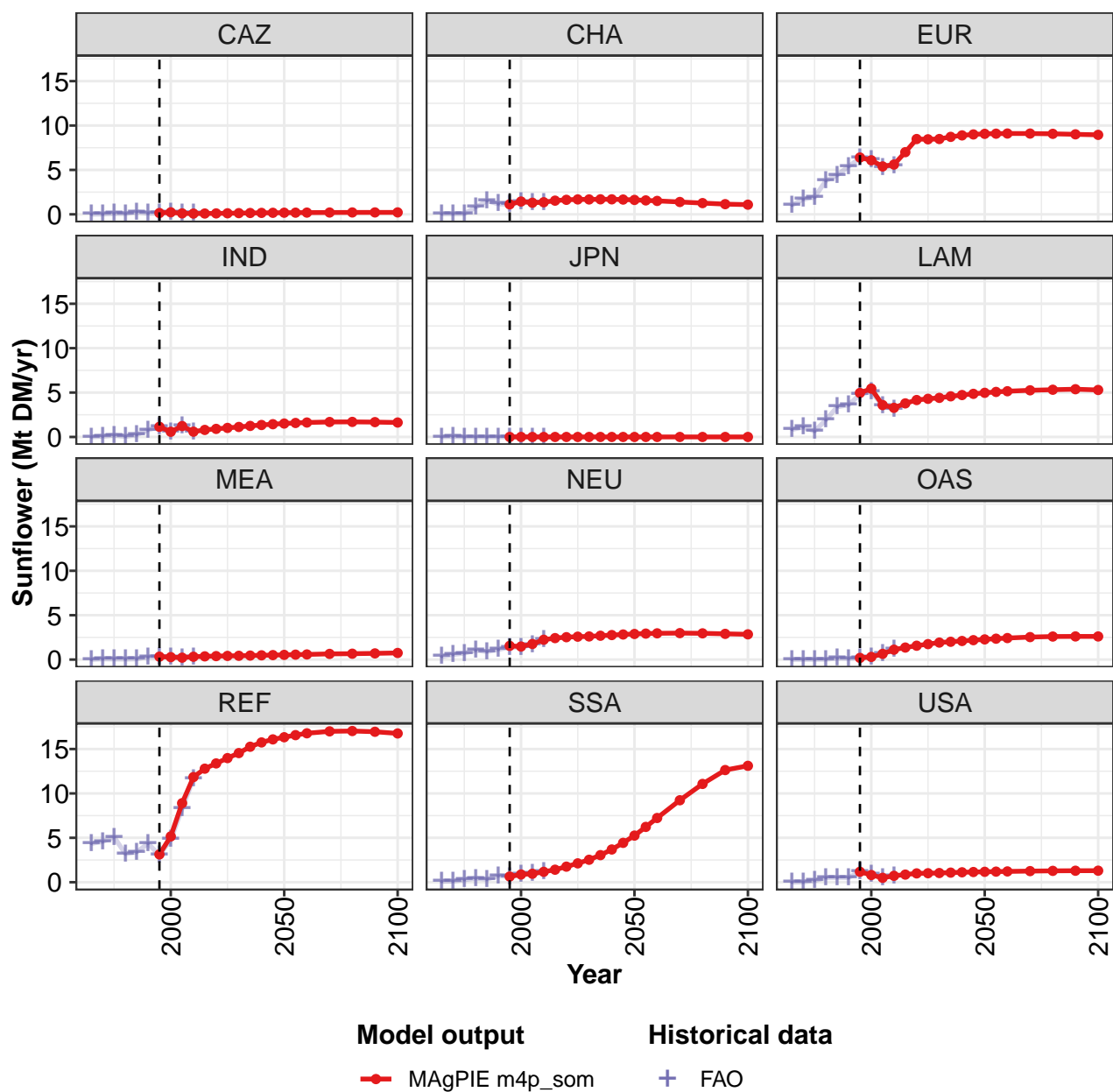


Figure 202: MAgPIE m4p\_som — Demand—Processing—Crops—Oil crops—Sunflower (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	20.8	22.7	24.6	28.3	32.4	35.9	37.4	38.9	40.9	42.7	44.3
CAZ	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
CHA	1.1	1.4	1.3	1.4	1.5	1.6	1.7	1.7	1.7	1.7	1.7
EUR	6.4	6.1	5.4	5.6	7.0	8.5	8.4	8.5	8.7	8.9	9.0
IND	1.1	0.6	1.2	0.6	0.8	0.9	1.0	1.1	1.2	1.3	1.4
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	5.0	5.4	3.6	3.3	3.8	4.2	4.3	4.4	4.6	4.7	4.9
MEA	0.3	0.3	0.2	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5
NEU	1.5	1.5	1.8	2.2	2.4	2.5	2.6	2.6	2.7	2.8	2.8
OAS	0.2	0.3	0.6	1.1	1.4	1.6	1.7	1.9	2.0	2.1	2.2
REF	3.1	5.2	8.9	11.8	12.8	13.4	14.0	14.5	15.3	15.7	16.1
SSA	0.6	0.9	1.0	1.2	1.4	1.8	2.1	2.5	3.1	3.7	4.4
USA	1.2	0.8	0.5	0.7	0.9	1.0	1.0	1.0	1.1	1.1	1.1

Table 605: MAgPIE m4p\_som — Demand—Processing—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	45.8	47.3	48.8	51.3	53.2	54.5	54.5
CAZ	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CHA	1.6	1.6	1.5	1.4	1.3	1.1	1.1
EUR	9.1	9.1	9.1	9.1	9.1	9.0	9.0
IND	1.5	1.6	1.6	1.7	1.7	1.7	1.6
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	5.0	5.1	5.2	5.3	5.3	5.4	5.3
MEA	0.5	0.6	0.6	0.6	0.7	0.7	0.7
NEU	2.9	2.9	3.0	3.0	3.0	2.9	2.8
OAS	2.3	2.4	2.4	2.5	2.6	2.6	2.6
REF	16.3	16.6	16.8	17.0	17.0	16.9	16.8
SSA	5.3	6.2	7.2	9.2	11.1	12.6	13.1
USA	1.2	1.2	1.2	1.3	1.3	1.3	1.3

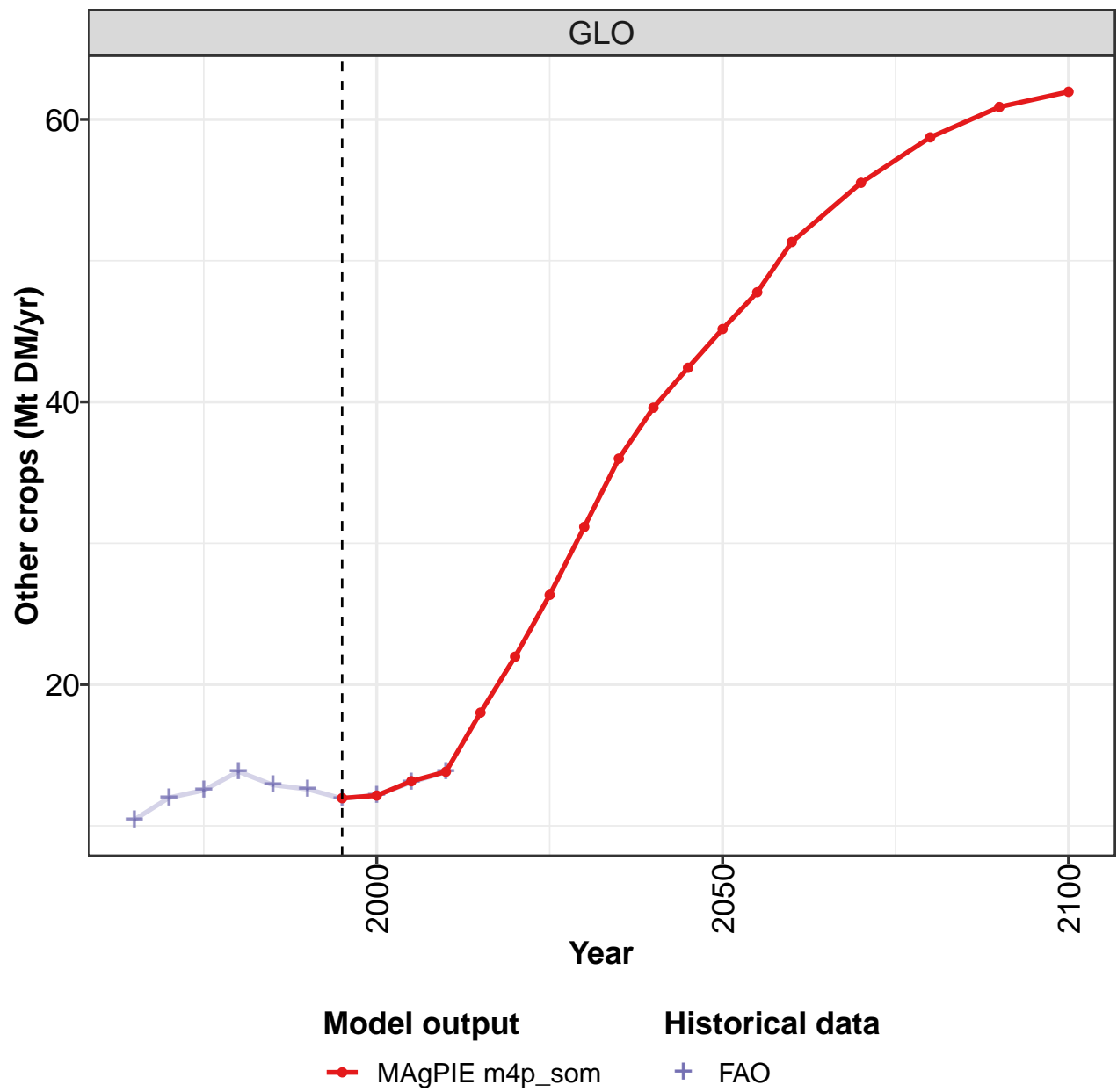
Table 606: MAgPIE m4p\_som — Demand—Processing—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	6.7	8.4	9.3	11.9	15.3	18.2	20.3	22.0	23.8	27.9
CAZ	0.0	0.0	0.1	0.1	0.3	0.1	0.1	0.2	0.1	0.1
CHA	0.1	0.1	0.1	0.8	1.5	1.2	1.1	1.4	1.3	1.4
EUR	1.0	1.7	1.9	3.8	4.4	5.4	6.3	6.1	5.3	5.5
IND	0.0	0.1	0.2	0.1	0.2	0.8	1.1	0.6	1.2	0.6
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.8	1.1	0.7	1.9	3.4	3.6	4.8	5.1	3.5	3.1
MEA	0.0	0.1	0.1	0.0	0.1	0.3	0.3	0.3	0.2	0.3
NEU	0.3	0.6	0.7	1.1	0.9	1.1	1.4	1.4	1.7	2.2
OAS	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.3	0.6	1.1
REF	4.4	4.6	5.1	3.2	3.4	4.4	3.0	4.8	8.3	11.7
SSA	0.1	0.1	0.3	0.4	0.3	0.7	0.6	0.9	1.0	1.2
USA	0.0	0.0	0.2	0.5	0.5	0.5	1.2	0.9	0.5	0.7

Table 607: FAO — Demand—Processing—Crops—Oil crops—Sunflower (Mt DM/yr)

9.1.13 Other crops

```
## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.
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## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

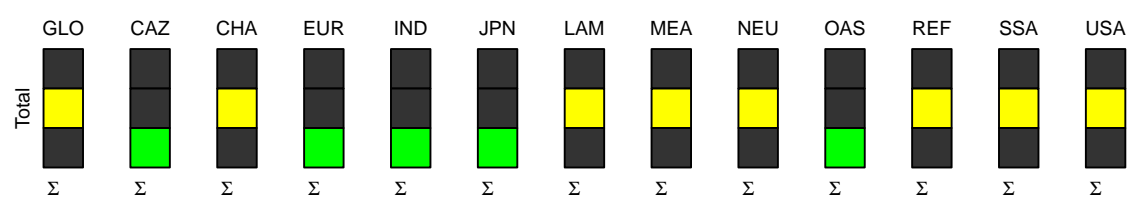
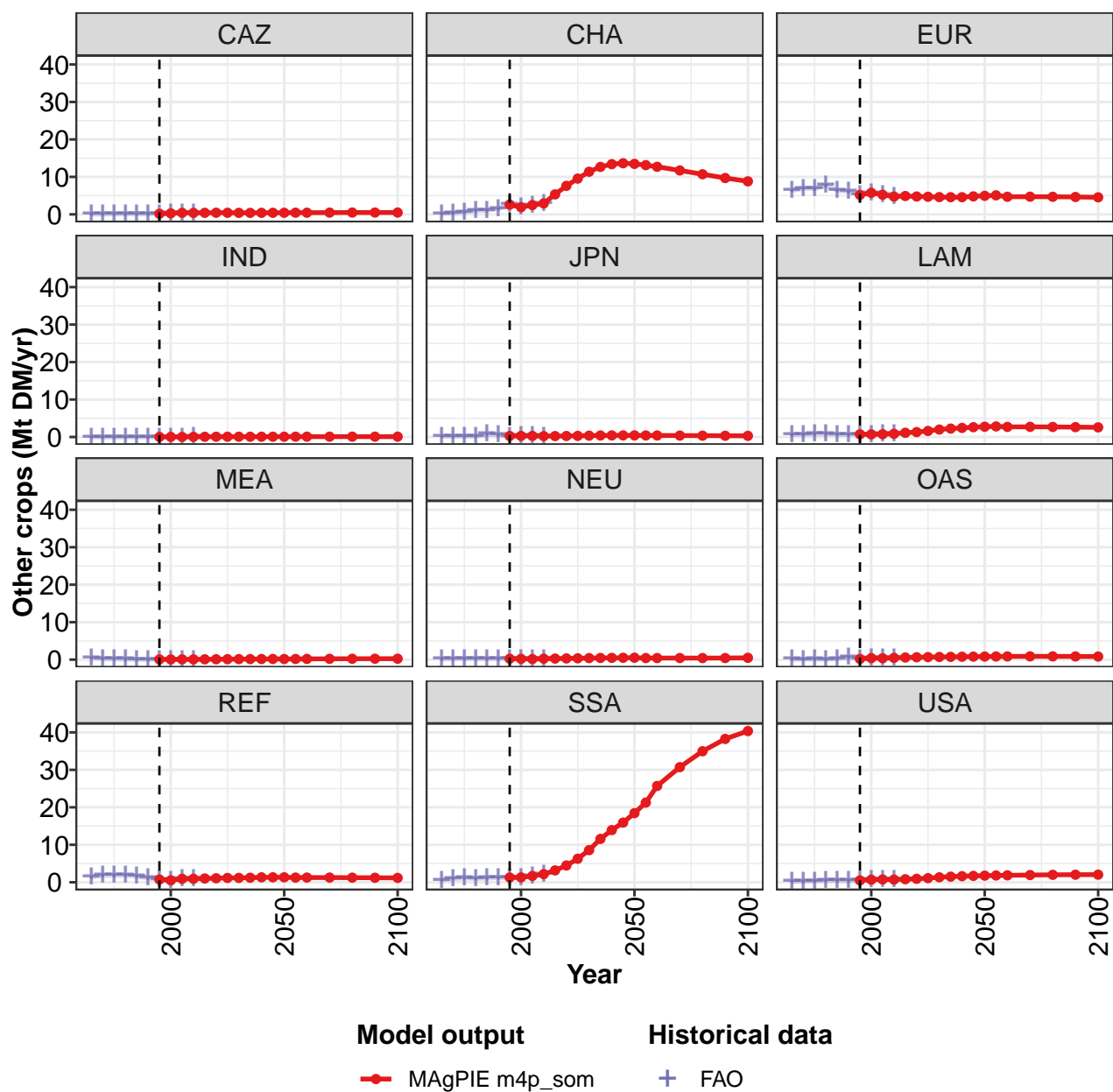


Figure 203: MAgPIE m4p\_som — Demand—Processing—Crops—Other crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	12.0	12.1	13.2	13.8	18.0	22.0	26.3	31.2	36.0	39.6	42.4
CAZ	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
CHA	2.6	1.9	2.5	2.9	5.3	7.6	9.5	11.4	12.7	13.4	13.6
EUR	5.2	5.7	5.2	4.8	4.9	4.8	4.7	4.6	4.6	4.6	4.8
IND	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
JPN	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4
LAM	0.7	0.7	0.8	0.9	1.1	1.3	1.6	2.0	2.2	2.4	2.6
MEA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
NEU	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.5	0.5
OAS	0.2	0.4	0.4	0.5	0.6	0.6	0.7	0.7	0.7	0.8	0.8
REF	0.7	0.5	0.9	0.9	1.0	1.1	1.2	1.2	1.2	1.3	1.3
SSA	1.3	1.3	1.7	2.2	3.2	4.5	6.3	8.6	11.6	13.9	15.9
USA	0.5	0.7	0.8	0.7	0.8	0.9	1.1	1.3	1.5	1.6	1.7

Table 608: MAgPIE m4p\_som — Demand—Processing—Crops—Other crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	45.2	47.8	51.3	55.5	58.7	60.9	62.0
CAZ	0.4	0.5	0.4	0.5	0.5	0.5	0.5
CHA	13.5	13.1	12.7	11.7	10.7	9.7	8.8
EUR	5.0	5.1	4.7	4.7	4.7	4.6	4.5
IND	0.1	0.1	0.1	0.1	0.1	0.1	0.1
JPN	0.4	0.4	0.4	0.4	0.4	0.3	0.3
LAM	2.7	2.8	2.7	2.7	2.7	2.6	2.6
MEA	0.2	0.2	0.2	0.2	0.2	0.2	0.3
NEU	0.5	0.4	0.4	0.4	0.4	0.4	0.5
OAS	0.8	0.8	0.9	0.9	0.9	0.9	0.8
REF	1.3	1.2	1.3	1.3	1.2	1.2	1.2
SSA	18.5	21.3	25.7	30.7	35.0	38.3	40.4
USA	1.8	1.8	1.9	1.9	2.0	2.0	2.0

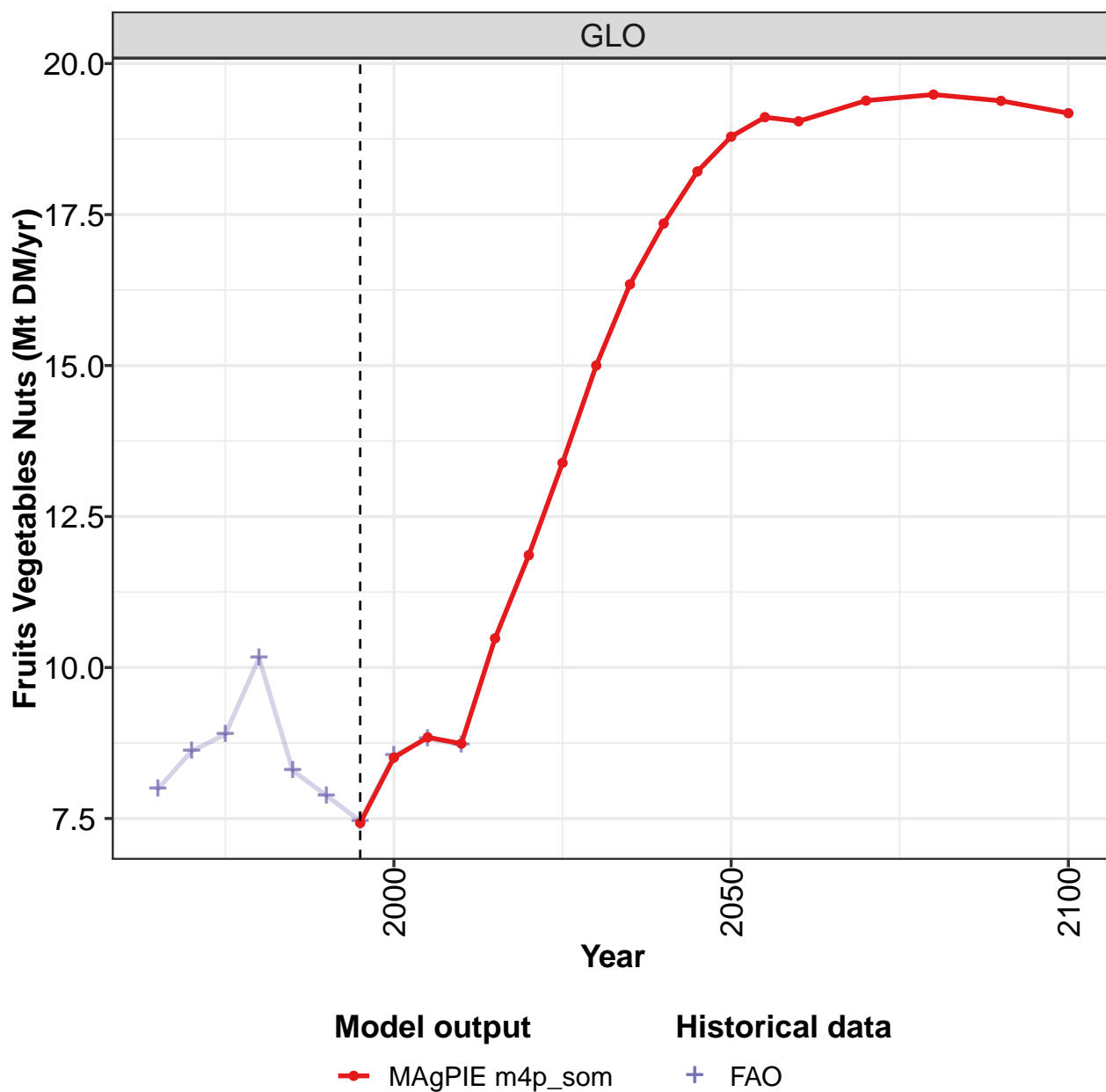
Table 609: MAgPIE m4p\_som — Demand—Processing—Crops—Other crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	10.4	12.0	12.5	13.8	12.9	12.6	11.9	12.2	13.1	13.8
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.4
CHA	0.2	0.3	0.6	1.0	1.1	1.5	2.6	1.9	2.5	3.0
EUR	6.4	6.9	6.8	7.8	6.4	6.1	5.2	5.8	5.2	4.7
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
JPN	0.2	0.2	0.2	0.2	0.8	0.5	0.3	0.3	0.3	0.2
LAM	0.6	0.7	0.8	0.8	0.7	0.6	0.7	0.7	0.8	0.9
MEA	0.5	0.3	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.1
NEU	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.3
OAS	0.1	0.1	0.1	0.1	0.3	0.6	0.2	0.4	0.4	0.5
REF	1.4	1.9	1.8	1.9	1.6	1.1	0.7	0.5	0.9	0.9
SSA	0.6	1.0	1.1	1.0	1.1	1.2	1.2	1.3	1.6	2.2
USA	0.2	0.3	0.4	0.5	0.5	0.4	0.5	0.7	0.8	0.7

Table 610: FAO — Demand—Processing—Crops—Other crops (Mt DM/yr)

## 9.1.14 Other crops—Fruits Vegetables Nuts

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

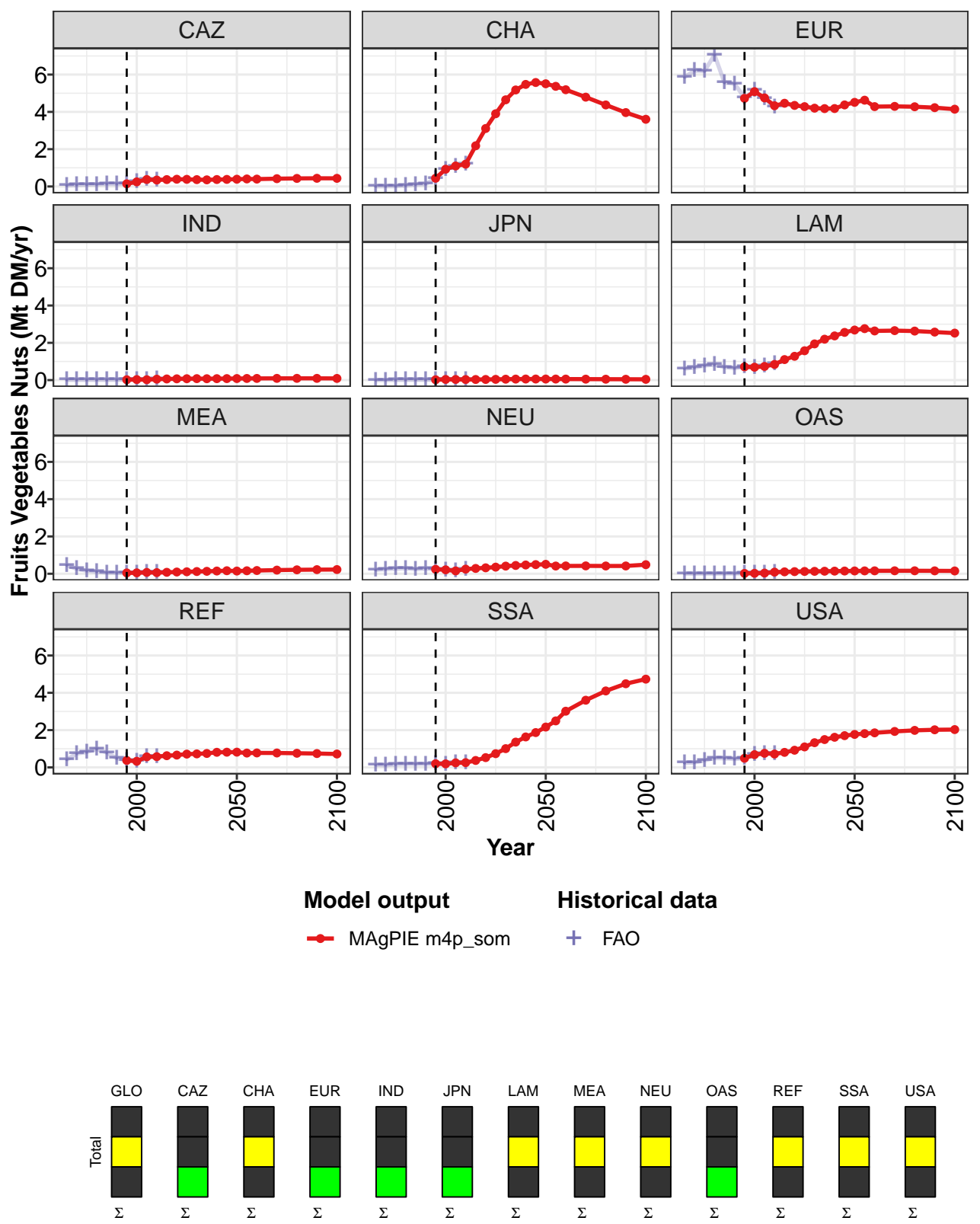


Figure 204: MAgPIE m4p\_som — Demand—Processing—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	7.4	8.5	8.8	8.7	10.5	11.9	13.4	15.0	16.3	17.4	18.2
CAZ	0.1	0.2	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
CHA	0.4	0.9	1.1	1.2	2.2	3.1	3.9	4.6	5.2	5.5	5.6
EUR	4.7	5.1	4.7	4.3	4.5	4.3	4.3	4.2	4.2	4.2	4.4
IND	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
LAM	0.7	0.7	0.7	0.8	1.1	1.3	1.6	1.9	2.2	2.4	2.6
MEA	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
NEU	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.5	0.5
OAS	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
REF	0.4	0.3	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8
SSA	0.2	0.2	0.2	0.3	0.4	0.5	0.7	1.0	1.4	1.6	1.9
USA	0.5	0.7	0.8	0.7	0.8	0.9	1.1	1.3	1.5	1.6	1.7

Table 611: MAgPIE m4p\_som — Demand—Processing—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	18.8	19.1	19.0	19.4	19.5	19.4	19.2
CAZ	0.4	0.4	0.4	0.4	0.4	0.4	0.4
CHA	5.5	5.4	5.2	4.8	4.4	4.0	3.6
EUR	4.5	4.6	4.3	4.3	4.3	4.2	4.1
IND	0.1	0.1	0.1	0.1	0.1	0.1	0.1
JPN	0.1	0.1	0.1	0.1	0.0	0.0	0.0
LAM	2.7	2.8	2.6	2.7	2.6	2.6	2.5
MEA	0.1	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.5	0.4	0.4	0.4	0.4	0.4	0.5
OAS	0.2	0.2	0.2	0.2	0.2	0.2	0.2
REF	0.8	0.8	0.8	0.8	0.8	0.7	0.7
SSA	2.2	2.5	3.0	3.6	4.1	4.5	4.7
USA	1.8	1.8	1.9	1.9	2.0	2.0	2.0

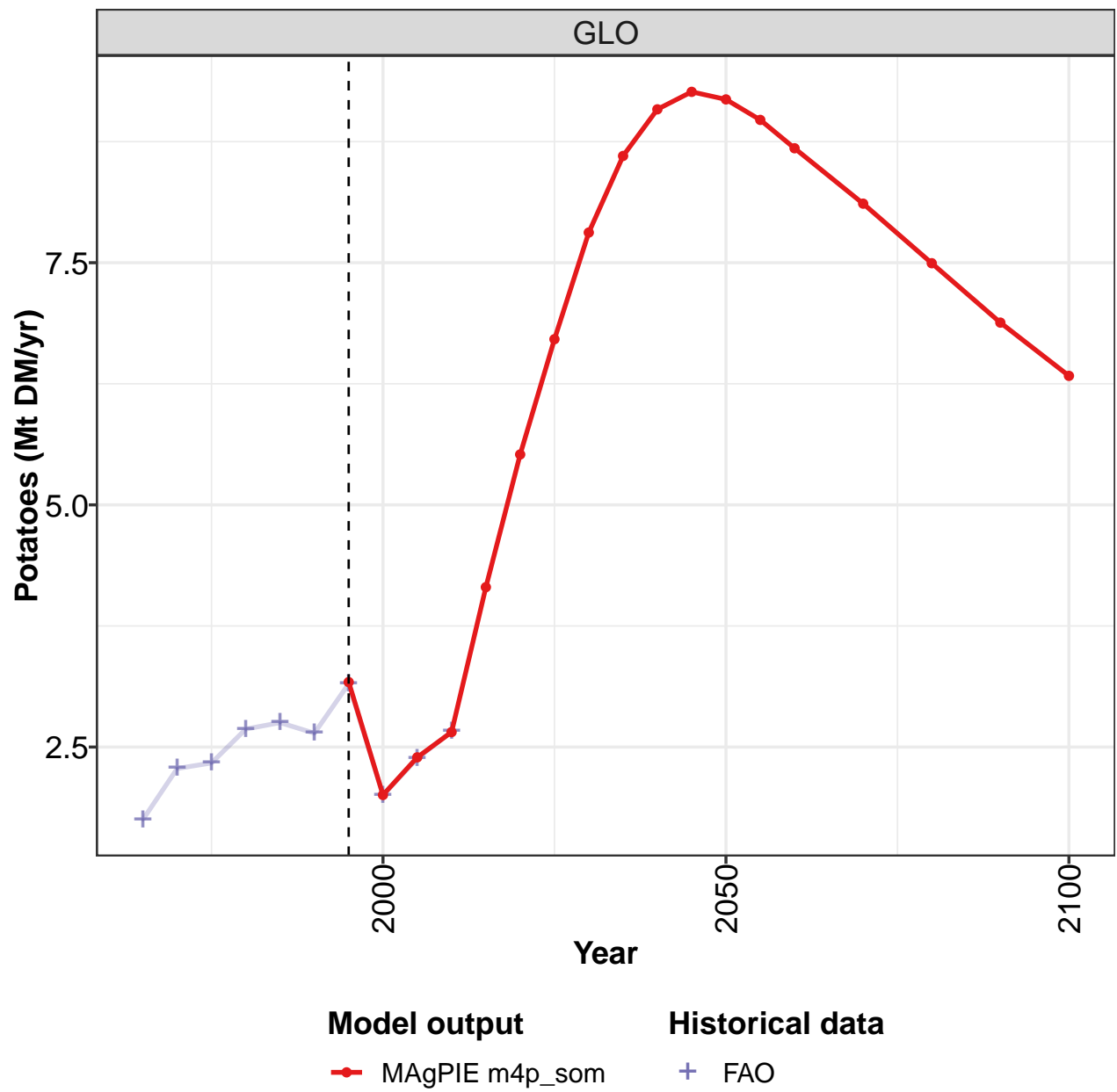
Table 612: MAgPIE m4p\_som — Demand—Processing—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	8.0	8.6	8.9	10.2	8.3	7.9	7.5	8.5	8.8	8.7
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.3
CHA	0.0	0.0	0.0	0.1	0.1	0.1	0.4	0.9	1.1	1.2
EUR	5.9	6.2	6.2	7.1	5.6	5.5	4.8	5.2	4.7	4.3
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.6	0.7	0.8	0.8	0.7	0.6	0.7	0.7	0.8	0.9
MEA	0.5	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.1
NEU	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2
OAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
REF	0.4	0.7	0.8	1.0	0.8	0.5	0.4	0.3	0.6	0.6
SSA	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
USA	0.2	0.3	0.4	0.5	0.5	0.4	0.5	0.7	0.8	0.7

Table 613: FAO — Demand—Processing—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

9.1.15
Other crops—Potatoes

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

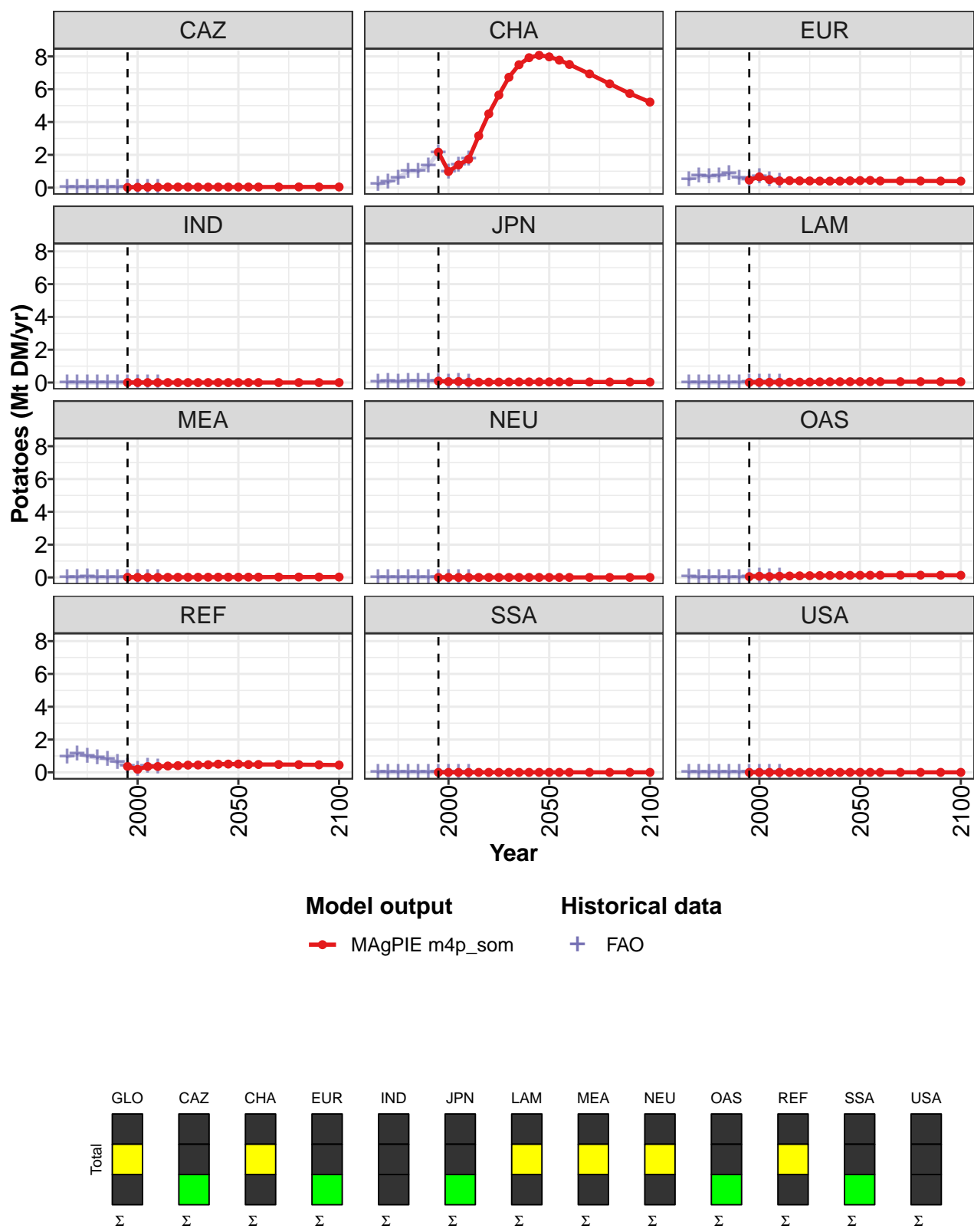


Figure 205: MAgPIE m4p\_som — Demand—Processing—Crops—Other crops—Potatoes (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	3.17	2.01	2.39	2.65	4.15	5.52	6.71	7.81	8.60	9.08	9.26
CAZ	0.02	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.03	0.04	0.04
CHA	2.16	0.98	1.38	1.73	3.16	4.50	5.65	6.73	7.49	7.92	8.07
EUR	0.46	0.66	0.49	0.41	0.43	0.41	0.41	0.40	0.40	0.40	0.42
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.09	0.05	0.06	0.02	0.02	0.02	0.03	0.03	0.04	0.04	0.04
LAM	0.01	0.01	0.02	0.02	0.02	0.02	0.03	0.04	0.04	0.05	0.05
MEA	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.05	0.07	0.05	0.08	0.09	0.10	0.11	0.11	0.12	0.12	0.13
REF	0.36	0.19	0.36	0.36	0.39	0.41	0.44	0.45	0.46	0.50	0.50
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 614: MAgPIE m4p\_som — Demand—Processing—Crops—Other crops—Potatoes (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	9.19	8.97	8.68	8.11	7.49	6.88	6.33
CAZ	0.04	0.04	0.04	0.04	0.04	0.04	0.04
CHA	7.97	7.77	7.51	6.93	6.33	5.74	5.22
EUR	0.43	0.44	0.41	0.41	0.41	0.40	0.40
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.04	0.04	0.04	0.03	0.03	0.03	0.03
LAM	0.05	0.05	0.05	0.05	0.05	0.05	0.05
MEA	0.02	0.02	0.02	0.02	0.02	0.03	0.03
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.13	0.13	0.14	0.14	0.14	0.13	0.13
REF	0.51	0.48	0.48	0.48	0.47	0.46	0.44
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00

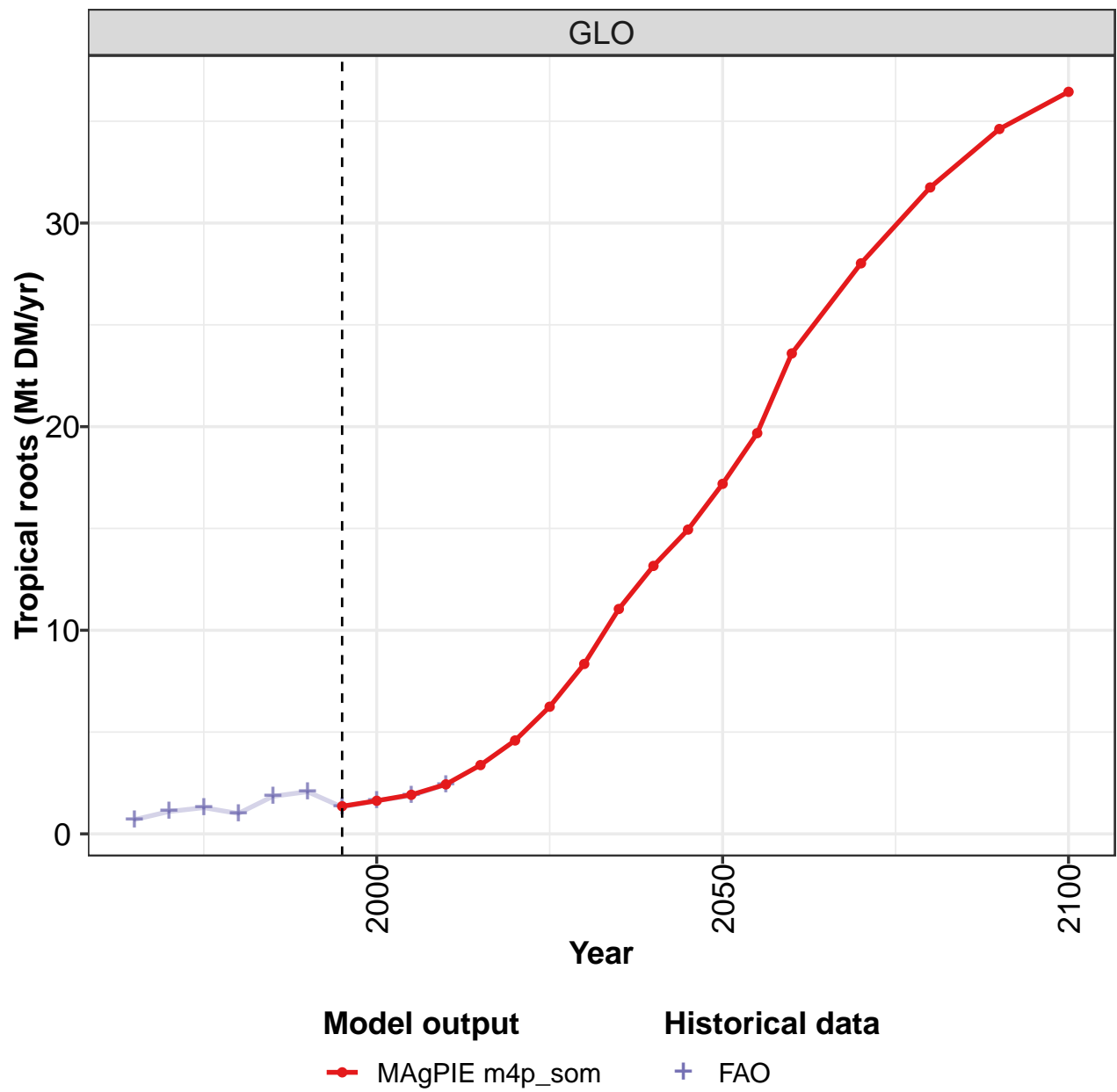
Table 615: MAgPIE m4p\_som — Demand—Processing—Crops—Other crops—Potatoes (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.75	2.28	2.34	2.69	2.75	2.64	3.15	2.00	2.38	2.66
CAZ	0.01	0.01	0.00	0.00	0.01	0.00	0.02	0.02	0.03	0.03
CHA	0.20	0.33	0.60	0.99	0.99	1.34	2.14	0.97	1.37	1.74
EUR	0.51	0.73	0.66	0.72	0.85	0.58	0.47	0.67	0.48	0.41
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.04	0.07	0.05	0.07	0.09	0.07	0.09	0.05	0.06	0.02
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.02
MEA	0.01	0.01	0.02	0.00	0.00	0.00	0.01	0.01	0.01	0.01
NEU	0.01	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
OAS	0.02	0.00	0.00	0.00	0.00	0.00	0.05	0.07	0.05	0.07
REF	0.95	1.12	0.99	0.88	0.81	0.63	0.36	0.19	0.36	0.36
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 616: FAO — Demand—Processing—Crops—Other crops—Potatoes (Mt DM/yr)

9.1.16 Other crops—Tropical roots

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

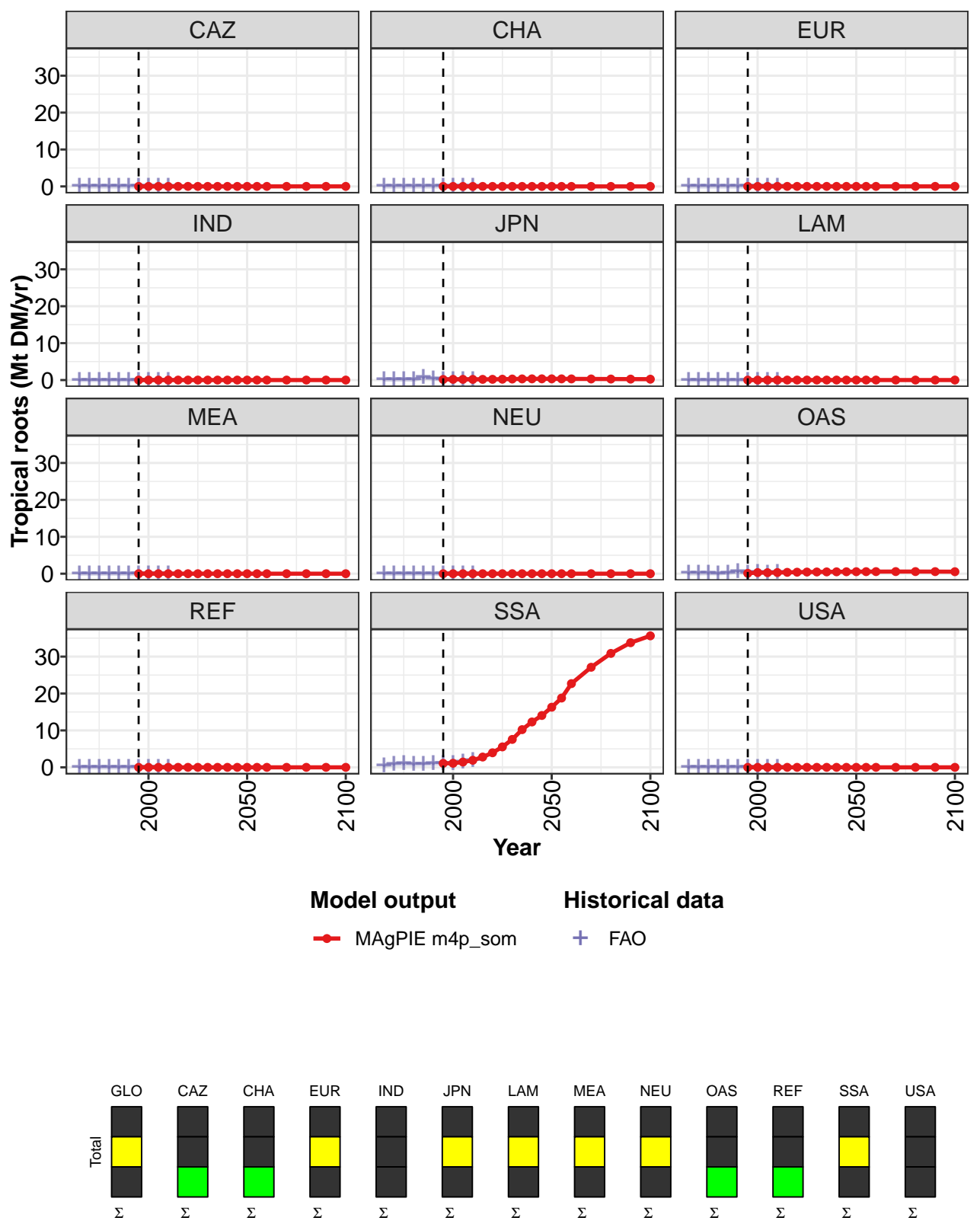


Figure 206: MAgPIE m4p\_som — Demand—Processing—Crops—Other crops—Tropical roots (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.4	1.6	1.9	2.4	3.4	4.6	6.2	8.3	11.0	13.2	14.9
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
LAM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.1	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	1.1	1.1	1.4	1.9	2.8	3.9	5.5	7.6	10.2	12.3	14.1
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 617: MAgPIE m4p\_som — Demand—Processing—Crops—Other crops—Tropical roots (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	17.2	19.7	23.6	28.0	31.8	34.6	36.4
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.3	0.3	0.3	0.3	0.3	0.3	0.2
LAM	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.5	0.6	0.6	0.6	0.6	0.6	0.5
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	16.3	18.8	22.7	27.1	30.9	33.8	35.6
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 618: MAgPIE m4p\_som — Demand—Processing—Crops—Other crops—Tropical roots (Mt DM/yr)  
[PART 2/2]

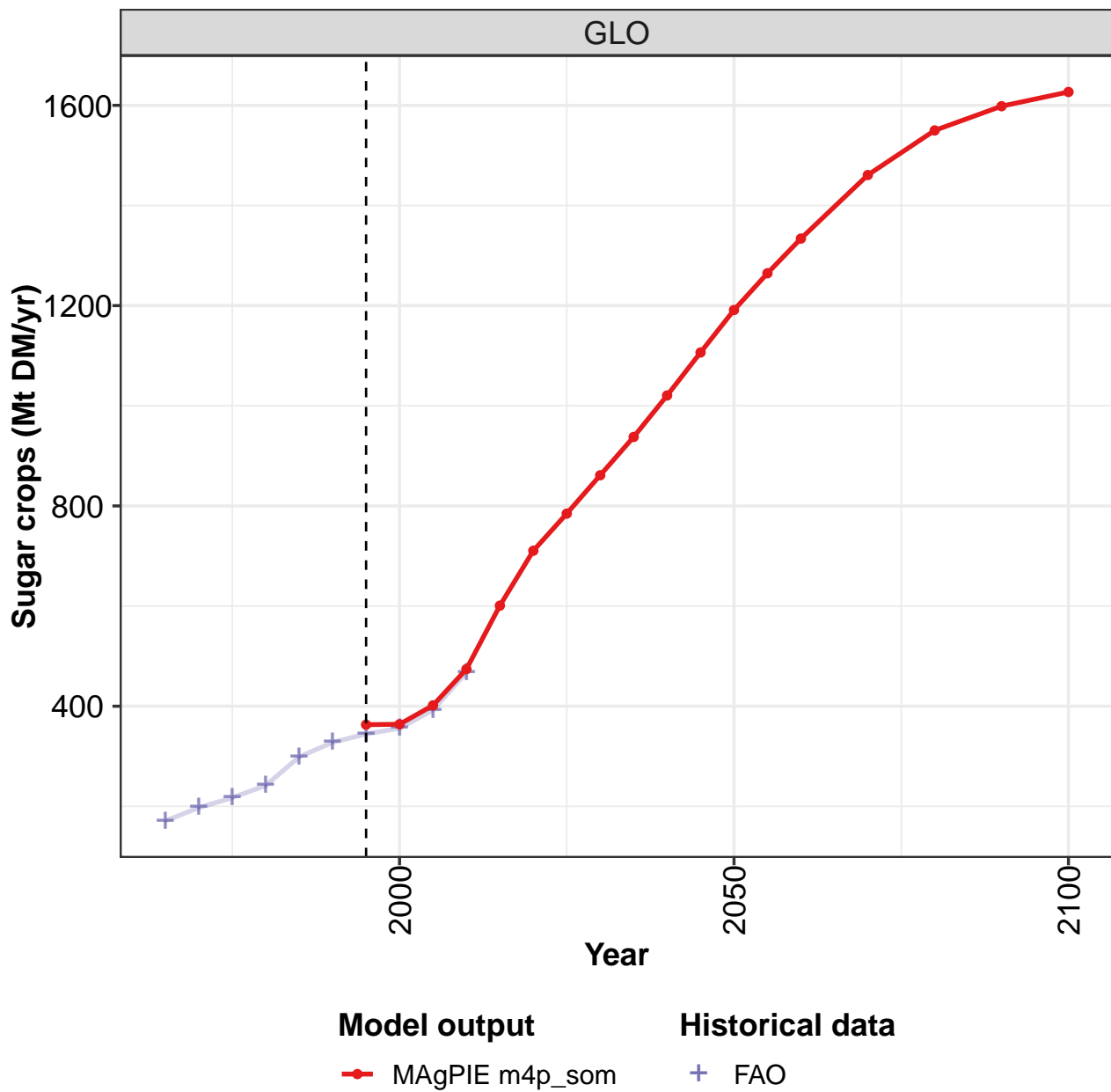
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.70	1.10	1.29	1.00	1.84	2.07	1.32	1.63	1.87	2.43
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.15	0.16	0.18	0.13	0.66	0.43	0.16	0.20	0.19	0.18
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.10	0.09	0.14	0.06	0.25	0.60	0.11	0.31	0.28	0.31
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.46	0.85	0.97	0.81	0.93	1.04	1.04	1.12	1.39	1.91
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 619: FAO — Demand—Processing—Crops—Other crops—Tropical roots (Mt DM/yr)



## 9.1.17 Sugar crops

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

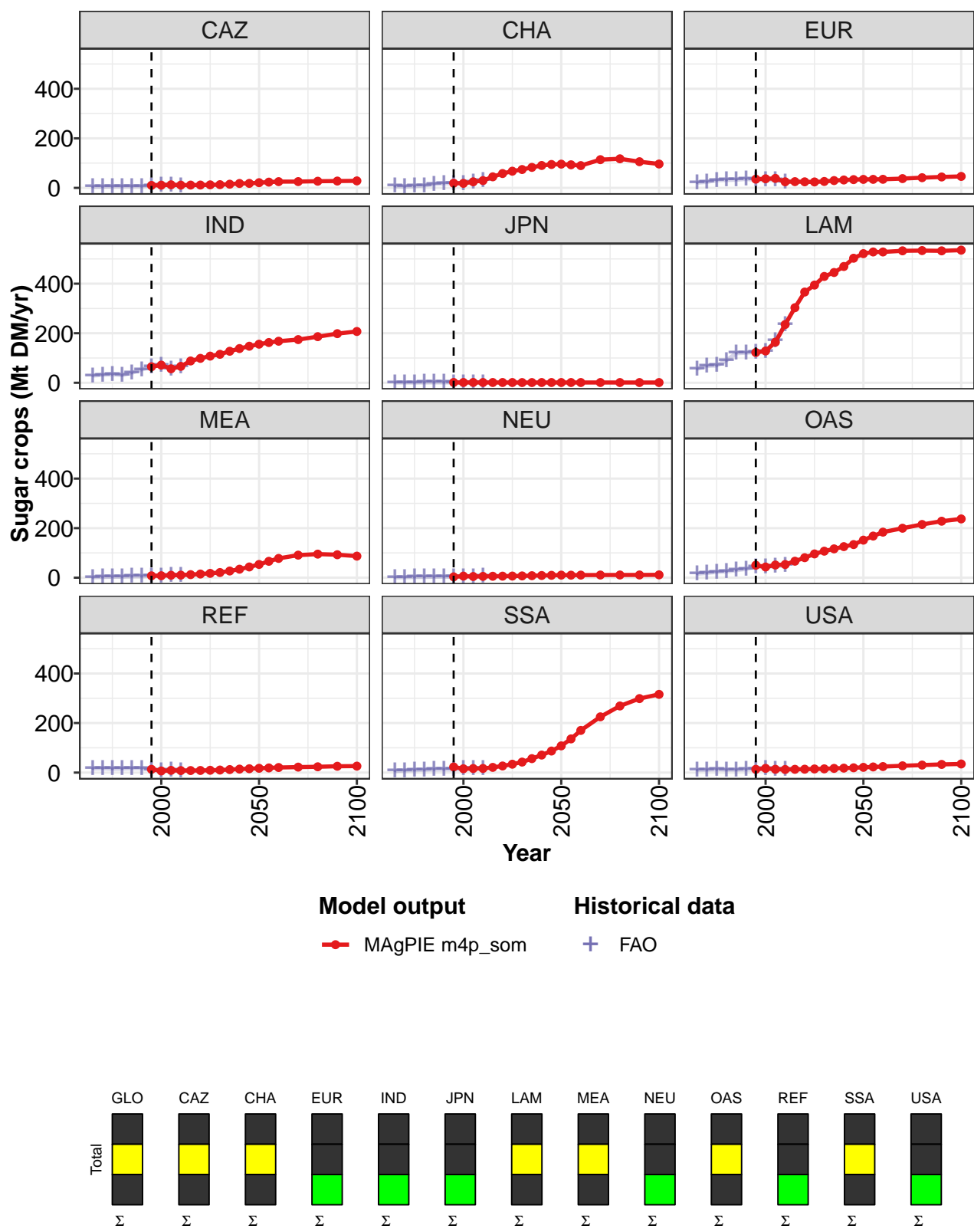


Figure 207: MAgPIE m4p\_som — Demand—Processing—Crops—Sugar crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	363	364	402	474	601	711	785	861	938	1021	1106
CAZ	10	11	12	11	11	11	12	13	15	18	18
CHA	19	18	25	29	45	58	67	74	83	90	94
EUR	35	37	38	25	25	24	24	26	30	32	33
IND	65	71	56	66	88	99	108	115	127	138	148
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	122	128	164	235	303	366	394	429	445	469	503
MEA	8	8	10	10	12	15	17	21	27	34	43
NEU	3	6	5	5	6	6	7	7	8	9	10
OAS	50	43	51	53	67	81	96	107	116	125	134
REF	13	7	9	8	8	9	9	10	12	14	16
SSA	23	16	17	17	21	27	34	42	56	71	87
USA	13	17	13	13	13	14	15	15	17	18	19

Table 620: MAgPIE m4p\_som — Demand—Processing—Crops—Sugar crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1191	1265	1334	1461	1550	1598	1627
CAZ	21	23	25	25	27	28	28
CHA	96	93	90	114	117	106	96
EUR	34	34	35	37	41	44	46
IND	156	163	168	174	186	198	207
JPN	1	1	1	1	1	1	1
LAM	521	528	528	533	534	533	535
MEA	53	66	78	91	95	93	87
NEU	10	10	10	11	11	11	11
OAS	152	168	184	200	215	228	237
REF	17	19	21	22	23	26	26
SSA	108	136	170	225	269	299	316
USA	21	23	24	27	30	33	35

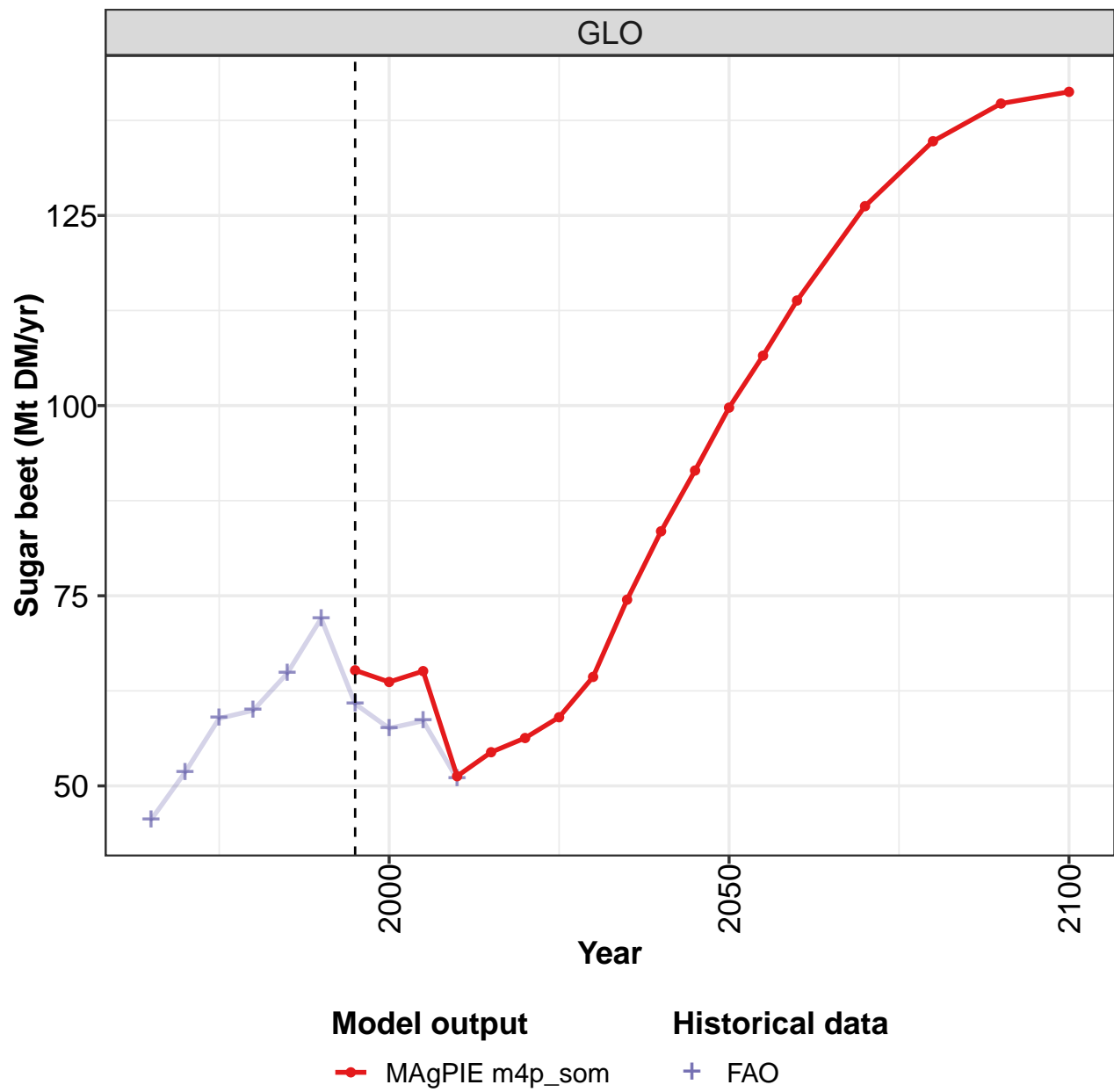
Table 621: MAgPIE m4p\_som — Demand—Processing—Crops—Sugar crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	171	197	217	242	299	328	345	356	393	467
CAZ	4	5	6	7	7	7	10	10	10	9
CHA	7	6	7	10	16	19	19	18	25	30
EUR	21	24	31	32	33	36	32	32	32	24
IND	29	32	34	31	40	54	65	71	56	66
JPN	1	1	1	1	2	1	1	1	1	1
LAM	57	68	70	90	119	121	124	127	169	235
MEA	2	3	4	4	6	6	8	8	10	10
NEU	1	2	2	3	4	5	3	5	5	5
OAS	16	19	23	25	30	35	44	43	46	50
REF	17	18	15	16	18	18	12	7	9	8
SSA	6	9	10	11	13	13	13	16	17	16
USA	10	11	13	11	11	12	13	17	13	13

Table 622: FAO — Demand—Processing—Crops—Sugar crops (Mt DM/yr)

9.1.18 Sugar crops—Sugar beet

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

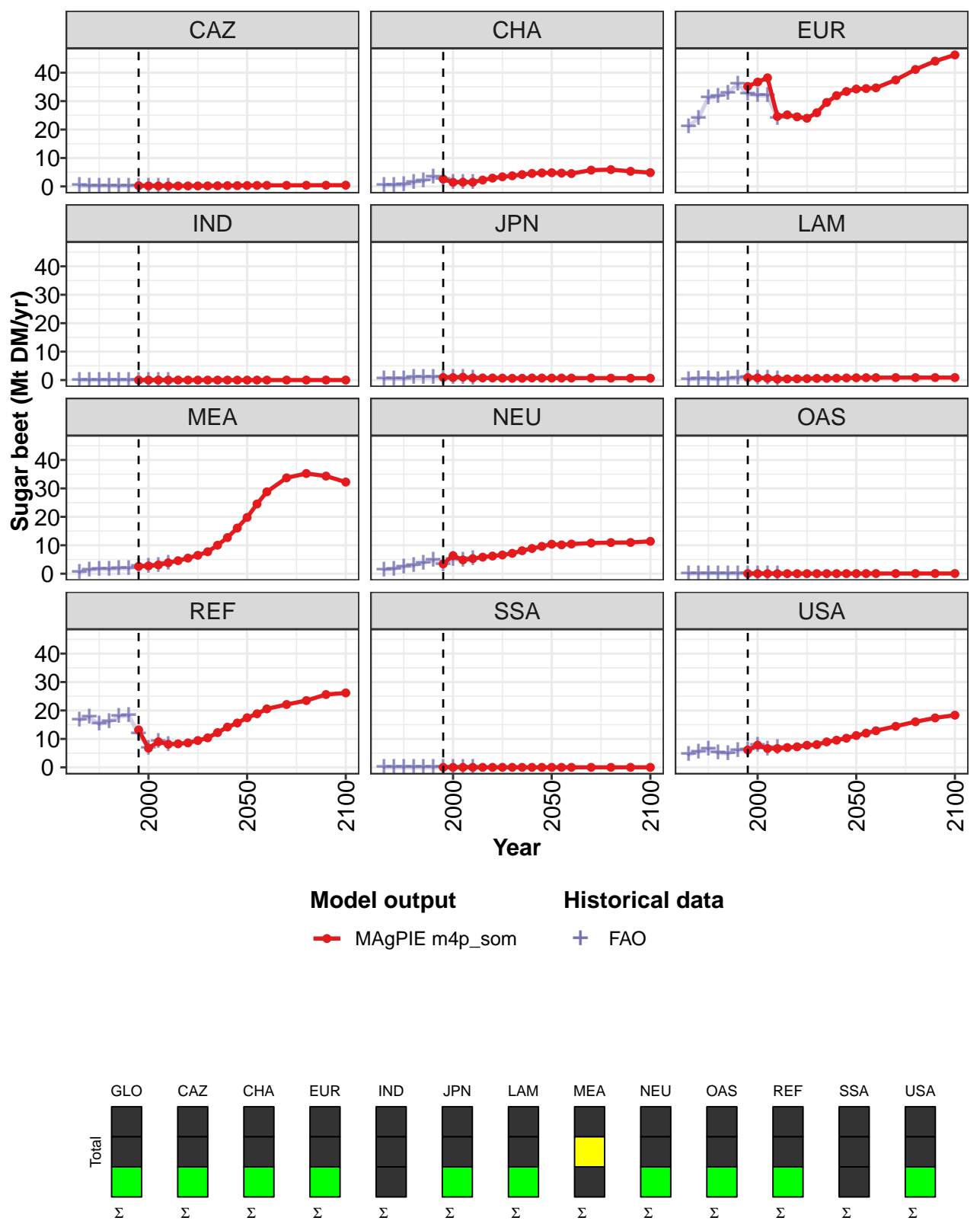


Figure 208: MAGPIE m4p\_som — Demand—Processing—Crops—Sugar crops—Sugar beet (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	65	64	65	51	54	56	59	64	74	83	91
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	3	1	2	1	2	3	3	4	4	5	5
EUR	35	37	38	25	25	24	24	26	30	32	33
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	1	1	1	0	0	0	1	1	1	1	1
MEA	3	3	3	4	5	5	6	8	10	13	16
NEU	3	6	5	5	6	6	7	7	8	9	10
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	13	7	9	8	8	9	9	10	12	14	16
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	6	8	7	7	7	7	8	8	9	10	10

Table 623: MAgPIE m4p\_som — Demand—Processing—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	100	107	114	126	135	140	141
CAZ	0	0	0	0	0	0	0
CHA	5	5	5	6	6	5	5
EUR	34	34	35	37	41	44	46
IND	0	0	0	0	0	0	0
JPN	1	1	1	1	1	1	1
LAM	1	1	1	1	1	1	1
MEA	20	25	29	34	35	34	32
NEU	10	10	10	11	11	11	11
OAS	0	0	0	0	0	0	0
REF	17	19	21	22	23	26	26
SSA	0	0	0	0	0	0	0
USA	11	12	13	14	16	17	18

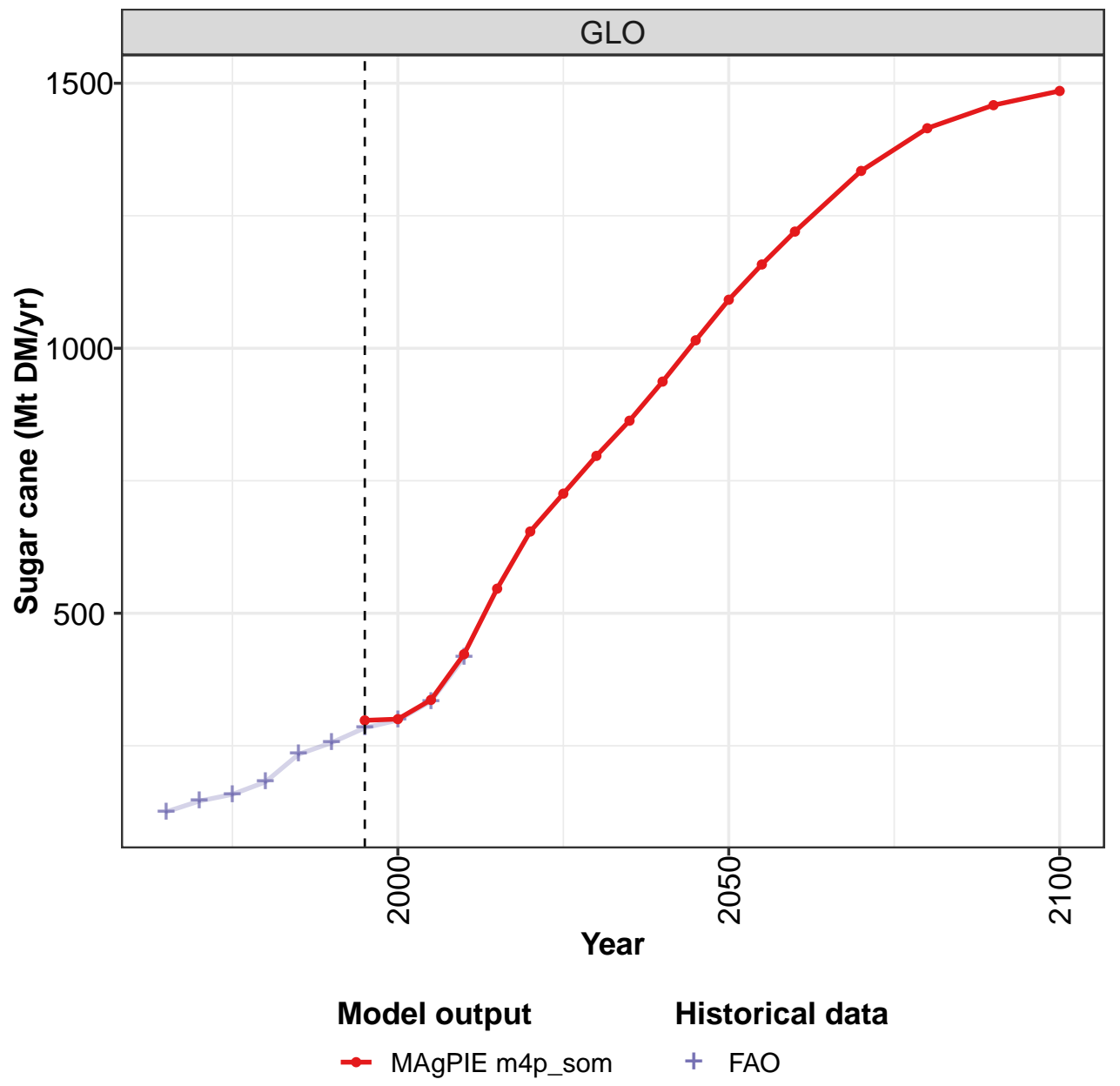
Table 624: MAgPIE m4p\_som — Demand—Processing—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	45.6	51.8	58.9	59.9	64.8	72.0	60.8	57.6	58.5	50.9
CAZ	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1
CHA	0.5	0.5	0.6	1.4	1.9	3.2	2.6	1.5	1.5	1.5
EUR	21.1	24.0	31.1	31.7	32.8	36.1	32.4	32.0	31.9	24.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.4	0.6	0.4	0.9	0.9	1.0	0.9	0.9	1.0	0.7
LAM	0.3	0.5	0.5	0.2	0.6	0.6	0.9	0.7	0.6	0.3
MEA	0.5	1.3	1.7	1.5	1.8	1.9	2.5	2.7	3.0	3.8
NEU	1.4	1.7	2.5	2.9	3.8	4.8	3.3	5.1	4.7	5.4
OAS	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0
REF	16.6	17.6	15.2	16.0	17.9	18.2	11.7	6.6	9.1	8.1
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	4.5	5.5	6.5	5.1	4.9	6.0	6.1	7.8	6.6	7.0

Table 625: FAO — Demand—Processing—Crops—Sugar crops—Sugar beet (Mt DM/yr)

9.1.19
Sugar crops—Sugar cane

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

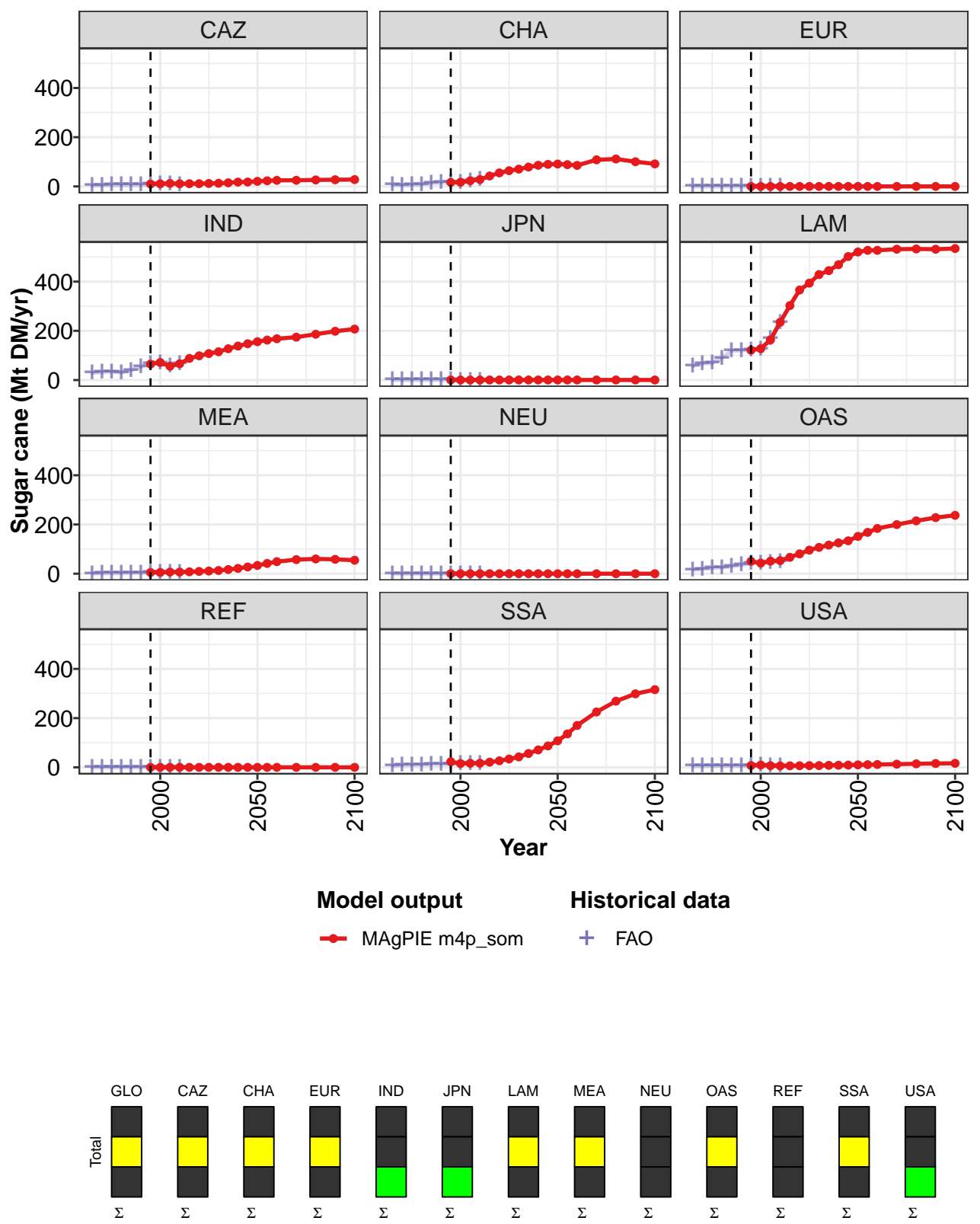


Figure 209: MAgPIE m4p\_som — Demand—Processing—Crops—Sugar crops—Sugar cane (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	298	300	337	423	546	654	726	797	863	937	1015
CAZ	10	11	12	11	11	11	12	13	15	18	18
CHA	16	17	23	28	42	55	64	70	79	86	90
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	65	71	56	66	88	99	108	115	127	138	148
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	121	128	163	235	303	366	394	429	445	469	502
MEA	5	5	7	7	8	9	11	13	17	22	27
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	50	43	51	53	67	81	96	107	116	125	134
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	23	16	17	17	21	27	34	42	56	71	87
USA	7	9	7	6	6	6	7	7	8	9	9

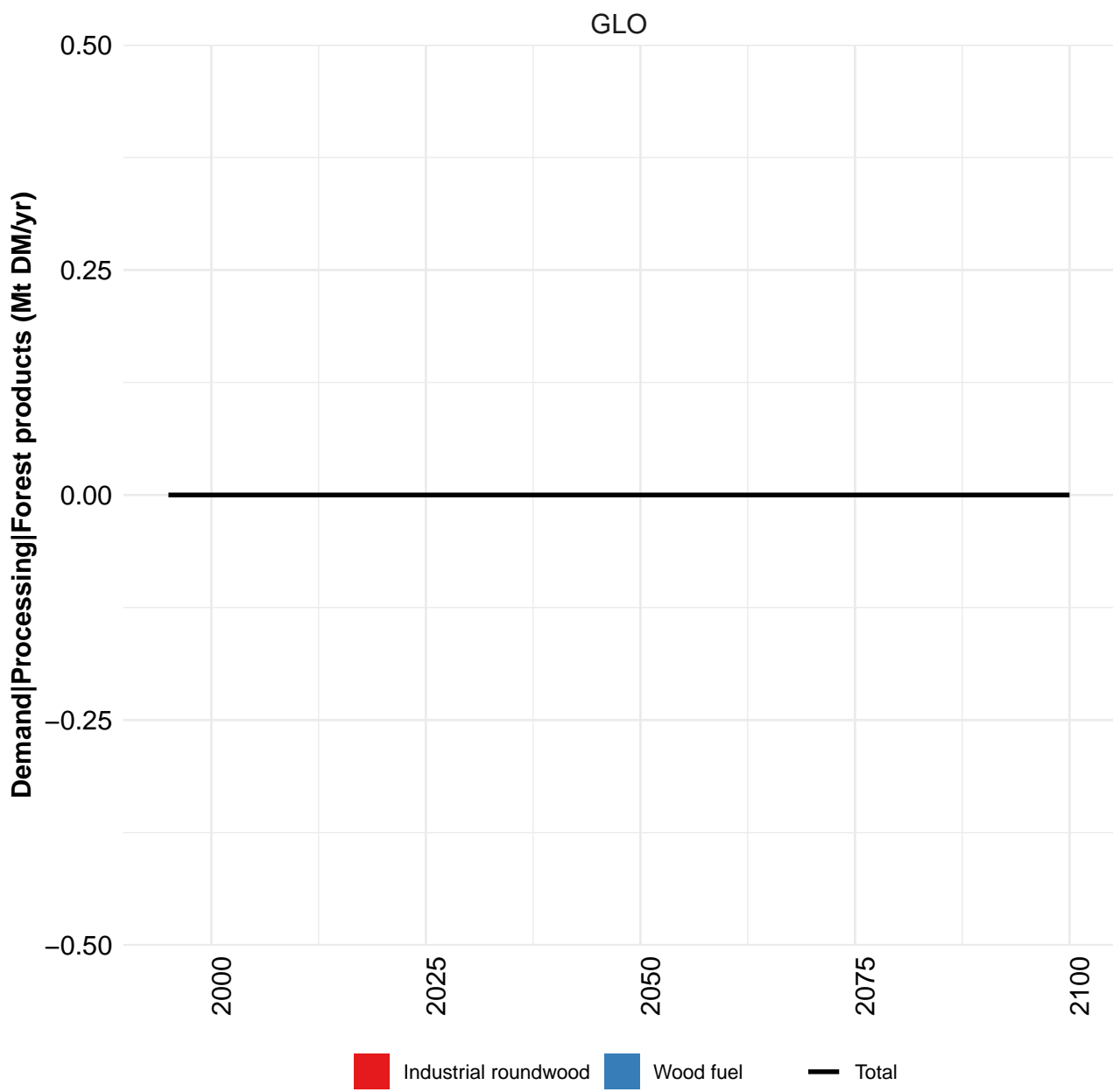
Table 626: MAgPIE m4p\_som — Demand—Processing—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 1/2]

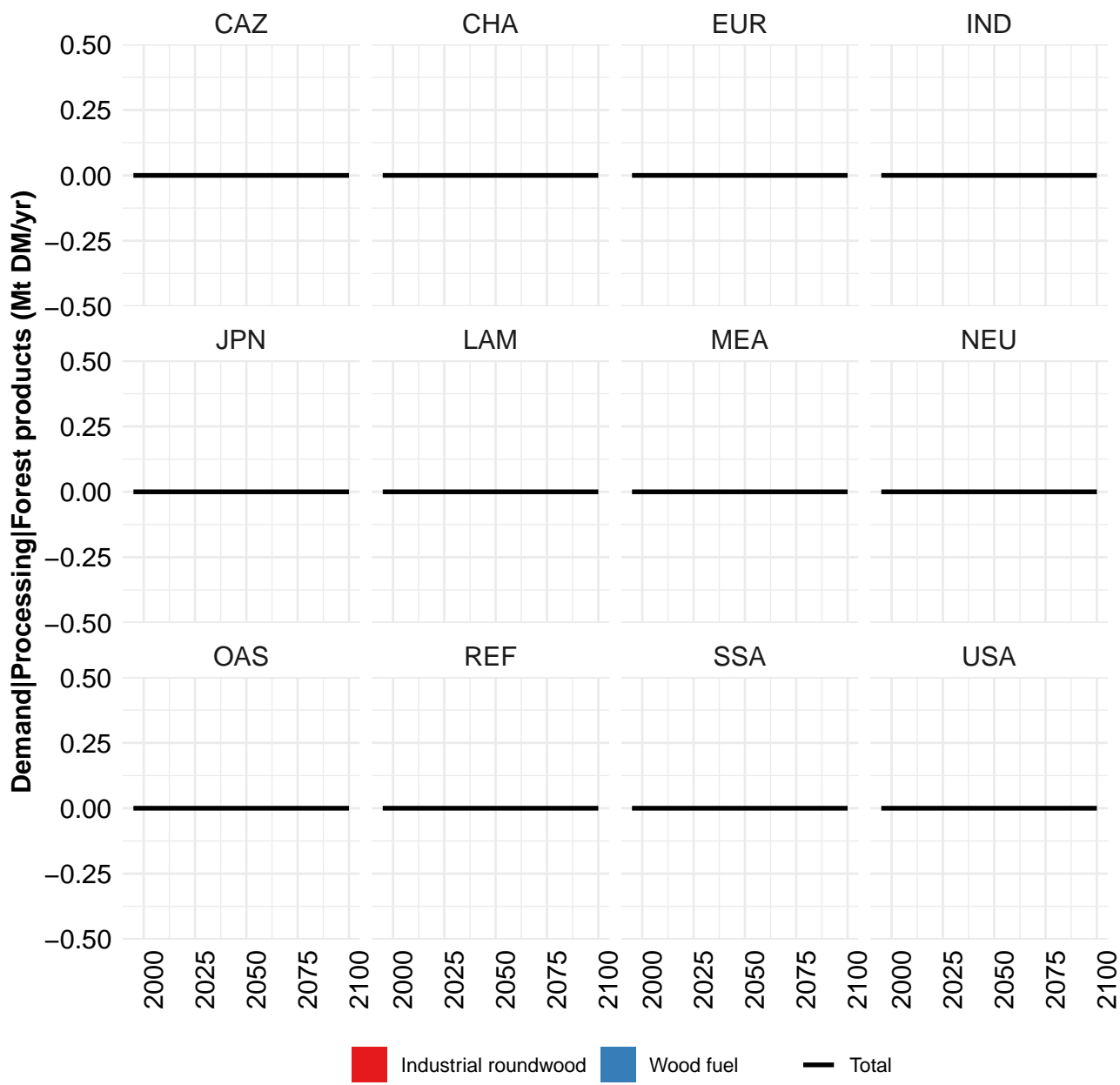
	2050	2055	2060	2070	2080	2090	2100
GLO	1092	1158	1220	1335	1415	1459	1485
CAZ	21	23	25	25	26	27	28
CHA	91	89	85	108	111	100	92
EUR	0	0	0	0	0	0	0
IND	156	163	168	174	186	198	207
JPN	0	0	0	0	0	0	0
LAM	520	527	527	532	533	532	534
MEA	34	42	49	57	60	58	55
NEU	0	0	0	0	0	0	0
OAS	152	168	184	200	215	228	237
REF	0	0	0	0	0	0	0
SSA	108	136	170	225	269	299	316
USA	10	11	12	13	14	16	16

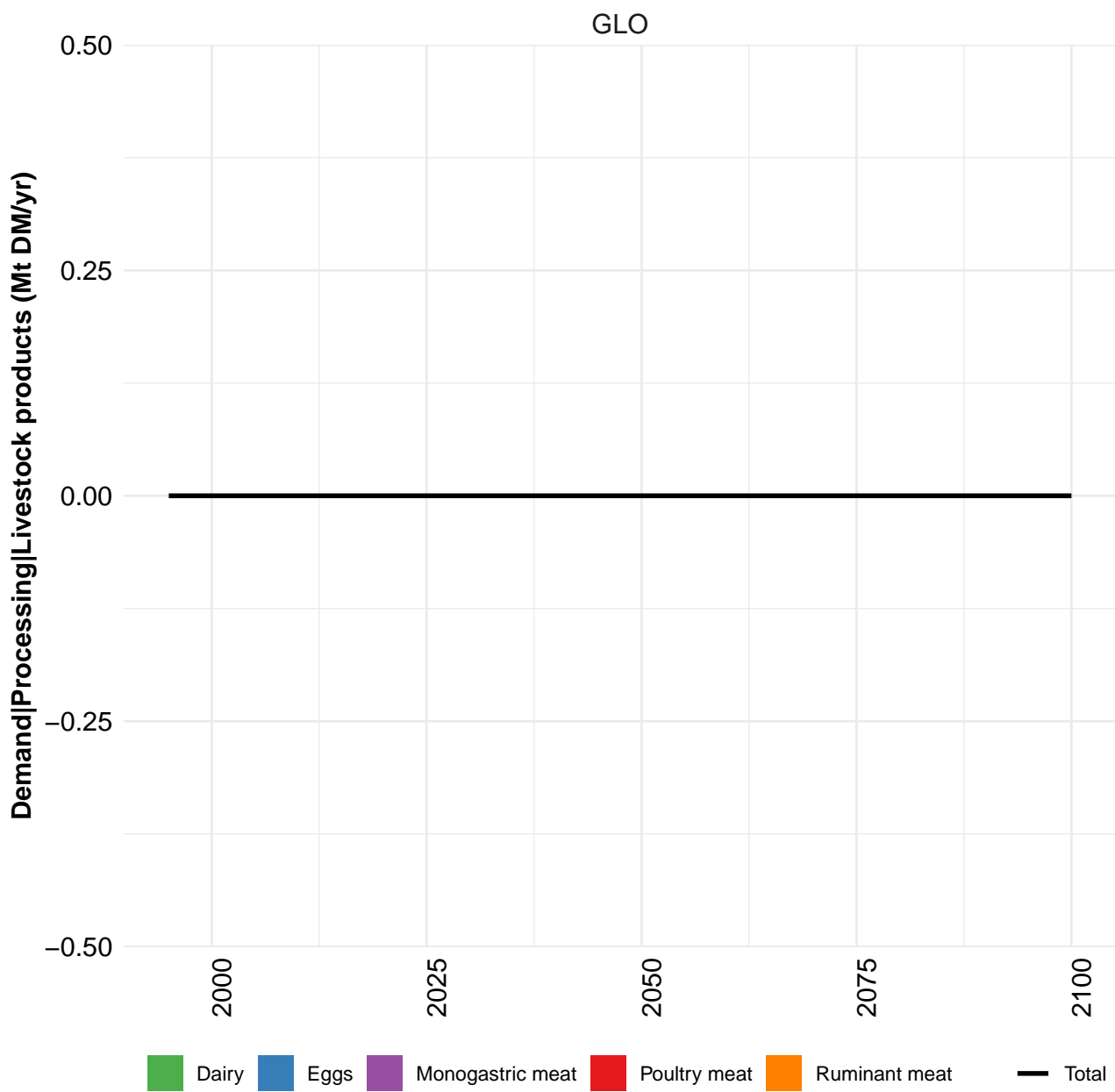
Table 627: MAgPIE m4p\_som — Demand—Processing—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 2/2]

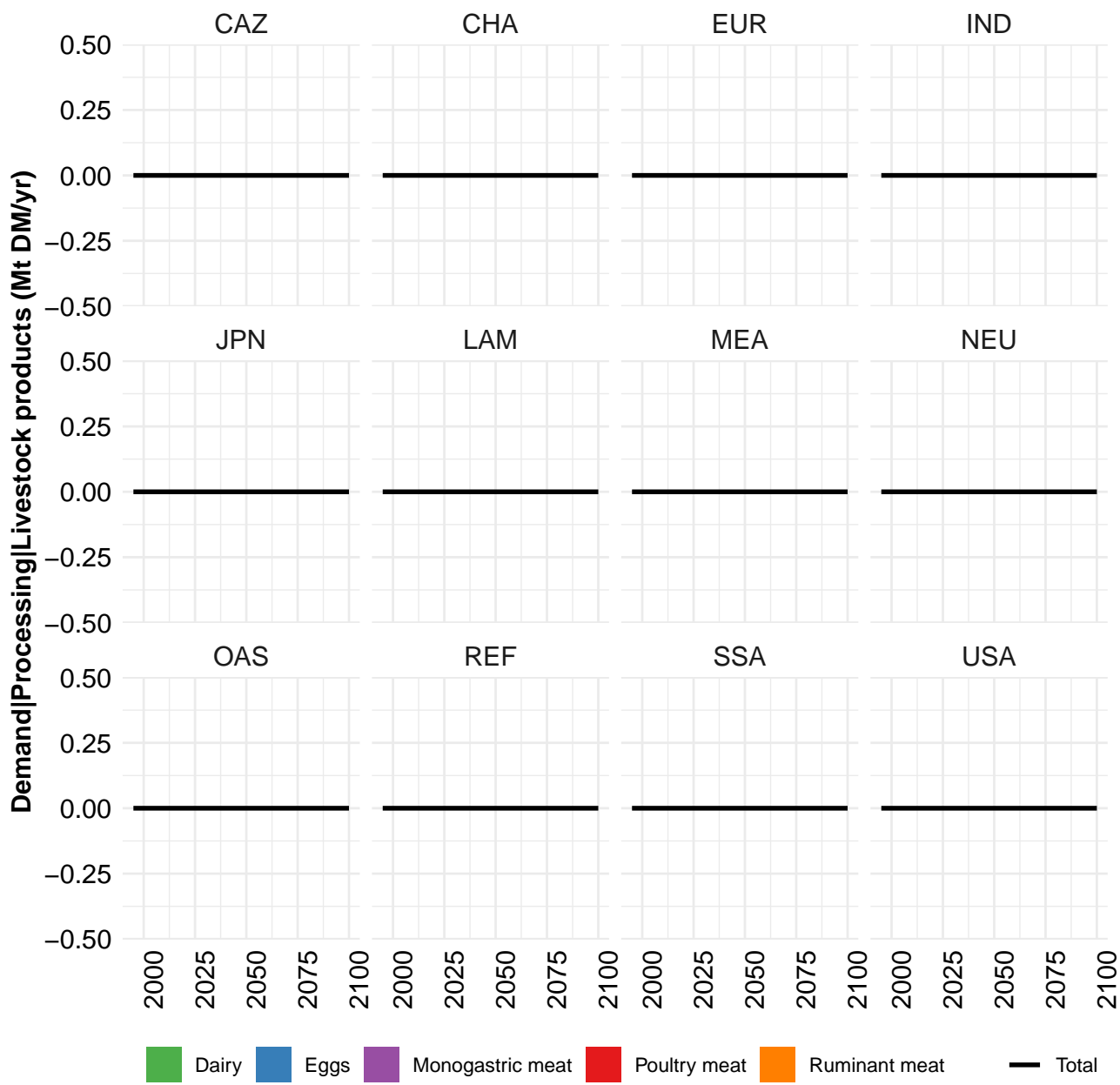
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	125	146	158	182	234	256	284	298	334	417
CAZ	4	5	6	6	7	7	9	10	10	8
CHA	6	5	6	8	14	15	16	17	23	28
EUR	0	0	0	0	0	0	0	0	0	0
IND	29	32	34	31	40	54	65	71	56	66
JPN	1	1	1	1	1	1	0	0	0	0
LAM	56	68	69	90	119	121	123	126	168	235
MEA	1	2	2	3	4	4	5	5	7	6
NEU	0	0	0	0	0	0	0	0	0	0
OAS	16	19	23	25	30	35	44	43	46	50
REF	0	0	0	0	0	0	0	0	0	0
SSA	6	9	10	11	13	13	13	16	17	16
USA	6	6	7	6	7	6	7	9	7	6

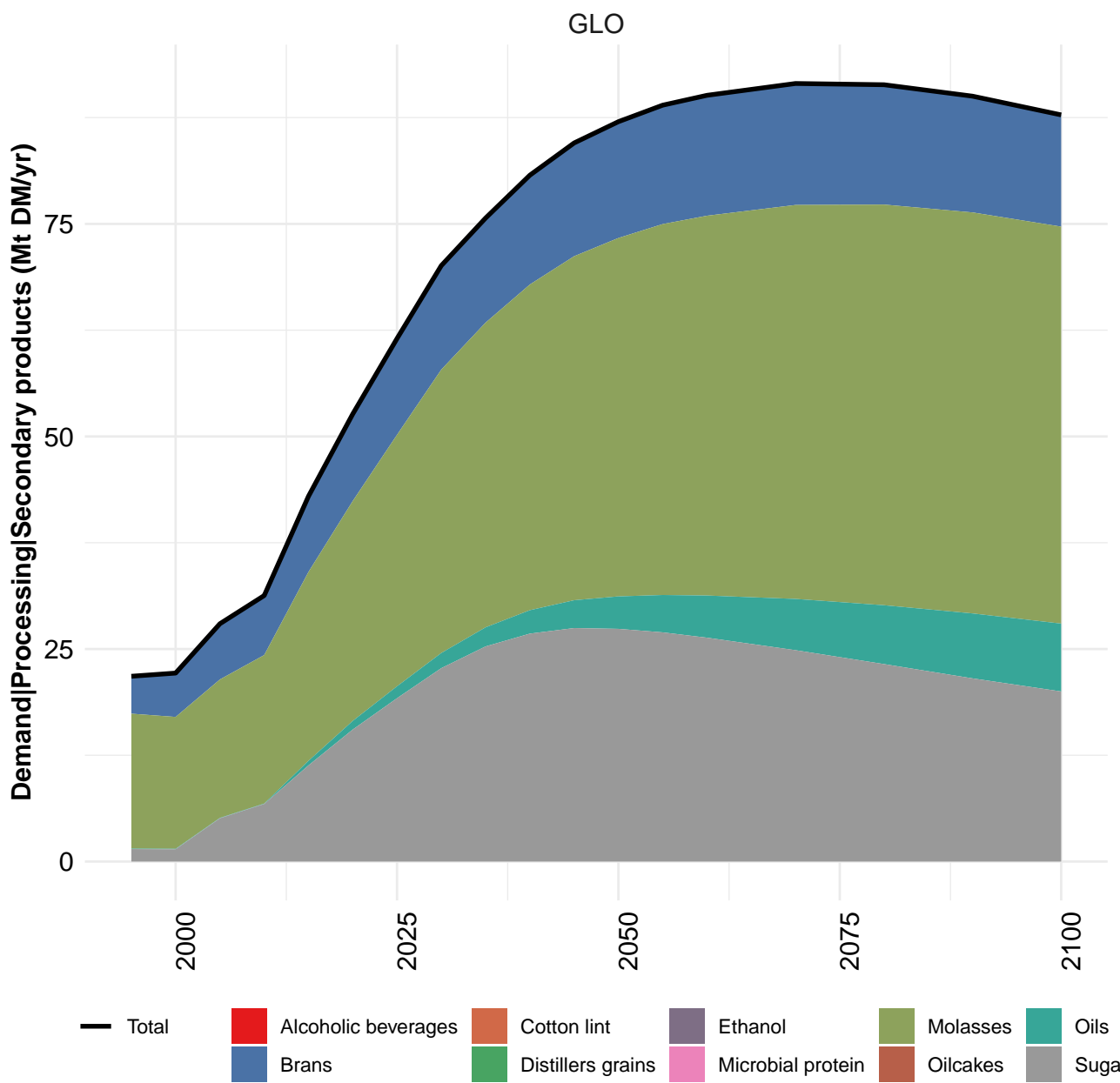
Table 628: FAO — Demand—Processing—Crops—Sugar crops—Sugar cane (Mt DM/yr)

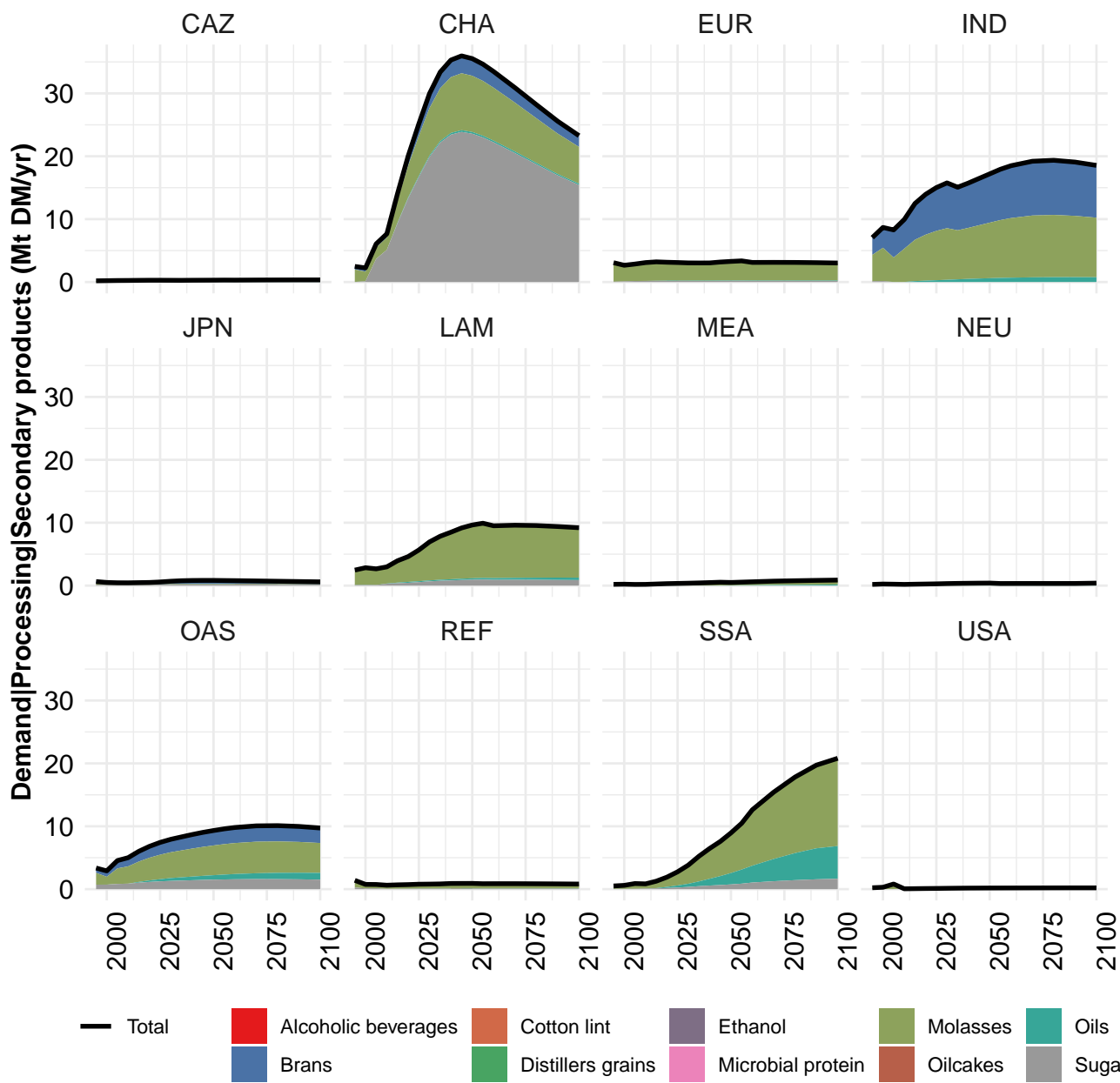






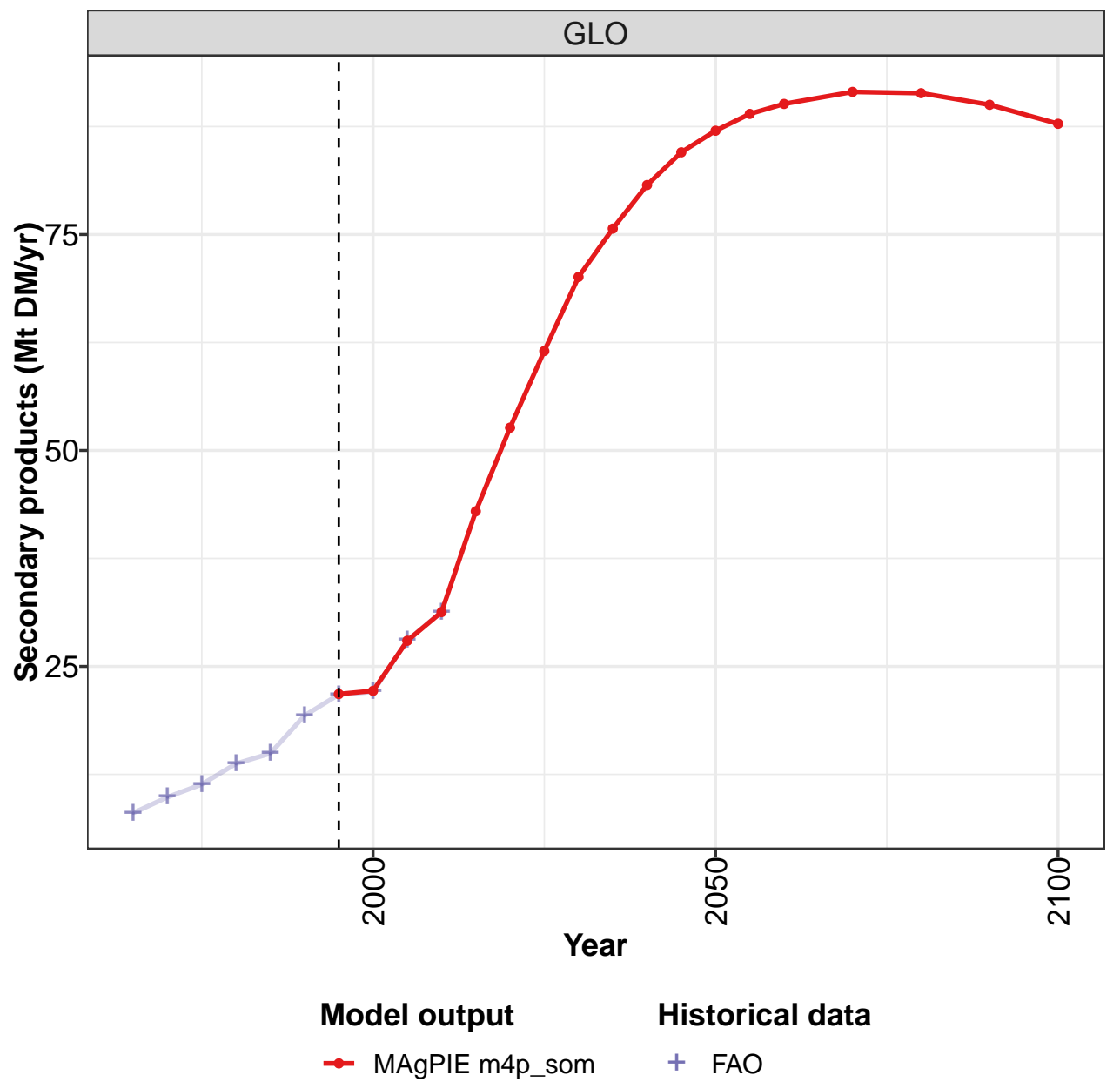






9.2 Secondary products

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

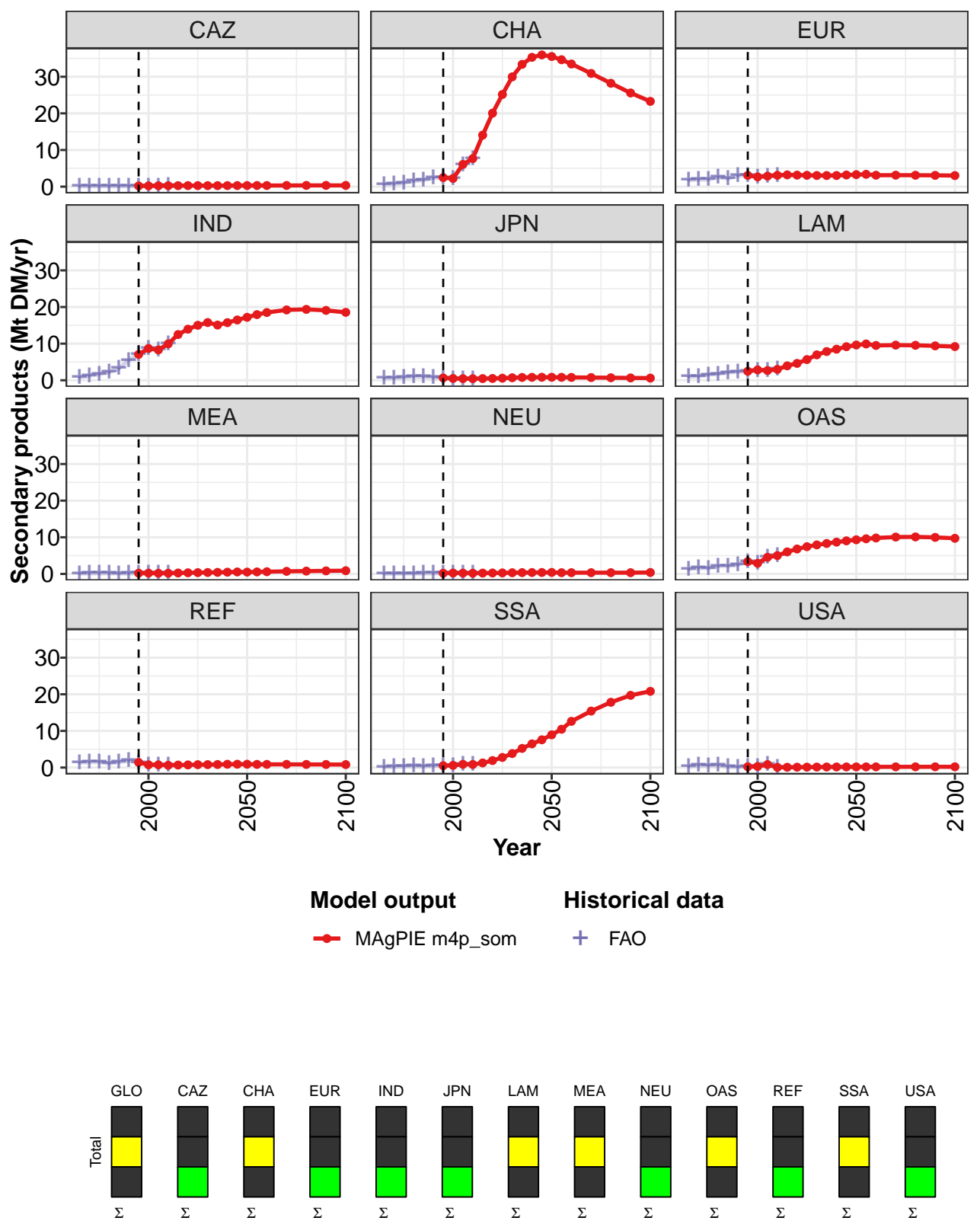


Figure 210: MAgPIE m4p\_som — Demand—Processing—Secondary products (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	21.8	22.2	28.0	31.3	43.0	52.6	61.5	70.1	75.7	80.7	84.5
CAZ	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
CHA	2.5	2.2	6.1	7.7	14.1	20.1	25.2	30.0	33.4	35.3	36.0
EUR	3.1	2.7	2.9	3.1	3.2	3.1	3.1	3.0	3.0	3.0	3.2
IND	7.1	8.7	8.3	9.9	12.5	13.9	15.0	15.8	15.1	15.7	16.5
JPN	0.6	0.5	0.4	0.4	0.5	0.5	0.6	0.7	0.8	0.8	0.8
LAM	2.5	2.8	2.7	3.0	3.9	4.6	5.7	6.9	7.8	8.5	9.2
MEA	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.5
NEU	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4
OAS	3.4	2.9	4.5	5.0	6.0	6.8	7.4	7.9	8.3	8.7	9.0
REF	1.4	0.8	0.7	0.6	0.7	0.7	0.8	0.8	0.8	0.9	0.9
SSA	0.5	0.6	0.9	0.8	1.3	1.9	2.8	3.8	5.2	6.5	7.6
USA	0.2	0.3	0.8	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2

Table 629: MAgPIE m4p\_som — Demand—Processing—Secondary products (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	87.0	89.0	90.1	91.5	91.4	90.0	87.8
CAZ	0.3	0.3	0.3	0.3	0.3	0.3	0.3
CHA	35.5	34.6	33.5	30.9	28.2	25.6	23.3
EUR	3.3	3.4	3.1	3.1	3.1	3.1	3.0
IND	17.2	17.9	18.5	19.2	19.4	19.1	18.5
JPN	0.8	0.8	0.8	0.7	0.7	0.6	0.6
LAM	9.6	9.9	9.5	9.6	9.5	9.4	9.2
MEA	0.5	0.6	0.6	0.7	0.8	0.8	0.9
NEU	0.4	0.3	0.3	0.3	0.3	0.3	0.4
OAS	9.3	9.6	9.8	10.1	10.1	10.0	9.7
REF	0.9	0.9	0.9	0.9	0.9	0.8	0.8
SSA	8.9	10.5	12.6	15.4	17.8	19.7	20.8
USA	0.2	0.2	0.2	0.2	0.2	0.2	0.2

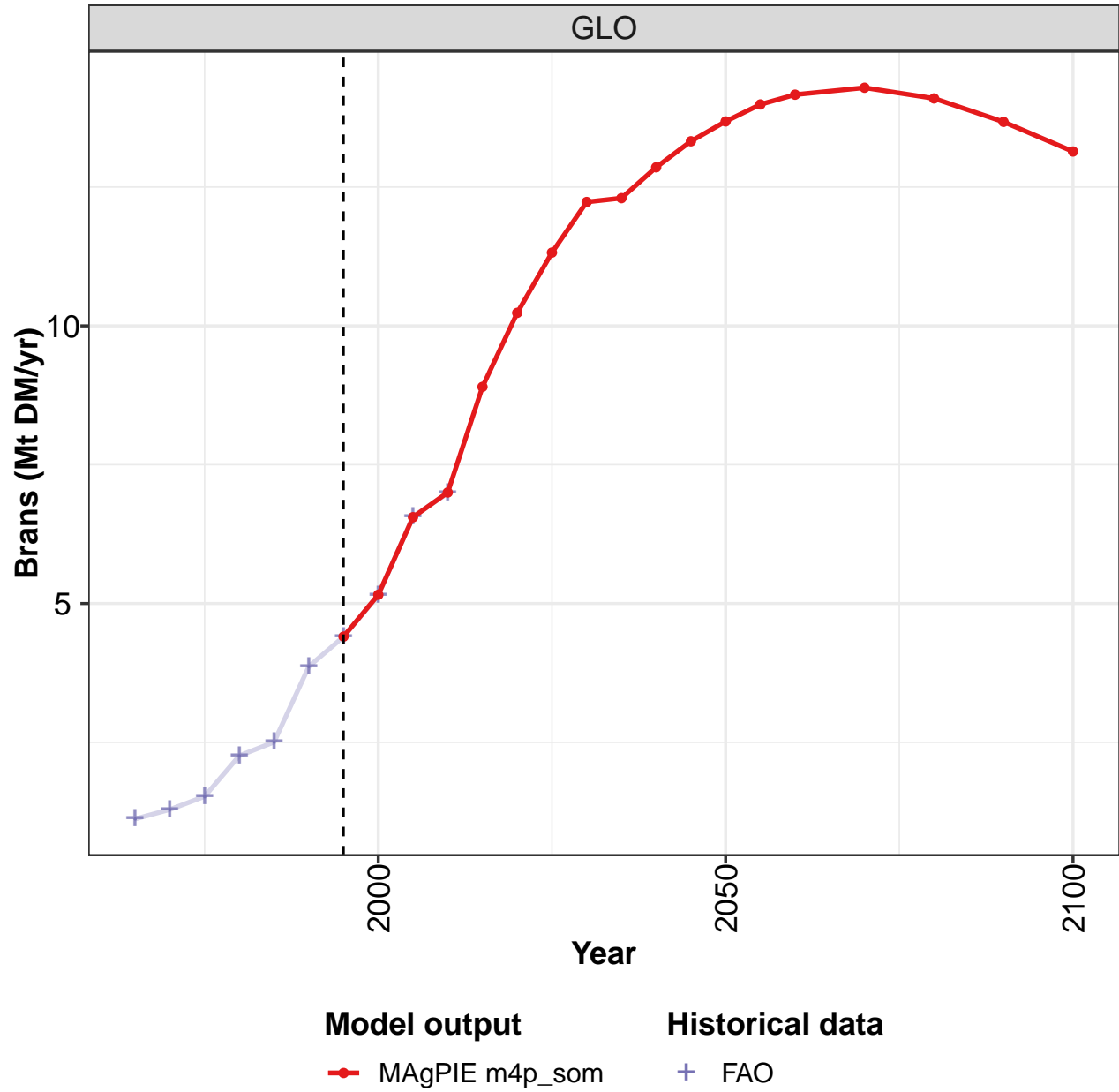
Table 630: MAgPIE m4p\_som — Demand—Processing—Secondary products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	8.0	9.9	11.3	13.7	14.9	19.3	21.7	22.1	28.0	31.3
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3
CHA	0.6	0.7	1.0	1.5	1.8	2.3	2.4	2.2	6.0	7.7
EUR	1.8	1.9	1.9	2.6	2.2	3.0	3.1	2.7	2.8	3.0
IND	0.8	1.2	1.7	2.2	3.2	5.5	7.1	8.7	8.3	9.9
JPN	0.5	0.6	0.8	1.0	0.9	0.8	0.6	0.5	0.4	0.4
LAM	1.0	1.1	1.5	1.7	2.2	2.3	2.4	2.7	2.8	3.1
MEA	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2
NEU	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
OAS	1.2	1.6	1.6	2.1	2.2	2.5	3.4	2.9	4.6	4.9
REF	1.3	1.5	1.5	1.1	1.5	1.9	1.4	0.8	0.7	0.6
SSA	0.2	0.2	0.4	0.4	0.3	0.5	0.5	0.6	0.9	0.8
USA	0.3	0.6	0.6	0.7	0.2	0.2	0.2	0.3	0.8	0.1

Table 631: FAO — Demand—Processing—Secondary products (Mt DM/yr)

9.2.1 Brans

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

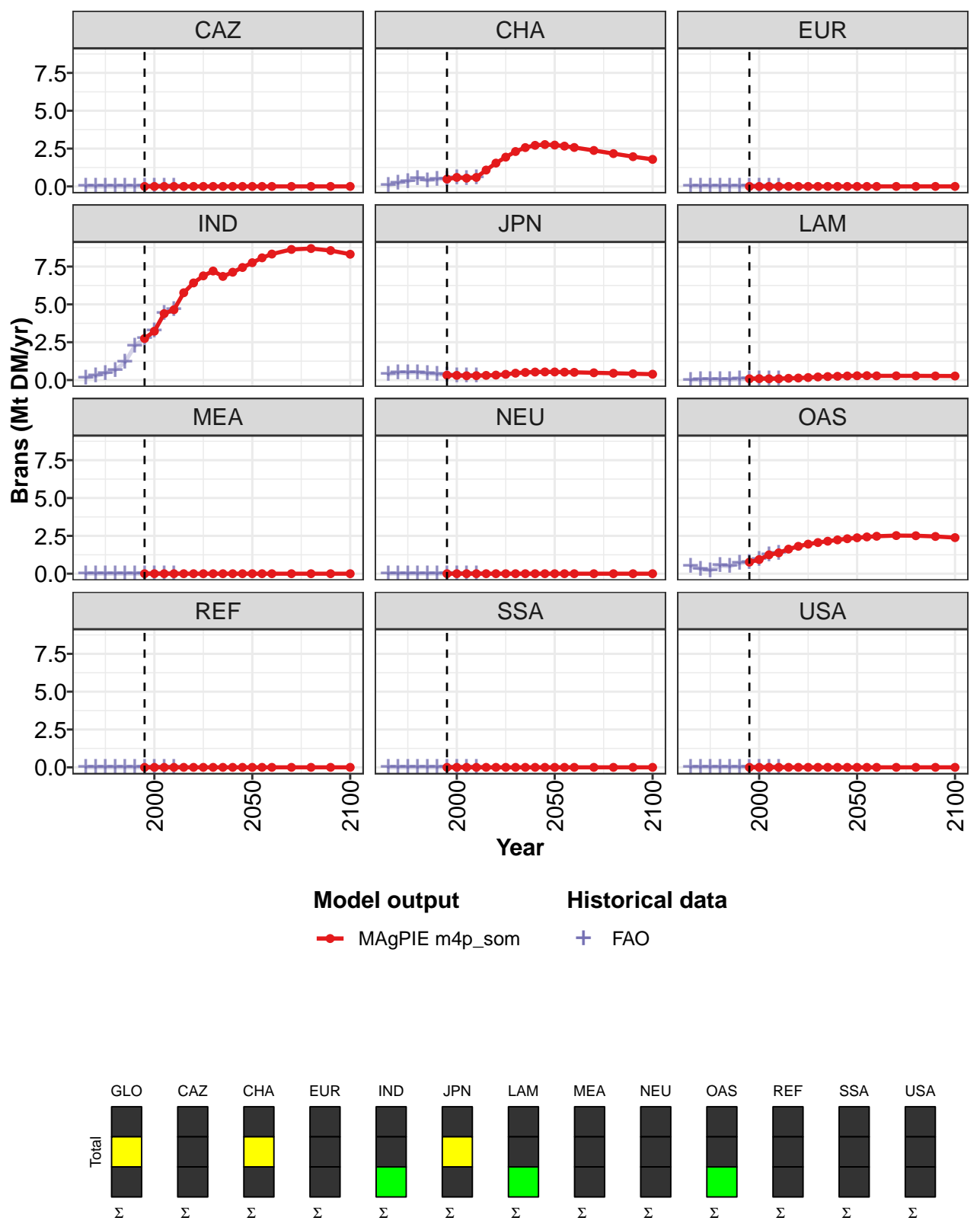


Figure 211: MAgPIE m4p\_som — Demand—Processing—Secondary products—Brans (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	4.4	5.2	6.6	7.0	8.9	10.2	11.3	12.2	12.3	12.9	13.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.5	0.6	0.5	0.6	1.1	1.5	1.9	2.3	2.6	2.7	2.8
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	2.7	3.2	4.4	4.6	5.8	6.4	6.9	7.2	6.8	7.1	7.4
JPN	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.5	0.5
LAM	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.8	0.9	1.2	1.4	1.6	1.8	2.0	2.1	2.1	2.2	2.3
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 632: MAgPIE m4p\_som — Demand—Processing—Secondary products—Brans (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	13.7	14.0	14.2	14.3	14.1	13.7	13.1
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	2.7	2.7	2.6	2.4	2.2	2.0	1.8
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	7.8	8.1	8.3	8.6	8.7	8.6	8.3
JPN	0.5	0.5	0.5	0.5	0.4	0.4	0.4
LAM	0.3	0.3	0.3	0.3	0.3	0.3	0.3
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	2.4	2.4	2.5	2.5	2.5	2.5	2.4
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

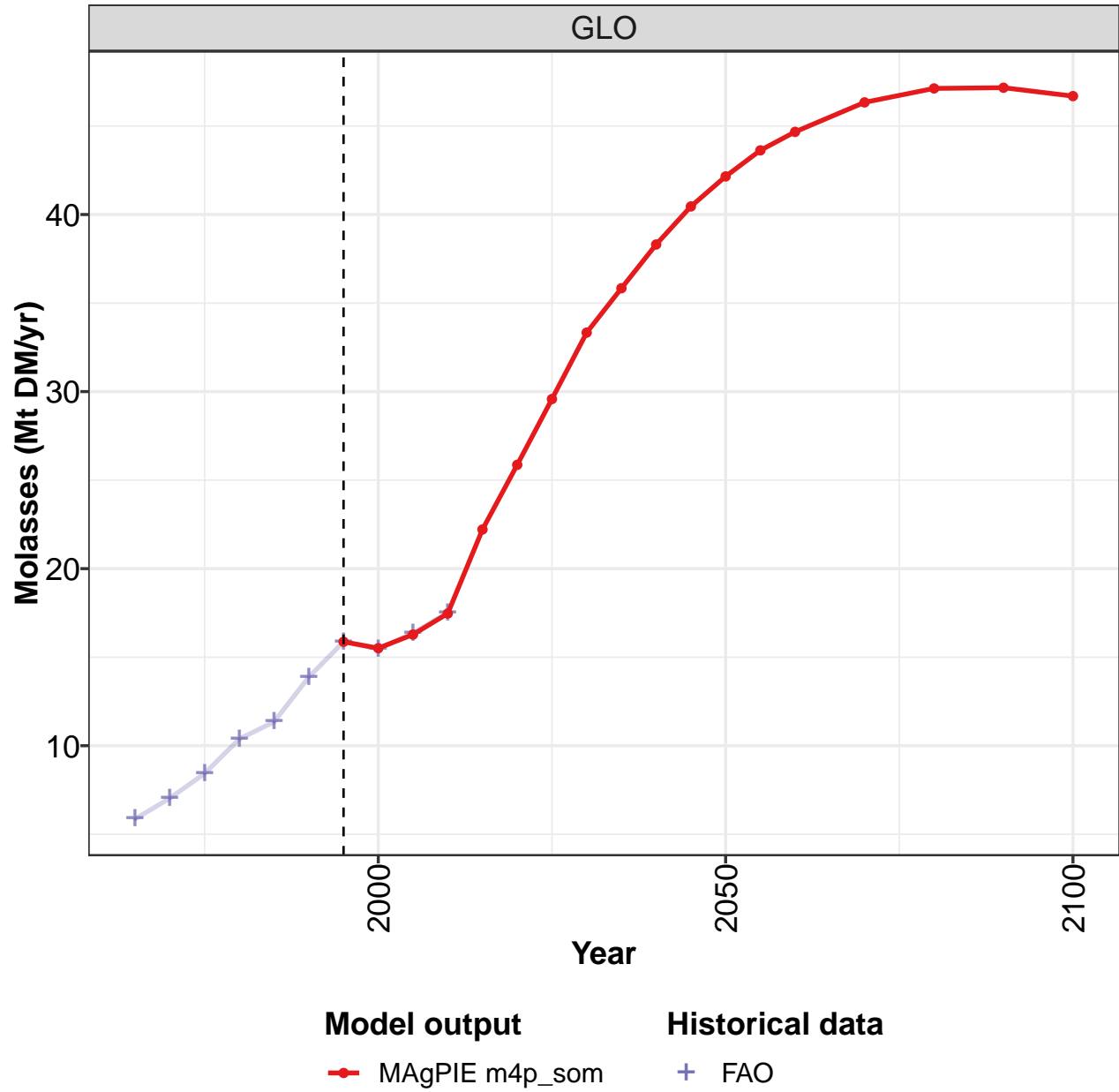
Table 633: MAgPIE m4p\_som — Demand—Processing—Secondary products—Brans (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.12	1.29	1.53	2.26	2.50	3.87	4.40	5.15	6.57	6.99
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.09	0.21	0.34	0.54	0.40	0.48	0.48	0.59	0.54	0.60
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.16	0.27	0.46	0.66	1.17	2.26	2.75	3.23	4.39	4.65
JPN	0.37	0.47	0.48	0.51	0.42	0.38	0.32	0.31	0.29	0.29
LAM	0.00	0.02	0.02	0.02	0.03	0.06	0.08	0.09	0.09	0.09
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.51	0.32	0.22	0.53	0.49	0.69	0.77	0.93	1.25	1.36
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 634: FAO — Demand—Processing—Secondary products—Brans (Mt DM/yr)

9.2.2 Molasses

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

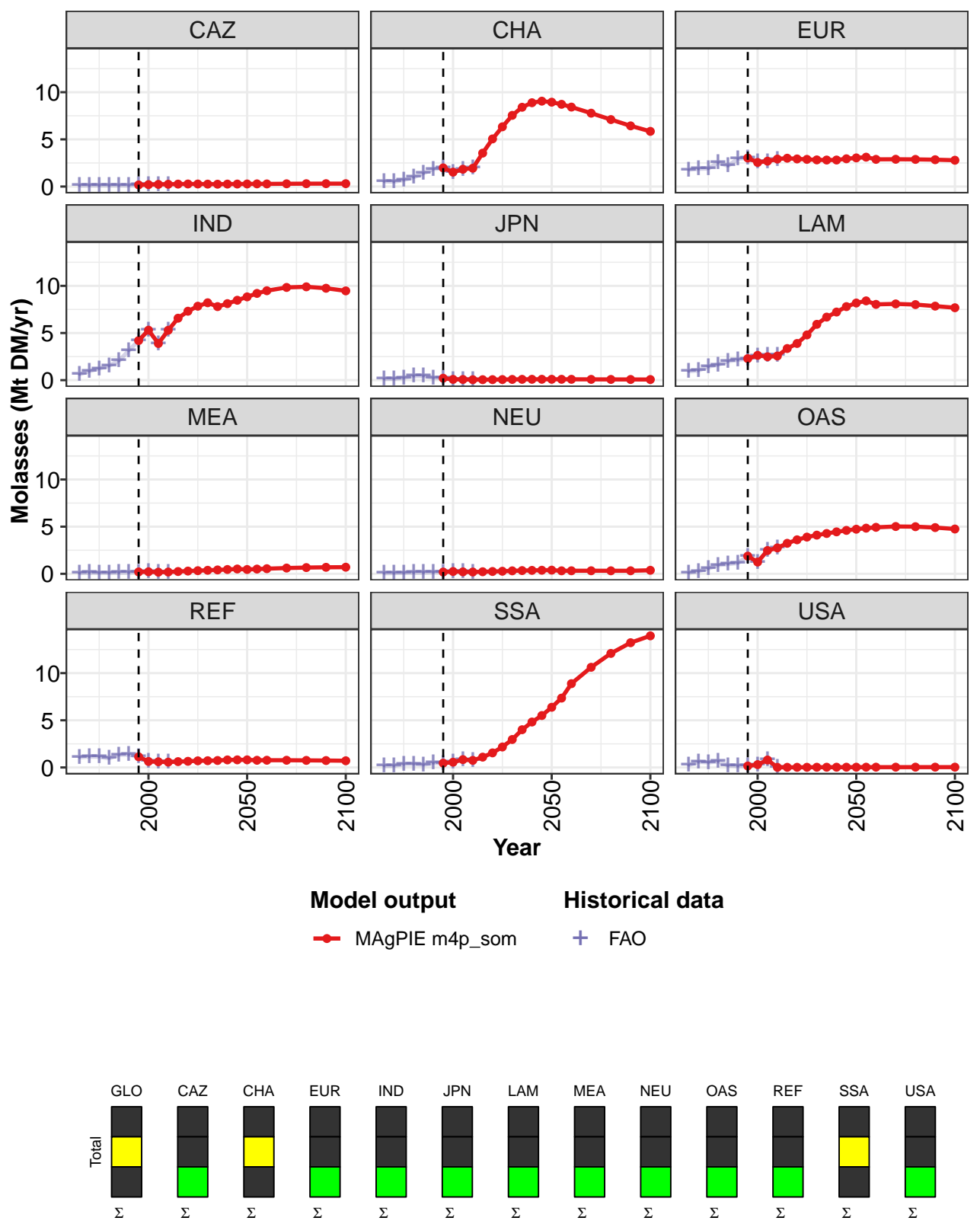


Figure 212: MAgPIE m4p\_som — Demand—Processing—Secondary products—Molasses (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	15.9	15.5	16.3	17.5	22.2	25.9	29.6	33.3	35.8	38.3	40.5
CAZ	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.3
CHA	2.0	1.5	1.8	1.9	3.5	5.0	6.3	7.5	8.4	8.9	9.1
EUR	3.0	2.6	2.7	2.9	3.0	2.9	2.9	2.8	2.8	2.8	2.9
IND	4.2	5.3	3.9	5.3	6.6	7.3	7.8	8.2	7.8	8.1	8.5
JPN	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	2.3	2.6	2.5	2.6	3.4	3.9	4.8	5.9	6.7	7.2	7.8
MEA	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4
OAS	1.9	1.2	2.5	2.7	3.2	3.6	3.9	4.1	4.3	4.4	4.6
REF	1.1	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8
SSA	0.5	0.6	0.8	0.8	1.1	1.5	2.2	3.0	4.0	4.8	5.5
USA	0.2	0.3	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 635: MAgPIE m4p\_som — Demand—Processing—Secondary products—Molasses (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	42.2	43.6	44.7	46.3	47.1	47.2	46.7
CAZ	0.3	0.3	0.3	0.3	0.3	0.3	0.3
CHA	8.9	8.7	8.4	7.8	7.1	6.4	5.8
EUR	3.0	3.1	2.9	2.9	2.9	2.8	2.8
IND	8.8	9.2	9.5	9.8	9.9	9.7	9.5
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	8.2	8.4	8.0	8.1	8.0	7.9	7.7
MEA	0.5	0.5	0.5	0.6	0.7	0.7	0.7
NEU	0.4	0.3	0.3	0.3	0.3	0.3	0.4
OAS	4.7	4.8	4.9	5.0	5.0	4.9	4.7
REF	0.8	0.8	0.8	0.8	0.7	0.7	0.7
SSA	6.4	7.4	8.9	10.6	12.1	13.2	14.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 636: MAgPIE m4p\_som — Demand—Processing—Secondary products—Molasses (Mt DM/yr) [PART 2/2]

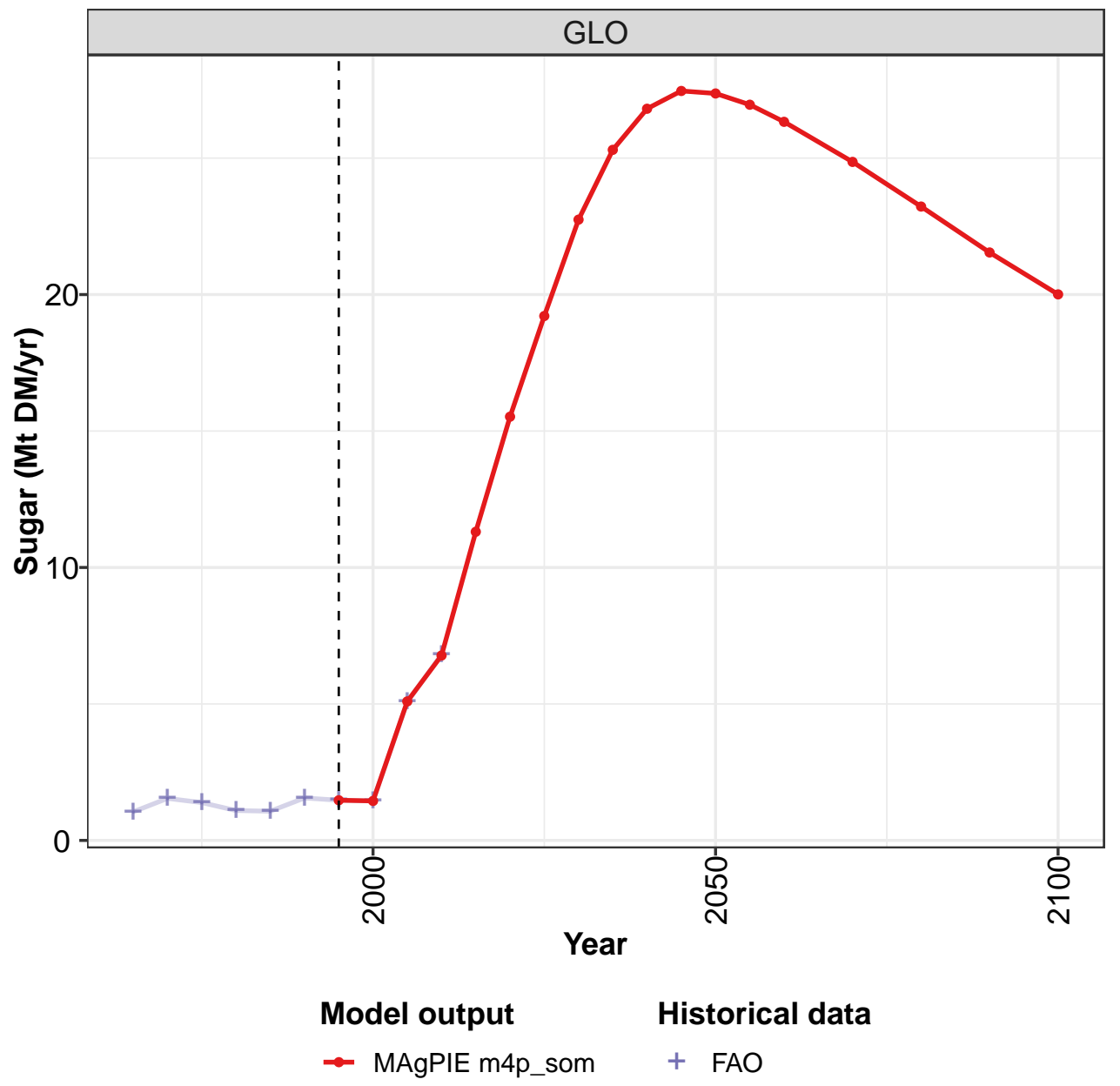
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	5.9	7.0	8.4	10.4	11.3	13.9	15.9	15.5	16.4	17.5
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
CHA	0.6	0.5	0.7	1.0	1.4	1.9	2.0	1.5	1.8	2.0
EUR	1.8	1.9	1.9	2.5	2.2	2.9	3.0	2.6	2.7	2.9
IND	0.6	1.0	1.2	1.5	2.0	3.1	4.2	5.3	3.9	5.3
JPN	0.1	0.1	0.2	0.4	0.5	0.3	0.2	0.1	0.1	0.1
LAM	0.9	1.0	1.4	1.6	2.0	2.1	2.3	2.6	2.6	2.7
MEA	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
NEU	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
OAS	0.1	0.3	0.6	0.9	1.0	1.1	1.9	1.2	2.5	2.7
REF	1.1	1.2	1.1	1.0	1.3	1.4	1.1	0.6	0.6	0.6
SSA	0.2	0.2	0.3	0.4	0.3	0.5	0.4	0.6	0.8	0.7
USA	0.2	0.6	0.5	0.6	0.2	0.1	0.2	0.3	0.8	0.0

Table 637: FAO — Demand—Processing—Secondary products—Molasses (Mt DM/yr)



9.2.3 Sugar

```
## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.
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## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

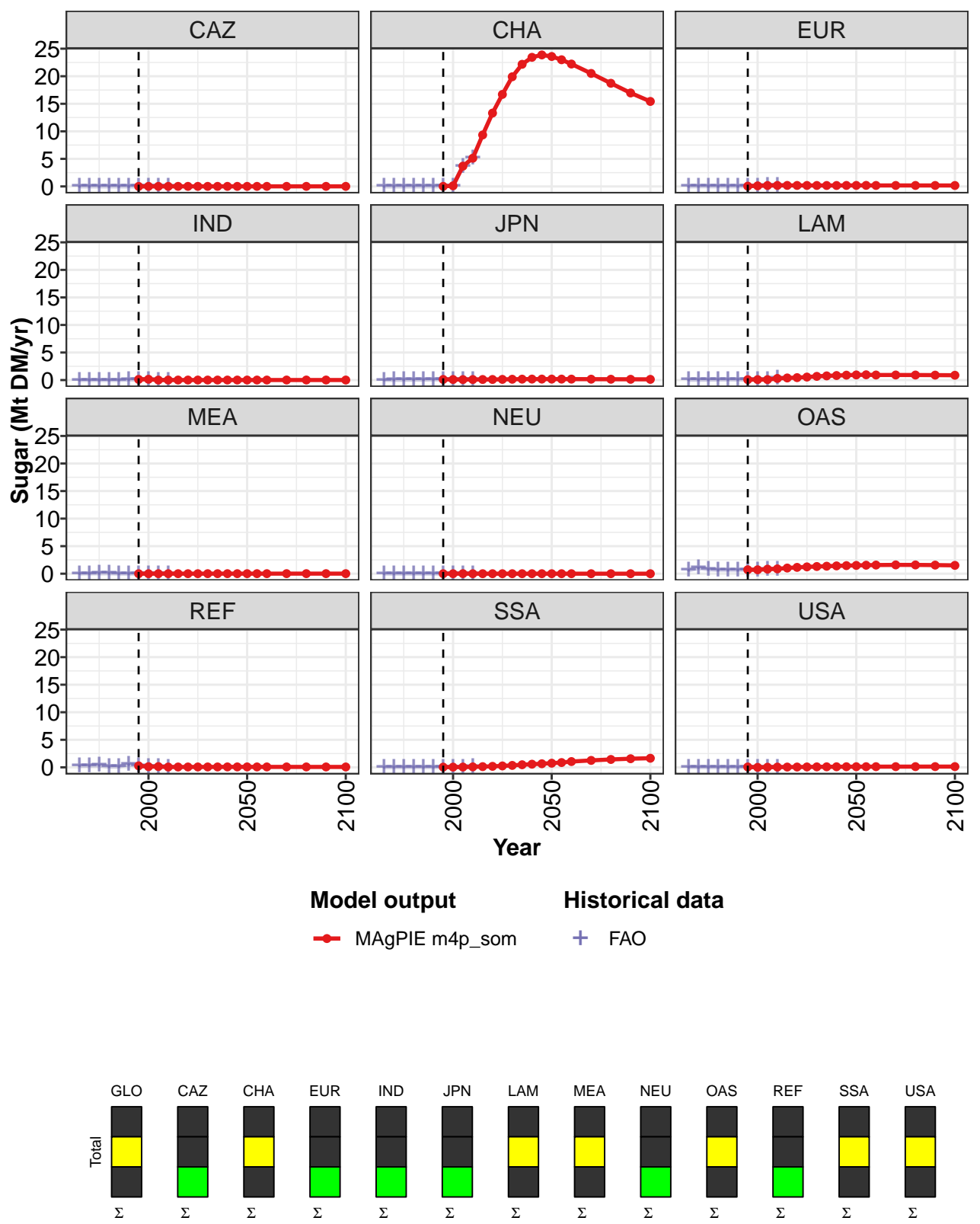


Figure 213: MAGPIE m4p\_som — Demand—Processing—Secondary products—Sugar (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.5	1.4	5.1	6.8	11.3	15.5	19.2	22.7	25.3	26.8	27.5
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.1	3.7	5.1	9.3	13.3	16.7	19.9	22.2	23.4	23.9
EUR	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
IND	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
LAM	0.1	0.1	0.1	0.3	0.4	0.4	0.5	0.7	0.8	0.8	0.9
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.7	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.4	1.5
REF	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SSA	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.4	0.5	0.6	0.7
USA	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Table 638: MAgPIE m4p\_som — Demand—Processing—Secondary products—Sugar (Mt DM/yr) [PART 1/2]

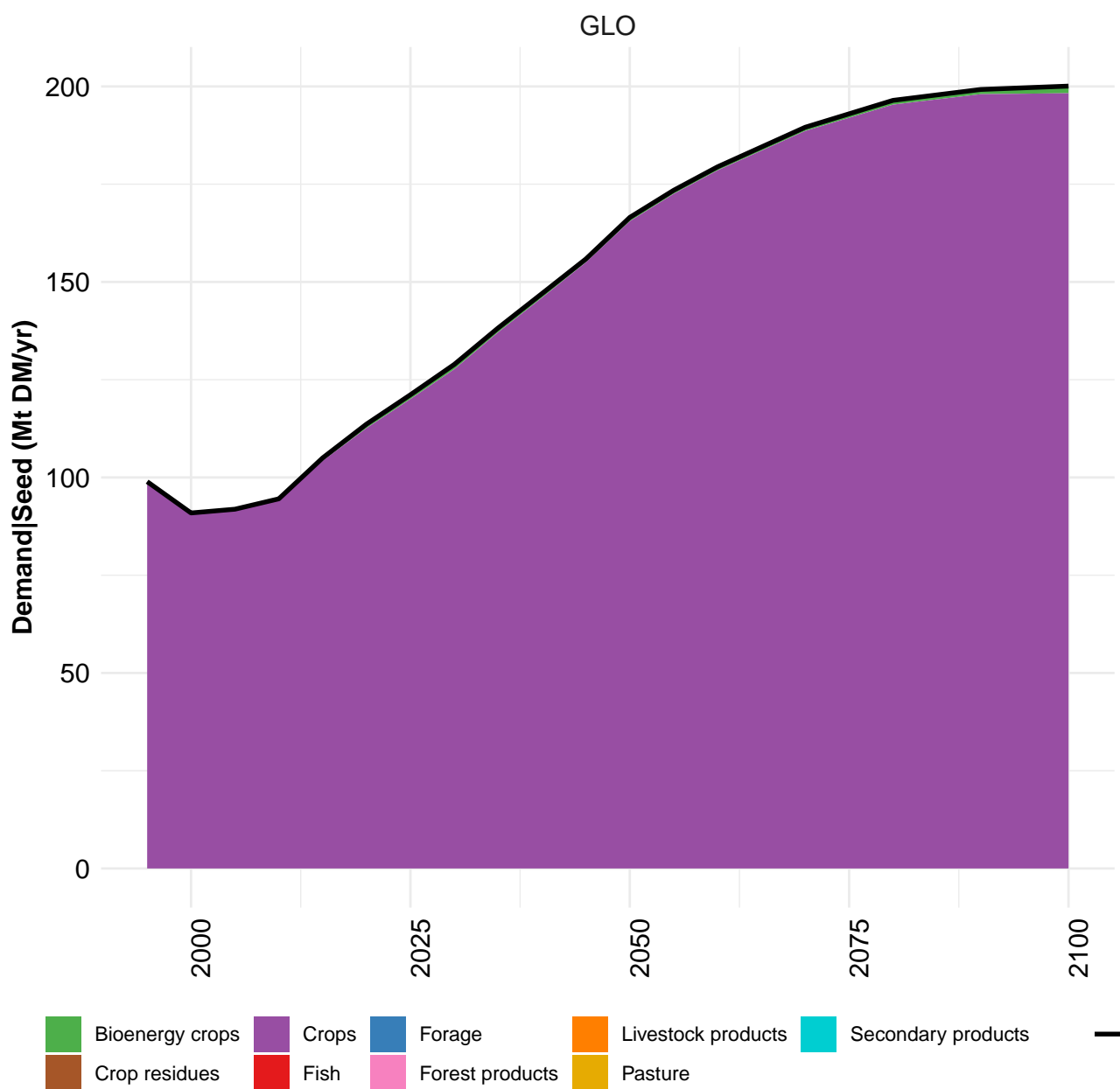
	2050	2055	2060	2070	2080	2090	2100
GLO	27.4	27.0	26.3	24.9	23.2	21.5	20.0
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	23.6	23.0	22.2	20.5	18.7	17.0	15.4
EUR	0.2	0.2	0.2	0.2	0.2	0.2	0.2
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.2	0.2	0.2	0.2	0.2	0.1	0.1
LAM	0.9	1.0	0.9	0.9	0.9	0.9	0.9
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.5	1.5	1.6	1.6	1.6	1.6	1.5
REF	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SSA	0.8	0.9	1.1	1.3	1.4	1.6	1.7
USA	0.1	0.1	0.1	0.1	0.1	0.1	0.1

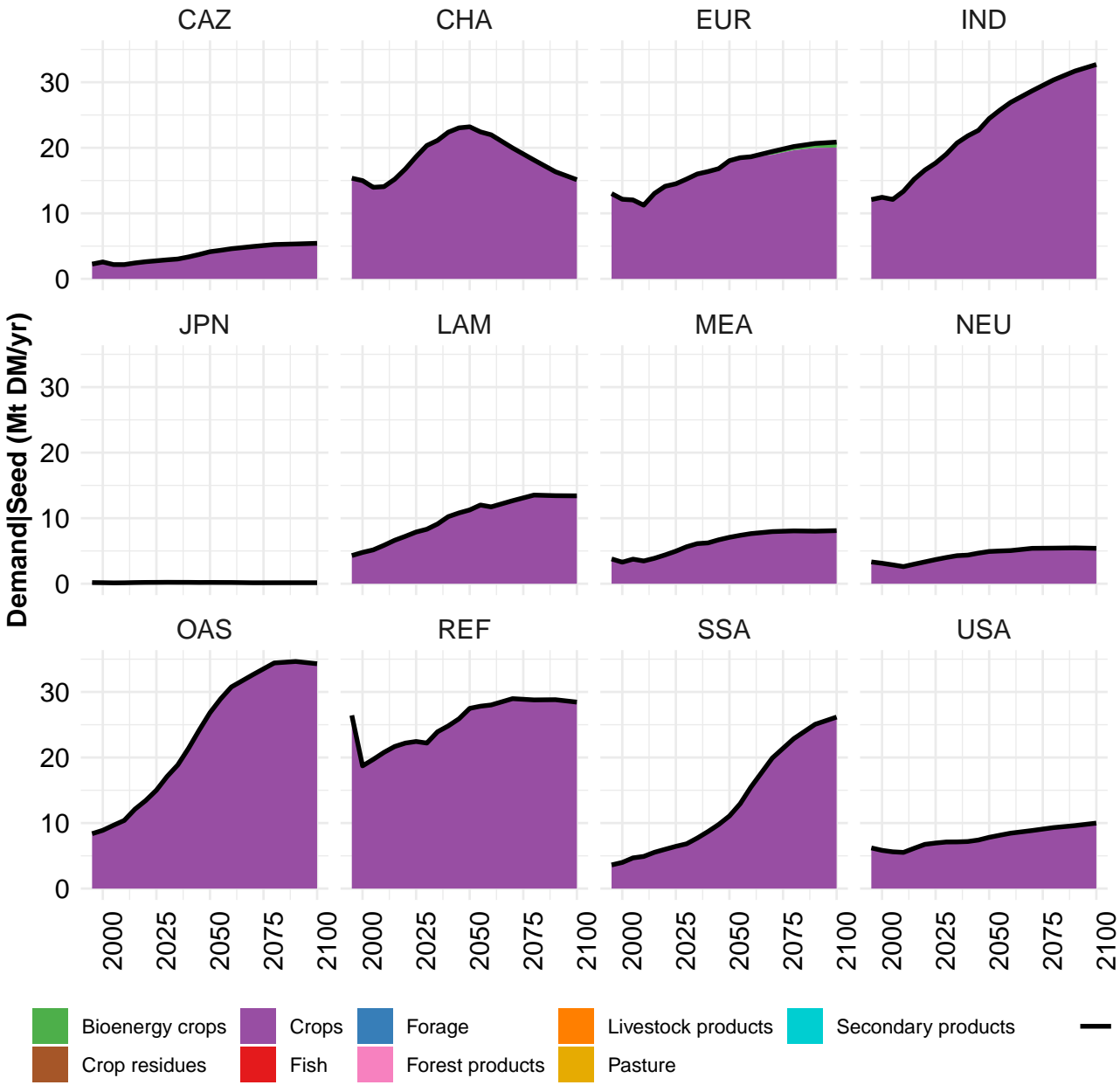
Table 639: MAgPIE m4p\_som — Demand—Processing—Secondary products—Sugar (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.05	1.54	1.39	1.09	1.07	1.55	1.47	1.44	5.07	6.81
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
CHA	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.12	3.65	5.16
EUR	0.01	0.04	0.03	0.02	0.03	0.02	0.05	0.11	0.16	0.17
IND	0.00	0.00	0.00	0.00	0.00	0.08	0.12	0.14	0.00	0.00
JPN	0.02	0.03	0.03	0.06	0.06	0.12	0.11	0.10	0.09	0.10
LAM	0.04	0.04	0.06	0.08	0.11	0.11	0.08	0.08	0.09	0.31
MEA	0.03	0.05	0.06	0.07	0.01	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
OAS	0.62	1.03	0.78	0.66	0.65	0.65	0.72	0.71	0.83	0.86
REF	0.27	0.32	0.37	0.14	0.16	0.51	0.27	0.12	0.14	0.06
SSA	0.01	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.06	0.09
USA	0.05	0.02	0.02	0.02	0.01	0.01	0.07	0.00	0.02	0.05

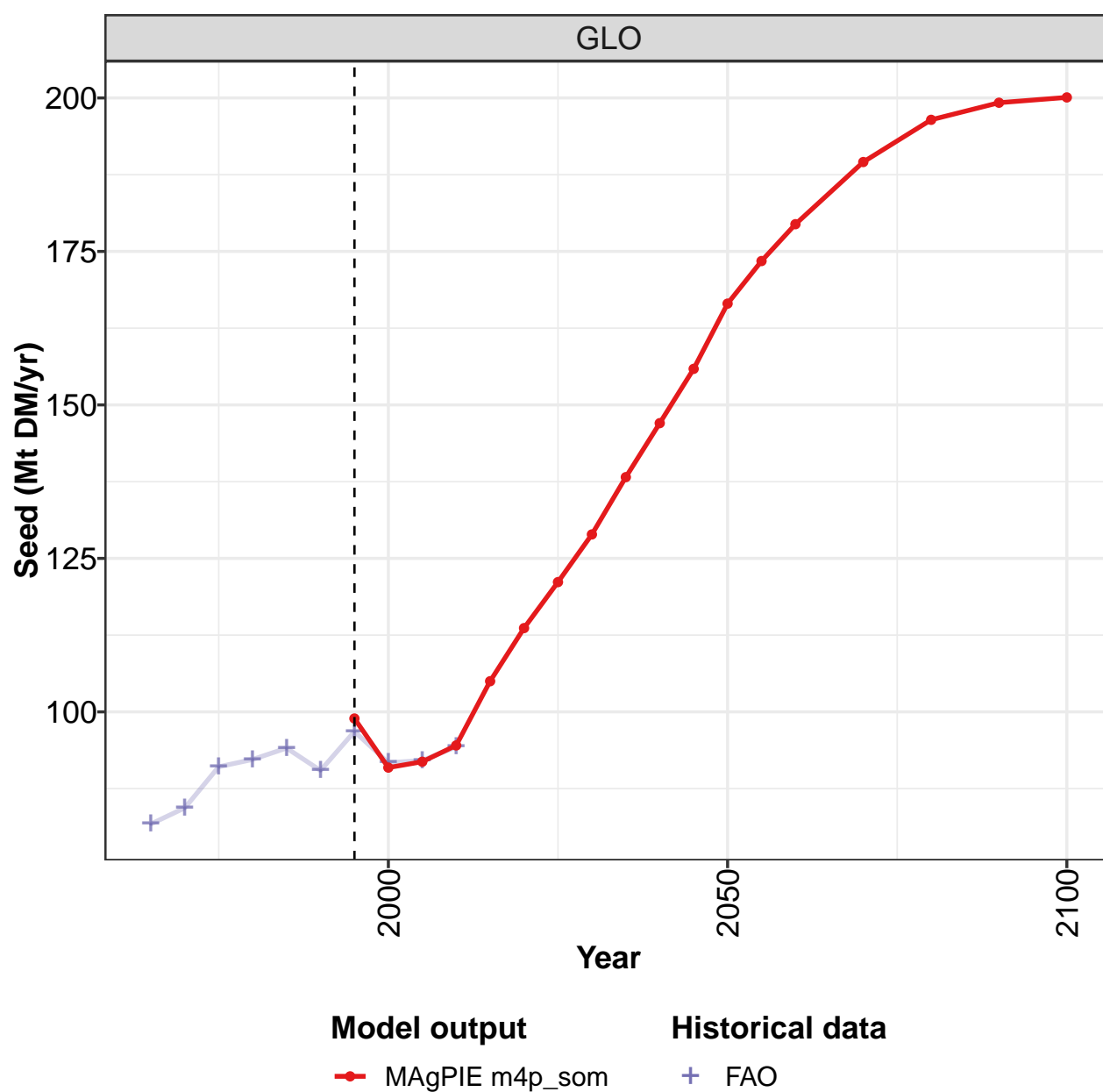
Table 640: FAO — Demand—Processing—Secondary products—Sugar (Mt DM/yr)

## 10 Seed





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

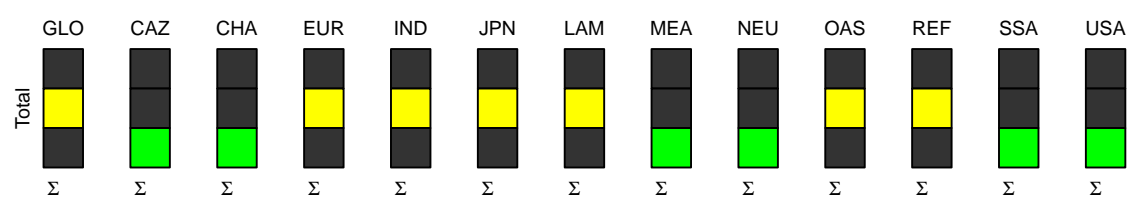
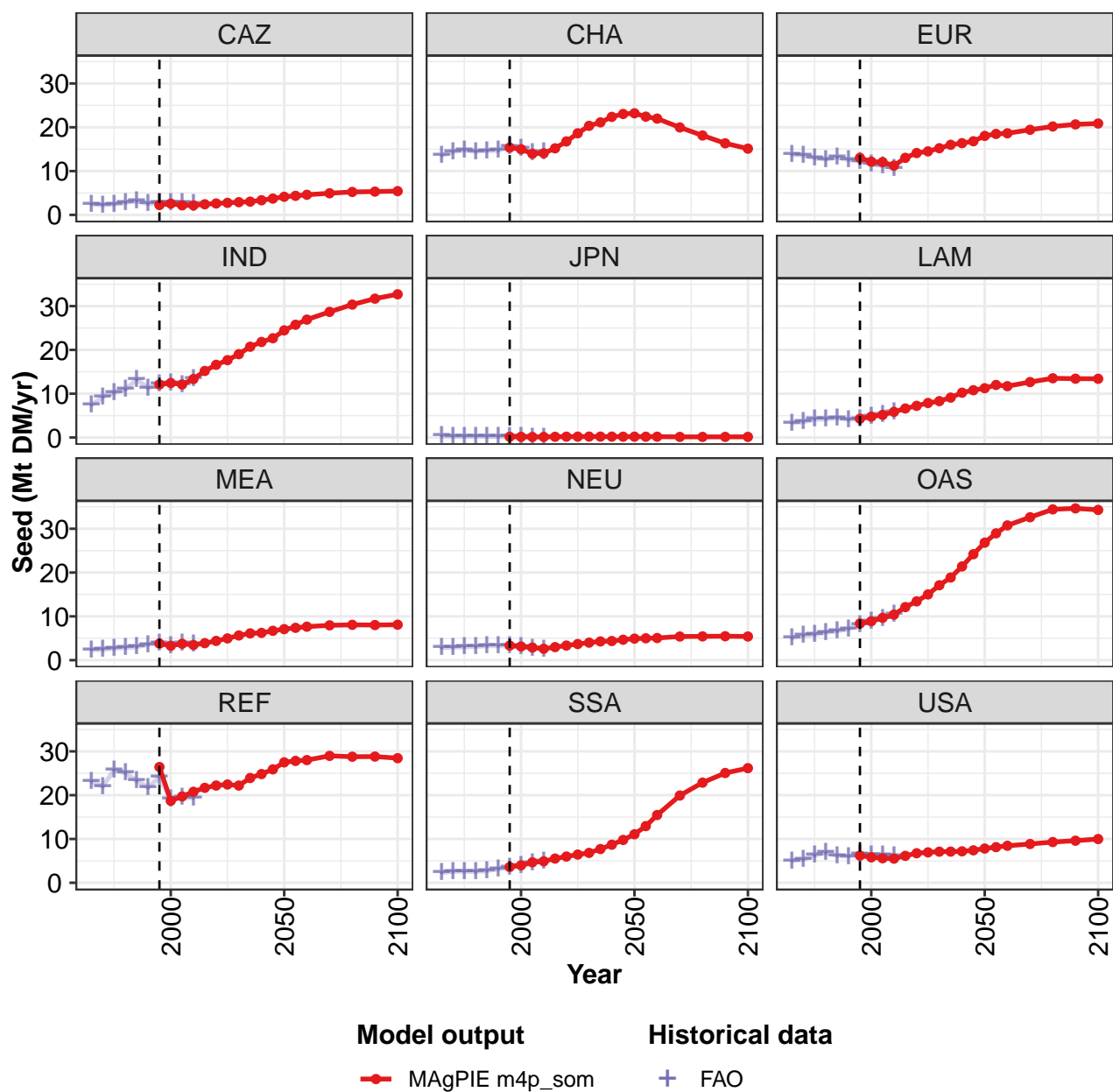


Figure 214: MAGPIE m4p\_som — Demand—Seed (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	99	91	92	95	105	114	121	129	138	147	156
CAZ	2	3	2	2	2	3	3	3	3	3	4
CHA	15	15	14	14	15	17	19	20	21	22	23
EUR	13	12	12	11	13	14	15	15	16	16	17
IND	12	12	12	13	15	17	18	19	21	22	23
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	4	5	5	6	7	7	8	8	9	10	11
MEA	4	3	4	3	4	4	5	6	6	6	7
NEU	3	3	3	3	3	3	4	4	4	4	5
OAS	8	9	10	10	12	13	15	17	19	21	24
REF	26	19	20	21	22	22	22	22	24	25	26
SSA	4	4	5	5	6	6	6	7	8	9	10
USA	6	6	6	6	6	7	7	7	7	7	7

Table 641: MAgPIE m4p\_som — Demand—Seed (Mt DM/yr) [PART 1/2]

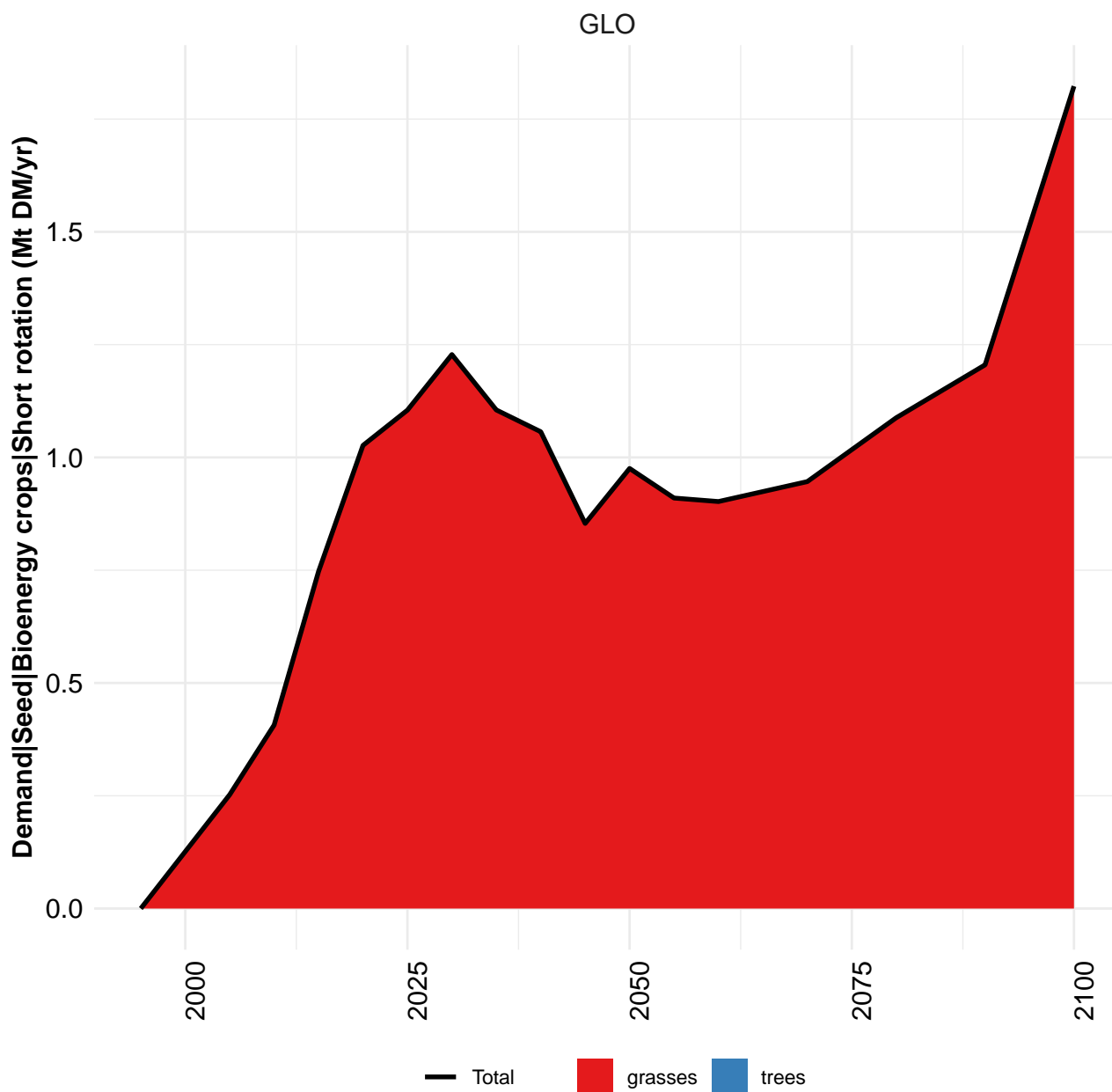
	2050	2055	2060	2070	2080	2090	2100
GLO	167	173	179	190	196	199	200
CAZ	4	4	5	5	5	5	5
CHA	23	22	22	20	18	16	15
EUR	18	18	19	19	20	21	21
IND	24	26	27	29	30	32	33
JPN	0	0	0	0	0	0	0
LAM	11	12	12	13	14	13	13
MEA	7	7	8	8	8	8	8
NEU	5	5	5	5	5	5	5
OAS	27	29	31	33	34	35	34
REF	27	28	28	29	29	29	28
SSA	11	13	15	20	23	25	26
USA	8	8	8	9	9	10	10

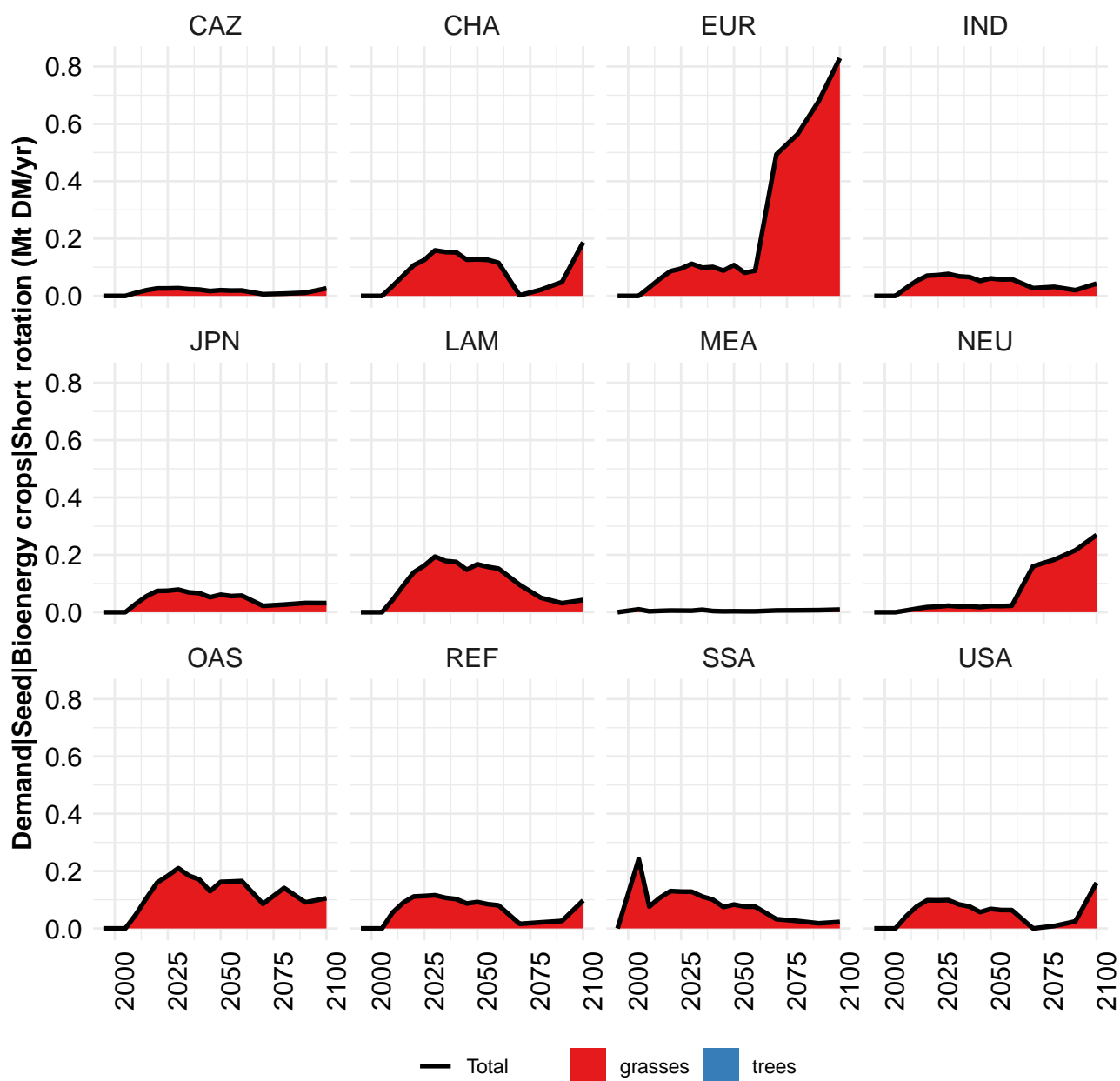
Table 642: MAgPIE m4p\_som — Demand—Seed (Mt DM/yr) [PART 2/2]

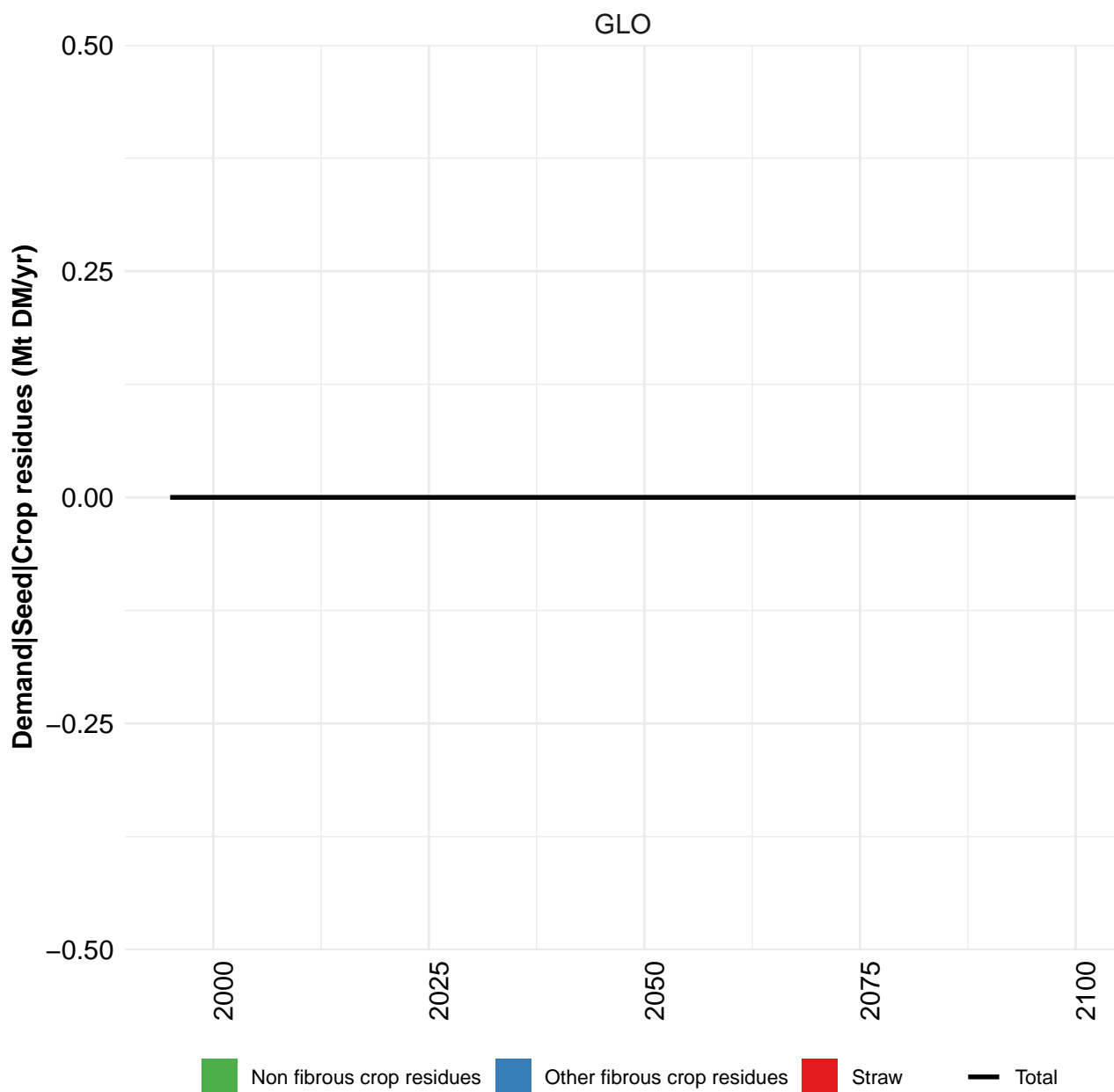
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	81.7	84.4	91.1	92.2	94.1	90.4	96.8	91.7	92.1	94.3
CAZ	2.5	2.3	2.4	2.8	3.1	2.6	2.8	2.9	2.8	2.6
CHA	13.6	14.4	14.8	14.5	14.7	14.7	15.6	15.3	14.1	14.4
EUR	13.8	13.7	13.0	12.7	13.1	12.6	12.2	11.6	11.2	10.6
IND	7.4	9.2	10.3	11.0	13.2	11.3	12.2	12.5	12.1	13.5
JPN	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1
LAM	3.3	3.6	4.2	4.2	4.5	4.1	4.3	4.8	5.3	5.9
MEA	2.4	2.4	2.7	2.8	3.0	3.6	3.9	3.4	3.8	3.6
NEU	2.8	3.0	3.0	3.1	3.3	3.3	3.2	3.0	2.8	2.5
OAS	5.1	5.6	5.8	6.4	6.6	7.2	8.1	8.8	9.5	10.5
REF	23.2	22.0	25.7	25.1	23.3	21.8	24.1	19.1	19.5	19.3
SSA	2.3	2.6	2.6	2.5	2.8	3.2	3.6	3.9	4.5	5.0
USA	5.0	5.3	6.3	6.9	6.2	6.0	6.6	6.4	6.3	6.2

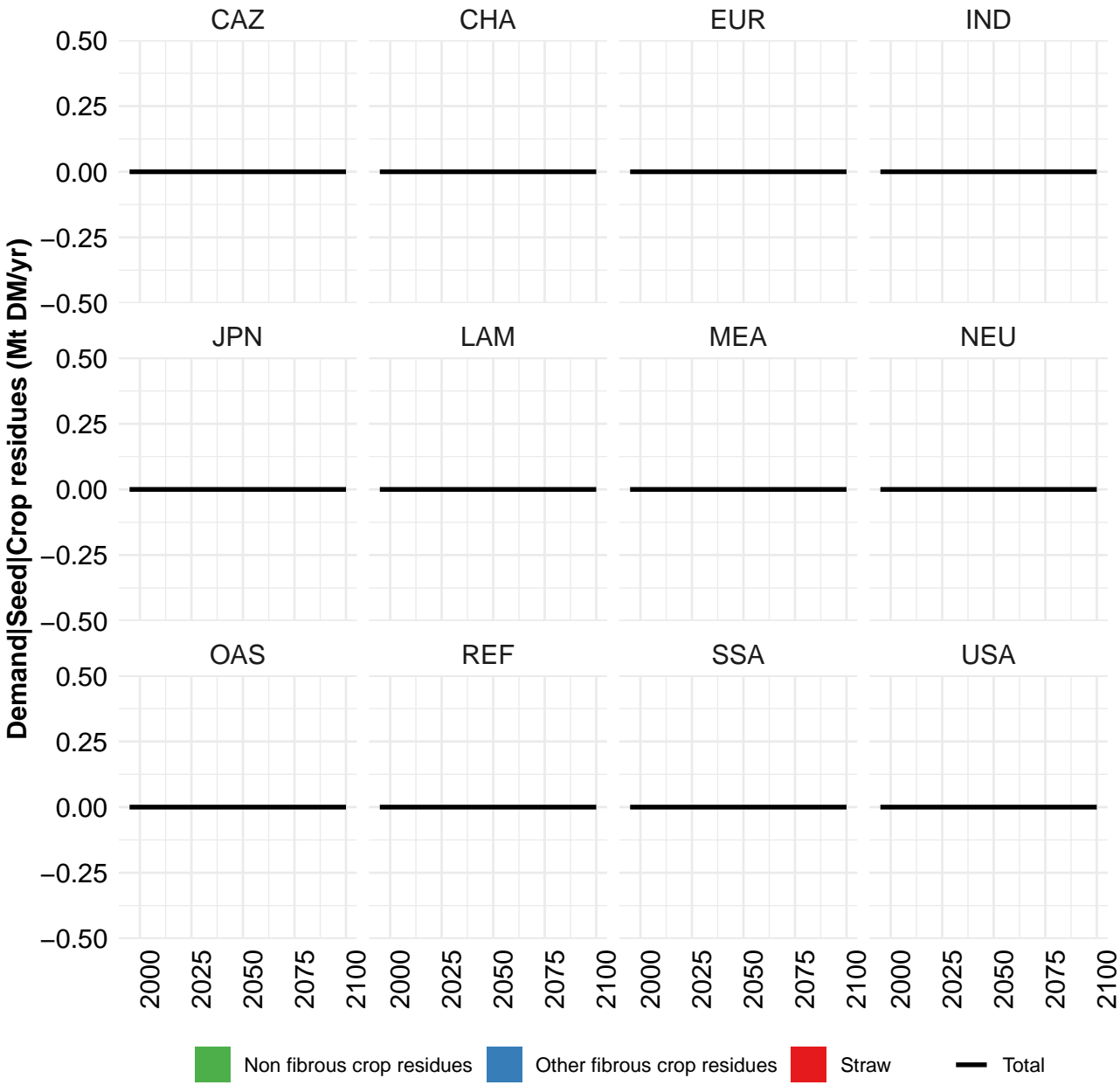
Table 643: FAO — Demand—Seed (Mt DM/yr)

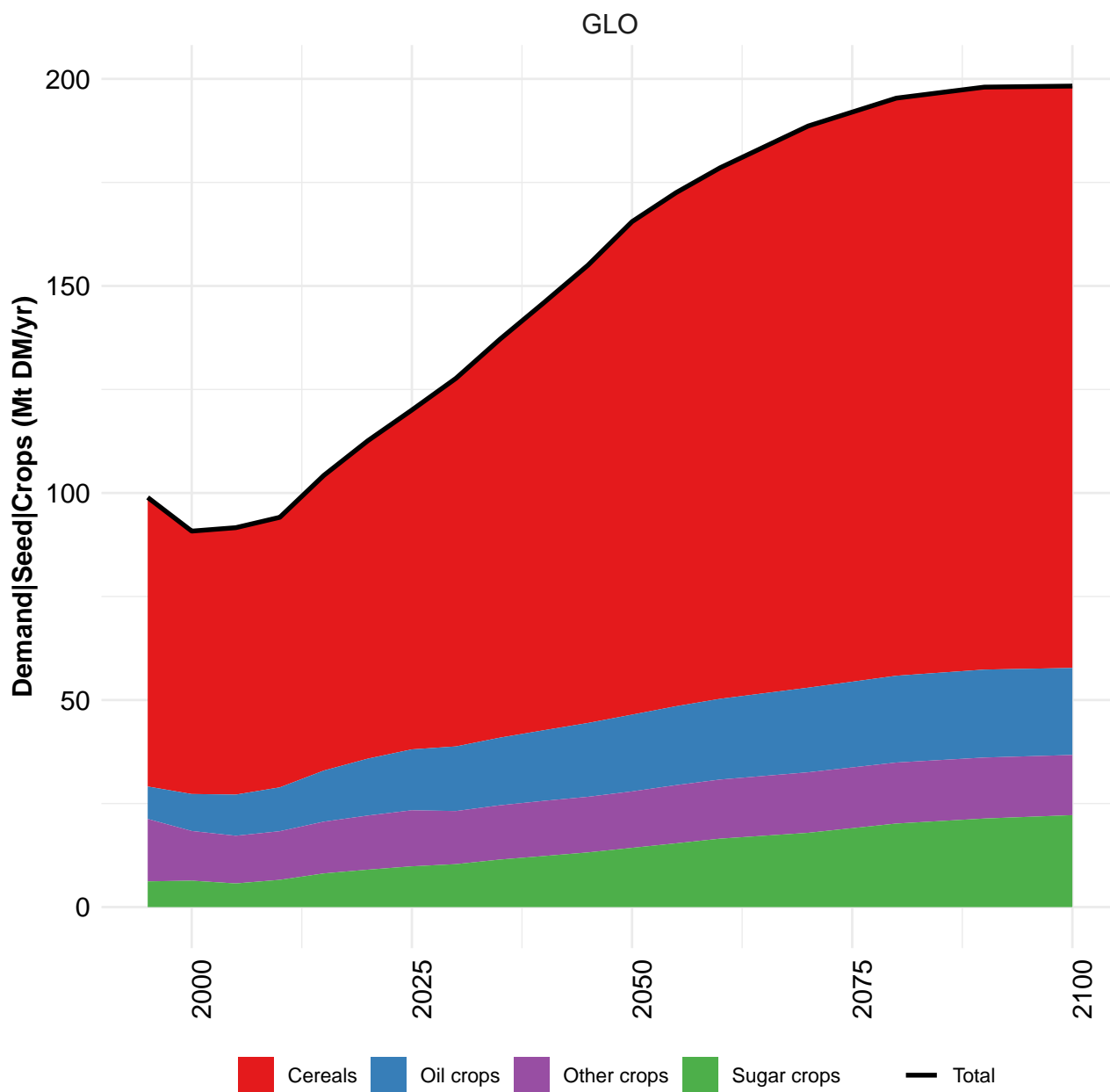


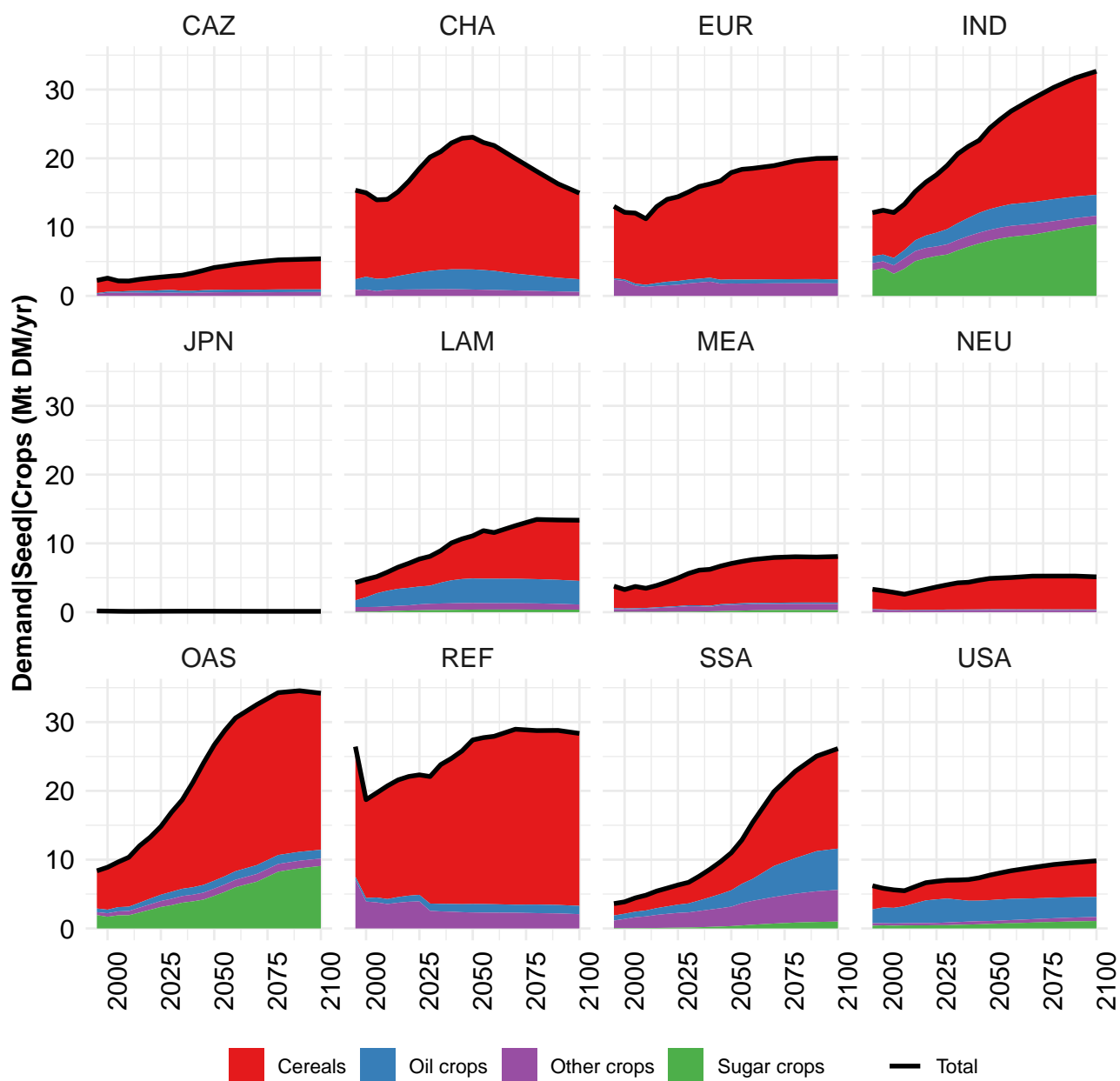






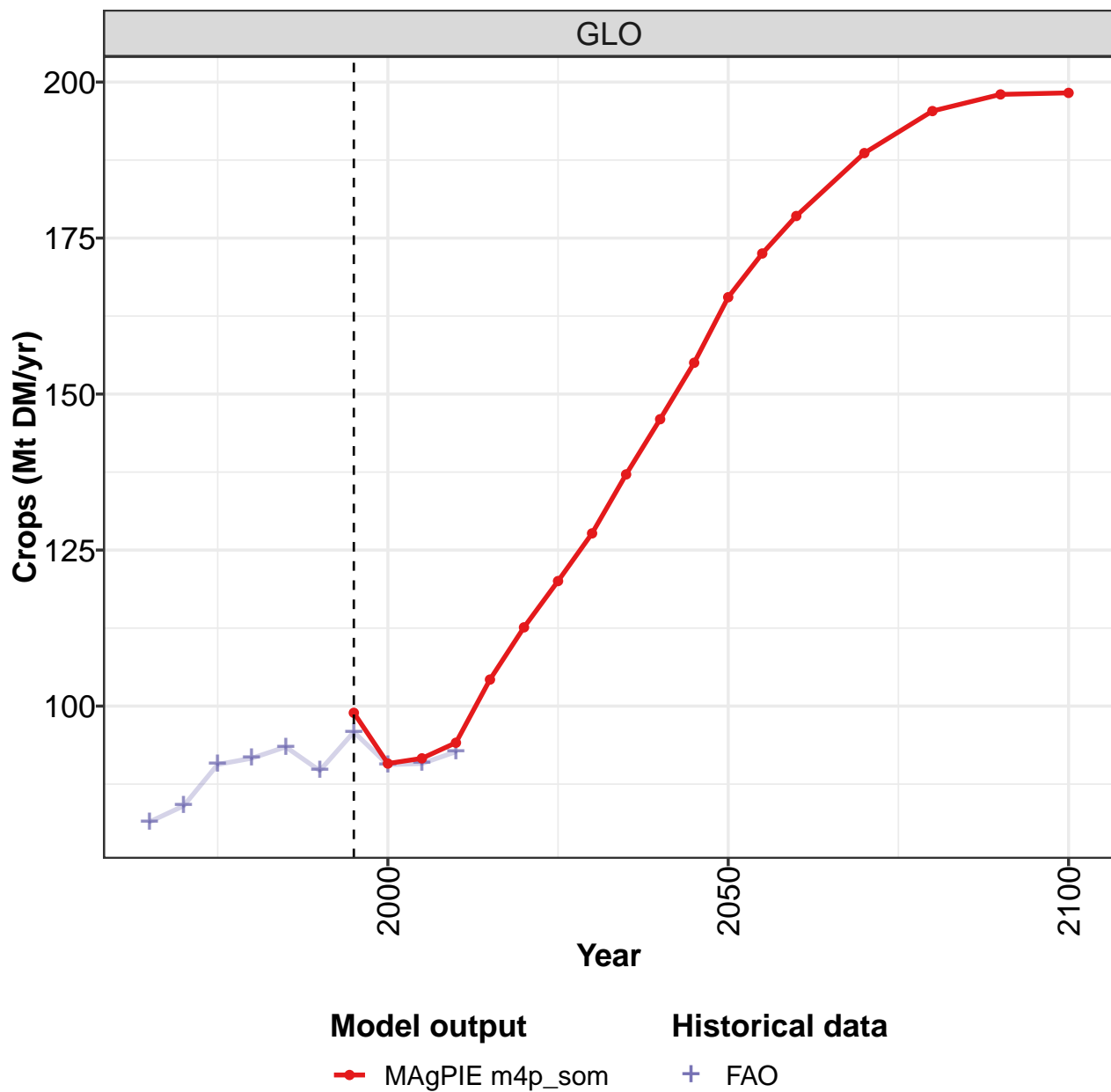






## 10.1 Crops

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

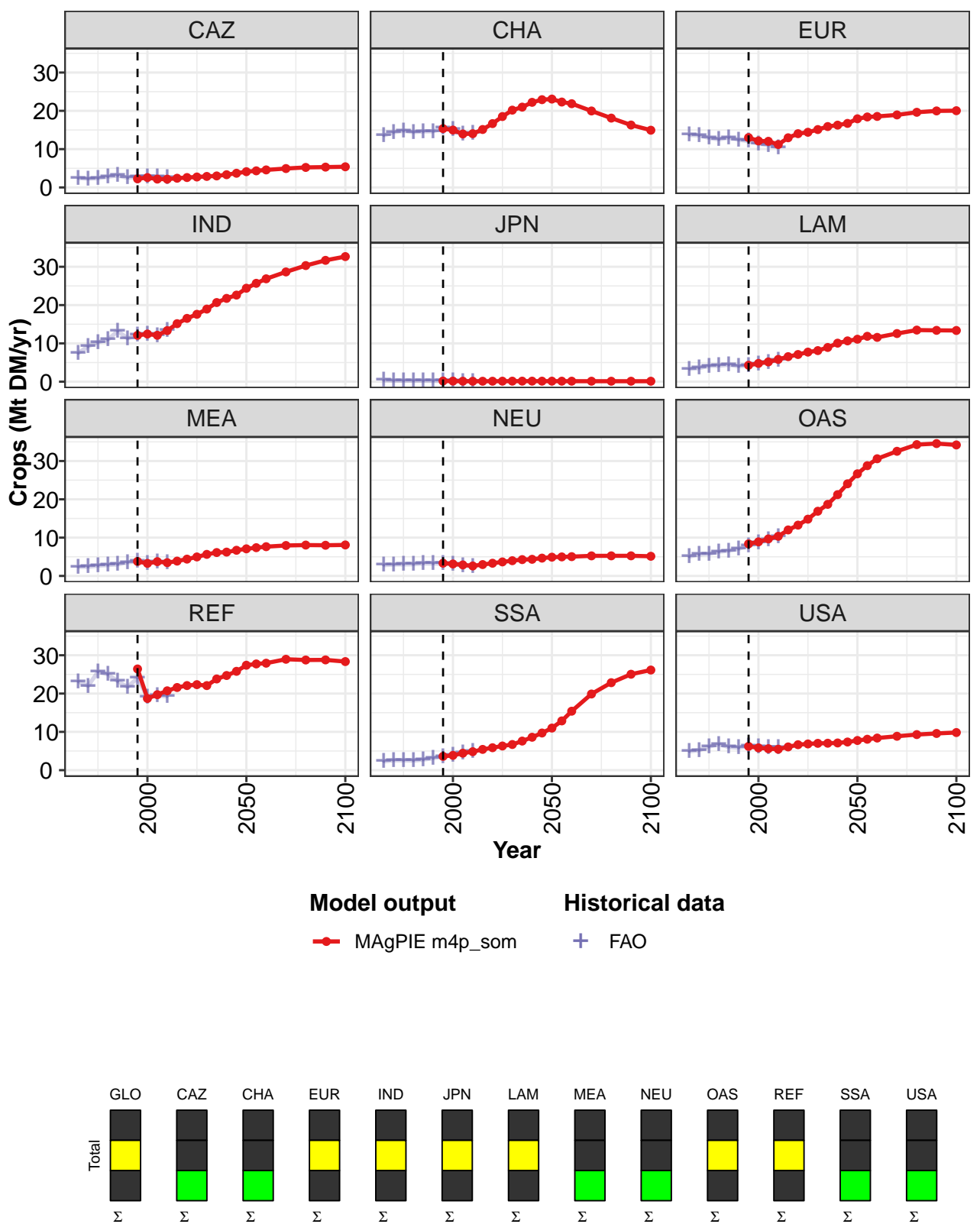


Figure 215: MAGPIE m4p\_som — Demand—Seed—Crops (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	99	91	92	94	104	113	120	128	137	146	155
CAZ	2	3	2	2	2	3	3	3	3	3	4
CHA	15	15	14	14	15	17	19	20	21	22	23
EUR	13	12	12	11	13	14	14	15	16	16	17
IND	12	12	12	13	15	17	18	19	21	22	23
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	4	5	5	6	7	7	8	8	9	10	11
MEA	4	3	4	3	4	4	5	6	6	6	7
NEU	3	3	3	3	3	3	4	4	4	4	5
OAS	8	9	10	10	12	13	15	17	19	21	24
REF	26	19	20	21	22	22	22	22	24	25	26
SSA	4	4	4	5	5	6	6	7	8	9	10
USA	6	6	6	5	6	7	7	7	7	7	7

Table 644: MAgPIE m4p\_som — Demand—Seed—Crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	166	173	179	189	195	198	198
CAZ	4	4	5	5	5	5	5
CHA	23	22	22	20	18	16	15
EUR	18	18	19	19	20	20	20
IND	24	26	27	29	30	32	33
JPN	0	0	0	0	0	0	0
LAM	11	12	12	13	13	13	13
MEA	7	7	8	8	8	8	8
NEU	5	5	5	5	5	5	5
OAS	27	29	31	33	34	35	34
REF	27	28	28	29	29	29	28
SSA	11	13	15	20	23	25	26
USA	8	8	8	9	9	10	10

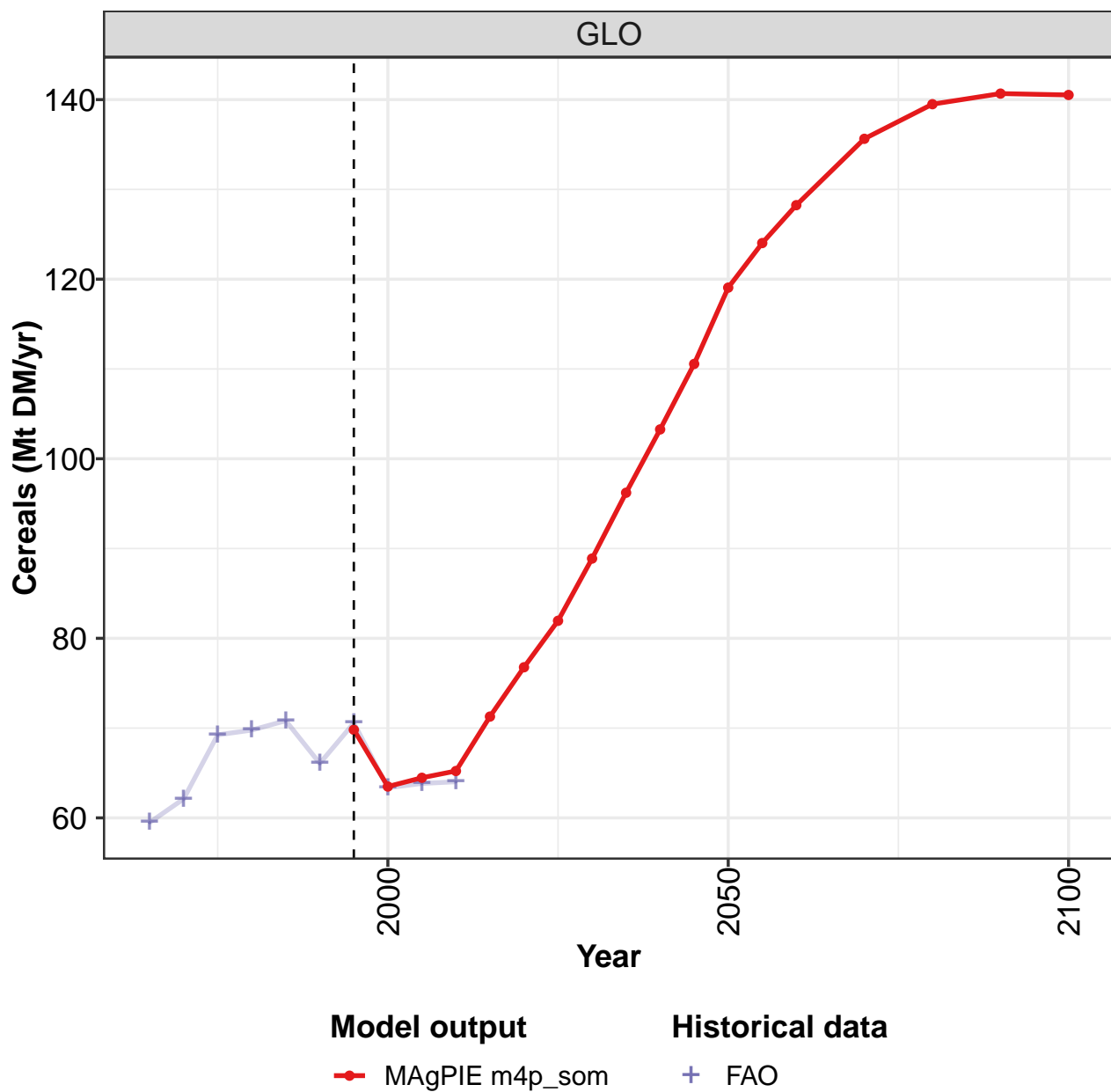
Table 645: MAgPIE m4p\_som — Demand—Seed—Crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	81.5	84.0	90.6	91.6	93.5	89.6	95.8	90.6	90.8	92.7
CAZ	2.4	2.3	2.4	2.8	3.1	2.5	2.8	2.8	2.8	2.5
CHA	13.6	14.4	14.8	14.4	14.6	14.7	15.5	15.1	13.9	14.1
EUR	13.7	13.6	12.9	12.6	13.0	12.4	12.1	11.4	11.1	10.4
IND	7.4	9.2	10.3	11.0	13.2	11.3	12.2	12.5	12.1	13.5
JPN	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
LAM	3.3	3.5	4.1	4.2	4.4	4.0	4.2	4.6	5.0	5.7
MEA	2.4	2.4	2.7	2.8	3.0	3.5	3.8	3.3	3.7	3.5
NEU	2.8	3.0	3.0	3.0	3.3	3.2	3.2	3.0	2.7	2.5
OAS	5.1	5.6	5.8	6.3	6.6	7.1	7.9	8.7	9.4	10.3
REF	23.2	22.0	25.7	25.0	23.2	21.7	24.1	19.0	19.5	19.2
SSA	2.3	2.6	2.6	2.5	2.7	3.1	3.5	3.9	4.5	5.0
USA	4.9	5.2	6.2	6.8	6.0	5.9	6.3	6.1	6.0	5.9

Table 646: FAO — Demand—Seed—Crops (Mt DM/yr)

## 10.1.1 Cereals

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

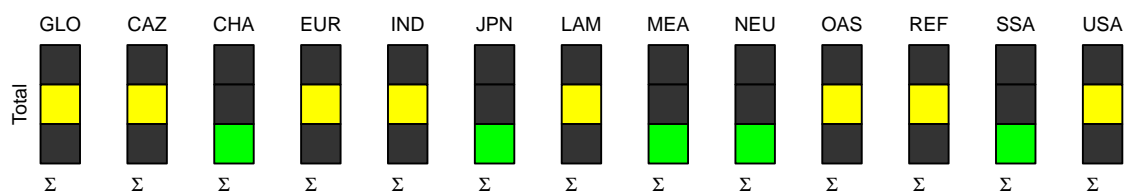
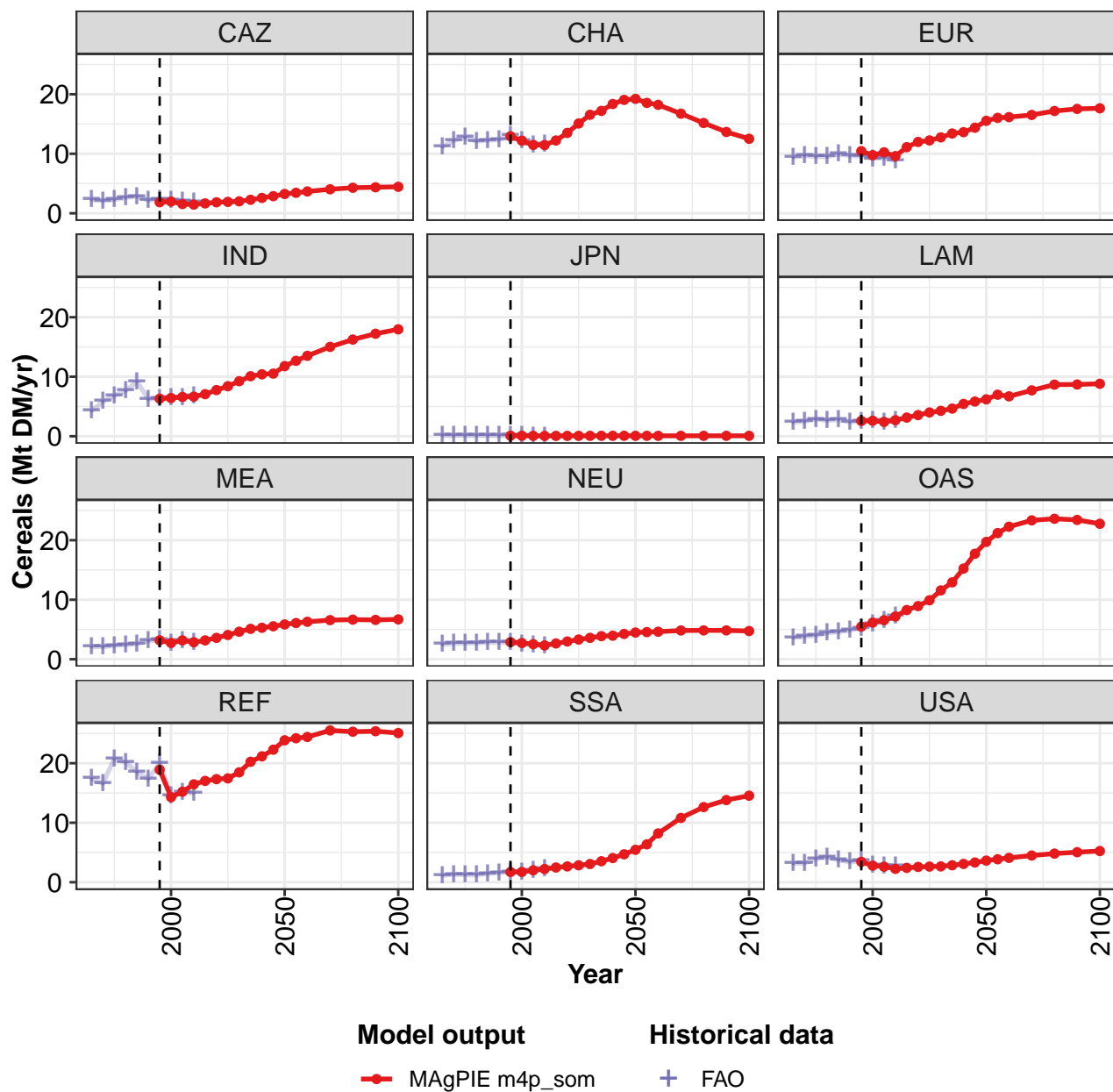


Figure 216: MAgPIE m4p\_som — Demand—Seed—Crops—Cereals (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	70	63	64	65	71	77	82	89	96	103	111
CAZ	2	2	2	1	2	2	2	2	2	3	3
CHA	13	12	11	11	12	14	15	17	17	18	19
EUR	10	10	10	10	11	12	12	13	13	14	14
IND	6	6	7	7	7	8	8	9	10	10	11
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	3	3	2	3	3	4	4	4	5	5	6
MEA	3	3	3	3	3	4	4	5	5	5	6
NEU	3	3	3	2	3	3	3	4	4	4	4
OAS	5	6	7	7	8	9	10	12	13	15	18
REF	19	14	15	16	17	17	17	18	20	21	22
SSA	2	2	2	2	2	3	3	3	4	4	5
USA	3	3	3	2	2	3	3	3	3	3	3

Table 647: MAgPIE m4p.som — Demand—Seed—Crops—Cereals (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	119	124	128	136	139	141	141
CAZ	3	3	4	4	4	4	4
CHA	19	19	18	17	15	14	13
EUR	16	16	16	17	17	18	18
IND	12	13	14	15	16	17	18
JPN	0	0	0	0	0	0	0
LAM	6	7	7	8	9	9	9
MEA	6	6	6	7	7	7	7
NEU	4	5	5	5	5	5	5
OAS	20	21	22	23	24	23	23
REF	24	24	24	26	25	25	25
SSA	5	6	8	11	13	14	15
USA	4	4	4	4	5	5	5

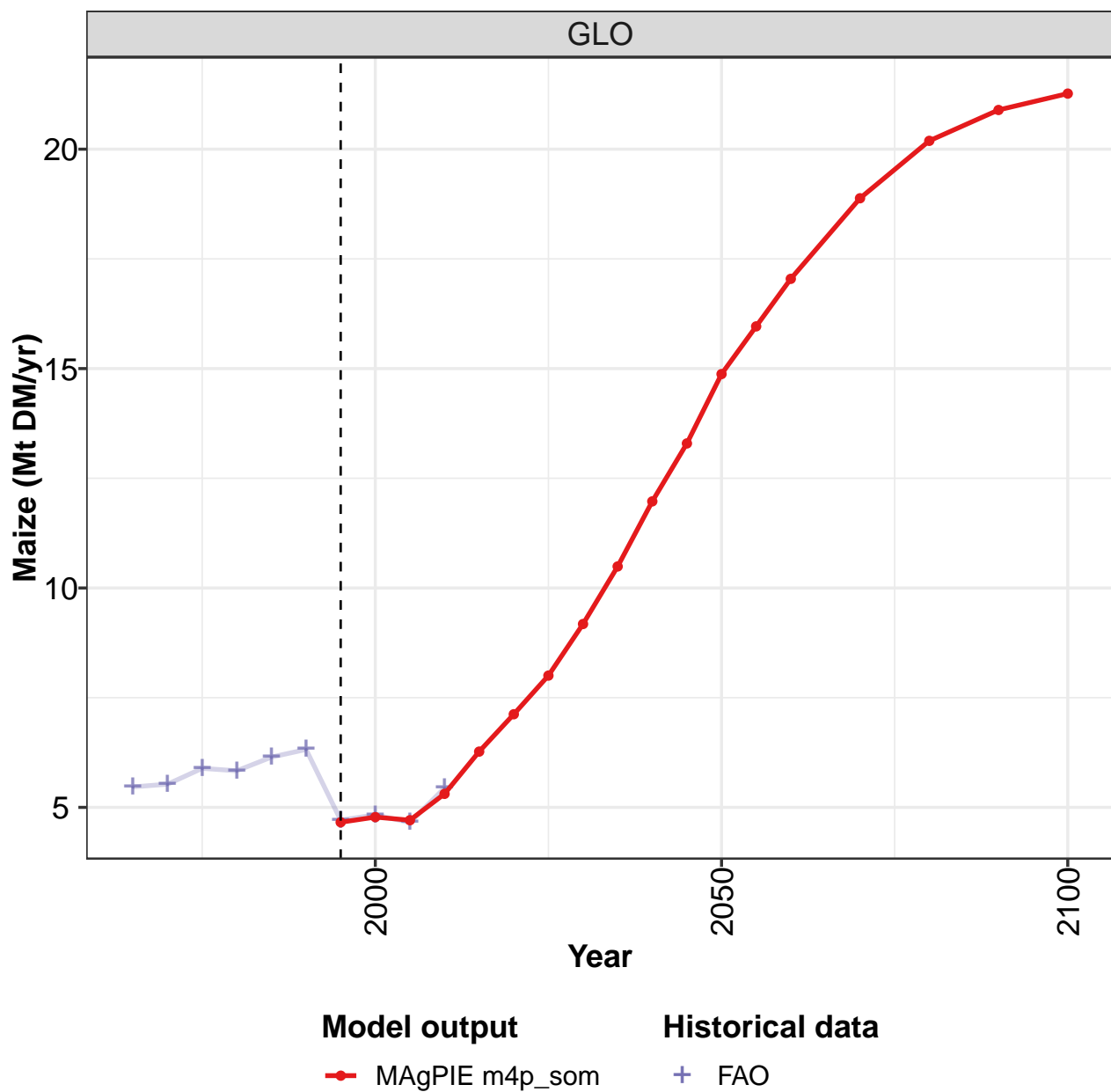
Table 648: MAgPIE m4p.som — Demand—Seed—Crops—Cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	59.5	62.1	69.2	69.8	70.8	66.1	70.6	63.4	63.8	64.0
CAZ	2.3	2.1	2.3	2.6	2.8	2.2	2.3	2.2	2.1	1.9
CHA	11.2	12.2	12.7	12.1	12.2	12.4	13.0	12.3	11.5	11.6
EUR	9.4	9.7	9.5	9.5	9.9	9.7	9.6	9.2	9.3	8.8
IND	4.2	5.8	6.8	7.6	9.2	6.2	6.4	6.5	6.6	6.8
JPN	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	2.3	2.5	2.9	2.6	2.8	2.4	2.6	2.6	2.4	2.6
MEA	2.1	2.1	2.3	2.4	2.6	3.1	3.2	2.8	3.2	2.9
NEU	2.5	2.6	2.7	2.7	2.8	2.8	2.8	2.6	2.4	2.2
OAS	3.6	3.8	4.0	4.4	4.6	4.9	5.3	6.0	6.5	7.2
REF	17.4	16.6	20.7	20.2	18.5	17.4	20.0	14.6	15.0	15.0
SSA	1.1	1.3	1.2	1.2	1.4	1.6	1.7	1.7	2.0	2.3
USA	3.1	3.2	3.9	4.2	3.7	3.4	3.5	2.9	2.8	2.7

Table 649: FAO — Demand—Seed—Crops—Cereals (Mt DM/yr)

## 10.1.2 Cereals—Maize

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

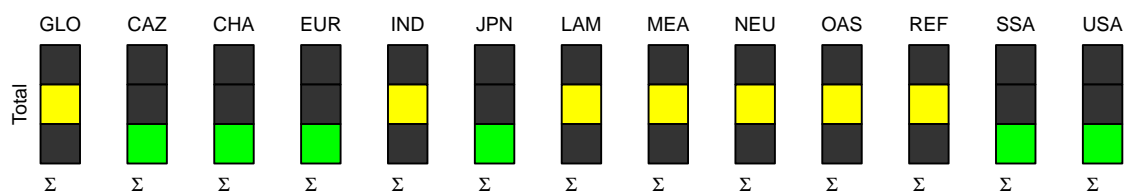
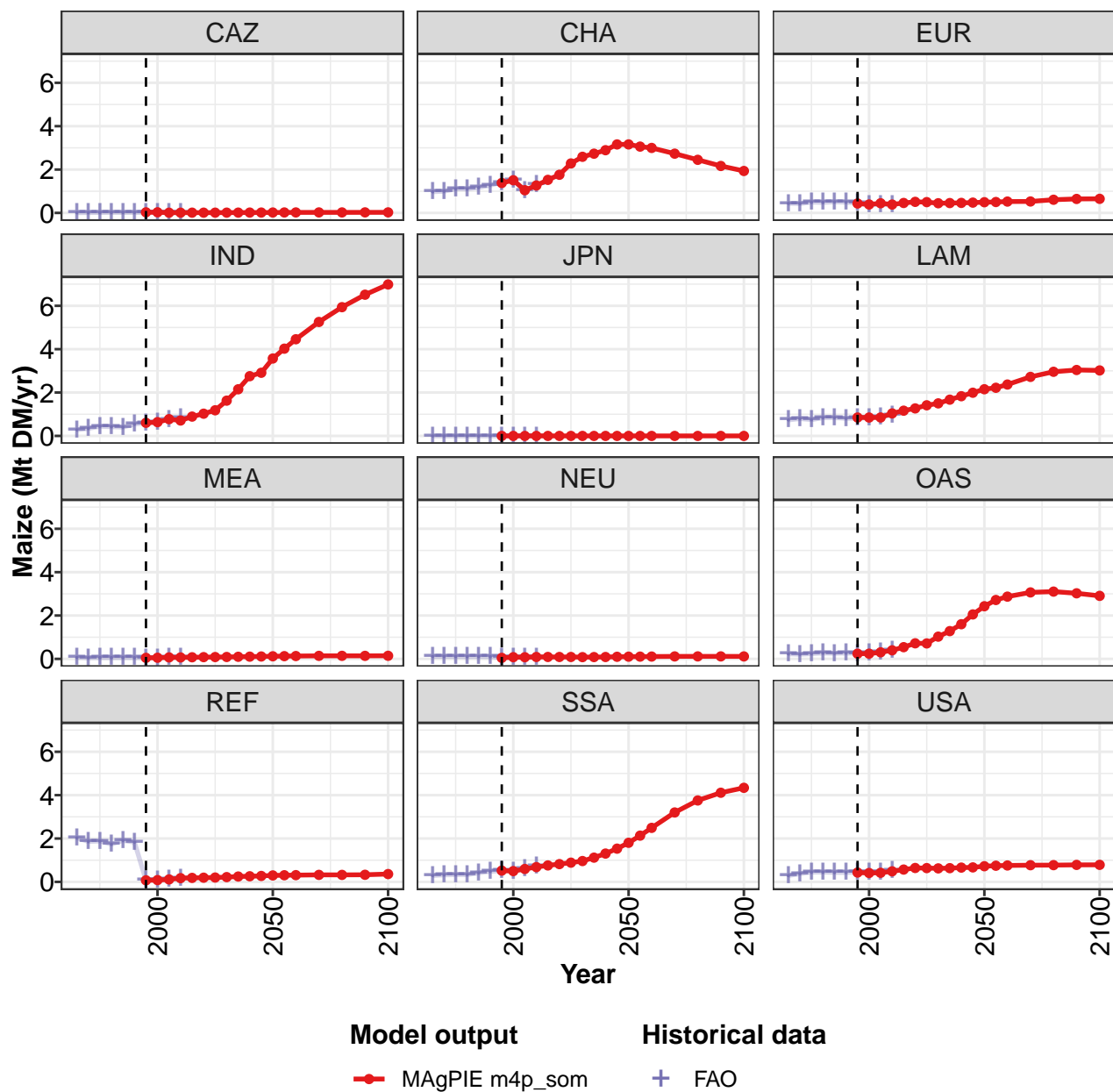


Figure 217: MAgPIE m4p\_som — Demand—Seed—Crops—Cereals—Maize (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	4.7	4.8	4.7	5.3	6.3	7.1	8.0	9.2	10.5	12.0	13.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	1.4	1.5	1.0	1.3	1.5	1.8	2.3	2.6	2.7	2.9	3.2
EUR	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.5	0.5	0.5
IND	0.6	0.6	0.8	0.7	0.9	1.0	1.2	1.6	2.2	2.8	2.9
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.8	0.8	0.8	1.0	1.2	1.3	1.4	1.5	1.7	1.8	2.0
MEA	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEU	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	0.2	0.2	0.3	0.4	0.5	0.7	0.7	1.0	1.3	1.6	2.1
REF	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
SSA	0.5	0.5	0.6	0.7	0.8	0.8	0.9	1.0	1.1	1.3	1.5
USA	0.4	0.4	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7

Table 650: MAgPIE m4p\_som — Demand—Seed—Crops—Cereals—Maize (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	14.9	16.0	17.0	18.9	20.2	20.9	21.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	3.2	3.1	3.0	2.7	2.4	2.2	1.9
EUR	0.5	0.5	0.5	0.5	0.6	0.6	0.6
IND	3.6	4.0	4.5	5.3	5.9	6.5	7.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	2.2	2.2	2.4	2.7	3.0	3.0	3.0
MEA	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	2.4	2.7	2.9	3.1	3.1	3.0	2.9
REF	0.3	0.3	0.3	0.3	0.3	0.3	0.4
SSA	1.8	2.1	2.5	3.2	3.8	4.1	4.3
USA	0.7	0.7	0.8	0.8	0.8	0.8	0.8

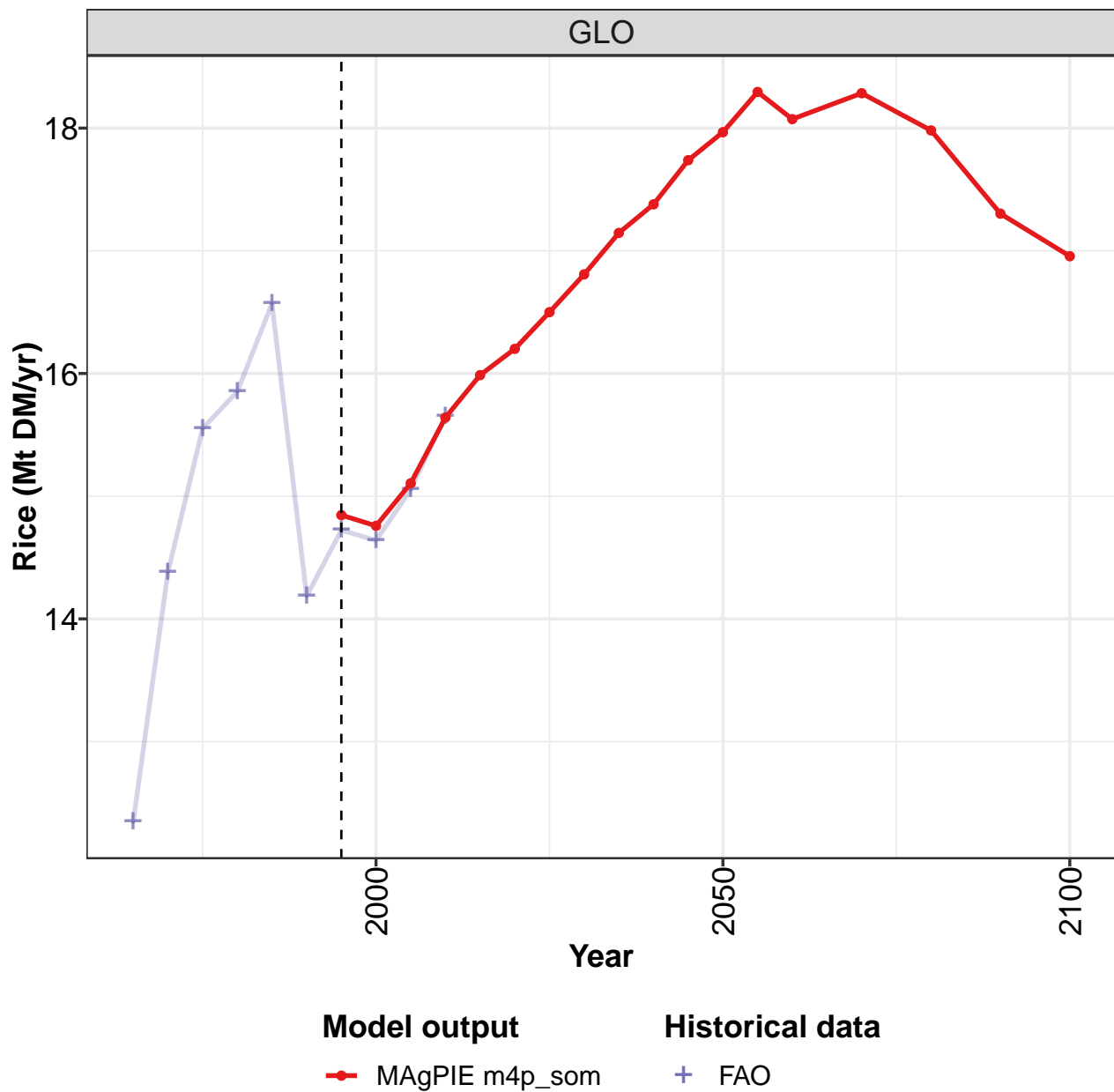
Table 651: MAgPIE m4p\_som — Demand—Seed—Crops—Cereals—Maize (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	5.47	5.53	5.89	5.83	6.15	6.32	4.71	4.83	4.65	5.44
CAZ	0.01	0.01	0.02	0.03	0.02	0.02	0.03	0.03	0.01	0.01
CHA	0.97	1.00	1.11	1.11	1.17	1.28	1.41	1.53	1.01	1.29
EUR	0.44	0.43	0.50	0.48	0.51	0.49	0.44	0.38	0.39	0.37
IND	0.28	0.34	0.44	0.42	0.40	0.54	0.61	0.64	0.76	0.84
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.74	0.80	0.75	0.84	0.84	0.81	0.82	0.84	0.87	0.97
MEA	0.07	0.05	0.06	0.06	0.06	0.06	0.05	0.05	0.07	0.07
NEU	0.11	0.11	0.11	0.10	0.11	0.10	0.06	0.08	0.08	0.09
OAS	0.23	0.21	0.24	0.27	0.26	0.27	0.25	0.26	0.31	0.40
REF	2.03	1.86	1.88	1.74	1.91	1.83	0.07	0.09	0.12	0.16
SSA	0.29	0.32	0.33	0.33	0.42	0.48	0.51	0.49	0.60	0.73
USA	0.29	0.38	0.45	0.45	0.44	0.43	0.45	0.43	0.44	0.51

Table 652: FAO — Demand—Seed—Crops—Cereals—Maize (Mt DM/yr)

## 10.1.3 Cereals—Rice

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

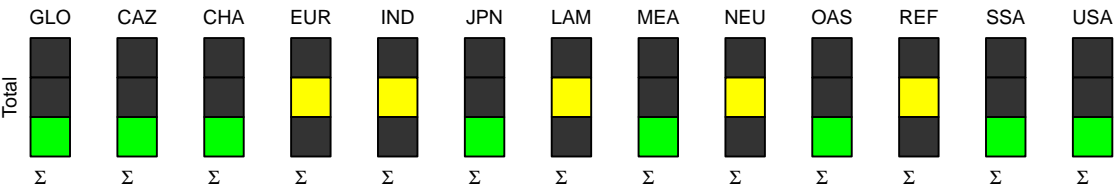
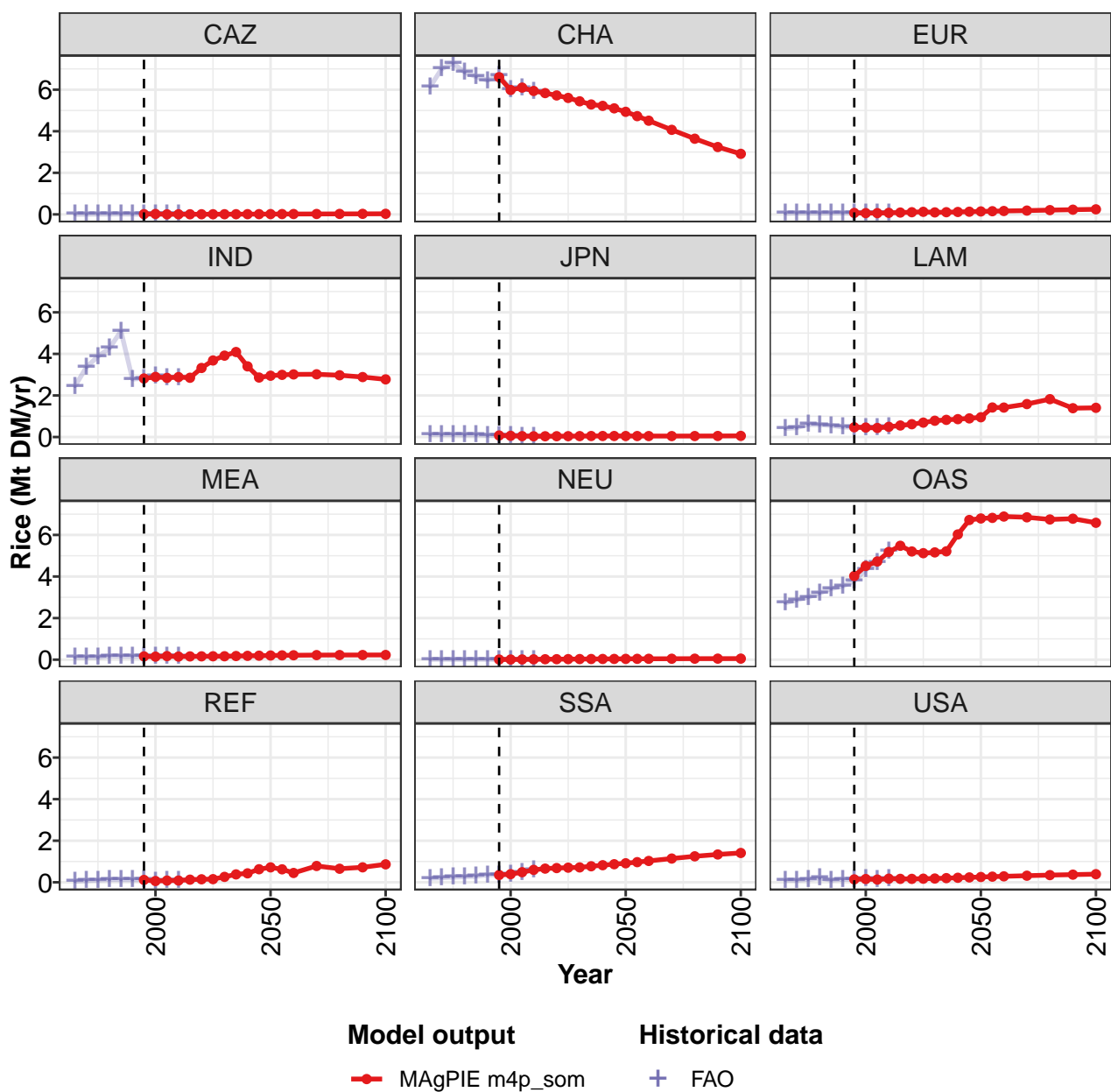


Figure 218: MAgPIE m4p\_som — Demand—Seed—Crops—Cereals—Rice (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	14.8	14.8	15.1	15.6	16.0	16.2	16.5	16.8	17.1	17.4	17.7
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	6.6	6.0	6.1	5.9	5.8	5.7	5.6	5.4	5.3	5.2	5.1
EUR	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
IND	2.8	2.9	2.8	2.9	2.9	3.3	3.7	3.9	4.1	3.4	2.9
JPN	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
LAM	0.5	0.5	0.4	0.5	0.6	0.6	0.7	0.8	0.8	0.9	0.9
MEA	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	4.0	4.5	4.7	5.2	5.5	5.2	5.1	5.2	5.2	6.0	6.7
REF	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.4	0.6
SSA	0.4	0.4	0.5	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.9
USA	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

Table 653: MAgPIE m4p\_som — Demand—Seed—Crops—Cereals—Rice (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	18.0	18.3	18.1	18.3	18.0	17.3	17.0
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	4.9	4.7	4.5	4.1	3.6	3.2	2.9
EUR	0.1	0.2	0.2	0.2	0.2	0.2	0.2
IND	2.9	3.0	3.0	3.0	3.0	2.9	2.8
JPN	0.0	0.0	0.0	0.0	0.0	0.1	0.1
LAM	1.0	1.4	1.4	1.6	1.8	1.4	1.4
MEA	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.1
OAS	6.8	6.8	6.9	6.8	6.7	6.8	6.6
REF	0.7	0.6	0.4	0.8	0.7	0.7	0.9
SSA	0.9	1.0	1.0	1.1	1.3	1.3	1.4
USA	0.3	0.3	0.3	0.3	0.3	0.4	0.4

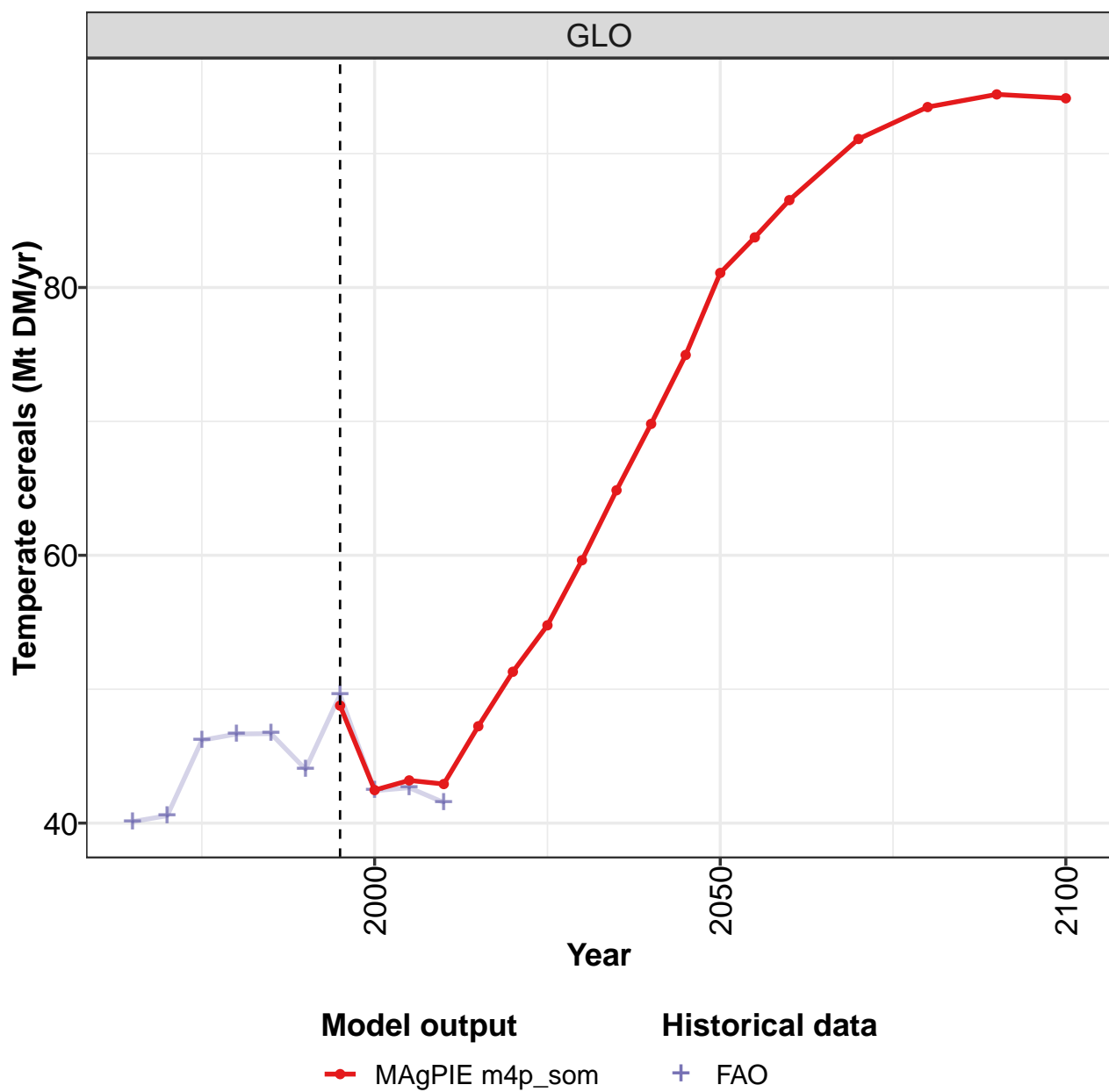
Table 654: MAgPIE m4p\_som — Demand—Seed—Crops—Cereals—Rice (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	12.3	14.4	15.6	15.9	16.6	14.2	14.7	14.6	15.1	15.7
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	6.1	7.0	7.3	6.8	6.6	6.4	6.7	6.0	6.1	5.9
EUR	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
IND	2.4	3.4	3.9	4.3	5.1	2.8	2.8	2.9	2.9	2.9
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0
LAM	0.4	0.4	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.5
MEA	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	2.7	2.9	3.0	3.2	3.4	3.5	3.8	4.3	4.7	5.2
REF	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SSA	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.5	0.6
USA	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.2

Table 655: FAO — Demand—Seed—Crops—Cereals—Rice (Mt DM/yr)

## 10.1.4 Cereals—Temperate cereals

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

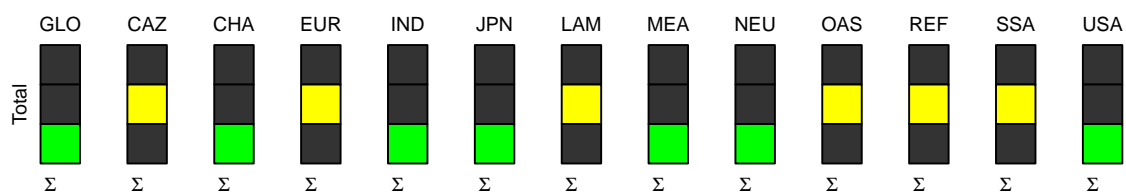
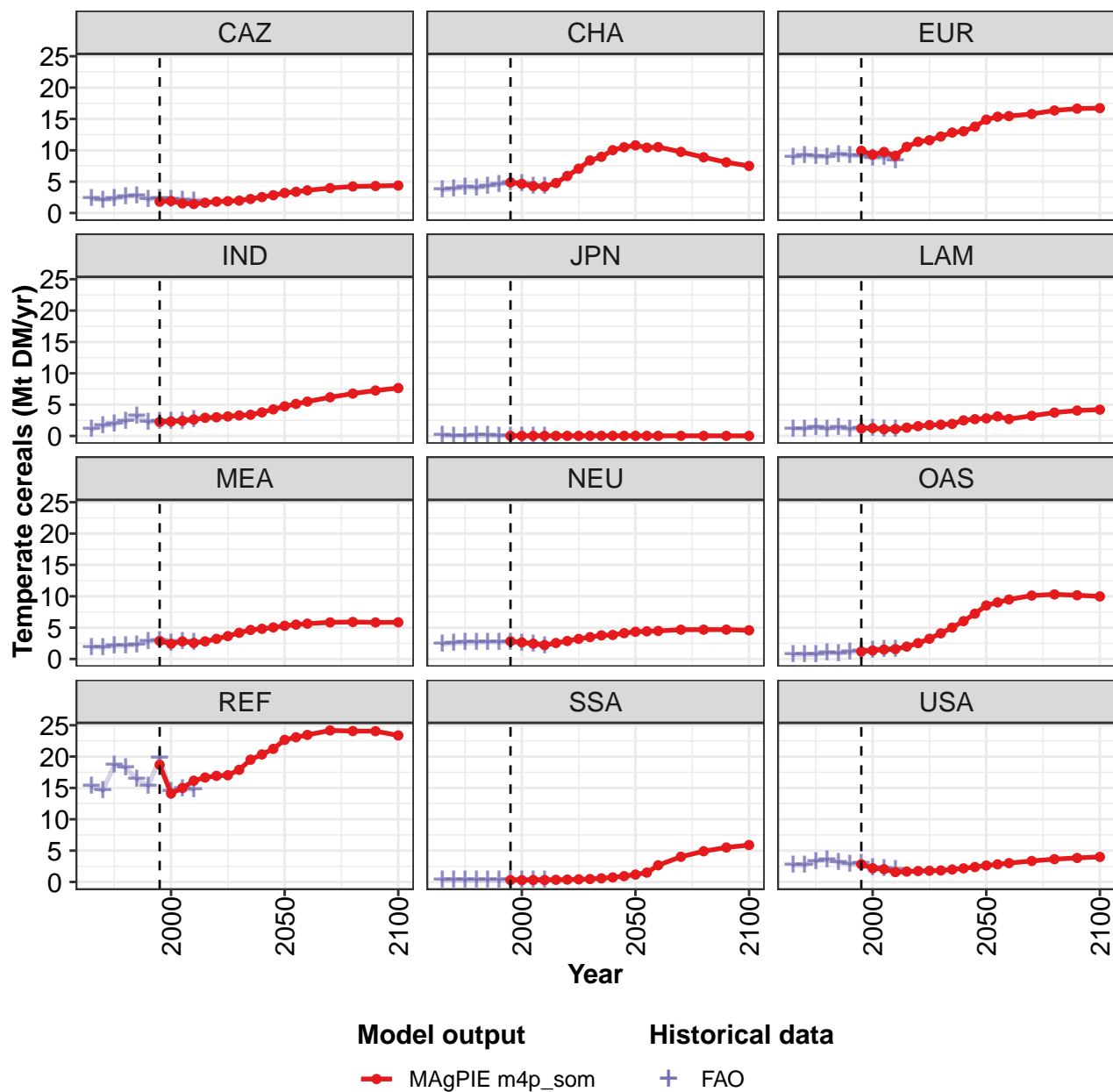


Figure 219: MAGPIE m4p\_som — Demand—Seed—Crops—Cereals—Temperate cereals (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	48.8	42.5	43.2	42.9	47.2	51.3	54.8	59.6	64.9	69.8	75.0
CAZ	1.8	1.9	1.5	1.4	1.6	1.8	1.9	2.0	2.2	2.5	2.8
CHA	4.9	4.6	4.3	4.2	4.8	5.9	7.1	8.4	9.0	10.0	10.5
EUR	9.9	9.3	9.7	9.1	10.6	11.4	11.6	12.2	12.8	13.0	13.8
IND	2.2	2.3	2.4	2.6	2.9	3.0	3.1	3.3	3.4	3.8	4.2
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.2	1.2	1.1	1.1	1.3	1.6	1.7	1.8	1.9	2.5	2.7
MEA	2.9	2.4	2.8	2.6	2.8	3.2	3.7	4.2	4.6	4.8	5.0
NEU	2.8	2.6	2.4	2.2	2.5	2.9	3.2	3.5	3.8	3.8	4.1
OAS	1.2	1.4	1.5	1.6	2.0	2.5	3.2	4.1	5.0	6.0	7.2
REF	18.7	14.1	15.0	16.1	16.7	16.9	17.0	17.9	19.5	20.3	21.2
SSA	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.6	0.7	0.9
USA	2.8	2.2	2.0	1.6	1.7	1.7	1.8	1.8	2.0	2.2	2.4

Table 656: MAgPIE m4p\_som — Demand—Seed—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	81.1	83.7	86.5	91.1	93.5	94.4	94.1
CAZ	3.2	3.4	3.6	4.0	4.2	4.3	4.4
CHA	10.8	10.4	10.5	9.7	8.9	8.1	7.5
EUR	14.9	15.4	15.5	15.8	16.4	16.6	16.7
IND	4.7	5.1	5.5	6.2	6.8	7.3	7.6
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	2.8	3.1	2.7	3.2	3.7	4.1	4.2
MEA	5.3	5.5	5.6	5.8	5.9	5.8	5.8
NEU	4.3	4.4	4.5	4.7	4.7	4.7	4.6
OAS	8.5	9.0	9.5	10.1	10.3	10.2	10.0
REF	22.7	23.1	23.5	24.2	24.1	24.1	23.4
SSA	1.2	1.5	2.7	4.0	4.9	5.5	5.9
USA	2.6	2.8	3.0	3.4	3.6	3.8	4.0

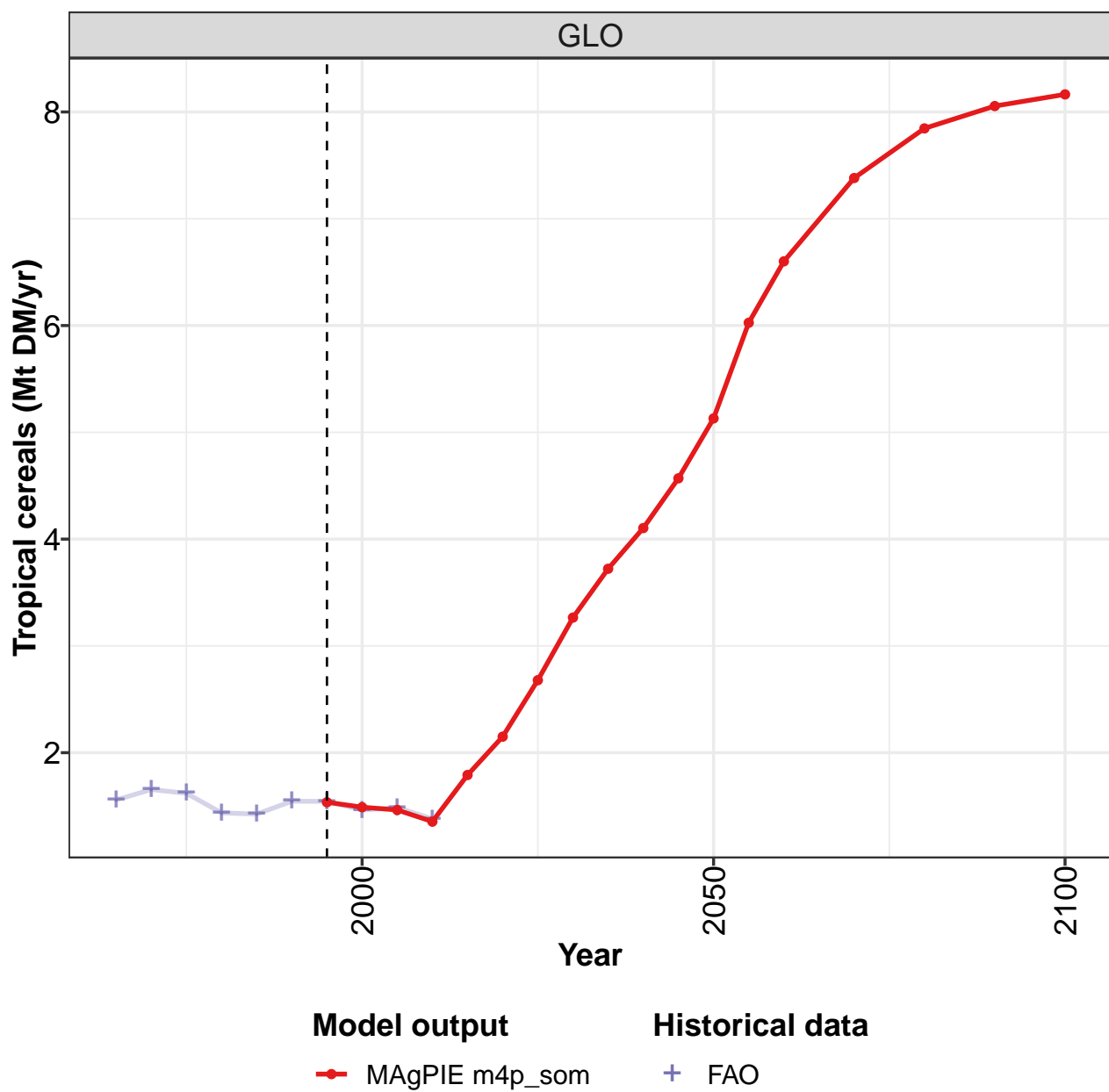
Table 657: MAgPIE m4p\_som — Demand—Seed—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	40.1	40.6	46.2	46.7	46.7	44.0	49.6	42.4	42.6	41.5
CAZ	2.3	2.1	2.2	2.6	2.8	2.1	2.3	2.1	2.1	1.8
CHA	3.6	3.8	4.1	4.0	4.3	4.5	4.9	4.7	4.3	4.3
EUR	8.9	9.2	9.0	8.9	9.3	9.1	9.1	8.7	8.9	8.4
IND	1.0	1.6	1.9	2.3	3.1	2.2	2.3	2.3	2.4	2.6
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.2	1.1	1.4	1.1	1.4	1.1	1.2	1.2	1.1	1.1
MEA	1.9	1.9	2.1	2.1	2.3	2.8	2.9	2.4	2.8	2.6
NEU	2.4	2.5	2.6	2.6	2.7	2.7	2.7	2.5	2.3	2.1
OAS	0.6	0.7	0.7	0.9	0.9	1.1	1.2	1.4	1.5	1.6
REF	15.2	14.6	18.6	18.2	16.4	15.3	19.8	14.4	14.8	14.7
SSA	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3
USA	2.7	2.7	3.3	3.5	3.1	2.8	2.9	2.3	2.2	2.0

Table 658: FAO — Demand—Seed—Crops—Cereals—Temperate cereals (Mt DM/yr)

## 10.1.5 Cereals—Tropical cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

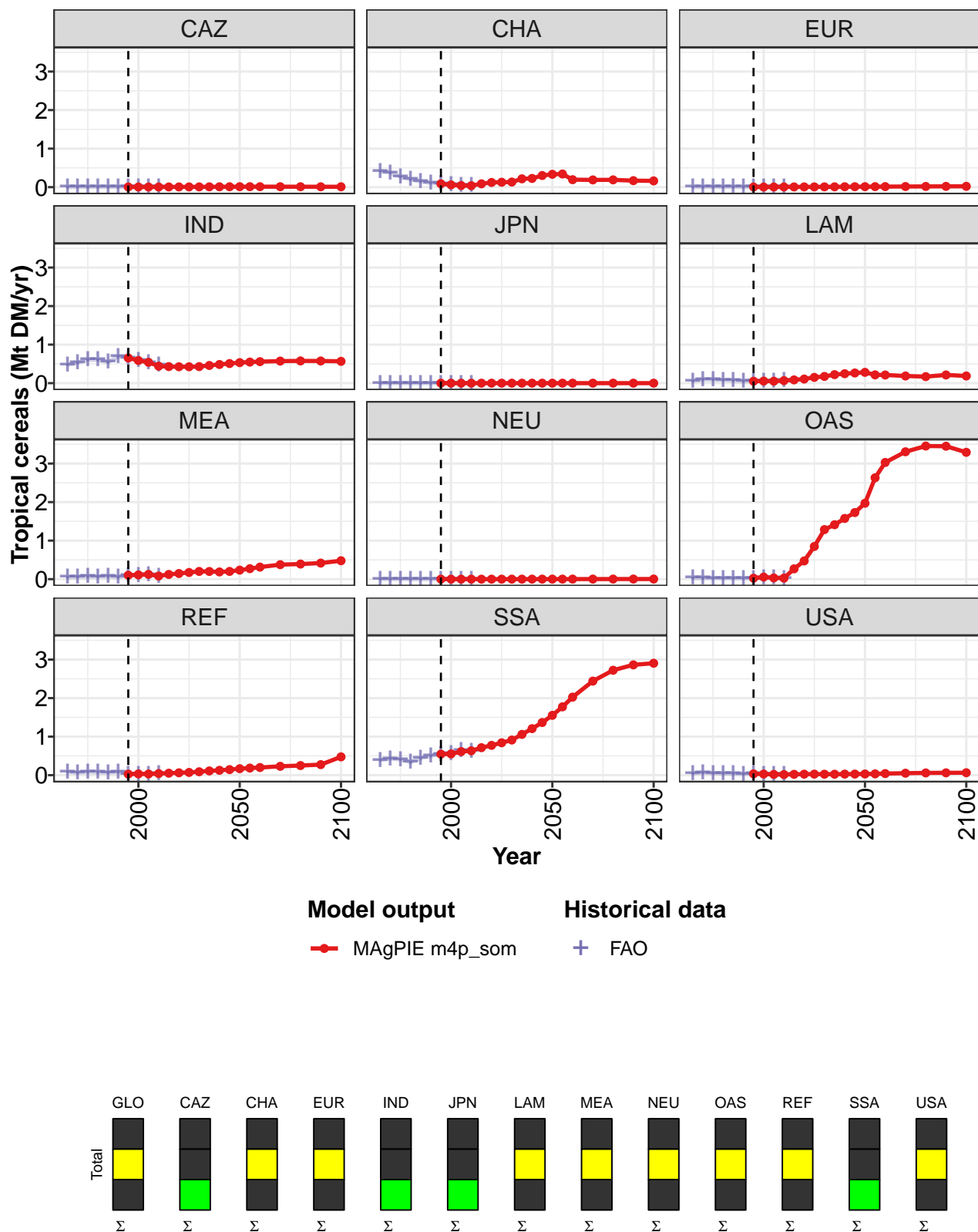


Figure 220: MAgPIE m4p\_som — Demand—Seed—Crops—Cereals—Tropical cereals (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.54	1.49	1.46	1.35	1.79	2.15	2.68	3.27	3.72	4.10	4.57
CAZ	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
CHA	0.09	0.06	0.04	0.04	0.09	0.12	0.13	0.13	0.22	0.23	0.30
EUR	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
IND	0.65	0.59	0.54	0.44	0.43	0.43	0.43	0.43	0.46	0.48	0.51
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.05	0.05	0.05	0.07	0.08	0.11	0.15	0.17	0.22	0.25	0.26
MEA	0.10	0.11	0.12	0.08	0.12	0.15	0.17	0.20	0.20	0.19	0.20
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.03	0.05	0.03	0.03	0.27	0.47	0.85	1.29	1.41	1.58	1.73
REF	0.03	0.03	0.03	0.04	0.05	0.06	0.07	0.09	0.11	0.13	0.14
SSA	0.55	0.55	0.61	0.63	0.71	0.77	0.84	0.91	1.06	1.21	1.37
USA	0.03	0.03	0.02	0.02	0.02	0.03	0.03	0.03	0.02	0.03	0.03

Table 659: MAgPIE m4p\_som — Demand—Seed—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	5.13	6.03	6.60	7.38	7.85	8.06	8.16
CAZ	0.01	0.01	0.01	0.01	0.01	0.01	0.01
CHA	0.33	0.34	0.19	0.19	0.19	0.17	0.16
EUR	0.01	0.01	0.01	0.02	0.02	0.02	0.02
IND	0.53	0.55	0.56	0.57	0.58	0.58	0.57
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.28	0.22	0.21	0.19	0.17	0.21	0.19
MEA	0.23	0.27	0.31	0.38	0.39	0.42	0.48
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	1.97	2.63	3.03	3.31	3.45	3.45	3.29
REF	0.17	0.18	0.20	0.23	0.25	0.27	0.48
SSA	1.55	1.77	2.03	2.44	2.72	2.86	2.91
USA	0.03	0.03	0.04	0.05	0.06	0.06	0.06

Table 660: MAgPIE m4p\_som — Demand—Seed—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 2/2]

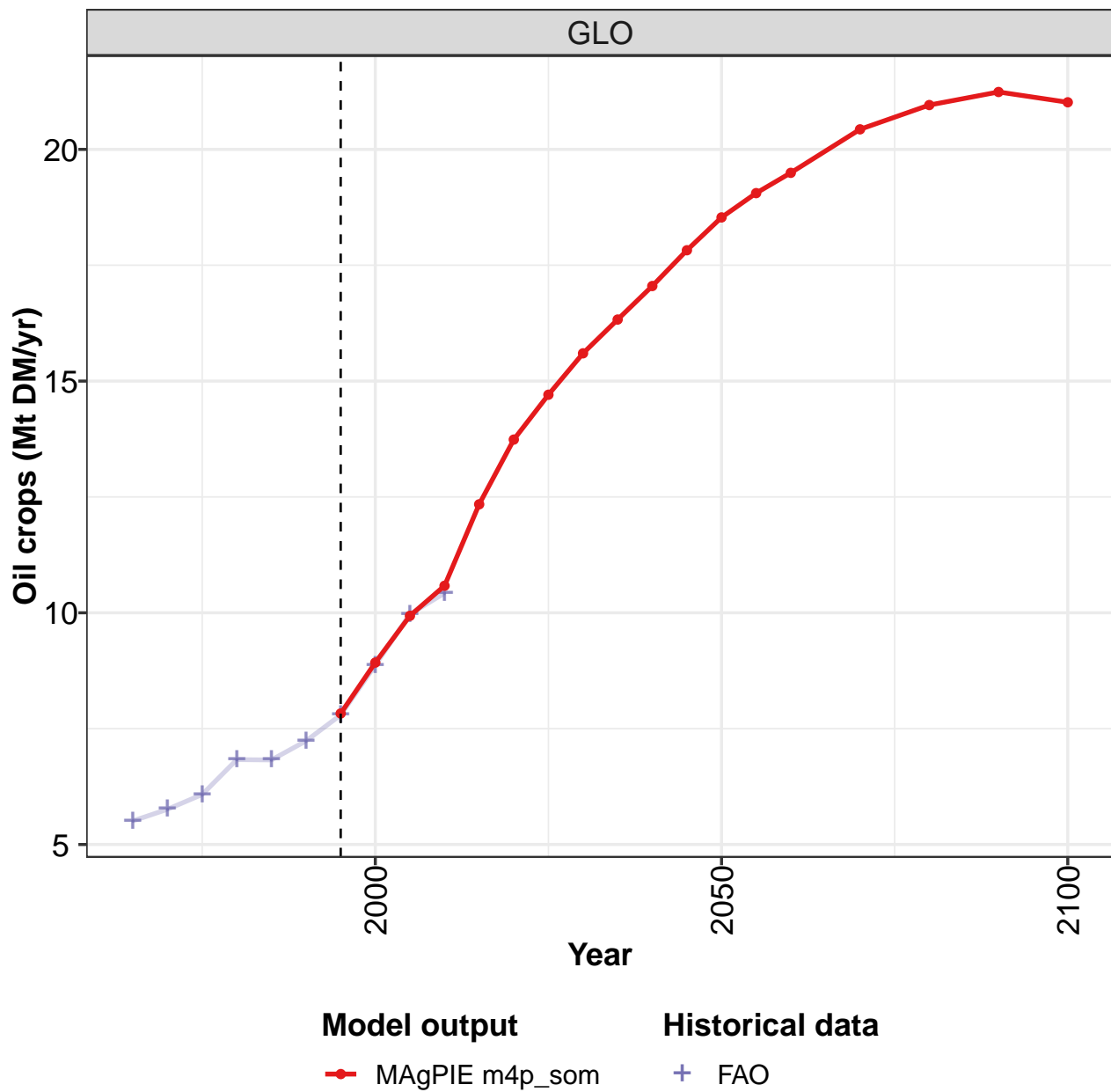
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.56	1.66	1.62	1.44	1.42	1.54	1.54	1.46	1.49	1.38
CAZ	0.00	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.00
CHA	0.42	0.38	0.27	0.20	0.15	0.11	0.09	0.06	0.04	0.04
EUR	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
IND	0.48	0.53	0.60	0.60	0.54	0.69	0.65	0.59	0.54	0.48
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.05	0.09	0.09	0.08	0.07	0.05	0.06	0.06	0.05	0.07
MEA	0.05	0.06	0.07	0.07	0.08	0.05	0.10	0.10	0.12	0.08
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.03	0.03	0.03	0.02	0.03	0.02	0.02	0.03	0.03	0.03
REF	0.09	0.06	0.08	0.07	0.07	0.08	0.03	0.03	0.03	0.04
SSA	0.39	0.43	0.41	0.34	0.44	0.50	0.55	0.56	0.64	0.63
USA	0.04	0.07	0.05	0.04	0.04	0.03	0.04	0.03	0.02	0.01

Table 661: FAO — Demand—Seed—Crops—Cereals—Tropical cereals (Mt DM/yr)



## 10.1.6 Oil crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

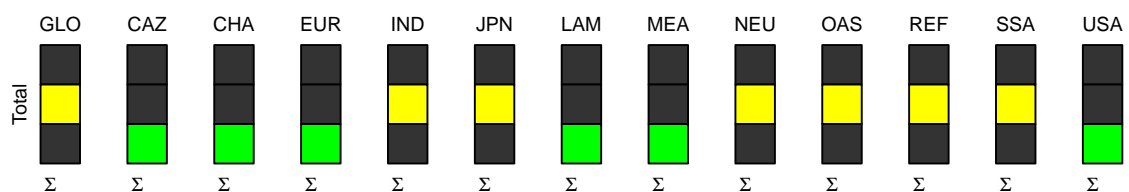
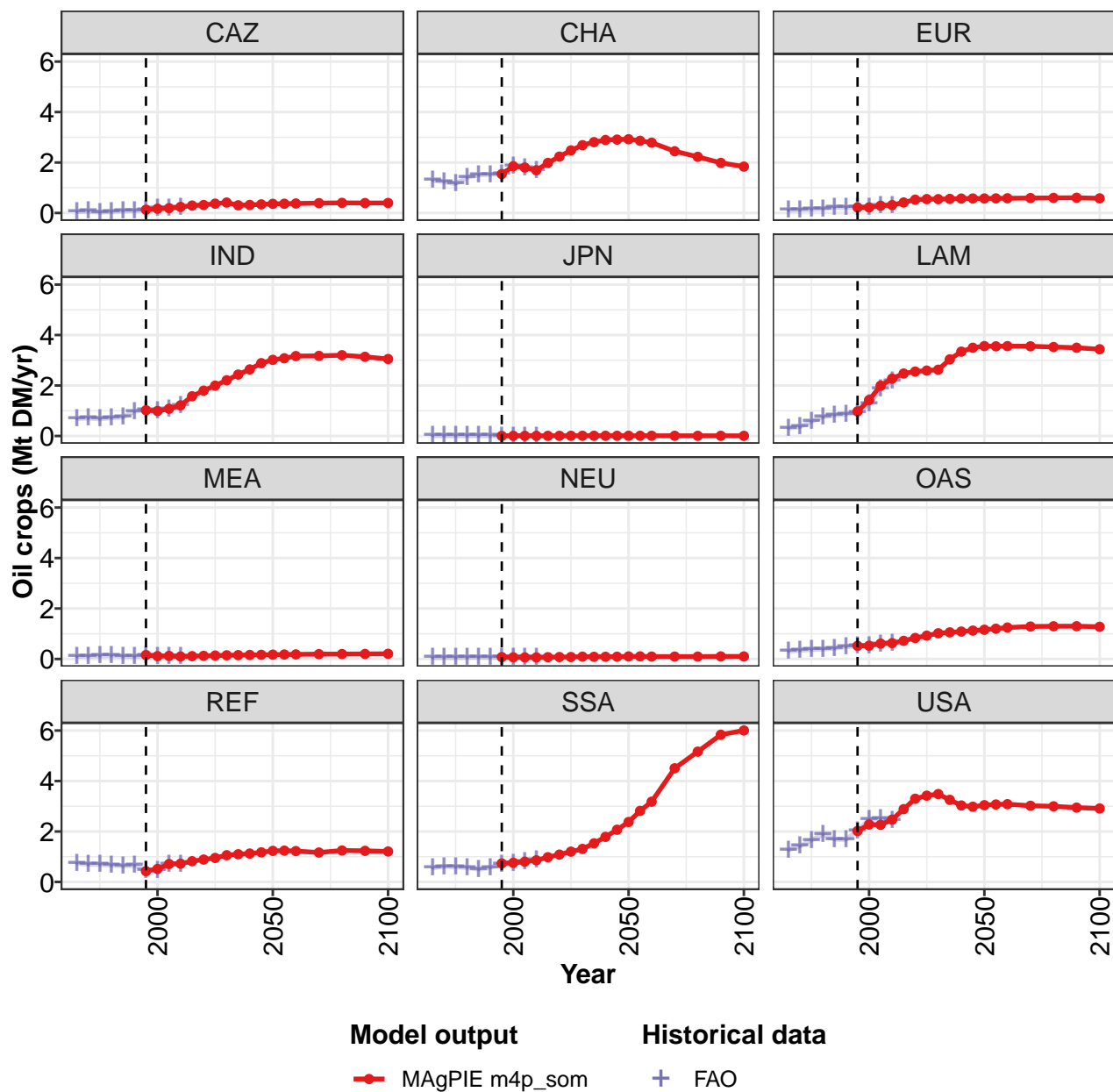


Figure 221: MAgPIE m4p\_som — Demand—Seed—Crops—Oil crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	7.8	8.9	9.9	10.6	12.3	13.7	14.7	15.6	16.3	17.1	17.8
CAZ	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.3	0.3	0.3
CHA	1.5	1.9	1.8	1.7	2.0	2.2	2.5	2.7	2.8	2.9	2.9
EUR	0.2	0.2	0.3	0.3	0.4	0.5	0.6	0.5	0.6	0.6	0.6
IND	1.0	1.0	1.1	1.2	1.6	1.8	2.0	2.2	2.4	2.6	2.9
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.0	1.4	2.0	2.3	2.5	2.6	2.6	2.6	3.0	3.3	3.5
MEA	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	0.5	0.5	0.6	0.6	0.7	0.8	0.9	1.0	1.1	1.1	1.1
REF	0.4	0.5	0.7	0.7	0.8	0.9	1.0	1.1	1.1	1.1	1.2
SSA	0.7	0.8	0.8	0.9	1.0	1.1	1.2	1.3	1.5	1.8	2.1
USA	2.0	2.3	2.3	2.5	2.9	3.3	3.4	3.5	3.3	3.0	3.0

Table 662: MAgPIE m4p\_som — Demand—Seed—Crops—Oil crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	18.5	19.1	19.5	20.4	21.0	21.2	21.0
CAZ	0.4	0.4	0.4	0.4	0.4	0.4	0.4
CHA	2.9	2.9	2.8	2.4	2.2	2.0	1.8
EUR	0.6	0.6	0.6	0.6	0.6	0.6	0.6
IND	3.0	3.1	3.2	3.2	3.2	3.1	3.1
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	3.6	3.6	3.6	3.6	3.5	3.5	3.4
MEA	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	1.2	1.2	1.2	1.3	1.3	1.3	1.3
REF	1.2	1.2	1.2	1.2	1.2	1.2	1.2
SSA	2.4	2.8	3.2	4.5	5.2	5.8	6.0
USA	3.0	3.1	3.1	3.0	3.0	2.9	2.9

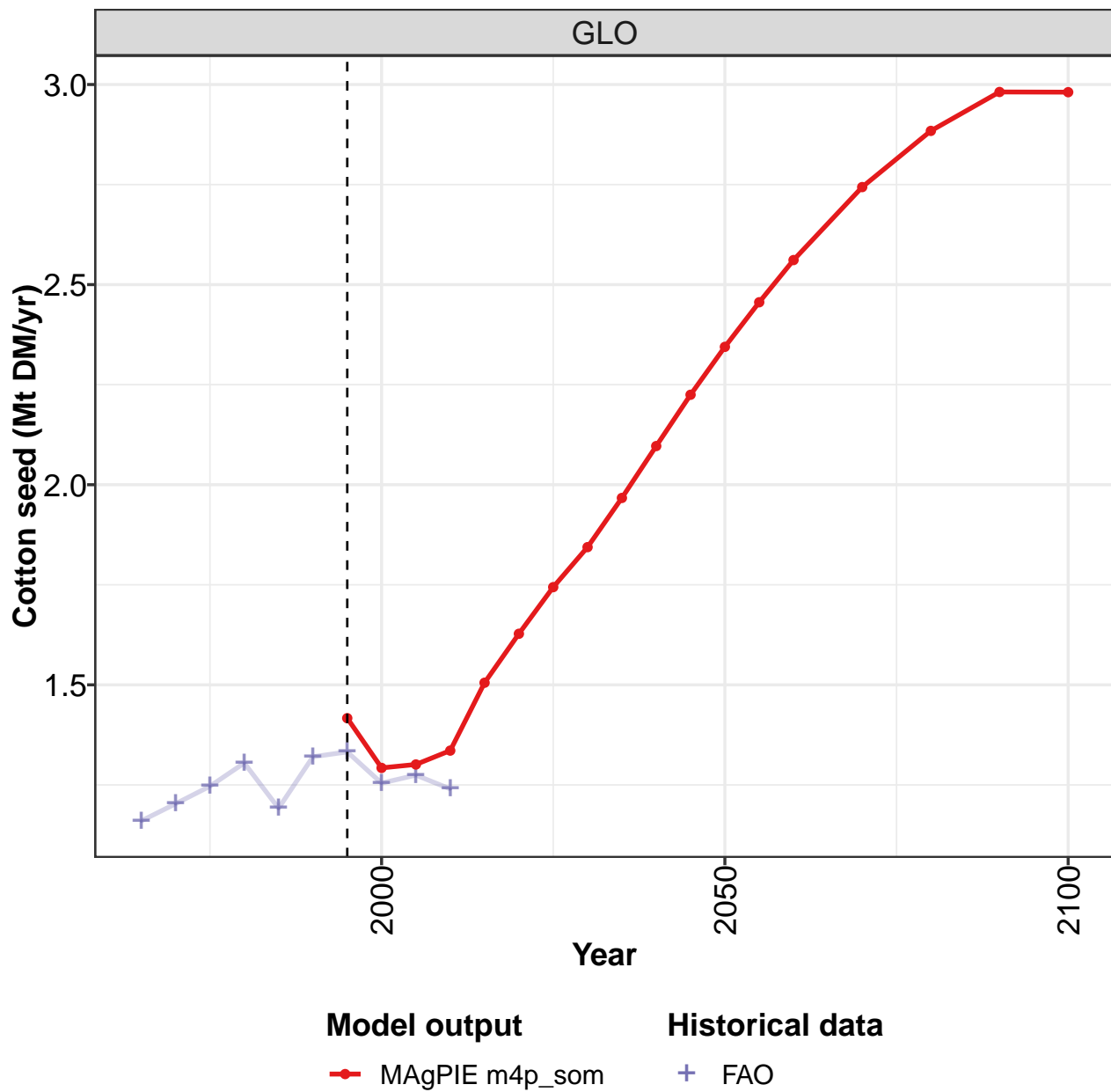
Table 663: MAgPIE m4p\_som — Demand—Seed—Crops—Oil crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	5.5	5.8	6.1	6.8	6.8	7.2	7.8	8.9	10.0	10.4
CAZ	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2
CHA	1.3	1.2	1.2	1.4	1.5	1.5	1.6	1.9	1.8	1.7
EUR	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3
IND	0.7	0.7	0.7	0.7	0.7	1.0	1.0	1.0	1.1	1.2
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.3	0.4	0.6	0.7	0.8	0.9	0.9	1.3	1.9	2.2
MEA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6
REF	0.7	0.7	0.7	0.7	0.6	0.7	0.5	0.4	0.7	0.7
SSA	0.6	0.6	0.6	0.6	0.5	0.6	0.7	0.8	0.8	0.9
USA	1.3	1.4	1.7	1.9	1.7	1.7	2.0	2.5	2.5	2.4

Table 664: FAO — Demand—Seed—Crops—Oil crops (Mt DM/yr)

## 10.1.7 Oil crops—Cotton seed

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

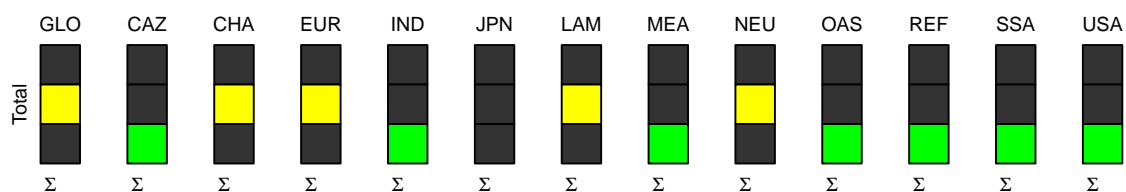
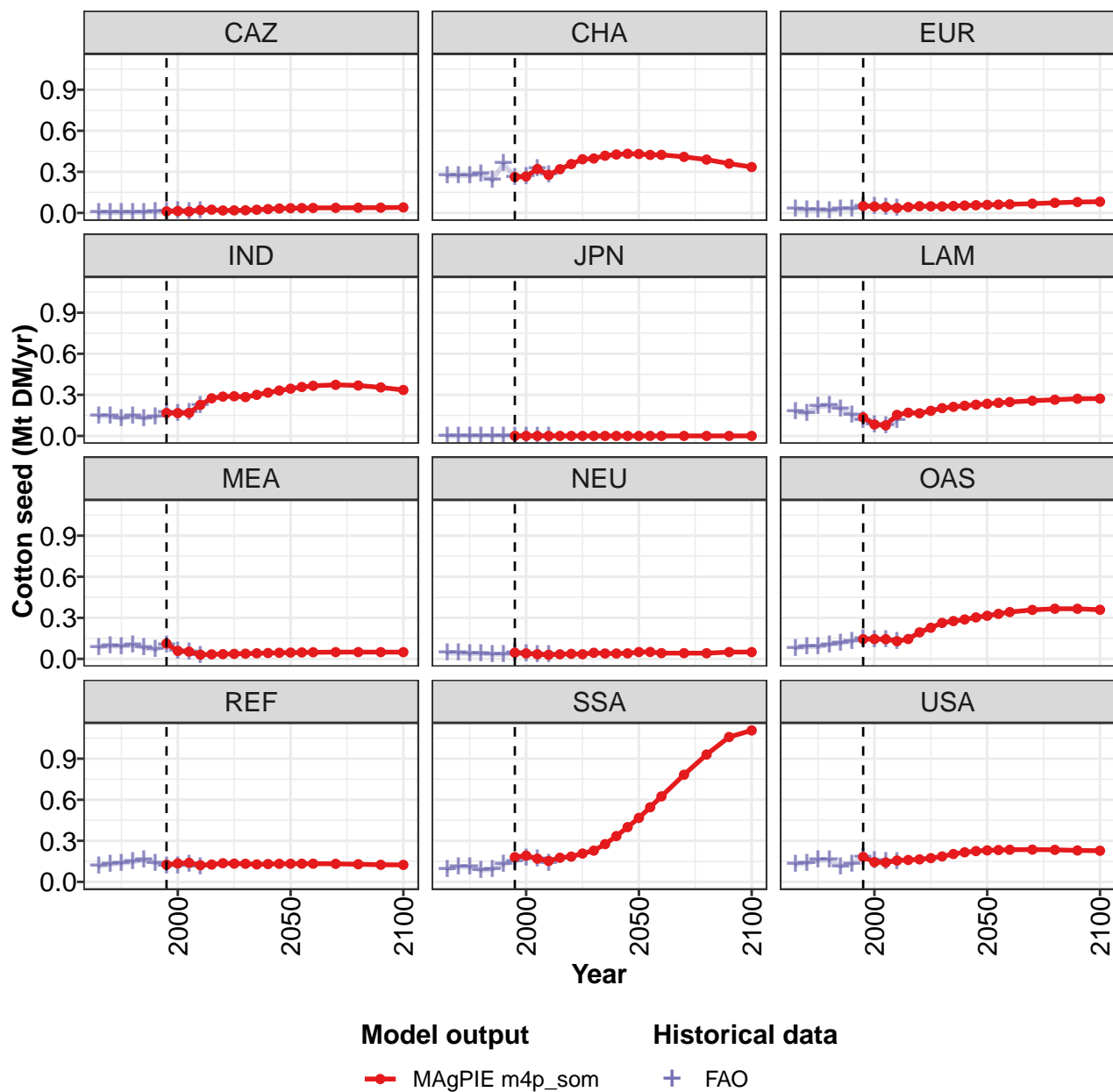


Figure 222: MAGPIE m4p\_som — Demand—Seed—Crops—Oil crops—Cotton seed (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.42	1.29	1.30	1.34	1.51	1.63	1.74	1.84	1.97	2.10	2.22
CAZ	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03
CHA	0.26	0.27	0.32	0.28	0.32	0.36	0.39	0.40	0.42	0.43	0.43
EUR	0.05	0.05	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.06
IND	0.17	0.17	0.17	0.23	0.27	0.29	0.29	0.28	0.30	0.32	0.33
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.14	0.08	0.08	0.15	0.17	0.17	0.18	0.20	0.21	0.22	0.23
MEA	0.11	0.06	0.05	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04
NEU	0.05	0.04	0.03	0.03	0.03	0.04	0.03	0.04	0.04	0.04	0.04
OAS	0.14	0.15	0.14	0.13	0.15	0.19	0.23	0.26	0.28	0.29	0.30
REF	0.13	0.13	0.14	0.12	0.13	0.14	0.13	0.13	0.13	0.13	0.13
SSA	0.18	0.19	0.17	0.15	0.18	0.18	0.21	0.23	0.28	0.33	0.40
USA	0.18	0.14	0.14	0.16	0.16	0.16	0.17	0.19	0.20	0.22	0.23

Table 665: MAgPIE m4p\_som — Demand—Seed—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	2.34	2.46	2.56	2.74	2.88	2.98	2.98
CAZ	0.03	0.04	0.04	0.04	0.04	0.04	0.04
CHA	0.43	0.42	0.42	0.41	0.39	0.36	0.34
EUR	0.06	0.06	0.06	0.07	0.07	0.08	0.08
IND	0.34	0.36	0.37	0.37	0.37	0.35	0.34
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.23	0.24	0.25	0.26	0.26	0.27	0.27
MEA	0.05	0.05	0.05	0.05	0.05	0.05	0.05
NEU	0.05	0.05	0.04	0.04	0.04	0.05	0.05
OAS	0.31	0.33	0.34	0.36	0.37	0.37	0.36
REF	0.13	0.13	0.13	0.13	0.13	0.12	0.12
SSA	0.47	0.54	0.62	0.78	0.93	1.06	1.11
USA	0.23	0.23	0.23	0.24	0.23	0.23	0.23

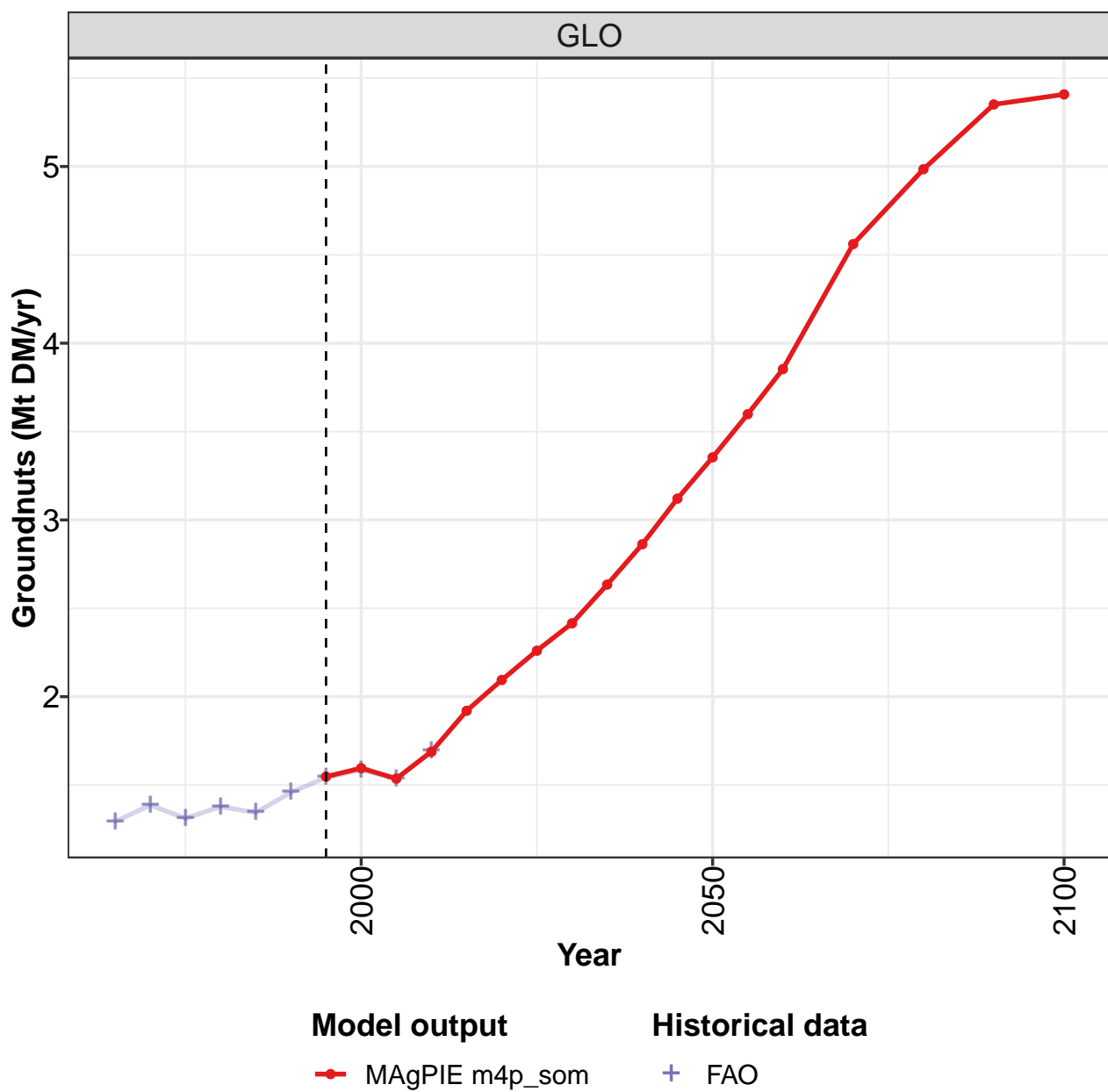
Table 666: MAgPIE m4p\_som — Demand—Seed—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.16	1.20	1.25	1.30	1.19	1.32	1.33	1.25	1.27	1.24
CAZ	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.02
CHA	0.27	0.27	0.27	0.29	0.24	0.36	0.26	0.27	0.32	0.28
EUR	0.03	0.02	0.02	0.02	0.03	0.03	0.05	0.05	0.04	0.04
IND	0.14	0.14	0.13	0.15	0.13	0.14	0.17	0.17	0.17	0.22
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.18	0.17	0.21	0.22	0.20	0.15	0.12	0.08	0.08	0.11
MEA	0.09	0.09	0.09	0.10	0.08	0.07	0.10	0.06	0.05	0.02
NEU	0.04	0.04	0.04	0.04	0.03	0.03	0.04	0.04	0.03	0.03
OAS	0.08	0.09	0.09	0.10	0.12	0.13	0.15	0.14	0.14	0.13
REF	0.11	0.13	0.14	0.15	0.16	0.14	0.12	0.12	0.13	0.11
SSA	0.09	0.11	0.11	0.08	0.09	0.13	0.15	0.18	0.16	0.13
USA	0.13	0.14	0.16	0.16	0.11	0.13	0.18	0.15	0.15	0.15

Table 667: FAO — Demand—Seed—Crops—Oil crops—Cotton seed (Mt DM/yr)

## 10.1.8 Oil crops—Groundnuts

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

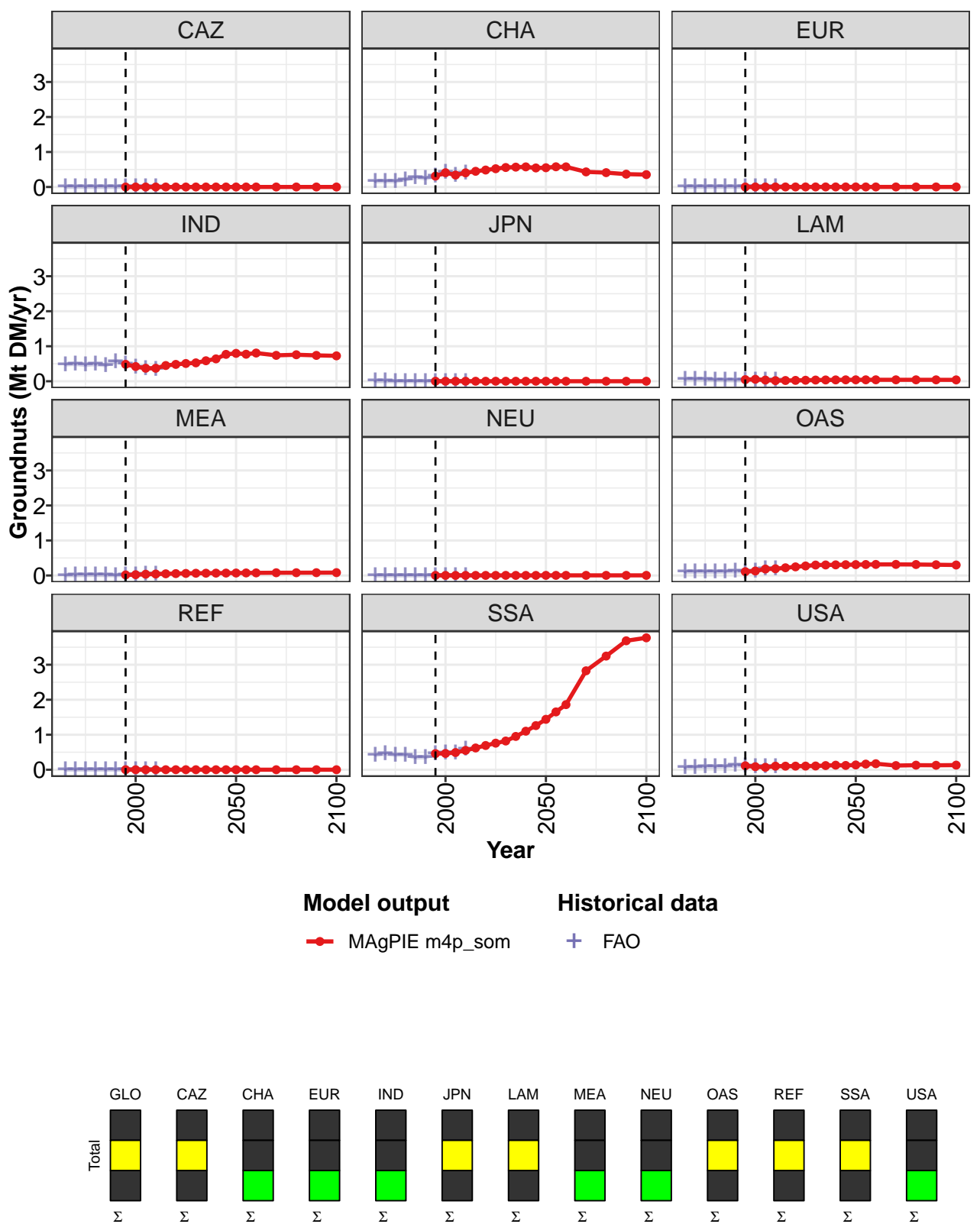


Figure 223: MAGPIE m4p\_som — Demand—Seed—Crops—Oil crops—Groundnuts (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.55	1.60	1.54	1.69	1.92	2.09	2.26	2.42	2.63	2.86	3.12
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.31	0.41	0.34	0.40	0.45	0.49	0.52	0.56	0.57	0.57	0.54
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.48	0.42	0.37	0.37	0.45	0.48	0.51	0.53	0.59	0.64	0.77
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.05	0.06	0.03	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.04
MEA	0.02	0.02	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.07
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.11	0.13	0.19	0.19	0.22	0.25	0.27	0.30	0.30	0.30	0.31
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.46	0.47	0.49	0.55	0.62	0.69	0.76	0.82	0.95	1.10	1.26
USA	0.11	0.09	0.07	0.10	0.10	0.10	0.10	0.11	0.12	0.13	0.12

Table 668: MAgPIE m4p\_som — Demand—Seed—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	3.35	3.60	3.85	4.56	4.98	5.35	5.41
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.55	0.58	0.58	0.43	0.41	0.37	0.35
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.80	0.77	0.81	0.74	0.76	0.74	0.73
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.04	0.04	0.04	0.04	0.04	0.04	0.04
MEA	0.07	0.07	0.07	0.08	0.08	0.08	0.08
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.31	0.31	0.32	0.32	0.31	0.31	0.30
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	1.44	1.65	1.86	2.83	3.25	3.68	3.77
USA	0.14	0.16	0.17	0.12	0.13	0.13	0.13

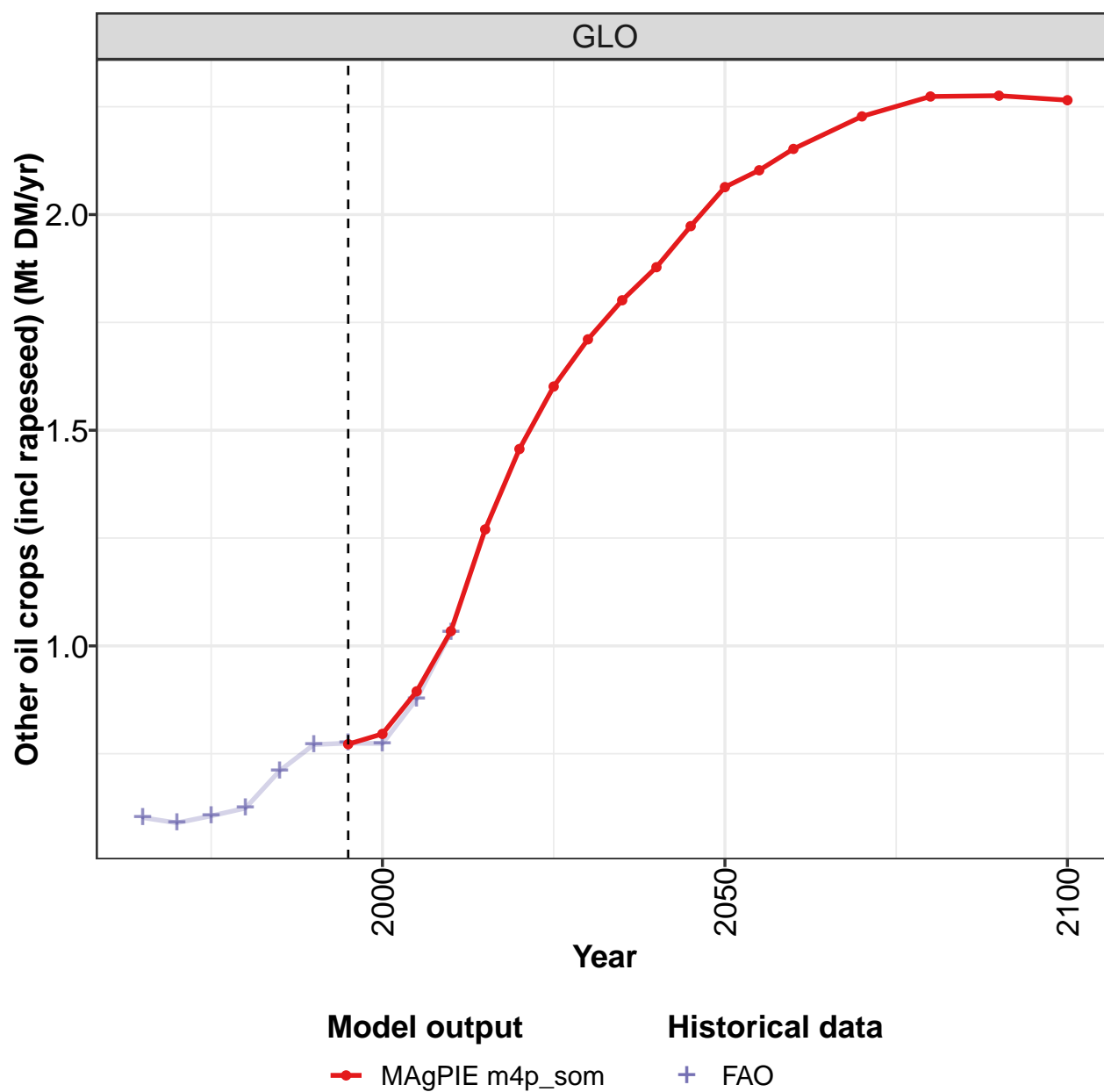
Table 669: MAgPIE m4p\_som — Demand—Seed—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.29	1.39	1.31	1.38	1.34	1.46	1.54	1.59	1.53	1.69
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.16	0.17	0.16	0.22	0.28	0.25	0.31	0.43	0.34	0.39
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.48	0.49	0.46	0.49	0.46	0.57	0.50	0.41	0.37	0.35
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.06	0.06	0.05	0.04	0.03	0.03	0.03	0.04	0.03	0.04
MEA	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.02	0.04	0.04
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.10	0.11	0.11	0.10	0.11	0.12	0.11	0.13	0.19	0.19
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.42	0.46	0.42	0.43	0.35	0.35	0.46	0.47	0.49	0.58
USA	0.06	0.08	0.08	0.08	0.09	0.12	0.10	0.08	0.08	0.09

Table 670: FAO — Demand—Seed—Crops—Oil crops—Groundnuts (Mt DM/yr)

## 10.1.9 Oil crops—Other oil crops (incl rapeseed)

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

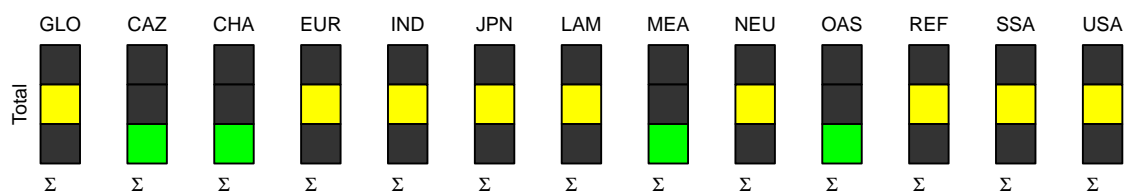
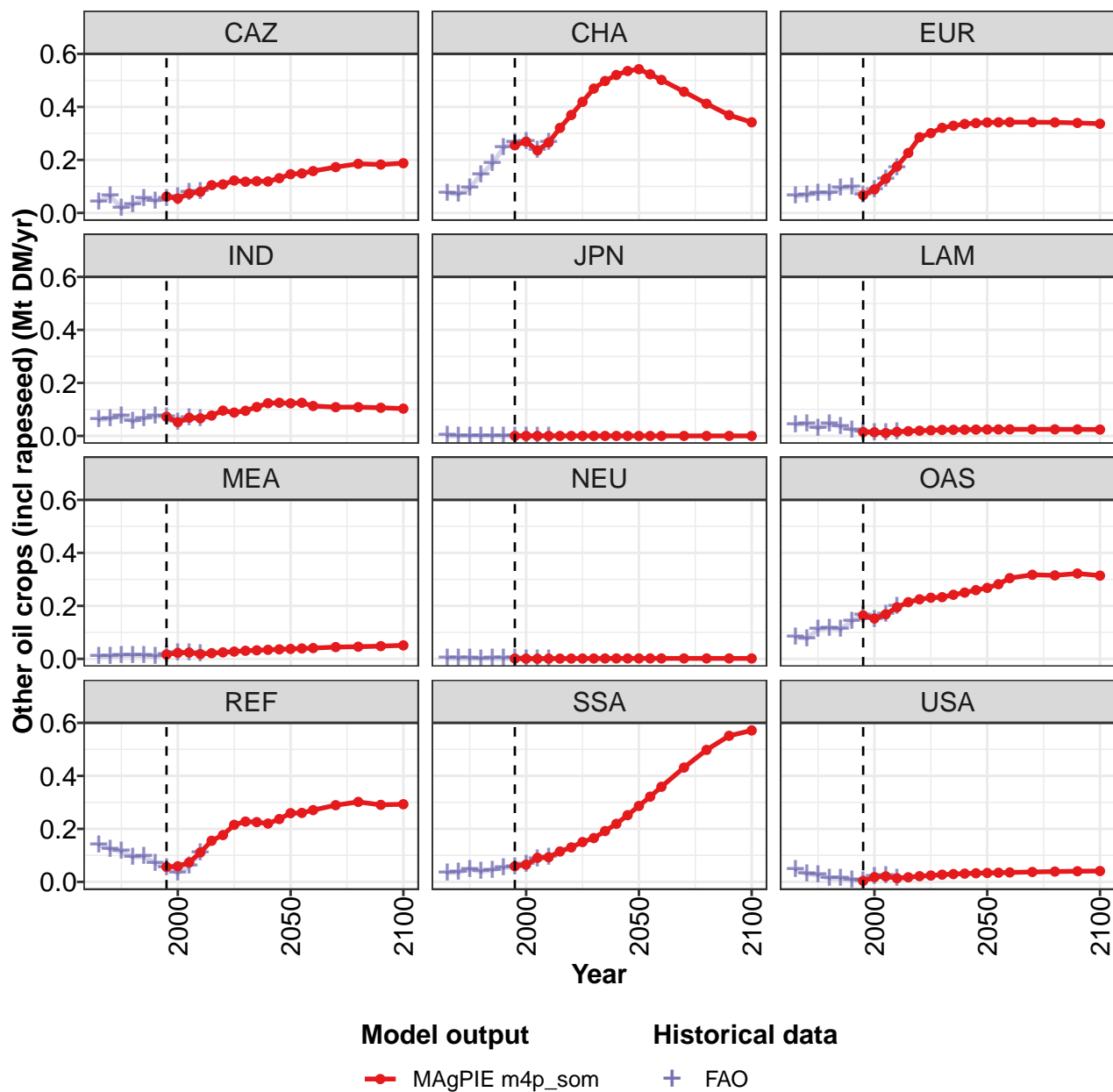


Figure 224: MAgPIE m4p\_som — Demand—Seed—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.77	0.80	0.89	1.03	1.27	1.46	1.60	1.71	1.80	1.88	1.97
CAZ	0.06	0.05	0.07	0.08	0.10	0.11	0.12	0.12	0.12	0.12	0.13
CHA	0.26	0.27	0.24	0.27	0.32	0.37	0.42	0.47	0.50	0.52	0.54
EUR	0.07	0.09	0.13	0.18	0.23	0.29	0.30	0.32	0.33	0.34	0.34
IND	0.07	0.05	0.07	0.07	0.08	0.10	0.09	0.09	0.11	0.12	0.13
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
MEA	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.04
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.16	0.15	0.17	0.19	0.21	0.22	0.23	0.23	0.24	0.25	0.26
REF	0.06	0.06	0.07	0.11	0.16	0.18	0.22	0.23	0.23	0.22	0.24
SSA	0.06	0.07	0.09	0.09	0.11	0.13	0.15	0.17	0.19	0.22	0.25
USA	0.00	0.02	0.02	0.01	0.02	0.02	0.02	0.03	0.03	0.03	0.03

Table 671: MAgPIE m4p\_som — Demand—Seed—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	2.06	2.10	2.15	2.23	2.27	2.28	2.27
CAZ	0.15	0.15	0.16	0.17	0.19	0.18	0.19
CHA	0.54	0.52	0.50	0.46	0.41	0.37	0.34
EUR	0.34	0.34	0.34	0.34	0.34	0.34	0.34
IND	0.12	0.12	0.11	0.11	0.11	0.11	0.10
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.02	0.02	0.02	0.02	0.02	0.02	0.02
MEA	0.04	0.04	0.04	0.04	0.05	0.05	0.05
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.27	0.28	0.30	0.32	0.32	0.32	0.31
REF	0.26	0.26	0.27	0.29	0.30	0.29	0.29
SSA	0.29	0.32	0.36	0.43	0.50	0.55	0.57
USA	0.03	0.03	0.04	0.04	0.04	0.04	0.04

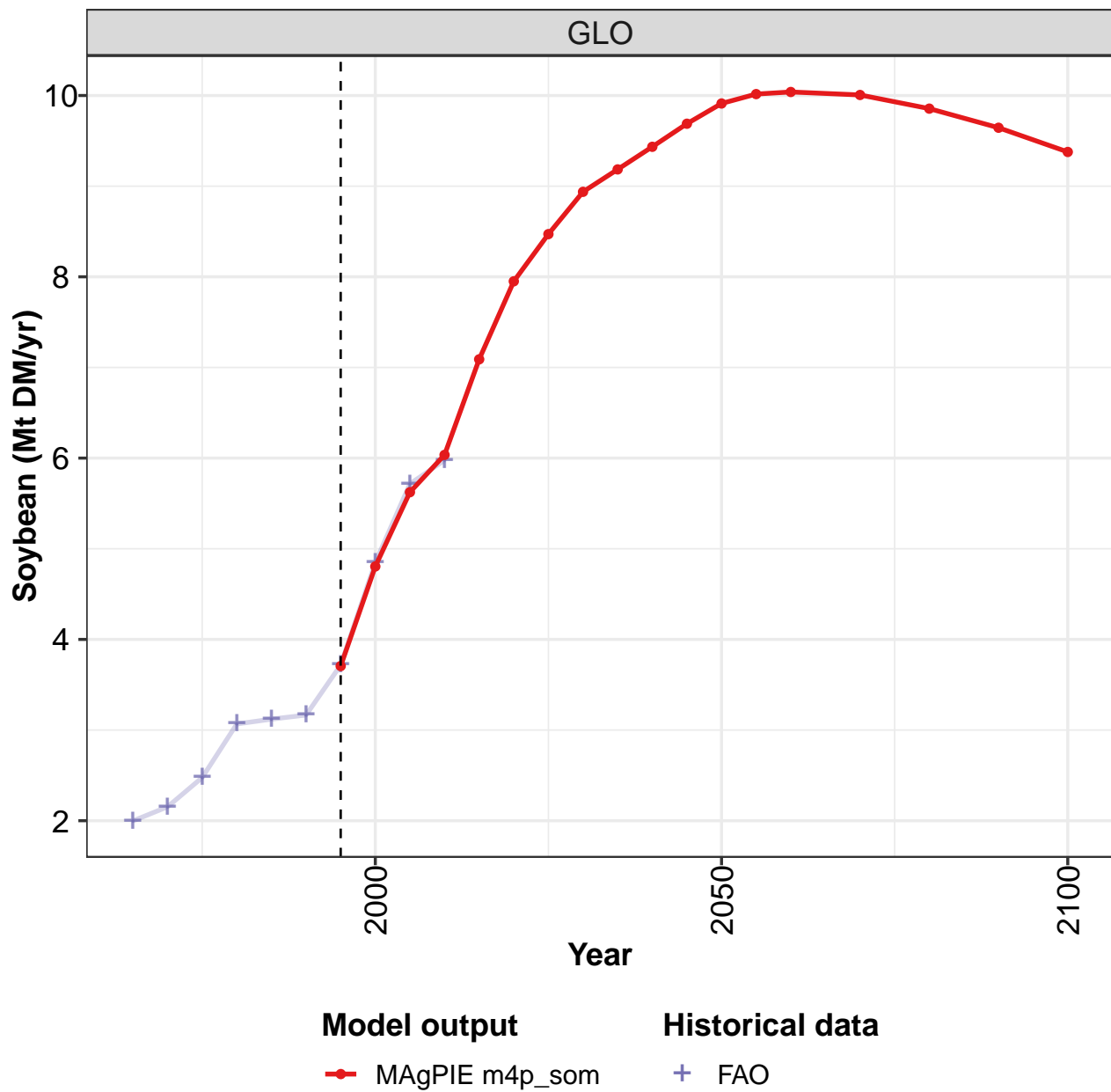
Table 672: MAgPIE m4p\_som — Demand—Seed—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.60	0.59	0.61	0.62	0.71	0.77	0.77	0.77	0.88	1.03
CAZ	0.04	0.06	0.02	0.03	0.05	0.05	0.05	0.06	0.08	0.08
CHA	0.08	0.07	0.09	0.14	0.19	0.25	0.27	0.27	0.23	0.27
EUR	0.06	0.07	0.08	0.07	0.09	0.10	0.07	0.09	0.13	0.17
IND	0.06	0.07	0.08	0.05	0.07	0.07	0.07	0.05	0.07	0.07
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.04	0.04	0.03	0.04	0.04	0.02	0.01	0.01	0.01	0.02
MEA	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.08	0.08	0.11	0.12	0.11	0.14	0.17	0.15	0.17	0.20
REF	0.14	0.12	0.11	0.09	0.10	0.07	0.05	0.03	0.06	0.11
SSA	0.03	0.04	0.05	0.04	0.04	0.05	0.06	0.07	0.09	0.09
USA	0.05	0.03	0.03	0.01	0.01	0.01	0.00	0.02	0.02	0.01

Table 673: FAO — Demand—Seed—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

## 10.1.10 Oil crops—Soybean

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

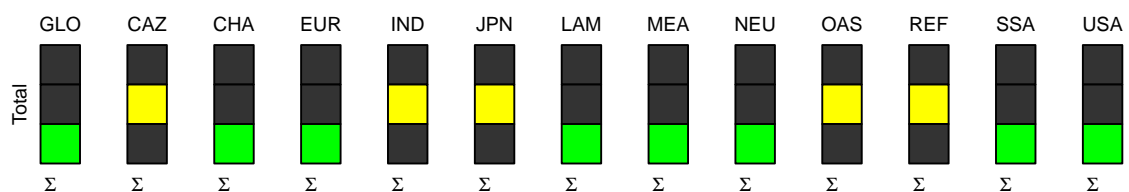
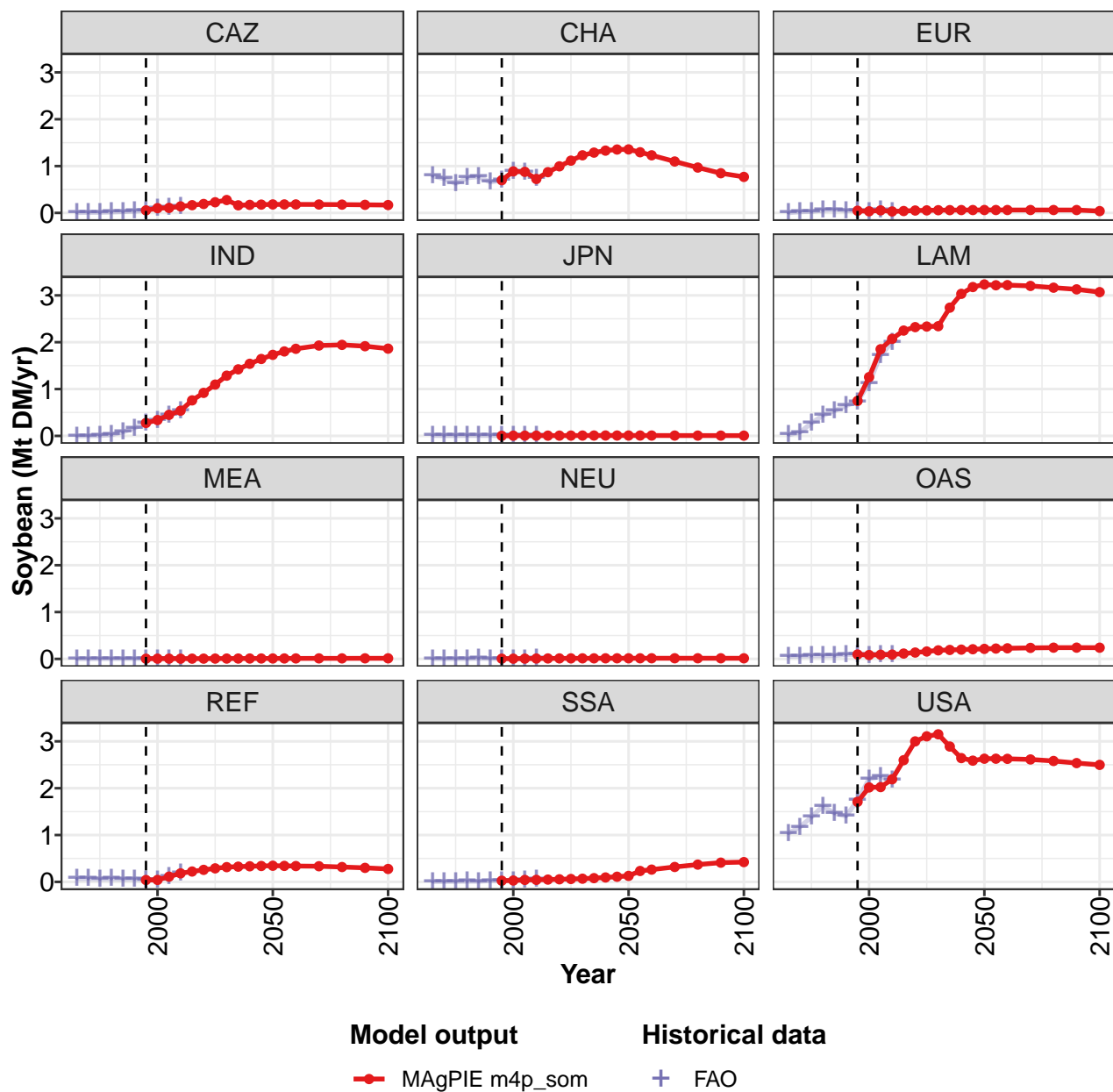


Figure 225: MAGPIE m4p\_som — Demand—Seed—Crops—Oil crops—Soybean (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	3.7	4.8	5.6	6.0	7.1	8.0	8.5	8.9	9.2	9.4	9.7
CAZ	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.2
CHA	0.7	0.9	0.9	0.7	0.9	1.0	1.1	1.2	1.3	1.3	1.4
EUR	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
IND	0.3	0.3	0.4	0.5	0.8	0.9	1.1	1.3	1.4	1.5	1.6
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.7	1.3	1.9	2.1	2.2	2.3	2.3	2.3	2.7	3.0	3.2
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
REF	0.0	0.0	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
SSA	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
USA	1.7	2.0	2.0	2.2	2.6	3.0	3.1	3.2	2.9	2.6	2.6

Table 674: MAgPIE m4p\_som — Demand—Seed—Crops—Oil crops—Soybean (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	9.9	10.0	10.0	10.0	9.9	9.6	9.4
CAZ	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CHA	1.4	1.3	1.2	1.1	1.0	0.8	0.8
EUR	0.1	0.1	0.1	0.1	0.1	0.1	0.0
IND	1.7	1.8	1.9	1.9	1.9	1.9	1.9
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	3.2	3.2	3.2	3.2	3.2	3.1	3.1
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.2	0.2	0.2	0.2	0.2	0.2	0.2
REF	0.3	0.3	0.3	0.3	0.3	0.3	0.3
SSA	0.1	0.2	0.3	0.3	0.4	0.4	0.4
USA	2.6	2.6	2.6	2.6	2.6	2.5	2.5

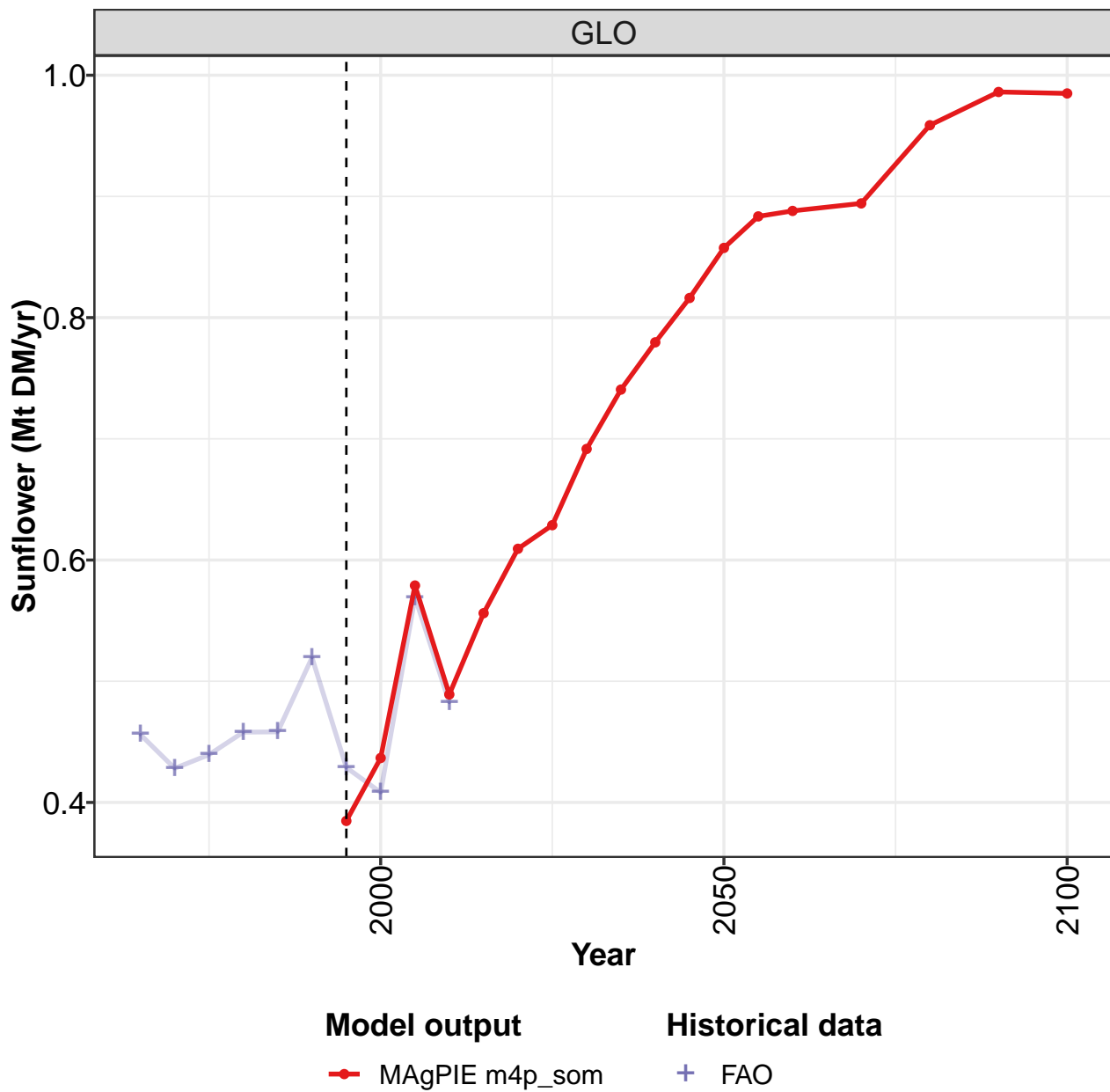
Table 675: MAgPIE m4p\_som — Demand—Seed—Crops—Oil crops—Soybean (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.00	2.15	2.48	3.07	3.12	3.17	3.72	4.85	5.72	5.98
CAZ	0.01	0.01	0.01	0.02	0.03	0.04	0.05	0.10	0.11	0.14
CHA	0.79	0.73	0.63	0.75	0.77	0.66	0.70	0.88	0.87	0.74
EUR	0.00	0.02	0.03	0.06	0.07	0.05	0.05	0.04	0.06	0.03
IND	0.00	0.00	0.01	0.03	0.08	0.17	0.28	0.34	0.44	0.54
JPN	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01
LAM	0.02	0.08	0.27	0.44	0.54	0.65	0.73	1.12	1.72	2.00
MEA	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00
NEU	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.01
OAS	0.06	0.06	0.07	0.07	0.07	0.09	0.09	0.08	0.09	0.09
REF	0.07	0.07	0.06	0.07	0.06	0.06	0.04	0.04	0.12	0.18
SSA	0.01	0.01	0.01	0.01	0.01	0.03	0.03	0.03	0.04	0.05
USA	1.04	1.17	1.38	1.62	1.46	1.40	1.74	2.20	2.25	2.18

Table 676: FAO — Demand—Seed—Crops—Oil crops—Soybean (Mt DM/yr)

## 10.1.11 Oil crops—Sunflower

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

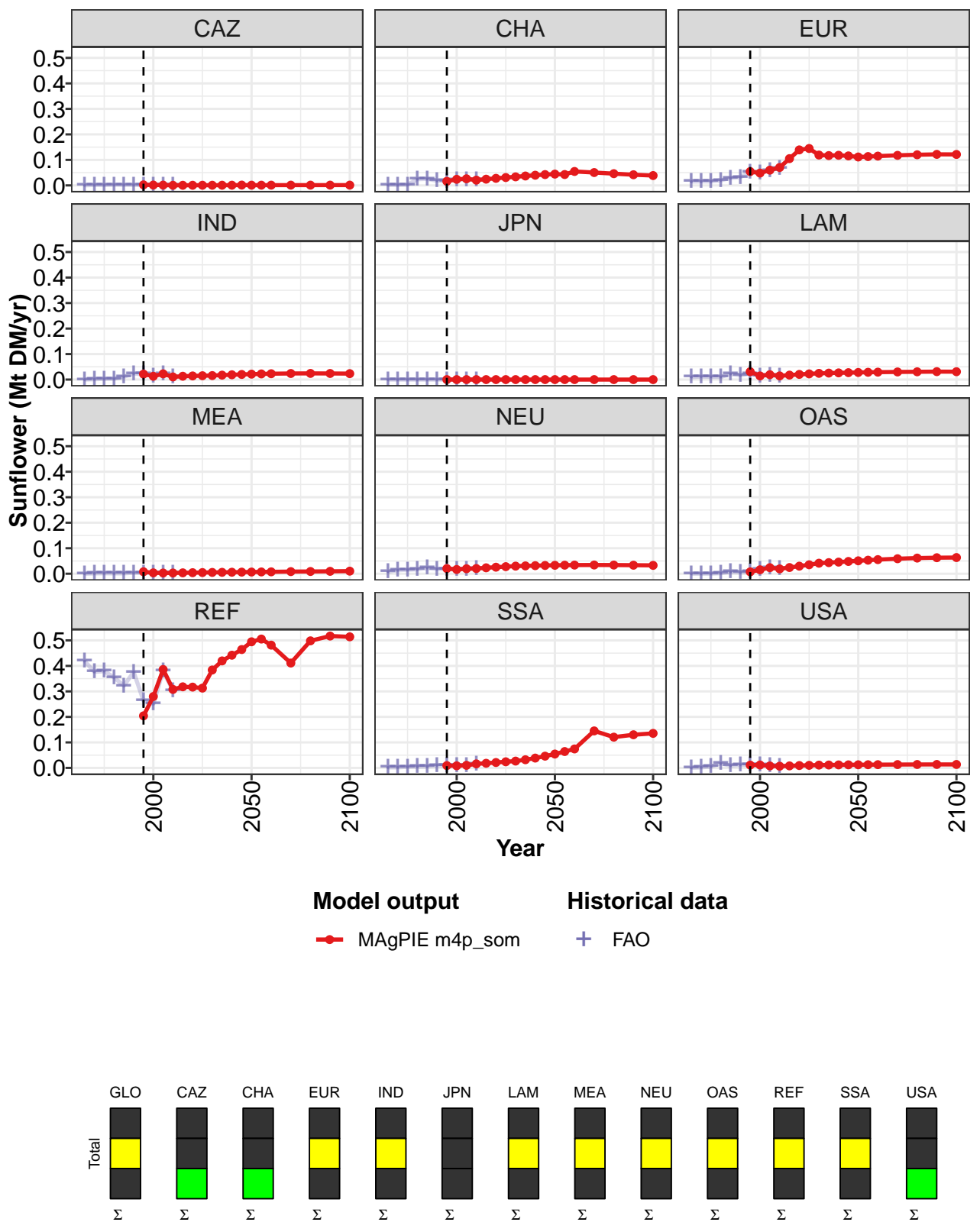


Figure 226: MAGPIE m4p\_som — Demand—Seed—Crops—Oil crops—Sunflower (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.385	0.437	0.579	0.489	0.556	0.609	0.629	0.692	0.741	0.780	0.816
CAZ	0.002	0.001	0.001	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001
CHA	0.016	0.024	0.026	0.021	0.024	0.028	0.031	0.034	0.037	0.040	0.042
EUR	0.054	0.048	0.060	0.070	0.105	0.139	0.145	0.119	0.117	0.118	0.116
IND	0.021	0.013	0.023	0.010	0.013	0.014	0.015	0.016	0.017	0.019	0.020
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.031	0.014	0.019	0.014	0.018	0.020	0.022	0.024	0.025	0.026	0.027
MEA	0.008	0.004	0.003	0.003	0.004	0.004	0.005	0.005	0.006	0.006	0.006
NEU	0.020	0.017	0.020	0.020	0.023	0.026	0.028	0.030	0.031	0.032	0.032
OAS	0.007	0.016	0.024	0.019	0.024	0.030	0.035	0.041	0.044	0.046	0.048
REF	0.204	0.280	0.386	0.308	0.318	0.317	0.313	0.384	0.420	0.442	0.464
SSA	0.009	0.008	0.010	0.016	0.018	0.021	0.024	0.027	0.032	0.039	0.046
USA	0.011	0.011	0.008	0.007	0.008	0.009	0.010	0.011	0.011	0.012	0.012

Table 677: MAgPIE m4p\_som — Demand—Seed—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.858	0.884	0.888	0.894	0.959	0.986	0.985
CAZ	0.001	0.001	0.001	0.001	0.001	0.001	0.001
CHA	0.044	0.043	0.055	0.050	0.046	0.042	0.039
EUR	0.111	0.113	0.115	0.118	0.120	0.122	0.121
IND	0.021	0.022	0.023	0.024	0.024	0.024	0.023
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.028	0.029	0.029	0.030	0.031	0.031	0.031
MEA	0.007	0.007	0.008	0.008	0.009	0.009	0.010
NEU	0.033	0.034	0.034	0.034	0.034	0.033	0.033
OAS	0.051	0.053	0.055	0.059	0.061	0.063	0.064
REF	0.495	0.505	0.481	0.411	0.498	0.517	0.514
SSA	0.054	0.064	0.074	0.145	0.121	0.130	0.135
USA	0.012	0.013	0.013	0.013	0.013	0.014	0.014

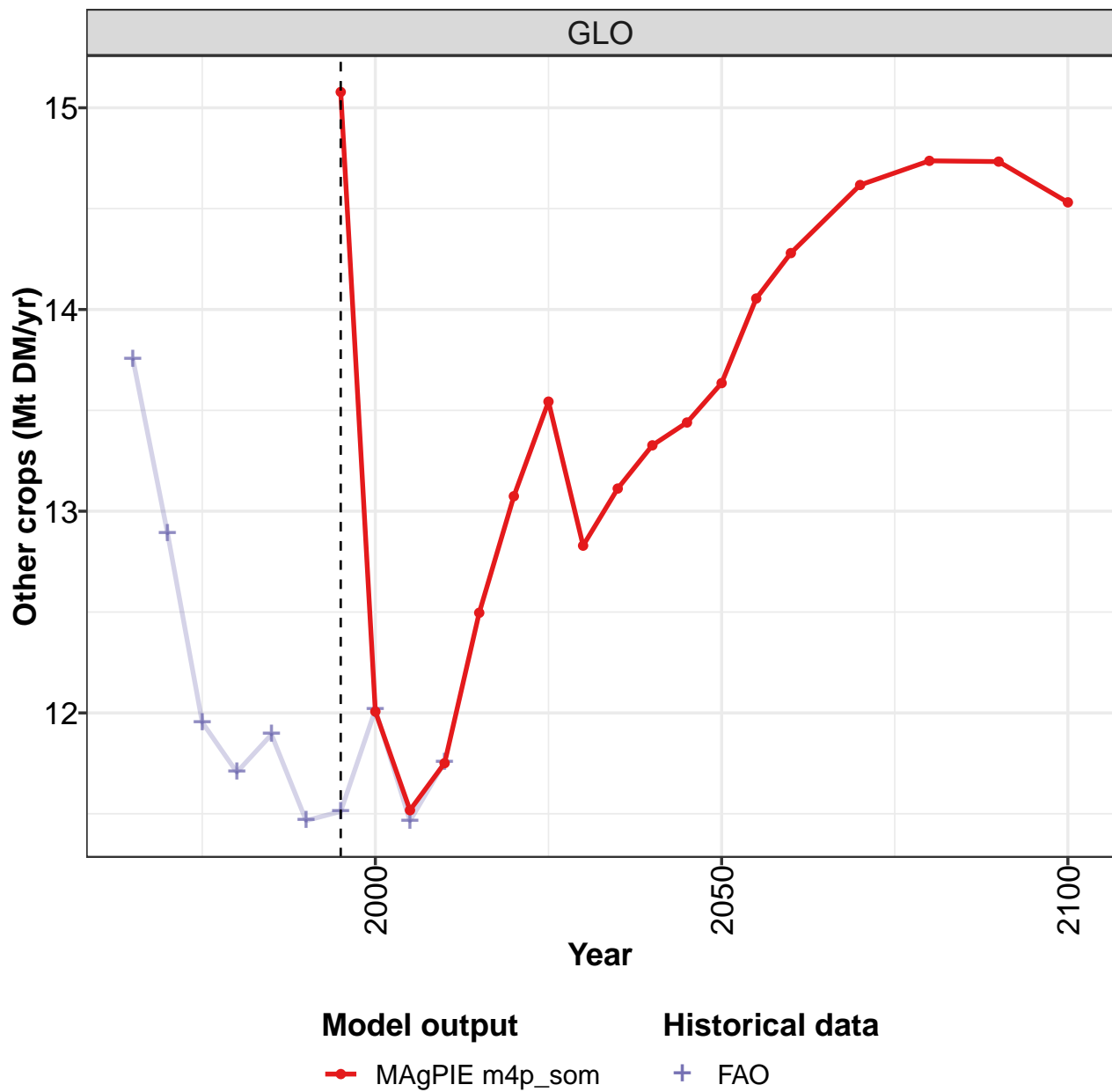
Table 678: MAgPIE m4p\_som — Demand—Seed—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.456	0.428	0.439	0.458	0.458	0.519	0.429	0.408	0.569	0.482
CAZ	0.000	0.002	0.001	0.003	0.002	0.002	0.001	0.001	0.001	0.000
CHA	0.002	0.002	0.003	0.024	0.026	0.018	0.016	0.024	0.023	0.022
EUR	0.015	0.016	0.016	0.020	0.029	0.033	0.053	0.048	0.059	0.068
IND	0.000	0.001	0.003	0.003	0.011	0.024	0.021	0.013	0.024	0.010
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.010	0.012	0.011	0.010	0.022	0.017	0.024	0.015	0.017	0.014
MEA	0.000	0.001	0.002	0.001	0.002	0.004	0.004	0.004	0.003	0.003
NEU	0.008	0.014	0.015	0.017	0.022	0.018	0.018	0.016	0.019	0.020
OAS	0.000	0.000	0.000	0.002	0.007	0.005	0.007	0.016	0.024	0.019
REF	0.419	0.377	0.380	0.354	0.322	0.376	0.263	0.251	0.381	0.302
SSA	0.002	0.002	0.004	0.005	0.006	0.010	0.009	0.008	0.010	0.016
USA	0.000	0.002	0.005	0.018	0.009	0.012	0.011	0.012	0.009	0.007

Table 679: FAO — Demand—Seed—Crops—Oil crops—Sunflower (Mt DM/yr)

## 10.1.12 Other crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

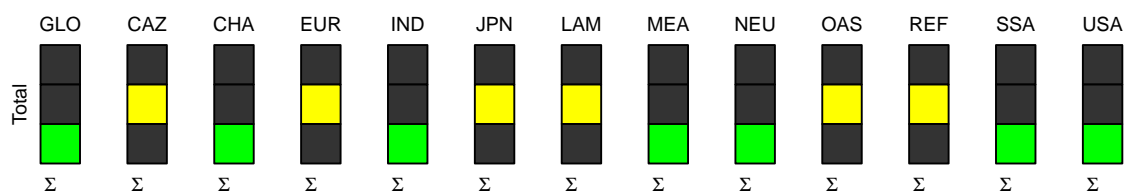
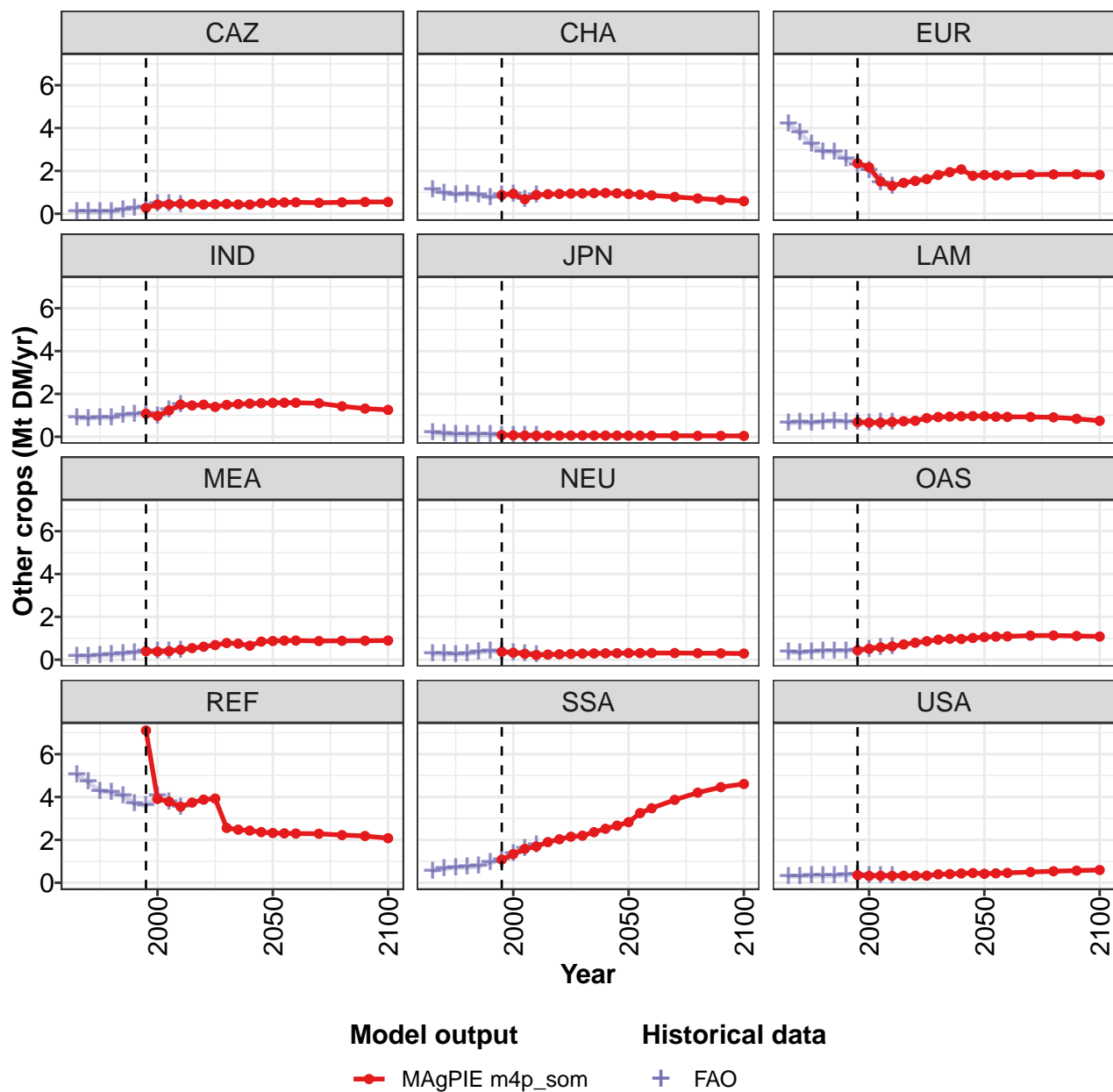


Figure 227: MAgPIE m4p\_som — Demand—Seed—Crops—Other crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	15.1	12.0	11.5	11.8	12.5	13.1	13.5	12.8	13.1	13.3	13.4
CAZ	0.3	0.4	0.4	0.5	0.5	0.4	0.4	0.5	0.4	0.4	0.5
CHA	0.9	0.9	0.7	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0
EUR	2.4	2.2	1.5	1.3	1.4	1.5	1.6	1.8	1.9	2.1	1.8
IND	1.1	1.0	1.2	1.5	1.5	1.5	1.4	1.5	1.5	1.5	1.6
JPN	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.7	0.7	0.7	0.7	0.7	0.7	0.9	0.9	0.9	1.0	1.0
MEA	0.4	0.4	0.4	0.5	0.5	0.6	0.7	0.8	0.8	0.7	0.8
NEU	0.4	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
OAS	0.4	0.5	0.6	0.6	0.7	0.8	0.9	0.9	1.0	1.0	1.0
REF	7.1	3.9	3.8	3.5	3.7	3.9	3.9	2.6	2.5	2.4	2.4
SSA	1.1	1.3	1.6	1.7	1.9	2.0	2.1	2.2	2.4	2.5	2.7
USA	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5

Table 680: MAgPIE m4p\_som — Demand—Seed—Crops—Other crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	13.6	14.1	14.3	14.6	14.7	14.7	14.5
CAZ	0.5	0.5	0.5	0.5	0.5	0.6	0.6
CHA	0.9	0.9	0.9	0.8	0.7	0.6	0.6
EUR	1.8	1.8	1.8	1.8	1.8	1.8	1.8
IND	1.6	1.6	1.6	1.6	1.4	1.3	1.3
JPN	0.1	0.1	0.0	0.0	0.0	0.0	0.0
LAM	1.0	0.9	0.9	0.9	0.9	0.8	0.7
MEA	0.9	0.9	0.9	0.9	0.9	0.9	0.9
NEU	0.3	0.3	0.3	0.3	0.3	0.3	0.3
OAS	1.1	1.1	1.1	1.1	1.1	1.1	1.1
REF	2.3	2.3	2.3	2.3	2.2	2.2	2.1
SSA	2.8	3.3	3.5	3.9	4.2	4.5	4.6
USA	0.4	0.4	0.5	0.5	0.5	0.6	0.6

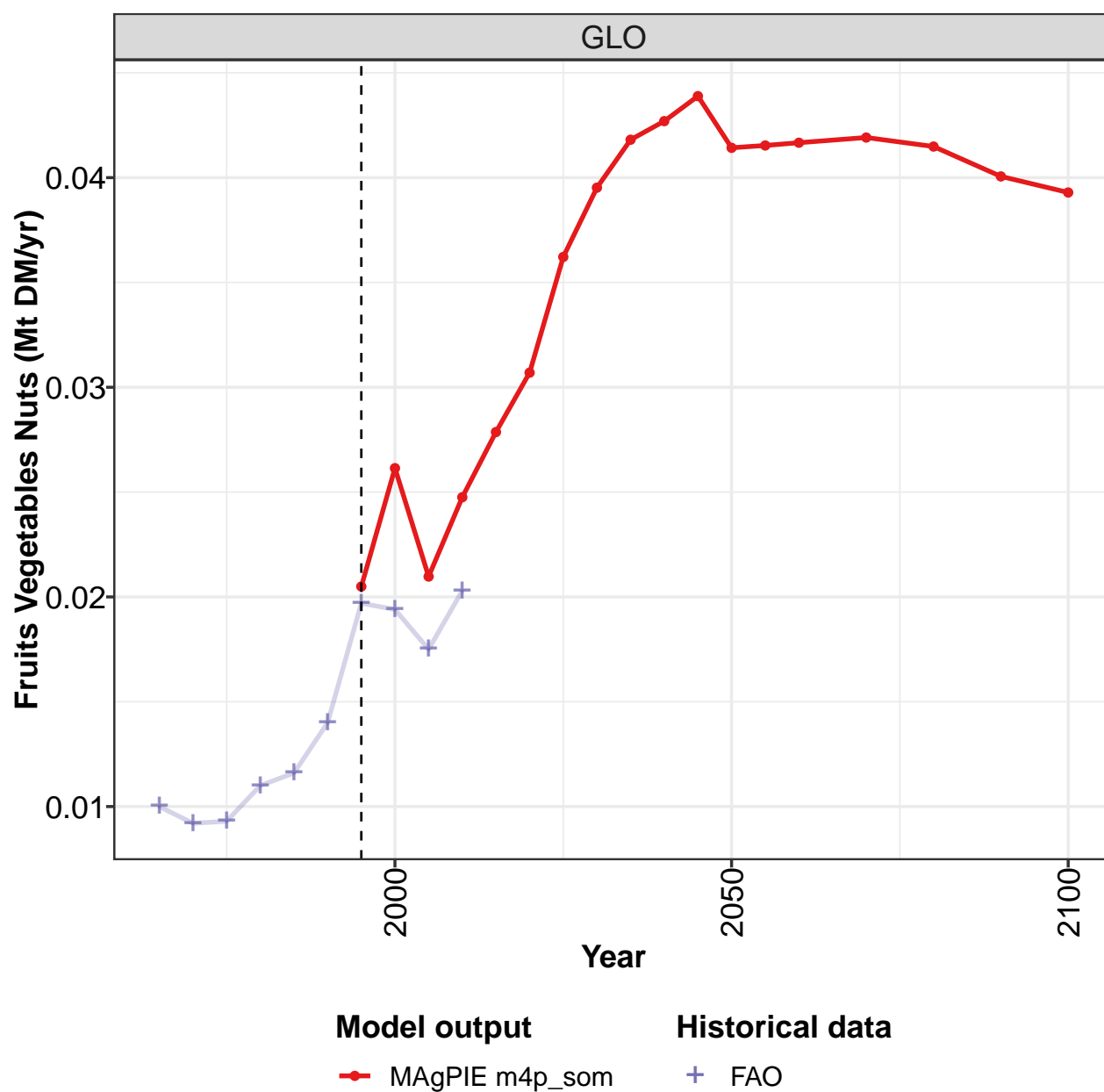
Table 681: MAgPIE m4p\_som — Demand—Seed—Crops—Other crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	13.8	12.9	12.0	11.7	11.9	11.5	11.5	12.0	11.5	11.8
CAZ	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.5	0.5	0.4
CHA	1.1	1.0	0.9	0.9	0.9	0.8	0.9	0.9	0.7	0.9
EUR	4.2	3.8	3.2	2.9	2.9	2.6	2.3	2.0	1.5	1.3
IND	0.9	0.9	0.9	0.9	1.0	1.0	1.1	1.0	1.2	1.5
JPN	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
LAM	0.6	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
MEA	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.5
NEU	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.2
OAS	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.6
REF	5.0	4.7	4.3	4.2	4.1	3.7	3.6	4.0	3.8	3.5
SSA	0.5	0.6	0.7	0.7	0.8	0.9	1.1	1.3	1.6	1.8
USA	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3

Table 682: FAO — Demand—Seed—Crops—Other crops (Mt DM/yr)

## 10.1.13 Other crops—Fruits Vegetables Nuts

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

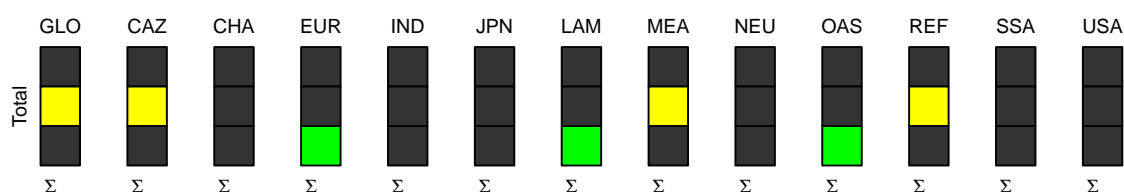
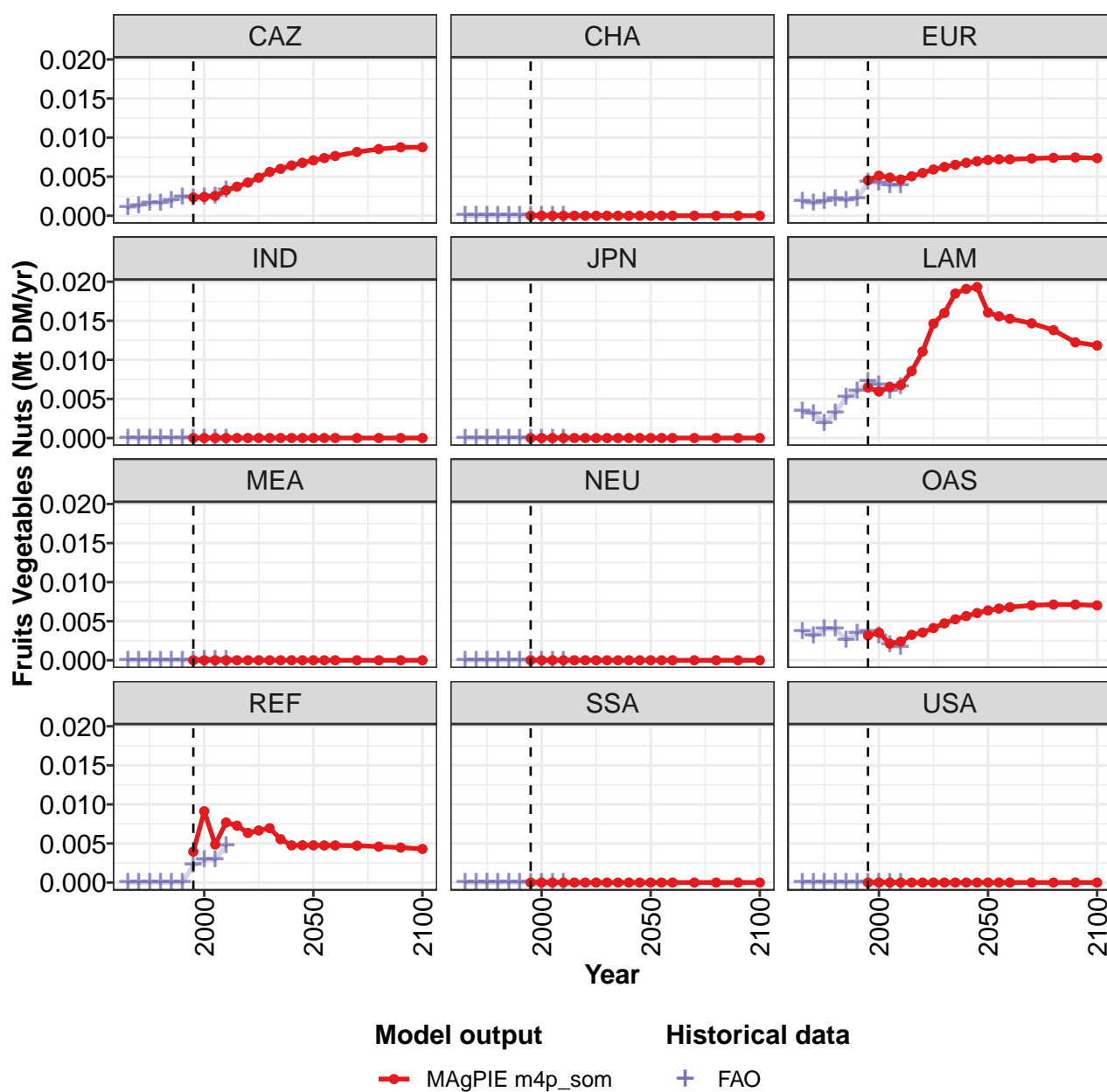


Figure 228: MAGPIE m4p\_som — Demand—Seed—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.0205	0.0261	0.0210	0.0248	0.0279	0.0307	0.0362	0.0395	0.0418	0.0427	0.0439
CAZ	0.0023	0.0024	0.0025	0.0033	0.0037	0.0043	0.0049	0.0056	0.0060	0.0064	0.0068
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0045	0.0051	0.0049	0.0046	0.0050	0.0055	0.0059	0.0062	0.0065	0.0068	0.0070
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0065	0.0059	0.0065	0.0068	0.0086	0.0111	0.0146	0.0160	0.0185	0.0191	0.0193
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0032	0.0035	0.0021	0.0024	0.0033	0.0036	0.0041	0.0047	0.0052	0.0057	0.0060
REF	0.0040	0.0091	0.0049	0.0077	0.0073	0.0064	0.0067	0.0070	0.0055	0.0048	0.0048
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 683: MAgPIE m4p\_som — Demand—Seed—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0414	0.0415	0.0417	0.0419	0.0415	0.0401	0.0393
CAZ	0.0071	0.0074	0.0076	0.0082	0.0085	0.0088	0.0088
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0071	0.0072	0.0072	0.0073	0.0074	0.0075	0.0074
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0161	0.0156	0.0153	0.0147	0.0138	0.0122	0.0118
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0064	0.0066	0.0068	0.0070	0.0071	0.0071	0.0070
REF	0.0048	0.0047	0.0047	0.0047	0.0046	0.0045	0.0043
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 684: MAgPIE m4p\_som — Demand—Seed—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)  
[PART 2/2]

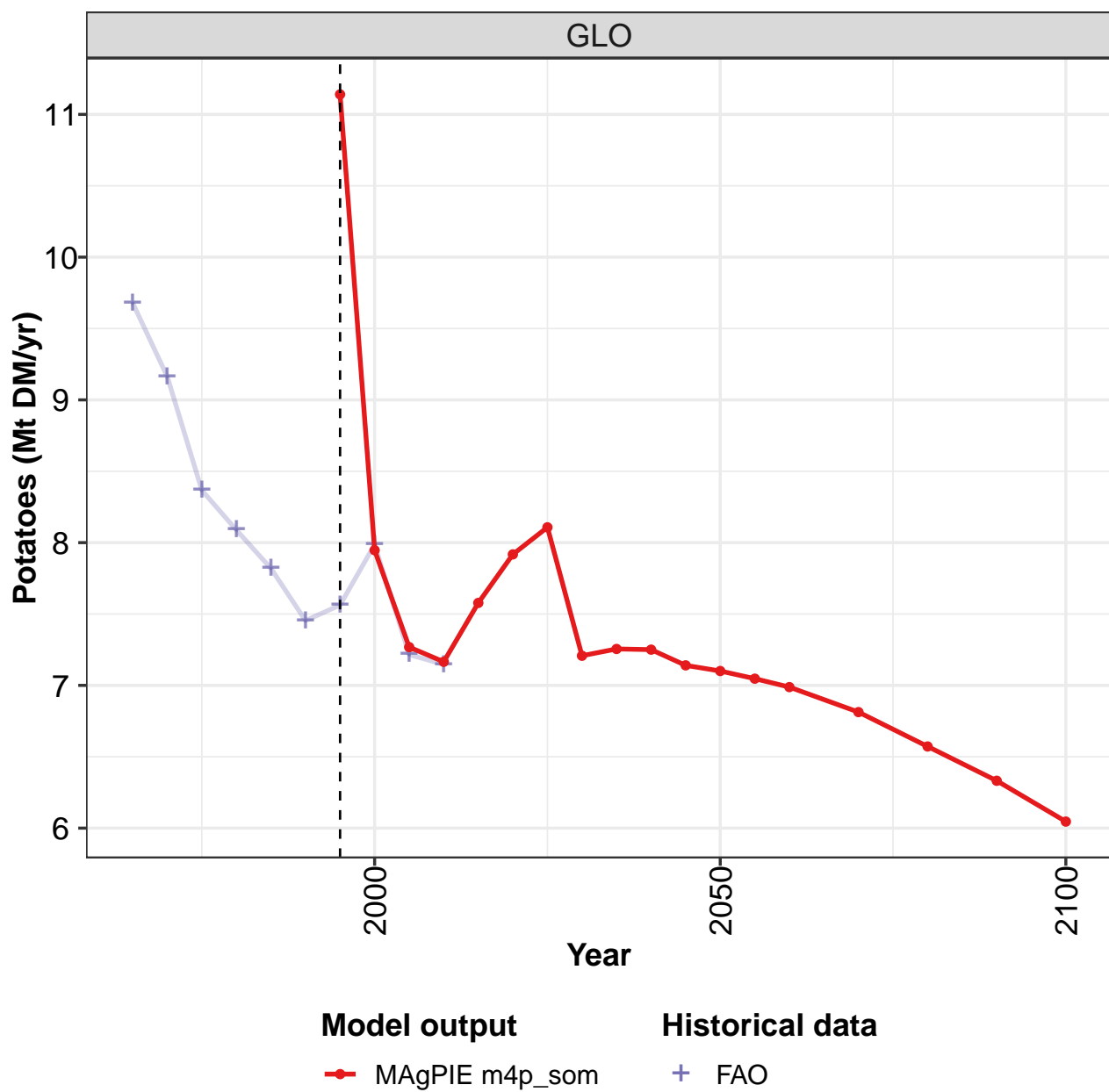
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0100	0.0092	0.0093	0.0110	0.0116	0.0140	0.0197	0.0194	0.0175	0.0203
CAZ	0.0010	0.0013	0.0016	0.0016	0.0019	0.0024	0.0023	0.0024	0.0025	0.0033
CHA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
EUR	0.0018	0.0016	0.0018	0.0022	0.0020	0.0022	0.0043	0.0042	0.0039	0.0039
IND	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JPN	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LAM	0.0034	0.0031	0.0019	0.0032	0.0052	0.0060	0.0072	0.0068	0.0060	0.0066
MEA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001
NEU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
OAS	0.0037	0.0031	0.0040	0.0040	0.0026	0.0035	0.0037	0.0031	0.0020	0.0017
REF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0022	0.0029	0.0029	0.0047
SSA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
USA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 685: FAO — Demand—Seed—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)



## 10.1.14 Other crops—Potatoes

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

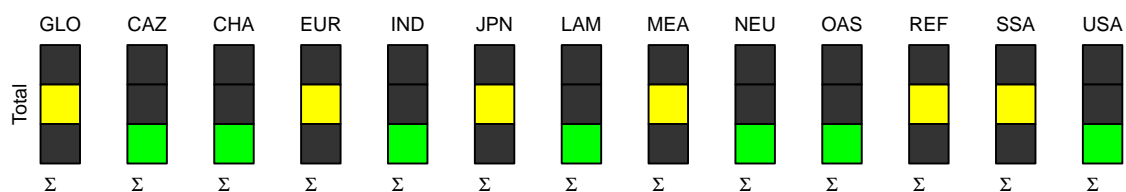
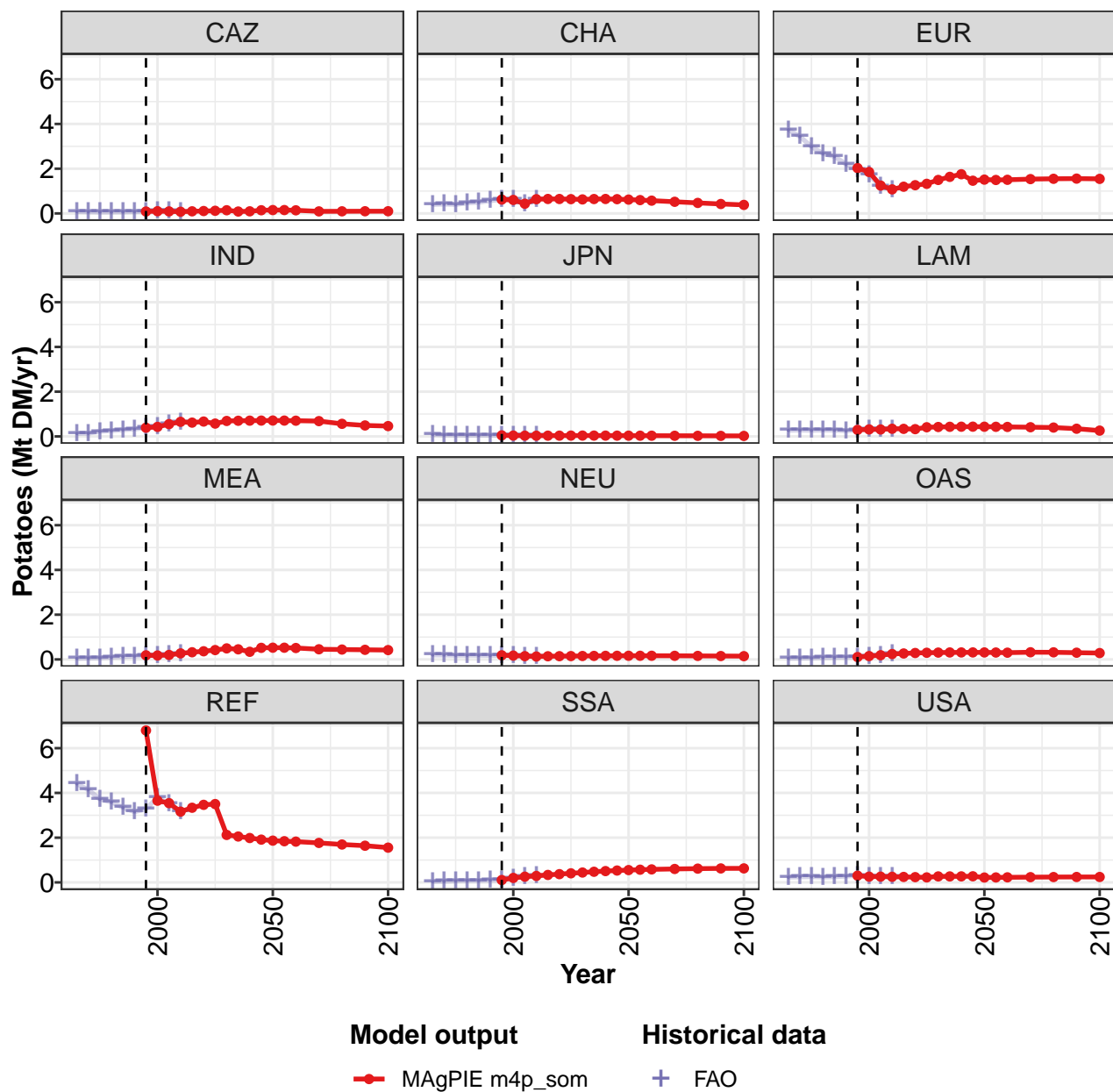


Figure 229: MAGPIE m4p\_som — Demand—Seed—Crops—Other crops—Potatoes (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	11.1	7.9	7.3	7.2	7.6	7.9	8.1	7.2	7.3	7.3	7.1
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	0.6	0.6	0.4	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
EUR	2.0	1.9	1.2	1.1	1.2	1.3	1.3	1.5	1.6	1.8	1.5
IND	0.4	0.4	0.6	0.7	0.6	0.7	0.6	0.7	0.7	0.7	0.7
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
MEA	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.3	0.5
NEU	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
OAS	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
REF	6.8	3.7	3.5	3.2	3.3	3.5	3.5	2.1	2.1	2.0	1.9
SSA	0.1	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5
USA	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3

Table 686: MAgPIE m4p\_som — Demand—Seed—Crops—Other crops—Potatoes (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	7.1	7.0	7.0	6.8	6.6	6.3	6.0
CAZ	0.2	0.2	0.1	0.1	0.1	0.1	0.1
CHA	0.6	0.6	0.6	0.5	0.5	0.4	0.4
EUR	1.5	1.5	1.5	1.5	1.5	1.6	1.5
IND	0.7	0.7	0.7	0.7	0.6	0.5	0.5
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.4	0.4	0.4	0.4	0.4	0.3	0.3
MEA	0.5	0.5	0.5	0.5	0.4	0.4	0.4
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.1
OAS	0.3	0.3	0.3	0.3	0.3	0.3	0.3
REF	1.9	1.8	1.8	1.8	1.7	1.6	1.6
SSA	0.6	0.6	0.6	0.6	0.6	0.6	0.6
USA	0.2	0.2	0.2	0.2	0.2	0.2	0.2

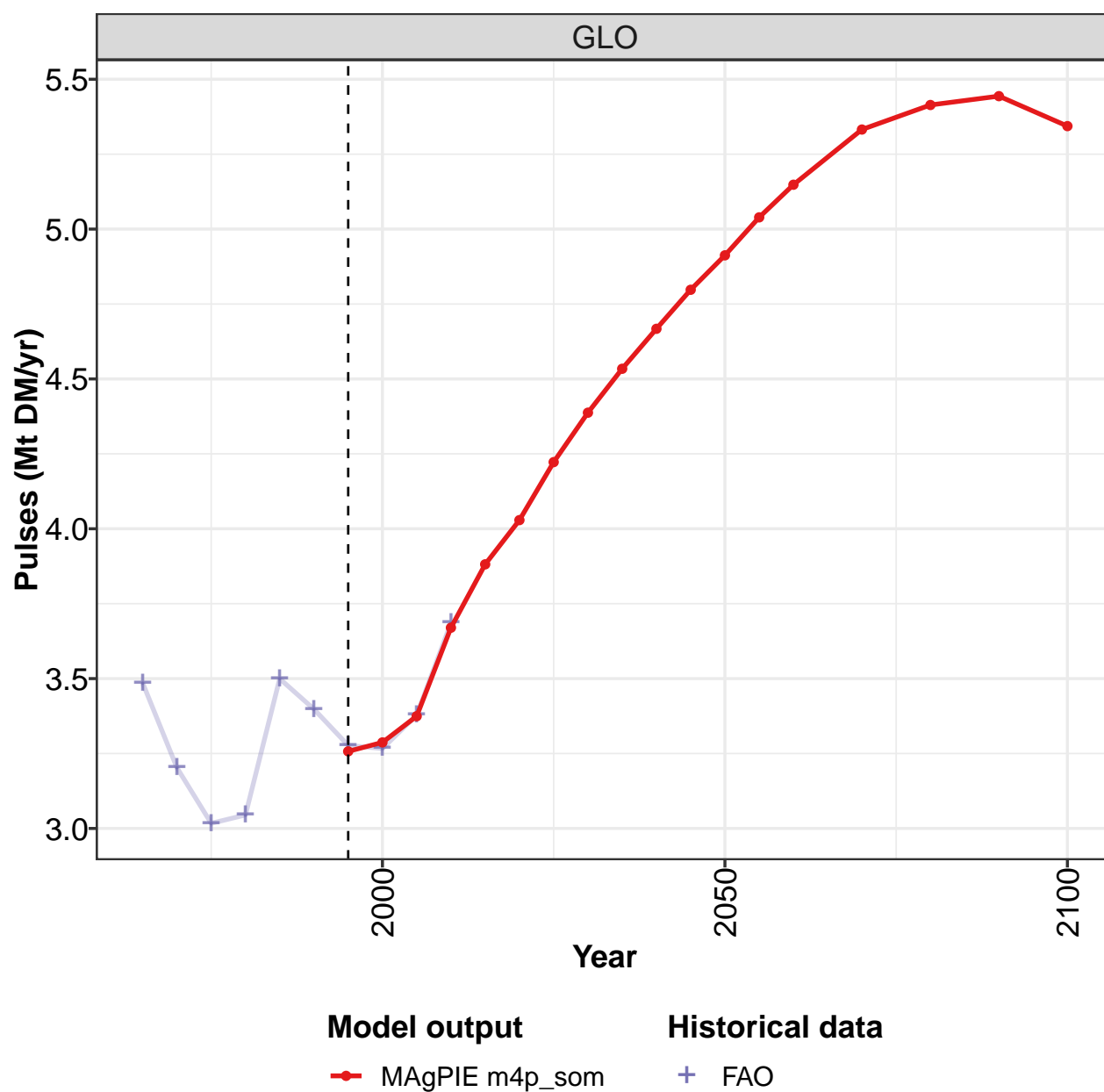
Table 687: MAgPIE m4p\_som — Demand—Seed—Crops—Other crops—Potatoes (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	9.68	9.16	8.37	8.09	7.82	7.45	7.56	7.99	7.22	7.15
CAZ	0.08	0.07	0.06	0.07	0.07	0.08	0.10	0.11	0.10	0.08
CHA	0.40	0.42	0.40	0.47	0.50	0.57	0.62	0.62	0.44	0.64
EUR	3.74	3.44	2.99	2.68	2.55	2.20	1.96	1.72	1.22	1.07
IND	0.13	0.14	0.22	0.26	0.30	0.33	0.39	0.43	0.55	0.66
JPN	0.09	0.07	0.06	0.05	0.05	0.05	0.05	0.04	0.04	0.03
LAM	0.27	0.28	0.27	0.29	0.28	0.25	0.29	0.31	0.31	0.34
MEA	0.04	0.06	0.07	0.10	0.12	0.15	0.18	0.17	0.20	0.26
NEU	0.20	0.20	0.18	0.18	0.18	0.18	0.18	0.17	0.15	0.13
OAS	0.05	0.06	0.06	0.09	0.09	0.10	0.11	0.15	0.19	0.24
REF	4.40	4.14	3.72	3.59	3.34	3.16	3.28	3.80	3.50	3.15
SSA	0.04	0.05	0.07	0.08	0.08	0.10	0.11	0.20	0.26	0.29
USA	0.23	0.24	0.26	0.24	0.25	0.28	0.31	0.27	0.26	0.25

Table 688: FAO — Demand—Seed—Crops—Other crops—Potatoes (Mt DM/yr)

## 10.1.15 Other crops—Pulses

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

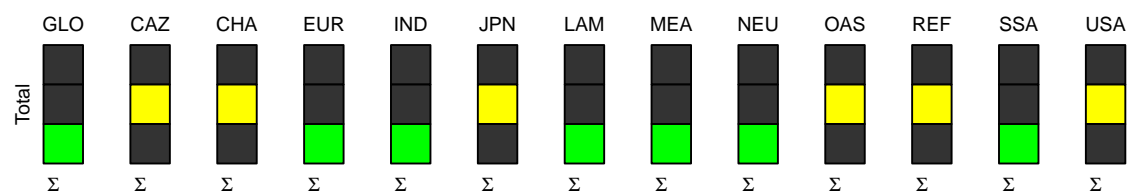
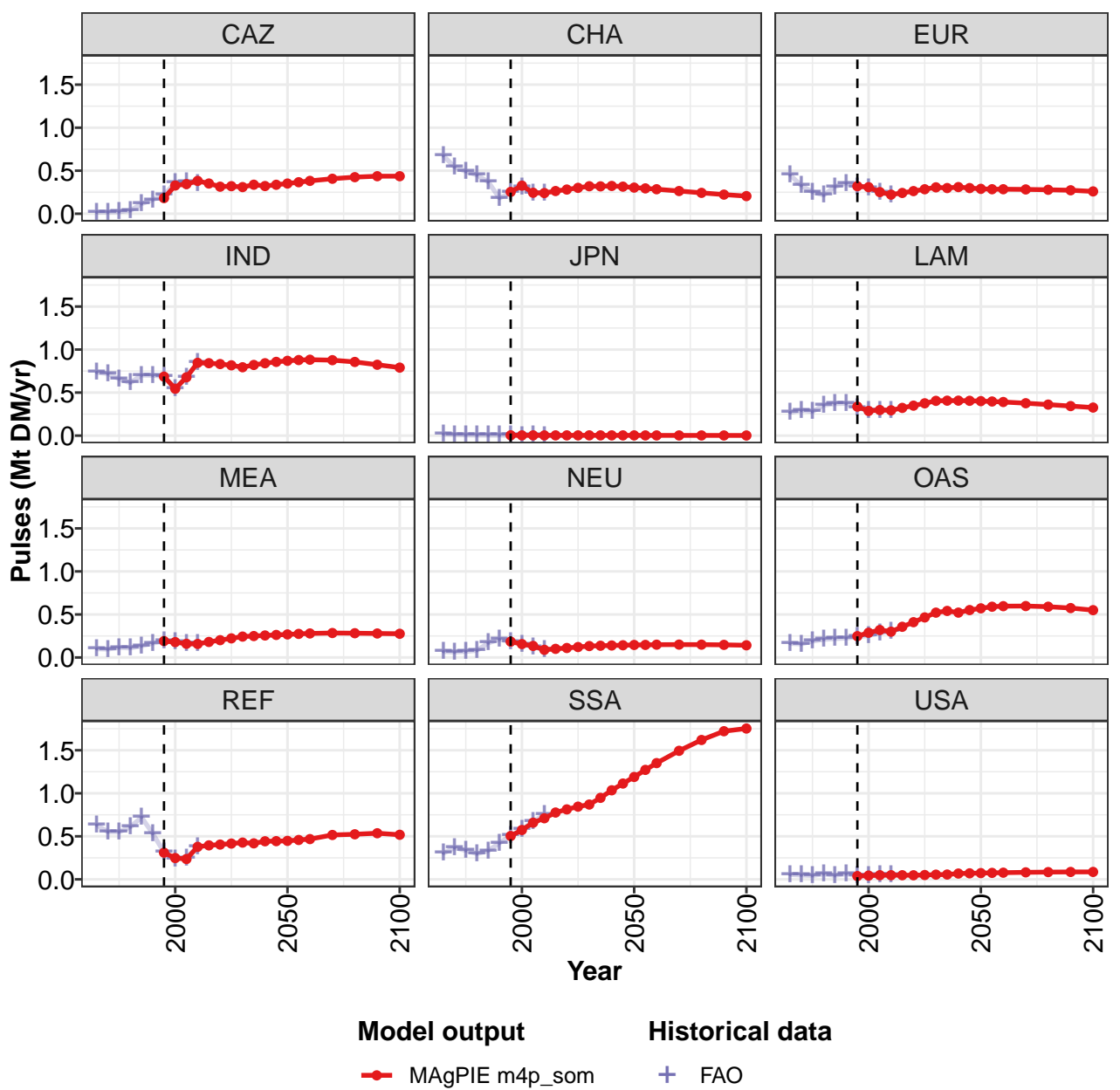


Figure 230: MAGPIE m4p\_som — Demand—Seed—Crops—Other crops—Pulses (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	3.26	3.29	3.37	3.67	3.88	4.03	4.22	4.39	4.53	4.67	4.80
CAZ	0.18	0.33	0.34	0.38	0.35	0.31	0.32	0.31	0.34	0.32	0.34
CHA	0.25	0.33	0.24	0.24	0.26	0.28	0.30	0.32	0.32	0.32	0.32
EUR	0.32	0.31	0.25	0.22	0.24	0.26	0.28	0.31	0.30	0.31	0.30
IND	0.69	0.54	0.68	0.85	0.84	0.83	0.82	0.79	0.82	0.84	0.86
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.34	0.29	0.30	0.29	0.32	0.35	0.38	0.40	0.41	0.41	0.40
MEA	0.19	0.18	0.16	0.16	0.18	0.20	0.22	0.24	0.25	0.26	0.26
NEU	0.18	0.16	0.13	0.09	0.10	0.11	0.12	0.13	0.14	0.14	0.14
OAS	0.25	0.29	0.32	0.30	0.36	0.41	0.47	0.52	0.54	0.52	0.55
REF	0.31	0.25	0.24	0.38	0.39	0.40	0.42	0.43	0.42	0.44	0.44
SSA	0.50	0.57	0.66	0.71	0.78	0.81	0.85	0.87	0.95	1.03	1.11
USA	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.07	0.07

Table 689: MAGPIE m4p\_som — Demand—Seed—Crops—Other crops—Pulses (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	4.91	5.04	5.15	5.33	5.41	5.44	5.34
CAZ	0.35	0.37	0.38	0.41	0.43	0.44	0.44
CHA	0.30	0.29	0.29	0.26	0.24	0.22	0.21
EUR	0.29	0.29	0.29	0.28	0.28	0.27	0.26
IND	0.87	0.88	0.88	0.88	0.86	0.82	0.79
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.40	0.40	0.39	0.38	0.36	0.34	0.33
MEA	0.27	0.27	0.28	0.28	0.28	0.28	0.28
NEU	0.15	0.15	0.15	0.15	0.15	0.15	0.14
OAS	0.57	0.59	0.60	0.60	0.59	0.57	0.55
REF	0.45	0.46	0.47	0.52	0.52	0.54	0.52
SSA	1.19	1.27	1.35	1.49	1.62	1.72	1.75
USA	0.07	0.08	0.08	0.08	0.08	0.09	0.09

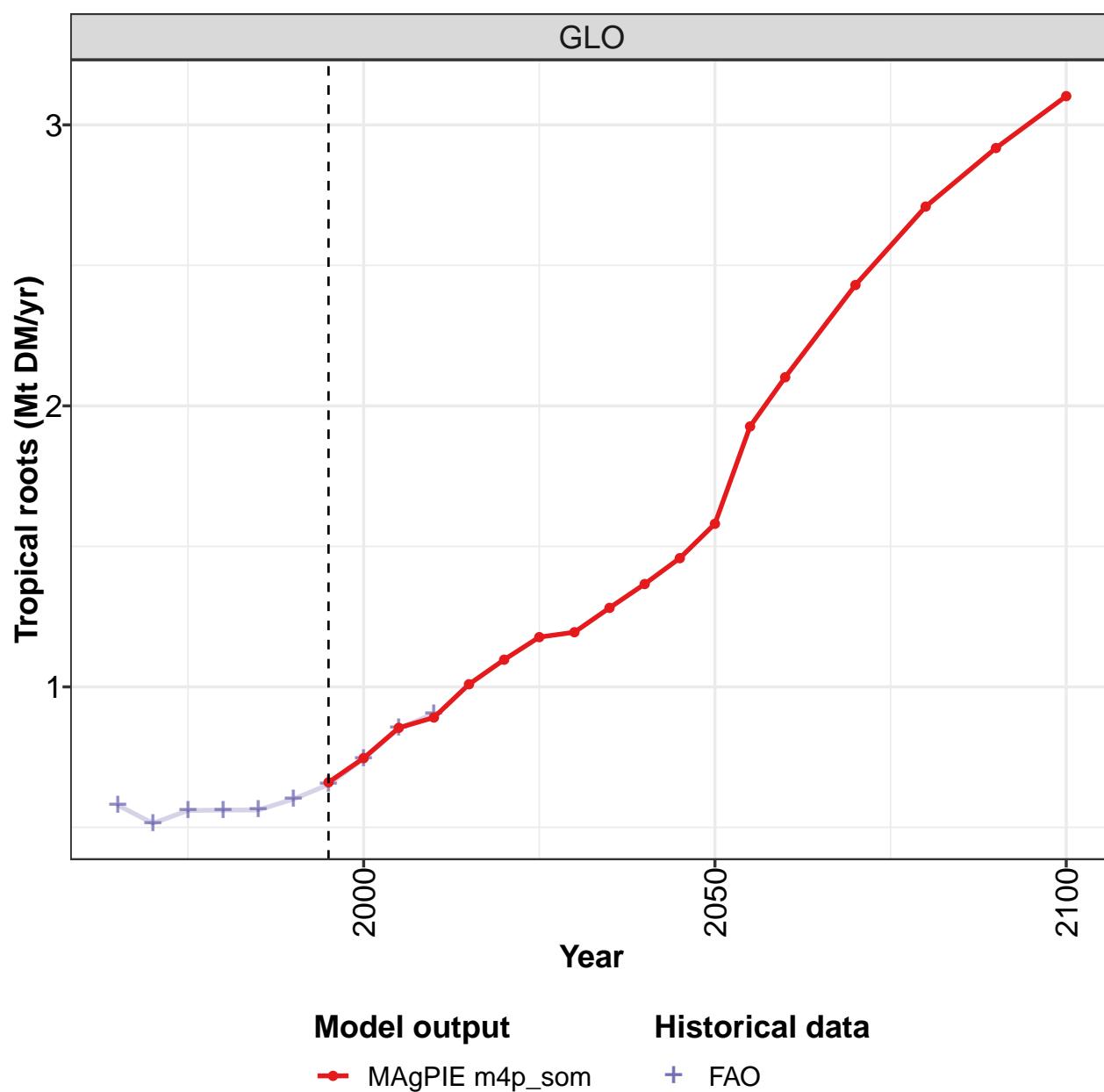
Table 690: MAGPIE m4p\_som — Demand—Seed—Crops—Other crops—Pulses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3.49	3.20	3.02	3.04	3.50	3.40	3.28	3.27	3.38	3.69
CAZ	0.02	0.02	0.02	0.04	0.12	0.16	0.22	0.36	0.37	0.35
CHA	0.67	0.54	0.49	0.45	0.37	0.18	0.25	0.31	0.24	0.24
EUR	0.45	0.33	0.25	0.22	0.32	0.36	0.31	0.30	0.25	0.22
IND	0.73	0.72	0.66	0.61	0.70	0.70	0.69	0.55	0.68	0.85
JPN	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
LAM	0.27	0.29	0.28	0.35	0.37	0.37	0.33	0.29	0.30	0.29
MEA	0.10	0.10	0.12	0.11	0.13	0.17	0.19	0.18	0.16	0.16
NEU	0.07	0.06	0.07	0.08	0.17	0.21	0.18	0.15	0.12	0.09
OAS	0.16	0.16	0.19	0.21	0.22	0.23	0.24	0.25	0.28	0.30
REF	0.63	0.55	0.55	0.61	0.72	0.53	0.32	0.24	0.25	0.38
SSA	0.30	0.37	0.33	0.30	0.33	0.42	0.51	0.58	0.67	0.75
USA	0.06	0.05	0.04	0.06	0.04	0.06	0.04	0.04	0.05	0.05

Table 691: FAO — Demand—Seed—Crops—Other crops—Pulses (Mt DM/yr)

## 10.1.16 Other crops—Tropical roots

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

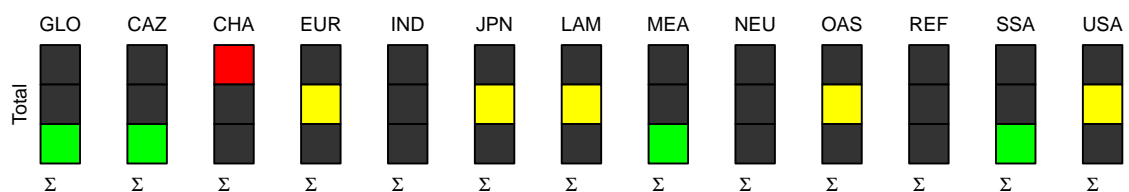
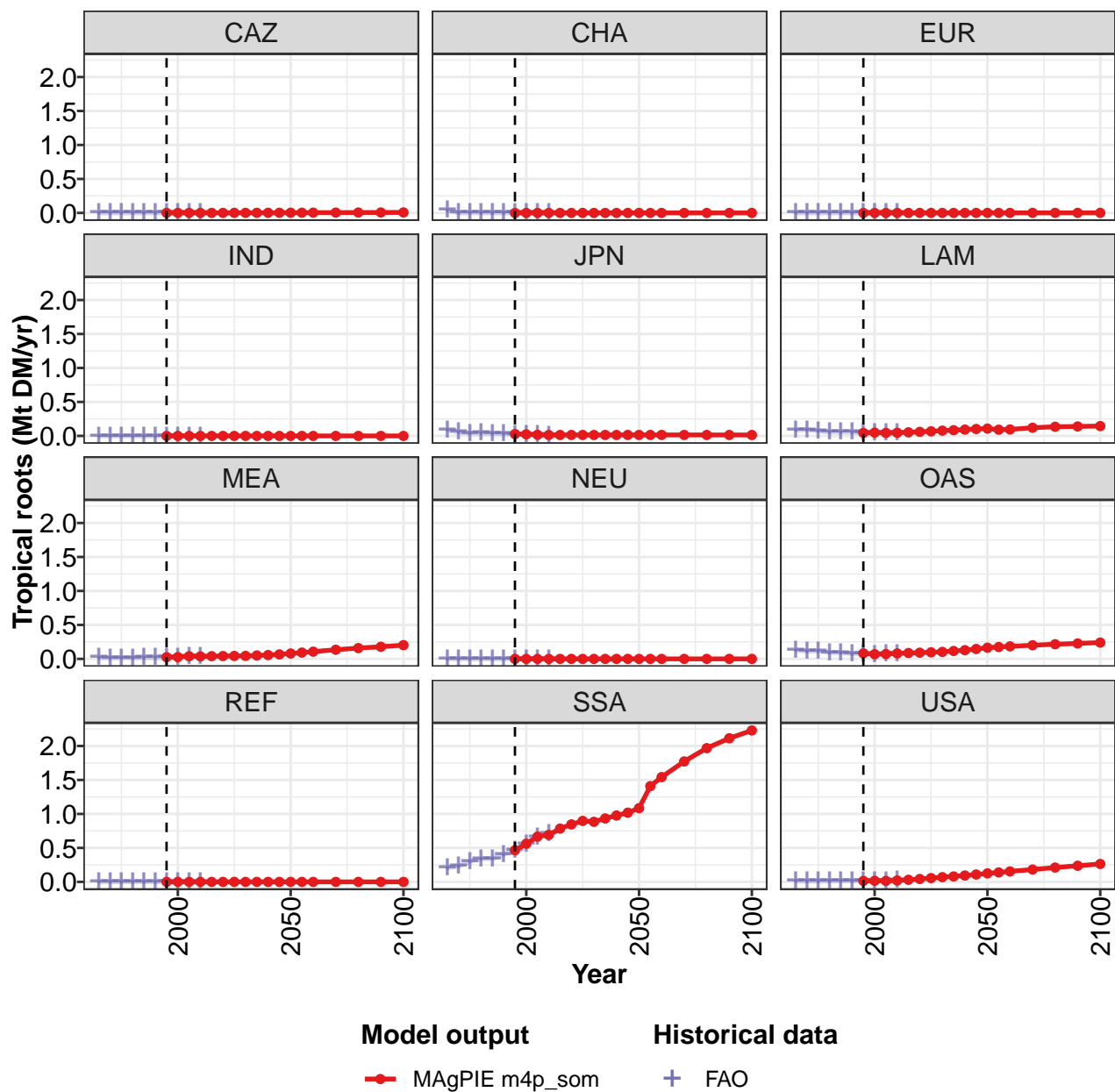


Figure 231: MAGPIE m4p\_som — Demand—Seed—Crops—Other crops—Tropical roots (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.66	0.75	0.85	0.89	1.01	1.10	1.18	1.19	1.28	1.37	1.46
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
LAM	0.04	0.05	0.04	0.05	0.05	0.06	0.07	0.08	0.08	0.09	0.10
MEA	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.06	0.07
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.08	0.07	0.07	0.08	0.09	0.09	0.10	0.10	0.12	0.13	0.15
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.47	0.56	0.67	0.69	0.78	0.85	0.90	0.88	0.93	0.98	1.02
USA	0.01	0.02	0.02	0.02	0.03	0.04	0.06	0.07	0.08	0.09	0.11

Table 692: MAgPIE m4p\_som — Demand—Seed—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.58	1.93	2.10	2.43	2.71	2.92	3.10
CAZ	0.00	0.00	0.00	0.00	0.01	0.01	0.01
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.01	0.01	0.01	0.01	0.01	0.01	0.01
LAM	0.11	0.09	0.10	0.12	0.13	0.14	0.14
MEA	0.08	0.09	0.11	0.13	0.16	0.18	0.20
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.16	0.18	0.18	0.20	0.22	0.23	0.24
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	1.09	1.41	1.54	1.77	1.97	2.11	2.23
USA	0.13	0.14	0.15	0.18	0.21	0.24	0.26

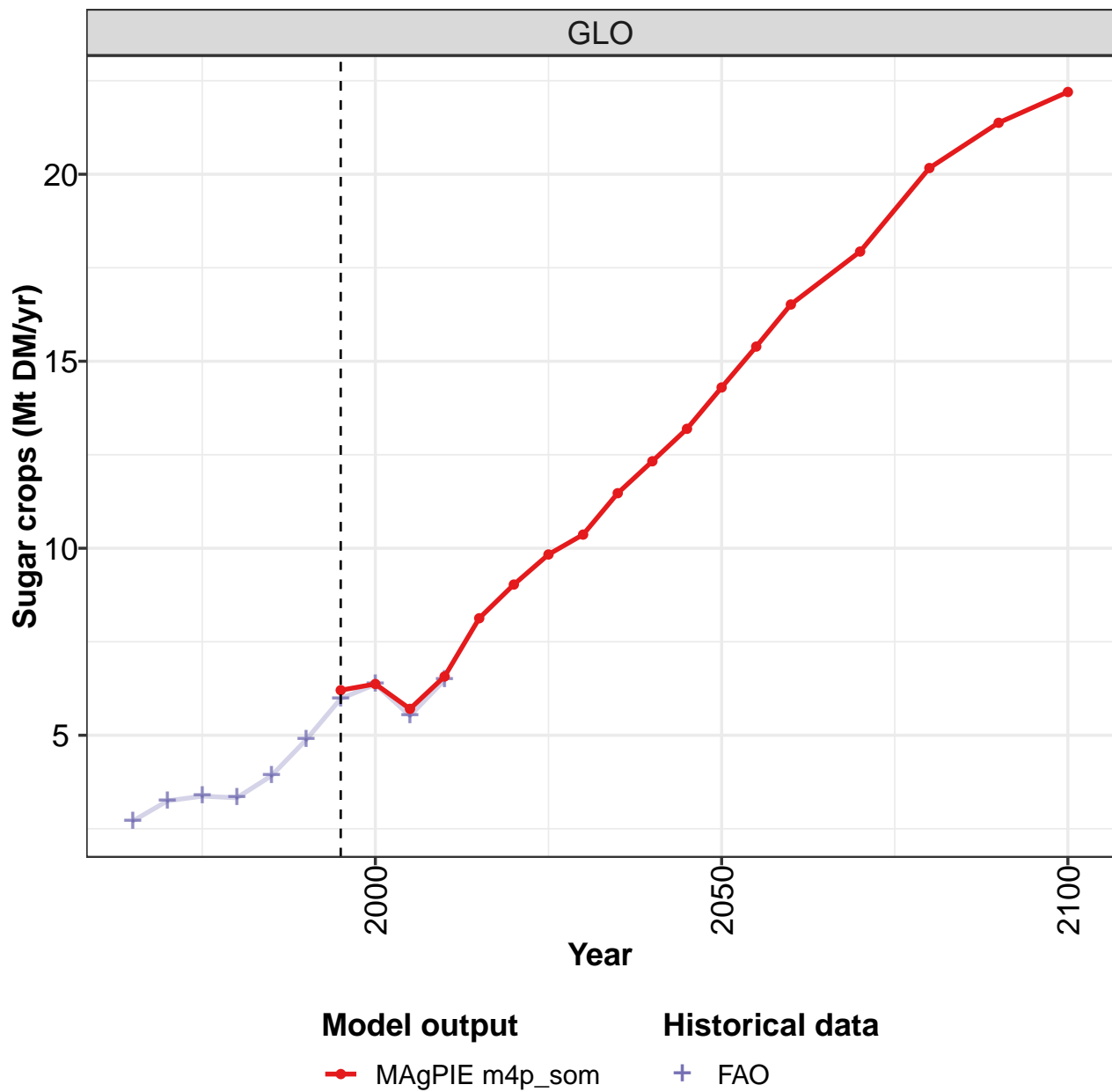
Table 693: MAgPIE m4p\_som — Demand—Seed—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.579	0.514	0.560	0.562	0.562	0.601	0.652	0.744	0.853	0.904
CAZ	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.001	0.001
CHA	0.040	0.000	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000
EUR	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.087	0.055	0.039	0.042	0.038	0.032	0.027	0.024	0.017	0.013
LAM	0.085	0.090	0.073	0.056	0.057	0.054	0.042	0.049	0.044	0.045
MEA	0.019	0.016	0.017	0.018	0.018	0.020	0.023	0.026	0.039	0.037
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.128	0.111	0.116	0.092	0.089	0.076	0.077	0.068	0.071	0.077
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.207	0.230	0.300	0.339	0.343	0.403	0.468	0.561	0.666	0.711
USA	0.012	0.012	0.012	0.014	0.016	0.016	0.014	0.016	0.016	0.021

Table 694: FAO — Demand—Seed—Crops—Other crops—Tropical roots (Mt DM/yr)

## 10.1.17 Sugar crops

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

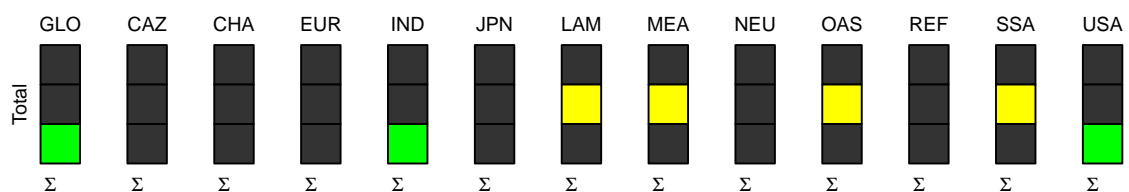
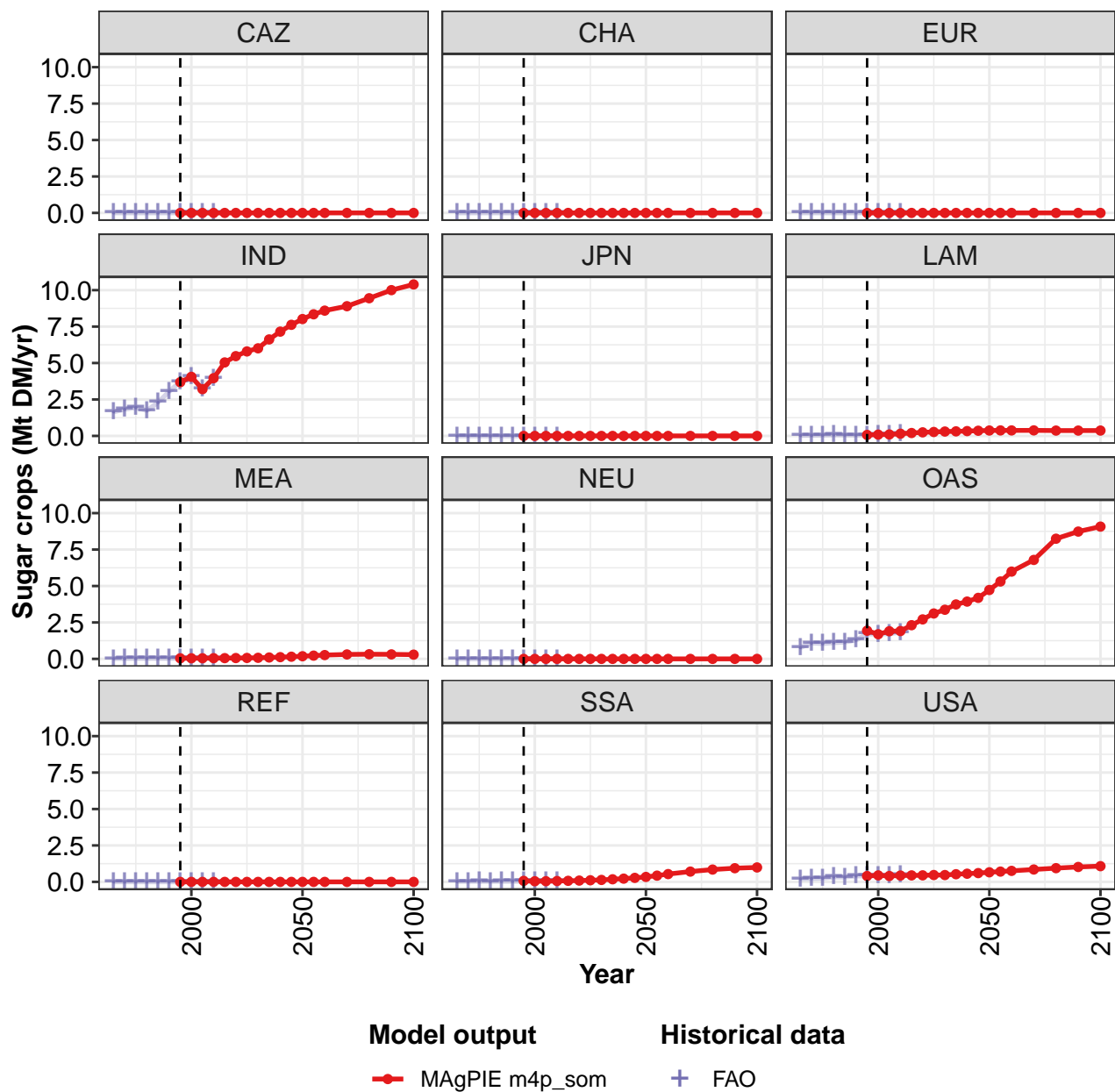


Figure 232: MAgPIE m4p\_som — Demand—Seed—Crops—Sugar crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	6.2	6.4	5.7	6.6	8.1	9.0	9.8	10.4	11.5	12.3	13.2
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	3.7	4.1	3.2	4.0	5.0	5.5	5.8	6.0	6.6	7.2	7.6
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4
MEA	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.9	1.7	1.9	1.9	2.3	2.7	3.1	3.4	3.7	3.9	4.2
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3
USA	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6

Table 695: MAgPIE m4p\_som — Demand—Seed—Crops—Sugar crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	14.3	15.4	16.5	17.9	20.2	21.4	22.2
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	8.0	8.3	8.6	8.9	9.4	10.0	10.4
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.4	0.4	0.4	0.4	0.4	0.4	0.4
MEA	0.2	0.2	0.3	0.3	0.3	0.3	0.3
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	4.7	5.3	6.0	6.8	8.2	8.7	9.1
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.3	0.4	0.5	0.7	0.8	0.9	1.0
USA	0.7	0.7	0.8	0.8	0.9	1.0	1.1

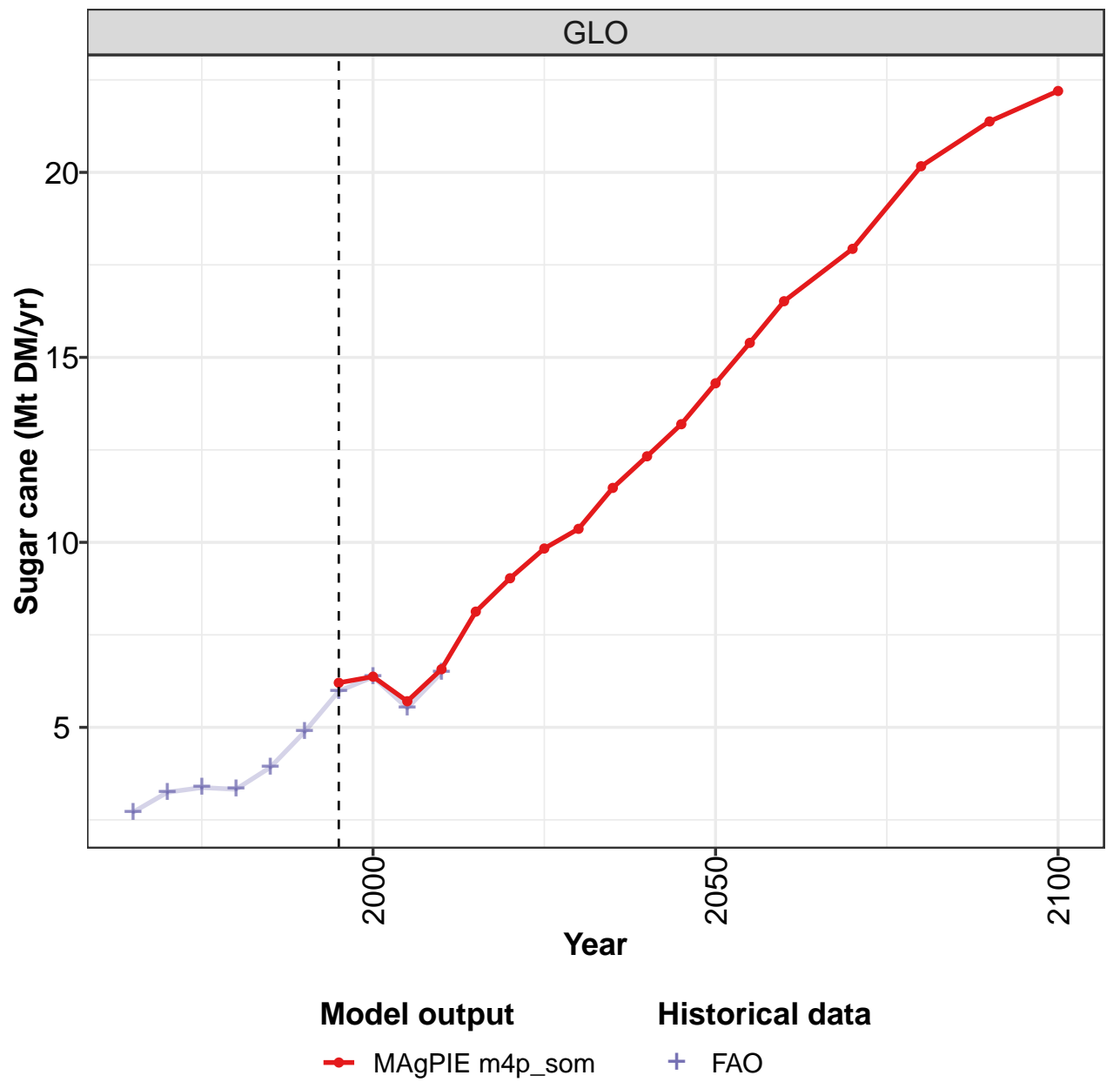
Table 696: MAgPIE m4p\_som — Demand—Seed—Crops—Sugar crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.71	3.25	3.37	3.33	3.92	4.88	5.98	6.36	5.52	6.48
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	1.65	1.82	1.95	1.74	2.30	3.05	3.72	4.04	3.20	3.95
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.03	0.04	0.05	0.08	0.07	0.06	0.06	0.09	0.10	0.15
MEA	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.77	1.09	1.05	1.11	1.15	1.29	1.71	1.70	1.72	1.83
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.03	0.04	0.04	0.03	0.04	0.04	0.04	0.04	0.05	0.06
USA	0.22	0.23	0.25	0.34	0.33	0.41	0.40	0.45	0.40	0.46

Table 697: FAO — Demand—Seed—Crops—Sugar crops (Mt DM/yr)

10.1.18 Sugar crops—Sugar cane

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

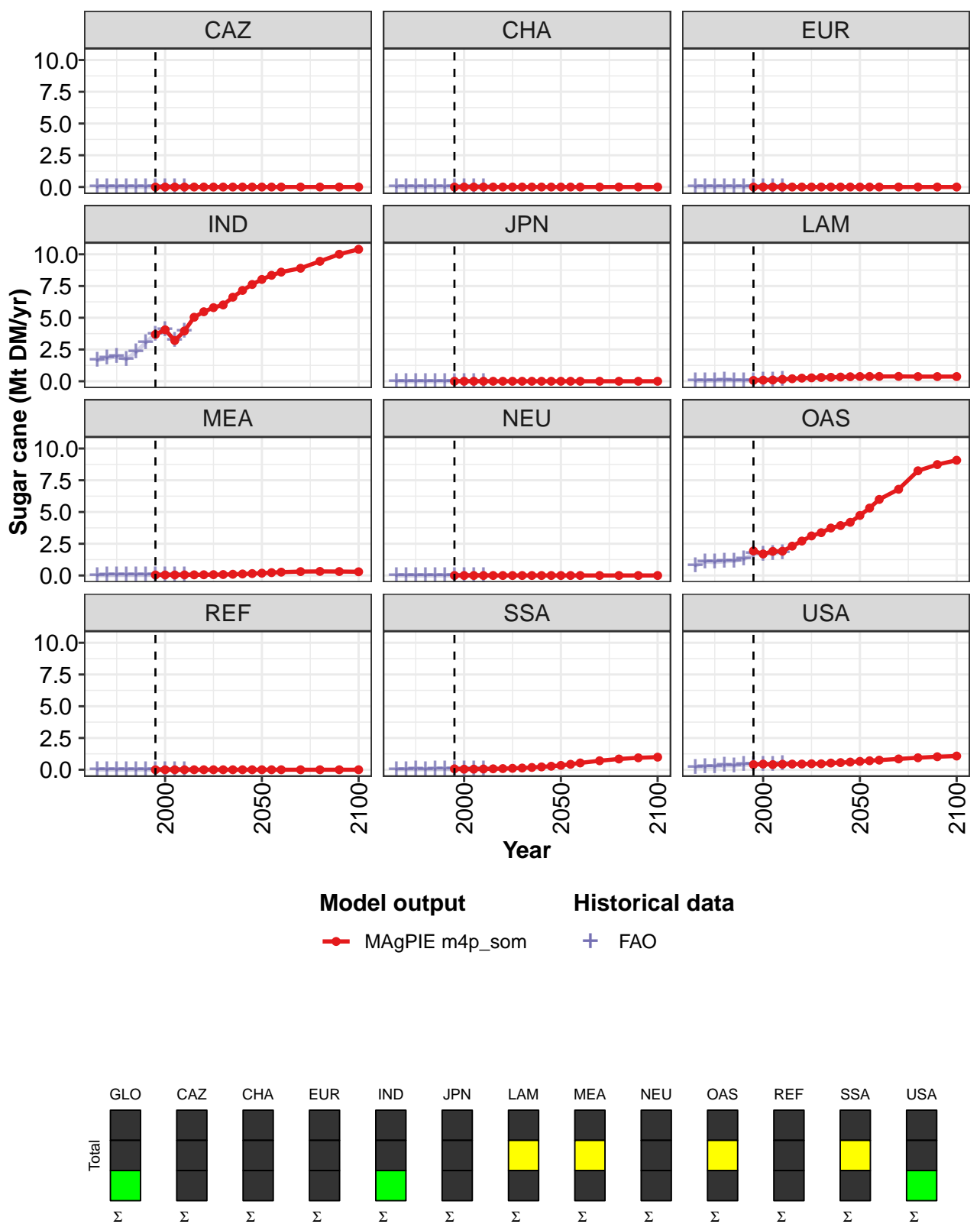


Figure 233: MAGPIE m4p\_som — Demand—Seed—Crops—Sugar crops—Sugar cane (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	6.2	6.4	5.7	6.6	8.1	9.0	9.8	10.4	11.5	12.3	13.2
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	3.7	4.1	3.2	4.0	5.0	5.5	5.8	6.0	6.6	7.2	7.6
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4
MEA	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.9	1.7	1.9	1.9	2.3	2.7	3.1	3.4	3.7	3.9	4.2
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3
USA	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6

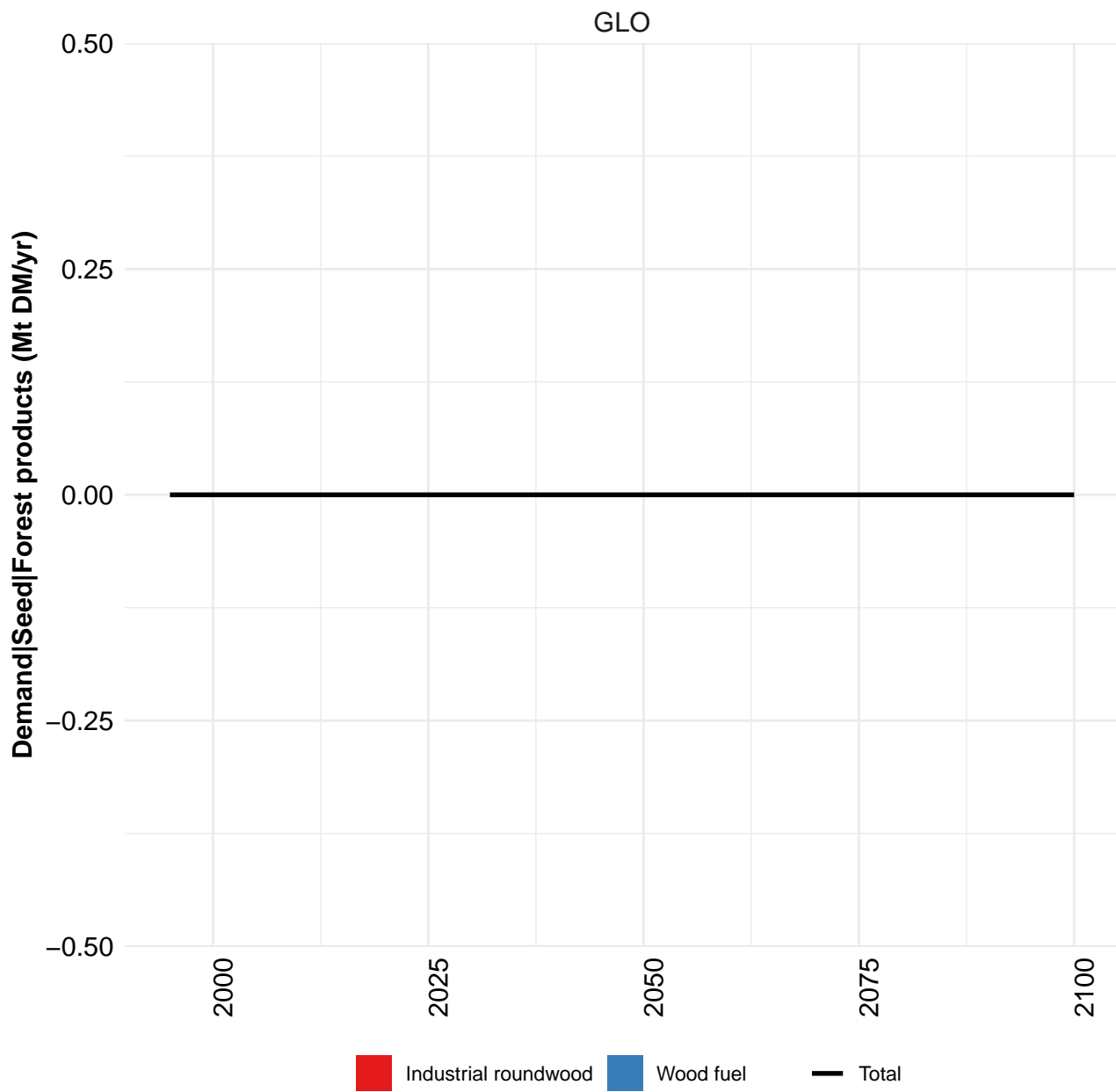
Table 698: MAgPIE m4p\_som — Demand—Seed—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	14.3	15.4	16.5	17.9	20.2	21.4	22.2
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	8.0	8.3	8.6	8.9	9.4	10.0	10.4
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.4	0.4	0.4	0.4	0.4	0.4	0.4
MEA	0.2	0.2	0.3	0.3	0.3	0.3	0.3
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	4.7	5.3	6.0	6.8	8.2	8.7	9.1
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.3	0.4	0.5	0.7	0.8	0.9	1.0
USA	0.7	0.7	0.8	0.8	0.9	1.0	1.1

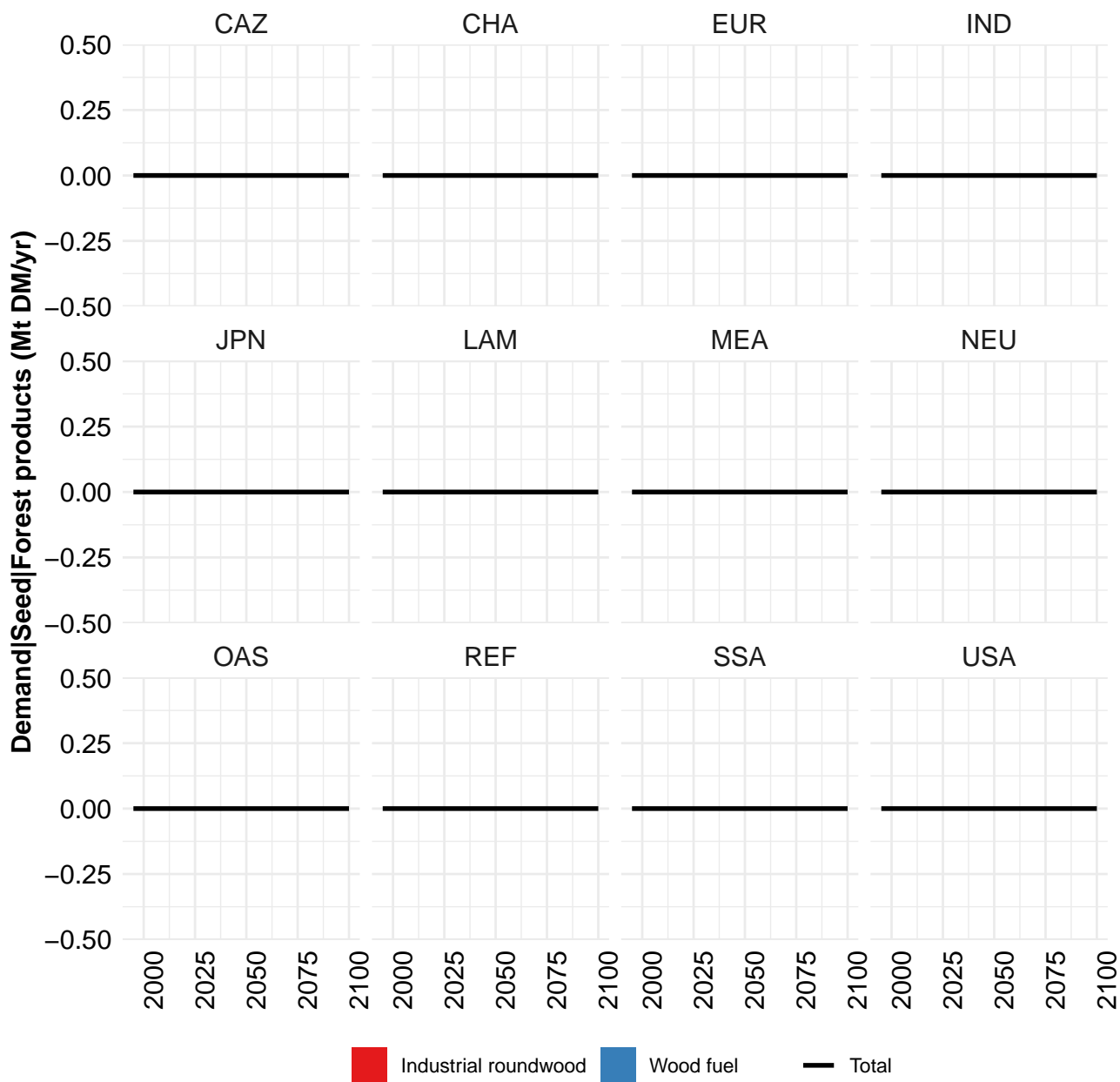
Table 699: MAgPIE m4p\_som — Demand—Seed—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 2/2]

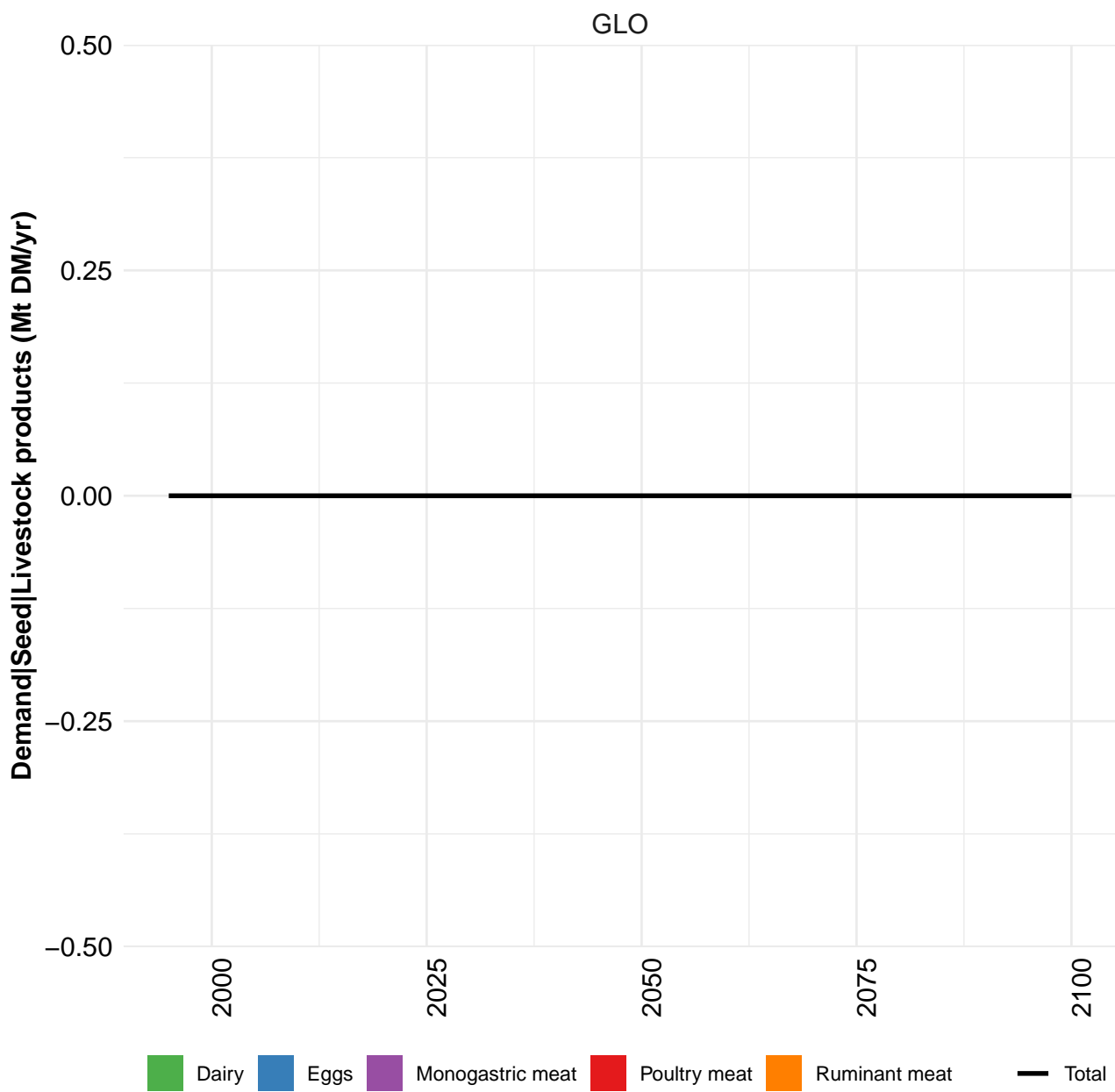
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.71	3.25	3.37	3.33	3.92	4.88	5.98	6.36	5.52	6.48
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	1.65	1.82	1.95	1.74	2.30	3.05	3.72	4.04	3.20	3.95
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.03	0.04	0.05	0.08	0.07	0.06	0.06	0.09	0.10	0.15
MEA	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.77	1.09	1.05	1.11	1.15	1.29	1.71	1.70	1.72	1.83
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.03	0.04	0.04	0.03	0.04	0.04	0.04	0.04	0.05	0.06
USA	0.22	0.23	0.25	0.34	0.33	0.41	0.40	0.45	0.40	0.46

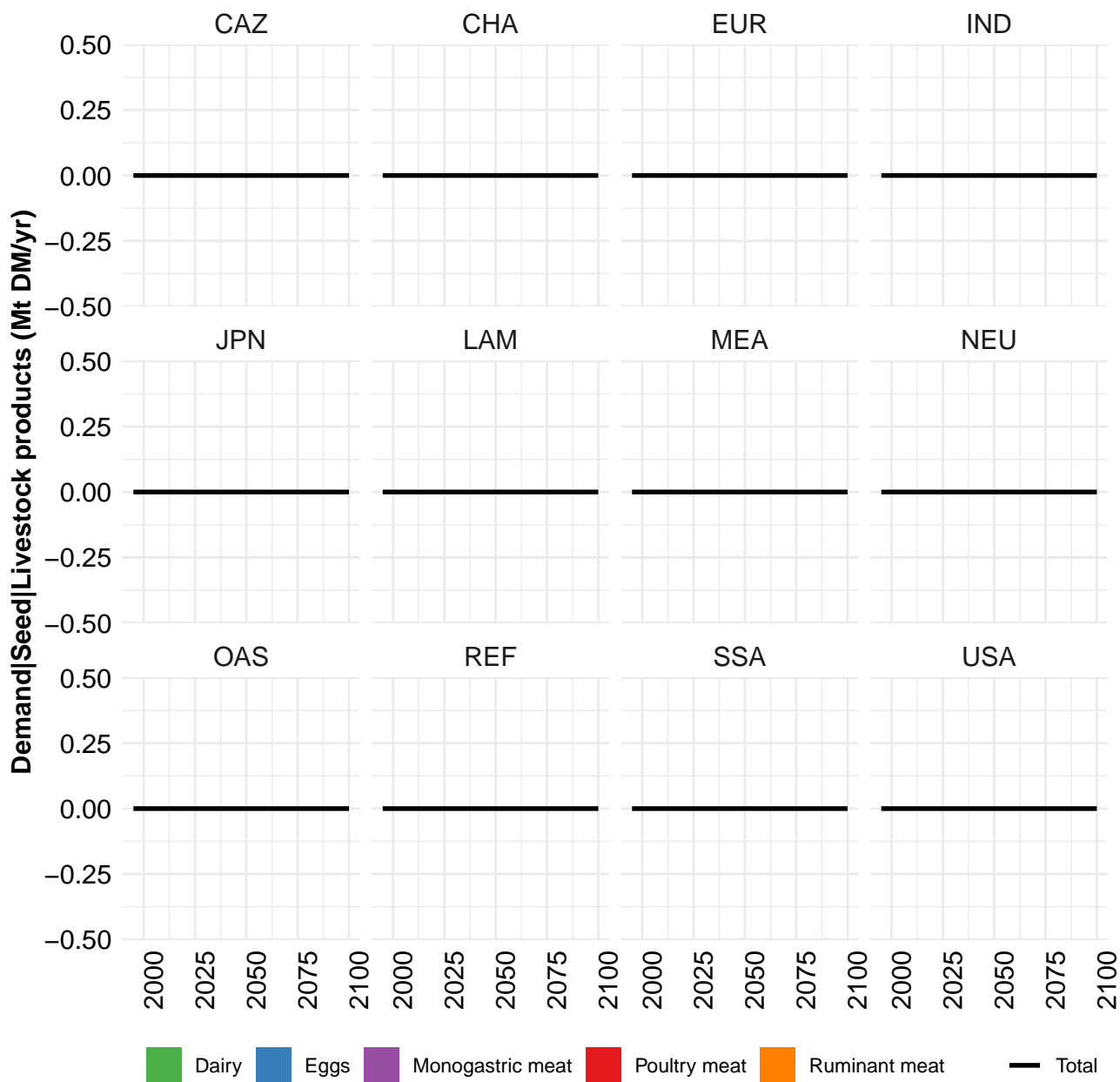
Table 700: FAO — Demand—Seed—Crops—Sugar crops—Sugar cane (Mt DM/yr)

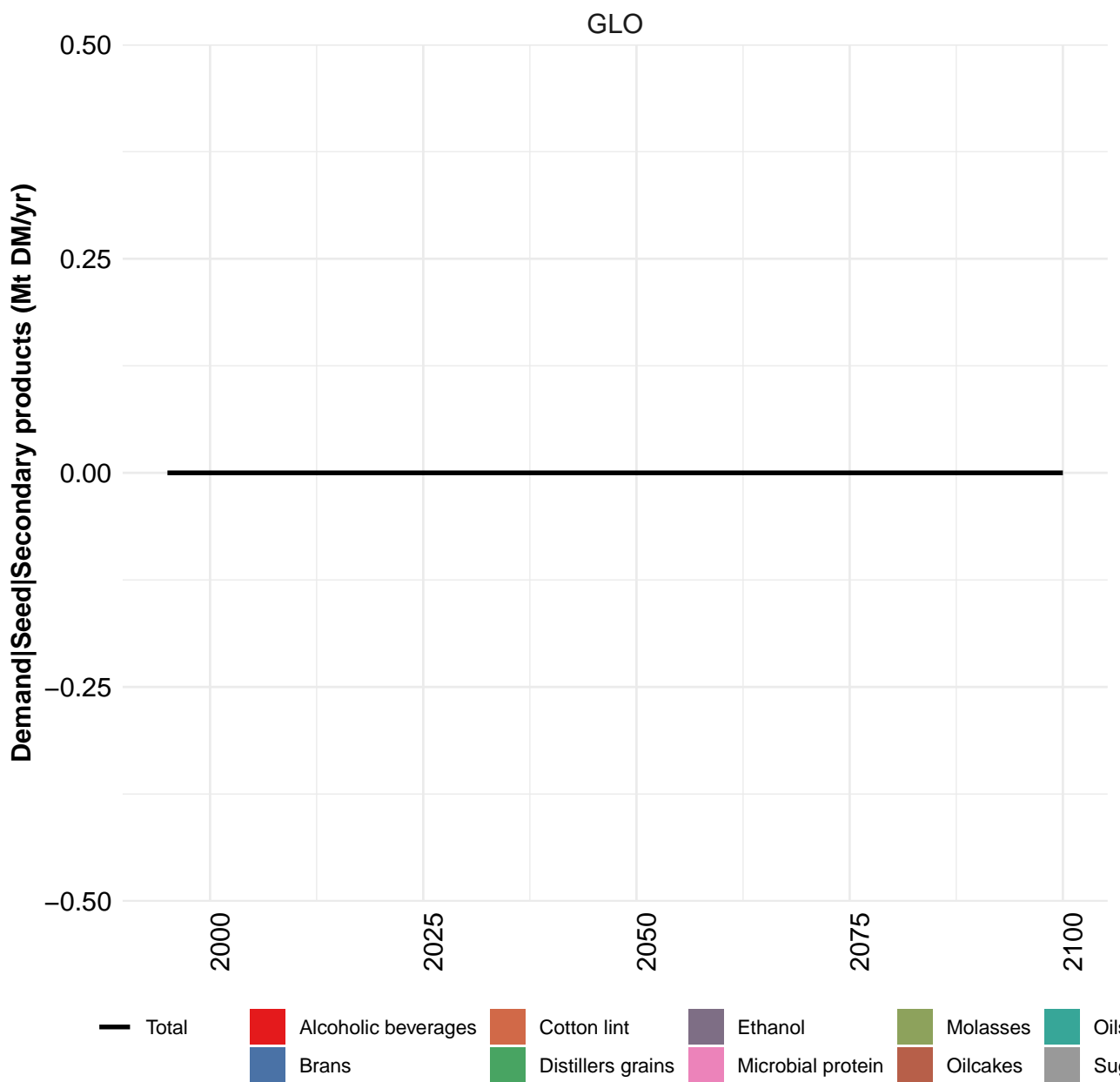


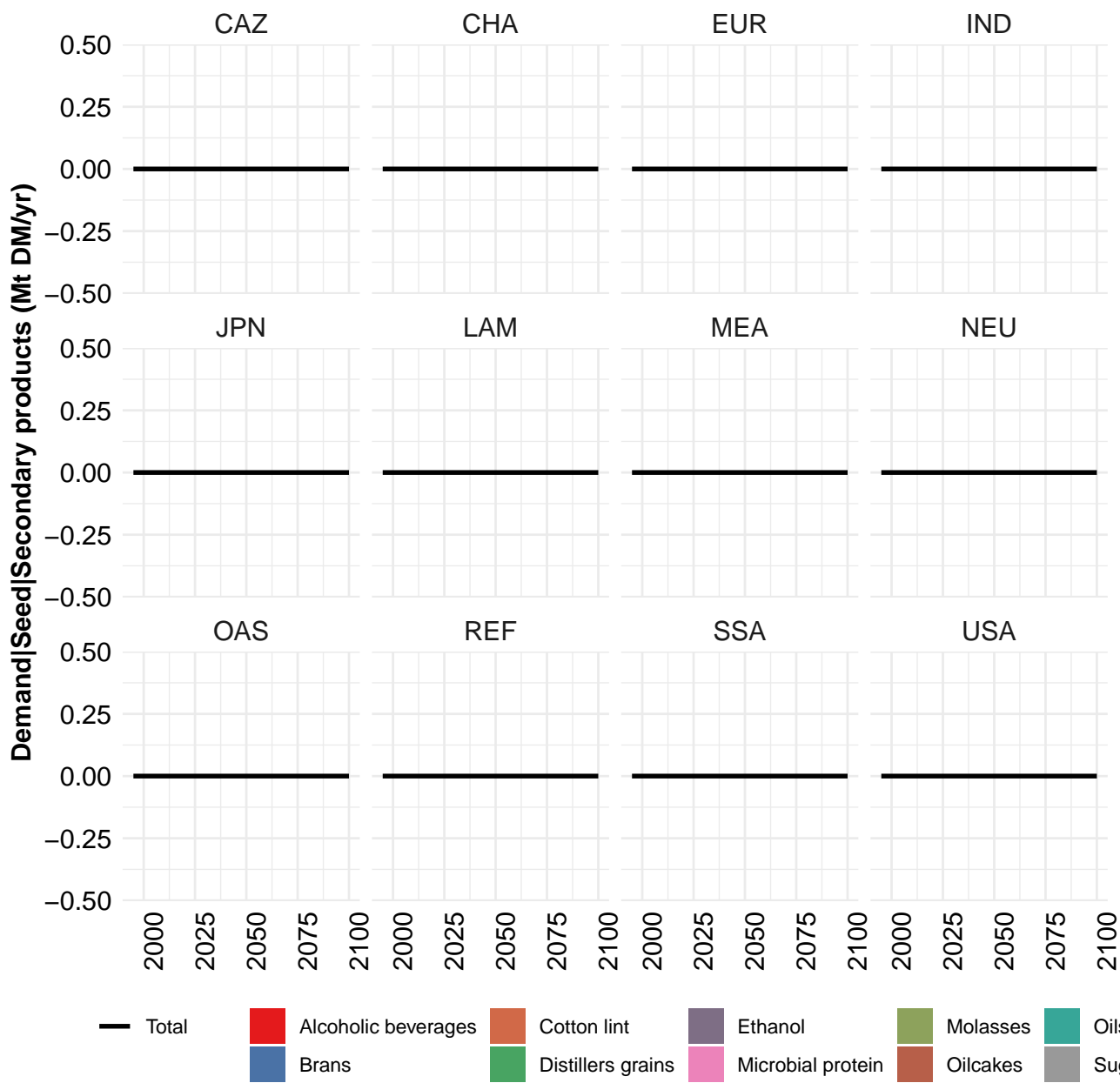








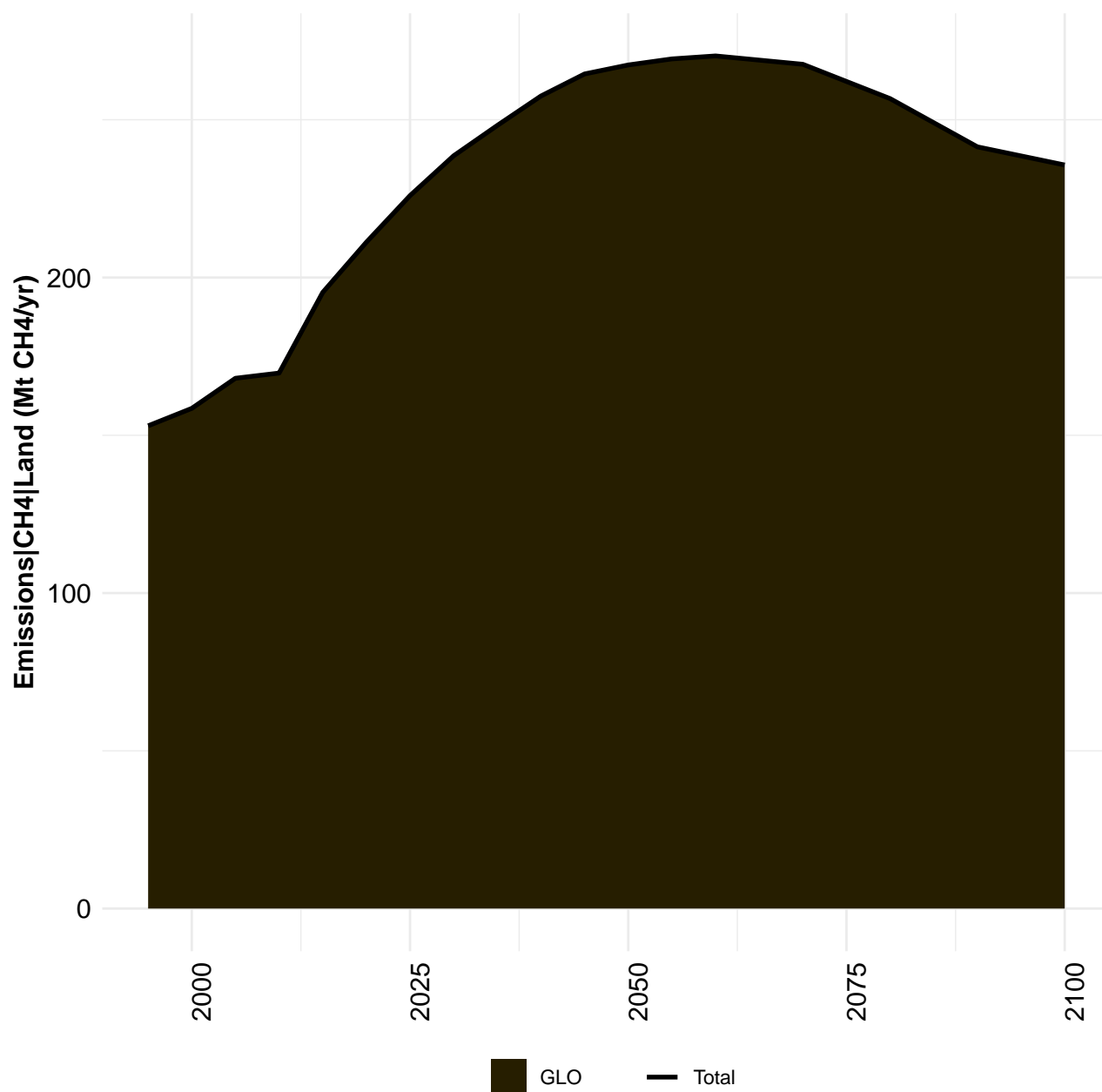


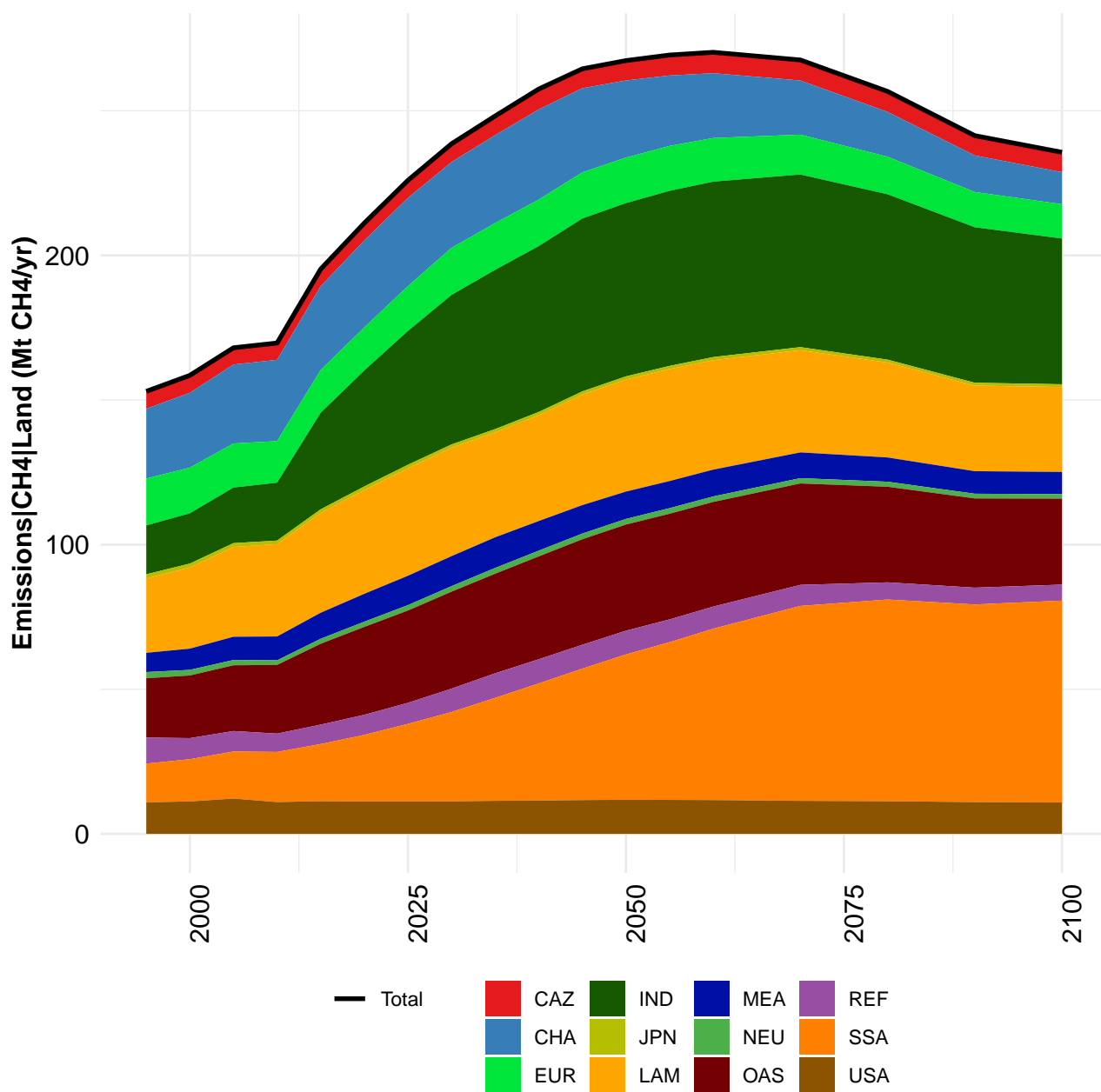


## Part IV

## Emissions

## 11 CH4

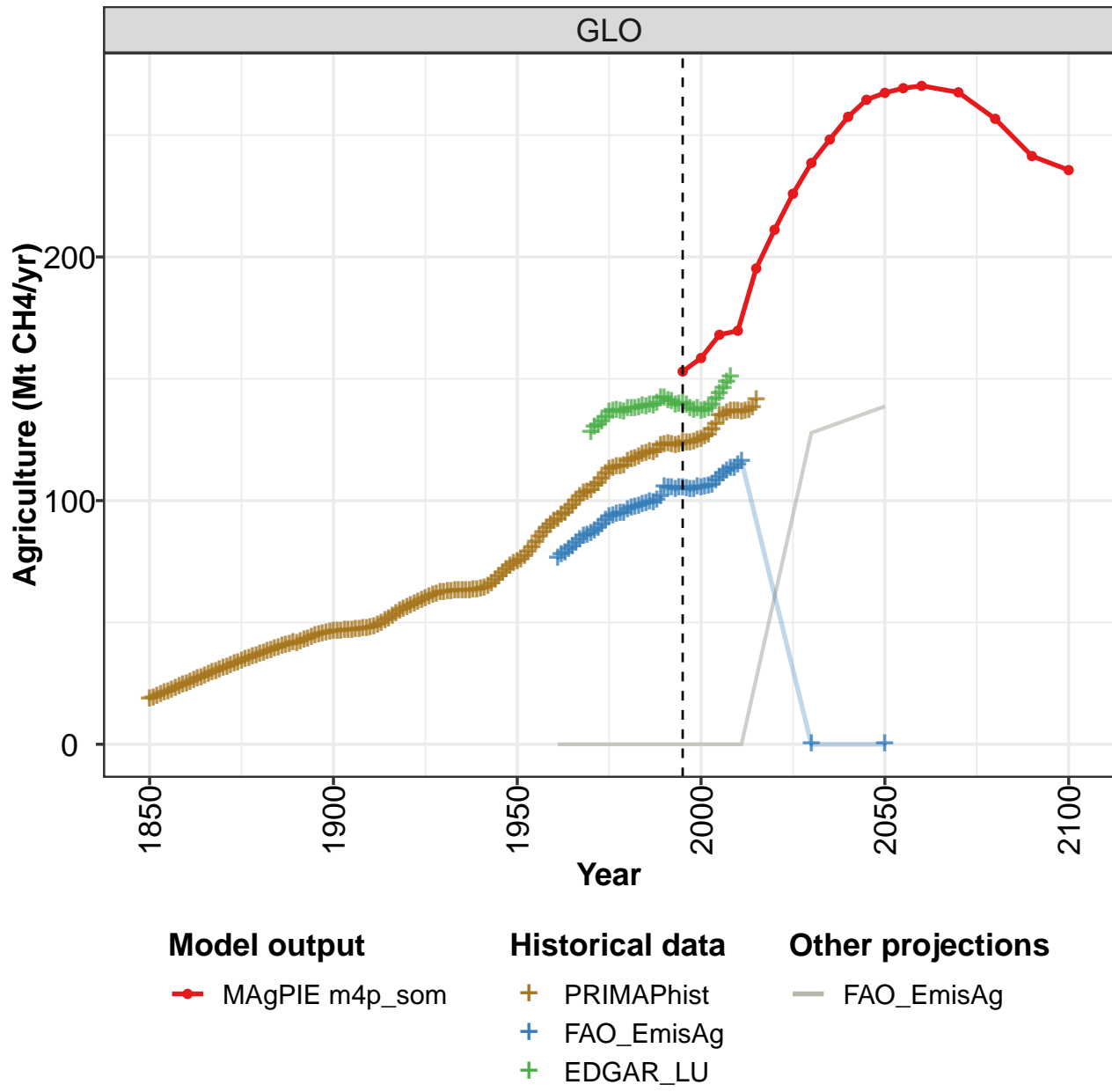




11.1Land

11.1.1Agriculture

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

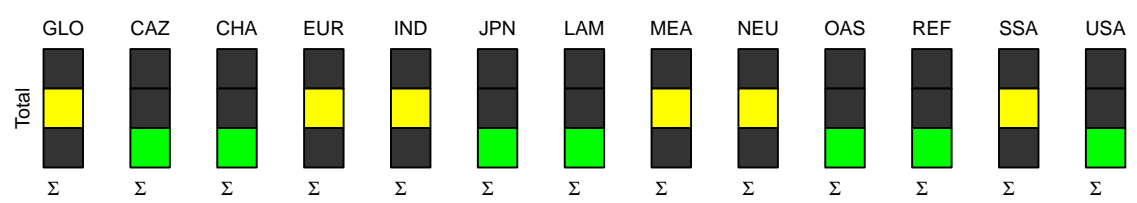
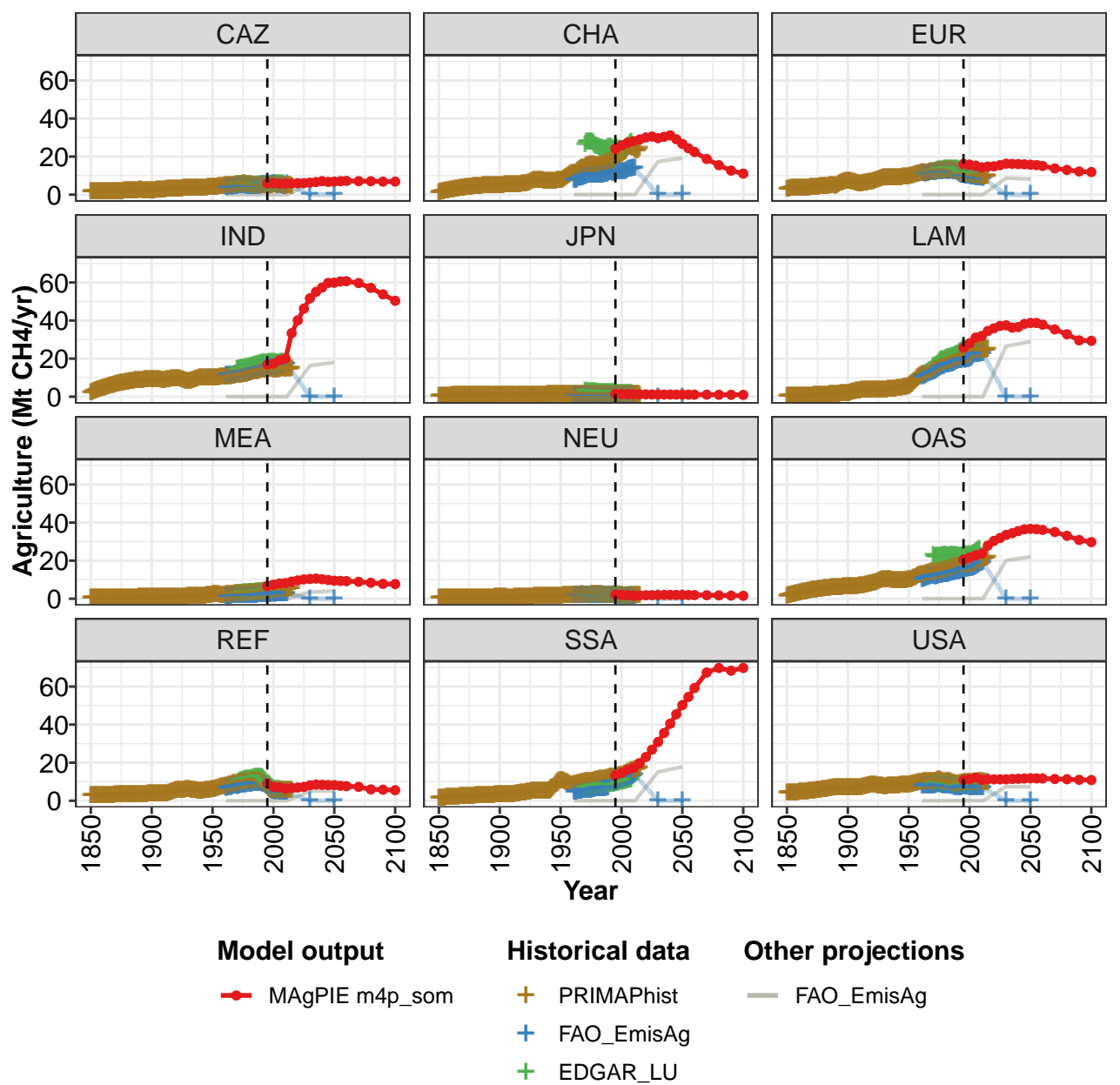


Figure 234: MAGPIE m4p\_som — Emissions—CH4—Land—Agriculture (Mt CH4/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	153	159	168	170	195	211	226	239	248	258	265
CAZ	6	6	6	6	6	6	6	6	7	7	7
CHA	24	26	27	28	29	30	31	30	30	31	29
EUR	16	16	15	14	15	15	15	16	16	16	16
IND	17	17	19	20	33	40	46	52	55	57	60
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	26	28	31	32	35	36	37	37	36	37	38
MEA	7	7	8	8	9	10	10	10	11	10	10
NEU	2	2	2	2	2	2	2	2	2	2	2
OAS	21	22	23	24	28	30	32	34	34	36	36
REF	9	7	7	6	7	7	7	8	8	8	8
SSA	13	15	16	17	20	23	27	31	36	40	45
USA	11	11	12	11	11	11	11	11	11	12	12

Table 701: MAgPIE m4p.som — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	267	269	270	268	257	241	236
CAZ	7	7	7	7	7	7	7
CHA	27	24	22	19	15	13	11
EUR	16	16	15	14	13	12	12
IND	60	61	61	60	57	54	50
JPN	1	1	1	1	1	1	1
LAM	39	39	38	35	33	30	29
MEA	9	9	9	9	8	8	8
NEU	2	2	2	2	2	2	2
OAS	37	37	36	35	33	31	30
REF	8	8	8	7	6	6	6
SSA	50	55	59	67	70	68	70
USA	12	12	12	11	11	11	11

Table 702: MAgPIE m4p.som — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 2/2]

	1850	1851	1852	1853	1854	1855	1856	1857	1858	1859	1860
GLO	18	19	20	20	21	22	22	23	24	24	25
CAZ	1	1	1	1	1	1	1	1	1	1	1
CHA	1	1	1	2	2	2	2	2	2	2	2
EUR	3	3	3	3	3	3	3	3	3	3	3
IND	2	2	3	3	3	3	3	4	4	4	4
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	0	0	0	0	0	0	0	0	0	0	0
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	1	2	2	2	2	2	2	3	3	3	3
REF	3	3	3	3	3	3	3	3	3	3	3
SSA	1	1	1	1	2	2	2	2	2	2	2
USA	4	4	4	4	4	4	4	4	4	4	4

Table 703: PRIMAPHist — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 1/16]

	1861	1862	1863	1864	1865	1866	1867	1868	1869	1870	1871
GLO	26	26	27	27	28	29	29	30	31	31	32
CAZ	1	1	1	1	1	2	2	2	2	2	2
CHA	3	3	3	3	3	3	3	3	3	3	4
EUR	3	3	3	3	3	3	4	4	4	4	4
IND	5	5	5	5	5	6	6	6	6	6	6
JPN	0	0	0	1	1	1	1	1	1	1	1
LAM	0	0	0	0	0	0	0	0	0	0	0
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	3	3	3	4	4	4	4	4	4	4	4
REF	3	3	3	3	3	3	3	3	3	3	3
SSA	2	2	2	2	2	2	2	2	2	2	2
USA	4	4	4	5	5	5	5	5	5	5	5

Table 704: PRIMAPHist — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 2/16]

	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882
GLO	32	33	34	34	35	35	36	36	37	38	38
CAZ	2	2	2	2	2	2	2	2	2	2	2
CHA	4	4	4	4	4	4	4	4	4	4	4
EUR	4	4	4	4	4	4	4	4	4	4	4
IND	7	7	7	7	7	7	7	8	8	8	8
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	1	1	1	1	1	1	1	1	1	1	1
MEA	0	0	0	0	0	0	0	1	1	1	1
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	4	5	5	5	5	5	5	5	5	5	5
REF	3	3	3	3	3	3	3	3	3	3	3
SSA	2	2	2	2	2	2	2	2	3	3	3
USA	5	5	5	5	5	6	6	6	6	6	6

Table 705: PRIMAPHist — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 3/16]

	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893
GLO	39	39	40	40	41	41	42	41	42	43	43
CAZ	2	2	2	2	2	2	2	2	2	2	2
CHA	4	4	4	5	5	5	5	5	5	5	5
EUR	4	5	5	5	5	5	5	4	5	5	6
IND	8	8	8	8	8	8	8	8	9	9	9
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	1	1	1	1	1	1	1	1	1	1	1
MEA	1	1	1	1	1	1	1	1	1	1	1
NEU	0	0	0	0	1	1	1	1	1	1	1
OAS	5	5	6	6	6	6	6	6	6	6	6
REF	3	3	3	3	3	3	3	3	3	3	3
SSA	3	3	3	3	3	3	3	3	3	3	3
USA	6	6	6	6	7	7	7	7	7	7	7

Table 706: PRIMAPHist — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 4/16]

	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
GLO	44	44	45	45	46	46	46	46	47	47	47
CAZ	2	2	2	2	2	2	2	2	2	2	2
CHA	5	5	5	5	5	5	5	5	5	5	5
EUR	6	6	7	7	7	7	7	7	7	7	7
IND	9	9	9	9	9	9	9	9	9	9	9
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	1	1	2	2	2	2	2	2	2	2	2
MEA	1	1	1	1	1	1	1	1	1	1	1
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	6	6	6	6	6	6	6	6	6	6	6
REF	3	3	3	3	3	3	3	3	4	4	4
SSA	3	3	3	3	3	3	3	3	3	3	3
USA	7	7	7	7	7	7	7	7	7	7	7

Table 707: PRIMAPhist — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 5/16]

	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915
GLO	47	47	47	47	48	48	48	49	50	51	52
CAZ	2	2	2	3	3	3	3	3	3	3	3
CHA	5	5	5	5	5	5	5	5	5	5	5
EUR	6	6	6	6	6	6	6	6	6	6	6
IND	9	9	9	9	9	9	9	9	9	9	9
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	3	3	3	3	3	3	3	3	3	3	3
MEA	1	1	1	1	1	1	1	1	1	1	1
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	6	6	6	7	7	7	7	7	7	7	7
REF	4	4	4	4	4	4	4	4	4	4	4
SSA	3	3	3	3	3	3	3	3	3	4	4
USA	7	7	7	7	7	7	7	7	7	7	8

Table 708: PRIMAPhist — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 6/16]

	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
GLO	53	54	55	55	56	57	57	58	59	60	60
CAZ	3	3	3	3	3	3	3	3	3	3	3
CHA	5	5	5	6	6	6	6	6	6	7	7
EUR	6	6	6	7	7	7	7	7	8	8	8
IND	9	9	9	9	10	9	9	9	9	9	9
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	3	3	3	3	3	4	4	4	4	4	4
MEA	1	1	1	1	1	1	1	1	1	1	1
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	7	7	8	8	8	8	8	9	9	9	9
REF	5	5	5	5	5	5	5	5	6	6	6
SSA	4	4	4	4	4	4	4	5	5	5	5
USA	8	8	8	8	8	8	8	8	8	8	8

Table 709: PRIMAPhist — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 7/16]

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
GLO	61	62	62	62	63	63	63	63	63	63	63
CAZ	3	3	3	3	3	3	3	3	3	3	3
CHA	7	7	8	8	8	8	7	7	7	7	7
EUR	8	9	9	9	9	9	9	9	9	9	9
IND	8	8	8	8	8	8	8	9	9	9	9
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	4	4	4	4	4	4	4	4	4	4	4
MEA	1	1	1	1	1	1	1	1	1	1	1
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	10	10	10	10	10	10	10	10	10	10	10
REF	6	6	6	6	6	6	6	6	5	5	5
SSA	5	5	5	5	5	5	5	5	5	5	5
USA	8	8	7	7	7	8	8	8	8	8	8

Table 710: PRIMAPhist — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 8/16]

	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948
GLO	63	63	64	64	65	66	67	69	70	72	73
CAZ	3	3	3	3	3	3	4	4	4	4	4
CHA	7	7	7	7	7	7	7	7	7	7	7
EUR	9	9	9	9	9	9	9	9	9	9	9
IND	10	10	10	10	10	10	10	10	10	10	10
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	4	4	4	4	4	4	5	5	5	5	5
MEA	1	1	1	1	1	1	1	2	2	2	2
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	9	9	9	9	9	9	10	10	10	10	10
REF	5	5	5	5	5	5	5	5	5	6	6
SSA	5	5	5	5	6	6	7	8	9	9	10
USA	8	8	8	8	8	8	8	8	8	8	8

Table 711: PRIMAPhist — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 9/16]

	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
GLO	74	75	76	77	79	81	83	85	87	89	90
CAZ	4	4	4	4	4	4	4	4	4	4	4
CHA	7	7	8	8	8	9	9	10	10	11	11
EUR	9	10	10	10	10	10	10	11	11	11	11
IND	10	10	10	10	10	10	10	10	10	10	10
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	5	5	6	6	7	7	8	9	10	10	11
MEA	2	2	2	2	2	2	2	2	2	2	2
NEU	1	1	1	2	2	2	2	2	2	2	2
OAS	10	10	10	10	10	11	11	11	12	12	12
REF	6	6	6	6	6	7	7	7	7	7	8
SSA	11	11	11	10	10	10	9	9	9	8	8
USA	8	8	8	9	9	9	9	9	9	9	10

Table 712: PRIMAPhist — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 10/16]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	91	92	94	95	97	98	100	102	103	103	104
CAZ	5	5	5	5	5	5	5	5	5	5	5
CHA	11	11	11	12	12	13	13	14	14	14	14
EUR	11	11	12	11	11	11	12	12	12	12	12
IND	10	10	10	10	11	10	11	11	11	11	11
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	11	11	12	12	12	13	13	13	14	14	14
MEA	2	2	2	2	2	2	2	2	2	3	3
NEU	2	2	2	2	2	2	2	2	2	2	2
OAS	12	12	13	13	13	13	13	13	14	14	14
REF	8	7	8	8	8	8	9	9	9	9	9
SSA	8	9	9	9	9	9	9	9	10	10	10
USA	10	10	10	10	10	10	10	10	10	10	10

Table 713: PRIMAPhist — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 11/16]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	106	107	109	111	113	113	114	114	114	116	117
CAZ	5	5	5	5	6	5	5	5	5	5	5
CHA	15	15	15	16	16	16	16	15	15	15	15
EUR	12	12	12	13	13	13	13	13	13	13	13
IND	11	11	11	11	12	12	12	12	12	12	12
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	14	15	15	16	16	17	17	17	18	18	19
MEA	3	3	3	3	3	3	3	3	3	3	3
NEU	2	2	2	2	2	2	2	2	2	2	2
OAS	14	14	14	14	14	14	15	15	15	15	15
REF	9	9	9	10	10	10	10	10	10	10	10
SSA	10	10	10	10	10	10	10	11	11	11	11
USA	10	10	10	11	11	11	10	10	10	10	10

Table 714: PRIMAPhist — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 12/16]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	117	118	119	119	120	120	121	123	123	123	123
CAZ	5	5	5	5	5	5	5	5	5	5	5
CHA	15	16	16	16	16	16	17	17	17	17	17
EUR	13	13	13	13	13	12	12	12	12	12	11
IND	12	13	13	13	13	13	14	14	14	14	14
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	19	19	19	19	19	19	20	20	20	21	21
MEA	3	3	3	3	3	3	3	3	3	3	4
NEU	2	2	2	2	2	2	2	2	2	2	2
OAS	15	16	16	16	17	16	17	17	17	17	18
REF	10	10	11	11	11	11	10	10	10	10	9
SSA	11	11	11	11	11	11	12	12	12	12	12
USA	10	10	10	10	9	9	9	9	9	9	9

Table 715: PRIMAPhist — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 13/16]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	122	123	124	124	124	124	125	125	126	127	129
CAZ	5	5	5	5	5	5	5	5	5	5	5
CHA	17	17	18	19	20	20	21	21	22	22	23
EUR	11	11	11	11	11	11	11	10	10	10	10
IND	14	14	14	14	14	14	14	14	14	14	14
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	21	21	22	21	21	21	22	22	22	23	24
MEA	4	4	4	4	4	4	4	4	4	4	5
NEU	2	2	2	2	2	2	2	2	1	1	1
OAS	18	18	18	18	18	18	18	18	18	18	18
REF	9	8	7	7	6	6	5	5	5	5	5
SSA	12	12	12	12	13	13	13	13	13	14	14
USA	9	9	10	9	9	9	10	10	10	10	10

Table 716: PRIMAPhist — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 14/16]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	131	135	135	136	137	137	137	136	137	137	138
CAZ	5	5	5	5	5	5	4	5	5	5	5
CHA	24	25	25	25	25	25	24	23	23	23	23
EUR	10	10	10	10	10	10	10	10	9	9	10
IND	14	14	14	15	15	15	15	15	15	15	15
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	24	25	24	24	24	24	24	24	24	24	25
MEA	5	5	5	5	5	5	5	5	5	5	5
NEU	1	1	2	2	1	1	2	2	2	2	2
OAS	18	19	19	20	20	20	21	21	21	21	21
REF	5	5	5	5	5	5	5	5	5	5	5
SSA	14	15	15	15	16	16	16	17	17	17	17
USA	9	10	10	10	10	10	10	10	10	10	10

Table 717: PRIMAPhist — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 15/16]

	2015
GLO	141
CAZ	4
CHA	24
EUR	10
IND	15
JPN	1
LAM	25
MEA	5
NEU	2
OAS	22
REF	6
SSA	17
USA	10

Table 718: PRIMAPhist — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 16/16]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	76	78	78	80	81	83	84	85	86	86	88
CAZ	4	4	4	4	4	4	4	4	4	4	5
CHA	7	7	8	8	8	9	9	9	9	9	10
EUR	11	11	11	11	11	11	11	11	11	11	11
IND	11	11	11	11	11	11	11	12	12	12	12
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	10	11	11	11	12	12	12	13	13	13	13
MEA	1	1	1	1	1	2	2	2	2	2	2
NEU	2	2	2	2	2	2	2	2	2	2	2
OAS	10	10	10	11	11	11	11	12	12	12	12
REF	6	7	7	7	7	7	8	8	8	7	8
SSA	5	5	5	5	5	5	5	5	5	5	6
USA	8	8	8	8	8	8	8	8	8	8	8

Table 719: FAO\_EmisAg — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	89	90	92	93	94	94	95	95	96	97	97
CAZ	5	5	5	5	5	5	4	4	4	4	4
CHA	10	10	10	10	10	10	10	10	10	10	10
EUR	12	12	12	12	12	12	12	12	12	12	12
IND	12	12	12	12	12	12	13	13	13	13	13
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	13	14	14	15	15	16	16	16	17	17	17
MEA	2	2	2	2	2	2	2	2	2	2	2
NEU	2	2	2	2	2	2	2	2	2	2	2
OAS	11	12	12	12	12	12	13	13	13	13	13
REF	8	8	8	8	8	8	9	9	9	9	9
SSA	6	6	6	6	6	6	6	6	6	6	6
USA	8	8	8	9	8	8	8	8	8	8	8

Table 720: FAO\_EmisAg — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	98	98	99	99	99	100	102	106	105	105	105
CAZ	4	4	4	4	4	4	4	5	5	5	5
CHA	10	10	10	11	11	11	11	11	11	11	11
EUR	12	12	12	12	12	12	12	12	11	11	10
IND	14	14	14	14	14	14	14	15	15	15	15
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	17	17	17	17	18	18	18	19	19	19	19
MEA	2	2	2	2	2	2	2	2	2	2	2
NEU	2	2	2	2	2	2	2	2	2	2	2
OAS	13	13	13	14	14	14	14	14	14	14	15
REF	9	9	9	9	9	9	9	9	9	9	8
SSA	7	6	6	7	7	7	7	10	10	10	9
USA	8	8	8	7	7	7	7	7	7	7	7

Table 721: FAO\_EmisAg — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 3/5]



	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	105	105	105	104	105	105	105	106	106	106	108
CAZ	5	5	5	5	5	5	6	6	6	5	5
CHA	11	12	12	12	12	12	12	12	12	12	13
EUR	10	10	10	10	10	10	10	9	9	9	9
IND	15	15	15	15	15	15	15	15	15	15	15
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	19	20	19	19	19	20	20	20	21	22	22
MEA	2	2	2	2	2	2	2	2	2	2	3
NEU	2	2	2	1	1	1	1	1	1	1	1
OAS	15	15	15	16	15	16	16	16	16	16	16
REF	8	7	7	6	5	5	5	5	5	5	5
SSA	10	10	10	10	10	10	10	11	11	11	11
USA	7	7	7	7	7	7	7	7	7	7	7

Table 722: FAO.EmisAg — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011	2030	2050
GLO	110	111	112	113	113	115	116	0	0
CAZ	5	5	5	4	4	4	6	0	0
CHA	13	13	13	14	14	14	14	0	0
EUR	9	9	9	9	9	9	9	0	0
IND	16	16	16	17	17	17	17	0	0
JPN	1	1	1	1	1	1	1	0	0
LAM	22	22	22	22	22	23	23	0	0
MEA	3	3	3	3	3	3	3	0	0
NEU	1	1	1	1	1	1	1	0	0
OAS	17	17	18	18	19	19	19	0	0
REF	5	5	4	5	4	5	4	0	0
SSA	12	12	12	13	13	13	14	0	0
USA	7	7	7	7	7	7	7	0	0

Table 723: FAO.EmisAg — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 5/5]

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
GLO	128	130	131	132	134	136	137	137	137	136	138
CAZ	5	5	5	5	5	6	6	5	5	5	5
CHA	26	28	28	27	28	28	28	27	26	25	25
EUR	12	12	12	13	13	13	13	13	13	13	13
IND	15	15	15	15	15	15	15	15	15	15	16
JPN	3	3	3	3	3	3	3	3	2	2	2
LAM	16	16	16	17	17	18	19	19	19	19	20
MEA	3	3	3	3	3	3	3	3	3	3	3
NEU	2	2	2	2	2	2	2	2	2	2	2
OAS	23	22	22	22	22	22	22	22	23	23	23
REF	9	10	10	10	11	11	11	11	11	11	11
SSA	7	7	7	7	7	7	7	7	8	8	8
USA	9	9	9	9	9	9	9	9	9	9	9

Table 724: EDGAR.LU — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 1/4]

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
GLO	138	138	138	139	138	139	139	140	142	142	141
CAZ	5	5	5	5	5	5	5	5	5	5	5
CHA	25	24	24	24	24	24	24	24	25	25	25
EUR	13	13	13	14	14	14	13	13	13	13	13
IND	16	16	16	16	17	17	17	17	17	17	18
JPN	2	2	2	2	2	2	2	2	2	2	2
LAM	20	20	20	21	21	21	21	22	22	22	23
MEA	3	3	3	3	3	3	3	3	4	4	4
NEU	2	2	2	2	2	2	2	2	2	2	2
OAS	23	22	22	23	23	23	22	23	23	22	22
REF	11	12	12	12	12	12	12	12	12	12	12
SSA	8	8	8	8	8	8	8	8	9	9	9
USA	9	9	9	9	9	8	8	8	8	8	8

Table 725: EDGAR.LU — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 2/4]

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
GLO	141	139	139	140	139	138	137	138	137	137	138
CAZ	5	5	5	5	5	5	5	5	5	5	5
CHA	24	23	23	24	24	23	24	24	23	23	23
EUR	12	12	11	11	11	11	11	11	11	11	11
IND	18	18	18	18	18	18	18	18	18	18	18
JPN	2	2	2	2	2	2	2	2	2	1	1
LAM	23	24	24	25	24	24	24	24	25	25	26
MEA	4	4	4	4	4	4	4	5	5	5	5
NEU	2	2	2	2	2	2	1	2	2	1	1
OAS	22	22	22	23	23	23	23	23	23	23	23
REF	11	10	10	9	8	7	6	6	6	6	6
SSA	9	9	9	9	9	9	10	10	10	10	10
USA	8	9	9	9	9	9	9	9	9	9	9

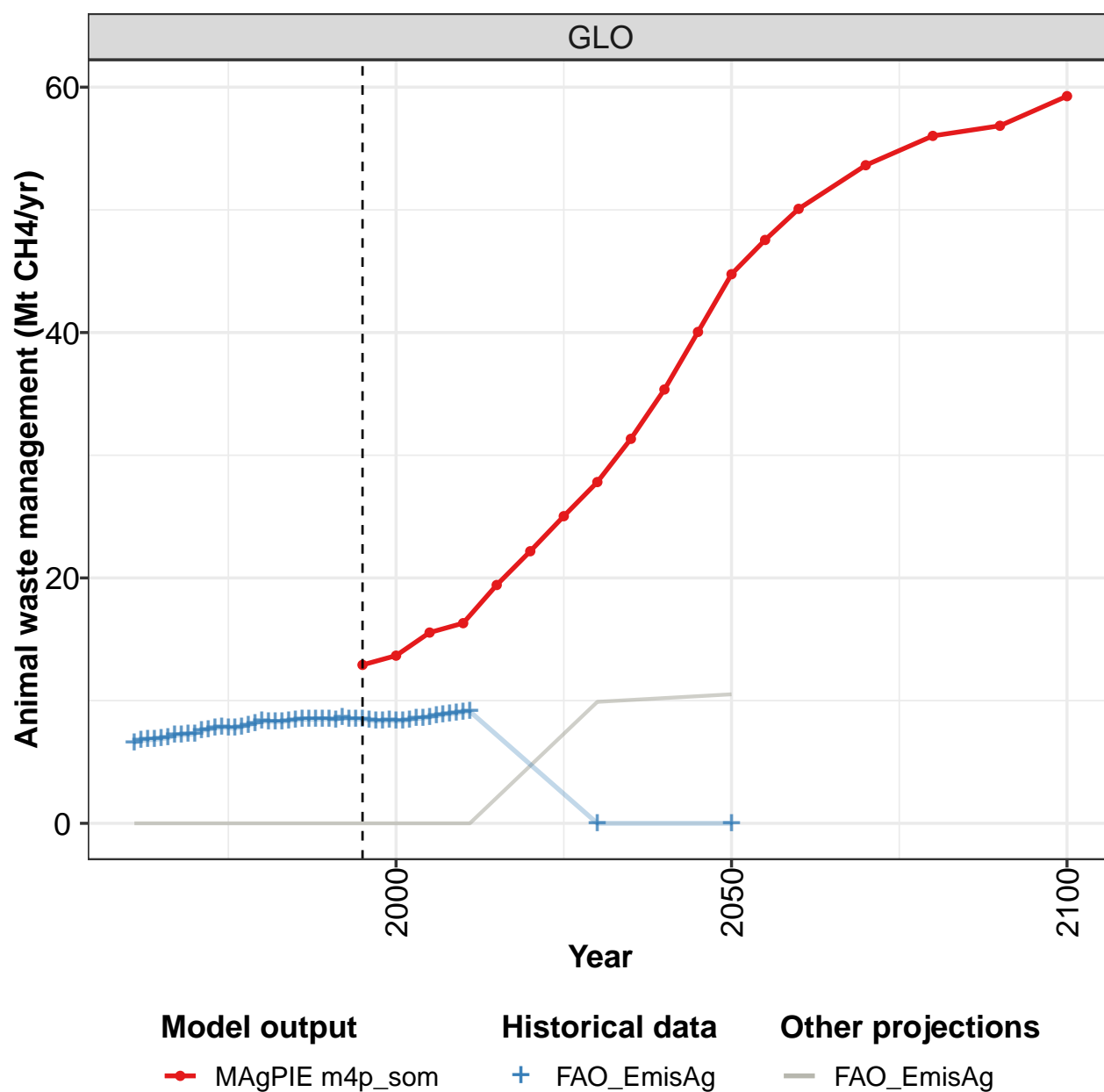
Table 726: EDGAR.LU — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 3/4]

	2003	2004	2005	2006	2007	2008
GLO	139	142	144	146	148	151
CAZ	5	5	5	6	6	6
CHA	23	24	25	26	27	28
EUR	11	10	10	10	10	10
IND	18	18	18	18	18	18
JPN	1	1	1	1	1	1
LAM	27	27	28	28	29	29
MEA	5	5	5	5	5	5
NEU	1	1	1	1	2	2
OAS	23	24	24	25	26	26
REF	6	6	6	6	5	5
SSA	10	10	11	11	11	11
USA	9	9	9	9	9	9

Table 727: EDGAR.LU — Emissions—CH4—Land—Agriculture (Mt CH4/yr) [PART 4/4]

## 11.1.2 Agriculture—Animal waste management

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



```
## Scale for 'colour' is already present. Adding another scale for 'colour', which will##
                                replace the existing scale.
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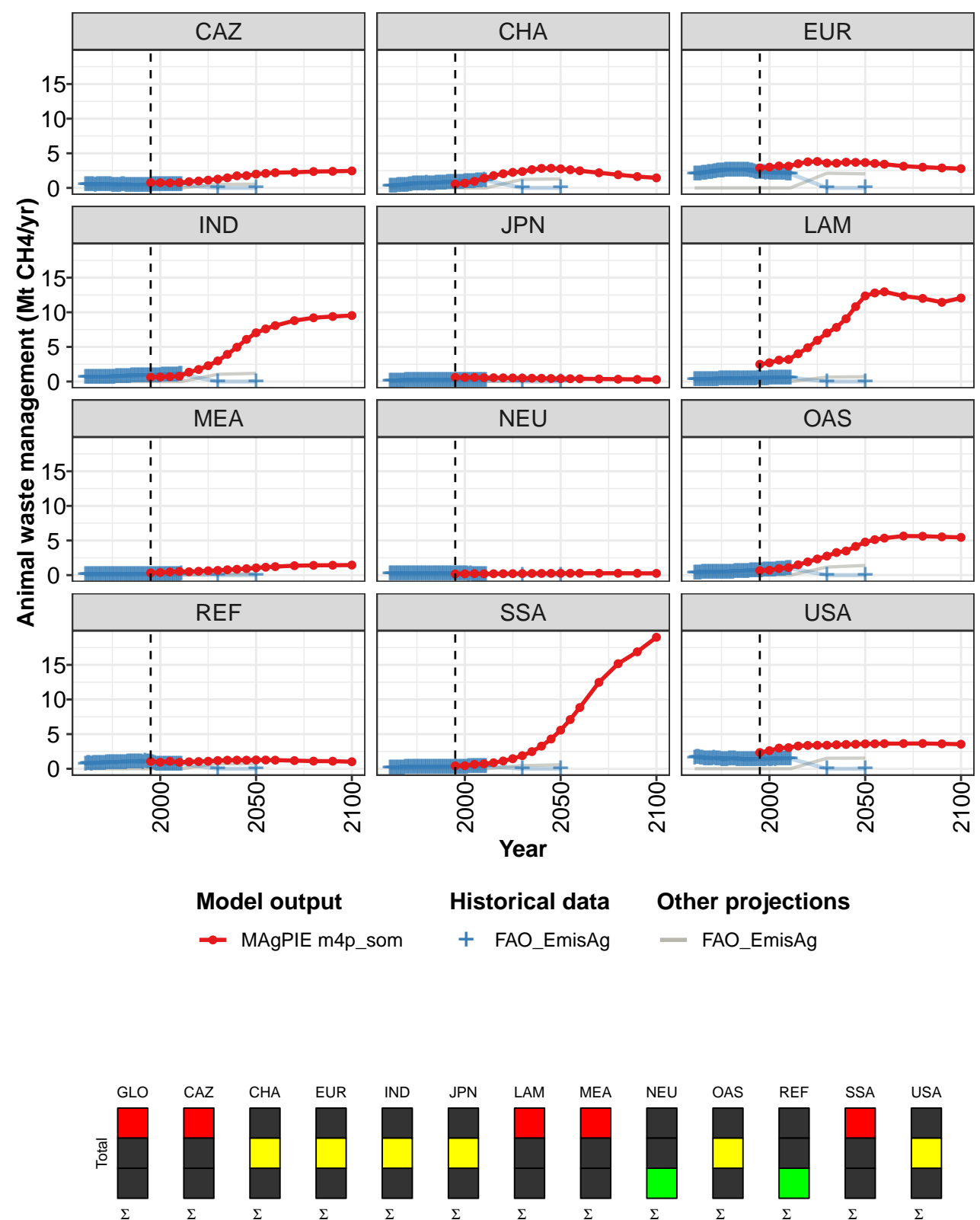


Figure 235: MAgPIE m4p\_som — Emissions—CH4—Land—Agriculture—Animal waste management (Mt CH4/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	12.9	13.7	15.5	16.3	19.4	22.2	25.0	27.8	31.3	35.4	40.1
CAZ	0.8	0.8	0.7	0.8	0.9	1.0	1.1	1.3	1.5	1.7	1.8
CHA	0.6	0.7	0.9	1.4	1.8	2.0	2.2	2.4	2.6	2.8	2.8
EUR	2.9	3.0	3.2	3.2	3.5	3.8	3.8	3.6	3.6	3.7	3.7
IND	0.6	0.7	0.7	0.8	1.3	1.7	2.3	3.0	3.9	5.0	6.1
JPN	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4
LAM	2.5	2.7	3.1	3.2	4.0	4.9	5.9	7.0	7.8	9.1	10.8
MEA	0.3	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.9
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
OAS	0.7	0.7	0.9	1.1	1.5	1.9	2.3	2.7	3.3	3.5	4.1
REF	1.1	0.9	1.1	0.9	1.0	1.0	1.1	1.2	1.2	1.2	1.2
SSA	0.4	0.4	0.6	0.7	0.9	1.1	1.4	1.9	2.5	3.3	4.3
USA	2.3	2.6	3.0	3.0	3.3	3.4	3.4	3.4	3.5	3.5	3.5

Table 728: MAgPIE m4p\_som — Emissions—CH4—Land—Agriculture—Animal waste management (Mt CH4/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	44.8	47.5	50.1	53.6	56.0	56.9	59.3
CAZ	2.0	2.1	2.2	2.3	2.4	2.4	2.5
CHA	2.8	2.6	2.5	2.2	1.9	1.6	1.5
EUR	3.7	3.5	3.4	3.1	3.0	2.9	2.8
IND	7.0	7.6	8.1	8.8	9.2	9.4	9.5
JPN	0.4	0.4	0.4	0.4	0.3	0.3	0.3
LAM	12.4	12.8	13.0	12.3	12.0	11.4	12.1
MEA	1.0	1.1	1.2	1.4	1.4	1.4	1.5
NEU	0.3	0.3	0.3	0.3	0.3	0.3	0.3
OAS	4.8	5.1	5.3	5.6	5.6	5.5	5.5
REF	1.3	1.3	1.2	1.2	1.1	1.1	1.0
SSA	5.6	7.1	8.8	12.5	15.2	16.9	19.0
USA	3.6	3.6	3.6	3.6	3.6	3.6	3.5

Table 729: MAgPIE m4p\_som — Emissions—CH4—Land—Agriculture—Animal waste management (Mt CH4/yr) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	6.59	6.75	6.81	6.83	6.90	6.96	7.16	7.22	7.23	7.30	7.56
CAZ	0.43	0.44	0.44	0.44	0.44	0.43	0.44	0.45	0.45	0.46	0.47
CHA	0.22	0.21	0.25	0.31	0.35	0.38	0.42	0.42	0.40	0.39	0.45
EUR	2.02	2.05	2.04	2.06	2.09	2.14	2.19	2.22	2.24	2.29	2.32
IND	0.60	0.60	0.59	0.60	0.60	0.61	0.61	0.62	0.63	0.63	0.64
JPN	0.07	0.09	0.09	0.10	0.11	0.10	0.11	0.12	0.13	0.14	0.15
LAM	0.26	0.26	0.27	0.28	0.29	0.29	0.30	0.31	0.31	0.32	0.32
MEA	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07
NEU	0.16	0.16	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17
OAS	0.33	0.35	0.36	0.37	0.38	0.39	0.39	0.41	0.41	0.42	0.42
REF	0.68	0.74	0.77	0.69	0.73	0.78	0.80	0.78	0.77	0.78	0.83
SSA	0.15	0.15	0.16	0.16	0.16	0.17	0.17	0.17	0.18	0.18	0.18
USA	1.60	1.64	1.63	1.60	1.52	1.44	1.49	1.48	1.47	1.43	1.52

Table 730: FAO\_EmisAg — Emissions—CH4—Land—Agriculture—Animal waste management (Mt CH4/yr) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	7.64	7.75	7.84	7.79	7.74	7.87	8.02	8.15	8.32	8.30	8.29
CAZ	0.46	0.45	0.44	0.43	0.42	0.42	0.41	0.42	0.44	0.43	0.43
CHA	0.53	0.55	0.54	0.55	0.58	0.59	0.60	0.62	0.65	0.63	0.61
EUR	2.34	2.46	2.51	2.50	2.50	2.53	2.57	2.59	2.62	2.60	2.60
IND	0.65	0.65	0.65	0.66	0.67	0.68	0.69	0.71	0.72	0.73	0.75
JPN	0.15	0.15	0.15	0.14	0.15	0.15	0.16	0.16	0.16	0.16	0.16
LAM	0.33	0.34	0.35	0.36	0.37	0.38	0.38	0.38	0.40	0.40	0.40
MEA	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.08
NEU	0.17	0.18	0.18	0.18	0.19	0.19	0.19	0.19	0.20	0.20	0.20
OAS	0.43	0.44	0.44	0.43	0.42	0.43	0.46	0.47	0.46	0.48	0.49
REF	0.86	0.86	0.88	0.90	0.87	0.88	0.92	0.93	0.94	0.94	0.95
SSA	0.18	0.18	0.18	0.19	0.19	0.20	0.20	0.21	0.21	0.21	0.22
USA	1.47	1.42	1.42	1.36	1.30	1.35	1.36	1.39	1.46	1.44	1.39

Table 731: FAO\_EmisAg — Emissions—CH4—Land—Agriculture—Animal waste management (Mt CH4/yr)  
[PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	8.27	8.37	8.40	8.49	8.46	8.47	8.51	8.51	8.44	8.61	8.51
CAZ	0.42	0.43	0.43	0.42	0.41	0.42	0.42	0.42	0.41	0.41	0.41
CHA	0.63	0.63	0.65	0.70	0.72	0.70	0.74	0.75	0.77	0.78	0.79
EUR	2.57	2.60	2.60	2.62	2.57	2.57	2.53	2.50	2.42	2.34	2.26
IND	0.76	0.78	0.79	0.80	0.80	0.81	0.82	0.84	0.85	0.86	0.87
JPN	0.16	0.16	0.17	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.19
LAM	0.40	0.41	0.41	0.41	0.42	0.42	0.43	0.43	0.44	0.45	0.45
MEA	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.11	0.10	0.11	0.11
NEU	0.19	0.20	0.19	0.19	0.20	0.19	0.19	0.19	0.19	0.18	0.17
OAS	0.51	0.52	0.53	0.55	0.56	0.57	0.59	0.59	0.61	0.63	0.64
REF	0.96	0.98	0.98	0.98	0.99	0.96	0.97	0.96	0.94	1.11	1.05
SSA	0.22	0.21	0.22	0.22	0.22	0.23	0.24	0.24	0.24	0.24	0.24
USA	1.35	1.36	1.34	1.31	1.29	1.31	1.30	1.29	1.29	1.32	1.33

Table 732: FAO\_EmisAg — Emissions—CH4—Land—Agriculture—Animal waste management (Mt CH4/yr)  
[PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	8.51	8.47	8.40	8.34	8.34	8.39	8.34	8.35	8.43	8.53	8.57
CAZ	0.42	0.43	0.44	0.44	0.45	0.45	0.45	0.47	0.48	0.48	0.48
CHA	0.80	0.81	0.83	0.83	0.83	0.85	0.87	0.88	0.89	0.90	0.93
EUR	2.25	2.22	2.19	2.19	2.17	2.19	2.17	2.14	2.13	2.12	2.11
IND	0.87	0.88	0.88	0.89	0.89	0.89	0.89	0.90	0.90	0.91	0.92
JPN	0.18	0.18	0.18	0.18	0.18	0.18	0.17	0.17	0.17	0.17	0.17
LAM	0.46	0.46	0.45	0.45	0.45	0.45	0.46	0.47	0.48	0.50	0.51
MEA	0.11	0.11	0.12	0.12	0.13	0.13	0.12	0.12	0.12	0.13	0.13
NEU	0.17	0.18	0.17	0.17	0.17	0.17	0.16	0.16	0.15	0.15	0.14
OAS	0.66	0.68	0.70	0.72	0.71	0.72	0.72	0.74	0.77	0.80	0.82
REF	1.00	0.92	0.85	0.76	0.72	0.69	0.67	0.64	0.65	0.70	0.66
SSA	0.24	0.25	0.25	0.26	0.27	0.28	0.28	0.28	0.29	0.30	0.30
USA	1.34	1.36	1.35	1.33	1.37	1.39	1.37	1.38	1.39	1.38	1.39

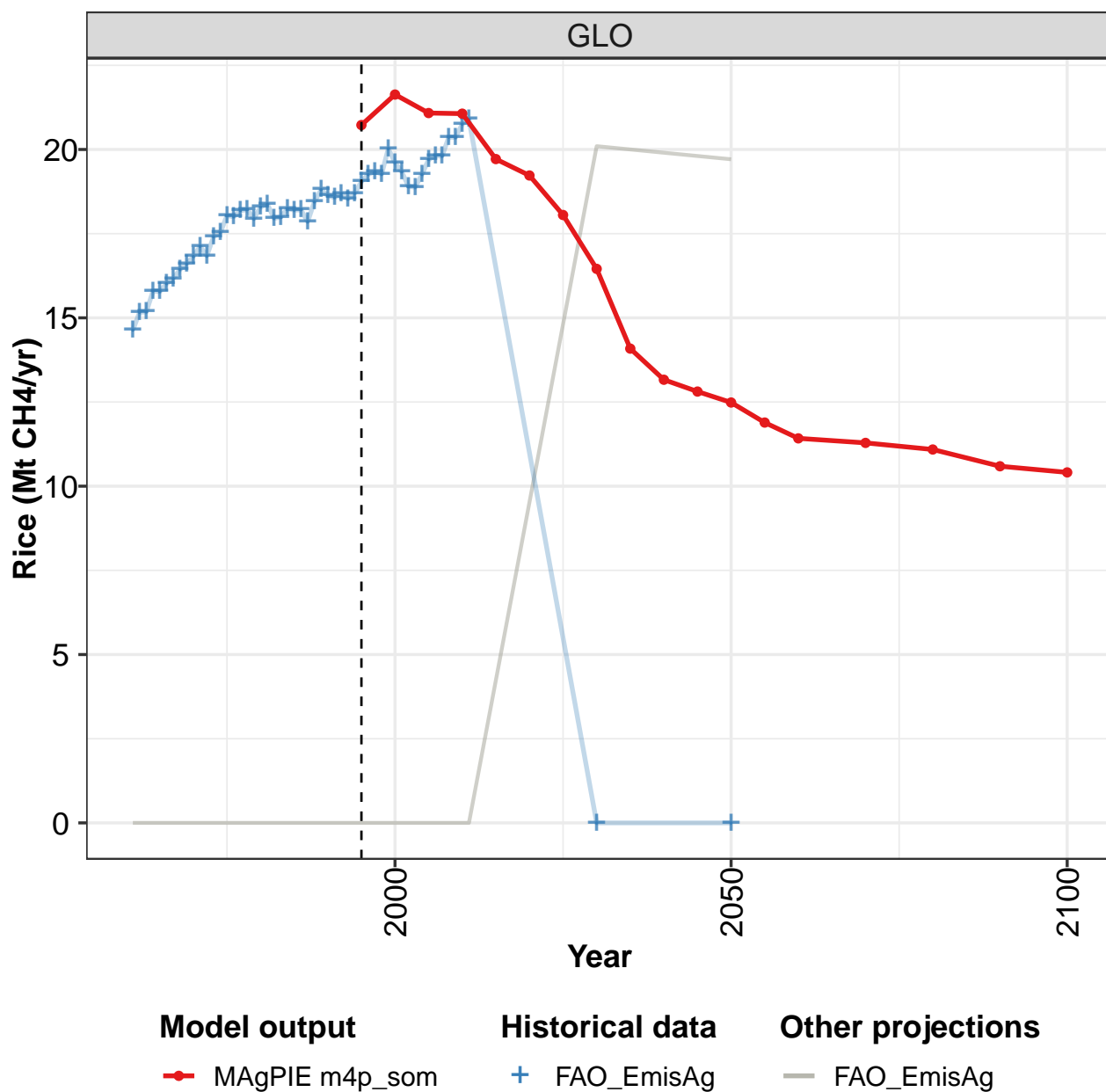
Table 733: FAO\_EmisAg — Emissions—CH4—Land—Agriculture—Animal waste management (Mt CH4/yr)  
[PART 4/5]

	2005	2006	2007	2008	2009	2010	2011	2030	2050
GLO	8.66	8.76	8.86	8.93	8.96	9.08	9.12	0.00	0.00
CAZ	0.48	0.48	0.47	0.45	0.45	0.44	0.45	0.00	0.00
CHA	0.96	0.99	1.01	1.02	1.05	1.10	1.09	0.00	0.00
EUR	2.11	2.09	2.10	2.08	2.06	2.07	2.05	0.00	0.00
IND	0.93	0.94	0.97	0.98	1.00	1.02	1.03	0.00	0.00
JPN	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.00	0.00
LAM	0.52	0.53	0.53	0.53	0.54	0.54	0.54	0.00	0.00
MEA	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.00	0.00
NEU	0.14	0.14	0.15	0.14	0.14	0.14	0.14	0.00	0.00
OAS	0.84	0.87	0.90	0.91	0.95	0.96	0.98	0.00	0.00
REF	0.66	0.67	0.66	0.67	0.65	0.67	0.69	0.00	0.00
SSA	0.31	0.32	0.34	0.36	0.36	0.37	0.38	0.00	0.00
USA	1.40	1.41	1.42	1.47	1.44	1.44	1.45	0.00	0.00

Table 734: FAO\_EmisAg — Emissions—CH4—Land—Agriculture—Animal waste management (Mt CH4/yr)  
[PART 5/5]

## 11.1.3 Agriculture—Rice

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

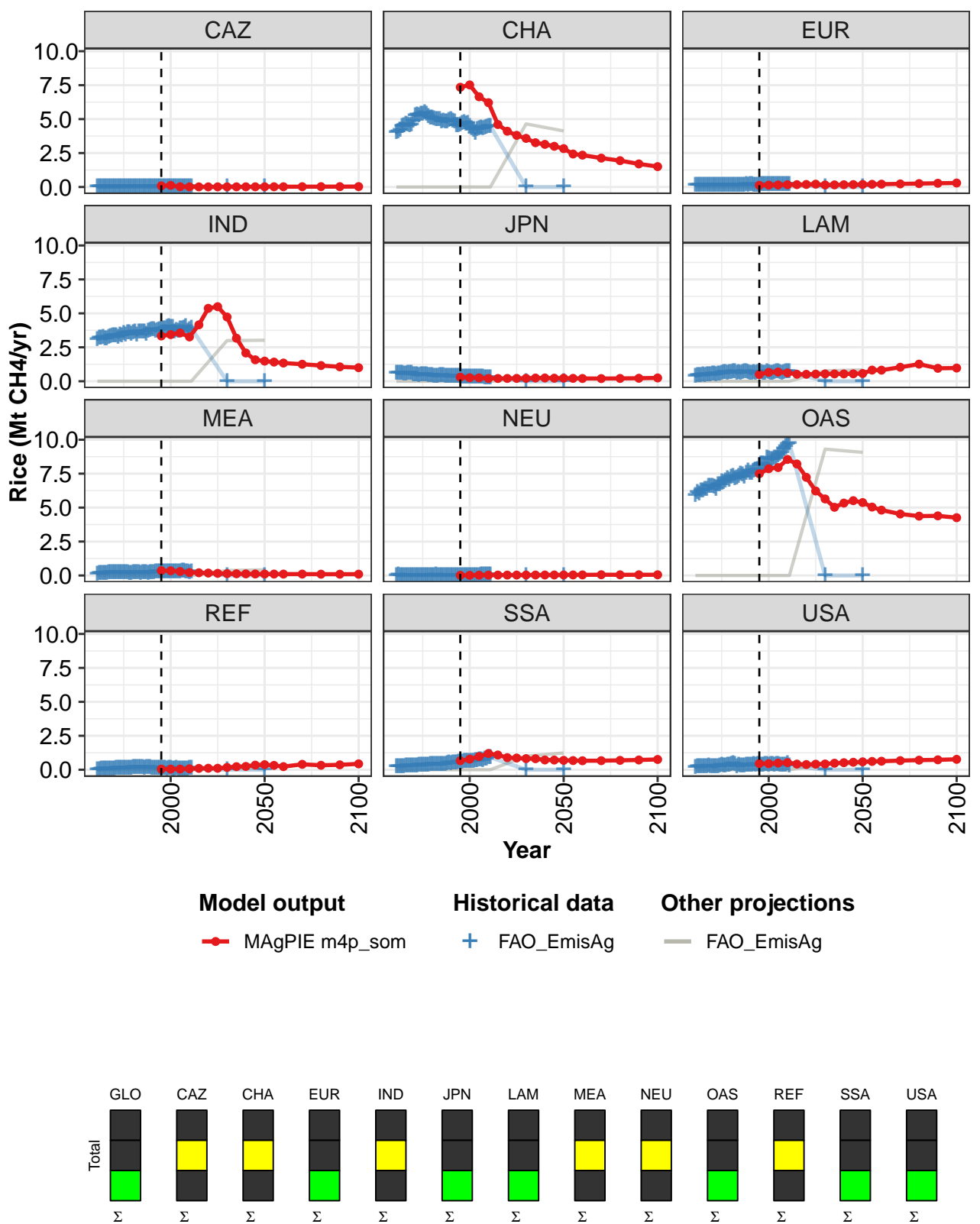


Figure 236: MAGPIE m4p\_som — Emissions—CH4—Land—Agriculture—Rice (Mt CH4/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	20.7	21.6	21.1	21.1	19.7	19.2	18.1	16.5	14.1	13.2	12.8
CAZ	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	7.3	7.5	6.6	6.2	4.6	4.1	3.8	3.6	3.3	3.1	3.0
EUR	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
IND	3.3	3.4	3.6	3.3	4.2	5.4	5.5	4.7	3.2	2.1	1.6
JPN	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
LAM	0.5	0.7	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5
MEA	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	7.5	7.9	7.9	8.5	8.2	7.2	6.2	5.6	5.0	5.3	5.5
REF	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3
SSA	0.7	0.8	1.0	1.2	1.1	0.9	0.9	0.8	0.8	0.7	0.7
USA	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.6

Table 735: MAgPIE m4p\_som — Emissions—CH4—Land—Agriculture—Rice (Mt CH4/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	12.5	11.9	11.4	11.3	11.1	10.6	10.4
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	2.8	2.4	2.3	2.1	1.9	1.7	1.5
EUR	0.2	0.2	0.2	0.2	0.3	0.3	0.3
IND	1.5	1.4	1.3	1.3	1.2	1.1	1.0
JPN	0.2	0.2	0.2	0.2	0.2	0.2	0.2
LAM	0.6	0.8	0.8	1.0	1.3	1.0	1.0
MEA	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEU	0.0	0.0	0.0	0.1	0.1	0.1	0.1
OAS	5.4	5.0	4.8	4.5	4.4	4.4	4.3
REF	0.4	0.3	0.2	0.4	0.3	0.4	0.4
SSA	0.7	0.7	0.7	0.7	0.7	0.7	0.8
USA	0.6	0.6	0.6	0.7	0.7	0.7	0.8

Table 736: MAgPIE m4p\_som — Emissions—CH4—Land—Agriculture—Rice (Mt CH4/yr) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	14.6	15.2	15.2	15.8	15.8	16.0	16.2	16.4	16.6	16.8	17.1
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	4.0	4.1	4.2	4.5	4.5	4.6	4.6	4.5	4.6	4.9	5.3
EUR	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
IND	3.1	3.2	3.2	3.2	3.1	3.1	3.2	3.3	3.3	3.3	3.3
JPN	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5
LAM	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
MEA	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	5.9	6.1	6.0	6.2	6.2	6.4	6.4	6.6	6.6	6.6	6.5
REF	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SSA	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
USA	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2

Table 737: FAO\_EmisAg — Emissions—CH4—Land—Agriculture—Rice (Mt CH4/yr) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	16.8	17.4	17.5	18.0	18.0	18.2	18.2	17.9	18.3	18.4	18.0
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	5.3	5.3	5.4	5.4	5.5	5.4	5.2	5.1	5.1	5.0	5.0
EUR	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1
IND	3.3	3.4	3.4	3.5	3.4	3.6	3.6	3.5	3.6	3.6	3.4
JPN	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4
LAM	0.5	0.5	0.5	0.6	0.7	0.6	0.6	0.6	0.7	0.7	0.7
MEA	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	6.3	6.7	6.7	6.9	6.9	7.0	7.1	7.0	7.2	7.3	7.2
REF	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2
SSA	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
USA	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.5	0.4

Table 738: FAO\_EmisAg — Emissions—CH4—Land—Agriculture—Rice (Mt CH4/yr) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	18.0	18.2	18.2	18.2	17.9	18.4	18.8	18.6	18.6	18.7	18.5
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	5.0	5.0	4.8	4.8	4.8	4.8	4.9	4.9	4.9	4.8	4.5
EUR	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
IND	3.7	3.6	3.6	3.7	3.4	3.7	3.7	3.8	3.8	3.7	3.8
JPN	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
LAM	0.6	0.7	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.7	0.6
MEA	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	7.2	7.3	7.5	7.4	7.3	7.6	7.7	7.6	7.5	7.7	7.8
REF	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1
SSA	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5
USA	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3

Table 739: FAO\_EmisAg — Emissions—CH4—Land—Agriculture—Rice (Mt CH4/yr) [PART 3/5]

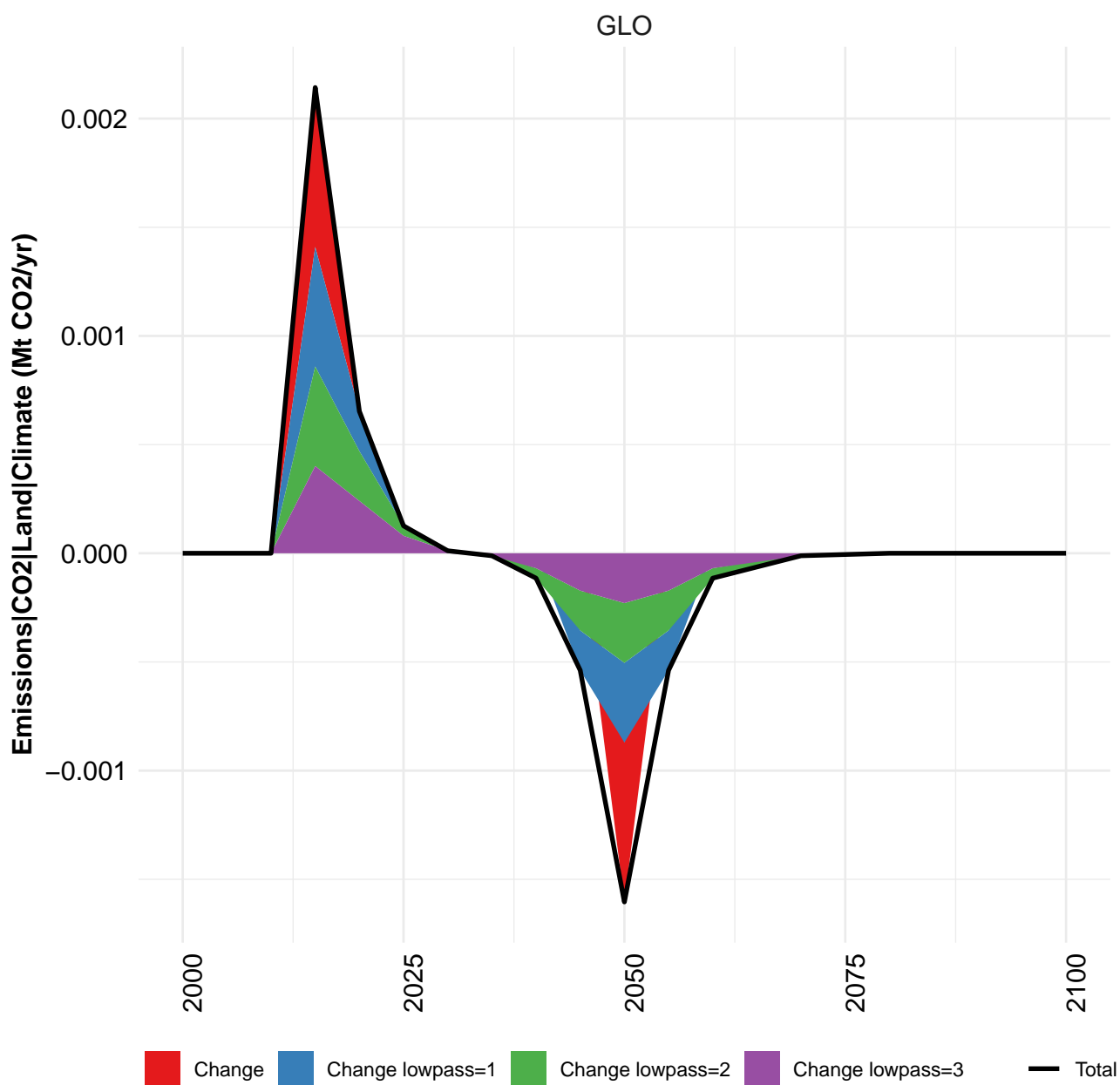
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	18.7	19.0	19.3	19.3	19.3	20.0	19.6	19.3	18.9	18.9	19.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	4.5	4.6	4.7	4.7	4.7	4.7	4.5	4.3	4.2	4.0	4.2
EUR	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
IND	3.8	3.8	3.8	3.9	4.0	4.0	4.0	4.0	3.7	3.8	3.7
JPN	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
LAM	0.7	0.7	0.6	0.6	0.6	0.7	0.7	0.6	0.6	0.6	0.7
MEA	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	7.8	8.1	8.2	8.2	8.1	8.7	8.6	8.6	8.5	8.6	8.7
REF	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SSA	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
USA	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4

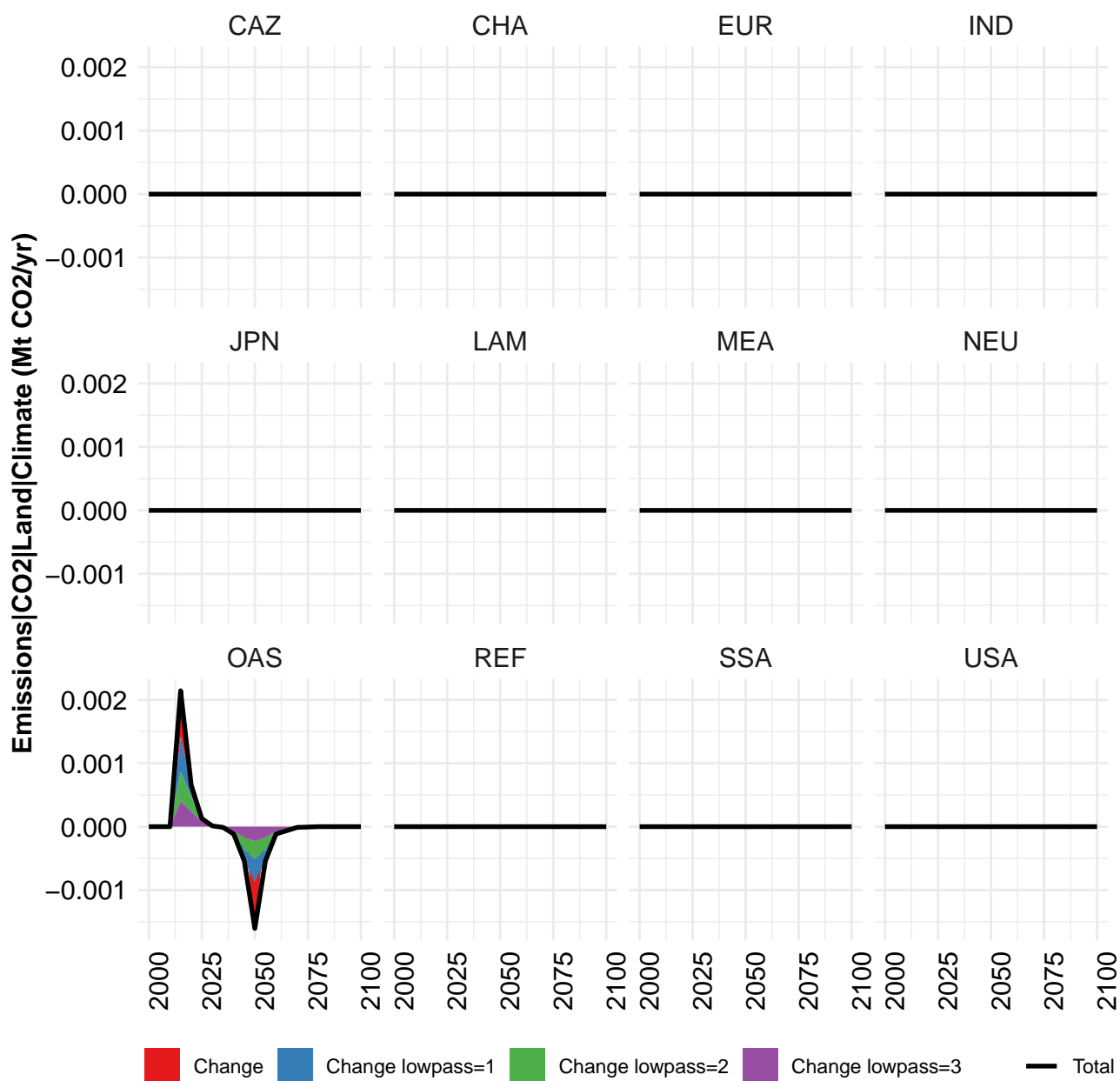
Table 740: FAO\_EmisAg — Emissions—CH4—Land—Agriculture—Rice (Mt CH4/yr) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011	2030	2050
GLO	19.7	19.8	19.8	20.4	20.4	20.8	20.9	0.0	0.0
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	4.3	4.4	4.3	4.4	4.4	4.4	4.5	0.0	0.0
EUR	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0
IND	3.9	3.9	3.9	4.0	3.7	3.8	3.9	0.0	0.0
JPN	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0
LAM	0.7	0.6	0.6	0.7	0.7	0.7	0.7	0.0	0.0
MEA	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	8.8	9.0	9.1	9.3	9.5	9.6	9.7	0.0	0.0
REF	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0
SSA	0.7	0.7	0.7	0.8	0.8	0.9	0.9	0.0	0.0
USA	0.4	0.3	0.3	0.4	0.4	0.4	0.3	0.0	0.0

Table 741: FAO\_EmisAg — Emissions—CH4—Land—Agriculture—Rice (Mt CH4/yr) [PART 5/5]

## 12 CO2

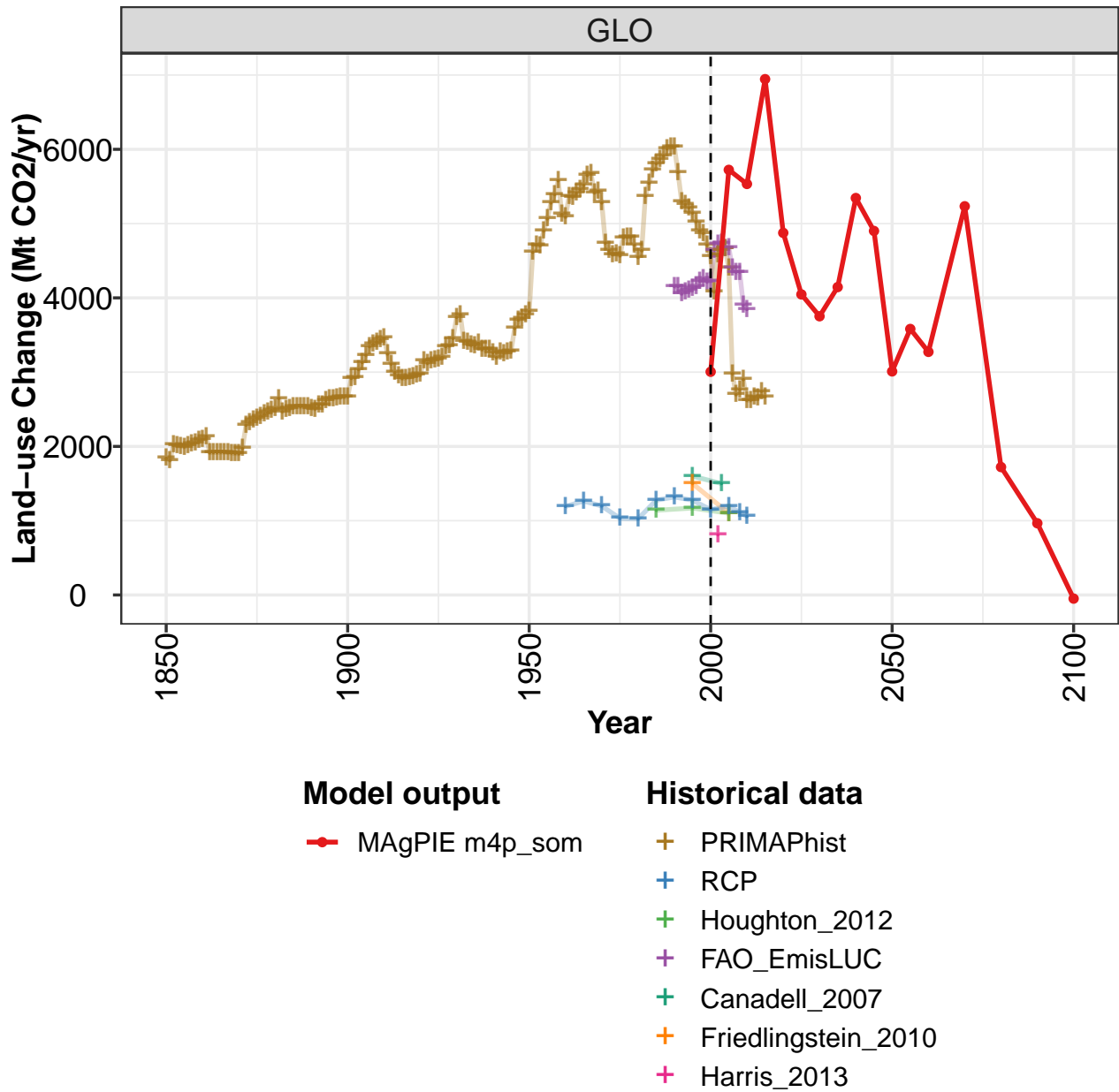




## 12.1 Land

### 12.1.1 Land-use Change

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

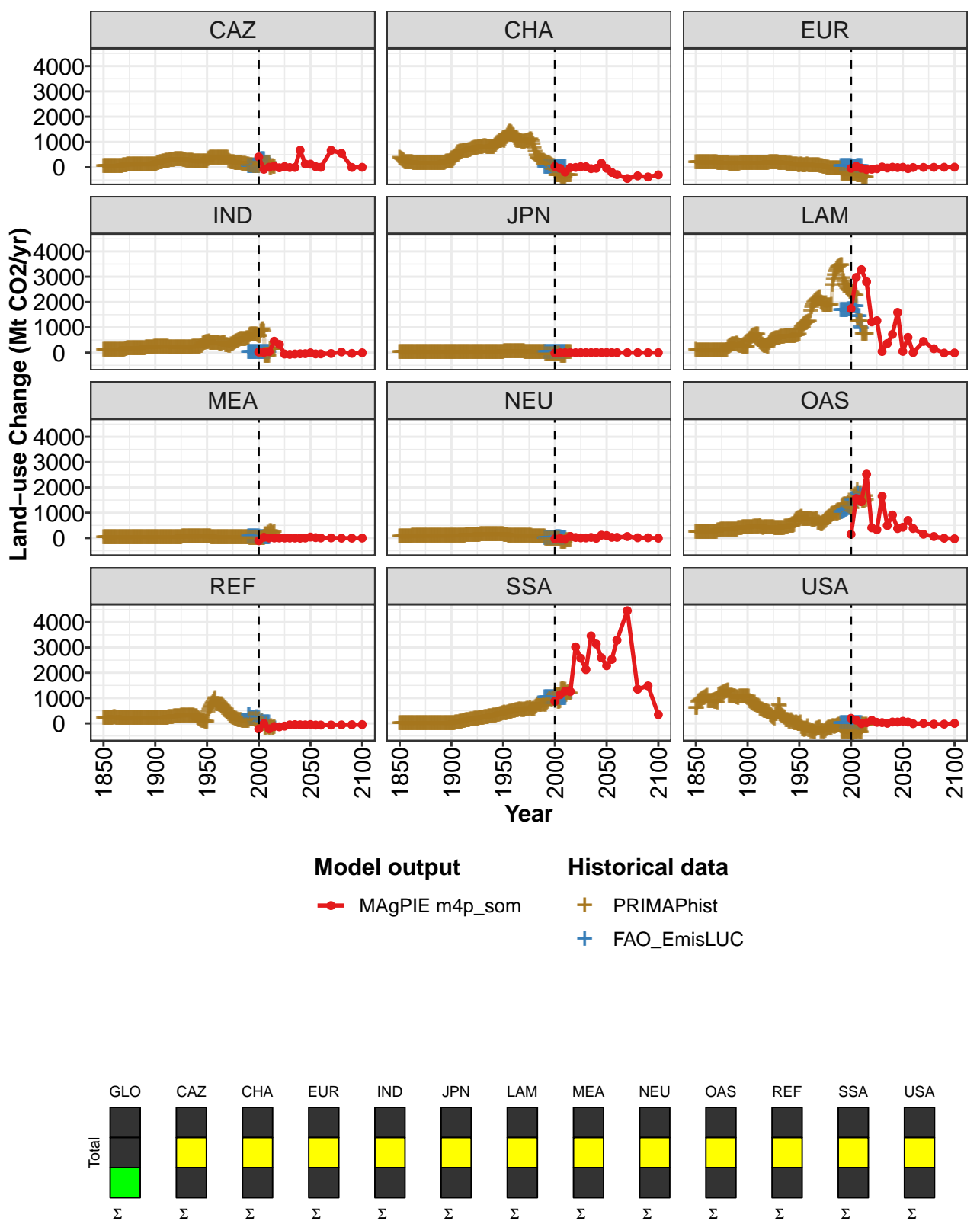


Figure 237: MAgPIE m4p\_som — Emissions—CO<sub>2</sub>—Land—Land-use Change (Mt CO<sub>2</sub>/yr)



	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
GLO	3005	5724	5534	6945	4875	4047	3752	4145	5345	4901	3010
CAZ	409	-78	2	45	-19	29	-9	-6	674	129	124
CHA	31	-44	-187	-14	-5	24	21	-54	-40	157	-42
EUR	-41	38	-36	-87	-76	-58	12	-29	3	-12	1
IND	23	8	39	452	325	-55	-68	-54	-44	-41	-7
JPN	-14	-6	-4	-2	-2	0	-0	1	6	0	5
LAM	1733	2974	3280	2802	1214	1262	47	361	721	1590	50
MEA	-108	31	1	2	1	1	-1	-1	-7	1	39
NEU	-29	-17	-48	62	22	6	4	24	-12	114	100
OAS	148	1563	1439	2525	404	330	1648	493	910	376	426
REF	-223	-8	-215	-124	-136	-109	-59	-51	-57	-60	-48
SSA	876	1136	1272	1257	3024	2576	2127	3458	3138	2595	2280
USA	200	126	-10	28	123	41	31	3	53	52	83

Table 742: MAgPIE m4p\_som — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 1/2]

	2055	2060	2070	2080	2090	2100
GLO	3582	3273	5234	1722	966	-49
CAZ	27	0	670	551	-5	1
CHA	-202	-289	-444	-341	-383	-299
EUR	-53	-8	-4	-1	2	5
IND	-51	-49	-34	26	-30	-4
JPN	0	0	0	1	0	0
LAM	603	1	444	156	-16	-10
MEA	16	3	5	-6	-5	-2
NEU	28	28	60	10	9	-7
OAS	696	377	150	61	-7	-30
REF	-66	-66	-65	-60	-54	-47
SSA	2529	3290	4455	1353	1483	344
USA	53	-13	-4	-28	-29	1

Table 743: MAgPIE m4p\_som — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 2/2]

	1850	1851	1852	1853	1854	1855	1856	1857	1858	1859	1860
GLO	1841	1812	2018	2010	2003	1992	2014	2034	2051	2079	2095
CAZ	29	28	28	28	28	28	28	28	28	28	27
CHA	368	336	303	268	233	196	191	186	182	179	177
EUR	176	176	176	176	176	176	176	176	176	176	176
IND	106	106	106	106	106	106	106	106	106	107	107
JPN	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3
LAM	87	85	85	84	83	82	81	81	80	80	78
MEA	4	4	4	4	4	4	4	4	4	4	4
NEU	48	48	48	48	48	48	48	48	48	48	48
OAS	222	220	219	219	218	218	218	218	218	218	218
REF	208	208	209	210	211	212	214	215	216	218	219
SSA	-5	-4	-4	-4	-4	-4	-4	-4	-5	-6	-7
USA	601	607	845	874	902	929	955	979	1000	1030	1050

Table 744: PRIMAPHist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 1/16]

	1861	1862	1863	1864	1865	1866	1867	1868	1869	1870	1871
GLO	2136	1916	1916	1918	1920	1921	1915	1910	1904	1900	1973
CAZ	28	34	36	38	41	43	45	47	49	52	71
CHA	175	173	169	167	166	165	164	163	162	162	161
EUR	176	176	176	176	177	177	178	178	179	179	161
IND	107	107	107	107	107	107	107	108	108	108	137
JPN	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	1
LAM	81	82	82	82	83	81	79	78	77	77	76
MEA	10	11	12	12	12	13	13	14	14	14	14
NEU	61	63	65	66	67	68	69	70	71	71	69
OAS	219	219	219	220	220	220	220	220	221	221	275
REF	221	191	191	191	191	191	190	189	189	189	189
SSA	-8	-7	-6	-5	-2	-2	-1	-1	-2	-2	-3
USA	1070	871	868	865	862	860	852	845	838	831	821

Table 745: PRIMAPhist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 2/16]

	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882
GLO	2286	2326	2353	2382	2410	2434	2459	2485	2507	2646	2469
CAZ	79	85	88	92	95	94	95	96	96	97	97
CHA	160	160	152	150	148	147	146	147	147	147	146
EUR	158	156	153	150	148	146	145	143	142	140	139
IND	144	148	152	155	157	158	160	161	162	163	163
JPN	2	3	3	3	3	3	4	4	4	4	4
LAM	76	75	75	75	75	77	79	80	82	198	232
MEA	15	15	15	15	16	16	16	16	16	16	17
NEU	70	70	70	70	70	70	70	71	71	71	71
OAS	288	297	304	310	313	316	319	321	323	324	325
REF	189	191	192	192	195	196	196	196	196	196	197
SSA	-4	-3	-2	-1	-0	-0	-0	0	-1	-1	-2
USA	1110	1130	1150	1170	1190	1210	1230	1250	1270	1290	1080

Table 746: PRIMAPhist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 3/16]

	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893
GLO	2495	2506	2529	2533	2532	2531	2529	2517	2504	2557	2560
CAZ	98	98	99	99	100	100	100	100	101	101	101
CHA	145	144	144	143	143	142	142	142	142	142	142
EUR	137	136	135	136	136	137	138	138	139	140	140
IND	164	164	164	165	165	165	166	166	188	193	197
JPN	4	4	4	5	5	5	5	5	5	5	5
LAM	258	280	298	309	316	323	329	333	269	257	247
MEA	17	17	17	17	17	17	18	18	18	18	18
NEU	71	71	71	72	72	73	73	73	74	74	75
OAS	326	326	328	328	329	329	330	330	370	379	386
REF	197	197	199	199	199	200	200	201	201	201	203
SSA	-3	-2	-1	0	0	-0	-1	-1	-2	-2	-4
USA	1080	1070	1070	1060	1050	1040	1030	1010	999	1050	1050

Table 747: PRIMAPhist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 4/16]

	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
GLO	2618	2638	2647	2655	2664	2664	2671	2914	2926	3033	3130
CAZ	102	102	102	102	103	103	103	104	151	163	173
CHA	198	204	210	216	222	228	233	238	299	363	430
EUR	141	142	142	143	143	144	145	145	146	147	148
IND	200	202	204	205	206	207	208	208	209	209	209
JPN	5	6	6	6	6	6	6	6	6	6	7
LAM	239	234	230	226	224	223	221	447	512	564	608
MEA	18	18	18	19	19	19	19	22	22	23	23
NEU	75	75	76	76	77	77	77	84	85	86	87
OAS	392	396	399	402	403	405	406	408	410	412	414
REF	203	203	204	204	204	204	205	206	206	207	207
SSA	-5	-5	-5	-4	-2	-2	-2	-3	-1	4	10
USA	1050	1060	1060	1060	1060	1050	1050	1050	881	850	815

Table 748: PRIMAPHist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 5/16]

	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915
GLO	3229	3342	3374	3409	3434	3456	3243	3109	2996	2956	2913
CAZ	184	194	204	214	222	232	241	250	258	267	276
CHA	498	567	583	597	607	616	624	626	627	641	643
EUR	149	151	152	153	154	155	156	158	159	161	162
IND	210	221	223	225	227	228	229	230	202	196	192
JPN	7	7	7	7	7	7	7	8	8	8	8
LAM	646	664	677	689	698	706	479	413	359	314	273
MEA	23	24	24	24	24	24	24	24	25	25	25
NEU	88	89	89	90	90	91	91	92	92	93	93
OAS	417	437	442	446	449	452	453	455	407	397	390
REF	208	208	208	208	208	208	208	208	226	231	237
SSA	18	27	37	47	57	66	74	83	92	100	108
USA	781	755	728	709	690	671	655	562	541	524	507

Table 749: PRIMAPHist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 6/16]

	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
GLO	2921	2932	2944	2965	2972	3148	3119	3147	3170	3182	3198
CAZ	284	287	290	292	295	298	300	303	305	308	310
CHA	644	662	681	699	717	736	745	754	763	771	779
EUR	163	165	167	168	170	171	173	174	176	177	176
IND	198	197	197	197	197	196	196	196	196	196	190
JPN	8	8	8	8	8	9	9	9	9	9	9
LAM	259	247	237	228	221	384	430	467	498	526	533
MEA	25	25	25	25	25	25	25	25	25	25	34
NEU	94	94	94	94	95	95	95	95	95	96	117
OAS	401	399	400	400	400	400	399	399	401	401	391
REF	241	246	250	255	260	264	269	274	279	284	289
SSA	116	125	134	142	151	158	165	171	177	182	187
USA	489	476	462	456	434	412	313	280	246	207	182

Table 750: PRIMAPHist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 7/16]

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
GLO	3342	3354	3453	3738	3777	3418	3406	3362	3356	3386	3303
CAZ	274	269	263	258	253	249	245	241	236	232	227
CHA	782	785	791	799	806	809	812	793	792	792	792
EUR	175	173	171	169	166	163	159	155	151	146	141
IND	189	188	188	187	187	187	187	188	188	211	216
JPN	9	9	9	9	9	10	10	10	10	10	10
LAM	539	544	546	550	593	606	614	621	627	634	640
MEA	37	39	39	39	40	41	41	42	42	43	43
NEU	122	126	127	127	128	129	130	130	131	131	132
OAS	388	388	387	386	387	387	387	387	388	428	439
REF	294	295	298	299	302	305	306	301	294	287	280
SSA	192	198	205	211	217	223	231	237	248	254	261
USA	341	341	429	703	688	311	284	257	249	218	120

Table 751: PRIMAPHist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 8/16]

	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948
GLO	3313	3307	3260	3196	3274	3254	3277	3282	3589	3700	3729
CAZ	223	220	215	211	212	212	213	213	214	214	214
CHA	792	792	792	792	836	881	929	977	1030	1030	1040
EUR	137	132	127	121	115	110	104	99	94	89	84
IND	221	224	226	230	233	236	240	243	341	366	385
JPN	10	10	10	10	11	11	11	11	11	11	11
LAM	647	652	657	652	650	649	647	647	658	669	681
MEA	44	44	44	45	45	46	46	46	46	46	47
NEU	132	132	132	133	133	132	133	132	132	133	132
OAS	445	451	457	462	469	476	483	490	662	706	738
REF	272	265	253	193	169	145	121	99	85	72	60
SSA	268	277	285	292	300	308	317	325	335	343	357
USA	122	108	60	55	101	48	33	0	-18	22	-19

Table 752: PRIMAPHist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 9/16]

	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
GLO	3768	3815	4613	4714	4703	4901	5064	5277	5390	5576	5123
CAZ	213	214	303	330	352	355	359	360	360	359	359
CHA	1050	1050	1040	1110	1180	1250	1320	1390	1400	1370	1300
EUR	79	74	81	80	79	79	79	80	81	82	75
IND	398	409	417	428	370	365	365	364	365	358	360
JPN	11	11	26	30	33	34	35	35	35	35	35
LAM	694	707	922	991	1048	1095	1136	1159	1180	1197	1211
MEA	47	47	37	36	34	31	29	28	27	27	26
NEU	132	131	109	104	99	93	87	85	84	82	80
OAS	761	781	813	838	741	736	738	738	739	729	728
REF	50	45	452	533	611	686	762	842	920	998	742
SSA	371	386	401	389	400	411	423	435	448	458	469
USA	-39	-42	12	-154	-243	-236	-269	-240	-249	-120	-263

Table 753: PRIMAPHist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 10/16]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	5089	5367	5360	5412	5460	5517	5648	5675	5415	5435	5278
CAZ	358	356	357	356	356	356	355	355	354	352	350
CHA	1240	1160	1070	1030	1030	1020	1020	1020	1010	1010	1010
EUR	75	66	64	63	62	61	60	58	57	56	47
IND	362	367	353	356	350	357	364	371	290	280	273
JPN	35	35	35	35	35	35	35	35	34	34	34
LAM	1224	1647	1774	1877	1958	2029	2066	2097	2125	2148	2169
MEA	25	25	24	23	23	22	23	24	24	24	23
NEU	79	76	74	73	72	70	73	73	74	73	72
OAS	732	740	712	717	707	719	731	743	602	582	571
REF	752	732	720	708	699	687	646	604	563	526	408
SSA	479	487	491	510	517	526	523	527	512	538	513
USA	-274	-324	-315	-337	-348	-365	-247	-232	-229	-188	-193

Table 754: PRIMAPHist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 11/16]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	4738	4639	4585	4596	4567	4810	4820	4815	4709	4548	4635
CAZ	253	219	194	185	177	171	166	161	157	153	159
CHA	1010	1020	1030	1030	1050	1090	1100	1030	894	755	609
EUR	38	28	18	8	-2	-12	-22	-33	-44	-51	-56
IND	265	265	299	324	329	370	399	419	438	450	506
JPN	18	13	9	8	7	6	5	4	3	3	3
LAM	1967	1924	1889	1861	1842	1844	1847	1851	1856	1860	1869
MEA	23	23	23	24	24	24	24	24	24	24	18
NEU	70	69	68	67	66	64	63	61	60	59	46
OAS	538	530	586	628	635	707	757	789	818	835	932
REF	356	303	253	230	208	199	178	159	140	125	118
SSA	525	539	553	568	530	584	523	547	552	531	612
USA	-326	-295	-339	-336	-298	-236	-219	-198	-188	-196	-183

Table 755: PRIMAPHist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 12/16]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	5369	5543	5720	5807	5871	5914	6006	6038	6029	5690	5297
CAZ	145	140	134	127	120	114	108	103	97	57	55
CHA	443	366	339	299	278	257	235	241	221	185	145
EUR	-59	-62	-64	-66	-67	-67	-67	-67	-65	-276	-276
IND	515	522	529	532	529	529	539	549	557	669	696
JPN	3	3	2	1	1	0	-1	-1	-2	-74	-74
LAM	2676	2880	3052	3199	3304	3363	3391	3414	3433	3435	2942
MEA	18	18	19	21	22	23	24	24	25	-13	-13
NEU	44	44	47	52	53	55	56	58	60	-52	-52
OAS	945	953	965	970	961	962	976	995	1007	1232	1279
REF	109	102	96	91	82	79	77	74	71	146	146
SSA	667	717	754	724	710	710	744	724	739	718	786
USA	-137	-140	-153	-142	-123	-111	-76	-77	-114	-336	-336

Table 756: PRIMAPHist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 13/16]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	5259	5212	5142	5025	4904	4869	4710	4555	4082	4586	4645
CAZ	52	49	47	44	43	42	41	40	95	94	97
CHA	144	156	113	100	77	45	19	-45	-339	-340	-339
EUR	-276	-276	-276	-276	-277	-276	-276	-276	-278	-278	-278
IND	717	711	709	705	696	689	670	655	629	834	885
JPN	-74	-74	-74	-74	-74	-74	-74	-74	-39	-39	-39
LAM	2811	2702	2616	2533	2488	2445	2404	2380	2358	2293	2256
MEA	-13	-13	-13	-13	-13	-13	-13	-13	-16	-16	-16
NEU	-52	-52	-52	-52	-52	-52	-52	-52	-57	-57	-56
OAS	1316	1305	1299	1286	1347	1258	1224	1198	1171	1541	1619
REF	146	146	146	158	115	166	129	134	-15	-8	63
SSA	825	895	964	958	909	989	969	958	961	949	828
USA	-336	-336	-336	-343	-354	-349	-331	-349	-389	-388	-375

Table 757: PRIMAPHist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 14/16]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	4670	4397	2979	2697	2766	2899	2622	2622	2666	2649	2742
CAZ	93	94	147	135	141	110	159	-36	-17	27	5
CHA	-340	-340	-396	-396	-395	-395	-396	-312	-312	-312	-312
EUR	-278	-278	-340	-339	-340	-340	-340	-427	-427	-428	-428
IND	923	818	-127	-127	-127	-127	-127	121	121	121	121
JPN	-39	-39	-143	-143	-143	-143	-143	7	7	7	7
LAM	2232	2226	1222	1217	1219	1221	1213	723	731	732	730
MEA	-16	-16	138	120	146	210	146	266	263	200	164
NEU	-57	-57	-163	-163	-163	-163	-163	-90	-90	-90	-90
OAS	1708	1500	1881	1543	1536	1757	1528	1433	1434	1439	1639
REF	-48	-30	-196	-200	-63	-163	-189	-180	-127	-181	-179
SSA	829	878	1327	1348	1337	1286	1308	1186	1163	1218	1156
USA	-338	-359	-372	-298	-383	-354	-373	-70	-80	-83	-72

Table 758: PRIMAPHist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 15/16]

	2015
GLO	2671
CAZ	-5
CHA	-312
EUR	-427
IND	121
JPN	7
LAM	729
MEA	223
NEU	-90
OAS	1488
REF	-167
SSA	1180
USA	-76

Table 759: PRIMAPHist — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 16/16]

	1960	1965	1970	1975	1980	1985	1990	1995	2000	2005	2008
GLO	1192	1264	1197	1032	1025	1275	1319	1275	1149	1196	1112
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 760: RCP — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 1/2]

	2010
GLO	1057
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 761: RCP — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 2/2]

	1985	1995	2005
GLO	1140	1170	1100
CAZ			
CHA			
EUR			
IND			
JPN			
LAM			
MEA			
NEU			
OAS			
REF			
SSA			
USA			

Table 762: Houghton\_2012 — Emissions—CO2—Land—Land-use Change (Mt CO2/yr)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	4151	4151	4054	4080	4106	4132	4149	4229	4258	4215	4227
CAZ	36	36	36	36	36	36	29	22	65	36	22
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	26	26	22	22	22	22	22	22	22	22	23
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	1663	1663	1667	1670	1674	1678	1682	1685	1690	1693	1696
MEA	53	53	53	53	53	54	53	54	55	54	55
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	1025	1024	1046	1067	1089	1110	1119	1232	1175	1188	1205
REF	329	329	211	211	211	211	216	190	222	198	202
SSA	1019	1019	1020	1021	1022	1022	1027	1024	1028	1023	1025
USA	0	0	0	0	0	0	0	0	0	0	0

Table 763: FAO\_EmisLUC — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 1/2]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
GLO	4644	4724	4733	4670	4675	4399	4347	4348	3903	3843
CAZ	284	317	317	299	302	149	144	149	131	163
CHA	0	0	0	0	0	0	0	0	0	0
EUR	15	16	16	16	16	30	30	30	30	30
IND	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0
LAM	1816	1818	1823	1824	1827	1437	1438	1441	996	944
MEA	13	18	11	15	13	21	19	23	30	23
NEU	2	2	2	2	2	0	0	0	0	0
OAS	1492	1521	1491	1506	1487	1768	1719	1709	1724	1689
REF	37	41	85	17	28	14	14	14	14	14
SSA	983	991	990	992	1001	979	982	982	978	981
USA	0	0	0	0	0	0	0	0	0	0

Table 764: FAO\_EmisLUC — Emissions—CO2—Land—Land-use Change (Mt CO2/yr) [PART 2/2]

	1995	2003
GLO	1600	1500
CAZ		
CHA		
EUR		
IND		
JPN		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 765: Canadell.2007 — Emissions—CO2—Land—Land-use Change (Mt CO2/yr)

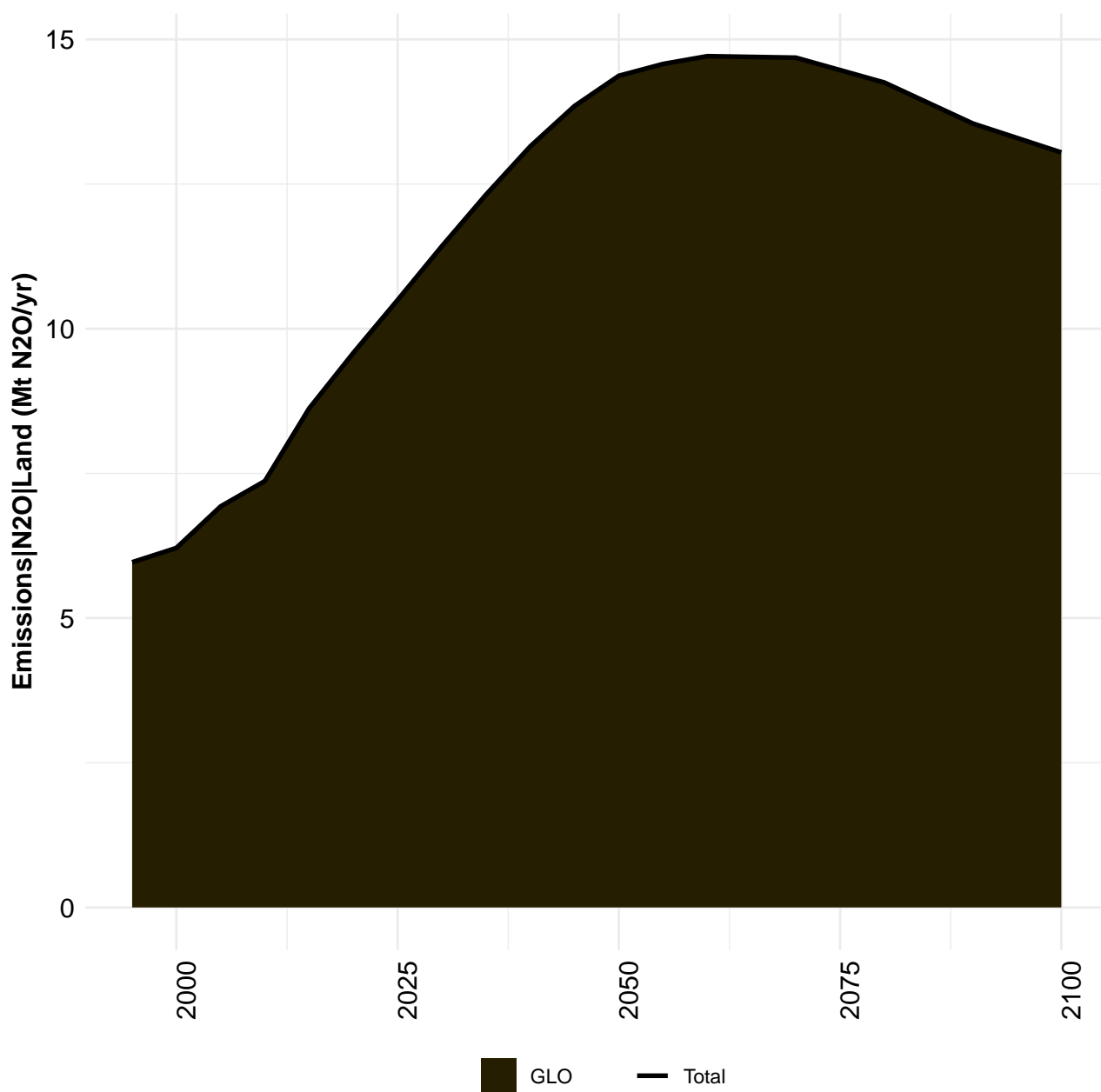


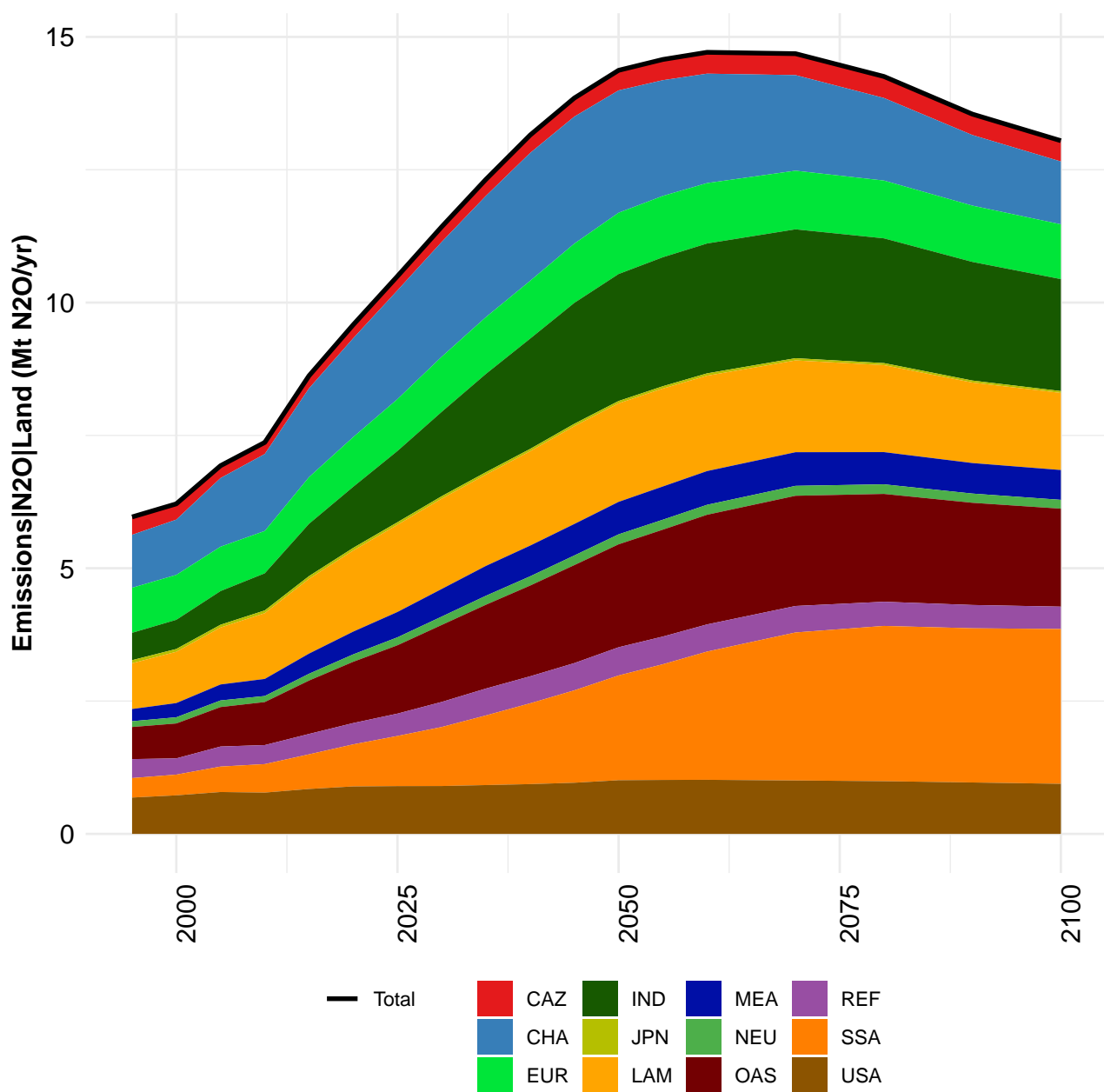
	1995	2005
GLO	1500	1100
CAZ		
CHA		
EUR		
IND		
JPN		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 766: Friedlingstein\_2010 — Emissions—CO2—Land—Land-use Change (Mt CO2/yr)

	2002
GLO	810
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 767: Harris\_2013 — Emissions—CO2—Land—Land-use Change (Mt CO2/yr)

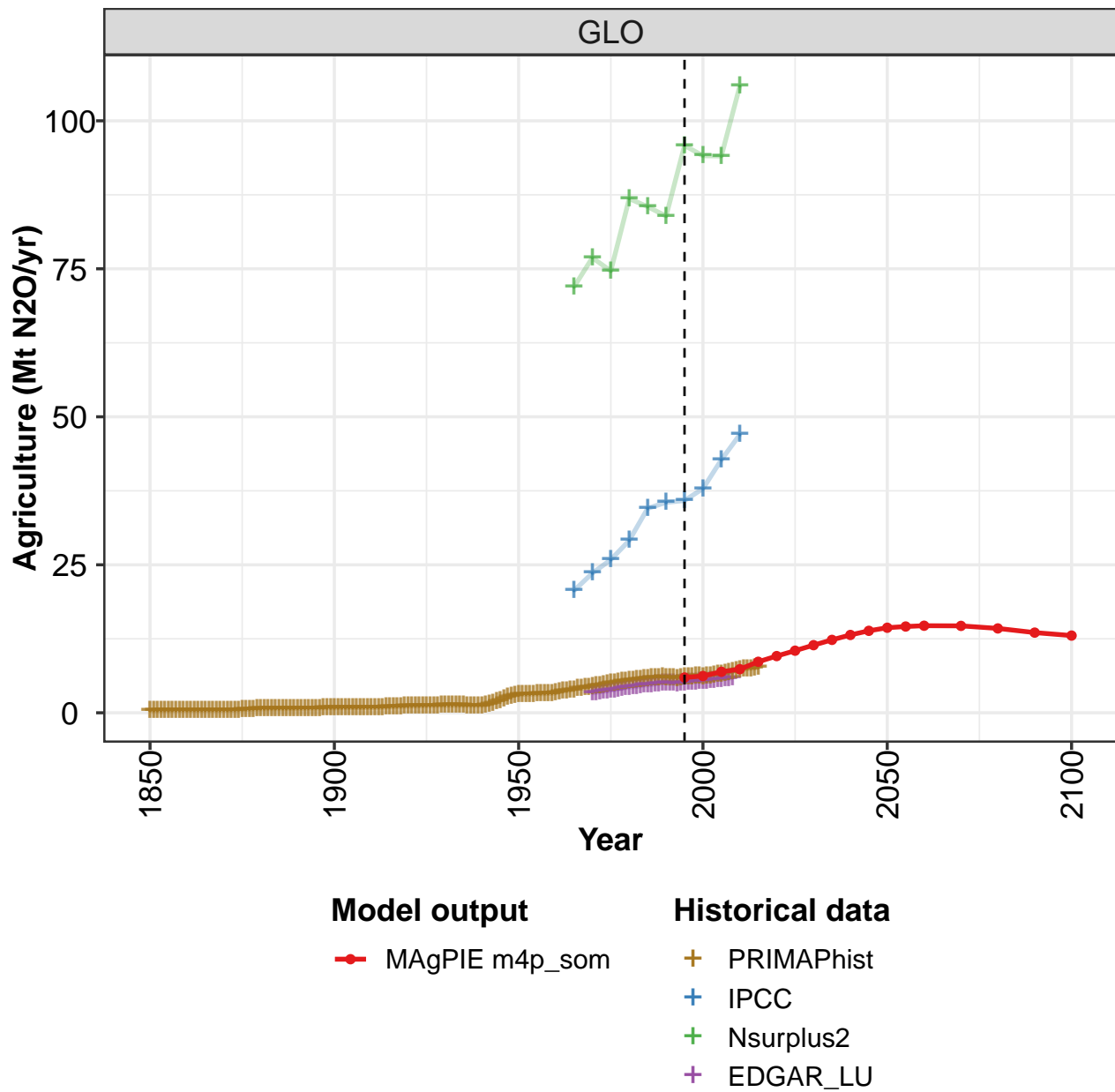
13 N<sub>2</sub>O



## 13.1 Land

### 13.1.1 Agriculture

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

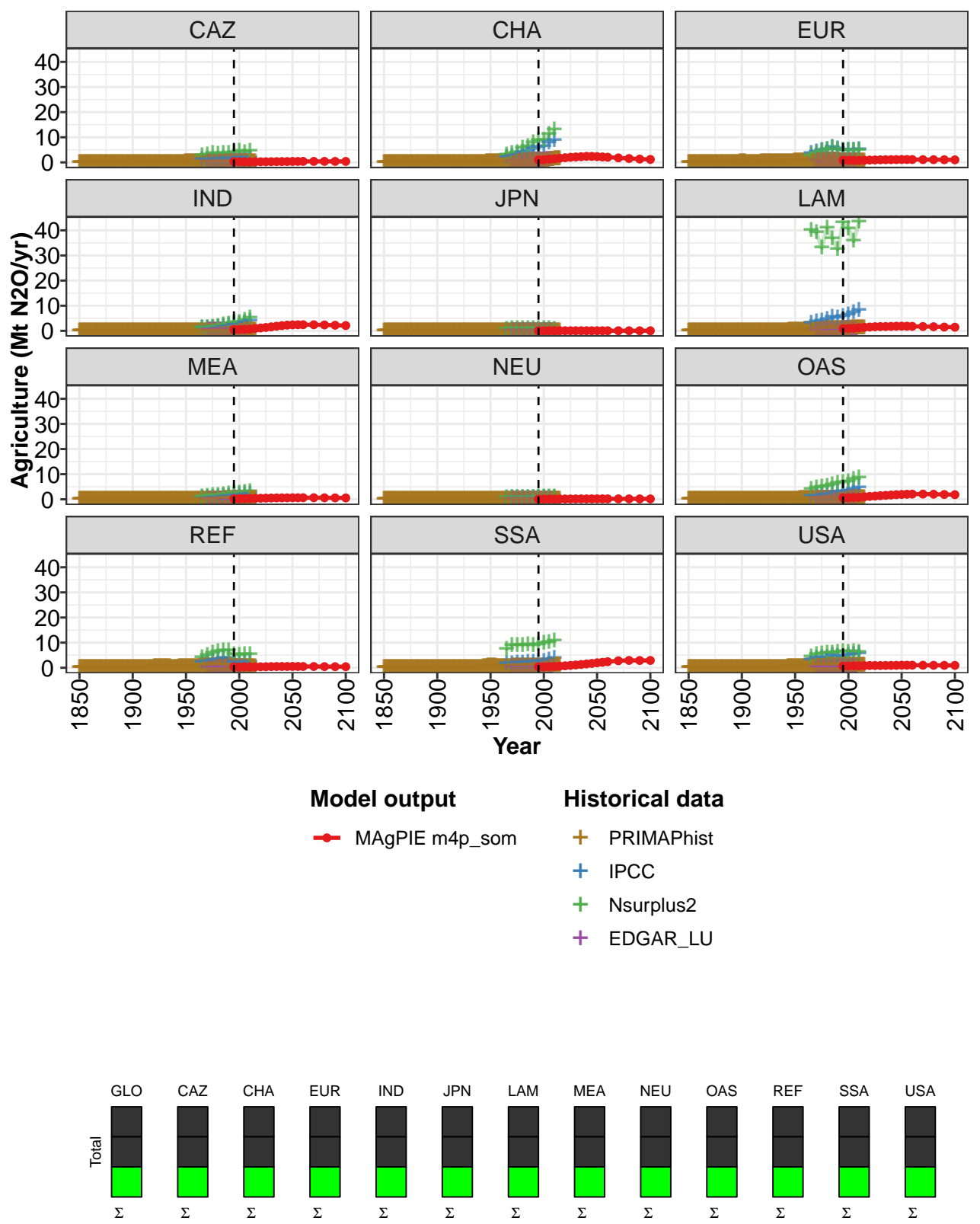


Figure 238: MAgPIE m4p\_som — Emissions—N<sub>2</sub>O—Land—Agriculture (Mt N<sub>2</sub>O/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	6.0	6.2	6.9	7.4	8.6	9.6	10.5	11.4	12.3	13.2	13.8
CAZ	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
CHA	1.0	1.0	1.3	1.4	1.7	1.9	2.0	2.2	2.3	2.4	2.4
EUR	0.8	0.8	0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.1	1.1
IND	0.5	0.5	0.6	0.7	1.0	1.1	1.3	1.6	1.8	2.1	2.3
JPN	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.9	1.0	1.1	1.2	1.4	1.5	1.6	1.7	1.7	1.8	1.8
MEA	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.6
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
OAS	0.6	0.7	0.7	0.8	1.0	1.2	1.3	1.4	1.6	1.7	1.8
REF	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
SSA	0.4	0.4	0.5	0.5	0.7	0.8	0.9	1.1	1.3	1.5	1.7
USA	0.7	0.7	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	1.0

Table 768: MAgPIE m4p\_som — Emissions—N2O—Land—Agriculture (Mt N2O/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	14.4	14.6	14.7	14.7	14.3	13.5	13.0
CAZ	0.4	0.4	0.4	0.4	0.4	0.4	0.4
CHA	2.3	2.2	2.1	1.8	1.6	1.3	1.2
EUR	1.2	1.2	1.1	1.1	1.1	1.1	1.0
IND	2.4	2.4	2.4	2.4	2.3	2.2	2.1
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.9	1.8	1.8	1.7	1.6	1.5	1.5
MEA	0.6	0.6	0.6	0.6	0.6	0.6	0.6
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	1.9	2.0	2.1	2.1	2.0	1.9	1.8
REF	0.5	0.5	0.5	0.5	0.5	0.4	0.4
SSA	2.0	2.2	2.4	2.8	2.9	2.9	2.9
USA	1.0	1.0	1.0	1.0	1.0	1.0	0.9

Table 769: MAgPIE m4p\_som — Emissions—N2O—Land—Agriculture (Mt N2O/yr) [PART 2/2]

	1850	1851	1852	1853	1854	1855	1856	1857	1858	1859	1860
GLO	0.35	0.36	0.36	0.37	0.38	0.38	0.39	0.39	0.39	0.40	0.40
CAZ	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
CHA	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
EUR	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
IND	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
MEA	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NEU	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
OAS	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
REF	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
SSA	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
USA	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11

Table 770: PRIMAPHist — Emissions—N2O—Land—Agriculture (Mt N2O/yr) [PART 1/16]

	1861	1862	1863	1864	1865	1866	1867	1868	1869	1870	1871
GLO	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.41
CAZ	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
CHA	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
EUR	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05
IND	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
MEA	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NEU	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
OAS	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04
REF	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
SSA	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04
USA	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12

Table 771: PRIMAPhist — Emissions—N2O—Land—Agriculture (Mt N2O/yr) [PART 2/16]

	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882
GLO	0.43	0.45	0.48	0.52	0.55	0.58	0.61	0.63	0.65	0.66	0.66
CAZ	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04
CHA	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
EUR	0.05	0.05	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07
IND	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
MEA	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NEU	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
OAS	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.06	0.06	0.06
REF	0.10	0.10	0.11	0.12	0.13	0.13	0.14	0.15	0.15	0.15	0.15
SSA	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.06	0.06	0.06
USA	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.18	0.19	0.19	0.19

Table 772: PRIMAPhist — Emissions—N2O—Land—Agriculture (Mt N2O/yr) [PART 3/16]

	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893
GLO	0.67	0.67	0.68	0.68	0.68	0.69	0.69	0.72	0.73	0.74	0.75
CAZ	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
CHA	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
EUR	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.07	0.08	0.08	0.09
IND	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
MEA	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NEU	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
OAS	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
REF	0.15	0.15	0.16	0.16	0.16	0.16	0.16	0.16	0.17	0.17	0.17
SSA	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
USA	0.19	0.19	0.19	0.20	0.20	0.20	0.20	0.21	0.21	0.21	0.21

Table 773: PRIMAPhist — Emissions—N2O—Land—Agriculture (Mt N2O/yr) [PART 4/16]

	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
GLO	0.76	0.77	0.78	0.79	0.80	0.80	0.81	0.81	0.82	0.83	0.83
CAZ	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
CHA	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
EUR	0.09	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.10	0.10
IND	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.05	0.05
MEA	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NEU	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
OAS	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
REF	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
SSA	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
USA	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21

Table 774: PRIMAPHist — Emissions—N2O—Land—Agriculture (Mt N2O/yr) [PART 5/16]

	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915
GLO	0.84	0.85	0.86	0.87	0.87	0.88	0.89	0.91	0.93	0.96	0.98
CAZ	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
CHA	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
EUR	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.10
IND	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.06	0.06	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08
MEA	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
NEU	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
OAS	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08
REF	0.18	0.18	0.18	0.18	0.18	0.18	0.19	0.19	0.20	0.21	0.22
SSA	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.10
USA	0.21	0.21	0.21	0.21	0.22	0.22	0.22	0.22	0.22	0.23	0.23

Table 775: PRIMAPHist — Emissions—N2O—Land—Agriculture (Mt N2O/yr) [PART 6/16]

	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
GLO	1.01	1.04	1.07	1.09	1.11	1.12	1.14	1.16	1.17	1.19	1.20
CAZ	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
CHA	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
EUR	0.10	0.10	0.11	0.11	0.11	0.11	0.12	0.12	0.13	0.13	0.14
IND	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.08	0.08	0.08	0.08	0.09	0.09	0.08	0.08	0.08	0.08	0.08
MEA	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03
NEU	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02
OAS	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.10
REF	0.23	0.25	0.26	0.26	0.27	0.27	0.27	0.28	0.28	0.28	0.28
SSA	0.11	0.11	0.12	0.12	0.13	0.13	0.14	0.15	0.15	0.16	0.16
USA	0.23	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.23	0.23	0.23

Table 776: PRIMAPHist — Emissions—N2O—Land—Agriculture (Mt N2O/yr) [PART 7/16]



	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
GLO	1.21	1.22	1.23	1.24	1.24	1.24	1.24	1.24	1.23	1.23	1.22
CAZ	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
CHA	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06
EUR	0.14	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.14
IND	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09
MEA	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
NEU	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
OAS	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11
REF	0.29	0.29	0.29	0.29	0.29	0.28	0.28	0.27	0.27	0.26	0.25
SSA	0.17	0.17	0.18	0.18	0.18	0.17	0.17	0.17	0.16	0.16	0.16
USA	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22

Table 777: PRIMAPHist — Emissions—N2O—Land—Agriculture (Mt N2O/yr) [PART 8/16]

	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948
GLO	1.22	1.22	1.23	1.28	1.41	1.61	1.84	2.10	2.36	2.60	2.81
CAZ	0.06	0.06	0.06	0.06	0.07	0.07	0.08	0.08	0.09	0.10	0.10
CHA	0.06	0.07	0.07	0.07	0.08	0.08	0.09	0.10	0.11	0.11	0.12
EUR	0.14	0.14	0.14	0.15	0.17	0.20	0.24	0.28	0.32	0.36	0.40
IND	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06
JPN	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.03	0.03
LAM	0.10	0.10	0.10	0.11	0.12	0.14	0.16	0.19	0.21	0.23	0.25
MEA	0.03	0.03	0.03	0.04	0.04	0.05	0.06	0.07	0.08	0.09	0.10
NEU	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.05	0.05	0.06
OAS	0.11	0.11	0.12	0.12	0.12	0.13	0.15	0.16	0.17	0.18	0.19
REF	0.25	0.25	0.24	0.25	0.26	0.27	0.29	0.31	0.33	0.35	0.37
SSA	0.15	0.15	0.15	0.17	0.21	0.27	0.35	0.43	0.51	0.59	0.65
USA	0.23	0.23	0.23	0.23	0.26	0.29	0.32	0.37	0.41	0.45	0.48

Table 778: PRIMAPHist — Emissions—N2O—Land—Agriculture (Mt N2O/yr) [PART 9/16]

	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
GLO	2.96	3.05	3.08	3.11	3.13	3.15	3.17	3.19	3.21	3.24	3.28
CAZ	0.10	0.11	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.13
CHA	0.13	0.13	0.14	0.15	0.15	0.16	0.16	0.17	0.17	0.18	0.19
EUR	0.42	0.43	0.44	0.44	0.44	0.45	0.45	0.46	0.46	0.46	0.47
IND	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
JPN	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
LAM	0.27	0.28	0.29	0.31	0.33	0.36	0.38	0.41	0.43	0.45	0.47
MEA	0.10	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.09	0.09	0.09
NEU	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
OAS	0.20	0.21	0.21	0.21	0.21	0.22	0.22	0.22	0.23	0.23	0.23
REF	0.38	0.40	0.41	0.42	0.43	0.44	0.45	0.47	0.48	0.49	0.51
SSA	0.69	0.71	0.71	0.69	0.66	0.62	0.59	0.55	0.51	0.48	0.47
USA	0.50	0.51	0.52	0.52	0.53	0.53	0.54	0.54	0.55	0.55	0.56

Table 779: PRIMAPHist — Emissions—N2O—Land—Agriculture (Mt N2O/yr) [PART 10/16]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	3.33	3.55	3.64	3.71	3.79	3.91	4.06	4.18	4.27	4.33	4.44
CAZ	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.14	0.14	0.15	0.15
CHA	0.19	0.20	0.21	0.22	0.25	0.27	0.29	0.29	0.30	0.31	0.32
EUR	0.47	0.51	0.53	0.53	0.54	0.55	0.57	0.59	0.61	0.62	0.63
IND	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08
JPN	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
LAM	0.48	0.50	0.51	0.52	0.53	0.55	0.57	0.58	0.59	0.60	0.61
MEA	0.09	0.10	0.10	0.10	0.11	0.11	0.11	0.12	0.13	0.13	0.13
NEU	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09
OAS	0.24	0.25	0.25	0.25	0.26	0.26	0.27	0.28	0.28	0.29	0.30
REF	0.52	0.55	0.58	0.59	0.60	0.61	0.65	0.67	0.69	0.69	0.72
SSA	0.46	0.51	0.52	0.52	0.53	0.54	0.54	0.55	0.56	0.56	0.57
USA	0.57	0.60	0.62	0.65	0.67	0.70	0.72	0.76	0.76	0.78	0.80

Table 780: PRIMAPhist — Emissions—N2O—Land—Agriculture (Mt N2O/yr) [PART 11/16]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	4.56	4.65	4.81	4.84	5.03	5.09	5.17	5.31	5.39	5.51	5.53
CAZ	0.15	0.15	0.15	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
CHA	0.34	0.35	0.37	0.36	0.39	0.39	0.43	0.47	0.51	0.54	0.53
EUR	0.65	0.66	0.68	0.69	0.71	0.71	0.72	0.75	0.76	0.76	0.76
IND	0.08	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.11
JPN	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
LAM	0.62	0.64	0.66	0.68	0.69	0.72	0.74	0.74	0.75	0.77	0.78
MEA	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.16	0.16	0.17	0.18
NEU	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.11	0.11	0.11	0.11
OAS	0.30	0.30	0.31	0.31	0.31	0.32	0.33	0.34	0.35	0.35	0.36
REF	0.76	0.78	0.81	0.83	0.85	0.86	0.86	0.89	0.87	0.90	0.90
SSA	0.58	0.58	0.58	0.58	0.59	0.60	0.61	0.62	0.63	0.64	0.65
USA	0.82	0.84	0.88	0.87	0.95	0.95	0.92	0.93	0.95	0.96	0.96

Table 781: PRIMAPhist — Emissions—N2O—Land—Agriculture (Mt N2O/yr) [PART 12/16]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	5.57	5.70	5.82	5.82	5.88	5.96	6.00	6.06	5.98	5.92	5.86
CAZ	0.16	0.16	0.17	0.17	0.17	0.16	0.16	0.17	0.13	0.13	0.13
CHA	0.55	0.59	0.62	0.60	0.61	0.69	0.72	0.75	0.78	0.79	0.80
EUR	0.77	0.78	0.79	0.79	0.80	0.78	0.78	0.78	0.76	0.72	0.68
IND	0.11	0.12	0.12	0.13	0.14	0.13	0.14	0.14	0.15	0.15	0.16
JPN	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
LAM	0.78	0.78	0.80	0.80	0.82	0.83	0.84	0.85	0.85	0.85	0.87
MEA	0.18	0.19	0.20	0.21	0.21	0.22	0.22	0.23	0.23	0.24	0.26
NEU	0.11	0.11	0.11	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.10
OAS	0.36	0.38	0.38	0.39	0.41	0.41	0.42	0.43	0.42	0.43	0.44
REF	0.93	0.97	0.97	1.00	1.02	1.03	1.01	0.97	0.92	0.88	0.79
SSA	0.65	0.65	0.65	0.66	0.66	0.67	0.68	0.69	0.69	0.69	0.69
USA	0.91	0.92	0.96	0.93	0.90	0.89	0.87	0.90	0.91	0.90	0.91

Table 782: PRIMAPhist — Emissions—N2O—Land—Agriculture (Mt N2O/yr) [PART 13/16]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	5.78	5.91	6.05	6.11	6.10	6.24	6.17	6.14	6.22	6.19	6.35
CAZ	0.13	0.13	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.14	0.15
CHA	0.76	0.80	0.90	0.94	0.90	0.90	0.93	0.89	0.90	0.89	0.89
EUR	0.67	0.66	0.66	0.66	0.67	0.66	0.66	0.65	0.65	0.64	0.62
IND	0.16	0.15	0.16	0.17	0.18	0.19	0.19	0.19	0.20	0.19	0.20
JPN	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03
LAM	0.88	0.90	0.92	0.91	0.93	0.95	0.95	0.99	1.02	1.03	1.09
MEA	0.26	0.44	0.42	0.41	0.40	0.39	0.37	0.36	0.37	0.36	0.39
NEU	0.10	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.10
OAS	0.46	0.45	0.47	0.49	0.50	0.52	0.54	0.55	0.54	0.56	0.58
REF	0.70	0.62	0.59	0.56	0.54	0.55	0.52	0.51	0.50	0.50	0.48
SSA	0.69	0.73	0.74	0.76	0.78	0.84	0.82	0.82	0.84	0.83	0.86
USA	0.93	0.89	0.92	0.93	0.92	0.98	0.91	0.90	0.93	0.93	0.94

Table 783: PRIMAPhist — Emissions—N<sub>2</sub>O—Land—Agriculture (Mt N<sub>2</sub>O/yr) [PART 14/16]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	6.55	6.51	6.66	6.85	7.00	7.09	7.28	7.34	7.42	7.47	7.53
CAZ	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.16	0.17	0.16
CHA	0.93	0.95	1.03	1.11	1.20	1.28	1.37	1.41	1.49	1.49	1.50
EUR	0.63	0.62	0.61	0.61	0.61	0.60	0.60	0.60	0.60	0.61	0.62
IND	0.21	0.22	0.23	0.25	0.25	0.26	0.27	0.28	0.27	0.27	0.27
JPN	0.03	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03
LAM	1.09	1.11	1.14	1.18	1.17	1.15	1.19	1.20	1.21	1.20	1.23
MEA	0.40	0.40	0.40	0.40	0.40	0.39	0.38	0.39	0.41	0.41	0.42
NEU	0.10	0.10	0.11	0.10	0.10	0.11	0.10	0.11	0.12	0.12	0.12
OAS	0.61	0.62	0.63	0.66	0.68	0.73	0.73	0.73	0.74	0.76	0.77
REF	0.49	0.48	0.48	0.47	0.48	0.49	0.50	0.51	0.52	0.52	0.52
SSA	0.87	0.89	0.88	0.90	0.95	0.92	0.96	0.98	0.97	1.00	0.99
USA	1.02	0.93	0.96	0.99	0.97	0.98	1.00	0.96	0.91	0.90	0.90

Table 784: PRIMAPhist — Emissions—N<sub>2</sub>O—Land—Agriculture (Mt N<sub>2</sub>O/yr) [PART 15/16]

	2015
GLO	7.72
CAZ	0.16
CHA	1.58
EUR	0.62
IND	0.29
JPN	0.03
LAM	1.26
MEA	0.42
NEU	0.12
OAS	0.80
REF	0.51
SSA	1.02
USA	0.90

Table 785: PRIMAPhist — Emissions—N<sub>2</sub>O—Land—Agriculture (Mt N<sub>2</sub>O/yr) [PART 16/16]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	20.6	23.6	25.9	29.1	34.5	35.5	35.8	37.9	42.7	47.0
CAZ	1.1	1.1	1.1	1.2	1.5	1.6	1.6	1.7	1.8	1.9
CHA	2.2	2.5	2.9	3.8	4.4	5.3	6.0	6.4	7.8	8.8
EUR	3.6	4.2	4.7	5.2	5.9	5.3	5.0	4.9	4.9	5.0
IND	1.1	1.2	1.3	1.5	1.8	2.1	2.5	2.8	3.3	4.0
JPN	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3
LAM	3.2	3.6	4.0	4.4	5.5	5.3	5.8	6.5	7.2	8.2
MEA	0.6	0.7	0.8	0.9	1.2	1.4	1.6	1.8	2.1	2.3
NEU	0.5	0.5	0.6	0.6	0.7	0.7	0.6	0.7	0.7	0.7
OAS	1.2	1.3	1.5	1.8	2.3	2.8	3.1	3.4	4.0	4.6
REF	2.2	2.6	2.9	3.2	3.8	3.7	2.3	1.8	2.2	2.1
SSA	1.6	1.7	1.8	1.9	2.1	2.3	2.4	2.6	3.2	3.6
USA	3.2	3.7	4.0	4.1	4.8	4.6	4.5	4.9	5.3	5.5

Table 786: IPCC — Emissions—N2O—Land—Agriculture (Mt N2O/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	72	77	75	87	85	84	96	94	94	106
CAZ	3	3	4	3	4	4	4	4	4	5
CHA	3	3	4	6	6	8	9	9	11	13
EUR	3	4	4	5	6	5	5	5	5	5
IND	1	1	1	2	2	3	3	3	4	5
JPN	1	1	1	1	1	1	1	1	1	1
LAM	40	39	33	41	37	32	43	41	36	43
MEA	1	1	1	2	2	2	3	3	3	3
NEU	1	1	1	1	1	1	1	1	1	1
OAS	4	5	5	5	6	7	7	7	8	9
REF	4	5	6	6	7	7	5	5	5	5
SSA	7	9	9	9	9	9	9	10	10	11
USA	4	5	6	6	6	6	7	6	6	6

Table 787: Nsurplus2 — Emissions—N2O—Land—Agriculture (Mt N2O/yr)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
GLO	3.34	3.42	3.52	3.62	3.66	3.82	3.89	4.00	4.11	4.23	4.32
CAZ	0.17	0.18	0.18	0.18	0.18	0.19	0.19	0.18	0.18	0.18	0.18
CHA	0.34	0.35	0.36	0.38	0.37	0.40	0.41	0.45	0.48	0.52	0.55
EUR	0.60	0.62	0.63	0.66	0.66	0.68	0.68	0.69	0.72	0.74	0.73
IND	0.19	0.20	0.20	0.20	0.20	0.21	0.22	0.23	0.24	0.25	0.26
JPN	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
LAM	0.45	0.46	0.48	0.49	0.51	0.53	0.55	0.58	0.57	0.58	0.61
MEA	0.11	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.13	0.13	0.14
NEU	0.06	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.09	0.09
OAS	0.32	0.32	0.32	0.33	0.33	0.34	0.34	0.36	0.37	0.38	0.38
REF	0.40	0.42	0.44	0.45	0.47	0.49	0.48	0.49	0.50	0.50	0.52
SSA	0.28	0.28	0.28	0.28	0.28	0.29	0.29	0.30	0.31	0.32	0.32
USA	0.40	0.41	0.42	0.45	0.44	0.49	0.48	0.48	0.49	0.51	0.51

Table 788: EDGAR\_LU — Emissions—N2O—Land—Agriculture (Mt N2O/yr) [PART 1/4]

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
GLO	4.36	4.42	4.54	4.67	4.69	4.75	4.84	4.94	5.00	5.02	4.97
CAZ	0.19	0.19	0.19	0.19	0.19	0.20	0.19	0.19	0.20	0.21	0.21
CHA	0.55	0.57	0.61	0.64	0.62	0.64	0.72	0.77	0.79	0.82	0.83
EUR	0.73	0.75	0.75	0.77	0.77	0.78	0.77	0.78	0.77	0.73	0.69
IND	0.27	0.28	0.30	0.32	0.33	0.35	0.33	0.37	0.37	0.38	0.40
JPN	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
LAM	0.62	0.62	0.62	0.64	0.65	0.66	0.68	0.69	0.70	0.70	0.70
MEA	0.15	0.15	0.16	0.16	0.17	0.17	0.17	0.18	0.19	0.19	0.19
NEU	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
OAS	0.39	0.40	0.42	0.43	0.44	0.44	0.44	0.45	0.46	0.47	0.47
REF	0.52	0.53	0.56	0.57	0.58	0.59	0.60	0.59	0.56	0.54	0.51
SSA	0.32	0.33	0.33	0.32	0.33	0.33	0.33	0.34	0.35	0.36	0.36
USA	0.51	0.49	0.48	0.51	0.49	0.48	0.48	0.45	0.48	0.49	0.49

Table 789: EDGAR\_LU — Emissions—N2O—Land—Agriculture (Mt N2O/yr) [PART 2/4]

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
GLO	4.96	4.92	4.99	5.10	5.20	5.17	5.23	5.28	5.26	5.32	5.41
CAZ	0.21	0.21	0.22	0.22	0.23	0.23	0.23	0.24	0.24	0.24	0.24
CHA	0.85	0.82	0.86	0.98	1.02	0.94	0.96	1.00	0.98	0.99	1.07
EUR	0.65	0.63	0.64	0.63	0.64	0.65	0.64	0.64	0.62	0.62	0.61
IND	0.41	0.42	0.44	0.45	0.46	0.47	0.48	0.49	0.47	0.48	0.46
JPN	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
LAM	0.72	0.74	0.77	0.78	0.77	0.79	0.80	0.80	0.83	0.85	0.87
MEA	0.20	0.20	0.21	0.21	0.22	0.23	0.24	0.24	0.25	0.26	0.26
NEU	0.09	0.09	0.09	0.08	0.09	0.09	0.09	0.09	0.09	0.08	0.08
OAS	0.48	0.49	0.50	0.50	0.52	0.52	0.53	0.53	0.54	0.53	0.55
REF	0.45	0.41	0.36	0.33	0.30	0.30	0.27	0.26	0.26	0.27	0.27
SSA	0.36	0.36	0.36	0.37	0.37	0.38	0.40	0.41	0.41	0.42	0.43
USA	0.51	0.51	0.54	0.53	0.55	0.56	0.56	0.55	0.54	0.55	0.55

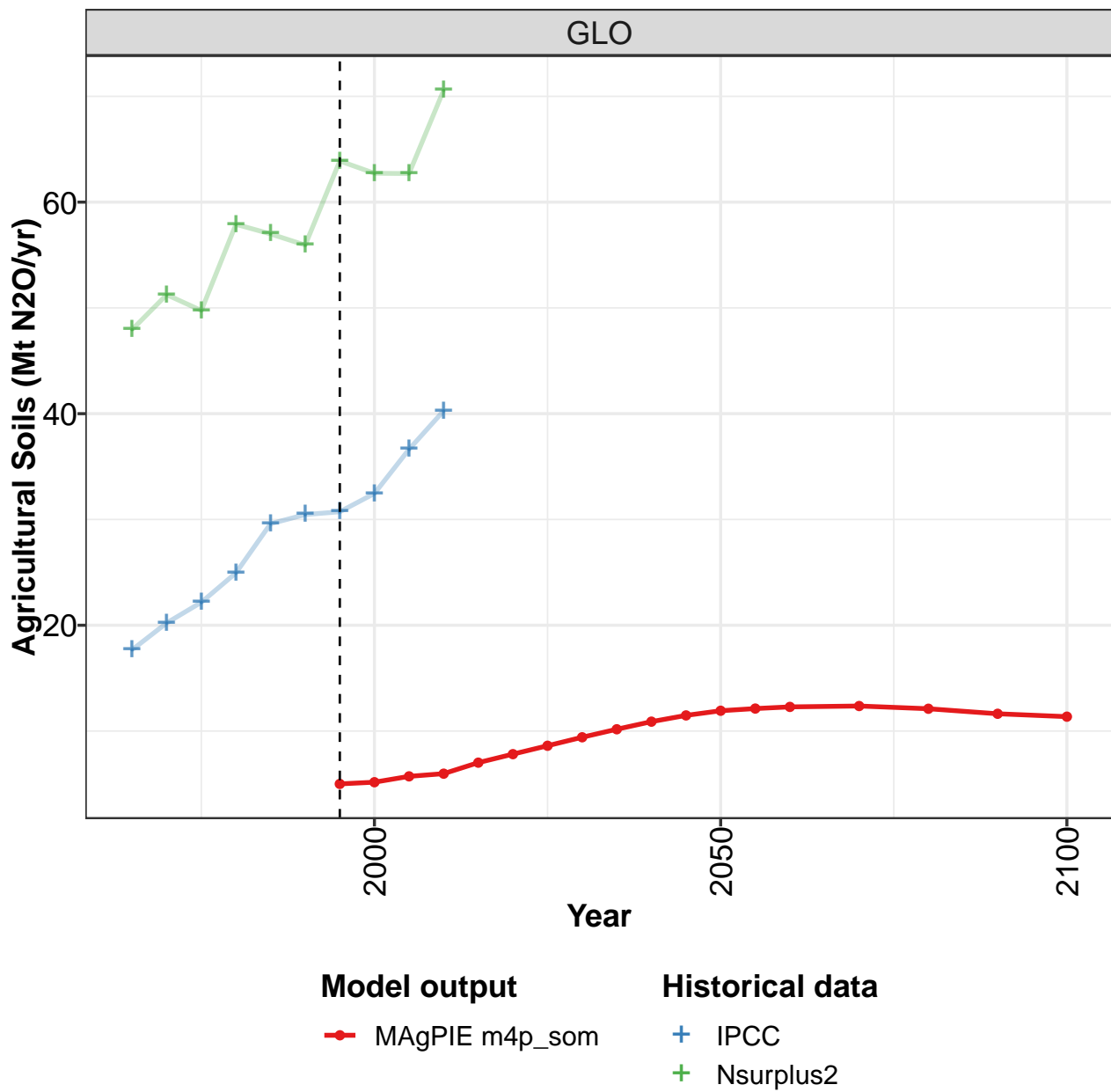
Table 790: EDGAR\_LU — Emissions—N2O—Land—Agriculture (Mt N2O/yr) [PART 3/4]

	2003	2004	2005	2006	2007	2008
GLO	5.49	5.64	5.68	5.75	5.82	5.88
CAZ	0.24	0.25	0.25	0.25	0.25	0.25
CHA	1.05	1.11	1.12	1.16	1.18	1.22
EUR	0.61	0.61	0.60	0.59	0.58	0.58
IND	0.48	0.50	0.50	0.50	0.51	0.52
JPN	0.03	0.03	0.03	0.03	0.03	0.03
LAM	0.93	0.95	0.96	0.98	1.01	1.03
MEA	0.26	0.27	0.27	0.28	0.28	0.28
NEU	0.08	0.09	0.09	0.09	0.09	0.09
OAS	0.56	0.57	0.58	0.59	0.60	0.61
REF	0.26	0.27	0.27	0.27	0.26	0.26
SSA	0.43	0.44	0.45	0.45	0.46	0.47
USA	0.56	0.58	0.58	0.57	0.56	0.56

Table 791: EDGAR\_LU — Emissions—N2O—Land—Agriculture (Mt N2O/yr) [PART 4/4]

## 13.1.2 Agriculture—Agricultural Soils

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

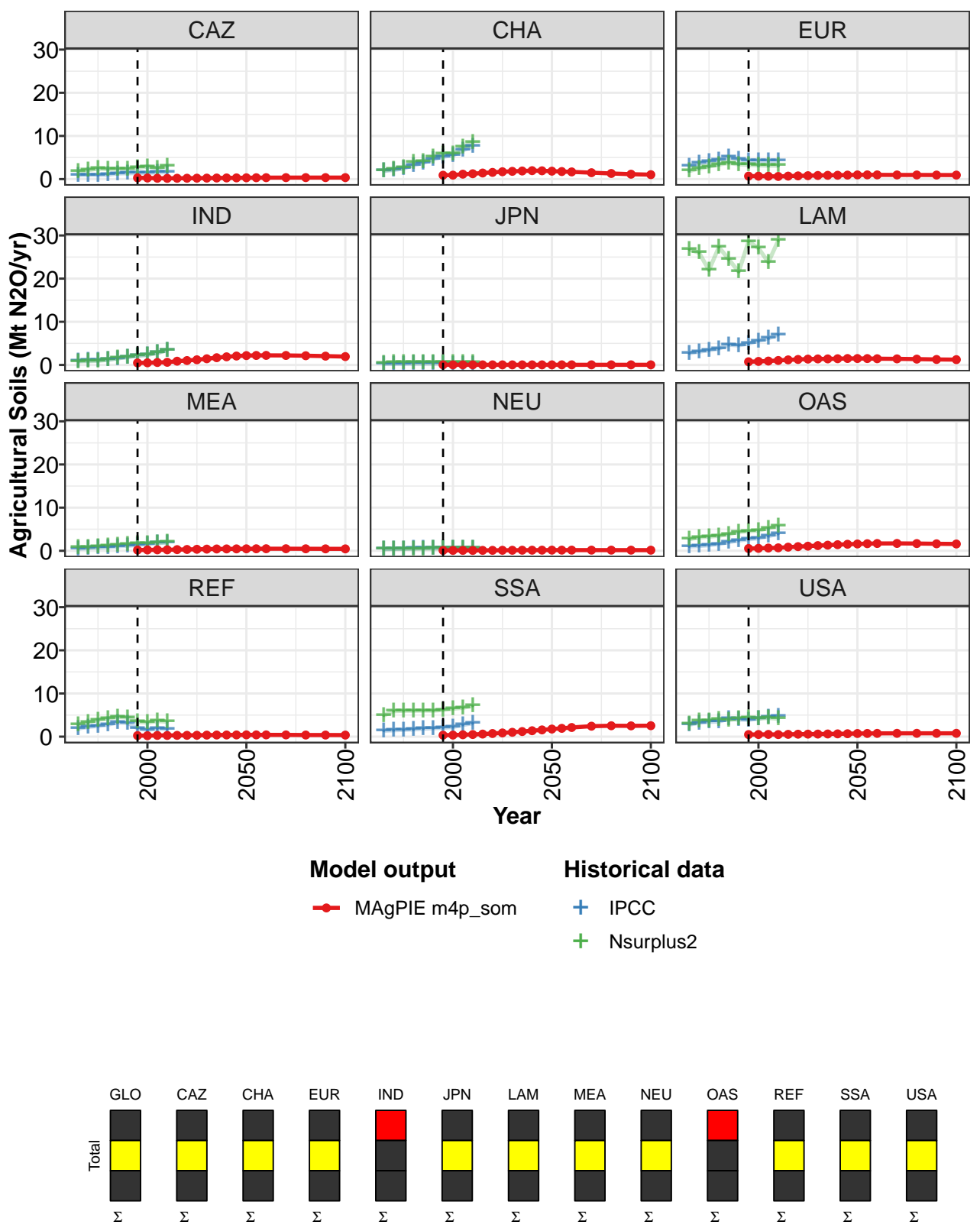


Figure 239: MAgPIE m4p\_som — Emissions—N2O—Land—Agriculture—Agricultural Soils (Mt N2O/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	5.0	5.2	5.7	6.0	7.0	7.8	8.6	9.4	10.2	10.9	11.5
CAZ	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
CHA	0.9	0.9	1.1	1.2	1.4	1.6	1.7	1.8	1.9	2.0	1.9
EUR	0.7	0.7	0.7	0.6	0.7	0.7	0.8	0.8	0.9	0.9	0.9
IND	0.5	0.5	0.6	0.6	0.9	1.0	1.2	1.4	1.7	1.9	2.1
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.7	0.8	0.9	1.0	1.2	1.3	1.4	1.4	1.4	1.4	1.5
MEA	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
OAS	0.5	0.6	0.6	0.7	0.8	1.0	1.1	1.2	1.3	1.4	1.5
REF	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4
SSA	0.3	0.4	0.4	0.5	0.6	0.7	0.9	1.0	1.2	1.4	1.6
USA	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.7

Table 792: MAgPIE m4p\_som — Emissions—N2O—Land—Agriculture—Agricultural Soils (Mt N2O/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	11.9	12.1	12.3	12.4	12.1	11.6	11.4
CAZ	0.3	0.3	0.3	0.3	0.3	0.3	0.3
CHA	1.8	1.8	1.7	1.5	1.3	1.1	1.0
EUR	1.0	1.0	1.0	1.0	1.0	0.9	0.9
IND	2.2	2.2	2.2	2.2	2.1	2.0	1.9
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.5	1.5	1.4	1.4	1.4	1.3	1.2
MEA	0.5	0.5	0.5	0.5	0.5	0.5	0.4
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.1
OAS	1.6	1.6	1.7	1.7	1.7	1.6	1.6
REF	0.4	0.4	0.4	0.4	0.4	0.4	0.4
SSA	1.8	1.9	2.1	2.4	2.5	2.5	2.5
USA	0.7	0.7	0.8	0.8	0.8	0.8	0.8

Table 793: MAgPIE m4p\_som — Emissions—N2O—Land—Agriculture—Agricultural Soils (Mt N2O/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	17.7	20.2	22.2	24.9	29.6	30.5	30.7	32.5	36.6	40.3
CAZ	0.9	1.0	0.9	1.0	1.3	1.4	1.4	1.4	1.5	1.6
CHA	1.9	2.1	2.4	3.2	3.7	4.6	5.2	5.5	6.7	7.6
EUR	3.1	3.6	4.0	4.5	5.1	4.6	4.2	4.2	4.2	4.3
IND	0.9	1.0	1.1	1.2	1.5	1.8	2.2	2.4	2.8	3.4
JPN	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
LAM	2.7	3.1	3.4	3.8	4.7	4.5	5.0	5.6	6.2	7.0
MEA	0.5	0.6	0.7	0.8	1.0	1.2	1.4	1.6	1.8	1.9
NEU	0.4	0.5	0.5	0.5	0.6	0.6	0.5	0.6	0.6	0.6
OAS	1.0	1.1	1.3	1.6	2.0	2.4	2.7	2.9	3.4	3.9
REF	1.9	2.3	2.5	2.8	3.3	3.2	2.0	1.5	1.9	1.8
SSA	1.4	1.5	1.6	1.7	1.8	2.0	2.1	2.2	2.7	3.1
USA	2.8	3.2	3.4	3.5	4.1	4.0	3.9	4.2	4.6	4.7

Table 794: IPCC — Emissions—N2O—Land—Agriculture—Agricultural Soils (Mt N2O/yr)

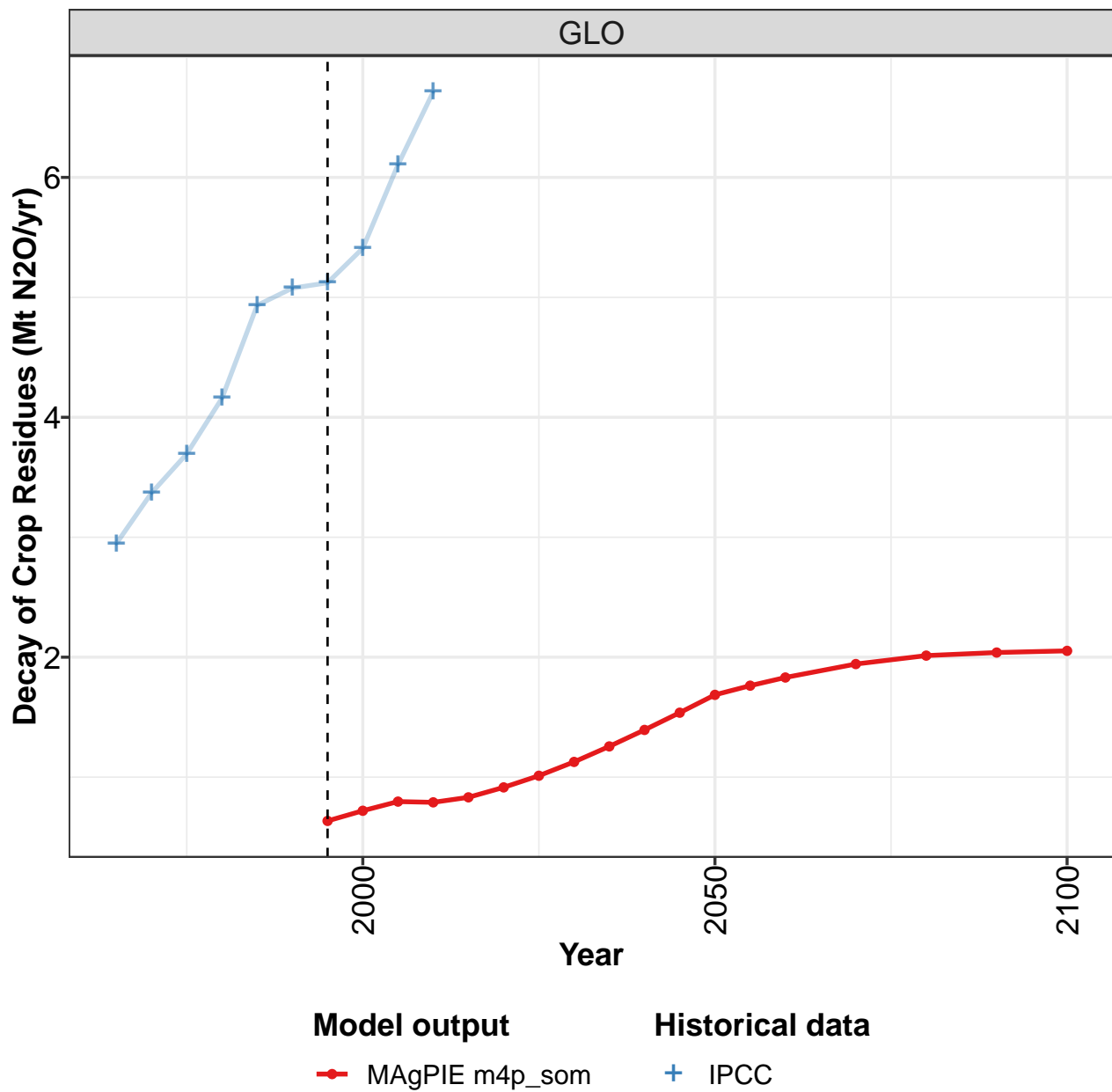


	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	47.9	51.2	49.8	57.9	57.0	55.9	63.9	62.7	62.7	70.6
CAZ	1.8	2.1	2.4	2.3	2.4	2.4	2.6	2.9	2.5	3.0
CHA	2.0	2.3	2.6	3.8	4.2	5.2	5.9	5.8	7.5	8.6
EUR	1.9	2.5	2.9	3.4	3.7	3.4	3.3	3.2	3.1	3.1
IND	0.8	0.9	0.9	1.2	1.5	1.8	2.2	2.3	2.8	3.4
JPN	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5
LAM	26.8	26.0	22.0	27.3	24.5	21.6	28.6	27.1	23.8	28.8
MEA	0.7	0.7	1.0	1.1	1.3	1.4	1.7	1.7	1.9	2.0
NEU	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.7
OAS	2.7	3.1	3.3	3.5	3.9	4.4	4.5	4.7	5.2	5.8
REF	2.8	3.3	3.9	4.2	4.5	4.4	3.4	3.3	3.6	3.5
SSA	4.9	5.9	6.0	6.0	6.0	6.0	6.2	6.5	6.7	7.1
USA	2.9	3.6	3.7	4.0	3.9	4.2	4.4	4.2	4.3	4.1

Table 795: Nsurplus2 — Emissions—N2O—Land—Agriculture—Agricultural Soils (Mt N2O/yr)

## 13.1.3 Agriculture—Agricultural Soils—Decay of Crop Residues

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

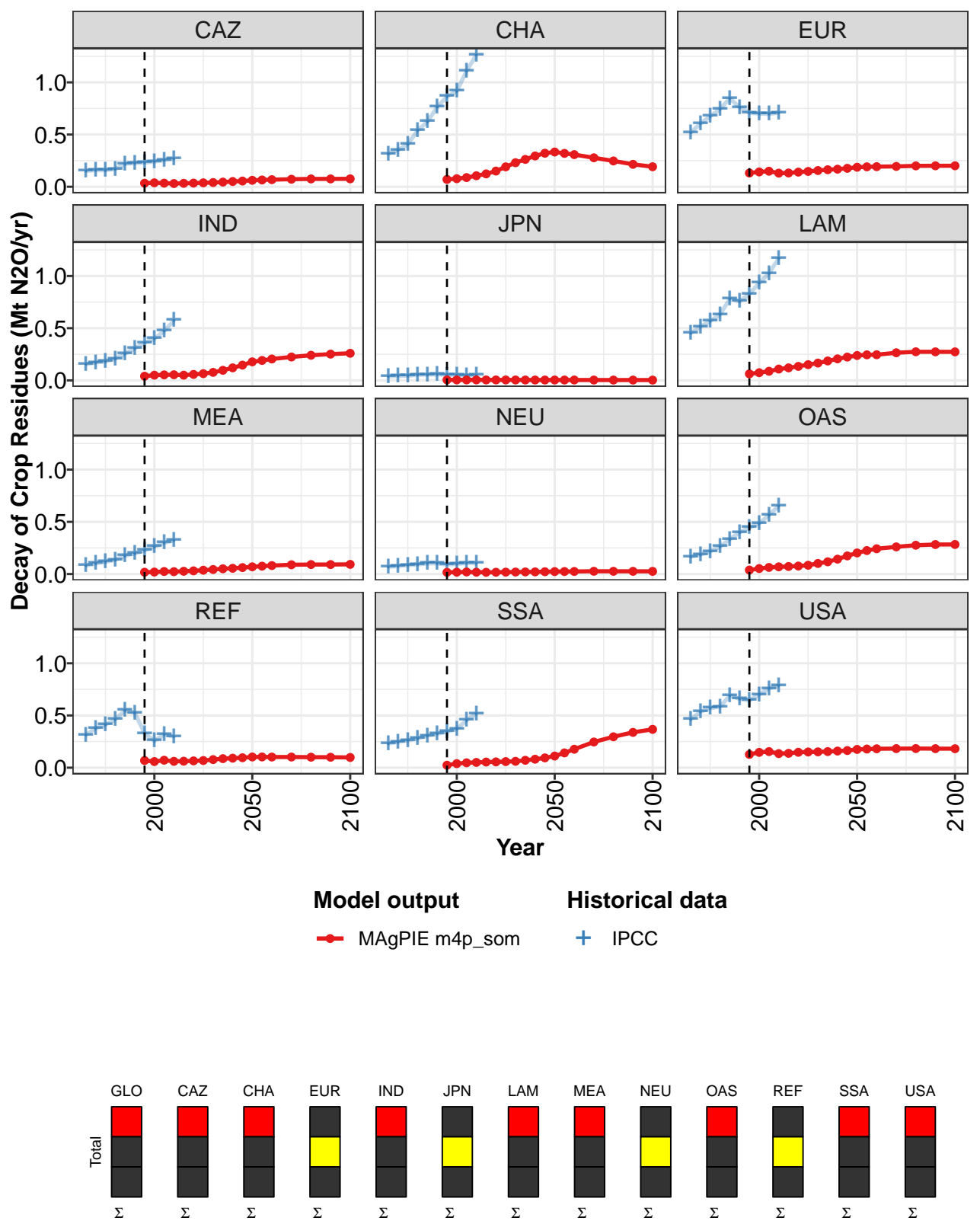


Figure 240: MAGPIE m4p\_som — Emissions—N2O—Land—Agriculture—Agricultural Soils—Decay of Crop Residues (Mt N2O/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.64	0.72	0.80	0.79	0.83	0.91	1.01	1.13	1.26	1.39	1.54
CAZ	0.03	0.04	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.05	0.05
CHA	0.07	0.08	0.09	0.11	0.12	0.15	0.19	0.23	0.26	0.29	0.32
EUR	0.13	0.14	0.15	0.13	0.13	0.14	0.15	0.16	0.16	0.17	0.18
IND	0.04	0.05	0.05	0.05	0.05	0.06	0.06	0.08	0.10	0.12	0.15
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.06	0.07	0.09	0.11	0.12	0.13	0.15	0.17	0.19	0.21	0.22
MEA	0.02	0.02	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.06	0.06
NEU	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
OAS	0.04	0.05	0.06	0.07	0.07	0.08	0.08	0.10	0.12	0.14	0.17
REF	0.07	0.06	0.07	0.06	0.06	0.07	0.07	0.08	0.09	0.09	0.10
SSA	0.02	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.07	0.08	0.09
USA	0.13	0.15	0.15	0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.16

Table 796: MAgPIE m4p\_som — Emissions—N2O—Land—Agriculture—Agricultural Soils—Decay of Crop Residues (Mt N2O/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.69	1.76	1.83	1.94	2.01	2.04	2.05
CAZ	0.06	0.06	0.07	0.07	0.08	0.07	0.08
CHA	0.33	0.32	0.31	0.28	0.25	0.21	0.19
EUR	0.19	0.19	0.19	0.19	0.20	0.20	0.20
IND	0.18	0.19	0.21	0.22	0.24	0.25	0.26
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.24	0.24	0.25	0.26	0.27	0.27	0.27
MEA	0.07	0.08	0.08	0.09	0.09	0.09	0.09
NEU	0.02	0.02	0.02	0.03	0.03	0.03	0.03
OAS	0.20	0.22	0.24	0.26	0.28	0.28	0.28
REF	0.10	0.10	0.10	0.10	0.10	0.10	0.10
SSA	0.11	0.14	0.18	0.25	0.30	0.34	0.37
USA	0.17	0.18	0.18	0.18	0.18	0.18	0.18

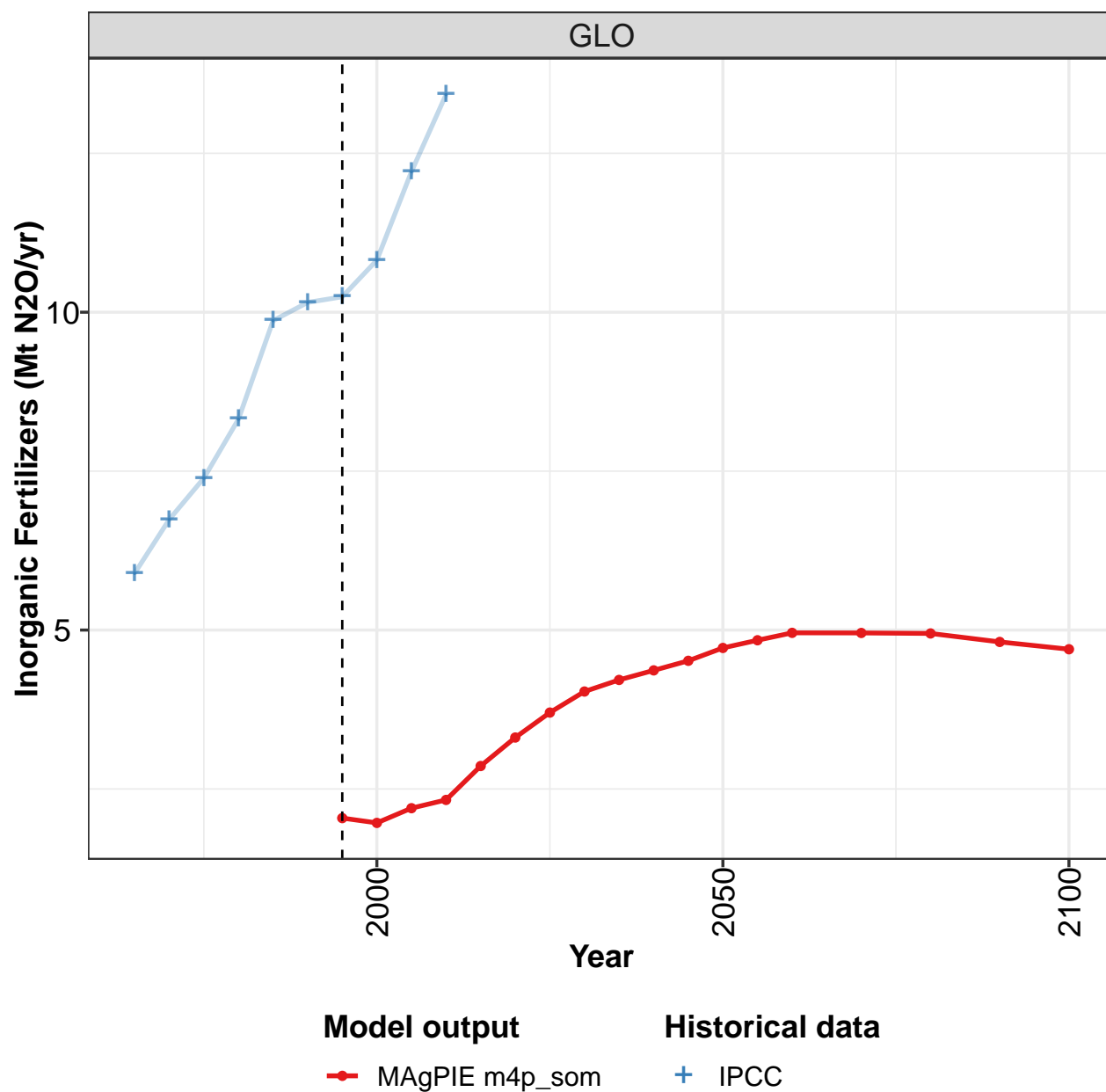
Table 797: MAgPIE m4p\_som — Emissions—N2O—Land—Agriculture—Agricultural Soils—Decay of Crop Residues (Mt N2O/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.95	3.37	3.69	4.16	4.93	5.08	5.12	5.41	6.11	6.71
CAZ	0.15	0.16	0.16	0.17	0.22	0.23	0.23	0.24	0.25	0.27
CHA	0.32	0.35	0.41	0.54	0.62	0.76	0.86	0.92	1.11	1.26
EUR	0.52	0.61	0.67	0.74	0.85	0.76	0.71	0.70	0.70	0.71
IND	0.15	0.17	0.18	0.21	0.26	0.31	0.36	0.40	0.47	0.57
JPN	0.04	0.04	0.04	0.05	0.06	0.06	0.05	0.05	0.05	0.05
LAM	0.45	0.51	0.57	0.63	0.78	0.76	0.83	0.93	1.03	1.17
MEA	0.08	0.10	0.12	0.14	0.17	0.20	0.23	0.26	0.30	0.32
NEU	0.07	0.08	0.09	0.09	0.10	0.10	0.09	0.10	0.10	0.10
OAS	0.17	0.19	0.22	0.26	0.33	0.40	0.44	0.48	0.57	0.65
REF	0.31	0.38	0.41	0.46	0.55	0.53	0.33	0.26	0.32	0.30
SSA	0.23	0.25	0.26	0.28	0.31	0.33	0.34	0.37	0.45	0.52
USA	0.46	0.54	0.57	0.58	0.69	0.66	0.64	0.70	0.76	0.79

Table 798: IPCC — Emissions—N2O—Land—Agriculture—Agricultural Soils—Decay of Crop Residues (Mt N2O/yr)

## 13.1.4 Agriculture—Agricultural Soils—Inorganic Fertilizers

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

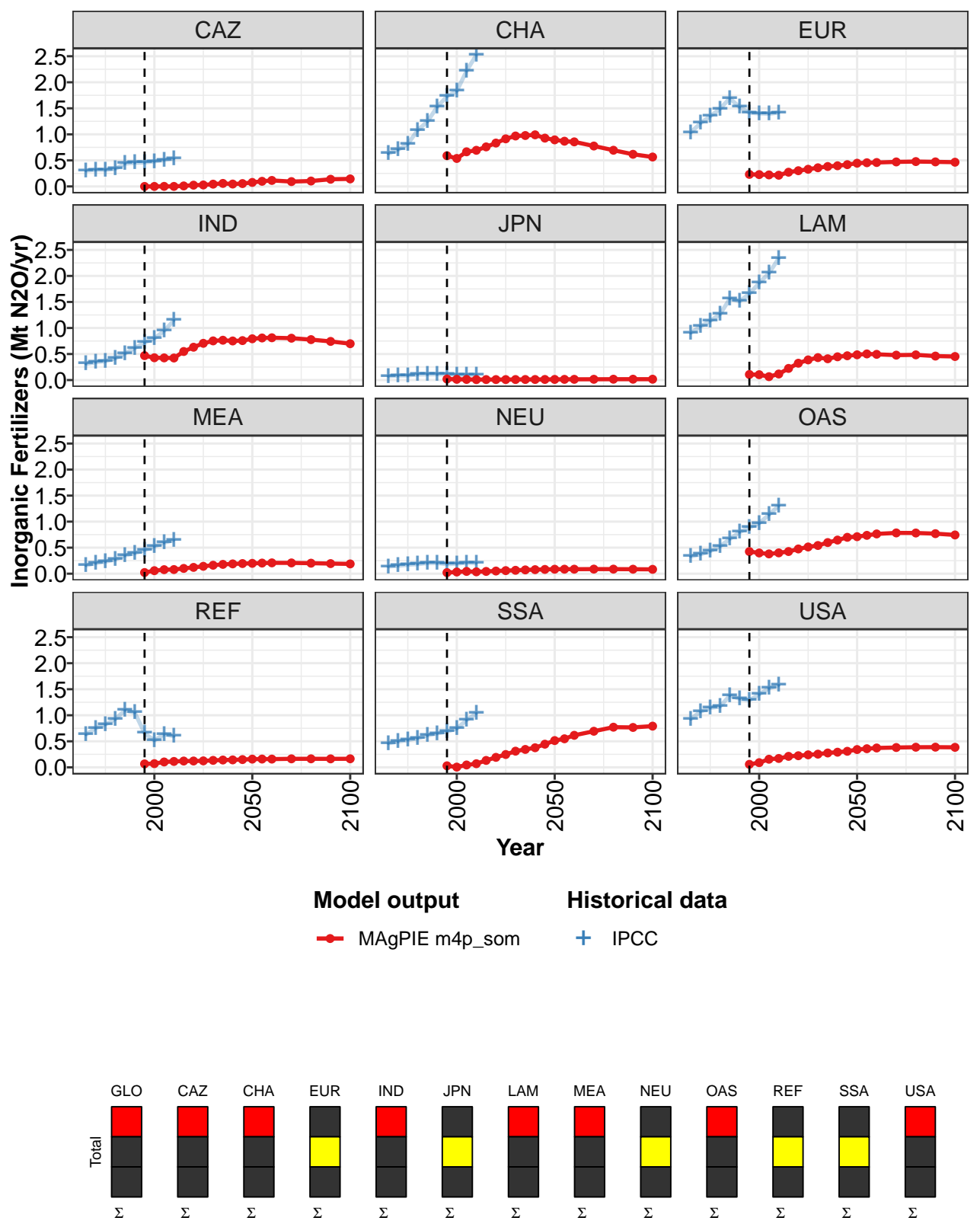


Figure 241: MAgPIE m4p\_som — Emissions—N2O—Land—Agriculture—Agricultural Soils—Inorganic Fertilizers (Mt N2O/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	2.04	1.97	2.20	2.33	2.86	3.31	3.70	4.03	4.22	4.37	4.52
CAZ	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.04	0.06	0.05	0.06
CHA	0.59	0.54	0.66	0.69	0.76	0.83	0.91	0.97	0.98	0.99	0.93
EUR	0.23	0.23	0.22	0.21	0.27	0.30	0.33	0.36	0.38	0.40	0.42
IND	0.47	0.43	0.43	0.42	0.55	0.63	0.71	0.75	0.77	0.75	0.76
JPN	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
LAM	0.11	0.10	0.07	0.12	0.22	0.32	0.39	0.43	0.41	0.45	0.47
MEA	0.02	0.06	0.08	0.08	0.10	0.12	0.14	0.16	0.18	0.19	0.20
NEU	0.02	0.03	0.04	0.04	0.04	0.05	0.06	0.07	0.07	0.08	0.08
OAS	0.43	0.40	0.38	0.40	0.43	0.48	0.51	0.54	0.60	0.65	0.70
REF	0.07	0.07	0.10	0.11	0.12	0.12	0.12	0.13	0.14	0.14	0.15
SSA	0.03	0.00	0.05	0.07	0.13	0.19	0.25	0.31	0.34	0.38	0.44
USA	0.06	0.09	0.16	0.17	0.21	0.22	0.24	0.25	0.28	0.29	0.31

Table 799: MAgPIE m4p\_som — Emissions—N2O—Land—Agriculture—Agricultural Soils—Inorganic Fertilizers (Mt N2O/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	4.72	4.84	4.96	4.95	4.95	4.81	4.70
CAZ	0.08	0.10	0.11	0.09	0.10	0.14	0.14
CHA	0.89	0.87	0.86	0.78	0.69	0.62	0.56
EUR	0.45	0.45	0.46	0.47	0.48	0.47	0.46
IND	0.79	0.81	0.81	0.80	0.78	0.74	0.70
JPN	0.01	0.01	0.01	0.02	0.02	0.02	0.02
LAM	0.49	0.50	0.49	0.48	0.48	0.46	0.45
MEA	0.20	0.20	0.21	0.21	0.20	0.19	0.19
NEU	0.09	0.09	0.09	0.09	0.09	0.09	0.08
OAS	0.71	0.74	0.76	0.78	0.78	0.77	0.74
REF	0.16	0.16	0.16	0.16	0.16	0.16	0.16
SSA	0.51	0.55	0.62	0.69	0.77	0.77	0.79
USA	0.34	0.36	0.37	0.38	0.39	0.39	0.38

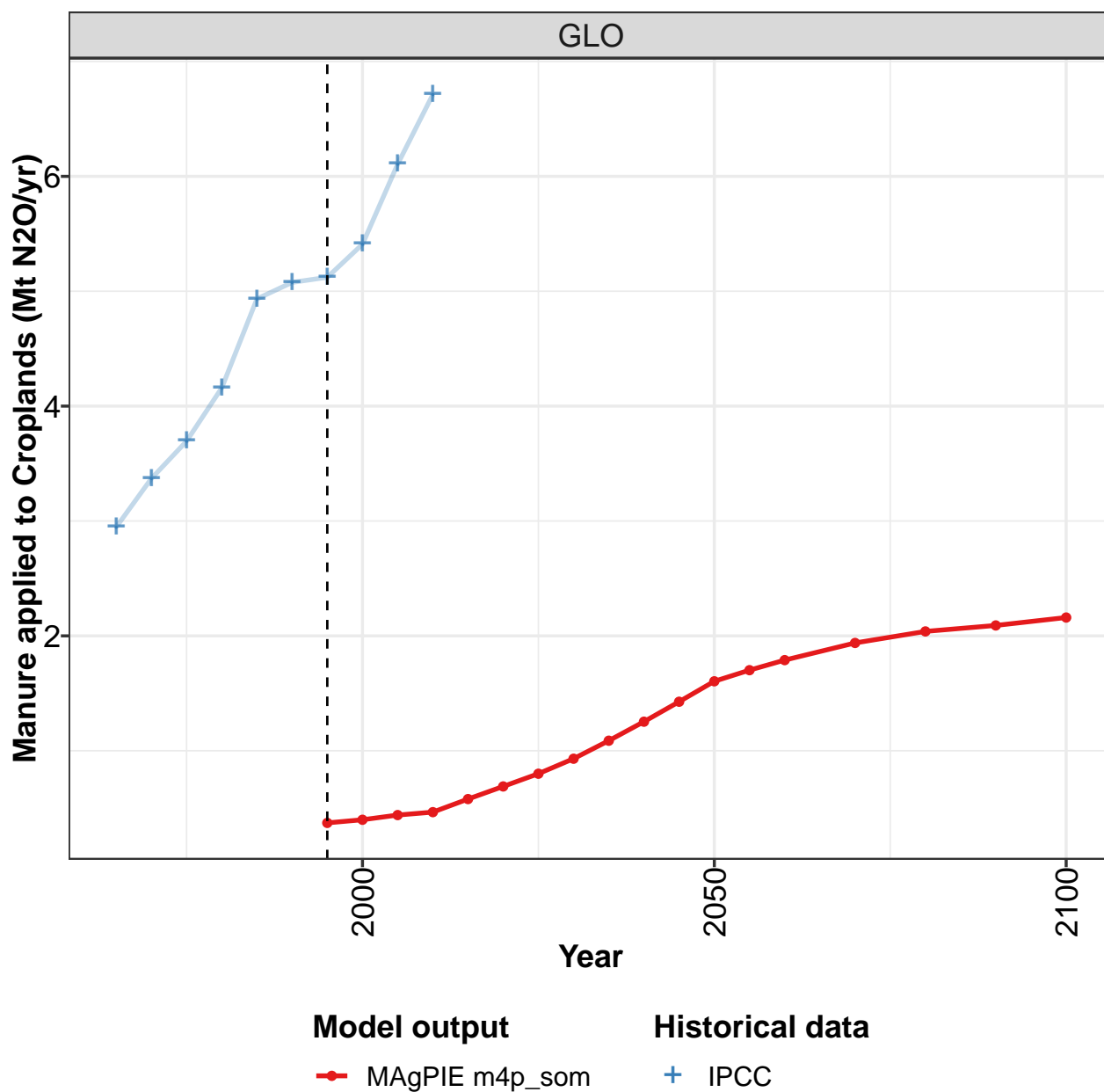
Table 800: MAgPIE m4p\_som — Emissions—N2O—Land—Agriculture—Agricultural Soils—Inorganic Fertilizers (Mt N2O/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	5.9	6.7	7.4	8.3	9.9	10.2	10.2	10.8	12.2	13.4
CAZ	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.5
CHA	0.6	0.7	0.8	1.1	1.2	1.5	1.7	1.8	2.2	2.5
EUR	1.0	1.2	1.3	1.5	1.7	1.5	1.4	1.4	1.4	1.4
IND	0.3	0.3	0.4	0.4	0.5	0.6	0.7	0.8	0.9	1.1
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.9	1.0	1.1	1.3	1.6	1.5	1.7	1.9	2.1	2.3
MEA	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.5	0.6	0.6
NEU	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	0.3	0.4	0.4	0.5	0.7	0.8	0.9	1.0	1.1	1.3
REF	0.6	0.8	0.8	0.9	1.1	1.1	0.7	0.5	0.6	0.6
SSA	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.9	1.0
USA	0.9	1.1	1.1	1.2	1.4	1.3	1.3	1.4	1.5	1.6

Table 801: IPCC — Emissions—N2O—Land—Agriculture—Agricultural Soils—Inorganic Fertilizers (Mt N2O/yr)

## 13.1.5 Agriculture—Agricultural Soils—Manure applied to Croplands

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

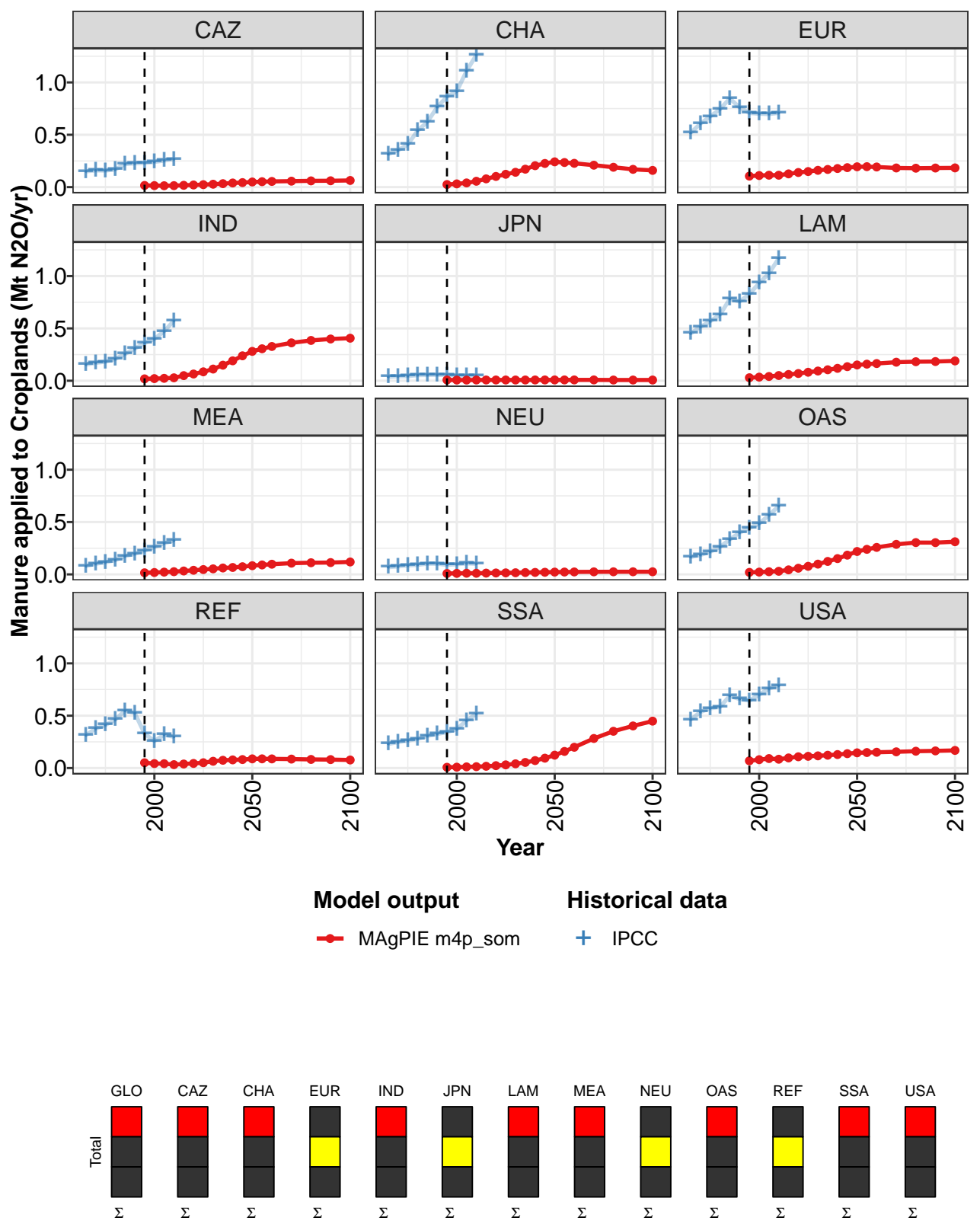


Figure 242: MAGPIE m4p\_som — Emissions—N2O—Land—Agriculture—Agricultural Soils—Manure applied to Croplands (Mt N2O/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.37	0.40	0.44	0.47	0.58	0.69	0.80	0.93	1.09	1.25	1.43
CAZ	0.02	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04	0.04
CHA	0.02	0.03	0.04	0.06	0.08	0.10	0.12	0.14	0.17	0.20	0.23
EUR	0.11	0.11	0.11	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19
IND	0.02	0.02	0.02	0.03	0.05	0.06	0.09	0.11	0.15	0.19	0.24
JPN	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
LAM	0.03	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.11	0.12	0.13
MEA	0.02	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.06	0.07	0.07
NEU	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
OAS	0.02	0.02	0.03	0.03	0.04	0.06	0.08	0.10	0.12	0.15	0.18
REF	0.05	0.04	0.04	0.03	0.04	0.04	0.05	0.06	0.07	0.08	0.08
SSA	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.07	0.09
USA	0.07	0.08	0.09	0.08	0.10	0.11	0.11	0.12	0.12	0.13	0.14

Table 802: MAgPIE m4p\_som — Emissions—N2O—Land—Agriculture—Agricultural Soils—Manure applied to Croplands (Mt N2O/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.60	1.70	1.79	1.94	2.04	2.09	2.16
CAZ	0.05	0.05	0.05	0.06	0.06	0.06	0.06
CHA	0.24	0.24	0.23	0.21	0.19	0.17	0.16
EUR	0.19	0.20	0.19	0.18	0.18	0.18	0.18
IND	0.28	0.31	0.33	0.36	0.39	0.40	0.41
JPN	0.01	0.01	0.01	0.01	0.01	0.01	0.01
LAM	0.15	0.16	0.16	0.18	0.18	0.18	0.19
MEA	0.08	0.09	0.10	0.11	0.11	0.11	0.12
NEU	0.02	0.02	0.02	0.02	0.03	0.03	0.03
OAS	0.22	0.24	0.26	0.29	0.30	0.30	0.31
REF	0.09	0.09	0.09	0.09	0.08	0.08	0.08
SSA	0.12	0.16	0.20	0.28	0.35	0.40	0.45
USA	0.15	0.15	0.15	0.15	0.16	0.16	0.17

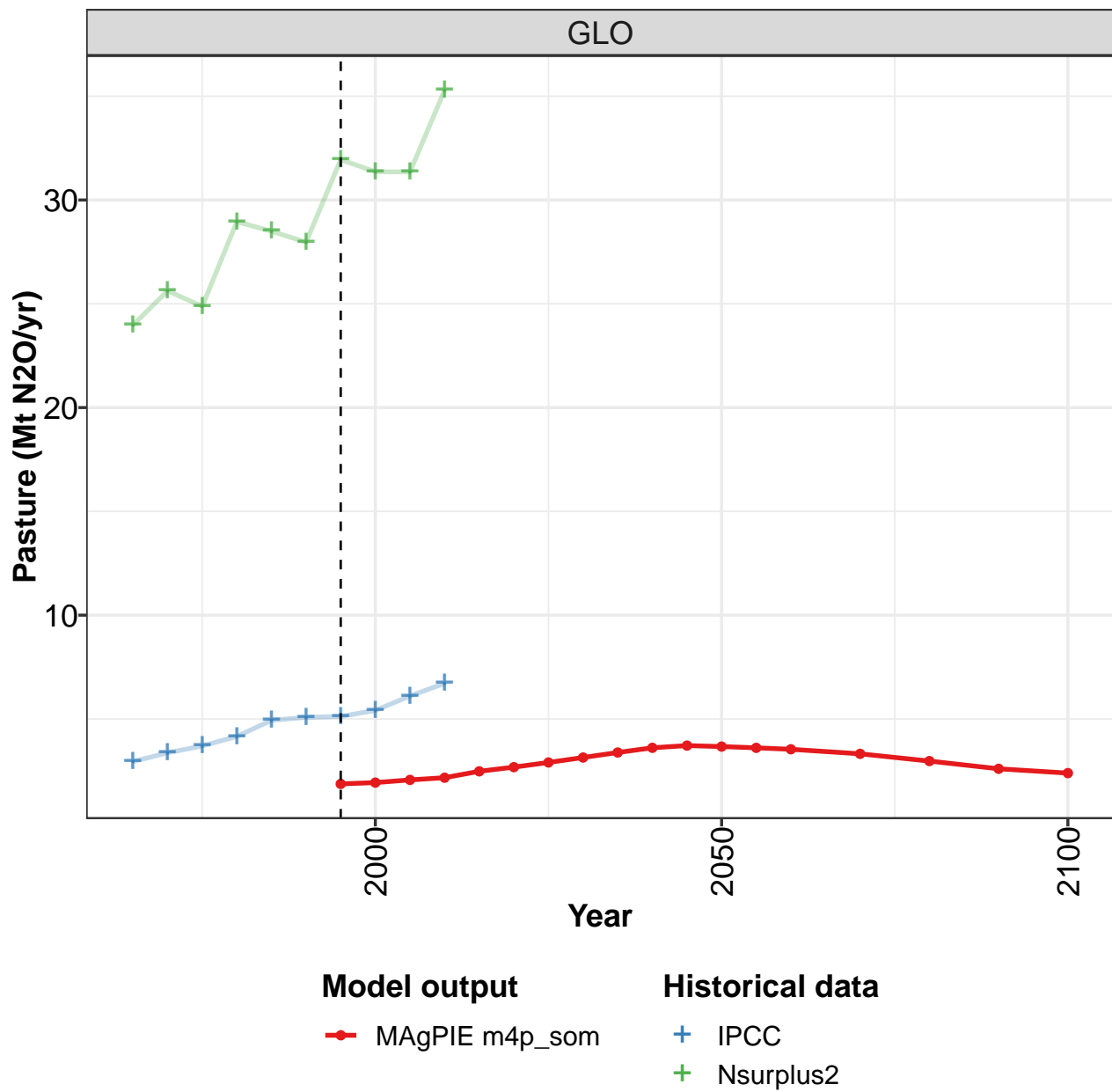
Table 803: MAgPIE m4p\_som — Emissions—N2O—Land—Agriculture—Agricultural Soils—Manure applied to Croplands (Mt N2O/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.95	3.37	3.69	4.16	4.93	5.08	5.12	5.41	6.11	6.71
CAZ	0.15	0.16	0.16	0.17	0.22	0.23	0.23	0.24	0.25	0.27
CHA	0.32	0.35	0.41	0.54	0.62	0.76	0.86	0.92	1.11	1.26
EUR	0.52	0.61	0.67	0.74	0.85	0.76	0.71	0.70	0.70	0.71
IND	0.15	0.17	0.18	0.21	0.26	0.31	0.36	0.40	0.47	0.57
JPN	0.04	0.04	0.04	0.05	0.06	0.06	0.05	0.05	0.05	0.05
LAM	0.45	0.51	0.57	0.63	0.78	0.76	0.83	0.93	1.03	1.17
MEA	0.08	0.10	0.12	0.14	0.17	0.20	0.23	0.26	0.30	0.32
NEU	0.07	0.08	0.09	0.09	0.10	0.10	0.09	0.10	0.10	0.10
OAS	0.17	0.19	0.22	0.26	0.33	0.40	0.44	0.48	0.57	0.65
REF	0.31	0.38	0.41	0.46	0.55	0.53	0.33	0.26	0.32	0.30
SSA	0.23	0.25	0.26	0.28	0.31	0.33	0.34	0.37	0.45	0.52
USA	0.46	0.54	0.57	0.58	0.69	0.66	0.64	0.70	0.76	0.79

Table 804: IPCC — Emissions—N2O—Land—Agriculture—Agricultural Soils—Manure applied to Croplands (Mt N2O/yr)

## 13.1.6 Agriculture—Agricultural Soils—Pasture

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

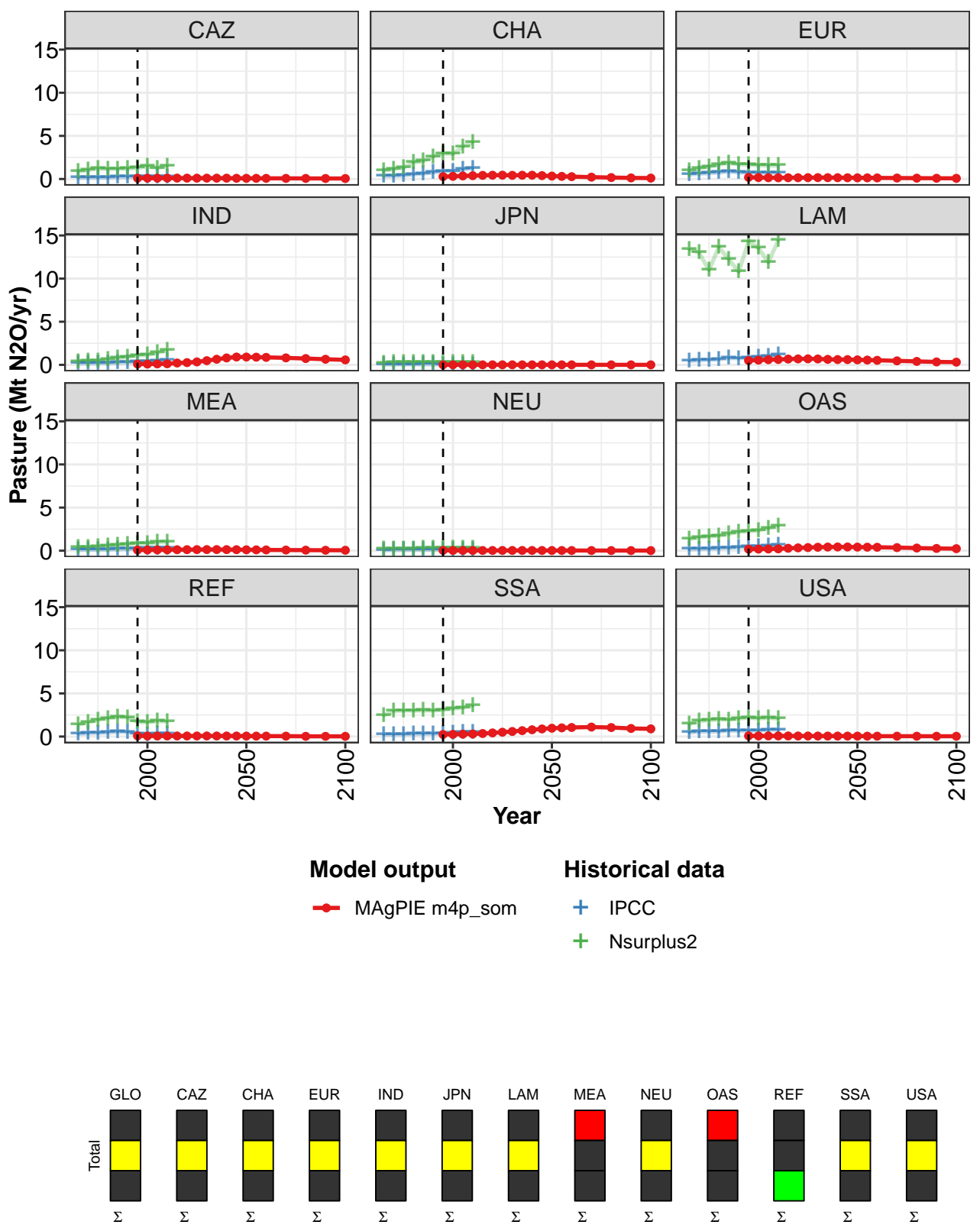


Figure 243: MAgPIE m4p\_som — Emissions—N2O—Land—Agriculture—Agricultural Soils—Pasture (Mt N2O/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.87	1.93	2.06	2.17	2.48	2.68	2.90	3.14	3.38	3.61	3.72
CAZ	0.10	0.10	0.10	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.08
CHA	0.28	0.31	0.36	0.39	0.42	0.44	0.45	0.43	0.44	0.44	0.39
EUR	0.19	0.17	0.15	0.14	0.15	0.15	0.16	0.16	0.16	0.15	0.15
IND	0.09	0.09	0.11	0.12	0.22	0.26	0.34	0.49	0.65	0.80	0.91
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.51	0.55	0.60	0.62	0.67	0.69	0.70	0.68	0.64	0.62	0.61
MEA	0.08	0.09	0.10	0.10	0.11	0.12	0.13	0.13	0.13	0.13	0.12
NEU	0.04	0.03	0.03	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03
OAS	0.18	0.19	0.20	0.22	0.28	0.33	0.37	0.40	0.42	0.43	0.43
REF	0.08	0.07	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06
SSA	0.24	0.26	0.28	0.30	0.35	0.42	0.50	0.59	0.69	0.79	0.88
USA	0.08	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.05

Table 805: MAgPIE m4p\_som — Emissions—N2O—Land—Agriculture—Agricultural Soils—Pasture (Mt N2O/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	3.67	3.61	3.54	3.32	2.97	2.60	2.39
CAZ	0.08	0.08	0.08	0.07	0.07	0.06	0.06
CHA	0.34	0.31	0.27	0.22	0.17	0.13	0.11
EUR	0.14	0.13	0.13	0.11	0.10	0.09	0.08
IND	0.91	0.89	0.87	0.81	0.73	0.65	0.58
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.58	0.56	0.53	0.46	0.40	0.34	0.31
MEA	0.11	0.10	0.09	0.08	0.06	0.05	0.05
NEU	0.02	0.02	0.02	0.02	0.02	0.02	0.01
OAS	0.42	0.41	0.40	0.36	0.31	0.26	0.24
REF	0.06	0.05	0.05	0.05	0.03	0.03	0.03
SSA	0.97	1.01	1.05	1.10	1.05	0.94	0.89
USA	0.05	0.05	0.05	0.04	0.04	0.04	0.04

Table 806: MAgPIE m4p\_som — Emissions—N2O—Land—Agriculture—Agricultural Soils—Pasture (Mt N2O/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.95	3.37	3.69	4.16	4.93	5.08	5.12	5.41	6.11	6.71
CAZ	0.15	0.16	0.16	0.17	0.22	0.23	0.23	0.24	0.25	0.27
CHA	0.32	0.35	0.41	0.54	0.62	0.76	0.86	0.92	1.11	1.26
EUR	0.52	0.61	0.67	0.74	0.85	0.76	0.71	0.70	0.70	0.71
IND	0.15	0.17	0.18	0.21	0.26	0.31	0.36	0.40	0.47	0.57
JPN	0.04	0.04	0.04	0.05	0.06	0.06	0.05	0.05	0.05	0.05
LAM	0.45	0.51	0.57	0.63	0.78	0.76	0.83	0.93	1.03	1.17
MEA	0.08	0.10	0.12	0.14	0.17	0.20	0.23	0.26	0.30	0.32
NEU	0.07	0.08	0.09	0.09	0.10	0.10	0.09	0.10	0.10	0.10
OAS	0.17	0.19	0.22	0.26	0.33	0.40	0.44	0.48	0.57	0.65
REF	0.31	0.38	0.41	0.46	0.55	0.53	0.33	0.26	0.32	0.30
SSA	0.23	0.25	0.26	0.28	0.31	0.33	0.34	0.37	0.45	0.52
USA	0.46	0.54	0.57	0.58	0.69	0.66	0.64	0.70	0.76	0.79

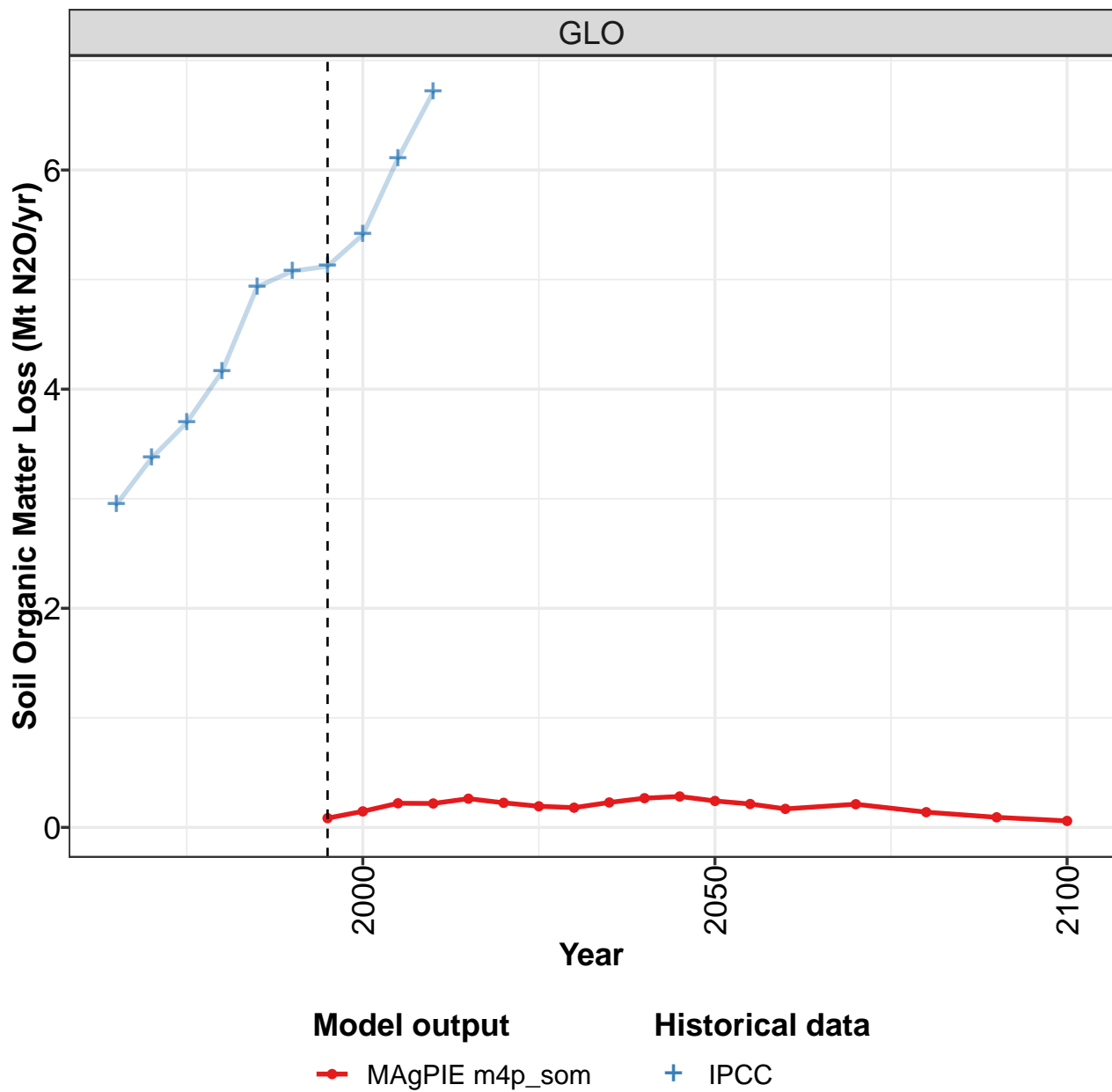
Table 807: IPCC — Emissions—N2O—Land—Agriculture—Agricultural Soils—Pasture (Mt N2O/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	24.0	25.6	24.9	29.0	28.5	28.0	31.9	31.4	31.4	35.3
CAZ	0.9	1.0	1.2	1.1	1.2	1.2	1.3	1.5	1.3	1.5
CHA	1.0	1.2	1.3	1.9	2.1	2.6	3.0	2.9	3.8	4.3
EUR	0.9	1.2	1.5	1.7	1.9	1.7	1.6	1.6	1.6	1.6
IND	0.4	0.4	0.5	0.6	0.8	0.9	1.1	1.2	1.4	1.7
JPN	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2
LAM	13.4	13.0	11.0	13.6	12.2	10.8	14.3	13.5	11.9	14.4
MEA	0.4	0.4	0.5	0.6	0.7	0.7	0.8	0.8	1.0	1.0
NEU	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
OAS	1.3	1.5	1.6	1.7	1.9	2.2	2.3	2.3	2.6	2.9
REF	1.4	1.6	2.0	2.1	2.3	2.2	1.7	1.6	1.8	1.7
SSA	2.4	3.0	3.0	3.0	3.0	3.0	3.1	3.2	3.3	3.6
USA	1.4	1.8	1.9	2.0	1.9	2.1	2.2	2.1	2.2	2.1

Table 808: Nsurplus2 — Emissions—N2O—Land—Agriculture—Agricultural Soils—Pasture (Mt N2O/yr)

## 13.1.7 Agriculture—Agricultural Soils—Soil Organic Matter Loss

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

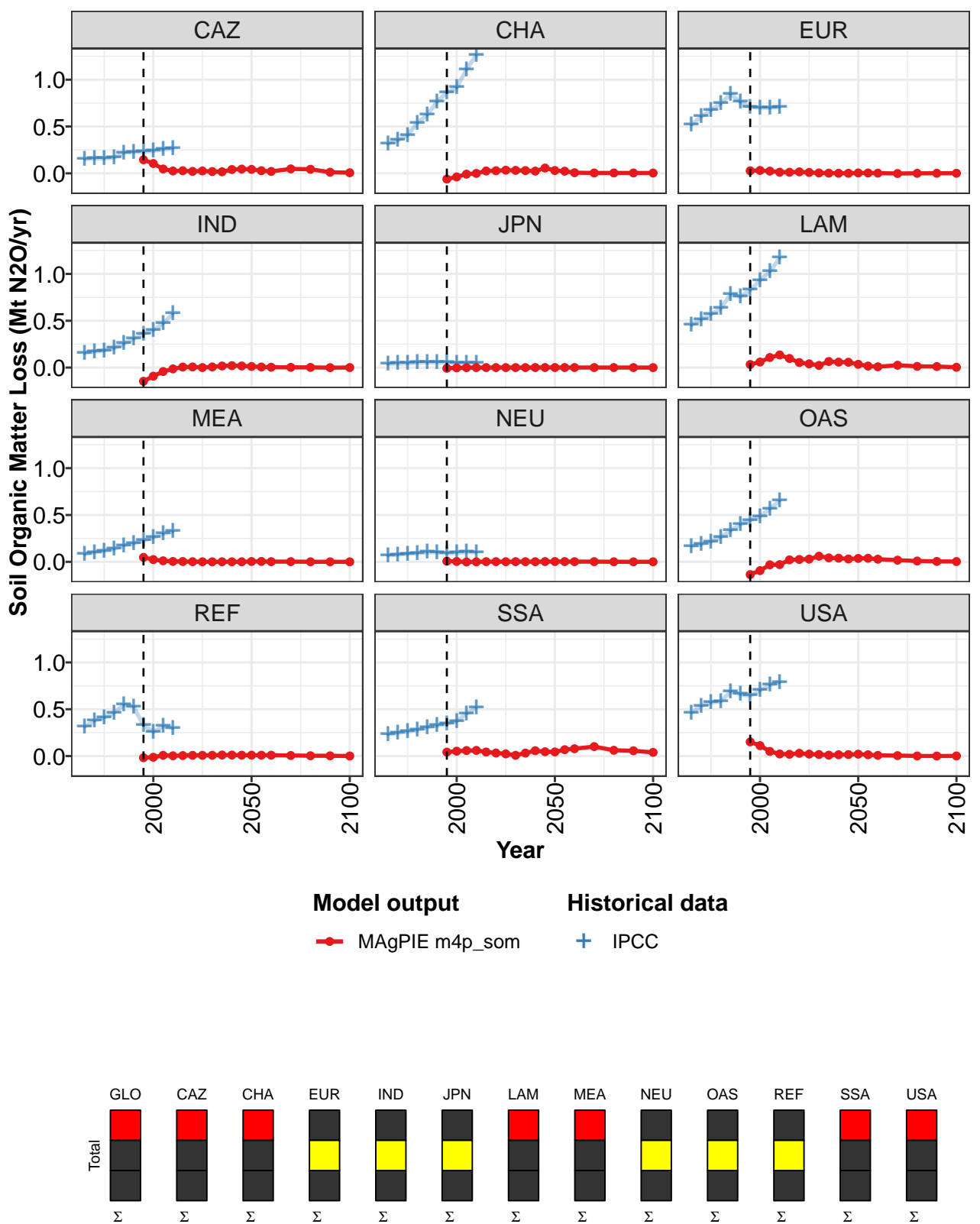


Figure 244: MAGPIE m4p\_som — Emissions—N2O—Land—Agriculture—Agricultural Soils—Soil Organic Matter Loss (Mt N2O/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.084	0.146	0.220	0.218	0.262	0.225	0.193	0.180	0.228	0.267	0.282
CAZ	0.144	0.105	0.046	0.025	0.028	0.021	0.026	0.019	0.017	0.040	0.045
CHA	-0.062	-0.038	-0.009	-0.001	0.025	0.028	0.034	0.031	0.030	0.024	0.057
EUR	0.027	0.031	0.024	0.012	0.012	0.016	0.010	0.004	0.002	0.001	0.001
IND	-0.146	-0.092	-0.042	-0.014	0.005	0.007	0.000	0.007	0.017	0.020	0.017
JPN	-0.008	-0.003	-0.001	0.000	-0.000	-0.000	0.000	0.000	0.000	0.000	0.001
LAM	0.033	0.059	0.108	0.135	0.097	0.054	0.040	0.023	0.065	0.058	0.057
MEA	0.047	0.024	0.011	0.004	0.003	0.002	0.001	0.000	0.001	0.000	0.000
NEU	0.007	0.004	-0.002	-0.000	0.002	0.002	0.001	0.002	0.001	0.001	0.003
OAS	-0.136	-0.094	-0.032	-0.030	0.021	0.025	0.029	0.060	0.042	0.039	0.030
REF	-0.017	-0.013	0.008	0.003	0.005	0.008	0.007	0.008	0.011	0.011	0.010
SSA	0.043	0.052	0.059	0.061	0.044	0.033	0.023	0.008	0.032	0.057	0.046
USA	0.151	0.112	0.050	0.022	0.019	0.030	0.021	0.017	0.010	0.014	0.016

Table 809: MAgPIE m4p\_som — Emissions—N2O—Land—Agriculture—Agricultural Soils—Soil Organic Matter Loss (Mt N2O/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.241	0.214	0.169	0.212	0.139	0.092	0.059
CAZ	0.042	0.028	0.020	0.048	0.043	0.012	0.006
CHA	0.030	0.023	0.007	0.004	0.004	0.004	0.003
EUR	0.004	0.004	0.002	-0.002	0.000	0.001	0.001
IND	0.012	0.006	0.004	0.002	0.002	-0.001	0.001
JPN	0.001	0.001	0.000	0.000	0.000	0.000	-0.000
LAM	0.035	0.016	0.009	0.025	0.013	0.011	0.003
MEA	0.004	0.004	0.002	0.002	0.000	0.000	0.000
NEU	0.003	0.002	0.002	0.002	0.001	0.000	0.000
OAS	0.036	0.038	0.028	0.018	0.009	0.004	0.003
REF	0.009	0.009	0.009	0.006	0.004	0.003	0.001
SSA	0.044	0.068	0.078	0.101	0.062	0.057	0.039
USA	0.021	0.014	0.008	0.005	0.001	0.001	0.001

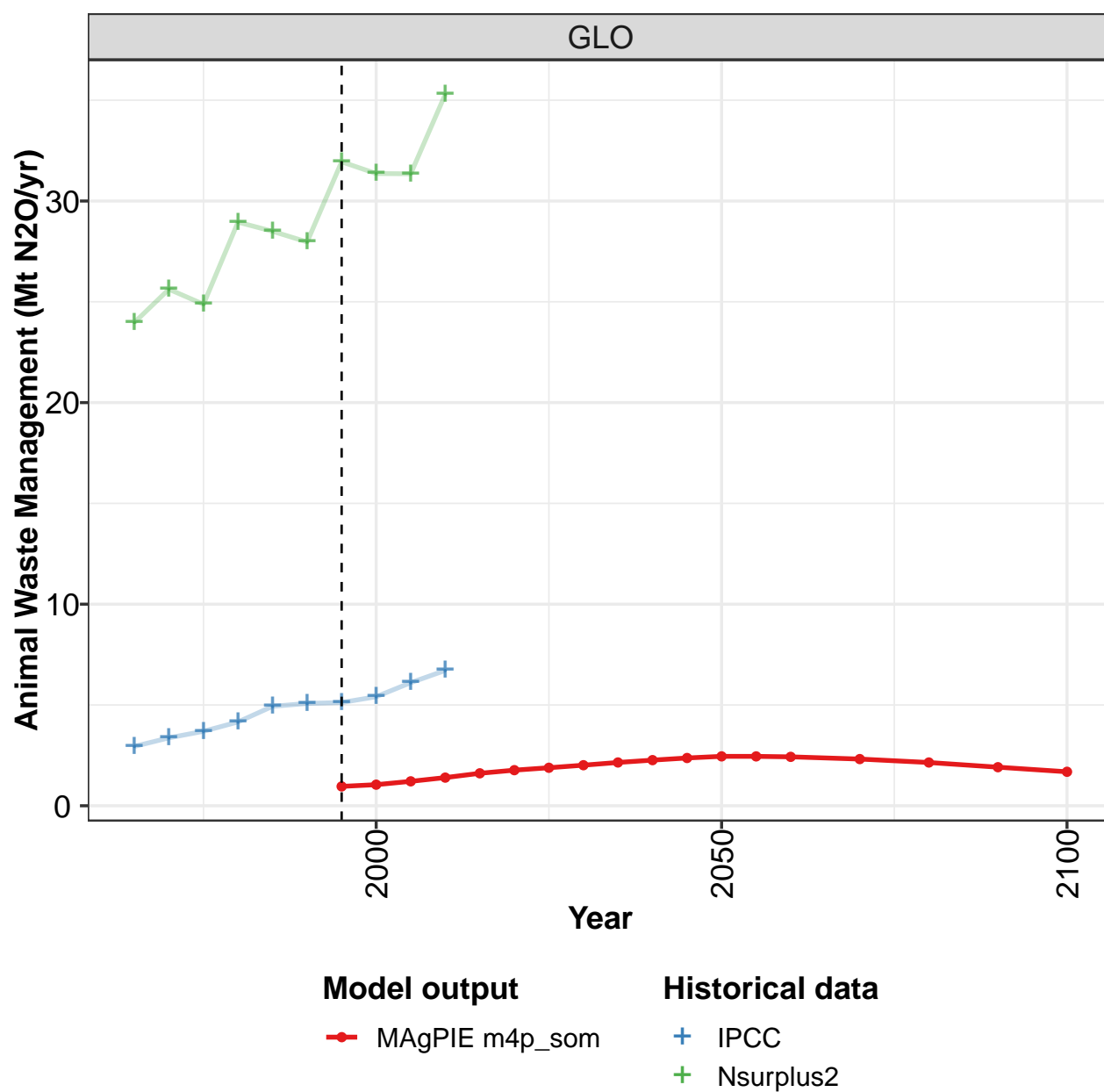
Table 810: MAgPIE m4p\_som — Emissions—N2O—Land—Agriculture—Agricultural Soils—Soil Organic Matter Loss (Mt N2O/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.95	3.37	3.69	4.16	4.93	5.08	5.12	5.41	6.11	6.71
CAZ	0.15	0.16	0.16	0.17	0.22	0.23	0.23	0.24	0.25	0.27
CHA	0.32	0.35	0.41	0.54	0.62	0.76	0.86	0.92	1.11	1.26
EUR	0.52	0.61	0.67	0.74	0.85	0.76	0.71	0.70	0.70	0.71
IND	0.15	0.17	0.18	0.21	0.26	0.31	0.36	0.40	0.47	0.57
JPN	0.04	0.04	0.04	0.05	0.06	0.06	0.05	0.05	0.05	0.05
LAM	0.45	0.51	0.57	0.63	0.78	0.76	0.83	0.93	1.03	1.17
MEA	0.08	0.10	0.12	0.14	0.17	0.20	0.23	0.26	0.30	0.32
NEU	0.07	0.08	0.09	0.09	0.10	0.10	0.09	0.10	0.10	0.10
OAS	0.17	0.19	0.22	0.26	0.33	0.40	0.44	0.48	0.57	0.65
REF	0.31	0.38	0.41	0.46	0.55	0.53	0.33	0.26	0.32	0.30
SSA	0.23	0.25	0.26	0.28	0.31	0.33	0.34	0.37	0.45	0.52
USA	0.46	0.54	0.57	0.58	0.69	0.66	0.64	0.70	0.76	0.79

Table 811: IPCC — Emissions—N2O—Land—Agriculture—Agricultural Soils—Soil Organic Matter Loss (Mt N2O/yr)

## 13.1.8 Agriculture—Animal Waste Management

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

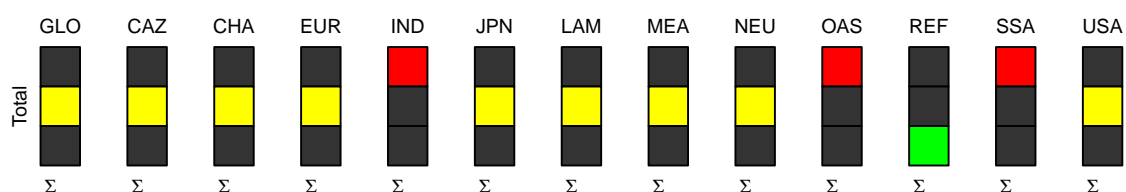
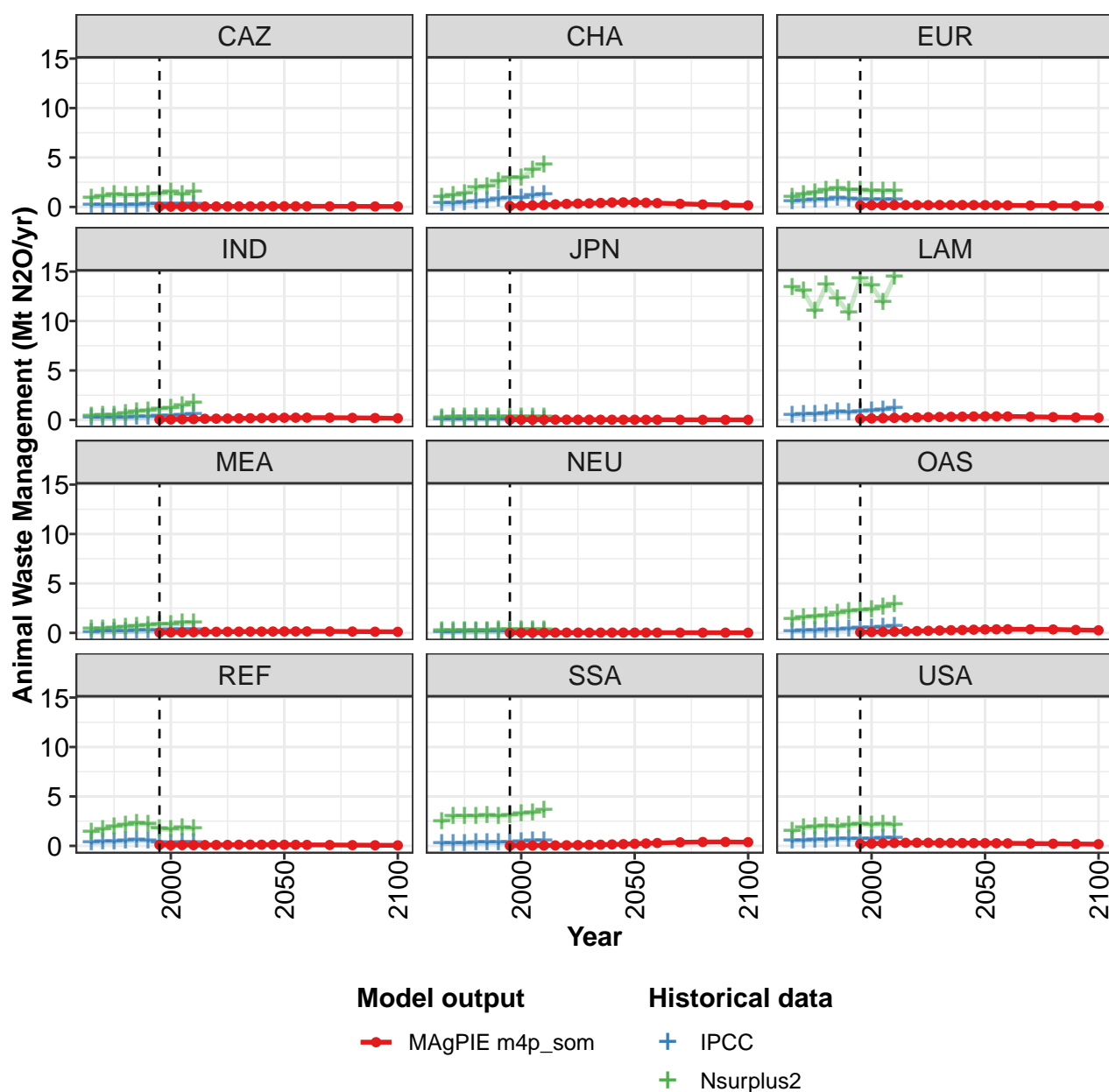


Figure 245: MAgPIE m4p\_som — Emissions—N<sub>2</sub>O—Land—Agriculture—Animal Waste Management (Mt N<sub>2</sub>O/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.96	1.05	1.21	1.40	1.61	1.77	1.89	2.01	2.15	2.26	2.37
CAZ	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.07
CHA	0.10	0.12	0.15	0.21	0.26	0.31	0.34	0.36	0.41	0.45	0.47
EUR	0.16	0.17	0.18	0.18	0.19	0.19	0.19	0.20	0.20	0.19	0.19
IND	0.04	0.05	0.06	0.08	0.12	0.13	0.14	0.15	0.17	0.19	0.21
JPN	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02
LAM	0.12	0.15	0.17	0.20	0.23	0.26	0.28	0.30	0.32	0.33	0.35
MEA	0.05	0.06	0.07	0.09	0.10	0.11	0.12	0.13	0.14	0.14	0.14
NEU	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
OAS	0.08	0.09	0.10	0.12	0.16	0.19	0.21	0.24	0.27	0.29	0.32
REF	0.11	0.08	0.09	0.08	0.09	0.09	0.10	0.12	0.13	0.12	0.12
SSA	0.02	0.03	0.03	0.04	0.05	0.07	0.08	0.10	0.12	0.15	0.18
USA	0.20	0.23	0.26	0.29	0.31	0.32	0.31	0.30	0.30	0.29	0.28

Table 812: MAgPIE m4p\_som — Emissions—N2O—Land—Agriculture—Animal Waste Management (Mt N2O/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	2.45	2.45	2.43	2.32	2.15	1.91	1.69
CAZ	0.07	0.07	0.07	0.06	0.06	0.05	0.04
CHA	0.46	0.43	0.39	0.32	0.25	0.19	0.16
EUR	0.18	0.18	0.16	0.14	0.13	0.12	0.10
IND	0.22	0.23	0.23	0.22	0.21	0.19	0.17
JPN	0.02	0.02	0.01	0.01	0.01	0.01	0.01
LAM	0.36	0.36	0.35	0.32	0.28	0.25	0.22
MEA	0.15	0.15	0.16	0.15	0.14	0.12	0.11
NEU	0.03	0.03	0.03	0.03	0.02	0.02	0.02
OAS	0.35	0.36	0.37	0.37	0.35	0.30	0.26
REF	0.12	0.11	0.10	0.09	0.08	0.07	0.06
SSA	0.21	0.25	0.29	0.36	0.40	0.40	0.37
USA	0.28	0.27	0.26	0.24	0.22	0.20	0.17

Table 813: MAgPIE m4p\_som — Emissions—N2O—Land—Agriculture—Animal Waste Management (Mt N2O/yr) [PART 2/2]

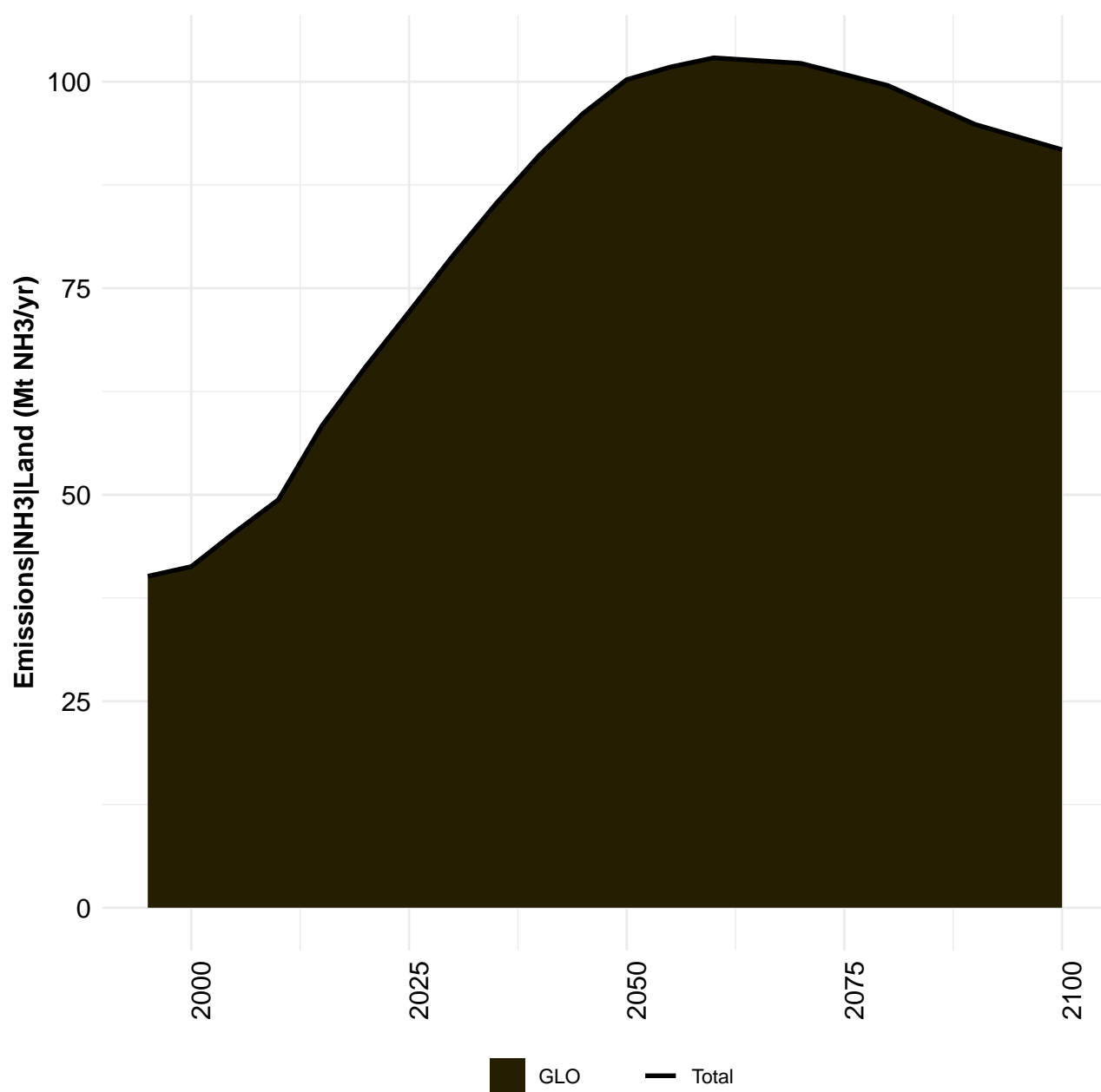
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.95	3.37	3.69	4.16	4.93	5.08	5.12	5.41	6.11	6.71
CAZ	0.15	0.16	0.16	0.17	0.22	0.23	0.23	0.24	0.25	0.27
CHA	0.32	0.35	0.41	0.54	0.62	0.76	0.86	0.92	1.11	1.26
EUR	0.52	0.61	0.67	0.74	0.85	0.76	0.71	0.70	0.70	0.71
IND	0.15	0.17	0.18	0.21	0.26	0.31	0.36	0.40	0.47	0.57
JPN	0.04	0.04	0.04	0.05	0.06	0.06	0.05	0.05	0.05	0.05
LAM	0.45	0.51	0.57	0.63	0.78	0.76	0.83	0.93	1.03	1.17
MEA	0.08	0.10	0.12	0.14	0.17	0.20	0.23	0.26	0.30	0.32
NEU	0.07	0.08	0.09	0.09	0.10	0.10	0.09	0.10	0.10	0.10
OAS	0.17	0.19	0.22	0.26	0.33	0.40	0.44	0.48	0.57	0.65
REF	0.31	0.38	0.41	0.46	0.55	0.53	0.33	0.26	0.32	0.30
SSA	0.23	0.25	0.26	0.28	0.31	0.33	0.34	0.37	0.45	0.52
USA	0.46	0.54	0.57	0.58	0.69	0.66	0.64	0.70	0.76	0.79

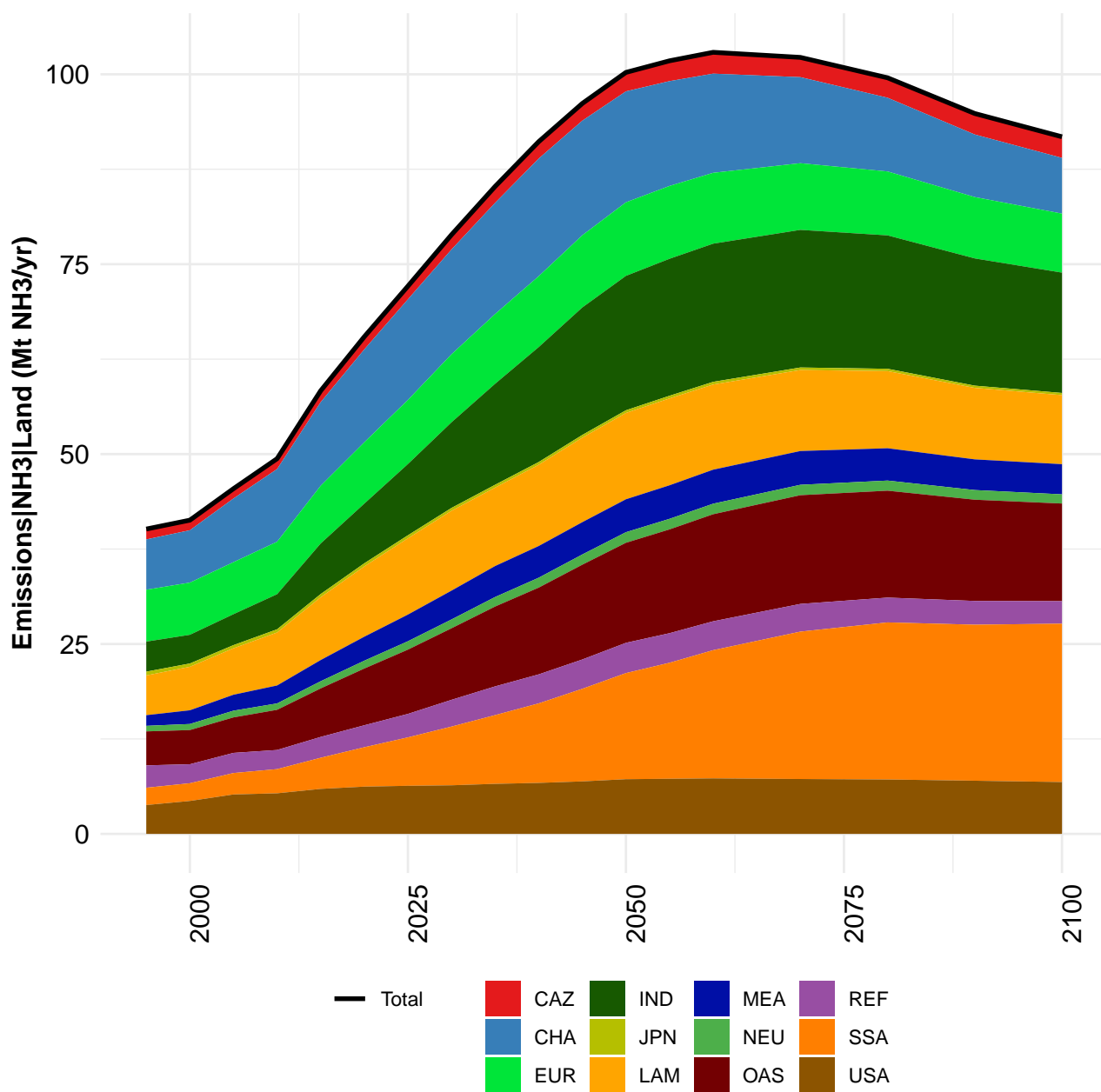
Table 814: IPCC — Emissions—N2O—Land—Agriculture—Animal Waste Management (Mt N2O/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	24.0	25.6	24.9	29.0	28.5	28.0	31.9	31.4	31.4	35.3
CAZ	0.9	1.0	1.2	1.1	1.2	1.2	1.3	1.5	1.3	1.5
CHA	1.0	1.2	1.3	1.9	2.1	2.6	3.0	2.9	3.8	4.3
EUR	0.9	1.2	1.5	1.7	1.9	1.7	1.6	1.6	1.6	1.6
IND	0.4	0.4	0.5	0.6	0.8	0.9	1.1	1.2	1.4	1.7
JPN	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2
LAM	13.4	13.0	11.0	13.6	12.2	10.8	14.3	13.5	11.9	14.4
MEA	0.4	0.4	0.5	0.6	0.7	0.7	0.8	0.8	1.0	1.0
NEU	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
OAS	1.3	1.5	1.6	1.7	1.9	2.2	2.3	2.3	2.6	2.9
REF	1.4	1.6	2.0	2.1	2.3	2.2	1.7	1.6	1.8	1.7
SSA	2.4	3.0	3.0	3.0	3.0	3.0	3.1	3.2	3.3	3.6
USA	1.4	1.8	1.9	2.0	1.9	2.1	2.2	2.1	2.2	2.1

Table 815: Nsurplus2 — Emissions—N2O—Land—Agriculture—Animal Waste Management (Mt N2O/yr)

## 14 NH3

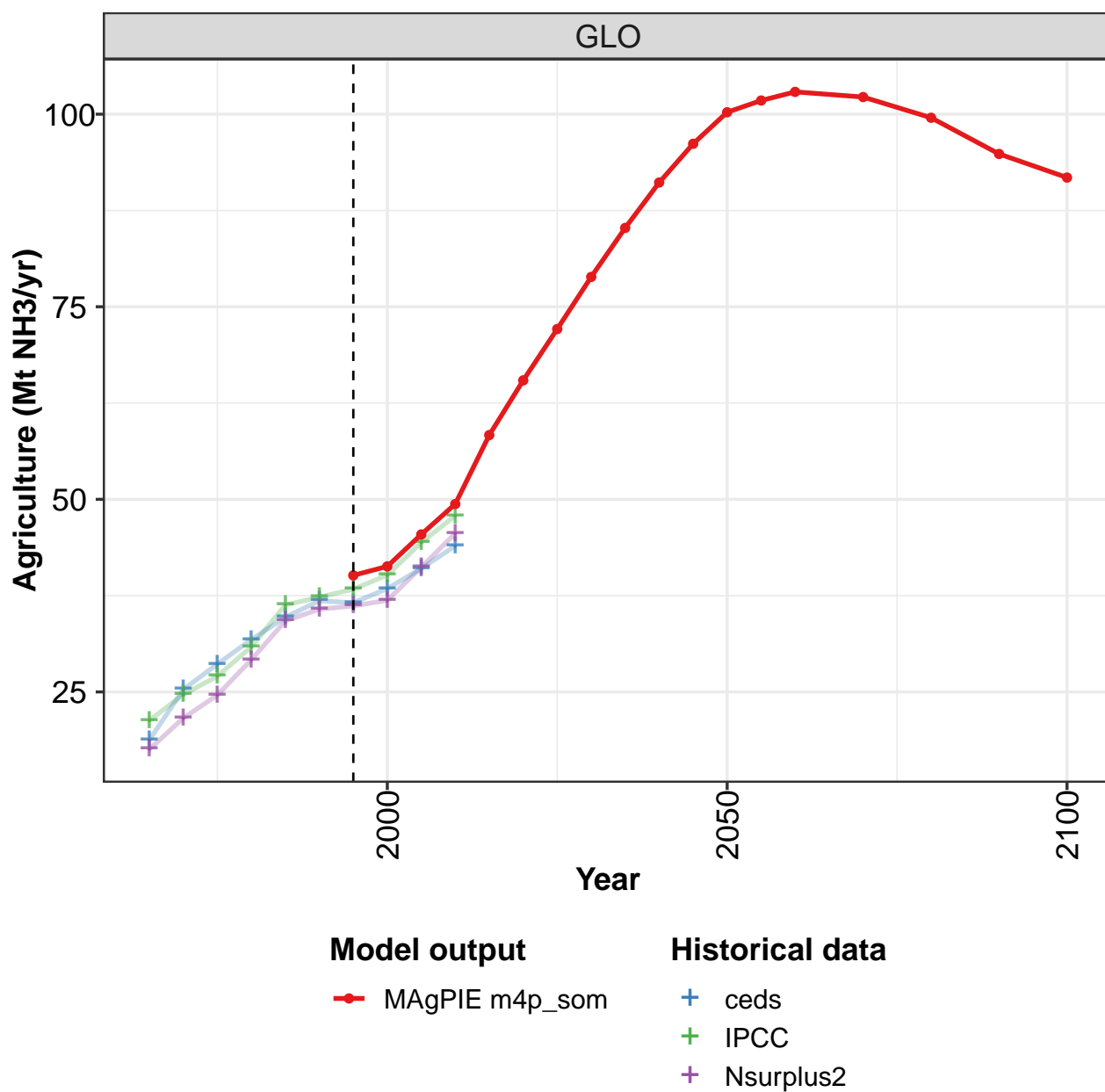




## 14.1 Land

### 14.1.1 Agriculture

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

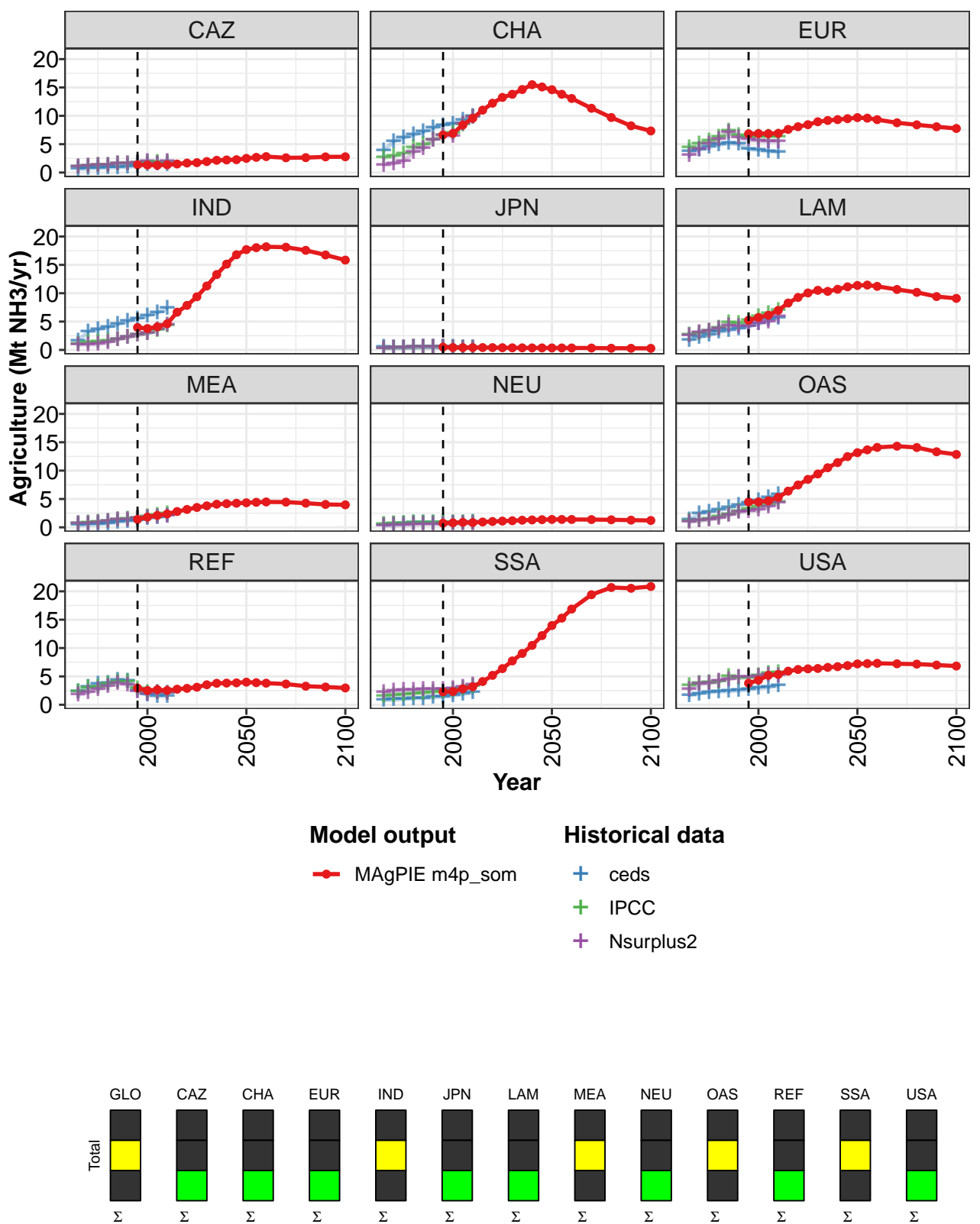


Figure 246: MAgPIE m4p\_som — Emissions—NH3—Land—Agriculture (Mt NH3/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	40	41	45	49	58	65	72	79	85	91	96
CAZ	1	1	1	1	2	2	2	2	2	2	2
CHA	7	7	8	10	11	12	13	14	15	15	15
EUR	7	7	7	7	8	8	8	9	9	9	10
IND	4	4	4	5	7	8	9	11	13	15	17
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	5	6	6	7	8	9	10	11	10	11	11
MEA	1	2	2	2	3	3	4	4	4	4	4
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	4	4	5	5	6	7	8	9	11	11	12
REF	3	3	3	3	3	3	3	4	4	4	4
SSA	2	2	3	3	4	5	6	8	9	10	12
USA	4	4	5	5	6	6	6	6	7	7	7

Table 816: MAgPIE m4p\_som — Emissions—NH3—Land—Agriculture (Mt NH3/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	100	102	103	102	100	95	92
CAZ	2	3	3	3	3	3	3
CHA	15	14	13	11	10	8	7
EUR	10	10	9	9	8	8	8
IND	18	18	18	18	18	17	16
JPN	0	0	0	0	0	0	0
LAM	11	11	11	11	10	9	9
MEA	4	4	4	4	4	4	4
NEU	1	1	1	1	1	1	1
OAS	13	14	14	14	14	13	13
REF	4	4	4	4	3	3	3
SSA	14	15	17	19	21	21	21
USA	7	7	7	7	7	7	7

Table 817: MAgPIE m4p\_som — Emissions—NH3—Land—Agriculture (Mt NH3/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	18.8	25.3	28.6	31.8	34.7	36.8	36.6	38.4	41.0	44.0
CAZ	0.6	0.7	0.8	0.8	0.9	1.0	1.2	1.4	1.5	1.5
CHA	3.9	5.5	6.1	6.6	7.1	7.8	8.3	8.6	9.2	9.8
EUR	3.8	4.0	4.5	4.9	5.2	5.0	4.1	4.0	3.8	3.6
IND	1.6	3.2	3.6	4.0	4.5	5.0	5.5	6.1	6.6	7.4
JPN	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.4
LAM	1.7	2.2	2.6	3.1	3.4	3.7	4.1	4.6	5.3	5.6
MEA	0.4	0.5	0.5	0.7	1.0	1.1	1.2	1.6	1.8	2.0
NEU	0.4	0.5	0.6	0.8	0.7	0.8	0.8	0.8	0.9	0.9
OAS	1.3	2.4	2.7	3.1	3.4	3.9	4.3	4.7	5.3	5.8
REF	2.3	3.1	3.6	3.8	4.3	4.2	2.5	1.7	1.5	1.5
SSA	0.8	0.9	1.0	1.1	1.1	1.3	1.4	1.6	1.9	2.2
USA	1.6	1.9	2.2	2.3	2.4	2.5	2.7	2.9	3.0	3.4

Table 818: ceds — Emissions—NH3—Land—Agriculture (Mt NH3/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	21.3	24.7	27.0	30.9	36.3	37.3	38.3	40.2	44.4	47.9
CAZ	1.1	1.2	1.2	1.3	1.5	1.5	1.7	1.8	1.8	1.8
CHA	2.6	2.9	3.3	4.4	4.9	5.8	6.6	7.0	8.4	9.7
EUR	4.3	5.1	5.6	6.3	7.3	6.5	6.2	6.2	6.2	6.2
IND	1.1	1.3	1.4	1.6	1.9	2.3	2.7	2.9	3.5	4.2
JPN	0.3	0.3	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4
LAM	2.6	3.0	3.4	3.8	4.8	4.7	5.2	5.9	6.4	7.0
MEA	0.6	0.8	0.9	1.0	1.3	1.4	1.6	1.9	2.2	2.4
NEU	0.6	0.6	0.7	0.7	0.8	0.8	0.7	0.8	0.8	0.8
OAS	1.1	1.3	1.5	1.8	2.3	2.8	3.3	3.6	4.0	4.5
REF	2.3	3.0	3.1	3.7	4.1	4.0	2.9	2.1	2.2	2.1
SSA	1.4	1.6	1.7	1.9	2.0	2.2	2.3	2.6	2.9	3.2
USA	3.3	3.8	3.9	4.0	5.0	4.8	4.8	5.1	5.6	5.6

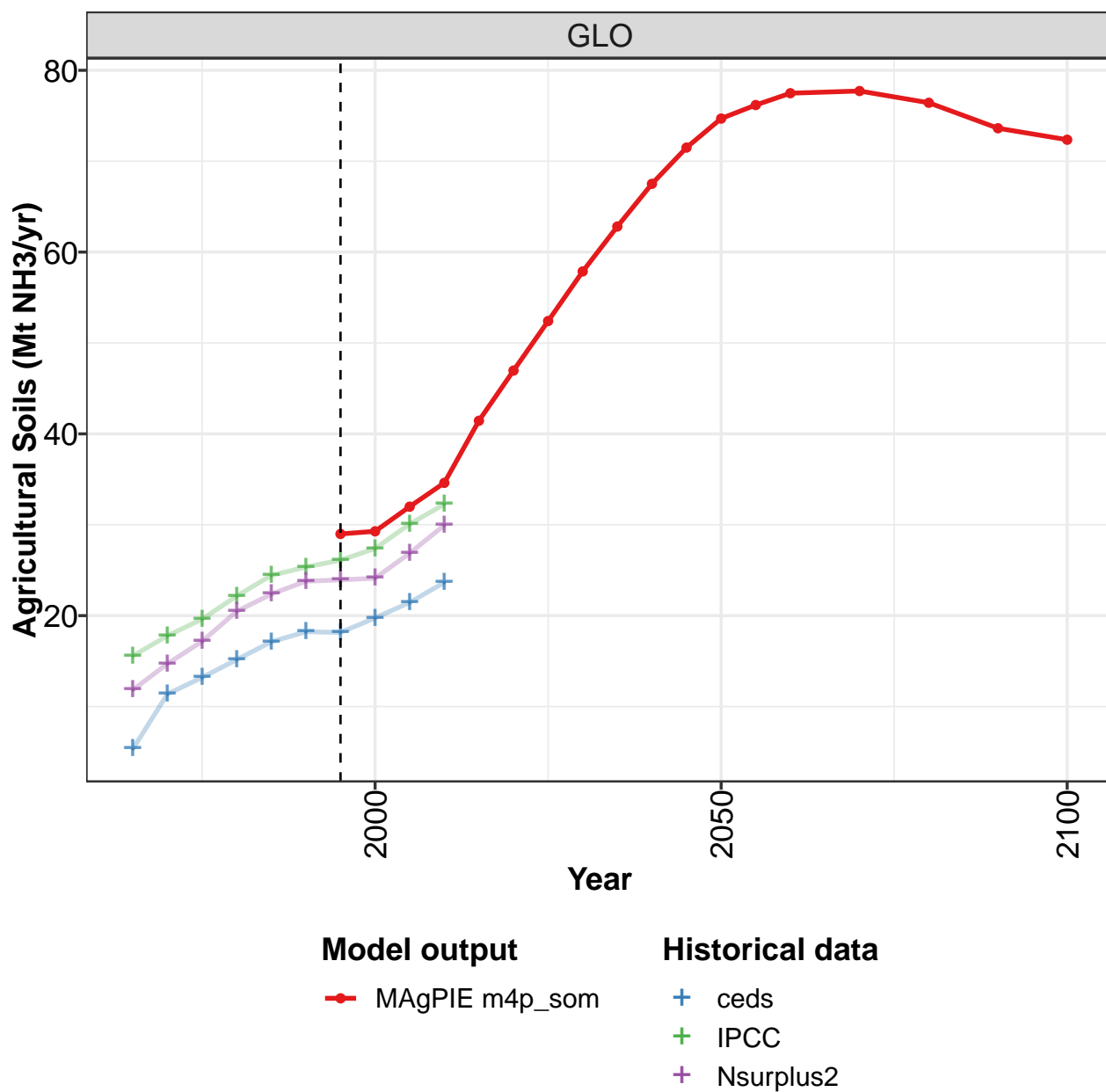
Table 819: IPCC — Emissions—NH3—Land—Agriculture (Mt NH3/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	17.6	21.6	24.6	29.2	34.2	35.7	36.2	36.9	41.2	45.6
CAZ	1.0	1.1	1.3	1.2	1.5	1.6	1.7	1.9	1.6	1.9
CHA	1.3	1.6	2.0	3.6	4.3	5.7	6.5	6.4	8.5	9.8
EUR	3.0	4.2	5.0	5.9	7.1	6.1	5.8	5.6	5.5	5.5
IND	0.9	0.9	1.0	1.3	1.8	2.2	2.6	2.9	3.6	4.4
JPN	0.3	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4
LAM	2.6	3.0	3.4	3.7	4.3	4.1	4.2	4.7	4.9	5.9
MEA	0.6	0.7	0.8	1.0	1.3	1.4	1.6	1.8	1.8	2.1
NEU	0.3	0.3	0.4	0.5	0.6	0.6	0.5	0.6	0.7	0.7
OAS	1.0	1.1	1.4	1.6	2.1	2.6	2.8	3.0	3.6	4.2
REF	1.7	2.2	2.7	3.3	3.8	3.5	2.3	1.9	2.2	2.0
SSA	2.1	2.4	2.5	2.5	2.7	2.7	2.7	2.8	3.1	3.6
USA	2.7	3.7	3.8	4.2	4.5	4.8	4.9	5.0	5.3	5.2

Table 820: Nsurplus2 — Emissions—NH3—Land—Agriculture (Mt NH3/yr)

## 14.1.2 Agriculture—Agricultural Soils

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

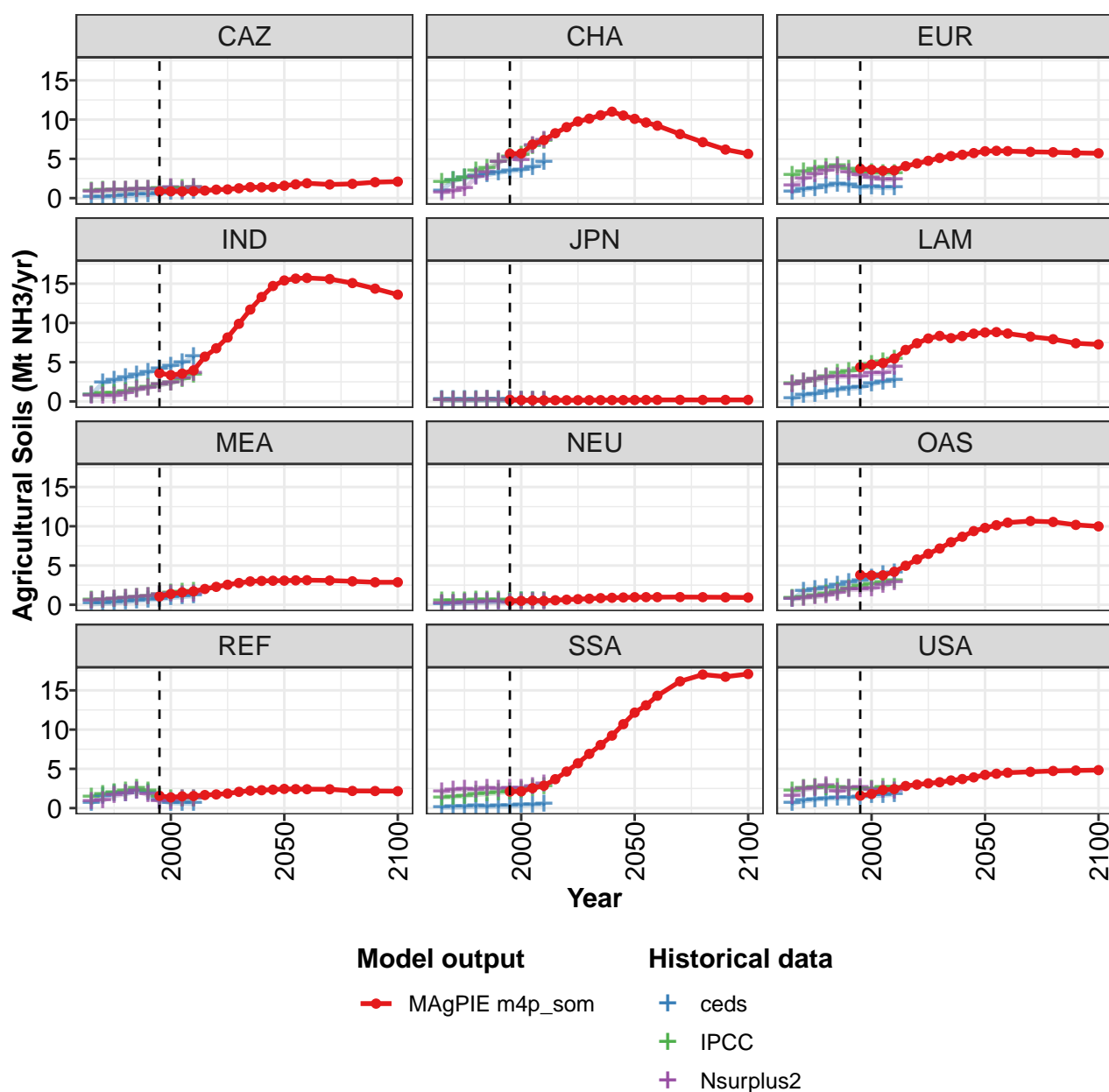


Figure 247: MAgPIE m4p\_som — Emissions—NH3—Land—Agriculture—Agricultural Soils (Mt NH3/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	29.0	29.3	32.0	34.6	41.4	47.0	52.4	57.9	62.8	67.5	71.5
CAZ	0.9	0.9	0.9	0.9	1.0	1.1	1.1	1.3	1.4	1.4	1.4
CHA	5.6	5.7	6.8	7.4	8.3	9.0	9.8	10.1	10.6	11.0	10.5
EUR	3.7	3.6	3.5	3.5	4.1	4.4	4.8	5.1	5.4	5.5	5.7
IND	3.6	3.4	3.5	4.0	5.7	6.8	8.1	9.9	11.7	13.3	14.7
JPN	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
LAM	4.4	4.7	4.9	5.5	6.6	7.4	8.0	8.4	8.1	8.3	8.6
MEA	1.1	1.4	1.6	1.7	2.0	2.3	2.6	2.8	3.0	3.0	3.1
NEU	0.5	0.5	0.5	0.5	0.6	0.7	0.7	0.8	0.8	0.9	0.9
OAS	3.8	3.7	3.8	4.2	5.0	5.8	6.5	7.2	8.0	8.7	9.4
REF	1.6	1.4	1.5	1.5	1.7	1.7	1.9	2.1	2.2	2.3	2.3
SSA	2.1	2.1	2.5	2.9	3.7	4.7	5.7	6.9	8.0	9.2	10.7
USA	1.6	1.8	2.3	2.4	2.8	3.0	3.2	3.3	3.5	3.7	3.9

Table 821: MAgPIE m4p\_som — Emissions—NH3—Land—Agriculture—Agricultural Soils (Mt NH3/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	74.7	76.2	77.5	77.7	76.4	73.6	72.4
CAZ	1.6	1.8	1.9	1.7	1.8	2.0	2.1
CHA	10.1	9.6	9.2	8.2	7.1	6.2	5.6
EUR	6.0	6.0	6.0	5.9	5.8	5.8	5.7
IND	15.4	15.6	15.7	15.6	15.1	14.4	13.6
JPN	0.2	0.2	0.2	0.2	0.2	0.2	0.2
LAM	8.8	8.8	8.6	8.3	7.9	7.4	7.3
MEA	3.1	3.1	3.1	3.1	3.0	2.9	2.9
NEU	1.0	1.0	1.0	1.0	1.0	0.9	0.9
OAS	9.8	10.1	10.5	10.7	10.6	10.2	10.0
REF	2.4	2.4	2.4	2.4	2.2	2.2	2.2
SSA	12.2	13.1	14.3	16.1	17.0	16.7	17.1
USA	4.2	4.4	4.5	4.6	4.7	4.8	4.8

Table 822: MAgPIE m4p\_som — Emissions—NH3—Land—Agriculture—Agricultural Soils (Mt NH3/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	5.3	11.4	13.2	15.2	17.1	18.2	18.1	19.7	21.5	23.6
CAZ	0.1	0.1	0.2	0.3	0.4	0.4	0.6	0.7	0.8	0.9
CHA	0.9	2.3	2.5	2.7	3.0	3.2	3.4	3.6	3.9	4.5
EUR	0.8	1.1	1.3	1.5	1.8	1.7	1.4	1.4	1.3	1.3
IND	0.8	2.4	2.6	3.0	3.3	3.7	4.1	4.5	4.9	5.6
JPN	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
LAM	0.4	0.8	0.9	1.3	1.5	1.6	1.8	2.2	2.5	2.7
MEA	0.1	0.2	0.2	0.3	0.5	0.6	0.7	0.9	1.0	1.1
NEU	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.5
OAS	0.7	1.7	1.9	2.2	2.5	2.8	3.1	3.3	3.8	4.1
REF	0.6	1.5	1.8	1.9	2.2	2.0	1.0	0.7	0.6	0.6
SSA	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.5
USA	0.6	0.9	1.1	1.2	1.3	1.3	1.4	1.6	1.6	1.7

Table 823: ceds — Emissions—NH3—Land—Agriculture—Agricultural Soils (Mt NH3/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	15.6	17.8	19.6	22.2	24.4	25.3	26.1	27.4	30.1	32.3
CAZ	0.9	0.9	1.0	1.0	1.1	1.1	1.2	1.2	1.2	1.3
CHA	1.9	2.2	2.5	3.4	3.8	4.6	5.2	5.4	6.6	7.3
EUR	2.9	3.3	3.6	3.9	4.1	3.6	3.3	3.2	3.1	3.1
IND	0.8	1.0	1.1	1.3	1.5	1.8	2.1	2.3	2.8	3.4
JPN	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
LAM	2.2	2.5	2.8	3.1	3.6	3.8	4.2	4.7	5.1	5.4
MEA	0.5	0.6	0.7	0.8	0.9	1.1	1.3	1.5	1.6	1.7
NEU	0.4	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.4
OAS	0.8	1.0	1.1	1.4	1.7	2.0	2.3	2.6	2.8	3.1
REF	1.4	1.8	2.0	2.2	2.5	2.2	1.4	1.1	1.1	1.2
SSA	1.3	1.4	1.5	1.7	1.8	1.9	2.1	2.3	2.5	2.7
USA	2.2	2.5	2.7	2.6	2.6	2.5	2.4	2.4	2.6	2.6

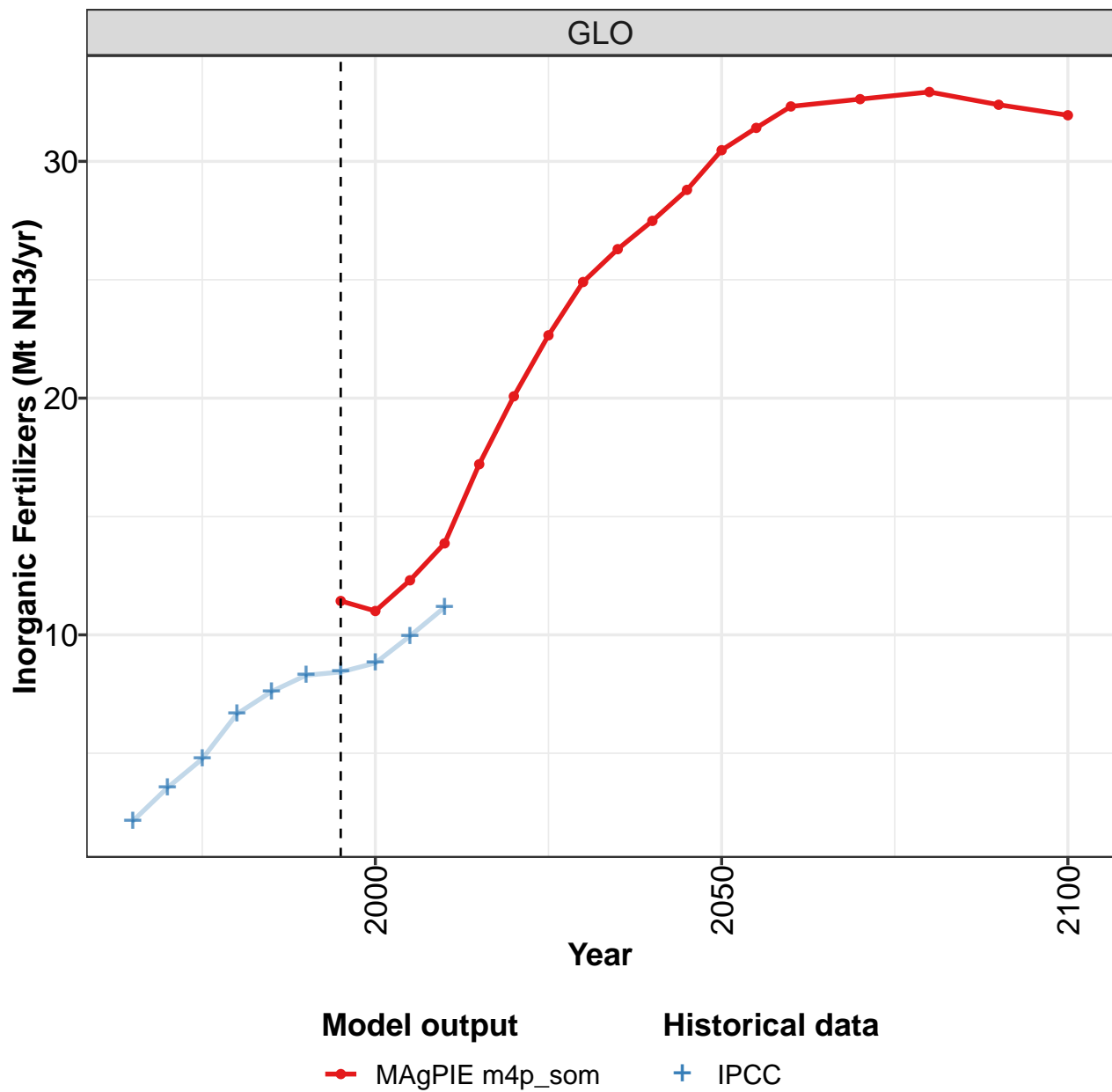
Table 824: IPCC — Emissions—NH3—Land—Agriculture—Agricultural Soils (Mt NH3/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	11.8	14.7	17.2	20.5	22.4	23.8	23.9	24.1	26.9	29.9
CAZ	0.8	0.9	1.0	1.0	1.1	1.1	1.2	1.4	1.0	1.4
CHA	0.7	0.9	1.2	2.7	3.2	4.5	5.1	4.8	6.6	7.3
EUR	1.6	2.4	3.0	3.5	3.9	3.3	2.8	2.6	2.4	2.4
IND	0.7	0.6	0.7	1.0	1.5	1.7	2.1	2.3	2.9	3.5
JPN	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
LAM	2.2	2.5	2.7	3.0	3.1	3.2	3.2	3.6	3.5	4.3
MEA	0.5	0.5	0.7	0.8	1.0	1.0	1.2	1.3	1.3	1.4
NEU	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.3
OAS	0.7	0.8	1.0	1.2	1.5	1.9	1.9	2.0	2.4	2.8
REF	0.8	1.0	1.6	1.8	2.1	1.7	0.8	0.9	1.2	1.1
SSA	2.0	2.3	2.4	2.3	2.5	2.4	2.5	2.5	2.7	3.1
USA	1.5	2.4	2.5	2.9	2.1	2.5	2.6	2.3	2.3	2.1

Table 825: Nsurplus2 — Emissions—NH3—Land—Agriculture—Agricultural Soils (Mt NH3/yr)

## 14.1.3 Agriculture—Agricultural Soils—Inorganic Fertilizers

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

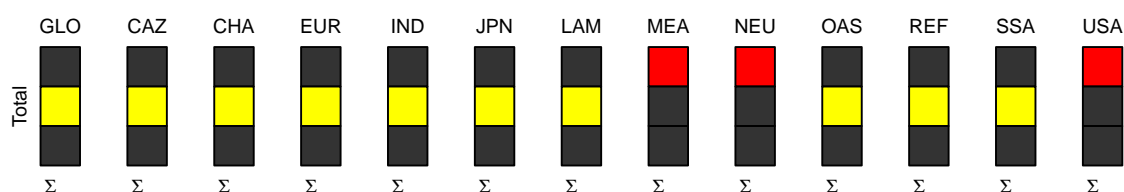
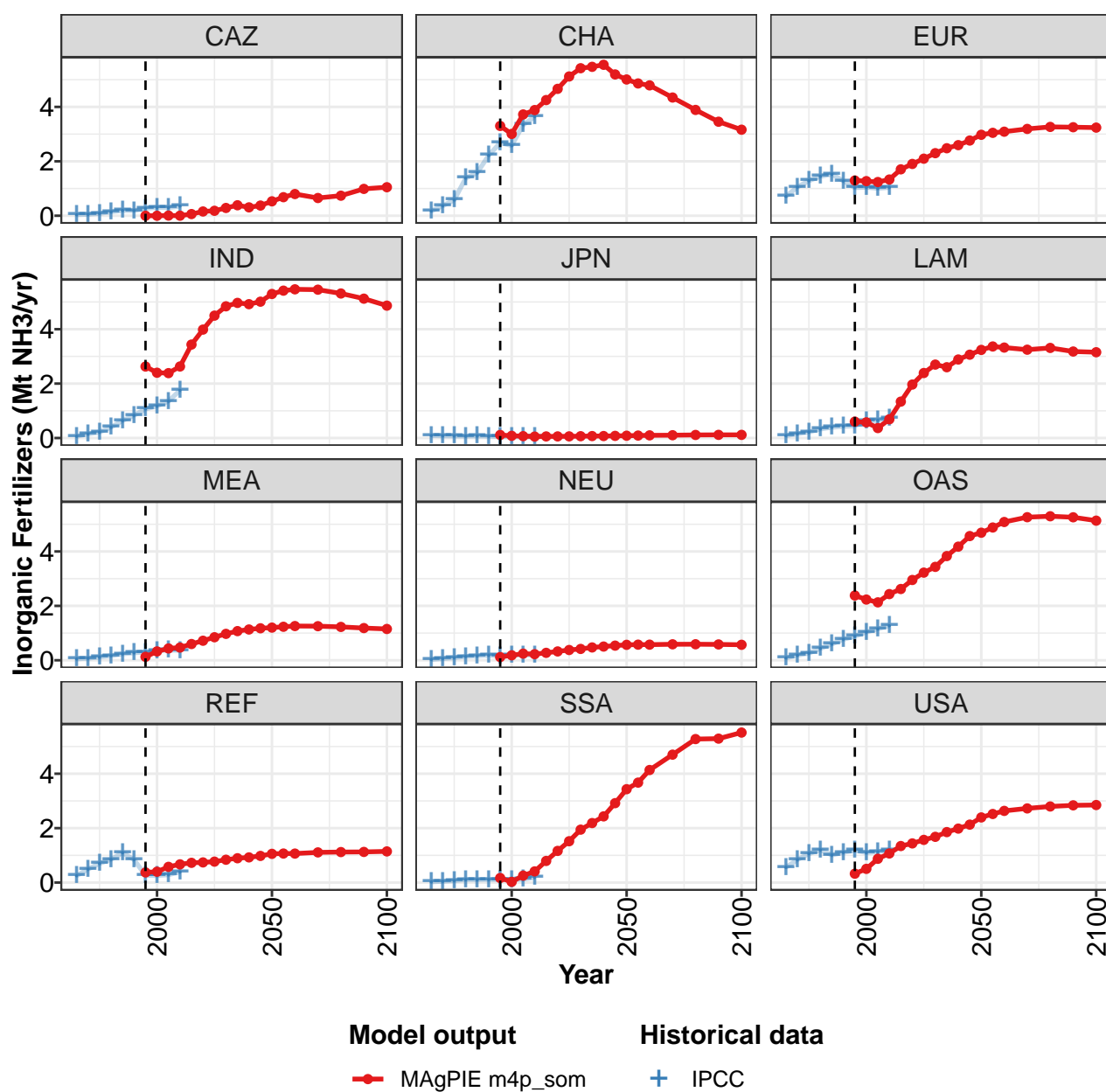


Figure 248: MAgPIE m4p\_som — Emissions—NH3—Land—Agriculture—Agricultural Soils—Inorganic Fertilizers (Mt NH3/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	11.4	11.0	12.3	13.9	17.2	20.1	22.7	24.9	26.3	27.5	28.8
CAZ	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.4	0.3	0.4
CHA	3.3	3.0	3.7	3.9	4.3	4.7	5.1	5.4	5.5	5.5	5.2
EUR	1.3	1.3	1.2	1.3	1.7	1.9	2.1	2.3	2.5	2.6	2.8
IND	2.6	2.4	2.4	2.6	3.4	4.0	4.5	4.8	5.0	4.9	5.0
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.6	0.6	0.4	0.7	1.3	2.0	2.4	2.7	2.6	2.9	3.1
MEA	0.1	0.3	0.4	0.5	0.6	0.7	0.8	1.0	1.1	1.1	1.2
NEU	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.5
OAS	2.4	2.2	2.1	2.4	2.6	3.0	3.2	3.4	3.8	4.2	4.6
REF	0.4	0.4	0.6	0.7	0.7	0.7	0.8	0.8	0.9	0.9	1.0
SSA	0.2	0.0	0.3	0.4	0.8	1.2	1.5	1.9	2.2	2.4	2.9
USA	0.3	0.5	0.9	1.1	1.3	1.4	1.6	1.7	1.9	2.0	2.1

Table 826: MAgPIE m4p\_som — Emissions—NH3—Land—Agriculture—Agricultural Soils—Inorganic Fertilizers (Mt NH3/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	30.5	31.4	32.3	32.6	32.9	32.4	31.9
CAZ	0.5	0.7	0.8	0.7	0.7	1.0	1.0
CHA	5.0	4.9	4.8	4.3	3.9	3.5	3.2
EUR	3.0	3.0	3.1	3.2	3.3	3.3	3.2
IND	5.3	5.4	5.5	5.5	5.3	5.1	4.9
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	3.2	3.4	3.3	3.2	3.3	3.2	3.2
MEA	1.2	1.2	1.3	1.3	1.2	1.2	1.2
NEU	0.6	0.6	0.6	0.6	0.6	0.6	0.6
OAS	4.7	4.9	5.1	5.3	5.3	5.3	5.1
REF	1.1	1.1	1.1	1.1	1.1	1.1	1.1
SSA	3.4	3.7	4.1	4.7	5.3	5.3	5.5
USA	2.4	2.5	2.6	2.7	2.8	2.8	2.9

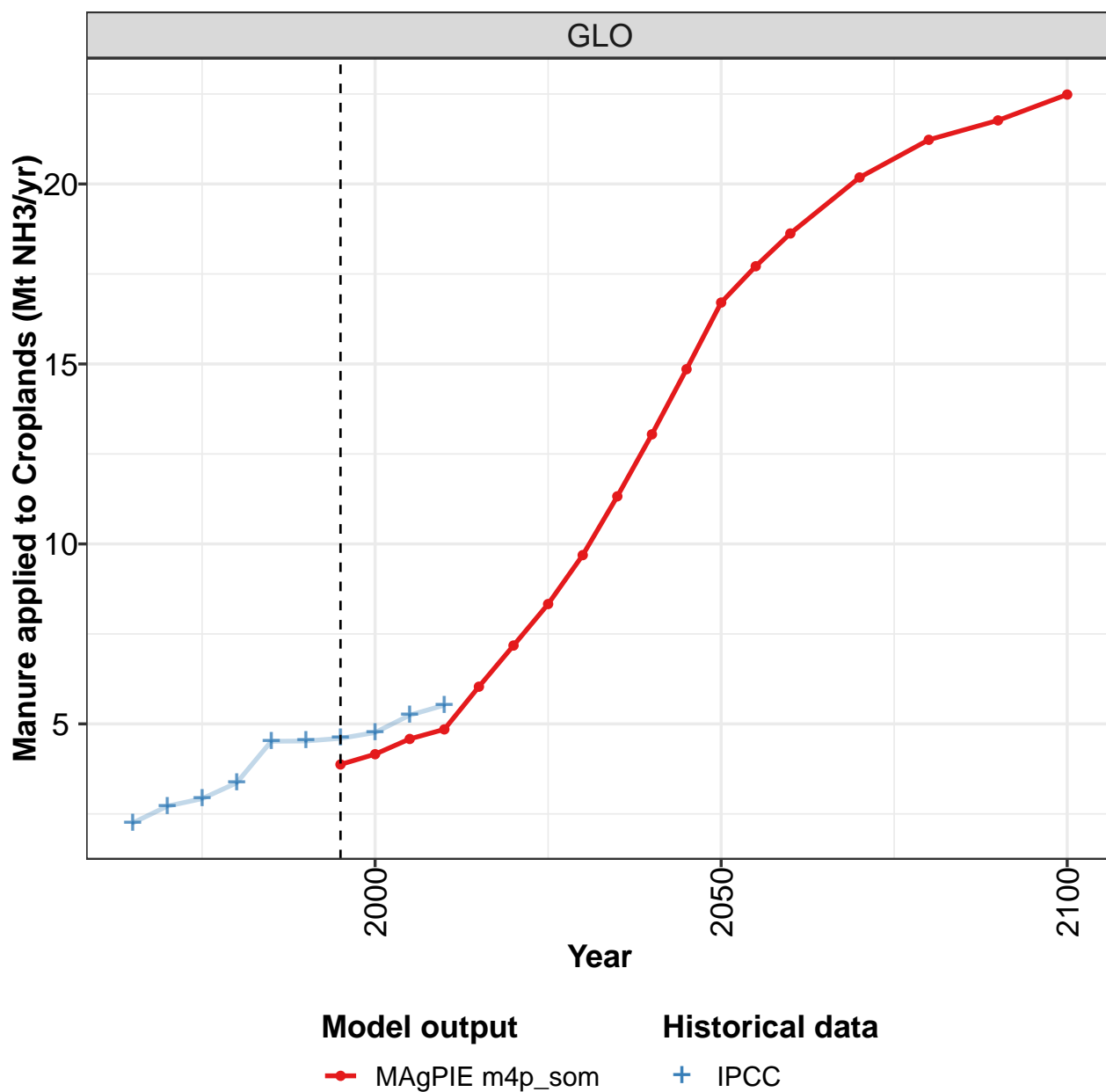
Table 827: MAgPIE m4p\_som — Emissions—NH3—Land—Agriculture—Agricultural Soils—Inorganic Fertilizers (Mt NH3/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.1	3.5	4.8	6.7	7.6	8.3	8.4	8.8	9.9	11.2
CAZ	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.4
CHA	0.2	0.4	0.6	1.4	1.6	2.2	2.7	2.6	3.3	3.6
EUR	0.7	1.1	1.3	1.4	1.5	1.3	1.0	1.0	1.0	1.0
IND	0.1	0.1	0.2	0.4	0.6	0.8	1.1	1.2	1.4	1.8
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
LAM	0.1	0.2	0.2	0.3	0.4	0.4	0.4	0.6	0.6	0.7
MEA	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.4
NEU	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
OAS	0.1	0.2	0.3	0.4	0.6	0.8	0.9	1.0	1.2	1.3
REF	0.2	0.5	0.7	0.9	1.1	0.8	0.3	0.3	0.3	0.4
SSA	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
USA	0.6	0.8	1.1	1.2	1.0	1.1	1.2	1.1	1.1	1.2

Table 828: IPCC — Emissions—NH3—Land—Agriculture—Agricultural Soils—Inorganic Fertilizers (Mt NH3/yr)

## 14.1.4 Agriculture—Agricultural Soils—Manure applied to Croplands

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

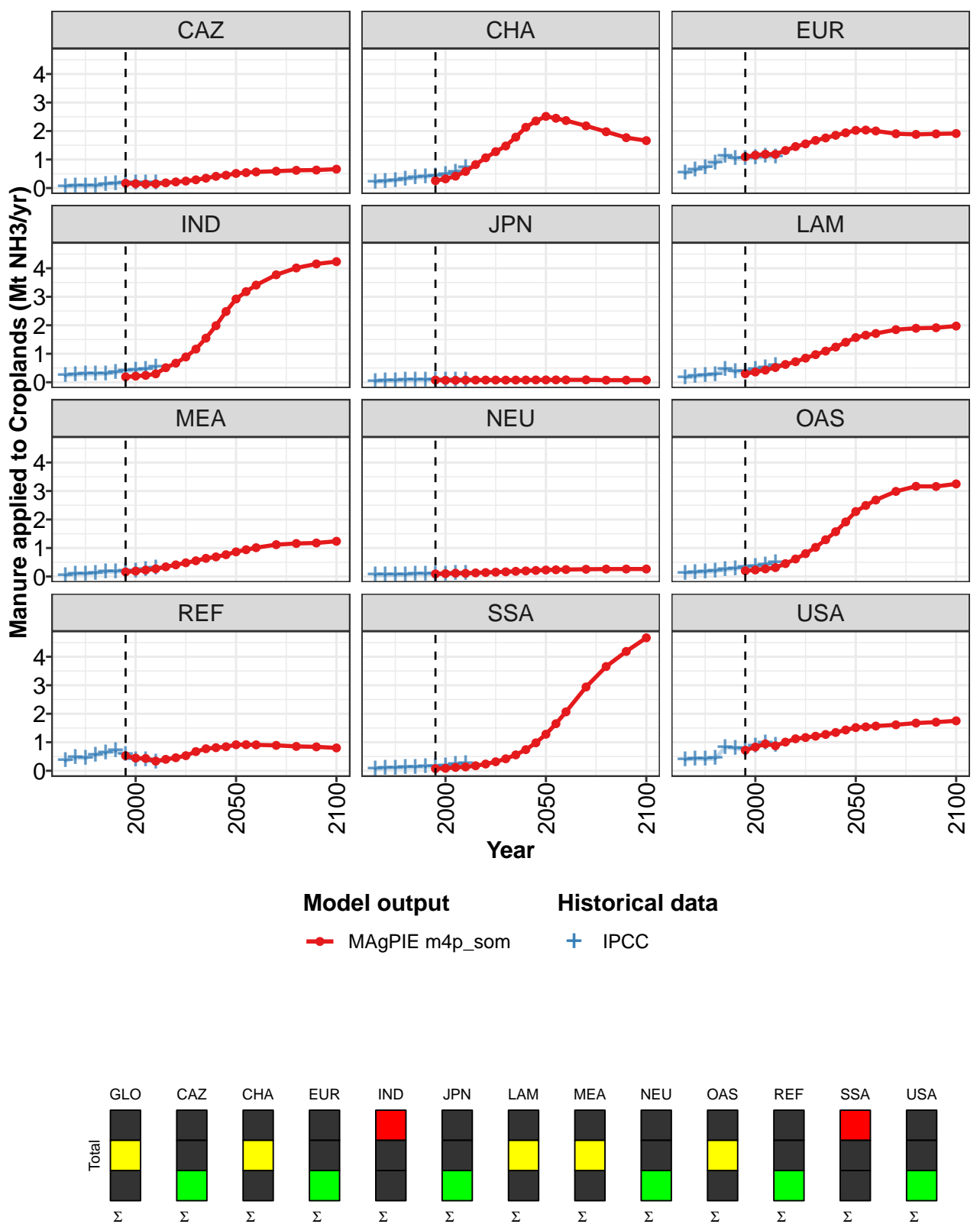


Figure 249: MAgPIE m4p\_som — Emissions—NH3—Land—Agriculture—Agricultural Soils—Manure applied to Croplands (Mt NH3/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	3.9	4.2	4.6	4.8	6.0	7.2	8.3	9.7	11.3	13.0	14.9
CAZ	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4
CHA	0.3	0.3	0.4	0.6	0.8	1.1	1.3	1.5	1.8	2.1	2.4
EUR	1.1	1.2	1.2	1.2	1.3	1.5	1.5	1.7	1.8	1.9	1.9
IND	0.2	0.2	0.2	0.3	0.5	0.7	0.9	1.2	1.5	2.0	2.5
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.3	0.4	0.4	0.5	0.6	0.7	0.8	1.0	1.1	1.2	1.4
MEA	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.6	0.6	0.7	0.8
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
OAS	0.2	0.2	0.3	0.3	0.5	0.6	0.8	1.0	1.3	1.6	1.9
REF	0.5	0.4	0.4	0.3	0.4	0.5	0.5	0.7	0.8	0.8	0.8
SSA	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.6	0.7	1.0
USA	0.7	0.8	0.9	0.9	1.0	1.1	1.2	1.2	1.3	1.3	1.4

Table 829: MAgPIE m4p\_som — Emissions—NH3—Land—Agriculture—Agricultural Soils—Manure applied to Croplands (Mt NH3/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	16.7	17.7	18.6	20.2	21.2	21.8	22.5
CAZ	0.5	0.5	0.6	0.6	0.6	0.6	0.7
CHA	2.5	2.4	2.4	2.2	2.0	1.8	1.7
EUR	2.0	2.0	2.0	1.9	1.9	1.9	1.9
IND	2.9	3.2	3.4	3.8	4.0	4.2	4.2
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	1.6	1.7	1.7	1.8	1.9	1.9	2.0
MEA	0.9	0.9	1.0	1.1	1.2	1.2	1.2
NEU	0.2	0.2	0.2	0.3	0.3	0.3	0.3
OAS	2.3	2.5	2.7	3.0	3.2	3.2	3.2
REF	0.9	0.9	0.9	0.9	0.9	0.8	0.8
SSA	1.3	1.7	2.1	2.9	3.7	4.2	4.7
USA	1.5	1.5	1.6	1.6	1.7	1.7	1.8

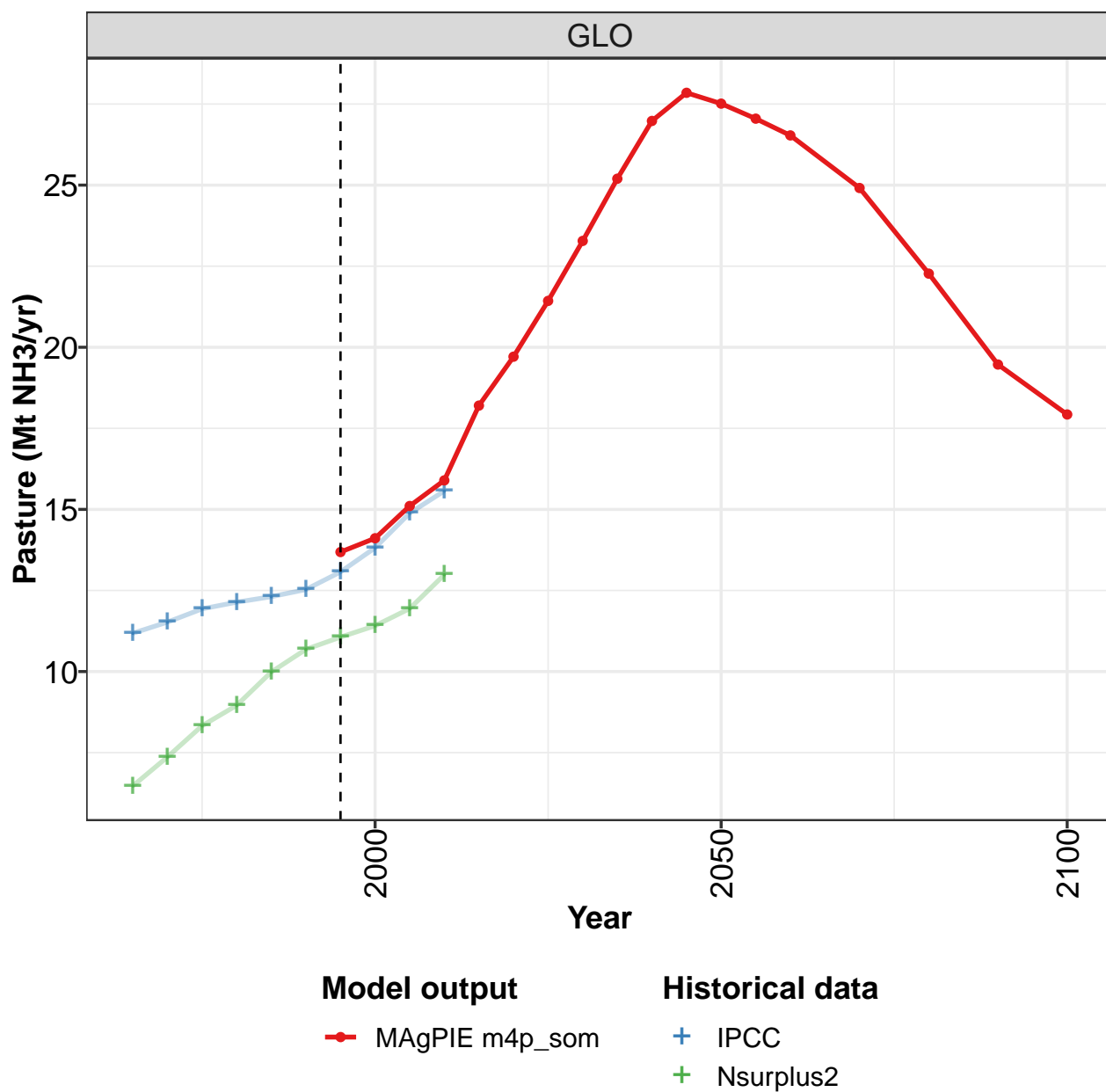
Table 830: MAgPIE m4p\_som — Emissions—NH3—Land—Agriculture—Agricultural Soils—Manure applied to Croplands (Mt NH3/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.25	2.72	2.92	3.36	4.52	4.52	4.60	4.76	5.24	5.52
CAZ	0.06	0.08	0.08	0.08	0.13	0.16	0.17	0.17	0.17	0.17
CHA	0.21	0.23	0.27	0.31	0.36	0.39	0.43	0.48	0.57	0.73
EUR	0.52	0.63	0.72	0.87	1.13	1.03	1.04	1.07	1.11	1.10
IND	0.23	0.27	0.28	0.28	0.30	0.35	0.39	0.42	0.46	0.53
JPN	0.04	0.05	0.06	0.07	0.08	0.08	0.08	0.07	0.07	0.08
LAM	0.16	0.20	0.25	0.27	0.46	0.37	0.39	0.44	0.50	0.58
MEA	0.05	0.09	0.10	0.12	0.17	0.17	0.19	0.21	0.25	0.29
NEU	0.05	0.05	0.06	0.06	0.09	0.09	0.09	0.09	0.11	0.11
OAS	0.12	0.14	0.16	0.19	0.24	0.28	0.33	0.36	0.42	0.49
REF	0.35	0.46	0.44	0.56	0.62	0.70	0.58	0.40	0.40	0.30
SSA	0.07	0.09	0.11	0.11	0.13	0.14	0.15	0.18	0.22	0.26
USA	0.39	0.42	0.41	0.43	0.82	0.78	0.75	0.87	0.96	0.90

Table 831: IPCC — Emissions—NH3—Land—Agriculture—Agricultural Soils—Manure applied to Croplands (Mt NH3/yr)

## 14.1.5 Agriculture—Agricultural Soils—Pasture

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

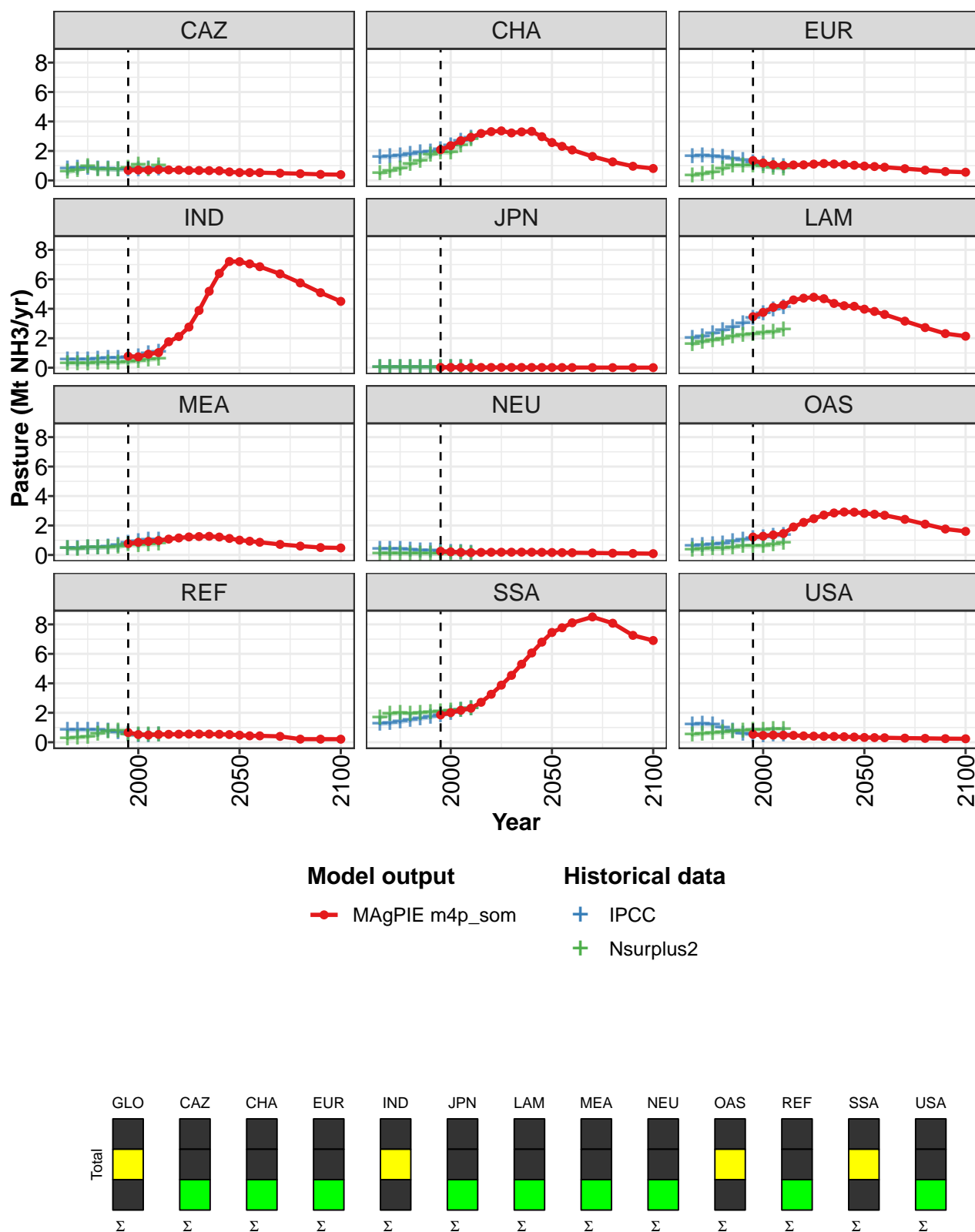


Figure 250: MAGPIE m4p\_som — Emissions—NH3—Land—Agriculture—Agricultural Soils—Pasture (Mt NH3/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	13.7	14.1	15.1	15.9	18.2	19.7	21.4	23.3	25.2	27.0	27.8
CAZ	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6
CHA	2.1	2.4	2.7	2.9	3.2	3.3	3.4	3.2	3.3	3.3	3.0
EUR	1.3	1.2	1.1	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.0
IND	0.8	0.7	0.9	1.0	1.8	2.1	2.8	3.9	5.2	6.4	7.2
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	3.5	3.8	4.1	4.3	4.6	4.7	4.8	4.7	4.4	4.2	4.2
MEA	0.8	0.9	0.9	1.0	1.1	1.2	1.2	1.3	1.3	1.2	1.1
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	1.2	1.3	1.4	1.5	1.9	2.2	2.5	2.7	2.9	2.9	2.9
REF	0.7	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.5	0.5
SSA	1.9	2.0	2.2	2.3	2.7	3.3	3.9	4.5	5.3	6.1	6.8
USA	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4

Table 832: MAgPIE m4p\_som — Emissions—NH3—Land—Agriculture—Agricultural Soils—Pasture (Mt NH3/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	27.5	27.0	26.5	24.9	22.3	19.5	17.9
CAZ	0.5	0.5	0.5	0.5	0.5	0.4	0.4
CHA	2.6	2.3	2.1	1.6	1.3	1.0	0.8
EUR	1.0	0.9	0.9	0.8	0.7	0.6	0.6
IND	7.2	7.0	6.9	6.4	5.8	5.1	4.5
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	4.0	3.8	3.6	3.2	2.7	2.3	2.1
MEA	1.0	0.9	0.9	0.7	0.6	0.5	0.5
NEU	0.2	0.2	0.2	0.1	0.1	0.1	0.1
OAS	2.8	2.8	2.7	2.4	2.1	1.8	1.6
REF	0.5	0.4	0.4	0.4	0.2	0.2	0.2
SSA	7.5	7.8	8.1	8.5	8.1	7.3	6.9
USA	0.3	0.3	0.3	0.3	0.3	0.2	0.2

Table 833: MAgPIE m4p\_som — Emissions—NH3—Land—Agriculture—Agricultural Soils—Pasture (Mt NH3/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	11.2	11.5	11.9	12.1	12.3	12.5	13.1	13.8	14.9	15.6
CAZ	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.8	0.8	0.8
CHA	1.6	1.6	1.7	1.8	1.9	2.0	2.1	2.4	2.7	2.9
EUR	1.6	1.7	1.6	1.6	1.5	1.3	1.2	1.1	1.0	0.9
IND	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.7	1.0	1.1
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	2.0	2.1	2.3	2.5	2.7	3.0	3.3	3.7	3.9	4.1
MEA	0.4	0.5	0.5	0.5	0.5	0.6	0.8	0.9	1.0	1.0
NEU	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.1
OAS	0.6	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.3
REF	0.8	0.8	0.8	0.8	0.7	0.6	0.5	0.5	0.5	0.5
SSA	1.2	1.3	1.4	1.5	1.6	1.7	1.8	2.0	2.2	2.3
USA	1.2	1.2	1.2	1.0	0.8	0.6	0.5	0.5	0.5	0.5

Table 834: IPCC — Emissions—NH3—Land—Agriculture—Agricultural Soils—Pasture (Mt NH3/yr)

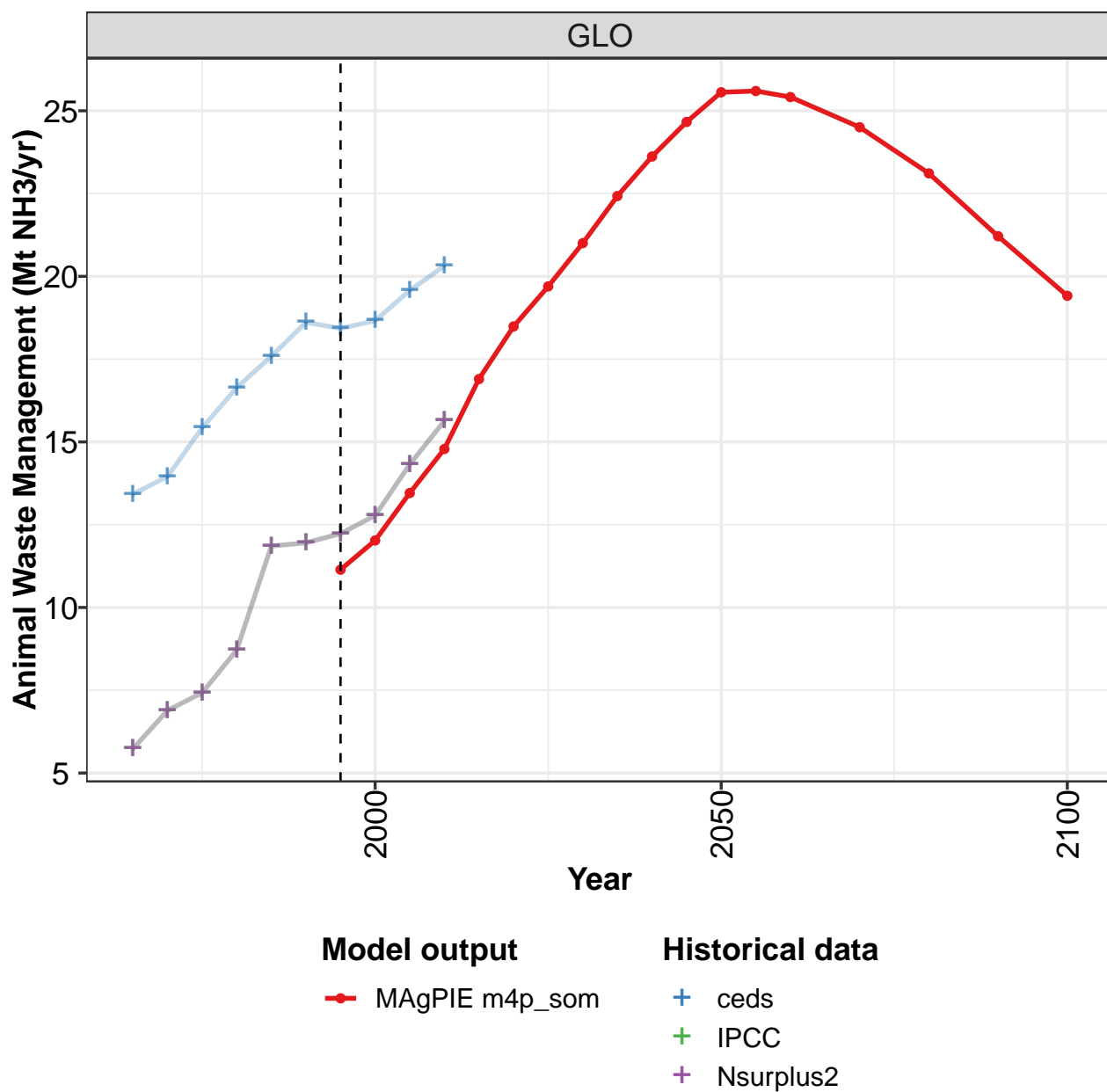


	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	6.5	7.4	8.3	9.0	10.0	10.7	11.1	11.4	11.9	13.0
CAZ	0.6	0.7	0.9	0.7	0.7	0.7	0.8	1.0	0.8	1.0
CHA	0.5	0.6	0.8	1.1	1.3	1.7	1.9	1.9	2.4	2.8
EUR	0.3	0.4	0.5	0.8	1.0	1.0	1.0	0.9	0.8	0.8
IND	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.6
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.6	1.7	1.9	1.9	2.1	2.2	2.2	2.3	2.4	2.6
MEA	0.4	0.4	0.5	0.5	0.5	0.5	0.7	0.6	0.7	0.7
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	0.3	0.4	0.4	0.4	0.5	0.6	0.6	0.6	0.7	0.8
REF	0.2	0.3	0.4	0.6	0.7	0.7	0.5	0.5	0.5	0.5
SSA	1.7	1.9	2.0	1.9	2.0	2.0	2.1	2.1	2.2	2.3
USA	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.9	0.9

Table 835: Nsurplus2 — Emissions—NH3—Land—Agriculture—Agricultural Soils—Pasture (Mt NH3/yr)

## 14.1.6 Agriculture—Animal Waste Management

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

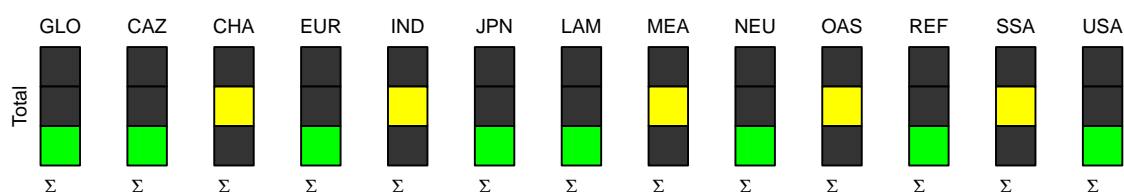
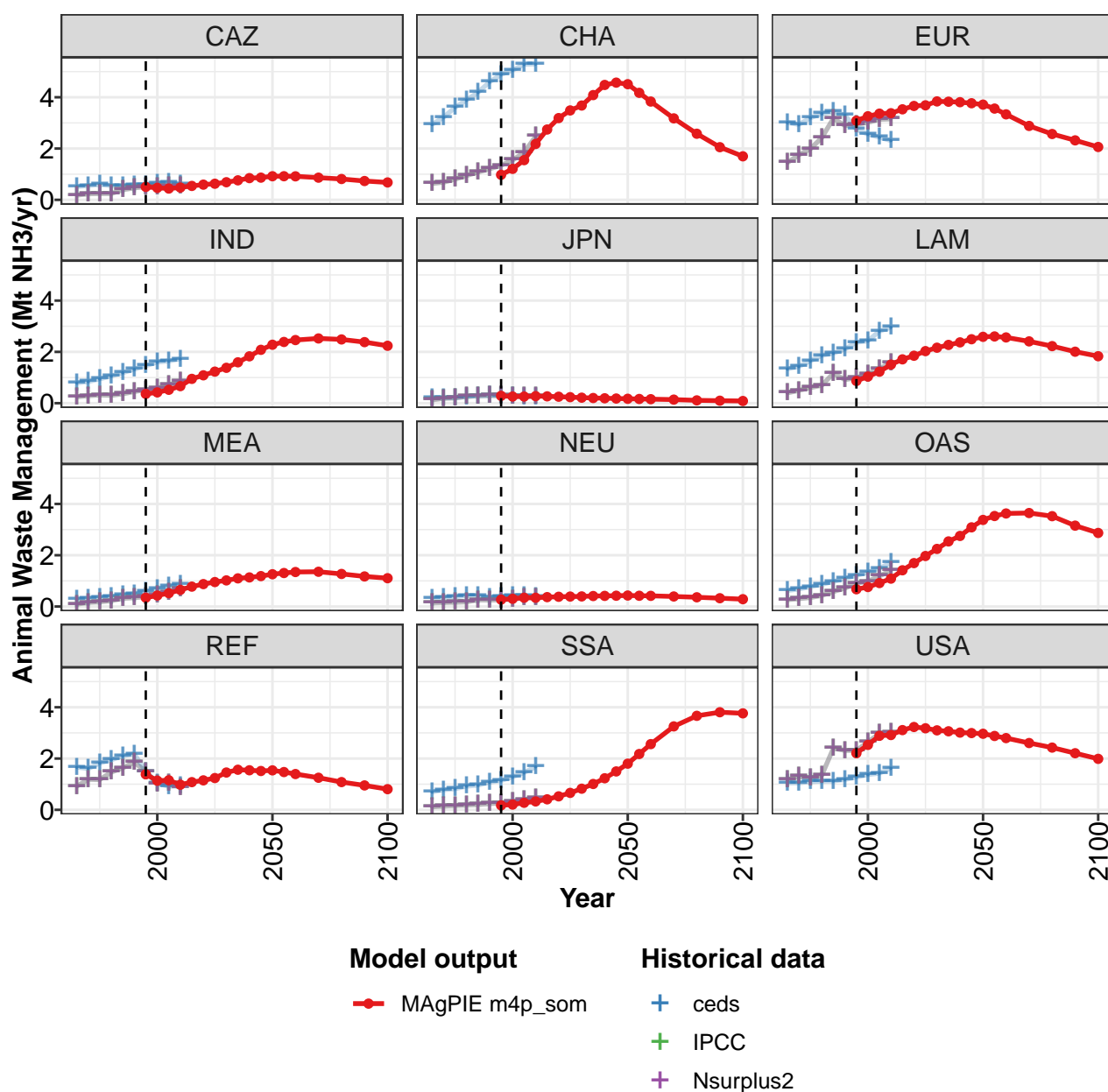


Figure 251: MAgPIE m4p\_som — Emissions—NH3—Land—Agriculture—Animal Waste Management (Mt NH3/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	11.1	12.0	13.5	14.8	16.9	18.5	19.7	21.0	22.4	23.6	24.7
CAZ	0.5	0.5	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.9
CHA	1.0	1.2	1.5	2.2	2.7	3.2	3.5	3.7	4.1	4.5	4.6
EUR	3.1	3.3	3.4	3.4	3.5	3.7	3.7	3.8	3.8	3.8	3.8
IND	0.4	0.4	0.5	0.7	0.9	1.1	1.2	1.4	1.6	1.8	2.1
JPN	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
LAM	0.9	1.0	1.2	1.5	1.7	1.8	2.0	2.2	2.3	2.4	2.5
MEA	0.3	0.4	0.5	0.6	0.8	0.9	1.0	1.0	1.1	1.1	1.2
NEU	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
OAS	0.7	0.8	0.9	1.1	1.4	1.7	2.0	2.2	2.5	2.8	3.1
REF	1.4	1.1	1.2	1.0	1.1	1.1	1.2	1.5	1.6	1.5	1.5
SSA	0.2	0.2	0.3	0.3	0.4	0.5	0.7	0.8	1.0	1.2	1.5
USA	2.2	2.5	2.9	2.9	3.1	3.2	3.2	3.1	3.1	3.0	3.0

Table 836: MAgPIE m4p\_som — Emissions—NH3—Land—Agriculture—Animal Waste Management (Mt NH3/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	25.6	25.6	25.4	24.5	23.1	21.2	19.4
CAZ	0.9	0.9	0.9	0.9	0.8	0.7	0.7
CHA	4.5	4.2	3.8	3.2	2.6	2.1	1.7
EUR	3.7	3.6	3.3	2.9	2.6	2.3	2.1
IND	2.3	2.4	2.5	2.5	2.5	2.4	2.2
JPN	0.2	0.2	0.2	0.1	0.1	0.1	0.1
LAM	2.6	2.6	2.6	2.4	2.2	2.0	1.8
MEA	1.3	1.3	1.3	1.4	1.3	1.2	1.1
NEU	0.4	0.4	0.4	0.4	0.4	0.3	0.3
OAS	3.4	3.5	3.6	3.6	3.5	3.2	2.9
REF	1.5	1.5	1.4	1.3	1.1	1.0	0.8
SSA	1.8	2.2	2.6	3.3	3.7	3.8	3.8
USA	3.0	2.9	2.8	2.6	2.4	2.2	2.0

Table 837: MAgPIE m4p\_som — Emissions—NH3—Land—Agriculture—Animal Waste Management (Mt NH3/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	13.4	14.0	15.4	16.6	17.6	18.6	18.4	18.7	19.6	20.3
CAZ	0.5	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.7	0.6
CHA	2.9	3.2	3.6	3.9	4.2	4.6	4.9	5.1	5.3	5.3
EUR	3.0	2.9	3.2	3.4	3.4	3.3	2.7	2.6	2.4	2.3
IND	0.8	0.8	0.9	1.1	1.2	1.3	1.5	1.6	1.6	1.7
JPN	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
LAM	1.3	1.4	1.6	1.9	1.9	2.1	2.4	2.4	2.8	3.0
MEA	0.3	0.3	0.3	0.4	0.4	0.5	0.6	0.7	0.8	0.8
NEU	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
OAS	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.5	1.7
REF	1.7	1.6	1.8	1.9	2.1	2.2	1.5	1.0	0.9	0.9
SSA	0.7	0.8	0.8	0.9	1.0	1.1	1.1	1.3	1.5	1.7
USA	1.0	1.1	1.1	1.1	1.1	1.2	1.3	1.4	1.4	1.6

Table 838: ceds — Emissions—NH3—Land—Agriculture—Animal Waste Management (Mt NH3/yr)

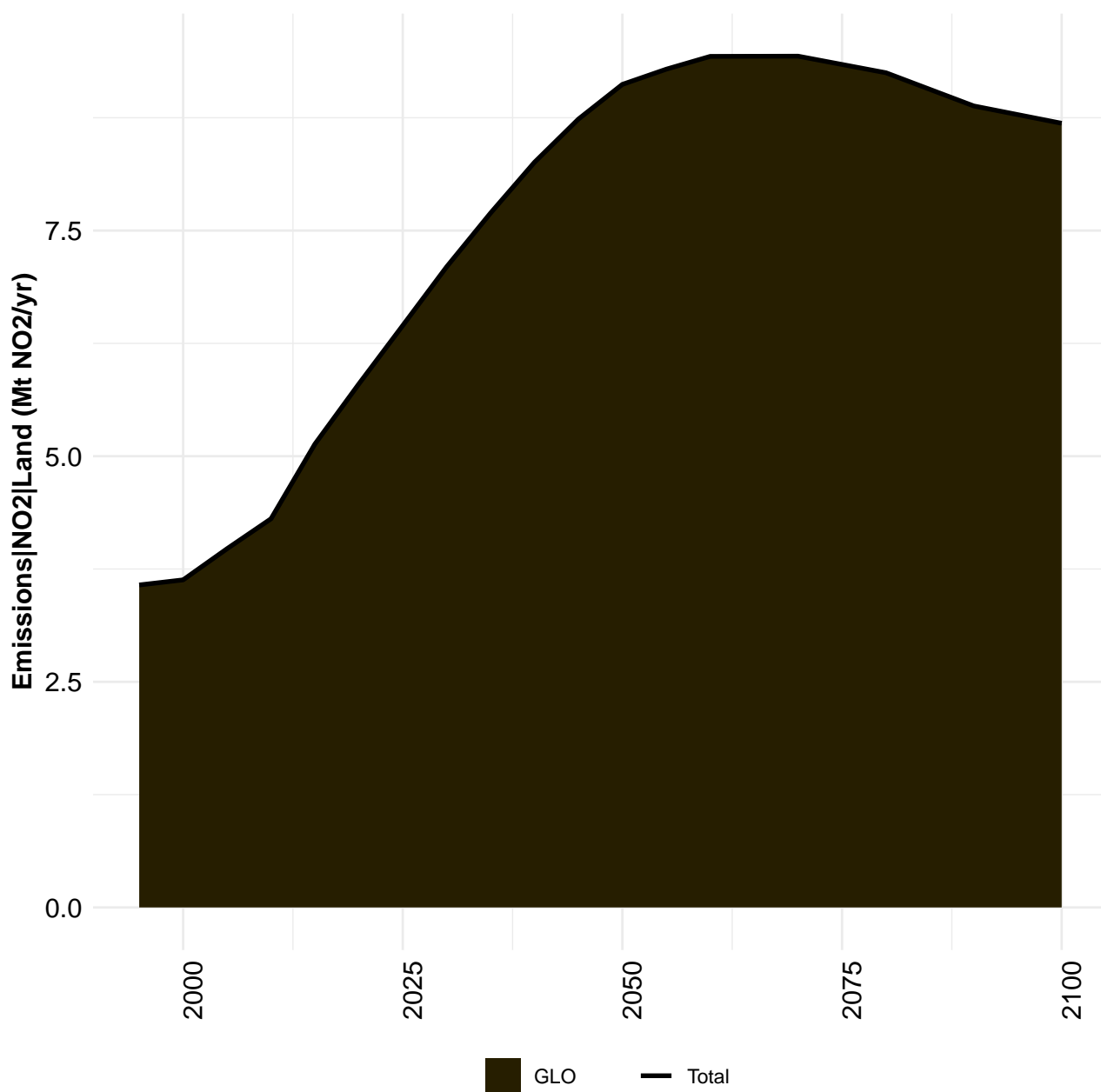
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	5.7	6.9	7.4	8.7	11.9	12.0	12.2	12.8	14.3	15.6
CAZ	0.2	0.2	0.2	0.2	0.4	0.5	0.5	0.5	0.5	0.5
CHA	0.6	0.7	0.8	0.9	1.1	1.2	1.3	1.6	1.8	2.5
EUR	1.4	1.8	2.0	2.4	3.2	2.9	2.9	3.0	3.1	3.2
IND	0.2	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.9
JPN	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
LAM	0.4	0.5	0.6	0.7	1.2	0.9	1.0	1.1	1.3	1.6
MEA	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.5	0.7
NEU	0.1	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3
OAS	0.3	0.3	0.3	0.4	0.6	0.7	0.9	1.0	1.2	1.4
REF	0.9	1.2	1.2	1.5	1.6	1.9	1.5	1.0	1.0	0.9
SSA	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.5
USA	1.2	1.3	1.2	1.4	2.4	2.3	2.3	2.6	3.0	3.0

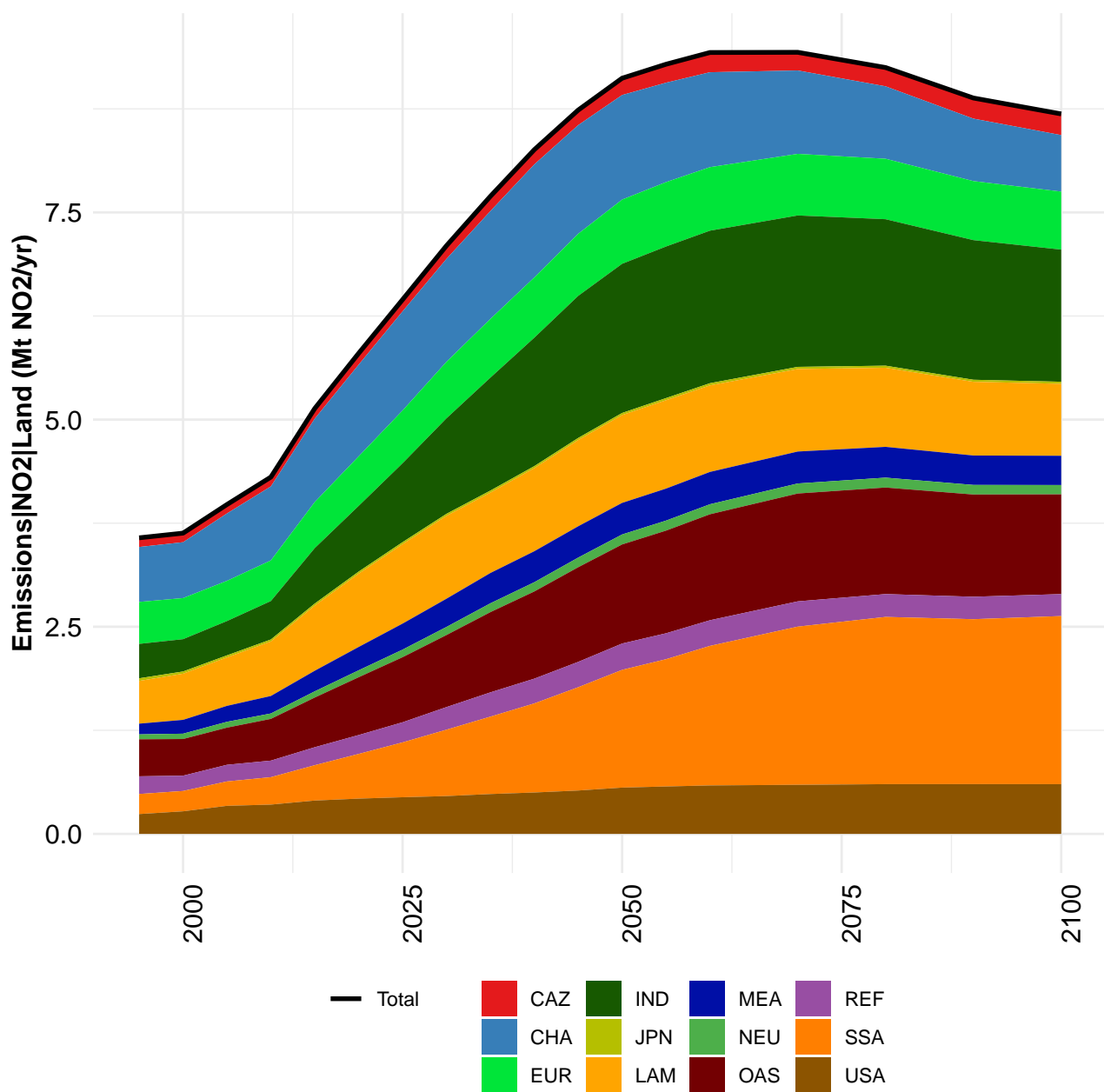
Table 839: IPCC — Emissions—NH3—Land—Agriculture—Animal Waste Management (Mt NH3/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	5.7	6.9	7.4	8.7	11.9	12.0	12.2	12.8	14.3	15.6
CAZ	0.2	0.2	0.2	0.2	0.4	0.5	0.5	0.5	0.5	0.5
CHA	0.6	0.7	0.8	0.9	1.1	1.2	1.3	1.6	1.8	2.5
EUR	1.4	1.8	2.0	2.4	3.2	2.9	2.9	3.0	3.1	3.2
IND	0.2	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.9
JPN	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
LAM	0.4	0.5	0.6	0.7	1.2	0.9	1.0	1.1	1.3	1.6
MEA	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.5	0.7
NEU	0.1	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3
OAS	0.3	0.3	0.3	0.4	0.6	0.7	0.9	1.0	1.2	1.4
REF	0.9	1.2	1.2	1.5	1.6	1.9	1.5	1.0	1.0	0.9
SSA	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.5
USA	1.2	1.3	1.2	1.4	2.4	2.3	2.3	2.6	3.0	3.0

Table 840: Nsurplus2 — Emissions—NH3—Land—Agriculture—Animal Waste Management (Mt NH3/yr)

## 15 NO2

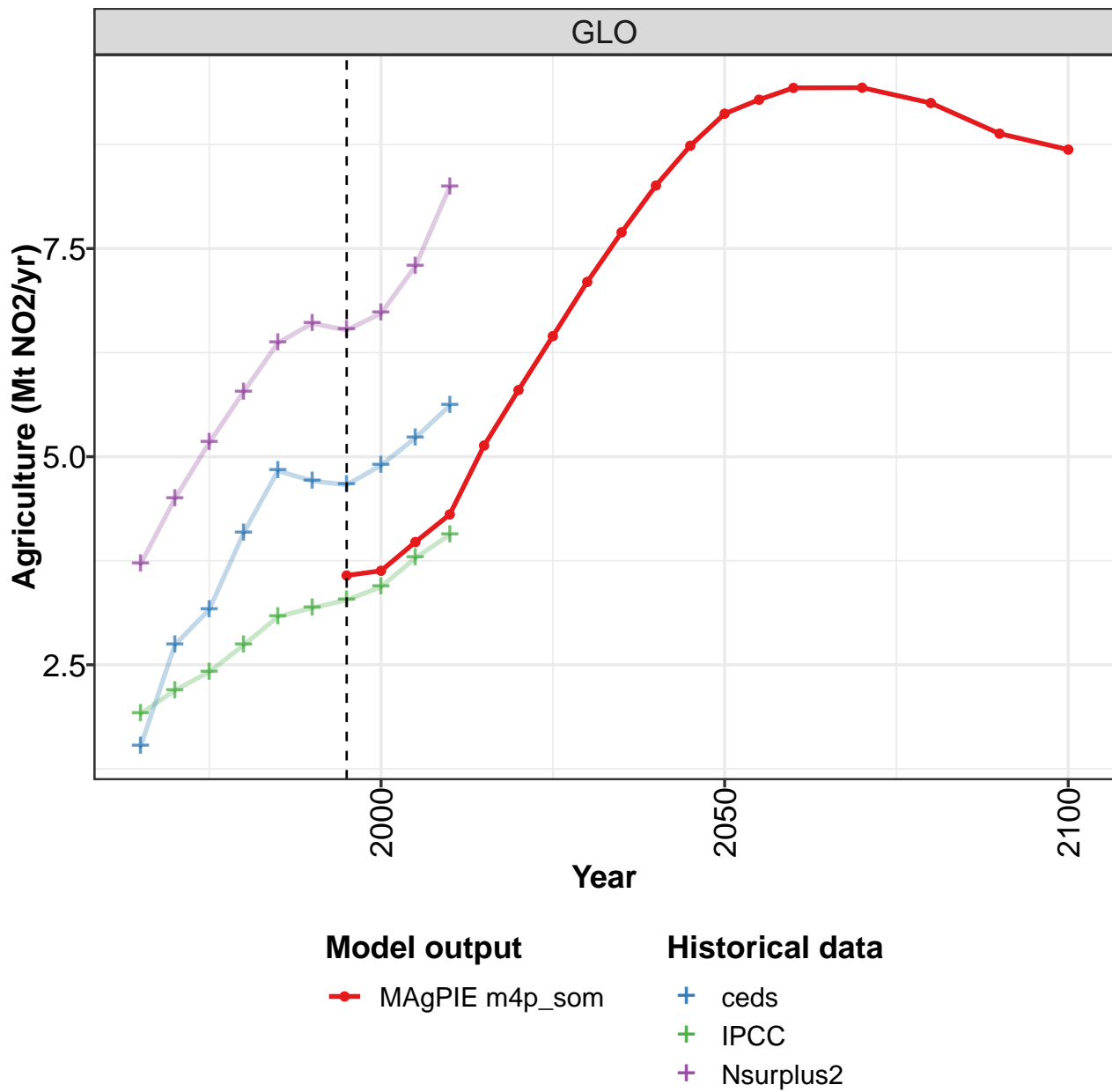




## 15.1 Land

### 15.1.1 Agriculture

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

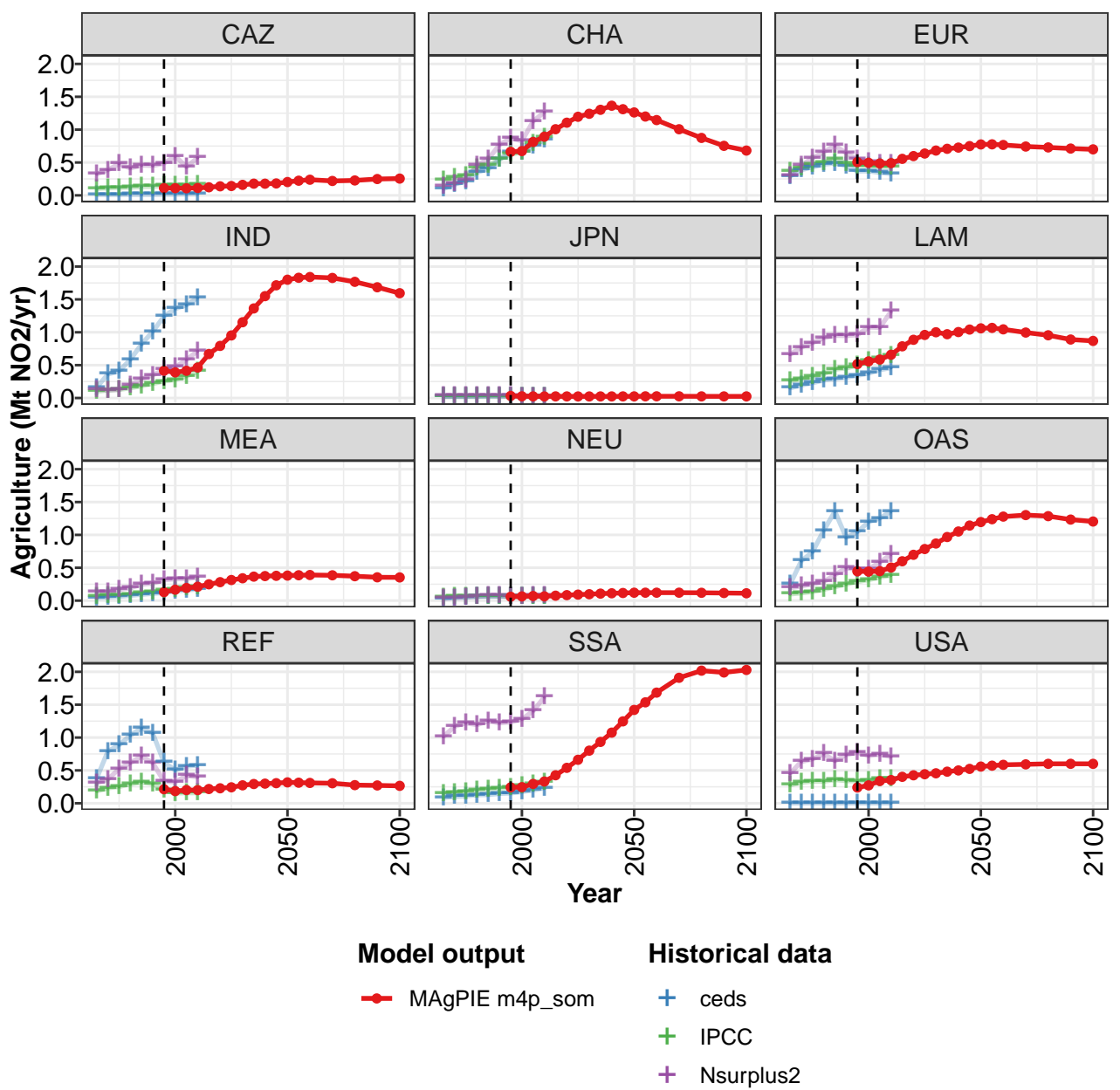


Figure 252: MAGPIE m4p\_som — Emissions—NO2—Land—Agriculture (Mt NO2/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	3.57	3.63	3.97	4.31	5.13	5.80	6.45	7.10	7.69	8.26	8.74
CAZ	0.11	0.11	0.11	0.11	0.12	0.14	0.14	0.16	0.18	0.18	0.18
CHA	0.66	0.67	0.81	0.89	1.01	1.11	1.20	1.24	1.30	1.36	1.31
EUR	0.51	0.50	0.49	0.49	0.56	0.60	0.64	0.68	0.71	0.73	0.75
IND	0.42	0.39	0.41	0.46	0.67	0.79	0.95	1.15	1.36	1.55	1.71
JPN	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
LAM	0.52	0.56	0.58	0.66	0.79	0.89	0.96	1.00	0.97	1.00	1.04
MEA	0.13	0.17	0.19	0.21	0.25	0.28	0.31	0.34	0.37	0.37	0.38
NEU	0.06	0.06	0.07	0.07	0.08	0.08	0.09	0.10	0.11	0.11	0.12
OAS	0.45	0.44	0.45	0.50	0.60	0.70	0.79	0.87	0.97	1.05	1.14
REF	0.21	0.19	0.20	0.20	0.22	0.23	0.24	0.27	0.29	0.30	0.31
SSA	0.24	0.25	0.29	0.33	0.43	0.54	0.66	0.80	0.93	1.07	1.25
USA	0.24	0.27	0.34	0.35	0.40	0.43	0.44	0.46	0.48	0.50	0.52

Table 841: MAgPIE m4p\_som — Emissions—NO2—Land—Agriculture (Mt NO2/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	9.12	9.29	9.43	9.43	9.25	8.88	8.69
CAZ	0.20	0.22	0.24	0.22	0.23	0.25	0.26
CHA	1.26	1.20	1.15	1.01	0.87	0.75	0.68
EUR	0.77	0.78	0.77	0.74	0.73	0.71	0.70
IND	1.80	1.83	1.84	1.83	1.77	1.68	1.59
JPN	0.03	0.03	0.03	0.03	0.02	0.02	0.02
LAM	1.06	1.07	1.04	1.00	0.95	0.89	0.87
MEA	0.38	0.39	0.39	0.39	0.37	0.36	0.35
NEU	0.12	0.12	0.12	0.12	0.12	0.12	0.11
OAS	1.20	1.24	1.28	1.30	1.29	1.23	1.20
REF	0.32	0.31	0.31	0.30	0.28	0.27	0.27
SSA	1.42	1.54	1.68	1.91	2.02	1.99	2.03
USA	0.56	0.57	0.58	0.59	0.60	0.60	0.60

Table 842: MAgPIE m4p\_som — Emissions—NO2—Land—Agriculture (Mt NO2/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.52	2.74	3.16	4.08	4.83	4.71	4.66	4.90	5.23	5.61
CAZ	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
CHA	0.10	0.17	0.21	0.35	0.40	0.55	0.66	0.66	0.75	0.84
EUR	0.29	0.39	0.43	0.47	0.49	0.45	0.37	0.37	0.35	0.33
IND	0.16	0.36	0.41	0.58	0.82	1.01	1.24	1.36	1.41	1.53
JPN	0.02	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.02
LAM	0.15	0.20	0.23	0.27	0.29	0.31	0.34	0.38	0.43	0.46
MEA	0.04	0.05	0.06	0.08	0.09	0.11	0.12	0.14	0.16	0.18
NEU	0.03	0.04	0.05	0.06	0.06	0.07	0.06	0.06	0.06	0.07
OAS	0.25	0.60	0.74	1.07	1.36	0.96	1.04	1.20	1.25	1.36
REF	0.38	0.79	0.89	1.03	1.14	1.06	0.62	0.50	0.56	0.58
SSA	0.09	0.10	0.11	0.13	0.13	0.15	0.15	0.17	0.20	0.23
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 843: ceds — Emissions—NO2—Land—Agriculture (Mt NO2/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.91	2.19	2.41	2.74	3.08	3.18	3.28	3.44	3.78	4.06
CAZ	0.10	0.11	0.12	0.12	0.13	0.13	0.15	0.15	0.15	0.16
CHA	0.24	0.27	0.31	0.41	0.46	0.55	0.62	0.66	0.79	0.89
EUR	0.36	0.42	0.46	0.50	0.55	0.49	0.45	0.44	0.43	0.43
IND	0.10	0.12	0.13	0.15	0.18	0.22	0.25	0.28	0.33	0.40
JPN	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.02	0.02	0.02
LAM	0.26	0.29	0.33	0.37	0.44	0.45	0.50	0.56	0.61	0.65
MEA	0.06	0.07	0.08	0.09	0.12	0.13	0.15	0.18	0.20	0.21
NEU	0.05	0.06	0.06	0.07	0.07	0.07	0.06	0.06	0.06	0.06
OAS	0.10	0.12	0.13	0.17	0.21	0.25	0.29	0.32	0.35	0.39
REF	0.18	0.23	0.25	0.29	0.32	0.30	0.20	0.15	0.16	0.16
SSA	0.15	0.16	0.18	0.20	0.21	0.23	0.24	0.26	0.29	0.32
USA	0.27	0.32	0.33	0.33	0.36	0.34	0.34	0.35	0.37	0.37

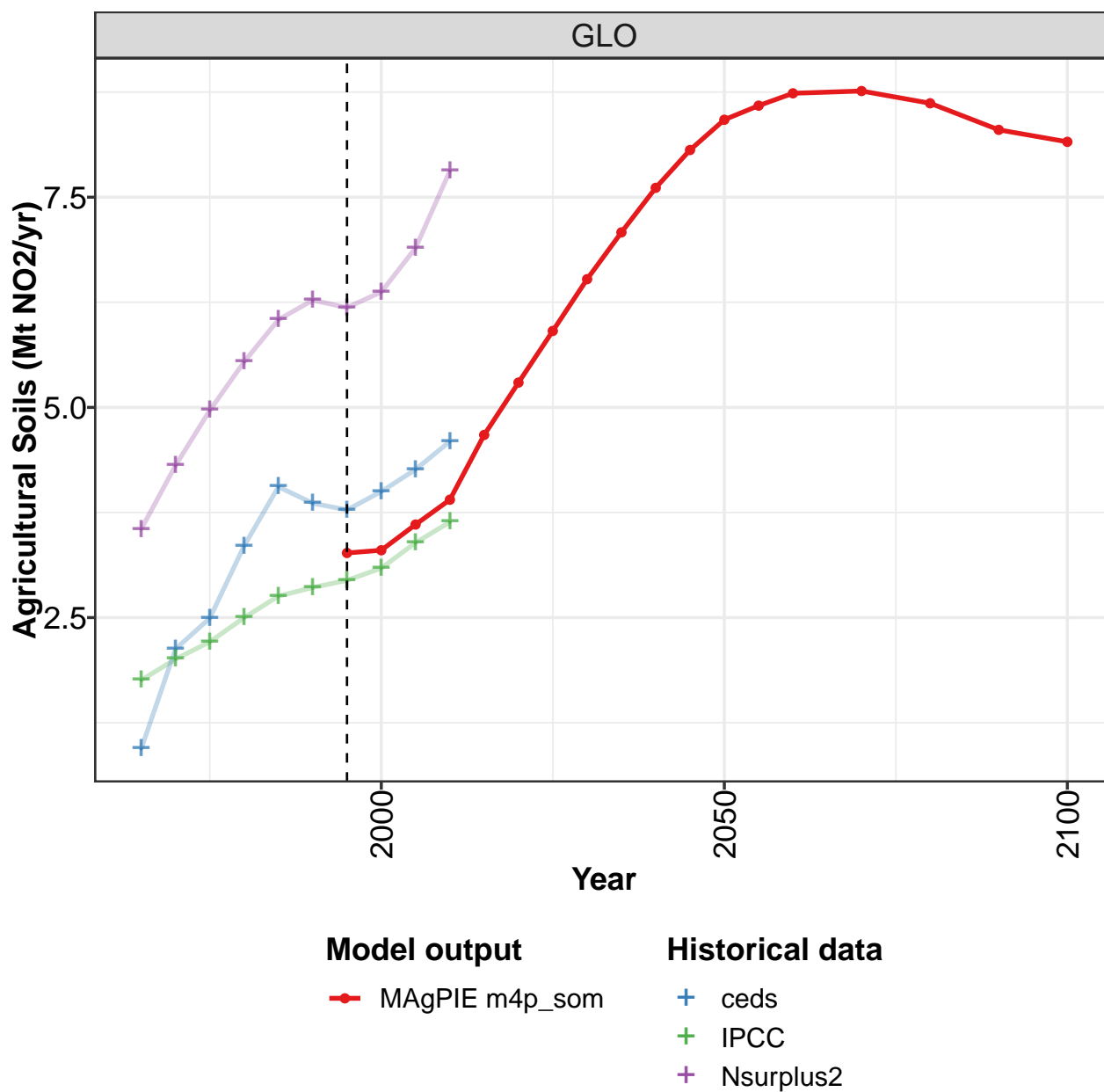
Table 844: IPCC — Emissions—NO2—Land—Agriculture (Mt NO2/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3.71	4.50	5.17	5.78	6.37	6.60	6.52	6.72	7.29	8.24
CAZ	0.32	0.39	0.48	0.41	0.46	0.45	0.49	0.60	0.43	0.57
CHA	0.14	0.17	0.23	0.46	0.55	0.77	0.87	0.83	1.13	1.27
EUR	0.30	0.45	0.57	0.66	0.76	0.64	0.55	0.52	0.48	0.48
IND	0.13	0.12	0.13	0.20	0.29	0.35	0.43	0.47	0.58	0.72
JPN	0.03	0.03	0.03	0.03	0.04	0.04	0.03	0.03	0.03	0.03
LAM	0.66	0.77	0.84	0.91	0.95	0.95	0.96	1.08	1.07	1.32
MEA	0.13	0.13	0.17	0.19	0.25	0.26	0.31	0.33	0.33	0.35
NEU	0.04	0.04	0.05	0.06	0.07	0.07	0.06	0.07	0.08	0.08
OAS	0.19	0.22	0.25	0.29	0.39	0.50	0.47	0.48	0.58	0.71
REF	0.31	0.36	0.52	0.61	0.72	0.61	0.33	0.32	0.42	0.40
SSA	1.01	1.17	1.22	1.19	1.25	1.22	1.23	1.28	1.40	1.62
USA	0.45	0.63	0.67	0.75	0.64	0.74	0.77	0.72	0.74	0.71

Table 845: Nsurplus2 — Emissions—NO2—Land—Agriculture (Mt NO2/yr)

## 15.1.2 Agriculture—Agricultural Soils

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

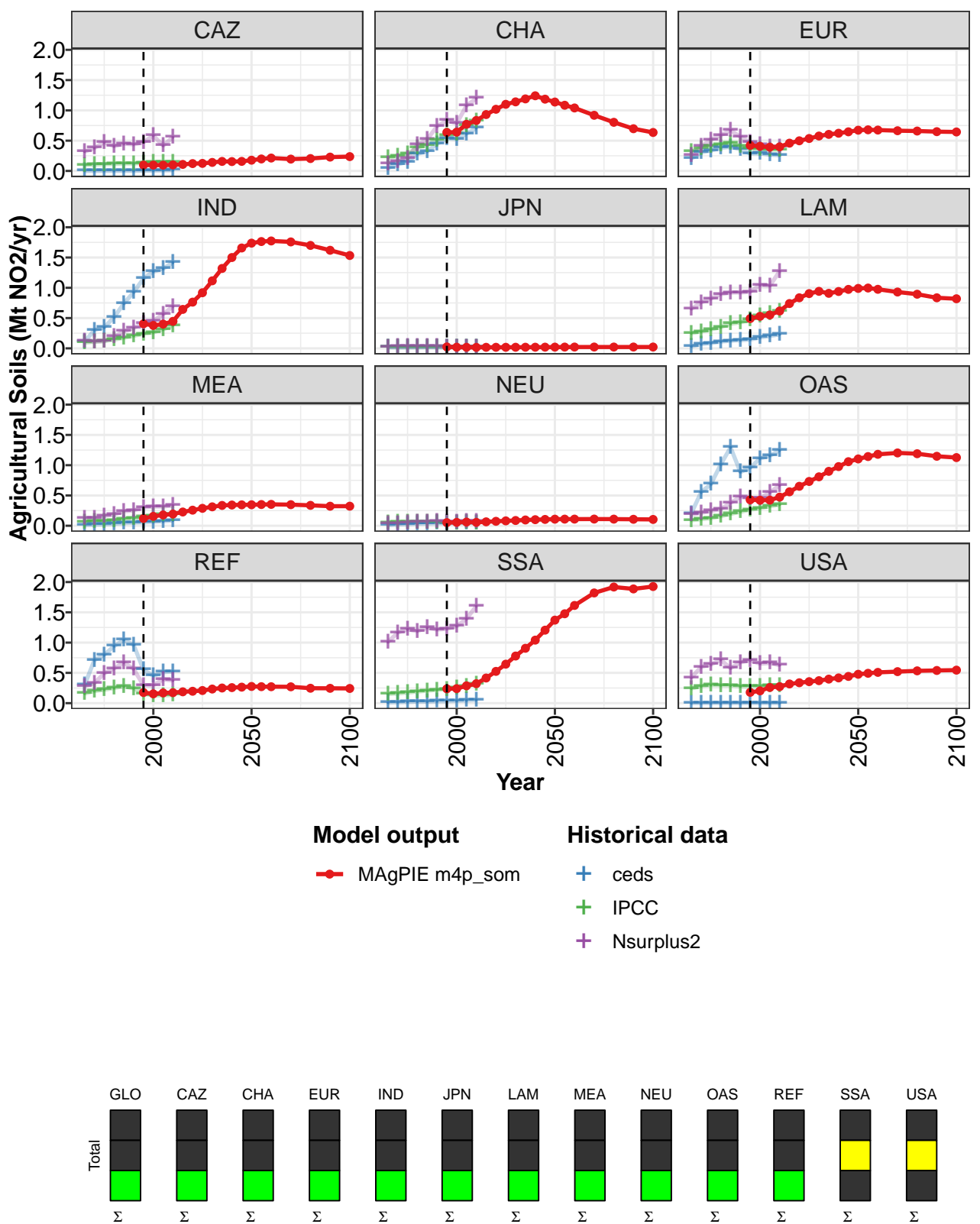


Figure 253: MAGPIE m4p\_som — Emissions—NO2—Land—Agriculture—Agricultural Soils (Mt NO2/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	3.27	3.30	3.61	3.90	4.67	5.30	5.91	6.53	7.08	7.61	8.06
CAZ	0.10	0.10	0.10	0.10	0.11	0.12	0.12	0.14	0.16	0.15	0.16
CHA	0.64	0.64	0.77	0.83	0.93	1.02	1.10	1.14	1.19	1.24	1.19
EUR	0.42	0.41	0.39	0.40	0.46	0.50	0.54	0.58	0.60	0.62	0.65
IND	0.41	0.38	0.40	0.45	0.64	0.76	0.92	1.12	1.32	1.50	1.66
JPN	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
LAM	0.49	0.53	0.55	0.62	0.74	0.84	0.90	0.94	0.91	0.94	0.97
MEA	0.12	0.16	0.18	0.19	0.23	0.26	0.29	0.31	0.34	0.34	0.35
NEU	0.05	0.06	0.06	0.06	0.07	0.07	0.08	0.09	0.10	0.10	0.10
OAS	0.43	0.42	0.42	0.47	0.56	0.65	0.73	0.81	0.90	0.98	1.06
REF	0.18	0.15	0.17	0.17	0.19	0.20	0.21	0.23	0.25	0.26	0.26
SSA	0.24	0.24	0.29	0.32	0.42	0.52	0.64	0.78	0.91	1.04	1.21
USA	0.18	0.20	0.26	0.27	0.32	0.34	0.36	0.37	0.40	0.42	0.44

Table 846: MAgPIE m4p\_som — Emissions—NO<sub>2</sub>—Land—Agriculture—Agricultural Soils (Mt NO<sub>2</sub>/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	8.42	8.59	8.74	8.76	8.62	8.30	8.16
CAZ	0.18	0.20	0.21	0.20	0.20	0.23	0.24
CHA	1.14	1.09	1.04	0.92	0.80	0.70	0.64
EUR	0.67	0.68	0.68	0.66	0.66	0.65	0.64
IND	1.74	1.76	1.77	1.76	1.70	1.62	1.53
JPN	0.02	0.02	0.02	0.02	0.02	0.02	0.02
LAM	0.99	1.00	0.98	0.93	0.89	0.83	0.82
MEA	0.35	0.35	0.35	0.35	0.34	0.32	0.32
NEU	0.11	0.11	0.11	0.11	0.11	0.11	0.10
OAS	1.10	1.14	1.18	1.20	1.19	1.15	1.13
REF	0.28	0.27	0.27	0.27	0.25	0.25	0.24
SSA	1.37	1.48	1.61	1.82	1.92	1.89	1.93
USA	0.48	0.49	0.51	0.52	0.53	0.54	0.55

Table 847: MAgPIE m4p\_som — Emissions—NO<sub>2</sub>—Land—Agriculture—Agricultural Soils (Mt NO<sub>2</sub>/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.94	2.13	2.49	3.35	4.06	3.86	3.78	4.00	4.26	4.60
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
CHA	0.05	0.11	0.15	0.28	0.32	0.45	0.54	0.53	0.62	0.71
EUR	0.20	0.30	0.34	0.38	0.40	0.36	0.28	0.29	0.27	0.26
IND	0.11	0.30	0.35	0.51	0.74	0.93	1.15	1.27	1.32	1.42
JPN	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01
LAM	0.03	0.07	0.09	0.11	0.12	0.13	0.15	0.18	0.20	0.23
MEA	0.01	0.02	0.02	0.03	0.04	0.05	0.06	0.07	0.07	0.09
NEU	0.01	0.02	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.05
OAS	0.20	0.55	0.69	1.01	1.29	0.89	0.96	1.11	1.16	1.25
REF	0.30	0.71	0.80	0.94	1.04	0.96	0.55	0.45	0.51	0.52
SSA	0.01	0.02	0.02	0.03	0.03	0.03	0.03	0.04	0.05	0.05
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 848: ceds — Emissions—NO<sub>2</sub>—Land—Agriculture—Agricultural Soils (Mt NO<sub>2</sub>/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.76	2.01	2.21	2.50	2.75	2.86	2.94	3.09	3.39	3.64
CAZ	0.10	0.11	0.11	0.12	0.12	0.12	0.13	0.14	0.14	0.15
CHA	0.22	0.25	0.28	0.39	0.43	0.52	0.59	0.61	0.74	0.82
EUR	0.32	0.38	0.41	0.44	0.47	0.41	0.37	0.36	0.35	0.35
IND	0.09	0.11	0.12	0.14	0.17	0.21	0.24	0.26	0.31	0.38
JPN	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01
LAM	0.25	0.28	0.31	0.35	0.40	0.43	0.47	0.53	0.57	0.61
MEA	0.06	0.07	0.08	0.09	0.11	0.12	0.14	0.17	0.18	0.19
NEU	0.05	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05
OAS	0.09	0.11	0.12	0.16	0.19	0.23	0.26	0.29	0.32	0.35
REF	0.16	0.20	0.22	0.25	0.28	0.25	0.16	0.13	0.13	0.13
SSA	0.15	0.16	0.17	0.19	0.21	0.22	0.23	0.25	0.28	0.31
USA	0.24	0.28	0.30	0.30	0.29	0.28	0.28	0.28	0.29	0.29

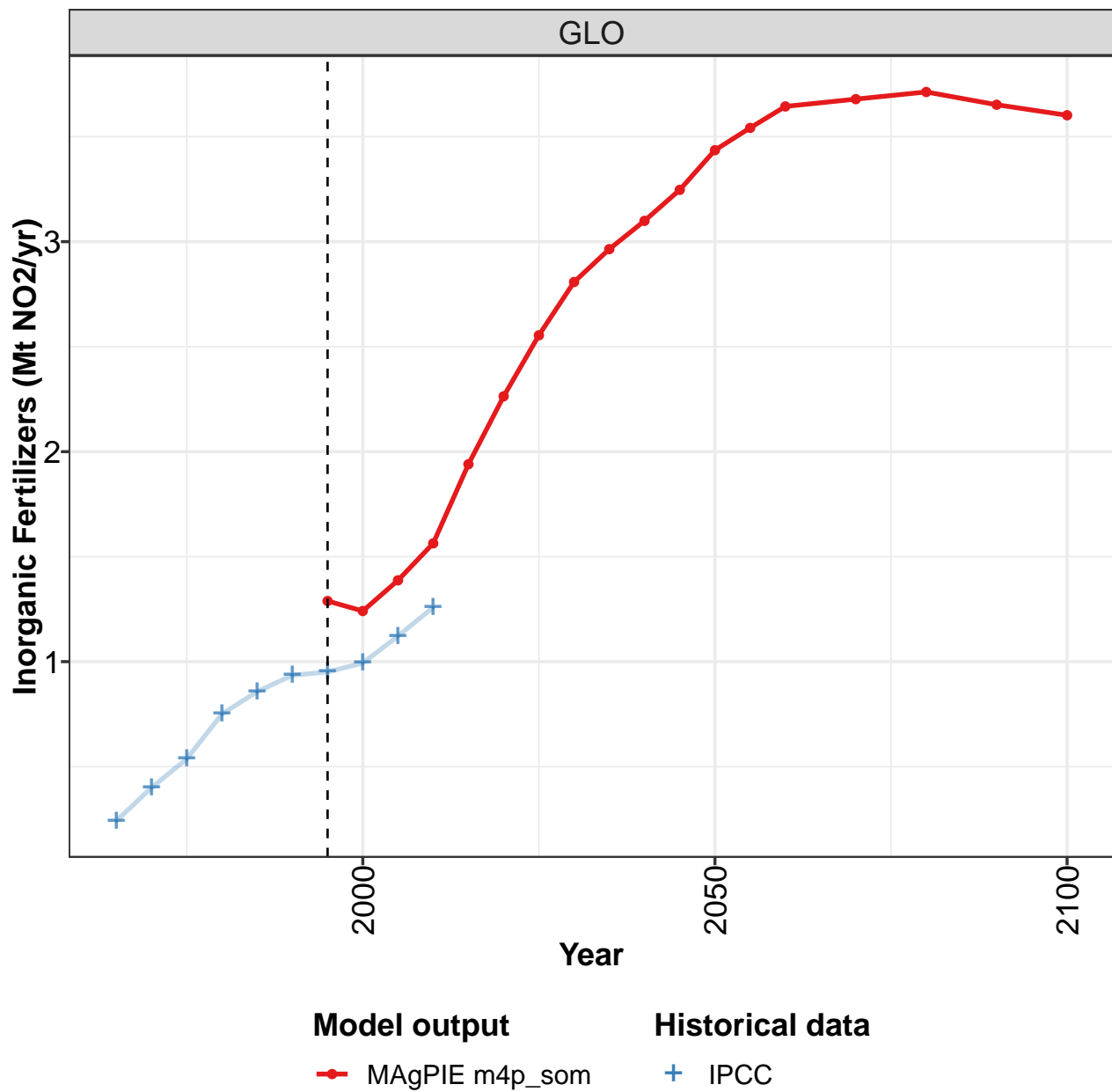
Table 849: IPCC — Emissions—NO2—Land—Agriculture—Agricultural Soils (Mt NO2/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3.55	4.31	4.96	5.54	6.04	6.27	6.19	6.37	6.90	7.81
CAZ	0.32	0.38	0.47	0.41	0.45	0.44	0.47	0.58	0.42	0.56
CHA	0.12	0.16	0.21	0.44	0.52	0.74	0.83	0.79	1.08	1.20
EUR	0.26	0.41	0.52	0.59	0.67	0.56	0.47	0.43	0.40	0.40
IND	0.12	0.11	0.12	0.19	0.28	0.34	0.42	0.45	0.56	0.69
JPN	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02
LAM	0.65	0.76	0.82	0.90	0.92	0.92	0.93	1.05	1.03	1.27
MEA	0.13	0.13	0.16	0.19	0.24	0.25	0.30	0.32	0.32	0.34
NEU	0.03	0.04	0.05	0.06	0.06	0.07	0.05	0.06	0.07	0.07
OAS	0.19	0.21	0.24	0.28	0.38	0.48	0.45	0.45	0.55	0.67
REF	0.28	0.33	0.49	0.57	0.67	0.56	0.29	0.30	0.39	0.37
SSA	1.01	1.17	1.22	1.19	1.25	1.21	1.23	1.27	1.39	1.60
USA	0.42	0.60	0.64	0.72	0.58	0.67	0.71	0.65	0.66	0.63

Table 850: Nsurplus2 — Emissions—NO2—Land—Agriculture—Agricultural Soils (Mt NO2/yr)

## 15.1.3 Agriculture—Agricultural Soils—Inorganic Fertilizers

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

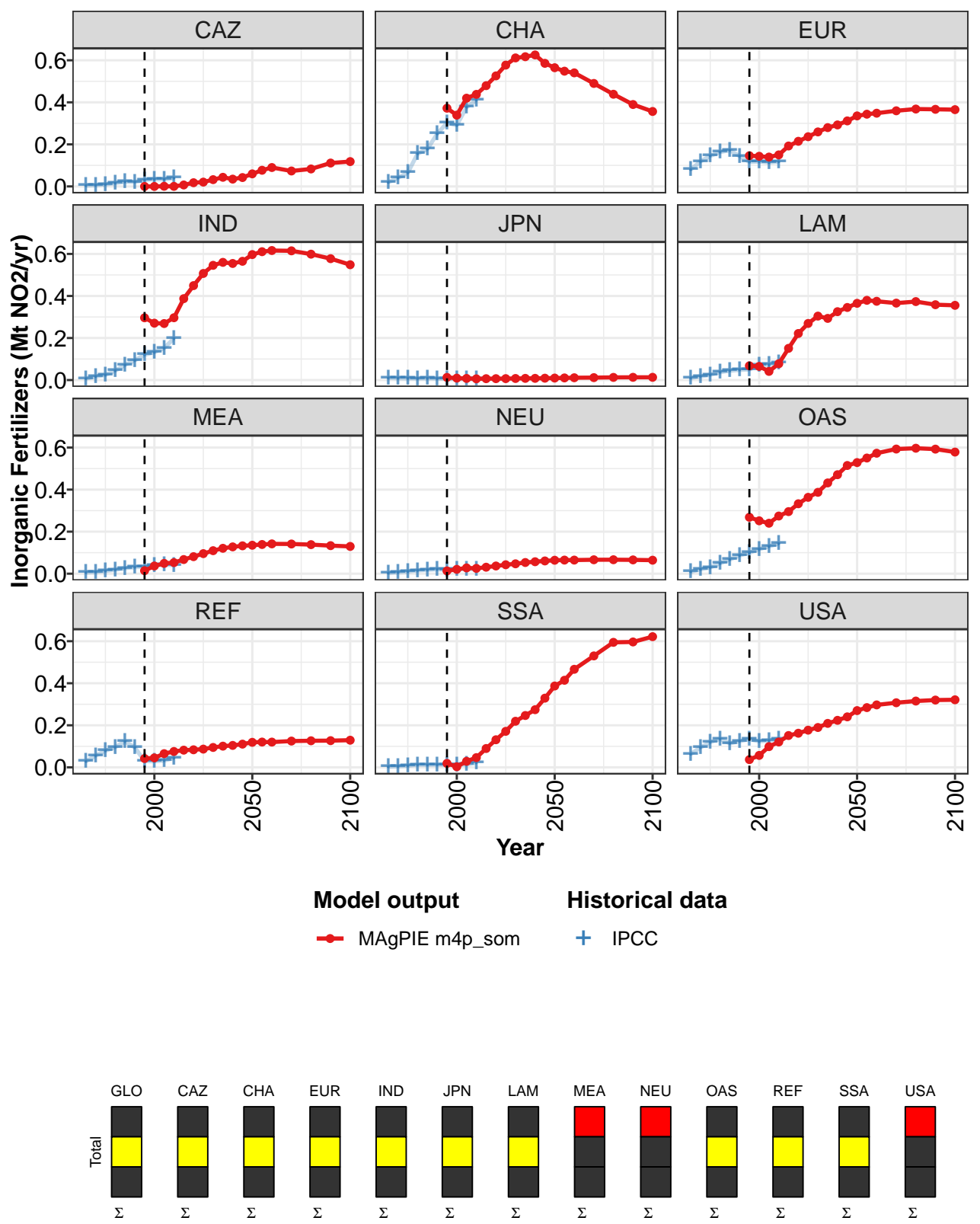


Figure 254: MAgPIE m4p\_som — Emissions—NO<sub>2</sub>—Land—Agriculture—Agricultural Soils—Inorganic Fertilizers (Mt NO<sub>2</sub>/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.29	1.24	1.39	1.56	1.94	2.26	2.55	2.81	2.96	3.10	3.25
CAZ	0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.03	0.04	0.03	0.04
CHA	0.37	0.34	0.42	0.44	0.48	0.53	0.58	0.61	0.62	0.63	0.59
EUR	0.15	0.14	0.14	0.15	0.19	0.21	0.24	0.26	0.28	0.29	0.31
IND	0.30	0.27	0.27	0.30	0.39	0.45	0.51	0.55	0.56	0.55	0.57
JPN	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
LAM	0.07	0.07	0.04	0.08	0.15	0.22	0.27	0.30	0.29	0.33	0.35
MEA	0.01	0.04	0.05	0.05	0.07	0.08	0.10	0.11	0.12	0.13	0.13
NEU	0.01	0.02	0.03	0.03	0.03	0.04	0.04	0.05	0.05	0.06	0.06
OAS	0.27	0.25	0.24	0.27	0.30	0.33	0.36	0.39	0.43	0.47	0.51
REF	0.04	0.04	0.07	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.11
SSA	0.02	0.00	0.03	0.05	0.09	0.13	0.17	0.22	0.25	0.27	0.33
USA	0.04	0.06	0.10	0.12	0.15	0.16	0.18	0.19	0.21	0.22	0.24

Table 851: MAgPIE m4p\_som — Emissions—NO2—Land—Agriculture—Agricultural Soils—Inorganic Fertilizers (Mt NO2/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	3.44	3.54	3.64	3.68	3.71	3.65	3.60
CAZ	0.06	0.08	0.09	0.07	0.08	0.11	0.12
CHA	0.56	0.55	0.54	0.49	0.44	0.39	0.36
EUR	0.34	0.34	0.35	0.36	0.37	0.37	0.37
IND	0.60	0.61	0.62	0.61	0.60	0.58	0.55
JPN	0.01	0.01	0.01	0.01	0.01	0.01	0.01
LAM	0.37	0.38	0.37	0.37	0.37	0.36	0.36
MEA	0.14	0.14	0.14	0.14	0.14	0.13	0.13
NEU	0.06	0.06	0.06	0.07	0.07	0.07	0.06
OAS	0.53	0.55	0.57	0.59	0.60	0.59	0.58
REF	0.12	0.12	0.12	0.13	0.13	0.13	0.13
SSA	0.39	0.41	0.47	0.53	0.59	0.60	0.62
USA	0.27	0.28	0.30	0.31	0.32	0.32	0.32

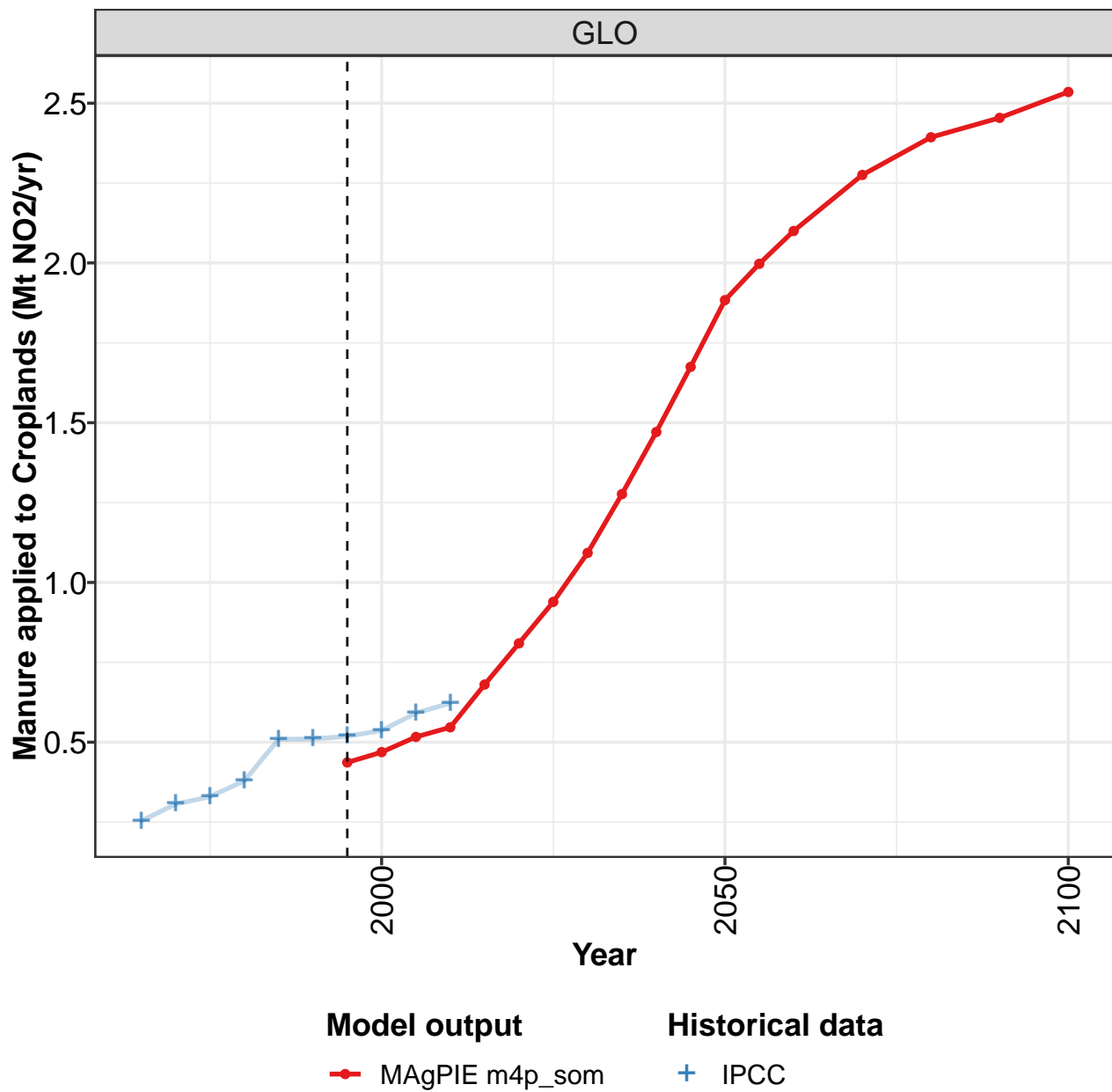
Table 852: MAgPIE m4p\_som — Emissions—NO2—Land—Agriculture—Agricultural Soils—Inorganic Fertilizers (Mt NO2/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.24	0.40	0.54	0.75	0.86	0.94	0.95	0.99	1.12	1.26
CAZ	0.00	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.03	0.04
CHA	0.02	0.04	0.07	0.16	0.18	0.25	0.30	0.29	0.38	0.41
EUR	0.08	0.12	0.14	0.16	0.17	0.14	0.12	0.12	0.11	0.12
IND	0.01	0.02	0.02	0.04	0.07	0.09	0.12	0.13	0.15	0.20
JPN	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
LAM	0.01	0.02	0.02	0.04	0.04	0.05	0.05	0.07	0.07	0.08
MEA	0.01	0.01	0.01	0.02	0.03	0.03	0.03	0.04	0.04	0.04
NEU	0.00	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02
OAS	0.01	0.02	0.03	0.05	0.07	0.09	0.10	0.12	0.13	0.14
REF	0.03	0.06	0.08	0.10	0.12	0.09	0.03	0.03	0.03	0.04
SSA	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02
USA	0.06	0.09	0.12	0.14	0.11	0.12	0.13	0.12	0.13	0.14

Table 853: IPCC — Emissions—NO2—Land—Agriculture—Agricultural Soils—Inorganic Fertilizers (Mt NO2/yr)

## 15.1.4 Agriculture—Agricultural Soils—Manure applied to Croplands

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

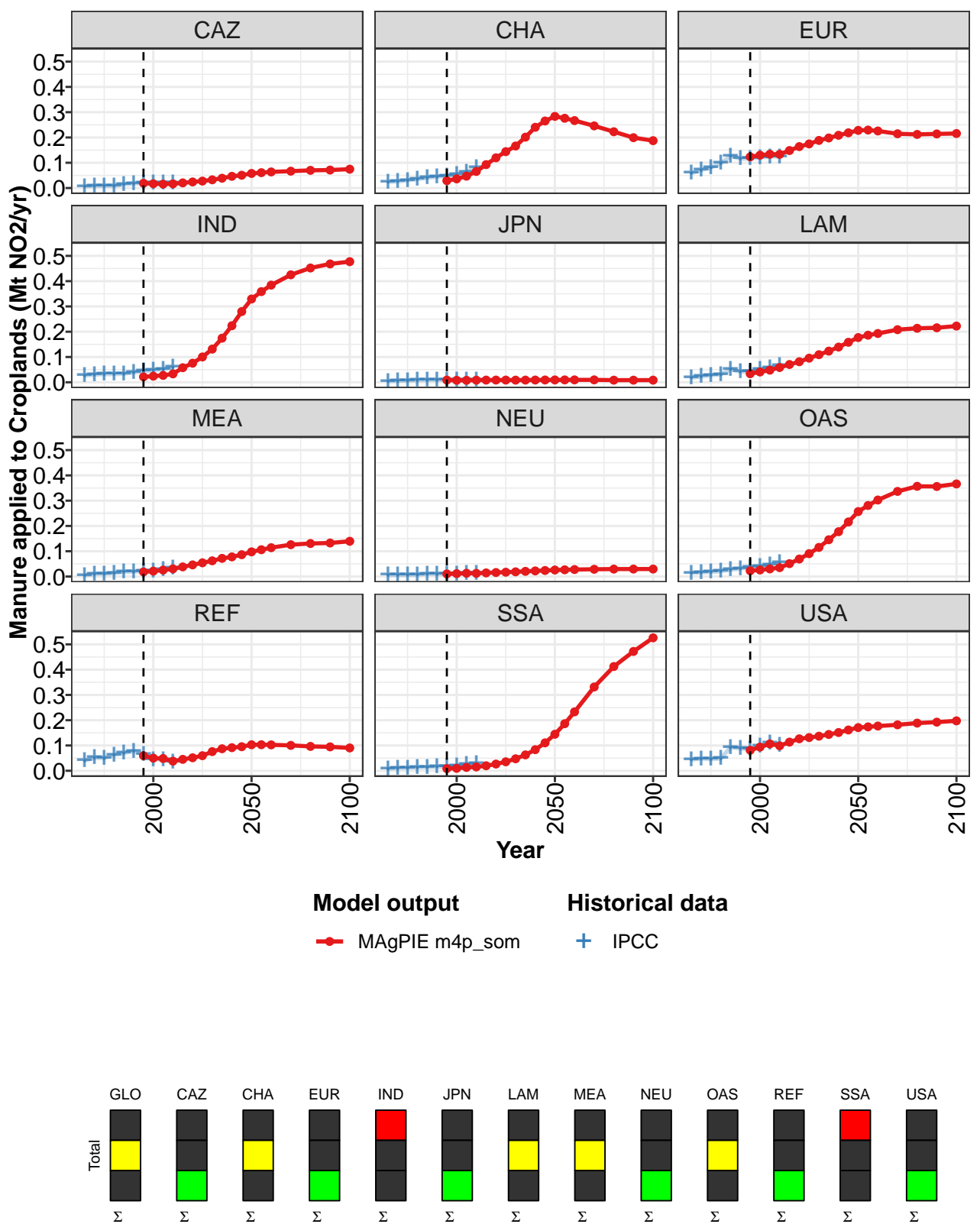


Figure 255: MAGPIE m4p\_som — Emissions—NO2—Land—Agriculture—Agricultural Soils—Manure applied to Croplands (Mt NO<sub>2</sub>/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.44	0.47	0.52	0.55	0.68	0.81	0.94	1.09	1.28	1.47	1.67
CAZ	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.04	0.05	0.05
CHA	0.03	0.04	0.05	0.07	0.09	0.12	0.14	0.17	0.20	0.24	0.27
EUR	0.12	0.13	0.13	0.13	0.15	0.16	0.17	0.19	0.20	0.21	0.22
IND	0.02	0.02	0.03	0.03	0.06	0.08	0.10	0.13	0.17	0.22	0.28
JPN	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
LAM	0.03	0.04	0.05	0.06	0.07	0.08	0.10	0.11	0.12	0.14	0.16
MEA	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.06	0.07	0.08	0.09
NEU	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02
OAS	0.02	0.03	0.03	0.04	0.05	0.07	0.09	0.12	0.15	0.18	0.22
REF	0.06	0.05	0.05	0.04	0.05	0.05	0.06	0.08	0.09	0.09	0.10
SSA	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.06	0.08	0.11
USA	0.08	0.09	0.11	0.10	0.11	0.13	0.13	0.14	0.14	0.15	0.16

Table 854: MAgPIE m4p\_som — Emissions—NO2—Land—Agriculture—Agricultural Soils—Manure applied to Croplands (Mt NO2/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.88	2.00	2.10	2.28	2.39	2.45	2.54
CAZ	0.06	0.06	0.06	0.07	0.07	0.07	0.07
CHA	0.28	0.28	0.27	0.25	0.22	0.20	0.19
EUR	0.23	0.23	0.23	0.21	0.21	0.21	0.22
IND	0.33	0.36	0.38	0.43	0.45	0.47	0.48
JPN	0.01	0.01	0.01	0.01	0.01	0.01	0.01
LAM	0.18	0.19	0.19	0.21	0.21	0.22	0.22
MEA	0.10	0.11	0.11	0.13	0.13	0.13	0.14
NEU	0.03	0.03	0.03	0.03	0.03	0.03	0.03
OAS	0.26	0.28	0.30	0.34	0.36	0.36	0.37
REF	0.10	0.10	0.10	0.10	0.10	0.09	0.09
SSA	0.14	0.19	0.23	0.33	0.41	0.47	0.53
USA	0.17	0.17	0.18	0.18	0.19	0.19	0.20

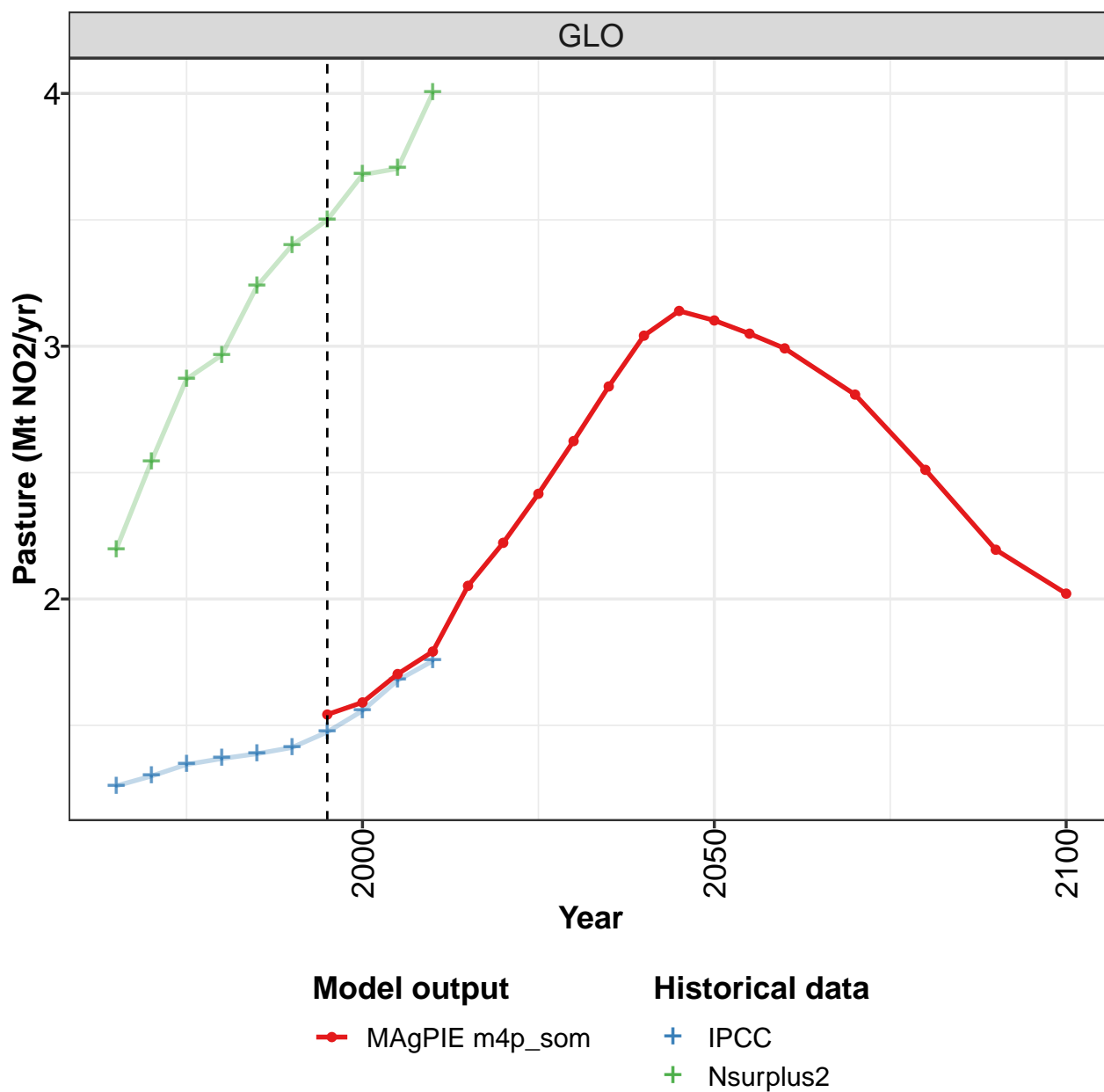
Table 855: MAgPIE m4p\_som — Emissions—NO2—Land—Agriculture—Agricultural Soils—Manure applied to Croplands (Mt NO2/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.254	0.306	0.329	0.379	0.509	0.510	0.518	0.537	0.591	0.622
CAZ	0.007	0.009	0.009	0.009	0.015	0.018	0.019	0.019	0.020	0.019
CHA	0.024	0.026	0.030	0.035	0.040	0.044	0.048	0.054	0.064	0.082
EUR	0.059	0.070	0.081	0.098	0.127	0.116	0.117	0.120	0.125	0.124
IND	0.026	0.030	0.032	0.032	0.034	0.039	0.044	0.047	0.052	0.059
JPN	0.004	0.006	0.007	0.008	0.009	0.009	0.009	0.008	0.008	0.009
LAM	0.018	0.023	0.028	0.031	0.052	0.041	0.044	0.050	0.057	0.066
MEA	0.005	0.010	0.011	0.014	0.019	0.019	0.021	0.023	0.028	0.033
NEU	0.006	0.006	0.006	0.007	0.010	0.010	0.010	0.011	0.013	0.012
OAS	0.014	0.016	0.018	0.021	0.027	0.031	0.038	0.041	0.047	0.055
REF	0.040	0.051	0.050	0.063	0.070	0.078	0.066	0.045	0.045	0.034
SSA	0.008	0.010	0.012	0.013	0.014	0.016	0.017	0.020	0.025	0.029
USA	0.044	0.048	0.046	0.048	0.093	0.088	0.085	0.098	0.109	0.101

Table 856: IPCC — Emissions—NO2—Land—Agriculture—Agricultural Soils—Manure applied to Croplands (Mt NO2/yr)

## 15.1.5 Agriculture—Agricultural Soils—Pasture

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

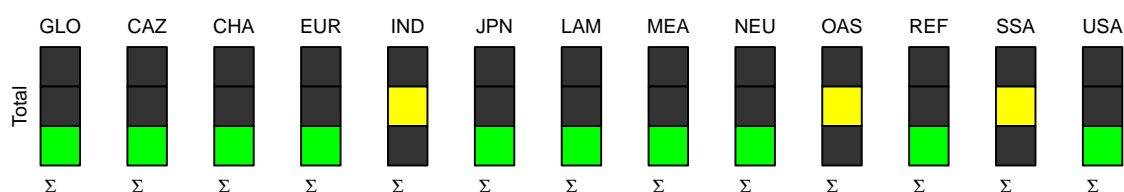
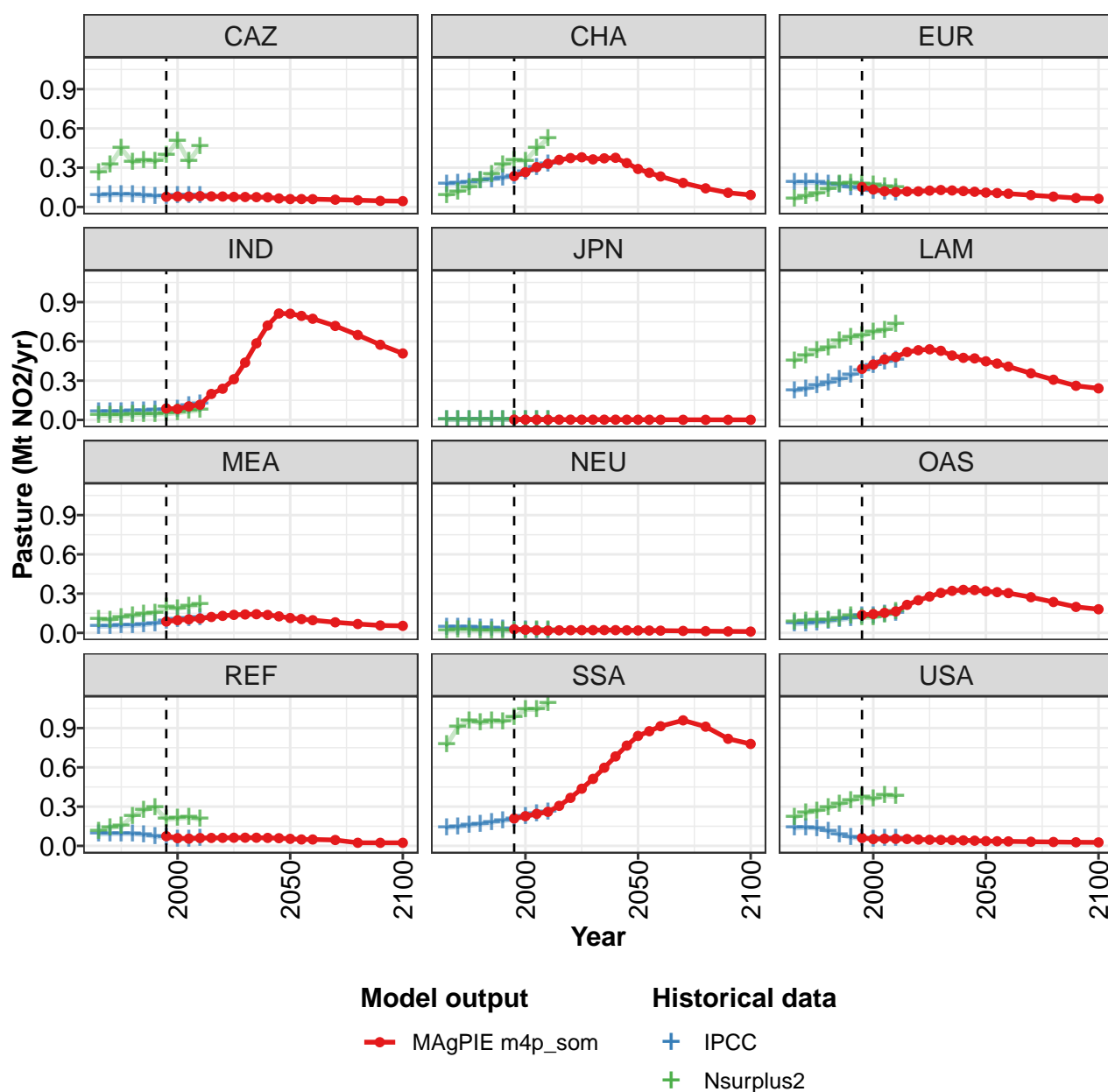


Figure 256: MAGPIE m4p\_som — Emissions—NO2—Land—Agriculture—Agricultural Soils—Pasture (Mt NO2/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.54	1.59	1.70	1.79	2.05	2.22	2.42	2.62	2.84	3.04	3.14
CAZ	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07
CHA	0.24	0.27	0.30	0.33	0.36	0.37	0.38	0.36	0.37	0.38	0.33
EUR	0.15	0.13	0.12	0.11	0.12	0.12	0.12	0.13	0.13	0.12	0.12
IND	0.09	0.08	0.10	0.12	0.20	0.24	0.31	0.44	0.58	0.72	0.81
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.39	0.42	0.46	0.48	0.52	0.53	0.54	0.53	0.49	0.47	0.47
MEA	0.09	0.10	0.10	0.11	0.12	0.13	0.14	0.14	0.14	0.14	0.13
NEU	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
OAS	0.14	0.14	0.15	0.16	0.21	0.25	0.28	0.31	0.32	0.33	0.33
REF	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
SSA	0.21	0.23	0.24	0.26	0.31	0.37	0.44	0.51	0.60	0.68	0.77
USA	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04

Table 857: MAgPIE m4p\_som — Emissions—NO2—Land—Agriculture—Agricultural Soils—Pasture (Mt NO2/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	3.10	3.05	2.99	2.81	2.51	2.19	2.02
CAZ	0.06	0.06	0.06	0.06	0.05	0.05	0.04
CHA	0.29	0.26	0.23	0.18	0.14	0.11	0.09
EUR	0.11	0.11	0.10	0.09	0.08	0.07	0.06
IND	0.81	0.79	0.77	0.72	0.65	0.57	0.51
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.45	0.43	0.41	0.36	0.31	0.26	0.24
MEA	0.11	0.11	0.10	0.08	0.07	0.06	0.05
NEU	0.02	0.02	0.02	0.02	0.01	0.01	0.01
OAS	0.32	0.31	0.30	0.27	0.24	0.20	0.18
REF	0.05	0.05	0.05	0.04	0.02	0.02	0.02
SSA	0.84	0.88	0.91	0.96	0.91	0.82	0.78
USA	0.04	0.04	0.03	0.03	0.03	0.03	0.03

Table 858: MAgPIE m4p\_som — Emissions—NO2—Land—Agriculture—Agricultural Soils—Pasture (Mt NO2/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.26	1.30	1.35	1.37	1.39	1.41	1.47	1.56	1.68	1.76
CAZ	0.09	0.09	0.09	0.09	0.09	0.08	0.08	0.09	0.09	0.09
CHA	0.18	0.18	0.19	0.20	0.21	0.22	0.24	0.27	0.30	0.33
EUR	0.18	0.19	0.18	0.18	0.17	0.15	0.14	0.12	0.11	0.11
IND	0.06	0.06	0.06	0.07	0.07	0.07	0.08	0.08	0.11	0.12
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.22	0.24	0.26	0.28	0.31	0.34	0.38	0.41	0.44	0.46
MEA	0.05	0.05	0.05	0.06	0.06	0.07	0.09	0.10	0.11	0.12
NEU	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02
OAS	0.07	0.07	0.08	0.09	0.10	0.11	0.13	0.13	0.14	0.15
REF	0.09	0.09	0.09	0.09	0.08	0.07	0.06	0.05	0.05	0.06
SSA	0.14	0.14	0.15	0.17	0.18	0.19	0.20	0.22	0.24	0.26
USA	0.14	0.14	0.13	0.11	0.09	0.07	0.06	0.05	0.05	0.06

Table 859: IPCC — Emissions—NO2—Land—Agriculture—Agricultural Soils—Pasture (Mt NO2/yr)

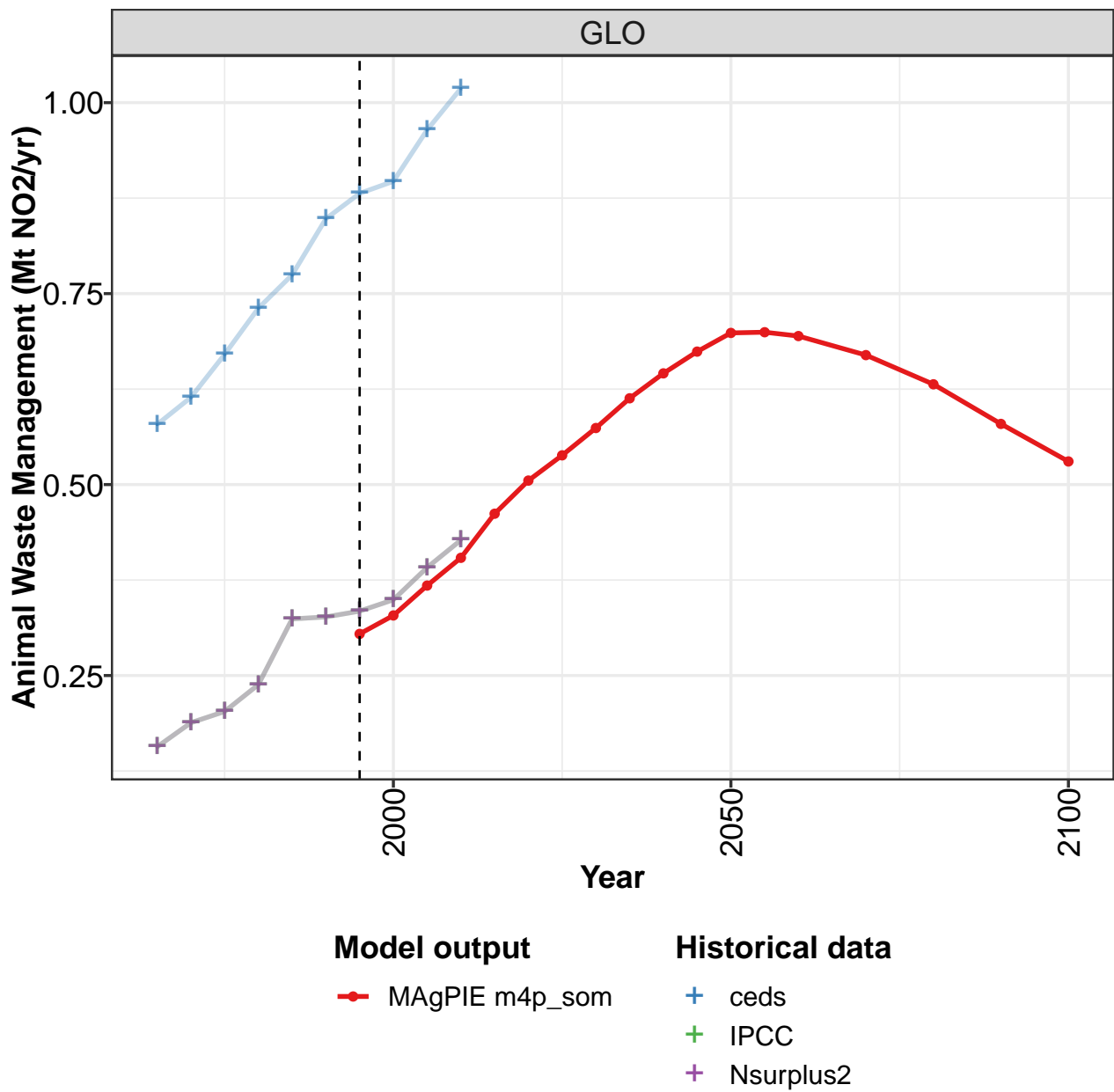


	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.20	2.54	2.87	2.96	3.24	3.40	3.50	3.68	3.70	4.00
CAZ	0.26	0.32	0.45	0.34	0.35	0.35	0.39	0.50	0.35	0.46
CHA	0.09	0.12	0.15	0.20	0.25	0.32	0.36	0.35	0.45	0.52
EUR	0.06	0.08	0.10	0.14	0.18	0.18	0.17	0.17	0.15	0.15
IND	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.07	0.07
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.45	0.49	0.53	0.55	0.61	0.63	0.64	0.67	0.68	0.73
MEA	0.10	0.10	0.12	0.13	0.14	0.15	0.19	0.18	0.20	0.21
NEU	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
OAS	0.08	0.09	0.10	0.09	0.11	0.13	0.12	0.12	0.14	0.16
REF	0.11	0.14	0.15	0.23	0.27	0.29	0.20	0.21	0.22	0.20
SSA	0.77	0.90	0.96	0.94	0.95	0.95	0.98	1.04	1.04	1.09
USA	0.22	0.25	0.27	0.29	0.32	0.34	0.37	0.36	0.38	0.38

Table 860: Nsurplus2 — Emissions—NO2—Land—Agriculture—Agricultural Soils—Pasture (Mt NO2/yr)

## 15.1.6 Agriculture—Animal Waste Management

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

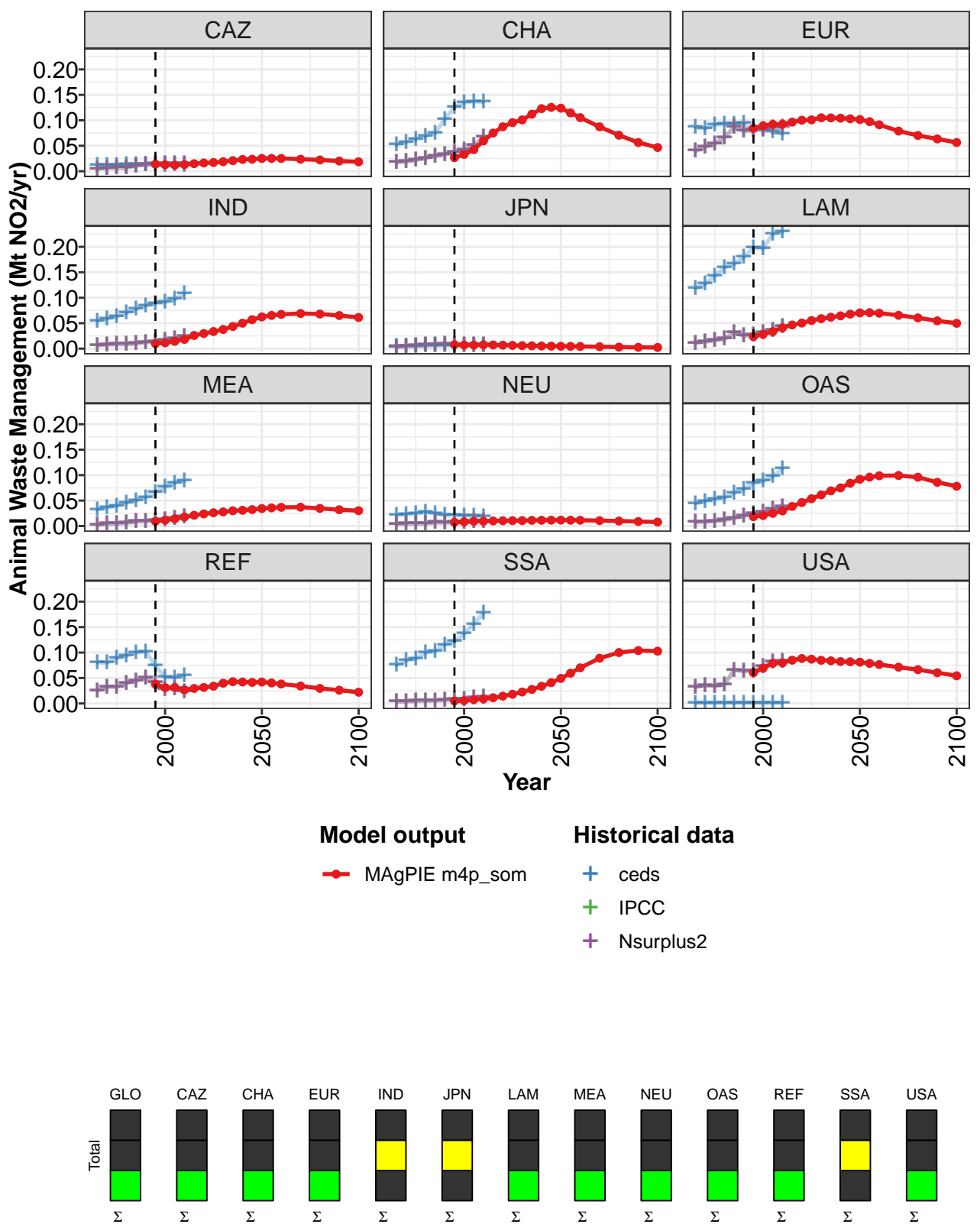


Figure 257: MAgPIE m4p\_som — Emissions—NO2—Land—Agriculture—Animal Waste Management (Mt NO2/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.305	0.329	0.368	0.404	0.462	0.505	0.538	0.574	0.613	0.646	0.674
CAZ	0.014	0.013	0.012	0.013	0.015	0.016	0.017	0.019	0.021	0.023	0.024
CHA	0.027	0.033	0.042	0.060	0.075	0.087	0.096	0.101	0.112	0.123	0.126
EUR	0.085	0.089	0.092	0.092	0.097	0.100	0.101	0.105	0.105	0.104	0.103
IND	0.010	0.012	0.014	0.018	0.026	0.030	0.034	0.038	0.044	0.050	0.057
JPN	0.008	0.007	0.007	0.008	0.007	0.007	0.006	0.006	0.006	0.005	0.005
LAM	0.024	0.028	0.033	0.041	0.047	0.050	0.055	0.059	0.062	0.064	0.068
MEA	0.009	0.012	0.014	0.018	0.021	0.024	0.026	0.028	0.030	0.031	0.032
NEU	0.007	0.008	0.009	0.009	0.010	0.010	0.011	0.011	0.011	0.011	0.012
OAS	0.018	0.021	0.025	0.030	0.039	0.046	0.054	0.061	0.069	0.075	0.084
REF	0.038	0.031	0.032	0.027	0.030	0.031	0.034	0.040	0.043	0.042	0.041
SSA	0.005	0.006	0.008	0.009	0.011	0.014	0.018	0.023	0.028	0.034	0.041
USA	0.060	0.069	0.079	0.080	0.085	0.088	0.087	0.085	0.084	0.082	0.082

Table 861: MAgPIE m4p\_som — Emissions—NO2—Land—Agriculture—Animal Waste Management (Mt NO2/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.699	0.699	0.694	0.669	0.631	0.579	0.530
CAZ	0.025	0.025	0.025	0.024	0.022	0.020	0.019
CHA	0.124	0.115	0.105	0.087	0.071	0.056	0.047
EUR	0.102	0.097	0.091	0.079	0.070	0.063	0.056
IND	0.062	0.065	0.067	0.069	0.068	0.065	0.061
JPN	0.005	0.004	0.004	0.004	0.003	0.003	0.002
LAM	0.070	0.071	0.070	0.066	0.060	0.055	0.050
MEA	0.034	0.036	0.037	0.037	0.035	0.032	0.030
NEU	0.012	0.011	0.011	0.011	0.010	0.009	0.008
OAS	0.092	0.096	0.099	0.099	0.096	0.086	0.078
REF	0.042	0.040	0.038	0.034	0.030	0.026	0.022
SSA	0.049	0.059	0.070	0.089	0.100	0.104	0.103
USA	0.081	0.079	0.076	0.071	0.066	0.060	0.054

Table 862: MAgPIE m4p\_som — Emissions—NO2—Land—Agriculture—Animal Waste Management (Mt NO2/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.58	0.61	0.67	0.73	0.77	0.85	0.88	0.90	0.96	1.02
CAZ	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
CHA	0.05	0.06	0.06	0.07	0.08	0.10	0.13	0.13	0.14	0.14
EUR	0.09	0.08	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.07
IND	0.05	0.06	0.06	0.07	0.08	0.08	0.09	0.09	0.10	0.11
JPN	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
LAM	0.12	0.13	0.14	0.16	0.17	0.18	0.20	0.20	0.22	0.23
MEA	0.03	0.04	0.04	0.05	0.05	0.06	0.07	0.08	0.09	0.09
NEU	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02
OAS	0.04	0.05	0.05	0.06	0.07	0.07	0.08	0.09	0.10	0.11
REF	0.08	0.08	0.09	0.09	0.10	0.10	0.07	0.05	0.05	0.05
SSA	0.08	0.08	0.09	0.10	0.10	0.12	0.12	0.14	0.16	0.18
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 863: ceds — Emissions—NO2—Land—Agriculture—Animal Waste Management (Mt NO2/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.157	0.188	0.203	0.238	0.324	0.327	0.334	0.349	0.391	0.427
CAZ	0.005	0.006	0.007	0.007	0.011	0.013	0.014	0.014	0.015	0.014
CHA	0.017	0.019	0.022	0.026	0.030	0.033	0.037	0.042	0.051	0.068
EUR	0.040	0.048	0.054	0.066	0.087	0.079	0.081	0.083	0.086	0.086
IND	0.007	0.008	0.009	0.008	0.010	0.012	0.014	0.016	0.019	0.023
JPN	0.003	0.005	0.005	0.007	0.008	0.008	0.008	0.007	0.007	0.008
LAM	0.011	0.014	0.017	0.019	0.032	0.025	0.027	0.031	0.037	0.043
MEA	0.002	0.004	0.005	0.006	0.009	0.009	0.011	0.012	0.015	0.019
NEU	0.004	0.004	0.004	0.005	0.007	0.007	0.007	0.008	0.009	0.009
OAS	0.007	0.008	0.010	0.012	0.016	0.019	0.025	0.027	0.033	0.038
REF	0.025	0.033	0.032	0.040	0.045	0.051	0.041	0.028	0.029	0.024
SSA	0.003	0.004	0.004	0.005	0.006	0.006	0.007	0.008	0.011	0.013
USA	0.032	0.035	0.034	0.037	0.066	0.063	0.063	0.072	0.081	0.082

Table 864: IPCC — Emissions—NO2—Land—Agriculture—Animal Waste Management (Mt NO2/yr)

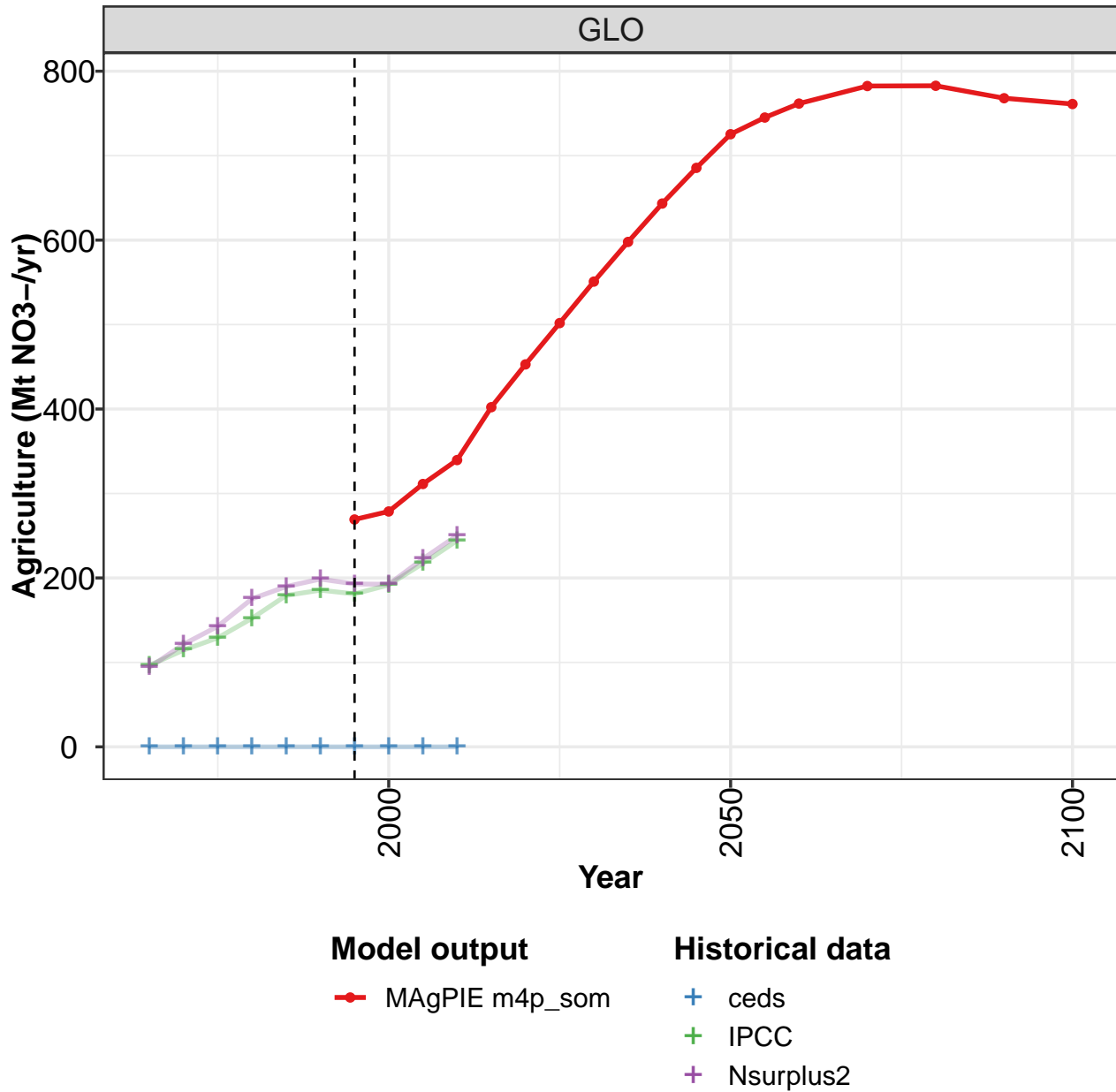
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.157	0.188	0.203	0.238	0.324	0.327	0.334	0.349	0.391	0.427
CAZ	0.005	0.006	0.007	0.007	0.011	0.013	0.014	0.014	0.015	0.014
CHA	0.017	0.019	0.022	0.026	0.030	0.033	0.037	0.042	0.051	0.068
EUR	0.040	0.048	0.054	0.066	0.087	0.079	0.081	0.083	0.086	0.086
IND	0.007	0.008	0.009	0.008	0.010	0.012	0.014	0.016	0.019	0.023
JPN	0.003	0.005	0.005	0.007	0.008	0.008	0.008	0.007	0.007	0.008
LAM	0.011	0.014	0.017	0.019	0.032	0.025	0.027	0.031	0.037	0.043
MEA	0.002	0.004	0.005	0.006	0.009	0.009	0.011	0.012	0.015	0.019
NEU	0.004	0.004	0.004	0.005	0.007	0.007	0.007	0.008	0.009	0.009
OAS	0.007	0.008	0.010	0.012	0.016	0.019	0.025	0.027	0.033	0.038
REF	0.025	0.033	0.032	0.040	0.045	0.051	0.041	0.028	0.029	0.024
SSA	0.003	0.004	0.004	0.005	0.006	0.006	0.007	0.008	0.011	0.013
USA	0.032	0.035	0.034	0.037	0.066	0.063	0.063	0.072	0.081	0.082

Table 865: Nsurplus2 — Emissions—NO2—Land—Agriculture—Animal Waste Management (Mt NO2/yr)

## 16 NO3Land

### 16.1 Agriculture

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

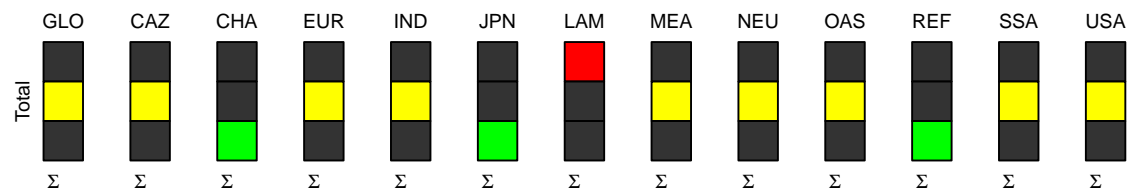
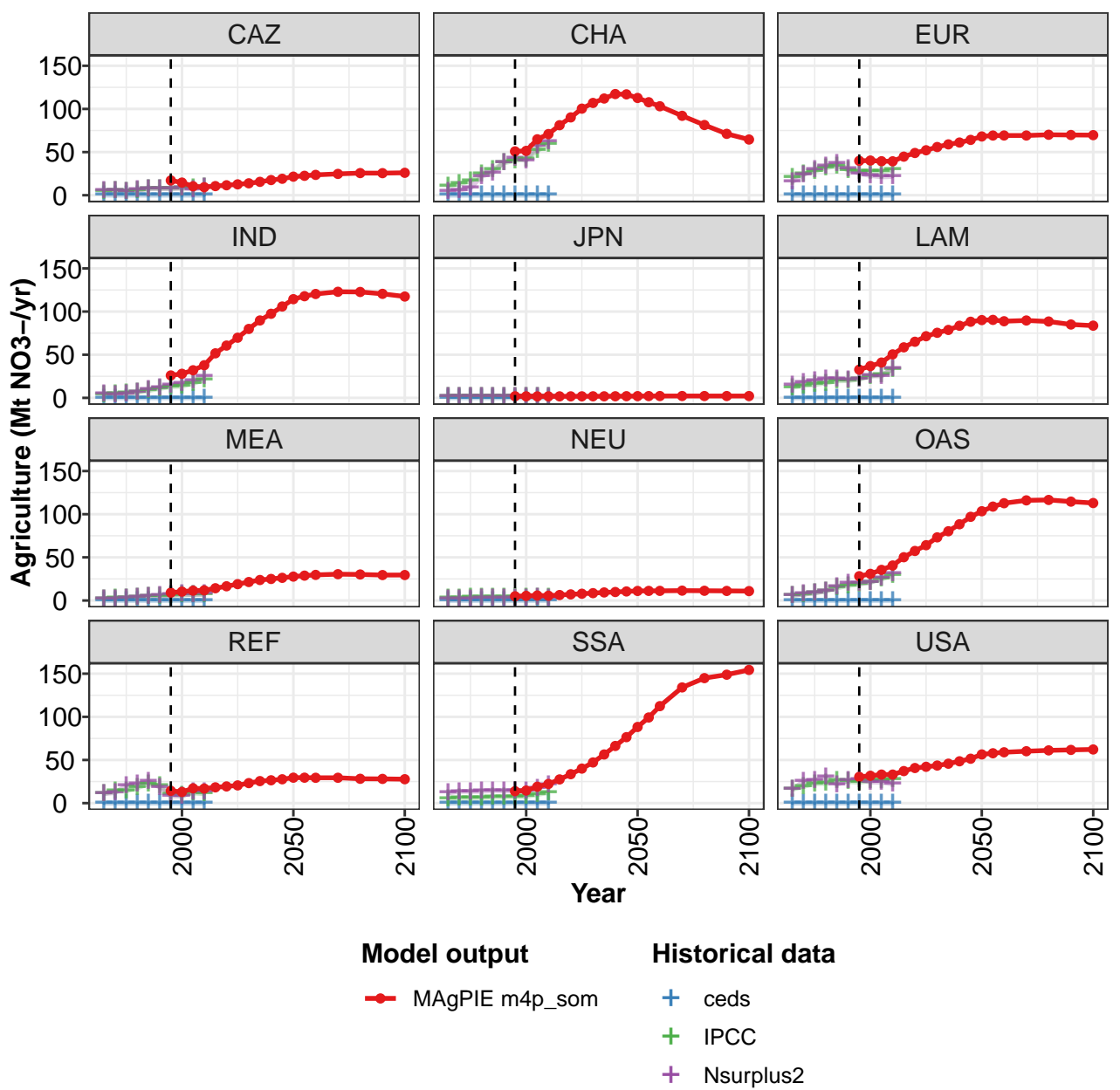


Figure 258: MAGPIE m4p\_som — Emissions—NO3Land—Agriculture (Mt NO3-/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	269	279	311	340	402	453	502	551	598	643	686
CAZ	17	15	10	9	11	12	13	14	16	18	19
CHA	51	51	65	71	81	90	100	107	112	117	117
EUR	40	40	39	39	45	49	52	56	59	61	64
IND	26	28	32	38	52	61	70	80	90	97	106
JPN	2	2	2	2	2	2	2	2	2	2	2
LAM	33	37	41	50	59	65	71	75	79	84	88
MEA	9	10	11	12	14	16	19	21	24	25	26
NEU	5	5	6	6	6	7	8	9	9	10	11
OAS	28	31	35	41	50	57	64	73	80	88	97
REF	14	13	17	17	18	19	21	23	26	27	28
SSA	14	15	19	22	28	34	40	47	56	66	76
USA	30	32	33	33	37	41	42	44	46	49	51

Table 866: MAgPIE m4p\_som — Emissions—NO3Land—Agriculture (Mt NO3-/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	725	745	762	782	783	768	761
CAZ	22	23	24	25	26	26	26
CHA	113	108	103	92	81	71	65
EUR	68	69	69	69	70	70	70
IND	114	118	120	123	123	121	117
JPN	2	2	2	2	2	2	2
LAM	90	90	89	90	88	85	84
MEA	28	29	30	31	30	29	30
NEU	11	11	11	11	11	11	11
OAS	103	109	113	116	117	115	113
REF	30	30	29	29	28	28	28
SSA	88	99	112	134	145	149	154
USA	56	58	59	60	61	62	62

Table 867: MAgPIE m4p\_som — Emissions—NO3Land—Agriculture (Mt NO3-/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0	0	0	0	0	0	0	0	0	0
CAZ	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0
LAM	0	0	0	0	0	0	0	0	0	0
MEA	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0
OAS	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0

Table 868: ceds — Emissions—NO3Land—Agriculture (Mt NO3-/yr)



	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	97	115	129	152	179	186	181	192	217	244
CAZ	5	5	5	5	8	8	8	8	9	10
CHA	11	13	16	25	29	37	40	42	51	59
EUR	21	24	28	32	34	29	27	28	27	29
IND	4	5	5	6	8	11	13	13	17	21
JPN	2	2	2	2	2	2	2	2	2	2
LAM	12	14	15	17	20	20	21	25	27	33
MEA	2	2	3	4	4	5	6	6	7	7
NEU	2	3	3	4	4	4	3	4	4	4
OAS	6	7	9	11	14	17	19	21	25	29
REF	11	14	14	18	22	20	10	9	12	11
SSA	5	6	6	6	7	7	7	8	10	12
USA	16	19	22	23	26	25	24	26	27	28

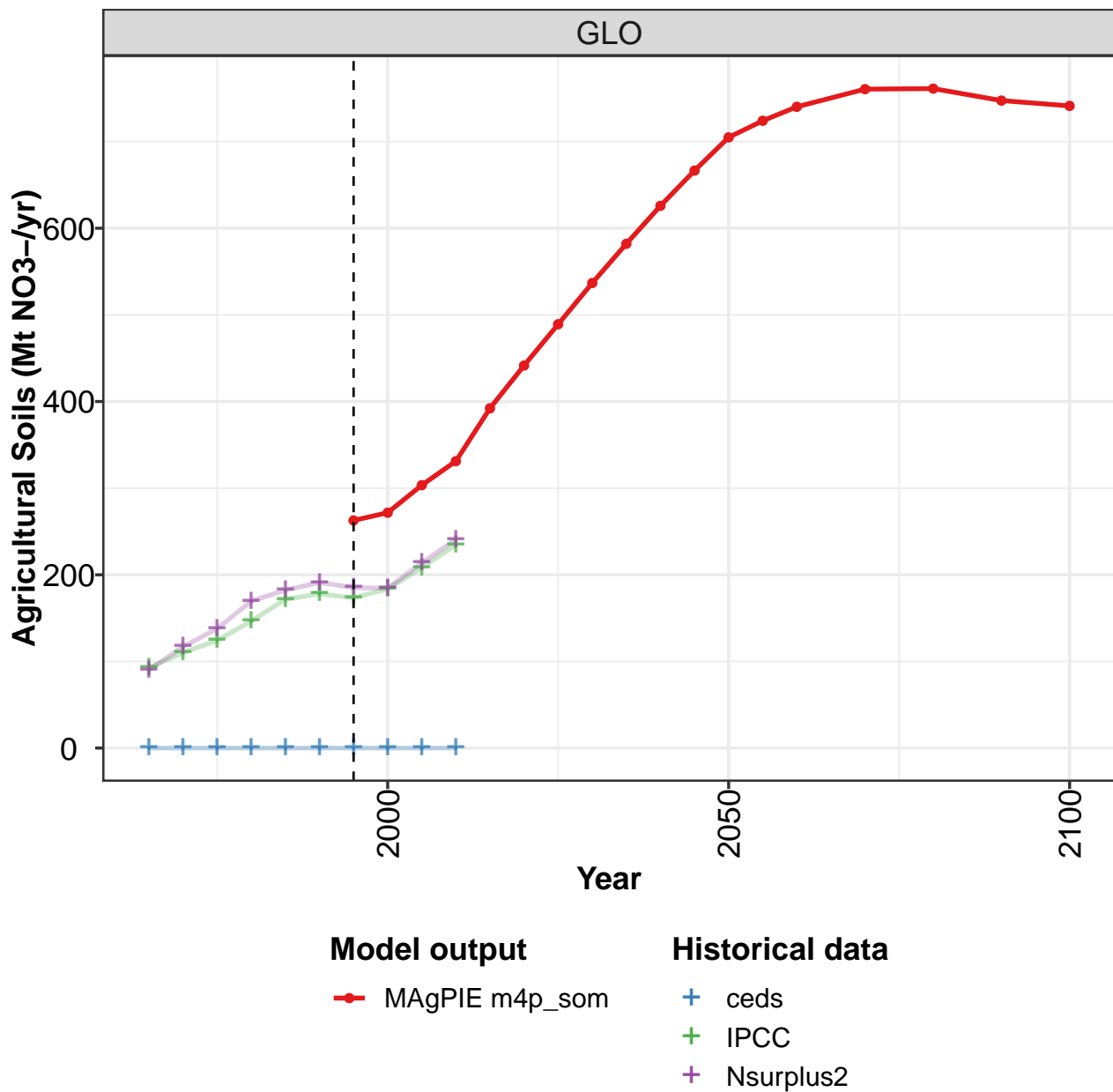
Table 869: IPCC — Emissions—NO3Land—Agriculture (Mt NO3-/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	94	121	143	175	190	199	193	192	223	250
CAZ	5	6	5	6	8	8	8	8	7	9
CHA	5	6	8	22	26	38	43	40	57	62
EUR	16	24	30	34	37	30	25	23	21	22
IND	4	4	4	7	10	12	15	16	20	25
JPN	2	2	2	2	2	2	2	2	2	1
LAM	15	18	20	22	22	21	22	26	25	34
MEA	2	2	3	4	5	5	6	7	7	7
NEU	1	2	2	3	3	3	3	3	3	3
OAS	6	7	9	11	16	20	20	21	26	31
REF	11	12	20	22	25	19	8	8	13	13
SSA	12	14	14	14	15	14	14	14	17	21
USA	16	25	27	30	22	26	27	24	24	22

Table 870: Nsurplus2 — Emissions—NO3Land—Agriculture (Mt NO3-/yr)

## 16.1.1 Agricultural Soils

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

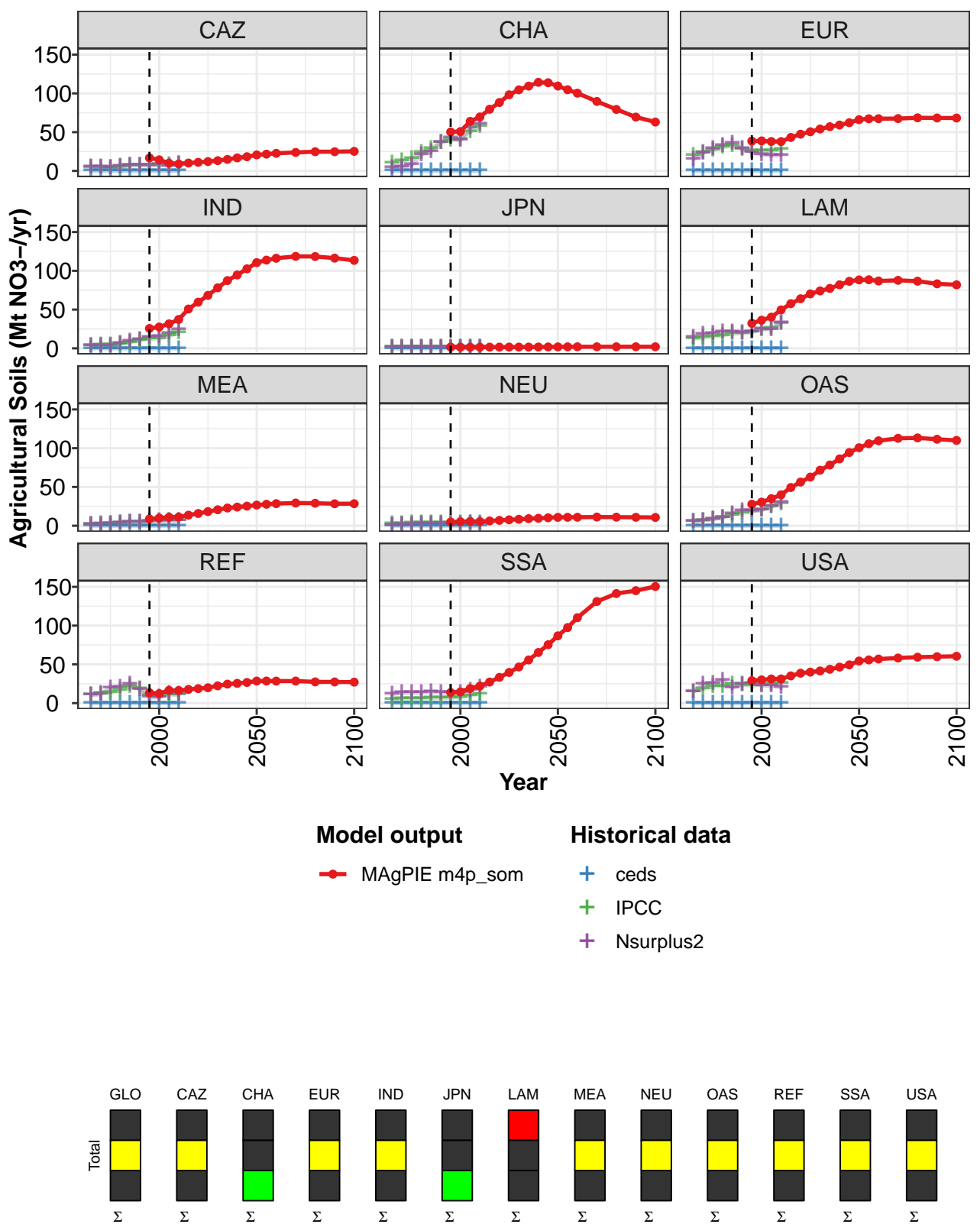


Figure 259: MAgPIE m4p\_som — Emissions—NO3Land—Agriculture—Agricultural Soils (Mt NO3-/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	263	272	303	331	392	442	489	537	582	626	667
CAZ	17	14	10	9	10	11	12	13	15	17	18
CHA	50	51	64	70	80	88	98	105	109	114	114
EUR	38	39	38	38	43	47	51	54	57	59	62
IND	26	28	32	37	51	60	68	78	87	95	103
JPN	2	2	2	2	2	2	2	2	2	2	2
LAM	32	36	40	50	58	64	70	74	77	82	86
MEA	9	10	11	11	14	16	18	21	23	24	25
NEU	5	5	6	5	6	7	8	8	9	10	10
OAS	28	30	35	40	49	56	63	72	78	86	94
REF	13	12	17	16	18	19	20	22	25	26	27
SSA	14	14	19	22	27	33	40	47	56	65	75
USA	29	30	31	31	35	39	40	42	44	46	49

Table 871: MAgPIE m4p\_som — Emissions—NO3Land—Agriculture—Agricultural Soils (Mt NO3-/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	705	724	740	761	761	747	741
CAZ	21	22	23	24	25	25	25
CHA	110	105	100	90	79	69	63
EUR	66	67	67	68	69	68	68
IND	111	114	116	119	118	116	113
JPN	2	2	2	2	2	2	2
LAM	88	88	87	88	87	83	82
MEA	27	28	29	29	29	28	28
NEU	11	11	11	11	11	11	11
OAS	101	106	110	113	113	112	110
REF	29	29	28	29	27	27	27
SSA	87	97	110	131	141	145	150
USA	54	56	57	58	59	60	61

Table 872: MAgPIE m4p\_som — Emissions—NO3Land—Agriculture—Agricultural Soils (Mt NO3-/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0	0	0	0	0	0	0	0	0	0
CAZ	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0
LAM	0	0	0	0	0	0	0	0	0	0
MEA	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0
OAS	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0

Table 873: ceds — Emissions—NO3Land—Agriculture—Agricultural Soils (Mt NO3-/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	93	110	124	147	172	178	173	184	208	235
CAZ	5	5	5	5	7	8	7	8	8	10
CHA	10	13	16	24	29	37	39	41	50	58
EUR	20	24	27	31	33	28	26	26	26	28
IND	4	4	5	6	8	10	12	13	16	20
JPN	2	2	2	2	2	2	2	1	1	1
LAM	12	14	15	17	19	19	21	24	26	32
MEA	2	2	3	3	4	5	5	6	7	7
NEU	2	3	3	3	4	4	3	3	4	4
OAS	6	7	9	11	14	17	18	21	24	28
REF	11	13	13	17	21	19	9	8	11	10
SSA	5	5	6	6	7	7	7	8	10	12
USA	15	18	22	22	24	23	23	24	25	26

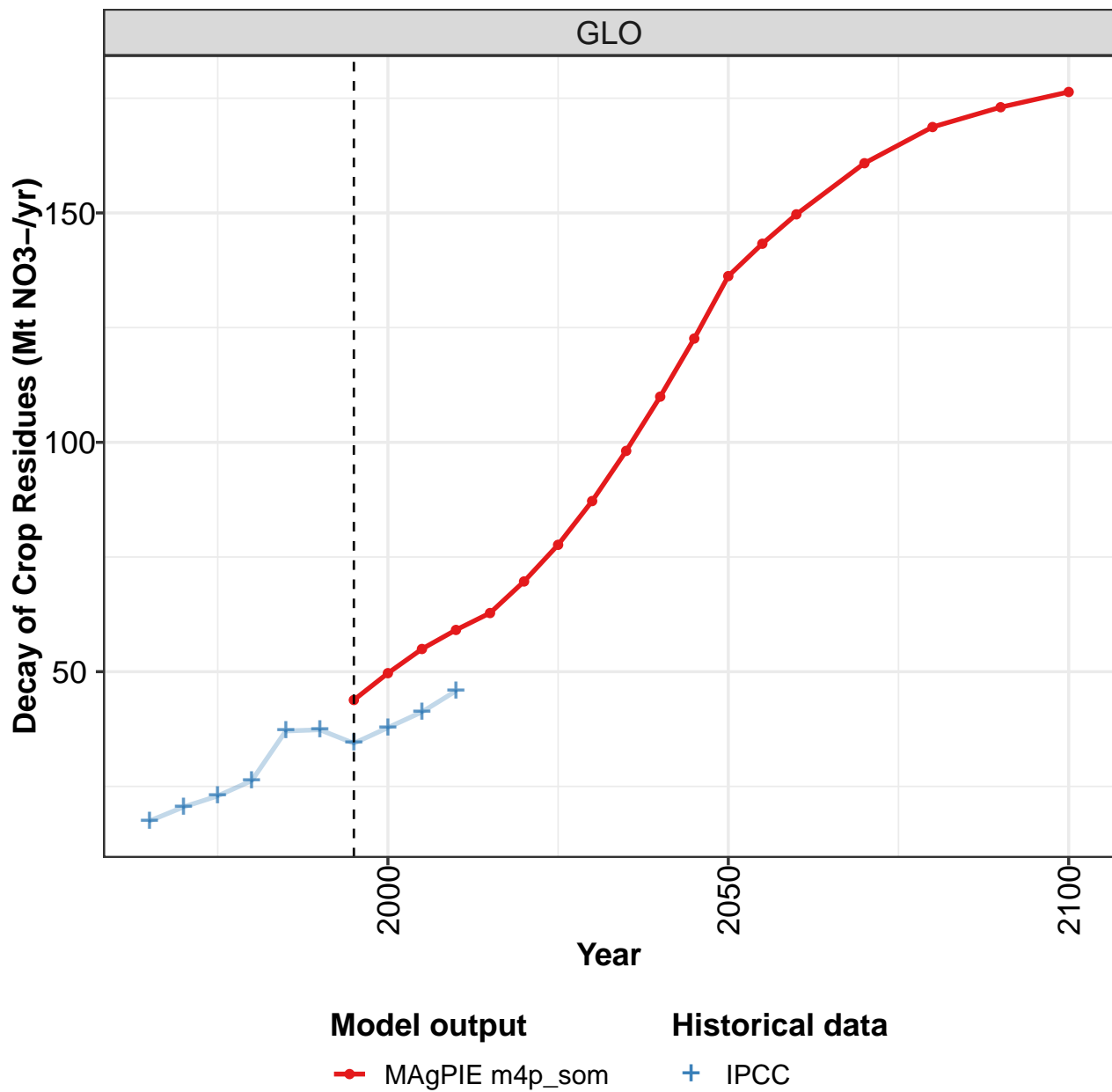
Table 874: IPCC — Emissions—NO3Land—Agriculture—Agricultural Soils (Mt NO3-/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	90	117	138	170	182	191	185	184	214	241
CAZ	5	5	5	6	7	7	7	8	6	9
CHA	4	5	8	21	25	37	43	39	56	61
EUR	15	23	29	33	36	29	24	21	20	20
IND	4	3	4	6	9	11	14	16	19	24
JPN	2	2	2	2	2	2	2	1	1	1
LAM	15	18	19	21	21	21	21	25	24	33
MEA	2	2	3	3	5	5	6	7	7	7
NEU	1	1	2	2	3	3	2	3	3	3
OAS	6	7	9	11	15	20	19	20	25	30
REF	10	12	20	21	24	18	7	8	13	12
SSA	12	13	13	13	14	14	14	14	17	21
USA	15	24	26	29	20	24	26	23	22	20

Table 875: Nsurplus2 — Emissions—NO3Land—Agriculture—Agricultural Soils (Mt NO3-/yr)

## 16.1.2 Agricultural Soils—Decay of Crop Residues

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

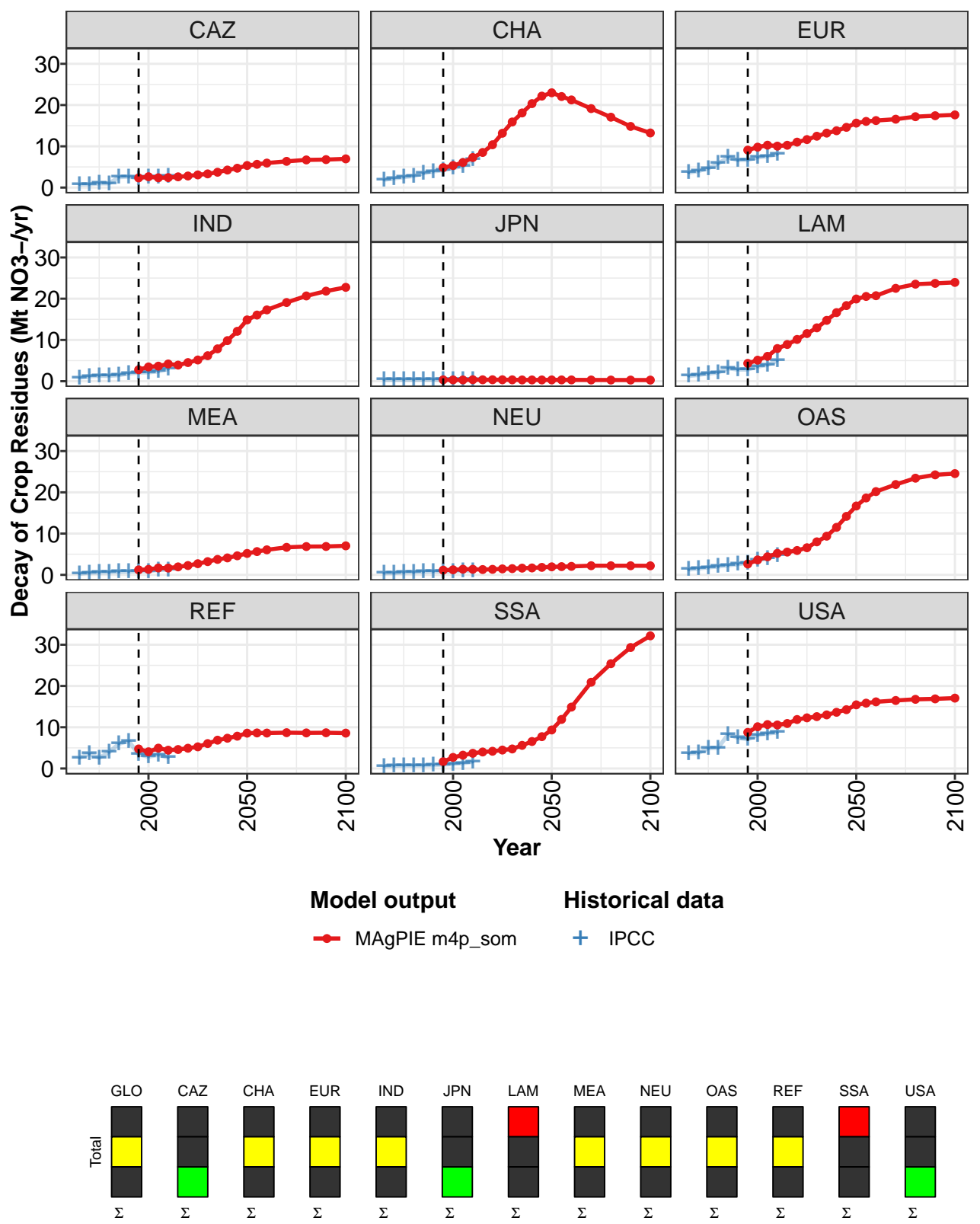


Figure 260: MAgPIE m4p\_som — Emissions—NO3Land—Agriculture—Agricultural Soils—Decay of Crop Residues (Mt NO<sub>3</sub>-yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	44	50	55	59	63	70	78	87	98	110	123
CAZ	2	3	2	2	3	3	3	3	4	4	5
CHA	5	5	6	7	9	10	13	16	18	20	22
EUR	9	10	10	10	10	11	12	12	13	14	15
IND	3	3	4	4	4	5	5	6	8	10	12
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	4	5	6	8	9	10	12	13	15	17	18
MEA	1	1	2	2	2	2	3	3	4	4	5
NEU	1	1	1	1	1	1	1	2	2	2	2
OAS	3	4	4	5	6	6	7	8	9	12	14
REF	5	4	5	4	5	5	5	6	7	7	8
SSA	2	3	3	4	4	4	4	5	6	7	8
USA	9	10	11	11	11	12	12	13	13	14	14

Table 876: MAgPIE m4p\_som — Emissions—NO3Land—Agriculture—Agricultural Soils—Decay of Crop Residues (Mt NO3-/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	136	143	150	161	169	173	176
CAZ	5	6	6	6	7	7	7
CHA	23	22	21	19	17	15	13
EUR	16	16	16	17	17	17	18
IND	15	16	17	19	21	22	23
JPN	0	0	0	0	0	0	0
LAM	20	21	21	23	24	24	24
MEA	5	6	6	7	7	7	7
NEU	2	2	2	2	2	2	2
OAS	17	19	20	22	23	24	25
REF	9	9	9	9	9	9	9
SSA	9	12	15	21	25	29	32
USA	15	16	16	16	17	17	17

Table 877: MAgPIE m4p\_som — Emissions—NO3Land—Agriculture—Agricultural Soils—Decay of Crop Residues (Mt NO3-/yr) [PART 2/2]

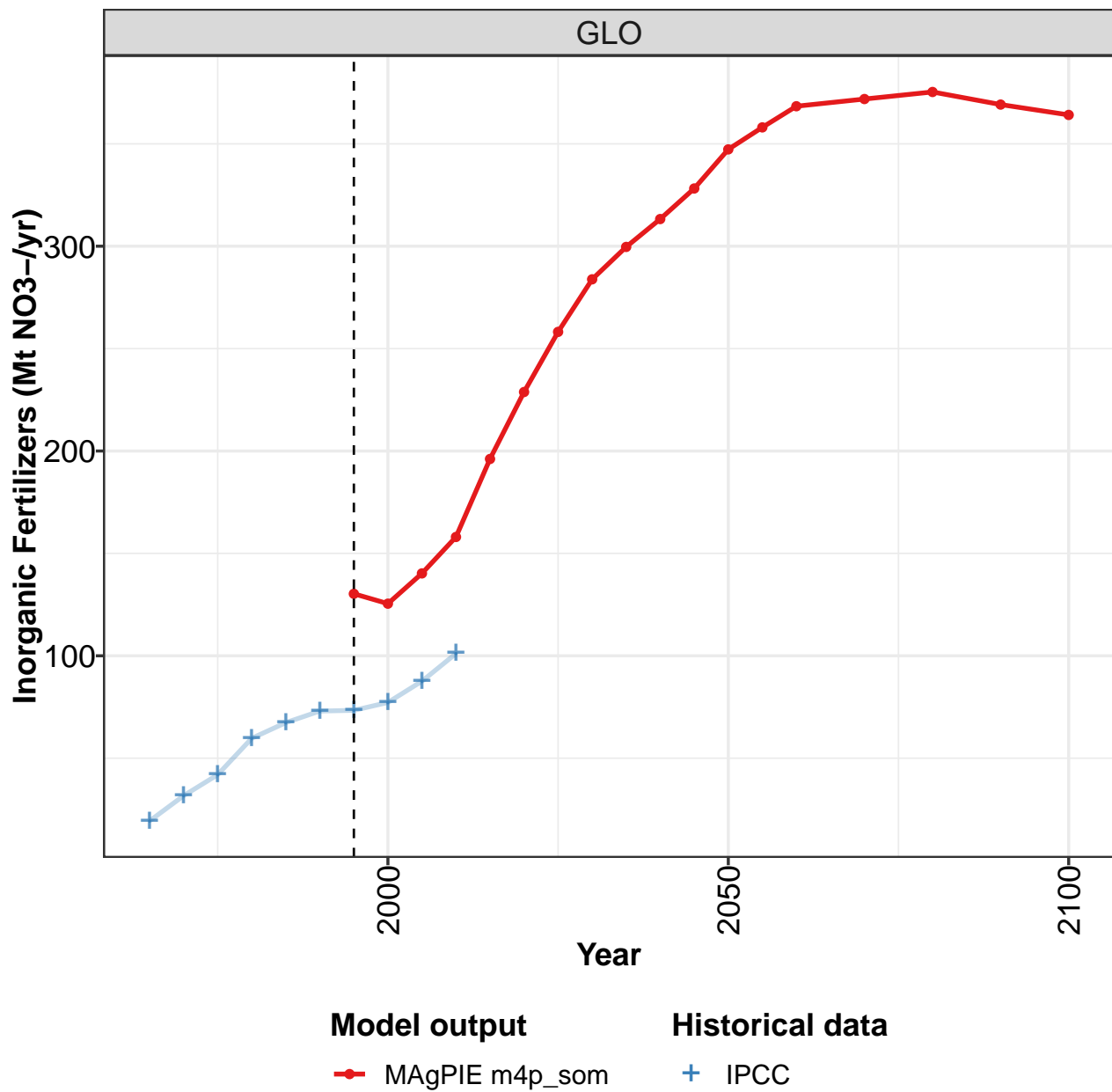
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	17.5	20.5	22.9	26.3	37.1	37.3	34.4	37.8	41.2	45.8
CAZ	0.8	0.8	1.0	1.0	2.5	2.7	2.2	2.5	2.6	2.8
CHA	1.9	2.2	2.5	2.8	3.5	3.9	4.2	4.7	5.2	6.8
EUR	3.6	4.0	4.7	5.8	7.3	6.6	6.7	7.3	7.6	8.0
IND	0.9	1.2	1.3	1.3	1.5	1.9	2.1	2.1	2.4	2.9
JPN	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4
LAM	1.2	1.5	1.9	2.1	3.1	2.8	2.8	3.5	3.9	5.0
MEA	0.3	0.5	0.6	0.6	0.7	0.8	0.9	0.9	1.2	1.2
NEU	0.4	0.4	0.6	0.6	0.8	0.8	0.8	0.8	1.0	0.9
OAS	1.3	1.5	1.8	2.0	2.3	2.6	2.9	3.5	4.0	4.8
REF	2.6	3.6	2.6	3.9	6.0	6.6	3.4	2.9	3.3	2.7
SSA	0.6	0.6	0.7	0.7	0.7	0.8	0.9	1.1	1.3	1.6
USA	3.6	3.8	4.9	5.0	8.3	7.4	7.1	8.1	8.5	8.7

Table 878: IPCC — Emissions—NO3Land—Agriculture—Agricultural Soils—Decay of Crop Residues (Mt NO3-/yr)



## 16.1.3 Agricultural Soils—Inorganic Fertilizers

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

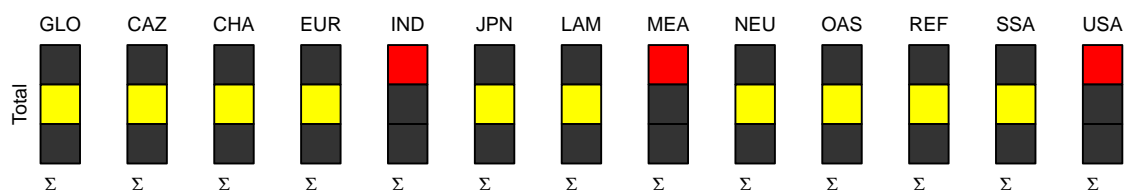
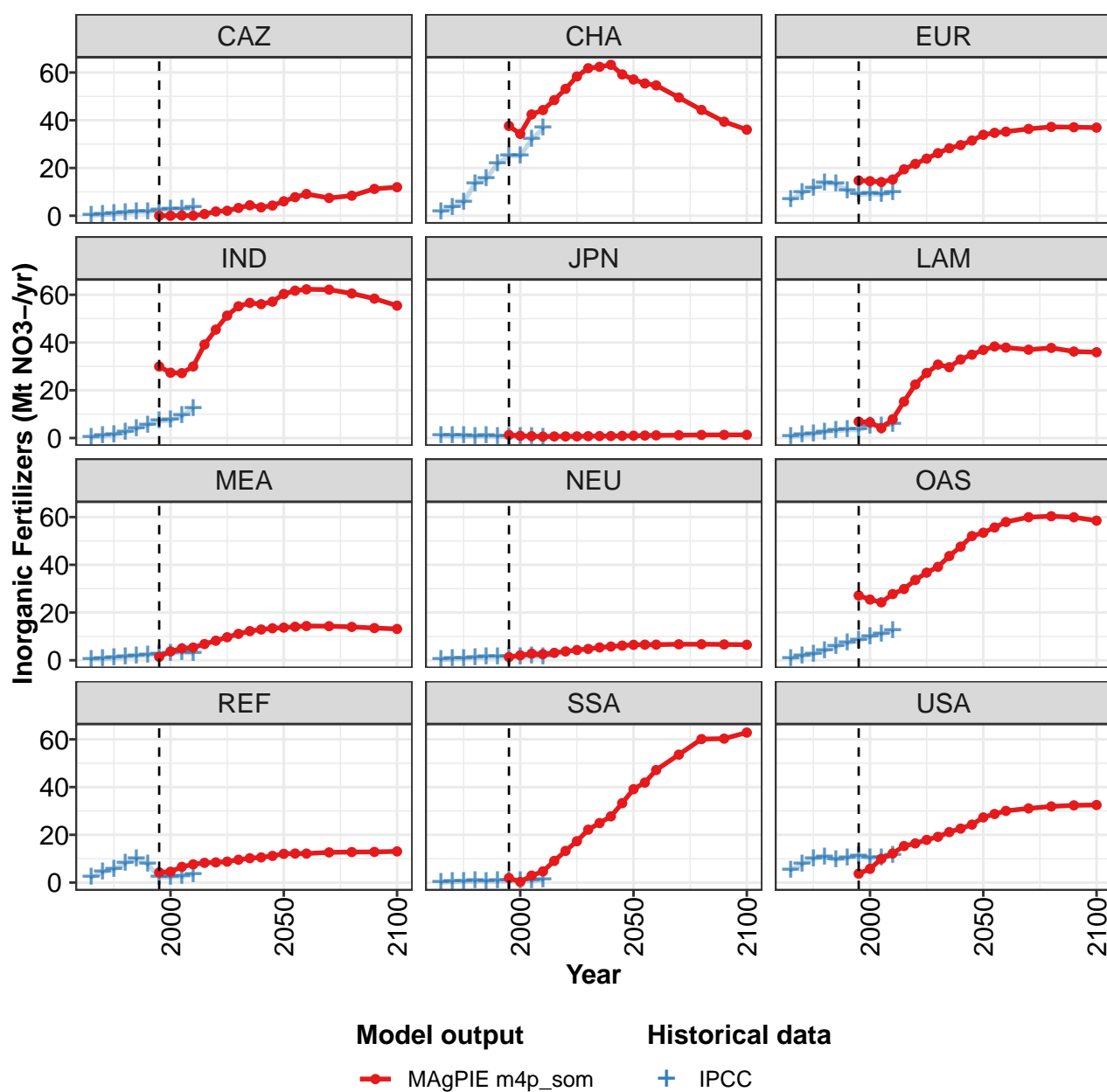


Figure 261: MAgPIE m4p\_som — Emissions—NO3Land—Agriculture—Agricultural Soils—Inorganic Fertilizers (Mt NO<sub>3</sub>-/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	130	125	140	158	196	229	258	284	300	313	328
CAZ	0	0	0	0	1	2	2	3	4	4	4
CHA	38	34	42	44	48	53	58	62	62	63	59
EUR	15	15	14	15	19	22	24	26	28	30	32
IND	30	27	27	30	39	45	51	55	57	56	57
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	7	7	4	8	15	22	27	31	30	33	35
MEA	1	4	5	5	7	8	10	11	12	13	13
NEU	1	2	3	3	3	4	4	5	5	6	6
OAS	27	25	24	28	30	34	37	39	44	48	52
REF	4	5	7	8	8	8	9	10	10	11	11
SSA	2	0	3	5	9	13	17	22	25	28	33
USA	4	6	10	12	15	16	18	19	21	23	24

Table 879: MAgPIE m4p\_som — Emissions—NO3Land—Agriculture—Agricultural Soils—Inorganic Fertilizers (Mt NO3-/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	347	358	368	372	375	369	364
CAZ	6	8	9	7	8	11	12
CHA	57	55	55	50	44	39	36
EUR	34	35	35	36	37	37	37
IND	60	62	62	62	61	58	55
JPN	1	1	1	1	1	1	1
LAM	37	38	38	37	38	36	36
MEA	14	14	14	14	14	13	13
NEU	6	7	7	7	7	7	7
OAS	53	56	58	60	60	60	58
REF	12	12	12	13	13	13	13
SSA	39	42	47	54	60	60	63
USA	27	29	30	31	32	32	32

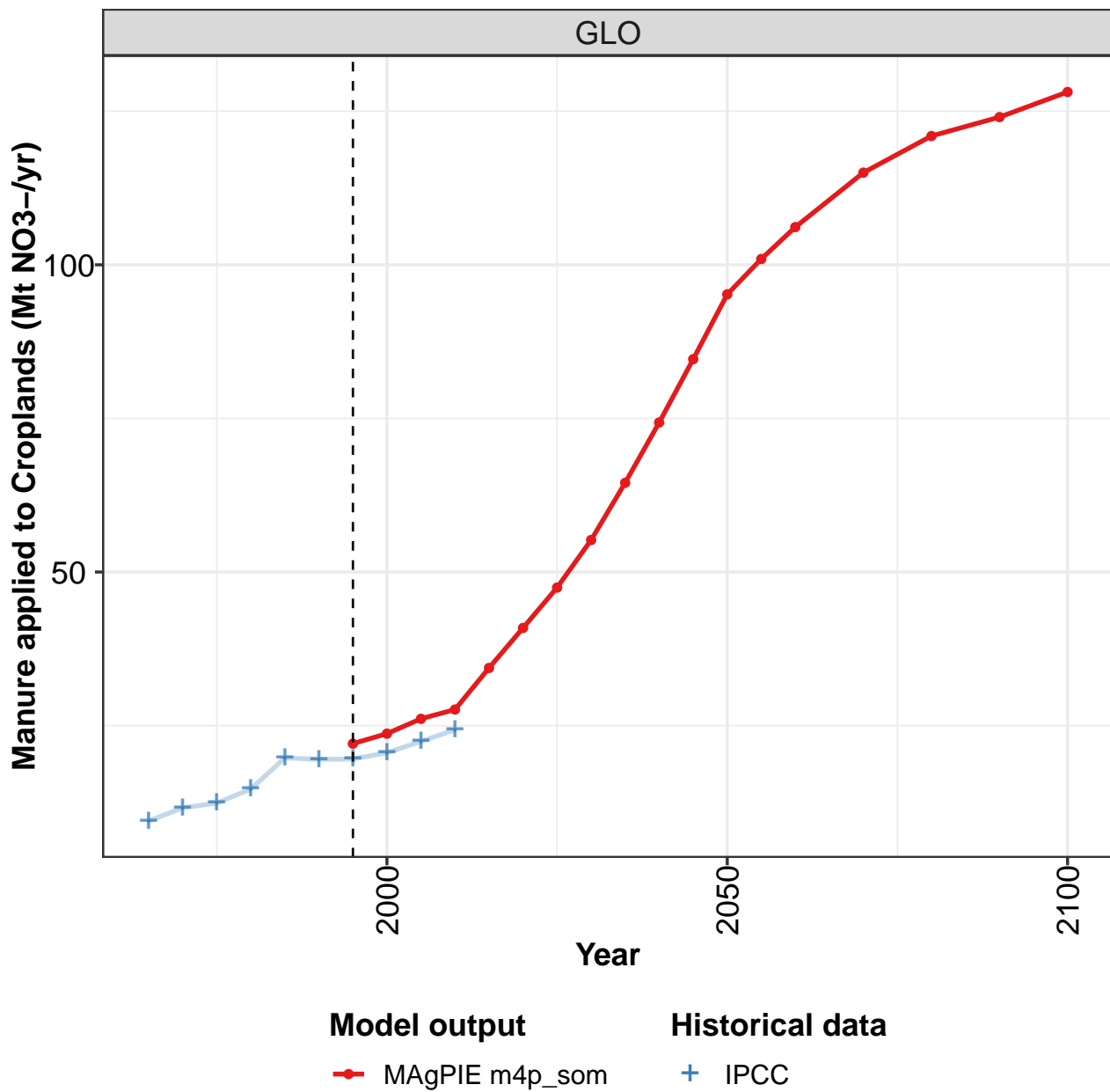
Table 880: MAgPIE m4p\_som — Emissions—NO3Land—Agriculture—Agricultural Soils—Inorganic Fertilizers (Mt NO3-/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	19	32	42	60	67	73	73	77	88	101
CAZ	0	0	1	1	2	2	2	3	3	3
CHA	2	4	6	13	16	22	25	25	32	37
EUR	7	10	12	14	13	11	9	9	9	10
IND	0	1	1	2	4	6	7	7	9	12
JPN	1	1	1	1	1	1	1	0	0	0
LAM	1	1	2	3	3	3	3	5	5	6
MEA	0	1	1	1	2	2	3	3	3	3
NEU	0	1	1	1	1	1	1	1	2	1
OAS	1	2	3	4	6	7	8	10	11	12
REF	2	4	6	8	10	8	2	2	3	3
SSA	0	0	0	1	1	1	1	1	1	1
USA	5	8	10	11	10	10	11	10	10	11

Table 881: IPCC — Emissions—NO3Land—Agriculture—Agricultural Soils—Inorganic Fertilizers (Mt NO3-/yr)

## 16.1.4 Agricultural Soils—Manure applied to Croplands

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

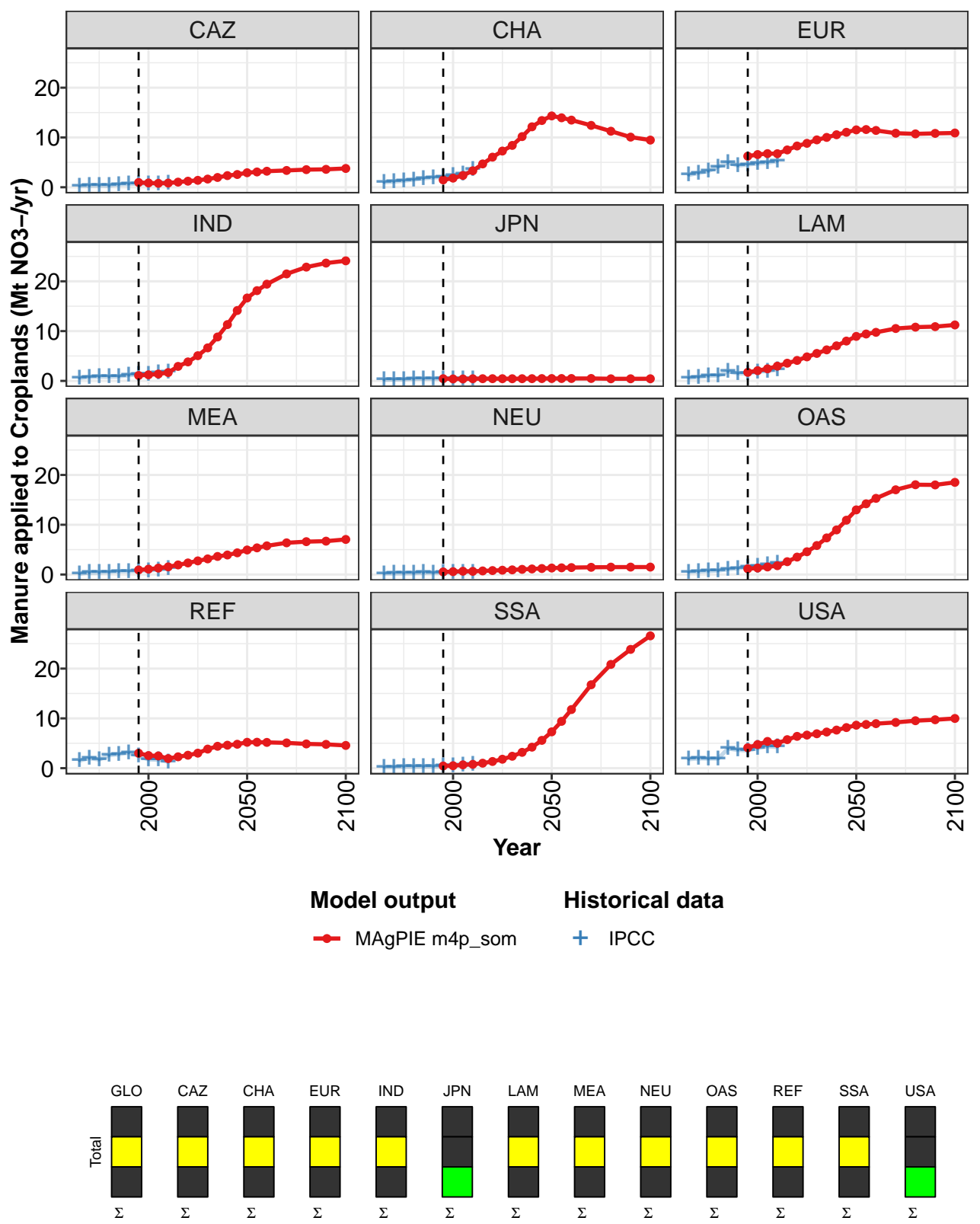


Figure 262: MAgPIE m4p\_som — Emissions—NO3Land—Agriculture—Agricultural Soils—Manure applied to Croplands (Mt NO<sub>3</sub>-yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	22	24	26	28	34	41	47	55	65	74	85
CAZ	1	1	1	1	1	1	1	2	2	2	3
CHA	1	2	2	3	5	6	7	8	10	12	13
EUR	6	7	7	7	8	8	9	10	10	11	11
IND	1	1	1	2	3	4	5	7	9	11	14
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	2	2	2	3	4	4	5	6	6	7	8
MEA	1	1	1	2	2	2	3	3	4	4	4
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	1	1	2	2	3	4	5	6	7	9	11
REF	3	3	2	2	2	3	3	4	4	5	5
SSA	0	0	1	1	1	1	2	2	3	4	6
USA	4	5	5	5	6	6	7	7	7	8	8

Table 882: MAgPIE m4p\_som — Emissions—NO3Land—Agriculture—Agricultural Soils—Manure applied to Croplands (Mt NO3-/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	95	101	106	115	121	124	128
CAZ	3	3	3	3	4	4	4
CHA	14	14	13	12	11	10	9
EUR	12	12	11	11	11	11	11
IND	17	18	19	21	23	24	24
JPN	0	0	0	0	0	0	0
LAM	9	9	10	11	11	11	11
MEA	5	5	6	6	7	7	7
NEU	1	1	1	1	1	1	1
OAS	13	14	15	17	18	18	19
REF	5	5	5	5	5	5	5
SSA	7	9	12	17	21	24	27
USA	9	9	9	9	10	10	10

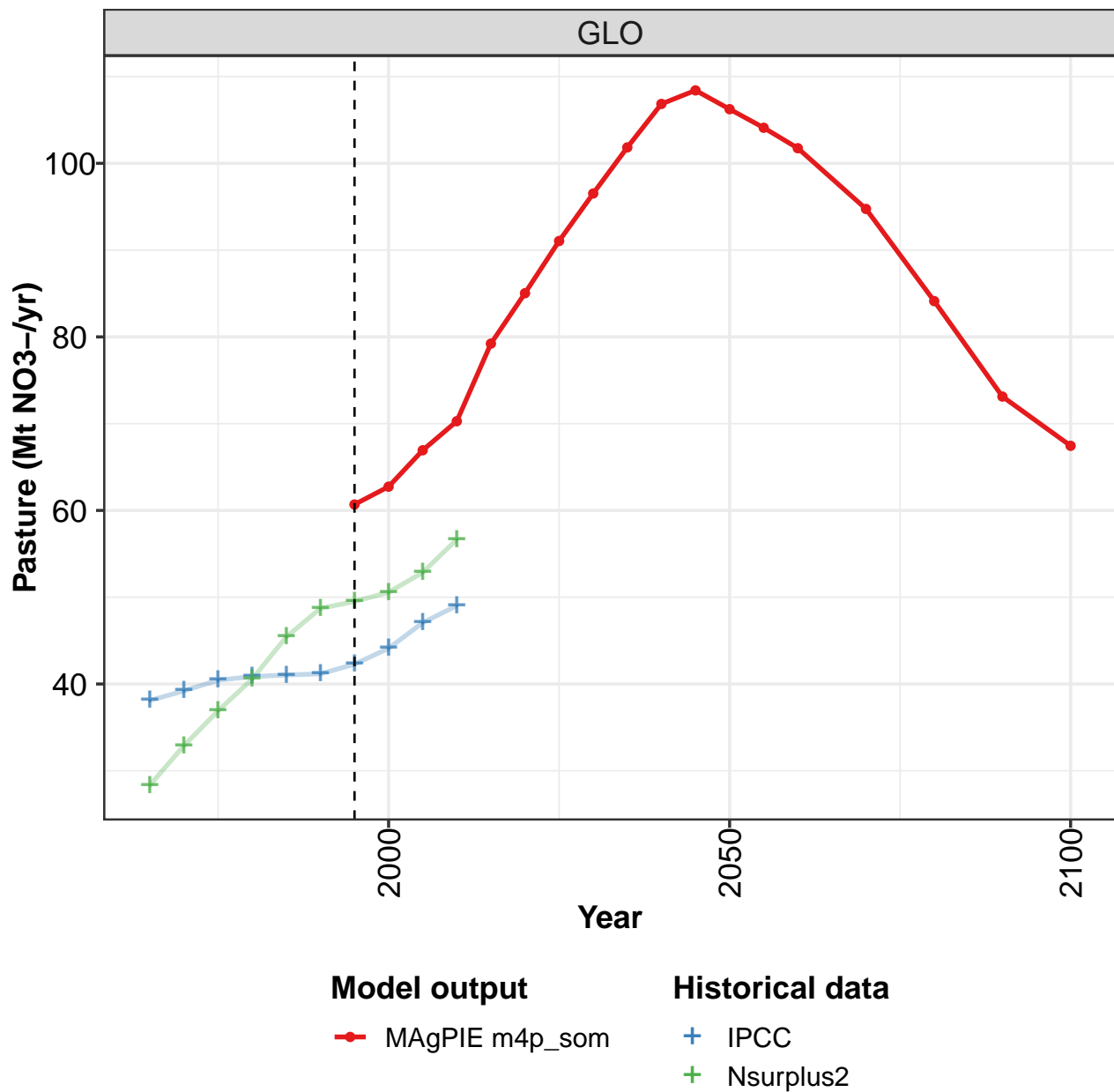
Table 883: MAgPIE m4p\_som — Emissions—NO3Land—Agriculture—Agricultural Soils—Manure applied to Croplands (Mt NO3-/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	9.5	11.6	12.4	14.7	19.7	19.5	19.6	20.6	22.4	24.3
CAZ	0.3	0.3	0.4	0.3	0.6	0.7	0.7	0.7	0.7	0.8
CHA	1.0	1.1	1.3	1.5	1.8	2.0	2.0	2.3	2.7	3.7
EUR	2.5	2.9	3.2	4.1	5.0	4.3	4.6	4.8	5.0	5.2
IND	0.6	0.8	0.9	0.8	0.9	1.1	1.3	1.3	1.6	1.9
JPN	0.2	0.3	0.3	0.4	0.4	0.5	0.4	0.4	0.4	0.4
LAM	0.6	0.8	1.0	1.1	1.9	1.5	1.5	1.8	2.0	2.2
MEA	0.2	0.4	0.4	0.5	0.6	0.7	0.7	0.8	1.0	1.2
NEU	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5
OAS	0.5	0.6	0.7	0.8	1.1	1.3	1.5	1.7	1.9	2.3
REF	1.5	2.0	1.7	2.6	2.8	3.1	2.4	1.7	1.7	1.3
SSA	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.7
USA	1.8	2.0	1.9	1.9	3.9	3.6	3.6	4.0	4.4	4.2

Table 884: IPCC — Emissions—NO3Land—Agriculture—Agricultural Soils—Manure applied to Croplands (Mt NO3-/yr)

## 16.1.5 Agricultural Soils—Pasture

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

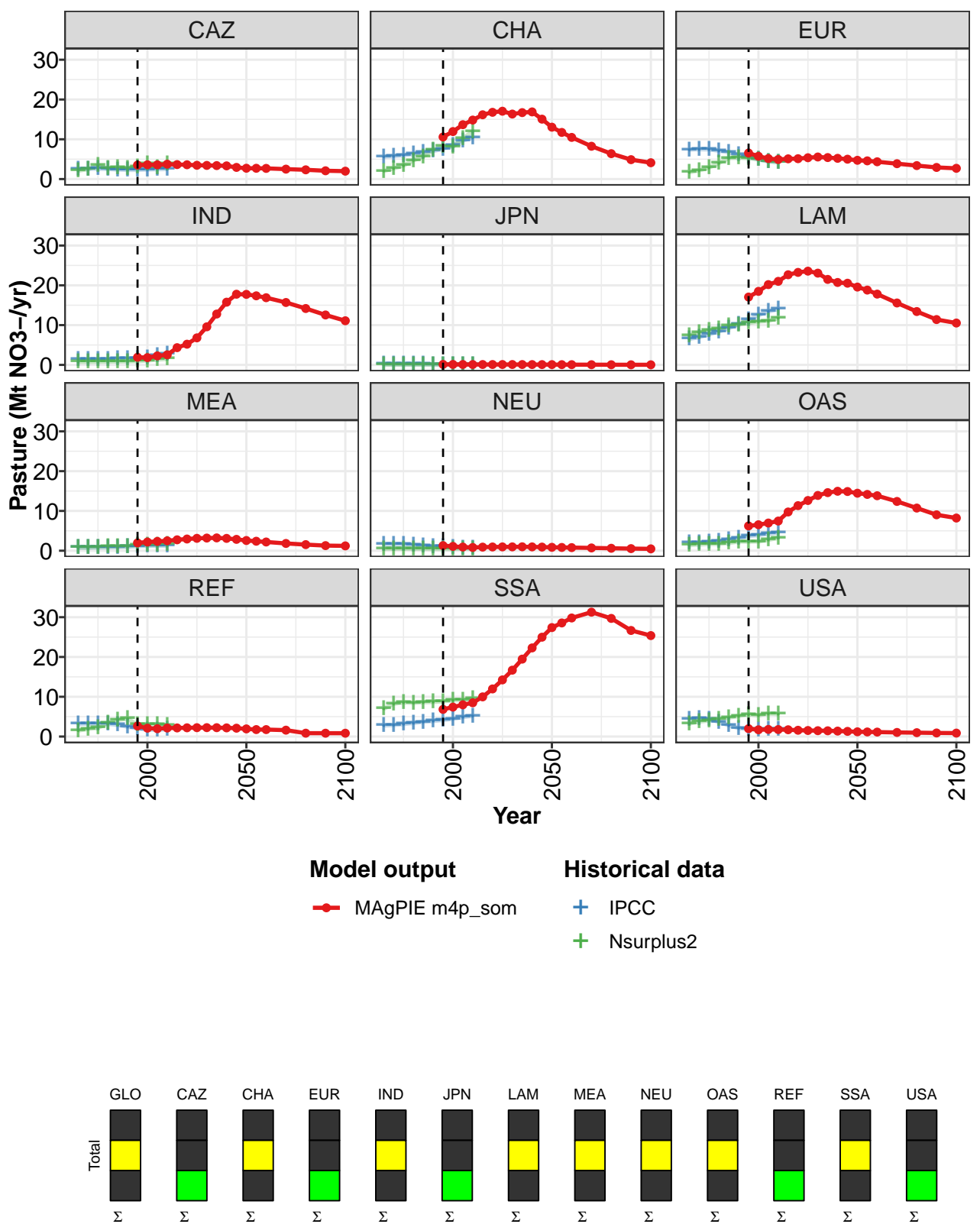


Figure 263: MAgPIE m4p\_som — Emissions—NO3Land—Agriculture—Agricultural Soils—Pasture (Mt NO<sub>3</sub>-/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	61	63	67	70	79	85	91	97	102	107	108
CAZ	4	4	4	4	4	4	3	3	3	3	3
CHA	11	12	14	15	16	17	17	16	17	17	15
EUR	7	6	5	5	5	5	5	6	5	5	5
IND	2	2	2	3	4	5	7	10	13	16	18
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	17	18	20	21	23	23	24	23	21	21	21
MEA	2	2	2	2	3	3	3	3	3	3	3
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	6	7	7	7	10	11	13	14	15	15	15
REF	3	2	2	2	2	2	2	2	2	2	2
SSA	7	7	8	8	10	12	14	17	19	22	25
USA	2	2	2	2	2	2	2	1	1	1	1

Table 885: MAgPIE m4p\_som — Emissions—NO3Land—Agriculture—Agricultural Soils—Pasture (Mt NO3-/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	106	104	102	95	84	73	67
CAZ	3	3	3	2	2	2	2
CHA	13	12	10	8	6	5	4
EUR	5	5	4	4	3	3	3
IND	18	17	17	16	14	13	11
JPN	0	0	0	0	0	0	0
LAM	20	19	18	16	13	11	11
MEA	3	2	2	2	2	1	1
NEU	1	1	1	1	1	1	0
OAS	14	14	14	12	11	9	8
REF	2	2	2	2	1	1	1
SSA	27	29	30	31	30	27	25
USA	1	1	1	1	1	1	1

Table 886: MAgPIE m4p\_som — Emissions—NO3Land—Agriculture—Agricultural Soils—Pasture (Mt NO3-/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	38.1	39.2	40.4	40.9	41.0	41.2	42.3	44.1	47.1	49.0
CAZ	2.5	2.6	2.6	2.5	2.4	2.3	2.3	2.4	2.5	2.5
CHA	5.6	5.7	6.0	6.3	6.7	7.1	7.6	8.5	9.7	10.4
EUR	7.4	7.5	7.4	7.1	6.7	6.1	5.5	4.9	4.5	4.2
IND	1.3	1.3	1.4	1.5	1.5	1.6	1.7	1.8	2.4	2.7
JPN	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
LAM	6.5	6.9	7.7	8.4	9.2	10.2	11.3	12.5	13.4	14.0
MEA	0.8	0.8	0.8	0.8	0.9	1.0	1.1	1.2	1.2	1.2
NEU	1.5	1.6	1.6	1.5	1.3	1.1	1.0	0.8	0.7	0.6
OAS	1.9	2.0	2.2	2.4	2.8	3.2	3.7	3.9	4.3	4.5
REF	3.1	3.2	3.2	3.2	2.9	2.5	2.0	1.7	1.7	1.8
SSA	2.8	2.9	3.1	3.4	3.7	3.9	4.1	4.4	4.9	5.2
USA	4.4	4.5	4.4	3.7	2.8	2.1	1.8	1.7	1.8	1.8

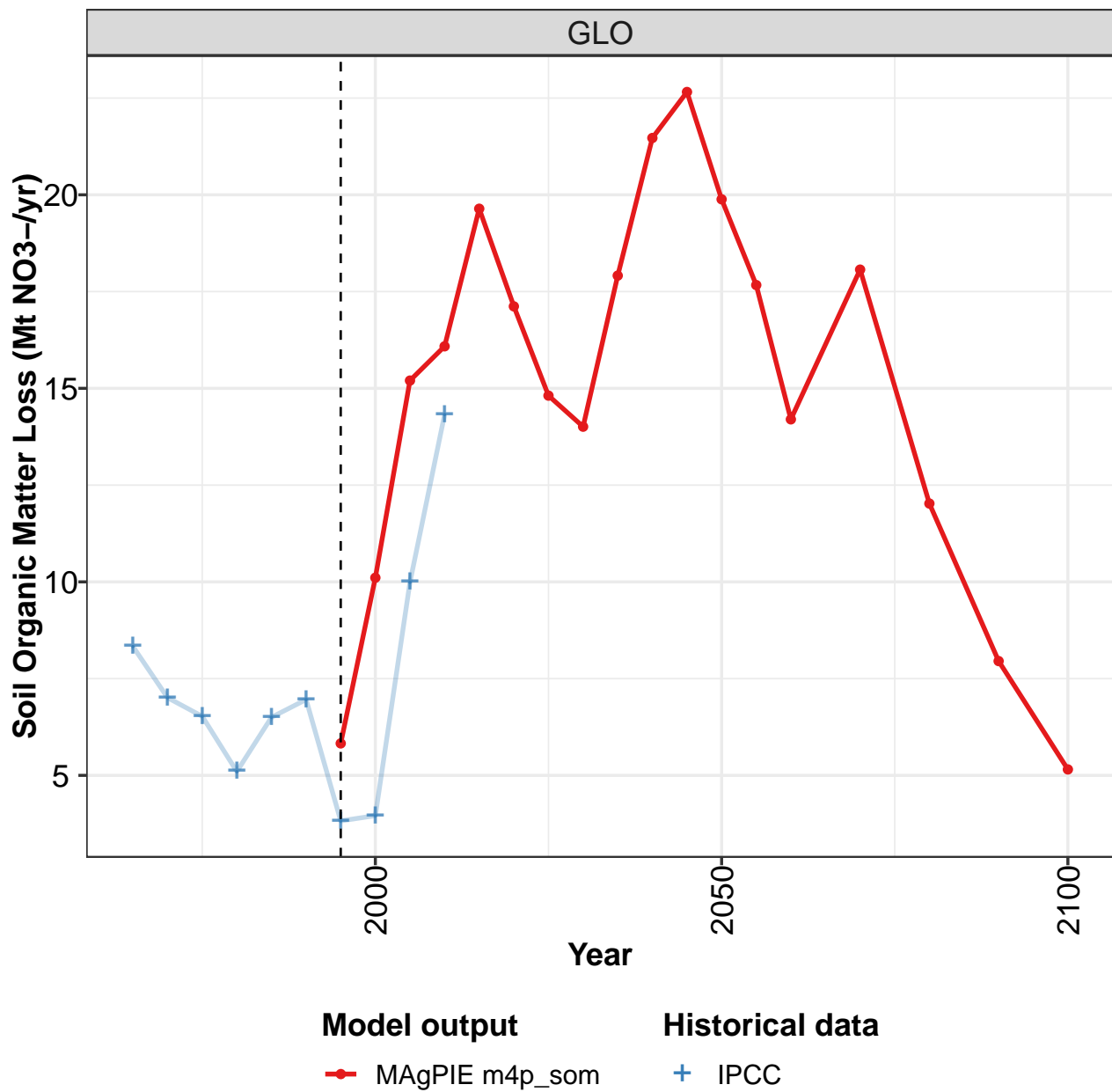
Table 887: IPCC — Emissions—NO3Land—Agriculture—Agricultural Soils—Pasture (Mt NO3-/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	28.3	32.9	36.9	40.6	45.4	48.7	49.5	50.6	52.9	56.7
CAZ	2.1	2.5	3.4	2.7	2.8	2.8	3.1	3.9	2.9	3.8
CHA	2.0	2.7	3.4	4.7	5.7	7.4	8.2	8.1	10.3	12.0
EUR	1.7	2.2	2.9	4.0	5.3	5.3	5.2	4.9	4.4	4.2
IND	0.7	0.7	0.7	0.8	0.8	0.9	0.9	1.1	1.3	1.5
JPN	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	7.4	8.1	8.7	9.1	9.8	10.1	10.5	10.9	11.0	11.8
MEA	0.8	0.8	0.9	1.0	1.1	1.1	1.4	1.4	1.4	1.6
NEU	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.5
OAS	1.4	1.5	1.7	1.7	1.9	2.3	2.2	2.3	2.7	3.2
REF	1.5	1.9	2.2	3.4	4.2	4.5	2.9	3.0	3.1	2.9
SSA	7.0	8.2	8.6	8.5	8.6	8.7	8.8	9.1	9.2	9.5
USA	3.2	3.8	4.0	4.3	4.7	5.2	5.5	5.3	5.8	5.6

Table 888: Nsurplus2 — Emissions—NO3Land—Agriculture—Agricultural Soils—Pasture (Mt NO3-/yr)

## 16.1.6 Agricultural Soils—Soil Organic Matter Loss

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

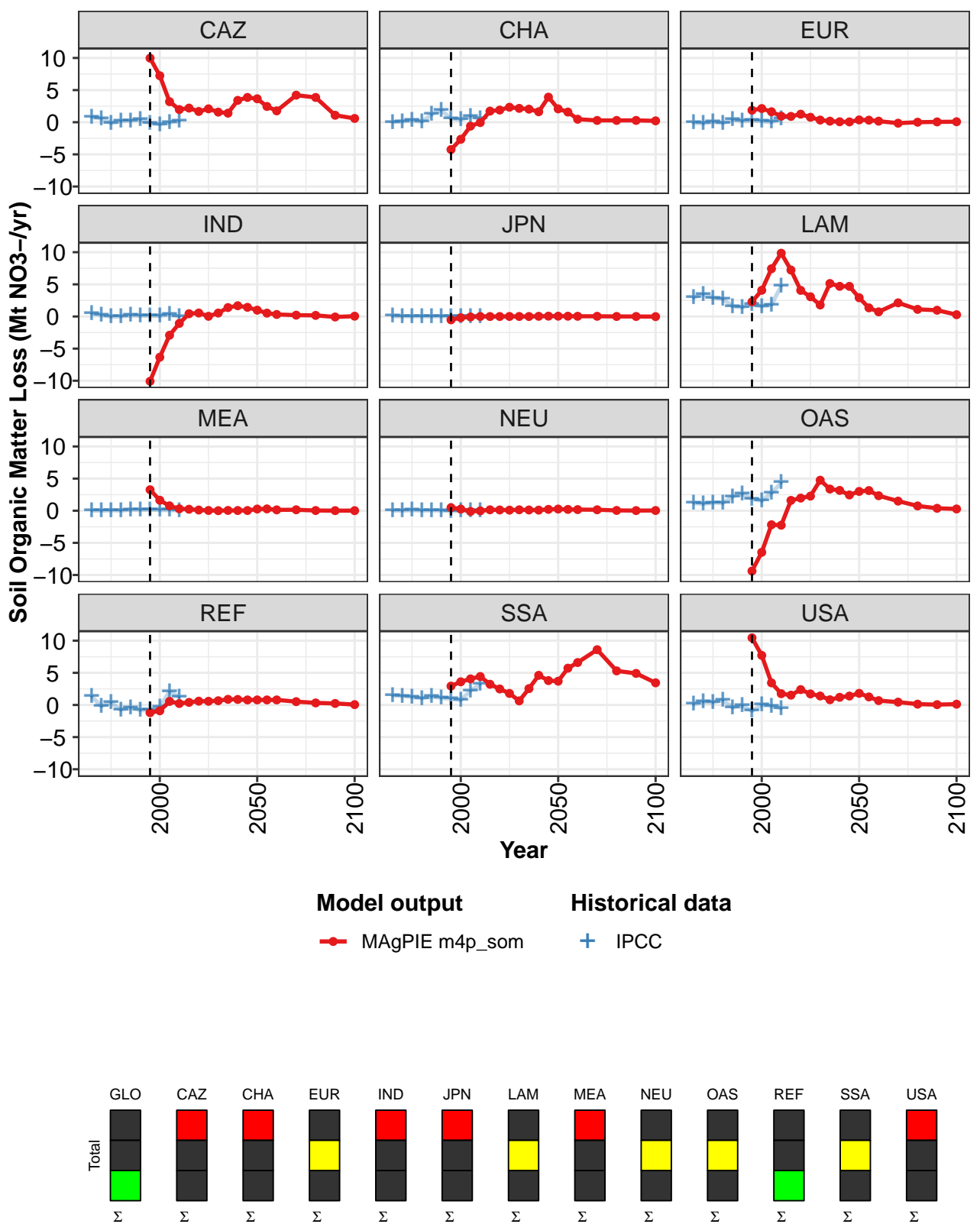


Figure 264: MAgPIE m4p\_som — Emissions—NO3Land—Agriculture—Agricultural Soils—Soil Organic Matter Loss (Mt NO3-/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	5.8	10.1	15.2	16.1	19.6	17.1	14.8	14.0	17.9	21.5	22.7
CAZ	10.0	7.2	3.2	2.0	2.2	1.7	2.1	1.6	1.4	3.4	3.9
CHA	-4.2	-2.7	-0.6	-0.1	1.7	1.9	2.3	2.2	2.0	1.6	3.9
EUR	1.9	2.1	1.6	0.9	0.9	1.3	0.8	0.3	0.2	0.1	0.1
IND	-10.1	-6.3	-2.9	-1.1	0.4	0.5	0.0	0.5	1.4	1.7	1.4
JPN	-0.5	-0.2	-0.1	0.0	-0.0	-0.0	0.0	0.0	0.0	0.0	0.1
LAM	2.3	4.1	7.4	9.8	7.2	4.1	3.1	1.8	5.1	4.7	4.7
MEA	3.3	1.6	0.8	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0
NEU	0.5	0.3	-0.1	-0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2
OAS	-9.4	-6.5	-2.2	-2.3	1.6	2.0	2.3	4.7	3.4	3.2	2.5
REF	-1.2	-0.9	0.6	0.2	0.4	0.6	0.6	0.7	0.9	0.9	0.8
SSA	2.9	3.6	4.1	4.4	3.2	2.5	1.8	0.6	2.5	4.6	3.8
USA	10.5	7.7	3.4	1.8	1.5	2.4	1.7	1.4	0.8	1.2	1.4

Table 889: MAgPIE m4p\_som — Emissions—NO3Land—Agriculture—Agricultural Soils—Soil Organic Matter Loss (Mt NO3-/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	19.9	17.7	14.2	18.1	12.0	8.0	5.2
CAZ	3.7	2.5	1.8	4.2	3.9	1.1	0.6
CHA	2.1	1.6	0.5	0.3	0.3	0.3	0.2
EUR	0.4	0.3	0.2	-0.1	0.0	0.1	0.1
IND	1.0	0.5	0.3	0.2	0.2	-0.1	0.0
JPN	0.1	0.0	0.0	0.0	0.0	0.0	-0.0
LAM	2.9	1.3	0.7	2.1	1.1	1.0	0.3
MEA	0.3	0.3	0.1	0.1	0.0	0.0	0.0
NEU	0.3	0.2	0.2	0.1	0.0	0.0	0.0
OAS	3.0	3.1	2.3	1.5	0.7	0.4	0.3
REF	0.8	0.8	0.8	0.5	0.3	0.2	0.1
SSA	3.7	5.7	6.6	8.6	5.3	4.9	3.4
USA	1.8	1.3	0.7	0.4	0.1	0.1	0.1

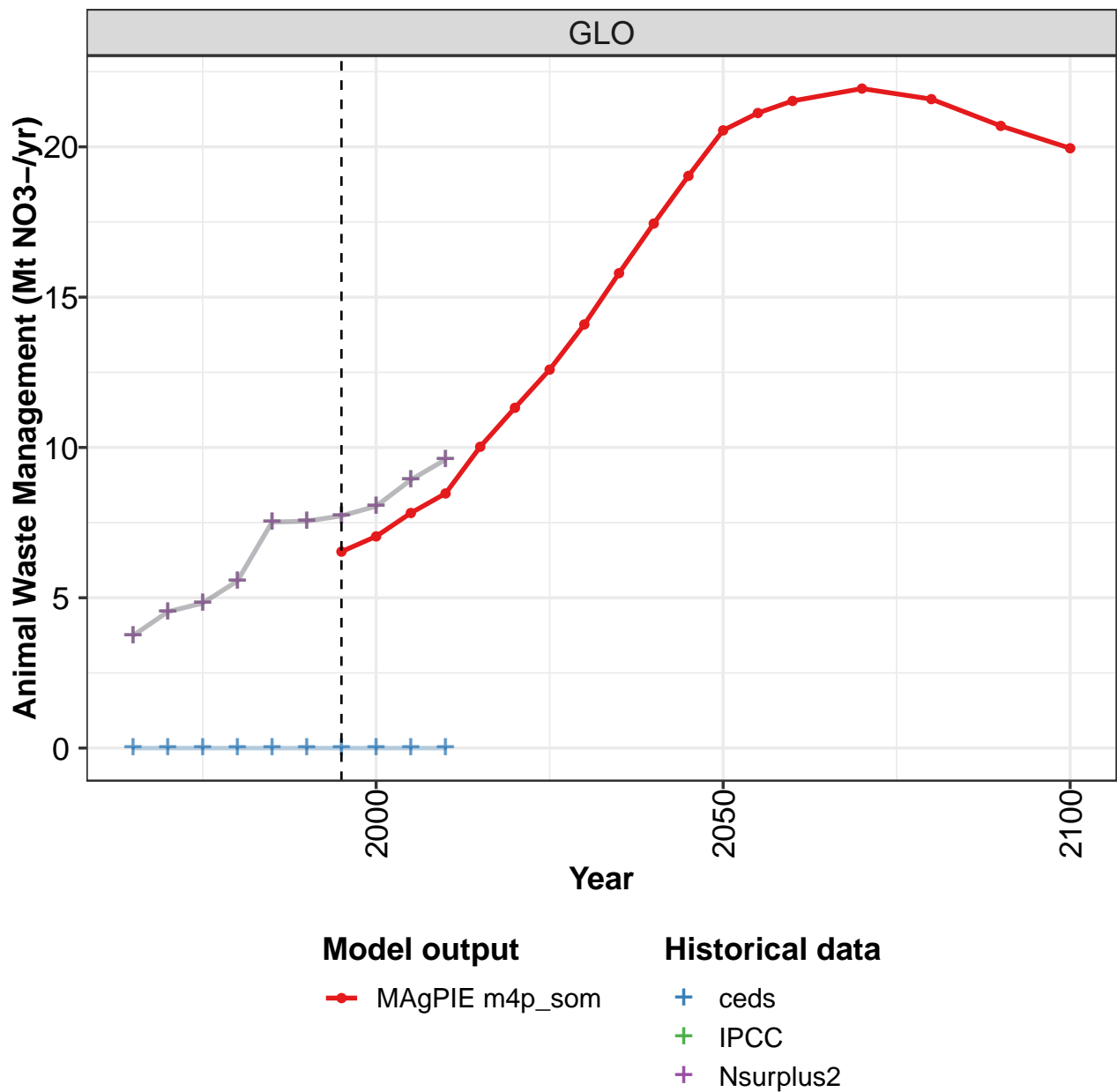
Table 890: MAgPIE m4p\_som — Emissions—NO3Land—Agriculture—Agricultural Soils—Soil Organic Matter Loss (Mt NO3-/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	8.3	7.0	6.5	5.1	6.5	7.0	3.8	4.0	10.0	14.3
CAZ	0.8	0.6	-0.1	0.2	0.2	0.4	-0.1	-0.3	-0.0	0.2
CHA	0.0	0.1	0.3	0.1	1.2	1.9	0.5	0.4	0.9	0.5
EUR	-0.1	-0.2	0.1	-0.1	0.4	0.2	0.3	0.2	0.0	0.5
IND	0.5	0.2	-0.0	0.0	0.2	0.1	0.1	0.1	0.3	0.0
JPN	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0
LAM	2.9	3.5	2.9	2.7	1.6	1.4	1.9	1.6	1.8	4.8
MEA	0.0	-0.0	0.1	0.0	0.2	0.1	0.1	0.1	0.1	0.0
NEU	0.0	0.0	0.1	0.0	0.1	0.0	-0.1	-0.0	-0.0	0.1
OAS	1.2	1.1	1.3	1.2	2.2	2.6	1.8	1.5	2.7	4.4
REF	1.3	-0.2	0.4	-0.8	-0.4	-0.8	-0.8	-0.3	2.1	1.2
SSA	1.5	1.4	1.2	1.0	1.3	1.1	1.0	0.7	2.2	3.2
USA	0.1	0.5	0.4	0.8	-0.4	-0.1	-0.9	0.0	-0.1	-0.6

Table 891: IPCC — Emissions—NO3Land—Agriculture—Agricultural Soils—Soil Organic Matter Loss (Mt NO3-/yr)

## 16.1.7 Animal Waste Management

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

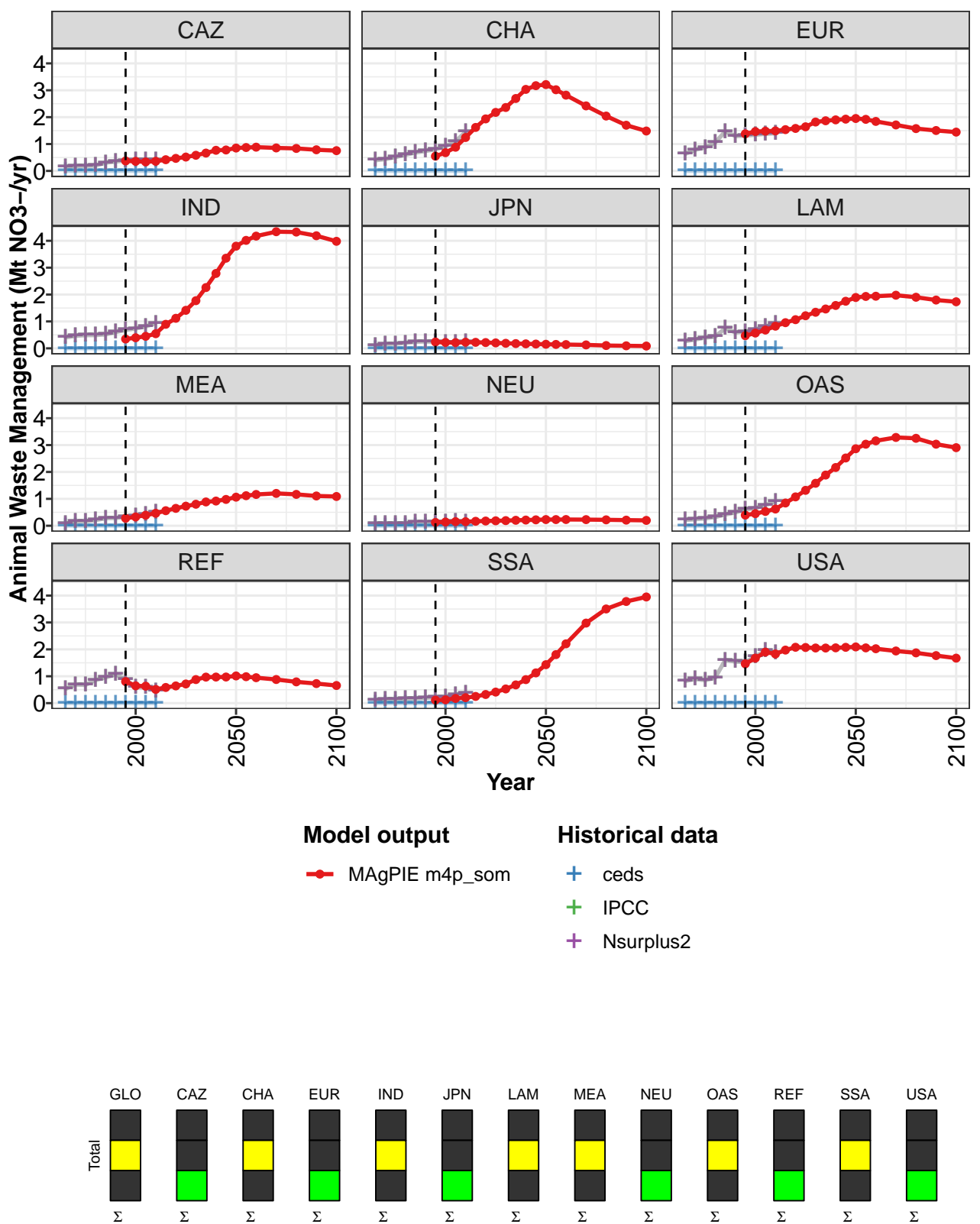


Figure 265: MAgPIE m4p\_som — Emissions—NO3Land—Agriculture—Animal Waste Management (Mt NO3-/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	6.5	7.0	7.8	8.5	10.0	11.3	12.6	14.1	15.8	17.4	19.0
CAZ	0.4	0.4	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.8	0.8
CHA	0.5	0.7	0.9	1.2	1.6	1.9	2.2	2.4	2.7	3.0	3.2
EUR	1.4	1.5	1.5	1.5	1.5	1.6	1.6	1.8	1.9	1.9	1.9
IND	0.3	0.4	0.4	0.5	0.9	1.1	1.4	1.8	2.3	2.8	3.4
JPN	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
LAM	0.5	0.6	0.7	0.8	1.0	1.1	1.2	1.3	1.5	1.6	1.8
MEA	0.3	0.3	0.4	0.5	0.6	0.6	0.7	0.8	0.9	0.9	1.0
NEU	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	0.4	0.4	0.5	0.6	0.8	1.1	1.3	1.6	1.9	2.2	2.5
REF	0.8	0.6	0.6	0.5	0.6	0.6	0.7	0.9	1.0	1.0	1.0
SSA	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.5	0.7	0.9	1.1
USA	1.5	1.7	1.9	1.8	2.0	2.1	2.1	2.1	2.1	2.1	2.1

Table 892: MAgPIE m4p\_som — Emissions—NO3Land—Agriculture—Animal Waste Management (Mt NO3-/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	20.5	21.1	21.5	21.9	21.6	20.7	20.0
CAZ	0.9	0.9	0.9	0.9	0.8	0.8	0.8
CHA	3.2	3.0	2.8	2.4	2.0	1.7	1.5
EUR	1.9	1.9	1.8	1.7	1.6	1.5	1.4
IND	3.8	4.0	4.2	4.3	4.3	4.2	4.0
JPN	0.2	0.1	0.1	0.1	0.1	0.1	0.1
LAM	1.9	1.9	1.9	2.0	1.9	1.8	1.7
MEA	1.1	1.1	1.2	1.2	1.2	1.1	1.1
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	2.9	3.0	3.2	3.3	3.3	3.0	2.9
REF	1.0	1.0	0.9	0.9	0.8	0.7	0.7
SSA	1.4	1.8	2.2	3.0	3.5	3.8	3.9
USA	2.1	2.1	2.0	1.9	1.9	1.8	1.7

Table 893: MAgPIE m4p\_som — Emissions—NO3Land—Agriculture—Animal Waste Management (Mt NO3-/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0	0	0	0	0	0	0	0	0	0
CAZ	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0
LAM	0	0	0	0	0	0	0	0	0	0
MEA	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0
OAS	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0

Table 894: ceds — Emissions—NO3Land—Agriculture—Animal Waste Management (Mt NO3-/yr)



	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3.75	4.53	4.82	5.56	7.52	7.55	7.72	8.05	8.92	9.60
CAZ	0.14	0.18	0.19	0.20	0.31	0.35	0.39	0.41	0.41	0.40
CHA	0.39	0.44	0.51	0.60	0.68	0.74	0.80	0.92	1.10	1.45
EUR	0.63	0.78	0.88	1.06	1.47	1.30	1.31	1.35	1.38	1.40
IND	0.40	0.46	0.49	0.49	0.52	0.60	0.68	0.74	0.82	0.93
JPN	0.10	0.16	0.17	0.20	0.24	0.25	0.24	0.23	0.22	0.23
LAM	0.26	0.33	0.40	0.43	0.75	0.59	0.62	0.71	0.81	0.93
MEA	0.08	0.15	0.16	0.21	0.28	0.29	0.32	0.36	0.42	0.50
NEU	0.06	0.07	0.08	0.08	0.13	0.12	0.12	0.13	0.15	0.15
OAS	0.21	0.24	0.27	0.32	0.42	0.49	0.60	0.65	0.77	0.89
REF	0.53	0.69	0.68	0.86	0.95	1.07	0.88	0.59	0.58	0.46
SSA	0.11	0.13	0.15	0.16	0.18	0.19	0.22	0.24	0.31	0.36
USA	0.82	0.90	0.85	0.94	1.60	1.55	1.52	1.74	1.95	1.89

Table 895: IPCC — Emissions—NO3Land—Agriculture—Animal Waste Management (Mt NO3-/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3.75	4.53	4.82	5.56	7.52	7.55	7.72	8.05	8.92	9.60
CAZ	0.14	0.18	0.19	0.20	0.31	0.35	0.39	0.41	0.41	0.40
CHA	0.39	0.44	0.51	0.60	0.68	0.74	0.80	0.92	1.10	1.45
EUR	0.63	0.78	0.88	1.06	1.47	1.30	1.31	1.35	1.38	1.40
IND	0.40	0.46	0.49	0.49	0.52	0.60	0.68	0.74	0.82	0.93
JPN	0.10	0.16	0.17	0.20	0.24	0.25	0.24	0.23	0.22	0.23
LAM	0.26	0.33	0.40	0.43	0.75	0.59	0.62	0.71	0.81	0.93
MEA	0.08	0.15	0.16	0.21	0.28	0.29	0.32	0.36	0.42	0.50
NEU	0.06	0.07	0.08	0.08	0.13	0.12	0.12	0.13	0.15	0.15
OAS	0.21	0.24	0.27	0.32	0.42	0.49	0.60	0.65	0.77	0.89
REF	0.53	0.69	0.68	0.86	0.95	1.07	0.88	0.59	0.58	0.46
SSA	0.11	0.13	0.15	0.16	0.18	0.19	0.22	0.24	0.31	0.36
USA	0.82	0.90	0.85	0.94	1.60	1.55	1.52	1.74	1.95	1.89

Table 896: Nsurplus2 — Emissions—NO3Land—Agriculture—Animal Waste Management (Mt NO3-/yr)

**Part V****Food Consumption Value**

- 17 Bioenergy crops**
- 18 Crop residues**
- 19 Crops**
- 20 Fish**
- 21 Forage**
- 22 Livestock products**
- 23 Pasture**
- 24 Secondary products**

**Part VI****Food Expenditure Share**

- 25** Bioenergy crops
- 26** Crop residues
- 27** Crops
- 28** Fish
- 29** Forage
- 30** Livestock products
- 31** Pasture
- 32** Secondary products

## Part VII

## Household Expenditure

## 33 Food

## 33.1 Expenditure

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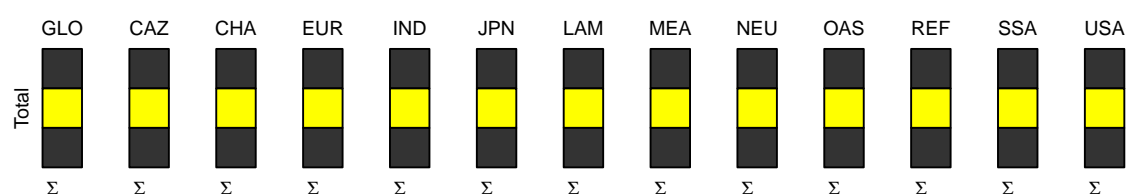


Figure 266: MAgPIE m4p\_som — Household Expenditure—Food—Expenditure (USD/capita)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	124	497	533	553	570	564	580	592	606	615	627
CAZ	0	723	685	666	842	843	845	854	861	836	848
CHA	312	761	886	1020	793	758	780	802	837	862	859
EUR	0	769	733	657	755	757	755	768	781	780	804
IND	0	258	245	328	362	369	424	445	442	422	425
JPN	0	478	470	445	464	454	448	437	420	411	414
LAM	306	604	579	577	586	588	599	609	621	630	646
MEA	0	376	405	455	534	492	500	509	528	544	581
NEU	0	603	621	554	540	546	561	540	575	562	548
OAS	0	265	235	293	332	355	372	379	399	414	438
REF	0	508	850	572	740	745	733	778	824	837	868
SSA	309	313	351	354	567	581	600	617	640	660	676
USA	0	763	939	751	875	854	819	802	788	848	865

Table 897: MAgPIE m4p\_som — Household Expenditure—Food—Expenditure (USD/capita) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	647	659	662	684	715	739	733
CAZ	887	897	904	881	1020	1018	929
CHA	890	858	803	794	771	753	751
EUR	809	835	829	811	808	814	813
IND	465	491	517	573	623	703	699
JPN	416	421	423	428	430	433	429
LAM	652	675	673	647	647	644	646
MEA	603	624	641	676	695	702	698
NEU	534	560	566	582	585	556	497
OAS	463	479	485	514	526	538	515
REF	891	895	895	914	911	890	852
SSA	688	705	724	752	809	843	857
USA	884	896	902	944	1051	1049	955

Table 898: MAgPIE m4p\_som — Household Expenditure—Food—Expenditure (USD/capita) [PART 2/2]

## 33.1.1 Crops

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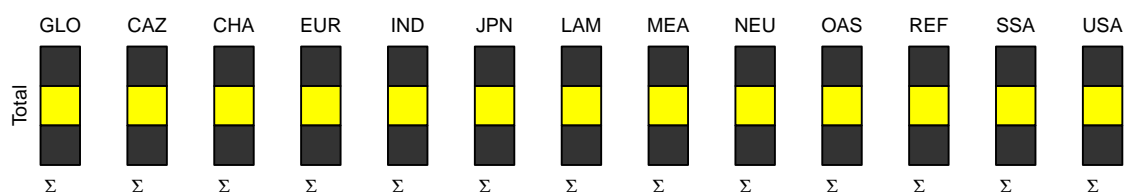


Figure 267: MAgPIE m4p\_som — Household Expenditure—Food—Expenditure—Crops (USD/capita)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	18	174	185	199	181	174	174	177	178	176	175
CAZ	0	143	141	155	147	146	135	133	135	134	134
CHA	84	254	282	321	260	240	237	237	239	241	237
EUR	0	163	156	145	157	155	153	154	155	154	157
IND	0	186	176	235	177	167	162	162	163	154	163
JPN	0	120	124	115	108	105	103	100	89	86	87
LAM	0	120	118	121	118	118	116	121	119	120	116
MEA	0	211	211	188	210	206	204	208	208	207	202
NEU	0	219	310	278	222	223	227	198	222	212	207
OAS	0	116	121	127	142	143	142	138	141	143	141
REF	0	35	91	38	77	72	104	183	185	183	181
SSA	0	170	199	202	195	196	200	204	207	202	195
USA	0	189	181	172	175	170	165	164	165	167	168

Table 899: MAgPIE m4p\_som — Household Expenditure—Food—Expenditure—Crops (USD/capita) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	172	169	166	164	162	161	158
CAZ	133	135	136	132	133	134	133
CHA	237	229	215	212	206	202	200
EUR	157	156	154	156	154	153	151
IND	167	168	170	179	177	183	175
JPN	87	87	88	86	86	86	85
LAM	113	114	114	113	113	112	110
MEA	190	190	188	186	182	179	176
NEU	187	187	187	187	185	169	159
OAS	137	136	134	133	130	129	125
REF	178	177	176	176	174	171	165
SSA	185	179	174	162	163	162	161
USA	170	170	171	172	174	174	171

Table 900: MAgPIE m4p\_som — Household Expenditure—Food—Expenditure—Crops (USD/capita) [PART 2/2]

### 33.1.2 Crops—Cereals

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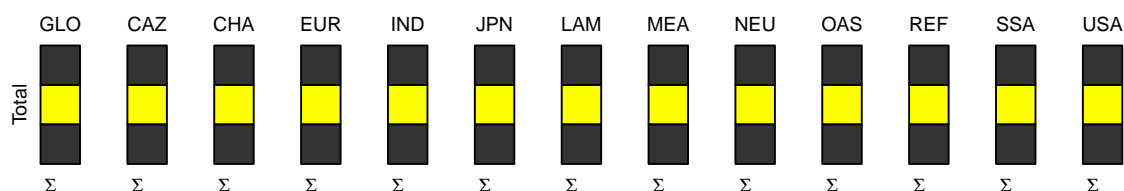


Figure 268: MAgPIE m4p\_som — Household Expenditure—Food—Expenditure—Crops—Cereals (USD/capita)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	65	69	71	51	45	41	40	39	38	40
CAZ	0	42	33	40	35	35	27	26	26	26	28
CHA	0	85	82	79	44	34	32	31	31	31	30
EUR	0	26	26	22	27	27	27	26	26	25	27
IND	0	105	97	124	59	48	35	35	37	34	47
JPN	0	37	36	36	30	31	30	29	19	17	18
LAM	0	30	30	34	28	27	25	25	24	24	24
MEA	0	72	90	69	65	62	59	60	57	56	56
NEU	0	35	33	39	29	28	30	38	36	37	36
OAS	0	59	61	65	54	51	47	42	38	38	36
REF	0	29	83	28	63	57	46	45	45	40	40
SSA	0	61	85	84	76	69	67	64	63	59	54
USA	0	32	32	30	29	27	24	23	24	26	28

Table 901: MAgPIE m4p\_som — Household Expenditure—Food—Expenditure—Crops—Cereals (USD/capita) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	38	37	36	35	34	34	32
CAZ	28	30	31	29	29	30	30
CHA	30	27	22	20	19	17	17
EUR	27	28	26	27	27	27	27
IND	48	48	48	51	49	52	48
JPN	18	19	19	18	18	18	17
LAM	24	24	23	24	24	25	24
MEA	51	51	51	52	49	48	47
NEU	36	36	36	36	35	30	23
OAS	34	33	32	30	27	26	23
REF	39	38	37	37	36	34	30
SSA	47	43	40	34	33	32	30
USA	30	30	31	32	33	33	32

Table 902: MAgPIE m4p\_som — Household Expenditure—Food—Expenditure—Crops—Cereals (USD/capita) [PART 2/2]

### 33.1.3 Crops—Oil crops

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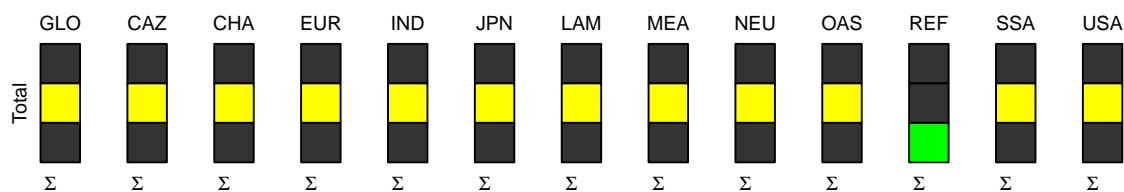


Figure 269: MAgPIE m4p\_som — Household Expenditure—Food—Expenditure—Crops—Oil crops (USD/capita)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.0	6.9	7.7	8.3	7.7	7.4	7.2	6.9	6.5	6.0	5.7
CAZ	0.0	3.7	4.2	5.3	6.5	5.8	6.0	5.7	5.7	5.1	4.8
CHA	0.0	6.2	6.2	7.4	5.7	4.8	4.3	4.1	4.0	4.1	3.9
EUR	0.0	2.0	1.9	2.5	2.7	2.4	2.4	2.3	2.3	2.2	2.3
IND	0.0	5.6	6.4	10.0	8.7	7.9	8.1	7.6	7.0	5.9	5.3
JPN	0.0	9.6	10.6	9.6	10.5	9.9	9.6	9.3	8.8	8.4	8.2
LAM	0.0	4.8	6.3	5.3	5.5	4.7	4.3	4.0	3.5	3.4	3.3
MEA	0.0	1.6	1.3	1.9	2.0	1.7	1.4	1.1	1.1	1.1	1.1
NEU	0.0	2.7	3.5	3.7	3.9	3.3	2.9	2.2	2.5	2.4	2.2
OAS	0.0	16.4	15.7	13.2	12.4	11.2	10.5	9.4	8.7	8.1	7.1
REF	0.0	0.4	1.1	0.8	1.0	0.9	0.9	0.9	0.7	0.6	0.6
SSA	0.0	9.7	14.1	14.1	13.8	15.3	15.3	15.1	14.1	12.7	12.1
USA	0.0	3.1	4.1	3.9	4.6	4.2	3.9	3.6	3.5	3.5	3.6

Table 903: MAgPIE m4p\_som — Household Expenditure—Food—Expenditure—Crops—Oil crops (USD/capita) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	5.6	5.4	5.2	4.8	4.6	4.6	4.5
CAZ	5.0	5.0	4.9	4.8	4.7	4.7	4.6
CHA	3.9	3.7	3.3	3.2	3.0	2.9	2.8
EUR	2.2	2.2	2.2	2.2	2.1	2.1	2.0
IND	5.4	5.4	5.4	5.6	5.5	5.7	5.3
JPN	8.2	8.1	8.1	7.9	7.8	7.7	7.5
LAM	3.1	3.1	3.0	2.8	2.7	2.5	2.4
MEA	1.1	1.1	1.1	1.0	1.0	1.0	1.0
NEU	2.0	2.0	2.0	2.0	2.0	1.9	1.8
OAS	6.6	6.3	6.1	5.7	5.3	5.1	4.9
REF	0.6	0.6	0.6	0.6	0.6	0.6	0.5
SSA	11.6	10.6	9.9	8.0	7.4	7.1	6.9
USA	3.8	3.8	3.9	4.0	4.1	4.2	4.0

Table 904: MAgPIE m4p\_som — Household Expenditure—Food—Expenditure—Crops—Oil crops (USD/capita) [PART 2/2]



## 33.1.4 Crops—Other crops

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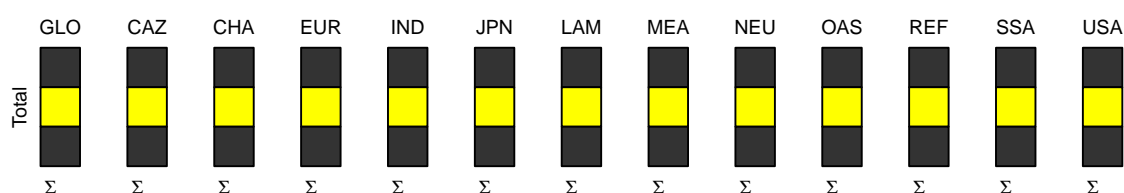


Figure 270: MAgPIE m4p\_som — Household Expenditure—Food—Expenditure—Crops—Other crops (USD/capita)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	18	102	108	119	122	121	125	130	132	132	130
CAZ	0	97	103	109	106	105	102	102	103	102	102
CHA	84	163	194	234	211	201	201	202	204	206	203
EUR	0	136	128	120	127	125	124	126	127	126	128
IND	0	75	72	100	109	110	118	119	119	113	111
JPN	0	74	77	69	67	65	63	62	61	61	61
LAM	0	85	81	81	84	86	86	92	91	93	89
MEA	0	137	120	117	143	142	143	147	149	150	145
NEU	0	181	274	236	190	191	195	158	184	173	169
OAS	0	41	44	48	75	81	84	87	94	97	97
REF	0	6	7	9	13	15	57	136	139	142	141
SSA	0	100	100	104	105	111	117	124	129	130	129
USA	0	154	146	138	142	140	138	137	137	137	137

Table 905: MAgPIE m4p\_som — Household Expenditure—Food—Expenditure—Crops—Other crops (USD/capita) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	127	127	125	124	123	123	122
CAZ	100	100	100	99	99	99	99
CHA	203	198	190	189	184	182	181
EUR	128	126	126	127	124	123	122
IND	113	115	116	121	122	124	121
JPN	60	61	61	61	60	60	60
LAM	86	87	88	86	86	85	84
MEA	138	137	136	133	132	130	128
NEU	149	149	149	149	148	137	134
OAS	95	96	95	97	97	98	96
REF	139	139	139	138	137	136	134
SSA	126	125	124	120	122	124	124
USA	137	136	137	136	137	136	135

Table 906: MAgPIE m4p\_som — Household Expenditure—Food—Expenditure—Crops—Other crops (USD/capita) [PART 2/2]

### 33.1.5 Crops—Sugar crops

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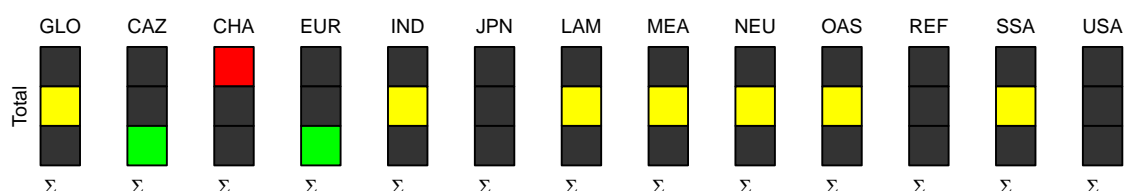


Figure 271: MAgPIE m4p\_som — Household Expenditure—Food—Expenditure—Crops—Sugar crops (USD/capita)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.000	0.169	0.141	0.249	0.221	0.210	0.210	0.196	0.189	0.175	0.167
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.000	0.005	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
EUR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
IND	0.000	0.470	0.383	0.973	0.826	0.748	0.737	0.690	0.649	0.566	0.519
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.000	0.087	0.077	0.117	0.113	0.110	0.104	0.098	0.094	0.090	0.086
MEA	0.000	0.400	0.309	0.267	0.251	0.257	0.273	0.275	0.276	0.259	0.272
NEU	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.000	0.314	0.241	0.220	0.206	0.197	0.189	0.175	0.165	0.166	0.158
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.000	0.086	0.105	0.121	0.122	0.125	0.123	0.087	0.092	0.100	0.095
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 907: MAgPIE m4p\_som — Household Expenditure—Food—Expenditure—Crops—Sugar crops (USD/capita) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.166	0.164	0.162	0.163	0.157	0.153	0.143
CAZ	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CHA	0.001	0.001	0.001	0.001	0.001	0.001	0.001
EUR	0.000	0.000	0.000	0.000	0.000	0.000	0.000
IND	0.523	0.522	0.520	0.539	0.527	0.522	0.492
JPN	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LAM	0.084	0.081	0.080	0.077	0.074	0.071	0.068
MEA	0.262	0.257	0.254	0.262	0.258	0.252	0.248
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.150	0.147	0.140	0.133	0.123	0.118	0.108
REF	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SSA	0.088	0.081	0.075	0.065	0.060	0.056	0.053
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 908: MAgPIE m4p\_som — Household Expenditure—Food—Expenditure—Crops—Sugar crops (USD/capita) [PART 2/2]

### 33.1.6 Fish

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## Error in '[<-.data.frame'('*tmp*', x_hist$scenario != "historical", "id", : missing
values are not allowed in subscripted assignments of data frames
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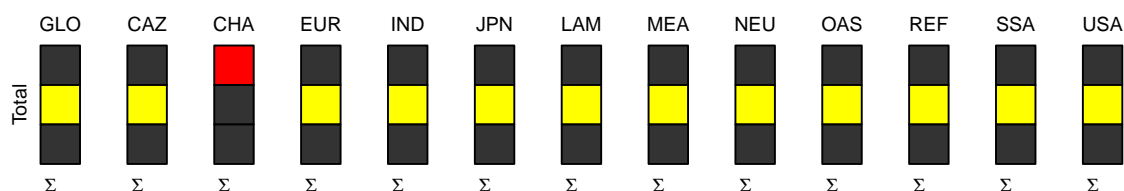


Figure 272: MAGPIE m4p\_som — Household Expenditure—Food—Expenditure—Fish (USD/capita)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.0	5.4	5.8	6.3	7.3	8.1	8.7	9.3	9.9	10.4	10.8
CAZ	0.0	6.6	6.7	7.1	7.1	7.1	7.1	7.1	7.1	7.2	7.2
CHA	0.0	6.5	6.9	8.7	10.1	11.2	11.9	12.4	12.7	13.0	13.2
EUR	0.0	9.1	10.5	10.7	10.9	11.0	11.1	11.0	11.2	11.3	11.4
IND	0.0	1.4	1.6	2.0	3.0	3.6	4.1	4.6	4.9	5.3	5.6
JPN	0.0	38.1	36.1	30.8	32.0	32.2	32.4	32.4	32.5	32.7	32.9
LAM	0.0	3.4	2.9	3.1	3.5	3.7	3.8	4.0	4.1	4.2	4.3
MEA	0.0	2.7	3.2	3.8	4.5	5.0	5.4	5.7	6.1	6.4	6.6
NEU	0.0	3.8	3.5	3.7	3.9	4.1	4.3	4.4	4.5	4.6	4.7
OAS	0.0	6.3	7.0	8.3	11.1	13.1	14.8	16.4	17.6	18.6	19.5
REF	0.0	4.6	5.9	6.3	6.5	6.7	7.0	7.2	7.4	7.5	7.6
SSA	0.0	2.4	2.8	3.1	3.9	5.1	6.3	7.6	9.0	10.3	11.8
USA	0.0	5.9	7.5	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.4

Table 909: MAGPIE m4p\_som — Household Expenditure—Food—Expenditure—Fish (USD/capita) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	11.3	11.8	12.2	13.0	13.7	14.4	14.8
CAZ	7.3	7.3	7.3	7.4	7.4	7.5	7.5
CHA	13.3	13.4	13.5	13.7	13.9	14.0	14.1
EUR	11.5	11.6	11.7	12.0	12.2	12.4	12.5
IND	5.9	6.1	6.3	6.7	7.0	7.3	7.5
JPN	33.2	33.5	33.7	34.5	35.0	35.5	35.9
LAM	4.4	4.5	4.6	4.7	4.8	4.9	5.0
MEA	6.9	7.1	7.3	7.7	8.0	8.3	8.4
NEU	4.8	4.9	5.0	5.2	5.4	5.5	5.6
OAS	20.3	20.9	21.5	22.2	22.9	23.3	23.5
REF	7.6	7.7	7.8	8.0	8.1	8.2	8.3
SSA	13.2	14.6	15.9	18.3	20.2	21.6	22.7
USA	7.5	7.5	7.5	7.5	7.6	7.6	7.6

Table 910: MAGPIE m4p\_som — Household Expenditure—Food—Expenditure—Fish (USD/capita) [PART 2/2]

### 33.1.7 Livestock products

```
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values are not allowed in subscripted assignments of data frames
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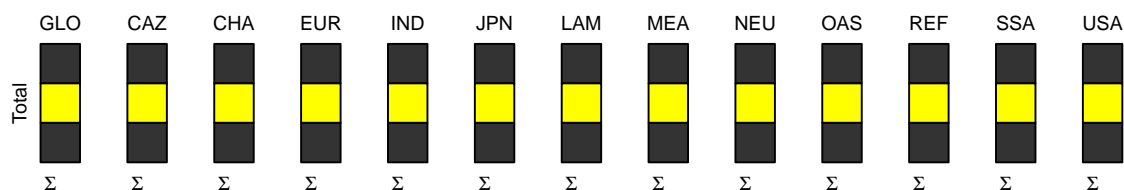


Figure 273: MAgPIE m4p\_som — Household Expenditure—Food—Expenditure—Livestock products (USD/capita)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	106	239	261	260	272	266	279	286	299	311	323
CAZ	0	396	329	395	449	463	481	499	506	497	513
CHA	228	422	523	578	374	340	353	367	395	412	411
EUR	0	370	384	354	374	379	380	390	402	403	421
IND	0	39	49	47	115	129	181	202	200	192	185
JPN	0	142	142	145	160	155	148	138	139	138	141
LAM	306	373	349	331	334	334	346	351	368	375	394
MEA	0	132	151	233	274	231	240	247	270	286	327
NEU	0	301	244	155	194	206	215	220	232	236	228
OAS	0	120	74	132	136	151	165	174	192	203	228
REF	0	390	630	392	498	508	460	418	461	477	508
SSA	309	75	79	82	294	298	304	308	318	352	366
USA	0	416	459	325	424	406	377	371	362	416	431

Table 911: MAgPIE m4p\_som — Household Expenditure—Food—Expenditure—Livestock products (USD/capita) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	346	358	363	383	413	437	431
CAZ	549	555	561	542	679	675	585
CHA	439	418	380	373	356	343	341
EUR	427	454	457	436	435	441	442
IND	220	242	263	303	353	424	429
JPN	142	144	145	151	154	156	151
LAM	407	427	424	398	401	422	410
MEA	359	379	396	433	457	467	465
NEU	236	262	266	281	287	276	229
OAS	256	272	278	306	320	331	312
REF	533	536	535	550	548	530	500
SSA	379	395	411	439	482	509	518
USA	444	457	457	497	599	598	510

Table 912: MAgPIE m4p\_som — Household Expenditure—Food—Expenditure—Livestock products (USD/capita) [PART 2/2]

## 33.1.8 Secondary products

```
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values are not allowed in subscripted assignments of data frames
```

```
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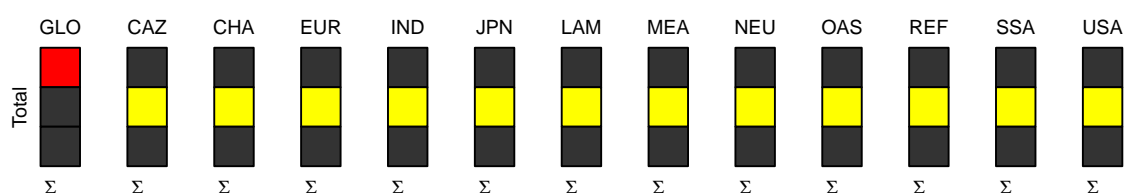


Figure 274: MAgPIE m4p\_som — Household Expenditure—Food—Expenditure—Secondary products (USD/capita)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	78	81	87	110	115	119	120	119	117	117
CAZ	0	177	209	109	239	226	222	215	213	199	193
CHA	0	79	73	113	149	166	178	185	190	196	197
EUR	0	227	182	147	213	212	210	213	213	212	215
IND	0	32	18	44	67	70	77	76	74	71	70
JPN	0	178	168	154	165	161	165	166	159	154	153
LAM	0	107	109	122	130	132	133	133	130	131	132
MEA	0	30	40	30	45	49	50	49	44	45	45
NEU	0	79	64	118	120	113	114	118	116	108	108
OAS	0	23	32	25	43	47	50	50	49	49	50
REF	0	78	123	136	158	158	162	171	170	170	172
SSA	0	65	70	67	74	82	90	98	107	96	103
USA	0	152	292	247	269	271	269	260	254	257	259

Table 913: MAgPIE m4p\_som — Household Expenditure—Food—Expenditure—Secondary products (USD/capita) [PART 1/2]

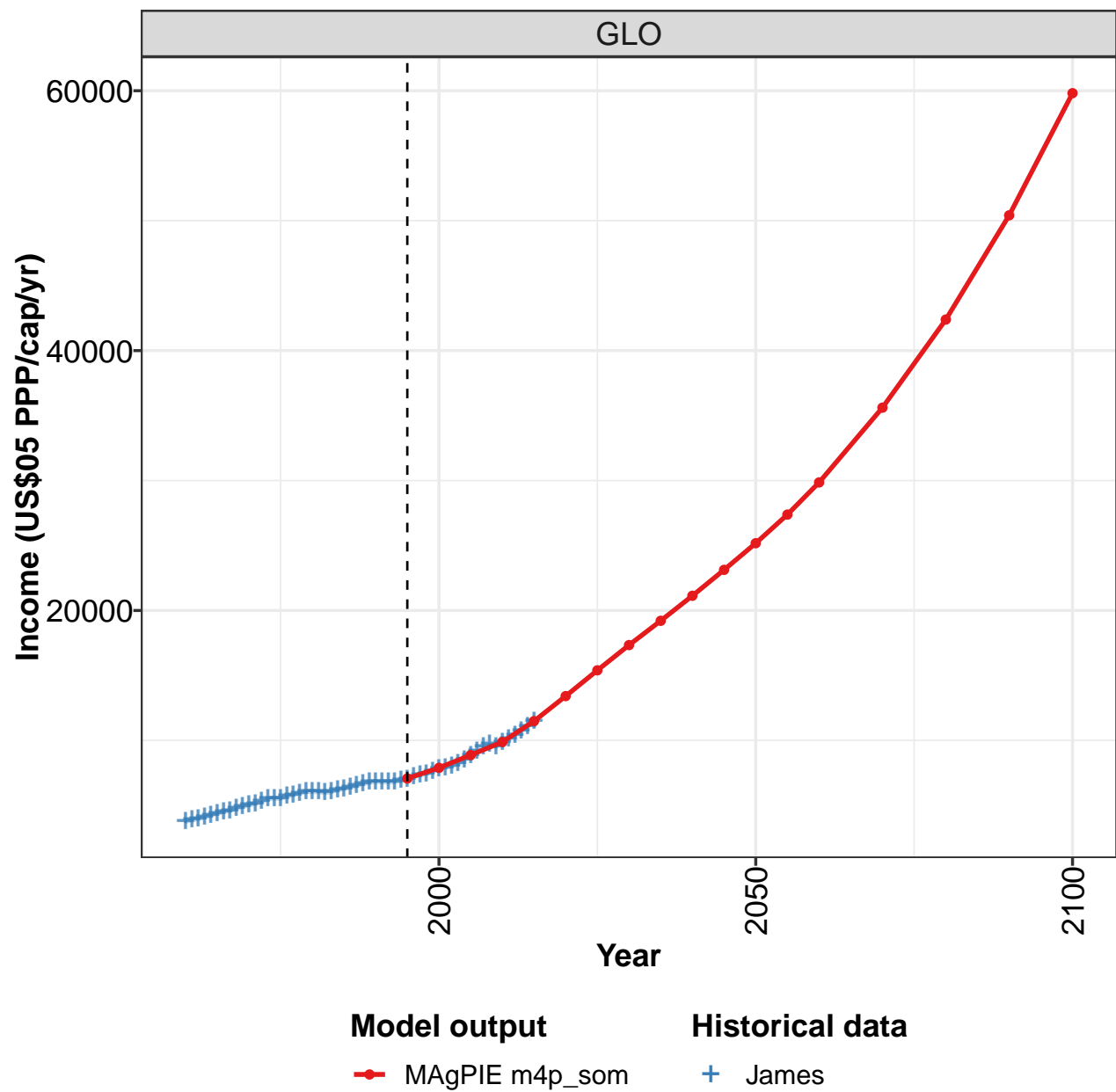
	2050	2055	2060	2070	2080	2090	2100
GLO	119	120	121	124	126	126	129
CAZ	197	200	200	200	200	202	202
CHA	200	198	194	195	195	194	195
EUR	214	213	206	207	207	208	207
IND	73	75	78	85	86	88	87
JPN	154	155	156	157	155	156	156
LAM	129	129	130	131	127	105	121
MEA	46	48	49	48	48	47	49
NEU	106	106	107	108	108	106	105
OAS	50	51	51	53	54	55	55
REF	172	174	176	179	180	181	179
SSA	110	117	124	134	144	150	155
USA	262	262	265	267	270	269	266

Table 914: MAgPIE m4p\_som — Household Expenditure—Food—Expenditure—Secondary products (USD/capita) [PART 2/2]

Part VIII

# Income

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

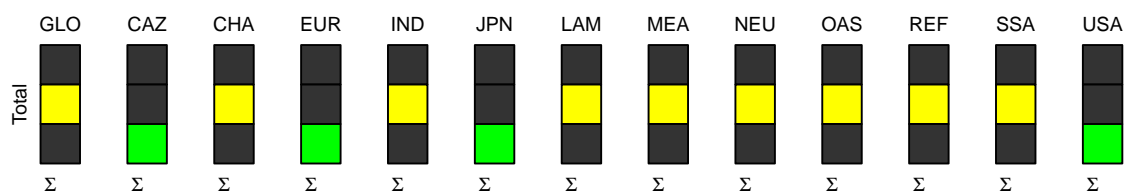
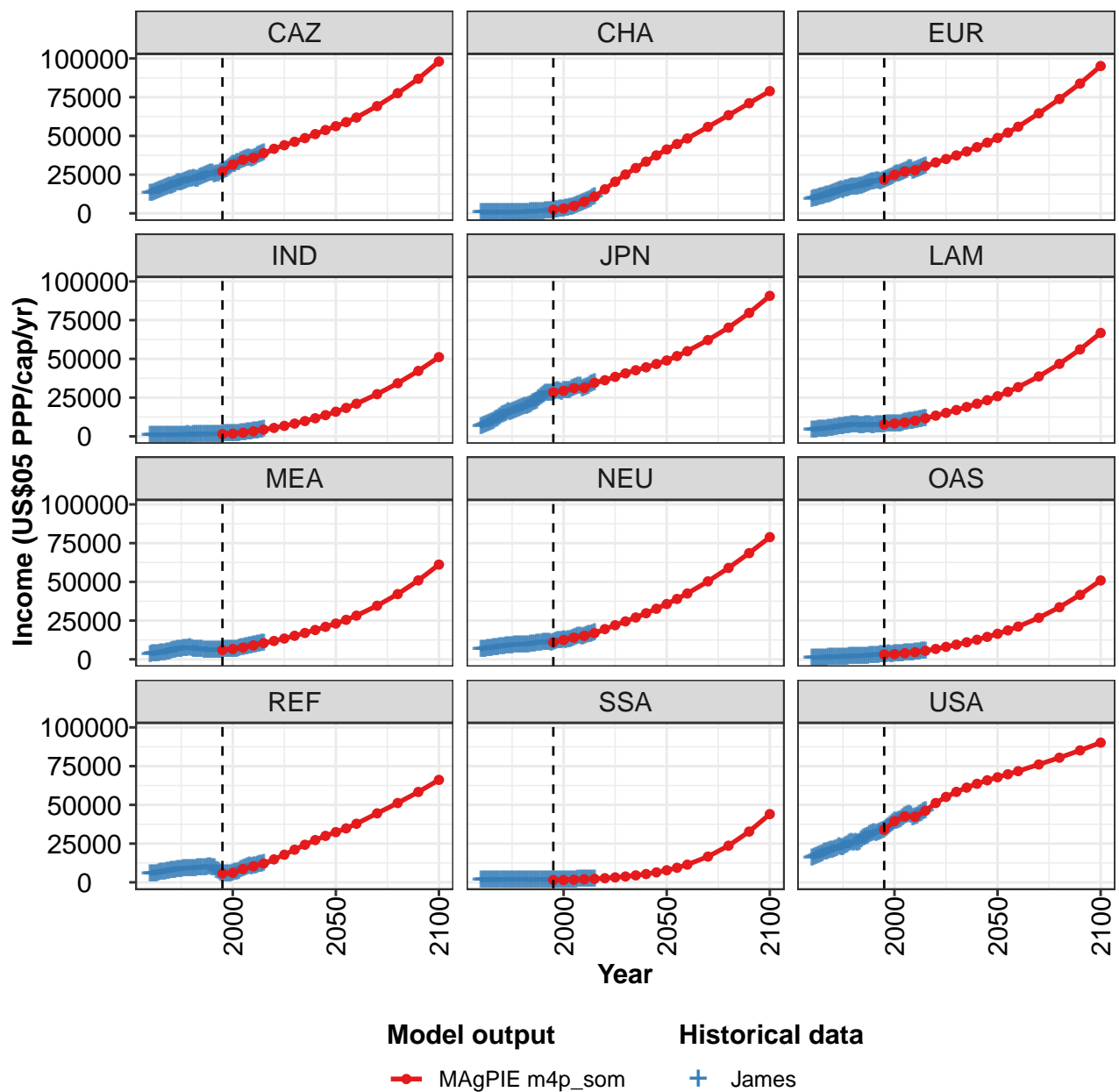


Figure 275: MAgPIE m4p\_som — Income (US\$05 PPP/cap/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	7073	7892	8875	9881	11486	13412	15396	17340	19209	21134	23129
CAZ	27123	31531	34642	35772	38839	41683	43965	46178	48581	51157	53788
CHA	2294	3145	4773	7508	10894	15528	20422	25076	29275	33376	37446
EUR	21701	24870	27003	27829	30612	32885	35088	37405	39933	42730	45655
IND	1467	1778	2336	3218	4354	5440	6763	8238	9863	11691	13695
JPN	28385	29396	31129	31329	34576	36237	38404	40665	42675	44566	46716
LAM	7651	8298	8937	10115	11659	13374	15156	17006	18945	21056	23364
MEA	6005	6669	7587	8980	10449	11856	13437	15208	17032	18964	20980
NEU	11011	12490	13974	15139	16938	19526	22013	24496	27026	29764	32651
OAS	3138	3362	3927	4630	5527	6710	8054	9485	10993	12663	14492
REF	5643	6102	8573	10334	12155	14806	17827	21044	24246	27274	29978
SSA	1447	1497	1712	1959	2250	2673	3183	3785	4482	5350	6433
USA	33906	39506	42583	42310	46247	51202	55133	58387	61135	63617	65878

Table 915: MAgPIE m4p\_som — Income (US\$05 PPP/cap/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	25179	27383	29857	35611	42390	50413	59813
CAZ	56258	58880	61858	69230	77575	86863	98046
CHA	41262	44765	48364	55818	63360	71103	78890
EUR	48674	52091	55917	64578	73793	83791	95101
IND	15883	18343	21063	27230	34259	42234	51150
JPN	48976	51817	54980	62164	70188	79660	90674
LAM	25903	28699	31763	38670	46764	56118	66772
MEA	23096	25500	28219	34605	42114	50947	61155
NEU	35698	38977	42505	50334	59031	68560	78879
OAS	16487	18696	21139	26820	33621	41621	50940
REF	32402	34829	37801	44525	51187	58318	66124
SSA	7772	9403	11398	16606	23657	32761	44029
USA	67814	69760	71774	76070	80449	85163	90160

Table 916: MAgPIE m4p\_som — Income (US\$05 PPP/cap/yr) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	3759	3866	3982	4070	4258	4394	4524	4606	4769	4913	5038
CAZ	13146	13232	13762	14252	14879	15382	15934	16158	16724	17373	17666
CHA	348	288	283	303	331	363	382	360	346	373	408
EUR	9030	9404	9730	10077	10531	10892	11245	11562	12046	12580	13054
IND	654	664	671	697	730	733	721	757	772	819	827
JPN	6249	6867	7352	7843	8574	8924	9695	10563	11673	12801	13734
LAM	4102	4223	4296	4352	4536	4652	4738	4835	5017	5168	5373
MEA	3254	3332	3424	3607	3823	4081	4224	4381	4761	5014	5340
NEU	6285	6459	6609	6861	7031	7124	7394	7548	7740	7944	8165
OAS	890	914	930	952	975	999	1030	1035	1088	1137	1194
REF	5379	5582	5643	5449	6044	6304	6528	6739	7054	7091	7551
SSA	1274	1273	1306	1346	1385	1406	1417	1406	1422	1477	1549
USA	15803	15934	16587	17047	17709	18524	19370	19646	20356	20785	20648

Table 917: James — Income (US\$05 PPP/cap/yr) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	5140	5285	5509	5544	5523	5699	5814	5949	6051	6049	6048
CAZ	18166	18697	19514	19771	19946	20509	20823	21346	21836	22085	22509
CHA	425	430	459	461	482	481	506	558	597	633	664
EUR	13434	13938	14645	14956	14925	15519	15896	16335	16829	16982	16880
IND	831	813	826	820	863	873	903	942	896	927	964
JPN	14155	15062	16014	15645	15880	16305	16827	17519	18281	18545	19087
LAM	5571	5801	6113	6353	6427	6657	6806	6957	7215	7457	7387
MEA	5603	6055	6329	6639	6660	7174	7234	7125	7284	6962	6686
NEU	8417	8651	8787	8903	8889	9192	9404	9417	9412	9452	9462
OAS	1240	1268	1348	1392	1418	1492	1565	1639	1692	1716	1778
REF	7680	7658	8209	8372	8332	8644	8779	8931	8835	8792	8814
SSA	1599	1613	1634	1702	1668	1678	1671	1643	1646	1658	1663
USA	21089	21973	22918	22678	22481	23423	24218	25229	25708	25425	25806

Table 918: James — Income (US\$05 PPP/cap/yr) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	5990	6040	6193	6298	6400	6506	6665	6774	6835	6808	6793
CAZ	21899	22109	23118	23945	24316	24938	25679	26038	25789	25102	25144
CHA	714	773	866	955	1021	1117	1208	1229	1267	1359	1514
EUR	16966	17228	17616	17995	18472	18954	19667	20226	20564	20609	20678
IND	976	1009	1036	1070	1094	1121	1194	1238	1284	1268	1301
JPN	19550	19905	20545	21633	22144	22911	24419	25605	26926	27699	27840
LAM	7198	6859	6968	7015	7174	7244	7170	7130	7056	7180	7274
MEA	6548	6452	6389	6269	6010	5944	5808	5762	5913	5946	5895
NEU	9329	9415	9615	9834	10068	10439	10507	10558	10981	10786	10710
OAS	1822	1896	1958	1976	2045	2133	2249	2366	2501	2621	2716
REF	8965	9179	9225	9242	9540	9594	9738	9852	9541	9169	7785
SSA	1624	1575	1564	1552	1516	1488	1516	1527	1519	1485	1426
USA	25105	26034	27677	28572	29291	29965	30894	31680	31898	31381	32016

Table 919: James — Income (US\$05 PPP/cap/yr) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	6805	6912	7032	7185	7361	7433	7595	7842	7913	8025	8203
CAZ	25629	26558	27122	27521	28374	29291	30521	31530	31864	32563	33068
CHA	1725	1909	2077	2250	2388	2524	2689	2882	3092	3350	3669
EUR	20559	21098	21671	22071	22639	23287	23948	24840	25302	25588	25896
IND	1326	1383	1467	1532	1594	1653	1746	1778	1830	1881	1980
JPN	27804	27946	28385	29056	29419	28727	28613	29396	29395	29398	29742
LAM	7421	7646	7596	7733	8036	8106	8021	8246	8194	8131	8170
MEA	5853	5870	6008	6240	6271	6427	6467	6673	6675	6717	6933
NEU	10846	10601	11009	11514	12130	12351	12076	12488	12112	12394	12631
OAS	2823	2969	3131	3273	3341	3079	3194	3355	3392	3517	3621
REF	6912	5983	5643	5433	5511	5310	5582	6102	6470	6838	7383
SSA	1396	1384	1401	1434	1448	1442	1440	1451	1480	1525	1563
USA	32508	33449	33906	34790	35945	37085	38406	39506	39449	39735	40368

Table 920: James — Income (US\$05 PPP/cap/yr) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	8505	8820	9163	9530	9689	9514	9826	10099	10420	10747	11089
CAZ	33819	34642	35231	35829	35817	35105	35771	36421	37097	37696	38276
CHA	4033	4488	5001	5643	6136	6648	7242	7833	8469	9153	9892
EUR	26490	26973	27789	28557	28683	27387	27798	28221	28772	29360	29968
IND	2129	2336	2522	2735	2833	2994	3218	3423	3630	3858	4098
JPN	30532	31129	31764	32515	32109	30449	31329	31861	32565	33243	33908
LAM	8528	8888	9267	9677	9952	9665	10069	10350	10656	10965	11279
MEA	7287	7593	7942	8312	8691	8738	8988	9304	9595	9864	10142
NEU	13332	13972	14606	15122	15205	14584	15137	15444	15792	16160	16546
OAS	3770	3920	4093	4280	4397	4410	4623	4782	4950	5128	5319
REF	8027	8573	9314	10147	10684	10043	10334	10653	11012	11382	11769
SSA	1604	1666	1732	1823	1877	1871	1915	1970	2037	2100	2160
USA	41454	42583	43308	43723	43333	41589	42310	42916	43809	44665	45482

Table 921: James — Income (US\$05 PPP/cap/yr) [PART 5/6]

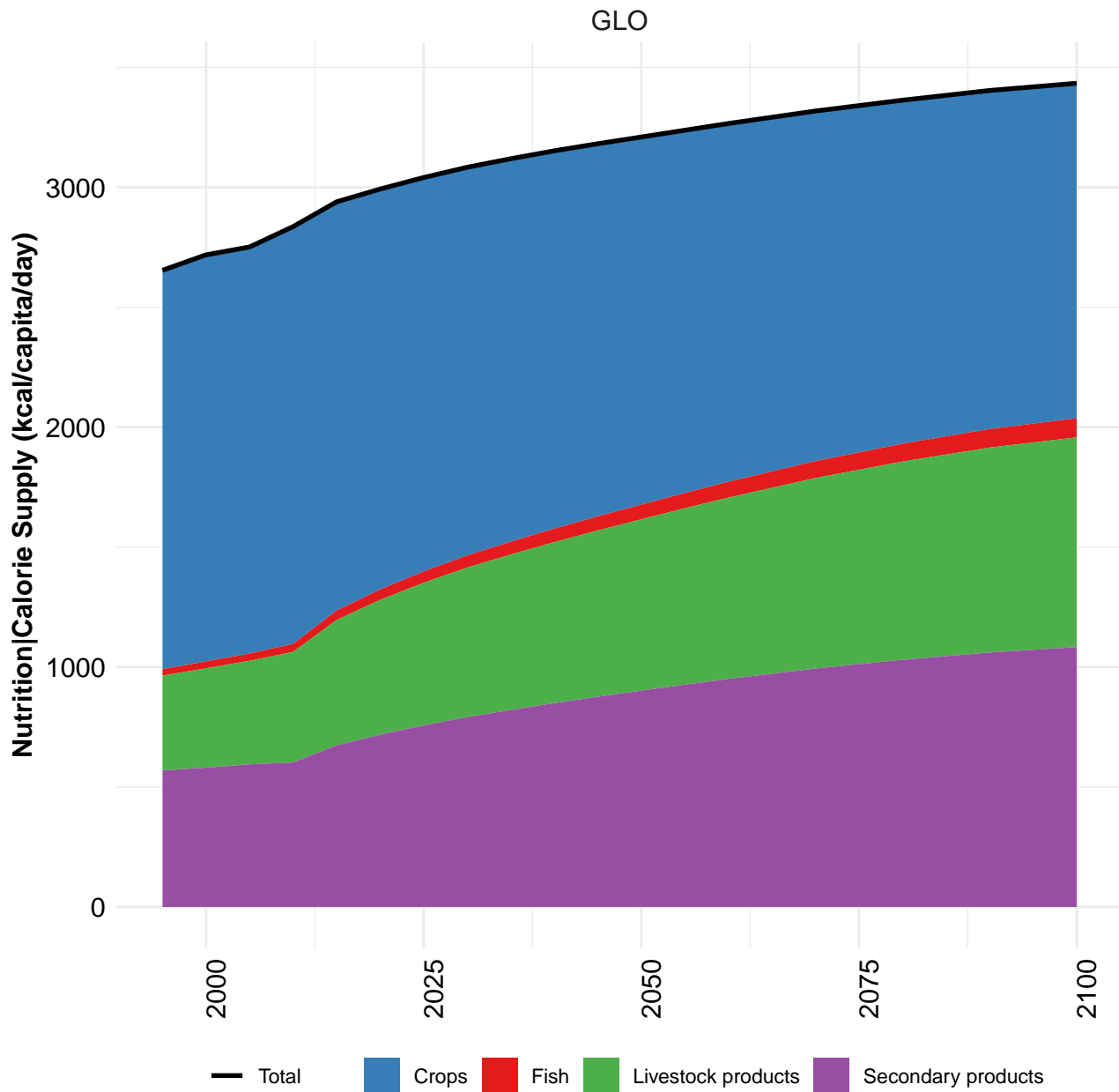
	2015
GLO	11446
CAZ	38838
CHA	10690
EUR	30583
IND	4354
JPN	34576
LAM	11619
MEA	10453
NEU	16937
OAS	5521
REF	12155
SSA	2220
USA	46247

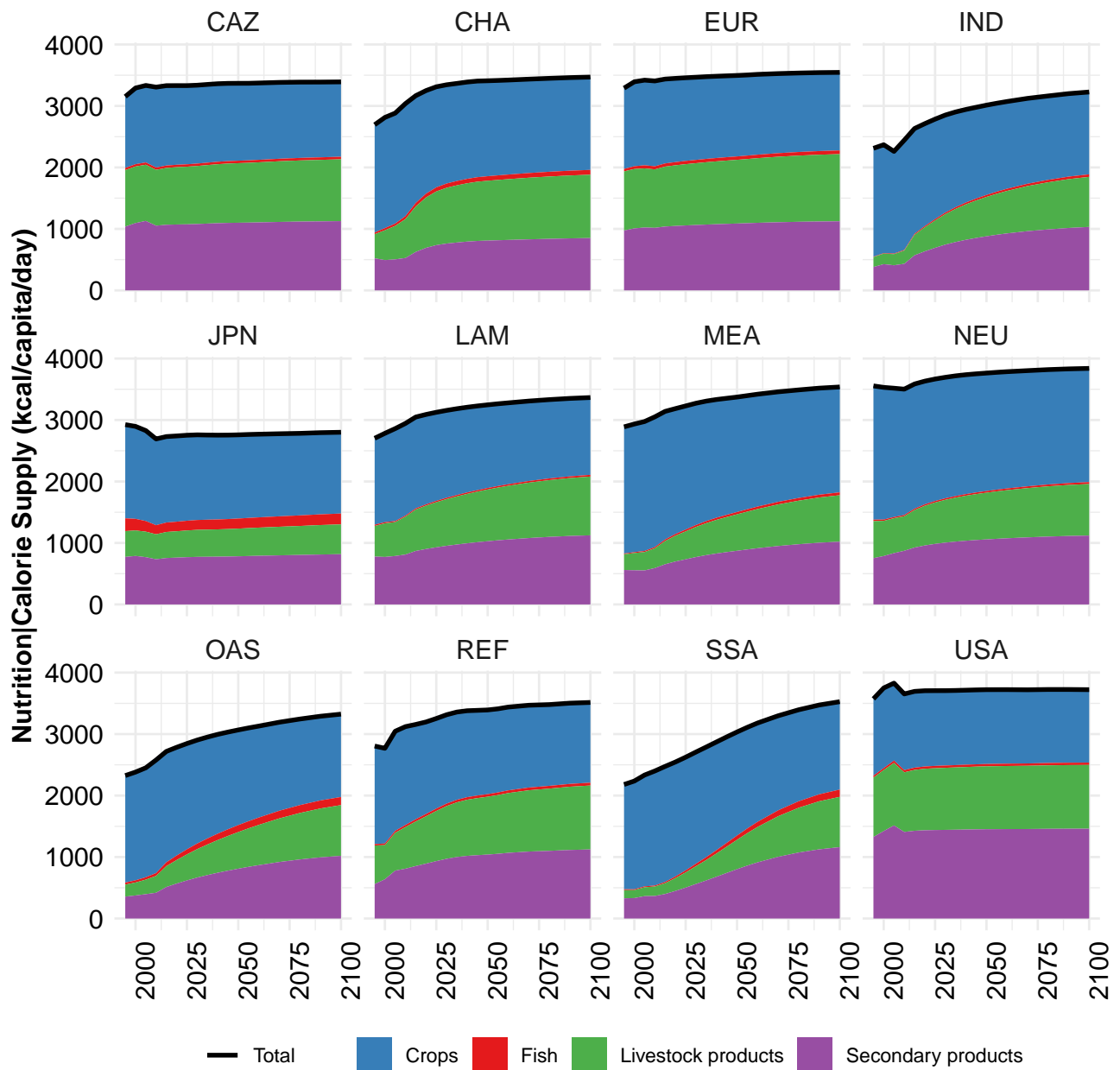
Table 922: James — Income (US\$05 PPP/cap/yr) [PART 6/6]

## Part IX

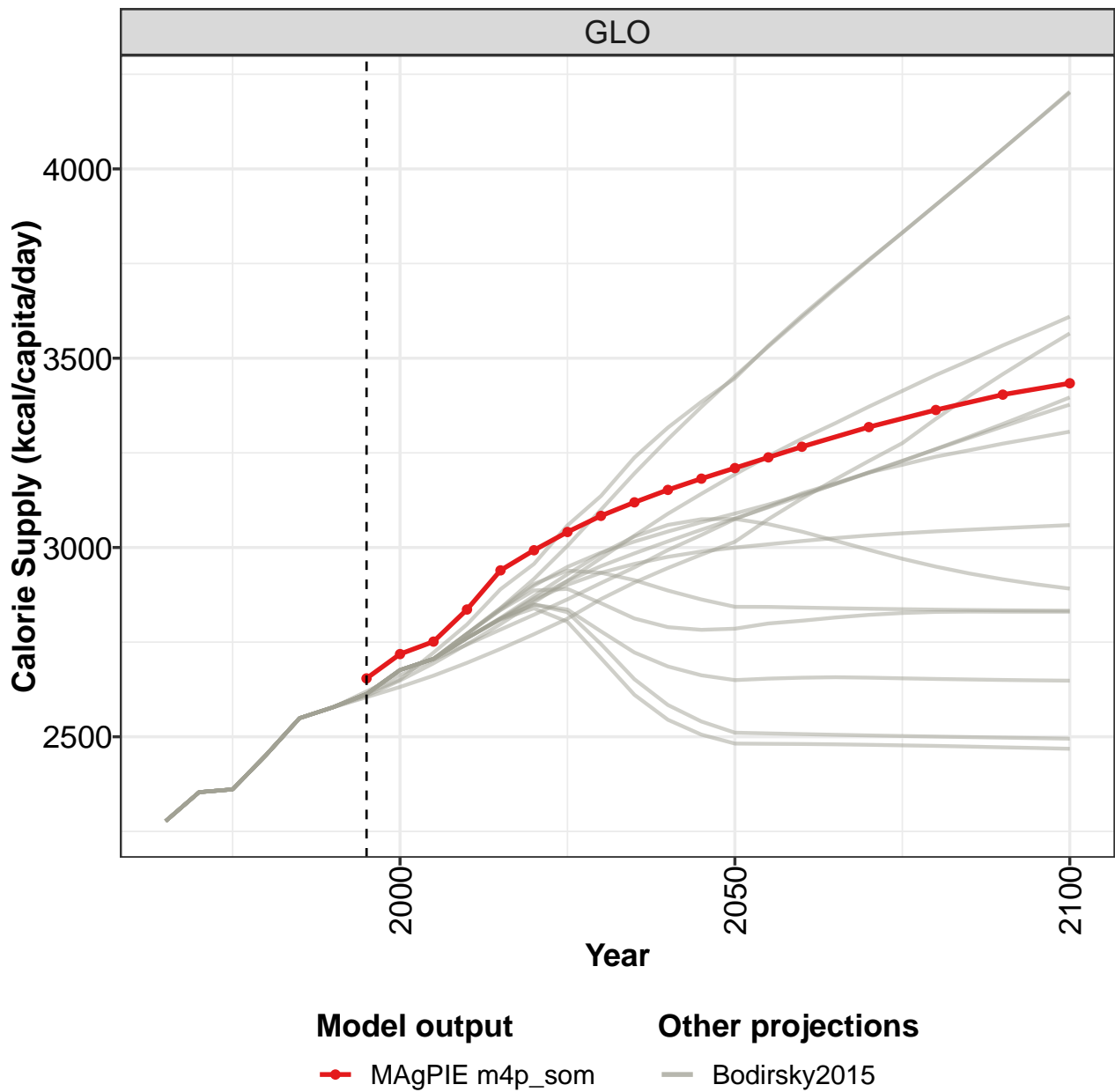
## Nutrition

## 34 Calorie Supply





## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

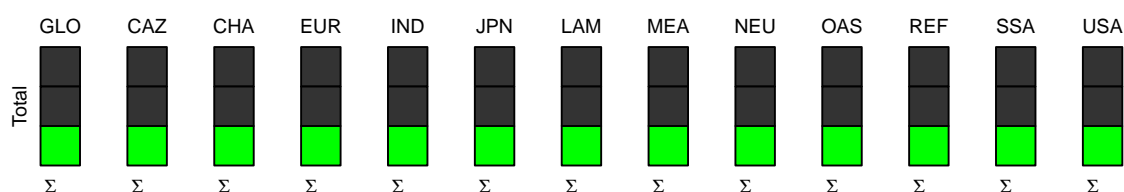
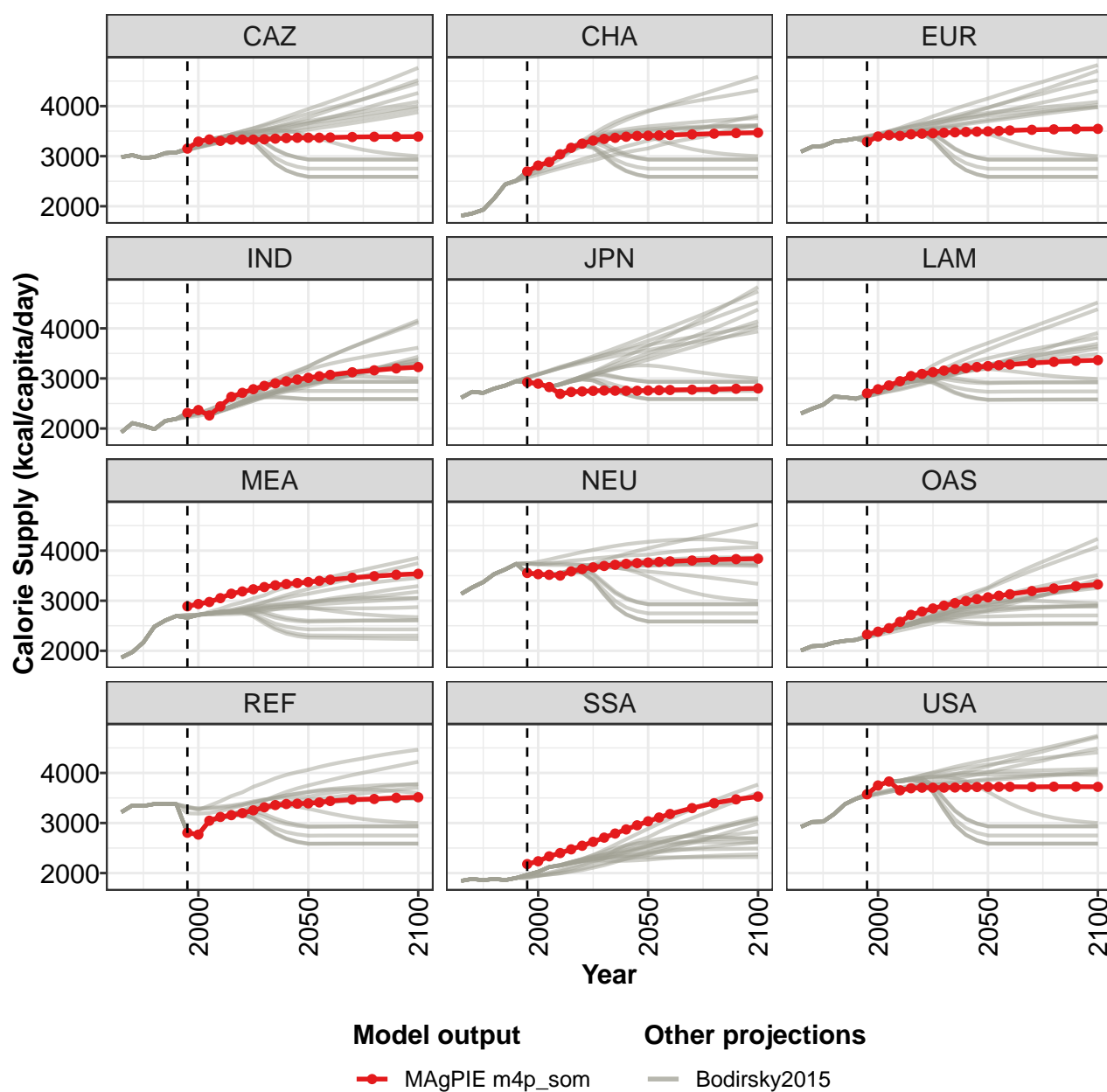


Figure 276: MagPIE m4p\_som — Nutrition—Calorie Supply (kcal/capita/day)

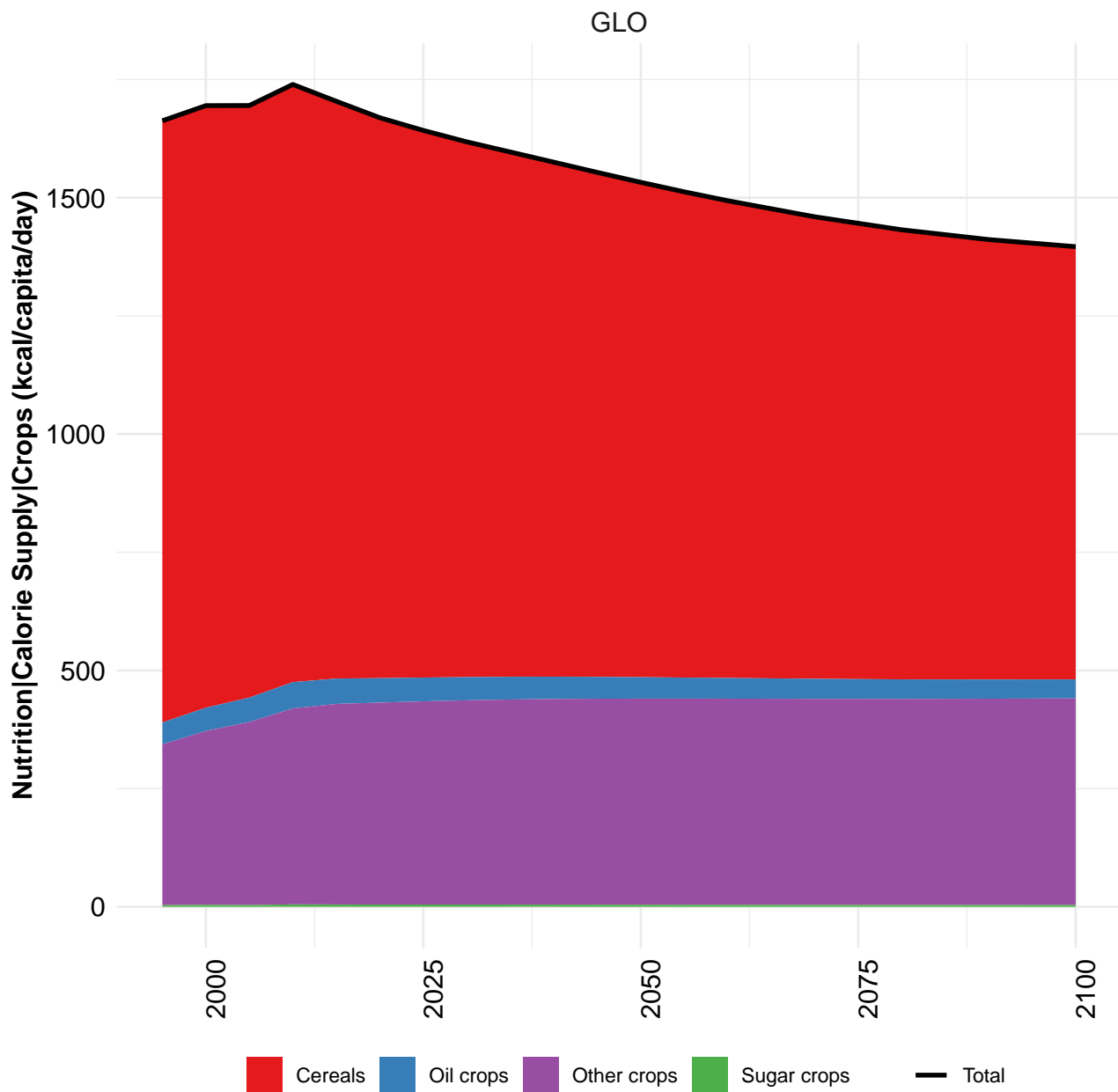


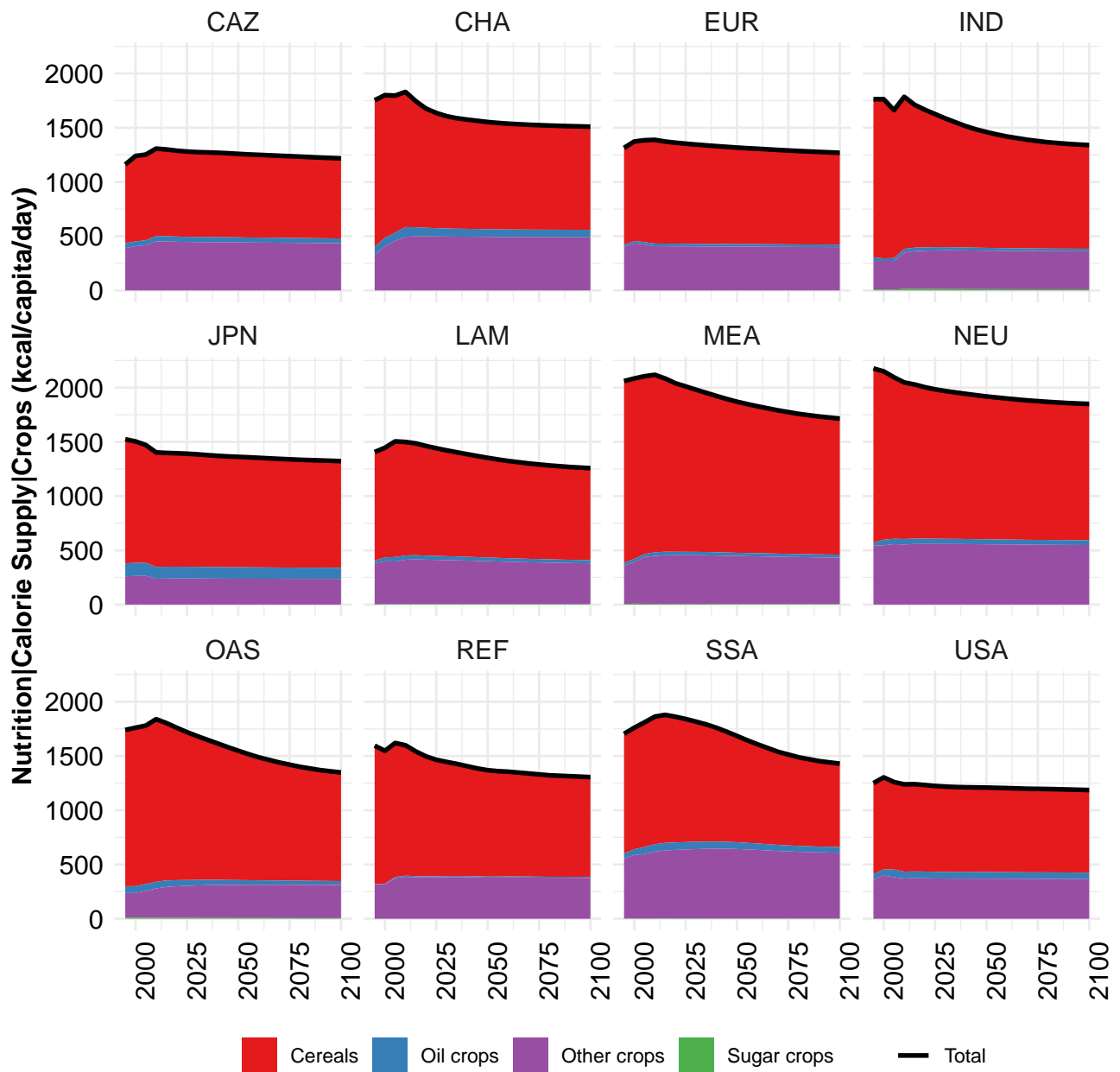
	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	2654	2719	2751	2836	2940	2993	3041	3084	3119	3152	3182
CAZ	3152	3292	3334	3306	3331	3331	3331	3338	3350	3362	3368
CHA	2694	2813	2883	3039	3167	3250	3311	3345	3367	3389	3405
EUR	3290	3393	3420	3407	3438	3449	3459	3467	3476	3484	3490
IND	2311	2369	2261	2443	2633	2712	2785	2852	2903	2943	2978
JPN	2925	2896	2828	2692	2731	2741	2753	2759	2756	2754	2755
LAM	2703	2784	2860	2945	3048	3090	3126	3157	3184	3208	3229
MEA	2889	2935	2975	3052	3140	3186	3229	3273	3308	3334	3354
NEU	3555	3531	3518	3502	3586	3632	3667	3695	3718	3737	3752
OAS	2325	2382	2451	2579	2718	2785	2846	2903	2951	2995	3033
REF	2805	2768	3046	3121	3157	3197	3253	3314	3358	3380	3386
SSA	2180	2236	2334	2400	2474	2546	2624	2708	2789	2872	2954
USA	3573	3750	3829	3653	3694	3705	3706	3707	3709	3714	3719

Table 923: MAgPIE m4p\_som — Nutrition—Calorie Supply (kcal/capita/day) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	3210	3238	3266	3318	3363	3404	3434
CAZ	3368	3369	3374	3383	3388	3389	3391
CHA	3410	3415	3422	3436	3450	3461	3470
EUR	3496	3504	3514	3527	3536	3543	3546
IND	3013	3044	3072	3123	3163	3201	3227
JPN	2759	2765	2769	2777	2783	2794	2801
LAM	3247	3264	3279	3308	3332	3352	3365
MEA	3373	3397	3420	3459	3490	3519	3537
NEU	3764	3776	3786	3803	3820	3832	3840
OAS	3068	3100	3130	3193	3245	3290	3324
REF	3392	3411	3439	3469	3480	3503	3514
SSA	3034	3110	3180	3298	3396	3473	3527
USA	3722	3723	3723	3721	3725	3725	3722

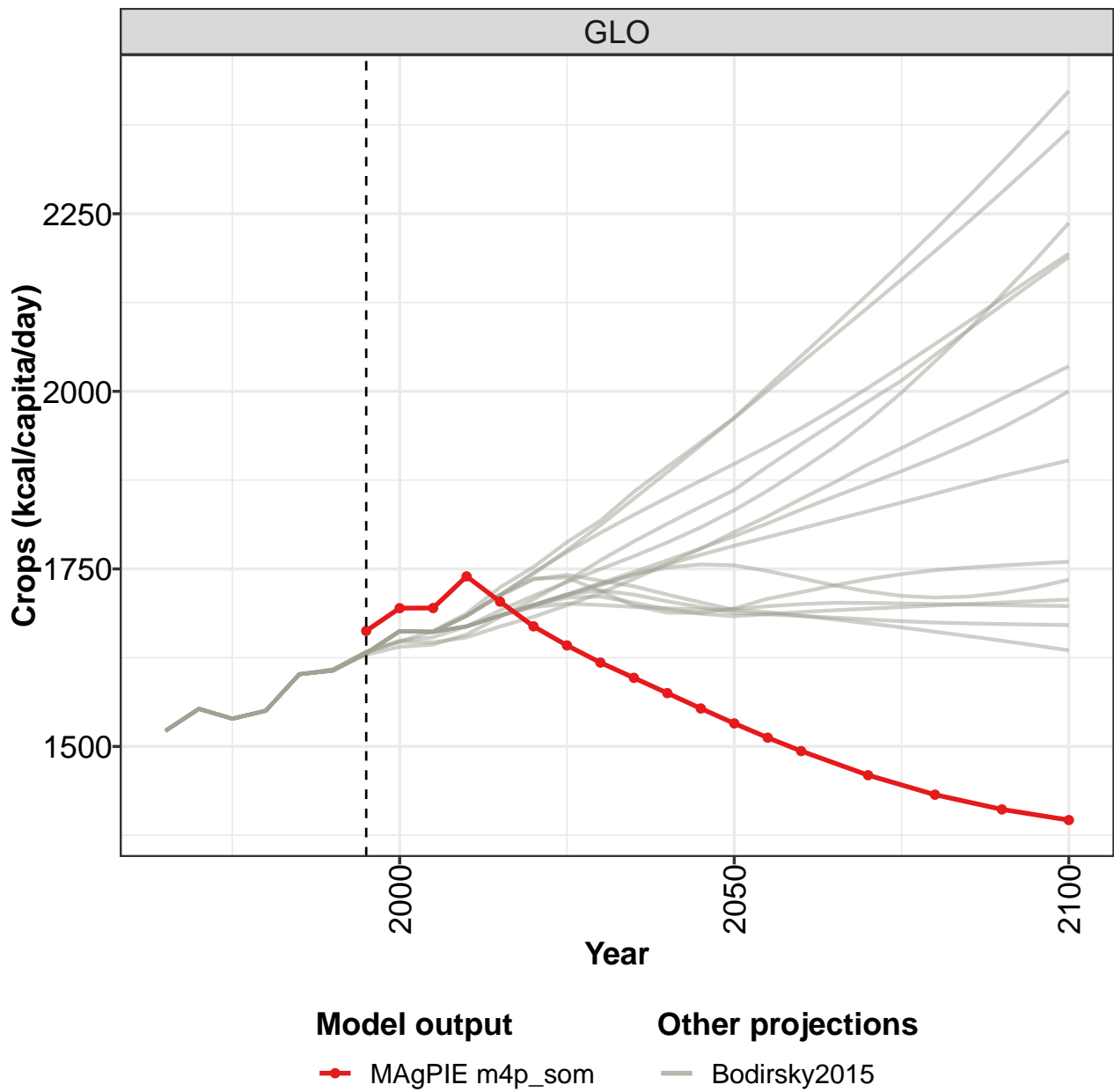
Table 924: MAgPIE m4p\_som — Nutrition—Calorie Supply (kcal/capita/day) [PART 2/2]





## 34.1 Crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

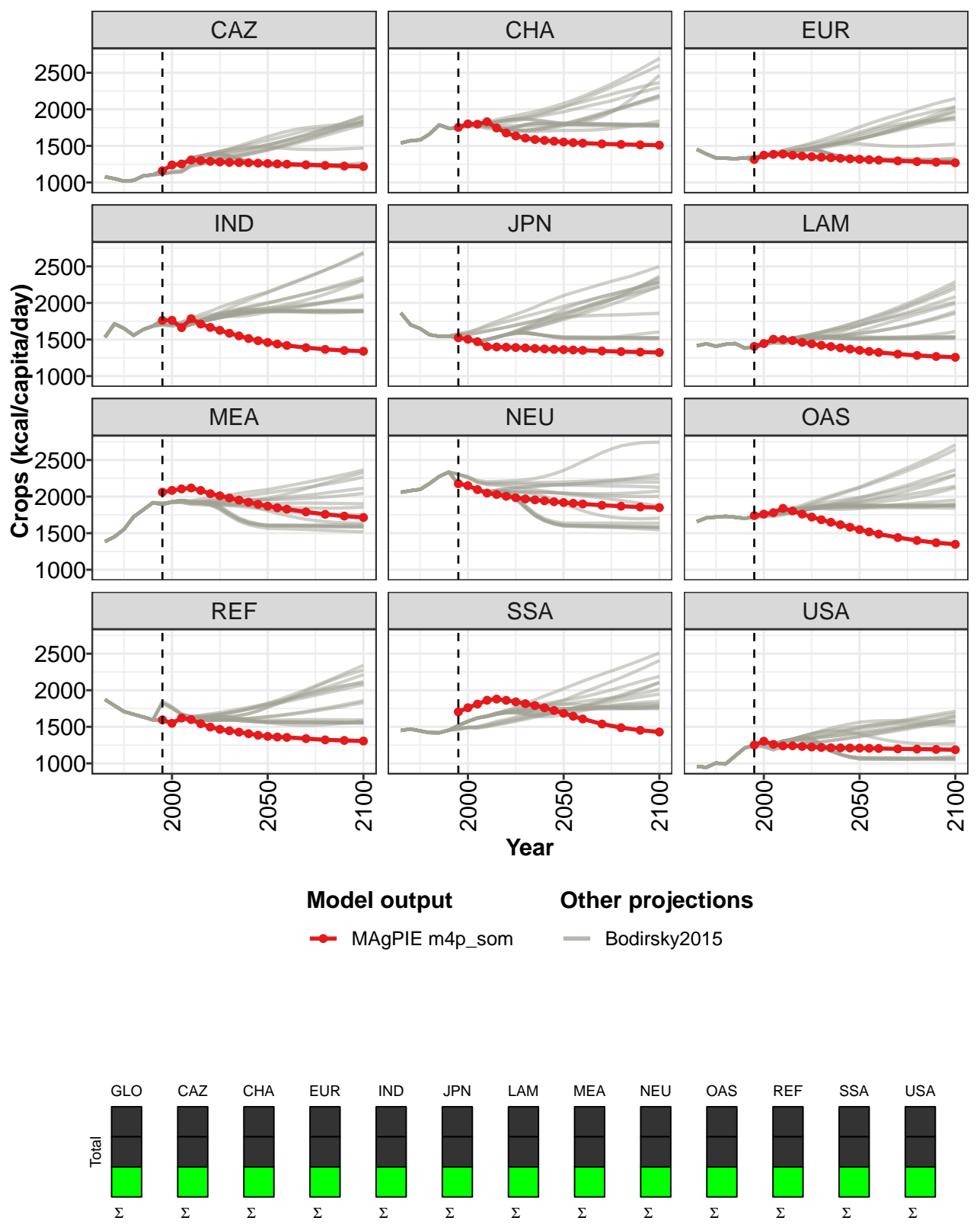


Figure 277: MAGPIE m4p\_som — Nutrition—Calorie Supply—Crops (kcal/capita/day)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1663	1695	1695	1739	1704	1669	1642	1618	1597	1575	1554
CAZ	1161	1240	1253	1308	1300	1289	1280	1275	1272	1269	1265
CHA	1753	1800	1796	1830	1745	1677	1636	1607	1587	1575	1564
EUR	1314	1373	1385	1388	1373	1362	1353	1345	1338	1330	1323
IND	1763	1763	1662	1785	1712	1666	1626	1586	1550	1514	1484
JPN	1524	1504	1471	1403	1398	1395	1391	1385	1378	1371	1366
LAM	1406	1446	1505	1499	1486	1462	1441	1422	1404	1387	1369
MEA	2061	2085	2105	2118	2084	2040	2011	1981	1952	1923	1895
NEU	2176	2150	2096	2048	2029	2004	1984	1968	1955	1943	1930
OAS	1740	1761	1780	1839	1804	1761	1720	1683	1649	1615	1581
REF	1595	1548	1620	1599	1542	1497	1465	1446	1427	1406	1385
SSA	1704	1761	1811	1863	1879	1862	1841	1817	1791	1760	1724
USA	1250	1303	1260	1239	1241	1232	1224	1218	1214	1212	1210

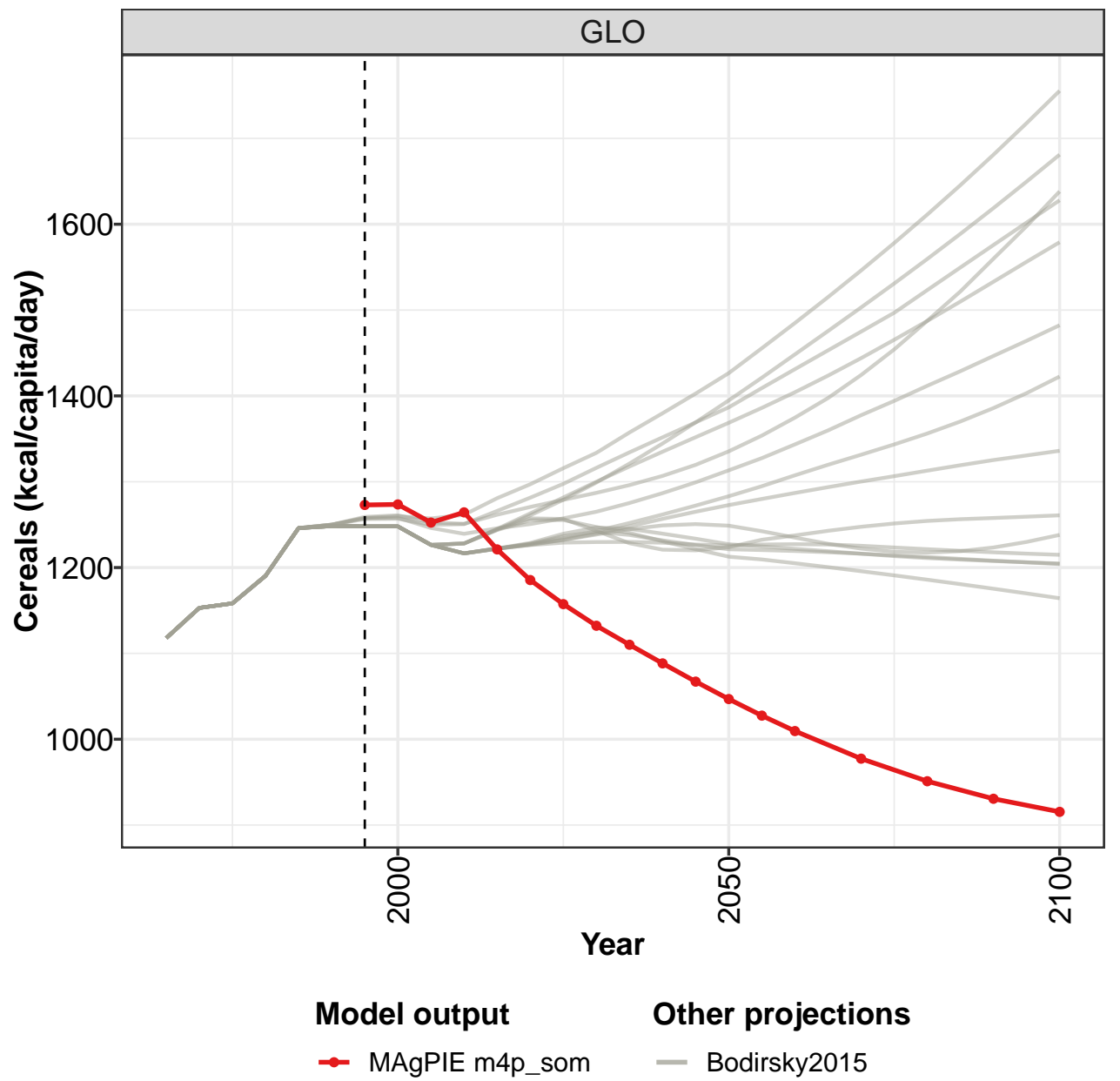
Table 925: MAgPIE m4p\_som — Nutrition—Calorie Supply—Crops (kcal/capita/day) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1532	1512	1494	1460	1432	1411	1396
CAZ	1259	1254	1250	1242	1233	1225	1218
CHA	1553	1544	1537	1527	1520	1514	1510
EUR	1317	1311	1306	1295	1285	1277	1269
IND	1460	1438	1419	1389	1366	1351	1339
JPN	1362	1358	1353	1343	1335	1329	1323
LAM	1353	1338	1324	1301	1283	1268	1257
MEA	1870	1848	1828	1790	1758	1733	1714
NEU	1919	1909	1899	1882	1869	1857	1850
OAS	1548	1517	1488	1440	1400	1370	1348
REF	1369	1360	1355	1339	1322	1314	1305
SSA	1685	1645	1608	1539	1488	1453	1430
USA	1209	1207	1204	1198	1196	1191	1186

Table 926: MAgPIE m4p\_som — Nutrition—Calorie Supply—Crops (kcal/capita/day) [PART 2/2]

34.1.1 Cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

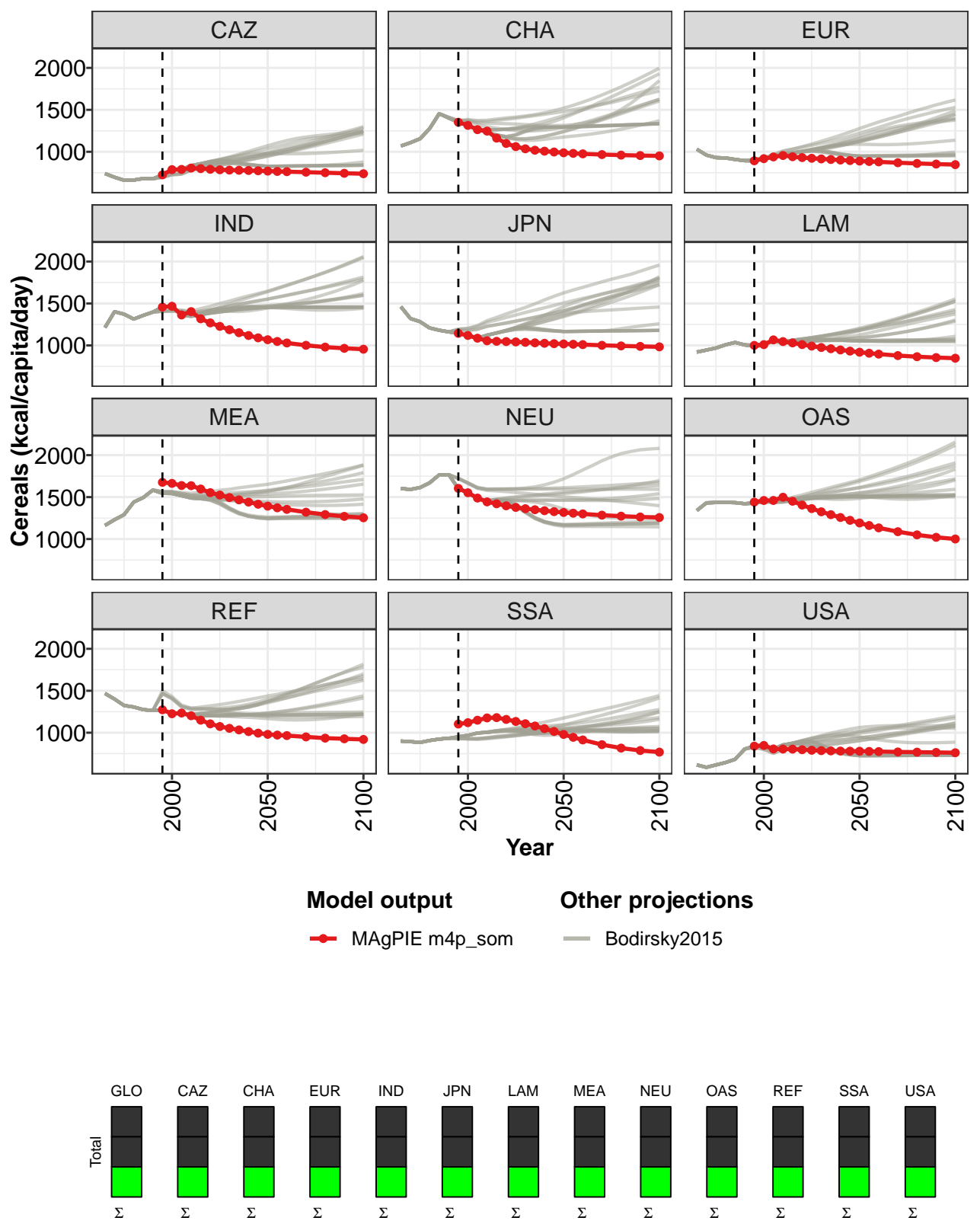


Figure 278: MAgPIE m4p\_som — Nutrition—Calorie Supply—Crops—Cereals (kcal/capita/day)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1273	1274	1252	1264	1221	1185	1157	1132	1110	1088	1067
CAZ	725	787	790	806	799	791	785	782	780	777	774
CHA	1352	1315	1263	1246	1163	1099	1062	1036	1019	1007	997
EUR	893	918	939	956	941	931	923	915	908	901	895
IND	1457	1467	1363	1403	1317	1269	1227	1187	1152	1118	1090
JPN	1144	1119	1086	1055	1049	1046	1042	1037	1031	1026	1021
LAM	1000	1010	1066	1046	1030	1010	992	975	961	946	932
MEA	1676	1664	1638	1636	1597	1553	1524	1495	1467	1441	1415
NEU	1604	1552	1489	1443	1421	1396	1377	1362	1350	1338	1327
OAS	1441	1460	1460	1499	1451	1406	1363	1325	1291	1257	1224
REF	1274	1226	1235	1202	1149	1106	1074	1052	1033	1013	995
SSA	1103	1120	1149	1176	1180	1158	1134	1107	1080	1049	1015
USA	840	848	806	805	804	797	791	786	783	781	780

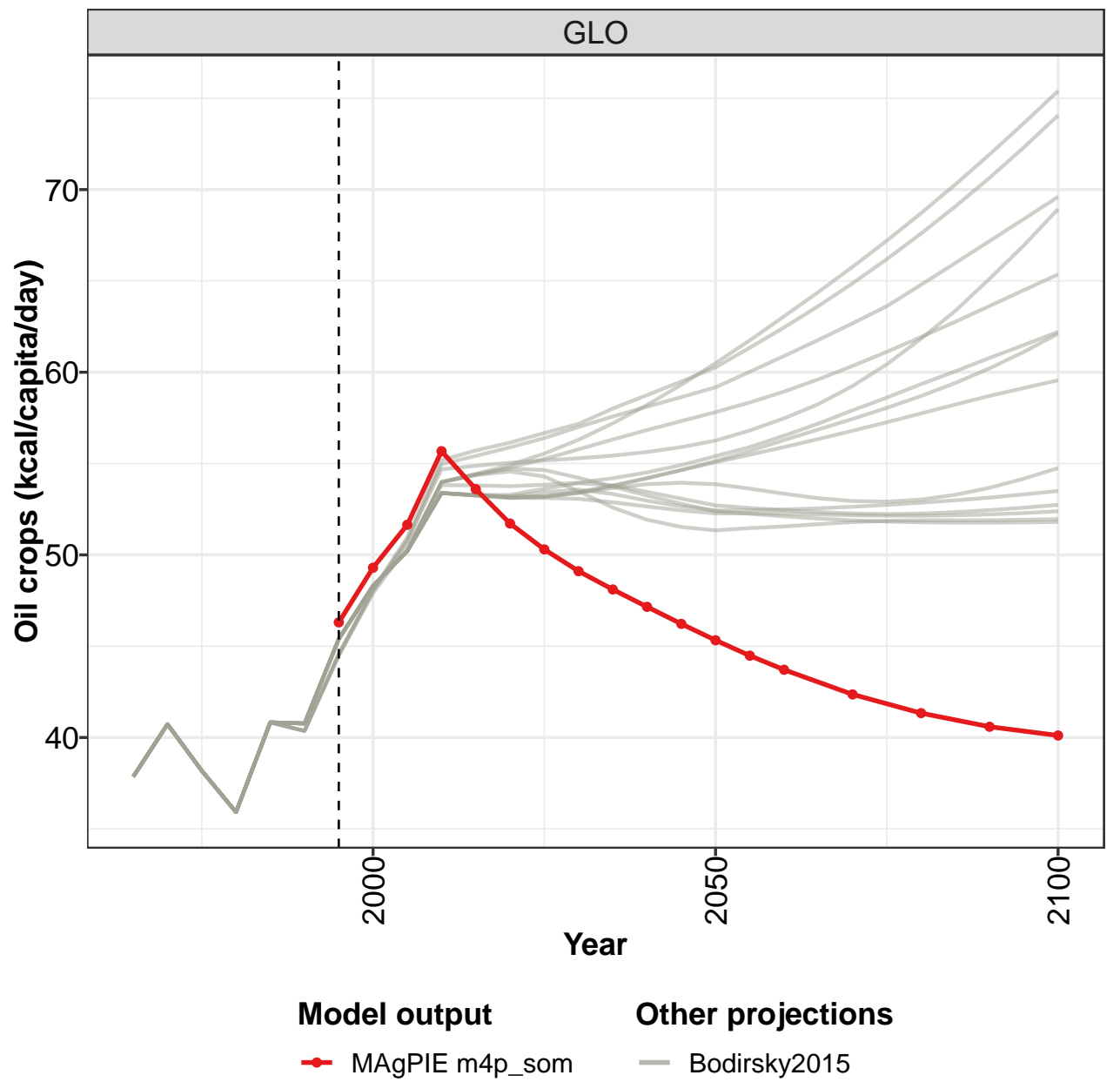
Table 927: MAgPIE m4p.som — Nutrition—Calorie Supply—Crops—Cereals (kcal/capita/day) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1047	1027	1010	977	951	931	915
CAZ	770	766	763	757	750	744	738
CHA	988	981	975	967	960	955	951
EUR	889	884	879	869	861	853	847
IND	1068	1047	1029	1001	980	965	955
JPN	1017	1014	1010	1001	994	988	983
LAM	919	907	896	879	865	855	848
MEA	1392	1372	1354	1320	1292	1270	1254
NEU	1317	1308	1300	1285	1273	1263	1257
OAS	1192	1162	1134	1088	1050	1021	1001
REF	980	972	966	950	935	927	920
SSA	979	945	914	857	817	788	769
USA	779	777	775	771	768	765	761

Table 928: MAgPIE m4p.som — Nutrition—Calorie Supply—Crops—Cereals (kcal/capita/day) [PART 2/2]

34.1.2
Oil crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

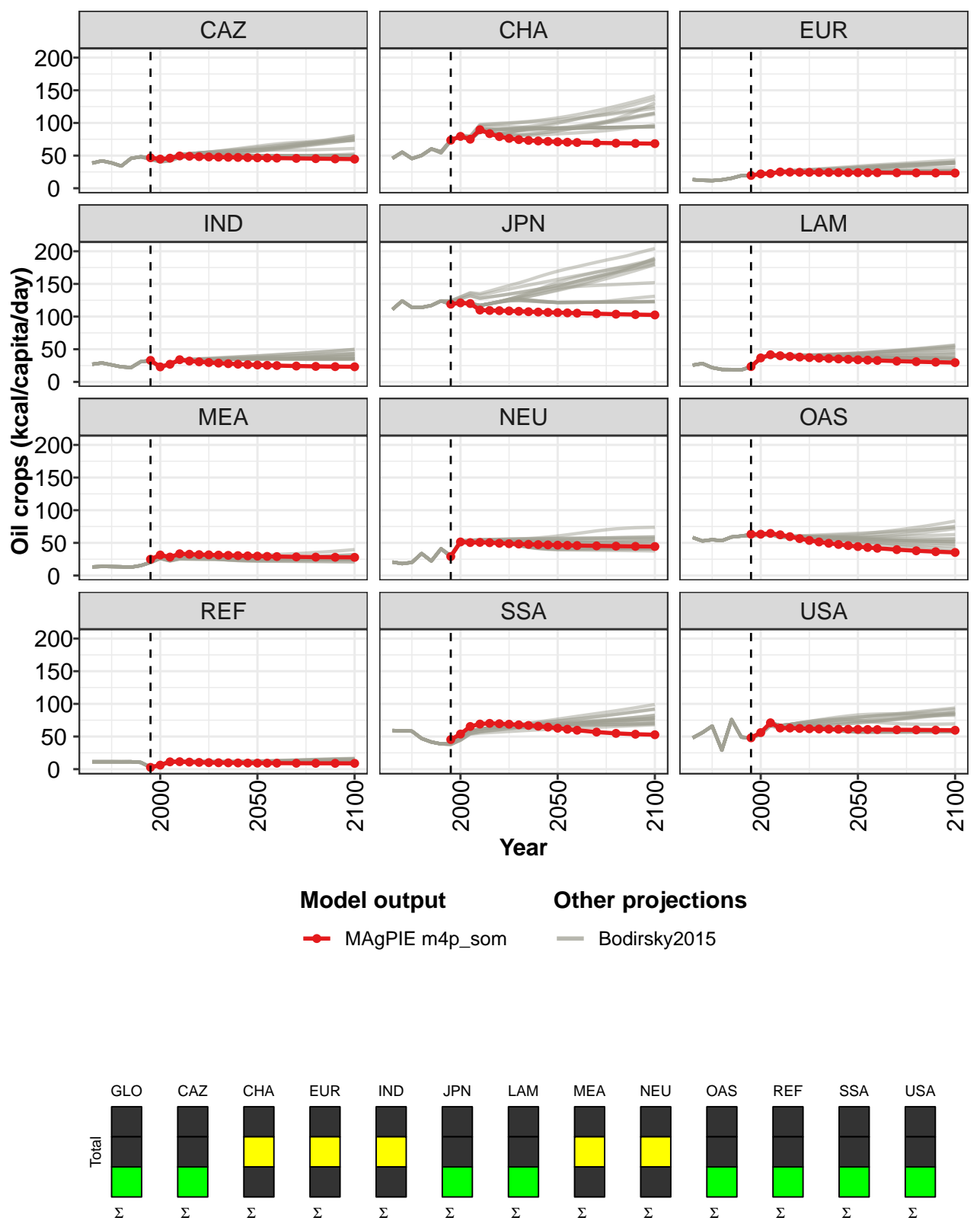


Figure 279: MAGPIE m4p\_som — Nutrition—Calorie Supply—Crops—Oil crops (kcal/capita/day)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	46	49	52	56	54	52	50	49	48	47	46
CAZ	47	45	46	49	49	48	48	48	47	47	47
CHA	74	79	75	90	84	79	76	74	73	72	72
EUR	20	22	22	25	25	24	24	24	24	24	24
IND	33	23	27	34	32	31	30	29	28	27	26
JPN	119	121	120	110	109	109	109	108	107	107	106
LAM	23	37	42	40	39	38	37	36	36	35	35
MEA	25	31	28	33	33	32	32	31	31	30	30
NEU	29	51	50	51	50	49	49	48	48	47	47
OAS	63	63	65	62	60	56	54	51	49	48	46
REF	3	6	11	11	11	10	10	10	10	10	9
SSA	45	54	65	69	70	70	69	68	67	66	64
USA	48	56	71	63	63	62	62	62	61	61	61

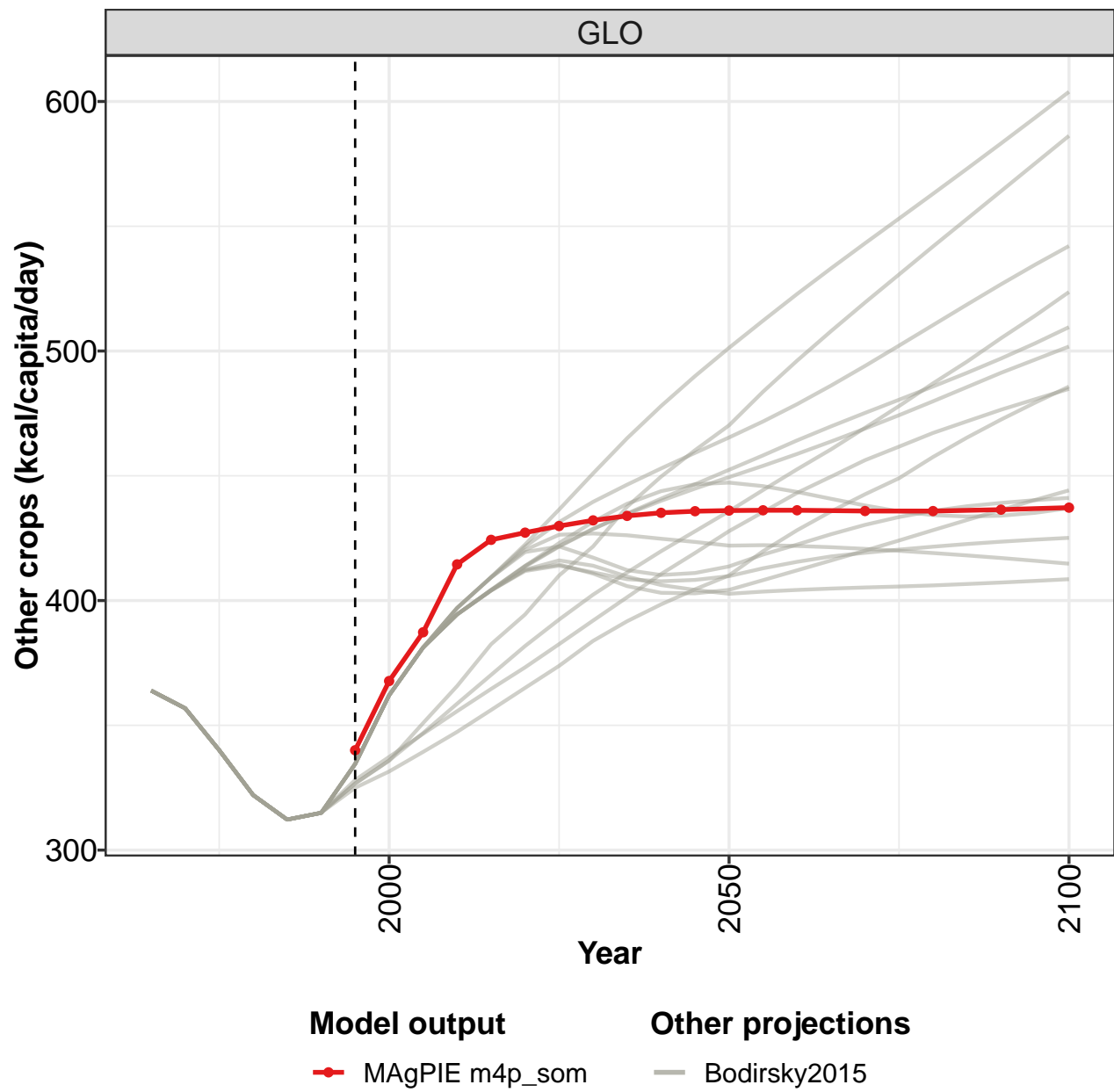
Table 929: MAgPIE m4p\_som — Nutrition—Calorie Supply—Crops—Oil crops (kcal/capita/day) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	45	44	44	42	41	41	40
CAZ	47	46	46	46	45	45	45
CHA	71	71	70	69	69	69	68
EUR	24	24	24	24	23	23	23
IND	26	25	25	24	24	23	23
JPN	106	106	105	104	104	103	103
LAM	34	33	33	32	31	30	30
MEA	30	29	29	29	28	28	28
NEU	47	46	46	45	45	45	44
OAS	44	43	42	40	38	36	35
REF	9	9	9	9	9	9	9
SSA	63	61	60	57	55	53	53
USA	61	61	61	60	60	60	60

Table 930: MAgPIE m4p\_som — Nutrition—Calorie Supply—Crops—Oil crops (kcal/capita/day) [PART 2/2]

34.1.3 Other crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

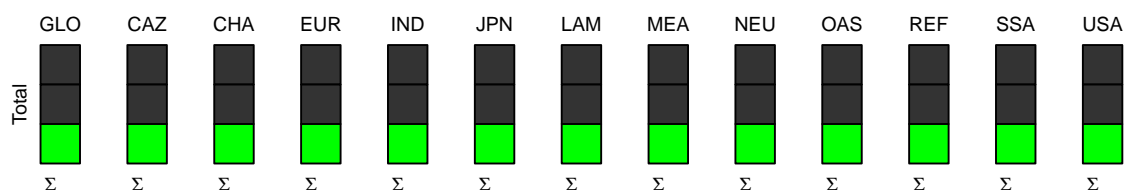
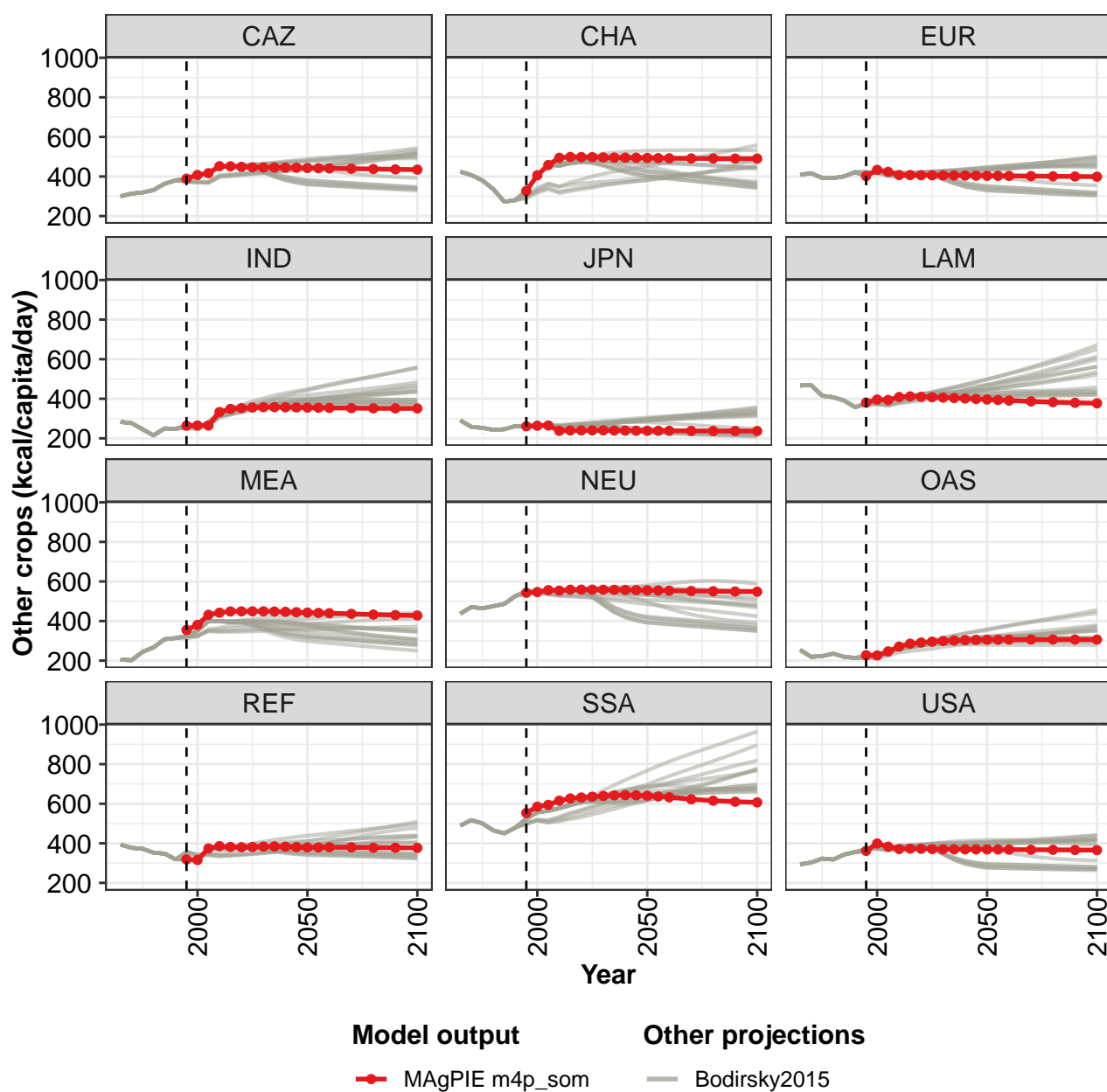


Figure 280: MAGPIE m4p\_som — Nutrition—Calorie Supply—Crops—Other crops (kcal/capita/day)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	340	368	387	415	424	427	430	432	434	435	436
CAZ	389	408	417	452	452	449	447	446	445	445	444
CHA	327	406	458	494	499	498	498	497	495	495	495
EUR	402	433	423	408	407	407	406	406	405	405	404
IND	264	265	265	333	349	353	356	358	358	357	356
JPN	261	264	265	238	240	240	241	240	240	239	239
LAM	381	396	394	409	412	410	408	406	404	401	399
MEA	355	381	432	442	448	449	449	449	448	447	445
NEU	543	547	556	554	558	559	559	558	558	557	556
OAS	228	226	247	271	286	292	296	299	302	304	305
REF	319	316	374	386	382	380	381	384	384	383	381
SSA	553	585	594	615	627	632	636	639	642	643	643
USA	362	399	383	371	373	372	371	370	370	370	370

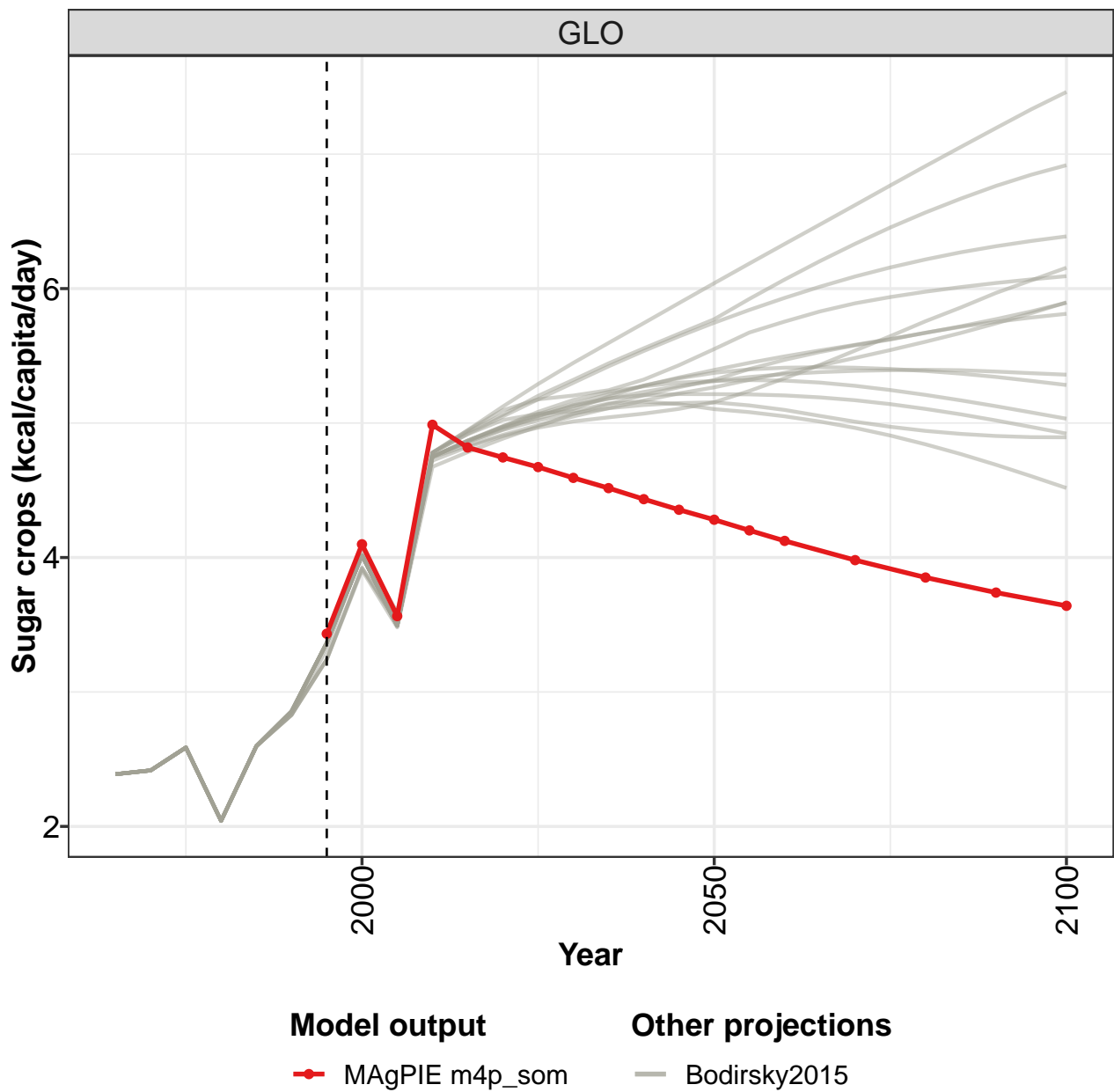
Table 931: MAgPIE m4p\_som — Nutrition—Calorie Supply—Crops—Other crops (kcal/capita/day) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	436	436	436	436	436	436	437
CAZ	443	442	441	440	438	436	435
CHA	493	493	492	491	491	491	490
EUR	404	403	403	402	401	400	399
IND	355	355	354	353	352	351	351
JPN	238	238	238	238	237	237	237
LAM	396	394	391	387	383	380	377
MEA	443	441	440	436	433	430	428
NEU	555	554	554	552	551	549	549
OAS	306	306	306	307	307	307	306
REF	379	380	381	380	378	378	377
SSA	641	637	633	623	615	610	607
USA	369	369	369	368	367	367	366

Table 932: MAgPIE m4p\_som — Nutrition—Calorie Supply—Crops—Other crops (kcal/capita/day) [PART 2/2]

## 34.1.4 Sugar crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

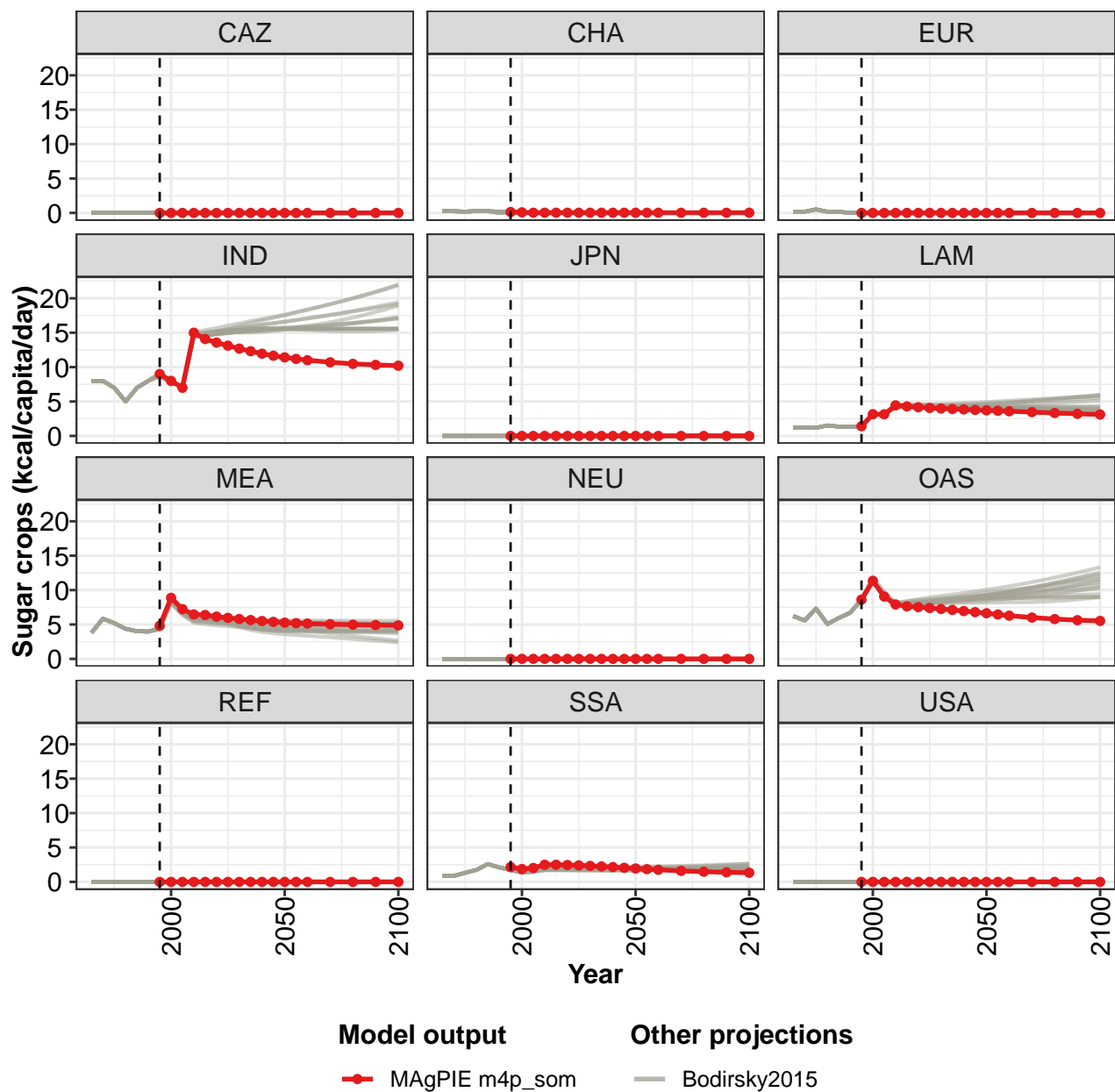


Figure 281: MAgPIE m4p\_som — Nutrition—Calorie Supply—Crops—Sugar crops (kcal/capita/day)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	3.4	4.1	3.6	5.0	4.8	4.7	4.7	4.6	4.5	4.4	4.4
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	9.0	8.0	7.0	15.0	14.1	13.6	13.1	12.7	12.3	12.0	11.7
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.4	3.2	3.1	4.4	4.3	4.2	4.1	4.0	3.9	3.8	3.8
MEA	4.8	8.9	7.2	6.5	6.4	6.1	6.0	5.8	5.6	5.5	5.4
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	8.6	11.3	9.1	7.9	7.6	7.5	7.4	7.3	7.1	7.0	6.8
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	2.2	1.9	2.0	2.5	2.5	2.5	2.4	2.3	2.2	2.2	2.1
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

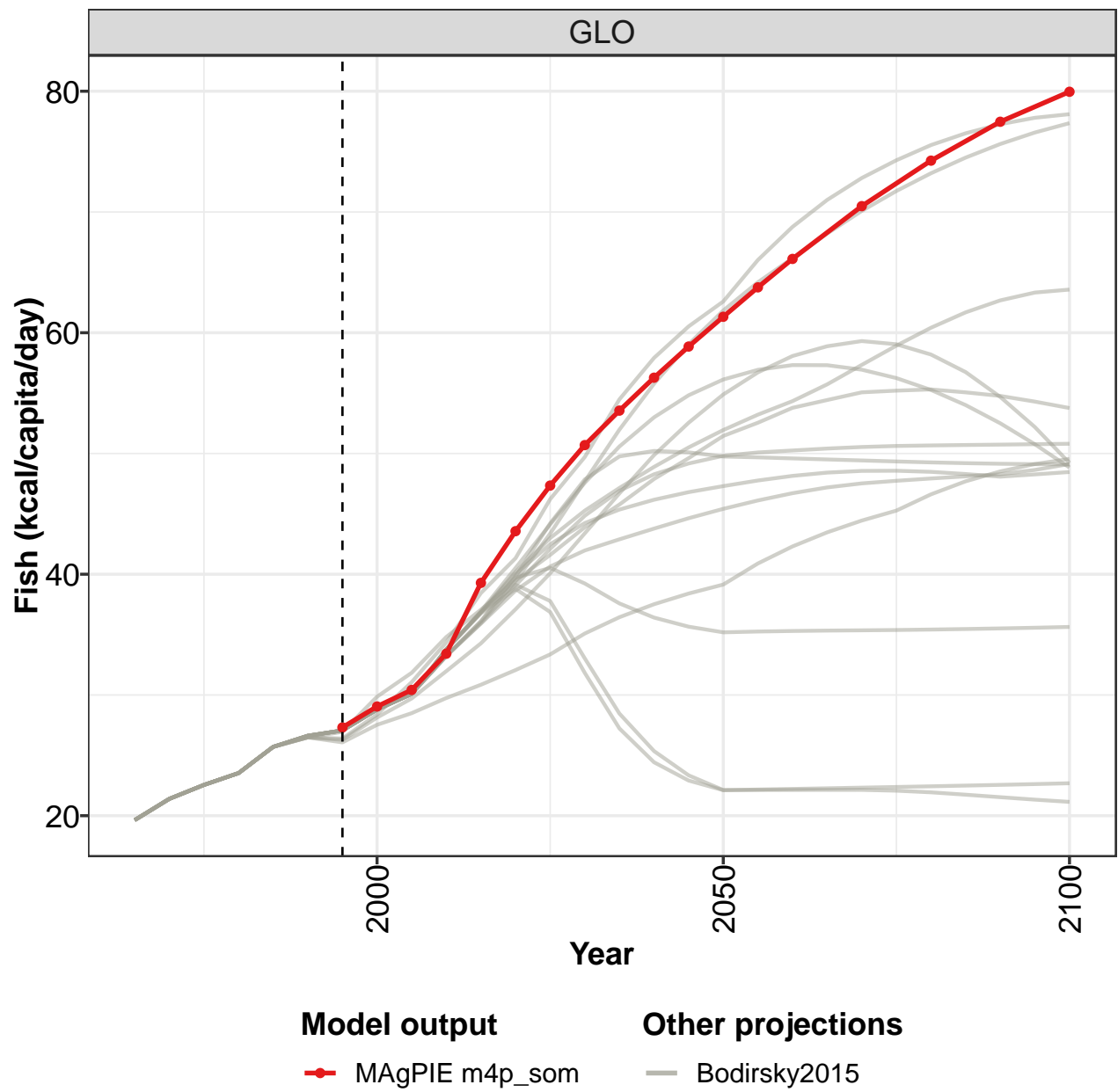
Table 933: MAgPIE m4p\_som — Nutrition—Calorie Supply—Crops—Sugar crops (kcal/capita/day) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	4.3	4.2	4.1	4.0	3.9	3.7	3.6
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	11.4	11.2	11.0	10.7	10.5	10.3	10.2
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	3.7	3.6	3.6	3.5	3.3	3.2	3.1
MEA	5.3	5.2	5.1	5.0	5.0	4.9	4.9
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	6.6	6.5	6.3	6.0	5.8	5.6	5.5
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	2.0	1.9	1.8	1.6	1.5	1.4	1.3
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 934: MAgPIE m4p\_som — Nutrition—Calorie Supply—Crops—Sugar crops (kcal/capita/day) [PART 2/2]

34.2 Fish

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

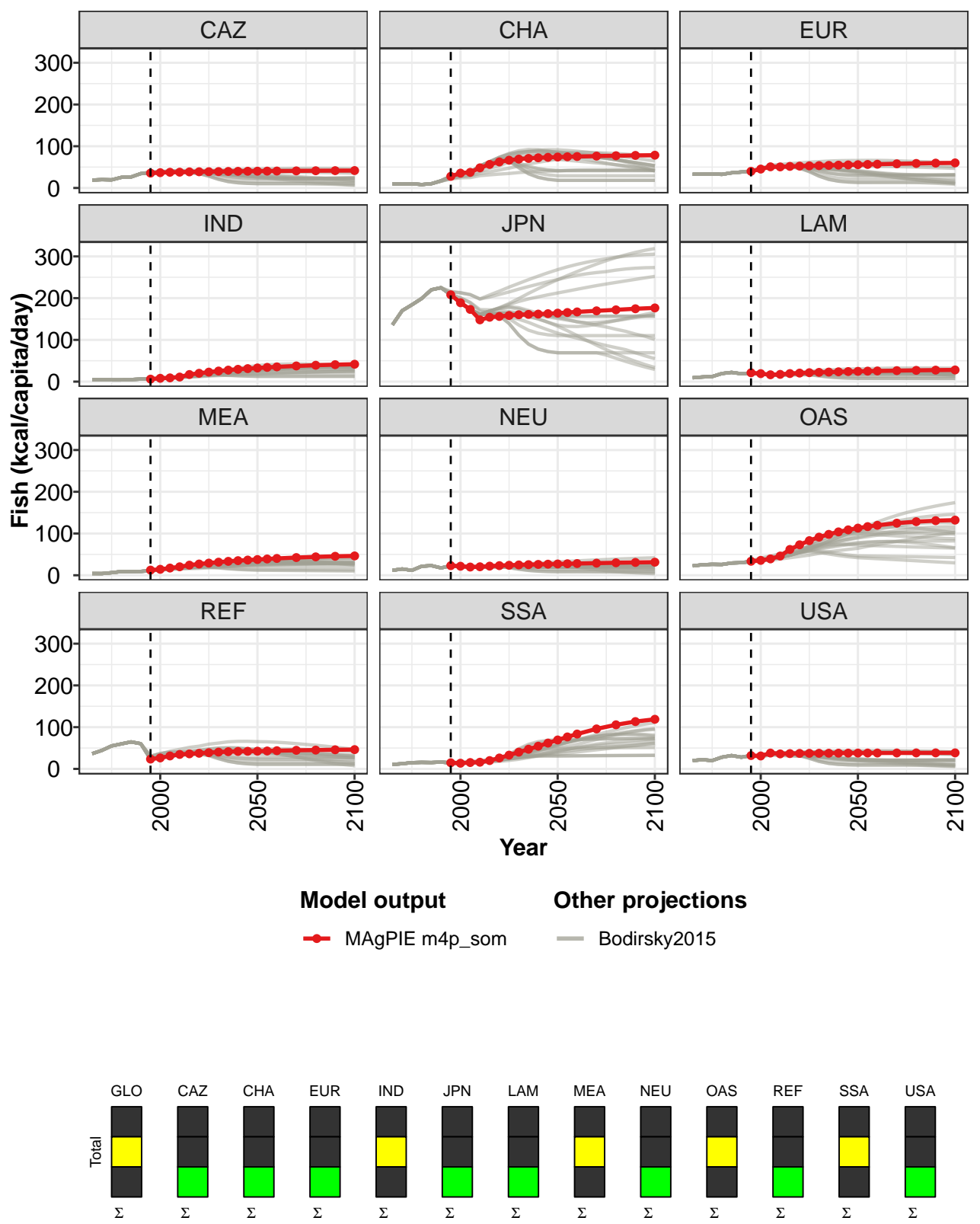


Figure 282: MAgPIE m4p\_som — Nutrition—Calorie Supply—Fish (kcal/capita/day)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	27	29	30	33	39	44	47	51	54	56	59
CAZ	36	37	38	38	39	39	39	39	40	40	40
CHA	28	36	38	48	56	62	67	69	71	72	73
EUR	40	45	51	51	52	52	53	54	54	55	55
IND	6	8	9	11	17	20	23	25	28	30	31
JPN	208	189	173	148	154	156	158	160	161	162	163
LAM	21	19	16	17	19	20	21	22	23	24	24
MEA	12	14	17	20	24	27	29	31	33	35	36
NEU	23	22	20	20	22	23	24	25	25	26	27
OAS	34	36	39	46	62	73	83	91	98	104	109
REF	24	26	31	35	36	37	39	40	41	42	42
SSA	15	14	15	16	20	26	33	40	47	54	62
USA	32	31	38	36	37	37	37	37	38	38	38

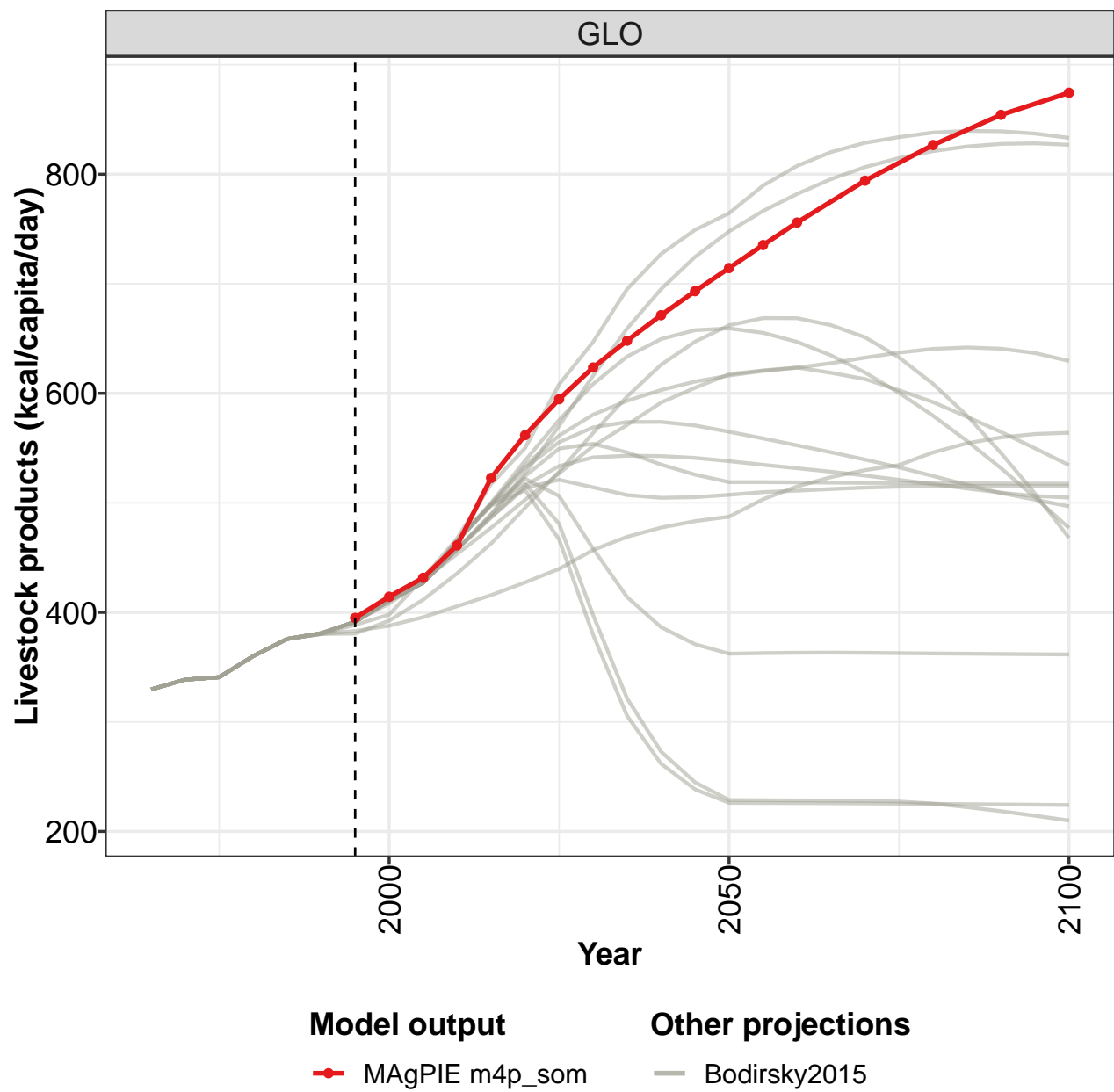
Table 935: MAgPIE m4p\_som — Nutrition—Calorie Supply—Fish (kcal/capita/day) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	61	64	66	70	74	77	80
CAZ	40	40	41	41	41	42	42
CHA	74	75	75	76	77	78	79
EUR	56	56	57	58	59	60	60
IND	33	34	35	38	39	41	42
JPN	164	166	167	170	172	175	177
LAM	25	25	26	26	27	28	28
MEA	38	39	40	42	44	45	46
NEU	27	28	28	29	30	31	31
OAS	113	117	120	125	128	131	132
REF	42	43	44	45	45	46	46
SSA	69	77	84	96	106	113	119
USA	38	38	38	38	38	38	38

Table 936: MAgPIE m4p\_som — Nutrition—Calorie Supply—Fish (kcal/capita/day) [PART 2/2]

34.3
Livestock products

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

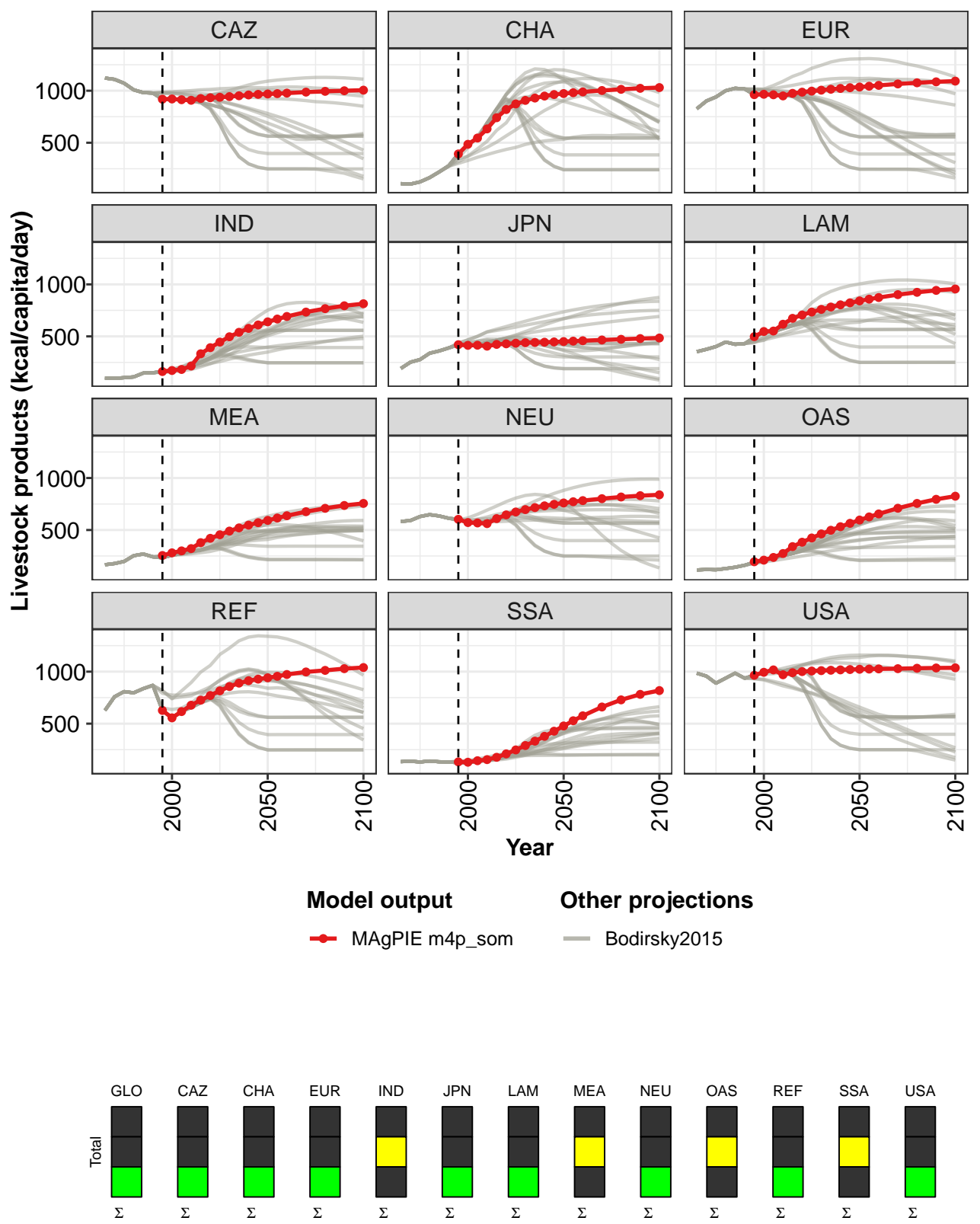


Figure 283: MAgPIE m4p\_som — Nutrition—Calorie Supply—Livestock products (kcal/capita/day)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	395	414	432	461	523	562	595	624	648	671	693
CAZ	919	921	914	908	925	932	937	944	952	959	965
CHA	392	485	545	633	740	819	873	907	930	949	963
EUR	962	966	961	950	975	986	996	1005	1014	1022	1029
IND	162	172	182	215	333	391	445	496	539	577	610
JPN	420	414	415	406	423	428	435	440	442	444	447
LAM	497	547	551	617	673	706	734	760	782	803	823
MEA	255	281	299	322	379	420	455	490	520	547	571
NEU	603	572	568	562	610	646	674	696	716	733	747
OAS	195	210	236	274	341	383	424	462	498	532	565
REF	627	556	616	677	726	771	816	857	890	913	928
SSA	132	129	144	154	176	210	248	290	332	378	428
USA	965	994	1017	970	990	1001	1006	1010	1014	1017	1021

Table 937: MAgPIE m4p.som — Nutrition—Calorie Supply—Livestock products (kcal/capita/day) [PART 1/2]

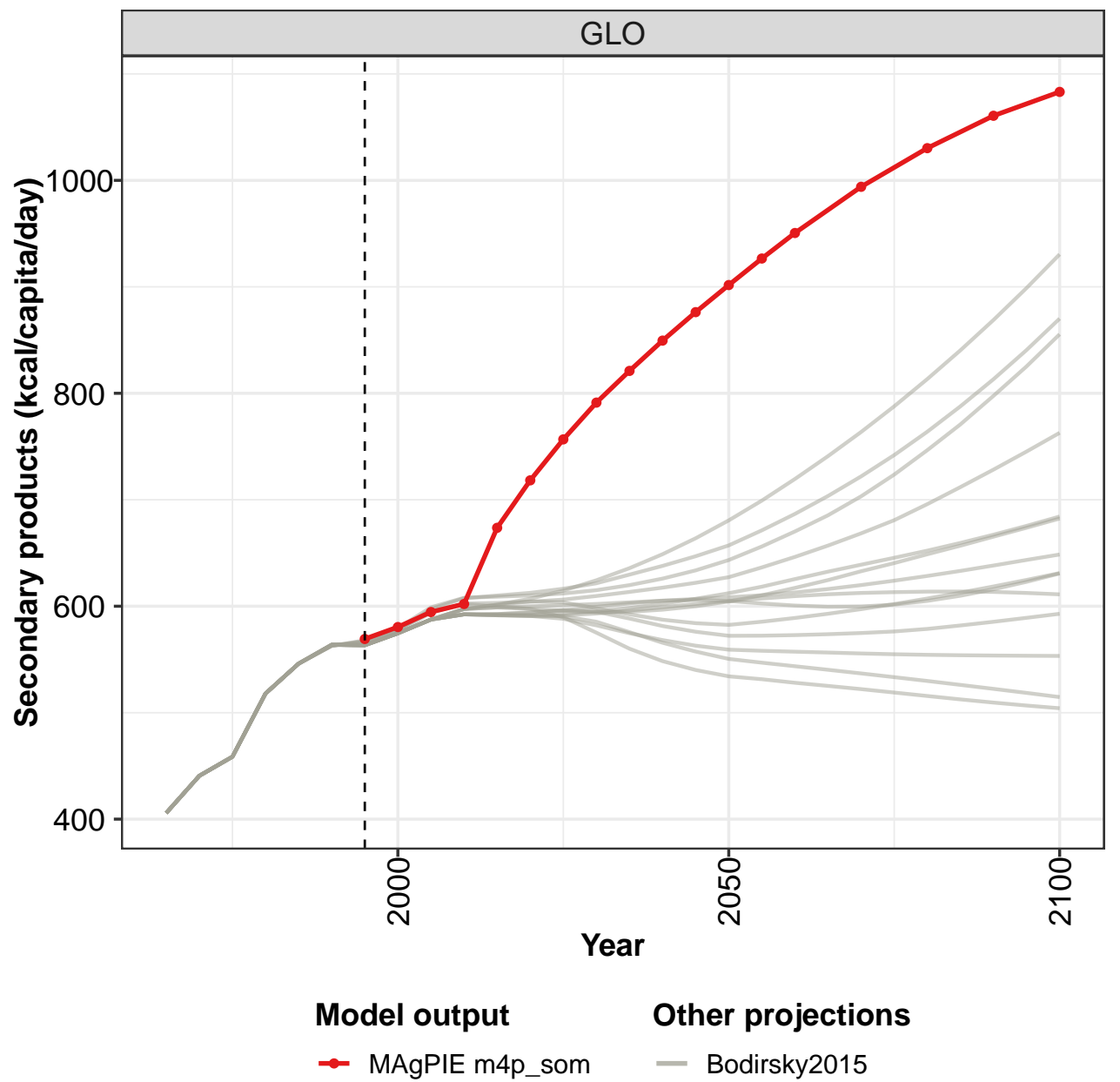
	2050	2055	2060	2070	2080	2090	2100
GLO	714	735	756	794	827	854	874
CAZ	969	972	977	987	994	1000	1005
CHA	973	981	989	1002	1014	1023	1030
EUR	1036	1043	1052	1065	1076	1086	1093
IND	640	667	691	734	767	794	814
JPN	450	454	458	465	472	479	484
LAM	841	858	874	901	924	942	956
MEA	593	615	637	676	709	736	756
NEU	760	772	783	801	818	830	838
OAS	596	626	655	709	756	795	825
REF	941	956	973	997	1012	1029	1040
SSA	478	528	576	660	729	782	818
USA	1023	1025	1026	1029	1033	1035	1037

Table 938: MAgPIE m4p.som — Nutrition—Calorie Supply—Livestock products (kcal/capita/day) [PART 2/2]



34.4 Secondary products

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

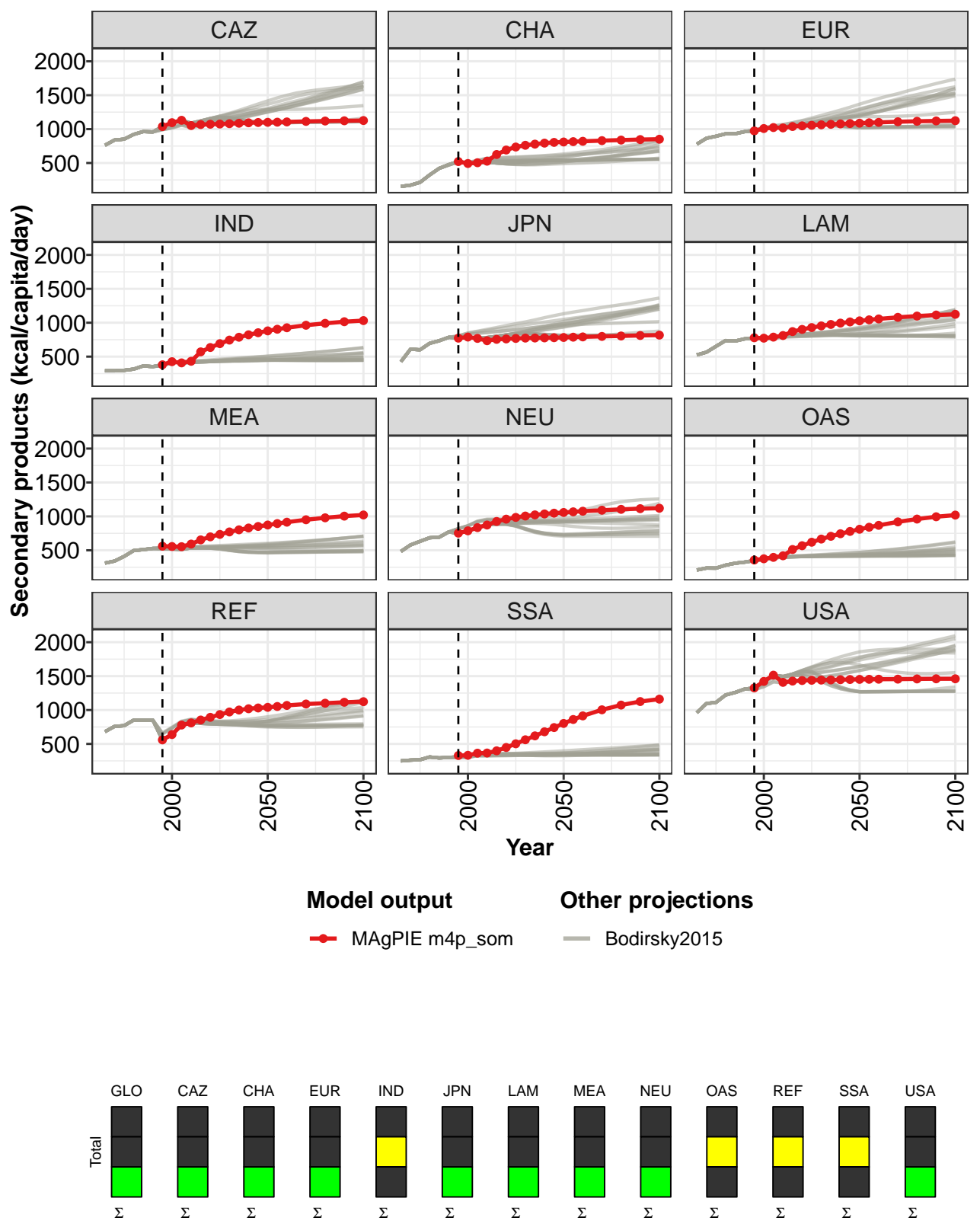


Figure 284: MAGPIE m4p\_som — Nutrition—Calorie Supply—Secondary products (kcal/capita/day)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	569	580	595	602	674	718	757	791	821	849	876
CAZ	1037	1095	1130	1053	1067	1072	1075	1080	1087	1093	1098
CHA	521	493	504	527	625	692	736	762	778	793	804
EUR	974	1009	1023	1018	1038	1048	1056	1063	1070	1077	1082
IND	380	426	408	432	571	635	692	744	786	822	853
JPN	773	789	769	735	755	761	768	774	775	777	779
LAM	779	772	788	812	870	902	929	953	975	995	1012
MEA	561	555	553	592	653	698	734	771	802	829	851
NEU	753	787	834	872	925	959	985	1005	1022	1036	1048
OAS	356	375	396	419	512	568	619	666	706	744	778
REF	560	638	779	810	853	892	933	971	1000	1019	1030
SSA	328	332	364	366	399	448	502	561	619	679	741
USA	1326	1422	1514	1408	1427	1435	1439	1441	1444	1447	1450

Table 939: MAgPIE m4p\_som — Nutrition—Calorie Supply—Secondary products (kcal/capita/day) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	902	927	951	994	1030	1061	1083
CAZ	1100	1102	1106	1114	1119	1123	1127
CHA	810	815	820	830	838	846	851
EUR	1087	1093	1099	1109	1115	1121	1124
IND	880	905	926	963	991	1015	1032
JPN	783	787	791	798	805	812	818
LAM	1028	1043	1056	1080	1099	1114	1124
MEA	873	894	915	950	979	1004	1021
NEU	1058	1067	1076	1091	1104	1114	1120
OAS	810	840	868	919	960	995	1019
REF	1040	1052	1068	1088	1100	1115	1123
SSA	802	860	913	1003	1073	1125	1161
USA	1452	1453	1454	1455	1459	1460	1461

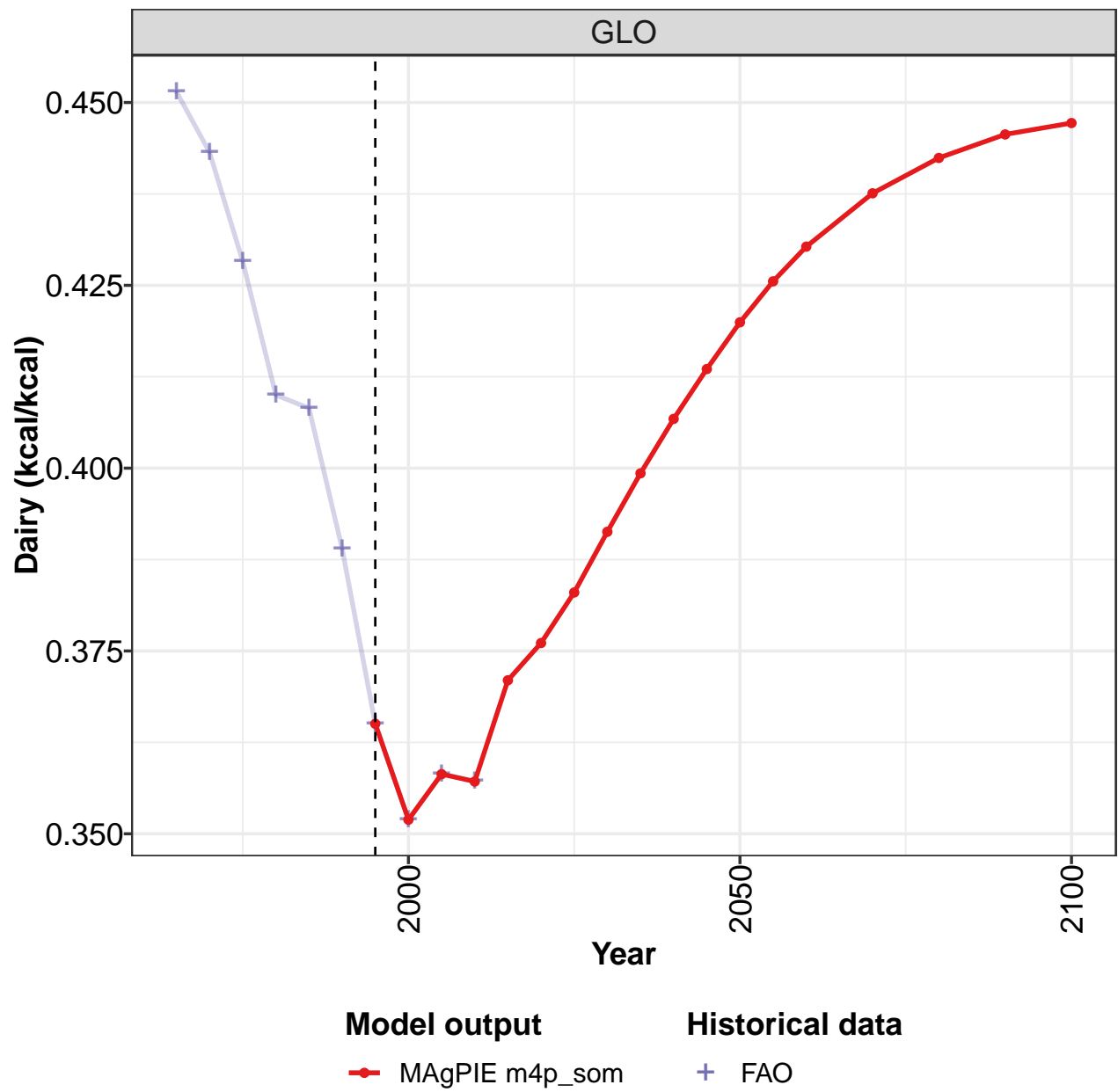
Table 940: MAgPIE m4p\_som — Nutrition—Calorie Supply—Secondary products (kcal/capita/day) [PART 2/2]

35 Dietary Composition

35.1 Livestock Demand Structure

35.1.1 Livestock products—Dairy

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

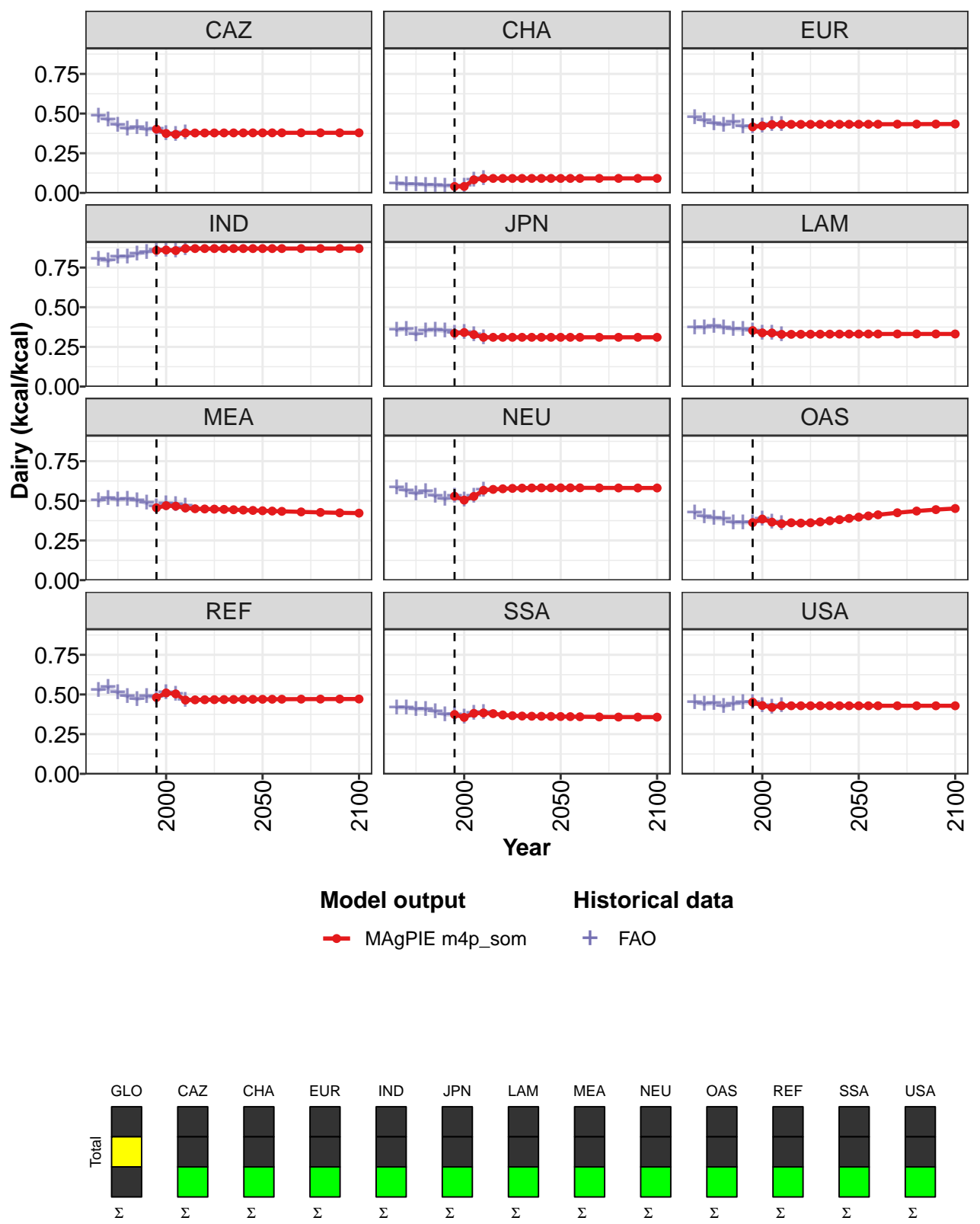


Figure 285: MAGPIE m4p\_som — Nutrition—Dietary Composition—Livestock Demand Structure—Livestock products—Dairy (kcal/kcal)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.365	0.352	0.358	0.357	0.371	0.376	0.383	0.391	0.399	0.407	0.414
CAZ	0.402	0.375	0.369	0.377	0.378	0.378	0.378	0.378	0.378	0.378	0.378
CHA	0.041	0.041	0.083	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091
EUR	0.416	0.422	0.431	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.433
IND	0.858	0.860	0.857	0.870	0.870	0.870	0.870	0.870	0.870	0.870	0.870
JPN	0.336	0.341	0.328	0.310	0.310	0.310	0.310	0.310	0.310	0.310	0.310
LAM	0.353	0.338	0.338	0.329	0.329	0.330	0.330	0.330	0.330	0.331	0.331
MEA	0.456	0.470	0.467	0.455	0.450	0.449	0.448	0.446	0.444	0.442	0.440
NEU	0.529	0.505	0.528	0.567	0.572	0.576	0.579	0.580	0.581	0.582	0.582
OAS	0.363	0.385	0.366	0.356	0.362	0.360	0.362	0.367	0.374	0.381	0.389
REF	0.481	0.510	0.504	0.465	0.466	0.467	0.468	0.468	0.469	0.469	0.470
SSA	0.374	0.356	0.381	0.384	0.379	0.371	0.366	0.364	0.363	0.363	0.362
USA	0.452	0.431	0.419	0.429	0.429	0.429	0.429	0.429	0.429	0.429	0.429

Table 941: MAgPIE m4p\_som — Nutrition—Dietary Composition—Livestock Demand Structure—Livestock products—Dairy (kcal/kcal) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.420	0.426	0.430	0.438	0.442	0.446	0.447
CAZ	0.379	0.379	0.379	0.379	0.379	0.379	0.379
CHA	0.091	0.091	0.091	0.091	0.091	0.092	0.092
EUR	0.433	0.433	0.433	0.433	0.433	0.434	0.434
IND	0.870	0.870	0.870	0.870	0.870	0.870	0.870
JPN	0.310	0.310	0.310	0.310	0.310	0.310	0.310
LAM	0.331	0.331	0.331	0.331	0.331	0.331	0.331
MEA	0.438	0.436	0.434	0.430	0.427	0.424	0.423
NEU	0.582	0.582	0.582	0.582	0.581	0.581	0.581
OAS	0.397	0.405	0.412	0.425	0.436	0.445	0.452
REF	0.470	0.470	0.470	0.471	0.471	0.471	0.471
SSA	0.361	0.360	0.360	0.358	0.358	0.357	0.357
USA	0.429	0.429	0.429	0.429	0.429	0.429	0.429

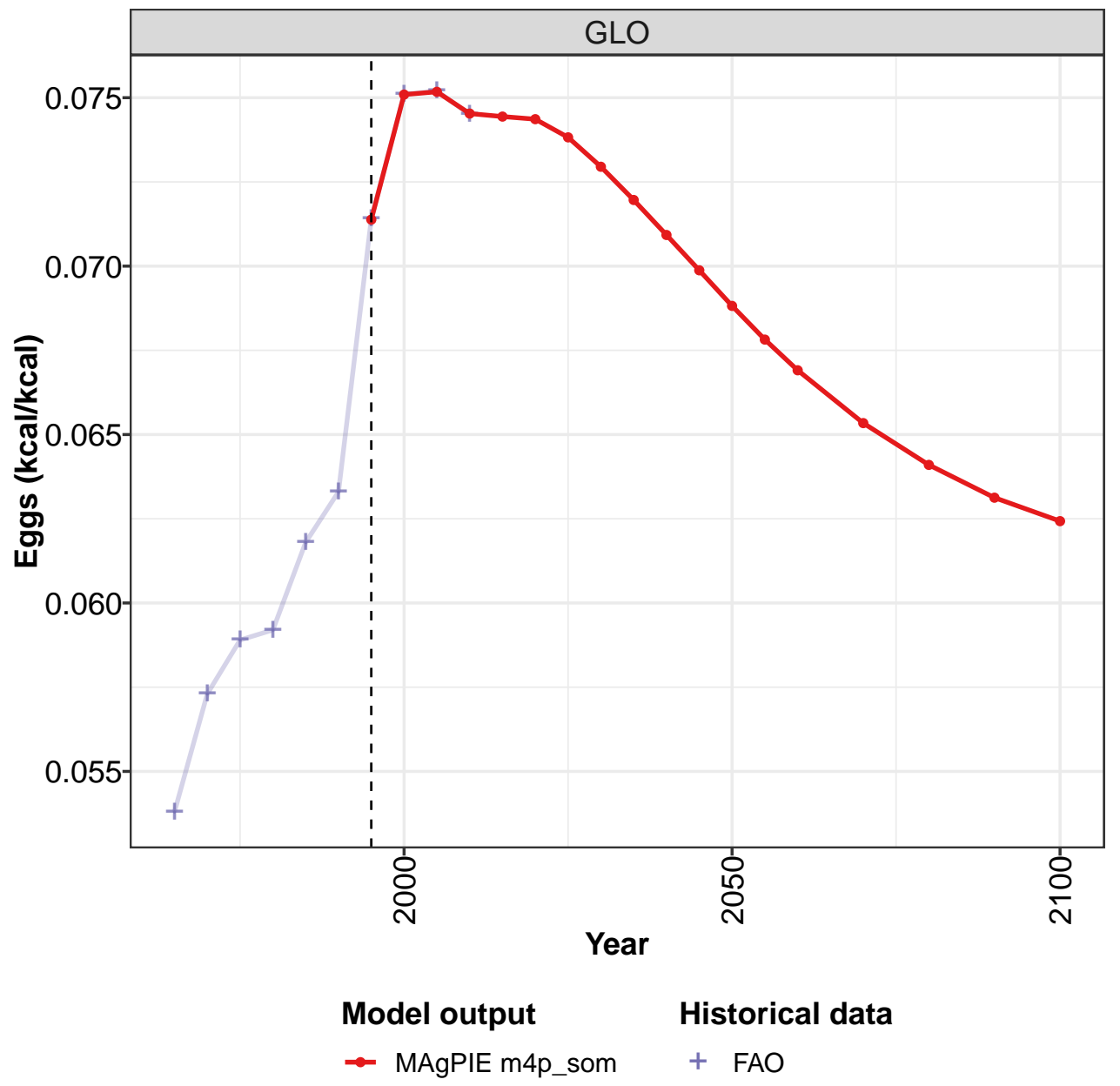
Table 942: MAgPIE m4p\_som — Nutrition—Dietary Composition—Livestock Demand Structure—Livestock products—Dairy (kcal/kcal) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.452	0.443	0.428	0.410	0.408	0.389	0.365	0.352	0.358	0.357
CAZ	0.486	0.460	0.425	0.405	0.413	0.400	0.402	0.375	0.369	0.377
CHA	0.059	0.054	0.054	0.049	0.047	0.045	0.041	0.041	0.083	0.091
EUR	0.473	0.455	0.439	0.428	0.445	0.416	0.416	0.422	0.431	0.432
IND	0.800	0.792	0.816	0.818	0.837	0.847	0.858	0.861	0.857	0.870
JPN	0.354	0.361	0.329	0.352	0.356	0.350	0.336	0.341	0.328	0.310
LAM	0.372	0.372	0.378	0.371	0.362	0.359	0.353	0.338	0.337	0.329
MEA	0.499	0.517	0.507	0.511	0.502	0.485	0.465	0.480	0.477	0.466
NEU	0.582	0.565	0.545	0.561	0.528	0.511	0.530	0.505	0.529	0.568
OAS	0.424	0.399	0.391	0.386	0.362	0.364	0.363	0.386	0.366	0.356
REF	0.528	0.544	0.513	0.487	0.471	0.486	0.481	0.510	0.504	0.465
SSA	0.418	0.416	0.407	0.406	0.393	0.373	0.374	0.356	0.383	0.385
USA	0.452	0.438	0.444	0.424	0.441	0.448	0.452	0.431	0.419	0.429

Table 943: FAO — Nutrition—Dietary Composition—Livestock Demand Structure—Livestock products—Dairy (kcal/kcal)

35.1.2
Livestock products—Eggs

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

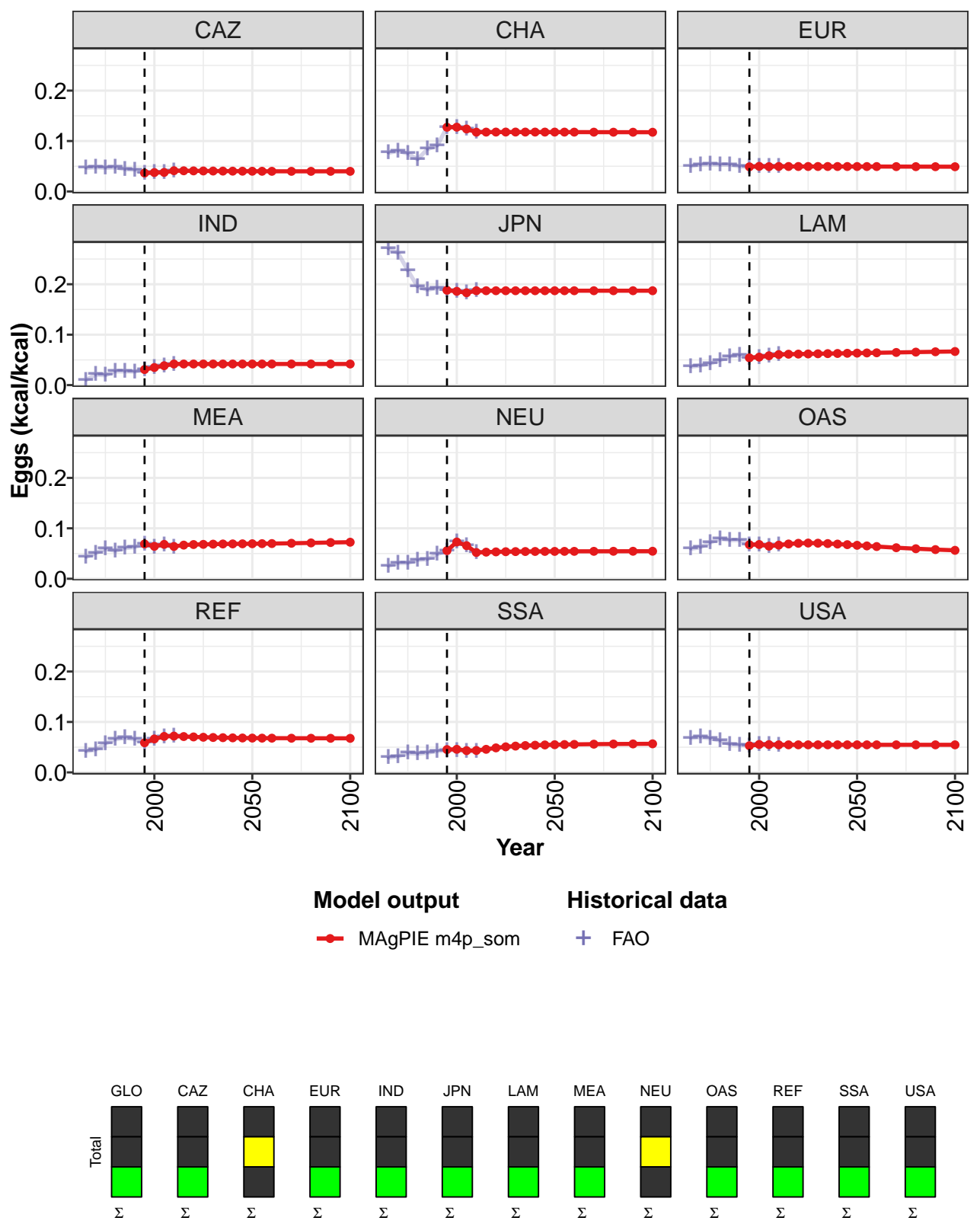


Figure 286: MAgPIE m4p\_som — Nutrition—Dietary Composition—Livestock Demand Structure—Livestock products—Eggs (kcal/kcal)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.071	0.075	0.075	0.075	0.074	0.074	0.074	0.073	0.072	0.071	0.070
CAZ	0.037	0.037	0.038	0.041	0.041	0.041	0.041	0.041	0.040	0.040	0.040
CHA	0.127	0.127	0.124	0.118	0.118	0.118	0.118	0.118	0.118	0.118	0.118
EUR	0.049	0.050	0.049	0.050	0.050	0.050	0.050	0.050	0.050	0.049	0.049
IND	0.031	0.035	0.038	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042
JPN	0.188	0.186	0.183	0.187	0.187	0.187	0.187	0.187	0.187	0.187	0.187
LAM	0.054	0.056	0.058	0.061	0.061	0.062	0.062	0.062	0.062	0.063	0.063
MEA	0.069	0.064	0.068	0.064	0.067	0.068	0.068	0.069	0.069	0.069	0.069
NEU	0.056	0.073	0.066	0.052	0.053	0.053	0.054	0.054	0.054	0.054	0.054
OAS	0.068	0.068	0.065	0.067	0.069	0.070	0.071	0.071	0.070	0.069	0.068
REF	0.059	0.066	0.071	0.072	0.071	0.070	0.070	0.069	0.069	0.068	0.068
SSA	0.045	0.046	0.043	0.043	0.046	0.049	0.051	0.052	0.053	0.054	0.054
USA	0.053	0.055	0.055	0.055	0.055	0.055	0.055	0.055	0.055	0.055	0.055

Table 944: MAgPIE m4p\_som — Nutrition—Dietary Composition—Livestock Demand Structure—Livestock products—Eggs (kcal/kcal) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.069	0.068	0.067	0.065	0.064	0.063	0.062
CAZ	0.040	0.040	0.040	0.040	0.040	0.040	0.040
CHA	0.118	0.118	0.118	0.118	0.118	0.117	0.117
EUR	0.049	0.049	0.049	0.049	0.049	0.049	0.049
IND	0.042	0.042	0.042	0.042	0.042	0.042	0.042
JPN	0.187	0.187	0.187	0.187	0.187	0.187	0.187
LAM	0.063	0.064	0.064	0.065	0.065	0.066	0.067
MEA	0.069	0.070	0.070	0.070	0.071	0.072	0.072
NEU	0.054	0.054	0.054	0.054	0.054	0.055	0.055
OAS	0.066	0.065	0.064	0.062	0.060	0.058	0.056
REF	0.068	0.068	0.068	0.068	0.068	0.068	0.068
SSA	0.055	0.055	0.056	0.056	0.056	0.056	0.057
USA	0.055	0.055	0.055	0.055	0.055	0.055	0.055

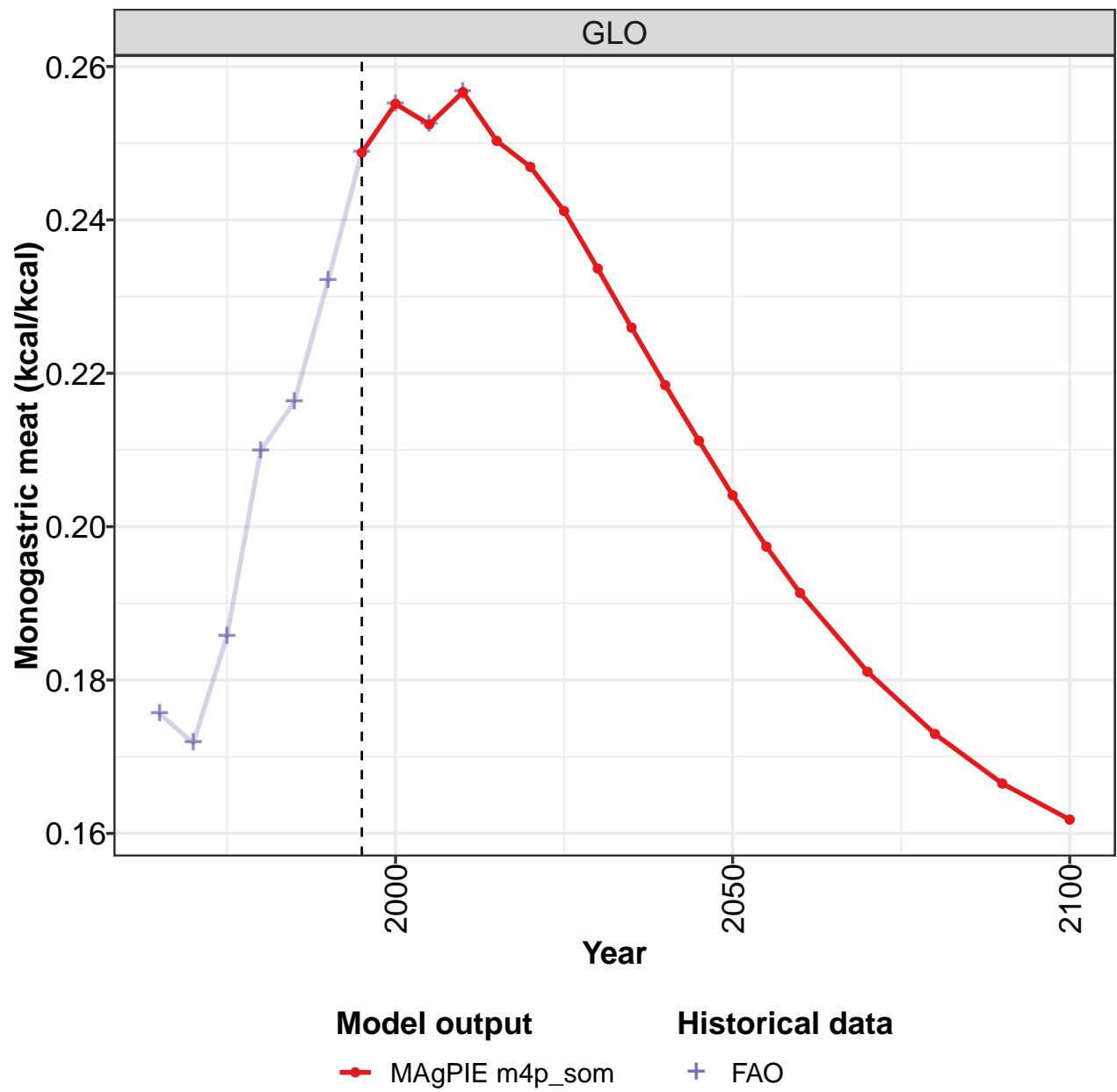
Table 945: MAgPIE m4p\_som — Nutrition—Dietary Composition—Livestock Demand Structure—Livestock products—Eggs (kcal/kcal) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.054	0.057	0.059	0.059	0.062	0.063	0.071	0.075	0.075	0.074
CAZ	0.046	0.048	0.047	0.048	0.044	0.043	0.036	0.037	0.038	0.041
CHA	0.076	0.081	0.075	0.064	0.084	0.090	0.127	0.128	0.124	0.118
EUR	0.050	0.053	0.054	0.053	0.053	0.050	0.049	0.050	0.049	0.050
IND	0.010	0.021	0.019	0.027	0.027	0.027	0.031	0.035	0.038	0.042
JPN	0.271	0.262	0.227	0.195	0.189	0.193	0.188	0.186	0.183	0.187
LAM	0.036	0.039	0.043	0.049	0.057	0.059	0.054	0.055	0.058	0.060
MEA	0.043	0.051	0.059	0.055	0.060	0.063	0.069	0.063	0.068	0.063
NEU	0.025	0.031	0.031	0.037	0.039	0.049	0.056	0.073	0.066	0.052
OAS	0.059	0.062	0.072	0.079	0.076	0.077	0.067	0.068	0.064	0.067
REF	0.042	0.045	0.057	0.066	0.068	0.066	0.059	0.066	0.071	0.072
SSA	0.029	0.032	0.038	0.037	0.039	0.042	0.044	0.044	0.041	0.042
USA	0.068	0.070	0.068	0.063	0.056	0.054	0.053	0.055	0.055	0.055

Table 946: FAO — Nutrition—Dietary Composition—Livestock Demand Structure—Livestock products—Eggs (kcal/kcal)

35.1.3 Livestock products—Monogastric meat

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

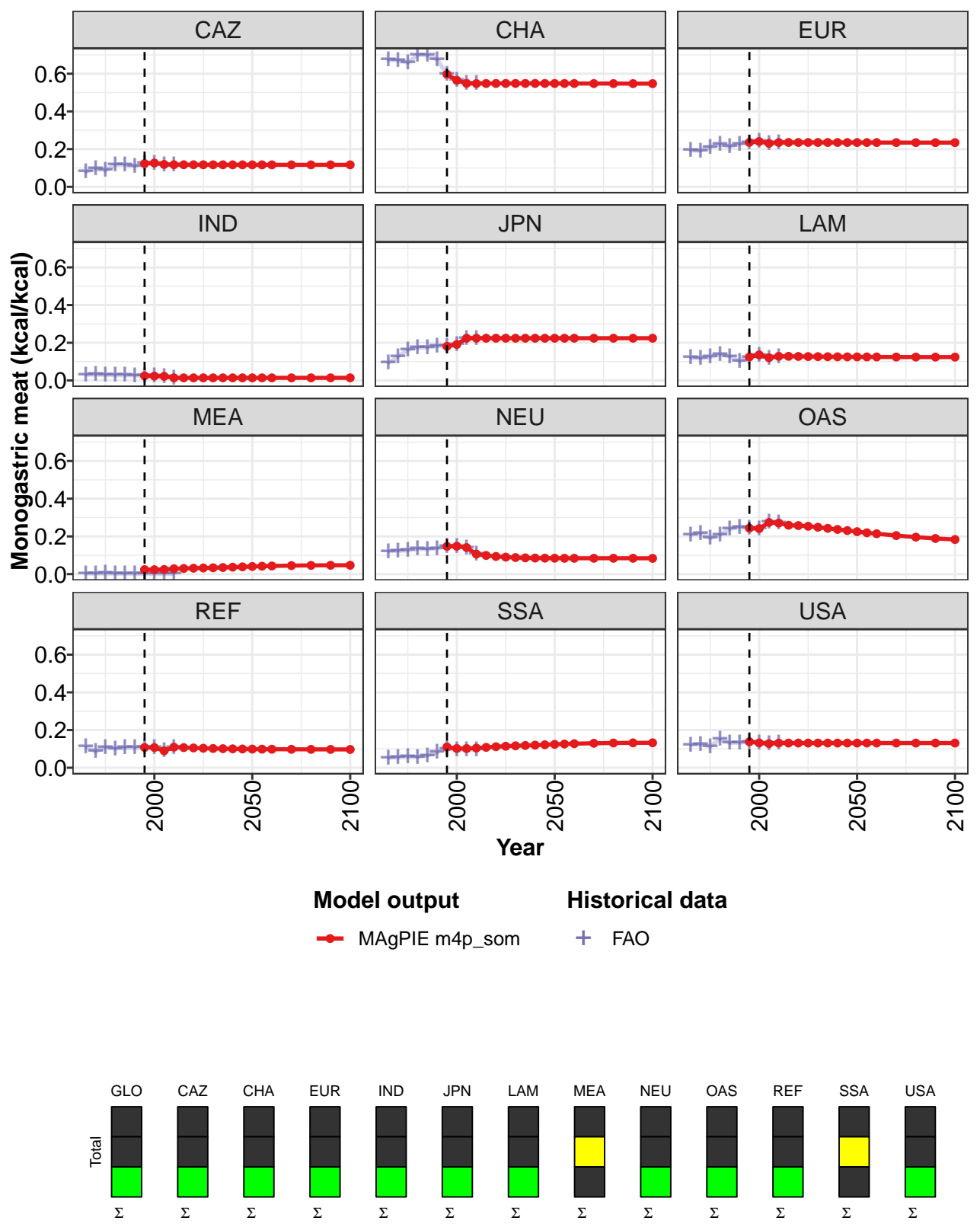


Figure 287: MAgPIE m4p\_som — Nutrition—Dietary Composition—Livestock Demand Structure—Livestock products—Monogastric meat (kcal/kcal)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.249	0.255	0.252	0.257	0.250	0.247	0.241	0.234	0.226	0.218	0.211
CAZ	0.123	0.126	0.119	0.117	0.117	0.117	0.117	0.117	0.117	0.117	0.117
CHA	0.597	0.565	0.549	0.548	0.548	0.548	0.549	0.549	0.549	0.548	0.548
EUR	0.236	0.240	0.231	0.235	0.235	0.235	0.235	0.235	0.235	0.235	0.235
IND	0.025	0.023	0.022	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
JPN	0.181	0.191	0.224	0.224	0.224	0.224	0.224	0.224	0.224	0.224	0.224
LAM	0.125	0.136	0.121	0.128	0.128	0.127	0.127	0.126	0.126	0.126	0.125
MEA	0.024	0.023	0.024	0.028	0.030	0.031	0.032	0.034	0.035	0.037	0.039
NEU	0.147	0.148	0.141	0.106	0.099	0.094	0.090	0.088	0.086	0.085	0.085
OAS	0.244	0.241	0.274	0.271	0.259	0.258	0.254	0.249	0.243	0.237	0.231
REF	0.108	0.107	0.090	0.109	0.107	0.105	0.103	0.102	0.101	0.100	0.100
SSA	0.110	0.102	0.102	0.104	0.108	0.112	0.114	0.116	0.118	0.120	0.122
USA	0.138	0.132	0.128	0.131	0.131	0.131	0.131	0.131	0.131	0.131	0.131

Table 947: MAgPIE m4p\_som — Nutrition—Dietary Composition—Livestock Demand Structure—Livestock products—Monogastric meat (kcal/kcal) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.204	0.197	0.191	0.181	0.173	0.167	0.162
CAZ	0.117	0.117	0.117	0.117	0.117	0.117	0.117
CHA	0.548	0.548	0.548	0.548	0.548	0.548	0.547
EUR	0.235	0.235	0.235	0.235	0.235	0.235	0.234
IND	0.014	0.014	0.014	0.014	0.014	0.014	0.014
JPN	0.224	0.224	0.224	0.224	0.224	0.224	0.224
LAM	0.125	0.125	0.125	0.124	0.124	0.124	0.124
MEA	0.040	0.042	0.043	0.045	0.046	0.047	0.047
NEU	0.084	0.084	0.084	0.084	0.084	0.084	0.084
OAS	0.225	0.219	0.214	0.204	0.196	0.189	0.184
REF	0.099	0.099	0.098	0.098	0.097	0.097	0.097
SSA	0.124	0.126	0.128	0.130	0.131	0.132	0.132
USA	0.131	0.131	0.131	0.131	0.131	0.131	0.131

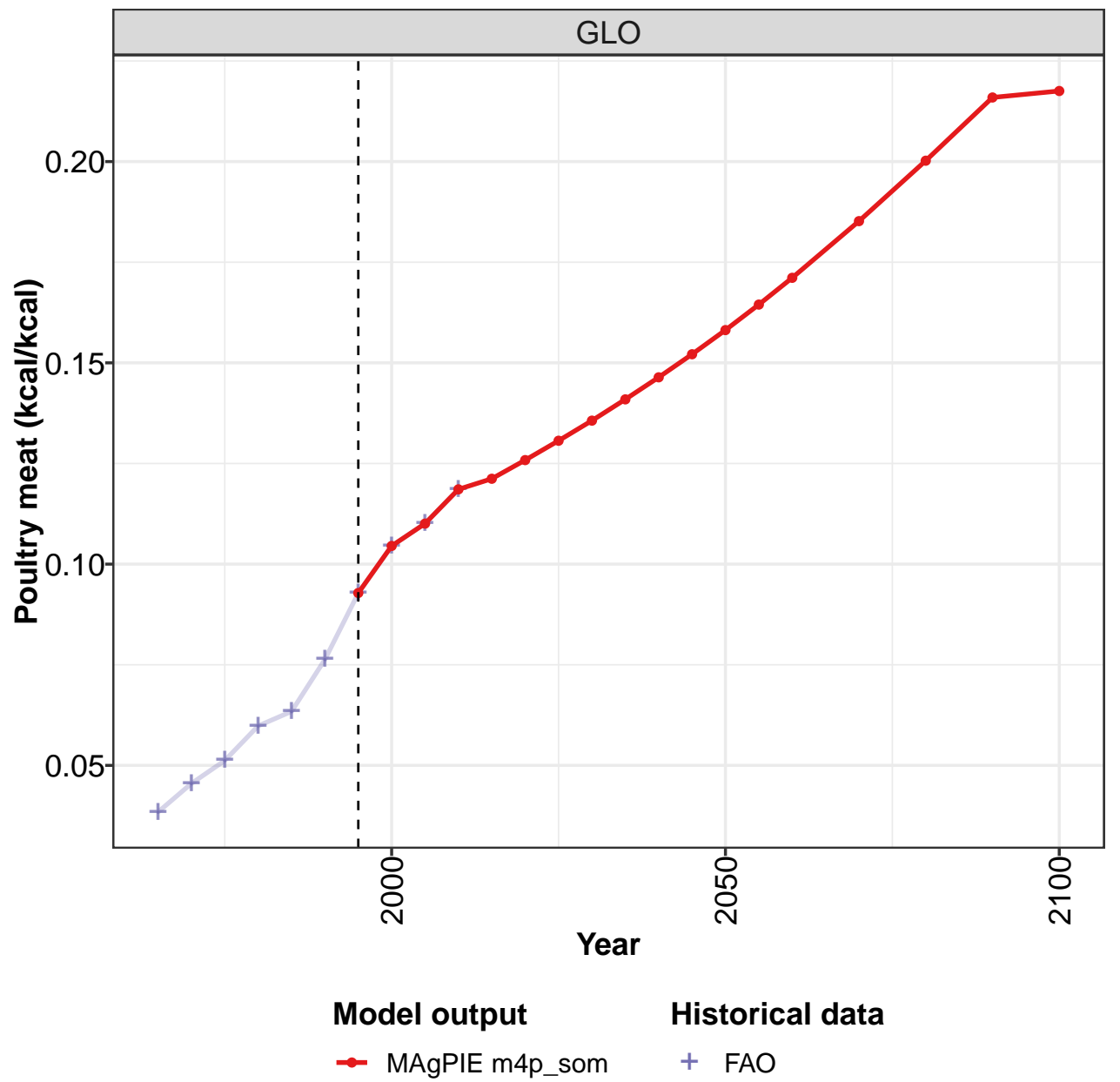
Table 948: MAgPIE m4p\_som — Nutrition—Dietary Composition—Livestock Demand Structure—Livestock products—Monogastric meat (kcal/kcal) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.176	0.172	0.186	0.210	0.216	0.232	0.249	0.255	0.253	0.257
CAZ	0.079	0.097	0.087	0.118	0.116	0.109	0.123	0.126	0.119	0.117
CHA	0.673	0.671	0.658	0.700	0.698	0.676	0.597	0.565	0.549	0.548
EUR	0.193	0.191	0.212	0.225	0.213	0.227	0.236	0.240	0.231	0.235
IND	0.030	0.031	0.029	0.027	0.027	0.027	0.025	0.023	0.022	0.014
JPN	0.094	0.127	0.163	0.175	0.175	0.182	0.181	0.191	0.224	0.224
LAM	0.120	0.117	0.124	0.138	0.127	0.102	0.123	0.134	0.119	0.127
MEA	0.004	0.003	0.004	0.002	0.003	0.002	0.002	0.003	0.003	0.002
NEU	0.120	0.124	0.125	0.134	0.132	0.137	0.147	0.147	0.141	0.106
OAS	0.209	0.216	0.191	0.209	0.240	0.250	0.244	0.241	0.275	0.271
REF	0.112	0.086	0.109	0.102	0.106	0.106	0.107	0.107	0.090	0.109
SSA	0.052	0.055	0.058	0.056	0.064	0.082	0.101	0.094	0.094	0.096
USA	0.121	0.124	0.114	0.151	0.131	0.133	0.138	0.132	0.128	0.131

Table 949: FAO — Nutrition—Dietary Composition—Livestock Demand Structure—Livestock products—Monogastric meat (kcal/kcal)

35.1.4 Livestock products—Poultry meat

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

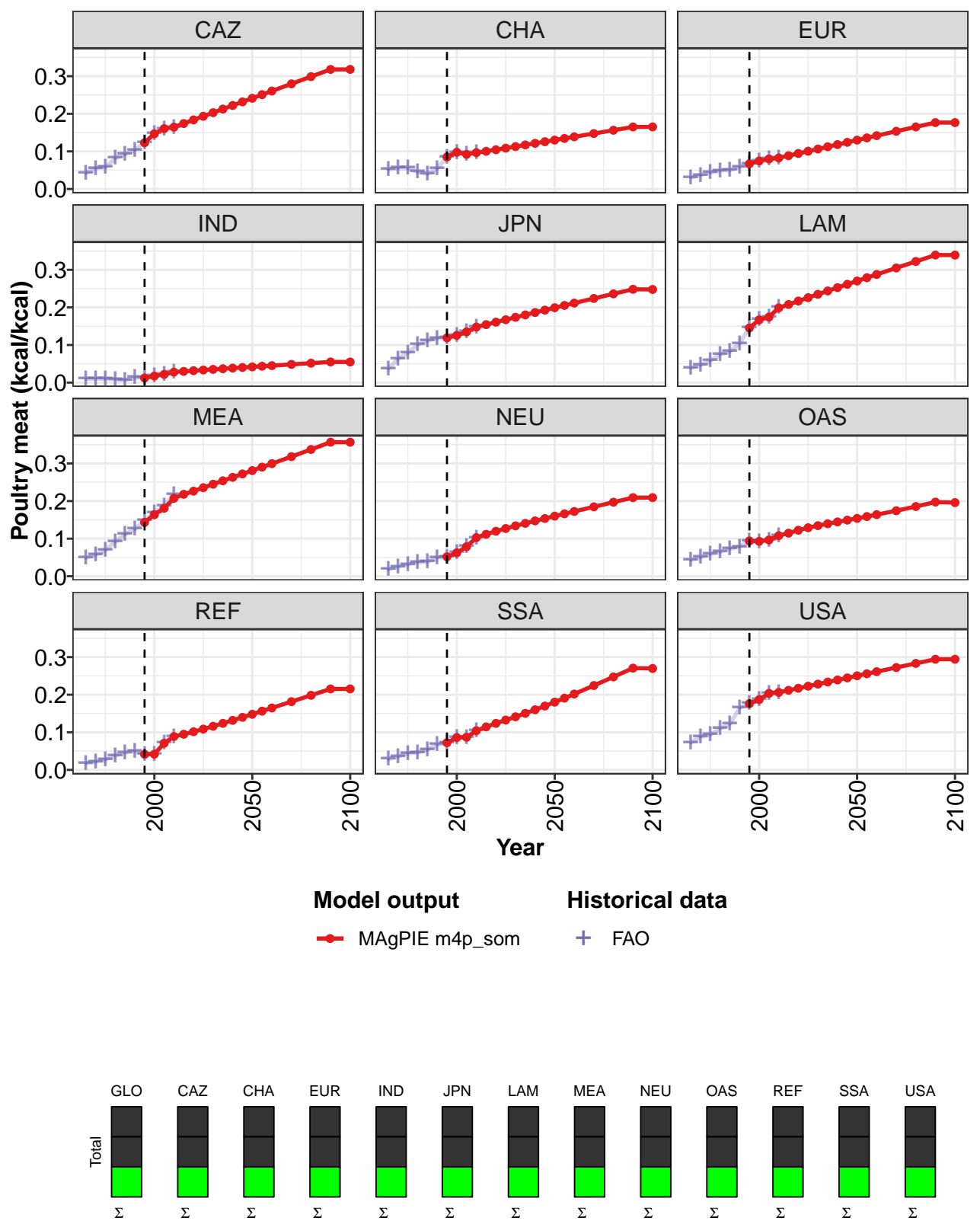


Figure 288: MAgPIE m4p\_som — Nutrition—Dietary Composition—Livestock Demand Structure—Livestock products—Poultry meat (kcal/kcal)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.093	0.105	0.110	0.119	0.121	0.126	0.131	0.136	0.141	0.146	0.152
CAZ	0.123	0.147	0.161	0.165	0.174	0.184	0.193	0.203	0.213	0.222	0.232
CHA	0.085	0.098	0.092	0.097	0.100	0.104	0.109	0.113	0.117	0.121	0.126
EUR	0.067	0.074	0.080	0.083	0.088	0.094	0.100	0.106	0.112	0.118	0.124
IND	0.012	0.017	0.022	0.028	0.030	0.032	0.034	0.035	0.037	0.039	0.040
JPN	0.119	0.126	0.135	0.148	0.154	0.161	0.167	0.174	0.180	0.186	0.193
LAM	0.145	0.167	0.174	0.199	0.208	0.217	0.226	0.235	0.244	0.253	0.262
MEA	0.143	0.164	0.181	0.207	0.218	0.226	0.236	0.245	0.254	0.263	0.272
NEU	0.052	0.062	0.079	0.103	0.112	0.120	0.127	0.134	0.141	0.147	0.154
OAS	0.094	0.093	0.097	0.108	0.115	0.122	0.129	0.135	0.140	0.145	0.149
REF	0.042	0.042	0.071	0.089	0.095	0.102	0.109	0.116	0.124	0.132	0.140
SSA	0.072	0.086	0.087	0.104	0.114	0.124	0.133	0.141	0.150	0.160	0.170
USA	0.176	0.187	0.204	0.206	0.212	0.217	0.223	0.228	0.234	0.239	0.245

Table 950: MAgPIE m4p\_som — Nutrition—Dietary Composition—Livestock Demand Structure—Livestock products—Poultry meat (kcal/kcal) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.158	0.164	0.171	0.185	0.200	0.216	0.218
CAZ	0.241	0.251	0.261	0.280	0.299	0.318	0.318
CHA	0.130	0.134	0.139	0.147	0.156	0.165	0.165
EUR	0.130	0.136	0.142	0.153	0.165	0.177	0.177
IND	0.042	0.044	0.045	0.048	0.052	0.055	0.055
JPN	0.199	0.205	0.212	0.224	0.236	0.248	0.248
LAM	0.270	0.279	0.288	0.305	0.322	0.339	0.339
MEA	0.281	0.290	0.299	0.318	0.337	0.357	0.357
NEU	0.160	0.166	0.172	0.185	0.197	0.209	0.209
OAS	0.154	0.159	0.164	0.174	0.185	0.197	0.196
REF	0.148	0.156	0.165	0.182	0.198	0.215	0.215
SSA	0.180	0.191	0.202	0.224	0.247	0.271	0.270
USA	0.250	0.256	0.261	0.272	0.283	0.294	0.294

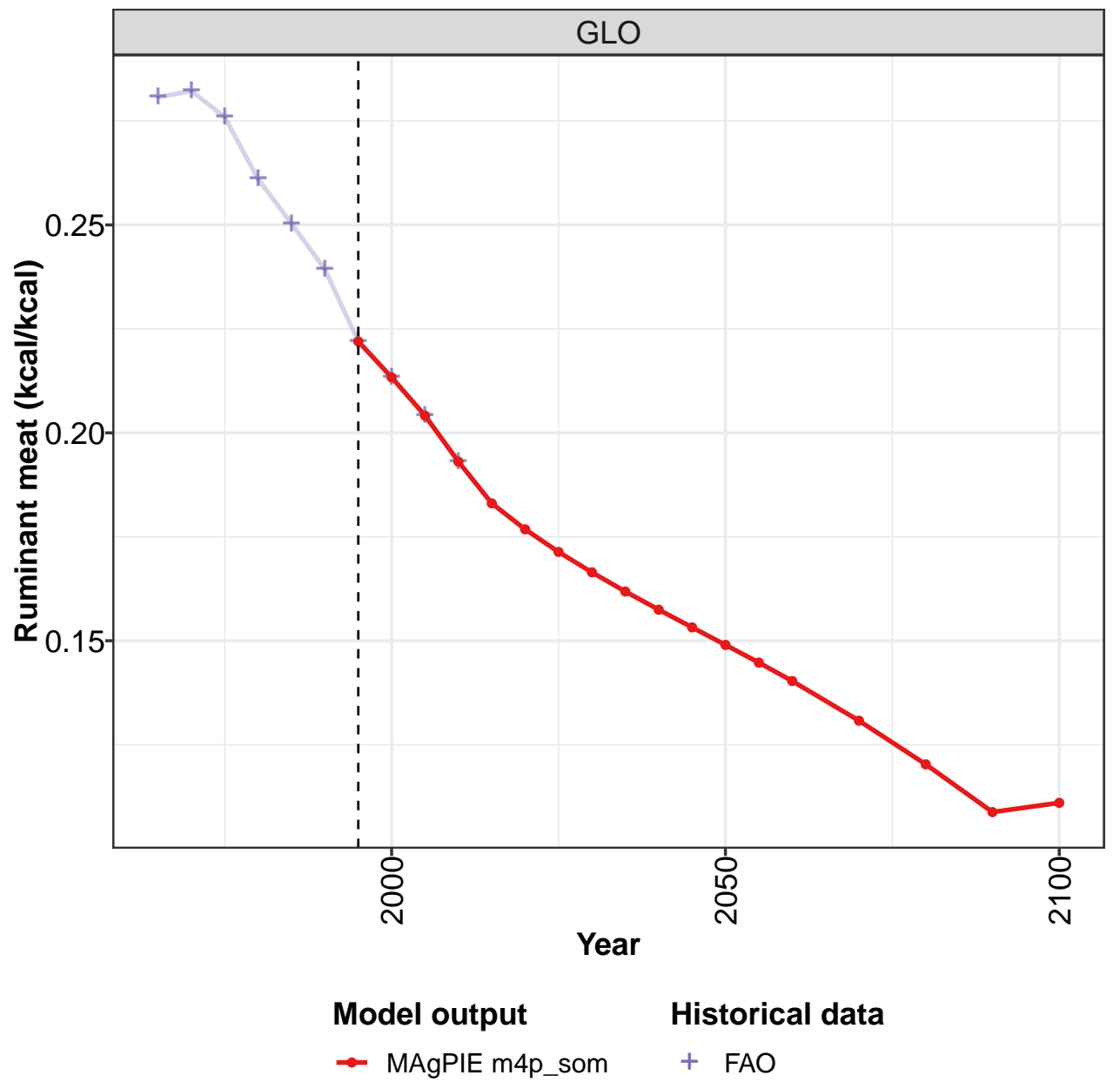
Table 951: MAgPIE m4p\_som — Nutrition—Dietary Composition—Livestock Demand Structure—Livestock products—Poultry meat (kcal/kcal) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.038	0.045	0.051	0.060	0.063	0.076	0.093	0.104	0.110	0.119
CAZ	0.042	0.055	0.058	0.082	0.092	0.104	0.123	0.147	0.161	0.165
CHA	0.052	0.055	0.055	0.045	0.040	0.054	0.085	0.098	0.092	0.097
EUR	0.031	0.037	0.043	0.049	0.050	0.058	0.067	0.074	0.080	0.083
IND	0.010	0.010	0.010	0.009	0.007	0.013	0.012	0.017	0.022	0.028
JPN	0.036	0.064	0.079	0.101	0.111	0.118	0.119	0.126	0.135	0.148
LAM	0.038	0.047	0.058	0.075	0.083	0.104	0.146	0.168	0.175	0.200
MEA	0.048	0.057	0.069	0.092	0.112	0.125	0.148	0.169	0.188	0.218
NEU	0.018	0.025	0.031	0.038	0.038	0.049	0.052	0.062	0.079	0.103
OAS	0.043	0.050	0.059	0.064	0.073	0.078	0.094	0.093	0.096	0.108
REF	0.018	0.021	0.027	0.038	0.046	0.050	0.042	0.042	0.071	0.089
SSA	0.028	0.035	0.044	0.046	0.054	0.067	0.071	0.085	0.086	0.103
USA	0.072	0.088	0.093	0.110	0.122	0.164	0.176	0.187	0.203	0.206

Table 952: FAO — Nutrition—Dietary Composition—Livestock Demand Structure—Livestock products—Poultry meat (kcal/kcal)

35.1.5 Livestock products—Ruminant meat

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

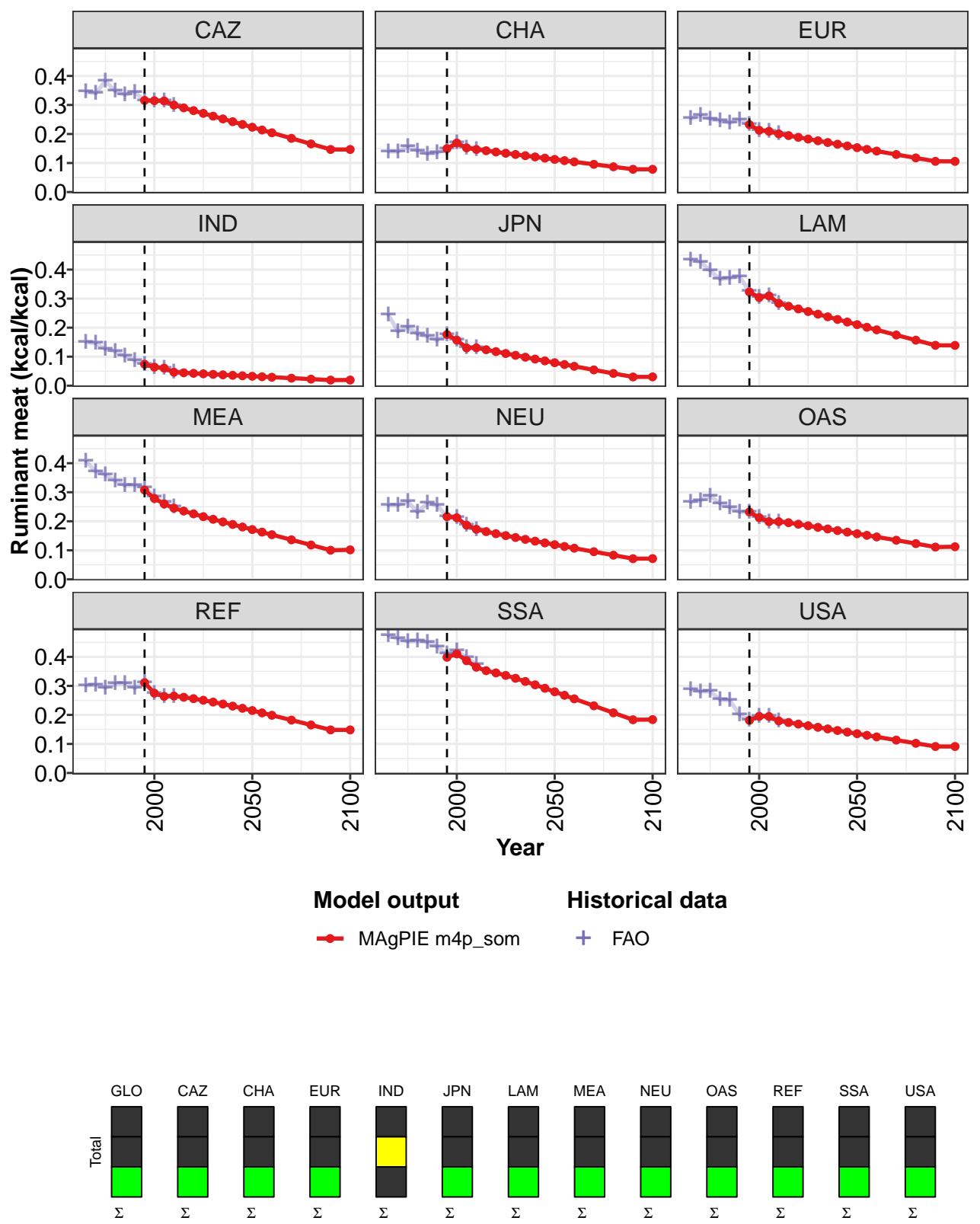


Figure 289: MAgPIE m4p\_som — Nutrition—Dietary Composition—Livestock Demand Structure—Livestock products—Ruminant meat (kcal/kcal)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.222	0.213	0.204	0.193	0.183	0.177	0.171	0.166	0.162	0.157	0.153
CAZ	0.316	0.315	0.314	0.300	0.290	0.281	0.271	0.262	0.252	0.242	0.233
CHA	0.150	0.169	0.152	0.147	0.142	0.138	0.134	0.130	0.125	0.121	0.117
EUR	0.232	0.213	0.209	0.201	0.195	0.189	0.183	0.177	0.171	0.165	0.159
IND	0.074	0.064	0.060	0.047	0.044	0.043	0.041	0.039	0.037	0.036	0.034
JPN	0.176	0.157	0.130	0.131	0.124	0.117	0.111	0.105	0.098	0.092	0.085
LAM	0.323	0.304	0.309	0.284	0.274	0.265	0.255	0.246	0.237	0.228	0.219
MEA	0.307	0.279	0.260	0.245	0.235	0.226	0.216	0.207	0.198	0.189	0.180
NEU	0.216	0.212	0.187	0.172	0.164	0.157	0.151	0.144	0.138	0.132	0.125
OAS	0.232	0.212	0.199	0.199	0.195	0.190	0.185	0.179	0.174	0.168	0.163
REF	0.311	0.275	0.264	0.265	0.261	0.256	0.251	0.244	0.237	0.230	0.223
SSA	0.399	0.410	0.387	0.364	0.352	0.345	0.336	0.326	0.315	0.304	0.292
USA	0.181	0.195	0.195	0.179	0.174	0.168	0.163	0.157	0.152	0.146	0.141

Table 953: MAgPIE m4p\_som — Nutrition—Dietary Composition—Livestock Demand Structure—Livestock products—Ruminant meat (kcal/kcal) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.149	0.145	0.140	0.131	0.120	0.109	0.111
CAZ	0.223	0.214	0.204	0.185	0.166	0.147	0.147
CHA	0.113	0.108	0.104	0.096	0.087	0.078	0.078
EUR	0.153	0.147	0.141	0.129	0.118	0.106	0.106
IND	0.032	0.031	0.029	0.026	0.023	0.019	0.020
JPN	0.079	0.073	0.067	0.054	0.042	0.030	0.030
LAM	0.210	0.201	0.192	0.175	0.157	0.139	0.139
MEA	0.171	0.163	0.154	0.136	0.118	0.100	0.102
NEU	0.119	0.113	0.107	0.095	0.083	0.071	0.071
OAS	0.157	0.152	0.146	0.135	0.123	0.111	0.112
REF	0.215	0.207	0.199	0.182	0.165	0.148	0.148
SSA	0.280	0.268	0.255	0.231	0.207	0.183	0.184
USA	0.135	0.130	0.124	0.113	0.102	0.091	0.091

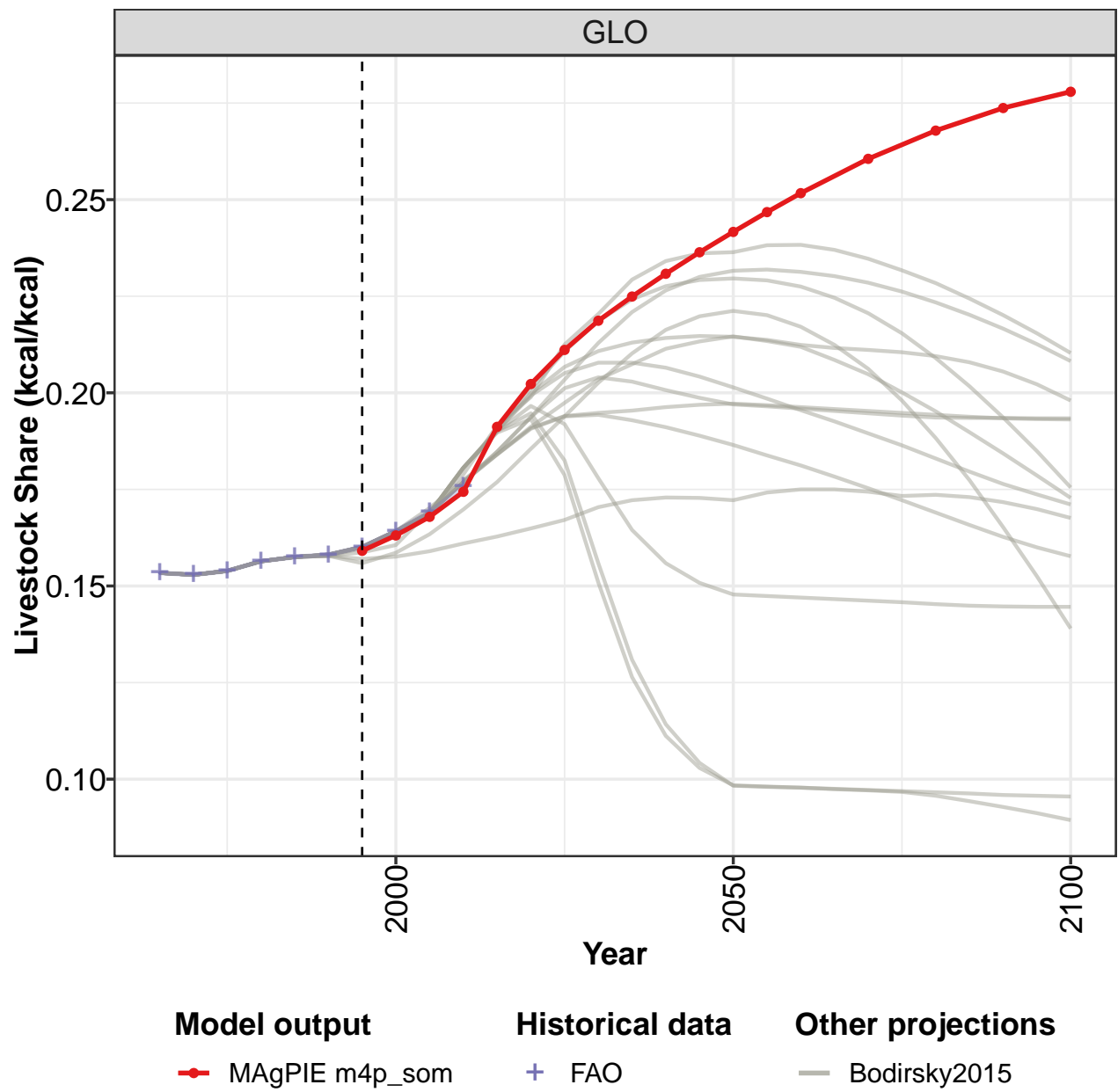
Table 954: MAgPIE m4p\_som — Nutrition—Dietary Composition—Livestock Demand Structure—Livestock products—Ruminant meat (kcal/kcal) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.281	0.282	0.276	0.261	0.250	0.239	0.222	0.213	0.204	0.193
CAZ	0.346	0.340	0.383	0.347	0.335	0.344	0.316	0.315	0.314	0.300
CHA	0.140	0.139	0.158	0.142	0.132	0.135	0.150	0.169	0.152	0.147
EUR	0.253	0.264	0.252	0.245	0.239	0.249	0.232	0.213	0.209	0.201
IND	0.150	0.146	0.126	0.118	0.102	0.087	0.074	0.064	0.060	0.046
JPN	0.245	0.186	0.202	0.177	0.169	0.157	0.176	0.157	0.130	0.131
LAM	0.433	0.426	0.397	0.366	0.371	0.376	0.325	0.305	0.311	0.285
MEA	0.406	0.372	0.360	0.339	0.323	0.325	0.316	0.284	0.265	0.251
NEU	0.255	0.256	0.268	0.231	0.263	0.255	0.216	0.212	0.187	0.172
OAS	0.266	0.272	0.288	0.261	0.248	0.231	0.232	0.212	0.199	0.199
REF	0.301	0.304	0.294	0.308	0.309	0.292	0.311	0.275	0.264	0.265
SSA	0.472	0.463	0.453	0.455	0.451	0.435	0.410	0.421	0.397	0.374
USA	0.287	0.280	0.281	0.252	0.251	0.200	0.181	0.195	0.195	0.179

Table 955: FAO — Nutrition—Dietary Composition—Livestock Demand Structure—Livestock products—Ruminant meat (kcal/kcal)

35.2 Livestock Share

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

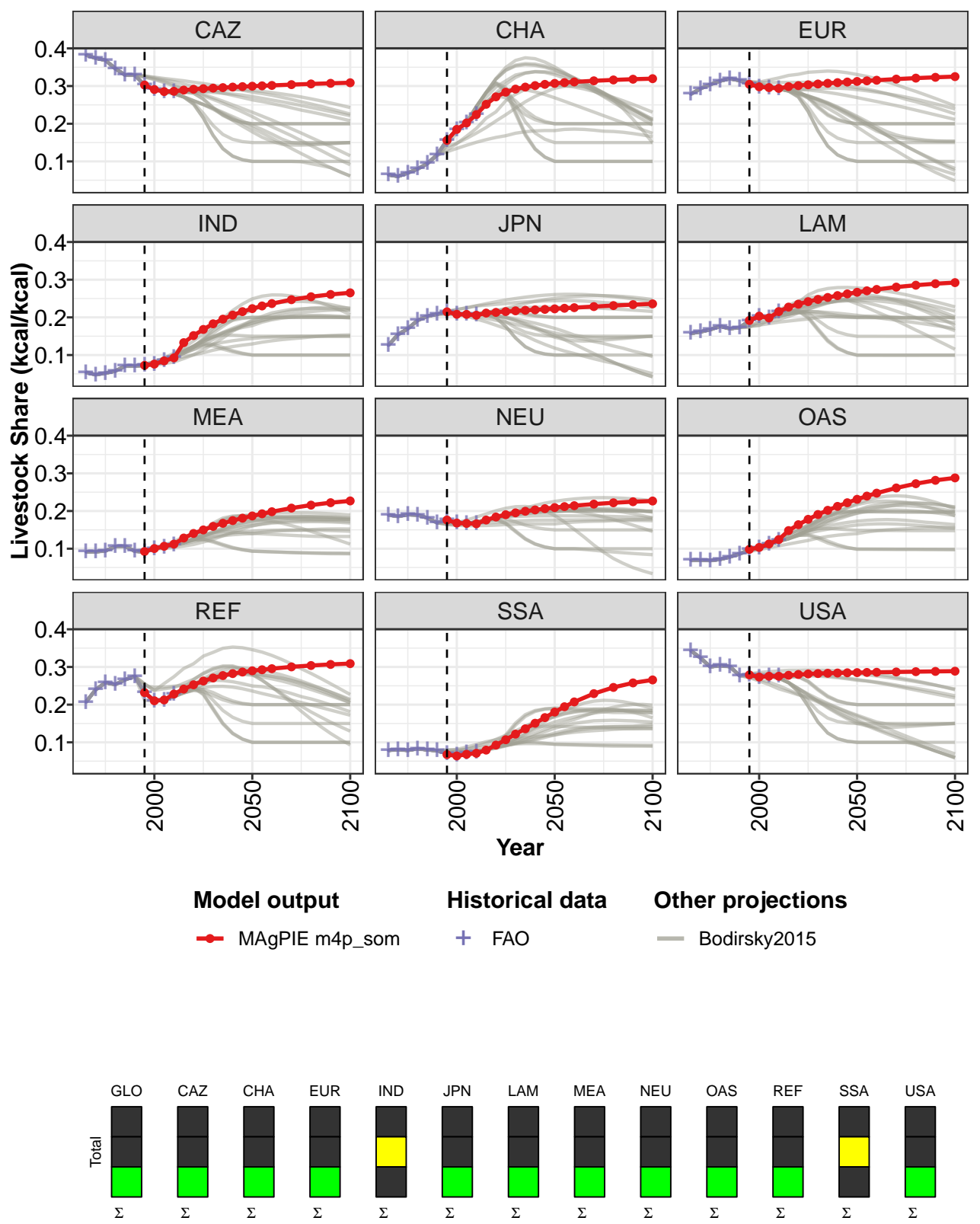


Figure 290: MAgPIE m4p\_som — Nutrition—Dietary Composition—Livestock Share (kcal/kcal)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.159	0.163	0.168	0.174	0.191	0.202	0.211	0.219	0.225	0.231	0.236
CAZ	0.303	0.291	0.285	0.286	0.289	0.292	0.293	0.294	0.296	0.297	0.299
CHA	0.156	0.185	0.202	0.224	0.252	0.271	0.284	0.292	0.297	0.301	0.305
EUR	0.305	0.298	0.296	0.294	0.299	0.301	0.303	0.305	0.307	0.309	0.311
IND	0.073	0.076	0.084	0.093	0.133	0.152	0.168	0.183	0.195	0.206	0.215
JPN	0.215	0.208	0.208	0.206	0.211	0.213	0.215	0.217	0.219	0.220	0.221
LAM	0.192	0.203	0.199	0.215	0.227	0.235	0.242	0.248	0.253	0.258	0.262
MEA	0.093	0.100	0.106	0.112	0.128	0.140	0.150	0.159	0.167	0.175	0.181
NEU	0.176	0.168	0.167	0.166	0.176	0.184	0.190	0.195	0.199	0.203	0.206
OAS	0.098	0.103	0.112	0.124	0.148	0.164	0.178	0.191	0.202	0.212	0.222
REF	0.232	0.210	0.212	0.228	0.241	0.253	0.263	0.271	0.277	0.282	0.287
SSA	0.067	0.064	0.068	0.071	0.079	0.093	0.107	0.122	0.136	0.151	0.166
USA	0.279	0.273	0.276	0.275	0.278	0.280	0.282	0.283	0.283	0.284	0.285

Table 956: MAgPIE m4p\_som — Nutrition—Dietary Composition—Livestock Share (kcal/kcal) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.242	0.247	0.252	0.261	0.268	0.274	0.278
CAZ	0.300	0.301	0.302	0.304	0.306	0.307	0.309
CHA	0.307	0.309	0.311	0.314	0.316	0.318	0.320
EUR	0.312	0.314	0.315	0.318	0.321	0.323	0.325
IND	0.223	0.230	0.237	0.247	0.255	0.261	0.265
JPN	0.223	0.224	0.226	0.229	0.231	0.234	0.236
LAM	0.267	0.271	0.274	0.280	0.285	0.289	0.292
MEA	0.187	0.193	0.198	0.208	0.216	0.222	0.227
NEU	0.209	0.212	0.214	0.218	0.222	0.225	0.227
OAS	0.231	0.240	0.247	0.261	0.272	0.281	0.288
REF	0.290	0.293	0.295	0.300	0.304	0.307	0.309
SSA	0.180	0.194	0.207	0.229	0.246	0.258	0.266
USA	0.285	0.286	0.286	0.287	0.288	0.288	0.289

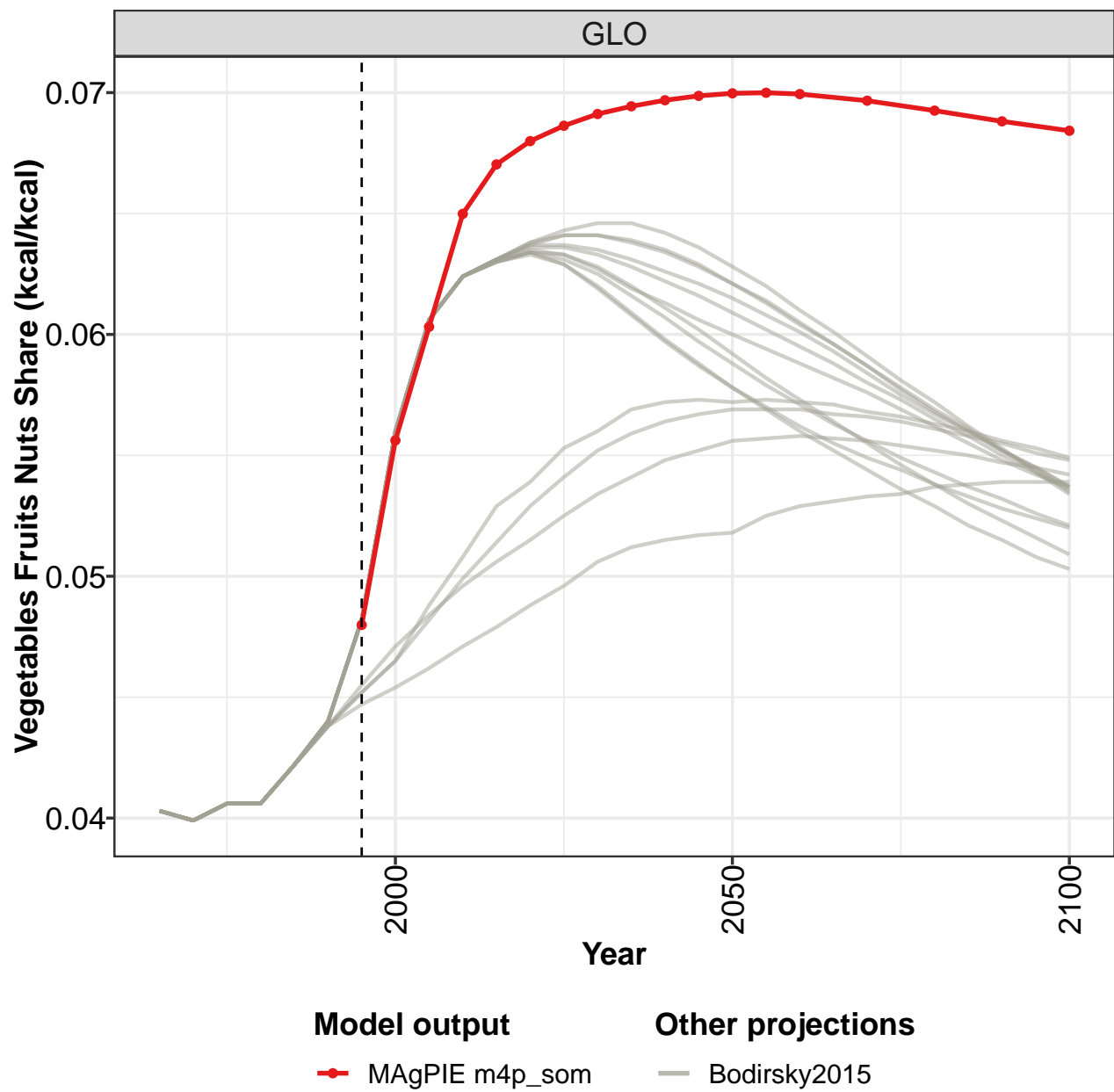
Table 957: MAgPIE m4p\_som — Nutrition—Dietary Composition—Livestock Share (kcal/kcal) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.153	0.153	0.154	0.156	0.158	0.158	0.160	0.164	0.169	0.176
CAZ	0.383	0.374	0.369	0.346	0.329	0.329	0.303	0.291	0.285	0.286
CHA	0.065	0.060	0.069	0.080	0.094	0.118	0.156	0.185	0.202	0.224
EUR	0.278	0.293	0.304	0.313	0.320	0.315	0.305	0.298	0.296	0.294
IND	0.054	0.048	0.052	0.057	0.071	0.071	0.073	0.076	0.085	0.092
JPN	0.125	0.154	0.170	0.192	0.203	0.208	0.215	0.208	0.208	0.206
LAM	0.157	0.162	0.167	0.176	0.170	0.173	0.191	0.203	0.198	0.215
MEA	0.091	0.092	0.094	0.106	0.107	0.093	0.091	0.100	0.105	0.109
NEU	0.189	0.186	0.190	0.189	0.182	0.169	0.176	0.168	0.167	0.166
OAS	0.069	0.070	0.069	0.072	0.078	0.086	0.097	0.102	0.111	0.123
REF	0.206	0.240	0.258	0.254	0.266	0.275	0.232	0.210	0.212	0.228
SSA	0.079	0.081	0.079	0.083	0.080	0.078	0.070	0.067	0.071	0.074
USA	0.344	0.324	0.300	0.304	0.301	0.277	0.279	0.273	0.276	0.275

Table 958: FAO — Nutrition—Dietary Composition—Livestock Share (kcal/kcal)

35.3 Vegetables Fruits Nuts Share

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

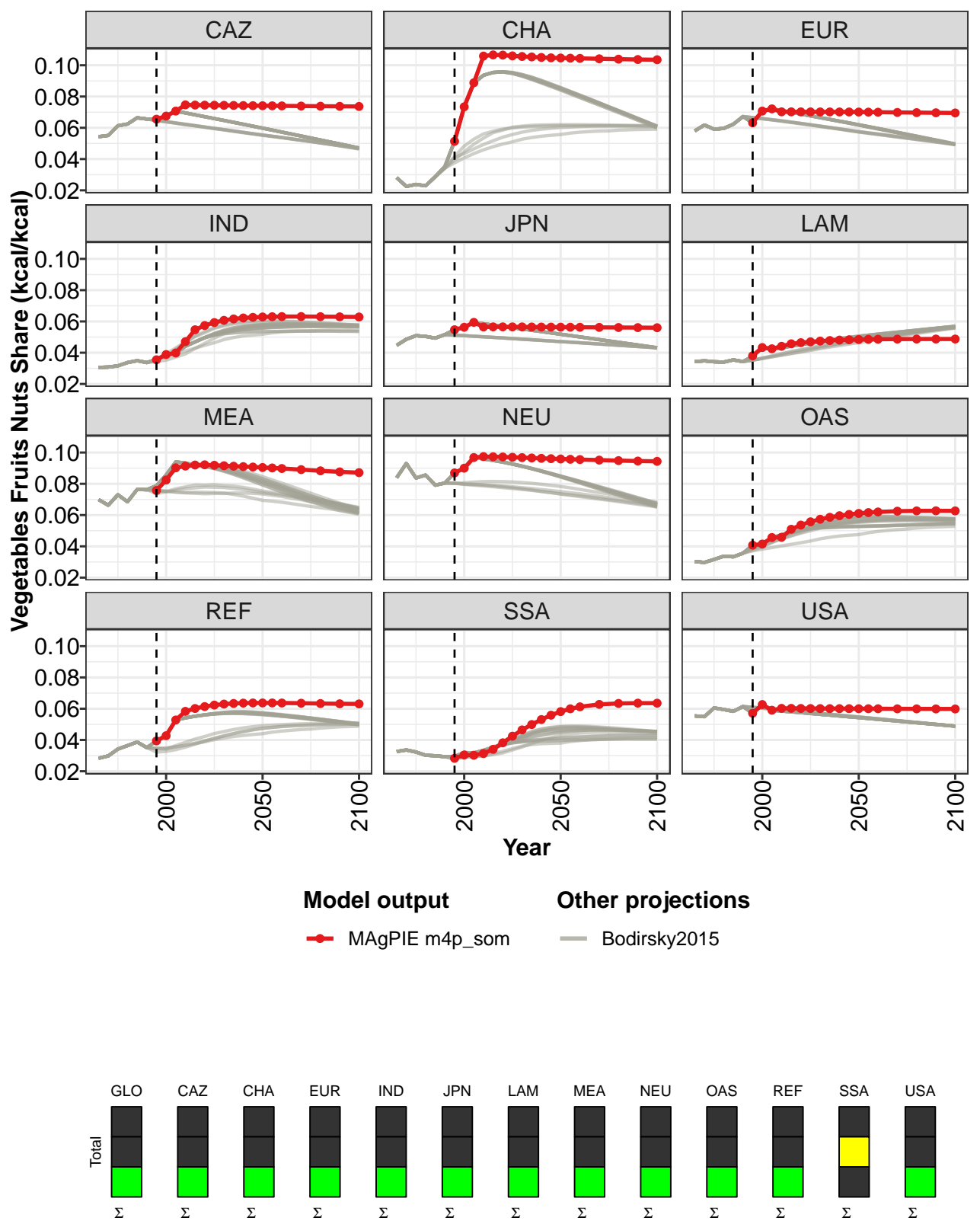


Figure 291: MAgPIE m4p\_som — Nutrition—Dietary Composition—Vegetables Fruits Nuts Share (kcal/kcal)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.048	0.056	0.060	0.065	0.067	0.068	0.069	0.069	0.069	0.070	0.070
CAZ	0.066	0.067	0.071	0.075	0.075	0.074	0.074	0.074	0.074	0.074	0.074
CHA	0.051	0.073	0.089	0.106	0.107	0.106	0.106	0.106	0.105	0.105	0.105
EUR	0.063	0.071	0.072	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070
IND	0.035	0.039	0.040	0.047	0.055	0.057	0.059	0.061	0.062	0.062	0.063
JPN	0.055	0.056	0.059	0.056	0.057	0.057	0.057	0.057	0.056	0.056	0.056
LAM	0.038	0.043	0.043	0.044	0.046	0.046	0.047	0.047	0.048	0.048	0.048
MEA	0.076	0.082	0.090	0.091	0.092	0.092	0.092	0.092	0.091	0.091	0.091
NEU	0.087	0.090	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.096	0.096
OAS	0.041	0.041	0.046	0.046	0.051	0.054	0.056	0.057	0.059	0.060	0.060
REF	0.039	0.043	0.053	0.058	0.060	0.061	0.062	0.063	0.063	0.064	0.064
SSA	0.028	0.030	0.030	0.031	0.034	0.038	0.042	0.046	0.050	0.053	0.056
USA	0.057	0.063	0.059	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060

Table 959: MAgPIE m4p\_som — Nutrition—Dietary Composition—Vegetables Fruits Nuts Share (kcal/kcal)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.070	0.070	0.070	0.070	0.069	0.069	0.068
CAZ	0.074	0.074	0.074	0.074	0.074	0.074	0.074
CHA	0.105	0.105	0.104	0.104	0.104	0.104	0.104
EUR	0.070	0.070	0.070	0.070	0.070	0.070	0.069
IND	0.063	0.063	0.063	0.063	0.063	0.063	0.063
JPN	0.056	0.056	0.056	0.056	0.056	0.056	0.056
LAM	0.048	0.049	0.049	0.049	0.049	0.049	0.049
MEA	0.090	0.090	0.090	0.089	0.088	0.088	0.087
NEU	0.096	0.096	0.096	0.095	0.095	0.095	0.094
OAS	0.061	0.062	0.062	0.062	0.063	0.063	0.063
REF	0.064	0.064	0.064	0.064	0.063	0.063	0.063
SSA	0.058	0.060	0.061	0.063	0.063	0.064	0.064
USA	0.060	0.060	0.060	0.060	0.060	0.060	0.060

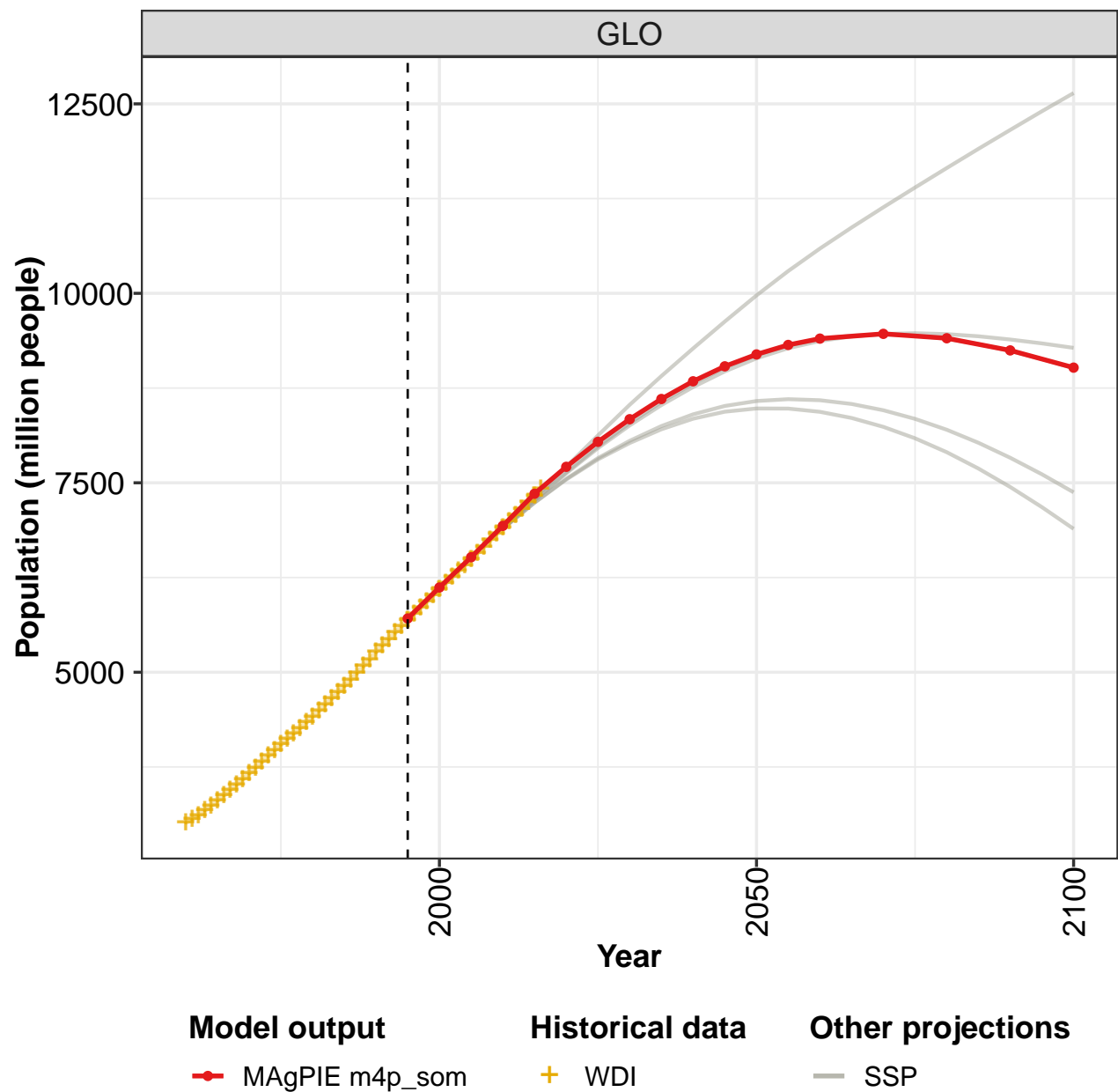
Table 960: MAgPIE m4p\_som — Nutrition—Dietary Composition—Vegetables Fruits Nuts Share (kcal/kcal)  
[PART 2/2]



Part X

# Population

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

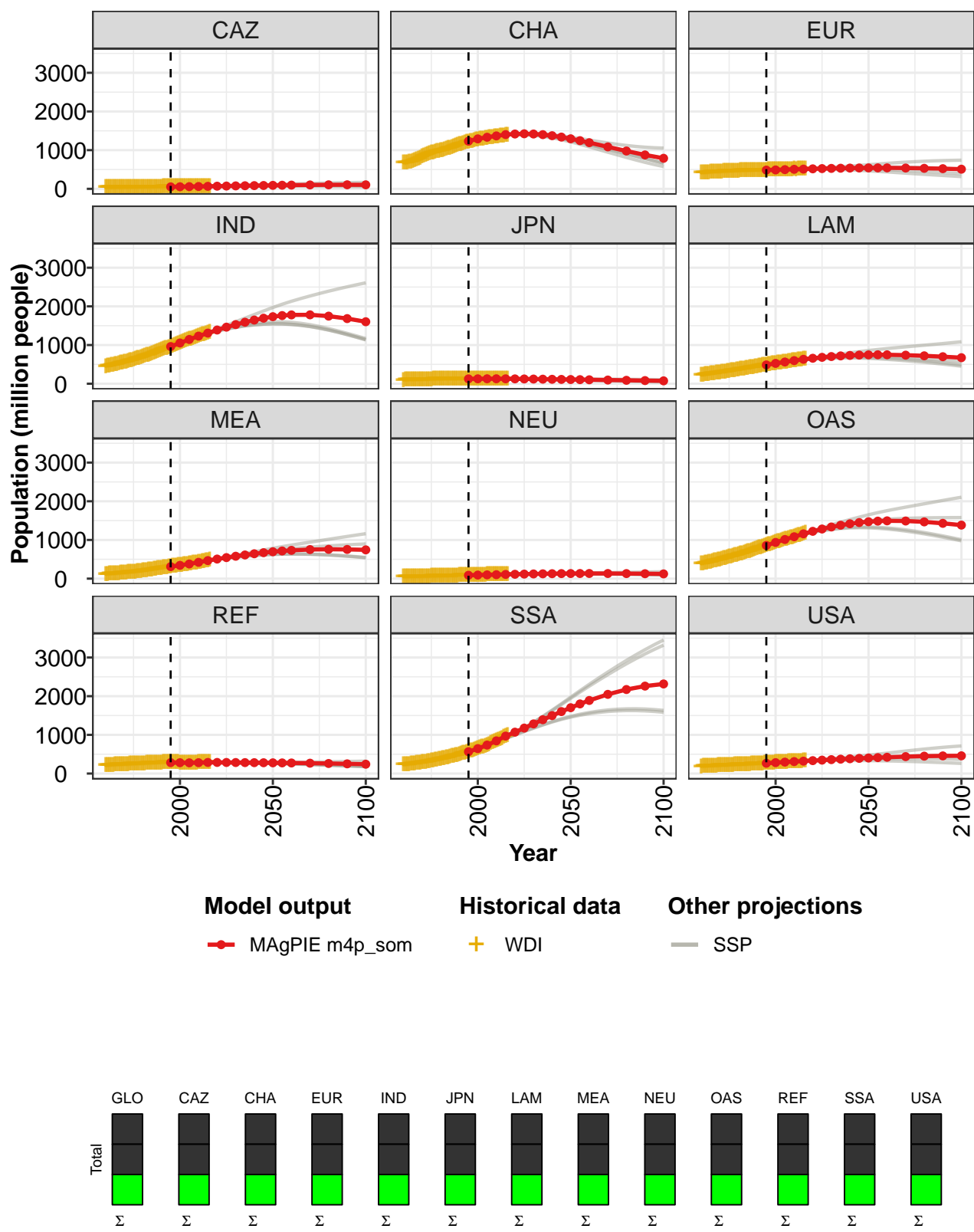


Figure 292: MAgPIE m4p\_som — Population (million people)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	5710	6118	6518	6932	7356	7711	8041	8339	8606	8839	9037
CAZ	51	54	57	60	64	68	72	76	80	83	86
CHA	1233	1292	1334	1368	1402	1418	1423	1418	1401	1374	1338
EUR	485	489	496	505	510	517	523	528	532	536	539
IND	960	1053	1144	1231	1309	1389	1463	1529	1591	1646	1695
JPN	125	127	128	128	127	126	124	121	118	115	112
LAM	487	526	562	598	632	659	683	703	720	732	741
MEA	310	344	379	422	467	506	544	579	612	643	671
NEU	88	92	97	102	109	113	118	121	125	128	130
OAS	858	936	1012	1083	1158	1223	1283	1336	1381	1419	1450
REF	283	280	278	281	287	287	286	285	283	281	280
SSA	564	644	736	845	969	1070	1176	1283	1391	1498	1602
USA	266	282	296	309	321	334	347	360	372	383	393

Table 961: MAgPIE m4p\_som — Population (million people) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	9194	9319	9403	9465	9407	9247	9020
CAZ	90	93	96	100	103	105	104
CHA	1294	1246	1193	1085	978	876	790
EUR	541	542	542	537	530	521	508
IND	1734	1763	1779	1781	1748	1684	1603
JPN	109	106	102	96	89	82	75
LAM	746	749	748	739	722	699	673
MEA	695	715	731	752	758	755	744
NEU	132	133	133	133	131	127	123
OAS	1472	1487	1494	1490	1467	1430	1384
REF	277	275	273	268	260	251	242
SSA	1702	1800	1890	2048	2172	2261	2316
USA	402	412	421	438	450	456	459

Table 962: MAgPIE m4p\_som — Population (million people) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	3016	3056	3109	3173	3238	3304	3374	3443	3513	3587	3662
CAZ	31	31	32	32	33	34	34	35	36	36	37
CHA	670	664	669	686	702	719	739	758	779	800	823
EUR	410	413	417	421	424	428	431	434	437	440	442
IND	449	458	468	478	487	498	508	519	530	542	554
JPN	93	95	96	97	98	99	100	101	101	103	104
LAM	220	227	233	239	246	253	260	266	273	280	287
MEA	113	116	119	122	126	129	133	137	141	145	149
NEU	43	44	45	46	47	48	49	50	51	52	53
OAS	378	388	398	409	420	431	442	454	466	479	491
REF	207	210	213	216	220	223	225	228	230	232	234
SSA	221	226	232	237	243	249	255	262	268	275	282
USA	181	184	187	189	192	194	197	199	201	203	205

Table 963: WDI — Population (million people) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	3739	3815	3891	3967	4042	4114	4186	4260	4335	4411	4489
CAZ	37	38	39	40	40	41	41	42	42	42	43
CHA	845	866	886	905	921	935	948	961	974	987	999
EUR	445	447	450	453	455	457	459	461	463	465	466
IND	566	579	593	607	621	636	650	666	681	697	713
JPN	106	107	108	110	112	113	114	115	116	117	118
LAM	295	302	310	317	325	332	340	348	356	364	372
MEA	153	157	162	166	171	176	182	187	193	200	206
NEU	54	56	57	58	59	60	61	62	63	64	65
OAS	503	516	528	541	554	567	580	594	608	622	636
REF	237	239	241	243	245	248	250	252	254	257	259
SSA	290	298	306	314	323	332	341	351	361	371	382
USA	208	210	212	214	216	218	220	223	225	227	229

Table 964: WDI — Population (million people) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	4569	4651	4732	4815	4900	4988	5076	5165	5263	5350	5433
CAZ	44	44	44	45	45	46	47	47	48	49	50
CHA	1014	1029	1042	1057	1073	1090	1108	1125	1141	1157	1171
EUR	468	469	470	471	472	473	475	477	478	479	481
IND	730	747	764	782	799	817	834	852	870	888	906
JPN	118	119	120	121	121	122	123	123	124	124	124
LAM	380	388	396	404	412	421	429	437	445	453	462
MEA	213	221	228	236	243	251	258	266	275	283	288
NEU	67	68	69	70	71	72	74	75	83	84	85
OAS	651	666	681	696	712	728	744	760	777	793	809
REF	261	263	266	268	271	273	276	278	280	281	282
SSA	393	404	416	428	440	452	465	478	492	506	520
USA	232	234	236	238	240	242	244	247	250	253	257

Table 965: WDI — Population (million people) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	5518	5602	5686	5769	5852	5933	6014	6094	6173	6253	6332
CAZ	50	51	51	52	52	53	53	54	54	55	56
CHA	1185	1198	1211	1224	1237	1249	1260	1270	1279	1288	1296
EUR	482	483	484	485	486	487	488	488	489	491	492
IND	924	942	960	979	997	1016	1035	1053	1071	1090	1108
JPN	125	125	125	126	126	126	127	127	127	127	128
LAM	470	478	486	494	502	510	517	525	532	539	547
MEA	295	302	310	317	323	330	337	343	350	357	364
NEU	86	87	88	89	89	90	91	92	93	94	95
OAS	825	842	858	874	890	905	921	936	952	967	982
REF	283	283	283	282	282	281	281	280	279	279	278
SSA	534	548	563	579	594	610	626	643	660	678	696
USA	260	263	266	269	273	276	279	282	285	288	290

Table 966: WDI — Population (million people) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	6412	6492	6574	6656	6739	6822	6906	6988	7068	7153	7239
CAZ	56	57	57	58	59	60	60	61	62	63	64
CHA	1303	1311	1318	1325	1332	1339	1345	1352	1358	1365	1372
EUR	494	496	498	500	502	503	505	504	505	507	508
IND	1126	1144	1162	1180	1197	1214	1231	1247	1263	1279	1294
JPN	128	128	128	128	128	128	128	128	128	127	127
LAM	554	561	568	575	582	589	597	604	611	618	624
MEA	371	379	387	395	404	413	421	430	439	448	457
NEU	96	97	98	99	100	101	102	103	105	106	107
OAS	997	1012	1026	1040	1054	1068	1083	1097	1113	1128	1143
REF	278	278	277	278	278	279	281	282	283	285	286
SSA	715	735	755	776	798	820	843	867	887	912	937
USA	293	296	298	301	304	307	309	312	314	316	319

Table 967: WDI — Population (million people) [PART 5/6]

	2015	2016
GLO	7325	7412
CAZ	64	65
CHA	1379	1387
EUR	510	512
IND	1309	1324
JPN	127	127
LAM	631	638
MEA	466	475
NEU	109	110
OAS	1158	1173
REF	287	289
SSA	963	990
USA	321	323

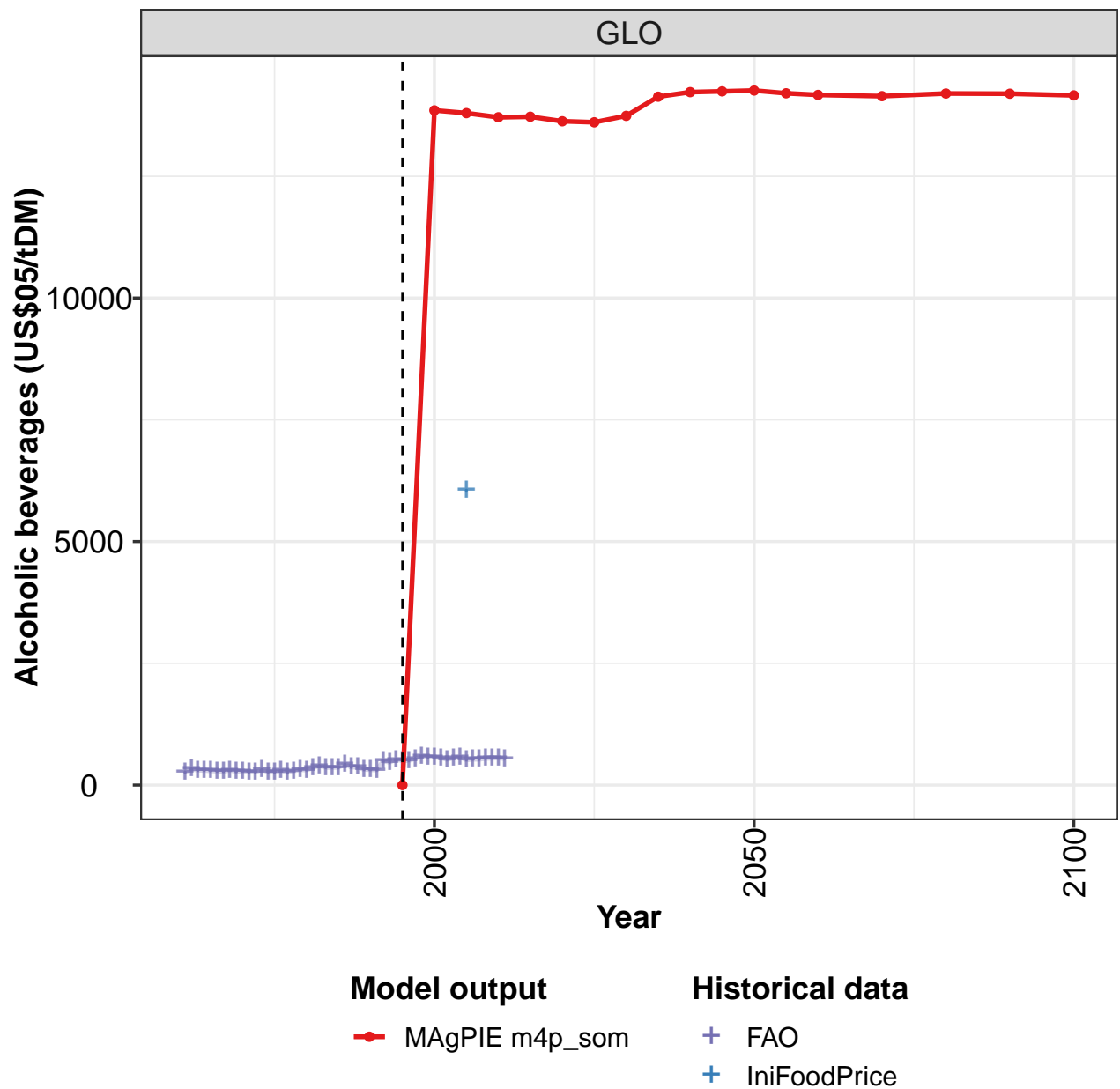
Table 968: WDI — Population (million people) [PART 6/6]

Part XI  
Prices

36 Agriculture

36.1 Alcoholic beverages

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

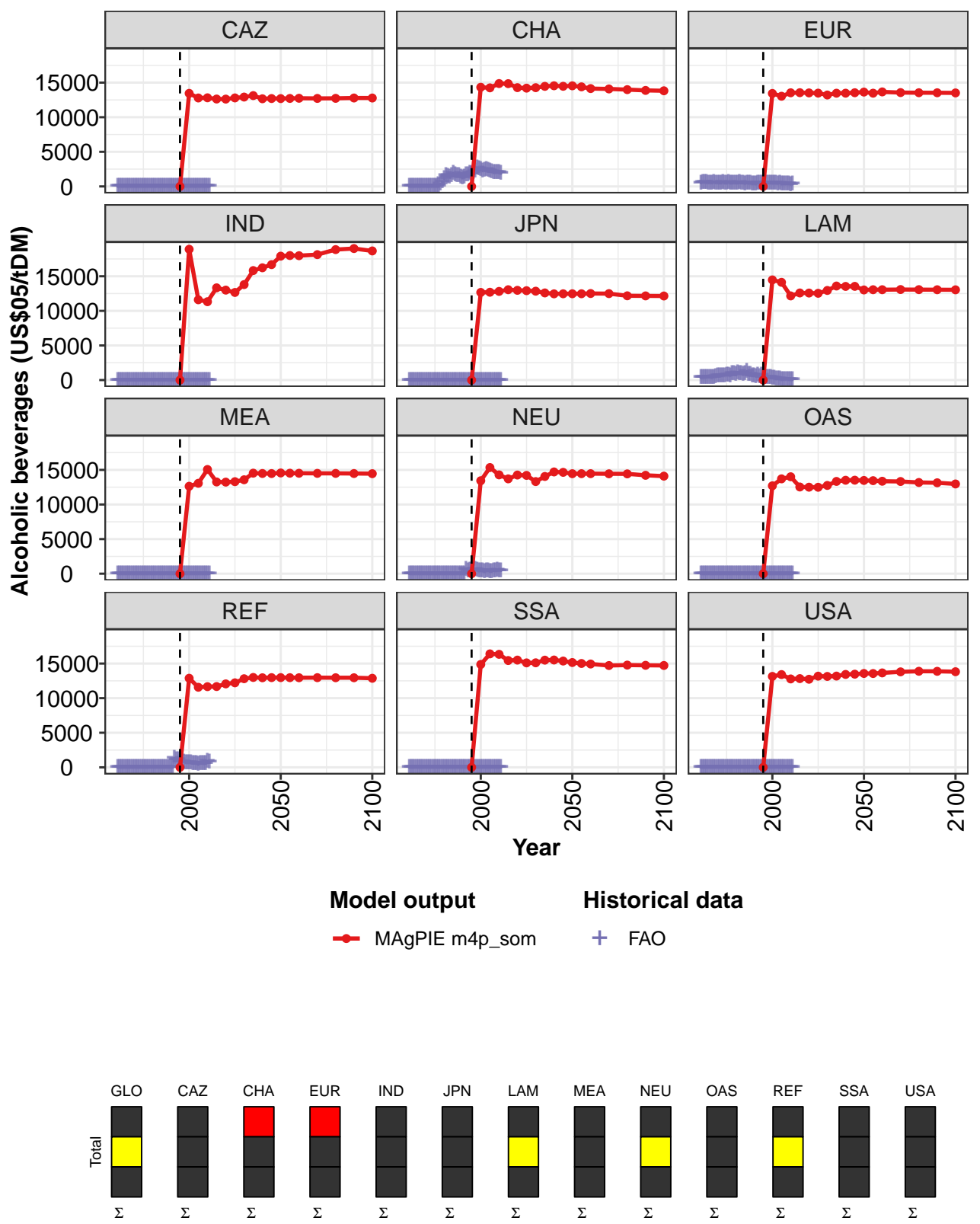


Figure 293: MAGPIE m4p\_som — Prices—Agriculture—Alcoholic beverages (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	13854	13797	13712	13723	13630	13609	13741	14135	14229	14245
CAZ	0	13448	12784	12808	12633	12621	12791	12917	13127	12669	12701
CHA	0	14332	14247	14867	14853	14279	14203	14273	14463	14546	14471
EUR	0	13437	13033	13534	13547	13516	13483	13213	13473	13476	13542
IND	0	18900	11602	11326	13331	13002	12663	13798	15826	16227	16686
JPN	0	12669	12693	12815	13057	12972	12918	12845	12595	12463	12472
LAM	0	14475	14127	12163	12589	12578	12541	12951	13591	13534	13544
MEA	0	12635	13066	15062	13258	13238	13301	13576	14530	14484	14471
NEU	0	13438	15342	14283	13709	14261	14209	13316	14055	14709	14650
OAS	0	12702	13708	14012	12533	12505	12493	12757	13337	13506	13515
REF	0	12876	11576	11664	11677	12063	12216	12808	12992	12947	12965
SSA	0	14874	16399	16337	15439	15502	15096	15110	15493	15513	15363
USA	0	13145	13407	12777	12825	12734	13179	13141	13190	13431	13465

Table 969: MAgPIE m4p\_som — Prices—Agriculture—Alcoholic beverages (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	14262	14205	14172	14146	14201	14196	14162
CAZ	12694	12717	12743	12719	12729	12781	12778
CHA	14540	14392	14142	14088	13990	13877	13822
EUR	13634	13475	13659	13561	13542	13535	13515
IND	17908	17998	17975	18129	18856	19006	18663
JPN	12474	12475	12508	12492	12180	12164	12150
LAM	13023	13059	13058	13082	13070	13055	13044
MEA	14560	14522	14514	14501	14497	14478	14455
NEU	14452	14456	14458	14438	14428	14223	14098
OAS	13477	13448	13362	13326	13184	13142	12970
REF	12968	12961	12953	12962	12951	12948	12873
SSA	15149	15012	14933	14716	14777	14747	14725
USA	13569	13560	13647	13802	13884	13879	13820

Table 970: MAgPIE m4p\_som — Prices—Agriculture—Alcoholic beverages (US\$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	264	330	304	302	294	286	278	309	276	290	270
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	509	614	579	553	537	530	525	590	524	523	498
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	348	355	384	408	430	425	377	451	473	663	629
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0

Table 971: FAO — Prices—Agriculture—Alcoholic beverages (US\$05/tDM) [PART 1/5]



	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	268	317	271	266	301	258	290	316	310	353	401
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	328	702	1159	1601	1498
EUR	494	580	484	483	561	481	478	516	472	484	621
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	625	658	677	708	709	669	915	937	802	1039	922
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0

Table 972: FAO — Prices—Agriculture—Alcoholic beverages (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	362	363	363	434	366	370	321	317	309	495	470
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	1392	1532	1898	1698	1559	1532	1412	1230	1311	1731	1678
EUR	514	518	426	526	445	435	376	405	348	483	483
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	909	817	903	1231	816	805	652	677	557	760	553
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	655	386
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	1308	1094
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0

Table 973: FAO — Prices—Agriculture—Alcoholic beverages (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	525	505	505	546	594	576	573	560	527	558	577
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	1875	1841	2023	2245	2672	2530	2474	2260	2328	2437	2310
EUR	483	502	517	500	482	481	461	465	437	420	494
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	696	452	352	373	350	378	307	314	190	226	154
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	532	512	555	616	549	386	448	378	275	405	431
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	1133	836	826	804	695	658	687	660	582	572	554
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0

Table 974: FAO — Prices—Agriculture—Alcoholic beverages (US\$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	519	532	529	549	553	558	545
CAZ	0	0	0	0	0	0	0
CHA	2271	2101	2007	1996	2046	1982	1872
EUR	352	375	363	370	367	312	340
IND	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0
LAM	77	100	110	111	79	59	66
MEA	0	0	0	0	0	0	0
NEU	331	328	458	412	489	478	435
OAS	0	0	0	0	0	0	0
REF	433	561	541	529	556	845	791
SSA	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0

Table 975: FAO — Prices—Agriculture—Alcoholic beverages (US\$05/tDM) [PART 5/5]

	2005
GLO	6054
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 976: IniFoodPrice — Prices—Agriculture—Alcoholic beverages (US\$05/tDM)

36.2 Brans

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale. ## geom\_path: Each group consists of only one observation. Do you need to adjust the group## aesthetic?

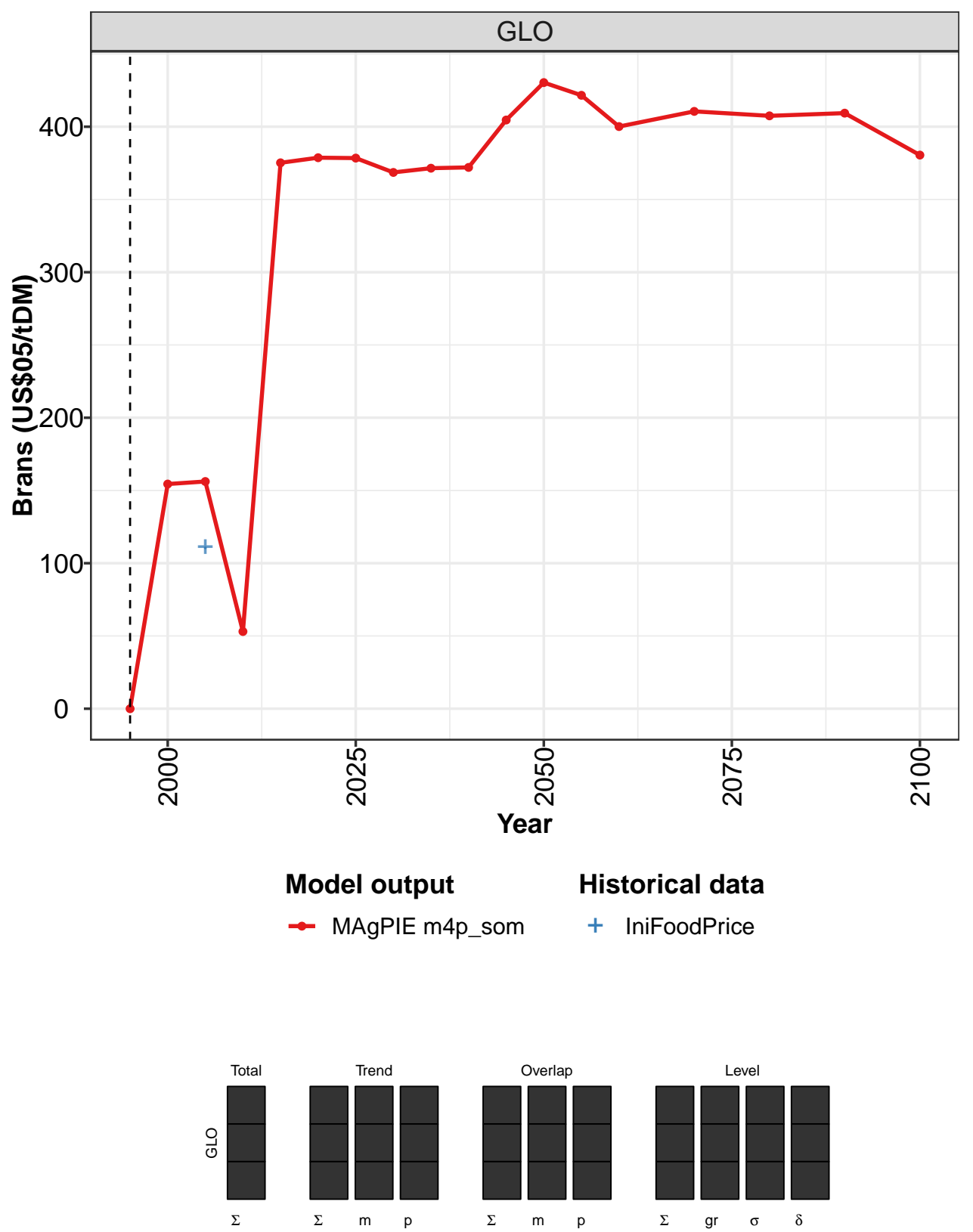


Figure 294: MAGPIE m4p\_som — Prices—Agriculture—Brans (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	154	156	53	375	379	378	369	371	372	405

Table 977: MAgPIE m4p\_som — Prices—Agriculture—Brans (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	430	422	400	411	407	409	381

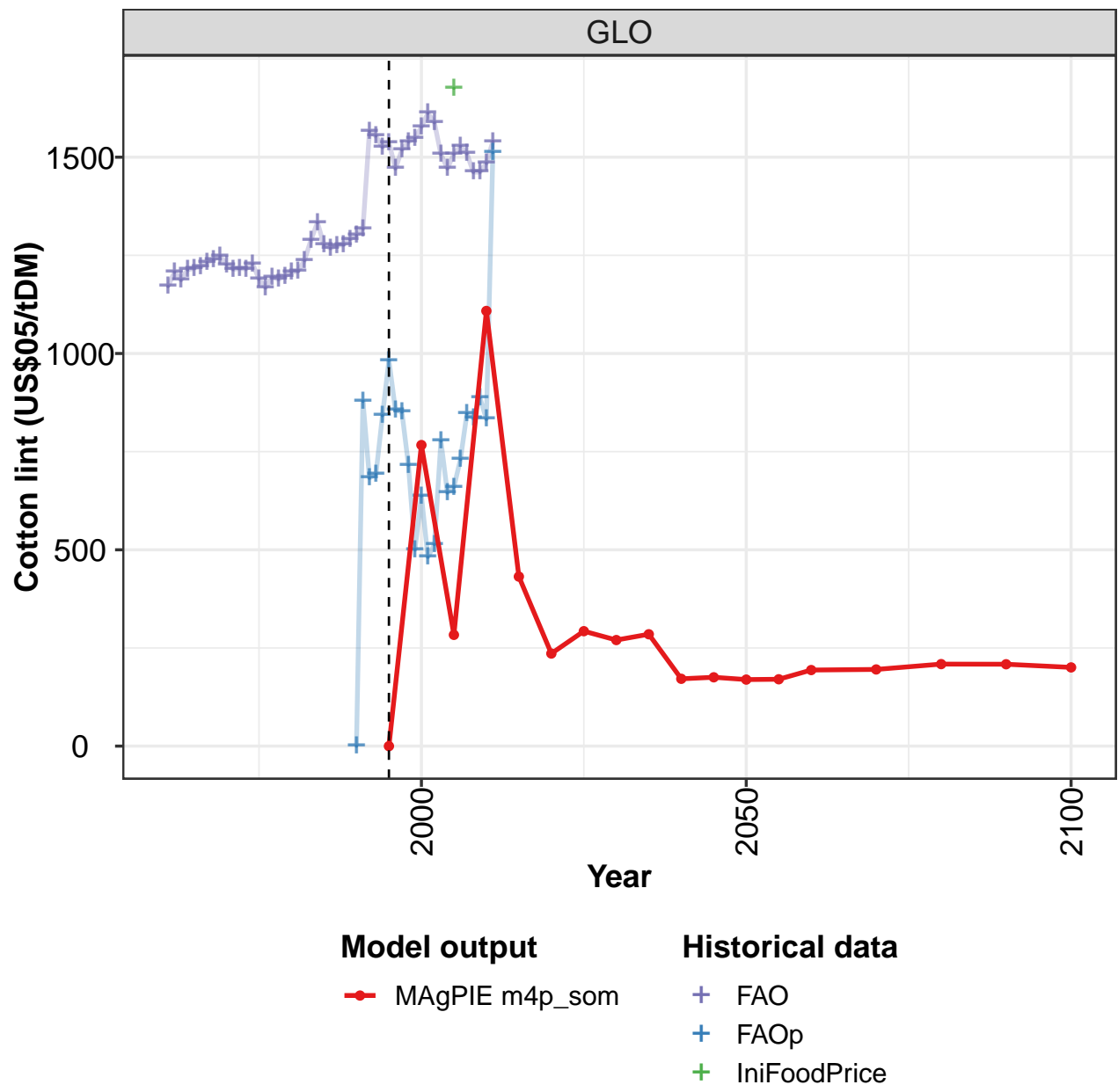
Table 978: MAgPIE m4p\_som — Prices—Agriculture—Brans (US\$05/tDM) [PART 2/2]

	2005
GLO	111

Table 979: IniFoodPrice — Prices—Agriculture—Brans (US\$05/tDM)

36.3 Cotton lint

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

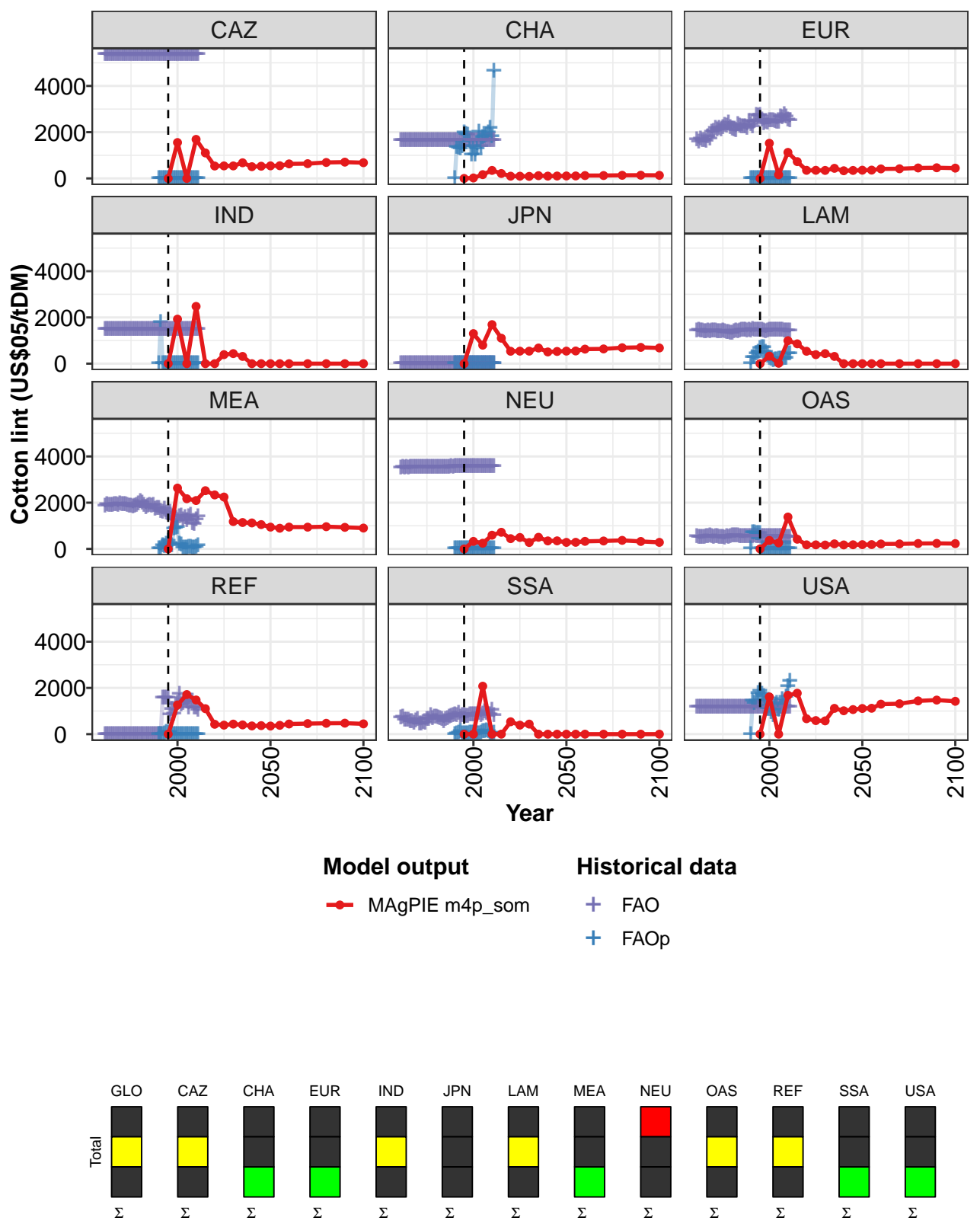


Figure 295: MAgPIE m4p\_som — Prices—Agriculture—Cotton lint (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	767	283	1108	432	236	293	270	285	171	175
CAZ	0	1552	0	1689	1102	537	542	541	677	507	528
CHA	0	20	164	346	212	97	95	88	119	100	104
EUR	0	1521	158	1126	727	350	351	346	437	332	346
IND	0	1926	0	2477	0	0	390	435	314	0	0
JPN	0	1301	800	1689	1102	537	542	541	677	507	528
LAM	0	325	16	993	859	537	390	435	314	0	0
MEA	0	2632	2171	2093	2519	2336	2244	1182	1142	1123	1052
NEU	0	325	246	593	720	444	494	277	502	346	349
OAS	0	367	260	1379	419	177	176	168	219	172	179
REF	0	1263	1712	1478	1102	428	390	435	400	356	368
SSA	0	0	2075	0	0	537	390	435	0	0	0
USA	0	1612	0	1683	1771	668	587	575	1116	1013	1064

Table 980: MAgPIE m4p\_som — Prices—Agriculture—Cotton lint (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	170	170	194	195	209	209	201
CAZ	543	549	629	638	690	704	680
CHA	107	108	123	125	135	138	133
EUR	356	360	412	417	452	461	445
IND	0	0	0	0	0	0	0
JPN	543	549	629	638	690	704	680
LAM	0	0	0	0	0	0	0
MEA	943	895	945	942	962	933	902
NEU	283	286	327	343	369	323	283
OAS	184	186	213	216	234	239	230
REF	351	383	439	456	470	475	445
SSA	0	0	0	0	0	0	0
USA	1111	1120	1297	1315	1438	1474	1422

Table 981: MAgPIE m4p\_som — Prices—Agriculture—Cotton lint (US\$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	1171	1207	1187	1213	1217	1221	1232	1239	1248	1226	1214
CAZ	5358	5358	5357	5359	5359	5359	5359	5359	5359	5359	5359
CHA	1651	1650	1651	1651	1651	1651	1651	1651	1651	1651	1651
EUR	1675	1570	1706	1632	1635	1613	1825	1701	2010	2046	2166
IND	1483	1483	1483	1483	1483	1483	1483	1483	1483	1483	1483
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	1436	1438	1410	1404	1397	1395	1410	1398	1410	1416	1415
MEA	1863	1909	1887	1878	1876	1922	1934	1880	1952	1925	1914
NEU	3513	3521	3512	3524	3512	3521	3528	3550	3543	3543	3552
OAS	536	511	506	517	521	547	544	557	526	519	530
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	697	741	621	617	600	531	560	479	565	656	461
USA	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180

Table 982: FAO — Prices—Agriculture—Cotton lint (US\$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	1217	1215	1228	1190	1168	1195	1189	1197	1207	1210	1237
CAZ	5359	5359	5359	5359	5359	5359	5359	5359	5359	5359	5359
CHA	1652	1652	1652	1652	1652	1652	1652	1652	1652	1652	1652
EUR	2093	2156	2115	2202	2317	2261	2418	2217	2122	2098	2079
IND	1483	1483	1483	1483	1483	1483	1483	1483	1483	1483	1483
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	1400	1388	1376	1406	1386	1363	1348	1335	1332	1388	1408
MEA	1907	1885	1865	1854	1823	1853	1905	1968	2037	1977	1894
NEU	3548	3542	3546	3538	3537	3542	3535	3532	3547	3538	3538
OAS	533	512	514	491	486	533	520	554	584	577	559
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	459	501	469	638	638	798	667	744	735	724	666
USA	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180

Table 983: FAO — Prices—Agriculture—Cotton lint (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	1289	1334	1277	1268	1276	1277	1291	1301	1318	1566	1554
CAZ	5359	5359	5359	5359	5359	5359	5359	5359	5359	5359	5359
CHA	1652	1652	1652	1652	1652	1652	1652	1652	1652	1652	1652
EUR	2330	2267	2230	2230	2228	2154	2455	2326	2253	2460	2730
IND	1483	1483	1483	1483	1483	1483	1483	1483	1483	1483	1483
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	1389	1416	1446	1460	1454	1435	1461	1425	1481	1440	1467
MEA	1789	1854	1876	1856	1893	1721	1751	1748	1629	1593	1709
NEU	3549	3546	3532	3533	3538	3555	3550	3558	3572	3572	3573
OAS	564	540	542	538	547	553	553	554	552	558	549
REF	0	0	0	0	0	0	0	0	0	1562	1562
SSA	640	557	637	687	754	760	807	844	793	892	747
USA	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180

Table 984: FAO — Prices—Agriculture—Cotton lint (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	1526	1537	1471	1519	1539	1548	1577	1612	1588	1507	1471
CAZ	5359	5359	5359	5359	5359	5359	5359	5359	5359	5359	5359
CHA	1652	1652	1652	1652	1652	1652	1652	1652	1652	1652	1652
EUR	2692	2738	2524	2382	2427	2412	2513	2501	2496	2456	2419
IND	1483	1483	1483	1483	1483	1483	1483	1483	1483	1483	1483
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	1453	1442	1440	1420	1396	1433	1456	1446	1461	1466	1455
MEA	1548	1534	1578	1380	1261	1266	1221	1381	1438	1252	1363
NEU	3573	3573	3573	3573	3573	3573	3573	3573	3573	3573	3573
OAS	546	544	534	529	527	530	528	532	527	526	531
REF	1564	1552	840	1065	859	1284	1328	1735	1264	1322	1467
SSA	801	800	763	774	848	857	849	829	847	892	809
USA	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180

Table 985: FAO — Prices—Agriculture—Cotton lint (US\$05/tDM) [PART 4/5]



	2005	2006	2007	2008	2009	2010	2011
GLO	1508	1528	1509	1462	1462	1485	1540
CAZ	5359	5359	5359	5359	5359	5359	5359
CHA	1652	1652	1652	1652	1652	1652	1652
EUR	2445	2650	2635	2756	2675	2538	2484
IND	1483	1483	1483	1483	1483	1483	1483
JPN	0	0	0	0	0	0	0
LAM	1446	1454	1439	1425	1426	1421	1407
MEA	1229	1382	1460	1108	1079	1260	1379
NEU	3573	3573	3573	3573	3573	3573	3573
OAS	530	527	524	524	521	507	505
REF	1395	1143	1446	1426	1129	1146	1039
SSA	875	980	893	836	840	1042	793
USA	1180	1180	1180	1180	1180	1180	1180

Table 986: FAO — Prices—Agriculture—Cotton lint (US\$05/tDM) [PART 5/5]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	878	683	692	842	982	856	851	716	501	637
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	1351	1327	1292	1385	1959	1923	1890	1594	1024	1389
EUR	0	0	3	2	2	5	4	3	2	2	1
IND	0	1774	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	0	263	259	428	484	669	688	703	508	320	228
MEA	0	0	130	100	203	343	239	148	879	895	943
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	687	712	660	676	654	4	4	6	5	6
REF	0	0	0	33	70	64	76	0	0	0	0
SSA	0	32	34	115	21	19	20	19	61	62	42
USA	0	1423	1344	1430	1763	1874	1726	1621	1474	1102	1220

Table 987: FAOp — Prices—Agriculture—Cotton lint (US\$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	482	514	777	646	660	730	847	835	888	833	1512
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	1016	1284	2021	1377	1781	1798	1879	1981	2188	1805	4630
EUR	2	1	1	1	0	0	0	0	0	1	0
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	187	128	176	165	188	215	210	232	244	420	425
MEA	192	177	48	49	48	71	75	53	46	65	154
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	11	8	8	1	2	2	1	1	1	1	2
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	38	19	25	40	111	114	148	105	17	18	41
USA	953	823	1267	1330	1045	1163	1501	1202	1588	2072	2290

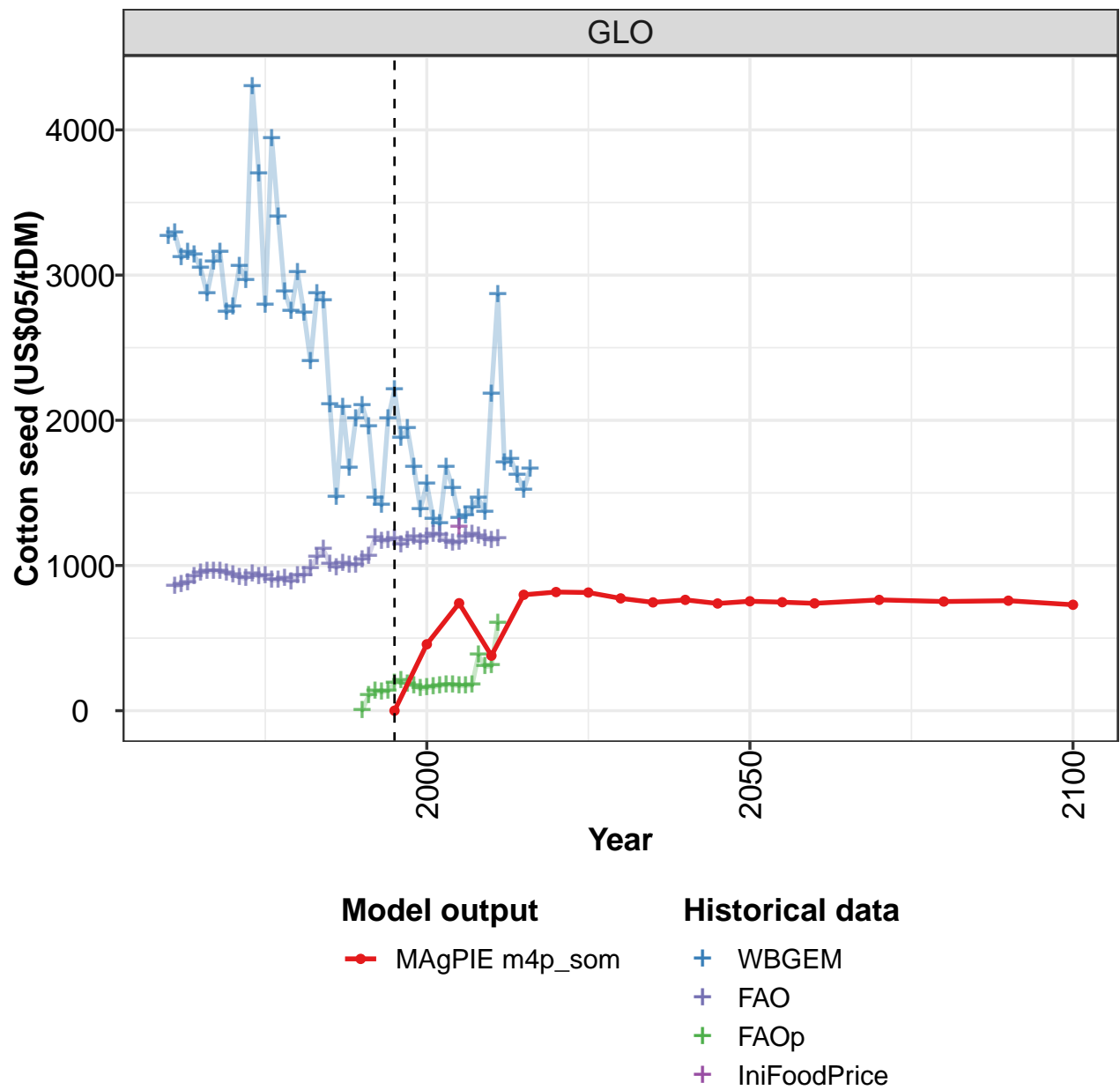
Table 988: FAOp — Prices—Agriculture—Cotton lint (US\$05/tDM) [PART 2/3]

	2005
GLO	1676
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 989: IniFoodPrice — Prices—Agriculture—Cotton lint (US\$05/tDM)

36.4 Cotton seed

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

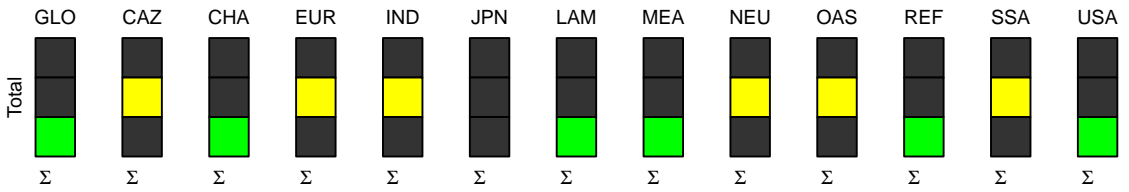
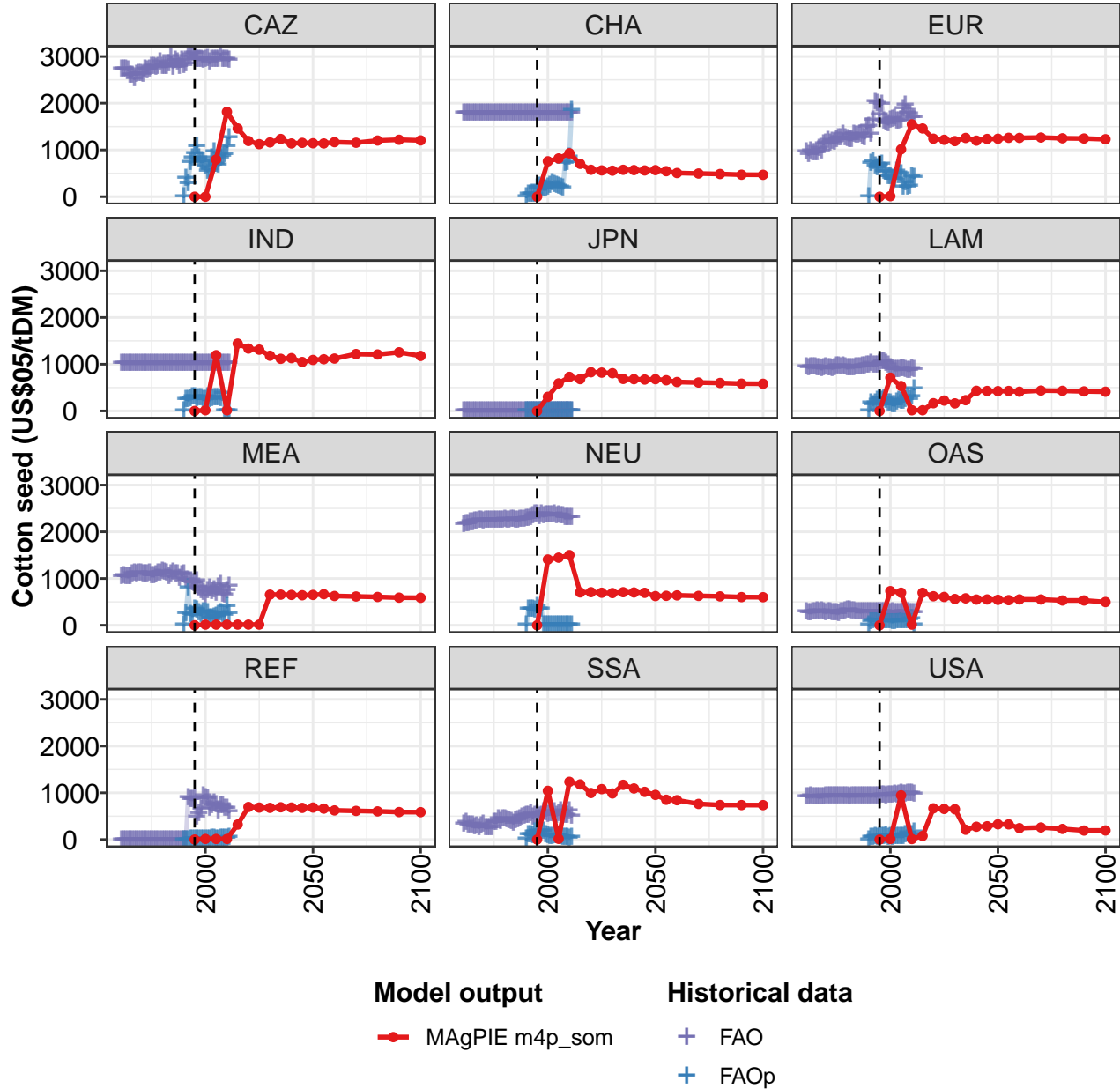


Figure 296: MAgPIE m4p\_som — Prices—Agriculture—Cotton seed (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	458	740	379	798	817	814	773	746	763	738
CAZ	0	0	794	1816	1459	1191	1123	1161	1235	1138	1151
CHA	0	757	818	929	703	575	563	556	575	569	562
EUR	0	11	1013	1548	1460	1241	1217	1189	1257	1199	1235
IND	0	15	1193	15	1441	1336	1312	1182	1116	1130	1048
JPN	0	303	590	730	682	829	821	808	686	681	673
LAM	0	712	535	16	16	166	223	162	231	432	428
MEA	0	14	14	14	14	14	15	655	655	649	642
NEU	0	1407	1446	1501	703	708	695	689	708	702	694
OAS	0	731	697	14	696	621	606	562	576	550	552
REF	0	13	12	12	322	697	684	678	690	685	677
SSA	0	1042	15	1235	1180	996	1079	986	1171	1093	1021
USA	0	11	946	11	77	668	655	649	210	274	285

Table 990: MAgPIE m4p.som — Prices—Agriculture—Cotton seed (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	754	747	739	763	752	758	729
CAZ	1142	1139	1167	1154	1201	1218	1204
CHA	569	546	506	496	485	470	468
EUR	1240	1260	1258	1265	1249	1245	1229
IND	1092	1107	1121	1218	1209	1255	1178
JPN	680	658	620	609	599	584	582
LAM	425	428	412	436	431	419	412
MEA	649	664	626	615	605	590	588
NEU	624	630	639	628	618	603	600
OAS	544	537	553	552	530	530	497
REF	685	662	624	613	603	588	586
SSA	956	851	842	762	739	738	737
USA	327	326	244	259	227	193	195

Table 991: MAgPIE m4p.som — Prices—Agriculture—Cotton seed (US\$05/tDM) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	3264	3288	3118	3158	3137	3048	2870	3090	3154	2742	2781
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 992: WBGEM — Prices—Agriculture—Cotton seed (US\$05/tDM) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	3062	2964	4298	3699	2792	3942	3399	2885	2748	3018	2735
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 993: WBGEM — Prices—Agriculture—Cotton seed (US\$05/tDM) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	2407	2869	2825	2108	1469	2092	1667	2007	2100	1955	1462
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 994: WBGEM — Prices—Agriculture—Cotton seed (US\$05/tDM) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	1416	2010	2210	1877	1942	1678	1387	1562	1319	1286	1677
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 995: WBGEM — Prices—Agriculture—Cotton seed (US\$05/tDM) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	1533	1325	1344	1396	1461	1368	2180	2863	1704	1734	1619
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 996: WBGEM — Prices—Agriculture—Cotton seed (US\$05/tDM) [PART 5/6]

	2015	2016
GLO	1518	1666
CAZ		
CHA		
EUR		
IND		
JPN		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 997: WBGEM — Prices—Agriculture—Cotton seed (US\$05/tDM) [PART 6/6]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	858	870	884	925	950	960	963	962	949	935	919
CAZ	2736	2735	2739	2719	2595	2604	2533	2622	2644	2631	2611
CHA	1782	1781	1782	1782	1782	1783	1783	1782	1783	1782	1783
EUR	967	908	986	946	937	931	1034	980	1127	1155	1203
IND	1016	1016	1016	1017	1017	1017	1017	1017	1017	1016	1017
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	946	934	939	937	952	924	924	904	922	942	924
MEA	1047	1066	1052	1038	1052	1090	1110	1100	1119	1111	1099
NEU	2154	2177	2178	2204	2205	2225	2223	2253	2242	2235	2255
OAS	291	277	274	281	285	302	298	310	283	277	283
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	337	371	315	313	306	274	285	264	298	332	252
USA	916	919	925	920	924	919	907	911	924	930	925

Table 998: FAO — Prices—Agriculture—Cotton seed (US\$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	910	939	926	931	897	901	914	889	929	932	979
CAZ	2731	2707	2722	2787	2789	2770	2789	2888	2788	2788	2791
CHA	1783	1783	1783	1783	1783	1783	1783	1783	1783	1783	1783
EUR	1150	1188	1159	1214	1254	1265	1341	1261	1237	1215	1223
IND	1017	1017	1017	1017	1016	1016	1017	1017	1017	1016	1016
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	927	915	928	962	966	945	962	939	922	931	935
MEA	1094	1095	1125	1058	1058	1088	1121	1121	1154	1137	1119
NEU	2256	2248	2255	2247	2247	2257	2251	2252	2267	2258	2257
OAS	286	273	277	262	260	292	285	306	328	322	305
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	253	261	262	368	361	441	395	442	437	433	410
USA	934	939	936	939	937	942	934	933	927	922	932

Table 999: FAO — Prices—Agriculture—Cotton seed (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	1055	1109	1010	985	1014	1004	1003	1042	1066	1193	1166
CAZ	2851	2991	2778	2924	2880	2797	2922	2799	2849	2987	3042
CHA	1783	1783	1783	1783	1783	1783	1783	1783	1783	1783	1783
EUR	1333	1317	1326	1328	1275	1261	1479	1502	1336	1642	2034
IND	1017	1017	1016	1017	1016	1017	1016	1017	1017	1016	1016
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	934	954	948	949	970	962	989	987	1011	977	986
MEA	1046	1103	1136	1097	1103	1006	1074	1103	959	967	930
NEU	2268	2264	2252	2253	2259	2277	2272	2281	2294	2305	2353
OAS	314	290	291	285	291	296	295	295	294	297	292
REF	0	0	0	0	0	0	0	0	0	888	864
SSA	390	357	404	424	452	474	503	526	511	553	485
USA	932	931	934	936	936	934	942	941	934	941	934

Table 1000: FAO — Prices—Agriculture—Cotton seed (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	1174	1184	1144	1172	1199	1162	1195	1213	1208	1169	1153
CAZ	3063	3067	2937	2939	2935	2922	2936	2953	2874	2938	2935
CHA	1783	1783	1783	1783	1783	1783	1783	1783	1783	1783	1783
EUR	2005	1760	1978	1611	1580	1558	1645	1659	1684	1625	1619
IND	1017	1016	1016	1017	1017	1017	1017	1017	1017	1016	1017
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	990	1018	1065	1053	1016	981	932	913	883	882	889
MEA	902	913	949	824	750	706	653	738	804	724	760
NEU	2386	2386	2320	2389	2343	2372	2367	2362	2365	2377	2341
OAS	291	289	284	280	278	279	278	281	275	275	277
REF	857	874	472	562	655	931	897	884	672	722	779
SSA	526	534	508	528	588	571	545	558	559	597	523
USA	939	943	947	954	940	949	950	956	963	958	972

Table 1001: FAO — Prices—Agriculture—Cotton seed (US\$05/tDM) [PART 4/5]



	2005	2006	2007	2008	2009	2010	2011
GLO	1158	1199	1214	1201	1185	1174	1183
CAZ	2935	2935	3044	2935	2936	2935	2920
CHA	1786	1783	1783	1783	1783	1783	1783
EUR	1633	1881	1966	1795	1767	1696	1696
IND	1017	1016	1016	1016	1017	1016	1016
JPN	0	0	0	0	0	0	0
LAM	899	908	896	875	871	911	894
MEA	686	809	879	663	649	743	827
NEU	2358	2348	2338	2297	2297	2297	2297
OAS	277	282	280	280	278	271	269
REF	753	609	734	724	672	664	590
SSA	555	619	537	524	514	608	502
USA	998	971	980	987	982	985	977

Table 1002: FAO — Prices—Agriculture—Cotton seed (US\$05/tDM) [PART 5/5]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	103	137	128	137	189	206	181	173	151	158
CAZ	0	400	275	737	827	931	1073	833	745	748	640
CHA	0	45	52	57	64	180	233	159	159	161	198
EUR	0	706	745	655	629	671	703	550	519	438	429
IND	0	252	238	261	301	299	265	282	288	251	239
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	0	180	142	178	233	268	236	256	227	167	181
MEA	0	259	795	236	210	344	323	267	229	291	282
NEU	0	351	345	340	320	402	344	349	0	0	0
OAS	0	81	102	111	110	107	108	103	104	92	92
REF	0	0	0	3	6	8	10	4	4	2	2
SSA	3	101	95	82	165	183	163	170	184	102	88
USA	0	39	53	61	55	58	76	72	77	53	63

Table 1003: FAOp — Prices—Agriculture—Cotton seed (US\$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	164	171	180	177	170	172	176	382	304	308	602
CAZ	552	582	826	950	698	685	821	872	911	1068	1262
CHA	244	290	267	244	224	206	191	711	739	852	1839
EUR	367	380	554	515	496	211	301	202	224	429	407
IND	306	242	265	293	279	292	270	375	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	137	129	196	220	212	218	252	299	253	296	469
MEA	263	154	162	175	188	238	270	233	210	394	249
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	75	89	92	93	93	96	105	100	121	146	0
REF	3	2	21	20	18	17	27	23	28	37	47
SSA	64	70	83	78	78	75	48	39	51	36	56
USA	54	60	70	64	58	66	97	134	95	96	156

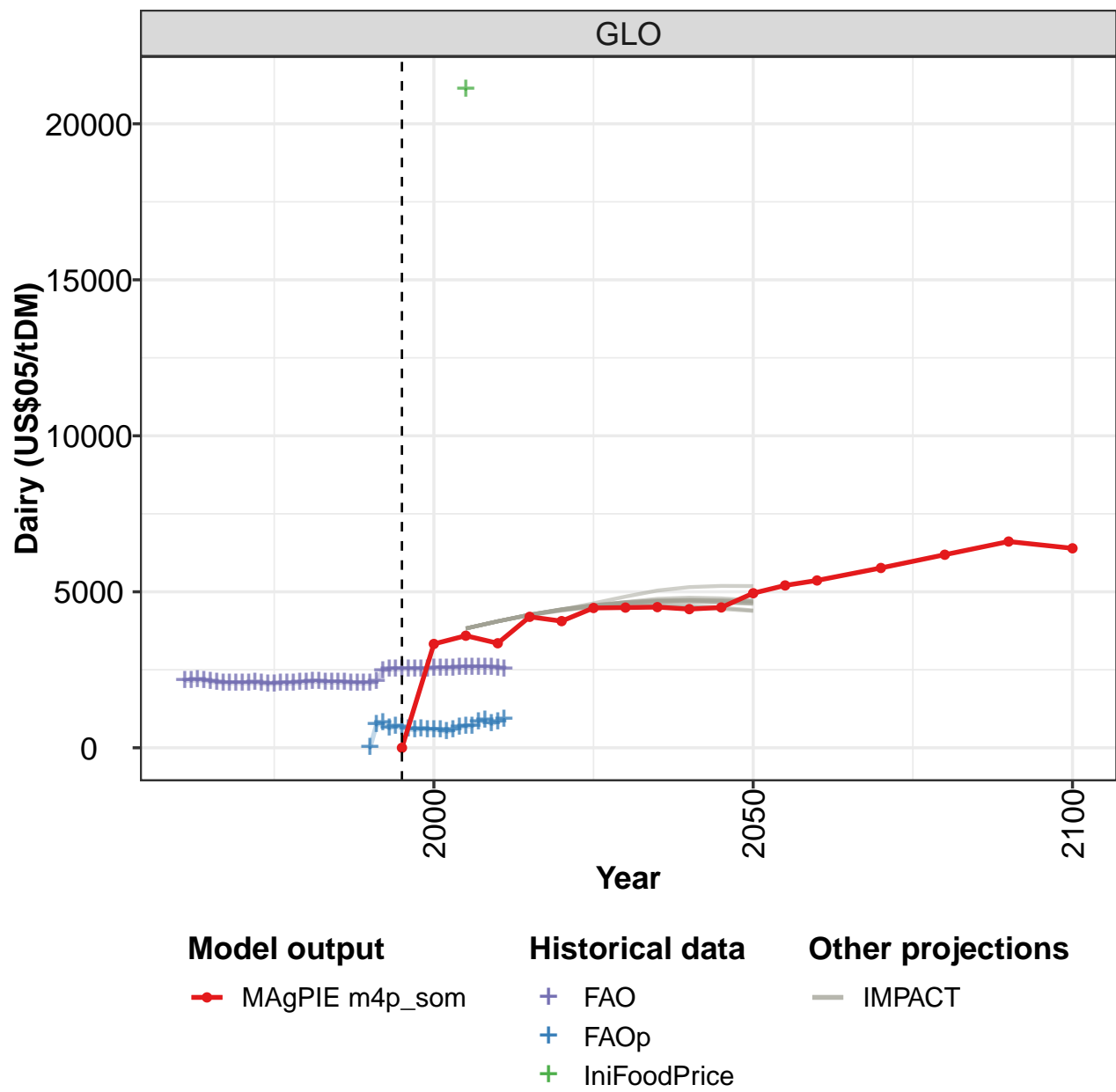
Table 1004: FAOp — Prices—Agriculture—Cotton seed (US\$05/tDM) [PART 2/3]

	2005
GLO	1260
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 1005: IniFoodPrice — Prices—Agriculture—Cotton seed (US\$05/tDM)

36.5 Dairy

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

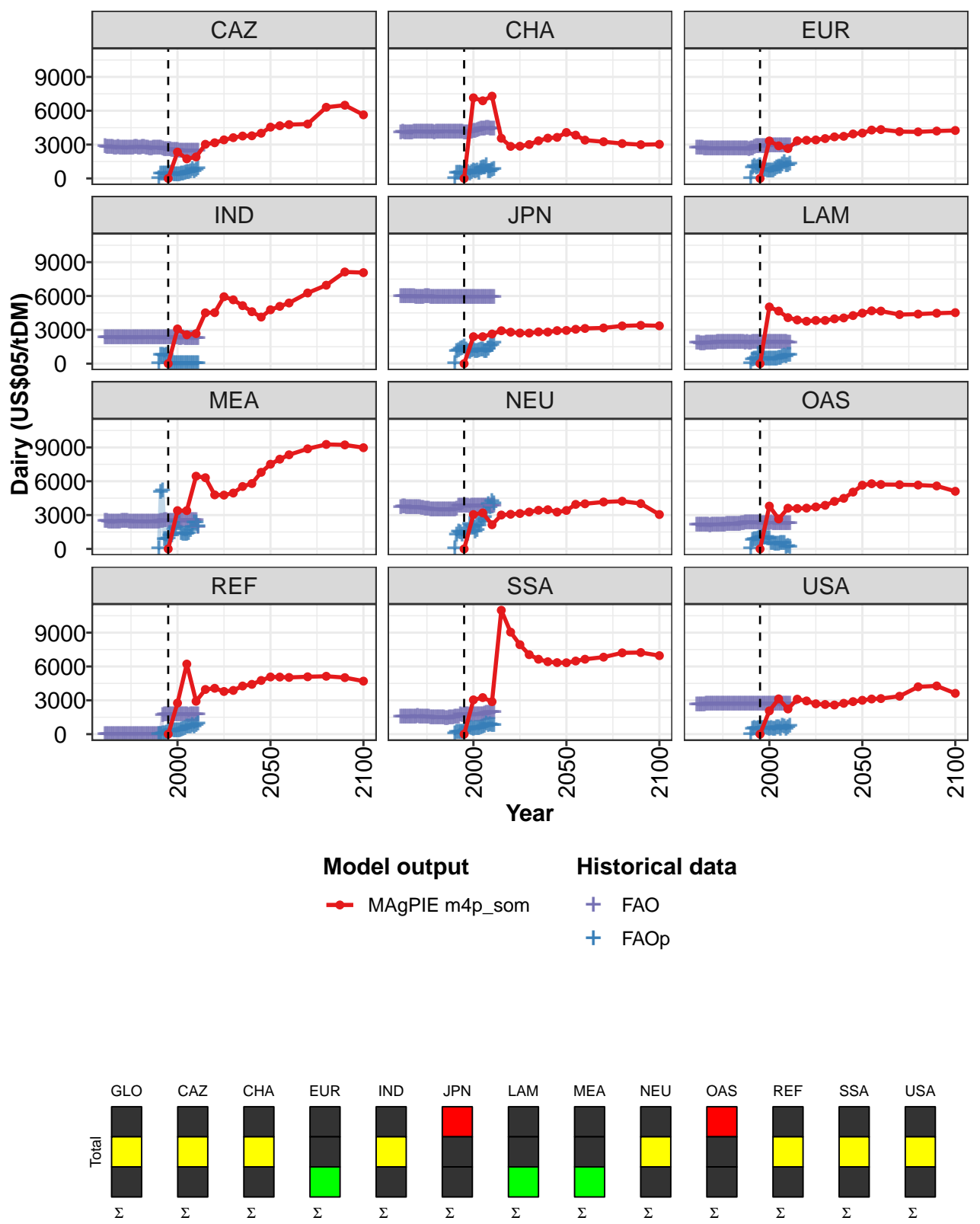


Figure 297: MAgPIE m4p\_som — Prices—Agriculture—Dairy (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	3328	3593	3350	4198	4060	4482	4494	4509	4444	4498
CAZ	0	2338	1738	1904	3025	3162	3418	3613	3759	3780	4008
CHA	0	7148	6884	7293	3559	2841	2856	3004	3334	3572	3639
EUR	0	3321	2890	2648	3335	3384	3410	3534	3685	3734	3943
IND	0	3080	2559	2662	4509	4526	5937	5661	5145	4609	4131
JPN	0	2391	2393	2631	2921	2793	2714	2713	2817	2801	2929
LAM	0	5029	4662	4079	3876	3760	3832	3832	3974	4055	4265
MEA	0	3394	3395	6448	6314	4793	4770	4954	5534	5795	6794
NEU	0	3044	3192	2142	3005	3073	3142	3270	3426	3477	3263
OAS	0	3796	2657	3611	3583	3616	3724	3864	4213	4485	5037
REF	0	2758	6217	2915	3962	4067	3784	3878	4269	4416	4762
SSA	0	3039	3242	2881	10987	9047	7934	7051	6643	6422	6343
USA	0	2064	3131	2234	3103	2948	2691	2631	2585	2735	2885

Table 1006: MAgPIE m4p\_som — Prices—Agriculture—Dairy (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	4954	5204	5364	5763	6188	6611	6394
CAZ	4549	4670	4773	4819	6309	6491	5638
CHA	4074	3839	3396	3252	3091	2993	3024
EUR	4021	4288	4329	4148	4127	4202	4253
IND	4777	5083	5380	6269	6956	8132	8073
JPN	2945	3050	3122	3168	3347	3399	3355
LAM	4481	4687	4662	4352	4395	4473	4523
MEA	7510	7957	8345	8877	9265	9223	8975
NEU	3409	3948	4000	4162	4230	4019	3050
OAS	5651	5779	5713	5694	5662	5583	5110
REF	5072	5064	5031	5087	5134	5013	4702
SSA	6332	6484	6645	6830	7210	7237	6961
USA	3005	3116	3155	3362	4197	4276	3619

Table 1007: MAgPIE m4p\_som — Prices—Agriculture—Dairy (US\$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	2162	2158	2175	2165	2117	2105	2084	2078	2085	2079	2080
CAZ	2805	2782	2773	2761	2739	2723	2702	2732	2724	2707	2698
CHA	4077	4080	4075	4061	4053	4038	4029	4112	4110	4108	4110
EUR	2662	2662	2666	2663	2654	2654	2637	2631	2629	2626	2624
IND	2286	2299	2309	2319	2324	2324	2286	2289	2293	2291	2294
JPN	5931	5923	5920	5923	5924	5924	5928	5920	5913	5914	5909
LAM	1798	1799	1791	1780	1796	1827	1840	1834	1844	1857	1857
MEA	2433	2427	2360	2377	2370	2366	2397	2413	2409	2423	2444
NEU	3695	3702	3710	3695	3688	3653	3648	3649	3642	3653	3658
OAS	2093	2099	2089	2116	2101	2098	2084	2065	2087	2124	2147
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	1551	1538	1531	1495	1536	1535	1539	1538	1519	1558	1539
USA	2631	2626	2629	2631	2633	2638	2637	2639	2640	2641	2642

Table 1008: FAO — Prices—Agriculture—Dairy (US\$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	2091	2063	2047	2055	2074	2061	2073	2086	2108	2123	2121
CAZ	2701	2690	2716	2716	2707	2733	2763	2702	2727	2745	2760
CHA	4107	4093	4088	4084	4080	4079	4110	4051	4139	4102	4126
EUR	2626	2616	2609	2613	2618	2613	2613	2619	2622	2627	2626
IND	2294	2294	2297	2289	2291	2293	2291	2296	2291	2293	2296
JPN	5915	5917	5920	5920	5919	5912	5908	5904	5909	5911	5912
LAM	1876	1883	1883	1880	1878	1902	1906	1902	1898	1897	1911
MEA	2424	2443	2413	2407	2388	2413	2401	2401	2398	2383	2381
NEU	3631	3597	3548	3530	3514	3493	3493	3488	3487	3473	3450
OAS	2148	2131	2129	2134	2130	2159	2157	2161	2185	2176	2169
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	1527	1523	1512	1497	1500	1477	1447	1451	1471	1466	1473
USA	2644	2647	2646	2646	2647	2646	2648	2648	2646	2645	2645

Table 1009: FAO — Prices—Agriculture—Dairy (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	2105	2103	2105	2096	2083	2075	2070	2078	2117	2481	2513
CAZ	2712	2679	2656	2647	2682	2686	2709	2695	2667	2637	2582
CHA	4115	4121	4143	4141	4128	4121	4119	4113	4126	4136	4106
EUR	2615	2611	2607	2602	2602	2599	2592	2600	2631	2737	2836
IND	2311	2313	2315	2314	2303	2295	2300	2285	2278	2275	2274
JPN	5905	5903	5897	5898	5912	5914	5910	5913	5913	5902	5894
LAM	1898	1898	1903	1891	1863	1868	1847	1855	1880	1882	1892
MEA	2376	2386	2396	2406	2414	2389	2402	2405	2428	2474	2497
NEU	3444	3456	3449	3455	3438	3454	3454	3467	3506	3829	3836
OAS	2162	2170	2220	2279	2294	2307	2336	2310	2307	2309	2300
REF	0	0	0	0	0	0	0	0	0	1679	1695
SSA	1467	1455	1412	1409	1437	1439	1442	1496	1529	1549	1698
USA	2645	2648	2646	2647	2649	2647	2645	2645	2645	2644	2645

Table 1010: FAO — Prices—Agriculture—Dairy (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	2516	2523	2528	2524	2521	2523	2546	2545	2544	2562	2568
CAZ	2553	2572	2536	2514	2511	2502	2462	2448	2414	2410	2416
CHA	4082	4058	4071	4054	4126	4138	4176	4211	4256	4315	4366
EUR	2843	2847	2850	2851	2848	2851	2921	2918	2918	2917	2915
IND	2276	2287	2286	2284	2280	2275	2274	2268	2268	2271	2269
JPN	5911	5911	5909	5908	5906	5908	5907	5911	5909	5911	5911
LAM	1872	1861	1853	1859	1866	1866	1878	1880	1884	1881	1883
MEA	2488	2468	2456	2458	2446	2467	2471	2491	2492	2546	2488
NEU	3818	3807	3798	3785	3761	3792	3792	3794	3792	3790	3786
OAS	2287	2279	2272	2253	2252	2246	2277	2319	2283	2279	2266
REF	1698	1703	1711	1711	1708	1718	1725	1743	1754	1753	1733
SSA	1678	1707	1697	1691	1685	1705	1708	1700	1737	1737	1754
USA	2645	2647	2649	2650	2650	2649	2649	2649	2648	2650	2650

Table 1011: FAO — Prices—Agriculture—Dairy (US\$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	2575	2574	2586	2582	2571	2565	2534
CAZ	2416	2422	2428	2440	2423	2423	2417
CHA	4391	4410	4423	4423	4393	4386	4398
EUR	2913	2911	2907	2910	2905	2906	2902
IND	2265	2265	2256	2250	2250	2250	2259
JPN	5908	5909	5912	5914	5907	5911	5918
LAM	1869	1877	1878	1882	1872	1861	1852
MEA	2492	2483	2491	2546	2535	2517	1934
NEU	3782	3779	3771	3778	3782	3794	3790
OAS	2272	2277	2270	2270	2264	2258	2253
REF	1755	1675	1756	1747	1741	1732	1718
SSA	1739	1764	1855	1892	1897	1921	1909
USA	2649	2648	2647	2646	2647	2647	2644

Table 1012: FAO — Prices—Agriculture—Dairy (US\$05/tDM) [PART 5/5]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	735	795	626	688	651	599	569	615	590	586
CAZ	0	388	394	388	384	402	446	413	352	355	329
CHA	0	436	457	434	408	436	458	566	402	548	645
EUR	0	971	1042	947	974	1127	815	733	742	693	636
IND	0	770	782	681	751	0	0	0	0	0	0
JPN	0	1081	1152	1284	1376	1476	1243	1115	1034	1182	1240
LAM	0	356	379	397	787	435	460	456	438	384	422
MEA	0	5009	5128	843	800	931	1162	1144	1707	1903	2399
NEU	0	1232	1493	1444	1253	1526	1432	1314	2164	2057	1943
OAS	0	794	815	851	931	991	1005	963	952	910	868
REF	0	0	12	45	103	216	329	378	325	273	293
SSA	8	152	172	148	181	214	354	566	558	512	468
USA	0	446	479	467	475	467	533	484	561	520	448

Table 1013: FAOp — Prices—Agriculture—Dairy (US\$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	564	520	563	660	694	700	830	894	767	840	907
CAZ	344	376	382	455	524	512	597	797	609	726	903
CHA	570	686	495	876	919	908	1146	592	619	744	802
EUR	659	674	784	952	992	981	1193	1378	1111	1141	1288
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	1109	1075	1176	1254	1209	1118	1099	1316	1572	1650	1836
LAM	422	386	403	424	490	499	609	703	613	723	763
MEA	2396	1349	1305	1271	1284	1393	1663	1908	2307	2306	1998
NEU	1498	1624	2071	2390	2587	2796	3202	3916	3661	4222	3991
OAS	473	483	440	445	447	516	524	496	185	194	175
REF	329	390	419	510	611	643	628	781	618	753	941
SSA	477	508	482	566	636	712	889	787	853	768	794
USA	543	441	454	584	549	469	695	667	467	590	731

Table 1014: FAOp — Prices—Agriculture—Dairy (US\$05/tDM) [PART 2/3]

	2005
GLO	21104
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 1015: IniFoodPrice — Prices—Agriculture—Dairy (US\$05/tDM)



36.6 Distillers grains

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale. ## geom\_path: Each group consists of only one observation. Do you need to adjust the group## aesthetic?

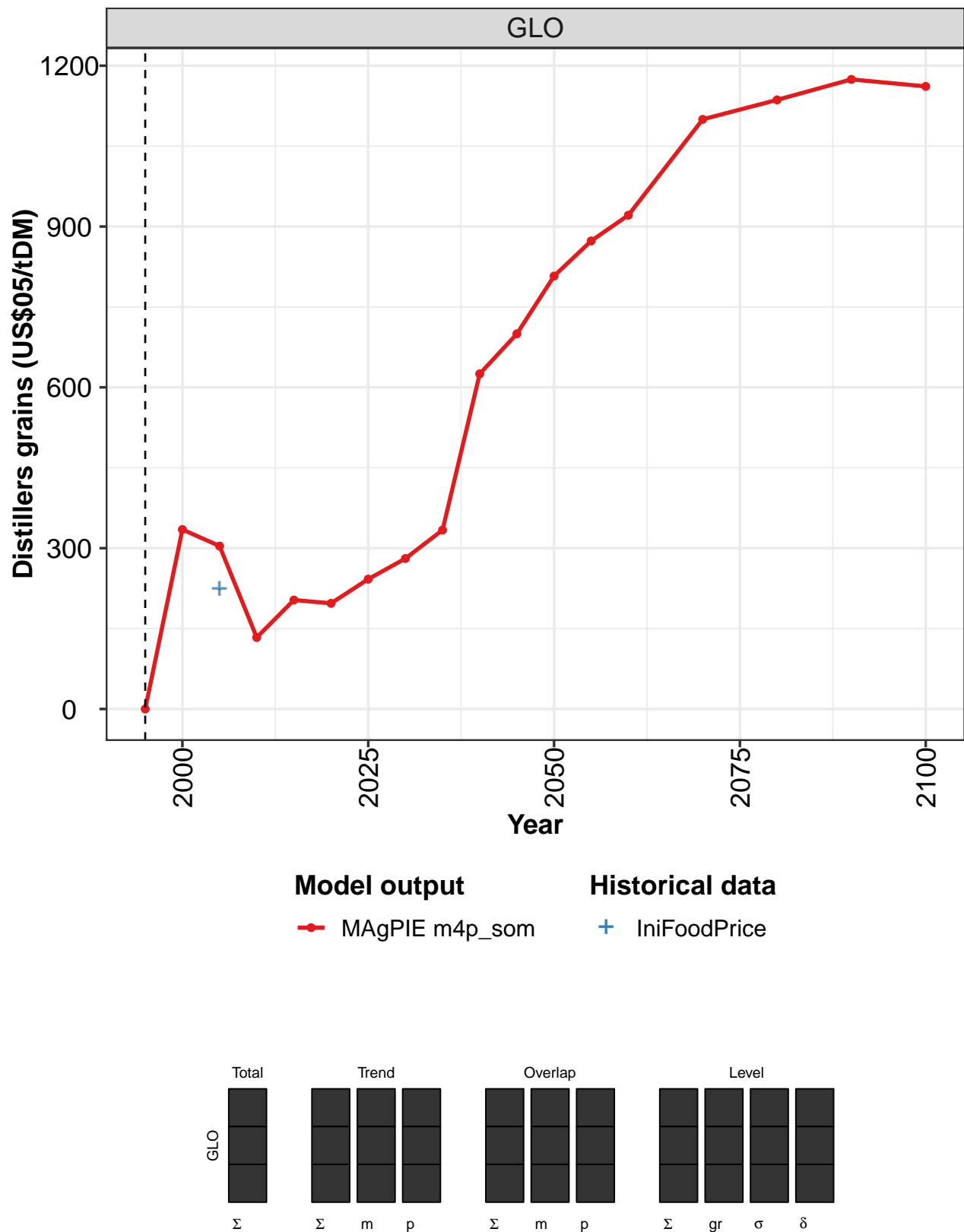


Figure 298: MAGPIE m4p\_som — Prices—Agriculture—Distillers grains (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	335	304	133	203	197	242	281	334	625	700

Table 1016: MAgPIE m4p\_som — Prices—Agriculture—Distillers grains (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	808	873	921	1100	1136	1174	1161

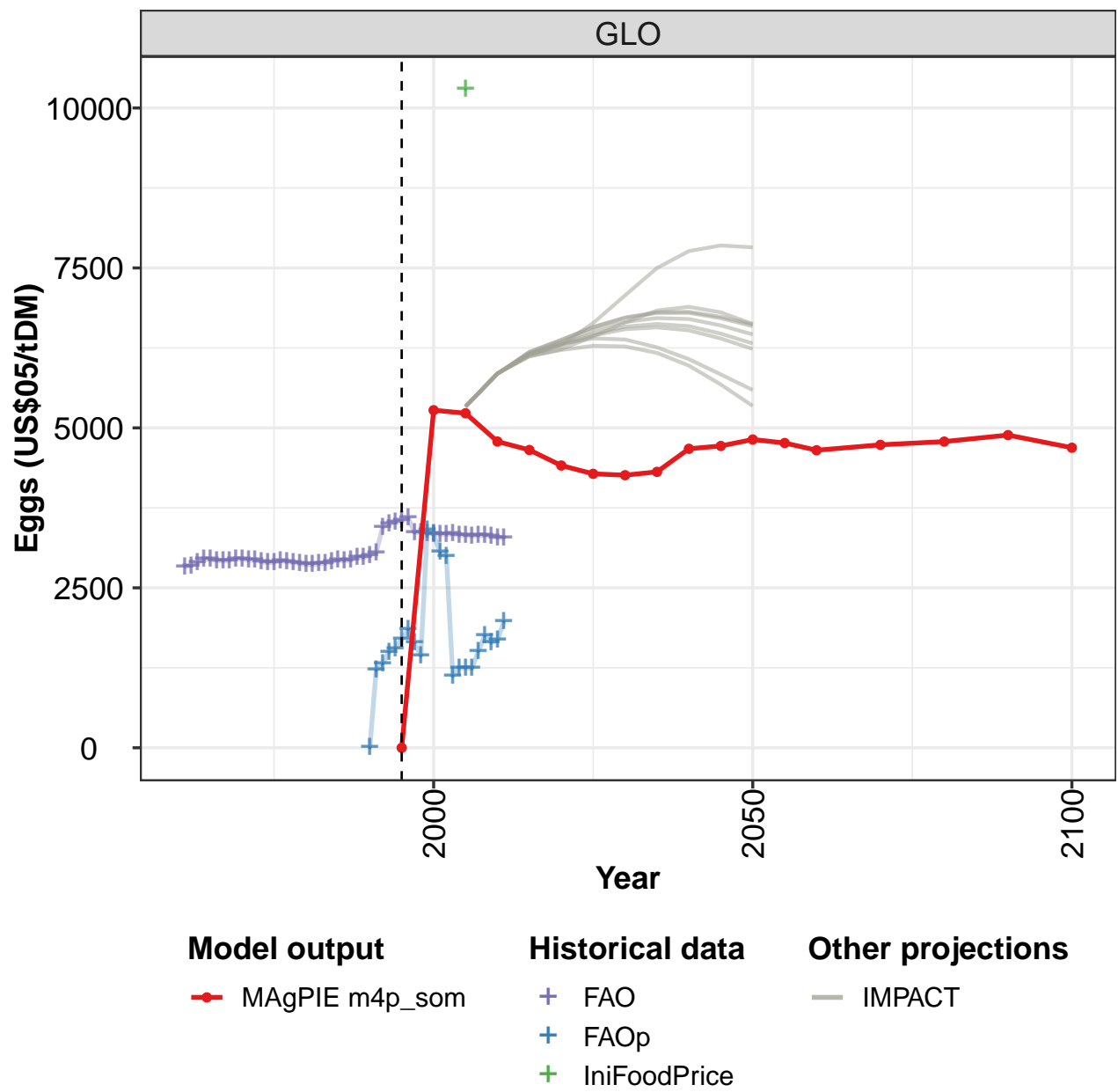
Table 1017: MAgPIE m4p\_som — Prices—Agriculture—Distillers grains (US\$05/tDM) [PART 2/2]

	2005
GLO	223

Table 1018: IniFoodPrice — Prices—Agriculture—Distillers grains (US\$05/tDM)

36.7 Eggs

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

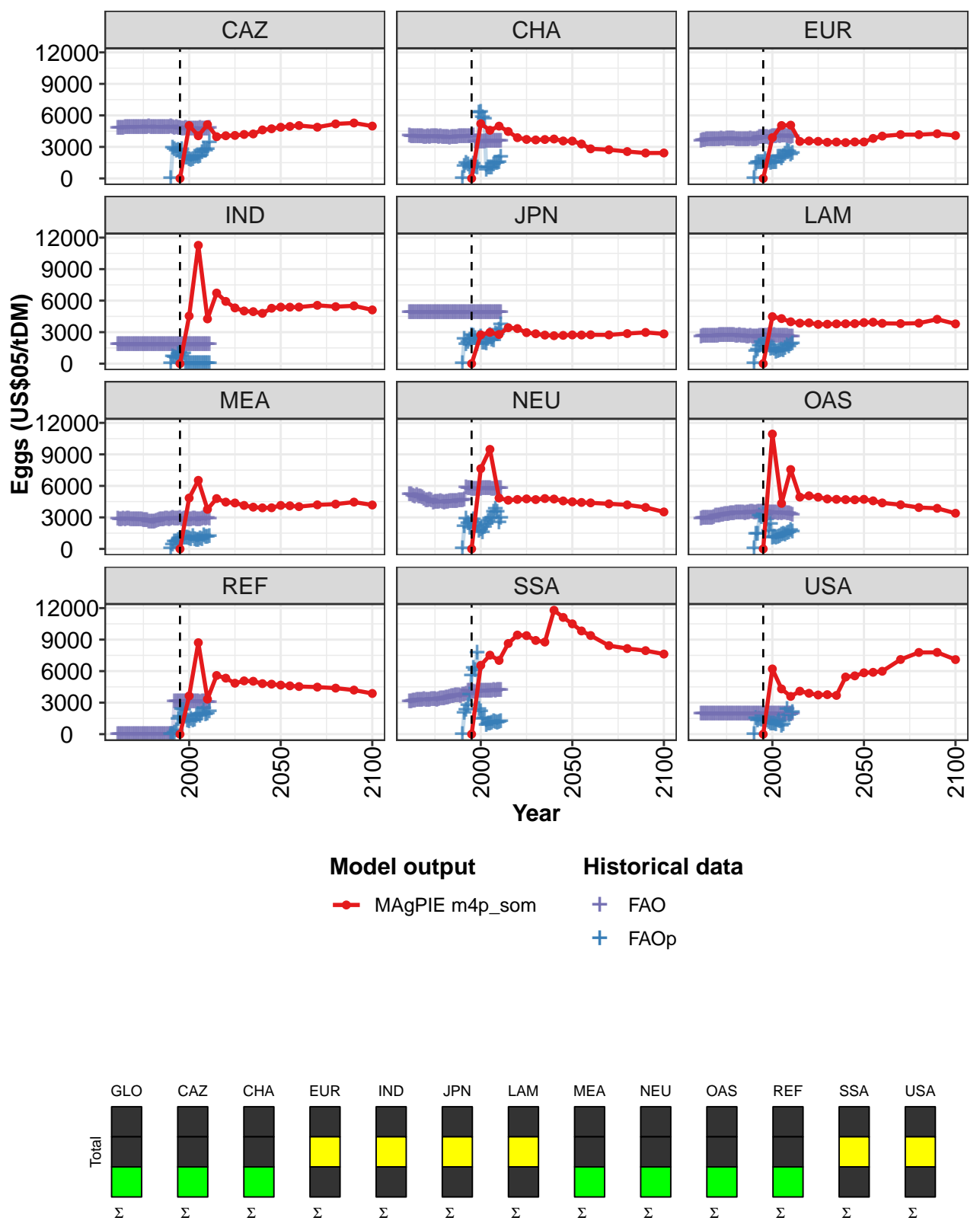


Figure 299: MAgPIE m4p\_som — Prices—Agriculture—Eggs (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	5276	5229	4787	4655	4412	4282	4260	4313	4674	4718
CAZ	0	5033	4061	5122	3972	4062	4092	4186	4234	4617	4726
CHA	0	5212	4584	4979	4467	3877	3710	3665	3704	3751	3566
EUR	0	3883	5037	5070	3520	3566	3528	3438	3464	3412	3474
IND	0	4539	11268	4263	6724	5928	5308	5016	4952	4791	5275
JPN	0	2742	2975	2777	3421	3342	2955	2845	2720	2663	2694
LAM	0	4478	4290	3987	3856	3883	3741	3758	3788	3798	3810
MEA	0	4845	6528	3771	4793	4456	4375	4139	3975	3908	3915
NEU	0	7642	9476	4840	4638	4709	4761	4694	4795	4749	4568
OAS	0	10935	4335	7557	4932	5055	4925	4753	4718	4690	4677
REF	0	3637	8711	3340	5586	5330	4849	5073	5037	4811	4762
SSA	0	6555	7523	7020	8632	9436	9380	8920	8767	11796	11114
USA	0	6209	4305	3594	4094	3892	3730	3762	3690	5440	5551

Table 1019: MAgPIE m4p\_som — Prices—Agriculture—Eggs (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	4818	4764	4651	4735	4786	4888	4690
CAZ	4872	4949	5033	4875	5190	5276	4981
CHA	3557	3277	2817	2734	2557	2416	2423
EUR	3470	3809	4029	4172	4164	4253	4085
IND	5383	5378	5386	5554	5425	5504	5118
JPN	2734	2727	2750	2739	2865	2976	2832
LAM	3909	3947	3836	3815	3856	4223	3787
MEA	4140	4106	4025	4195	4263	4457	4181
NEU	4481	4423	4384	4292	4192	3950	3520
OAS	4721	4577	4381	4202	3938	3865	3395
REF	4671	4599	4536	4478	4382	4196	3872
SSA	10502	9828	9392	8426	8151	7951	7624
USA	5843	5888	5987	7106	7779	7786	7100

Table 1020: MAgPIE m4p\_som — Prices—Agriculture—Eggs (US\$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	2832	2846	2893	2949	2947	2926	2920	2928	2954	2951	2933
CAZ	4798	4799	4806	4794	4819	4840	4837	4853	4842	4836	4855
CHA	4018	4013	4008	4000	3968	3965	3991	3957	3934	3930	3965
EUR	3566	3587	3646	3659	3684	3711	3708	3703	3698	3704	3711
IND	1790	1790	1790	1790	1790	1790	1790	1790	1790	1790	1790
JPN	4869	4869	4869	4869	4869	4869	4869	4869	4869	4869	4869
LAM	2580	2628	2625	2631	2628	2631	2629	2626	2641	2631	2659
MEA	2832	2805	2807	2817	2793	2852	2829	2805	2774	2799	2786
NEU	5138	5157	5030	4972	5129	4962	4941	4875	4740	4619	4600
OAS	2878	2888	2911	2908	2917	2890	2896	2963	3147	3126	3171
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	3087	3097	3131	3134	3204	3215	3216	3233	3278	3247	3256
USA	1902	1902	1902	1902	1902	1902	1902	1902	1902	1902	1902

Table 1021: FAO — Prices—Agriculture—Eggs (US\$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	2931	2910	2891	2900	2928	2908	2897	2882	2863	2862	2880
CAZ	4882	4879	4868	4887	4885	4882	4894	4880	4852	4871	4871
CHA	3942	3969	3952	3954	3948	3906	3951	3888	3893	3900	3907
EUR	3729	3712	3721	3746	3768	3751	3735	3740	3700	3711	3709
IND	1790	1790	1790	1790	1790	1790	1790	1790	1790	1790	1790
JPN	4869	4869	4869	4869	4869	4869	4869	4869	4869	4869	4869
LAM	2668	2704	2682	2682	2692	2700	2711	2690	2621	2647	2658
MEA	2779	2777	2758	2710	2693	2684	2589	2558	2544	2562	2633
NEU	4657	4589	4383	4442	4442	4467	4516	4482	4409	4442	4441
OAS	3207	3198	3250	3271	3261	3351	3324	3334	3413	3396	3397
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	3250	3284	3306	3322	3234	3317	3361	3388	3396	3417	3480
USA	1902	1902	1902	1902	1902	1902	1902	1902	1902	1902	1902

Table 1022: FAO — Prices—Agriculture—Eggs (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	2880	2909	2932	2923	2932	2978	2972	3007	3051	3446	3496
CAZ	4866	4864	4845	4845	4829	4824	4842	4891	4849	4813	4815
CHA	3866	3904	3935	3941	3941	3967	3961	3966	3986	3979	3988
EUR	3720	3713	3695	3707	3693	3736	3719	3718	3714	3799	3928
IND	1790	1790	1790	1790	1790	1790	1790	1790	1790	1790	1790
JPN	4869	4869	4869	4869	4869	4869	4869	4869	4869	4869	4869
LAM	2647	2604	2597	2577	2580	2600	2563	2542	2538	2562	2590
MEA	2703	2745	2774	2742	2835	2867	2792	2851	2960	2869	2844
NEU	4501	4510	4520	4495	4490	4626	4573	4559	4697	5804	5739
OAS	3407	3409	3393	3422	3436	3477	3472	3434	3444	3485	3521
REF	0	0	0	0	0	0	0	0	0	3058	3056
SSA	3527	3558	3572	3637	3678	3645	3608	3765	3773	3800	4065
USA	1902	1902	1902	1902	1902	1902	1902	1902	1902	1902	1902

Table 1023: FAO — Prices—Agriculture—Eggs (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	3524	3549	3594	3364	3365	3354	3346	3340	3334	3346	3325
CAZ	4757	4747	4739	4737	4752	4739	4712	4698	4694	4678	4699
CHA	4003	4005	4058	3496	3499	3502	3504	3504	3487	3510	3511
EUR	3900	3904	3908	3894	3864	3887	3957	3966	4000	4054	3986
IND	1790	1790	1790	1790	1790	1790	1790	1790	1790	1790	1790
JPN	4869	4869	4869	4869	4869	4869	4869	4869	4869	4869	4869
LAM	2598	2605	2639	2637	2662	2646	2641	2670	2635	2631	2616
MEA	2843	2889	2803	2845	2854	2773	2766	2765	2844	2839	2759
NEU	5743	5696	5710	5683	5688	5691	5690	5731	5739	5725	5732
OAS	3518	3547	3512	3505	3408	3405	3398	3431	3410	3378	3415
REF	3073	3077	3084	3092	3092	3092	3109	3112	3097	3099	3083
SSA	4092	4052	4019	3979	4103	4106	4094	4096	4087	4098	4103
USA	1902	1902	1902	1902	1902	1902	1902	1902	1902	1902	1902

Table 1024: FAO — Prices—Agriculture—Eggs (US\$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	3324	3312	3321	3321	3308	3286	3283
CAZ	4697	4750	4728	4720	4714	4728	4767
CHA	3517	3515	3516	3521	3522	3513	3522
EUR	4019	4019	4019	3998	4012	3944	3983
IND	1790	1790	1790	1790	1790	1790	1790
JPN	4869	4869	4869	4869	4869	4869	4869
LAM	2627	2626	2615	2607	2581	2570	2561
MEA	2796	2780	2855	2900	2819	2911	2875
NEU	5721	5709	5698	5721	5734	5755	5739
OAS	3366	3408	3416	3368	3335	3285	3227
REF	3083	3043	3070	3052	3042	3023	2998
SSA	4120	4132	4149	4133	4148	4155	4173
USA	1902	1902	1902	1902	1902	1902	1902

Table 1025: FAO — Prices—Agriculture—Eggs (US\$05/tDM) [PART 5/5]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	1213	1311	1499	1551	1694	1849	1637	1441	3399	3333
CAZ	0	2912	2763	2620	2639	2429	2748	2114	1962	1929	1800
CHA	0	1179	1423	1303	1019	1179	1359	1055	993	6215	6286
EUR	0	1363	1491	1487	1490	1501	1783	1581	1644	1427	1544
IND	0	696	611	519	854	1022	718	933	0	0	0
JPN	0	2314	1786	2013	2290	2714	2648	2372	1833	2414	2525
LAM	0	1160	1309	1662	2062	1924	2169	2111	1737	1390	1423
MEA	0	393	698	649	785	969	987	1027	1030	1070	962
NEU	0	2095	2861	2433	1947	2540	2762	2472	2194	1674	1810
OAS	0	1388	1435	3149	3021	3262	3224	2751	1681	2313	1072
REF	0	0	78	355	1423	1605	2322	2294	1652	1258	1207
SSA	0	1962	2296	2716	3728	5580	6284	6073	7691	2346	2137
USA	0	1472	1255	1381	1339	1362	1404	1283	1148	988	975

Table 1026: FAOp — Prices—Agriculture—Eggs (US\$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	3054	2992	1123	1249	1251	1240	1508	1751	1647	1680	1973
CAZ	1732	1797	2026	2108	2042	2125	2431	2742	2603	2769	3422
CHA	5765	5662	784	987	1030	976	1290	1447	1477	1535	2056
EUR	1482	1538	2040	2013	1910	2064	2315	2574	2540	2210	2381
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	1990	1991	1865	2319	2699	2285	2168	2835	2768	3200	3725
LAM	1359	1063	1170	1245	1291	1228	1422	1757	1612	1792	1922
MEA	868	1194	912	803	803	979	921	1262	1134	1087	1189
NEU	1518	2063	2359	2630	2815	2956	3534	3810	3519	2523	2940
OAS	1090	1038	1077	1197	1351	1409	1358	1484	1526	1729	1592
REF	1395	1306	1365	1683	1816	1714	1912	2454	1869	1942	2148
SSA	1393	1473	831	950	967	1038	1207	1131	1029	1137	1207
USA	993	898	1255	1218	758	878	1862	2385	1782	1867	2082

Table 1027: FAOp — Prices—Agriculture—Eggs (US\$05/tDM) [PART 2/3]

	2005
GLO	10291
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 1028: IniFoodPrice — Prices—Agriculture—Eggs (US\$05/tDM)



36.8 Ethanol

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale. ## geom\_path: Each group consists of only one observation. Do you need to adjust the group## aesthetic?

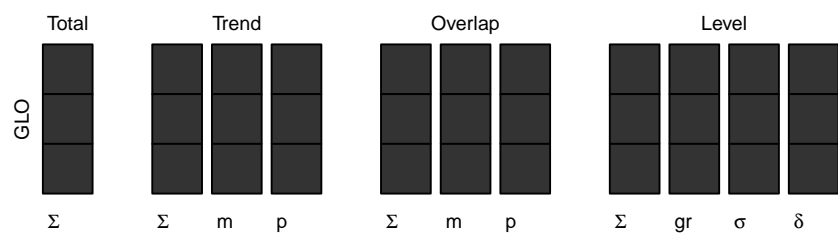
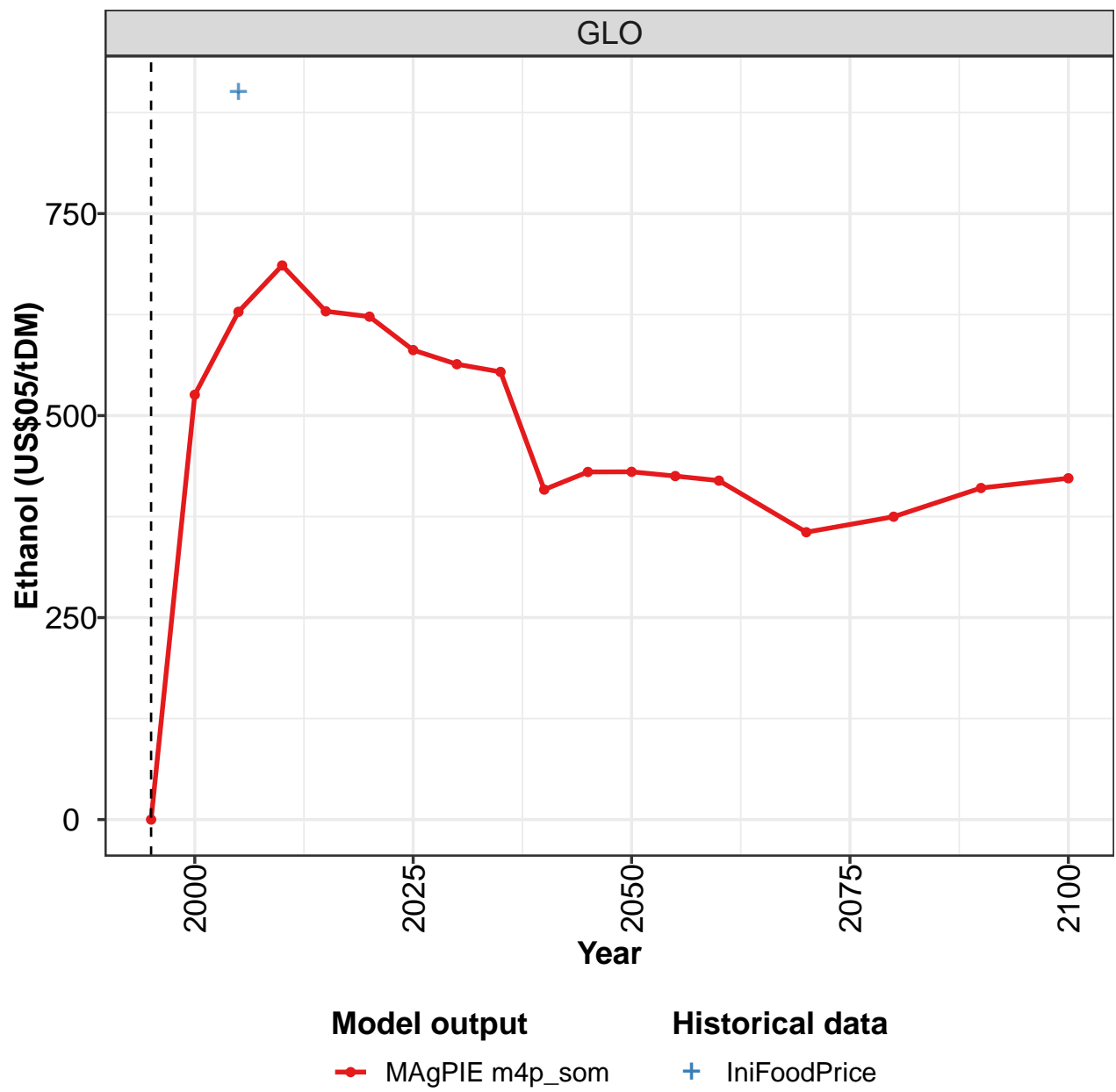


Figure 300: MAgPIE m4p\_som — Prices—Agriculture—Ethanol (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	526	628	686	629	622	581	564	554	408	430

Table 1029: MAgPIE m4p.som — Prices—Agriculture—Ethanol (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	430	425	419	356	375	410	422

Table 1030: MAgPIE m4p.som — Prices—Agriculture—Ethanol (US\$05/tDM) [PART 2/2]

	2005
GLO	900

Table 1031: IniFoodPrice — Prices—Agriculture—Ethanol (US\$05/tDM)

36.9
Fish

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
 replace the existing scale.

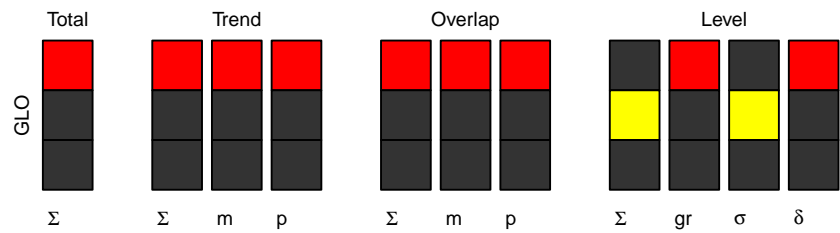
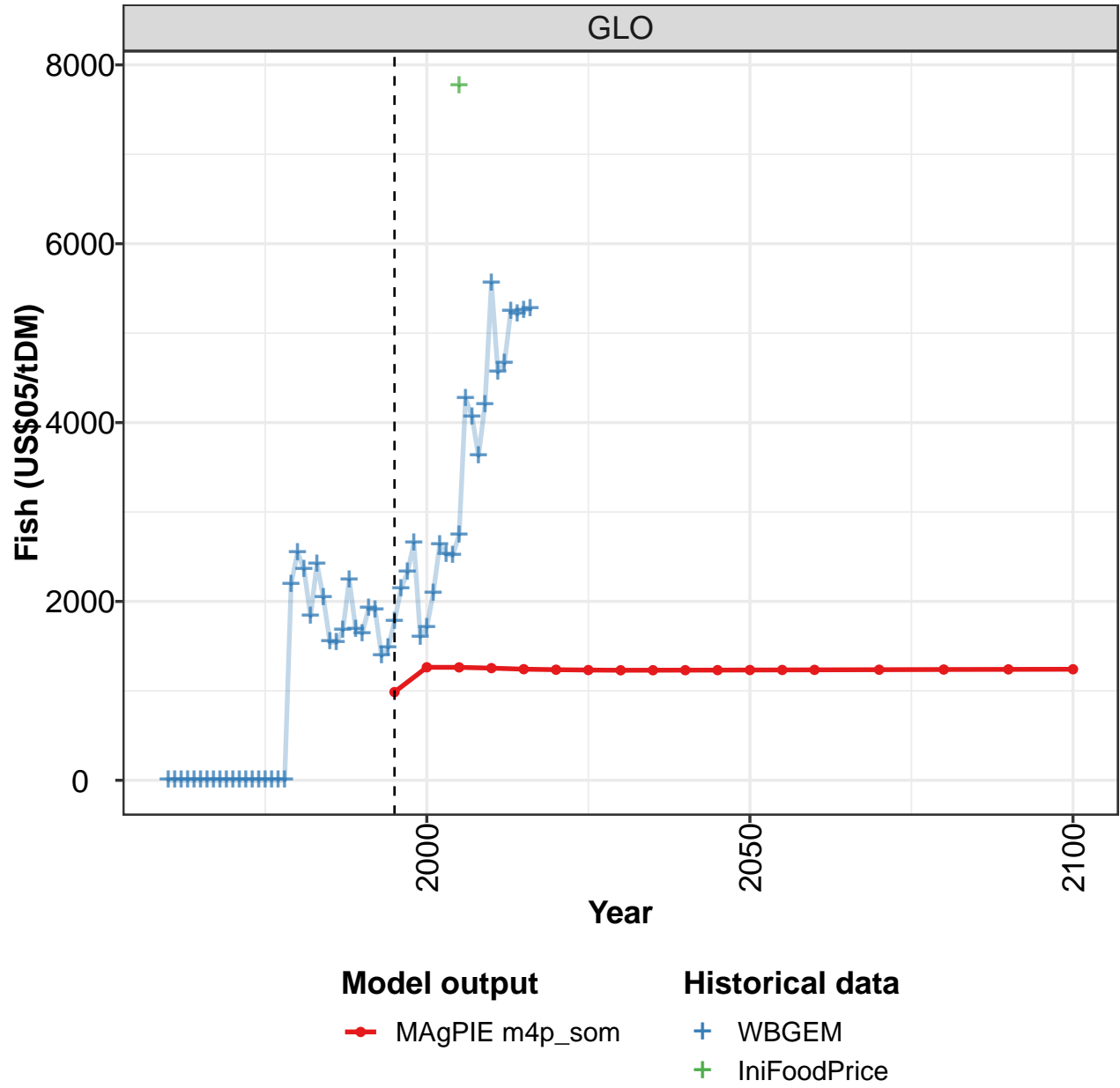


Figure 301: MAgPIE m4p\_som — Prices—Agriculture—Fish (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	987	1263	1263	1254	1242	1237	1233	1230	1231	1231	1232

Table 1032: MAgPIE m4p\_som — Prices—Agriculture—Fish (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1233	1234	1235	1237	1238	1240	1242

Table 1033: MAgPIE m4p\_som — Prices—Agriculture—Fish (US\$05/tDM) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	0	0	0	0	0	0	0	0	0	0	0

Table 1034: WBGEM — Prices—Agriculture—Fish (US\$05/tDM) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	0	0	0	0	0	0	0	0	2194	2548	2358

Table 1035: WBGEM — Prices—Agriculture—Fish (US\$05/tDM) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	1835	2417	2038	1546	1538	1679	2239	1689	1642	1922	1901

Table 1036: WBGEM — Prices—Agriculture—Fish (US\$05/tDM) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	1392	1481	1774	2141	2324	2654	1604	1710	2094	2637	2527

Table 1037: WBGEM — Prices—Agriculture—Fish (US\$05/tDM) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	2513	2745	4273	4064	3630	4201	5559	4564	4659	5245	5211

Table 1038: WBGEM — Prices—Agriculture—Fish (US\$05/tDM) [PART 5/6]

	2015	2016
GLO	5256	5275

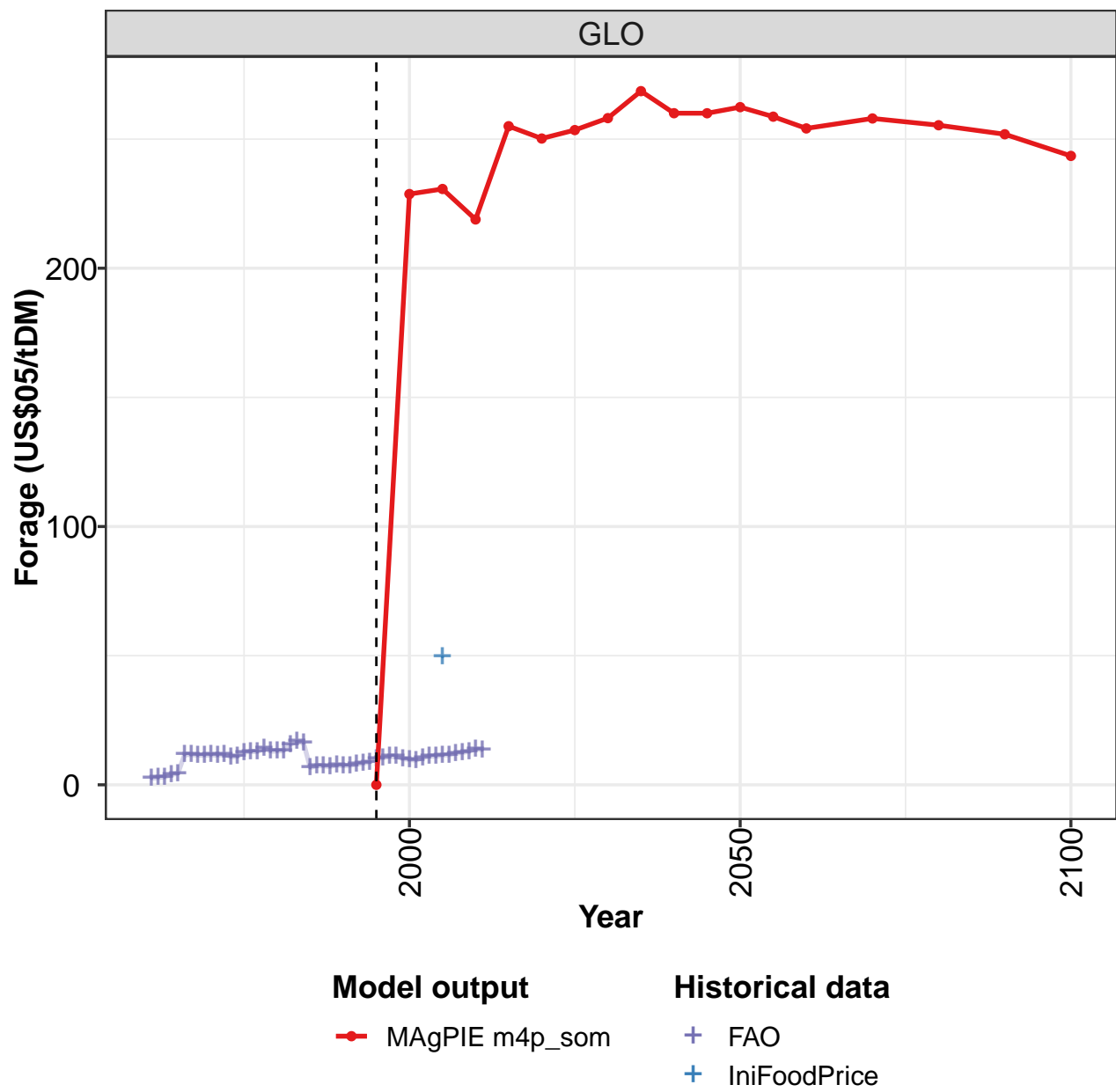
Table 1039: WBGEM — Prices—Agriculture—Fish (US\$05/tDM) [PART 6/6]

	2005
GLO	7766

Table 1040: IniFoodPrice — Prices—Agriculture—Fish (US\$05/tDM)

36.10 Forage

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

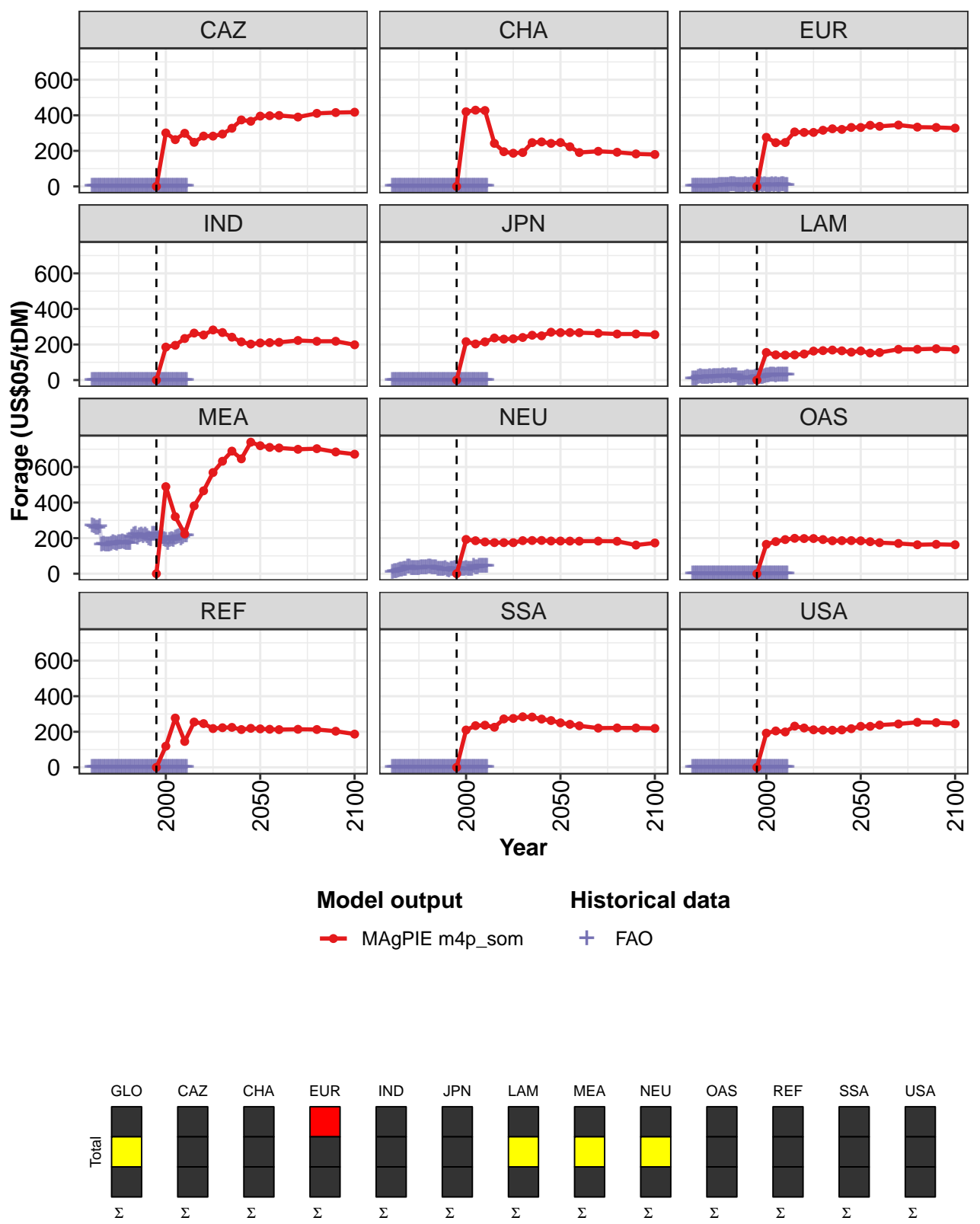


Figure 302: MAgPIE m4p\_som — Prices—Agriculture—Forage (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	229	231	219	255	250	253	258	269	260	260
CAZ	0	301	263	299	248	283	283	294	327	374	366
CHA	0	420	429	427	242	195	187	191	246	250	242
EUR	0	276	246	247	306	304	304	316	324	321	332
IND	0	185	195	234	264	254	282	267	241	215	202
JPN	0	216	203	215	237	230	232	239	252	249	269
LAM	0	155	142	140	141	146	163	166	169	165	157
MEA	0	489	321	224	382	466	569	632	689	646	740
NEU	0	193	185	178	175	175	175	186	187	187	184
OAS	0	165	181	192	199	198	198	192	185	186	186
REF	0	119	277	146	255	246	218	223	225	213	219
SSA	0	210	234	237	225	272	275	284	283	271	263
USA	0	192	205	199	232	221	211	209	209	211	217

Table 1041: MAgPIE m4p\_som — Prices—Agriculture—Forage (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	262	259	254	258	255	252	243
CAZ	395	397	399	390	411	415	417
CHA	247	223	191	198	192	183	180
EUR	331	344	338	345	333	332	328
IND	209	210	212	223	218	218	198
JPN	267	267	266	263	259	259	255
LAM	164	152	155	173	173	176	172
MEA	720	710	707	700	703	685	672
NEU	184	183	183	183	182	161	173
OAS	185	180	175	170	163	165	163
REF	216	214	212	214	213	203	187
SSA	250	242	233	221	222	221	219
USA	231	231	238	244	253	251	245

Table 1042: MAgPIE m4p\_som — Prices—Agriculture—Forage (US\$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	2	3	3	4	4	12	12	11	11	12	11
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	6	6	7	15	19	16	18	16	15	18	17
MEA	269	264	257	254	266	164	165	163	163	163	165
NEU	8	12	14	15	19	23	24	24	36	37	29
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0

Table 1043: FAO — Prices—Agriculture—Forage (US\$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	12	11	11	13	13	13	14	13	13	13	16
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	0	0	0	7	6	7	7	7	8	9	9
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	18	18	19	20	20	22	22	20	24	21	23
MEA	174	170	168	174	175	179	174	172	171	173	204
NEU	29	29	29	31	33	33	33	33	37	37	35
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0

Table 1044: FAO — Prices—Agriculture—Forage (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	17	16	7	7	7	7	8	7	7	8	8
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	9	8	5	7	6	7	8	7	7	9	9
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	24	25	7	8	9	9	12	14	13	11	12
MEA	217	223	202	215	220	209	216	209	195	192	220
NEU	34	35	25	26	26	23	28	22	19	25	26
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0

Table 1045: FAO — Prices—Agriculture—Forage (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	9	10	10	11	11	10	10	10	10	11	11
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	8	7	8	10	8	9	7	7	8	8	8
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	14	18	18	17	18	18	22	24	26	27	27
MEA	224	224	198	201	207	191	187	172	186	194	189
NEU	28	28	26	27	26	26	27	25	24	24	40
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0

Table 1046: FAO — Prices—Agriculture—Forage (US\$05/tDM) [PART 4/5]



	2005	2006	2007	2008	2009	2010	2011
GLO	12	12	12	13	13	14	14
CAZ	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0
EUR	8	7	8	9	8	8	7
IND	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0
LAM	26	28	28	30	28	29	28
MEA	201	207	208	198	207	214	215
NEU	36	33	41	42	43	44	43
OAS	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0

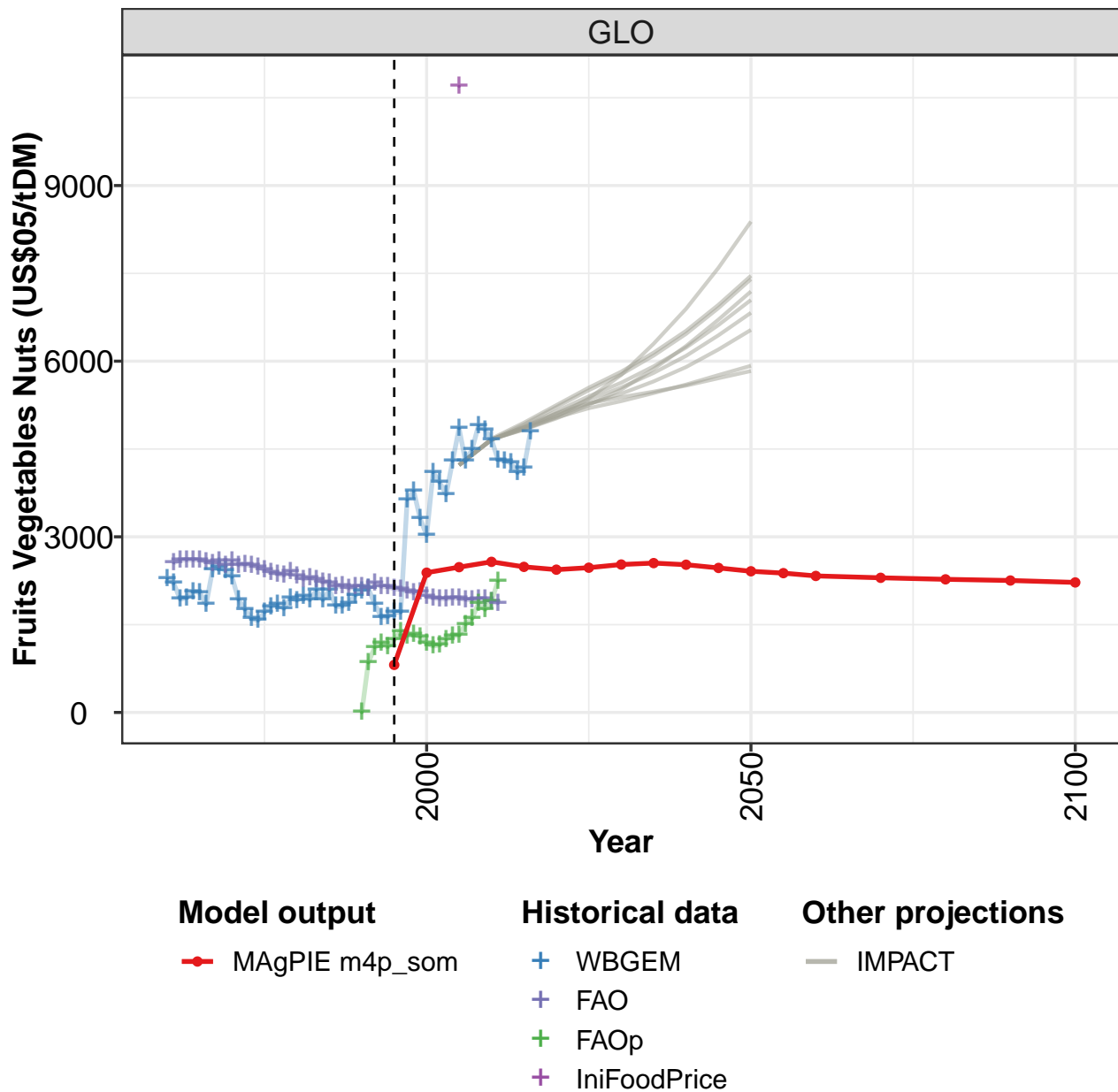
Table 1047: FAO — Prices—Agriculture—Forage (US\$05/tDM) [PART 5/5]

	2005
GLO	50
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 1048: IniFoodPrice — Prices—Agriculture—Forage (US\$05/tDM)

## 36.11 Fruits Vegetables Nuts

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

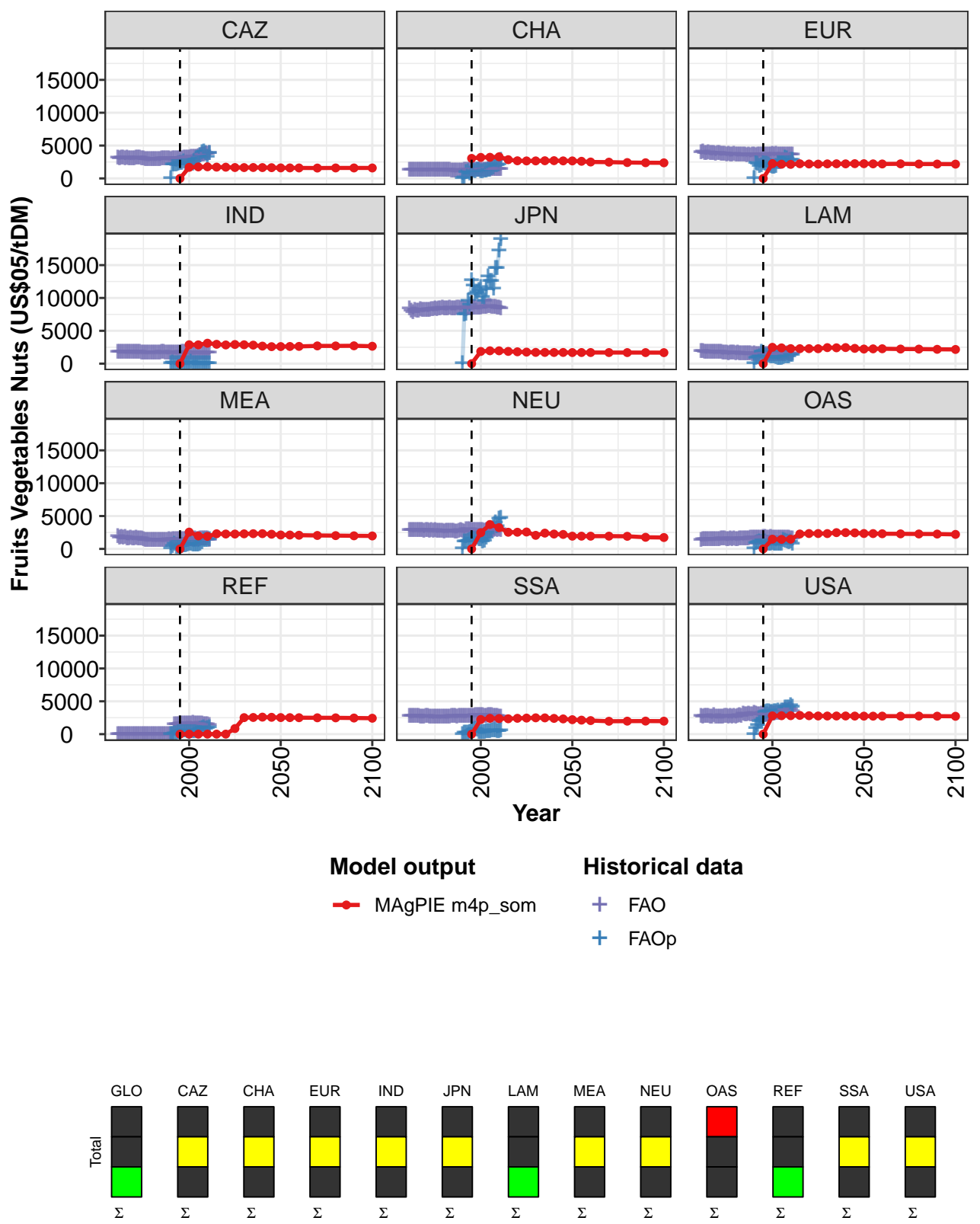


Figure 303: MAgPIE m4p\_som — Prices—Agriculture—Fruits Vegetables Nuts (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	813	2387	2482	2573	2487	2439	2473	2527	2551	2524	2469
CAZ	0	1688	1751	1767	1718	1708	1659	1650	1660	1648	1635
CHA	3051	3199	3217	3293	2853	2683	2665	2666	2690	2704	2670
EUR	0	2250	2157	2138	2233	2196	2177	2215	2225	2216	2243
IND	0	2879	2868	3116	2950	2849	2918	2876	2824	2673	2590
JPN	0	1860	1961	1958	1865	1805	1758	1717	1712	1702	1709
LAM	0	2489	2403	2289	2281	2288	2276	2441	2413	2450	2329
MEA	0	2559	1978	1912	2305	2266	2263	2295	2320	2320	2236
NEU	0	2468	3711	3238	2539	2539	2572	2067	2403	2262	2203
OAS	0	1475	1450	1475	2270	2340	2338	2333	2478	2478	2439
REF	0	9	9	9	9	9	853	2516	2538	2592	2565
SSA	0	2232	2408	2377	2341	2417	2448	2485	2477	2400	2320
USA	0	2785	2807	2811	2853	2806	2768	2760	2765	2768	2754

Table 1049: MAgPIE m4p\_som — Prices—Agriculture—Fruits Vegetables Nuts (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	2412	2380	2332	2300	2274	2254	2221
CAZ	1602	1598	1593	1579	1592	1594	1590
CHA	2664	2606	2499	2474	2415	2385	2375
EUR	2241	2218	2201	2221	2188	2184	2174
IND	2602	2617	2629	2703	2697	2720	2652
JPN	1690	1695	1697	1693	1687	1684	1679
LAM	2225	2255	2269	2226	2215	2183	2162
MEA	2122	2114	2083	2045	2024	1993	1973
NEU	1940	1940	1938	1944	1919	1767	1736
OAS	2347	2334	2306	2292	2275	2261	2208
REF	2523	2517	2504	2492	2483	2458	2424
SSA	2202	2133	2067	1962	1981	1989	1978
USA	2743	2741	2745	2739	2751	2738	2720

Table 1050: MAgPIE m4p\_som — Prices—Agriculture—Fruits Vegetables Nuts (US\$05/tDM) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	2288	2204	1933	1959	2064	2052	1843	2440	2488	2424	2311
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1051: WBGEM — Prices—Agriculture—Fruits Vegetables Nuts (US\$05/tDM) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	1928	1755	1601	1569	1712	1800	1852	1774	1960	1914	1984
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1052: WBGEM — Prices—Agriculture—Fruits Vegetables Nuts (US\$05/tDM) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	1923	2088	1921	2088	1813	1812	1867	2000	2081	2117	1851
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1053: WBGEM — Prices—Agriculture—Fruits Vegetables Nuts (US\$05/tDM) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	1628	1632	1706	1711	3632	3784	3312	3026	4101	3930	3722
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1054: WBGEM — Prices—Agriculture—Fruits Vegetables Nuts (US\$05/tDM) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	4294	4851	4291	4491	4901	4828	4662	4316	4300	4263	4093
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1055: WBGEM — Prices—Agriculture—Fruits Vegetables Nuts (US\$05/tDM) [PART 5/6]

	2015	2016
GLO	4170	4788
CAZ		
CHA		
EUR		
IND		
JPN		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 1056: WBGEM — Prices—Agriculture—Fruits Vegetables Nuts (US\$05/tDM) [PART 6/6]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	2556	2603	2606	2607	2607	2579	2546	2590	2513	2588	2520
CAZ	3160	3053	3126	3129	3018	3083	3054	3030	3048	3053	3088
CHA	1308	1254	1280	1294	1292	1290	1287	1273	1278	1275	1259
EUR	3876	4000	3864	3835	3919	3773	3756	3816	3653	3831	3763
IND	1788	1774	1769	1757	1732	1728	1731	1715	1707	1713	1711
JPN	8312	8009	7733	8134	7981	8034	8193	8070	8096	8172	8101
LAM	1846	1827	1803	1750	1804	1742	1767	1705	1705	1705	1738
MEA	1847	1716	1729	1693	1736	1554	1524	1629	1553	1583	1606
NEU	2808	2850	2779	2799	2814	2781	2787	2822	2679	2858	2781
OAS	1343	1375	1373	1400	1404	1426	1420	1448	1452	1459	1456
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	2712	2672	2710	2728	2697	2697	2645	2653	2659	2726	2709
USA	2689	2659	2746	2785	2709	2664	2590	2797	2616	2596	2627

Table 1057: FAO — Prices—Agriculture—Fruits Vegetables Nuts (US\$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	2527	2508	2484	2437	2388	2368	2342	2409	2332	2276	2300
CAZ	3074	3077	2981	2966	2919	2905	2847	2902	2925	2901	2905
CHA	1295	1300	1295	1284	1283	1271	1263	1257	1256	1249	1234
EUR	3694	3755	3749	3636	3674	3554	3587	3700	3631	3566	3608
IND	1695	1702	1693	1691	1683	1682	1685	1690	1693	1687	1691
JPN	8166	8294	8195	8321	8242	8302	8378	8464	8348	8319	8357
LAM	1717	1616	1680	1636	1568	1628	1651	1655	1562	1589	1558
MEA	1508	1535	1498	1428	1366	1342	1343	1361	1309	1314	1279
NEU	2760	2766	2739	2773	2686	2717	2729	2681	2641	2676	2656
OAS	1487	1490	1489	1439	1457	1514	1470	1542	1468	1481	1496
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	2632	2630	2574	2642	2616	2599	2573	2620	2620	2599	2596
USA	2599	2618	2681	2717	2625	2688	2613	2767	2638	2710	2849

Table 1058: FAO — Prices—Agriculture—Fruits Vegetables Nuts (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	2270	2222	2215	2153	2168	2123	2147	2145	2116	2213	2149
CAZ	2934	2891	2978	2994	2984	2995	2949	2939	3024	3035	3037
CHA	1219	1177	1167	1126	1142	1138	1152	1192	1225	1213	1223
EUR	3593	3554	3592	3522	3592	3455	3529	3566	3470	3569	3529
IND	1692	1685	1701	1697	1691	1651	1677	1668	1651	1670	1641
JPN	8446	8329	8357	8332	8431	8440	8368	8501	8403	8407	8461
LAM	1558	1535	1523	1509	1527	1494	1451	1462	1456	1450	1444
MEA	1305	1305	1278	1285	1310	1343	1397	1341	1444	1414	1462
NEU	2732	2702	2666	2631	2618	2721	2775	2702	2620	2917	2884
OAS	1557	1498	1554	1568	1583	1617	1634	1611	1645	1668	1647
REF	0	0	0	0	0	0	0	0	0	1406	1443
SSA	2666	2685	2697	2673	2667	2720	2731	2696	2684	2679	2776
USA	2764	3020	2974	2909	3022	2994	2988	3156	3122	3007	2947

Table 1059: FAO — Prices—Agriculture—Fruits Vegetables Nuts (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	2147	2114	2100	2075	2044	2054	1986	1954	1943	1938	1959
CAZ	2988	2988	2983	3072	3098	3109	3166	3227	3246	3277	3282
CHA	1256	1284	1291	1290	1315	1316	1248	1244	1256	1290	1325
EUR	3539	3558	3584	3551	3546	3586	3694	3634	3682	3591	3580
IND	1683	1672	1699	1700	1616	1597	1598	1576	1604	1602	1657
JPN	8480	8411	8443	8529	8466	8471	8524	8568	8585	8639	8719
LAM	1469	1430	1404	1379	1430	1389	1380	1432	1409	1416	1405
MEA	1446	1447	1446	1462	1399	1425	1381	1459	1443	1495	1483
NEU	2893	2812	2810	2830	2807	2770	2807	2806	2757	2780	2704
OAS	1659	1753	1723	1710	1682	1728	1699	1674	1678	1672	1673
REF	1481	1531	1545	1519	1586	1562	1613	1604	1638	1603	1597
SSA	2769	2779	2777	2803	2831	2832	2856	2818	2770	2768	2842
USA	3055	2926	2957	2959	2842	3195	3021	3040	3179	3158	3207

Table 1060: FAO — Prices—Agriculture—Fruits Vegetables Nuts (US\$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	1948	1927	1924	1932	1936	1898	1867
CAZ	3385	3410	3544	3570	3706	3734	3829
CHA	1338	1341	1365	1412	1426	1408	1423
EUR	3616	3597	3578	3528	3594	3579	3605
IND	1617	1601	1593	1604	1602	1581	1580
JPN	8738	8571	8552	8625	8512	8510	8412
LAM	1420	1451	1444	1462	1445	1459	1472
MEA	1482	1513	1499	1569	1568	1557	1366
NEU	2799	2837	2822	2882	2840	2877	2823
OAS	1671	1642	1648	1633	1603	1553	1537
REF	1615	1556	1530	1452	1458	1423	1385
SSA	2824	2787	2783	2769	2731	2656	2618
USA	3305	3368	3636	3562	3610	3737	3452

Table 1061: FAO — Prices—Agriculture—Fruits Vegetables Nuts (US\$05/tDM) [PART 5/5]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	848	1112	1187	1117	1242	1387	1308	1332	1291	1178
CAZ	0	2083	2075	2030	2135	2313	2310	2595	2111	2265	2203
CHA	0	100	870	1085	735	807	1164	1057	1258	1260	1055
EUR	0	2264	2191	1880	2015	2286	2198	2143	2125	1871	1688
IND	0	131	29	30	32	31	37	38	34	30	29
JPN	0	7476	7502	9520	8980	12627	11838	10565	10749	11113	11550
LAM	0	864	964	1096	1775	1085	1194	1184	1142	1031	1009
MEA	0	341	758	247	284	401	418	459	533	643	701
NEU	0	1128	1116	1212	1269	1586	1494	1403	1676	1441	1454
OAS	0	874	950	1034	994	1132	1095	895	705	750	801
REF	0	0	19	99	311	271	406	523	479	380	334
SSA	2	131	144	176	295	456	613	699	616	310	265
USA	0	874	1386	1929	2062	2213	3280	3395	3413	3312	3261

Table 1062: FAOp — Prices—Agriculture—Fruits Vegetables Nuts (US\$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	1133	1150	1247	1304	1320	1505	1601	1867	1757	1901	2245
CAZ	2146	2247	2699	2758	3027	3442	3941	4023	3796	3242	3770
CHA	1011	1129	1186	1206	1224	1470	1571	1993	1909	2050	2744
EUR	1724	1809	2379	2364	2541	2664	3088	2965	2575	2735	2713
IND	210	4	6	8	7	8	0	0	0	0	0
JPN	10151	9511	11282	13285	12554	12582	11323	14460	14496	17195	18859
LAM	1034	936	817	841	856	916	1031	1094	1011	1271	1290
MEA	777	559	558	590	564	696	987	1256	1303	1316	1371
NEU	1083	1235	1641	2128	2469	2662	3297	3935	3406	4556	4619
OAS	756	681	755	741	725	1345	1161	1131	975	1104	708
REF	371	411	462	539	581	705	891	960	741	842	1026
SSA	270	291	370	404	431	476	493	570	390	451	488
USA	3393	3400	3541	3310	3486	3494	3983	3988	4007	4343	4106

Table 1063: FAOp — Prices—Agriculture—Fruits Vegetables Nuts (US\$05/tDM) [PART 2/3]

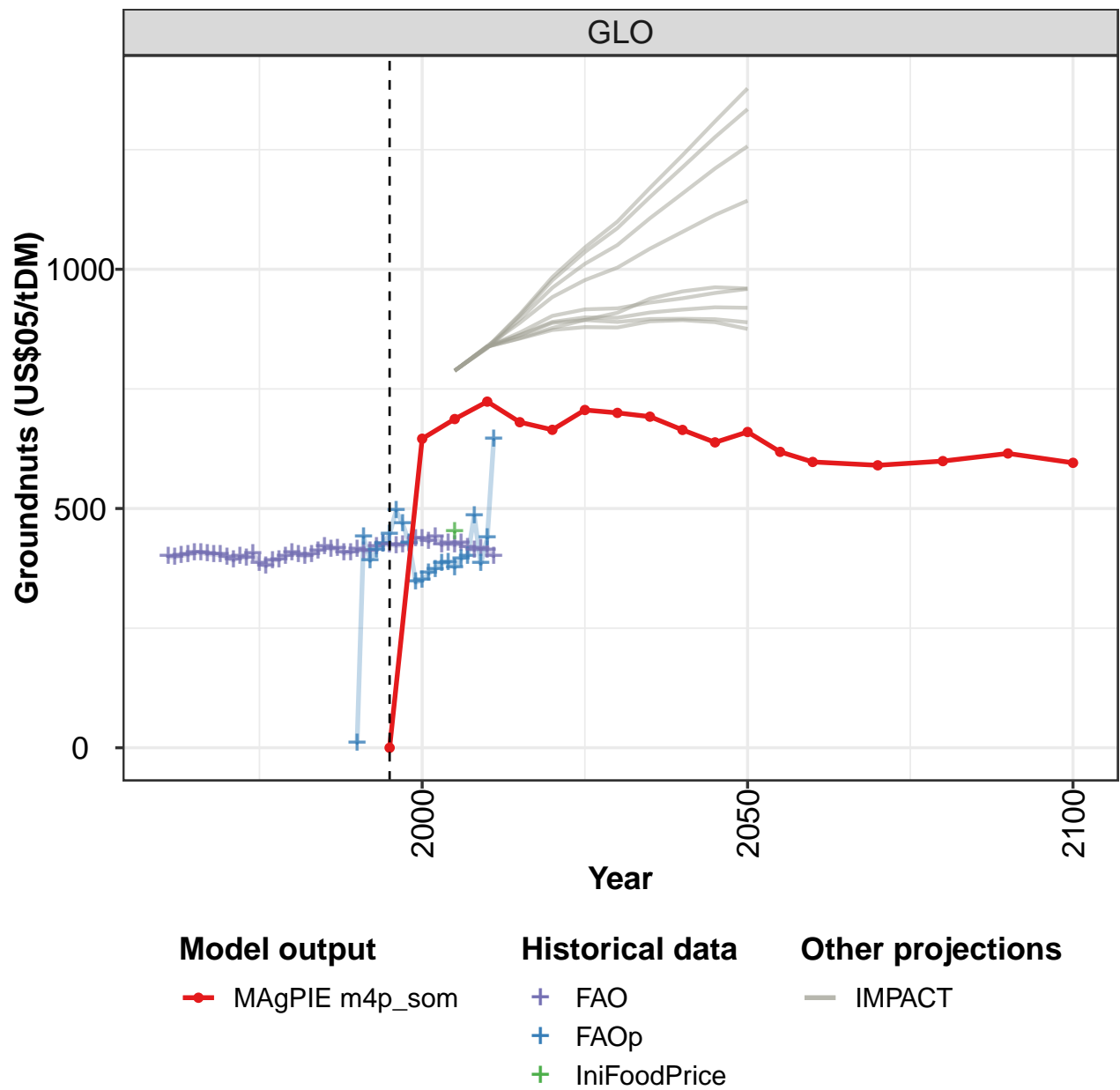


	2005
GLO	10696
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 1064: IniFoodPrice — Prices—Agriculture—Fruits Vegetables Nuts (US\$05/tDM)

36.12 Groundnuts

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

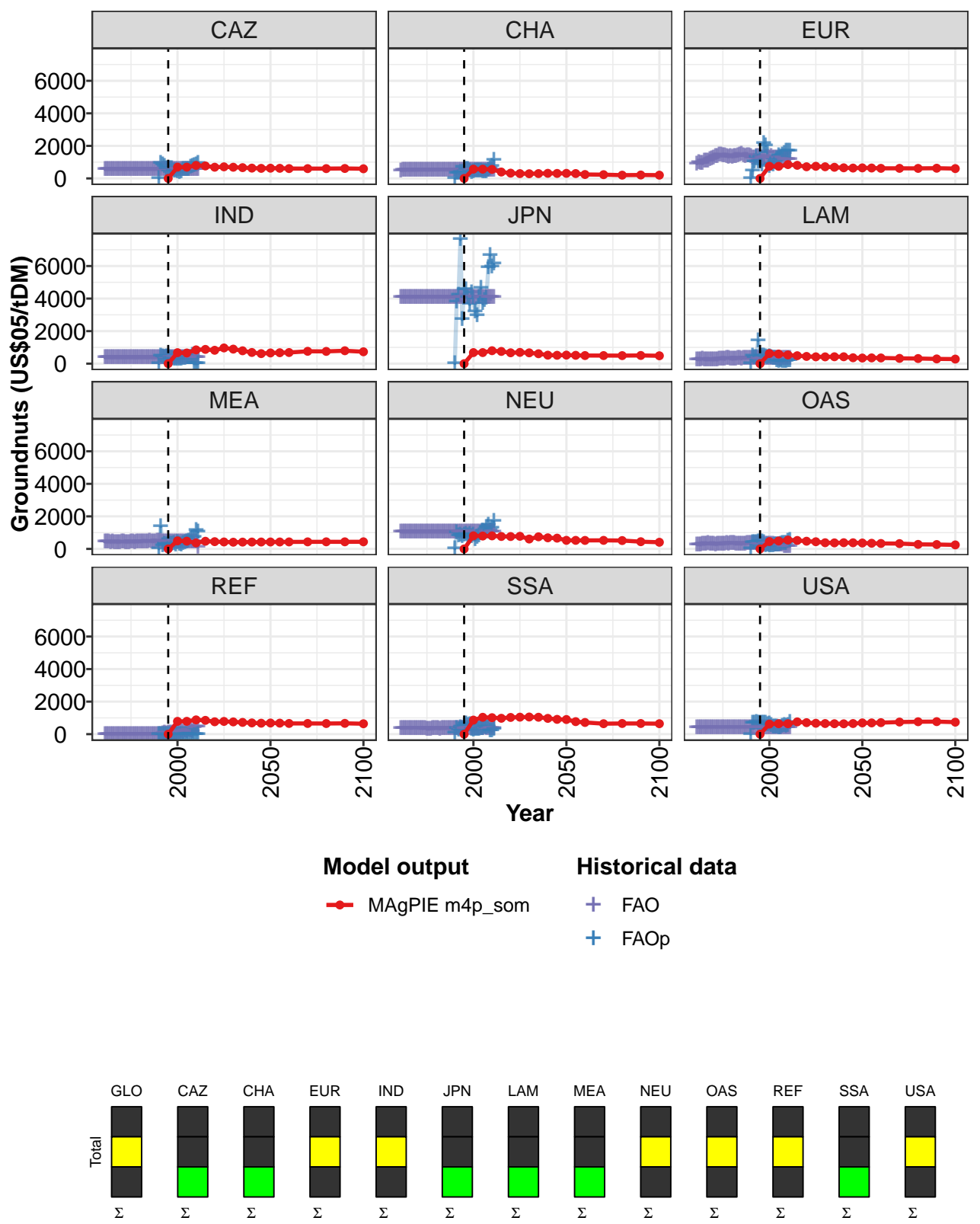


Figure 304: MAgPIE m4p\_som — Prices—Agriculture—Groundnuts (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	646	687	723	680	665	706	700	692	664	638
CAZ	0	694	693	799	766	688	713	687	663	633	618
CHA	0	570	568	555	392	325	296	287	297	314	307
EUR	0	747	742	850	804	716	746	716	685	653	636
IND	0	677	657	849	877	824	967	893	792	689	618
JPN	0	682	681	797	751	669	693	666	611	522	515
LAM	0	622	594	537	489	445	421	418	425	424	364
MEA	0	495	475	368	470	445	428	412	417	421	424
NEU	0	805	791	802	765	761	775	608	744	682	662
OAS	0	452	486	544	519	472	441	379	372	381	378
REF	0	787	789	878	848	761	783	753	723	691	674
SSA	0	864	1037	1013	977	1027	1044	1053	1040	970	909
USA	0	620	642	641	756	706	670	653	642	638	652

Table 1065: MAgPIE m4p\_som — Prices—Agriculture—Groundnuts (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	660	618	597	590	599	615	596
CAZ	629	622	605	603	603	612	593
CHA	311	300	241	230	200	210	201
EUR	648	640	620	619	616	627	604
IND	659	672	685	760	754	794	731
JPN	526	513	498	497	494	504	485
LAM	347	355	352	325	316	291	282
MEA	426	426	430	434	436	435	437
NEU	527	526	521	525	514	443	409
OAS	363	347	335	327	278	269	246
REF	685	677	657	657	653	663	639
SSA	900	770	718	643	655	656	643
USA	692	691	708	744	763	770	737

Table 1066: MAgPIE m4p\_som — Prices—Agriculture—Groundnuts (US\$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	399	398	402	404	407	408	405	405	403	398	392
CAZ	543	544	544	544	543	543	543	544	543	543	543
CHA	481	487	497	496	497	504	498	501	502	501	507
EUR	899	974	953	915	1084	1058	1073	1170	1219	1271	1354
IND	359	359	359	359	359	359	359	359	359	359	359
JPN	4082	4082	4082	4082	4082	4082	4082	4082	4082	4082	4082
LAM	246	254	248	278	243	231	233	229	227	219	236
MEA	427	421	419	409	418	412	410	408	409	425	424
NEU	1030	1030	1030	1030	1030	1030	1030	1030	1030	1030	1030
OAS	265	262	245	281	282	317	320	308	295	284	269
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	361	366	371	369	374	367	366	373	374	367	359
USA	421	421	421	421	421	421	421	421	421	421	421

Table 1067: FAO — Prices—Agriculture—Groundnuts (US\$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	399	397	406	385	380	392	393	400	408	403	401
CAZ	543	543	543	543	543	543	544	543	543	543	543
CHA	506	506	509	509	505	509	509	513	517	518	518
EUR	1360	1456	1431	1401	1395	1358	1327	1344	1323	1341	1349
IND	359	359	359	359	359	359	359	359	359	359	359
JPN	4082	4082	4082	4082	4082	4082	4082	4082	4082	4082	4082
LAM	222	271	290	291	265	322	327	297	268	284	288
MEA	412	407	411	417	418	412	425	421	428	438	457
NEU	1030	1030	1030	1030	1030	1030	1030	1030	1030	1030	1030
OAS	274	298	300	308	306	320	318	335	346	325	298
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	365	346	376	316	305	325	330	332	348	337	325
USA	421	421	421	421	421	421	421	421	421	421	421

Table 1068: FAO — Prices—Agriculture—Groundnuts (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	403	412	420	416	417	407	408	415	412	411	421
CAZ	543	543	543	543	543	543	543	543	543	544	543
CHA	521	520	522	522	520	521	523	524	522	522	524
EUR	1391	1435	1490	1422	1367	1377	1377	1342	1239	1253	1340
IND	359	359	359	359	359	359	359	359	359	359	359
JPN	4082	4082	4082	4082	4082	4082	4082	4082	4083	4082	4082
LAM	310	316	296	326	333	347	345	335	339	323	317
MEA	448	452	461	448	445	450	461	485	474	458	452
NEU	1030	1030	1030	1030	1030	1030	1030	1030	1030	1030	1030
OAS	306	308	286	319	314	328	344	333	328	353	328
REF	0	0	0	0	0	0	0	0	0	39	50
SSA	337	343	340	347	339	353	339	339	338	343	349
USA	421	421	421	421	421	421	421	421	421	421	421

Table 1069: FAO — Prices—Agriculture—Groundnuts (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	426	424	423	424	426	436	437	431	440	424	428
CAZ	543	544	544	543	543	543	543	544	543	543	544
CHA	525	524	525	525	526	526	526	527	526	526	527
EUR	1342	1222	1278	1246	1302	1283	1260	1331	1264	1253	1273
IND	359	359	359	359	359	359	359	359	359	359	359
JPN	4082	4082	4082	4082	4082	4082	4082	4083	4082	4083	4082
LAM	309	307	335	339	336	339	336	332	311	313	310
MEA	433	425	423	429	439	425	430	435	424	431	442
NEU	1030	1030	1030	1030	1030	1030	1030	1030	1030	1030	1030
OAS	322	308	302	300	300	301	291	278	273	268	260
REF	45	60	53	85	87	77	134	111	143	109	218
SSA	355	349	375	368	369	374	375	360	373	363	368
USA	421	421	421	421	421	421	421	421	421	421	421

Table 1070: FAO — Prices—Agriculture—Groundnuts (US\$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	424	428	418	413	416	413	400
CAZ	544	543	543	543	543	544	543
CHA	527	526	527	527	527	527	527
EUR	1278	1259	1235	1167	1185	1187	1165
IND	359	359	359	359	359	359	359
JPN	4082	4082	4083	4082	4082	4082	4082
LAM	299	304	320	314	326	324	320
MEA	448	448	450	433	430	435	105
NEU	1030	1030	1030	1030	1030	1030	1030
OAS	250	253	242	152	145	150	146
REF	176	269	204	188	402	424	457
SSA	373	385	369	365	366	368	343
USA	421	421	421	421	421	421	421

Table 1071: FAO — Prices—Agriculture—Groundnuts (US\$05/tDM) [PART 5/5]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	10	440	391	413	426	446	495	469	427	346	350
CAZ	0	908	828	735	586	587	608	584	448	453	413
CHA	0	309	307	384	359	418	539	541	463	379	401
EUR	0	481	1024	1294	1031	1297	859	2168	2006	1594	729
IND	0	488	419	376	420	424	354	330	268	285	289
JPN	0	3787	4235	7615	2717	4545	4565	4091	3646	4382	4029
LAM	0	480	370	390	1416	436	450	462	449	395	418
MEA	0	1363	201	289	257	278	301	290	329	258	398
NEU	0	982	792	870	741	863	881	826	900	774	860
OAS	0	400	404	407	439	435	445	395	210	262	219
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	59	348	277	407	342	475	618	519	610	286	247
USA	0	664	703	713	678	687	687	658	666	596	643

Table 1072: FAOp — Prices—Agriculture—Groundnuts (US\$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	364	373	386	388	377	395	401	486	385	438	644
CAZ	391	405	545	533	536	561	714	763	768	849	910
CHA	440	455	473	446	422	404	394	519	590	751	1115
EUR	906	826	986	1203	1379	1218	1451	1557	1681	1662	1682
IND	302	297	320	352	367	357	399	513	0	0	0
JPN	3204	2944	4077	4647	3702	3898	4042	5894	6673	5970	6117
LAM	363	320	317	189	151	179	133	158	147	172	206
MEA	300	250	364	387	425	479	638	659	704	1132	1045
NEU	556	710	800	959	1085	1046	1336	1471	1147	1277	1690
OAS	199	220	267	254	229	297	340	363	352	499	530
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	283	314	325	357	367	438	415	447	231	219	304
USA	549	427	452	444	405	415	481	539	508	528	746

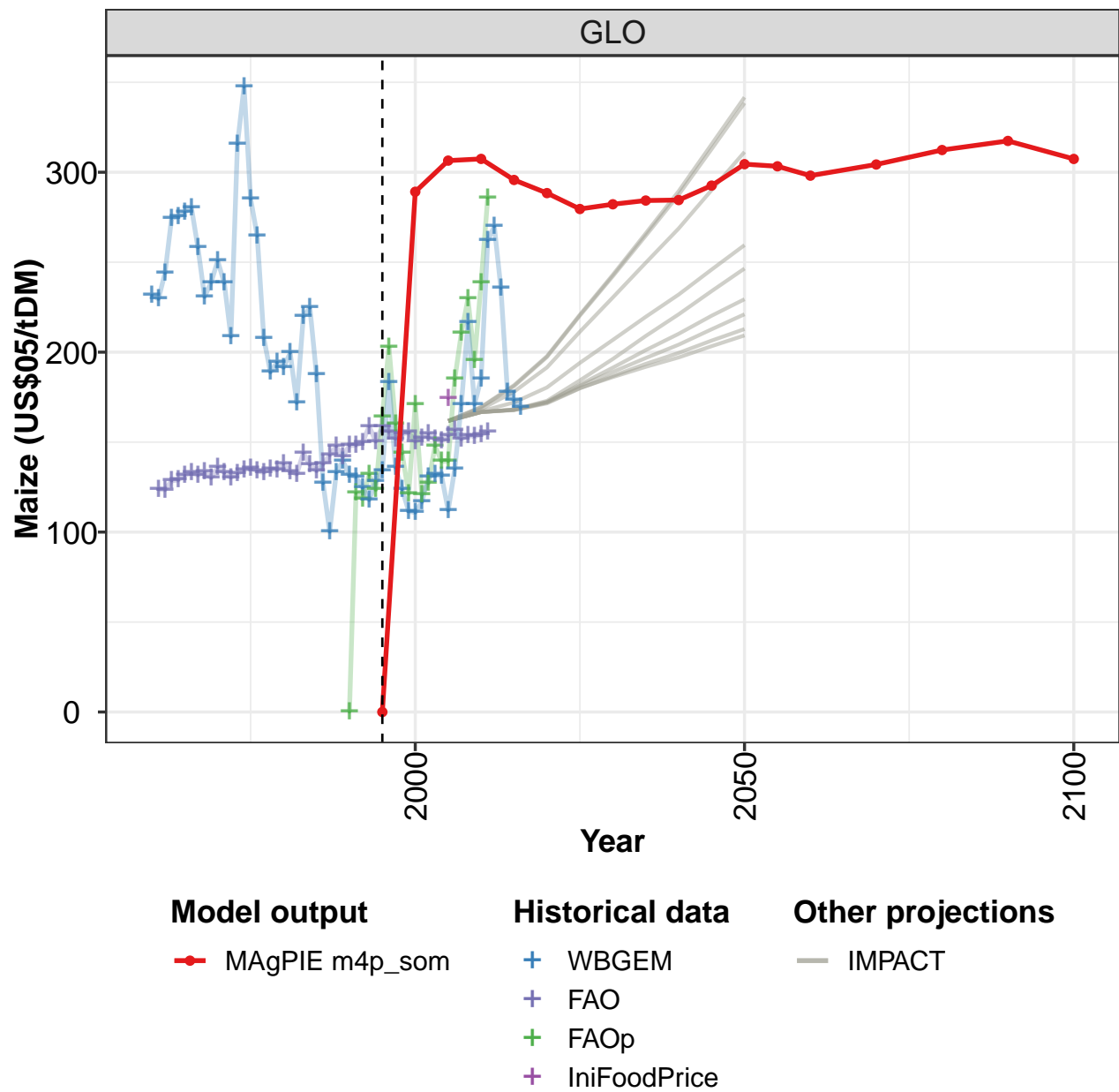
Table 1073: FAOp — Prices—Agriculture—Groundnuts (US\$05/tDM) [PART 2/3]

	2005
GLO	451
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 1074: IniFoodPrice — Prices—Agriculture—Groundnuts (US\$05/tDM)

36.13 Maize

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

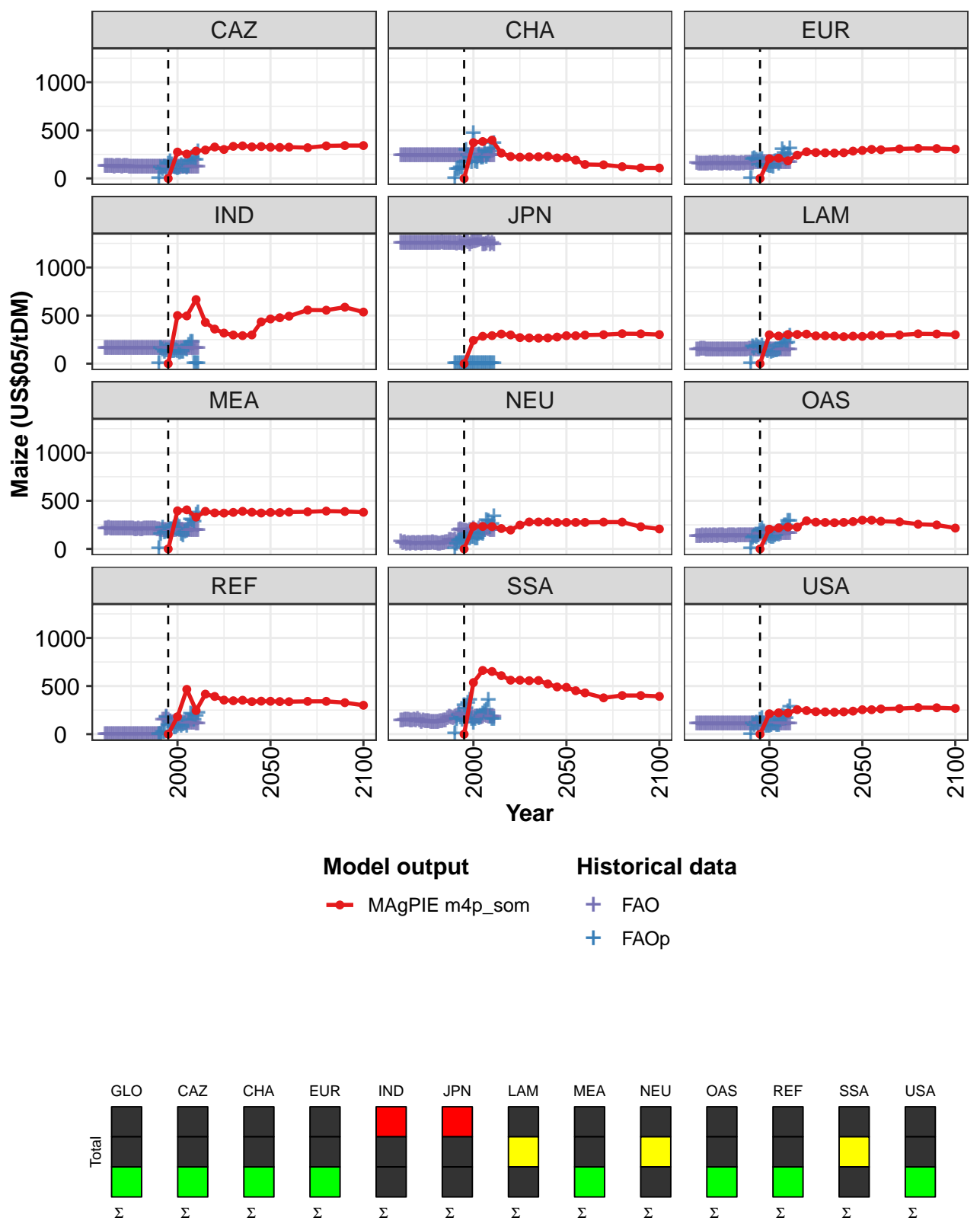


Figure 305: MAgPIE m4p\_som — Prices—Agriculture—Maize (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	289	306	307	296	288	280	282	284	285	293
CAZ	0	274	253	284	295	326	301	334	338	328	332
CHA	0	372	383	398	263	228	221	223	225	230	213
EUR	0	205	210	183	242	277	269	266	263	267	284
IND	0	501	497	666	429	360	318	298	291	299	434
JPN	0	242	285	291	308	299	271	268	266	268	277
LAM	0	300	287	303	304	307	289	290	287	280	286
MEA	0	396	406	331	390	374	372	380	391	381	373
NEU	0	235	233	232	212	196	248	280	280	281	275
OAS	0	205	218	227	227	292	278	275	272	276	284
REF	0	181	466	246	416	392	354	347	353	338	343
SSA	0	536	663	651	608	561	561	556	558	522	491
USA	0	212	222	219	255	245	234	231	228	232	239

Table 1075: MAgPIE m4p\_som — Prices—Agriculture—Maize (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	304	303	298	304	312	317	307
CAZ	324	322	325	319	338	341	341
CHA	217	190	145	141	122	109	108
EUR	291	302	298	307	312	310	304
IND	465	477	494	558	556	587	536
JPN	291	290	298	301	311	310	302
LAM	283	293	294	298	310	308	301
MEA	379	377	383	386	393	389	381
NEU	275	275	275	279	279	230	207
OAS	299	299	288	281	256	249	216
REF	342	339	337	341	341	327	300
SSA	487	452	429	377	402	401	393
USA	254	254	262	266	276	274	268

Table 1076: MAgPIE m4p\_som — Prices—Agriculture—Maize (US\$05/tDM) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	232	230	244	275	275	278	280	258	231	239	251
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1077: WBGEM — Prices—Agriculture—Maize (US\$05/tDM) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	238	209	316	347	285	265	208	189	194	191	200
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1078: WBGEM — Prices—Agriculture—Maize (US\$05/tDM) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	172	220	225	187	127	100	133	140	132	131	125
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1079: WBGEM — Prices—Agriculture—Maize (US\$05/tDM) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	118	128	134	183	136	124	112	111	117	131	132
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1080: WBGEM — Prices—Agriculture—Maize (US\$05/tDM) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	131	112	135	171	216	171	185	262	270	236	178
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1081: WBGEM — Prices—Agriculture—Maize (US\$05/tDM) [PART 5/6]

	2015	2016
GLO	173	169
CAZ		
CHA		
EUR		
IND		
JPN		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 1082: WBGEM — Prices—Agriculture—Maize (US\$05/tDM) [PART 6/6]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	124	123	129	129	132	133	132	133	130	136	133
CAZ	127	127	127	123	123	121	122	122	122	122	122
CHA	239	238	239	239	239	239	239	239	239	239	239
EUR	156	151	153	152	152	151	152	154	152	154	154
IND	162	162	162	162	162	162	162	162	162	162	162
JPN	1252	1252	1252	1252	1252	1252	1252	1252	1252	1252	1252
LAM	146	146	148	149	149	147	144	147	146	143	143
MEA	208	212	213	212	210	207	209	209	210	208	210
NEU	74	55	66	53	58	49	57	56	51	59	60
OAS	129	133	127	134	131	135	132	137	132	136	134
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	142	143	147	146	145	141	139	148	142	154	140
USA	106	106	106	106	106	106	106	106	106	106	106

Table 1083: FAO — Prices—Agriculture—Maize (US\$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	130	132	134	136	134	133	135	134	138	134	132
CAZ	124	122	121	121	122	122	121	120	120	119	120
CHA	238	238	238	238	238	239	239	239	239	239	239
EUR	154	152	153	150	154	153	155	152	155	154	152
IND	162	162	162	162	162	162	162	162	162	162	162
JPN	1252	1251	1252	1252	1252	1251	1252	1252	1253	1252	1253
LAM	146	141	140	144	145	144	144	142	147	141	141
MEA	208	208	210	209	206	201	204	205	204	203	207
NEU	53	55	60	54	58	54	68	57	54	53	53
OAS	132	136	134	134	131	132	136	135	135	136	131
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	126	139	129	135	127	126	125	124	125	126	132
USA	106	106	106	106	106	106	106	106	106	106	106

Table 1084: FAO — Prices—Agriculture—Maize (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	144	137	134	138	143	148	142	148	148	150	159
CAZ	119	120	120	121	120	120	119	120	119	122	119
CHA	238	238	238	238	238	238	238	238	238	238	238
EUR	153	153	156	153	155	157	154	160	154	164	166
IND	162	162	162	162	162	162	162	162	162	162	162
JPN	1257	1252	1253	1250	1250	1250	1250	1253	1245	1250	1250
LAM	145	145	144	144	145	145	149	153	149	145	147
MEA	206	205	207	207	206	205	204	199	194	193	191
NEU	58	54	69	67	87	88	78	98	66	194	201
OAS	134	135	135	137	136	139	138	138	135	141	137
REF	0	0	0	0	0	0	0	0	0	150	150
SSA	133	135	138	160	177	171	164	178	189	214	191
USA	106	106	106	106	106	106	106	106	106	106	106

Table 1085: FAO — Prices—Agriculture—Maize (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	150	159	156	152	154	155	150	152	155	152	151
CAZ	119	120	121	121	119	120	121	120	120	119	120
CHA	238	238	238	238	239	239	239	239	239	239	239
EUR	167	167	168	167	167	166	168	167	167	169	167
IND	162	162	162	162	162	162	162	162	162	162	162
JPN	1245	1250	1273	1263	1235	1263	1269	1270	1278	1280	1288
LAM	147	146	147	143	140	144	144	144	145	145	147
MEA	196	195	195	195	195	196	198	192	192	192	189
NEU	189	183	187	180	191	186	210	186	186	205	190
OAS	139	154	159	159	154	158	159	155	154	155	156
REF	178	144	131	116	122	128	116	116	119	116	113
SSA	196	213	176	182	184	186	169	177	175	181	171
USA	106	106	106	106	106	106	106	106	106	106	106

Table 1086: FAO — Prices—Agriculture—Maize (US\$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	153	157	152	154	153	154	155
CAZ	120	120	118	120	120	119	119
CHA	239	239	239	239	239	239	239
EUR	165	165	168	164	164	164	165
IND	162	162	162	162	162	162	162
JPN	1238	1237	1246	1278	1240	1255	1240
LAM	144	147	143	142	145	141	139
MEA	190	192	192	193	196	196	190
NEU	198	193	207	196	195	192	195
OAS	157	156	158	159	158	158	158
REF	116	114	117	114	112	109	109
SSA	182	190	189	178	182	174	181
USA	106	106	106	106	106	106	106

Table 1087: FAO — Prices—Agriculture—Maize (US\$05/tDM) [PART 5/5]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	122	118	132	123	164	203	160	144	122	171
CAZ	0	109	97	118	100	147	177	145	119	109	103
CHA	0	91	96	110	111	162	293	240	212	166	466
EUR	0	200	206	186	173	192	197	153	138	133	127
IND	0	158	140	123	137	137	125	129	127	135	126
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	0	171	160	180	164	156	183	151	146	130	142
MEA	0	150	220	168	179	183	197	198	217	256	244
NEU	0	48	84	93	103	100	130	113	107	122	120
OAS	0	116	129	124	141	186	208	179	111	142	129
REF	0	0	20	18	167	95	125	102	66	66	84
SSA	1	152	194	167	151	298	268	318	350	154	114
USA	0	106	92	111	101	145	159	109	86	82	83

Table 1088: FAOp — Prices—Agriculture—Maize (US\$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	121	127	148	139	139	185	211	230	196	239	286
CAZ	111	132	119	128	107	125	171	215	187	193	275
CHA	177	166	243	215	215	286	220	248	276	310	365
EUR	124	118	174	174	147	174	296	263	195	247	311
IND	113	120	123	150	145	192	221	219	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	118	129	135	136	140	161	205	250	203	213	286
MEA	220	156	139	175	187	200	300	292	283	353	373
NEU	109	102	154	160	151	193	298	286	222	258	331
OAS	122	125	137	151	147	167	202	242	240	285	289
REF	96	85	99	104	87	129	207	201	148	186	214
SSA	152	176	161	180	213	236	252	351	179	155	152
USA	89	103	108	92	90	136	188	182	159	232	278

Table 1089: FAOp — Prices—Agriculture—Maize (US\$05/tDM) [PART 2/3]

	2005
GLO	174
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 1090: IniFoodPrice — Prices—Agriculture—Maize (US\$05/tDM)

36.14 Molasses

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale. ## geom\_path: Each group consists of only one observation. Do you need to adjust the group## aesthetic?

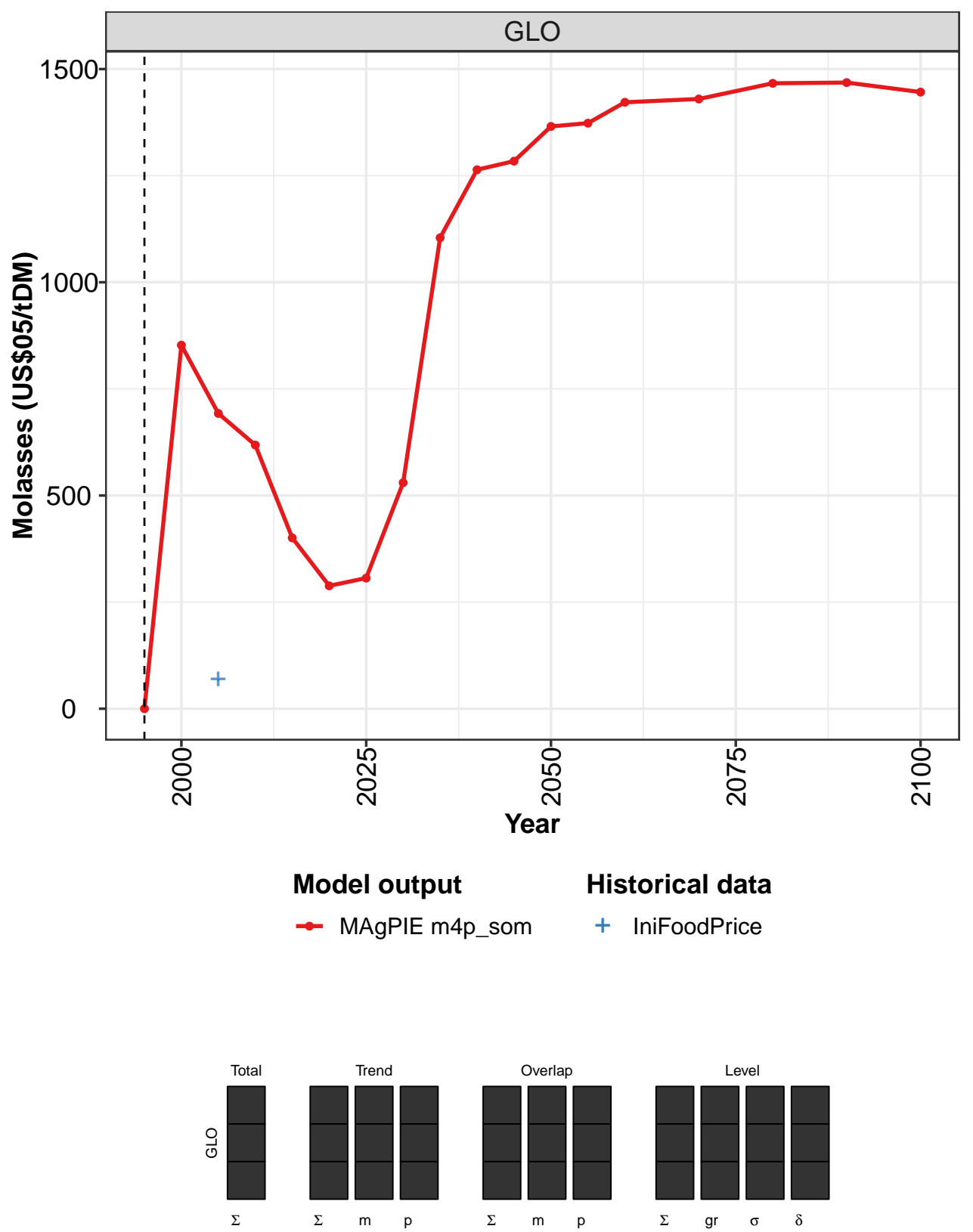


Figure 306: MAgPIE m4p\_som — Prices—Agriculture—Molasses (US\$05/tDM)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	853	692	618	401	288	306	530	1104	1264	1284

Table 1091: MAgPIE m4p\_som — Prices—Agriculture—Molasses (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1365	1373	1422	1430	1467	1468	1446

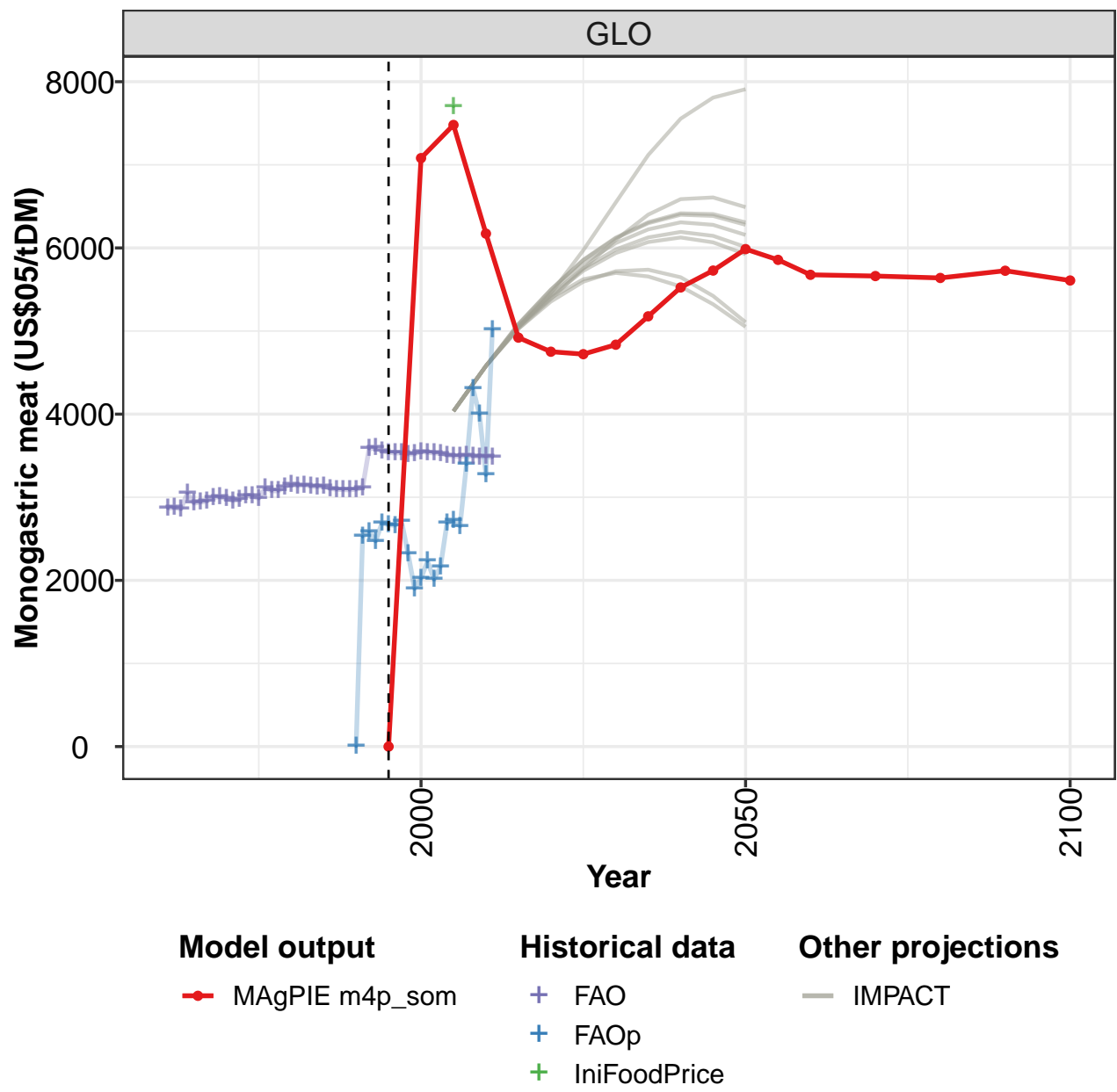
Table 1092: MAgPIE m4p\_som — Prices—Agriculture—Molasses (US\$05/tDM) [PART 2/2]

	2005
GLO	68.0

Table 1093: IniFoodPrice — Prices—Agriculture—Molasses (US\$05/tDM)

36.15 Monogastric meat

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

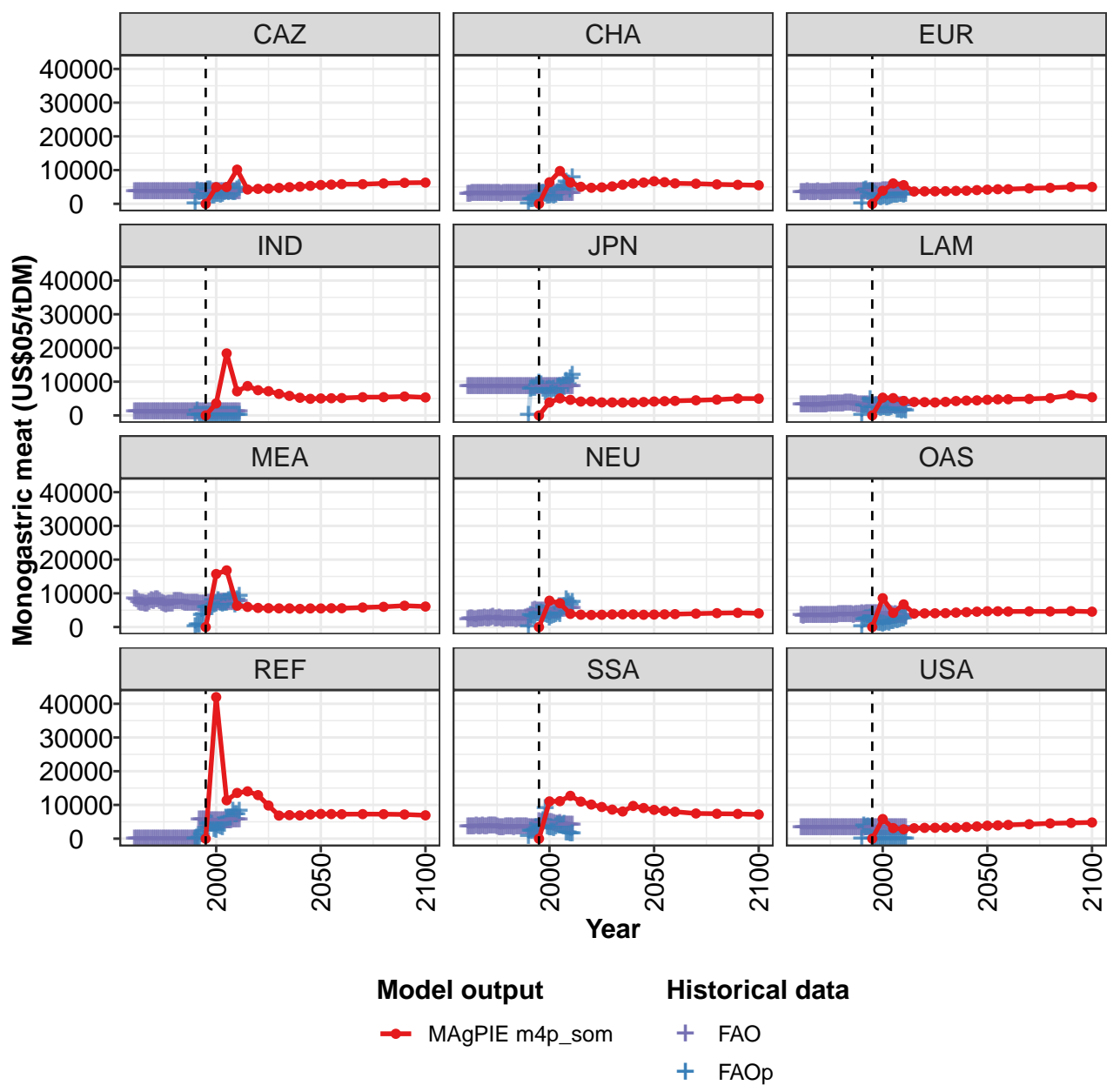


Figure 307: MAgPIE m4p\_som — Prices—Agriculture—Monogastric meat (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	7081	7480	6172	4921	4751	4722	4836	5177	5525	5728
CAZ	0	4947	4969	10140	4242	4432	4501	4714	4937	5087	5329
CHA	0	6382	9719	6316	5049	4749	4867	5156	5659	6023	6295
EUR	0	3871	6048	5539	3654	3688	3706	3745	3834	3886	4066
IND	0	3570	18400	7144	8709	7478	7183	6396	5800	5239	4934
JPN	0	3858	5060	4625	4118	4131	3857	3852	3814	3844	3980
LAM	0	5270	5134	4300	3991	3938	3832	4015	4260	4405	4465
MEA	0	15728	16809	6327	5968	5665	5585	5537	5540	5388	5522
NEU	0	7806	7051	3899	3657	3579	3640	3742	3775	3747	3638
OAS	0	8557	4204	6722	3979	4054	4083	4123	4265	4405	4550
REF	0	41971	11376	13564	14028	12914	9830	6850	6978	6889	7151
SSA	0	11046	11116	12701	10990	10116	9388	8614	8060	9707	9081
USA	0	5819	3140	2785	3090	3204	3225	3279	3279	3442	3615

Table 1094: MAgPIE m4p\_som — Prices—Agriculture—Monogastric meat (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	5986	5857	5677	5662	5639	5726	5608
CAZ	5573	5692	5833	5820	6039	6219	6293
CHA	6693	6420	6061	5970	5767	5626	5502
EUR	4196	4321	4336	4572	4729	4992	5003
IND	5040	5091	5151	5404	5429	5610	5336
JPN	4121	4219	4306	4485	4683	4998	4976
LAM	4642	4764	4793	4893	5122	6023	5392
MEA	5514	5570	5575	5798	5994	6325	6082
NEU	3699	3765	3824	3970	4114	4214	4063
OAS	4688	4678	4615	4650	4623	4724	4562
REF	7321	7293	7244	7275	7255	7172	6923
SSA	8553	8220	7985	7470	7385	7339	7167
USA	3858	3937	4070	4276	4527	4666	4801

Table 1095: MAgPIE m4p\_som — Prices—Agriculture—Monogastric meat (US\$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	2868	2876	2858	3049	2929	2940	2952	2998	3005	2983	2959
CAZ	3701	3702	3705	3706	3707	3699	3687	3690	3692	3685	3686
CHA	2741	2801	2942	2998	3016	3009	3005	2995	2978	2951	2969
EUR	3436	3441	3431	3485	3449	3446	3433	3449	3465	3441	3435
IND	1005	1005	1005	1005	1005	1005	1005	1005	1005	1005	1005
JPN	8612	8612	8612	8612	8612	8612	8612	8612	8612	8612	8612
LAM	3134	3111	3120	3119	3069	3011	3040	3040	3046	3036	3015
MEA	8461	8075	7201	7107	7060	6668	6838	7311	7880	7563	8039
NEU	2225	2365	2375	2161	2029	2421	2405	2491	2758	2478	2385
OAS	3361	3281	3347	3382	3432	3482	3364	3370	3410	3397	3362
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	3512	3537	3558	3573	3745	3577	3550	3648	3550	3542	3627
USA	3317	3317	3317	3317	3317	3317	3317	3317	3317	3317	3317

Table 1096: FAO — Prices—Agriculture—Monogastric meat (US\$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	2971	3018	3014	2987	3113	3077	3076	3126	3155	3138	3148
CAZ	3685	3684	3681	3687	3686	3693	3686	3675	3669	3669	3675
CHA	2980	2955	2969	2999	2951	2926	2949	2962	3007	3014	3022
EUR	3436	3445	3440	3440	3490	3481	3465	3491	3492	3491	3508
IND	1005	1005	1005	1005	1005	1005	1005	1005	1005	1005	1005
JPN	8612	8612	8612	8612	8612	8612	8612	8612	8612	8612	8612
LAM	3126	3222	3283	3338	3386	3387	3468	3455	3469	3502	3589
MEA	8148	7674	7002	6699	6643	6810	6754	6827	7466	7445	7478
NEU	2636	2879	2520	2478	2626	2520	2245	2375	2504	2424	2470
OAS	3357	3384	3379	3369	3371	3405	3490	3695	3729	3579	3609
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	3653	3651	3681	3526	3320	3315	3322	3385	3395	3379	3371
USA	3317	3317	3317	3317	3317	3317	3317	3317	3317	3317	3317

Table 1097: FAO — Prices—Agriculture—Monogastric meat (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	3132	3126	3133	3105	3095	3091	3088	3096	3116	3583	3595
CAZ	3674	3677	3679	3679	3676	3675	3676	3677	3678	3677	3678
CHA	3020	3022	3028	3026	3026	3044	3052	3050	3048	3058	3065
EUR	3500	3497	3492	3488	3485	3474	3464	3484	3484	3560	3703
IND	1005	1005	1005	1005	1005	1005	1005	1005	1005	1005	1005
JPN	8612	8612	8612	8612	8612	8612	8612	8612	8612	8612	8612
LAM	3646	3695	3604	3392	3280	3215	3156	3130	3117	3112	2996
MEA	7456	7356	7087	7001	6932	6966	6940	6952	6943	6891	6733
NEU	2486	2244	2394	2499	2375	2407	2448	2434	2590	4811	4896
OAS	3682	3776	3740	3529	3599	3663	3734	3831	3808	4034	4037
REF	0	0	0	0	0	0	0	0	0	5446	5457
SSA	3327	3388	3477	3521	3439	3525	3448	3301	3257	3318	3307
USA	3317	3317	3317	3317	3317	3317	3317	3317	3317	3317	3317

Table 1098: FAO — Prices—Agriculture—Monogastric meat (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	3554	3540	3531	3534	3519	3521	3549	3540	3532	3528	3507
CAZ	3678	3678	3678	3677	3674	3668	3666	3664	3663	3663	3663
CHA	3067	3069	3066	3095	3114	3122	3119	3116	3122	3130	3129
EUR	3700	3666	3659	3671	3660	3674	3856	3853	3829	3827	3822
IND	1005	1005	1005	1005	1005	1005	1005	1005	1005	1005	1005
JPN	8612	8612	8612	8612	8612	8612	8612	8612	8612	8612	8612
LAM	2945	2964	2941	2954	2864	2877	2860	2873	2851	2799	2796
MEA	6788	6910	6988	7168	6993	7085	7163	7219	7266	7345	7360
NEU	4817	4744	4633	4664	4714	4676	4691	4818	4745	4795	4860
OAS	3995	4005	4056	4035	4023	4001	3919	3887	3843	3875	3689
REF	5460	5442	5414	5392	5359	5346	5378	5368	5399	5410	5397
SSA	3247	4982	4875	4877	4910	4901	4839	4715	4624	4323	4373
USA	3317	3317	3317	3317	3317	3317	3317	3317	3317	3317	3317

Table 1099: FAO — Prices—Agriculture—Monogastric meat (US\$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	3497	3493	3499	3496	3488	3491	3484
CAZ	3663	3663	3663	3661	3658	3659	3660
CHA	3132	3134	3137	3145	3148	3151	3150
EUR	3827	3830	3830	3829	3838	3833	3834
IND	1005	1005	1005	1005	1005	1005	1005
JPN	8612	8612	8612	8612	8612	8612	8612
LAM	2865	2877	2847	2841	2836	2835	2885
MEA	7369	7374	7378	7391	7437	7470	7464
NEU	4848	5427	5330	5398	5455	5429	5404
OAS	3562	3578	3561	3524	3450	3458	3297
REF	5365	5370	5388	5430	5448	5449	5438
SSA	4439	3974	4028	4098	3885	3924	3901
USA	3317	3317	3317	3317	3317	3317	3317

Table 1100: FAO — Prices—Agriculture—Monogastric meat (US\$05/tDM) [PART 5/5]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	4	2526	2586	2472	2693	2666	2663	2708	2323	1900	2024
CAZ	0	3904	3399	3563	3344	3377	4119	4206	2303	2274	2887
CHA	0	1304	1353	1486	1544	2568	2719	3105	2813	2196	2296
EUR	0	3780	4100	3211	3473	3308	3140	2642	2048	1819	2059
IND	0	1368	0	0	0	0	0	0	0	0	0
JPN	0	7848	7998	8071	8748	9564	9159	7849	6740	7524	7697
LAM	0	2889	2807	2580	4706	2239	2299	2738	2300	1979	2303
MEA	0	683	723	3435	3709	5858	5847	5969	5710	6553	6781
NEU	0	3420	3114	3010	4077	3942	4135	3896	3711	3460	2557
OAS	0	2175	2361	2407	2582	2960	1410	1488	989	1108	949
REF	0	0	187	1088	2104	3016	4231	4442	4387	2634	2524
SSA	523	2127	2162	2472	2951	3164	3559	5271	8817	3562	3190
USA	0	3813	3271	3548	3130	0	0	0	0	0	0

Table 1101: FAOp — Prices—Agriculture—Monogastric meat (US\$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	2230	2010	2166	2687	2724	2652	3395	4310	3997	3269	5020
CAZ	2927	2489	2735	3428	3510	3293	3484	3377	3215	4076	4731
CHA	2475	2327	2566	3325	3187	2945	4761	6384	5843	4162	7642
EUR	2376	1862	2097	2378	2460	2534	2495	2935	2706	2511	2827
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	7598	7741	6936	8400	8518	7945	8246	10142	9138	10850	12018
LAM	2289	1984	2009	2333	2810	2723	1697	1551	1364	1569	1416
MEA	7851	7090	6796	6985	7105	7754	9337	7874	6592	8148	8985
NEU	3146	3391	3691	4235	3740	5150	5935	7981	7209	6407	7252
OAS	1169	1297	1206	1613	1722	2074	2003	2269	2277	2356	2870
REF	3704	3428	3280	4375	5844	5958	5988	8232	7062	7228	8013
SSA	3123	3064	3532	3913	4099	3729	4255	1804	1704	1428	1502
USA	0	0	0	0	0	0	0	0	0	0	0

Table 1102: FAOp — Prices—Agriculture—Monogastric meat (US\$05/tDM) [PART 2/3]

	2005
GLO	7703
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 1103: IniFoodPrice — Prices—Agriculture—Monogastric meat (US\$05/tDM)

36.16 Non fibrous crop residues

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale. ## geom\_path: Each group consists of only one observation. Do you need to adjust the group## aesthetic?

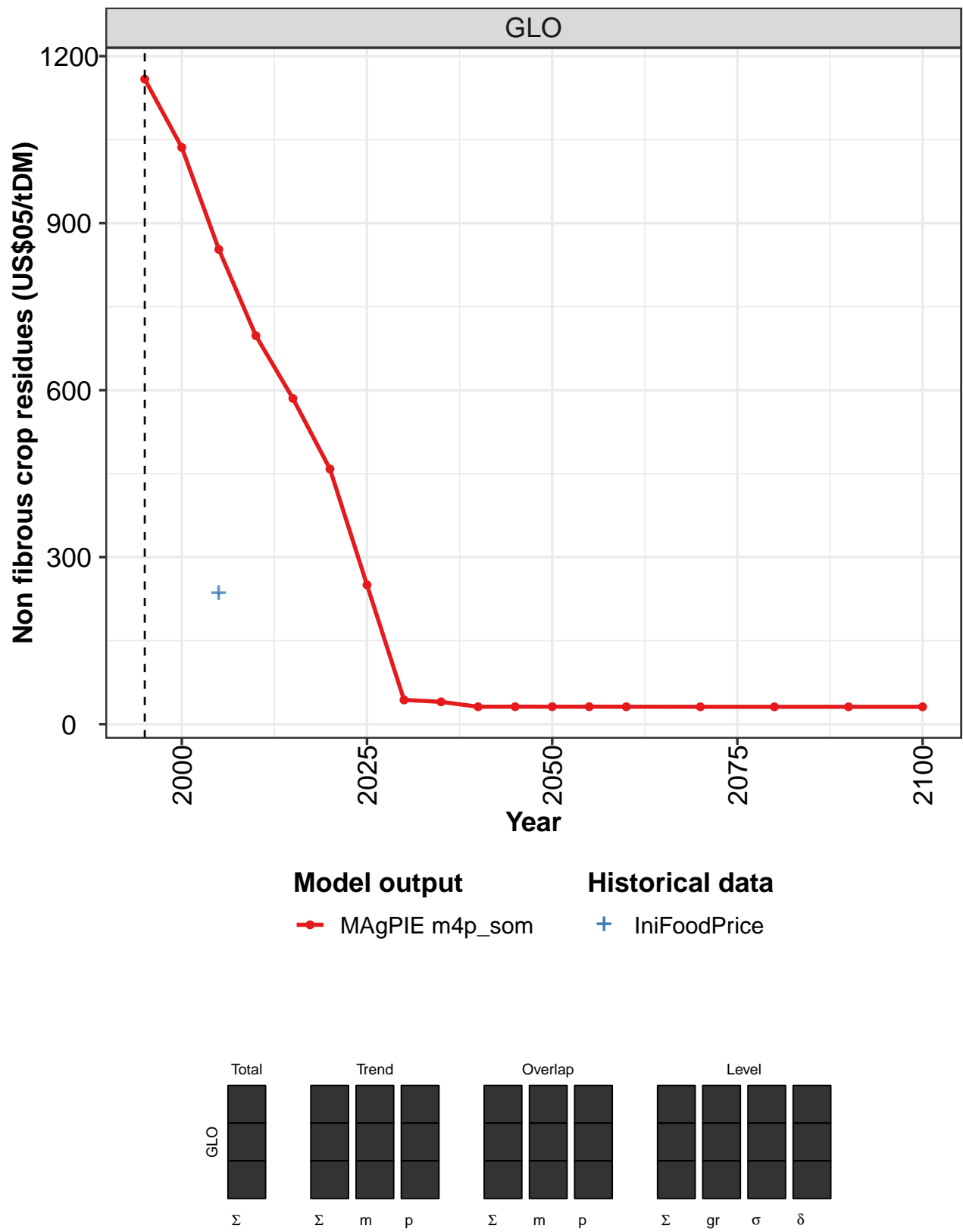


Figure 308: MAgPIE m4p\_som — Prices—Agriculture—Non fibrous crop residues (US\$05/tDM)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1159	1036	853	698	585	458	250	44	40	31	31

Table 1104: MAgPIE m4p\_som — Prices—Agriculture—Non fibrous crop residues (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	31	31	31	31	31	31	31

Table 1105: MAgPIE m4p\_som — Prices—Agriculture—Non fibrous crop residues (US\$05/tDM) [PART 2/2]

	2005
GLO	234

Table 1106: IniFoodPrice — Prices—Agriculture—Non fibrous crop residues (US\$05/tDM)

36.17 Oilcakes

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale. ## geom\_path: Each group consists of only one observation. Do you need to adjust the group## aesthetic?

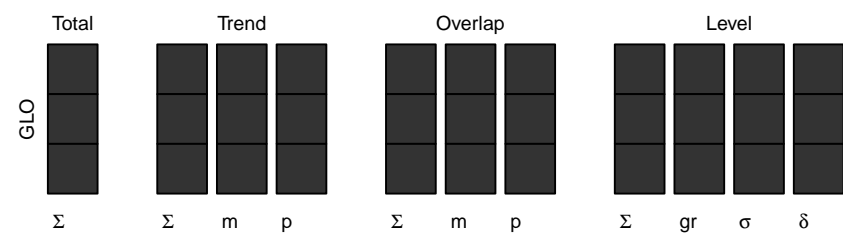
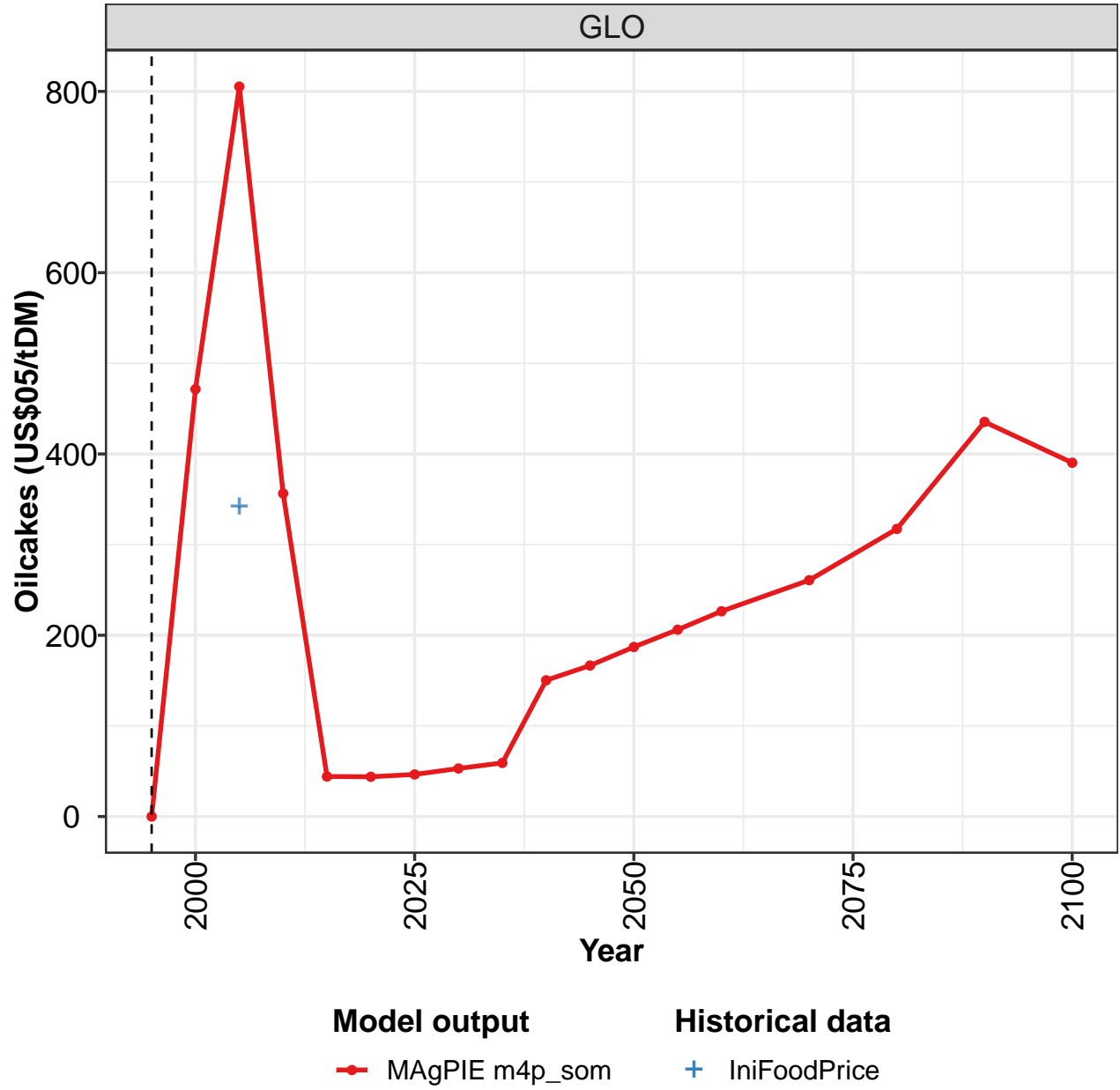


Figure 309: MAgPIE m4p\_som — Prices—Agriculture—Oilcakes (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	471	805	356	44	44	46	53	59	150	167

Table 1107: MAgPIE m4p\_som — Prices—Agriculture—Oilcakes (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	187	206	226	261	317	435	390

Table 1108: MAgPIE m4p\_som — Prices—Agriculture—Oilcakes (US\$05/tDM) [PART 2/2]

	2005
GLO	341

Table 1109: IniFoodPrice — Prices—Agriculture—Oilcakes (US\$05/tDM)

36.18 Oilpalms

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale. ## geom\_path: Each group consists of only one observation. Do you need to adjust the group## aesthetic?

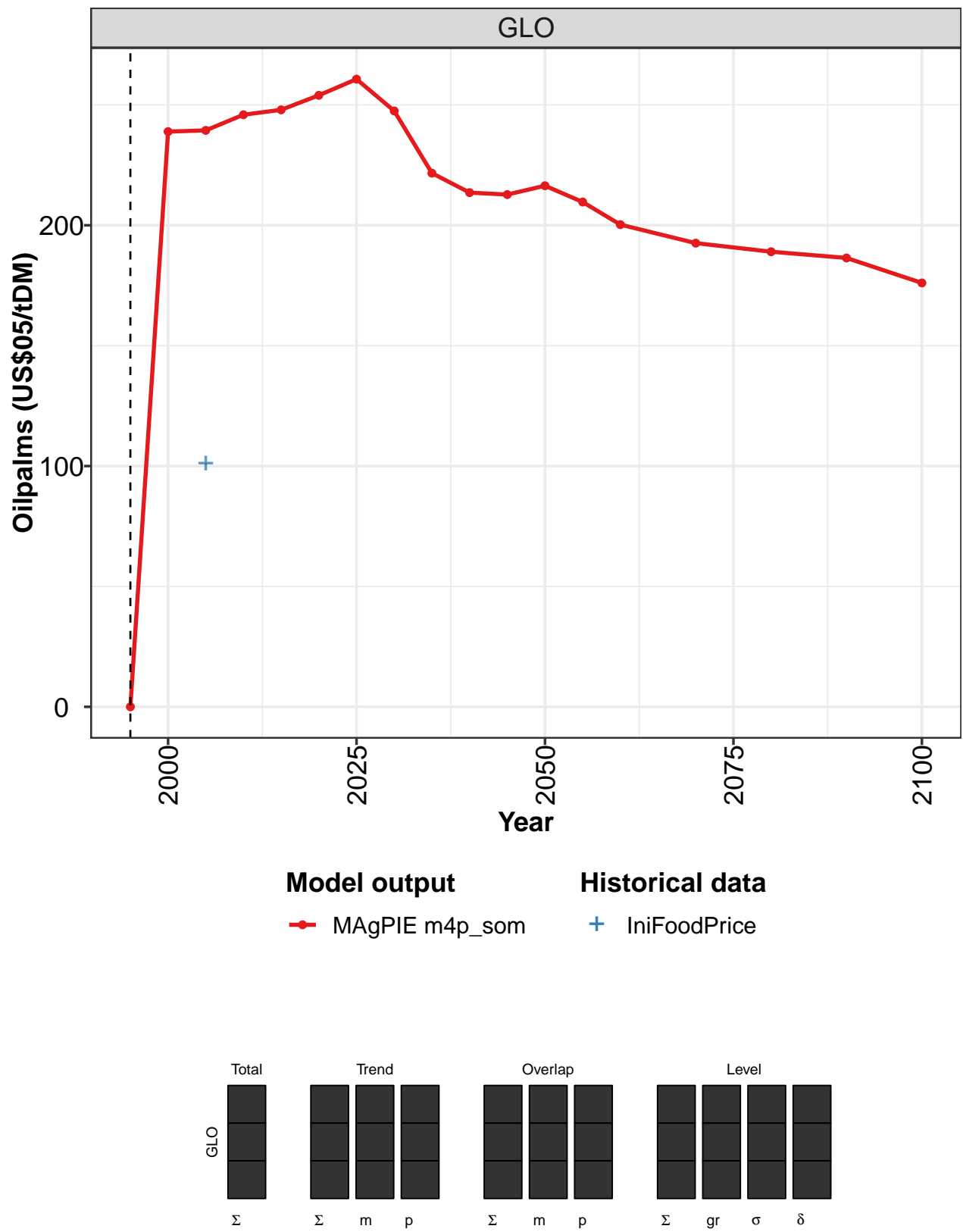


Figure 310: MAgPIE m4p\_som — Prices—Agriculture—Oilpalms (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	239	239	246	248	254	261	247	222	214	213

Table 1110: MAgPIE m4p\_som — Prices—Agriculture—Oilpalms (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	216	210	200	193	189	186	176

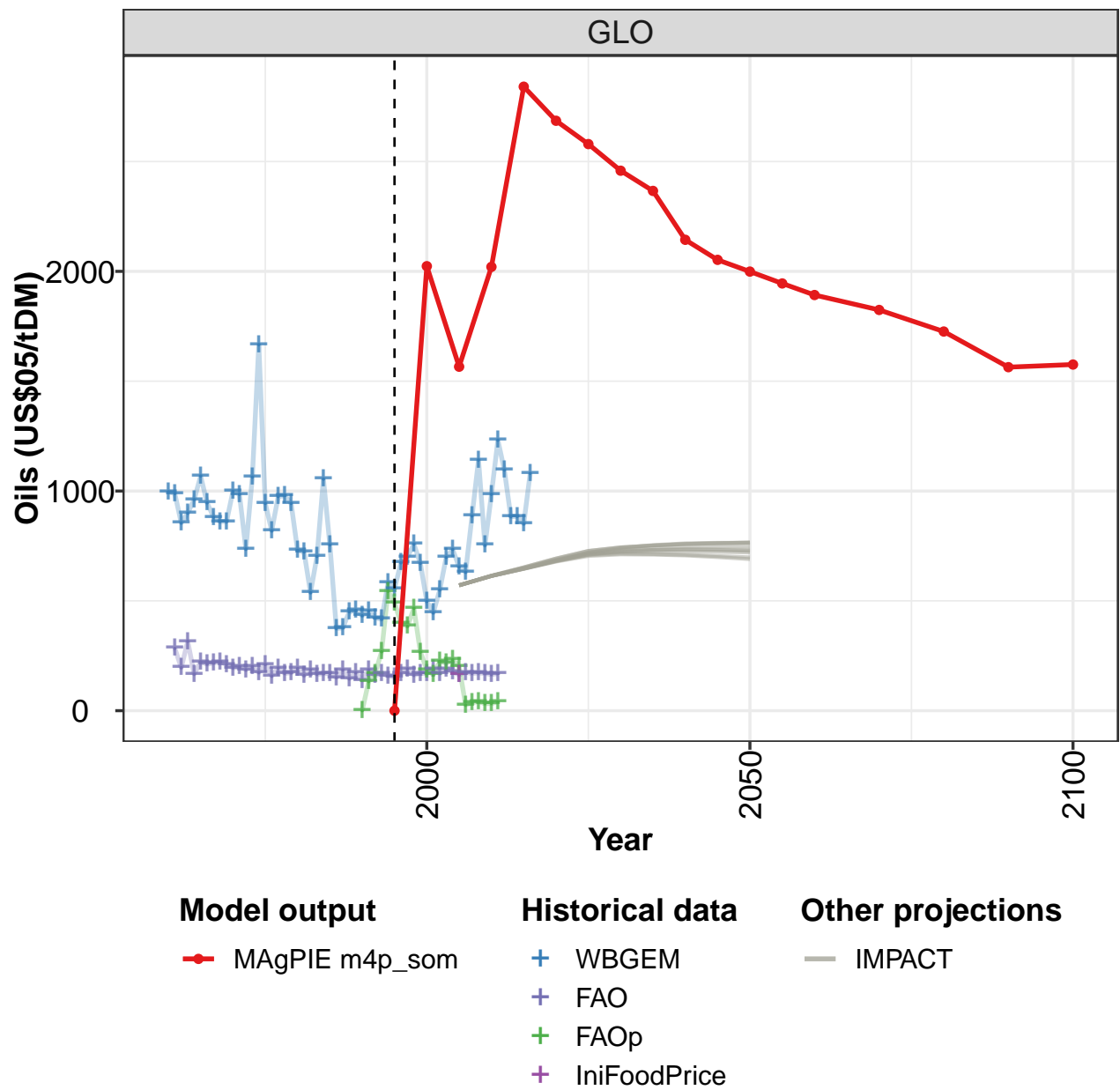
Table 1111: MAgPIE m4p\_som — Prices—Agriculture—Oilpalms (US\$05/tDM) [PART 2/2]

	2005
GLO	101

Table 1112: IniFoodPrice — Prices—Agriculture—Oilpalms (US\$05/tDM)

36.19 Oils

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

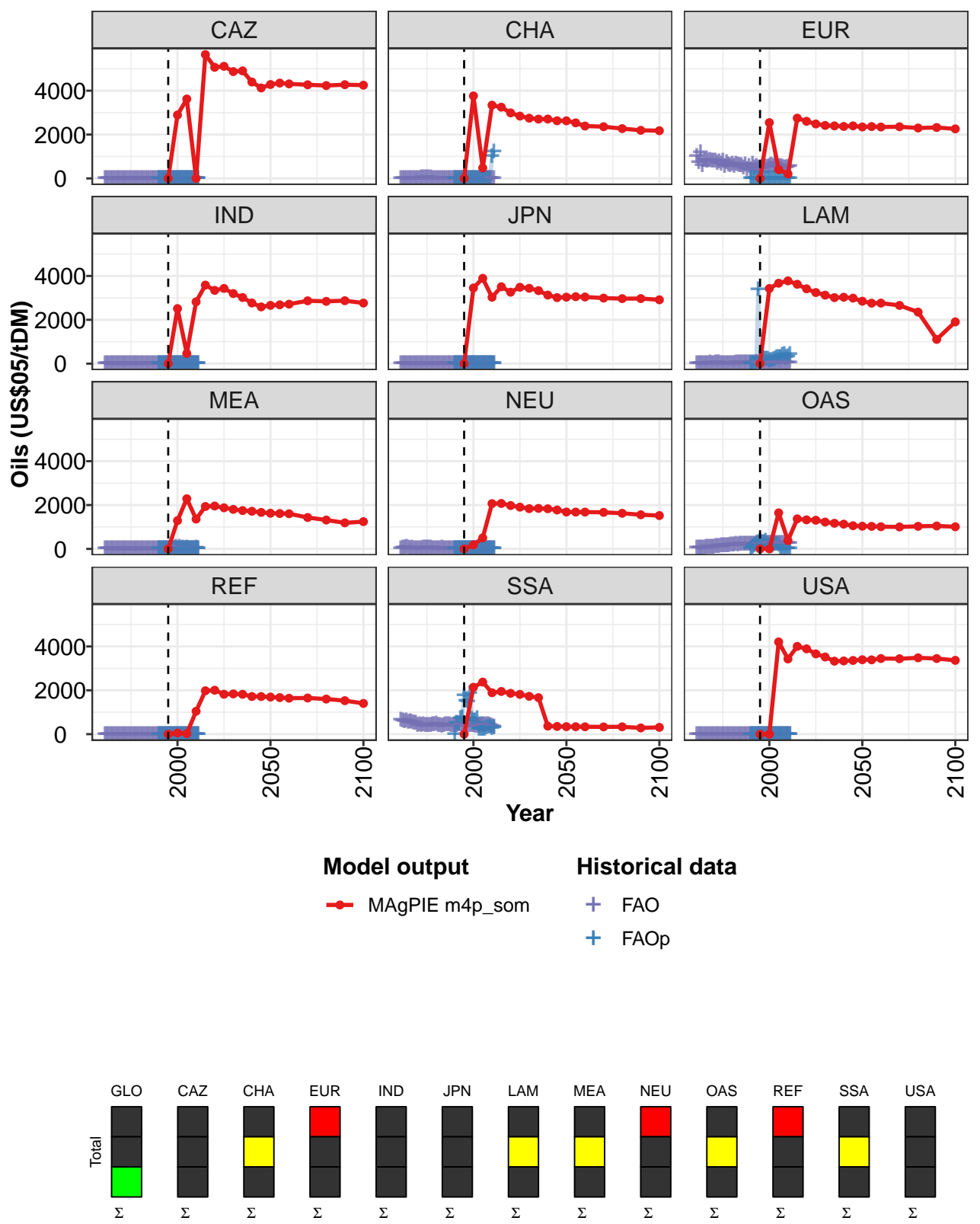


Figure 311: MAgPIE m4p\_som — Prices—Agriculture—Oils (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	2024	1566	2020	2841	2686	2579	2458	2366	2144	2052
CAZ	0	2893	3622	2	5651	5068	5114	4873	4906	4398	4126
CHA	0	3763	479	3342	3249	2989	2842	2748	2705	2708	2630
EUR	0	2545	404	205	2750	2606	2483	2416	2397	2371	2397
IND	0	2512	466	2820	3585	3343	3432	3198	3019	2768	2589
JPN	0	3452	3893	3030	3510	3261	3485	3438	3332	3128	3014
LAM	0	3429	3669	3776	3621	3414	3244	3125	3013	3031	2989
MEA	0	1291	2288	1361	1935	1957	1875	1804	1749	1717	1666
NEU	0	182	506	2066	2074	1979	1905	1837	1848	1831	1775
OAS	0	0	1645	381	1370	1326	1308	1225	1170	1129	1057
REF	0	52	23	1044	1979	2005	1820	1835	1818	1717	1716
SSA	0	2138	2376	1889	1947	1863	1815	1725	1665	367	351
USA	0	0	4207	3430	4003	3891	3662	3520	3329	3340	3362

Table 1113: MAgPIE m4p\_som — Prices—Agriculture—Oils (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1999	1945	1892	1824	1726	1564	1576
CAZ	4283	4349	4312	4270	4235	4275	4252
CHA	2628	2535	2390	2359	2272	2193	2177
EUR	2347	2366	2345	2356	2300	2322	2260
IND	2659	2685	2713	2867	2841	2872	2765
JPN	3033	3055	3041	2991	2966	2969	2913
LAM	2849	2759	2761	2657	2351	1108	1906
MEA	1627	1614	1605	1432	1317	1188	1244
NEU	1683	1680	1681	1668	1626	1558	1521
OAS	1035	1029	1012	1001	1030	1047	1009
REF	1692	1668	1640	1649	1602	1527	1402
SSA	343	339	335	331	336	284	311
USA	3395	3389	3450	3440	3482	3448	3366

Table 1114: MAgPIE m4p\_som — Prices—Agriculture—Oils (US\$05/tDM) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	997	988	855	900	961	1068	946	881	861	861	999
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1115: WBGEM — Prices—Agriculture—Oils (US\$05/tDM) [PART 1/6]



	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	985	736	1064	1666	943	819	974	980	943	730	723
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1116: WBGEM — Prices—Agriculture—Oils (US\$05/tDM) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	538	702	1054	755	374	377	450	457	432	454	423
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1117: WBGEM — Prices—Agriculture—Oils (US\$05/tDM) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	416	581	556	673	700	758	671	497	446	549	698
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1118: WBGEM — Prices—Agriculture—Oils (US\$05/tDM) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	734	654	631	886	1141	753	985	1231	1096	883	884
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1119: WBGEM — Prices—Agriculture—Oils (US\$05/tDM) [PART 5/6]

	2015	2016
GLO	851	1081
CAZ		
CHA		
EUR		
IND		
JPN		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 1120: WBGEM — Prices—Agriculture—Oils (US\$05/tDM) [PART 6/6]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	284	196	316	167	223	211	218	222	211	195	201
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	8	7	6	6	5	7	8	10	11	12	13
EUR	1016	715	1177	597	842	782	805	829	802	793	787
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	15	15	17	18	16	16	20	23	19	18	22
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	22	44	34	64	36	28	33	26	27	10	29
OAS	60	49	53	56	60	65	75	82	93	96	105
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	637	596	584	596	552	584	524	502	489	401	427
USA	0	0	0	0	0	0	0	0	0	0	0

Table 1121: FAO — Prices—Agriculture—Oils (US\$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	186	201	174	210	158	195	170	173	192	160	187
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	15	15	15	14	16	15	13	12	10	9	8
EUR	679	751	651	792	549	714	624	599	667	569	664
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	23	22	18	15	14	15	14	15	15	18	21
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	24	42	32	38	32	45	25	27	21	20	12
OAS	115	131	147	150	142	161	159	181	191	190	208
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	384	417	400	415	412	396	423	452	465	404	390
USA	0	0	0	0	0	0	0	0	0	0	0

Table 1122: FAO — Prices—Agriculture—Oils (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	166	169	169	151	185	146	172	139	186	160	168
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	8	7	9	10	8	8	8	6	6	6	6
EUR	608	604	575	478	610	430	544	381	644	493	549
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	22	25	24	29	30	33	36	37	40	39	42
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	37	15	20	9	18	13	15	5	18	8	16
OAS	195	219	214	204	210	220	236	225	232	235	241
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	382	404	439	427	438	396	414	398	402	424	425
USA	0	0	0	0	0	0	0	0	0	0	0

Table 1123: FAO — Prices—Agriculture—Oils (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	159	154	168	190	162	170	169	188	170	189	177
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	6	6	5	5	4	4	4	4	3	3	3
EUR	473	451	534	630	505	516	542	632	545	682	611
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	43	39	39	44	41	38	43	46	42	39	44
MEA	0	0	29	66	19	88	13	74	24	45	13
NEU	14	17	9	11	3	2	4	6	5	4	3
OAS	243	238	247	250	246	261	254	256	259	262	259
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	419	420	386	380	389	388	389	360	363	376	393
USA	0	0	0	0	0	0	0	0	0	0	0

Table 1124: FAO — Prices—Agriculture—Oils (US\$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	164	174	170	172	170	165	170
CAZ	0	0	0	0	0	0	0
CHA	3	3	3	3	3	2	2
EUR	518	553	532	479	470	516	539
IND	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0
LAM	46	47	46	48	52	47	48
MEA	60	14	15	27	7	31	27
NEU	2	2	2	2	2	2	2
OAS	262	267	263	268	267	250	260
REF	0	0	0	0	0	0	0
SSA	390	417	426	418	394	357	341
USA	0	0	0	0	0	0	0

Table 1125: FAO — Prices—Agriculture—Oils (US\$05/tDM) [PART 5/5]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	132	170	268	544	491	397	384	466	267	187
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	0	6	15	35	3375	235	224	198	221	207	153
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	85	137	229	304	360	289	292	341	234	154
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	502	481	705	747	1752	1512	1461	1846	681	610
USA	0	0	0	0	0	0	0	0	0	0	0

Table 1126: FAOp — Prices—Agriculture—Oils (US\$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	164	224	216	232	202	26	36	42	32	33	40
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	1012	1228
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	150	174	202	287	270	277	373	432	270	300	422
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	132	192	219	230	199	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	605	697	211	241	211	216	286	339	333	268	284
USA	0	0	0	0	0	0	0	0	0	0	0

Table 1127: FAOp — Prices—Agriculture—Oils (US\$05/tDM) [PART 2/3]

	2005
GLO	164
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 1128: IniFoodPrice — Prices—Agriculture—Oils (US\$05/tDM)

36.20 Other fibrous crop residues

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale. ## geom\_path: Each group consists of only one observation. Do you need to adjust the group## aesthetic?

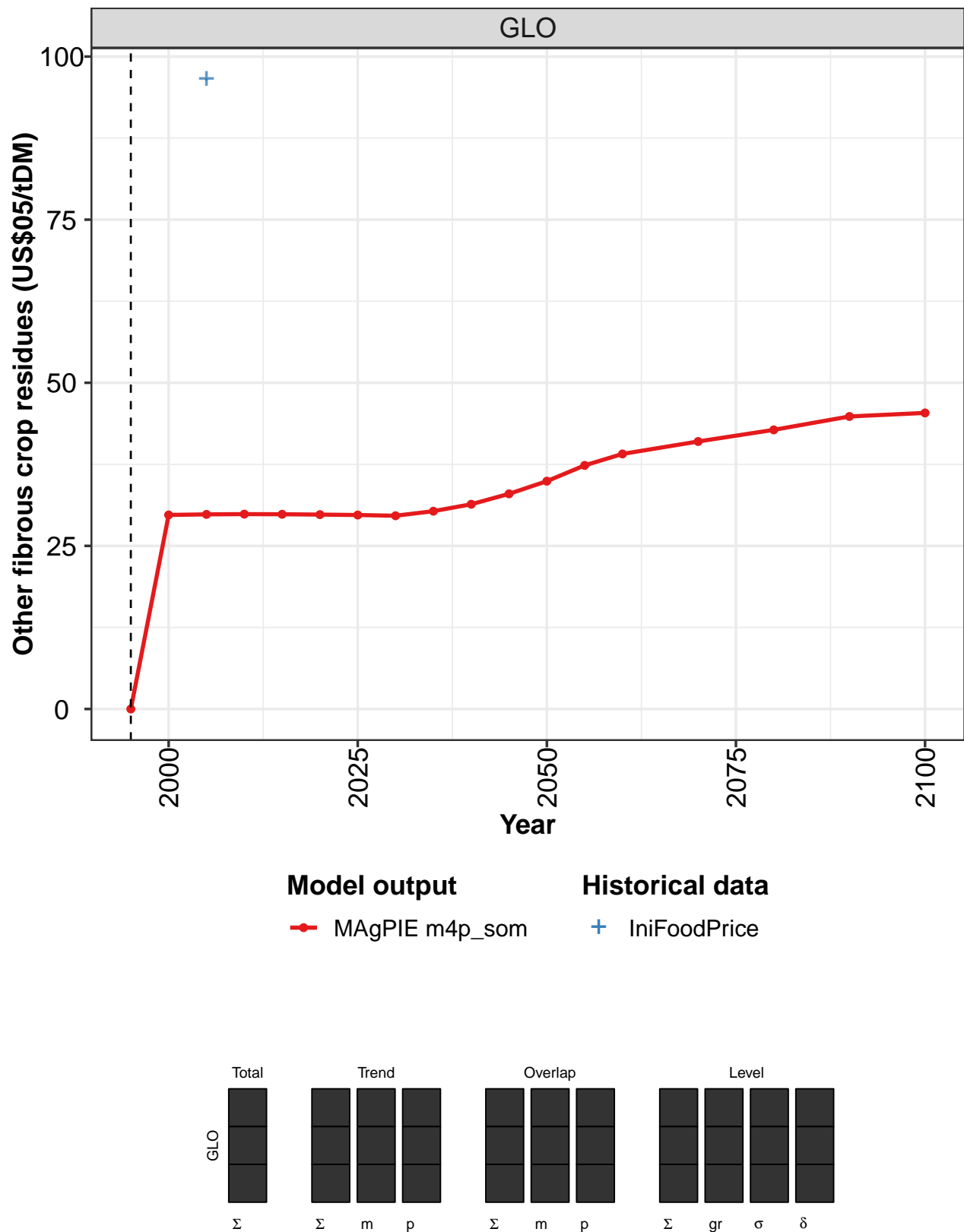


Figure 312: MAgPIE m4p\_som — Prices—Agriculture—Other fibrous crop residues (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.0	29.7	29.8	29.9	29.8	29.8	29.7	29.6	30.3	31.4	33.0

Table 1129: MAgPIE m4p\_som — Prices—Agriculture—Other fibrous crop residues (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	34.9	37.3	39.1	41.0	42.8	44.8	45.4

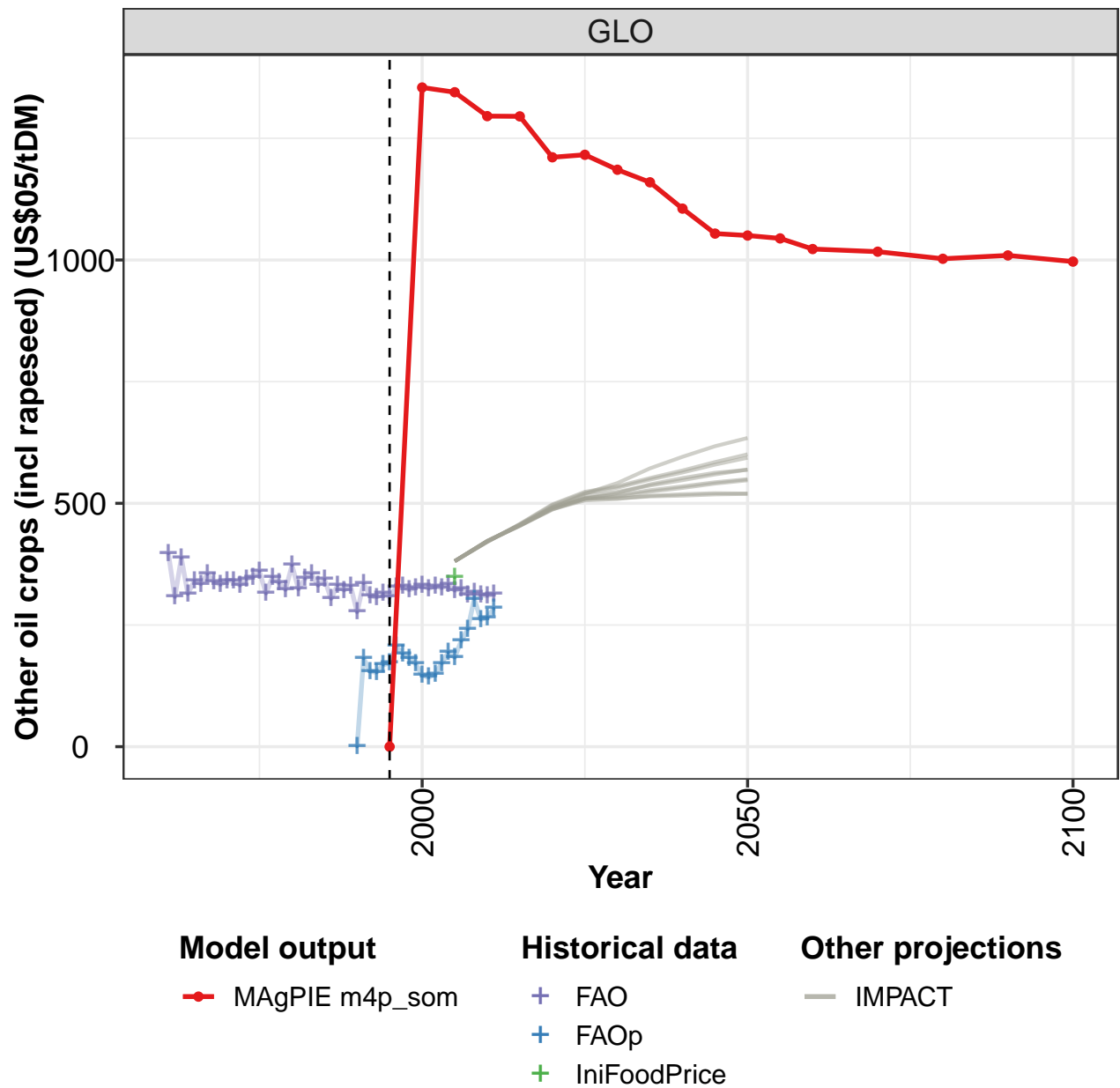
Table 1130: MAgPIE m4p\_som — Prices—Agriculture—Other fibrous crop residues (US\$05/tDM) [PART 2/2]

	2005
GLO	96.5

Table 1131: IniFoodPrice — Prices—Agriculture—Other fibrous crop residues (US\$05/tDM)

36.21 Other oil crops (incl rapeseed)

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

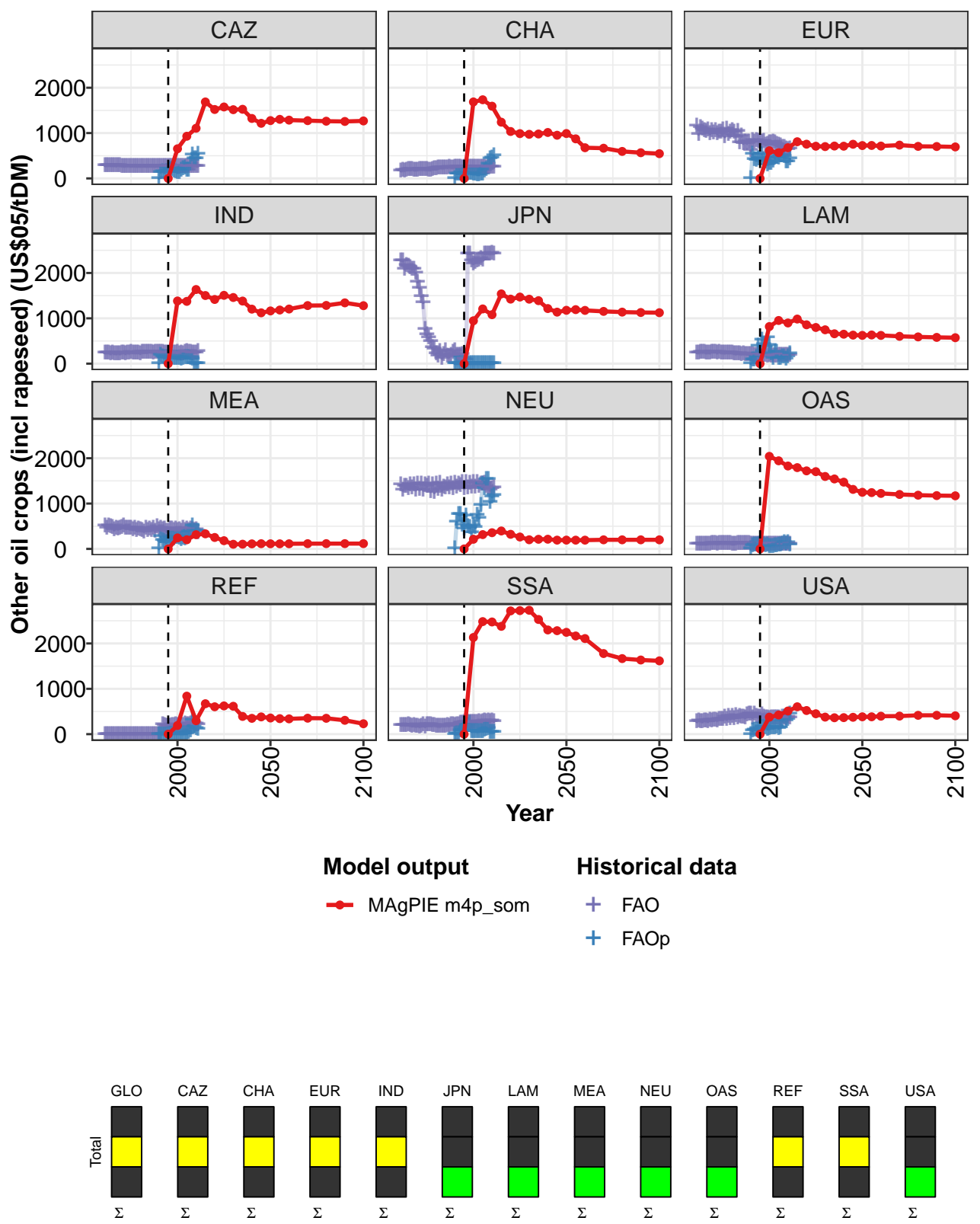


Figure 313: MAgPIE m4p\_som — Prices—Agriculture—Other oil crops (incl rapeseed) (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	1354	1345	1296	1295	1211	1216	1185	1160	1106	1054
CAZ	0	654	930	1106	1686	1520	1576	1516	1525	1323	1215
CHA	0	1687	1735	1593	1240	1035	988	973	980	1013	952
EUR	0	610	568	677	809	755	710	702	714	711	753
IND	0	1382	1374	1635	1503	1416	1507	1459	1381	1203	1121
JPN	0	946	1207	1081	1539	1424	1469	1422	1389	1216	1136
LAM	0	818	952	897	984	857	798	747	659	650	630
MEA	0	243	201	314	332	252	181	102	104	111	115
NEU	0	213	315	357	396	322	263	202	213	214	194
OAS	0	2041	1943	1829	1793	1721	1704	1598	1543	1472	1313
REF	0	191	838	297	671	604	623	615	391	349	381
SSA	0	2132	2483	2474	2378	2719	2725	2732	2529	2298	2282
USA	0	375	423	510	604	521	450	376	362	365	372

Table 1132: MAgPIE m4p\_som — Prices—Agriculture—Other oil crops (incl rapeseed) (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1050	1044	1022	1017	1002	1009	997
CAZ	1275	1303	1286	1274	1262	1256	1268
CHA	990	873	677	666	596	567	546
EUR	725	727	714	735	707	704	695
IND	1163	1183	1205	1281	1284	1341	1279
JPN	1177	1192	1175	1153	1137	1128	1124
LAM	624	633	623	603	590	579	573
MEA	113	113	114	116	116	117	117
NEU	194	193	193	200	200	200	200
OAS	1249	1242	1224	1201	1185	1176	1171
REF	356	342	337	352	350	305	230
SSA	2245	2165	2108	1778	1667	1635	1617
USA	383	383	396	398	415	416	405

Table 1133: MAgPIE m4p\_som — Prices—Agriculture—Other oil crops (incl rapeseed) (US\$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	397	308	388	314	341	334	354	339	333	341	341
CAZ	280	283	284	280	281	280	275	285	278	274	269
CHA	161	175	174	190	196	195	196	187	185	189	196
EUR	1161	977	1130	1091	1052	1041	1067	984	1056	1012	1050
IND	236	235	234	216	235	221	216	228	215	230	235
JPN	2277	2262	2092	2173	2158	2115	2082	2088	1999	1799	1667
LAM	240	242	249	248	248	237	242	236	255	259	255
MEA	511	459	509	490	469	418	453	436	460	475	505
NEU	1411	1295	1388	1391	1341	1422	1353	1410	1304	1425	1308
OAS	110	109	107	108	108	107	111	114	116	117	115
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	197	201	201	201	204	189	182	194	173	178	166
USA	271	297	286	272	291	288	279	307	302	303	319

Table 1134: FAO — Prices—Agriculture—Other oil crops (incl rapeseed) (US\$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	331	345	349	360	315	349	336	322	373	324	345
CAZ	271	273	273	268	272	270	267	267	266	269	269
CHA	196	195	192	192	189	187	204	215	209	229	230
EUR	992	1029	1017	1067	920	1094	966	1025	1051	1030	929
IND	221	236	230	251	244	240	240	239	224	261	251
JPN	1484	1346	752	641	569	495	350	317	226	168	269
LAM	237	259	241	237	232	241	237	239	232	223	212
MEA	453	466	459	454	423	465	407	434	419	413	382
NEU	1441	1306	1415	1377	1431	1266	1410	1244	1437	1308	1447
OAS	113	115	119	118	119	116	117	115	105	108	113
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	178	210	168	215	210	204	191	188	183	172	170
USA	301	331	332	333	387	321	395	338	402	348	410

Table 1135: FAO — Prices—Agriculture—Other oil crops (incl rapeseed) (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	354	331	344	304	332	321	330	277	335	310	307
CAZ	266	267	268	269	266	264	266	269	266	265	266
CHA	227	229	239	239	245	236	236	243	243	244	243
EUR	1041	794	930	773	804	776	809	616	834	802	837
IND	255	250	256	248	239	248	254	252	256	253	233
JPN	123	199	289	167	149	192	259	280	182	186	192
LAM	221	214	210	212	211	207	205	206	206	192	189
MEA	454	416	442	411	465	386	485	418	467	419	434
NEU	1290	1372	1348	1416	1349	1428	1335	1442	1371	1429	1392
OAS	122	128	122	120	118	126	122	114	110	110	104
REF	0	0	0	0	0	0	0	0	0	203	193
SSA	185	185	183	188	185	217	202	198	202	207	246
USA	369	387	382	375	362	425	447	440	367	442	397

Table 1136: FAO — Prices—Agriculture—Other oil crops (incl rapeseed) (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	315	308	328	329	322	327	332	325	330	326	333
CAZ	265	267	268	267	268	269	268	270	268	269	268
CHA	241	245	244	242	243	245	247	247	247	244	247
EUR	828	808	810	814	739	749	791	783	804	795	752
IND	234	239	243	254	231	243	249	227	228	227	255
JPN	203	101	89	2427	2427	2275	2206	2236	2272	2287	2318
LAM	183	187	190	179	178	178	180	178	171	171	177
MEA	385	393	446	438	408	449	403	429	395	458	403
NEU	1464	1332	1464	1357	1455	1358	1463	1358	1461	1389	1438
OAS	109	109	108	108	107	108	110	109	104	101	105
REF	182	185	177	187	190	204	195	200	196	197	221
SSA	247	254	262	260	260	261	261	262	264	270	266
USA	378	375	429	378	357	368	350	363	356	362	363

Table 1137: FAO — Prices—Agriculture—Other oil crops (incl rapeseed) (US\$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	321	325	312	317	311	310	314
CAZ	268	268	270	269	269	270	270
CHA	245	243	241	244	244	243	243
EUR	744	720	681	691	648	633	653
IND	263	254	246	236	241	243	264
JPN	2283	2427	2427	2427	2427	2429	2428
LAM	179	179	179	179	181	182	182
MEA	440	403	442	420	413	417	364
NEU	1436	1442	1379	1350	1296	1326	1354
OAS	105	101	102	103	100	99	99
REF	206	211	219	242	236	227	208
SSA	275	295	284	289	274	295	279
USA	356	332	379	354	345	380	365

Table 1138: FAO — Prices—Agriculture—Other oil crops (incl rapeseed) (US\$05/tDM) [PART 5/5]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	181	155	153	168	172	207	191	182	170	147
CAZ	0	137	147	133	147	151	200	195	165	157	131
CHA	0	99	101	104	108	122	110	104	114	113	95
EUR	0	532	423	400	437	435	535	416	367	306	328
IND	0	178	150	135	129	132	117	131	123	118	111
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	0	83	91	134	389	146	526	425	366	574	402
MEA	0	273	190	165	140	213	238	248	221	261	253
NEU	0	592	755	761	520	448	724	493	478	362	507
OAS	0	75	86	84	91	102	112	94	79	94	60
REF	0	0	0	0	1	6	5	6	11	11	9
SSA	0	4	4	69	77	92	145	190	242	60	63
USA	0	73	98	89	100	121	163	162	140	113	118

Table 1139: FAOp — Prices—Agriculture—Other oil crops (incl rapeseed) (US\$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	143	149	171	193	183	217	241	303	261	265	284
CAZ	139	180	219	239	191	187	315	525	441	439	527
CHA	94	84	80	97	100	164	193	311	427	447	506
EUR	336	385	447	469	448	503	519	483	371	371	431
IND	114	102	118	134	143	143	112	101	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	226	114	256	248	113	119	157	161	95	160	213
MEA	246	212	242	218	270	368	389	508	383	393	388
NEU	471	742	684	969	1426	1325	1536	1539	1032	1143	1190
OAS	57	61	65	71	93	94	104	132	113	134	87
REF	7	5	4	9	8	45	78	310	163	119	108
SSA	59	53	56	64	65	92	116	122	38	35	39
USA	140	138	147	162	129	145	291	374	291	330	446

Table 1140: FAOp — Prices—Agriculture—Other oil crops (incl rapeseed) (US\$05/tDM) [PART 2/3]

	2005
GLO	348
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 1141: IniFoodPrice — Prices—Agriculture—Other oil crops (incl rapeseed) (US\$05/tDM)

36.22 Pasture

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale. ## geom\_path: Each group consists of only one observation. Do you need to adjust the group## aesthetic?

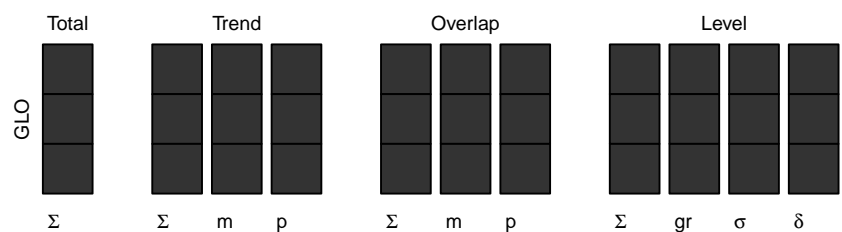
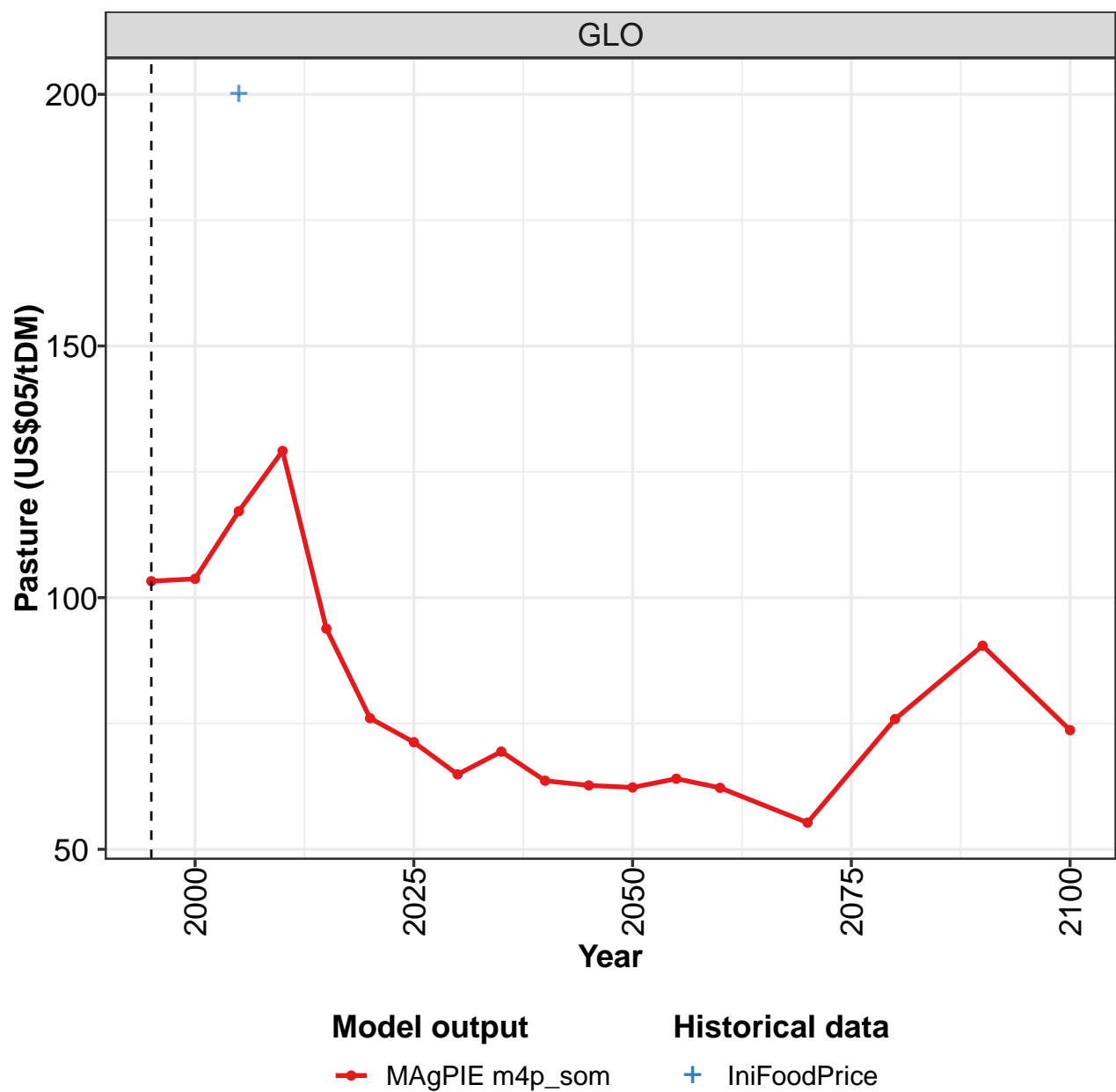


Figure 314: MAgPIE m4p\_som — Prices—Agriculture—Pasture (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	103	104	117	129	94	76	71	65	69	64	63

Table 1142: MAgPIE m4p\_som — Prices—Agriculture—Pasture (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	62	64	62	55	76	90	74

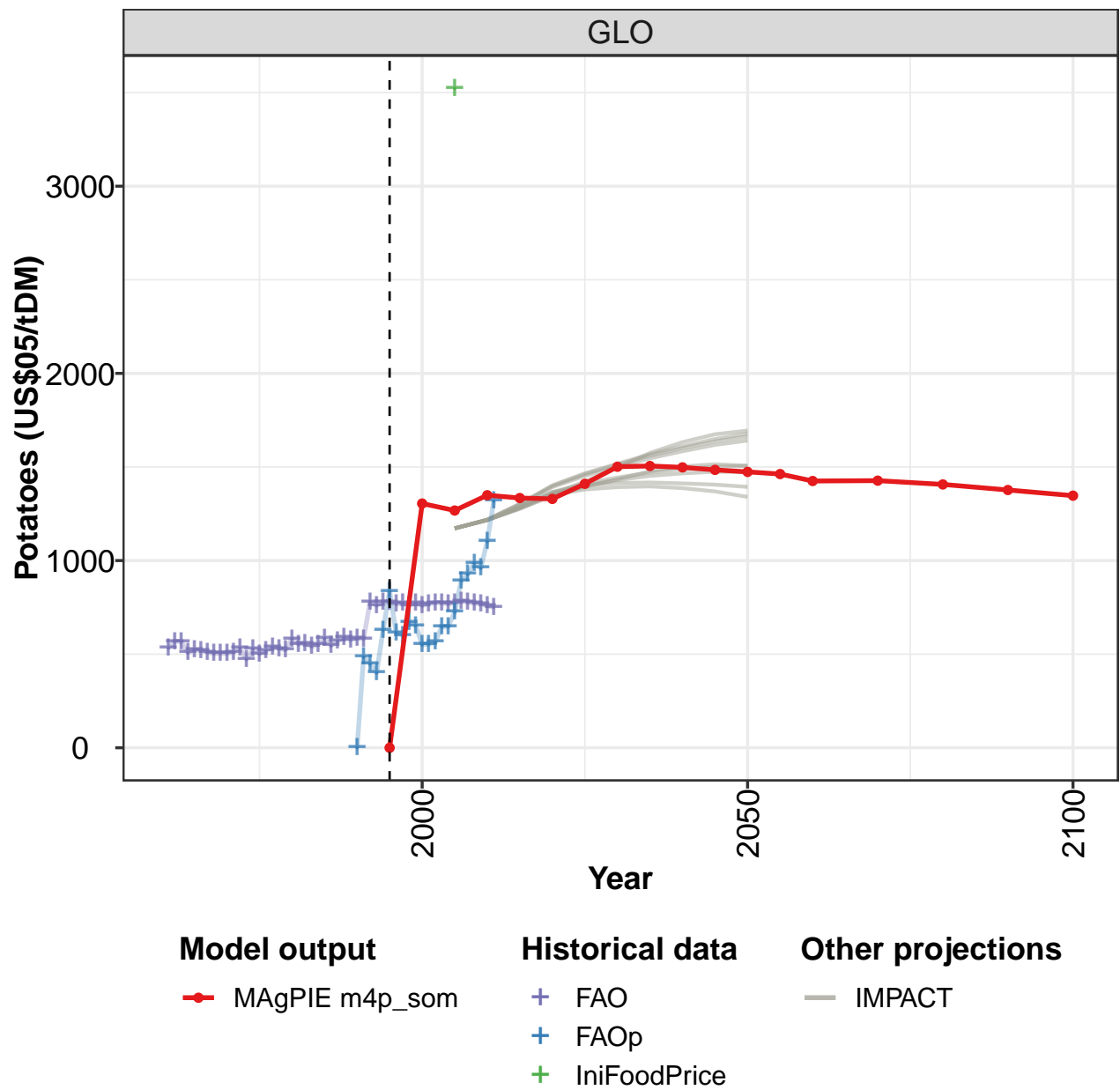
Table 1143: MAgPIE m4p\_som — Prices—Agriculture—Pasture (US\$05/tDM) [PART 2/2]

	2005
GLO	200

Table 1144: IniFoodPrice — Prices—Agriculture—Pasture (US\$05/tDM)

36.23 Potatoes

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

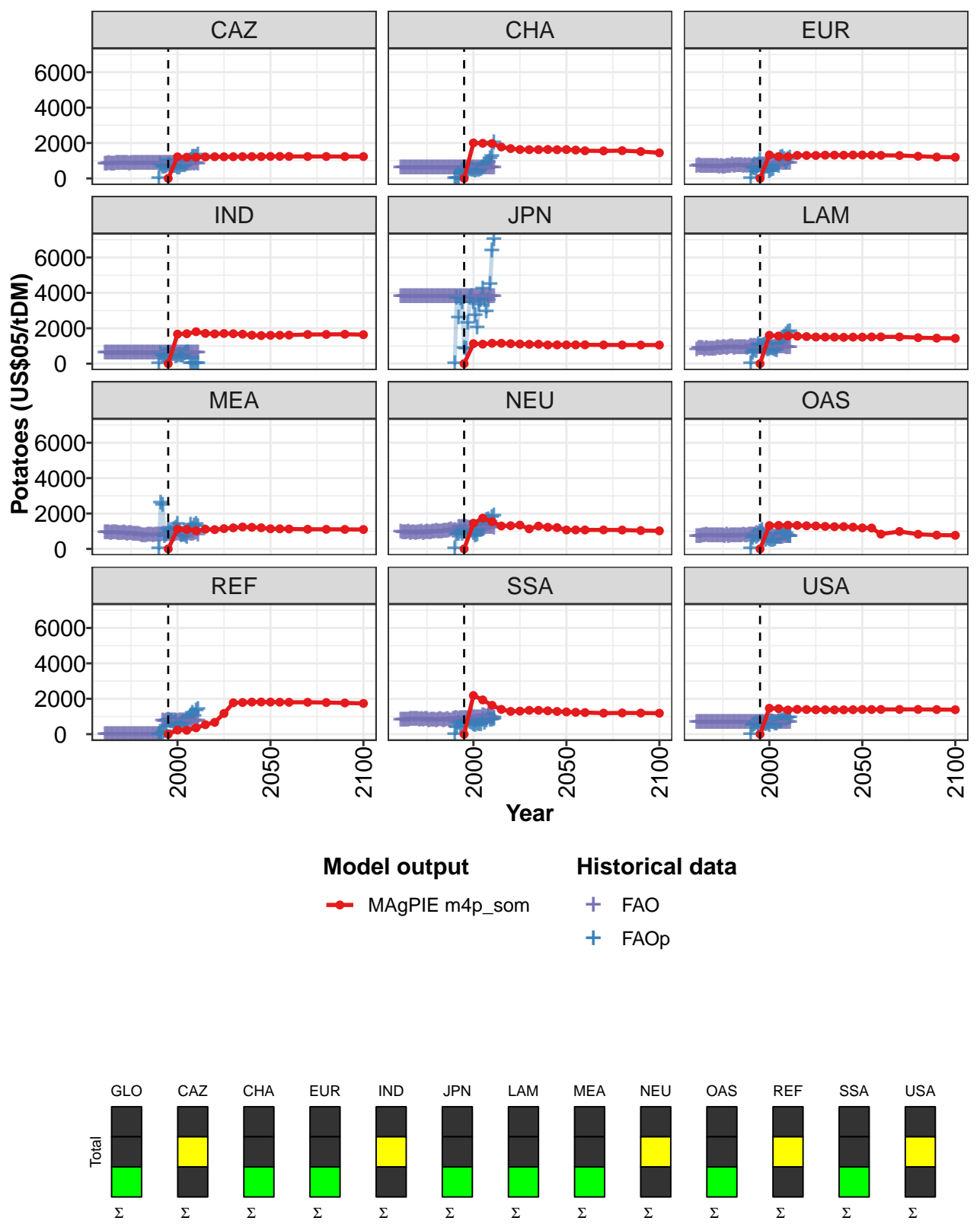


Figure 315: MAgPIE m4p\_som — Prices—Agriculture—Potatoes (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	1305	1267	1349	1334	1329	1410	1501	1505	1498	1485
CAZ	0	1217	1199	1194	1214	1226	1223	1227	1231	1232	1231
CHA	0	2005	1985	1971	1776	1686	1632	1624	1627	1637	1621
EUR	0	1326	1237	1222	1302	1297	1298	1312	1316	1311	1323
IND	0	1667	1693	1804	1709	1681	1705	1692	1667	1611	1588
JPN	0	1128	1102	1151	1151	1129	1111	1094	1101	1055	1061
LAM	0	1602	1564	1564	1551	1531	1505	1502	1498	1488	1499
MEA	0	1115	1095	1026	1113	1089	1145	1190	1238	1220	1195
NEU	0	1450	1739	1543	1294	1311	1345	1133	1290	1223	1204
OAS	0	1318	1328	1342	1326	1306	1297	1272	1255	1260	1229
REF	0	233	219	356	535	667	1170	1772	1789	1812	1816
SSA	0	2182	1934	1631	1400	1287	1303	1347	1346	1320	1283
USA	0	1463	1440	1365	1402	1390	1378	1377	1372	1374	1381

Table 1145: MAgPIE m4p\_som — Prices—Agriculture—Potatoes (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1474	1462	1425	1427	1407	1377	1347
CAZ	1243	1244	1243	1237	1239	1235	1234
CHA	1628	1603	1561	1554	1569	1520	1446
EUR	1322	1314	1303	1294	1253	1209	1194
IND	1601	1607	1615	1648	1651	1662	1639
JPN	1060	1061	1063	1059	1056	1053	1052
LAM	1498	1511	1514	1512	1468	1442	1429
MEA	1138	1137	1124	1110	1106	1101	1097
NEU	1071	1071	1071	1074	1066	1037	1021
OAS	1187	1181	836	985	828	780	769
REF	1812	1807	1801	1800	1786	1763	1738
SSA	1256	1236	1221	1186	1199	1192	1183
USA	1393	1392	1396	1397	1399	1390	1382

Table 1146: MAgPIE m4p\_som — Prices—Agriculture—Potatoes (US\$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	532	568	567	508	524	521	512	503	505	504	511
CAZ	822	829	849	833	826	832	845	836	853	843	861
CHA	590	590	590	590	590	590	590	590	590	590	590
EUR	691	708	705	665	692	682	676	669	668	665	691
IND	586	586	586	586	586	586	586	586	586	586	586
JPN	3803	3803	3803	3803	3803	3803	3803	3803	3803	3803	3803
LAM	782	873	856	853	784	848	832	833	811	816	834
MEA	907	938	905	895	907	938	912	892	891	884	917
NEU	948	926	923	922	954	886	922	922	884	899	918
OAS	710	701	694	764	762	790	756	759	760	754	761
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	793	785	801	798	794	820	826	819	826	828	818
USA	668	668	668	668	668	668	668	668	668	668	668

Table 1147: FAO — Prices—Agriculture—Potatoes (US\$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	533	473	529	501	518	539	531	523	583	553	559
CAZ	875	854	833	853	842	840	846	842	857	852	853
CHA	590	590	590	590	589	590	590	590	590	590	590
EUR	666	643	673	654	660	700	680	675	753	687	722
IND	586	586	586	586	586	586	586	586	586	586	586
JPN	3803	3803	3803	3803	3803	3803	3803	3803	3803	3803	3803
LAM	890	882	857	909	898	886	923	937	943	878	925
MEA	855	832	852	871	832	824	840	811	772	757	743
NEU	945	895	901	963	926	904	975	946	986	970	974
OAS	742	759	737	755	708	771	716	737	751	746	733
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	830	812	819	834	759	801	785	814	751	819	846
USA	668	668	668	668	668	668	668	668	668	668	668

Table 1148: FAO — Prices—Agriculture—Potatoes (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	540	553	583	545	569	591	576	587	582	780	760
CAZ	853	860	852	856	853	868	861	868	870	849	852
CHA	590	590	590	590	590	590	590	590	590	590	590
EUR	722	719	728	700	706	700	712	690	693	766	737
IND	586	586	586	586	586	586	586	586	586	586	586
JPN	3803	3803	3803	3803	3803	3803	3803	3803	3803	3803	3803
LAM	918	928	897	898	913	875	918	981	957	976	933
MEA	763	771	804	771	767	809	808	791	809	829	814
NEU	954	997	1024	991	1036	1081	1024	1045	1022	1212	1228
OAS	733	744	753	774	758	749	808	785	769	807	871
REF	0	0	0	0	0	0	0	0	0	737	723
SSA	791	772	818	837	743	747	859	869	890	829	881
USA	668	668	668	668	668	668	668	668	668	668	668

Table 1149: FAO — Prices—Agriculture—Potatoes (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	779	780	767	771	760	774	759	770	773	774	768
CAZ	848	840	848	845	847	845	832	844	838	826	830
CHA	590	590	590	590	590	590	590	590	590	590	590
EUR	780	777	771	787	773	800	789	820	844	851	849
IND	586	586	586	586	586	586	586	586	586	586	586
JPN	3803	3803	3803	3803	3803	3803	3803	3803	3803	3803	3803
LAM	920	917	916	894	886	908	912	927	915	930	921
MEA	817	823	822	843	809	820	853	814	830	850	869
NEU	1197	1183	1204	1185	1184	1196	1217	1177	1178	1198	1167
OAS	836	875	880	796	753	719	698	647	690	670	680
REF	735	741	728	743	733	739	732	744	745	744	736
SSA	901	904	895	897	869	999	938	935	944	946	934
USA	668	668	668	668	668	668	668	668	668	668	668

Table 1150: FAO — Prices—Agriculture—Potatoes (US\$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	775	785	777	772	770	757	751
CAZ	840	828	827	842	830	839	834
CHA	590	590	590	590	590	590	590
EUR	869	890	858	860	875	866	872
IND	586	586	586	586	586	586	586
JPN	3803	3803	3803	3803	3803	3803	3803
LAM	940	931	957	942	926	926	914
MEA	855	857	851	852	886	902	797
NEU	1151	1195	1212	1200	1199	1198	1197
OAS	680	663	679	689	708	683	683
REF	747	745	745	730	740	718	738
SSA	1043	1025	970	1072	961	945	924
USA	668	668	668	668	668	668	668

Table 1151: FAO — Prices—Agriculture—Potatoes (US\$05/tDM) [PART 5/5]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	484	448	401	629	836	615	601	671	653	550
CAZ	0	771	658	631	697	764	730	683	668	689	596
CHA	0	0	0	262	405	612	385	419	532	483	477
EUR	0	586	558	371	699	1026	538	439	623	620	404
IND	0	584	436	421	458	533	518	522	530	396	427
JPN	0	3698	2588	3650	3429	886	811	2292	3688	3803	3438
LAM	0	586	728	678	1095	984	977	1036	1100	780	831
MEA	0	2583	2483	717	770	1090	905	856	1097	1188	1404
NEU	0	833	833	944	825	1215	922	848	1124	993	860
OAS	0	629	740	676	730	968	1026	735	498	584	544
REF	0	0	51	140	465	777	745	704	587	661	504
SSA	0	372	645	470	562	614	566	753	658	607	537
USA	0	495	555	618	559	677	491	564	559	577	509

Table 1152: FAOp — Prices—Agriculture—Potatoes (US\$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	553	564	645	648	725	893	926	987	960	1102	1317
CAZ	615	713	733	746	809	943	1008	1214	1186	1206	1311
CHA	434	450	461	494	599	678	782	915	1104	1248	2014
EUR	483	494	713	728	698	1158	1184	1068	890	1062	1163
IND	464	434	434	571	595	591	0	0	0	0	0
JPN	2715	2045	3313	3582	4240	3589	2909	3562	4465	6392	7000
LAM	877	816	797	744	984	1065	1150	1521	1643	1779	1817
MEA	1020	766	795	733	676	987	1369	1135	1298	1381	1277
NEU	728	769	1033	1051	1090	1303	1625	1650	1534	1787	1868
OAS	493	498	529	653	662	640	820	828	861	745	690
REF	484	582	659	580	709	901	1005	1202	1000	1317	1382
SSA	484	584	530	549	806	632	753	974	789	777	857
USA	700	668	591	568	705	732	755	909	827	923	941

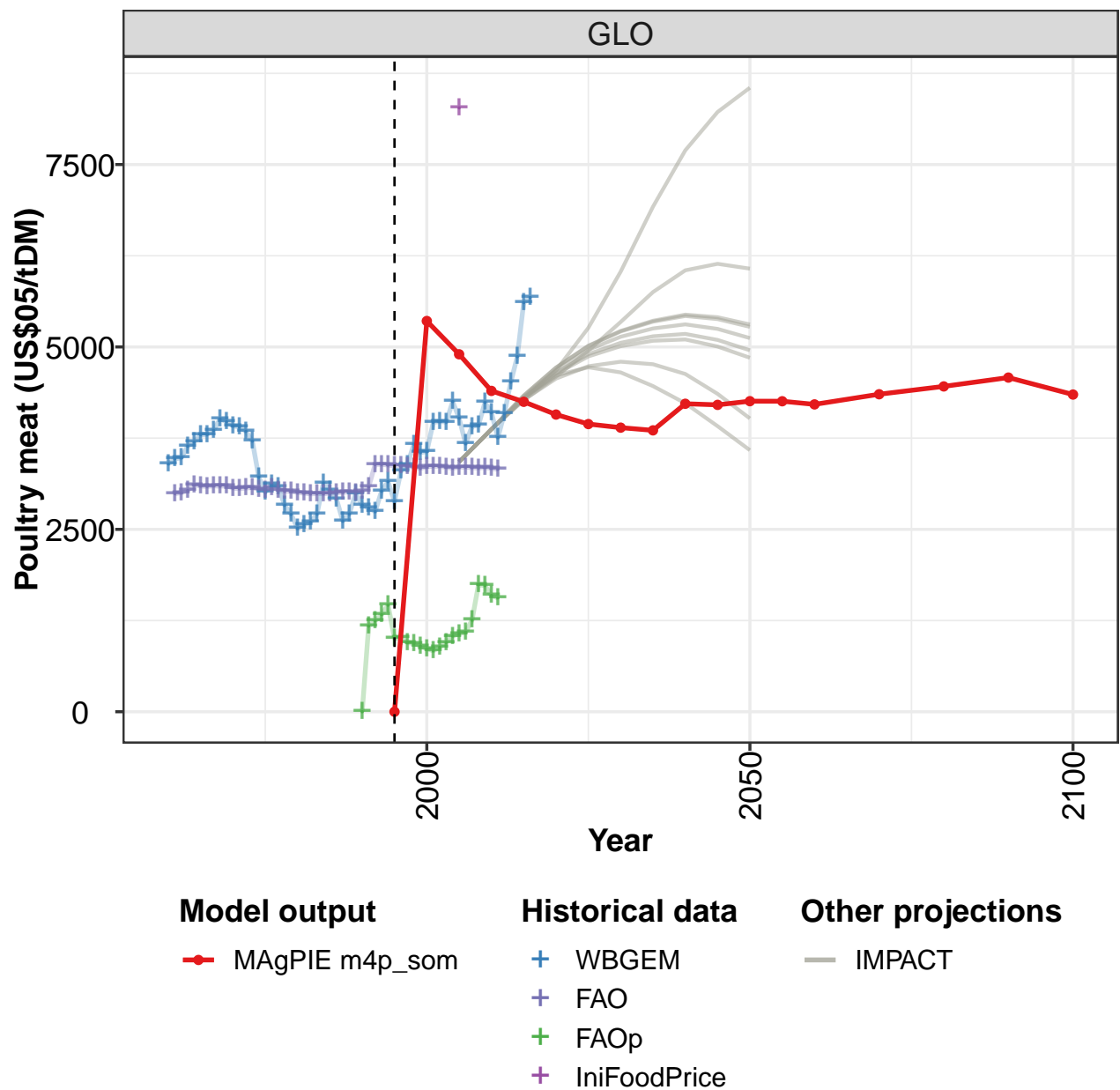
Table 1153: FAOp — Prices—Agriculture—Potatoes (US\$05/tDM) [PART 2/3]

	2005
GLO	3522
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 1154: IniFoodPrice — Prices—Agriculture—Potatoes (US\$05/tDM)

36.24 Poultry meat

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

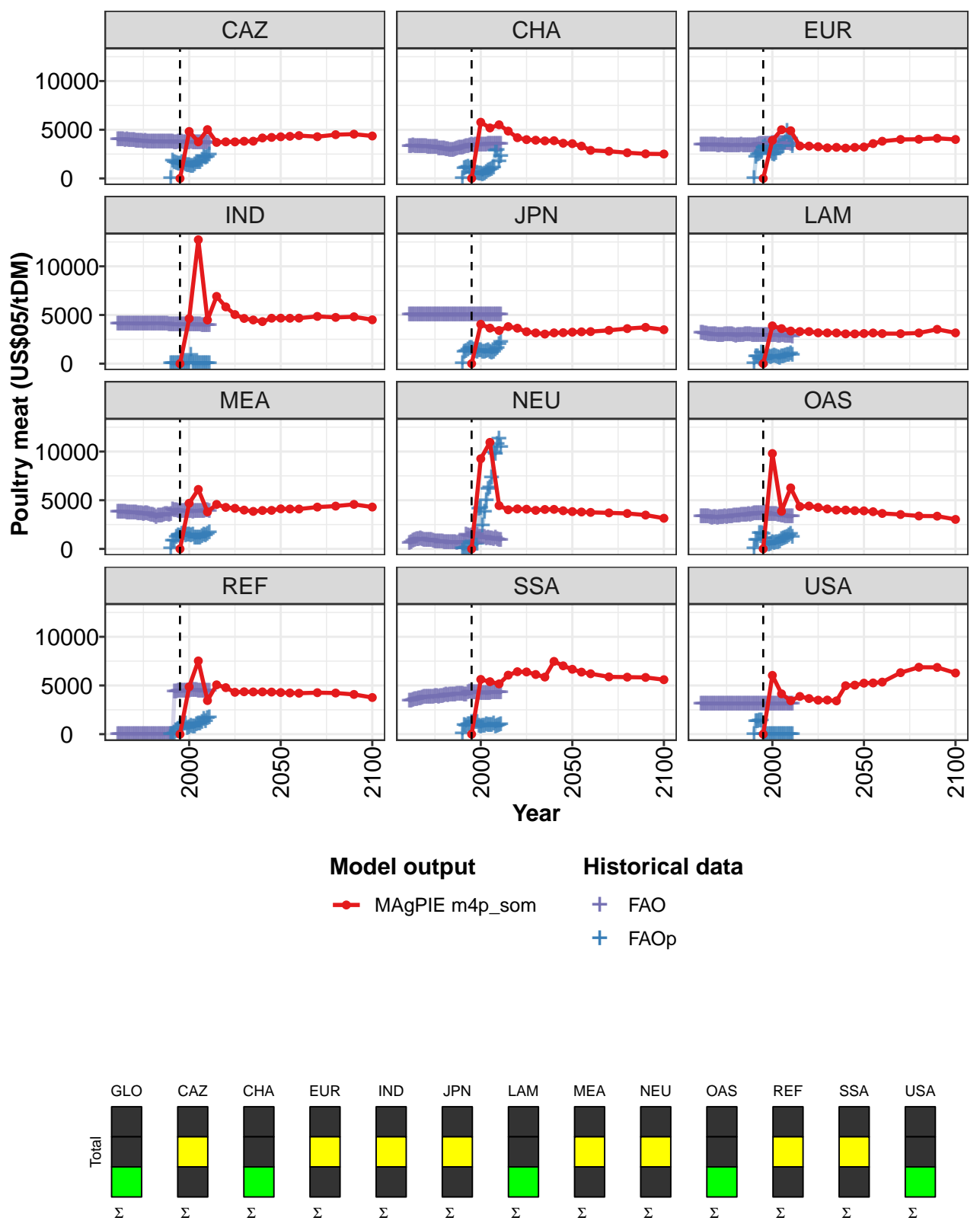


Figure 316: MAgPIE m4p\_som — Prices—Agriculture—Poultry meat (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	5356	4900	4398	4248	4073	3943	3894	3857	4221	4206
CAZ	0	4820	3753	5016	3699	3757	3752	3817	3824	4157	4212
CHA	0	5772	5185	5510	4861	4180	3984	3925	3857	3876	3614
EUR	0	3906	5001	4899	3335	3322	3261	3140	3193	3110	3187
IND	0	4634	12726	4485	6912	5830	5044	4645	4490	4322	4667
JPN	0	4045	3651	3403	3802	3642	3279	3159	3040	3163	3184
LAM	0	3882	3598	3354	3299	3296	3170	3161	3152	3060	3056
MEA	0	4687	6110	3808	4573	4267	4169	3987	3853	3945	3960
NEU	0	9264	10944	4447	4020	4110	4077	3958	4051	4061	3920
OAS	0	9795	3864	6271	4353	4406	4262	4103	3988	3989	3930
REF	0	4864	7523	3450	5067	4777	4301	4354	4337	4341	4324
SSA	0	5621	5387	5165	6059	6414	6390	6128	5865	7473	7019
USA	0	6039	4144	3438	3875	3660	3492	3505	3417	4977	5036

Table 1155: MAgPIE m4p.som — Prices—Agriculture—Poultry meat (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	4257	4256	4213	4352	4459	4580	4348
CAZ	4277	4325	4399	4285	4493	4547	4357
CHA	3572	3319	2879	2791	2637	2525	2504
EUR	3226	3578	3819	4003	4019	4118	4001
IND	4675	4663	4678	4855	4753	4817	4507
JPN	3237	3271	3292	3424	3601	3731	3488
LAM	3096	3154	3088	3080	3151	3528	3165
MEA	4115	4102	4096	4295	4398	4575	4298
NEU	3832	3792	3751	3703	3641	3477	3149
OAS	3908	3822	3642	3533	3381	3365	3030
REF	4275	4233	4204	4260	4225	4081	3764
SSA	6663	6372	6206	5883	5855	5826	5595
USA	5238	5261	5346	6313	6873	6857	6281

Table 1156: MAgPIE m4p.som — Prices—Agriculture—Poultry meat (US\$05/tDM) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	3395	3465	3481	3640	3695	3796	3801	3857	4013	3976	3918
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1157: WBGEM — Prices—Agriculture—Poultry meat (US\$05/tDM) [PART 1/6]



	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	3903	3843	3709	3216	3008	3123	3086	2832	2704	2514	2567
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1158: WBGEM — Prices—Agriculture—Poultry meat (US\$05/tDM) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	2597	2711	3137	3040	2919	2615	2711	2990	2834	2792	2744
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1159: WBGEM — Prices—Agriculture—Poultry meat (US\$05/tDM) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	3024	3152	2882	3299	3389	3669	3552	3567	3967	3979	3970
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1160: WBGEM — Prices—Agriculture—Poultry meat (US\$05/tDM) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	4251	4023	3675	3911	3928	4238	4098	3759	4086	4518	4867
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1161: WBGEM — Prices—Agriculture—Poultry meat (US\$05/tDM) [PART 5/6]

	2015	2016
GLO	5608	5678
CAZ		
CHA		
EUR		
IND		
JPN		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 1162: WBGEM — Prices—Agriculture—Poultry meat (US\$05/tDM) [PART 6/6]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	2989	3002	3034	3108	3093	3088	3097	3091	3098	3066	3057
CAZ	3954	3953	3954	3948	3935	3953	3917	3893	3885	3877	3841
CHA	3302	3312	3318	3314	3290	3282	3269	3252	3250	3255	3231
EUR	3407	3412	3425	3429	3442	3433	3427	3417	3417	3391	3391
IND	4065	4075	4085	4093	4101	4108	4103	4097	4091	4086	4081
JPN	4982	4982	4982	4982	4982	4982	4982	4982	4982	4982	4982
LAM	3158	3145	3098	3075	3010	2989	2985	2967	2949	2926	2932
MEA	3806	3778	3773	3767	3742	3723	3715	3715	3713	3708	3678
NEU	589	635	777	876	965	998	1004	968	919	867	890
OAS	3332	3309	3311	3291	3273	3218	3189	3237	3208	3154	3214
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	3410	3438	3507	3564	3596	3632	3680	3715	3765	3776	3804
USA	3105	3103	3103	3103	3103	3103	3104	3102	3101	3101	3102

Table 1163: FAO — Prices—Agriculture—Poultry meat (US\$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	3067	3072	3052	3038	3075	3042	3022	3023	3005	2996	2985
CAZ	3829	3839	3805	3777	3789	3770	3747	3753	3722	3731	3743
CHA	3177	3202	3211	3195	3171	3060	3026	3028	3005	2948	2940
EUR	3401	3400	3379	3387	3380	3375	3384	3390	3369	3376	3386
IND	4077	4078	4079	4079	4079	4082	4097	4102	4102	4107	4111
JPN	4982	4982	4982	4982	4982	4982	4982	4982	4982	4982	4982
LAM	2928	2921	2942	2982	3000	2987	2949	2897	2859	2870	2903
MEA	3634	3606	3605	3572	3596	3641	3579	3503	3476	3380	3210
NEU	906	896	844	726	715	743	705	717	671	640	620
OAS	3270	3234	3292	3269	3290	3306	3273	3361	3417	3403	3420
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	3765	3819	3789	3845	3848	3833	3886	3907	3926	4002	3954
USA	3102	3102	3102	3101	3102	3101	3101	3101	3101	3101	3101

Table 1164: FAO — Prices—Agriculture—Poultry meat (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	2990	2987	2993	3002	3007	3014	3005	3026	3081	3389	3392
CAZ	3727	3745	3726	3725	3722	3722	3712	3717	3713	3701	3703
CHA	2875	2895	2908	2982	3007	3105	3082	3113	3210	3242	3298
EUR	3398	3389	3394	3380	3374	3375	3380	3374	3387	3469	3543
IND	4111	4107	4105	4096	4050	4046	4035	4021	3998	3995	3993
JPN	4982	4982	4982	4982	4982	4982	4982	4982	4982	4982	4982
LAM	2893	2939	2943	2967	2950	2942	2874	2880	2917	2906	2890
MEA	3373	3357	3372	3489	3517	3554	3461	3565	3977	3925	3911
NEU	682	623	662	625	599	624	678	634	685	1444	1343
OAS	3465	3436	3431	3475	3507	3494	3562	3612	3605	3597	3598
REF	0	0	0	0	0	0	0	0	0	4350	4357
SSA	4004	3994	4018	4063	4102	4094	4114	4130	4066	4051	4294
USA	3101	3101	3101	3102	3103	3103	3103	3103	3103	3102	3102

Table 1165: FAO — Prices—Agriculture—Poultry meat (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	3381	3372	3371	3363	3350	3337	3357	3366	3363	3351	3340
CAZ	3715	3716	3714	3687	3682	3696	3695	3713	3693	3684	3684
CHA	3336	3402	3383	3396	3427	3441	3451	3461	3460	3472	3480
EUR	3527	3525	3511	3499	3484	3486	3591	3583	3582	3619	3593
IND	3996	3999	4002	4003	3996	3991	3984	3981	3974	3969	3966
JPN	4982	4982	4982	4982	4982	4982	4982	4982	4982	4982	4982
LAM	2884	2882	2883	2886	2870	2864	2878	2904	2902	2861	2836
MEA	3871	3819	3860	3878	3906	3851	3848	3834	3812	3865	3858
NEU	1295	1367	1556	1509	1406	1223	1193	1223	1205	1026	1112
OAS	3655	3653	3673	3645	3525	3523	3543	3523	3533	3470	3495
REF	4395	4422	4385	4407	4421	4435	4458	4474	4502	4491	4483
SSA	4314	4289	4296	4278	4277	4246	4208	4209	4223	4177	4210
USA	3101	3101	3101	3101	3100	3100	3100	3100	3100	3100	3099

Table 1166: FAO — Prices—Agriculture—Poultry meat (US\$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	3352	3352	3346	3341	3350	3337	3324
CAZ	3676	3668	3656	3671	3660	3648	3623
CHA	3501	3502	3515	3533	3537	3541	3537
EUR	3580	3568	3567	3576	3559	3550	3547
IND	3963	3960	3956	3955	3953	3952	3953
JPN	4982	4982	4982	4982	4982	4982	4982
LAM	2880	2880	2861	2830	2826	2795	2778
MEA	3881	3872	3838	3883	3927	3934	3872
NEU	1059	1017	996	1088	961	910	882
OAS	3424	3394	3348	3308	3308	3303	3312
REF	4454	4434	4453	4433	4433	4424	4430
SSA	4212	4285	4279	4279	4275	4262	4248
USA	3099	3099	3099	3099	3099	3098	3098

Table 1167: FAO — Prices—Agriculture—Poultry meat (US\$05/tDM) [PART 5/5]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	1174	1243	1332	1460	1005	1018	948	936	901	864
CAZ	0	1790	1602	1535	1485	1475	1623	1538	1379	1332	1284
CHA	0	1000	1049	1137	1026	556	587	541	526	492	457
EUR	0	2212	2448	2511	2626	3131	3241	3078	2939	2746	2499
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	1194	1276	1432	1545	1597	1377	1230	1143	1311	1375
LAM	0	689	714	504	1101	375	405	459	730	669	711
MEA	0	807	801	1215	1359	1290	1514	1614	1386	1454	1442
NEU	0	0	98	67	71	513	537	529	477	4127	4136
OAS	0	879	924	1571	1554	1516	1040	650	446	511	621
REF	0	0	33	254	515	710	962	1088	1082	612	631
SSA	16	931	852	999	999	1198	1221	1226	1177	797	744
USA	0	1267	1272	1338	1381	0	0	0	0	0	0

Table 1168: FAOp — Prices—Agriculture—Poultry meat (US\$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	835	885	948	1037	1070	1089	1256	1742	1728	1594	1559
CAZ	1263	1223	1418	1609	1633	1637	1899	2206	2102	2217	2454
CHA	352	481	643	806	849	908	1115	2842	2902	1691	2266
EUR	2450	2579	3007	3292	3260	3310	3637	4876	4133	4067	3250
IND	890	0	0	0	0	0	0	0	0	0	0
JPN	1220	1183	1259	1309	1208	1127	1174	1435	1552	1978	2194
LAM	768	711	594	584	682	712	782	875	878	990	869
MEA	1318	1419	1113	1128	1143	1116	1267	1457	1351	1544	1697
NEU	2403	3774	4976	6117	6261	7279	9892	9759	10714	11289	10466
OAS	601	655	642	748	954	1073	1103	1181	1326	1509	1177
REF	785	749	778	950	1094	1047	1233	1498	1308	1644	1710
SSA	794	852	957	931	939	939	1083	771	840	895	949
USA	0	0	0	0	0	0	0	0	0	0	0

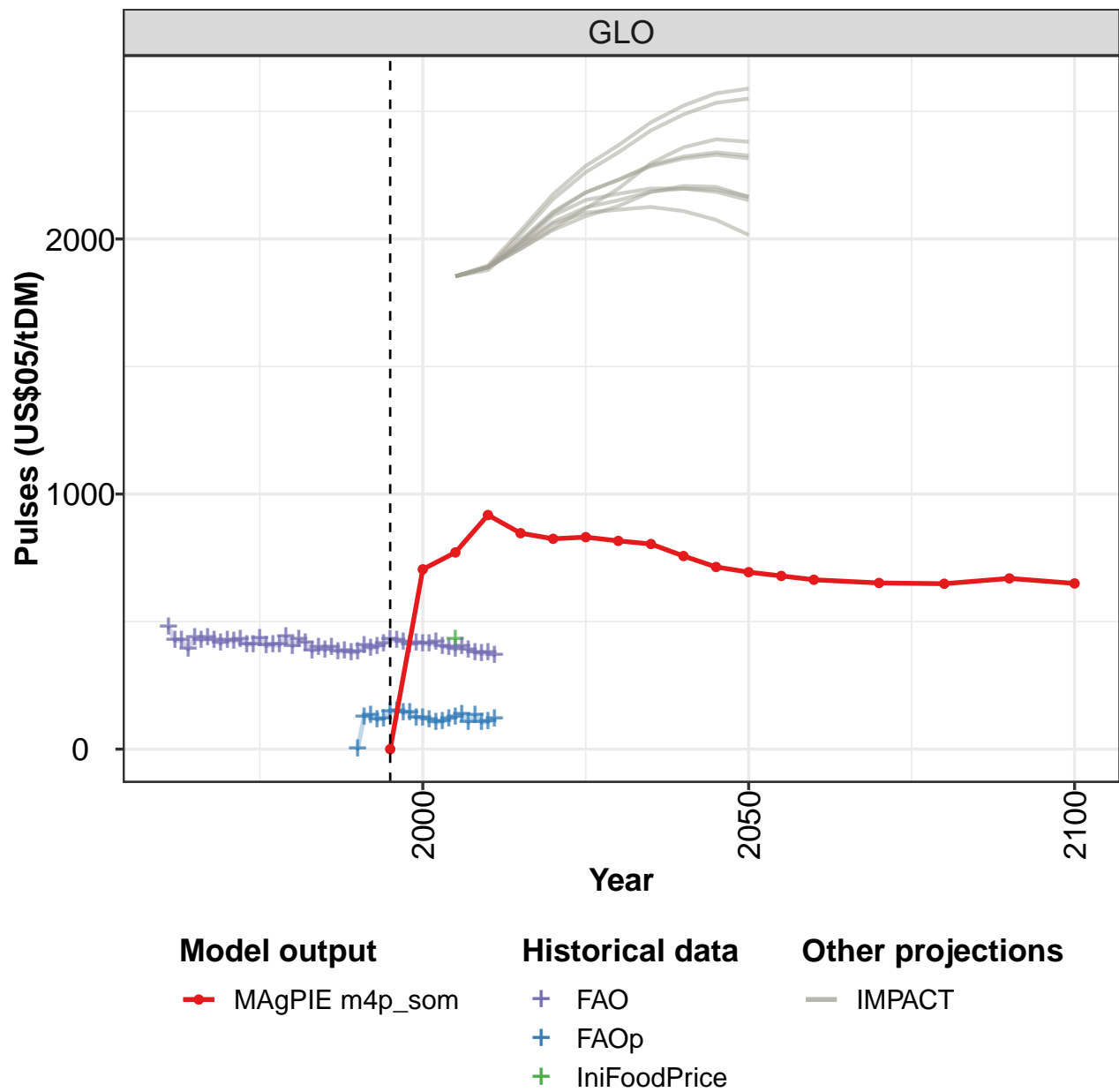
Table 1169: FAOp — Prices—Agriculture—Poultry meat (US\$05/tDM) [PART 2/3]

	2005
GLO	8277
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 1170: IniFoodPrice — Prices—Agriculture—Poultry meat (US\$05/tDM)

36.25 Pulses

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

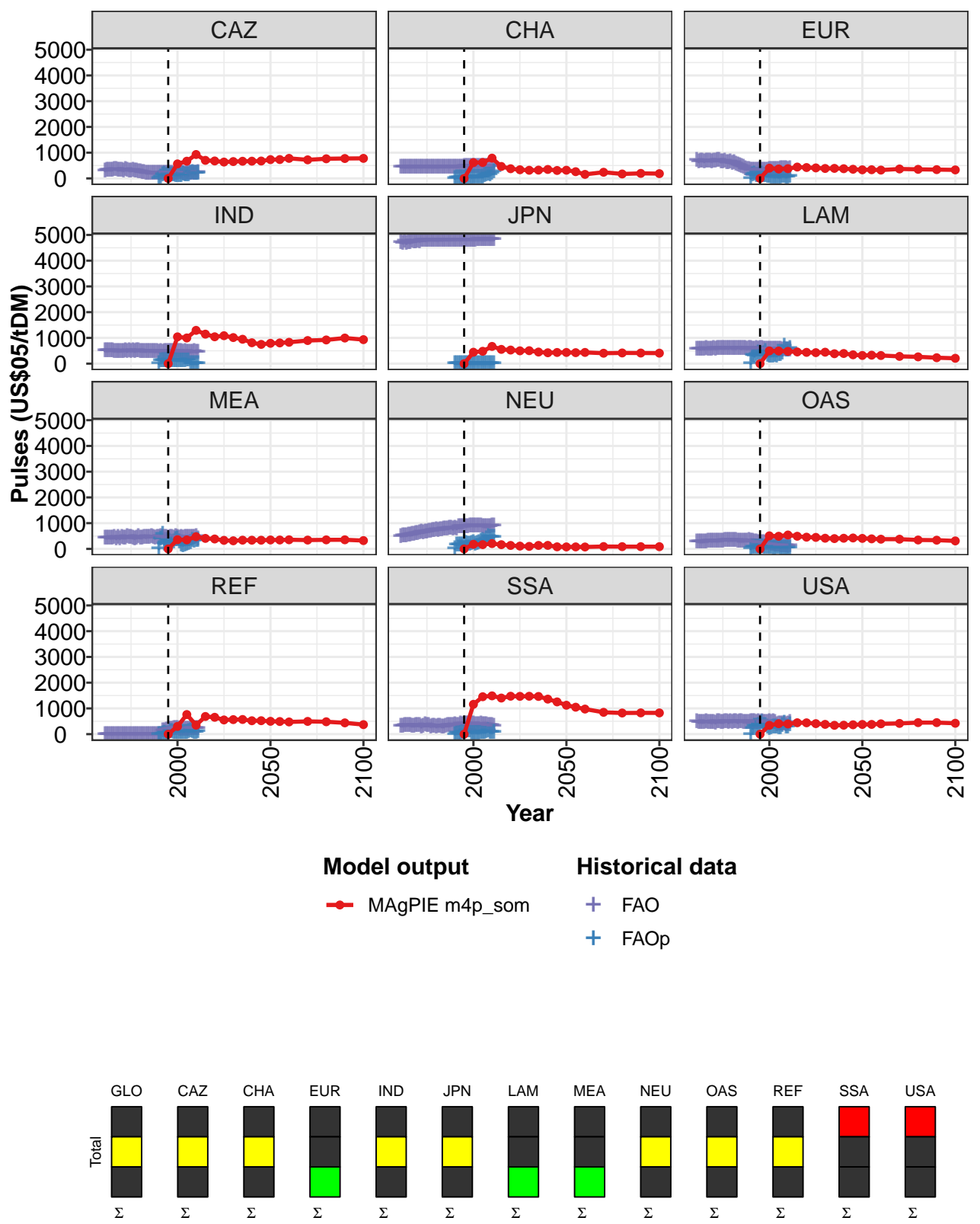


Figure 317: MAgPIE m4p\_som — Prices—Agriculture—Pulses (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	705	771	918	847	825	831	816	804	757	714
CAZ	0	564	669	929	702	679	636	655	667	670	676
CHA	0	615	620	788	465	376	336	317	323	348	308
EUR	0	397	366	378	441	423	408	386	390	377	356
IND	0	1041	999	1294	1147	1044	1086	1014	948	813	749
JPN	0	444	481	670	555	529	499	505	451	424	435
LAM	0	495	492	478	454	439	428	445	386	395	344
MEA	0	358	350	474	408	385	333	316	339	338	338
NEU	0	179	166	207	164	135	109	98	136	137	82
OAS	0	508	491	540	492	456	448	415	401	415	425
REF	0	301	762	350	686	656	552	565	570	521	523
SSA	0	1159	1454	1488	1403	1474	1469	1472	1465	1362	1253
USA	0	343	407	396	443	441	409	380	344	349	364

Table 1171: MAgPIE m4p\_som — Prices—Agriculture—Pulses (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	694	679	664	651	649	669	650
CAZ	730	733	778	722	763	774	779
CHA	319	262	157	240	172	196	185
EUR	334	337	324	367	353	341	331
IND	791	806	830	898	921	996	933
JPN	436	428	437	406	416	413	409
LAM	320	329	316	283	264	231	208
MEA	348	347	355	343	352	354	324
NEU	78	78	75	92	88	87	88
OAS	408	391	377	377	346	339	311
REF	499	491	475	496	481	439	370
SSA	1124	1047	975	848	822	827	825
USA	377	378	401	417	448	448	423

Table 1172: MAgPIE m4p\_som — Prices—Agriculture—Pulses (US\$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	477	425	427	391	435	426	437	425	415	426	424
CAZ	304	317	326	320	330	351	358	321	331	312	303
CHA	433	435	433	431	432	434	434	435	437	438	434
EUR	703	653	681	674	651	689	675	670	662	674	678
IND	496	491	496	508	497	486	488	480	483	485	491
JPN	4720	4690	4771	4673	4716	4696	4755	4744	4750	4764	4750
LAM	579	577	571	578	573	582	578	576	579	582	580
MEA	437	416	432	414	421	448	402	452	404	460	420
NEU	495	508	525	526	550	538	563	577	589	590	626
OAS	287	280	271	269	280	288	291	315	297	303	303
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	314	320	328	331	338	329	314	318	355	342	335
USA	489	459	469	455	466	480	467	462	447	458	439

Table 1173: FAO — Prices—Agriculture—Pulses (US\$05/tDM) [PART 1/5]



	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	429	410	411	435	404	408	408	441	404	429	418
CAZ	339	318	303	296	332	289	284	275	273	239	231
CHA	436	437	437	437	434	436	432	431	432	434	437
EUR	698	706	641	643	669	621	628	639	600	616	567
IND	498	479	496	487	493	479	491	495	481	479	477
JPN	4785	4790	4793	4791	4791	4793	4794	4793	4791	4787	4800
LAM	584	590	597	593	590	596	593	607	587	588	584
MEA	422	471	460	460	426	406	433	471	428	436	464
NEU	669	631	655	669	702	695	724	720	742	732	752
OAS	299	304	315	318	343	339	321	329	327	332	333
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	280	313	373	348	337	293	307	312	290	299	309
USA	478	476	460	458	476	500	452	476	474	494	484

Table 1174: FAO — Prices—Agriculture—Pulses (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	385	399	388	401	382	385	379	380	406	394	403
CAZ	214	206	210	202	213	202	205	218	213	209	197
CHA	439	439	443	441	439	444	443	447	437	441	454
EUR	523	493	462	427	394	366	364	327	330	327	326
IND	474	489	475	475	474	466	466	458	491	451	476
JPN	4793	4803	4803	4803	4804	4804	4806	4807	4807	4808	4807
LAM	606	603	582	591	586	575	581	587	578	574	581
MEA	440	458	463	476	467	411	463	451	479	455	458
NEU	759	770	771	774	800	811	769	811	783	876	866
OAS	303	295	295	293	308	306	328	301	293	270	263
REF	0	0	0	0	0	0	0	0	0	146	146
SSA	287	285	324	335	329	341	355	361	333	352	397
USA	455	484	491	467	472	452	459	496	482	480	462

Table 1175: FAO — Prices—Agriculture—Pulses (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	413	431	425	421	410	418	415	411	419	402	400
CAZ	192	196	198	189	188	204	210	224	230	206	188
CHA	451	457	456	456	456	465	465	465	460	463	466
EUR	330	342	336	328	324	330	338	350	347	343	347
IND	483	486	475	482	476	476	477	488	476	452	465
JPN	4810	4811	4810	4811	4811	4811	4811	4810	4812	4812	4812
LAM	575	585	583	574	572	566	558	570	570	562	555
MEA	457	436	447	443	429	478	463	432	443	430	456
NEU	870	879	875	881	888	902	892	892	892	895	895
OAS	256	254	241	238	228	219	208	195	175	172	163
REF	151	166	188	206	220	208	213	196	204	199	195
SSA	374	396	394	399	369	391	389	375	356	374	390
USA	489	464	488	455	460	473	481	466	477	455	381

Table 1176: FAO — Prices—Agriculture—Pulses (US\$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	391	402	390	380	373	378	367
CAZ	202	208	202	192	200	214	220
CHA	464	462	460	463	463	461	458
EUR	350	368	384	388	368	352	369
IND	458	462	453	460	463	452	457
JPN	4812	4812	4812	4812	4812	4812	4812
LAM	553	560	549	557	546	542	526
MEA	440	451	465	462	446	478	401
NEU	878	863	858	869	869	886	889
OAS	153	138	136	114	113	112	113
REF	200	189	217	209	216	234	214
SSA	383	382	361	352	341	346	307
USA	398	401	386	413	384	410	445

Table 1177: FAO — Prices—Agriculture—Pulses (US\$05/tDM) [PART 5/5]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	127	134	115	119	146	151	143	143	123	123
CAZ	0	53	137	181	123	148	149	147	138	128	109
CHA	0	27	28	32	24	37	51	51	63	40	45
EUR	0	148	175	116	119	150	162	126	110	85	80
IND	0	130	107	109	122	138	123	127	132	126	118
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	0	319	296	360	421	340	370	374	485	320	301
MEA	0	403	562	174	204	308	262	244	262	362	385
NEU	0	163	162	172	157	264	219	185	195	207	241
OAS	0	76	74	64	78	99	98	74	71	73	76
REF	0	0	20	31	25	27	93	111	66	62	88
SSA	0	39	30	51	60	90	144	139	121	54	57
USA	0	234	305	320	332	310	445	332	341	281	226

Table 1178: FAOp — Prices—Agriculture—Pulses (US\$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	116	106	109	118	126	137	106	133	105	107	118
CAZ	123	129	168	137	147	131	200	223	192	197	216
CHA	48	52	53	59	61	117	141	182	145	204	254
EUR	71	69	63	66	48	57	74	74	60	68	78
IND	119	117	119	132	138	153	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	306	309	317	304	368	370	412	683	524	541	593
MEA	279	150	141	167	182	207	258	330	314	329	345
NEU	177	210	253	296	331	318	385	492	442	449	447
OAS	64	52	53	58	59	46	49	50	44	51	52
REF	89	72	65	80	74	90	133	90	73	83	101
SSA	59	53	55	63	78	80	93	131	68	61	84
USA	267	291	290	284	255	238	337	436	285	270	367

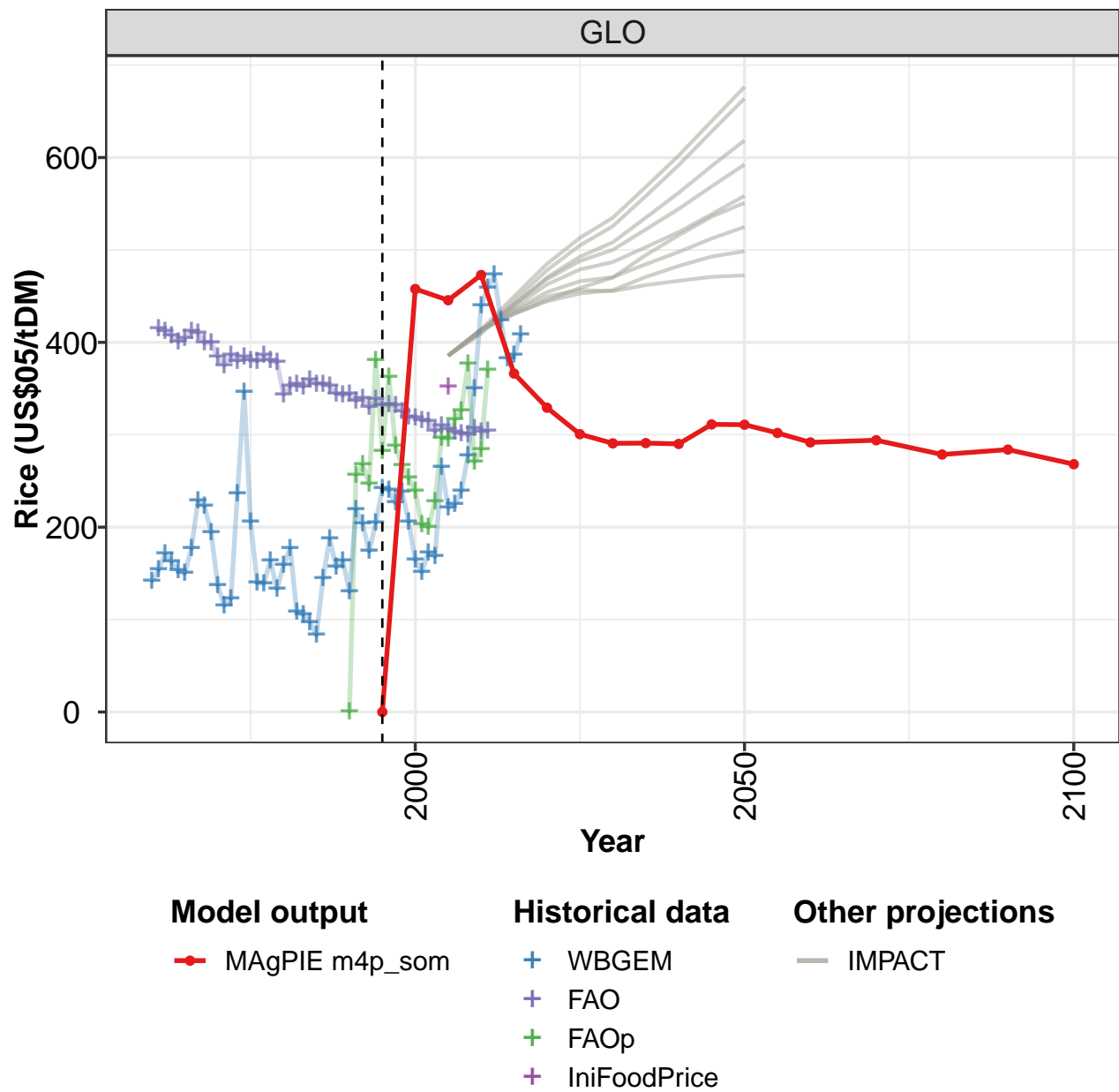
Table 1179: FAOp — Prices—Agriculture—Pulses (US\$05/tDM) [PART 2/3]

	2005
GLO	431
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 1180: IniFoodPrice — Prices—Agriculture—Pulses (US\$05/tDM)

36.26 Rice

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

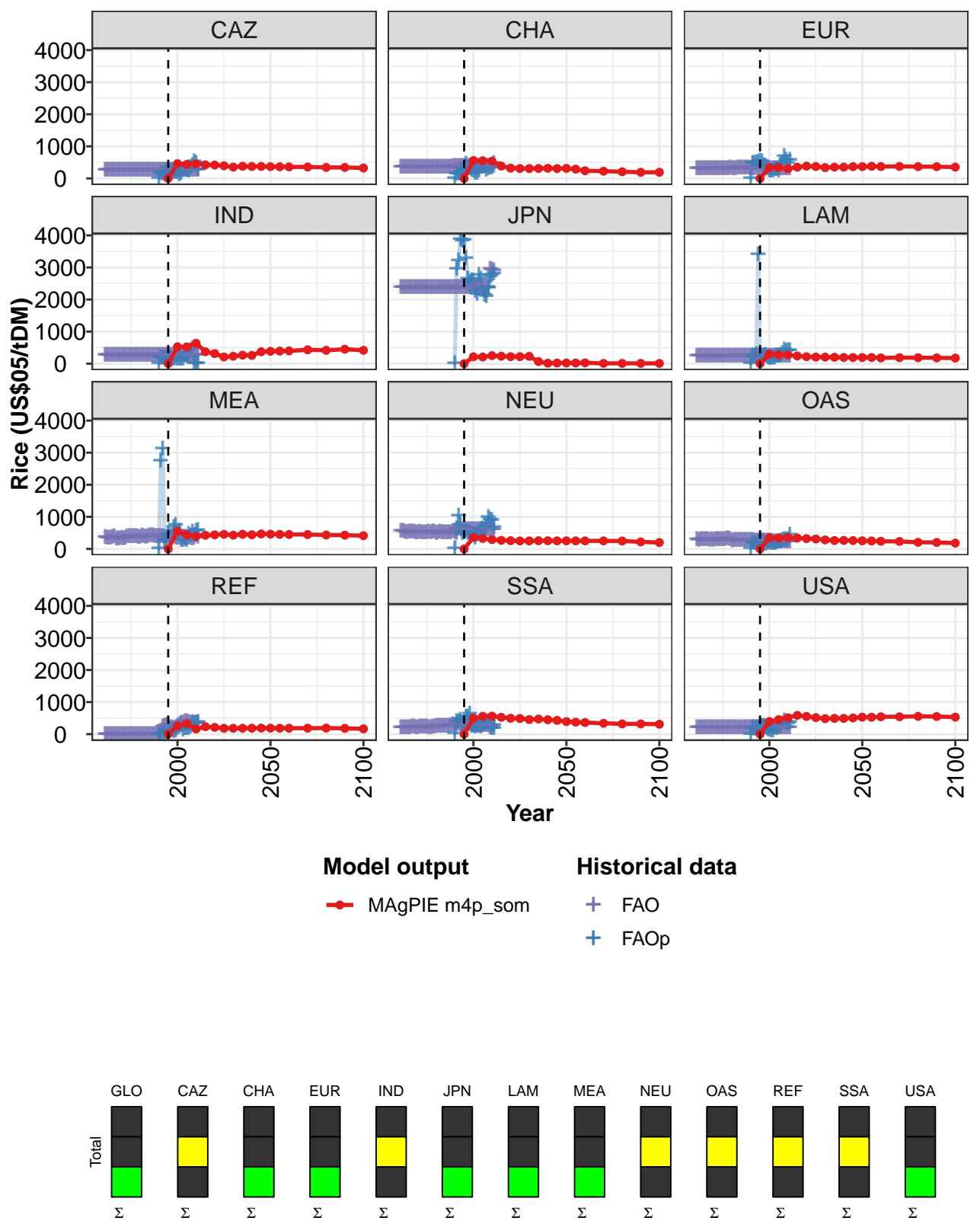


Figure 318: MAgPIE m4p\_som — Prices—Agriculture—Rice (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	458	446	473	366	329	301	291	291	290	311
CAZ	0	461	437	456	424	416	394	351	378	372	373
CHA	0	558	551	540	384	320	309	308	310	316	307
EUR	0	332	339	303	350	382	370	338	351	352	367
IND	0	527	522	636	372	314	210	232	266	258	372
JPN	0	215	207	250	232	218	219	229	65	15	20
LAM	0	295	275	273	239	217	205	205	200	194	192
MEA	0	551	441	393	424	439	455	428	457	442	467
NEU	0	359	326	290	268	257	248	250	255	255	251
OAS	0	350	338	356	338	321	310	280	261	265	261
REF	0	254	328	162	231	211	183	183	185	186	190
SSA	0	498	557	561	525	495	489	455	471	449	430
USA	0	393	453	510	586	552	516	484	492	492	505

Table 1181: MAgPIE m4p\_som — Prices—Agriculture—Rice (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	311	302	292	294	279	284	268
CAZ	368	363	360	356	342	342	326
CHA	314	289	239	225	208	191	191
EUR	368	377	369	374	368	365	352
IND	385	391	398	432	416	449	416
JPN	21	20	25	9	9	8	9
LAM	192	193	180	187	187	180	175
MEA	460	454	450	448	433	427	412
NEU	251	251	250	250	246	217	199
OAS	253	246	238	232	206	201	181
REF	188	186	185	186	189	181	165
SSA	392	373	362	338	320	320	309
USA	530	528	542	542	555	550	531

Table 1182: MAgPIE m4p\_som — Prices—Agriculture—Rice (US\$05/tDM) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	141	154	171	162	153	150	177	228	223	194	137
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1183: WBGEM — Prices—Agriculture—Rice (US\$05/tDM) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	115	122	236	346	206	140	139	164	133	159	177
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1184: WBGEM — Prices—Agriculture—Rice (US\$05/tDM) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	108	105	97	83	145	187	156	164	130	219	204
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1185: WBGEM — Prices—Agriculture—Rice (US\$05/tDM) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	174	205	242	240	226	238	206	164	151	172	168
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1186: WBGEM — Prices—Agriculture—Rice (US\$05/tDM) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	265	221	225	239	278	350	439	459	473	424	382
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1187: WBGEM — Prices—Agriculture—Rice (US\$05/tDM) [PART 5/6]

	2015	2016
GLO	386	408
CAZ		
CHA		
EUR		
IND		
JPN		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 1188: WBGEM — Prices—Agriculture—Rice (US\$05/tDM) [PART 6/6]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	415	412	407	401	404	412	410	399	400	384	375
CAZ	257	257	257	257	257	257	257	257	257	257	257
CHA	353	355	357	358	358	359	359	358	359	360	361
EUR	308	306	308	308	308	310	312	312	314	313	316
IND	257	257	257	257	257	257	257	257	257	257	257
JPN	2365	2365	2365	2365	2365	2365	2365	2365	2365	2365	2365
LAM	234	234	235	237	240	241	240	242	238	235	236
MEA	365	341	332	342	365	380	324	313	322	335	325
NEU	546	546	524	502	519	532	531	525	503	513	520
OAS	287	269	286	288	281	300	282	265	285	278	284
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	203	214	200	204	206	200	219	220	213	214	215
USA	211	211	211	211	211	211	211	211	211	211	211

Table 1189: FAO — Prices—Agriculture—Rice (US\$05/tDM) [PART 1/5]



	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	386	380	384	381	379	386	380	378	344	352	355
CAZ	257	257	257	257	257	257	257	257	257	257	257
CHA	360	362	361	361	360	361	362	362	363	363	363
EUR	314	316	318	318	318	315	318	319	316	317	317
IND	257	257	257	257	257	257	257	257	257	257	257
JPN	2365	2365	2365	2365	2365	2365	2365	2365	2365	2365	2365
LAM	238	239	237	235	240	238	241	243	242	242	241
MEA	344	376	384	386	393	378	387	359	368	401	390
NEU	498	512	514	501	529	509	522	532	490	516	522
OAS	288	282	290	288	301	317	313	303	251	274	276
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	220	220	224	221	199	214	220	237	248	258	248
USA	211	211	211	211	211	211	211	211	211	211	211

Table 1190: FAO — Prices—Agriculture—Rice (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	352	359	354	355	352	344	343	344	337	340	329
CAZ	257	257	257	257	257	257	257	257	257	257	257
CHA	363	364	364	365	365	365	365	366	366	366	366
EUR	323	322	323	323	320	321	320	317	315	317	319
IND	257	257	257	257	257	257	257	257	257	257	257
JPN	2365	2365	2365	2365	2365	2365	2365	2365	2365	2365	2365
LAM	245	241	241	239	243	241	241	244	244	244	242
MEA	362	395	409	404	403	391	391	382	397	384	372
NEU	516	513	512	497	495	516	544	524	503	618	606
OAS	277	280	276	276	275	280	272	269	260	256	244
REF	0	0	0	0	0	0	0	0	0	219	247
SSA	251	251	258	249	259	269	296	278	306	311	302
USA	211	211	211	211	211	211	211	211	211	211	211

Table 1191: FAO — Prices—Agriculture—Rice (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	338	332	332	331	325	319	319	315	315	304	310
CAZ	257	257	257	257	257	257	257	257	257	257	257
CHA	366	366	367	366	367	367	366	367	366	366	367
EUR	316	315	313	312	312	312	311	311	312	312	312
IND	257	257	257	257	257	257	257	257	257	257	257
JPN	2365	2365	2365	2365	2365	2365	2365	2365	2365	2365	2365
LAM	238	237	233	232	236	234	240	242	243	239	239
MEA	353	353	371	346	382	344	328	339	358	365	341
NEU	607	606	611	612	610	608	608	605	605	606	606
OAS	248	242	249	252	243	238	236	237	230	222	227
REF	269	294	209	210	187	212	260	297	350	353	394
SSA	286	301	297	303	295	301	302	288	286	283	285
USA	211	211	211	211	211	211	211	211	211	211	211

Table 1192: FAO — Prices—Agriculture—Rice (US\$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	306	303	301	300	307	303	304
CAZ	257	257	257	257	257	257	257
CHA	367	367	368	367	367	367	367
EUR	313	314	315	314	315	313	312
IND	257	257	257	257	257	257	257
JPN	2365	2365	2365	2365	2957	2932	2899
LAM	242	241	243	244	241	247	247
MEA	350	334	334	315	345	404	359
NEU	605	605	605	605	606	606	606
OAS	220	216	213	216	217	209	213
REF	393	379	350	370	327	346	362
SSA	279	281	267	279	267	259	264
USA	211	211	211	211	211	211	211

Table 1193: FAO — Prices—Agriculture—Rice (US\$05/tDM) [PART 5/5]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	257	268	246	381	282	362	287	267	253	239
CAZ	0	158	138	134	203	181	210	211	186	197	178
CHA	0	140	136	170	168	209	438	302	316	268	234
EUR	0	466	477	486	487	541	529	412	375	341	243
IND	0	184	176	162	162	173	178	137	138	166	152
JPN	0	2949	3202	3862	3837	3849	3270	2642	2545	2595	2565
LAM	0	230	215	294	3399	220	235	242	268	192	179
MEA	0	2744	3129	251	268	465	388	374	670	743	453
NEU	0	631	1038	741	494	512	565	479	498	460	449
OAS	0	188	185	166	187	213	248	232	158	183	195
REF	0	0	12	28	38	95	139	137	95	105	175
SSA	7	386	403	448	296	352	537	543	637	246	244
USA	0	192	149	202	171	232	244	254	225	151	143

Table 1194: FAOp — Prices—Agriculture—Rice (US\$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	203	200	228	296	296	316	326	376	271	284	369
CAZ	127	171	259	275	261	236	326	400	516	482	284
CHA	173	160	236	358	366	377	259	317	324	338	460
EUR	242	244	285	272	245	417	467	676	571	483	569
IND	143	143	154	239	234	298	397	443	0	0	0
JPN	2265	2171	2758	2634	2318	2144	2083	2352	2700	2751	2801
LAM	177	170	202	245	238	239	317	433	378	402	402
MEA	542	270	271	284	274	453	402	537	445	544	580
NEU	350	427	512	592	632	593	659	987	921	883	662
OAS	173	180	178	204	212	220	271	298	270	302	438
REF	228	266	142	177	183	175	219	299	356	345	336
SSA	232	257	241	232	308	317	335	399	214	168	179
USA	108	114	205	186	194	253	324	425	364	322	368

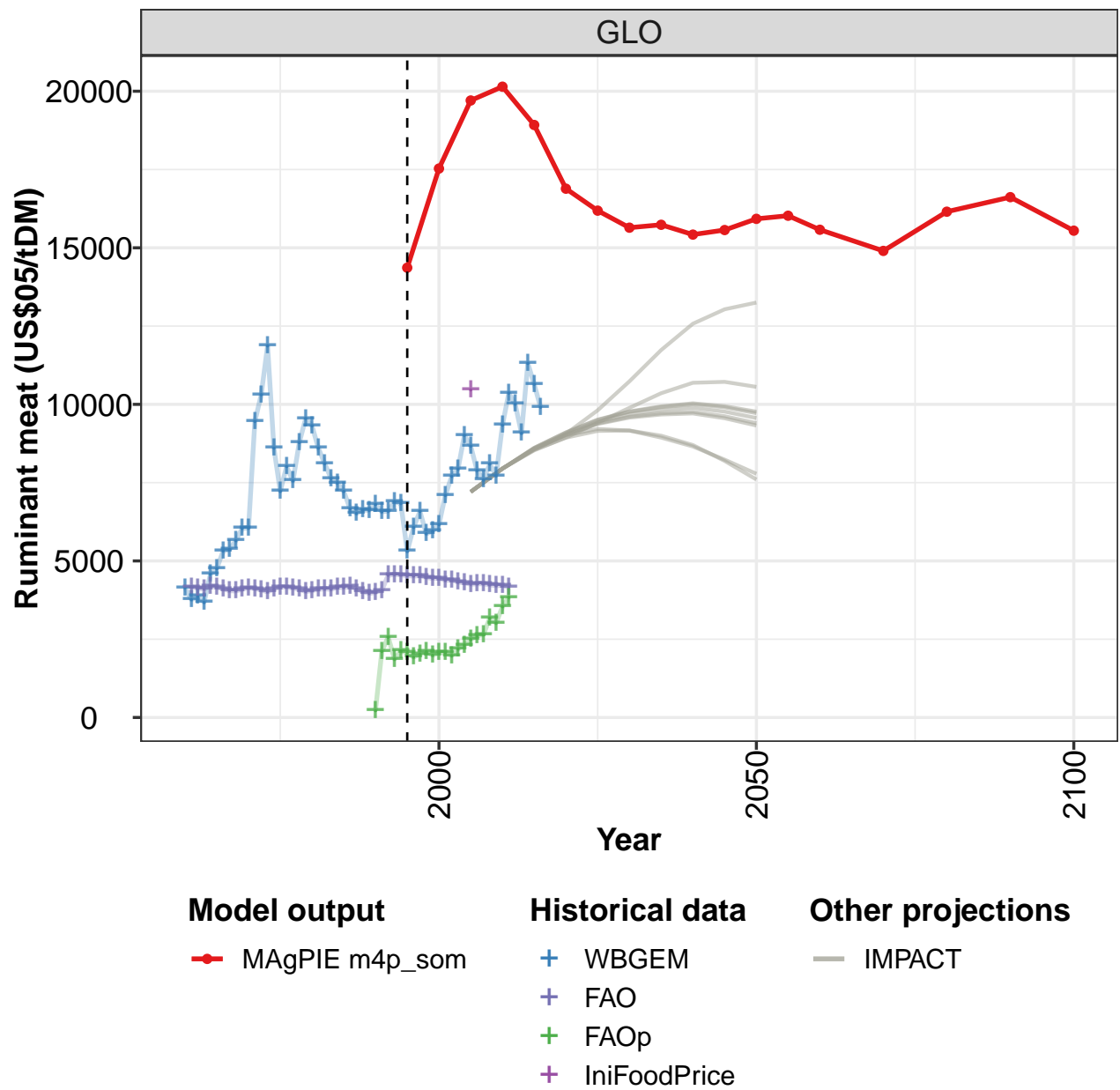
Table 1195: FAOp — Prices—Agriculture—Rice (US\$05/tDM) [PART 2/3]

	2005
GLO	352
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 1196: IniFoodPrice — Prices—Agriculture—Rice (US\$05/tDM)

36.27 Ruminant meat

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

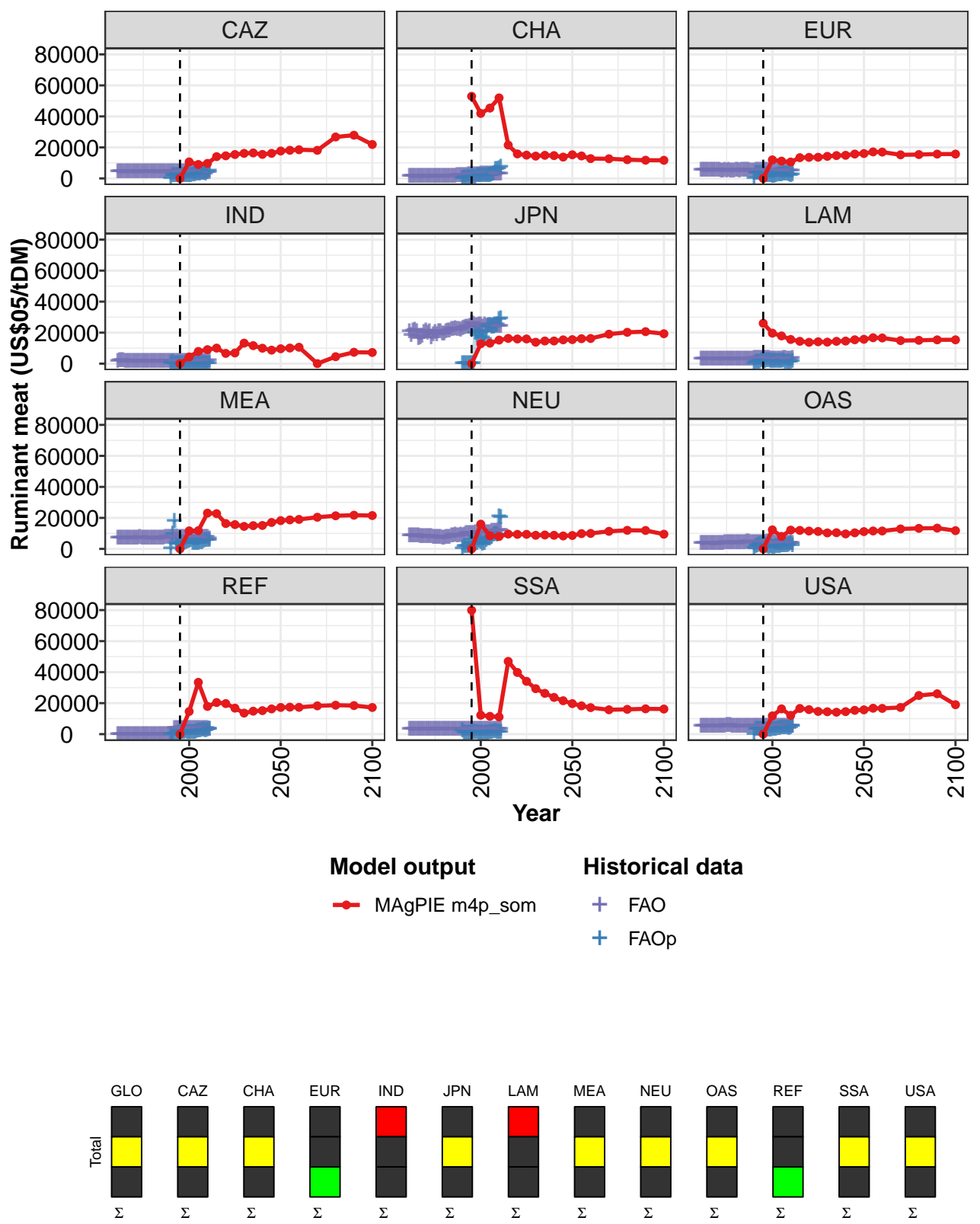


Figure 319: MAGPIE m4p\_som — Prices—Agriculture—Ruminant meat (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	14364	17531	19705	20146	18923	16888	16187	15643	15736	15422	15567
CAZ	0	10643	9000	9701	14031	14585	15414	16155	16420	15493	16175
CHA	52954	41919	45359	51931	21505	15814	15026	14390	14892	14718	13759
EUR	0	11964	11167	10567	13375	13566	13648	14228	14738	14910	15728
IND	0	4332	7877	9056	10026	6622	6898	13258	11618	9969	8731
JPN	0	12880	13218	15209	16277	15922	15934	13828	14627	14623	15349
LAM	26023	19683	17896	15605	14419	13761	14111	13887	14402	14576	15402
MEA	0	11641	11769	23088	22729	16362	15675	14517	15013	15129	17054
NEU	0	15952	8443	8027	9573	9388	9413	8795	8983	8780	8363
OAS	0	12278	8058	12127	11956	11528	11248	10330	10446	9670	10373
REF	0	14619	33432	17893	20403	19721	16783	13575	14824	15178	16273
SSA	79904	12219	11500	11092	46936	39809	34074	29331	26321	23700	21562
USA	0	11784	16299	12113	16577	15840	14646	14440	14142	14534	15353

Table 1197: MAgPIE m4p\_som — Prices—Agriculture—Ruminant meat (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	15925	16025	15577	14902	16153	16618	15547
CAZ	17663	18139	18496	18122	26722	27876	21894
CHA	15249	14491	12777	12659	12061	11743	11692
EUR	16049	17103	16984	15213	15386	15696	15702
IND	9621	10064	10588	25	4496	7356	7217
JPN	15502	16108	16237	19028	20220	20637	19304
LAM	15726	16702	16565	14882	15056	15369	15375
MEA	18246	18725	19016	20430	21363	21739	21510
NEU	8657	9846	9989	11345	11990	11896	9480
OAS	11171	11565	11553	12881	13252	13406	11784
REF	17224	17397	17299	18252	18664	18430	17198
SSA	19691	18255	17107	15719	16004	16334	16198
USA	15674	16730	16610	17230	24937	26037	18989

Table 1198: MAgPIE m4p\_som — Prices—Agriculture—Ruminant meat (US\$05/tDM) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	4146	3765	3871	3679	4579	4755	5317	5368	5644	6037	6054
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1199: WBGEM — Prices—Agriculture—Ruminant meat (US\$05/tDM) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	9456	10310	11867	8604	7229	8013	7554	8781	9548	9316	8602
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1200: WBGEM — Prices—Agriculture—Ruminant meat (US\$05/tDM) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	8106	7636	7492	7218	6663	6514	6628	6616	6803	6570	6593
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1201: WBGEM — Prices—Agriculture—Ruminant meat (US\$05/tDM) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	6896	6830	5307	6070	6582	5869	5954	6163	7093	7699	7935
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1202: WBGEM — Prices—Agriculture—Ruminant meat (US\$05/tDM) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	9012	8668	7888	7590	8092	7722	9337	10362	10006	9080	11309
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1203: WBGEM — Prices—Agriculture—Ruminant meat (US\$05/tDM) [PART 5/6]

	2015	2016
GLO	10644	9909
CAZ		
CHA		
EUR		
IND		
JPN		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 1204: WBGEM — Prices—Agriculture—Ruminant meat (US\$05/tDM) [PART 6/6]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	4174	4129	4100	4194	4158	4106	4048	4040	4096	4142	4116
CAZ	4242	4248	4268	4291	4349	4328	4287	4287	4274	4219	4214
CHA	1581	1498	1319	1226	1219	1259	1281	1302	1341	1338	1326
EUR	5307	5305	5311	5171	5143	5238	5240	5214	5252	5307	5246
IND	1744	1782	1782	1768	1754	1743	1721	1698	1679	1657	1630
JPN	20734	18239	21150	21882	20687	16476	16576	17592	19984	20982	19738
LAM	3166	3168	3161	3165	3174	3180	3177	3151	3152	3138	3156
MEA	7250	7163	7103	7115	7128	7158	7157	7236	7234	7151	7198
NEU	8522	8429	8605	8469	8282	8399	8157	7811	8113	8165	7976
OAS	3457	3539	3598	3759	3619	3427	3437	3414	3391	3518	3513
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	3097	3053	3086	3127	3133	3088	3101	3154	3243	3163	3224
USA	5102	5083	5088	5143	5309	5340	5268	5252	5269	5271	5175

Table 1205: FAO — Prices—Agriculture—Ruminant meat (US\$05/tDM) [PART 1/5]



	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	4072	4010	4107	4172	4164	4135	4094	4021	4054	4093	4109
CAZ	4236	4252	4270	4328	4344	4348	4329	4279	4224	4226	4244
CHA	1304	1366	1429	1481	1404	1423	1473	1456	1536	1537	1548
EUR	5056	5044	5121	5098	5114	5085	5045	5084	5143	5114	5088
IND	1613	1602	1589	1593	1585	1580	1588	1589	1595	1601	1603
JPN	20517	16869	18739	20010	18910	20448	20695	19243	19328	20860	21176
LAM	3122	3125	3145	3158	3155	3144	3140	3137	3142	3153	3154
MEA	7237	7283	7237	7217	7164	7056	6956	6866	6791	6871	6957
NEU	7889	7917	7672	7743	7657	7732	7455	7191	7271	7521	7557
OAS	3577	3707	3844	4093	3970	3858	3870	3941	3956	3956	3910
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	3235	3127	3154	3168	3183	3192	3253	3291	3408	3344	3350
USA	5284	5292	5316	5538	5537	5446	5391	5124	5053	5139	5252

Table 1206: FAO — Prices—Agriculture—Ruminant meat (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	4094	4154	4153	4178	4110	4023	3963	3996	4063	4543	4567
CAZ	4231	4205	4194	4208	4170	4176	4152	4187	4183	4150	4144
CHA	1575	1583	1548	1603	1757	1844	1945	1970	2067	2097	2226
EUR	5105	5136	5130	5192	5114	4997	4946	5053	5168	5244	5273
IND	1603	1602	1592	1595	1629	1630	1630	1634	1633	1632	1640
JPN	21337	22099	22073	22458	22187	22213	21519	22531	23319	23743	23734
LAM	3164	3158	3153	3211	3203	3201	3193	3290	3281	3282	3270
MEA	6964	6904	7056	7140	7293	7365	7535	7551	7609	7580	7557
NEU	7595	8543	8491	9103	8583	8599	8811	8668	9111	10074	9945
OAS	3844	3993	4281	4560	4483	4242	3903	3873	3867	4087	4258
REF	0	0	0	0	0	0	0	0	0	3816	3882
SSA	3379	3390	3366	3124	3182	3138	3092	3029	3046	3076	3368
USA	5220	5250	5253	5344	5290	5197	5149	5164	5126	5050	5050

Table 1207: FAO — Prices—Agriculture—Ruminant meat (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	4553	4528	4517	4527	4477	4441	4458	4378	4398	4320	4299
CAZ	4140	4106	4127	4149	4169	4172	4157	4136	4104	4068	4126
CHA	2231	2343	2429	2570	2620	2616	2663	2650	2653	2679	2708
EUR	5245	5264	5217	5188	5050	5019	5180	5170	5185	5110	5136
IND	1649	1658	1665	1675	1677	1679	1680	1682	1684	1686	1700
JPN	24219	25985	25448	24821	24797	25110	25083	23732	25235	24184	24651
LAM	3275	3274	3253	3269	3252	3220	3210	3204	3206	3205	3198
MEA	7393	7311	7344	7286	7236	7325	7396	7388	7511	7408	7401
NEU	10160	9974	9917	10396	10296	10507	10457	10574	10512	10344	10636
OAS	4223	4182	4224	4578	4683	4478	4340	4004	3833	3733	3718
REF	3940	3815	3878	3823	3783	3709	3718	3731	3737	3677	3673
SSA	3389	3295	3326	3336	3296	3283	3275	3238	3254	3255	3284
USA	5074	5115	5165	5158	5062	5086	5159	5129	5152	5096	4988

Table 1208: FAO — Prices—Agriculture—Ruminant meat (US\$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	4259	4267	4270	4237	4208	4219	4164
CAZ	4139	4121	4110	4089	4083	4096	4071
CHA	2705	2700	2749	2730	2727	2706	2703
EUR	5096	5079	5052	5012	5000	4937	4886
IND	1712	1726	1739	1749	1756	1759	1770
JPN	24378	24194	24351	24688	24201	24293	24257
LAM	3220	3261	3301	3210	3201	3235	3246
MEA	7382	7368	7359	7382	7441	7512	6365
NEU	10528	11350	11576	11448	11242	11982	12159
OAS	3652	3668	3623	3692	3767	3607	3736
REF	3647	3590	3611	3631	3599	3550	3417
SSA	3270	3196	3243	3286	3264	3275	3273
USA	4972	5069	5049	4966	4959	4972	4965

Table 1209: FAO — Prices—Agriculture—Ruminant meat (US\$05/tDM) [PART 5/5]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	217	2114	2565	1864	2123	2071	1926	2026	2108	1986	2066
CAZ	0	1891	1794	1746	1889	1802	1723	1865	1765	1883	1937
CHA	0	629	640	703	639	851	891	1116	1971	1748	1863
EUR	0	3323	3515	3259	3393	3169	2430	2147	2108	1708	1582
IND	0	959	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	19687	18165	20234	20698
LAM	0	893	1014	960	2183	1792	1688	1778	1819	1534	1661
MEA	0	9618	17971	2917	3029	3474	3901	3512	4018	4525	5144
NEU	0	1630	1762	1548	3364	3797	3057	2975	3510	4949	4283
OAS	0	1458	1874	2983	2866	3023	2482	1740	1346	1404	1328
REF	0	0	80	391	705	1005	1434	1443	1508	1038	1058
SSA	2412	608	581	730	827	1022	1074	1183	1229	657	628
USA	0	3306	3252	3339	3095	2837	2732	2911	2746	2918	3161

Table 1210: FAOp — Prices—Agriculture—Ruminant meat (US\$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	2071	1974	2184	2314	2490	2605	2650	3169	3017	3536	3838
CAZ	2024	2319	2353	2663	3045	3050	3283	3149	3130	3661	4777
CHA	1834	1866	1952	1979	2122	2353	2835	5672	5837	6521	7271
EUR	1601	1831	2244	2433	2537	2677	2752	2780	2173	2088	2222
IND	480	0	0	0	0	0	0	0	0	0	0
JPN	16997	15646	20502	24020	24475	23534	23604	24141	25013	28420	29262
LAM	1558	1341	1428	1499	1724	1800	1096	1075	987	1272	1394
MEA	5451	3685	3616	3465	3687	3934	4143	4926	5480	5351	5409
NEU	3244	3828	5389	6508	6670	7605	9189	9693	8961	20711	20180
OAS	1332	1738	1748	1750	2031	2136	2310	2083	2687	3484	2109
REF	1399	1388	1295	1687	2115	2281	2640	2822	2455	2615	3098
SSA	679	769	926	984	1102	1381	1698	1858	1199	1231	1409
USA	3281	3060	3657	3944	4114	4004	4124	4085	3674	4228	5180

Table 1211: FAOp — Prices—Agriculture—Ruminant meat (US\$05/tDM) [PART 2/3]

	2005
GLO	10464
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 1212: IniFoodPrice — Prices—Agriculture—Ruminant meat (US\$05/tDM)

36.28 Short rotation grasses

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale. ## geom\_path: Each group consists of only one observation. Do you need to adjust the group## aesthetic?

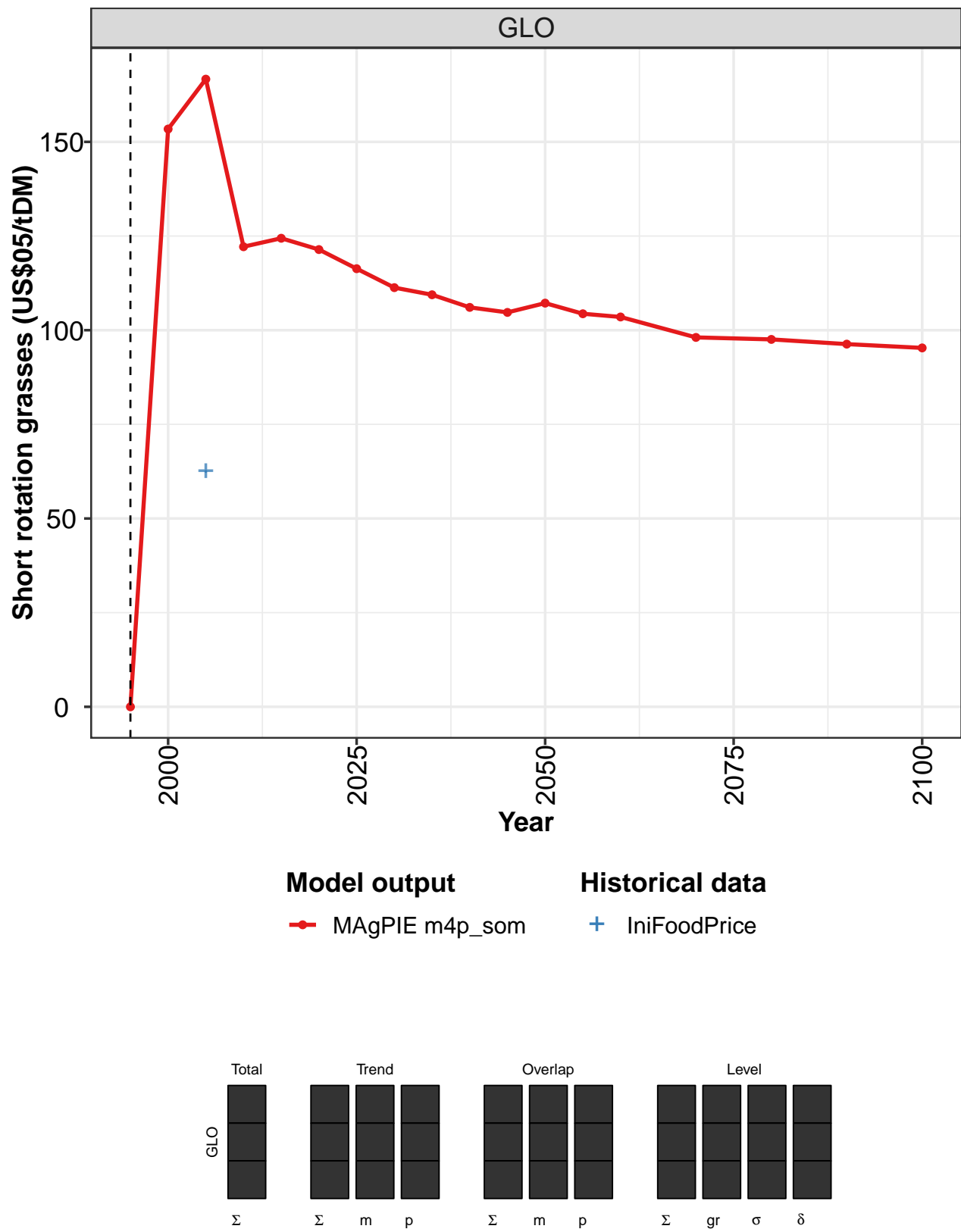


Figure 320: MAgPIE m4p\_som — Prices—Agriculture—Short rotation grasses (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	153	167	122	124	121	116	111	109	106	105

Table 1213: MAgPIE m4p\_som — Prices—Agriculture—Short rotation grasses (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	107	104	104	98	98	96	95

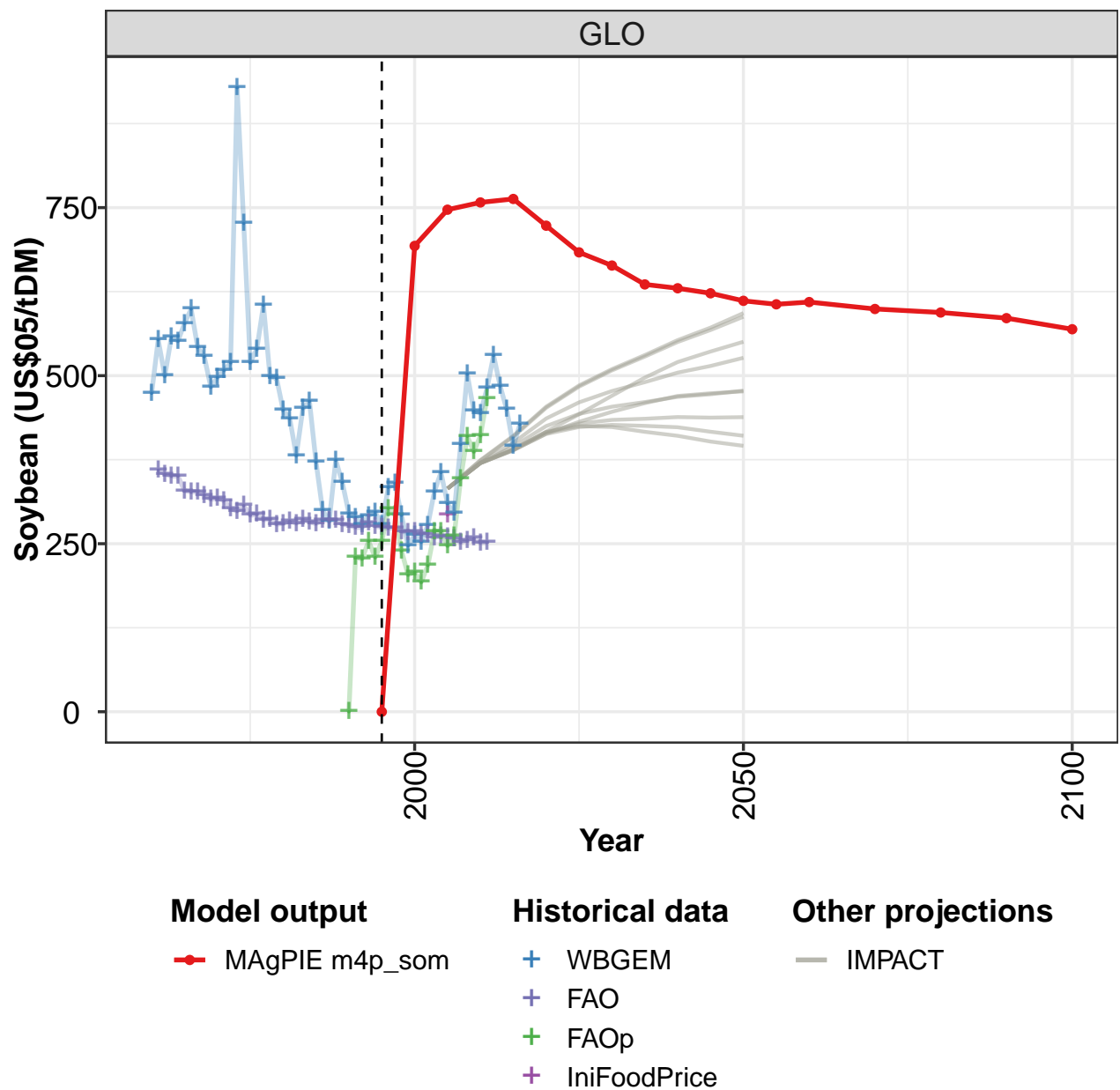
Table 1214: MAgPIE m4p\_som — Prices—Agriculture—Short rotation grasses (US\$05/tDM) [PART 2/2]

	2005
GLO	62.5

Table 1215: IniFoodPrice — Prices—Agriculture—Short rotation grasses (US\$05/tDM)

36.29 Soybean

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

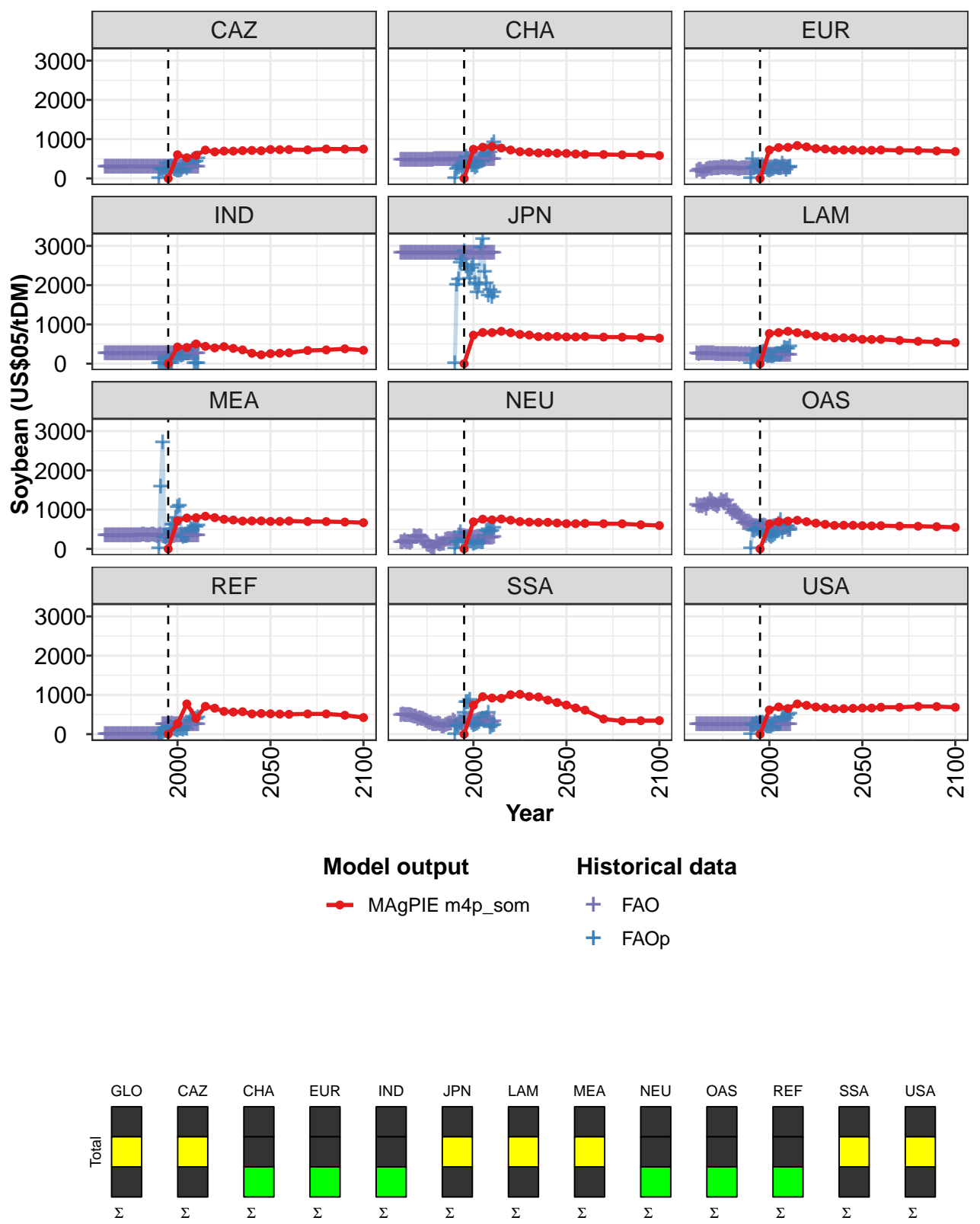


Figure 321: MAGPIE m4p\_som — Prices—Agriculture—Soybean (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	693	747	758	763	723	683	664	636	630	623
CAZ	0	603	526	589	722	676	697	695	707	714	705
CHA	0	743	795	812	773	724	682	669	648	651	641
EUR	0	725	785	793	838	802	763	749	724	726	726
IND	0	424	413	503	441	401	434	389	352	265	225
JPN	0	725	795	791	825	788	746	729	689	692	694
LAM	0	767	791	824	789	753	707	688	657	660	653
MEA	0	718	788	795	833	796	754	737	710	713	713
NEU	0	690	758	740	762	733	696	683	675	677	660
OAS	0	636	690	709	730	692	655	627	598	603	602
REF	0	268	770	403	709	661	580	563	572	516	525
SSA	0	736	954	921	912	1004	1015	960	947	868	805
USA	0	617	693	653	770	733	692	675	646	649	658

Table 1216: MAgPIE m4p\_som — Prices—Agriculture—Soybean (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	611	606	610	599	594	586	569
CAZ	736	732	735	728	750	746	748
CHA	636	623	612	609	601	596	583
EUR	715	716	726	714	711	700	685
IND	256	266	277	336	350	378	342
JPN	682	681	691	677	676	664	650
LAM	619	616	619	593	570	550	537
MEA	701	700	710	697	696	685	668
NEU	643	642	651	642	640	616	595
OAS	591	587	591	581	578	567	550
REF	519	512	506	515	516	482	423
SSA	742	667	612	386	335	343	346
USA	666	665	686	685	707	704	684

Table 1217: MAgPIE m4p\_som — Prices—Agriculture—Soybean (US\$05/tDM) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	474	553	499	557	552	578	599	542	528	483	497
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1218: WBGEM — Prices—Agriculture—Soybean (US\$05/tDM) [PART 1/6]



	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	508	519	928	727	520	540	605	499	496	449	436
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1219: WBGEM — Prices—Agriculture—Soybean (US\$05/tDM) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	381	451	462	371	300	283	374	341	295	289	279
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1220: WBGEM — Prices—Agriculture—Soybean (US\$05/tDM) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	292	297	279	334	340	292	247	263	253	278	327
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1221: WBGEM — Prices—Agriculture—Soybean (US\$05/tDM) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	356	309	295	397	502	447	444	481	530	485	450
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1222: WBGEM — Prices—Agriculture—Soybean (US\$05/tDM) [PART 5/6]

	2015	2016
GLO	395	427
CAZ		
CHA		
EUR		
IND		
JPN		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 1223: WBGEM — Prices—Agriculture—Soybean (US\$05/tDM) [PART 6/6]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	360	353	351	351	329	327	327	322	316	318	314
CAZ	286	286	286	286	286	286	286	286	286	287	288
CHA	472	472	472	472	471	472	471	471	472	472	472
EUR	179	214	204	156	156	214	232	243	240	251	253
IND	254	254	253	253	253	253	253	253	253	253	253
JPN	2812	2812	2812	2812	2812	2812	2812	2812	2812	2812	2812
LAM	245	244	246	251	246	246	249	254	249	246	240
MEA	338	338	338	338	338	332	332	332	332	334	332
NEU	156	165	208	168	167	151	185	314	289	304	307
OAS	1103	1067	1096	1081	1111	1023	1130	1254	1216	1135	1105
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	481	491	482	471	470	475	459	439	437	379	394
USA	246	246	246	246	246	246	246	246	246	246	246

Table 1224: FAO — Prices—Agriculture—Soybean (US\$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	302	298	307	292	294	285	287	279	280	284	280
CAZ	290	290	294	294	294	290	293	293	291	291	290
CHA	471	472	471	472	472	472	473	474	474	475	475
EUR	251	256	260	265	263	258	262	262	261	255	242
IND	253	254	253	253	253	253	253	253	253	253	253
JPN	2812	2812	2812	2812	2812	2812	2812	2812	2812	2812	2812
LAM	239	236	234	235	232	231	229	228	229	228	227
MEA	335	337	334	333	333	335	340	343	345	347	346
NEU	297	178	184	96	79	42	28	26	177	129	111
OAS	1076	1130	1226	1195	1185	1236	1084	1003	908	951	950
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	373	382	335	312	287	281	244	241	239	255	244
USA	246	246	246	246	246	246	246	246	246	246	246

Table 1225: FAO — Prices—Agriculture—Soybean (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	287	282	280	285	285	286	279	277	274	274	281
CAZ	289	290	291	291	289	289	291	289	288	288	287
CHA	475	475	475	475	475	475	475	475	475	475	475
EUR	237	239	245	250	255	258	258	259	254	263	269
IND	253	253	253	253	253	253	253	253	253	253	253
JPN	2812	2812	2812	2812	2812	2812	2812	2812	2812	2812	2812
LAM	228	225	226	224	226	223	227	223	222	222	223
MEA	345	345	345	346	351	340	323	335	352	322	322
NEU	119	131	217	234	243	239	231	252	193	333	324
OAS	892	832	764	654	663	678	676	649	595	575	573
REF	0	0	0	0	0	0	0	0	0	251	251
SSA	191	188	216	237	254	272	341	293	245	300	261
USA	246	246	246	246	246	246	246	246	246	246	246

Table 1226: FAO — Prices—Agriculture—Soybean (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	276	274	273	273	268	267	268	264	264	259	261
CAZ	288	287	287	287	287	288	288	287	287	286	287
CHA	475	475	475	476	476	476	476	476	476	476	476
EUR	270	270	268	267	268	271	268	271	272	270	268
IND	253	253	253	253	253	253	253	253	253	253	253
JPN	2812	2812	2812	2812	2812	2812	2812	2812	2812	2812	2812
LAM	223	222	221	223	221	220	220	220	220	220	220
MEA	325	321	315	324	324	330	328	328	328	331	333
NEU	324	317	293	292	301	285	286	279	289	295	277
OAS	554	561	573	585	567	525	528	549	542	521	571
REF	252	252	253	253	251	249	250	251	249	248	247
SSA	262	338	317	344	346	339	322	315	342	353	364
USA	246	246	246	246	246	246	246	246	246	246	246

Table 1227: FAO — Prices—Agriculture—Soybean (US\$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	260	258	252	255	258	251	252
CAZ	287	287	287	286	287	287	286
CHA	476	476	476	476	476	476	476
EUR	269	269	270	273	272	273	273
IND	253	253	253	253	253	253	253
JPN	2812	2812	2812	2812	2812	2812	2812
LAM	219	219	219	219	221	219	221
MEA	333	331	333	335	333	334	334
NEU	266	283	283	282	283	286	293
OAS	620	583	509	534	532	472	520
REF	247	246	248	247	249	247	250
SSA	352	355	353	352	308	285	317
USA	246	246	246	246	246	246	246

Table 1228: FAO — Prices—Agriculture—Soybean (US\$05/tDM) [PART 5/5]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	229	227	254	230	253	303	293	239	204	208
CAZ	0	222	220	242	241	238	288	297	239	203	200
CHA	0	226	268	315	238	278	539	475	408	320	324
EUR	0	480	252	282	272	265	319	287	262	208	199
IND	0	0	0	0	0	0	0	0	217	221	217
JPN	0	2001	2134	2564	2637	2861	2464	2372	2157	2435	2508
LAM	0	194	192	222	226	210	271	290	224	170	187
MEA	0	1581	2706	305	285	328	488	605	601	776	1056
NEU	0	152	181	408	230	208	238	205	180	183	114
OAS	0	464	461	493	511	540	564	499	312	374	329
REF	0	0	38	71	122	186	162	140	121	116	93
SSA	0	208	206	296	286	538	810	797	860	283	217
USA	0	231	230	265	226	278	278	268	204	191	188

Table 1229: FAOp — Prices—Agriculture—Soybean (US\$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	193	218	268	268	247	261	347	410	387	411	466
CAZ	190	211	263	302	257	302	321	440	409	421	503
CHA	268	301	411	510	452	465	622	564	656	832	905
EUR	213	231	288	285	257	251	374	281	213	263	285
IND	211	205	225	249	258	254	293	360	0	0	0
JPN	2048	1814	2007	2946	3156	2334	2042	1734	1860	1681	1806
LAM	175	182	216	241	210	209	272	384	372	362	433
MEA	1086	350	300	314	323	353	505	480	560	557	583
NEU	133	152	182	155	154	277	444	496	432	447	527
OAS	295	334	370	442	456	723	410	534	572	577	471
REF	118	124	103	137	122	236	340	429	381	376	418
SSA	249	263	302	358	377	368	391	526	172	200	227
USA	181	229	304	238	234	266	418	412	396	467	517

Table 1230: FAOp — Prices—Agriculture—Soybean (US\$05/tDM) [PART 2/3]

	2005
GLO	293
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 1231: IniFoodPrice — Prices—Agriculture—Soybean (US\$05/tDM)

## 36.30 Straw

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale. ## geom\_path: Each group consists of only one observation. Do you need to adjust the group## aesthetic?

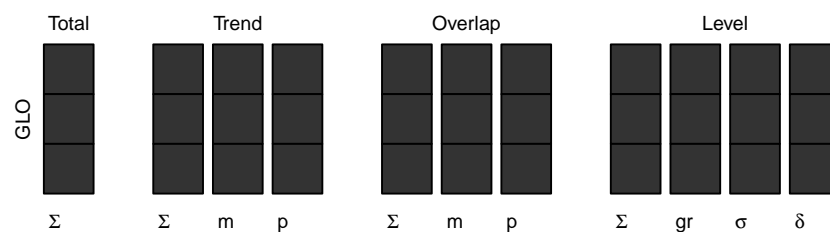
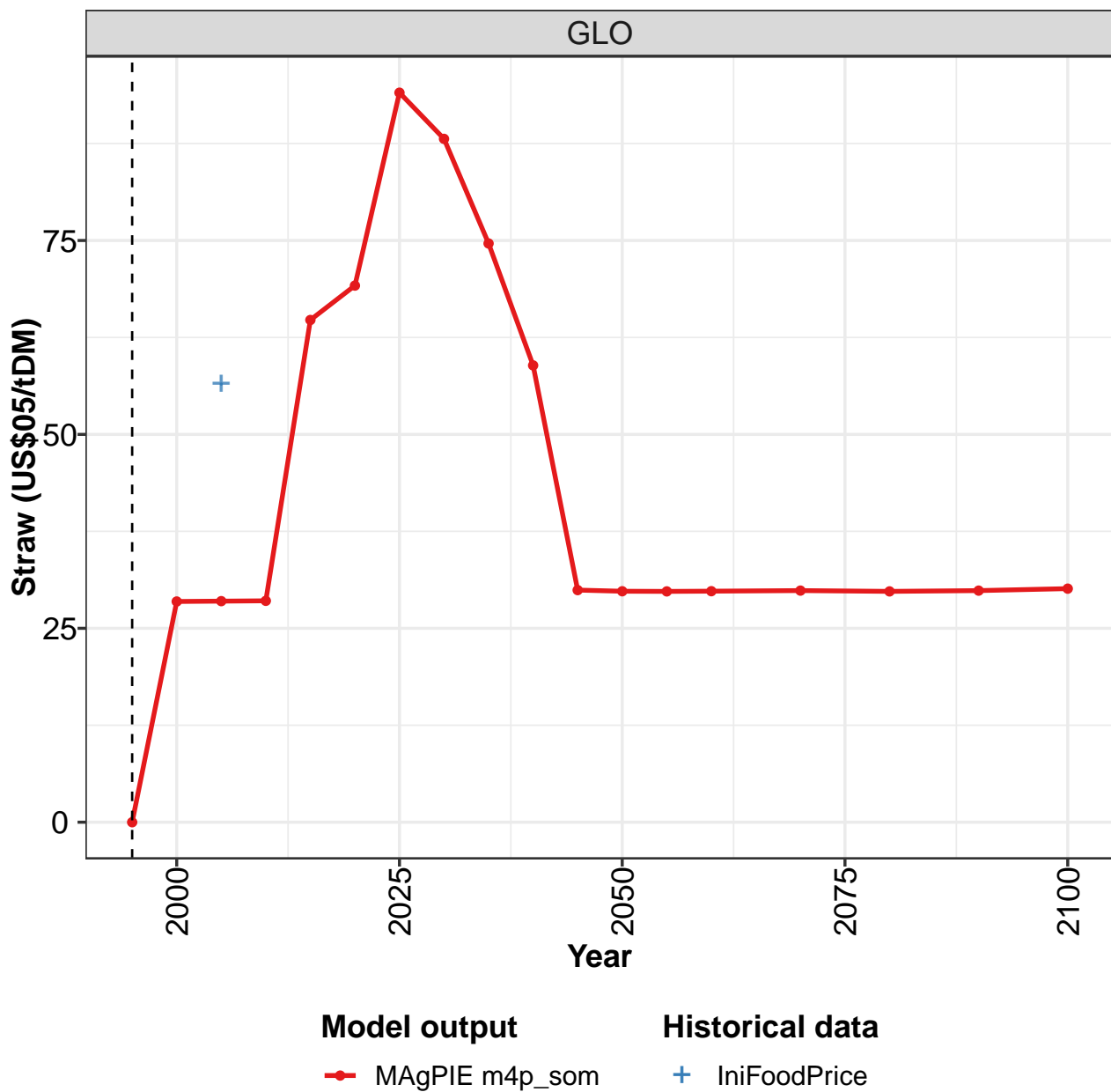


Figure 322: MAGPIE m4p\_som — Prices—Agriculture—Straw (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.0	28.5	28.5	28.5	64.8	69.2	94.1	88.1	74.6	58.9	29.9

Table 1232: MAgPIE m4p\_som — Prices—Agriculture—Straw (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	29.8	29.8	29.8	29.9	29.8	29.9	30.1

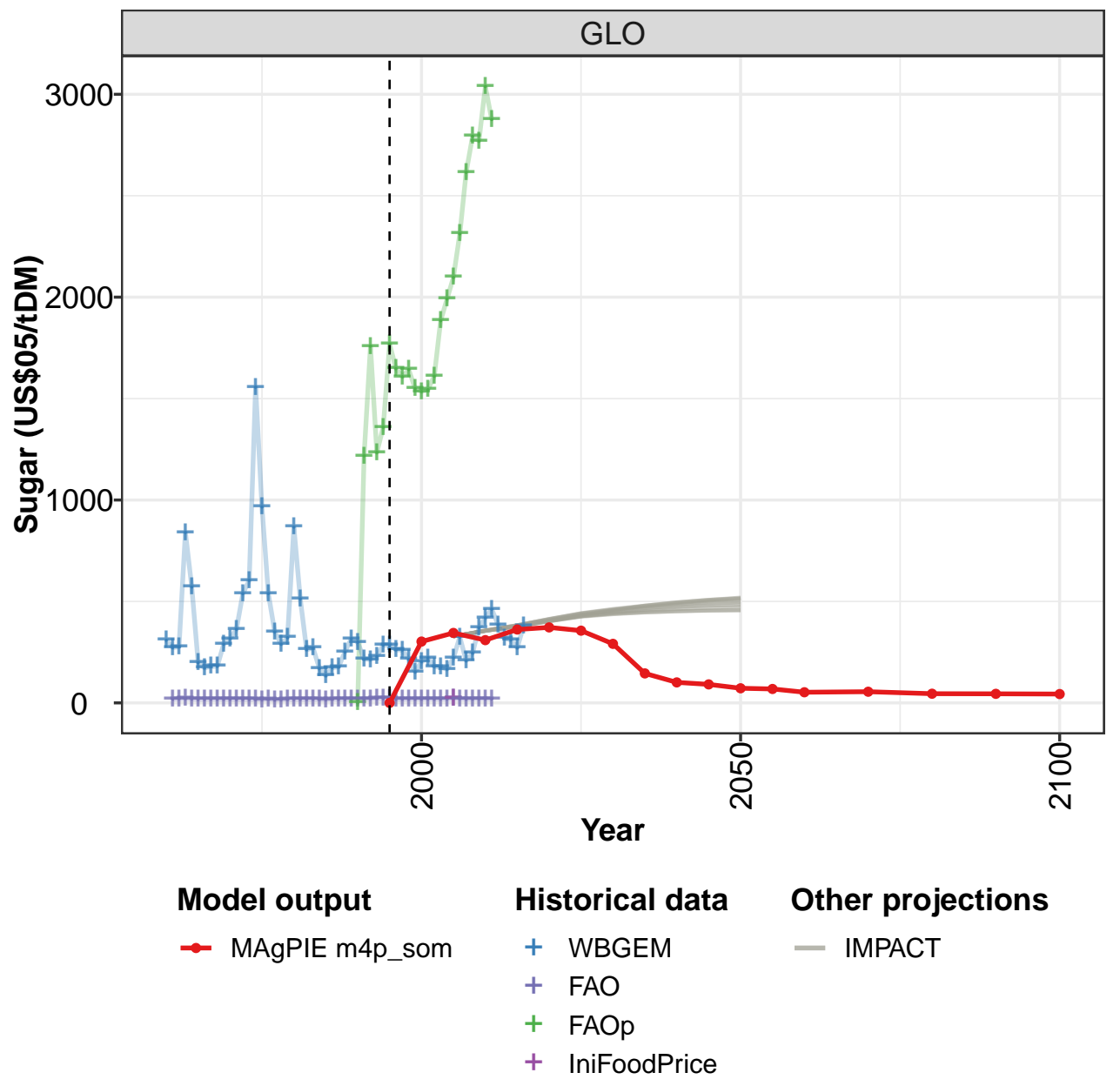
Table 1233: MAgPIE m4p\_som — Prices—Agriculture—Straw (US\$05/tDM) [PART 2/2]

	2005
GLO	56.5

Table 1234: IniFoodPrice — Prices—Agriculture—Straw (US\$05/tDM)

36.31 Sugar

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

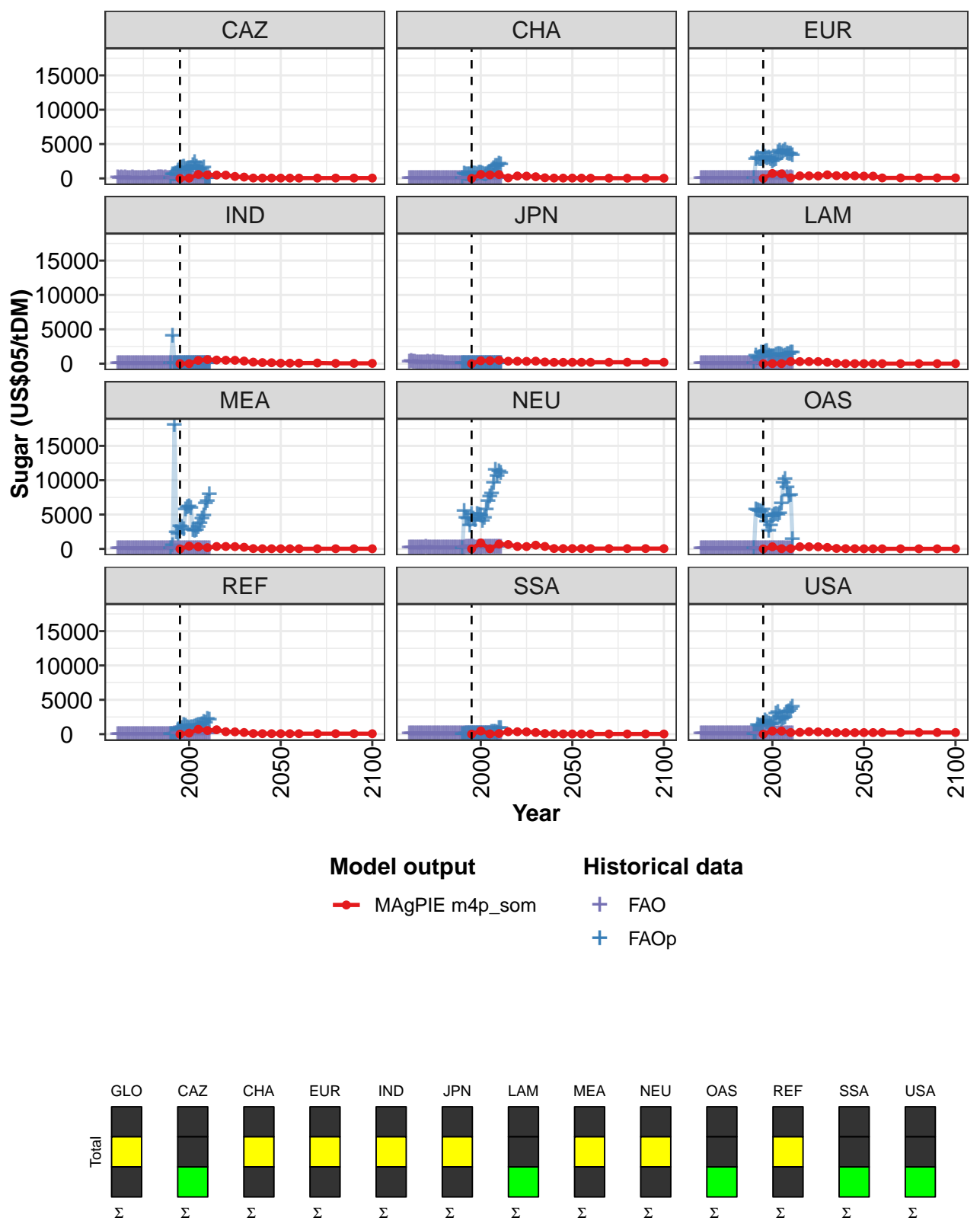


Figure 323: MAgPIE m4p\_som — Prices—Agriculture—Sugar (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	302	345	309	362	372	356	291	145	101	91
CAZ	0	39	581	511	490	484	286	194	56	49	49
CHA	0	576	513	555	76	353	333	243	92	52	48
EUR	0	715	668	85	375	374	354	523	401	369	379
IND	0	0	475	586	530	498	489	383	224	155	136
JPN	0	426	428	492	356	355	335	365	241	188	190
LAM	0	8	7	309	302	302	297	206	55	14	6
MEA	0	405	314	187	354	354	333	243	44	28	25
NEU	0	865	25	702	642	353	344	547	358	51	48
OAS	0	313	31	44	317	315	308	216	69	41	34
REF	0	151	705	528	637	354	333	243	93	73	71
SSA	0	462	36	91	354	353	333	243	92	52	29
USA	0	455	450	233	264	354	334	243	217	213	218

Table 1235: MAgPIE m4p\_som — Prices—Agriculture—Sugar (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	72	69	52	55	45	45	44
CAZ	48	48	48	47	50	50	50
CHA	49	44	36	35	32	29	29
EUR	333	329	73	75	76	75	74
IND	73	73	79	98	44	44	44
JPN	197	196	200	201	207	206	202
LAM	7	6	6	6	7	6	6
MEA	26	25	25	25	25	25	25
NEU	49	44	44	44	44	44	44
OAS	17	17	16	16	15	15	13
REF	72	70	70	70	71	69	65
SSA	29	28	26	24	25	25	25
USA	229	228	234	236	244	243	238

Table 1236: MAgPIE m4p\_som — Prices—Agriculture—Sugar (US\$05/tDM) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	309	273	278	840	571	198	172	180	181	289	317
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1237: WBGEM — Prices—Agriculture—Sugar (US\$05/tDM) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	363	538	604	1556	965	539	350	290	321	866	512
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1238: WBGEM — Prices—Agriculture—Sugar (US\$05/tDM) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	262	271	170	134	174	177	251	317	299	216	214
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1239: WBGEM — Prices—Agriculture—Sugar (US\$05/tDM) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	229	285	285	261	261	214	153	203	222	179	176
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1240: WBGEM — Prices—Agriculture—Sugar (US\$05/tDM) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	166	222	324	208	245	371	420	462	386	318	311
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1241: WBGEM — Prices—Agriculture—Sugar (US\$05/tDM) [PART 5/6]

	2015	2016
GLO	271	380
CAZ		
CHA		
EUR		
IND		
JPN		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 1242: WBGEM — Prices—Agriculture—Sugar (US\$05/tDM) [PART 6/6]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	18	21	21	19	17	18	19	19	18	18	17
CAZ	58	38	52	42	46	39	36	29	45	42	36
CHA	19	24	21	15	12	12	14	15	18	18	18
EUR	26	31	33	31	32	32	35	35	31	37	31
IND	4	5	5	4	5	6	7	7	6	6	6
JPN	203	295	213	178	141	174	165	170	154	157	185
LAM	7	9	9	9	8	9	8	8	8	7	7
MEA	67	68	63	62	56	48	48	39	36	38	39
NEU	124	130	135	133	110	107	107	156	115	206	143
OAS	2	1	1	1	1	1	1	1	1	1	1
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	10	9	8	8	9	7	6	7	6	7	6
USA	58	55	52	47	41	40	35	28	43	35	29

Table 1243: FAO — Prices—Agriculture—Sugar (US\$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	17	17	17	16	19	15	16	17	17	18	18
CAZ	36	40	34	36	33	32	43	43	40	39	38
CHA	19	15	13	15	14	12	12	16	17	14	14
EUR	27	28	30	26	37	25	24	25	25	24	31
IND	7	7	7	6	6	6	5	6	8	6	6
JPN	135	165	218	177	150	139	113	90	63	59	65
LAM	8	8	8	8	8	8	9	9	9	10	7
MEA	52	42	42	39	38	38	47	45	48	43	39
NEU	135	129	153	154	175	112	113	132	138	136	139
OAS	1	2	1	2	2	3	4	4	4	14	6
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	6	6	6	7	6	6	6	6	6	5	5
USA	29	33	26	23	23	22	28	28	22	19	23

Table 1244: FAO — Prices—Agriculture—Sugar (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	18	17	16	19	19	19	19	18	18	20	22
CAZ	43	43	45	42	44	38	29	36	35	39	29
CHA	16	14	13	14	20	17	15	14	12	11	13
EUR	37	31	26	32	33	34	39	30	31	32	35
IND	6	6	6	7	6	6	6	5	5	5	5
JPN	63	57	61	45	49	39	41	39	33	32	31
LAM	9	7	8	10	10	10	10	10	10	10	11
MEA	38	39	40	38	45	44	50	47	46	46	51
NEU	116	123	135	170	142	184	164	180	188	225	244
OAS	6	7	8	12	9	11	9	9	11	9	9
REF	0	0	0	0	0	0	0	0	0	42	40
SSA	7	5	6	6	7	7	8	8	8	11	22
USA	20	15	12	16	17	16	13	14	15	14	15

Table 1245: FAO — Prices—Agriculture—Sugar (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	21	22	19	18	19	19	20	20	19	19	20
CAZ	35	25	26	26	29	28	24	32	25	26	25
CHA	14	13	13	12	11	16	18	14	12	14	16
EUR	34	38	27	26	29	30	31	38	30	39	36
IND	5	5	4	4	4	4	4	4	4	4	5
JPN	30	27	27	26	25	29	30	27	28	28	28
LAM	10	9	8	8	8	9	9	8	8	7	7
MEA	56	54	66	56	57	52	50	47	45	34	48
NEU	219	363	209	188	190	233	181	213	238	270	250
OAS	9	10	8	8	8	10	17	20	18	15	13
REF	50	45	58	75	78	76	65	63	56	48	42
SSA	19	19	18	15	16	16	16	18	18	17	17
USA	13	13	12	11	12	11	12	10	9	10	10

Table 1246: FAO — Prices—Agriculture—Sugar (US\$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	21	21	19	20	21	21	20
CAZ	26	33	25	27	29	30	33
CHA	16	14	12	15	18	18	17
EUR	35	44	39	43	40	45	40
IND	5	4	3	4	5	5	4
JPN	27	26	27	27	22	23	23
LAM	8	8	7	7	6	6	7
MEA	56	58	66	69	75	63	64
NEU	249	280	251	232	206	221	259
OAS	23	22	23	20	23	22	16
REF	41	37	37	41	44	48	26
SSA	17	19	16	16	14	17	15
USA	9	8	8	9	8	9	8

Table 1247: FAO — Prices—Agriculture—Sugar (US\$05/tDM) [PART 5/5]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	1218	1758	1235	1359	1769	1648	1608	1643	1549	1535
CAZ	0	488	496	491	1125	1328	1566	1611	1289	1272	1271
CHA	0	599	532	596	544	763	608	675	567	715	729
EUR	0	2743	2955	2758	2786	3685	3110	2913	3018	2705	2401
IND	0	3989	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	0	1081	829	862	1523	1477	1716	1738	1164	966	999
MEA	0	507	18037	2325	2153	3252	3175	2819	5746	6031	6165
NEU	0	5510	4515	4404	3399	4972	4332	4178	4998	4891	4826
OAS	0	5691	5523	5434	5391	5647	4727	3870	2564	3396	4736
REF	0	0	0	10	630	691	789	1298	1174	994	843
SSA	2	2	59	57	19	28	27	26	31	30	30
USA	0	0	1237	1212	1187	1540	1997	1691	1484	1349	1342

Table 1248: FAOp — Prices—Agriculture—Sugar (US\$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	1544	1611	1884	1991	2097	2312	2615	2793	2770	3038	2875
CAZ	1403	1879	2323	1648	1279	1311	1371	1535	0	0	0
CHA	608	543	520	711	905	1132	1401	1745	1813	2097	1998
EUR	2599	2731	3741	3982	3641	3893	4088	3625	3534	3486	3354
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	1002	1205	1387	1296	1209	1032	1090	1338	1367	1584	1606
MEA	5941	2707	2607	2681	3119	3665	4393	4828	6560	6930	7879
NEU	4019	4435	5714	6947	7587	8031	9603	11423	10523	11284	10996
OAS	4898	5074	4924	5161	6543	9543	10082	8874	7659	7806	1330
REF	960	932	1005	1121	1329	1324	1409	1705	1590	2187	2105
SSA	29	24	31	17	22	288	295	262	173	882	796
USA	1583	2985	3119	2447	2074	2260	2421	3196	3312	3640	3969

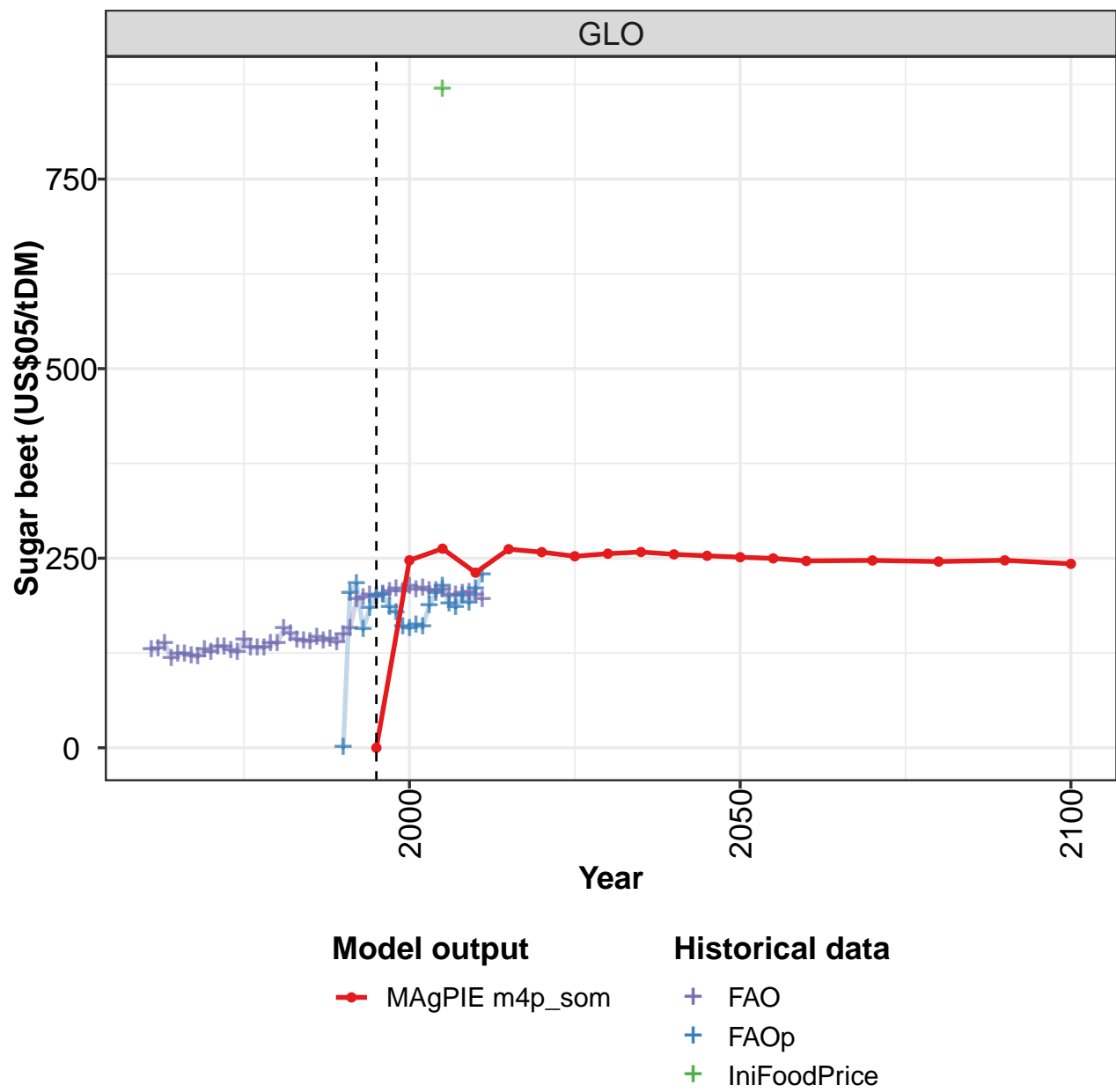
Table 1249: FAOp — Prices—Agriculture—Sugar (US\$05/tDM) [PART 2/3]

	2005
GLO	22
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 1250: IniFoodPrice — Prices—Agriculture—Sugar (US\$05/tDM)

36.32 Sugar beet

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale. ## geom\_path: Each group consists of only one observation. Do you need to adjust the group## aesthetic?

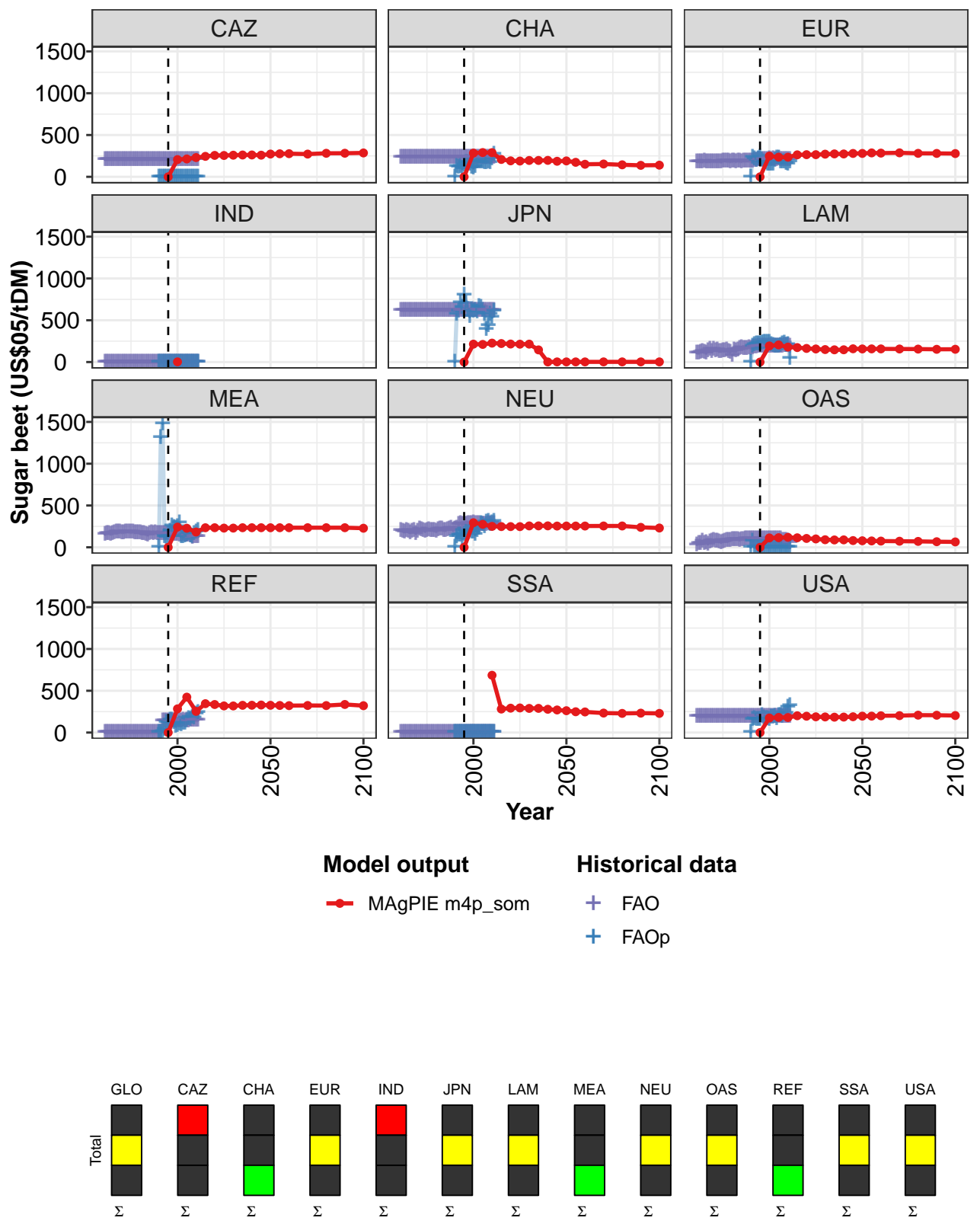


Figure 324: MAgPIE m4p\_som — Prices—Agriculture—Sugar beet (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	247	263	231	262	258	253	256	258	255	253
CAZ	0	206	214	230	245	256	255	259	261	261	259
CHA	0	284	290	289	208	191	189	196	196	197	186
EUR	0	248	235	234	263	265	265	271	274	274	280
IND		2									
JPN	0	214	211	226	222	216	214	215	146	1	2
LAM	0	193	205	179	173	163	157	150	147	147	159
MEA	0	242	228	183	234	234	230	230	234	234	234
NEU	0	294	275	251	248	248	247	256	256	257	254
OAS	0	112	115	119	114	106	100	91	88	89	81
REF	0	284	424	253	345	336	319	318	326	327	329
SSA				685	281	292	294	289	290	279	270
USA	0	174	181	180	201	195	188	187	184	185	189

Table 1251: MAgPIE m4p\_som — Prices—Agriculture—Sugar beet (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	251	250	246	247	246	247	243
CAZ	272	276	277	272	282	282	286
CHA	190	174	150	153	144	137	139
EUR	280	286	284	287	281	280	278
IND							
JPN	2	2	2	2	2	2	2
LAM	157	158	157	156	155	152	153
MEA	234	234	234	234	234	234	228
NEU	254	254	254	255	255	239	231
OAS	78	76	74	73	71	67	64
REF	326	324	322	324	323	336	321
SSA	261	249	246	233	229	232	229
USA	196	196	201	202	208	207	203

Table 1252: MAgPIE m4p\_som — Prices—Agriculture—Sugar beet (US\$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	129	131	138	118	123	124	121	120	130	126	133
CAZ	207	207	207	207	207	207	207	207	207	207	207
CHA	239	239	239	239	239	239	239	239	239	239	239
EUR	180	183	181	180	186	181	183	182	185	184	184
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	619	619	619	619	619	619	619	619	619	619	619
LAM	109	107	118	131	117	106	136	155	126	157	138
MEA	155	165	165	159	162	179	180	183	180	178	178
NEU	205	194	185	205	189	177	195	205	167	196	217
OAS	33	45	44	72	46	56	41	61	76	81	74
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	192	192	192	192	192	192	192	192	192	192	192

Table 1253: FAO — Prices—Agriculture—Sugar beet (US\$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	133	128	126	142	132	132	132	138	138	157	150
CAZ	207	207	207	207	207	207	207	207	207	207	207
CHA	239	239	239	239	239	239	239	239	239	239	239
EUR	183	184	179	186	192	186	186	183	186	189	185
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	619	619	619	619	619	619	619	619	619	619	619
LAM	143	128	129	135	134	144	127	119	87	148	132
MEA	182	185	183	180	181	177	179	176	172	169	168
NEU	209	202	191	203	215	205	206	198	190	210	222
OAS	77	67	59	69	76	81	82	83	91	97	96
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	192	192	192	192	192	192	192	192	192	192	192

Table 1254: FAO — Prices—Agriculture—Sugar beet (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	142	141	140	145	141	144	138	150	157	195	198
CAZ	207	207	207	207	207	207	207	207	207	207	207
CHA	239	239	239	239	239	239	239	239	239	239	239
EUR	189	186	184	188	189	191	189	190	189	196	203
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	619	619	619	619	619	619	619	619	619	619	619
LAM	148	163	169	165	167	166	174	168	171	179	185
MEA	156	148	168	171	170	171	167	168	165	166	165
NEU	222	204	201	213	216	230	203	224	226	272	285
OAS	94	88	96	97	100	100	100	100	101	101	100
REF	0	0	0	0	0	0	0	0	0	140	139
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	192	192	192	192	192	192	192	192	192	192	192

Table 1255: FAO — Prices—Agriculture—Sugar beet (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	201	199	203	206	210	205	212	209	211	207	207
CAZ	207	207	207	207	207	207	207	207	207	207	207
CHA	239	239	239	239	239	239	239	239	239	239	239
EUR	204	203	203	203	205	204	213	212	212	211	211
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	619	619	619	619	619	619	619	619	619	619	619
LAM	187	188	189	188	188	188	188	188	188	190	190
MEA	163	164	164	167	161	160	155	146	148	152	150
NEU	276	279	278	284	286	280	292	281	283	283	276
OAS	100	100	100	100	99	100	100	100	101	100	99
REF	138	139	139	138	138	142	145	144	145	146	145
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	192	192	192	192	192	192	192	192	192	192	192

Table 1256: FAO — Prices—Agriculture—Sugar beet (US\$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	208	200	201	203	205	202	196
CAZ	207	207	207	207	207	207	207
CHA	239	239	239	239	239	239	239
EUR	213	208	207	206	206	206	205
IND	0	0	0	0	0	0	0
JPN	619	619	619	619	619	619	619
LAM	191	193	196	197	201	197	193
MEA	149	149	139	123	127	126	125
NEU	274	276	275	285	283	279	282
OAS	99	98	87	83	86	78	59
REF	145	144	146	146	148	146	146
SSA	0	0	0	0	0	0	0
USA	192	192	192	192	192	192	192

Table 1257: FAO — Prices—Agriculture—Sugar beet (US\$05/tDM) [PART 5/5]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	203	216	156	183	200	201	185	178	160	157
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	129	119	124	98	144	171	167	150	121	107
EUR	0	237	220	199	219	239	211	182	175	156	152
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	571	609	712	657	801	705	632	545	620	612
LAM	0	194	213	219	215	215	227	232	234	233	233
MEA	0	1310	1482	131	119	130	191	254	238	230	248
NEU	0	127	143	146	104	157	193	171	201	183	184
OAS	0	75	0	0	0	0	0	0	0	0	0
REF	0	0	11	40	125	120	148	148	125	77	86
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	0	163	171	163	163	158	208	179	167	171	158

Table 1258: FAOp — Prices—Agriculture—Sugar beet (US\$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	162	159	188	203	213	190	185	200	191	210	228
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	125	176	192	183	177	173	172	178	171	215	271
EUR	152	151	196	222	227	181	180	182	164	156	181
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	619	604	666	658	620	577	393	433	575	538	607
LAM	213	198	191	190	189	197	216	230	204	212	50
MEA	295	127	125	135	143	169	136	126	169	180	205
NEU	153	205	228	283	274	249	298	308	276	290	310
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	100	98	113	116	141	165	155	184	173	224	239
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	183	183	192	171	200	204	192	221	233	308	321

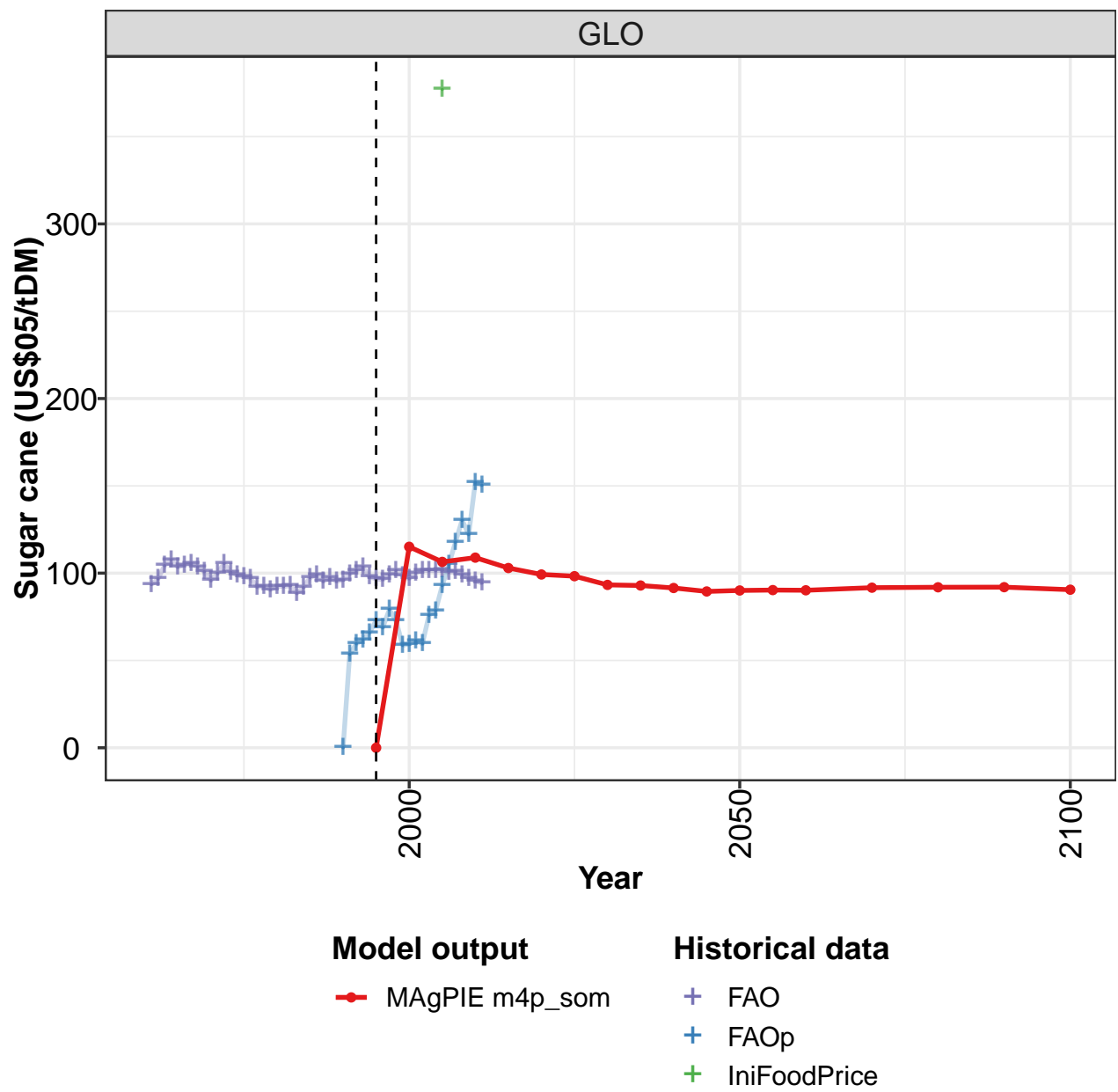
Table 1259: FAOp — Prices—Agriculture—Sugar beet (US\$05/tDM) [PART 2/3]

	2005
GLO	868
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 1260: IniFoodPrice — Prices—Agriculture—Sugar beet (US\$05/tDM)

36.33 Sugar cane

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

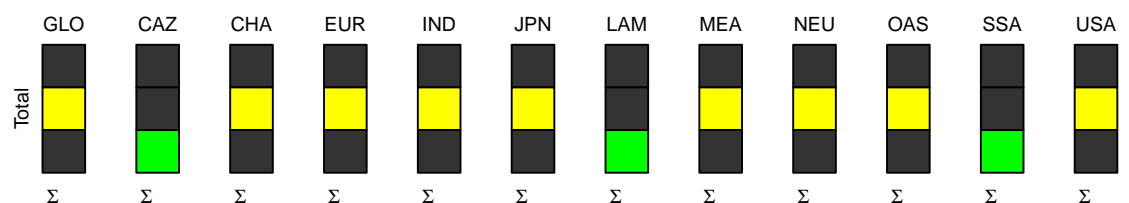
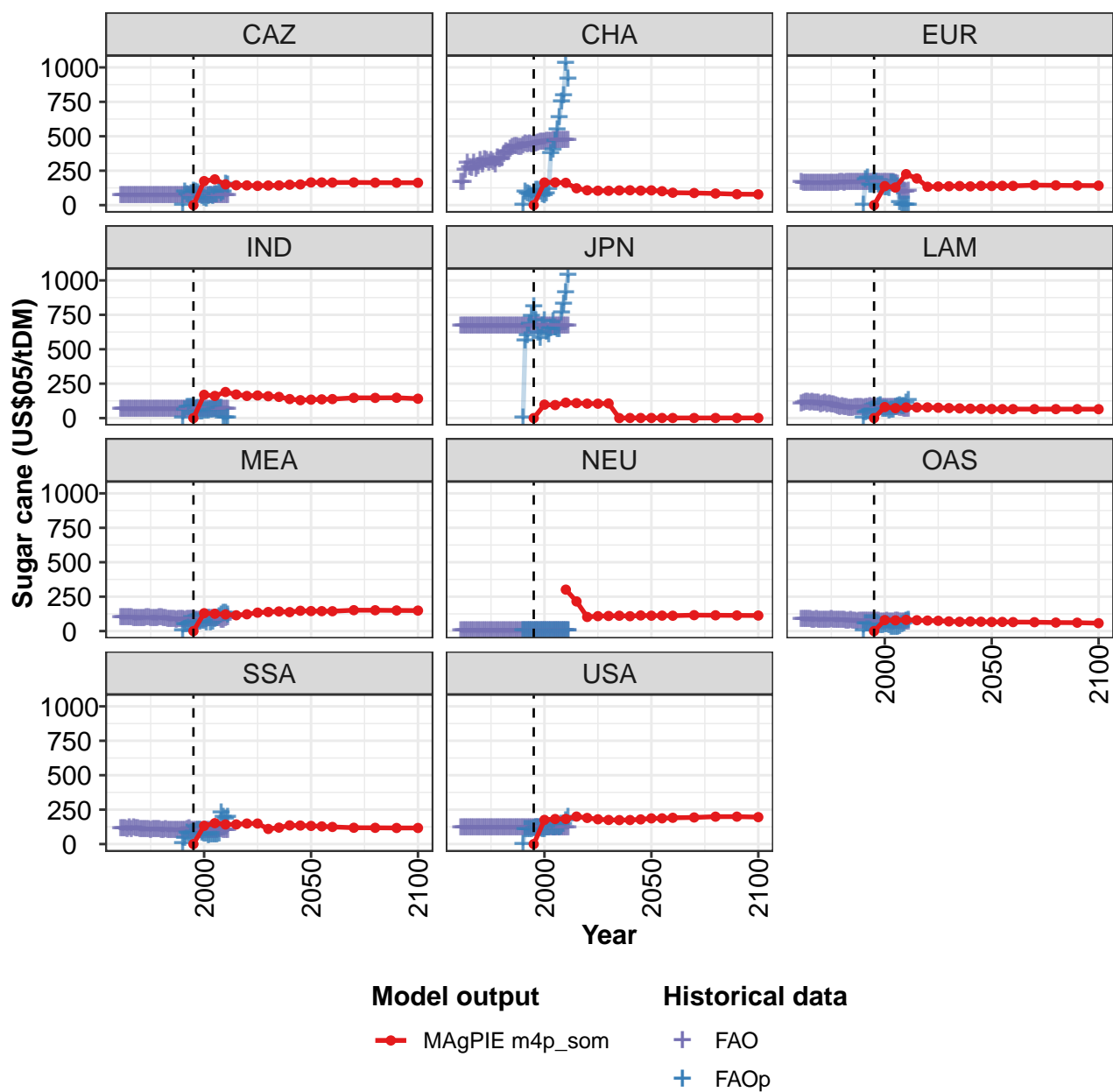


Figure 325: MAgPIE m4p\_som — Prices—Agriculture—Sugar cane (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	115	106	109	103	99	98	93	93	92	90
CAZ	0	174	187	151	144	143	140	142	143	148	150
CHA	0	164	165	162	122	108	105	104	107	108	105
EUR	0	138	128	225	193	133	135	137	139	136	140
IND	0	169	161	190	171	161	164	159	154	138	130
JPN	0	98	95	112	109	105	105	106	0	1	1
LAM	0	80	72	78	78	78	76	73	71	69	67
MEA	0	130	126	121	115	122	134	138	143	138	148
NEU				301	215	103	109	110	112	108	113
OAS	0	80	78	81	79	76	75	70	68	70	68
SSA	0	133	152	142	143	149	149	110	119	136	134
USA	0	175	182	182	200	190	180	175	174	175	179

Table 1261: MAgPIE m4p\_som — Prices—Agriculture—Sugar cane (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	90	90	90	92	92	92	91
CAZ	165	165	164	165	163	163	162
CHA	107	101	90	88	84	79	78
EUR	139	140	140	145	144	142	142
IND	134	136	138	147	147	148	141
JPN	1	1	1	1	1	1	1
LAM	66	66	65	65	65	65	65
MEA	145	145	144	152	151	150	149
NEU	112	112	112	116	115	114	113
OAS	66	67	65	65	62	61	57
SSA	132	128	124	119	118	117	117
USA	186	187	191	193	199	199	196

Table 1262: MAgPIE m4p\_som — Prices—Agriculture—Sugar cane (US\$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	94	97	104	108	104	105	106	103	101	96	100
CAZ	71	71	71	71	71	71	71	71	71	71	71
CHA	163	166	255	302	275	263	306	260	281	325	293
EUR	162	157	158	158	160	159	159	159	160	159	160
IND	63	63	63	63	63	63	63	63	63	63	63
JPN	667	667	667	667	667	667	667	667	667	667	667
LAM	100	107	114	113	106	115	107	107	106	93	104
MEA	96	96	96	96	99	97	91	89	91	91	92
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	85	84	82	84	82	79	80	83	80	80	81
SSA	113	108	114	107	117	107	115	112	111	105	104
USA	119	119	119	119	119	119	119	119	119	119	119

Table 1263: FAO — Prices—Agriculture—Sugar cane (US\$05/tDM) [PART 1/5]



	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	106	101	99	98	97	92	93	91	93	92	93
CAZ	71	71	71	71	71	71	71	71	71	71	71
CHA	328	326	305	322	309	290	341	328	339	367	385
EUR	158	161	158	160	160	159	160	162	163	161	163
IND	63	63	63	63	63	63	63	63	63	63	63
JPN	667	667	667	667	667	667	667	667	667	667	667
LAM	108	99	100	97	96	87	85	79	80	76	75
MEA	94	95	94	93	89	89	88	97	95	90	89
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	81	81	81	83	80	77	77	79	80	77	75
SSA	104	105	105	101	108	104	104	104	100	99	104
USA	119	119	119	119	119	119	119	119	119	119	119

Table 1264: FAO — Prices—Agriculture—Sugar cane (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	89	92	97	99	95	97	95	96	100	102	103
CAZ	71	71	71	71	71	71	71	71	71	71	71
CHA	383	404	417	423	426	416	417	432	444	440	442
EUR	164	165	165	165	165	165	165	166	165	165	165
IND	63	63	63	63	63	63	63	63	63	63	63
JPN	667	667	667	667	667	667	667	667	667	667	667
LAM	72	71	73	77	76	79	76	73	74	76	82
MEA	85	82	83	85	76	83	83	82	79	82	84
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	74	76	73	74	69	72	72	73	72	72	73
SSA	99	98	101	99	100	100	99	100	100	108	112
USA	119	119	119	119	119	119	119	119	119	119	119

Table 1265: FAO — Prices—Agriculture—Sugar cane (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	98	97	96	99	102	99	97	100	102	102	101
CAZ	71	71	71	71	71	71	71	71	71	71	71
CHA	436	442	446	452	455	455	455	461	464	466	469
EUR	165	164	162	163	164	165	164	164	164	164	163
IND	63	63	63	63	63	63	63	63	63	63	63
JPN	667	667	667	667	667	667	667	667	667	667	667
LAM	76	76	76	74	77	79	78	79	76	77	75
MEA	84	83	81	80	80	83	85	87	88	92	94
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	72	69	69	69	69	68	69	69	69	67	68
SSA	99	100	101	99	100	95	100	101	97	96	97
USA	119	119	119	119	119	119	119	119	119	119	119

Table 1266: FAO — Prices—Agriculture—Sugar cane (US\$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	102	101	101	99	97	96	94
CAZ	71	71	71	71	71	71	71
CHA	470	472	472	472	473	472	472
EUR	161	150	99	94	93	97	98
IND	63	63	63	63	63	63	63
JPN	667	667	667	667	667	667	667
LAM	76	75	73	69	67	67	67
MEA	92	90	90	81	79	93	96
NEU	0	0	0	0	0	0	0
OAS	70	70	67	65	67	66	65
SSA	98	97	102	103	100	98	97
USA	119	119	119	119	119	119	119

Table 1267: FAO — Prices—Agriculture—Sugar cane (US\$05/tDM) [PART 5/5]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	53	60	62	66	73	69	79	73	59	59
CAZ	0	92	76	71	81	99	93	88	74	65	49
CHA	0	92	80	74	61	91	109	108	98	78	69
EUR	0	186	198	147	148	169	163	146	146	144	124
IND	0	61	76	79	80	85	66	69	47	48	49
JPN	0	563	597	680	740	805	708	618	579	666	709
LAM	0	38	44	49	57	60	61	83	87	62	63
MEA	0	47	49	55	62	68	70	67	68	70	69
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	56	52	51	55	62	59	54	38	38	44
SSA	1	43	82	72	80	88	87	96	96	78	72
USA	0	107	104	107	107	111	115	115	111	104	107

Table 1268: FAOp — Prices—Agriculture—Sugar cane (US\$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	61	60	76	79	93	105	118	130	122	152	150
CAZ	44	62	67	63	74	78	102	81	94	150	145
CHA	83	117	373	397	465	549	634	752	793	1027	912
EUR	130	119	160	156	152	130	17	0	0	0	0
IND	49	53	58	61	64	66	73	69	0	0	0
JPN	621	604	649	702	655	644	641	765	828	911	1034
LAM	66	54	56	57	75	86	90	83	86	111	127
MEA	57	90	56	65	84	94	102	118	128	131	116
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	44	40	28	26	27	29	36	45	53	71	79
SSA	71	59	64	65	66	65	71	225	195	183	194
USA	119	115	122	115	115	126	119	122	141	170	193

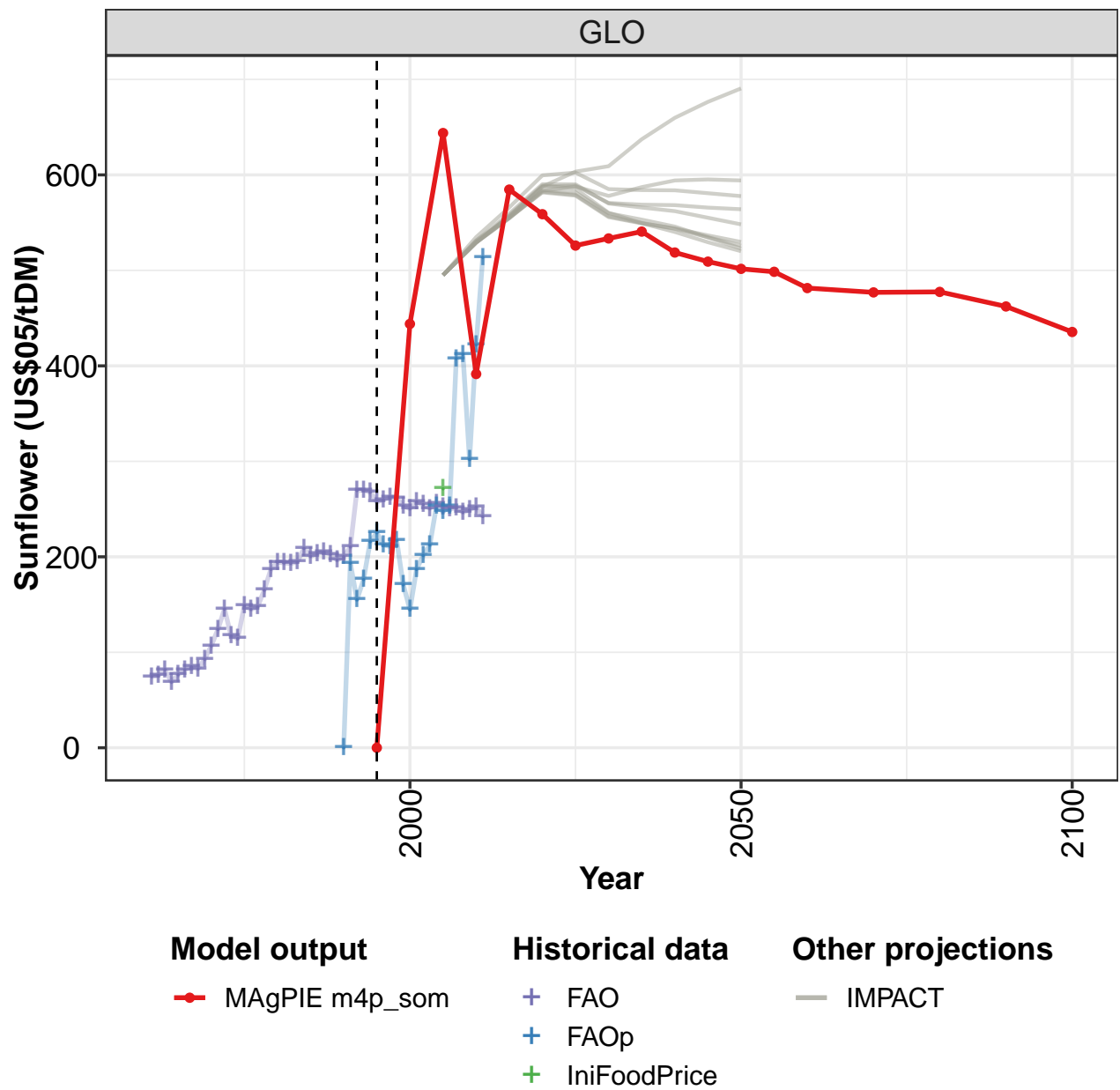
Table 1269: FAOp — Prices—Agriculture—Sugar cane (US\$05/tDM) [PART 2/3]

	2005
GLO	377
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
SSA	
USA	

Table 1270: IniFoodPrice — Prices—Agriculture—Sugar cane (US\$05/tDM)

36.34 Sunflower

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

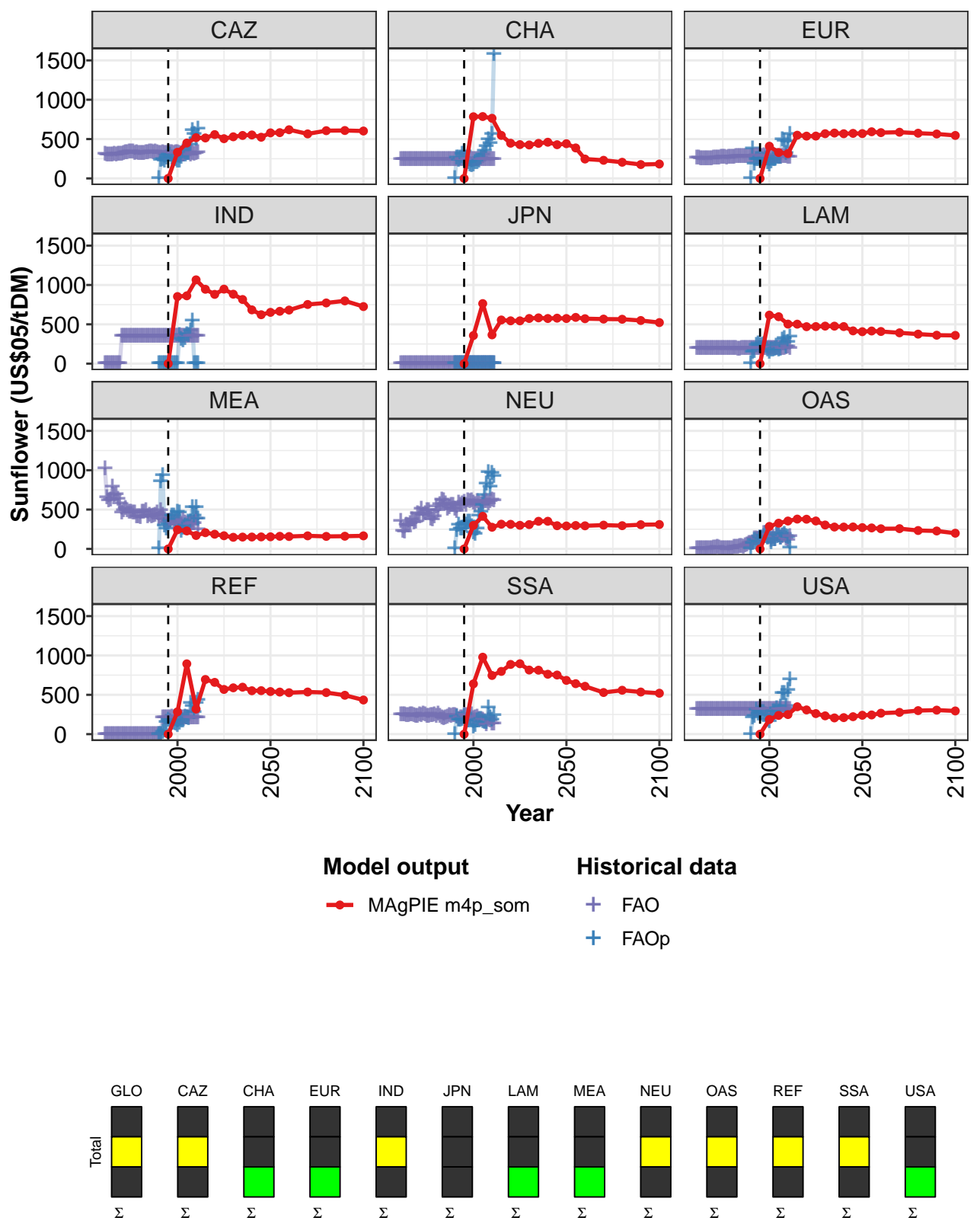


Figure 326: MAgPIE m4p\_som — Prices—Agriculture—Sunflower (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	444	644	391	585	559	526	533	541	519	509
CAZ	0	332	450	518	514	557	505	529	546	552	523
CHA	0	784	786	764	547	447	430	425	445	460	428
EUR	0	409	330	316	549	537	538	568	576	568	573
IND	0	853	862	1065	946	881	947	883	815	684	622
JPN	0	358	764	366	555	545	544	574	582	574	578
LAM	0	617	597	503	502	470	472	477	477	472	417
MEA	0	243	228	171	206	187	168	148	150	151	153
NEU	0	299	414	275	314	313	300	309	351	351	295
OAS	0	286	327	355	379	377	355	304	278	278	279
REF	0	284	894	319	695	658	568	589	597	552	553
SSA	0	640	978	746	798	886	895	815	813	761	752
USA	0	186	238	249	348	308	261	233	206	210	222

Table 1271: MAgPIE m4p\_som — Prices—Agriculture—Sunflower (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	502	499	481	477	477	462	436
CAZ	579	582	619	566	607	609	602
CHA	442	387	246	230	205	176	183
EUR	570	593	582	587	574	565	546
IND	652	666	681	752	772	798	725
JPN	574	588	571	567	565	549	522
LAM	406	415	409	392	375	362	359
MEA	154	160	158	166	159	161	166
NEU	292	298	294	302	295	308	310
OAS	271	267	256	258	234	228	199
REF	542	535	527	536	529	494	434
SSA	684	642	608	529	558	536	520
USA	240	244	266	277	299	305	295

Table 1272: MAgPIE m4p\_som — Prices—Agriculture—Sunflower (US\$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	75	76	82	69	76	82	85	83	93	107	124
CAZ	304	303	303	302	302	305	301	307	310	313	317
CHA	245	245	245	245	245	245	245	245	245	245	245
EUR	256	255	254	254	253	255	254	254	254	261	262
IND	0	0	0	0	0	0	0	0	0	347	347
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	193	192	195	195	192	194	191	191	191	191	195
MEA	1022	649	616	625	783	685	690	632	576	457	486
NEU	352	221	221	305	296	325	373	336	347	449	438
OAS	4	4	5	5	6	5	6	7	8	10	14
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	244	244	244	236	235	245	243	237	231	227	247
USA	319	318	319	319	319	319	319	319	319	319	319

Table 1273: FAO — Prices—Agriculture—Sunflower (US\$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	145	117	114	149	145	148	165	187	194	194	193
CAZ	328	331	341	335	334	320	324	319	319	323	323
CHA	245	245	245	245	245	245	245	245	245	245	245
EUR	263	263	266	269	266	265	266	267	273	269	276
IND	347	347	347	347	347	347	347	347	347	347	347
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	193	192	190	192	192	191	191	191	191	191	190
MEA	511	489	468	468	454	459	407	411	403	468	464
NEU	505	432	449	489	483	381	371	410	536	485	560
OAS	21	11	5	6	5	4	0	3	4	23	22
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	239	253	250	229	226	241	236	243	232	252	224
USA	319	319	319	319	319	319	319	319	319	319	319

Table 1274: FAO — Prices—Agriculture—Sunflower (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	195	209	201	203	205	203	196	200	210	269	270
CAZ	329	329	336	338	332	336	331	316	322	324	315
CHA	245	245	245	245	245	245	245	245	245	245	245
EUR	277	280	281	278	280	281	279	282	278	280	285
IND	347	347	347	347	347	347	347	347	347	347	347
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	189	190	190	190	192	194	197	197	192	191	192
MEA	490	408	431	411	421	424	458	381	490	432	372
NEU	618	609	578	511	522	552	559	508	479	579	559
OAS	23	36	36	25	42	53	67	66	83	131	125
REF	0	0	0	0	0	0	0	0	0	212	212
SSA	211	194	205	215	236	229	236	233	232	186	204
USA	319	319	319	319	319	319	319	319	319	319	319

Table 1275: FAO — Prices—Agriculture—Sunflower (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	268	258	260	263	262	253	250	258	255	251	256
CAZ	319	327	323	330	319	327	325	317	311	304	322
CHA	245	245	245	245	245	245	245	245	245	245	245
EUR	282	279	283	285	282	279	283	282	279	277	276
IND	347	347	347	347	347	347	347	347	347	347	347
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	190	190	191	190	191	190	191	191	191	191	192
MEA	331	351	353	378	333	306	337	311	315	359	332
NEU	578	596	553	610	599	611	582	560	600	571	561
OAS	119	140	136	192	194	149	181	113	145	123	181
REF	212	212	211	213	213	214	212	214	213	213	213
SSA	213	238	237	213	217	244	201	204	217	188	181
USA	319	319	319	319	319	319	319	319	319	319	319

Table 1276: FAO — Prices—Agriculture—Sunflower (US\$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	252	250	251	247	249	252	242
CAZ	317	315	303	315	313	315	330
CHA	245	245	245	245	245	245	245
EUR	275	275	281	276	277	272	273
IND	347	347	347	347	347	347	347
JPN	0	0	0	0	0	0	0
LAM	192	192	198	198	203	211	198
MEA	310	324	308	325	327	378	247
NEU	592	603	604	576	600	619	609
OAS	165	138	160	165	126	107	161
REF	213	213	213	212	212	212	212
SSA	175	156	121	181	169	131	129
USA	319	319	319	319	319	319	319

Table 1277: FAO — Prices—Agriculture—Sunflower (US\$05/tDM) [PART 5/5]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	193	155	176	216	225	212	211	217	171	145
CAZ	0	234	237	220	261	296	297	257	264	243	224
CHA	0	262	234	255	306	334	250	200	177	162	170
EUR	0	377	181	242	245	260	241	229	249	198	177
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	0	150	158	235	250	230	230	242	258	173	146
MEA	0	852	934	293	254	310	353	421	423	376	470
NEU	0	231	303	250	256	322	307	342	344	279	211
OAS	0	67	112	107	94	138	129	160	195	139	147
REF	0	0	26	42	146	183	161	144	138	132	107
SSA	0	222	178	182	189	229	172	168	195	184	97
USA	0	206	231	305	254	273	273	275	252	178	163

Table 1278: FAOp — Prices—Agriculture—Sunflower (US\$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	187	201	212	253	247	253	408	412	302	422	514
CAZ	218	274	340	331	314	319	424	610	564	499	627
CHA	200	207	217	257	300	349	409	495	441	556	1575
EUR	212	237	240	271	271	273	489	472	317	461	558
IND	357	311	289	318	366	356	414	547	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	175	172	182	196	170	181	302	324	219	274	337
MEA	461	222	262	293	286	318	340	528	423	523	381
NEU	186	259	424	468	552	680	823	970	784	959	924
OAS	83	124	118	178	167	139	171	182	158	150	14
REF	145	165	169	223	209	198	392	350	272	390	426
SSA	111	168	178	185	157	154	151	335	204	183	237
USA	228	287	287	325	287	344	514	517	358	553	690

Table 1279: FAOp — Prices—Agriculture—Sunflower (US\$05/tDM) [PART 2/3]

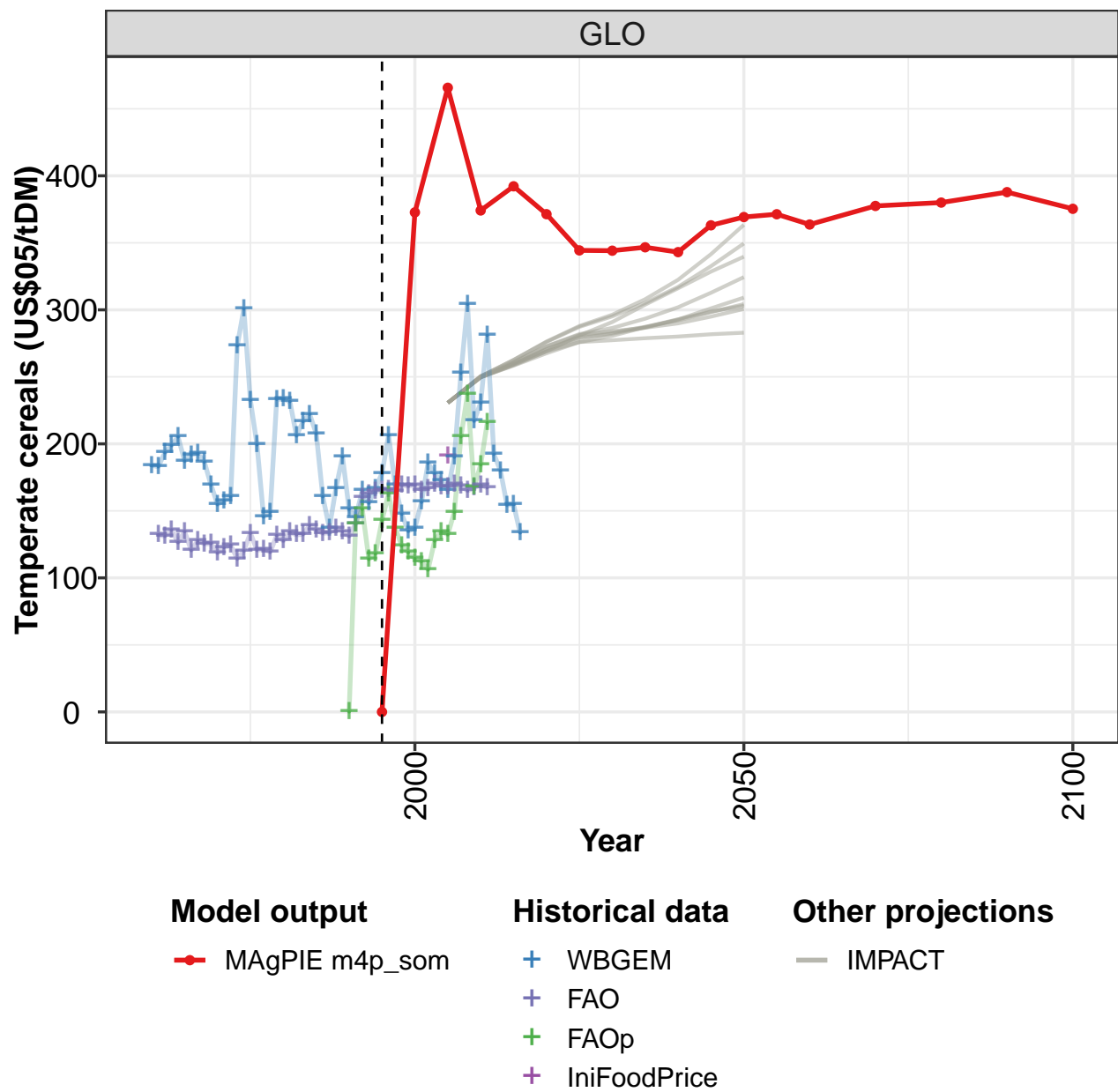


	2005
GLO	271
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 1280: IniFoodPrice — Prices—Agriculture—Sunflower (US\$05/tDM)

36.35 Temperate cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

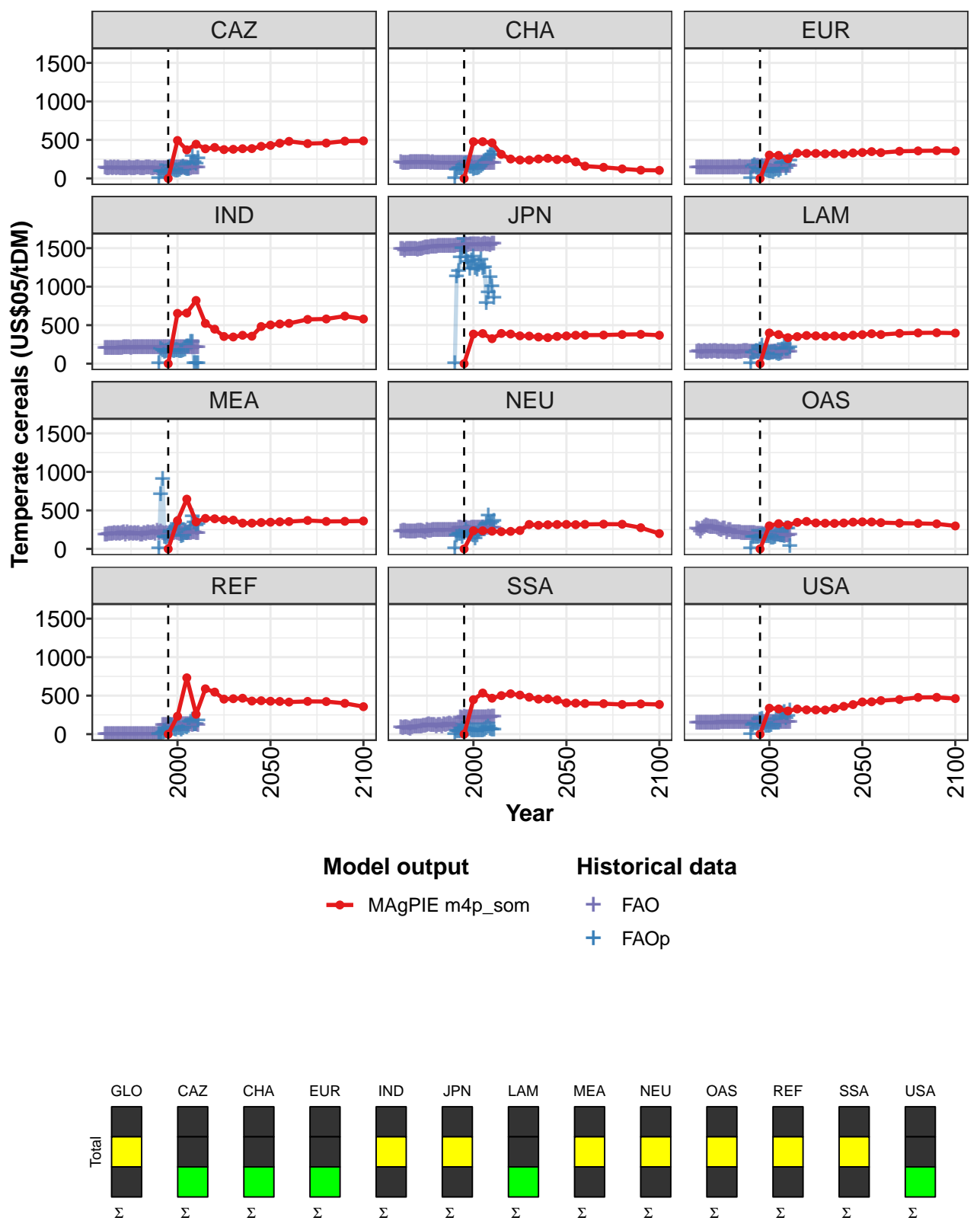


Figure 327: MAgPIE m4p\_som — Prices—Agriculture—Temperate cereals (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	373	466	374	392	371	344	344	347	343	363
CAZ	0	493	371	444	385	402	374	378	386	387	417
CHA	0	476	477	462	313	252	239	239	252	261	244
EUR	0	303	300	256	328	325	325	319	323	315	331
IND	0	653	657	821	523	448	353	347	369	356	482
JPN	0	384	391	324	392	385	361	359	346	338	354
LAM	0	398	378	338	351	366	361	356	361	353	370
MEA	0	366	647	352	396	391	378	374	335	335	343
NEU	0	235	235	230	224	228	239	317	307	313	317
OAS	0	300	328	309	344	357	337	334	331	337	348
REF	0	233	732	258	589	546	455	460	467	430	434
SSA	0	448	534	467	501	524	508	480	455	460	444
USA	0	337	328	301	327	316	315	313	336	361	384

Table 1281: MAgPIE m4p\_som — Prices—Agriculture—Temperate cereals (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	369	371	364	378	380	388	375
CAZ	428	457	481	452	459	484	487
CHA	252	215	159	144	124	107	105
EUR	337	348	335	353	357	361	357
IND	503	515	523	575	580	618	580
JPN	360	369	371	372	378	381	369
LAM	377	389	378	394	399	402	397
MEA	347	352	355	369	357	359	362
NEU	318	314	318	322	320	275	199
OAS	351	350	341	334	331	326	298
REF	428	425	417	425	423	400	357
SSA	406	403	398	396	385	392	385
USA	418	420	436	450	477	478	462

Table 1282: MAgPIE m4p\_som — Prices—Agriculture—Temperate cereals (US\$05/tDM) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	184	183	193	199	205	187	192	193	186	169	155
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1283: WBGEM — Prices—Agriculture—Temperate cereals (US\$05/tDM) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	158	160	273	301	232	199	146	149	233	234	232
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1284: WBGEM — Prices—Agriculture—Temperate cereals (US\$05/tDM) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	206	217	222	208	161	137	167	190	151	145	165
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1285: WBGEM — Prices—Agriculture—Temperate cereals (US\$05/tDM) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	156	167	178	206	169	148	135	137	156	186	178
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1286: WBGEM — Prices—Agriculture—Temperate cereals (US\$05/tDM) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	172	165	190	253	304	217	231	281	192	180	154
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1287: WBGEM — Prices—Agriculture—Temperate cereals (US\$05/tDM) [PART 5/6]

	2015	2016
GLO	155	134
CAZ		
CHA		
EUR		
IND		
JPN		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 1288: WBGEM — Prices—Agriculture—Temperate cereals (US\$05/tDM) [PART 6/6]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	132	131	136	126	135	121	128	125	126	119	123
CAZ	136	132	131	134	129	133	131	136	131	129	127
CHA	204	201	201	201	201	203	202	202	204	204	203
EUR	138	141	140	140	142	141	141	140	140	140	140
IND	202	202	203	203	203	203	203	203	204	204	204
JPN	1483	1483	1467	1482	1480	1483	1483	1484	1487	1478	1480
LAM	153	155	148	146	154	154	151	155	153	161	156
MEA	182	181	193	192	193	198	193	201	190	205	213
NEU	222	229	226	225	226	219	221	225	223	231	228
OAS	264	252	225	262	277	303	286	283	279	276	278
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	84	75	83	89	76	69	89	93	94	95	96
USA	145	145	145	146	146	146	147	147	146	146	147

Table 1289: FAO — Prices—Agriculture—Temperate cereals (US\$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	124	114	120	133	121	121	119	132	128	134	132
CAZ	126	132	133	132	130	128	136	137	130	132	126
CHA	203	203	203	203	202	201	202	201	201	201	200
EUR	140	138	139	141	139	138	139	141	142	141	141
IND	204	204	204	204	204	204	204	205	205	205	205
JPN	1481	1499	1506	1505	1508	1517	1518	1518	1514	1520	1522
LAM	149	151	155	150	147	156	150	150	151	149	143
MEA	179	210	193	202	193	203	195	203	185	177	197
NEU	230	221	214	236	232	234	237	243	237	243	239
OAS	270	249	243	258	256	210	237	244	212	214	213
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	97	107	104	117	128	112	114	113	91	111	116
USA	148	148	149	149	150	149	149	150	151	150	151

Table 1290: FAO — Prices—Agriculture—Temperate cereals (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	133	139	136	133	134	137	135	131	141	160	163
CAZ	137	137	133	131	129	134	131	131	129	132	132
CHA	200	200	199	198	199	198	198	198	198	199	198
EUR	140	142	141	142	142	142	141	140	142	146	153
IND	205	205	205	205	205	205	205	205	205	205	205
JPN	1520	1522	1524	1526	1526	1527	1528	1529	1531	1533	1532
LAM	145	146	154	155	156	155	154	151	152	150	150
MEA	190	214	199	206	212	194	227	205	218	204	194
NEU	236	238	242	244	242	240	237	239	238	269	267
OAS	215	213	203	199	197	203	202	200	197	198	195
REF	0	0	0	0	0	0	0	0	0	110	111
SSA	97	121	118	124	133	126	107	103	103	104	210
USA	150	150	150	150	150	152	151	152	151	151	152

Table 1291: FAO — Prices—Agriculture—Temperate cereals (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	165	166	166	164	169	168	169	165	167	170	168
CAZ	128	133	135	134	136	137	136	139	133	139	136
CHA	197	197	197	197	197	197	198	196	196	197	196
EUR	153	152	153	152	152	152	155	153	154	155	154
IND	205	205	205	205	205	205	205	205	205	205	205
JPN	1534	1537	1540	1539	1541	1541	1545	1543	1540	1543	1538
LAM	148	149	144	145	147	143	143	145	148	148	146
MEA	205	187	204	199	205	208	202	193	189	202	209
NEU	263	264	271	264	265	267	270	266	267	271	265
OAS	190	195	193	186	187	192	200	202	188	182	190
REF	111	113	111	112	119	120	122	118	121	127	124
SSA	208	219	211	210	210	211	215	212	215	212	212
USA	152	152	152	152	152	153	152	153	152	153	153

Table 1292: FAO — Prices—Agriculture—Temperate cereals (US\$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	168	170	168	165	167	170	167
CAZ	138	130	132	136	138	140	142
CHA	195	195	196	196	196	195	196
EUR	153	155	155	155	153	154	154
IND	205	205	205	205	205	205	205
JPN	1547	1550	1543	1540	1536	1554	1552
LAM	149	145	144	154	153	147	147
MEA	199	205	201	214	212	204	201
NEU	269	269	269	270	270	271	270
OAS	178	180	175	185	172	173	183
REF	125	128	125	119	123	121	115
SSA	211	212	209	219	216	221	223
USA	153	153	153	153	153	153	153

Table 1293: FAO — Prices—Agriculture—Temperate cereals (US\$05/tDM) [PART 5/5]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	140	151	114	118	143	163	137	124	119	114
CAZ	0	88	91	81	75	120	144	116	106	100	96
CHA	0	111	124	128	127	175	190	169	150	152	119
EUR	0	149	167	139	131	139	146	118	104	97	91
IND	0	192	171	153	155	166	185	173	163	168	168
JPN	0	1125	1198	1377	1490	1609	1378	1313	1231	1339	1389
LAM	0	136	144	160	154	181	224	163	141	132	134
MEA	0	708	908	147	145	161	207	210	241	273	318
NEU	0	170	190	192	152	204	244	211	200	183	169
OAS	0	151	155	152	156	159	173	174	157	158	163
REF	0	0	13	28	50	64	112	103	63	57	75
SSA	0	33	35	37	65	71	63	50	60	47	48
USA	0	117	129	131	137	182	192	138	108	103	108

Table 1294: FAOp — Prices—Agriculture—Temperate cereals (US\$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	112	106	128	135	132	149	205	237	168	184	216
CAZ	106	124	144	129	119	121	189	288	203	185	257
CHA	129	127	137	159	179	193	225	260	298	310	346
EUR	86	82	106	114	99	122	198	211	125	168	227
IND	158	158	170	178	214	223	275	282	0	0	0
JPN	1237	1221	1274	1345	1239	1249	780	919	1123	1004	852
LAM	138	142	149	130	119	130	176	247	191	187	209
MEA	308	163	175	198	200	209	250	414	335	302	322
NEU	136	167	225	251	269	248	321	432	318	341	355
OAS	139	145	154	182	176	170	167	161	258	259	29
REF	75	58	74	96	87	101	154	185	127	128	177
SSA	45	42	45	45	41	59	79	91	66	55	59
USA	115	147	141	139	141	174	263	280	204	233	298

Table 1295: FAOp — Prices—Agriculture—Temperate cereals (US\$05/tDM) [PART 2/3]

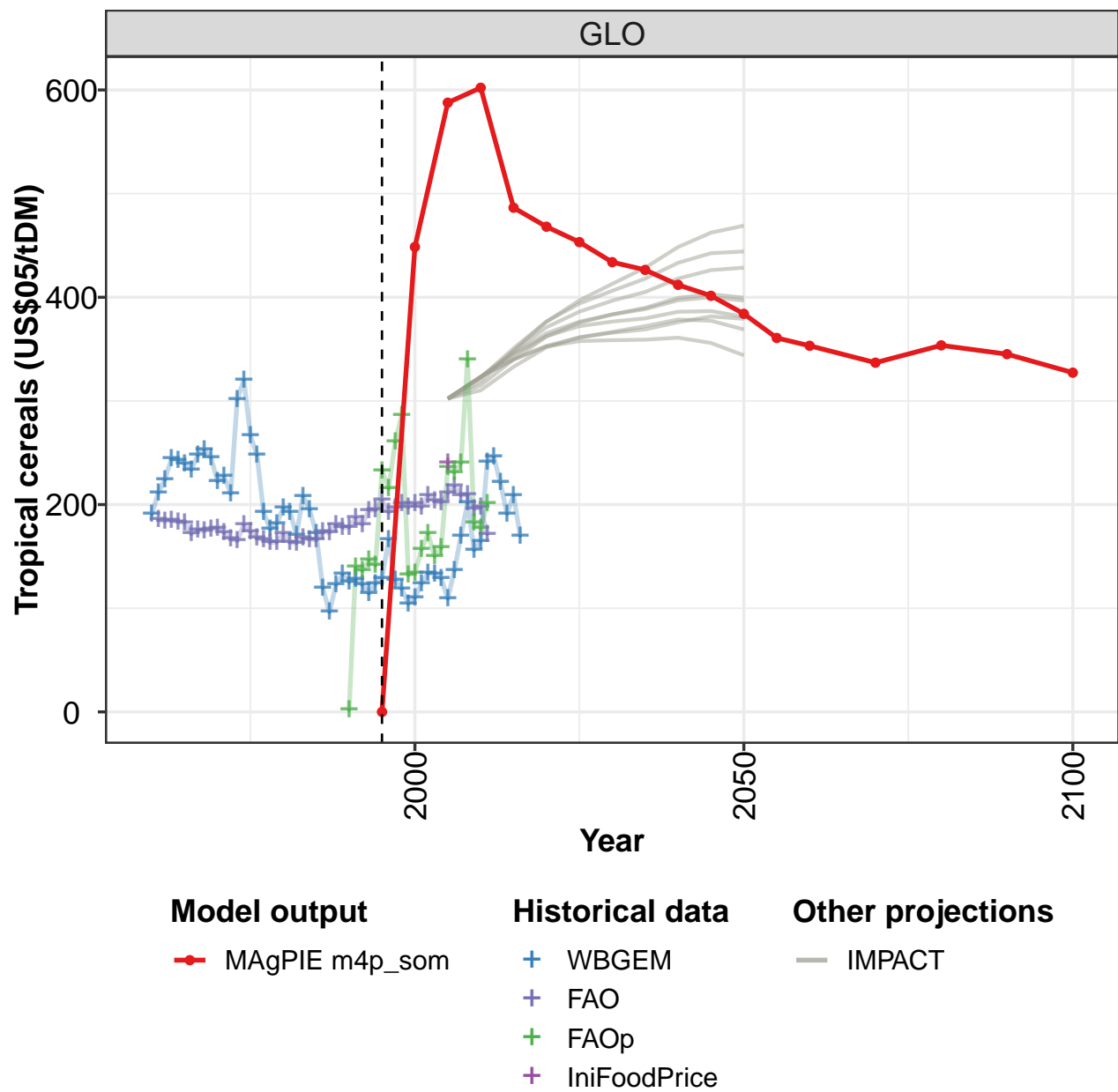


	2005
GLO	191
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 1296: IniFoodPrice — Prices—Agriculture—Temperate cereals (US\$05/tDM)

36.36 Tropical cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

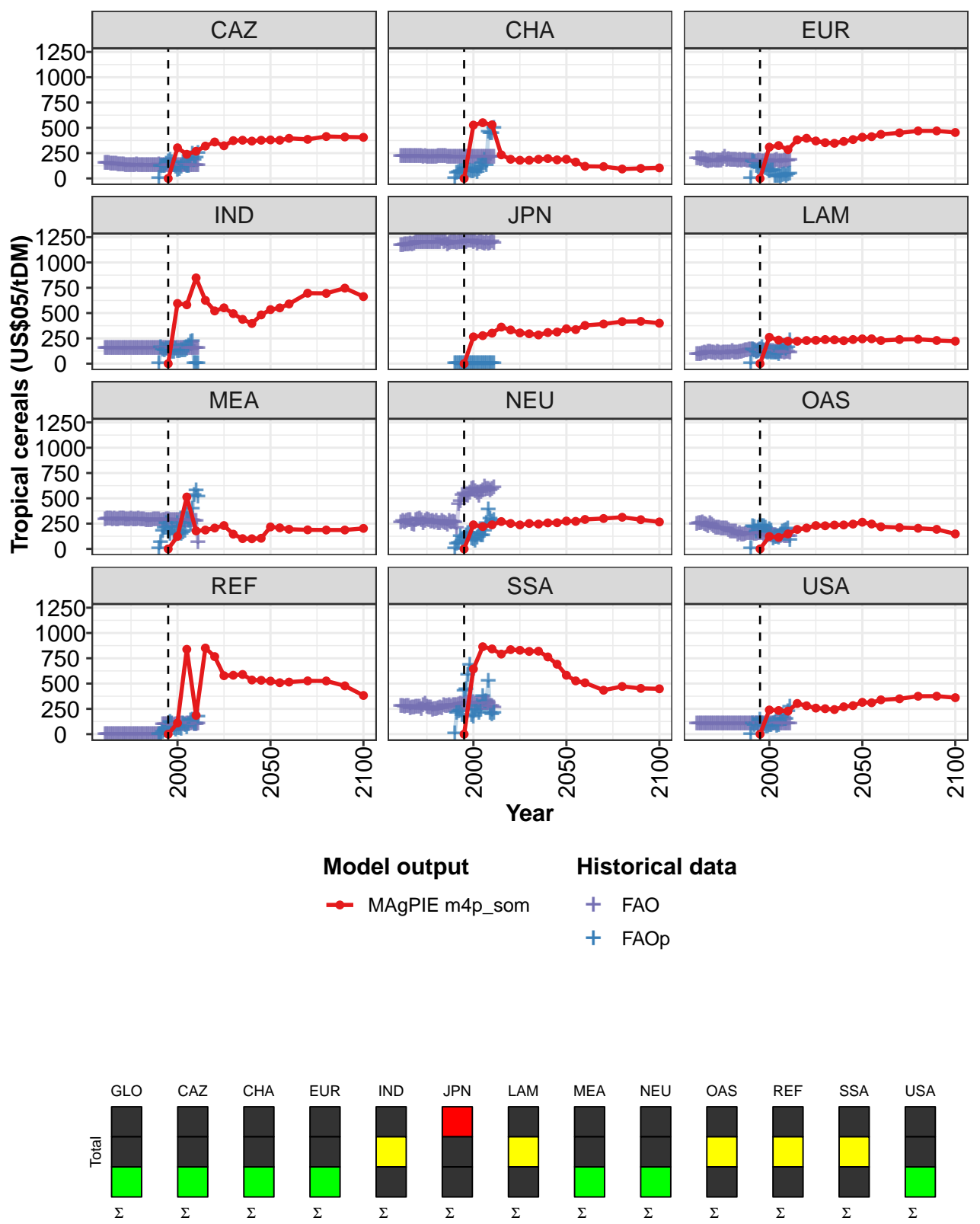


Figure 328: MAgPIE m4p\_som — Prices—Agriculture—Tropical cereals (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	449	588	602	486	468	453	434	426	412	401
CAZ	0	303	238	268	320	360	323	373	377	369	377
CHA	0	527	551	530	233	189	180	179	189	196	184
EUR	0	309	325	285	381	397	370	354	347	365	384
IND	0	595	582	848	625	521	552	494	438	397	482
JPN	0	265	277	302	361	333	304	295	284	308	313
LAM	0	261	233	223	221	229	231	238	236	227	239
MEA	0	124	513	178	187	206	231	146	102	100	105
NEU	0	238	221	238	270	252	237	251	246	258	259
OAS	0	123	114	148	193	206	231	229	236	237	245
REF	0	110	839	185	851	767	578	582	590	535	532
SSA	0	645	864	843	791	835	829	818	820	763	691
USA	0	239	234	228	303	280	257	251	243	271	282

Table 1297: MAgPIE m4p\_som — Prices—Agriculture—Tropical cereals (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	384	361	353	337	354	345	327
CAZ	381	378	396	386	414	410	406
CHA	190	161	120	117	93	99	104
EUR	407	413	435	450	470	470	454
IND	534	551	590	696	695	747	663
JPN	345	337	378	392	416	418	400
LAM	245	246	229	239	241	229	222
MEA	217	208	194	188	187	187	203
NEU	276	272	291	300	313	289	267
OAS	264	246	219	211	204	193	148
REF	524	509	515	527	526	477	382
SSA	582	526	508	434	472	452	448
USA	314	311	339	349	375	376	361

Table 1298: MAgPIE m4p\_som — Prices—Agriculture—Tropical cereals (US\$05/tDM) [PART 2/2]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GLO	190	212	224	244	243	239	234	248	253	246	222
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1299: WBGEM — Prices—Agriculture—Tropical cereals (US\$05/tDM) [PART 1/6]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
GLO	228	210	301	320	267	248	193	176	182	197	193
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1300: WBGEM — Prices—Agriculture—Tropical cereals (US\$05/tDM) [PART 2/6]

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GLO	171	208	195	172	120	96	122	133	125	128	123
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1301: WBGEM — Prices—Agriculture—Tropical cereals (US\$05/tDM) [PART 3/6]

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GLO	114	124	129	166	127	119	104	110	124	134	133
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1302: WBGEM — Prices—Agriculture—Tropical cereals (US\$05/tDM) [PART 4/6]

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GLO	129	109	136	170	201	156	165	241	246	221	191
CAZ											
CHA											
EUR											
IND											
JPN											
LAM											
MEA											
NEU											
OAS											
REF											
SSA											
USA											

Table 1303: WBGEM — Prices—Agriculture—Tropical cereals (US\$05/tDM) [PART 5/6]

	2015	2016
GLO	209	170
CAZ		
CHA		
EUR		
IND		
JPN		
LAM		
MEA		
NEU		
OAS		
REF		
SSA		
USA		

Table 1304: WBGEM — Prices—Agriculture—Tropical cereals (US\$05/tDM) [PART 6/6]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	185	184	185	183	182	172	175	175	176	178	173
CAZ	146	148	147	145	145	143	141	137	136	135	132
CHA	217	214	215	215	214	216	216	216	216	217	216
EUR	194	194	187	193	181	170	166	171	175	180	174
IND	153	154	153	153	153	153	153	154	153	151	152
JPN	1171	1169	1172	1172	1175	1181	1177	1186	1198	1198	1198
LAM	89	89	94	96	105	101	110	111	108	103	101
MEA	291	294	295	293	290	293	287	291	293	293	294
NEU	257	272	259	270	285	279	245	234	281	285	292
OAS	247	248	251	258	241	233	221	251	239	220	208
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	275	278	271	274	275	252	258	264	267	269	266
USA	104	104	104	104	104	104	104	104	104	104	104

Table 1305: FAO — Prices—Agriculture—Tropical cereals (US\$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	167	165	181	174	168	166	163	164	172	164	163
CAZ	128	129	130	128	128	128	132	130	127	128	129
CHA	214	213	214	212	210	213	213	213	213	214	215
EUR	174	174	174	184	208	178	184	181	180	177	177
IND	152	152	154	152	153	154	153	154	153	153	154
JPN	1199	1198	1199	1200	1200	1198	1198	1198	1201	1199	1201
LAM	112	103	100	108	108	105	106	109	122	110	106
MEA	285	285	288	295	291	291	291	294	289	288	287
NEU	281	249	272	287	282	267	274	256	270	254	253
OAS	207	209	198	201	198	196	180	171	166	171	167
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	246	284	295	269	257	260	239	242	244	249	257
USA	104	104	104	104	104	104	104	104	104	104	104

Table 1306: FAO — Prices—Agriculture—Tropical cereals (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	168	167	166	174	173	180	178	178	187	181	195
CAZ	130	128	127	128	129	130	127	132	129	129	129
CHA	214	214	215	212	211	210	212	211	209	209	210
EUR	176	178	174	177	176	174	174	169	169	164	165
IND	153	153	154	153	155	152	153	153	153	153	154
JPN	1225	1201	1202	1176	1190	1199	1196	1198	1193	1195	1201
LAM	107	110	115	123	129	130	138	134	133	130	122
MEA	278	278	279	282	287	285	290	286	277	282	282
NEU	275	255	253	239	274	261	265	256	202	439	467
OAS	136	150	140	139	143	152	153	154	151	148	144
REF	0	0	0	0	0	0	0	0	0	95	93
SSA	255	279	272	278	279	271	280	282	281	293	296
USA	104	104	104	104	104	104	104	104	104	104	104

Table 1307: FAO — Prices—Agriculture—Tropical cereals (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	195	204	193	197	201	197	201	197	209	204	202
CAZ	130	130	127	128	129	128	129	129	129	128	128
CHA	207	208	209	208	211	211	212	211	210	210	212
EUR	172	169	167	166	169	168	166	166	165	169	177
IND	152	153	153	151	152	153	151	151	153	150	151
JPN	1194	1205	1200	1212	1212	1212	1198	1212	1182	1201	1198
LAM	129	134	131	125	118	118	118	121	119	116	116
MEA	289	286	282	285	283	282	281	281	280	278	275
NEU	529	542	529	523	548	587	599	570	551	526	558
OAS	156	152	150	135	136	129	135	131	128	129	126
REF	93	91	92	91	88	94	98	95	99	95	95
SSA	291	302	299	307	304	304	311	295	301	303	307
USA	104	104	104	104	104	105	104	105	104	105	105

Table 1308: FAO — Prices—Agriculture—Tropical cereals (US\$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	211	218	209	210	196	197	171
CAZ	126	127	129	126	127	128	128
CHA	211	211	213	211	212	210	212
EUR	169	167	168	176	172	176	181
IND	151	151	150	151	152	150	150
JPN	1192	1184	1194	1182	1191	1207	1191
LAM	112	114	112	109	112	112	106
MEA	280	283	283	280	275	276	60
NEU	577	610	592	592	575	593	607
OAS	120	124	128	123	124	126	122
REF	100	100	105	109	93	95	102
SSA	303	304	303	308	273	274	260
USA	105	105	105	105	104	105	105

Table 1309: FAO — Prices—Agriculture—Tropical cereals (US\$05/tDM) [PART 5/5]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	2	139	136	146	141	233	216	260	286	132	134
CAZ	0	119	118	121	139	165	181	155	125	113	83
CHA	0	56	57	66	64	92	98	77	78	70	67
EUR	0	167	159	119	101	104	117	110	97	88	70
IND	0	155	134	129	141	147	143	115	117	146	122
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	0	137	128	112	123	136	162	126	115	104	112
MEA	0	66	172	204	251	178	147	210	153	137	249
NEU	0	49	53	121	79	106	130	156	155	100	96
OAS	0	221	213	165	205	229	222	219	203	171	193
REF	0	0	21	37	47	80	120	101	60	43	60
SSA	7	210	223	230	186	426	441	586	682	184	173
USA	0	100	83	102	94	140	103	97	73	71	86

Table 1310: FAOp — Prices—Agriculture—Tropical cereals (US\$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	157	172	150	158	235	231	240	340	182	177	201
CAZ	89	110	157	138	119	120	197	244	182	200	244
CHA	84	63	90	112	147	180	126	458	447	446	498
EUR	73	76	22	24	20	17	32	33	22	34	44
IND	123	129	128	128	147	178	213	222	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	107	110	107	106	95	123	154	175	142	159	223
MEA	217	146	157	176	357	273	248	395	530	574	514
NEU	81	108	152	134	134	178	249	389	293	266	284
OAS	172	99	114	113	108	139	168	175	184	202	82
REF	59	52	100	86	64	91	134	138	103	105	168
SSA	241	273	211	240	376	320	323	522	210	189	209
USA	87	105	108	81	85	149	183	143	144	225	269

Table 1311: FAOp — Prices—Agriculture—Tropical cereals (US\$05/tDM) [PART 2/3]

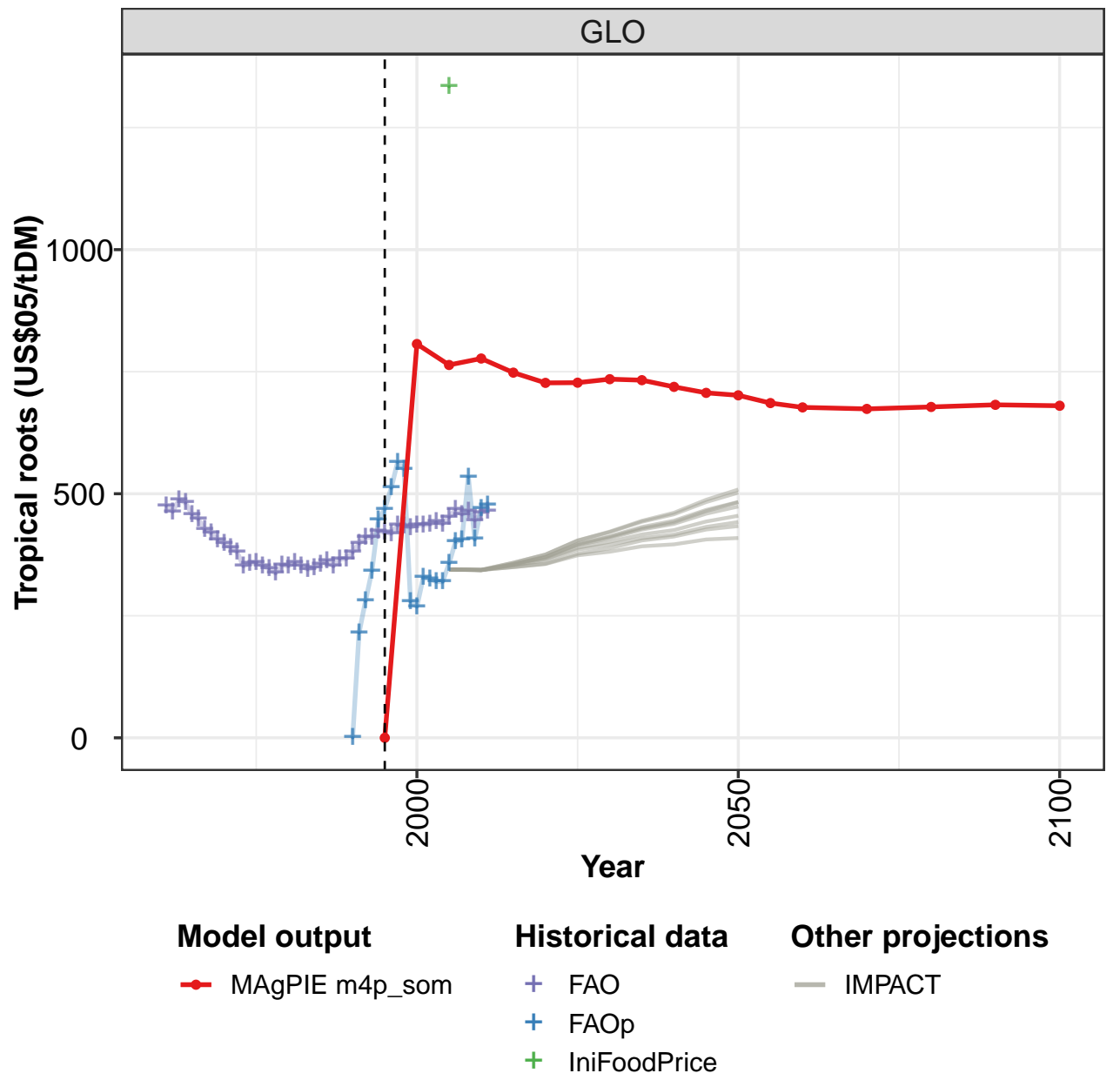


	2005
GLO	240
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 1312: IniFoodPrice — Prices—Agriculture—Tropical cereals (US\$05/tDM)

36.37
Tropical roots

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
 replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

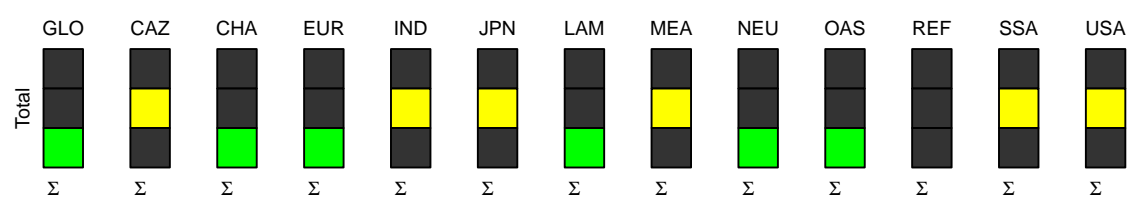
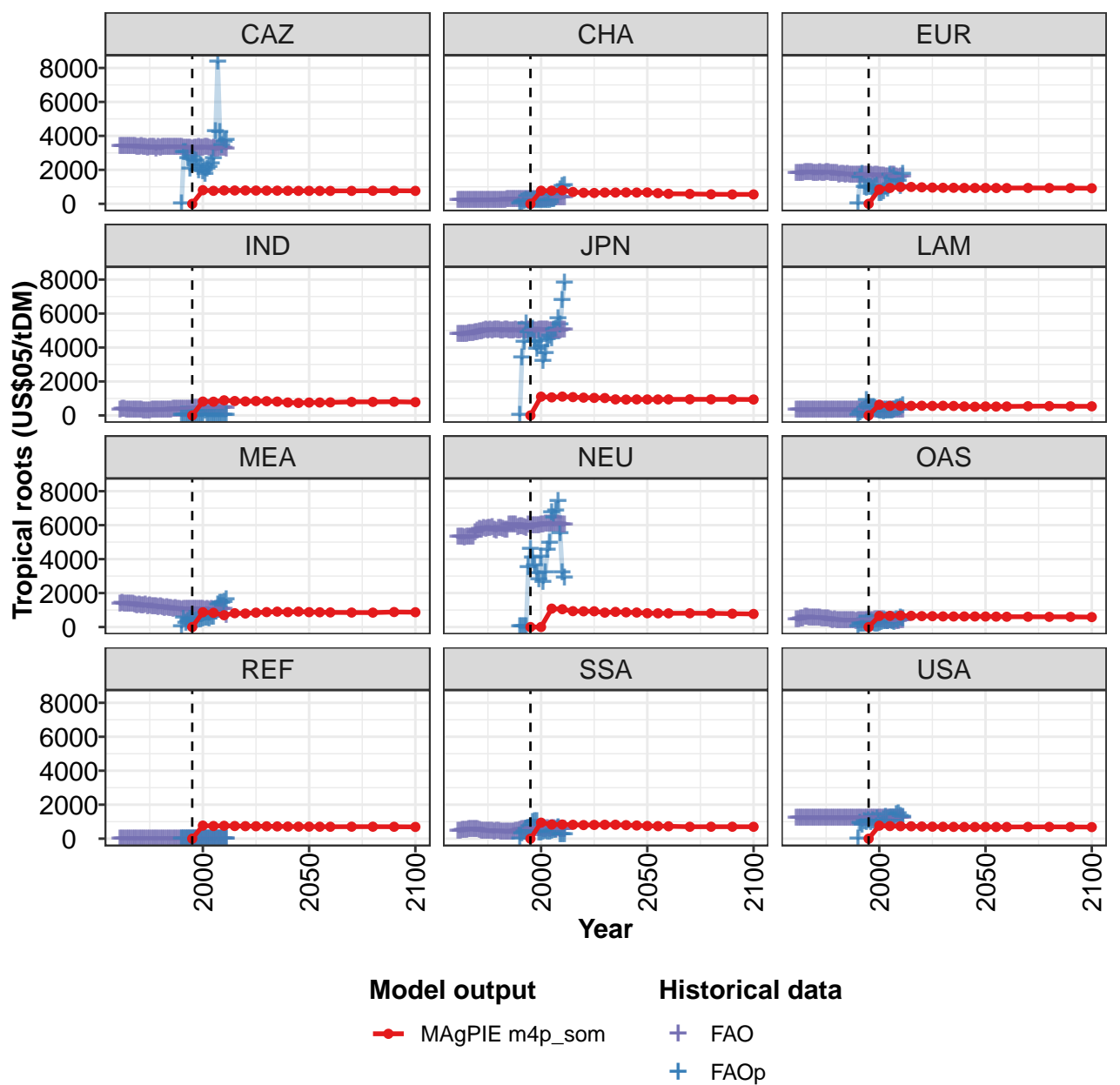


Figure 329: MAgPIE m4p\_som — Prices—Agriculture—Tropical roots (US\$05/tDM)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	807	764	777	748	727	727	735	733	719	707
CAZ	0	800	766	789	785	787	782	779	776	769	762
CHA	0	770	775	793	696	649	637	660	663	667	662
EUR	0	839	933	989	992	971	956	944	943	934	932
IND	0	814	808	890	848	825	844	838	816	761	737
JPN	0	1105	1064	1109	1078	1048	1032	1023	945	934	943
LAM	0	632	559	564	562	570	560	568	558	531	513
MEA	0	871	834	698	816	797	847	879	907	877	911
NEU	0	2	1085	1050	936	927	928	849	894	866	855
OAS	0	653	659	676	662	643	640	628	624	624	624
REF	0	768	746	758	744	735	731	727	722	714	708
SSA	0	942	830	831	817	801	810	818	819	796	776
USA	0	764	741	733	728	716	707	699	694	688	686

Table 1313: MAgPIE m4p\_som — Prices—Agriculture—Tropical roots (US\$05/tDM) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	702	686	677	674	678	682	680
CAZ	765	760	760	761	768	770	763
CHA	670	625	589	581	561	552	552
EUR	933	932	928	933	930	925	915
IND	758	762	769	796	797	805	783
JPN	940	940	944	949	947	946	937
LAM	528	522	528	542	549	537	537
MEA	875	870	862	854	849	884	871
NEU	812	808	807	811	809	785	770
OAS	619	614	606	605	601	599	586
REF	709	704	702	705	705	701	693
SSA	750	737	729	700	703	703	700
USA	693	688	688	692	694	689	682

Table 1314: MAgPIE m4p\_som — Prices—Agriculture—Tropical roots (US\$05/tDM) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	476	463	488	481	457	448	426	419	406	398	390
CAZ	3390	3384	3384	3385	3374	3379	3358	3356	3343	3339	3353
CHA	185	185	188	189	187	183	184	188	188	188	192
EUR	1792	1794	1795	1787	1820	1835	1842	1821	1786	1788	1795
IND	334	349	359	329	337	332	318	301	300	288	300
JPN	4760	4766	4769	4782	4791	4800	4816	4819	4848	4857	4910
LAM	306	303	298	295	295	300	299	295	298	304	310
MEA	1344	1386	1366	1359	1357	1347	1352	1284	1256	1279	1265
NEU	5281	5278	5270	5263	5285	5282	5314	5315	5547	5637	5779
OAS	438	437	466	502	580	595	550	545	545	545	537
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	451	452	467	479	503	520	521	521	539	533	507
USA	1194	1189	1191	1197	1190	1194	1192	1192	1190	1190	1193

Table 1315: FAO — Prices—Agriculture—Tropical roots (US\$05/tDM) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	381	352	357	359	352	346	337	354	352	359	352
CAZ	3335	3305	3298	3316	3336	3342	3221	3316	3252	3301	3339
CHA	196	189	194	195	199	199	200	208	213	223	223
EUR	1817	1784	1807	1827	1842	1800	1803	1801	1773	1708	1742
IND	285	281	283	286	290	302	316	306	312	314	315
JPN	4930	4990	5003	4989	5004	4992	5019	5026	5008	4986	4986
LAM	312	320	320	317	315	314	317	318	320	316	311
MEA	1231	1276	1203	1224	1189	1189	1191	1146	1170	1164	1113
NEU	5728	5782	5766	5810	5800	5840	5702	5675	5820	5786	5750
OAS	528	498	473	485	452	436	396	425	396	395	386
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	459	458	449	452	424	414	409	423	423	410	402
USA	1192	1193	1192	1190	1187	1192	1189	1186	1189	1187	1184

Table 1316: FAO — Prices—Agriculture—Tropical roots (US\$05/tDM) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	345	349	356	363	352	366	367	380	398	410	411
CAZ	3346	3337	3335	3336	3327	3329	3340	3317	3280	3269	3279
CHA	222	226	230	237	231	235	230	230	236	242	239
EUR	1742	1709	1738	1690	1665	1683	1686	1671	1691	1676	1701
IND	322	325	330	347	350	344	358	365	367	369	387
JPN	5004	5005	4980	4987	4992	5003	4984	4994	5006	4981	4972
LAM	317	321	314	311	316	319	313	317	325	333	336
MEA	1138	1100	1068	1065	1111	1057	1031	989	1020	1046	1025
NEU	5682	5719	5986	6004	6017	6014	5869	5917	5926	5842	5817
OAS	385	372	373	400	370	357	345	362	365	361	361
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	385	392	390	393	393	437	451	478	518	543	562
USA	1185	1191	1188	1193	1198	1203	1200	1194	1199	1199	1199

Table 1317: FAO — Prices—Agriculture—Tropical roots (US\$05/tDM) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	423	421	418	435	434	431	436	436	437	442	438
CAZ	3257	3247	3254	3269	3304	3276	3280	3319	3300	3266	3247
CHA	246	245	235	252	248	246	258	264	268	277	277
EUR	1693	1688	1686	1642	1669	1663	1618	1621	1626	1605	1581
IND	385	383	390	407	406	422	408	400	397	413	420
JPN	5005	5009	4997	4993	4998	5034	5020	5018	5018	5005	4991
LAM	331	331	349	338	338	332	325	323	316	316	310
MEA	1046	1036	1021	1027	1032	1033	1021	1006	1042	1007	1035
NEU	6021	5954	5945	5938	5953	5981	6011	6031	6039	6040	6042
OAS	376	401	382	384	404	409	407	402	410	382	341
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	570	566	569	571	569	573	570	560	555	566	563
USA	1196	1198	1195	1195	1209	1217	1217	1213	1207	1200	1193

Table 1318: FAO — Prices—Agriculture—Tropical roots (US\$05/tDM) [PART 4/5]

	2005	2006	2007	2008	2009	2010	2011
GLO	452	468	458	464	445	462	464
CAZ	3258	3200	3222	3248	3280	3284	3236
CHA	285	321	341	337	351	363	365
EUR	1599	1677	1687	1589	1551	1568	1577
IND	414	419	425	425	422	441	438
JPN	4992	4987	4991	4994	4986	5019	5006
LAM	308	312	307	313	316	316	319
MEA	1010	1024	1003	1026	1016	1040	677
NEU	6042	6038	6042	6041	6023	6024	6024
OAS	373	358	358	346	333	355	370
REF	0	0	0	0	0	0	0
SSA	576	582	556	571	529	542	544
USA	1197	1192	1198	1190	1189	1184	1182

Table 1319: FAO — Prices—Agriculture—Tropical roots (US\$05/tDM) [PART 5/5]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	0	215	280	342	447	469	512	565	550	279	269
CAZ	0	3026	3015	2656	2020	2783	2575	2514	1941	2237	1897
CHA	0	107	143	189	172	271	196	215	186	185	175
EUR	0	1528	1715	984	892	985	959	860	965	1058	617
IND	0	29	24	18	19	21	25	16	17	17	14
JPN	0	3366	4301	5377	4889	4994	5058	4288	3881	4341	4061
LAM	0	178	281	293	882	415	366	395	403	288	285
MEA	0	518	208	338	461	413	341	382	429	412	480
NEU	0	0	0	0	3495	4587	4067	3590	3135	2799	4108
OAS	0	159	164	162	196	267	252	233	151	179	209
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	1	296	391	528	553	717	933	1015	1021	358	325
USA	0	883	814	998	928	1051	953	1042	1017	1167	1024

Table 1320: FAOp — Prices—Agriculture—Tropical roots (US\$05/tDM) [PART 1/3]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GLO	329	325	320	320	357	401	406	534	407	471	478
CAZ	1753	2037	2170	2333	2637	4246	8334	4220	3446	3653	3737
CHA	209	189	197	223	227	266	328	434	836	1008	1076
EUR	631	734	970	863	1693	1460	1587	1369	1314	997	1717
IND	256	0	0	0	0	0	0	0	0	0	0
JPN	3184	3624	4476	4661	4528	5006	5073	5704	5324	6787	7787
LAM	270	217	236	244	262	285	333	420	438	491	545
MEA	517	555	475	564	599	906	1311	1387	1413	1433	1581
NEU	2642	3214	4502	4943	6711	6437	6833	7382	5483	3174	2870
OAS	297	338	346	313	365	328	263	417	393	512	467
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	409	433	392	382	442	510	502	664	225	257	251
USA	1024	1118	1267	1160	1199	1204	1210	1392	1439	1309	1241

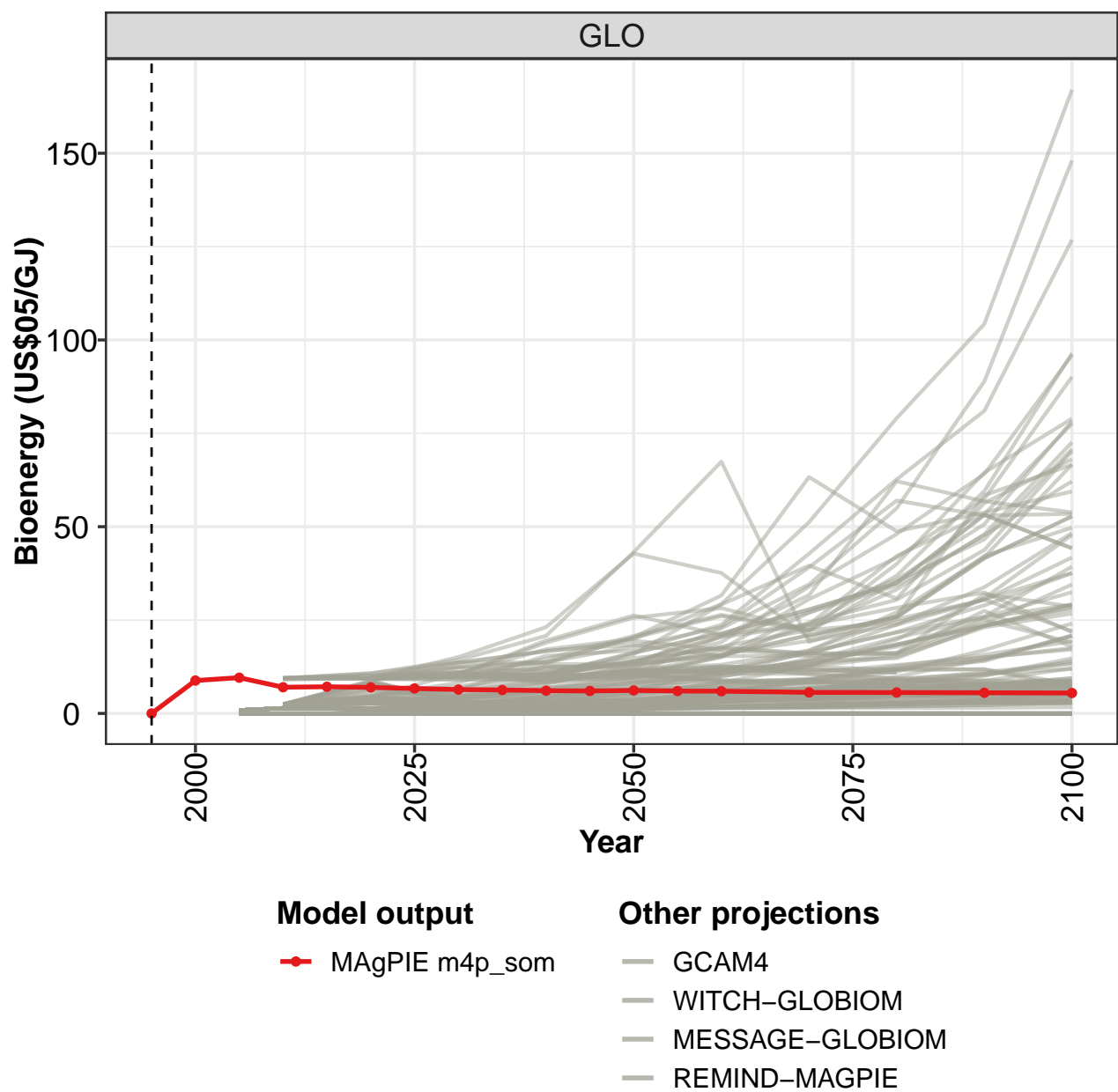
Table 1321: FAOp — Prices—Agriculture—Tropical roots (US\$05/tDM) [PART 2/3]

	2005
GLO	1334
CAZ	
CHA	
EUR	
IND	
JPN	
LAM	
MEA	
NEU	
OAS	
REF	
SSA	
USA	

Table 1322: IniFoodPrice — Prices—Agriculture—Tropical roots (US\$05/tDM)

## 37 Bioenergy

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

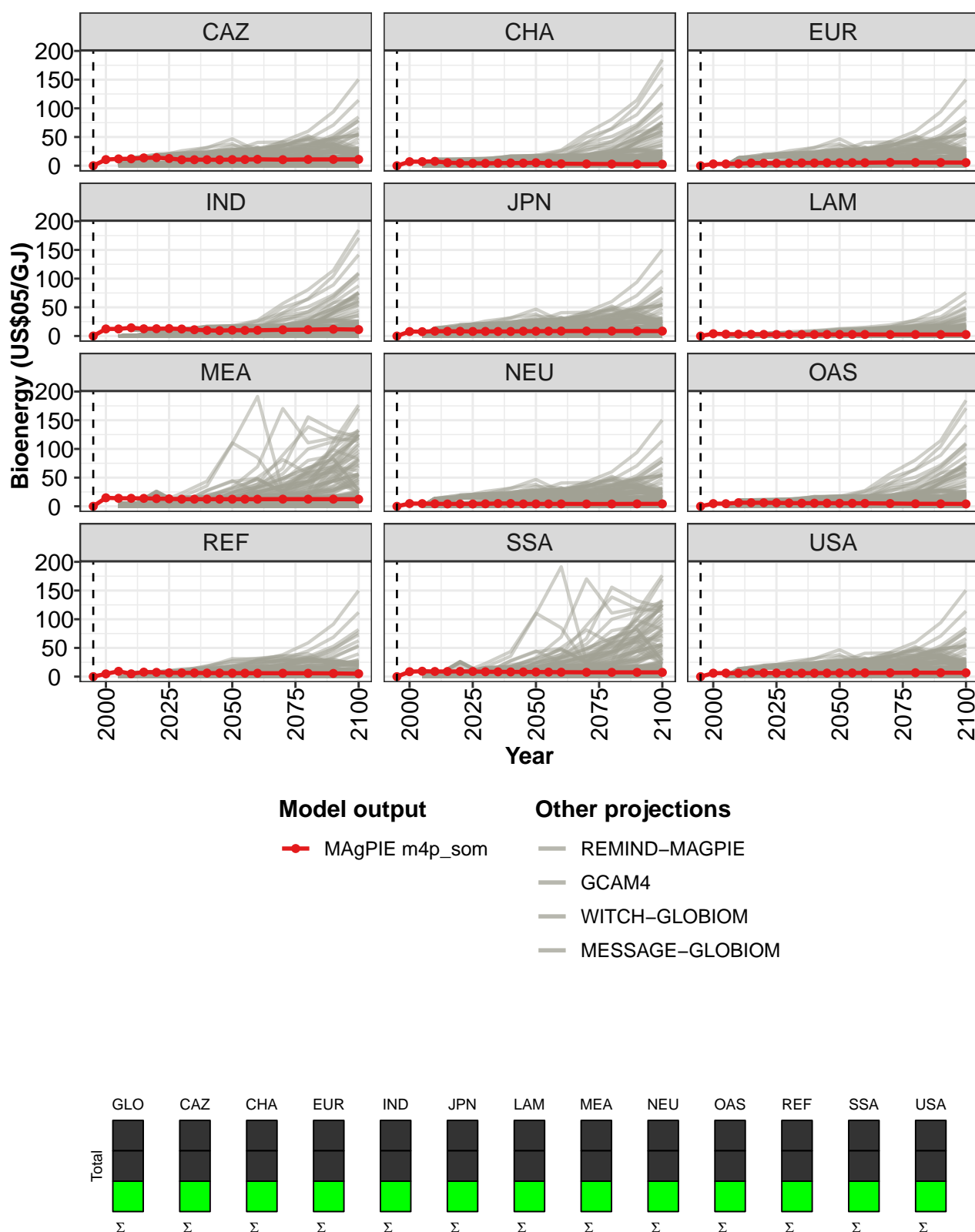


Figure 330: MAGPIE m4p\_som — Prices—Bioenergy (US\$05/GJ)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.0	8.8	9.6	7.0	7.1	7.0	6.7	6.4	6.3	6.1	6.0
CAZ	0.0	10.7	11.9	12.1	13.6	14.1	12.5	10.4	10.5	10.5	10.3
CHA	0.0	7.0	7.1	7.6	5.3	4.5	4.2	4.1	4.5	4.7	4.5
EUR	0.0	3.1	3.1	3.3	4.7	4.5	4.4	4.7	4.9	4.8	5.0
IND	0.0	12.4	12.3	14.3	12.6	12.7	13.0	12.2	11.0	9.8	9.4
JPN	0.0	7.7	7.6	8.4	8.2	8.2	7.9	8.0	7.9	7.9	8.4
LAM	0.0	4.0	3.2	3.2	3.0	2.8	2.6	2.6	2.6	2.6	2.6
MEA	0.0	14.8	14.0	14.0	13.8	13.4	13.0	12.5	12.4	12.4	12.4
NEU	0.0	4.8	4.7	4.4	4.1	4.2	4.1	4.3	4.9	4.9	4.2
OAS	0.0	4.7	4.6	6.3	6.2	6.2	6.0	5.6	5.4	5.4	5.4
REF	0.0	4.8	9.3	4.9	7.8	7.5	6.6	6.5	6.5	6.2	6.2
SSA	0.0	8.6	9.4	9.0	8.9	9.1	9.0	8.4	8.3	8.2	8.1
USA	0.0	6.0	6.1	6.1	6.7	6.5	6.3	6.1	6.0	6.1	6.2

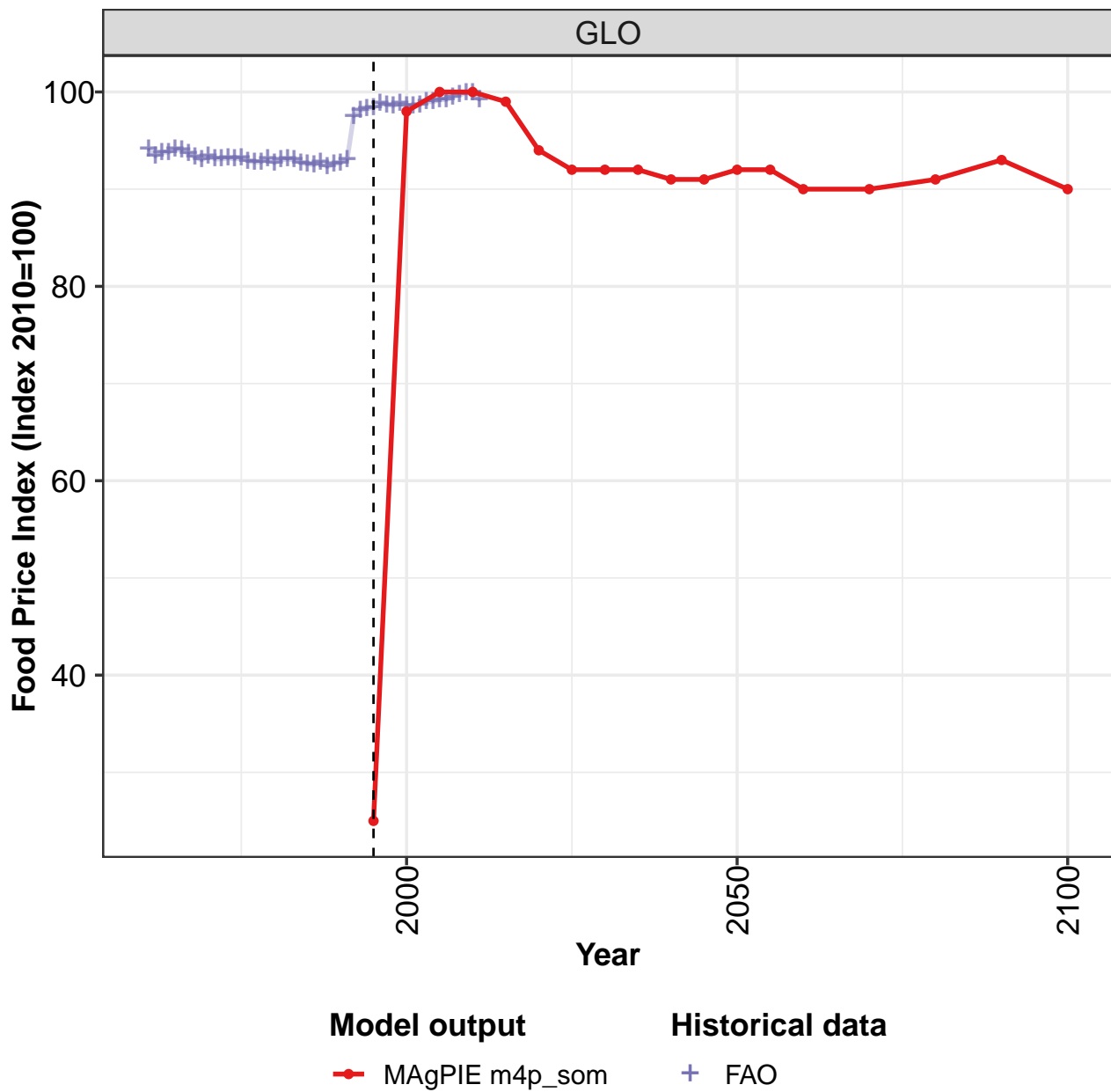
Table 1323: MAgPIE m4p\_som — Prices—Bioenergy (US\$05/GJ) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	6.2	6.0	5.9	5.6	5.6	5.5	5.5
CAZ	10.7	10.8	11.2	10.6	10.9	11.0	11.0
CHA	5.3	4.1	3.4	3.1	2.9	2.6	2.6
EUR	5.1	5.3	5.2	5.8	5.6	5.5	5.4
IND	10.2	9.8	10.0	10.9	11.1	11.8	11.2
JPN	8.3	8.5	8.6	8.7	8.6	8.6	8.5
LAM	2.7	2.7	2.7	2.5	2.6	2.6	2.5
MEA	12.4	12.4	12.4	12.5	12.5	12.5	12.3
NEU	4.2	4.1	4.2	4.0	4.1	4.2	4.2
OAS	5.3	5.3	5.1	4.9	4.4	4.3	4.1
REF	6.0	6.0	5.9	5.9	5.8	5.6	5.0
SSA	8.0	7.9	7.7	7.5	7.4	7.4	7.4
USA	6.4	6.4	6.5	6.6	6.8	6.8	6.6

Table 1324: MAgPIE m4p\_som — Prices—Bioenergy (US\$05/GJ) [PART 2/2]

## 38 Food Price Index

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

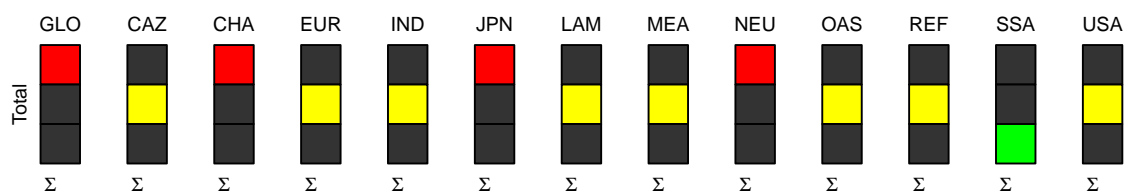
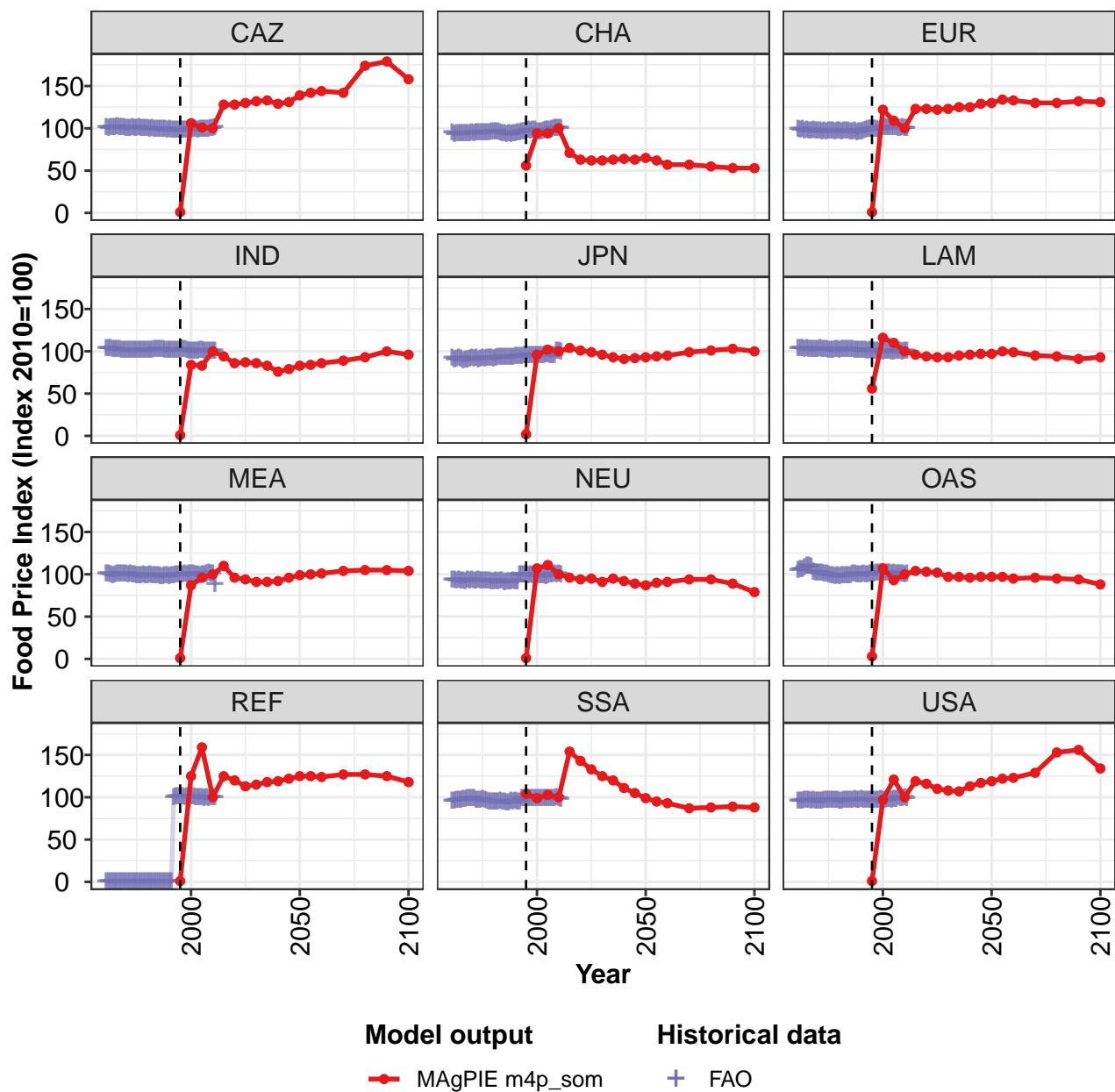


Figure 331: MAgPIE m4p\_som — Prices—Food Price Index (Index 2010=100)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	25	98	100	100	99	94	92	92	92	91	91
CAZ	1	106	101	100	128	128	130	132	133	129	131
CHA	56	94	94	100	71	63	62	62	63	64	63
EUR	1	122	109	100	123	123	122	123	125	125	129
IND	1	84	83	100	94	86	87	86	83	76	79
JPN	2	96	102	100	104	101	99	96	93	91	92
LAM	56	116	110	100	96	94	93	93	95	96	97
MEA	1	87	96	100	110	96	94	91	91	92	96
NEU	1	107	111	100	96	94	95	91	95	92	89
OAS	3	107	93	100	104	103	102	97	97	96	97
REF	1	125	159	100	125	120	113	115	118	119	122
SSA	104	99	103	100	154	143	133	125	120	111	105
USA	1	97	121	100	119	116	110	108	107	113	117

Table 1325: MAgPIE m4p\_som — Prices—Food Price Index (Index 2010=100) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	92	92	90	90	91	93	90
CAZ	139	142	144	142	174	179	158
CHA	65	62	57	57	55	53	53
EUR	130	134	133	130	130	132	131
IND	83	84	86	89	93	100	96
JPN	93	94	95	99	101	103	100
LAM	97	100	99	95	94	91	93
MEA	99	100	101	104	105	105	104
NEU	87	90	91	94	94	89	79
OAS	97	97	95	96	95	94	88
REF	125	125	124	127	127	125	118
SSA	99	95	93	87	88	89	88
USA	119	122	123	129	153	156	134

Table 1326: MAgPIE m4p\_som — Prices—Food Price Index (Index 2010=100) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	94	93	94	94	94	94	94	93	93	93	93
CAZ	101	100	101	101	101	102	101	100	100	100	100
CHA	95	93	94	94	94	94	94	94	94	95	94
EUR	99	98	98	97	98	97	97	97	96	97	96
IND	103	103	103	102	102	102	102	101	101	101	101
JPN	92	90	91	92	91	89	90	90	91	92	91
LAM	104	103	103	102	103	102	102	102	102	102	103
MEA	100	100	99	99	99	100	100	100	100	100	99
NEU	93	93	92	93	92	92	92	93	92	94	92
OAS	105	105	106	108	110	109	109	102	101	101	102
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	96	96	96	97	97	98	98	98	98	99	99
USA	95	95	95	96	96	96	95	96	95	95	95

Table 1327: FAO — Prices—Food Price Index (Index 2010=100) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	93	93	93	93	93	93	93	93	93	93	93
CAZ	100	100	100	100	101	100	100	100	100	99	100
CHA	95	95	95	95	95	95	95	96	96	96	96
EUR	96	97	96	97	97	96	96	97	96	96	96
IND	101	101	101	101	101	101	101	101	101	101	101
JPN	92	90	91	92	91	92	92	92	91	92	93
LAM	102	102	102	102	101	101	102	102	101	102	102
MEA	100	100	99	98	98	98	99	98	98	99	98
NEU	92	93	93	92	92	93	92	91	91	92	91
OAS	101	101	100	99	98	98	98	98	98	98	98
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	96	97	96	98	96	96	95	94	95	95	94
USA	95	96	96	97	97	96	96	96	95	95	97

Table 1328: FAO — Prices—Food Price Index (Index 2010=100) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	93	93	93	92	93	92	93	93	93	98	98
CAZ	99	99	98	98	98	98	98	98	98	98	98
CHA	95	94	94	93	94	93	94	94	95	95	96
EUR	96	96	96	96	96	95	96	96	96	98	99
IND	102	102	102	102	102	101	101	101	101	101	101
JPN	93	93	93	93	93	93	93	94	94	94	94
LAM	102	102	102	102	101	101	101	101	101	101	100
MEA	99	98	98	98	97	98	99	98	98	98	99
NEU	92	92	90	91	91	92	93	91	91	99	99
OAS	98	98	99	100	100	100	99	99	100	100	99
REF	0	0	0	0	0	0	0	0	0	100	100
SSA	96	94	94	94	93	95	95	95	94	94	99
USA	96	97	97	97	98	97	97	98	97	97	96

Table 1329: FAO — Prices—Food Price Index (Index 2010=100) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	98	98	99	99	99	99	99	99	99	99	99
CAZ	98	98	98	98	98	99	98	99	99	98	98
CHA	96	97	98	97	98	98	96	96	96	97	98
EUR	99	98	99	99	98	98	101	101	101	101	101
IND	101	101	102	102	101	100	100	100	100	100	101
JPN	95	95	95	95	95	95	95	95	95	95	96
LAM	101	100	100	100	100	100	100	100	100	100	100
MEA	99	99	100	100	99	100	100	100	100	100	99
NEU	99	100	98	99	98	98	98	99	98	98	98
OAS	100	101	100	101	101	102	101	101	102	101	101
REF	101	100	101	100	100	100	100	100	100	99	99
SSA	99	99	99	99	98	99	99	98	98	99	98
USA	97	96	97	97	96	98	97	97	98	98	97

Table 1330: FAO — Prices—Food Price Index (Index 2010=100) [PART 4/5]

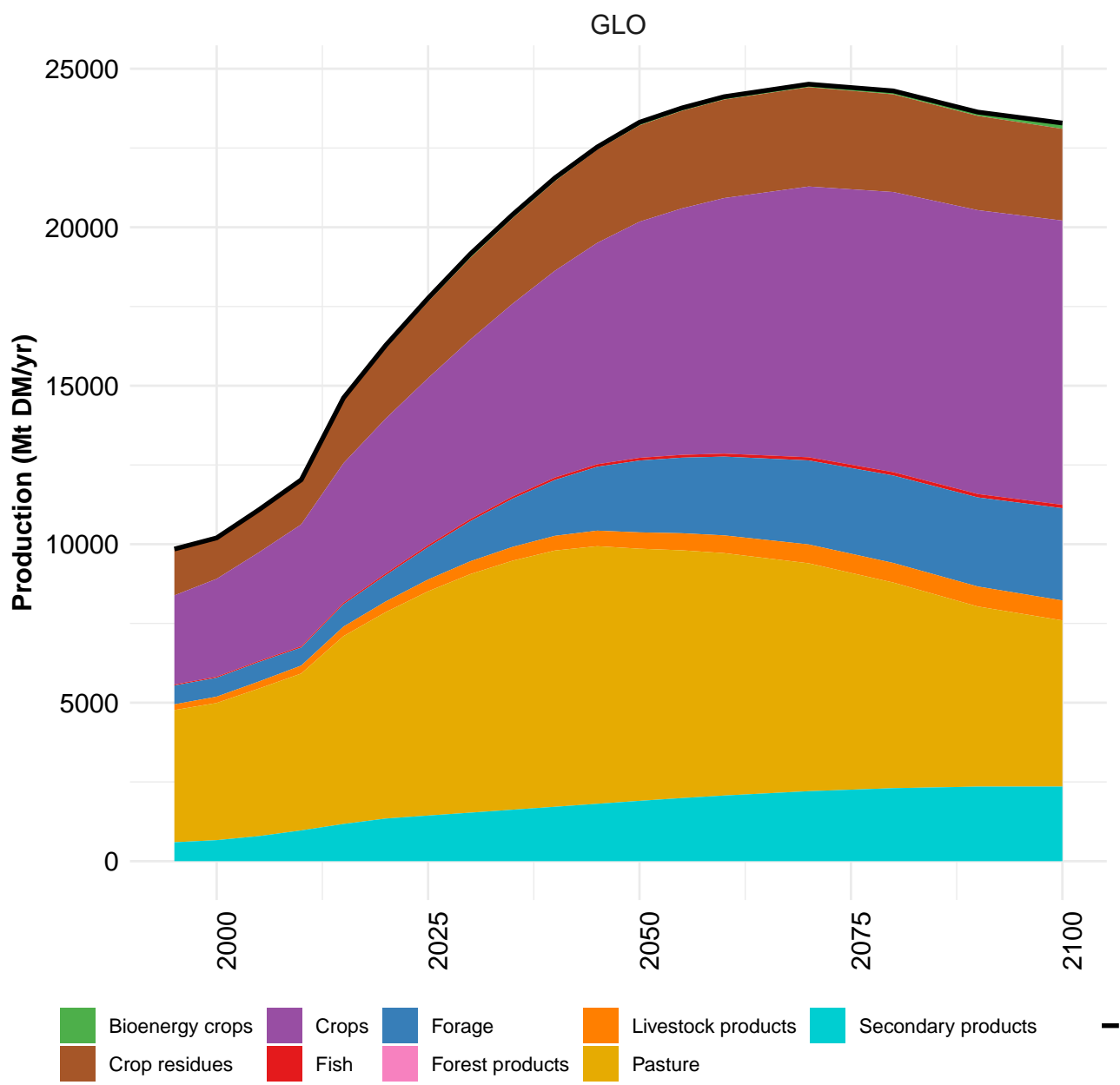
	2005	2006	2007	2008	2009	2010	2011
GLO	99	99	100	100	100	100	99
CAZ	99	99	99	99	100	100	101
CHA	98	98	99	100	100	100	100
EUR	101	101	100	100	100	100	100
IND	101	100	100	100	100	100	100
JPN	96	95	95	95	100	100	99
LAM	100	100	100	100	100	100	100
MEA	100	100	100	101	101	100	88
NEU	99	100	99	100	99	100	99
OAS	101	101	101	101	100	100	100
REF	99	99	99	99	100	100	99
SSA	98	99	98	99	99	98	98
USA	98	98	100	99	99	100	99

Table 1331: FAO — Prices—Food Price Index (Index 2010=100) [PART 5/5]

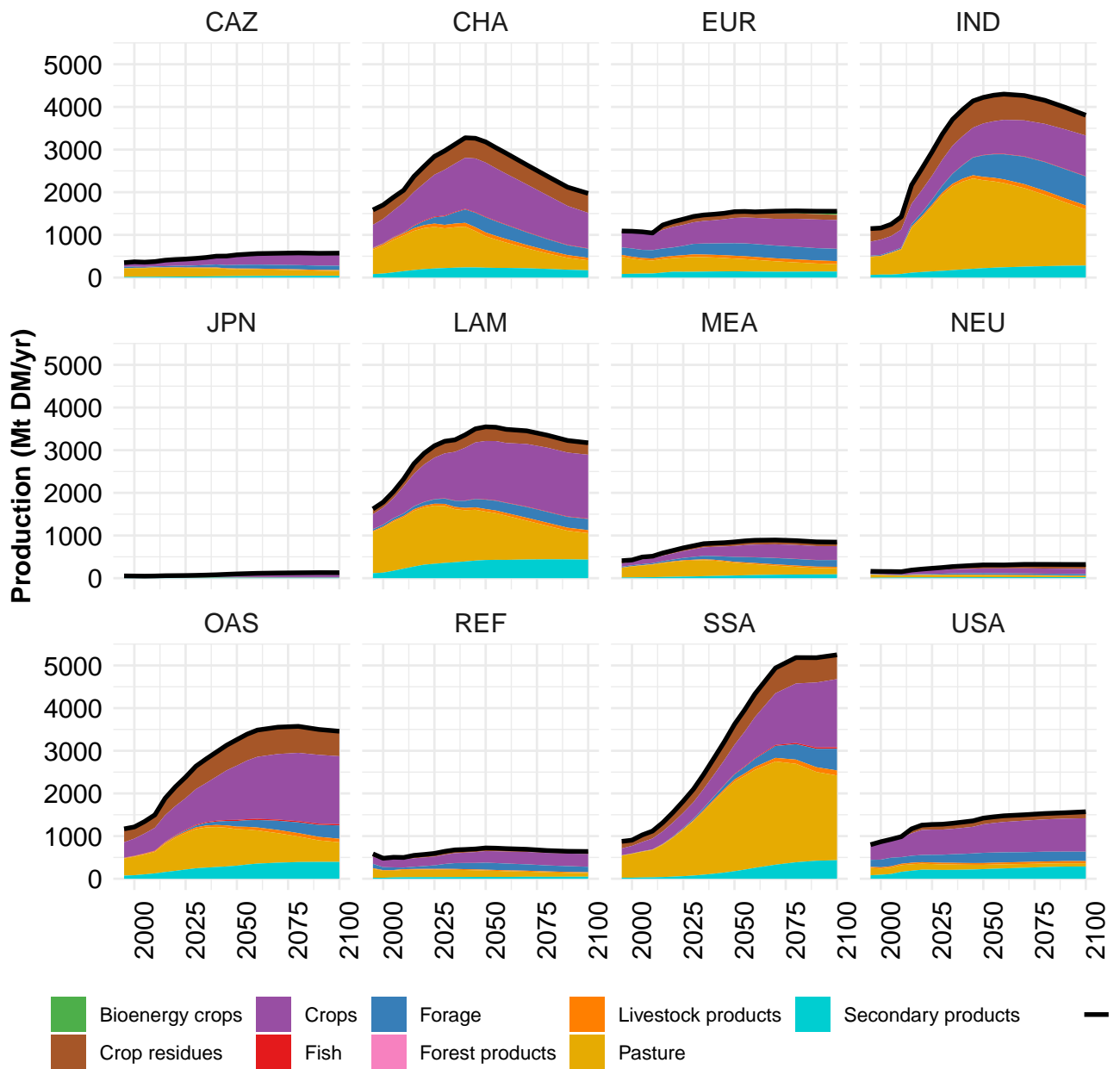
**39 GHG Emission****40 Land****41 Water**

Part XII

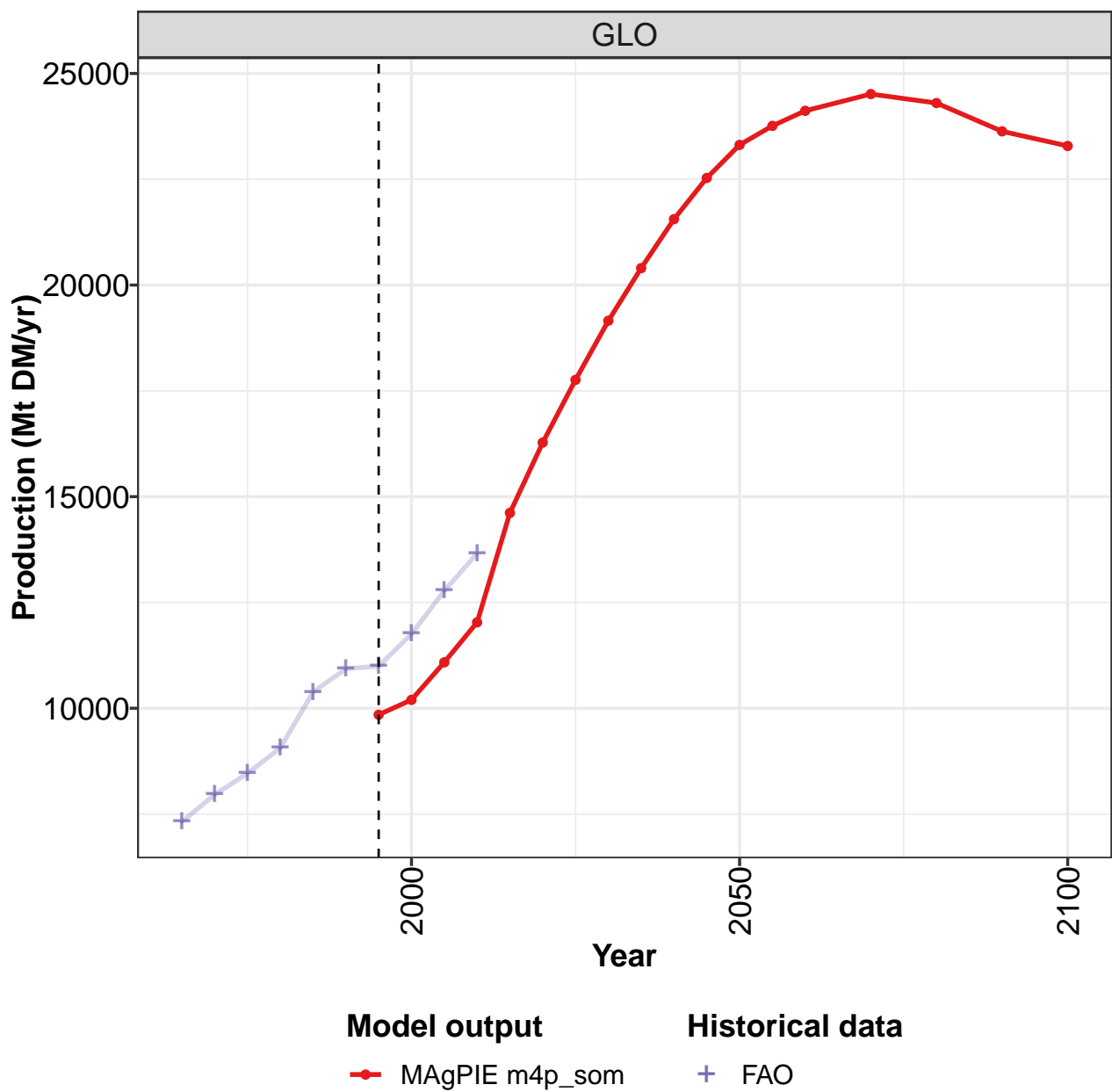
# Production







## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

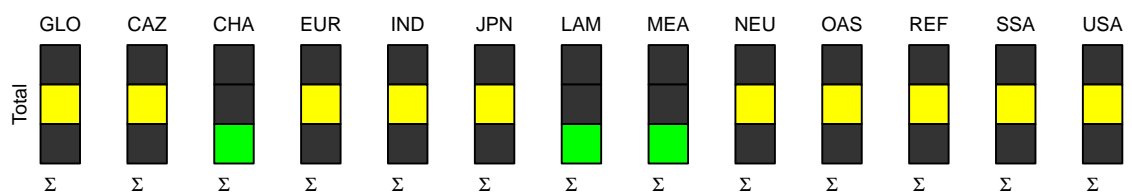
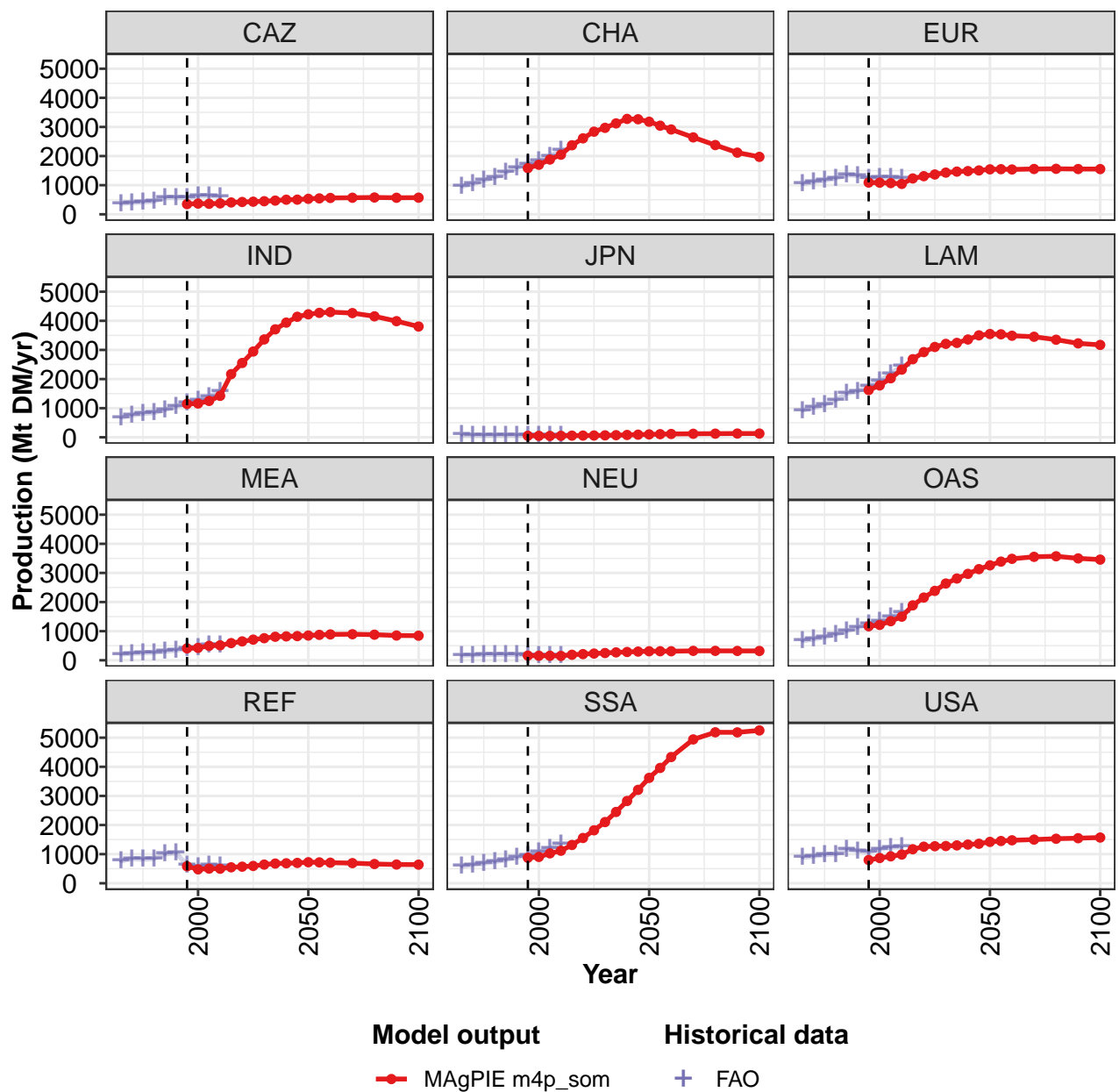


Figure 332: MAgPIE m4p\_som — Production (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	9847	10199	11086	12031	14616	16278	17761	19156	20400	21557	22531
CAZ	350	369	361	375	407	423	433	450	471	501	504
CHA	1586	1702	1882	2047	2371	2609	2838	2970	3123	3277	3265
EUR	1091	1086	1072	1044	1231	1309	1368	1432	1467	1484	1507
IND	1147	1161	1248	1423	2169	2552	2947	3361	3708	3939	4140
JPN	53	50	47	51	58	60	62	67	73	80	90
LAM	1623	1781	2028	2324	2682	2926	3102	3209	3242	3359	3501
MEA	409	426	496	514	590	649	709	759	808	821	831
NEU	161	156	155	151	189	212	231	249	271	285	299
OAS	1170	1215	1342	1498	1886	2155	2384	2637	2808	2969	3130
REF	584	480	504	500	548	570	594	642	677	686	699
SSA	876	905	1028	1118	1316	1556	1820	2102	2450	2827	3209
USA	799	868	925	987	1169	1257	1273	1279	1301	1329	1357

Table 1332: MAgPIE m4p\_som — Production (Mt DM/yr) [PART 1/2]

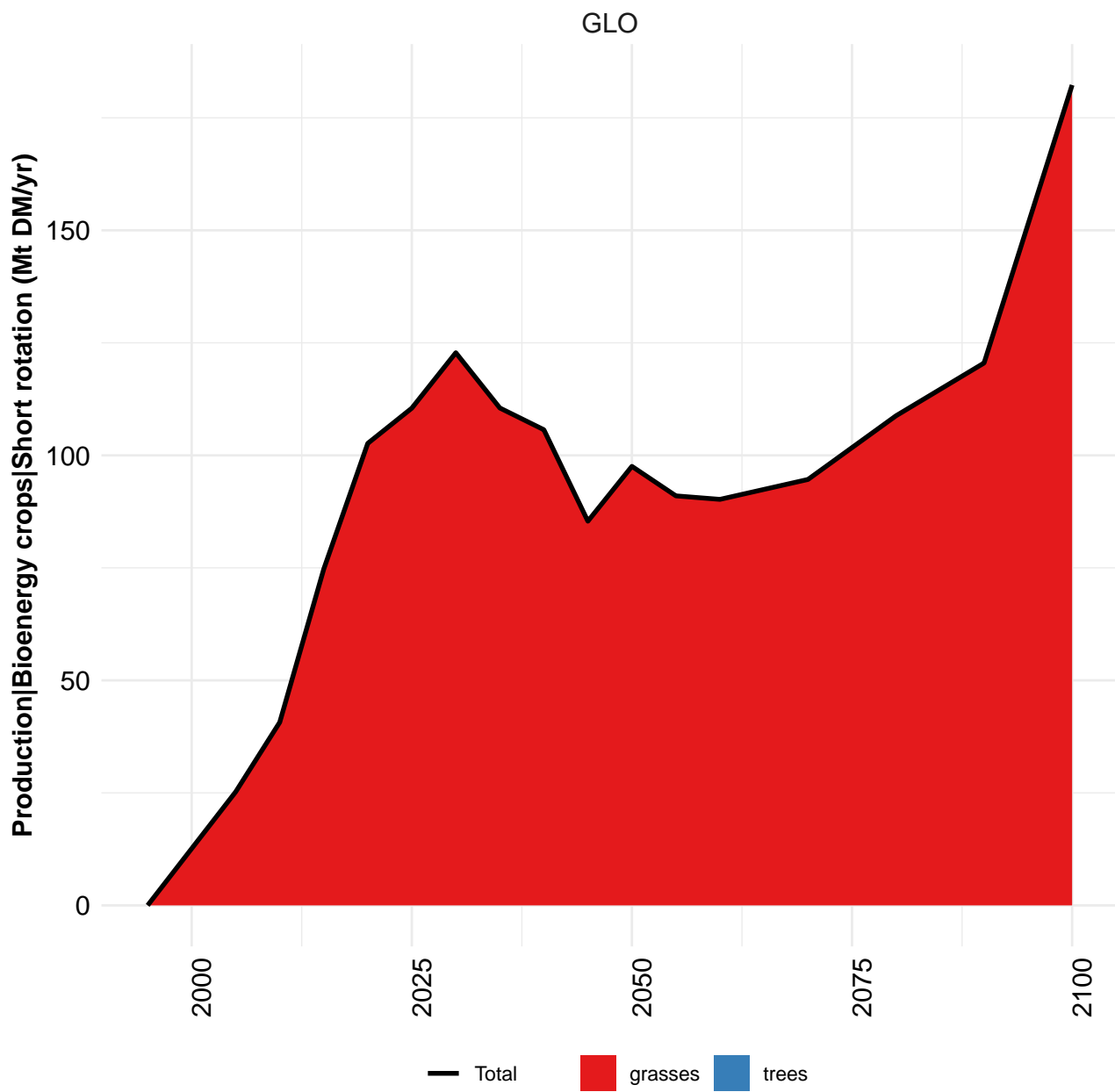
	2050	2055	2060	2070	2080	2090	2100
GLO	23312	23762	24117	24513	24301	23632	23286
CAZ	532	547	561	569	578	568	572
CHA	3180	3044	2914	2643	2378	2118	1973
EUR	1544	1550	1540	1556	1563	1555	1553
IND	4223	4274	4300	4266	4155	3989	3805
JPN	100	107	114	121	126	130	129
LAM	3547	3537	3488	3453	3351	3226	3173
MEA	850	873	888	894	879	851	845
NEU	310	311	309	323	323	321	320
OAS	3261	3389	3485	3553	3573	3499	3458
REF	723	718	707	692	661	644	640
SSA	3620	3961	4335	4941	5185	5182	5249
USA	1422	1451	1476	1500	1530	1548	1571

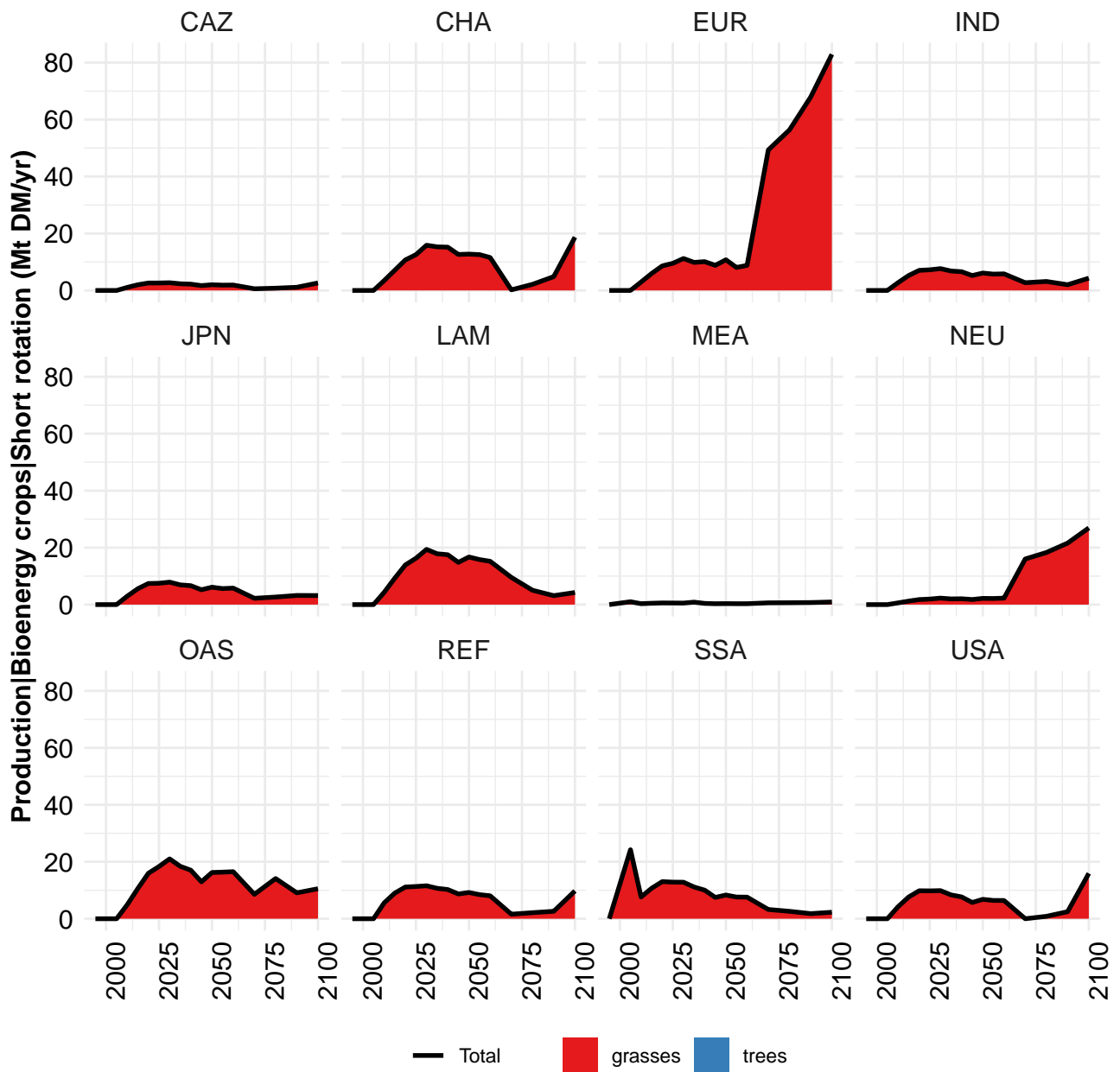
Table 1333: MAgPIE m4p\_som — Production (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	7317	7958	8459	9061	10381	10933	10993	11756	12774	13658
CAZ	368	397	417	445	578	583	570	621	643	603
CHA	961	1042	1160	1264	1439	1599	1716	1836	1998	2207
EUR	1041	1114	1167	1236	1355	1327	1243	1271	1271	1247
IND	678	759	808	843	942	1062	1168	1278	1395	1577
JPN	83	80	73	75	80	75	67	61	57	59
LAM	921	1020	1118	1269	1505	1582	1760	1936	2181	2454
MEA	208	231	249	266	304	343	397	438	513	524
NEU	170	178	191	193	193	189	174	172	173	173
OAS	664	726	791	887	1004	1124	1234	1339	1486	1651
REF	759	849	820	846	1002	1044	622	558	612	591
SSA	580	635	684	737	806	887	969	1071	1210	1333
USA	882	927	980	1000	1172	1117	1072	1174	1237	1241

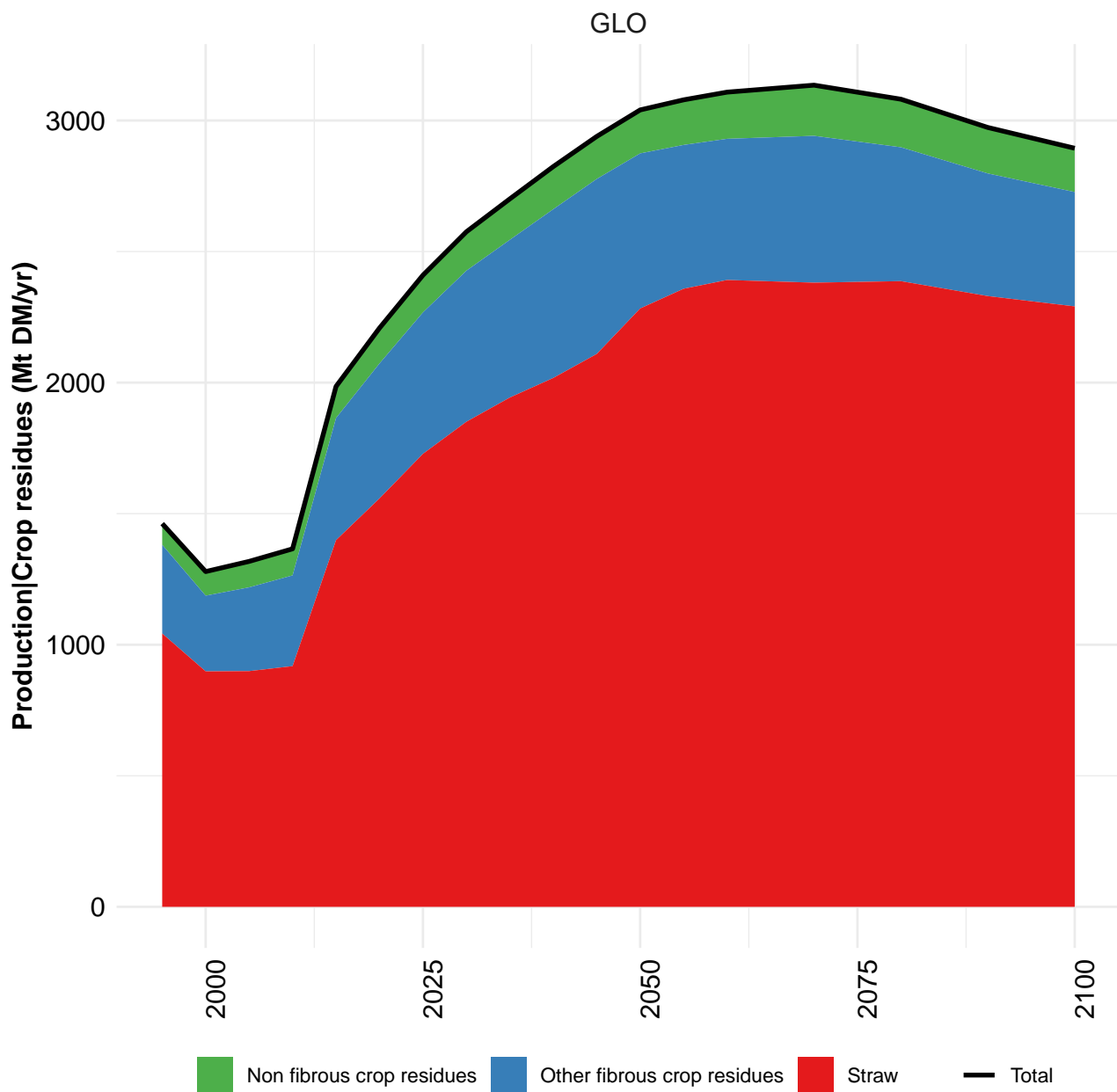
Table 1334: FAO — Production (Mt DM/yr)

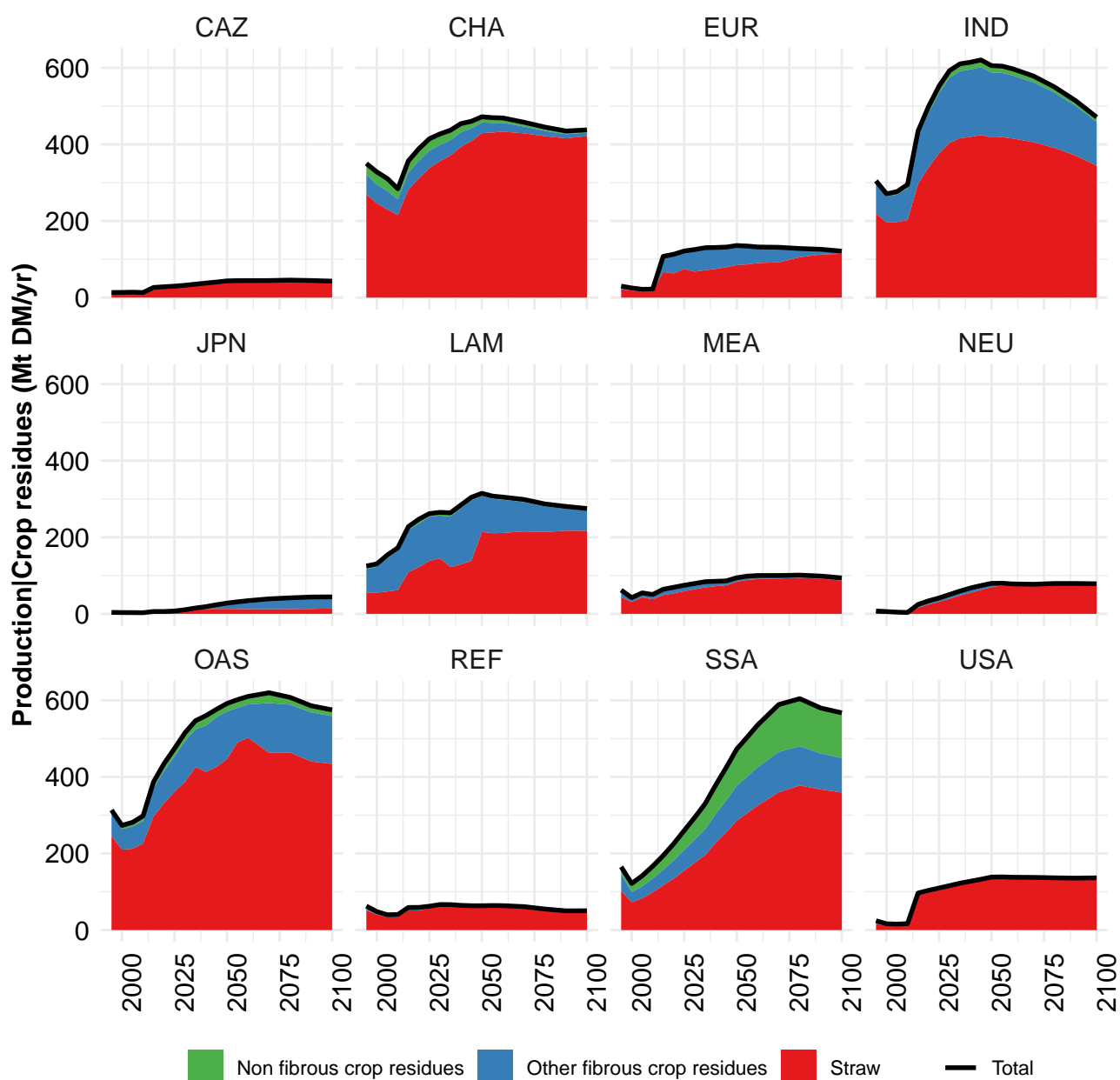
## 42 Bioenergy crops





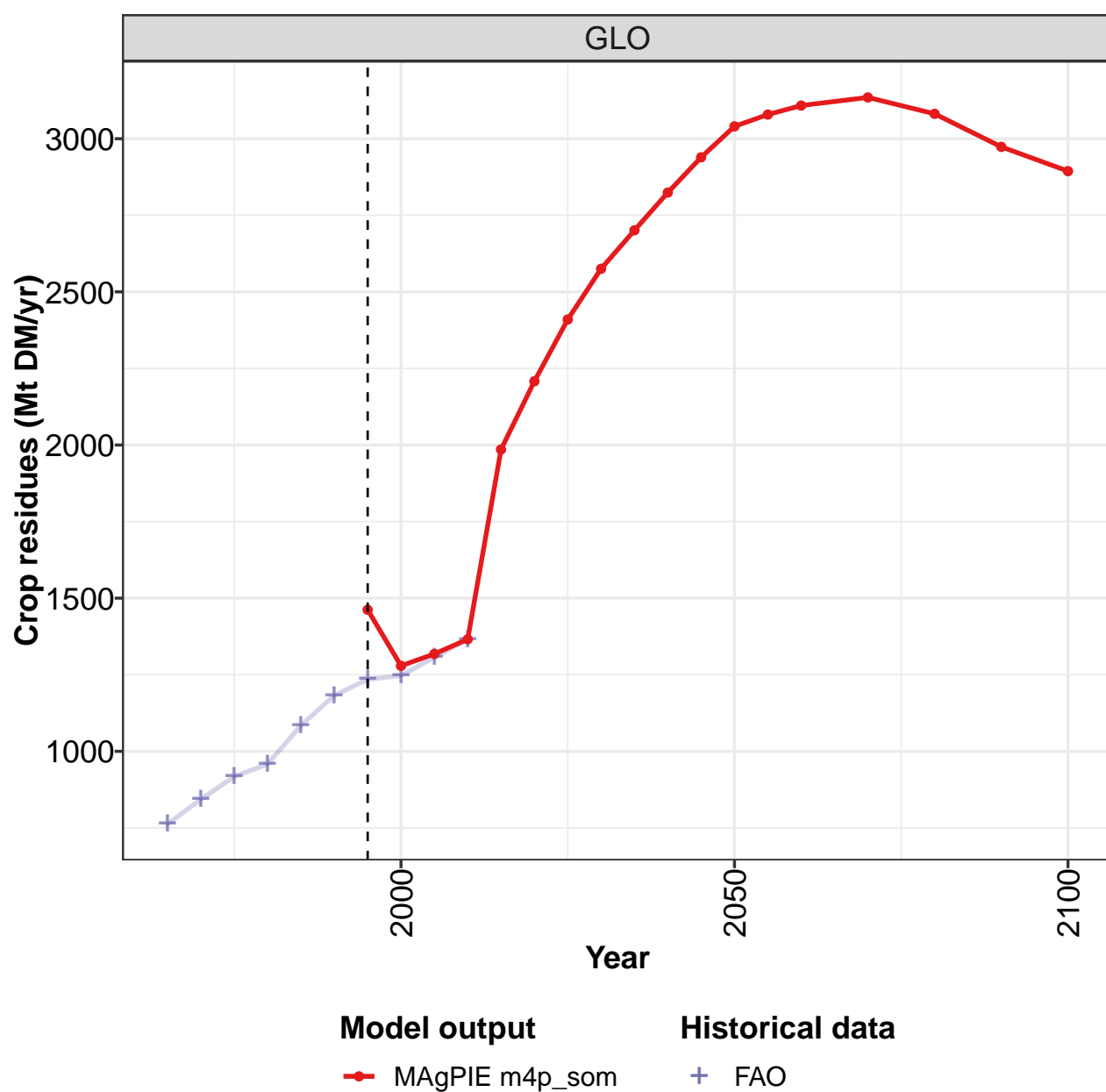
## 43 Crop residues







## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

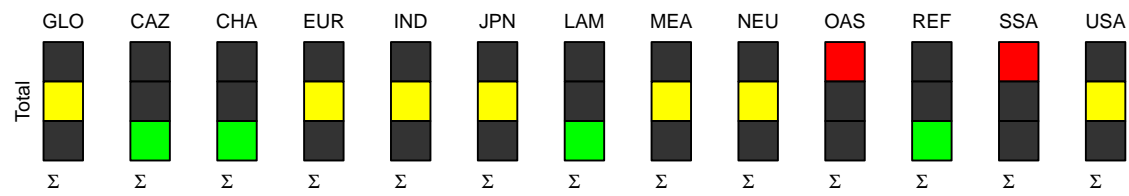
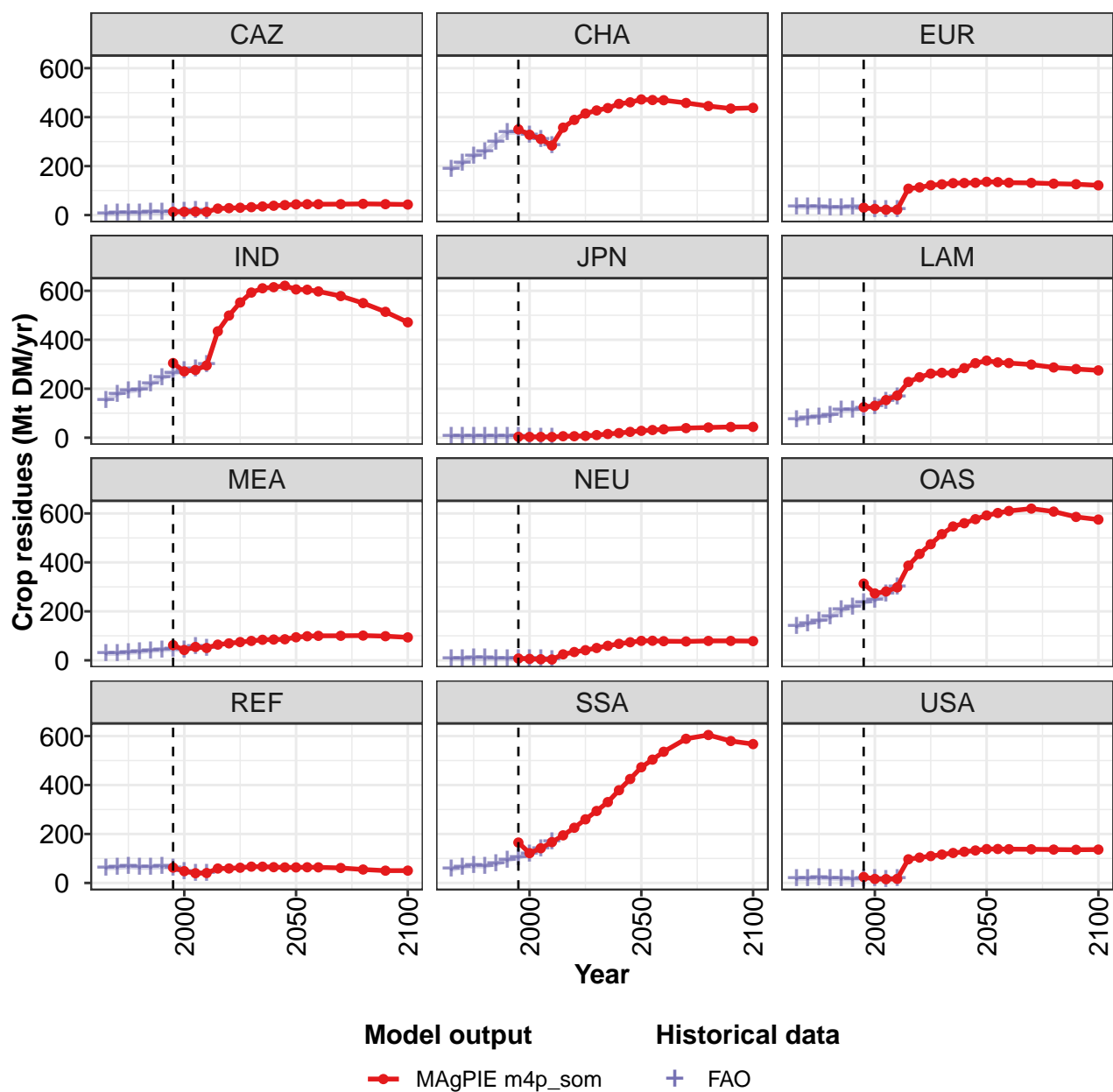


Figure 333: MAgPIE m4p\_som — Production—Crop residues (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1462	1279	1318	1366	1985	2208	2410	2575	2701	2824	2939
CAZ	13	13	14	13	26	28	30	32	35	38	41
CHA	350	328	311	284	357	389	415	427	437	454	461
EUR	30	25	22	22	108	113	122	126	130	131	132
IND	305	271	277	295	435	499	552	593	610	615	621
JPN	4	3	3	3	6	6	7	11	15	19	24
LAM	125	130	154	172	228	247	262	265	264	284	304
MEA	62	42	55	50	64	69	75	79	84	85	86
NEU	7	6	4	3	24	34	41	50	59	67	74
OAS	313	273	281	298	387	435	474	515	547	560	577
REF	63	48	40	41	59	59	62	67	66	65	64
SSA	165	122	142	167	194	226	260	294	330	379	425
USA	24	16	16	17	97	104	110	116	122	127	133

Table 1335: MAgPIE m4p\_som — Production—Crop residues (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	3040	3079	3108	3135	3081	2973	2894
CAZ	44	44	44	45	46	45	43
CHA	472	470	469	458	445	435	438
EUR	136	135	132	131	128	126	121
IND	606	604	597	579	550	514	471
JPN	28	31	34	39	42	44	44
LAM	315	308	305	299	287	280	275
MEA	94	98	100	100	101	99	94
NEU	80	80	78	77	79	79	78
OAS	592	602	610	620	608	586	575
REF	64	64	64	61	55	50	50
SSA	473	504	536	589	604	580	567
USA	138	139	138	138	136	136	136

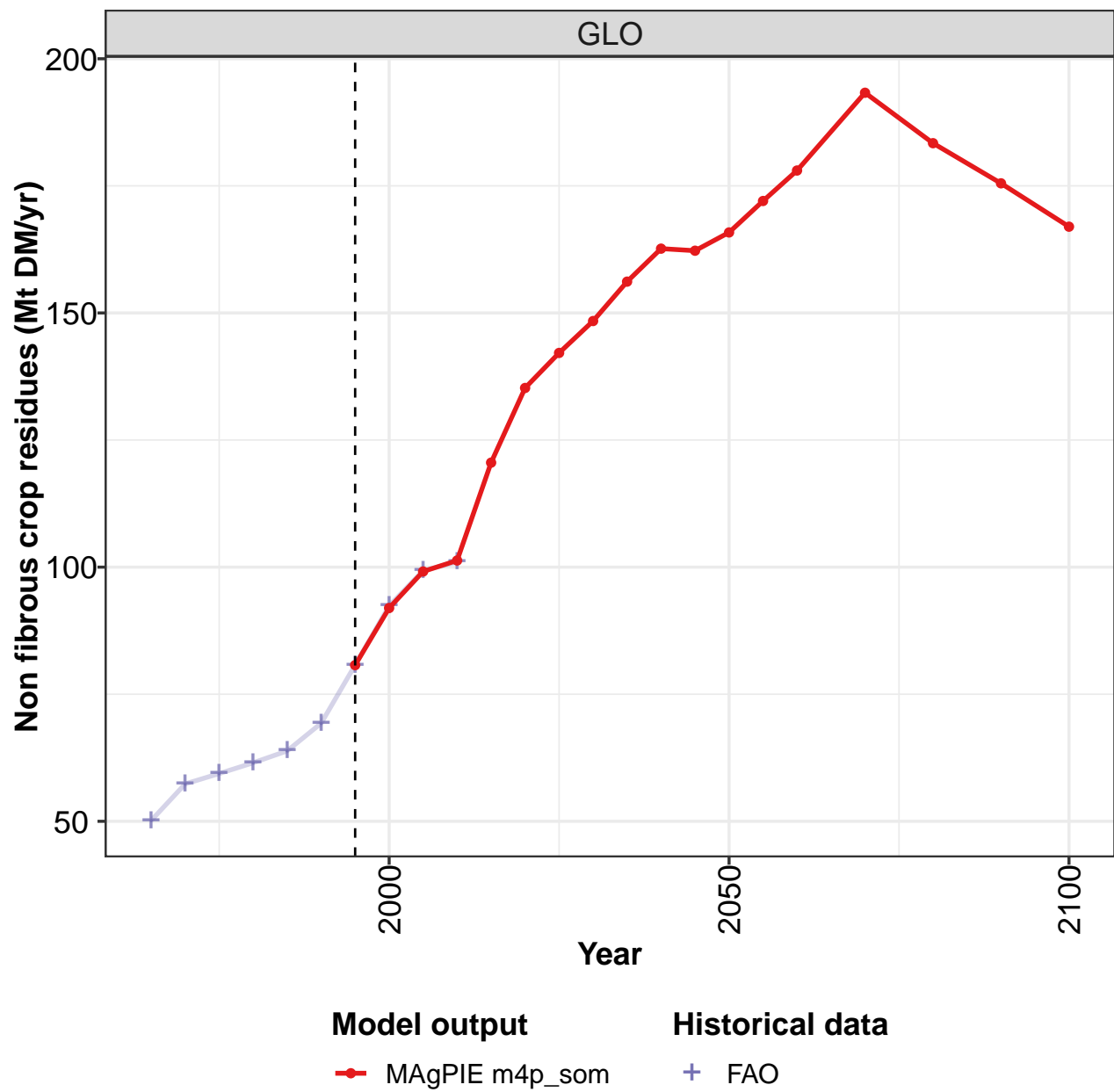
Table 1336: MAgPIE m4p\_som — Production—Crop residues (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	763	843	918	958	1085	1182	1235	1247	1307	1365
CAZ	6	7	9	9	11	10	12	16	17	15
CHA	186	212	240	260	299	337	339	327	310	284
EUR	33	32	32	31	31	32	27	24	21	21
IND	153	179	190	195	219	244	262	272	280	298
JPN	6	4	4	4	4	4	4	3	3	3
LAM	74	82	85	91	111	113	121	128	150	167
MEA	27	28	32	34	39	42	45	42	55	50
NEU	7	7	8	8	8	7	7	6	4	3
OAS	138	150	161	176	205	219	236	246	271	299
REF	61	63	66	63	63	66	60	46	39	40
SSA	55	64	70	69	77	93	104	119	141	167
USA	16	18	20	19	17	15	18	17	16	17

Table 1337: FAO — Production—Crop residues (Mt DM/yr)

43.1 Non fibrous crop residues

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

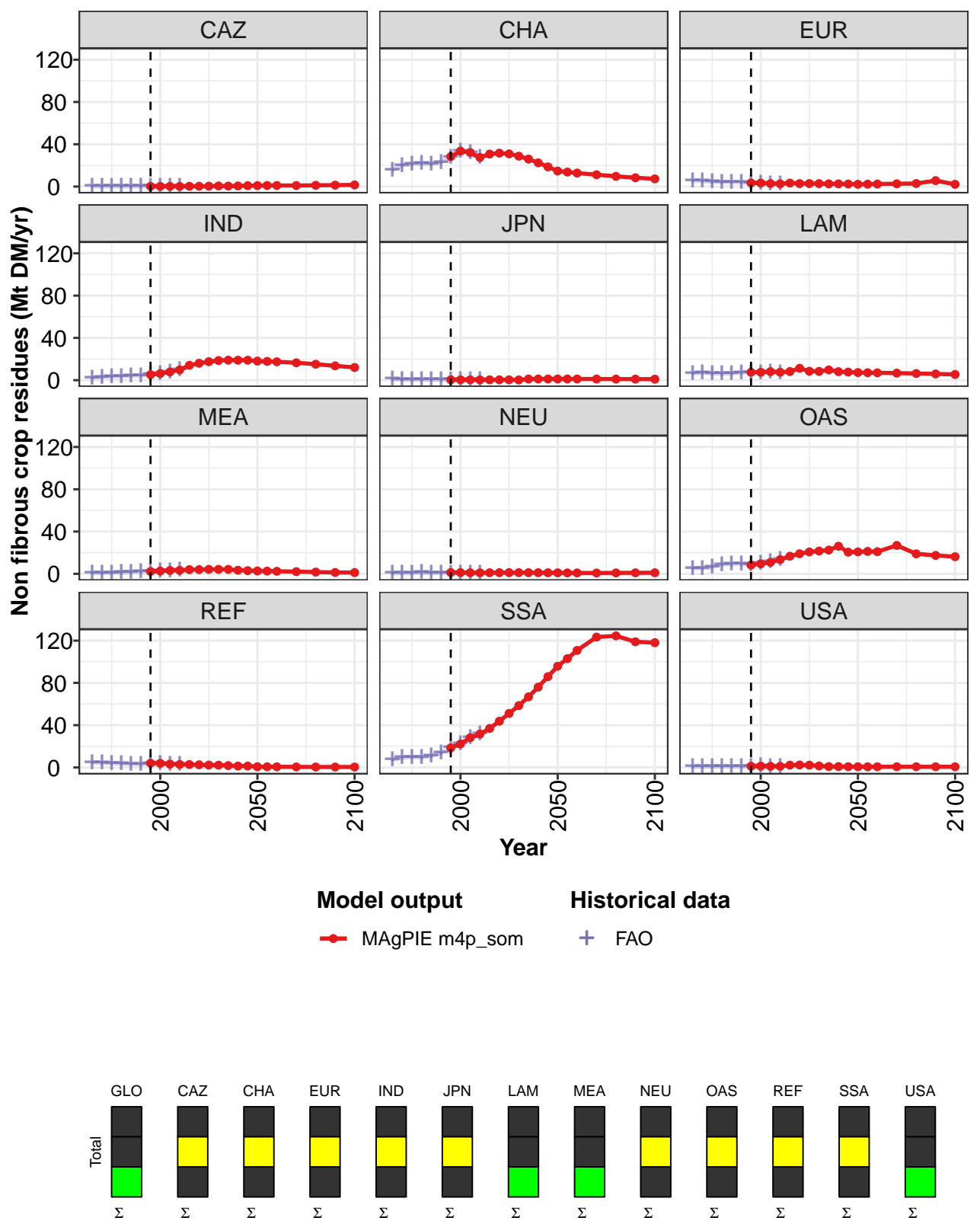


Figure 334: MAgPIE m4p\_som — Production—Crop residues—Non fibrous crop residues (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	81	92	99	101	121	135	142	148	156	163	162
CAZ	0	0	0	0	0	0	0	1	0	1	1
CHA	28	34	32	28	31	32	31	29	26	22	19
EUR	3	3	3	3	3	3	3	3	3	3	2
IND	5	6	8	10	14	16	18	19	19	19	19
JPN	0	0	0	0	0	0	0	0	1	1	1
LAM	8	8	8	8	8	11	8	8	10	8	8
MEA	2	3	3	3	4	4	4	4	4	3	3
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	8	9	11	13	17	19	21	22	23	26	21
REF	4	4	3	3	3	3	2	2	2	1	1
SSA	19	22	28	32	37	44	51	59	67	76	86
USA	1	1	1	1	2	2	2	1	1	1	1

Table 1338: MAgPIE m4p\_som — Production—Crop residues—Non fibrous crop residues (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	166	172	178	193	183	175	167
CAZ	1	1	1	1	1	1	2
CHA	15	14	13	11	10	8	7
EUR	2	2	2	3	3	6	2
IND	18	18	17	16	15	14	12
JPN	1	1	1	1	1	1	1
LAM	7	7	7	7	6	6	5
MEA	3	3	2	2	2	1	1
NEU	1	1	1	1	1	1	1
OAS	21	21	21	27	19	17	16
REF	1	1	1	1	0	0	0
SSA	96	103	111	123	125	119	118
USA	1	1	1	1	1	1	1

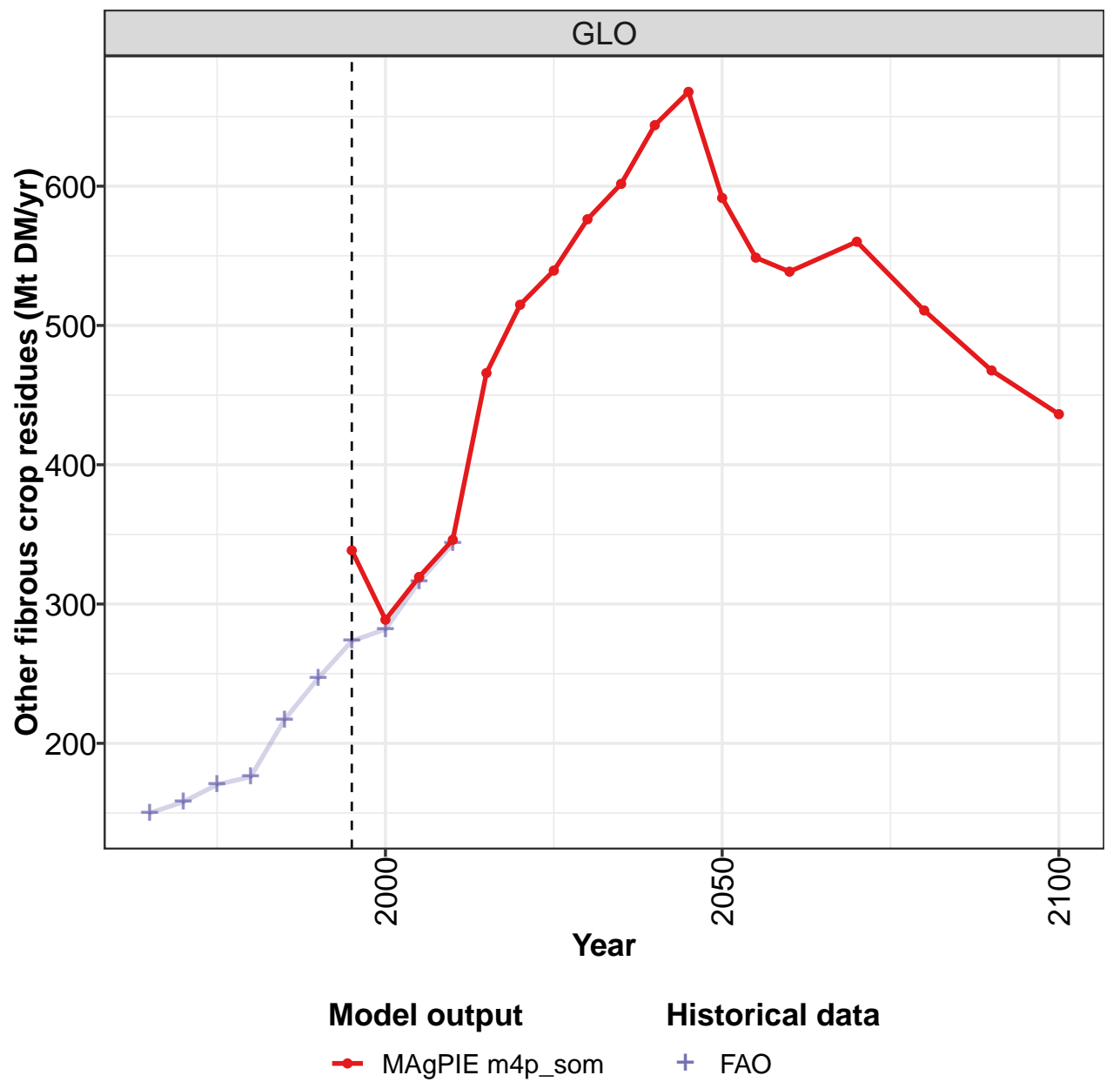
Table 1339: MAgPIE m4p\_som — Production—Crop residues—Non fibrous crop residues (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	50	57	59	62	64	69	81	92	99	101
CAZ	0	0	0	0	0	0	0	0	0	0
CHA	16	20	21	22	21	23	28	33	32	28
EUR	5	5	5	4	4	4	3	3	3	3
IND	2	3	3	4	4	4	5	6	8	10
JPN	1	1	0	0	0	0	0	0	0	0
LAM	6	7	6	6	6	7	7	7	8	7
MEA	1	1	1	1	2	2	2	3	3	3
NEU	1	1	1	1	1	1	1	1	1	1
OAS	5	5	6	9	9	9	9	10	11	13
REF	5	4	4	4	3	3	4	4	3	3
SSA	7	9	10	9	11	14	19	23	28	32
USA	1	1	1	1	1	1	1	1	1	1

Table 1340: FAO — Production—Crop residues—Non fibrous crop residues (Mt DM/yr)

43.2 Other fibrous crop residues

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

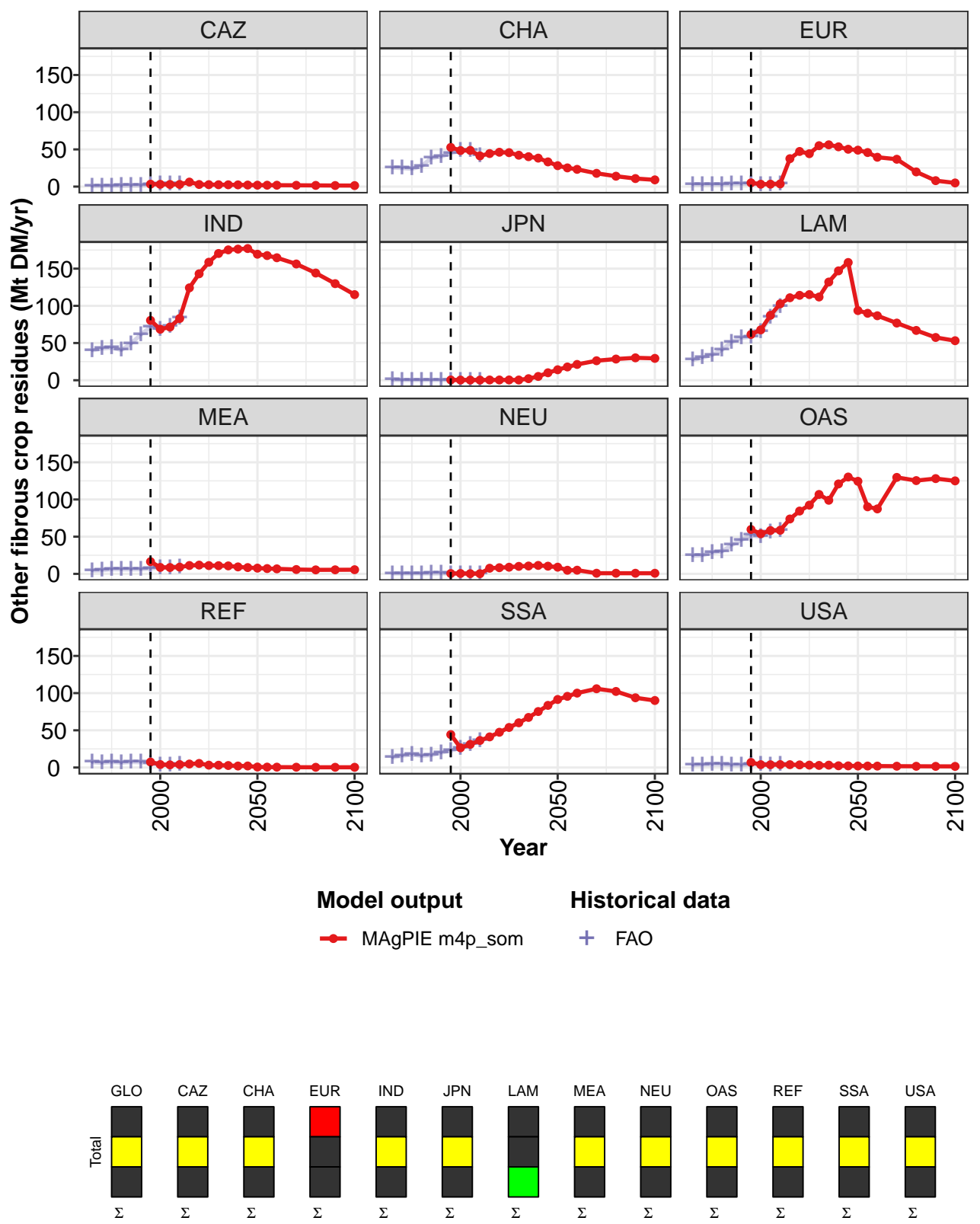


Figure 335: MAgPIE m4p\_som — Production—Crop residues—Other fibrous crop residues (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	339	289	319	346	466	515	539	576	602	644	668
CAZ	3	3	3	3	6	3	3	3	2	2	2
CHA	53	48	49	41	44	46	46	42	40	38	33
EUR	5	3	3	4	38	47	44	55	56	53	50
IND	80	69	72	83	124	143	159	170	175	176	177
JPN	0	0	0	0	0	0	0	0	2	5	10
LAM	62	68	87	103	111	114	115	112	132	147	158
MEA	16	9	9	9	11	12	11	11	11	9	8
NEU	0	1	0	0	8	8	9	10	11	11	10
OAS	60	54	58	59	74	84	92	107	99	121	130
REF	7	4	4	4	5	6	3	3	3	2	2
SSA	44	27	31	36	41	47	54	60	67	75	84
USA	7	4	4	4	4	4	3	3	3	2	2

Table 1341: MAgPIE m4p\_som — Production—Crop residues—Other fibrous crop residues (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	592	549	539	560	511	468	436
CAZ	2	2	2	2	2	1	1
CHA	28	25	23	18	14	11	9
EUR	49	46	39	37	20	8	5
IND	169	168	165	156	144	130	115
JPN	14	18	21	26	28	30	29
LAM	94	90	87	77	67	57	53
MEA	8	7	7	6	5	5	6
NEU	9	5	5	1	1	1	1
OAS	124	90	87	130	125	128	125
REF	1	1	0	0	0	0	0
SSA	91	96	100	106	102	94	90
USA	2	2	2	2	2	2	2

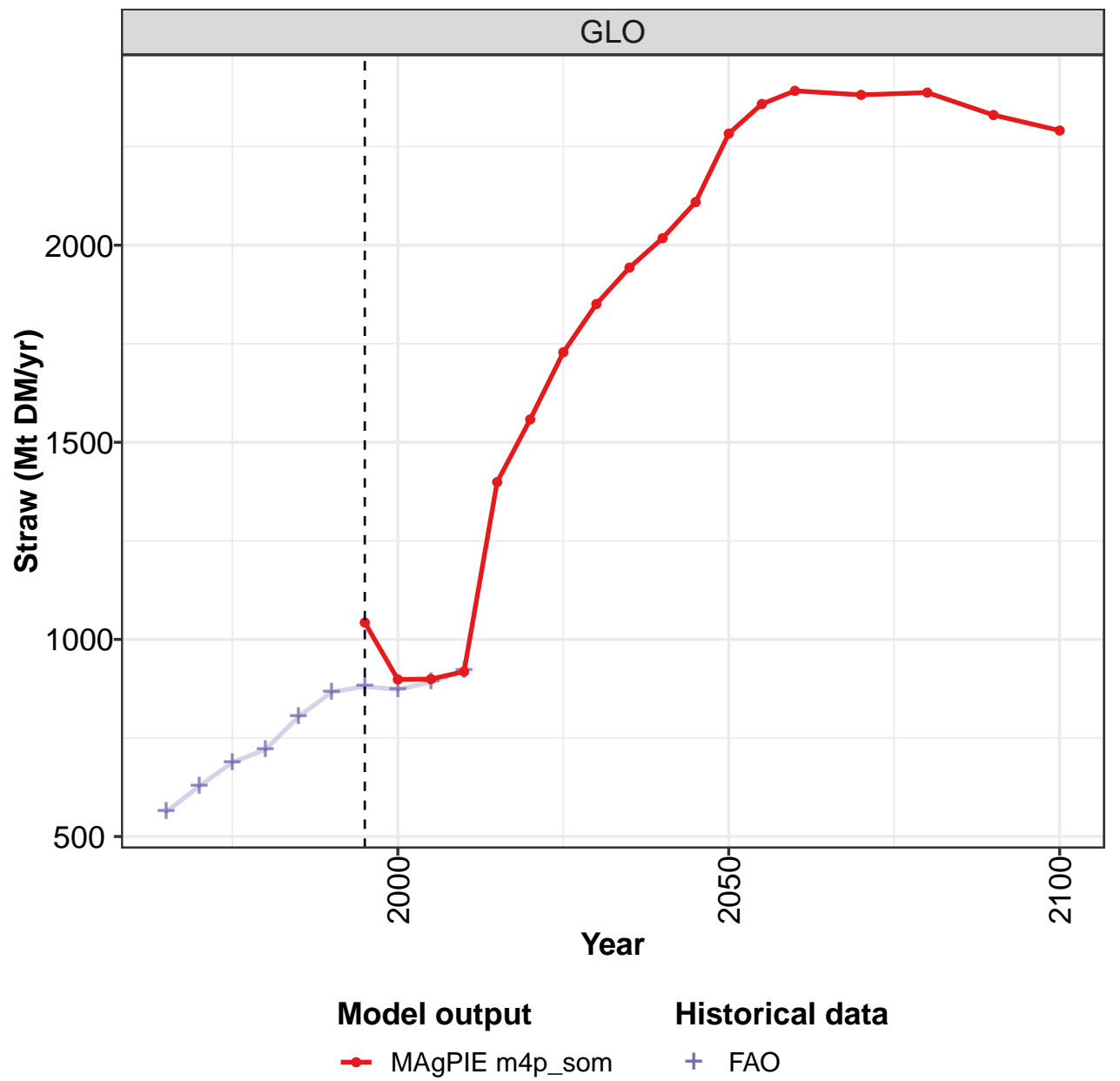
Table 1342: MAgPIE m4p\_som — Production—Crop residues—Other fibrous crop residues (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	150	158	170	176	217	247	273	282	316	343
CAZ	1	1	1	1	2	2	3	4	4	3
CHA	26	25	24	28	38	40	45	48	48	41
EUR	3	3	3	3	3	4	3	3	3	4
IND	40	42	44	41	49	61	72	69	72	83
JPN	0	0	0	0	0	0	0	0	0	0
LAM	27	31	34	41	52	57	58	65	85	99
MEA	4	5	6	6	6	6	7	9	9	9
NEU	1	1	1	1	1	1	1	1	0	0
OAS	24	25	29	30	39	46	52	50	56	58
REF	7	6	7	6	7	7	5	3	3	4
SSA	14	16	17	16	17	20	23	26	31	36
USA	3	4	4	4	3	3	4	4	4	4

Table 1343: FAO — Production—Crop residues—Other fibrous crop residues (Mt DM/yr)

43.3 Straw

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



Figure 336: MAGPIE m4p\_som — Production—Crop residues—Straw (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1043	898	899	918	1399	1558	1728	1851	1943	2018	2109
CAZ	10	10	11	10	20	25	27	29	32	35	38
CHA	269	246	230	215	282	311	338	356	371	394	409
EUR	22	19	16	16	67	63	75	68	72	75	79
IND	219	196	197	202	296	340	376	404	416	420	425
JPN	3	3	3	2	5	5	7	10	12	13	13
LAM	56	55	58	62	109	122	138	145	122	129	138
MEA	43	31	43	38	49	53	59	64	69	72	75
NEU	6	4	3	2	16	24	31	39	48	55	63
OAS	245	210	212	226	296	331	361	387	425	413	426
REF	51	40	33	34	52	51	57	61	62	61	60
SSA	102	73	82	99	116	134	155	175	196	228	255
USA	16	11	11	12	91	98	104	112	118	124	130

Table 1344: MAgPIE m4p\_som — Production—Crop residues—Straw (Mt DM/yr) [PART 1/2]

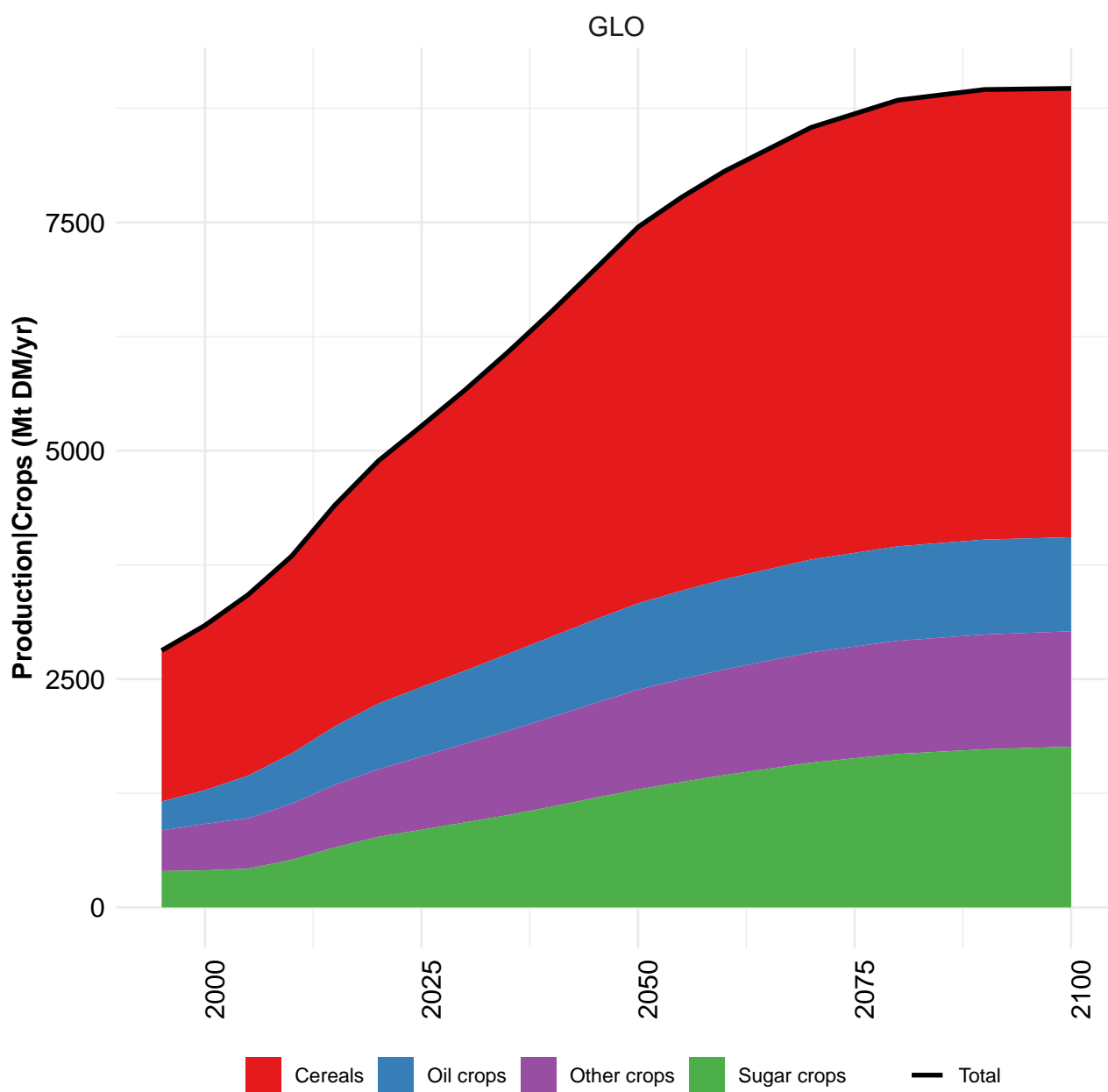
	2050	2055	2060	2070	2080	2090	2100
GLO	2283	2358	2392	2381	2387	2330	2291
CAZ	41	41	41	42	43	42	40
CHA	429	431	433	429	422	416	422
EUR	85	87	90	92	106	112	114
IND	418	419	415	406	391	371	344
JPN	13	12	12	12	12	13	14
LAM	214	210	211	215	214	217	216
MEA	84	89	91	92	94	92	87
NEU	70	74	72	75	78	77	77
OAS	447	490	502	463	463	440	434
REF	62	63	63	60	54	49	50
SSA	285	305	325	360	378	367	359
USA	136	136	135	135	134	133	134

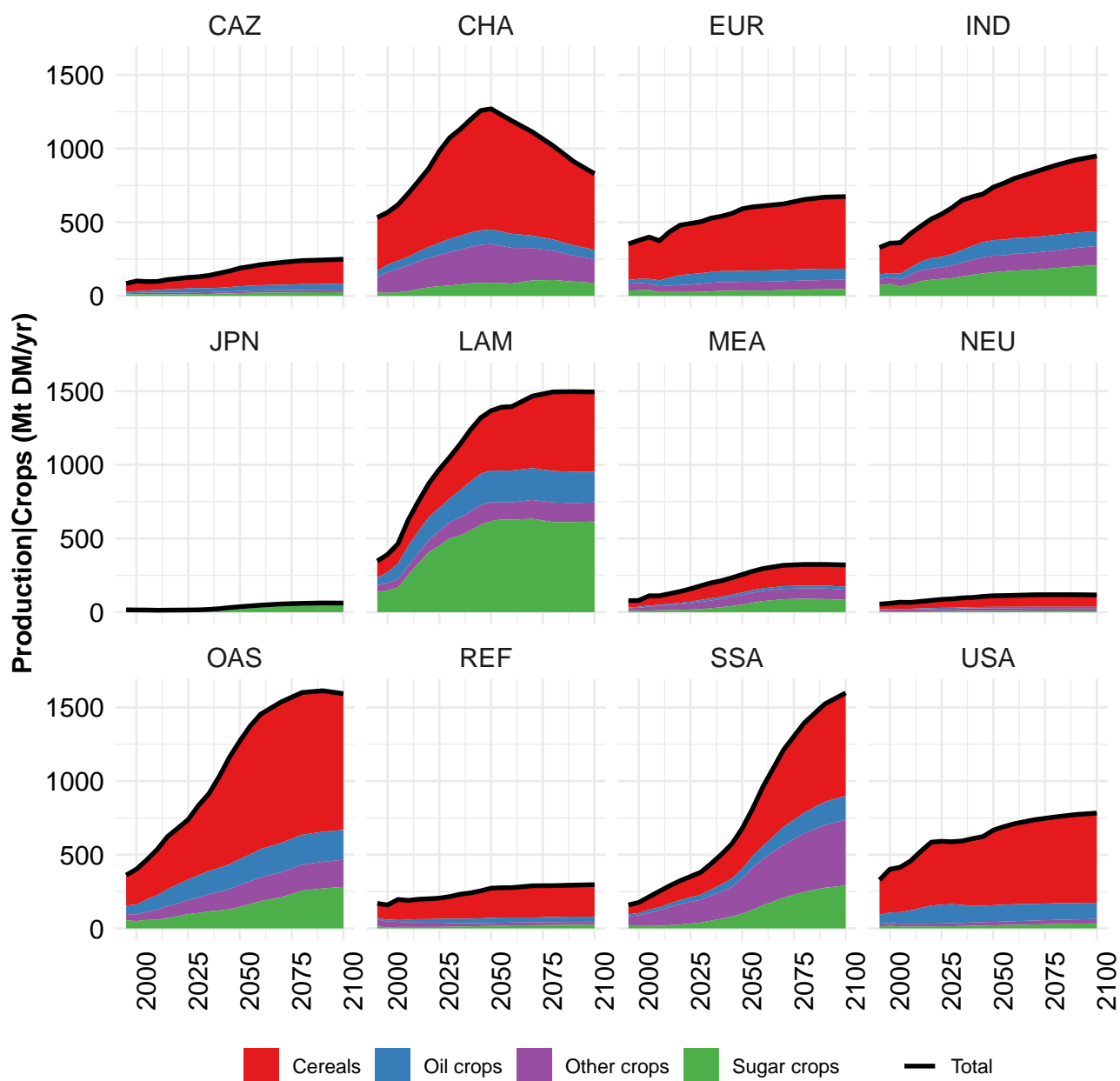
Table 1345: MAgPIE m4p\_som — Production—Crop residues—Straw (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	563	628	688	721	804	866	881	873	892	921
CAZ	5	6	7	7	9	8	9	12	14	12
CHA	145	167	195	210	239	274	266	246	230	215
EUR	25	24	25	24	24	24	21	18	15	15
IND	111	133	142	151	165	178	185	198	200	205
JPN	4	3	4	3	3	3	3	3	3	2
LAM	40	44	45	44	53	50	55	56	57	60
MEA	22	22	25	27	31	34	35	31	43	38
NEU	6	6	7	6	6	6	5	4	3	2
OAS	108	119	126	137	157	164	175	186	204	227
REF	50	52	55	53	53	56	51	39	32	33
SSA	35	39	42	44	50	59	63	70	81	99
USA	12	13	15	14	13	11	13	12	11	12

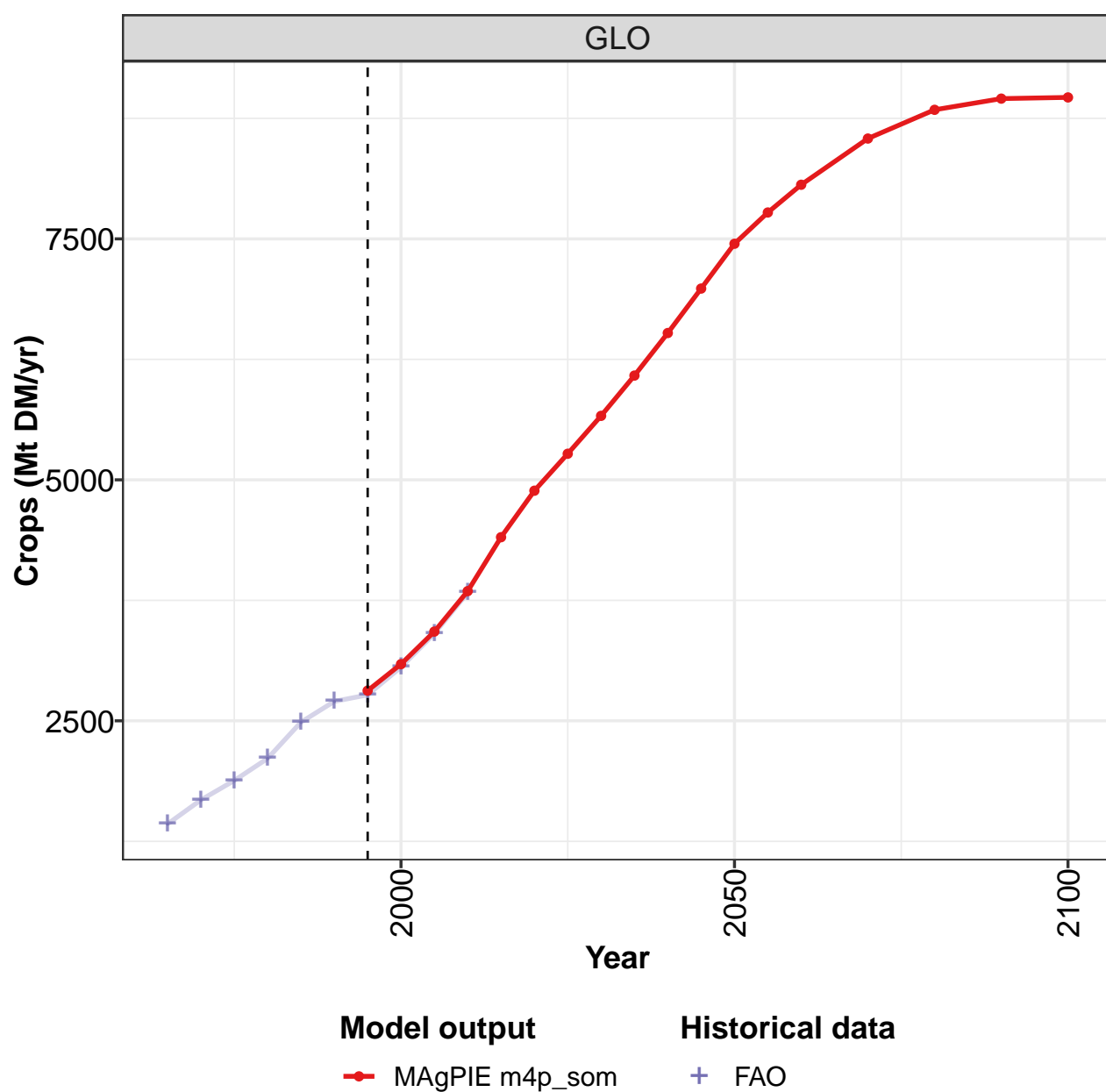
Table 1346: FAO — Production—Crop residues—Straw (Mt DM/yr)

## 44 Crops





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

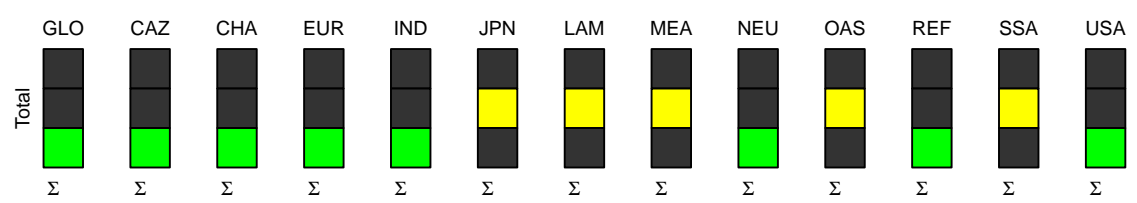
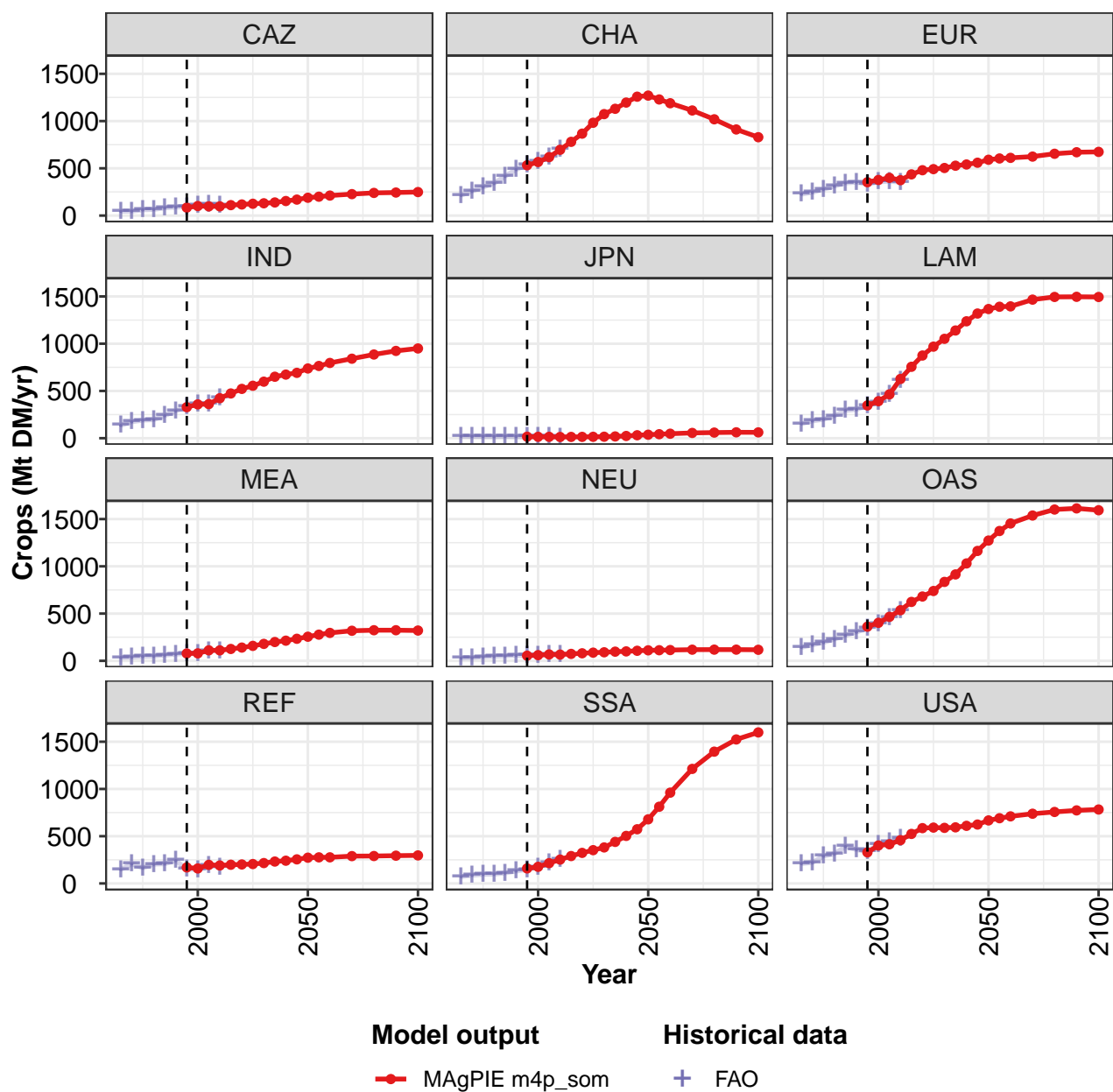


Figure 337: MAgPIE m4p\_som — Production—Crops (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	2813	3088	3426	3846	4405	4888	5271	5664	6082	6523	6985
CAZ	84	101	97	98	111	118	125	130	139	154	169
CHA	532	567	618	696	780	867	982	1074	1130	1196	1258
EUR	353	377	399	375	436	480	491	503	528	541	559
IND	328	358	361	423	473	522	555	598	650	673	692
JPN	16	15	15	13	14	14	15	16	19	24	31
LAM	347	392	464	627	756	875	969	1052	1140	1237	1319
MEA	78	79	111	111	126	140	158	179	199	213	233
NEU	55	60	68	66	73	80	87	90	97	100	107
OAS	362	402	466	536	624	681	739	835	915	1031	1163
REF	170	159	197	190	198	201	205	216	232	241	255
SSA	159	176	215	253	290	324	353	381	440	503	574
USA	329	402	415	458	524	586	591	589	594	610	624

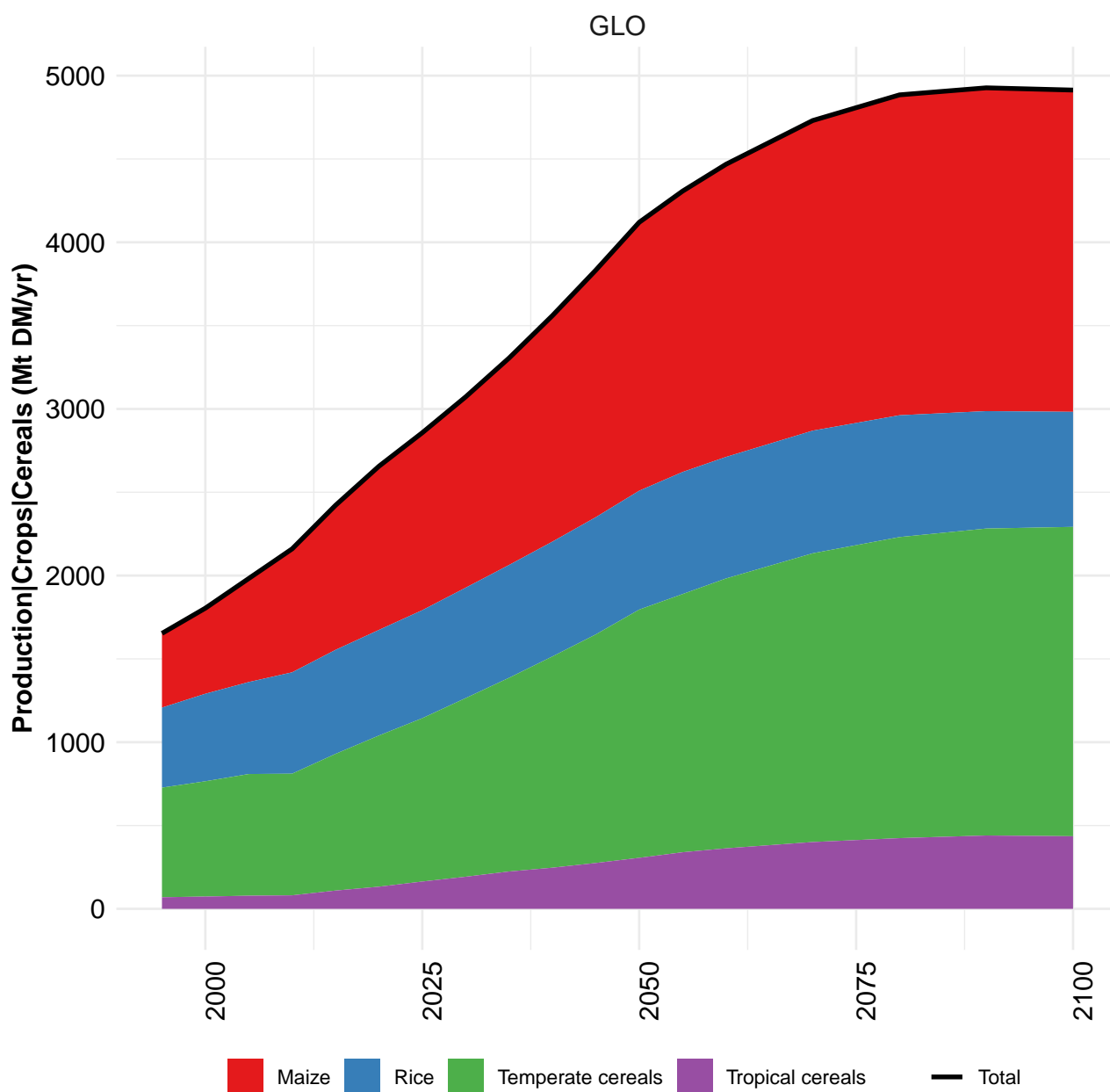
Table 1347: MAgPIE m4p\_som — Production—Crops (Mt DM/yr) [PART 1/2]

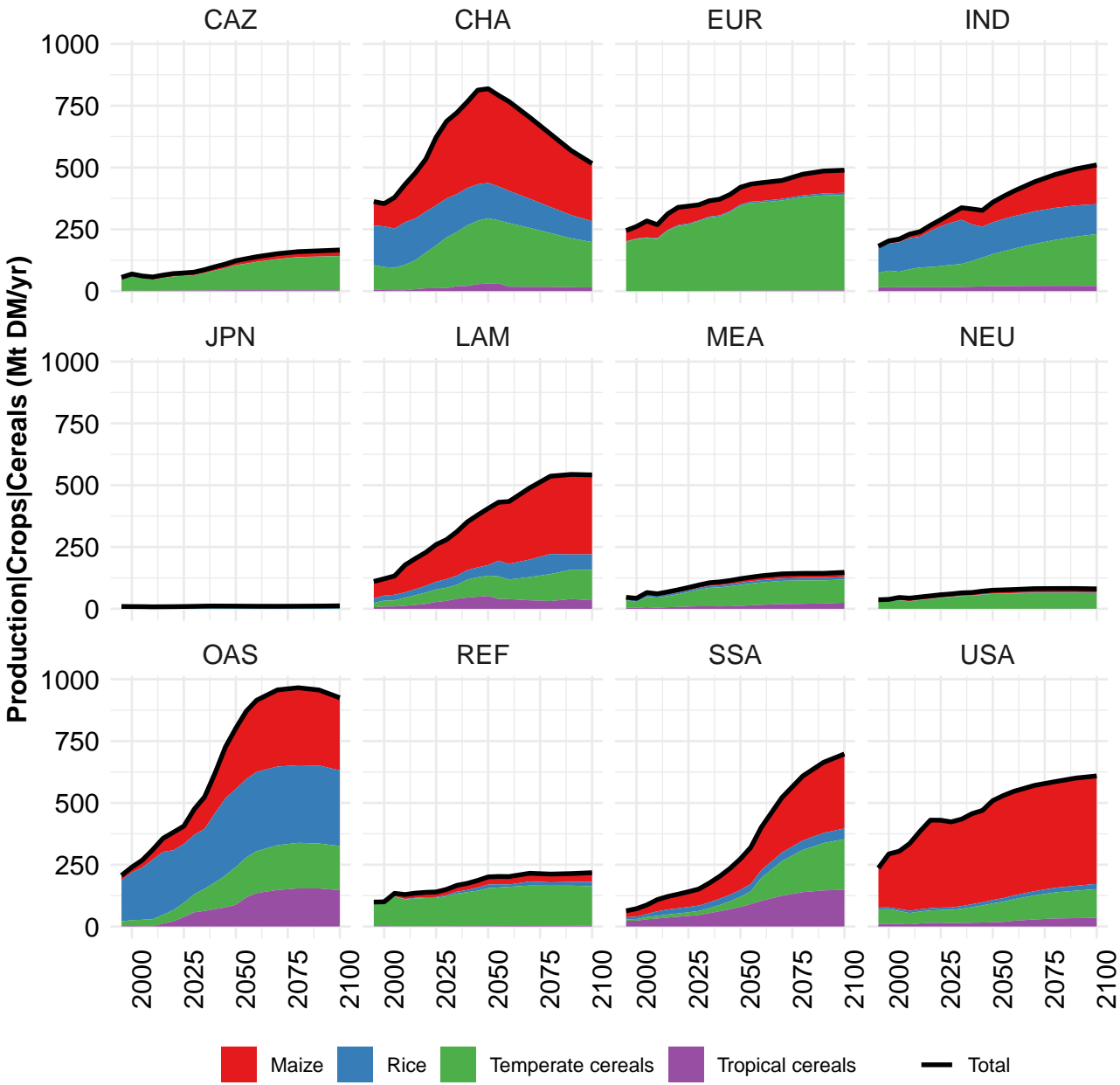
	2050	2055	2060	2070	2080	2090	2100
GLO	7449	7774	8062	8541	8839	8955	8967
CAZ	189	200	212	227	240	244	249
CHA	1270	1229	1189	1112	1019	911	829
EUR	591	604	611	624	654	670	674
IND	738	764	796	841	886	924	950
JPN	37	42	47	56	60	62	62
LAM	1367	1391	1395	1466	1495	1496	1494
MEA	255	277	296	318	324	324	321
NEU	111	113	114	118	119	119	117
OAS	1273	1374	1454	1538	1601	1613	1594
REF	273	276	277	289	290	294	297
SSA	679	812	961	1212	1395	1524	1598
USA	667	691	710	738	757	773	783

Table 1348: MAgPIE m4p\_som — Production—Crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1430	1679	1880	2110	2486	2702	2769	3057	3404	3830
CAZ	44	47	60	64	81	88	95	109	116	108
CHA	214	258	301	342	417	488	536	569	615	702
EUR	226	245	278	311	345	353	333	356	363	353
IND	135	173	190	196	239	289	330	360	360	426
JPN	21	20	19	17	19	17	16	15	15	13
LAM	153	182	199	237	294	305	343	384	462	615
MEA	34	38	46	50	61	70	78	78	108	108
NEU	29	33	43	48	52	58	54	57	65	63
OAS	143	168	194	229	269	304	345	394	455	535
REF	148	206	164	204	208	241	153	144	188	173
SSA	72	87	97	99	111	131	148	176	216	258
USA	210	221	289	314	390	358	338	415	440	475

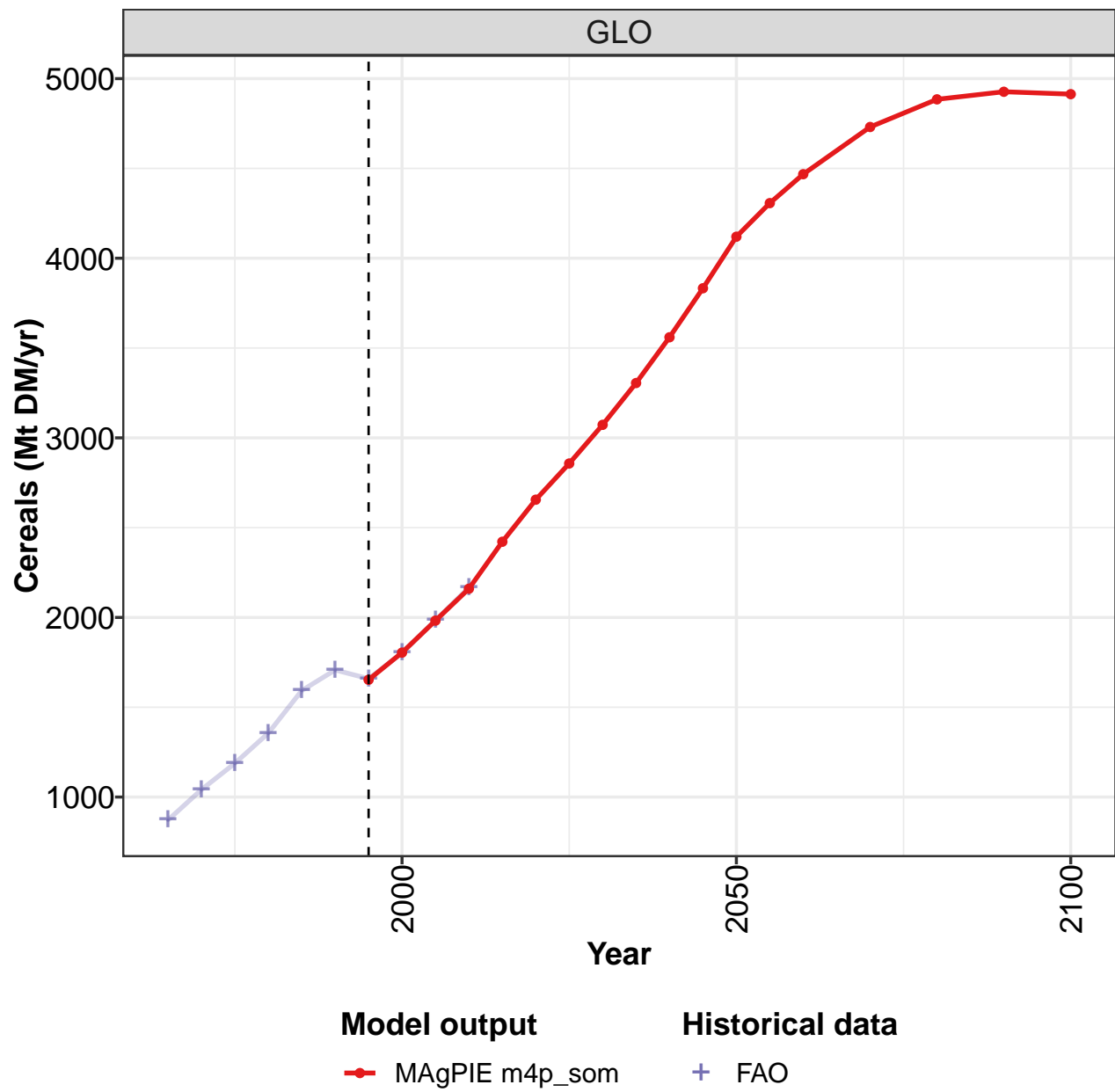
Table 1349: FAO — Production—Crops (Mt DM/yr)





44.1 Cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

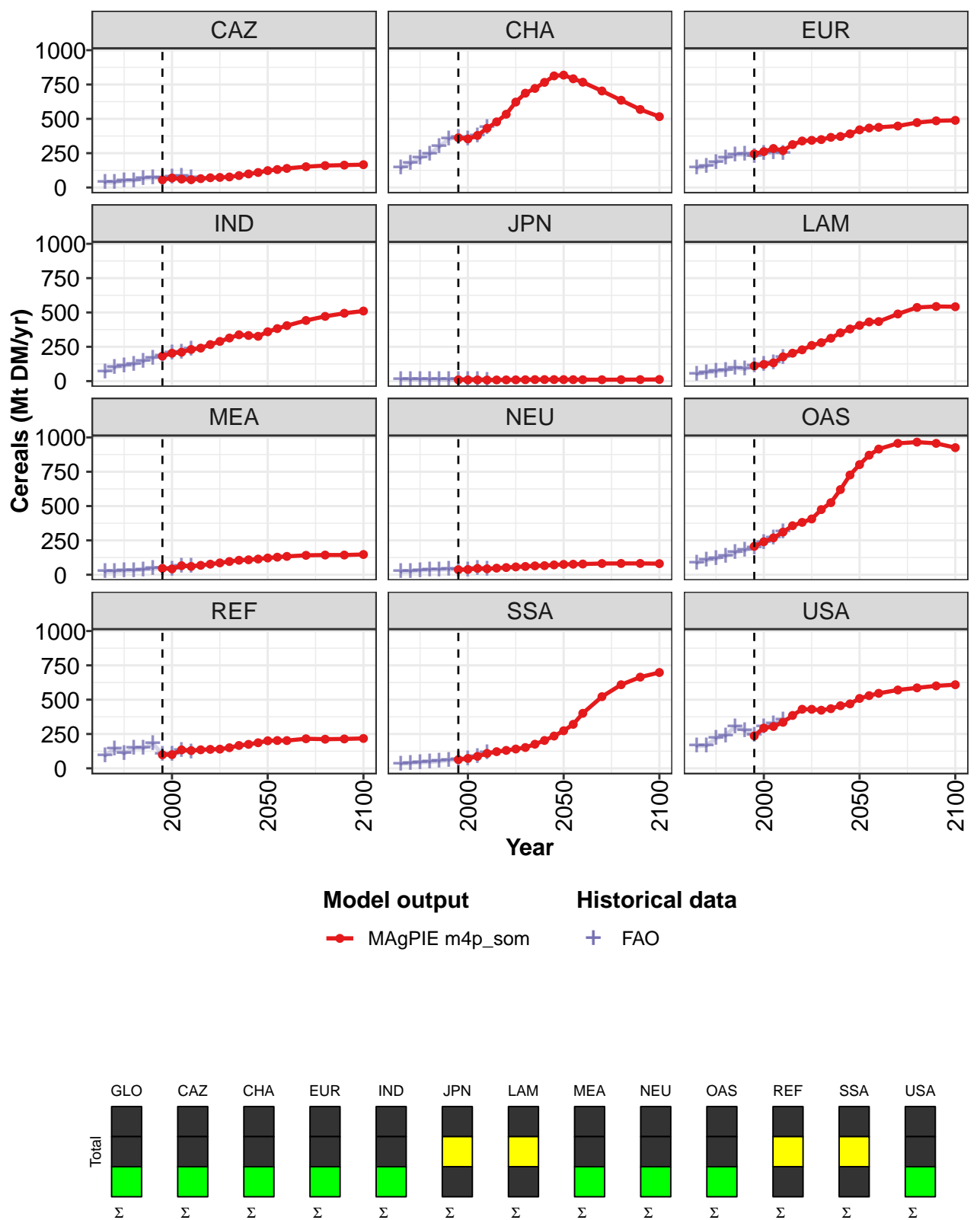


Figure 338: MAGPIE m4p\_som — Production—Crops—Cereals (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1653	1804	1982	2160	2422	2656	2857	3072	3305	3560	3833
CAZ	56	69	61	57	65	71	74	77	87	99	109
CHA	362	354	379	431	478	534	622	687	722	766	813
EUR	245	261	284	269	312	339	344	349	365	372	391
IND	182	203	210	230	240	266	289	314	337	332	327
JPN	10	9	9	8	8	9	9	10	11	11	11
LAM	110	122	133	177	203	228	260	280	312	352	379
MEA	46	43	66	61	68	77	86	96	105	109	114
NEU	37	38	46	43	48	52	57	60	64	66	71
OAS	207	240	268	310	357	381	406	474	525	620	726
REF	99	100	134	129	135	138	140	150	166	175	186
SSA	63	72	87	109	121	131	141	152	176	203	235
USA	236	294	304	335	385	430	430	423	434	456	469

Table 1350: MAgPIE m4p\_som — Production—Crops—Cereals (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	4120	4307	4468	4731	4885	4927	4914
CAZ	123	131	139	151	160	163	166
CHA	819	792	767	703	636	568	516
EUR	420	433	438	448	473	486	489
IND	359	383	404	442	471	494	510
JPN	11	11	10	10	11	11	12
LAM	406	431	434	489	536	544	542
MEA	122	128	133	141	143	143	147
NEU	75	77	78	82	82	82	81
OAS	802	871	915	957	966	957	925
REF	201	202	202	215	212	214	218
SSA	274	320	401	522	609	664	698
USA	509	529	546	571	586	600	609

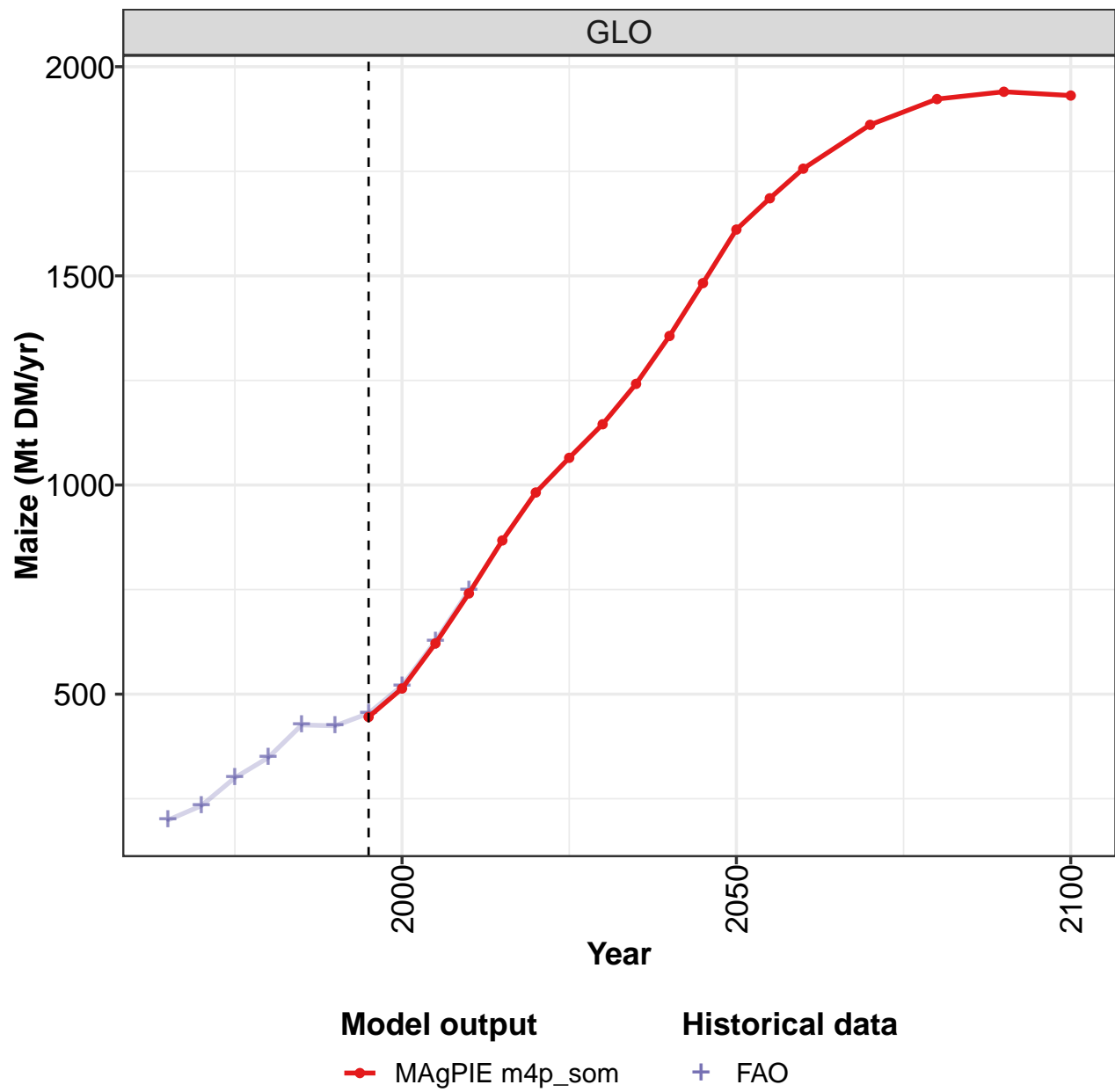
Table 1351: MAgPIE m4p\_som — Production—Crops—Cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	872	1041	1188	1356	1593	1707	1659	1802	1984	2167
CAZ	37	37	49	51	65	71	68	76	81	70
CHA	142	176	214	245	297	354	366	356	376	436
EUR	143	155	184	217	238	241	229	247	256	249
IND	70	100	112	123	145	169	184	205	210	234
JPN	13	12	12	9	11	10	10	9	9	8
LAM	51	63	71	78	97	87	109	121	135	170
MEA	23	24	29	31	37	44	47	42	65	61
NEU	21	24	31	34	37	39	37	37	45	41
OAS	86	106	116	137	162	178	198	233	265	313
REF	92	144	108	147	146	180	104	102	133	118
SSA	33	38	43	46	52	59	63	72	88	112
USA	162	164	219	238	305	275	244	301	322	353

Table 1352: FAO — Production—Crops—Cereals (Mt DM/yr)

44.1.1 Maize

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

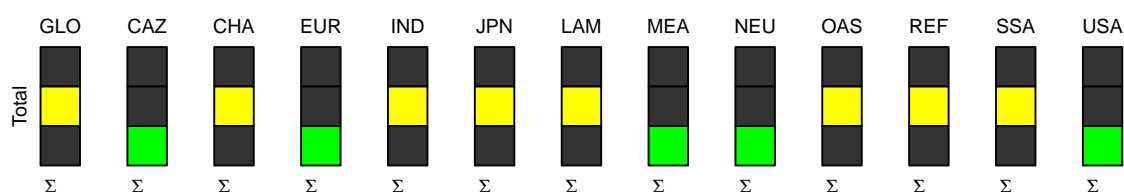
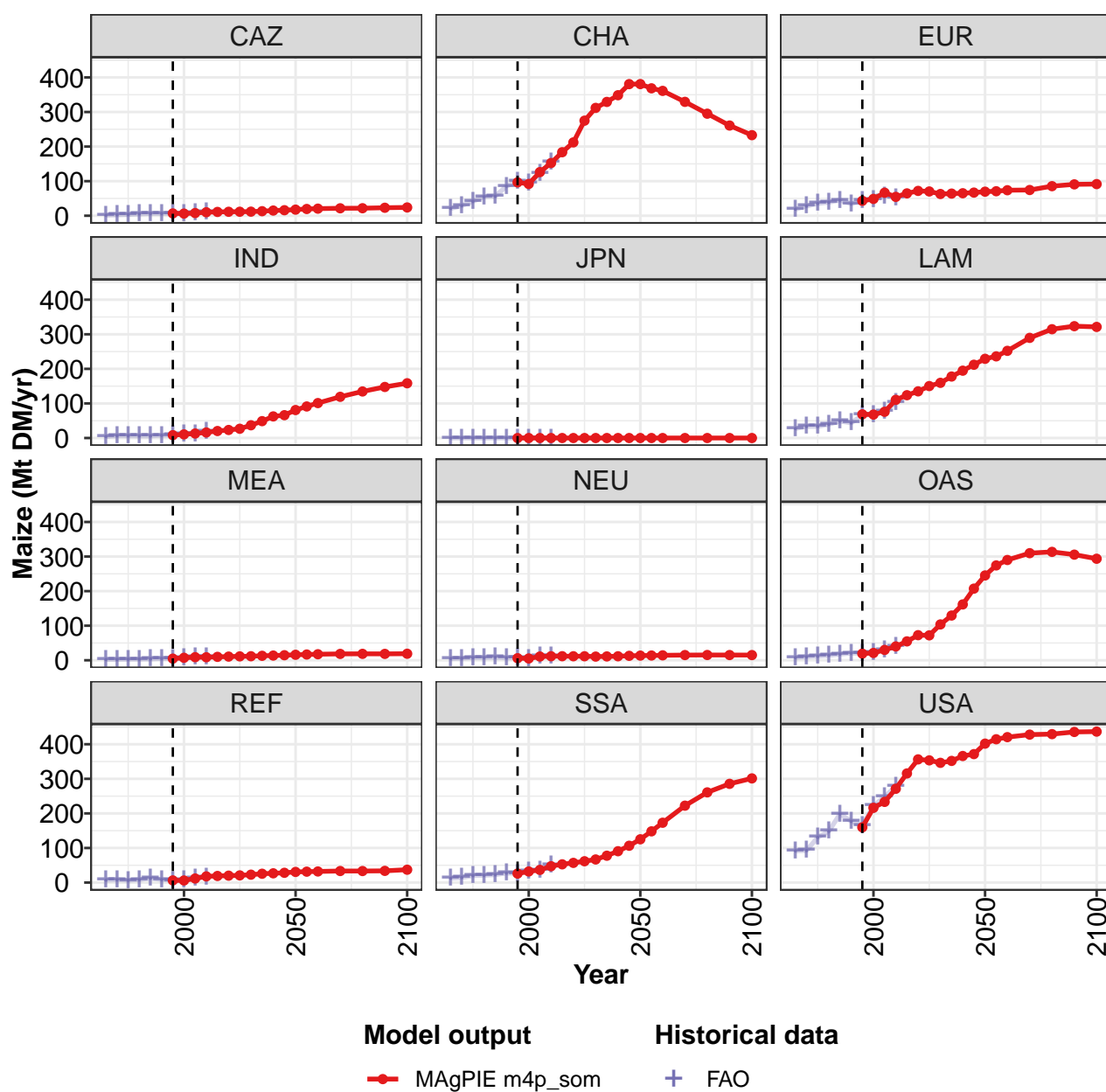


Figure 339: MAgPIE m4p\_som — Production—Crops—Cereals—Maize (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	446	514	621	741	867	982	1065	1145	1242	1356	1483
CAZ	7	6	8	10	11	11	12	12	13	15	16
CHA	97	92	126	152	184	212	275	312	329	349	381
EUR	43	49	67	55	65	72	70	63	64	65	67
IND	8	11	13	16	20	23	27	37	49	62	66
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	68	68	76	110	124	135	150	160	178	195	212
MEA	5	7	9	9	10	11	11	12	13	14	15
NEU	6	5	11	12	12	12	12	11	11	12	13
OAS	19	21	30	40	55	73	72	104	129	162	207
REF	6	6	12	18	19	20	21	23	26	27	28
SSA	26	32	37	47	53	57	62	67	78	91	106
USA	160	216	233	271	316	356	353	346	352	366	372

Table 1353: MAgPIE m4p\_som — Production—Crops—Cereals—Maize (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1611	1686	1756	1861	1923	1940	1931
CAZ	18	20	20	22	22	23	24
CHA	381	369	361	329	295	261	233
EUR	70	71	74	74	86	91	92
IND	81	91	101	119	135	148	158
JPN	0	0	0	0	0	0	0
LAM	229	236	252	290	315	323	321
MEA	16	17	17	18	19	19	19
NEU	14	14	14	15	15	15	15
OAS	245	274	290	310	314	306	294
REF	31	32	32	33	33	34	37
SSA	125	148	173	222	261	286	301
USA	402	414	421	428	429	436	437

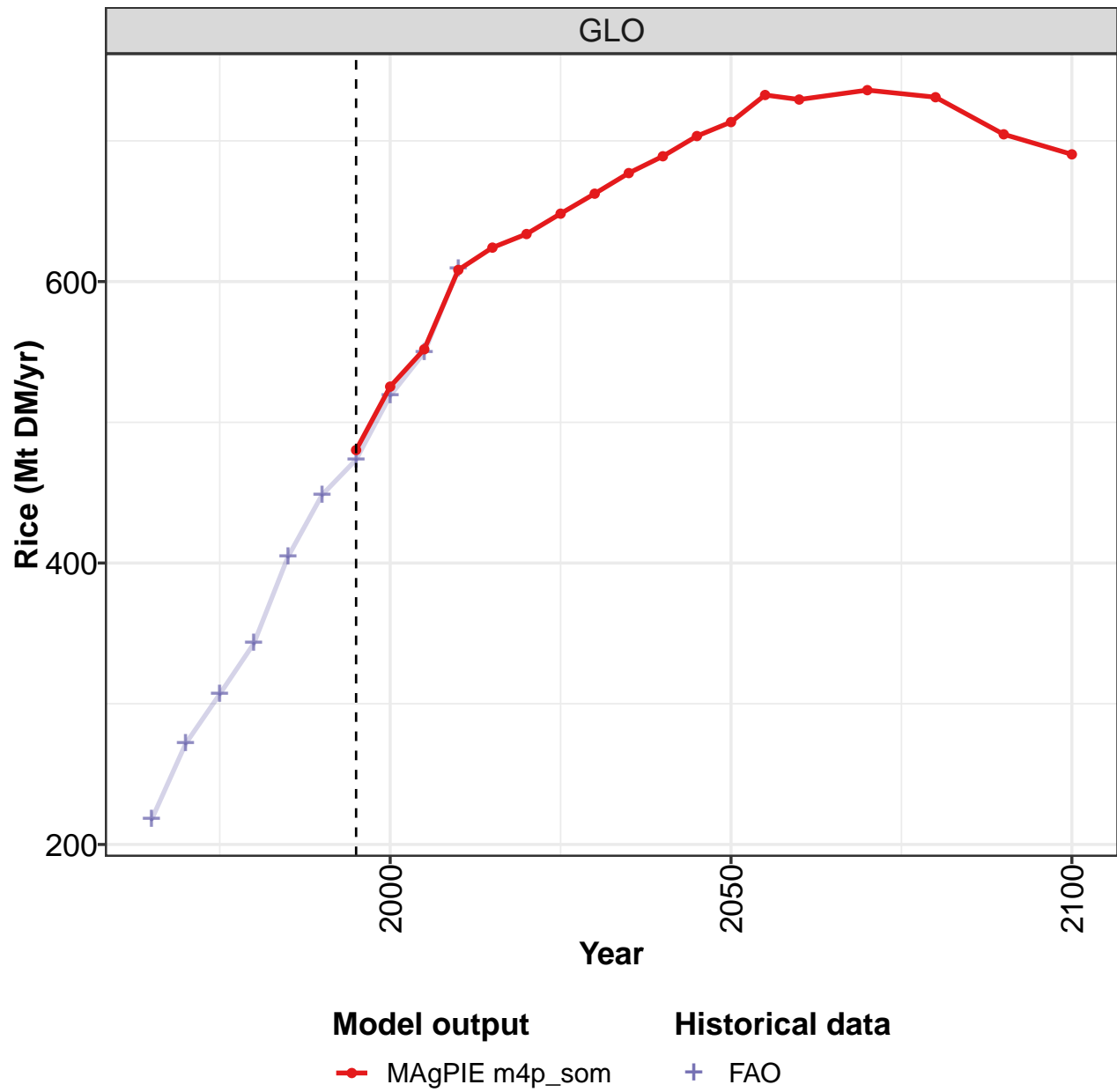
Table 1354: MAgPIE m4p\_som — Production—Crops—Cereals—Maize (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	199	233	300	348	426	424	454	520	627	748
CAZ	2	3	3	5	7	7	7	7	9	11
CHA	21	29	42	55	56	86	99	93	123	156
EUR	19	28	35	39	45	34	44	47	58	52
IND	4	7	6	6	6	8	8	11	13	19
JPN	0	0	0	0	0	0	0	0	0	0
LAM	27	34	34	40	49	44	66	67	77	103
MEA	2	2	3	3	4	5	5	7	9	9
NEU	5	6	8	8	9	7	8	6	11	11
OAS	8	10	12	14	18	21	20	23	30	41
REF	7	8	6	8	13	9	6	7	12	16
SSA	12	15	20	21	23	27	26	32	37	51
USA	92	93	131	148	198	177	165	222	248	278

Table 1355: FAO — Production—Crops—Cereals—Maize (Mt DM/yr)

44.1.2 Rice

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

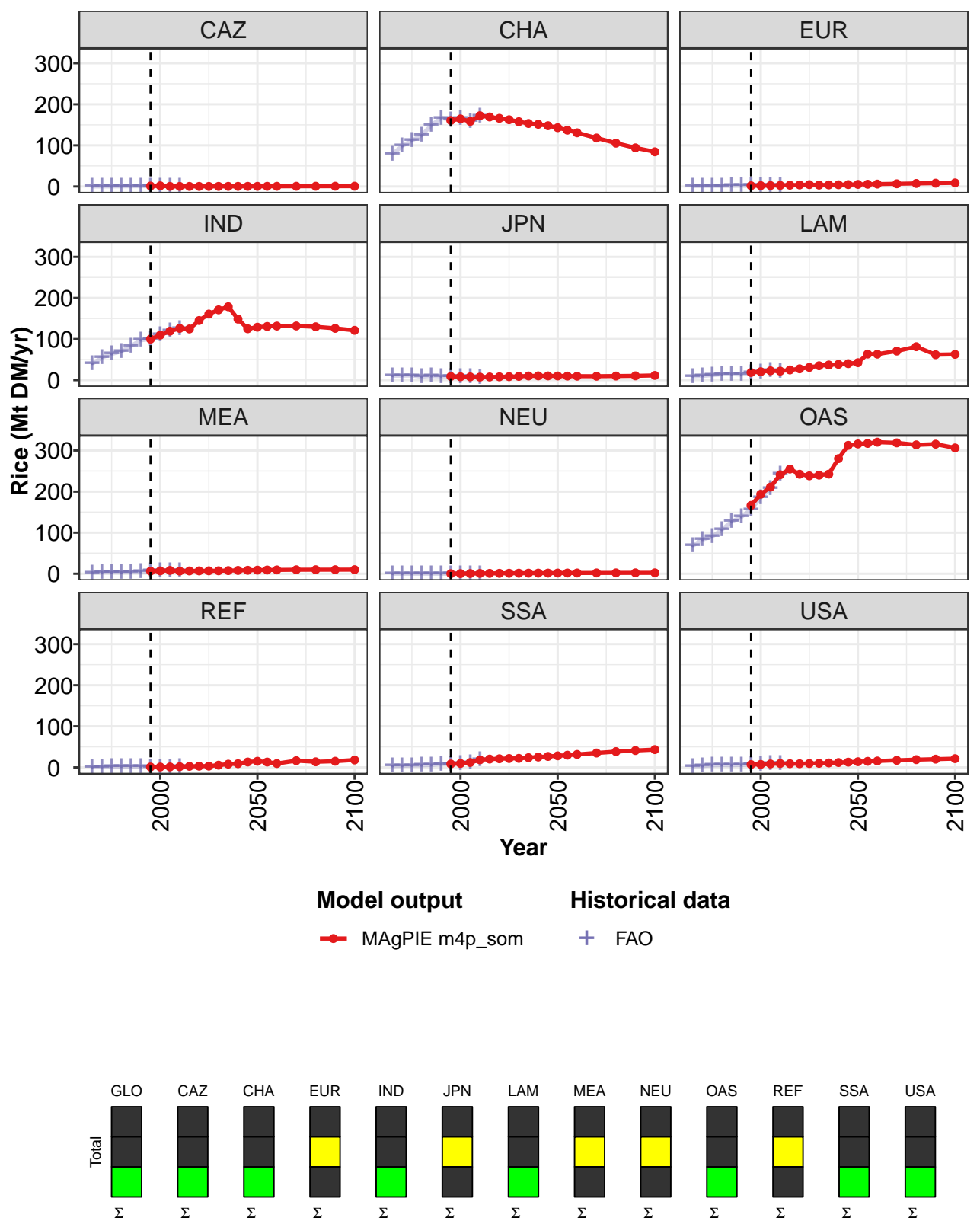


Figure 340: MAgPIE m4p\_som — Production—Crops—Cereals—Rice (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	480	525	552	608	624	634	648	662	677	689	703
CAZ	1	2	0	0	0	0	0	0	0	0	0
CHA	161	164	158	172	169	166	162	158	153	151	148
EUR	2	2	2	3	3	4	4	3	4	4	5
IND	100	110	119	126	125	145	161	171	179	148	125
JPN	9	8	8	7	8	8	8	9	10	10	10
LAM	19	20	23	22	25	28	31	35	37	38	40
MEA	6	7	8	7	7	7	7	7	8	8	8
NEU	0	0	1	1	1	1	1	1	1	1	2
OAS	166	194	211	241	255	242	238	240	242	280	313
REF	1	1	1	2	3	3	3	5	8	9	13
SSA	8	10	12	18	20	21	22	22	24	25	27
USA	7	7	8	9	9	9	9	10	11	12	13

Table 1356: MAgPIE m4p\_som — Production—Crops—Cereals—Rice (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	713	733	729	736	731	705	690
CAZ	0	0	0	1	1	1	1
CHA	143	137	131	118	106	94	84
EUR	5	6	6	7	7	8	9
IND	129	131	132	132	130	126	121
JPN	10	10	10	10	10	10	11
LAM	43	63	63	71	81	62	63
MEA	9	9	9	10	10	10	10
NEU	2	2	2	2	2	2	2
OAS	316	317	320	319	314	315	306
REF	15	13	9	16	14	15	18
SSA	28	30	32	35	38	41	43
USA	14	15	16	17	19	20	21

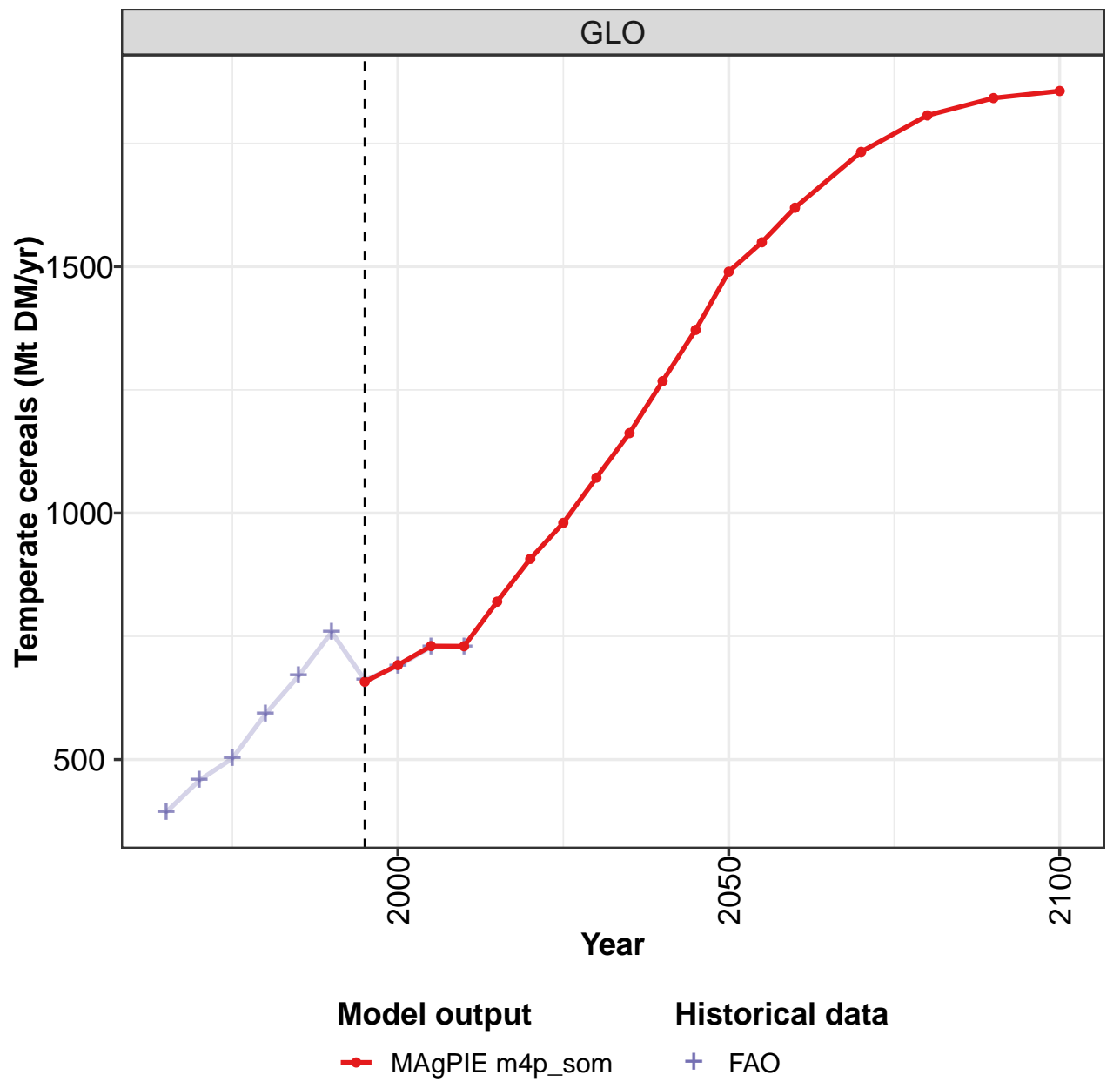
Table 1357: MAgPIE m4p\_som — Production—Crops—Cereals—Rice (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	218	272	307	343	404	448	473	519	550	609
CAZ	0	0	0	1	1	1	1	1	0	0
CHA	79	98	112	124	149	167	163	165	158	172
EUR	1	2	2	2	2	2	2	2	2	3
IND	40	55	64	70	83	97	100	111	120	125
JPN	11	11	11	8	10	9	9	8	8	7
LAM	9	10	12	14	15	14	19	20	23	22
MEA	3	3	3	3	4	5	6	7	8	7
NEU	0	0	0	0	0	0	0	0	1	1
OAS	68	83	90	107	127	138	156	186	208	243
REF	0	1	2	2	2	2	1	1	1	2
SSA	3	4	5	5	6	8	8	10	12	18
USA	3	3	5	6	5	6	7	8	9	10

Table 1358: FAO — Production—Crops—Cereals—Rice (Mt DM/yr)

44.1.3 Temperate cereals

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## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.
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## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

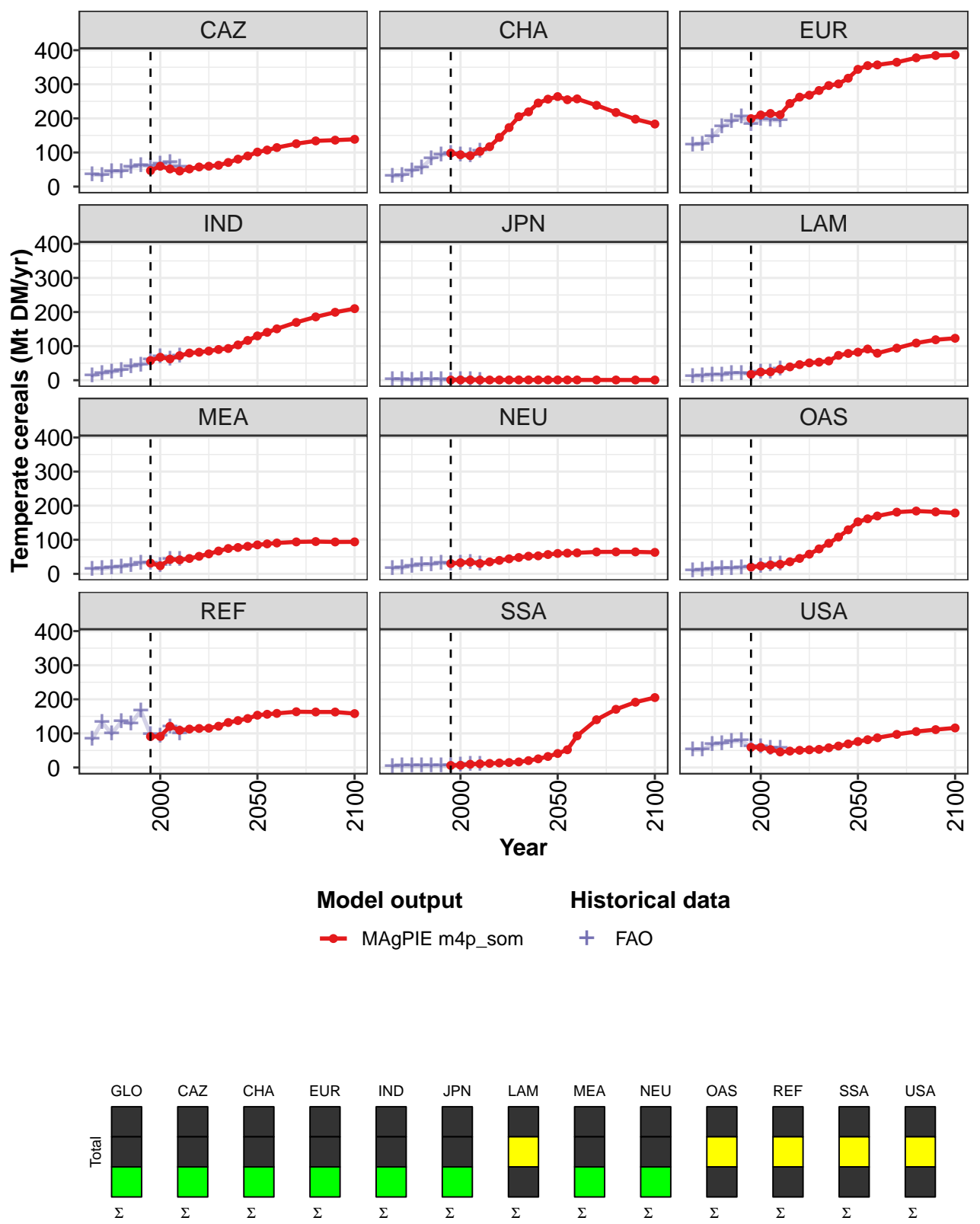


Figure 341: MAgPIE m4p\_som — Production—Crops—Cereals—Temperate cereals (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	658	692	730	730	820	907	980	1072	1162	1268	1372
CAZ	47	60	52	46	52	57	60	63	71	80	90
CHA	98	93	91	103	117	144	173	205	219	245	256
EUR	199	210	214	211	244	262	268	282	296	301	318
IND	58	67	63	72	80	82	86	90	93	104	117
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	17	24	25	32	39	46	51	53	56	73	79
MEA	31	24	42	41	45	51	59	67	74	77	81
NEU	30	33	35	31	35	40	44	48	52	53	57
OAS	20	23	26	28	35	45	58	73	90	108	129
REF	91	91	121	109	113	115	115	121	132	138	144
SSA	6	7	10	11	12	13	15	16	20	25	32
USA	59	59	53	46	48	51	52	53	58	63	69

Table 1359: MAgPIE m4p\_som — Production—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1490	1549	1619	1733	1807	1842	1856
CAZ	101	107	114	126	134	136	139
CHA	264	255	257	238	217	198	183
EUR	344	355	357	365	378	384	386
IND	130	141	151	170	186	199	210
JPN	1	1	1	1	1	1	1
LAM	82	91	79	94	109	119	123
MEA	85	88	91	94	95	94	94
NEU	60	61	62	64	64	64	63
OAS	153	162	170	181	184	182	178
REF	153	156	159	164	163	163	158
SSA	41	52	93	140	171	192	205
USA	76	81	87	97	105	111	116

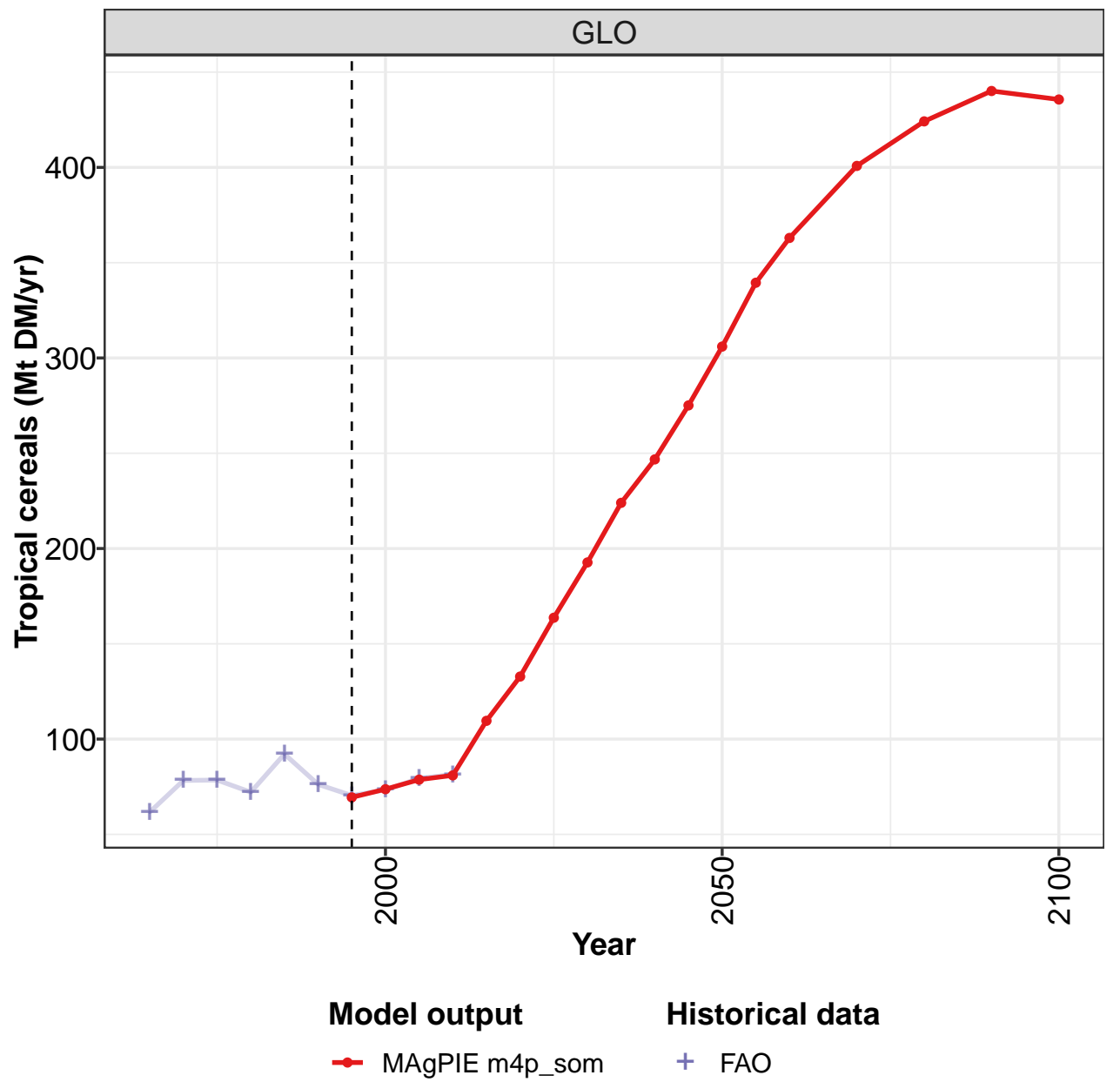
Table 1360: MAgPIE m4p\_som — Production—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	393	458	502	592	670	758	661	690	728	729
CAZ	35	34	44	45	57	63	59	66	70	58
CHA	30	32	47	55	81	93	98	94	91	105
EUR	123	125	146	175	191	204	183	197	195	194
IND	13	20	24	29	40	45	59	68	61	72
JPN	2	1	0	1	1	1	1	1	1	1
LAM	12	12	16	15	20	21	17	24	25	33
MEA	15	15	18	21	25	32	32	24	42	42
NEU	16	17	23	27	28	32	29	31	33	29
OAS	9	12	13	15	16	18	20	23	26	28
REF	83	133	99	135	129	166	96	93	119	100
SSA	4	5	4	5	5	5	6	7	9	11
USA	52	53	67	70	76	78	61	61	56	57

Table 1361: FAO — Production—Crops—Cereals—Temperate cereals (Mt DM/yr)

44.1.4 Tropical cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

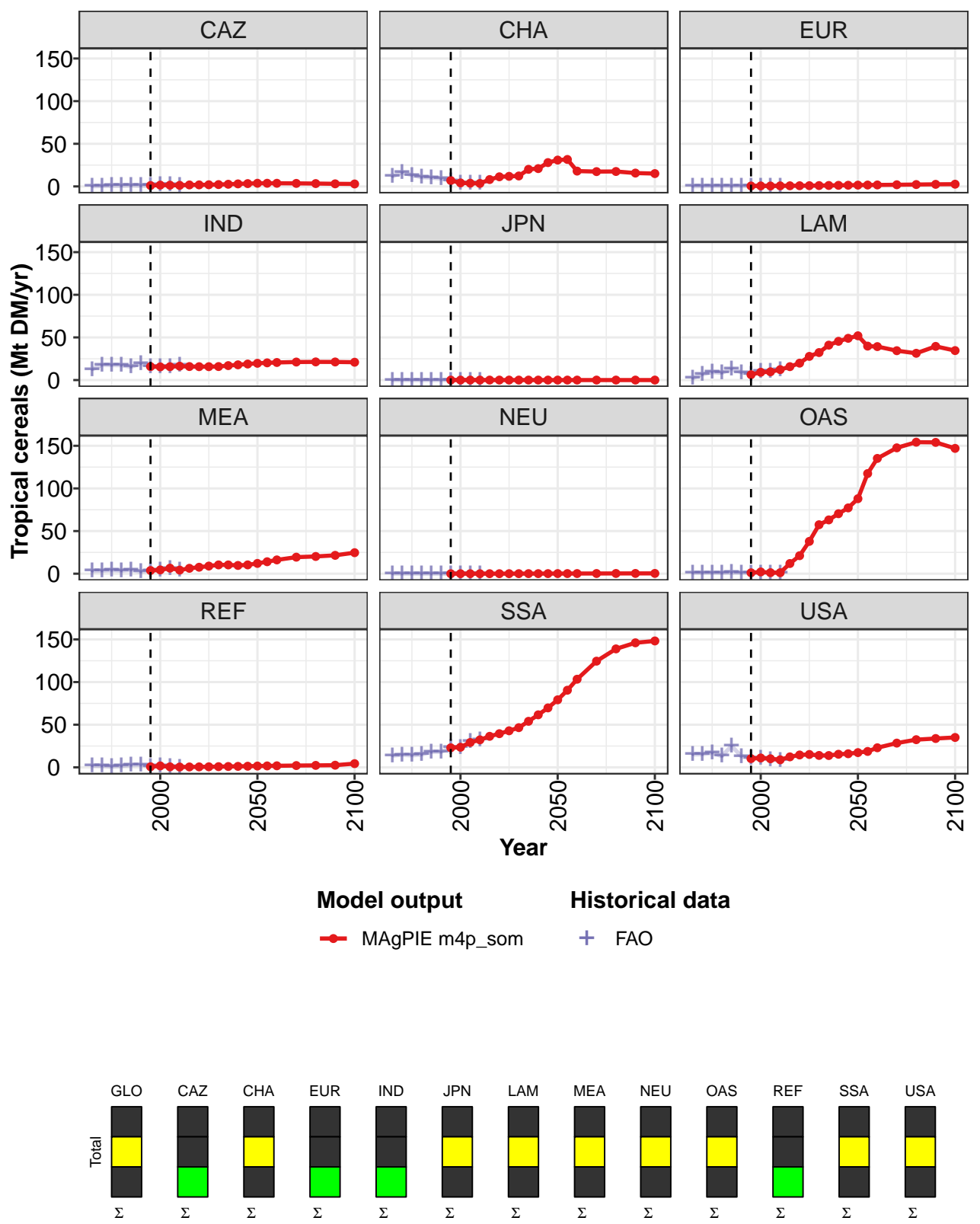


Figure 342: MAgPIE m4p\_som — Production—Crops—Cereals—Tropical cereals (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	69	74	79	81	110	133	164	193	224	247	275
CAZ	1	2	1	1	2	2	2	2	3	3	3
CHA	7	4	4	4	8	11	12	12	20	21	28
EUR	1	1	0	1	1	1	1	1	1	1	1
IND	16	15	16	16	16	16	16	16	17	18	19
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	6	9	10	12	16	20	28	32	41	45	49
MEA	4	4	7	4	6	8	9	10	10	10	10
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	1	2	1	1	12	21	38	57	63	70	77
REF	1	2	1	0	0	1	1	1	1	1	1
SSA	23	24	29	32	36	39	43	47	54	62	70
USA	10	11	10	9	12	15	15	14	14	15	16

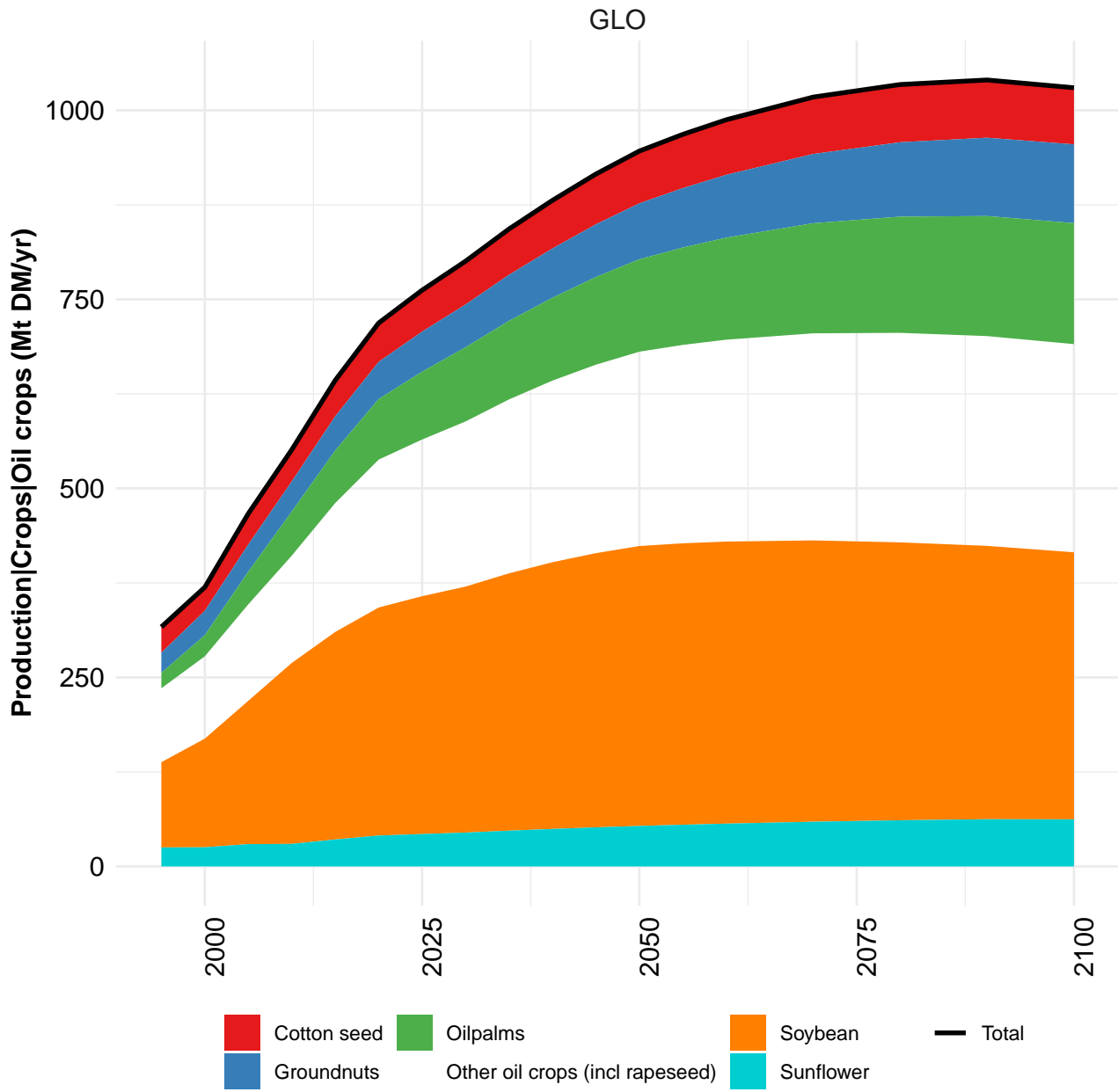
Table 1362: MAgPIE m4p\_som — Production—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	306	339	363	401	424	440	436
CAZ	4	4	4	4	3	3	3
CHA	31	32	18	17	18	16	15
EUR	2	2	2	2	2	2	3
IND	20	20	21	21	21	21	21
JPN	0	0	0	0	0	0	0
LAM	52	40	39	34	31	40	35
MEA	12	14	16	19	20	22	25
NEU	0	0	0	0	0	0	0
OAS	88	117	135	148	154	154	147
REF	2	2	2	2	2	3	4
SSA	79	90	103	125	139	146	148
USA	17	19	23	28	32	34	35

Table 1363: MAgPIE m4p\_som — Production—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	61.7	78.3	78.5	72.1	92.1	76.2	70.4	73.3	79.4	81.4
CAZ	0.2	0.5	0.8	0.8	1.2	0.9	1.2	1.9	1.8	1.4
CHA	11.7	16.3	13.2	10.8	10.3	9.1	6.9	4.2	3.8	3.5
EUR	0.2	0.4	0.5	0.6	0.3	0.5	0.5	0.6	0.5	0.6
IND	12.5	17.8	17.6	17.4	15.5	19.5	15.8	15.5	15.6	17.6
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	2.2	6.7	9.2	8.4	13.3	8.9	7.0	10.0	10.0	12.2
MEA	3.0	3.4	4.0	3.5	4.4	2.3	3.8	4.1	6.4	4.2
NEU	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
OAS	1.0	1.1	1.1	1.0	1.3	1.1	1.0	1.1	1.1	1.2
REF	1.8	1.7	1.0	1.6	2.6	2.9	0.7	1.5	0.6	0.3
SSA	13.7	14.7	14.0	15.0	18.0	18.1	23.0	23.8	30.4	32.2
USA	15.1	15.4	16.9	13.1	25.2	13.0	10.4	10.7	9.1	8.0

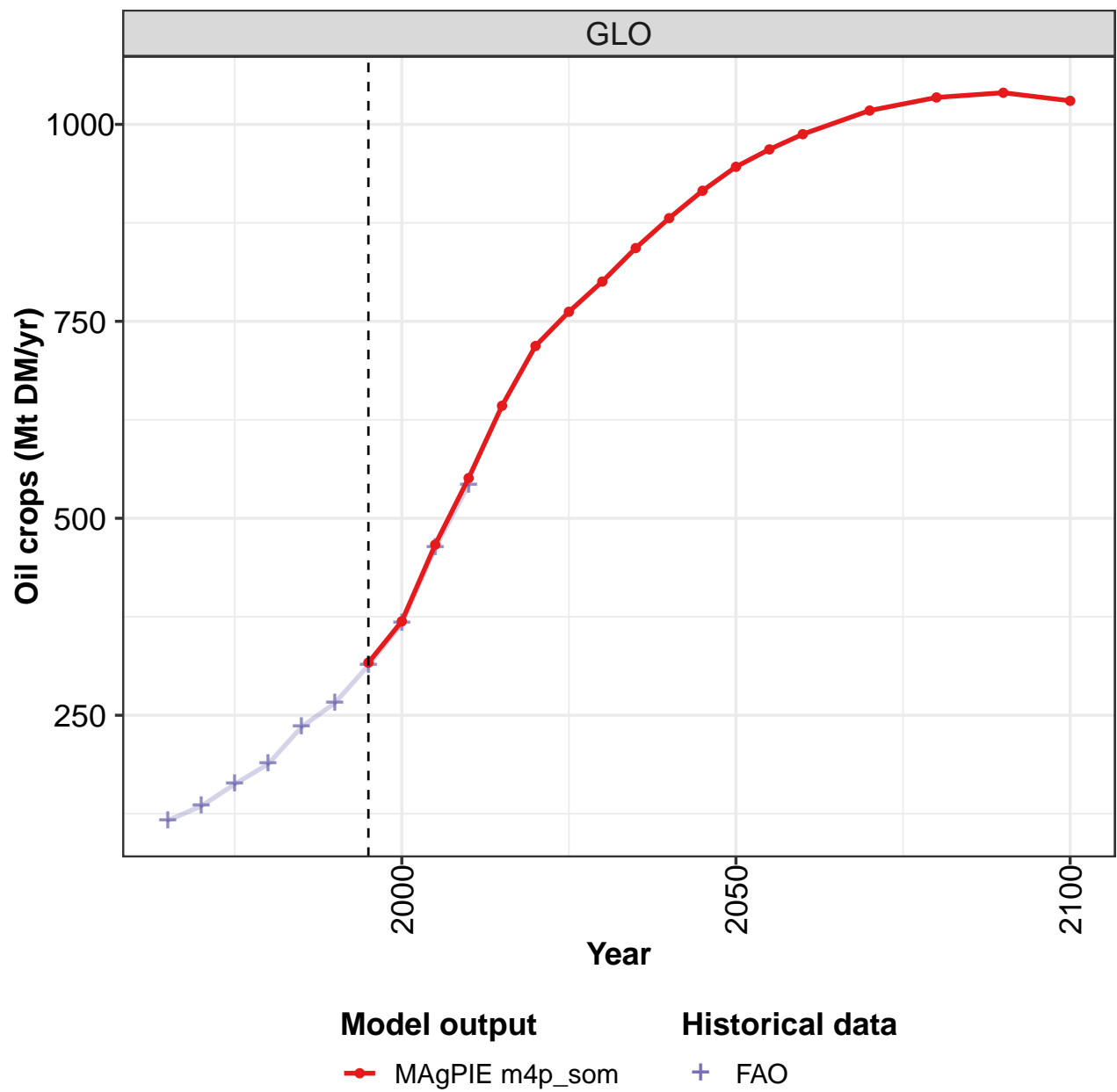
Table 1364: FAO — Production—Crops—Cereals—Tropical cereals (Mt DM/yr)





44.2 Oil crops

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

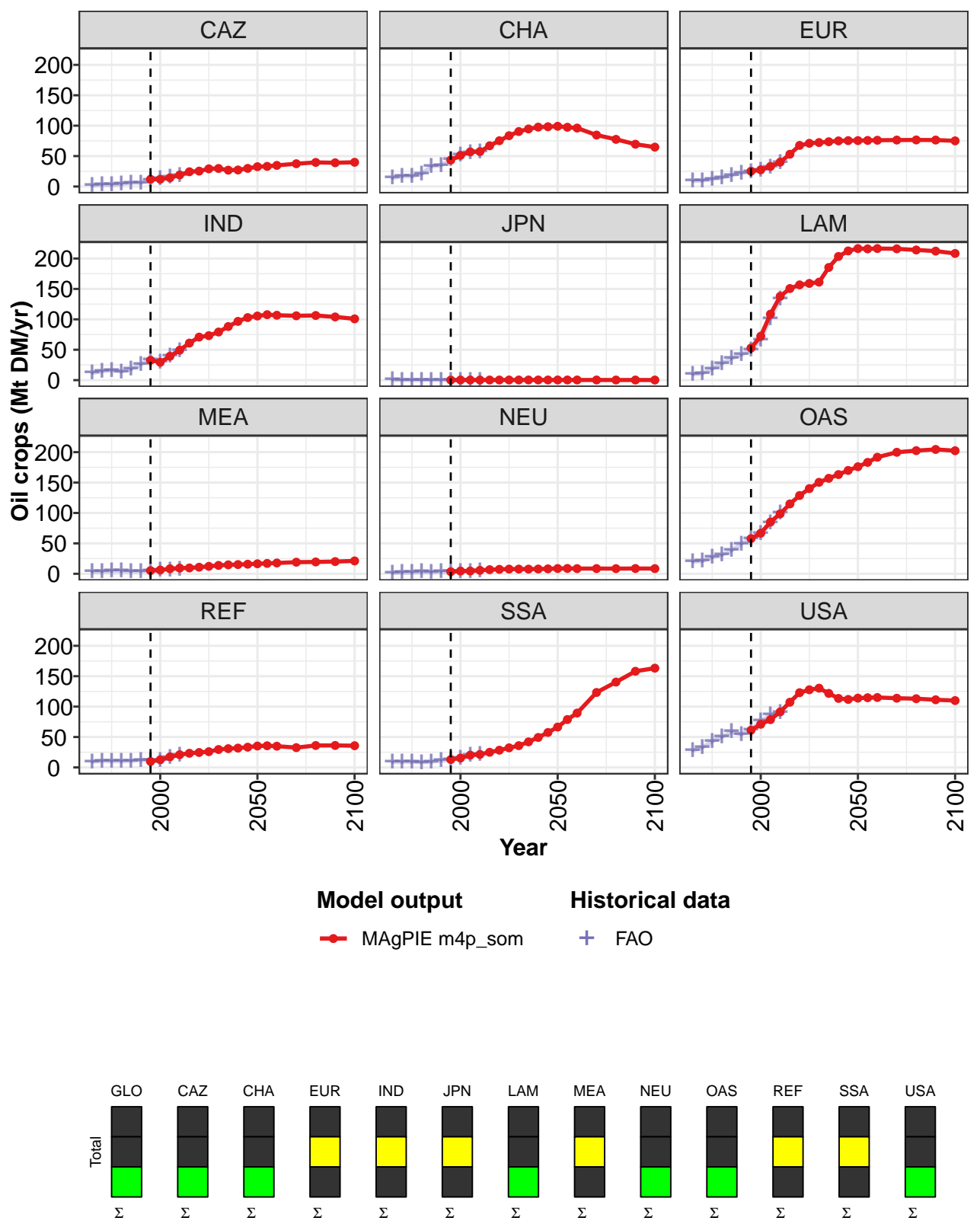


Figure 343: MAgPIE m4p\_som — Production—Crops—Oil crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	317	369	467	551	643	719	762	800	843	881	916
CAZ	12	12	14	19	24	25	29	30	27	27	30
CHA	43	51	57	57	67	75	84	90	95	98	98
EUR	25	27	33	40	53	68	71	72	74	75	75
IND	33	29	39	49	61	71	73	79	88	97	103
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	53	72	109	138	151	157	159	161	185	203	213
MEA	5	6	8	9	10	11	12	14	15	15	16
NEU	3	5	5	6	7	7	8	8	8	8	8
OAS	58	67	85	99	115	129	140	150	157	163	170
REF	10	13	17	21	23	25	26	29	31	32	33
SSA	13	15	20	21	25	28	32	36	42	49	57
USA	61	71	79	91	107	123	128	130	122	113	112

Table 1365: MAgPIE m4p\_som — Production—Crops—Oil crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	946	968	988	1018	1034	1040	1030
CAZ	33	33	35	37	40	39	40
CHA	99	97	96	85	78	70	65
EUR	76	76	76	76	77	76	75
IND	106	108	107	106	106	104	101
JPN	0	0	0	0	0	0	0
LAM	216	216	216	216	214	212	208
MEA	17	17	18	19	19	20	21
NEU	9	9	9	9	8	9	9
OAS	176	183	192	200	202	204	202
REF	35	36	35	33	36	36	36
SSA	66	79	89	123	140	158	163
USA	114	115	115	114	113	111	110

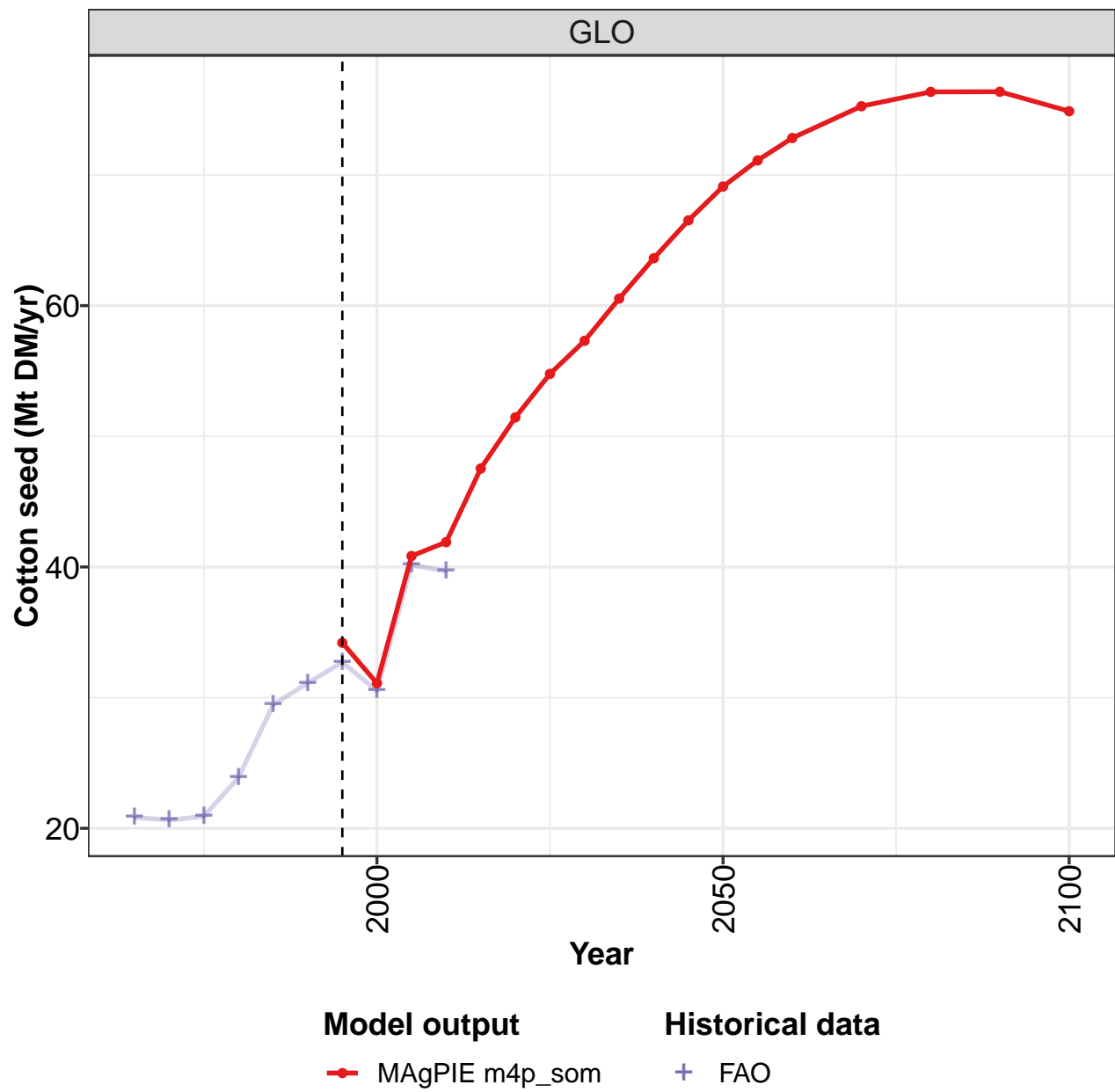
Table 1366: MAgPIE m4p\_som — Production—Crops—Oil crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	116	135	163	188	235	266	313	366	462	542
CAZ	1	3	3	4	6	6	10	13	15	19
CHA	14	17	17	21	33	35	44	52	56	57
EUR	9	10	12	15	19	22	25	28	33	39
IND	12	15	16	14	18	26	33	29	39	49
JPN	0	0	0	0	0	0	0	0	0	0
LAM	9	11	18	27	36	42	50	66	101	133
MEA	3	4	5	4	4	4	5	6	7	7
NEU	1	2	2	3	3	4	3	4	4	5
OAS	20	21	27	31	38	49	58	66	84	100
REF	9	11	10	10	11	12	11	11	17	20
SSA	9	9	9	8	9	11	12	15	20	22
USA	28	33	43	50	59	54	62	76	86	90

Table 1367: FAO — Production—Crops—Oil crops (Mt DM/yr)

44.2.1 Cotton seed

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

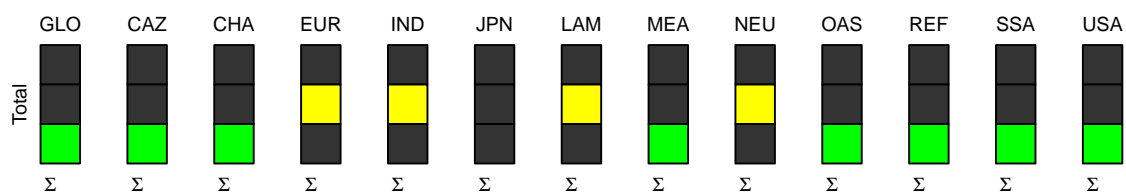
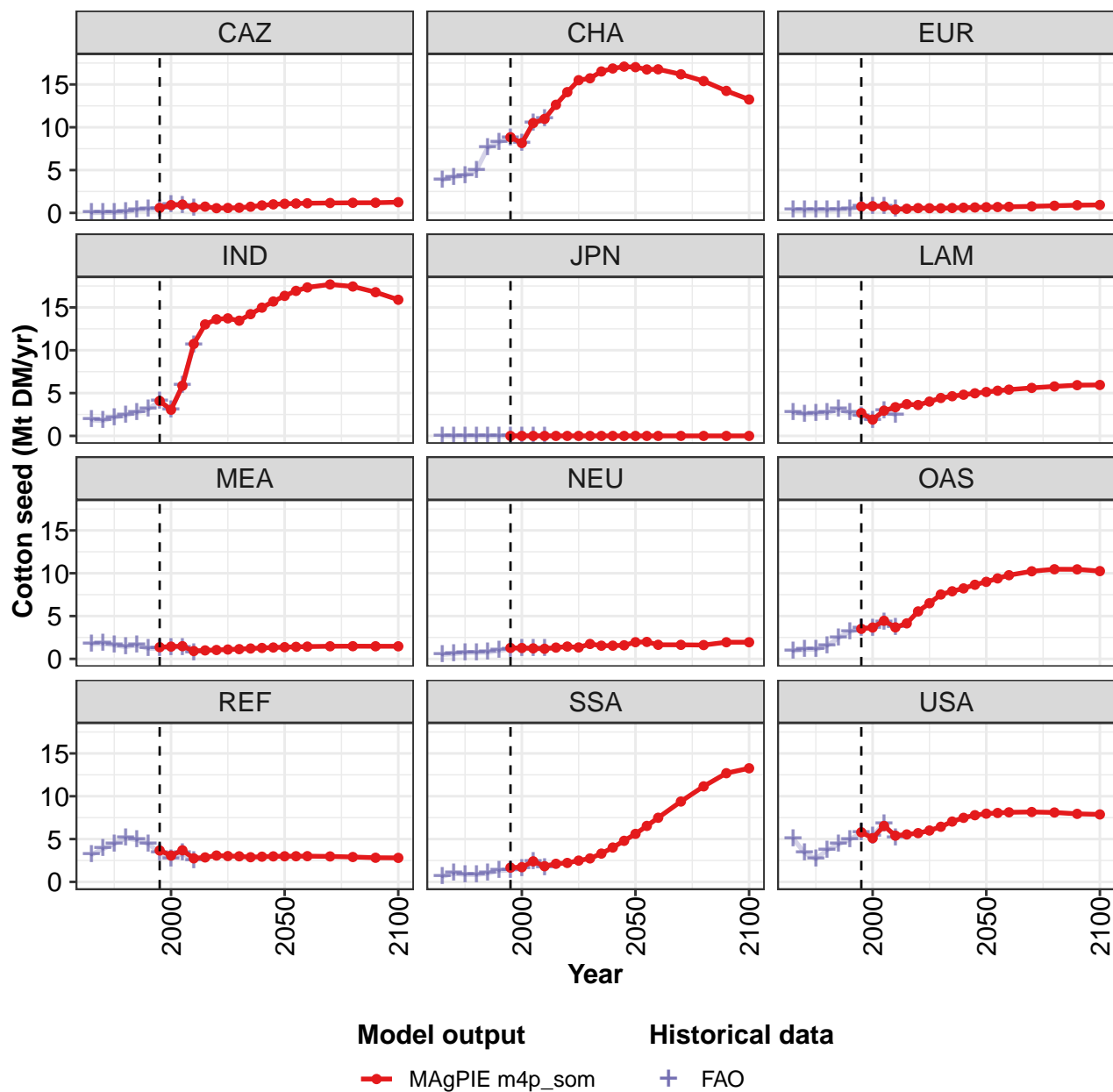


Figure 344: MAgPIE m4p\_som — Production—Crops—Oil crops—Cotton seed (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	34.2	31.1	40.8	41.9	47.5	51.4	54.8	57.3	60.5	63.6	66.5
CAZ	0.6	0.9	1.0	0.6	0.7	0.6	0.6	0.6	0.7	0.9	1.0
CHA	8.8	8.2	10.5	11.0	12.6	14.1	15.5	15.7	16.5	16.9	17.1
EUR	0.7	0.8	0.8	0.4	0.5	0.6	0.5	0.5	0.6	0.6	0.6
IND	4.1	3.1	5.9	10.7	13.0	13.6	13.7	13.5	14.2	15.0	15.7
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	2.7	1.9	2.9	3.4	3.7	3.6	4.0	4.4	4.6	4.8	5.0
MEA	1.4	1.4	1.5	0.9	1.0	1.0	1.1	1.1	1.2	1.3	1.3
NEU	1.3	1.3	1.2	1.2	1.3	1.4	1.3	1.7	1.5	1.5	1.6
OAS	3.5	3.7	4.5	3.7	4.2	5.5	6.5	7.5	7.9	8.2	8.7
REF	3.7	3.1	3.7	2.8	2.9	3.1	3.0	3.0	2.9	2.9	3.0
SSA	1.7	1.7	2.4	1.8	2.1	2.2	2.5	2.7	3.3	4.0	4.8
USA	5.8	5.1	6.5	5.4	5.5	5.7	6.0	6.4	7.0	7.5	7.8

Table 1368: MAgPIE m4p.som — Production—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	69.1	71.1	72.8	75.3	76.4	76.4	74.9
CAZ	1.1	1.1	1.1	1.2	1.2	1.2	1.3
CHA	17.0	16.7	16.8	16.2	15.4	14.2	13.2
EUR	0.7	0.7	0.7	0.8	0.8	0.9	0.9
IND	16.3	16.9	17.3	17.7	17.4	16.8	15.9
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	5.1	5.3	5.4	5.6	5.8	5.9	5.9
MEA	1.4	1.4	1.4	1.5	1.5	1.5	1.5
NEU	2.0	2.0	1.6	1.6	1.6	1.9	1.9
OAS	9.0	9.4	9.8	10.2	10.5	10.5	10.3
REF	3.0	3.0	3.0	3.0	2.9	2.8	2.8
SSA	5.6	6.5	7.5	9.4	11.2	12.7	13.3
USA	8.0	8.0	8.1	8.2	8.1	7.9	7.9

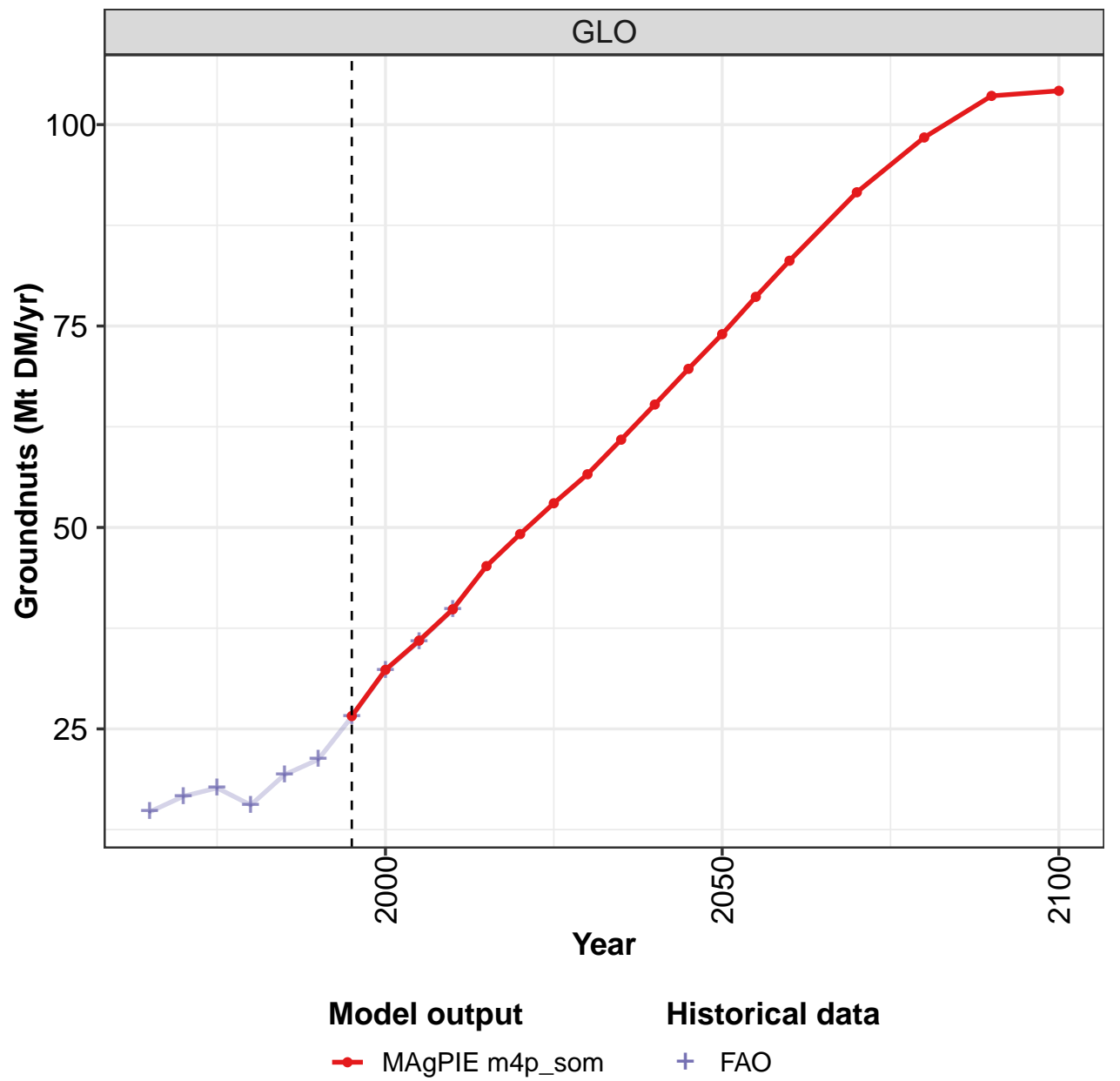
Table 1369: MAgPIE m4p.som — Production—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	20.8	20.6	20.9	23.9	29.4	31.1	32.7	30.5	40.2	39.7
CAZ	0.0	0.0	0.0	0.1	0.4	0.5	0.4	1.0	0.8	0.5
CHA	3.9	4.2	4.4	5.0	7.6	8.3	8.8	8.1	10.5	11.0
EUR	0.3	0.3	0.3	0.3	0.4	0.5	0.7	0.8	0.8	0.4
IND	1.9	1.8	2.2	2.4	2.8	3.1	4.1	3.1	5.9	10.6
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	2.7	2.6	2.6	2.7	3.1	2.7	2.3	1.8	2.9	2.5
MEA	1.8	1.8	1.6	1.4	1.6	1.2	1.2	1.4	1.4	0.7
NEU	0.5	0.6	0.7	0.7	0.8	1.0	1.2	1.2	1.2	1.2
OAS	0.9	1.1	1.1	1.5	2.5	3.2	3.5	3.6	4.3	3.7
REF	3.2	3.9	4.4	5.1	4.9	4.4	3.4	2.7	3.3	2.5
SSA	0.6	1.0	0.9	0.8	1.0	1.3	1.4	1.6	2.3	1.6
USA	5.1	3.4	2.7	3.7	4.4	5.0	5.7	5.4	6.8	5.1

Table 1370: FAO — Production—Crops—Oil crops—Cotton seed (Mt DM/yr)

44.2.2 Groundnuts

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
 replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

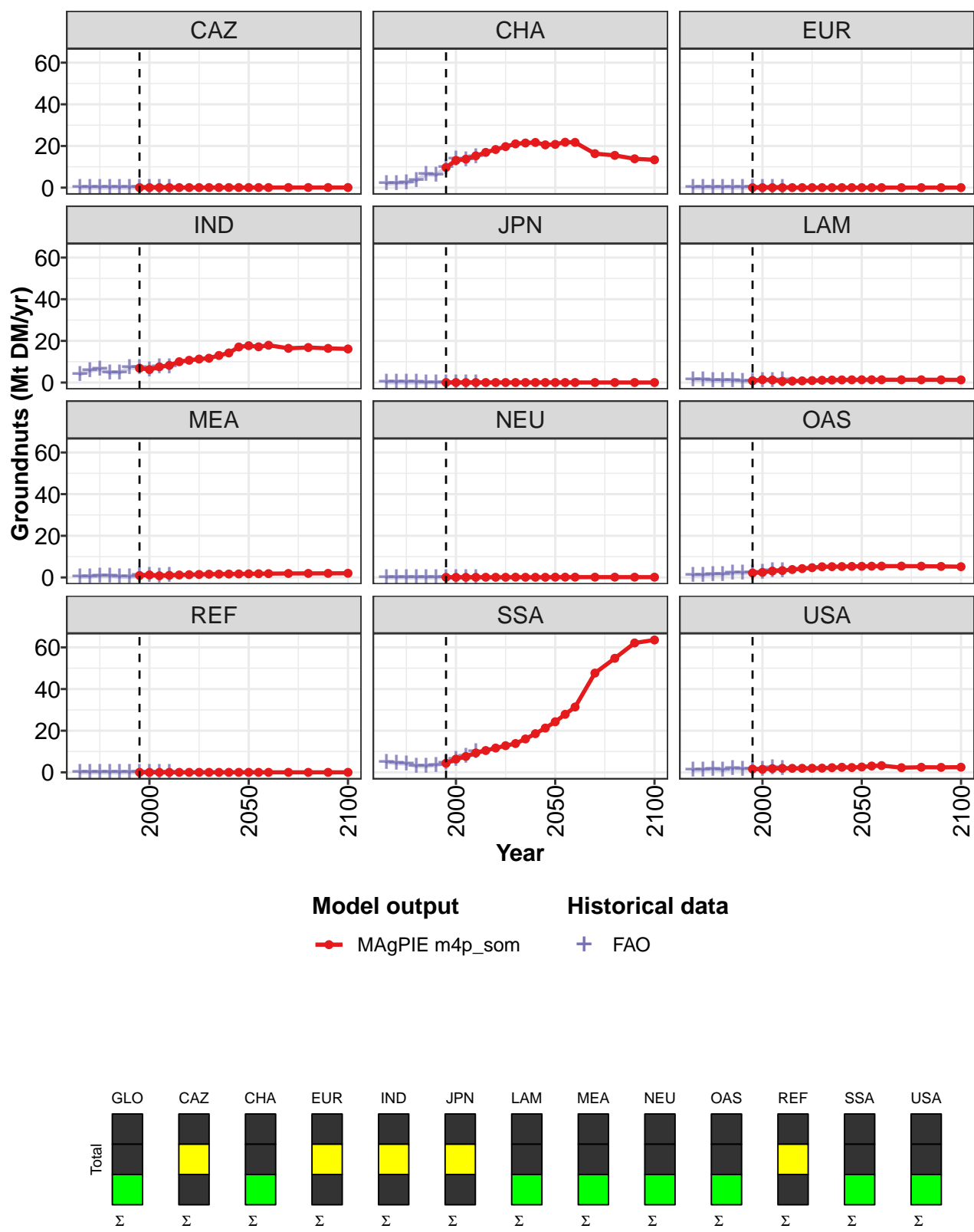


Figure 345: MagPIE m4p\_som — Production—Crops—Oil crops—Groundnuts (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	27	32	36	40	45	49	53	57	61	65	70
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	10	13	14	15	17	18	20	21	21	22	21
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	7	6	8	8	10	11	11	12	13	14	17
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	1	1	1	1	1	1	1	1	1	1	1
MEA	1	1	1	1	1	1	1	2	2	2	2
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	2	2	3	3	4	4	5	5	5	5	5
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	4	6	8	9	10	12	13	14	16	19	21
USA	2	1	2	2	2	2	2	2	2	2	2

Table 1371: MAgPIE m4p.som — Production—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	74	79	83	92	98	104	104
CAZ	0	0	0	0	0	0	0
CHA	21	22	22	16	15	14	13
EUR	0	0	0	0	0	0	0
IND	18	17	18	16	17	16	16
JPN	0	0	0	0	0	0	0
LAM	1	1	1	1	1	1	1
MEA	2	2	2	2	2	2	2
NEU	0	0	0	0	0	0	0
OAS	5	5	5	5	5	5	5
REF	0	0	0	0	0	0	0
SSA	24	28	31	48	55	62	64
USA	3	3	3	2	2	2	2

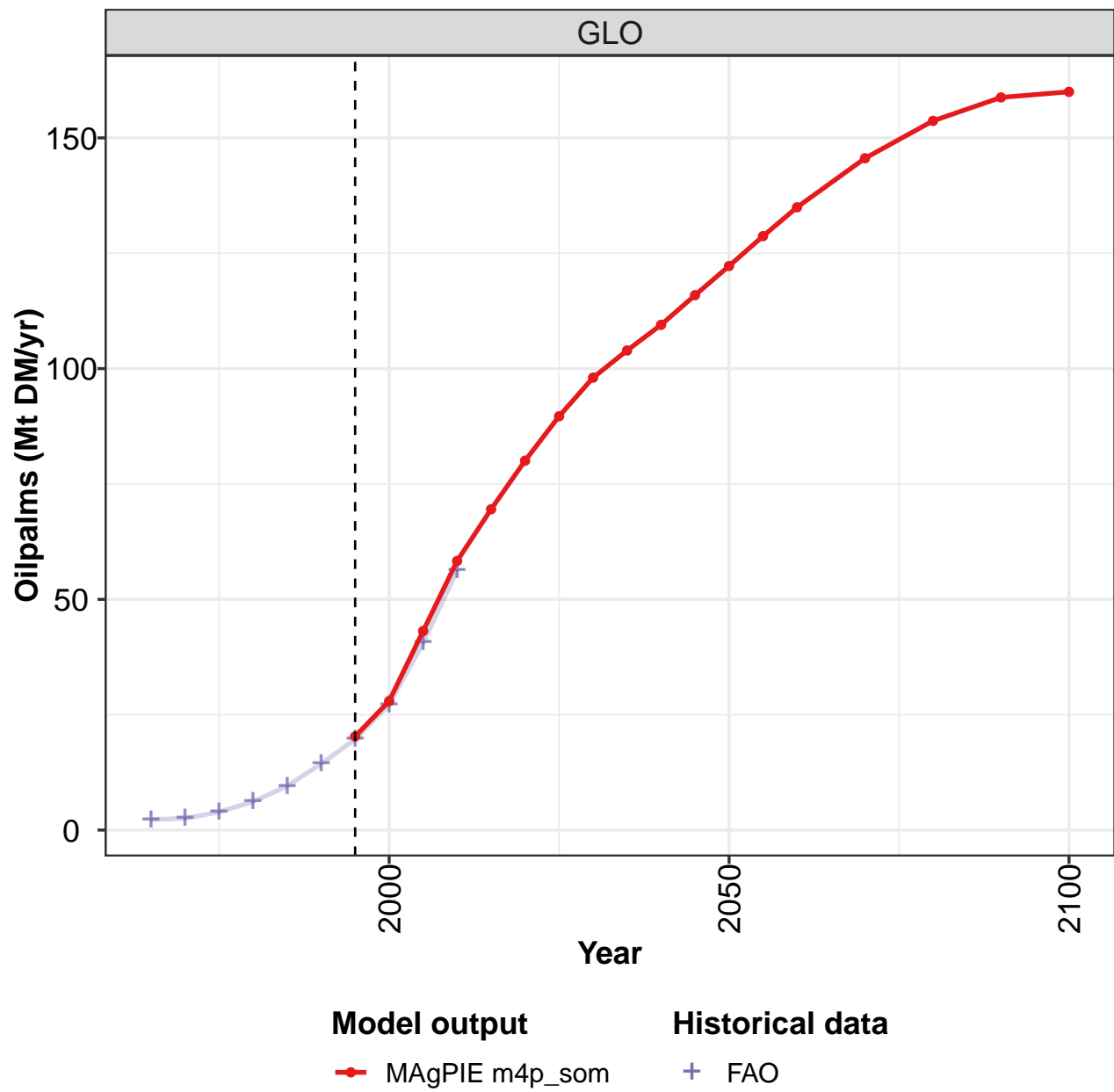
Table 1372: MAgPIE m4p.som — Production—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	14.7	16.6	17.7	15.5	19.3	21.2	26.5	32.3	35.9	39.8
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	1.9	2.1	2.2	3.5	6.3	6.0	9.7	13.6	13.5	14.8
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	4.0	5.7	6.3	4.7	4.8	7.1	7.1	6.1	7.5	7.8
JPN	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.3	1.3	1.0	1.0	0.9	0.6	0.6	0.9	1.1	1.2
MEA	0.4	0.4	0.8	0.8	0.4	0.2	0.9	1.2	0.8	1.0
NEU	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
OAS	1.0	1.2	1.4	1.5	2.0	2.1	2.2	2.5	3.1	3.3
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	4.9	4.4	4.1	3.0	2.9	3.5	4.4	6.5	7.6	9.8
USA	1.0	1.3	1.6	1.0	1.8	1.5	1.5	1.4	2.1	1.8

Table 1373: FAO — Production—Crops—Oil crops—Groundnuts (Mt DM/yr)

44.2.3 Oilpalms

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

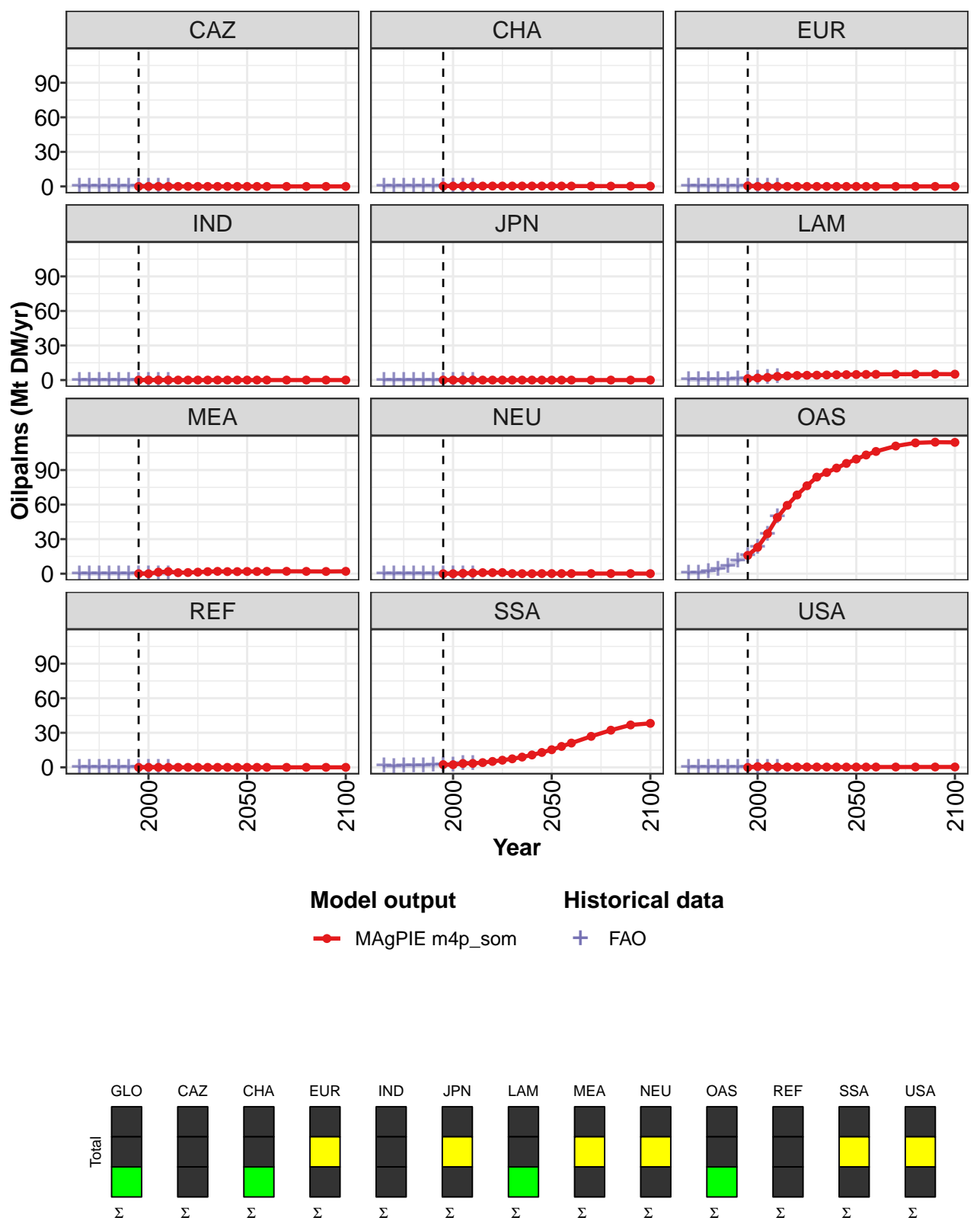


Figure 346: MAgPIE m4p\_som — Production—Crops—Oil crops—Oilpalms (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	20	28	43	58	70	80	90	98	104	109	116
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	1	2	2	3	4	4	4	4	4	5	5
MEA	0	0	1	2	1	1	1	2	2	2	2
NEU	0	0	0	1	1	1	1	0	0	0	0
OAS	16	23	35	49	59	68	76	84	88	92	96
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	2	2	3	3	4	5	6	7	9	11	13
USA	0	1	1	0	0	0	0	0	0	0	0

Table 1374: MAGPIE m4p\_som — Production—Crops—Oil crops—Oilpalms (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	122	129	135	146	154	159	160
CAZ	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0
LAM	5	5	5	5	5	5	5
MEA	2	2	2	2	2	2	2
NEU	0	0	0	0	0	0	0
OAS	99	103	106	111	114	114	114
REF	0	0	0	0	0	0	0
SSA	15	18	21	27	32	37	38
USA	0	0	0	0	0	0	0

Table 1375: MAGPIE m4p\_som — Production—Crops—Oil crops—Oilpalms (Mt DM/yr) [PART 2/2]

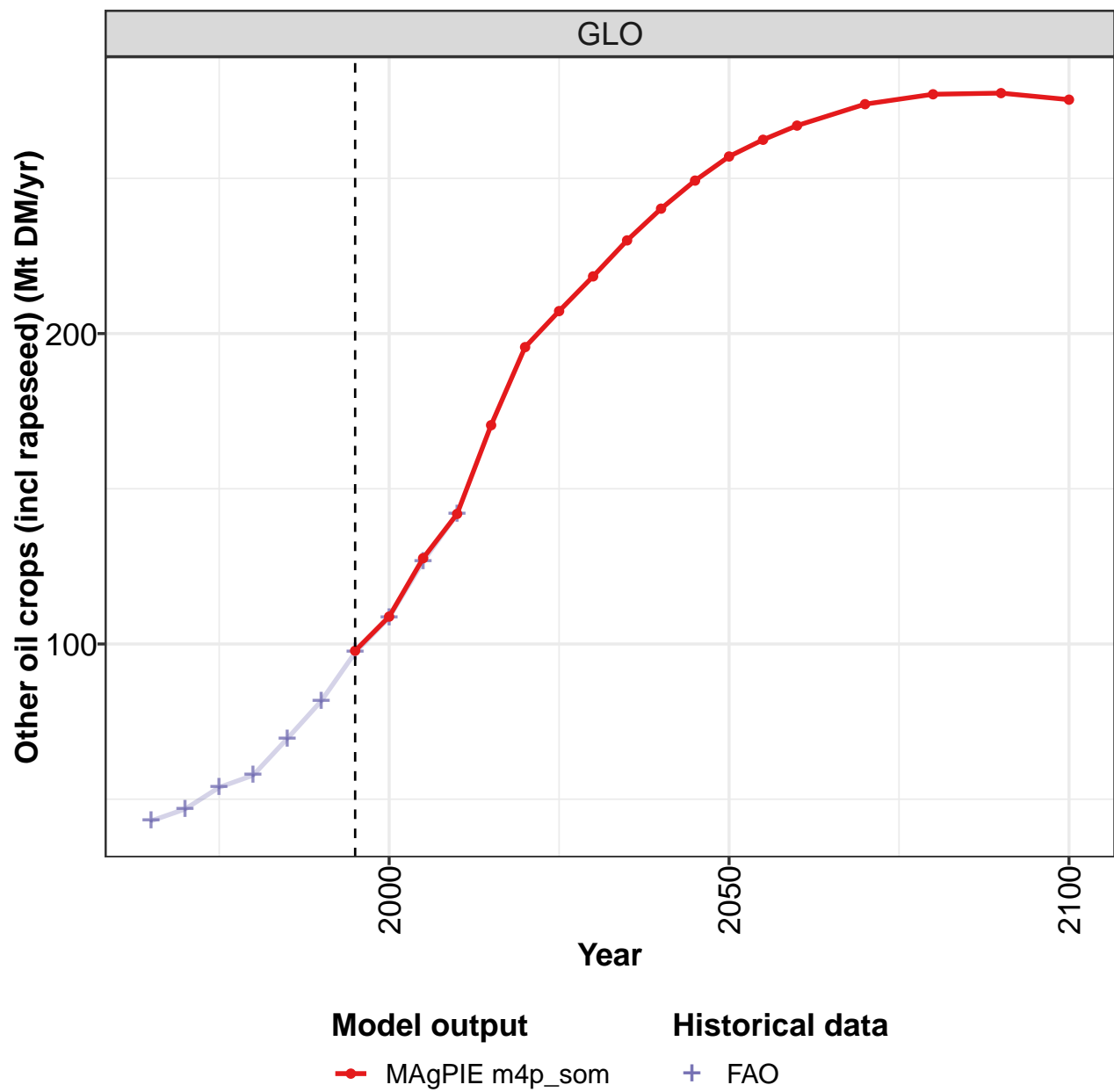
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.3	2.5	3.9	6.2	9.5	14.4	19.7	27.2	40.6	56.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.1	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3
EUR	0.6	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.2	0.3	0.3	0.4	0.7	1.0	1.2	1.7	2.3	3.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.3	0.7	1.9	3.9	6.9	11.2	15.9	23.0	34.6	49.6
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	1.1	1.0	1.2	1.5	1.6	1.9	2.3	2.3	3.4	3.4
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 1376: FAO — Production—Crops—Oil crops—Oilpalms (Mt DM/yr)



44.2.4 Other oil crops (incl rapeseed)

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

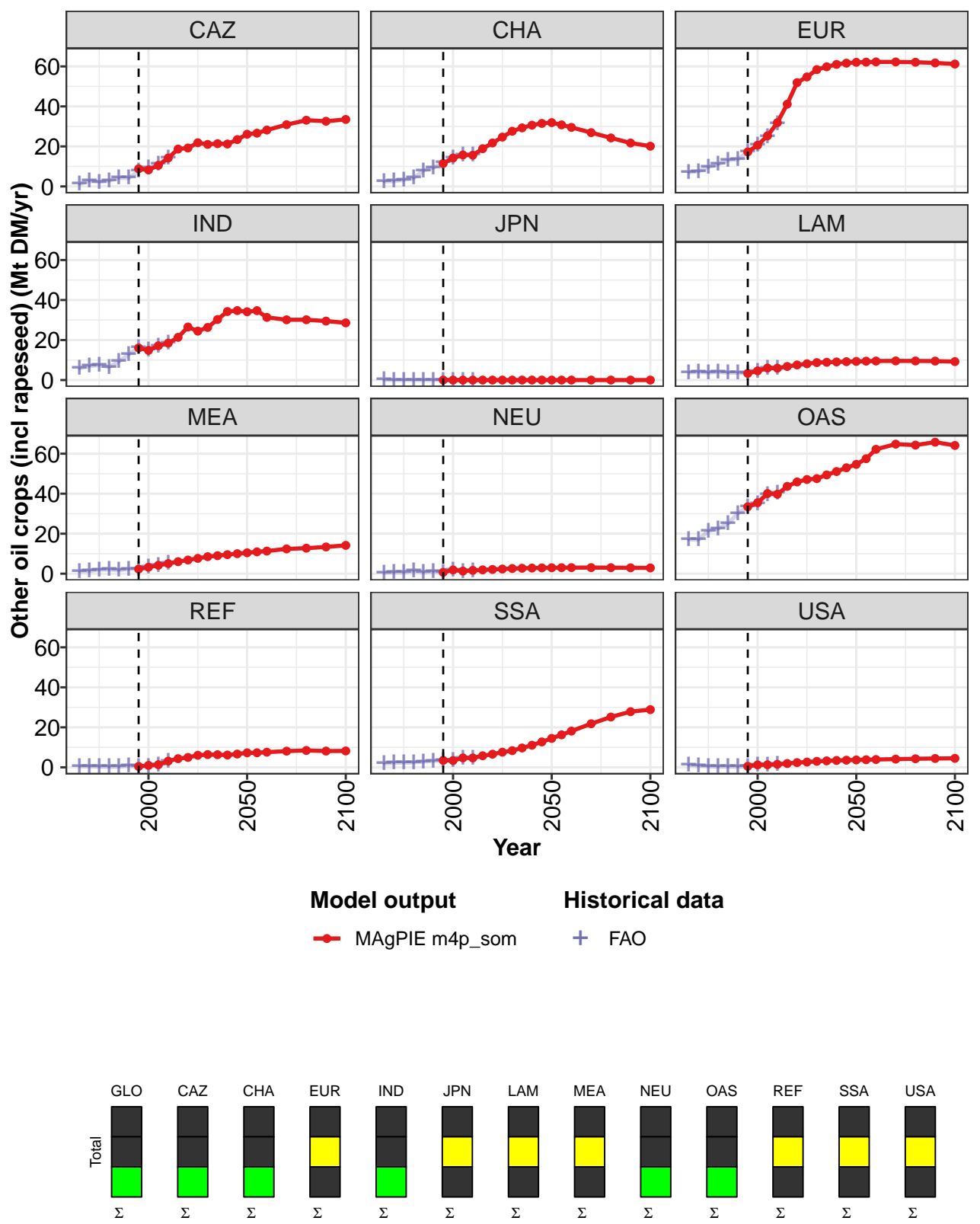


Figure 347: MAgPIE m4p\_som — Production—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	98	109	128	142	170	196	207	218	230	240	249
CAZ	9	8	11	14	19	19	22	21	21	21	23
CHA	11	14	16	16	19	22	25	28	29	31	31
EUR	17	21	25	32	41	52	55	58	60	61	62
IND	16	15	17	18	21	27	24	26	30	34	35
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	3	5	6	6	7	8	8	9	9	9	9
MEA	2	3	4	5	6	7	8	9	9	10	10
NEU	1	2	1	2	2	2	2	3	3	3	3
OAS	33	35	40	40	44	46	47	48	49	51	53
REF	0	1	1	3	4	5	6	6	6	6	7
SSA	3	3	5	5	6	7	8	8	10	11	13
USA	1	1	1	2	2	2	3	3	3	3	4

Table 1377: MAgPIE m4p.som — Production—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	257	262	267	274	277	277	275
CAZ	26	27	28	31	33	33	33
CHA	32	31	30	27	24	22	20
EUR	62	62	62	62	62	62	61
IND	34	35	31	30	30	29	29
JPN	0	0	0	0	0	0	0
LAM	9	9	10	10	10	9	9
MEA	10	11	11	12	13	13	14
NEU	3	3	3	3	3	3	3
OAS	55	57	62	65	64	66	64
REF	7	7	8	8	8	8	8
SSA	14	16	18	22	25	28	29
USA	4	4	4	4	4	4	5

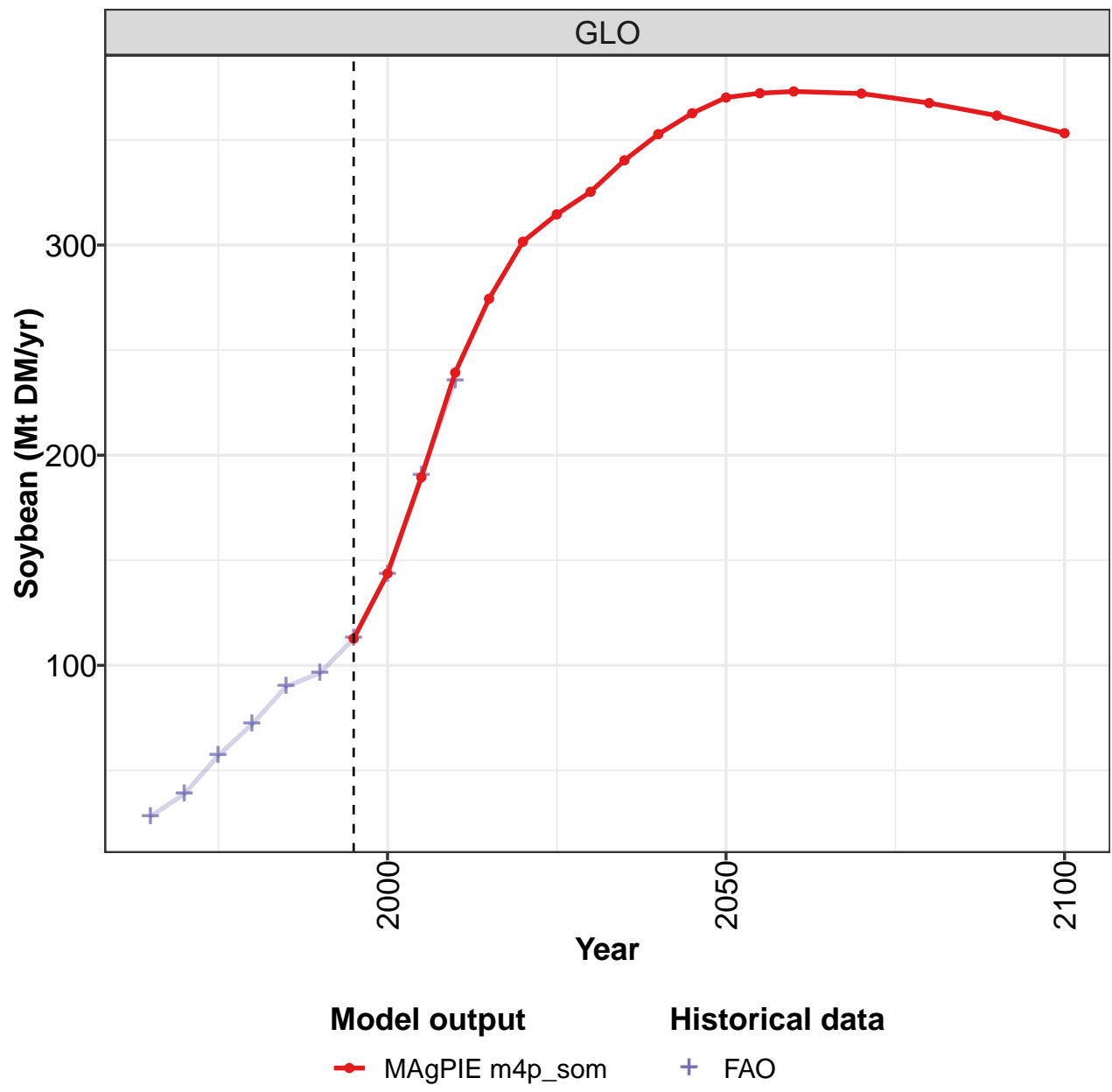
Table 1378: MAgPIE m4p.som — Production—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	43	47	54	58	69	82	97	109	127	142
CAZ	1	3	2	3	4	4	8	9	11	14
CHA	2	3	3	4	8	9	12	14	16	16
EUR	7	8	10	11	13	14	17	21	25	31
IND	6	7	8	6	9	13	16	15	17	19
JPN	0	0	0	0	0	0	0	0	0	0
LAM	4	4	4	4	4	4	3	4	6	6
MEA	1	1	2	2	2	2	2	3	4	5
NEU	0	1	1	1	1	1	1	2	1	2
OAS	17	17	21	23	25	30	34	35	39	40
REF	1	1	0	0	0	1	0	1	1	3
SSA	2	2	2	2	3	3	3	3	5	5
USA	1	1	1	0	0	0	1	1	1	2

Table 1379: FAO — Production—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

44.2.5 Soybean

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

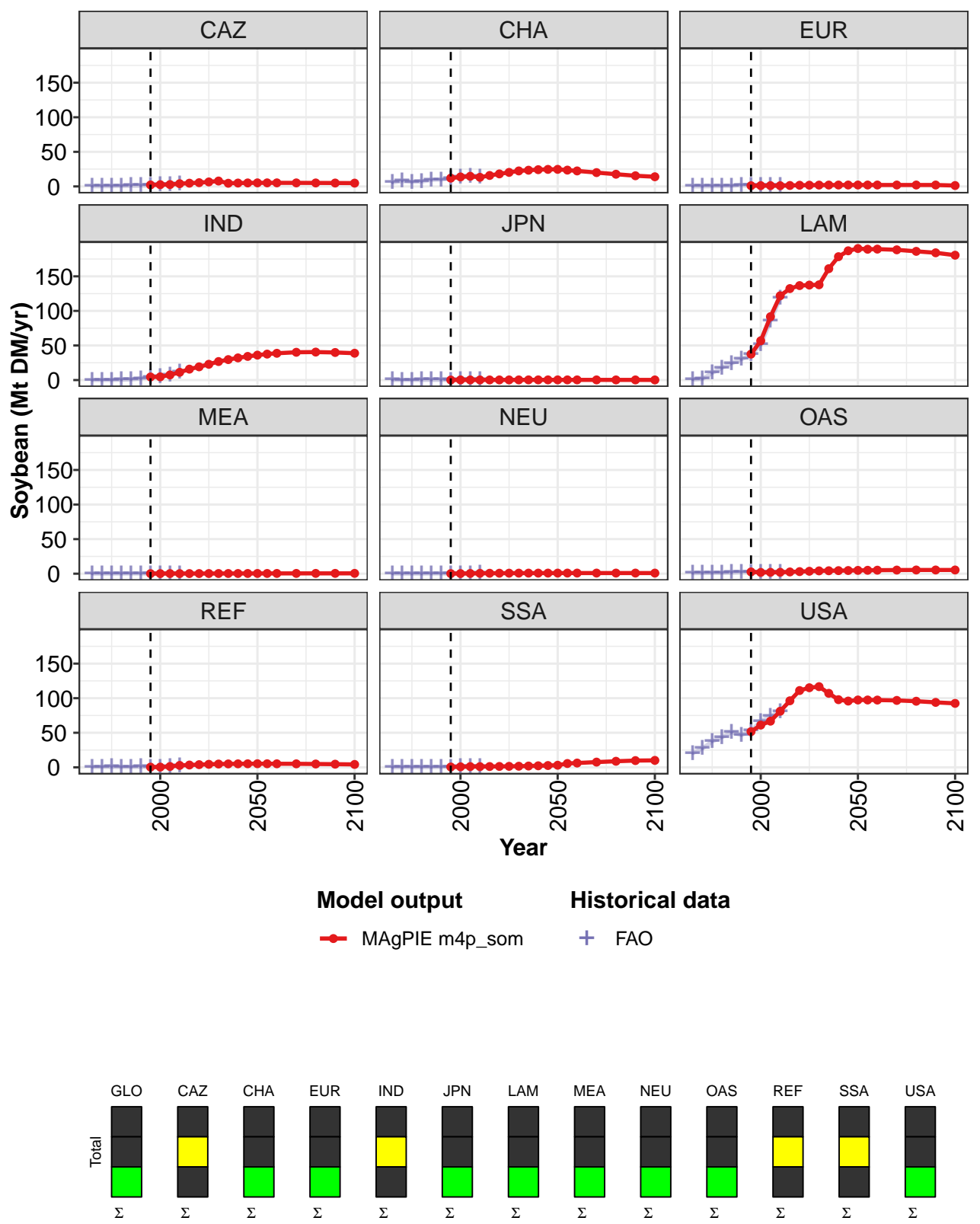


Figure 348: MAgPIE m4p\_som — Production—Crops—Oil crops—Soybean (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	113	144	190	239	274	302	315	325	340	353	363
CAZ	2	3	3	4	5	5	6	8	5	5	5
CHA	12	14	15	13	16	18	20	22	23	24	25
EUR	1	1	1	1	1	2	2	2	2	2	2
IND	4	5	7	11	16	19	23	27	30	32	34
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	38	57	92	122	132	137	137	138	161	178	187
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	1	1	1	1	1	1	1	1
OAS	3	2	2	2	3	3	4	4	4	4	5
REF	0	0	1	3	3	4	4	5	5	5	5
SSA	0	1	1	1	1	1	1	2	2	2	3
USA	52	61	67	81	96	111	115	117	107	98	96

Table 1380: MAgPIE m4p\_som — Production—Crops—Oil crops—Soybean (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	370	372	373	372	368	362	353
CAZ	5	5	5	5	5	5	5
CHA	25	24	22	20	18	15	14
EUR	2	2	2	2	2	2	1
IND	36	38	39	40	40	40	39
JPN	0	0	0	0	0	0	0
LAM	190	189	189	188	186	184	181
MEA	0	0	0	0	0	0	1
NEU	1	1	1	1	1	1	1
OAS	5	5	5	5	5	5	5
REF	5	5	5	5	5	5	4
SSA	3	6	6	8	9	10	10
USA	97	97	97	97	96	94	93

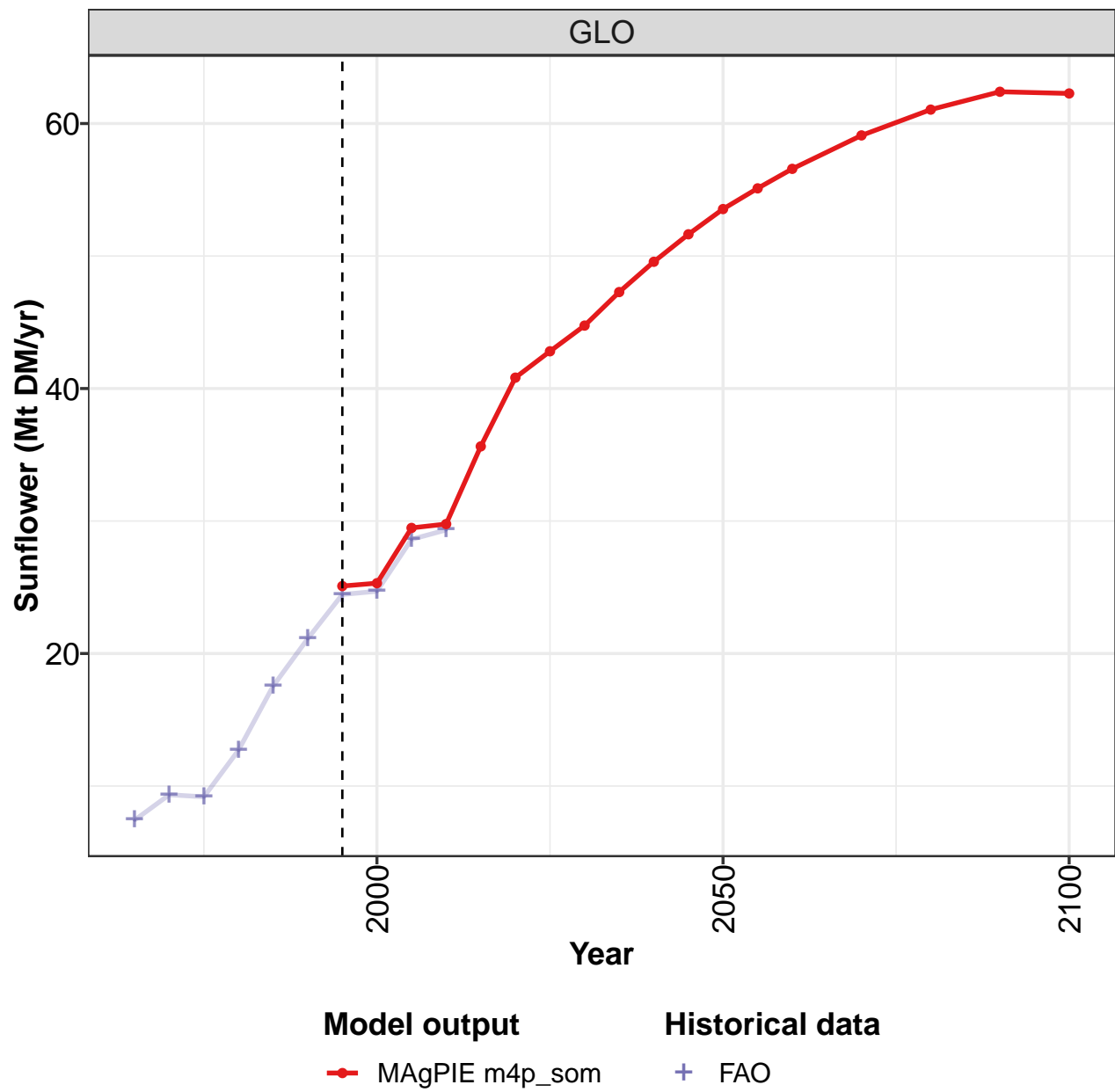
Table 1381: MAgPIE m4p\_som — Production—Crops—Oil crops—Soybean (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	28	39	57	72	90	96	113	143	191	235
CAZ	0	0	0	1	1	1	2	2	3	4
CHA	6	8	6	7	9	10	12	14	15	13
EUR	0	0	0	1	1	2	1	1	1	1
IND	0	0	0	0	1	2	5	5	7	11
JPN	0	0	0	0	0	0	0	0	0	0
LAM	1	2	10	18	24	30	37	51	85	118
MEA	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	1
OAS	1	1	1	1	2	3	3	2	2	2
REF	0	1	1	0	0	1	0	0	1	3
SSA	0	0	0	0	0	1	0	1	1	1
USA	20	27	37	43	51	47	53	67	74	80

Table 1382: FAO — Production—Crops—Oil crops—Soybean (Mt DM/yr)

44.2.6 Sunflower

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

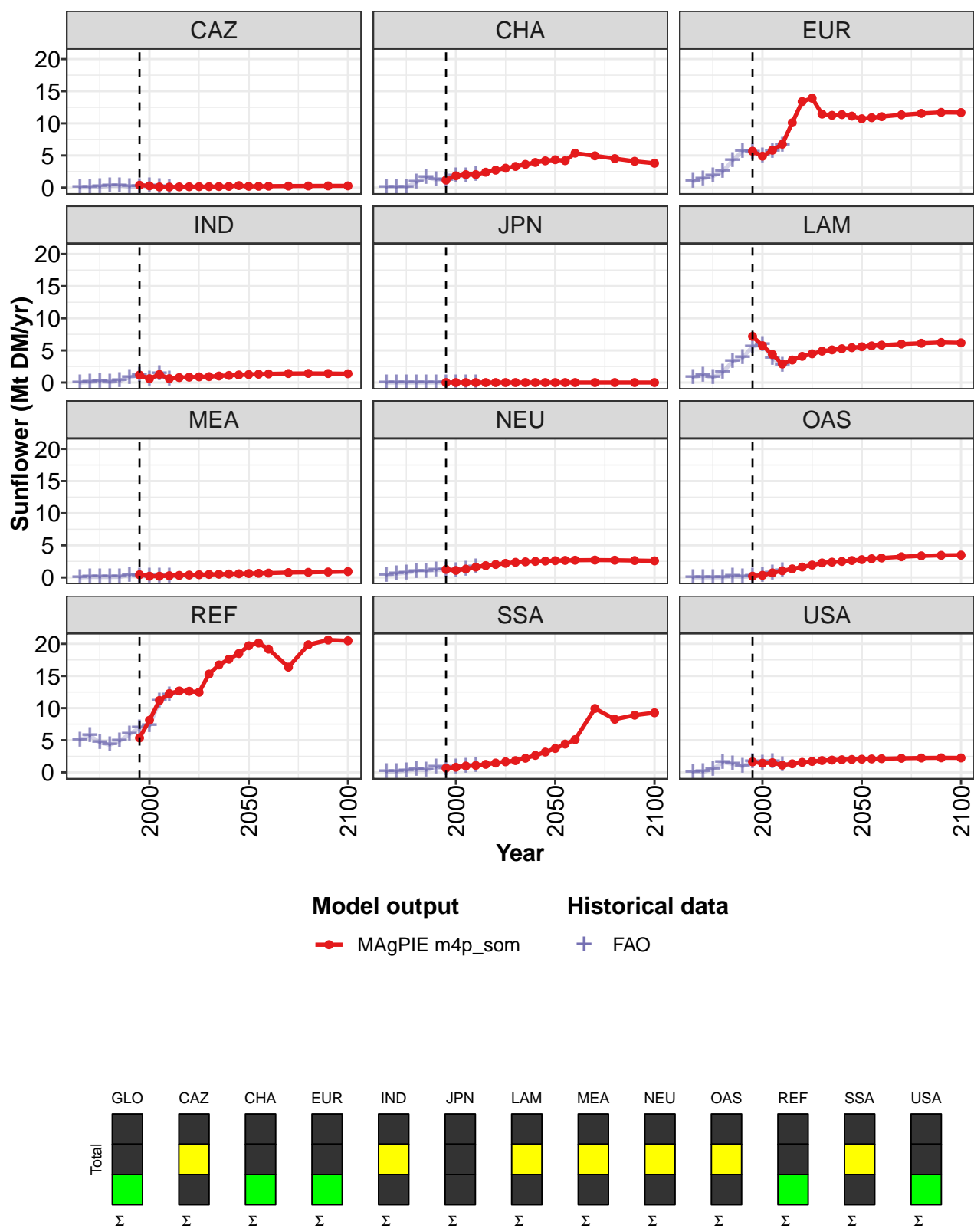


Figure 349: MAgPIE m4p\_som — Production—Crops—Oil crops—Sunflower (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	25.1	25.3	29.5	29.8	35.6	40.8	42.8	44.8	47.3	49.6	51.6
CAZ	0.4	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3
CHA	1.2	1.8	2.0	2.0	2.4	2.7	3.0	3.3	3.6	3.9	4.2
EUR	5.7	4.9	5.8	6.8	10.1	13.4	13.9	11.4	11.2	11.4	11.1
IND	1.2	0.6	1.3	0.6	0.8	0.8	0.9	0.9	1.0	1.1	1.2
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	7.2	5.7	4.4	2.9	3.5	4.1	4.5	4.9	5.1	5.3	5.4
MEA	0.4	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.6
NEU	1.2	1.1	1.3	1.6	1.8	2.0	2.2	2.4	2.4	2.5	2.6
OAS	0.2	0.3	0.7	1.0	1.3	1.6	1.9	2.3	2.4	2.5	2.6
REF	5.4	8.1	11.2	12.3	12.7	12.6	12.5	15.3	16.7	17.6	18.5
SSA	0.7	0.8	1.0	1.1	1.2	1.5	1.7	1.8	2.2	2.6	3.2
USA	1.6	1.4	1.5	1.1	1.3	1.6	1.7	1.8	1.9	2.0	2.0

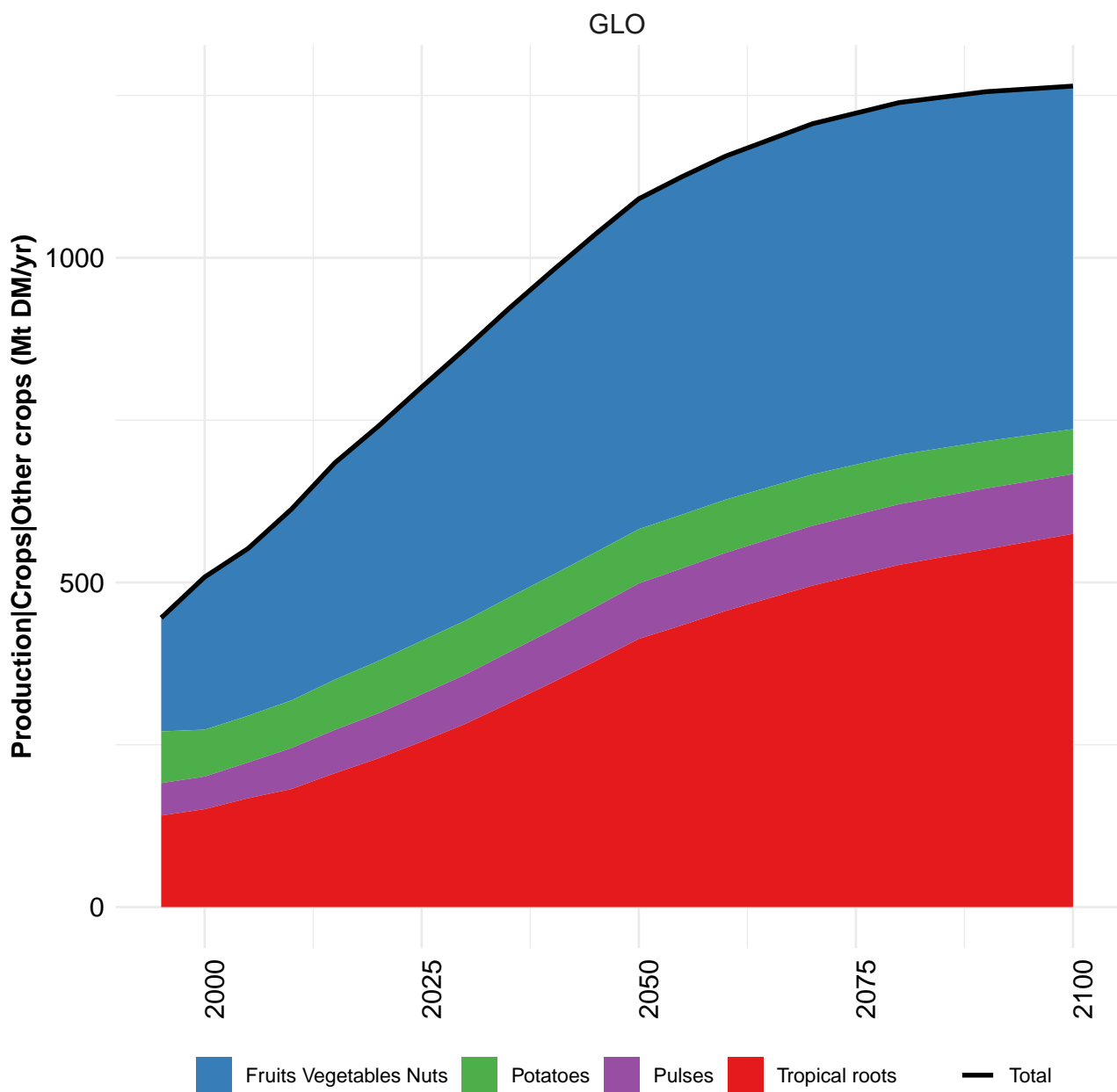
Table 1383: MAgPIE m4p\_som — Production—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 1/2]

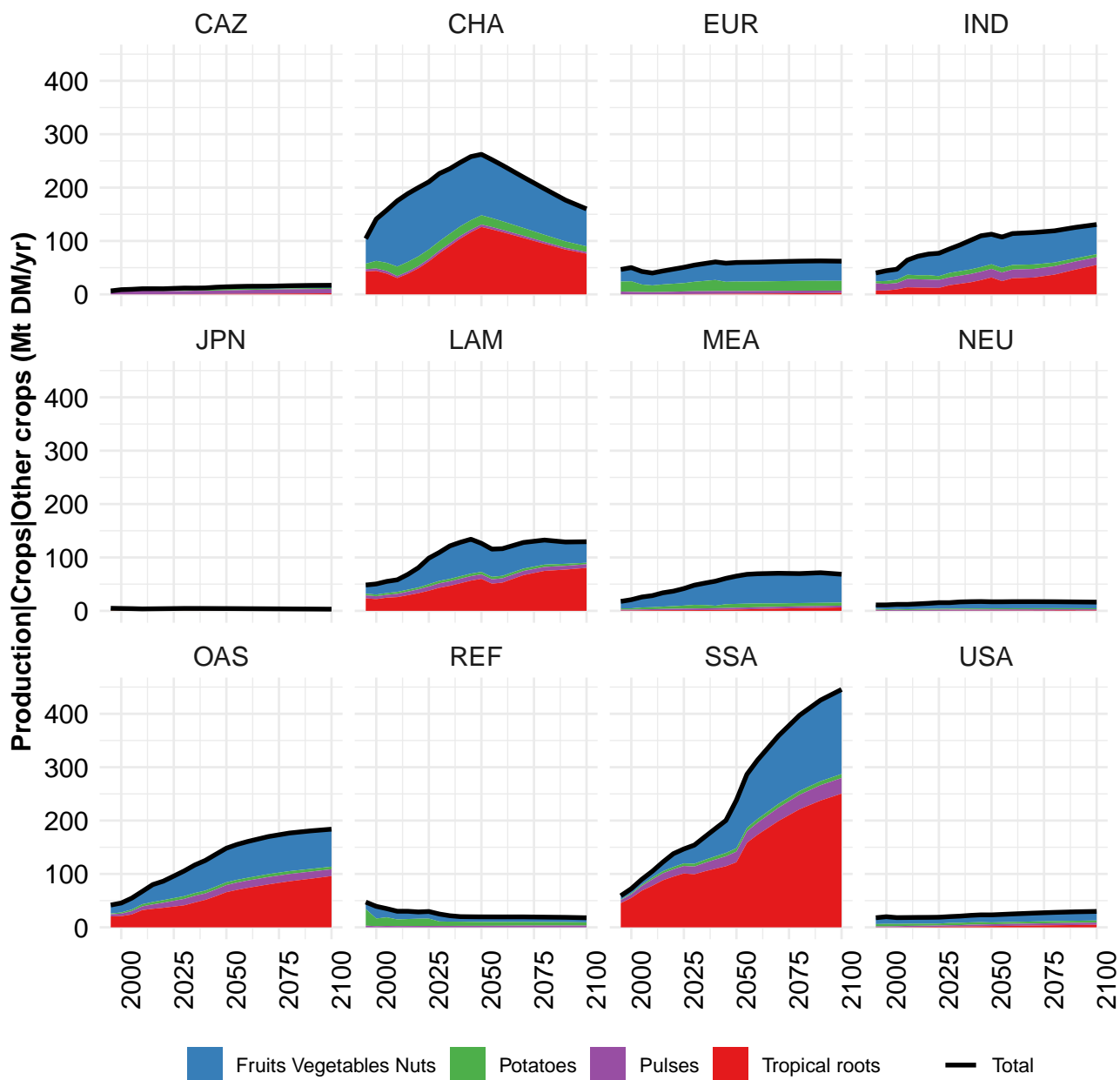
	2050	2055	2060	2070	2080	2090	2100
GLO	53.5	55.1	56.6	59.1	61.1	62.4	62.3
CAZ	0.2	0.2	0.2	0.2	0.3	0.3	0.3
CHA	4.3	4.2	5.4	4.9	4.5	4.1	3.8
EUR	10.7	10.9	11.0	11.3	11.6	11.7	11.7
IND	1.2	1.3	1.3	1.4	1.4	1.4	1.4
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	5.6	5.7	5.8	6.0	6.1	6.2	6.2
MEA	0.6	0.6	0.7	0.8	0.8	0.9	0.9
NEU	2.6	2.7	2.7	2.7	2.7	2.6	2.6
OAS	2.8	2.9	3.0	3.2	3.4	3.4	3.5
REF	19.7	20.1	19.2	16.4	19.9	20.6	20.5
SSA	3.7	4.4	5.1	9.9	8.3	8.9	9.3
USA	2.1	2.1	2.1	2.2	2.2	2.3	2.3

Table 1384: MAgPIE m4p\_som — Production—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	7.4	9.3	9.2	12.7	17.5	21.1	24.5	24.7	28.6	29.3
CAZ	0.0	0.0	0.1	0.3	0.3	0.2	0.2	0.3	0.1	0.1
CHA	0.1	0.1	0.1	0.8	1.6	1.2	1.2	1.8	1.8	2.1
EUR	1.0	1.4	1.8	2.5	4.3	5.7	5.6	4.9	5.7	6.6
IND	0.0	0.1	0.2	0.1	0.3	0.8	1.2	0.6	1.3	0.6
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.8	1.1	0.8	1.6	3.3	3.9	5.6	6.0	3.8	2.7
MEA	0.0	0.1	0.1	0.1	0.1	0.3	0.2	0.2	0.2	0.3
NEU	0.4	0.6	0.7	1.0	1.0	1.2	1.1	1.1	1.3	1.6
OAS	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.3	0.7	1.1
REF	5.1	5.7	4.6	4.3	4.9	6.0	6.9	7.3	11.0	12.0
SSA	0.1	0.1	0.3	0.4	0.4	0.8	0.6	0.8	1.0	1.1
USA	0.0	0.1	0.5	1.6	1.3	1.0	1.7	1.5	1.7	1.2

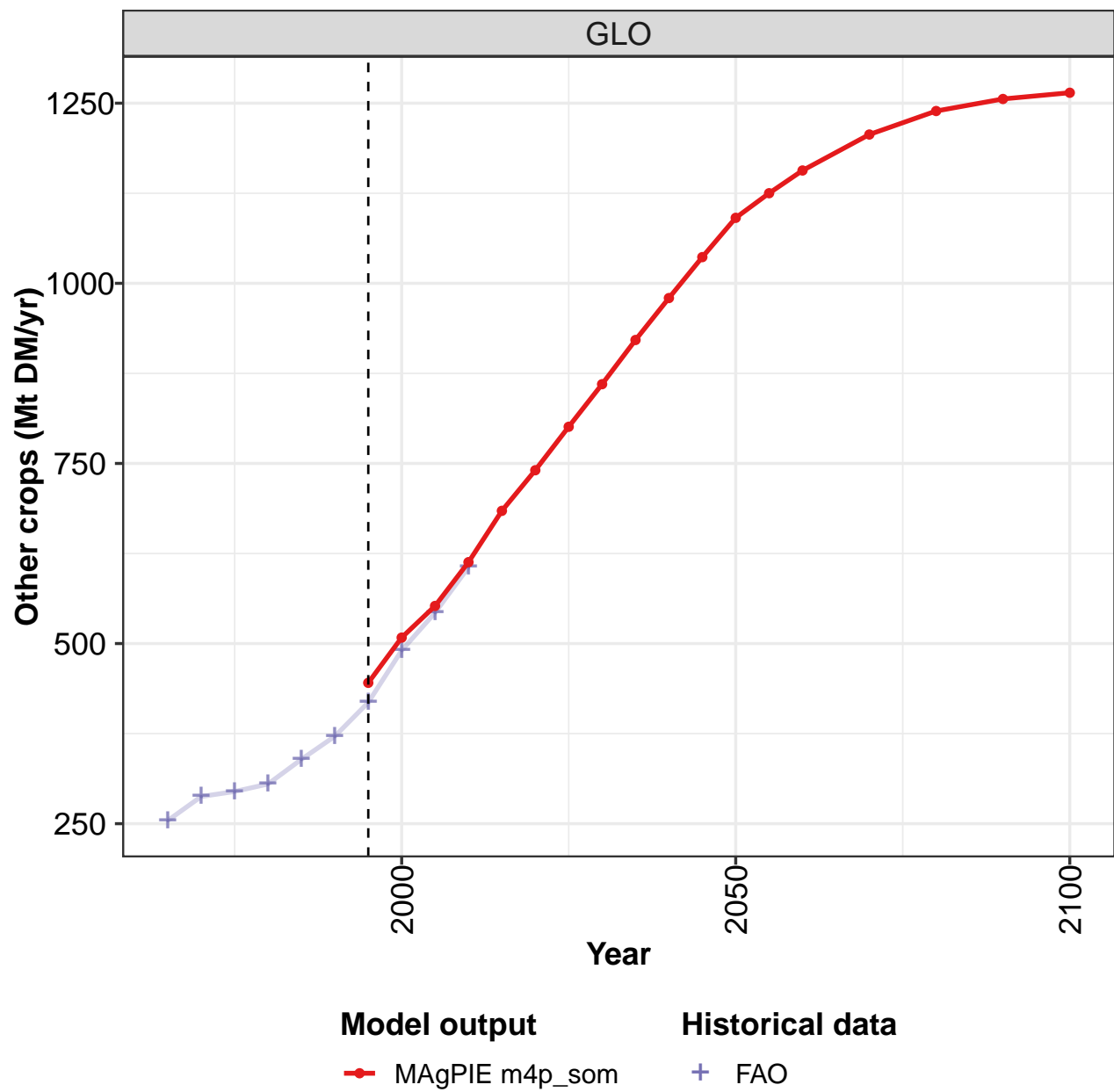
Table 1385: FAO — Production—Crops—Oil crops—Sunflower (Mt DM/yr)





44.3 Other crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

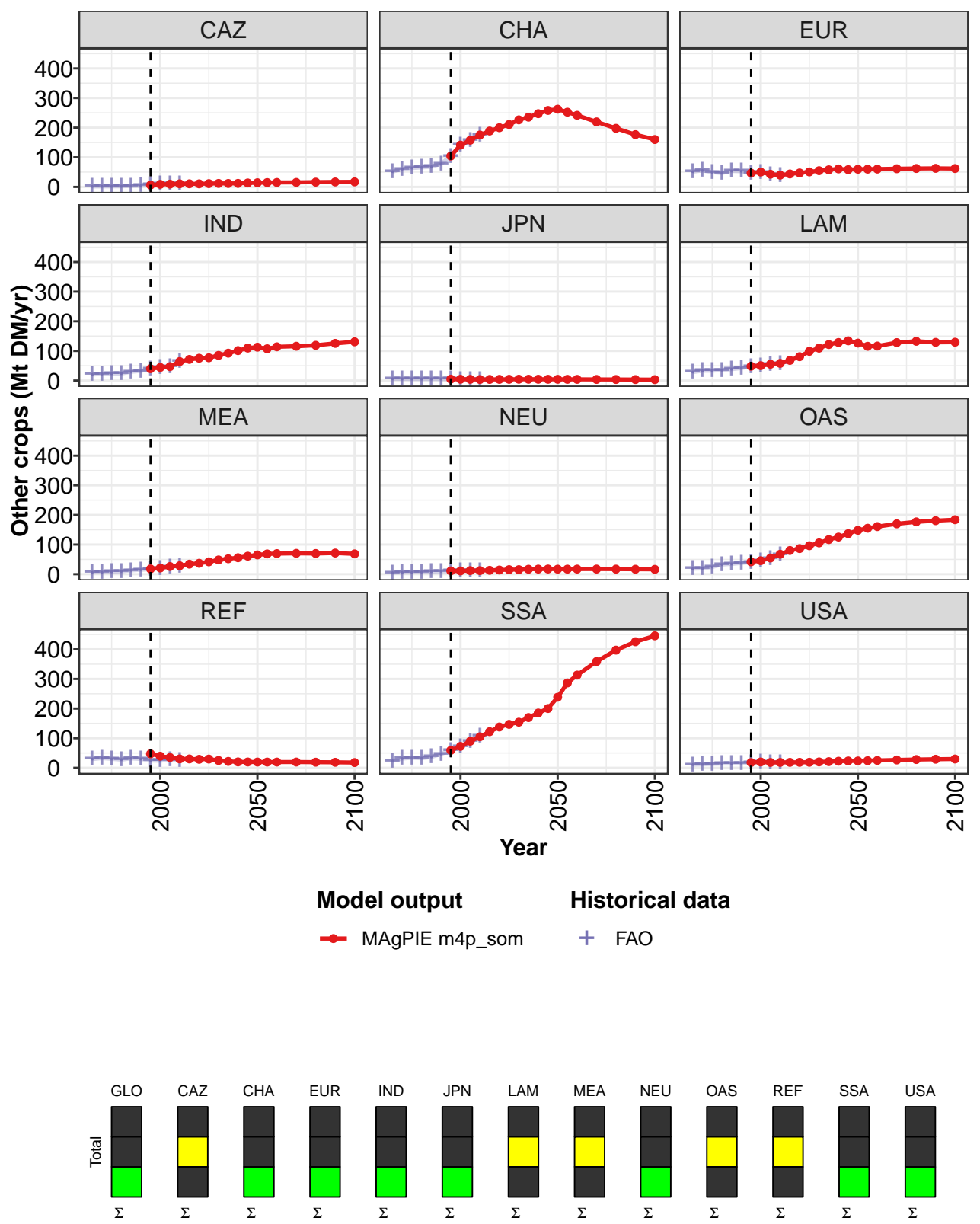


Figure 350: MAgPIE m4p\_som — Production—Crops—Other crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	446	508	552	613	684	741	801	860	921	980	1036
CAZ	6	9	9	11	11	10	11	12	12	12	13
CHA	104	141	158	175	189	200	211	226	235	247	258
EUR	47	50	43	40	44	47	51	55	58	61	58
IND	40	44	47	64	71	75	77	85	93	101	110
JPN	5	4	4	4	4	4	4	5	4	4	4
LAM	48	50	55	58	68	81	99	109	122	128	134
MEA	18	21	26	29	34	37	42	48	52	56	61
NEU	11	11	12	12	13	14	15	15	17	17	17
OAS	42	46	55	67	80	86	96	106	117	125	137
REF	47	39	35	30	30	29	30	25	22	20	20
SSA	59	72	90	105	122	138	147	154	170	185	200
USA	18	20	18	18	19	19	19	20	21	22	23

Table 1386: MAgPIE m4p\_som — Production—Crops—Other crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1091	1125	1157	1207	1239	1256	1265
CAZ	14	15	15	15	16	17	17
CHA	262	252	242	219	198	176	160
EUR	60	60	60	61	62	63	62
IND	113	107	114	116	119	126	131
JPN	4	4	4	4	4	3	3
LAM	126	116	116	128	133	129	129
MEA	65	68	69	70	70	71	69
NEU	17	17	17	17	17	17	16
OAS	148	155	161	170	177	181	184
REF	20	20	20	20	19	19	18
SSA	238	287	313	359	397	426	446
USA	23	24	25	27	28	29	30

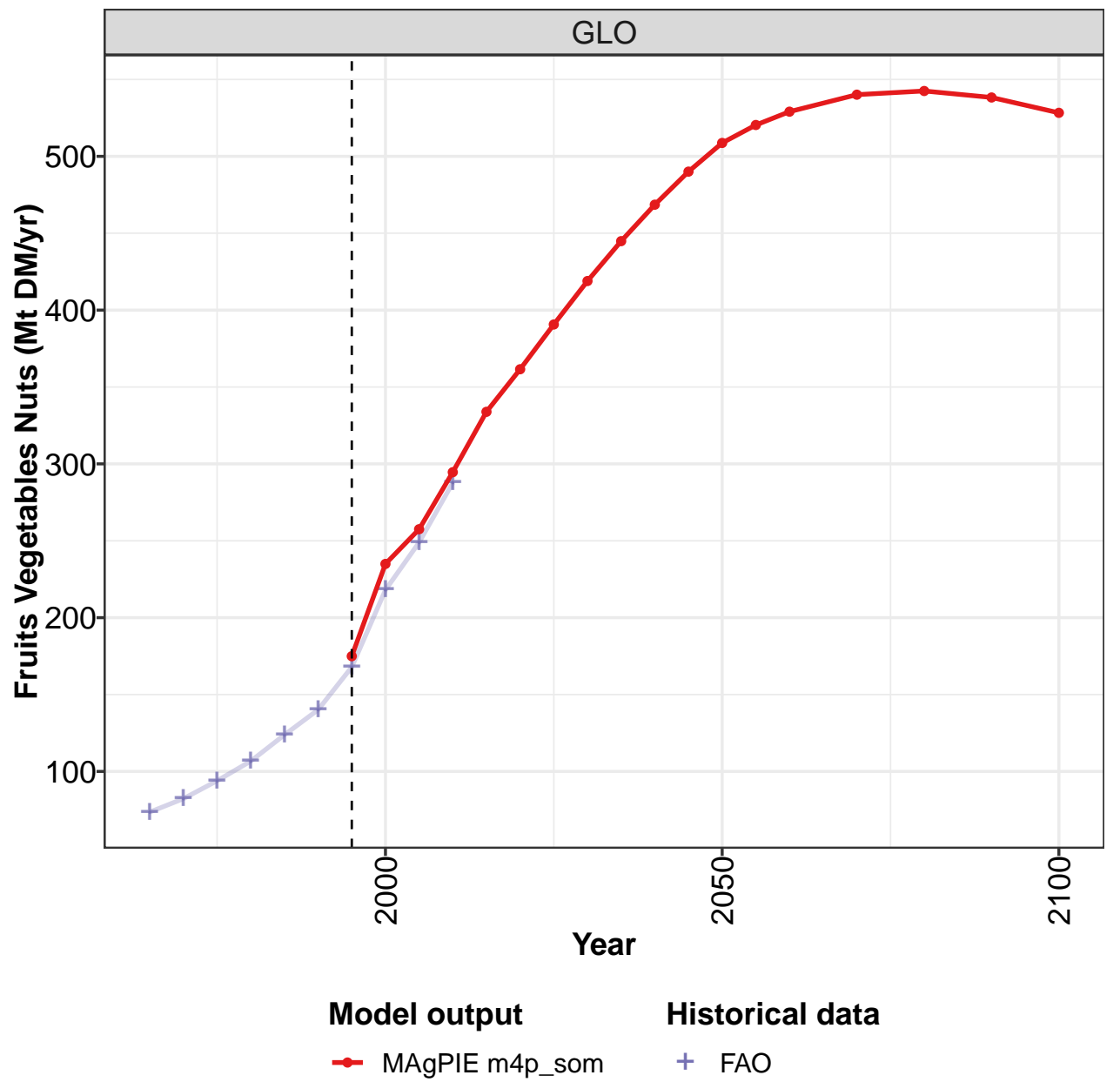
Table 1387: MAgPIE m4p\_som — Production—Crops—Other crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	254	288	295	305	339	371	418	490	543	606
CAZ	2	2	2	2	3	4	7	9	10	10
CHA	52	60	64	66	68	78	104	141	158	176
EUR	52	56	50	47	54	53	46	49	42	40
IND	21	22	23	24	30	33	39	44	47	65
JPN	6	6	6	6	6	5	5	4	4	4
LAM	29	33	33	35	38	42	48	51	55	58
MEA	6	7	8	10	13	15	17	20	25	27
NEU	5	6	6	7	9	10	10	11	12	12
OAS	19	20	24	33	35	38	40	45	53	65
REF	29	33	30	28	32	30	25	24	28	24
SSA	24	32	34	32	37	47	59	72	90	107
USA	11	12	13	14	15	16	18	20	18	18

Table 1388: FAO — Production—Crops—Other crops (Mt DM/yr)

44.3.1
Fruits Vegetables Nuts

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

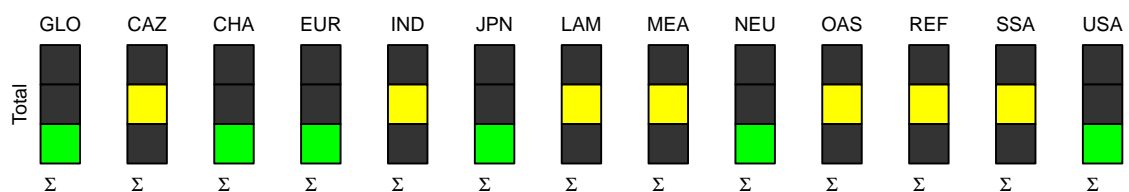
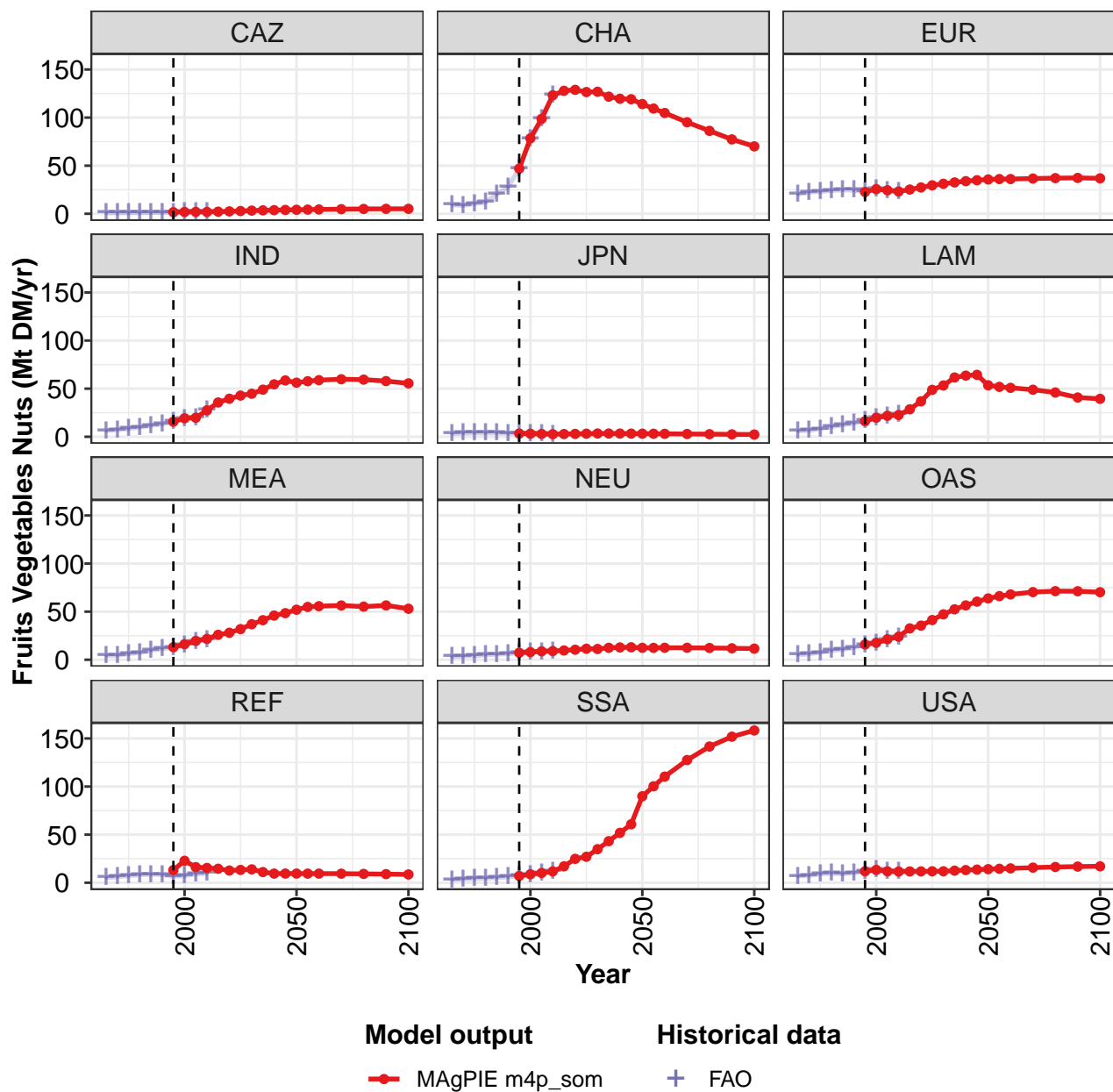


Figure 351: MAgPIE m4p\_som — Production—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	175	235	258	295	334	362	391	419	445	469	490
CAZ	2	2	2	2	2	3	3	3	4	4	4
CHA	47	78	99	123	128	129	127	127	122	120	119
EUR	23	26	24	23	25	27	30	31	33	34	35
IND	16	19	20	27	36	40	43	45	49	55	59
JPN	3	3	3	3	3	3	3	3	3	3	3
LAM	16	20	22	23	29	37	49	53	62	64	64
MEA	13	16	20	22	26	28	32	37	41	46	48
NEU	7	8	9	9	10	10	11	11	12	13	13
OAS	16	18	21	24	33	36	41	47	52	57	60
REF	13	23	16	15	15	13	13	14	11	10	10
SSA	7	9	10	12	17	25	27	35	43	52	61
USA	12	13	12	12	12	12	12	12	13	13	14

Table 1389: MAgPIE m4p\_som — Production—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	509	520	529	540	543	538	528
CAZ	4	4	4	5	5	5	5
CHA	114	109	105	95	86	77	70
EUR	36	36	36	37	37	37	37
IND	56	58	59	60	59	58	56
JPN	3	3	3	3	3	3	2
LAM	54	52	51	49	46	41	39
MEA	52	55	56	56	55	56	53
NEU	12	12	12	12	12	12	12
OAS	64	66	68	70	71	71	70
REF	10	9	9	9	9	9	9
SSA	90	100	110	128	142	152	158
USA	14	15	15	16	16	17	17

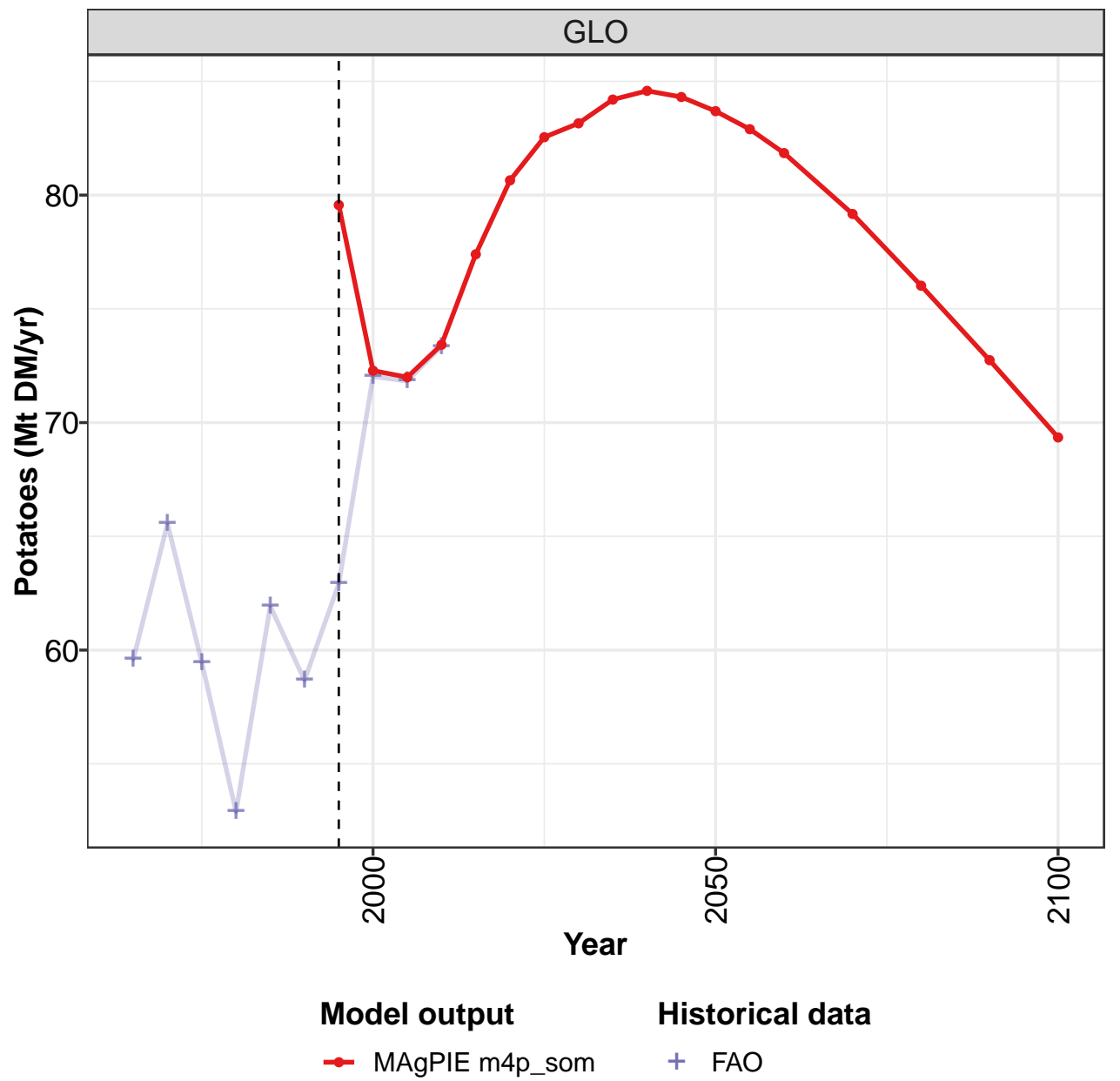
Table 1390: MAgPIE m4p\_som — Production—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	74	82	94	107	124	140	168	218	249	288
CAZ	1	1	1	1	1	1	2	2	2	2
CHA	9	9	10	12	20	28	47	78	98	123
EUR	20	23	23	24	25	25	23	26	24	23
IND	6	7	8	10	12	13	16	19	20	28
JPN	3	4	4	4	4	4	3	3	3	3
LAM	6	7	8	10	12	14	17	20	22	23
MEA	4	5	6	7	10	11	13	16	19	21
NEU	3	4	4	5	6	6	7	8	8	9
OAS	5	6	8	10	11	13	16	18	21	23
REF	5	6	7	8	9	8	7	7	9	10
SSA	3	4	4	5	5	6	7	9	10	12
USA	7	8	9	10	9	10	12	13	12	12

Table 1391: FAO — Production—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

44.3.2
Potatoes

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
 replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

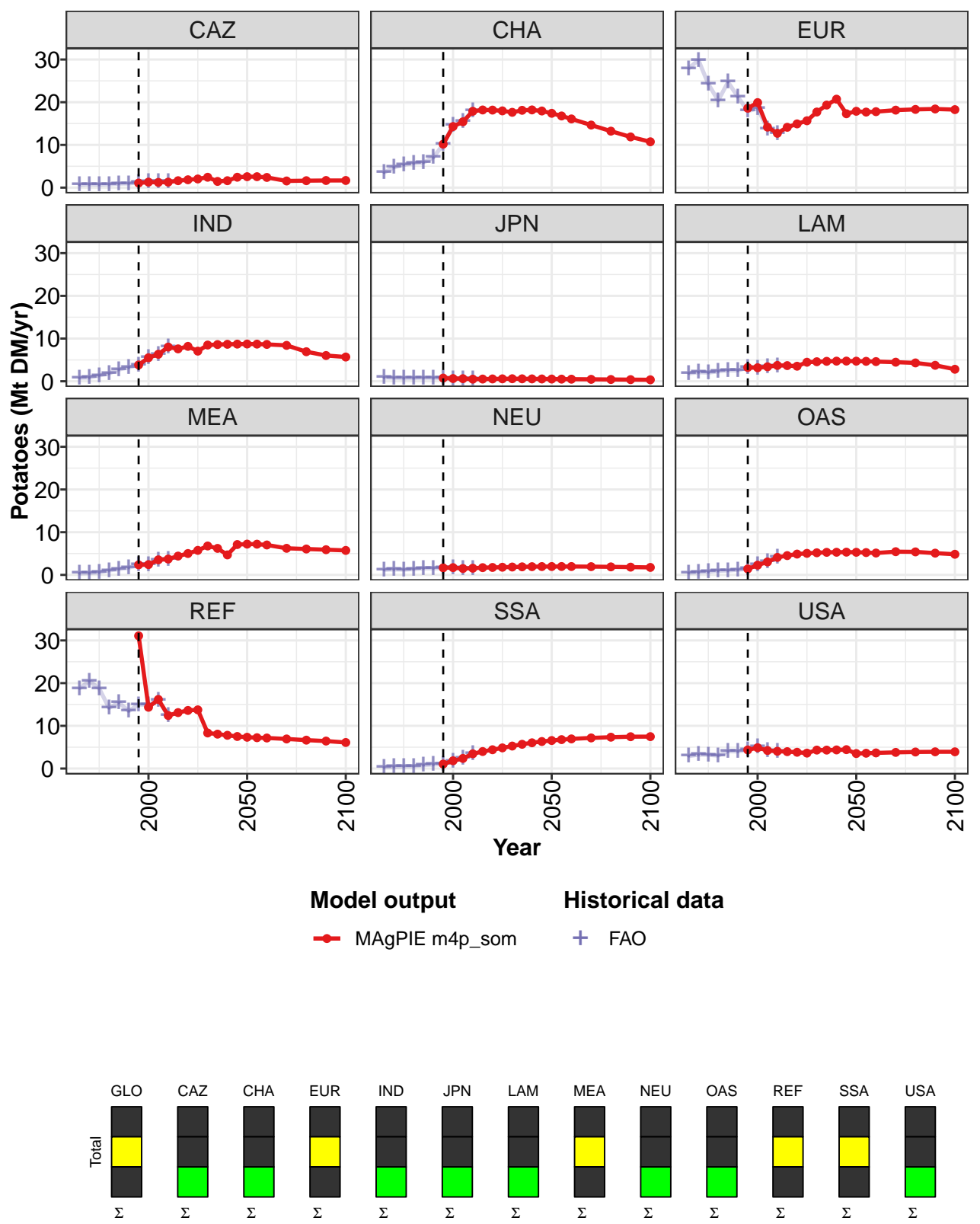


Figure 352: MAgPIE m4p\_som — Production—Crops—Other crops—Potatoes (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	79.6	72.3	72.0	73.4	77.4	80.6	82.5	83.2	84.2	84.6	84.3
CAZ	1.1	1.3	1.2	1.3	1.6	1.8	2.0	2.4	1.5	1.6	2.4
CHA	10.2	14.3	15.4	17.9	18.2	18.2	18.0	17.6	18.1	18.2	17.9
EUR	18.6	19.9	14.2	12.7	14.1	14.9	15.7	17.7	19.3	20.7	17.3
IND	3.8	5.5	6.3	8.0	7.6	8.2	7.1	8.5	8.6	8.7	8.7
JPN	0.7	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.5
LAM	3.2	3.2	3.4	3.7	3.7	3.5	4.5	4.6	4.7	4.7	4.7
MEA	2.4	2.4	3.5	3.7	4.4	5.0	5.7	6.8	6.2	4.7	7.1
NEU	1.7	1.7	1.5	1.6	1.7	1.8	1.8	1.8	1.9	1.9	2.0
OAS	1.4	2.3	3.0	4.1	4.5	4.9	5.0	5.2	5.3	5.3	5.3
REF	31.1	14.4	16.2	12.4	13.1	13.6	13.7	8.3	8.1	7.8	7.5
SSA	1.0	1.8	2.4	3.5	4.0	4.4	4.8	5.3	5.7	6.0	6.3
USA	4.4	4.9	4.2	4.0	4.0	3.8	3.6	4.3	4.3	4.4	4.4

Table 1392: MAgPIE m4p\_som — Production—Crops—Other crops—Potatoes (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	83.7	82.9	81.8	79.2	76.0	72.7	69.3
CAZ	2.6	2.6	2.4	1.6	1.6	1.7	1.7
CHA	17.4	16.8	16.1	14.7	13.2	11.9	10.7
EUR	17.9	17.7	17.8	18.1	18.3	18.4	18.3
IND	8.7	8.7	8.6	8.4	6.9	6.0	5.7
JPN	0.5	0.5	0.5	0.5	0.4	0.4	0.4
LAM	4.7	4.7	4.6	4.5	4.3	3.7	2.8
MEA	7.2	7.2	7.0	6.2	6.1	5.9	5.7
NEU	2.0	2.0	2.0	1.9	1.9	1.8	1.8
OAS	5.3	5.2	5.1	5.4	5.4	5.1	4.8
REF	7.3	7.2	7.2	6.9	6.7	6.4	6.1
SSA	6.6	6.8	6.9	7.2	7.3	7.5	7.5
USA	3.5	3.6	3.7	3.8	3.9	3.9	3.9

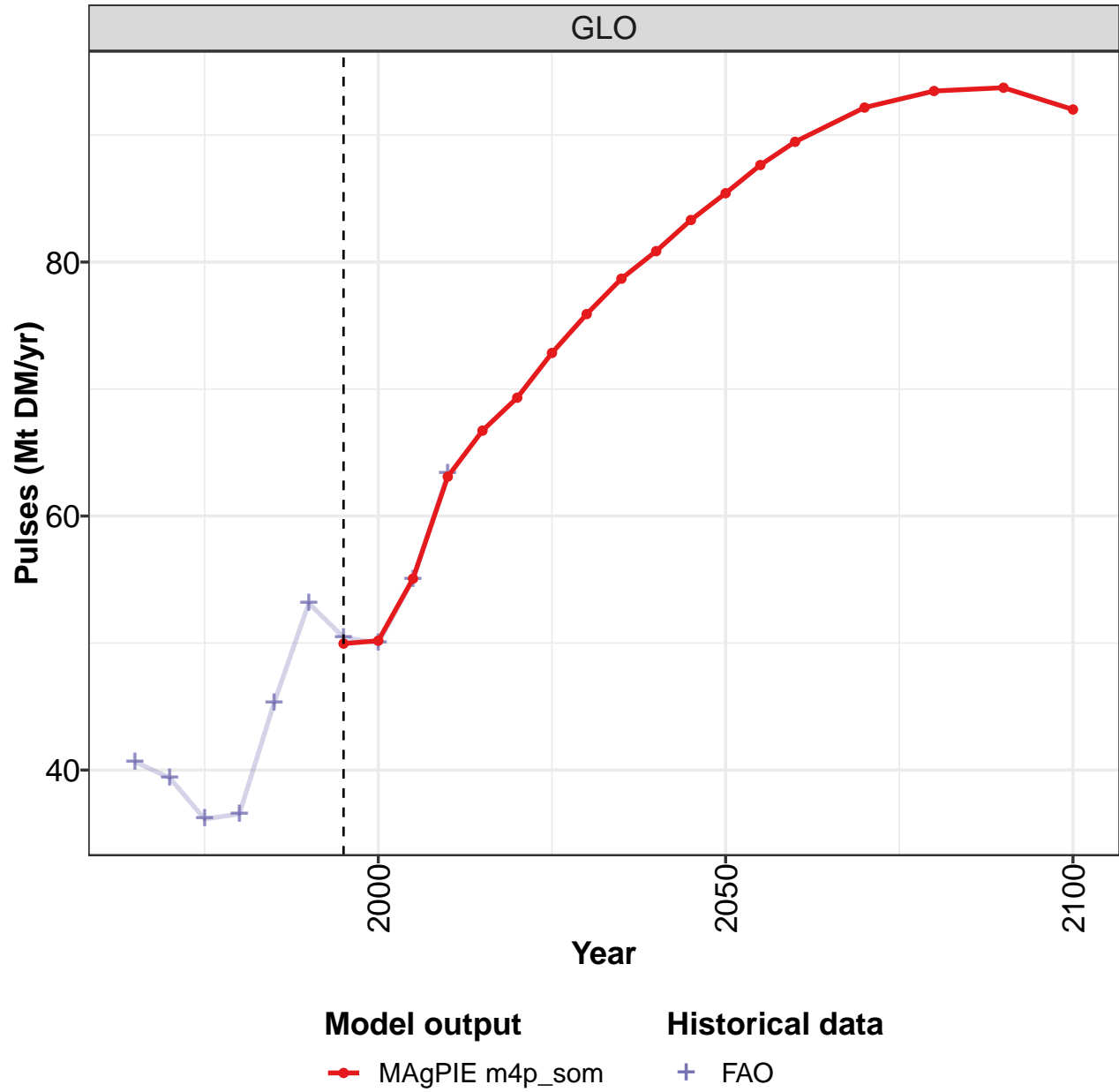
Table 1393: MAgPIE m4p\_som — Production—Crops—Other crops—Potatoes (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	59.6	65.6	59.5	52.9	61.9	58.7	62.9	72.0	71.8	73.4
CAZ	0.6	0.8	0.7	0.8	0.9	1.0	1.2	1.4	1.4	1.4
CHA	3.5	4.7	5.4	5.7	5.9	7.0	10.1	14.6	15.6	18.0
EUR	27.9	29.8	24.3	20.4	24.7	21.2	17.9	18.5	13.8	12.6
IND	0.8	0.9	1.4	1.8	2.8	3.2	3.8	5.5	6.3	8.0
JPN	0.9	0.8	0.7	0.8	0.8	0.8	0.7	0.6	0.6	0.5
LAM	1.9	2.1	2.0	2.3	2.6	2.5	3.2	3.1	3.4	3.7
MEA	0.4	0.4	0.6	1.1	1.4	1.7	2.3	2.4	3.5	3.6
NEU	1.2	1.3	1.2	1.4	1.6	1.5	1.6	1.7	1.5	1.6
OAS	0.5	0.6	0.7	1.0	1.0	1.2	1.4	2.3	3.1	4.1
REF	18.8	20.5	18.8	14.2	15.4	13.4	15.0	14.9	16.0	12.4
SSA	0.3	0.4	0.5	0.6	0.8	1.0	1.0	1.8	2.4	3.5
USA	2.9	3.3	3.2	3.0	4.1	4.0	4.4	5.1	4.2	4.0

Table 1394: FAO — Production—Crops—Other crops—Potatoes (Mt DM/yr)

44.3.3 Pulses

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

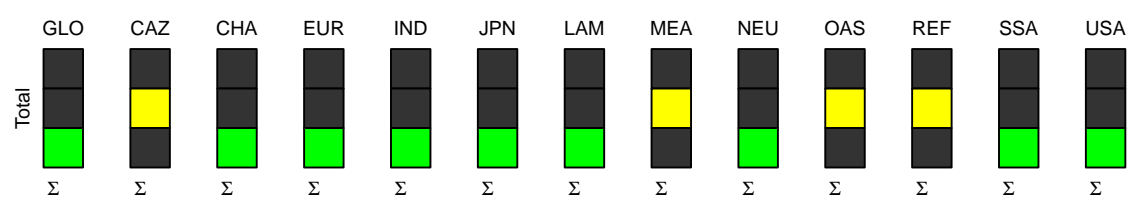
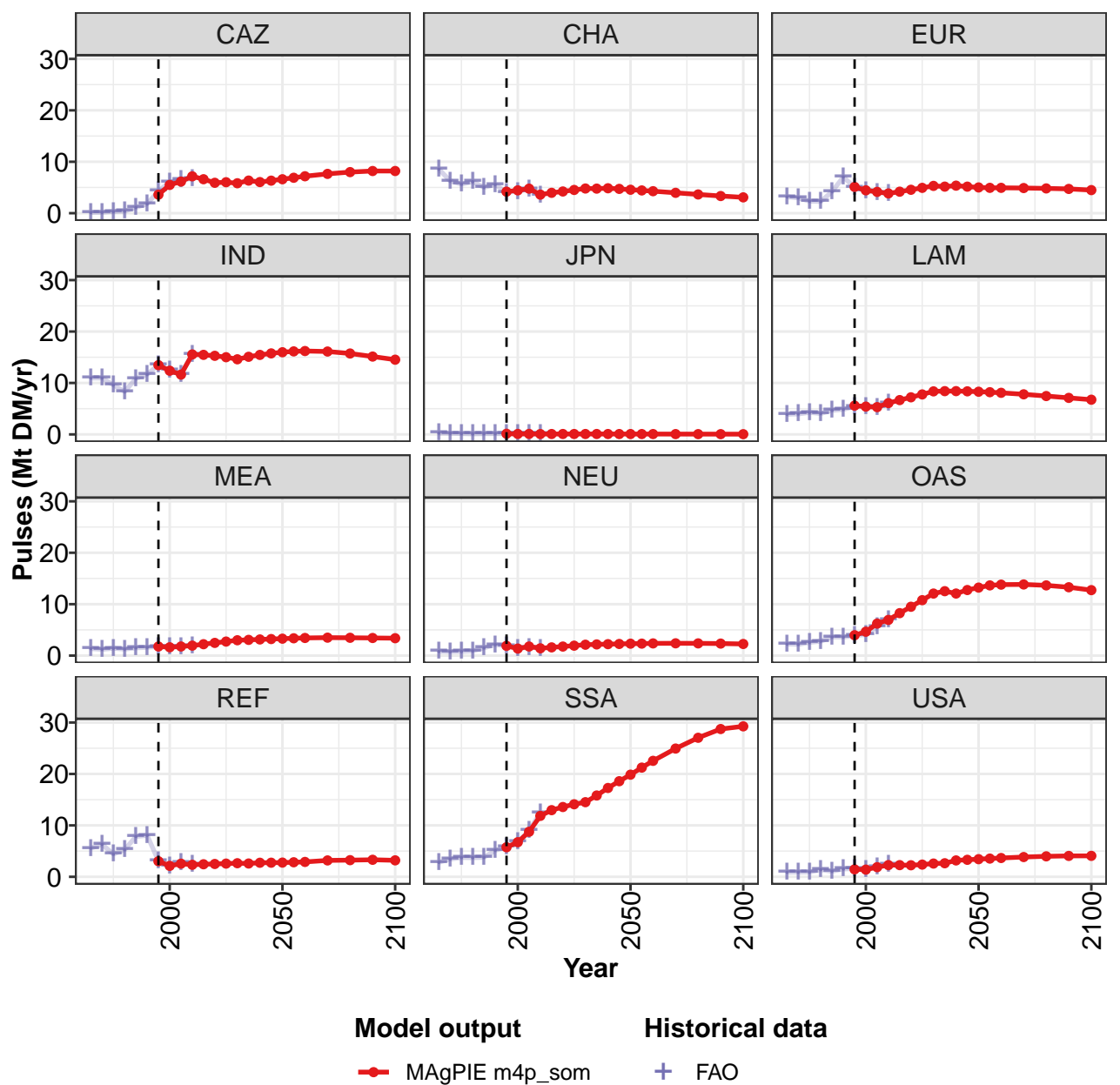


Figure 353: MAgPIE m4p\_som — Production—Crops—Other crops—Pulses (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	50.0	50.2	55.1	63.1	66.7	69.3	72.8	75.9	78.7	80.9	83.3
CAZ	3.6	5.5	6.2	7.2	6.6	5.9	6.0	5.8	6.3	6.1	6.3
CHA	4.2	4.4	4.8	3.6	4.0	4.2	4.5	4.8	4.8	4.8	4.7
EUR	5.1	4.5	4.1	3.8	4.2	4.6	4.9	5.3	5.2	5.4	5.2
IND	13.5	12.4	11.6	15.6	15.5	15.3	15.0	14.6	15.1	15.5	15.8
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	5.6	5.4	5.3	6.1	6.7	7.2	7.8	8.4	8.4	8.4	8.4
MEA	1.8	1.6	1.8	1.9	2.2	2.5	2.7	3.0	3.1	3.1	3.2
NEU	1.9	1.4	1.8	1.4	1.6	1.8	1.9	2.1	2.2	2.2	2.3
OAS	4.0	4.7	6.2	6.9	8.3	9.5	10.8	12.1	12.5	12.1	12.8
REF	3.0	2.1	2.6	2.3	2.4	2.5	2.6	2.6	2.6	2.7	2.7
SSA	5.7	6.7	8.8	11.9	13.0	13.6	14.1	14.5	15.8	17.3	18.6
USA	1.5	1.4	1.9	2.3	2.3	2.2	2.4	2.6	2.6	3.2	3.3

Table 1395: MAgPIE m4p\_som — Production—Crops—Other crops—Pulses (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	85.4	87.6	89.5	92.2	93.5	93.7	92.0
CAZ	6.6	6.9	7.2	7.6	8.0	8.2	8.2
CHA	4.6	4.4	4.3	4.0	3.6	3.3	3.1
EUR	5.0	4.9	4.9	4.9	4.8	4.7	4.5
IND	16.0	16.1	16.2	16.1	15.7	15.1	14.5
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.0
LAM	8.3	8.2	8.1	7.8	7.5	7.1	6.7
MEA	3.3	3.4	3.4	3.5	3.5	3.4	3.4
NEU	2.3	2.3	2.4	2.4	2.4	2.3	2.3
OAS	13.2	13.7	13.8	13.8	13.7	13.3	12.7
REF	2.8	2.8	2.9	3.2	3.2	3.3	3.2
SSA	19.9	21.2	22.6	24.9	27.0	28.7	29.3
USA	3.4	3.5	3.7	3.8	4.0	4.1	4.1

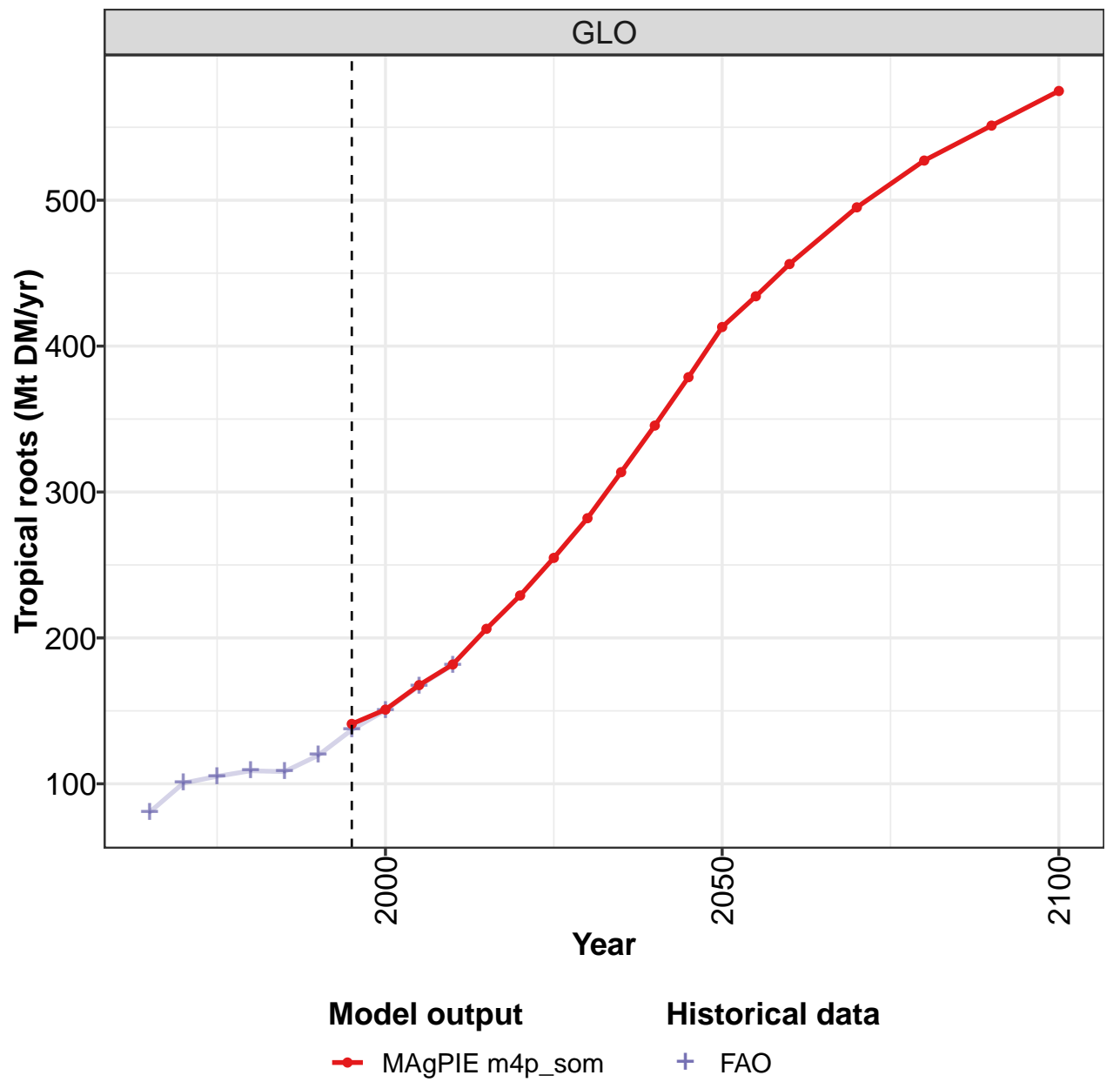
Table 1396: MAgPIE m4p\_som — Production—Crops—Other crops—Pulses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	40.7	39.4	36.1	36.5	45.3	53.1	50.4	50.0	55.0	63.3
CAZ	0.1	0.2	0.3	0.4	1.1	1.8	4.3	6.1	6.5	6.7
CHA	8.6	6.3	5.6	6.1	5.0	5.6	4.1	4.3	4.7	3.5
EUR	3.2	3.0	2.3	2.3	4.2	7.0	5.0	4.4	4.1	3.8
IND	10.9	11.0	9.6	8.3	10.9	11.7	13.5	12.4	11.7	15.6
JPN	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	3.9	4.0	4.3	4.1	4.7	4.9	5.4	5.4	5.3	6.1
MEA	1.3	1.2	1.4	1.3	1.5	1.6	1.8	1.6	1.8	1.9
NEU	0.8	0.8	0.8	0.9	1.5	2.1	1.9	1.3	1.6	1.4
OAS	2.3	2.2	2.6	2.8	3.6	3.6	3.9	4.1	5.6	7.0
REF	5.6	6.3	4.4	5.3	7.8	8.1	3.1	2.0	2.7	2.4
SSA	2.8	3.4	3.7	3.7	3.8	5.1	5.8	6.8	8.9	12.5
USA	0.9	0.9	0.9	1.4	1.1	1.5	1.6	1.4	1.9	2.4

Table 1397: FAO — Production—Crops—Other crops—Pulses (Mt DM/yr)

44.3.4
Tropical roots

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

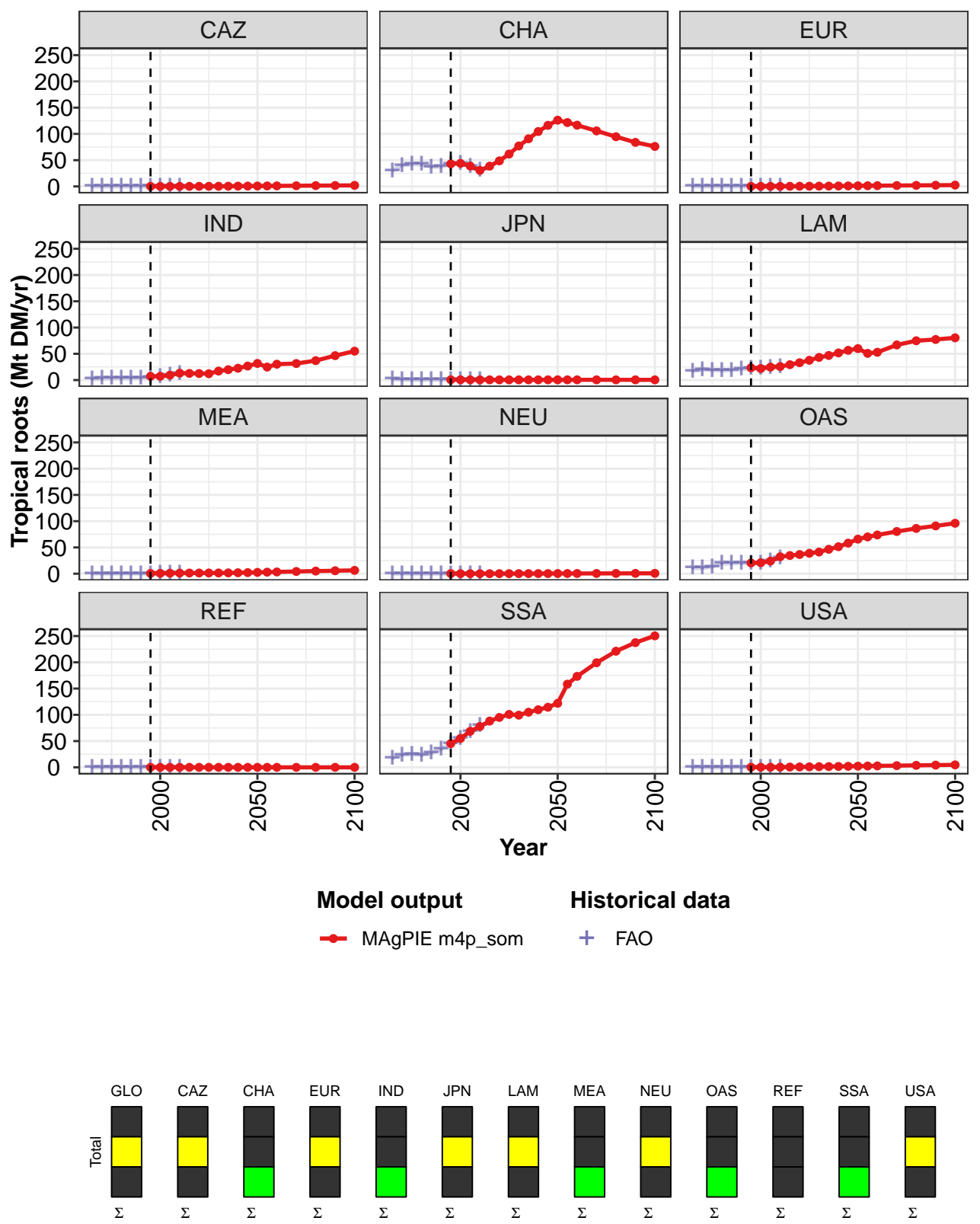


Figure 354: MAgPIE m4p\_som — Production—Crops—Other crops—Tropical roots (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	141	151	168	182	206	229	255	282	314	346	379
CAZ	0	0	0	0	0	0	0	0	0	1	1
CHA	43	44	39	31	39	49	62	77	91	105	116
EUR	0	0	0	0	0	0	0	1	1	1	1
IND	7	7	9	13	13	12	12	17	20	23	27
JPN	1	1	1	0	0	0	0	0	0	0	0
LAM	23	22	25	26	29	33	38	43	47	52	57
MEA	1	1	1	1	1	1	1	1	2	2	2
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	20	21	24	32	35	37	39	41	46	51	58
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	45	55	69	78	88	95	101	99	105	110	114
USA	0	0	0	0	1	1	1	1	1	2	2

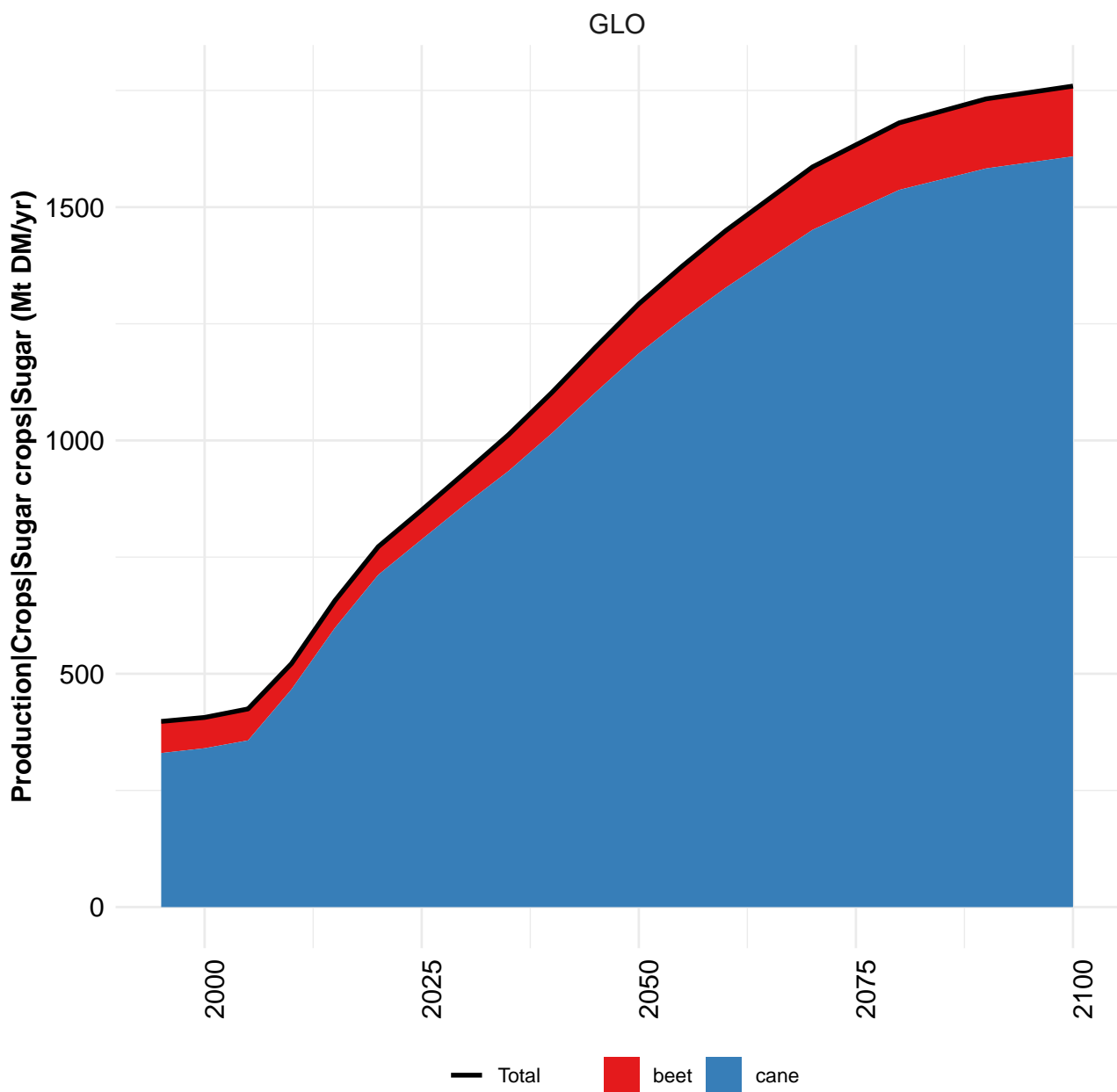
Table 1398: MAgPIE m4p\_som — Production—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 1/2]

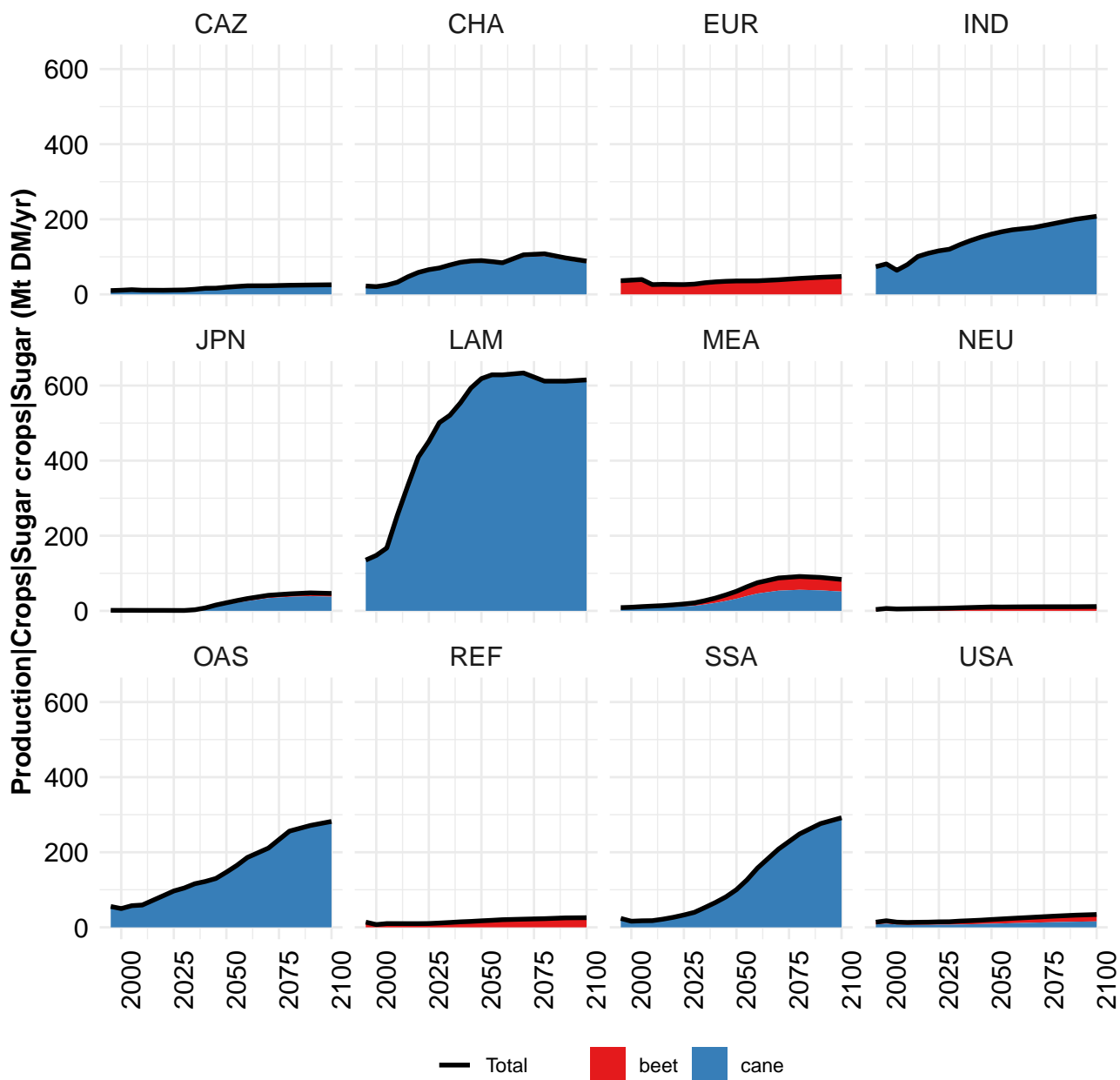
	2050	2055	2060	2070	2080	2090	2100
GLO	413	434	456	495	527	551	575
CAZ	1	1	1	1	2	2	2
CHA	126	122	117	106	95	84	76
EUR	1	1	1	2	2	2	3
IND	32	25	30	31	37	46	55
JPN	0	0	0	0	0	0	0
LAM	60	51	53	67	75	77	80
MEA	3	3	3	4	5	6	6
NEU	0	0	0	1	1	1	1
OAS	66	70	74	80	86	91	96
REF	0	0	0	0	0	0	0
SSA	122	158	173	199	221	237	250
USA	2	3	3	3	4	4	5

Table 1399: MAgPIE m4p\_som — Production—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	81	101	105	109	108	119	137	150	167	181
CAZ	0	0	0	0	0	0	0	0	0	0
CHA	30	40	42	42	37	38	43	44	39	31
EUR	0	0	0	0	0	0	0	0	0	0
IND	3	3	4	4	4	5	6	7	9	13
JPN	2	1	1	1	1	1	1	1	1	0
LAM	17	20	19	19	19	21	22	22	25	25
MEA	0	0	0	0	0	0	0	1	1	1
NEU	0	0	0	0	0	0	0	0	0	0
OAS	11	11	13	20	20	20	19	21	24	31
REF	0	0	0	0	0	0	0	0	0	0
SSA	17	24	25	24	27	35	45	55	68	79
USA	0	0	0	0	0	0	0	0	0	0

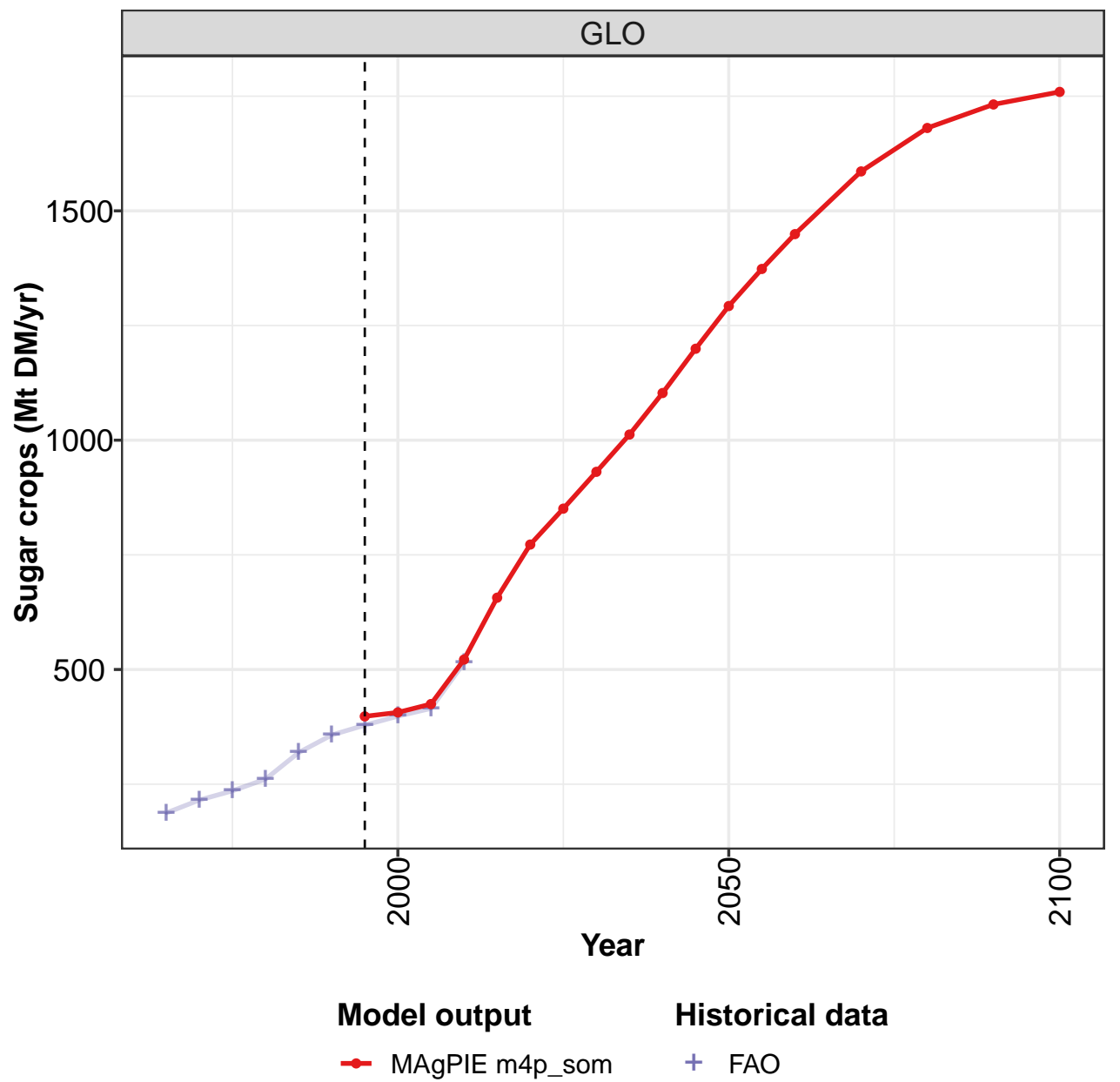
Table 1400: FAO — Production—Crops—Other crops—Tropical roots (Mt DM/yr)





44.4 Sugar crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

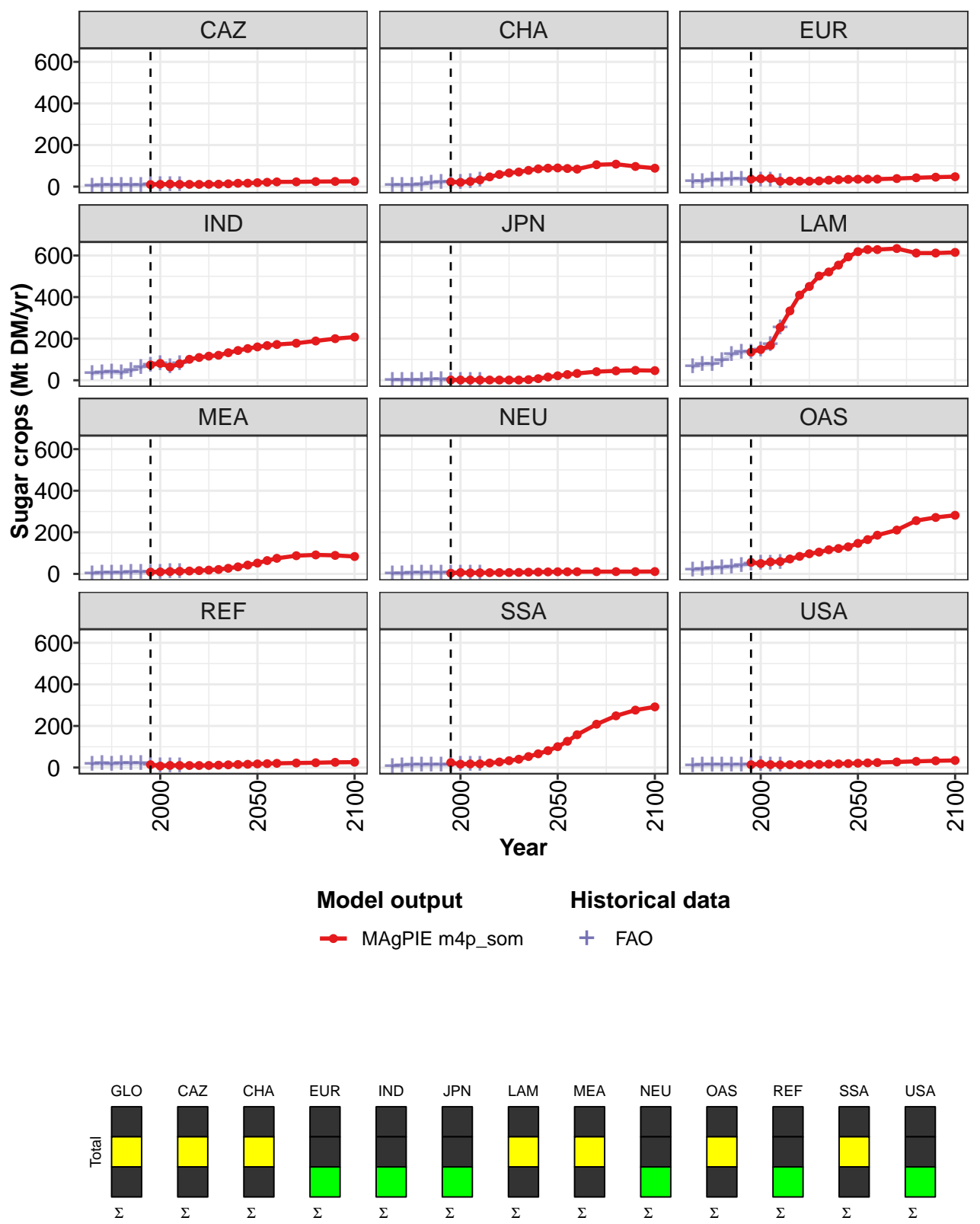


Figure 355: MAgPIE m4p\_som — Production—Crops—Sugar crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	398	406	425	522	657	772	851	931	1012	1103	1199
CAZ	10	11	12	11	11	11	11	12	13	16	16
CHA	22	21	25	32	47	58	66	70	78	85	89
EUR	36	38	40	26	27	26	26	27	31	33	35
IND	74	81	64	79	101	109	116	120	132	143	152
JPN	1	1	1	1	1	1	1	1	3	8	15
LAM	135	148	167	254	333	410	451	501	521	554	593
MEA	9	10	11	13	14	16	18	21	27	34	42
NEU	3	6	5	5	6	6	7	7	8	9	10
OAS	55	50	58	59	72	84	97	105	116	122	130
REF	14	7	10	10	10	10	10	11	13	15	16
SSA	24	16	17	18	22	27	33	40	53	66	81
USA	14	18	14	13	14	14	15	15	17	18	19

Table 1401: MAgPIE m4p\_som — Production—Crops—Sugar crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1293	1373	1449	1586	1681	1732	1759
CAZ	19	21	23	23	24	25	26
CHA	90	87	84	105	108	97	89
EUR	36	36	36	39	43	45	48
IND	160	167	172	178	189	200	208
JPN	21	27	33	41	45	48	46
LAM	618	629	628	633	612	612	615
MEA	52	64	75	87	91	89	84
NEU	10	10	10	11	11	11	11
OAS	147	165	186	211	256	271	282
REF	17	19	20	22	23	25	26
SSA	100	126	158	208	249	276	292
USA	21	22	24	27	30	32	34

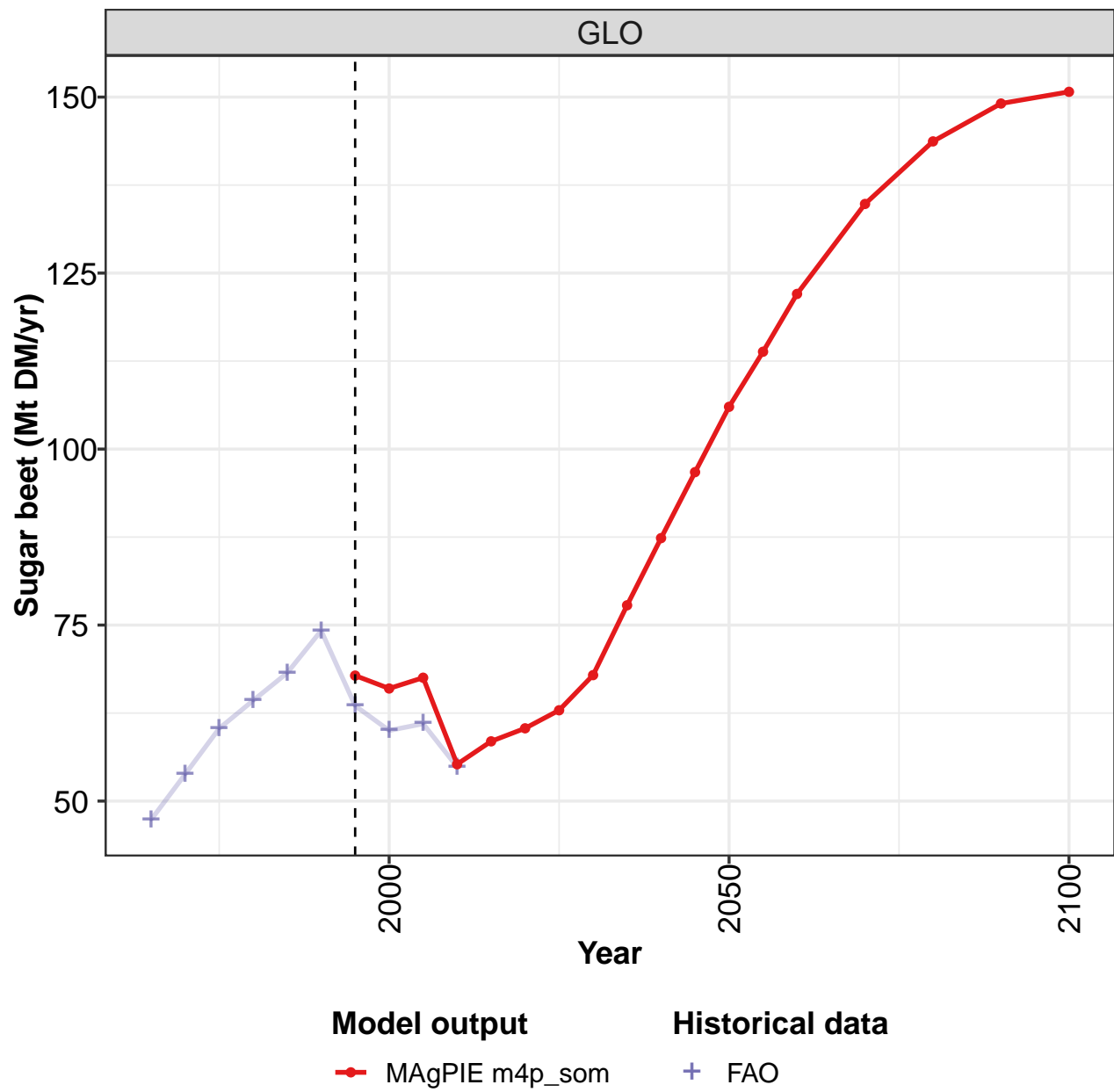
Table 1402: MAgPIE m4p\_som — Production—Crops—Sugar crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	187	215	235	261	319	357	379	398	415	515
CAZ	4	5	6	7	7	7	10	11	10	9
CHA	7	6	7	10	18	21	22	21	26	32
EUR	23	25	32	33	34	37	33	33	33	25
IND	33	36	39	35	46	61	74	81	64	79
JPN	1	1	1	1	2	1	1	1	1	1
LAM	64	75	77	96	123	134	137	146	172	254
MEA	2	4	5	5	7	7	9	9	11	12
NEU	1	2	3	3	4	5	3	5	5	5
OAS	18	22	27	29	34	39	49	50	52	57
REF	17	19	16	19	19	20	13	7	10	10
SSA	7	9	11	12	14	14	13	16	18	17
USA	10	11	13	12	12	13	14	18	14	14

Table 1403: FAO — Production—Crops—Sugar crops (Mt DM/yr)

44.4.1 Sugar beet

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

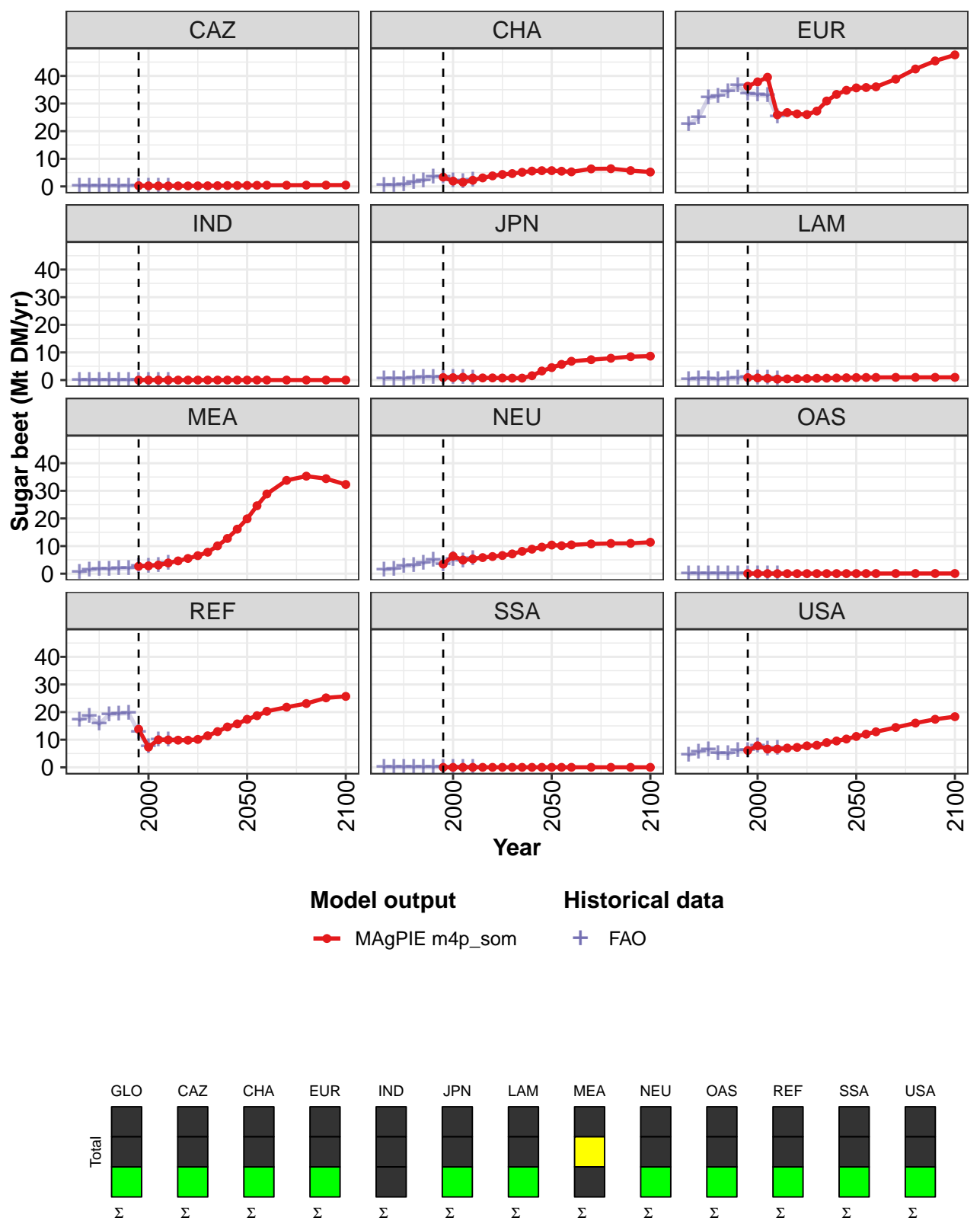


Figure 356: MAgPIE m4p\_som — Production—Crops—Sugar crops—Sugar beet (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	68	66	68	55	58	60	63	68	78	87	97
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	3	2	2	2	3	4	4	5	5	6	6
EUR	36	38	40	26	27	26	26	27	31	33	35
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	1	1	1	1	1	1	1	1	1	2	3
LAM	1	1	1	0	0	0	1	1	1	1	1
MEA	3	3	3	4	5	6	7	8	10	13	16
NEU	3	6	5	5	6	6	7	7	8	9	10
OAS	0	0	0	0	0	0	0	0	0	0	0
REF	14	7	10	10	10	10	10	11	13	15	16
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	6	8	7	7	7	7	8	8	9	10	10

Table 1404: MAgPIE m4p\_som — Production—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	106	114	122	135	144	149	151
CAZ	0	0	0	0	0	0	0
CHA	6	6	5	6	6	6	5
EUR	36	36	36	39	43	45	48
IND	0	0	0	0	0	0	0
JPN	5	6	7	7	8	8	9
LAM	1	1	1	1	1	1	1
MEA	20	25	29	34	35	34	32
NEU	10	10	10	11	11	11	11
OAS	0	0	0	0	0	0	0
REF	17	19	20	22	23	25	26
SSA	0	0	0	0	0	0	0
USA	11	12	13	14	16	17	18

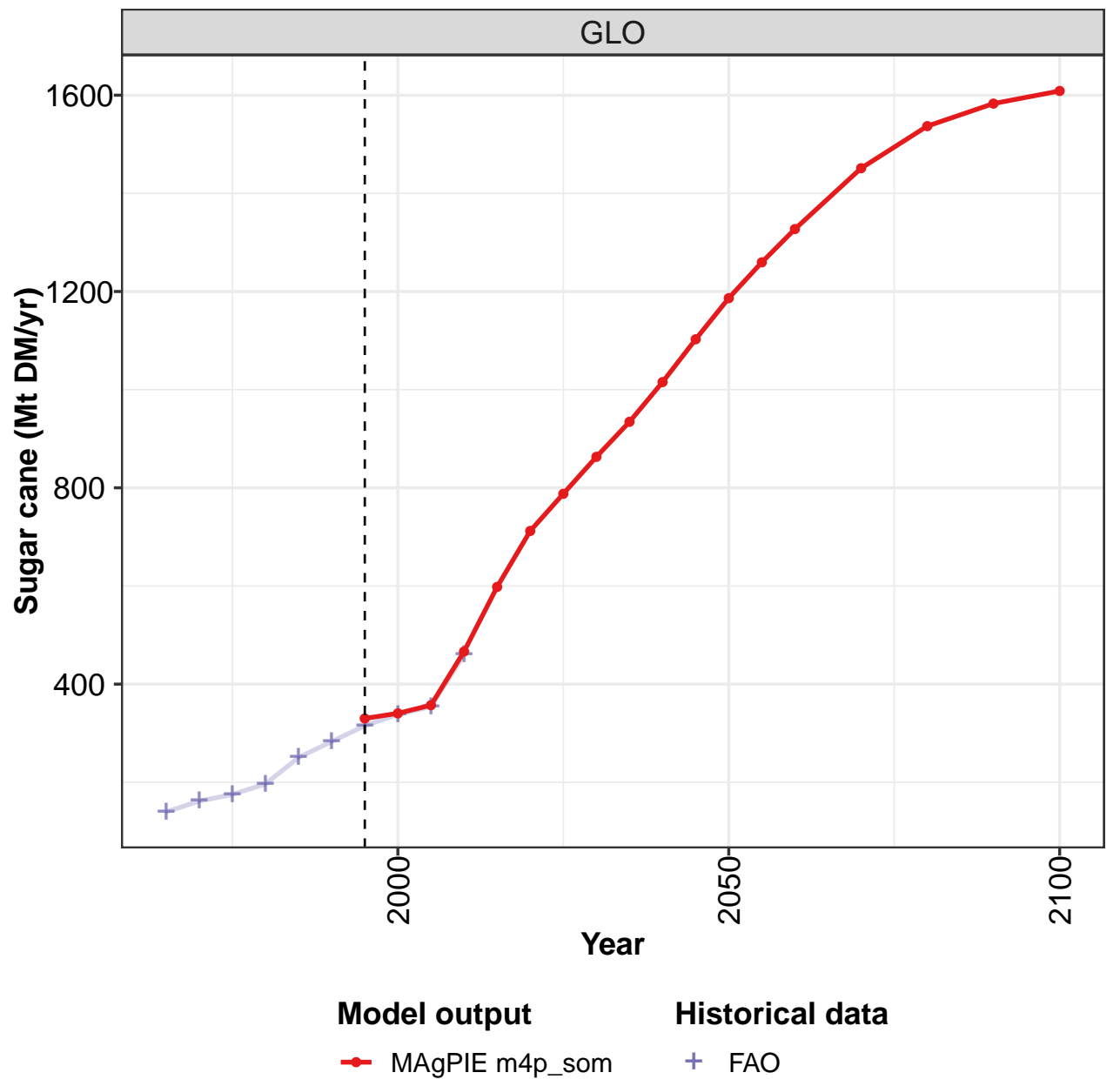
Table 1405: MAgPIE m4p\_som — Production—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	47.4	53.8	60.3	64.3	68.2	74.2	63.5	60.0	61.0	54.9
CAZ	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1
CHA	0.5	0.5	0.6	1.5	2.1	3.5	3.4	1.9	1.9	2.2
EUR	22.5	24.9	32.0	32.7	34.4	36.5	33.4	33.1	32.8	25.2
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.4	0.6	0.4	0.9	0.9	1.0	0.9	0.9	1.0	0.7
LAM	0.3	0.5	0.5	0.2	0.6	0.6	0.9	0.7	0.6	0.4
MEA	0.5	1.3	1.7	1.6	1.8	2.0	2.7	2.8	3.1	3.8
NEU	1.4	1.7	2.7	2.9	3.9	4.8	3.3	5.1	4.7	5.4
OAS	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0
REF	17.0	18.6	15.6	19.1	19.4	19.6	12.6	7.4	10.0	9.9
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	4.5	5.5	6.5	5.1	4.9	6.0	6.1	7.8	6.6	7.0

Table 1406: FAO — Production—Crops—Sugar crops—Sugar beet (Mt DM/yr)

44.4.2 Sugar cane

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

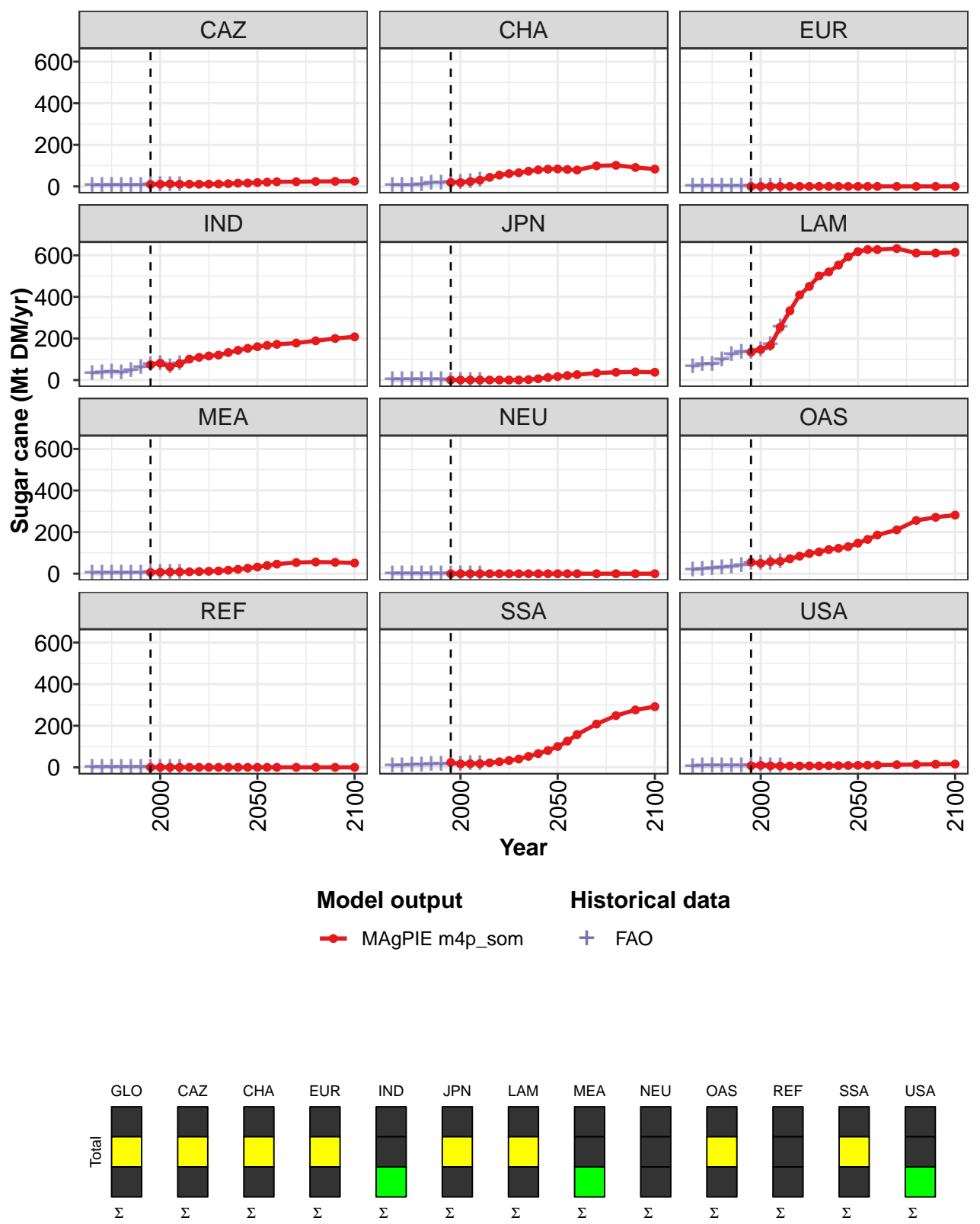


Figure 357: MAgPIE m4p\_som — Production—Crops—Sugar crops—Sugar cane (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	330	340	357	467	598	712	788	863	934	1015	1103
CAZ	10	11	12	11	11	11	11	12	13	16	16
CHA	19	19	23	30	44	55	62	66	73	80	83
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	74	81	64	79	101	109	116	120	132	143	152
JPN	0	0	0	0	0	0	0	0	2	6	12
LAM	134	147	167	254	333	409	451	501	520	553	593
MEA	6	7	8	9	9	10	12	13	17	21	26
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	55	50	58	59	72	84	97	105	116	122	130
REF	0	0	0	0	0	0	0	0	0	0	0
SSA	24	16	17	18	22	27	33	40	53	66	81
USA	8	10	7	6	7	7	7	7	8	8	9

Table 1407: MAgPIE m4p\_som — Production—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1186	1260	1327	1451	1537	1583	1609
CAZ	19	21	22	22	24	24	25
CHA	84	82	79	99	102	91	83
EUR	0	0	0	0	0	0	0
IND	160	167	172	178	189	200	208
JPN	17	22	26	34	37	39	38
LAM	618	628	627	632	611	611	614
MEA	32	39	46	54	56	55	51
NEU	0	0	0	0	0	0	0
OAS	147	165	186	211	256	271	282
REF	0	0	0	0	0	0	0
SSA	100	126	158	208	249	276	292
USA	10	10	11	12	14	15	16

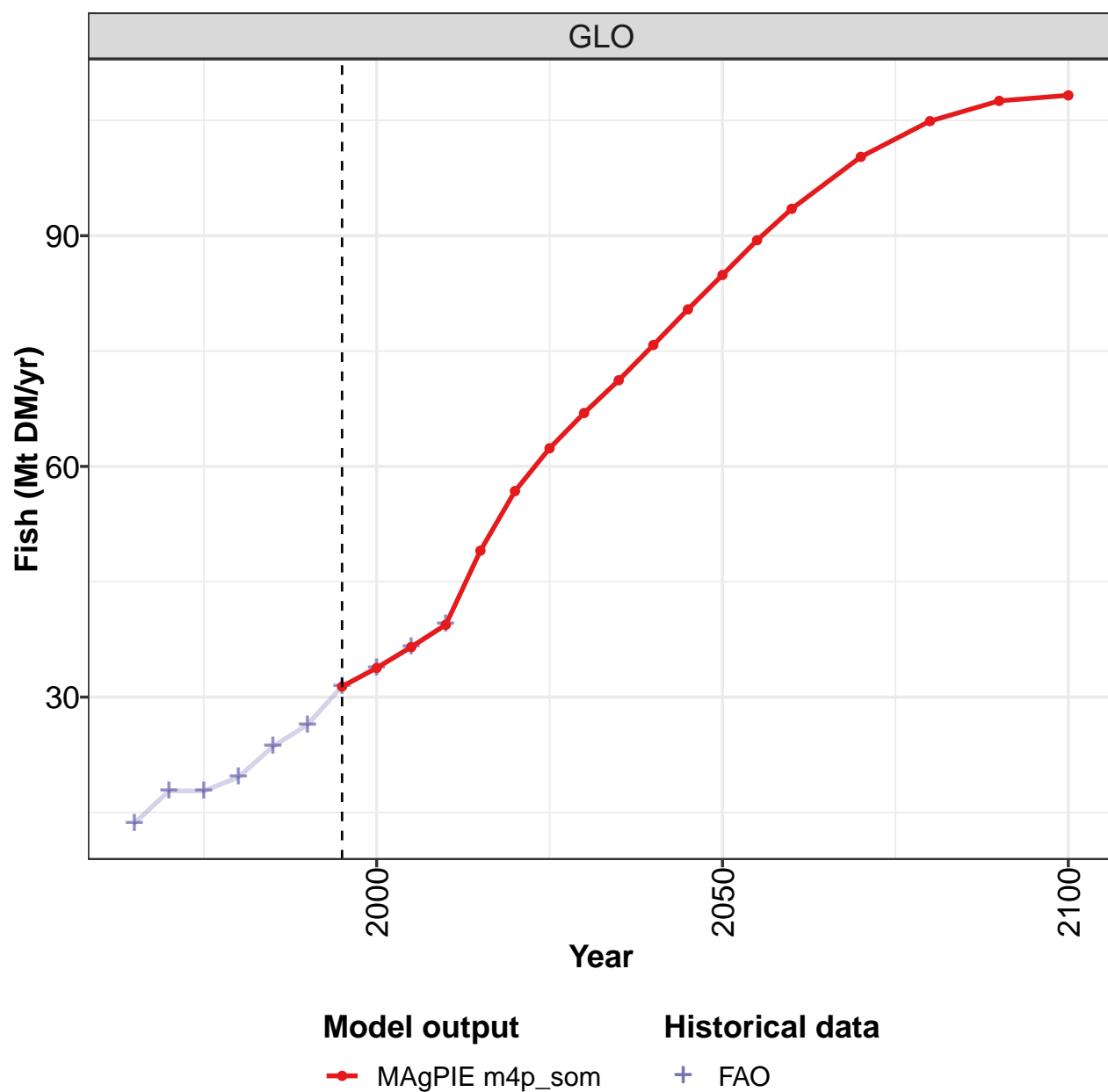
Table 1408: MAgPIE m4p\_som — Production—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	140	162	175	197	251	283	315	338	354	460
CAZ	4	5	6	6	7	7	9	10	10	8
CHA	6	5	7	9	16	17	19	19	24	30
EUR	0	0	0	0	0	0	0	0	0	0
IND	33	36	39	35	46	61	74	81	64	79
JPN	1	1	1	1	1	1	0	0	0	0
LAM	64	75	76	96	122	133	136	145	171	254
MEA	1	2	3	3	5	5	6	7	8	8
NEU	0	0	0	0	0	0	0	0	0	0
OAS	18	22	27	29	34	39	49	50	52	57
REF	0	0	0	0	0	0	0	0	0	0
SSA	7	9	11	12	14	14	13	16	18	17
USA	6	6	7	7	7	7	8	10	7	7

Table 1409: FAO — Production—Crops—Sugar crops—Sugar cane (Mt DM/yr)

## 45 Fish

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

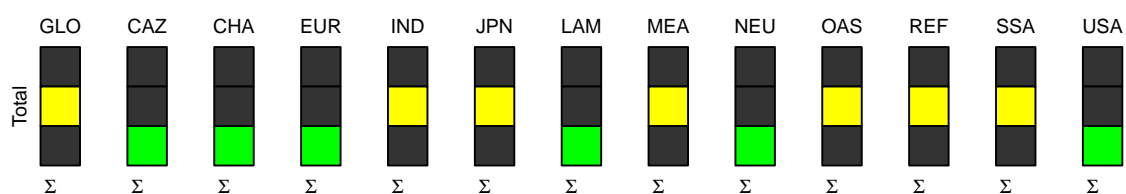
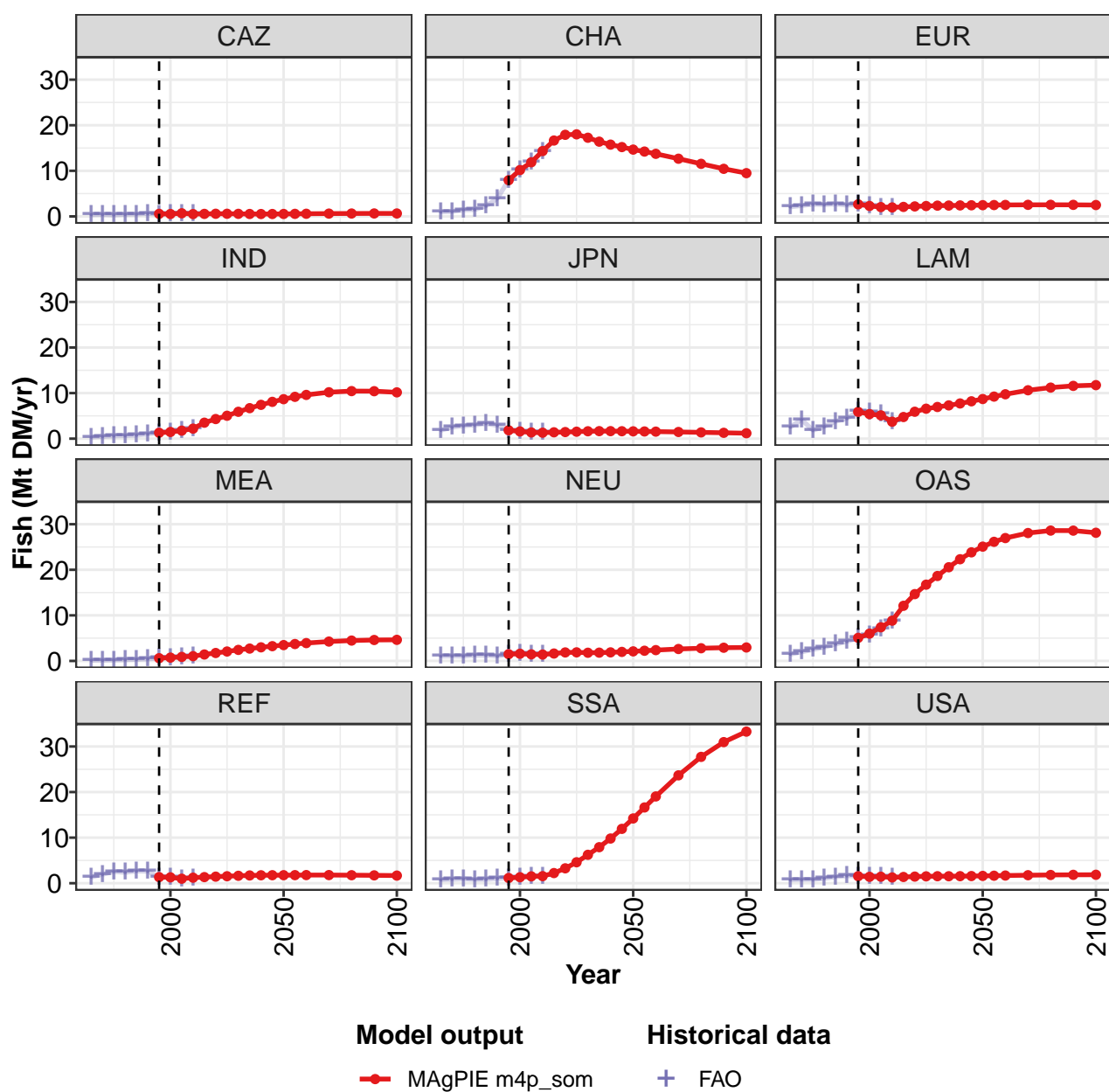


Figure 358: MAGPIE m4p\_som — Production—Fish (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	31	34	37	39	49	57	62	67	71	76	80
CAZ	1	1	1	1	1	1	1	1	1	1	1
CHA	8	10	12	14	17	18	18	17	16	16	15
EUR	3	2	2	2	2	2	2	2	2	2	2
IND	1	1	2	2	4	4	5	6	7	7	8
JPN	2	2	1	1	1	1	2	2	2	2	2
LAM	6	5	5	4	5	6	7	7	7	8	8
MEA	1	1	1	1	1	2	2	2	3	3	3
NEU	1	2	1	1	2	2	2	2	2	2	2
OAS	5	6	7	9	12	15	17	19	21	22	24
REF	1	1	1	1	1	1	2	2	2	2	2
SSA	1	1	2	2	2	3	5	6	8	10	12
USA	2	1	1	1	1	1	2	2	2	2	2

Table 1410: MAgPIE m4p\_som — Production—Fish (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	85	89	93	100	105	108	108
CAZ	1	1	1	1	1	1	1
CHA	15	14	14	13	12	10	9
EUR	2	2	3	3	3	3	2
IND	9	9	10	10	10	10	10
JPN	2	2	2	1	1	1	1
LAM	9	9	10	11	11	12	12
MEA	3	4	4	4	4	5	5
NEU	2	2	2	3	3	3	3
OAS	25	26	27	28	29	29	28
REF	2	2	2	2	2	2	2
SSA	14	17	19	24	28	31	33
USA	2	2	2	2	2	2	2

Table 1411: MAgPIE m4p\_som — Production—Fish (Mt DM/yr) [PART 2/2]

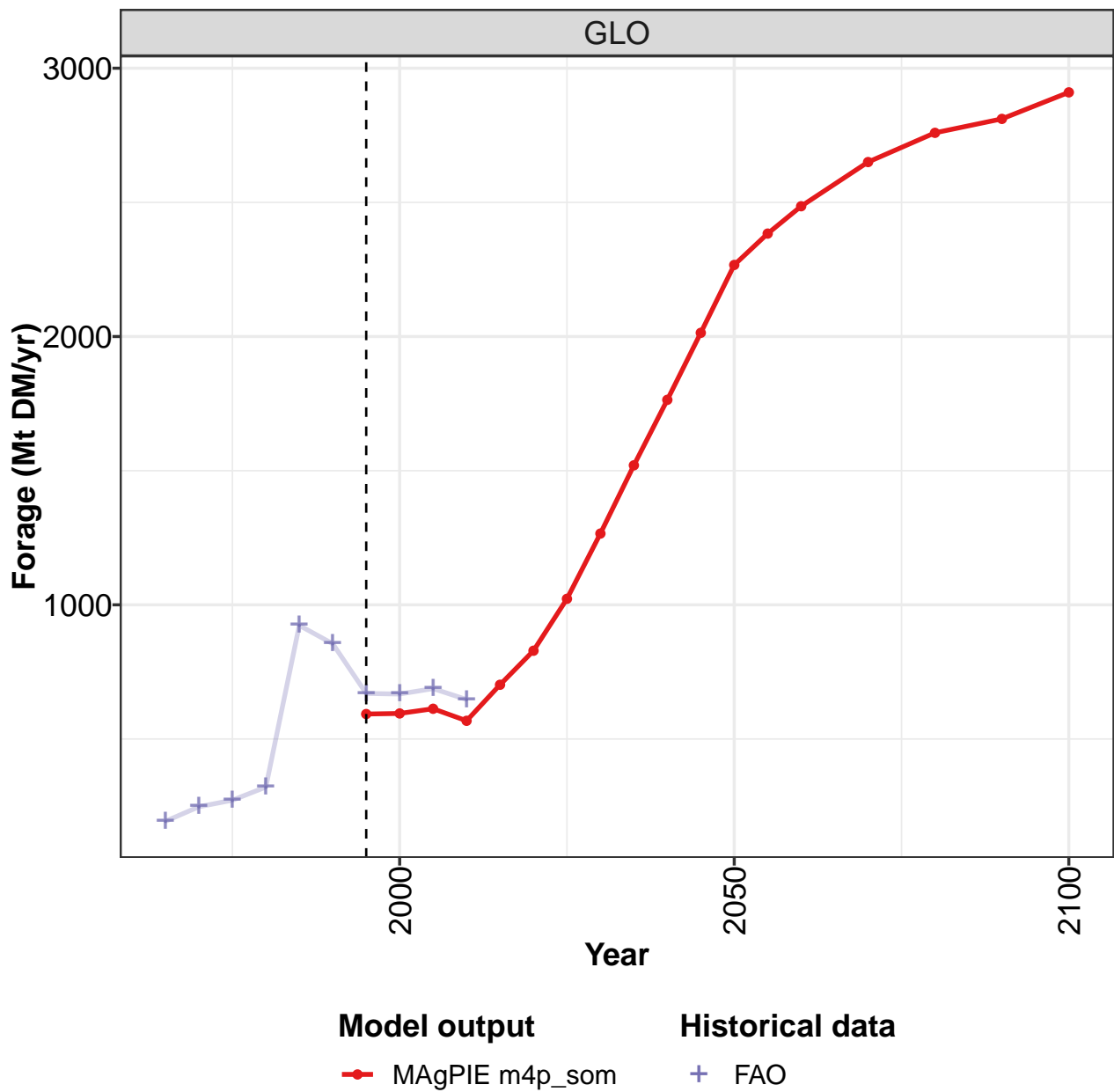
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	13.6	17.8	17.8	19.6	23.6	26.4	31.4	33.8	36.6	39.5
CAZ	0.4	0.4	0.3	0.5	0.5	0.6	0.5	0.5	0.6	0.5
CHA	1.0	1.1	1.5	1.5	2.3	3.9	8.0	10.1	11.9	14.3
EUR	2.1	2.4	2.7	2.6	2.7	2.5	2.6	2.3	2.0	2.0
IND	0.4	0.5	0.6	0.7	0.8	1.0	1.3	1.5	1.8	2.3
JPN	1.8	2.5	2.8	3.0	3.3	2.9	1.8	1.6	1.4	1.3
LAM	2.5	4.2	1.8	2.7	3.8	4.4	6.0	5.7	5.5	3.8
MEA	0.1	0.2	0.2	0.2	0.3	0.4	0.6	0.7	0.9	1.1
NEU	1.1	1.1	1.0	1.3	1.3	1.0	1.4	1.6	1.5	1.5
OAS	1.5	2.0	2.5	3.0	3.7	4.3	5.1	5.7	7.1	8.8
REF	1.3	1.9	2.6	2.4	2.7	2.6	1.3	1.2	1.0	1.2
SSA	0.7	0.9	1.0	0.8	0.8	1.0	1.1	1.3	1.5	1.5
USA	0.7	0.8	0.8	1.1	1.4	1.6	1.6	1.4	1.5	1.3

Table 1412: FAO — Production—Fish (Mt DM/yr)



## 46 Forage

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

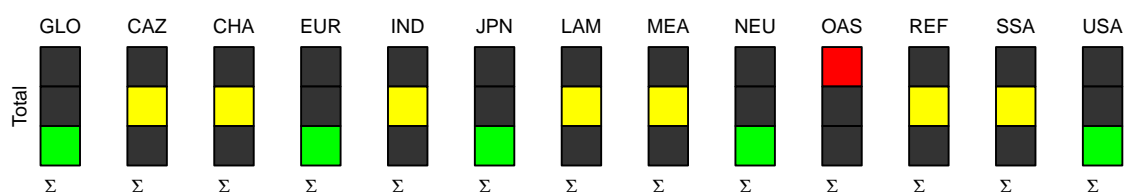
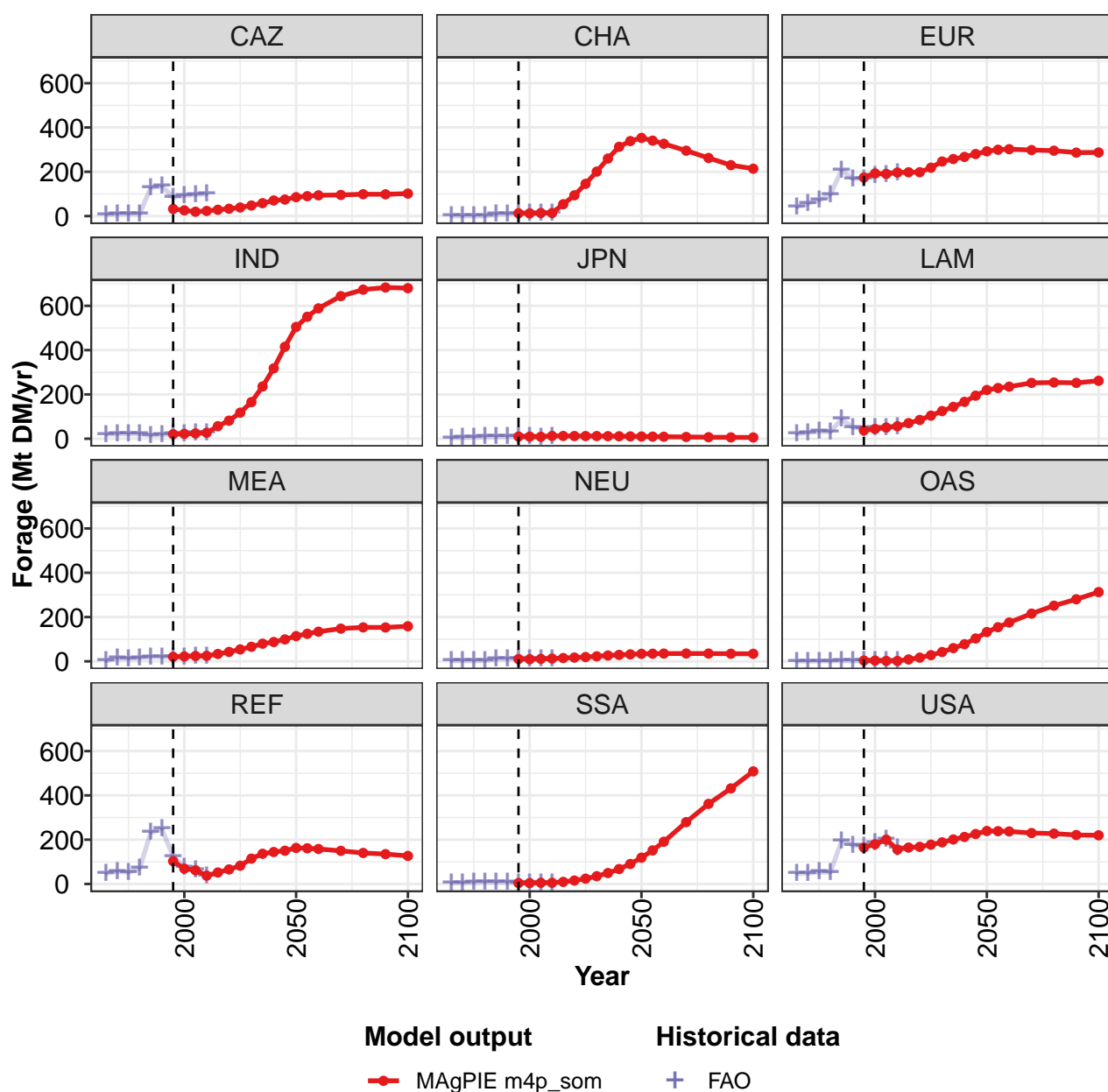


Figure 359: MAgPIE m4p\_som — Production—Forage (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	593	595	613	568	702	829	1022	1266	1520	1764	2014
CAZ	32	26	20	23	29	33	39	48	58	70	75
CHA	13	12	14	14	54	94	146	201	260	313	339
EUR	174	193	191	197	198	198	219	247	258	267	280
IND	20	22	24	27	57	82	118	165	236	318	415
JPN	10	10	9	13	12	12	12	12	12	11	11
LAM	37	44	50	56	71	85	104	125	144	167	194
MEA	21	22	24	25	33	43	54	66	80	87	99
NEU	10	10	11	13	15	17	20	23	26	29	32
OAS	4	3	2	2	9	17	28	42	60	77	103
REF	103	69	62	38	52	66	82	115	136	144	150
SSA	4	4	5	5	10	16	24	35	49	67	90
USA	165	180	200	155	164	168	178	188	201	212	226

Table 1413: MAgPIE m4p\_som — Production—Forage (Mt DM/yr) [PART 1/2]

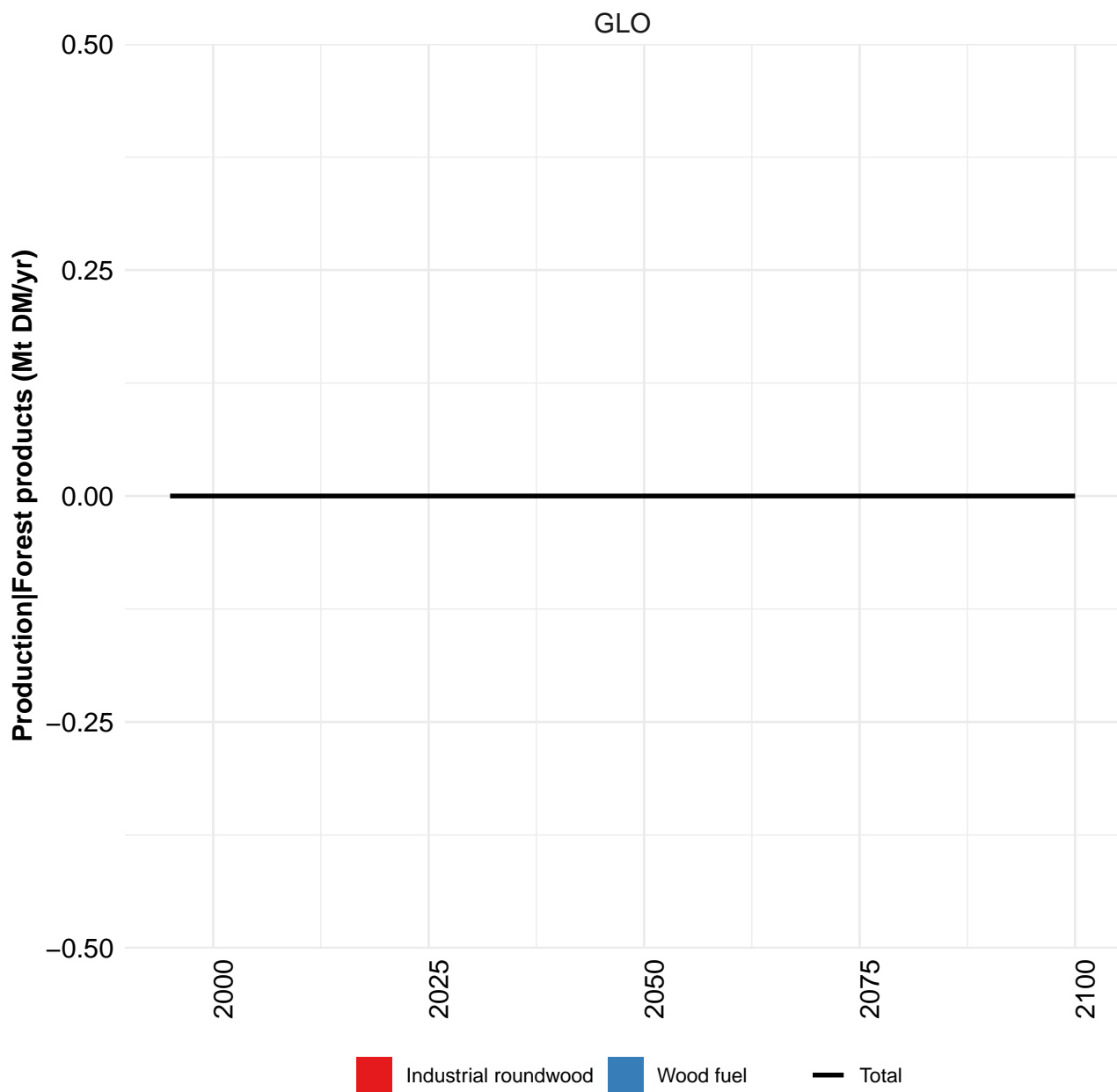
	2050	2055	2060	2070	2080	2090	2100
GLO	2267	2384	2486	2650	2759	2811	2910
CAZ	85	90	94	96	99	98	102
CHA	353	341	327	295	262	230	214
EUR	292	300	302	298	295	287	287
IND	505	551	589	644	673	683	680
JPN	10	10	9	8	7	6	6
LAM	220	229	235	252	254	252	262
MEA	114	125	134	148	153	153	158
NEU	34	35	35	35	35	34	34
OAS	132	154	175	215	251	280	313
REF	163	161	158	150	140	135	127
SSA	119	152	191	279	362	432	508
USA	239	238	237	230	227	221	220

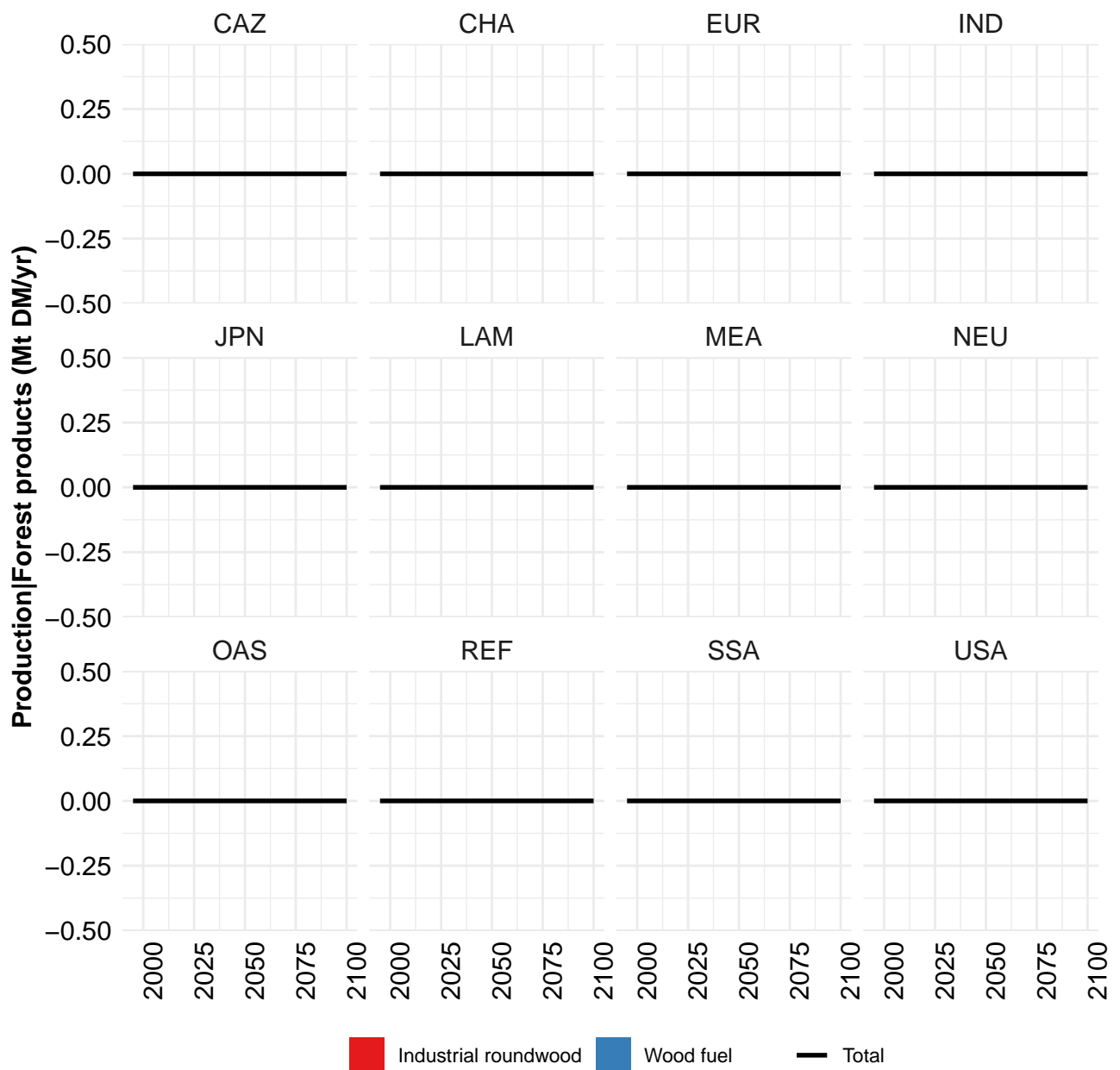
Table 1414: MAgPIE m4p\_som — Production—Forage (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	193	247	272	321	923	855	670	667	688	647
CAZ	7	9	10	10	128	135	85	93	96	99
CHA	0	0	0	0	8	10	11	12	13	14
EUR	40	57	71	97	206	168	169	182	186	196
IND	19	21	21	22	15	18	20	22	25	28
JPN	3	6	8	9	10	10	9	9	8	12
LAM	21	27	33	31	88	51	46	50	51	54
MEA	2	14	13	15	21	20	20	21	23	25
NEU	2	2	3	3	11	11	11	10	12	13
OAS	1	1	1	1	3	2	2	2	2	2
REF	47	57	52	71	232	248	123	77	65	38
SSA	4	5	6	9	9	7	5	5	5	5
USA	47	48	54	53	193	175	170	185	201	162

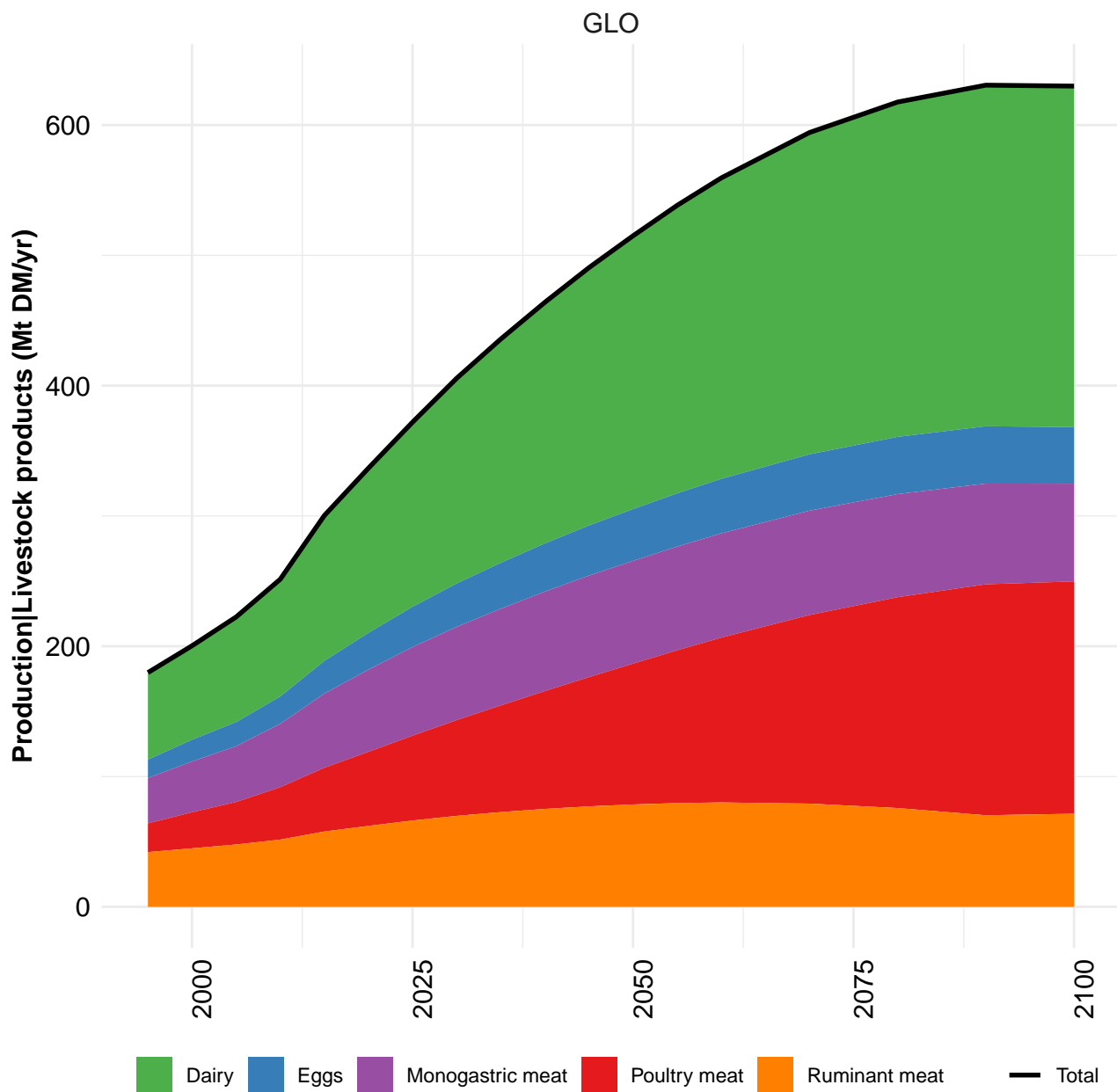
Table 1415: FAO — Production—Forage (Mt DM/yr)

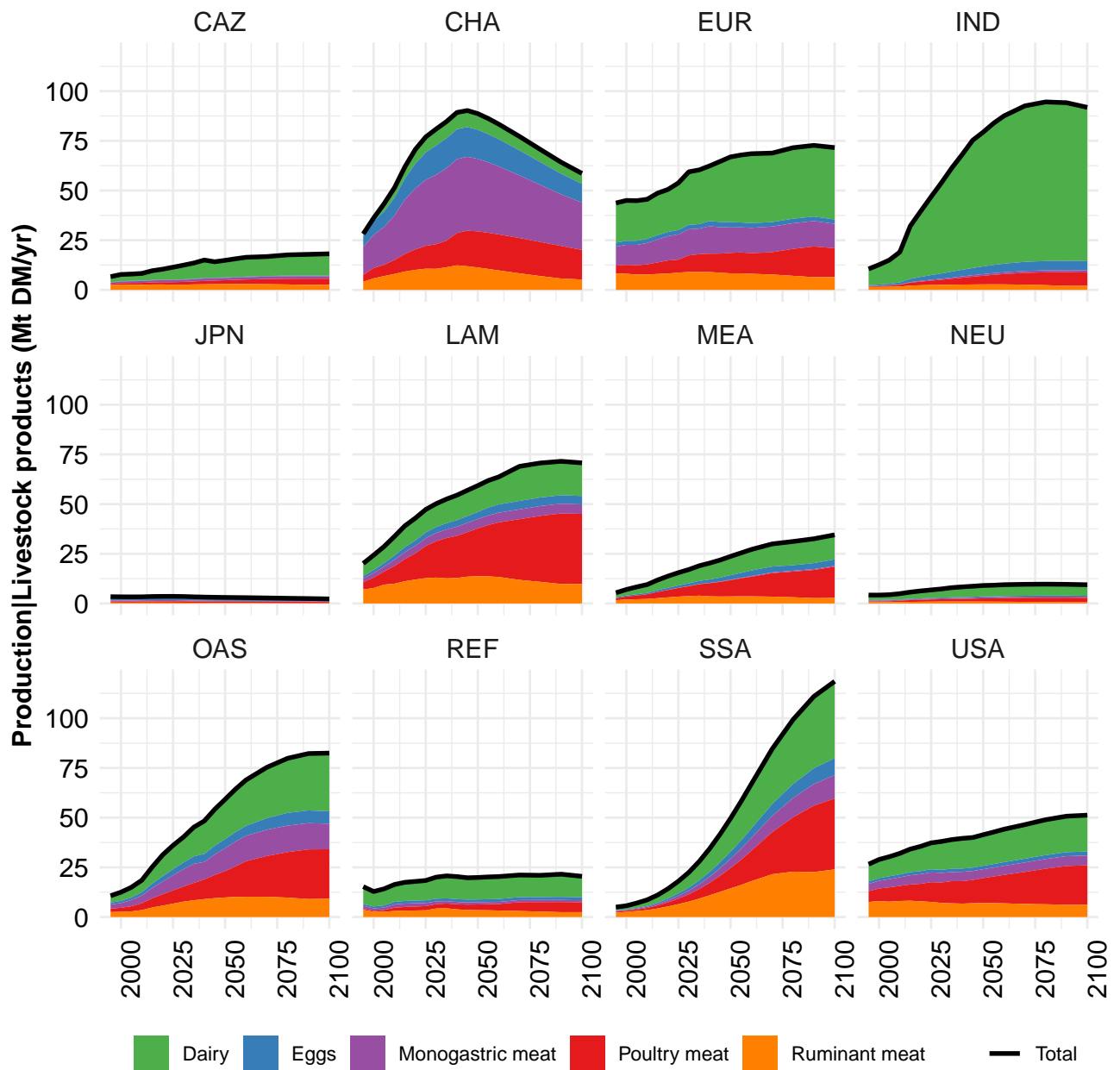
## 47 Forest products



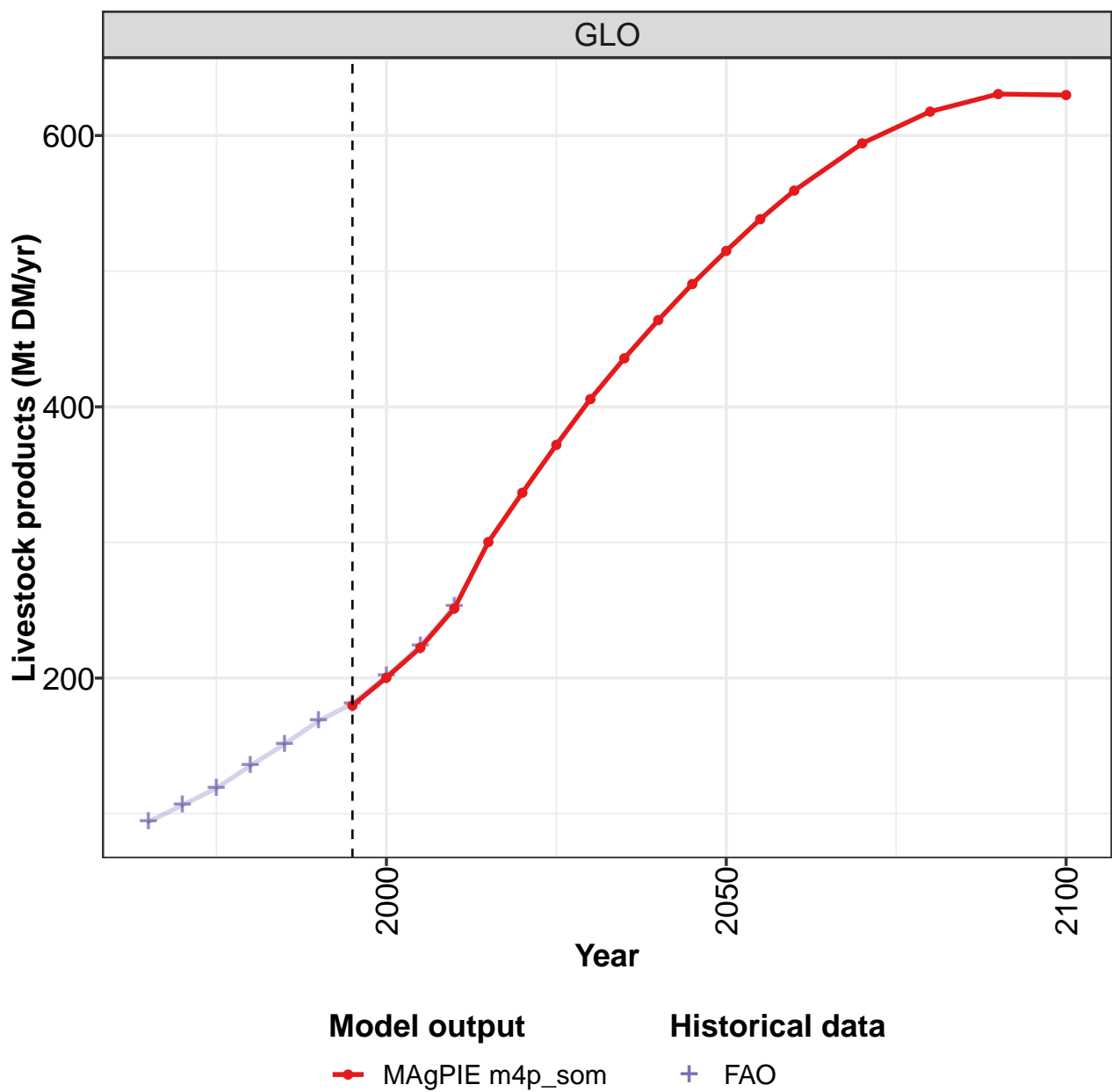


## 48 Livestock products





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

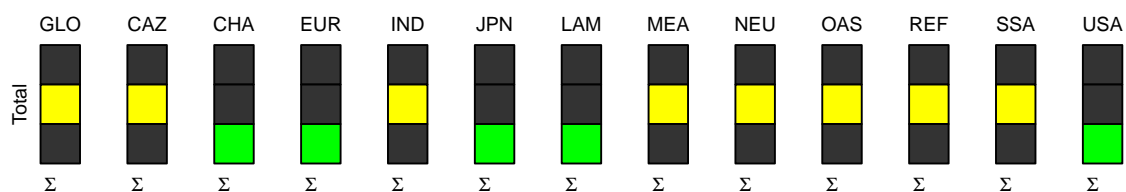
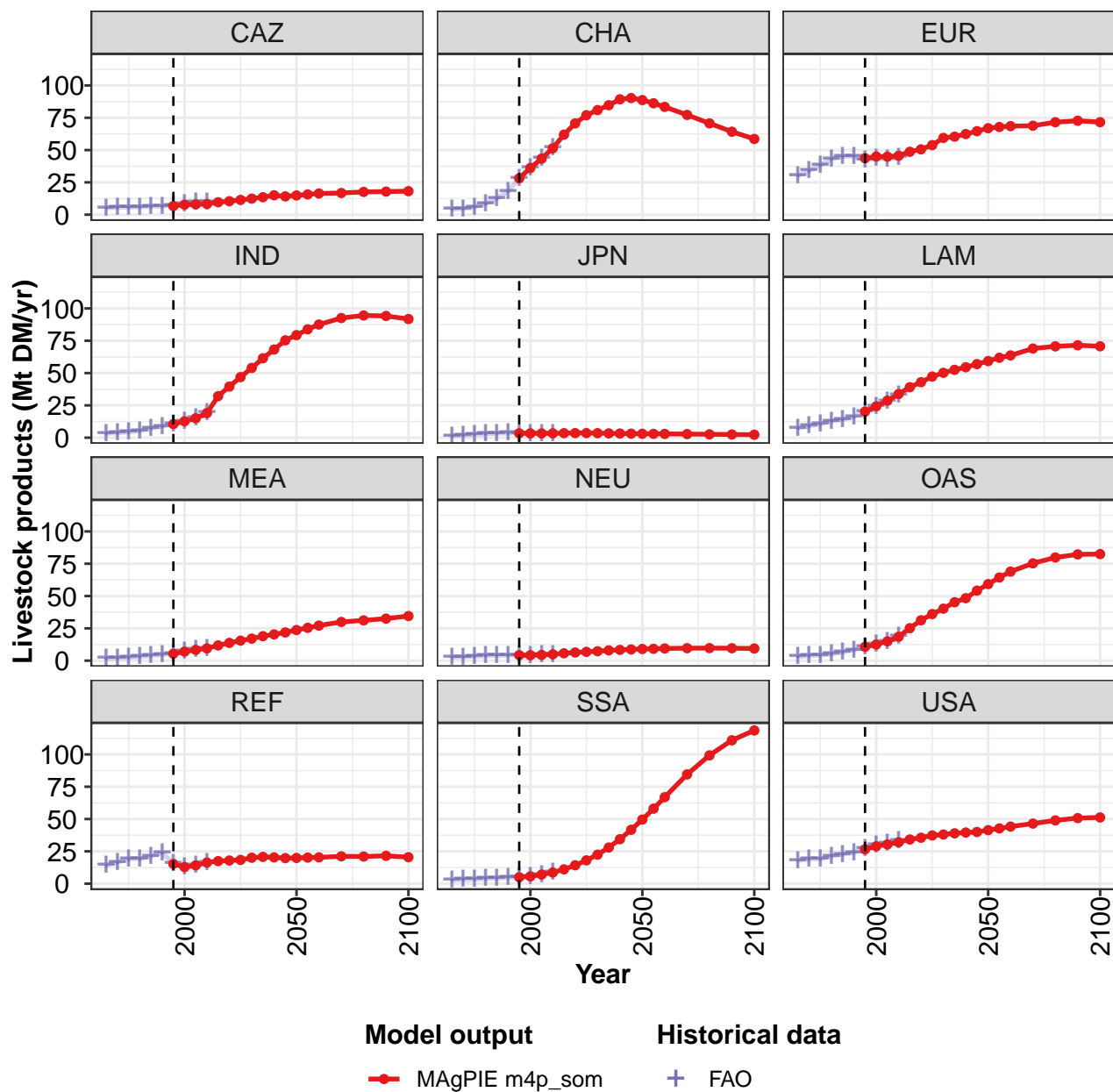


Figure 360: MAgPIE m4p\_som — Production—Livestock products (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	180	200	222	251	300	337	372	406	436	464	491
CAZ	7	8	8	8	10	10	11	12	14	15	14
CHA	28	36	43	51	62	71	77	81	85	89	90
EUR	44	45	45	46	49	51	54	59	60	62	65
IND	11	13	15	19	32	40	47	54	61	68	75
JPN	3	3	3	3	3	4	4	3	3	3	3
LAM	20	24	29	34	39	43	47	50	53	54	57
MEA	5	7	8	10	12	14	15	17	19	20	22
NEU	4	4	4	5	6	6	7	7	8	8	9
OAS	11	12	15	19	25	31	36	40	45	48	54
REF	15	13	14	16	17	18	18	20	21	20	20
SSA	5	6	7	9	11	14	18	22	28	34	42
USA	27	29	30	32	34	36	37	38	39	40	40

Table 1416: MAgPIE m4p\_som — Production—Livestock products (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	515	538	559	594	618	631	630
CAZ	15	16	16	17	18	18	18
CHA	89	86	83	77	71	64	59
EUR	67	68	69	69	72	73	72
IND	79	84	88	93	95	94	92
JPN	3	3	3	3	3	2	2
LAM	59	62	64	69	71	72	71
MEA	24	25	27	30	31	33	35
NEU	9	9	9	10	10	10	9
OAS	59	64	69	75	80	82	82
REF	20	20	20	21	21	22	20
SSA	50	58	67	85	99	111	119
USA	41	43	44	46	49	51	51

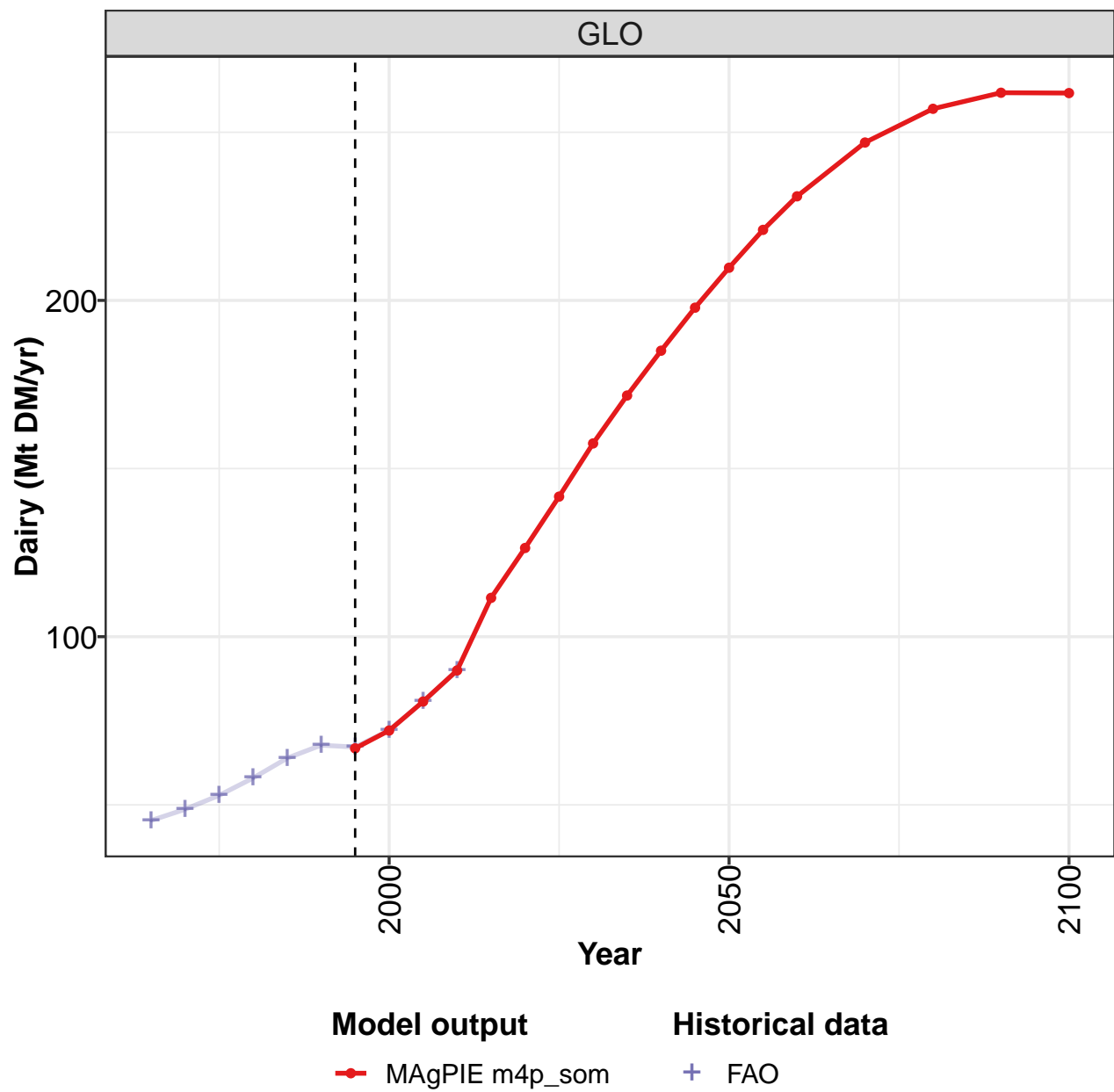
Table 1417: MAgPIE m4p\_som — Production—Livestock products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	94	106	119	135	151	168	181	202	224	253
CAZ	5	6	6	6	6	7	7	9	9	10
CHA	4	5	6	9	13	18	28	36	44	52
EUR	30	34	38	43	45	45	43	44	43	44
IND	3	4	4	5	7	9	11	13	15	19
JPN	1	2	2	3	3	4	3	3	3	3
LAM	7	9	10	13	14	16	20	24	29	33
MEA	2	2	2	3	4	5	6	7	8	10
NEU	3	3	3	4	4	4	4	4	4	5
OAS	3	4	4	5	6	8	11	13	15	19
REF	14	17	19	19	21	24	16	13	14	16
SSA	3	3	3	4	4	5	5	6	7	9
USA	18	19	19	21	23	24	27	30	31	33

Table 1418: FAO — Production—Livestock products (Mt DM/yr)

48.1 Dairy

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

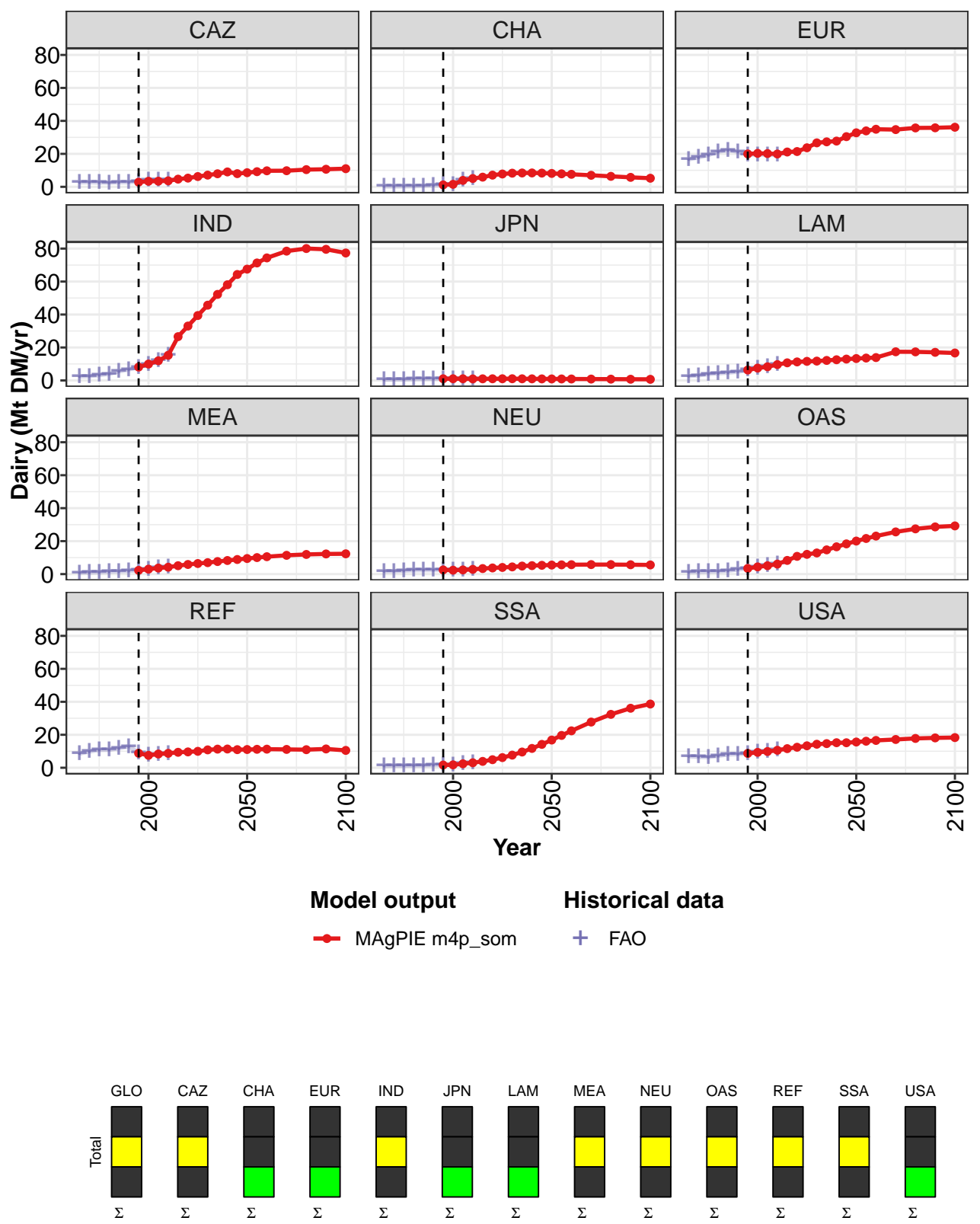


Figure 361: MAgPIE m4p\_som — Production—Livestock products—Dairy (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	67	72	81	90	112	126	142	157	172	185	198
CAZ	3	3	3	4	5	5	6	7	8	9	8
CHA	1	2	4	5	6	7	8	8	8	8	8
EUR	20	20	20	20	21	21	24	27	27	28	30
IND	8	10	12	15	27	33	39	46	52	58	64
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	6	7	8	10	11	11	12	12	12	13	13
MEA	2	3	4	4	5	6	6	7	8	8	9
NEU	3	2	3	3	3	4	4	4	5	5	5
OAS	3	4	5	6	8	11	12	13	15	17	18
REF	9	8	8	9	9	10	10	11	11	11	11
SSA	2	2	2	3	4	5	6	8	10	12	14
USA	9	9	10	11	12	12	13	14	15	15	15

Table 1419: MAgPIE m4p\_som — Production—Livestock products—Dairy (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	210	221	231	247	257	262	262
CAZ	9	9	10	10	10	11	11
CHA	8	8	8	7	6	6	5
EUR	33	34	35	35	36	36	36
IND	68	71	74	78	80	80	77
JPN	1	1	1	1	1	1	1
LAM	13	14	14	17	17	17	17
MEA	9	10	11	11	12	12	12
NEU	5	6	6	6	6	6	6
OAS	20	22	23	26	27	29	29
REF	11	11	11	11	11	11	11
SSA	17	20	22	28	32	36	39
USA	16	16	17	17	18	18	18

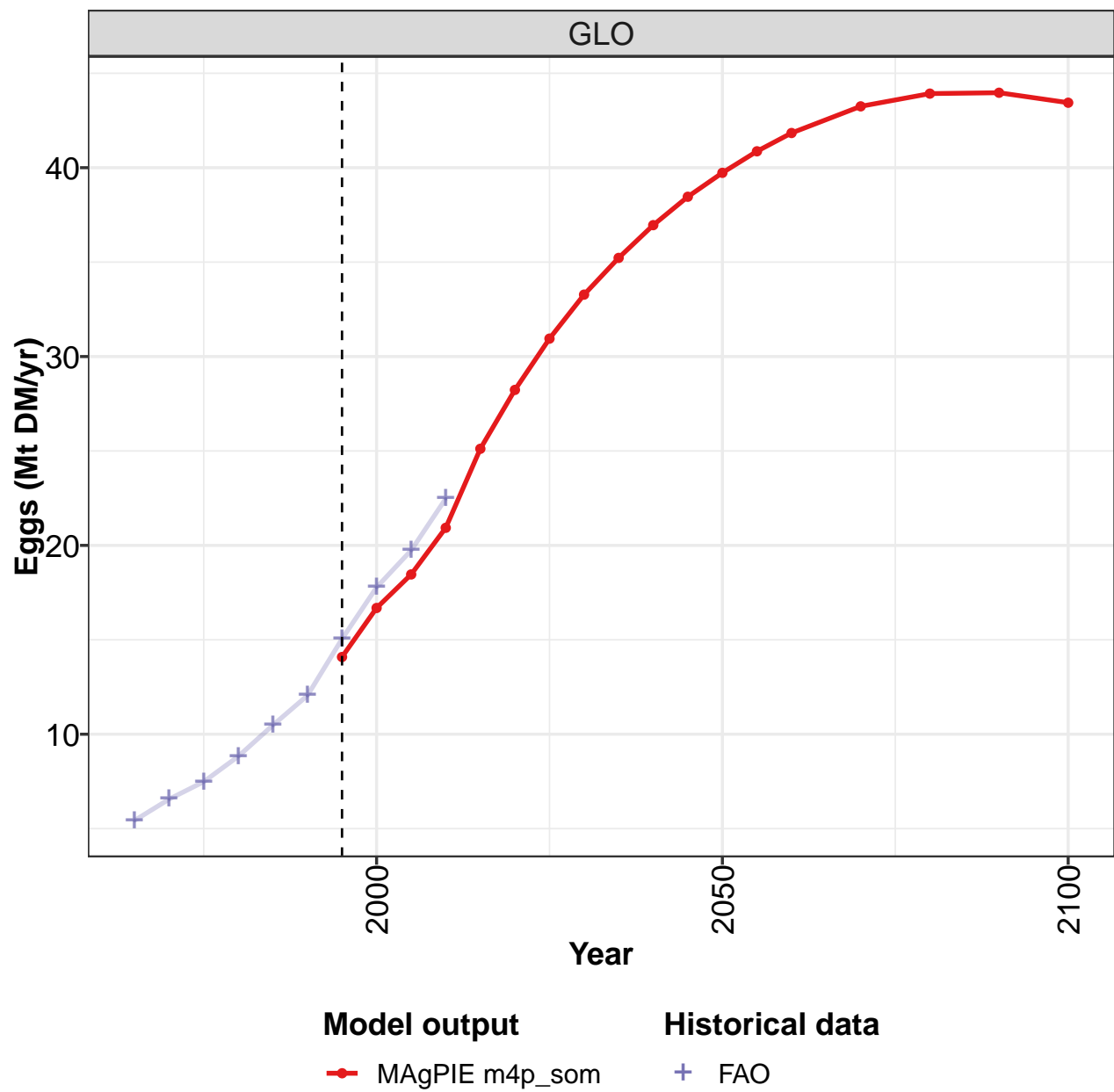
Table 1420: MAgPIE m4p\_som — Production—Livestock products—Dairy (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	45.3	48.7	52.8	58.0	63.9	67.7	67.2	72.2	80.7	89.9
CAZ	2.7	2.8	2.6	2.5	2.7	2.8	3.2	3.9	4.1	4.3
CHA	0.2	0.2	0.3	0.4	0.6	0.9	1.2	1.5	3.9	5.0
EUR	16.7	17.8	19.2	21.3	22.2	21.3	19.5	19.5	19.4	19.2
IND	2.4	2.6	3.2	3.9	5.5	6.7	8.1	10.0	12.0	15.3
JPN	0.4	0.6	0.6	0.8	0.9	1.0	1.0	1.0	1.0	1.0
LAM	2.6	3.1	3.9	4.3	4.7	5.2	6.3	7.5	8.3	9.7
MEA	0.9	1.0	1.2	1.5	1.7	2.0	2.3	3.1	3.7	4.2
NEU	1.7	1.8	2.0	2.3	2.4	2.4	2.5	2.4	2.5	2.9
OAS	1.2	1.3	1.5	1.7	2.1	2.7	3.5	4.4	5.1	6.1
REF	8.6	9.8	10.8	10.8	11.8	13.0	9.2	7.7	8.2	8.5
SSA	1.0	1.2	1.2	1.3	1.4	1.6	1.7	1.8	2.4	3.0
USA	7.0	6.5	6.4	7.2	8.0	8.2	8.7	9.3	9.9	10.8

Table 1421: FAO — Production—Livestock products—Dairy (Mt DM/yr)

48.2 Eggs

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

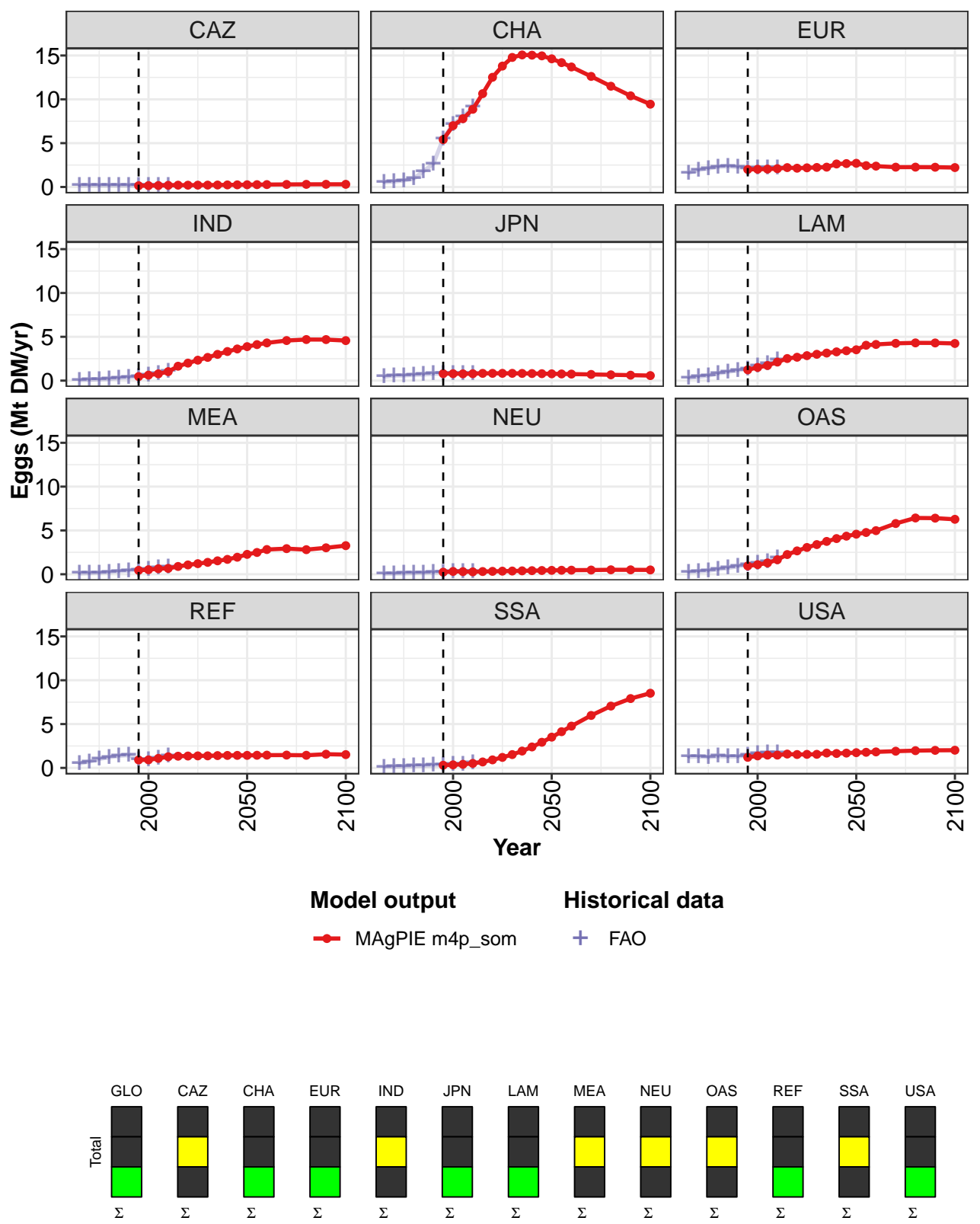


Figure 362: MAgPIE m4p\_som — Production—Livestock products—Eggs (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	14.1	16.7	18.5	20.9	25.1	28.2	30.9	33.3	35.2	37.0	38.5
CAZ	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CHA	5.4	7.0	7.8	8.9	10.6	12.5	13.8	14.8	15.1	15.0	15.0
EUR	2.0	2.0	2.0	2.1	2.2	2.1	2.2	2.2	2.3	2.6	2.7
IND	0.5	0.6	0.8	1.0	1.6	2.0	2.3	2.7	3.0	3.3	3.6
JPN	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
LAM	1.2	1.5	1.7	2.1	2.5	2.7	2.8	3.0	3.1	3.3	3.4
MEA	0.4	0.5	0.6	0.7	0.9	1.1	1.2	1.4	1.5	1.7	1.9
NEU	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
OAS	1.0	1.1	1.3	1.7	2.2	2.7	3.1	3.4	3.7	4.1	4.3
REF	0.9	0.9	1.1	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4
SSA	0.3	0.3	0.4	0.5	0.7	0.9	1.2	1.5	1.9	2.4	2.9
USA	1.2	1.4	1.5	1.5	1.6	1.5	1.5	1.6	1.7	1.6	1.7

Table 1422: MAgPIE m4p.som — Production—Livestock products—Eggs (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	39.7	40.9	41.8	43.2	43.9	44.0	43.4
CAZ	0.3	0.3	0.3	0.3	0.3	0.3	0.3
CHA	14.6	14.2	13.7	12.6	11.5	10.4	9.4
EUR	2.7	2.4	2.4	2.3	2.3	2.3	2.2
IND	3.9	4.1	4.3	4.6	4.7	4.7	4.6
JPN	0.8	0.8	0.7	0.7	0.7	0.6	0.6
LAM	3.5	4.0	4.1	4.3	4.3	4.3	4.2
MEA	2.3	2.5	2.8	2.9	2.8	3.0	3.3
NEU	0.4	0.5	0.5	0.5	0.5	0.5	0.5
OAS	4.6	4.8	5.0	5.8	6.4	6.4	6.3
REF	1.4	1.4	1.5	1.5	1.4	1.6	1.5
SSA	3.5	4.1	4.8	6.0	7.1	7.9	8.5
USA	1.7	1.8	1.8	1.9	2.0	2.0	2.0

Table 1423: MAgPIE m4p.som — Production—Livestock products—Eggs (Mt DM/yr) [PART 2/2]

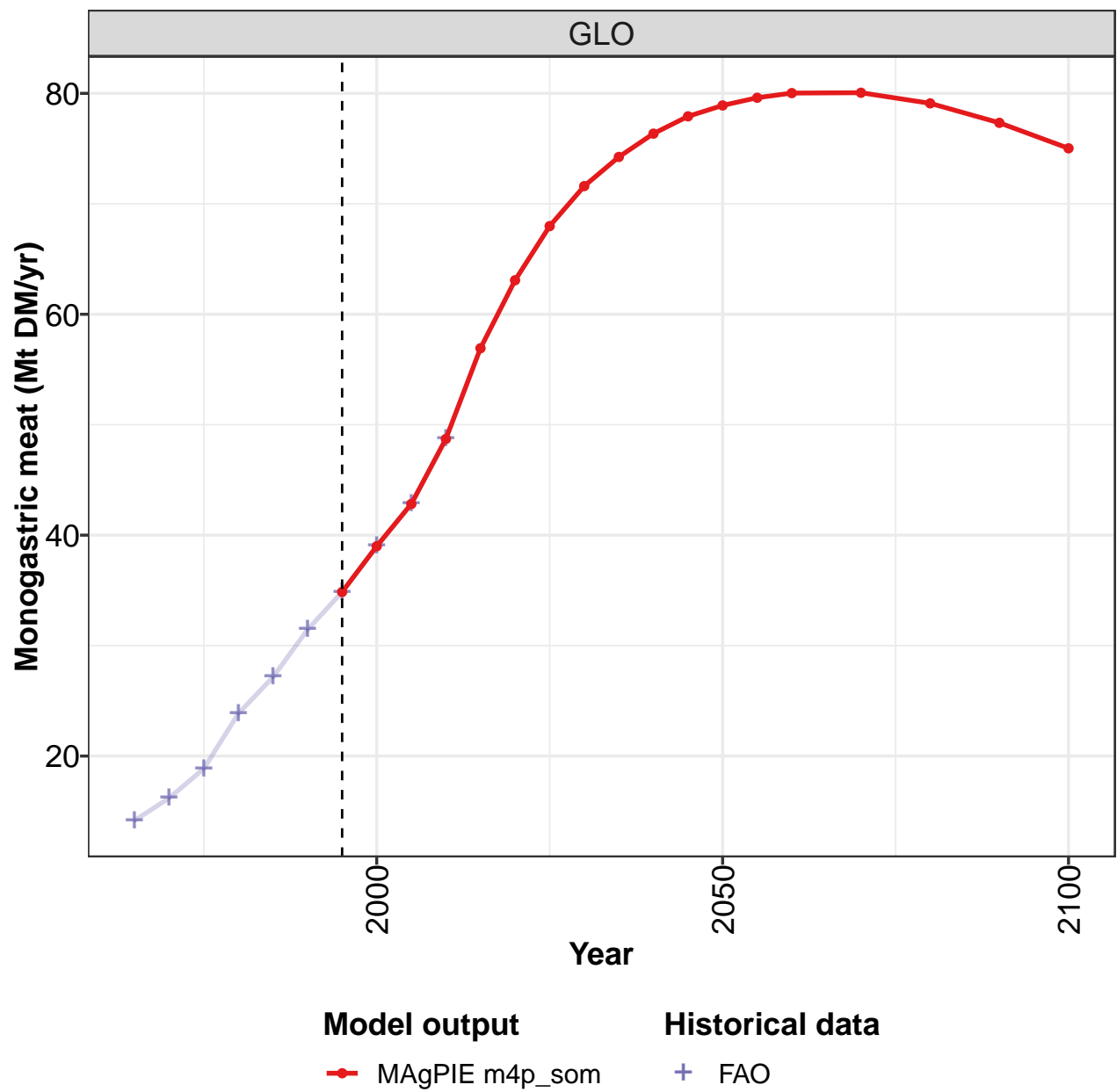
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	5.4	6.6	7.5	8.8	10.5	12.0	15.0	17.8	19.7	22.5
CAZ	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CHA	0.5	0.6	0.7	0.9	1.8	2.6	5.5	7.2	8.0	9.1
EUR	1.6	1.9	2.1	2.3	2.4	2.3	2.1	2.2	2.2	2.2
IND	0.1	0.1	0.1	0.2	0.3	0.4	0.5	0.7	0.8	1.1
JPN	0.4	0.6	0.6	0.6	0.7	0.8	0.8	0.8	0.8	0.8
LAM	0.3	0.4	0.6	0.8	1.0	1.2	1.4	1.7	1.9	2.4
MEA	0.1	0.1	0.2	0.2	0.4	0.4	0.5	0.6	0.7	0.8
NEU	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3
OAS	0.3	0.3	0.4	0.6	0.7	0.9	1.1	1.3	1.5	1.9
REF	0.5	0.7	1.0	1.2	1.4	1.5	0.9	0.9	1.1	1.3
SSA	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.6
USA	1.3	1.3	1.2	1.3	1.3	1.3	1.4	1.6	1.7	1.7

Table 1424: FAO — Production—Livestock products—Eggs (Mt DM/yr)



48.3 Monogastric meat

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

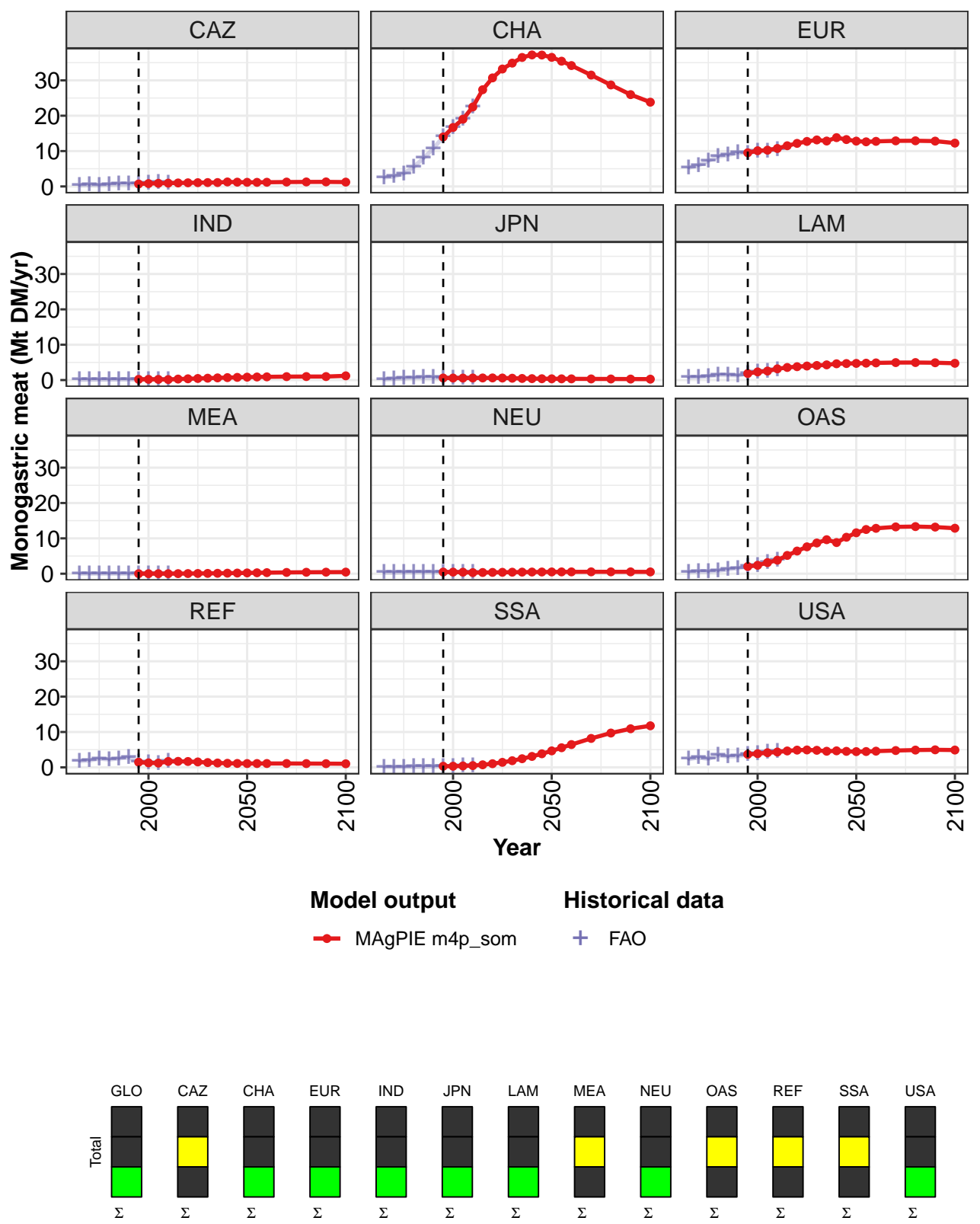


Figure 363: MAgPIE m4p\_som — Production—Livestock products—Monogastric meat (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	34.9	39.0	42.8	48.7	56.9	63.1	68.0	71.6	74.2	76.4	77.9
CAZ	0.7	0.8	0.9	0.9	1.0	1.0	1.1	1.1	1.1	1.3	1.2
CHA	14.0	16.7	19.0	22.5	27.4	30.7	33.2	34.9	36.5	37.2	37.2
EUR	9.5	10.1	10.3	10.7	11.5	12.2	12.7	13.2	12.8	13.8	13.3
IND	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.5	0.6	0.7	0.8
JPN	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.4	0.4
LAM	1.9	2.3	2.6	3.2	3.6	3.8	4.0	4.1	4.3	4.6	4.7
MEA	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2
NEU	0.5	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5
OAS	2.0	2.4	3.1	3.8	5.2	6.4	7.6	8.7	9.6	8.8	10.3
REF	1.5	1.3	1.2	1.7	1.7	1.7	1.5	1.4	1.2	1.2	1.1
SSA	0.3	0.3	0.4	0.5	0.7	1.0	1.4	1.9	2.4	3.1	3.8
USA	3.7	3.9	4.1	4.3	4.6	4.9	4.9	4.8	4.6	4.7	4.5

Table 1425: MAgPIE m4p\_som — Production—Livestock products—Monogastric meat (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	78.9	79.6	80.0	80.1	79.1	77.3	75.0
CAZ	1.2	1.2	1.2	1.2	1.3	1.3	1.2
CHA	36.5	35.4	34.2	31.5	28.7	26.0	23.8
EUR	12.8	12.6	12.8	12.9	12.9	12.8	12.3
IND	0.8	0.9	0.9	1.0	1.0	1.0	1.2
JPN	0.4	0.4	0.3	0.3	0.3	0.3	0.3
LAM	4.7	4.8	4.9	4.9	5.0	4.9	4.7
MEA	0.2	0.3	0.3	0.4	0.4	0.4	0.5
NEU	0.5	0.5	0.5	0.5	0.5	0.5	0.5
OAS	11.6	12.5	12.8	13.2	13.3	13.2	12.9
REF	1.1	1.1	1.1	1.1	1.1	1.0	1.0
SSA	4.7	5.5	6.4	8.2	9.7	10.9	11.8
USA	4.4	4.5	4.6	4.8	4.9	5.0	4.9

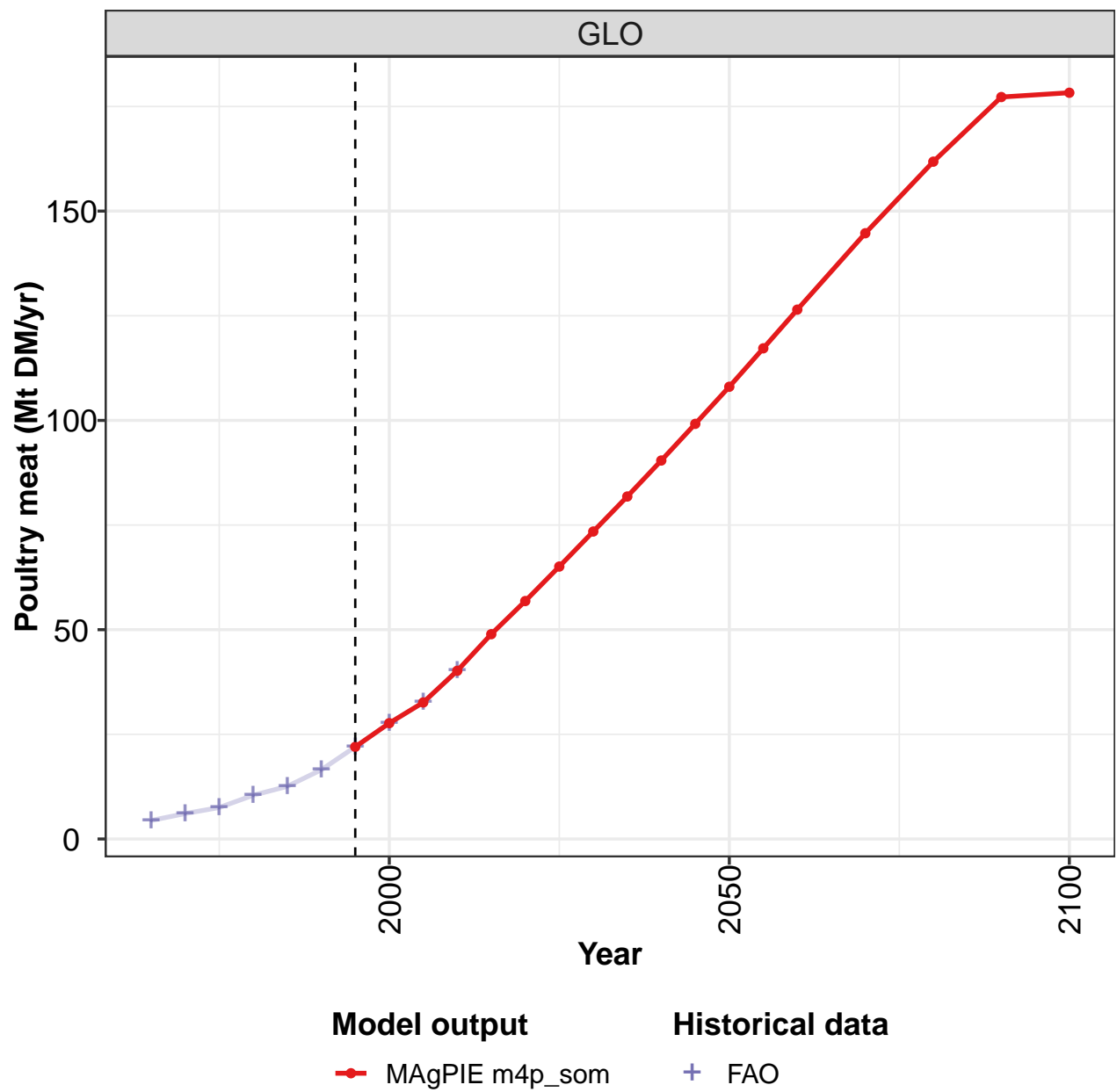
Table 1426: MAgPIE m4p\_som — Production—Livestock products—Monogastric meat (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	14.2	16.2	18.9	23.8	27.1	31.4	34.9	39.0	42.8	48.7
CAZ	0.3	0.4	0.4	0.6	0.6	0.7	0.8	0.9	1.1	1.0
CHA	2.5	2.8	3.6	5.5	8.0	10.7	14.1	16.7	19.0	22.5
EUR	5.3	5.9	7.2	8.4	8.8	9.5	9.4	9.9	9.9	10.5
IND	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
JPN	0.2	0.3	0.5	0.7	0.7	0.7	0.6	0.6	0.6	0.6
LAM	0.7	0.9	1.1	1.4	1.4	1.3	1.9	2.3	2.6	3.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.3
OAS	0.5	0.6	0.6	0.8	1.2	1.6	2.0	2.4	3.2	3.8
REF	1.8	1.9	2.5	2.2	2.5	2.8	1.5	1.3	1.2	1.7
SSA	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.5
USA	2.3	2.8	2.4	3.4	3.0	3.2	3.7	3.9	4.3	4.6

Table 1427: FAO — Production—Livestock products—Monogastric meat (Mt DM/yr)

48.4 Poultry meat

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

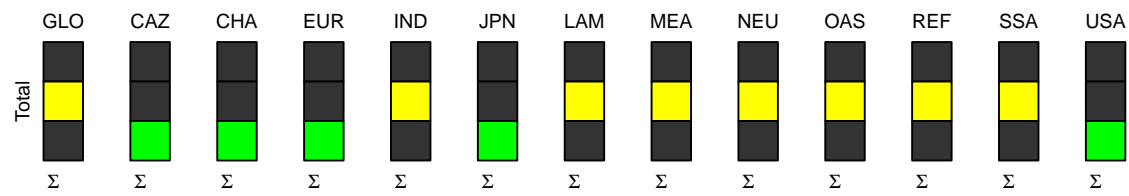
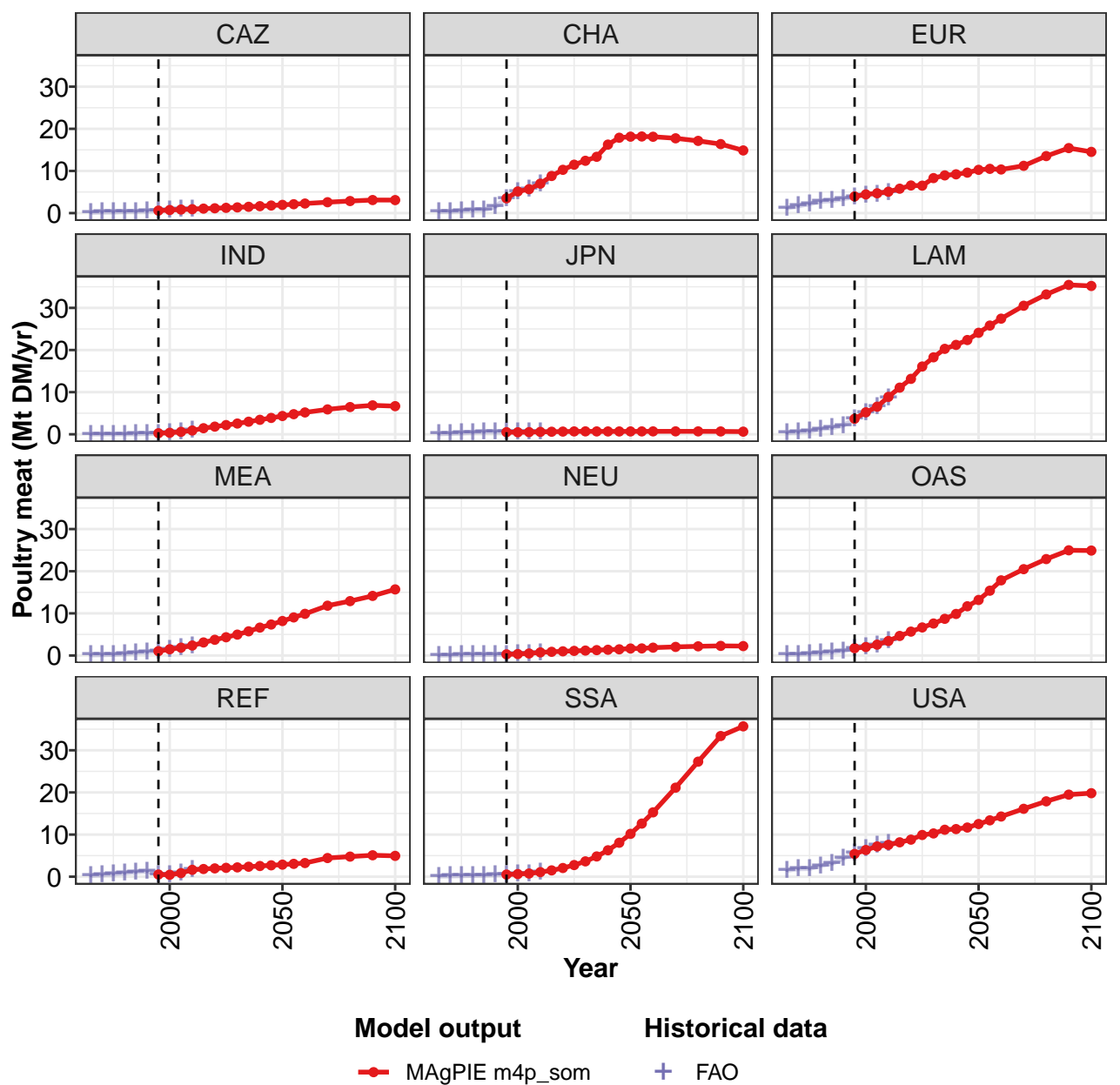


Figure 364: MAGPIE m4p\_som — Production—Livestock products—Poultry meat (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	22	28	33	40	49	57	65	73	82	90	99
CAZ	1	1	1	1	1	1	1	1	2	2	2
CHA	4	5	6	7	9	10	11	12	13	16	18
EUR	4	4	5	5	6	7	7	8	9	9	10
IND	0	0	1	1	1	2	2	3	3	3	4
JPN	1	0	1	1	1	1	1	1	1	1	1
LAM	4	5	7	9	11	13	16	18	20	21	22
MEA	1	1	2	2	3	4	4	5	6	7	7
NEU	0	0	0	1	1	1	1	1	1	1	1
OAS	2	2	3	3	5	6	7	8	9	10	12
REF	1	0	1	2	2	2	2	2	2	3	3
SSA	1	1	1	1	2	2	3	4	5	6	8
USA	5	6	7	8	8	9	10	10	11	11	12

Table 1428: MAgPIE m4p\_som — Production—Livestock products—Poultry meat (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	108	117	126	145	162	177	178
CAZ	2	2	2	3	3	3	3
CHA	18	18	18	18	17	16	15
EUR	10	11	10	11	14	15	15
IND	4	5	5	6	6	7	7
JPN	1	1	1	1	1	1	1
LAM	24	26	27	31	33	35	35
MEA	8	9	10	12	13	14	16
NEU	2	2	2	2	2	2	2
OAS	13	15	18	20	23	25	25
REF	3	3	3	4	5	5	5
SSA	10	13	15	21	27	33	36
USA	13	13	14	16	18	19	20

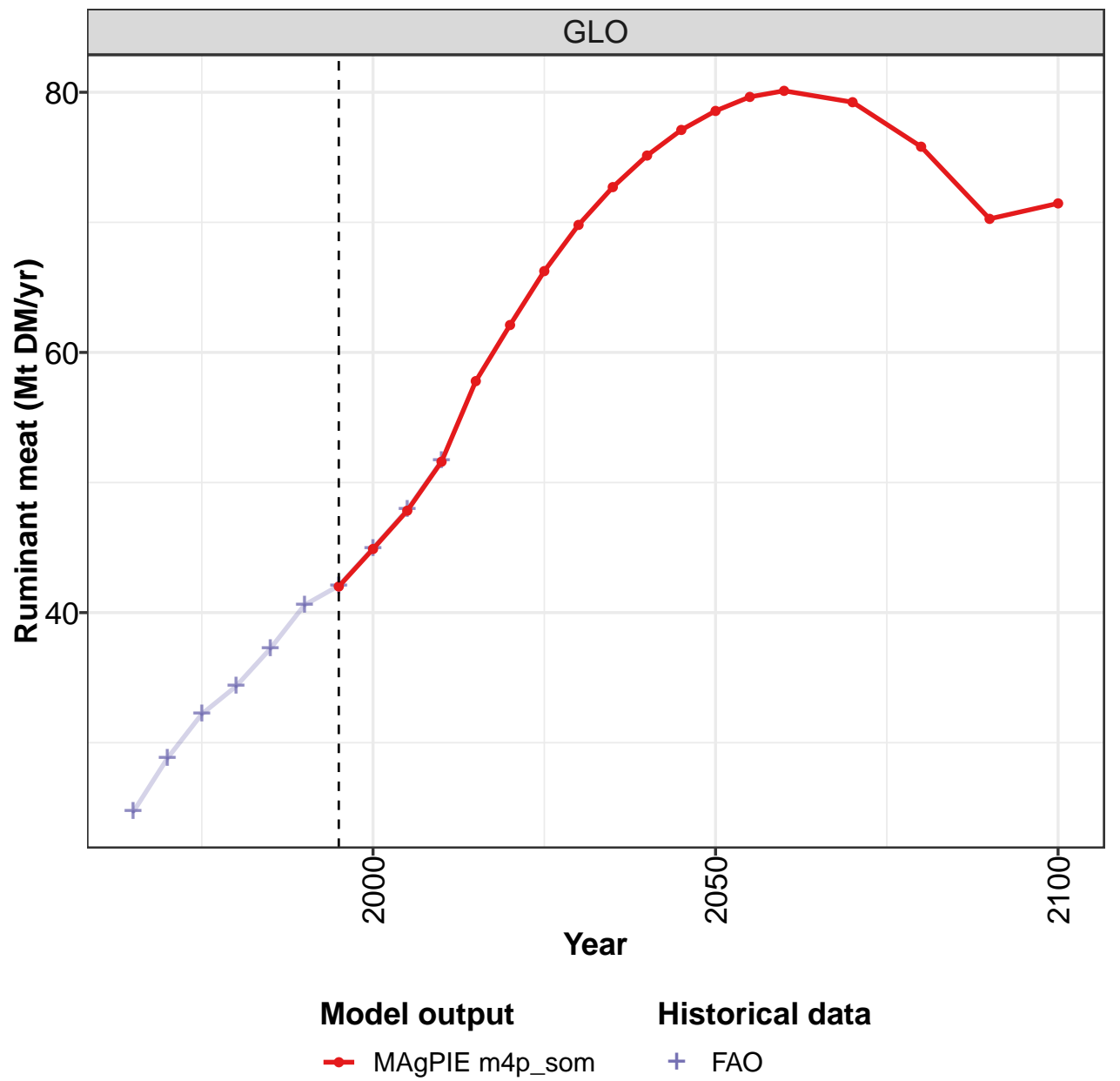
Table 1429: MAgPIE m4p\_som — Production—Livestock products—Poultry meat (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4.4	6.1	7.5	10.4	12.6	16.5	22.0	27.7	32.6	40.2
CAZ	0.2	0.2	0.3	0.4	0.4	0.5	0.6	0.7	0.9	0.9
CHA	0.3	0.4	0.5	0.7	0.8	1.5	3.5	5.1	5.7	7.0
EUR	1.2	1.7	2.2	2.8	2.9	3.4	3.8	4.3	4.4	4.9
IND	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.6	0.9
JPN	0.1	0.2	0.3	0.5	0.5	0.6	0.5	0.5	0.5	0.6
LAM	0.3	0.5	0.7	1.3	1.5	2.1	3.6	5.1	6.5	8.7
MEA	0.1	0.2	0.2	0.4	0.7	0.8	1.0	1.5	1.9	2.4
NEU	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.5	0.7
OAS	0.2	0.3	0.4	0.5	0.8	1.1	1.7	2.0	2.5	3.4
REF	0.3	0.4	0.6	0.8	1.1	1.3	0.5	0.5	0.9	1.6
SSA	0.1	0.2	0.2	0.3	0.4	0.5	0.5	0.6	0.8	1.1
USA	1.5	1.9	1.9	2.6	3.1	4.4	5.6	6.6	7.5	7.9

Table 1430: FAO — Production—Livestock products—Poultry meat (Mt DM/yr)

48.5 Ruminant meat

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## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.
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## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

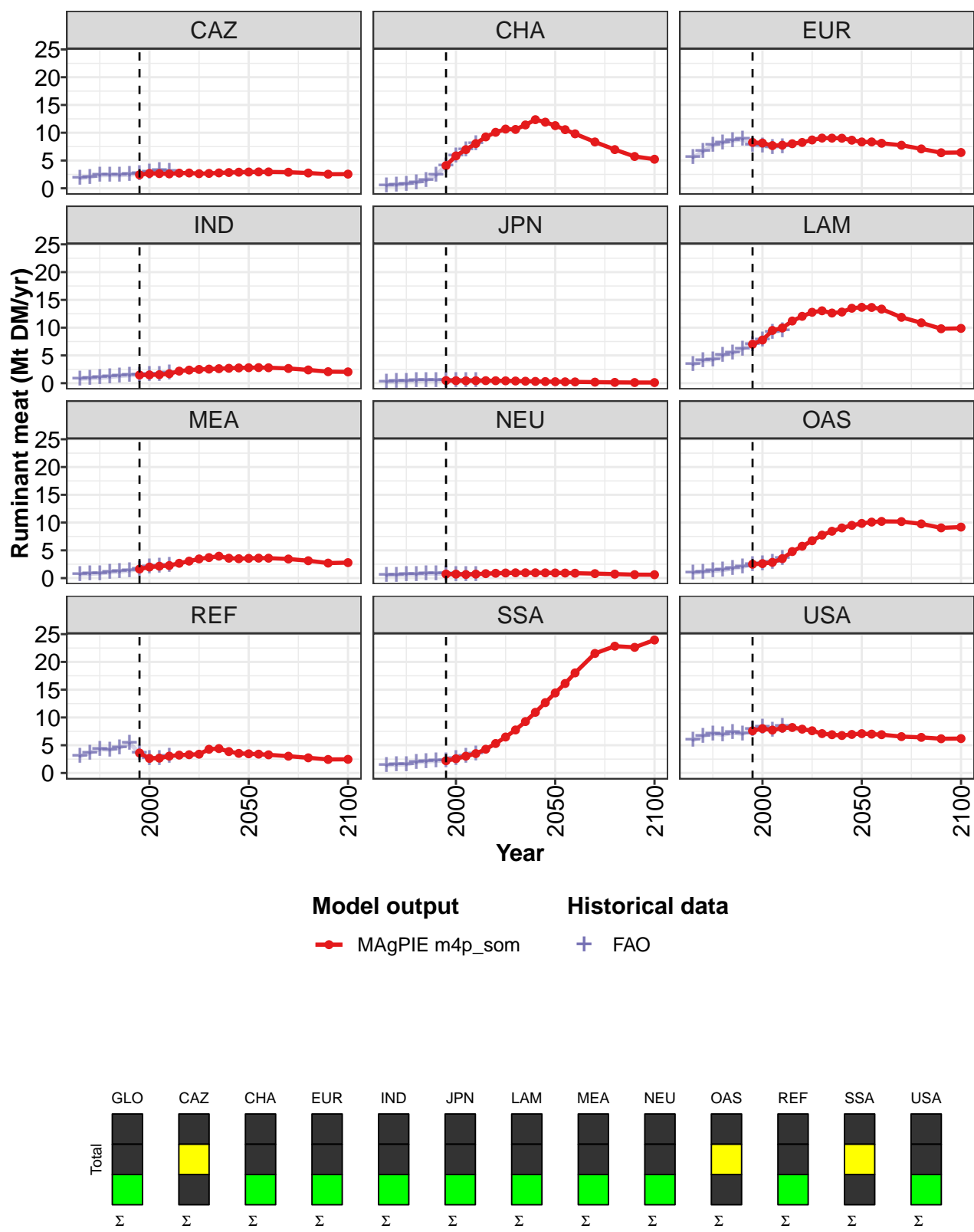


Figure 365: MagPIE m4p\_som — Production—Livestock products—Ruminant meat (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	42.0	44.9	47.8	51.6	57.8	62.1	66.3	69.8	72.7	75.1	77.1
CAZ	2.4	2.7	2.6	2.6	2.7	2.8	2.6	2.7	2.8	2.8	2.9
CHA	4.1	5.8	7.0	8.0	9.2	10.1	10.7	10.6	11.4	12.4	11.9
EUR	8.3	8.1	7.7	7.8	8.0	8.3	8.7	9.0	9.0	9.0	8.7
IND	1.5	1.5	1.5	1.7	2.2	2.4	2.5	2.5	2.6	2.7	2.7
JPN	0.5	0.5	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.3	0.3
LAM	7.0	7.8	9.5	9.9	11.2	12.0	12.8	13.0	12.6	12.8	13.5
MEA	1.6	2.0	2.1	2.3	2.7	3.1	3.5	3.7	3.9	3.6	3.5
NEU	0.7	0.7	0.6	0.7	0.8	0.9	0.9	1.0	1.0	1.0	1.0
OAS	2.5	2.6	2.8	3.5	4.8	5.7	6.7	7.7	8.4	9.0	9.5
REF	3.6	2.6	2.7	3.0	3.2	3.3	3.4	4.3	4.4	3.9	3.5
SSA	2.2	2.6	3.0	3.5	4.3	5.3	6.5	7.8	9.3	10.9	12.7
USA	7.6	8.0	7.7	8.1	8.2	7.9	7.6	7.1	6.9	6.8	6.9

Table 1431: MAgPIE m4p\_som — Production—Livestock products—Ruminant meat (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	78.6	79.6	80.1	79.2	75.8	70.3	71.5
CAZ	2.9	2.9	2.9	2.9	2.8	2.5	2.6
CHA	11.3	10.6	9.8	8.3	7.0	5.7	5.2
EUR	8.3	8.3	8.1	7.8	7.1	6.4	6.4
IND	2.8	2.8	2.8	2.7	2.4	2.1	2.0
JPN	0.3	0.2	0.2	0.2	0.1	0.1	0.1
LAM	13.7	13.6	13.3	11.9	10.9	9.8	9.9
MEA	3.6	3.6	3.6	3.4	3.1	2.7	2.8
NEU	0.9	0.9	0.9	0.8	0.7	0.6	0.6
OAS	9.8	10.1	10.2	10.2	9.8	9.0	9.2
REF	3.5	3.4	3.3	3.0	2.7	2.4	2.5
SSA	14.4	16.1	18.0	21.5	22.8	22.6	24.0
USA	7.1	7.0	6.9	6.6	6.4	6.2	6.2

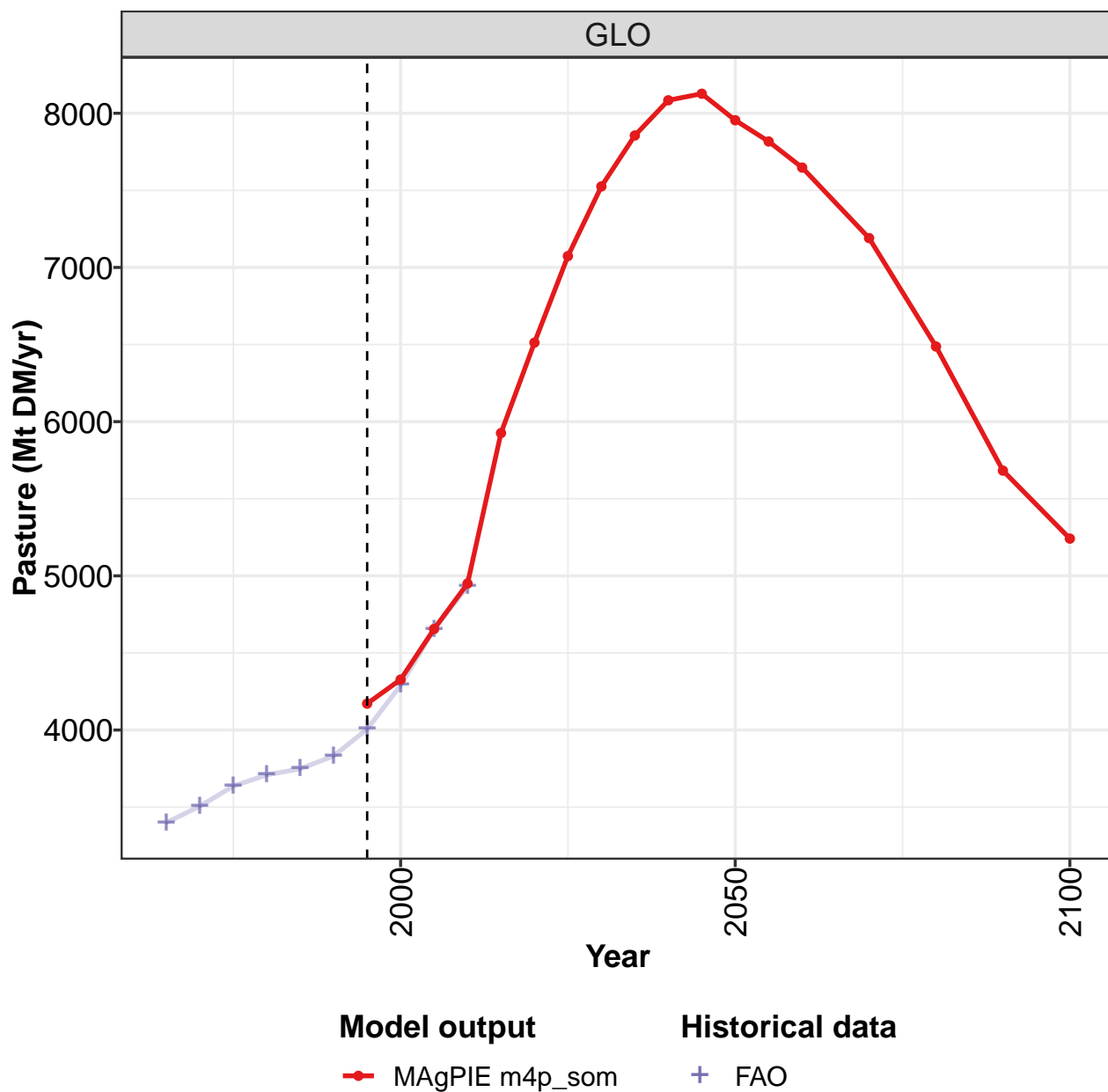
Table 1432: MAgPIE m4p\_som — Production—Livestock products—Ruminant meat (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	24.7	28.8	32.2	34.3	37.2	40.6	42.1	44.9	47.9	51.7
CAZ	1.8	2.0	2.3	2.4	2.3	2.4	2.7	3.0	3.2	3.0
CHA	0.5	0.6	0.8	1.0	1.4	2.4	4.1	5.8	6.9	8.0
EUR	5.5	6.6	7.7	8.2	8.6	8.8	7.8	7.6	7.4	7.5
IND	0.8	0.9	1.0	1.1	1.3	1.4	1.5	1.5	1.6	1.8
JPN	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.4
LAM	3.3	4.1	4.2	5.0	5.4	6.2	7.0	7.8	9.2	9.5
MEA	0.7	0.8	0.9	1.0	1.2	1.4	1.6	2.0	2.2	2.3
NEU	0.5	0.6	0.7	0.7	0.8	0.8	0.7	0.7	0.6	0.7
OAS	1.0	1.1	1.3	1.4	1.7	2.0	2.5	2.6	2.8	3.5
REF	3.0	3.6	4.3	4.2	4.6	5.3	3.6	2.6	2.7	3.0
SSA	1.4	1.5	1.6	1.9	2.1	2.2	2.2	2.6	3.0	3.5
USA	5.9	6.7	7.1	6.9	7.2	7.1	7.8	8.2	7.8	8.4

Table 1433: FAO — Production—Livestock products—Ruminant meat (Mt DM/yr)

## 49 Pasture

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

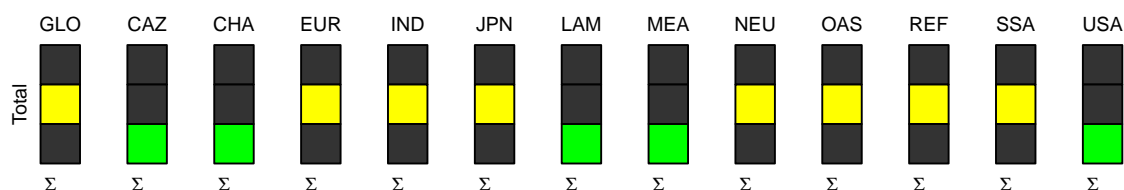
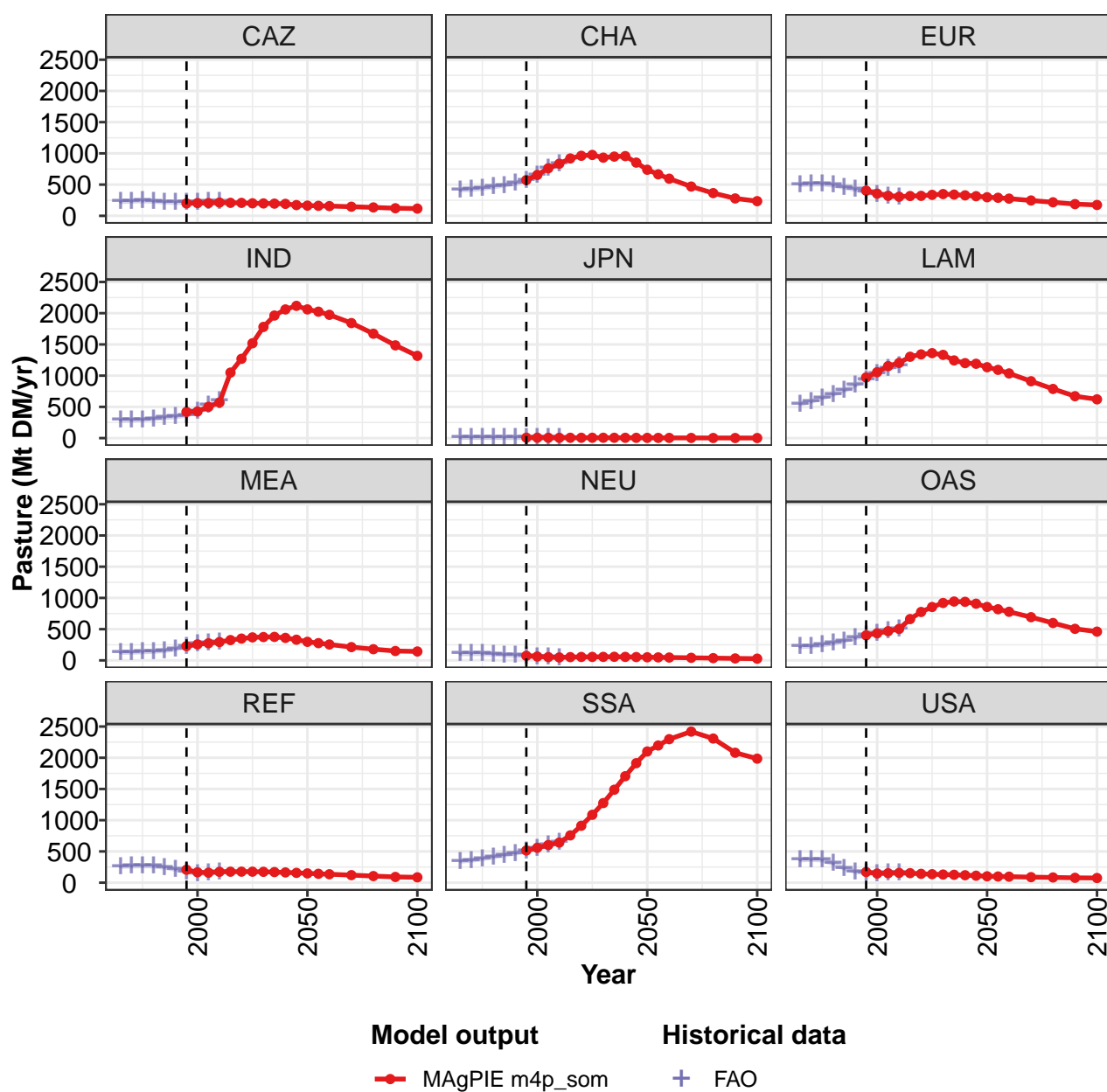


Figure 366: MAgPIE m4p\_som — Production—Pasture (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	4171	4327	4655	4950	5926	6513	7074	7526	7856	8084	8127
CAZ	199	204	204	213	208	208	201	199	196	192	172
CHA	573	655	762	835	919	961	975	931	949	957	853
EUR	404	355	321	306	317	320	336	349	340	328	315
IND	420	427	501	570	1049	1270	1519	1781	1963	2061	2118
JPN	7	7	6	5	5	6	6	6	5	5	5
LAM	972	1056	1153	1204	1303	1341	1361	1333	1244	1200	1191
MEA	228	257	274	294	325	349	369	374	376	360	331
NEU	73	62	53	47	52	55	56	56	58	56	53
OAS	401	434	468	504	662	775	855	919	942	938	908
REF	207	166	160	174	175	176	176	174	170	164	157
SSA	516	559	603	642	757	911	1086	1274	1488	1705	1913
USA	170	146	151	156	152	141	135	130	126	119	112

Table 1434: MAgPIE m4p\_som — Production—Pasture (Mt DM/yr) [PART 1/2]

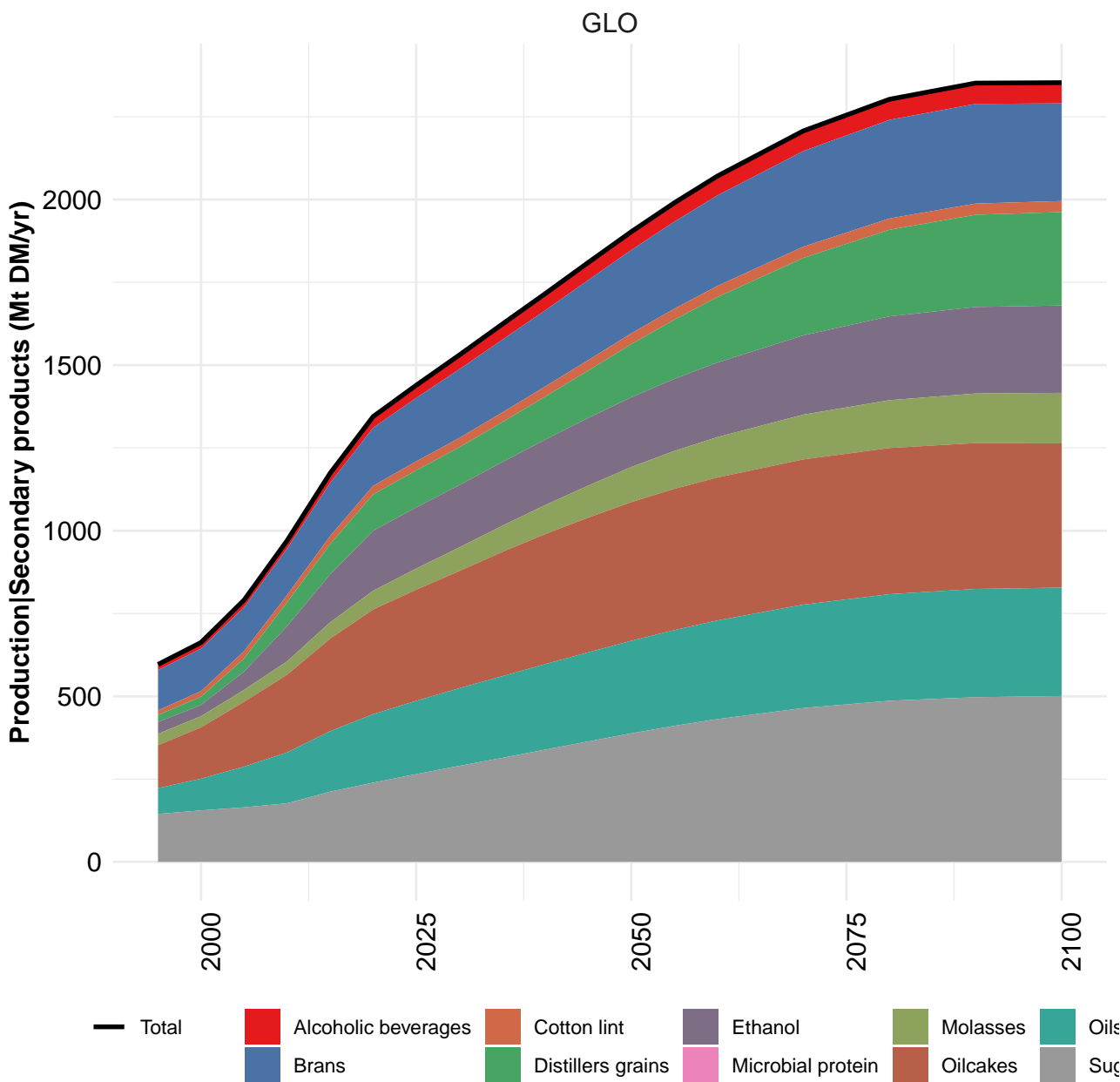
	2050	2055	2060	2070	2080	2090	2100
GLO	7955	7817	7648	7190	6487	5682	5241
CAZ	164	160	156	146	135	121	116
CHA	738	665	595	469	364	279	235
EUR	298	290	276	246	217	188	174
IND	2061	2025	1974	1842	1672	1485	1317
JPN	4	4	3	3	2	2	2
LAM	1135	1093	1036	911	787	671	621
MEA	297	276	255	213	179	150	143
NEU	50	48	46	41	36	31	28
OAS	856	819	778	691	598	505	461
REF	149	142	135	120	106	91	85
SSA	2100	2197	2298	2419	2307	2080	1986
USA	102	99	96	88	83	77	75

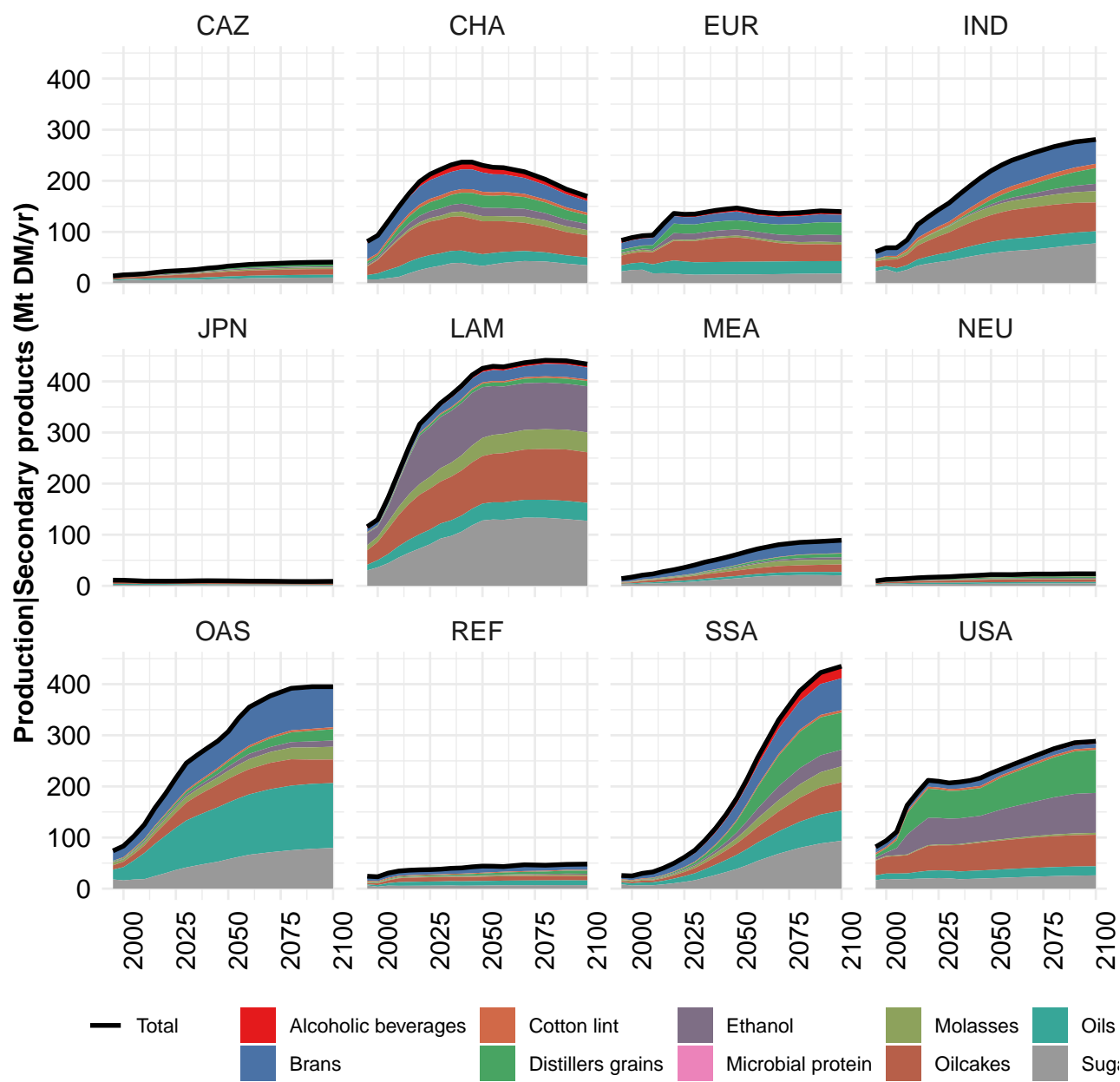
Table 1435: MAgPIE m4p\_som — Production—Pasture (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3399	3506	3636	3709	3748	3832	4006	4290	4653	4931
CAZ	225	234	239	233	220	212	215	223	229	231
CHA	414	422	438	463	490	521	572	657	760	832
EUR	499	509	510	491	457	421	381	339	309	296
IND	287	288	295	311	328	342	367	429	522	594
JPN	10	10	9	9	8	8	7	7	6	5
LAM	548	586	643	702	765	845	939	1034	1113	1157
MEA	127	130	136	142	156	183	222	260	284	294
NEU	105	107	107	101	89	78	68	59	51	47
OAS	218	228	246	273	313	360	402	438	475	503
REF	260	266	270	265	246	213	173	148	152	168
SSA	344	357	381	412	443	471	502	546	600	640
USA	362	371	361	307	230	177	157	149	152	162

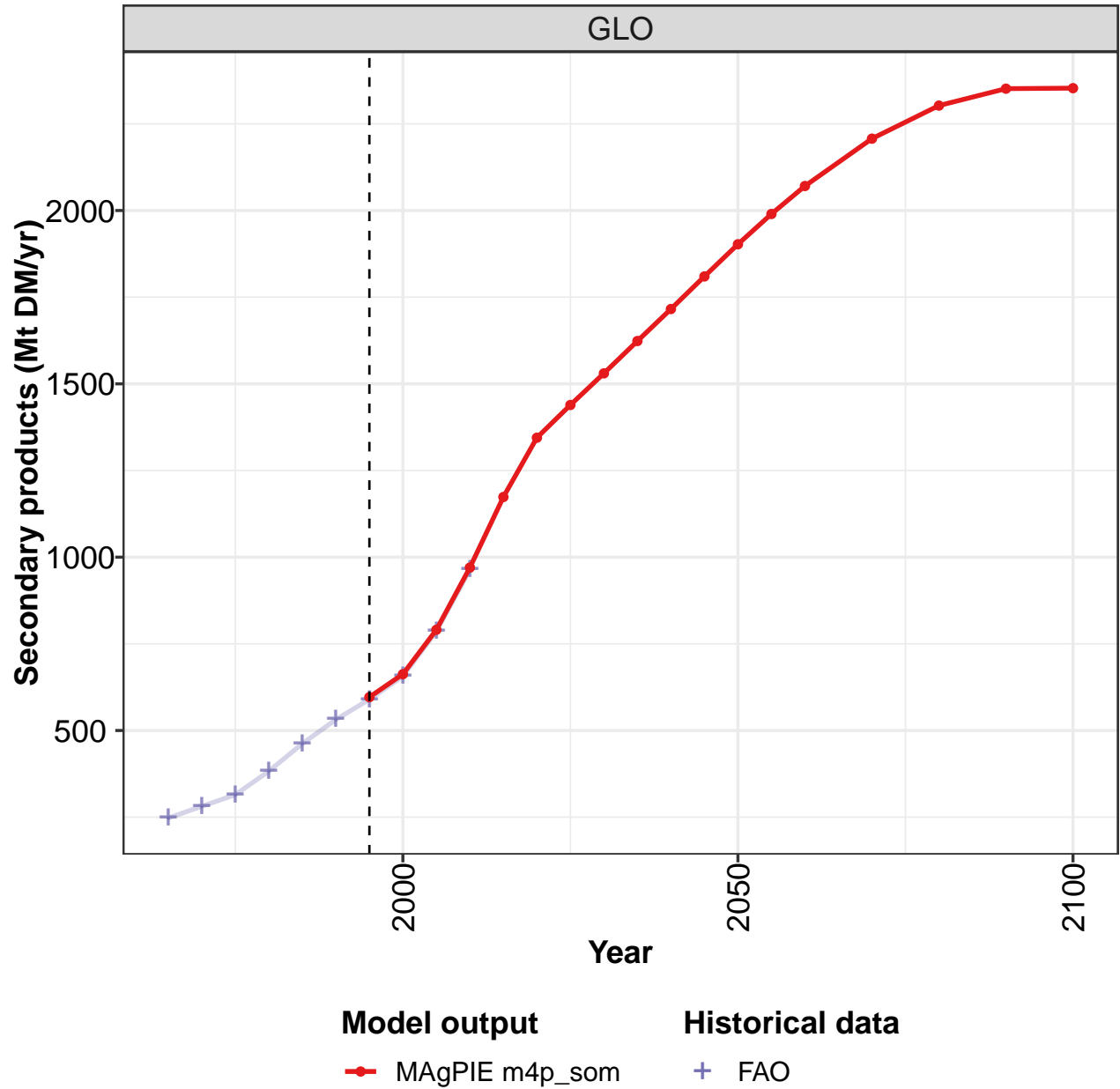
Table 1436: FAO — Production—Pasture (Mt DM/yr)

50 Secondary products





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

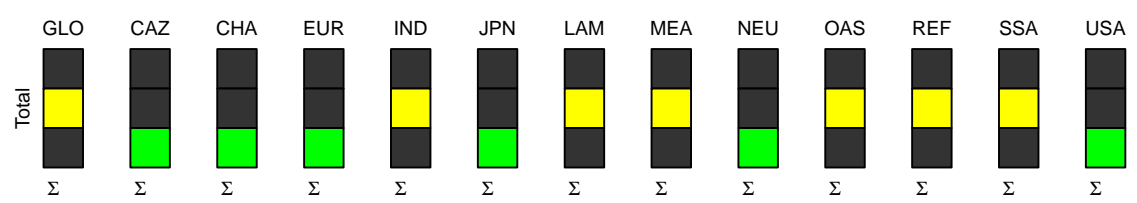
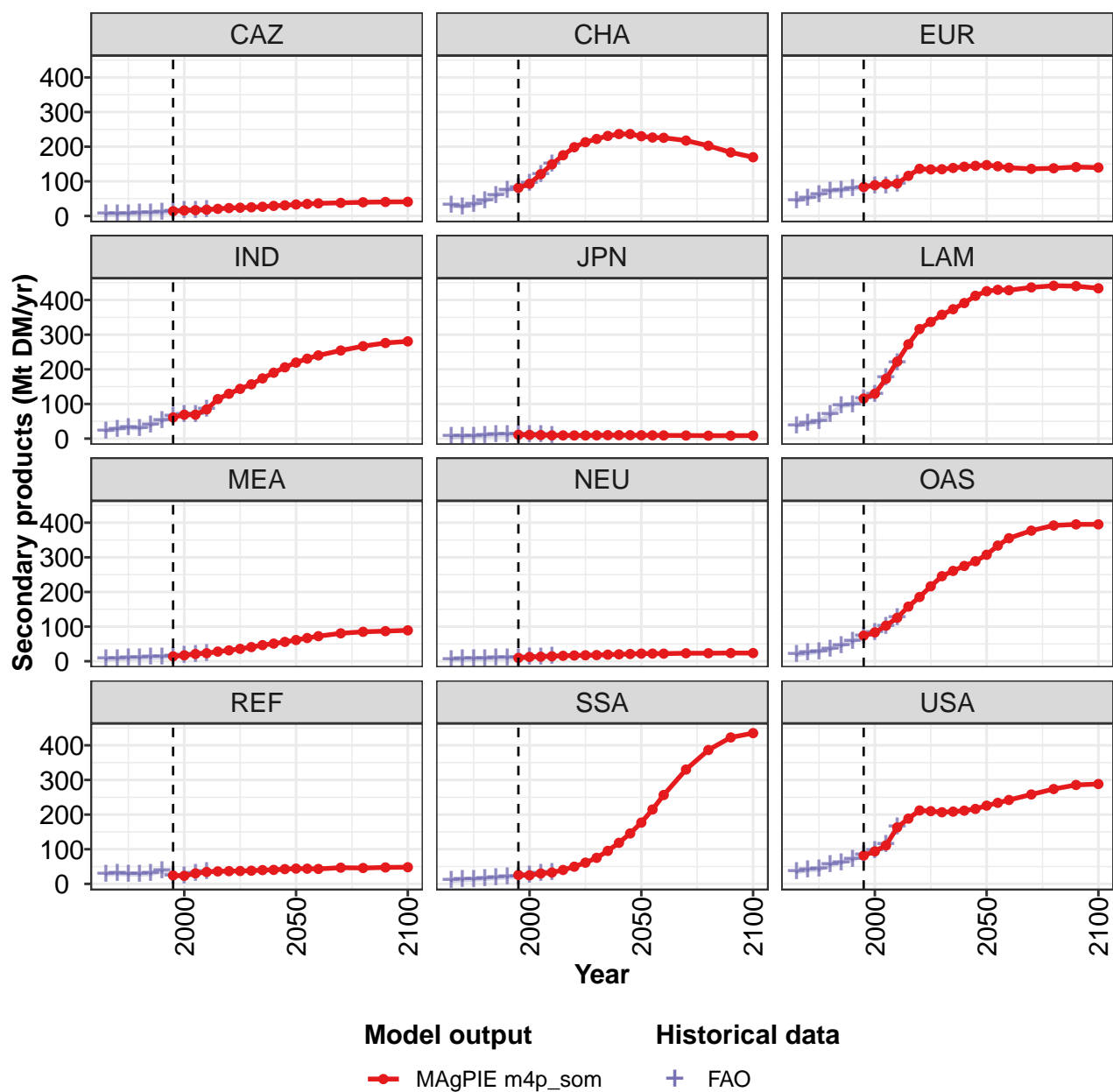


Figure 367: MAgPIE m4p\_som — Production—Secondary products (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	596	663	791	970	1174	1345	1439	1530	1624	1716	1810
CAZ	14	16	17	18	21	23	24	25	27	29	31
CHA	81	93	121	149	175	199	213	222	231	237	237
EUR	84	89	93	94	116	136	134	135	139	142	145
IND	61	69	69	84	114	129	144	157	174	190	206
JPN	11	11	10	9	9	9	9	10	10	10	10
LAM	116	130	173	222	272	316	337	358	373	391	412
MEA	14	17	21	23	28	31	36	41	47	51	56
NEU	10	12	13	14	16	17	17	18	19	20	21
OAS	74	83	103	125	158	185	216	246	261	275	289
REF	24	23	30	34	36	37	37	38	40	40	43
SSA	26	25	30	33	40	50	61	75	95	119	146
USA	82	94	111	163	188	212	210	207	209	211	216

Table 1437: MAgPIE m4p\_som — Production—Secondary products (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1903	1990	2071	2207	2303	2352	2353
CAZ	33	35	36	38	40	41	41
CHA	230	226	226	218	203	184	170
EUR	147	143	139	136	138	141	140
IND	220	231	240	254	267	276	281
JPN	10	10	9	9	9	9	9
LAM	426	430	428	437	441	440	434
MEA	61	67	72	81	85	87	89
NEU	22	22	22	23	23	24	24
OAS	307	334	355	377	392	395	395
REF	44	44	43	47	46	47	48
SSA	177	215	257	330	386	423	435
USA	226	234	242	258	274	286	288

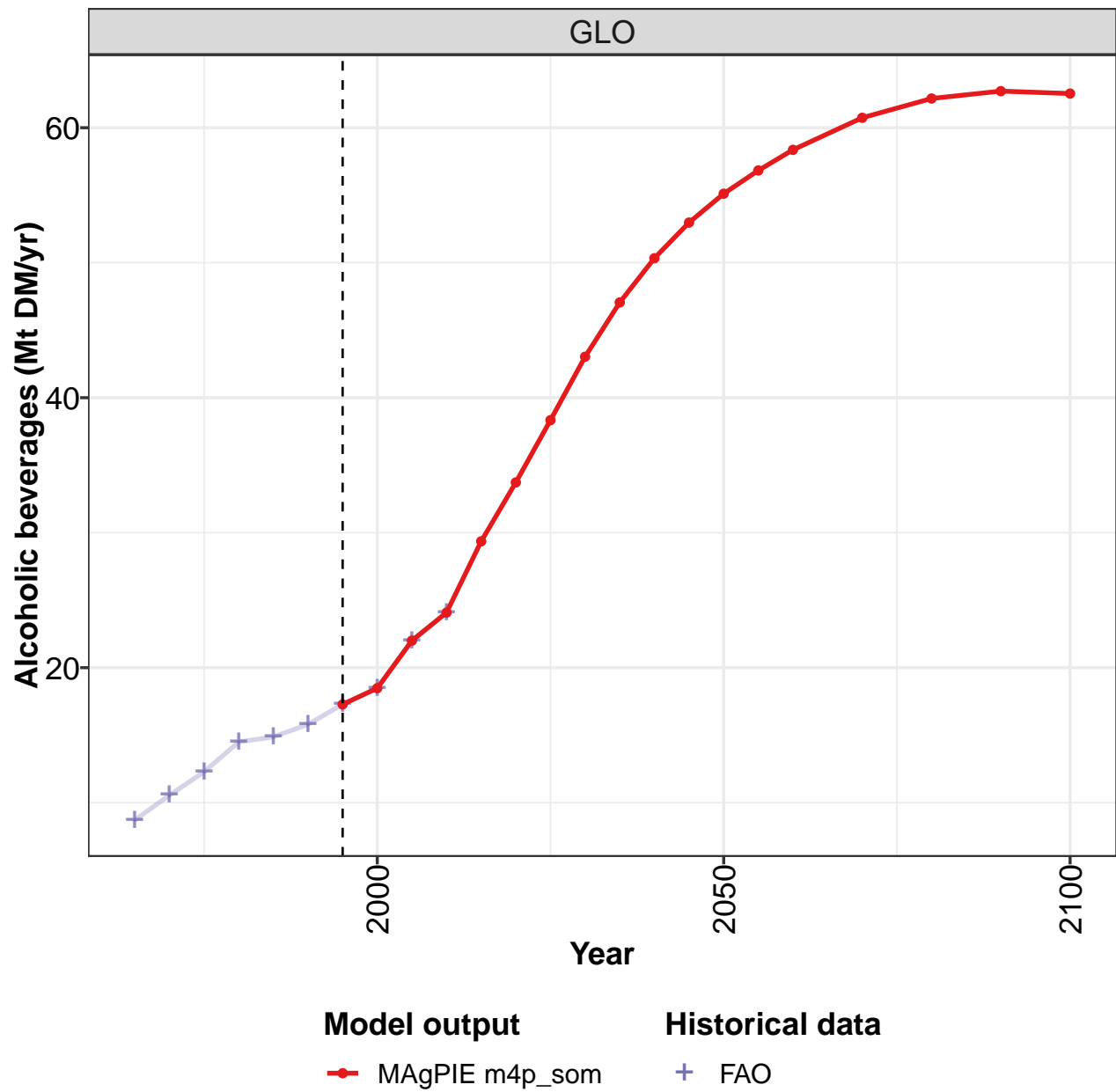
Table 1438: MAgPIE m4p\_som — Production—Secondary products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	247	281	315	383	462	532	590	657	786	964
CAZ	5	6	7	8	9	10	13	16	16	18
CHA	30	27	32	43	60	75	81	93	120	149
EUR	45	51	60	72	74	79	82	86	88	92
IND	23	28	32	30	40	51	64	69	69	84
JPN	5	7	7	9	11	11	11	11	10	9
LAM	37	44	49	70	94	98	115	127	175	218
MEA	6	8	9	10	12	12	14	17	20	23
NEU	5	6	7	8	9	10	9	11	13	14
OAS	19	23	28	35	46	58	73	83	101	126
REF	28	30	28	28	30	37	23	22	30	34
SSA	9	12	13	15	17	20	21	25	30	32
USA	35	40	42	56	62	70	83	96	114	164

Table 1439: FAO — Production—Secondary products (Mt DM/yr)

50.1 Alcoholic beverages

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

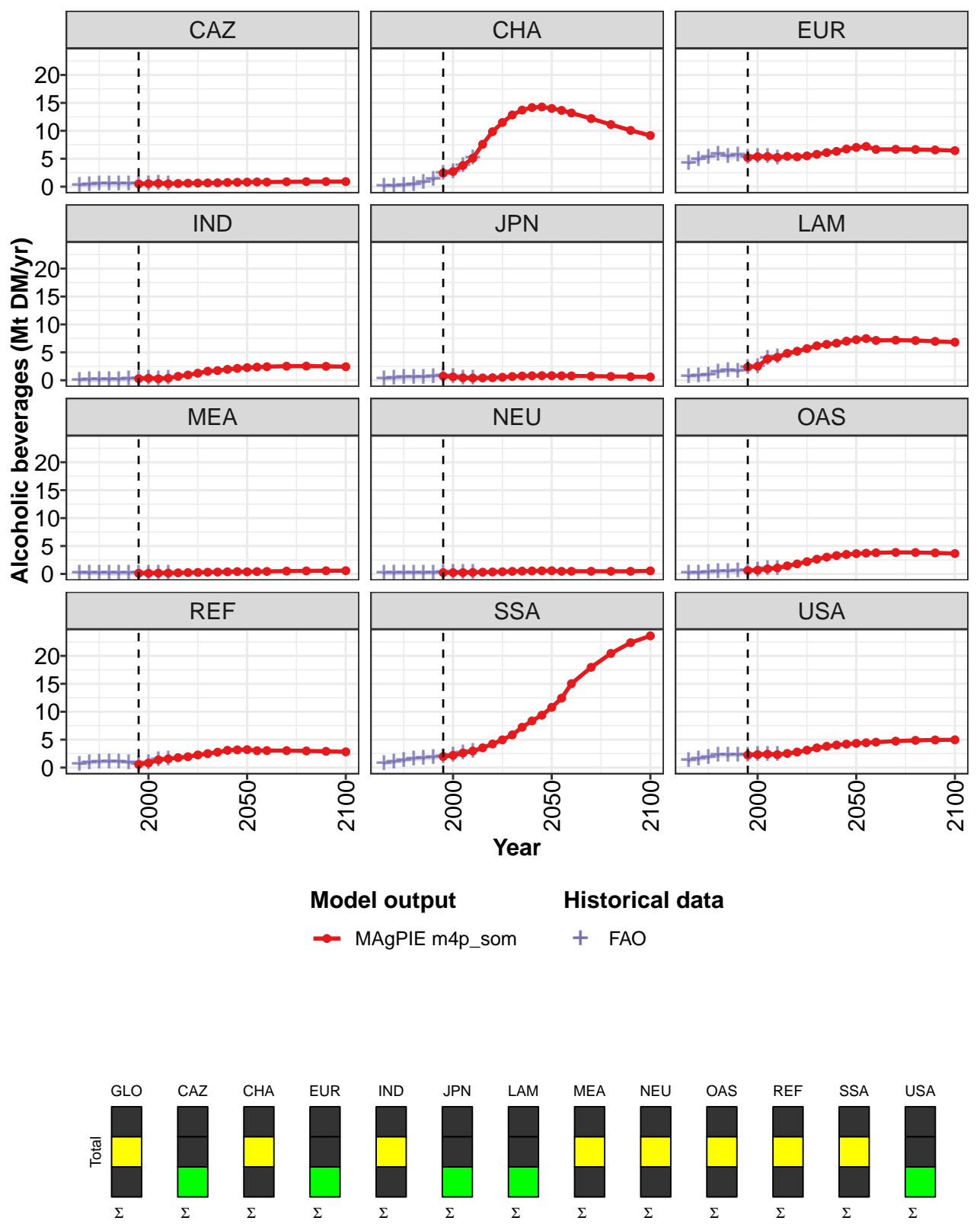


Figure 368: MAgPIE m4p\_som — Production—Secondary products—Alcoholic beverages (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	17.3	18.5	22.0	24.1	29.4	33.7	38.3	43.0	47.1	50.3	53.0
CAZ	0.5	0.5	0.6	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.8
CHA	2.4	2.7	3.8	5.1	7.6	9.8	11.5	12.8	13.7	14.2	14.3
EUR	5.2	5.4	5.4	5.2	5.4	5.3	5.5	5.8	6.1	6.3	6.7
IND	0.3	0.4	0.3	0.4	0.7	1.0	1.3	1.6	1.7	2.0	2.1
JPN	0.7	0.6	0.4	0.4	0.4	0.5	0.5	0.7	0.8	0.8	0.8
LAM	2.4	2.5	3.8	4.1	4.8	5.2	5.7	6.2	6.4	6.6	7.0
MEA	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4
NEU	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.6
OAS	0.6	0.7	0.9	1.1	1.4	1.8	2.2	2.6	3.0	3.3	3.5
REF	0.6	0.8	1.4	1.6	1.8	1.9	2.3	2.5	2.8	3.1	3.2
SSA	2.0	2.2	2.6	3.0	3.5	4.2	5.0	5.9	7.2	8.4	9.4
USA	2.2	2.3	2.4	2.3	2.5	2.8	3.1	3.5	3.8	4.0	4.2

Table 1440: MAgPIE m4p\_som — Production—Secondary products—Alcoholic beverages (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	55.1	56.8	58.4	60.7	62.2	62.7	62.5
CAZ	0.8	0.8	0.8	0.9	0.9	0.9	0.9
CHA	14.0	13.7	13.2	12.2	11.1	10.1	9.2
EUR	7.0	7.2	6.7	6.7	6.7	6.6	6.4
IND	2.3	2.4	2.4	2.5	2.5	2.5	2.4
JPN	0.8	0.8	0.8	0.7	0.7	0.6	0.6
LAM	7.3	7.5	7.1	7.2	7.1	7.0	6.8
MEA	0.4	0.4	0.4	0.5	0.5	0.6	0.6
NEU	0.6	0.5	0.5	0.5	0.5	0.5	0.6
OAS	3.6	3.7	3.8	3.9	3.8	3.8	3.6
REF	3.2	3.0	3.0	3.0	3.0	2.9	2.8
SSA	10.8	12.4	15.0	18.0	20.4	22.4	23.6
USA	4.3	4.4	4.5	4.7	4.9	4.9	5.0

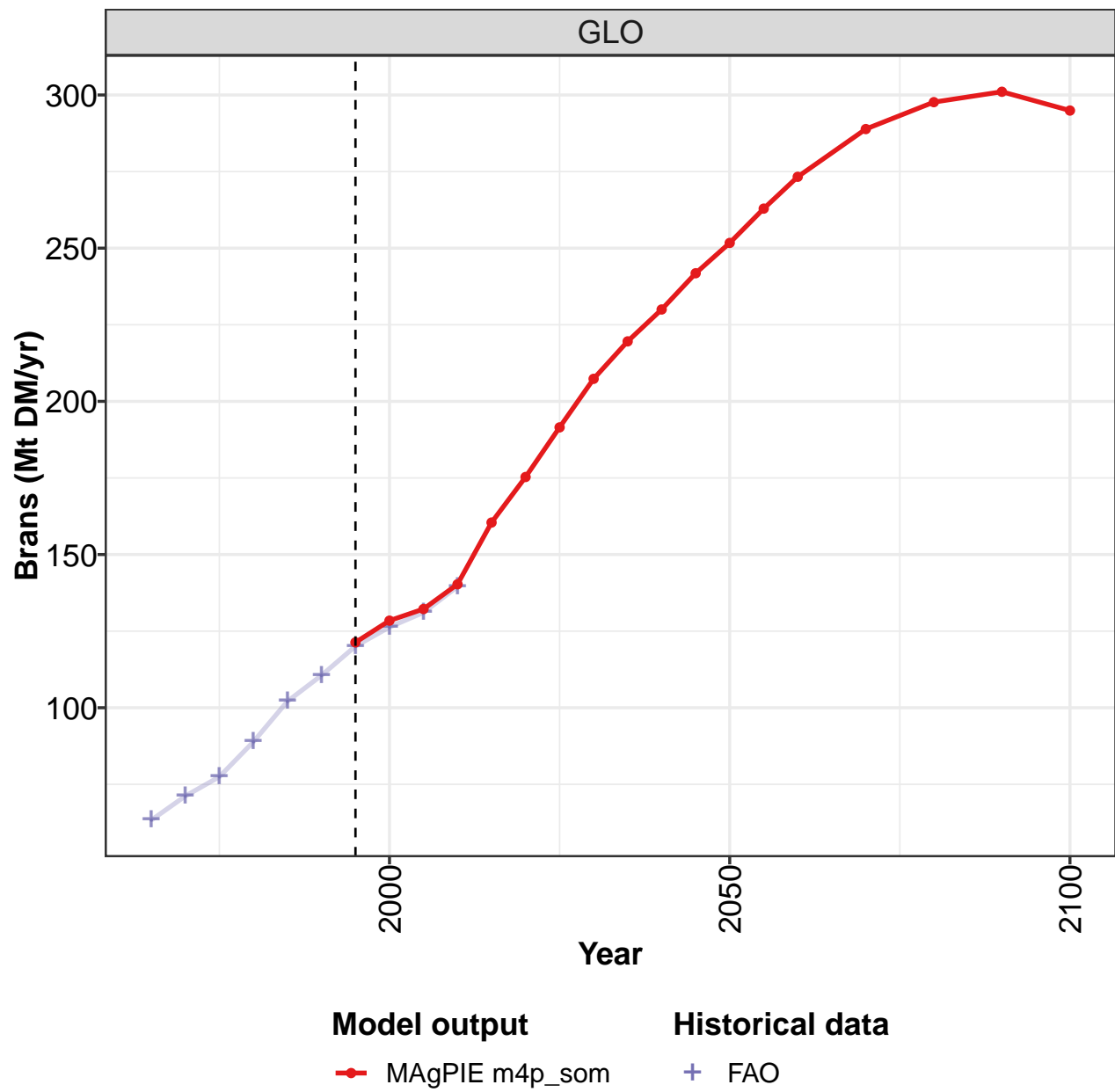
Table 1441: MAgPIE m4p\_som — Production—Secondary products—Alcoholic beverages (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	8.7	10.5	12.3	14.5	14.9	15.8	17.3	18.5	22.0	24.1
CAZ	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5
CHA	0.1	0.1	0.2	0.4	0.8	1.3	2.4	2.7	3.8	5.1
EUR	4.2	4.9	5.3	5.8	5.4	5.6	5.2	5.4	5.3	5.1
IND	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.3	0.4
JPN	0.3	0.4	0.5	0.6	0.6	0.7	0.7	0.6	0.4	0.4
LAM	0.7	0.8	1.0	1.6	1.8	1.7	2.4	2.5	3.9	4.2
MEA	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
NEU	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
OAS	0.1	0.2	0.3	0.4	0.5	0.5	0.6	0.7	0.9	1.0
REF	0.6	0.9	1.0	1.1	1.1	0.9	0.6	0.8	1.4	1.6
SSA	0.8	1.0	1.3	1.5	1.6	1.8	1.9	2.2	2.6	3.0
USA	1.2	1.5	1.8	2.2	2.2	2.3	2.2	2.3	2.4	2.3

Table 1442: FAO — Production—Secondary products—Alcoholic beverages (Mt DM/yr)

50.2 Brans

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

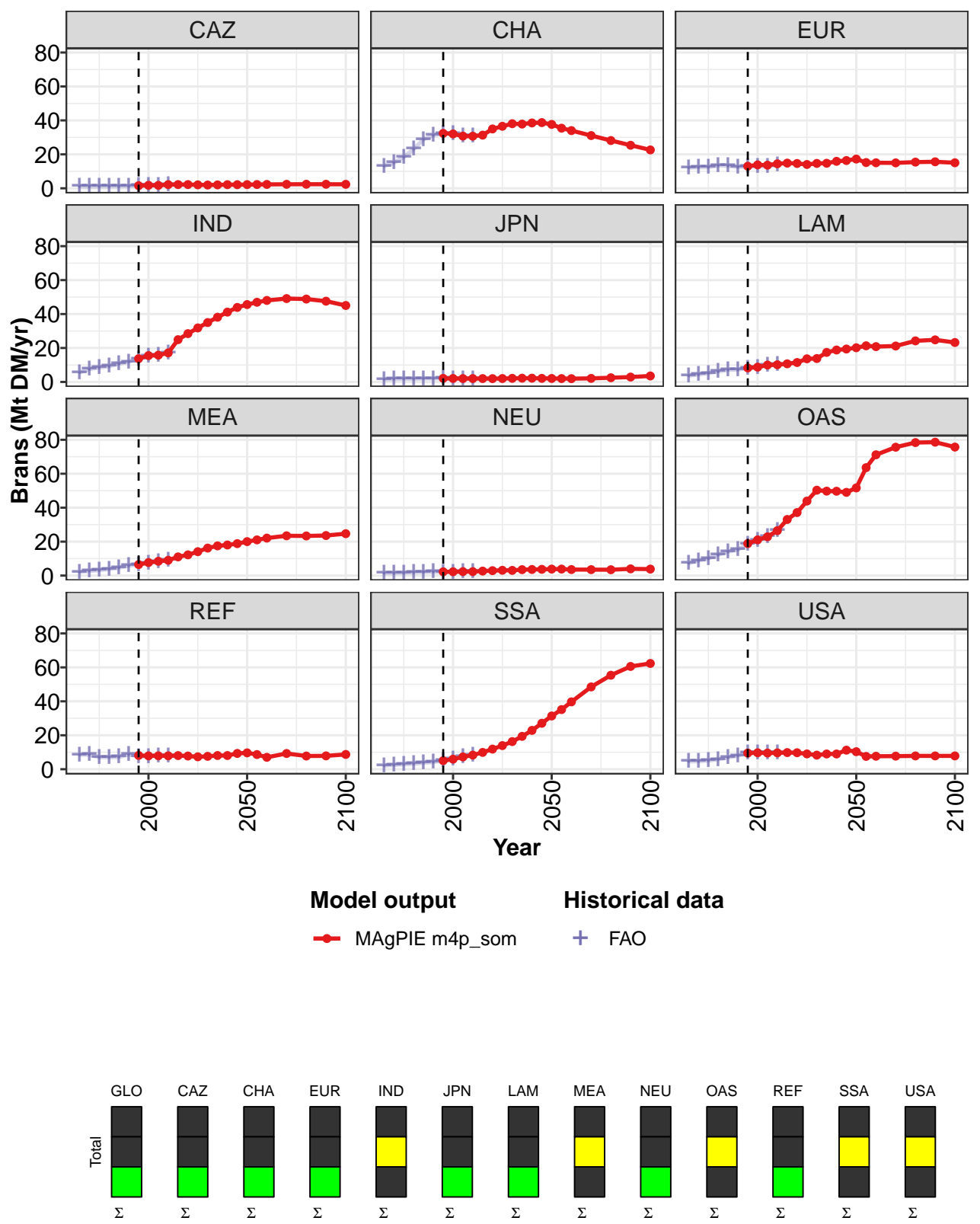


Figure 369: MAgPIE m4p\_som — Production—Secondary products—Brans (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	121	128	132	140	160	175	192	207	220	230	242
CAZ	2	2	2	2	2	2	2	2	2	2	2
CHA	32	32	31	31	31	35	37	38	38	39	39
EUR	13	14	14	14	15	15	14	15	15	16	16
IND	14	16	16	17	25	28	32	35	38	41	44
JPN	2	2	2	2	2	2	2	2	2	2	2
LAM	8	9	10	10	11	11	14	14	17	19	19
MEA	7	8	8	9	11	12	14	16	18	18	19
NEU	2	2	2	2	3	3	3	3	3	4	4
OAS	19	21	23	26	33	37	44	50	50	50	49
REF	8	8	8	8	8	8	7	8	8	8	9
SSA	5	6	7	8	10	12	14	16	19	23	27
USA	10	10	10	10	10	10	9	8	9	9	11

Table 1443: MAgPIE m4p\_som — Production—Secondary products—Brans (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	252	263	273	289	298	301	295
CAZ	2	2	2	2	2	2	2
CHA	38	35	34	31	28	25	23
EUR	17	15	15	15	15	16	15
IND	46	47	48	49	49	48	45
JPN	2	2	2	2	2	3	4
LAM	20	21	21	21	24	25	23
MEA	20	21	22	23	23	24	25
NEU	4	4	4	4	3	4	4
OAS	52	64	71	76	78	79	76
REF	10	9	7	9	8	8	9
SSA	31	35	40	48	55	61	62
USA	10	8	8	8	8	8	8

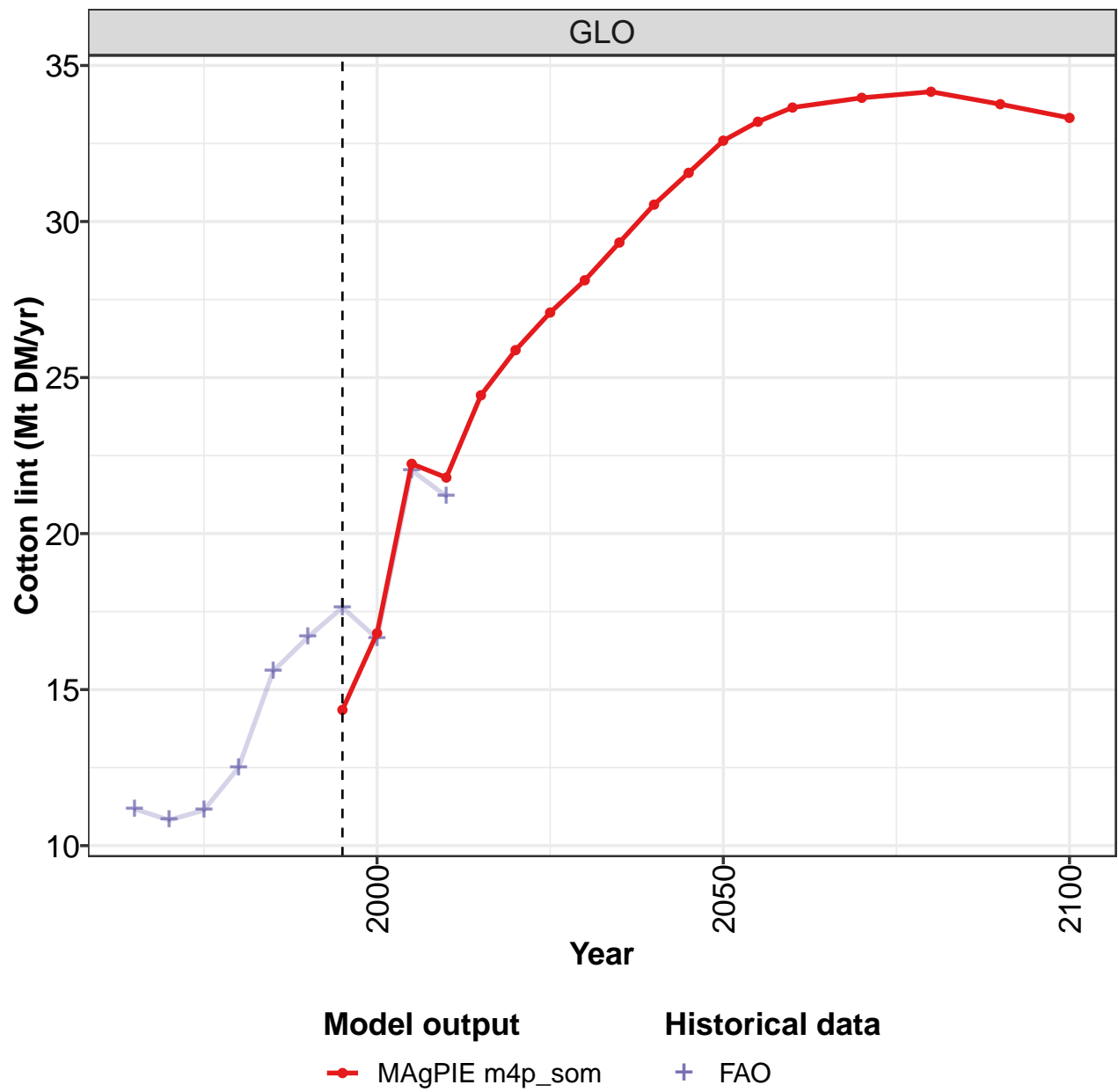
Table 1444: MAgPIE m4p\_som — Production—Secondary products—Brans (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	63	71	77	89	102	111	120	126	131	140
CAZ	1	1	1	1	1	1	2	2	2	2
CHA	13	15	18	23	29	31	32	32	31	31
EUR	12	12	12	13	13	13	13	13	13	14
IND	6	8	9	9	11	12	14	16	16	17
JPN	2	2	2	2	2	2	2	2	2	2
LAM	4	4	5	6	7	7	8	9	10	10
MEA	2	3	3	4	5	6	7	7	8	9
NEU	1	2	2	2	2	2	2	2	2	2
OAS	7	9	10	12	14	15	19	21	23	26
REF	9	9	7	7	7	9	8	8	8	8
SSA	2	3	3	3	4	4	5	6	7	8
USA	5	5	5	6	7	8	10	10	10	10

Table 1445: FAO — Production—Secondary products—Brans (Mt DM/yr)

50.3 Cotton lint

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
 replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

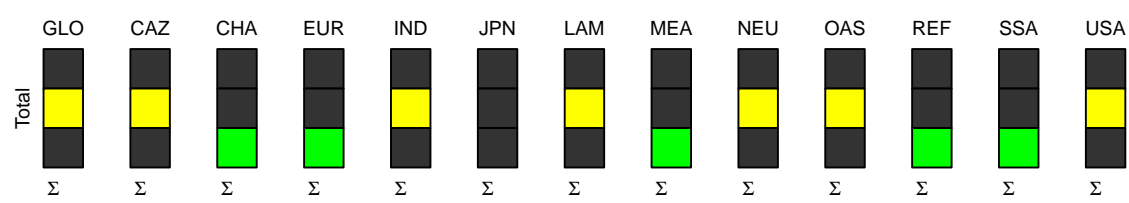
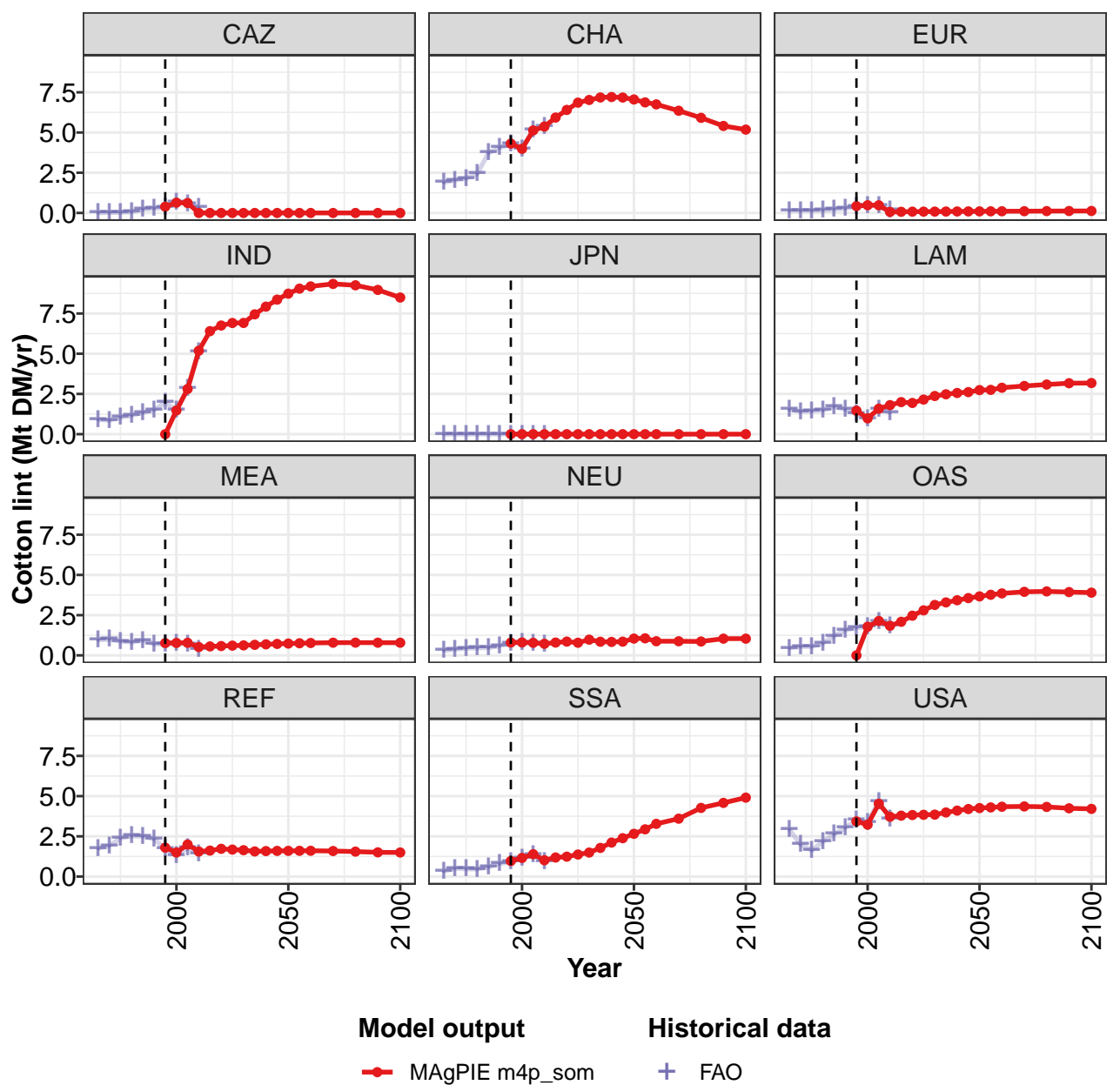


Figure 370: MAgPIE m4p\_som — Production—Secondary products—Cotton lint (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	14.4	16.8	22.2	21.8	24.4	25.9	27.1	28.1	29.3	30.5	31.6
CAZ	0.4	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	4.3	4.0	5.1	5.4	5.9	6.4	6.9	7.0	7.2	7.2	7.2
EUR	0.4	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
IND	0.0	1.5	2.8	5.2	6.4	6.8	6.9	6.9	7.4	7.9	8.4
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.5	1.0	1.6	1.8	2.0	1.9	2.2	2.4	2.5	2.6	2.6
MEA	0.8	0.8	0.8	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.7
NEU	0.8	0.8	0.8	0.7	0.8	0.9	0.8	1.0	0.8	0.8	0.9
OAS	0.0	1.8	2.1	1.8	2.1	2.5	2.8	3.1	3.3	3.4	3.6
REF	1.8	1.5	2.0	1.6	1.6	1.7	1.7	1.6	1.6	1.6	1.6
SSA	1.0	1.2	1.4	1.0	1.2	1.2	1.4	1.5	1.8	2.1	2.4
USA	3.4	3.2	4.5	3.7	3.8	3.8	3.8	3.9	4.0	4.1	4.2

Table 1446: MAgPIE m4p\_som — Production—Secondary products—Cotton lint (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	32.6	33.2	33.7	34.0	34.2	33.8	33.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	7.1	6.9	6.8	6.4	5.9	5.4	5.2
EUR	0.1	0.1	0.1	0.1	0.1	0.1	0.1
IND	8.7	9.0	9.2	9.3	9.3	9.0	8.5
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	2.7	2.8	2.9	3.0	3.1	3.2	3.2
MEA	0.7	0.8	0.8	0.8	0.8	0.8	0.8
NEU	1.0	1.1	0.9	0.9	0.9	1.0	1.0
OAS	3.7	3.8	3.9	4.0	4.0	3.9	3.9
REF	1.6	1.6	1.6	1.6	1.6	1.5	1.5
SSA	2.7	2.9	3.3	3.6	4.3	4.6	4.9
USA	4.3	4.3	4.3	4.4	4.3	4.2	4.2

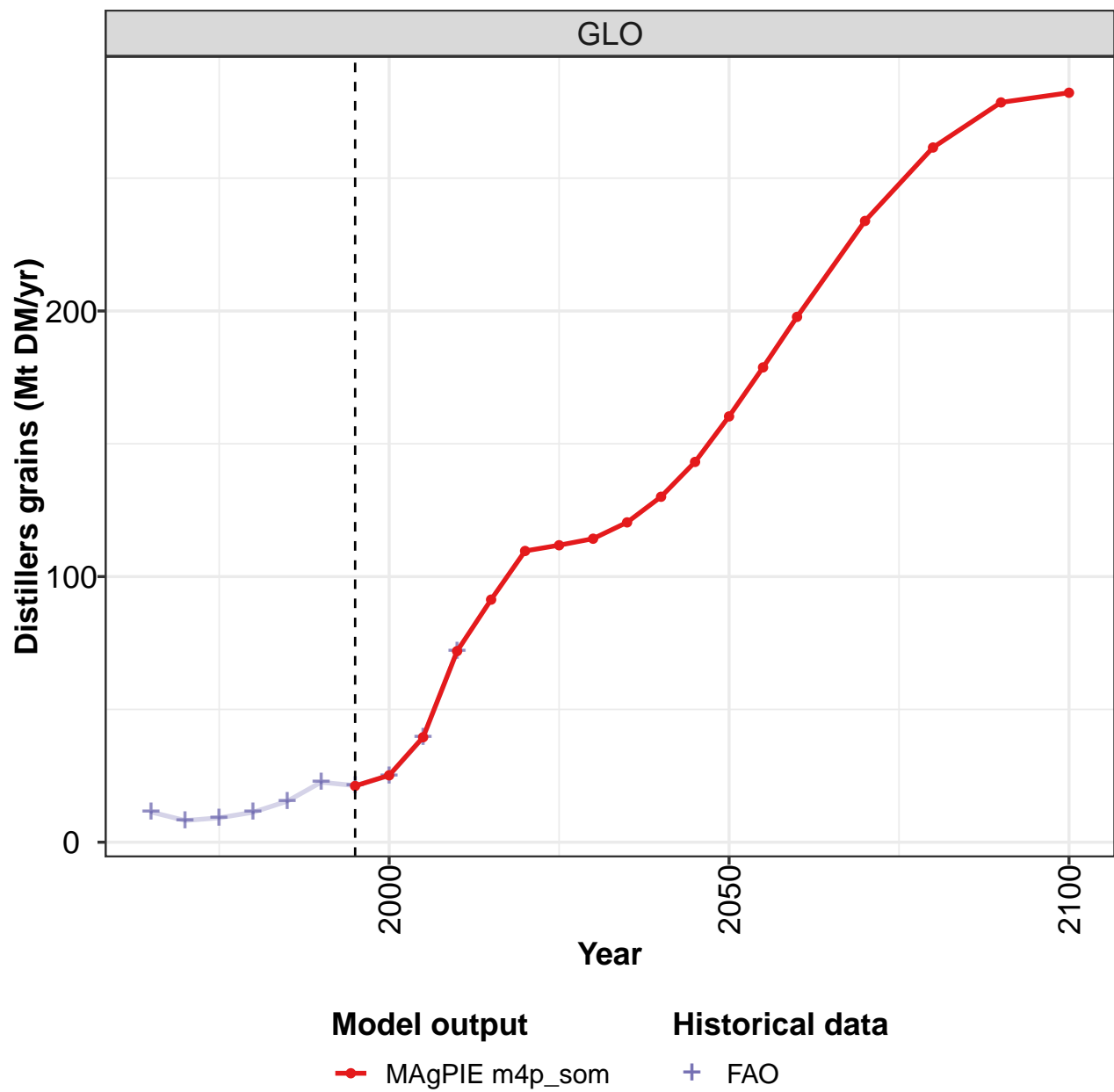
Table 1447: MAgPIE m4p\_som — Production—Secondary products—Cotton lint (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	11.2	10.8	11.1	12.5	15.6	16.7	17.6	16.6	22.0	21.2
CAZ	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.7	0.6	0.3
CHA	1.9	2.1	2.1	2.4	3.7	4.1	4.3	4.0	5.1	5.4
EUR	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.5	0.2
IND	0.9	0.9	1.0	1.2	1.3	1.5	2.0	1.5	2.8	5.1
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.5	1.4	1.4	1.5	1.7	1.5	1.3	1.0	1.6	1.3
MEA	1.0	1.0	0.9	0.8	0.9	0.7	0.7	0.7	0.7	0.4
NEU	0.3	0.4	0.4	0.5	0.5	0.6	0.8	0.8	0.8	0.7
OAS	0.4	0.5	0.5	0.8	1.2	1.6	1.7	1.8	2.1	1.8
REF	1.7	1.9	2.4	2.5	2.5	2.3	1.7	1.3	1.8	1.4
SSA	0.3	0.5	0.5	0.5	0.6	0.8	0.9	1.1	1.4	0.9
USA	2.9	2.0	1.6	2.2	2.6	3.0	3.5	3.4	4.7	3.5

Table 1448: FAO — Production—Secondary products—Cotton lint (Mt DM/yr)

50.4 Distillers grains

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

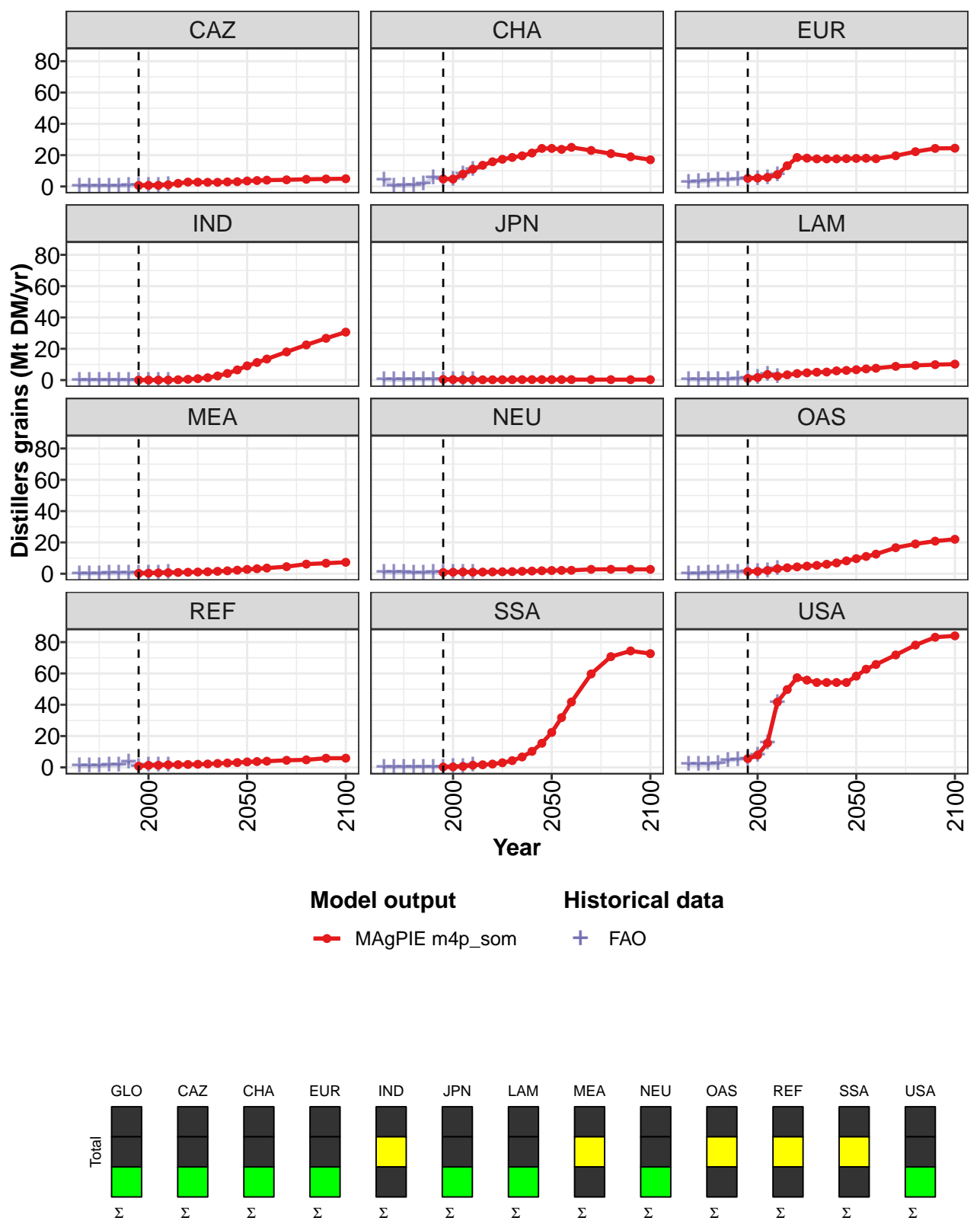


Figure 371: MAGPIE m4p\_som — Production—Secondary products—Distillers grains (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	21	25	40	72	91	110	112	114	120	130	143
CAZ	1	1	1	1	2	3	3	3	3	3	3
CHA	5	5	8	11	14	16	17	19	20	21	24
EUR	5	5	6	8	13	18	18	18	18	18	18
IND	0	0	0	0	0	0	1	2	3	4	7
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	1	2	4	2	3	4	5	5	5	6	6
MEA	0	0	1	1	1	1	1	1	2	2	2
NEU	1	1	1	1	1	1	1	1	2	2	2
OAS	1	2	2	3	4	4	5	5	6	7	8
REF	1	1	1	2	2	2	2	2	2	3	3
SSA	0	0	1	1	2	2	3	4	7	10	15
USA	6	8	15	42	50	57	56	54	54	54	54

Table 1449: MAgPIE m4p.som — Production—Secondary products—Distillers grains (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	160	179	198	234	262	279	282
CAZ	4	4	4	4	5	5	5
CHA	24	24	25	23	21	19	17
EUR	18	18	18	20	22	24	24
IND	9	11	13	18	22	27	31
JPN	0	0	0	0	0	0	0
LAM	7	7	8	9	9	10	10
MEA	3	3	4	5	6	7	7
NEU	2	2	2	3	3	3	3
OAS	10	11	13	17	19	21	22
REF	3	4	4	5	5	6	6
SSA	22	32	42	60	71	74	73
USA	58	63	66	72	78	83	84

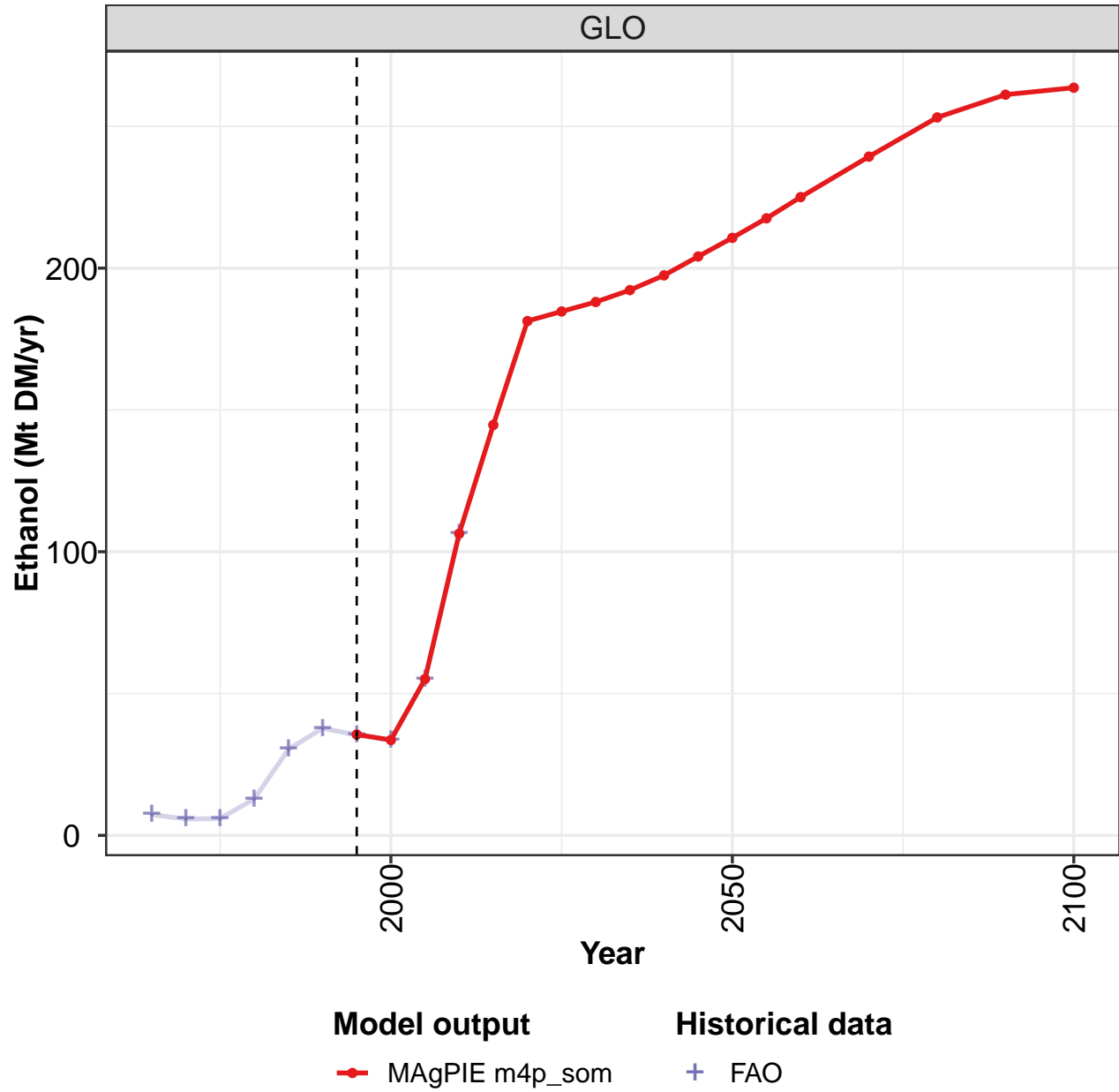
Table 1450: MAgPIE m4p.som — Production—Secondary products—Distillers grains (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	11.3	8.2	9.2	11.3	15.4	22.6	21.3	25.0	39.3	71.8
CAZ	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.8	0.7	1.1
CHA	4.0	0.4	0.6	0.8	1.6	5.7	4.8	4.7	7.9	11.1
EUR	2.8	3.0	3.5	4.0	4.3	4.7	5.3	5.2	5.7	7.4
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.3	0.3	0.2
LAM	0.3	0.3	0.4	0.5	0.6	0.9	1.1	1.7	3.6	2.5
MEA	0.0	0.1	0.1	0.2	0.3	0.2	0.3	0.4	0.5	0.7
NEU	0.9	0.8	0.9	0.6	0.6	0.7	0.8	0.9	1.1	1.0
OAS	0.1	0.2	0.2	0.4	0.8	1.0	1.4	1.5	2.1	3.2
REF	0.8	0.8	0.9	1.3	1.7	3.2	0.7	1.3	1.3	1.6
SSA	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.3	0.6	1.4
USA	1.8	1.8	1.9	2.3	4.3	5.0	5.6	7.9	15.5	41.7

Table 1451: FAO — Production—Secondary products—Distillers grains (Mt DM/yr)

50.5 Ethanol

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

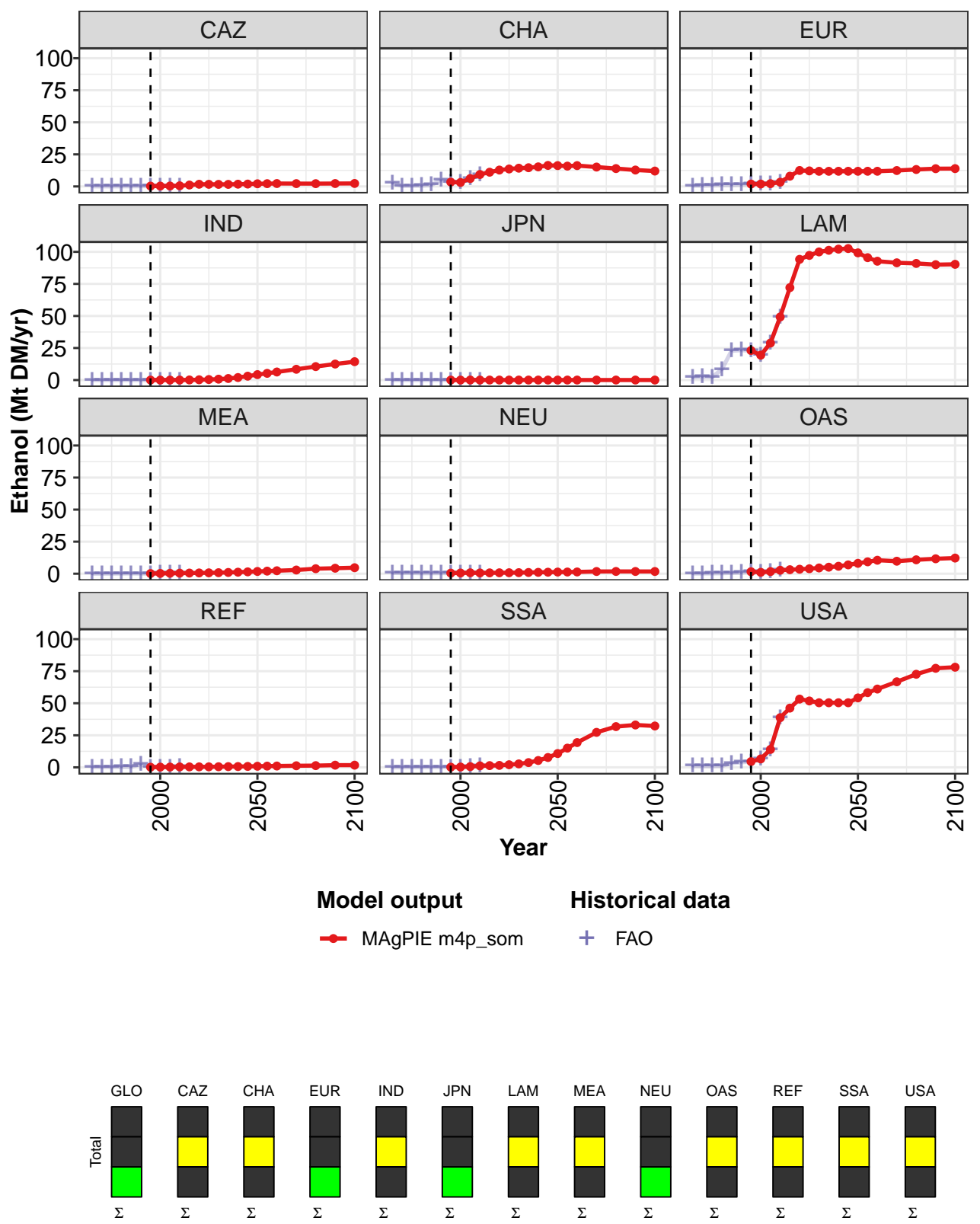


Figure 372: MAgPIE m4p\_som — Production—Secondary products—Ethanol (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	36	34	55	106	145	181	185	188	192	197	204
CAZ	0	0	0	1	1	2	2	2	2	2	2
CHA	3	3	6	9	11	13	14	14	15	15	16
EUR	2	2	2	3	8	12	12	12	12	12	12
IND	0	0	0	0	0	0	0	1	1	2	3
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	23	19	29	49	72	94	97	100	101	102	103
MEA	0	0	0	0	1	1	1	1	1	1	1
NEU	0	1	1	1	1	1	1	1	1	1	1
OAS	2	1	2	3	3	3	4	4	5	6	7
REF	0	0	0	0	0	0	0	0	1	1	1
SSA	0	0	1	1	1	2	2	3	4	5	8
USA	4	7	14	39	46	53	52	50	50	50	50

Table 1452: MAgPIE m4p\_som — Production—Secondary products—Ethanol (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	211	218	225	239	253	261	264
CAZ	2	2	2	2	2	2	2
CHA	16	16	16	15	14	13	12
EUR	12	12	12	12	13	14	14
IND	4	5	6	8	11	13	14
JPN	0	0	0	0	0	0	0
LAM	99	95	93	91	91	90	90
MEA	2	2	2	3	4	4	5
NEU	1	1	1	2	2	2	2
OAS	8	9	11	10	11	12	12
REF	1	1	1	1	1	2	2
SSA	11	15	19	27	32	33	32
USA	54	58	61	67	73	77	78

Table 1453: MAgPIE m4p\_som — Production—Secondary products—Ethanol (Mt DM/yr) [PART 2/2]

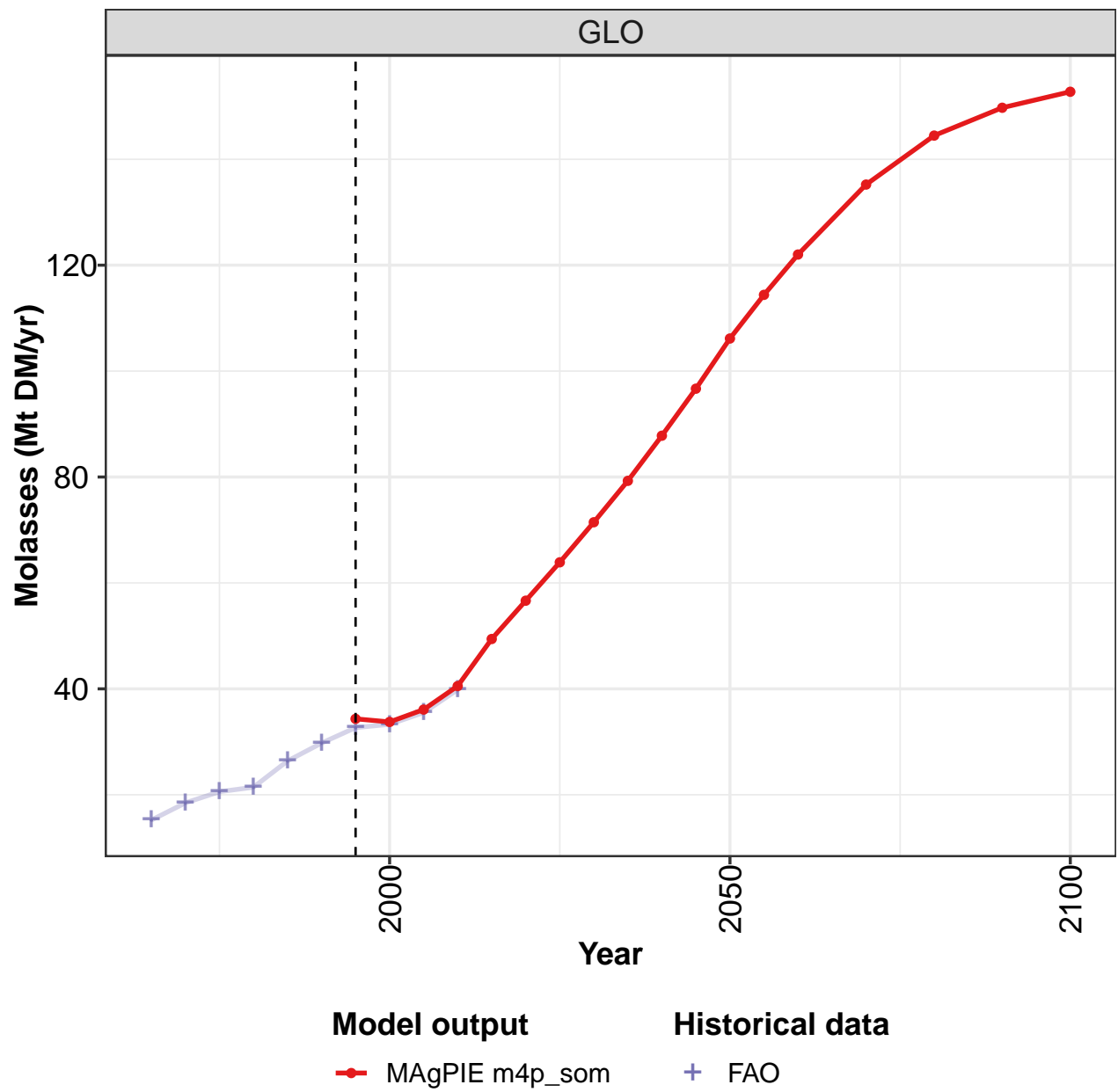
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	7	6	6	13	30	38	35	34	55	106
CAZ	0	0	0	0	0	0	0	0	0	1
CHA	3	0	0	1	1	5	3	3	6	9
EUR	1	1	1	1	1	2	2	2	2	3
IND	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0
LAM	2	3	2	8	23	23	23	19	29	49
MEA	0	0	0	0	0	0	0	0	0	0
NEU	1	0	1	0	0	0	0	1	1	1
OAS	0	0	0	0	1	1	2	1	2	3
REF	0	0	0	0	0	2	0	0	0	0
SSA	0	0	0	0	0	0	0	0	1	1
USA	1	1	1	1	3	4	4	7	14	39

Table 1454: FAO — Production—Secondary products—Ethanol (Mt DM/yr)



50.6 Molasses

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

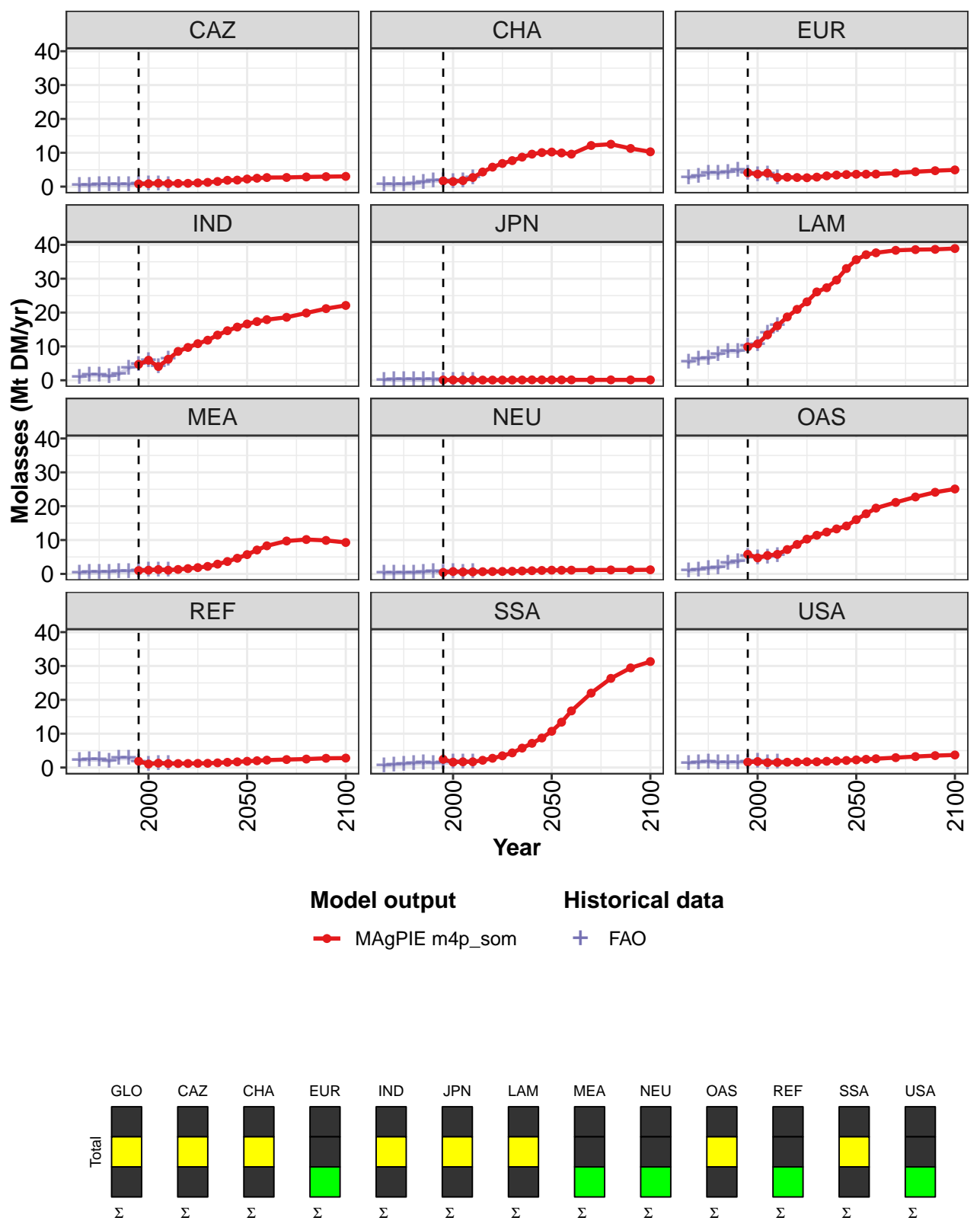


Figure 373: MAgPIE m4p\_som — Production—Secondary products—Molasses (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	34	34	36	41	49	57	64	71	79	88	97
CAZ	1	1	1	1	1	1	1	1	2	2	2
CHA	2	1	2	3	4	6	7	8	9	10	10
EUR	4	4	4	3	3	3	3	3	3	3	4
IND	5	6	4	6	9	10	11	12	13	15	16
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	10	11	13	16	19	21	23	26	27	30	33
MEA	1	1	1	1	1	2	2	2	3	4	5
NEU	0	1	1	1	1	1	1	1	1	1	1
OAS	6	5	5	6	7	9	10	11	12	13	14
REF	2	1	1	1	1	1	1	1	1	2	2
SSA	2	2	2	2	2	3	3	4	6	7	9
USA	2	2	1	2	2	2	2	2	2	2	2

Table 1455: MAgPIE m4p\_som — Production—Secondary products—Molasses (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	106	114	122	135	144	150	153
CAZ	2	2	3	3	3	3	3
CHA	10	10	10	12	13	11	10
EUR	4	4	4	4	4	5	5
IND	17	17	18	19	20	21	22
JPN	0	0	0	0	0	0	0
LAM	36	37	38	38	39	39	39
MEA	6	7	8	10	10	10	9
NEU	1	1	1	1	1	1	1
OAS	16	18	19	21	23	24	25
REF	2	2	2	2	3	3	3
SSA	11	13	17	22	26	29	31
USA	2	2	3	3	3	4	4

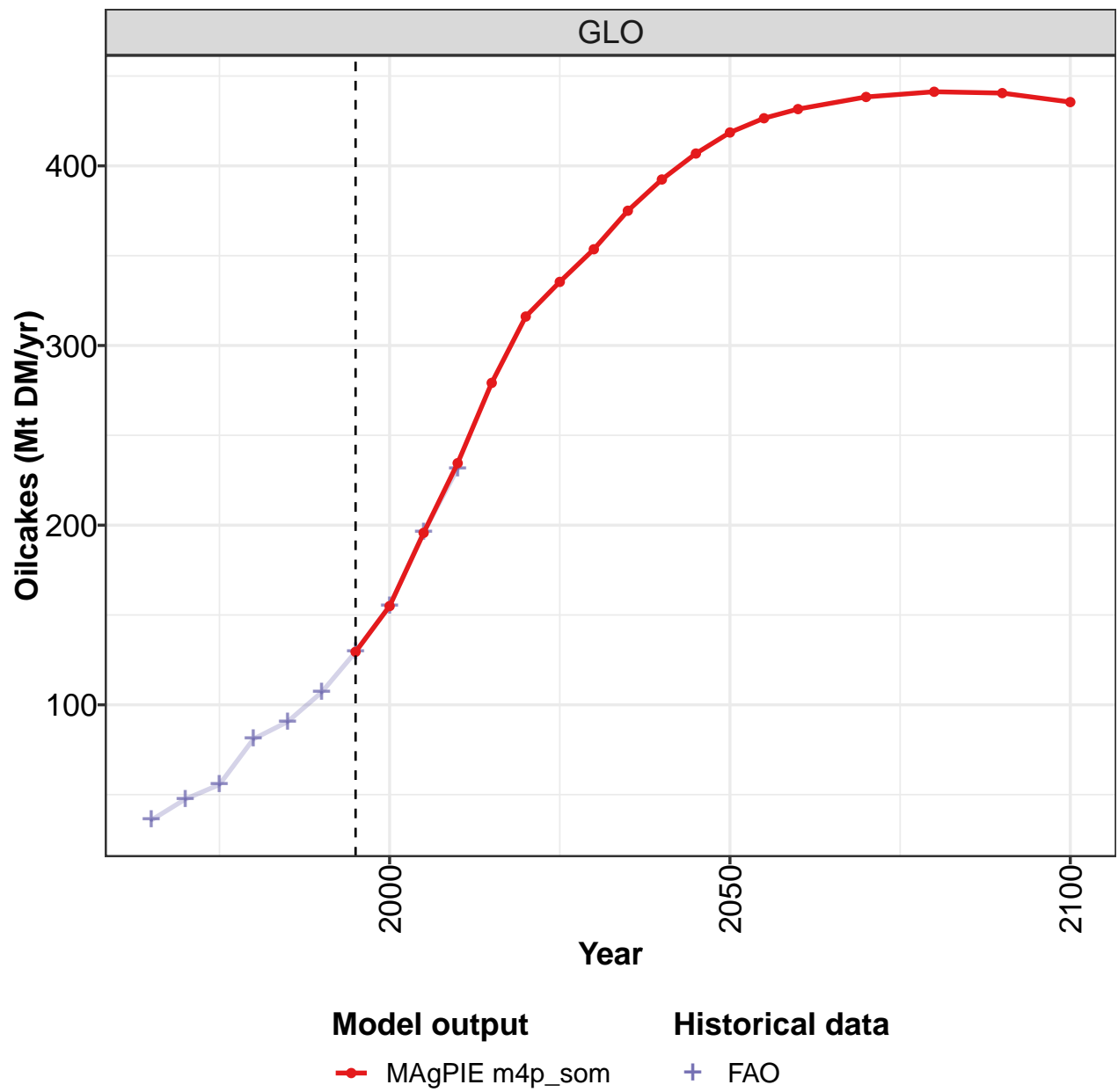
Table 1456: MAgPIE m4p\_som — Production—Secondary products—Molasses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	15.2	18.5	20.6	21.4	26.4	29.8	32.7	33.3	35.5	39.8
CAZ	0.3	0.4	0.5	0.5	0.5	0.5	0.8	0.8	0.8	0.7
CHA	0.6	0.6	0.7	0.9	1.3	1.7	1.7	1.5	1.8	2.7
EUR	2.6	3.1	3.9	3.9	4.3	4.8	4.0	3.5	3.7	2.7
IND	1.0	1.5	1.5	1.2	1.8	3.6	4.8	5.9	4.1	6.2
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	5.3	6.3	6.4	7.6	8.5	8.4	10.1	10.6	13.9	16.1
MEA	0.2	0.4	0.5	0.6	0.8	0.8	1.0	1.1	1.3	1.1
NEU	0.2	0.2	0.3	0.4	0.5	0.6	0.4	0.6	0.6	0.6
OAS	0.8	1.3	1.6	1.8	3.1	3.6	5.1	4.8	4.9	5.4
REF	2.2	2.3	2.3	1.9	2.7	2.8	1.7	1.0	1.3	1.2
SSA	0.6	0.9	1.0	1.2	1.3	1.3	1.3	1.6	1.7	1.6
USA	1.3	1.5	1.7	1.4	1.4	1.5	1.6	1.8	1.5	1.6

Table 1457: FAO — Production—Secondary products—Molasses (Mt DM/yr)

50.7 Oilcakes

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

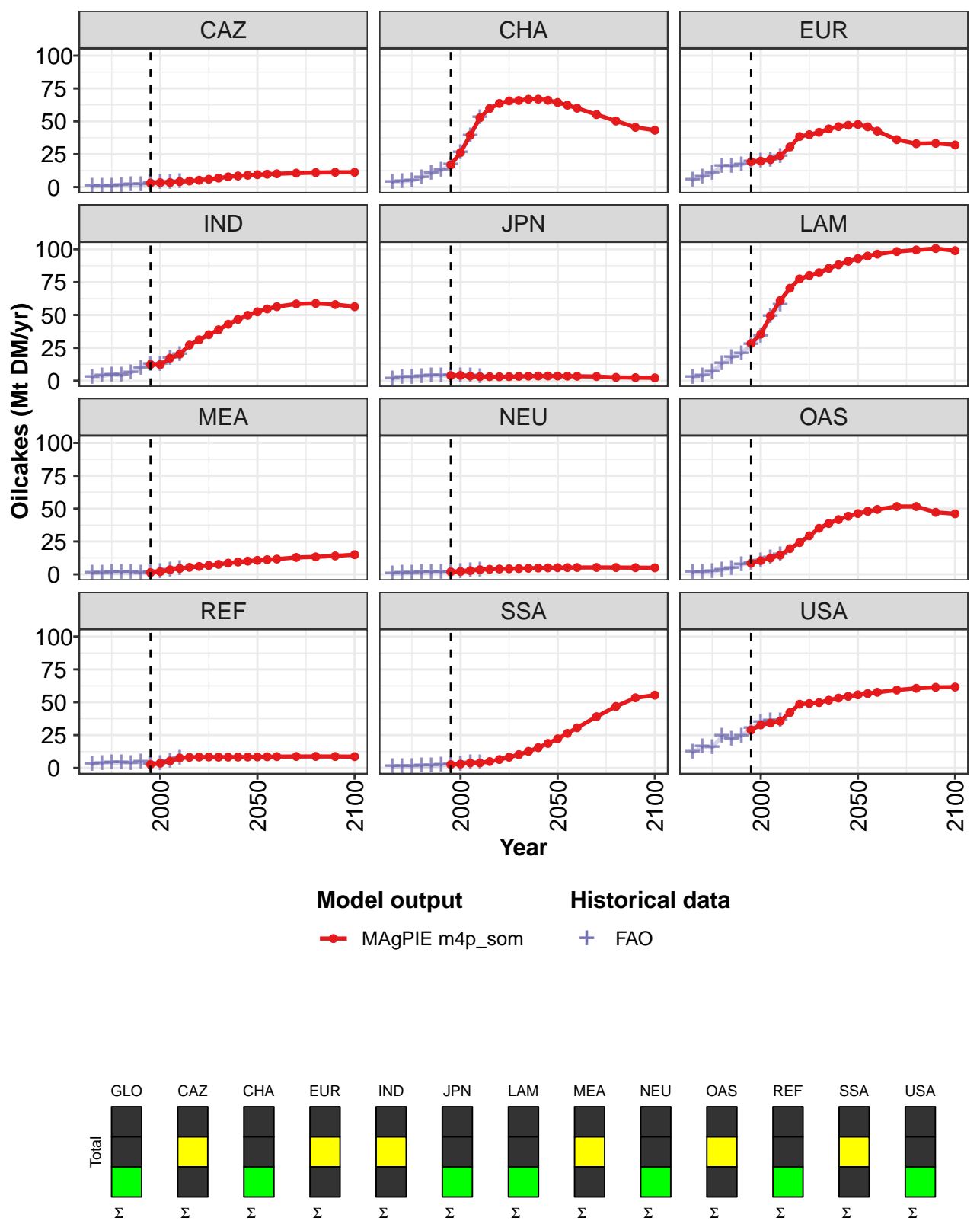


Figure 374: MAgPIE m4p\_som — Production—Secondary products—Oilcakes (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	129	155	196	234	279	316	335	354	375	392	407
CAZ	3	3	3	4	5	5	6	7	8	8	9
CHA	17	26	39	53	60	64	66	66	67	67	66
EUR	19	20	21	24	30	38	40	42	44	46	47
IND	12	12	17	20	27	31	35	39	43	47	50
JPN	4	4	4	3	3	3	3	3	3	4	4
LAM	28	35	49	61	70	77	80	82	85	88	91
MEA	1	2	3	4	5	6	7	8	9	9	10
NEU	2	2	3	4	4	4	4	4	5	5	5
OAS	8	10	12	15	20	24	29	35	39	42	44
REF	3	4	5	8	8	8	8	8	8	8	8
SSA	3	3	4	4	5	6	8	10	13	15	19
USA	29	33	34	36	42	48	49	50	52	53	54

Table 1458: MAgPIE m4p\_som — Production—Secondary products—Oilcakes (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	419	426	432	438	441	440	435
CAZ	9	10	10	11	11	11	11
CHA	64	62	60	55	50	45	43
EUR	48	46	43	36	33	33	32
IND	52	55	56	58	59	58	56
JPN	4	3	3	3	3	2	2
LAM	93	95	96	98	99	101	99
MEA	11	11	12	13	13	14	15
NEU	5	5	5	5	5	5	5
OAS	46	48	49	52	52	47	46
REF	8	9	9	9	9	9	9
SSA	22	26	31	39	47	53	55
USA	56	57	58	59	61	61	62

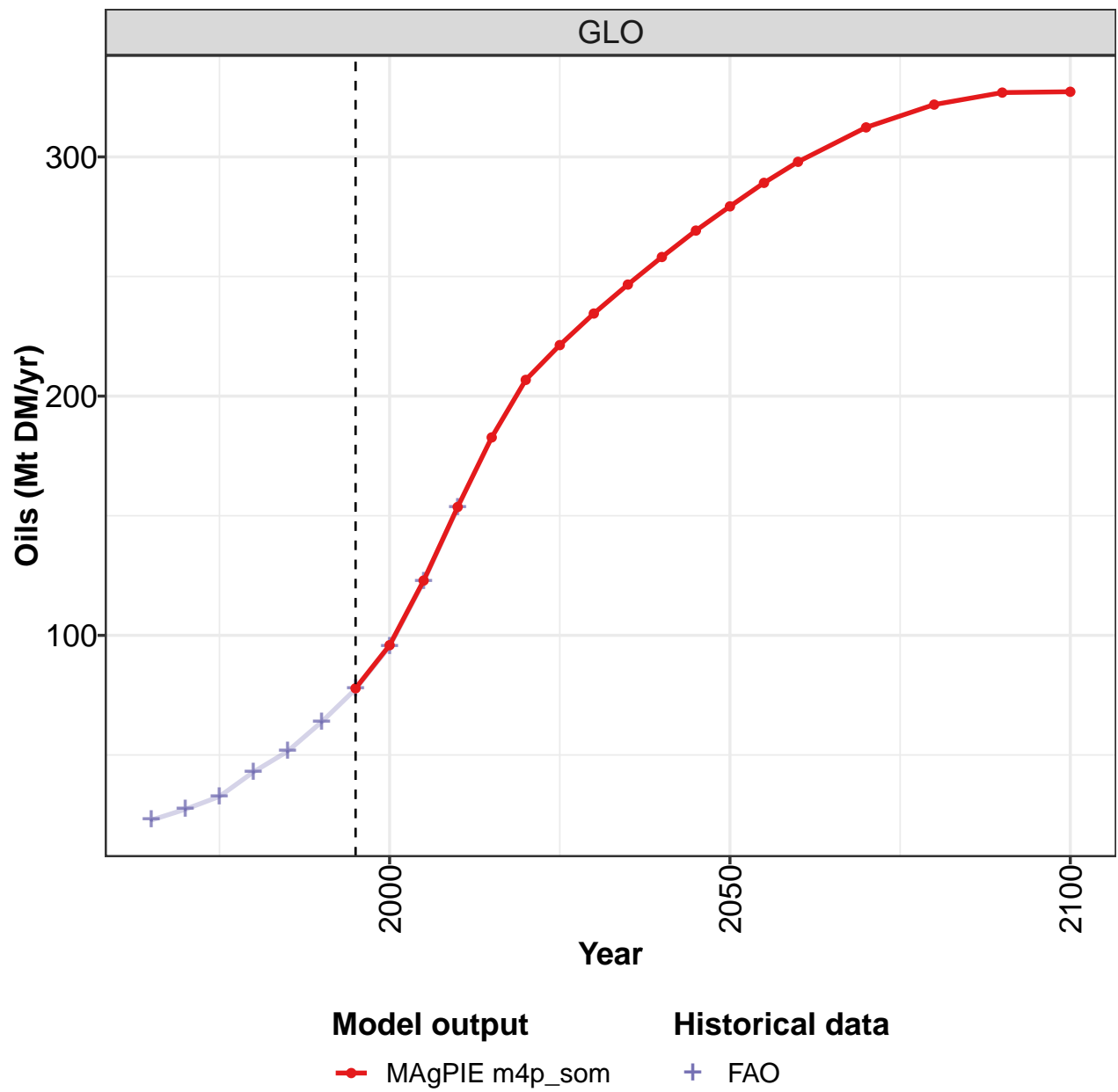
Table 1459: MAgPIE m4p\_som — Production—Secondary products—Oilcakes (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	36	48	56	81	91	107	129	155	196	232
CAZ	0	1	1	1	2	2	3	3	4	4
CHA	4	4	5	7	10	13	17	26	39	53
EUR	5	8	10	16	16	17	19	20	20	23
IND	3	4	5	4	6	10	13	12	17	20
JPN	2	3	3	3	4	4	4	4	4	3
LAM	3	4	7	13	18	20	27	34	49	58
MEA	1	1	1	1	1	1	1	2	3	4
NEU	1	1	1	1	1	2	2	2	3	3
OAS	2	2	2	3	5	7	9	10	13	15
REF	3	3	4	4	4	5	3	3	5	8
SSA	1	1	1	1	2	2	2	3	4	4
USA	12	16	15	24	22	24	30	35	36	36

Table 1460: FAO — Production—Secondary products—Oilcakes (Mt DM/yr)

50.8 Oils

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

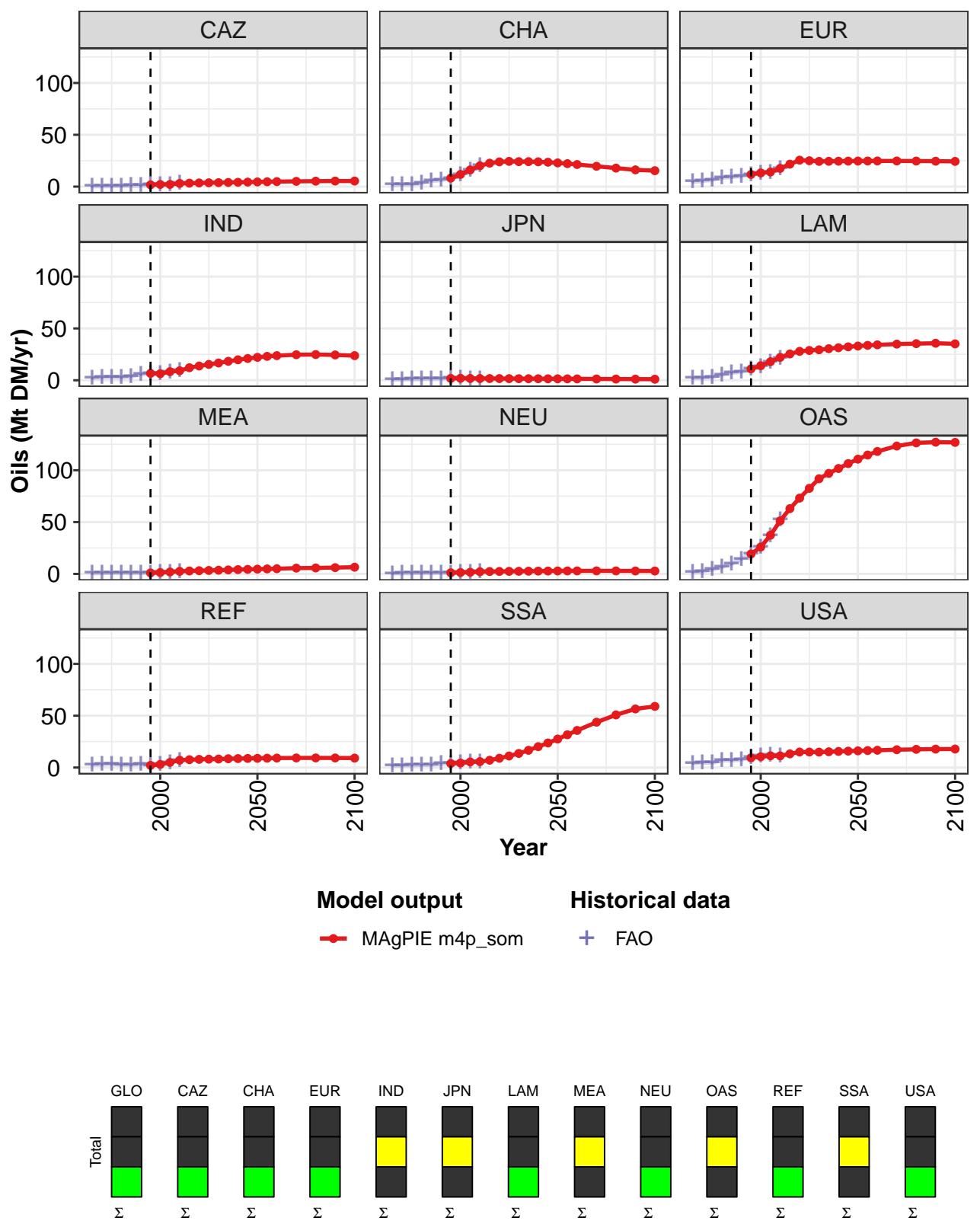


Figure 375: MAgPIE m4p\_som — Production—Secondary products—Oils (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	78	96	123	154	183	207	221	235	247	258	269
CAZ	2	2	2	3	3	4	4	4	4	4	4
CHA	8	12	16	20	23	24	24	24	24	24	24
EUR	12	13	14	18	22	26	25	24	24	25	25
IND	7	6	8	9	12	14	15	17	18	20	21
JPN	2	2	2	2	2	2	2	2	2	1	1
LAM	11	14	18	22	25	28	29	29	30	31	32
MEA	1	1	2	2	3	3	3	4	4	4	4
NEU	1	1	2	2	2	2	2	3	3	3	3
OAS	19	26	37	51	63	73	83	92	97	102	106
REF	2	3	5	7	8	8	8	8	8	9	9
SSA	4	4	5	6	7	9	11	14	17	20	24
USA	9	10	11	11	13	15	15	15	15	16	16

Table 1461: MAgPIE m4p.som — Production—Secondary products—Oils (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	279	289	298	312	322	327	327
CAZ	5	5	5	5	5	5	5
CHA	23	22	21	20	18	16	15
EUR	25	25	25	25	25	25	24
IND	22	23	24	25	25	24	24
JPN	1	1	1	1	1	1	1
LAM	33	34	34	35	35	36	35
MEA	5	5	5	6	6	6	6
NEU	3	3	3	3	3	3	3
OAS	111	115	118	123	126	127	127
REF	9	9	9	9	9	9	9
SSA	28	32	36	44	51	57	59
USA	16	16	17	17	18	18	18

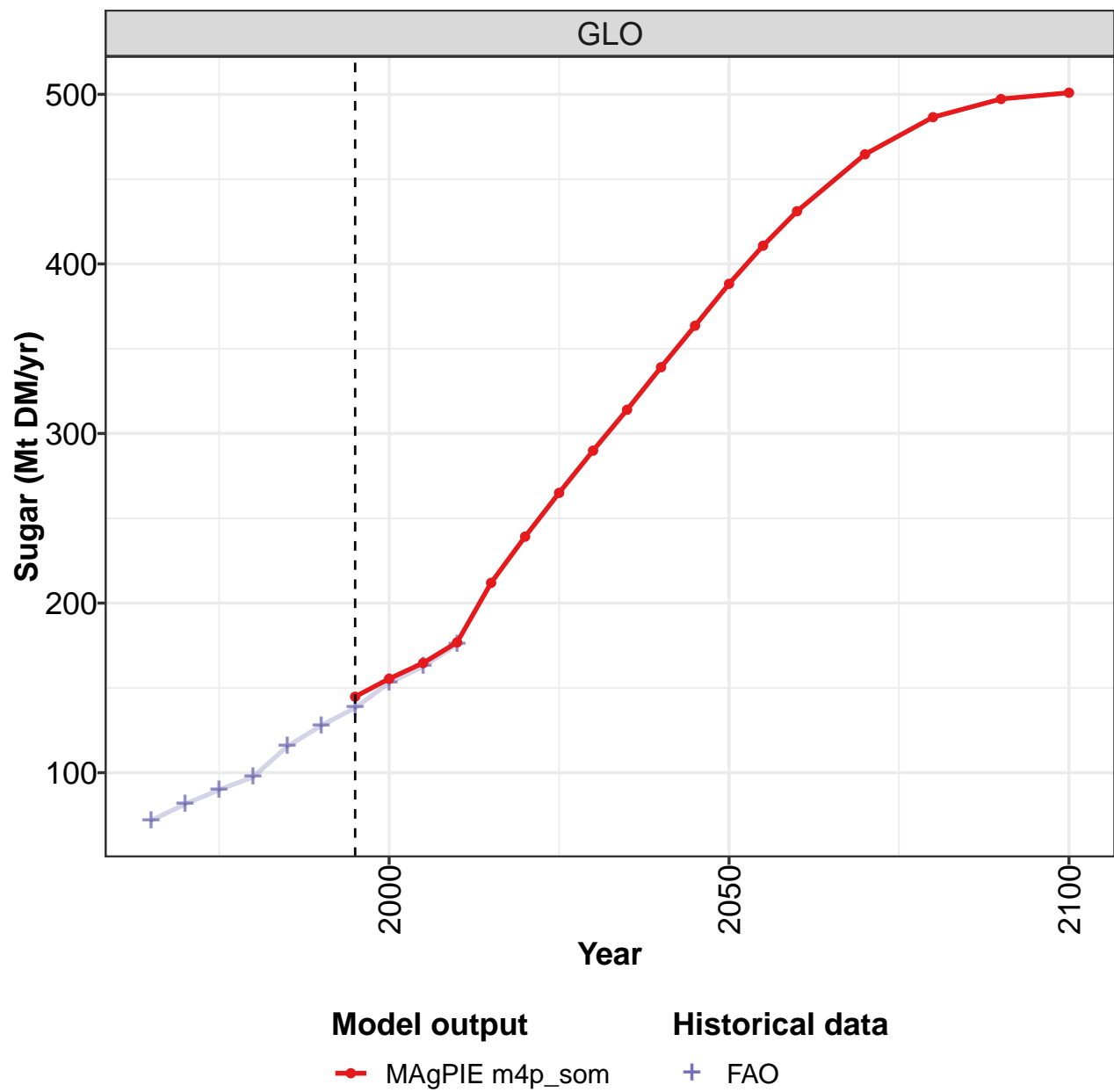
Table 1462: MAgPIE m4p.som — Production—Secondary products—Oils (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	23	27	33	43	51	64	78	95	122	153
CAZ	0	0	0	1	1	1	2	2	2	3
CHA	2	2	2	3	5	6	8	12	16	20
EUR	5	5	7	9	9	10	12	13	14	18
IND	2	3	3	3	4	6	7	6	8	9
JPN	1	1	1	1	2	2	2	2	2	2
LAM	2	2	3	5	7	8	11	13	18	21
MEA	1	1	1	1	1	1	1	1	2	2
NEU	0	1	1	1	1	1	1	1	2	2
OAS	2	2	4	7	10	14	19	26	37	52
REF	3	3	3	3	3	3	2	3	5	7
SSA	2	2	2	2	3	4	4	4	5	6
USA	4	5	5	7	7	8	10	11	12	11

Table 1463: FAO — Production—Secondary products—Oils (Mt DM/yr)

50.9 Sugar

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

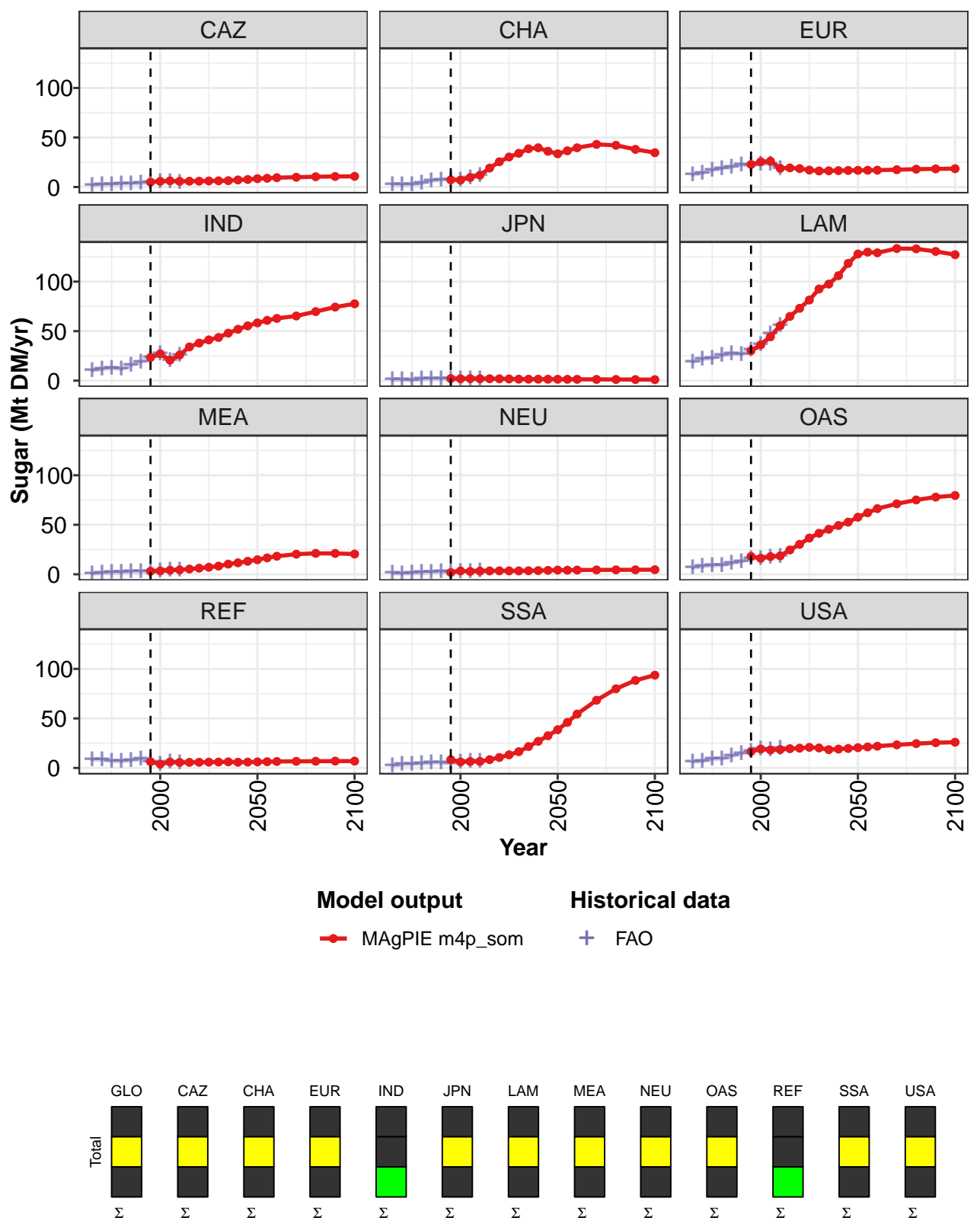


Figure 376: MAgPIE m4p\_som — Production—Secondary products—Sugar (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	145	155	165	177	212	239	265	290	314	339	364
CAZ	5	6	6	6	6	6	6	6	6	7	8
CHA	7	7	10	12	19	26	30	34	39	40	36
EUR	23	25	26	19	19	19	17	16	16	17	17
IND	23	27	21	26	34	38	41	44	48	52	55
JPN	2	2	2	2	2	2	2	2	1	1	1
LAM	30	36	44	55	65	73	81	93	98	106	118
MEA	3	3	4	4	5	6	7	8	10	12	13
NEU	2	3	3	3	3	4	3	3	4	4	4
OAS	18	16	18	19	25	30	37	41	45	49	53
REF	6	4	6	6	6	6	6	6	6	6	6
SSA	8	6	7	7	8	11	13	16	22	27	33
USA	17	19	18	19	19	20	21	20	18	19	20

Table 1464: MAgPIE m4p\_som — Production—Secondary products—Sugar (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	388	411	431	465	487	497	501
CAZ	8	9	9	10	10	11	11
CHA	34	37	40	43	42	38	35
EUR	17	17	17	17	18	18	19
IND	58	61	63	65	70	74	78
JPN	1	1	1	1	1	1	1
LAM	128	130	129	133	133	131	127
MEA	15	17	18	20	21	21	20
NEU	4	4	4	4	4	5	5
OAS	58	62	66	71	75	78	80
REF	6	6	7	7	7	7	7
SSA	39	46	54	68	80	88	94
USA	20	21	22	23	25	25	26

Table 1465: MAgPIE m4p\_som — Production—Secondary products—Sugar (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	72	81	90	97	115	128	138	153	163	176
CAZ	2	2	3	3	3	4	5	6	5	5
CHA	3	2	3	4	6	7	7	7	10	12
EUR	12	14	17	19	20	23	22	23	23	19
IND	10	12	13	12	16	19	24	27	21	26
JPN	1	1	1	2	2	2	2	2	2	2
LAM	19	22	23	25	27	27	31	37	47	55
MEA	1	1	2	2	3	2	3	3	4	4
NEU	1	1	1	2	2	2	2	3	3	3
OAS	6	8	9	9	11	13	16	16	17	18
REF	8	8	7	7	8	9	6	4	6	6
SSA	2	3	4	4	5	5	5	6	7	6
USA	6	7	9	9	12	14	17	19	18	20

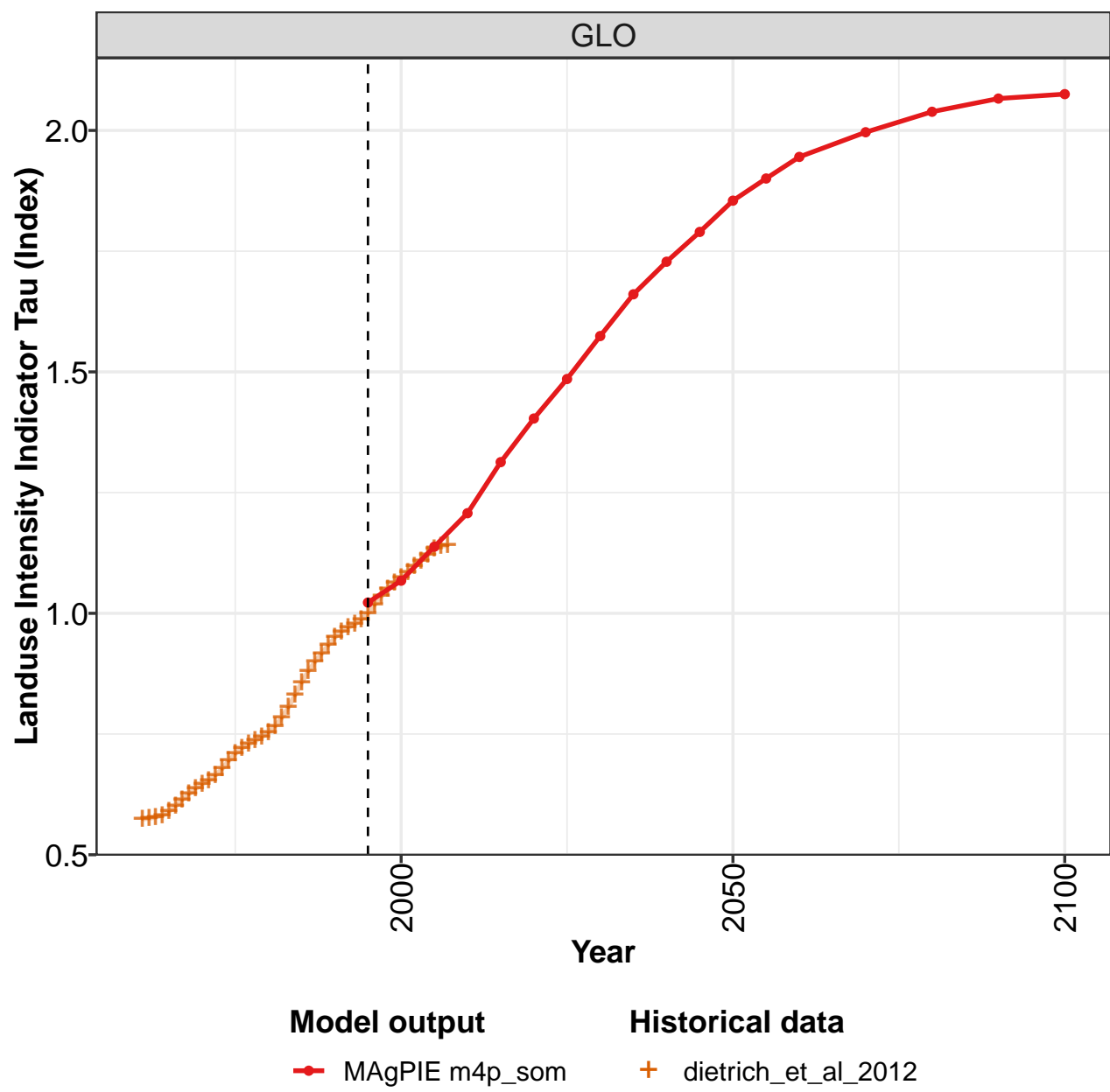
Table 1466: FAO — Production—Secondary products—Sugar (Mt DM/yr)

Part XIII

# Productivity

## 51 Landuse Intensity Indicator Tau

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

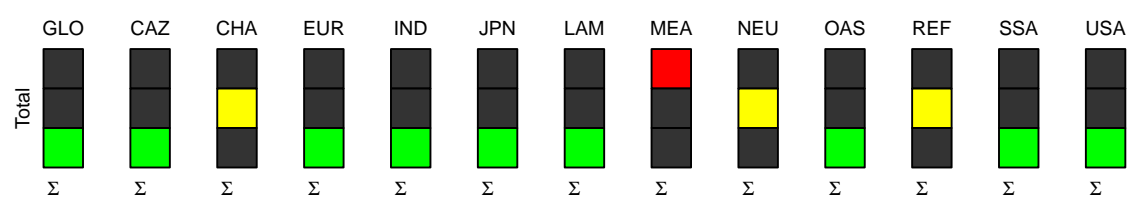
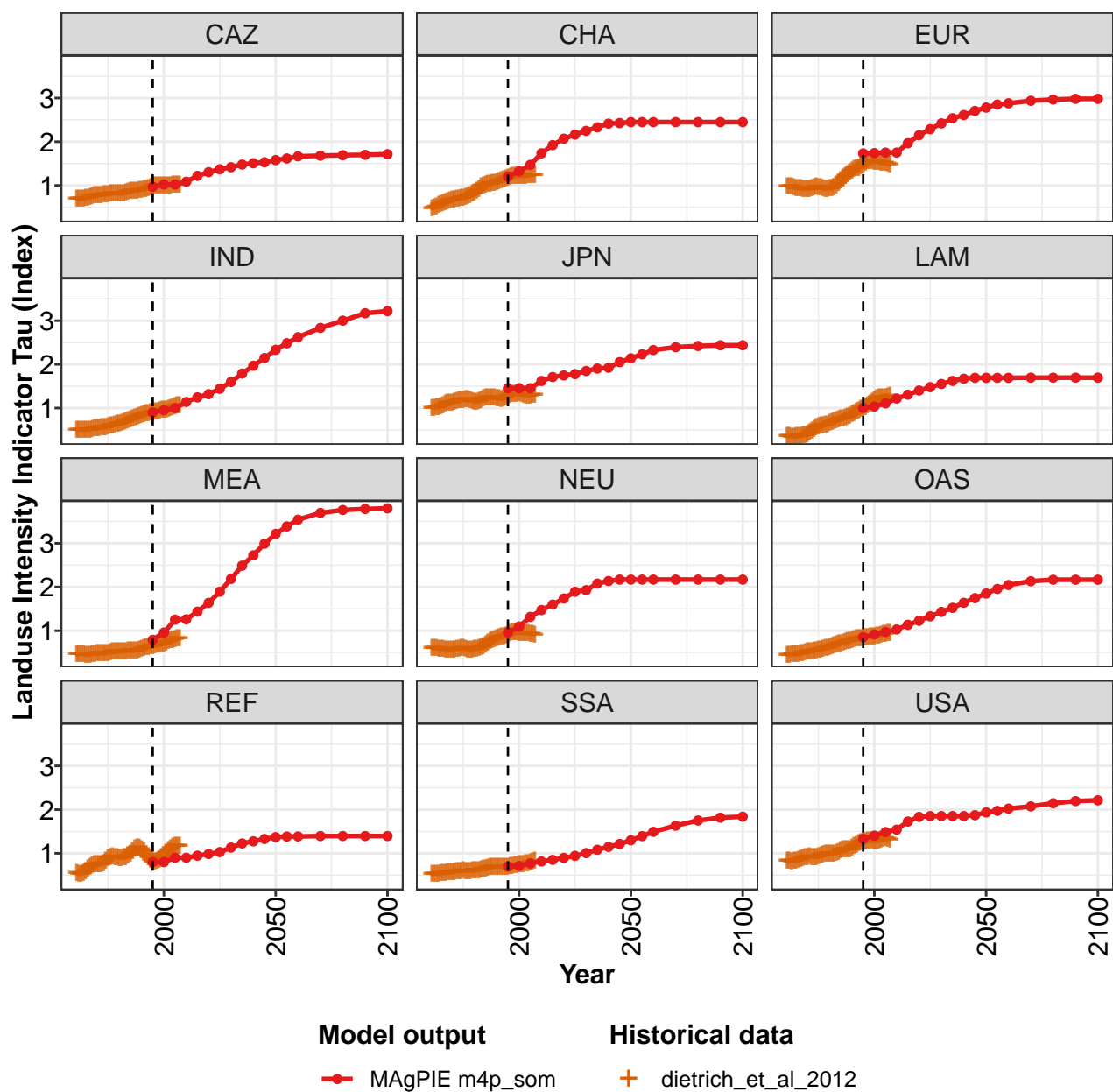


Figure 377: MAGPIE m4p\_som — Productivity—Landuse Intensity Indicator Tau (Index)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.02	1.07	1.14	1.21	1.31	1.40	1.49	1.57	1.66	1.73	1.79
CAZ	0.97	1.02	1.02	1.08	1.22	1.30	1.37	1.42	1.48	1.51	1.53
CHA	1.21	1.32	1.47	1.74	1.92	2.07	2.16	2.25	2.33	2.41	2.43
EUR	1.73	1.74	1.75	1.75	1.97	2.15	2.29	2.42	2.54	2.61	2.70
IND	0.90	0.95	1.00	1.14	1.24	1.32	1.44	1.60	1.79	1.97	2.15
JPN	1.45	1.45	1.45	1.62	1.71	1.75	1.78	1.85	1.90	1.92	2.05
LAM	1.00	1.03	1.11	1.22	1.31	1.40	1.48	1.55	1.62	1.67	1.69
MEA	0.79	0.96	1.25	1.26	1.44	1.64	1.89	2.18	2.49	2.72	2.99
NEU	0.96	1.10	1.32	1.47	1.60	1.74	1.89	1.93	2.08	2.14	2.17
OAS	0.85	0.91	0.97	1.03	1.14	1.23	1.33	1.43	1.52	1.64	1.74
REF	0.80	0.80	0.90	0.90	0.95	0.99	1.03	1.13	1.23	1.27	1.33
SSA	0.70	0.71	0.77	0.81	0.85	0.90	0.94	1.01	1.08	1.15	1.21
USA	1.33	1.41	1.49	1.54	1.73	1.83	1.85	1.85	1.85	1.85	1.87

Table 1467: MAgPIE m4p\_som — Productivity—Landuse Intensity Indicator Tau (Index) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.85	1.90	1.95	2.00	2.04	2.07	2.08
CAZ	1.58	1.62	1.67	1.68	1.69	1.70	1.72
CHA	2.45	2.45	2.45	2.45	2.45	2.45	2.45
EUR	2.78	2.85	2.88	2.94	2.96	2.98	2.98
IND	2.33	2.48	2.62	2.84	3.00	3.17	3.22
JPN	2.14	2.23	2.33	2.39	2.42	2.44	2.44
LAM	1.69	1.69	1.69	1.70	1.70	1.70	1.70
MEA	3.21	3.39	3.54	3.70	3.76	3.79	3.80
NEU	2.17	2.17	2.17	2.17	2.17	2.17	2.17
OAS	1.85	1.96	2.05	2.13	2.17	2.17	2.17
REF	1.37	1.38	1.39	1.40	1.40	1.40	1.40
SSA	1.30	1.39	1.49	1.63	1.75	1.82	1.84
USA	1.94	1.97	2.02	2.07	2.15	2.20	2.21

Table 1468: MAgPIE m4p\_som — Productivity—Landuse Intensity Indicator Tau (Index) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	0.57	0.58	0.58	0.58	0.59	0.60	0.61	0.63	0.64	0.65	0.65
CAZ	0.69	0.69	0.69	0.69	0.70	0.71	0.73	0.75	0.76	0.77	0.77
CHA	0.47	0.48	0.51	0.54	0.57	0.60	0.61	0.63	0.65	0.66	0.68
EUR	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.91	0.91
IND	0.50	0.50	0.50	0.49	0.49	0.49	0.50	0.52	0.53	0.54	0.54
JPN	1.00	1.00	1.00	1.01	1.03	1.05	1.09	1.11	1.12	1.12	1.13
LAM	0.35	0.34	0.34	0.34	0.34	0.35	0.35	0.36	0.38	0.40	0.43
MEA	0.45	0.45	0.46	0.45	0.45	0.44	0.45	0.45	0.46	0.47	0.47
NEU	0.60	0.59	0.59	0.58	0.57	0.57	0.57	0.56	0.56	0.56	0.56
OAS	0.44	0.45	0.45	0.45	0.45	0.46	0.47	0.48	0.50	0.51	0.52
REF	0.54	0.53	0.53	0.55	0.59	0.65	0.69	0.72	0.73	0.74	0.74
SSA	0.52	0.52	0.53	0.53	0.53	0.54	0.55	0.55	0.56	0.56	0.57
USA	0.82	0.81	0.81	0.81	0.82	0.84	0.86	0.88	0.89	0.91	0.91

Table 1469: dietrich\_et\_al.2012 — Productivity—Landuse Intensity Indicator Tau (Index) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	0.66	0.68	0.69	0.71	0.72	0.73	0.74	0.74	0.75	0.77	0.78
CAZ	0.78	0.78	0.78	0.79	0.80	0.81	0.82	0.81	0.81	0.80	0.81
CHA	0.69	0.70	0.71	0.72	0.73	0.75	0.77	0.80	0.83	0.87	0.92
EUR	0.93	0.94	0.96	0.96	0.94	0.92	0.91	0.92	0.92	0.94	0.96
IND	0.54	0.55	0.56	0.57	0.59	0.60	0.61	0.62	0.64	0.66	0.68
JPN	1.14	1.16	1.18	1.18	1.18	1.18	1.17	1.15	1.13	1.13	1.15
LAM	0.47	0.51	0.55	0.58	0.59	0.60	0.61	0.62	0.64	0.67	0.70
MEA	0.47	0.47	0.48	0.49	0.50	0.51	0.51	0.51	0.51	0.52	0.52
NEU	0.57	0.58	0.59	0.59	0.58	0.57	0.56	0.56	0.57	0.58	0.59
OAS	0.52	0.53	0.54	0.55	0.56	0.58	0.59	0.60	0.62	0.64	0.66
REF	0.74	0.77	0.82	0.88	0.91	0.92	0.91	0.90	0.89	0.89	0.89
SSA	0.57	0.58	0.59	0.59	0.59	0.59	0.59	0.59	0.60	0.60	0.61
USA	0.91	0.90	0.90	0.91	0.94	0.96	0.98	0.99	0.99	0.98	0.98

Table 1470: dietrich\_et\_al.2012 — Productivity—Landuse Intensity Indicator Tau (Index) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	0.81	0.83	0.86	0.88	0.90	0.92	0.93	0.95	0.96	0.97	0.98
CAZ	0.82	0.84	0.87	0.88	0.88	0.87	0.88	0.89	0.91	0.92	0.93
CHA	0.96	1.00	1.02	1.03	1.04	1.04	1.06	1.07	1.09	1.11	1.13
EUR	0.99	1.04	1.10	1.17	1.22	1.25	1.29	1.34	1.37	1.39	1.40
IND	0.70	0.71	0.73	0.74	0.76	0.79	0.81	0.83	0.85	0.86	0.87
JPN	1.18	1.21	1.23	1.23	1.23	1.23	1.23	1.22	1.21	1.20	1.21
LAM	0.72	0.74	0.75	0.76	0.78	0.80	0.82	0.85	0.87	0.90	0.94
MEA	0.52	0.53	0.53	0.54	0.54	0.54	0.56	0.58	0.59	0.61	0.62
NEU	0.61	0.64	0.68	0.72	0.75	0.77	0.79	0.82	0.84	0.85	0.86
OAS	0.68	0.69	0.71	0.72	0.73	0.75	0.77	0.78	0.80	0.81	0.82
REF	0.91	0.94	0.99	1.04	1.10	1.13	1.13	1.09	1.03	0.96	0.90
SSA	0.62	0.64	0.65	0.66	0.67	0.68	0.69	0.69	0.69	0.68	0.67
USA	0.99	1.02	1.05	1.07	1.08	1.07	1.09	1.12	1.16	1.19	1.22

Table 1471: dietrich\_et\_al.2012 — Productivity—Landuse Intensity Indicator Tau (Index) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	0.99	1.00	1.02	1.04	1.05	1.06	1.07	1.09	1.10	1.11	1.12
CAZ	0.95	0.97	0.98	0.99	0.99	0.99	0.99	0.99	0.99	0.99	1.00
CHA	1.15	1.17	1.19	1.21	1.22	1.21	1.21	1.21	1.21	1.21	1.22
EUR	1.43	1.47	1.51	1.54	1.55	1.55	1.54	1.53	1.52	1.52	1.51
IND	0.88	0.89	0.90	0.92	0.94	0.95	0.96	0.96	0.97	0.99	1.01
JPN	1.24	1.27	1.30	1.31	1.31	1.32	1.33	1.32	1.30	1.28	1.27
LAM	0.96	0.99	1.02	1.05	1.09	1.13	1.17	1.21	1.24	1.23	1.22
MEA	0.63	0.64	0.66	0.67	0.68	0.69	0.70	0.72	0.75	0.77	0.78
NEU	0.88	0.90	0.93	0.95	0.95	0.95	0.94	0.94	0.93	0.93	0.93
OAS	0.82	0.83	0.83	0.84	0.85	0.86	0.86	0.87	0.88	0.89	0.91
REF	0.84	0.80	0.79	0.81	0.85	0.89	0.94	1.00	1.06	1.10	1.14
SSA	0.67	0.68	0.70	0.71	0.72	0.73	0.74	0.74	0.75	0.75	0.77
USA	1.24	1.25	1.27	1.27	1.28	1.27	1.27	1.27	1.28	1.30	1.33

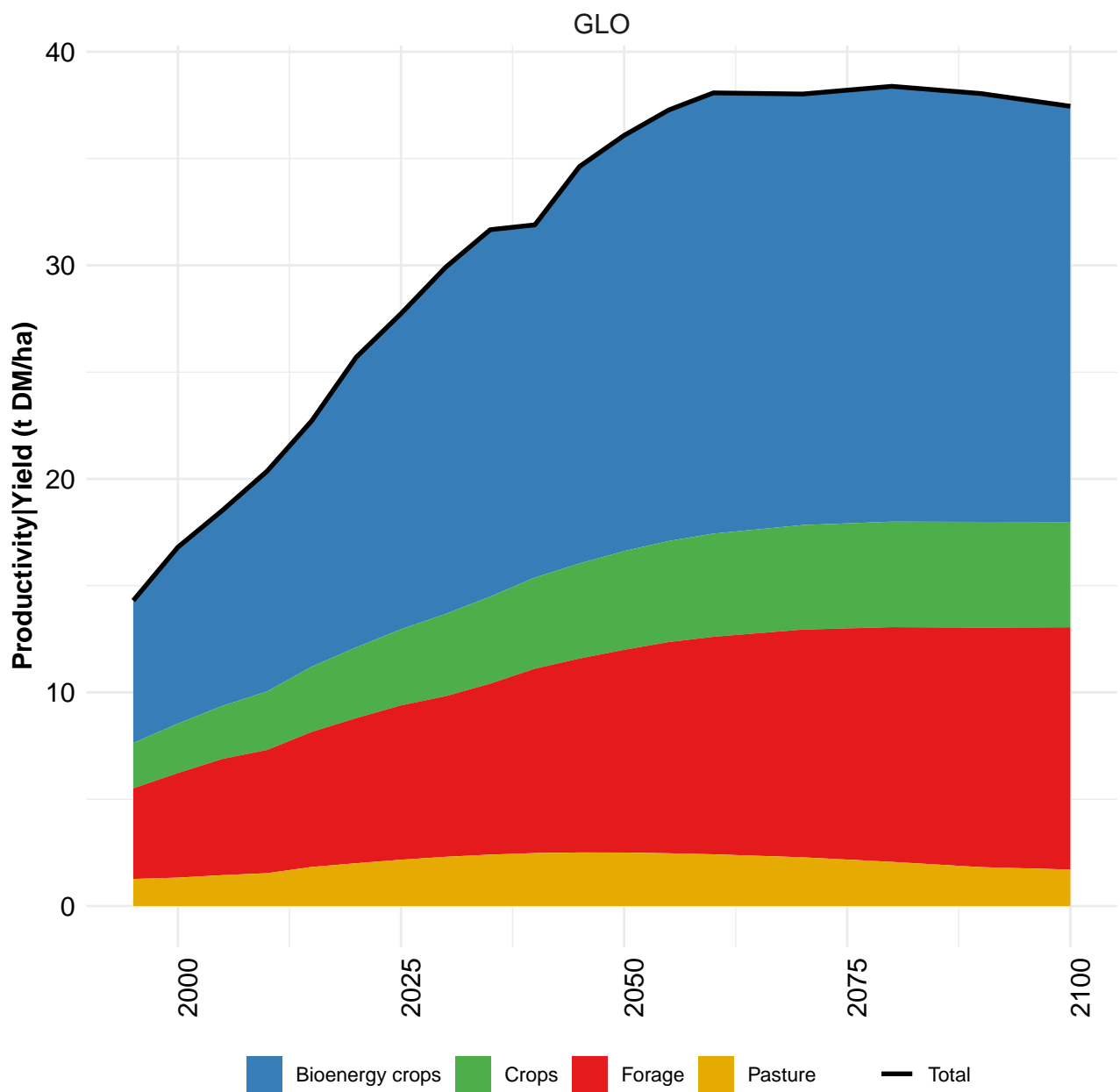
Table 1472: dietrich\_et\_al.2012 — Productivity—Landuse Intensity Indicator Tau (Index) [PART 4/5]

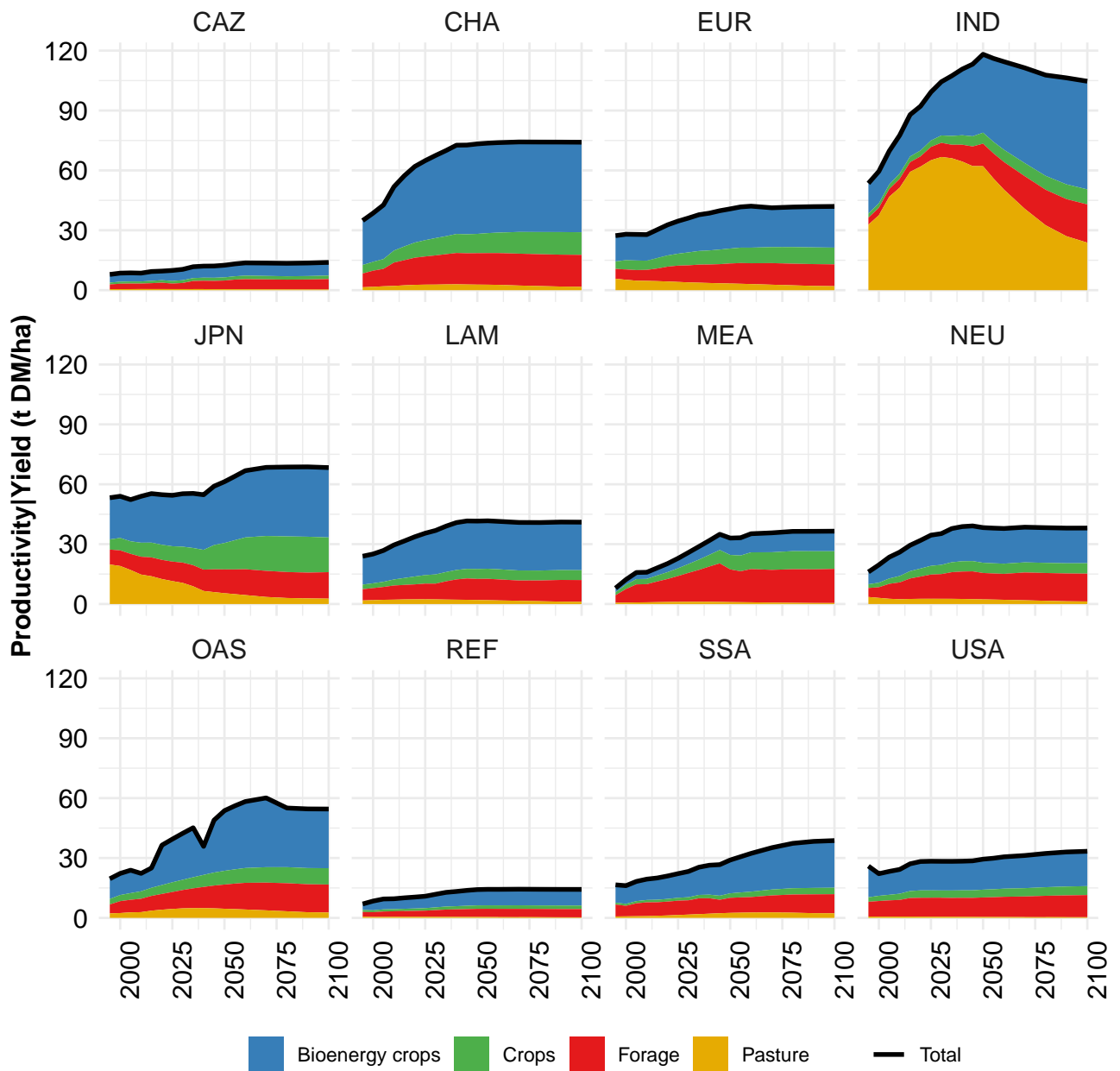


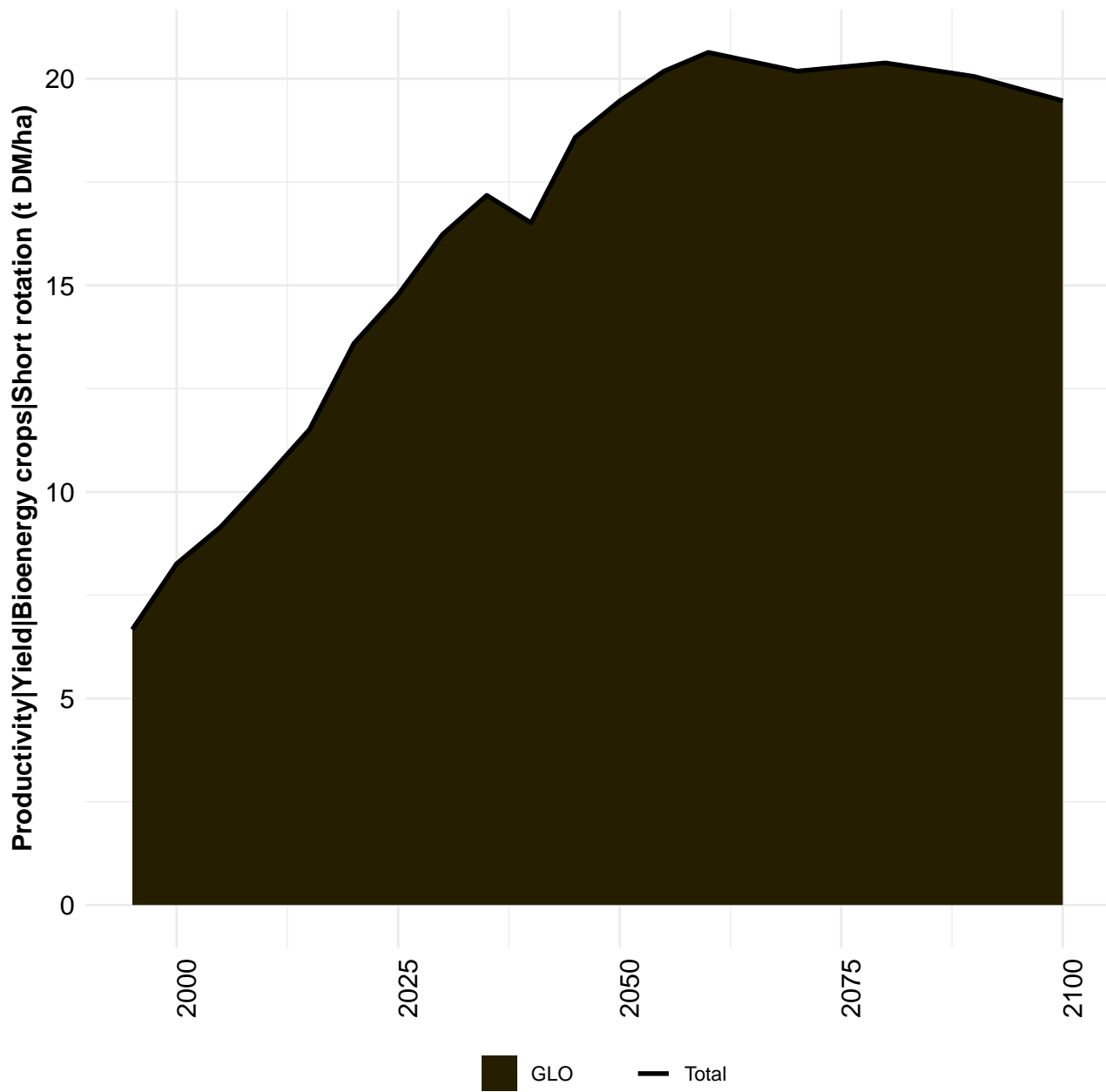
	2005	2006	2007
GLO	1.13	1.14	1.14
CAZ	1.01	1.01	1.00
CHA	1.23	1.23	1.24
EUR	1.51	1.49	1.47
IND	1.03	1.05	1.06
JPN	1.28	1.29	1.29
LAM	1.23	1.25	1.27
MEA	0.80	0.81	0.82
NEU	0.93	0.92	0.91
OAS	0.93	0.94	0.94
REF	1.16	1.17	1.17
SSA	0.79	0.81	0.83
USA	1.34	1.33	1.31

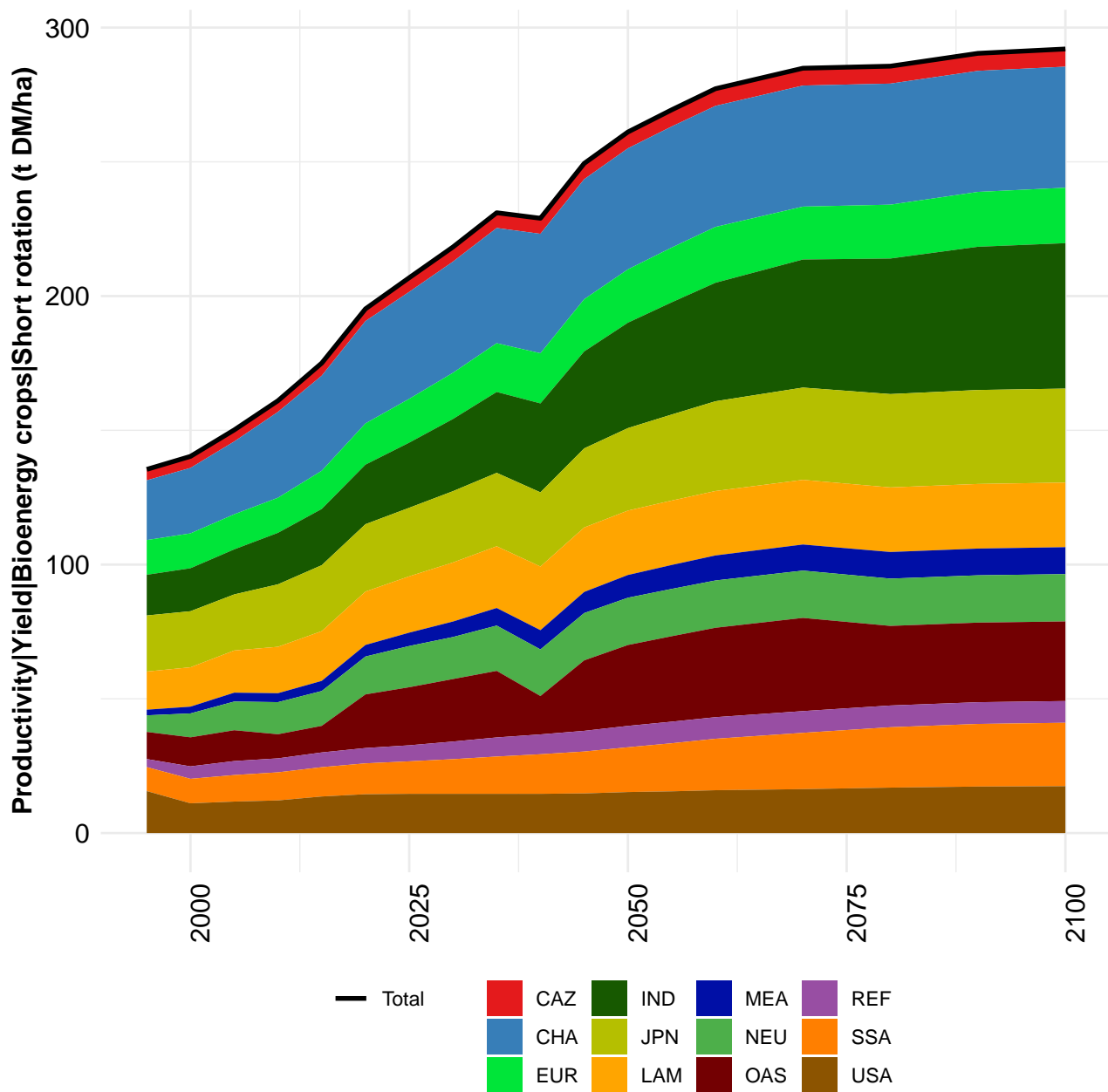
Table 1473: dietrich\_et\_al\_2012 — Productivity—Landuse Intensity Indicator Tau (Index) [PART 5/5]

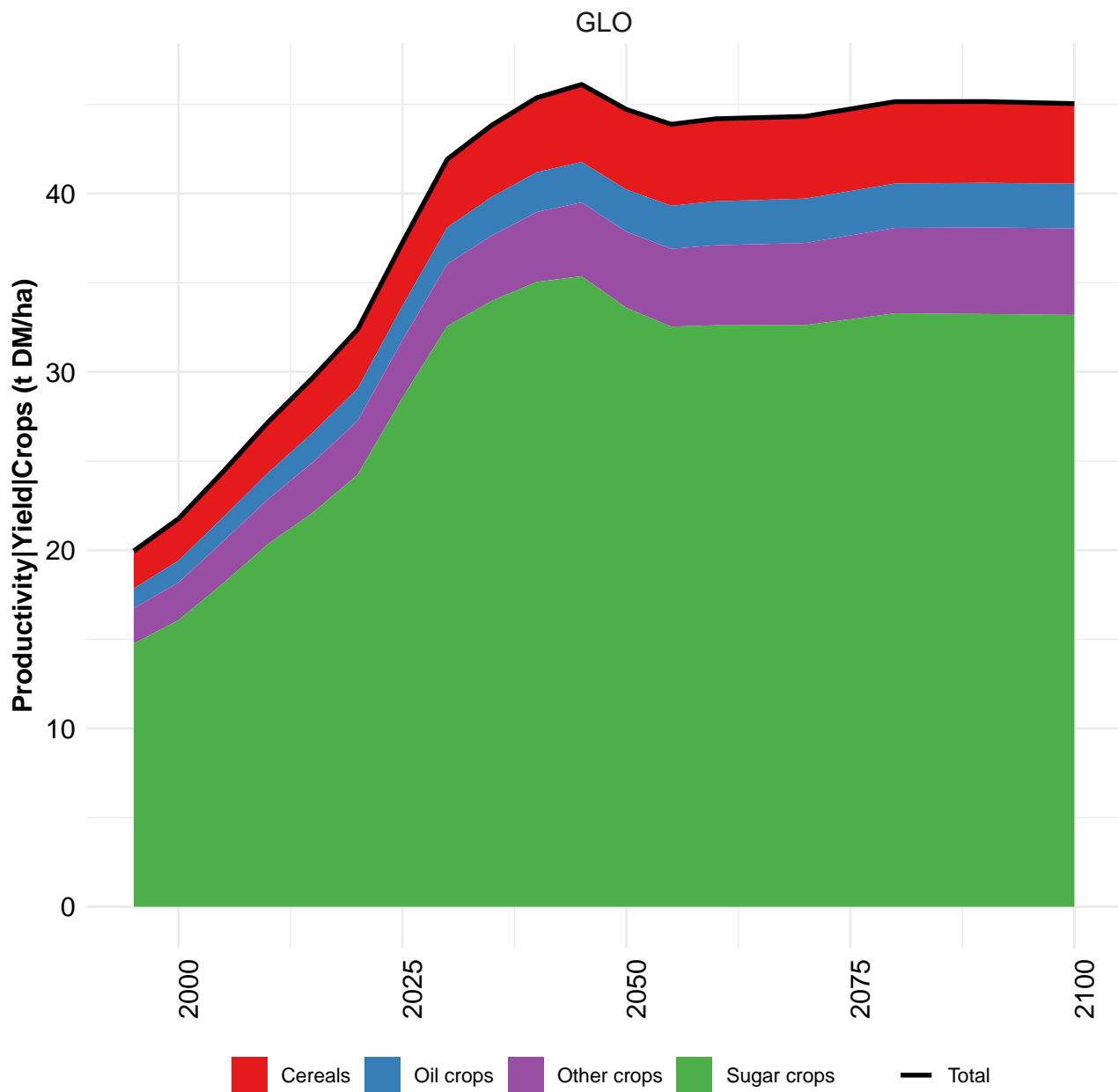
## 52 Yield

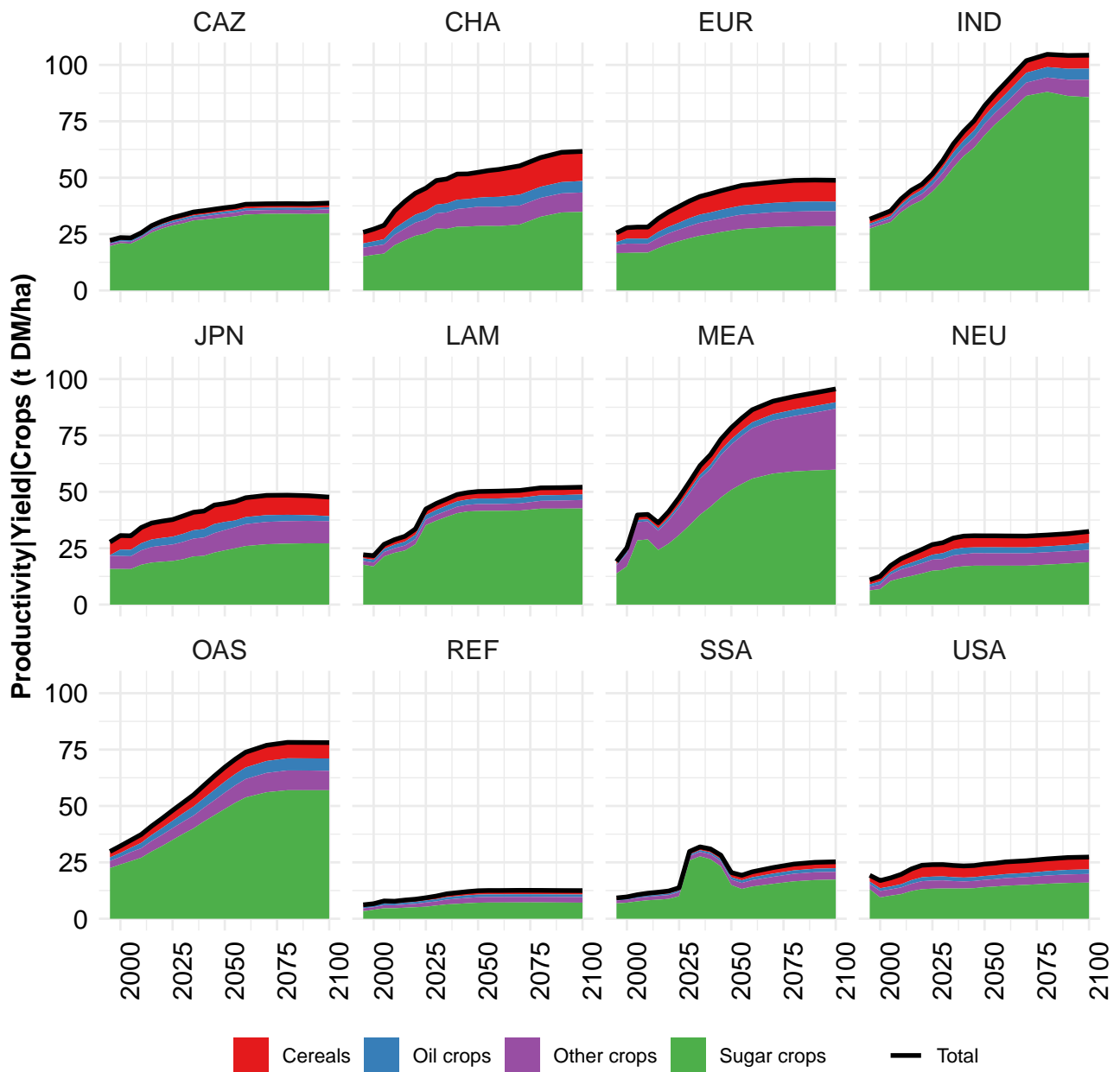






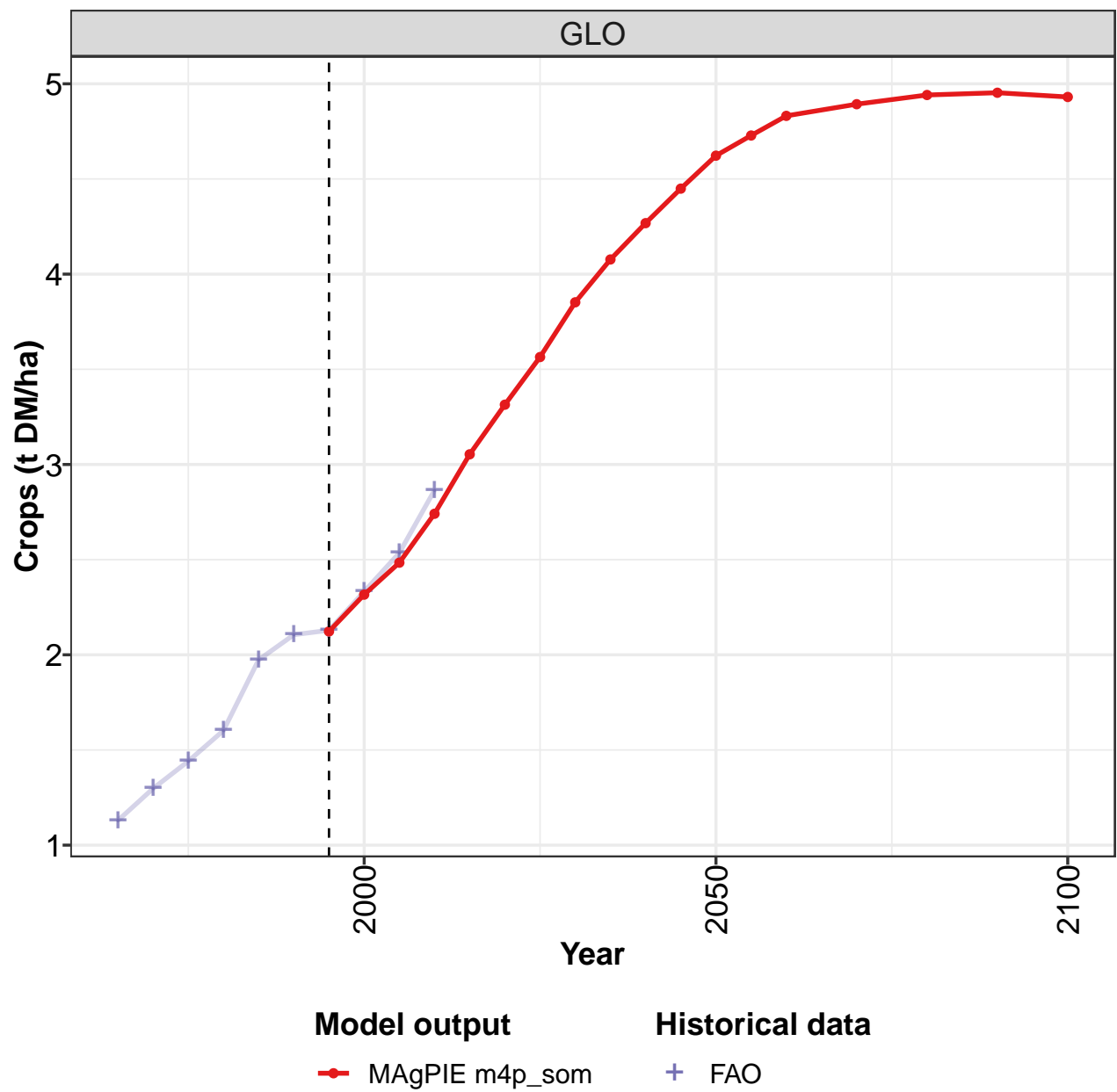






52.1 Crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

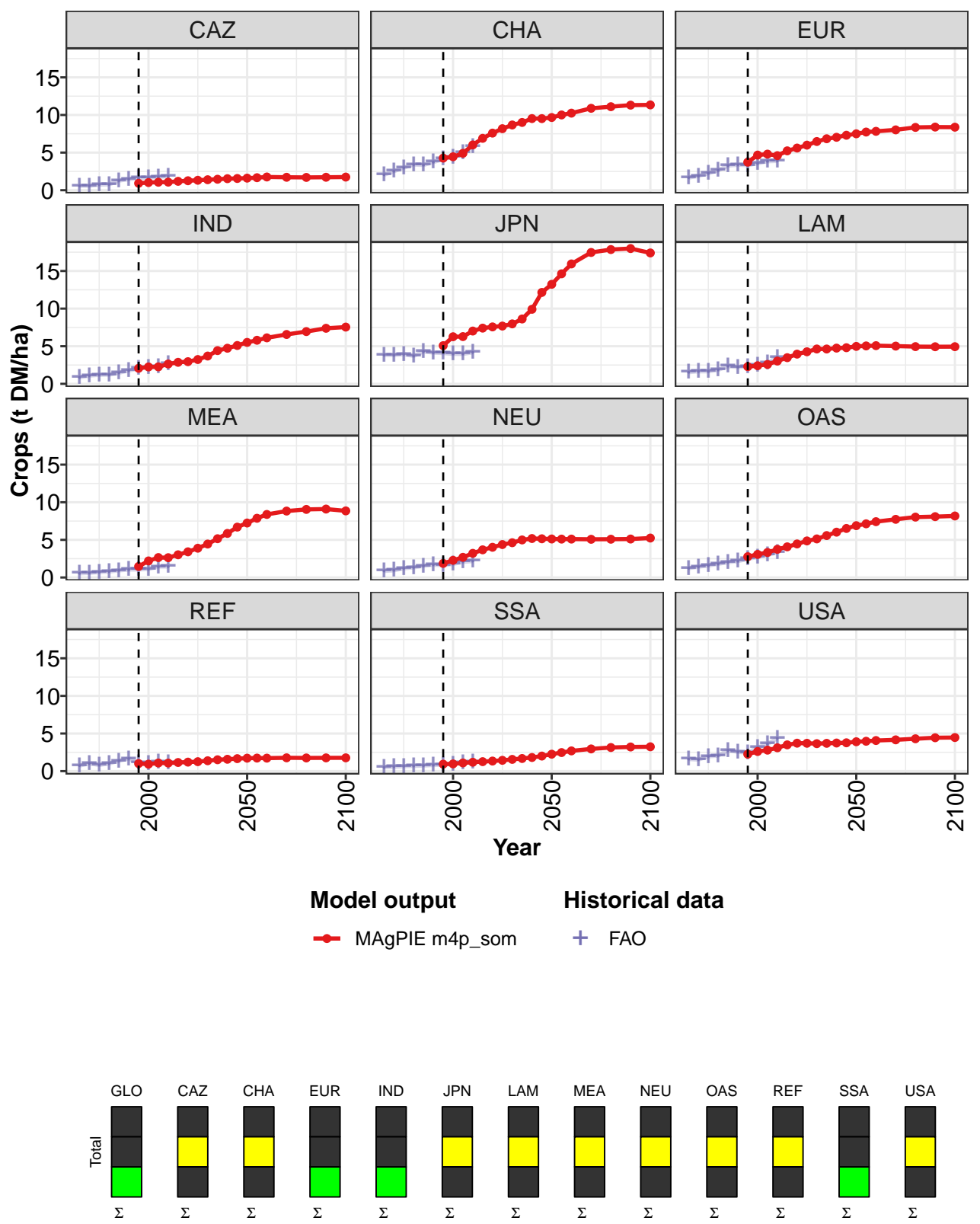


Figure 378: MAGPIE m4p\_som — Productivity—Yield—Crops (t DM/ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	2.1	2.3	2.5	2.7	3.1	3.3	3.6	3.9	4.1	4.3	4.4
CAZ	0.9	1.0	1.1	1.1	1.2	1.3	1.3	1.4	1.5	1.5	1.6
CHA	4.3	4.4	4.9	6.0	6.9	7.6	8.2	8.7	9.0	9.5	9.5
EUR	3.7	4.7	4.8	4.6	5.2	5.6	6.0	6.5	6.8	7.0	7.3
IND	2.1	2.2	2.3	2.6	2.9	2.9	3.2	3.7	4.4	4.7	5.1
JPN	5.1	6.3	6.3	7.0	7.4	7.6	7.7	8.0	8.6	9.9	12.2
LAM	2.3	2.4	2.6	3.0	3.5	4.0	4.3	4.6	4.6	4.7	4.8
MEA	1.5	2.2	2.6	2.6	3.0	3.4	3.9	4.4	5.2	5.9	6.7
NEU	1.9	2.3	2.7	3.2	3.7	4.0	4.4	4.6	5.0	5.2	5.1
OAS	2.8	3.1	3.3	3.7	4.1	4.5	4.9	5.1	5.6	6.0	6.5
REF	1.0	0.9	1.1	1.1	1.1	1.2	1.3	1.4	1.5	1.6	1.7
SSA	0.9	1.0	1.1	1.2	1.3	1.3	1.4	1.6	1.7	1.8	2.0
USA	2.3	2.6	2.8	3.1	3.5	3.7	3.7	3.7	3.7	3.7	3.8

Table 1474: MAgPIE m4p\_som — Productivity—Yield—Crops (t DM/ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	4.6	4.7	4.8	4.9	4.9	5.0	4.9
CAZ	1.6	1.7	1.8	1.7	1.7	1.7	1.7
CHA	9.7	10.0	10.2	10.9	11.1	11.3	11.3
EUR	7.5	7.7	7.8	8.0	8.3	8.4	8.4
IND	5.5	5.8	6.1	6.6	6.9	7.4	7.5
JPN	13.2	14.6	15.9	17.5	17.9	18.0	17.4
LAM	5.0	5.0	5.1	5.0	4.9	4.9	4.9
MEA	7.2	7.9	8.4	8.8	9.0	9.1	8.9
NEU	5.1	5.1	5.1	5.1	5.1	5.1	5.2
OAS	6.9	7.1	7.4	7.7	8.0	8.1	8.2
REF	1.7	1.7	1.7	1.8	1.8	1.8	1.8
SSA	2.3	2.5	2.7	3.0	3.1	3.2	3.2
USA	3.9	4.0	4.1	4.2	4.3	4.4	4.5

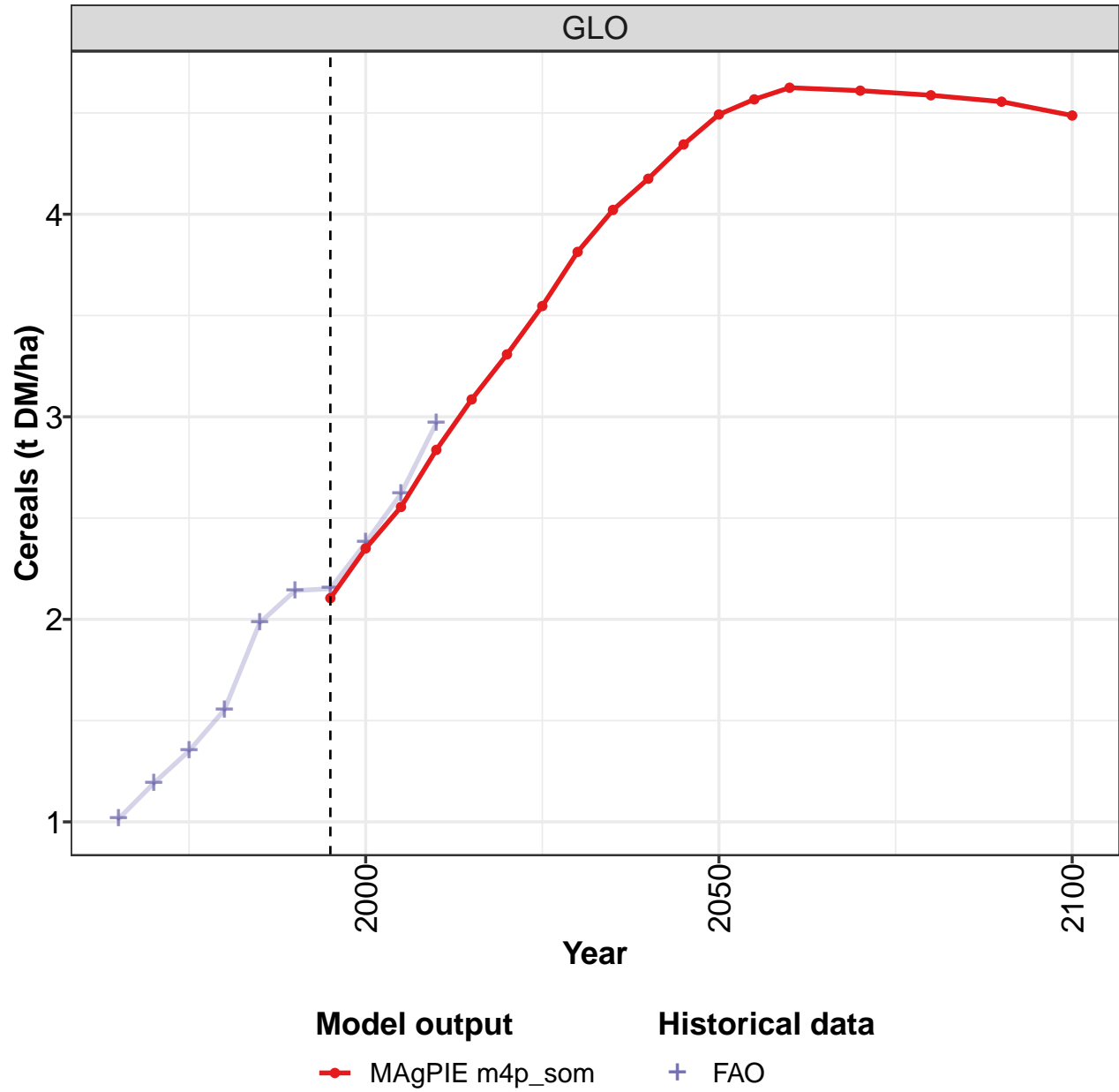
Table 1475: MAgPIE m4p\_som — Productivity—Yield—Crops (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.13	1.30	1.44	1.60	1.97	2.11	2.13	2.33	2.54	2.86
CAZ	0.58	0.58	0.74	0.77	1.27	1.47	1.61	1.66	1.79	1.85
CHA	2.05	2.52	2.99	3.41	3.35	3.74	4.15	4.43	4.97	5.80
EUR	1.68	1.90	2.25	2.64	3.26	3.39	3.32	3.58	3.85	3.89
IND	0.86	1.09	1.20	1.21	1.48	1.78	2.03	2.22	2.24	2.67
JPN	3.83	3.82	3.95	3.71	4.31	4.15	4.09	3.98	3.98	4.19
LAM	1.54	1.66	1.66	1.86	2.34	2.23	2.31	2.53	2.76	3.54
MEA	0.55	0.61	0.71	0.79	0.94	1.05	1.07	1.13	1.44	1.45
NEU	0.87	0.95	1.22	1.34	1.55	1.70	1.63	1.80	2.07	2.18
OAS	1.24	1.43	1.59	1.81	2.05	2.17	2.48	2.72	3.00	3.35
REF	0.73	1.03	0.82	1.01	1.37	1.67	1.10	1.04	1.25	1.15
SSA	0.50	0.59	0.66	0.69	0.73	0.81	0.85	0.96	1.09	1.24
USA	1.60	1.53	1.97	2.06	2.75	2.56	2.44	3.13	3.61	4.37

Table 1476: FAO — Productivity—Yield—Crops (t DM/ha)

52.1.1 Cereals

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## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.
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## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

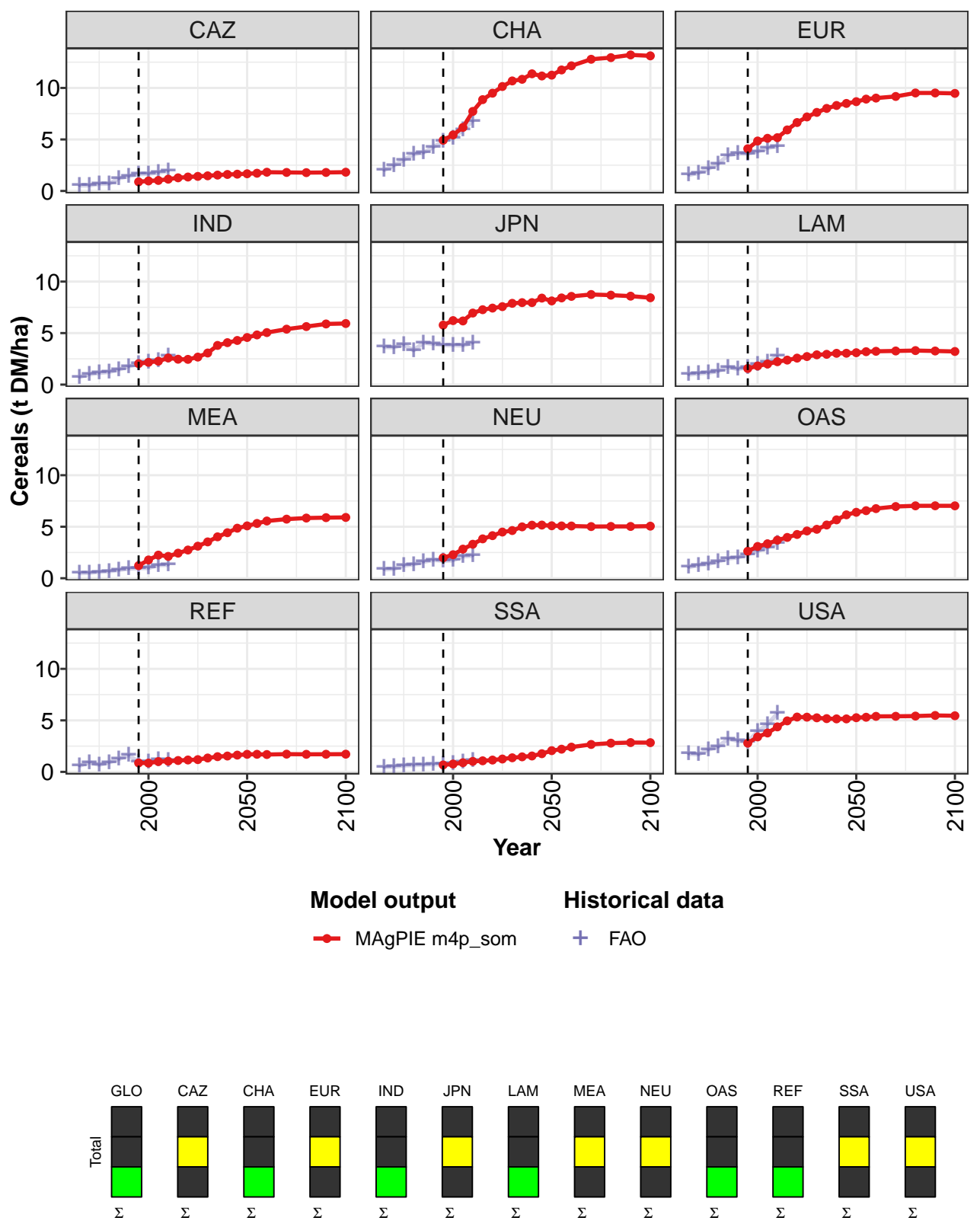


Figure 379: MAgPIE m4p\_som — Productivity—Yield—Crops—Cereals (t DM/ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	2.1	2.4	2.6	2.8	3.1	3.3	3.5	3.8	4.0	4.2	4.3
CAZ	0.9	1.0	1.0	1.1	1.3	1.4	1.4	1.5	1.5	1.6	1.6
CHA	4.9	5.4	6.2	7.7	8.9	9.5	10.1	10.7	10.8	11.4	11.2
EUR	4.1	4.9	5.1	5.2	5.9	6.6	7.2	7.6	8.0	8.3	8.5
IND	2.0	2.2	2.3	2.6	2.5	2.5	2.7	3.1	3.8	4.1	4.3
JPN	5.8	6.2	6.2	6.9	7.3	7.4	7.6	7.9	8.0	8.0	8.4
LAM	1.6	1.8	2.0	2.2	2.4	2.6	2.7	2.9	2.9	3.0	3.0
MEA	1.2	1.8	2.2	2.1	2.4	2.7	3.1	3.5	4.0	4.4	4.9
NEU	2.0	2.3	2.8	3.3	3.8	4.1	4.5	4.6	5.0	5.2	5.2
OAS	2.6	3.1	3.3	3.7	4.0	4.2	4.6	4.8	5.2	5.7	6.2
REF	0.9	0.9	1.0	1.0	1.1	1.2	1.2	1.3	1.5	1.5	1.6
SSA	0.7	0.8	0.9	1.0	1.1	1.1	1.3	1.4	1.5	1.5	1.8
USA	2.8	3.4	3.8	4.4	5.0	5.3	5.3	5.2	5.2	5.1	5.1

Table 1477: MAgPIE m4p\_som — Productivity—Yield—Crops—Cereals (t DM/ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	4.5	4.6	4.6	4.6	4.6	4.6	4.5
CAZ	1.7	1.7	1.8	1.8	1.8	1.8	1.8
CHA	11.2	11.7	12.1	12.8	12.9	13.2	13.1
EUR	8.7	8.9	9.0	9.2	9.5	9.5	9.5
IND	4.6	4.8	5.1	5.4	5.6	5.9	5.9
JPN	8.1	8.4	8.6	8.7	8.7	8.6	8.4
LAM	3.1	3.2	3.2	3.3	3.3	3.3	3.2
MEA	5.1	5.3	5.6	5.7	5.8	5.9	5.9
NEU	5.1	5.1	5.1	5.0	5.0	5.0	5.1
OAS	6.4	6.6	6.8	7.0	7.0	7.0	7.0
REF	1.7	1.7	1.7	1.7	1.7	1.7	1.7
SSA	2.1	2.2	2.4	2.7	2.8	2.8	2.8
USA	5.3	5.3	5.4	5.4	5.4	5.5	5.4

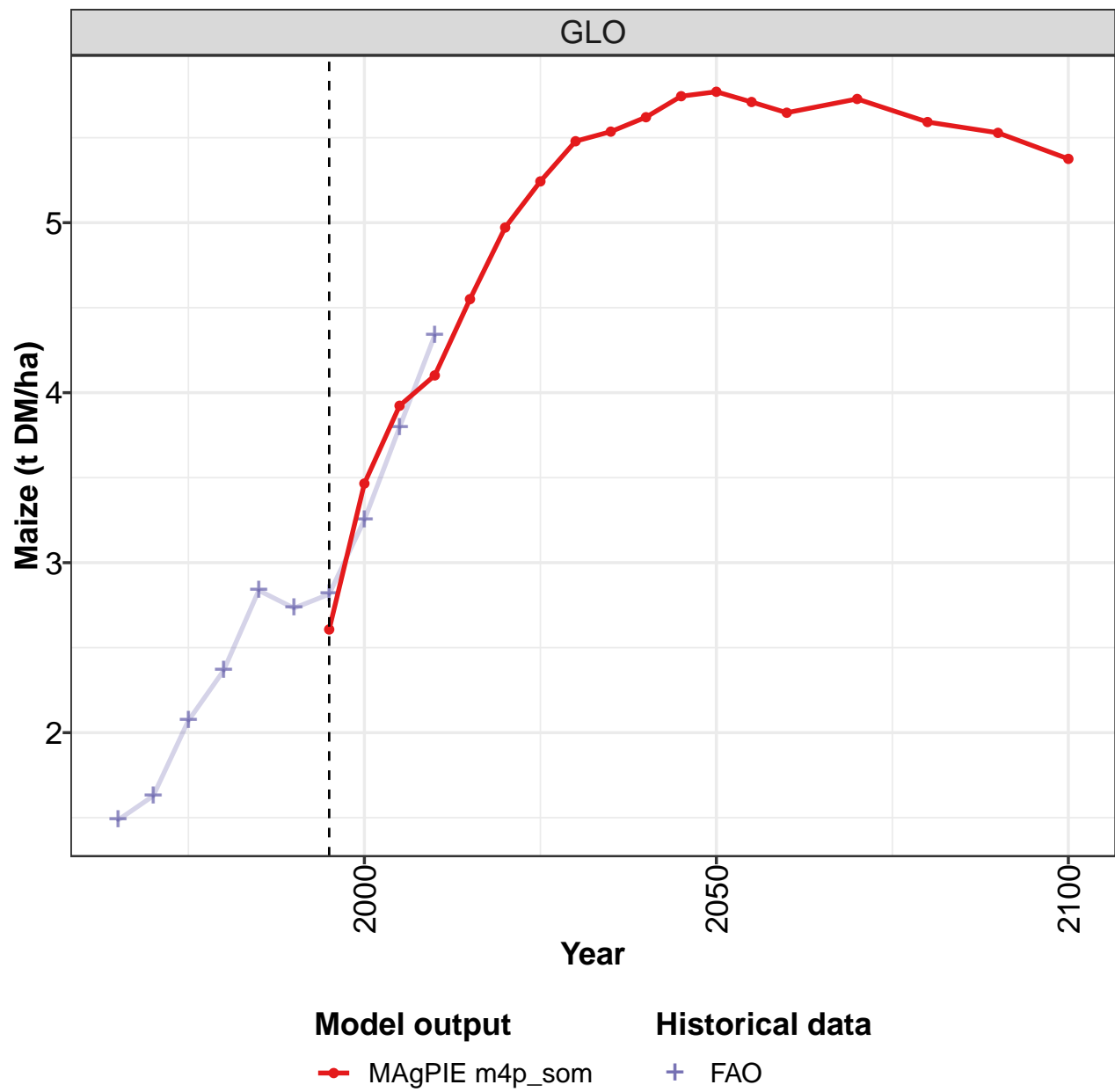
Table 1478: MAgPIE m4p\_som — Productivity—Yield—Crops—Cereals (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.01	1.19	1.35	1.55	1.98	2.14	2.15	2.38	2.62	2.97
CAZ	0.53	0.53	0.68	0.69	1.22	1.44	1.63	1.66	1.79	1.94
CHA	2.01	2.47	3.02	3.56	3.71	4.26	4.82	5.15	5.92	6.79
EUR	1.55	1.73	2.15	2.64	3.46	3.64	3.61	3.83	4.17	4.34
IND	0.73	1.00	1.12	1.22	1.46	1.77	2.01	2.18	2.37	2.79
JPN	3.64	3.62	3.88	3.31	4.06	3.94	3.83	3.83	3.79	4.04
LAM	0.98	1.08	1.15	1.30	1.70	1.49	1.70	1.94	2.18	2.78
MEA	0.49	0.52	0.61	0.68	0.80	0.92	0.97	0.99	1.28	1.29
NEU	0.86	0.90	1.22	1.35	1.59	1.77	1.69	1.73	2.11	2.19
OAS	1.07	1.27	1.38	1.62	1.92	2.01	2.30	2.65	2.98	3.37
REF	0.58	0.92	0.68	0.92	1.24	1.62	0.99	0.98	1.20	1.12
SSA	0.44	0.51	0.61	0.65	0.69	0.73	0.74	0.83	0.95	1.14
USA	1.76	1.69	2.16	2.43	3.22	3.00	2.92	3.93	4.61	5.67

Table 1479: FAO — Productivity—Yield—Crops—Cereals (t DM/ha)

52.1.2 Cereals—Maize

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

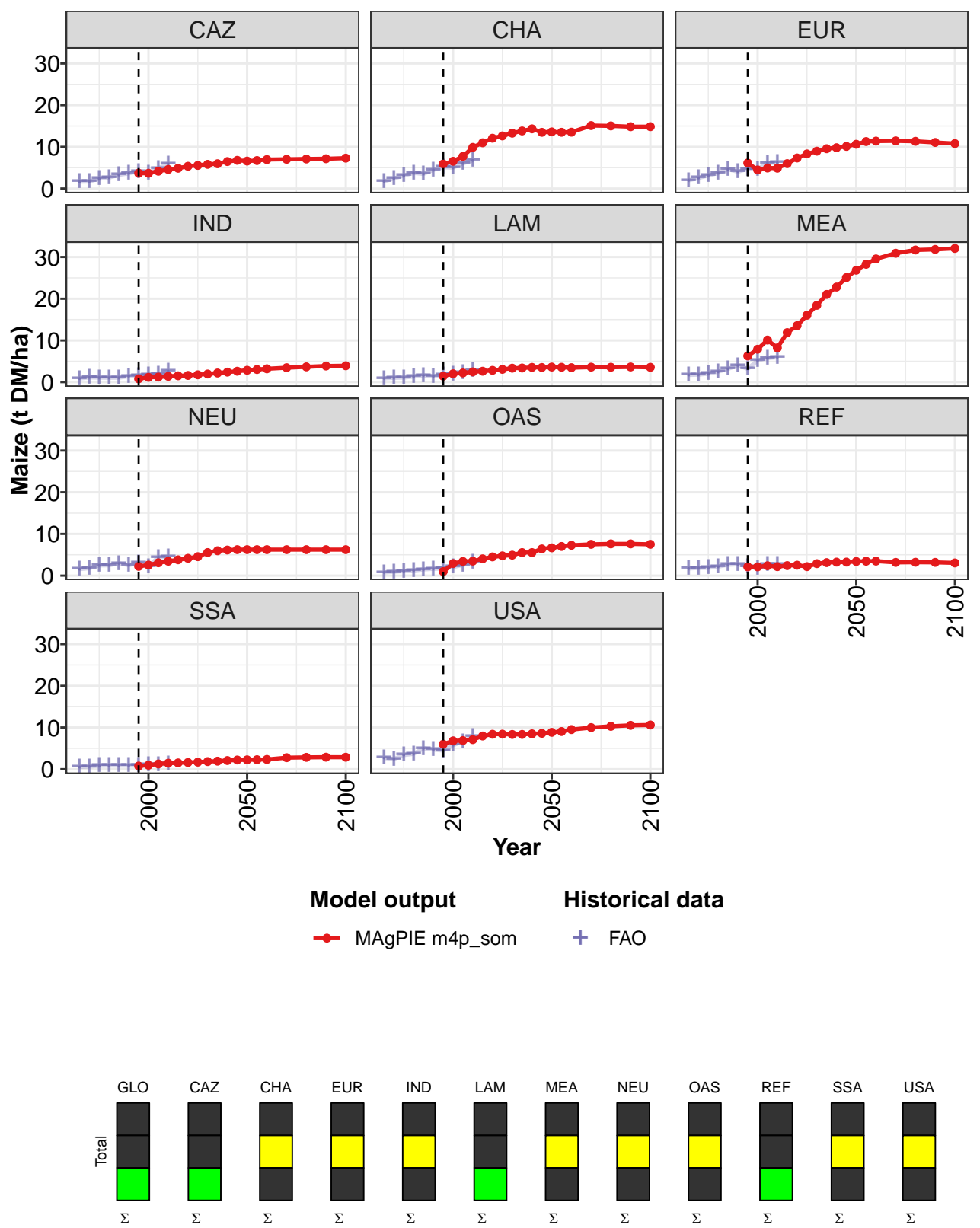


Figure 380: MAgPIE m4p\_som — Productivity—Yield—Crops—Cereals—Maize (t DM/ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	2.6	3.5	3.9	4.1	4.6	5.0	5.2	5.5	5.5	5.6	5.7
CAZ	3.7	3.7	4.2	4.6	4.9	5.3	5.6	5.8	6.0	6.5	6.8
CHA	5.9	6.5	7.7	9.9	11.0	12.1	12.6	13.3	13.8	14.3	13.5
EUR	6.1	4.5	4.9	4.9	6.0	7.3	8.3	9.0	9.6	9.8	10.1
IND	0.8	1.2	1.2	1.4	1.5	1.6	1.8	1.9	2.2	2.4	2.6
LAM	1.4	2.0	2.2	2.5	2.6	2.8	3.1	3.3	3.4	3.5	3.5
MEA	6.3	7.9	10.1	8.2	11.9	13.5	16.0	18.4	21.0	22.8	25.1
NEU	2.2	2.5	3.1	3.5	3.8	4.2	4.6	5.5	6.0	6.1	6.2
OAS	1.0	2.9	3.4	3.5	4.0	4.5	4.7	4.9	5.5	5.5	6.4
REF	2.1	2.1	2.4	2.2	2.4	2.5	2.2	2.9	3.1	3.2	3.3
SSA	0.8	1.0	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.1	2.2
USA	6.0	6.8	6.9	7.1	8.0	8.4	8.4	8.3	8.3	8.5	8.6

Table 1480: MAgPIE m4p\_som — Productivity—Yield—Crops—Cereals—Maize (t DM/ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	5.8	5.7	5.6	5.7	5.6	5.5	5.4
CAZ	6.6	6.7	6.9	7.0	7.1	7.1	7.3
CHA	13.6	13.5	13.5	15.1	15.0	14.8	14.8
EUR	10.6	11.3	11.4	11.4	11.3	11.0	10.8
IND	2.8	3.0	3.2	3.5	3.7	3.9	3.9
LAM	3.6	3.6	3.5	3.6	3.6	3.6	3.5
MEA	26.8	28.3	29.5	30.9	31.7	31.8	32.1
NEU	6.2	6.2	6.2	6.2	6.2	6.2	6.2
OAS	6.7	7.0	7.3	7.5	7.6	7.6	7.5
REF	3.4	3.5	3.5	3.2	3.2	3.2	3.0
SSA	2.2	2.3	2.3	2.8	2.8	2.9	2.9
USA	8.8	9.0	9.5	10.0	10.3	10.5	10.6

Table 1481: MAgPIE m4p\_som — Productivity—Yield—Crops—Cereals—Maize (t DM/ha) [PART 2/2]

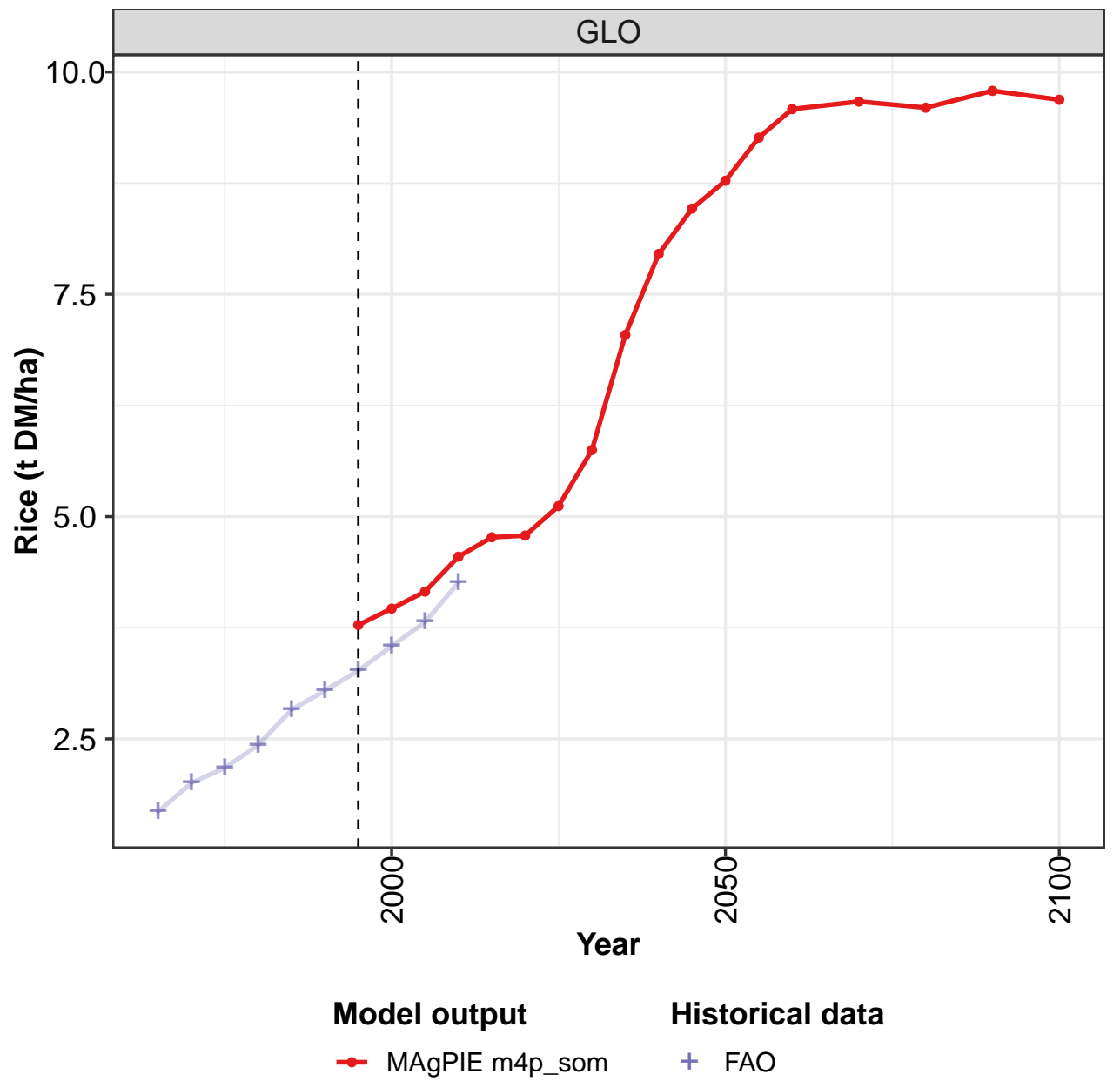
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.49	1.63	2.07	2.37	2.84	2.73	2.81	3.25	3.80	4.34
CAZ	1.65	1.69	2.36	2.62	3.27	3.65	4.11	3.70	4.85	5.92
CHA	1.73	2.42	3.10	3.74	3.52	4.49	5.11	5.02	6.03	6.75
EUR	1.96	2.53	3.12	3.71	4.62	4.04	4.70	4.64	6.16	6.21
IND	0.86	1.13	1.08	1.05	1.06	1.43	1.53	1.74	1.92	2.67
LAM	0.90	1.04	1.10	1.32	1.60	1.40	1.70	1.88	2.22	2.85
MEA	1.71	1.79	2.02	2.50	3.18	4.01	3.19	5.19	5.74	5.96
NEU	1.55	1.79	2.45	2.49	2.94	2.52	3.09	2.20	4.42	4.49
OAS	0.78	0.92	1.07	1.22	1.49	1.63	1.74	2.07	2.55	3.25
REF	1.71	1.85	1.88	2.15	2.61	2.73	2.20	1.75	2.71	2.64
SSA	0.53	0.64	0.82	0.88	0.86	0.87	0.83	1.05	1.07	1.36
USA	2.69	2.44	3.38	3.68	5.01	4.70	4.47	5.77	6.64	7.79

Table 1482: FAO — Productivity—Yield—Crops—Cereals—Maize (t DM/ha)



52.1.3 Cereals—Rice

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

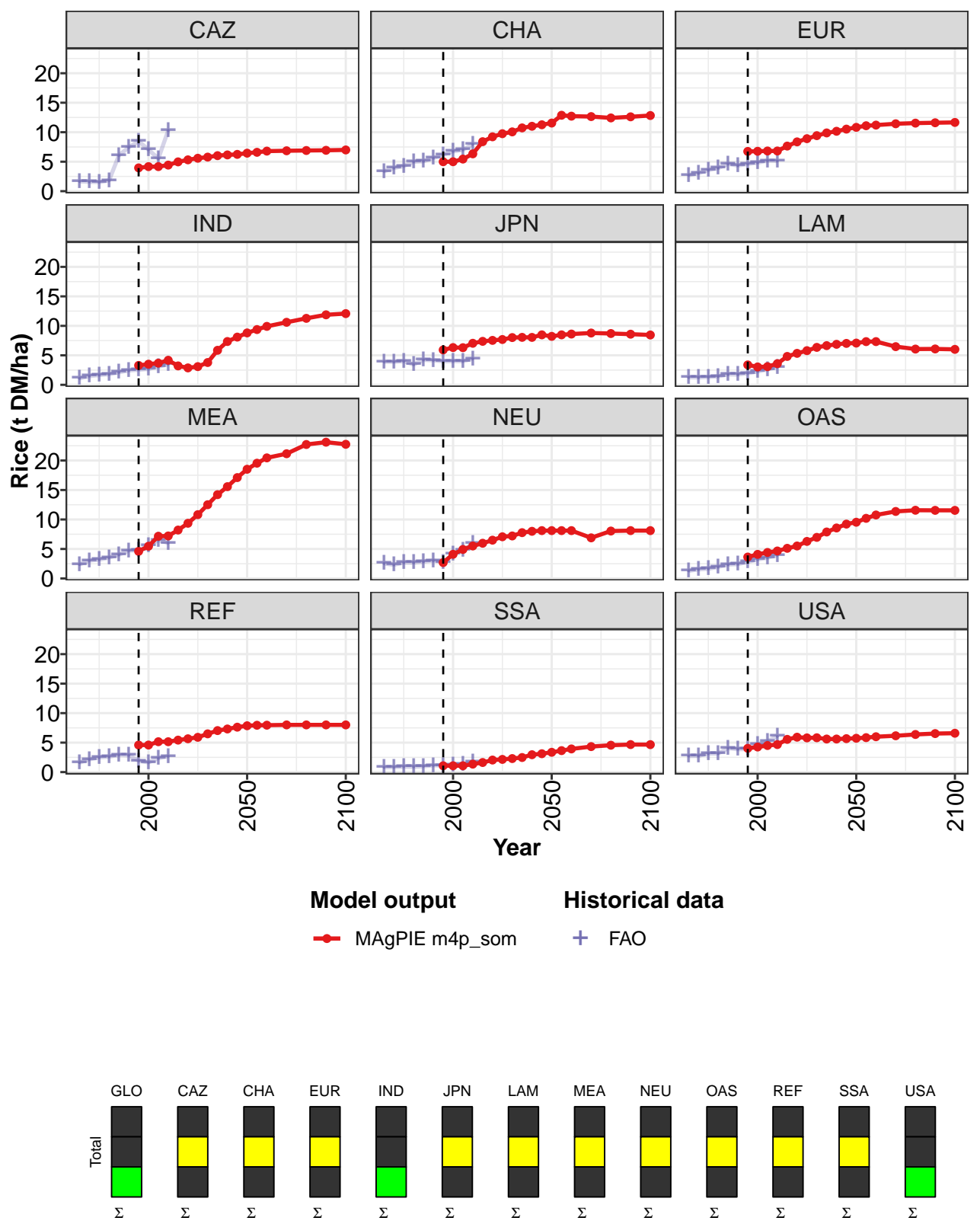


Figure 381: MAgPIE m4p\_som — Productivity—Yield—Crops—Cereals—Rice (t DM/ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	3.8	4.0	4.2	4.5	4.8	4.8	5.1	5.7	7.0	8.0	8.5
CAZ	4.0	4.2	4.2	4.4	5.0	5.3	5.6	5.8	6.0	6.2	6.2
CHA	5.0	5.0	5.4	6.3	8.4	9.2	9.7	10.1	10.7	11.0	11.3
EUR	6.7	6.8	6.8	6.8	7.7	8.4	8.9	9.4	9.9	10.2	10.5
IND	3.3	3.5	3.7	4.2	3.2	2.9	3.1	3.8	5.9	7.3	8.1
JPN	5.9	6.3	6.3	7.0	7.4	7.5	7.7	8.0	8.1	8.0	8.5
LAM	3.4	3.0	3.1	3.6	4.8	5.3	5.8	6.4	6.6	6.9	7.0
MEA	4.6	5.5	7.2	7.2	8.2	9.4	10.8	12.5	14.2	15.6	17.1
NEU	2.7	4.1	4.9	5.5	6.0	6.5	7.1	7.2	7.8	8.0	8.1
OAS	3.6	4.1	4.4	4.7	5.1	5.5	6.3	7.0	7.9	8.6	9.2
REF	4.6	4.6	5.2	5.2	5.4	5.7	5.9	6.5	7.0	7.3	7.6
SSA	1.1	1.1	1.1	1.4	1.6	2.0	2.2	2.3	2.5	2.9	3.1
USA	4.0	4.3	4.5	4.7	5.6	5.9	5.8	5.8	5.6	5.6	5.7

Table 1483: MAgPIE m4p\_som — Productivity—Yield—Crops—Cereals—Rice (t DM/ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	8.8	9.3	9.6	9.7	9.6	9.8	9.7
CAZ	6.4	6.6	6.8	6.9	6.9	6.9	7.0
CHA	11.6	12.9	12.7	12.7	12.4	12.6	12.8
EUR	10.8	11.1	11.2	11.4	11.5	11.6	11.7
IND	8.8	9.4	9.9	10.6	11.3	11.9	12.1
JPN	8.2	8.5	8.6	8.8	8.7	8.6	8.5
LAM	7.1	7.3	7.3	6.5	6.1	6.1	6.0
MEA	18.5	19.5	20.5	21.2	22.7	23.1	22.8
NEU	8.1	8.1	8.1	6.9	8.0	8.1	8.1
OAS	9.5	10.2	10.8	11.4	11.6	11.6	11.5
REF	7.9	7.9	8.0	8.0	8.0	8.0	8.0
SSA	3.4	3.6	3.9	4.3	4.6	4.7	4.7
USA	5.7	5.8	6.0	6.2	6.4	6.5	6.6

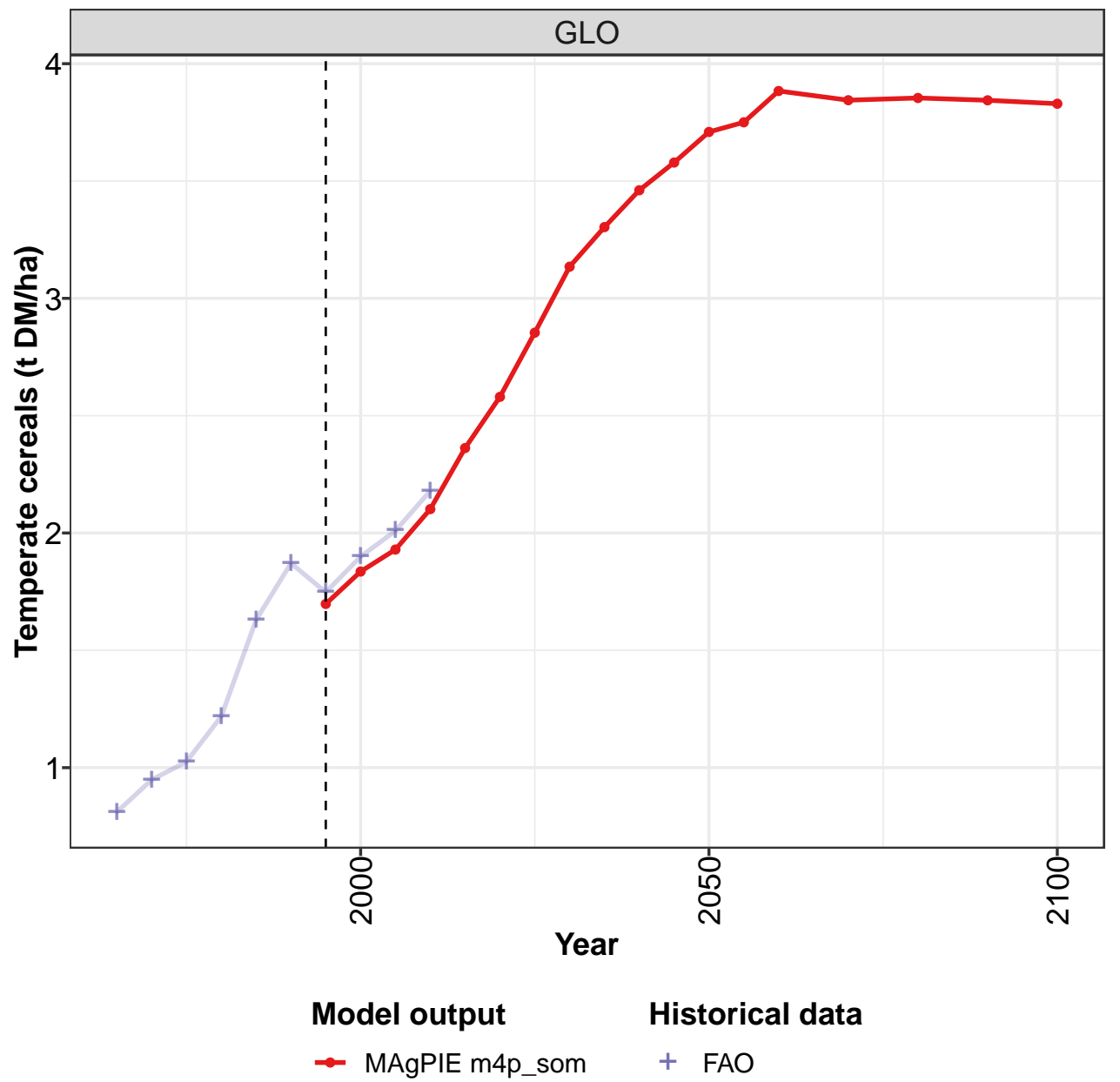
Table 1484: MAgPIE m4p\_som — Productivity—Yield—Crops—Cereals—Rice (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.7	2.0	2.2	2.4	2.8	3.0	3.3	3.5	3.8	4.3
CAZ	1.7	1.6	1.5	1.8	6.1	7.5	8.5	7.0	5.5	10.3
CHA	3.4	3.9	4.3	5.0	5.1	5.6	6.2	6.7	7.0	8.0
EUR	2.7	3.0	3.6	3.9	4.6	4.4	4.6	4.8	5.2	5.1
IND	1.1	1.5	1.6	1.8	2.1	2.4	2.6	2.7	3.1	3.5
JPN	3.9	3.9	4.0	3.4	4.2	4.2	4.0	4.0	4.0	4.4
LAM	1.3	1.3	1.3	1.4	1.8	1.7	2.0	2.3	2.6	3.0
MEA	2.4	3.0	3.2	3.5	4.0	4.7	4.8	5.6	6.5	6.0
NEU	2.5	2.3	2.7	2.7	2.9	3.0	2.7	4.1	4.8	5.9
OAS	1.3	1.5	1.6	2.0	2.3	2.4	2.8	3.2	3.5	3.9
REF	1.6	2.2	2.5	2.6	2.9	2.9	1.9	1.6	2.4	2.7
SSA	0.8	0.8	0.9	0.9	1.0	1.1	1.1	1.2	1.3	1.7
USA	2.7	2.7	3.2	3.2	4.1	3.9	3.9	4.7	5.3	6.1

Table 1485: FAO — Productivity—Yield—Crops—Cereals—Rice (t DM/ha)

52.1.4 Cereals—Temperate cereals

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

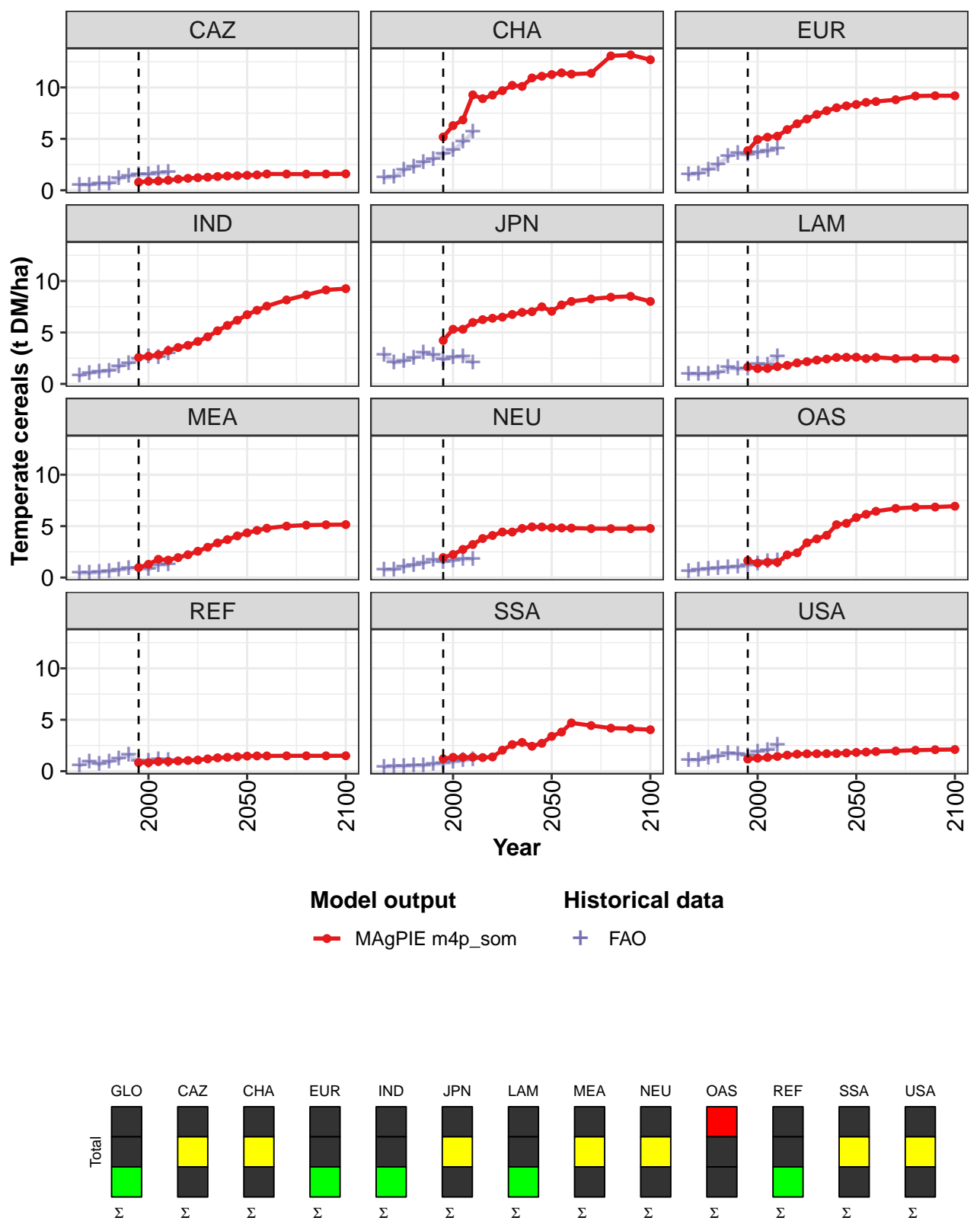


Figure 382: MAGPIE m4p\_som — Productivity—Yield—Crops—Cereals—Temperate cereals (t DM/ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.7	1.8	1.9	2.1	2.4	2.6	2.9	3.1	3.3	3.5	3.6
CAZ	0.8	0.9	0.9	1.0	1.1	1.2	1.2	1.3	1.3	1.4	1.4
CHA	5.2	6.3	6.8	9.3	8.9	9.3	9.7	10.2	10.1	10.9	11.1
EUR	3.9	4.9	5.2	5.3	5.9	6.5	6.9	7.4	7.7	8.0	8.2
IND	2.6	2.7	2.8	3.2	3.5	3.8	4.1	4.6	5.2	5.7	6.2
JPN	4.2	5.3	5.3	6.0	6.2	6.4	6.5	6.8	7.0	7.0	7.5
LAM	1.7	1.5	1.5	1.7	1.8	2.0	2.2	2.3	2.4	2.6	2.6
MEA	1.0	1.3	1.8	1.7	1.9	2.2	2.6	3.0	3.4	3.7	4.1
NEU	1.9	2.2	2.7	3.2	3.8	4.1	4.4	4.4	4.8	4.9	4.9
OAS	1.6	1.4	1.5	1.5	2.2	2.4	3.4	3.8	4.1	5.1	5.3
REF	0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.2	1.3	1.4	1.4
SSA	1.2	1.3	1.3	1.4	1.3	1.4	2.0	2.6	2.8	2.4	2.7
USA	1.2	1.3	1.3	1.4	1.6	1.7	1.7	1.7	1.7	1.7	1.8

Table 1486: MAgPIE m4p\_som — Productivity—Yield—Crops—Cereals—Temperate cereals (t DM/ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	3.7	3.8	3.9	3.8	3.9	3.8	3.8
CAZ	1.5	1.5	1.6	1.6	1.6	1.6	1.6
CHA	11.2	11.4	11.3	11.4	13.1	13.2	12.7
EUR	8.3	8.5	8.6	8.8	9.2	9.2	9.2
IND	6.7	7.2	7.6	8.2	8.7	9.1	9.3
JPN	7.1	7.7	8.0	8.3	8.4	8.5	8.0
LAM	2.6	2.5	2.6	2.5	2.5	2.5	2.4
MEA	4.3	4.6	4.8	5.0	5.1	5.1	5.1
NEU	4.8	4.8	4.8	4.8	4.8	4.7	4.8
OAS	5.8	6.1	6.4	6.7	6.8	6.9	6.9
REF	1.5	1.5	1.5	1.5	1.5	1.5	1.5
SSA	3.4	3.8	4.7	4.4	4.2	4.1	4.0
USA	1.8	1.9	1.9	2.0	2.0	2.1	2.1

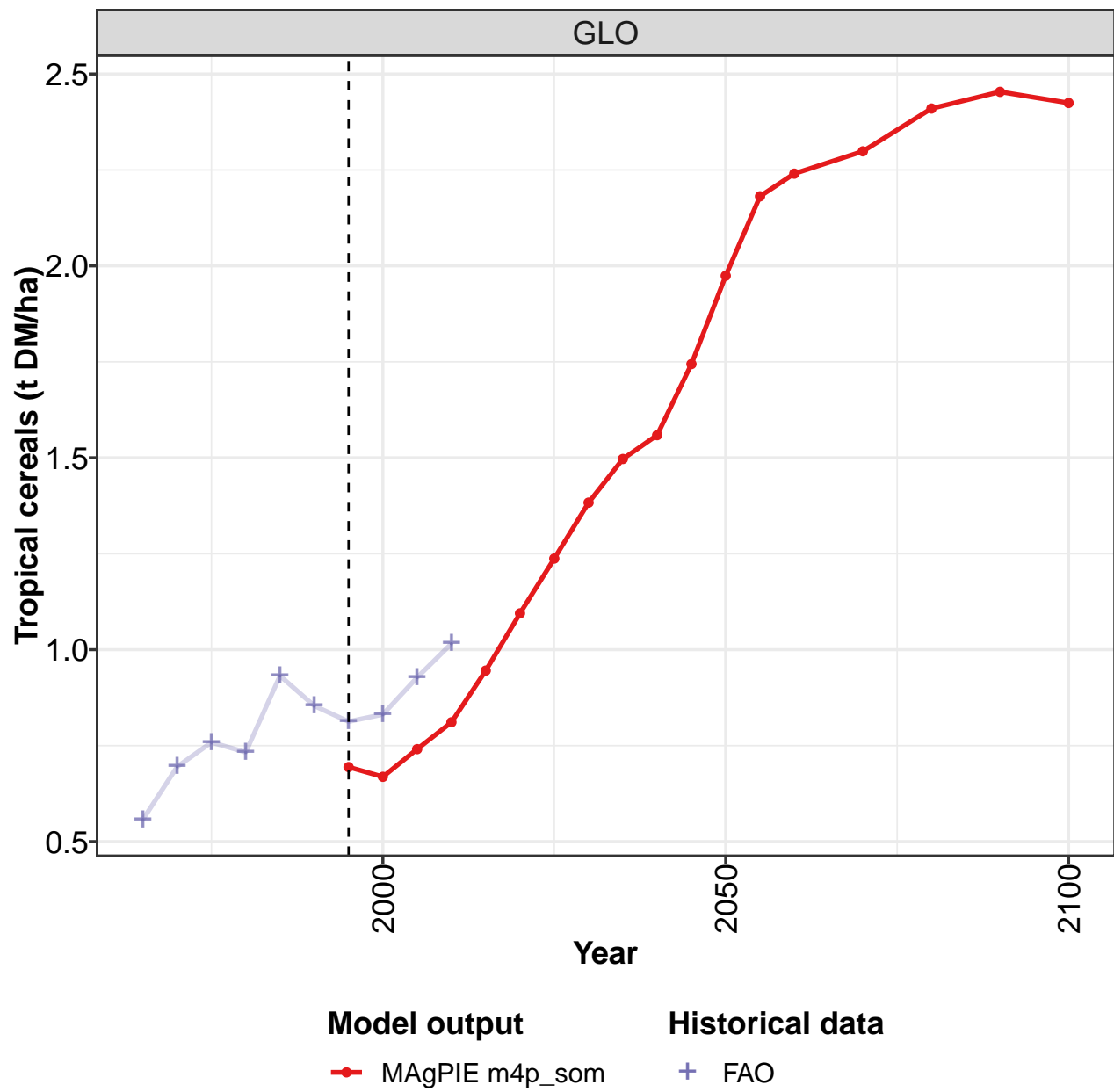
Table 1487: MAgPIE m4p\_som — Productivity—Yield—Crops—Cereals—Temperate cereals (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.81	0.95	1.03	1.22	1.63	1.87	1.75	1.90	2.01	2.18
CAZ	0.51	0.51	0.65	0.63	1.12	1.34	1.50	1.54	1.65	1.71
CHA	1.19	1.28	1.96	2.25	2.73	3.01	3.49	3.86	4.66	5.64
EUR	1.50	1.61	2.00	2.48	3.26	3.57	3.41	3.67	3.80	4.01
IND	0.79	1.04	1.17	1.27	1.69	1.97	2.41	2.63	2.55	2.96
JPN	2.83	2.05	2.19	2.47	2.99	2.79	2.35	2.58	2.64	2.07
LAM	0.96	0.91	0.95	1.05	1.57	1.43	1.49	1.93	1.86	2.62
MEA	0.40	0.42	0.51	0.60	0.72	0.86	0.92	0.78	1.21	1.26
NEU	0.75	0.77	1.04	1.19	1.39	1.66	1.50	1.66	1.78	1.79
OAS	0.61	0.73	0.83	0.91	0.97	1.03	1.17	1.31	1.56	1.66
REF	0.55	0.90	0.65	0.89	1.18	1.60	0.95	0.96	1.14	1.01
SSA	0.37	0.45	0.47	0.55	0.55	0.68	0.73	0.90	1.02	1.16
USA	1.06	1.08	1.27	1.45	1.70	1.67	1.53	1.90	2.02	2.53

Table 1488: FAO — Productivity—Yield—Crops—Cereals—Temperate cereals (t DM/ha)

52.1.5 Cereals—Tropical cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

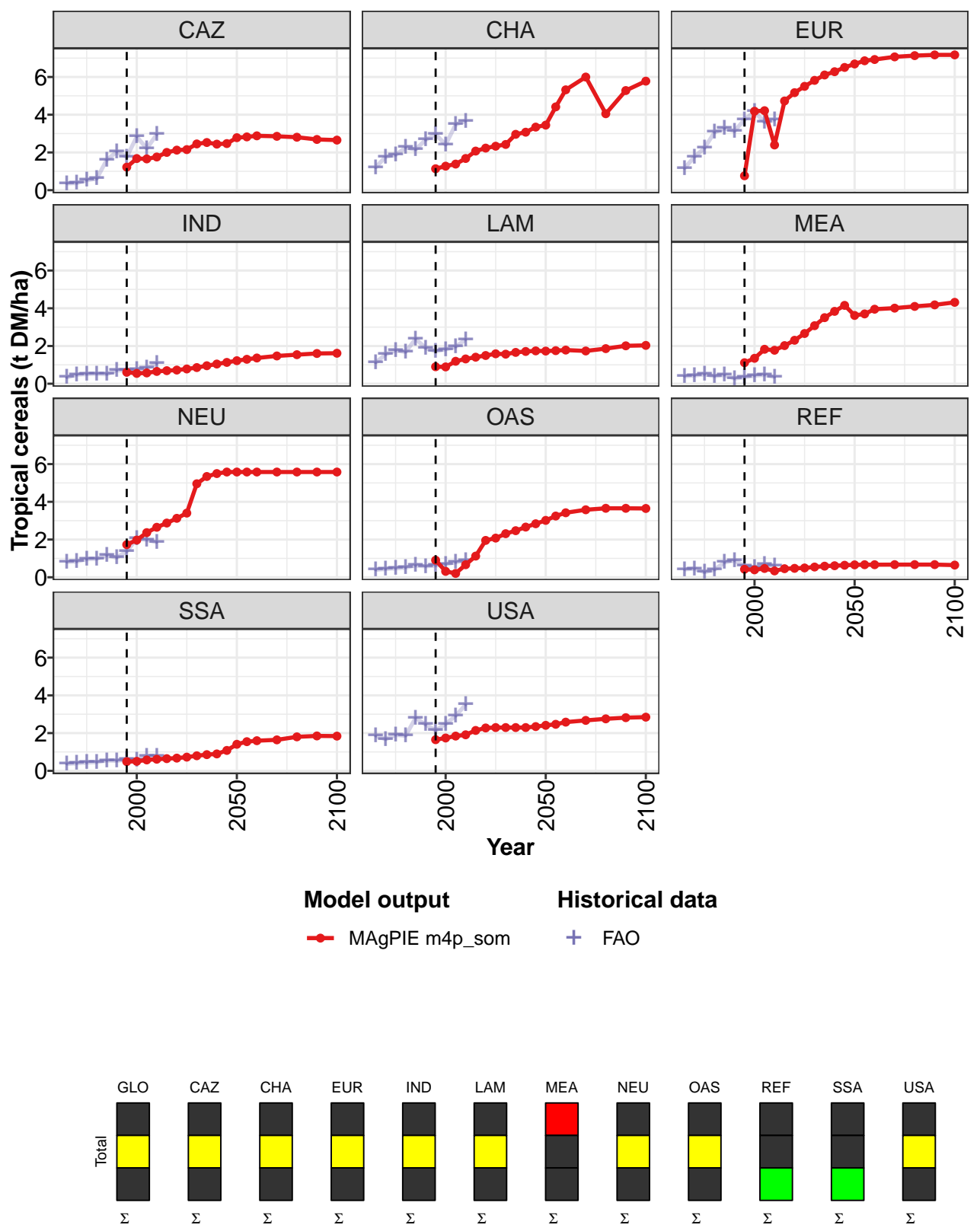


Figure 383: MAgPIE m4p\_som — Productivity—Yield—Crops—Cereals—Tropical cereals (t DM/ha)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.69	0.67	0.74	0.81	0.95	1.09	1.24	1.38	1.50	1.56	1.74
CAZ	1.22	1.68	1.66	1.76	2.00	2.12	2.15	2.45	2.53	2.44	2.47
CHA	1.14	1.27	1.38	1.68	2.07	2.23	2.33	2.42	2.96	3.07	3.34
EUR	0.76	4.18	4.21	2.40	4.73	5.17	5.50	5.82	6.11	6.28	6.51
IND	0.61	0.55	0.57	0.65	0.69	0.72	0.78	0.86	0.95	1.04	1.13
LAM	0.90	0.89	1.19	1.31	1.41	1.50	1.59	1.57	1.66	1.71	1.74
MEA	1.12	1.35	1.83	1.77	2.02	2.30	2.66	3.08	3.50	3.84	4.15
NEU	1.73	1.97	2.37	2.65	2.87	3.13	3.40	4.96	5.34	5.50	5.58
OAS	0.90	0.31	0.20	0.67	1.12	1.95	2.08	2.31	2.47	2.66	2.84
REF	0.43	0.40	0.47	0.34	0.45	0.47	0.49	0.54	0.59	0.61	0.64
SSA	0.49	0.50	0.58	0.61	0.65	0.67	0.73	0.80	0.86	0.90	1.08
USA	1.65	1.74	1.84	1.91	2.14	2.27	2.29	2.29	2.29	2.29	2.35

Table 1489: MAgPIE m4p\_som — Productivity—Yield—Crops—Cereals—Tropical cereals (t DM/ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.97	2.18	2.24	2.30	2.41	2.45	2.42
CAZ	2.78	2.82	2.88	2.86	2.81	2.69	2.65
CHA	3.45	4.42	5.32	6.00	4.05	5.28	5.78
EUR	6.69	6.86	6.93	7.07	7.13	7.17	7.17
IND	1.22	1.30	1.36	1.47	1.54	1.60	1.62
LAM	1.73	1.75	1.78	1.74	1.86	2.01	2.03
MEA	3.62	3.70	3.95	4.01	4.10	4.18	4.31
NEU	5.58	5.58	5.58	5.58	5.58	5.58	5.58
OAS	3.02	3.25	3.42	3.58	3.66	3.66	3.65
REF	0.66	0.67	0.67	0.67	0.67	0.67	0.65
SSA	1.41	1.55	1.60	1.64	1.80	1.85	1.84
USA	2.41	2.47	2.58	2.67	2.76	2.82	2.85

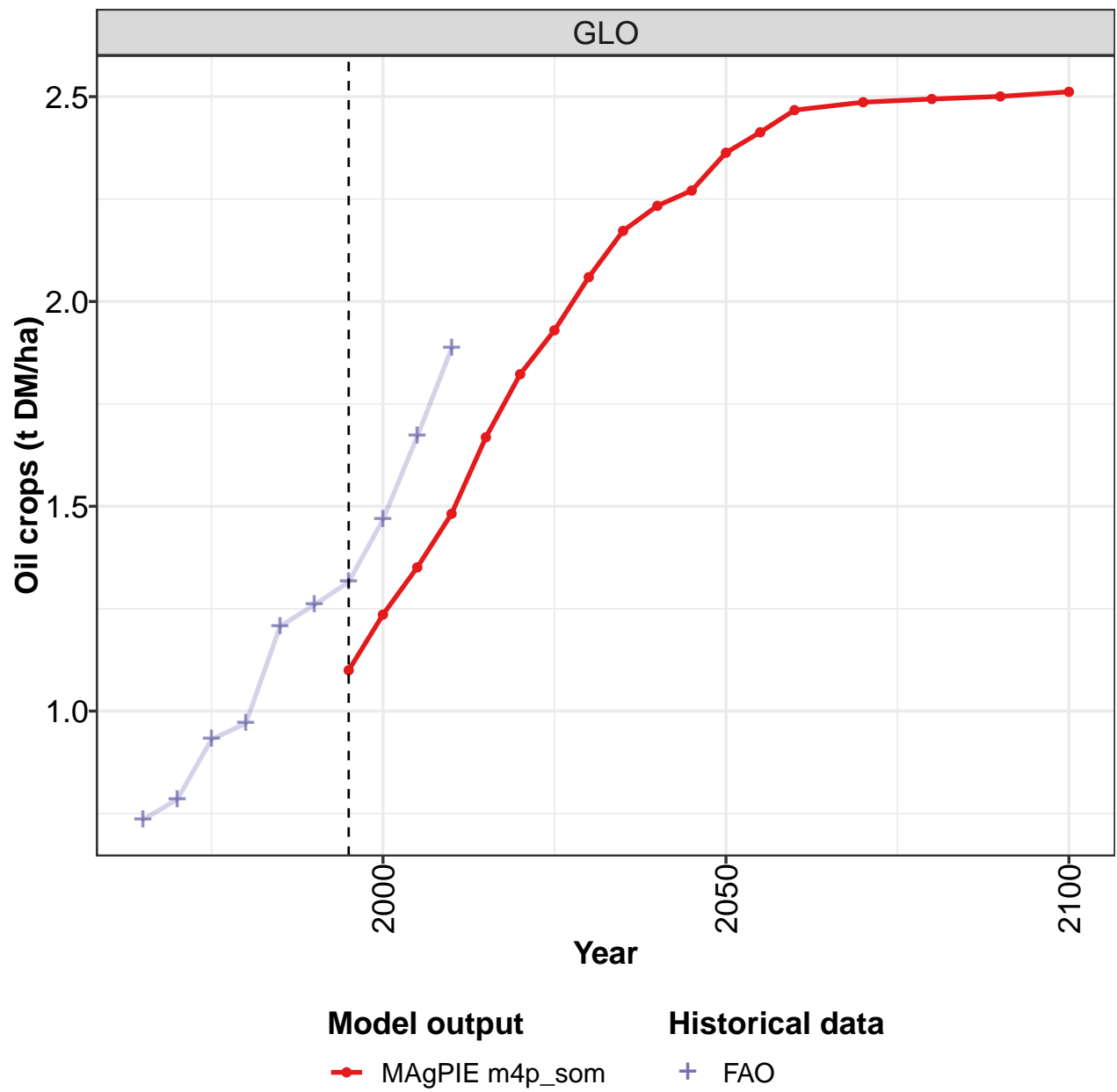
Table 1490: MAgPIE m4p\_som — Productivity—Yield—Crops—Cereals—Tropical cereals (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.56	0.69	0.76	0.73	0.93	0.85	0.81	0.83	0.93	1.02
CAZ	0.36	0.38	0.53	0.61	1.60	2.04	1.75	2.84	2.21	2.95
CHA	1.20	1.77	1.86	2.26	2.16	2.67	2.97	2.41	3.48	3.67
EUR	1.16	1.77	2.23	3.07	3.27	3.13	3.74	4.15	3.60	3.72
IND	0.33	0.48	0.51	0.53	0.50	0.71	0.72	0.74	0.82	1.07
LAM	1.11	1.55	1.77	1.68	2.38	1.89	1.73	1.82	1.96	2.35
MEA	0.40	0.44	0.50	0.40	0.47	0.27	0.35	0.43	0.47	0.35
NEU	0.81	0.84	0.96	0.98	1.17	1.04	1.38	2.04	1.99	1.86
OAS	0.39	0.44	0.47	0.51	0.63	0.58	0.62	0.70	0.79	0.88
REF	0.42	0.46	0.26	0.40	0.79	0.89	0.59	0.52	0.67	0.62
SSA	0.37	0.40	0.44	0.46	0.54	0.53	0.59	0.58	0.75	0.79
USA	1.85	1.68	1.90	1.86	2.81	2.45	2.15	2.48	2.91	3.51

Table 1491: FAO — Productivity—Yield—Crops—Cereals—Tropical cereals (t DM/ha)

52.1.6 Oil crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

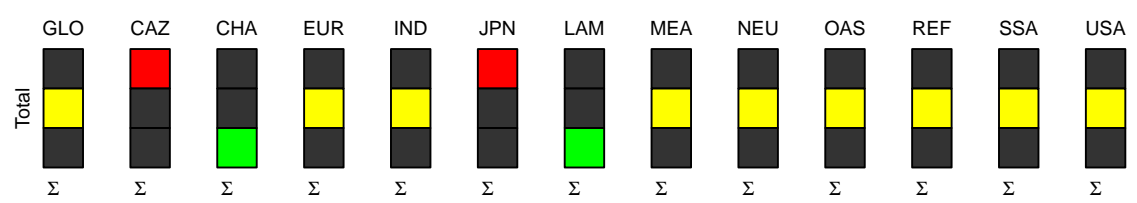
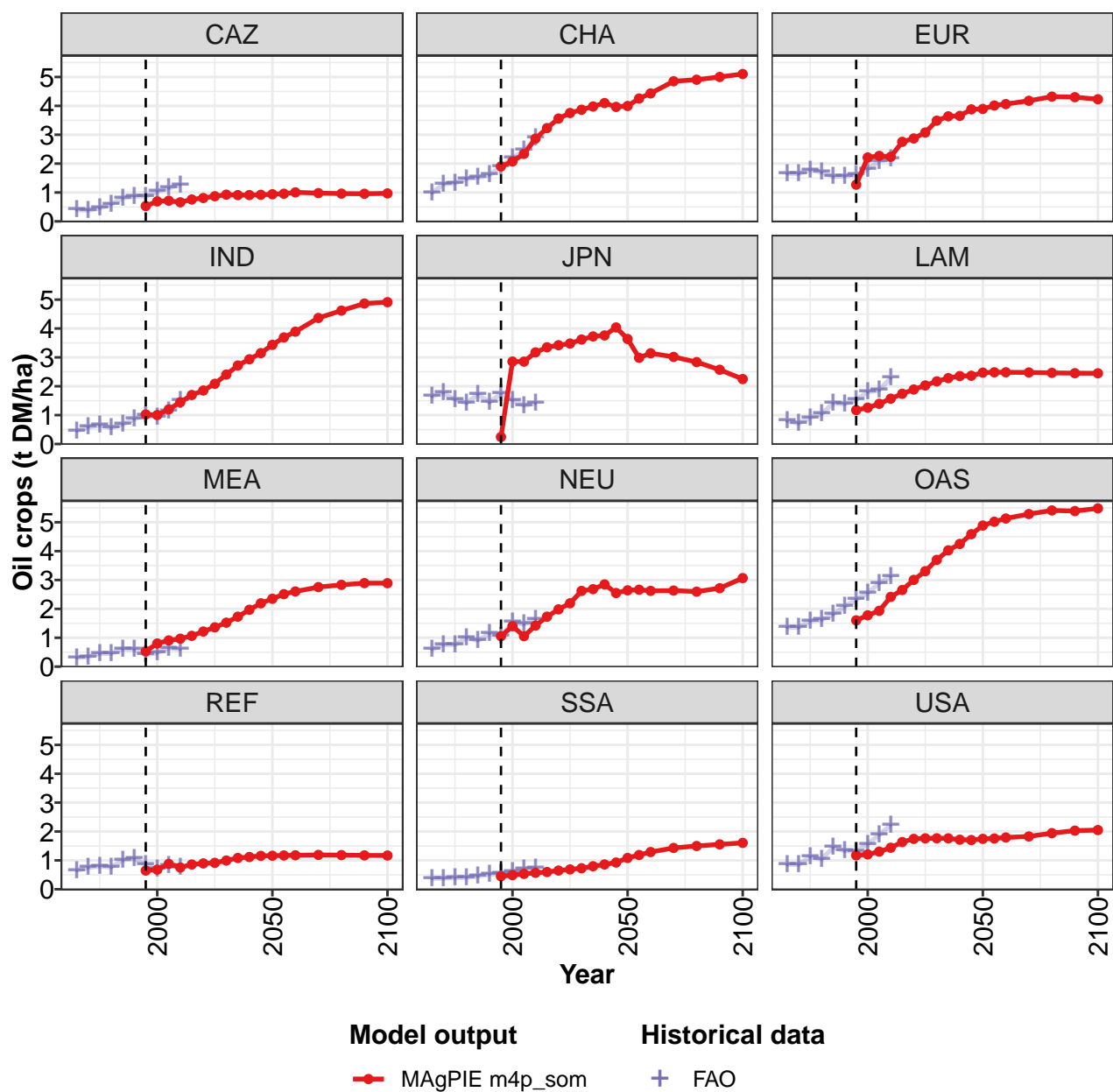


Figure 384: MAGPIE m4p\_som — Productivity—Yield—Crops—Oil crops (t DM/ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.10	1.24	1.35	1.48	1.67	1.82	1.93	2.06	2.17	2.23	2.27
CAZ	0.53	0.69	0.72	0.66	0.76	0.81	0.87	0.92	0.91	0.91	0.92
CHA	1.90	2.08	2.34	2.87	3.23	3.56	3.75	3.87	3.98	4.10	3.97
EUR	1.27	2.21	2.27	2.24	2.76	2.87	3.08	3.49	3.64	3.65	3.88
IND	1.02	1.00	1.20	1.45	1.70	1.85	2.09	2.40	2.72	2.93	3.15
JPN	0.24	2.85	2.85	3.17	3.35	3.42	3.48	3.62	3.73	3.76	4.04
LAM	1.17	1.26	1.39	1.57	1.74	1.89	2.03	2.17	2.28	2.35	2.36
MEA	0.53	0.80	0.91	0.97	1.07	1.22	1.36	1.52	1.73	1.97	2.19
NEU	1.06	1.40	1.06	1.42	1.73	1.98	2.19	2.62	2.68	2.85	2.55
OAS	1.60	1.78	1.93	2.41	2.65	3.00	3.31	3.70	4.03	4.25	4.59
REF	0.65	0.68	0.88	0.75	0.86	0.90	0.91	1.00	1.08	1.12	1.16
SSA	0.45	0.49	0.53	0.57	0.60	0.65	0.69	0.73	0.80	0.86	0.93
USA	1.17	1.21	1.30	1.44	1.64	1.75	1.76	1.77	1.76	1.72	1.71

Table 1492: MAgPIE m4p\_som — Productivity—Yield—Crops—Oil crops (t DM/ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	2.36	2.41	2.47	2.49	2.49	2.50	2.51
CAZ	0.94	0.96	1.00	0.98	0.96	0.96	0.97
CHA	4.00	4.26	4.43	4.85	4.91	5.00	5.10
EUR	3.89	4.01	4.06	4.18	4.32	4.30	4.23
IND	3.43	3.69	3.89	4.37	4.62	4.87	4.91
JPN	3.64	2.99	3.14	3.02	2.84	2.57	2.25
LAM	2.47	2.48	2.48	2.48	2.46	2.45	2.45
MEA	2.35	2.51	2.60	2.75	2.83	2.89	2.89
NEU	2.64	2.66	2.62	2.63	2.60	2.72	3.07
OAS	4.89	5.02	5.13	5.29	5.41	5.39	5.48
REF	1.16	1.17	1.18	1.19	1.18	1.17	1.17
SSA	1.08	1.19	1.29	1.43	1.50	1.55	1.61
USA	1.75	1.76	1.79	1.83	1.94	2.03	2.05

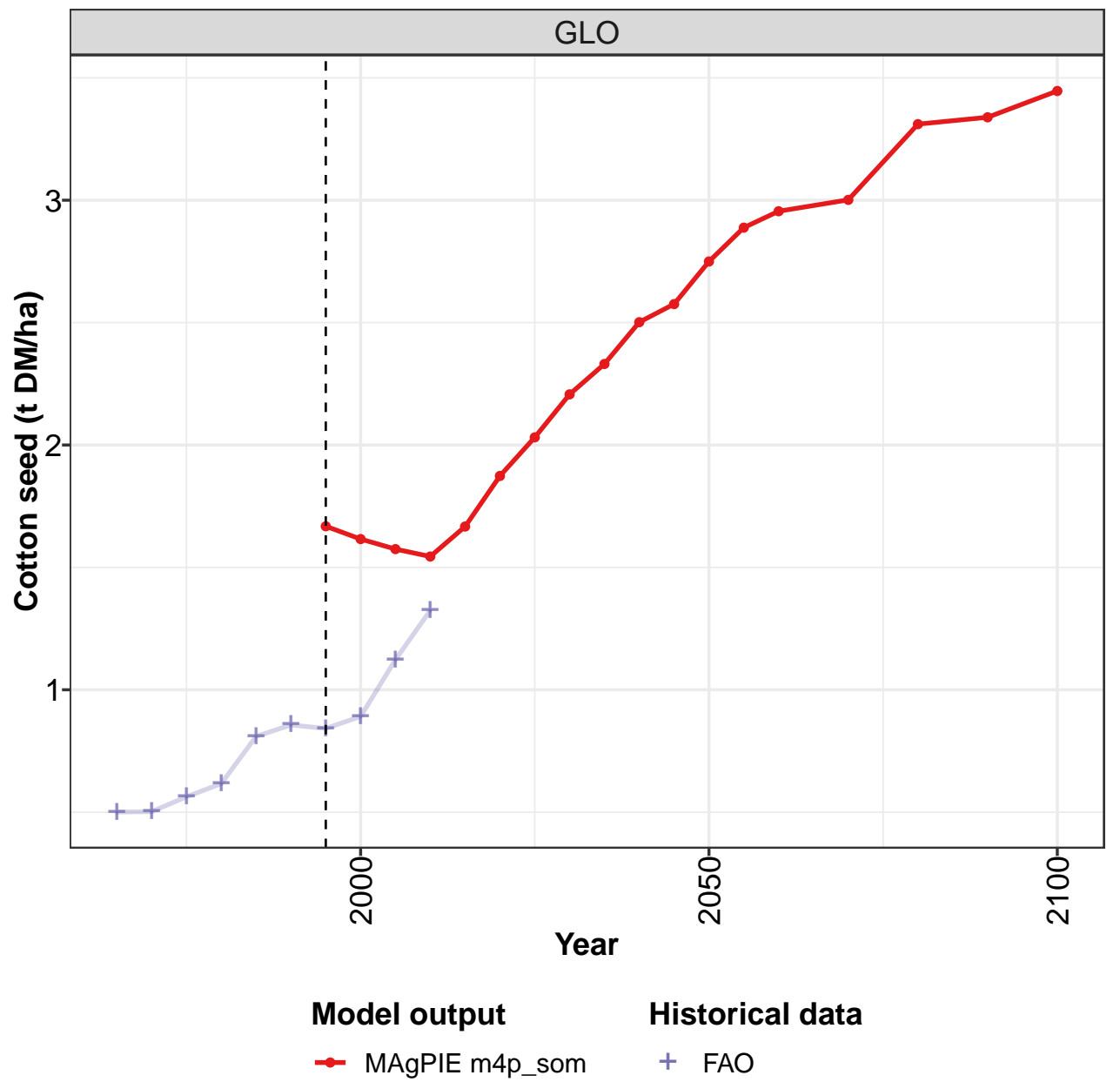
Table 1493: MAgPIE m4p\_som — Productivity—Yield—Crops—Oil crops (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.74	0.78	0.93	0.97	1.21	1.26	1.32	1.47	1.67	1.89
CAZ	0.40	0.38	0.46	0.59	0.81	0.87	0.87	1.04	1.15	1.27
CHA	0.98	1.29	1.33	1.47	1.52	1.61	1.91	2.19	2.46	2.88
EUR	1.66	1.65	1.78	1.70	1.55	1.57	1.61	1.81	2.09	2.16
IND	0.45	0.58	0.65	0.56	0.68	0.87	0.99	0.92	1.14	1.50
JPN	1.65	1.77	1.54	1.42	1.72	1.44	1.74	1.52	1.33	1.41
LAM	0.79	0.71	0.92	1.05	1.41	1.38	1.53	1.80	1.86	2.29
MEA	0.31	0.34	0.45	0.45	0.61	0.59	0.41	0.48	0.64	0.60
NEU	0.59	0.77	0.76	1.00	0.90	1.14	1.05	1.53	1.47	1.64
OAS	1.36	1.36	1.58	1.62	1.81	2.08	2.33	2.55	2.89	3.12
REF	0.65	0.75	0.80	0.76	1.01	1.07	0.84	0.70	0.82	0.75
SSA	0.37	0.38	0.39	0.41	0.45	0.52	0.54	0.61	0.70	0.74
USA	0.85	0.85	1.12	1.04	1.45	1.33	1.31	1.57	1.89	2.22

Table 1494: FAO — Productivity—Yield—Crops—Oil crops (t DM/ha)

52.1.7 Oil crops—Cotton seed

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

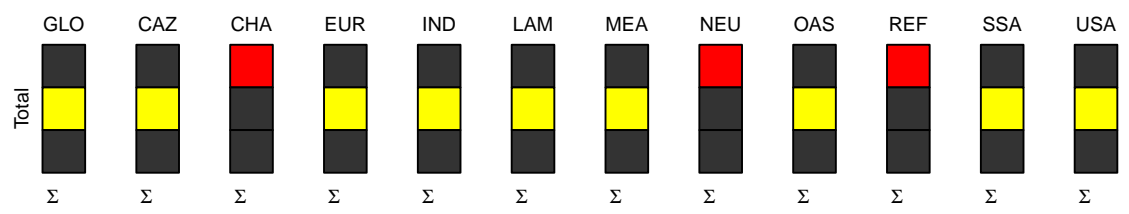
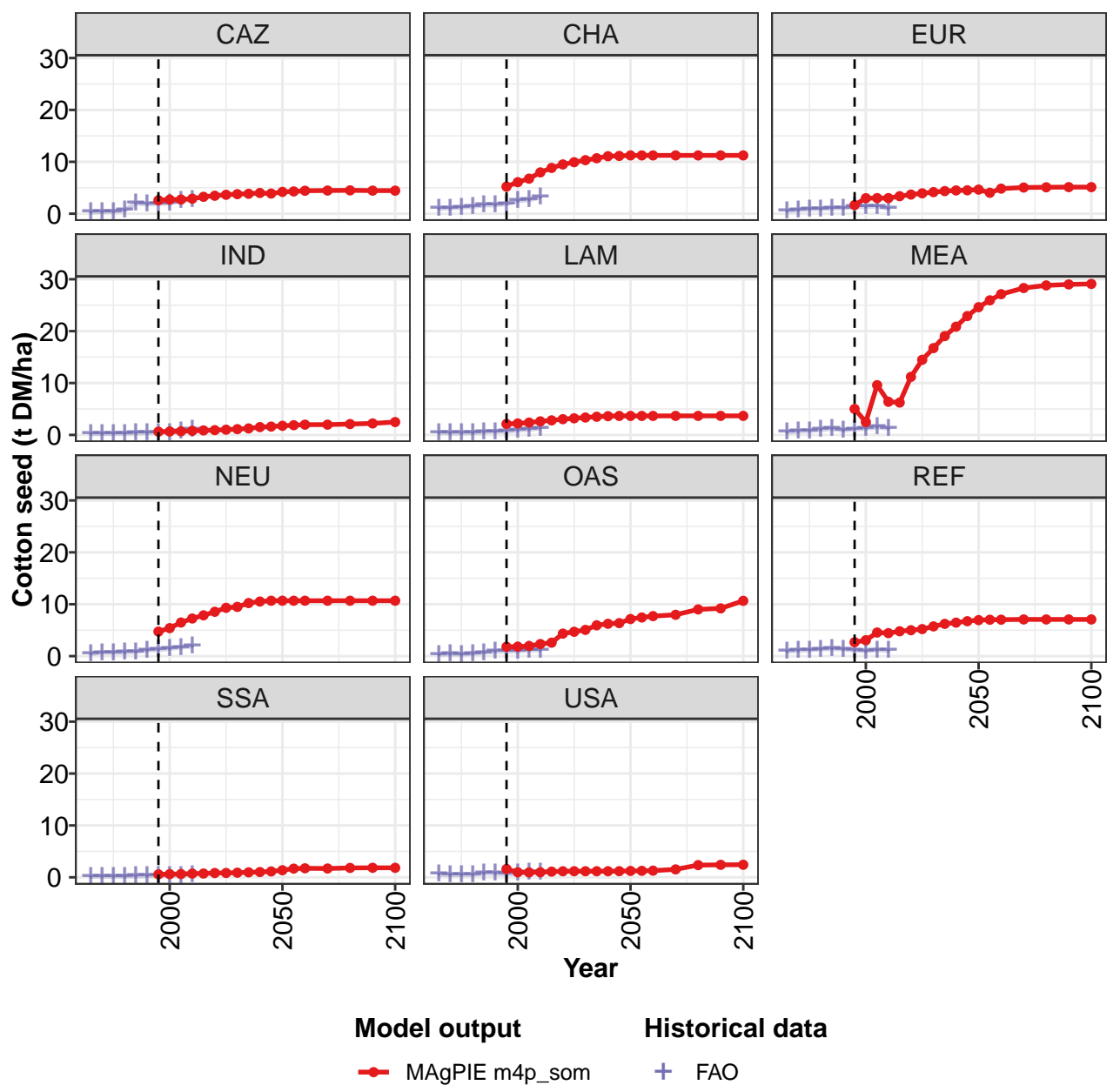


Figure 385: MAgPIE m4p\_som — Productivity—Yield—Crops—Oil crops—Cotton seed (t DM/ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.7	1.6	1.6	1.5	1.7	1.9	2.0	2.2	2.3	2.5	2.6
CAZ	2.6	2.7	2.7	2.9	3.3	3.5	3.6	3.8	3.8	4.0	3.9
CHA	5.2	6.1	6.8	8.0	8.8	9.5	9.9	10.3	10.7	11.1	11.1
EUR	1.7	3.0	3.0	3.0	3.4	3.7	3.9	4.2	4.4	4.5	4.5
IND	0.6	0.7	0.7	0.8	0.9	0.9	1.0	1.1	1.3	1.5	1.6
LAM	2.1	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.5	3.6	3.7
MEA	5.0	2.5	9.6	6.4	6.2	11.2	14.5	16.7	19.1	20.9	22.9
NEU	4.7	5.4	6.5	7.3	7.9	8.5	9.3	9.5	10.2	10.5	10.7
OAS	1.8	1.8	1.9	2.3	2.6	4.3	4.7	5.1	5.9	6.2	6.4
REF	2.7	3.1	4.6	4.4	4.8	5.0	5.2	5.7	6.2	6.5	6.7
SSA	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	1.0	1.0	1.1
USA	1.6	1.0	0.9	1.0	1.1	1.2	1.2	1.2	1.2	1.2	1.2

Table 1495: MAgPIE m4p\_som — Productivity—Yield—Crops—Oil crops—Cotton seed (t DM/ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	2.7	2.9	3.0	3.0	3.3	3.3	3.4
CAZ	4.2	4.3	4.4	4.5	4.5	4.5	4.4
CHA	11.2	11.2	11.2	11.2	11.2	11.2	11.2
EUR	4.6	4.0	4.8	5.0	5.1	5.1	5.1
IND	1.8	1.9	2.0	2.0	2.1	2.2	2.5
LAM	3.7	3.7	3.7	3.7	3.7	3.7	3.7
MEA	24.6	25.9	27.1	28.3	28.8	29.0	29.1
NEU	10.7	10.7	10.7	10.7	10.7	10.7	10.7
OAS	7.2	7.5	7.7	8.0	9.0	9.2	10.7
REF	6.9	7.0	7.0	7.1	7.1	7.1	7.1
SSA	1.4	1.7	1.7	1.7	1.8	1.8	1.8
USA	1.2	1.3	1.3	1.5	2.4	2.4	2.4

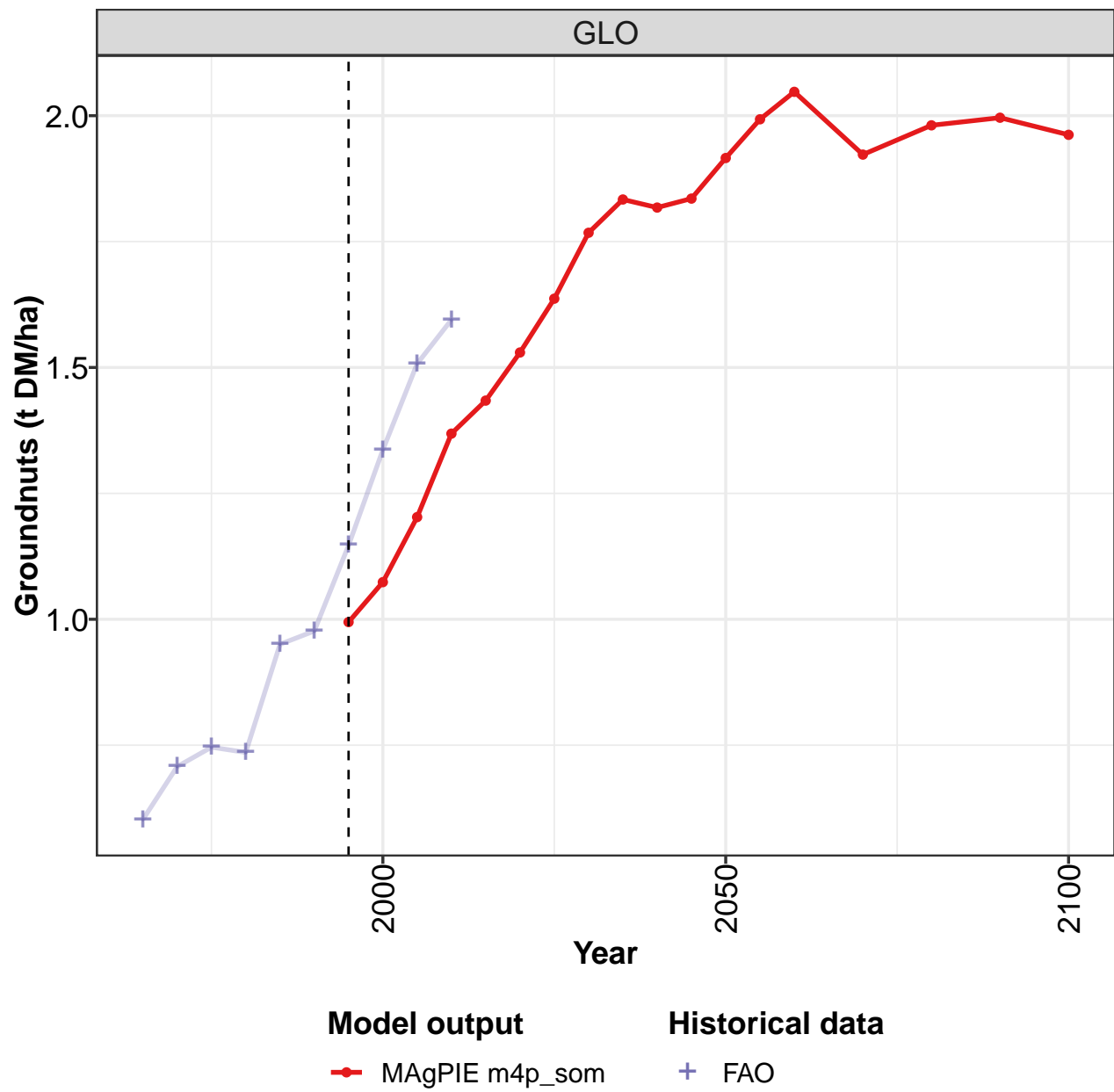
Table 1496: MAgPIE m4p\_som — Productivity—Yield—Crops—Oil crops—Cotton seed (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.50	0.50	0.56	0.62	0.81	0.86	0.84	0.89	1.12	1.32
CAZ	0.32	0.41	0.44	0.66	2.02	1.84	1.95	2.03	2.51	2.76
CHA	1.00	1.10	1.22	1.40	1.64	1.67	1.91	2.49	2.68	3.18
EUR	0.52	0.73	0.90	0.93	1.09	1.12	1.35	1.34	1.44	0.99
IND	0.23	0.24	0.30	0.32	0.39	0.45	0.49	0.39	0.76	1.14
LAM	0.49	0.36	0.38	0.42	0.56	0.66	0.68	0.90	1.07	1.30
MEA	0.52	0.68	0.81	1.01	1.23	0.89	1.14	1.26	1.53	1.27
NEU	0.47	0.70	0.70	0.71	0.86	1.15	1.23	1.46	1.72	1.93
OAS	0.33	0.41	0.36	0.49	0.71	0.93	0.94	0.97	1.17	1.18
REF	0.92	1.06	1.20	1.32	1.43	1.32	1.17	0.99	1.21	1.08
SSA	0.15	0.20	0.20	0.22	0.26	0.32	0.34	0.33	0.41	0.47
USA	0.61	0.46	0.53	0.51	0.82	0.75	0.63	0.77	0.99	1.08

Table 1497: FAO — Productivity—Yield—Crops—Oil crops—Cotton seed (t DM/ha)

52.1.8 Oil crops—Groundnuts

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

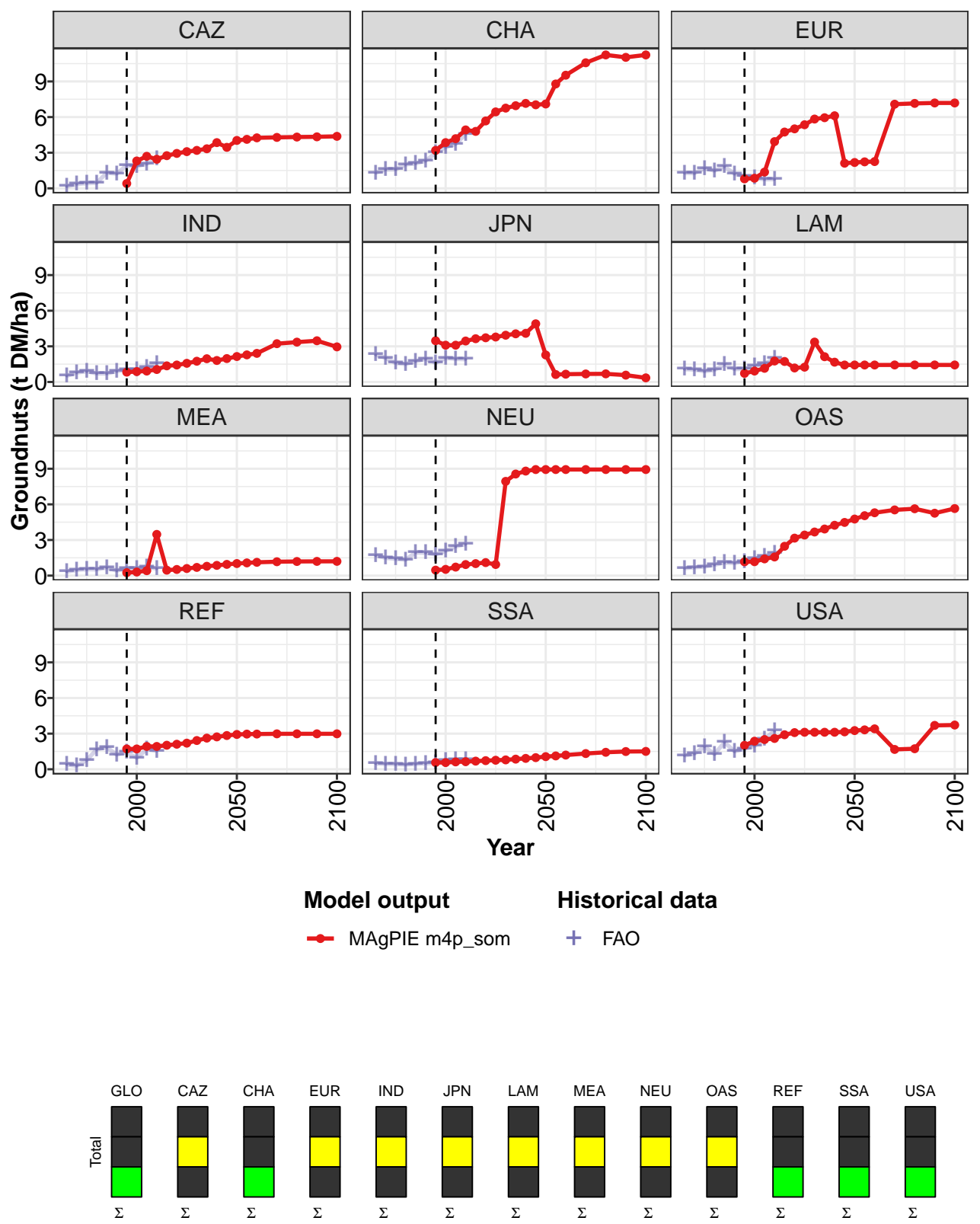


Figure 386: MAgPIE m4p\_som — Productivity—Yield—Crops—Oil crops—Groundnuts (t DM/ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.0	1.1	1.2	1.4	1.4	1.5	1.6	1.8	1.8	1.8	1.8
CAZ	0.4	2.3	2.7	2.4	2.8	2.9	3.1	3.2	3.3	3.8	3.5
CHA	3.2	3.8	4.2	4.9	4.8	5.7	6.4	6.8	7.0	7.2	7.0
EUR	0.8	0.9	1.4	3.9	4.7	5.0	5.4	5.8	5.9	6.1	2.1
IND	0.8	0.9	0.9	1.1	1.4	1.4	1.6	1.7	2.0	1.8	2.0
JPN	3.5	3.1	3.1	3.5	3.6	3.7	3.8	3.9	4.1	4.1	4.9
LAM	0.7	0.9	1.1	1.8	1.7	1.2	1.2	3.4	2.1	1.7	1.4
MEA	0.3	0.3	0.4	3.5	0.5	0.5	0.6	0.7	0.8	0.9	0.9
NEU	0.5	0.5	0.7	0.9	1.0	1.1	0.9	7.9	8.6	8.8	8.9
OAS	1.2	1.2	1.4	1.6	2.5	3.2	3.4	3.7	3.9	4.2	4.5
REF	1.7	1.7	1.9	1.9	2.0	2.1	2.2	2.4	2.6	2.7	2.8
SSA	0.6	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	0.9	1.0
USA	2.0	2.4	2.5	2.6	2.9	3.1	3.1	3.1	3.1	3.1	3.2

Table 1498: MAgPIE m4p\_som — Productivity—Yield—Crops—Oil crops—Groundnuts (t DM/ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.9	2.0	2.0	1.9	2.0	2.0	2.0
CAZ	4.0	4.1	4.3	4.3	4.3	4.3	4.4
CHA	7.1	8.8	9.5	10.6	11.2	11.0	11.2
EUR	2.2	2.2	2.3	7.1	7.2	7.2	7.2
IND	2.1	2.3	2.4	3.2	3.4	3.5	3.0
JPN	2.3	0.6	0.7	0.7	0.7	0.6	0.3
LAM	1.4	1.4	1.4	1.4	1.4	1.4	1.4
MEA	1.0	1.1	1.1	1.2	1.2	1.2	1.2
NEU	8.9	8.9	8.9	8.9	8.9	8.9	8.9
OAS	4.8	5.0	5.3	5.5	5.6	5.3	5.6
REF	2.9	3.0	3.0	3.0	3.0	3.0	3.0
SSA	1.1	1.1	1.2	1.3	1.4	1.5	1.5
USA	3.3	3.3	3.4	1.7	1.7	3.7	3.7

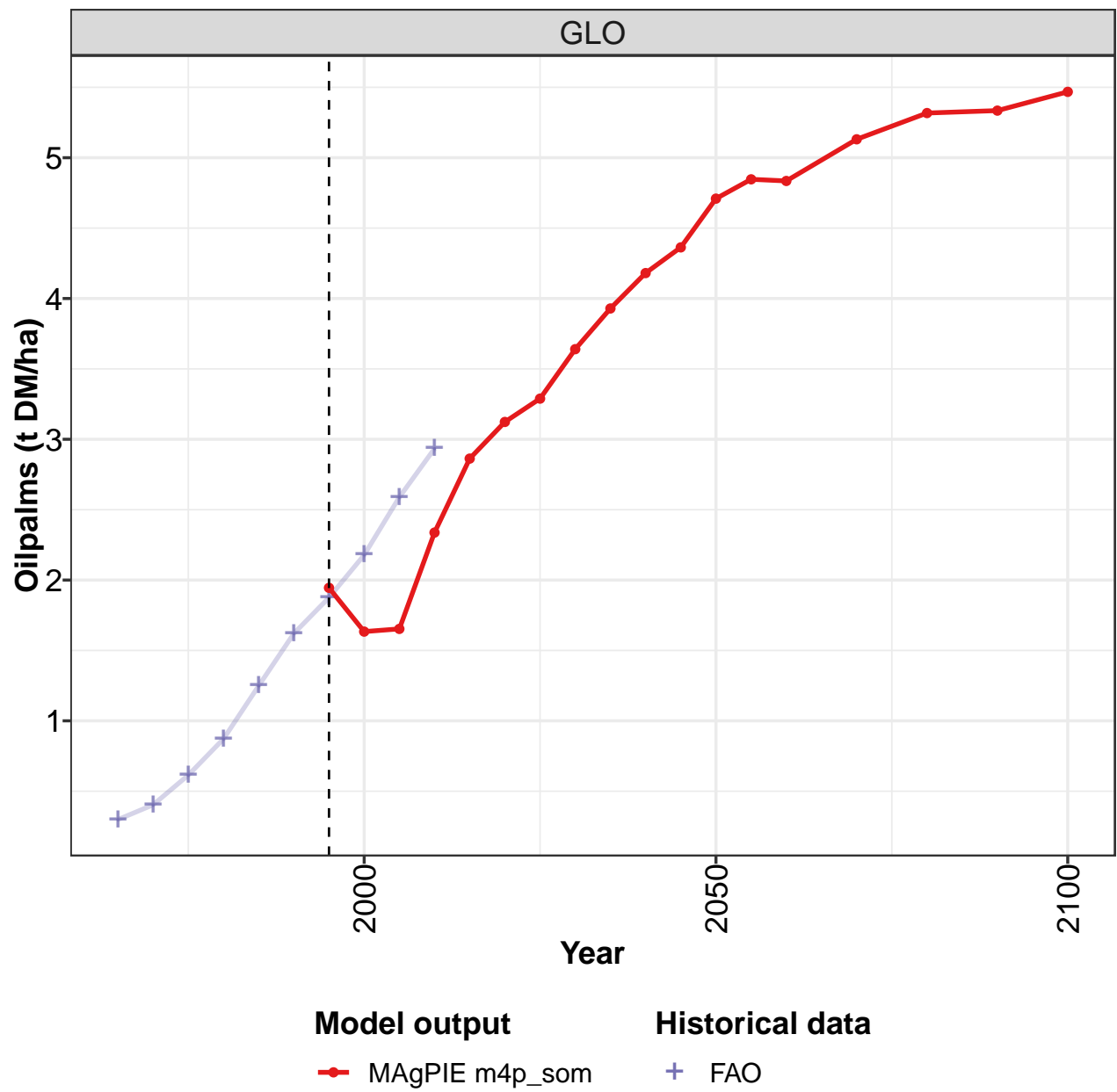
Table 1499: MAgPIE m4p\_som — Productivity—Yield—Crops—Oil crops—Groundnuts (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.60	0.71	0.75	0.74	0.95	0.98	1.15	1.34	1.51	1.59
CAZ	0.16	0.35	0.43	0.46	1.31	1.23	1.94	1.86	2.06	2.48
CHA	1.31	1.58	1.59	2.00	2.09	2.32	2.98	3.46	3.73	4.55
EUR	1.30	1.27	1.69	1.48	1.84	1.22	1.00	0.86	0.76	0.77
IND	0.51	0.79	0.90	0.71	0.71	0.91	1.03	1.01	1.25	1.58
JPN	2.29	2.02	1.59	1.51	1.75	1.95	1.62	2.01	1.94	1.91
LAM	1.08	1.03	0.90	1.01	1.49	1.08	1.10	1.34	1.54	1.99
MEA	0.33	0.47	0.53	0.52	0.67	0.42	0.63	0.59	0.75	0.58
NEU	1.70	1.50	1.41	1.34	1.95	1.92	1.78	2.08	2.45	2.64
OAS	0.63	0.69	0.75	0.91	1.09	1.05	1.20	1.41	1.65	1.89
REF	0.41	0.29	0.77	1.67	1.85	1.22	1.43	0.96	1.68	1.55
SSA	0.48	0.44	0.42	0.38	0.44	0.49	0.53	0.72	0.79	0.81
USA	1.15	1.30	1.92	1.27	2.27	1.50	1.72	1.96	2.56	3.22

Table 1500: FAO — Productivity—Yield—Crops—Oil crops—Groundnuts (t DM/ha)

52.1.9 Oil crops—Oilpalms

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale. ## geom\_path: Each group consists of only one observation. Do you need to adjust the group## aesthetic?

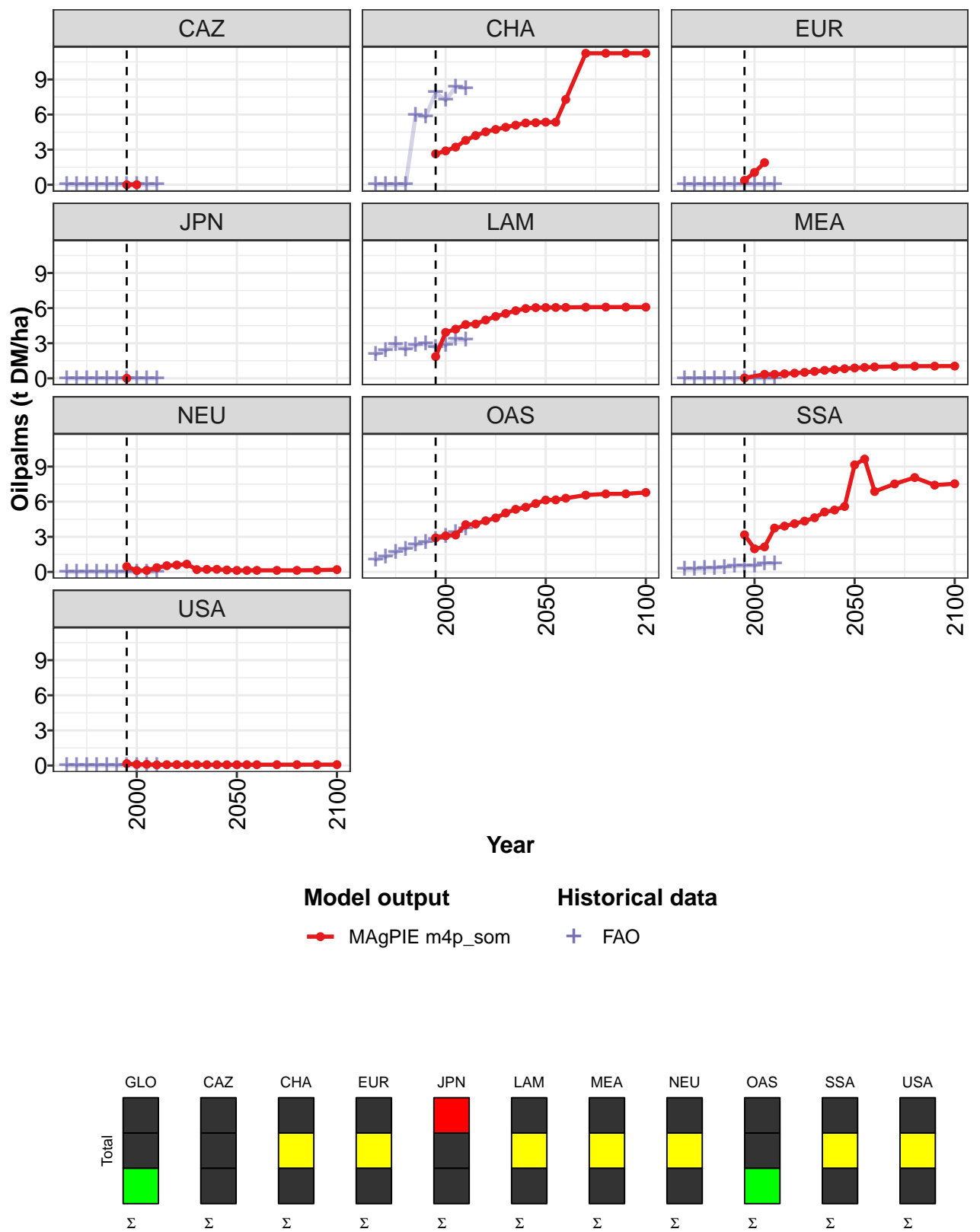


Figure 387: MAgPIE m4p\_som — Productivity—Yield—Crops—Oil crops—Oilpalms (t DM/ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	2	2	2	2	3	3	3	4	4	4	4
CAZ	0	0									
CHA	3	3	3	4	4	5	5	5	5	5	5
EUR	0	1	2								
JPN	0										
LAM	2	4	4	5	5	5	5	6	6	6	6
MEA	0		0	0	0	0	1	1	1	1	1
NEU	0	0	0	0	1	1	1	0	0	0	0
OAS	3	3	3	4	4	4	5	5	5	6	6
SSA	3	2	2	4	4	4	4	5	5	5	6
USA	0	0	0	0	0	0	0	0	0	0	0

Table 1501: MAgPIE m4p\_som — Productivity—Yield—Crops—Oil crops—Oilpalms (t DM/ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	5	5	5	5	5	5	5
CAZ							
CHA	5	5	7	11	11	11	11
EUR							
JPN							
LAM	6	6	6	6	6	6	6
MEA	1	1	1	1	1	1	1
NEU	0	0	0	0	0	0	0
OAS	6	6	6	7	7	7	7
SSA	9	10	7	8	8	7	8
USA	0	0	0	0	0	0	0

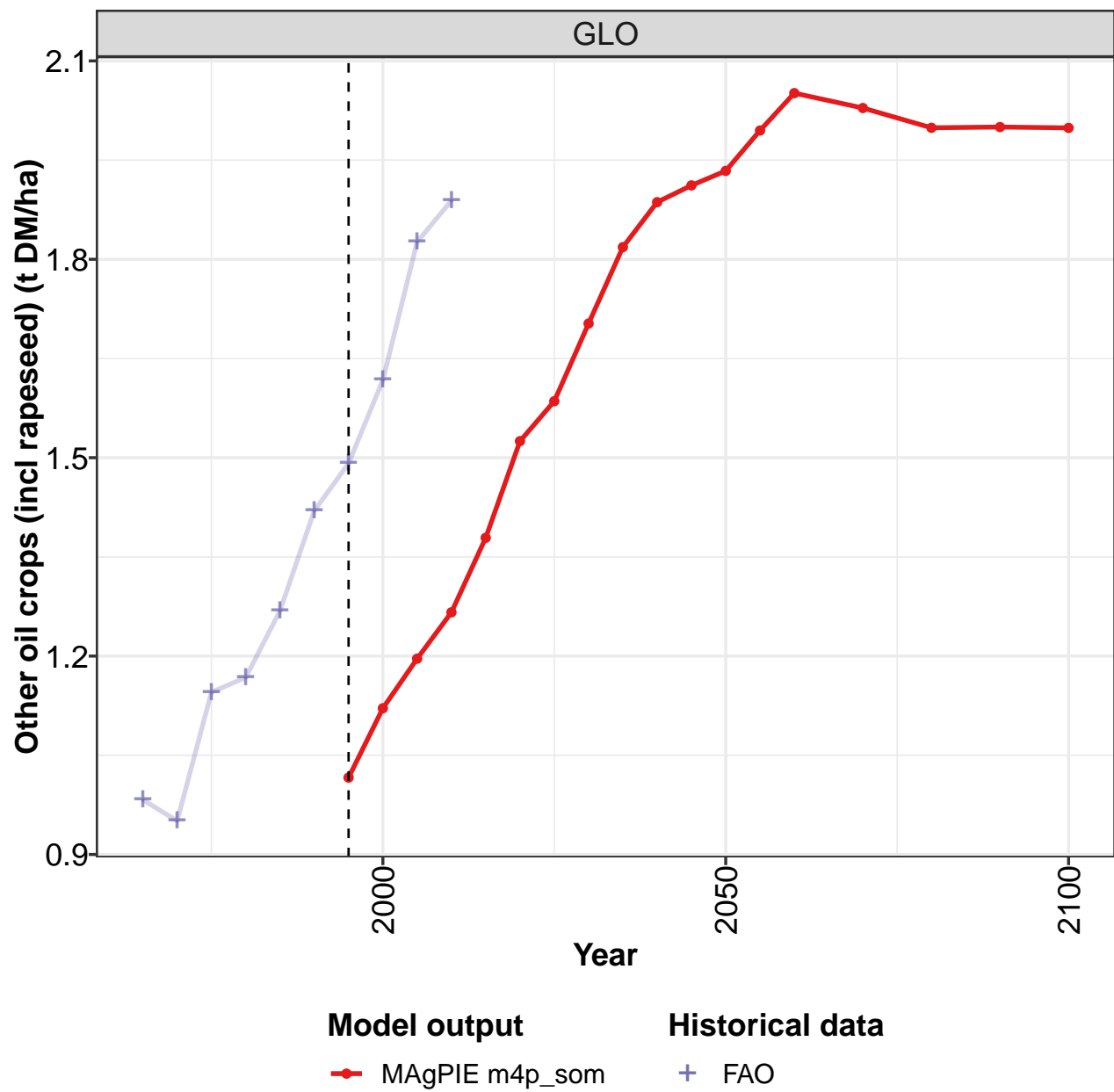
Table 1502: MAgPIE m4p\_som — Productivity—Yield—Crops—Oil crops—Oilpalms (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.30	0.40	0.61	0.87	1.25	1.62	1.88	2.18	2.59	2.93
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	5.93	5.80	7.86	7.21	8.36	8.24
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	2.02	2.36	2.93	2.46	2.81	2.96	2.65	2.82	3.32	3.26
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	1.03	1.26	1.67	1.96	2.30	2.51	2.79	3.04	3.36	3.67
SSA	0.21	0.24	0.28	0.34	0.38	0.49	0.53	0.53	0.73	0.72
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 1503: FAO — Productivity—Yield—Crops—Oil crops—Oilpalms (t DM/ha)

52.1.10 Oil crops—Other oil crops (incl rapeseed)

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale. ## geom\_path: Each group consists of only one observation. Do you need to adjust the group## aesthetic?

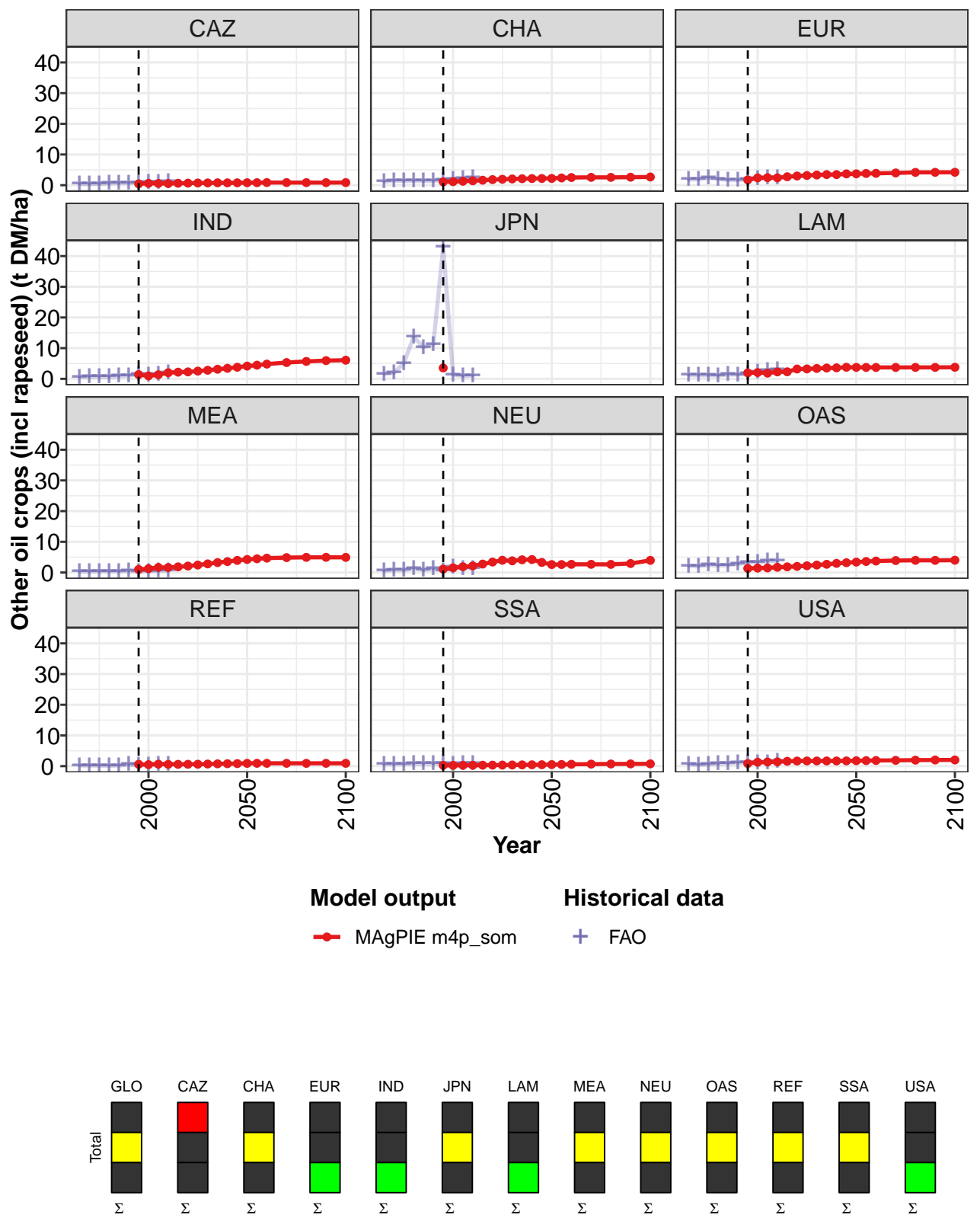


Figure 388: MAGPIE m4p\_som — Productivity—Yield—Crops—Oil crops—Other oil crops (incl rapeseed) (t DM/ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1	1	1	1	1	2	2	2	2	2	2
CAZ	0	1	1	1	1	1	1	1	1	1	1
CHA	1	1	1	1	2	2	2	2	2	2	2
EUR	2	2	2	2	3	3	3	3	3	3	4
IND	1	1	1	2	2	2	3	3	3	3	4
JPN	4										
LAM	2	2	2	2	2	3	3	3	4	4	4
MEA	1	1	2	2	2	2	2	3	3	4	4
NEU	1	2	2	2	3	3	4	4	4	4	3
OAS	1	1	1	2	2	2	2	2	3	3	3
REF	1	0	1	1	1	1	1	1	1	1	1
SSA	0	0	0	0	0	0	0	0	0	0	0
USA	1	1	1	1	2	2	2	2	2	2	2

Table 1504: MAgPIE m4p\_som — Productivity—Yield—Crops—Oil crops—Other oil crops (incl rapeseed) (t DM/ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	2	2	2	2	2	2	2
CAZ	1	1	1	1	1	1	1
CHA	2	2	3	3	3	3	3
EUR	4	4	4	4	4	4	4
IND	4	4	5	5	6	6	6
JPN							
LAM	4	4	4	4	4	4	4
MEA	4	4	5	5	5	5	5
NEU	3	3	3	3	3	3	4
OAS	3	4	4	4	4	4	4
REF	1	1	1	1	1	1	1
SSA	1	1	1	1	1	1	1
USA	2	2	2	2	2	2	2

Table 1505: MAgPIE m4p\_som — Productivity—Yield—Crops—Oil crops—Other oil crops (incl rapeseed) (t DM/ha) [PART 2/2]

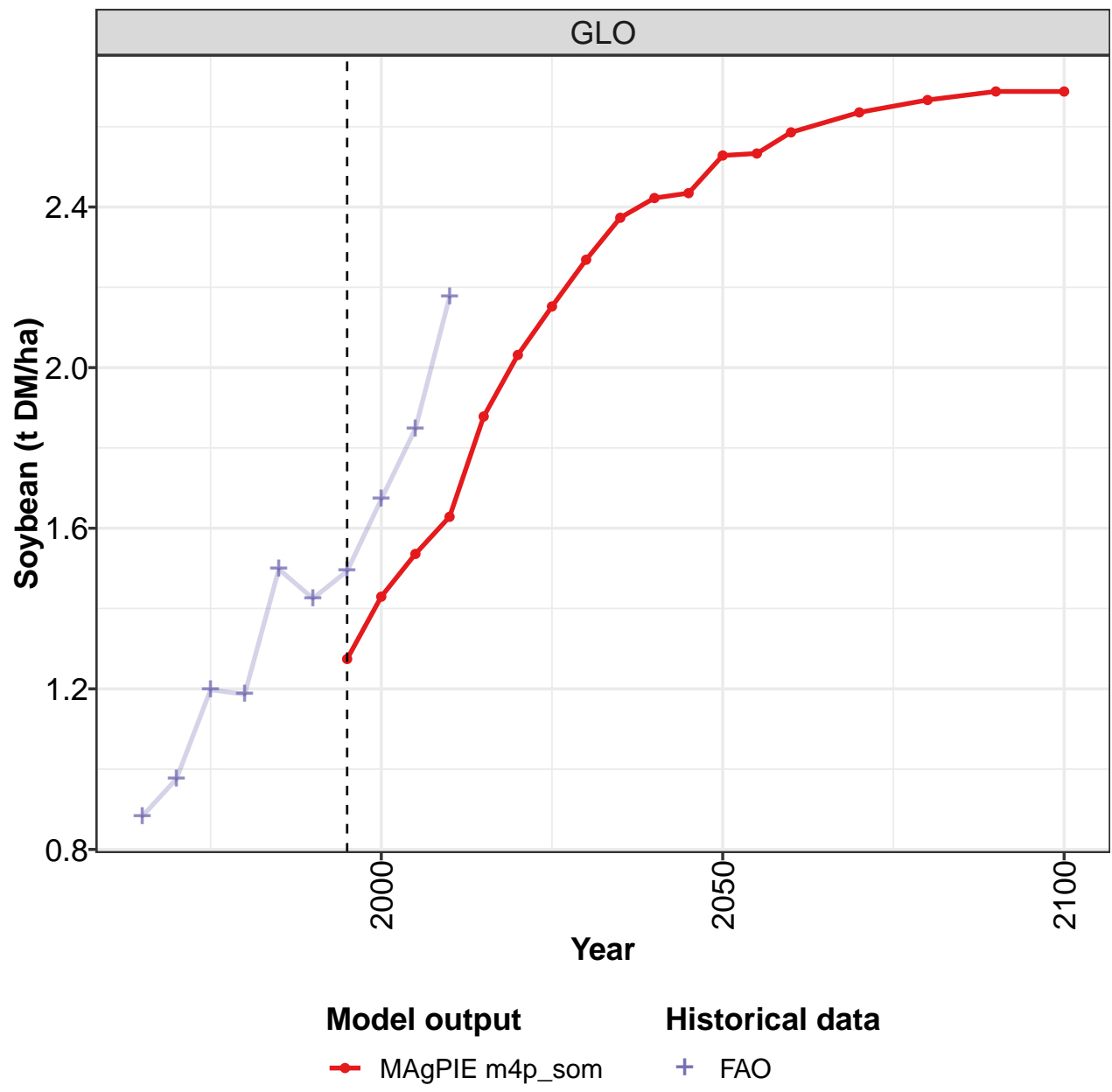
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.0	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.8	1.9
CAZ	0.4	0.4	0.5	0.6	0.7	0.7	0.8	0.9	1.0	1.2
CHA	1.1	1.5	1.4	1.4	1.4	1.4	1.6	1.8	2.2	2.5
EUR	1.8	1.9	2.4	2.0	1.7	1.6	1.8	2.1	2.3	2.4
IND	0.6	0.7	0.7	0.6	0.9	1.1	1.4	1.3	1.5	1.9
JPN	1.6	1.9	5.0	13.6	10.3	11.3	43.0	1.4	0.9	1.1
LAM	1.2	1.2	1.2	1.1	1.4	1.4	1.8	2.2	2.8	3.0
MEA	0.3	0.3	0.4	0.4	0.4	0.5	0.3	0.4	0.6	0.6
NEU	0.5	0.8	0.7	1.4	0.8	1.2	0.7	1.9	1.3	1.4
OAS	2.1	2.0	2.4	2.2	2.4	2.8	3.2	3.4	3.7	3.7
REF	0.2	0.2	0.2	0.1	0.2	0.5	0.3	0.4	0.7	0.7
SSA	0.6	0.6	0.7	0.8	0.8	0.8	0.8	0.7	0.8	0.8
USA	0.6	0.4	0.6	0.8	0.9	1.1	1.1	1.1	1.2	1.7

Table 1506: FAO — Productivity—Yield—Crops—Oil crops—Other oil crops (incl rapeseed) (t DM/ha)



52.1.11 Oil crops—Soybean

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

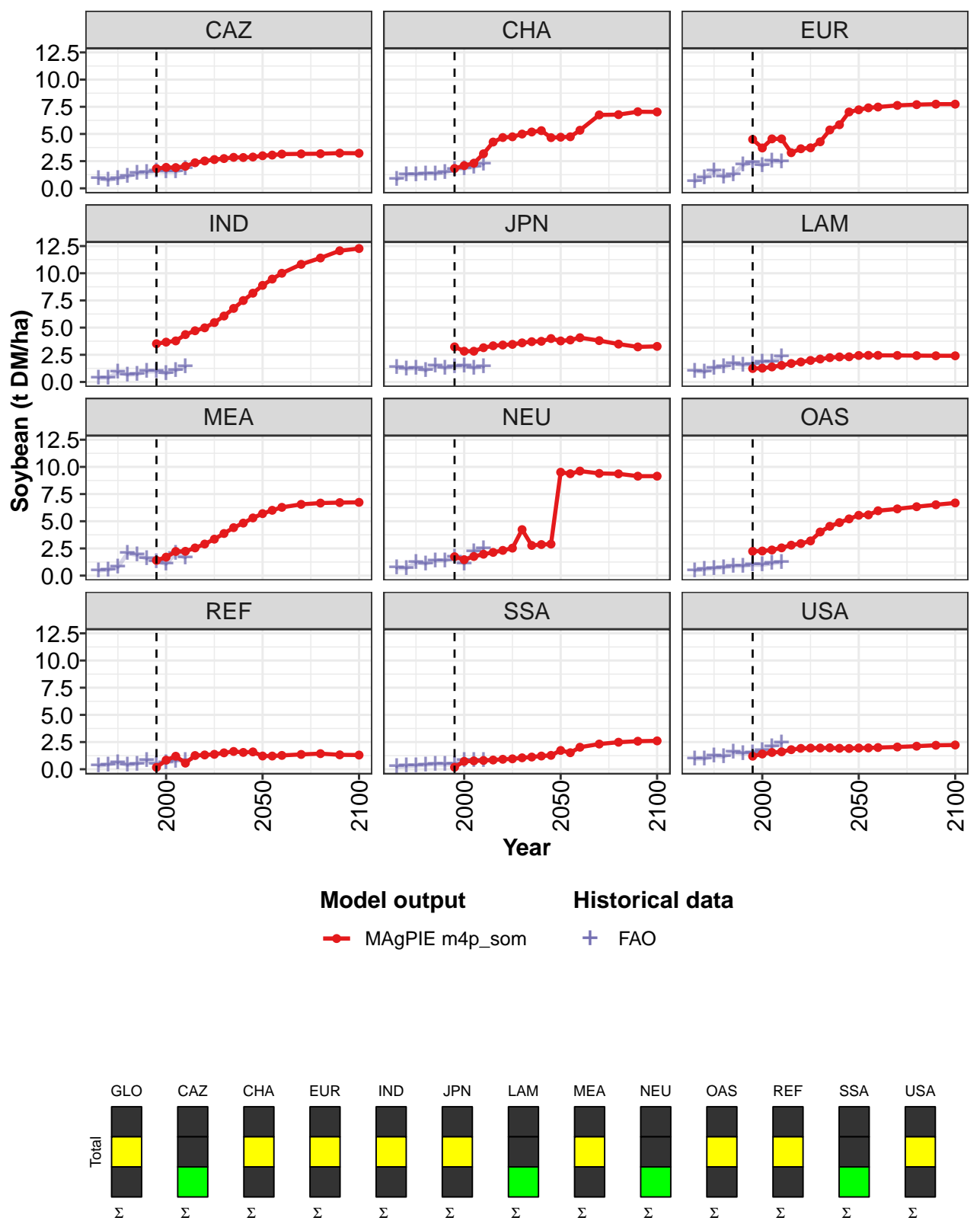


Figure 389: MAGPIE m4p\_som — Productivity—Yield—Crops—Oil crops—Soybean (t DM/ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.3	1.4	1.5	1.6	1.9	2.0	2.2	2.3	2.4	2.4	2.4
CAZ	1.8	1.9	1.9	2.0	2.4	2.5	2.6	2.7	2.9	2.8	2.9
CHA	1.8	2.1	2.3	3.2	4.3	4.7	4.7	5.0	5.2	5.3	4.7
EUR	4.5	3.7	4.5	4.5	3.3	3.6	3.7	4.3	5.4	5.8	7.0
IND	3.5	3.7	3.8	4.4	4.7	5.0	5.5	6.1	6.8	7.5	8.2
JPN	3.2	2.8	2.8	3.2	3.3	3.4	3.5	3.6	3.7	3.7	4.0
LAM	1.2	1.3	1.4	1.5	1.7	1.8	2.0	2.1	2.2	2.3	2.3
MEA	1.4	1.7	2.2	2.2	2.5	2.9	3.4	3.9	4.4	4.8	5.3
NEU	1.7	1.5	1.8	2.0	2.1	2.3	2.5	4.2	2.8	2.9	2.9
OAS	2.2	2.3	2.4	2.6	2.8	2.9	3.2	4.0	4.5	4.9	5.2
REF	0.2	0.8	1.2	0.6	1.3	1.3	1.4	1.5	1.6	1.5	1.6
SSA	0.2	0.7	0.8	0.8	0.8	0.9	1.0	1.1	1.1	1.2	1.3
USA	1.2	1.4	1.5	1.6	1.8	1.9	1.9	2.0	2.0	1.9	1.9

Table 1507: MAgPIE m4p\_som — Productivity—Yield—Crops—Oil crops—Soybean (t DM/ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	2.5	2.5	2.6	2.6	2.7	2.7	2.7
CAZ	3.0	3.1	3.1	3.2	3.2	3.2	3.2
CHA	4.7	4.7	5.3	6.8	6.8	7.0	7.0
EUR	7.2	7.4	7.5	7.6	7.7	7.7	7.7
IND	8.9	9.5	10.0	10.8	11.4	12.1	12.3
JPN	3.8	3.9	4.1	3.8	3.5	3.2	3.3
LAM	2.4	2.4	2.4	2.4	2.4	2.4	2.4
MEA	5.7	6.0	6.3	6.6	6.7	6.7	6.7
NEU	9.5	9.4	9.6	9.4	9.4	9.1	9.1
OAS	5.5	5.6	6.0	6.1	6.3	6.5	6.7
REF	1.2	1.2	1.3	1.4	1.4	1.3	1.3
SSA	1.7	1.5	2.0	2.3	2.5	2.6	2.6
USA	2.0	2.0	2.0	2.0	2.1	2.2	2.2

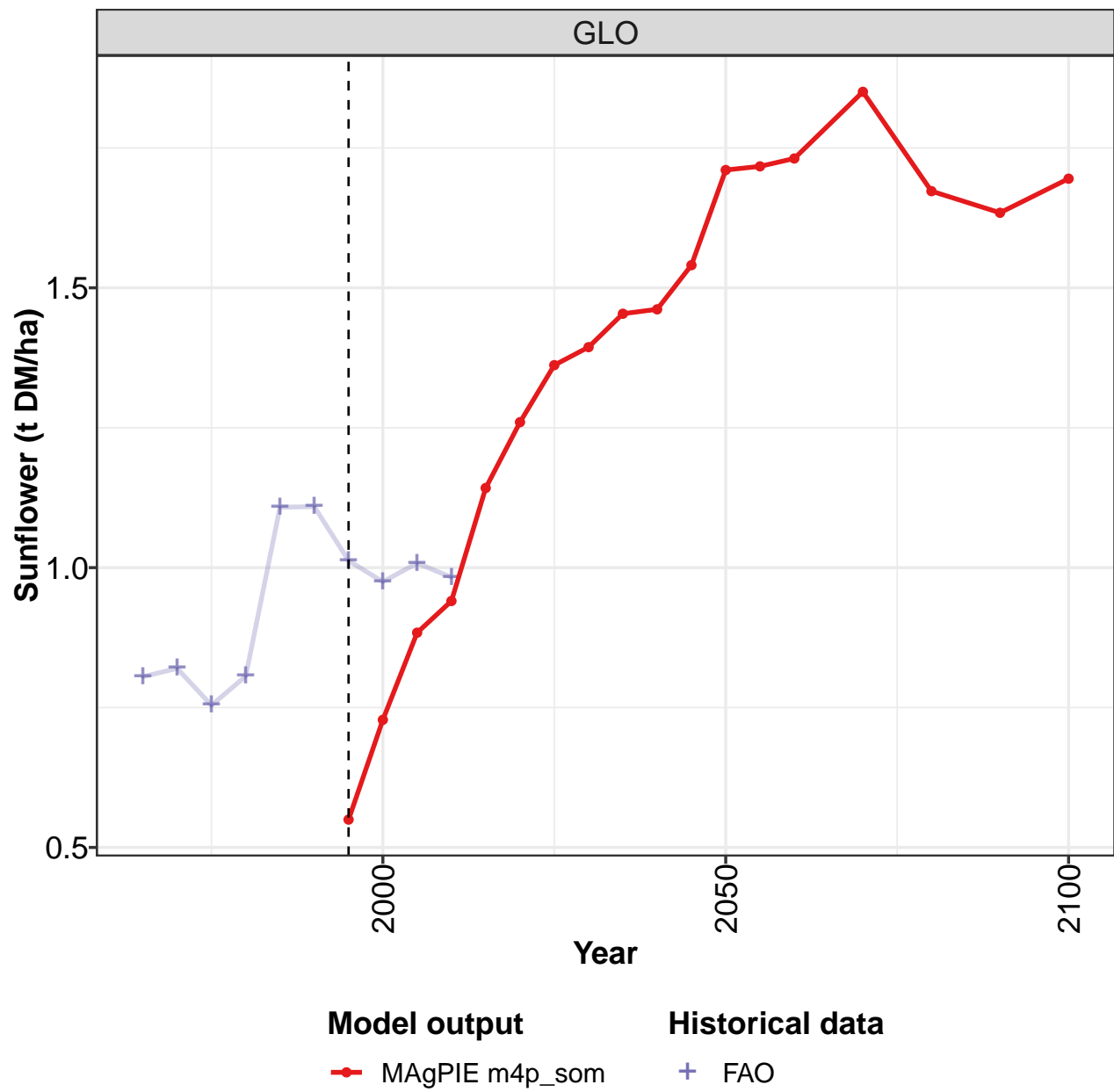
Table 1508: MAgPIE m4p\_som — Productivity—Yield—Crops—Oil crops—Soybean (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.88	0.98	1.20	1.19	1.50	1.43	1.49	1.67	1.85	2.18
CAZ	0.90	0.77	0.92	1.09	1.38	1.44	1.60	1.52	1.53	1.80
CHA	0.83	1.28	1.28	1.35	1.34	1.46	1.74	1.82	1.96	2.21
EUR	0.66	0.98	1.58	1.06	1.24	2.13	2.40	2.10	2.48	2.44
IND	0.38	0.39	0.88	0.67	0.71	0.96	0.98	0.79	1.07	1.41
JPN	1.32	1.22	1.25	1.06	1.50	1.28	1.40	1.48	1.29	1.39
LAM	1.00	0.93	1.30	1.39	1.69	1.55	1.61	1.84	1.87	2.32
MEA	0.47	0.53	0.77	2.05	1.89	1.56	1.30	1.07	2.04	1.63
NEU	0.70	0.68	1.20	1.10	1.36	1.38	1.71	1.10	2.21	2.50
OAS	0.47	0.58	0.67	0.75	0.87	0.88	0.99	0.98	1.12	1.24
REF	0.32	0.42	0.61	0.39	0.50	0.83	0.43	0.61	0.77	0.82
SSA	0.22	0.29	0.35	0.41	0.48	0.43	0.48	0.80	0.78	0.83
USA	0.96	0.97	1.22	1.16	1.56	1.46	1.51	1.74	2.09	2.40

Table 1509: FAO — Productivity—Yield—Crops—Oil crops—Soybean (t DM/ha)

52.1.12 Oil crops—Sunflower

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

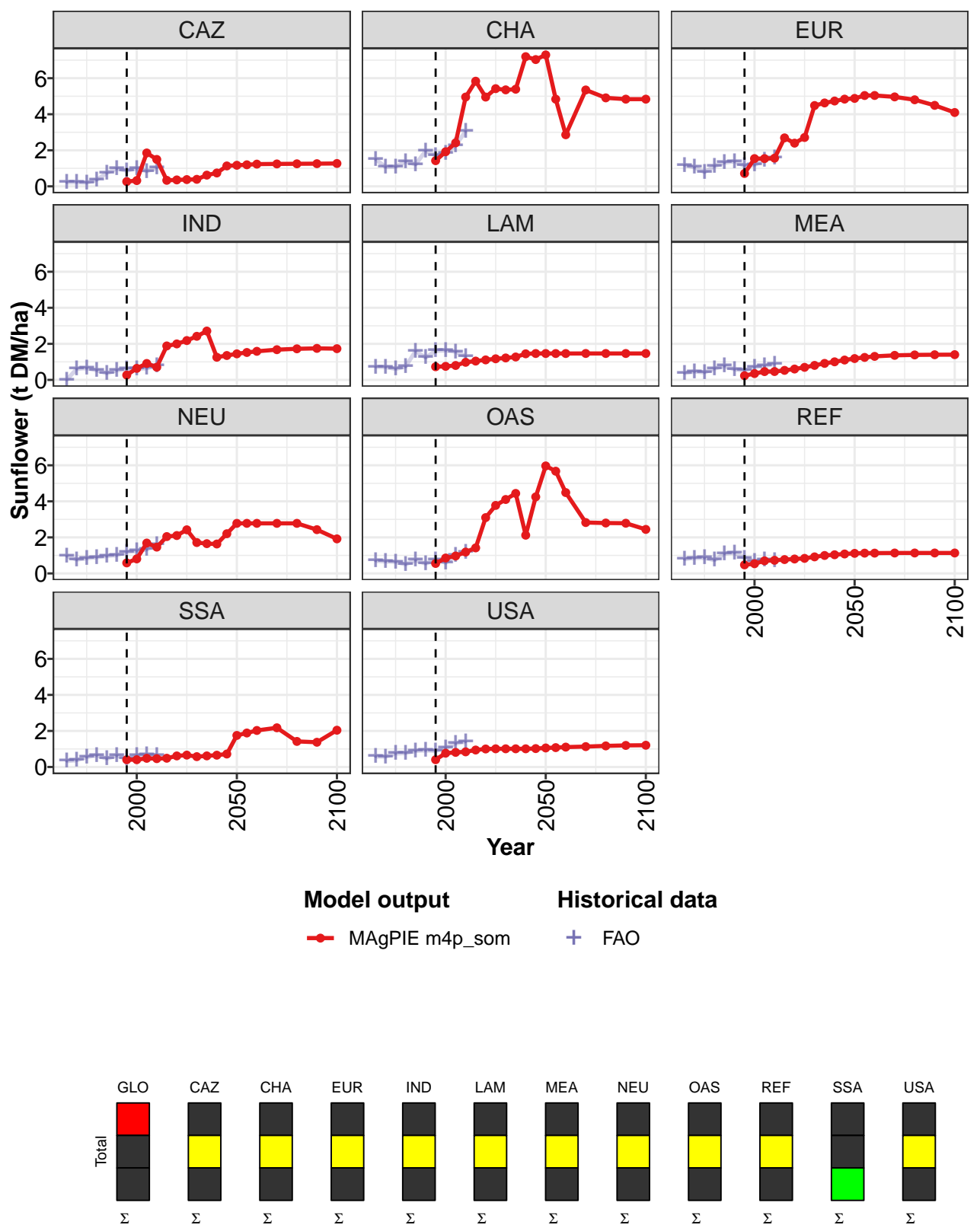


Figure 390: MAgPIE m4p\_som — Productivity—Yield—Crops—Oil crops—Sunflower (t DM/ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.55	0.73	0.88	0.94	1.14	1.26	1.36	1.39	1.45	1.46	1.54
CAZ	0.27	0.32	1.85	1.49	0.33	0.36	0.37	0.39	0.62	0.74	1.13
CHA	1.42	1.92	2.41	4.95	5.83	4.95	5.42	5.35	5.39	7.20	7.03
EUR	0.71	1.54	1.54	1.56	2.69	2.40	2.71	4.48	4.63	4.73	4.84
IND	0.27	0.64	0.91	0.70	1.88	2.00	2.18	2.42	2.71	1.26	1.35
LAM	0.73	0.75	0.80	0.98	1.04	1.11	1.17	1.22	1.27	1.45	1.46
MEA	0.23	0.35	0.46	0.46	0.53	0.60	0.70	0.80	0.92	1.00	1.10
NEU	0.58	0.81	1.69	1.46	2.05	2.10	2.42	1.71	1.65	1.63	2.20
OAS	0.55	0.86	0.97	1.19	1.42	3.10	3.77	4.10	4.44	2.12	4.25
REF	0.48	0.54	0.70	0.73	0.77	0.80	0.84	0.92	1.00	1.04	1.08
SSA	0.40	0.40	0.48	0.46	0.49	0.61	0.66	0.57	0.62	0.65	0.72
USA	0.40	0.77	0.81	0.84	0.94	1.00	1.01	1.01	1.01	1.01	1.02

Table 1510: MAgPIE m4p\_som — Productivity—Yield—Crops—Oil crops—Sunflower (t DM/ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.71	1.72	1.73	1.85	1.67	1.63	1.70
CAZ	1.17	1.20	1.23	1.24	1.25	1.26	1.27
CHA	7.29	4.84	2.86	5.35	4.91	4.84	4.84
EUR	4.88	5.04	5.04	4.96	4.80	4.49	4.10
IND	1.45	1.52	1.59	1.68	1.73	1.75	1.73
LAM	1.46	1.46	1.46	1.47	1.47	1.46	1.47
MEA	1.18	1.25	1.30	1.36	1.39	1.39	1.40
NEU	2.78	2.78	2.78	2.78	2.78	2.43	1.92
OAS	5.97	5.67	4.49	2.82	2.80	2.79	2.44
REF	1.11	1.13	1.13	1.13	1.13	1.13	1.13
SSA	1.75	1.89	2.03	2.18	1.42	1.37	2.04
USA	1.06	1.08	1.10	1.13	1.17	1.20	1.21

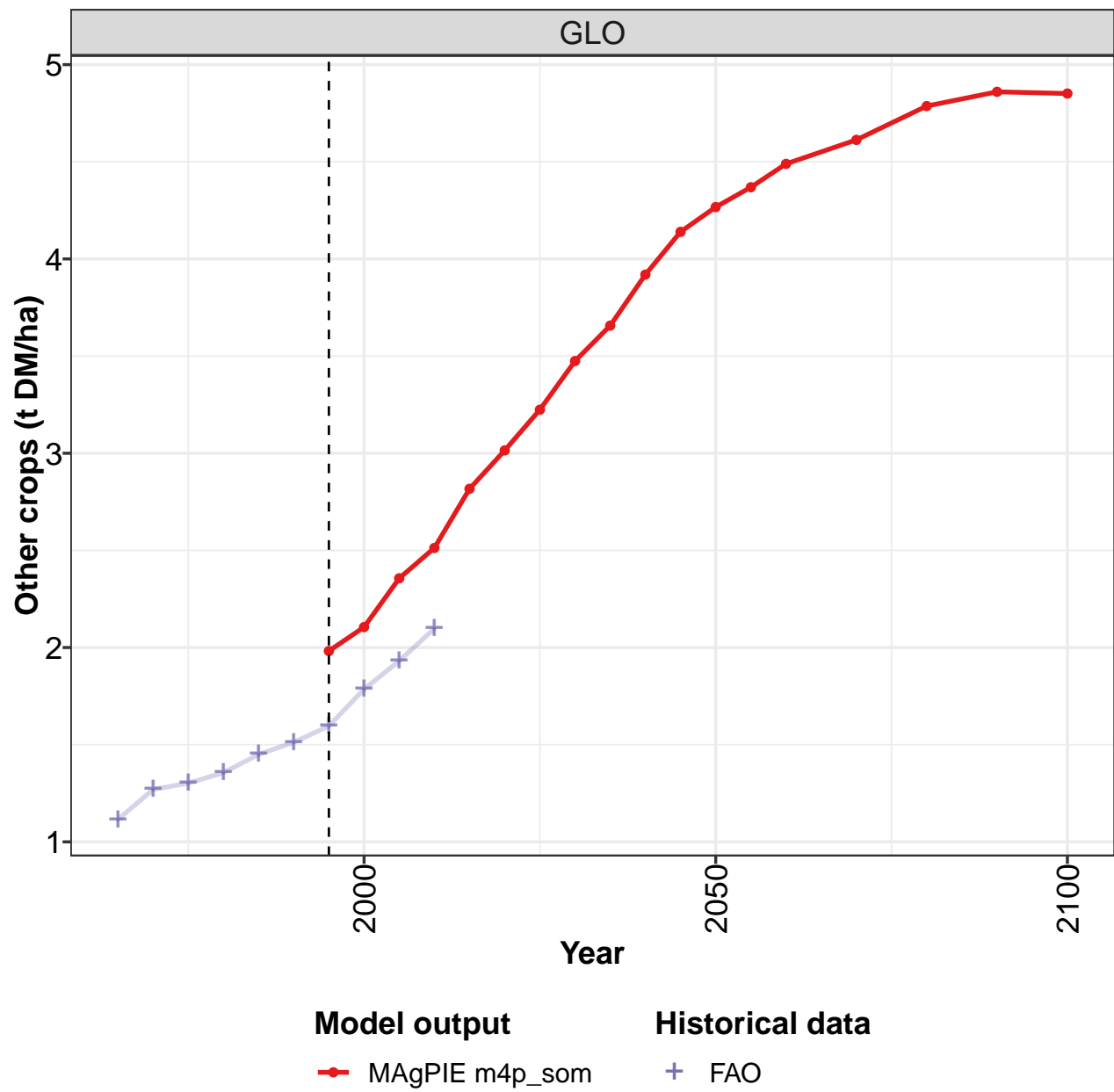
Table 1511: MAgPIE m4p\_som — Productivity—Yield—Crops—Oil crops—Sunflower (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.81	0.82	0.75	0.81	1.11	1.11	1.01	0.97	1.01	0.98
CAZ	0.22	0.23	0.20	0.36	0.74	0.99	0.86	1.00	0.84	1.03
CHA	1.50	1.07	1.08	1.39	1.21	1.97	1.72	1.83	2.28	3.05
EUR	1.17	1.05	0.78	1.13	1.32	1.38	1.14	1.19	1.46	1.60
IND	0.00	0.61	0.65	0.53	0.36	0.53	0.60	0.61	0.64	0.78
LAM	0.72	0.71	0.61	0.74	1.60	1.23	1.61	1.63	1.56	1.30
MEA	0.38	0.46	0.42	0.63	0.77	0.59	0.52	0.71	0.77	0.89
NEU	0.97	0.76	0.84	0.90	0.96	1.01	1.20	1.25	1.33	1.59
OAS	0.70	0.67	0.64	0.50	0.73	0.54	0.76	0.59	1.00	1.20
REF	0.79	0.86	0.86	0.73	1.10	1.15	0.86	0.66	0.77	0.69
SSA	0.32	0.37	0.55	0.65	0.46	0.63	0.45	0.64	0.67	0.65
USA	0.58	0.57	0.75	0.78	0.89	0.92	0.89	1.06	1.30	1.40

Table 1512: FAO — Productivity—Yield—Crops—Oil crops—Sunflower (t DM/ha)

52.1.13 Other crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

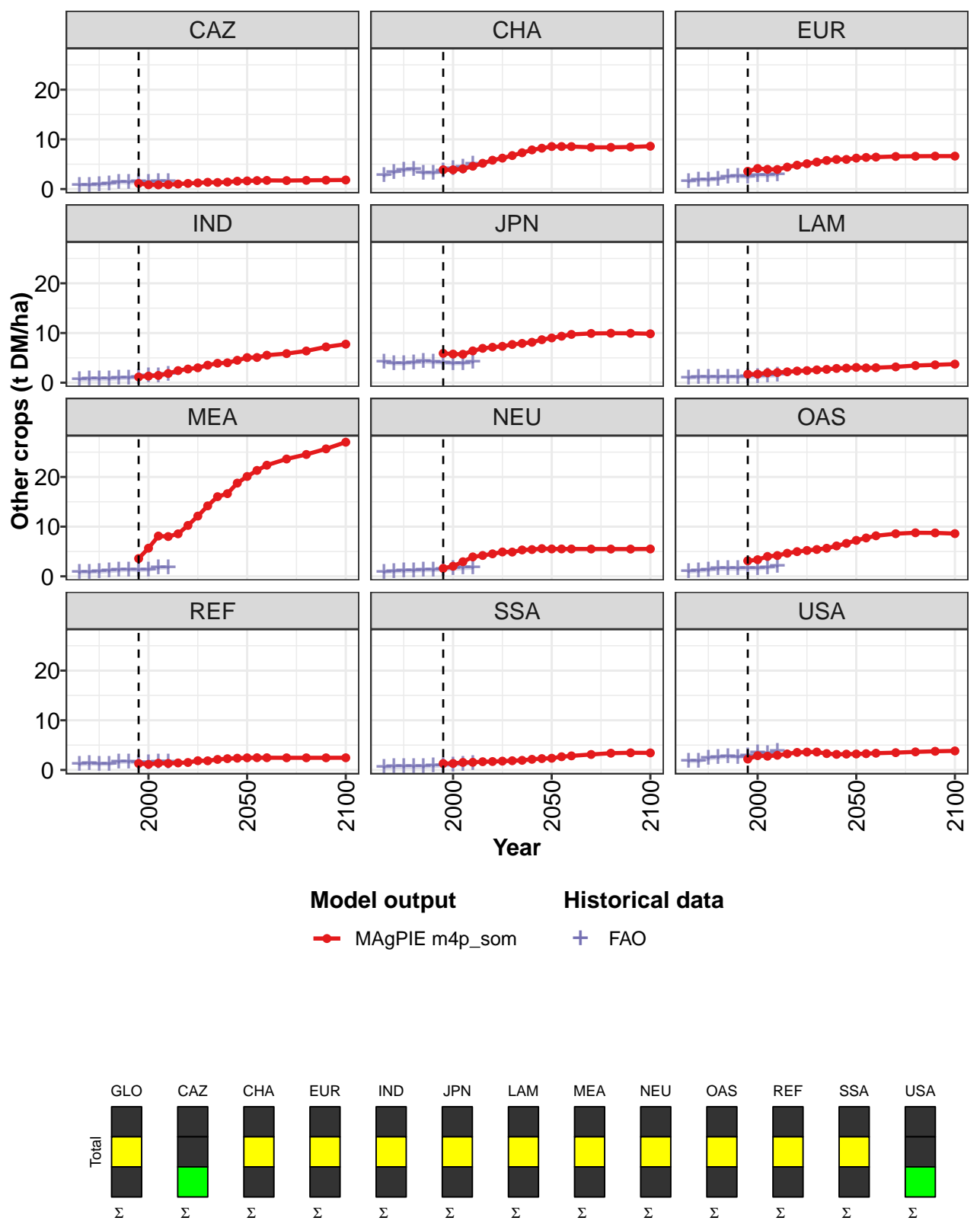


Figure 391: MAgPIE m4p\_som — Productivity—Yield—Crops—Other crops (t DM/ha)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	2.0	2.1	2.4	2.5	2.8	3.0	3.2	3.5	3.7	3.9	4.1
CAZ	1.1	0.9	0.8	0.9	1.0	1.1	1.2	1.4	1.3	1.4	1.6
CHA	3.9	3.9	4.1	4.6	5.2	5.8	6.2	6.7	7.3	7.9	8.2
EUR	3.6	4.1	4.0	3.9	4.4	4.8	5.1	5.4	5.8	6.0	6.0
IND	1.2	1.3	1.5	1.8	2.4	2.7	3.0	3.5	3.9	4.0	4.5
JPN	5.9	5.8	5.7	6.4	6.9	7.1	7.3	7.7	7.9	8.1	8.6
LAM	1.7	1.7	2.0	2.0	2.2	2.3	2.4	2.6	2.7	2.9	2.9
MEA	3.6	5.7	8.1	8.0	8.6	10.2	12.1	14.2	16.0	16.6	18.8
NEU	1.6	2.0	2.9	3.9	4.2	4.5	4.9	4.9	5.3	5.4	5.6
OAS	3.1	3.3	4.0	4.2	4.6	5.0	5.2	5.4	5.7	6.1	6.6
REF	1.3	1.1	1.4	1.3	1.4	1.5	1.9	1.8	2.1	2.3	2.4
SSA	1.3	1.3	1.5	1.5	1.7	1.7	1.8	1.9	1.9	2.1	2.3
USA	2.2	2.9	2.8	3.0	3.2	3.5	3.6	3.6	3.3	3.1	3.2

Table 1513: MAgPIE m4p\_som — Productivity—Yield—Crops—Other crops (t DM/ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	4.3	4.4	4.5	4.6	4.8	4.9	4.9
CAZ	1.6	1.7	1.7	1.7	1.8	1.8	1.8
CHA	8.6	8.6	8.5	8.4	8.4	8.5	8.6
EUR	6.2	6.4	6.4	6.6	6.6	6.6	6.6
IND	5.1	5.1	5.5	5.9	6.4	7.2	7.8
JPN	9.0	9.4	9.7	9.9	10.0	9.9	9.8
LAM	3.1	3.0	3.0	3.2	3.5	3.6	3.7
MEA	20.1	21.3	22.4	23.6	24.5	25.7	27.0
NEU	5.5	5.5	5.5	5.5	5.5	5.5	5.5
OAS	7.2	7.7	8.2	8.6	8.8	8.7	8.6
REF	2.4	2.5	2.5	2.4	2.4	2.4	2.5
SSA	2.4	2.7	2.8	3.1	3.4	3.5	3.4
USA	3.2	3.3	3.4	3.5	3.6	3.8	3.8

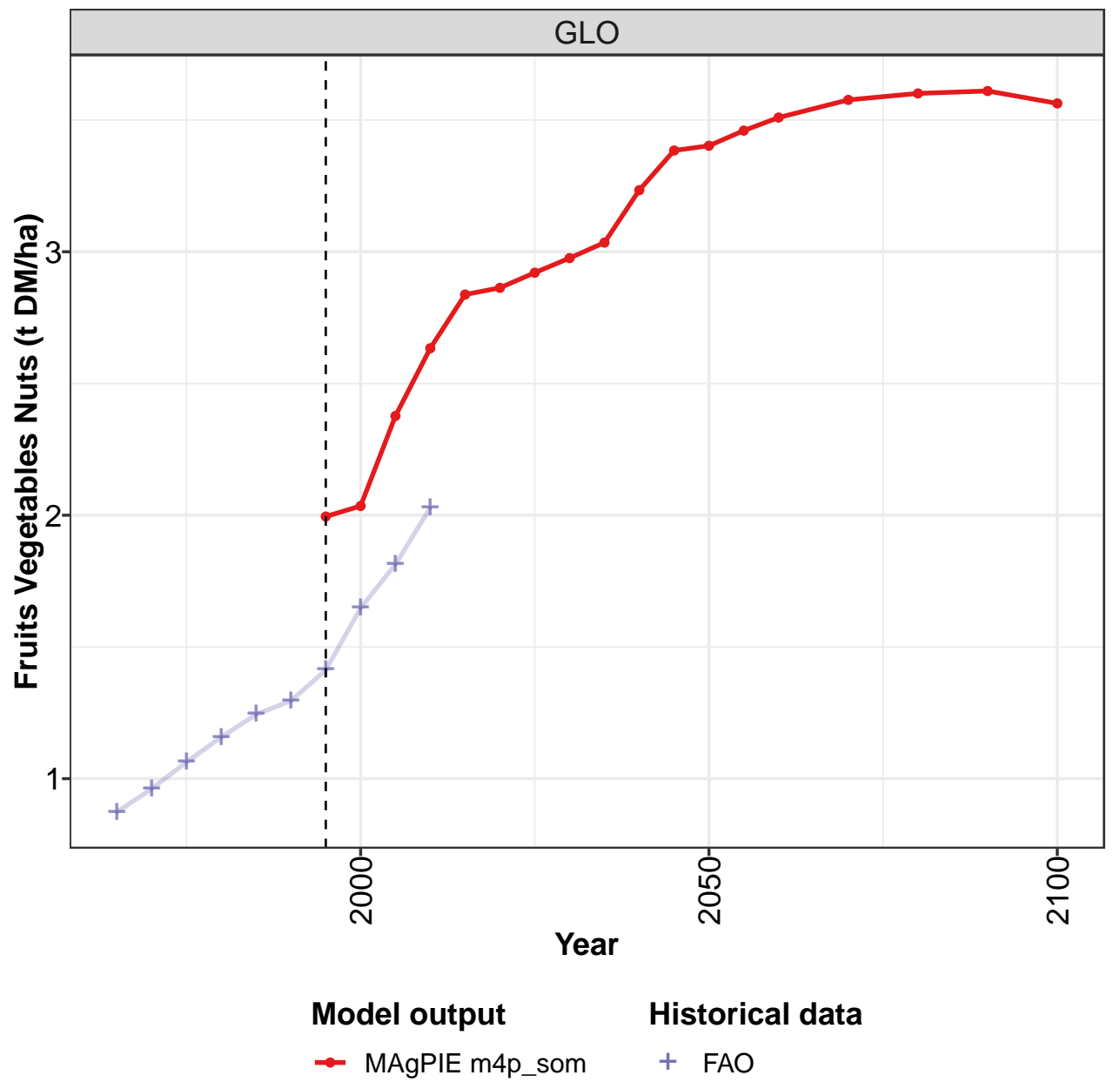
Table 1514: MAgPIE m4p\_som — Productivity—Yield—Crops—Other crops (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.11	1.27	1.30	1.36	1.45	1.51	1.60	1.79	1.93	2.10
CAZ	0.79	0.81	0.86	1.06	1.40	1.32	1.45	1.32	1.56	1.48
CHA	2.68	3.38	3.81	3.98	3.25	3.23	3.61	4.08	4.36	4.97
EUR	1.53	1.83	1.85	2.01	2.50	2.57	2.45	2.77	2.74	2.84
IND	0.64	0.73	0.74	0.73	0.90	0.99	1.15	1.40	1.37	1.63
JPN	4.18	3.89	3.87	4.06	4.24	4.12	4.06	3.89	3.92	4.14
LAM	0.97	1.12	1.07	1.07	1.14	1.13	1.17	1.24	1.40	1.49
MEA	0.76	0.83	0.94	1.07	1.22	1.33	1.24	1.35	1.74	1.80
NEU	0.82	1.02	1.07	1.14	1.25	1.26	1.37	1.54	1.66	1.77
OAS	0.97	1.10	1.27	1.54	1.54	1.53	1.62	1.61	1.78	2.05
REF	1.15	1.30	1.22	1.23	1.62	1.65	1.47	1.44	1.68	1.60
SSA	0.53	0.63	0.66	0.64	0.66	0.81	0.92	1.04	1.21	1.35
USA	1.80	1.80	2.32	2.52	2.71	2.61	2.87	3.40	3.31	3.69

Table 1515: FAO — Productivity—Yield—Crops—Other crops (t DM/ha)

52.1.14 Other crops—Fruits Vegetables Nuts

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

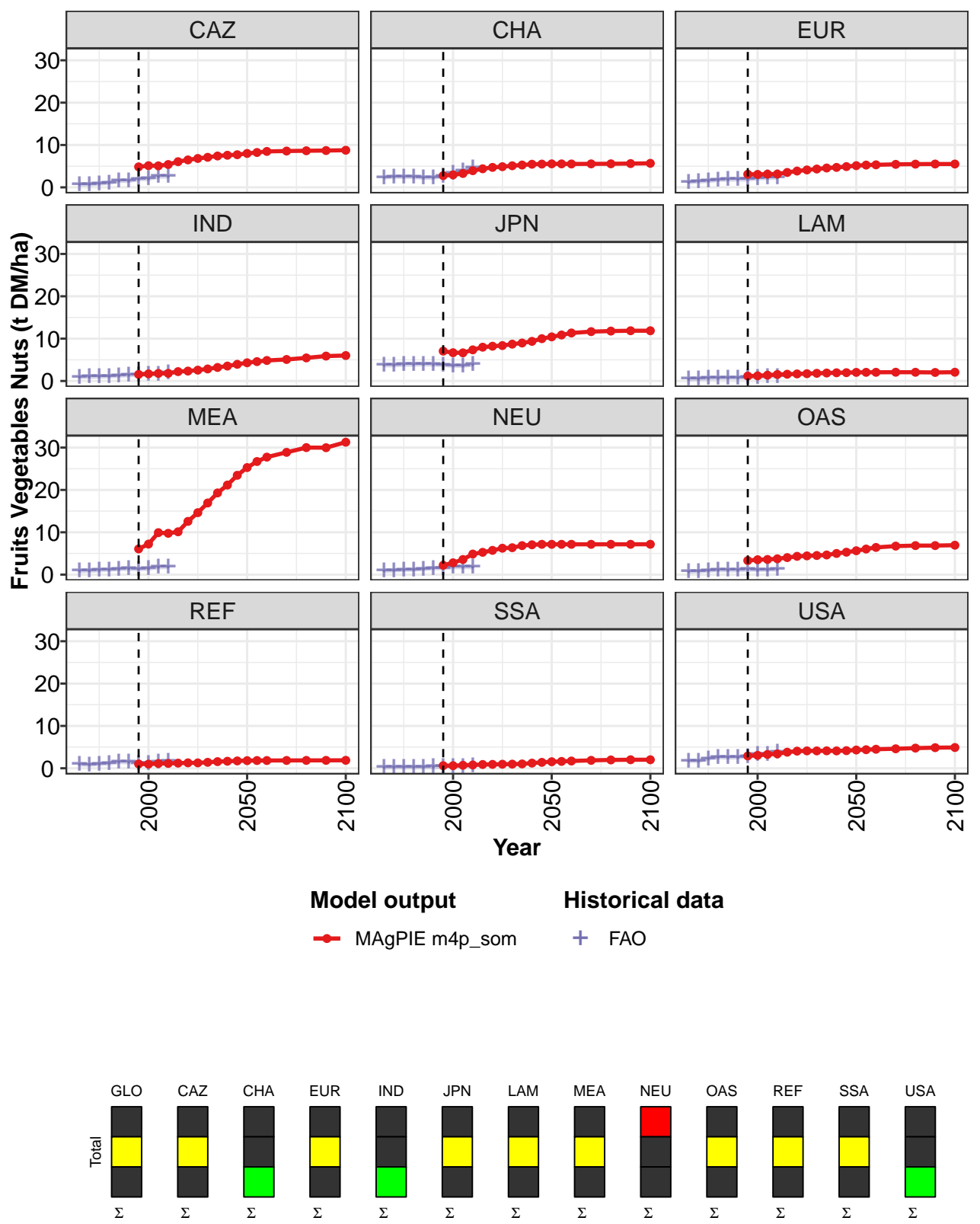


Figure 392: MAGPIE m4p\_som — Productivity—Yield—Crops—Other crops—Fruits Vegetables Nuts (t DM/ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	2.0	2.0	2.4	2.6	2.8	2.9	2.9	3.0	3.0	3.2	3.4
CAZ	4.8	5.1	5.1	5.4	6.1	6.5	6.8	7.1	7.4	7.6	7.7
CHA	2.8	2.9	3.3	3.9	4.4	4.7	4.9	5.1	5.3	5.5	5.5
EUR	3.1	3.0	3.1	3.1	3.5	3.9	4.1	4.3	4.6	4.7	4.9
IND	1.6	1.7	1.8	1.8	2.2	2.3	2.6	2.8	3.2	3.5	3.9
JPN	7.1	6.7	6.6	7.4	8.0	8.2	8.4	8.7	9.0	9.4	10.0
LAM	1.2	1.2	1.4	1.5	1.6	1.7	1.7	1.8	1.9	1.9	2.0
MEA	6.1	7.2	9.9	9.8	10.1	12.6	14.6	16.9	19.3	21.2	23.5
NEU	2.2	2.8	3.6	4.9	5.3	5.7	6.2	6.4	6.9	7.1	7.2
OAS	3.3	3.5	3.6	3.7	4.0	4.3	4.4	4.5	4.6	5.0	5.3
REF	1.0	1.0	1.1	1.1	1.2	1.3	1.3	1.4	1.6	1.7	1.7
SSA	0.6	0.6	0.7	0.8	0.9	0.9	1.0	1.0	1.0	1.2	1.4
USA	2.9	3.1	3.3	3.4	3.8	4.0	4.1	4.1	4.1	4.1	4.2

Table 1516: MAGPIE m4p\_som — Productivity—Yield—Crops—Other crops—Fruits Vegetables Nuts (t DM/ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	3.4	3.5	3.5	3.6	3.6	3.6	3.6
CAZ	8.0	8.2	8.5	8.6	8.6	8.7	8.8
CHA	5.6	5.5	5.5	5.5	5.6	5.6	5.7
EUR	5.1	5.3	5.3	5.4	5.5	5.5	5.5
IND	4.3	4.6	4.8	5.1	5.5	5.9	6.0
JPN	10.4	10.9	11.3	11.7	11.8	11.9	11.9
LAM	2.0	2.0	2.1	2.1	2.1	2.0	2.1
MEA	25.3	26.7	27.7	28.9	30.0	30.0	31.3
NEU	7.2	7.2	7.2	7.2	7.2	7.2	7.2
OAS	5.6	6.0	6.4	6.7	6.9	6.9	6.9
REF	1.8	1.8	1.8	1.8	1.9	1.9	1.9
SSA	1.5	1.6	1.7	1.9	2.0	2.0	2.0
USA	4.3	4.4	4.5	4.6	4.8	4.9	4.9

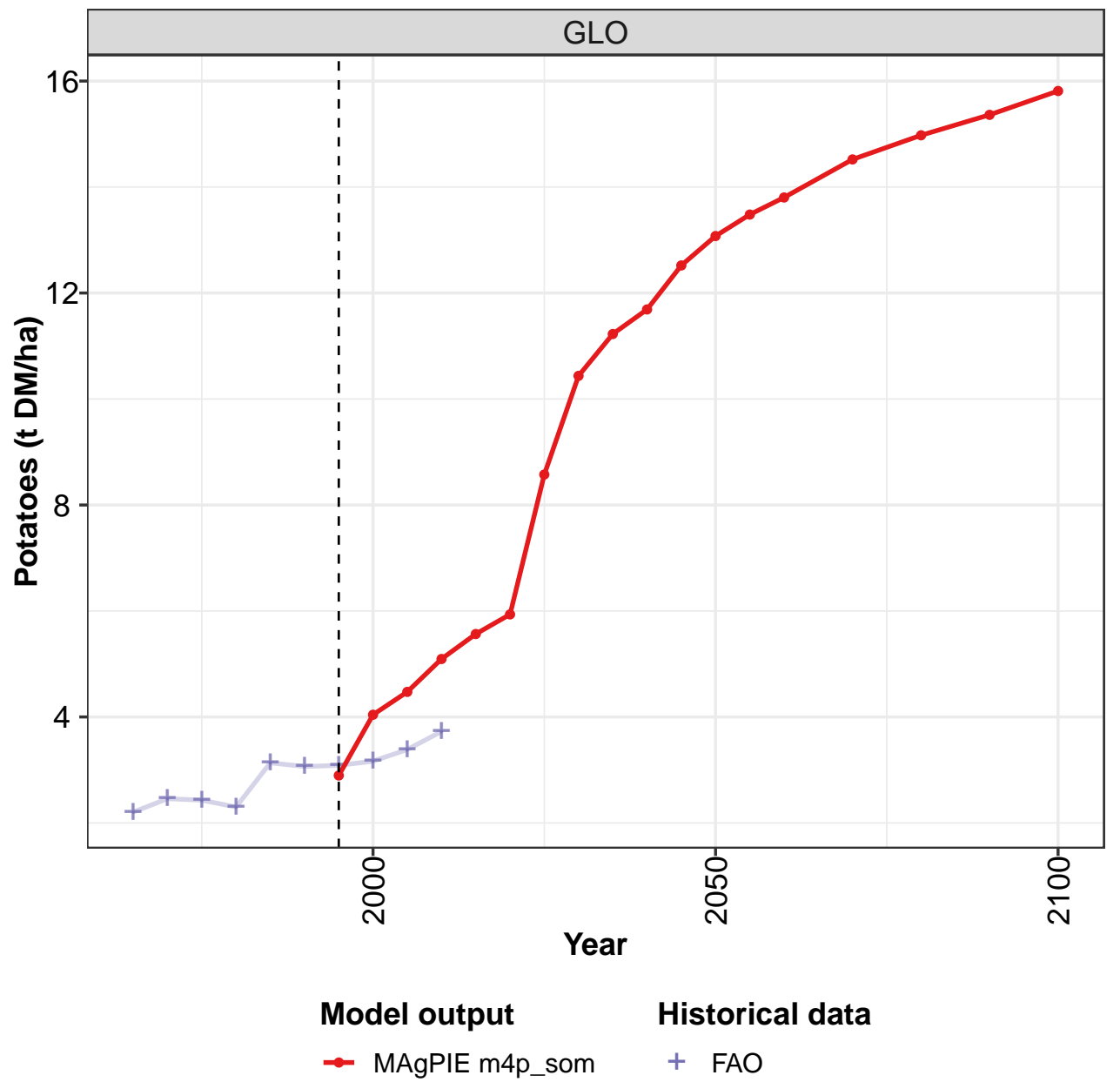
Table 1517: MAGPIE m4p\_som — Productivity—Yield—Crops—Other crops—Fruits Vegetables Nuts (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.87	0.96	1.06	1.16	1.24	1.30	1.41	1.65	1.81	2.03
CAZ	0.68	0.71	0.87	1.07	1.53	1.52	1.93	2.01	2.54	2.57
CHA	2.33	2.50	2.46	2.44	2.27	2.27	2.67	3.43	3.83	4.64
EUR	1.19	1.41	1.49	1.75	1.82	1.88	1.86	2.14	2.20	2.26
IND	0.92	0.99	1.06	1.11	1.25	1.39	1.39	1.64	1.57	1.87
JPN	3.72	3.69	3.84	3.88	3.96	3.84	3.76	3.60	3.58	3.86
LAM	0.44	0.51	0.62	0.69	0.76	0.74	0.83	0.92	1.01	1.09
MEA	0.83	0.91	1.03	1.16	1.31	1.39	1.30	1.43	1.73	1.81
NEU	0.87	1.00	1.07	1.17	1.32	1.50	1.54	1.76	1.76	1.75
OAS	0.68	0.81	0.96	1.07	1.03	1.03	1.20	1.10	1.16	1.21
REF	0.90	0.84	1.00	1.16	1.49	1.42	1.12	1.13	1.49	1.69
SSA	0.22	0.26	0.27	0.28	0.29	0.34	0.39	0.42	0.48	0.51
USA	1.75	1.72	2.30	2.62	2.52	2.58	2.84	3.31	3.36	3.85

Table 1518: FAO — Productivity—Yield—Crops—Other crops—Fruits Vegetables Nuts (t DM/ha)

52.1.15 Other crops—Potatoes

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

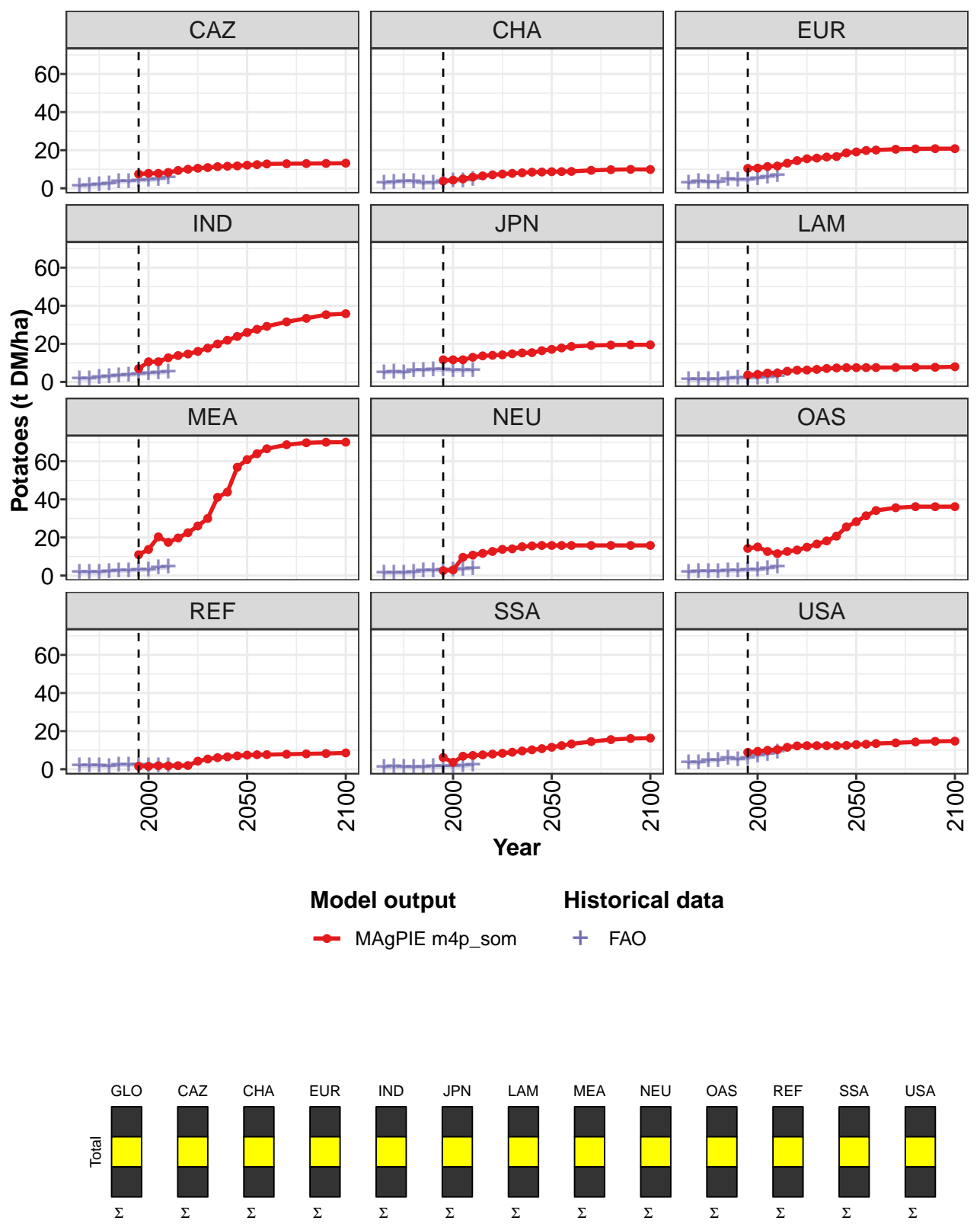


Figure 393: MAgPIE m4p\_som — Productivity—Yield—Crops—Other crops—Potatoes (t DM/ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	2.9	4.0	4.5	5.1	5.6	5.9	8.6	10.4	11.2	11.7	12.5
CAZ	7.4	7.8	7.8	8.3	9.4	10.0	10.5	10.9	11.3	11.6	11.8
CHA	3.8	4.3	4.9	5.9	6.5	7.1	7.5	7.8	8.1	8.5	8.6
EUR	10.5	10.6	11.4	11.7	13.2	14.5	15.5	15.8	16.4	16.7	18.6
IND	7.0	10.6	10.6	12.7	13.8	14.7	16.0	17.8	19.9	21.9	23.9
JPN	11.6	11.6	11.6	13.0	13.7	14.0	14.2	14.8	15.2	15.4	16.4
LAM	3.6	3.9	4.7	4.7	5.6	6.2	6.3	6.6	7.1	7.3	7.5
MEA	11.0	13.7	20.3	17.5	19.7	22.5	26.0	30.0	41.1	43.9	56.9
NEU	2.6	3.0	9.6	10.7	11.6	12.7	13.8	14.1	15.1	15.6	15.8
OAS	14.3	15.0	12.7	11.5	12.7	13.4	14.9	16.5	18.2	20.7	25.6
REF	1.6	1.6	1.8	1.8	1.9	1.9	4.2	5.4	6.1	6.5	7.0
SSA	6.2	3.6	6.8	7.2	7.5	7.9	8.4	8.9	9.6	10.2	10.8
USA	8.9	9.4	9.9	10.3	11.5	12.2	12.3	12.3	12.3	12.3	12.5

Table 1519: MAgPIE m4p\_som — Productivity—Yield—Crops—Other crops—Potatoes (t DM/ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	13.1	13.5	13.8	14.5	15.0	15.4	15.8
CAZ	12.1	12.4	12.8	12.9	13.0	13.1	13.2
CHA	8.7	8.8	8.9	9.4	9.8	9.9	9.9
EUR	19.1	19.9	20.1	20.5	20.7	20.8	20.8
IND	26.0	27.6	29.2	31.5	33.4	35.3	35.8
JPN	17.1	17.8	18.6	19.1	19.4	19.5	19.5
LAM	7.5	7.5	7.6	7.6	7.7	7.7	8.0
MEA	60.9	64.0	66.6	68.7	69.7	70.0	70.0
NEU	15.8	15.8	15.8	15.8	15.8	15.8	15.8
OAS	28.3	31.4	34.1	35.6	36.2	36.2	36.2
REF	7.4	7.6	7.7	7.9	8.1	8.2	8.6
SSA	11.5	12.4	13.2	14.5	15.6	16.1	16.3
USA	12.9	13.1	13.5	13.8	14.3	14.6	14.8

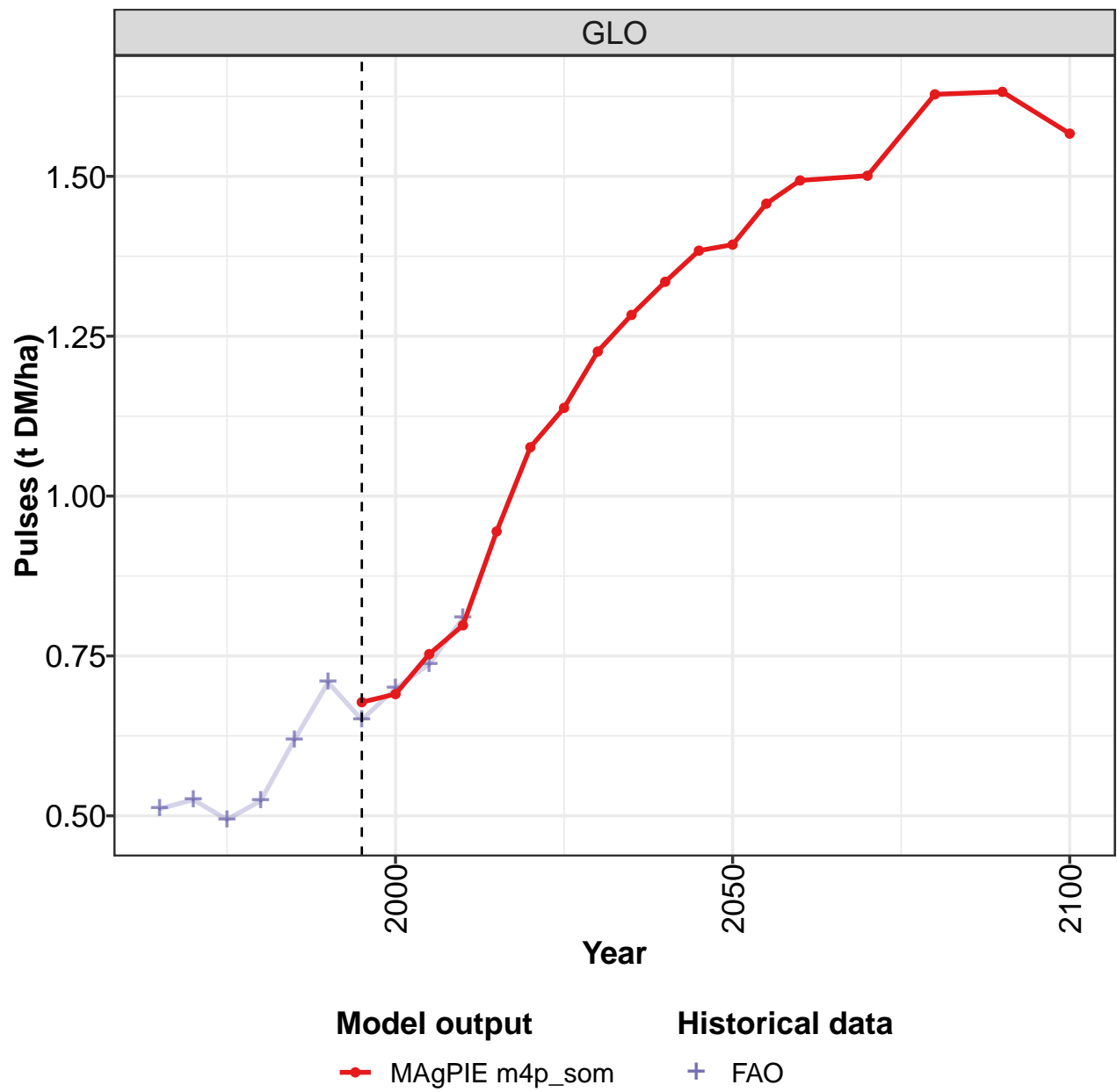
Table 1520: MAgPIE m4p\_som — Productivity—Yield—Crops—Other crops—Potatoes (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.20	2.46	2.43	2.30	3.13	3.07	3.09	3.16	3.38	3.73
CAZ	1.31	1.50	1.91	2.46	3.57	3.56	4.12	4.33	4.61	5.54
CHA	2.69	3.11	3.52	3.41	2.63	2.80	3.48	3.83	4.14	4.84
EUR	2.89	3.38	3.26	3.09	4.75	4.54	4.43	5.30	6.05	6.56
IND	1.80	1.75	2.37	2.76	3.42	3.70	3.90	4.45	4.67	5.23
JPN	4.99	5.20	5.01	5.92	6.20	6.42	6.48	5.84	6.02	5.91
LAM	1.23	1.32	1.30	1.36	1.81	1.92	2.07	2.16	2.59	2.77
MEA	1.60	1.67	1.54	2.17	2.55	2.52	2.97	2.82	3.99	4.33
NEU	1.42	1.53	1.52	1.69	2.56	2.68	2.75	3.07	3.28	3.78
OAS	1.78	2.10	2.14	2.20	2.42	2.50	2.94	2.96	3.63	4.67
REF	1.71	1.88	1.84	1.57	2.28	2.17	2.11	1.80	2.02	1.84
SSA	0.99	1.27	1.21	1.11	1.22	1.44	1.42	1.58	1.65	2.24
USA	3.41	3.43	4.45	4.76	5.64	5.20	5.69	7.17	7.82	9.20

Table 1521: FAO — Productivity—Yield—Crops—Other crops—Potatoes (t DM/ha)

52.1.16 Other crops—Pulses

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

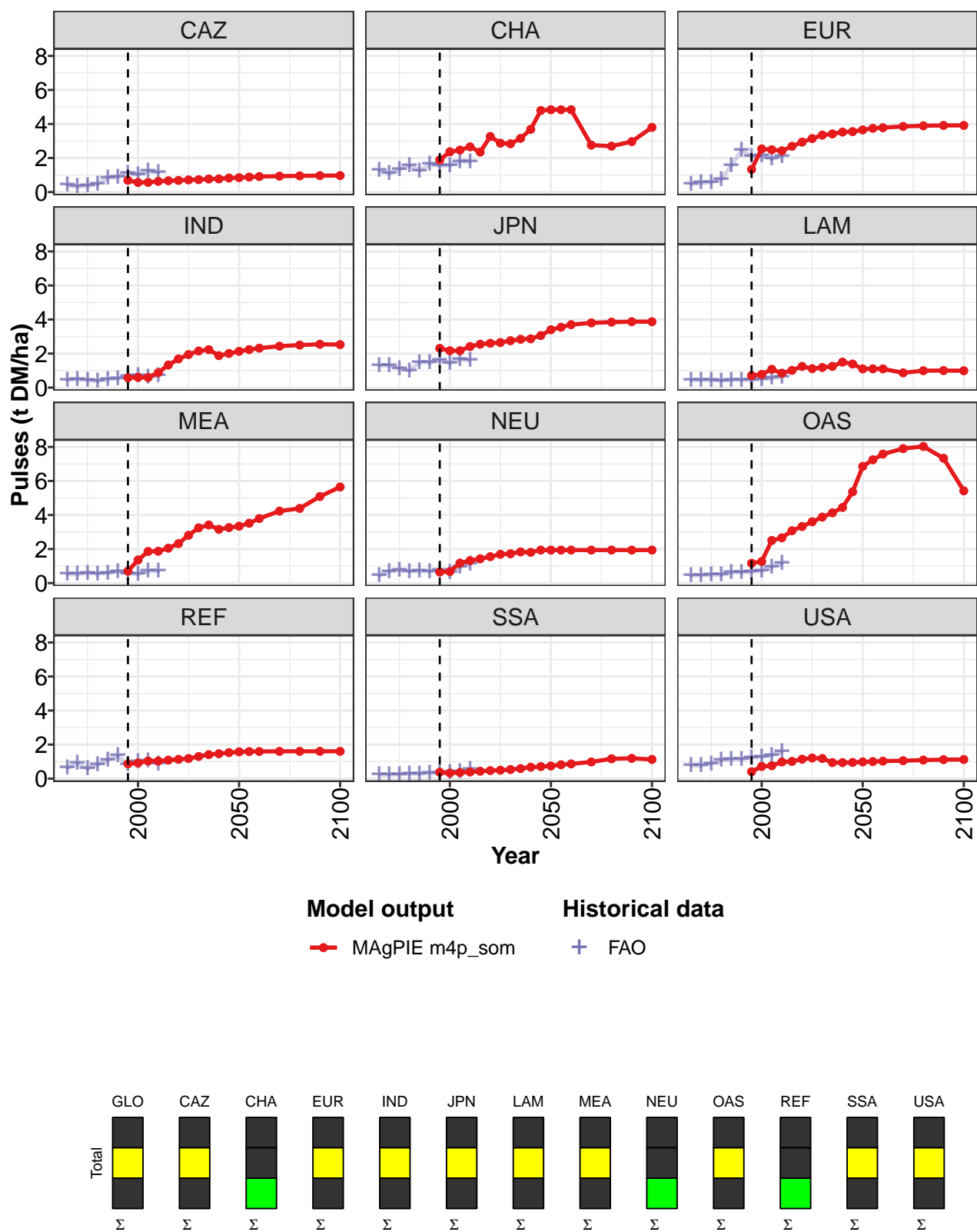


Figure 394: MAgPIE m4p\_som — Productivity—Yield—Crops—Other crops—Pulses (t DM/ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.68	0.69	0.75	0.80	0.94	1.08	1.14	1.23	1.28	1.34	1.38
CAZ	0.69	0.57	0.57	0.63	0.67	0.69	0.72	0.73	0.77	0.77	0.83
CHA	1.89	2.37	2.47	2.66	2.35	3.27	2.87	2.84	3.16	3.69	4.80
EUR	1.33	2.54	2.49	2.42	2.69	2.94	3.14	3.35	3.42	3.52	3.55
IND	0.57	0.60	0.59	0.88	1.33	1.68	1.94	2.15	2.23	1.88	2.00
JPN	2.31	2.17	2.17	2.41	2.55	2.60	2.65	2.76	2.84	2.87	3.06
LAM	0.71	0.77	1.07	0.84	1.01	1.24	1.11	1.18	1.25	1.50	1.39
MEA	0.71	1.36	1.86	1.87	2.05	2.32	2.81	3.25	3.42	3.16	3.26
NEU	0.65	0.68	1.18	1.32	1.43	1.55	1.69	1.72	1.83	1.81	1.94
OAS	1.17	1.27	2.50	2.66	3.08	3.33	3.60	3.88	4.13	4.44	5.36
REF	0.87	0.92	1.03	1.03	1.09	1.13	1.18	1.30	1.41	1.46	1.53
SSA	0.38	0.33	0.36	0.39	0.43	0.47	0.50	0.53	0.59	0.67	0.71
USA	0.41	0.71	0.76	0.98	1.01	1.14	1.21	1.18	0.94	0.94	0.95

Table 1522: MAgPIE m4p\_som — Productivity—Yield—Crops—Other crops—Pulses (t DM/ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.39	1.46	1.49	1.50	1.63	1.63	1.57
CAZ	0.85	0.88	0.91	0.94	0.95	0.96	0.97
CHA	4.84	4.84	4.84	2.76	2.70	2.97	3.80
EUR	3.65	3.75	3.78	3.86	3.89	3.92	3.92
IND	2.13	2.23	2.32	2.43	2.50	2.55	2.53
JPN	3.40	3.54	3.70	3.80	3.85	3.87	3.87
LAM	1.10	1.10	1.10	0.87	0.99	1.00	0.99
MEA	3.34	3.52	3.79	4.23	4.39	5.09	5.65
NEU	1.94	1.94	1.94	1.94	1.94	1.94	1.94
OAS	6.86	7.25	7.58	7.90	8.03	7.33	5.42
REF	1.57	1.59	1.59	1.60	1.60	1.60	1.60
SSA	0.74	0.82	0.86	0.98	1.16	1.19	1.13
USA	0.98	1.00	1.03	1.05	1.09	1.11	1.12

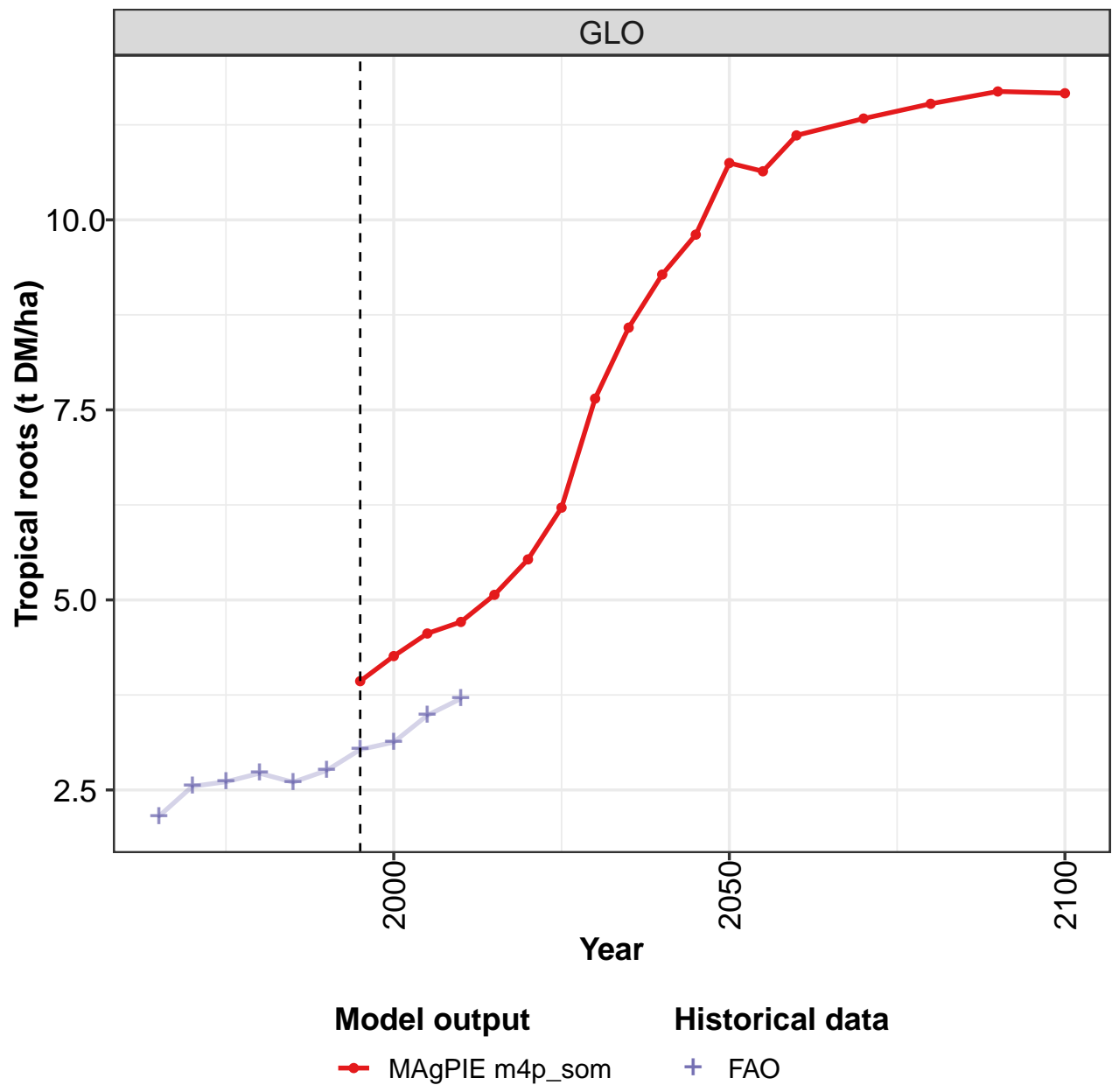
Table 1523: MAgPIE m4p\_som — Productivity—Yield—Crops—Other crops—Pulses (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.51	0.53	0.49	0.52	0.62	0.71	0.65	0.70	0.74	0.81
CAZ	0.40	0.32	0.36	0.47	0.85	0.89	1.12	1.03	1.23	1.15
CHA	1.28	1.08	1.34	1.56	1.26	1.65	1.54	1.57	1.80	1.79
EUR	0.46	0.54	0.58	0.76	1.56	2.46	2.08	2.13	1.94	2.12
IND	0.45	0.49	0.44	0.37	0.49	0.53	0.65	0.69	0.60	0.70
JPN	1.28	1.30	1.13	1.00	1.48	1.46	1.61	1.44	1.66	1.60
LAM	0.42	0.43	0.43	0.41	0.45	0.44	0.45	0.50	0.56	0.63
MEA	0.54	0.53	0.59	0.55	0.60	0.69	0.55	0.53	0.70	0.70
NEU	0.45	0.69	0.75	0.69	0.72	0.69	0.74	0.65	0.93	1.14
OAS	0.43	0.46	0.50	0.49	0.62	0.63	0.67	0.72	0.96	1.15
REF	0.62	0.89	0.58	0.83	1.10	1.34	0.82	1.00	1.06	0.85
SSA	0.23	0.23	0.25	0.29	0.27	0.34	0.30	0.38	0.42	0.56
USA	0.77	0.76	0.88	1.08	1.13	1.13	1.25	1.26	1.37	1.60

Table 1524: FAO — Productivity—Yield—Crops—Other crops—Pulses (t DM/ha)

52.1.17 Other crops—Tropical roots

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

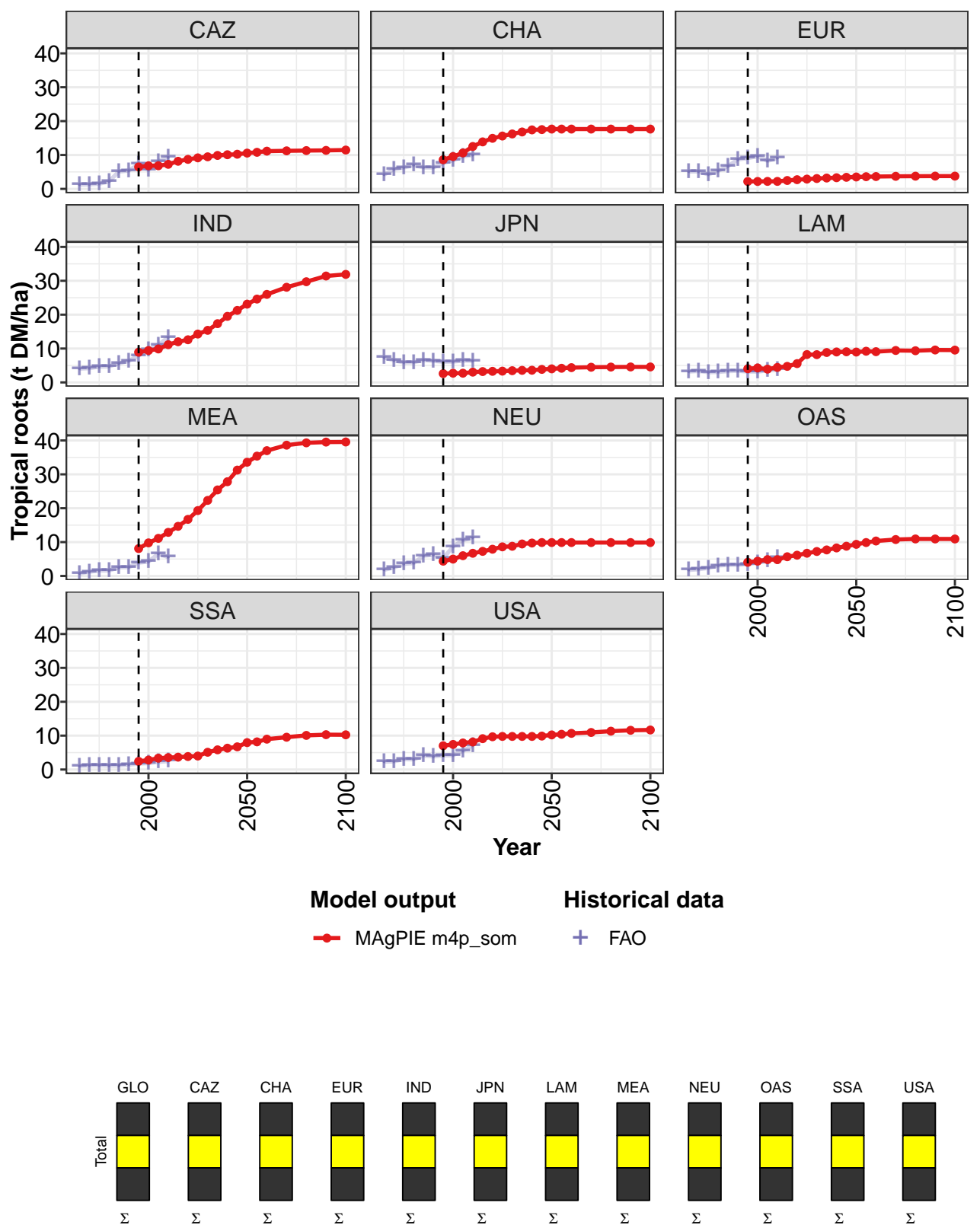


Figure 395: MAGPIE m4p\_som — Productivity—Yield—Crops—Other crops—Tropical roots (t DM/ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	3.9	4.3	4.6	4.7	5.1	5.5	6.2	7.6	8.6	9.3	9.8
CAZ	6.5	6.8	6.8	7.2	8.1	8.7	9.2	9.5	9.9	10.1	10.2
CHA	8.6	9.5	10.6	12.5	13.9	14.9	15.6	16.2	16.8	17.4	17.5
EUR	2.2	2.2	2.2	2.2	2.5	2.7	2.9	3.1	3.2	3.3	3.4
IND	8.9	9.4	9.9	11.1	12.0	12.6	14.3	15.4	17.3	19.5	21.3
JPN	2.6	2.7	2.7	3.0	3.2	3.3	3.3	3.5	3.6	3.6	3.8
LAM	4.0	4.3	3.9	4.4	4.7	5.6	8.2	8.2	8.8	9.0	9.0
MEA	8.1	9.8	11.1	12.9	14.7	16.7	19.3	22.3	25.4	27.8	31.2
NEU	4.4	5.0	6.0	6.7	7.3	7.9	8.6	8.8	9.4	9.7	9.9
OAS	4.0	4.4	4.8	4.8	5.7	6.1	6.7	7.2	7.7	8.3	8.8
SSA	2.4	2.8	3.3	3.5	3.7	3.8	4.0	5.1	5.8	6.3	6.7
USA	7.0	7.4	7.8	8.1	9.1	9.7	9.8	9.8	9.8	9.8	9.9

Table 1525: MAgPIE m4p\_som — Productivity—Yield—Crops—Other crops—Tropical roots (t DM/ha)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	10.7	10.6	11.1	11.3	11.5	11.7	11.7
CAZ	10.6	10.8	11.1	11.2	11.3	11.4	11.5
CHA	17.7	17.7	17.7	17.7	17.7	17.7	17.7
EUR	3.5	3.6	3.6	3.7	3.7	3.8	3.8
IND	23.1	24.6	26.0	28.1	29.7	31.4	31.9
JPN	4.0	4.2	4.4	4.5	4.5	4.6	4.6
LAM	9.0	9.2	9.1	9.4	9.4	9.6	9.5
MEA	33.6	35.4	37.0	38.6	39.3	39.5	39.6
NEU	9.9	9.9	9.9	9.9	9.9	9.9	9.9
OAS	9.3	9.9	10.3	10.8	10.9	10.9	10.9
SSA	7.9	8.2	9.0	9.5	10.1	10.3	10.2
USA	10.2	10.4	10.7	10.9	11.3	11.6	11.7

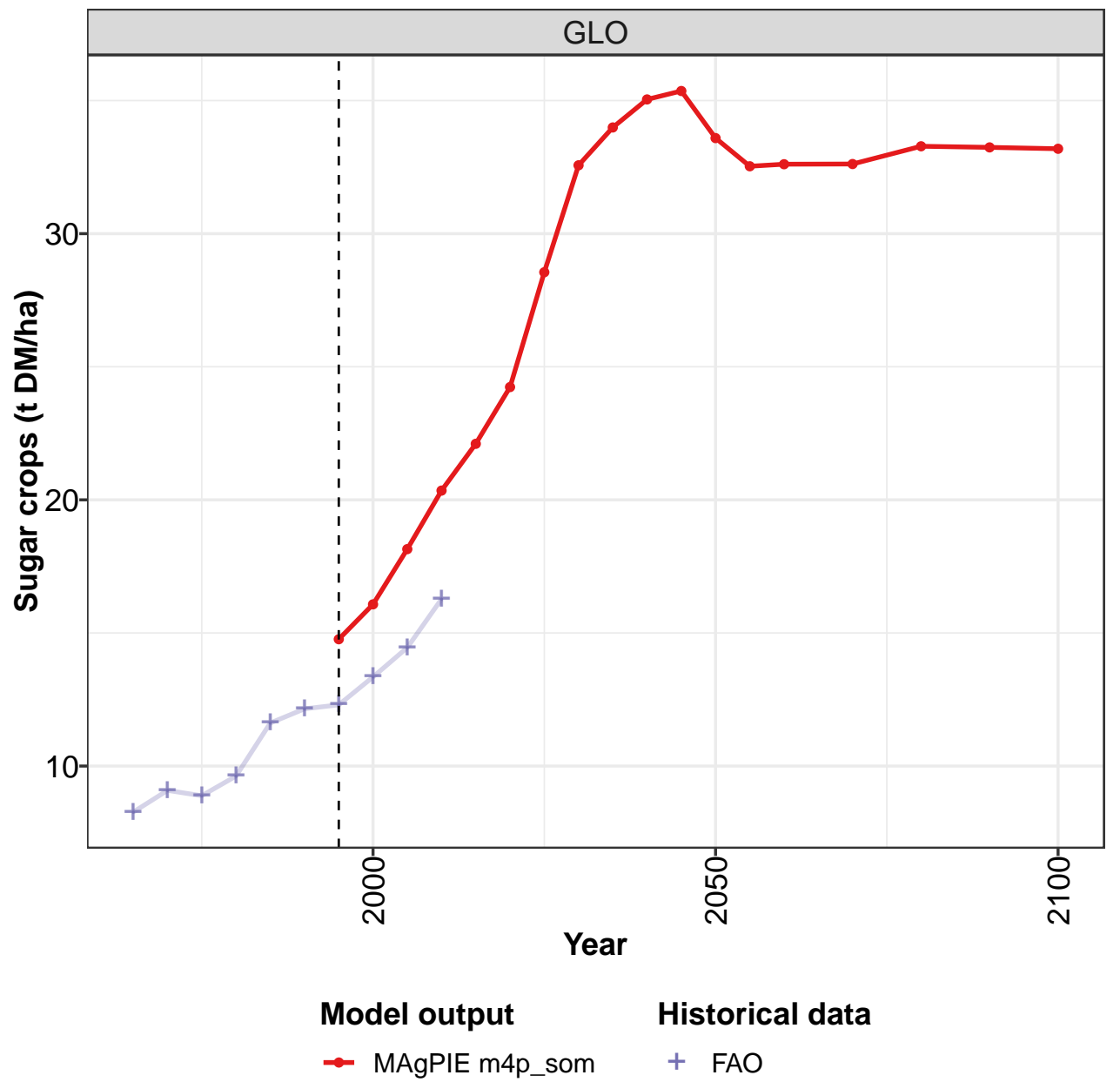
Table 1526: MAgPIE m4p\_som — Productivity—Yield—Crops—Other crops—Tropical roots (t DM/ha)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.2	2.5	2.6	2.7	2.6	2.8	3.0	3.1	3.5	3.7
CAZ	1.2	1.3	1.5	2.2	5.1	5.4	7.3	5.6	8.1	9.3
CHA	4.2	5.8	6.3	7.0	6.3	6.3	7.6	8.4	9.6	10.0
EUR	5.1	5.1	4.3	5.3	6.7	8.7	9.1	9.6	8.3	9.1
IND	4.0	4.2	4.6	4.7	5.6	6.3	7.9	9.7	11.1	13.3
JPN	7.4	6.5	5.9	5.9	6.6	6.3	6.1	6.1	6.4	6.4
LAM	3.2	3.4	3.0	3.1	3.3	3.4	3.2	3.2	3.5	3.7
MEA	0.7	1.2	1.6	1.6	2.5	2.6	3.9	4.2	6.5	5.6
NEU	1.8	2.5	3.5	3.8	5.9	6.3	5.2	8.7	10.6	11.3
OAS	1.8	2.0	2.4	3.1	3.2	3.3	3.5	3.9	4.5	5.5
SSA	1.0	1.2	1.2	1.2	1.2	1.4	1.7	1.9	2.2	2.5
USA	2.3	2.4	3.0	3.0	4.1	3.8	4.2	4.2	5.5	7.1

Table 1527: FAO — Productivity—Yield—Crops—Other crops—Tropical roots (t DM/ha)

52.1.18 Sugar crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

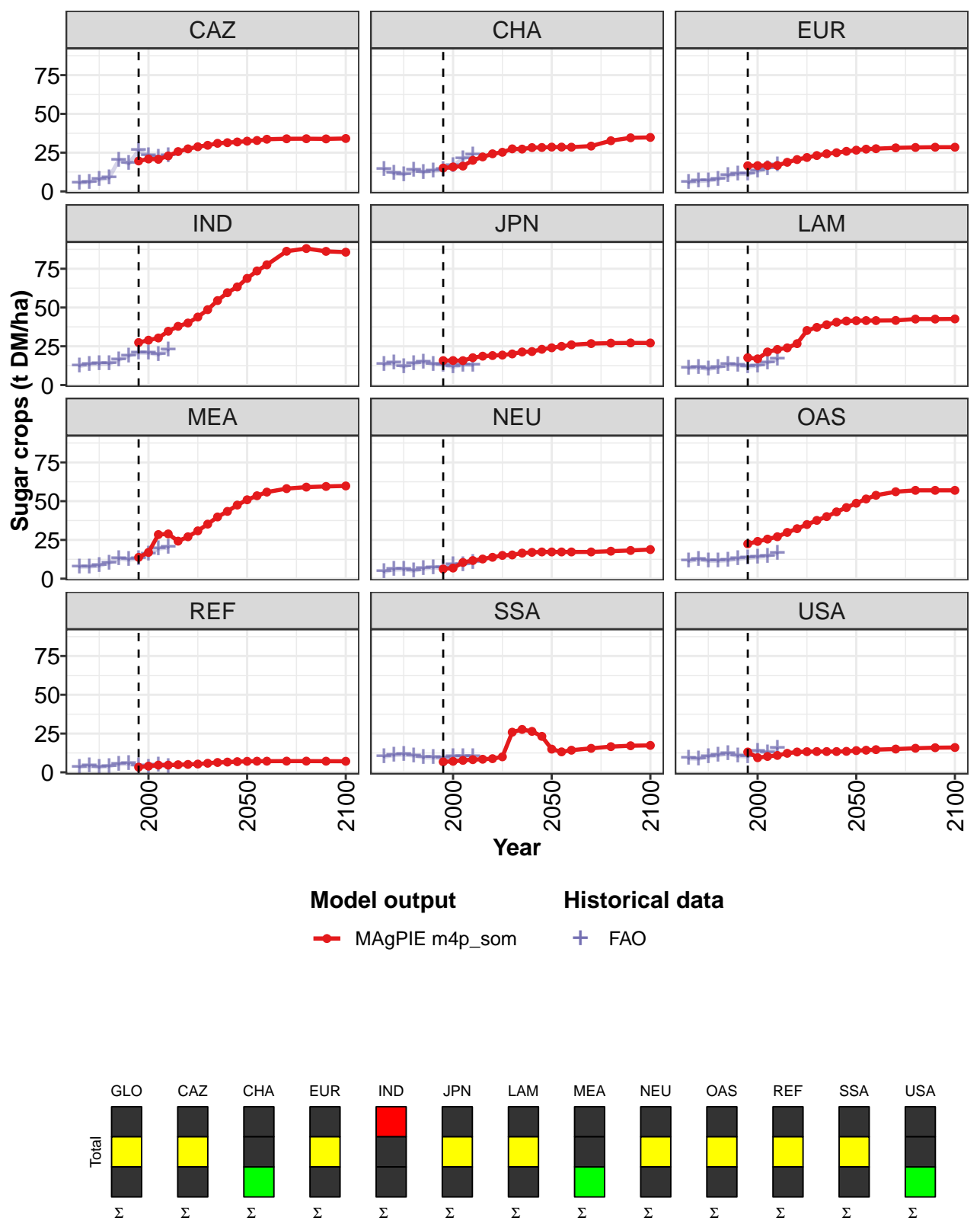


Figure 396: MAgPIE m4p\_som — Productivity—Yield—Crops—Sugar crops (t DM/ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	14.8	16.1	18.1	20.3	22.1	24.2	28.6	32.6	34.0	35.0	35.4
CAZ	19.6	20.9	20.7	22.9	25.7	27.5	28.8	29.7	31.0	31.4	31.9
CHA	15.1	15.8	16.3	20.1	22.2	24.2	25.2	27.4	27.3	28.3	28.3
EUR	16.6	16.6	16.7	16.8	18.8	20.5	21.9	23.1	24.3	25.0	25.9
IND	27.4	28.9	30.3	34.7	37.9	40.0	43.9	48.6	54.5	59.6	63.3
JPN	15.8	15.8	15.7	17.7	18.6	19.0	19.3	20.1	21.3	21.6	23.1
LAM	17.7	16.9	21.3	23.0	24.0	26.7	35.2	37.2	38.9	40.5	41.3
MEA	13.8	17.0	28.5	28.9	24.2	27.0	30.9	35.2	39.8	43.4	47.5
NEU	6.3	6.9	10.5	11.7	12.7	13.8	15.0	15.3	16.5	17.0	17.2
OAS	22.5	24.1	25.5	27.1	29.8	32.3	34.9	37.6	40.0	43.1	45.9
REF	3.3	4.0	4.7	4.7	4.9	5.1	5.3	5.9	6.4	6.6	6.9
SSA	6.8	7.1	7.7	8.2	8.4	8.8	10.0	25.9	27.7	26.4	23.2
USA	13.1	9.4	10.2	10.9	12.3	13.1	13.3	13.4	13.4	13.4	13.5

Table 1528: MAgPIE m4p\_som — Productivity—Yield—Crops—Sugar crops (t DM/ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	33.6	32.5	32.6	32.6	33.3	33.2	33.2
CAZ	32.4	32.8	33.7	33.9	34.0	33.9	34.1
CHA	28.6	28.6	28.5	29.2	32.7	34.6	34.8
EUR	26.6	27.3	27.5	28.1	28.4	28.5	28.5
IND	68.8	73.6	77.6	86.3	88.0	86.2	85.7
JPN	24.0	25.0	26.0	26.7	27.0	27.2	27.1
LAM	41.5	41.6	41.6	41.7	42.5	42.5	42.6
MEA	50.9	53.5	55.8	58.1	59.1	59.5	59.8
NEU	17.2	17.2	17.2	17.2	17.7	18.2	18.8
OAS	48.7	51.4	53.8	56.1	57.0	57.0	57.0
REF	7.1	7.2	7.2	7.2	7.2	7.2	7.1
SSA	15.0	13.2	14.3	15.5	16.6	17.2	17.4
USA	14.0	14.3	14.6	15.0	15.5	15.9	16.0

Table 1529: MAgPIE m4p\_som — Productivity—Yield—Crops—Sugar crops (t DM/ha) [PART 2/2]

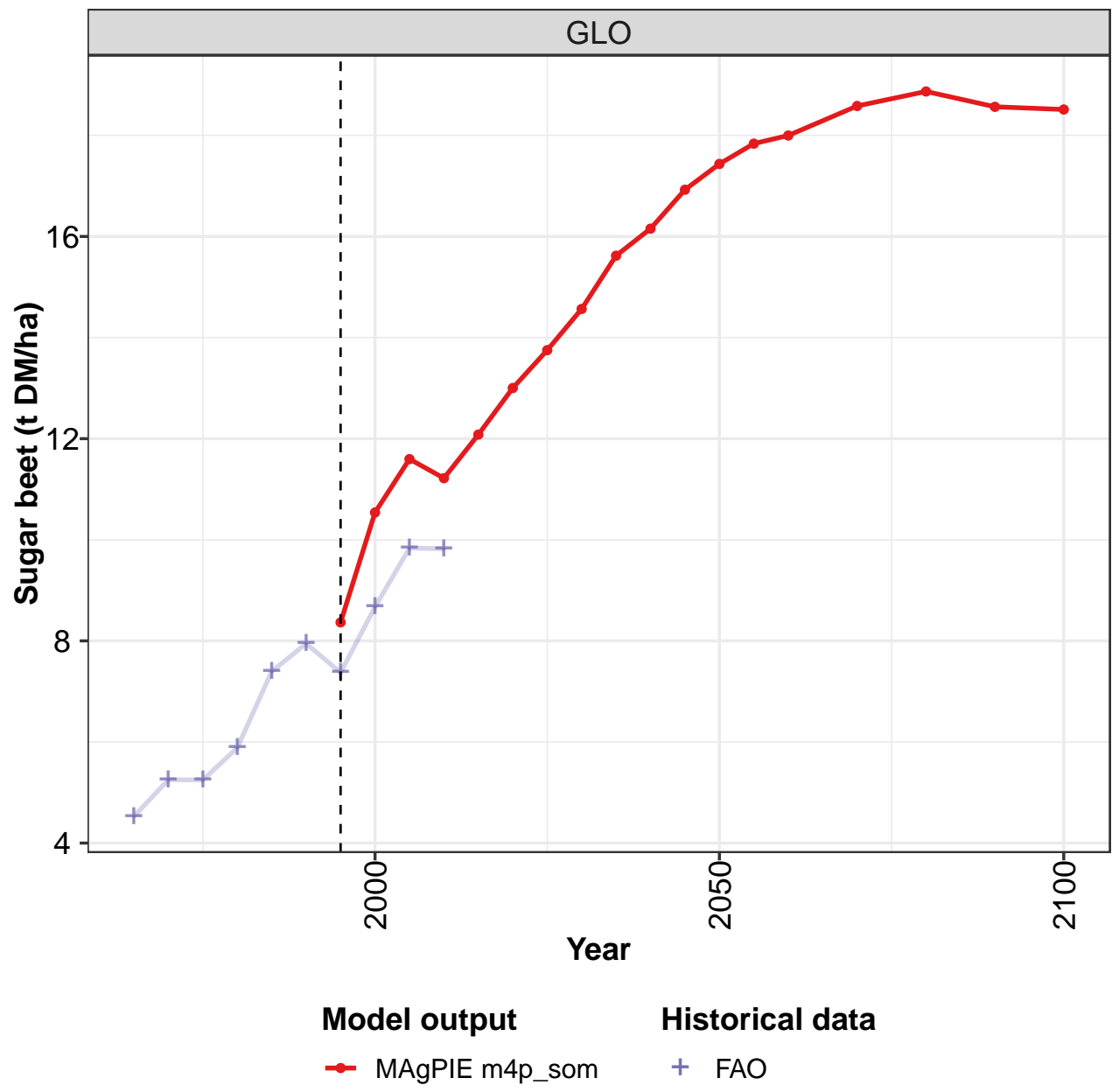
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	8.3	9.1	8.9	9.6	11.6	12.1	12.3	13.3	14.5	16.3
CAZ	5.6	6.1	7.7	8.6	20.4	17.9	26.3	23.2	21.9	23.2
CHA	14.4	11.7	11.0	13.7	12.5	13.3	14.0	16.8	20.9	23.7
EUR	5.7	6.7	7.0	8.0	10.2	11.3	11.2	13.2	14.8	17.2
IND	12.4	13.3	13.7	13.7	16.3	18.9	21.0	20.8	19.6	22.5
JPN	13.3	14.1	11.8	14.0	15.1	13.6	13.1	11.8	13.0	12.8
LAM	11.0	11.3	10.4	11.4	13.1	12.9	11.9	12.5	14.6	16.7
MEA	7.7	7.8	8.3	10.2	13.0	12.2	13.0	15.9	19.4	20.1
NEU	4.4	5.9	6.0	5.2	6.5	7.3	6.9	8.8	9.2	10.7
OAS	11.3	12.5	11.6	11.5	11.9	12.8	13.4	14.1	14.6	16.6
REF	3.5	4.1	3.3	4.0	5.3	5.5	4.0	3.2	4.6	3.9
SSA	10.1	11.1	11.5	10.8	9.6	9.6	9.1	10.0	10.3	10.3
USA	9.0	8.8	10.3	11.0	12.0	10.5	10.2	13.8	12.8	15.3

Table 1530: FAO — Productivity—Yield—Crops—Sugar crops (t DM/ha)



52.1.19 Sugar crops—Sugar beet

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

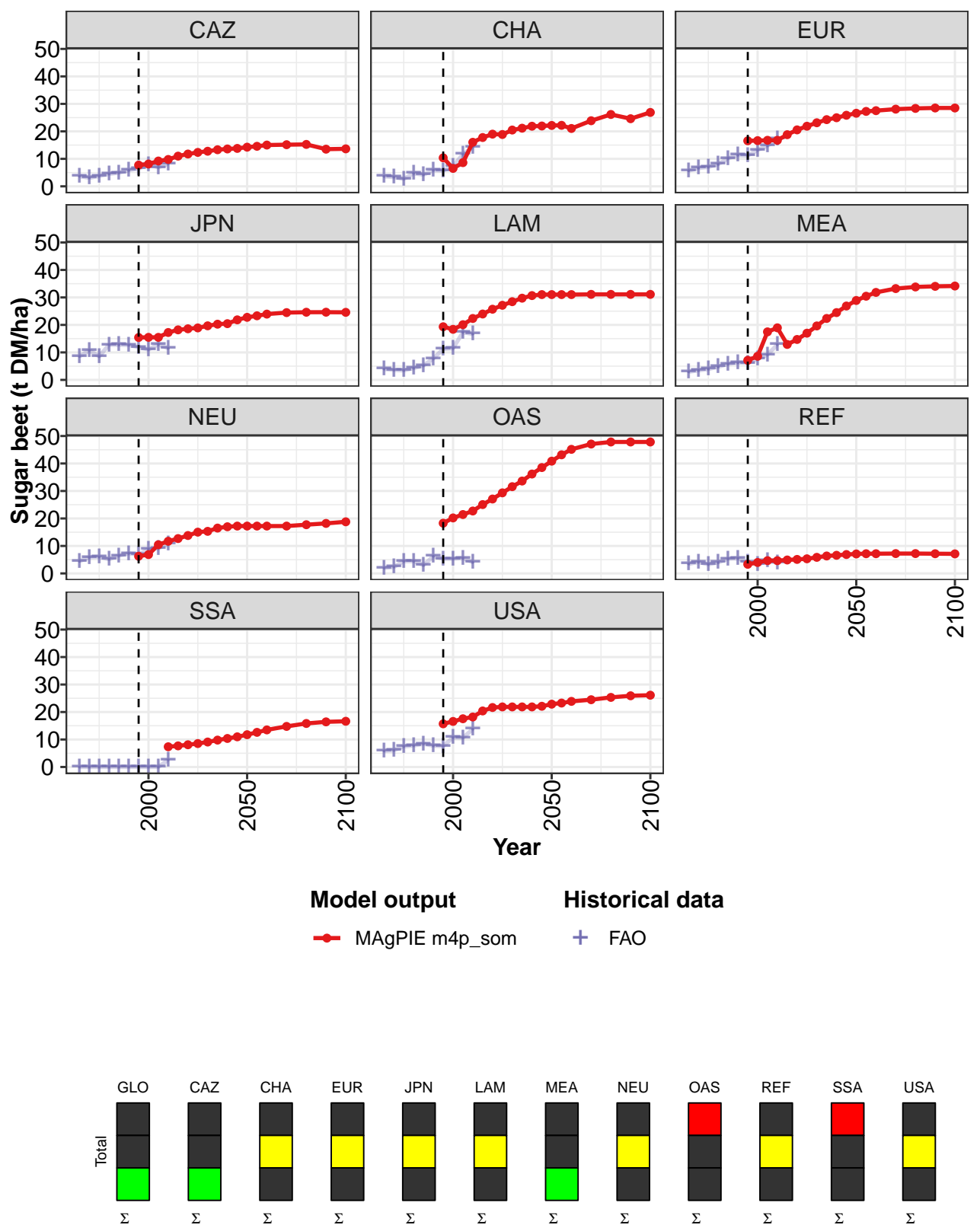


Figure 397: MAgPIE m4p\_som — Productivity—Yield—Crops—Sugar crops—Sugar beet (t DM/ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	8	11	12	11	12	13	14	15	16	16	17
CAZ	8	8	9	10	11	12	12	13	13	14	14
CHA	10	7	9	16	18	19	19	20	21	22	22
EUR	17	17	17	17	19	21	22	23	24	25	26
JPN	15	15	15	17	18	19	19	20	20	20	22
LAM	19	18	20	22	24	26	27	28	30	31	31
MEA	7	9	17	19	13	15	17	20	22	24	27
NEU	6	7	10	12	13	14	15	15	17	17	17
OAS	18	20	21	23	25	27	29	32	34	36	39
REF	3	4	5	5	5	5	5	6	6	7	7
SSA				7	8	8	9	9	10	10	11
USA	16	17	18	18	20	22	22	22	22	22	22

Table 1531: MAgPIE m4p\_som — Productivity—Yield—Crops—Sugar crops—Sugar beet (t DM/ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	17	18	18	19	19	19	19
CAZ	14	15	15	15	15	14	14
CHA	22	22	21	24	26	25	27
EUR	27	27	28	28	28	29	29
JPN	23	23	24	24	25	25	25
LAM	31	31	31	31	31	31	31
MEA	29	30	32	33	34	34	34
NEU	17	17	17	17	18	18	19
OAS	41	43	45	47	48	48	48
REF	7	7	7	7	7	7	7
SSA	12	13	13	15	16	16	17
USA	23	23	24	24	25	26	26

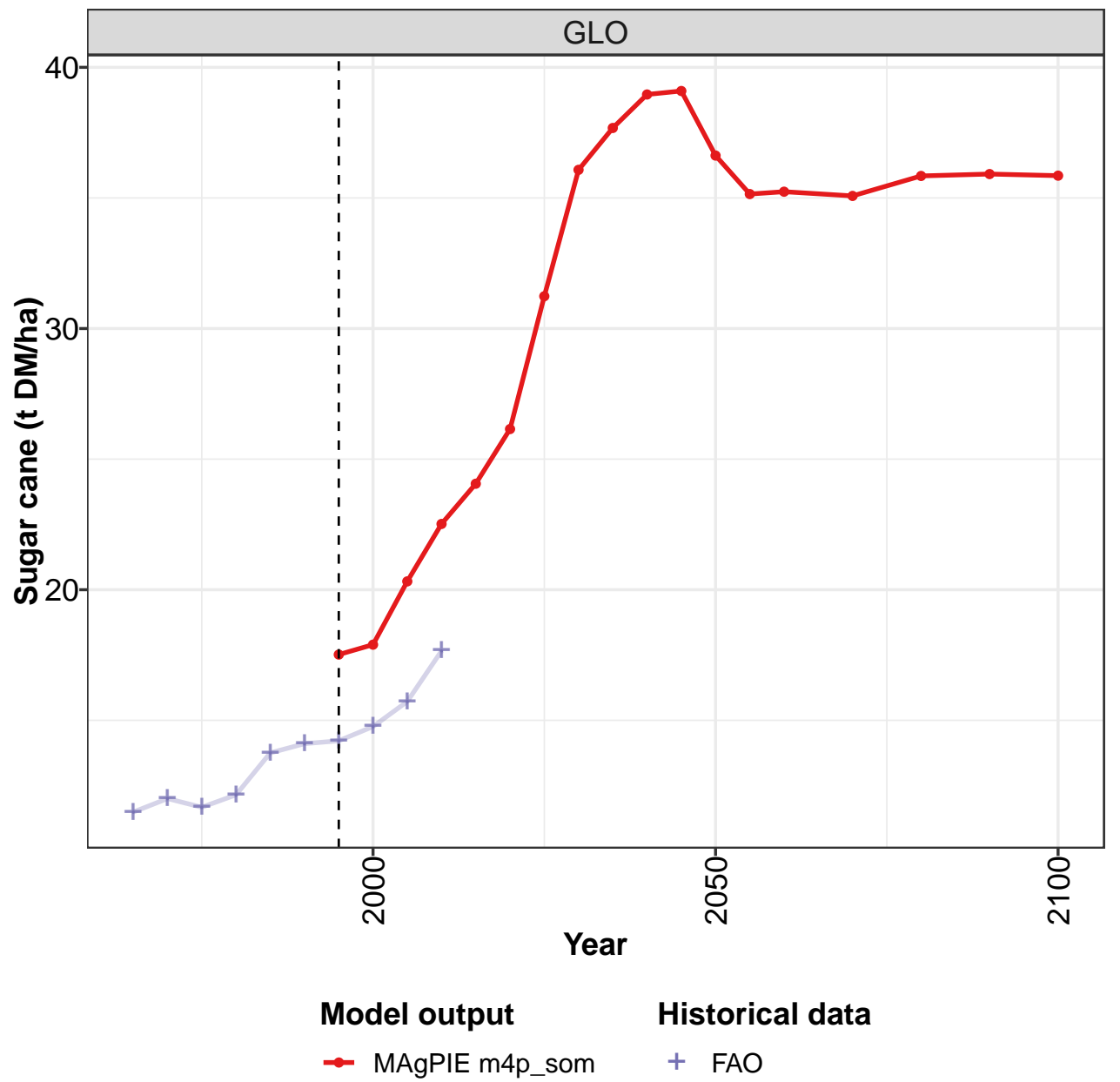
Table 1532: MAgPIE m4p\_som — Productivity—Yield—Crops—Sugar crops—Sugar beet (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4.5	5.3	5.2	5.9	7.4	7.9	7.4	8.7	9.8	9.8
CAZ	3.7	3.1	3.8	4.5	4.9	5.8	6.5	7.9	6.9	8.2
CHA	3.6	3.3	2.7	4.7	4.2	5.9	5.7	7.3	11.7	14.3
EUR	5.7	6.6	7.0	8.0	10.2	11.3	11.2	13.2	14.8	17.2
JPN	8.6	10.8	8.6	12.8	12.8	12.7	11.9	11.0	12.9	11.5
LAM	4.0	3.6	3.4	4.3	5.2	7.8	11.2	11.5	17.3	16.7
MEA	2.9	3.4	3.9	4.8	5.8	6.3	6.1	7.6	9.2	12.8
NEU	4.4	5.9	6.0	5.2	6.5	7.3	6.9	8.8	9.2	10.7
OAS	2.0	2.4	4.4	4.5	3.0	6.2	5.3	5.3	5.6	4.1
REF	3.5	4.1	3.3	4.0	5.3	5.5	4.0	3.2	4.6	3.9
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6
USA	5.8	6.1	7.5	7.8	8.4	7.7	7.6	10.7	10.6	13.8

Table 1533: FAO — Productivity—Yield—Crops—Sugar crops—Sugar beet (t DM/ha)

52.1.20 Sugar crops—Sugar cane

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

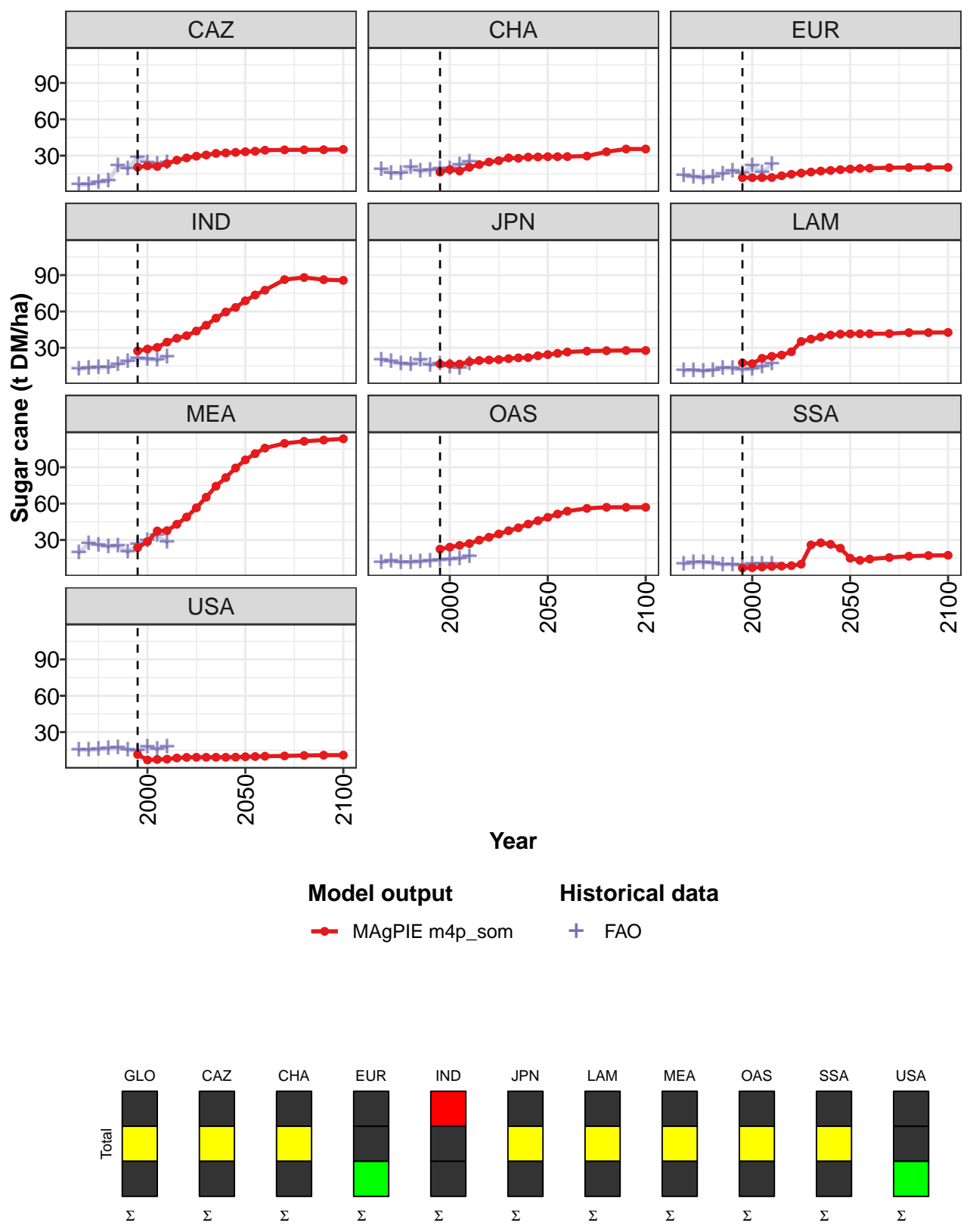


Figure 398: MAGPIE m4p\_som — Productivity—Yield—Crops—Sugar crops—Sugar cane (t DM/ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	18	18	20	23	24	26	31	36	38	39	39
CAZ	20	22	21	23	26	28	30	31	32	32	33
CHA	16	19	17	20	23	25	26	28	28	29	29
EUR	12	12	12	12	13	15	16	16	17	18	18
IND	27	29	30	35	38	40	44	49	54	60	63
JPN	17	17	17	18	20	20	20	21	22	22	23
LAM	18	17	21	23	24	27	35	37	39	41	41
MEA	24	29	37	38	43	49	57	65	74	81	89
OAS	22	24	26	27	30	32	35	38	40	43	46
SSA	7	7	8	8	8	9	10	26	28	26	23
USA	12	7	7	8	9	9	9	9	9	9	9

Table 1534: MAgPIE m4p\_som — Productivity—Yield—Crops—Sugar crops—Sugar cane (t DM/ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	37	35	35	35	36	36	36
CAZ	33	34	34	35	35	35	35
CHA	29	29	29	30	33	35	35
EUR	19	19	20	20	20	20	20
IND	69	74	78	86	88	86	86
JPN	24	25	27	27	28	28	28
LAM	42	42	42	42	43	43	43
MEA	96	101	106	110	111	112	114
OAS	49	51	54	56	57	57	57
SSA	15	13	14	15	17	17	17
USA	10	10	10	10	11	11	11

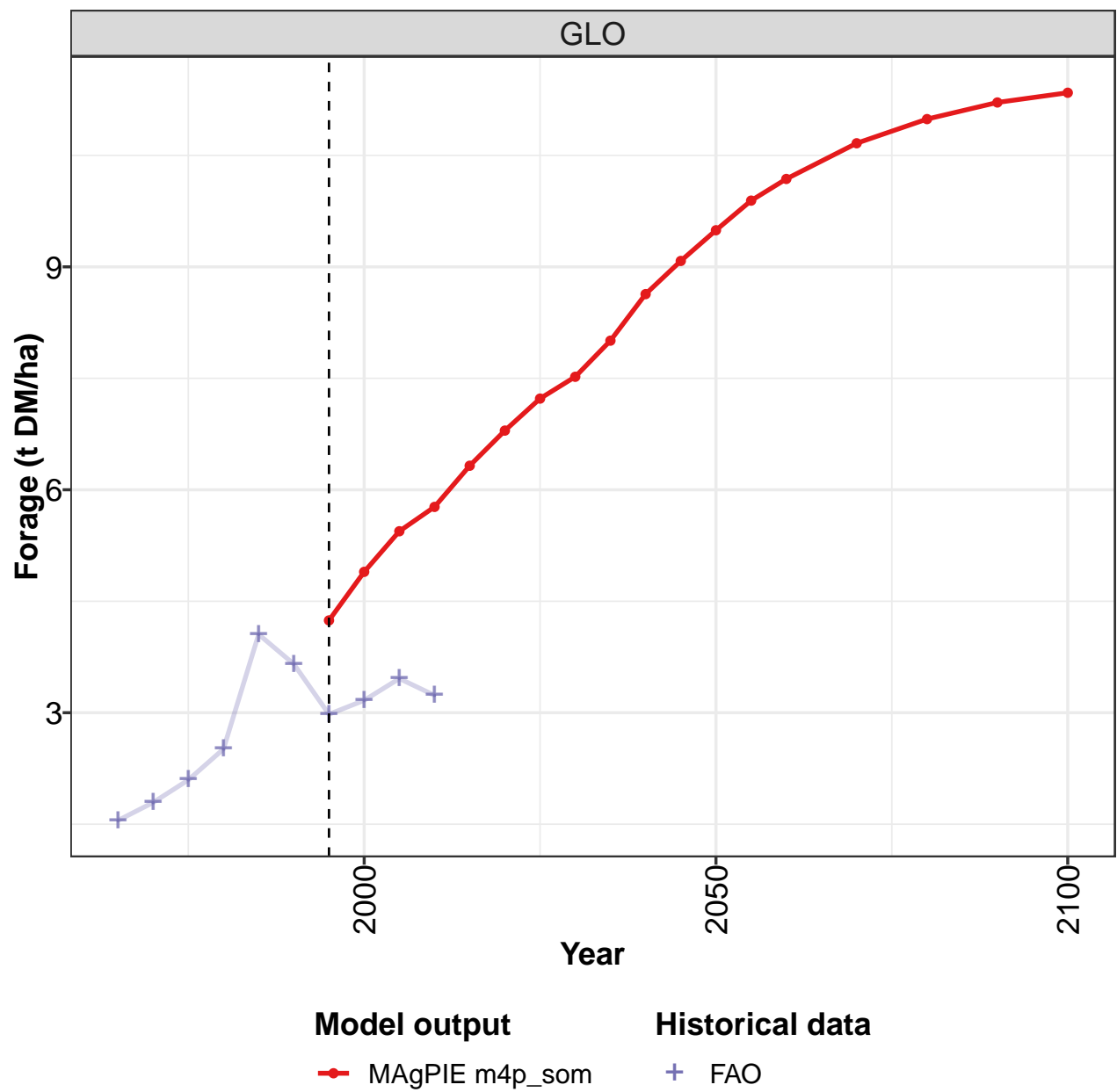
Table 1535: MAgPIE m4p\_som — Productivity—Yield—Crops—Sugar crops—Sugar cane (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	11.5	12.0	11.7	12.1	13.8	14.1	14.2	14.8	15.7	17.7
CAZ	5.8	6.3	8.0	8.9	21.3	19.3	28.6	24.1	22.6	23.9
CHA	18.7	15.4	15.1	20.4	17.0	18.0	18.9	19.4	22.3	24.9
EUR	13.5	12.5	11.4	12.3	14.9	17.3	15.5	21.7	15.8	22.7
IND	12.4	13.3	13.7	13.7	16.3	18.9	21.0	20.8	19.6	22.5
JPN	19.8	18.7	17.0	16.3	19.7	15.5	16.6	14.1	13.3	16.5
LAM	11.1	11.4	10.6	11.5	13.2	12.9	11.9	12.5	14.5	16.7
MEA	19.3	27.0	25.7	24.5	24.9	19.8	26.5	29.7	33.7	28.0
OAS	11.4	12.7	11.6	11.6	11.9	12.8	13.5	14.1	14.6	16.6
SSA	10.1	11.1	11.5	10.8	9.6	9.6	9.1	10.0	10.3	10.3
USA	15.3	15.2	15.7	16.3	17.0	15.4	14.3	17.8	15.7	17.4

Table 1536: FAO — Productivity—Yield—Crops—Sugar crops—Sugar cane (t DM/ha)

52.2 Forage

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

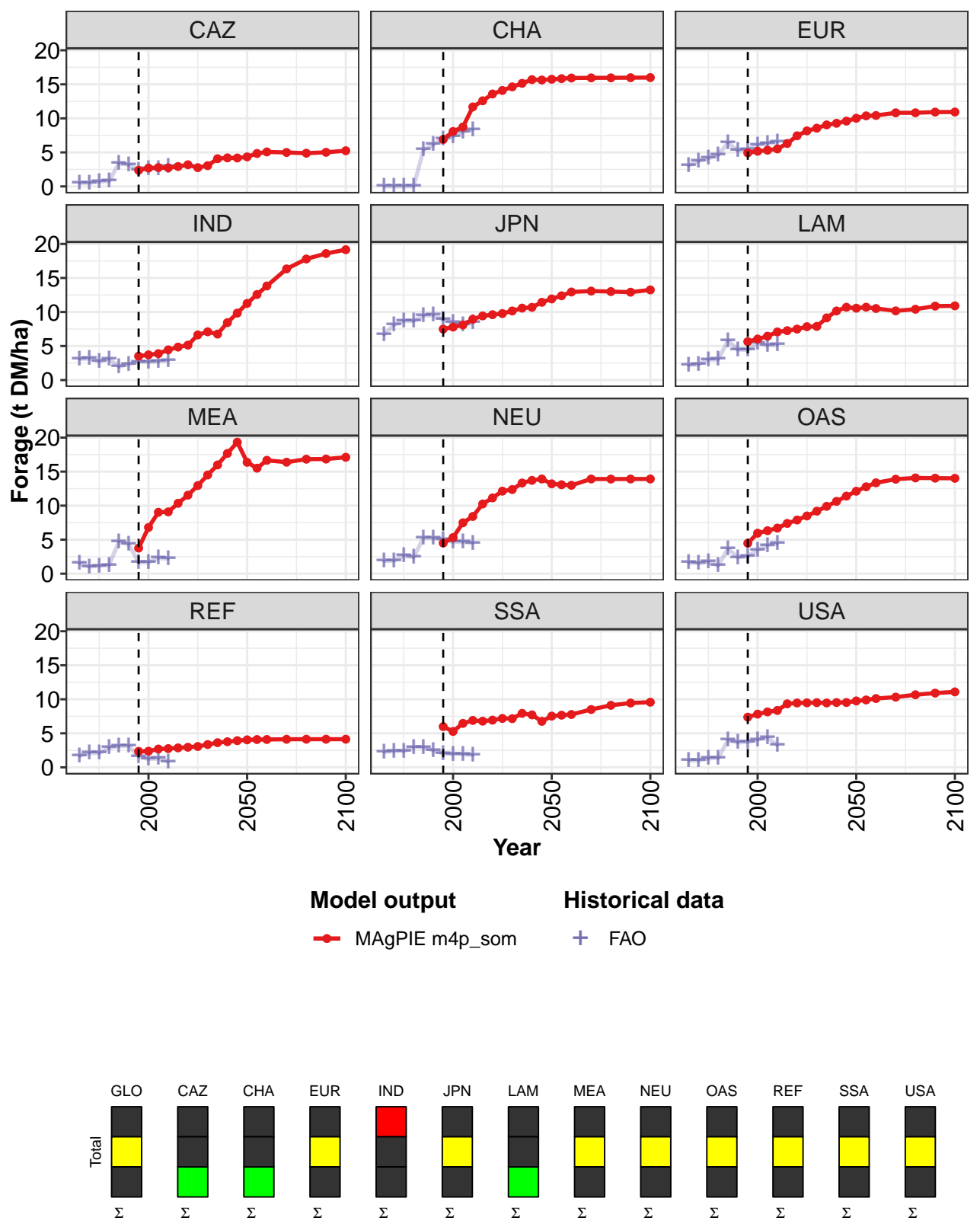


Figure 399: MAgPIE m4p\_som — Productivity—Yield—Forage (t DM/ha)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	4.2	4.9	5.4	5.8	6.3	6.8	7.2	7.5	8.0	8.6	9.1
CAZ	2.4	2.7	2.8	2.7	2.9	3.2	2.8	3.1	4.1	4.2	4.2
CHA	6.9	8.1	8.7	11.7	12.6	13.6	14.1	14.6	15.1	15.7	15.6
EUR	4.9	5.2	5.3	5.5	6.3	7.4	8.2	8.6	9.0	9.3	9.6
IND	3.5	3.7	3.9	4.4	4.8	5.1	6.6	7.1	6.8	8.4	9.8
JPN	7.5	7.8	8.1	8.9	9.4	9.6	9.8	10.2	10.6	10.7	11.4
LAM	5.6	6.0	6.4	7.1	7.3	7.5	7.8	7.9	9.1	10.2	10.7
MEA	3.8	6.8	9.0	9.1	10.3	11.5	13.0	14.5	16.0	17.7	19.3
NEU	4.5	5.3	7.5	8.4	10.2	11.1	12.1	12.4	13.3	13.7	13.9
OAS	4.5	6.0	6.3	6.7	7.4	7.9	8.5	9.2	9.9	10.6	11.4
REF	2.4	2.4	2.7	2.8	2.9	3.0	3.1	3.4	3.6	3.8	3.9
SSA	6.0	5.3	6.5	6.9	6.8	6.9	7.2	7.2	7.9	7.7	6.8
USA	7.4	7.8	8.1	8.4	9.3	9.5	9.5	9.5	9.5	9.5	9.5

Table 1537: MAgPIE m4p\_som — Productivity—Yield—Forage (t DM/ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	9.5	9.9	10.2	10.7	11.0	11.2	11.3
CAZ	4.3	4.8	5.1	5.0	4.9	5.0	5.2
CHA	15.7	15.8	15.9	16.0	16.0	16.0	16.0
EUR	10.0	10.4	10.4	10.8	10.8	10.9	10.9
IND	11.3	12.6	13.8	16.3	17.8	18.6	19.2
JPN	11.9	12.4	12.9	13.1	13.0	12.9	13.2
LAM	10.6	10.7	10.5	10.2	10.4	10.9	10.9
MEA	16.4	15.5	16.7	16.4	16.8	16.8	17.1
NEU	13.2	13.1	13.0	13.9	13.9	13.9	13.9
OAS	12.1	12.8	13.4	13.9	14.1	14.0	14.0
REF	4.0	4.1	4.1	4.1	4.1	4.1	4.1
SSA	7.5	7.7	7.8	8.5	9.1	9.5	9.6
USA	9.8	9.9	10.1	10.3	10.7	10.9	11.1

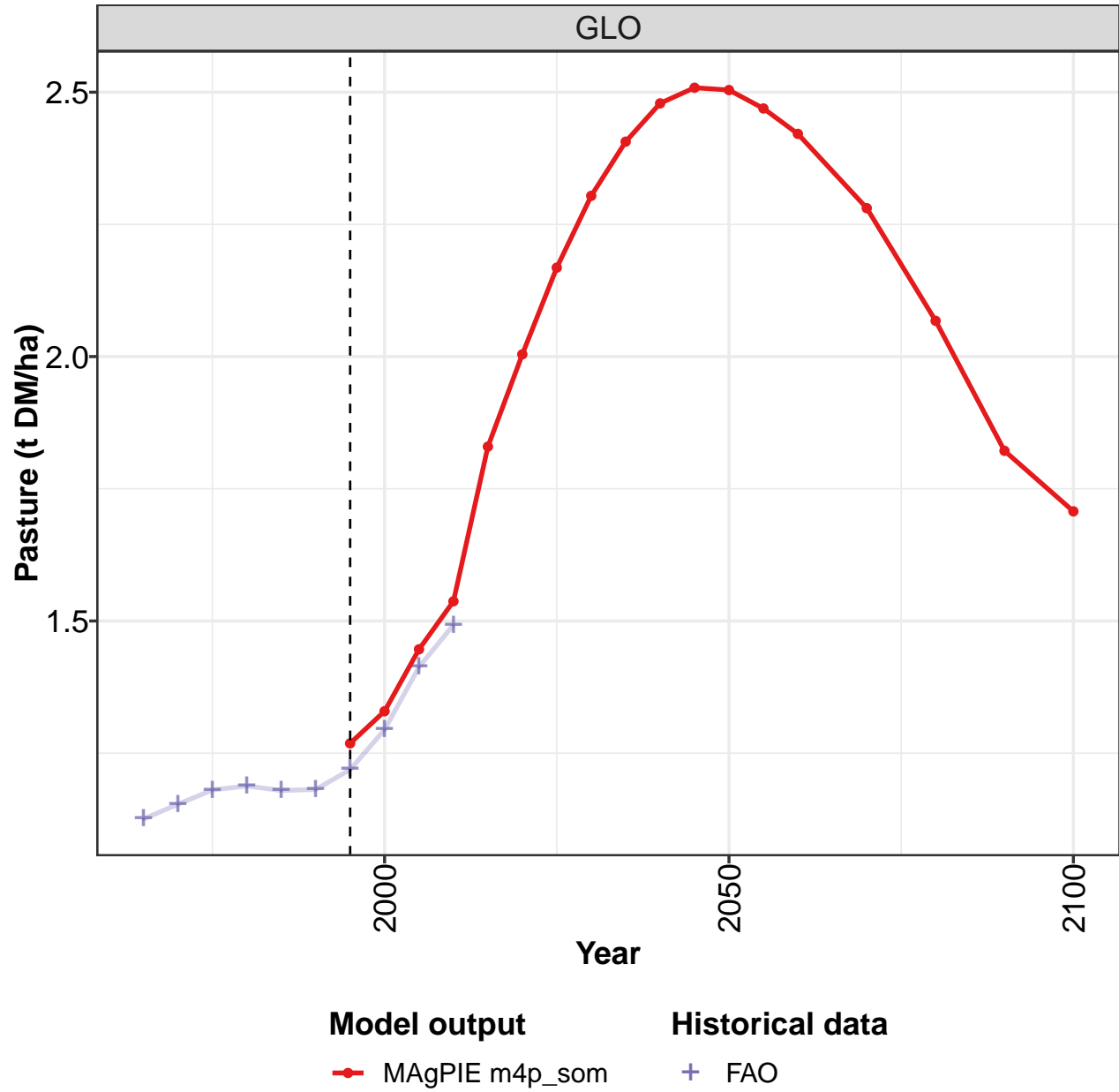
Table 1538: MAgPIE m4p\_som — Productivity—Yield—Forage (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.55	1.79	2.09	2.51	4.05	3.65	2.98	3.17	3.46	3.23
CAZ	0.50	0.53	0.69	0.78	3.39	3.16	2.42	2.59	2.58	2.93
CHA	0.00	0.00	0.00	0.00	5.36	6.15	6.99	7.36	8.05	8.36
EUR	3.05	3.72	4.13	4.60	6.40	5.25	5.42	6.10	6.31	6.49
IND	3.09	3.15	2.73	3.10	1.97	2.35	2.66	2.64	2.72	2.90
JPN	6.65	8.09	8.70	8.68	9.46	9.55	8.86	8.43	8.08	8.47
LAM	2.17	2.30	3.00	3.04	5.79	4.46	4.45	5.45	5.10	5.17
MEA	1.57	1.03	1.16	1.25	4.70	4.32	1.63	1.69	2.31	2.21
NEU	1.86	1.92	2.66	2.40	5.27	5.20	5.08	4.65	4.66	4.52
OAS	1.63	1.53	1.73	1.21	3.66	2.39	2.56	3.49	4.17	4.41
REF	1.67	2.12	2.10	2.86	3.14	3.14	1.58	1.21	1.30	0.81
SSA	2.25	2.39	2.37	2.98	2.96	2.47	2.03	1.97	1.92	1.80
USA	0.99	1.03	1.31	1.39	4.01	3.65	3.72	4.06	4.41	3.25

Table 1539: FAO — Productivity—Yield—Forage (t DM/ha)

52.3 Pasture

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## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.
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## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

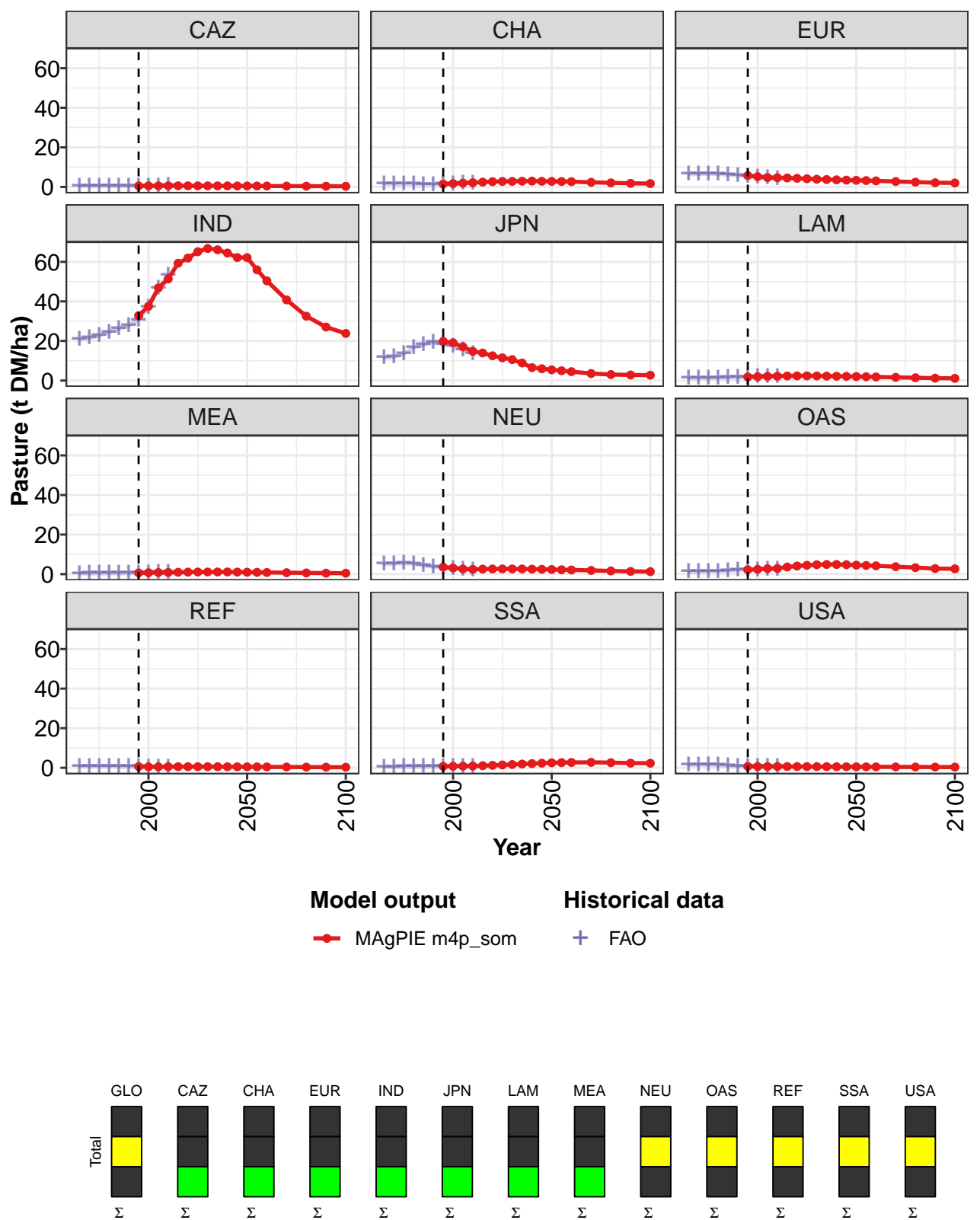


Figure 400: MAgPIE m4p\_som — Productivity—Yield—Pasture (t DM/ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.3	1.3	1.4	1.5	1.8	2.0	2.2	2.3	2.4	2.5	2.5
CAZ	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5
CHA	1.5	1.7	2.0	2.1	2.4	2.7	2.8	2.8	2.9	2.9	2.9
EUR	5.7	5.2	4.7	4.7	4.5	4.3	4.1	3.9	3.8	3.6	3.4
IND	32.8	37.5	46.8	51.3	59.3	61.9	65.1	66.7	66.1	64.4	62.2
JPN	19.8	19.1	17.0	14.8	13.9	12.5	11.5	10.6	8.9	6.5	6.0
LAM	1.8	2.0	2.1	2.2	2.3	2.3	2.4	2.3	2.2	2.2	2.1
MEA	0.6	0.7	0.8	0.9	1.0	1.0	1.1	1.1	1.1	1.1	1.0
NEU	3.5	3.1	2.6	2.4	2.5	2.6	2.6	2.6	2.6	2.5	2.4
OAS	2.2	2.4	2.8	2.9	3.6	4.1	4.5	4.8	4.9	4.9	4.8
REF	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
SSA	0.7	0.8	0.8	0.9	1.0	1.2	1.4	1.6	1.9	2.1	2.3
USA	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5

Table 1540: MAgPIE m4p.som — Productivity—Yield—Pasture (t DM/ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	2.5	2.5	2.4	2.3	2.1	1.8	1.7
CAZ	0.5	0.5	0.5	0.4	0.4	0.3	0.3
CHA	2.8	2.7	2.7	2.3	2.1	1.8	1.7
EUR	3.3	3.2	3.1	2.7	2.4	2.1	2.0
IND	62.1	56.0	50.4	40.8	32.5	27.0	23.8
JPN	5.4	4.9	4.5	3.5	3.0	2.8	2.7
LAM	2.0	1.9	1.8	1.6	1.4	1.2	1.1
MEA	1.0	0.9	0.9	0.7	0.6	0.5	0.5
NEU	2.3	2.2	2.1	1.9	1.6	1.4	1.3
OAS	4.6	4.4	4.2	3.8	3.3	2.8	2.7
REF	0.5	0.4	0.4	0.4	0.3	0.3	0.3
SSA	2.5	2.6	2.7	2.7	2.6	2.3	2.3
USA	0.5	0.5	0.4	0.4	0.4	0.4	0.3

Table 1541: MAgPIE m4p.som — Productivity—Yield—Pasture (t DM/ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.4	1.5
CAZ	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6
CHA	1.6	1.6	1.5	1.4	1.3	1.3	1.5	1.7	2.0	2.1
EUR	6.4	6.5	6.7	6.5	6.2	5.9	5.3	4.9	4.5	4.4
IND	20.8	21.5	22.7	24.5	26.3	27.8	30.7	37.0	46.5	53.4
JPN	11.5	11.9	13.5	16.6	18.1	19.3	18.4	17.6	15.6	13.5
LAM	1.2	1.2	1.3	1.4	1.5	1.6	1.7	1.9	2.0	2.1
MEA	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.7	0.8	0.8
NEU	5.1	5.3	5.4	5.3	4.5	3.7	3.3	2.9	2.5	2.3
OAS	1.2	1.3	1.4	1.5	1.8	2.0	2.2	2.3	2.7	2.6
REF	0.8	0.9	0.9	0.8	0.8	0.7	0.5	0.4	0.4	0.5
SSA	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.8	0.8	0.9
USA	1.4	1.5	1.5	1.3	1.0	0.7	0.7	0.6	0.6	0.7

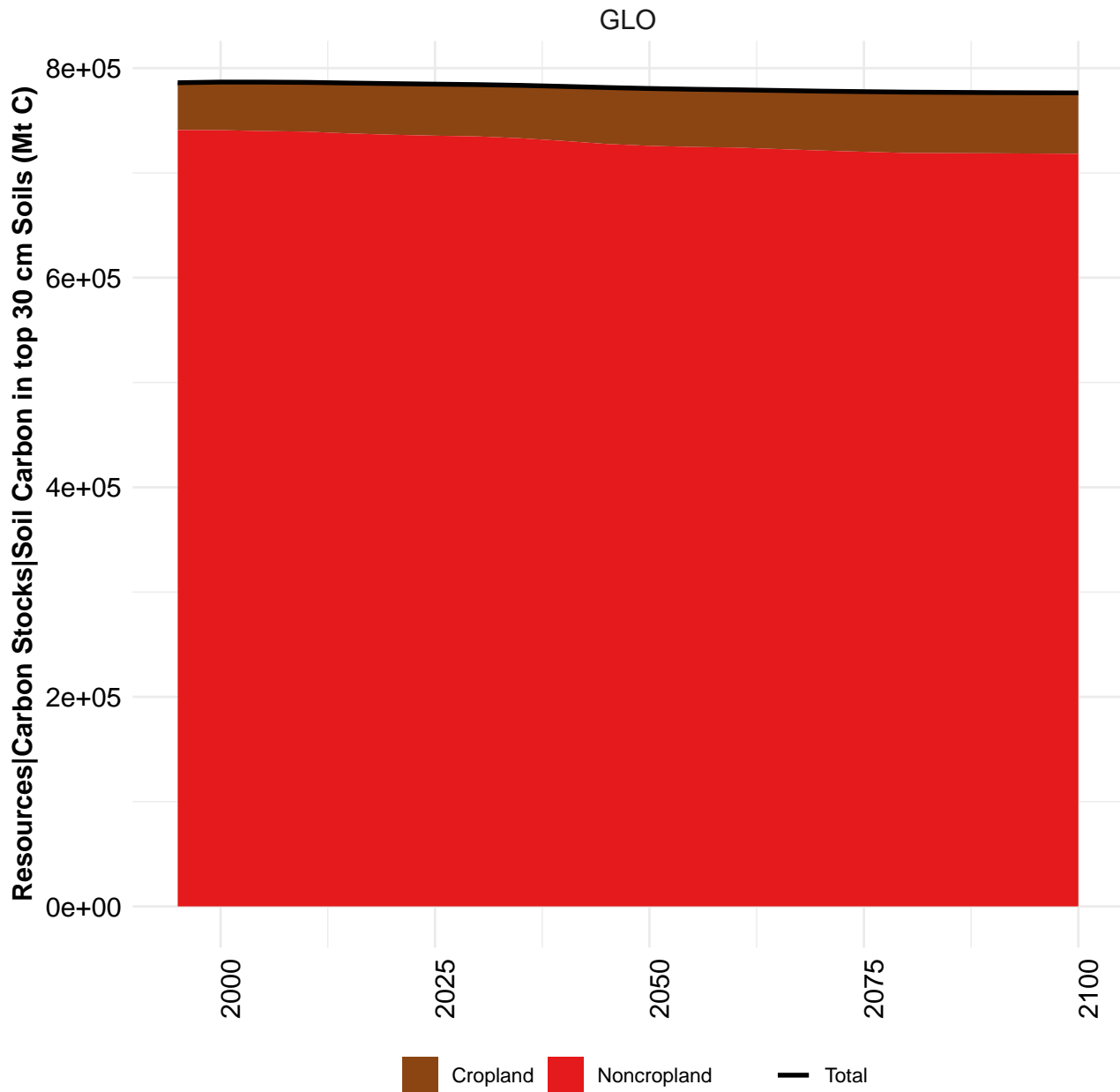
Table 1542: FAO — Productivity—Yield—Pasture (t DM/ha)

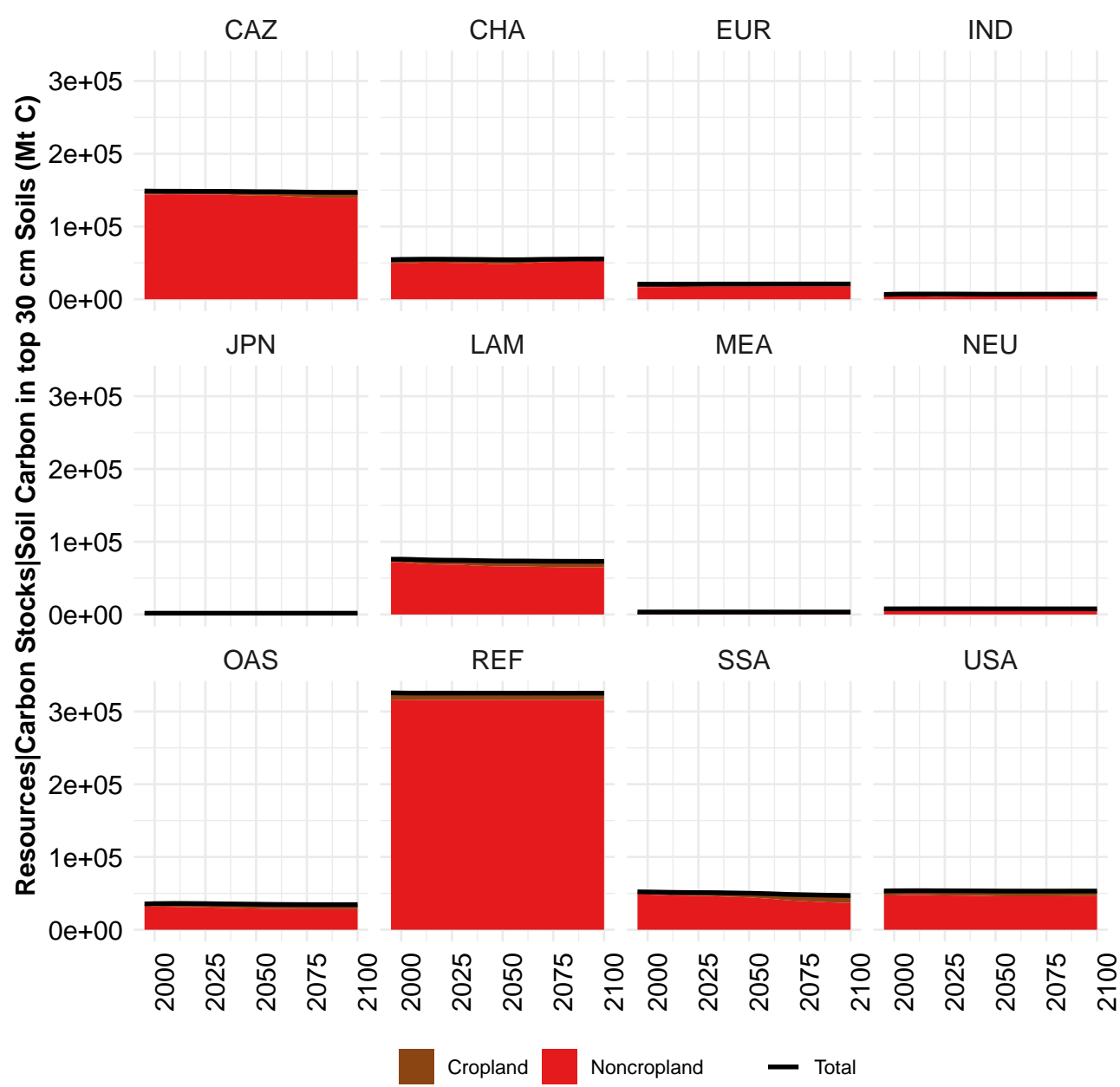
## 53 Yield-increasing technological change

## Part XIV

## Resources

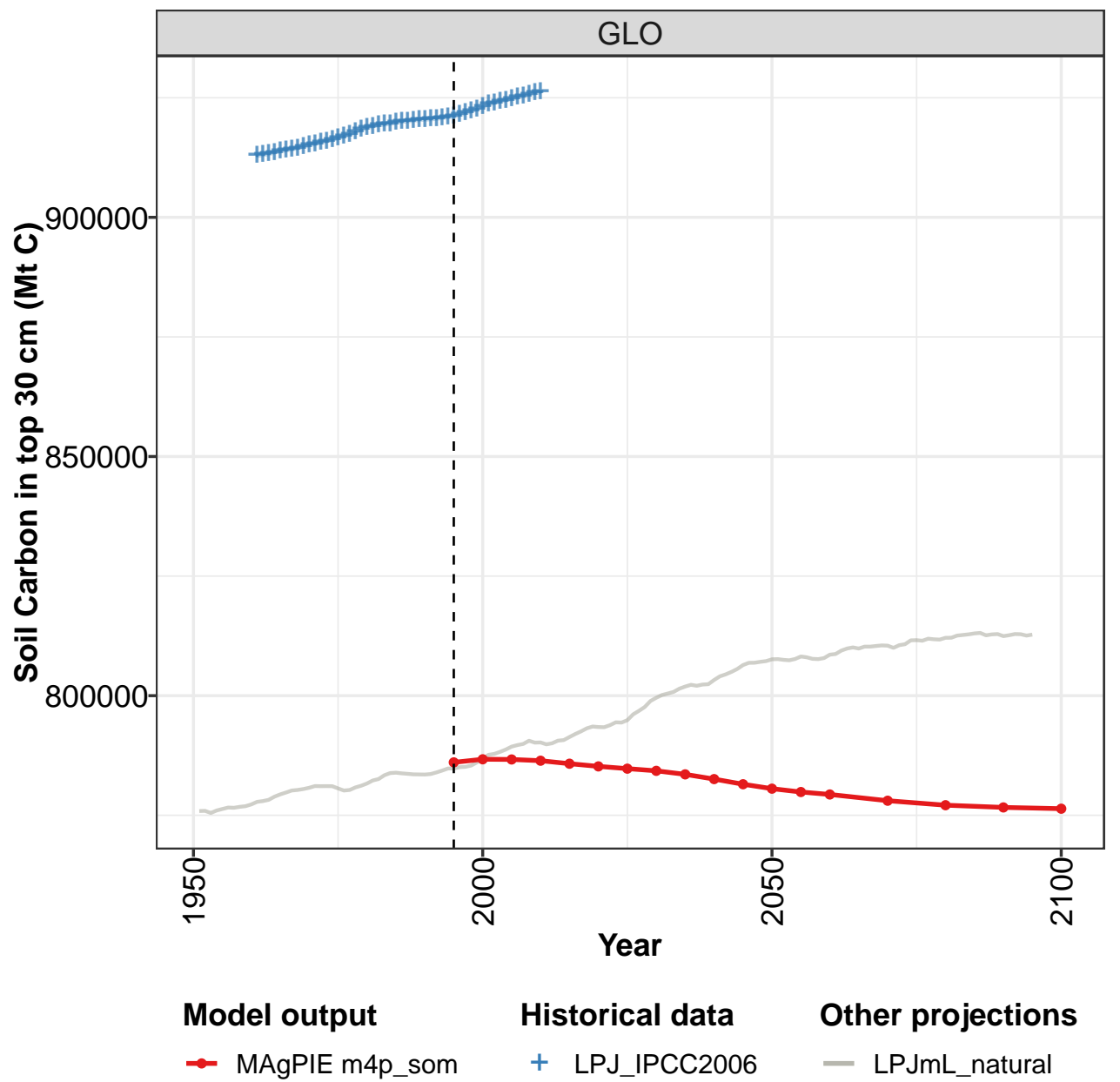
## 54 Carbon Stocks





54.1 Soil Carbon in top 30 cm

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

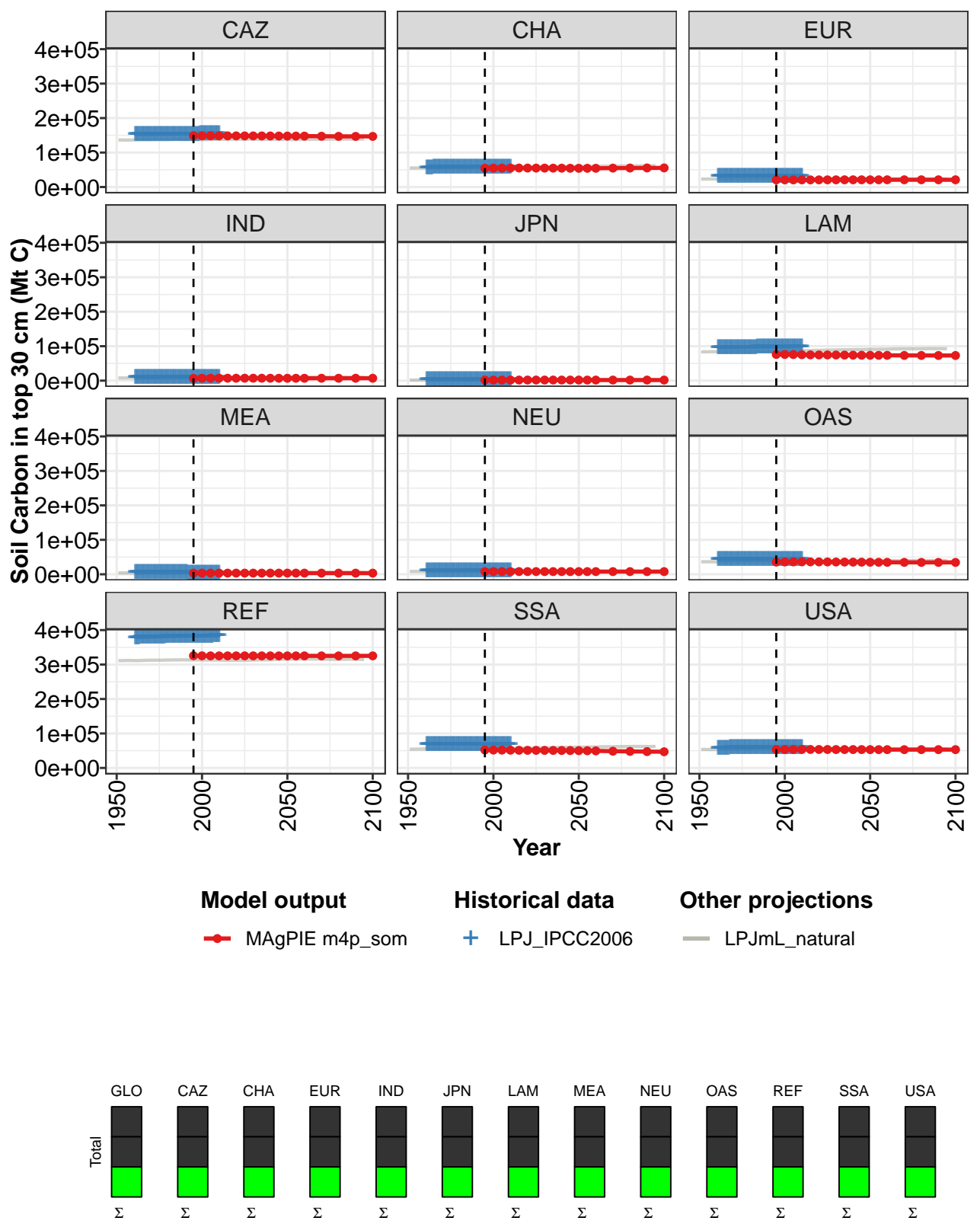


Figure 401: MAGPIE m4p\_som — Resources—Carbon Stocks—Soil Carbon in top 30 cm (Mt C)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	786059	786706	786669	786407	785781	785222	784749	784292	783553	782567	781487
CAZ	148768	148559	148516	148492	148442	148417	148366	148343	148328	148201	148048
CHA	54521	54808	54936	55093	55101	55064	54972	54877	54783	54709	54505
EUR	20725	20716	20702	20710	20746	20797	20858	20906	20936	20949	20955
IND	6622	6969	7129	7188	7164	7134	7153	7159	7115	7048	6992
JPN	1755	1776	1787	1790	1793	1794	1795	1796	1797	1796	1794
LAM	76016	75992	75749	75274	74906	74709	74581	74506	74236	73985	73730
MEA	3401	3430	3439	3445	3442	3441	3440	3441	3441	3444	3447
NEU	7792	7803	7828	7859	7871	7875	7876	7872	7869	7867	7858
OAS	35440	35870	36025	36170	36106	36011	35894	35676	35516	35359	35235
REF	325654	325380	325226	325235	325242	325243	325247	325246	325234	325223	325216
SSA	52079	51925	51717	51476	51299	51160	51060	51024	50881	50621	50407
USA	53285	53478	53614	53675	53669	53577	53507	53447	53417	53364	53300

Table 1543: MAgPIE m4p\_som — Resources—Carbon Stocks—Soil Carbon in top 30 cm (Mt C) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	780562	779864	779349	778046	777108	776643	776379
CAZ	147906	147833	147797	147401	147019	146944	146924
CHA	54404	54385	54445	54889	55090	55323	55445
EUR	20953	20978	20990	21021	21025	21022	21015
IND	6956	6954	6968	7016	7034	7062	7064
JPN	1792	1790	1788	1785	1784	1784	1786
LAM	73574	73524	73500	73276	73159	73056	73031
MEA	3435	3421	3415	3400	3397	3397	3395
NEU	7846	7837	7830	7817	7814	7814	7816
OAS	35077	34909	34787	34629	34552	34515	34542
REF	325209	325203	325196	325183	325178	325179	325199
SSA	50199	49876	49503	48532	47933	47380	46992
USA	53211	53154	53130	53096	53124	53167	53170

Table 1544: MAgPIE m4p\_som — Resources—Carbon Stocks—Soil Carbon in top 30 cm (Mt C) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	912905	913125	913316	913601	913844	914079	914282	914512	914823	915128	915406
CAZ	152459	152414	152372	152361	152370	152369	152365	152383	152416	152455	152498
CHA	56641	56678	56713	56766	56815	56848	56880	56908	56939	56973	57004
EUR	31754	31768	31788	31806	31825	31854	31875	31893	31921	31946	31972
IND	9175	9183	9189	9190	9175	9158	9142	9128	9116	9114	9121
JPN	3154	3152	3150	3149	3147	3146	3144	3143	3141	3139	3138
LAM	95922	95942	95954	96034	96093	96149	96177	96216	96242	96265	96288
MEA	5084	5078	5075	5076	5074	5071	5067	5061	5058	5054	5046
NEU	10283	10280	10283	10285	10288	10293	10301	10311	10322	10335	10345
OAS	42709	42716	42715	42721	42714	42706	42692	42680	42664	42655	42647
REF	378503	378623	378729	378852	378976	379117	379244	379364	379526	379712	379893
SSA	69099	69140	69182	69182	69159	69128	69130	69131	69151	69128	69088
USA	58123	58152	58165	58180	58210	58239	58263	58295	58326	58351	58368

Table 1545: LPJ\_IPCC2006 — Resources—Carbon Stocks—Soil Carbon in top 30 cm (Mt C) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	915667	915946	916288	916606	916962	917386	917896	918375	918756	919071	919320
CAZ	152542	152620	152742	152894	153046	153180	153299	153400	153460	153490	153506
CHA	57025	57049	57067	57083	57097	57117	57136	57158	57189	57214	57222
EUR	32000	32013	32024	32024	32022	32029	32043	32061	32079	32090	32090
IND	9116	9114	9107	9115	9117	9131	9150	9163	9169	9178	9182
JPN	3136	3133	3131	3129	3127	3125	3122	3119	3116	3113	3110
LAM	96317	96377	96446	96515	96575	96654	96730	96807	96866	96944	97004
MEA	5037	5026	5011	4994	4981	4972	4967	4964	4963	4962	4957
NEU	10355	10363	10368	10369	10373	10379	10387	10397	10407	10416	10425
OAS	42629	42626	42625	42628	42627	42632	42638	42640	42652	42661	42658
REF	380066	380214	380340	380435	380555	380710	380888	381075	381259	381399	381527
SSA	69055	68987	68978	68958	68977	68999	69076	69126	69138	69141	69133
USA	58388	58424	58449	58463	58465	58459	58460	58465	58457	58463	58505

Table 1546: LPJ\_IPCC2006 — Resources—Carbon Stocks—Soil Carbon in top 30 cm (Mt C) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	919451	919621	919840	920048	920152	920291	920424	920509	920566	920666	920870
CAZ	153521	153556	153609	153668	153690	153694	153704	153713	153714	153740	153777
CHA	57231	57239	57258	57269	57280	57286	57291	57307	57325	57345	57381
EUR	32077	32065	32055	32054	32058	32065	32067	32061	32066	32062	32063
IND	9193	9194	9191	9186	9179	9169	9154	9152	9139	9122	9114
JPN	3107	3104	3102	3101	3099	3098	3096	3092	3089	3086	3083
LAM	97049	97127	97219	97315	97387	97444	97498	97533	97563	97622	97652
MEA	4947	4929	4904	4875	4846	4822	4802	4782	4765	4749	4735
NEU	10432	10436	10438	10441	10444	10448	10451	10450	10452	10451	10452
OAS	42667	42680	42691	42692	42690	42696	42691	42691	42694	42703	42727
REF	381619	381706	381810	381884	381962	382066	382153	382222	382240	382270	382330
SSA	69053	68979	68904	68834	68727	68678	68667	68635	68631	68591	68561
USA	58554	58605	58661	58730	58788	58825	58850	58869	58888	58923	58996

Table 1547: LPJ\_IPCC2006 — Resources—Carbon Stocks—Soil Carbon in top 30 cm (Mt C) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	921022	921179	921445	921815	922231	922696	923215	923649	923977	924252	924537
CAZ	153787	153796	153833	153899	153987	154095	154274	154448	154569	154651	154724
CHA	57410	57449	57494	57533	57569	57597	57619	57619	57613	57628	57634
EUR	32061	32052	32053	32057	32069	32080	32076	32078	32088	32100	32119
IND	9109	9111	9113	9124	9144	9155	9156	9145	9127	9107	9089
JPN	3080	3078	3077	3076	3075	3076	3076	3077	3078	3080	3081
LAM	97669	97674	97698	97729	97774	97844	97944	98040	98150	98259	98377
MEA	4721	4712	4708	4710	4715	4719	4719	4713	4702	4690	4682
NEU	10454	10459	10466	10473	10481	10486	10486	10482	10482	10482	10478
OAS	42752	42789	42823	42846	42885	42923	42942	42944	42930	42907	42869
REF	382403	382451	382492	382553	382604	382661	382734	382789	382844	382903	382986
SSA	68523	68497	68515	68574	68622	68694	68766	68839	68874	68891	68893
USA	59052	59111	59173	59242	59304	59368	59424	59476	59519	59555	59605

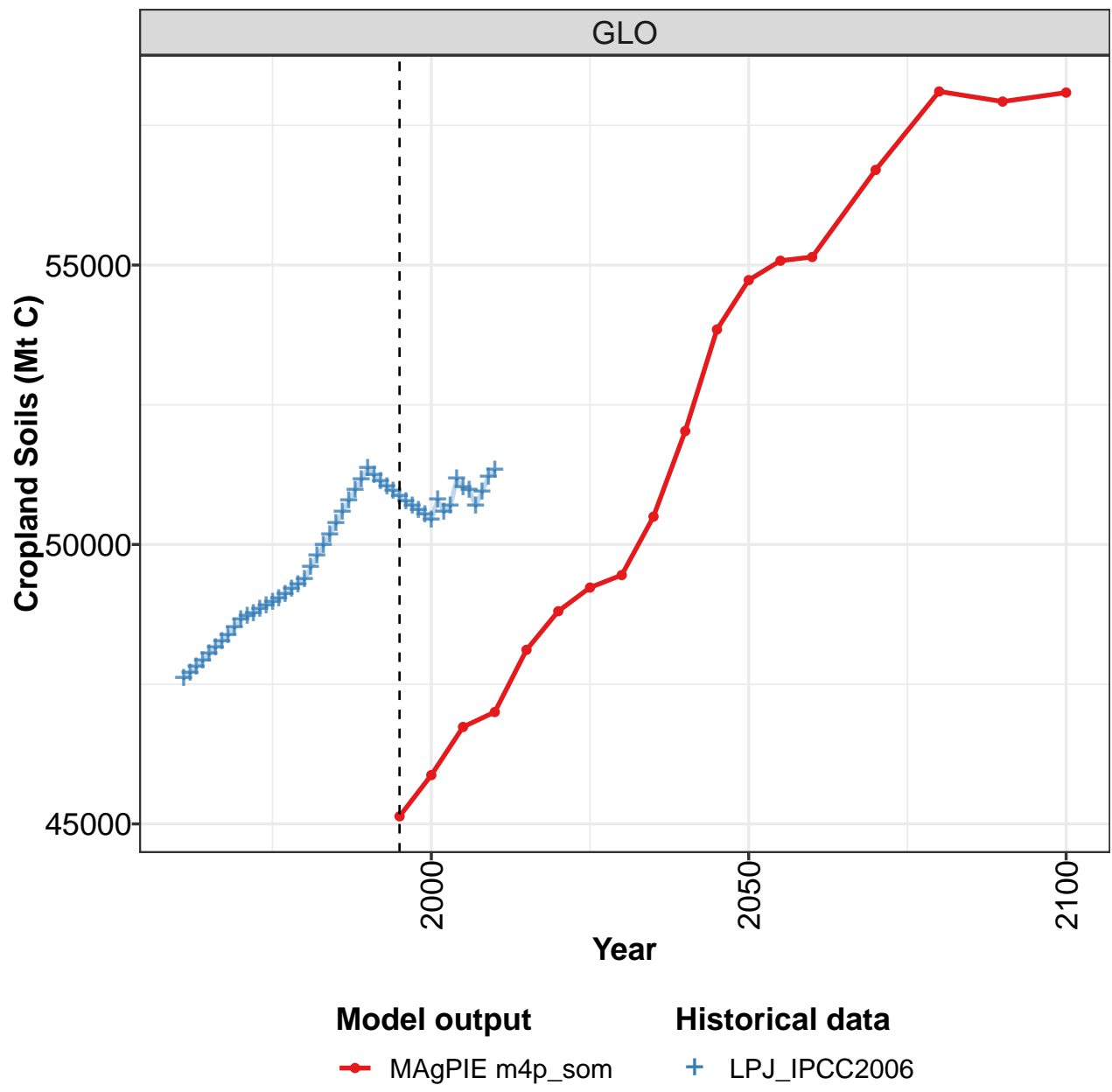
Table 1548: LPJ\_IPCC2006 — Resources—Carbon Stocks—Soil Carbon in top 30 cm (Mt C) [PART 4/5]

	2005	2006	2007	2008	2009	2010
GLO	924787	925091	925406	925704	926004	926227
CAZ	154761	154791	154833	154883	154935	154995
CHA	57671	57702	57757	57815	57866	57914
EUR	32137	32143	32150	32154	32150	32151
IND	9085	9086	9093	9101	9107	9113
JPN	3082	3084	3085	3087	3088	3089
LAM	98473	98563	98623	98684	98741	98741
MEA	4675	4671	4670	4670	4667	4666
NEU	10475	10470	10463	10455	10451	10446
OAS	42850	42826	42798	42753	42698	42638
REF	383074	383147	383217	383256	383307	383362
SSA	68859	68914	68970	69032	69103	69139
USA	59645	59693	59747	59814	59892	59974

Table 1549: LPJ\_IPCC2006 — Resources—Carbon Stocks—Soil Carbon in top 30 cm (Mt C) [PART 5/5]

54.1.1 Cropland Soils

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

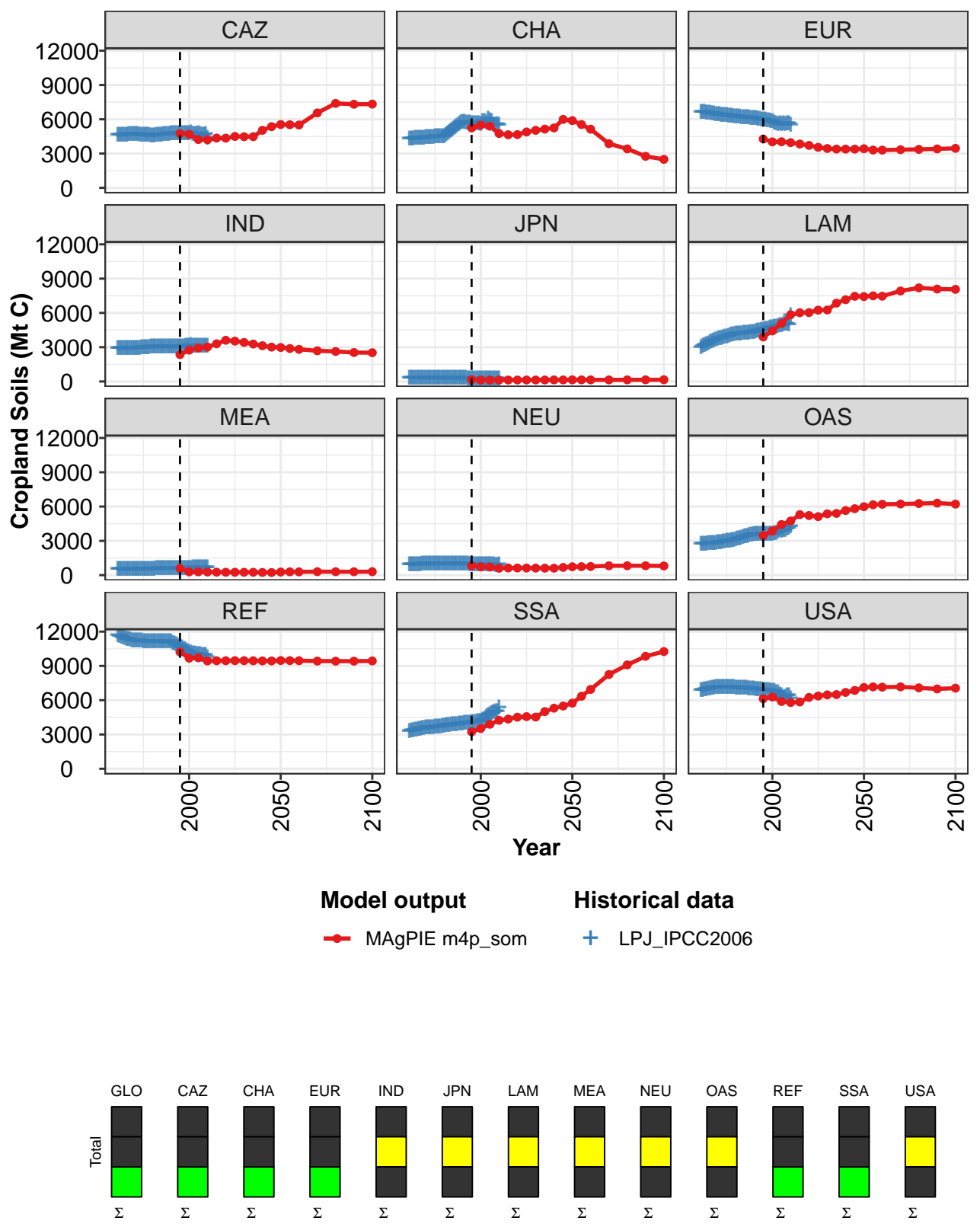


Figure 402: MAgPIE m4p\_som — Resources—Carbon Stocks—Soil Carbon in top 30 cm—Cropland Soils (Mt C)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	45136	45873	46734	47002	48115	48806	49229	49452	50499	52030	53847
CAZ	4750	4690	4228	4203	4356	4350	4499	4477	4479	5037	5356
CHA	5242	5491	5398	4758	4648	4662	4890	5034	5141	5243	5989
EUR	4273	4025	4035	3957	3835	3715	3547	3444	3395	3391	3389
IND	2354	2748	2935	3014	3300	3609	3534	3418	3278	3135	3011
JPN	158	129	126	127	128	131	132	133	136	142	140
LAM	3896	4428	5085	5848	6017	6030	6242	6257	6855	7157	7457
MEA	583	289	291	274	261	254	252	251	251	236	230
NEU	820	732	708	604	627	623	621	615	612	609	677
OAS	3472	3864	4431	4737	5293	5214	5121	5366	5402	5654	5814
REF	10219	9679	9712	9437	9452	9456	9461	9462	9451	9440	9438
SSA	3237	3518	3896	4241	4352	4517	4562	4527	5004	5304	5491
USA	6131	6280	5888	5800	5846	6245	6367	6468	6495	6682	6855

Table 1550: MAgPIE m4p\_som — Resources—Carbon Stocks—Soil Carbon in top 30 cm—Cropland Soils (Mt C) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	54730	55077	55144	56703	58107	57926	58086
CAZ	5542	5523	5500	6558	7392	7317	7327
CHA	5888	5542	5136	3865	3410	2763	2492
EUR	3424	3309	3303	3341	3368	3408	3458
IND	2976	2888	2813	2690	2628	2533	2520
JPN	148	146	144	142	146	151	155
LAM	7431	7496	7465	7921	8192	8088	8064
MEA	273	292	286	304	299	297	301
NEU	734	744	756	819	823	822	805
OAS	5987	6159	6199	6224	6267	6303	6218
REF	9470	9463	9456	9425	9416	9416	9437
SSA	5744	6347	6944	8248	9089	9842	10256
USA	7114	7167	7143	7167	7078	6986	7053

Table 1551: MAgPIE m4p\_som — Resources—Carbon Stocks—Soil Carbon in top 30 cm—Cropland Soils (Mt C) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	47602	47702	47801	47918	48036	48151	48263	48376	48510	48653	48709
CAZ	4597	4599	4602	4610	4624	4640	4655	4669	4684	4701	4682
CHA	4285	4296	4308	4325	4338	4349	4360	4370	4382	4394	4407
EUR	6650	6622	6596	6568	6542	6518	6491	6463	6438	6413	6395
IND	2869	2880	2891	2899	2900	2900	2900	2902	2905	2913	2923
JPN	325	323	321	319	318	316	314	313	311	310	308
LAM	2993	3079	3163	3246	3326	3405	3482	3557	3631	3704	3743
MEA	510	511	512	514	516	518	520	521	524	527	529
NEU	925	927	931	935	940	944	949	954	958	963	965
OAS	2713	2722	2732	2743	2755	2766	2778	2791	2803	2817	2847
REF	11633	11565	11499	11445	11394	11344	11295	11250	11214	11185	11181
SSA	3271	3303	3337	3370	3402	3433	3466	3500	3534	3566	3578
USA	6831	6874	6910	6944	6983	7018	7053	7089	7126	7160	7151

Table 1552: LPJ.IPCC2006 — Resources—Carbon Stocks—Soil Carbon in top 30 cm—Cropland Soils (Mt C) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	48765	48837	48905	48969	49032	49106	49198	49286	49373	49584	49789
CAZ	4662	4648	4636	4626	4614	4600	4587	4573	4557	4573	4589
CHA	4419	4431	4443	4454	4464	4475	4486	4498	4512	4649	4780
EUR	6380	6360	6340	6319	6297	6276	6257	6239	6220	6210	6196
IND	2927	2933	2937	2949	2958	2973	2990	3004	3015	3020	3024
JPN	305	303	301	299	297	295	293	291	289	287	286
LAM	3784	3830	3876	3923	3973	4023	4075	4126	4175	4178	4182
MEA	531	533	535	536	537	539	541	543	545	549	554
NEU	968	970	972	973	975	977	980	983	985	984	982
OAS	2875	2903	2931	2959	2986	3013	3040	3067	3095	3153	3207
REF	11177	11175	11172	11160	11151	11147	11146	11144	11150	11143	11136
SSA	3591	3603	3617	3633	3652	3672	3696	3719	3741	3768	3794
USA	7145	7146	7144	7138	7127	7116	7107	7099	7088	7069	7059

Table 1553: LPJ\_IPCC2006 — Resources—Carbon Stocks—Soil Carbon in top 30 cm—Cropland Soils (Mt C)  
[PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	49984	50175	50376	50583	50780	50976	51164	51365	51236	51120	51039
CAZ	4605	4621	4639	4660	4678	4695	4711	4728	4723	4724	4730
CHA	4909	5038	5166	5291	5414	5535	5654	5774	5742	5713	5689
EUR	6179	6163	6148	6134	6122	6112	6102	6091	6067	6039	6011
IND	3031	3033	3034	3032	3030	3028	3024	3026	3026	3025	3027
JPN	284	283	282	280	279	278	276	275	273	270	268
LAM	4191	4203	4219	4236	4254	4270	4286	4306	4352	4399	4444
MEA	557	559	561	563	565	567	570	572	576	580	584
NEU	981	979	977	975	973	971	970	969	963	957	951
OAS	3261	3313	3362	3409	3454	3499	3542	3585	3578	3574	3573
REF	11124	11112	11107	11102	11098	11100	11099	11100	11007	10915	10833
SSA	3814	3833	3852	3871	3888	3909	3933	3956	3973	3989	4005
USA	7049	7038	7031	7030	7025	7011	6995	6984	6957	6932	6924

Table 1554: LPJ\_IPCC2006 — Resources—Carbon Stocks—Soil Carbon in top 30 cm—Cropland Soils (Mt C)  
[PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	50947	50853	50767	50689	50615	50532	50440	50800	50584	50684	51166
CAZ	4732	4731	4732	4733	4733	4736	4739	4792	4705	4683	4696
CHA	5667	5649	5635	5619	5605	5589	5574	5843	5787	5695	6023
EUR	5982	5951	5921	5893	5867	5842	5813	5686	5632	5550	5590
IND	3031	3037	3043	3053	3068	3080	3086	3145	3126	3122	3104
JPN	265	263	261	259	257	254	252	251	249	248	247
LAM	4484	4522	4560	4599	4639	4679	4722	4774	4753	4861	4917
MEA	587	590	593	598	603	607	611	615	618	646	640
NEU	945	940	935	931	926	922	916	917	920	908	924
OAS	3574	3577	3582	3587	3595	3605	3613	3653	3660	3793	3927
REF	10750	10662	10569	10479	10384	10283	10186	10102	10093	10035	9999
SSA	4022	4040	4060	4084	4107	4129	4150	4243	4355	4508	4635
USA	6907	6890	6873	6854	6831	6806	6776	6779	6687	6635	6465

Table 1555: LPJ\_IPCC2006 — Resources—Carbon Stocks—Soil Carbon in top 30 cm—Cropland Soils (Mt C)  
[PART 4/5]

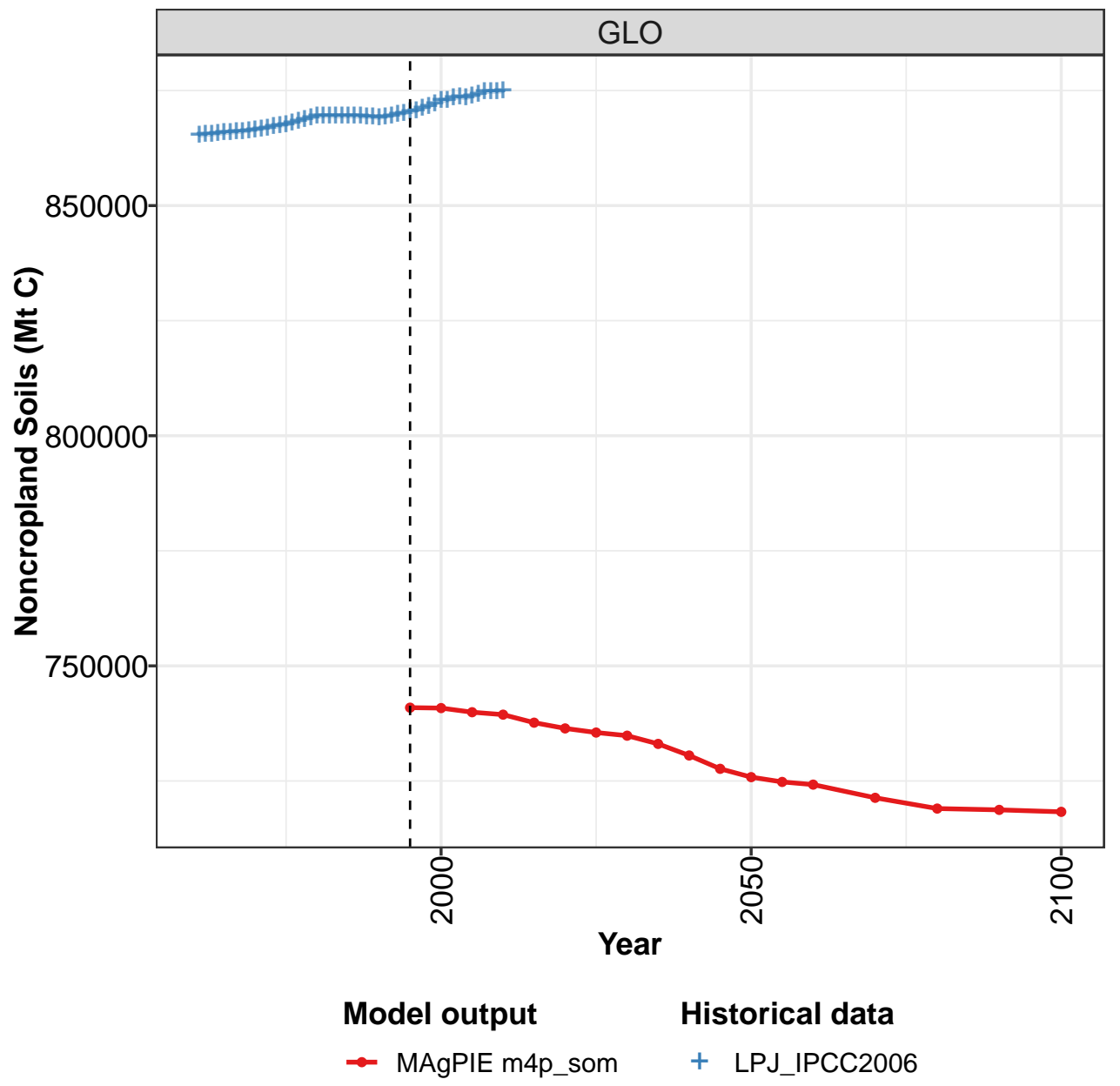
	2005	2006	2007	2008	2009	2010
GLO	51015	50971	50691	50938	51211	51324
CAZ	4731	4700	4640	4637	4699	4345
CHA	5854	5844	5469	5465	5563	5478
EUR	5557	5601	5558	5605	5598	5514
IND	3094	3093	3089	3090	3101	3094
JPN	246	245	244	243	242	242
LAM	4914	4948	5033	5015	4992	5746
MEA	662	658	661	655	679	664
NEU	927	911	887	875	867	889
OAS	3856	3903	3944	4041	4130	4235
REF	10022	9984	9954	9940	9955	9706
SSA	4758	4872	4920	4975	5014	5301
USA	6393	6212	6291	6395	6369	6109

Table 1556: LPJ\_IPCC2006 — Resources—Carbon Stocks—Soil Carbon in top 30 cm—Cropland Soils (Mt C)  
[PART 5/5]



54.1.2 Noncropland Soils

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

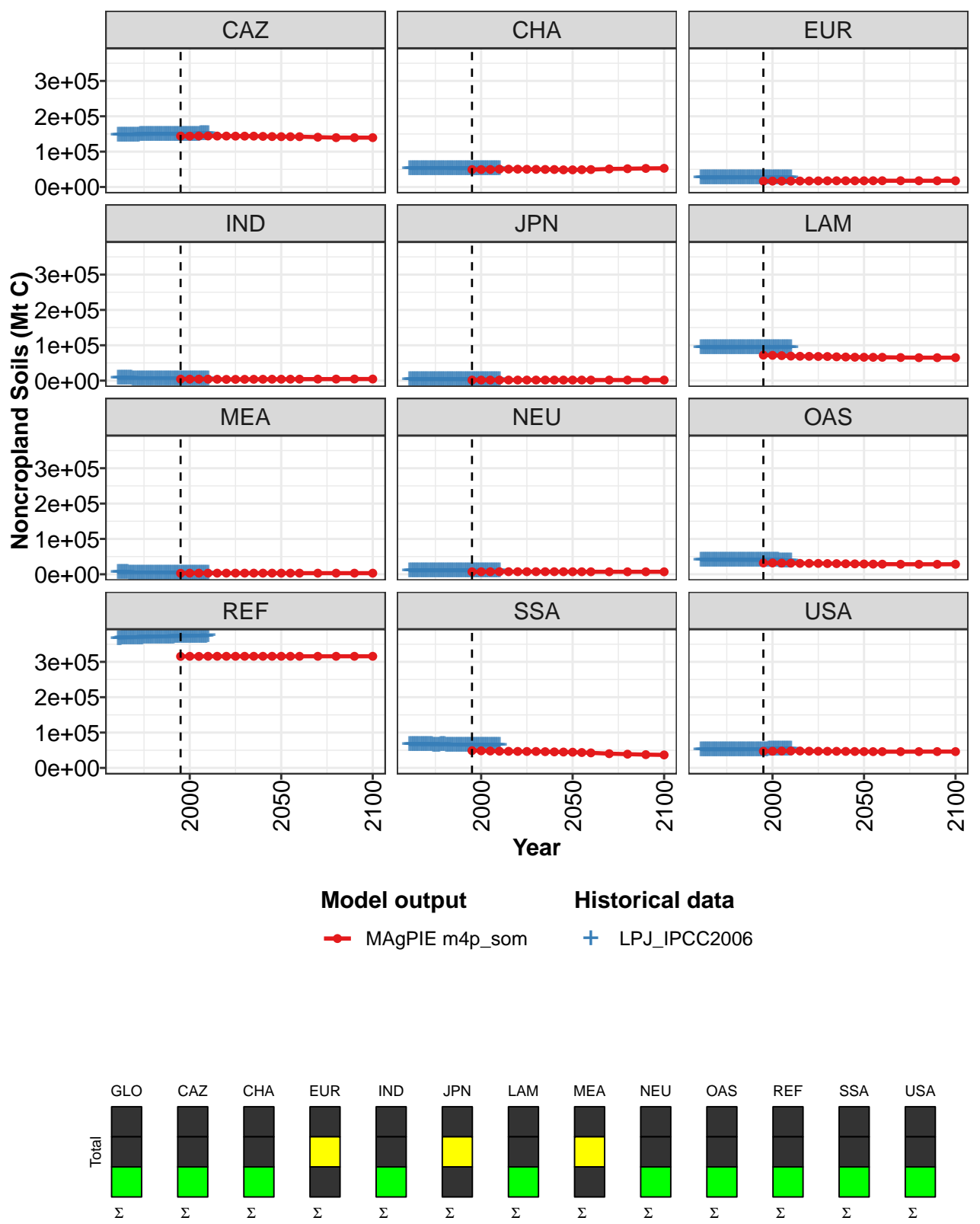


Figure 403: MAGPIE m4p\_som — Resources—Carbon Stocks—Soil Carbon in top 30 cm—Noncropland Soils (Mt C)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	740924	740832	739935	739405	737666	736416	735519	734840	733054	730537	727640
CAZ	144018	143868	144288	144289	144086	144067	143867	143866	143849	143164	142691
CHA	49280	49317	49538	50335	50453	50402	50081	49843	49642	49465	48516
EUR	16452	16691	16667	16753	16911	17082	17311	17462	17541	17558	17566
IND	4268	4222	4194	4174	3864	3525	3619	3741	3837	3914	3981
JPN	1598	1647	1661	1664	1665	1663	1663	1663	1661	1654	1654
LAM	72120	71564	70664	69426	68889	68679	68338	68248	67381	66828	66273
MEA	2818	3141	3148	3171	3182	3186	3188	3189	3190	3208	3217
NEU	6972	7071	7120	7255	7244	7252	7255	7256	7257	7257	7180
OAS	31969	32006	31594	31432	30812	30798	30773	30310	30114	29705	29421
REF	315434	315702	315514	315797	315790	315787	315785	315785	315783	315783	315779
SSA	48841	48406	47821	47235	46947	46643	46498	46498	45877	45317	44916
USA	47154	47199	47726	47875	47823	47333	47140	46979	46922	46683	46445

Table 1557: MAgPIE m4p\_som — Resources—Carbon Stocks—Soil Carbon in top 30 cm—Noncropland Soils (Mt C) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	725832	724787	724205	721343	719002	718717	718293
CAZ	142364	142310	142297	140843	139627	139627	139597
CHA	48516	48842	49309	51024	51680	52561	52953
EUR	17528	17669	17687	17680	17658	17614	17557
IND	3980	4066	4155	4327	4406	4529	4544
JPN	1644	1644	1644	1643	1638	1633	1631
LAM	66143	66028	66035	65355	64967	64967	64967
MEA	3162	3130	3130	3096	3098	3100	3094
NEU	7112	7093	7075	6999	6992	6992	7010
OAS	29090	28750	28587	28405	28285	28212	28325
REF	315740	315740	315740	315758	315762	315763	315763
SSA	44455	43529	42560	40284	38844	37539	36735
USA	46097	45987	45987	45929	46046	46181	46117

Table 1558: MAgPIE m4p\_som — Resources—Carbon Stocks—Soil Carbon in top 30 cm—Noncropland Soils (Mt C) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	865303	865424	865515	865683	865808	865929	866019	866135	866314	866475	866697
CAZ	147862	147815	147770	147751	147746	147730	147710	147715	147732	147754	147816
CHA	52356	52382	52405	52442	52476	52499	52520	52538	52558	52580	52597
EUR	25103	25145	25193	25238	25283	25337	25383	25430	25483	25533	25577
IND	6306	6303	6298	6291	6275	6258	6242	6226	6211	6201	6198
JPN	2829	2829	2829	2829	2829	2830	2830	2830	2830	2830	2830
LAM	92929	92862	92792	92788	92766	92744	92696	92659	92611	92561	92545
MEA	4573	4567	4564	4562	4558	4553	4548	4540	4535	4527	4517
NEU	9359	9353	9352	9349	9348	9349	9353	9357	9364	9371	9379
OAS	39996	39993	39983	39977	39959	39940	39914	39889	39861	39838	39800
REF	366870	367058	367229	367407	367582	367773	367949	368115	368313	368527	368711
SSA	65828	65837	65845	65812	65757	65695	65663	65631	65617	65562	65509
USA	51292	51278	51255	51236	51227	51221	51211	51206	51201	51191	51217

Table 1559: LPJ\_IPCC2006 — Resources—Carbon Stocks—Soil Carbon in top 30 cm—Noncropland Soils (Mt C) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	866901	867109	867383	867637	867930	868280	868697	869089	869383	869487	869531
CAZ	147880	147972	148105	148268	148432	148580	148712	148826	148903	148917	148917
CHA	52607	52618	52625	52629	52633	52641	52649	52660	52677	52565	52442
EUR	25620	25652	25683	25705	25725	25753	25786	25822	25859	25880	25894
IND	6188	6181	6170	6166	6159	6159	6160	6159	6155	6158	6159
JPN	2831	2830	2830	2830	2830	2830	2829	2828	2827	2826	2824
LAM	92532	92546	92570	92591	92602	92631	92655	92681	92690	92766	92822
MEA	4506	4492	4476	4458	4444	4433	4426	4422	4418	4412	4404
NEU	9387	9392	9396	9396	9398	9402	9407	9414	9421	9432	9443
OAS	39755	39723	39694	39669	39641	39619	39598	39573	39557	39509	39451
REF	368890	369039	369168	369275	369404	369563	369743	369931	370110	370256	370391
SSA	65463	65385	65361	65325	65325	65327	65380	65407	65397	65373	65340
USA	51243	51278	51305	51324	51338	51343	51353	51365	51369	51394	51446

Table 1560: LPJ\_IPCC2006 — Resources—Carbon Stocks—Soil Carbon in top 30 cm—Noncropland Soils (Mt C) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	869467	869446	869464	869465	869372	869316	869261	869144	869330	869546	869831
CAZ	148916	148935	148970	149007	149012	148999	148993	148985	148991	149016	149047
CHA	52322	52201	52092	51978	51866	51751	51637	51533	51583	51632	51692
EUR	25898	25902	25907	25920	25936	25953	25965	25970	25999	26023	26052
IND	6162	6161	6157	6154	6148	6141	6130	6126	6112	6097	6087
JPN	2822	2821	2821	2820	2820	2820	2819	2817	2816	2816	2815
LAM	92858	92923	93001	93079	93133	93174	93212	93227	93211	93223	93208
MEA	4390	4370	4342	4312	4281	4255	4232	4210	4189	4169	4151
NEU	9451	9457	9461	9466	9472	9477	9481	9482	9488	9494	9501
OAS	39406	39368	39329	39283	39236	39197	39149	39106	39116	39129	39154
REF	370495	370594	370703	370782	370864	370966	371053	371123	371234	371355	371497
SSA	65240	65146	65052	64963	64839	64769	64734	64680	64658	64602	64555
USA	51506	51567	51630	51700	51763	51814	51854	51885	51932	51991	52072

Table 1561: LPJ\_IPCC2006 — Resources—Carbon Stocks—Soil Carbon in top 30 cm—Noncropland Soils (Mt C) [PART 3/5]

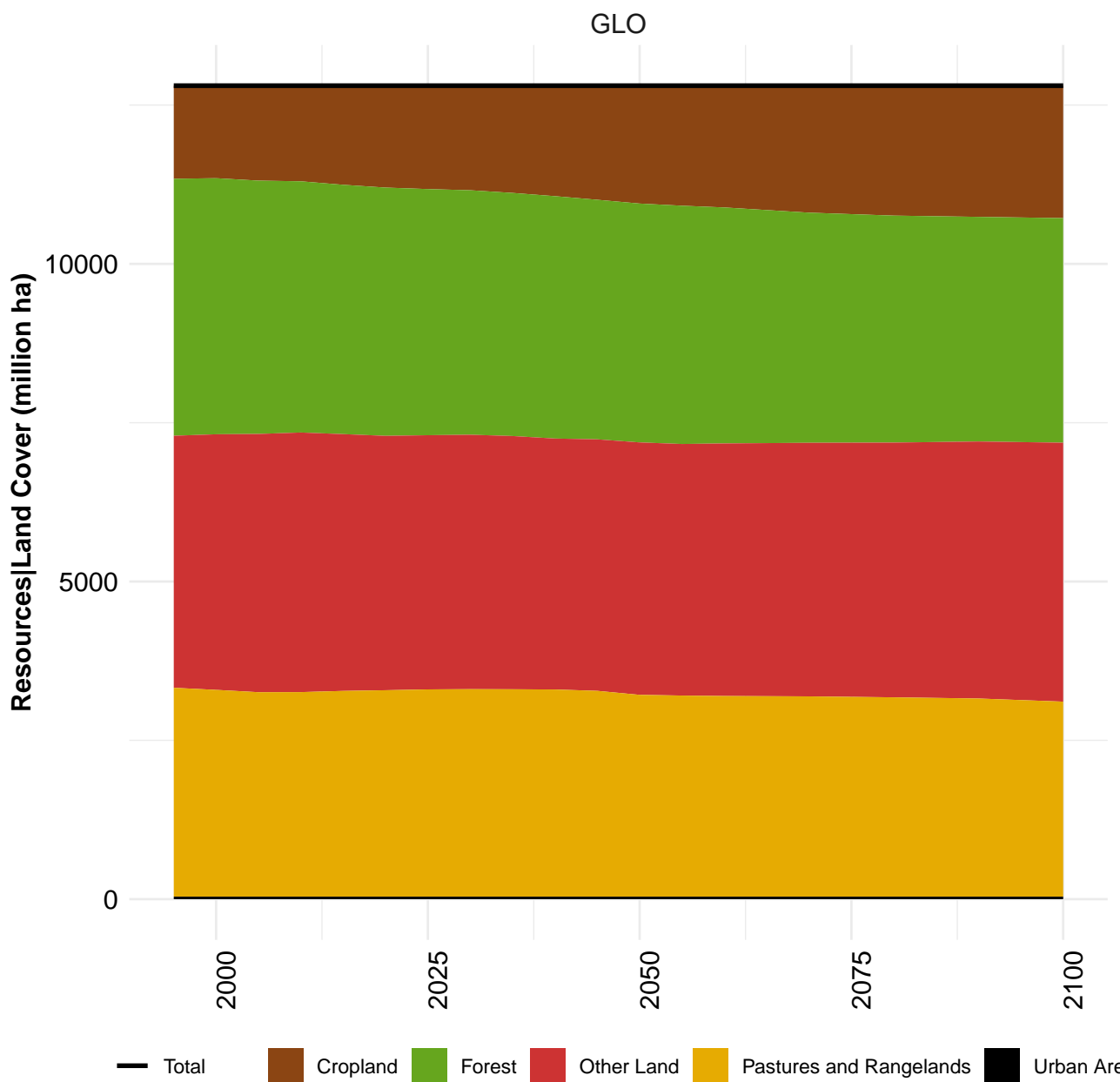
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	870075	870326	870679	871126	871616	872164	872776	872849	873393	873567	873370
CAZ	149055	149064	149101	149166	149254	149359	149535	149656	149864	149968	150028
CHA	51742	51800	51858	51914	51964	52007	52045	51776	51827	51933	51612
EUR	26079	26101	26132	26164	26202	26238	26263	26392	26456	26551	26529
IND	6078	6074	6070	6071	6076	6075	6070	6000	6001	5985	5985
JPN	2814	2815	2816	2817	2819	2821	2824	2826	2829	2832	2834
LAM	93185	93152	93138	93130	93136	93165	93221	93265	93397	93398	93460
MEA	4134	4123	4115	4112	4113	4112	4108	4098	4084	4043	4042
NEU	9509	9519	9530	9542	9554	9564	9570	9565	9562	9574	9554
OAS	39178	39211	39240	39259	39290	39318	39329	39290	39271	39114	38941
REF	371653	371789	371923	372073	372220	372378	372547	372687	372751	372867	372987
SSA	64501	64457	64455	64489	64516	64565	64616	64596	64519	64383	64258
USA	52145	52220	52300	52388	52473	52562	52648	52697	52832	52920	53139

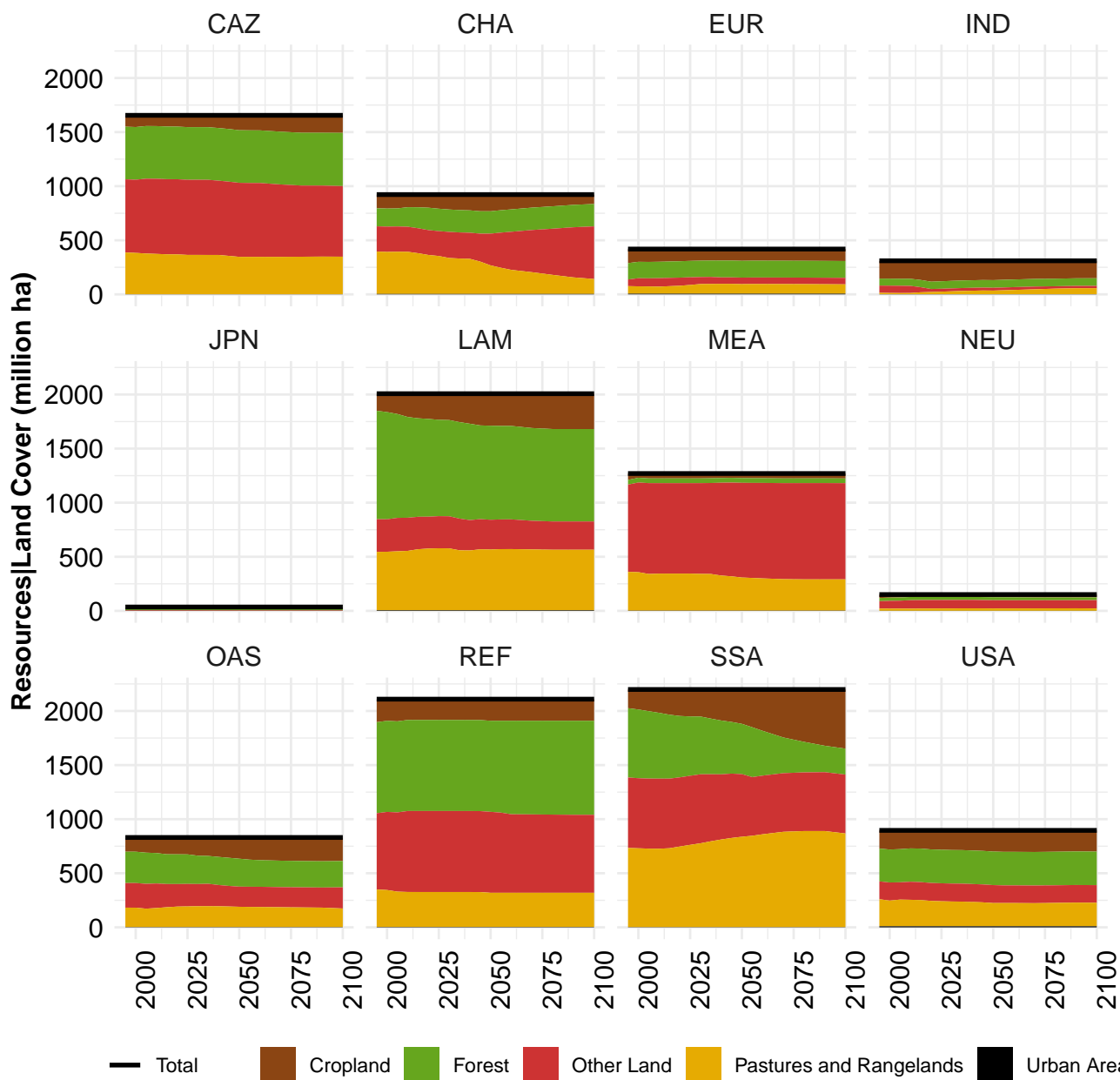
Table 1562: LPJ\_IPCC2006 — Resources—Carbon Stocks—Soil Carbon in top 30 cm—Noncropland Soils (Mt C) [PART 4/5]

	2005	2006	2007	2008	2009	2010
GLO	873772	874120	874715	874766	874793	874903
CAZ	150030	150092	150193	150246	150235	150650
CHA	51817	51858	52288	52350	52303	52436
EUR	26580	26542	26592	26549	26551	26636
IND	5991	5993	6004	6011	6006	6019
JPN	2837	2839	2841	2844	2846	2848
LAM	93559	93615	93590	93668	93749	92995
MEA	4013	4013	4009	4015	3988	4001
NEU	9548	9559	9576	9580	9583	9557
OAS	38994	38923	38854	38711	38568	38404
REF	373052	373163	373262	373316	373352	373656
SSA	64101	64043	64049	64057	64089	63837
USA	53251	53481	53456	53419	53523	53864

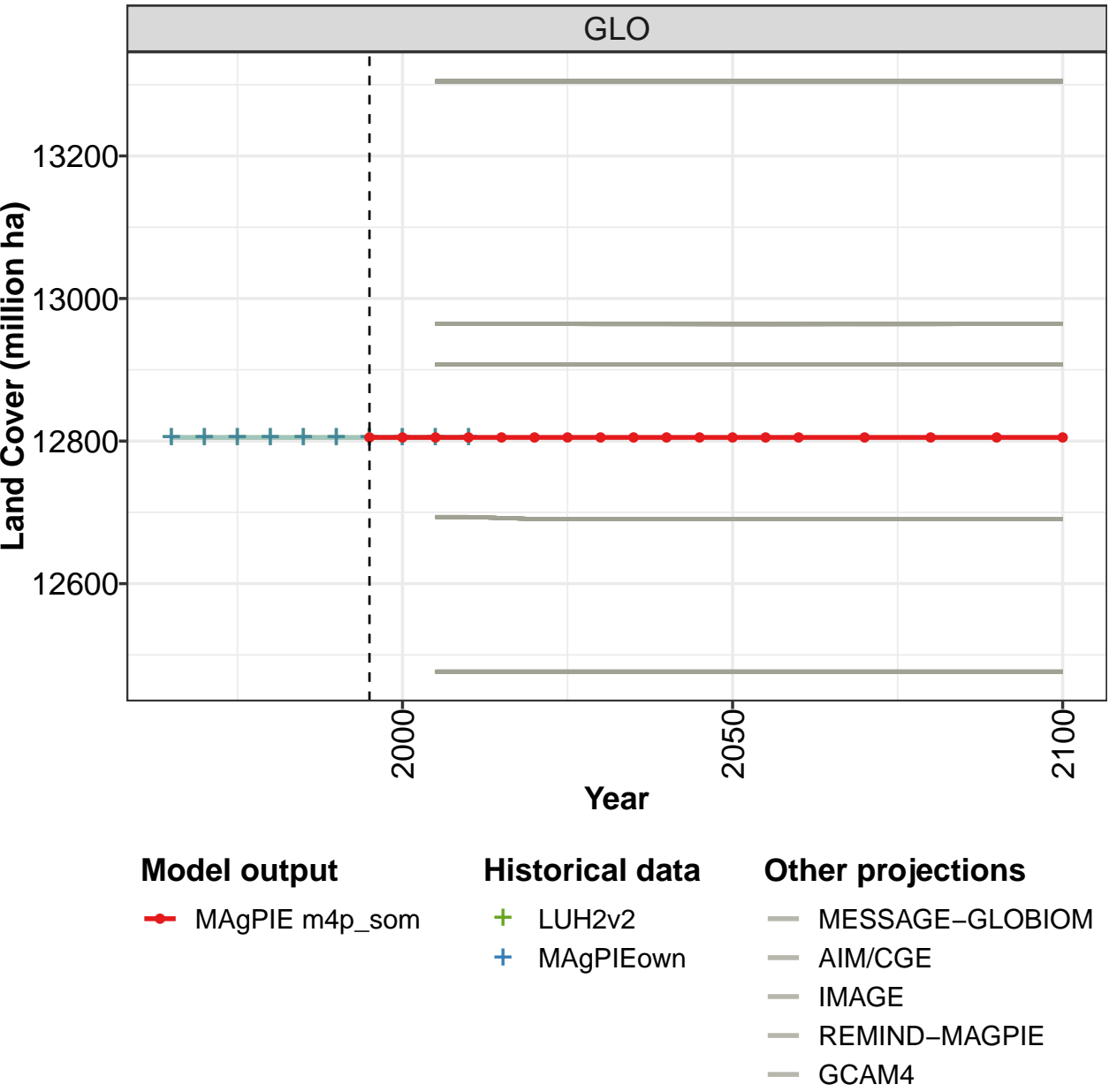
Table 1563: LPJ\_IPCC2006 — Resources—Carbon Stocks—Soil Carbon in top 30 cm—Noncropland Soils (Mt C) [PART 5/5]

55 Land Cover





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

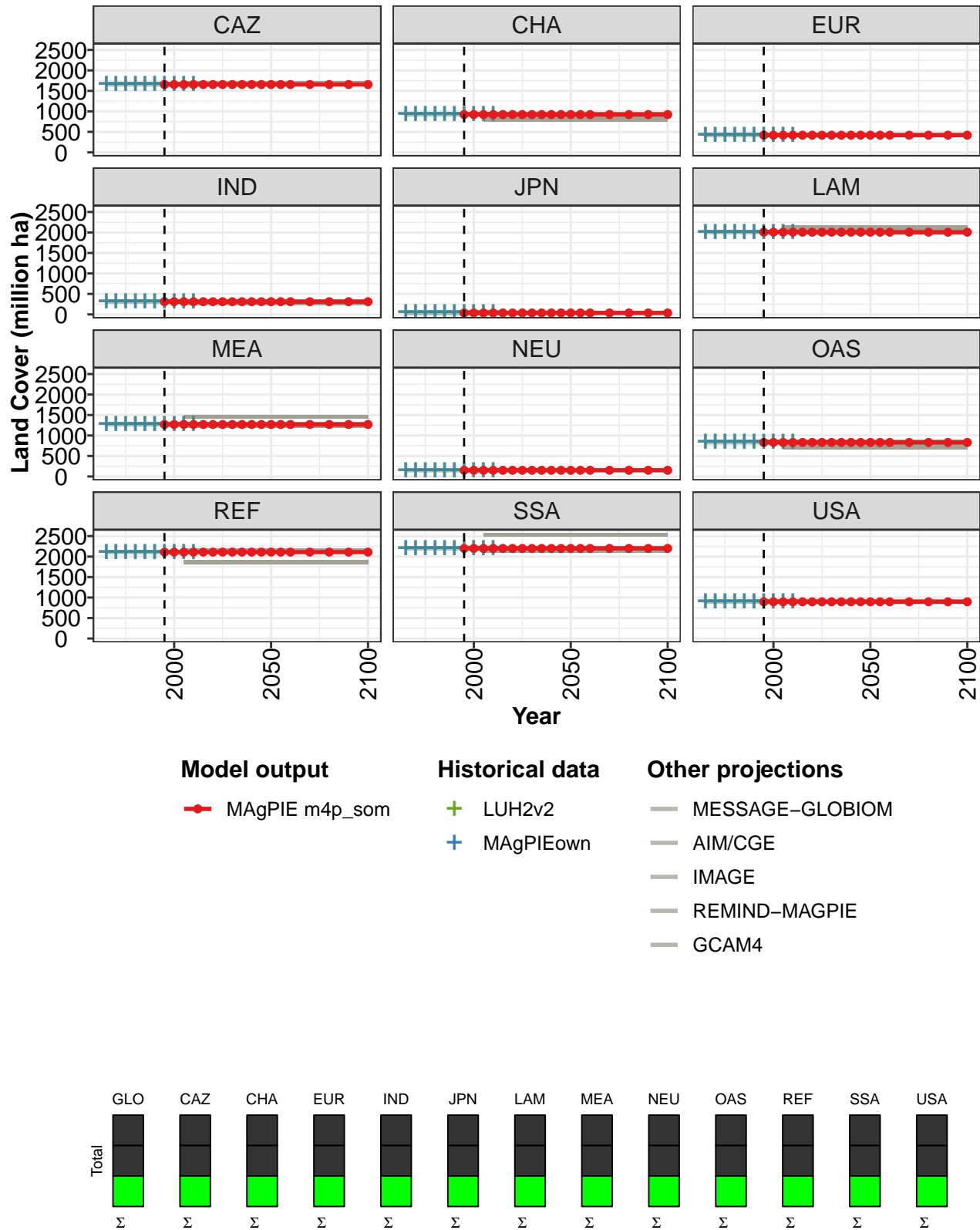


Figure 404: MAgPIE m4p\_som — Resources—Land Cover (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	12805	12805	12805	12805	12805	12805	12805	12805	12805	12805	12805
CAZ	1655	1655	1655	1655	1655	1655	1655	1655	1655	1655	1655
CHA	922	922	922	922	922	922	922	922	922	922	922
EUR	419	419	419	419	419	419	419	419	419	419	419
IND	310	310	310	310	310	310	310	310	310	310	310
JPN	35	35	35	35	35	35	35	35	35	35	35
LAM	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007
MEA	1269	1269	1269	1269	1269	1269	1269	1269	1269	1269	1269
NEU	151	151	151	151	151	151	151	151	151	151	151
OAS	831	831	831	831	831	831	831	831	831	831	831
REF	2110	2110	2110	2110	2110	2110	2110	2110	2110	2110	2110
SSA	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199
USA	896	896	896	896	896	896	896	896	896	896	896

Table 1564: MAgPIE m4p.som — Resources—Land Cover (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	12805	12805	12805	12805	12805	12805	12805
CAZ	1655	1655	1655	1655	1655	1655	1655
CHA	922	922	922	922	922	922	922
EUR	419	419	419	419	419	419	419
IND	310	310	310	310	310	310	310
JPN	35	35	35	35	35	35	35
LAM	2007	2007	2007	2007	2007	2007	2007
MEA	1269	1269	1269	1269	1269	1269	1269
NEU	151	151	151	151	151	151	151
OAS	831	831	831	831	831	831	831
REF	2110	2110	2110	2110	2110	2110	2110
SSA	2199	2199	2199	2199	2199	2199	2199
USA	896	896	896	896	896	896	896

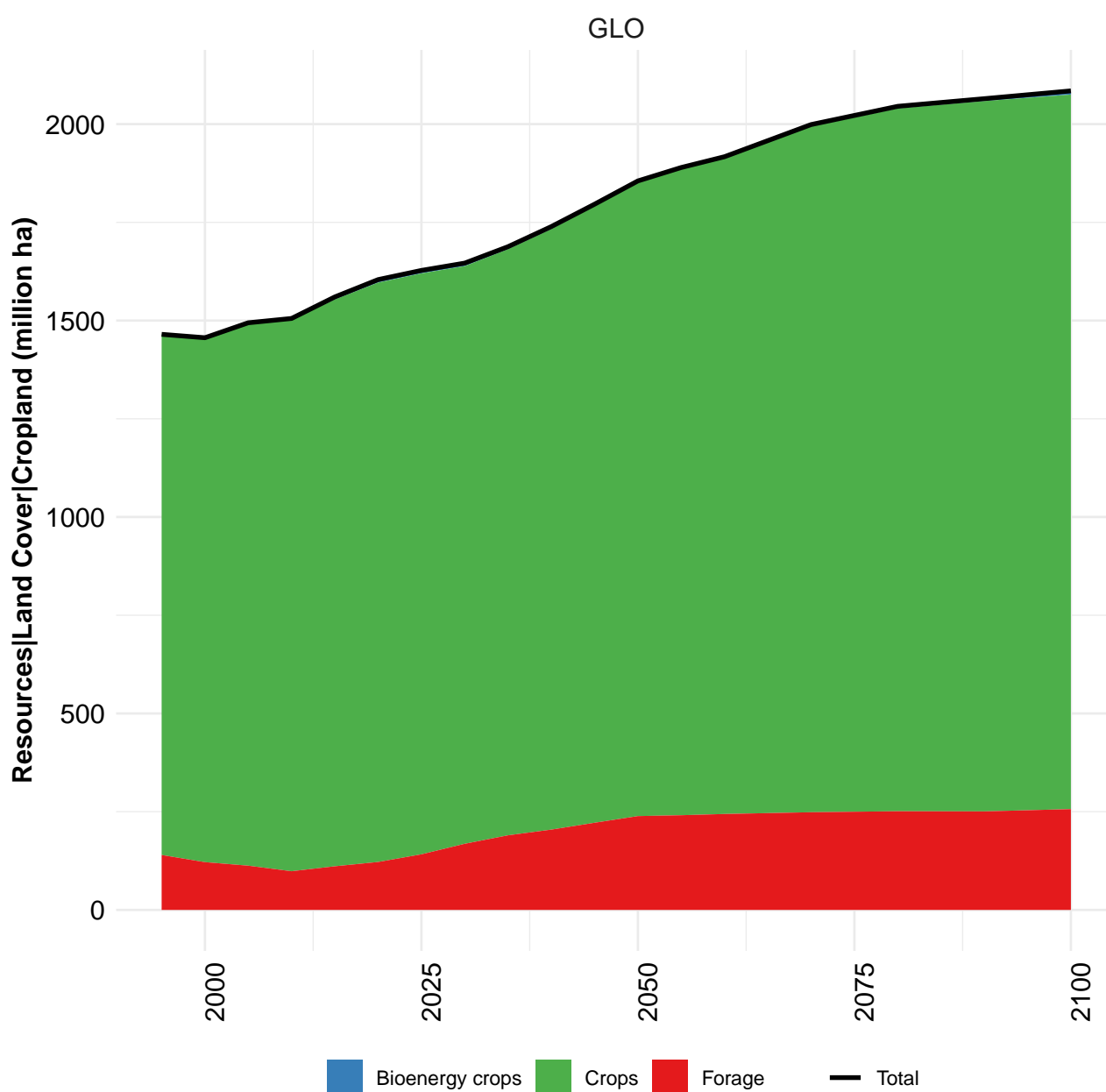
Table 1565: MAgPIE m4p.som — Resources—Land Cover (million ha) [PART 2/2]

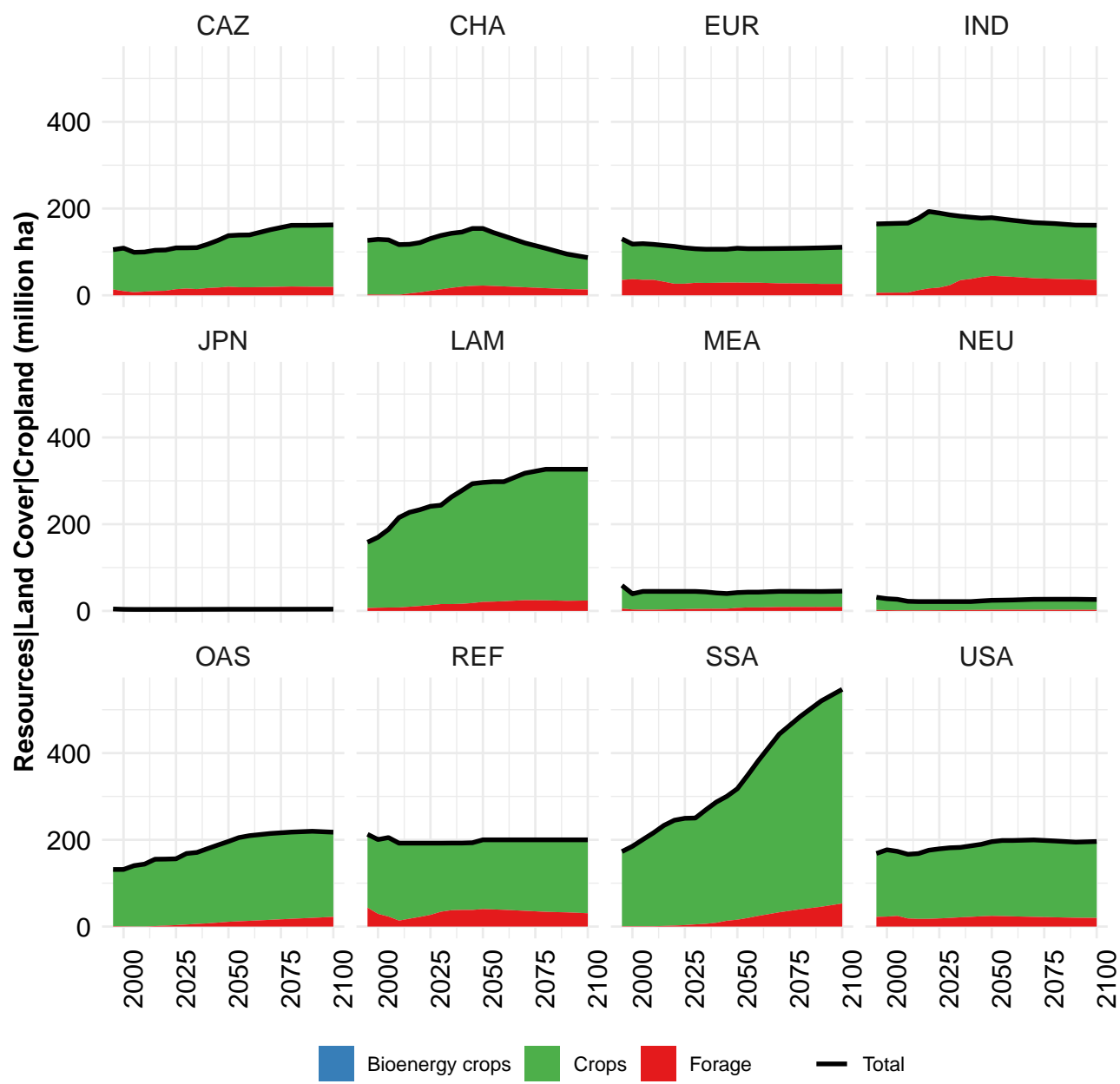
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	12805	12805	12805	12805	12805	12805	12805	12805	12805	12805
CAZ	1655	1655	1655	1655	1655	1655	1655	1655	1655	1655
CHA	922	922	922	922	922	922	922	922	922	922
EUR	419	419	419	419	419	419	419	419	419	419
IND	310	310	310	310	310	310	310	310	310	310
JPN	35	35	35	35	35	35	35	35	35	35
LAM	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007
MEA	1269	1269	1269	1269	1269	1269	1269	1269	1269	1269
NEU	151	151	151	151	151	151	151	151	151	151
OAS	831	831	831	831	831	831	831	831	831	831
REF	2110	2110	2110	2110	2110	2110	2110	2110	2110	2110
SSA	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199
USA	896	896	896	896	896	896	896	896	896	896

Table 1566: LUH2v2 — Resources—Land Cover (million ha)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	12805	12805	12805	12805	12805	12805	12805	12805	12805	12805
CAZ	1655	1655	1655	1655	1655	1655	1655	1655	1655	1655
CHA	922	922	922	922	922	922	922	922	922	922
EUR	419	419	419	419	419	419	419	419	419	419
IND	310	310	310	310	310	310	310	310	310	310
JPN	35	35	35	35	35	35	35	35	35	35
LAM	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007
MEA	1269	1269	1269	1269	1269	1269	1269	1269	1269	1269
NEU	151	151	151	151	151	151	151	151	151	151
OAS	831	831	831	831	831	831	831	831	831	831
REF	2110	2110	2110	2110	2110	2110	2110	2110	2110	2110
SSA	2199	2199	2199	2199	2199	2199	2199	2199	2199	2199
USA	896	896	896	896	896	896	896	896	896	896

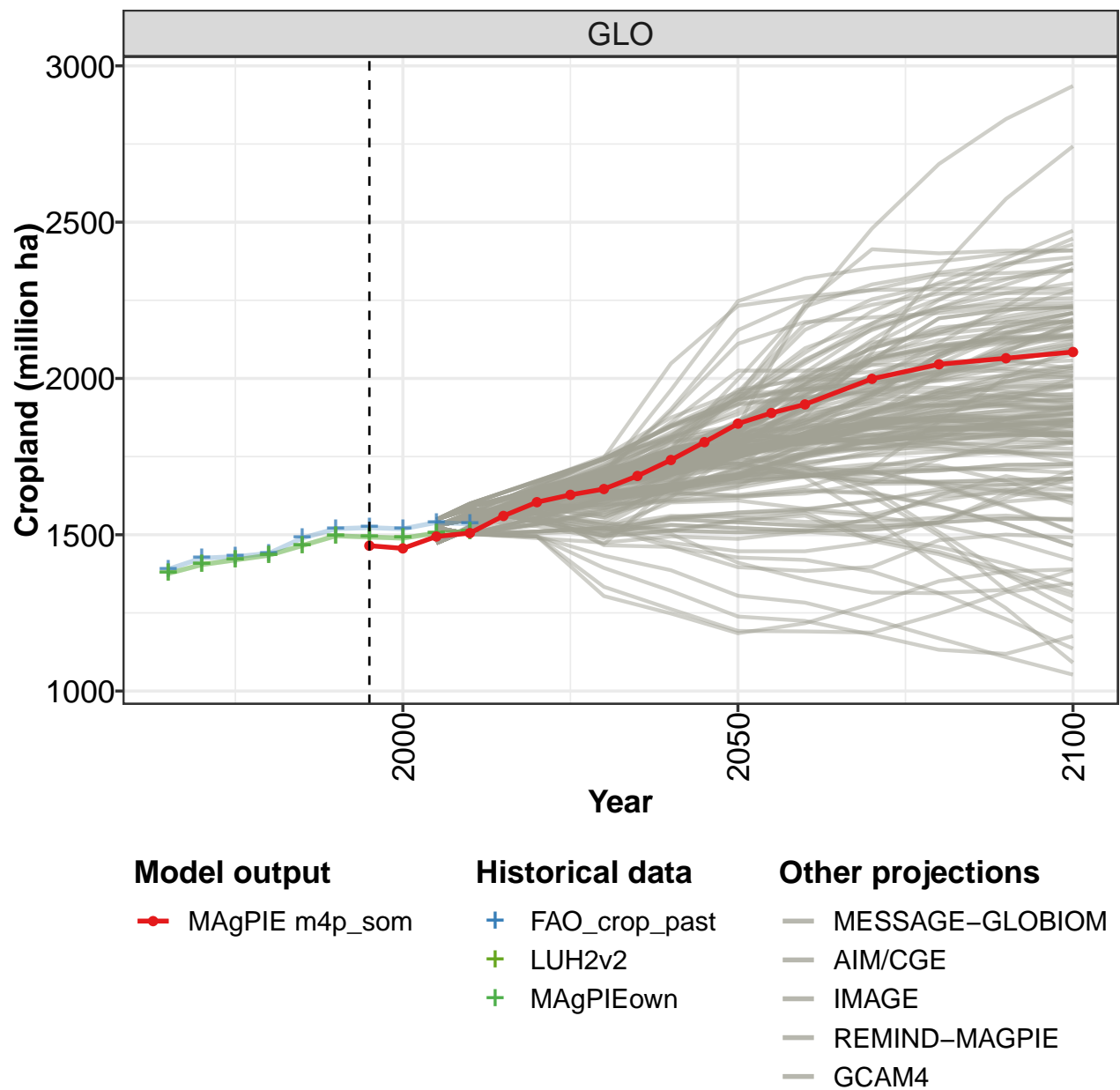
Table 1567: MAgPIEown — Resources—Land Cover (million ha)





55.1 Cropland

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

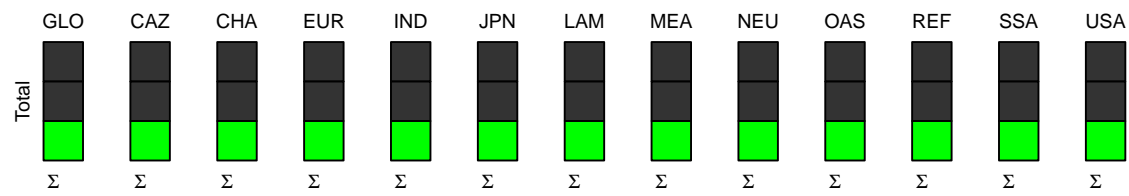
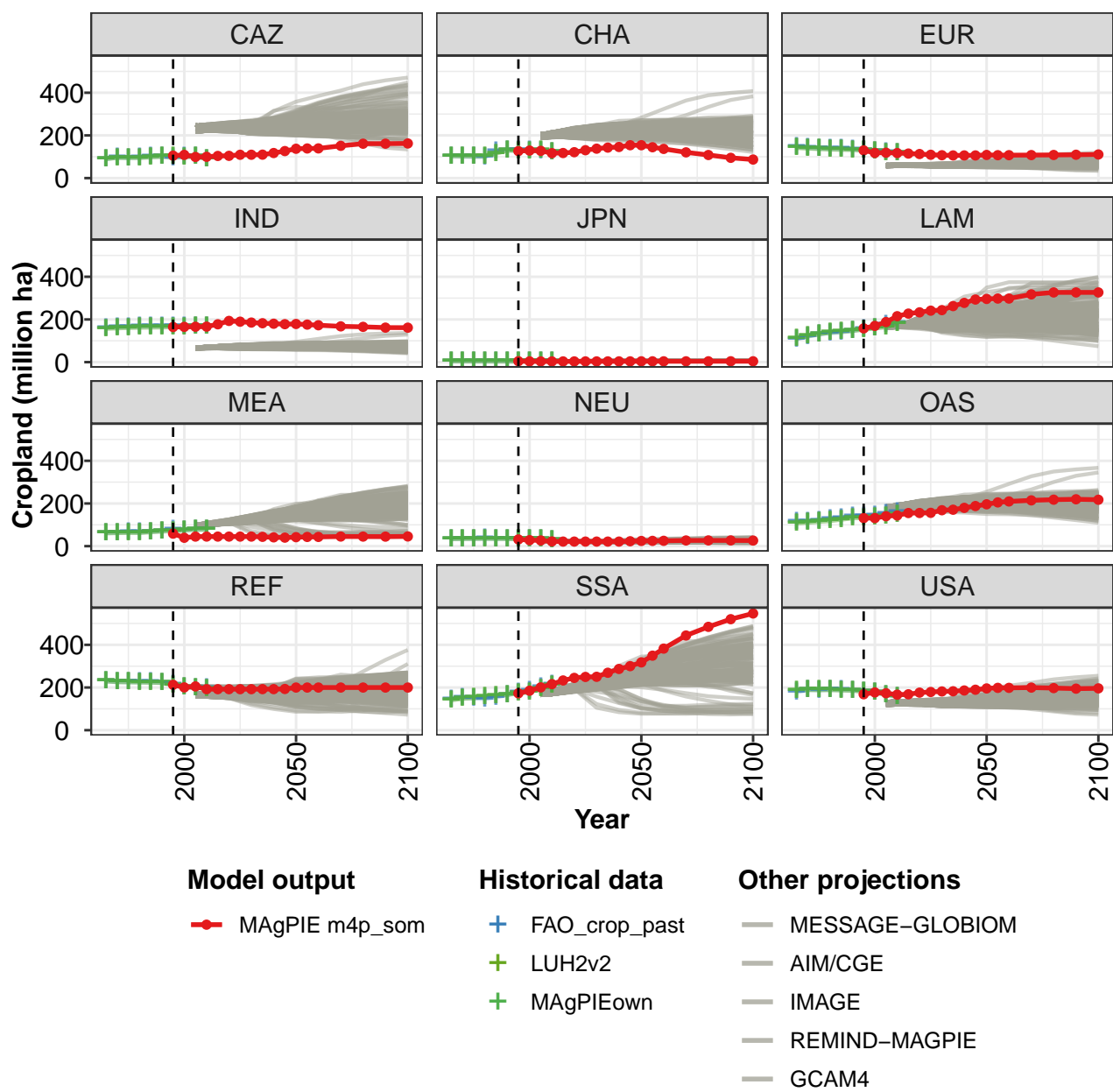


Figure 405: MAgPIE m4p\_som — Resources—Land Cover—Cropland (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1465	1456	1494	1505	1560	1604	1628	1646	1688	1739	1796
CAZ	105	109	99	100	104	104	109	109	110	118	127
CHA	127	129	128	117	118	121	131	138	143	146	154
EUR	130	118	119	117	115	113	109	107	106	106	106
IND	165	165	166	166	177	193	190	185	182	180	178
JPN	4	4	3	3	3	3	3	3	4	4	4
LAM	158	170	188	215	227	233	241	244	263	278	293
MEA	59	39	45	45	45	45	45	45	44	41	40
NEU	31	28	27	22	22	22	22	22	22	22	23
OAS	132	132	140	144	155	156	156	168	171	180	188
REF	213	201	205	192	192	192	192	192	193	193	193
SSA	173	185	201	216	233	245	250	250	269	287	300
USA	168	177	173	167	168	176	179	182	182	186	190

Table 1568: MAgPIE m4p\_som — Resources—Land Cover—Cropland (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1855	1890	1917	1999	2045	2065	2085
CAZ	138	139	139	151	161	161	162
CHA	154	145	137	121	108	95	87
EUR	109	107	107	108	108	109	111
IND	179	176	173	168	165	162	161
JPN	4	4	4	4	4	4	4
LAM	296	298	298	318	327	327	327
MEA	42	43	43	45	45	45	46
NEU	24	25	25	27	27	27	26
OAS	196	205	210	215	218	220	218
REF	200	200	200	200	200	200	200
SSA	318	349	382	444	484	520	547
USA	196	198	198	200	197	195	196

Table 1569: MAgPIE m4p\_som — Resources—Land Cover—Cropland (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1390	1425	1430	1440	1489	1519	1523	1519	1539	1534
CAZ	91	98	96	97	102	103	94	101	102	92
CHA	105	103	101	100	126	132	131	130	125	123
EUR	147	144	140	139	138	136	131	129	123	120
IND	162	165	167	168	169	170	170	170	170	169
JPN	6	6	6	5	5	5	5	5	5	5
LAM	109	121	131	137	141	148	159	161	177	184
MEA	64	65	67	65	69	72	78	75	80	80
NEU	35	36	36	37	36	36	35	34	34	32
OAS	116	118	122	127	132	141	140	145	152	160
REF	231	227	227	226	226	223	217	203	200	198
SSA	146	153	150	148	156	166	179	188	203	214
USA	179	190	188	191	190	188	184	178	168	159

Table 1570: FAO\_crop\_past — Resources—Land Cover—Cropland (million ha)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1376	1404	1419	1434	1465	1497	1493	1489	1506	1510
CAZ	91	96	96	96	99	101	101	100	101	91
CHA	104	104	104	103	117	130	129	128	130	122
EUR	143	140	138	135	134	133	130	127	119	118
IND	158	160	162	163	164	165	166	167	169	168
JPN	5	5	5	5	5	5	4	4	4	4
LAM	112	124	132	140	144	148	154	160	165	182
MEA	62	63	63	64	67	70	72	75	79	78
NEU	34	35	36	36	36	35	34	33	33	31
OAS	108	112	116	120	126	132	134	136	141	150
REF	230	227	226	225	224	223	213	203	199	196
SSA	142	149	153	157	162	168	173	179	197	212
USA	187	190	190	190	188	186	182	178	167	158

Table 1571: LUH2v2 — Resources—Land Cover—Cropland (million ha)

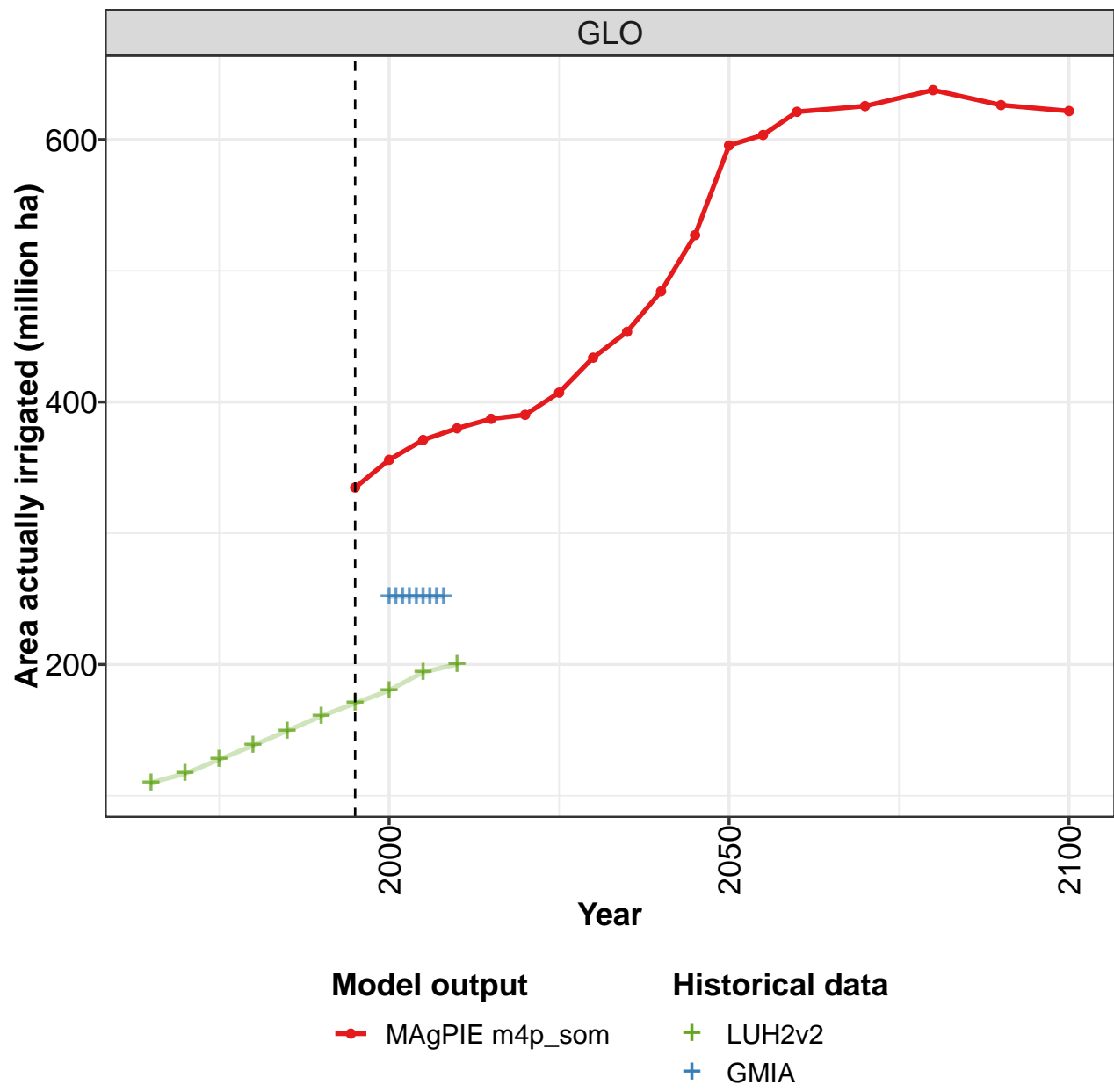
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1376	1404	1419	1434	1465	1497	1493	1489	1506	1510
CAZ	91	96	96	96	99	101	101	100	101	91
CHA	104	104	104	103	117	130	129	128	130	122
EUR	143	140	138	135	134	133	130	127	119	118
IND	158	160	162	163	164	165	166	167	169	168
JPN	5	5	5	5	5	5	4	4	4	4
LAM	112	124	132	140	144	148	154	160	165	182
MEA	62	63	63	64	67	70	72	75	79	78
NEU	34	35	36	36	36	35	34	33	33	31
OAS	108	112	116	120	126	132	134	136	141	150
REF	230	227	226	225	224	223	213	203	199	196
SSA	142	149	153	157	162	168	173	179	197	212
USA	187	190	190	190	188	186	182	178	167	158

Table 1572: MAgPIEown — Resources—Land Cover—Cropland (million ha)



55.1.1 Area actually irrigated

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

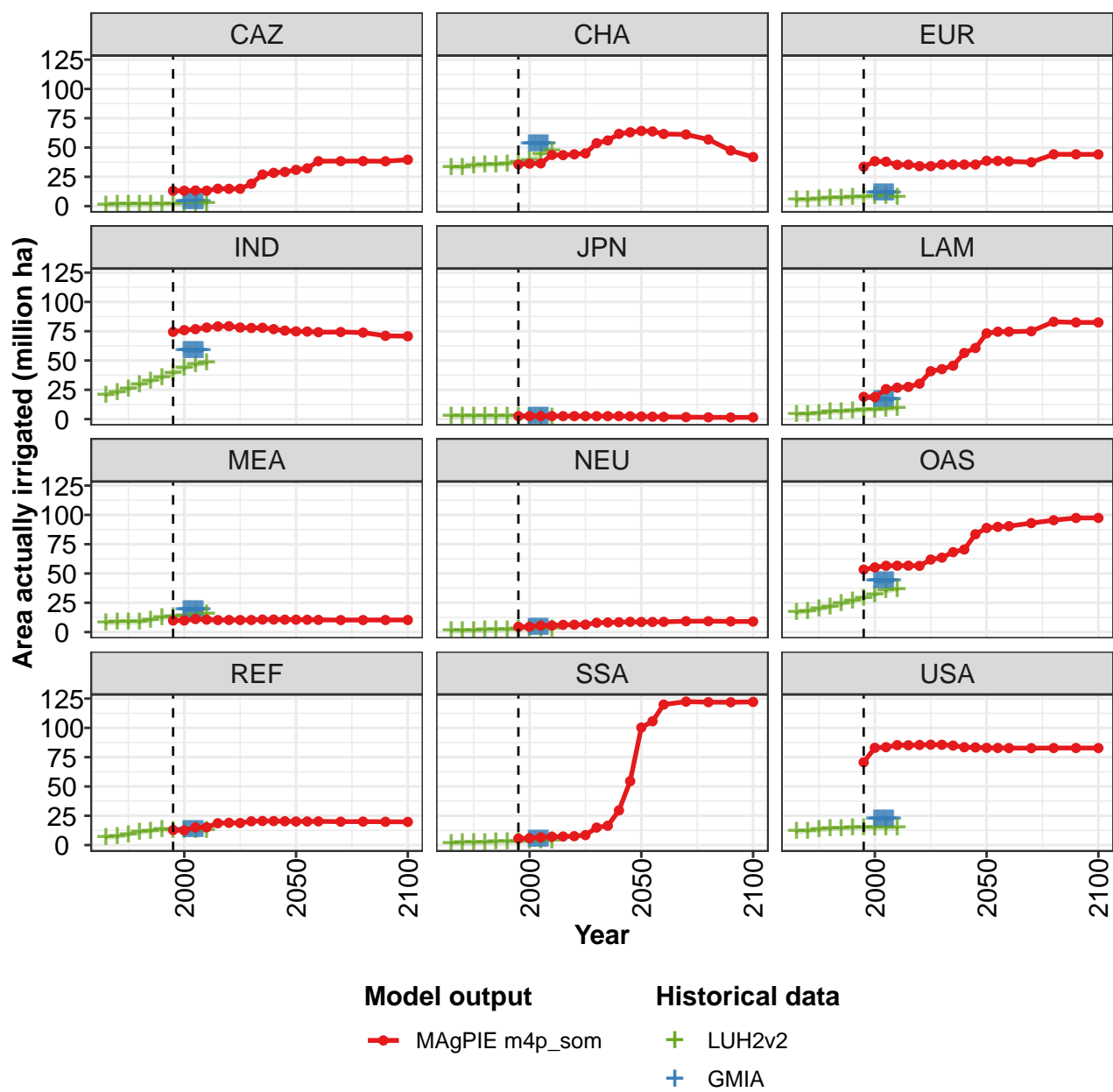


Figure 406: MAGPIE m4p\_som — Resources—Land Cover—Cropland—Area actually irrigated (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	335	356	371	380	387	390	407	434	454	484	527
CAZ	13	13	13	13	15	15	15	19	27	28	29
CHA	36	36	36	44	44	44	45	54	56	62	63
EUR	34	38	38	35	35	34	34	35	35	35	35
IND	74	76	77	78	79	79	78	78	78	77	76
JPN	3	3	3	3	3	3	3	3	3	3	2
LAM	19	19	26	27	27	30	41	43	46	56	61
MEA	10	10	11	11	10	10	10	10	11	11	11
NEU	4	5	6	6	6	6	6	8	8	8	9
OAS	53	55	57	57	57	57	62	64	68	70	83
REF	13	13	15	15	19	19	19	20	21	20	20
SSA	6	6	7	7	7	8	9	15	17	30	55
USA	71	83	84	85	85	85	86	86	85	83	83

Table 1573: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Area actually irrigated (million ha)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	596	604	621	626	638	626	622
CAZ	31	32	38	38	38	38	40
CHA	64	64	62	61	57	47	42
EUR	39	39	38	37	44	44	44
IND	75	75	74	74	74	71	71
JPN	2	2	2	2	2	1	1
LAM	73	75	75	75	83	83	82
MEA	11	11	10	10	10	10	10
NEU	9	9	9	9	9	9	9
OAS	89	90	90	93	95	97	97
REF	20	20	20	20	20	20	20
SSA	100	106	120	122	122	122	122
USA	83	83	83	83	83	83	83

Table 1574: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Area actually irrigated (million ha)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	110	117	128	138	149	161	170	180	194	200
CAZ	1	1	1	1	1	2	2	2	2	2
CHA	33	33	34	35	35	36	37	39	44	47
EUR	5	5	6	6	7	7	8	8	8	8
IND	20	22	26	29	32	35	39	43	46	48
JPN	2	3	2	2	2	2	2	2	2	2
LAM	4	4	5	6	6	7	8	8	9	9
MEA	8	8	8	9	10	12	13	14	15	15
NEU	1	1	1	1	2	2	2	3	3	3
OAS	16	18	20	21	24	26	29	32	35	36
REF	7	7	9	11	12	13	13	12	12	12
SSA	2	2	2	2	2	3	3	3	3	4
USA	11	12	13	14	14	15	15	15	14	14

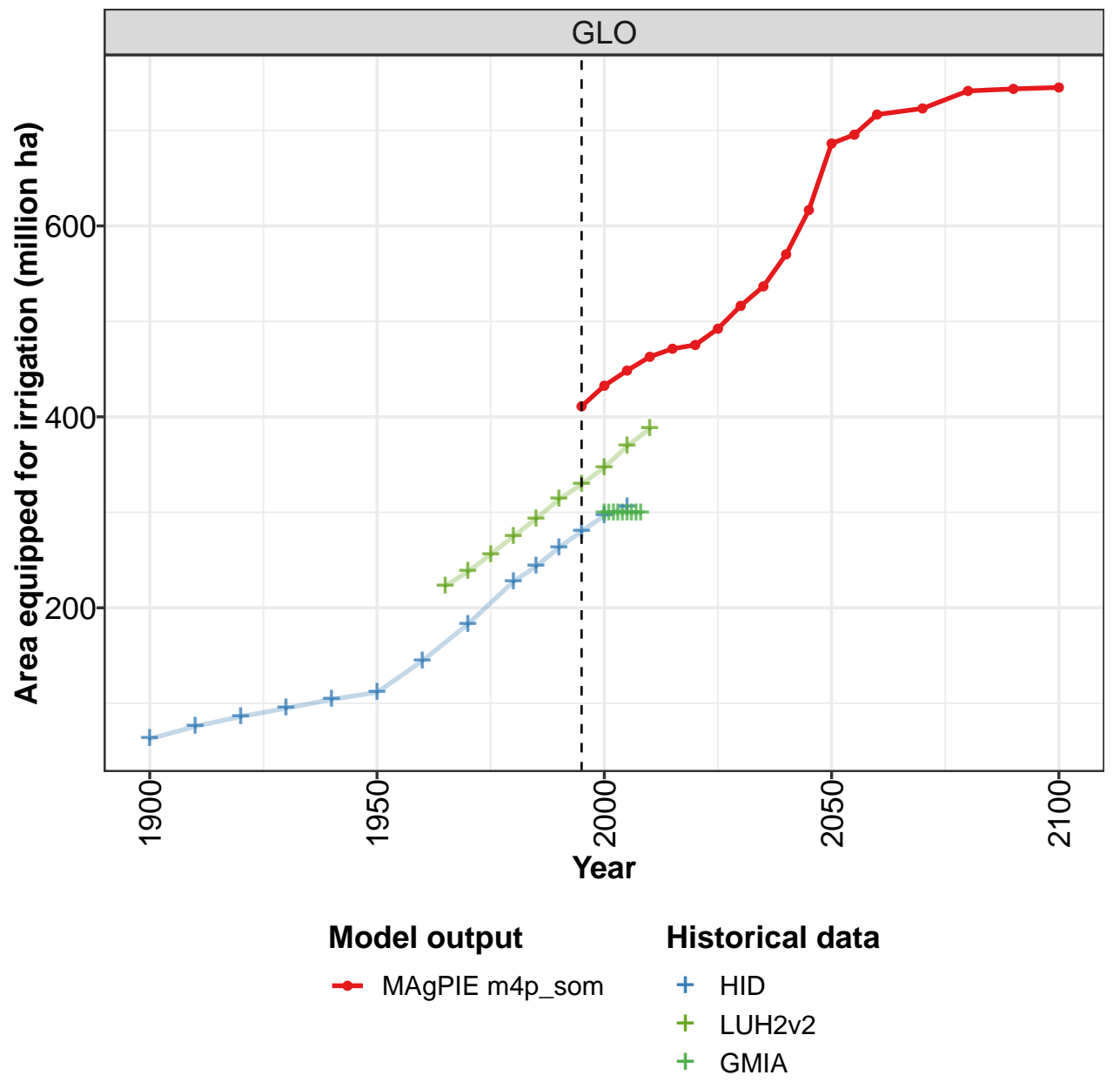
Table 1575: LUH2v2 — Resources—Land Cover—Cropland—Area actually irrigated (million ha)

	2000	2001	2002	2003	2004	2005	2006	2007	2008
GLO	252	252	252	252	252	252	252	252	252
CAZ	4	4	4	4	4	4	4	4	4
CHA	53	53	53	53	53	53	53	53	53
EUR	11	11	11	11	11	11	11	11	11
IND	58	58	58	58	58	58	58	58	58
JPN	3	3	3	3	3	3	3	3	3
LAM	16	16	16	16	16	16	16	16	16
MEA	19	19	19	19	19	19	19	19	19
NEU	4	4	4	4	4	4	4	4	4
OAS	43	43	43	43	43	43	43	43	43
REF	13	13	13	13	13	13	13	13	13
SSA	5	5	5	5	5	5	5	5	5
USA	22	22	22	22	22	22	22	22	22

Table 1576: GMIA — Resources—Land Cover—Cropland—Area actually irrigated (million ha)

55.1.2 Area equipped for irrigation

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

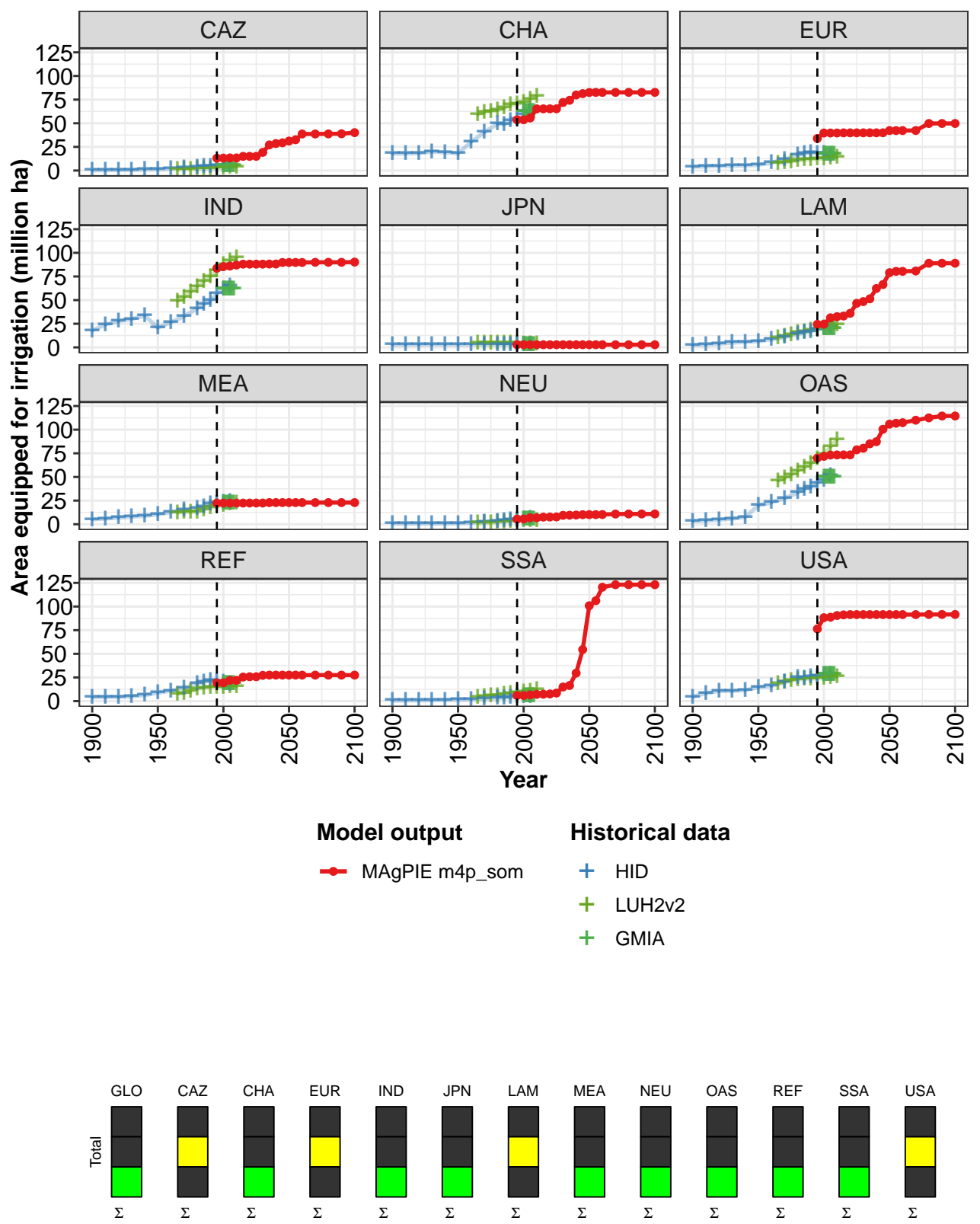


Figure 407: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Area equipped for irrigation (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	411	433	448	463	471	475	492	516	537	570	617
CAZ	13	13	13	13	15	15	15	19	27	29	29
CHA	54	54	56	65	65	65	65	72	74	80	81
EUR	34	40	40	40	40	40	40	40	40	40	40
IND	84	85	86	87	88	88	88	88	88	88	90
JPN	3	3	3	3	3	3	3	3	3	3	3
LAM	24	25	31	33	33	36	47	48	51	62	66
MEA	22	22	22	22	22	22	22	22	23	23	23
NEU	5	6	7	7	8	8	8	9	10	10	10
OAS	70	72	73	73	73	73	79	80	85	87	100
REF	19	19	22	22	25	26	26	27	27	27	27
SSA	6	6	7	7	7	8	9	15	17	30	55
USA	76	88	89	91	91	91	91	91	91	91	91

Table 1577: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Area equipped for irrigation (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	686	696	717	723	741	744	745
CAZ	31	33	39	39	39	39	40
CHA	83	83	83	83	83	83	83
EUR	42	42	42	42	50	50	50
IND	90	90	90	90	90	90	90
JPN	3	3	3	3	3	3	3
LAM	79	80	80	81	89	89	89
MEA	23	23	23	23	23	23	23
NEU	10	10	10	11	11	11	11
OAS	106	107	107	110	113	114	114
REF	27	27	27	27	27	27	27
SSA	101	106	120	123	123	123	123
USA	91	91	91	91	92	92	92

Table 1578: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Area equipped for irrigation (million ha) [PART 2/2]

	1900	1910	1920	1930	1940	1950	1960	1970	1980	1985	1990
GLO	63	76	86	95	104	111	144	183	227	243	263
CAZ	0	0	0	1	1	1	2	3	4	4	5
CHA	18	18	18	20	19	18	30	40	49	49	52
EUR	4	4	5	5	5	6	8	12	16	18	19
IND	18	24	28	30	34	21	27	33	41	46	49
JPN	3	3	3	3	3	3	3	3	3	3	3
LAM	2	3	4	5	6	6	8	11	14	16	17
MEA	5	6	7	8	9	10	13	15	17	18	21
NEU	1	1	1	1	1	1	1	2	3	4	5
OAS	3	4	5	6	8	20	23	27	33	37	39
REF	4	4	4	5	6	9	11	14	18	20	22
SSA	1	1	1	1	1	2	2	2	3	4	4
USA	4	8	11	11	11	15	16	20	25	24	26

Table 1579: HID — Resources—Land Cover—Cropland—Area equipped for irrigation (million ha) [PART 1/2]

	1995	2000	2005
GLO	280	297	306
CAZ	6	5	6
CHA	54	59	62
EUR	18	18	16
IND	57	62	65
JPN	3	3	3
LAM	19	20	21
MEA	23	24	24
NEU	5	6	6
OAS	44	47	51
REF	21	20	17
SSA	5	5	5
USA	26	28	28

Table 1580: HID — Resources—Land Cover—Cropland—Area equipped for irrigation (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	223	238	256	275	293	313	329	347	369	388
CAZ	1	1	2	2	2	2	3	3	3	3
CHA	59	62	63	64	66	70	70	72	76	79
EUR	8	9	10	11	11	12	12	13	14	14
IND	49	53	59	65	70	75	81	87	92	95
JPN	5	5	5	5	5	5	4	4	4	4
LAM	11	12	14	16	17	18	19	20	22	24
MEA	12	13	13	13	15	18	19	20	22	23
NEU	1	1	2	2	3	3	4	4	4	4
OAS	46	49	53	56	60	64	69	74	82	89
REF	8	8	11	13	14	15	15	15	15	15
SSA	4	5	5	6	7	8	9	10	11	12
USA	19	20	22	23	23	24	24	25	25	25

Table 1581: LUH2v2 — Resources—Land Cover—Cropland—Area equipped for irrigation (million ha)

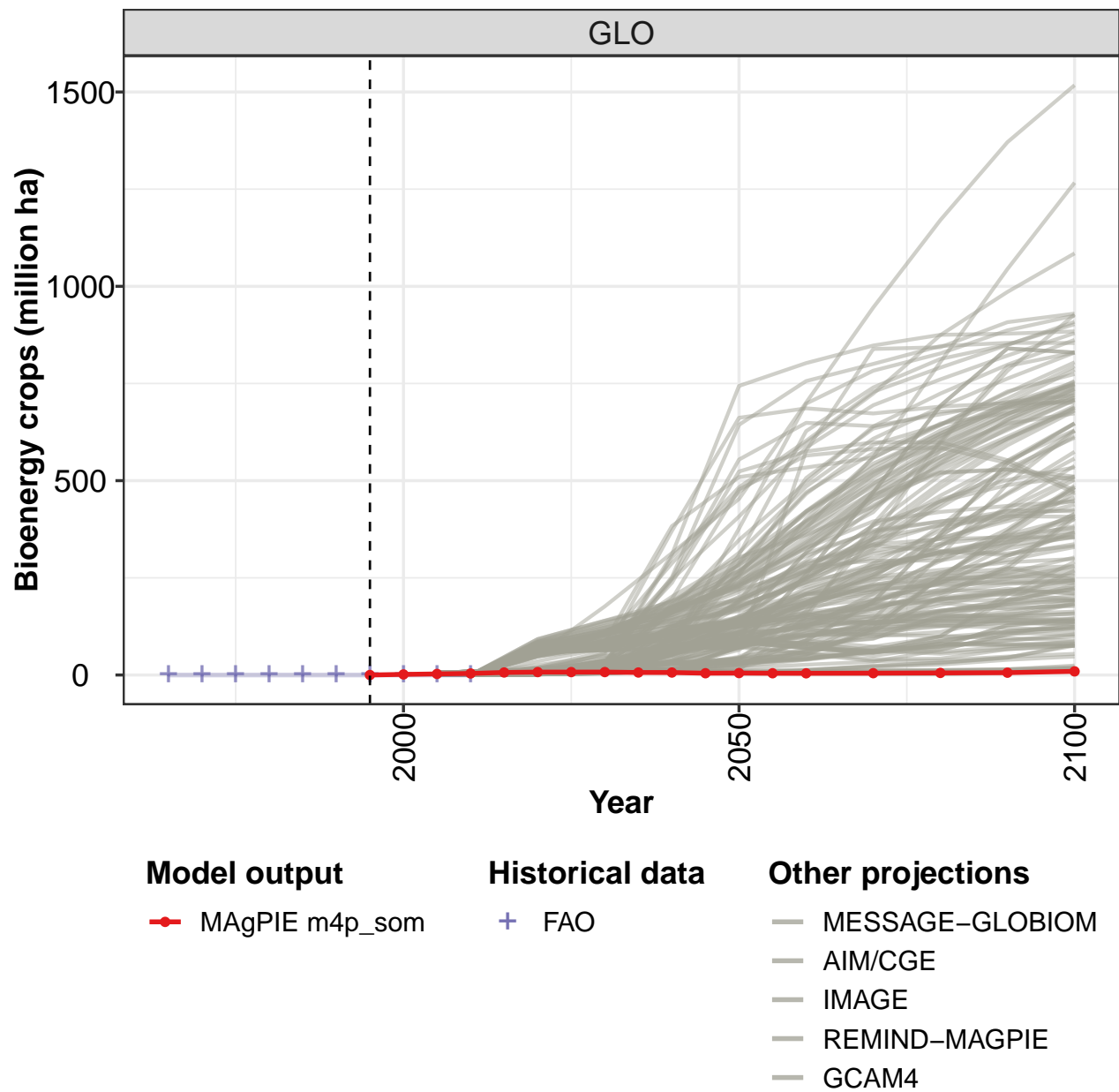
	2000	2001	2002	2003	2004	2005	2006	2007	2008
GLO	299	299	299	299	299	299	299	299	299
CAZ	5	5	5	5	5	5	5	5	5
CHA	62	62	62	62	62	62	62	62	62
EUR	17	17	17	17	17	17	17	17	17
IND	62	62	62	62	62	62	62	62	62
JPN	3	3	3	3	3	3	3	3	3
LAM	20	20	20	20	20	20	20	20	20
MEA	23	23	23	23	23	23	23	23	23
NEU	6	6	6	6	6	6	6	6	6
OAS	50	50	50	50	50	50	50	50	50
REF	19	19	19	19	19	19	19	19	19
SSA	5	5	5	5	5	5	5	5	5
USA	28	28	28	28	28	28	28	28	28

Table 1582: GMIA — Resources—Land Cover—Cropland—Area equipped for irrigation (million ha)



55.1.3 Bioenergy crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

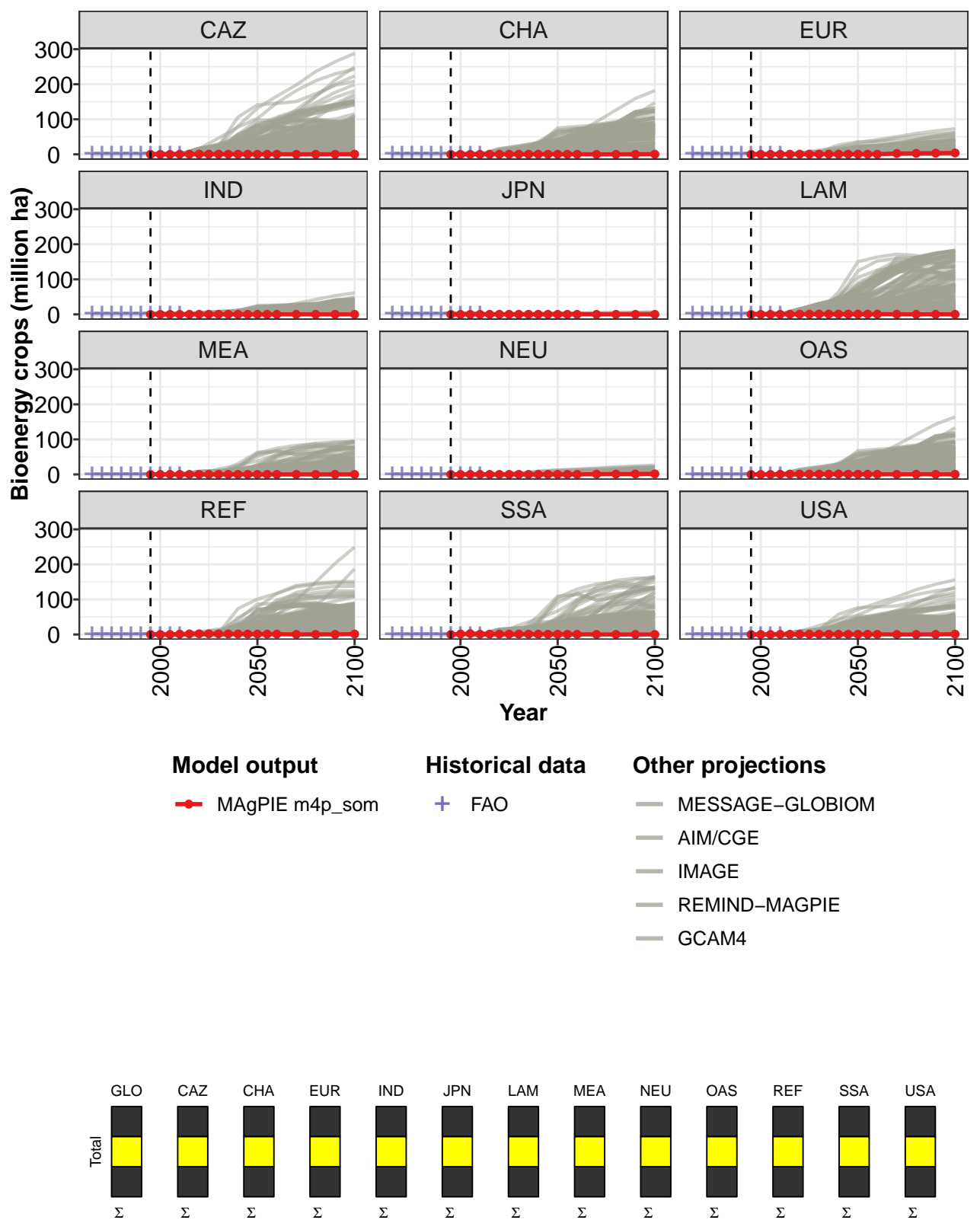


Figure 408: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Bioenergy crops (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.00	1.53	2.76	3.94	6.49	7.55	7.48	7.57	6.43	6.40	4.59
CAZ	0.00	0.00	0.00	0.26	0.43	0.57	0.50	0.50	0.41	0.38	0.29
CHA	0.00	0.00	0.00	0.11	0.20	0.28	0.32	0.38	0.36	0.34	0.28
EUR	0.00	0.00	0.00	0.23	0.42	0.56	0.58	0.65	0.54	0.54	0.45
IND	0.00	0.00	0.00	0.14	0.25	0.32	0.30	0.29	0.23	0.20	0.15
JPN	0.00	0.00	0.00	0.13	0.23	0.30	0.29	0.30	0.25	0.24	0.18
LAM	0.00	0.00	0.00	0.25	0.50	0.70	0.77	0.88	0.78	0.74	0.62
MEA	0.00	0.20	0.30	0.09	0.13	0.13	0.11	0.09	0.13	0.06	0.04
NEU	0.00	0.00	0.00	0.05	0.09	0.13	0.13	0.15	0.12	0.12	0.10
OAS	0.00	0.00	0.00	0.55	1.07	0.80	0.85	0.90	0.74	1.19	0.49
REF	0.00	0.00	0.00	1.07	1.64	1.95	1.90	1.76	1.50	1.39	1.13
SSA	0.00	1.33	2.45	0.73	0.98	1.13	1.06	0.99	0.80	0.68	0.48
USA	0.00	0.00	0.00	0.35	0.56	0.68	0.67	0.68	0.57	0.52	0.39

Table 1583: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Bioenergy crops (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	5.01	4.51	4.37	4.69	5.34	6.01	9.36
CAZ	0.33	0.30	0.30	0.09	0.12	0.17	0.40
CHA	0.28	0.28	0.26	0.00	0.05	0.11	0.41
EUR	0.54	0.40	0.42	2.51	2.81	3.32	4.01
IND	0.16	0.14	0.13	0.06	0.06	0.04	0.08
JPN	0.20	0.18	0.17	0.06	0.08	0.09	0.09
LAM	0.70	0.66	0.63	0.40	0.21	0.13	0.18
MEA	0.04	0.04	0.03	0.06	0.07	0.07	0.09
NEU	0.12	0.12	0.13	0.91	1.04	1.23	1.53
OAS	0.54	0.51	0.50	0.25	0.48	0.31	0.36
REF	1.16	1.05	1.00	0.20	0.26	0.32	1.21
SSA	0.50	0.43	0.40	0.15	0.12	0.08	0.10
USA	0.45	0.41	0.40	0.00	0.05	0.14	0.91

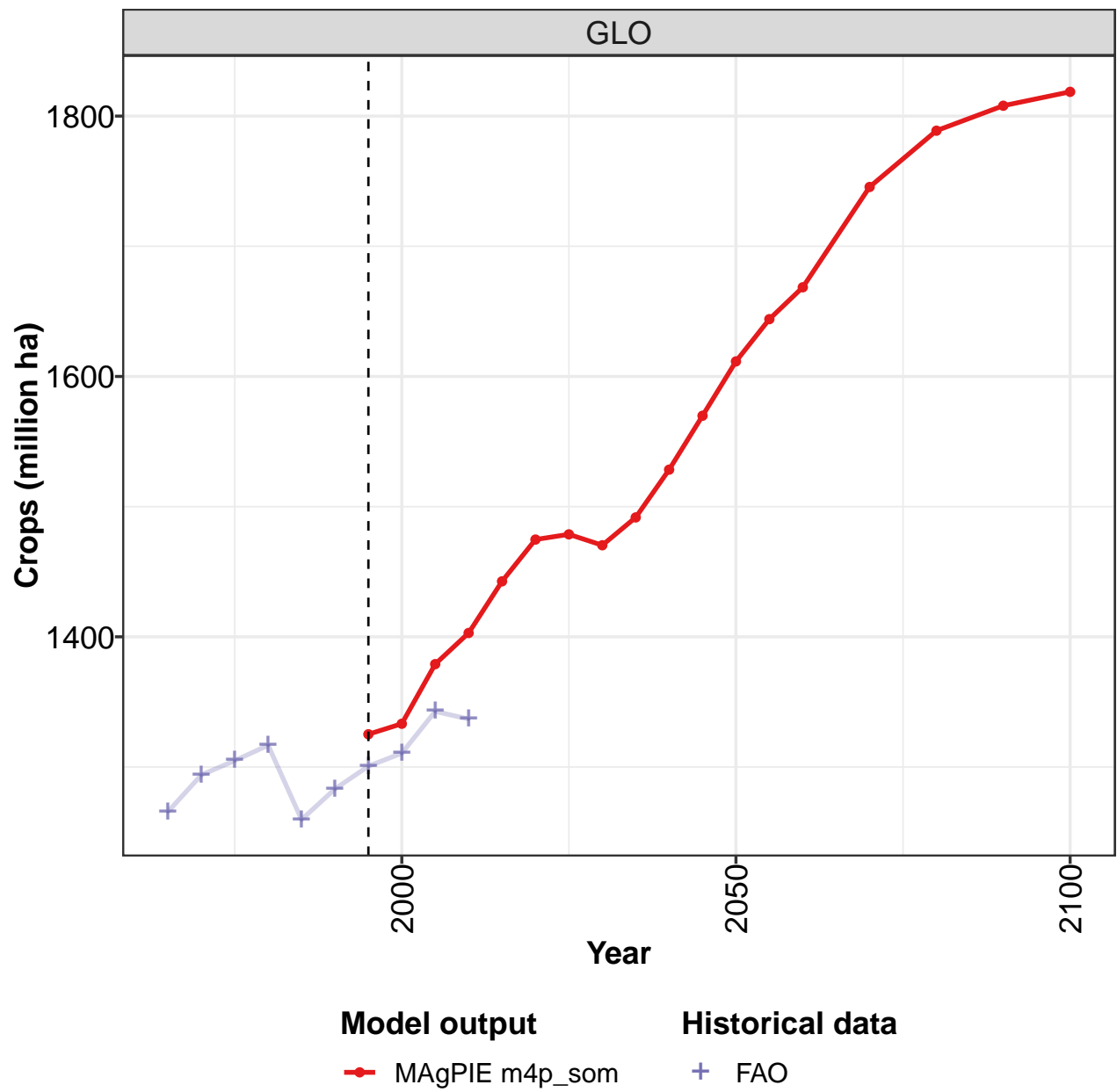
Table 1584: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Bioenergy crops (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0	0	0	0	0	0	0	0	0	0
CAZ	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0
LAM	0	0	0	0	0	0	0	0	0	0
MEA	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0
OAS	0	0	0	0	0	0	0	0	0	0
REF	0	0	0	0	0	0	0	0	0	0
SSA	0	0	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0

Table 1585: FAO — Resources—Land Cover—Cropland—Bioenergy crops (million ha)

55.1.4 Crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

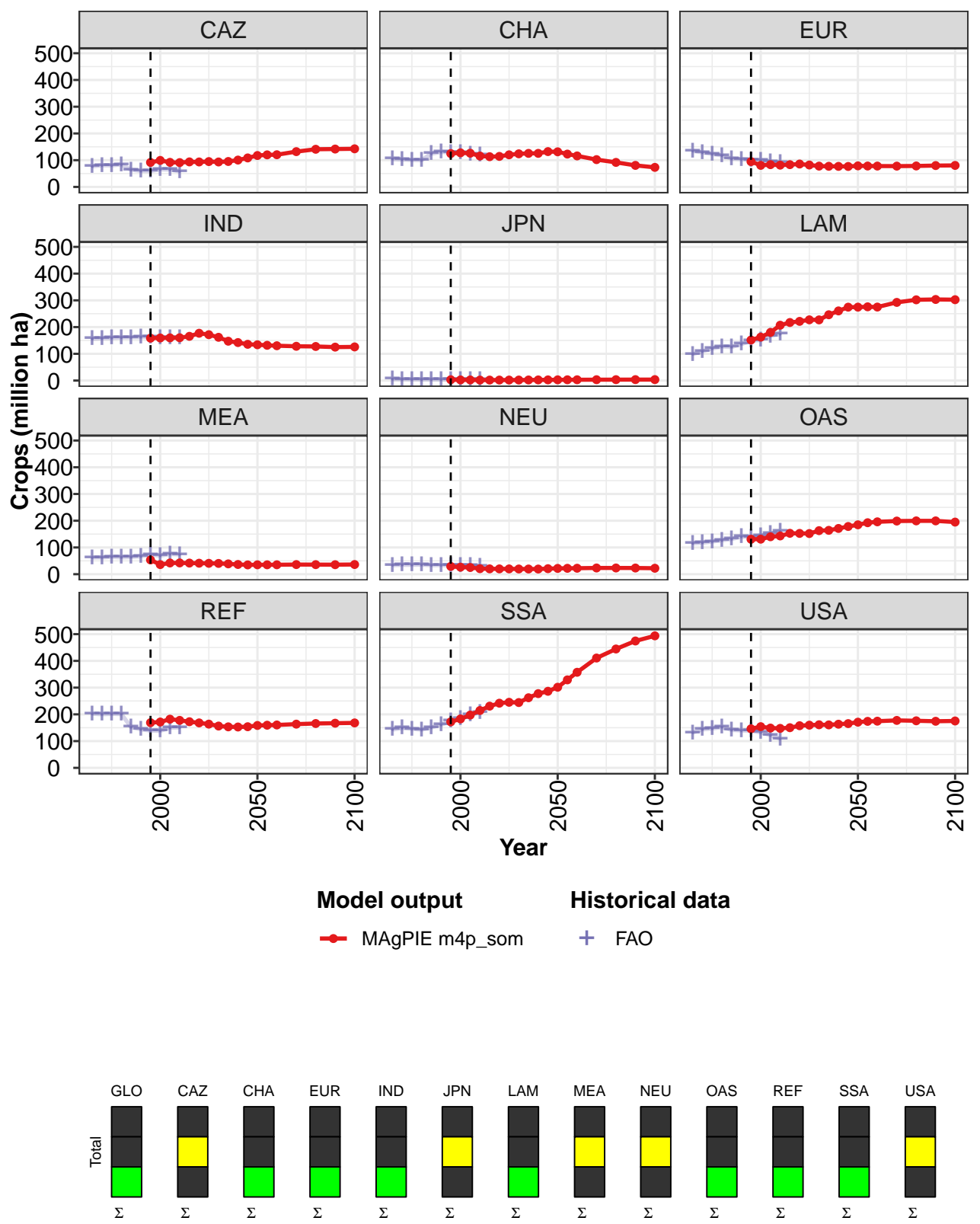


Figure 409: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1325	1333	1379	1403	1443	1475	1479	1470	1492	1528	1570
CAZ	92	99	92	91	94	93	95	93	95	100	109
CHA	125	128	126	116	113	114	120	124	125	126	132
EUR	95	81	83	82	83	86	82	78	77	77	77
IND	159	159	160	160	165	177	172	162	147	142	136
JPN	3	2	2	2	2	2	2	2	2	2	3
LAM	152	163	180	207	217	221	227	227	246	261	275
MEA	53	36	42	42	42	41	41	40	39	36	35
NEU	29	26	25	21	20	20	20	20	19	19	21
OAS	131	131	140	143	153	153	152	163	164	171	178
REF	169	171	182	178	173	168	164	156	153	153	154
SSA	172	183	197	214	231	242	245	244	262	278	286
USA	146	154	149	148	150	158	160	161	161	163	166

Table 1586: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1612	1644	1669	1746	1789	1808	1819
CAZ	117	120	120	132	141	142	143
CHA	131	123	116	102	92	81	73
EUR	79	78	78	78	78	80	80
IND	134	132	130	128	127	125	126
JPN	3	3	3	3	3	3	4
LAM	275	276	275	292	302	303	302
MEA	35	35	35	36	36	36	36
NEU	22	22	22	23	23	23	22
OAS	185	193	196	199	199	199	195
REF	159	159	160	163	166	167	168
SSA	301	329	357	411	445	475	494
USA	171	174	175	177	176	174	175

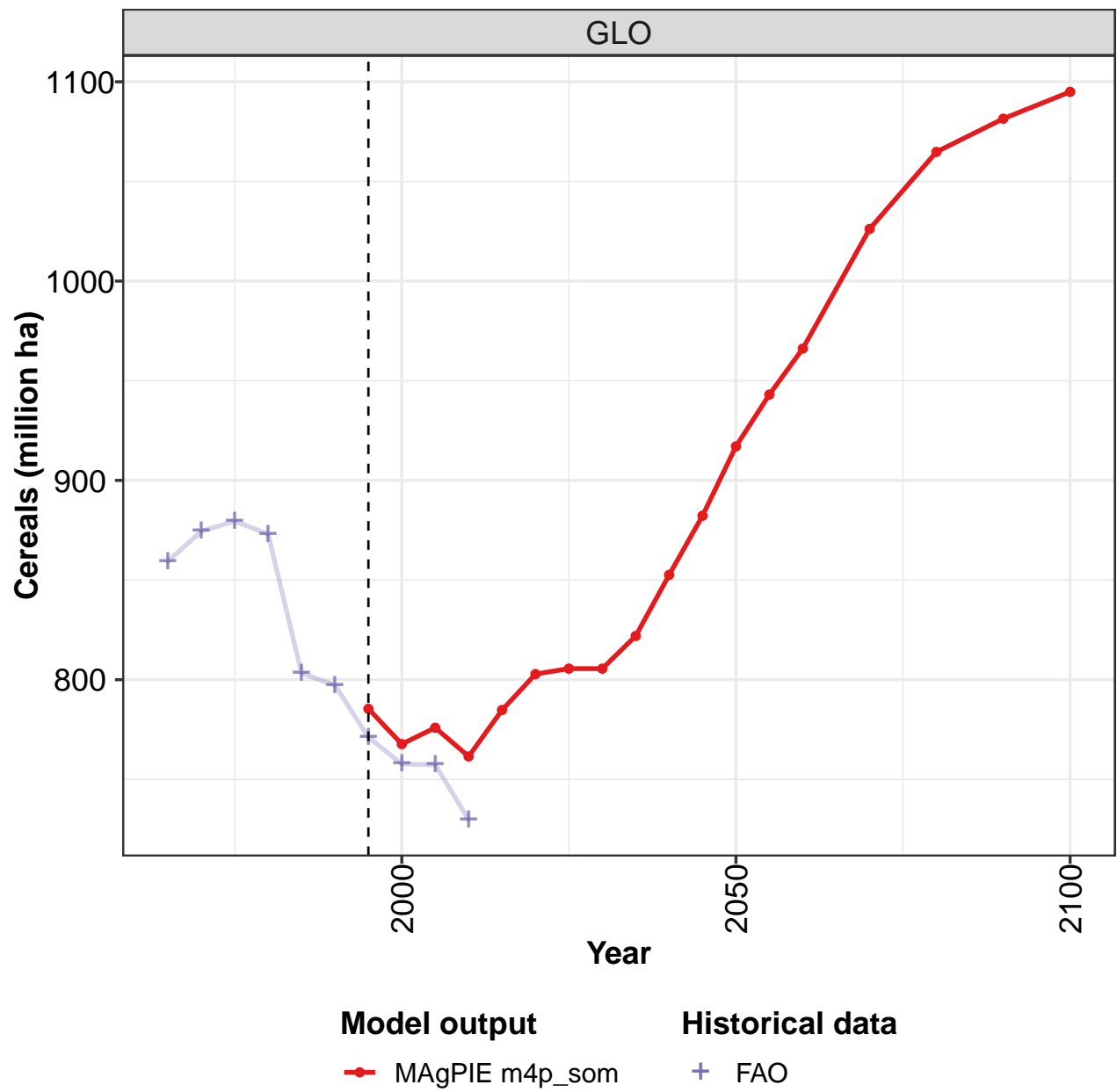
Table 1587: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1266	1294	1305	1317	1260	1283	1301	1311	1343	1337
CAZ	77	81	81	84	64	60	59	66	65	58
CHA	105	103	101	100	124	131	129	128	124	121
EUR	135	129	123	118	106	104	100	99	94	91
IND	156	158	159	161	162	162	162	162	161	160
JPN	6	5	5	4	4	4	4	4	4	3
LAM	99	110	120	127	125	136	148	152	167	174
MEA	62	63	65	63	64	67	73	69	75	74
NEU	34	35	35	36	34	34	33	32	32	29
OAS	115	118	122	127	131	140	139	145	152	160
REF	202	200	202	201	152	144	139	138	150	151
SSA	143	149	146	143	151	161	175	183	198	208
USA	132	144	147	153	142	140	139	133	122	109

Table 1588: FAO — Resources—Land Cover—Cropland—Crops (million ha)

55.1.5 Crops—Cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

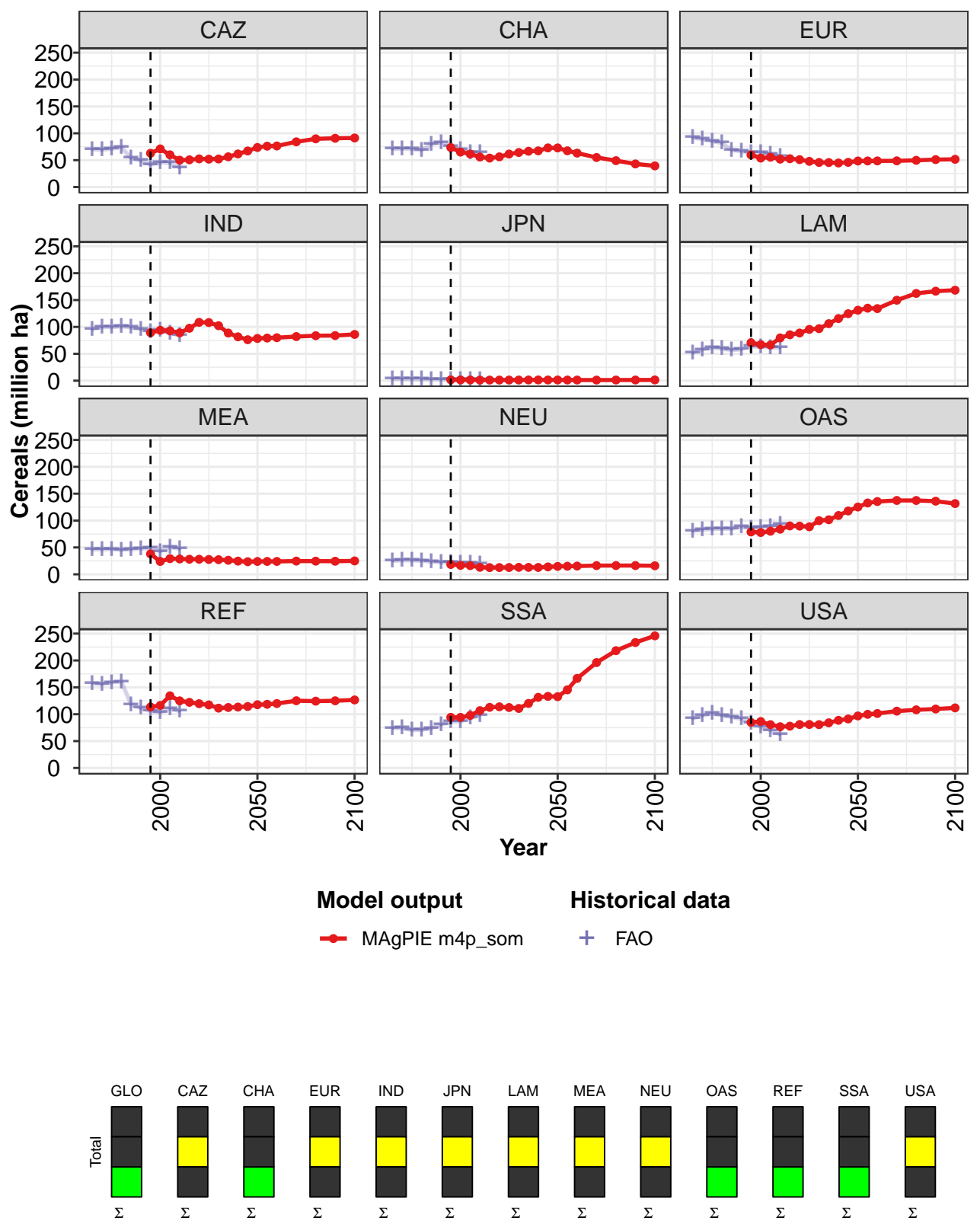


Figure 410: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Cereals (million ha)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	785	768	776	761	785	803	806	806	822	853	882
CAZ	63	71	60	50	51	52	52	52	56	62	67
CHA	74	65	61	56	54	56	61	64	67	67	73
EUR	60	54	56	52	53	51	48	46	46	45	46
IND	89	94	93	89	98	109	108	102	89	82	76
JPN	2	1	1	1	1	1	1	1	1	1	1
LAM	71	67	66	80	85	89	95	97	106	116	125
MEA	38	24	29	29	28	28	28	27	26	25	24
NEU	18	17	16	13	13	13	13	13	13	13	14
OAS	79	78	80	84	90	90	88	100	102	109	118
REF	114	116	134	125	122	120	117	111	113	113	114
SSA	94	94	98	107	113	114	113	111	120	131	133
USA	85	86	81	77	78	81	81	81	84	89	91

Table 1589: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Cereals (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	917	943	966	1026	1065	1081	1095
CAZ	74	76	76	84	90	91	91
CHA	73	67	63	55	49	43	39
EUR	48	49	49	49	50	51	52
IND	79	79	80	82	84	84	86
JPN	1	1	1	1	1	1	1
LAM	131	135	134	150	162	167	168
MEA	24	24	24	25	25	24	25
NEU	15	15	15	16	16	16	16
OAS	125	133	135	137	137	136	132
REF	118	118	120	125	124	125	127
SSA	133	145	167	196	218	233	246
USA	97	100	101	106	108	110	112

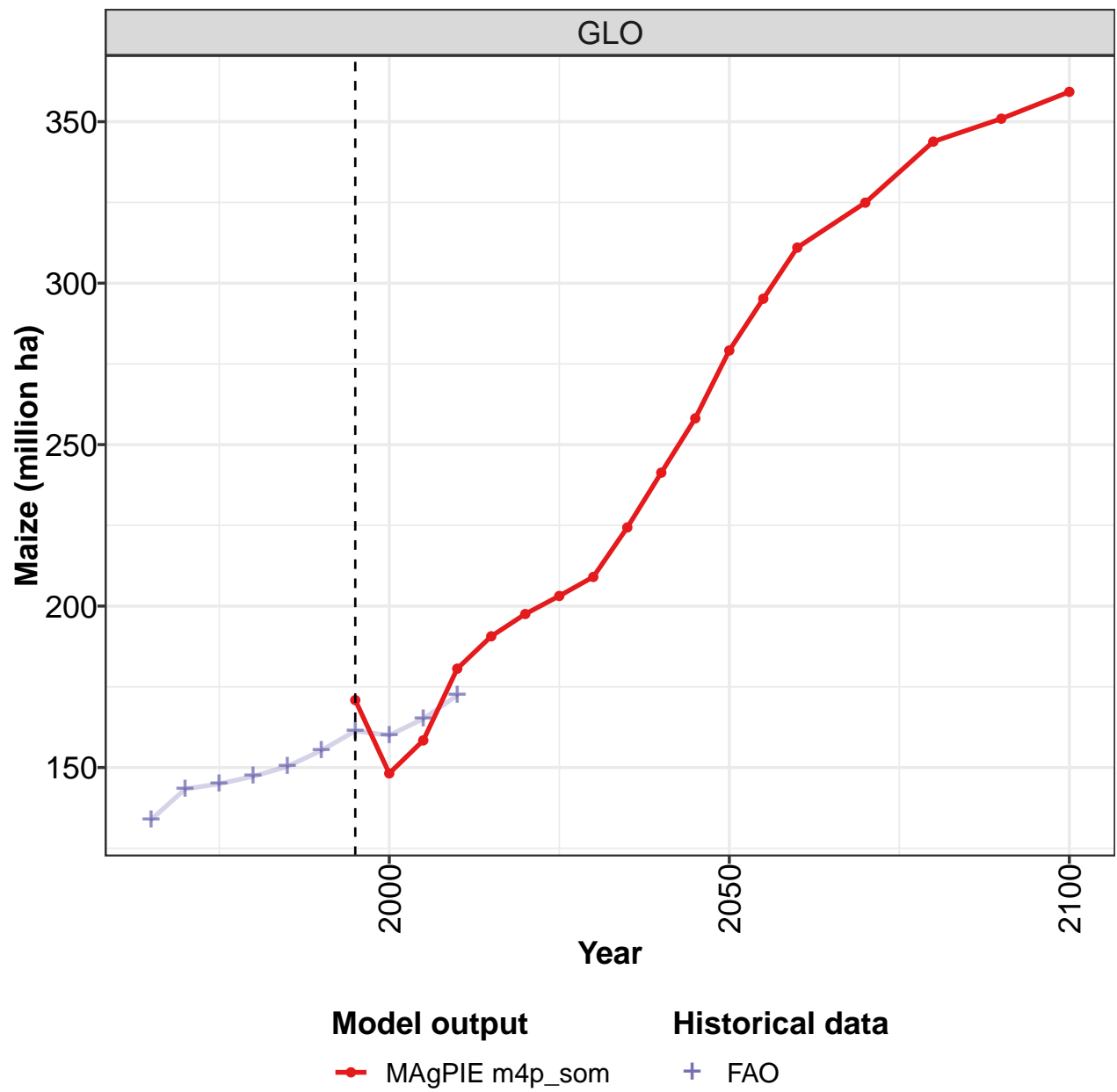
Table 1590: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Cereals (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	859	874	880	873	803	797	771	758	757	730
CAZ	70	69	71	74	54	49	42	46	45	36
CHA	71	71	71	69	80	83	76	69	64	64
EUR	92	89	85	82	69	66	63	64	61	57
IND	96	100	100	101	99	96	91	94	89	84
JPN	4	3	3	3	3	3	3	2	2	2
LAM	52	58	61	60	57	58	64	63	62	61
MEA	46	46	47	45	47	48	49	43	51	47
NEU	25	26	26	25	23	22	22	21	21	19
OAS	80	83	84	85	85	88	86	88	89	93
REF	158	156	159	160	118	111	106	104	111	106
SSA	74	74	71	71	74	81	86	87	93	98
USA	92	97	102	98	95	91	84	77	70	62

Table 1591: FAO — Resources—Land Cover—Cropland—Crops—Cereals (million ha)

55.1.6 Crops—Cereals—Maize

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

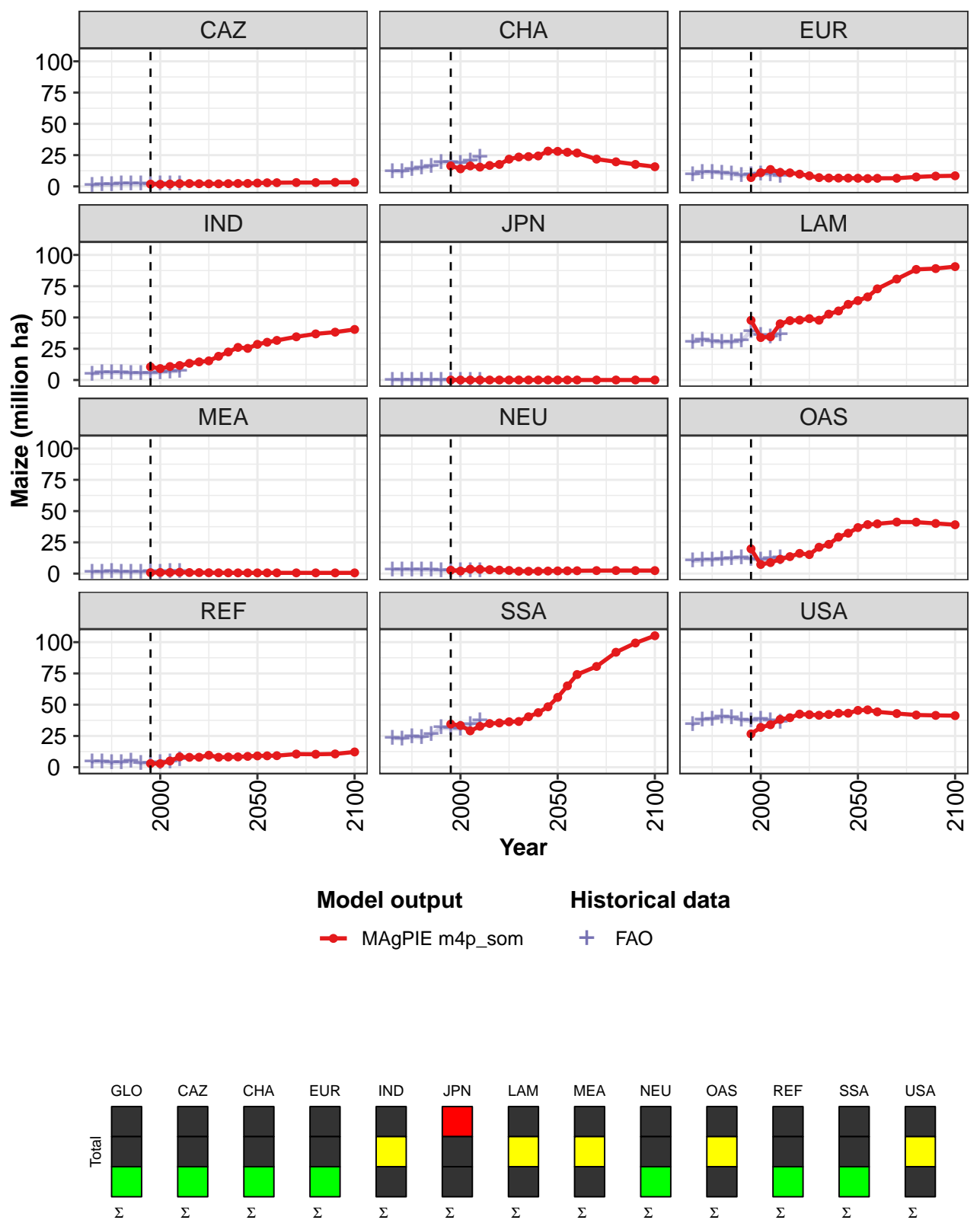


Figure 411: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Cereals—Maize (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	171	148	158	181	191	198	203	209	224	241	258
CAZ	2	2	2	2	2	2	2	2	2	2	2
CHA	16	14	16	15	17	18	22	23	24	24	28
EUR	7	11	14	11	11	10	8	7	7	7	7
IND	11	9	11	12	13	14	15	19	22	26	25
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	48	34	35	45	47	48	49	48	53	55	60
MEA	1	1	1	1	1	1	1	1	1	1	1
NEU	3	2	4	3	3	3	3	2	2	2	2
OAS	20	7	9	11	14	16	15	21	23	29	32
REF	3	3	5	8	8	8	10	8	8	8	9
SSA	34	33	29	33	35	35	36	37	40	44	48
USA	27	32	34	38	40	42	42	42	42	43	43

Table 1592: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Cereals—Maize (million ha)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	279	295	311	325	344	351	359
CAZ	3	3	3	3	3	3	3
CHA	28	27	27	22	20	18	16
EUR	7	6	6	7	8	8	8
IND	29	30	32	35	37	38	40
JPN	0	0	0	0	0	0	0
LAM	63	66	73	81	88	89	91
MEA	1	1	1	1	1	1	1
NEU	2	2	2	2	2	2	2
OAS	37	39	40	41	41	40	39
REF	9	9	9	11	10	11	12
SSA	56	65	74	81	92	99	105
USA	45	46	44	43	42	41	41

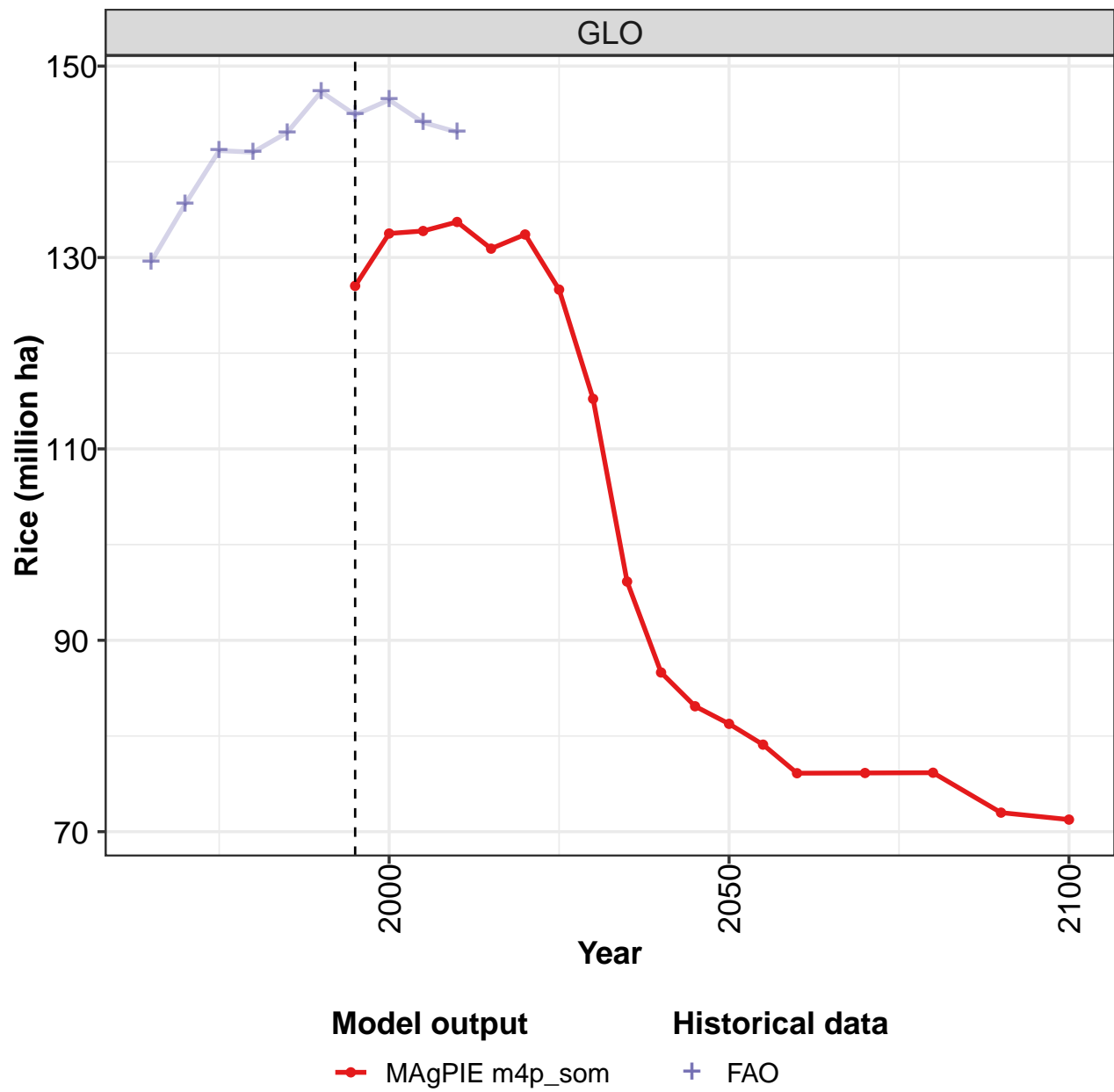
Table 1593: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Cereals—Maize (million ha)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	134	143	145	147	150	155	161	160	165	172
CAZ	1	1	1	2	2	2	2	2	2	2
CHA	12	12	13	15	16	19	19	19	20	23
EUR	10	11	11	11	10	9	9	10	9	8
IND	5	6	6	6	6	6	5	6	7	7
JPN	0	0	0	0	0	0	0	0	0	0
LAM	30	32	31	30	30	31	39	36	35	36
MEA	1	1	1	1	1	1	2	1	2	2
NEU	3	3	3	3	3	3	2	3	3	3
OAS	10	11	11	12	12	13	12	11	12	13
REF	4	4	3	4	5	3	3	4	4	6
SSA	23	23	24	24	26	32	31	31	34	37
USA	34	38	39	40	40	38	37	38	37	36

Table 1594: FAO — Resources—Land Cover—Cropland—Crops—Cereals—Maize (million ha)

55.1.7 Crops—Cereals—Rice

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## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.
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## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

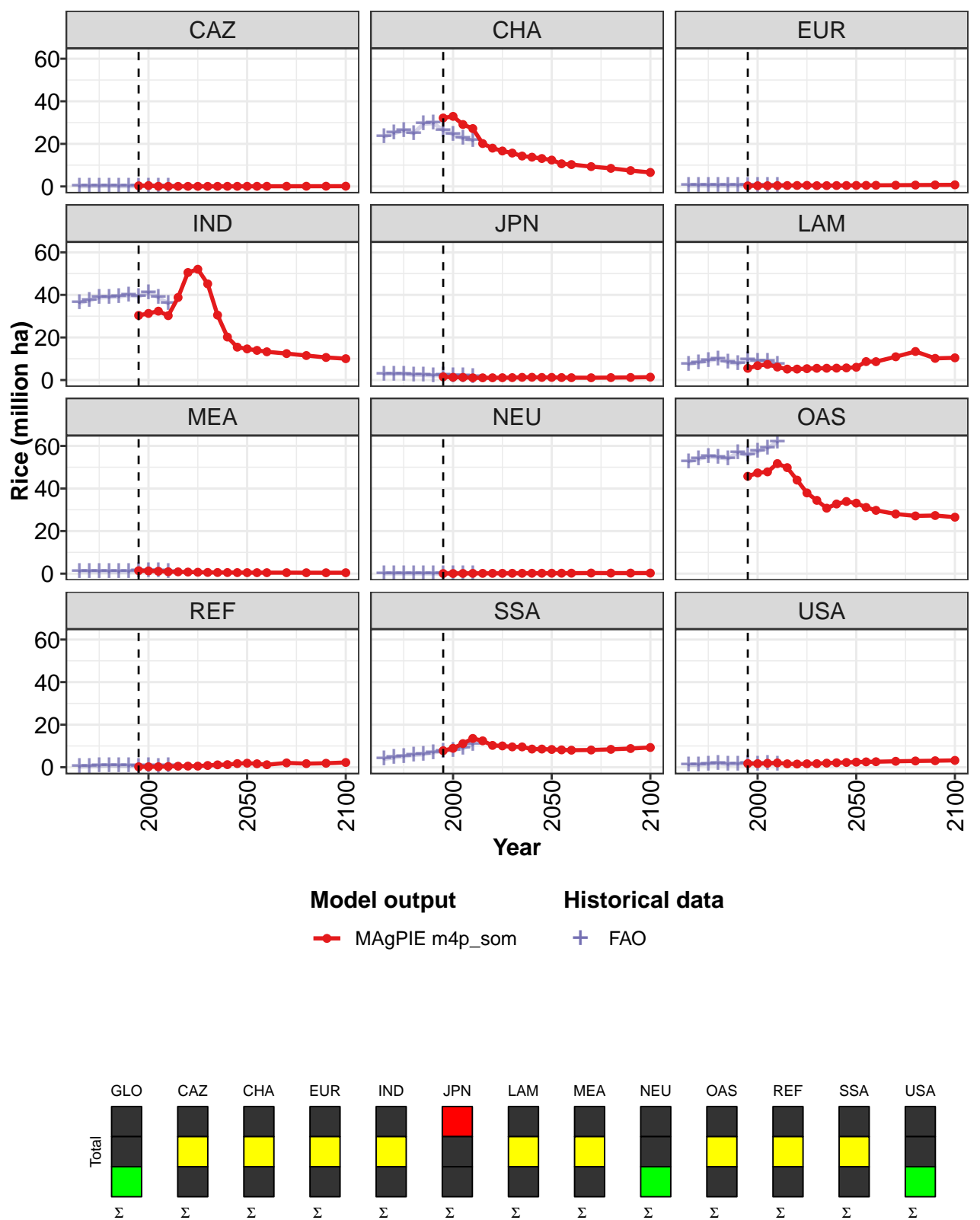


Figure 412: MAGPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Cereals—Rice (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	127	133	133	134	131	132	127	115	96	87	83
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	32	33	29	27	20	18	17	16	14	14	13
EUR	0	0	0	0	0	0	1	0	0	0	0
IND	30	31	32	30	39	51	52	45	31	20	15
JPN	2	1	1	1	1	1	1	1	1	1	1
LAM	5	7	7	6	5	5	5	6	6	6	6
MEA	1	1	1	1	1	1	1	1	1	1	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	46	47	48	52	50	44	38	34	31	33	34
REF	0	0	0	0	0	1	1	1	1	1	2
SSA	8	9	11	14	12	10	10	10	10	9	9
USA	2	2	2	2	2	2	2	2	2	2	2

Table 1595: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Cereals—Rice (million ha)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	81	79	76	76	76	72	71
CAZ	0	0	0	0	0	0	0
CHA	12	11	10	9	8	7	7
EUR	0	0	1	1	1	1	1
IND	15	14	13	12	12	11	10
JPN	1	1	1	1	1	1	1
LAM	6	9	9	11	13	10	10
MEA	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0
OAS	33	31	30	28	27	27	27
REF	2	2	1	2	2	2	2
SSA	8	8	8	8	8	9	9
USA	2	3	3	3	3	3	3

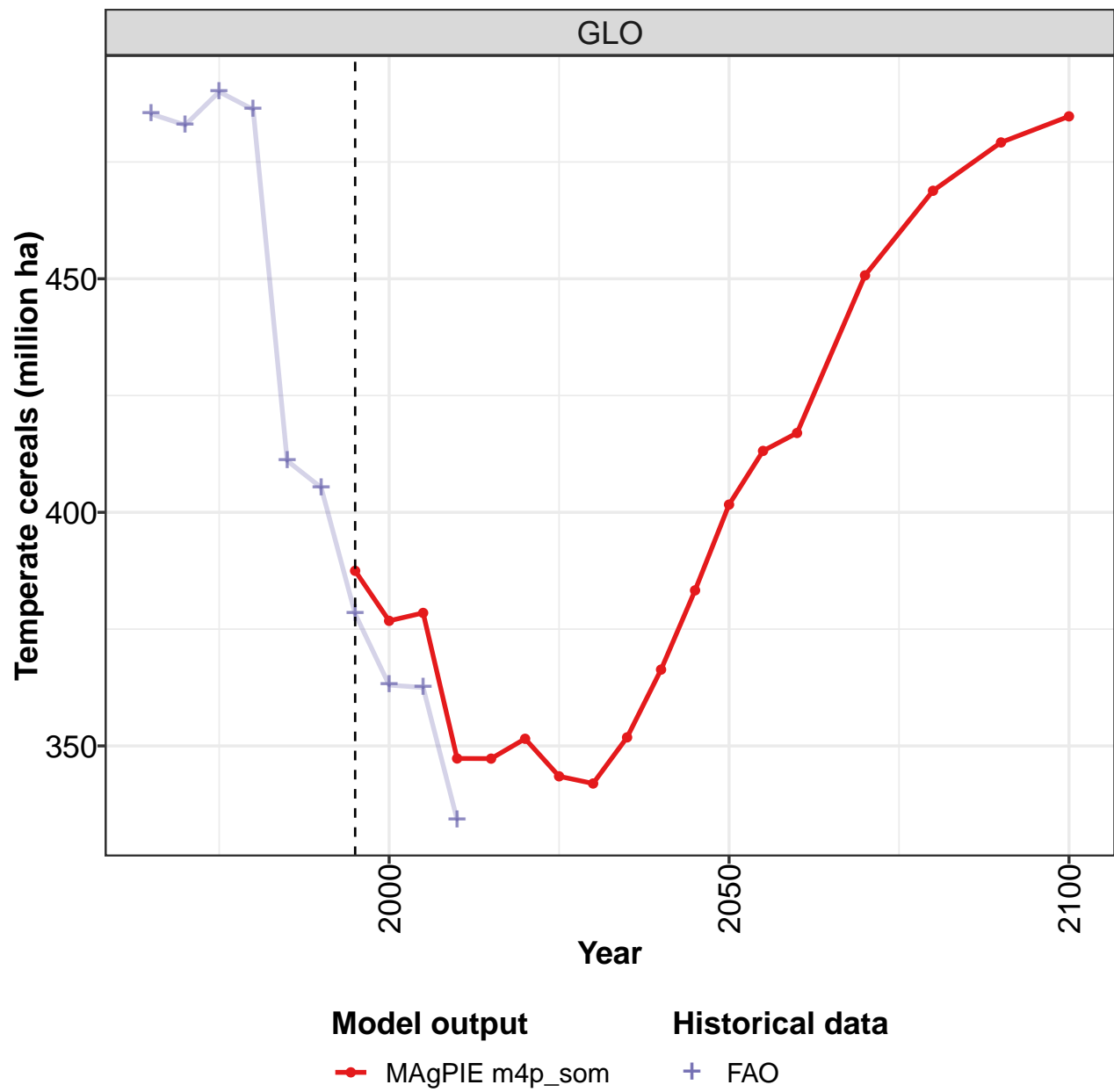
Table 1596: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Cereals—Rice (million ha)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	130	136	141	141	143	147	145	146	144	143
CAZ	0	0	0	0	0	0	0	0	0	0
CHA	23	25	26	25	29	30	26	24	23	22
EUR	0	0	0	0	0	0	0	0	0	1
IND	36	37	39	39	39	40	39	41	39	36
JPN	3	3	3	2	2	2	2	2	2	2
LAM	7	8	9	10	8	8	9	9	9	7
MEA	1	1	1	1	1	1	1	1	1	1
NEU	0	0	0	0	0	0	0	0	0	0
OAS	53	54	55	55	54	57	56	58	59	62
REF	0	0	1	1	1	1	1	1	0	1
SSA	4	5	5	6	6	7	8	8	9	11
USA	1	1	2	2	1	2	2	2	2	2

Table 1597: FAO — Resources—Land Cover—Cropland—Crops—Cereals—Rice (million ha)

55.1.8 Crops—Cereals—Temperate cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

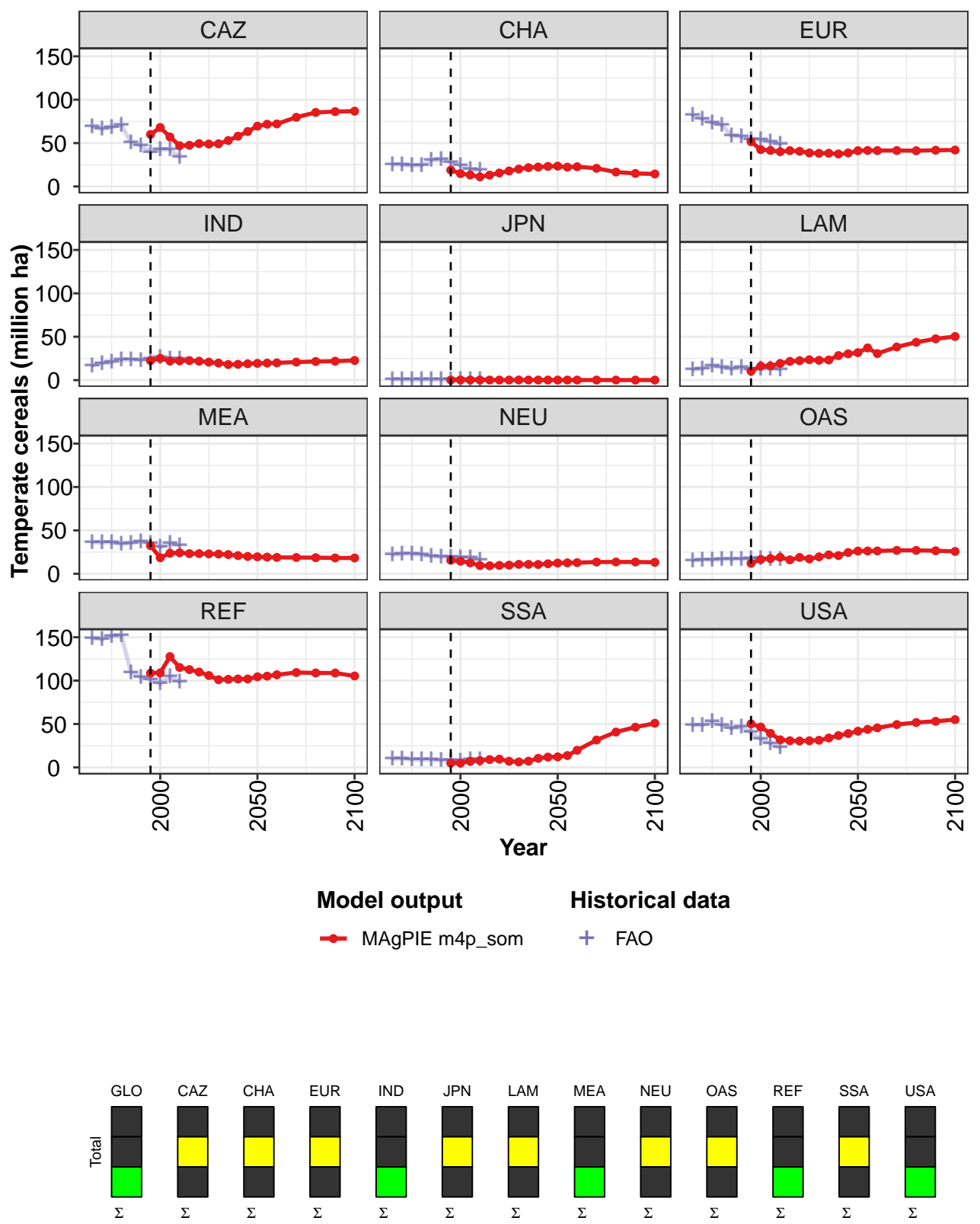


Figure 413: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Cereals—Temperate cereals (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	387	377	378	347	347	352	343	342	352	366	383
CAZ	60	68	57	47	48	49	49	49	53	58	63
CHA	19	15	13	11	13	16	18	20	22	22	23
EUR	52	43	42	40	41	41	39	38	38	38	39
IND	22	25	22	22	23	22	21	20	18	18	19
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	10	16	16	19	22	22	23	23	23	28	30
MEA	32	18	24	24	23	23	23	23	22	21	20
NEU	16	15	13	9	9	10	10	11	11	11	12
OAS	12	17	18	19	16	19	17	19	22	21	25
REF	109	109	128	115	113	110	106	101	102	102	102
SSA	5	5	7	8	9	10	7	6	7	10	12
USA	50	47	39	32	31	30	31	31	34	37	39

Table 1598: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Cereals—Temperate cereals (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	402	413	417	451	469	479	485
CAZ	70	72	72	80	85	86	87
CHA	23	22	23	21	17	15	14
EUR	41	42	41	41	41	42	42
IND	19	20	20	21	21	22	23
JPN	0	0	0	0	0	0	0
LAM	32	37	31	38	44	48	50
MEA	20	19	19	19	19	18	18
NEU	12	13	13	14	14	14	13
OAS	26	26	26	27	27	27	26
REF	104	105	107	109	109	109	105
SSA	12	14	20	32	41	46	51
USA	42	44	46	49	52	53	55

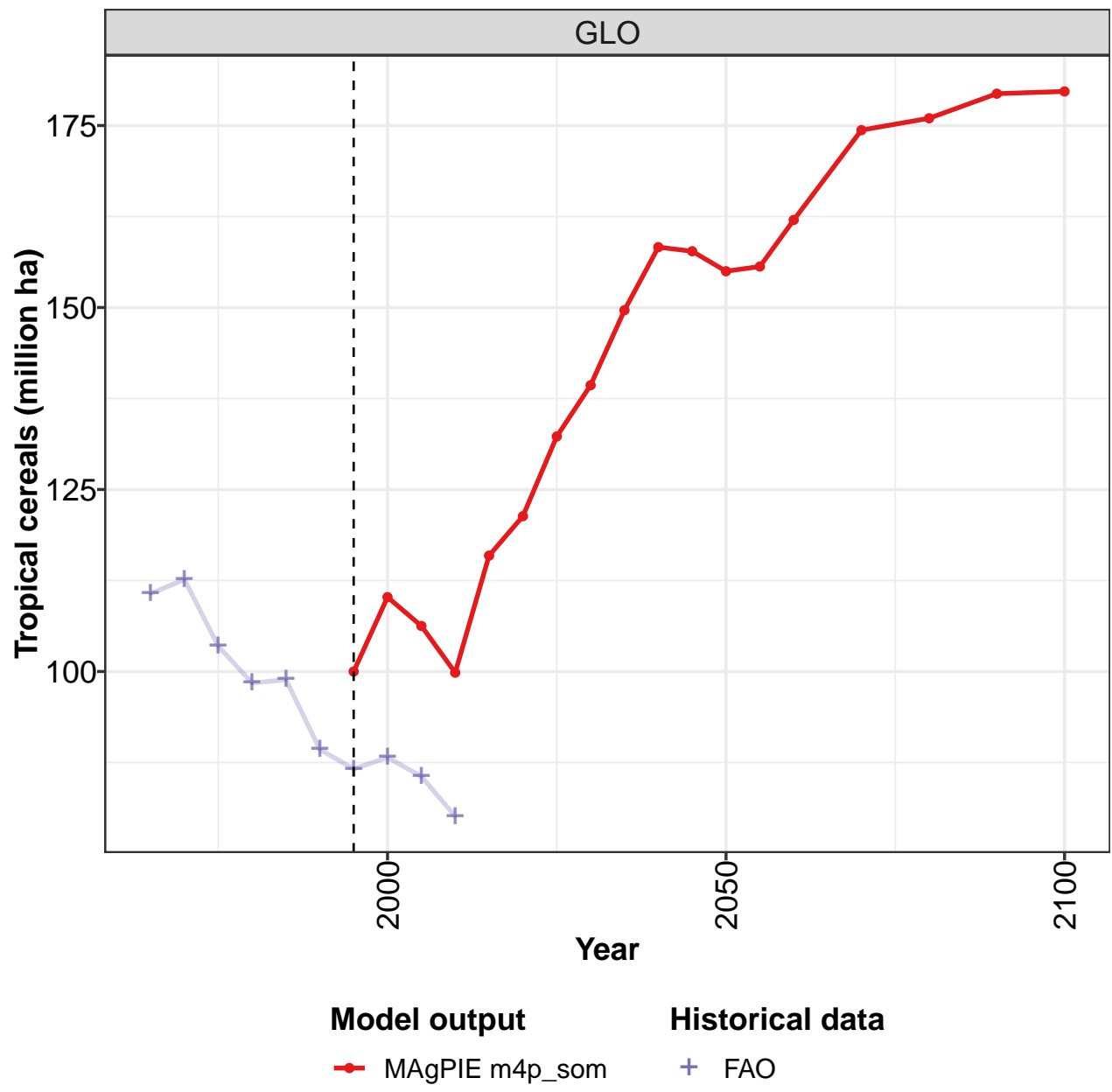
Table 1599: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Cereals—Temperate cereals (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	485	483	490	486	411	405	378	363	363	334
CAZ	69	66	68	71	51	47	39	43	42	34
CHA	25	25	24	24	30	31	28	24	19	19
EUR	82	78	73	71	59	57	54	54	51	48
IND	17	19	21	23	24	23	24	26	24	24
JPN	1	0	0	0	0	0	0	0	0	0
LAM	12	13	16	15	13	15	12	12	13	12
MEA	36	36	36	34	35	37	35	31	35	33
NEU	22	23	23	22	20	19	19	19	18	16
OAS	15	16	16	17	17	17	17	18	17	17
REF	149	147	151	152	109	104	101	96	105	98
SSA	10	10	9	9	9	8	8	7	9	9
USA	49	49	53	49	45	47	40	32	28	23

Table 1600: FAO — Resources—Land Cover—Cropland—Crops—Cereals—Temperate cereals (million ha)

55.1.9 Crops—Cereals—Tropical cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

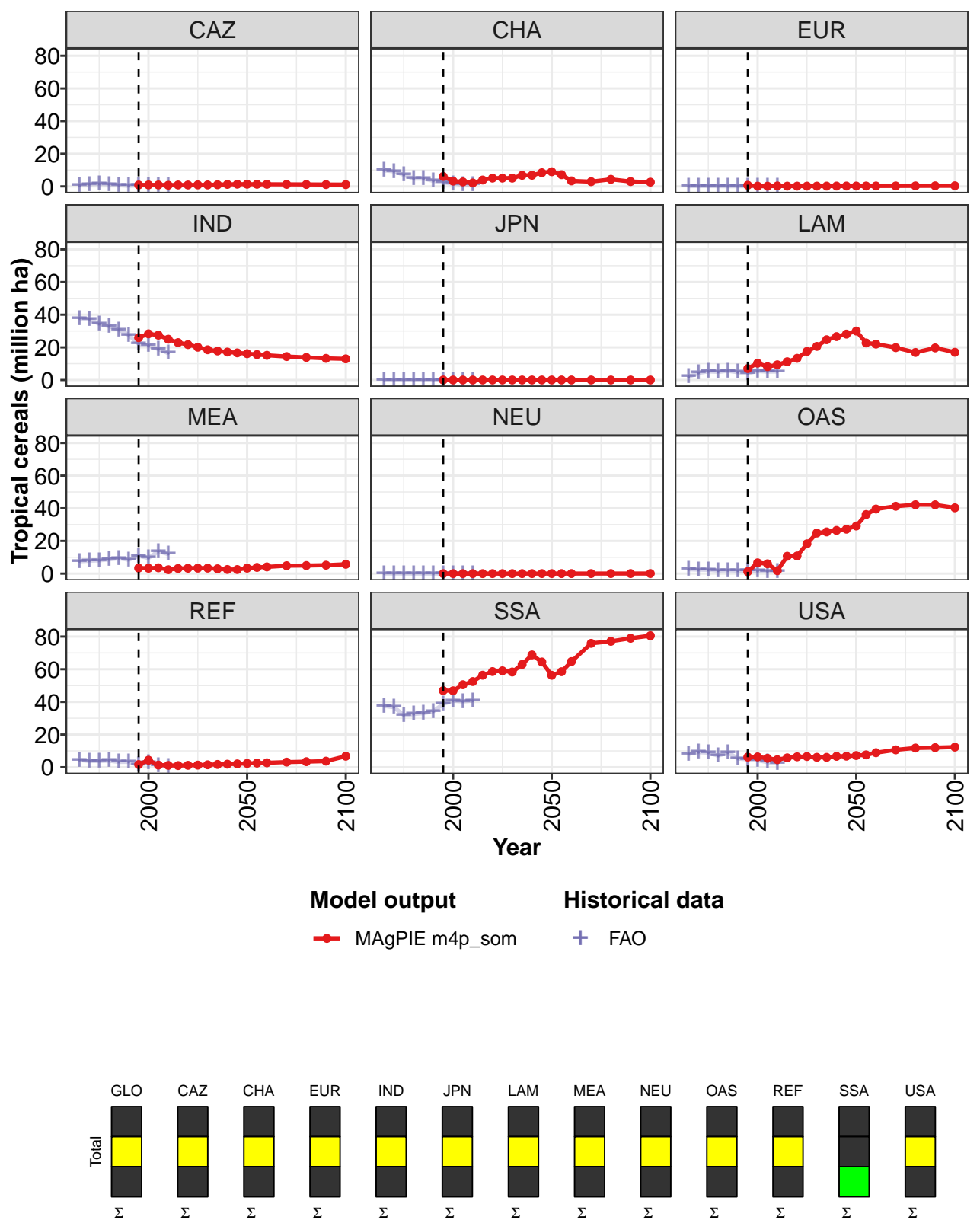


Figure 414: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Cereals—Tropical cereals (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	100	110	106	100	116	121	132	139	150	158	158
CAZ	1	1	1	1	1	1	1	1	1	1	1
CHA	6	3	3	2	4	5	5	5	7	7	8
EUR	1	0	0	0	0	0	0	0	0	0	0
IND	26	28	27	25	23	22	20	19	18	17	17
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	7	10	8	9	11	13	17	21	25	27	28
MEA	3	3	4	2	3	3	3	3	3	3	2
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	1	7	6	2	11	11	18	25	26	26	27
REF	2	4	1	1	1	1	1	1	2	2	2
SSA	47	47	51	52	56	59	59	58	63	69	64
USA	6	6	5	5	6	6	7	6	6	7	7

Table 1601: MAgPIE m4p.som — Resources—Land Cover—Cropland—Crops—Cereals—Tropical cereals (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	155	156	162	174	176	179	180
CAZ	1	1	1	1	1	1	1
CHA	9	7	3	3	4	3	3
EUR	0	0	0	0	0	0	0
IND	16	16	15	14	14	13	13
JPN	0	0	0	0	0	0	0
LAM	30	23	22	20	17	20	17
MEA	3	4	4	5	5	5	6
NEU	0	0	0	0	0	0	0
OAS	29	36	40	41	42	42	40
REF	2	3	3	3	3	4	7
SSA	56	59	65	76	77	79	81
USA	7	8	9	11	12	12	12

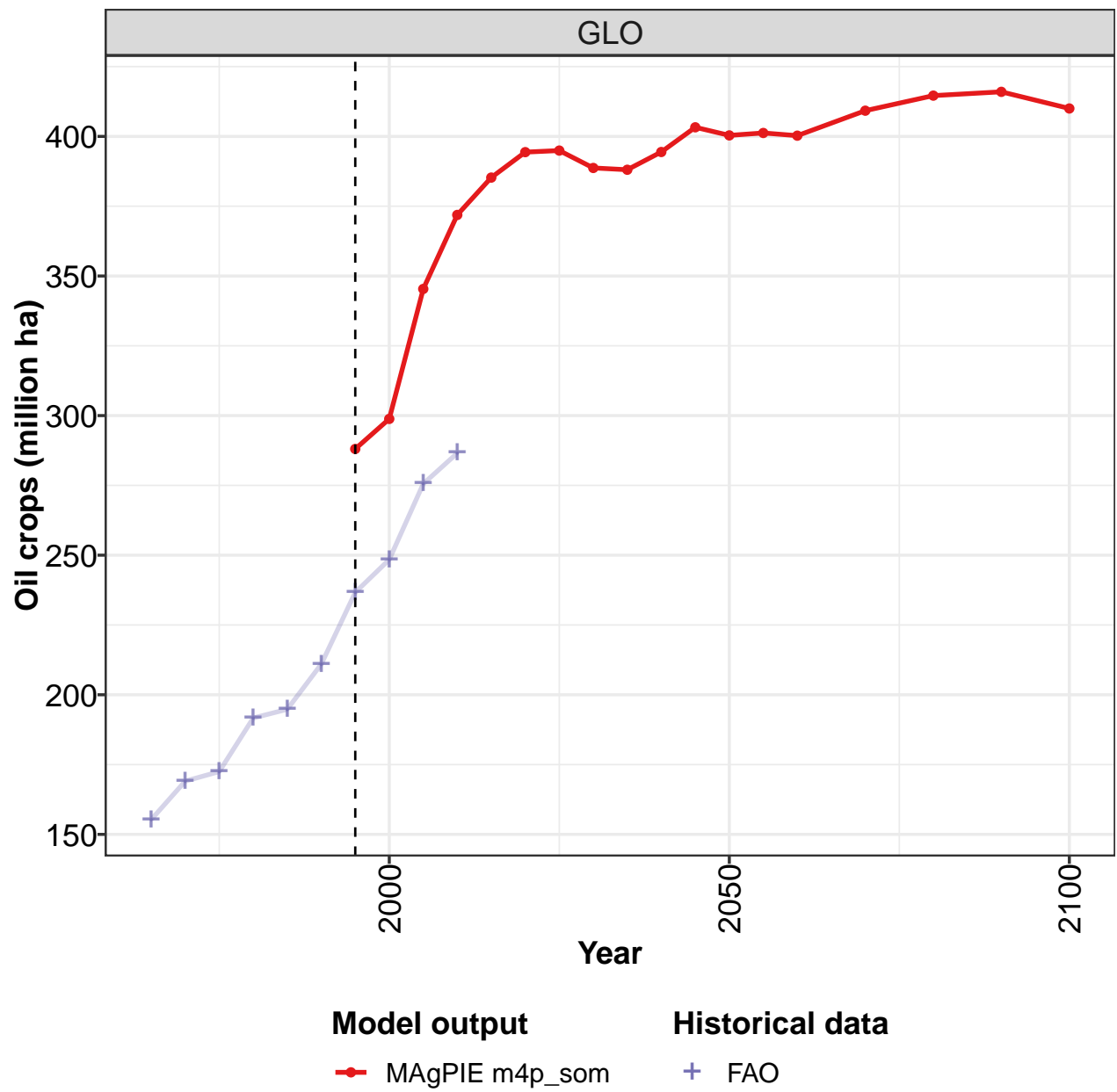
Table 1602: MAgPIE m4p.som — Resources—Land Cover—Cropland—Crops—Cereals—Tropical cereals (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	111	113	103	98	99	89	87	88	86	80
CAZ	1	1	2	1	1	0	1	1	1	0
CHA	10	9	7	5	5	3	2	2	1	1
EUR	0	0	0	0	0	0	0	0	0	0
IND	38	37	34	33	31	28	22	21	19	16
JPN	0	0	0	0	0	0	0	0	0	0
LAM	2	4	5	5	6	5	4	5	5	5
MEA	8	8	8	9	9	8	11	10	14	12
NEU	0	0	0	0	0	0	0	0	0	0
OAS	3	2	2	2	2	2	2	2	1	1
REF	4	4	4	4	3	3	1	3	1	1
SSA	38	37	32	33	33	34	39	41	40	41
USA	8	9	9	7	9	5	5	4	3	2

Table 1603: FAO — Resources—Land Cover—Cropland—Crops—Cereals—Tropical cereals (million ha)

55.1.10 Crops—Oil crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

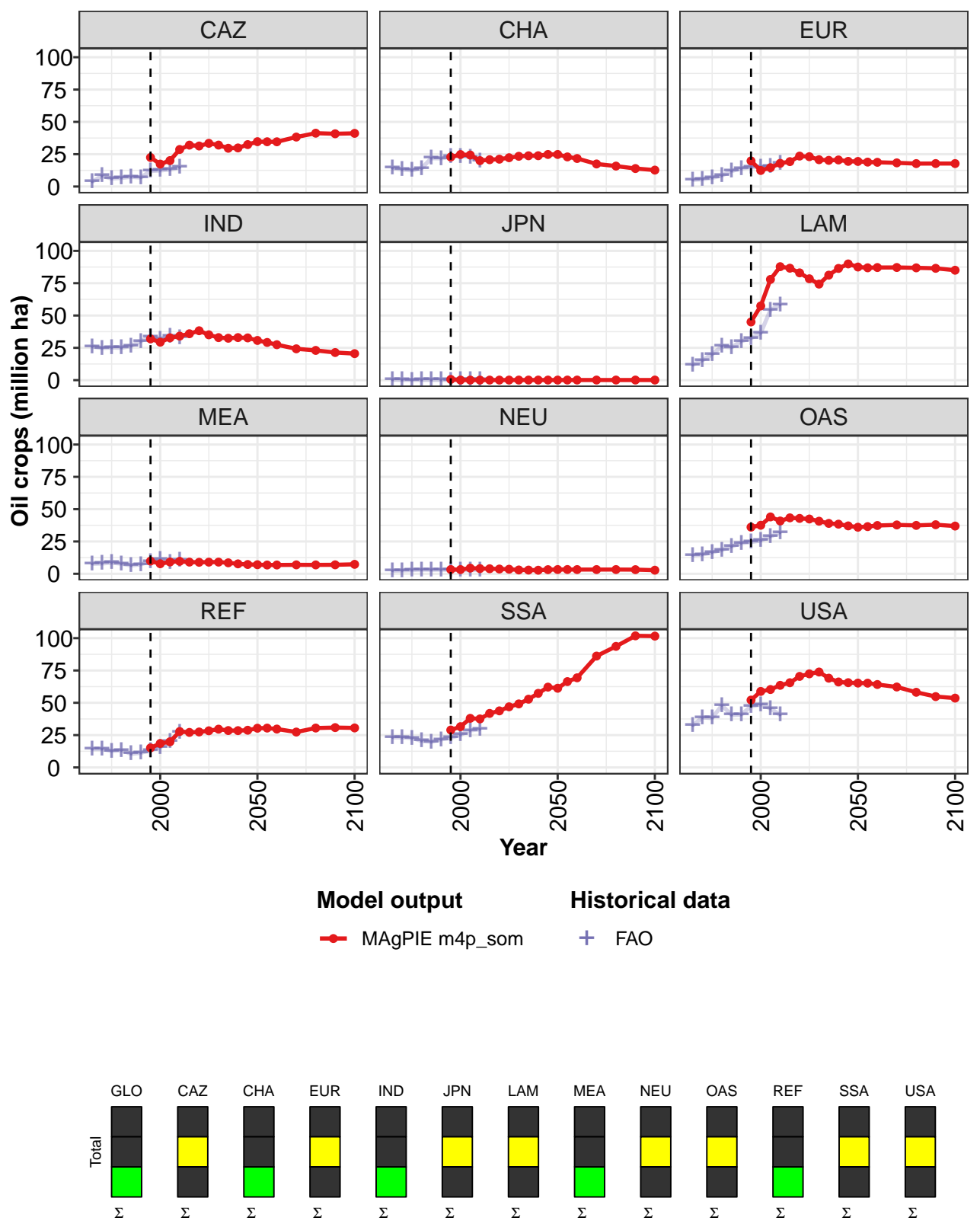


Figure 415: MAGPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Oil crops (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	288	299	345	372	385	394	395	389	388	394	403
CAZ	22	17	20	29	32	31	33	32	30	30	32
CHA	23	25	24	20	21	21	22	23	24	24	25
EUR	20	12	15	18	19	24	23	21	20	21	19
IND	32	29	33	34	36	38	35	33	32	33	33
JPN	1	0	0	0	0	0	0	0	0	0	0
LAM	45	57	78	88	87	83	78	74	81	86	90
MEA	10	8	9	10	9	9	9	9	8	8	7
NEU	3	3	4	4	4	4	4	3	3	3	3
OAS	36	38	44	41	43	43	42	41	39	38	37
REF	15	19	20	28	27	27	28	30	29	28	29
SSA	29	32	38	38	42	44	47	49	53	57	62
USA	52	59	60	64	66	70	72	74	69	66	66

Table 1604: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Oil crops (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	400	401	400	409	415	416	410
CAZ	35	35	35	38	41	41	41
CHA	25	23	22	17	16	14	13
EUR	19	19	19	18	18	18	18
IND	31	29	27	24	23	21	21
JPN	0	0	0	0	0	0	0
LAM	88	87	87	87	87	87	85
MEA	7	7	7	7	7	7	7
NEU	3	3	3	3	3	3	3
OAS	36	37	37	38	37	38	37
REF	30	30	30	27	30	31	31
SSA	61	66	69	86	94	102	102
USA	65	65	64	62	58	55	54

Table 1605: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Oil crops (million ha) [PART 2/2]

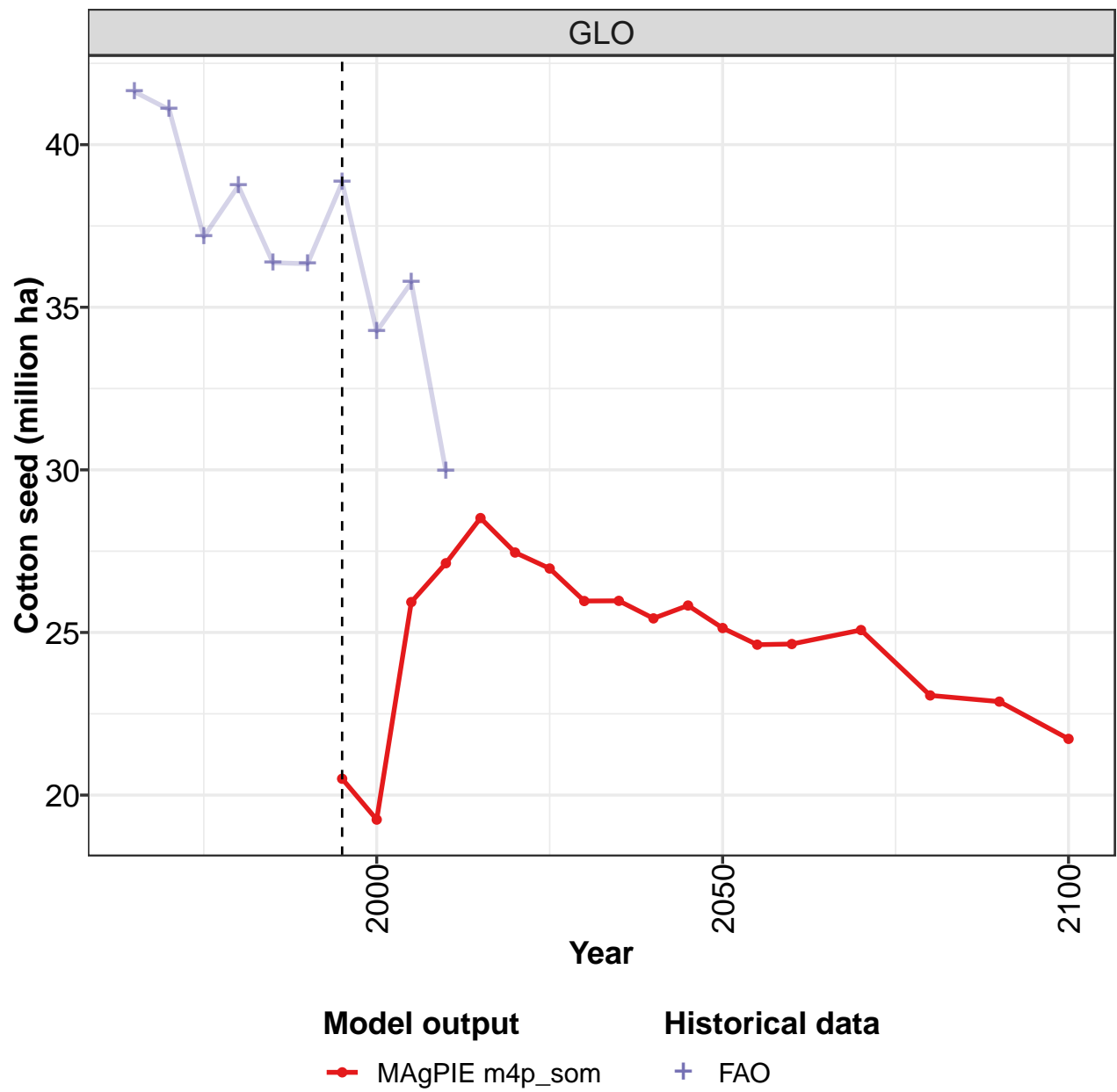
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	155	169	172	192	195	211	237	248	276	287
CAZ	4	8	6	7	7	7	12	12	13	15
CHA	14	13	12	14	22	22	23	24	23	20
EUR	5	6	7	8	12	14	15	15	15	18
IND	26	25	25	25	26	30	34	32	34	33
JPN	0	0	0	0	0	0	0	0	0	0
LAM	12	15	20	26	25	30	32	36	54	58
MEA	8	8	9	8	6	7	10	11	9	11
NEU	2	3	3	3	3	3	3	3	3	3
OAS	14	15	17	18	21	24	25	26	29	32
REF	14	14	13	13	10	11	13	16	20	27
SSA	23	23	23	20	20	22	23	25	29	29
USA	32	39	38	48	41	41	47	49	46	41

Table 1606: FAO — Resources—Land Cover—Cropland—Crops—Oil crops (million ha)



55.1.11 Crops—Oil crops—Cotton seed

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



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## Scale for 'colour' is already present. Adding another scale for 'colour', which will##
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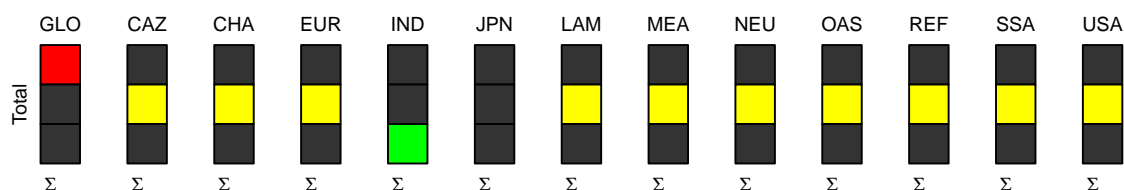
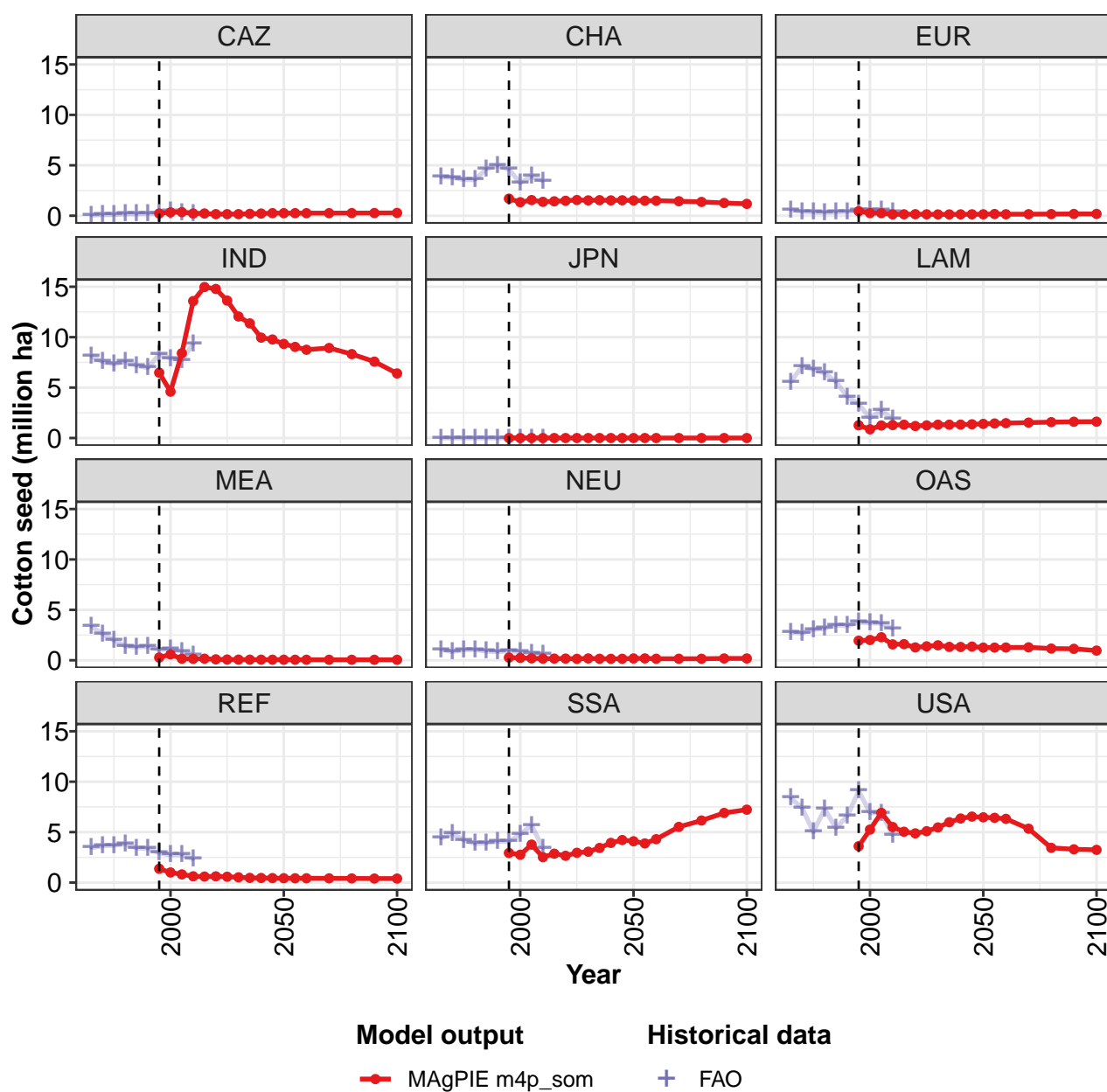


Figure 416: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Oil crops—Cotton seed (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	20.5	19.2	25.9	27.1	28.5	27.5	27.0	26.0	26.0	25.4	25.8
CAZ	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
CHA	1.7	1.3	1.6	1.4	1.4	1.5	1.6	1.5	1.5	1.5	1.5
EUR	0.4	0.3	0.3	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
IND	6.5	4.6	8.4	13.6	15.0	14.8	13.6	12.1	11.4	10.0	9.8
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.3	0.9	1.2	1.3	1.3	1.2	1.3	1.3	1.3	1.3	1.4
MEA	0.3	0.6	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
NEU	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1
OAS	1.9	2.0	2.3	1.6	1.6	1.3	1.4	1.5	1.3	1.3	1.4
REF	1.4	1.0	0.8	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.4
SSA	2.9	2.8	3.8	2.5	2.9	2.7	3.0	3.1	3.4	3.9	4.2
USA	3.6	5.3	6.9	5.5	5.0	4.9	5.1	5.5	6.0	6.4	6.5

Table 1607: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Oil crops—Cotton seed (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	25.1	24.6	24.6	25.1	23.1	22.9	21.7
CAZ	0.3	0.3	0.3	0.3	0.3	0.3	0.3
CHA	1.5	1.5	1.5	1.4	1.4	1.3	1.2
EUR	0.1	0.2	0.1	0.2	0.2	0.2	0.2
IND	9.3	9.0	8.8	8.9	8.3	7.6	6.4
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.4	1.4	1.5	1.5	1.6	1.6	1.6
MEA	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	1.3	1.3	1.3	1.3	1.2	1.1	1.0
REF	0.4	0.4	0.4	0.4	0.4	0.4	0.4
SSA	4.1	3.9	4.3	5.5	6.2	6.9	7.2
USA	6.5	6.4	6.3	5.3	3.4	3.3	3.2

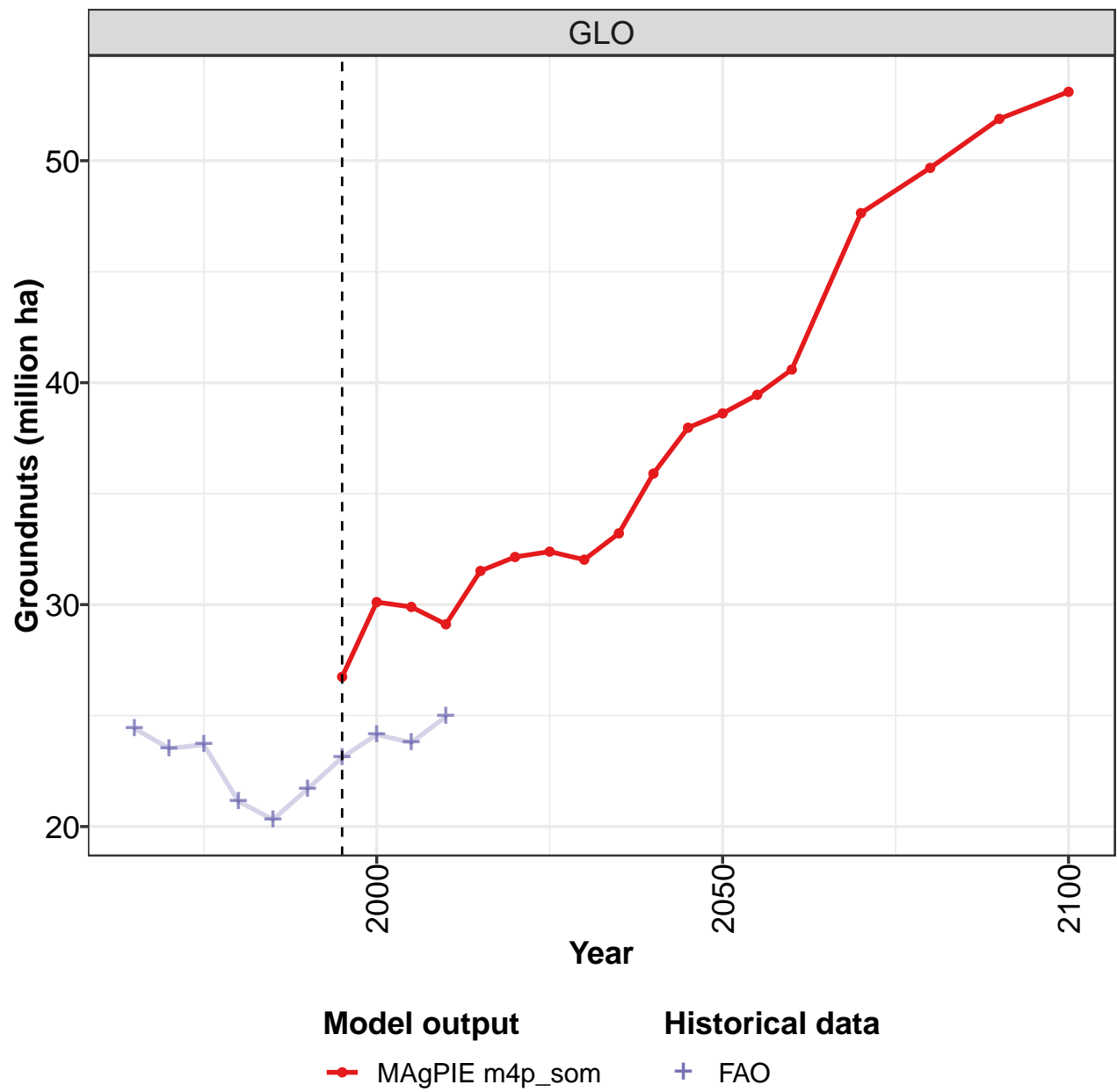
Table 1608: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Oil crops—Cotton seed (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	41.6	41.1	37.2	38.7	36.4	36.3	38.8	34.3	35.8	30.0
CAZ	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.5	0.3	0.2
CHA	3.8	3.8	3.6	3.6	4.6	5.0	4.6	3.3	3.9	3.4
EUR	0.6	0.4	0.4	0.3	0.4	0.4	0.5	0.6	0.5	0.4
IND	8.1	7.6	7.3	7.6	7.2	7.0	8.3	7.9	7.7	9.3
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	5.6	7.1	6.8	6.4	5.6	4.1	3.4	2.0	2.7	1.9
MEA	3.4	2.6	2.0	1.4	1.3	1.4	1.1	1.1	0.9	0.5
NEU	1.1	0.9	1.0	1.0	0.9	0.8	0.9	0.8	0.7	0.6
OAS	2.8	2.7	3.1	3.2	3.5	3.4	3.8	3.7	3.7	3.1
REF	3.4	3.6	3.7	3.8	3.4	3.4	2.9	2.7	2.8	2.3
SSA	4.4	4.9	4.2	3.9	3.9	4.1	4.1	4.8	5.7	3.4
USA	8.4	7.4	5.0	7.3	5.4	6.6	9.1	6.9	6.9	4.7

Table 1609: FAO — Resources—Land Cover—Cropland—Crops—Oil crops—Cotton seed (million ha)

55.1.12 Crops—Oil crops—Groundnuts

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

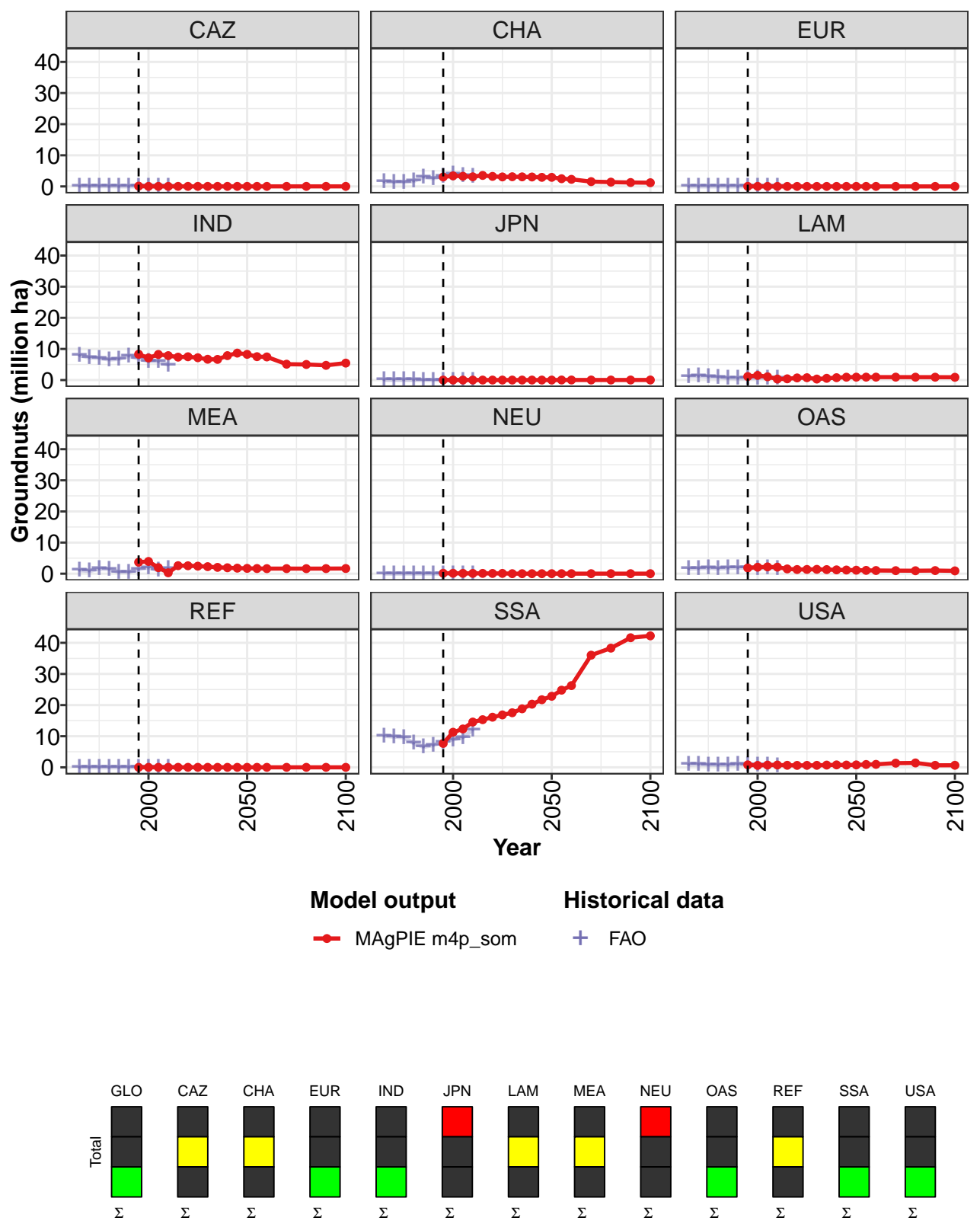


Figure 417: MAGPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Oil crops—Groundnuts (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	26.7	30.1	29.9	29.1	31.5	32.1	32.4	32.0	33.2	35.9	38.0
CAZ	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	3.0	3.4	3.3	3.1	3.5	3.2	3.1	3.1	3.1	3.0	2.9
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	8.3	7.1	8.2	7.9	7.4	7.5	7.2	6.7	6.6	7.9	8.7
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.1	1.5	1.1	0.3	0.4	0.7	0.8	0.3	0.6	0.8	0.9
MEA	3.7	3.9	2.0	0.3	2.6	2.5	2.4	2.3	2.0	1.9	1.8
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
OAS	1.8	2.1	2.2	2.1	1.5	1.3	1.4	1.4	1.3	1.2	1.2
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	7.7	11.3	12.3	14.6	15.3	16.1	16.8	17.5	18.8	20.3	21.7
USA	0.8	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.7	0.8	0.7

Table 1610: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Oil crops—Groundnuts (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	38.6	39.5	40.6	47.6	49.7	51.9	53.1
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	2.9	2.5	2.3	1.5	1.4	1.3	1.2
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	8.3	7.5	7.4	5.1	5.0	4.7	5.5
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.9	0.9	0.9	0.9	0.9	0.9	0.9
MEA	1.7	1.7	1.6	1.6	1.6	1.6	1.7
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.1	1.1	1.0	1.0	1.0	1.0	0.9
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	22.8	24.8	26.3	36.0	38.3	41.6	42.3
USA	0.8	0.9	1.0	1.3	1.4	0.6	0.7

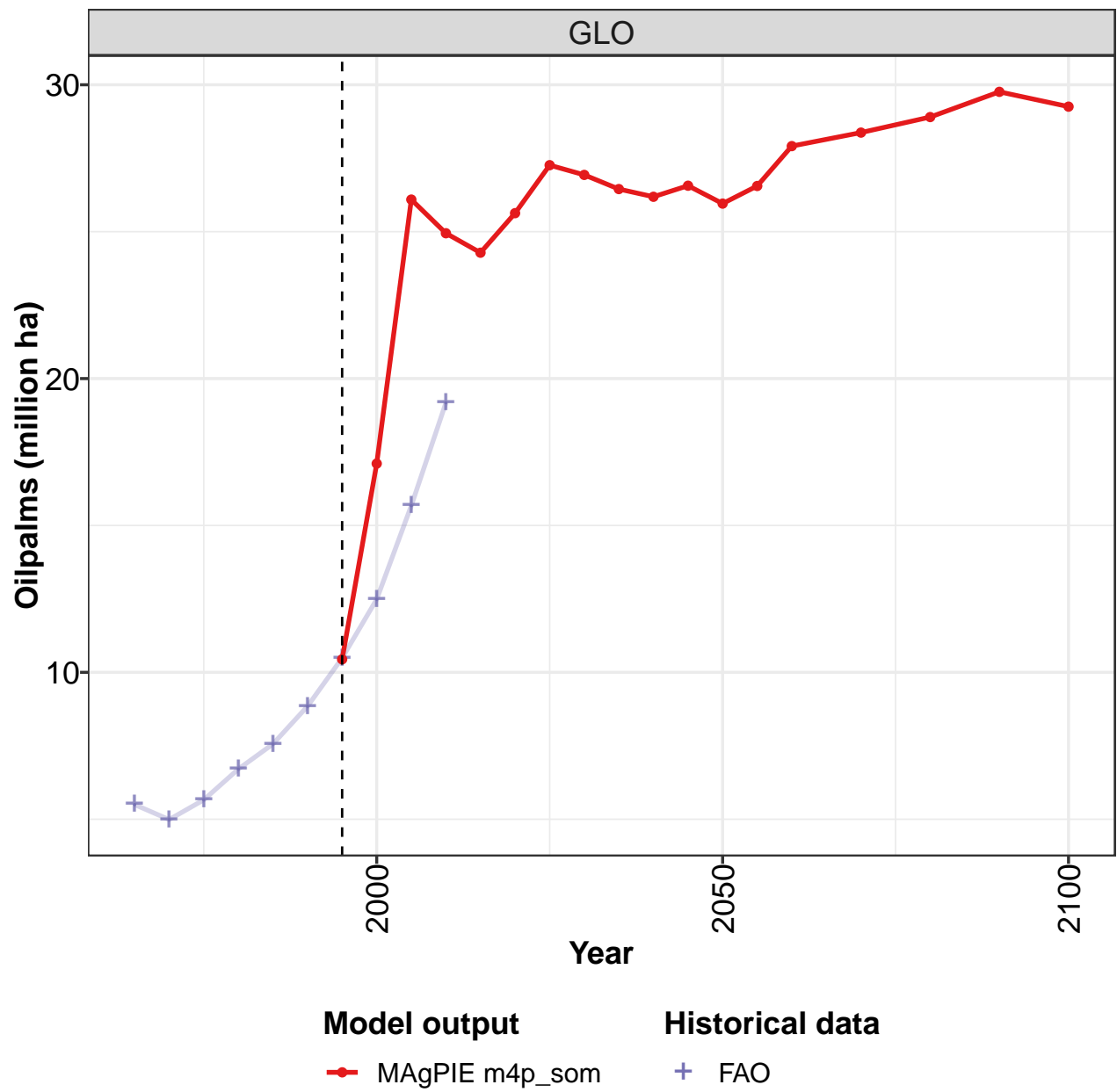
Table 1611: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Oil crops—Groundnuts (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	24.4	23.5	23.7	21.1	20.3	21.7	23.1	24.1	23.8	25.0
CAZ	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
CHA	1.5	1.3	1.4	1.7	3.0	2.6	3.3	3.9	3.6	3.2
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	7.9	7.3	7.1	6.6	6.8	7.8	6.9	6.0	6.0	4.9
JPN	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.2	1.3	1.1	1.0	0.6	0.6	0.5	0.7	0.7	0.6
MEA	1.1	0.9	1.6	1.5	0.6	0.5	1.4	2.0	1.1	1.7
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.6	1.7	1.9	1.6	1.8	2.0	1.8	1.7	1.9	1.7
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	10.1	9.9	9.6	7.8	6.6	7.1	8.2	8.9	9.6	12.1
USA	0.9	1.0	0.9	0.8	0.8	1.0	0.9	0.7	0.8	0.6

Table 1612: FAO — Resources—Land Cover—Cropland—Crops—Oil crops—Groundnuts (million ha)

55.1.13 Crops—Oil crops—Oilpalms

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

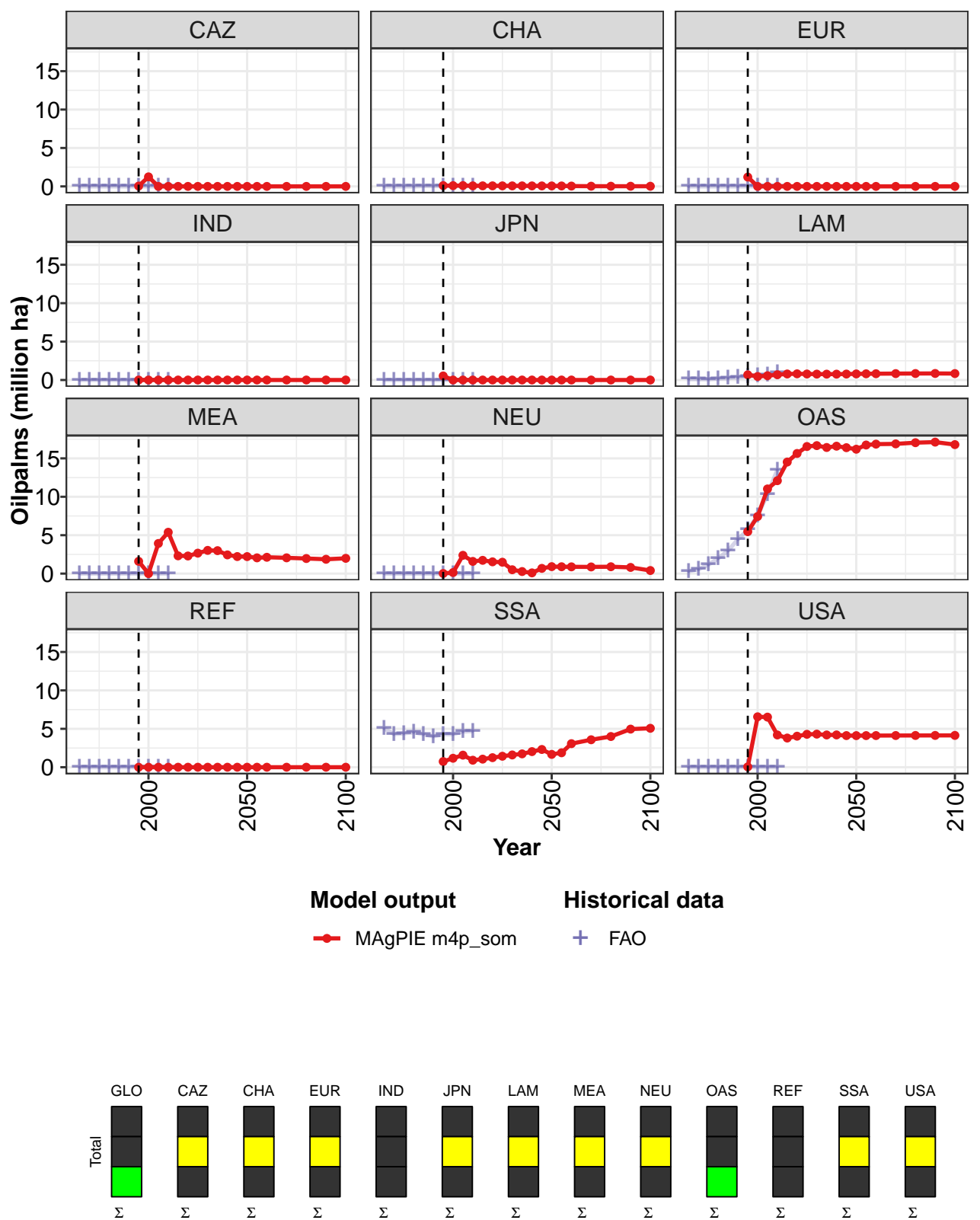


Figure 418: MAGPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Oil crops—Oilpalms (million ha)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	10.4	17.1	26.1	24.9	24.3	25.6	27.3	26.9	26.5	26.2	26.6
CAZ	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
EUR	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.7	0.5	0.6	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
MEA	1.6	0.0	3.9	5.4	2.3	2.3	2.7	3.0	3.0	2.4	2.2
NEU	0.0	0.1	2.4	1.6	1.7	1.5	1.5	0.5	0.3	0.1	0.7
OAS	5.5	7.4	11.0	12.1	14.5	15.6	16.5	16.7	16.4	16.6	16.4
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.7	1.2	1.6	0.9	1.1	1.2	1.4	1.6	1.7	2.0	2.3
USA	0.0	6.6	6.5	4.2	3.8	4.0	4.3	4.3	4.2	4.2	4.1

Table 1613: MAGPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Oil crops—Oilpalms (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	26.0	26.6	27.9	28.4	28.9	29.8	29.3
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.1	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.8	0.8	0.8	0.8	0.8	0.9	0.8
MEA	2.2	2.1	2.1	2.1	2.0	1.9	2.0
NEU	0.9	0.9	0.9	0.9	0.9	0.8	0.4
OAS	16.2	16.7	16.9	16.9	17.0	17.1	16.8
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	1.7	1.9	3.1	3.6	4.0	5.0	5.1
USA	4.1	4.1	4.1	4.1	4.1	4.1	4.1

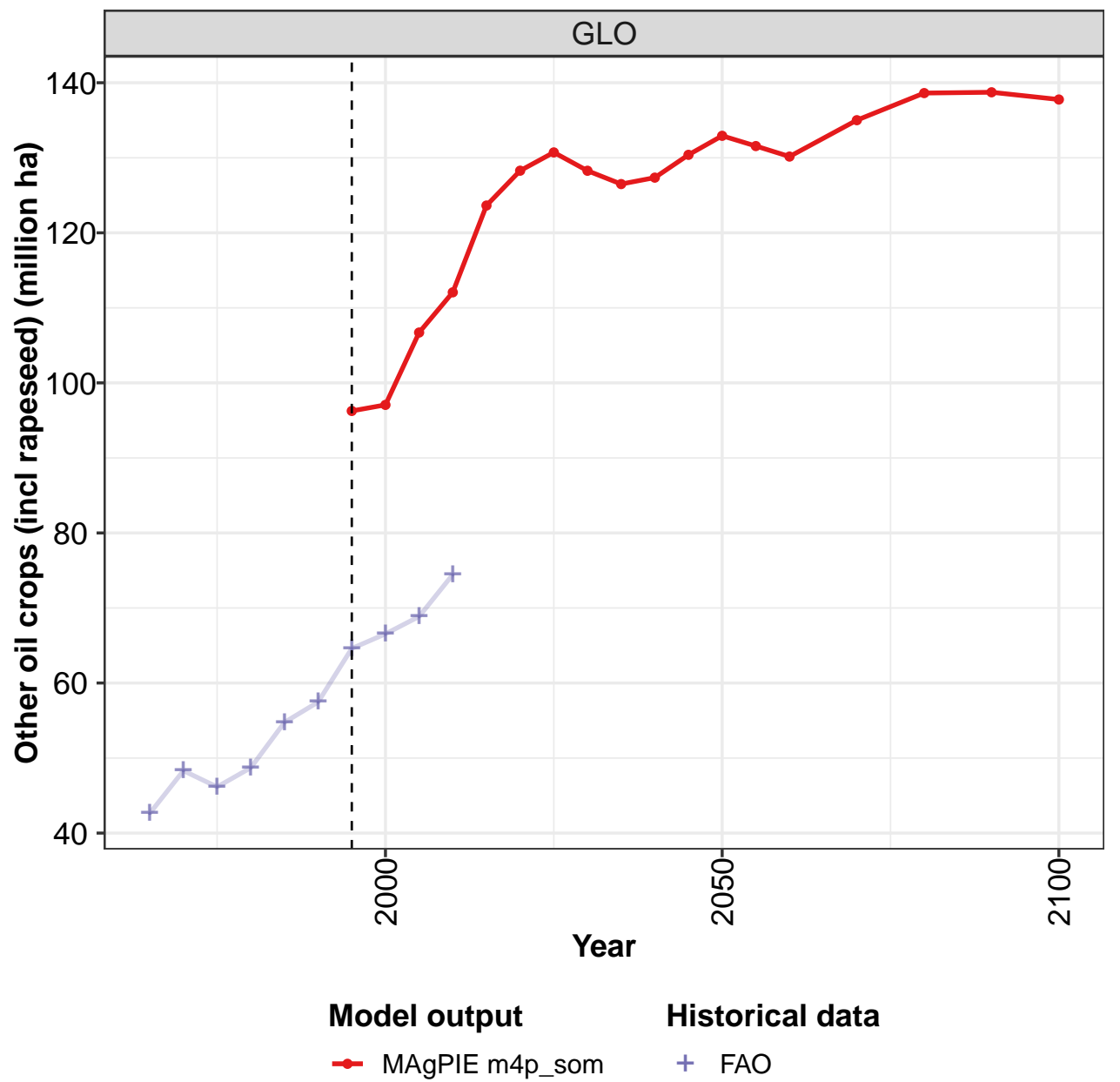
Table 1614: MAGPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Oil crops—Oilpalms (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	5.5	5.0	5.7	6.7	7.6	8.8	10.5	12.5	15.7	19.2
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.1	0.1	0.1	0.2	0.2	0.3	0.5	0.6	0.7	0.9
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.3	0.6	1.1	2.0	3.0	4.5	5.7	7.5	10.3	13.5
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	5.1	4.3	4.4	4.5	4.3	4.0	4.3	4.3	4.6	4.7
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 1615: FAO — Resources—Land Cover—Cropland—Crops—Oil crops—Oilpalms (million ha)

55.1.14 Crops—Oil crops—Other oil crops (incl rapeseed)

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

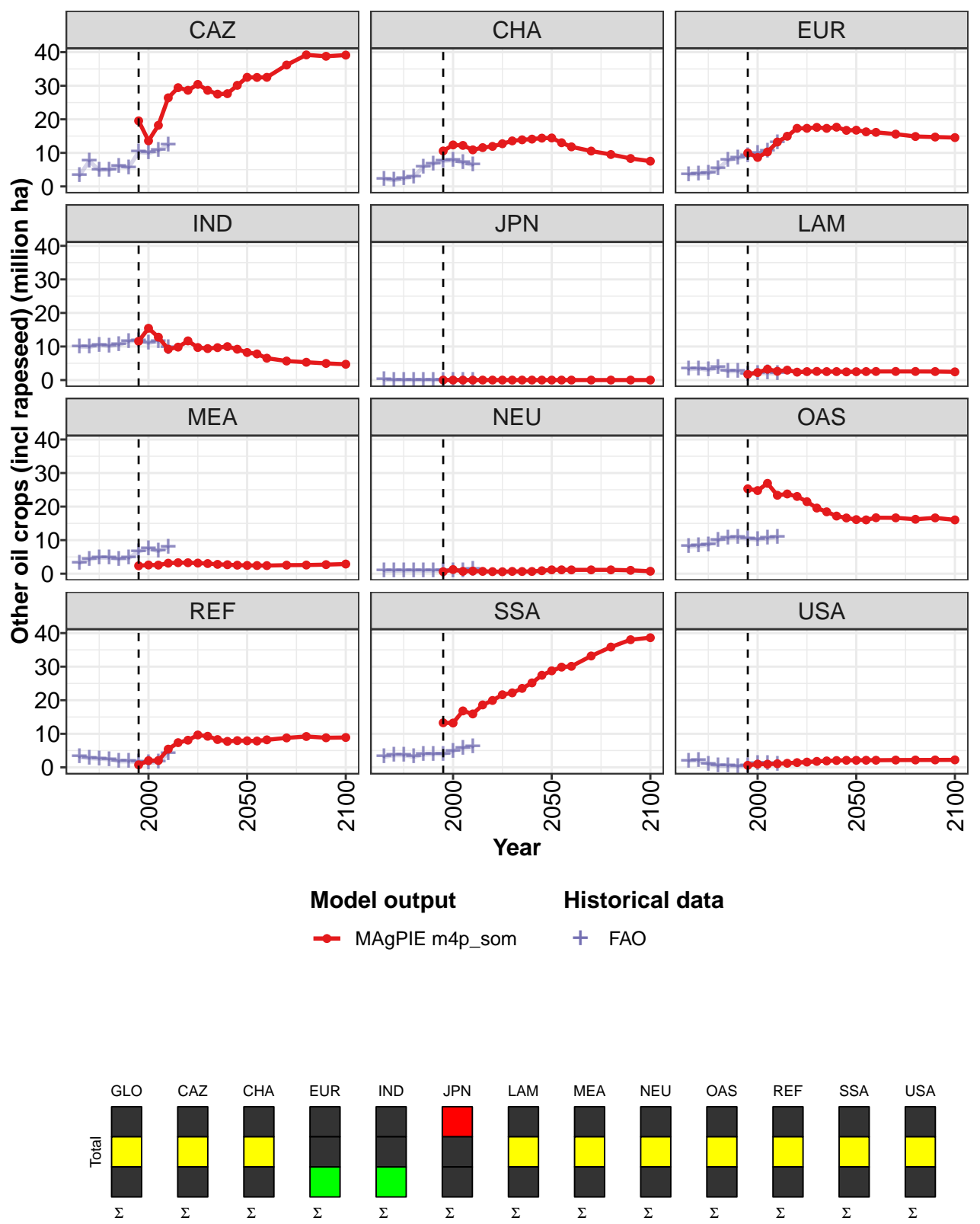


Figure 419: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Oil crops—Other oil crops (incl rapeseed) (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	96	97	107	112	124	128	131	128	126	127	130
CAZ	20	14	18	26	29	29	30	29	27	28	30
CHA	11	12	12	11	12	12	13	14	14	14	14
EUR	10	9	10	13	15	17	17	18	17	18	17
IND	12	15	13	9	10	12	10	9	10	10	9
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	2	2	3	3	3	2	3	3	3	3	2
MEA	2	3	3	3	3	3	3	3	3	3	3
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	25	25	27	23	24	23	21	20	18	17	17
REF	1	2	2	5	7	8	10	9	8	8	8
SSA	13	13	17	16	19	20	22	22	24	25	27
USA	1	1	1	1	1	1	2	2	2	2	2

Table 1616: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Oil crops—Other oil crops (incl rapeseed) (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	133	132	130	135	139	139	138
CAZ	33	32	33	36	39	39	39
CHA	14	13	12	11	10	8	8
EUR	17	16	16	16	15	15	15
IND	8	8	7	6	5	5	5
JPN	0	0	0	0	0	0	0
LAM	2	3	3	3	3	3	2
MEA	2	2	2	3	3	3	3
NEU	1	1	1	1	1	1	1
OAS	16	16	17	17	16	17	16
REF	8	8	8	9	9	9	9
SSA	29	30	30	33	36	38	39
USA	2	2	2	2	2	2	2

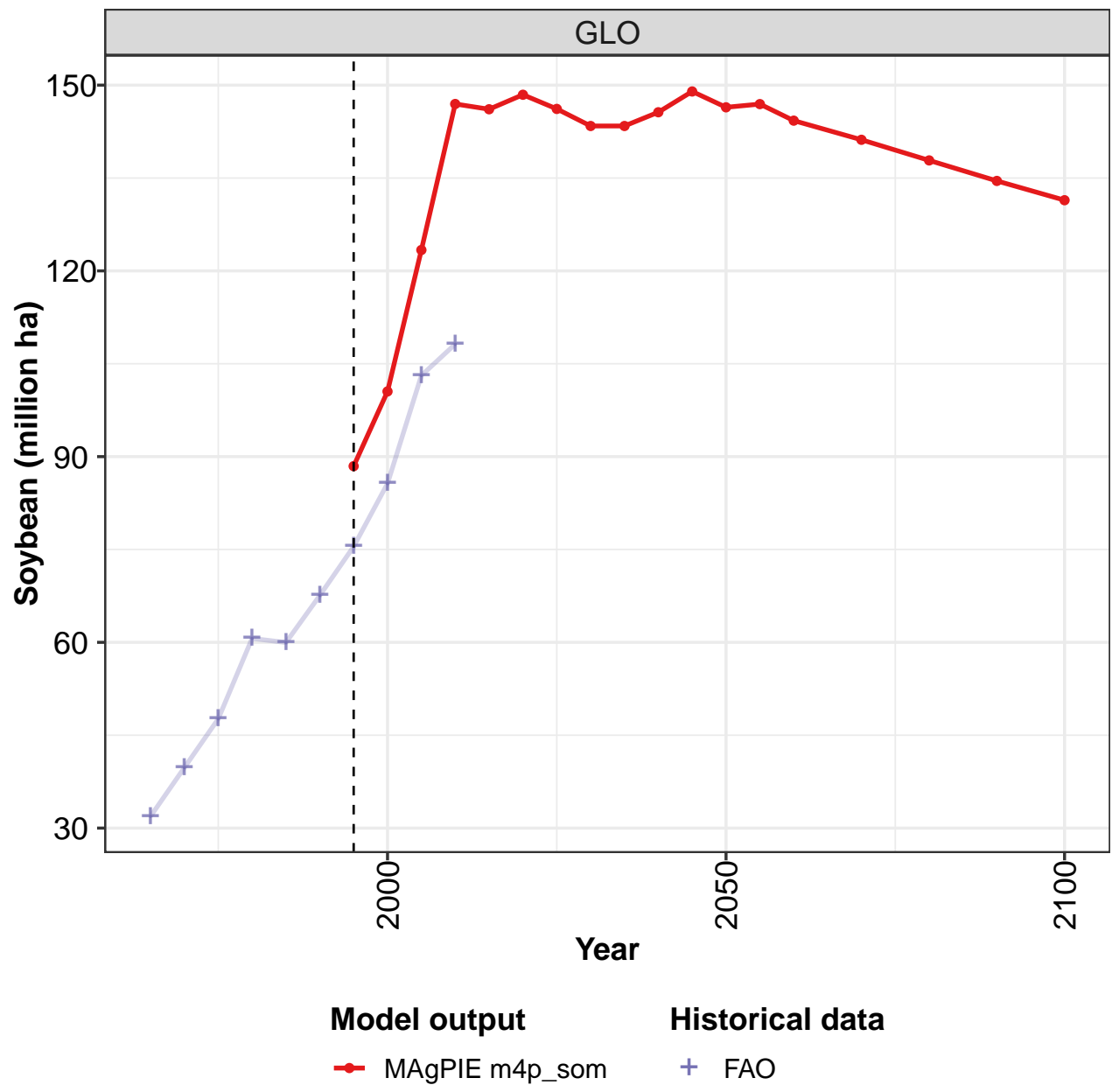
Table 1617: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Oil crops—Other oil crops (incl rapeseed) (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	42.6	48.3	46.2	48.7	54.8	57.5	64.6	66.5	68.9	74.5
CAZ	3.3	7.6	4.8	5.0	6.1	5.7	10.3	10.0	10.7	12.3
CHA	2.2	1.8	2.3	2.9	5.8	6.8	7.6	7.8	7.1	6.4
EUR	3.6	3.7	3.9	5.3	7.8	8.4	9.1	9.7	10.6	13.0
IND	10.0	9.9	10.4	10.2	10.5	11.5	11.8	11.1	11.6	9.6
JPN	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	3.2	3.4	3.1	3.7	2.6	2.7	1.8	2.0	2.1	1.9
MEA	3.2	4.3	4.8	4.7	4.4	4.6	6.6	7.5	6.7	8.0
NEU	0.9	0.9	0.9	1.0	0.9	0.9	1.0	0.9	1.0	1.2
OAS	8.1	8.3	8.7	10.0	10.6	10.8	10.4	10.2	10.5	10.8
REF	3.1	2.7	2.6	2.4	1.8	1.8	1.5	1.3	1.6	4.2
SSA	3.1	3.6	3.6	3.1	3.8	3.9	3.9	4.9	5.8	6.1
USA	2.0	2.1	1.0	0.5	0.4	0.3	0.5	1.2	1.2	0.9

Table 1618: FAO — Resources—Land Cover—Cropland—Crops—Oil crops—Other oil crops (incl rapeseed) (million ha)

55.1.15 Crops—Oil crops—Soybean

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

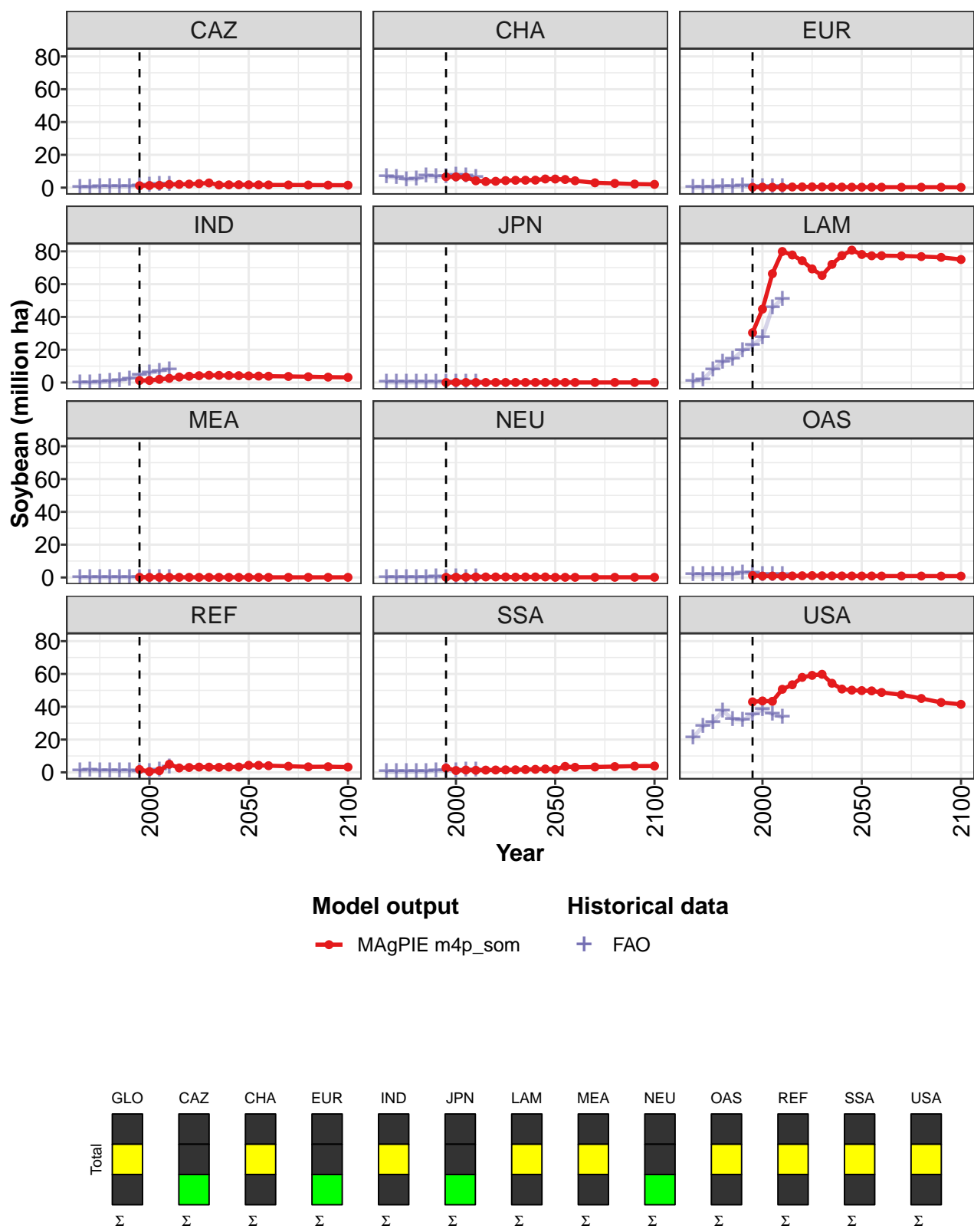


Figure 420: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Oil crops—Soybean (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	88	101	123	147	146	148	146	143	143	146	149
CAZ	1	1	1	2	2	2	2	3	2	2	2
CHA	7	7	6	4	4	4	4	4	5	5	5
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	1	1	2	3	3	4	4	4	4	4	4
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	30	45	66	80	78	74	69	65	72	77	81
MEA	0	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	1	1	1	1	1	1	1	1	1	1	1
REF	2	0	1	5	3	3	3	3	3	3	3
SSA	3	1	1	1	1	1	2	2	2	2	2
USA	43	44	43	51	53	58	59	60	54	51	50

Table 1619: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Oil crops—Soybean (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	146	147	144	141	138	135	131
CAZ	2	2	2	2	2	2	1
CHA	5	5	4	3	3	2	2
EUR	0	0	0	0	0	0	0
IND	4	4	4	4	4	3	3
JPN	0	0	0	0	0	0	0
LAM	78	77	77	77	77	76	75
MEA	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0
OAS	1	1	1	1	1	1	1
REF	4	4	4	4	3	3	3
SSA	2	4	3	3	4	4	4
USA	50	50	49	47	45	43	41

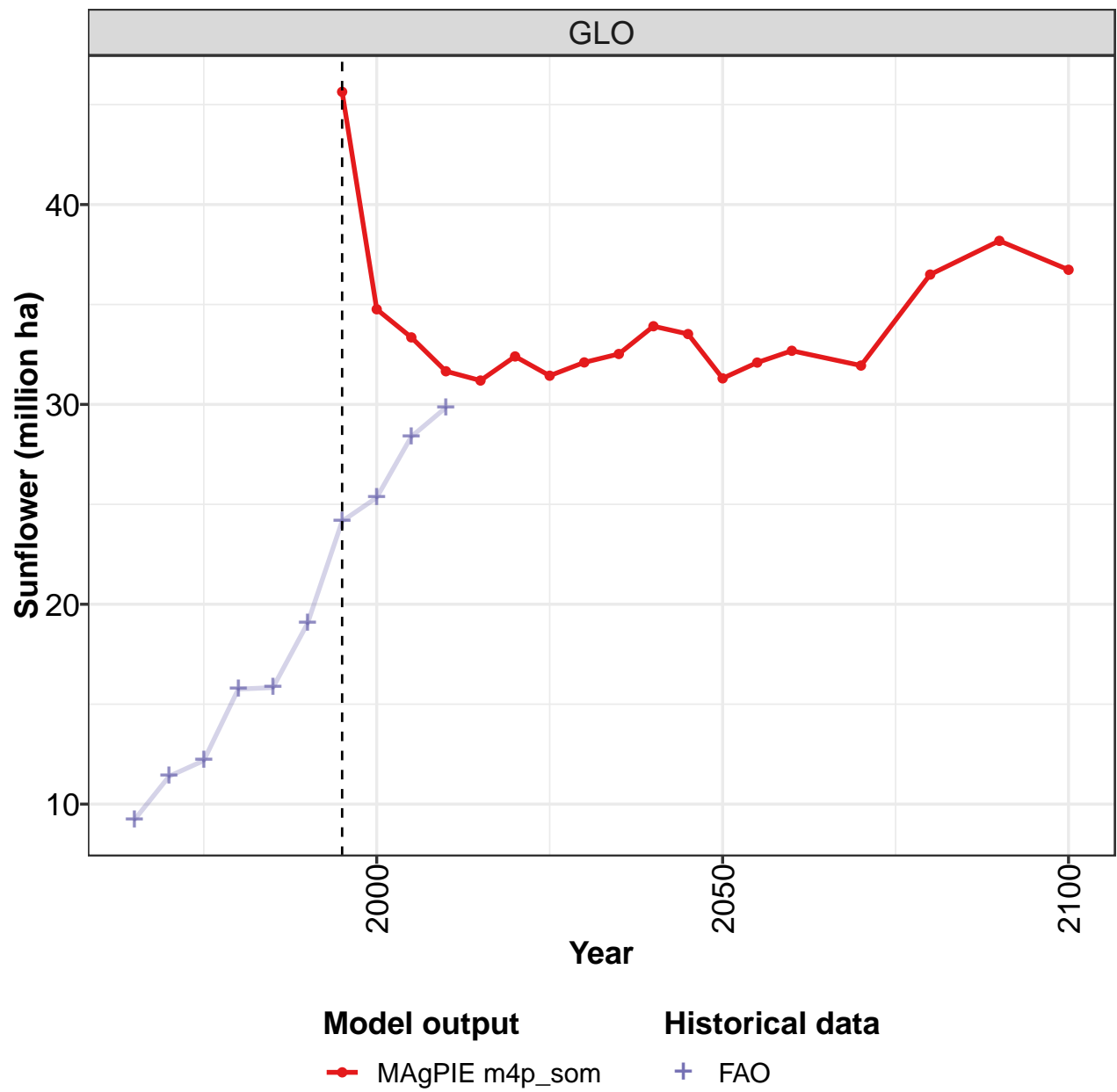
Table 1620: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Oil crops—Soybean (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	32	40	48	61	60	68	75	86	103	108
CAZ	0	0	0	1	1	1	1	2	2	2
CHA	7	6	5	5	7	7	7	8	7	6
EUR	0	0	0	1	1	1	0	1	0	0
IND	0	0	0	1	1	2	5	6	7	8
JPN	0	0	0	0	0	0	0	0	0	0
LAM	1	2	8	13	14	19	23	28	46	51
MEA	0	0	0	0	0	0	0	0	0	0
NEU	0	0	0	0	0	0	0	0	0	0
OAS	2	2	2	2	2	3	3	2	2	2
REF	1	1	1	1	1	1	1	1	2	3
SSA	0	0	0	1	0	1	1	1	1	2
USA	21	28	31	37	32	32	35	38	35	34

Table 1621: FAO — Resources—Land Cover—Cropland—Crops—Oil crops—Soybean (million ha)

55.1.16 Crops—Oil crops—Sunflower

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

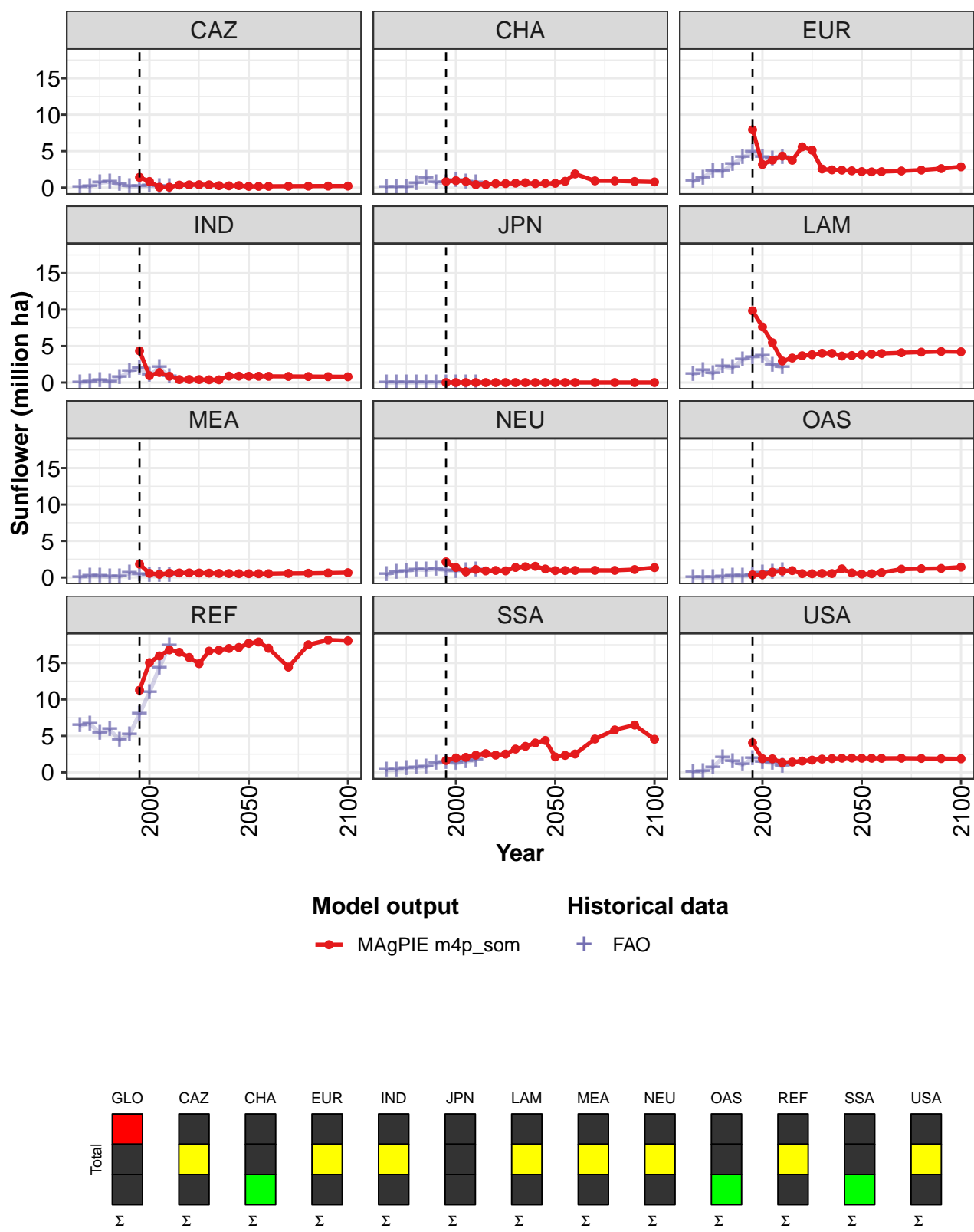


Figure 421: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Oil crops—Sunflower (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	45.6	34.8	33.4	31.7	31.2	32.4	31.4	32.1	32.5	33.9	33.5
CAZ	1.4	0.8	0.1	0.1	0.4	0.4	0.4	0.4	0.3	0.3	0.3
CHA	0.8	1.0	0.8	0.4	0.4	0.5	0.6	0.6	0.7	0.5	0.6
EUR	7.9	3.2	3.8	4.3	3.8	5.6	5.1	2.6	2.4	2.4	2.3
IND	4.3	0.9	1.4	0.9	0.4	0.4	0.4	0.4	0.4	0.9	0.9
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	9.8	7.6	5.5	3.0	3.4	3.7	3.8	4.0	4.0	3.6	3.7
MEA	1.8	0.6	0.4	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5
NEU	2.1	1.4	0.8	1.1	0.9	1.0	0.9	1.4	1.5	1.5	1.2
OAS	0.4	0.4	0.7	0.9	0.9	0.5	0.5	0.6	0.5	1.2	0.6
REF	11.3	15.1	16.0	16.8	16.5	15.8	14.9	16.6	16.8	17.0	17.1
SSA	1.6	2.0	2.1	2.4	2.6	2.4	2.5	3.2	3.6	4.0	4.4
USA	4.1	1.9	1.9	1.3	1.4	1.6	1.7	1.8	1.9	1.9	2.0

Table 1622: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Oil crops—Sunflower (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	31.3	32.1	32.7	31.9	36.5	38.2	36.7
CAZ	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CHA	0.6	0.9	1.9	0.9	0.9	0.8	0.8
EUR	2.2	2.2	2.2	2.3	2.4	2.6	2.9
IND	0.9	0.9	0.8	0.8	0.8	0.8	0.8
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	3.8	3.9	4.0	4.1	4.2	4.3	4.2
MEA	0.5	0.5	0.5	0.6	0.6	0.6	0.7
NEU	0.9	1.0	1.0	1.0	1.0	1.1	1.3
OAS	0.5	0.5	0.7	1.1	1.2	1.2	1.4
REF	17.7	17.9	17.0	14.4	17.5	18.2	18.0
SSA	2.1	2.3	2.5	4.6	5.8	6.5	4.5
USA	1.9	1.9	1.9	1.9	1.9	1.9	1.9

Table 1623: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Oil crops—Sunflower (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	9.2	11.4	12.2	15.8	15.8	19.0	24.2	25.3	28.4	29.8
CAZ	0.1	0.2	0.7	0.8	0.4	0.2	0.2	0.3	0.2	0.1
CHA	0.0	0.1	0.1	0.6	1.3	0.6	0.7	1.0	0.8	0.7
EUR	0.8	1.3	2.3	2.2	3.2	4.1	4.9	4.1	3.9	4.1
IND	0.0	0.1	0.3	0.1	0.7	1.5	1.9	1.0	2.1	0.8
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.1	1.6	1.2	2.2	2.0	3.1	3.5	3.6	2.4	2.1
MEA	0.0	0.2	0.2	0.1	0.1	0.6	0.4	0.3	0.3	0.3
NEU	0.4	0.8	0.8	1.1	1.0	1.2	0.9	0.8	0.9	1.0
OAS	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.6	0.7	0.9
REF	6.4	6.6	5.4	5.9	4.4	5.2	8.0	11.0	14.4	17.4
SSA	0.3	0.3	0.5	0.7	0.8	1.3	1.4	1.2	1.5	1.7
USA	0.0	0.1	0.7	2.0	1.5	1.0	1.9	1.4	1.3	0.8

Table 1624: FAO — Resources—Land Cover—Cropland—Crops—Oil crops—Sunflower (million ha)

## 55.1.17 Crops—Other crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

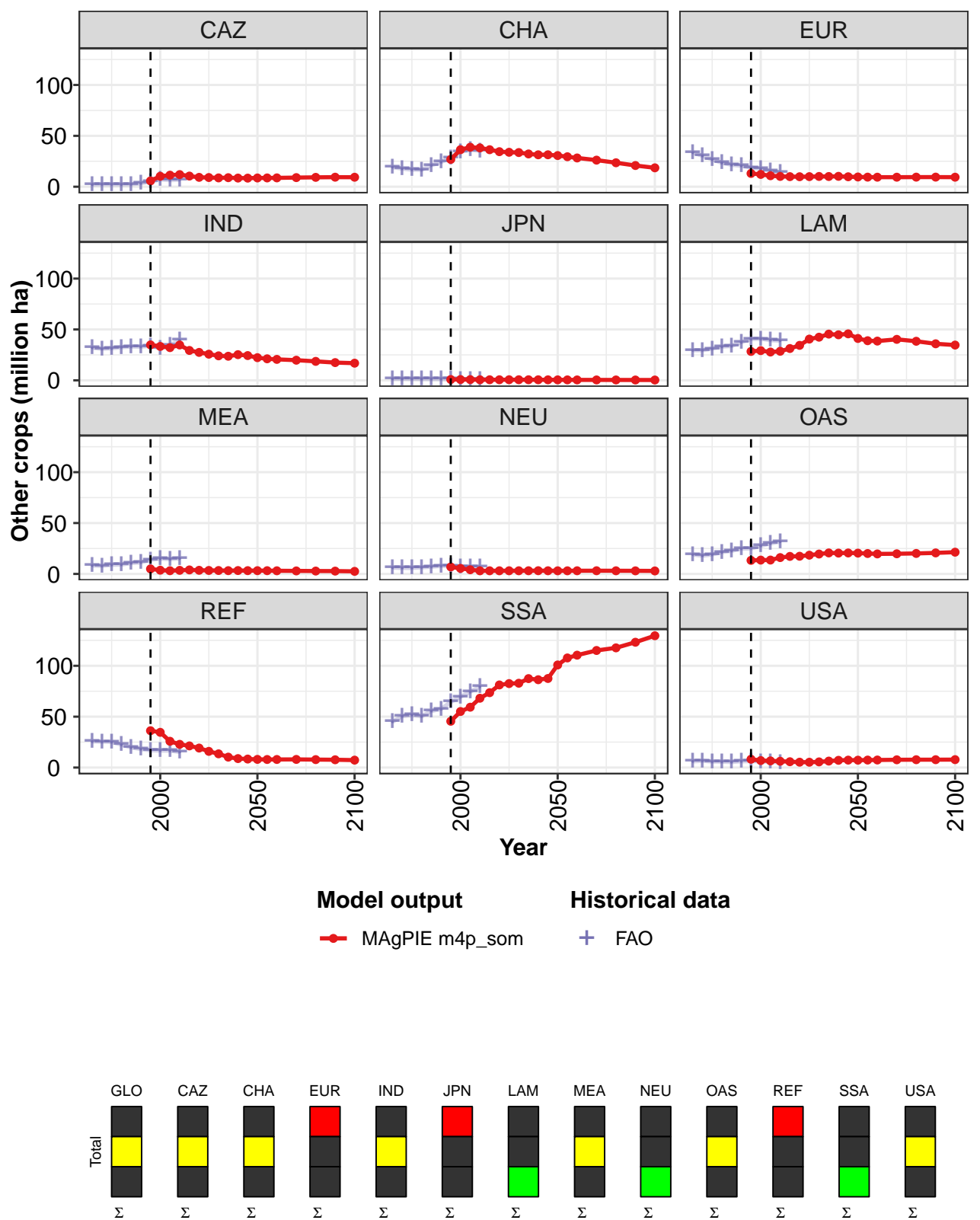


Figure 422: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Other crops (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	225	241	234	244	243	246	248	248	252	250	250
CAZ	6	10	11	12	10	9	9	9	9	9	8
CHA	27	36	39	38	36	34	34	34	32	31	31
EUR	13	12	11	10	10	10	10	10	10	10	10
IND	35	33	32	35	29	27	26	24	24	25	24
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	28	29	28	29	31	34	41	42	45	45	46
MEA	5	4	3	4	4	4	3	3	3	3	3
NEU	7	5	4	3	3	3	3	3	3	3	3
OAS	13	14	14	16	17	17	18	20	21	20	21
REF	36	35	26	23	21	19	16	13	10	9	8
SSA	46	55	59	68	74	81	83	83	87	86	88
USA	8	7	7	6	6	5	5	6	6	7	7

Table 1625: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Other crops (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	256	258	258	262	259	258	261
CAZ	9	9	9	9	9	9	9
CHA	31	29	28	26	24	21	19
EUR	10	9	9	9	9	9	9
IND	22	21	21	20	19	17	17
JPN	0	0	0	0	0	0	0
LAM	41	39	39	40	38	36	35
MEA	3	3	3	3	3	3	3
NEU	3	3	3	3	3	3	3
OAS	20	20	20	20	20	21	21
REF	8	8	8	8	8	8	7
SSA	101	108	110	115	118	123	130
USA	7	7	7	8	8	8	8

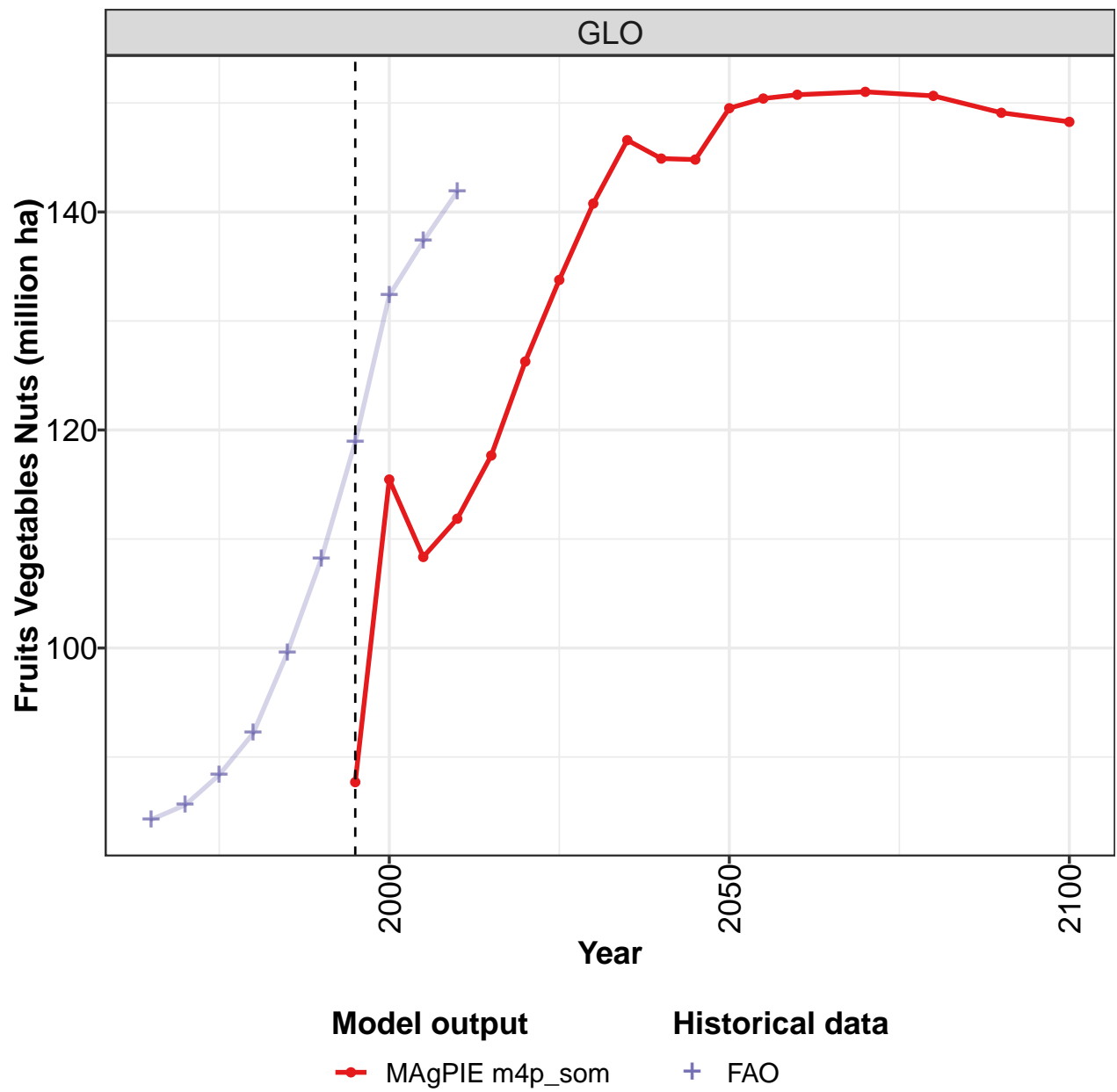
Table 1626: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Other crops (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	228	227	226	225	234	246	262	275	281	289
CAZ	2	2	2	2	2	3	5	7	6	7
CHA	19	18	17	17	21	24	29	34	36	35
EUR	34	30	27	23	22	21	19	18	15	14
IND	32	31	31	33	33	33	34	32	34	40
JPN	1	2	1	1	1	1	1	1	1	1
LAM	30	30	31	33	34	37	40	41	39	39
MEA	8	8	9	9	11	11	14	15	15	15
NEU	6	6	6	6	7	8	8	7	7	7
OAS	19	18	19	21	23	25	25	28	30	32
REF	26	25	25	23	20	18	17	17	17	15
SSA	45	50	52	50	56	58	64	70	75	79
USA	6	7	6	6	5	6	6	6	6	5

Table 1627: FAO — Resources—Land Cover—Cropland—Crops—Other crops (million ha)

55.1.18 Crops—Other crops—Fruits Vegetables Nuts

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

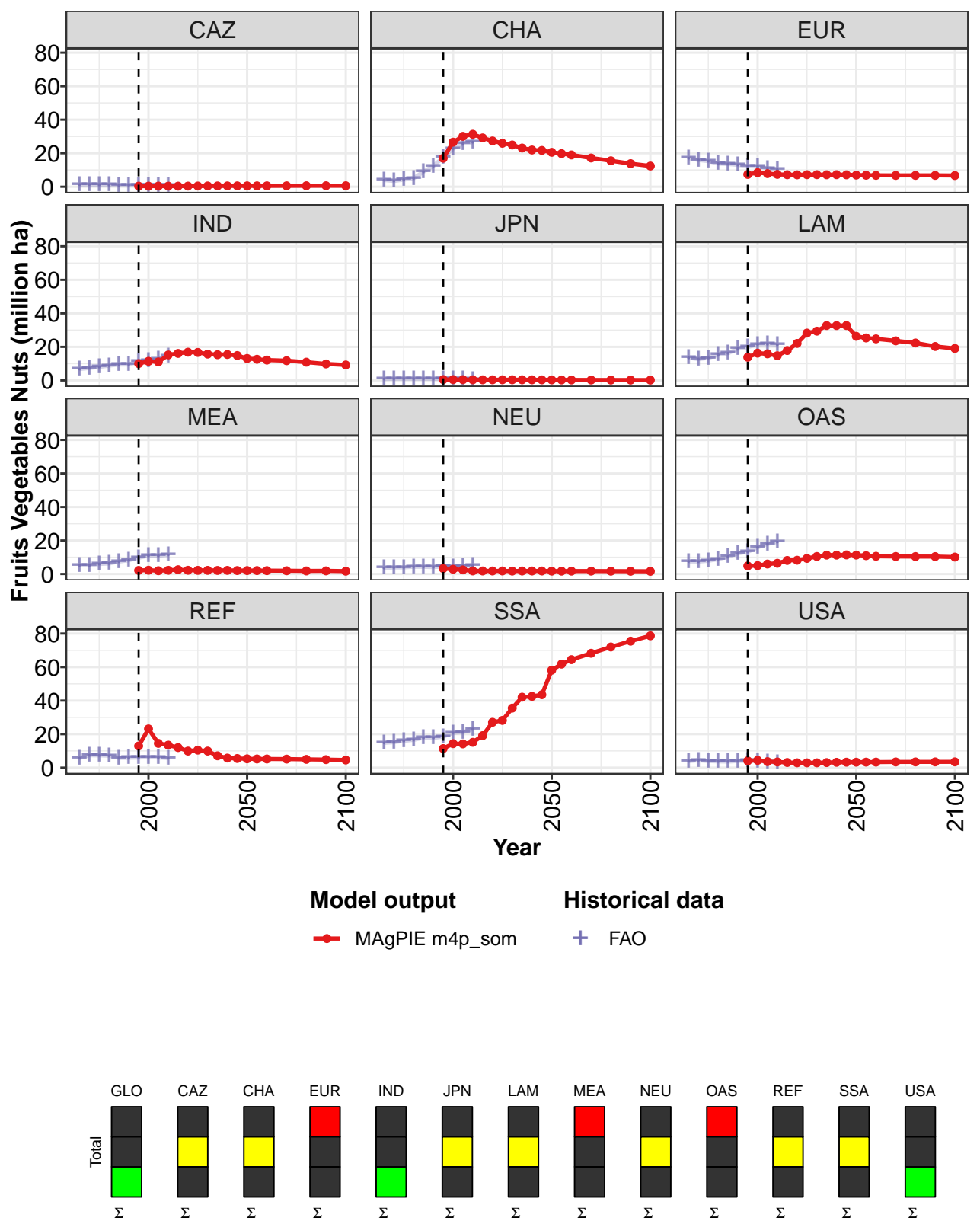


Figure 423: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Other crops—Fruits Vegetables Nuts (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	88	115	108	112	118	126	134	141	147	145	145
CAZ	0	0	0	0	0	0	0	0	0	0	1
CHA	17	27	30	31	29	27	26	25	23	22	22
EUR	7	8	8	7	7	7	7	7	7	7	7
IND	10	11	11	15	16	17	17	16	15	15	15
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	14	16	16	15	18	22	28	29	33	33	33
MEA	2	2	2	2	3	2	2	2	2	2	2
NEU	3	3	2	2	2	2	2	2	2	2	2
OAS	5	5	6	6	8	8	9	10	11	11	11
REF	13	23	15	13	12	10	10	10	7	6	5
SSA	11	14	14	15	19	27	28	36	42	43	44
USA	4	4	4	3	3	3	3	3	3	3	3

Table 1628: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Other crops—Fruits Vegetables Nuts (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	150	150	151	151	151	149	148
CAZ	1	1	1	1	1	1	1
CHA	21	20	19	17	15	14	12
EUR	7	7	7	7	7	7	7
IND	13	13	12	12	11	10	9
JPN	0	0	0	0	0	0	0
LAM	26	25	25	24	22	20	19
MEA	2	2	2	2	2	2	2
NEU	2	2	2	2	2	2	2
OAS	11	11	11	10	10	10	10
REF	5	5	5	5	5	5	5
SSA	58	62	64	68	72	75	79
USA	3	3	3	3	3	3	3

Table 1629: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Other crops—Fruits Vegetables Nuts (million ha) [PART 2/2]

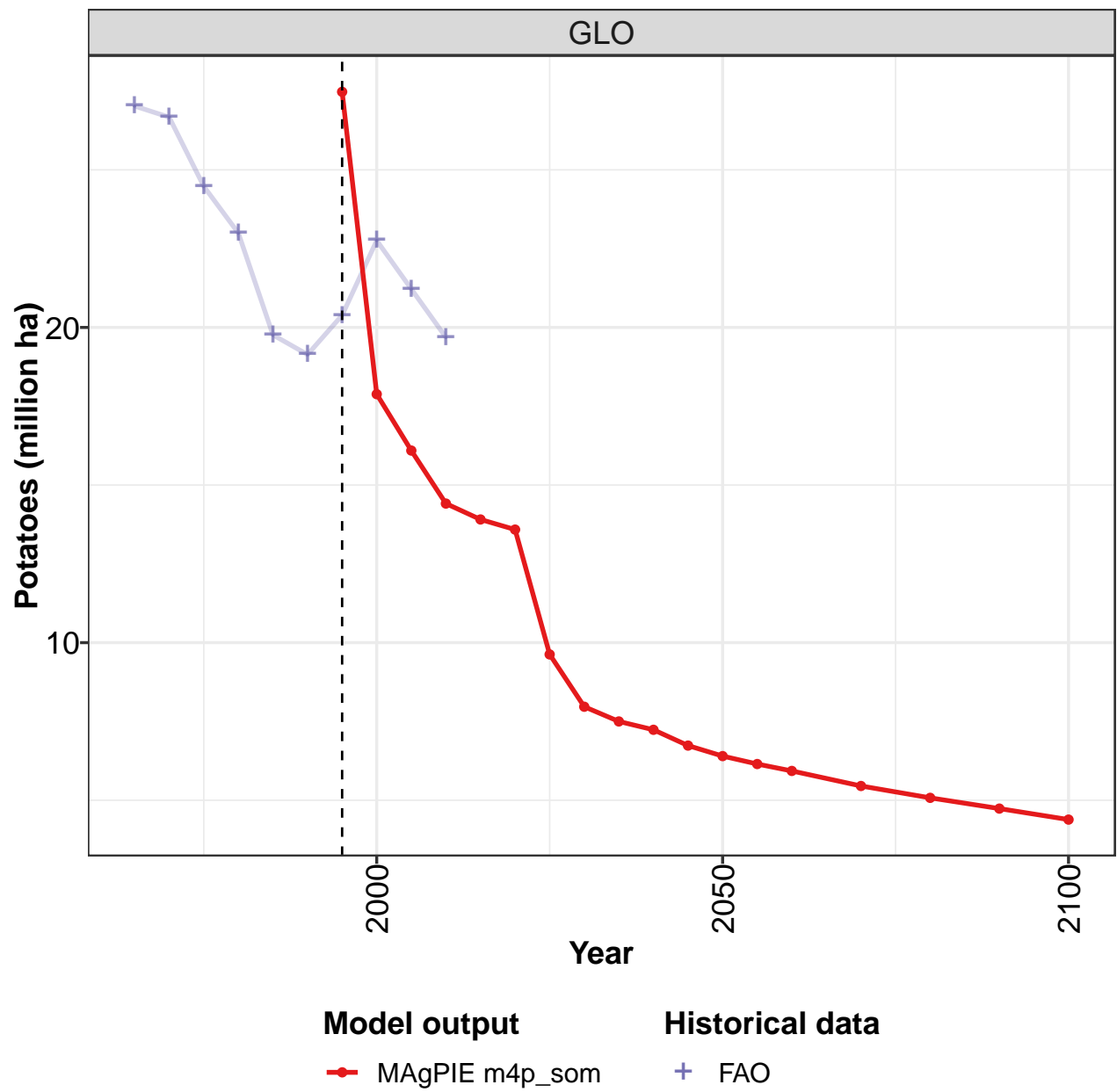
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	84	86	88	92	100	108	119	132	137	142
CAZ	1	1	1	1	1	1	1	1	1	1
CHA	4	3	4	5	9	12	18	23	26	27
EUR	17	16	15	14	14	13	12	12	11	10
IND	7	7	8	9	10	10	11	12	13	15
JPN	1	1	1	1	1	1	1	1	1	1
LAM	13	13	13	15	16	19	20	22	22	21
MEA	5	5	6	6	7	8	10	11	11	11
NEU	4	4	4	4	4	4	5	4	5	5
OAS	8	7	8	9	10	12	13	16	18	19
REF	6	7	7	7	6	6	6	6	6	6
SSA	15	15	16	17	18	18	19	21	21	23
USA	4	4	4	4	4	4	4	4	4	3

Table 1630: FAO — Resources—Land Cover—Cropland—Crops—Other crops—Fruits Vegetables Nuts (million ha)



55.1.19 Crops—Other crops—Potatoes

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

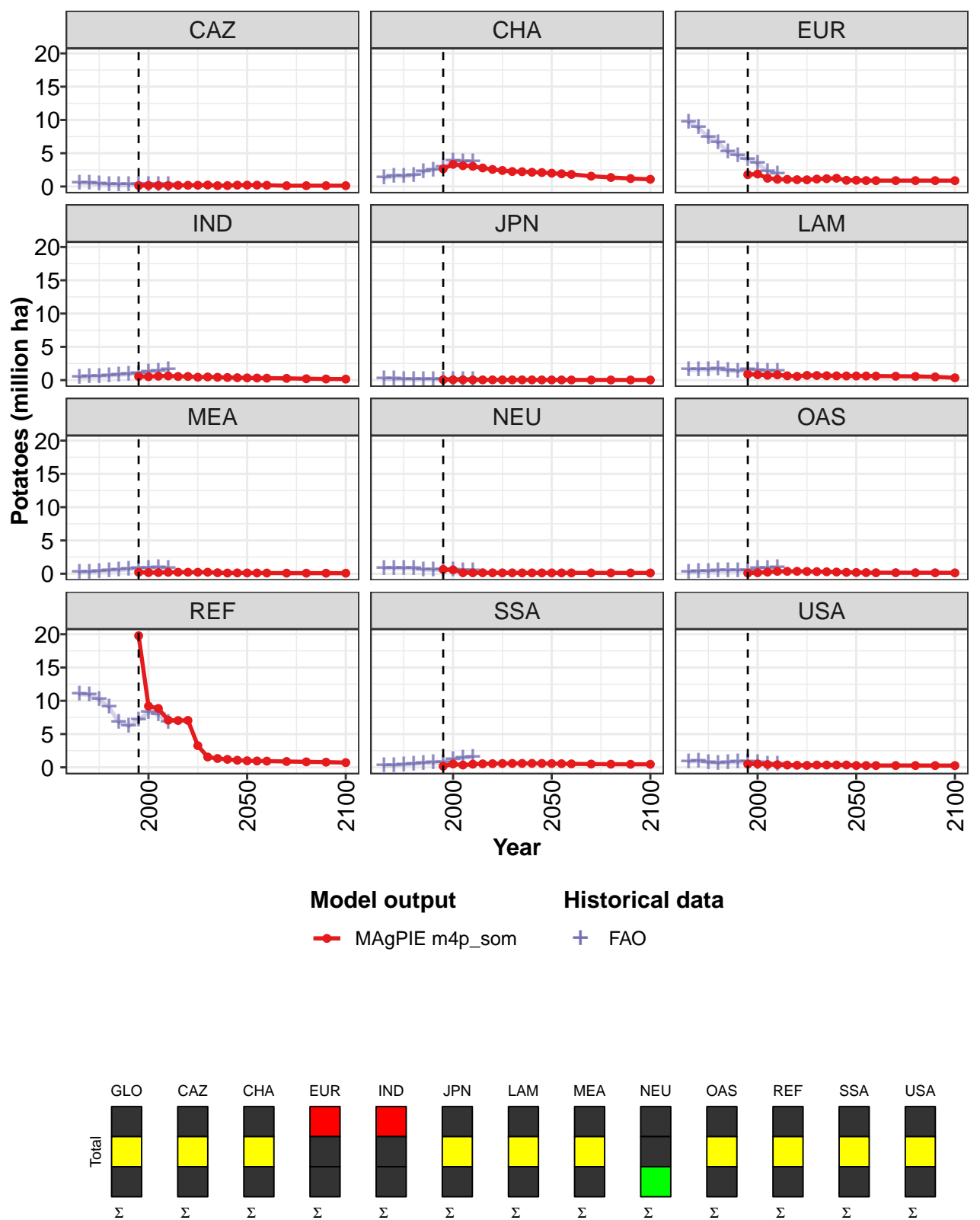


Figure 424: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Other crops—Potatoes (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	27.5	17.9	16.1	14.4	13.9	13.6	9.6	8.0	7.5	7.2	6.7
CAZ	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2
CHA	2.7	3.3	3.1	3.0	2.8	2.6	2.4	2.3	2.2	2.1	2.1
EUR	1.8	1.9	1.2	1.1	1.1	1.0	1.0	1.1	1.2	1.2	0.9
IND	0.5	0.5	0.6	0.6	0.5	0.6	0.4	0.5	0.4	0.4	0.4
JPN	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.9	0.8	0.7	0.8	0.7	0.6	0.7	0.7	0.7	0.6	0.6
MEA	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
NEU	0.6	0.6	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	0.1	0.2	0.2	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2
REF	19.8	9.2	8.8	7.1	7.0	7.1	3.3	1.6	1.3	1.2	1.1
SSA	0.2	0.5	0.3	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
USA	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4

Table 1631: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Other crops—Potatoes (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	6.4	6.1	5.9	5.5	5.1	4.7	4.4
CAZ	0.2	0.2	0.2	0.1	0.1	0.1	0.1
CHA	2.0	1.9	1.8	1.6	1.4	1.2	1.1
EUR	0.9	0.9	0.9	0.9	0.9	0.9	0.9
IND	0.3	0.3	0.3	0.3	0.2	0.2	0.2
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.6	0.6	0.6	0.6	0.6	0.5	0.4
MEA	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	0.2	0.2	0.2	0.2	0.1	0.1	0.1
REF	1.0	1.0	0.9	0.9	0.8	0.8	0.7
SSA	0.6	0.5	0.5	0.5	0.5	0.5	0.5
USA	0.3	0.3	0.3	0.3	0.3	0.3	0.3

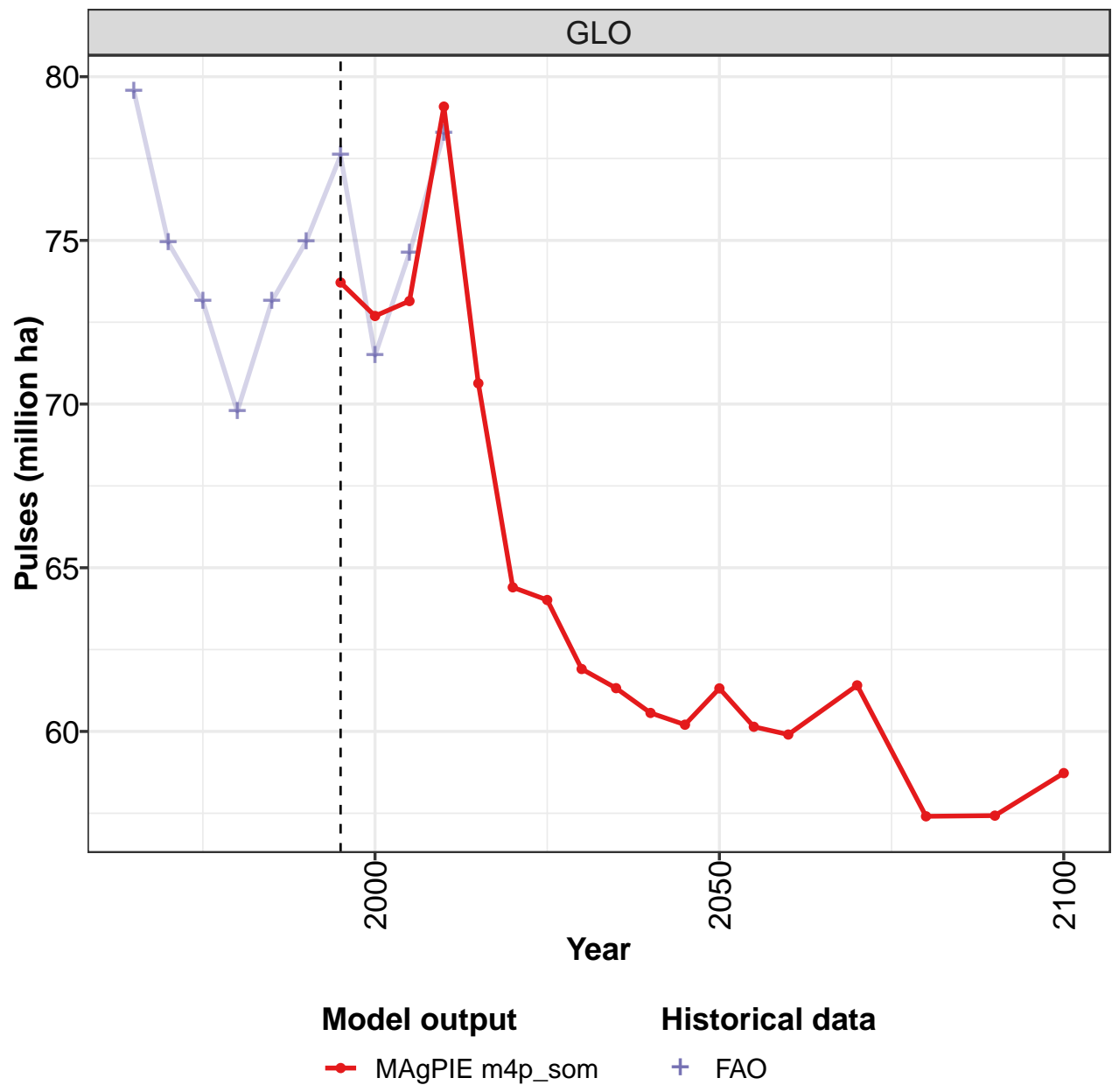
Table 1632: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Other crops—Potatoes (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	27.0	26.7	24.5	23.0	19.8	19.1	20.4	22.8	21.2	19.7
CAZ	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2
CHA	1.3	1.5	1.5	1.7	2.2	2.5	2.9	3.8	3.8	3.7
EUR	9.6	8.8	7.4	6.6	5.2	4.7	4.0	3.5	2.3	1.9
IND	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.4	1.5
JPN	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	1.5	1.6	1.6	1.7	1.4	1.3	1.6	1.5	1.3	1.3
MEA	0.2	0.3	0.4	0.5	0.5	0.7	0.8	0.9	0.9	0.8
NEU	0.8	0.8	0.8	0.8	0.6	0.6	0.6	0.5	0.5	0.4
OAS	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.8	0.9	0.9
REF	11.0	10.9	10.2	9.1	6.8	6.2	7.1	8.3	7.9	6.7
SSA	0.3	0.3	0.4	0.5	0.6	0.7	0.7	1.1	1.4	1.6
USA	0.9	0.9	0.7	0.6	0.7	0.8	0.8	0.7	0.5	0.4

Table 1633: FAO — Resources—Land Cover—Cropland—Crops—Other crops—Potatoes (million ha)

55.1.20 Crops—Other crops—Pulses

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

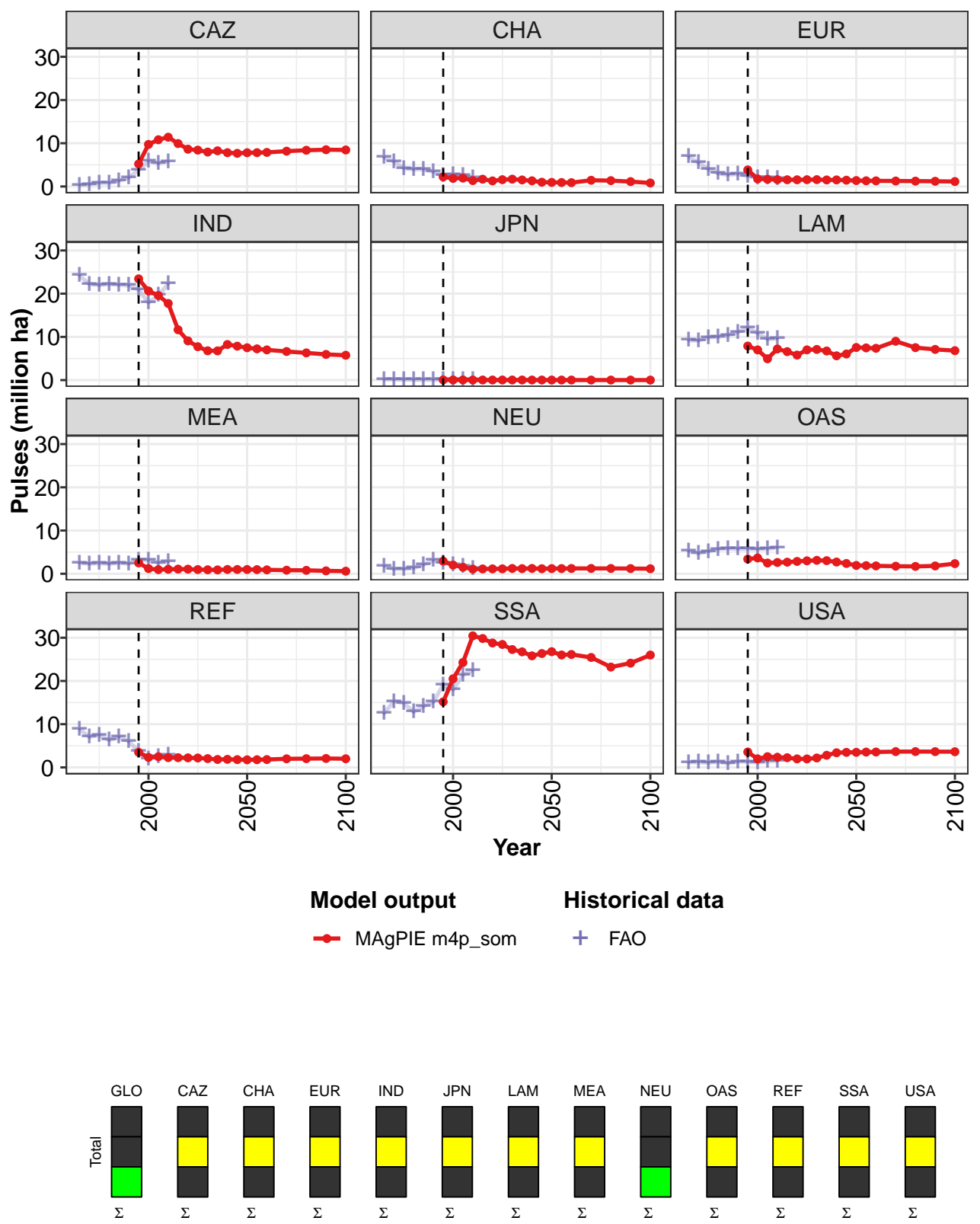


Figure 425: MAGPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Other crops—Pulses (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	73.7	72.7	73.1	79.1	70.6	64.4	64.0	61.9	61.3	60.6	60.2
CAZ	5.2	9.7	10.8	11.4	9.9	8.6	8.4	8.0	8.3	7.8	7.7
CHA	2.2	1.9	1.9	1.4	1.7	1.3	1.6	1.7	1.5	1.3	1.0
EUR	3.8	1.8	1.7	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.5
IND	23.4	20.6	19.6	17.7	11.7	9.1	7.7	6.8	6.8	8.2	7.9
JPN	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	7.9	7.0	4.9	7.2	6.6	5.8	7.0	7.1	6.7	5.6	6.0
MEA	2.5	1.2	1.0	1.0	1.1	1.1	1.0	0.9	0.9	1.0	1.0
NEU	2.9	2.0	1.5	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2
OAS	3.4	3.7	2.5	2.6	2.7	2.9	3.0	3.1	3.0	2.7	2.4
REF	3.5	2.3	2.5	2.3	2.2	2.2	2.2	2.0	1.8	1.9	1.8
SSA	15.2	20.5	24.3	30.4	29.8	28.8	28.4	27.3	26.7	25.8	26.3
USA	3.6	2.0	2.5	2.3	2.2	2.0	2.0	2.2	2.8	3.4	3.5

Table 1634: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Other crops—Pulses (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	61.3	60.1	59.9	61.4	57.4	57.4	58.7
CAZ	7.8	7.8	7.9	8.2	8.4	8.5	8.5
CHA	0.9	0.9	0.9	1.4	1.4	1.1	0.8
EUR	1.4	1.3	1.3	1.3	1.2	1.2	1.1
IND	7.5	7.2	7.0	6.6	6.3	5.9	5.8
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	7.6	7.5	7.4	9.0	7.5	7.1	6.8
MEA	1.0	1.0	0.9	0.8	0.8	0.7	0.6
NEU	1.2	1.2	1.2	1.2	1.2	1.2	1.2
OAS	1.9	1.9	1.8	1.8	1.7	1.8	2.3
REF	1.8	1.8	1.8	2.0	2.0	2.1	2.0
SSA	26.8	26.0	26.1	25.4	23.2	24.1	26.0
USA	3.5	3.5	3.6	3.7	3.7	3.6	3.6

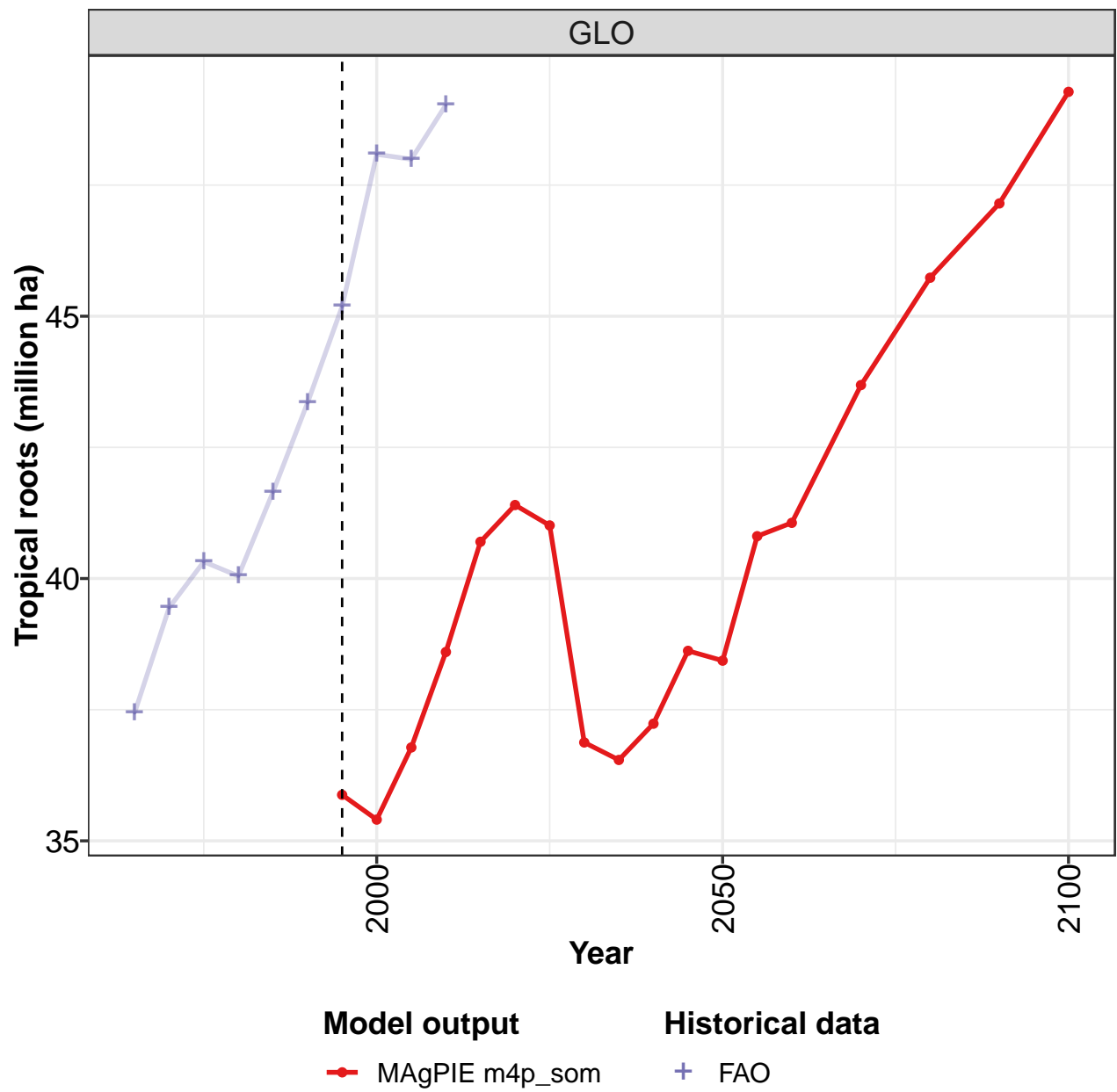
Table 1635: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Other crops—Pulses (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	79.5	74.9	73.1	69.8	73.1	75.0	77.6	71.5	74.6	78.3
CAZ	0.3	0.5	0.8	0.8	1.3	2.0	3.8	5.9	5.3	5.8
CHA	6.7	5.8	4.2	3.9	4.0	3.4	2.6	2.7	2.6	2.0
EUR	6.9	5.5	4.0	3.0	2.7	2.9	2.4	2.1	2.1	1.8
IND	24.2	22.2	22.0	22.2	22.1	21.9	20.9	17.9	19.6	22.3
JPN	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
LAM	9.2	9.1	9.9	10.0	10.4	11.1	12.1	10.9	9.5	9.6
MEA	2.5	2.3	2.4	2.3	2.5	2.3	3.2	3.1	2.5	2.8
NEU	1.8	1.1	1.1	1.3	2.1	3.1	2.5	2.1	1.7	1.3
OAS	5.2	4.7	5.2	5.7	5.9	5.7	5.8	5.7	5.8	6.1
REF	8.9	7.0	7.5	6.3	7.1	6.0	3.8	2.0	2.6	2.8
SSA	12.5	15.3	14.9	12.8	14.1	15.1	19.1	18.0	21.4	22.5
USA	1.2	1.2	1.0	1.3	1.0	1.3	1.3	1.1	1.4	1.5

Table 1636: FAO — Resources—Land Cover—Cropland—Crops—Other crops—Pulses (million ha)

55.1.21 Crops—Other crops—Tropical roots

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

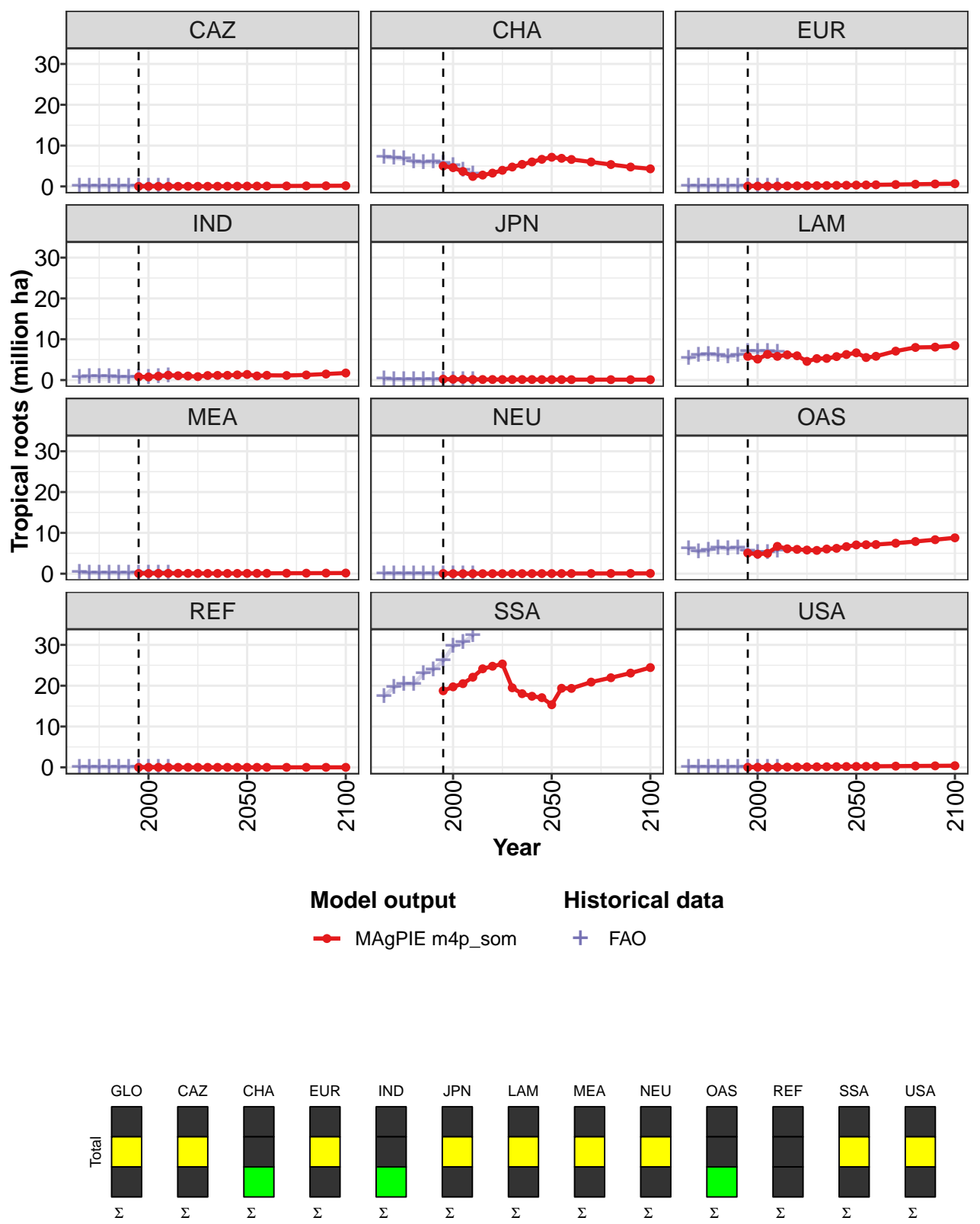


Figure 426: MAGPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Other crops—Tropical roots (million ha)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	35.9	35.4	36.8	38.6	40.7	41.4	41.0	36.9	36.5	37.2	38.6
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
CHA	5.0	4.6	3.7	2.4	2.8	3.3	4.0	4.7	5.4	6.0	6.6
EUR	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3
IND	0.8	0.8	0.9	1.2	1.1	1.0	0.8	1.1	1.1	1.2	1.3
JPN	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	5.8	5.1	6.3	5.8	6.2	5.9	4.6	5.3	5.3	5.8	6.3
MEA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEU	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	5.1	4.8	5.0	6.7	6.1	6.0	5.8	5.7	6.0	6.2	6.6
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	18.8	19.7	20.5	22.1	24.1	24.8	25.3	19.5	18.0	17.4	17.1
USA	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2

Table 1637: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Other crops—Tropical roots (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	38.4	40.8	41.1	43.7	45.7	47.2	49.3
CAZ	0.1	0.1	0.1	0.1	0.1	0.2	0.2
CHA	7.1	6.9	6.6	6.0	5.4	4.8	4.3
EUR	0.3	0.4	0.4	0.5	0.5	0.6	0.7
IND	1.4	1.0	1.2	1.1	1.2	1.5	1.7
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	6.7	5.5	5.8	7.1	8.0	8.1	8.4
MEA	0.1	0.1	0.1	0.1	0.1	0.1	0.2
NEU	0.0	0.0	0.0	0.1	0.1	0.1	0.1
OAS	7.1	7.1	7.1	7.5	7.9	8.3	8.8
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	15.3	19.4	19.3	20.9	22.0	23.1	24.4
USA	0.2	0.2	0.3	0.3	0.3	0.4	0.4

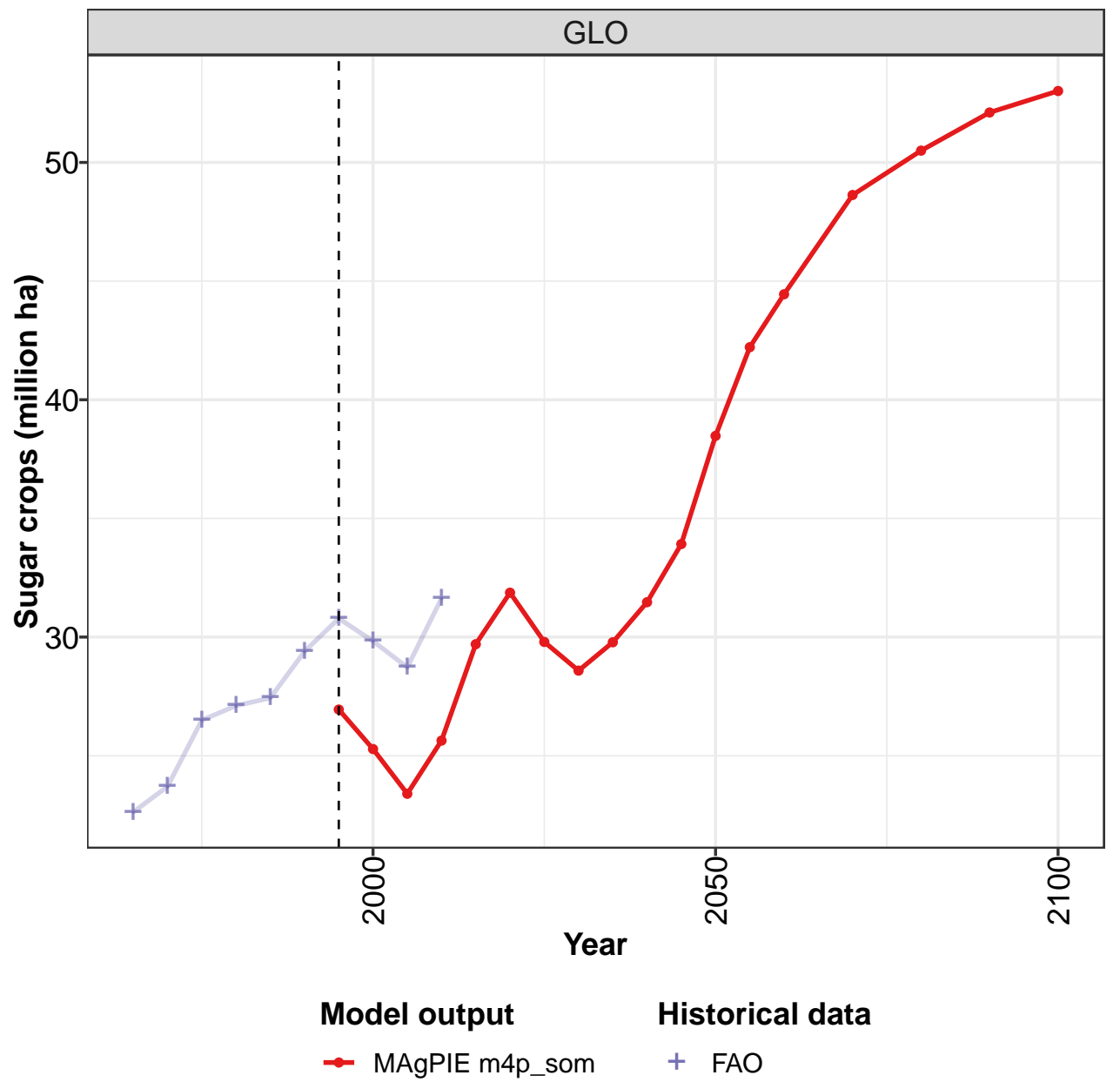
Table 1638: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Other crops—Tropical roots (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	37.4	39.4	40.3	40.0	41.6	43.3	45.2	48.1	48.0	49.0
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	7.2	7.0	6.7	6.0	5.9	6.0	5.6	5.2	4.1	3.1
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.6	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.8	1.0
JPN	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	5.3	6.1	6.3	6.1	5.7	6.1	7.0	7.0	6.9	6.8
MEA	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	6.1	5.5	5.7	6.4	6.0	6.3	5.5	5.3	5.3	5.6
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	17.4	19.6	20.4	20.4	23.0	24.0	26.1	29.6	30.5	32.2
USA	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1

Table 1639: FAO — Resources—Land Cover—Cropland—Crops—Other crops—Tropical roots (million ha)

55.1.22 Crops—Sugar crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

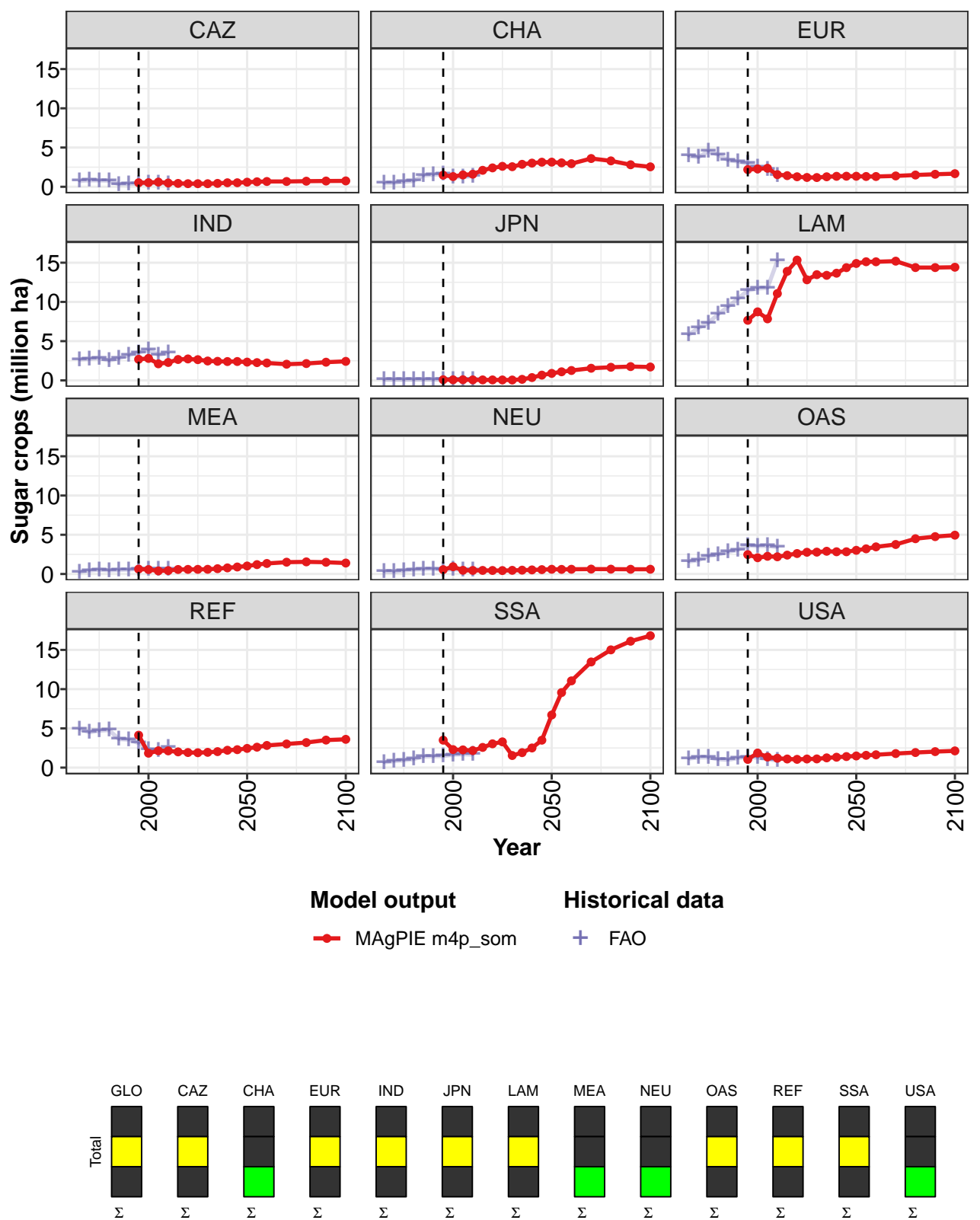


Figure 427: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Sugar crops (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	26.9	25.3	23.4	25.6	29.7	31.9	29.8	28.6	29.8	31.5	33.9
CAZ	0.5	0.5	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5
CHA	1.5	1.3	1.5	1.6	2.1	2.4	2.6	2.6	2.9	3.0	3.1
EUR	2.2	2.3	2.4	1.5	1.4	1.3	1.2	1.2	1.3	1.3	1.3
IND	2.7	2.8	2.1	2.3	2.7	2.7	2.6	2.5	2.4	2.4	2.4
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.4	0.7
LAM	7.7	8.7	7.8	11.1	13.9	15.3	12.8	13.5	13.4	13.7	14.4
MEA	0.6	0.6	0.4	0.4	0.6	0.6	0.6	0.6	0.7	0.8	0.9
NEU	0.6	0.9	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.6
OAS	2.5	2.1	2.3	2.2	2.4	2.6	2.8	2.8	2.9	2.8	2.8
REF	4.1	1.8	2.1	2.1	2.0	1.9	1.9	1.9	2.0	2.2	2.3
SSA	3.5	2.3	2.3	2.2	2.6	3.0	3.3	1.5	1.9	2.5	3.5
USA	1.0	1.9	1.3	1.2	1.1	1.1	1.1	1.1	1.2	1.3	1.4

Table 1640: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Sugar crops (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	38.5	42.2	44.4	48.6	50.5	52.1	53.0
CAZ	0.6	0.6	0.7	0.7	0.7	0.7	0.7
CHA	3.1	3.1	2.9	3.6	3.3	2.8	2.5
EUR	1.3	1.3	1.3	1.4	1.5	1.6	1.7
IND	2.3	2.3	2.2	2.1	2.1	2.3	2.4
JPN	0.9	1.1	1.3	1.5	1.7	1.8	1.7
LAM	14.9	15.1	15.1	15.2	14.4	14.4	14.4
MEA	1.0	1.2	1.3	1.5	1.5	1.5	1.4
NEU	0.6	0.6	0.6	0.6	0.6	0.6	0.6
OAS	3.0	3.2	3.5	3.8	4.5	4.8	4.9
REF	2.4	2.6	2.8	3.0	3.2	3.5	3.6
SSA	6.7	9.6	11.1	13.5	15.0	16.1	16.8
USA	1.5	1.6	1.6	1.8	1.9	2.0	2.1

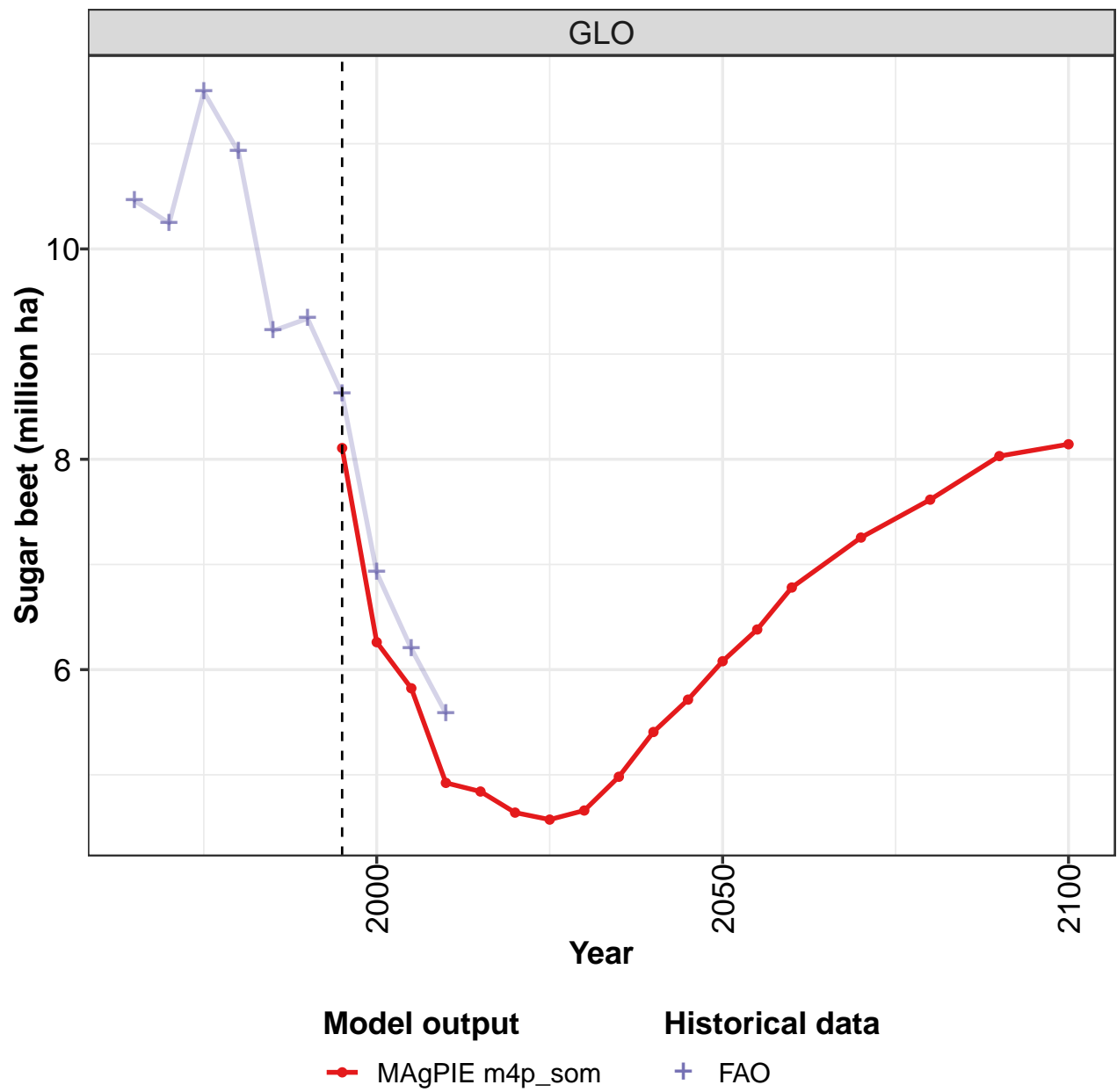
Table 1641: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Sugar crops (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	22.6	23.7	26.5	27.1	27.4	29.4	30.8	29.8	28.7	31.6
CAZ	0.7	0.8	0.8	0.8	0.3	0.4	0.4	0.5	0.5	0.4
CHA	0.5	0.5	0.7	0.7	1.4	1.5	1.6	1.2	1.2	1.4
EUR	4.0	3.8	4.6	4.1	3.4	3.2	3.0	2.5	2.2	1.5
IND	2.7	2.7	2.8	2.5	2.8	3.2	3.5	3.9	3.3	3.5
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	5.8	6.7	7.3	8.4	9.4	10.4	11.5	11.7	11.8	15.2
MEA	0.3	0.5	0.5	0.5	0.5	0.6	0.7	0.6	0.6	0.6
NEU	0.3	0.3	0.4	0.6	0.6	0.7	0.5	0.6	0.5	0.5
OAS	1.6	1.8	2.3	2.5	2.8	3.1	3.6	3.6	3.6	3.4
REF	4.9	4.5	4.7	4.8	3.6	3.6	3.1	2.3	2.2	2.5
SSA	0.7	0.8	0.9	1.1	1.4	1.4	1.5	1.6	1.7	1.7
USA	1.1	1.3	1.3	1.1	1.0	1.2	1.3	1.3	1.1	0.9

Table 1642: FAO — Resources—Land Cover—Cropland—Crops—Sugar crops (million ha)

55.1.23 Crops—Sugar crops—Sugar beet

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

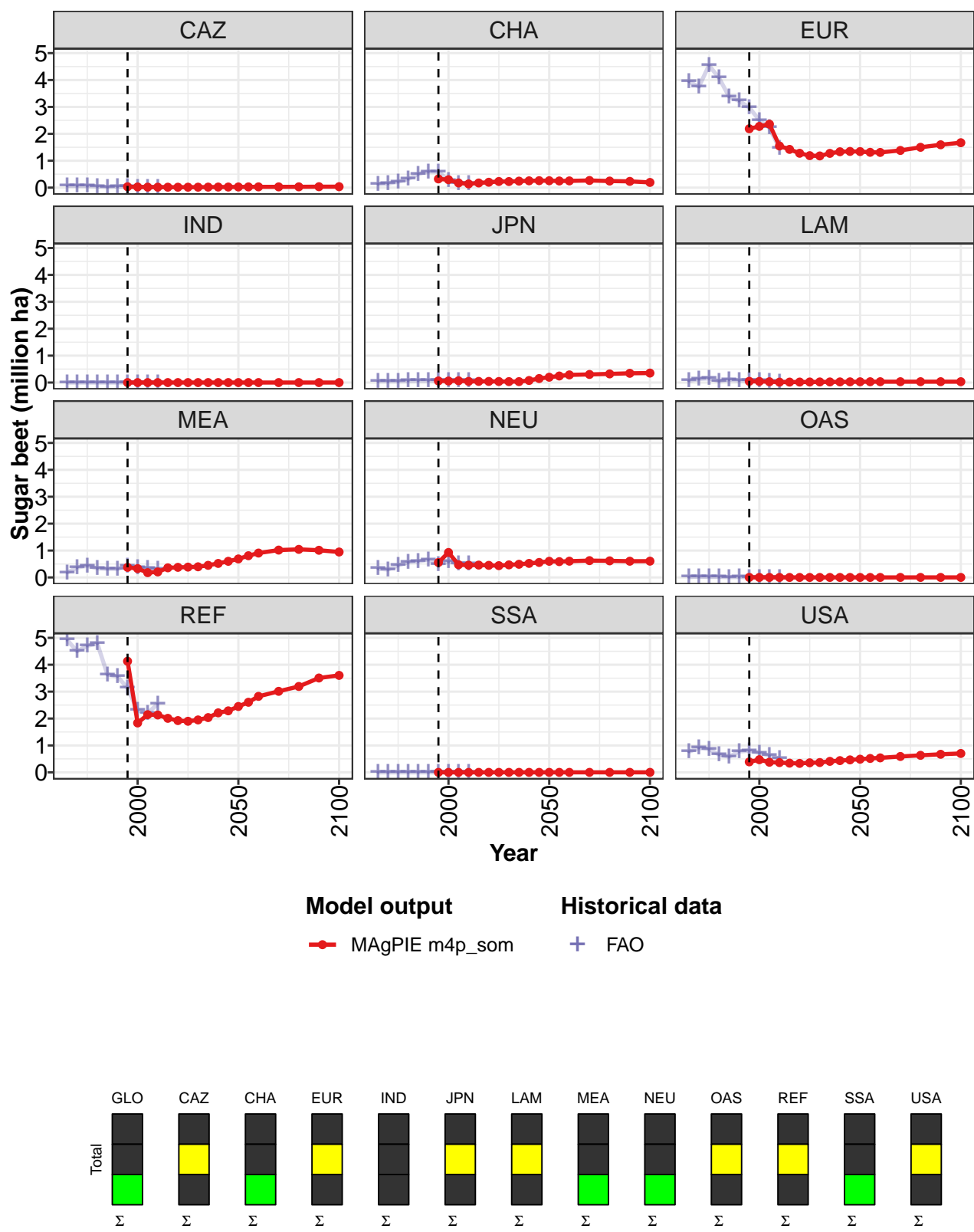


Figure 428: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Sugar crops—Sugar beet (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	8.11	6.26	5.82	4.92	4.84	4.64	4.57	4.66	4.98	5.41	5.72
CAZ	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
CHA	0.32	0.30	0.17	0.14	0.17	0.20	0.23	0.23	0.24	0.25	0.26
EUR	2.19	2.28	2.36	1.55	1.42	1.28	1.19	1.18	1.27	1.33	1.35
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.06	0.06	0.07	0.04	0.04	0.04	0.04	0.04	0.03	0.08	0.15
LAM	0.05	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03
MEA	0.38	0.33	0.18	0.21	0.36	0.38	0.38	0.40	0.45	0.52	0.60
NEU	0.56	0.93	0.47	0.46	0.46	0.45	0.44	0.47	0.49	0.52	0.56
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	4.13	1.84	2.14	2.13	2.01	1.92	1.90	1.95	2.04	2.21	2.29
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.39	0.47	0.38	0.36	0.34	0.33	0.36	0.37	0.41	0.44	0.46

Table 1643: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Sugar crops—Sugar beet (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	6.08	6.38	6.78	7.26	7.62	8.03	8.14
CAZ	0.03	0.03	0.03	0.03	0.03	0.04	0.04
CHA	0.26	0.25	0.25	0.27	0.25	0.23	0.19
EUR	1.34	1.31	1.31	1.38	1.50	1.59	1.67
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.20	0.24	0.28	0.30	0.32	0.34	0.35
LAM	0.03	0.03	0.03	0.03	0.03	0.03	0.03
MEA	0.69	0.81	0.91	1.02	1.04	1.01	0.95
NEU	0.60	0.59	0.61	0.63	0.62	0.60	0.61
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	2.45	2.61	2.82	3.01	3.19	3.51	3.60
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.49	0.52	0.54	0.59	0.63	0.67	0.70

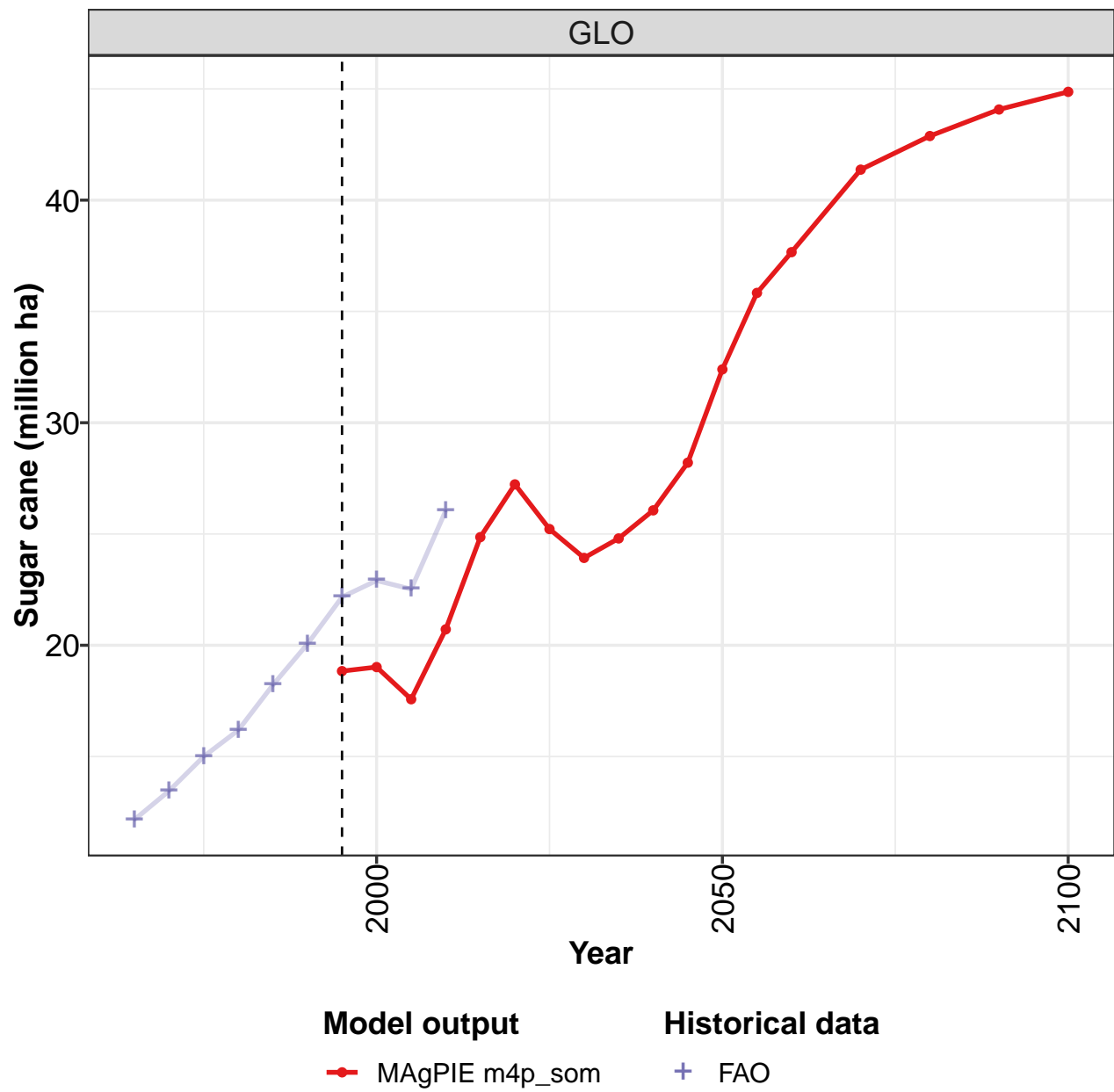
Table 1644: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Sugar crops—Sugar beet (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	10.5	10.2	11.5	10.9	9.2	9.3	8.6	6.9	6.2	5.6
CAZ	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.1	0.2	0.2	0.3	0.5	0.6	0.6	0.3	0.2	0.2
EUR	3.9	3.7	4.5	4.1	3.4	3.2	3.0	2.5	2.2	1.5
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0
MEA	0.2	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.3	0.3
NEU	0.3	0.3	0.4	0.6	0.6	0.7	0.5	0.6	0.5	0.5
OAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REF	4.9	4.5	4.7	4.8	3.6	3.6	3.1	2.3	2.2	2.5
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.8	0.9	0.9	0.7	0.6	0.8	0.8	0.7	0.6	0.5

Table 1645: FAO — Resources—Land Cover—Cropland—Crops—Sugar crops—Sugar beet (million ha)

55.1.24 Crops—Sugar crops—Sugar cane

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

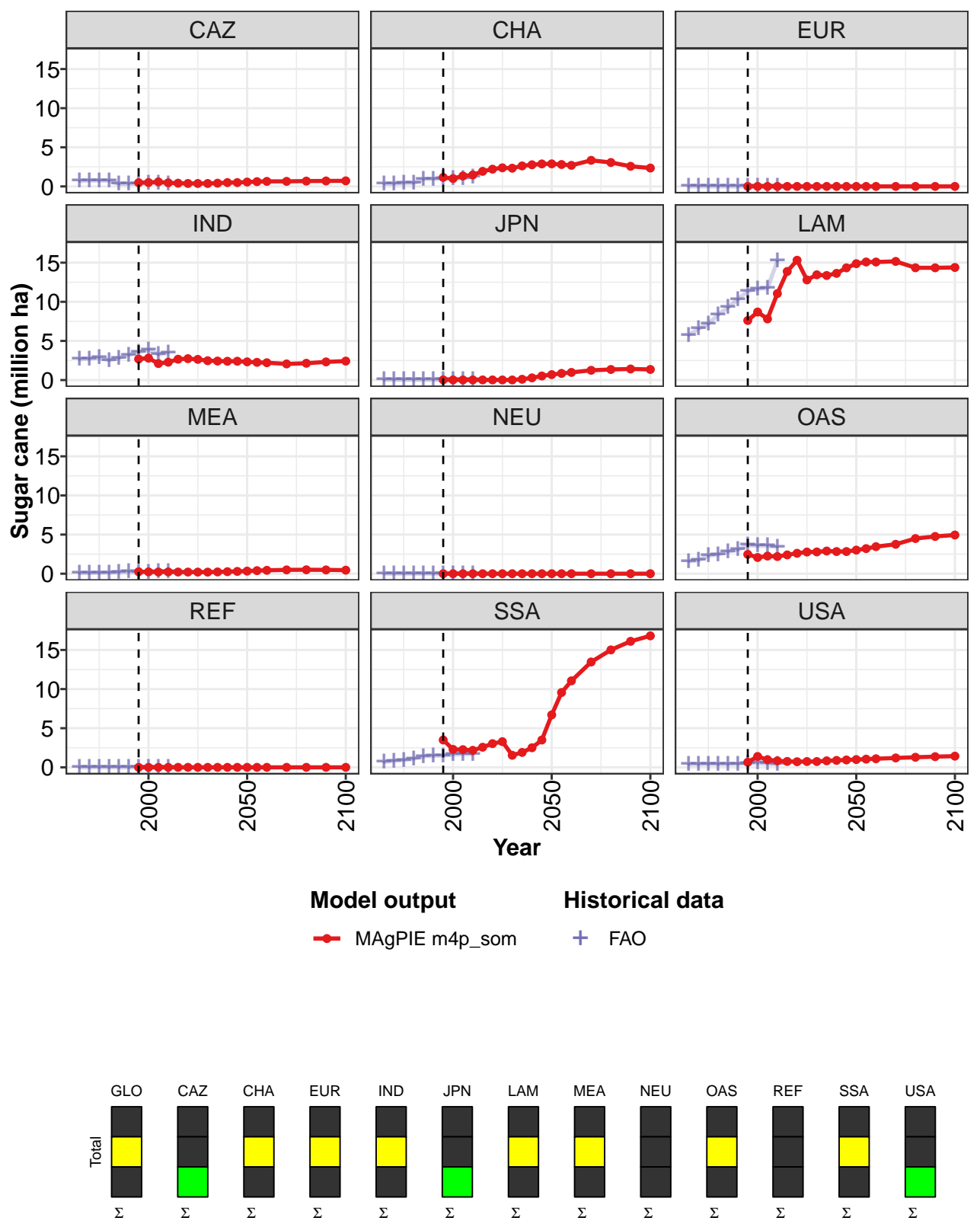


Figure 429: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Sugar crops—Sugar cane (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	18.8	19.0	17.6	20.7	24.9	27.2	25.2	23.9	24.8	26.1	28.2
CAZ	0.5	0.5	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5
CHA	1.2	1.0	1.3	1.5	1.9	2.2	2.4	2.3	2.6	2.8	2.9
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	2.7	2.8	2.1	2.3	2.7	2.7	2.6	2.5	2.4	2.4	2.4
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.5
LAM	7.6	8.7	7.8	11.1	13.9	15.3	12.8	13.5	13.4	13.6	14.3
MEA	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	2.5	2.1	2.3	2.2	2.4	2.6	2.8	2.8	2.9	2.8	2.8
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	3.5	2.3	2.3	2.2	2.6	3.0	3.3	1.5	1.9	2.5	3.5
USA	0.7	1.4	1.0	0.8	0.8	0.7	0.7	0.7	0.8	0.9	0.9

Table 1646: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Sugar crops—Sugar cane (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	32.4	35.8	37.7	41.4	42.9	44.1	44.9
CAZ	0.6	0.6	0.6	0.6	0.7	0.7	0.7
CHA	2.9	2.8	2.7	3.3	3.1	2.6	2.3
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	2.3	2.3	2.2	2.1	2.1	2.3	2.4
JPN	0.7	0.9	1.0	1.2	1.4	1.4	1.4
LAM	14.9	15.1	15.1	15.2	14.3	14.3	14.4
MEA	0.3	0.4	0.4	0.5	0.5	0.5	0.5
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	3.0	3.2	3.5	3.8	4.5	4.8	4.9
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	6.7	9.6	11.1	13.5	15.0	16.1	16.8
USA	1.0	1.1	1.1	1.2	1.3	1.4	1.4

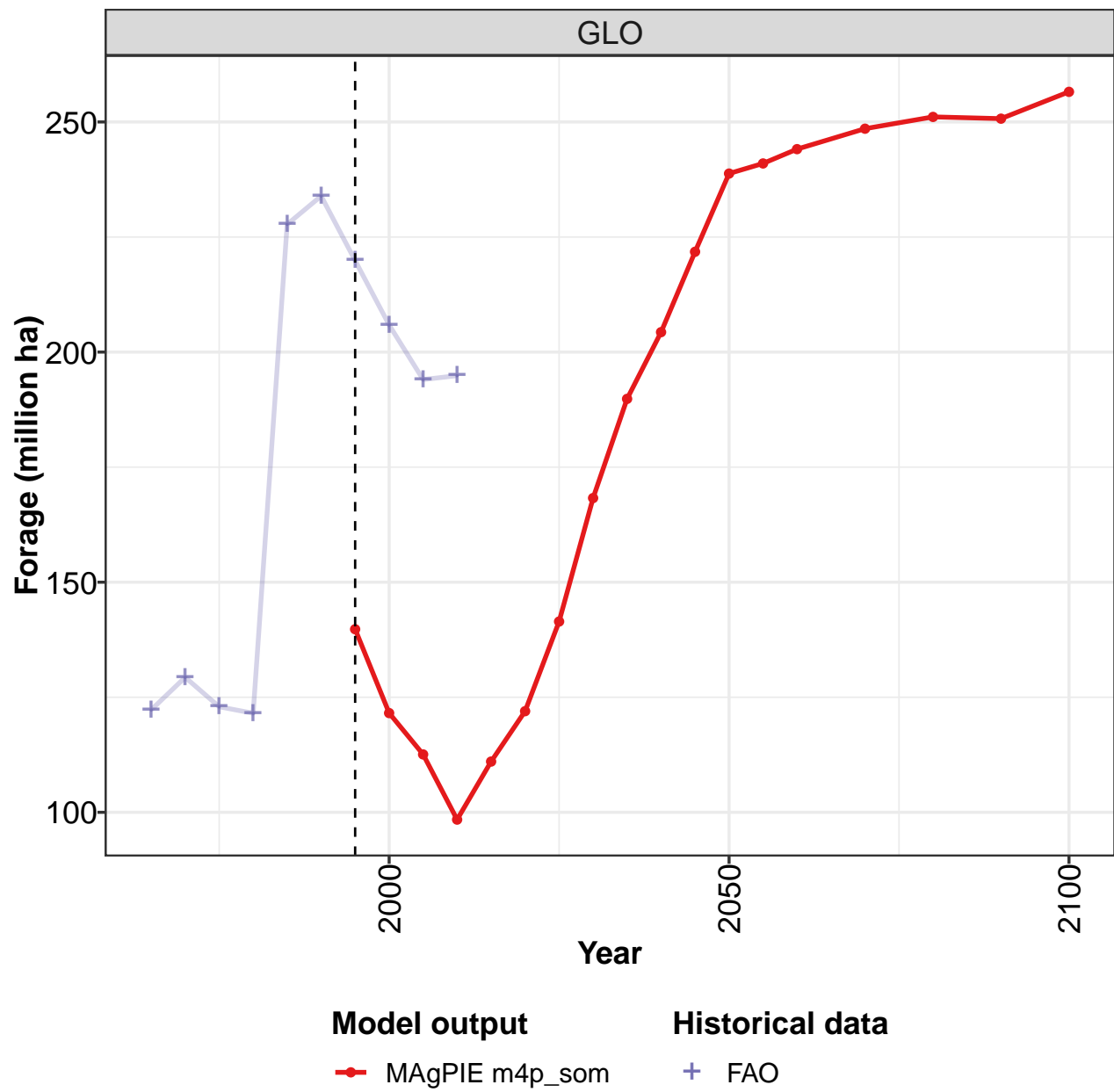
Table 1647: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Crops—Sugar crops—Sugar cane (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	12.2	13.5	15.0	16.2	18.2	20.1	22.2	22.9	22.5	26.0
CAZ	0.7	0.8	0.7	0.7	0.3	0.3	0.3	0.4	0.5	0.4
CHA	0.3	0.3	0.4	0.4	0.9	1.0	1.0	1.0	1.1	1.2
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	2.7	2.7	2.8	2.5	2.8	3.2	3.5	3.9	3.3	3.5
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	5.7	6.6	7.2	8.4	9.3	10.3	11.4	11.6	11.7	15.2
MEA	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.6	1.7	2.3	2.5	2.8	3.1	3.6	3.6	3.6	3.4
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.7	0.8	0.9	1.1	1.4	1.4	1.5	1.6	1.7	1.7
USA	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4

Table 1648: FAO — Resources—Land Cover—Cropland—Crops—Sugar crops—Sugar cane (million ha)

55.1.25 Forage

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

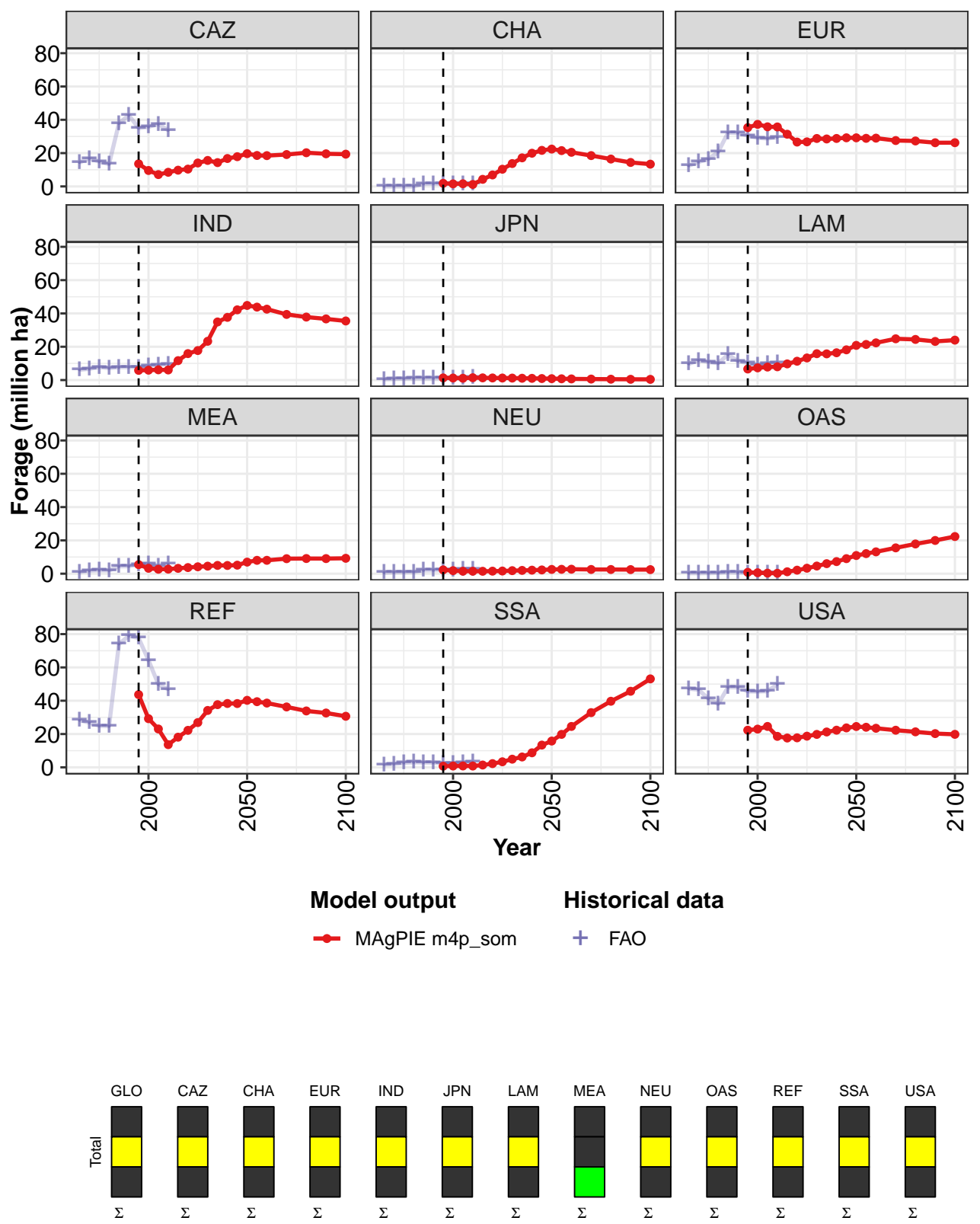


Figure 430: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Forage (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	140	122	113	98	111	122	141	168	190	204	222
CAZ	14	10	7	8	10	10	14	16	14	17	18
CHA	2	2	2	1	4	7	10	14	17	20	22
EUR	35	37	36	36	31	27	27	29	29	29	29
IND	6	6	6	6	12	16	18	23	35	38	42
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	7	7	8	8	10	11	13	16	16	16	18
MEA	5	3	3	3	3	4	4	5	5	5	5
NEU	2	2	2	2	1	2	2	2	2	2	2
OAS	1	1	0	0	1	2	3	5	6	7	9
REF	44	29	23	14	18	22	27	34	38	38	38
SSA	1	1	1	1	1	2	3	5	6	9	13
USA	22	23	25	19	18	18	19	20	21	22	24

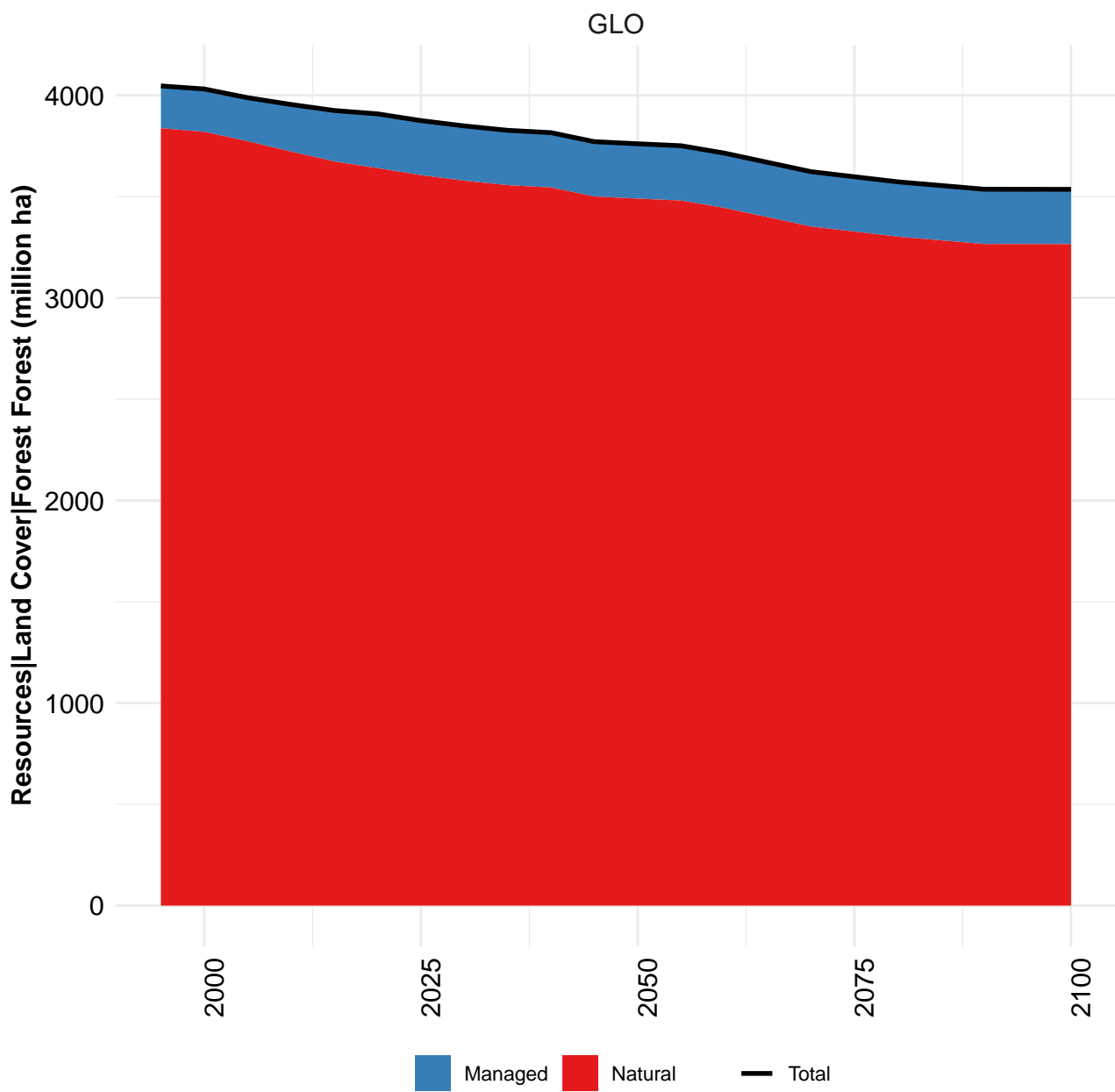
Table 1649: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Forage (million ha) [PART 1/2]

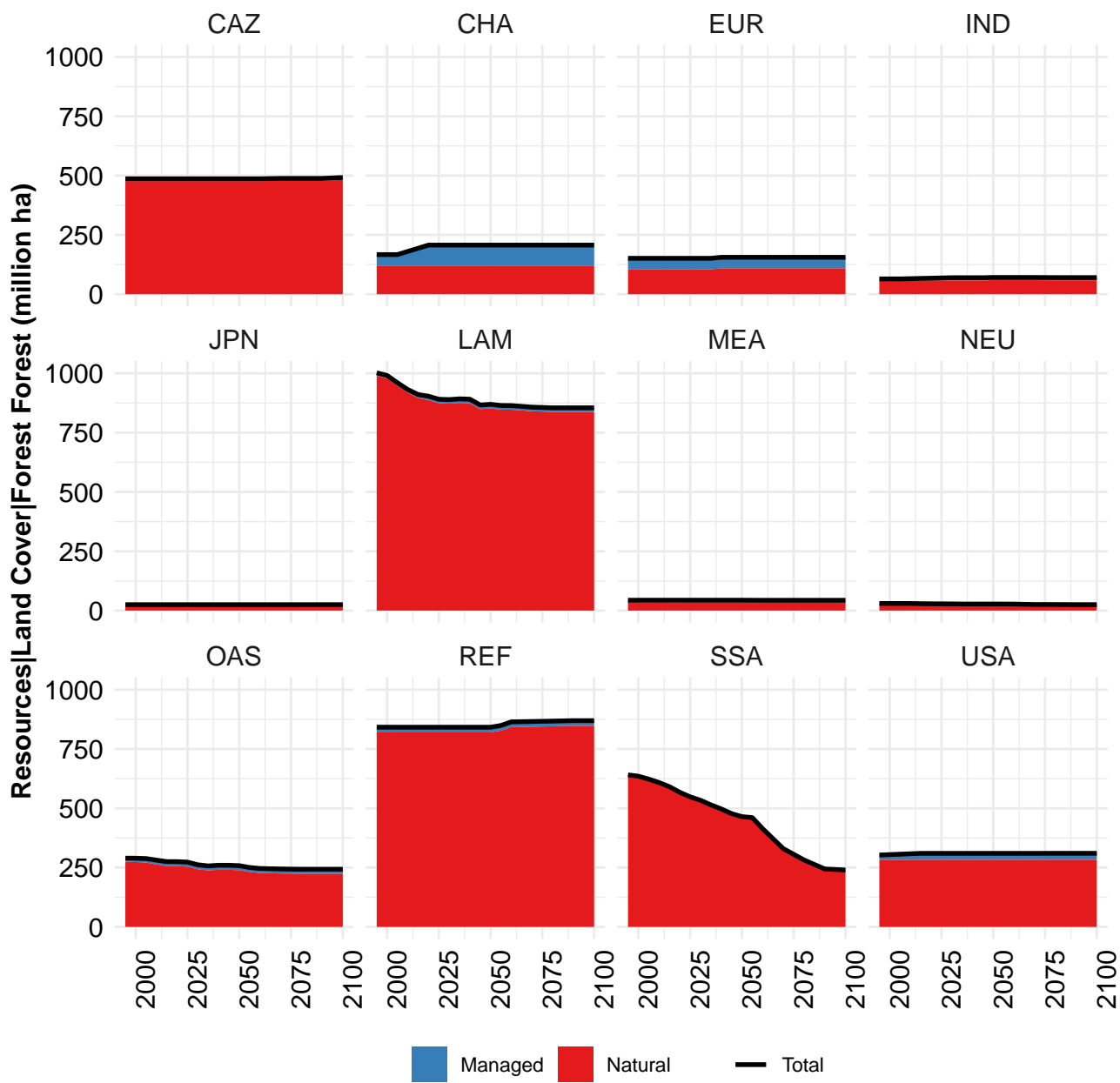
	2050	2055	2060	2070	2080	2090	2100
GLO	239	241	244	249	251	251	257
CAZ	20	19	18	19	20	20	19
CHA	22	22	21	19	16	14	13
EUR	29	29	29	28	27	26	26
IND	45	44	43	39	38	37	35
JPN	1	1	1	1	1	0	0
LAM	21	21	22	25	24	23	24
MEA	7	8	8	9	9	9	9
NEU	3	3	3	3	3	2	2
OAS	11	12	13	16	18	20	22
REF	40	39	39	36	34	33	31
SSA	16	20	25	33	40	46	53
USA	25	24	23	22	21	20	20

Table 1650: MAgPIE m4p\_som — Resources—Land Cover—Cropland—Forage (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	122	129	123	122	228	234	220	206	194	195
CAZ	14	17	15	13	38	43	35	36	37	34
CHA	0	0	0	0	2	2	2	2	2	2
EUR	12	15	16	21	32	32	30	29	29	30
IND	6	7	8	7	8	8	8	8	9	10
JPN	1	1	1	1	1	1	1	1	1	1
LAM	10	12	11	10	15	11	10	9	10	10
MEA	1	2	2	2	4	5	6	6	5	6
NEU	1	1	1	1	2	2	2	2	3	3
OAS	0	0	0	0	1	1	0	0	0	0
REF	28	27	25	25	74	79	78	64	50	47
SSA	2	2	3	3	3	3	2	2	3	3
USA	47	47	41	38	48	48	46	45	46	50

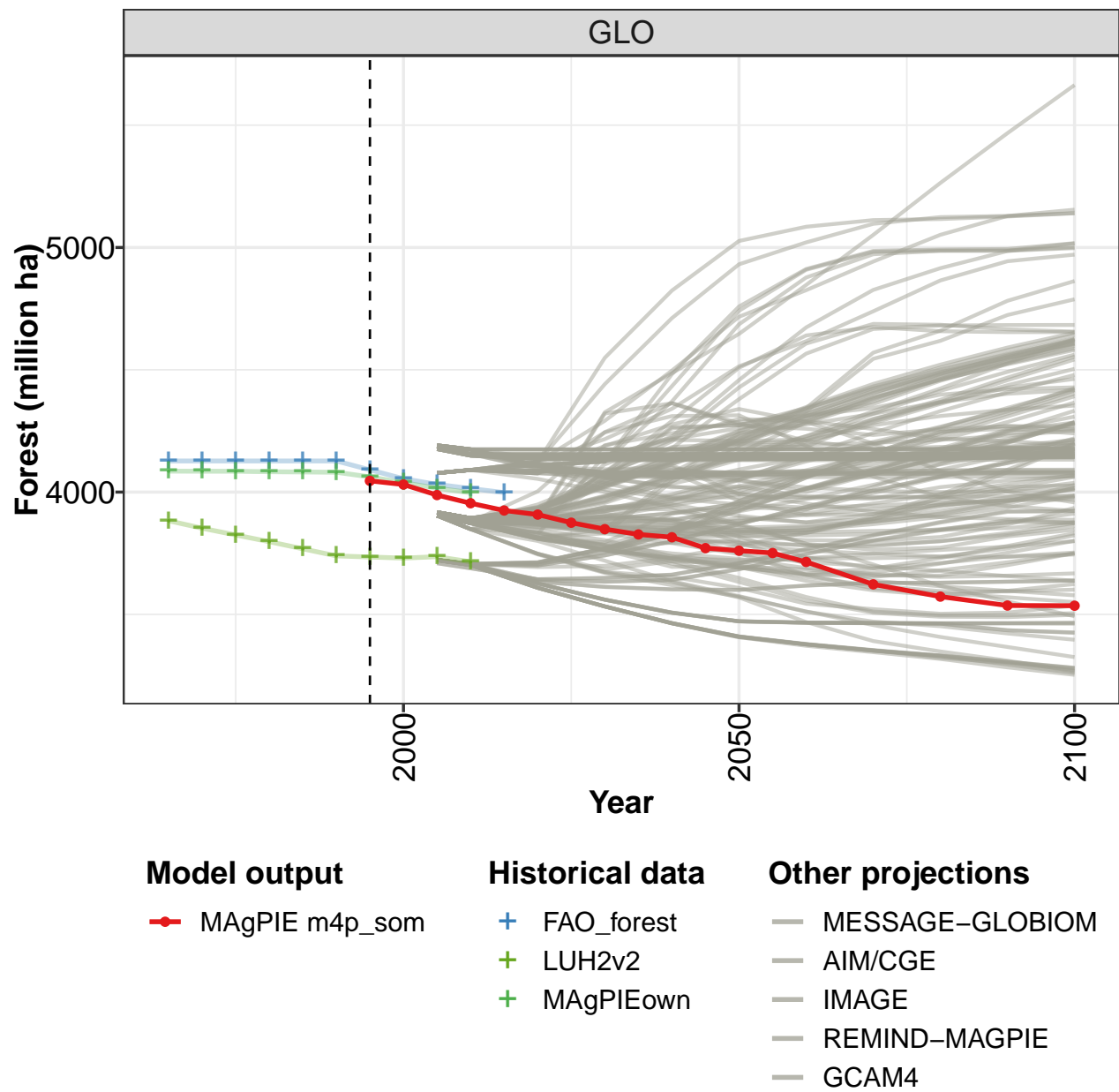
Table 1651: FAO — Resources—Land Cover—Cropland—Forage (million ha)





55.2 Forest

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

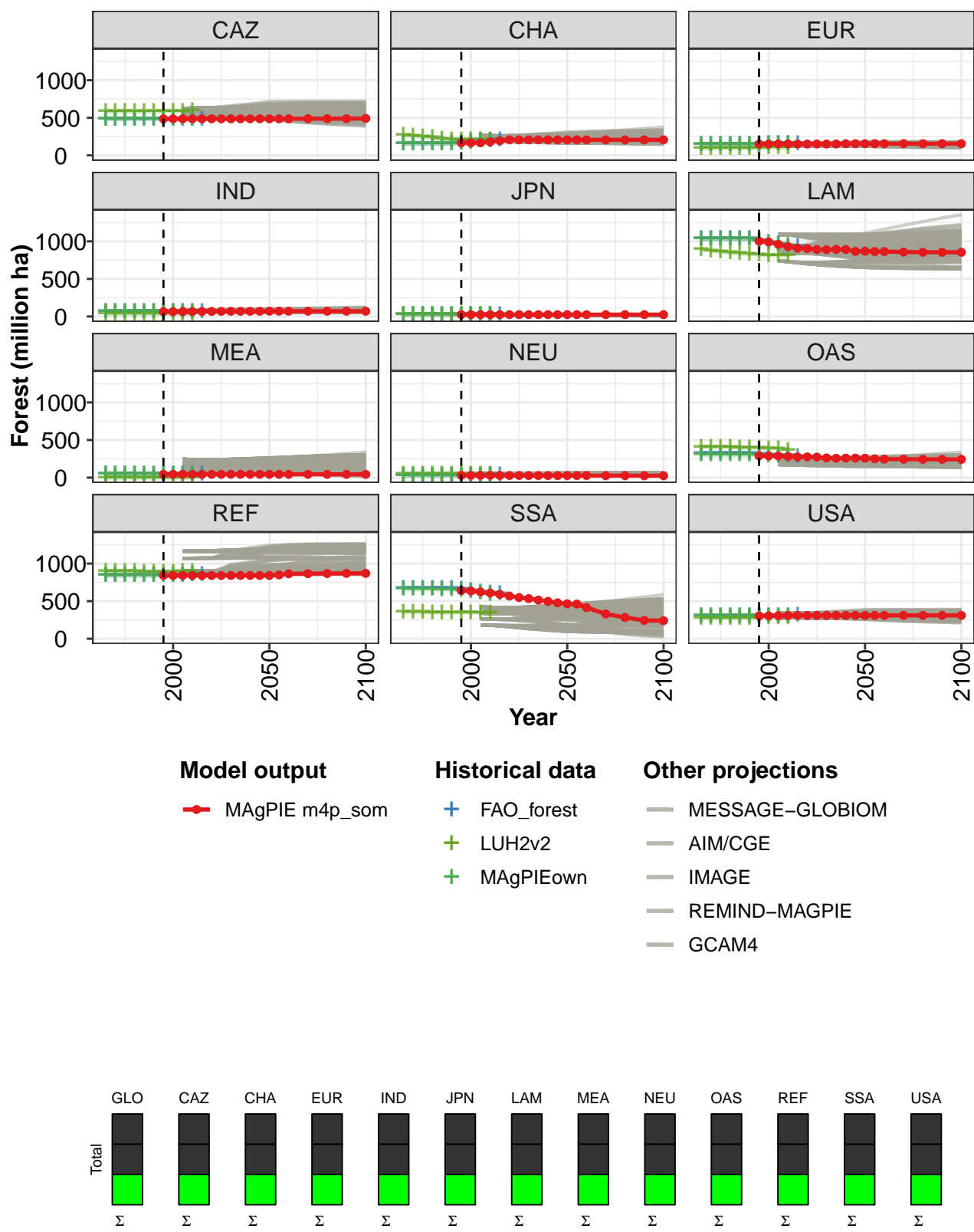


Figure 431: MAgPIE m4p\_som — Resources—Land Cover—Forest (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	4046	4031	3988	3954	3925	3908	3875	3849	3827	3815	3771
CAZ	487	487	487	487	487	487	487	487	487	487	487
CHA	167	167	167	180	194	207	207	207	207	207	207
EUR	151	151	151	151	151	151	151	151	151	156	156
IND	65	65	65	66	67	68	69	70	70	70	70
JPN	25	25	25	25	25	25	25	25	25	25	25
LAM	1002	991	960	932	911	904	891	889	892	891	866
MEA	44	44	44	44	44	44	44	44	44	44	44
NEU	30	30	30	30	29	29	28	28	28	28	28
OAS	290	290	288	282	275	275	273	262	257	260	260
REF	842	842	842	842	842	842	842	842	842	842	842
SSA	641	635	623	609	591	567	548	534	514	497	478
USA	303	305	307	308	310	310	310	310	310	310	310

Table 1652: MAgPIE m4p\_som — Resources—Land Cover—Forest (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	3760	3751	3714	3623	3573	3536	3536
CAZ	487	487	487	488	488	488	492
CHA	207	207	207	207	207	207	207
EUR	156	156	156	156	156	156	156
IND	71	71	71	71	70	70	70
JPN	25	25	25	25	25	25	25
LAM	869	864	864	857	855	855	855
MEA	44	43	43	43	43	43	43
NEU	28	28	27	26	26	25	25
OAS	258	250	246	244	243	243	243
REF	842	849	864	866	868	869	869
SSA	465	461	414	330	282	244	240
USA	310	310	310	310	310	310	310

Table 1653: MAgPIE m4p\_som — Resources—Land Cover—Forest (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015
GLO	4127	4127	4127	4127	4127	4127	4091	4055	4032	4014	3998
CAZ	486	486	486	486	486	486	487	487	485	481	482
CHA	157	157	157	157	157	157	167	177	193	201	208
EUR	148	148	148	148	148	148	151	155	157	159	161
IND	64	64	64	64	64	64	65	65	68	70	71
JPN	25	25	25	25	25	25	25	25	25	25	25
LAM	1032	1032	1032	1032	1032	1032	1010	988	964	946	935
MEA	44	44	44	44	44	44	44	43	44	44	43
NEU	30	30	30	30	30	30	30	31	31	32	33
OAS	322	322	322	322	322	322	310	298	292	291	285
REF	842	842	842	842	842	842	843	843	843	850	850
SSA	674	674	674	674	674	674	657	640	625	608	595
USA	302	302	302	302	302	302	303	304	305	309	310

Table 1654: FAO\_forest — Resources—Land Cover—Forest (million ha)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3883	3852	3825	3797	3768	3739	3735	3730	3736	3715
CAZ	583	582	582	582	583	583	583	584	587	590
CHA	267	261	249	237	220	203	204	206	204	207
EUR	94	95	96	97	98	98	100	102	103	103
IND	37	37	36	36	36	36	36	36	36	36
JPN	29	29	29	29	29	29	30	30	30	30
LAM	897	876	862	847	839	830	823	815	815	808
MEA	0	0	0	0	0	0	0	0	0	0
NEU	50	50	50	51	50	50	51	52	52	52
OAS	408	406	405	404	398	393	390	388	386	368
REF	892	891	891	890	890	890	890	889	895	895
SSA	354	352	350	349	349	348	349	349	345	342
USA	273	273	274	274	276	278	279	279	282	285

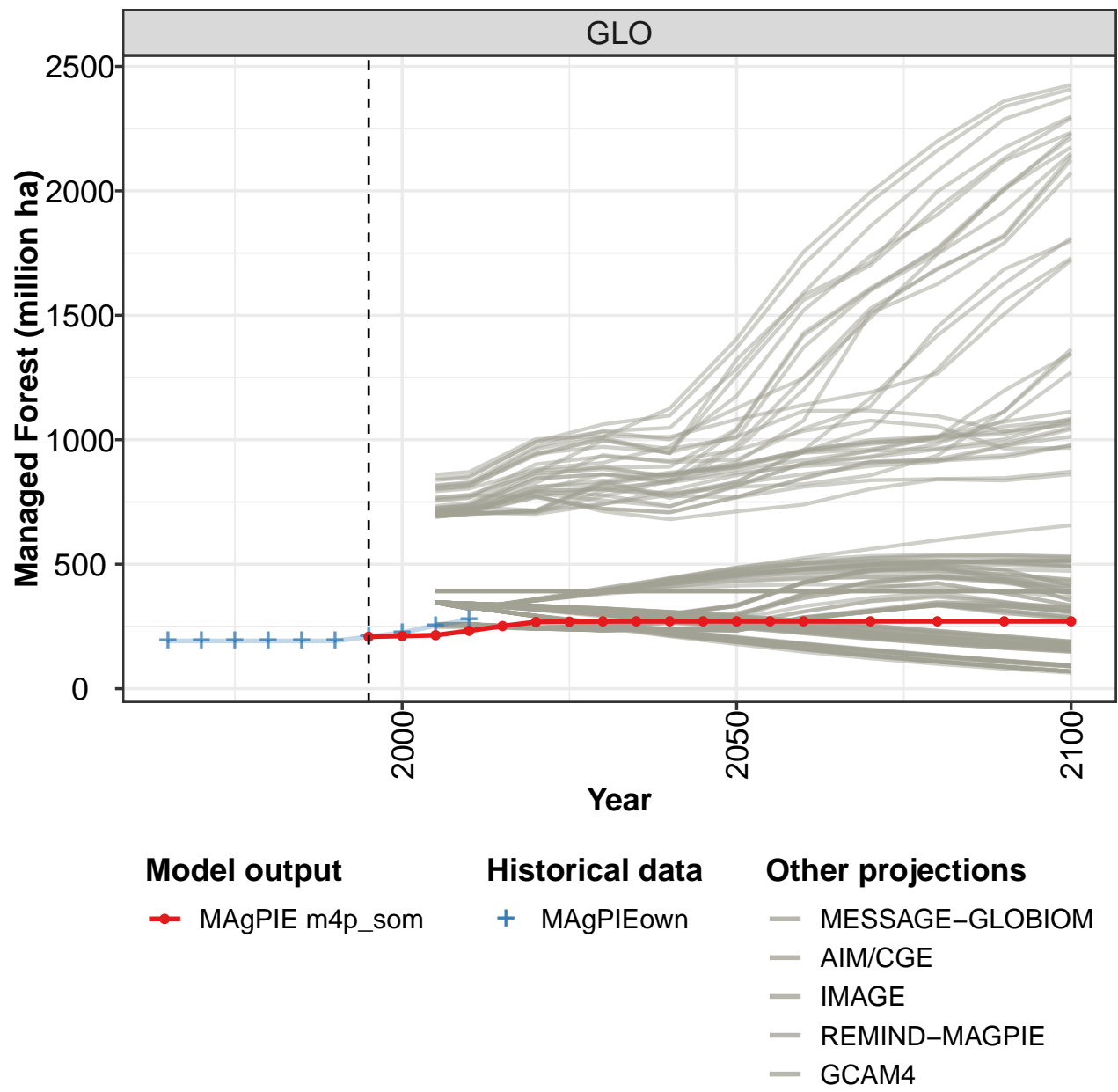
Table 1655: LUH2v2 — Resources—Land Cover—Forest (million ha)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4086	4085	4085	4083	4082	4081	4062	4039	4016	3998
CAZ	486	486	486	486	486	486	487	487	485	481
CHA	157	157	157	157	157	157	167	177	193	201
EUR	148	148	148	148	148	148	151	155	157	159
IND	64	64	64	64	64	64	65	65	68	70
JPN	25	25	25	25	25	25	25	25	25	25
LAM	1031	1031	1031	1030	1030	1030	1008	986	962	945
MEA	44	44	44	44	44	44	44	43	44	44
NEU	29	29	29	29	29	29	30	31	31	32
OAS	298	298	298	298	298	298	297	297	291	289
REF	842	842	842	842	842	842	843	843	843	850
SSA	658	658	658	656	655	654	642	627	611	594
USA	302	302	302	302	302	302	303	304	305	309

Table 1656: MAgPIEown — Resources—Land Cover—Forest (million ha)

55.2.1 Managed Forest

```
## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.
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## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

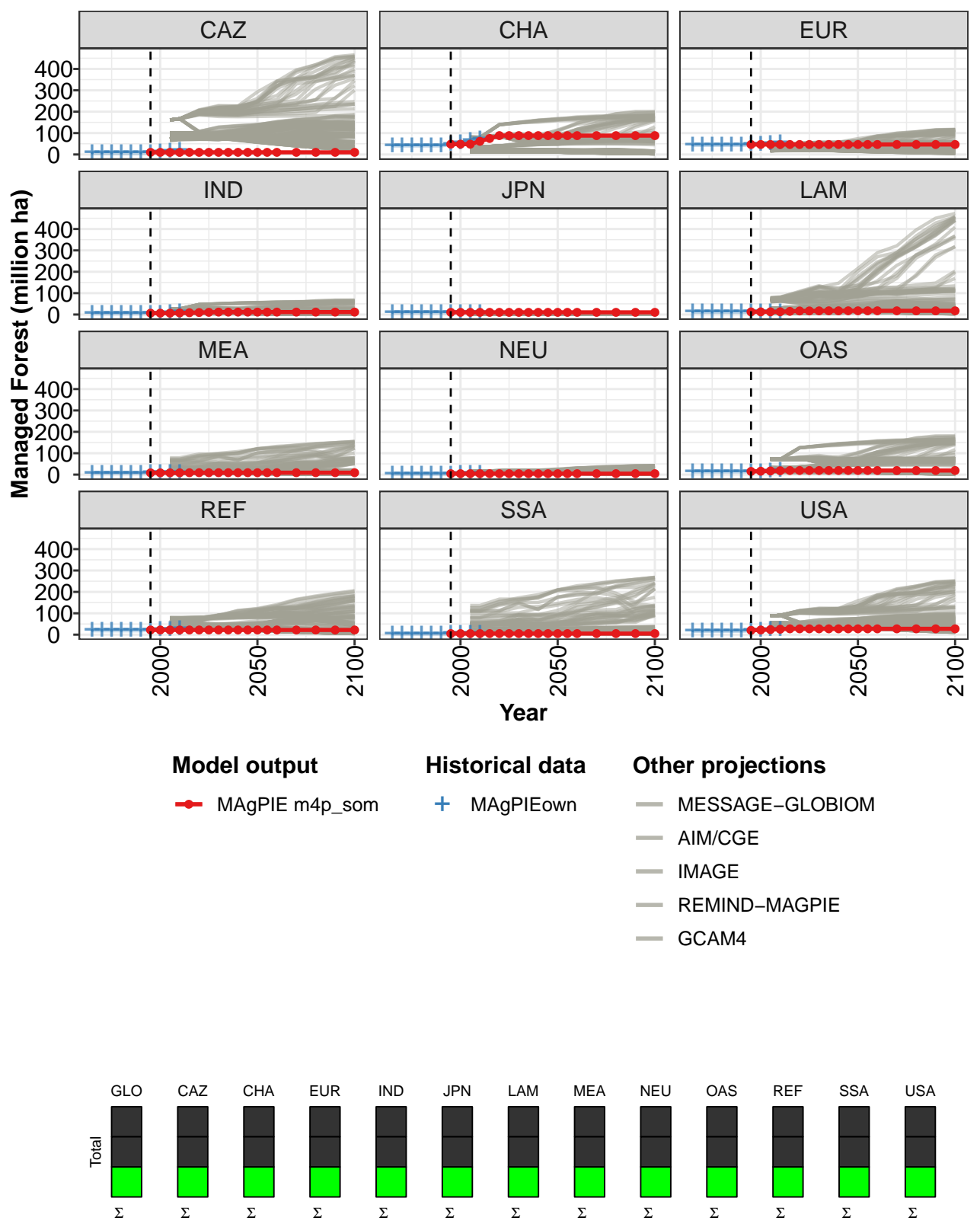


Figure 432: MAGPIE m4p\_som — Resources—Land Cover—Forest—Managed Forest (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	209	212	215	232	252	268	269	270	271	271	271
CAZ	10	10	10	10	10	10	10	10	10	10	10
CHA	48	48	48	62	75	88	88	88	88	88	88
EUR	47	47	47	47	47	47	47	47	47	47	47
IND	6	6	6	7	8	9	10	11	11	11	11
JPN	10	10	10	10	10	10	10	10	10	10	10
LAM	12	13	13	13	15	17	17	17	17	17	17
MEA	8	8	8	8	9	9	9	9	9	9	9
NEU	4	4	4	4	4	4	4	4	4	4	4
OAS	15	16	17	18	19	19	19	19	19	19	19
REF	22	22	22	22	22	22	22	22	22	22	22
SSA	5	5	5	5	5	5	5	5	5	5	5
USA	20	22	24	26	27	27	27	27	27	27	27

Table 1657: MAgPIE m4p\_som — Resources—Land Cover—Forest—Managed Forest (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	271	271	271	271	271	271	271
CAZ	10	10	10	10	10	10	10
CHA	88	88	88	88	88	88	88
EUR	47	47	47	47	47	47	47
IND	11	11	11	11	11	11	11
JPN	10	10	10	10	10	10	10
LAM	17	17	17	17	17	17	17
MEA	9	9	9	9	9	9	9
NEU	4	4	4	4	4	4	4
OAS	19	19	19	19	19	19	19
REF	22	22	22	22	22	22	22
SSA	5	5	5	5	5	5	5
USA	27	27	27	27	27	27	27

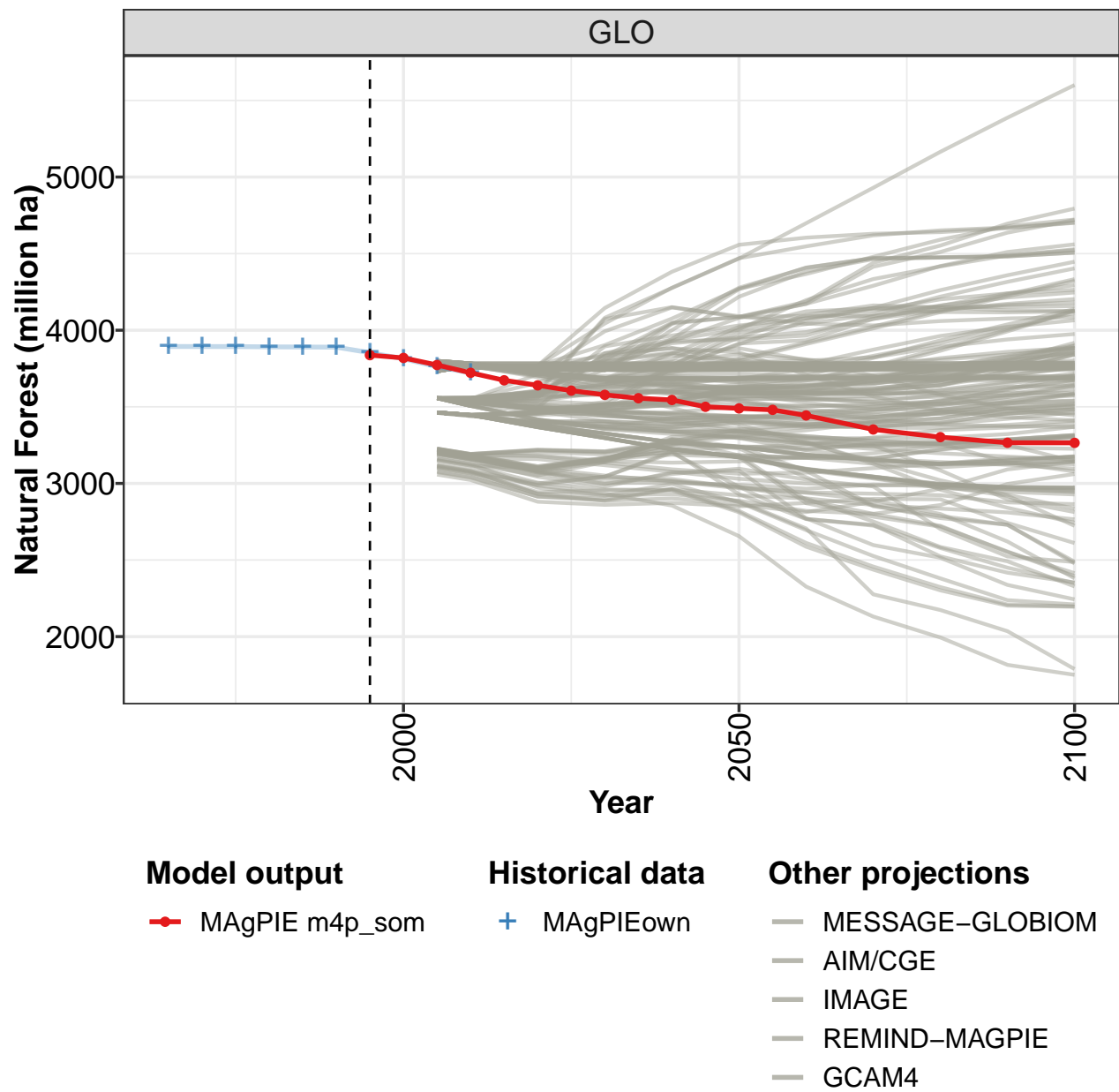
Table 1658: MAgPIE m4p\_som — Resources—Land Cover—Forest—Managed Forest (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	192	192	192	192	192	192	209	225	253	277
CAZ	7	7	7	7	7	7	10	13	15	18
CHA	42	42	42	42	42	42	48	54	67	73
EUR	45	45	45	45	45	45	47	49	52	54
IND	6	6	6	6	6	6	6	7	9	11
JPN	10	10	10	10	10	10	10	10	10	10
LAM	12	12	12	12	12	12	12	12	12	14
MEA	8	8	8	8	8	8	8	9	9	10
NEU	4	4	4	4	4	4	4	5	5	6
OAS	15	15	15	15	15	15	15	15	17	19
REF	20	20	20	20	20	20	22	24	25	28
SSA	5	5	5	5	5	5	5	5	6	7
USA	18	18	18	18	18	18	20	23	24	26

Table 1659: MAgPIEown — Resources—Land Cover—Forest—Managed Forest (million ha)

55.2.2 Natural Forest

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

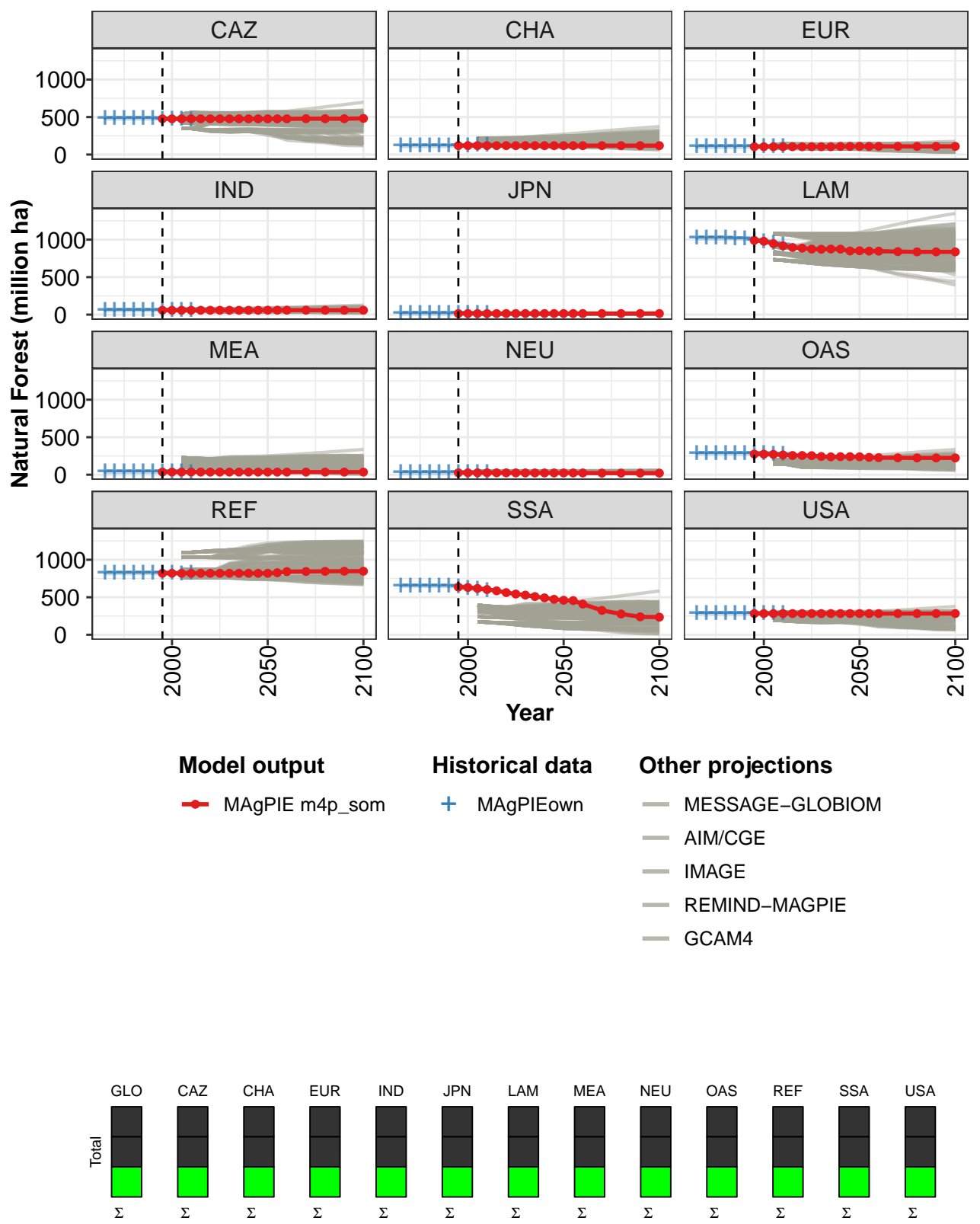


Figure 433: MAGPIE m4p\_som — Resources—Land Cover—Forest—Natural Forest (million ha)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	3837	3819	3773	3722	3673	3640	3606	3578	3556	3545	3500
CAZ	477	477	477	477	477	477	477	477	477	477	477
CHA	119	119	119	119	119	119	119	119	119	119	119
EUR	105	105	105	105	105	105	105	105	105	109	109
IND	58	58	58	58	58	58	58	58	58	58	58
JPN	15	15	15	15	15	15	15	15	15	15	15
LAM	990	978	947	918	896	887	874	872	875	874	849
MEA	35	35	35	35	35	35	35	35	35	35	35
NEU	26	26	26	26	25	24	24	24	23	23	23
OAS	275	274	271	264	256	256	254	243	238	241	241
REF	820	820	820	820	820	820	820	820	820	820	820
SSA	636	630	618	603	586	562	543	529	509	492	472
USA	283	283	283	283	283	283	283	283	283	283	283

Table 1660: MAgPIE m4p\_som — Resources—Land Cover—Forest—Natural Forest (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	3490	3480	3444	3352	3302	3265	3265
CAZ	477	477	477	478	478	478	482
CHA	119	119	119	119	119	119	119
EUR	109	109	109	109	109	109	109
IND	59	59	59	59	59	59	59
JPN	15	15	15	15	15	15	15
LAM	852	847	847	840	837	837	837
MEA	35	35	34	34	34	34	34
NEU	23	23	23	21	21	21	21
OAS	239	231	227	225	224	224	224
REF	820	827	842	844	846	847	847
SSA	460	456	409	325	277	239	235
USA	283	283	283	283	283	283	283

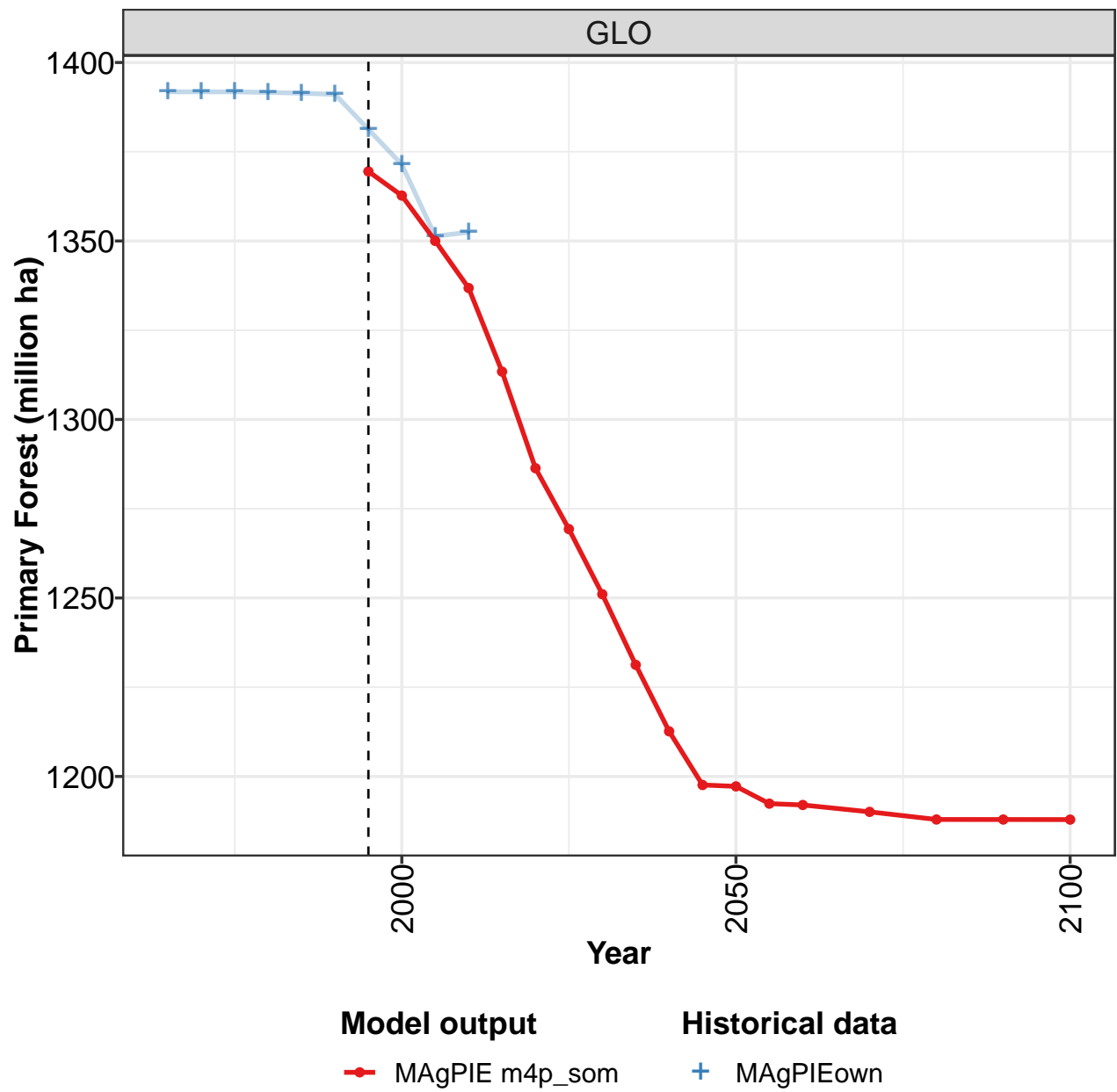
Table 1661: MAgPIE m4p\_som — Resources—Land Cover—Forest—Natural Forest (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3894	3894	3893	3891	3891	3889	3853	3813	3762	3721
CAZ	479	479	479	479	479	479	477	474	470	463
CHA	115	115	115	115	115	115	119	123	126	128
EUR	103	103	103	103	103	103	105	106	105	105
IND	58	58	58	58	58	58	58	58	58	59
JPN	15	15	15	15	15	15	15	15	15	15
LAM	1018	1018	1018	1018	1018	1018	996	974	950	930
MEA	36	36	36	36	36	36	35	34	35	34
NEU	25	25	25	25	25	25	26	26	26	26
OAS	284	284	284	284	284	284	283	282	274	270
REF	822	822	822	822	822	822	821	820	818	821
SSA	654	653	653	651	650	649	637	621	605	587
USA	285	285	285	285	285	285	283	281	280	283

Table 1662: MAgPIEown — Resources—Land Cover—Forest—Natural Forest (million ha)

55.2.3 Natural Forest—Primary Forest

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

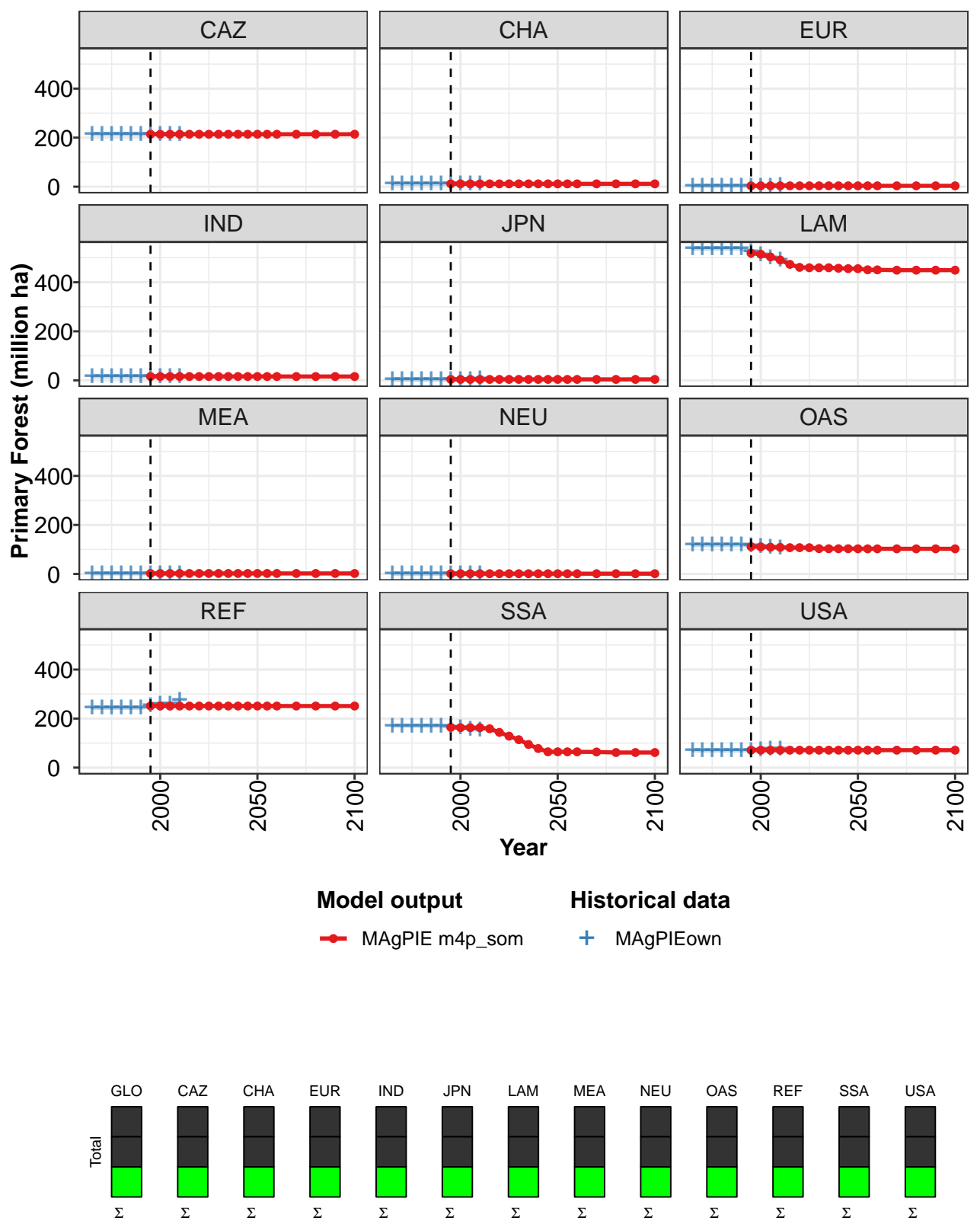


Figure 434: MAgPIE m4p\_som — Resources—Land Cover—Forest—Natural Forest—Primary Forest (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1369	1363	1350	1337	1313	1286	1269	1251	1231	1213	1198
CAZ	214	214	214	214	214	214	214	214	214	214	214
CHA	12	12	12	12	12	12	12	12	12	12	12
EUR	4	4	4	4	4	4	4	4	4	4	4
IND	16	16	16	16	16	16	16	16	16	16	16
JPN	4	4	4	4	4	4	4	4	4	4	4
LAM	519	514	503	491	473	461	459	459	459	457	456
MEA	2	2	2	2	2	2	2	2	2	2	2
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	112	111	109	109	107	107	107	103	103	103	103
REF	251	251	251	251	251	251	251	251	251	251	251
SSA	164	163	163	163	159	144	128	114	94	78	65
USA	71	71	71	71	71	71	71	71	71	71	71

Table 1663: MAgPIE m4p\_som — Resources—Land Cover—Forest—Natural Forest—Primary Forest (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1197	1192	1192	1190	1188	1188	1188
CAZ	214	214	214	214	214	214	214
CHA	12	12	12	12	12	12	12
EUR	4	4	4	4	4	4	4
IND	16	16	16	16	16	16	16
JPN	4	4	4	4	4	4	4
LAM	455	451	451	449	449	449	449
MEA	2	2	2	2	2	2	2
NEU	1	1	1	1	1	1	1
OAS	103	103	103	103	103	103	103
REF	251	251	251	251	251	251	251
SSA	65	64	64	64	62	62	62
USA	71	71	71	71	71	71	71

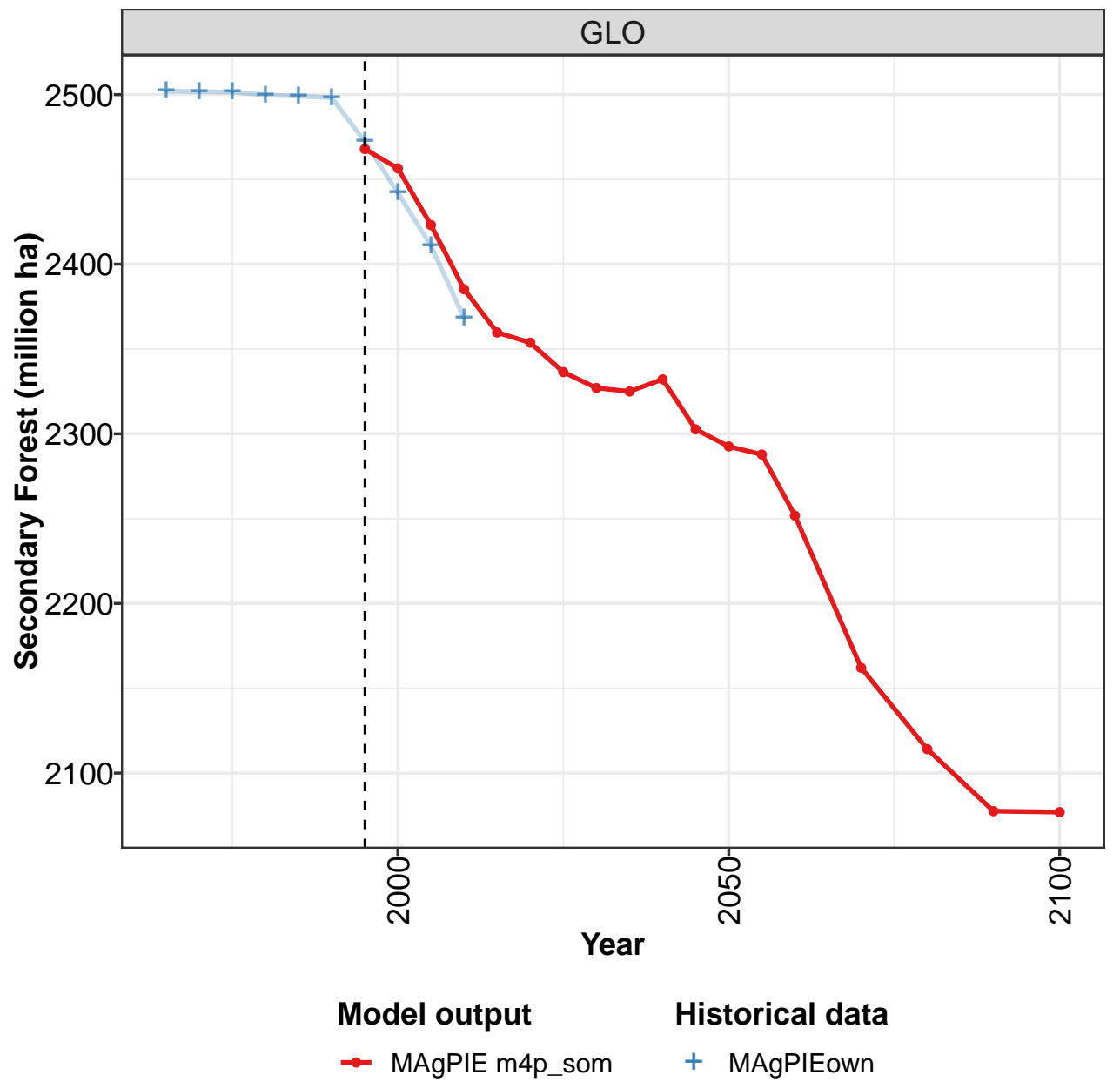
Table 1664: MAgPIE m4p\_som — Resources—Land Cover—Forest—Natural Forest—Primary Forest (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1392	1392	1392	1392	1391	1391	1381	1371	1351	1352
CAZ	214	214	214	214	214	214	214	214	214	213
CHA	12	12	12	12	12	12	12	12	12	12
EUR	4	4	4	4	4	4	4	4	4	4
IND	16	16	16	16	16	16	16	16	16	16
JPN	4	4	4	4	4	4	4	4	4	5
LAM	537	537	537	537	537	537	525	512	500	490
MEA	2	2	2	2	2	2	2	2	2	2
NEU	1	1	1	1	1	1	1	1	1	1
OAS	118	118	118	118	118	118	115	113	108	106
REF	244	244	244	244	244	244	252	260	258	276
SSA	171	171	170	170	170	170	166	162	158	153
USA	70	70	70	70	70	70	71	72	76	75

Table 1665: MAgPIEown — Resources—Land Cover—Forest—Natural Forest—Primary Forest (million ha)

55.2.4 Natural Forest—Secondary Forest

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

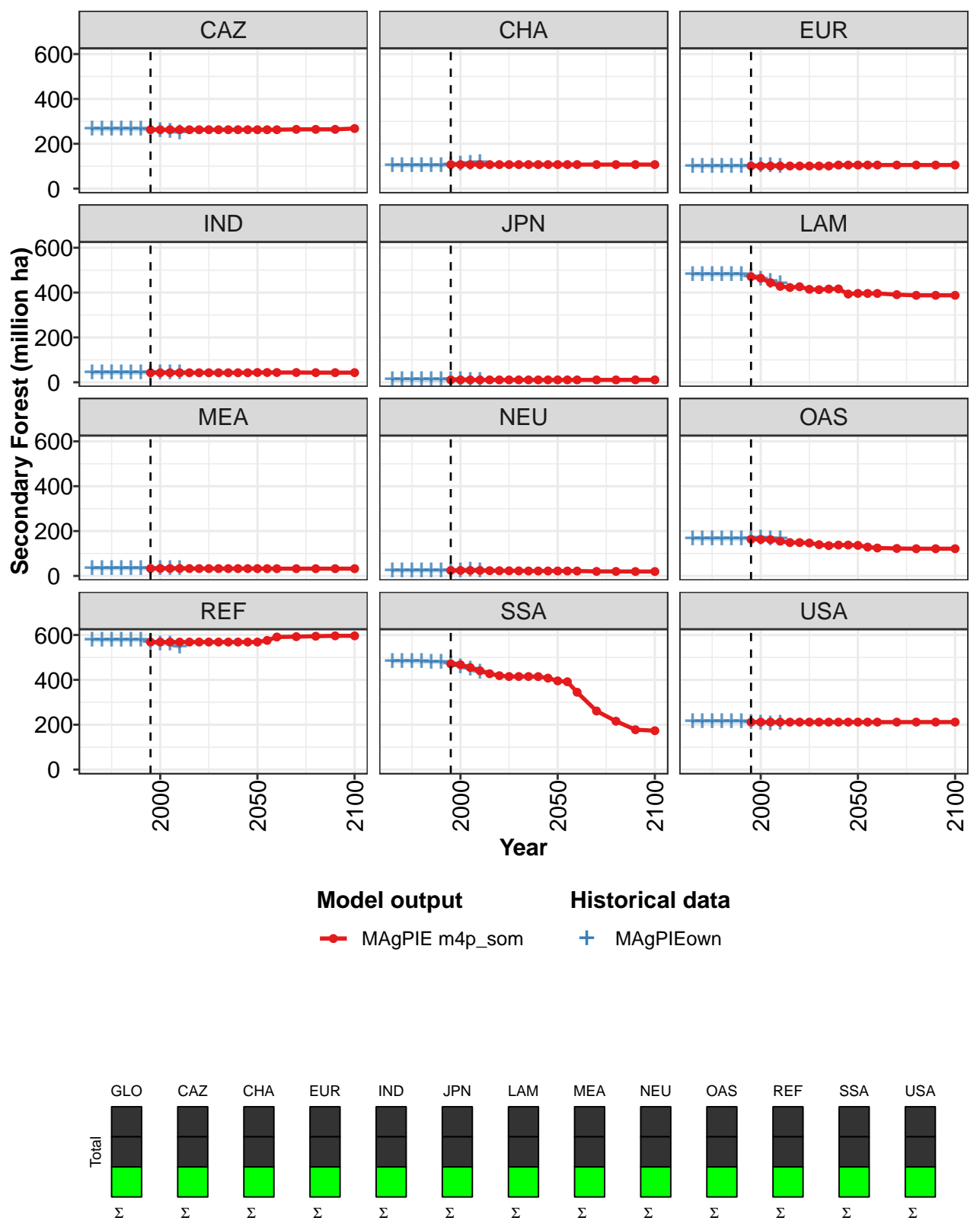


Figure 435: MAgPIE m4p\_som — Resources—Land Cover—Forest—Natural Forest—Secondary Forest (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	2468	2457	2423	2385	2360	2354	2336	2327	2325	2332	2303
CAZ	263	263	263	263	263	263	263	263	263	263	263
CHA	107	107	107	107	107	107	107	107	107	107	107
EUR	101	101	101	101	101	101	101	101	101	105	105
IND	43	43	43	43	43	43	43	43	43	43	43
JPN	11	11	11	11	11	11	11	11	11	11	11
LAM	471	464	444	428	423	426	415	413	416	416	393
MEA	33	33	33	33	33	33	33	33	33	33	33
NEU	24	24	24	24	24	23	23	23	22	22	22
OAS	163	163	162	155	149	149	147	139	135	138	138
REF	569	569	569	569	569	569	569	569	569	569	569
SSA	471	467	455	441	427	419	415	415	415	414	408
USA	212	212	212	212	212	212	212	212	212	212	212

Table 1666: MAgPIE m4p\_som — Resources—Land Cover—Forest—Natural Forest—Secondary Forest (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	2293	2288	2252	2162	2114	2078	2077
CAZ	263	263	263	264	264	264	268
CHA	107	107	107	107	107	107	107
EUR	105	105	105	105	105	105	105
IND	44	44	44	44	43	43	43
JPN	11	11	11	11	11	11	11
LAM	396	396	396	391	388	388	388
MEA	33	32	32	32	32	32	32
NEU	22	22	22	20	20	20	20
OAS	136	129	125	122	121	121	121
REF	569	576	591	593	595	596	596
SSA	395	391	345	261	216	178	173
USA	212	212	212	212	212	212	212

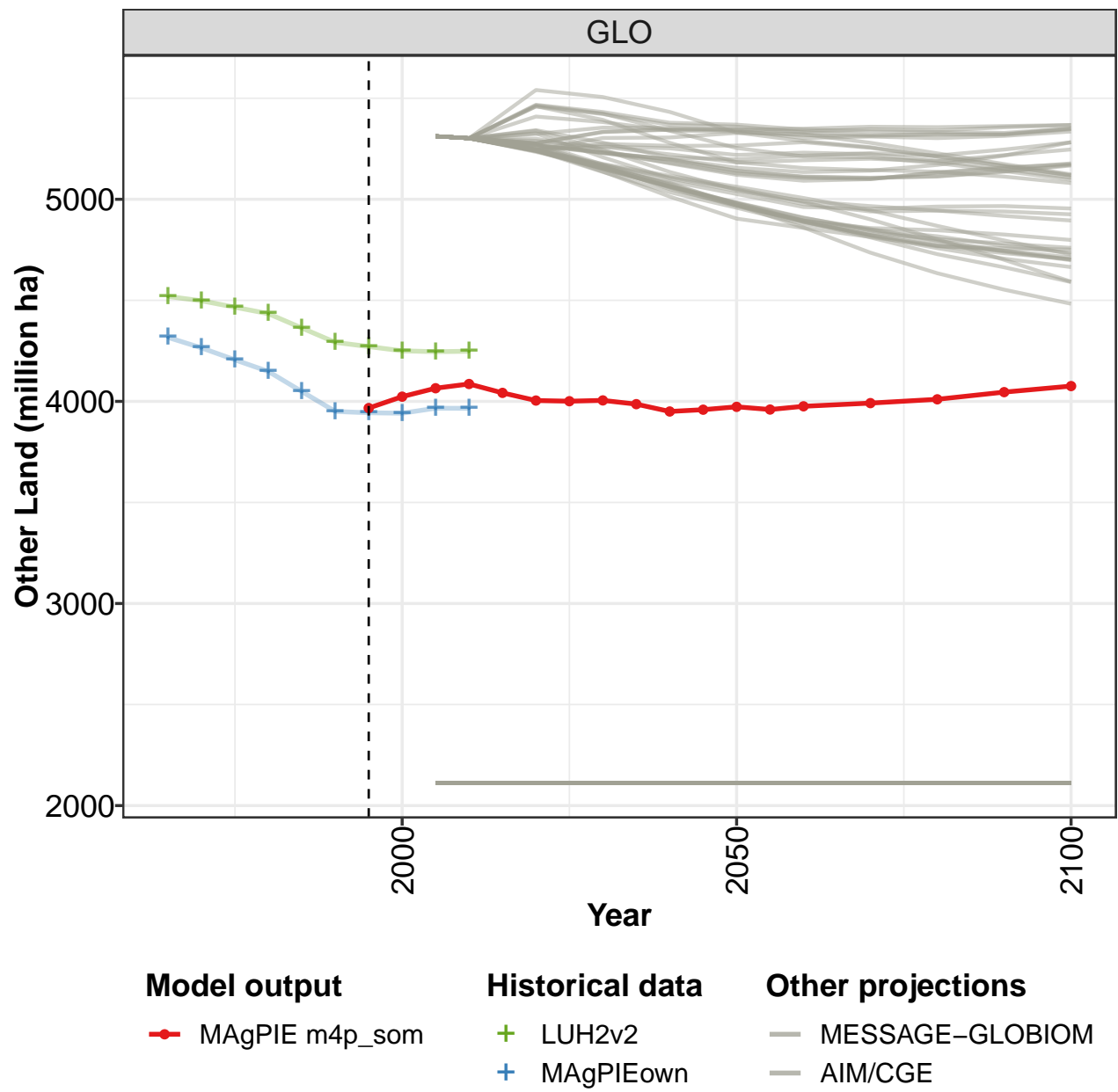
Table 1667: MAgPIE m4p\_som — Resources—Land Cover—Forest—Natural Forest—Secondary Forest (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2502	2502	2502	2500	2499	2498	2472	2442	2411	2368
CAZ	265	265	265	265	265	265	263	260	256	249
CHA	104	104	104	104	104	104	107	111	114	116
EUR	100	100	100	100	100	100	101	102	101	101
IND	43	43	43	43	43	43	43	43	43	43
JPN	11	11	11	11	11	11	11	10	10	10
LAM	481	481	481	481	481	481	471	462	451	440
MEA	34	34	34	34	34	34	33	32	33	32
NEU	24	24	24	24	24	24	24	25	25	25
OAS	166	166	166	166	166	166	167	169	166	165
REF	578	578	578	578	578	578	569	559	560	546
SSA	483	483	482	481	480	479	471	460	448	434
USA	214	214	214	214	214	214	212	209	205	208

Table 1668: MAgPIEown — Resources—Land Cover—Forest—Natural Forest—Secondary Forest (million ha)

55.3 Other Land

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

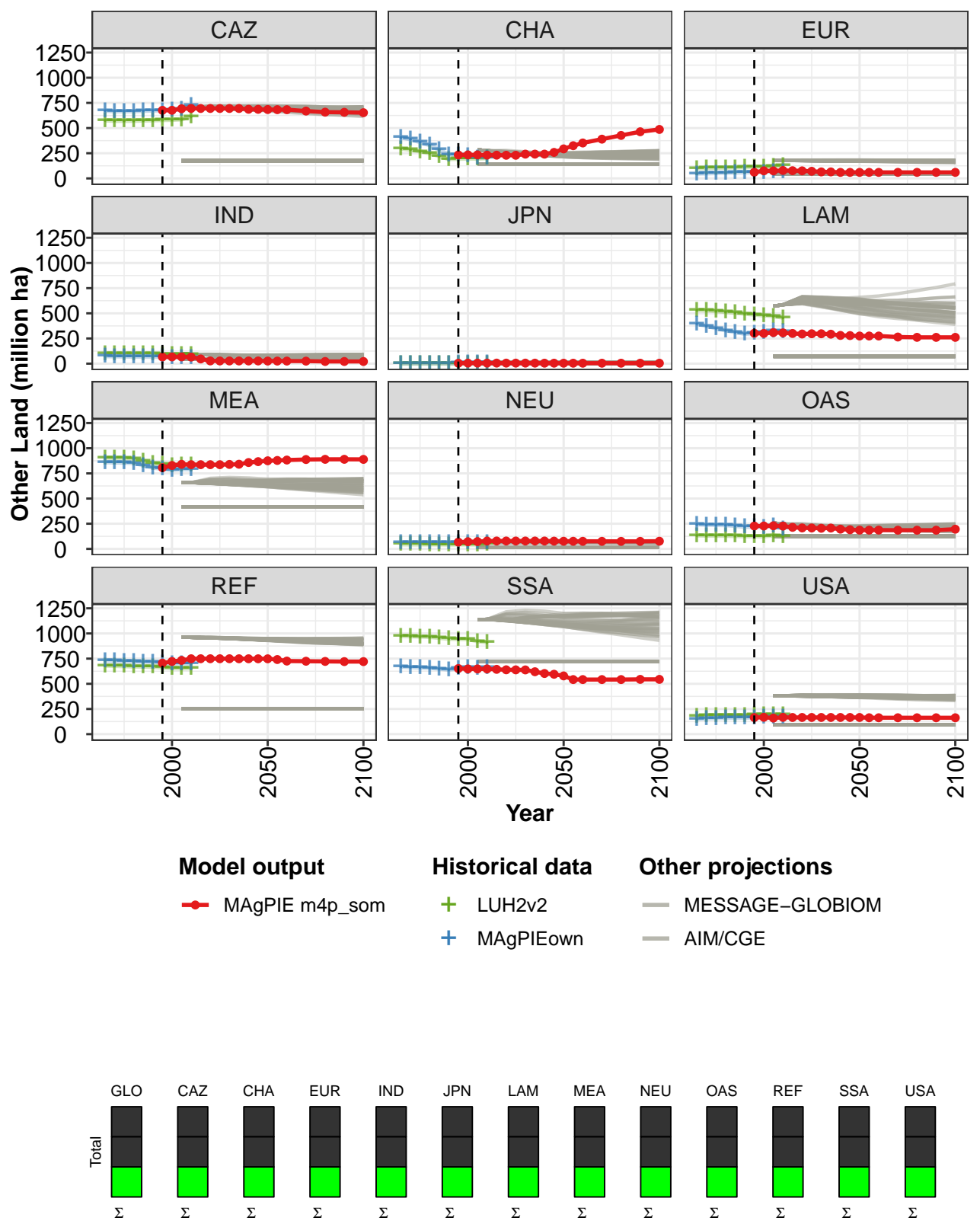


Figure 436: MAgPIE m4p\_som — Resources—Land Cover—Other Land (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	3967	4023	4065	4086	4042	4004	4001	4005	3986	3950	3959
CAZ	676	677	692	695	695	695	695	695	694	687	686
CHA	233	234	234	231	231	230	230	241	241	241	259
EUR	61	75	75	79	77	75	71	65	65	60	60
IND	67	67	67	65	47	27	27	27	27	27	27
JPN	5	5	6	6	6	5	5	5	5	5	5
LAM	302	300	309	306	300	294	297	297	293	280	279
MEA	807	829	840	836	836	836	836	839	841	858	867
NEU	68	71	73	78	78	78	78	78	78	78	77
OAS	227	228	230	227	214	208	208	205	207	196	190
REF	705	722	733	749	749	749	749	749	749	749	749
SSA	652	648	648	648	644	639	639	638	620	603	595
USA	165	167	160	167	166	166	166	166	166	166	166

Table 1669: MAgPIE m4p\_som — Resources—Land Cover—Other Land (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	3973	3960	3976	3992	4010	4046	4076
CAZ	684	683	683	669	658	657	653
CHA	293	325	352	390	427	463	486
EUR	60	60	60	60	60	60	60
IND	26	26	26	25	22	22	22
JPN	5	5	5	5	5	5	5
LAM	275	275	275	265	261	261	261
MEA	875	879	883	888	890	890	889
NEU	76	76	75	75	75	75	76
OAS	186	186	187	186	186	186	196
REF	748	741	726	724	722	721	721
SSA	579	542	542	542	542	544	544
USA	166	163	163	163	163	163	163

Table 1670: MAgPIE m4p\_som — Resources—Land Cover—Other Land (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4519	4498	4466	4434	4363	4292	4271	4250	4246	4248
CAZ	576	571	571	571	574	577	579	581	585	614
CHA	295	285	268	250	221	192	194	197	196	200
EUR	101	103	105	107	108	110	113	116	122	125
IND	101	99	98	97	96	96	95	94	93	93
JPN	0	0	0	0	0	0	0	0	0	0
LAM	531	528	521	513	505	496	487	478	472	456
MEA	904	902	900	897	874	852	839	825	835	835
NEU	45	44	44	44	44	43	43	44	43	45
OAS	133	131	130	130	128	126	125	125	133	122
REF	680	677	674	672	670	668	661	654	652	654
SSA	974	972	968	965	956	947	945	943	922	911
USA	179	185	187	189	188	186	190	193	192	192

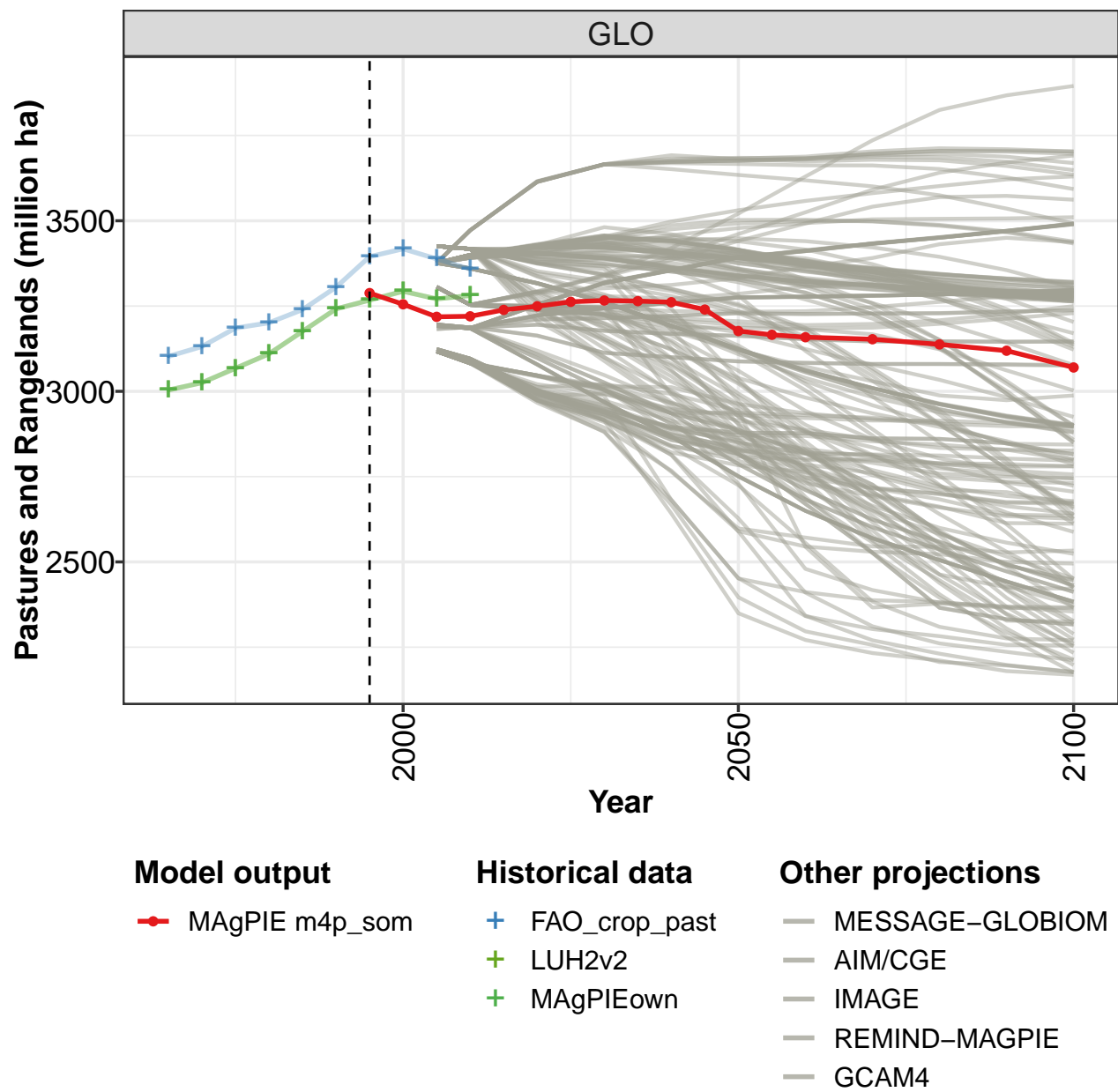
Table 1671: LUH2v2 — Resources—Land Cover—Other Land (million ha)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4317	4265	4206	4148	4049	3950	3944	3941	3966	3966
CAZ	672	667	667	667	670	674	676	678	687	724
CHA	406	389	359	329	283	237	231	225	207	206
EUR	47	50	53	56	58	60	61	62	69	69
IND	74	72	70	69	69	68	66	65	61	59
JPN	4	4	4	4	4	4	5	5	5	5
LAM	397	374	352	330	313	296	302	308	325	319
MEA	860	858	855	853	830	807	795	782	791	791
NEU	66	65	65	65	65	64	65	65	64	65
OAS	243	239	237	235	228	220	218	216	229	201
REF	730	726	723	720	718	716	708	700	704	699
SSA	669	665	661	658	649	641	652	666	656	659
USA	149	156	159	161	161	162	165	169	170	168

Table 1672: MAgPIEown — Resources—Land Cover—Other Land (million ha)

55.4 Pastures and Rangelands

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

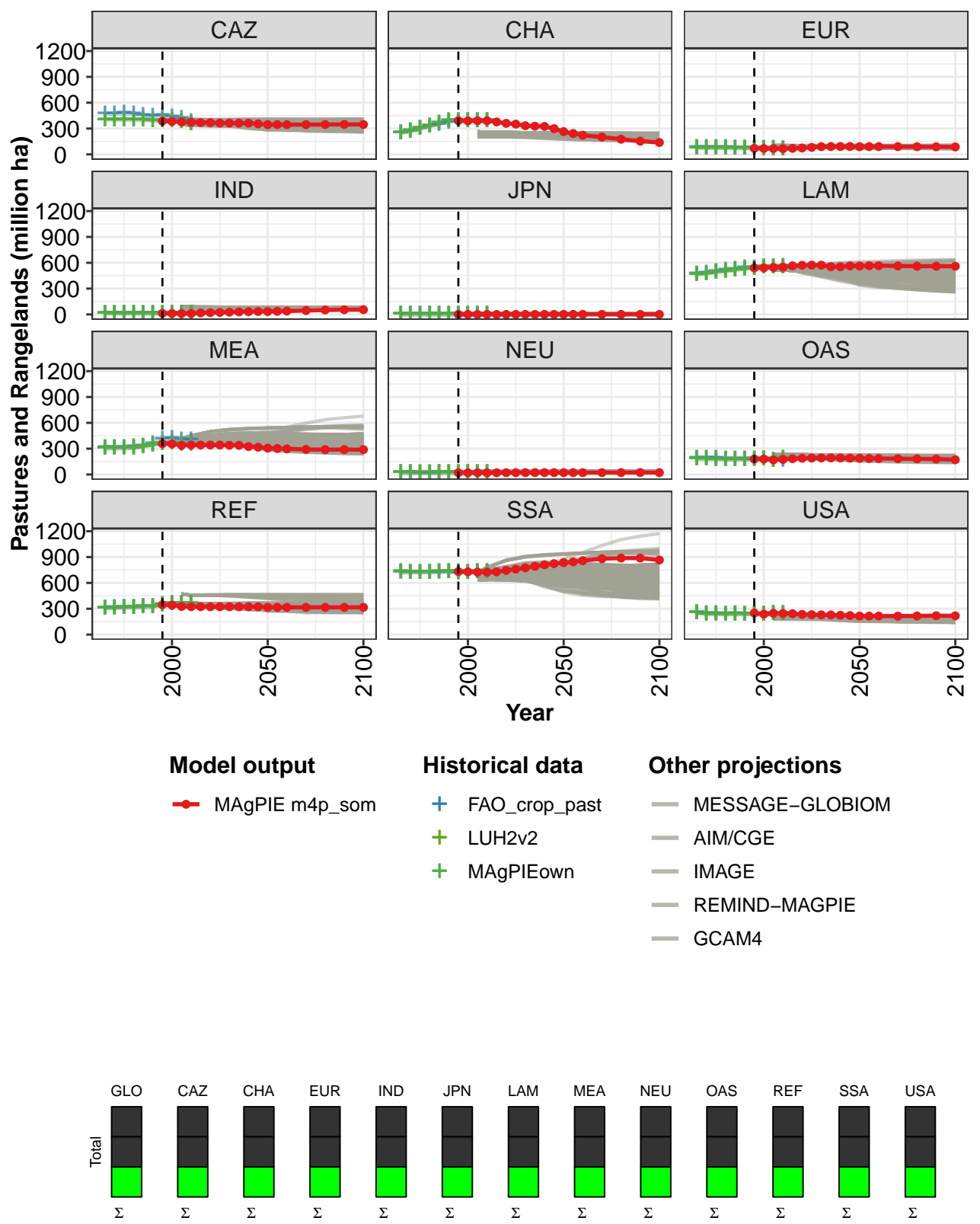


Figure 437: MAgPIE m4p\_som — Resources—Land Cover—Pastures and Rangelands (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	3288	3255	3218	3220	3239	3249	3262	3266	3265	3261	3240
CAZ	386	382	376	373	369	368	363	363	363	363	354
CHA	392	389	390	390	377	360	351	333	328	325	299
EUR	70	68	68	66	70	74	81	90	91	91	91
IND	13	11	11	11	18	21	23	27	30	32	34
JPN	0	0	0	0	0	0	0	1	1	1	1
LAM	540	541	546	550	565	571	574	573	555	554	564
MEA	358	356	339	342	342	342	342	340	339	324	317
NEU	21	20	20	20	21	21	21	21	22	22	22
OAS	179	179	170	176	183	189	191	193	193	192	190
REF	346	342	327	323	323	323	323	323	323	323	323
SSA	732	729	725	725	729	745	760	775	793	810	824
USA	250	238	247	245	243	235	232	229	228	225	221

Table 1673: MAgPIE m4p\_som — Resources—Land Cover—Pastures and Rangelands (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	3177	3166	3159	3153	3138	3119	3070
CAZ	346	346	346	346	347	348	347
CHA	264	242	223	201	176	153	138
EUR	89	90	90	90	89	88	87
IND	33	36	39	45	51	55	55
JPN	1	1	1	1	1	1	1
LAM	562	566	566	563	560	560	560
MEA	306	302	298	291	289	289	289
NEU	21	22	22	22	22	23	22
OAS	187	186	185	183	181	180	172
REF	316	316	316	316	316	316	316
SSA	835	844	858	881	888	888	866
USA	215	215	215	214	216	219	218

Table 1674: MAgPIE m4p\_som — Resources—Land Cover—Pastures and Rangelands (million ha) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3102	3131	3186	3201	3240	3305	3395	3418	3388	3358
CAZ	468	469	476	469	455	446	452	437	422	381
CHA	251	273	301	328	351	374	393	393	393	393
EUR	81	81	80	79	76	76	74	72	70	68
IND	15	13	13	12	12	11	11	11	10	10
JPN	1	1	1	1	0	0	0	0	0	0
LAM	473	486	503	514	527	539	547	554	555	561
MEA	316	318	319	322	329	362	416	420	405	406
NEU	20	20	19	19	19	20	20	21	22	22
OAS	194	195	195	178	178	181	173	185	169	169
REF	307	313	316	320	325	326	355	362	362	363
SSA	720	720	721	722	724	730	718	727	735	736
USA	257	244	242	238	242	239	236	236	244	250

Table 1675: FAO\_crop\_past — Resources—Land Cover—Pastures and Rangelands (million ha)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3004	3025	3068	3110	3176	3242	3267	3293	3271	3281
CAZ	405	405	405	405	399	393	391	389	380	358
CHA	253	270	300	330	362	395	391	388	388	388
EUR	77	76	75	75	73	72	70	69	68	66
IND	14	13	13	13	12	12	12	12	11	11
JPN	1	1	1	1	0	0	0	0	0	0
LAM	465	476	490	503	516	529	539	549	549	555
MEA	303	303	306	308	327	346	356	367	353	353
NEU	21	20	20	19	20	21	21	20	21	21
OAS	180	180	178	175	177	178	179	179	166	187
REF	306	312	315	319	322	325	342	360	360	361
SSA	728	726	727	727	731	734	730	725	731	731
USA	252	241	238	236	236	237	236	236	243	249

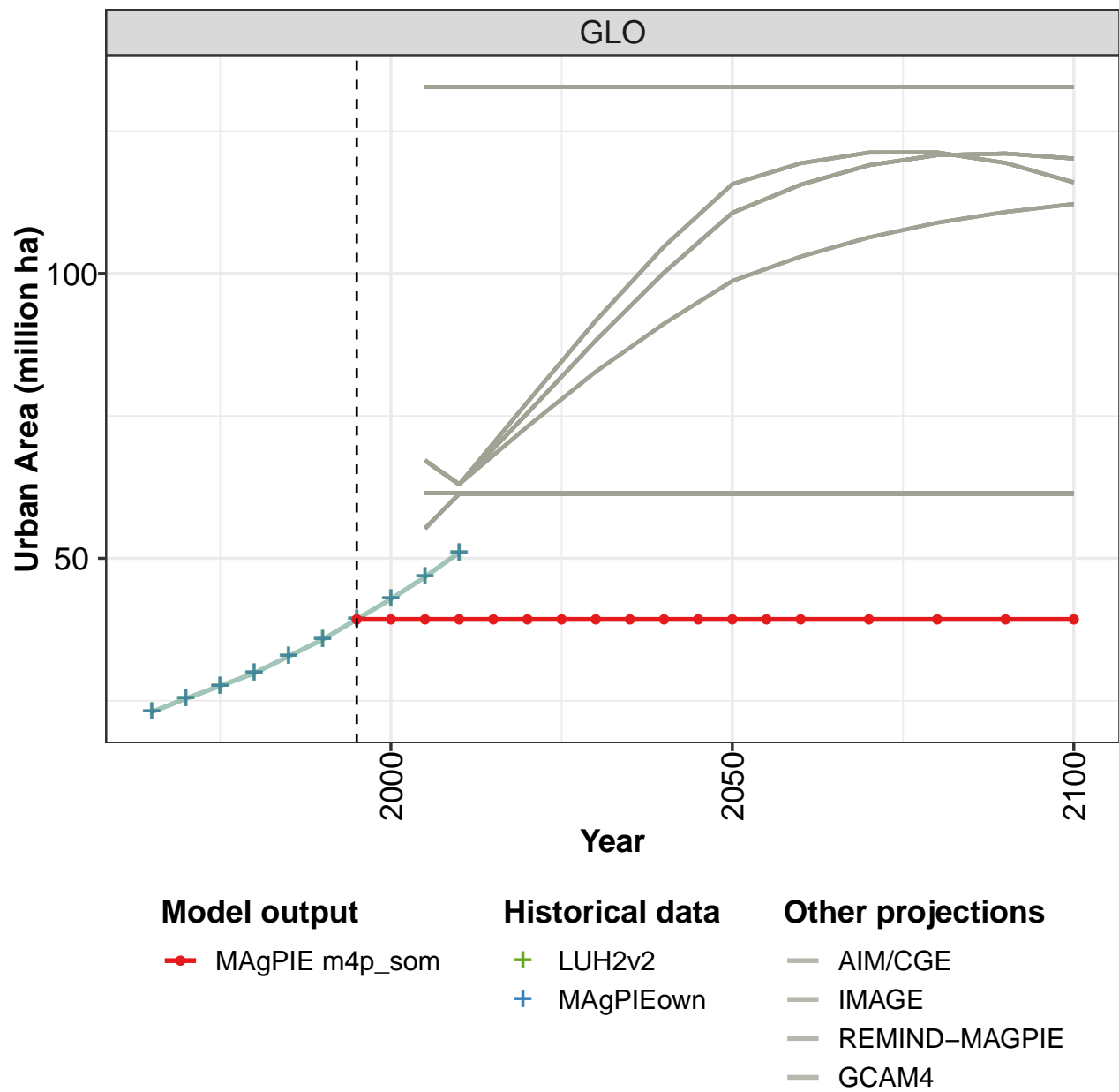
Table 1676: LUH2v2 — Resources—Land Cover—Pastures and Rangelands (million ha)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3004	3025	3068	3110	3176	3242	3267	3293	3271	3281
CAZ	405	405	405	405	399	393	391	389	380	358
CHA	253	270	300	330	362	395	391	388	388	388
EUR	77	76	75	75	73	72	70	69	68	66
IND	14	13	13	13	12	12	12	12	11	11
JPN	1	1	1	1	0	0	0	0	0	0
LAM	465	476	490	503	516	529	539	549	549	555
MEA	303	303	306	308	327	346	356	367	353	353
NEU	21	20	20	19	20	21	21	20	21	21
OAS	180	180	178	175	177	178	179	179	166	187
REF	306	312	315	319	322	325	342	360	360	361
SSA	728	726	727	727	731	734	730	725	731	731
USA	252	241	238	236	236	237	236	236	243	249

Table 1677: MAgPIEown — Resources—Land Cover—Pastures and Rangelands (million ha)

55.5 Urban Area

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

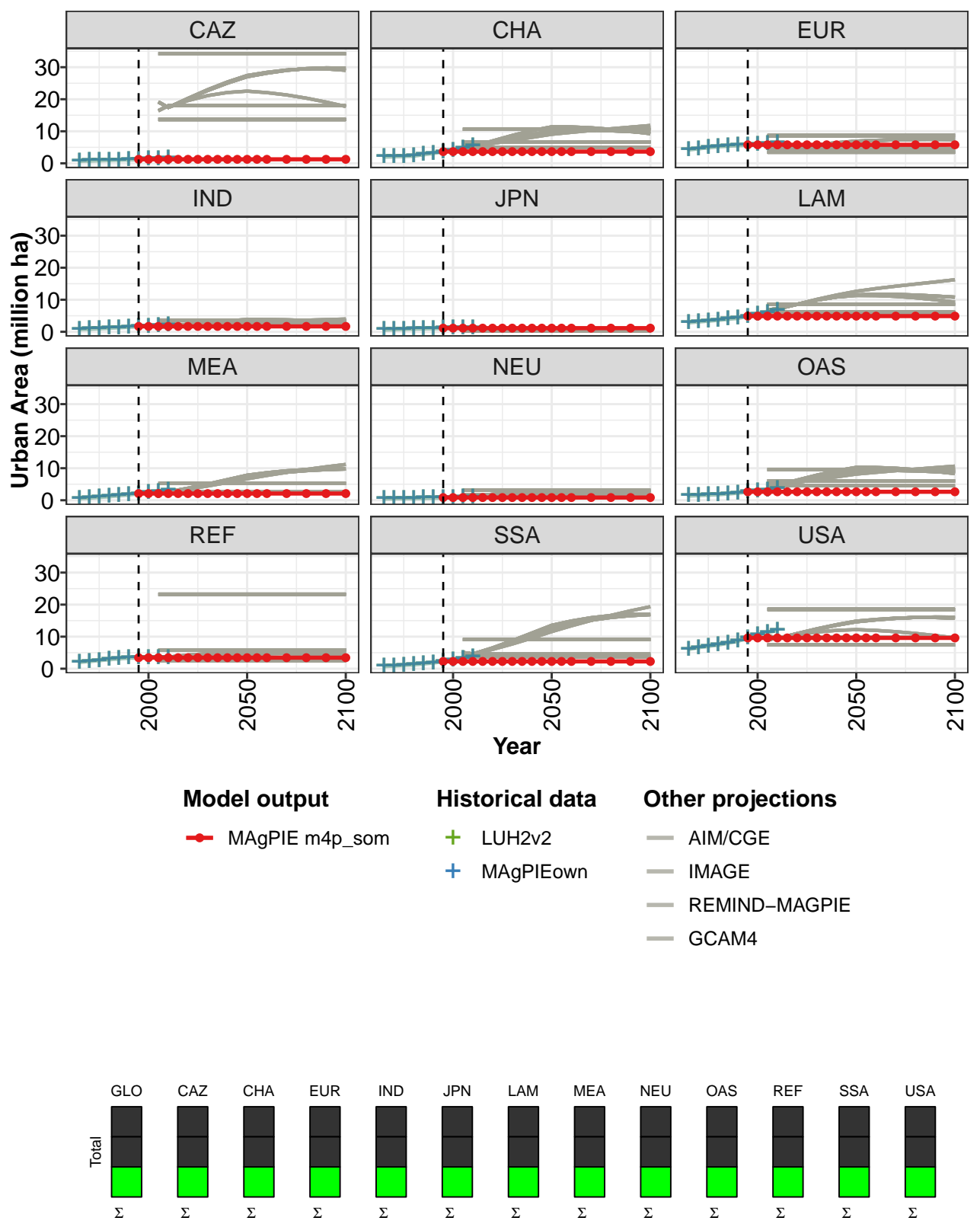


Figure 438: MAgPIE m4p\_som — Resources—Land Cover—Urban Area (million ha)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3
CAZ	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
CHA	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
EUR	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
IND	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
JPN	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
LAM	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
MEA	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
NEU	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
OAS	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
REF	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
SSA	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
USA	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6

Table 1678: MAgPIE m4p\_som — Resources—Land Cover—Urban Area (million ha) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	39.3	39.3	39.3	39.3	39.3	39.3	39.3
CAZ	1.3	1.3	1.3	1.3	1.3	1.3	1.3
CHA	3.7	3.7	3.7	3.7	3.7	3.7	3.7
EUR	5.8	5.8	5.8	5.8	5.8	5.8	5.8
IND	1.7	1.7	1.7	1.7	1.7	1.7	1.7
JPN	1.1	1.1	1.1	1.1	1.1	1.1	1.1
LAM	4.9	4.9	4.9	4.9	4.9	4.9	4.9
MEA	2.1	2.1	2.1	2.1	2.1	2.1	2.1
NEU	0.8	0.8	0.8	0.8	0.8	0.8	0.8
OAS	2.6	2.6	2.6	2.6	2.6	2.6	2.6
REF	3.4	3.4	3.4	3.4	3.4	3.4	3.4
SSA	2.3	2.3	2.3	2.3	2.3	2.3	2.3
USA	9.6	9.6	9.6	9.6	9.6	9.6	9.6

Table 1679: MAgPIE m4p\_som — Resources—Land Cover—Urban Area (million ha) [PART 2/2]

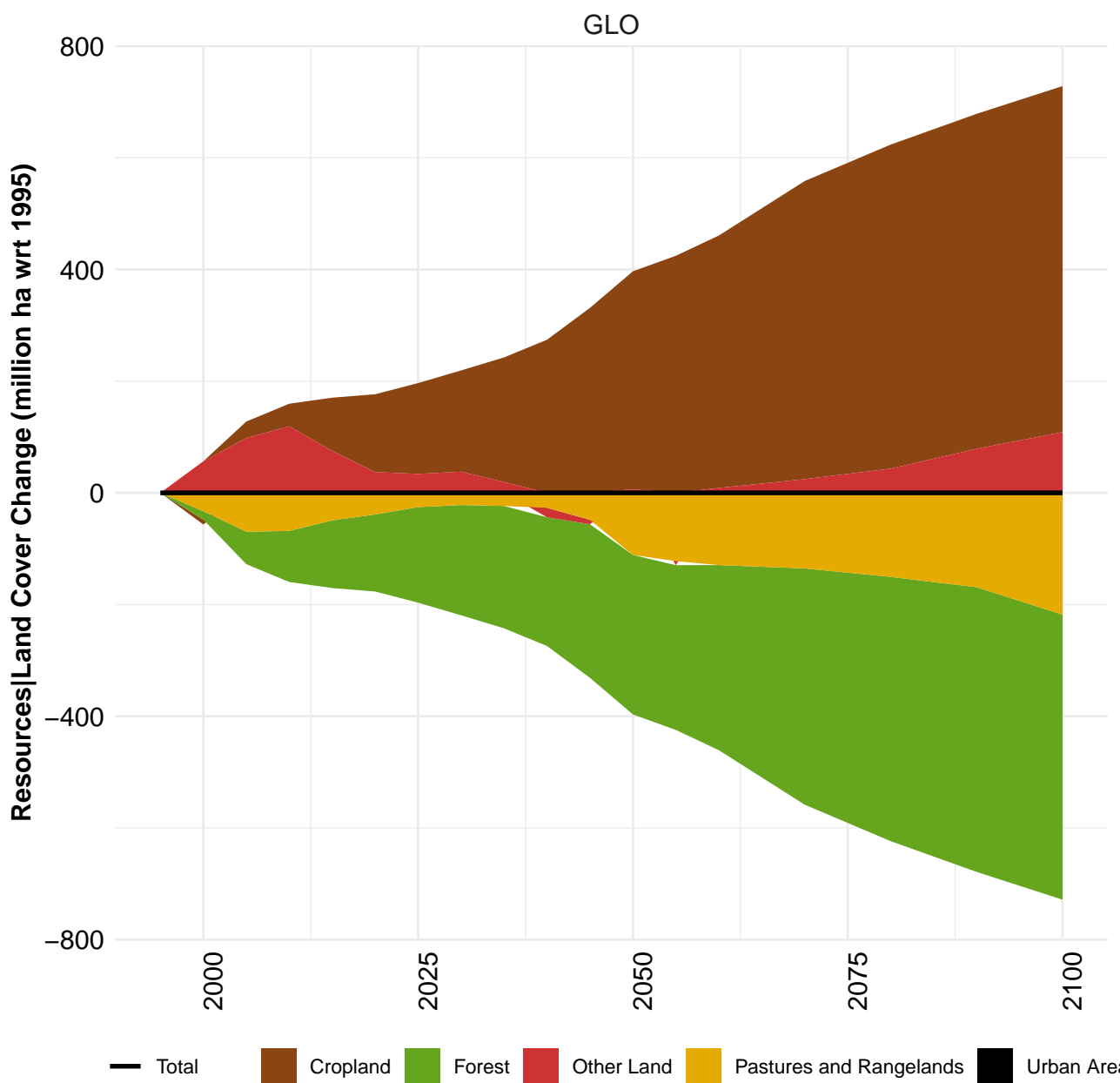
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	23.0	25.4	27.6	29.8	32.8	35.7	39.3	42.8	46.7	51.0
CAZ	0.8	0.9	0.9	1.0	1.1	1.2	1.3	1.3	1.5	1.6
CHA	2.1	2.2	2.3	2.3	2.8	3.2	3.7	4.1	4.7	5.5
EUR	4.3	4.6	4.9	5.3	5.5	5.6	5.8	5.9	6.2	6.4
IND	0.8	0.9	1.1	1.2	1.4	1.5	1.7	1.8	2.0	2.2
JPN	0.7	0.8	0.9	1.0	1.0	1.1	1.1	1.2	1.2	1.2
LAM	2.9	3.2	3.4	3.7	4.0	4.3	4.9	5.5	6.1	6.8
MEA	0.6	0.8	1.0	1.2	1.5	1.8	2.1	2.4	2.8	3.1
NEU	0.5	0.6	0.6	0.6	0.7	0.8	0.8	0.9	1.0	1.1
OAS	1.4	1.6	1.7	1.8	2.1	2.3	2.6	3.0	3.3	3.7
REF	2.1	2.4	2.6	2.9	3.2	3.4	3.4	3.5	3.5	3.6
SSA	0.8	0.9	1.1	1.3	1.6	1.9	2.3	2.6	3.1	3.7
USA	6.1	6.7	7.1	7.5	8.1	8.7	9.6	10.5	11.3	12.1

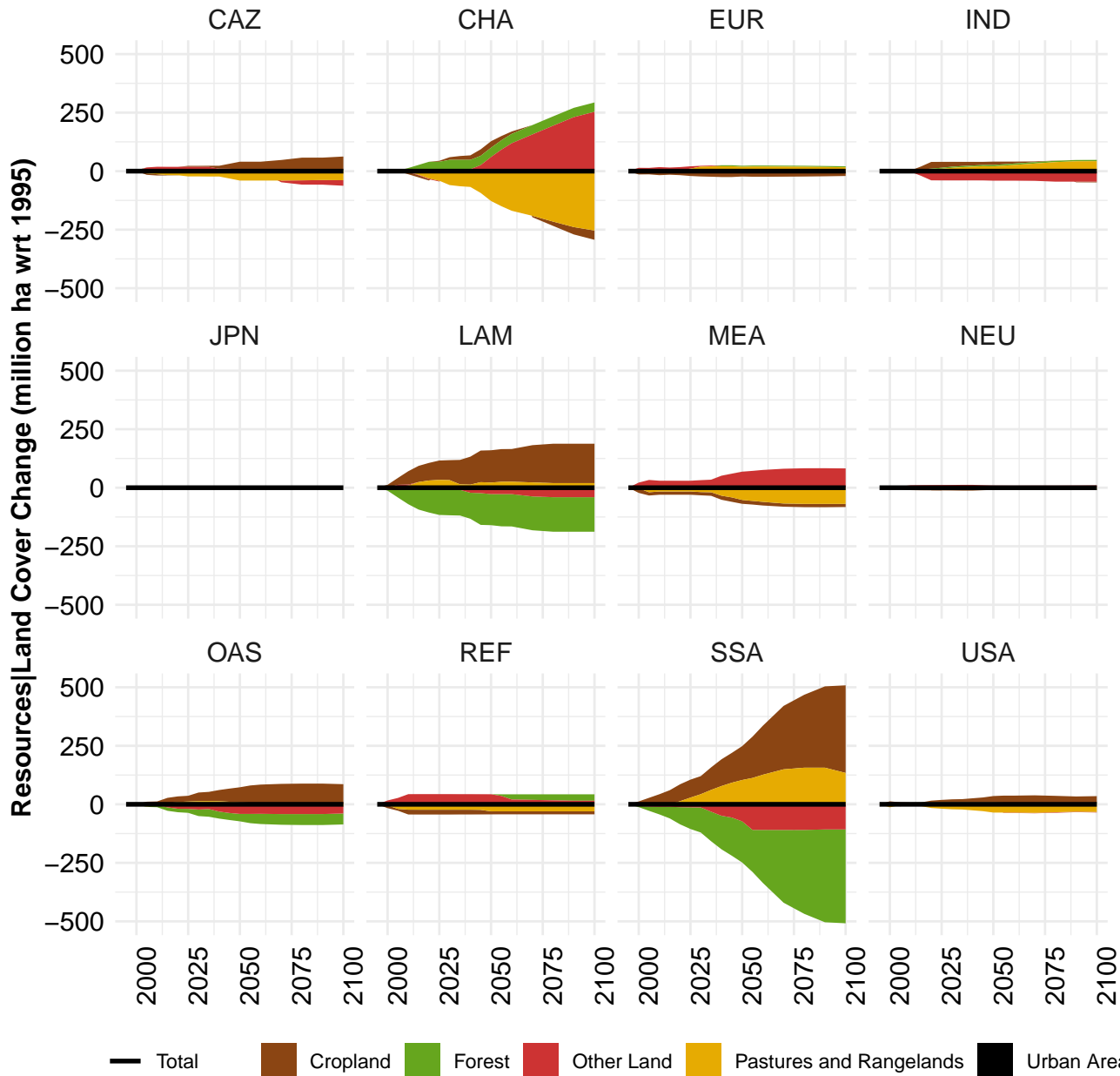
Table 1680: LUH2v2 — Resources—Land Cover—Urban Area (million ha)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	23.0	25.4	27.6	29.8	32.8	35.7	39.3	42.8	46.7	51.0
CAZ	0.8	0.9	0.9	1.0	1.1	1.2	1.3	1.3	1.5	1.6
CHA	2.1	2.2	2.3	2.3	2.8	3.2	3.7	4.1	4.7	5.5
EUR	4.3	4.6	4.9	5.3	5.5	5.6	5.8	5.9	6.2	6.4
IND	0.8	0.9	1.1	1.2	1.4	1.5	1.7	1.8	2.0	2.2
JPN	0.7	0.8	0.9	1.0	1.0	1.1	1.1	1.2	1.2	1.2
LAM	2.9	3.2	3.4	3.7	4.0	4.3	4.9	5.5	6.1	6.8
MEA	0.6	0.8	1.0	1.2	1.5	1.8	2.1	2.4	2.8	3.1
NEU	0.5	0.6	0.6	0.6	0.7	0.8	0.8	0.9	1.0	1.1
OAS	1.4	1.6	1.7	1.8	2.1	2.3	2.6	3.0	3.3	3.7
REF	2.1	2.4	2.6	2.9	3.2	3.4	3.4	3.5	3.5	3.6
SSA	0.8	0.9	1.1	1.3	1.6	1.9	2.3	2.6	3.1	3.7
USA	6.1	6.7	7.1	7.5	8.1	8.7	9.6	10.5	11.3	12.1

Table 1681: MAgPIEown — Resources—Land Cover—Urban Area (million ha)

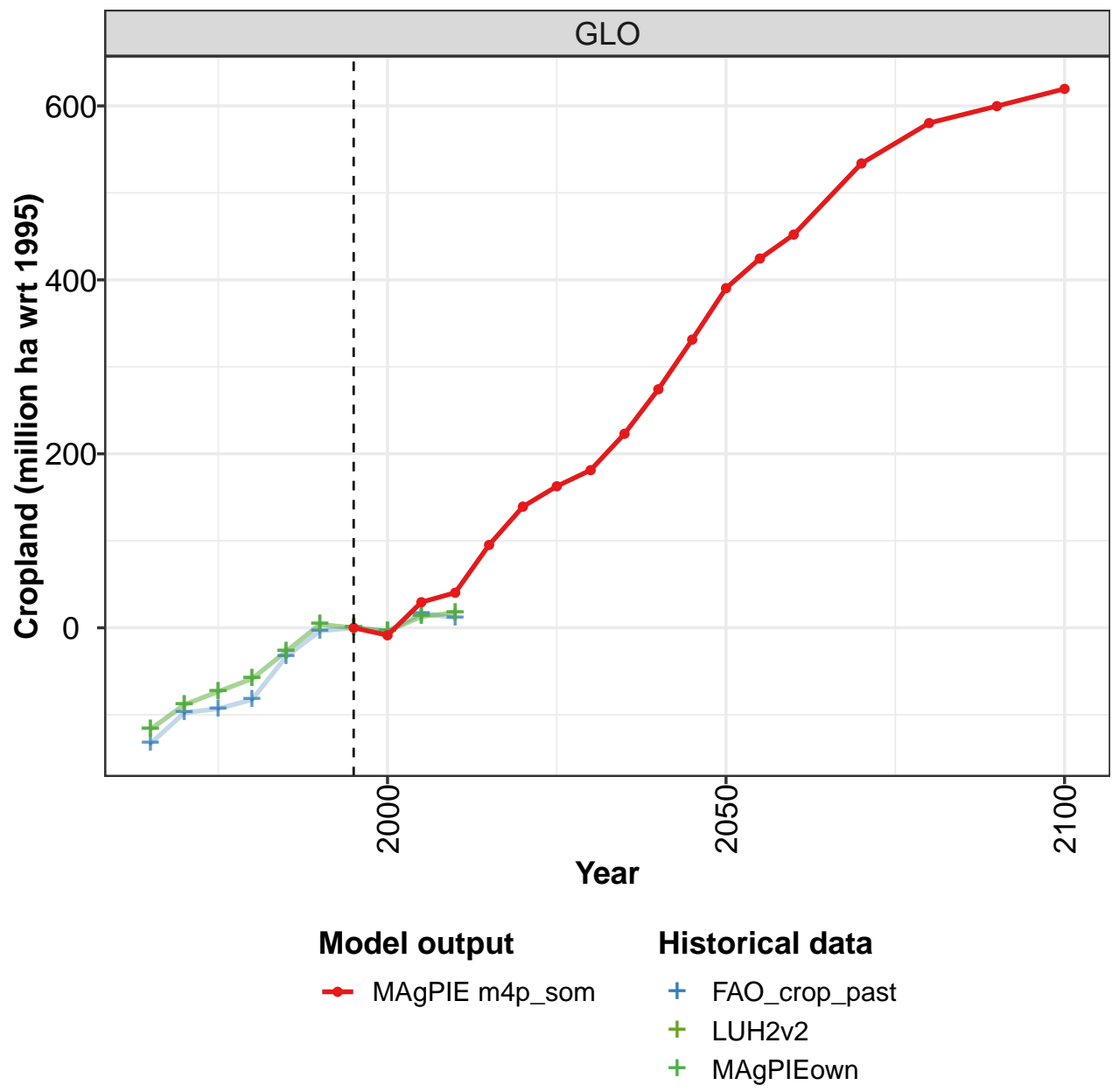
56 Land Cover Change





56.1 Cropland

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

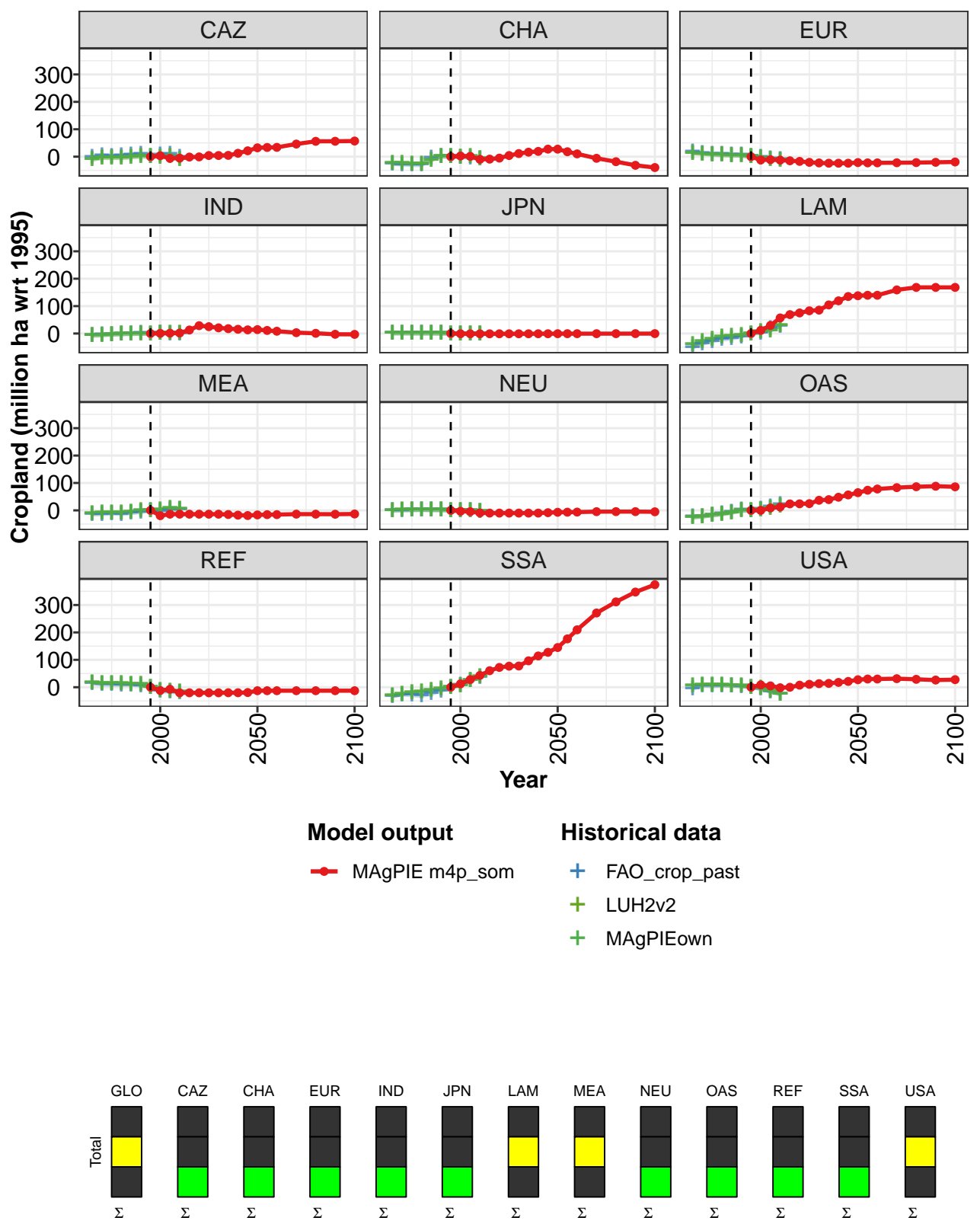


Figure 439: MAgPIE m4p\_som — Resources—Land Cover Change—Cropland (million ha wrt 1995)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	-9	29	40	95	139	163	181	223	274	331
CAZ	0	4	-6	-5	-1	-1	4	4	5	12	21
CHA	0	2	1	-10	-9	-5	4	11	16	19	28
EUR	0	-12	-11	-13	-15	-17	-21	-23	-24	-24	-24
IND	0	1	1	2	13	29	25	21	18	15	13
JPN	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
LAM	0	12	30	57	69	75	83	85	104	119	135
MEA	0	-19	-14	-14	-14	-14	-14	-14	-15	-17	-19
NEU	0	-3	-5	-9	-10	-10	-10	-10	-10	-10	-8
OAS	0	0	9	12	24	24	25	37	39	48	56
REF	0	-12	-7	-20	-20	-20	-20	-20	-20	-20	-19
SSA	0	12	28	43	60	72	77	77	96	114	127
USA	0	9	5	-2	-0	8	11	13	14	18	21

Table 1682: MAgPIE m4p\_som — Resources—Land Cover Change—Cropland (million ha wrt 1995) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	390	425	452	534	580	600	620
CAZ	32	34	34	46	56	56	57
CHA	28	18	10	-6	-18	-31	-40
EUR	-22	-23	-23	-22	-22	-21	-19
IND	14	11	8	3	1	-3	-3
JPN	-1	-1	-1	-1	-0	-0	-0
LAM	138	140	140	159	168	168	168
MEA	-17	-16	-15	-14	-14	-14	-13
NEU	-7	-7	-6	-5	-5	-5	-5
OAS	65	74	78	83	86	88	86
REF	-13	-13	-13	-13	-13	-13	-13
SSA	145	176	210	271	311	347	374
USA	27	30	30	31	29	26	28

Table 1683: MAgPIE m4p\_som — Resources—Land Cover Change—Cropland (million ha wrt 1995) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-133.1	-97.7	-93.0	-82.6	-33.4	-3.7	0.0	-4.0	16.6	11.6
CAZ	-3.1	3.5	1.3	3.1	7.5	8.4	0.0	7.1	8.1	-2.3
CHA	-26.4	-28.4	-30.2	-30.7	-5.0	1.3	0.0	-0.9	-5.4	-8.3
EUR	16.5	13.1	9.1	8.0	7.4	5.5	0.0	-2.0	-7.4	-10.3
IND	-7.5	-4.9	-3.1	-1.8	-0.6	0.2	0.0	0.2	-0.2	-0.7
JPN	1.0	0.8	0.5	0.4	0.3	0.2	0.0	-0.2	-0.3	-0.4
LAM	-50.1	-37.3	-27.9	-21.6	-18.2	-11.1	0.0	2.1	18.6	25.3
MEA	-14.9	-13.8	-11.2	-13.4	-9.5	-6.8	0.0	-3.2	1.5	1.2
NEU	-0.5	0.6	0.8	1.6	0.7	0.8	0.0	-1.1	-1.0	-3.3
OAS	-23.9	-21.6	-17.4	-12.3	-7.4	1.1	0.0	5.6	12.3	20.4
REF	13.9	10.4	9.9	9.0	9.3	6.5	0.0	-14.1	-17.0	-19.1
SSA	-32.8	-26.6	-29.0	-31.5	-23.6	-13.4	0.0	8.6	23.9	34.8
USA	-5.3	6.4	4.1	6.5	5.7	3.6	0.0	-6.1	-16.3	-25.6

Table 1684: FAO\_crop\_past — Resources—Land Cover Change—Cropland (million ha wrt 1995)

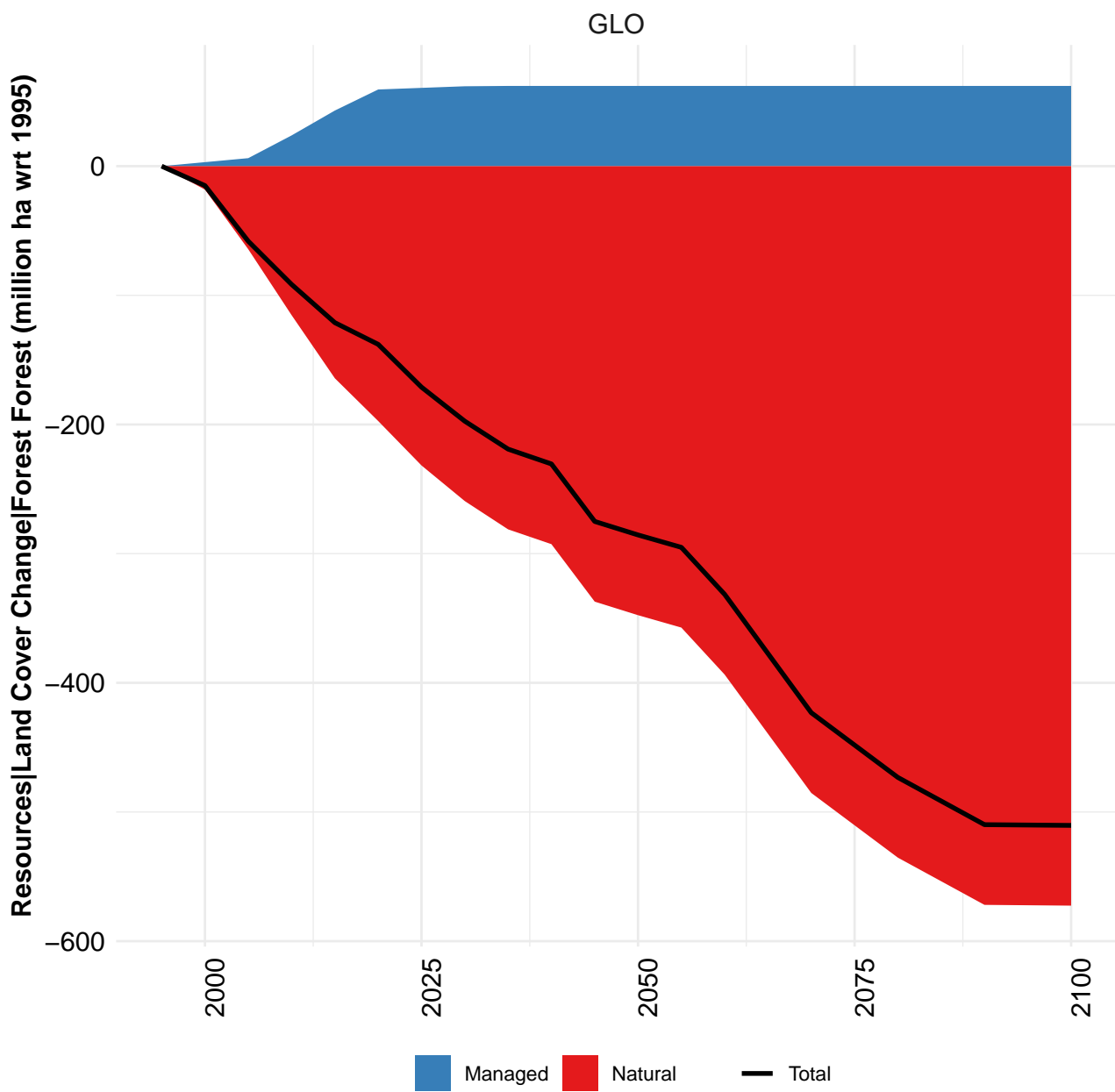


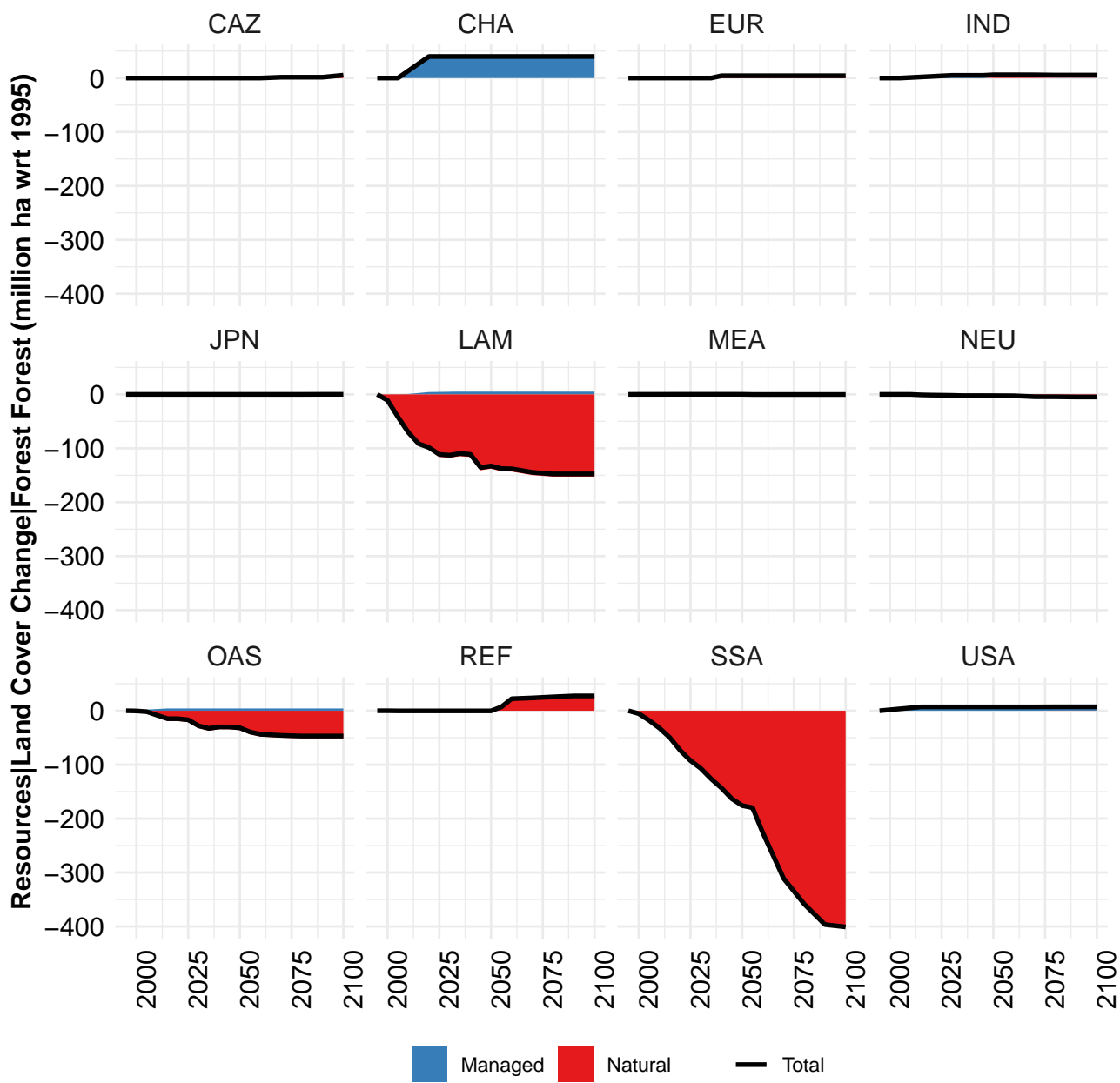
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-116.7	-88.3	-73.4	-58.5	-27.3	3.8	0.0	-3.8	12.9	17.4
CAZ	-10.3	-4.5	-4.6	-4.8	-2.1	0.6	0.0	-0.6	0.5	-9.8
CHA	-24.9	-25.3	-25.5	-25.7	-12.4	1.0	0.0	-1.0	1.1	-7.1
EUR	13.0	10.2	7.9	5.5	4.4	3.3	0.0	-3.3	-10.5	-11.8
IND	-7.5	-5.5	-4.0	-2.4	-1.8	-1.2	0.0	1.2	2.8	2.6
JPN	0.7	0.7	0.5	0.4	0.3	0.2	0.0	-0.2	-0.3	-0.4
LAM	-41.5	-30.2	-21.8	-13.4	-9.7	-5.9	0.0	5.9	11.0	28.1
MEA	-10.7	-9.5	-9.2	-9.0	-5.6	-2.2	0.0	2.2	6.9	5.7
NEU	-0.0	1.0	1.4	1.9	1.5	1.1	0.0	-1.1	-0.9	-3.0
OAS	-26.1	-22.3	-18.4	-14.4	-8.1	-1.8	0.0	1.8	7.0	15.6
REF	17.2	14.0	13.3	12.6	11.3	10.1	0.0	-10.1	-13.8	-16.8
SSA	-31.4	-24.7	-20.8	-16.8	-11.3	-5.8	0.0	5.8	23.5	38.2
USA	4.8	8.0	7.8	7.7	6.1	4.4	0.0	-4.4	-14.6	-23.9

Table 1685: LUH2v2 — Resources—Land Cover Change—Cropland (million ha wrt 1995)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-116.7	-88.3	-73.4	-58.5	-27.3	3.8	0.0	-3.8	12.9	17.4
CAZ	-10.3	-4.5	-4.6	-4.8	-2.1	0.6	0.0	-0.6	0.5	-9.8
CHA	-24.9	-25.3	-25.5	-25.7	-12.4	1.0	0.0	-1.0	1.1	-7.1
EUR	13.0	10.2	7.9	5.5	4.4	3.3	0.0	-3.3	-10.5	-11.8
IND	-7.5	-5.5	-4.0	-2.4	-1.8	-1.2	0.0	1.2	2.8	2.6
JPN	0.7	0.7	0.5	0.4	0.3	0.2	0.0	-0.2	-0.3	-0.4
LAM	-41.5	-30.2	-21.8	-13.4	-9.7	-5.9	0.0	5.9	11.0	28.1
MEA	-10.7	-9.5	-9.2	-9.0	-5.6	-2.2	0.0	2.2	6.9	5.7
NEU	-0.0	1.0	1.4	1.9	1.5	1.1	0.0	-1.1	-0.9	-3.0
OAS	-26.1	-22.3	-18.4	-14.4	-8.1	-1.8	0.0	1.8	7.0	15.6
REF	17.2	14.0	13.3	12.6	11.3	10.1	0.0	-10.1	-13.8	-16.8
SSA	-31.4	-24.7	-20.8	-16.8	-11.3	-5.8	0.0	5.8	23.5	38.2
USA	4.8	8.0	7.8	7.7	6.1	4.4	0.0	-4.4	-14.6	-23.9

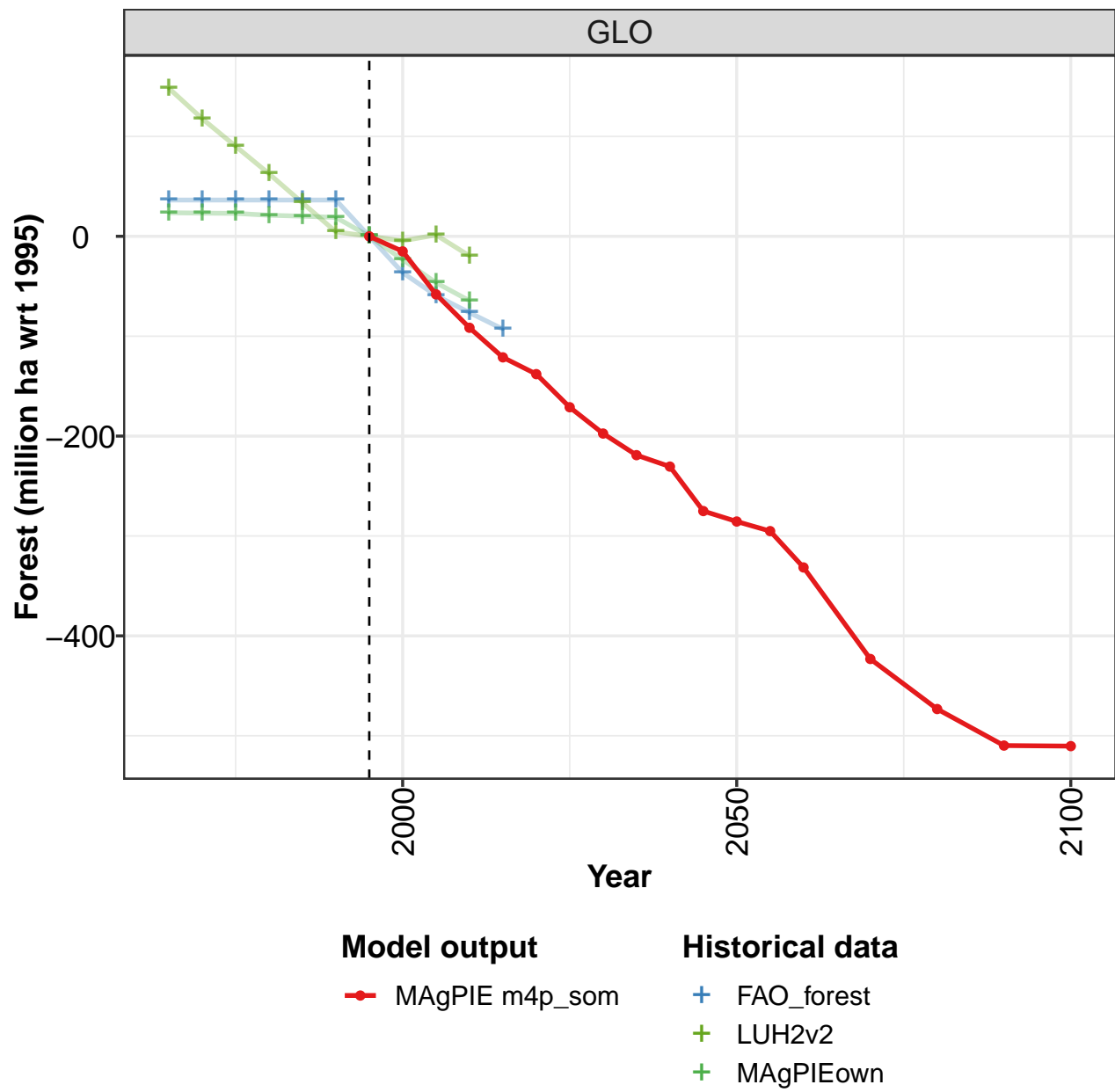
Table 1686: MAgPIEown — Resources—Land Cover Change—Cropland (million ha wrt 1995)





56.2 Forest

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

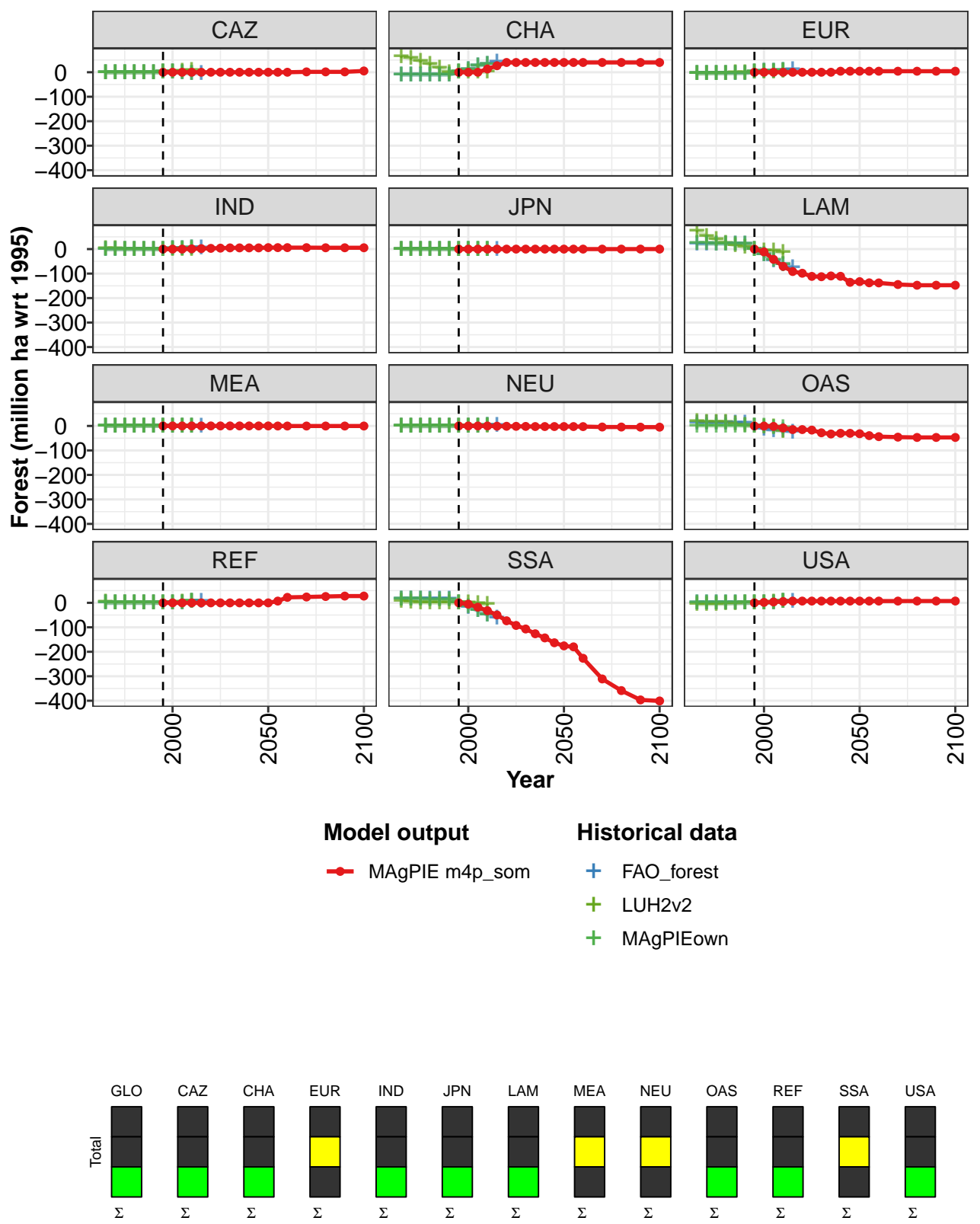


Figure 440: MAgPIE m4p\_som — Resources—Land Cover Change—Forest (million ha wrt 1995)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.0	-15.1	-58.1	-91.5	-121.2	-137.9	-171.1	-197.4	-219.1	-230.5	-275.0
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	13.3	26.7	40.0	40.0	40.0	40.0	40.0	40.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	4.2
IND	0.0	0.0	0.0	1.0	2.0	3.0	4.0	5.0	5.0	5.0	5.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	-11.2	-41.9	-70.5	-91.5	-98.6	-111.4	-112.8	-109.7	-111.1	-135.7
MEA	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.0	0.0	0.0	0.0	-0.9	-1.3	-1.5	-1.8	-2.4	-2.4	-2.4
OAS	0.0	-0.4	-1.8	-8.4	-14.7	-14.8	-16.8	-28.0	-32.7	-30.0	-30.1
REF	0.0	0.0	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
SSA	0.0	-5.4	-17.8	-32.2	-49.7	-73.4	-92.4	-106.9	-126.4	-143.4	-163.2
USA	0.0	1.8	3.6	5.3	7.1	7.1	7.1	7.1	7.1	7.1	7.1

Table 1687: MAgPIE m4p\_som — Resources—Land Cover Change—Forest (million ha wrt 1995) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	-285.5	-295.1	-331.5	-423.1	-473.2	-509.8	-510.4
CAZ	0.0	0.0	0.0	1.5	1.5	1.5	5.3
CHA	40.0	40.0	40.0	40.0	40.0	40.0	40.0
EUR	4.2	4.2	4.2	4.2	4.2	4.2	4.2
IND	6.0	6.0	6.0	6.0	5.5	5.5	5.5
JPN	0.0	0.0	0.0	0.0	0.0	0.1	0.1
LAM	-132.8	-137.6	-138.1	-144.6	-147.5	-147.5	-147.5
MEA	0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2
NEU	-2.4	-2.5	-2.6	-4.3	-4.4	-4.8	-4.8
OAS	-31.8	-39.5	-43.6	-45.7	-46.9	-46.9	-46.9
REF	-0.2	7.1	22.3	23.8	25.7	27.5	27.5
SSA	-175.8	-179.8	-226.6	-310.9	-358.5	-396.5	-400.9
USA	7.1	7.1	7.1	7.1	7.3	7.3	7.3

Table 1688: MAgPIE m4p\_som — Resources—Land Cover Change—Forest (million ha wrt 1995) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015
GLO	36.3	36.3	36.3	36.3	36.3	36.3	0.0	-36.3	-59.3	-76.4	-92.9
CAZ	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	0.0	0.2	-1.2	-6.0	-4.7
CHA	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	0.0	9.9	26.0	33.5	41.3
EUR	-3.4	-3.4	-3.4	-3.4	-3.4	-3.4	0.0	3.4	5.4	7.9	9.7
IND	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	0.0	0.7	3.0	5.1	6.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.1	0.0
LAM	22.3	22.3	22.3	22.3	22.3	22.3	0.0	-22.3	-46.1	-63.9	-74.8
MEA	0.6	0.6	0.6	0.6	0.6	0.6	0.0	-0.6	0.4	0.3	-0.5
NEU	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	0.0	0.4	0.9	1.9	2.5
OAS	12.3	12.3	12.3	12.3	12.3	12.3	0.0	-12.3	-17.8	-19.5	-24.7
REF	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	0.0	0.6	0.5	6.9	6.9
SSA	16.9	16.9	16.9	16.9	16.9	16.9	0.0	-16.9	-32.2	-48.4	-61.8
USA	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	0.0	0.5	1.8	5.7	7.1

Table 1689: FAO\_forest — Resources—Land Cover Change—Forest (million ha wrt 1995)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	148	118	90	63	34	5	0	-5	1	-20
CAZ	-1	-1	-1	-1	-1	-0	0	0	4	7
CHA	63	56	45	33	16	-1	0	1	0	3
EUR	-6	-5	-4	-3	-2	-2	0	2	3	3
IND	1	1	0	0	0	0	0	-0	-0	-0
JPN	-1	-1	-1	-0	-0	-0	0	0	0	0
LAM	74	53	39	24	16	8	0	-8	-8	-15
MEA	0	0	0	0	0	0	0	0	0	0
NEU	-1	-1	-1	-1	-1	-1	0	1	1	1
OAS	18	16	15	14	8	2	0	-2	-4	-22
REF	2	2	1	1	1	0	0	-0	5	5
SSA	5	3	2	0	-0	-0	0	0	-4	-7
USA	-6	-5	-5	-4	-2	-1	0	1	3	6

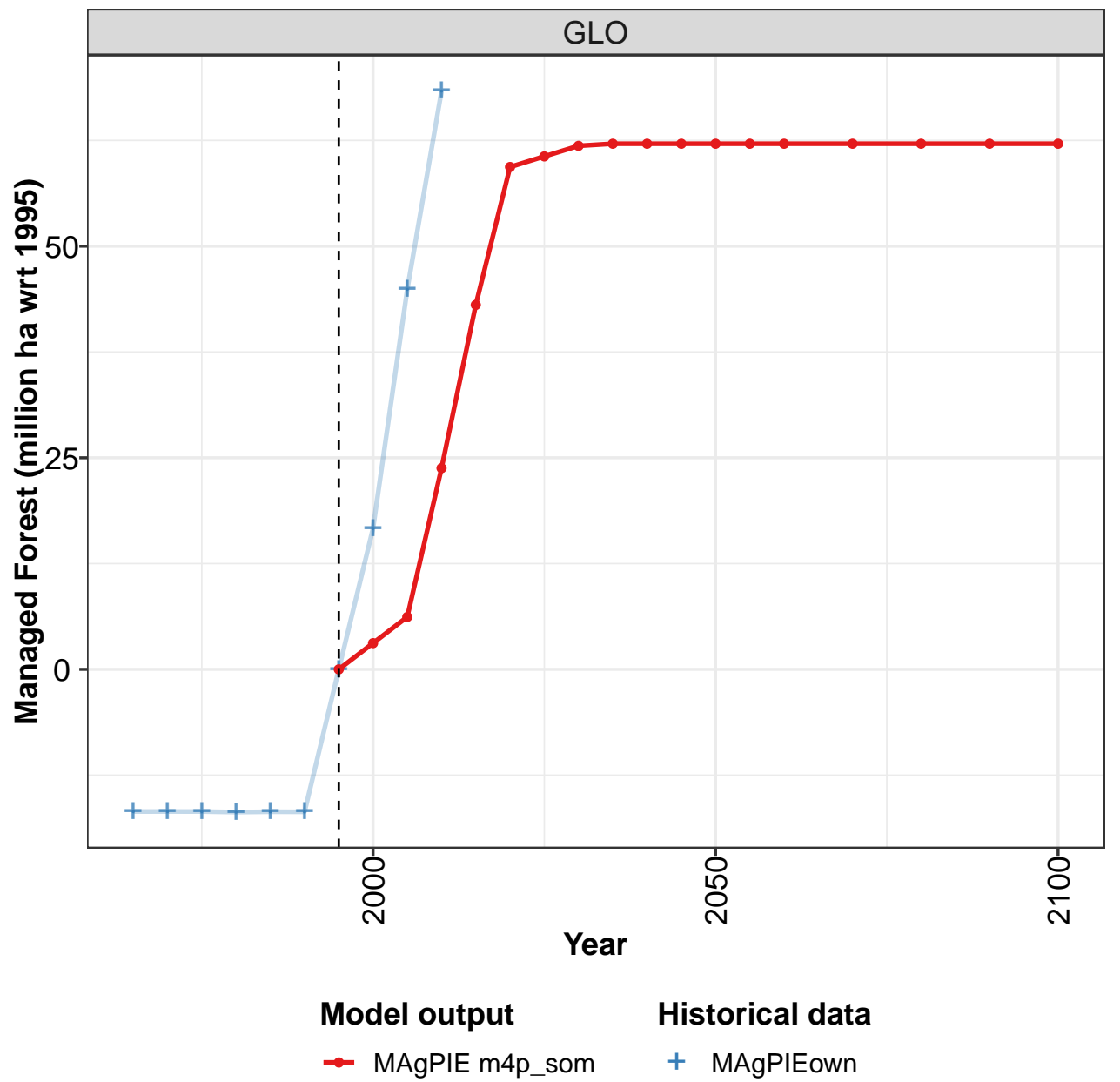
Table 1690: LUH2v2 — Resources—Land Cover Change—Forest (million ha wrt 1995)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	23.6	23.2	23.0	21.1	20.2	18.9	0.0	-23.4	-46.4	-64.5
CAZ	-0.2	-0.2	-0.2	-0.4	-0.2	-0.2	0.0	0.2	-1.2	-6.0
CHA	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	0.0	9.9	26.0	33.5
EUR	-3.4	-3.4	-3.4	-3.4	-3.4	-3.4	0.0	3.4	5.4	7.9
IND	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	0.0	0.7	3.0	5.1
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.1
LAM	22.5	22.4	22.3	22.0	21.9	21.8	0.0	-22.2	-45.9	-63.7
MEA	0.6	0.6	0.6	0.6	0.6	0.6	0.0	-0.6	0.4	0.3
NEU	-1.1	-1.0	-0.9	-0.8	-0.7	-0.7	0.0	0.5	1.0	1.9
OAS	1.0	1.0	1.0	1.0	0.9	0.9	0.0	-0.9	-6.3	-8.0
REF	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	0.0	0.6	0.5	6.9
SSA	16.1	15.7	15.4	13.9	12.8	11.7	0.0	-15.5	-31.0	-48.1
USA	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	0.0	0.5	1.8	5.7

Table 1691: MAgPIEown — Resources—Land Cover Change—Forest (million ha wrt 1995)

56.2.1 Managed Forest

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

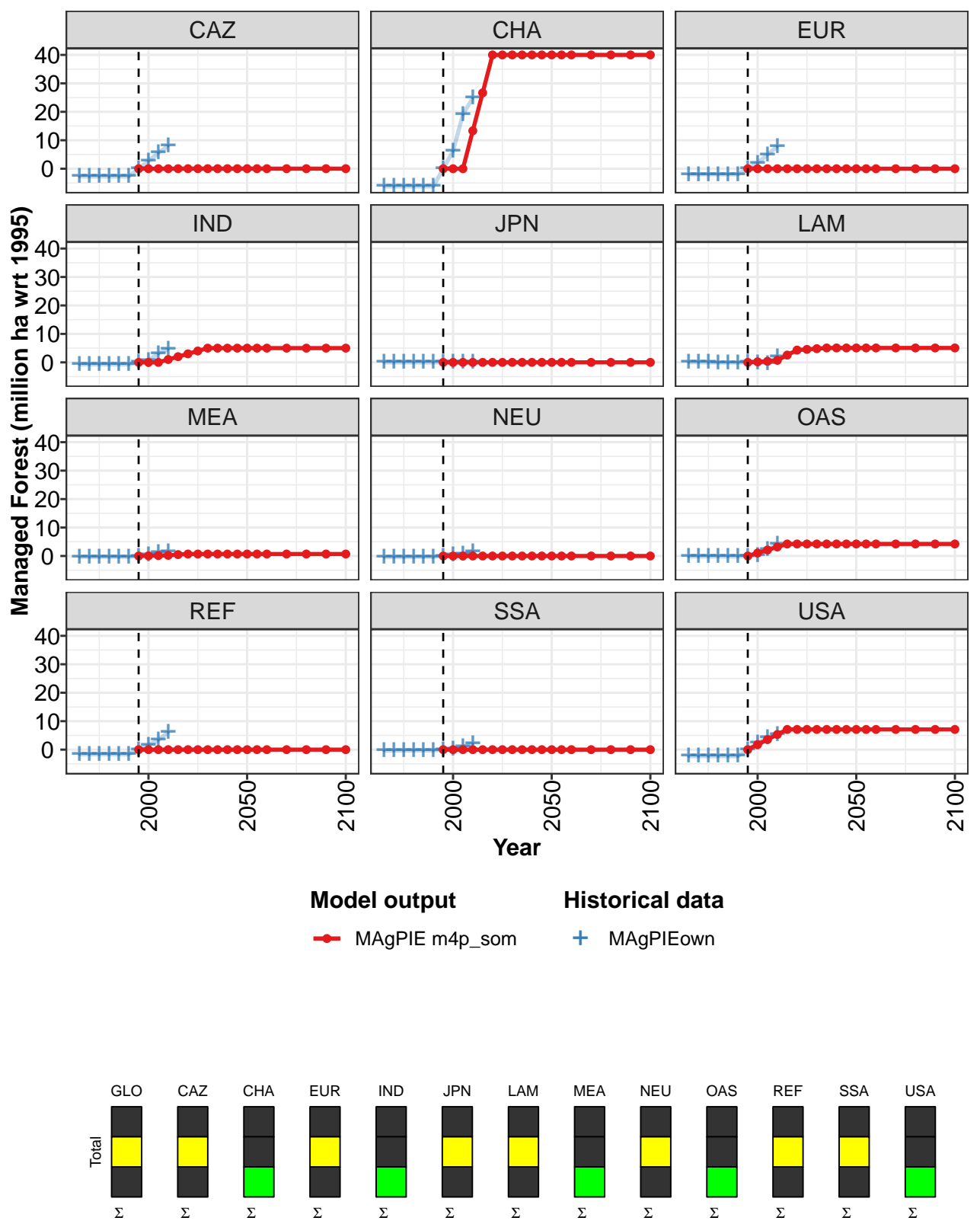


Figure 441: MAgPIE m4p\_som — Resources—Land Cover Change—Forest—Managed Forest (million ha wrt 1995)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.0	3.1	6.2	23.8	43.1	59.4	60.6	61.9	62.1	62.1	62.1
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	13.3	26.7	40.0	40.0	40.0	40.0	40.0	40.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	1.0	2.0	3.0	4.0	5.0	5.0	5.0	5.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.2	0.4	0.7	2.6	4.3	4.6	4.8	5.1	5.1	5.1
MEA	0.0	0.1	0.2	0.2	0.5	0.7	0.7	0.7	0.7	0.7	0.7
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.0	1.1	2.1	3.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	1.8	3.6	5.3	7.1	7.1	7.1	7.1	7.1	7.1	7.1

Table 1692: MAgPIE m4p\_som — Resources—Land Cover Change—Forest—Managed Forest (million ha wrt 1995) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	62.1	62.1	62.1	62.1	62.1	62.1	62.1
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	40.0	40.0	40.0	40.0	40.0	40.0	40.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	5.0	5.0	5.0	5.0	5.0	5.0	5.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	5.1	5.1	5.1	5.1	5.1	5.1	5.1
MEA	0.7	0.7	0.7	0.7	0.7	0.7	0.7
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	4.2	4.2	4.2	4.2	4.2	4.2	4.2
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	7.1	7.1	7.1	7.1	7.1	7.1	7.1

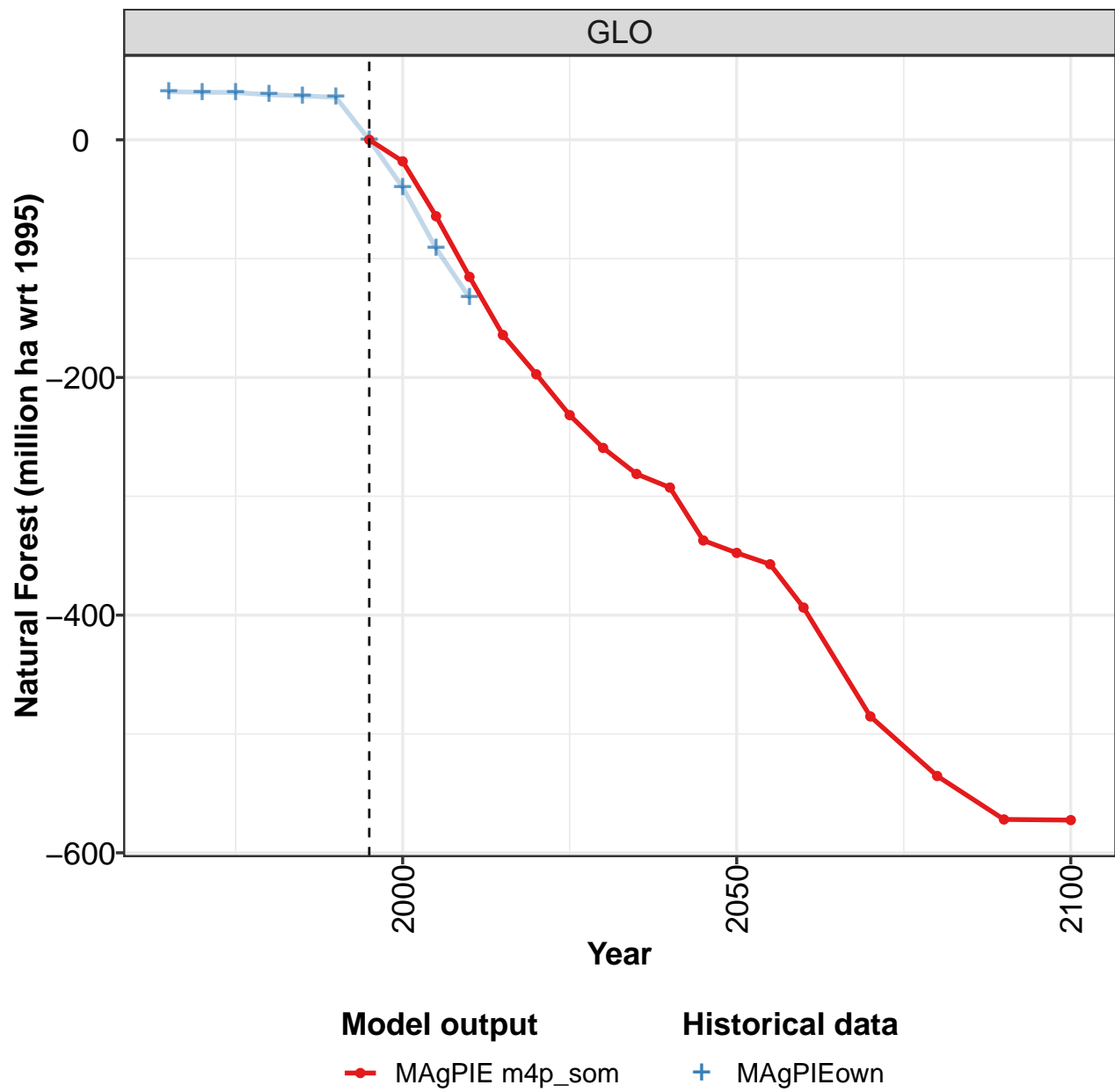
Table 1693: MAgPIE m4p\_som — Resources—Land Cover Change—Forest—Managed Forest (million ha wrt 1995) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-16.8	-16.8	-16.8	-16.9	-16.8	-16.8	0.0	16.7	44.9	68.3
CAZ	-2.7	-2.7	-2.7	-2.8	-2.7	-2.7	0.0	2.7	5.5	8.1
CHA	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2	0.0	6.2	19.0	24.9
EUR	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	0.0	2.0	5.0	7.8
IND	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	0.0	0.7	3.0	4.7
JPN	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	0.0	0.0	0.0	-0.0
LAM	0.0	0.0	-0.0	-0.1	-0.1	-0.1	0.0	-0.1	-0.3	2.1
MEA	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	0.0	0.3	1.2	1.5
NEU	-0.4	-0.4	-0.4	-0.4	-0.4	-0.3	0.0	0.3	0.7	1.5
OAS	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	0.0	0.2	2.2	4.2
REF	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	0.0	1.6	3.3	6.2
SSA	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	0.0	0.3	1.0	2.1
USA	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	0.0	2.3	4.2	5.3

Table 1694: MAgPIEown — Resources—Land Cover Change—Forest—Managed Forest (million ha wrt 1995)

56.2.2 Natural Forest

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

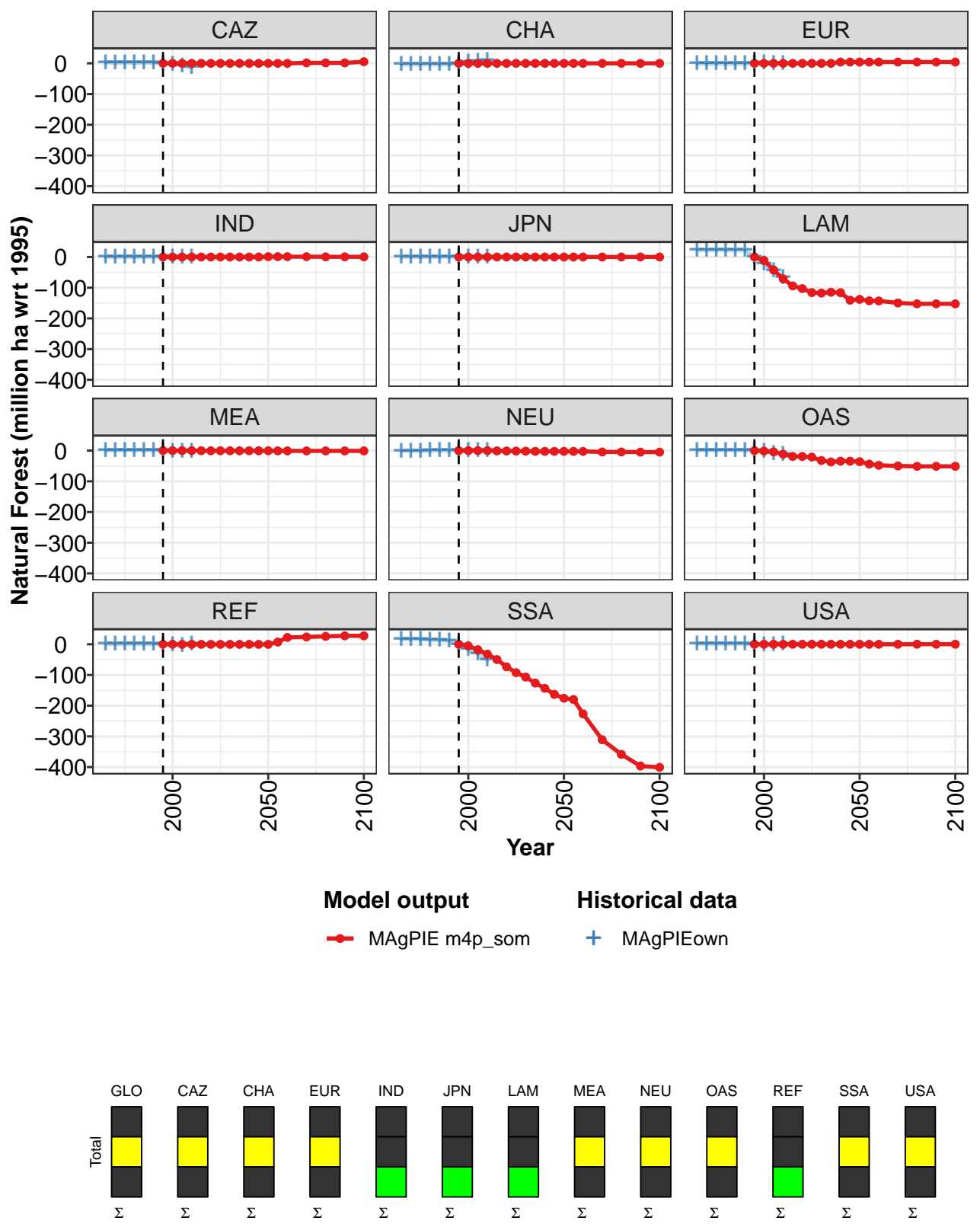


Figure 442: MAgPIE m4p\_som — Resources—Land Cover Change—Forest—Natural Forest (million ha wrt 1995)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.0	-18.2	-64.3	-115.3	-164.2	-197.3	-231.7	-259.3	-281.2	-292.6	-337.2
CAZ	0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	4.2
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	-11.4	-42.3	-71.2	-94.1	-102.9	-115.9	-117.6	-114.7	-116.2	-140.8
MEA	0.0	0.0	-0.0	-0.1	-0.4	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
NEU	0.0	0.0	0.0	0.0	-0.9	-1.3	-1.5	-1.8	-2.4	-2.4	-2.4
OAS	0.0	-1.4	-3.9	-11.5	-19.0	-19.0	-21.0	-32.2	-37.0	-34.2	-34.3
REF	0.0	0.0	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
SSA	0.0	-5.4	-17.8	-32.2	-49.7	-73.4	-92.4	-106.9	-126.4	-143.4	-163.2
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 1695: MAgPIE m4p\_som — Resources—Land Cover Change—Forest—Natural Forest (million ha wrt 1995) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	-347.6	-357.2	-393.6	-485.2	-535.4	-571.9	-572.5
CAZ	-0.0	-0.0	-0.0	1.5	1.5	1.5	5.3
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	4.2	4.2	4.2	4.2	4.2	4.2	4.2
IND	1.0	1.0	1.0	1.0	0.5	0.5	0.5
JPN	0.0	0.0	0.0	0.0	0.0	0.1	0.1
LAM	-137.9	-142.7	-143.1	-149.7	-152.6	-152.6	-152.6
MEA	-0.6	-0.8	-0.9	-0.9	-0.9	-0.9	-0.9
NEU	-2.4	-2.5	-2.6	-4.3	-4.4	-4.8	-4.8
OAS	-36.0	-43.7	-47.9	-49.9	-51.1	-51.1	-51.1
REF	-0.2	7.1	22.3	23.8	25.7	27.5	27.5
SSA	-175.8	-179.8	-226.6	-310.9	-358.5	-396.5	-400.9
USA	0.0	0.0	0.0	0.0	0.2	0.2	0.2

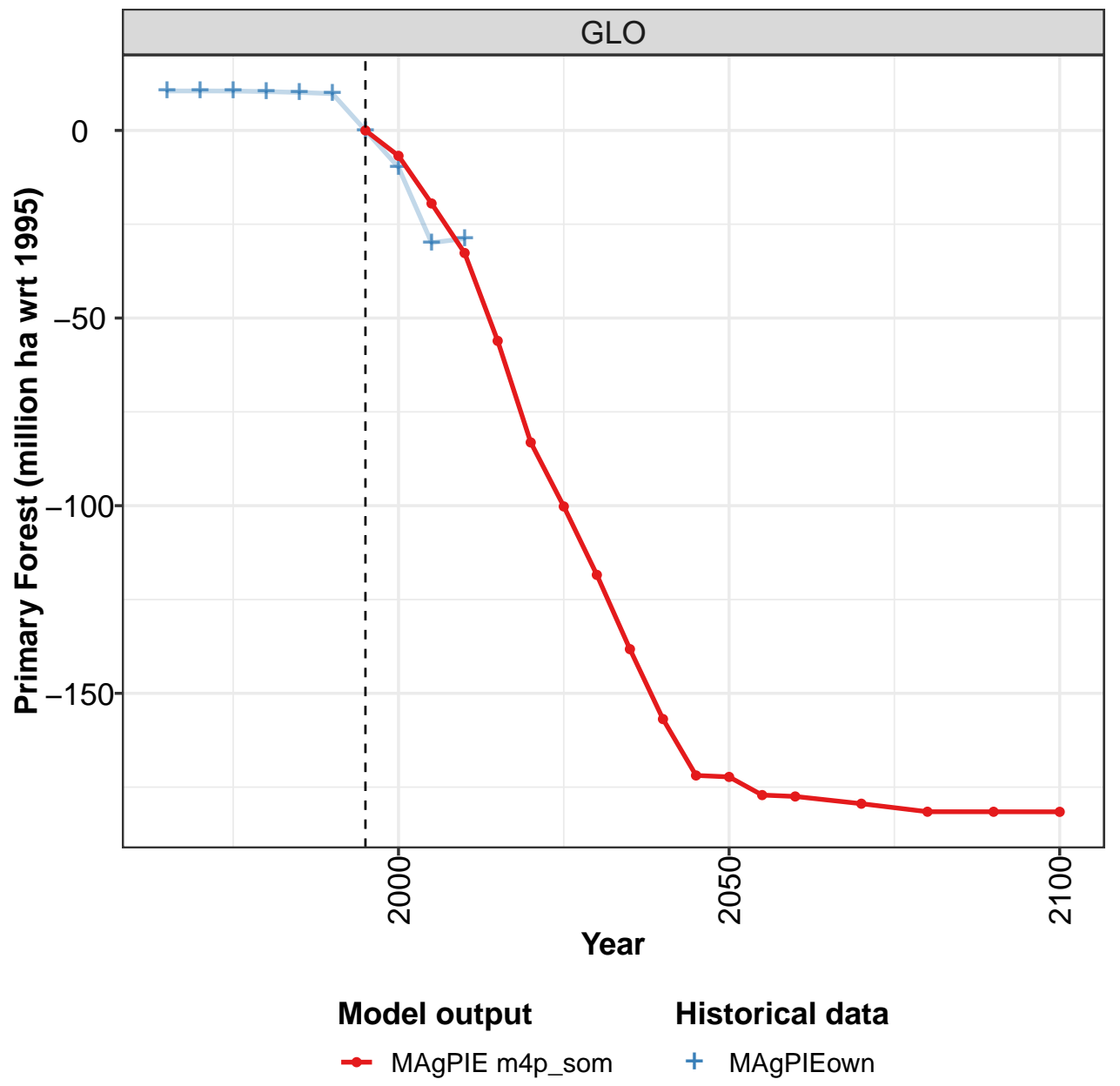
Table 1696: MAgPIE m4p\_som — Resources—Land Cover Change—Forest—Natural Forest (million ha wrt 1995) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	40.4	40.0	39.8	37.9	37.0	35.8	0.0	-40.0	-91.3	-132.8
CAZ	2.6	2.6	2.6	2.3	2.6	2.6	0.0	-2.6	-6.8	-14.0
CHA	-3.7	-3.7	-3.7	-3.7	-3.7	-3.7	0.0	3.7	6.9	8.6
EUR	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	0.0	1.5	0.4	0.1
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.0	-0.1	0.0	0.1
LAM	22.4	22.4	22.3	22.1	22.0	21.9	0.0	-22.2	-45.6	-65.8
MEA	0.9	0.9	0.9	0.9	0.9	0.9	0.0	-0.9	-0.7	-1.2
NEU	-0.7	-0.6	-0.5	-0.4	-0.4	-0.3	0.0	0.2	0.4	0.3
OAS	1.1	1.1	1.1	1.1	1.1	1.0	0.0	-1.0	-8.6	-12.2
REF	1.0	1.0	1.0	1.0	1.0	1.0	0.0	-1.0	-2.9	0.7
SSA	16.5	16.0	15.7	14.2	13.1	12.0	0.0	-15.8	-32.1	-50.2
USA	1.8	1.8	1.8	1.8	1.8	1.8	0.0	-1.8	-2.4	0.4

Table 1697: MAgPIEown — Resources—Land Cover Change—Forest—Natural Forest (million ha wrt 1995)

56.2.3 Natural Forest—Primary Forest

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

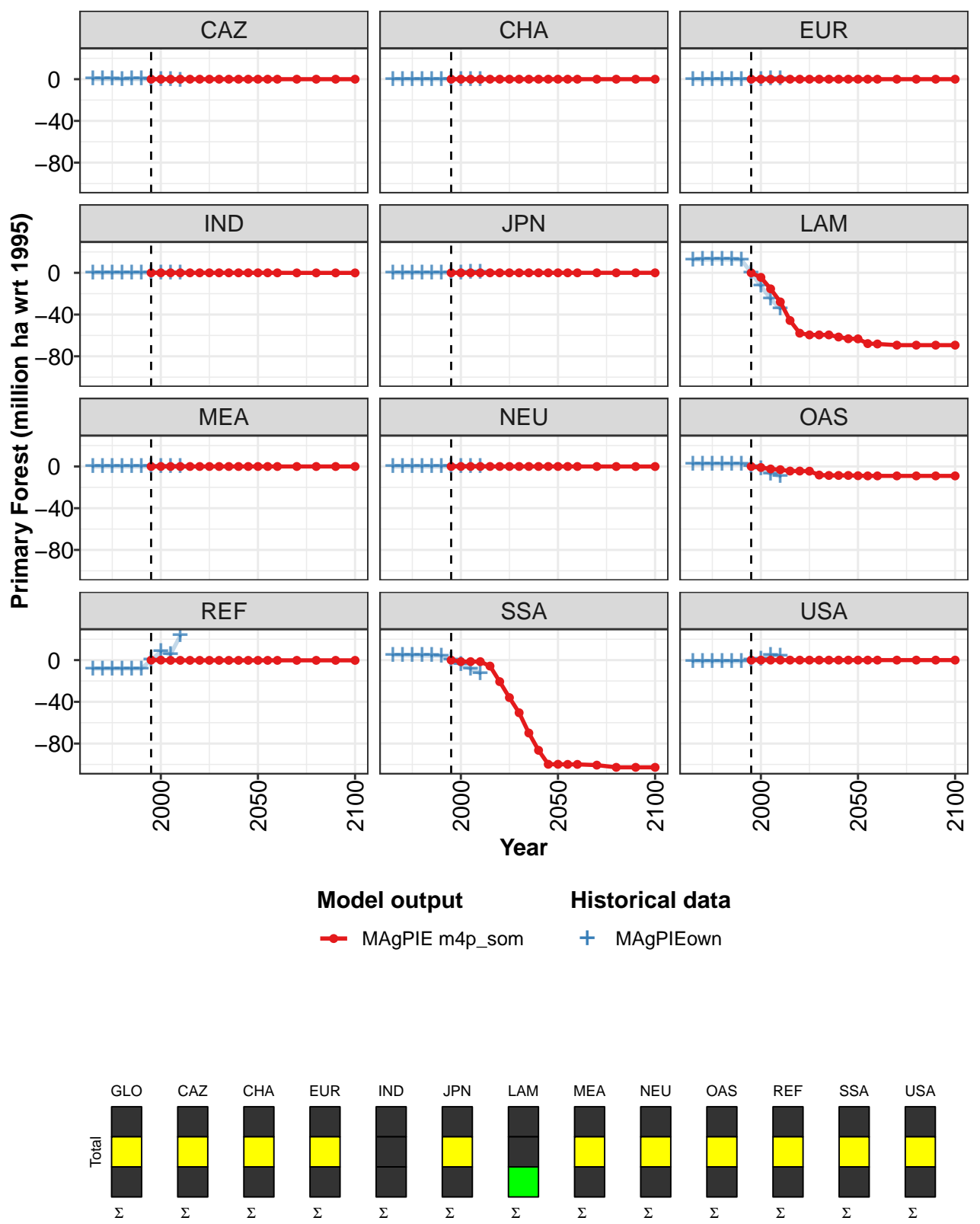


Figure 443: MAgPIE m4p\_som — Resources—Land Cover Change—Forest—Natural Forest—Primary Forest (million ha wrt 1995)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	-7	-19	-33	-56	-83	-100	-118	-138	-157	-172
CAZ	0	0	0	0	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	0	0	0	0	0
IND	0	0	0	0	0	0	0	0	0	0	0
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	0	-4	-15	-28	-46	-58	-59	-59	-59	-62	-63
MEA	0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0
NEU	0	0	0	0	0	0	0	0	0	0	0
OAS	0	-1	-2	-3	-4	-4	-4	-8	-9	-9	-9
REF	0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0
SSA	0	-1	-1	-1	-6	-21	-36	-50	-70	-86	-100
USA	0	0	0	0	0	0	0	0	0	0	0

Table 1698: MAgPIE m4p\_som — Resources—Land Cover Change—Forest—Natural Forest—Primary Forest (million ha wrt 1995) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	-172	-177	-177	-179	-182	-182	-182
CAZ	0	0	0	0	0	0	0
CHA	0	0	0	0	0	0	0
EUR	0	0	0	0	0	0	0
IND	0	0	-0	-0	-0	-0	-0
JPN	0	0	0	0	0	0	0
LAM	-63	-68	-68	-69	-69	-69	-69
MEA	-0	-0	-0	-0	-0	-0	-0
NEU	0	-0	-0	-0	-0	-0	-0
OAS	-9	-9	-9	-9	-9	-9	-9
REF	-0	-0	-0	-0	-0	-0	-0
SSA	-100	-100	-100	-101	-103	-103	-103
USA	0	0	0	0	0	0	0

Table 1699: MAgPIE m4p\_som — Resources—Land Cover Change—Forest—Natural Forest—Primary Forest (million ha wrt 1995) [PART 2/2]

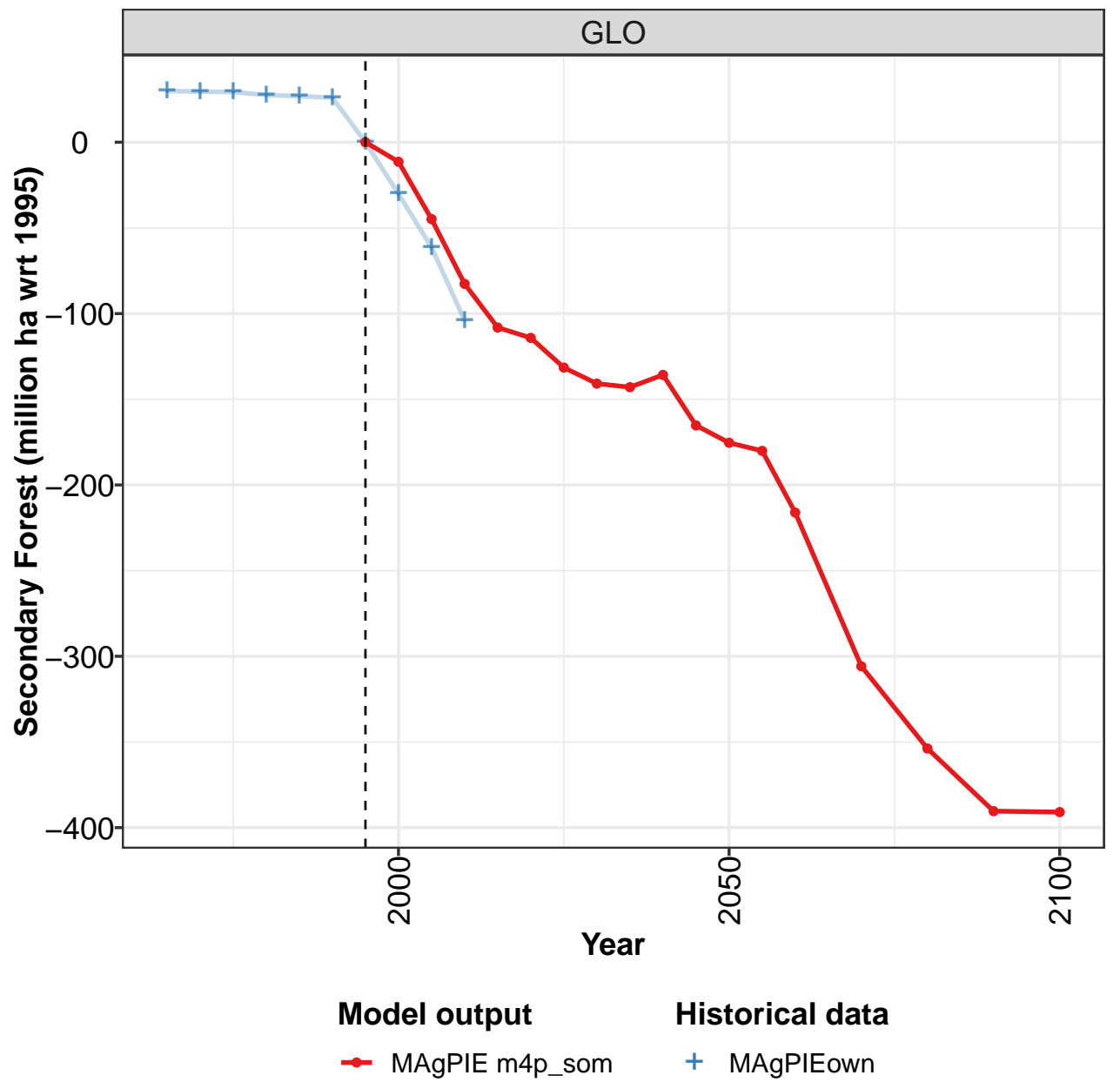
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	10.5	10.5	10.5	10.3	10.1	9.8	0.0	-9.9	-29.9	-28.8
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.0	-0.1	-0.3	-0.7
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0
EUR	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.1	0.1	0.4
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.1	0.5	0.9
LAM	12.6	12.7	12.8	12.9	12.8	12.6	0.0	-12.6	-25.0	-34.5
MEA	0.1	0.1	0.1	0.1	0.1	0.1	0.0	-0.1	-0.1	-0.2
NEU	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	0.0	0.0	0.0	0.1
OAS	2.5	2.5	2.5	2.5	2.5	2.4	0.0	-2.4	-7.0	-9.5
REF	-8.2	-8.2	-8.2	-8.2	-8.2	-8.2	0.0	8.2	5.6	23.3
SSA	4.8	4.7	4.6	4.4	4.3	4.2	0.0	-4.2	-8.3	-12.7
USA	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	0.0	1.1	4.6	4.1

Table 1700: MAgPIEown — Resources—Land Cover Change—Forest—Natural Forest—Primary Forest (million ha wrt 1995)



56.2.4 Natural Forest—Secondary Forest

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

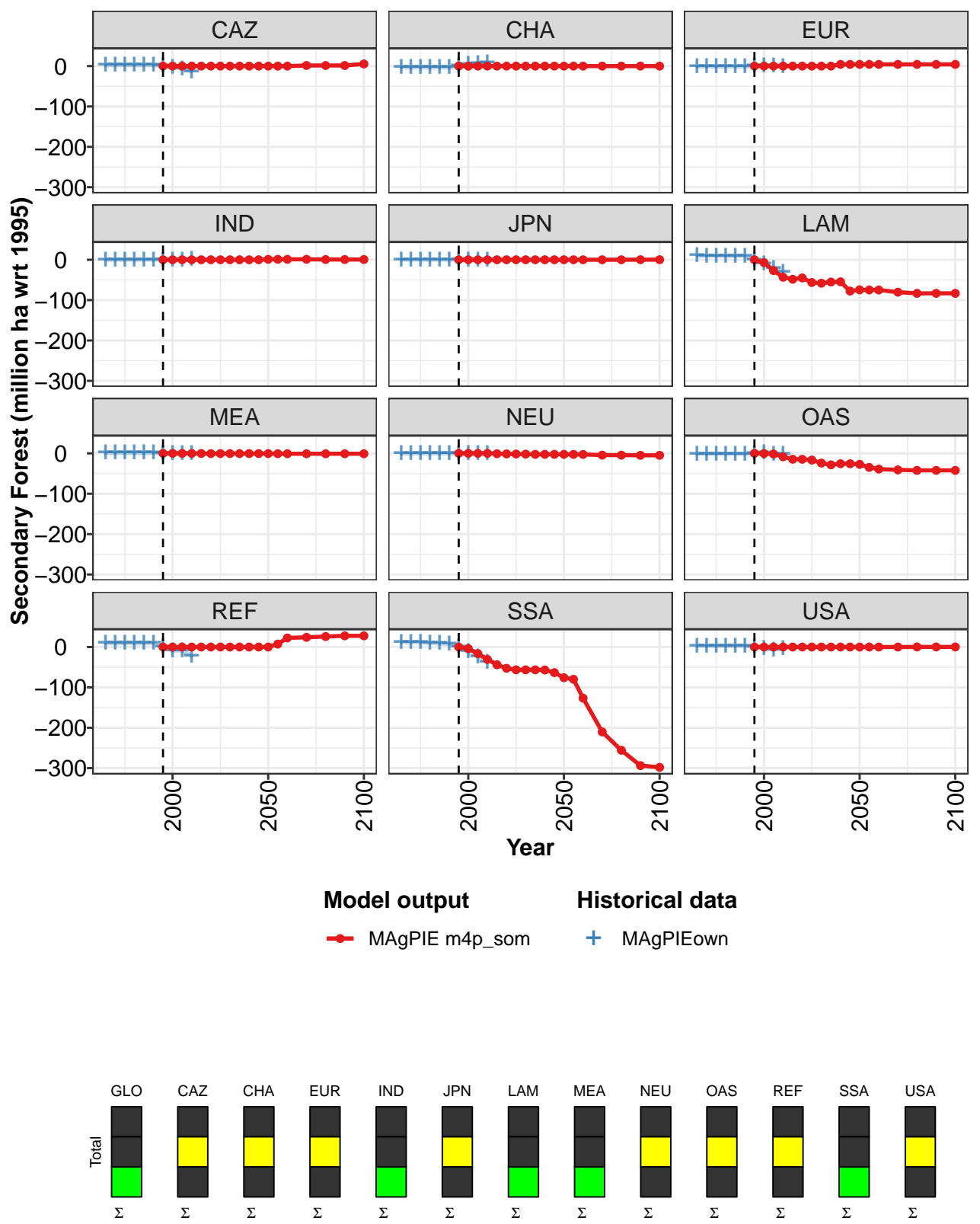


Figure 444: MAGPIE m4p\_som — Resources—Land Cover Change—Forest—Natural Forest—Secondary Forest (million ha wrt 1995)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.0	-11.4	-44.8	-82.7	-108.1	-114.2	-131.5	-140.9	-143.0	-135.8	-165.3
CAZ	0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	4.2
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	-7.0	-26.9	-43.3	-48.4	-45.0	-56.4	-58.1	-55.2	-54.6	-77.6
MEA	0.0	0.0	-0.0	-0.1	-0.3	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
NEU	0.0	0.0	0.0	0.0	-0.9	-1.3	-1.5	-1.8	-2.4	-2.4	-2.4
OAS	0.0	-0.4	-1.5	-8.4	-14.6	-14.6	-16.5	-24.0	-28.4	-25.6	-25.7
REF	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0
SSA	0.0	-3.9	-16.4	-30.8	-44.0	-52.7	-56.5	-56.5	-56.5	-56.9	-63.4
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 1701: MAgPIE m4p.som — Resources—Land Cover Change—Forest—Natural Forest—Secondary Forest (million ha wrt 1995) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	-175.4	-180.1	-216.1	-305.8	-353.8	-390.4	-390.9
CAZ	-0.0	-0.0	-0.0	1.5	1.5	1.5	5.3
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	4.2	4.2	4.2	4.2	4.2	4.2	4.2
IND	1.0	1.0	1.0	1.0	0.6	0.6	0.6
JPN	0.0	0.0	0.0	0.0	0.0	0.1	0.1
LAM	-74.6	-74.8	-74.9	-80.3	-83.3	-83.2	-83.2
MEA	-0.5	-0.8	-0.9	-0.9	-0.9	-0.9	-0.9
NEU	-2.4	-2.5	-2.6	-4.3	-4.4	-4.8	-4.8
OAS	-27.1	-34.7	-38.9	-40.9	-42.1	-42.1	-42.1
REF	-0.0	7.3	22.5	24.0	26.0	27.7	27.7
SSA	-76.0	-79.9	-126.6	-210.2	-255.7	-293.7	-298.1
USA	0.0	0.0	0.0	0.0	0.2	0.2	0.2

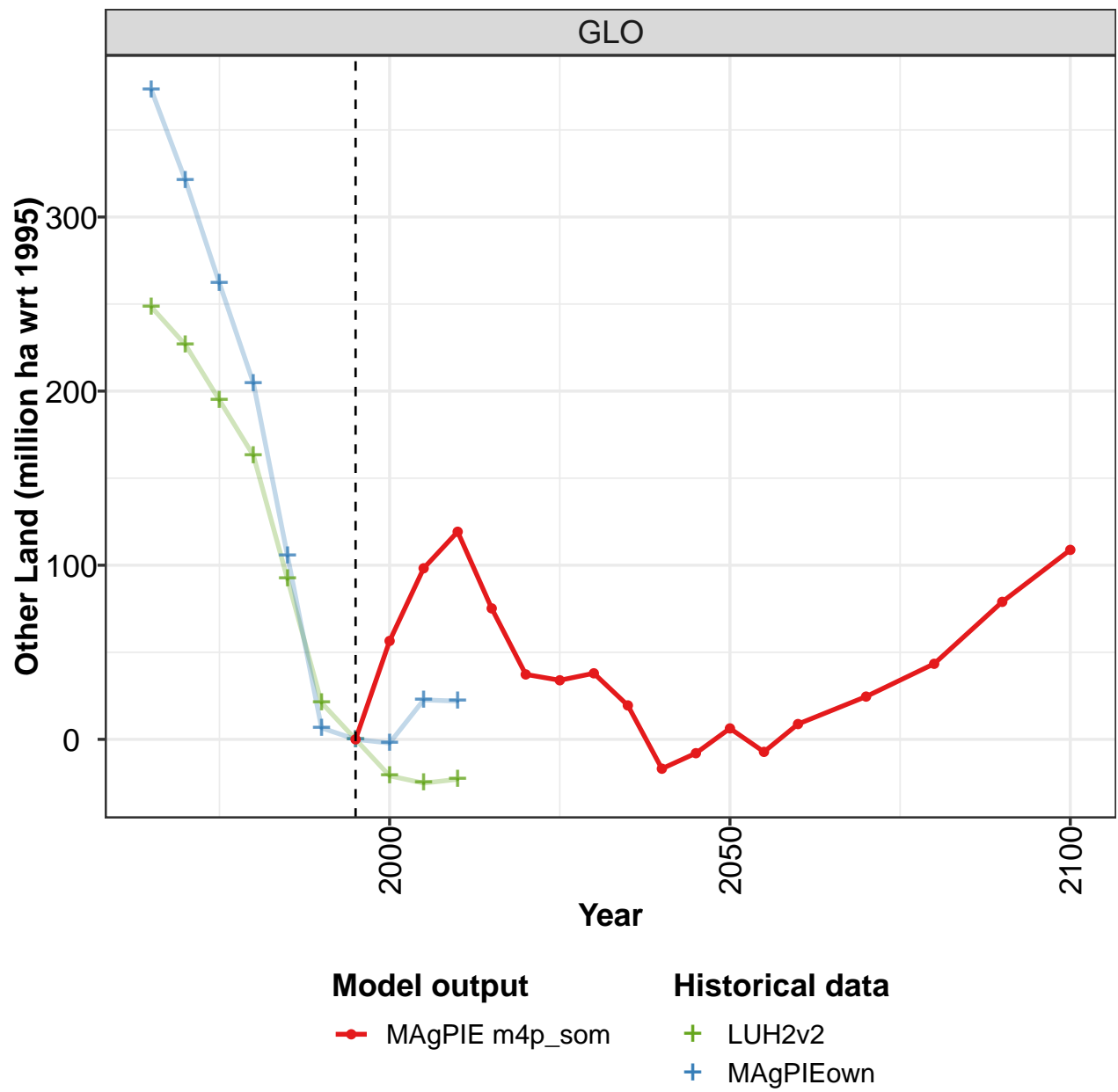
Table 1702: MAgPIE m4p.som — Resources—Land Cover Change—Forest—Natural Forest—Secondary Forest (million ha wrt 1995) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	29.9	29.5	29.3	27.6	26.9	26.0	0.0	-30.2	-61.4	-104.0
CAZ	2.4	2.4	2.4	2.2	2.4	2.4	0.0	-2.4	-6.4	-13.3
CHA	-3.7	-3.7	-3.7	-3.7	-3.7	-3.7	0.0	3.7	6.9	8.7
EUR	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	0.0	1.4	0.3	-0.4
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
JPN	0.2	0.2	0.2	0.2	0.2	0.2	0.0	-0.2	-0.5	-0.8
LAM	9.8	9.7	9.5	9.2	9.3	9.3	0.0	-9.6	-20.6	-31.2
MEA	0.9	0.9	0.9	0.9	0.9	0.9	0.0	-0.9	-0.6	-1.1
NEU	-0.7	-0.6	-0.5	-0.4	-0.4	-0.3	0.0	0.1	0.3	0.3
OAS	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	0.0	1.4	-1.6	-2.8
REF	9.3	9.3	9.3	9.3	9.3	9.3	0.0	-9.3	-8.4	-22.6
SSA	11.6	11.3	11.2	9.8	8.8	7.9	0.0	-11.6	-23.7	-37.5
USA	2.9	2.9	2.9	2.9	2.9	2.9	0.0	-2.9	-7.0	-3.7

Table 1703: MAgPIEown — Resources—Land Cover Change—Forest—Natural Forest—Secondary Forest (million ha wrt 1995)

56.3 Other Land

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

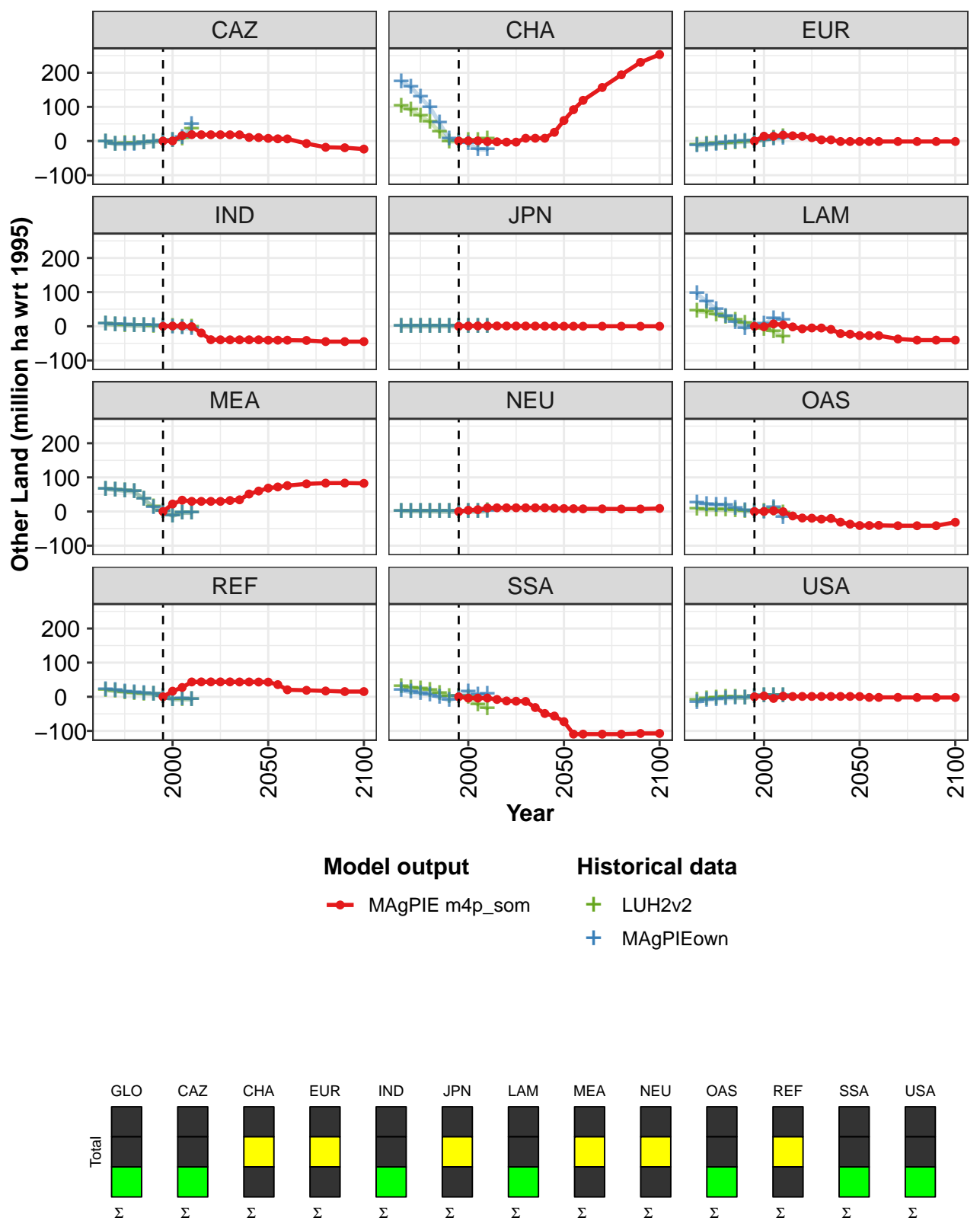


Figure 445: MAgPIE m4p\_som — Resources—Land Cover Change—Other Land (million ha wrt 1995)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	57	98	119	75	37	34	38	19	-17	-8
CAZ	0	0	16	19	18	18	18	18	18	11	10
CHA	0	1	1	-2	-2	-3	-3	8	8	8	26
EUR	0	14	14	17	15	14	10	4	4	-1	-1
IND	0	1	1	-1	-20	-39	-40	-40	-40	-40	-40
JPN	0	1	1	1	1	1	1	1	1	0	0
LAM	0	-1	7	4	-2	-7	-5	-5	-9	-21	-23
MEA	0	22	33	30	30	30	30	32	34	51	60
NEU	0	4	5	10	11	11	11	11	11	11	10
OAS	0	0	2	-1	-13	-19	-20	-22	-20	-31	-37
REF	0	16	27	43	44	44	44	44	43	43	43
SSA	0	-4	-4	-4	-8	-12	-13	-14	-32	-49	-56
USA	0	2	-5	2	1	1	1	1	1	1	1

Table 1704: MAgPIE m4p\_som — Resources—Land Cover Change—Other Land (million ha wrt 1995) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	6	-7	9	25	43	79	109
CAZ	8	7	6	-7	-18	-20	-24
CHA	60	92	119	157	194	230	253
EUR	-1	-1	-1	-1	-1	-1	-1
IND	-41	-41	-41	-41	-45	-45	-45
JPN	0	0	0	0	0	0	0
LAM	-27	-27	-27	-37	-40	-40	-40
MEA	69	72	76	81	83	83	83
NEU	9	8	8	8	7	7	9
OAS	-41	-41	-41	-42	-42	-42	-31
REF	43	36	20	19	17	15	15
SSA	-73	-109	-109	-109	-109	-107	-107
USA	1	-2	-2	-2	-2	-2	-2

Table 1705: MAgPIE m4p\_som — Resources—Land Cover Change—Other Land (million ha wrt 1995) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	248	227	195	163	92	21	0	-21	-25	-23
CAZ	-3	-8	-8	-8	-5	-2	0	2	6	35
CHA	101	91	73	55	26	-3	0	3	1	6
EUR	-12	-10	-8	-6	-4	-3	0	3	10	13
IND	6	4	3	2	1	1	0	-1	-2	-2
JPN	0	0	0	0	0	0	0	0	0	0
LAM	44	41	34	26	17	9	0	-9	-15	-31
MEA	66	64	61	59	36	13	0	-13	-4	-4
NEU	1	1	1	1	0	-0	0	0	-0	2
OAS	8	6	5	4	2	1	0	-1	8	-3
REF	19	16	13	10	9	7	0	-7	-9	-7
SSA	29	27	23	20	11	2	0	-2	-23	-34
USA	-11	-5	-3	-1	-2	-3	0	3	3	3

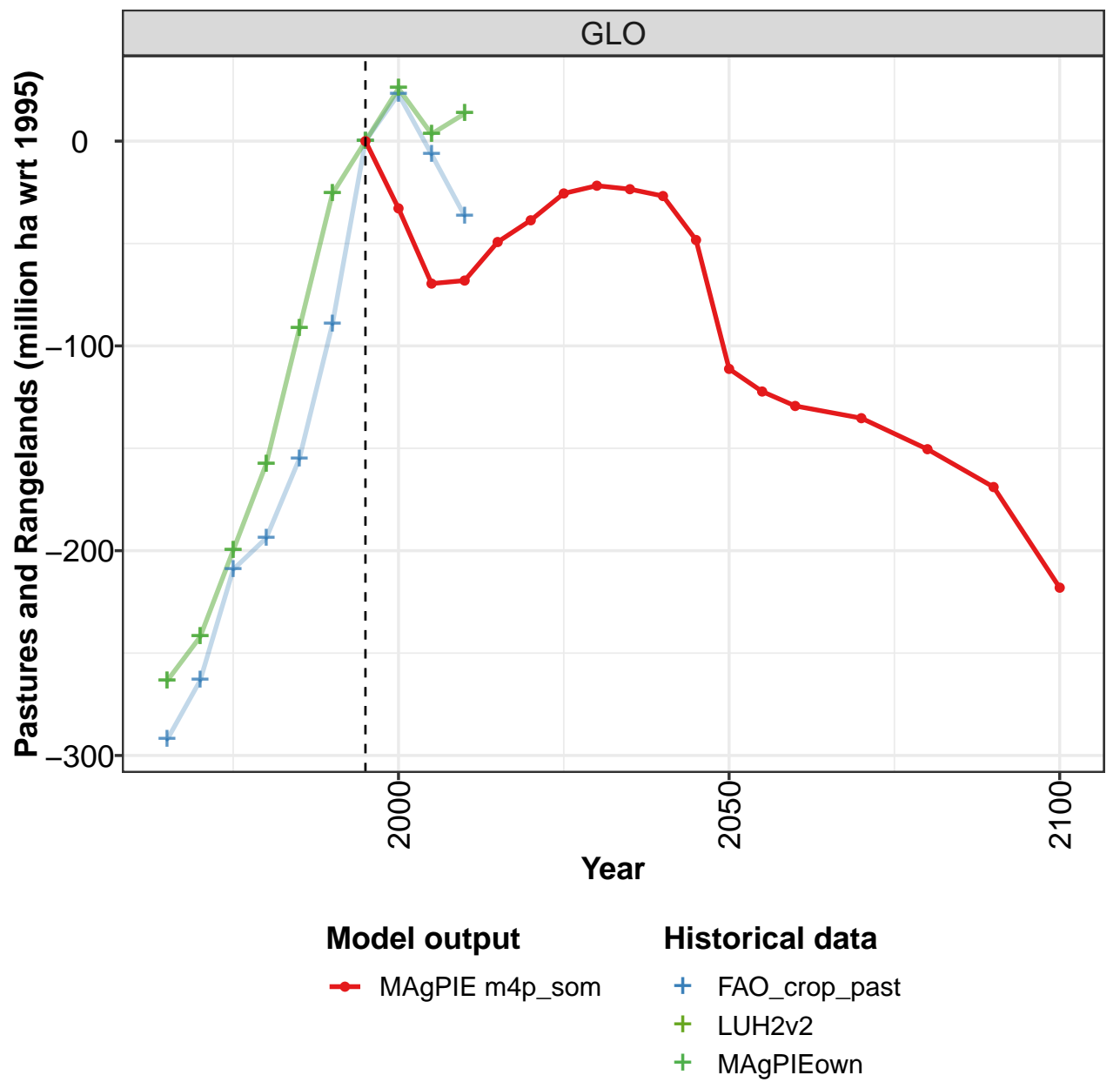
Table 1706: LUH2v2 — Resources—Land Cover Change—Other Land (million ha wrt 1995)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	373	321	262	204	105	7	0	-2	23	22
CAZ	-4	-9	-9	-9	-6	-2	0	2	12	48
CHA	174	158	128	98	52	6	0	-6	-25	-25
EUR	-14	-12	-9	-6	-3	-1	0	1	7	8
IND	7	6	4	3	2	2	0	-2	-5	-7
JPN	-1	-1	-1	-0	-0	-0	0	0	0	0
LAM	95	72	50	28	11	-6	0	6	23	18
MEA	65	63	61	58	35	13	0	-13	-4	-4
NEU	2	1	1	1	0	-1	0	1	-1	1
OAS	25	21	19	17	10	2	0	-2	11	-17
REF	21	18	15	12	10	8	0	-8	-5	-9
SSA	18	14	9	6	-2	-10	0	14	5	7
USA	-17	-9	-7	-5	-4	-3	0	3	4	3

Table 1707: MAgPIEown — Resources—Land Cover Change—Other Land (million ha wrt 1995)

56.4 Pastures and Rangelands

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

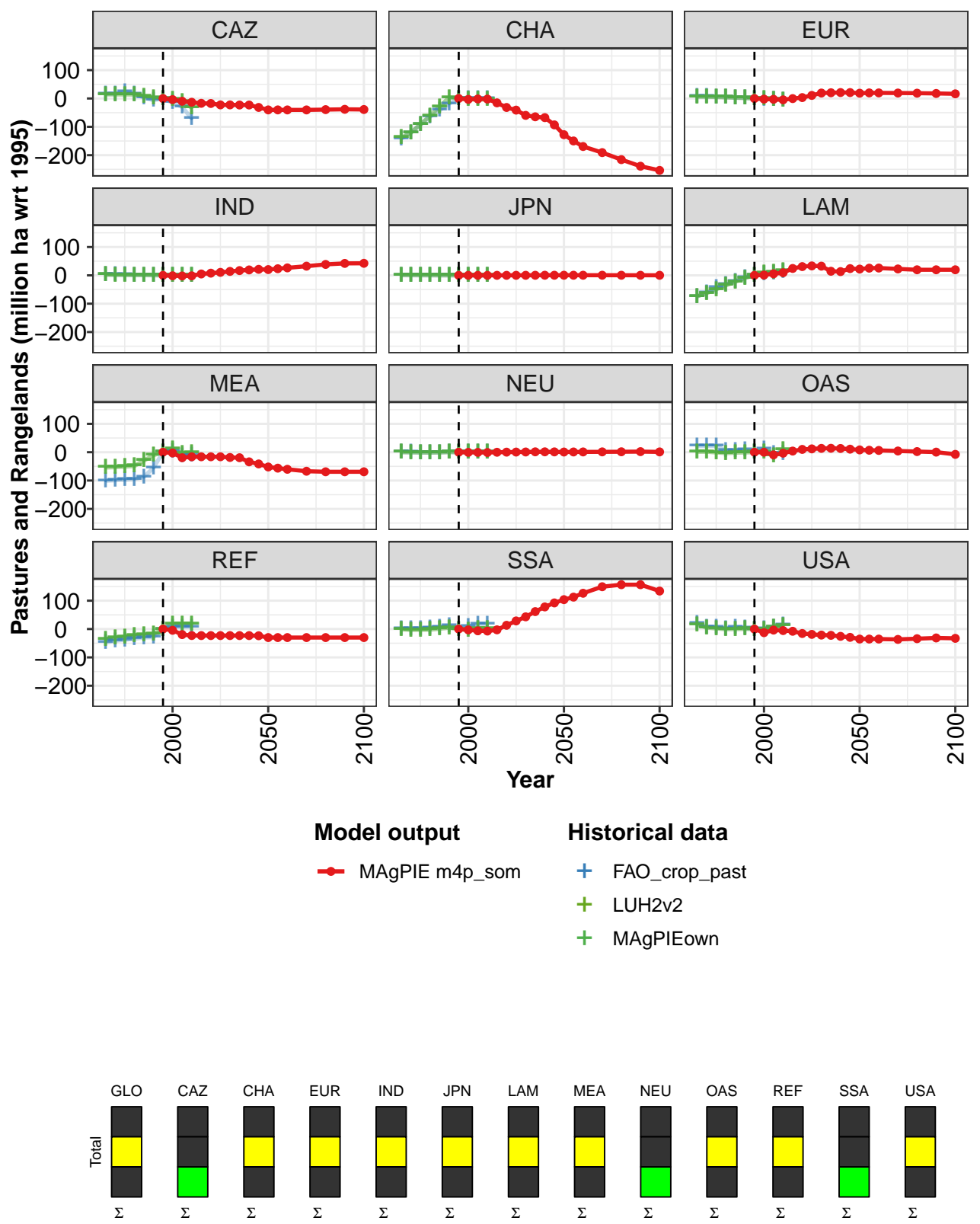


Figure 446: MAgPIE m4p\_som — Resources—Land Cover Change—Pastures and Rangelands (million ha wrt 1995)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0	-33	-70	-68	-49	-39	-26	-22	-23	-27	-48
CAZ	0	-4	-10	-13	-17	-18	-23	-23	-23	-23	-32
CHA	0	-3	-2	-2	-15	-32	-41	-60	-65	-67	-93
EUR	0	-2	-3	-5	-0	3	11	19	20	21	21
IND	0	-1	-2	-2	5	8	11	14	17	19	21
JPN	0	-0	-0	-0	0	0	0	0	0	0	0
LAM	0	1	5	9	24	31	33	32	14	13	24
MEA	0	-3	-19	-16	-16	-16	-16	-19	-19	-34	-41
NEU	0	-1	-1	-1	-0	0	1	1	1	1	1
OAS	0	-0	-9	-3	4	10	12	13	14	13	11
REF	0	-4	-20	-23	-23	-23	-23	-23	-23	-23	-24
SSA	0	-3	-6	-7	-3	13	29	43	62	78	92
USA	0	-13	-4	-5	-8	-16	-19	-21	-22	-26	-29

Table 1708: MAgPIE m4p\_som — Resources—Land Cover Change—Pastures and Rangelands (million ha wrt 1995) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	-111	-122	-129	-135	-150	-169	-218
CAZ	-40	-40	-40	-40	-39	-38	-39
CHA	-128	-150	-169	-191	-216	-239	-254
EUR	19	20	20	19	19	18	16
IND	20	23	26	32	39	42	43
JPN	0	0	0	0	0	0	0
LAM	22	25	26	23	20	20	20
MEA	-52	-56	-60	-67	-69	-69	-69
NEU	1	1	1	1	2	2	1
OAS	8	7	6	4	2	0	-8
REF	-30	-30	-30	-30	-30	-30	-30
SSA	104	113	126	149	156	156	134
USA	-35	-35	-35	-37	-34	-31	-33

Table 1709: MAgPIE m4p\_som — Resources—Land Cover Change—Pastures and Rangelands (million ha wrt 1995) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-292.3	-263.4	-209.2	-193.8	-155.2	-89.4	0.0	22.9	-6.5	-36.5
CAZ	16.0	16.7	24.1	16.7	3.0	-6.3	0.0	-14.9	-30.0	-70.8
CHA	-141.8	-119.8	-91.8	-64.5	-41.5	-18.4	0.0	0.0	0.0	-0.0
EUR	7.2	6.8	6.1	4.8	2.7	2.3	0.0	-2.1	-3.3	-5.5
IND	3.7	2.0	1.8	1.1	1.0	0.3	0.0	-0.2	-0.6	-0.7
JPN	0.6	0.5	0.3	0.2	0.1	0.0	0.0	0.0	-0.4	-0.4
LAM	-73.9	-60.9	-43.7	-33.0	-19.7	-7.3	0.0	6.9	8.6	14.3
MEA	-100.7	-98.9	-97.1	-94.7	-87.2	-55.0	0.0	3.0	-11.6	-10.9
NEU	0.3	-0.3	-1.2	-1.4	-1.0	0.4	0.0	1.3	1.8	1.9
OAS	21.5	21.9	21.9	5.5	5.6	8.2	0.0	12.2	-3.9	-3.7
REF	-47.6	-41.3	-38.1	-34.2	-29.9	-28.7	0.0	7.1	7.8	8.2
SSA	1.4	2.1	2.6	4.1	6.2	12.0	0.0	9.1	17.1	17.4
USA	21.0	7.9	5.9	1.5	5.6	3.2	0.0	0.3	8.0	13.9

Table 1710: FAO\_crop\_past — Resources—Land Cover Change—Pastures and Rangelands (million ha wrt 1995)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-263.6	-242.1	-199.8	-157.6	-91.7	-25.7	0.0	25.7	3.5	13.4
CAZ	14.5	14.3	14.2	14.0	8.0	2.0	0.0	-2.0	-11.1	-32.5
CHA	-137.9	-120.8	-91.0	-61.2	-28.9	3.4	0.0	-3.4	-3.6	-3.4
EUR	6.3	6.0	5.1	4.1	2.8	1.5	0.0	-1.5	-2.6	-4.8
IND	1.8	1.4	1.1	0.7	0.5	0.4	0.0	-0.4	-0.7	-0.8
JPN	0.5	0.4	0.3	0.1	0.1	0.0	0.0	-0.0	-0.0	-0.0
LAM	-74.3	-62.8	-49.3	-35.7	-22.7	-9.6	0.0	9.6	10.3	15.9
MEA	-53.8	-53.0	-50.8	-48.7	-29.7	-10.6	0.0	10.6	-3.7	-2.9
NEU	-0.1	-0.5	-1.0	-1.5	-0.6	0.3	0.0	-0.3	0.2	0.2
OAS	1.4	1.5	-0.8	-3.2	-2.0	-0.8	0.0	0.8	-12.1	8.8
REF	-36.7	-30.4	-26.8	-23.3	-20.4	-17.6	0.0	17.6	17.9	18.7
SSA	-1.1	-3.3	-2.8	-2.4	1.2	4.8	0.0	-4.8	1.9	1.5
USA	15.8	4.9	2.2	-0.5	0.0	0.6	0.0	-0.6	7.0	12.7

Table 1711: LUH2v2 — Resources—Land Cover Change—Pastures and Rangelands (million ha wrt 1995)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-263.6	-242.1	-199.8	-157.6	-91.7	-25.7	0.0	25.7	3.5	13.4
CAZ	14.5	14.3	14.2	14.0	8.0	2.0	0.0	-2.0	-11.1	-32.5
CHA	-137.9	-120.8	-91.0	-61.2	-28.9	3.4	0.0	-3.4	-3.6	-3.4
EUR	6.3	6.0	5.1	4.1	2.8	1.5	0.0	-1.5	-2.6	-4.8
IND	1.8	1.4	1.1	0.7	0.5	0.4	0.0	-0.4	-0.7	-0.8
JPN	0.5	0.4	0.3	0.1	0.1	0.0	0.0	-0.0	-0.0	-0.0
LAM	-74.3	-62.8	-49.3	-35.7	-22.7	-9.6	0.0	9.6	10.3	15.9
MEA	-53.8	-53.0	-50.8	-48.7	-29.7	-10.6	0.0	10.6	-3.7	-2.9
NEU	-0.1	-0.5	-1.0	-1.5	-0.6	0.3	0.0	-0.3	0.2	0.2
OAS	1.4	1.5	-0.8	-3.2	-2.0	-0.8	0.0	0.8	-12.1	8.8
REF	-36.7	-30.4	-26.8	-23.3	-20.4	-17.6	0.0	17.6	17.9	18.7
SSA	-1.1	-3.3	-2.8	-2.4	1.2	4.8	0.0	-4.8	1.9	1.5
USA	15.8	4.9	2.2	-0.5	0.0	0.6	0.0	-0.6	7.0	12.7

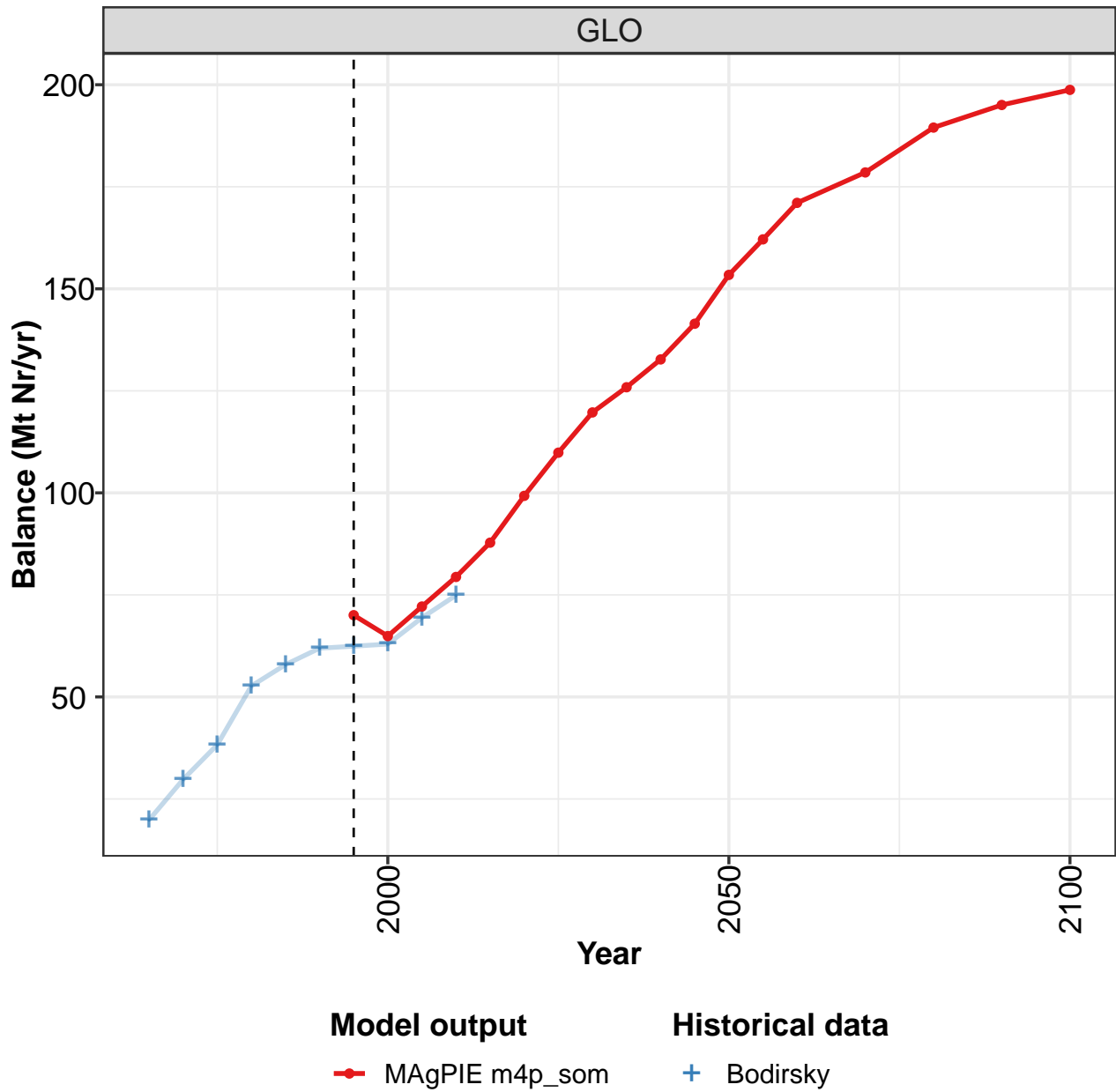
Table 1712: MAgPIEown — Resources—Land Cover Change—Pastures and Rangelands (million ha wrt 1995)

## 57 Nitrogen

### 57.1 Cropland Budget

#### 57.1.1 Balance

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

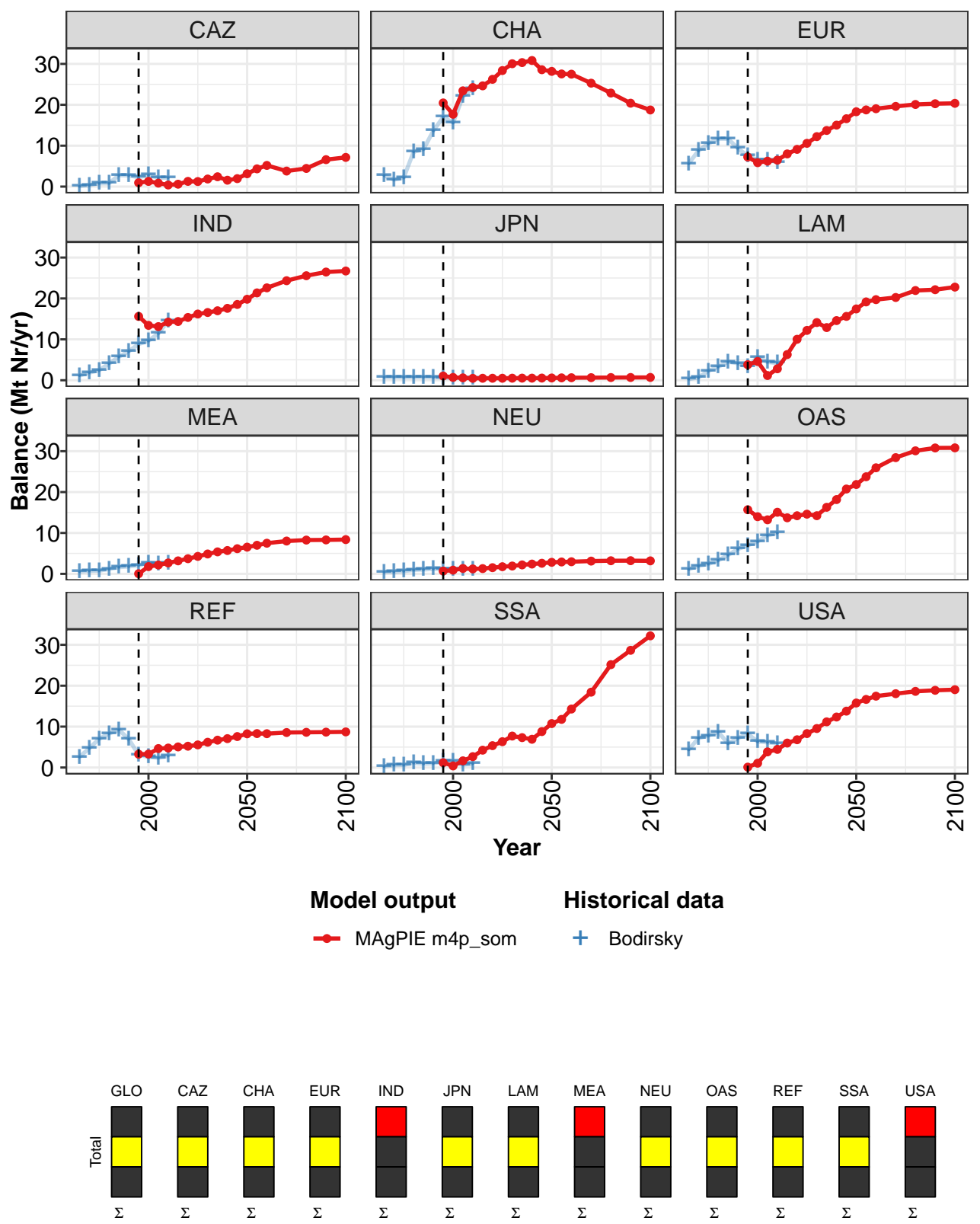


Figure 447: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Balance (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	70	65	72	79	88	99	110	120	126	133	141
CAZ	1	1	1	0	1	1	1	2	2	2	2
CHA	20	18	23	24	25	26	28	30	30	31	29
EUR	7	6	6	6	8	9	11	12	14	15	17
IND	16	13	13	14	14	15	16	17	17	18	19
JPN	1	1	1	0	0	0	0	1	1	1	1
LAM	4	5	1	3	6	10	12	14	13	15	16
MEA	0	2	2	3	3	4	4	5	5	6	6
NEU	1	1	1	1	1	2	2	2	2	2	3
OAS	16	14	13	15	14	14	15	14	16	18	21
REF	3	3	5	5	5	5	6	6	7	7	8
SSA	1	0	2	3	4	5	6	8	7	7	9
USA	0	1	4	4	6	7	8	10	11	12	14

Table 1713: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Balance (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	153	162	171	179	190	195	199
CAZ	3	4	5	4	4	7	7
CHA	28	28	27	25	23	20	19
EUR	18	19	19	20	20	20	20
IND	20	21	23	24	26	26	27
JPN	1	1	1	1	1	1	1
LAM	17	19	20	20	22	22	23
MEA	7	7	7	8	8	8	8
NEU	3	3	3	3	3	3	3
OAS	22	24	26	28	30	31	31
REF	8	8	8	9	9	9	9
SSA	11	12	14	18	25	29	32
USA	16	17	17	18	19	19	19

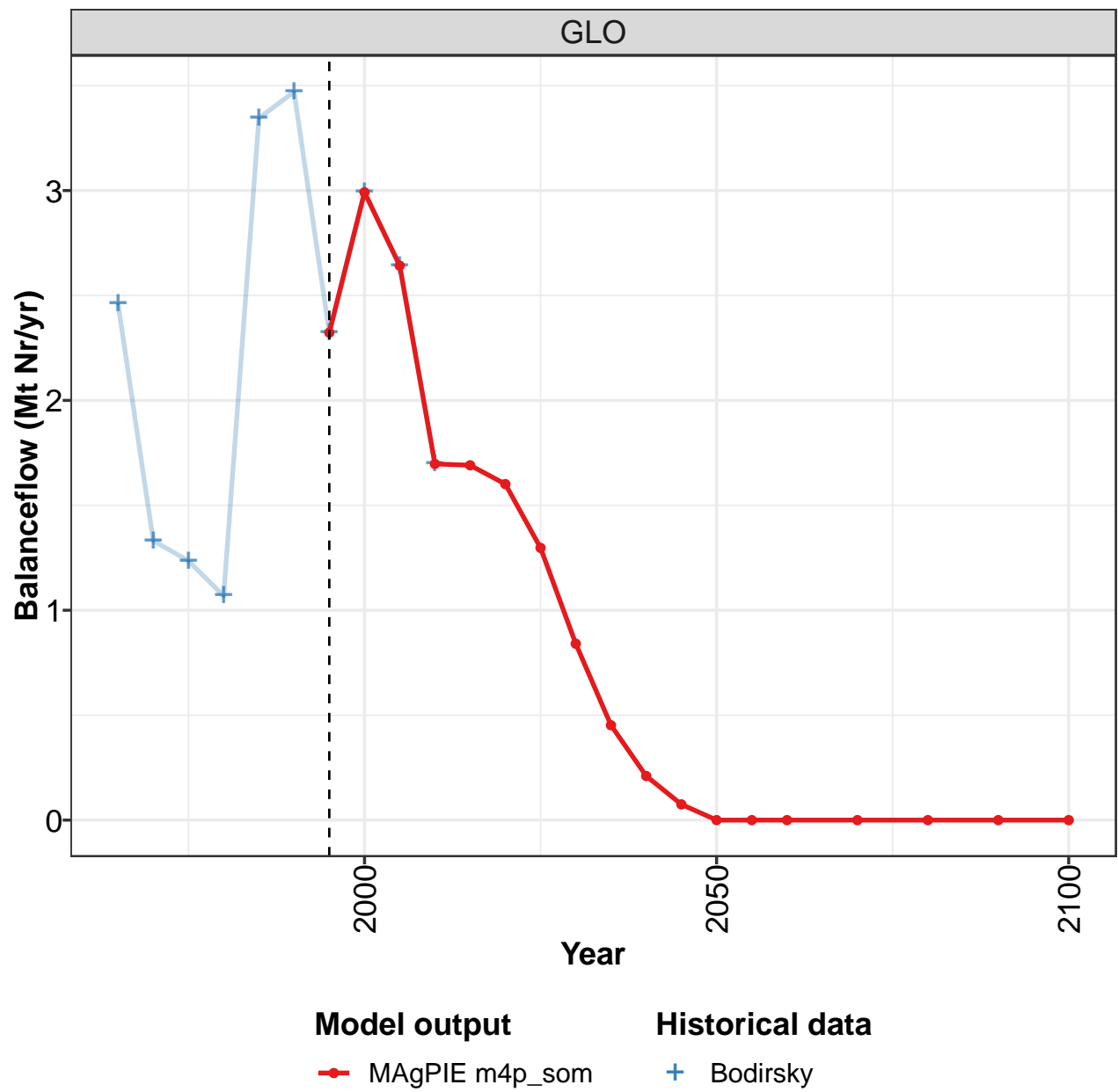
Table 1714: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Balance (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	19.8	29.8	38.3	52.7	57.9	61.9	62.4	62.9	69.4	74.9
CAZ	0.1	0.3	0.8	0.8	2.8	2.7	2.3	2.8	2.1	2.2
CHA	2.7	1.7	2.2	8.5	9.1	13.7	17.0	15.6	22.0	24.0
EUR	5.6	8.8	10.5	11.7	11.7	9.4	7.5	6.5	6.5	5.9
IND	1.1	1.9	2.4	4.0	5.7	7.1	8.9	9.6	11.4	14.6
JPN	0.7	0.8	0.7	0.8	0.8	0.7	0.6	0.5	0.5	0.5
LAM	0.3	0.7	2.3	3.3	4.5	4.2	3.2	5.6	4.5	4.2
MEA	0.6	0.7	0.8	1.2	1.6	1.8	2.1	2.7	2.4	2.7
NEU	0.5	0.5	0.7	1.0	1.1	1.2	1.2	1.1	1.2	1.1
OAS	1.1	1.9	2.4	3.3	4.6	6.1	7.0	7.9	9.4	10.0
REF	2.6	4.7	7.0	8.3	9.2	6.9	3.1	2.6	2.4	2.8
SSA	0.2	0.6	0.6	1.1	0.9	1.0	1.5	1.5	0.7	0.9
USA	4.3	7.2	7.8	8.7	5.9	7.2	8.2	6.3	6.1	5.9

Table 1715: Bodirsky — Resources—Nitrogen—Cropland Budget—Balance (Mt Nr/yr)

57.1.2 Balance—Balanceflow

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

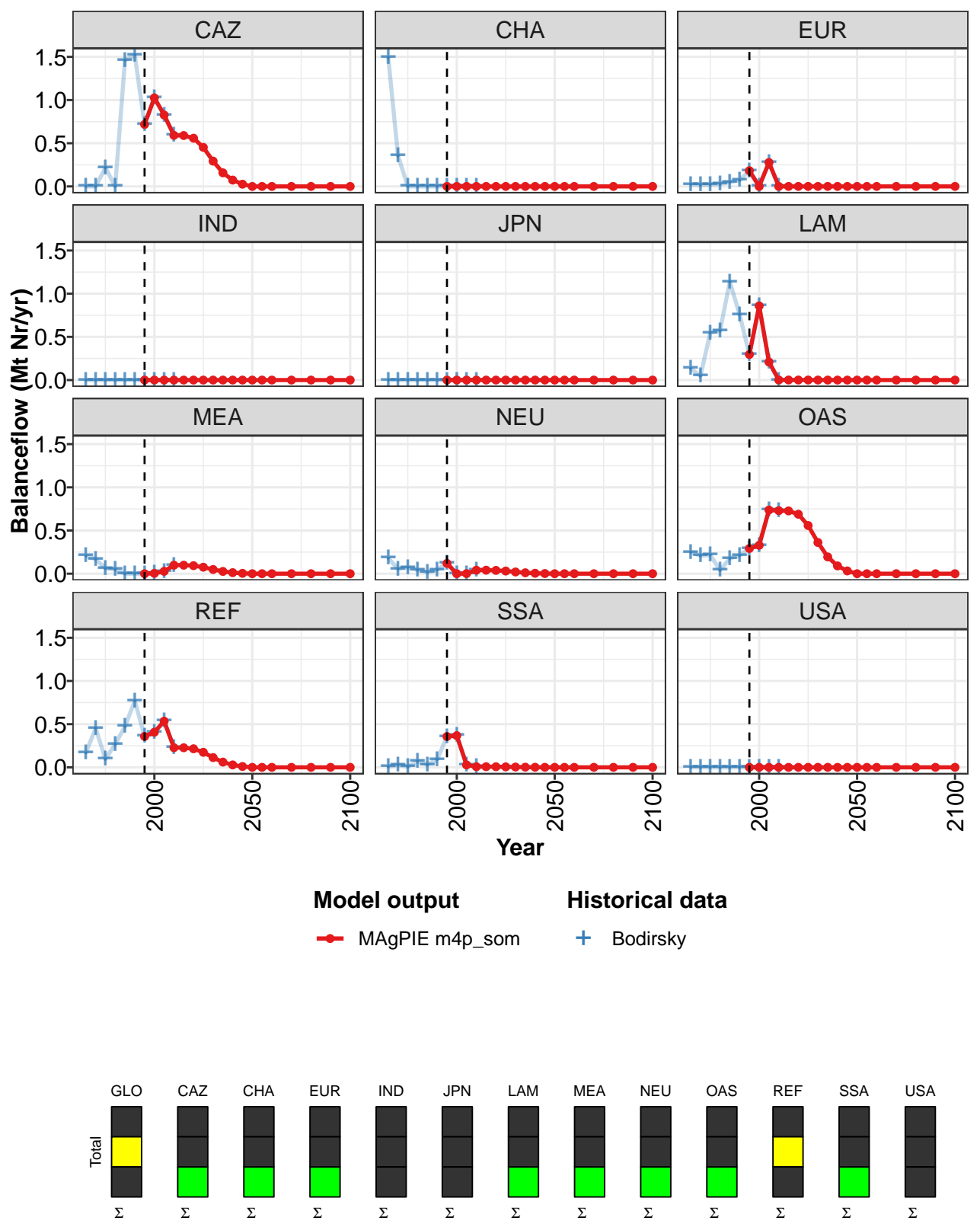


Figure 448: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Balance—Balanceflow (Mt Nr/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	2.32	2.99	2.64	1.70	1.69	1.60	1.30	0.84	0.45	0.21	0.07
CAZ	0.72	1.03	0.83	0.59	0.59	0.56	0.45	0.29	0.16	0.07	0.03
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.18	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.30	0.86	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.03	0.10	0.10	0.09	0.08	0.05	0.03	0.01	0.00
NEU	0.12	0.00	0.00	0.04	0.04	0.04	0.03	0.02	0.01	0.01	0.00
OAS	0.29	0.33	0.74	0.73	0.73	0.69	0.56	0.36	0.19	0.09	0.03
REF	0.36	0.41	0.53	0.23	0.23	0.21	0.17	0.11	0.06	0.03	0.01
SSA	0.36	0.37	0.03	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 1716: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Balance—Balanceflow (Mt Nr/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00

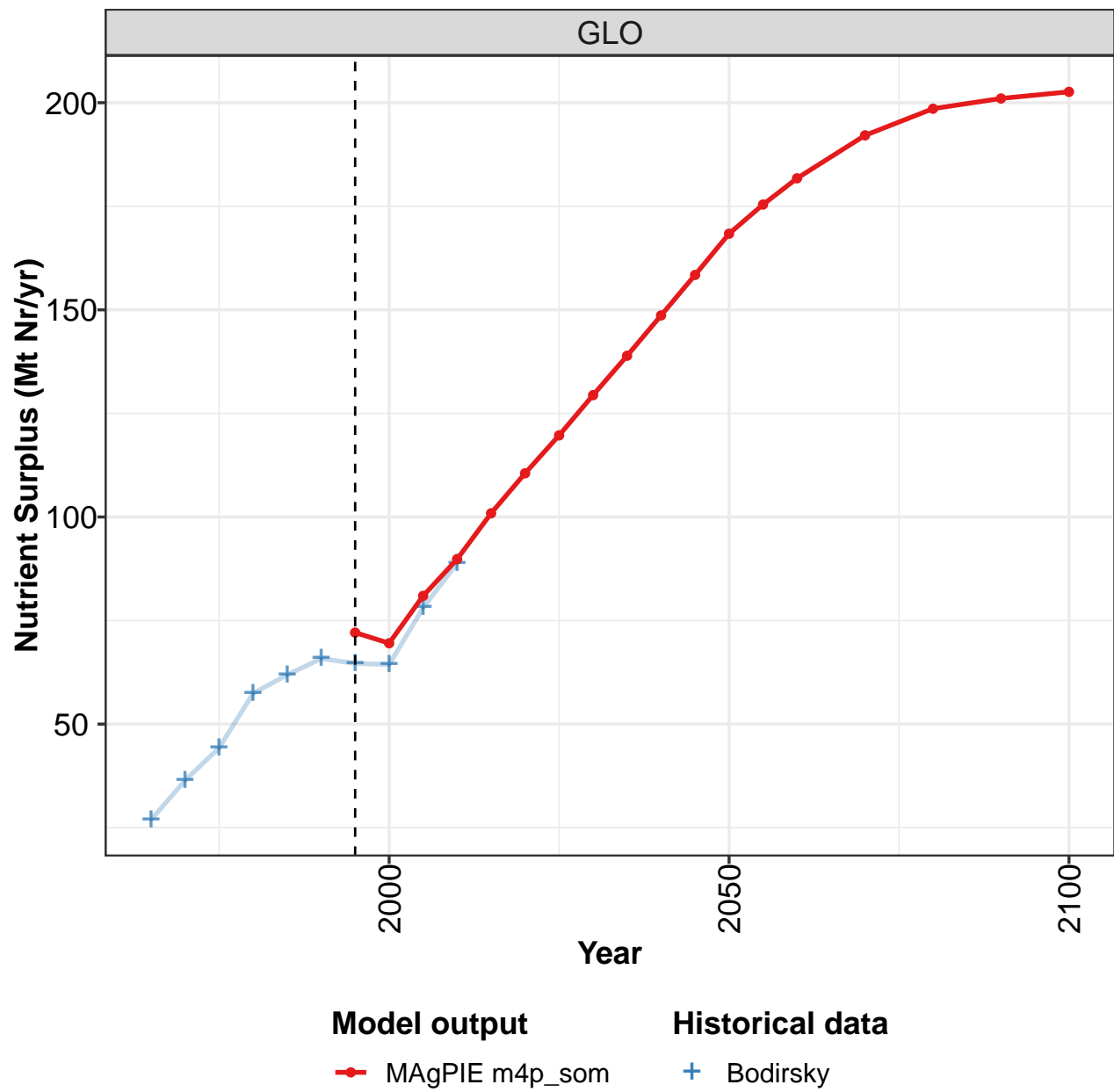
Table 1717: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Balance—Balanceflow (Mt Nr/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	2.46	1.33	1.24	1.07	3.34	3.47	2.32	2.99	2.64	1.70
CAZ	0.00	0.00	0.22	0.00	1.46	1.52	0.72	1.03	0.83	0.59
CHA	1.49	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.02	0.02	0.02	0.03	0.05	0.07	0.18	0.00	0.28	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.13	0.05	0.55	0.57	1.14	0.76	0.30	0.86	0.21	0.00
MEA	0.21	0.17	0.06	0.05	0.00	0.00	0.00	0.00	0.03	0.10
NEU	0.18	0.06	0.07	0.04	0.02	0.05	0.12	0.00	0.00	0.04
OAS	0.25	0.21	0.22	0.04	0.18	0.21	0.29	0.33	0.74	0.73
REF	0.17	0.45	0.10	0.27	0.47	0.77	0.36	0.41	0.53	0.23
SSA	0.01	0.03	0.01	0.07	0.03	0.09	0.36	0.37	0.03	0.01
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 1718: Bodirsky — Resources—Nitrogen—Cropland Budget—Balance—Balanceflow (Mt Nr/yr)

57.1.3 Balance—Nutrient Surplus

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

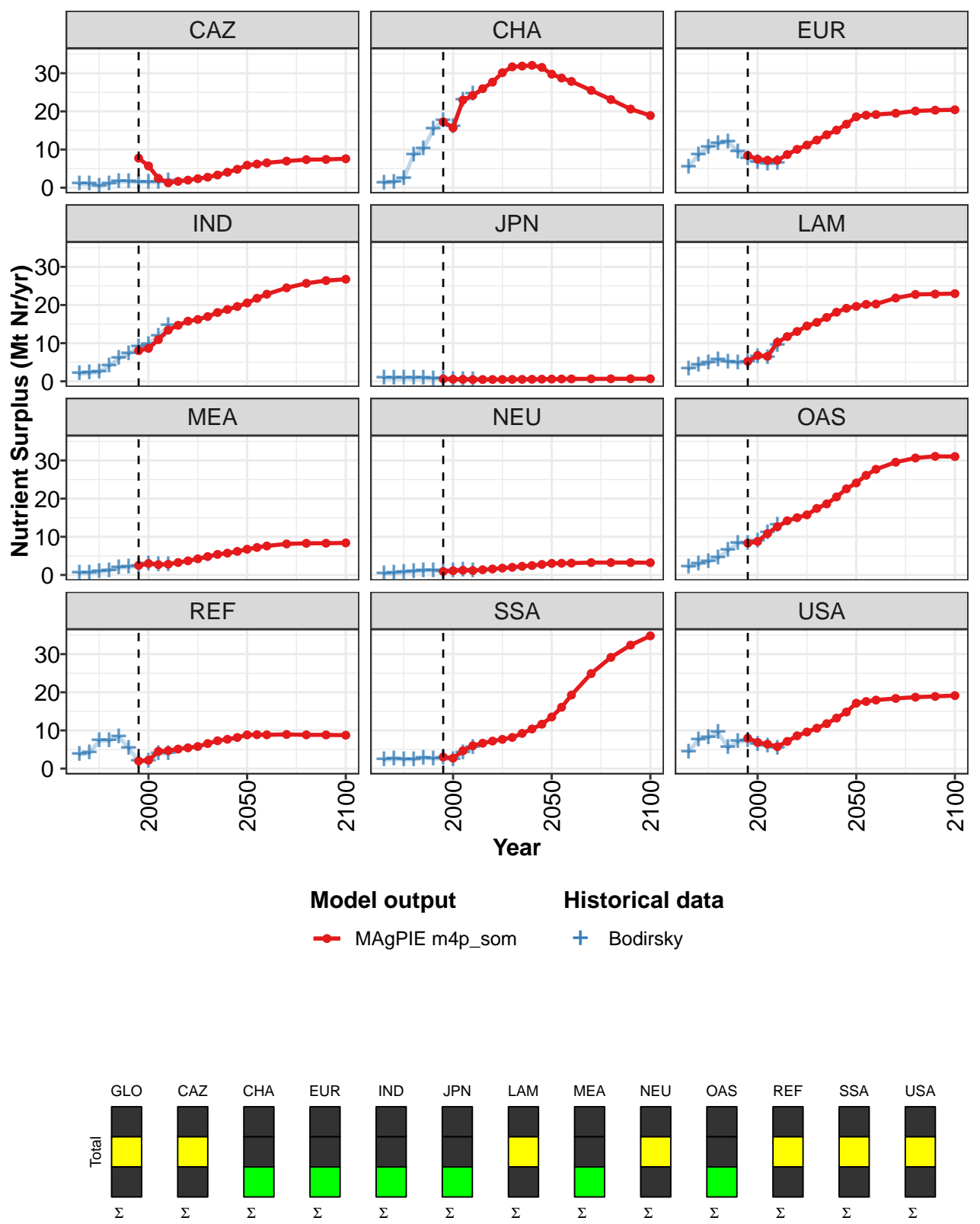


Figure 449: MAGPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Balance—Nutrient Surplus (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	72	70	81	90	101	111	120	129	139	149	158
CAZ	8	6	2	1	2	2	2	3	3	4	5
CHA	17	16	23	24	26	28	30	32	32	32	32
EUR	8	7	7	7	9	10	11	12	14	15	17
IND	8	9	11	13	15	16	16	17	18	19	20
JPN	1	1	1	0	0	0	0	1	1	1	1
LAM	5	7	7	10	12	13	14	15	17	18	19
MEA	3	3	3	3	3	4	4	5	5	6	6
NEU	1	1	1	1	1	2	2	2	2	2	3
OAS	8	9	11	13	14	15	16	17	19	20	23
REF	2	2	5	5	5	5	6	7	7	8	8
SSA	3	3	5	6	7	7	8	8	9	10	12
USA	8	7	6	6	7	9	10	11	12	13	15

Table 1719: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Balance—Nutrient Surplus (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	168	175	182	192	199	201	203
CAZ	6	6	7	7	7	7	8
CHA	30	29	28	25	23	21	19
EUR	19	19	19	20	20	20	20
IND	21	22	23	24	26	26	27
JPN	1	1	1	1	1	1	1
LAM	20	20	20	22	23	23	23
MEA	7	7	8	8	8	8	8
NEU	3	3	3	3	3	3	3
OAS	24	26	28	30	31	31	31
REF	9	9	9	9	9	9	9
SSA	14	16	19	25	29	32	35
USA	17	18	18	18	19	19	19

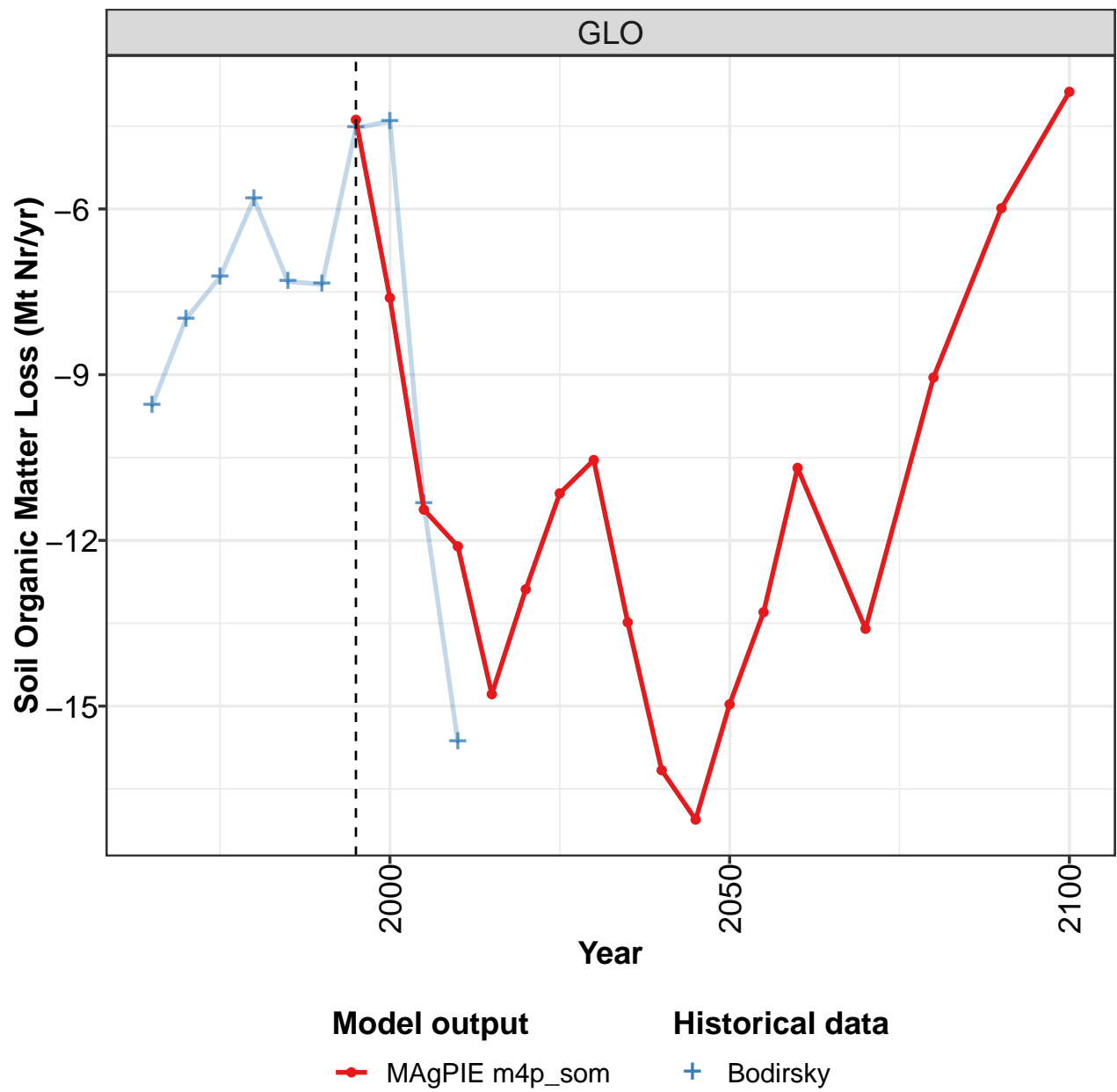
Table 1720: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Balance—Nutrient Surplus (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	26.9	36.4	44.3	57.4	61.9	65.8	64.6	64.4	78.1	88.8
CAZ	0.9	1.0	0.4	1.0	1.6	1.6	1.4	1.4	1.4	1.8
CHA	1.2	1.5	2.5	8.6	10.2	15.3	17.5	16.0	22.9	24.5
EUR	5.5	8.6	10.6	11.5	12.1	9.5	7.6	6.7	6.3	6.4
IND	2.0	2.2	2.4	4.0	6.0	7.2	9.0	9.7	11.9	14.6
JPN	0.8	0.8	0.8	0.8	0.8	0.8	0.6	0.5	0.5	0.4
LAM	3.3	4.3	4.8	5.6	5.1	4.9	5.0	6.5	6.2	9.4
MEA	0.4	0.6	0.8	1.2	1.9	2.1	2.4	2.9	2.6	2.8
NEU	0.3	0.5	0.7	0.9	1.1	1.2	1.0	1.1	1.2	1.2
OAS	2.1	2.8	3.5	4.5	6.4	8.3	8.3	8.9	11.0	13.0
REF	3.7	4.1	7.3	7.3	8.3	5.4	1.9	1.9	4.0	3.9
SSA	2.3	2.6	2.4	2.4	2.8	2.6	2.7	2.4	4.1	5.5
USA	4.4	7.6	8.2	9.4	5.5	7.1	7.3	6.4	6.0	5.4

Table 1721: Bodirsky — Resources—Nitrogen—Cropland Budget—Balance—Nutrient Surplus (Mt Nr/yr)

57.1.4 Balance—Soil Organic Matter Loss

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

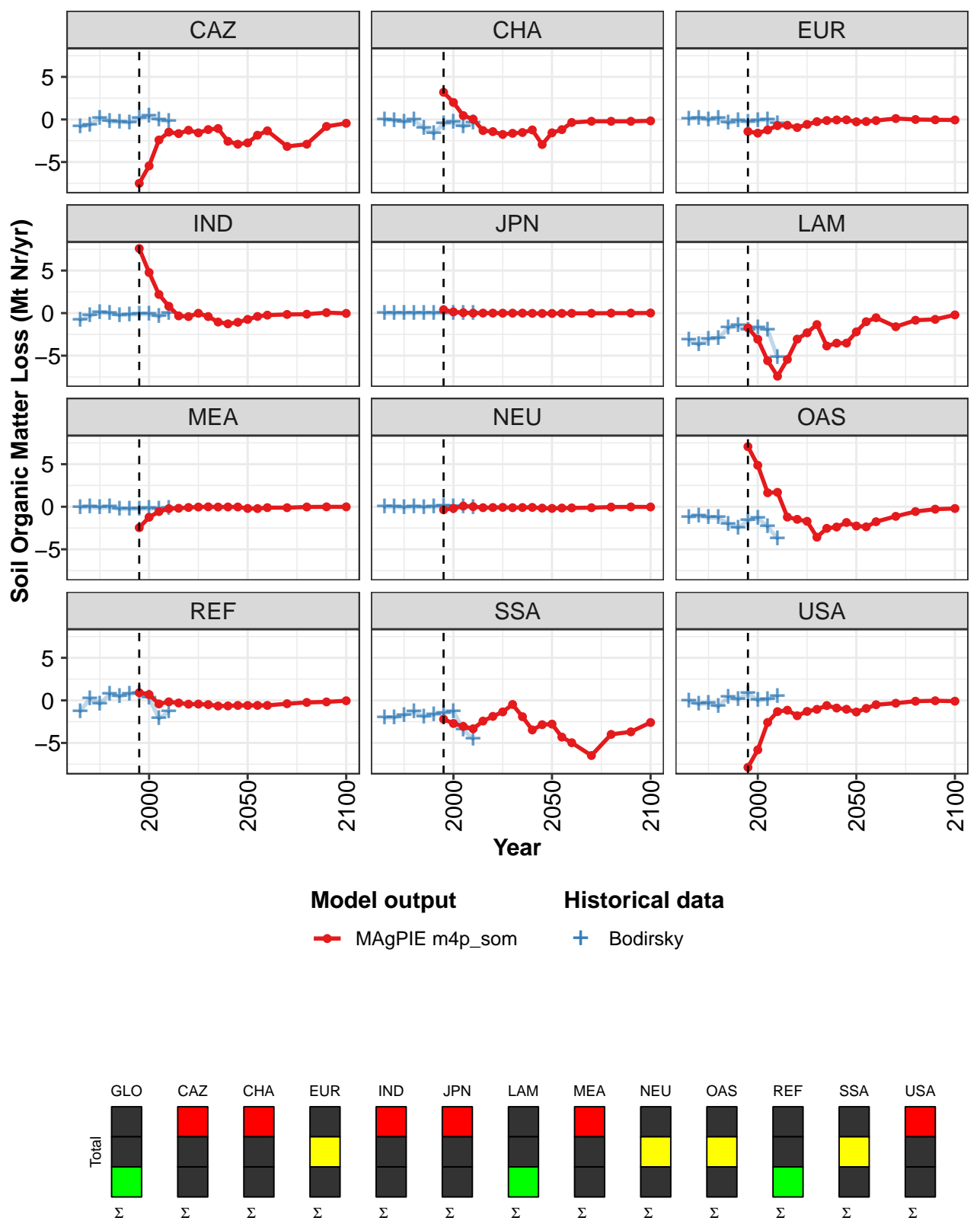


Figure 450: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Balance—Soil Organic Matter Loss (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-4.39	-7.61	-11.44	-12.11	-14.78	-12.88	-11.15	-10.54	-13.48	-16.16	-17.05
CAZ	-7.51	-5.45	-2.41	-1.49	-1.66	-1.26	-1.57	-1.19	-1.06	-2.56	-2.91
CHA	3.20	2.00	0.45	0.04	-1.30	-1.43	-1.76	-1.62	-1.53	-1.23	-2.94
EUR	-1.41	-1.60	-1.23	-0.71	-0.68	-0.94	-0.58	-0.26	-0.13	-0.06	-0.04
IND	7.58	4.77	2.19	0.81	-0.32	-0.41	-0.02	-0.41	-1.05	-1.26	-1.07
JPN	0.39	0.14	0.05	-0.00	0.00	0.00	-0.00	-0.00	-0.00	-0.03	-0.04
LAM	-1.72	-3.07	-5.59	-7.41	-5.44	-3.06	-2.31	-1.35	-3.86	-3.53	-3.53
MEA	-2.46	-1.23	-0.57	-0.23	-0.18	-0.08	-0.03	-0.01	-0.03	-0.03	-0.03
NEU	-0.36	-0.19	0.08	0.01	-0.11	-0.09	-0.07	-0.11	-0.09	-0.07	-0.16
OAS	7.06	4.87	1.64	1.69	-1.21	-1.48	-1.71	-3.57	-2.54	-2.38	-1.85
REF	0.90	0.68	-0.42	-0.17	-0.30	-0.45	-0.43	-0.50	-0.66	-0.65	-0.59
SSA	-2.21	-2.71	-3.06	-3.33	-2.43	-1.88	-1.35	-0.48	-1.92	-3.47	-2.85
USA	-7.87	-5.81	-2.59	-1.32	-1.15	-1.80	-1.29	-1.05	-0.61	-0.90	-1.04

Table 1722: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Balance—Soil Organic Matter Loss (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	-14.97	-13.30	-10.69	-13.60	-9.05	-5.99	-3.88
CAZ	-2.75	-1.85	-1.33	-3.17	-2.90	-0.82	-0.44
CHA	-1.57	-1.19	-0.35	-0.21	-0.22	-0.22	-0.16
EUR	-0.27	-0.24	-0.13	0.11	-0.00	-0.04	-0.06
IND	-0.74	-0.39	-0.24	-0.16	-0.13	0.06	-0.04
JPN	-0.04	-0.03	-0.02	-0.02	-0.00	-0.00	0.01
LAM	-2.20	-1.01	-0.54	-1.60	-0.84	-0.74	-0.21
MEA	-0.20	-0.22	-0.10	-0.11	-0.03	-0.01	-0.01
NEU	-0.20	-0.15	-0.13	-0.11	-0.04	-0.02	-0.03
OAS	-2.26	-2.36	-1.76	-1.13	-0.56	-0.29	-0.21
REF	-0.59	-0.59	-0.59	-0.39	-0.24	-0.18	-0.04
SSA	-2.79	-4.31	-4.97	-6.48	-3.99	-3.70	-2.59
USA	-1.37	-0.94	-0.51	-0.33	-0.10	-0.04	-0.09

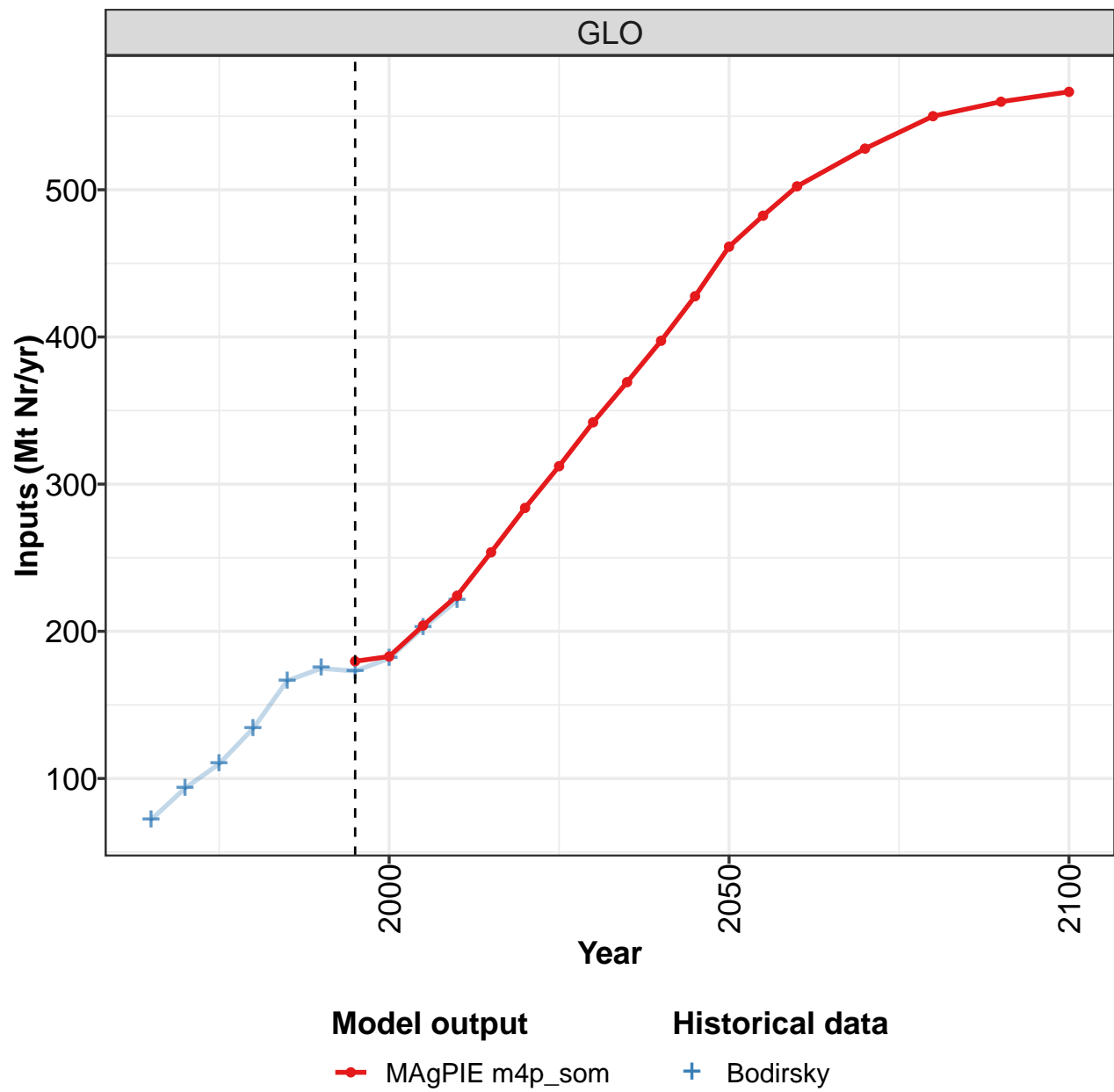
Table 1723: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Balance—Soil Organic Matter Loss (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	-9.561	-7.987	-7.232	-5.814	-7.315	-7.363	-4.536	-4.412	-11.341	-15.644
CAZ	-0.845	-0.633	0.157	-0.241	-0.284	-0.360	0.115	0.362	-0.064	-0.215
CHA	-0.007	-0.118	-0.280	-0.072	-1.050	-1.641	-0.497	-0.333	-0.842	-0.443
EUR	0.079	0.174	-0.074	0.143	-0.439	-0.161	-0.306	-0.147	-0.009	-0.464
IND	-0.828	-0.324	0.053	-0.001	-0.254	-0.170	-0.145	-0.097	-0.424	-0.002
JPN	-0.040	-0.026	-0.023	-0.024	-0.017	-0.021	-0.013	0.003	0.005	0.007
LAM	-3.127	-3.718	-3.037	-2.939	-1.765	-1.481	-2.028	-1.703	-1.974	-5.195
MEA	-0.089	-0.029	-0.131	-0.048	-0.285	-0.252	-0.269	-0.196	-0.250	-0.152
NEU	-0.040	-0.005	-0.104	-0.004	-0.059	-0.016	0.074	0.034	0.006	-0.053
OAS	-1.232	-1.063	-1.282	-1.284	-2.025	-2.480	-1.630	-1.302	-2.339	-3.733
REF	-1.287	0.201	-0.398	0.715	0.431	0.777	0.852	0.277	-2.139	-1.330
SSA	-2.043	-2.012	-1.744	-1.327	-1.932	-1.671	-1.546	-1.296	-3.449	-4.562
USA	-0.103	-0.435	-0.369	-0.731	0.365	0.113	0.857	-0.013	0.136	0.498

Table 1724: Bodirsky — Resources—Nitrogen—Cropland Budget—Balance—Soil Organic Matter Loss (Mt Nr/yr)

57.1.5 Inputs

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

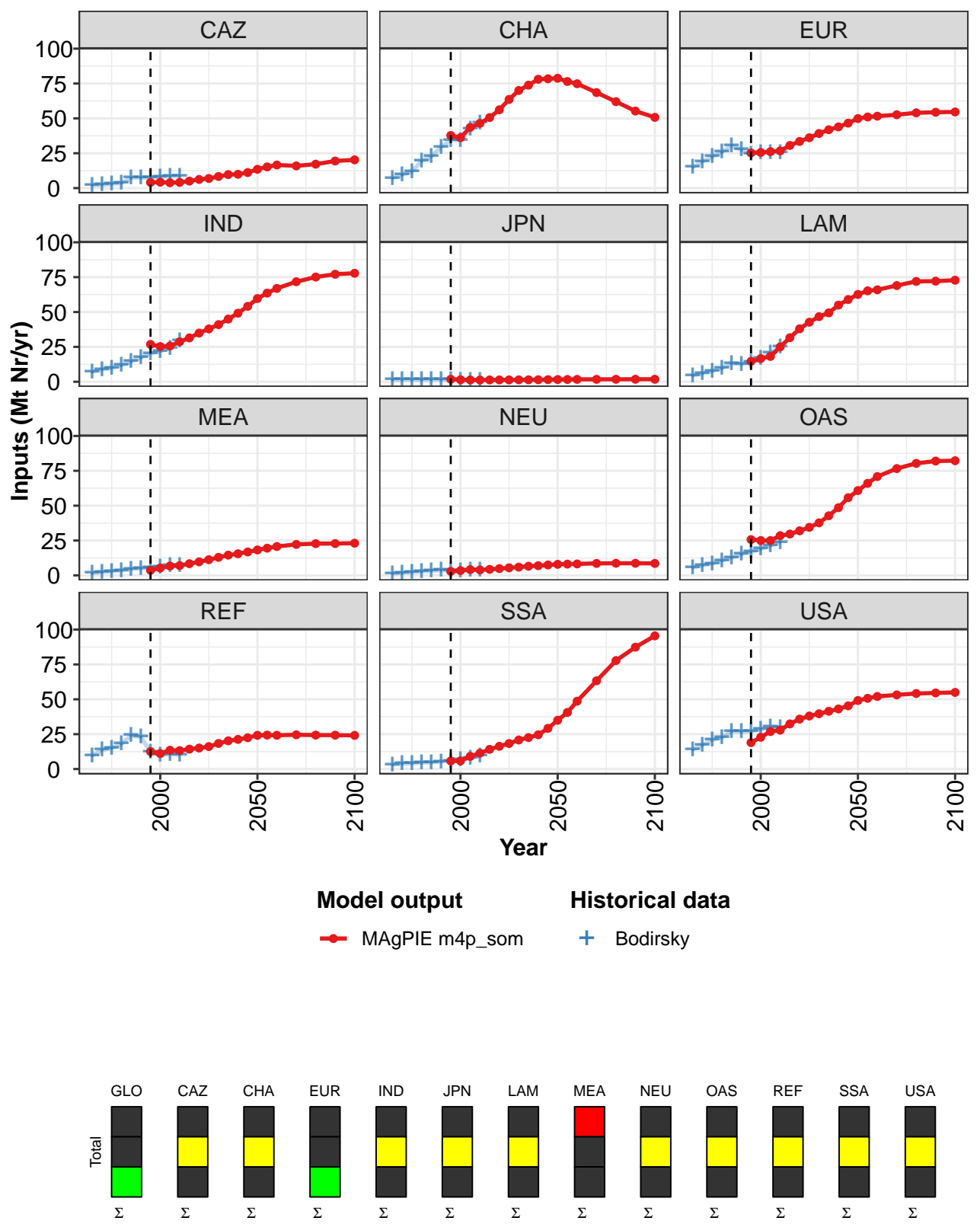


Figure 451: MAGPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	180	183	204	224	254	284	312	342	369	397	428
CAZ	4	4	4	4	5	6	7	8	10	10	11
CHA	38	36	44	46	51	56	64	70	74	78	78
EUR	25	26	26	27	31	33	36	39	42	44	47
IND	27	25	26	29	31	35	38	41	45	49	54
JPN	2	1	1	1	1	1	1	1	1	1	2
LAM	15	17	18	25	32	38	43	47	49	55	59
MEA	4	5	7	7	8	10	11	13	15	16	17
NEU	3	3	4	4	4	5	5	6	7	7	7
OAS	26	25	25	28	30	32	34	38	43	49	56
REF	13	11	13	13	14	15	16	18	20	21	22
SSA	6	6	9	11	14	16	18	21	23	25	29
USA	19	23	27	28	32	36	38	40	41	43	45

Table 1725: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	461	482	502	528	550	560	567
CAZ	13	15	17	16	17	19	20
CHA	79	76	75	69	62	55	51
EUR	50	51	52	53	54	54	55
IND	60	64	67	72	75	77	78
JPN	2	2	2	2	2	2	2
LAM	63	65	66	69	72	72	73
MEA	18	20	21	22	23	23	23
NEU	8	8	8	9	9	9	9
OAS	61	66	71	77	80	82	82
REF	24	24	24	25	24	24	24
SSA	35	41	49	63	78	87	96
USA	49	51	52	53	54	55	55

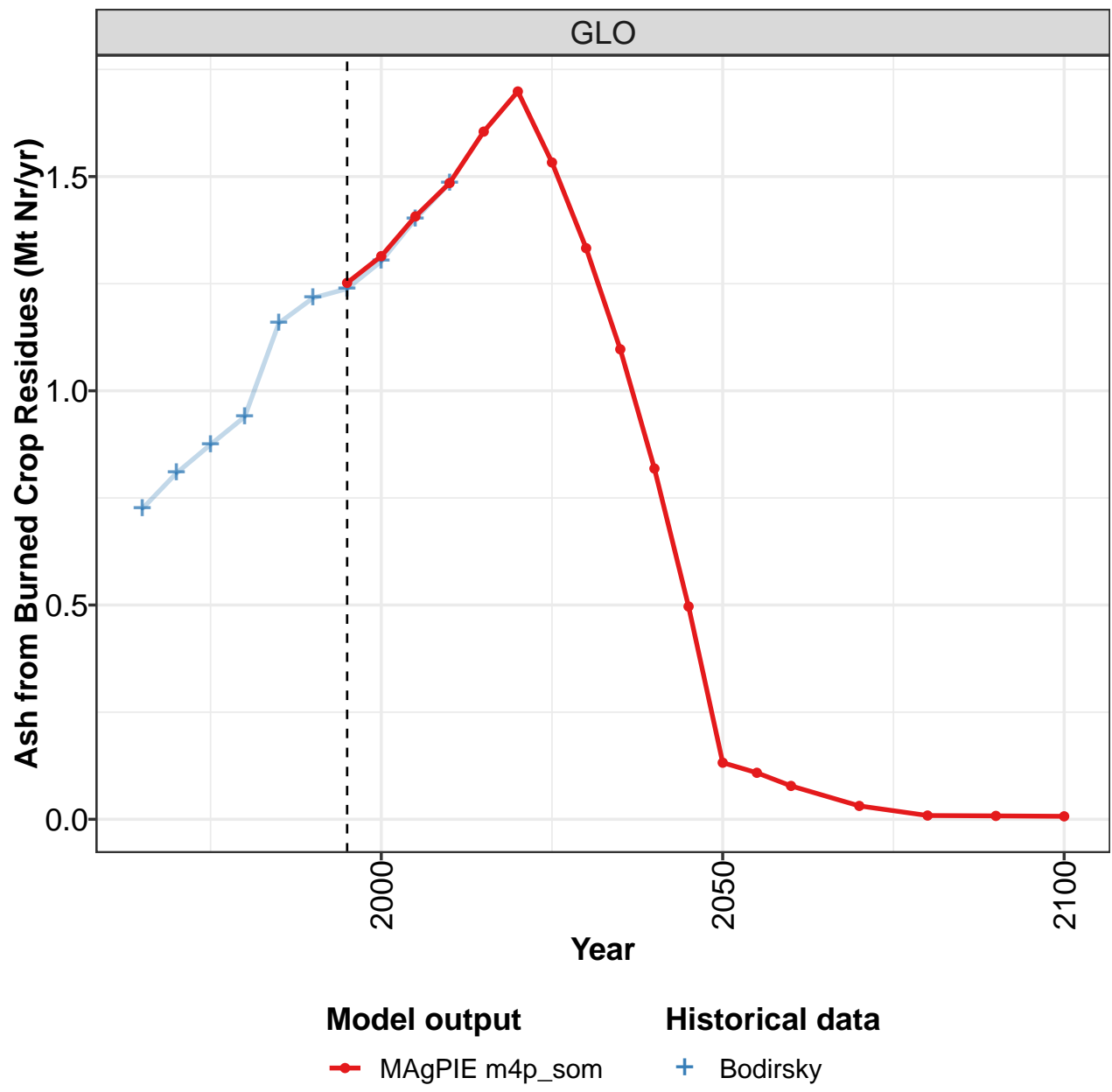
Table 1726: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	72	93	110	134	166	175	173	182	202	221
CAZ	2	2	3	4	7	8	7	8	8	9
CHA	7	10	12	20	23	29	34	34	42	47
EUR	15	19	22	26	31	27	25	25	25	25
IND	7	9	10	12	14	17	20	22	24	29
JPN	1	2	2	2	2	2	1	1	1	1
LAM	4	6	8	10	13	13	14	17	21	25
MEA	2	2	3	4	5	5	6	6	7	7
NEU	1	2	2	3	3	4	3	4	4	4
OAS	6	7	8	11	13	15	17	19	21	24
REF	10	14	15	18	24	23	12	10	11	10
SSA	3	4	4	5	5	5	6	7	8	9
USA	14	17	21	23	27	27	27	29	30	30

Table 1727: Bodirsky — Resources—Nitrogen—Cropland Budget—Inputs (Mt Nr/yr)

57.1.6 Inputs—Ash from Burned Crop Residues

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

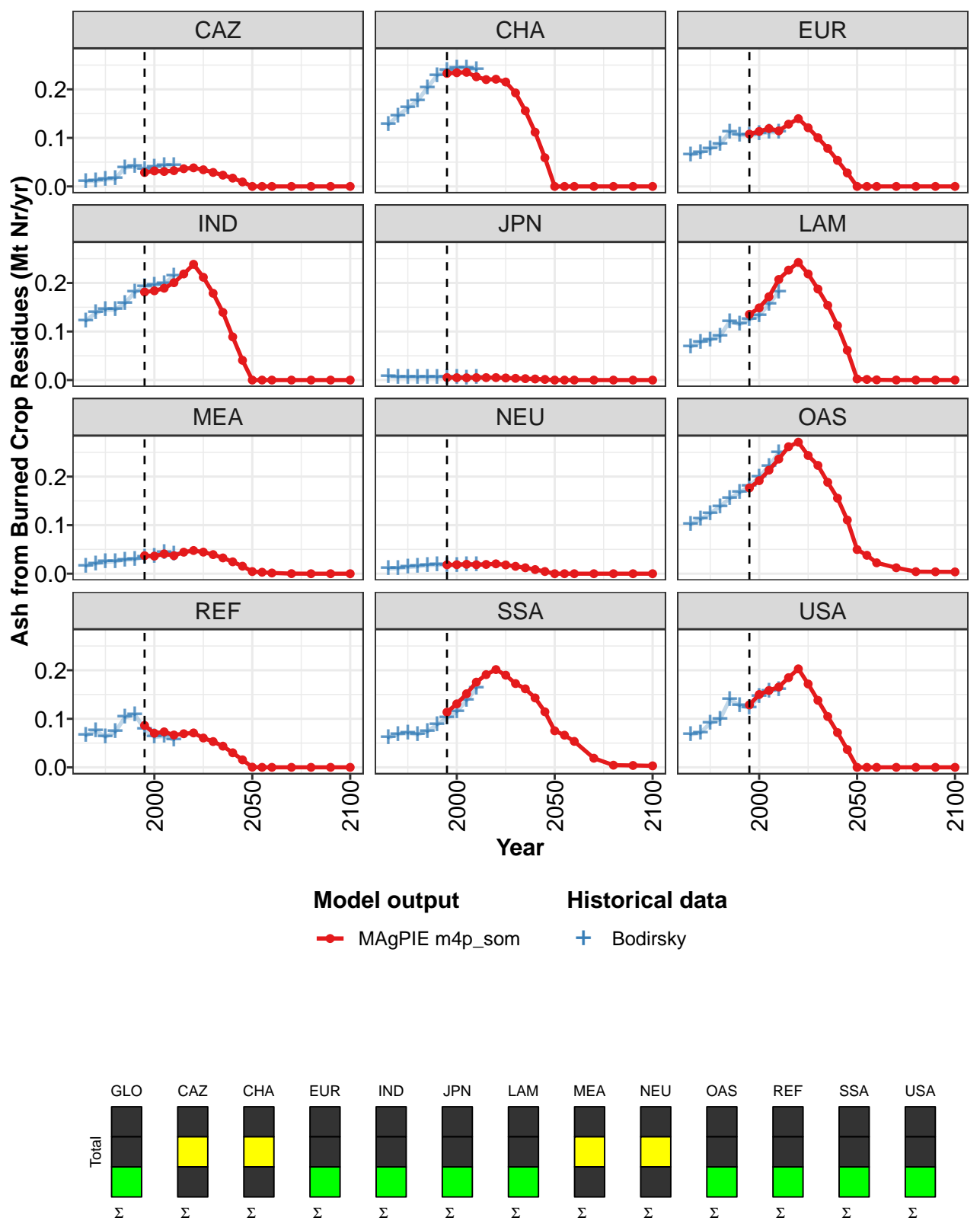


Figure 452: MAGPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs—Ash from Burned Crop Residues (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.25	1.31	1.41	1.48	1.60	1.70	1.53	1.33	1.10	0.82	0.50
CAZ	0.03	0.03	0.03	0.03	0.04	0.04	0.03	0.03	0.02	0.02	0.01
CHA	0.23	0.23	0.24	0.23	0.22	0.22	0.22	0.19	0.16	0.11	0.06
EUR	0.11	0.11	0.12	0.11	0.13	0.14	0.12	0.10	0.08	0.05	0.03
IND	0.18	0.18	0.19	0.20	0.22	0.24	0.21	0.18	0.14	0.09	0.04
JPN	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
LAM	0.14	0.15	0.17	0.21	0.23	0.24	0.22	0.19	0.15	0.11	0.06
MEA	0.04	0.04	0.04	0.04	0.04	0.05	0.04	0.04	0.03	0.02	0.02
NEU	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.00
OAS	0.18	0.19	0.21	0.24	0.26	0.27	0.24	0.22	0.19	0.16	0.11
REF	0.09	0.07	0.07	0.07	0.07	0.07	0.06	0.05	0.04	0.03	0.02
SSA	0.11	0.13	0.15	0.18	0.19	0.20	0.19	0.17	0.16	0.14	0.11
USA	0.13	0.15	0.16	0.17	0.18	0.20	0.17	0.14	0.10	0.07	0.04

Table 1728: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs—Ash from Burned Crop Residues (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.13	0.11	0.08	0.03	0.01	0.01	0.01
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.05	0.04	0.02	0.01	0.00	0.00	0.00
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.08	0.07	0.05	0.02	0.00	0.00	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00

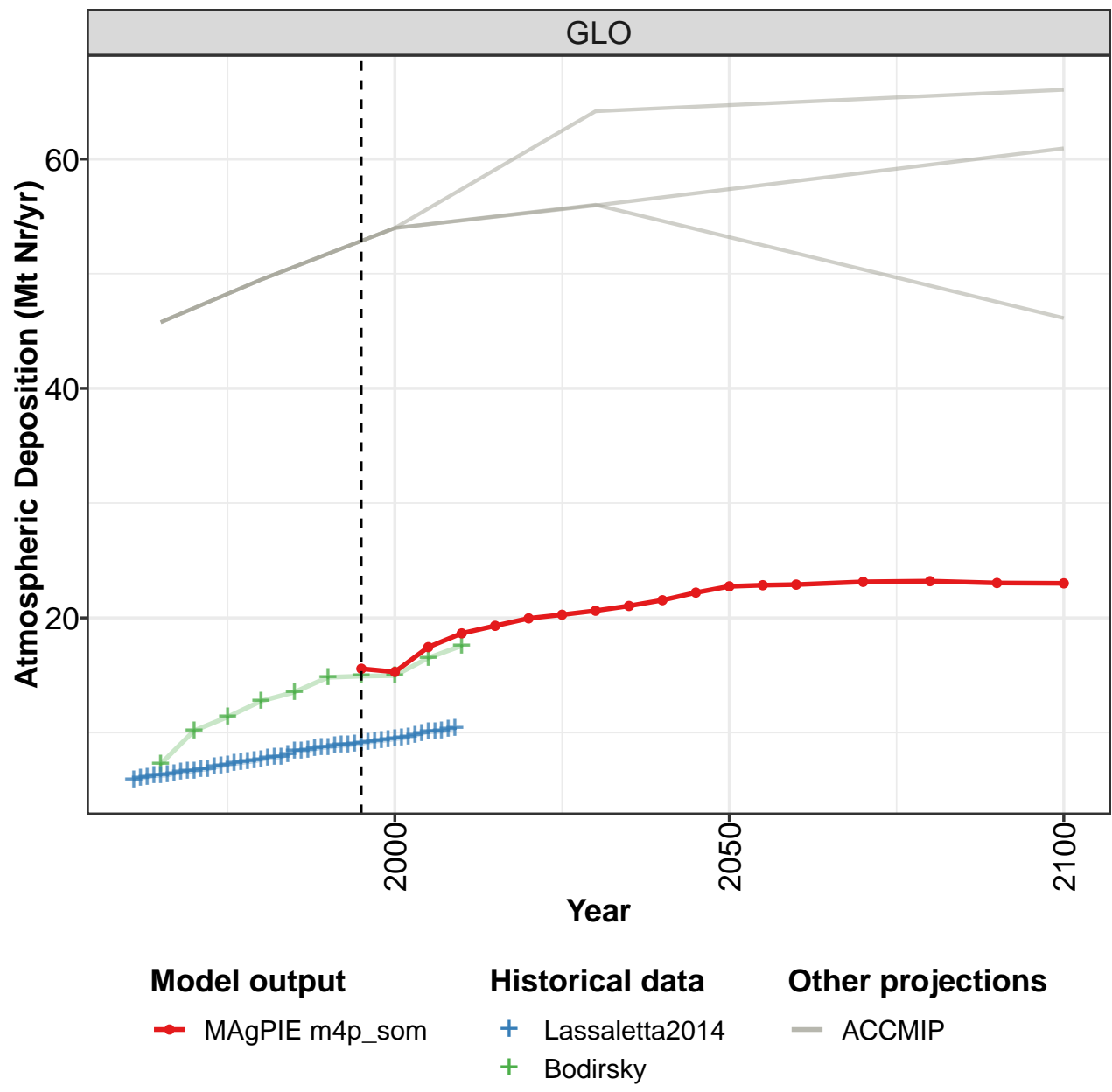
Table 1729: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs—Ash from Burned Crop Residues (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.72	0.81	0.87	0.94	1.16	1.22	1.24	1.30	1.40	1.48
CAZ	0.01	0.01	0.01	0.02	0.04	0.04	0.04	0.04	0.04	0.04
CHA	0.13	0.15	0.16	0.18	0.20	0.23	0.24	0.24	0.24	0.24
EUR	0.07	0.07	0.08	0.09	0.11	0.11	0.10	0.11	0.11	0.11
IND	0.12	0.14	0.14	0.14	0.16	0.18	0.19	0.20	0.20	0.21
JPN	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01
LAM	0.07	0.08	0.08	0.09	0.12	0.12	0.12	0.13	0.16	0.18
MEA	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.04	0.04	0.04
NEU	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02
OAS	0.10	0.11	0.12	0.14	0.16	0.17	0.18	0.20	0.22	0.25
REF	0.07	0.07	0.06	0.07	0.10	0.11	0.08	0.06	0.06	0.06
SSA	0.06	0.07	0.07	0.07	0.07	0.09	0.10	0.11	0.14	0.16
USA	0.07	0.07	0.09	0.10	0.14	0.13	0.12	0.15	0.16	0.16

Table 1730: Bodirsky — Resources—Nitrogen—Cropland Budget—Inputs—Ash from Burned Crop Residues (Mt Nr/yr)

57.1.7 Inputs—Atmospheric Deposition

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

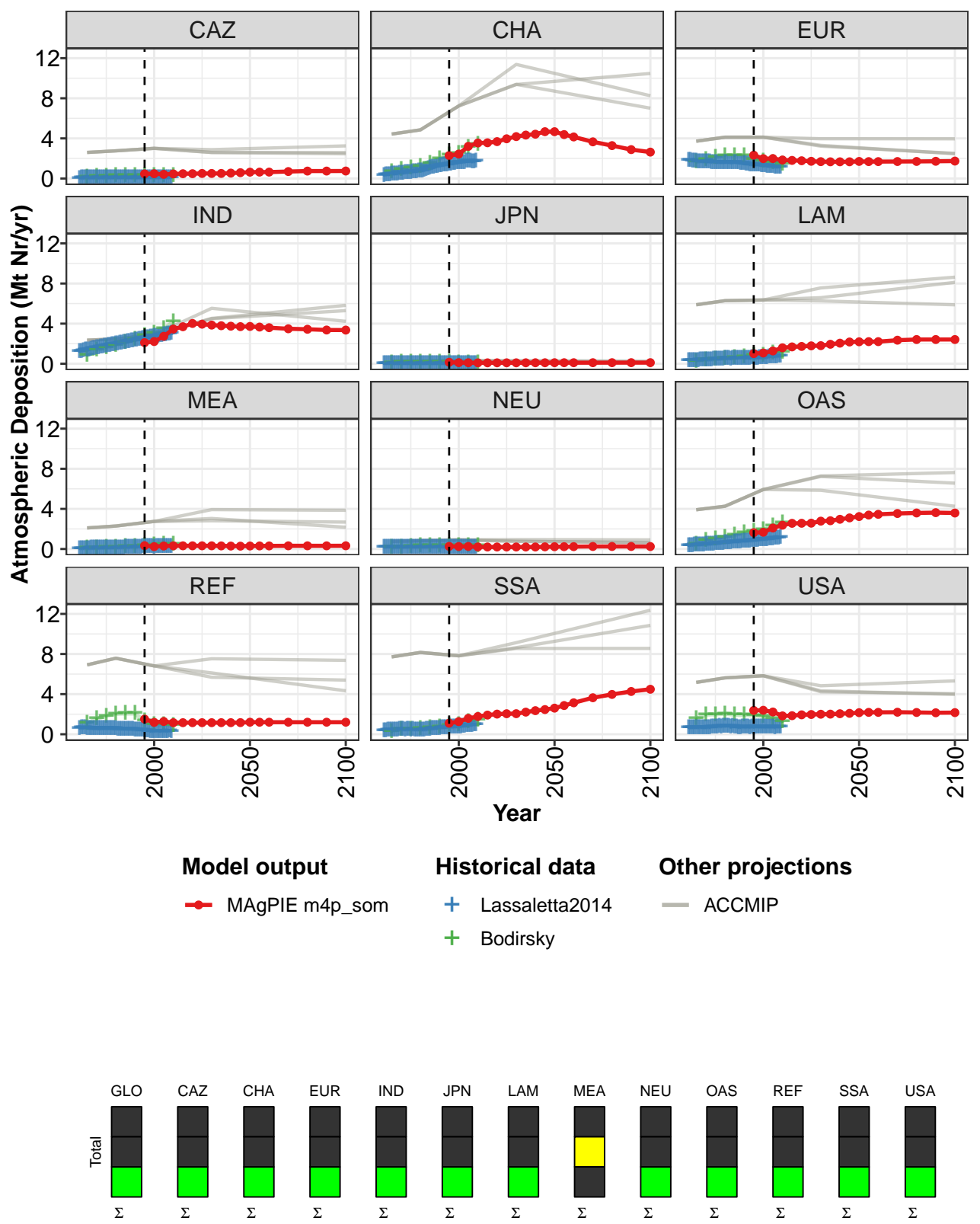


Figure 453: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs—Atmospheric Deposition (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	15.6	15.3	17.5	18.7	19.3	20.0	20.3	20.6	21.0	21.5	22.2
CAZ	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
CHA	2.3	2.4	3.2	3.5	3.6	3.7	4.0	4.2	4.3	4.4	4.7
EUR	2.3	2.0	2.0	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7
IND	2.1	2.2	2.7	3.5	3.7	4.0	3.9	3.9	3.8	3.7	3.7
JPN	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	1.0	1.1	1.3	1.6	1.7	1.7	1.8	1.8	1.9	2.1	2.2
MEA	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
NEU	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	1.6	1.7	2.1	2.4	2.6	2.6	2.6	2.8	2.8	3.0	3.1
REF	1.5	1.2	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
SSA	1.1	1.3	1.6	1.8	1.9	2.0	2.0	2.1	2.2	2.4	2.5
USA	2.4	2.4	2.2	1.8	1.9	1.9	2.0	2.0	2.0	2.0	2.1

Table 1731: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs—Atmospheric Deposition (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	22.7	22.8	22.9	23.1	23.2	23.0	23.0
CAZ	0.6	0.6	0.6	0.7	0.7	0.7	0.7
CHA	4.7	4.4	4.1	3.7	3.3	2.9	2.6
EUR	1.7	1.7	1.7	1.7	1.7	1.7	1.7
IND	3.7	3.7	3.6	3.5	3.4	3.4	3.4
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	2.2	2.2	2.2	2.3	2.4	2.4	2.4
MEA	0.3	0.3	0.3	0.3	0.3	0.3	0.3
NEU	0.2	0.2	0.2	0.3	0.3	0.3	0.2
OAS	3.2	3.4	3.5	3.5	3.6	3.6	3.6
REF	1.2	1.2	1.2	1.2	1.2	1.2	1.2
SSA	2.6	2.9	3.1	3.6	4.0	4.3	4.5
USA	2.2	2.2	2.2	2.2	2.2	2.1	2.2

Table 1732: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs—Atmospheric Deposition (Mt Nr/yr) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	5.9	6.0	6.1	6.2	6.3	6.3	6.4	6.5	6.6	6.7	6.8
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
CHA	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6
EUR	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
IND	1.2	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.5	1.6	1.6
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
MEA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5
REF	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5
SSA	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5
USA	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7

Table 1733: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Atmospheric Deposition (Mt Nr/yr) [PART 1/5]



	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	6.8	7.0	7.1	7.2	7.3	7.4	7.5	7.5	7.7	7.8	7.9
CAZ	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.8
EUR	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
IND	1.7	1.7	1.8	1.8	1.8	1.9	1.9	1.9	2.0	2.0	2.1
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
MEA	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7
REF	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5
SSA	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.4	0.5
USA	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8

Table 1734: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Atmospheric Deposition (Mt Nr/yr) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	7.9	8.1	8.4	8.4	8.5	8.6	8.7	8.7	8.8	8.9	8.9
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	0.9	1.0	1.1	1.1	1.2	1.2	1.2	1.3	1.3	1.4	1.4
EUR	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.4	1.4
IND	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.4	2.4	2.4	2.5
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
MEA	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8
REF	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4
SSA	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7
USA	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7

Table 1735: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Atmospheric Deposition (Mt Nr/yr) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	9.0	9.1	9.2	9.2	9.3	9.4	9.5	9.5	9.6	9.7	10.0
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.7
EUR	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.2	1.2	1.2
IND	2.5	2.5	2.6	2.6	2.7	2.7	2.8	2.8	2.8	2.8	2.9
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
MEA	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	0.8	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0
REF	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
SSA	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.9
USA	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7

Table 1736: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Atmospheric Deposition (Mt Nr/yr) [PART 4/5]

	2005	2006	2007	2008	2009
GLO	10.1	10.1	10.1	10.3	10.4
CAZ	0.1	0.1	0.1	0.1	0.1
CHA	1.7	1.8	1.7	1.7	1.7
EUR	1.2	1.2	1.1	1.2	1.1
IND	2.9	2.9	3.0	3.0	3.0
JPN	0.0	0.0	0.0	0.0	0.0
LAM	0.7	0.7	0.7	0.8	0.7
MEA	0.3	0.3	0.3	0.3	0.3
NEU	0.2	0.2	0.2	0.2	0.2
OAS	1.1	1.1	1.1	1.1	1.1
REF	0.3	0.3	0.3	0.3	0.3
SSA	0.9	0.9	0.9	0.9	0.9
USA	0.7	0.7	0.7	0.7	0.7

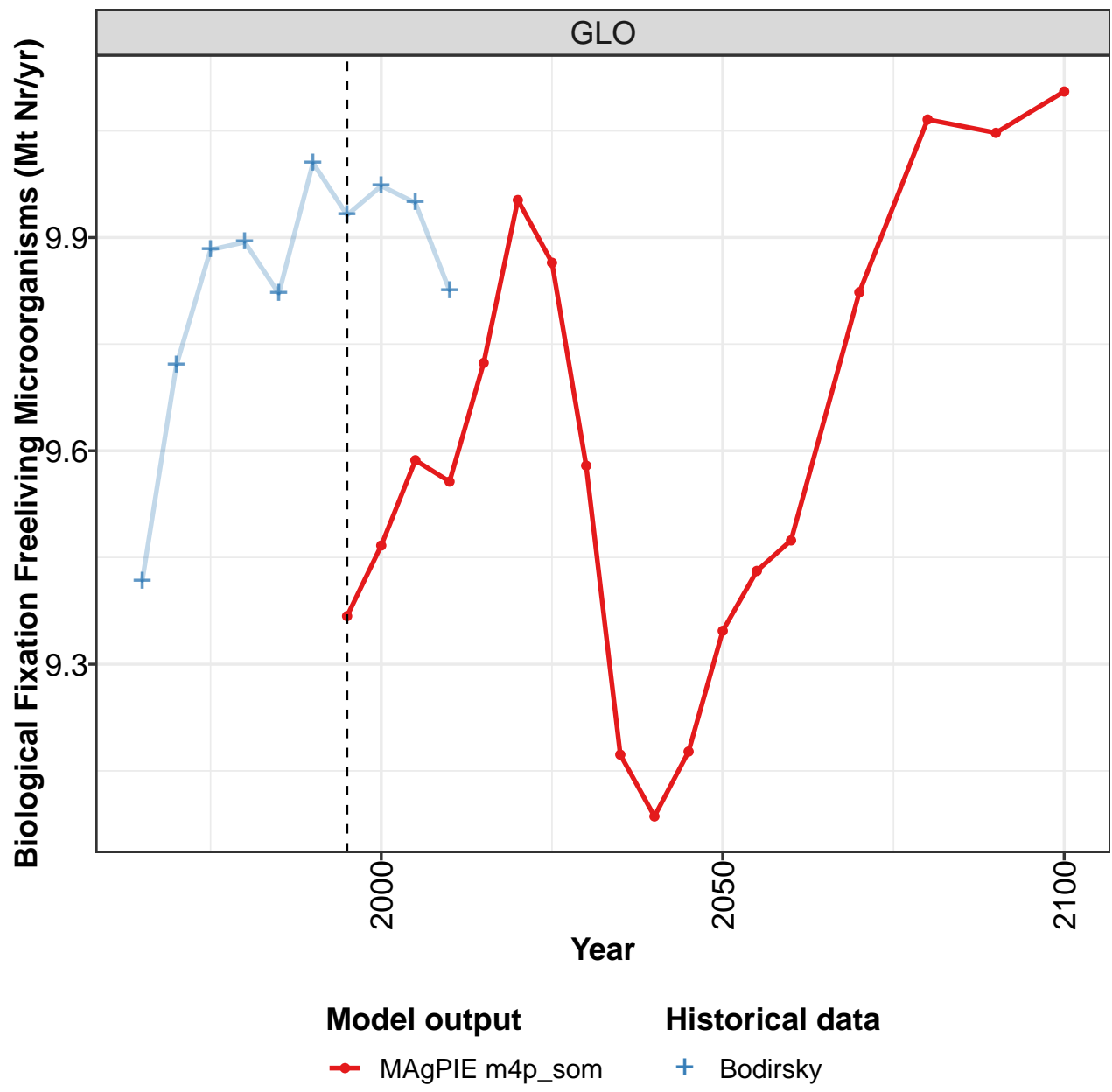
Table 1737: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Atmospheric Deposition (Mt Nr/yr) [PART 5/5]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	7.3	10.2	11.4	12.7	13.5	14.8	14.9	15.0	16.5	17.6
CAZ	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
CHA	0.6	0.9	1.1	1.2	1.5	2.0	2.4	2.5	3.1	3.4
EUR	1.6	1.9	2.1	2.3	2.3	2.3	1.9	1.7	1.6	1.4
IND	0.8	1.4	1.6	1.9	2.1	2.5	2.8	3.0	3.5	4.2
JPN	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
LAM	0.3	0.4	0.5	0.6	0.6	0.7	0.9	0.9	1.1	1.2
MEA	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.5
NEU	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3
OAS	0.5	0.9	1.0	1.2	1.4	1.6	1.8	1.9	2.3	2.6
REF	1.1	1.5	1.8	2.0	2.1	2.1	1.3	1.0	0.9	0.9
SSA	0.3	0.5	0.5	0.6	0.6	0.7	0.9	1.0	1.3	1.4
USA	1.5	2.0	2.0	2.0	1.9	1.9	1.9	1.8	1.5	1.3

Table 1738: Bodirsky — Resources—Nitrogen—Cropland Budget—Inputs—Atmospheric Deposition (Mt Nr/yr)

57.1.8 Inputs—Biological Fixation Freelifving Microorganisms

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

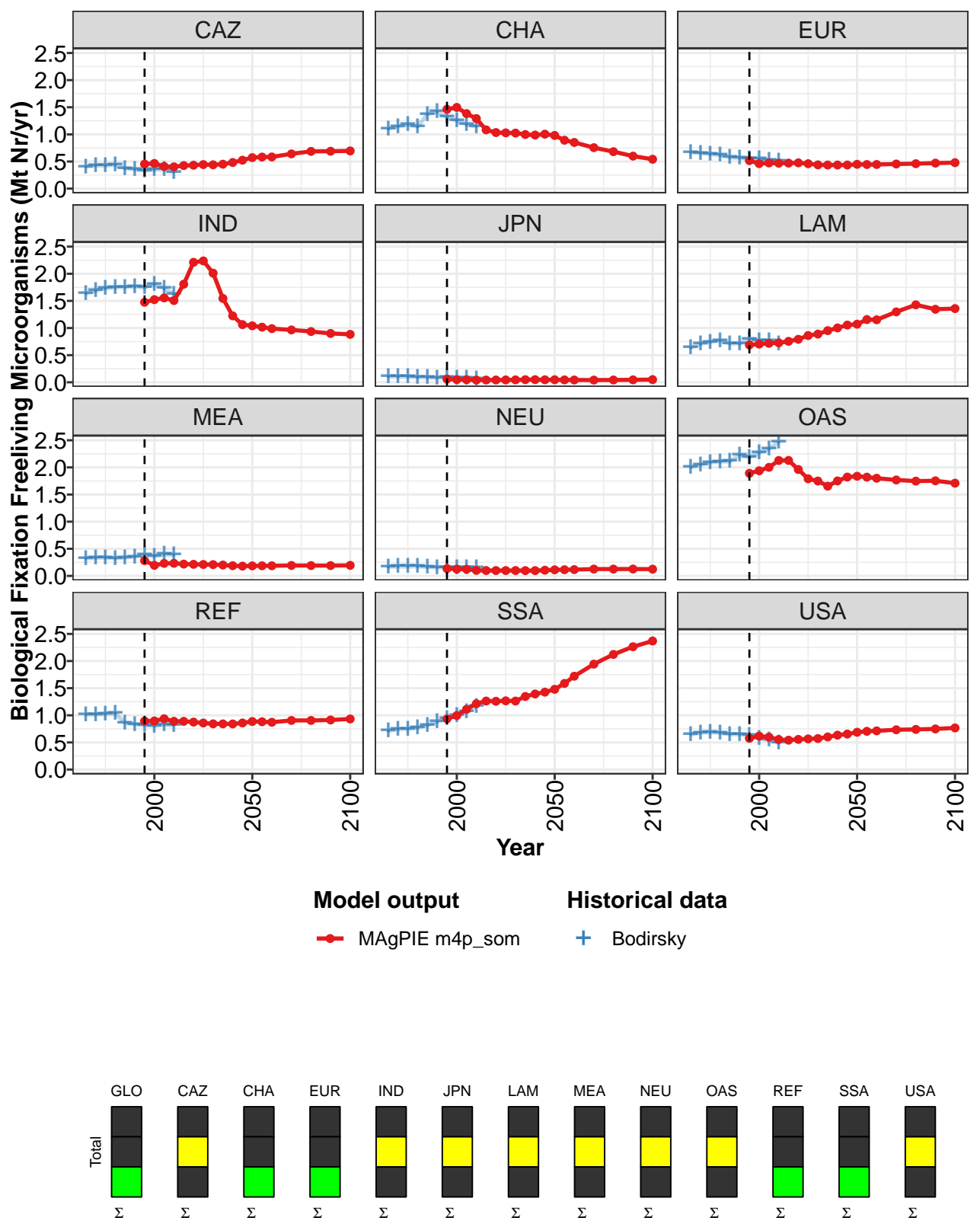


Figure 454: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Free-living Microorganisms (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	9.4	9.5	9.6	9.6	9.7	10.0	9.9	9.6	9.2	9.1	9.2
CAZ	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5
CHA	1.5	1.5	1.4	1.3	1.1	1.0	1.0	1.0	1.0	1.0	1.0
EUR	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4
IND	1.5	1.5	1.6	1.5	1.8	2.2	2.2	2.0	1.5	1.2	1.1
JPN	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.7	0.7	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.1
MEA	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	1.9	1.9	2.0	2.1	2.1	2.0	1.8	1.7	1.7	1.8	1.8
REF	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.9
SSA	0.9	1.0	1.1	1.2	1.3	1.3	1.3	1.3	1.3	1.4	1.4
USA	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.7

Table 1739: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Free-living Microorganisms (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	9.3	9.4	9.5	9.8	10.1	10.0	10.1
CAZ	0.6	0.6	0.6	0.6	0.7	0.7	0.7
CHA	1.0	0.9	0.9	0.8	0.7	0.6	0.5
EUR	0.4	0.4	0.4	0.5	0.5	0.5	0.5
IND	1.0	1.0	1.0	1.0	0.9	0.9	0.9
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.1	1.2	1.2	1.3	1.4	1.3	1.4
MEA	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	1.8	1.8	1.8	1.8	1.7	1.8	1.7
REF	0.9	0.9	0.9	0.9	0.9	0.9	0.9
SSA	1.5	1.6	1.7	1.9	2.1	2.3	2.4
USA	0.7	0.7	0.7	0.7	0.7	0.7	0.8

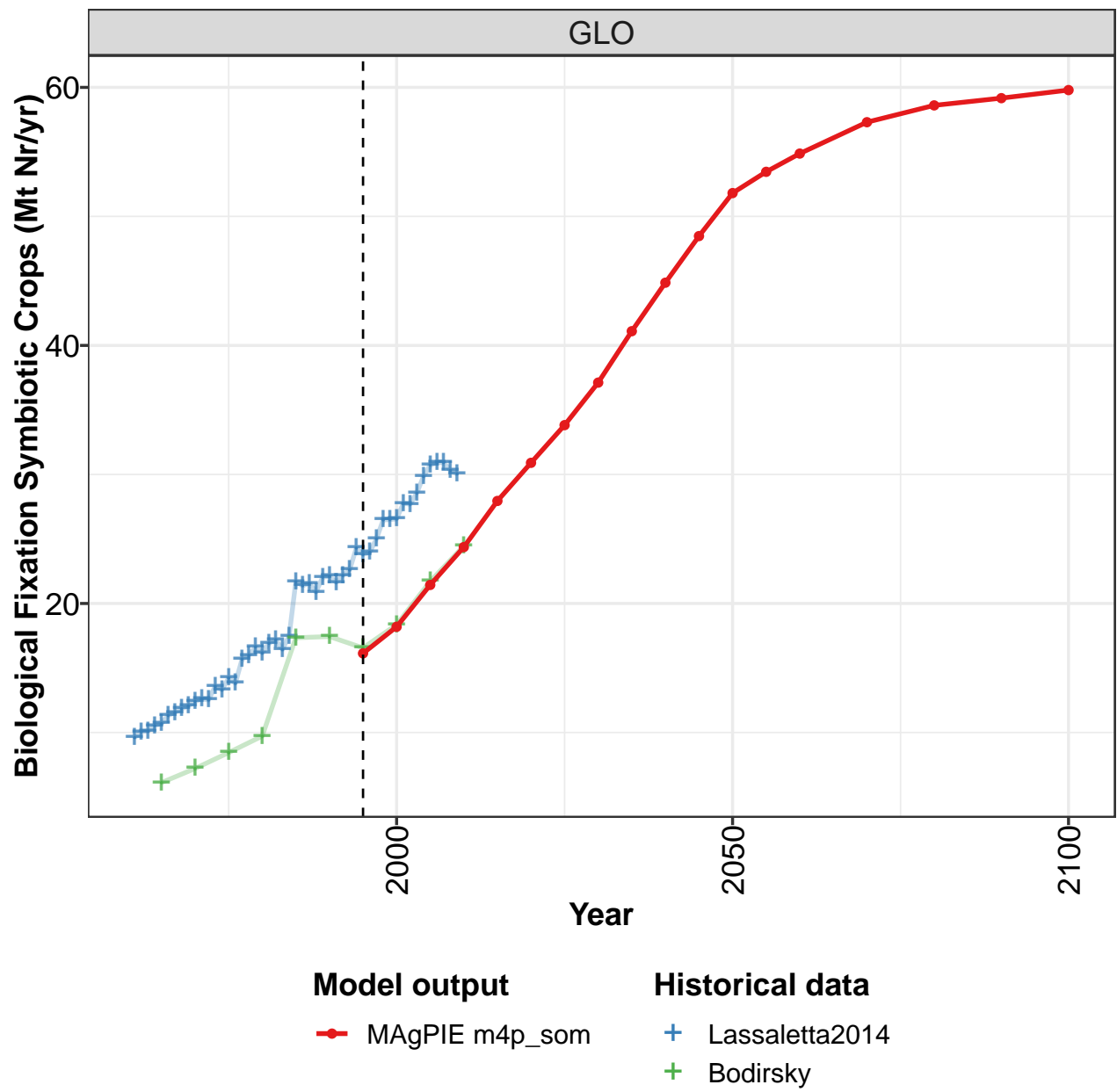
Table 1740: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Free-living Microorganisms (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	9.4	9.7	9.9	9.9	9.8	10.0	9.9	10.0	9.9	9.8
CAZ	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.3
CHA	1.1	1.1	1.2	1.1	1.4	1.4	1.3	1.3	1.2	1.1
EUR	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5
IND	1.6	1.7	1.7	1.7	1.8	1.8	1.7	1.8	1.7	1.6
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.6	0.7	0.7	0.8	0.7	0.7	0.8	0.8	0.8	0.7
MEA	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
OAS	2.0	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.5
REF	1.0	1.0	1.0	1.0	0.9	0.8	0.8	0.8	0.8	0.8
SSA	0.7	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.1	1.2
USA	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5

Table 1741: Bodirsky — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Freelifving Microorganisms (Mt Nr/yr)

57.1.9 Inputs—Biological Fixation Symbiotic Crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

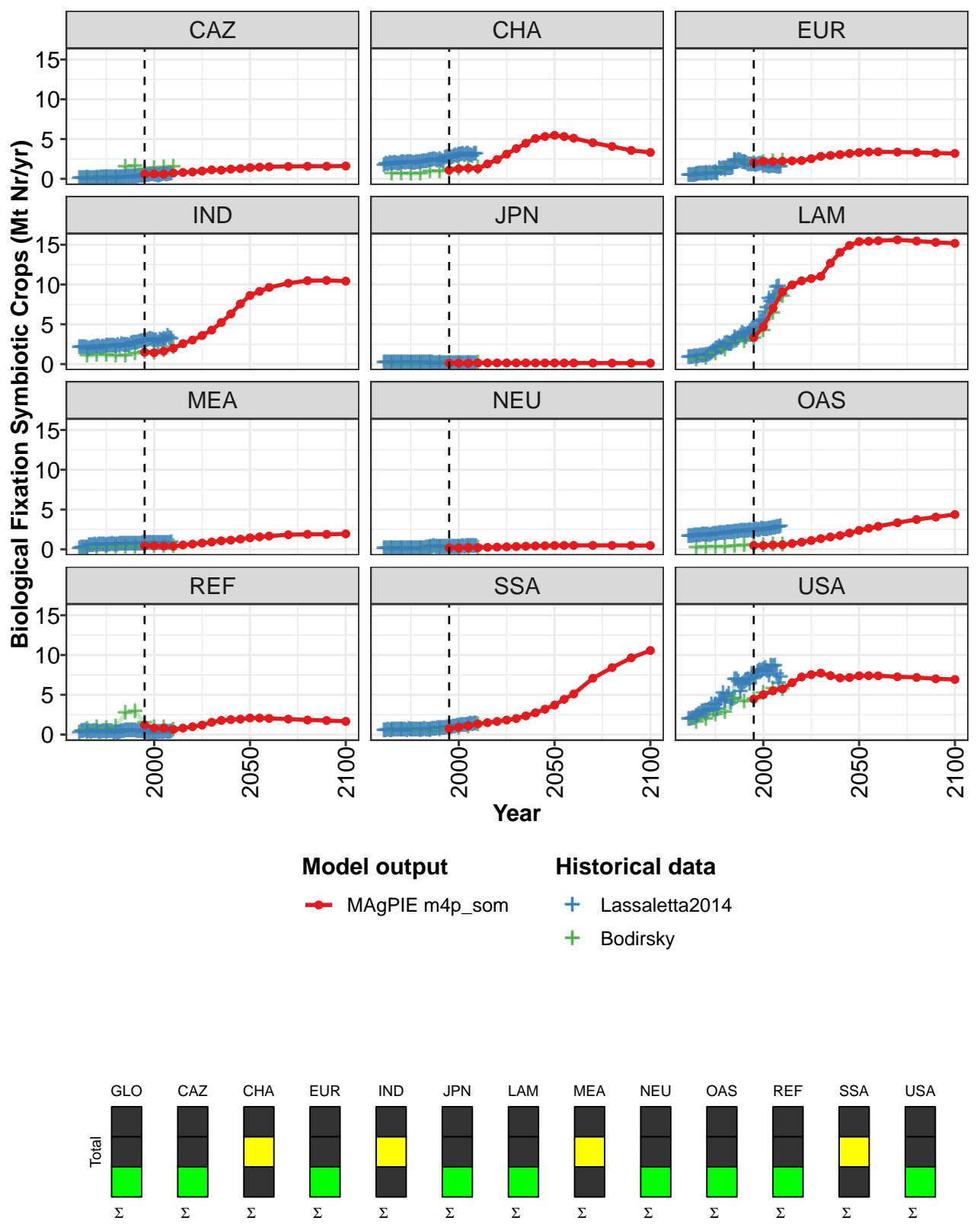


Figure 455: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Symbiotic Crops (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	16.1	18.2	21.4	24.4	27.9	30.9	33.8	37.1	41.1	44.9	48.5
CAZ	0.6	0.6	0.6	0.7	0.8	0.9	1.0	1.1	1.1	1.2	1.3
CHA	1.1	1.3	1.3	1.3	1.9	2.4	3.1	3.8	4.5	5.1	5.3
EUR	2.0	2.2	2.2	2.2	2.3	2.3	2.5	2.8	2.9	3.0	3.2
IND	1.5	1.4	1.6	2.0	2.6	3.0	3.6	4.3	5.2	6.3	7.6
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	3.3	4.7	7.0	9.1	10.0	10.5	10.7	11.0	12.7	14.0	14.9
MEA	0.4	0.4	0.4	0.4	0.5	0.7	0.8	0.9	1.1	1.2	1.3
NEU	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.5
OAS	0.5	0.5	0.5	0.6	0.7	0.9	1.1	1.3	1.6	1.7	2.0
REF	1.2	0.8	0.8	0.7	0.8	1.0	1.2	1.5	1.8	1.9	1.9
SSA	0.7	0.9	1.1	1.3	1.5	1.6	1.8	2.0	2.3	2.7	3.2
USA	4.5	5.0	5.5	5.7	6.5	7.2	7.5	7.7	7.4	7.1	7.2

Table 1742: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Symbiotic Crops (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	51.8	53.5	54.9	57.3	58.6	59.2	59.8
CAZ	1.4	1.5	1.5	1.5	1.6	1.6	1.6
CHA	5.5	5.3	5.1	4.5	4.1	3.6	3.3
EUR	3.3	3.4	3.4	3.4	3.3	3.2	3.2
IND	8.6	9.1	9.6	10.2	10.5	10.5	10.4
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	15.4	15.4	15.5	15.6	15.5	15.3	15.2
MEA	1.4	1.6	1.7	1.8	1.9	1.9	1.9
NEU	0.5	0.5	0.5	0.5	0.5	0.5	0.5
OAS	2.4	2.6	2.9	3.3	3.7	4.1	4.4
REF	2.1	2.1	2.0	1.9	1.8	1.8	1.7
SSA	3.7	4.4	5.1	7.1	8.4	9.6	10.6
USA	7.4	7.4	7.4	7.3	7.2	7.0	6.9

Table 1743: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Symbiotic Crops (Mt Nr/yr) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	9.6	10.1	10.1	10.5	10.7	11.3	11.6	11.8	12.1	12.4	12.6
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	1.7	1.8	1.8	2.0	1.9	1.9	1.9	1.9	1.8	2.0	2.1
EUR	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
IND	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.1	2.1	2.2	2.2
JPN	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
LAM	0.8	0.9	0.8	0.9	0.9	0.9	1.0	1.0	1.0	1.1	1.1
MEA	0.1	0.1	0.1	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.5
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8
REF	0.2	0.4	0.4	0.5	0.3	0.3	0.3	0.4	0.4	0.4	0.3
SSA	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6
USA	1.9	2.0	2.0	2.0	2.3	2.5	2.6	2.8	2.9	2.9	3.0

Table 1744: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Symbiotic Crops (Mt Nr/yr) [PART 1/5]



	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	12.5	13.6	13.3	14.2	13.8	15.7	16.0	16.6	16.2	16.9	17.2
CAZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CHA	1.9	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.1
EUR	0.7	0.7	0.7	0.7	0.6	1.2	1.2	1.3	1.3	1.3	1.3
IND	2.0	2.1	2.0	2.2	2.2	2.3	2.3	2.3	2.1	2.3	2.2
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	1.2	1.4	1.6	1.9	2.0	2.2	2.0	2.1	2.6	2.6	2.4
MEA	0.6	0.5	0.6	0.5	0.6	0.6	0.7	0.6	0.6	0.6	0.6
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	1.8	1.8	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.0
REF	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.2	0.3	0.2	0.3
SSA	0.6	0.5	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
USA	3.2	3.7	3.1	3.8	3.2	4.2	4.4	5.2	4.2	4.7	5.1

Table 1745: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Symbiotic Crops (Mt Nr/yr) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	16.4	17.5	21.7	21.4	21.6	20.9	22.0	22.1	21.6	22.2	22.6
CAZ	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.4
CHA	2.2	2.2	2.3	2.4	2.4	2.4	2.3	2.4	2.2	2.2	2.6
EUR	1.3	1.4	2.2	2.2	2.3	2.3	2.0	2.0	2.0	1.7	1.8
IND	2.4	2.4	2.3	2.4	2.3	2.6	2.7	2.7	2.7	2.7	2.8
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	2.5	2.7	3.3	2.9	3.2	3.5	3.9	3.7	3.3	3.8	4.1
MEA	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6
NEU	0.1	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
OAS	2.1	2.1	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3
REF	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.3	0.4	0.4
SSA	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.7	0.8	0.8	0.8
USA	3.9	4.5	6.9	6.9	6.6	5.4	6.3	6.5	6.7	6.9	6.4

Table 1746: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Symbiotic Crops (Mt Nr/yr) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	24.3	23.8	24.0	25.0	26.5	26.5	26.6	27.8	27.7	28.6	29.8
CAZ	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5
CHA	2.8	2.7	2.7	2.7	2.9	2.9	3.0	3.0	3.1	2.9	3.1
EUR	1.7	1.7	1.7	1.8	1.8	1.8	1.6	1.6	1.6	1.5	1.6
IND	2.8	2.9	3.0	3.0	3.1	3.0	2.9	2.9	2.6	3.1	2.9
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	4.4	4.4	4.2	4.5	5.3	5.4	5.6	6.5	7.0	8.2	7.8
MEA	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8
NEU	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
OAS	2.3	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.6	2.6
REF	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3
SSA	0.8	0.8	0.9	0.9	1.0	1.1	1.0	1.1	1.1	1.2	1.2
USA	7.6	7.0	7.3	7.8	8.0	8.0	8.1	8.3	7.9	7.4	8.6

Table 1747: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Symbiotic Crops (Mt Nr/yr) [PART 4/5]

	2005	2006	2007	2008	2009
GLO	30.7	30.9	30.9	30.3	30.0
CAZ	0.6	0.5	0.5	0.6	0.6
CHA	3.1	2.9	2.8	3.1	3.1
EUR	1.6	1.5	1.4	1.4	1.5
IND	3.1	3.1	3.5	3.3	3.1
JPN	0.1	0.1	0.1	0.1	0.1
LAM	8.3	8.6	9.6	9.8	8.7
MEA	0.8	0.8	0.8	0.8	0.8
NEU	0.4	0.4	0.3	0.3	0.3
OAS	2.7	2.7	2.7	2.8	2.8
REF	0.3	0.3	0.3	0.3	0.3
SSA	1.3	1.4	1.3	1.4	1.4
USA	8.6	8.6	7.6	6.5	7.2

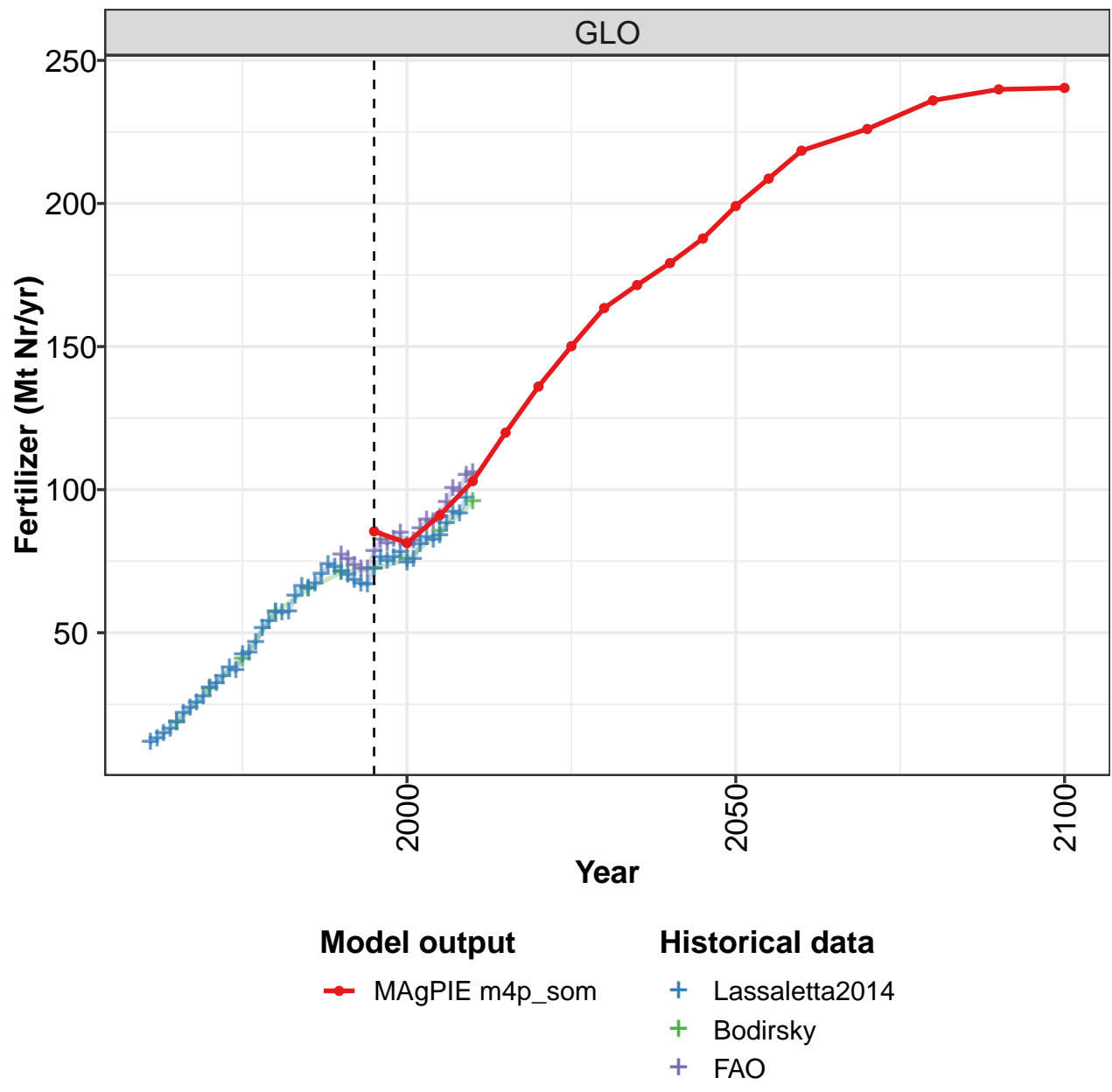
Table 1748: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Symbiotic Crops (Mt Nr/yr) [PART 5/5]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	6.1	7.2	8.4	9.7	17.3	17.4	16.6	18.4	21.7	24.5
CAZ	0.1	0.1	0.1	0.2	1.4	1.5	1.1	1.3	1.4	1.5
CHA	0.6	0.7	0.6	0.7	0.9	0.9	1.1	1.3	1.4	1.3
EUR	0.5	0.7	0.8	1.1	2.3	2.1	2.0	2.1	2.1	2.2
IND	1.0	1.1	1.1	1.0	1.0	1.3	1.5	1.4	1.7	2.0
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.6	0.7	1.3	1.8	2.9	2.8	3.2	4.2	6.4	8.5
MEA	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4
NEU	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
OAS	0.2	0.2	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.6
REF	0.7	0.8	0.7	0.9	2.7	2.9	1.4	0.9	0.8	0.6
SSA	0.5	0.6	0.6	0.5	0.5	0.6	0.7	0.8	1.0	1.3
USA	1.6	1.9	2.5	2.8	4.5	4.2	4.4	5.2	5.7	5.6

Table 1749: Bodirsky — Resources—Nitrogen—Cropland Budget—Inputs—Biological Fixation Symbiotic Crops (Mt Nr/yr)

57.1.10 Inputs—Fertilizer

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

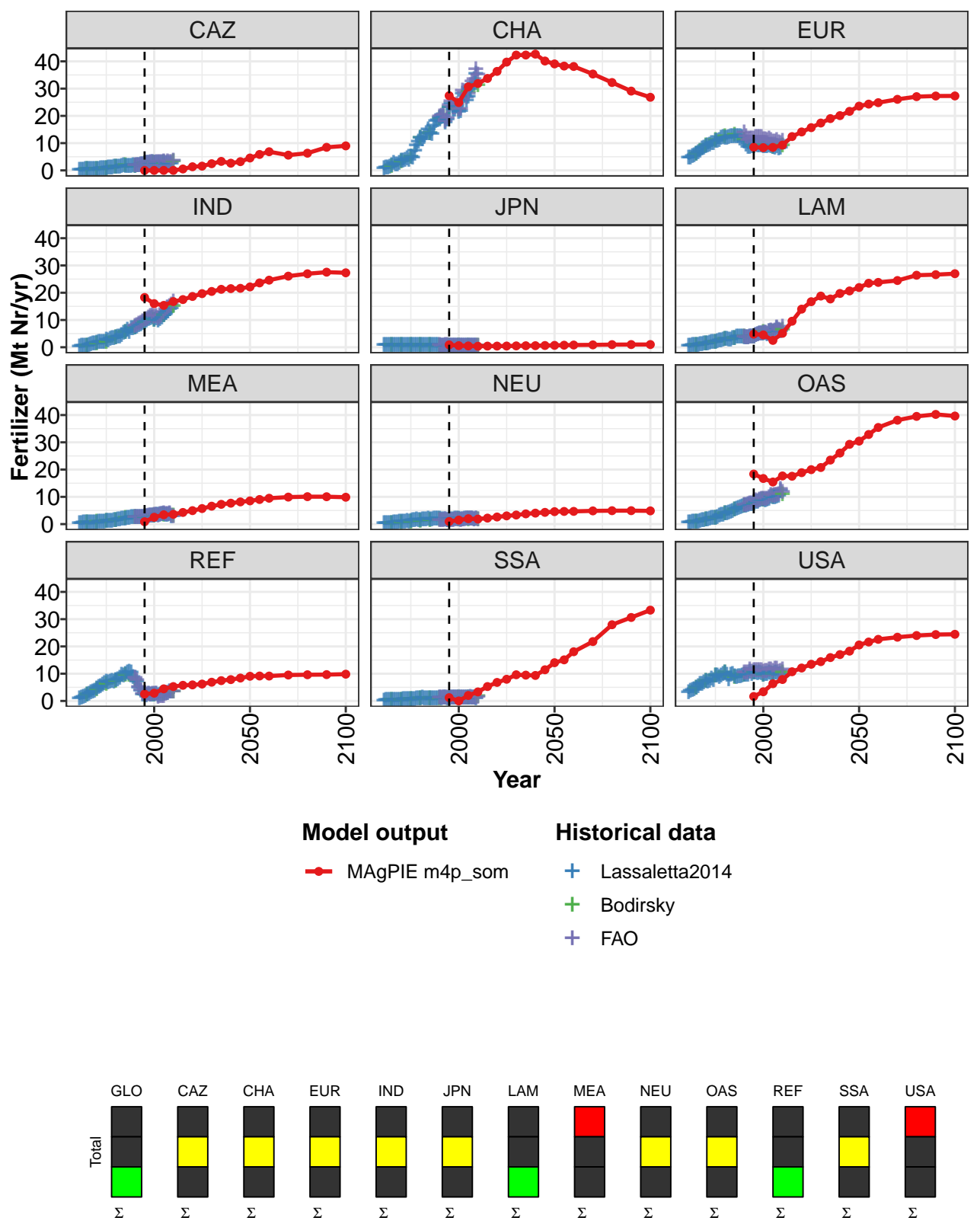


Figure 456: MAGPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs—Fertilizer (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	85	81	91	103	120	136	150	163	171	179	188
CAZ	0	0	0	0	1	1	2	2	3	3	3
CHA	27	25	31	32	34	36	40	42	42	43	40
EUR	8	8	8	9	12	14	16	17	19	20	22
IND	18	16	15	17	17	19	20	20	21	22	22
JPN	1	1	0	0	0	0	0	1	1	1	1
LAM	5	5	3	5	10	14	17	19	18	20	21
MEA	1	3	3	4	4	5	6	7	7	8	8
NEU	1	1	2	2	2	3	3	3	4	4	4
OAS	18	17	15	18	18	19	20	21	23	26	29
REF	3	3	4	5	6	6	6	7	7	8	8
SSA	1	0	2	3	5	7	8	10	9	9	11
USA	2	3	6	8	11	12	13	14	16	17	18

Table 1750: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs—Fertilizer (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	199	209	218	226	236	240	240
CAZ	5	6	7	6	6	8	9
CHA	39	38	38	35	32	29	27
EUR	24	24	25	26	27	27	27
IND	22	24	25	26	27	28	27
JPN	1	1	1	1	1	1	1
LAM	22	23	24	24	26	27	27
MEA	9	9	9	10	10	10	10
NEU	5	5	5	5	5	5	5
OAS	30	33	35	38	40	40	40
REF	9	9	9	10	10	10	10
SSA	14	15	18	22	28	31	33
USA	21	22	23	23	24	24	24

Table 1751: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs—Fertilizer (Mt Nr/yr) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	11.6	13.1	14.6	16.3	18.8	21.7	23.6	25.6	27.6	30.7	32.3
CAZ	0.1	0.2	0.2	0.2	0.3	0.4	0.5	0.4	0.4	0.4	0.5
CHA	0.5	0.8	1.0	1.2	1.8	2.7	1.9	2.1	2.6	3.3	3.3
EUR	4.5	4.7	5.0	5.4	6.0	6.6	7.2	7.9	8.2	8.7	9.1
IND	0.2	0.3	0.4	0.6	0.6	0.7	1.0	1.2	1.3	1.5	1.8
JPN	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.7	0.7
LAM	0.4	0.5	0.6	0.7	0.7	0.8	0.9	1.1	1.2	1.3	1.3
MEA	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.6	0.7
NEU	0.2	0.3	0.3	0.3	0.3	0.4	0.5	0.6	0.6	0.7	0.8
OAS	0.6	0.6	0.7	0.6	0.7	0.8	1.1	1.2	1.4	1.6	1.6
REF	0.9	1.1	1.3	1.7	2.2	2.6	3.0	3.4	3.7	4.4	5.0
SSA	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4
USA	3.1	3.6	3.9	4.2	4.8	5.4	6.1	6.2	6.6	7.2	7.1

Table 1752: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Fertilizer (Mt Nr/yr) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	34.8	37.6	36.7	42.3	43.0	46.5	51.4	54.0	57.3	56.8	57.3
CAZ	0.6	0.7	0.7	0.7	0.8	1.0	1.1	1.1	1.2	1.2	1.3
CHA	3.8	4.4	3.8	5.0	4.7	7.0	9.1	10.5	11.9	11.3	12.0
EUR	9.4	9.9	9.9	10.6	10.8	11.0	11.8	12.2	11.9	11.9	12.1
IND	1.8	1.8	1.7	2.7	2.4	2.8	3.3	3.4	3.5	3.9	3.9
JPN	0.7	0.8	0.7	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6
LAM	1.6	1.7	1.8	1.9	2.2	2.5	2.4	2.6	2.8	2.8	2.8
MEA	0.8	0.9	0.9	1.0	1.0	1.1	1.0	1.3	1.4	1.5	1.7
NEU	0.9	0.9	0.8	1.0	1.2	1.3	1.5	1.4	1.5	1.5	1.6
OAS	2.0	2.0	2.0	2.2	2.5	2.9	3.3	3.4	3.7	3.9	4.2
REF	5.4	5.9	6.3	6.9	6.8	7.0	7.1	6.9	7.6	7.7	8.3
SSA	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.9	1.0	0.9
USA	7.3	8.0	7.5	9.1	9.3	8.7	9.3	9.9	10.3	9.5	7.8

Table 1753: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Fertilizer (Mt Nr/yr) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	62.7	66.2	65.4	67.2	70.3	73.6	72.9	71.4	70.0	68.2	66.9
CAZ	1.6	1.7	1.6	1.5	1.6	1.6	1.6	1.6	1.8	1.9	2.0
CHA	13.4	14.8	13.5	13.2	16.4	18.0	18.3	19.0	19.4	19.7	17.4
EUR	12.3	12.3	12.5	12.5	12.3	12.5	12.2	10.5	9.4	8.4	8.6
IND	4.4	5.1	5.5	6.2	5.4	6.8	6.8	7.1	7.6	7.9	8.2
JPN	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5
LAM	2.7	3.2	3.4	3.8	3.9	3.7	3.7	3.6	3.4	3.5	3.7
MEA	1.9	1.9	2.0	2.3	2.3	2.3	2.5	2.3	2.4	2.5	2.5
NEU	1.7	1.8	1.7	1.7	1.9	1.8	1.8	1.8	1.6	1.6	1.7
OAS	4.4	4.8	5.1	5.6	5.7	6.1	6.4	6.6	6.6	7.0	7.1
REF	9.4	9.3	9.9	10.3	10.5	10.3	8.8	7.7	6.9	4.7	3.5
SSA	0.8	0.9	0.9	0.8	0.8	0.9	0.9	1.0	1.0	1.0	1.0
USA	9.5	9.8	8.9	8.7	8.9	8.9	9.3	9.5	9.6	9.5	10.5

Table 1754: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Fertilizer (Mt Nr/yr) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	66.8	72.4	76.3	74.9	76.2	78.0	74.5	75.7	80.9	83.3	82.5
CAZ	2.1	2.3	2.5	2.5	2.6	2.8	2.6	2.7	2.7	2.7	2.7
CHA	18.5	23.0	24.4	22.2	22.1	23.3	21.3	21.6	28.0	27.3	25.5
EUR	8.8	8.6	9.3	9.0	9.0	9.0	8.6	8.7	8.7	9.2	8.7
IND	8.9	9.2	9.6	10.1	10.5	10.7	10.1	10.4	9.6	10.1	10.7
JPN	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
LAM	3.8	3.8	4.4	4.7	4.8	4.8	5.0	5.1	4.7	5.6	5.6
MEA	2.4	2.6	2.7	2.8	3.0	3.0	3.1	3.3	3.3	3.4	3.5
NEU	1.4	1.5	1.6	1.7	1.9	1.9	1.8	1.6	1.7	1.8	2.0
OAS	7.3	7.6	8.1	7.9	8.6	8.8	8.9	8.6	8.8	9.2	10.0
REF	2.4	2.3	2.1	2.5	2.2	2.3	2.3	2.5	2.0	2.2	2.2
SSA	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1
USA	9.7	10.2	10.2	10.1	10.2	10.1	9.4	9.8	9.8	10.3	10.1

Table 1755: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Fertilizer (Mt Nr/yr) [PART 4/5]

	2005	2006	2007	2008	2009
GLO	84.0	88.1	92.2	91.5	97.2
CAZ	2.8	2.3	2.6	2.5	2.3
CHA	26.9	29.8	31.1	31.7	35.2
EUR	8.4	8.3	8.8	8.0	8.3
IND	11.6	12.5	13.1	13.7	14.2
JPN	0.4	0.4	0.4	0.4	0.3
LAM	5.6	5.7	7.0	6.0	5.8
MEA	3.5	3.4	3.3	3.6	2.9
NEU	1.9	1.9	1.9	1.7	2.0
OAS	9.7	9.6	9.9	10.2	12.1
REF	2.4	2.7	2.9	3.3	3.4
SSA	1.0	1.2	1.0	1.1	1.0
USA	9.8	10.3	10.2	9.4	9.7

Table 1756: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Inputs—Fertilizer (Mt Nr/yr) [PART 5/5]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	18.4	30.4	40.8	57.1	65.2	71.1	72.3	75.6	85.4	95.8
CAZ	0.3	0.5	0.7	1.2	1.7	1.6	2.3	2.6	2.6	3.0
CHA	1.5	3.1	5.0	11.8	13.5	19.0	23.0	22.1	28.7	31.2
EUR	6.1	9.0	11.0	12.4	13.1	11.0	8.8	9.0	8.6	8.9
IND	0.5	1.3	1.9	3.4	5.5	7.1	9.2	10.1	11.6	15.1
JPN	0.8	0.7	0.6	0.6	0.6	0.6	0.4	0.4	0.4	0.3
LAM	0.7	1.3	1.9	2.8	3.4	3.7	3.8	5.3	5.6	6.4
MEA	0.4	0.6	1.0	1.4	2.0	2.3	2.6	3.0	3.2	3.1
NEU	0.2	0.5	0.8	1.2	1.4	1.6	1.3	1.6	1.7	1.5
OAS	0.7	1.6	2.3	3.7	5.1	6.6	7.6	8.9	9.9	10.9
REF	2.1	4.2	6.0	7.3	9.4	7.2	2.2	2.2	2.5	3.4
SSA	0.2	0.4	0.6	0.9	0.9	1.0	0.9	1.0	1.0	1.6
USA	4.8	7.2	9.1	10.3	8.7	9.5	10.2	9.4	9.7	10.3

Table 1757: Bodirsky — Resources—Nitrogen—Cropland Budget—Inputs—Fertilizer (Mt Nr/yr)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	77	76	74	72	72	78	82	81	83	85	81
CAZ	2	2	2	2	2	2	3	3	3	3	3
CHA	20	20	20	18	19	24	25	23	23	24	22
EUR	14	12	11	11	12	11	12	12	12	12	11
IND	8	8	8	9	10	10	10	11	11	12	11
JPN	1	1	1	1	1	1	1	0	0	0	0
LAM	4	4	4	4	4	4	4	5	5	5	5
MEA	2	2	3	3	2	3	3	3	3	3	3
NEU	1	1	1	2	1	1	1	1	2	2	2
OAS	7	7	7	7	8	8	8	8	9	9	9
REF	8	8	5	4	3	3	2	3	2	2	2
SSA	1	1	1	1	1	1	1	1	1	1	1
USA	10	10	10	11	11	11	11	11	11	11	10

Table 1758: FAO — Resources—Nitrogen—Cropland Budget—Inputs—Fertilizer (Mt Nr/yr) [PART 1/2]

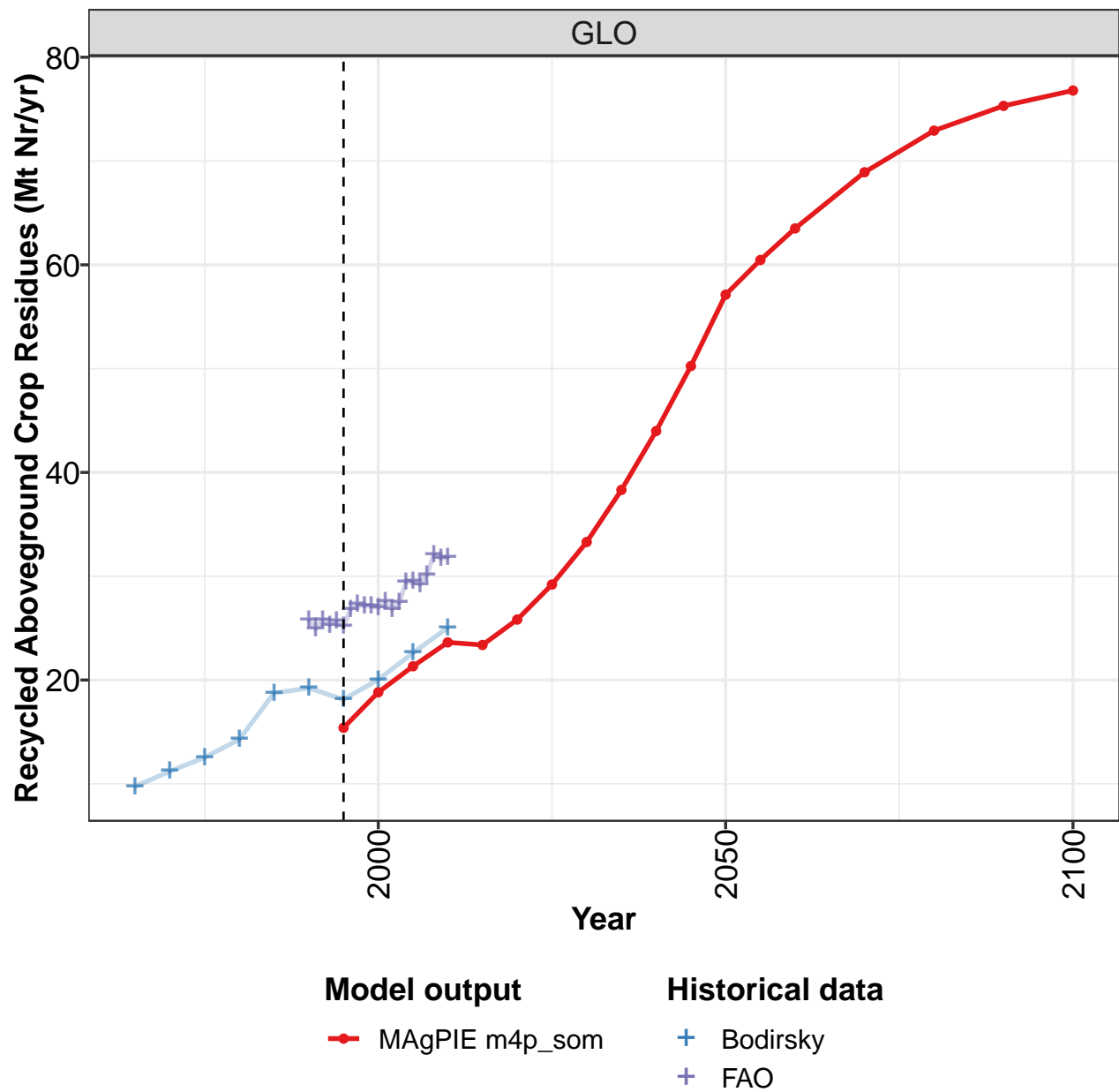
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
GLO	82	86	90	89	90	96	100	99	105	106
CAZ	3	3	3	3	3	2	3	3	3	3
CHA	22	29	28	27	28	31	33	33	37	35
EUR	11	11	12	11	10	10	11	10	10	11
IND	11	10	11	12	13	14	14	15	16	17
JPN	0	1	1	1	1	1	1	0	1	0
LAM	5	5	6	6	6	6	7	6	6	7
MEA	3	3	3	4	4	4	3	4	3	3
NEU	1	2	2	2	2	2	2	2	2	2
OAS	9	9	10	10	10	10	10	11	13	12
REF	3	1	2	2	2	3	3	3	3	3
SSA	1	1	1	1	1	1	1	1	1	1
USA	11	11	12	11	11	12	12	11	11	11

Table 1759: FAO — Resources—Nitrogen—Cropland Budget—Inputs—Fertilizer (Mt Nr/yr) [PART 2/2]



57.1.11 Inputs—Recycled Aboveground Crop Residues

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

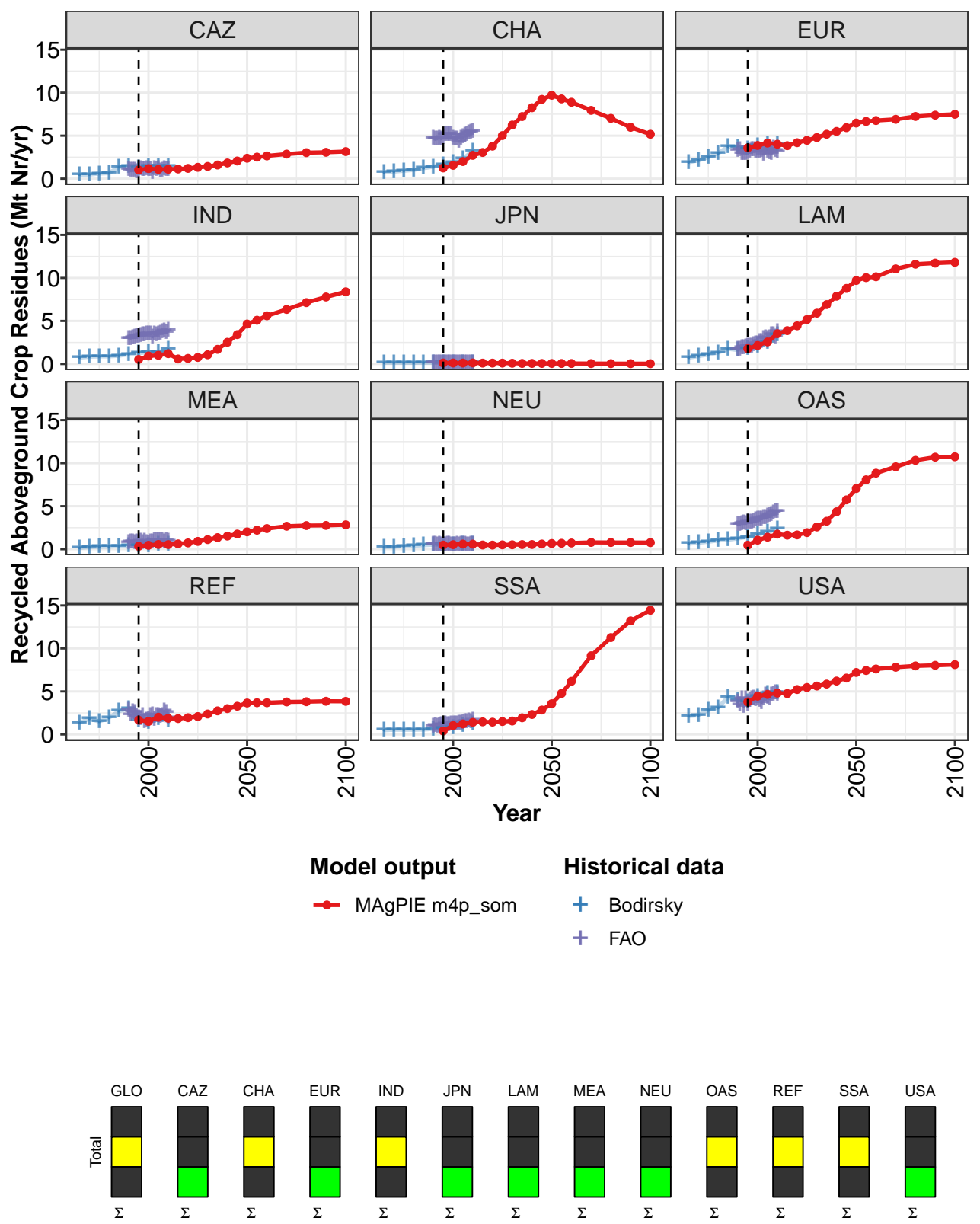


Figure 457: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs—Recycled Aboveground Crop Residues (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	15.4	18.8	21.3	23.6	23.4	25.8	29.2	33.3	38.3	44.0	50.2
CAZ	1.0	1.2	1.1	1.1	1.1	1.2	1.3	1.4	1.6	1.8	2.1
CHA	1.2	1.6	2.0	2.7	3.0	3.8	5.0	6.2	7.2	8.2	9.2
EUR	3.6	3.9	4.1	4.0	3.8	4.2	4.5	4.8	5.2	5.5	5.9
IND	0.5	0.9	1.0	1.2	0.6	0.6	0.8	1.1	1.7	2.5	3.4
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	1.8	2.2	2.6	3.5	3.9	4.4	5.2	5.9	6.9	7.9	8.8
MEA	0.3	0.5	0.5	0.5	0.6	0.7	0.9	1.1	1.3	1.5	1.8
NEU	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6
OAS	0.5	1.0	1.4	1.8	1.6	1.7	1.9	2.6	3.3	4.4	5.7
REF	1.7	1.5	2.0	1.9	1.8	1.9	2.1	2.4	2.7	3.0	3.3
SSA	0.4	1.0	1.2	1.4	1.5	1.4	1.5	1.6	1.9	2.3	2.8
USA	3.8	4.5	4.7	4.8	4.8	5.2	5.5	5.6	5.9	6.2	6.6

Table 1760: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs—Recycled Aboveground Crop Residues (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	57.1	60.5	63.5	68.9	72.9	75.3	76.8
CAZ	2.4	2.5	2.6	2.9	3.0	3.1	3.2
CHA	9.7	9.3	8.9	7.9	7.0	6.0	5.2
EUR	6.5	6.7	6.8	6.9	7.2	7.4	7.5
IND	4.6	5.1	5.6	6.3	7.1	7.8	8.4
JPN	0.1	0.1	0.1	0.0	0.0	0.0	0.0
LAM	9.7	10.0	10.1	11.0	11.6	11.7	11.8
MEA	2.0	2.2	2.4	2.7	2.7	2.8	2.8
NEU	0.7	0.7	0.7	0.8	0.8	0.8	0.8
OAS	7.1	8.1	8.8	9.6	10.3	10.7	10.7
REF	3.7	3.7	3.7	3.8	3.8	3.9	3.8
SSA	3.6	4.8	6.2	9.1	11.3	13.2	14.4
USA	7.2	7.4	7.6	7.8	8.0	8.0	8.1

Table 1761: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs—Recycled Aboveground Crop Residues (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	9.7	11.2	12.5	14.3	18.7	19.2	18.1	20.0	22.6	25.0
CAZ	0.5	0.5	0.6	0.7	1.4	1.4	1.3	1.4	1.5	1.5
CHA	0.7	0.8	0.9	1.0	1.2	1.4	1.7	1.9	2.3	3.2
EUR	1.9	2.1	2.5	3.0	3.7	3.6	3.5	3.8	4.0	4.0
IND	0.7	0.8	0.9	0.9	1.0	1.1	1.3	1.4	1.4	1.7
JPN	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
LAM	0.7	0.9	1.1	1.3	1.8	1.6	1.8	2.1	2.5	3.4
MEA	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.6	0.6
NEU	0.3	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.6	0.6
OAS	0.6	0.7	0.9	1.0	1.1	1.2	1.4	1.7	2.0	2.4
REF	1.3	1.8	1.5	2.0	2.7	3.0	1.6	1.4	1.8	1.6
SSA	0.5	0.5	0.5	0.5	0.6	0.6	0.7	0.8	1.0	1.2
USA	2.1	2.2	2.9	3.1	4.4	4.0	3.8	4.5	4.8	4.8

Table 1762: Bodirsky — Resources—Nitrogen—Cropland Budget—Inputs—Recycled Aboveground Crop Residues (Mt Nr/yr)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GLO	25.8	24.9	25.8	25.3	25.7	25.2	26.8	27.3	27.1	27.1	27.0
CAZ	1.0	1.0	1.0	1.0	0.8	1.0	1.2	1.1	1.1	1.2	1.1
CHA	4.7	4.6	4.7	4.8	4.6	4.8	5.1	5.2	5.2	5.2	4.7
EUR	3.3	3.4	3.0	3.0	3.0	3.0	3.2	3.4	3.4	3.2	3.2
IND	3.0	3.0	3.1	3.2	3.2	3.2	3.3	3.4	3.4	3.5	3.5
JPN	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
LAM	1.8	1.7	1.9	1.9	2.0	2.0	2.1	2.1	2.2	2.3	2.4
MEA	0.7	0.9	0.8	0.8	0.9	0.8	1.0	0.8	0.9	0.7	0.7
NEU	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.6	0.6	0.5	0.5
OAS	2.9	2.9	3.0	3.0	3.0	3.1	3.2	3.2	3.3	3.5	3.5
REF	2.8	2.3	2.7	2.6	2.1	1.9	1.9	2.2	1.5	1.7	1.8
SSA	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2
USA	3.8	3.4	4.1	3.3	4.2	3.5	4.0	4.1	4.3	4.1	4.2

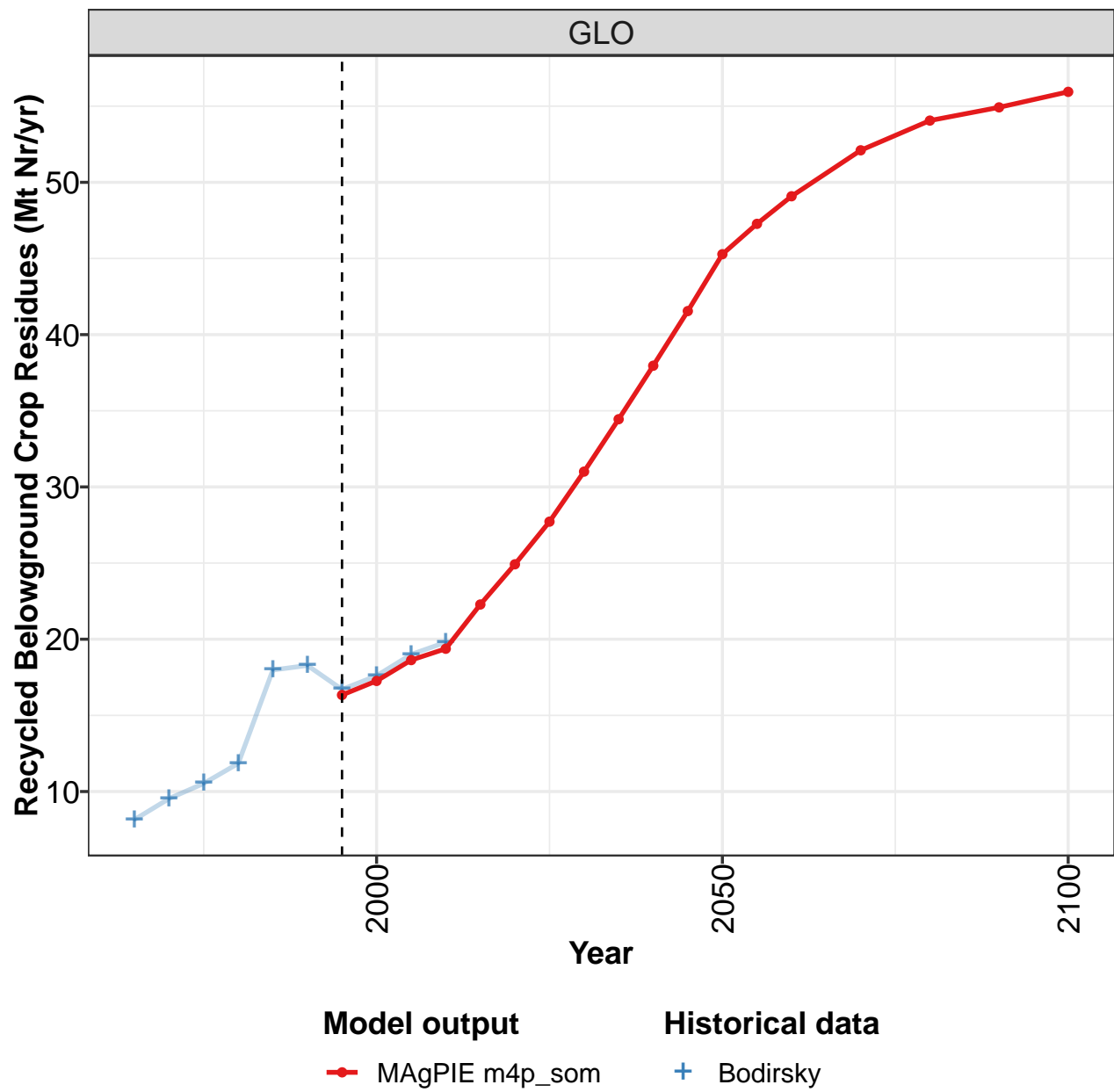
Table 1763: FAO — Resources—Nitrogen—Cropland Budget—Inputs—Recycled Aboveground Crop Residues (Mt Nr/yr) [PART 1/2]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
GLO	27.6	26.8	27.4	29.4	29.5	29.2	30.1	32.1	31.7	31.8
CAZ	1.1	0.8	1.2	1.1	1.2	0.9	1.0	1.2	1.1	1.1
CHA	4.6	4.6	4.4	4.7	4.9	5.1	5.1	5.3	5.4	5.5
EUR	3.2	3.3	2.9	3.6	3.2	3.1	3.0	3.5	3.3	3.1
IND	3.5	3.2	3.5	3.4	3.5	3.6	3.8	3.9	3.7	3.9
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	2.6	2.6	3.0	3.0	3.0	3.1	3.4	3.4	3.1	3.7
MEA	0.8	0.9	1.0	1.0	1.1	1.1	1.0	0.8	1.0	1.0
NEU	0.5	0.6	0.5	0.6	0.6	0.6	0.5	0.5	0.6	0.6
OAS	3.5	3.5	3.7	3.7	3.9	3.9	4.1	4.2	4.4	4.4
REF	2.2	2.3	1.8	2.2	2.2	2.2	2.2	2.7	2.6	1.9
SSA	1.2	1.3	1.3	1.3	1.4	1.5	1.5	1.6	1.5	1.7
USA	4.0	3.7	4.1	4.6	4.4	4.1	4.6	4.7	4.9	4.7

Table 1764: FAO — Resources—Nitrogen—Cropland Budget—Inputs—Recycled Aboveground Crop Residues (Mt Nr/yr) [PART 2/2]

57.1.12 Inputs—Recycled Belowground Crop Residues

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

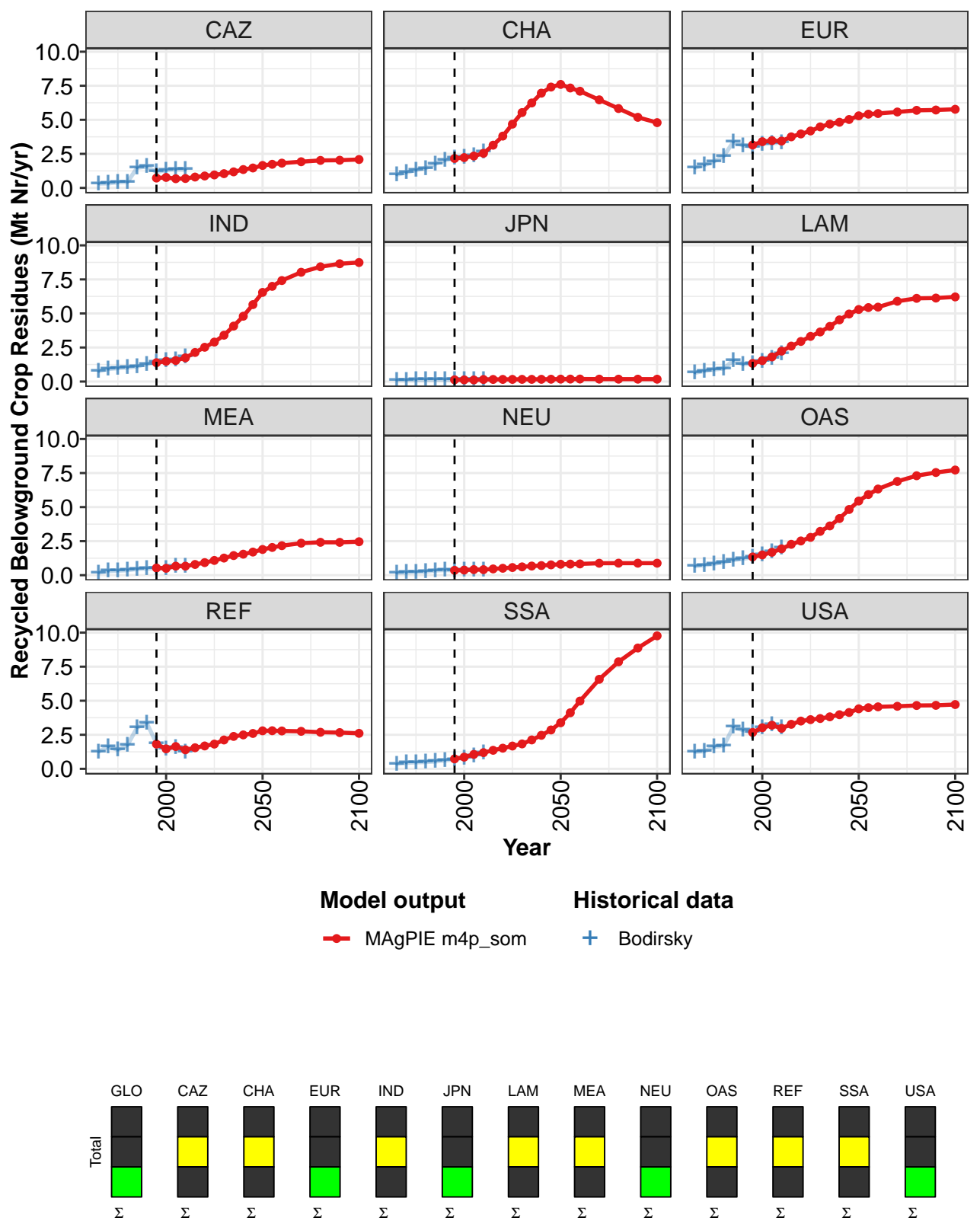


Figure 458: MAGPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs—Recycled Belowground Crop Residues (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	16.3	17.3	18.6	19.4	22.3	24.9	27.7	31.0	34.4	38.0	41.5
CAZ	0.7	0.8	0.7	0.7	0.8	0.9	1.0	1.0	1.2	1.3	1.5
CHA	2.2	2.2	2.3	2.5	3.1	3.8	4.7	5.5	6.2	7.0	7.4
EUR	3.2	3.4	3.5	3.4	3.8	4.0	4.2	4.5	4.7	4.8	5.0
IND	1.4	1.5	1.5	1.7	2.1	2.5	2.9	3.4	4.1	4.8	5.7
JPN	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
LAM	1.3	1.5	1.8	2.2	2.6	2.9	3.3	3.6	4.1	4.5	5.0
MEA	0.5	0.5	0.7	0.7	0.8	0.9	1.1	1.3	1.4	1.5	1.7
NEU	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8
OAS	1.3	1.5	1.7	1.9	2.3	2.5	2.8	3.2	3.6	4.2	4.8
REF	1.8	1.5	1.6	1.4	1.5	1.7	1.8	2.1	2.4	2.5	2.6
SSA	0.7	0.9	1.1	1.2	1.4	1.5	1.7	1.8	2.1	2.5	2.9
USA	2.7	3.0	3.2	3.0	3.3	3.5	3.6	3.7	3.8	4.0	4.1

Table 1765: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs—Recycled Belowground Crop Residues (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	45.3	47.3	49.1	52.1	54.1	54.9	55.9
CAZ	1.6	1.7	1.8	1.9	2.0	2.0	2.1
CHA	7.6	7.3	7.1	6.5	5.8	5.2	4.8
EUR	5.3	5.4	5.5	5.6	5.7	5.7	5.8
IND	6.5	7.0	7.4	8.0	8.4	8.6	8.7
JPN	0.2	0.2	0.2	0.2	0.2	0.2	0.2
LAM	5.3	5.4	5.5	5.9	6.1	6.1	6.2
MEA	1.9	2.0	2.2	2.4	2.4	2.4	2.5
NEU	0.8	0.8	0.8	0.9	0.9	0.9	0.9
OAS	5.4	5.9	6.3	6.9	7.3	7.5	7.7
REF	2.8	2.8	2.8	2.8	2.7	2.7	2.6
SSA	3.4	4.1	5.0	6.6	7.9	8.9	9.8
USA	4.4	4.5	4.6	4.6	4.7	4.7	4.7

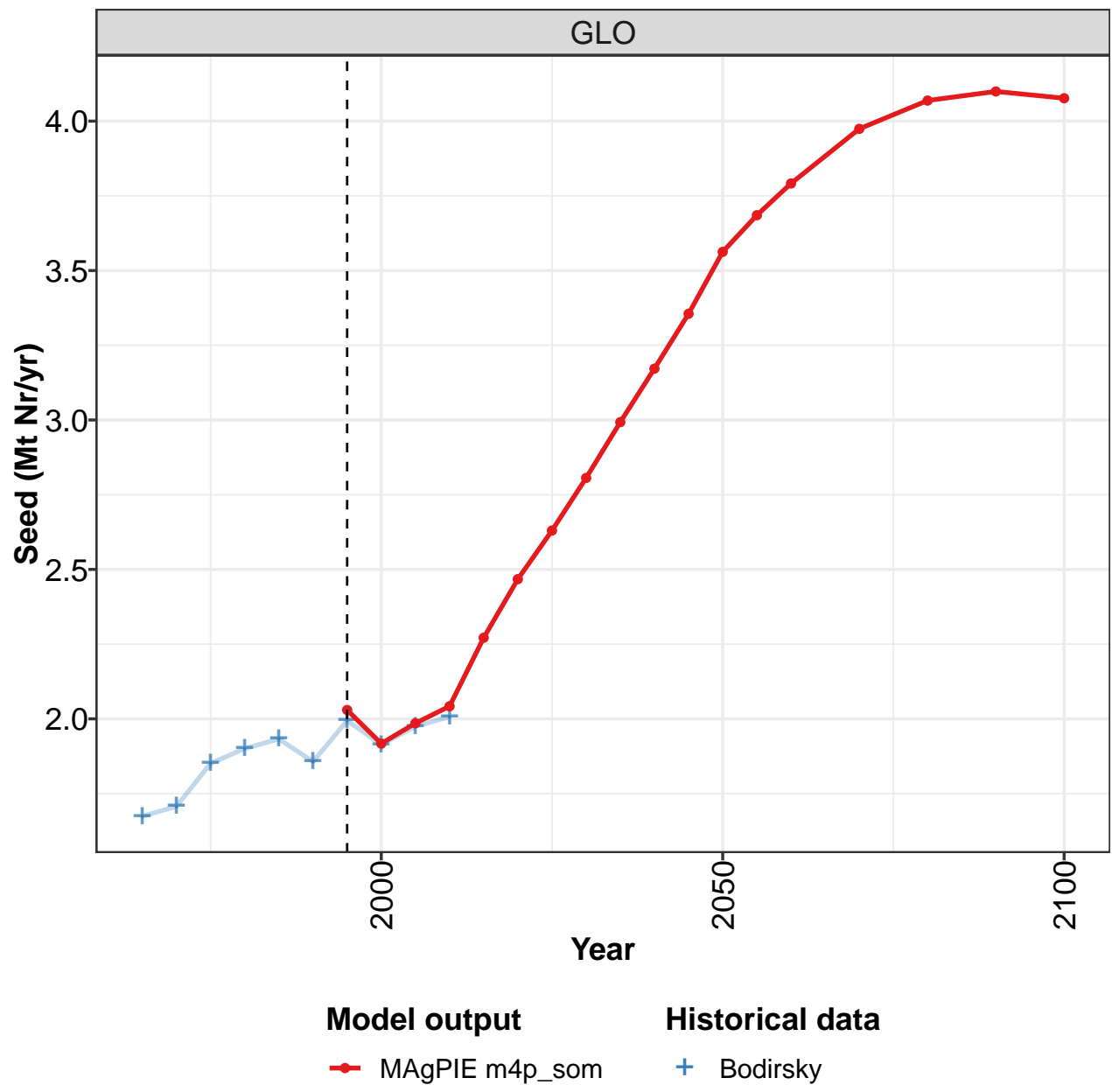
Table 1766: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs—Recycled Belowground Crop Residues (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	8.2	9.5	10.5	11.8	18.0	18.3	16.7	17.6	19.0	19.8
CAZ	0.3	0.3	0.4	0.4	1.5	1.6	1.2	1.3	1.4	1.3
CHA	1.0	1.1	1.3	1.4	1.8	2.0	2.2	2.3	2.4	2.6
EUR	1.5	1.7	1.9	2.3	3.4	3.1	3.0	3.2	3.3	3.3
IND	0.8	0.9	1.0	1.0	1.1	1.3	1.4	1.6	1.6	1.8
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.6	0.8	0.9	1.0	1.6	1.3	1.3	1.5	1.7	2.1
MEA	0.2	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.7	0.7
NEU	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4
OAS	0.7	0.7	0.8	1.0	1.1	1.2	1.3	1.5	1.7	2.0
REF	1.3	1.6	1.4	1.7	3.0	3.4	1.9	1.4	1.6	1.2
SSA	0.4	0.4	0.5	0.5	0.5	0.6	0.7	0.8	1.0	1.2
USA	1.2	1.3	1.6	1.7	3.1	2.8	2.7	3.0	3.2	3.0

Table 1767: Bodirsky — Resources—Nitrogen—Cropland Budget—Inputs—Recycled Belowground Crop Residues (Mt Nr/yr)

57.1.13 Inputs—Seed

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

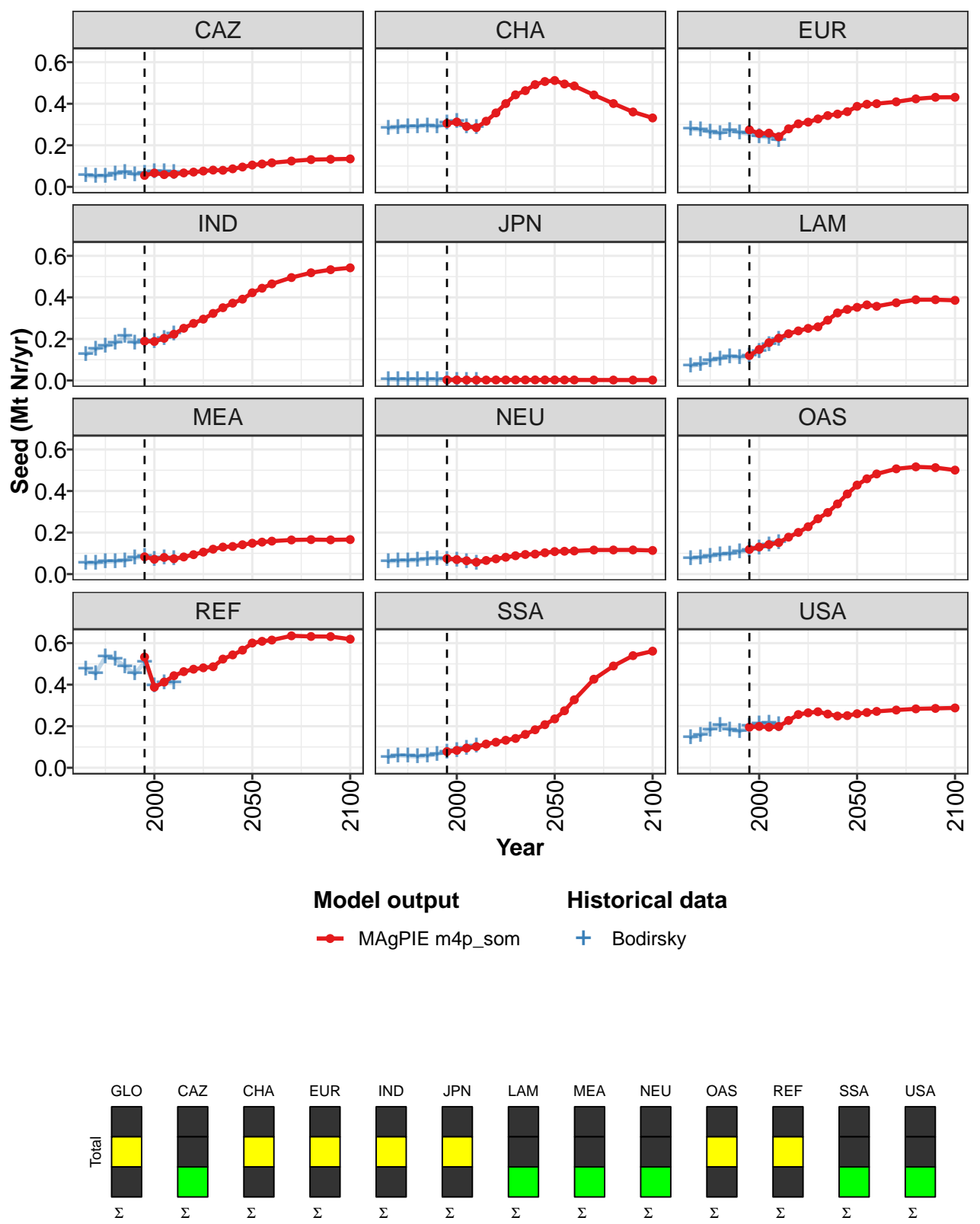


Figure 459: MAGPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs—Seed (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	2.03	1.92	1.99	2.04	2.27	2.47	2.63	2.81	2.99	3.17	3.36
CAZ	0.05	0.07	0.06	0.06	0.07	0.07	0.08	0.08	0.08	0.09	0.10
CHA	0.31	0.31	0.29	0.29	0.32	0.36	0.40	0.44	0.46	0.49	0.51
EUR	0.27	0.26	0.26	0.24	0.28	0.30	0.31	0.33	0.34	0.35	0.36
IND	0.19	0.19	0.20	0.22	0.25	0.27	0.30	0.32	0.35	0.37	0.39
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.12	0.15	0.18	0.20	0.22	0.24	0.25	0.26	0.29	0.33	0.34
MEA	0.08	0.07	0.08	0.07	0.08	0.09	0.11	0.12	0.13	0.13	0.14
NEU	0.08	0.07	0.06	0.06	0.07	0.07	0.08	0.09	0.09	0.10	0.10
OAS	0.12	0.13	0.14	0.15	0.18	0.20	0.23	0.27	0.30	0.34	0.39
REF	0.53	0.39	0.41	0.44	0.46	0.47	0.48	0.49	0.52	0.54	0.57
SSA	0.08	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.16	0.18	0.21
USA	0.20	0.20	0.20	0.20	0.23	0.26	0.26	0.27	0.26	0.25	0.25

Table 1768: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs—Seed (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	3.56	3.69	3.79	3.97	4.07	4.10	4.08
CAZ	0.10	0.11	0.12	0.12	0.13	0.13	0.13
CHA	0.51	0.49	0.49	0.44	0.40	0.36	0.33
EUR	0.39	0.40	0.40	0.41	0.42	0.43	0.43
IND	0.42	0.44	0.46	0.50	0.52	0.53	0.54
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.35	0.36	0.36	0.37	0.39	0.39	0.39
MEA	0.15	0.15	0.16	0.16	0.17	0.16	0.17
NEU	0.11	0.11	0.11	0.12	0.12	0.12	0.11
OAS	0.43	0.46	0.48	0.51	0.52	0.51	0.50
REF	0.60	0.61	0.61	0.64	0.63	0.63	0.62
SSA	0.24	0.27	0.33	0.43	0.49	0.54	0.56
USA	0.26	0.27	0.27	0.28	0.28	0.29	0.29

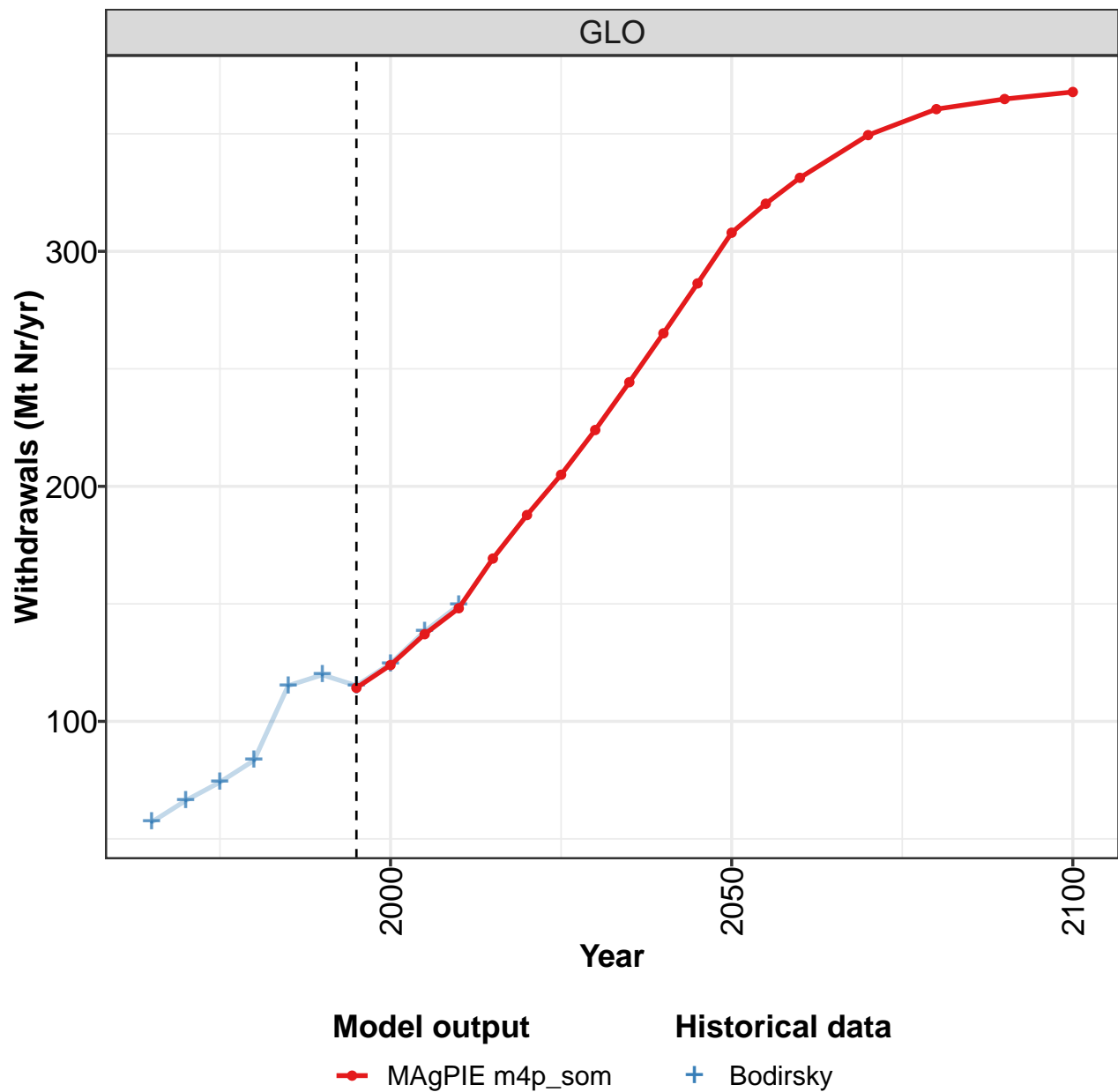
Table 1769: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Inputs—Seed (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.67	1.71	1.85	1.90	1.93	1.86	1.99	1.91	1.97	2.01
CAZ	0.05	0.05	0.05	0.06	0.07	0.06	0.07	0.07	0.07	0.07
CHA	0.28	0.29	0.29	0.29	0.29	0.29	0.31	0.31	0.29	0.29
EUR	0.28	0.28	0.26	0.26	0.27	0.26	0.26	0.24	0.24	0.22
IND	0.12	0.15	0.16	0.18	0.21	0.18	0.19	0.19	0.20	0.22
JPN	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.07	0.08	0.10	0.10	0.11	0.11	0.12	0.14	0.17	0.20
MEA	0.05	0.05	0.06	0.06	0.07	0.08	0.08	0.07	0.08	0.07
NEU	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.05
OAS	0.08	0.08	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15
REF	0.48	0.45	0.54	0.52	0.49	0.45	0.51	0.39	0.41	0.41
SSA	0.05	0.06	0.06	0.05	0.06	0.07	0.08	0.08	0.09	0.10
USA	0.14	0.16	0.18	0.20	0.18	0.18	0.20	0.21	0.21	0.21

Table 1770: Bodirsky — Resources—Nitrogen—Cropland Budget—Inputs—Seed (Mt Nr/yr)

57.1.14 Withdrawals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

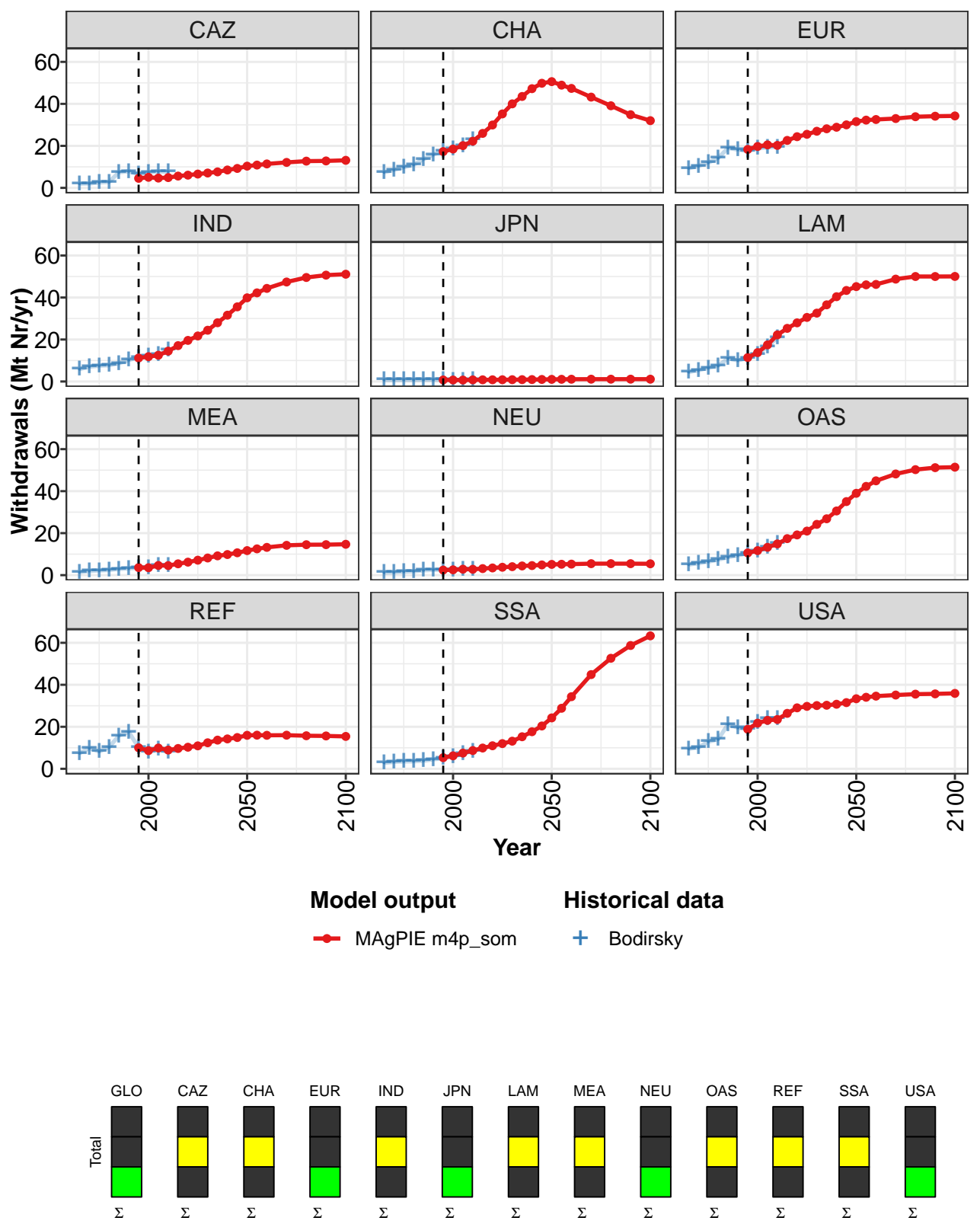


Figure 460: MAGPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Withdrawals (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	114	124	137	148	169	188	205	224	244	265	286
CAZ	5	5	5	5	6	6	7	7	8	9	9
CHA	17	19	20	22	26	30	35	40	44	47	50
EUR	18	20	20	20	23	24	26	27	28	29	30
IND	11	12	13	14	17	20	22	24	28	32	36
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	11	14	17	22	25	28	31	33	37	40	43
MEA	4	4	5	5	5	6	7	8	9	10	11
NEU	2	3	3	3	3	3	4	4	4	5	5
OAS	11	12	13	15	17	19	21	24	27	31	35
REF	10	9	10	9	10	10	11	12	14	14	15
SSA	5	6	7	9	10	11	12	13	15	18	20
USA	19	22	23	23	26	29	30	30	30	31	32

Table 1771: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Withdrawals (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	308	320	331	349	361	365	368
CAZ	10	11	11	12	13	13	13
CHA	51	49	47	43	39	35	32
EUR	32	32	33	33	34	34	34
IND	40	42	44	47	50	51	51
JPN	1	1	1	1	1	1	1
LAM	45	46	46	49	50	50	50
MEA	12	13	13	14	14	15	15
NEU	5	5	5	5	5	5	5
OAS	39	42	45	48	50	51	51
REF	16	16	16	16	16	16	15
SSA	24	29	34	45	53	59	63
USA	33	34	35	35	36	36	36

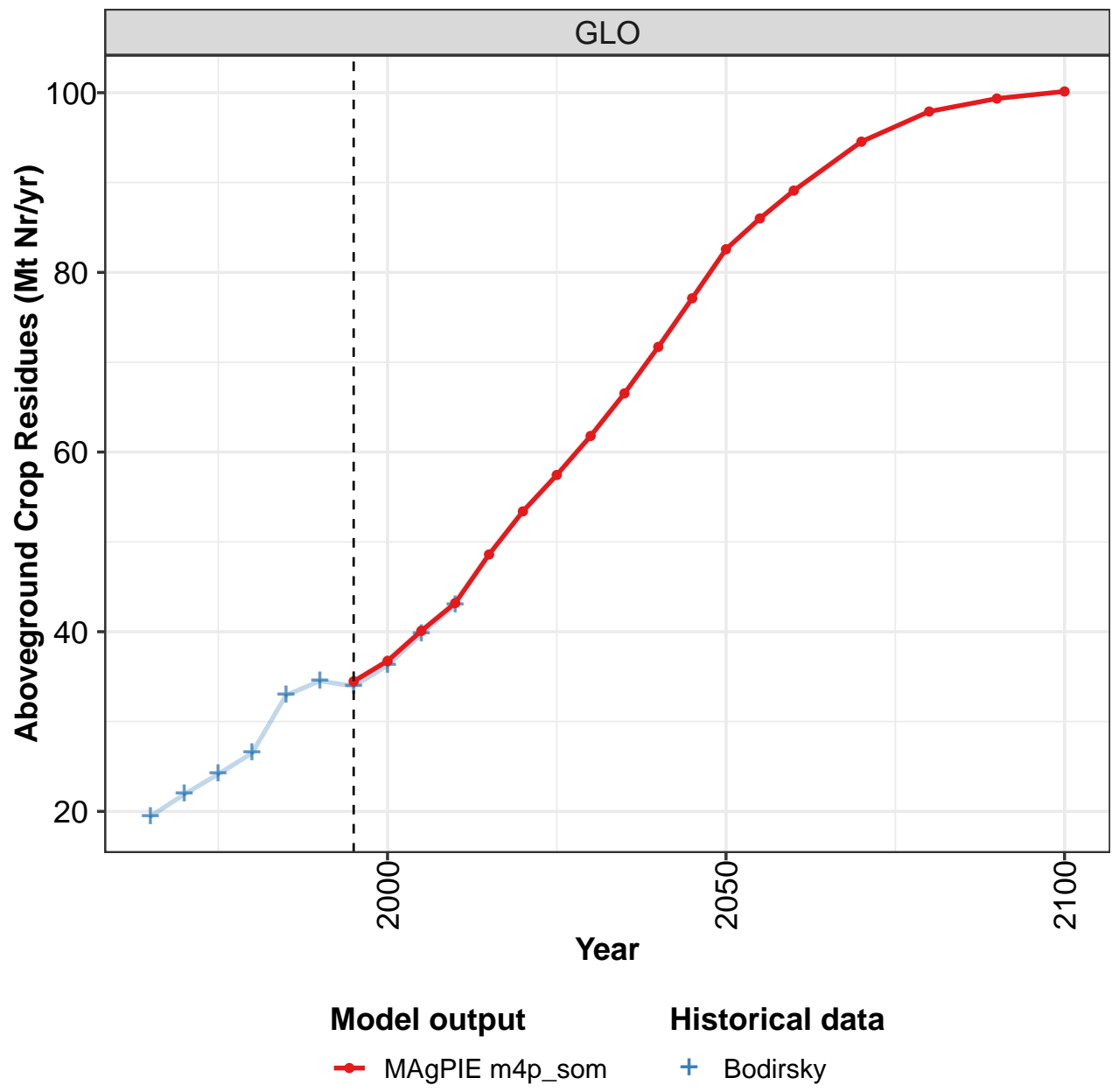
Table 1772: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Withdrawals (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	57	66	74	83	115	120	115	125	138	149
CAZ	2	2	3	3	7	8	7	7	8	8
CHA	7	9	10	11	14	16	17	19	20	23
EUR	9	10	12	14	19	18	17	19	19	19
IND	6	7	7	8	9	10	12	12	13	15
JPN	1	1	1	1	1	1	1	1	1	1
LAM	4	5	7	8	11	10	11	13	17	21
MEA	1	2	2	2	3	3	3	3	5	5
NEU	1	1	2	2	2	3	2	2	3	3
OAS	5	6	6	7	9	9	10	12	13	15
REF	7	10	8	10	16	18	10	8	9	8
SSA	3	3	3	4	4	4	5	6	7	8
USA	10	10	13	14	21	20	19	22	24	24

Table 1773: Bodirsky — Resources—Nitrogen—Cropland Budget—Withdrawals (Mt Nr/yr)

57.1.15 Withdrawals—Aboveground Crop Residues

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

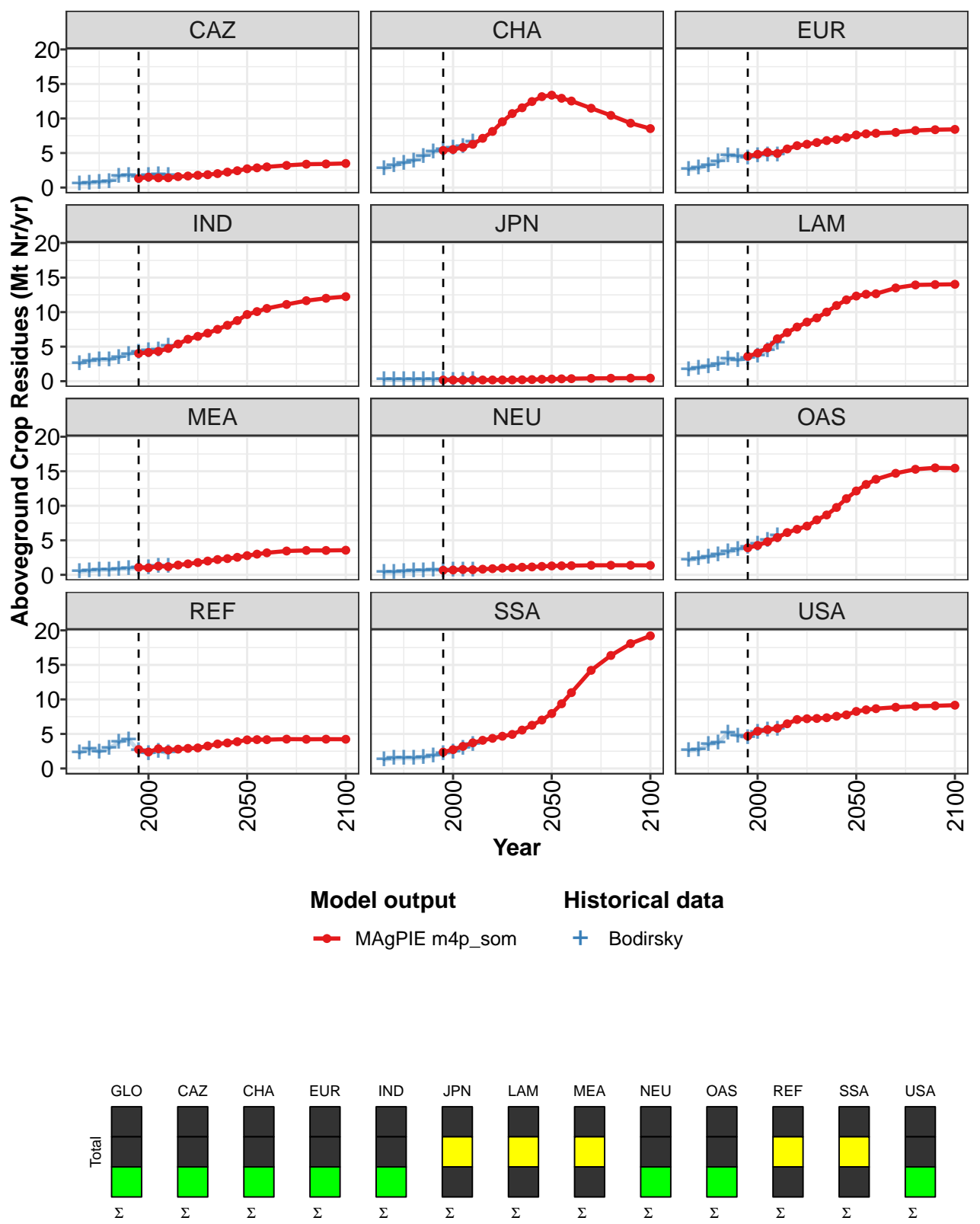


Figure 461: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Withdrawals—Aboveground Crop Residues (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	34	37	40	43	49	53	57	62	67	72	77
CAZ	1	2	1	1	2	2	2	2	2	2	2
CHA	5	6	6	6	7	8	10	11	12	12	13
EUR	5	5	5	5	6	6	6	7	7	7	7
IND	4	4	4	5	5	6	6	7	8	8	9
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	4	4	5	6	7	8	9	9	10	11	12
MEA	1	1	1	1	1	2	2	2	2	2	3
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	4	4	5	5	6	7	7	8	9	10	11
REF	3	2	3	3	3	3	3	3	4	4	4
SSA	2	3	3	4	4	4	5	5	6	6	7
USA	5	5	6	6	6	7	7	7	7	8	8

Table 1774: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Withdrawals—Aboveground Crop Residues (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	83	86	89	95	98	99	100
CAZ	3	3	3	3	3	3	3
CHA	13	13	13	11	10	9	9
EUR	8	8	8	8	8	8	8
IND	10	10	11	11	12	12	12
JPN	0	0	0	0	0	0	0
LAM	12	13	13	14	14	14	14
MEA	3	3	3	3	4	4	4
NEU	1	1	1	1	1	1	1
OAS	12	13	14	15	15	15	15
REF	4	4	4	4	4	4	4
SSA	8	9	11	14	16	18	19
USA	8	8	9	9	9	9	9

Table 1775: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Withdrawals—Aboveground Crop Residues (Mt Nr/yr) [PART 2/2]

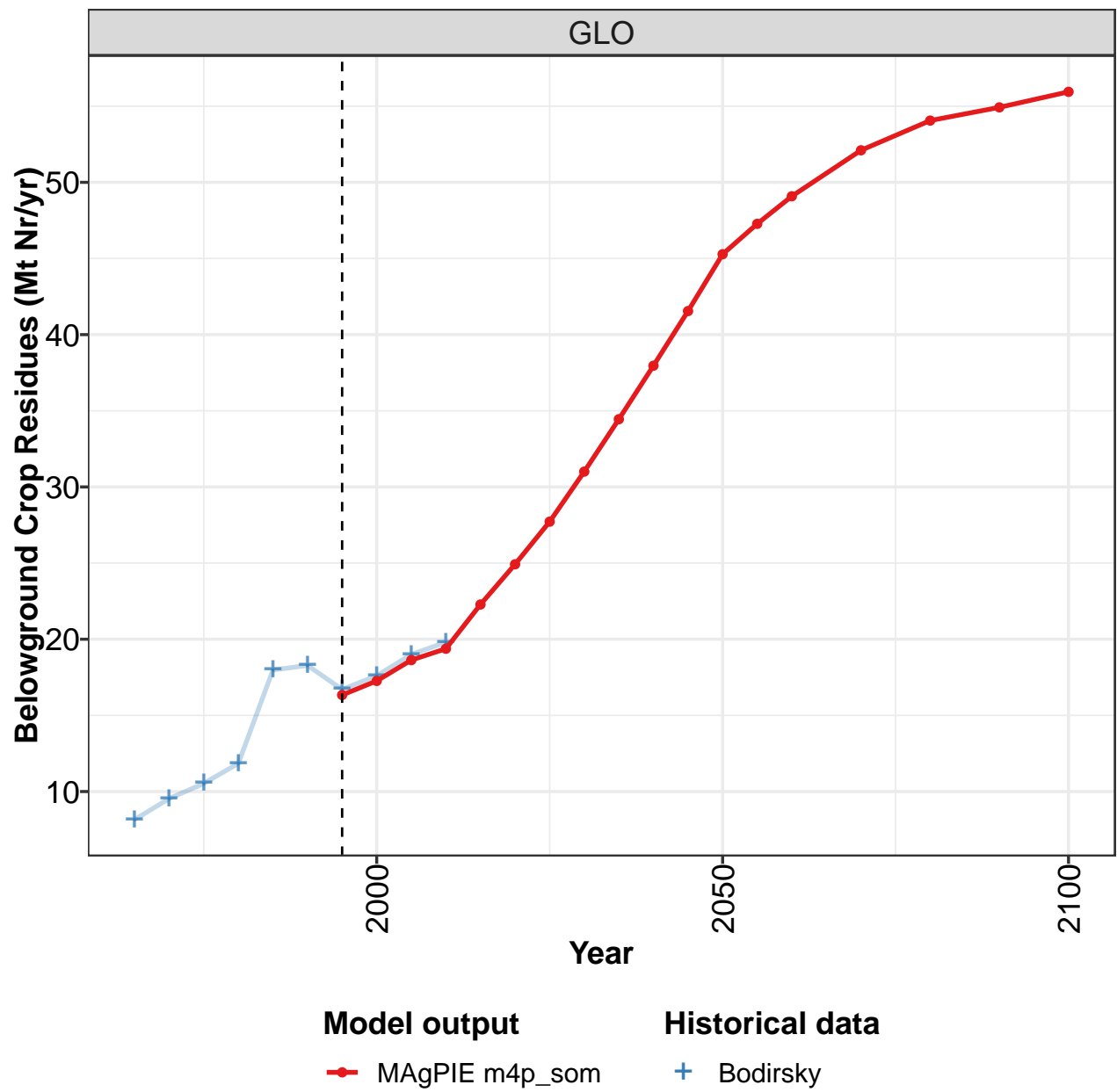
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	19.5	21.9	24.1	26.5	32.9	34.5	33.9	36.2	39.7	43.0
CAZ	0.6	0.6	0.8	0.8	1.7	1.7	1.6	1.8	1.8	1.8
CHA	2.8	3.1	3.5	3.9	4.6	5.1	5.5	5.7	6.0	6.6
EUR	2.6	2.8	3.2	3.7	4.6	4.5	4.3	4.6	4.8	4.8
IND	2.5	2.9	3.1	3.1	3.4	3.9	4.3	4.4	4.5	5.1
JPN	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
LAM	1.7	1.9	2.2	2.5	3.2	3.0	3.3	3.7	4.4	5.5
MEA	0.5	0.6	0.7	0.7	0.8	0.9	1.0	1.0	1.3	1.3
NEU	0.4	0.4	0.5	0.5	0.6	0.7	0.6	0.7	0.7	0.7
OAS	2.1	2.3	2.6	2.9	3.3	3.6	4.0	4.4	5.0	5.7
REF	2.3	2.8	2.4	2.9	3.8	4.2	2.5	2.1	2.5	2.2
SSA	1.3	1.4	1.5	1.5	1.6	1.9	2.1	2.4	2.9	3.4
USA	2.6	2.7	3.4	3.7	5.1	4.7	4.5	5.2	5.6	5.7

Table 1776: Bodirsky — Resources—Nitrogen—Cropland Budget—Withdrawals—Aboveground Crop Residues (Mt Nr/yr)



57.1.16 Withdrawals—Belowground Crop Residues

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

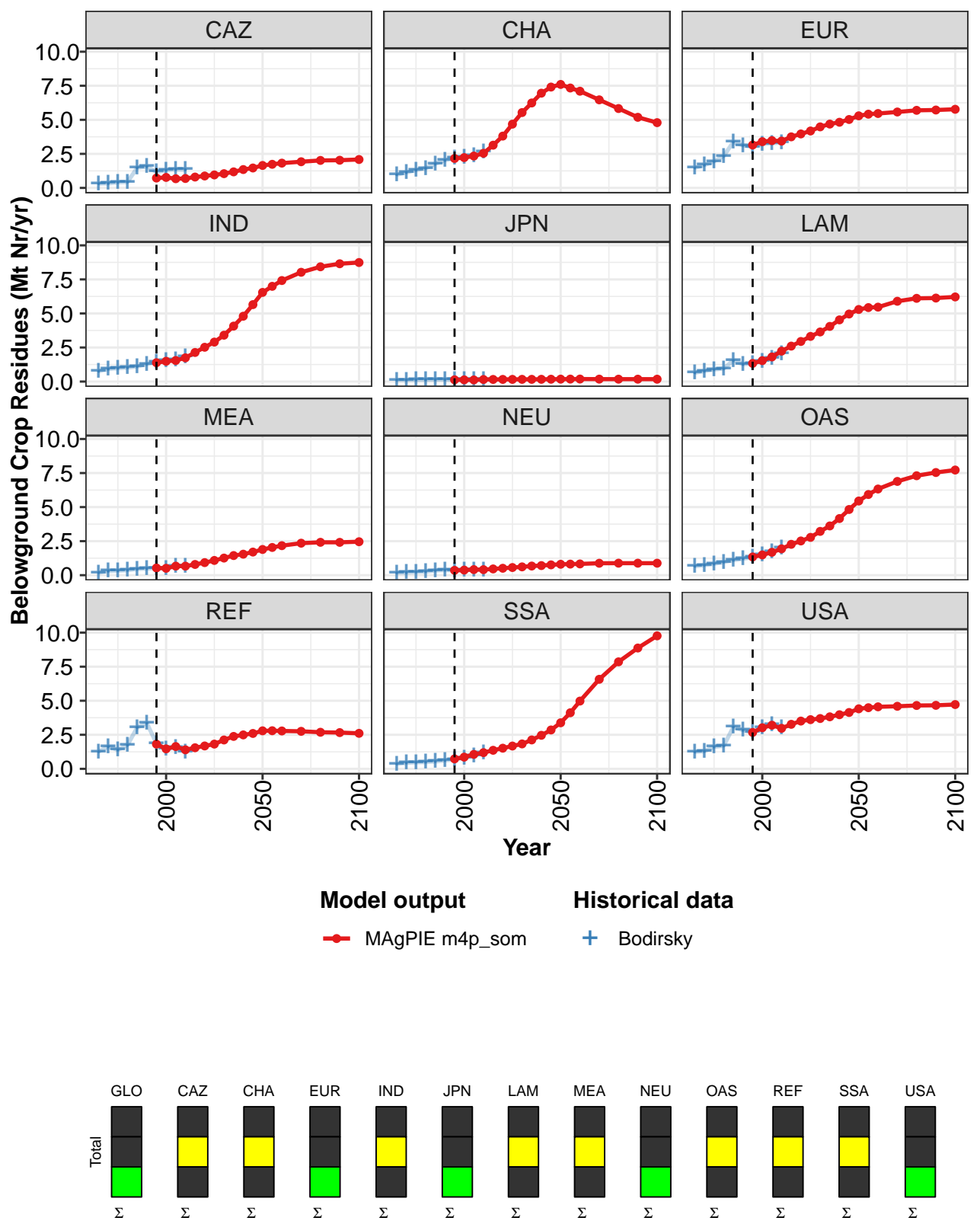


Figure 462: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Withdrawals—Belowground Crop Residues (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	16.3	17.3	18.6	19.4	22.3	24.9	27.7	31.0	34.4	38.0	41.5
CAZ	0.7	0.8	0.7	0.7	0.8	0.9	1.0	1.0	1.2	1.3	1.5
CHA	2.2	2.2	2.3	2.5	3.1	3.8	4.7	5.5	6.2	7.0	7.4
EUR	3.2	3.4	3.5	3.4	3.8	4.0	4.2	4.5	4.7	4.8	5.0
IND	1.4	1.5	1.5	1.7	2.1	2.5	2.9	3.4	4.1	4.8	5.7
JPN	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
LAM	1.3	1.5	1.8	2.2	2.6	2.9	3.3	3.6	4.1	4.5	5.0
MEA	0.5	0.5	0.7	0.7	0.8	0.9	1.1	1.3	1.4	1.5	1.7
NEU	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8
OAS	1.3	1.5	1.7	1.9	2.3	2.5	2.8	3.2	3.6	4.2	4.8
REF	1.8	1.5	1.6	1.4	1.5	1.7	1.8	2.1	2.4	2.5	2.6
SSA	0.7	0.9	1.1	1.2	1.4	1.5	1.7	1.8	2.1	2.5	2.9
USA	2.7	3.0	3.2	3.0	3.3	3.5	3.6	3.7	3.8	4.0	4.1

Table 1777: MAgPIE m4p.som — Resources—Nitrogen—Cropland Budget—Withdrawals—Belowground Crop Residues (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	45.3	47.3	49.1	52.1	54.1	54.9	55.9
CAZ	1.6	1.7	1.8	1.9	2.0	2.0	2.1
CHA	7.6	7.3	7.1	6.5	5.8	5.2	4.8
EUR	5.3	5.4	5.5	5.6	5.7	5.7	5.8
IND	6.5	7.0	7.4	8.0	8.4	8.6	8.7
JPN	0.2	0.2	0.2	0.2	0.2	0.2	0.2
LAM	5.3	5.4	5.5	5.9	6.1	6.1	6.2
MEA	1.9	2.0	2.2	2.4	2.4	2.4	2.5
NEU	0.8	0.8	0.8	0.9	0.9	0.9	0.9
OAS	5.4	5.9	6.3	6.9	7.3	7.5	7.7
REF	2.8	2.8	2.8	2.8	2.7	2.7	2.6
SSA	3.4	4.1	5.0	6.6	7.9	8.9	9.8
USA	4.4	4.5	4.6	4.6	4.7	4.7	4.7

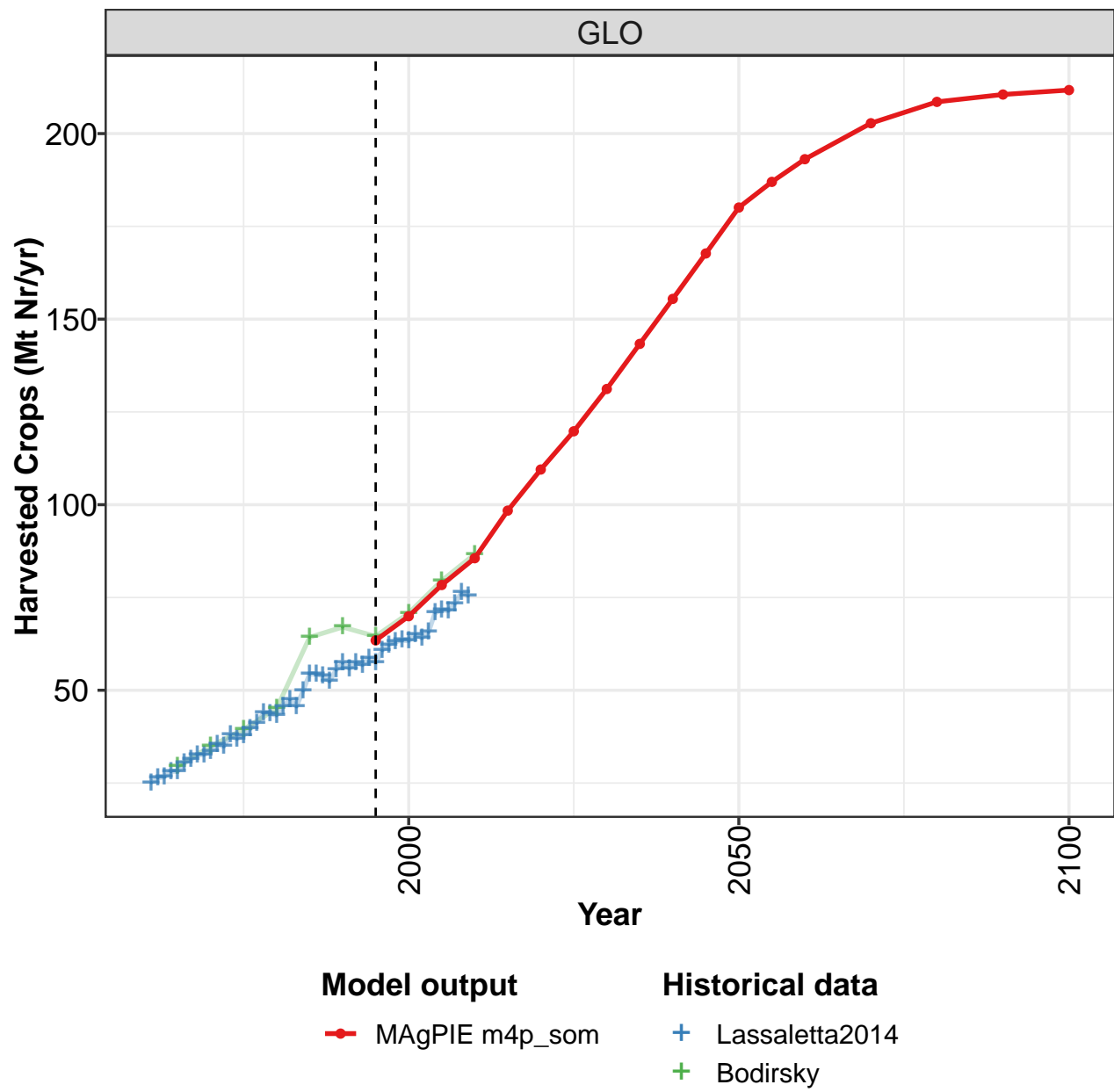
Table 1778: MAgPIE m4p.som — Resources—Nitrogen—Cropland Budget—Withdrawals—Belowground Crop Residues (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	8.2	9.5	10.5	11.8	18.0	18.3	16.7	17.6	19.0	19.8
CAZ	0.3	0.3	0.4	0.4	1.5	1.6	1.2	1.3	1.4	1.3
CHA	1.0	1.1	1.3	1.4	1.8	2.0	2.2	2.3	2.4	2.6
EUR	1.5	1.7	1.9	2.3	3.4	3.1	3.0	3.2	3.3	3.3
IND	0.8	0.9	1.0	1.0	1.1	1.3	1.4	1.6	1.6	1.8
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.6	0.8	0.9	1.0	1.6	1.3	1.3	1.5	1.7	2.1
MEA	0.2	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.7	0.7
NEU	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4
OAS	0.7	0.7	0.8	1.0	1.1	1.2	1.3	1.5	1.7	2.0
REF	1.3	1.6	1.4	1.7	3.0	3.4	1.9	1.4	1.6	1.2
SSA	0.4	0.4	0.5	0.5	0.5	0.6	0.7	0.8	1.0	1.2
USA	1.2	1.3	1.6	1.7	3.1	2.8	2.7	3.0	3.2	3.0

Table 1779: Bodirsky — Resources—Nitrogen—Cropland Budget—Withdrawals—Belowground Crop Residues (Mt Nr/yr)

57.1.17 Withdrawals—Harvested Crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

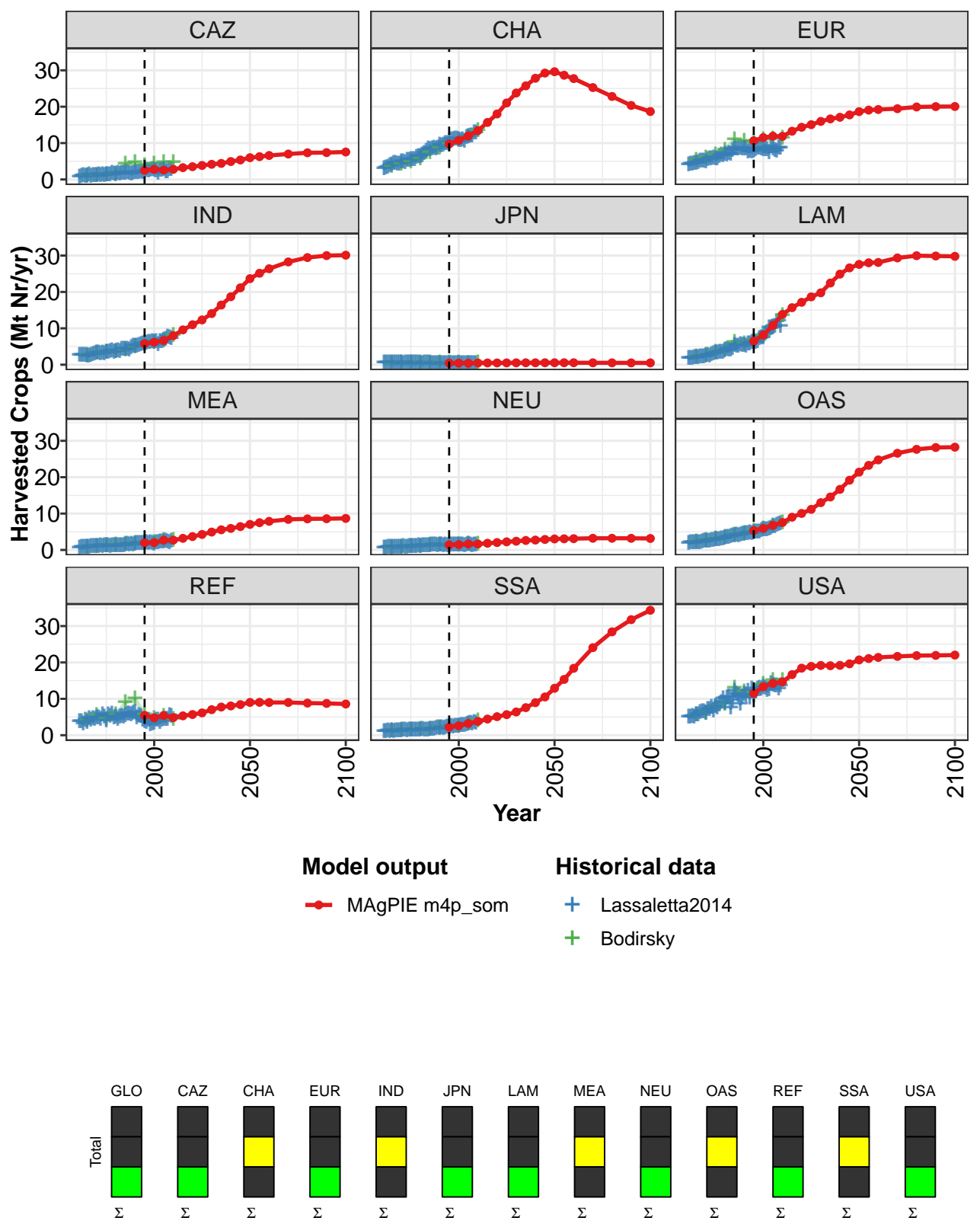


Figure 463: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Withdrawals—Harvested Crops (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	63	70	78	86	98	109	120	131	143	155	168
CAZ	3	3	3	3	3	4	4	4	4	5	5
CHA	10	11	12	13	16	18	21	24	26	28	29
EUR	11	12	12	12	13	14	15	16	17	17	18
IND	6	6	7	8	10	11	12	14	16	19	21
JPN	0	0	0	0	0	0	1	1	1	1	1
LAM	6	8	11	14	16	17	19	20	22	25	27
MEA	2	2	3	3	3	4	4	5	6	6	6
NEU	1	1	2	2	2	2	2	2	3	3	3
OAS	5	6	7	8	9	10	11	13	15	17	19
REF	5	5	5	5	5	6	6	7	8	8	8
SSA	2	3	3	4	4	5	6	6	8	9	11
USA	11	13	14	15	17	18	19	19	19	19	20

Table 1780: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Withdrawals—Harvested Crops (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	180	187	193	203	209	211	212
CAZ	6	6	7	7	7	7	8
CHA	30	29	28	25	23	20	19
EUR	19	19	19	19	20	20	20
IND	24	25	26	28	29	30	30
JPN	1	1	1	1	1	1	1
LAM	28	28	28	29	30	30	30
MEA	7	7	8	8	9	9	9
NEU	3	3	3	3	3	3	3
OAS	21	23	25	27	28	28	28
REF	9	9	9	9	9	9	9
SSA	13	15	18	24	28	32	34
USA	21	21	21	22	22	22	22

Table 1781: MAgPIE m4p\_som — Resources—Nitrogen—Cropland Budget—Withdrawals—Harvested Crops (Mt Nr/yr) [PART 2/2]

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
GLO	25.1	26.3	26.6	28.1	28.2	30.3	31.3	32.5	32.6	33.5	35.5
CAZ	0.6	0.9	1.0	1.0	1.0	1.2	0.9	1.2	1.2	1.0	1.3
CHA	3.0	3.3	3.5	3.9	4.0	4.4	4.4	4.3	4.3	4.8	5.0
EUR	4.0	4.2	4.2	4.3	4.5	4.7	5.1	5.1	5.1	5.0	5.5
IND	2.6	2.6	2.6	2.7	2.5	2.4	2.7	2.9	2.9	3.2	3.2
JPN	0.5	0.5	0.5	0.4	0.5	0.4	0.5	0.5	0.5	0.4	0.4
LAM	1.7	1.8	1.9	2.0	2.0	2.1	2.2	2.2	2.3	2.4	2.5
MEA	0.5	0.7	0.7	0.7	0.7	0.9	1.0	1.0	1.0	1.0	1.0
NEU	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.9
OAS	1.9	2.0	2.0	2.1	2.1	2.1	2.1	2.3	2.4	2.5	2.5
REF	3.7	3.8	3.1	4.1	3.5	4.5	4.2	4.6	4.4	4.9	4.7
SSA	1.0	1.1	1.1	1.1	1.1	1.1	1.3	1.2	1.3	1.3	1.4
USA	5.0	5.0	5.3	5.0	5.7	5.7	6.2	6.4	6.5	6.2	7.1

Table 1782: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Withdrawals—Harvested Crops (Mt Nr/yr) [PART 1/5]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
GLO	34.8	37.9	36.9	37.8	39.6	41.1	43.9	43.7	43.3	45.6	47.5
CAZ	1.1	1.2	1.1	1.3	1.4	1.4	1.6	1.5	1.4	1.7	1.6
CHA	4.7	5.2	5.3	5.5	5.5	5.4	6.1	6.4	6.3	6.6	7.2
EUR	5.7	5.8	6.0	5.7	5.6	6.4	6.8	6.6	6.9	6.8	7.2
IND	3.0	3.3	3.0	3.5	3.4	3.7	3.8	3.5	3.6	3.9	3.8
JPN	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.4
LAM	2.5	2.7	3.0	3.2	3.3	3.5	3.4	3.5	3.8	4.2	4.1
MEA	1.2	1.0	1.1	1.1	1.2	1.1	1.2	1.1	1.2	1.2	1.3
NEU	0.9	0.8	0.9	1.0	1.1	1.1	1.0	1.1	1.1	1.1	1.2
OAS	2.4	2.7	2.7	2.8	2.9	2.9	3.1	3.1	3.3	3.5	3.5
REF	4.4	5.7	5.1	3.9	5.7	5.2	5.9	4.7	5.0	4.3	5.1
SSA	1.4	1.2	1.5	1.4	1.4	1.4	1.5	1.4	1.5	1.6	1.5
USA	7.1	7.8	6.7	7.9	7.6	8.7	9.0	10.1	8.7	10.2	10.5

Table 1783: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Withdrawals—Harvested Crops (Mt Nr/yr) [PART 2/5]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GLO	45.6	49.8	54.4	54.3	53.9	52.4	55.5	57.3	55.9	57.5	56.8
CAZ	1.8	1.8	1.8	2.0	1.8	1.5	1.7	1.9	1.9	1.9	2.1
CHA	7.9	8.4	8.1	8.4	8.7	8.5	8.6	9.5	9.3	9.4	9.9
EUR	6.9	8.1	8.4	8.4	8.5	8.6	8.5	8.3	8.5	7.6	7.7
IND	4.4	4.4	4.3	4.3	4.1	4.7	5.2	5.1	5.2	5.4	5.6
JPN	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3
LAM	4.0	4.4	5.4	5.0	5.2	5.5	5.4	5.3	5.2	5.7	5.8
MEA	1.3	1.2	1.5	1.6	1.5	1.6	1.5	1.6	1.8	1.8	1.7
NEU	1.2	1.2	1.2	1.4	1.4	1.4	1.3	1.4	1.4	1.2	1.3
OAS	3.7	3.8	4.0	4.1	3.9	4.2	4.4	4.4	4.5	4.6	4.7
REF	5.2	4.9	5.5	5.8	5.9	5.5	6.0	6.3	4.8	5.4	5.2
SSA	1.4	1.4	1.6	1.8	1.7	1.9	2.0	1.9	2.1	1.9	2.1
USA	7.4	9.7	12.1	11.4	10.8	8.6	10.5	11.2	10.8	12.2	10.3

Table 1784: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Withdrawals—Harvested Crops (Mt Nr/yr) [PART 3/5]

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
GLO	58.7	57.5	60.7	62.2	63.1	63.5	63.3	65.1	64.0	65.7	70.9
CAZ	1.9	2.2	2.5	2.3	2.5	2.7	2.5	2.3	1.7	2.5	2.5
CHA	9.9	10.3	10.9	11.0	11.2	11.2	10.9	10.8	11.0	10.5	11.5
EUR	7.6	7.8	8.2	8.6	8.6	8.5	8.2	8.2	8.3	7.4	9.1
IND	5.7	5.8	6.0	6.2	6.2	6.4	6.3	6.3	5.6	6.5	6.4
JPN	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
LAM	6.2	6.2	6.2	6.4	7.2	7.3	7.5	8.5	8.8	10.1	9.9
MEA	1.9	1.8	2.1	1.8	2.0	1.8	1.7	1.9	2.1	2.3	2.3
NEU	1.2	1.3	1.3	1.4	1.4	1.3	1.3	1.3	1.4	1.3	1.5
OAS	4.6	4.9	5.0	4.9	5.1	5.4	5.6	5.5	5.7	5.9	6.1
REF	4.2	3.7	3.5	4.2	2.9	3.2	3.4	4.1	4.2	3.5	4.2
SSA	2.2	2.2	2.4	2.4	2.4	2.5	2.5	2.6	2.7	2.8	2.9
USA	12.8	11.0	12.2	12.7	13.1	12.8	13.1	13.0	12.3	12.5	14.3

Table 1785: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Withdrawals—Harvested Crops (Mt Nr/yr) [PART 4/5]

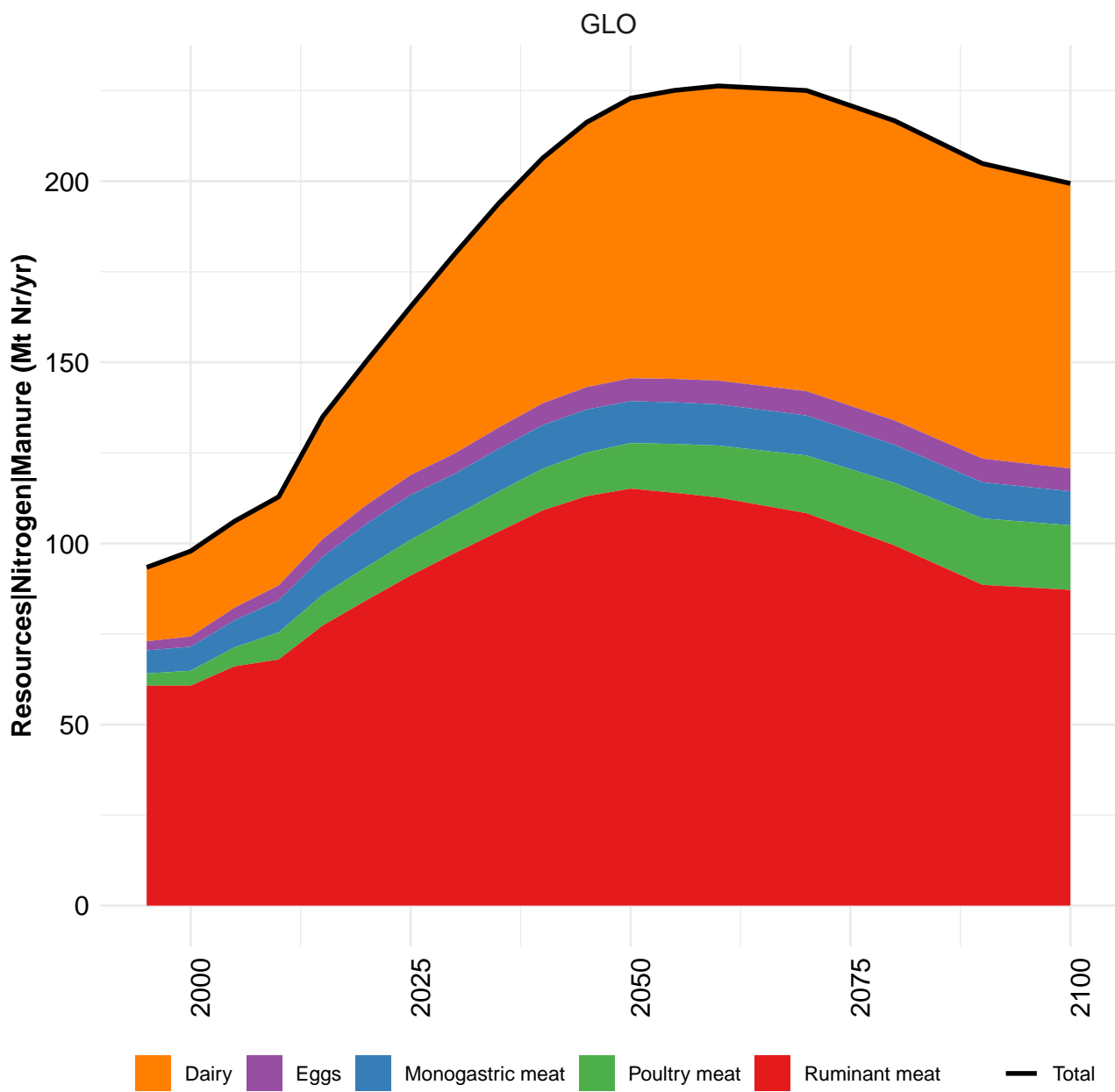
	2005	2006	2007	2008	2009
GLO	71.6	71.4	73.3	76.4	75.4
CAZ	2.7	2.2	2.3	2.8	2.7
CHA	11.7	12.0	12.1	12.9	12.9
EUR	8.3	8.0	7.7	8.7	8.6
IND	6.8	6.9	7.6	7.5	7.2
JPN	0.3	0.3	0.3	0.4	0.3
LAM	10.2	10.6	11.9	12.1	10.5
MEA	2.3	2.4	2.3	2.0	2.4
NEU	1.5	1.5	1.3	1.4	1.5
OAS	6.4	6.5	6.8	7.1	7.3
REF	4.3	4.3	4.3	5.4	5.1
SSA	3.1	3.2	3.1	3.4	3.4
USA	13.9	13.5	13.6	12.7	13.5

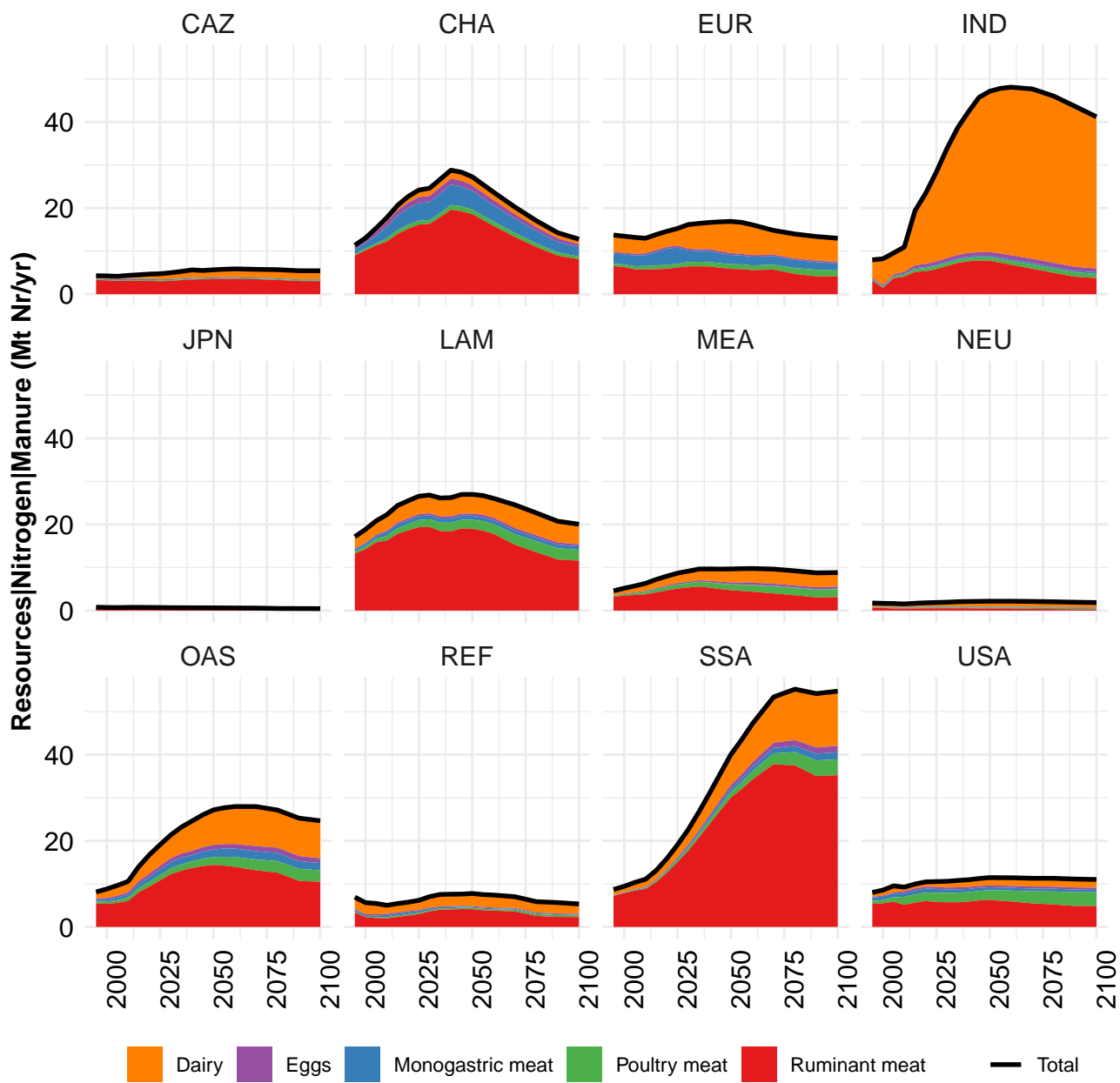
Table 1786: Lassaletta2014 — Resources—Nitrogen—Cropland Budget—Withdrawals—Harvested Crops (Mt Nr/yr) [PART 5/5]

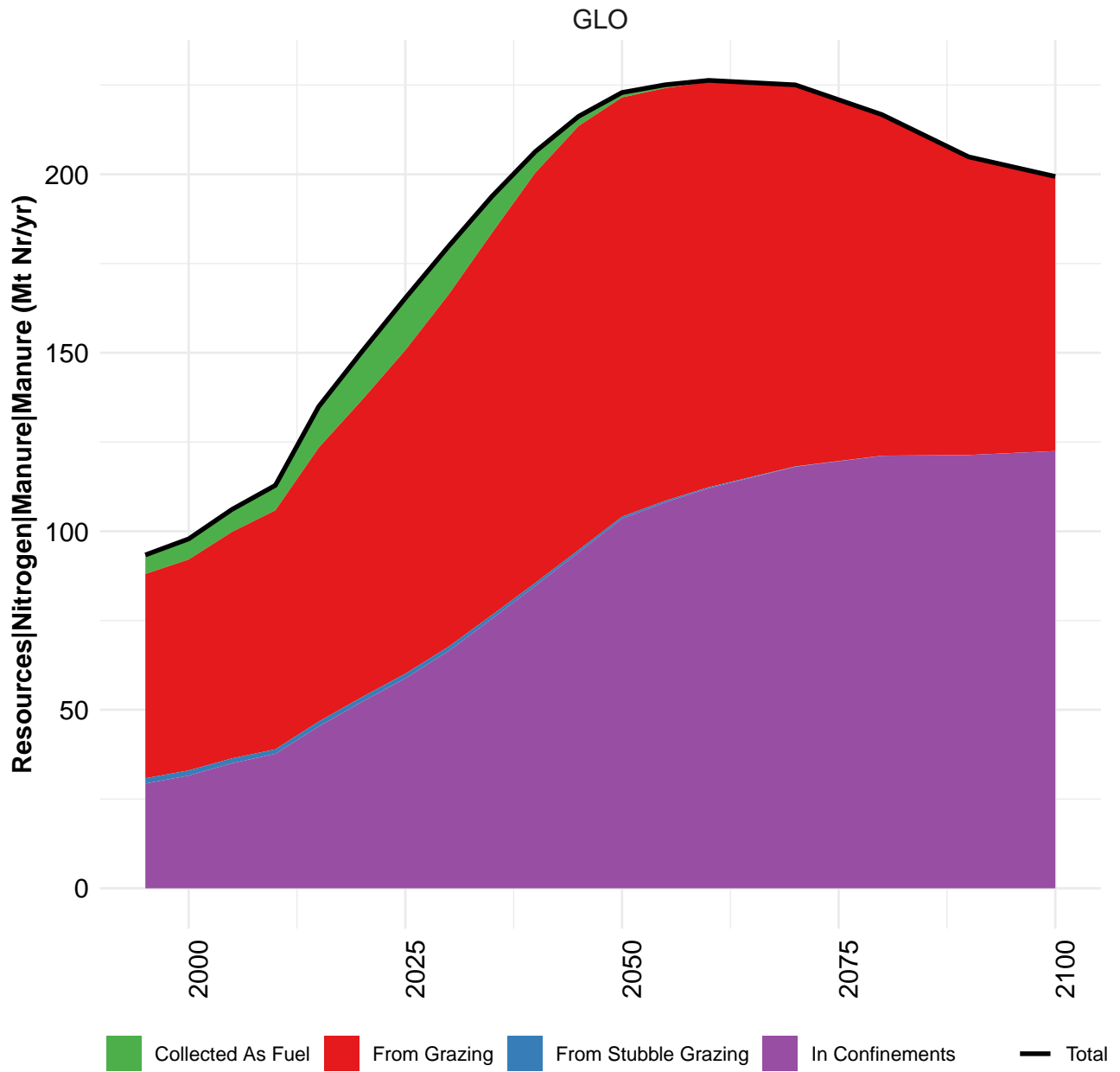
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	29.5	34.9	39.5	45.1	64.3	67.0	64.5	70.8	79.5	86.6
CAZ	1.0	1.1	1.4	1.5	4.3	4.6	3.8	4.3	4.6	4.6
CHA	3.7	4.3	4.9	5.6	7.3	8.6	9.8	10.8	11.9	13.5
EUR	5.3	5.9	6.8	8.1	11.0	10.6	10.1	10.9	11.2	11.4
IND	2.6	3.2	3.4	3.6	4.2	5.0	5.8	6.2	6.6	8.1
JPN	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.5
LAM	2.2	2.7	3.5	4.1	6.2	5.7	6.5	7.9	10.4	13.4
MEA	0.8	1.1	1.2	1.3	1.7	1.8	2.0	2.0	2.6	2.7
NEU	0.7	0.8	0.9	1.1	1.3	1.4	1.4	1.4	1.6	1.6
OAS	2.2	2.6	3.0	3.5	4.1	4.6	5.2	5.8	6.7	7.6
REF	3.9	5.4	4.4	5.6	8.9	10.0	5.6	4.5	5.2	4.4
SSA	1.2	1.4	1.5	1.6	1.7	2.0	2.2	2.6	3.2	3.9
USA	5.7	6.1	7.9	8.6	13.0	12.0	11.8	13.9	15.1	15.1

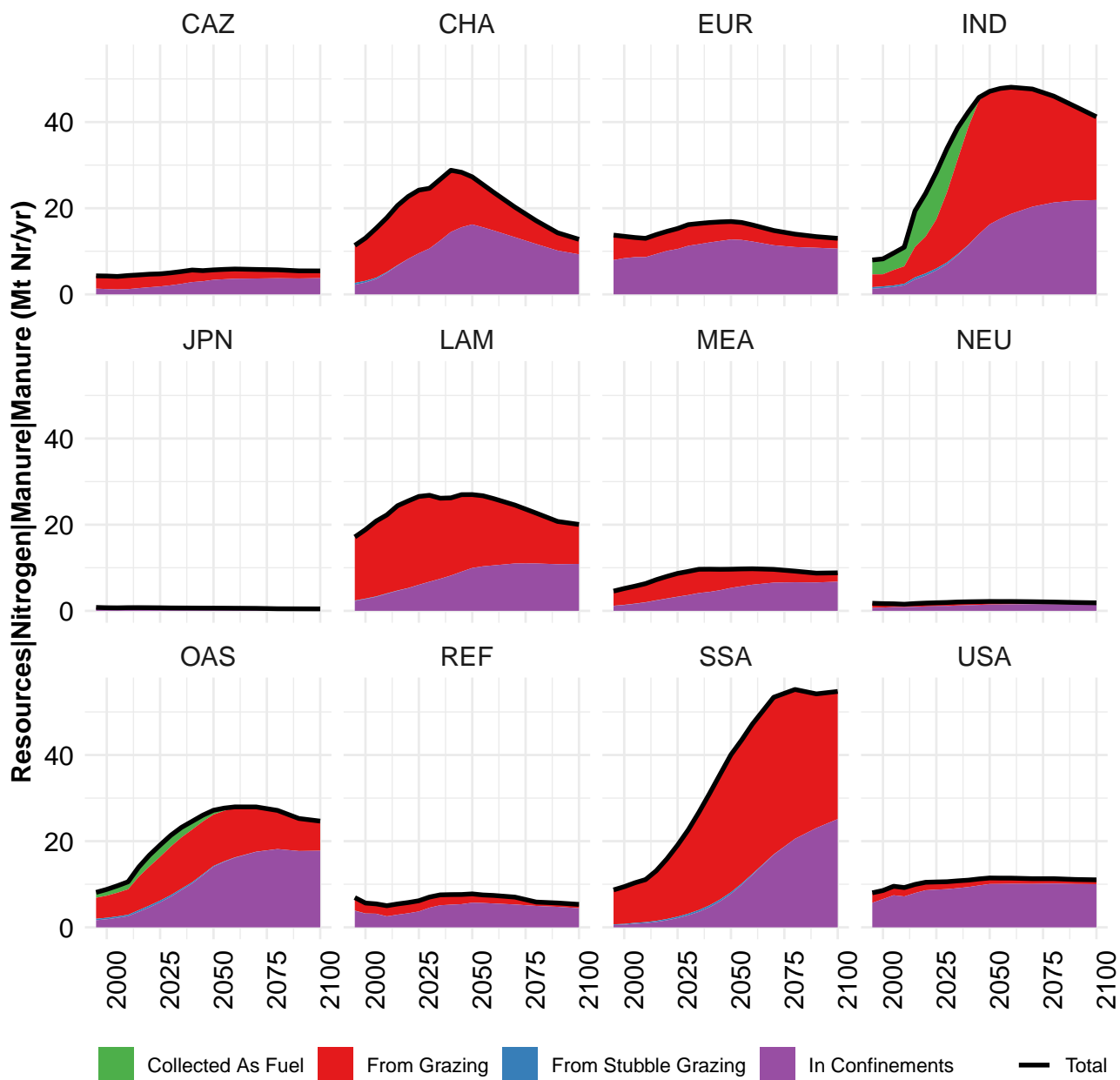
Table 1787: Bodirsky — Resources—Nitrogen—Cropland Budget—Withdrawals—Harvested Crops (Mt Nr/yr)





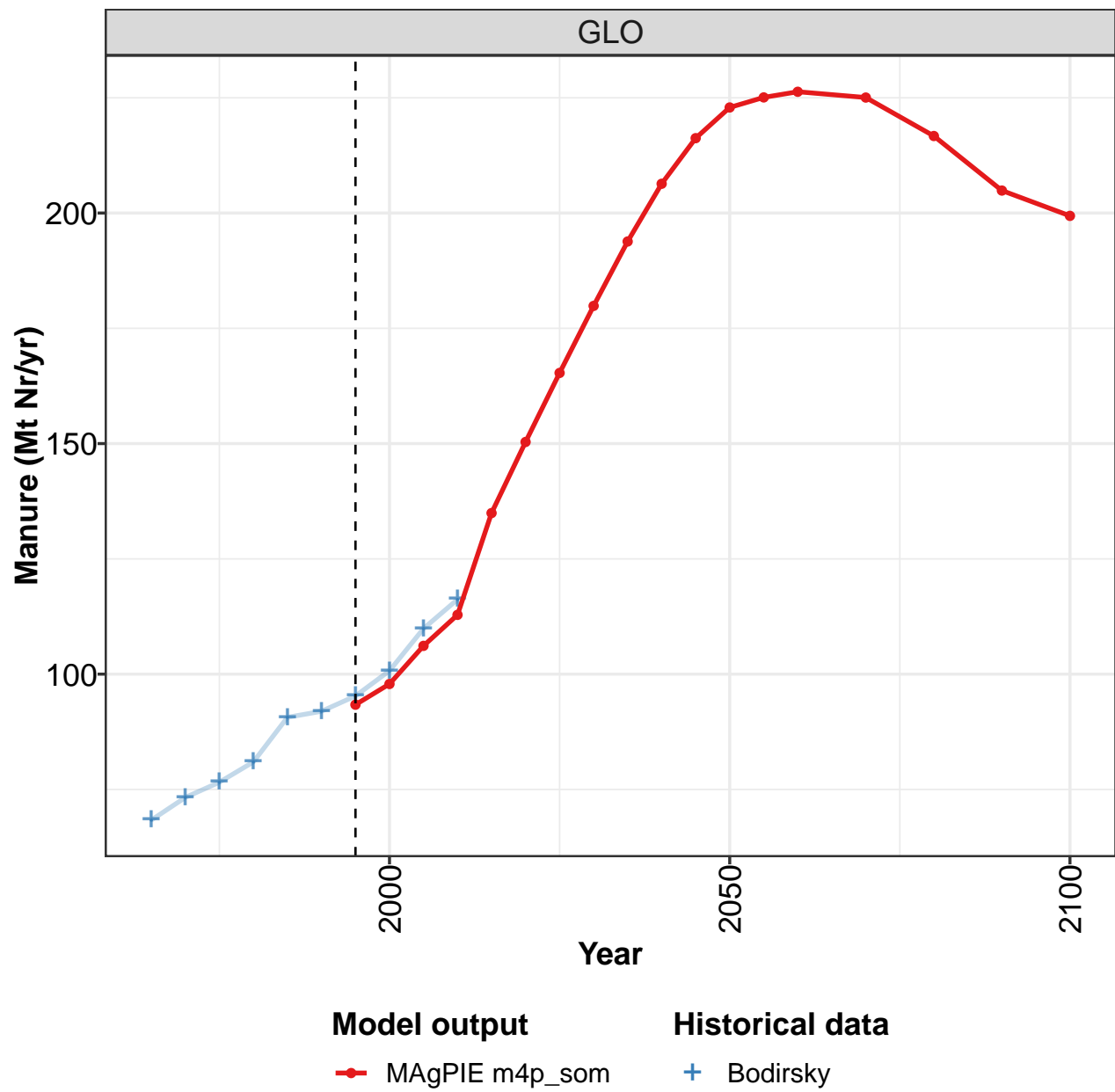






57.2 Manure

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

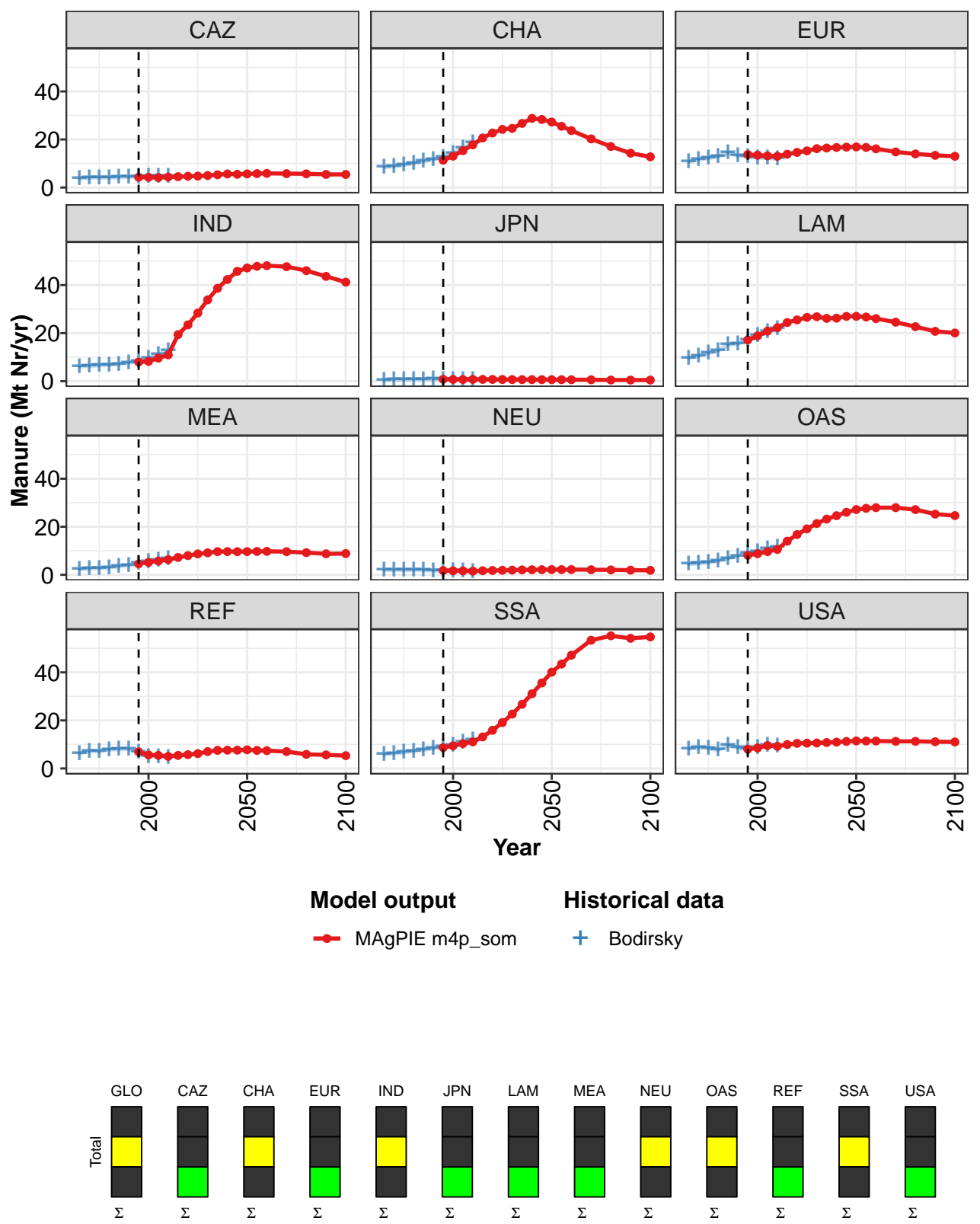


Figure 464: MAgPIE m4p\_som — Resources—Nitrogen—Manure (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	93	98	106	113	135	150	165	180	194	206	216
CAZ	4	4	4	4	5	5	5	5	5	6	6
CHA	11	13	15	18	21	23	24	25	27	29	28
EUR	14	13	13	13	14	15	15	16	16	17	17
IND	8	8	10	11	19	23	28	34	39	42	46
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	17	19	21	22	24	26	27	27	26	26	27
MEA	5	5	6	6	7	8	9	9	10	10	10
NEU	2	2	2	2	2	2	2	2	2	2	2
OAS	8	9	10	11	14	17	19	21	23	25	26
REF	7	6	5	5	5	6	6	7	8	8	8
SSA	9	9	10	11	13	16	19	23	27	31	36
USA	8	9	10	9	10	10	11	11	11	11	11

Table 1788: MAgPIE m4p\_som — Resources—Nitrogen—Manure (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	223	225	226	225	217	205	199
CAZ	6	6	6	6	6	5	5
CHA	27	25	24	20	17	14	13
EUR	17	17	16	15	14	13	13
IND	47	48	48	48	46	44	41
JPN	1	1	1	1	0	0	0
LAM	27	27	26	25	23	21	20
MEA	10	10	10	10	9	9	9
NEU	2	2	2	2	2	2	2
OAS	27	28	28	28	27	25	25
REF	8	8	7	7	6	6	5
SSA	40	43	47	53	55	54	55
USA	11	11	11	11	11	11	11

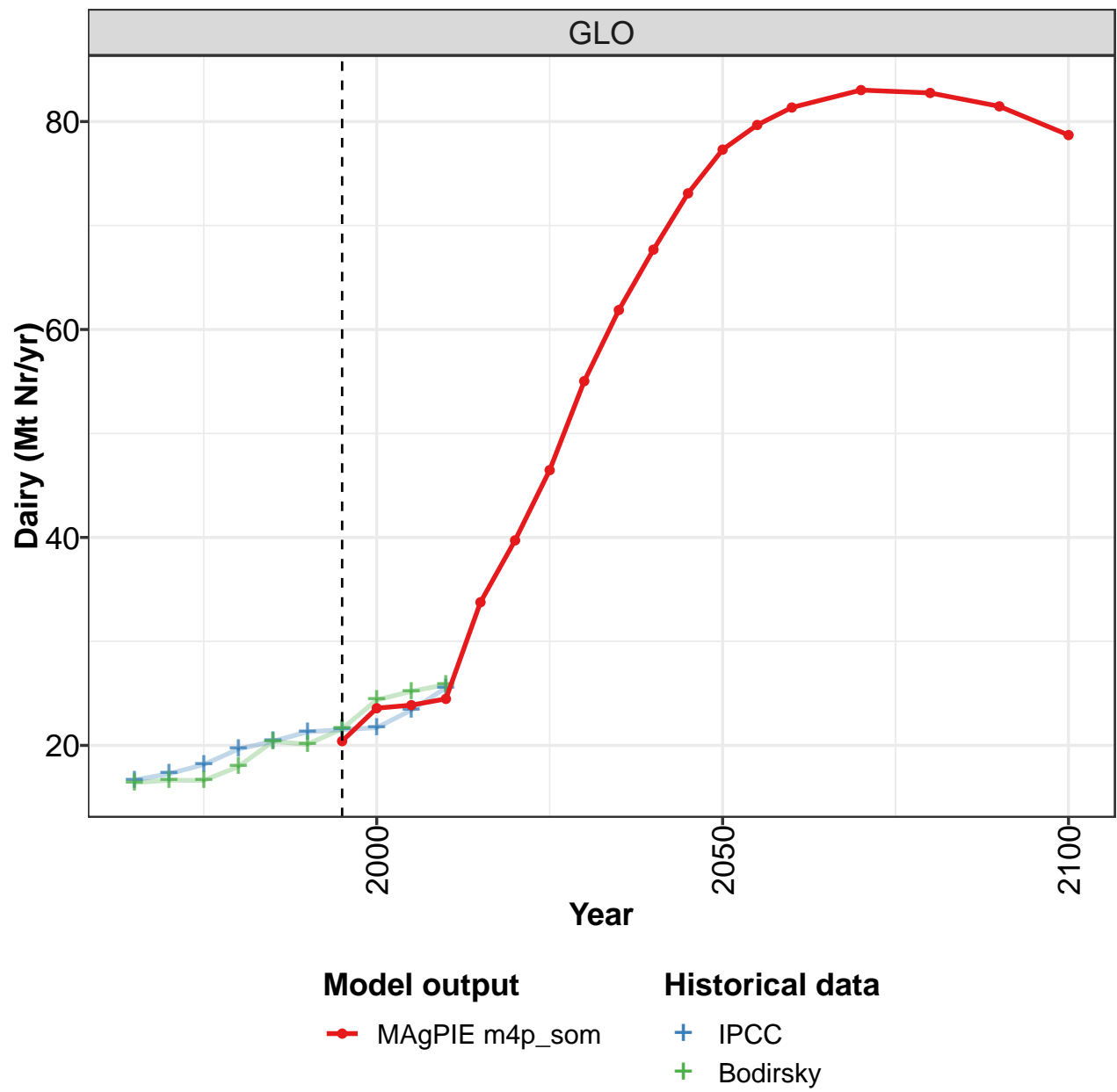
Table 1789: MAgPIE m4p\_som — Resources—Nitrogen—Manure (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	68	73	77	81	91	92	95	101	110	116
CAZ	4	4	4	4	4	4	5	5	5	5
CHA	8	9	9	10	11	12	13	14	16	19
EUR	11	12	12	13	15	13	13	12	12	12
IND	6	6	7	7	7	8	8	9	11	13
JPN	0	1	1	1	1	1	1	1	1	1
LAM	10	10	12	13	15	16	17	19	21	22
MEA	2	3	3	3	4	4	5	5	6	7
NEU	2	2	2	2	2	2	2	2	2	1
OAS	4	5	5	6	7	8	9	10	11	12
REF	6	7	7	8	8	8	7	5	5	5
SSA	6	6	7	7	8	8	9	10	11	12
USA	8	9	8	8	10	9	8	9	10	9

Table 1790: Bodirsky — Resources—Nitrogen—Manure (Mt Nr/yr)

57.2.1 Dairy

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

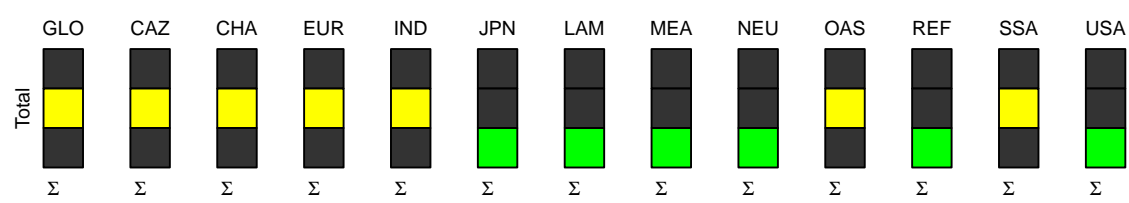
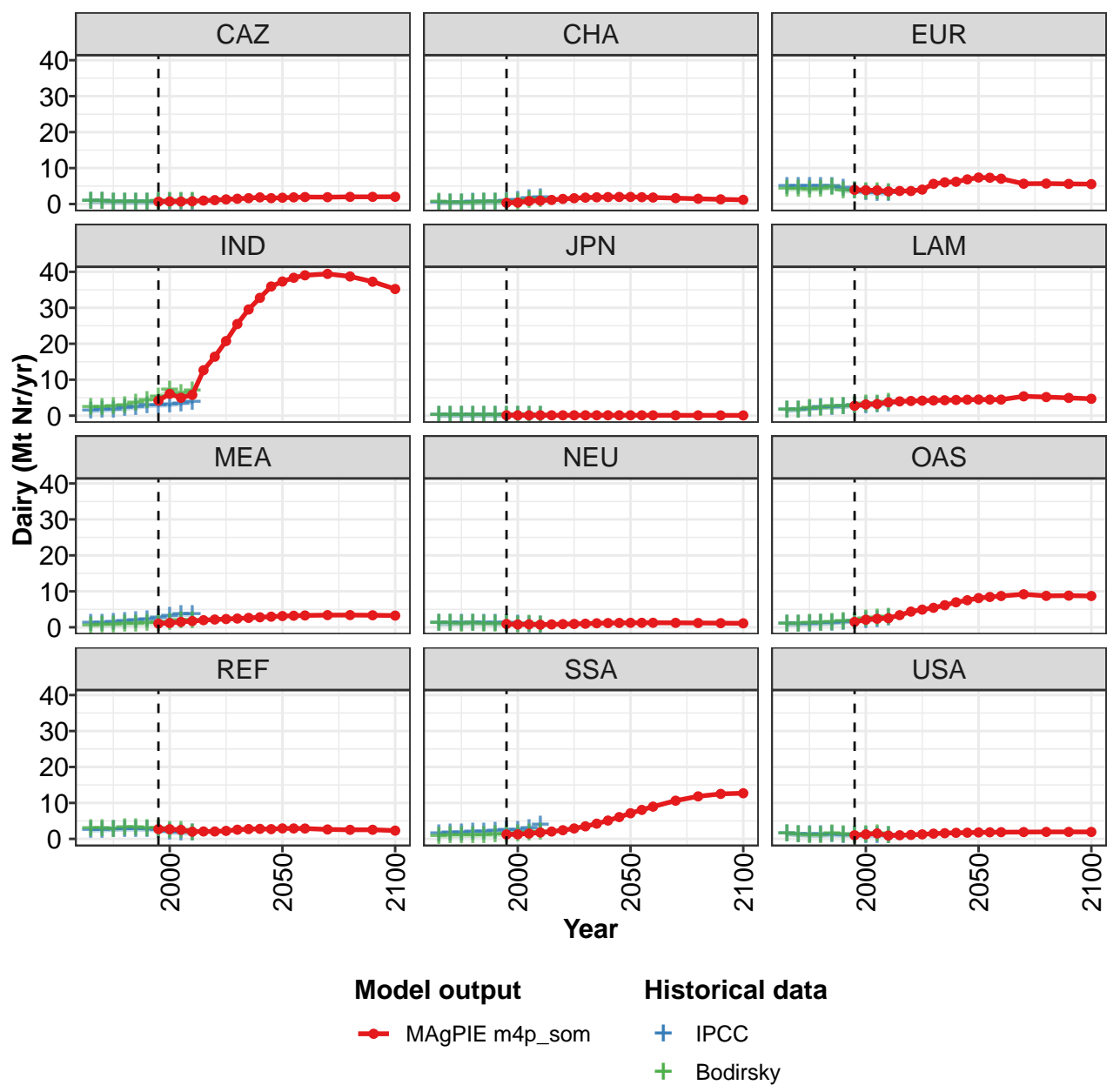


Figure 465: MAgPIE m4p\_som — Resources—Nitrogen—Manure—Dairy (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	20.4	23.6	23.9	24.5	33.8	39.7	46.5	55.0	61.9	67.7	73.1
CAZ	0.7	0.7	0.7	0.8	1.0	1.1	1.3	1.5	1.6	1.9	1.6
CHA	0.3	0.4	0.8	1.0	1.1	1.4	1.6	1.8	1.9	1.9	2.0
EUR	4.0	3.9	3.8	3.5	3.6	3.6	4.0	5.6	6.0	6.2	6.9
IND	4.2	6.1	5.0	5.8	12.6	16.4	20.7	25.5	29.5	32.8	35.9
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	2.7	3.1	3.2	3.7	4.0	4.1	4.2	4.2	4.3	4.4	4.4
MEA	1.0	1.2	1.5	1.7	2.0	2.2	2.3	2.4	2.6	2.8	2.9
NEU	0.9	0.8	0.8	0.7	0.8	0.9	0.9	1.0	1.1	1.2	1.2
OAS	1.5	2.1	2.4	2.5	3.4	4.4	4.9	5.4	6.1	6.9	7.5
REF	2.7	2.7	2.5	2.0	2.1	2.1	2.2	2.6	2.7	2.8	2.7
SSA	1.2	1.3	1.5	1.8	2.0	2.4	2.9	3.5	4.2	5.1	6.1
USA	1.0	1.3	1.5	0.9	1.0	1.1	1.3	1.5	1.6	1.7	1.7

Table 1791: MAgPIE m4p\_som — Resources—Nitrogen—Manure—Dairy (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	77.3	79.7	81.4	83.0	82.8	81.5	78.7
CAZ	1.8	1.9	1.9	1.9	2.0	2.0	2.0
CHA	2.0	1.9	1.8	1.6	1.5	1.3	1.2
EUR	7.4	7.3	7.0	5.6	5.7	5.6	5.5
IND	37.3	38.4	39.0	39.4	38.7	37.3	35.2
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	4.5	4.5	4.5	5.4	5.2	4.9	4.7
MEA	3.1	3.2	3.3	3.4	3.4	3.3	3.2
NEU	1.2	1.2	1.2	1.2	1.2	1.1	1.1
OAS	8.1	8.4	8.7	9.2	8.7	8.8	8.7
REF	2.9	2.9	2.9	2.6	2.5	2.5	2.3
SSA	7.1	8.1	9.0	10.6	11.8	12.5	12.7
USA	1.8	1.8	1.9	1.9	1.9	1.9	1.9

Table 1792: MAgPIE m4p\_som — Resources—Nitrogen—Manure—Dairy (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	16.7	17.3	18.2	19.6	20.4	21.3	21.5	21.7	23.4	25.5
CAZ	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.6
CHA	0.3	0.3	0.4	0.4	0.5	0.6	0.8	1.0	1.5	1.8
EUR	4.8	4.8	4.9	4.9	4.8	4.3	3.6	3.2	2.9	2.8
IND	1.2	1.4	1.6	2.0	2.3	2.7	2.9	3.0	3.3	3.8
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	1.5	1.6	1.9	2.3	2.3	2.6	2.8	2.8	3.1	3.2
MEA	1.1	1.2	1.4	1.7	1.9	2.2	2.6	3.0	3.6	3.6
NEU	1.0	1.0	1.1	1.2	1.2	1.2	1.1	0.9	0.7	0.7
OAS	0.8	0.8	0.9	1.1	1.1	1.4	1.6	1.9	2.1	2.7
REF	2.4	2.5	2.6	2.7	2.7	2.6	2.4	1.8	1.6	1.6
SSA	1.4	1.6	1.6	1.8	1.9	2.2	2.3	2.5	2.9	3.8
USA	1.5	1.2	1.1	1.0	1.1	1.0	0.9	0.9	0.9	0.9

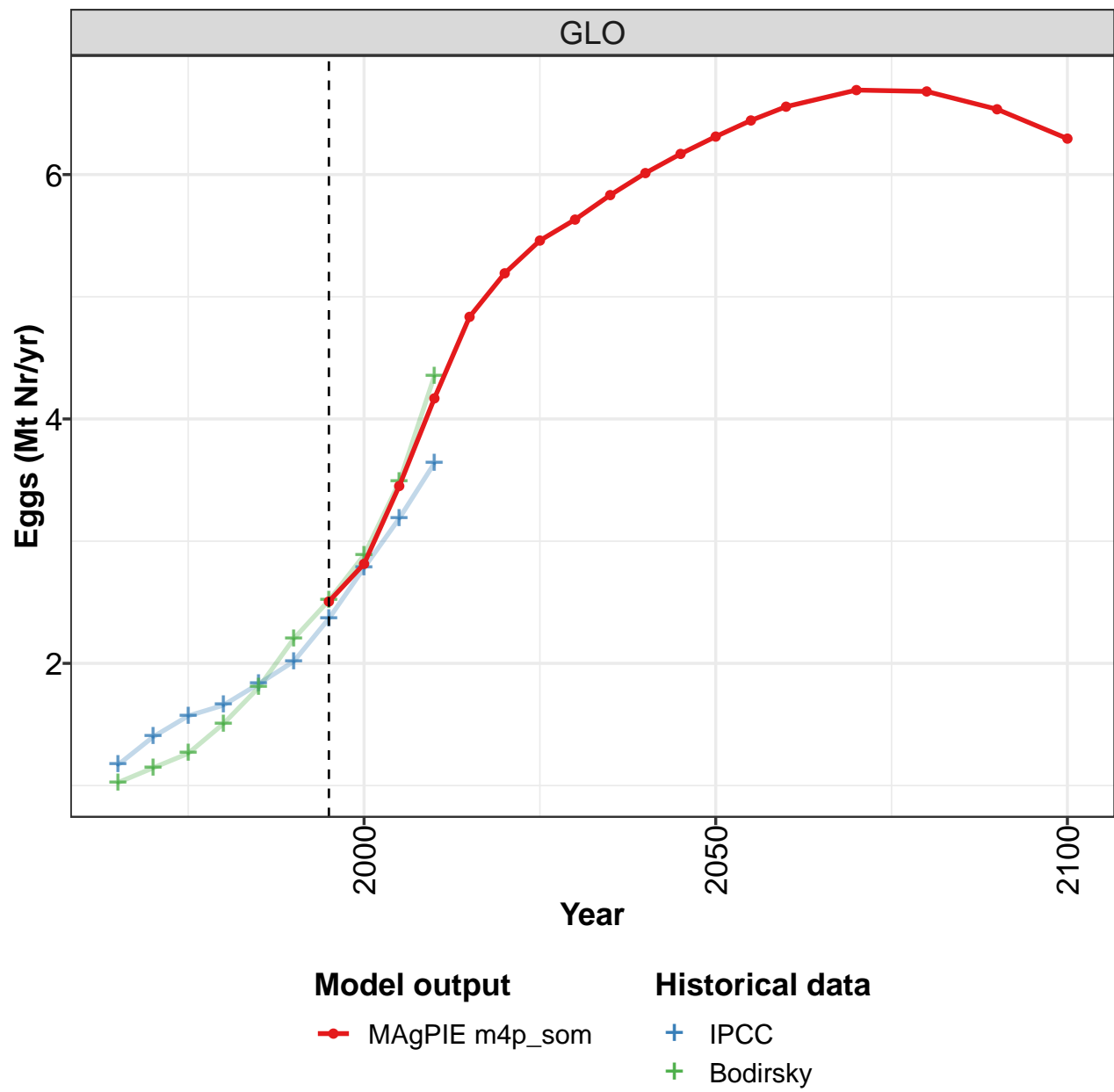
Table 1793: IPCC — Resources—Nitrogen—Manure—Dairy (Mt Nr/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	16.4	16.6	16.6	18.0	20.4	20.1	21.6	24.4	25.2	25.8
CAZ	0.7	0.7	0.6	0.5	0.6	0.6	0.7	0.8	0.8	0.9
CHA	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.5	1.0	1.2
EUR	4.1	4.1	3.9	4.1	4.7	3.6	3.6	3.5	3.4	3.1
IND	2.2	2.2	2.5	2.8	3.5	4.1	5.2	7.1	6.0	6.9
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	1.5	1.6	2.1	2.1	2.5	2.5	2.8	3.2	3.3	3.7
MEA	0.5	0.6	0.6	0.8	0.9	1.1	1.2	1.4	1.8	1.9
NEU	1.1	1.0	0.9	1.1	0.9	0.8	0.8	0.7	0.8	0.7
OAS	0.9	1.0	1.0	1.1	1.3	1.5	1.7	2.4	2.6	2.8
REF	2.7	3.0	2.7	3.1	3.1	2.8	2.8	2.3	2.3	1.7
SSA	0.8	0.9	0.9	0.9	1.0	1.1	1.2	1.3	1.6	2.0
USA	1.4	1.1	1.0	0.9	1.4	1.3	1.0	1.3	1.5	0.9

Table 1794: Bodirsky — Resources—Nitrogen—Manure—Dairy (Mt Nr/yr)

57.2.2 Eggs

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

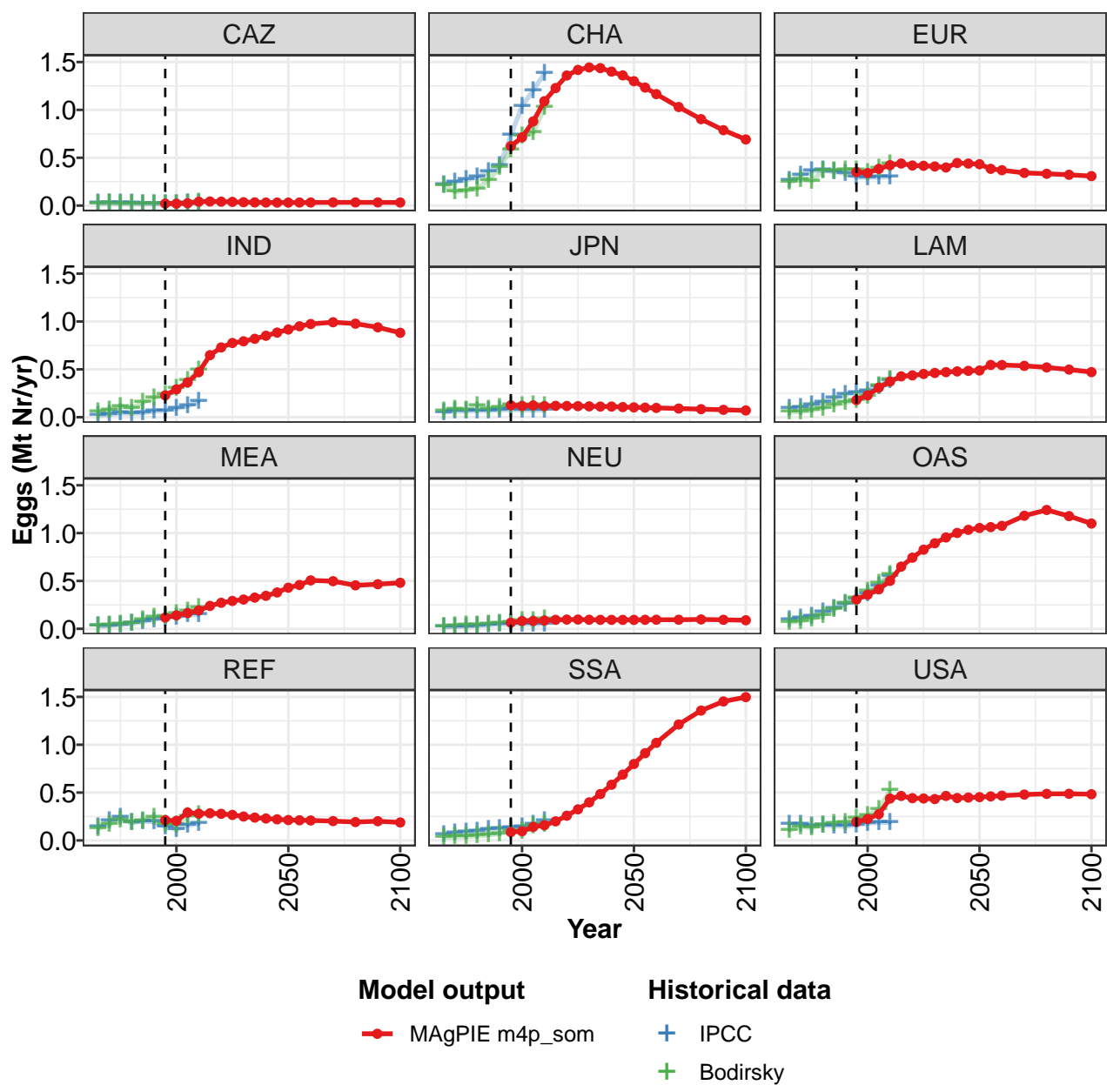


Figure 466: MAgPIE m4p\_som — Resources—Nitrogen—Manure—Eggs (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	2.51	2.81	3.45	4.17	4.84	5.19	5.46	5.63	5.83	6.01	6.17
CAZ	0.02	0.02	0.02	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03
CHA	0.62	0.71	0.88	1.09	1.23	1.36	1.42	1.44	1.44	1.40	1.36
EUR	0.35	0.34	0.38	0.42	0.44	0.42	0.42	0.41	0.40	0.45	0.44
IND	0.23	0.29	0.36	0.47	0.65	0.73	0.78	0.79	0.82	0.85	0.88
JPN	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.11	0.11
LAM	0.18	0.23	0.31	0.37	0.43	0.44	0.45	0.46	0.47	0.48	0.48
MEA	0.12	0.14	0.16	0.19	0.24	0.27	0.29	0.31	0.33	0.34	0.38
NEU	0.06	0.08	0.08	0.09	0.09	0.10	0.10	0.09	0.09	0.09	0.09
OAS	0.31	0.36	0.41	0.50	0.65	0.74	0.83	0.89	0.95	1.00	1.03
REF	0.21	0.20	0.29	0.28	0.28	0.28	0.27	0.25	0.24	0.23	0.22
SSA	0.09	0.10	0.14	0.16	0.20	0.26	0.32	0.40	0.48	0.58	0.69
USA	0.19	0.22	0.27	0.44	0.46	0.44	0.44	0.43	0.46	0.44	0.45

Table 1795: MAgPIE m4p\_som — Resources—Nitrogen—Manure—Eggs (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	6.31	6.44	6.56	6.69	6.68	6.53	6.29
CAZ	0.03	0.03	0.03	0.03	0.03	0.03	0.03
CHA	1.30	1.23	1.17	1.03	0.90	0.79	0.69
EUR	0.43	0.38	0.37	0.34	0.33	0.32	0.31
IND	0.92	0.95	0.97	0.99	0.98	0.94	0.88
JPN	0.10	0.10	0.10	0.09	0.08	0.08	0.07
LAM	0.49	0.55	0.55	0.54	0.52	0.50	0.47
MEA	0.43	0.46	0.51	0.50	0.45	0.47	0.48
NEU	0.09	0.09	0.09	0.09	0.10	0.09	0.09
OAS	1.05	1.06	1.08	1.18	1.24	1.18	1.10
REF	0.21	0.21	0.21	0.20	0.19	0.20	0.19
SSA	0.80	0.91	1.02	1.21	1.36	1.45	1.50
USA	0.45	0.46	0.47	0.48	0.49	0.49	0.48

Table 1796: MAgPIE m4p\_som — Resources—Nitrogen—Manure—Eggs (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.17	1.40	1.57	1.66	1.83	2.02	2.37	2.78	3.19	3.64
CAZ	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02
CHA	0.22	0.24	0.27	0.30	0.35	0.42	0.73	1.04	1.20	1.38
EUR	0.26	0.32	0.36	0.37	0.35	0.34	0.30	0.29	0.30	0.30
IND	0.02	0.03	0.04	0.04	0.04	0.06	0.07	0.09	0.12	0.16
JPN	0.05	0.06	0.06	0.07	0.07	0.07	0.08	0.08	0.07	0.08
LAM	0.09	0.10	0.13	0.15	0.20	0.24	0.26	0.28	0.32	0.38
MEA	0.03	0.03	0.04	0.05	0.07	0.10	0.12	0.12	0.15	0.15
NEU	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.05	0.05	0.05
OAS	0.09	0.11	0.13	0.18	0.21	0.26	0.32	0.37	0.45	0.55
REF	0.14	0.21	0.24	0.19	0.20	0.19	0.14	0.12	0.16	0.18
SSA	0.06	0.07	0.09	0.10	0.12	0.12	0.13	0.14	0.17	0.20
USA	0.16	0.17	0.15	0.16	0.15	0.15	0.16	0.18	0.19	0.19

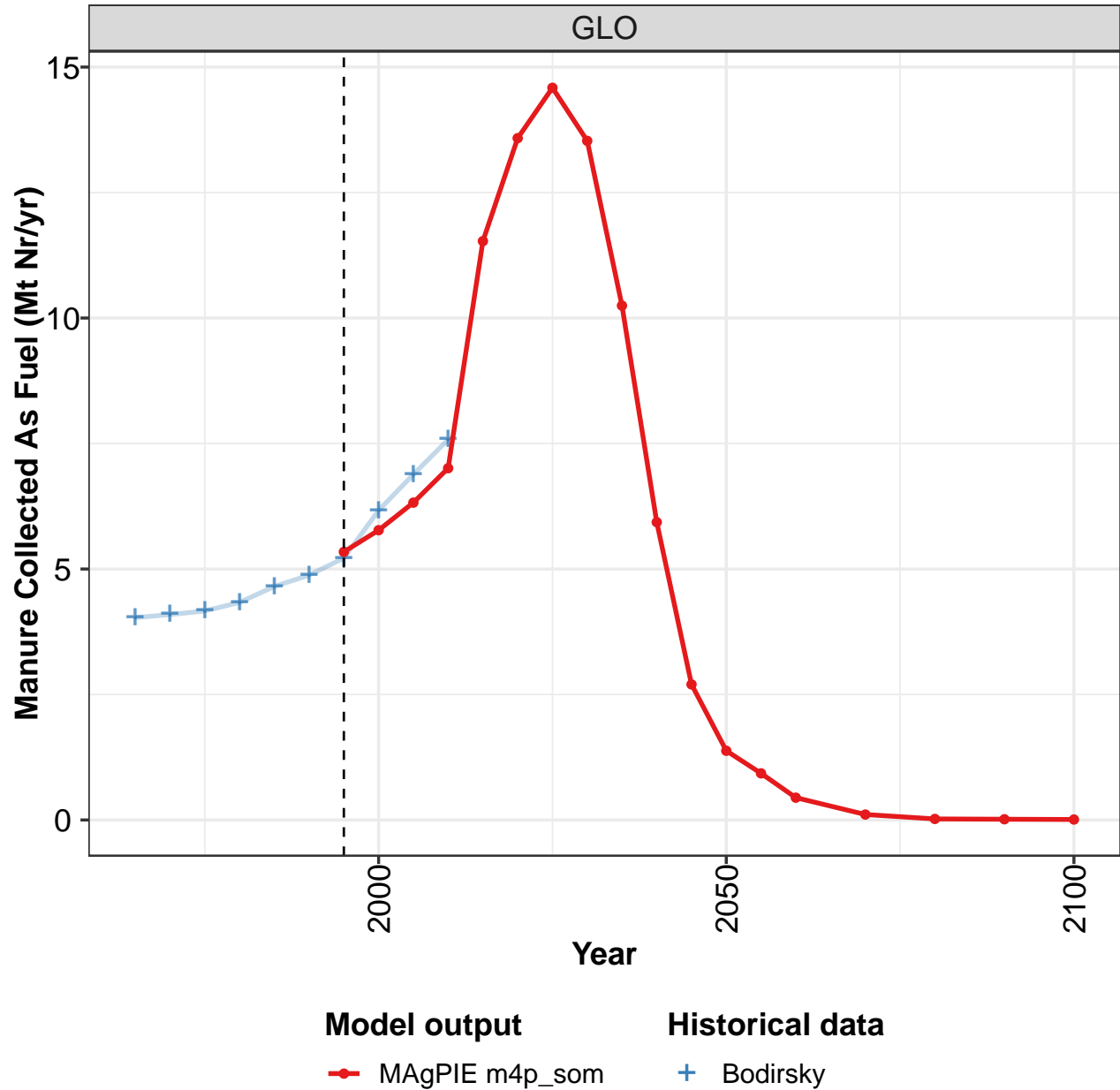
Table 1797: IPCC — Resources—Nitrogen—Manure—Eggs (Mt Nr/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.02	1.14	1.26	1.50	1.80	2.20	2.51	2.89	3.48	4.35
CAZ	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.04
CHA	0.21	0.14	0.16	0.18	0.27	0.40	0.58	0.73	0.76	1.02
EUR	0.24	0.28	0.26	0.36	0.36	0.38	0.37	0.34	0.39	0.44
IND	0.05	0.07	0.11	0.10	0.15	0.20	0.24	0.30	0.38	0.49
JPN	0.06	0.08	0.07	0.12	0.09	0.10	0.13	0.12	0.13	0.12
LAM	0.05	0.06	0.07	0.09	0.12	0.15	0.17	0.22	0.33	0.39
MEA	0.03	0.04	0.05	0.06	0.09	0.12	0.13	0.15	0.18	0.22
NEU	0.02	0.03	0.04	0.04	0.05	0.06	0.07	0.08	0.09	0.10
OAS	0.06	0.08	0.10	0.14	0.20	0.27	0.32	0.40	0.47	0.57
REF	0.12	0.17	0.21	0.19	0.21	0.24	0.17	0.16	0.25	0.27
SSA	0.03	0.04	0.04	0.05	0.06	0.07	0.10	0.10	0.15	0.17
USA	0.11	0.14	0.13	0.16	0.18	0.18	0.23	0.26	0.32	0.52

Table 1798: Bodirsky — Resources—Nitrogen—Manure—Eggs (Mt Nr/yr)

57.2.3 Manure Collected As Fuel

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

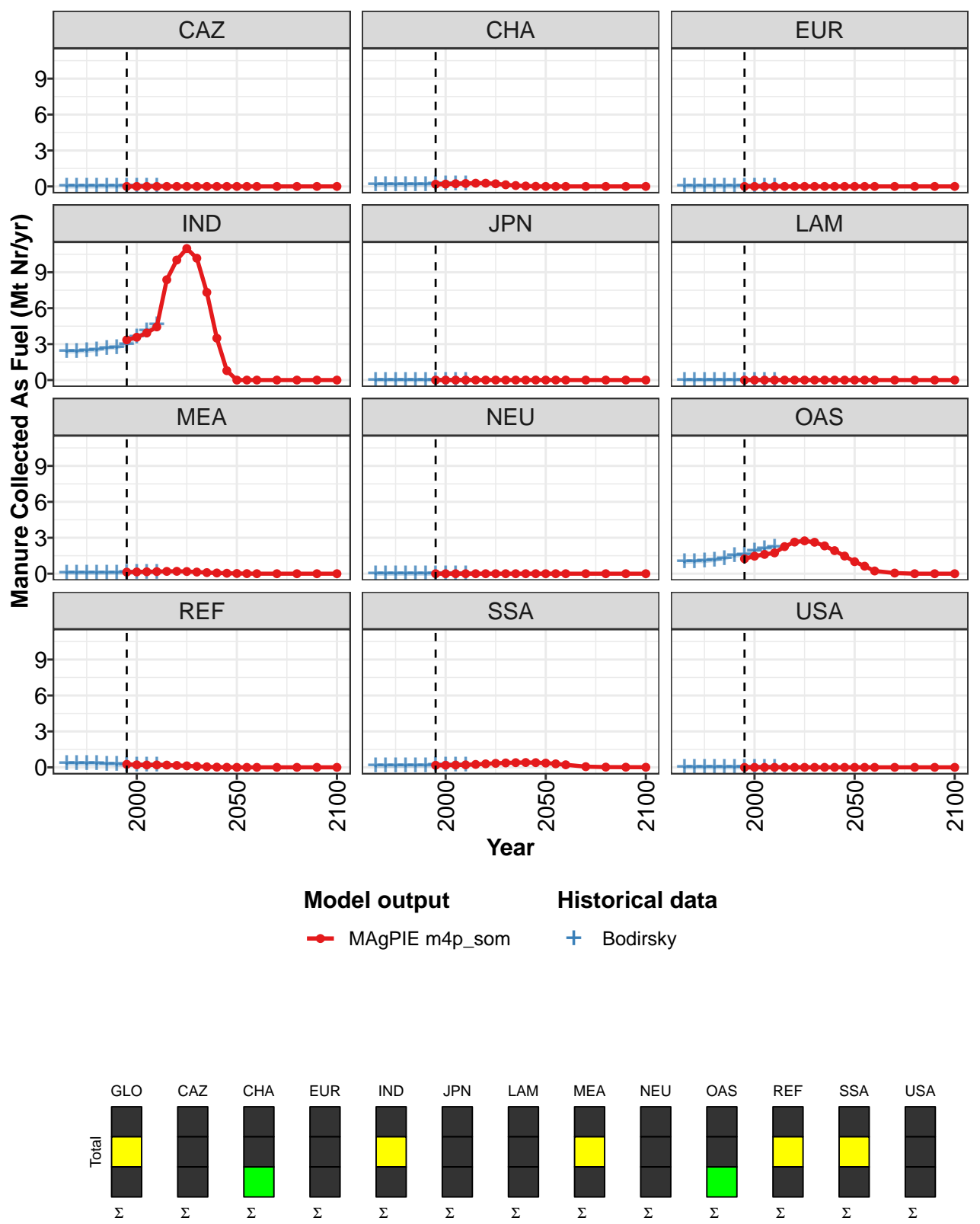


Figure 467: MAgPIE m4p\_som — Resources—Nitrogen—Manure—Manure Collected As Fuel (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	5.3	5.8	6.3	7.0	11.5	13.6	14.6	13.5	10.2	5.9	2.7
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.1	0.1	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	3.4	3.6	3.9	4.4	8.4	10.0	11.0	10.2	7.3	3.5	0.8
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEA	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.2	1.5	1.6	1.7	2.3	2.6	2.7	2.6	2.3	1.9	1.5
REF	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0
SSA	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 1799: MAgPIE m4p\_som — Resources—Nitrogen—Manure—Manure Collected As Fuel (Mt Nr/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.4	0.9	0.4	0.1	0.0	0.0	0.0
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IND	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	1.0	0.6	0.2	0.1	0.0	0.0	0.0
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.4	0.3	0.2	0.1	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

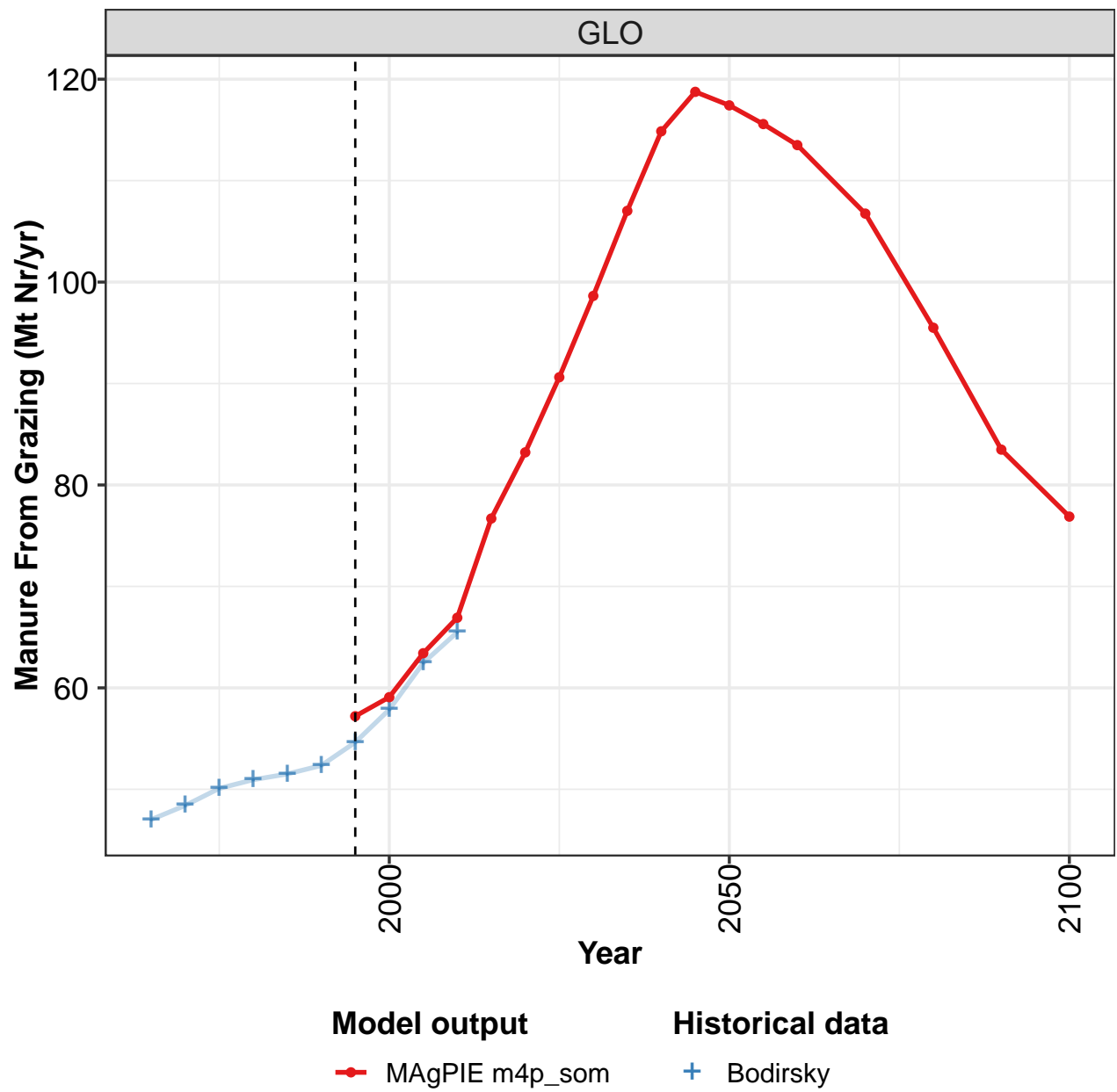
Table 1800: MAgPIE m4p\_som — Resources—Nitrogen—Manure—Manure Collected As Fuel (Mt Nr/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4.03	4.09	4.16	4.33	4.65	4.88	5.22	6.17	6.88	7.58
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.13	0.15	0.15	0.14	0.17	0.18	0.19	0.20	0.23	0.24
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	2.39	2.39	2.45	2.52	2.68	2.73	2.98	3.59	4.08	4.60
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.08	0.08	0.07	0.07	0.08	0.09	0.09	0.11	0.12	0.12
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.98	1.03	1.05	1.15	1.29	1.50	1.59	1.91	2.07	2.22
REF	0.32	0.32	0.31	0.32	0.29	0.23	0.19	0.17	0.18	0.19
SSA	0.12	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.20	0.21
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 1801: Bodirsky — Resources—Nitrogen—Manure—Manure Collected As Fuel (Mt Nr/yr)

57.2.4 Manure From Grazing

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

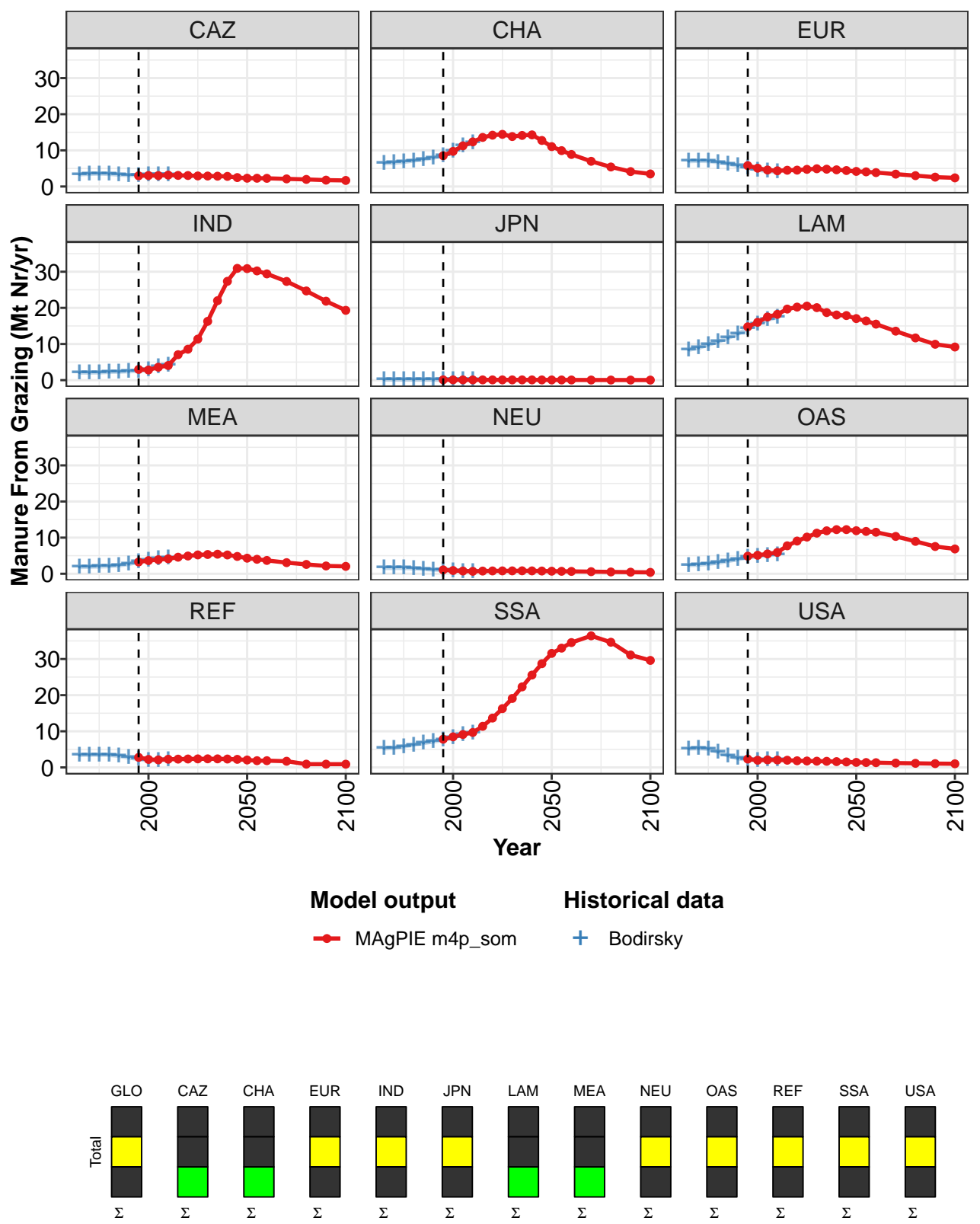


Figure 468: MAGPIE m4p\_som — Resources—Nitrogen—Manure—Manure From Grazing (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	57	59	63	67	77	83	91	99	107	115	119
CAZ	3	3	3	3	3	3	3	3	3	3	2
CHA	9	10	11	12	14	14	14	14	14	14	13
EUR	6	5	5	4	5	5	5	5	5	5	4
IND	3	3	4	4	7	9	11	16	22	27	31
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	15	16	17	18	20	20	20	20	19	18	18
MEA	3	4	4	4	5	5	5	5	5	5	5
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	5	5	5	6	8	9	10	11	12	12	12
REF	3	2	2	2	2	2	2	2	2	2	2
SSA	8	8	9	10	11	14	16	19	22	26	29
USA	2	2	2	2	2	2	2	2	2	2	2

Table 1802: MAgPIE m4p\_som — Resources—Nitrogen—Manure—Manure From Grazing (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	117	116	114	107	96	83	77
CAZ	2	2	2	2	2	2	2
CHA	11	10	9	7	5	4	3
EUR	4	4	4	3	3	3	2
IND	31	30	29	27	25	22	19
JPN	0	0	0	0	0	0	0
LAM	17	16	15	14	12	10	9
MEA	4	4	4	3	3	2	2
NEU	1	1	1	1	1	0	0
OAS	12	12	11	10	9	8	7
REF	2	2	2	2	1	1	1
SSA	32	33	35	36	35	31	30
USA	1	1	1	1	1	1	1

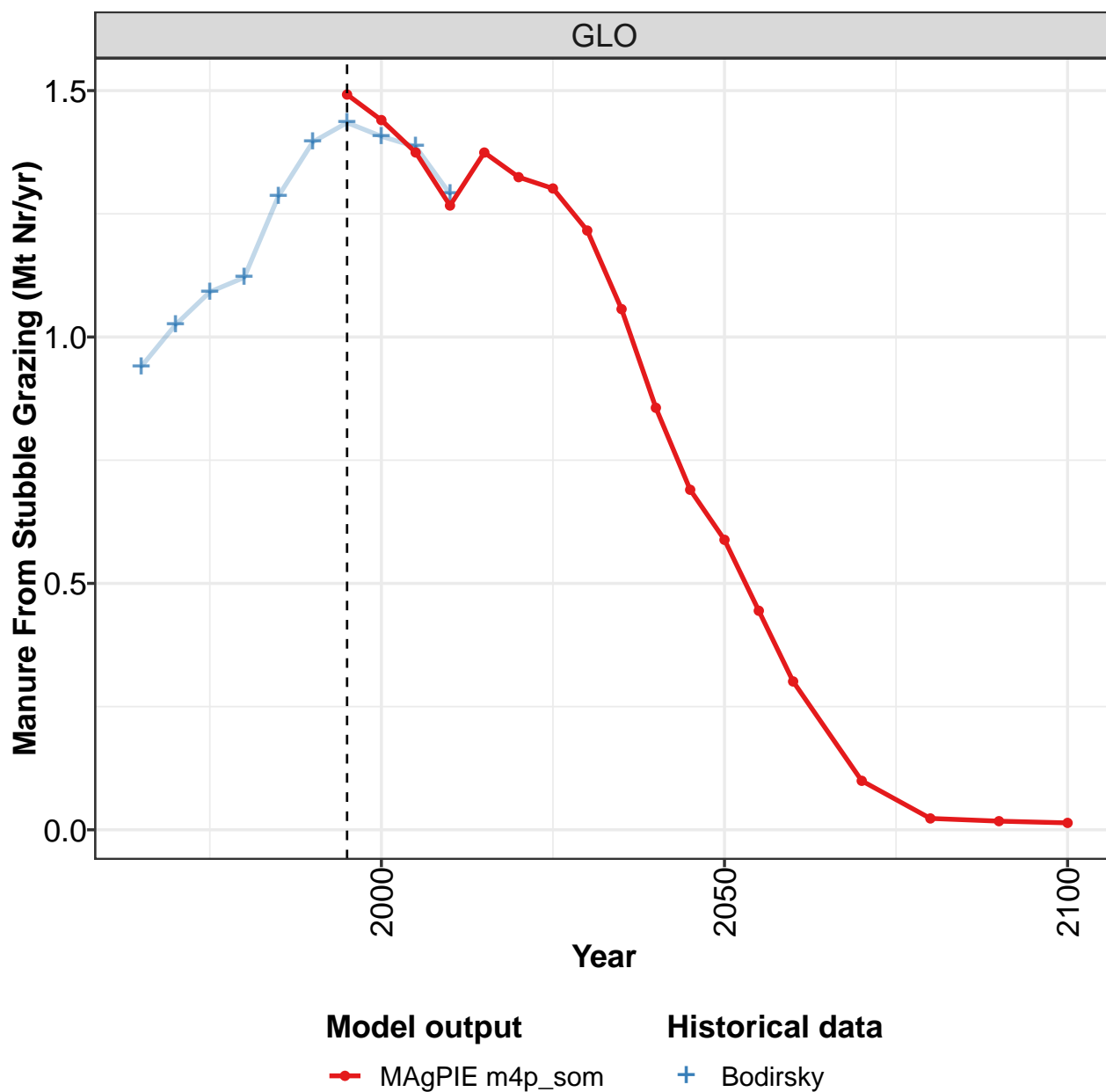
Table 1803: MAgPIE m4p\_som — Resources—Nitrogen—Manure—Manure From Grazing (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	47.0	48.4	50.1	50.9	51.5	52.3	54.6	57.9	62.5	65.5
CAZ	3.4	3.5	3.5	3.5	3.3	3.2	3.2	3.2	3.3	3.3
CHA	6.4	6.5	6.8	7.2	7.5	7.9	8.6	9.8	11.2	12.2
EUR	7.0	7.1	7.0	6.7	6.3	5.7	5.2	4.6	4.2	4.0
IND	2.1	2.1	2.1	2.3	2.3	2.4	2.5	2.8	3.8	4.3
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	8.4	8.9	9.8	10.6	11.7	12.8	14.2	15.6	16.7	17.4
MEA	1.9	1.9	2.0	2.1	2.3	2.7	3.3	3.8	4.2	4.4
NEU	1.6	1.6	1.6	1.5	1.3	1.1	1.0	0.8	0.7	0.6
OAS	2.4	2.5	2.7	3.1	3.5	4.0	4.5	4.7	5.1	5.4
REF	3.4	3.5	3.5	3.4	3.2	2.7	2.3	1.9	2.0	2.1
SSA	5.2	5.4	5.8	6.3	6.7	7.1	7.6	8.3	9.0	9.6
USA	5.2	5.3	5.1	4.3	3.3	2.5	2.1	2.0	2.1	2.1

Table 1804: Bodirsky — Resources—Nitrogen—Manure—Manure From Grazing (Mt Nr/yr)

## 57.2.5 Manure From Stubble Grazing

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

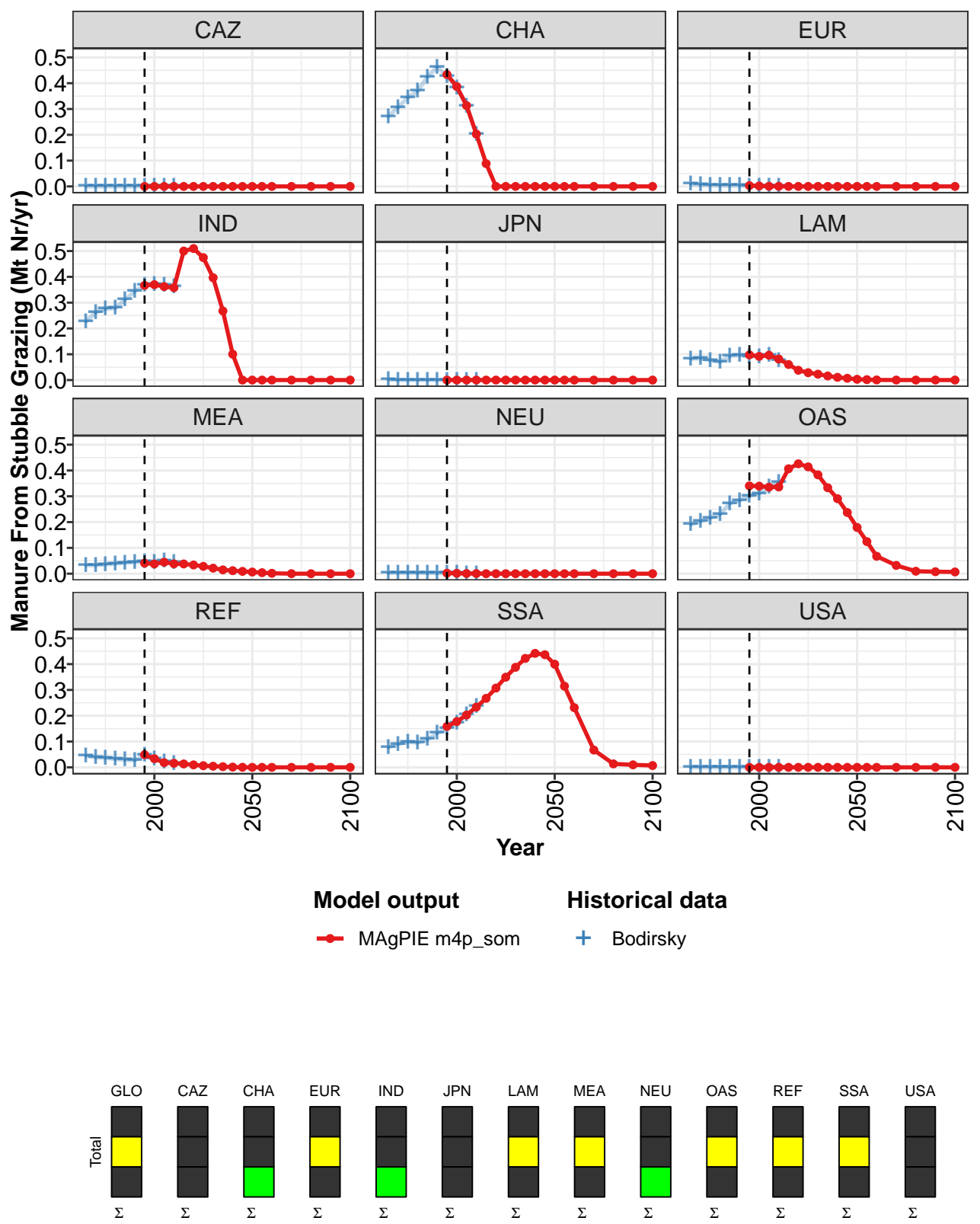


Figure 469: MAGPIE m4p\_som — Resources—Nitrogen—Manure—Manure From Stubble Grazing (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.49	1.44	1.37	1.27	1.37	1.32	1.30	1.22	1.06	0.86	0.69
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.43	0.39	0.31	0.20	0.09	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.37	0.37	0.36	0.36	0.50	0.51	0.47	0.40	0.27	0.10	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.10	0.09	0.10	0.08	0.06	0.04	0.03	0.02	0.02	0.01	0.01
MEA	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.02	0.01	0.01	0.01
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.34	0.34	0.34	0.34	0.41	0.43	0.41	0.38	0.33	0.29	0.24
REF	0.05	0.03	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00
SSA	0.16	0.18	0.20	0.23	0.27	0.31	0.35	0.39	0.42	0.44	0.44
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 1805: MAgPIE m4p\_som — Resources—Nitrogen—Manure—Manure From Stubble Grazing (Mt Nr/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.59	0.44	0.30	0.10	0.02	0.02	0.01
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEA	0.01	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.18	0.12	0.07	0.03	0.01	0.01	0.01
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.40	0.31	0.23	0.07	0.01	0.01	0.01
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 1806: MAgPIE m4p\_som — Resources—Nitrogen—Manure—Manure From Stubble Grazing (Mt Nr/yr)  
[PART 2/2]

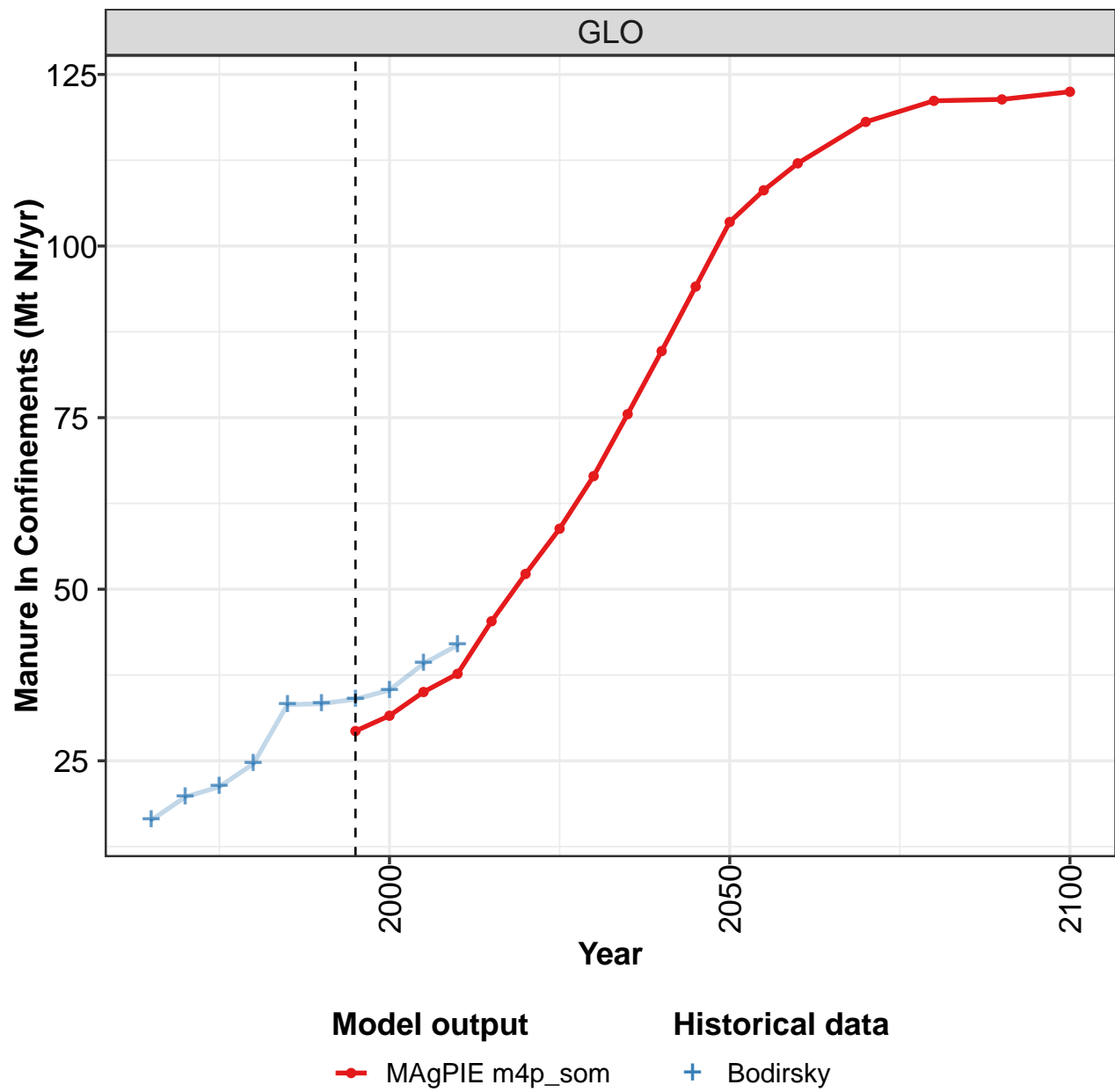
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.94	1.02	1.09	1.12	1.29	1.40	1.43	1.41	1.39	1.29
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.27	0.31	0.34	0.37	0.42	0.46	0.43	0.38	0.31	0.20
EUR	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IND	0.23	0.26	0.28	0.28	0.31	0.34	0.37	0.37	0.37	0.36
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.08	0.08	0.08	0.07	0.09	0.10	0.09	0.09	0.10	0.08
MEA	0.03	0.03	0.04	0.04	0.04	0.04	0.05	0.04	0.05	0.04
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.19	0.20	0.22	0.23	0.27	0.28	0.30	0.31	0.34	0.35
REF	0.04	0.04	0.04	0.03	0.03	0.03	0.05	0.03	0.02	0.02
SSA	0.08	0.09	0.10	0.10	0.11	0.13	0.15	0.17	0.20	0.24
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 1807: Bodirsky — Resources—Nitrogen—Manure—Manure From Stubble Grazing (Mt Nr/yr)



57.2.6 Manure In Confinements

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

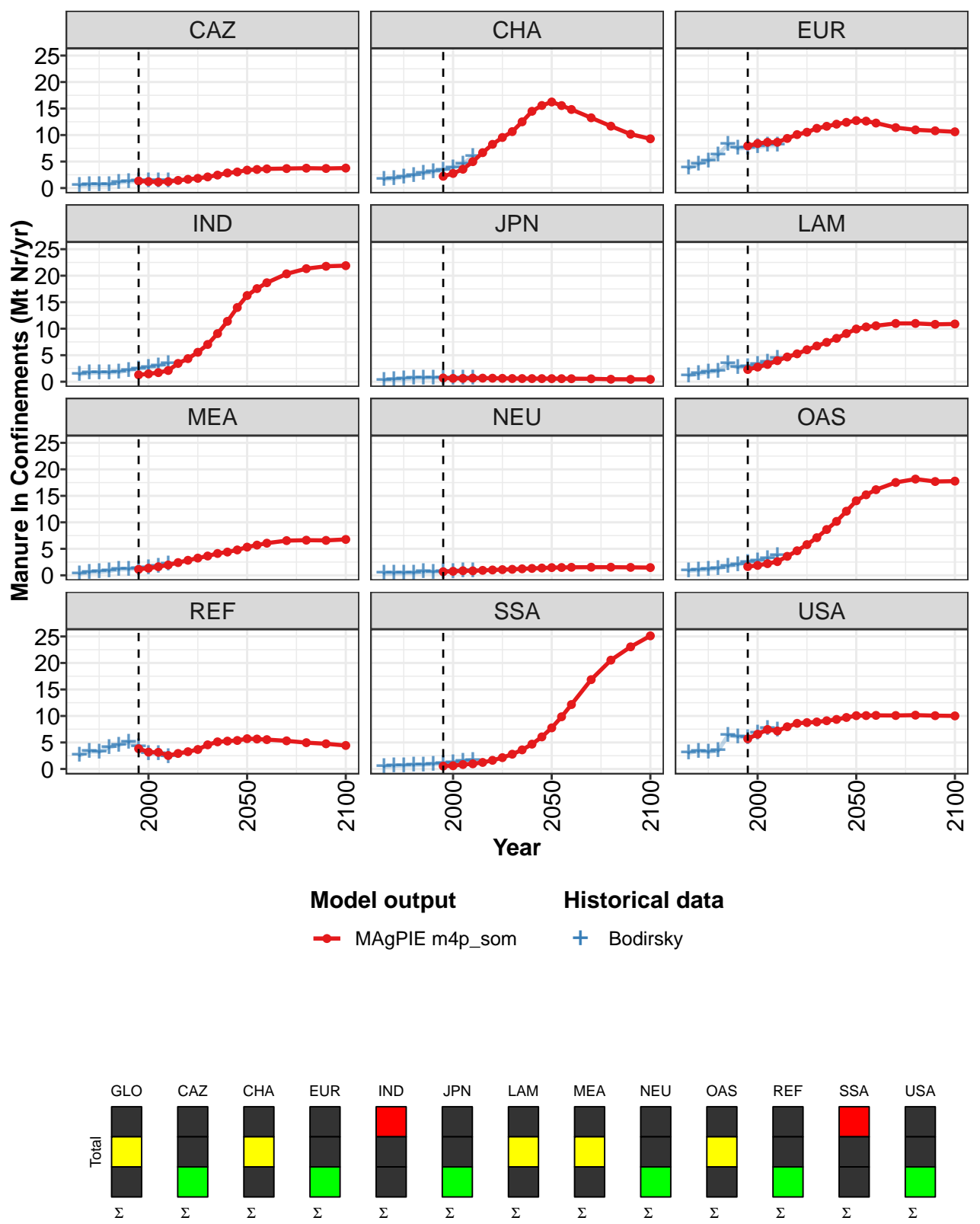


Figure 470: MAGPIE m4p\_som — Resources—Nitrogen—Manure—Manure In Confinements (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	29	32	35	38	45	52	59	66	76	85	94
CAZ	1	1	1	1	1	2	2	2	2	3	3
CHA	2	3	4	5	7	8	10	11	12	14	16
EUR	8	8	9	9	9	10	11	11	12	12	12
IND	1	1	2	2	3	4	6	7	9	11	14
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	2	3	3	4	5	5	6	7	7	8	9
MEA	1	1	2	2	2	3	3	4	4	4	5
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	2	2	2	3	4	5	6	7	9	10	12
REF	4	3	3	3	3	3	4	5	5	5	5
SSA	1	1	1	1	1	2	2	3	4	5	6
USA	6	7	7	7	8	9	9	9	9	9	10

Table 1808: MAgPIE m4p\_som — Resources—Nitrogen—Manure—Manure In Confinements (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	104	108	112	118	121	121	122
CAZ	3	4	4	4	4	4	4
CHA	16	16	15	13	12	10	9
EUR	13	13	12	11	11	11	11
IND	16	18	19	20	21	22	22
JPN	1	1	1	1	0	0	0
LAM	10	10	11	11	11	11	11
MEA	5	6	6	7	7	7	7
NEU	1	1	2	2	2	1	1
OAS	14	15	16	18	18	18	18
REF	6	6	6	5	5	5	4
SSA	8	10	12	17	21	23	25
USA	10	10	10	10	10	10	10

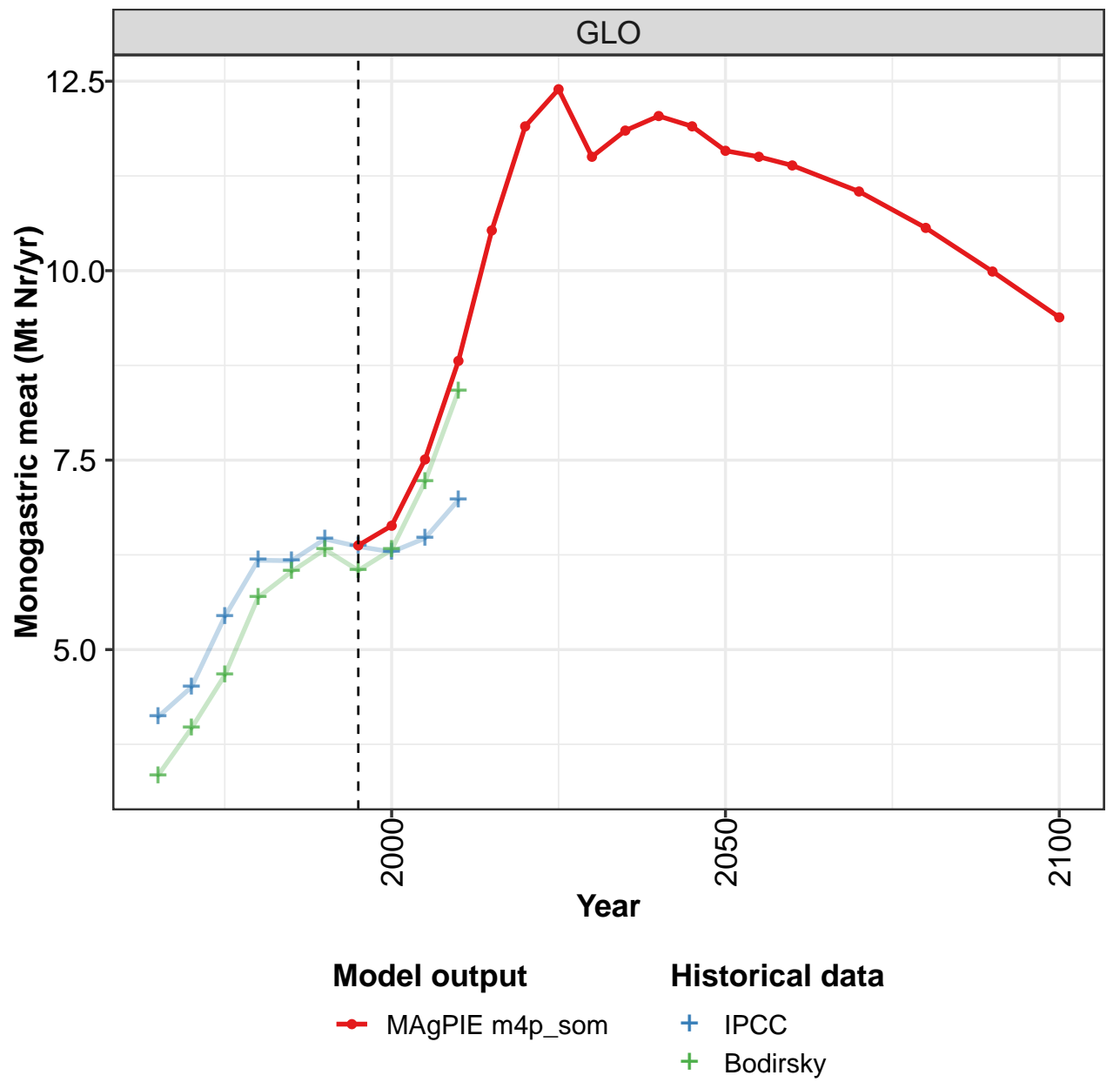
Table 1809: MAgPIE m4p\_som — Resources—Nitrogen—Manure—Manure In Confinements (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	16.4	19.7	21.2	24.6	33.2	33.3	34.0	35.3	39.2	41.8
CAZ	0.5	0.6	0.6	0.6	1.0	1.2	1.4	1.4	1.4	1.4
CHA	1.6	1.8	2.1	2.4	2.8	3.1	3.4	3.9	4.6	6.0
EUR	3.8	4.5	5.2	6.3	8.2	7.5	7.6	7.8	8.1	8.1
IND	1.4	1.6	1.7	1.7	1.8	2.2	2.4	2.7	3.0	3.4
JPN	0.3	0.5	0.5	0.6	0.7	0.7	0.7	0.6	0.6	0.7
LAM	1.2	1.5	1.8	2.0	3.4	2.7	2.8	3.3	3.8	4.4
MEA	0.3	0.6	0.7	0.8	1.1	1.2	1.3	1.5	1.7	2.1
NEU	0.4	0.4	0.4	0.5	0.7	0.6	0.7	0.7	0.8	0.8
OAS	0.9	1.0	1.1	1.3	1.7	2.0	2.5	2.7	3.2	3.7
REF	2.5	3.3	3.2	4.1	4.5	5.1	4.2	2.9	2.9	2.3
SSA	0.5	0.6	0.7	0.7	0.8	0.9	1.0	1.1	1.4	1.7
USA	3.1	3.4	3.2	3.4	6.4	6.1	6.0	6.8	7.6	7.4

Table 1810: Bodirsky — Resources—Nitrogen—Manure—Manure In Confinements (Mt Nr/yr)

57.2.7 Monogastric meat

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

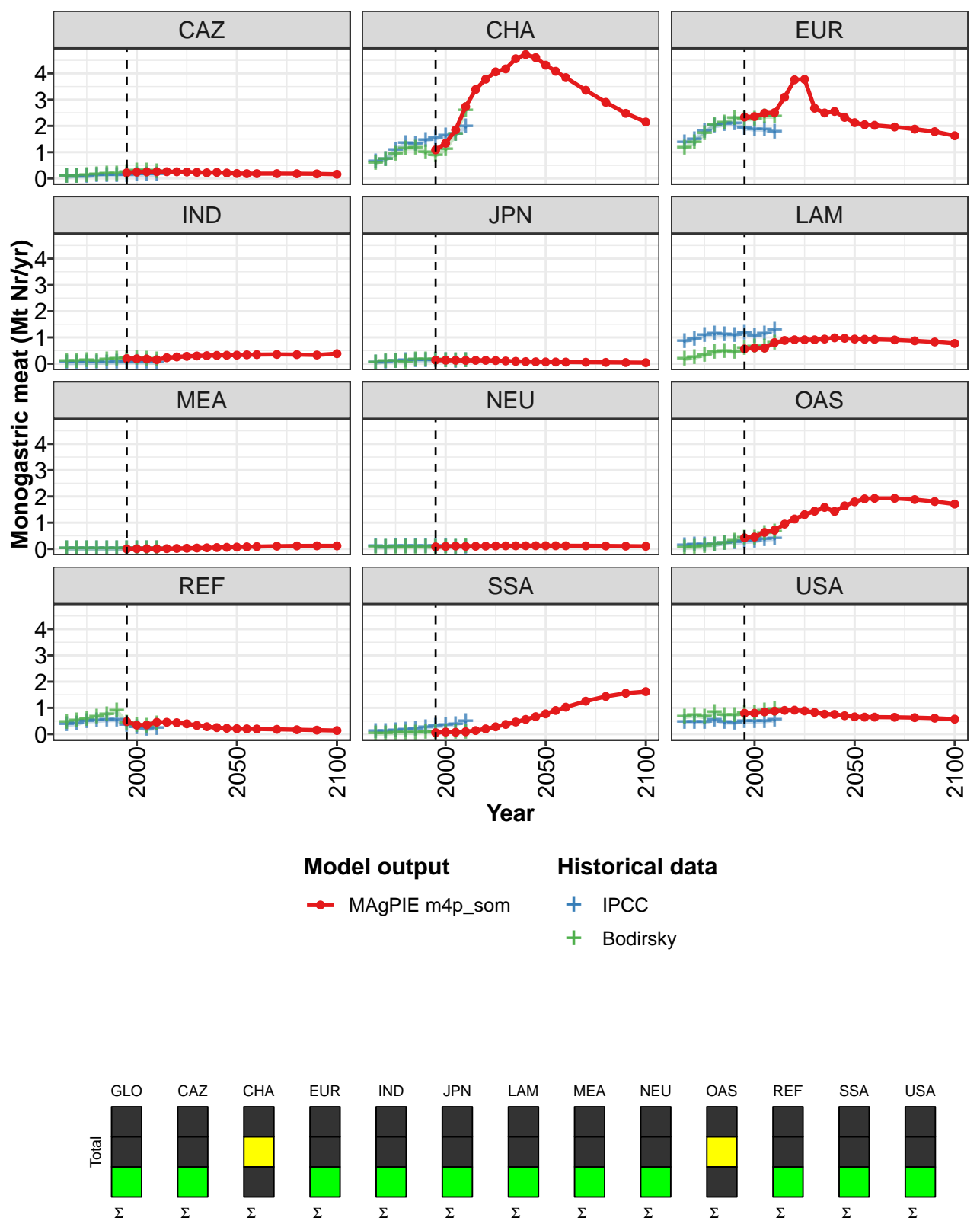


Figure 471: MAgPIE m4p\_som — Resources—Nitrogen—Manure—Monogastric meat (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	6.4	6.6	7.5	8.8	10.5	11.9	12.4	11.5	11.8	12.0	11.9
CAZ	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
CHA	1.1	1.3	1.8	2.7	3.4	3.8	4.1	4.2	4.6	4.7	4.6
EUR	2.3	2.4	2.5	2.5	3.1	3.8	3.8	2.7	2.5	2.6	2.3
IND	0.2	0.2	0.2	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.3
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.6	0.6	0.6	0.8	0.9	0.9	0.9	0.9	0.9	1.0	1.0
MEA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	0.4	0.5	0.6	0.7	0.9	1.1	1.3	1.4	1.6	1.4	1.6
REF	0.5	0.3	0.3	0.5	0.5	0.4	0.4	0.3	0.3	0.2	0.2
SSA	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.5	0.6	0.7
USA	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.7

Table 1811: MAgPIE m4p\_som — Resources—Nitrogen—Manure—Monogastric meat (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	11.6	11.5	11.4	11.0	10.6	10.0	9.4
CAZ	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CHA	4.3	4.1	3.8	3.4	2.9	2.5	2.1
EUR	2.1	2.0	2.0	2.0	1.9	1.8	1.6
IND	0.3	0.3	0.3	0.4	0.3	0.3	0.4
JPN	0.1	0.1	0.1	0.1	0.0	0.0	0.0
LAM	0.9	0.9	0.9	0.9	0.9	0.8	0.8
MEA	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	1.8	1.9	1.9	1.9	1.9	1.8	1.7
REF	0.2	0.2	0.2	0.2	0.2	0.2	0.1
SSA	0.8	0.9	1.0	1.3	1.4	1.6	1.6
USA	0.7	0.6	0.6	0.6	0.6	0.6	0.6

Table 1812: MAgPIE m4p\_som — Resources—Nitrogen—Manure—Monogastric meat (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	4.11	4.50	5.43	6.18	6.17	6.46	6.36	6.29	6.47	6.98
CAZ	0.07	0.09	0.08	0.11	0.12	0.12	0.12	0.14	0.15	0.13
CHA	0.64	0.72	1.08	1.34	1.29	1.45	1.52	1.63	1.67	1.96
EUR	1.36	1.48	1.78	1.99	2.04	2.09	1.90	1.86	1.86	1.78
IND	0.02	0.02	0.03	0.04	0.04	0.05	0.05	0.06	0.05	0.04
JPN	0.04	0.07	0.08	0.11	0.12	0.13	0.11	0.11	0.10	0.11
LAM	0.85	0.94	1.07	1.13	1.10	1.08	1.17	1.06	1.14	1.28
MEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NEU	0.09	0.08	0.10	0.10	0.11	0.09	0.09	0.08	0.08	0.08
OAS	0.13	0.15	0.15	0.17	0.20	0.23	0.26	0.29	0.36	0.38
REF	0.36	0.38	0.49	0.50	0.53	0.53	0.35	0.26	0.19	0.22
SSA	0.09	0.11	0.12	0.15	0.18	0.25	0.29	0.33	0.37	0.47
USA	0.45	0.46	0.44	0.54	0.44	0.43	0.48	0.48	0.49	0.52

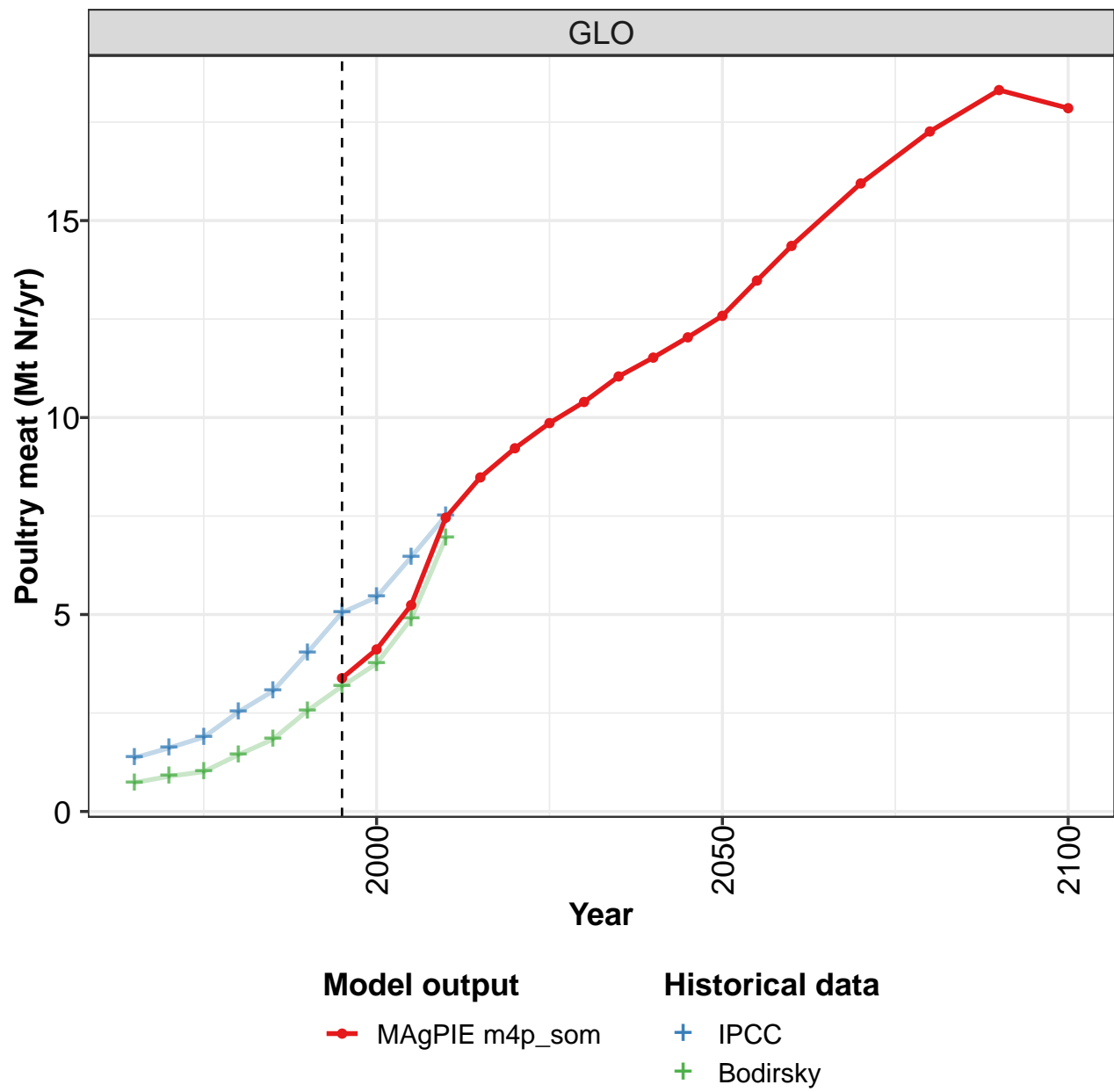
Table 1813: IPCC — Resources—Nitrogen—Manure—Monogastric meat (Mt Nr/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	3.34	3.96	4.66	5.69	6.03	6.32	6.04	6.32	7.21	8.41
CAZ	0.07	0.10	0.10	0.15	0.17	0.19	0.24	0.28	0.30	0.26
CHA	0.58	0.72	0.91	1.14	1.15	0.98	0.87	1.10	1.68	2.59
EUR	1.16	1.36	1.70	2.02	2.12	2.29	2.25	2.26	2.35	2.35
IND	0.09	0.10	0.11	0.10	0.16	0.19	0.20	0.20	0.19	0.15
JPN	0.04	0.08	0.09	0.07	0.16	0.16	0.14	0.13	0.13	0.13
LAM	0.17	0.23	0.33	0.44	0.47	0.45	0.58	0.65	0.63	0.78
MEA	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.00
NEU	0.06	0.06	0.07	0.07	0.08	0.07	0.06	0.07	0.08	0.09
OAS	0.05	0.07	0.09	0.15	0.22	0.31	0.42	0.41	0.59	0.66
REF	0.45	0.52	0.58	0.65	0.73	0.89	0.42	0.32	0.30	0.38
SSA	0.02	0.03	0.04	0.05	0.06	0.08	0.06	0.09	0.07	0.09
USA	0.65	0.70	0.65	0.83	0.71	0.72	0.80	0.81	0.88	0.94

Table 1814: Bodirsky — Resources—Nitrogen—Manure—Monogastric meat (Mt Nr/yr)

57.2.8 Poultry meat

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## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.
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## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

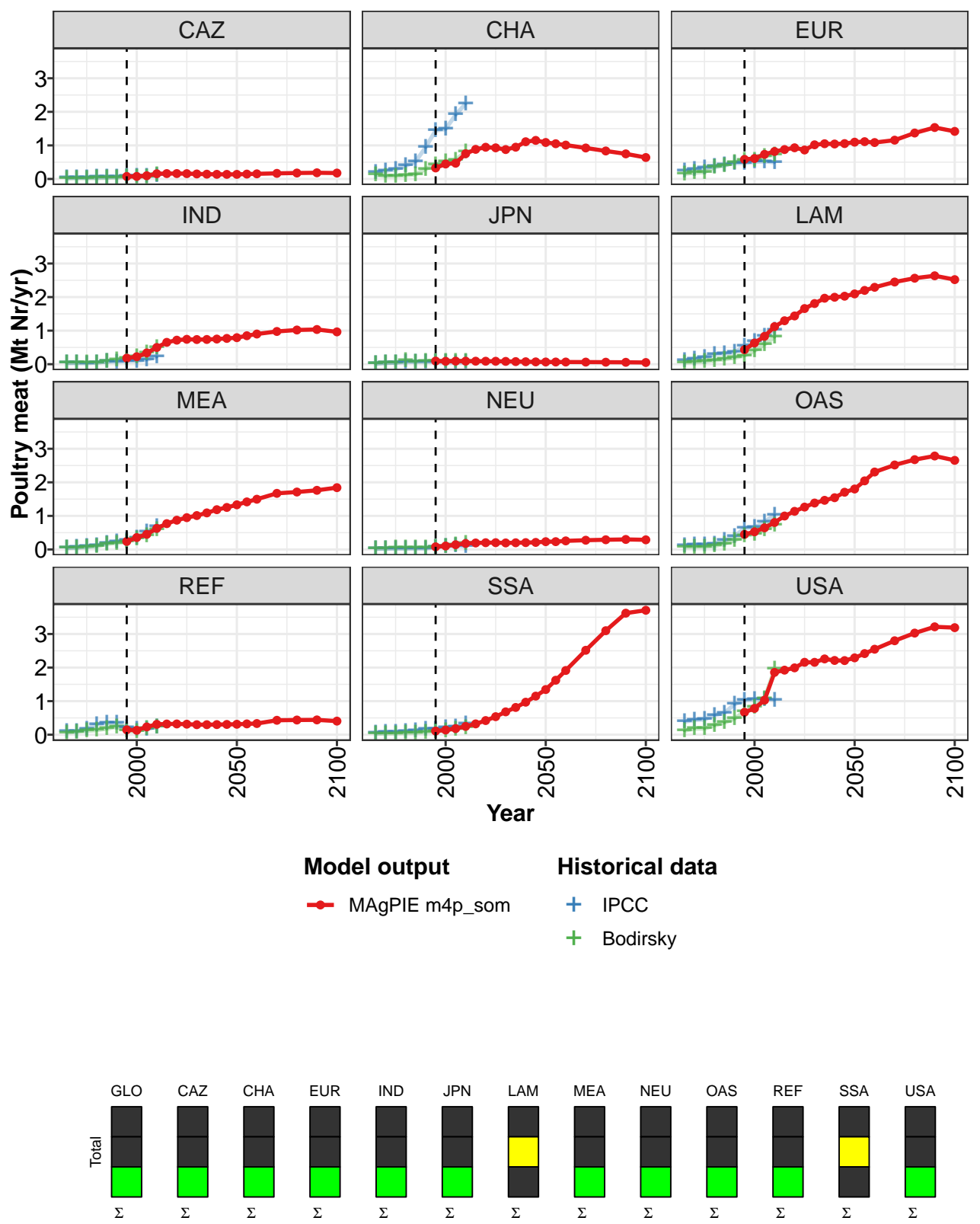


Figure 472: MAgPIE m4p\_som — Resources—Nitrogen—Manure—Poultry meat (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	3.4	4.1	5.2	7.5	8.5	9.2	9.9	10.4	11.0	11.5	12.0
CAZ	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
CHA	0.3	0.4	0.5	0.8	0.9	0.9	0.9	0.9	0.9	1.1	1.1
EUR	0.6	0.6	0.7	0.8	0.9	0.9	0.9	1.0	1.0	1.0	1.1
IND	0.2	0.2	0.3	0.5	0.7	0.7	0.7	0.7	0.7	0.7	0.8
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	0.4	0.6	0.8	1.1	1.3	1.4	1.7	1.8	2.0	2.0	2.0
MEA	0.2	0.4	0.5	0.6	0.8	0.9	0.9	1.0	1.1	1.2	1.3
NEU	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	0.4	0.5	0.6	0.8	1.0	1.1	1.3	1.4	1.5	1.5	1.7
REF	0.1	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
SSA	0.1	0.1	0.2	0.2	0.3	0.4	0.5	0.7	0.8	1.0	1.1
USA	0.7	0.8	1.0	1.9	1.9	2.0	2.2	2.2	2.3	2.2	2.2

Table 1815: MAgPIE m4p\_som — Resources—Nitrogen—Manure—Poultry meat (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	12.6	13.5	14.4	15.9	17.3	18.3	17.9
CAZ	0.1	0.1	0.2	0.2	0.2	0.2	0.2
CHA	1.1	1.1	1.0	0.9	0.8	0.7	0.6
EUR	1.1	1.1	1.1	1.2	1.4	1.5	1.4
IND	0.8	0.8	0.9	1.0	1.0	1.0	1.0
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	2.1	2.2	2.3	2.4	2.6	2.6	2.5
MEA	1.3	1.4	1.5	1.7	1.7	1.8	1.8
NEU	0.2	0.2	0.3	0.3	0.3	0.3	0.3
OAS	1.8	2.0	2.3	2.5	2.7	2.8	2.7
REF	0.3	0.3	0.3	0.4	0.4	0.4	0.4
SSA	1.3	1.6	1.9	2.5	3.1	3.6	3.7
USA	2.3	2.4	2.5	2.8	3.0	3.2	3.2

Table 1816: MAgPIE m4p\_som — Resources—Nitrogen—Manure—Poultry meat (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.36	1.61	1.89	2.52	3.06	4.03	5.05	5.44	6.46	7.51
CAZ	0.03	0.04	0.04	0.05	0.05	0.06	0.08	0.09	0.09	0.09
CHA	0.20	0.24	0.29	0.39	0.52	0.94	1.44	1.49	1.91	2.25
EUR	0.25	0.28	0.32	0.37	0.42	0.47	0.47	0.51	0.52	0.50
IND	0.03	0.04	0.03	0.05	0.08	0.07	0.09	0.10	0.14	0.22
JPN	0.02	0.04	0.05	0.06	0.07	0.07	0.06	0.06	0.05	0.05
LAM	0.12	0.16	0.21	0.30	0.32	0.36	0.53	0.67	0.84	1.02
MEA	0.04	0.06	0.08	0.12	0.19	0.24	0.26	0.35	0.51	0.67
NEU	0.02	0.02	0.02	0.03	0.03	0.03	0.07	0.09	0.11	0.09
OAS	0.12	0.14	0.14	0.17	0.27	0.39	0.64	0.65	0.82	1.02
REF	0.09	0.10	0.17	0.31	0.35	0.34	0.21	0.16	0.17	0.24
SSA	0.05	0.07	0.08	0.10	0.11	0.16	0.17	0.21	0.23	0.33
USA	0.39	0.44	0.45	0.58	0.65	0.91	1.02	1.06	1.06	1.04

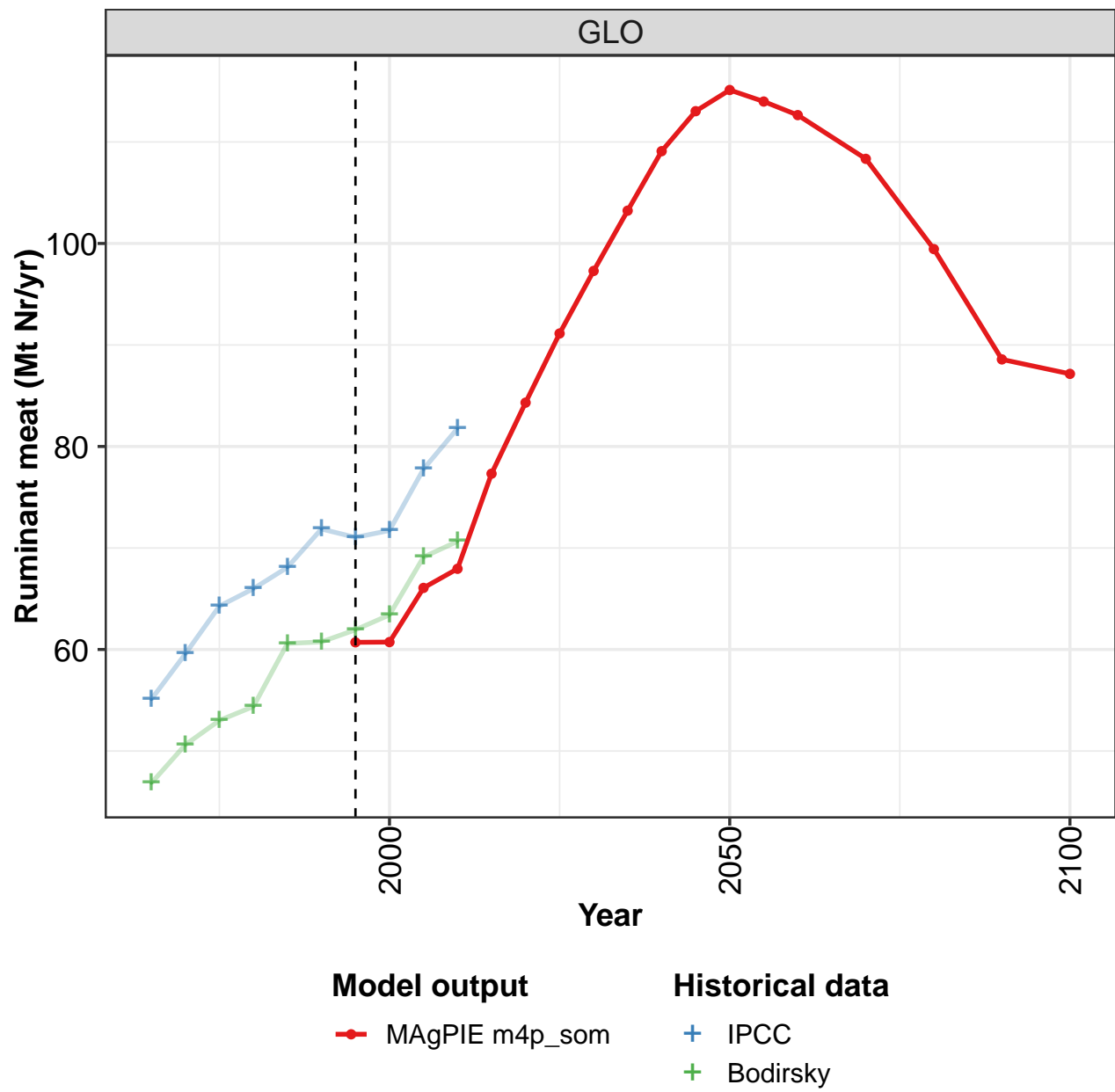
Table 1817: IPCC — Resources—Nitrogen—Manure—Poultry meat (Mt Nr/yr)

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.73	0.89	1.01	1.44	1.83	2.56	3.18	3.75	4.89	6.94
CAZ	0.02	0.02	0.02	0.03	0.04	0.04	0.06	0.05	0.07	0.12
CHA	0.12	0.08	0.09	0.11	0.14	0.30	0.43	0.51	0.57	0.81
EUR	0.15	0.19	0.21	0.35	0.40	0.50	0.55	0.55	0.66	0.73
IND	0.04	0.05	0.05	0.05	0.08	0.13	0.18	0.22	0.34	0.50
JPN	0.02	0.04	0.04	0.10	0.08	0.09	0.09	0.09	0.09	0.09
LAM	0.05	0.06	0.08	0.12	0.15	0.19	0.26	0.40	0.60	0.80
MEA	0.04	0.05	0.07	0.09	0.16	0.19	0.23	0.33	0.42	0.59
NEU	0.02	0.03	0.04	0.04	0.04	0.05	0.08	0.10	0.14	0.18
OAS	0.06	0.07	0.08	0.10	0.17	0.27	0.40	0.46	0.59	0.73
REF	0.06	0.08	0.11	0.13	0.18	0.24	0.11	0.10	0.18	0.23
SSA	0.03	0.04	0.04	0.05	0.05	0.08	0.10	0.12	0.17	0.21
USA	0.12	0.18	0.18	0.27	0.36	0.48	0.69	0.82	1.08	1.95

Table 1818: Bodirsky — Resources—Nitrogen—Manure—Poultry meat (Mt Nr/yr)

57.2.9 Ruminant meat

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

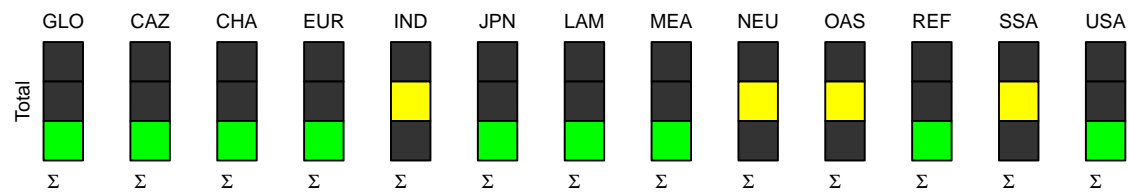
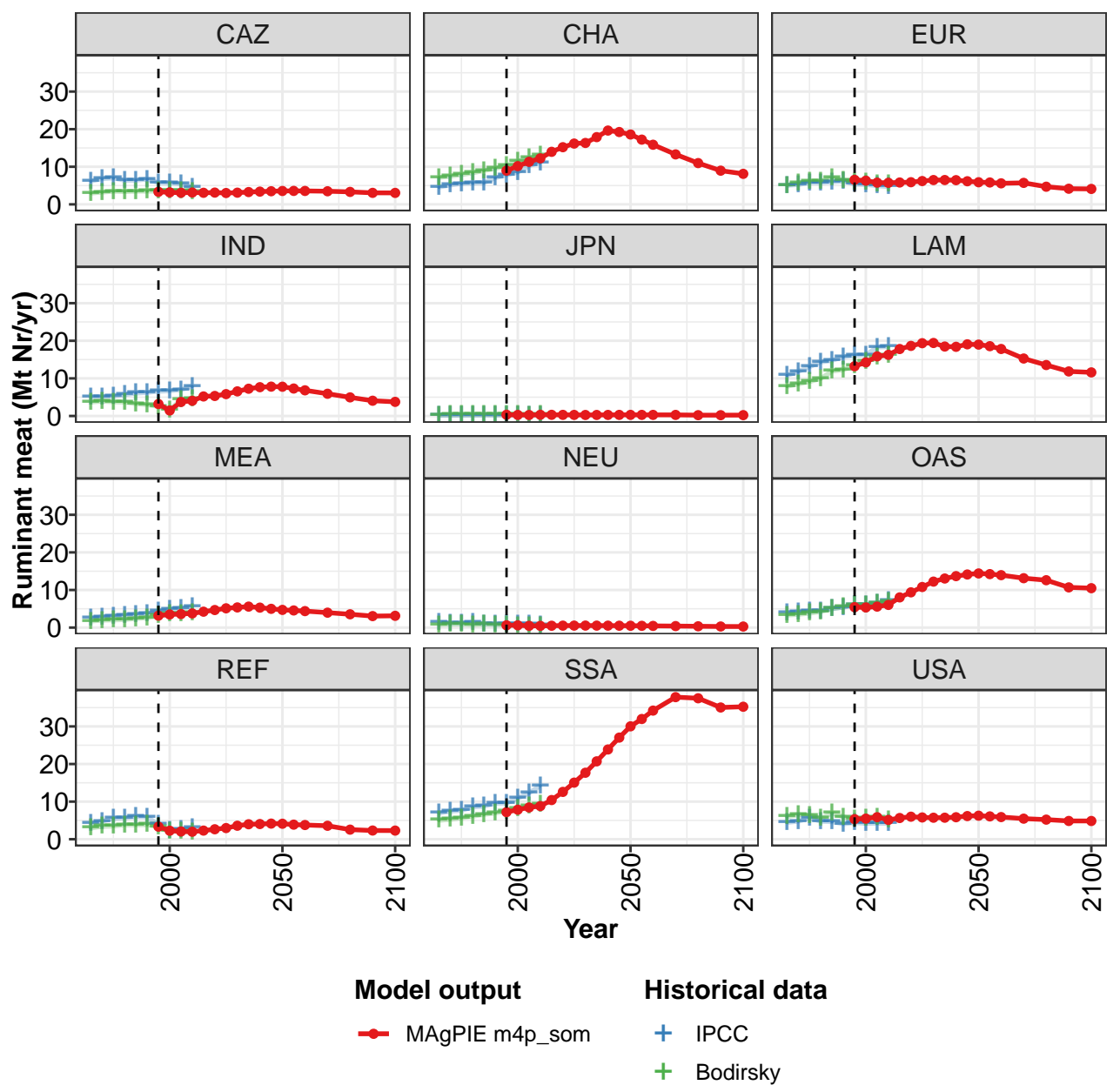


Figure 473: MAgPIE m4p\_som — Resources—Nitrogen—Manure—Ruminant meat (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	61	61	66	68	77	84	91	97	103	109	113
CAZ	3	3	3	3	3	3	3	3	3	3	3
CHA	9	10	11	12	14	15	16	16	18	20	19
EUR	7	6	6	6	6	6	6	6	6	6	6
IND	3	1	4	4	5	5	6	7	7	8	8
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	13	14	16	16	18	19	19	19	18	18	19
MEA	3	3	4	4	4	5	5	5	6	5	5
NEU	1	1	0	0	0	1	1	1	1	1	1
OAS	5	5	6	6	8	9	11	12	13	14	14
REF	3	2	2	2	2	3	3	4	4	4	4
SSA	7	8	8	9	10	13	15	18	21	24	27
USA	5	5	6	5	6	6	6	6	6	6	6

Table 1819: MAgPIE m4p\_som — Resources—Nitrogen—Manure—Ruminant meat (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	115	114	113	108	99	89	87
CAZ	4	4	4	3	3	3	3
CHA	19	17	16	13	11	9	8
EUR	6	6	6	6	5	4	4
IND	8	7	7	6	5	4	4
JPN	0	0	0	0	0	0	0
LAM	19	19	18	15	14	12	12
MEA	5	5	4	4	4	3	3
NEU	0	0	0	0	0	0	0
OAS	14	14	14	13	13	11	10
REF	4	4	4	4	3	2	2
SSA	30	32	34	38	37	35	35
USA	6	6	6	5	5	5	5

Table 1820: MAgPIE m4p\_som — Resources—Nitrogen—Manure—Ruminant meat (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	55.1	59.6	64.3	66.0	68.1	71.9	71.0	71.7	77.8	81.8
CAZ	6.2	6.8	7.0	6.4	6.4	6.7	5.8	5.7	5.4	4.5
CHA	4.6	5.1	5.5	5.7	5.8	7.1	7.8	8.5	10.3	11.1
EUR	5.1	5.2	5.8	5.7	6.0	6.2	5.4	5.3	4.9	4.7
IND	5.0	5.1	5.3	5.7	6.1	6.3	6.6	6.7	7.0	7.9
JPN	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
LAM	10.8	11.8	13.1	14.3	14.8	15.7	16.1	16.2	18.3	18.4
MEA	2.4	2.9	3.1	3.3	3.5	3.7	4.4	4.9	5.2	5.6
NEU	1.3	1.3	1.2	1.3	1.0	1.0	0.9	0.8	0.9	0.8
OAS	3.9	4.2	4.3	4.4	5.1	5.4	6.0	6.0	6.4	7.2
REF	4.3	4.8	5.5	5.7	6.0	5.9	3.9	2.3	2.6	3.0
SSA	7.0	7.5	7.7	8.6	8.8	9.6	9.6	10.9	12.3	14.3
USA	4.5	4.8	5.6	4.7	4.6	4.1	4.4	4.2	4.2	4.2

Table 1821: IPCC — Resources—Nitrogen—Manure—Ruminant meat (Mt Nr/yr)

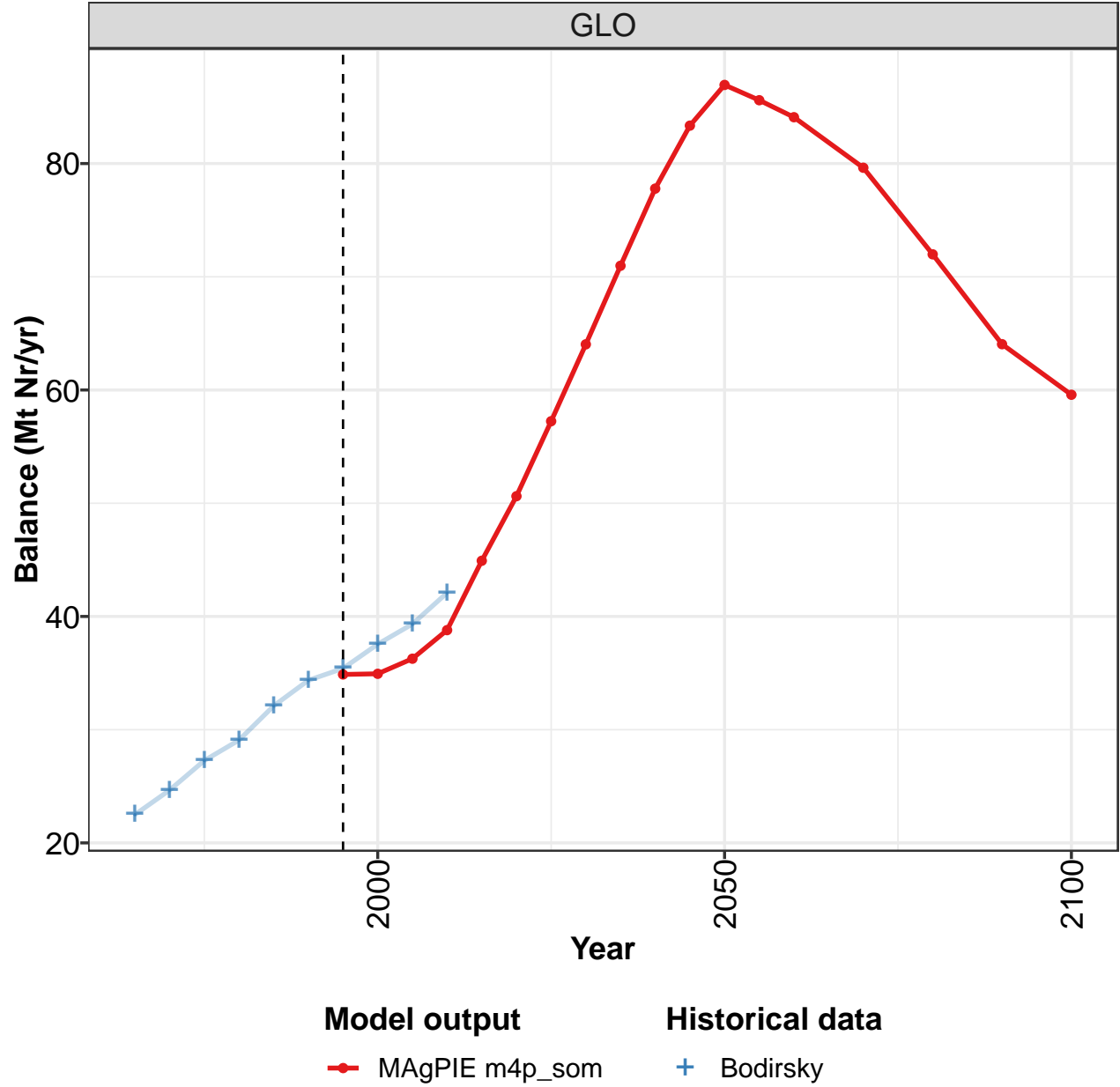
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	46.8	50.6	53.0	54.4	60.6	60.8	61.9	63.4	69.1	70.7
CAZ	3.0	3.2	3.5	3.4	3.5	3.5	3.5	3.5	3.5	3.4
CHA	7.2	7.5	7.9	8.4	9.0	9.6	10.3	11.4	12.3	13.0
EUR	5.1	5.7	6.1	6.2	7.0	6.4	6.0	5.8	5.4	5.5
IND	3.7	3.9	3.8	3.7	3.2	3.0	2.5	1.7	4.3	4.6
JPN	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3
LAM	7.9	8.5	9.1	9.9	11.9	12.3	13.3	14.5	15.7	16.1
MEA	1.7	2.0	2.0	2.1	2.4	2.6	3.2	3.6	3.7	3.9
NEU	0.8	0.9	0.9	0.7	0.9	0.8	0.6	0.6	0.5	0.4
OAS	3.3	3.5	3.8	4.2	5.0	5.5	6.1	6.1	6.5	6.9
REF	2.9	3.4	3.5	3.8	3.8	3.9	3.2	2.2	2.0	2.0
SSA	5.0	5.3	5.7	6.1	6.6	7.0	7.4	8.2	8.9	9.3
USA	6.0	6.5	6.4	5.5	6.9	5.9	5.4	5.7	5.9	5.1

Table 1822: Bodirsky — Resources—Nitrogen—Manure—Ruminant meat (Mt Nr/yr)

57.3 Pasture Budget

57.3.1 Balance

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

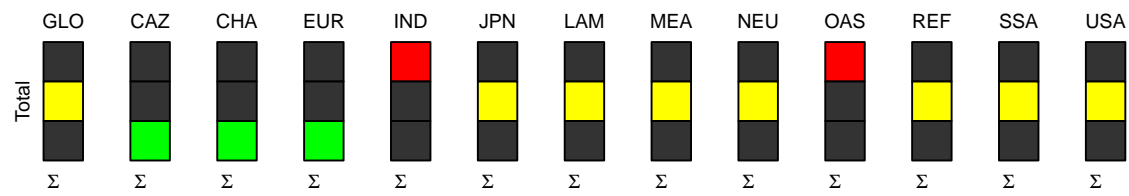
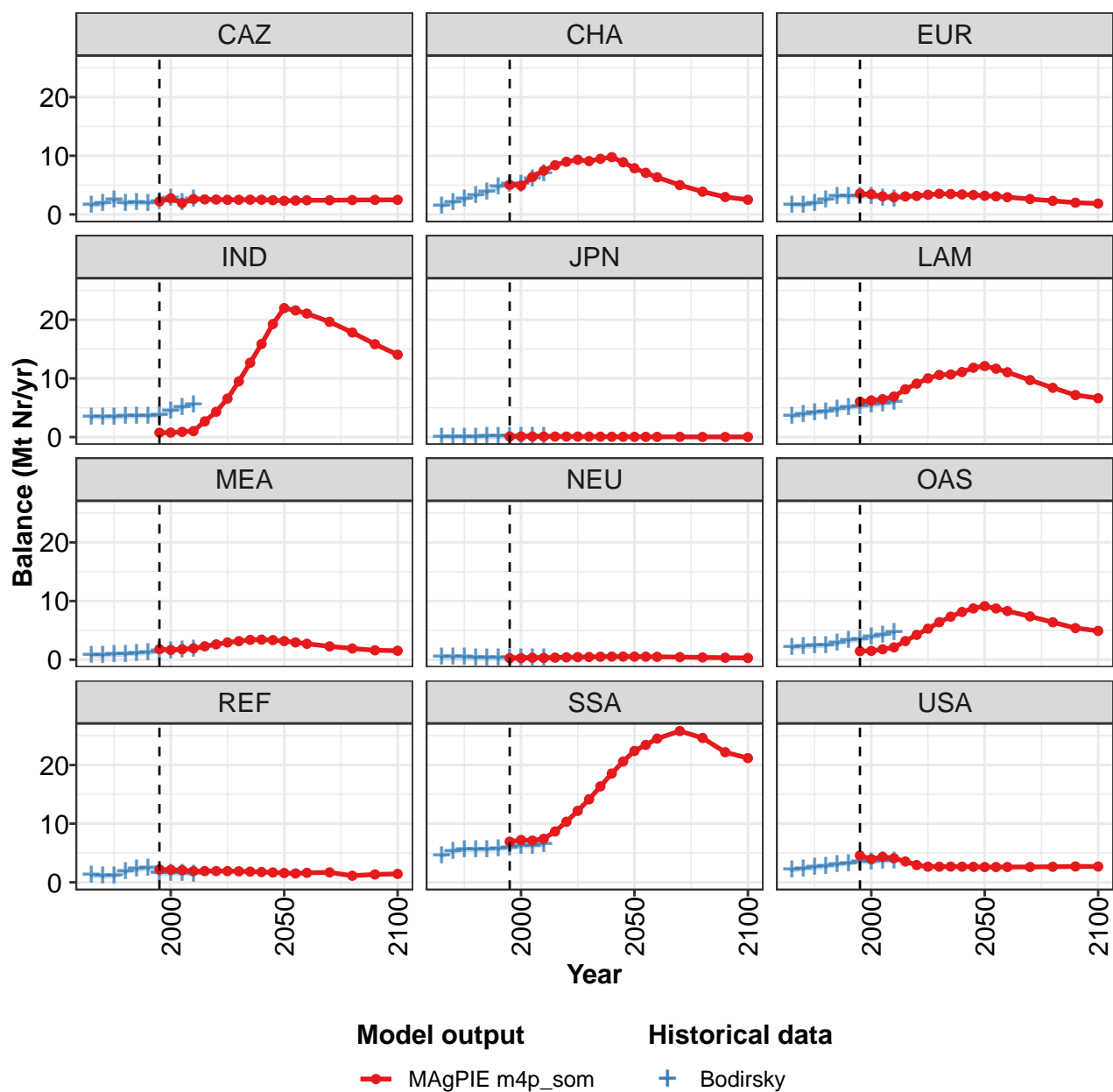


Figure 474: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Balance (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	34.9	34.9	36.3	38.8	44.9	50.6	57.2	64.0	71.0	77.8	83.3
CAZ	2.2	2.8	1.9	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.4
CHA	5.0	4.9	6.4	7.5	8.4	9.0	9.3	9.1	9.5	9.8	8.9
EUR	3.6	3.4	3.1	2.9	3.1	3.1	3.3	3.5	3.5	3.4	3.3
IND	0.7	0.8	0.9	1.0	2.7	4.3	6.6	9.5	12.7	15.9	19.3
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	6.0	6.2	6.5	6.9	8.1	9.1	10.0	10.6	10.7	11.1	11.8
MEA	1.8	1.7	1.8	1.9	2.3	2.6	2.9	3.2	3.4	3.4	3.3
NEU	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5
OAS	1.5	1.5	1.8	2.1	3.2	4.2	5.3	6.4	7.3	8.1	8.7
REF	2.2	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.7
SSA	6.9	7.2	7.1	7.4	8.7	10.3	12.2	14.2	16.4	18.6	20.6
USA	4.6	4.0	4.4	4.1	3.6	2.9	2.7	2.7	2.7	2.7	2.7

Table 1823: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Balance (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	86.9	85.6	84.1	79.6	72.0	64.0	59.6
CAZ	2.3	2.4	2.4	2.4	2.5	2.5	2.5
CHA	7.9	7.1	6.3	5.0	3.9	3.0	2.5
EUR	3.2	3.1	2.9	2.6	2.3	2.0	1.9
IND	22.0	21.6	21.1	19.7	17.8	15.8	14.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	12.1	11.7	11.1	9.7	8.4	7.2	6.6
MEA	3.2	2.9	2.7	2.3	1.9	1.6	1.5
NEU	0.5	0.5	0.5	0.4	0.4	0.3	0.3
OAS	9.1	8.7	8.3	7.4	6.4	5.4	4.9
REF	1.6	1.5	1.6	1.7	1.1	1.3	1.4
SSA	22.4	23.4	24.5	25.8	24.6	22.2	21.2
USA	2.6	2.6	2.6	2.6	2.7	2.7	2.7

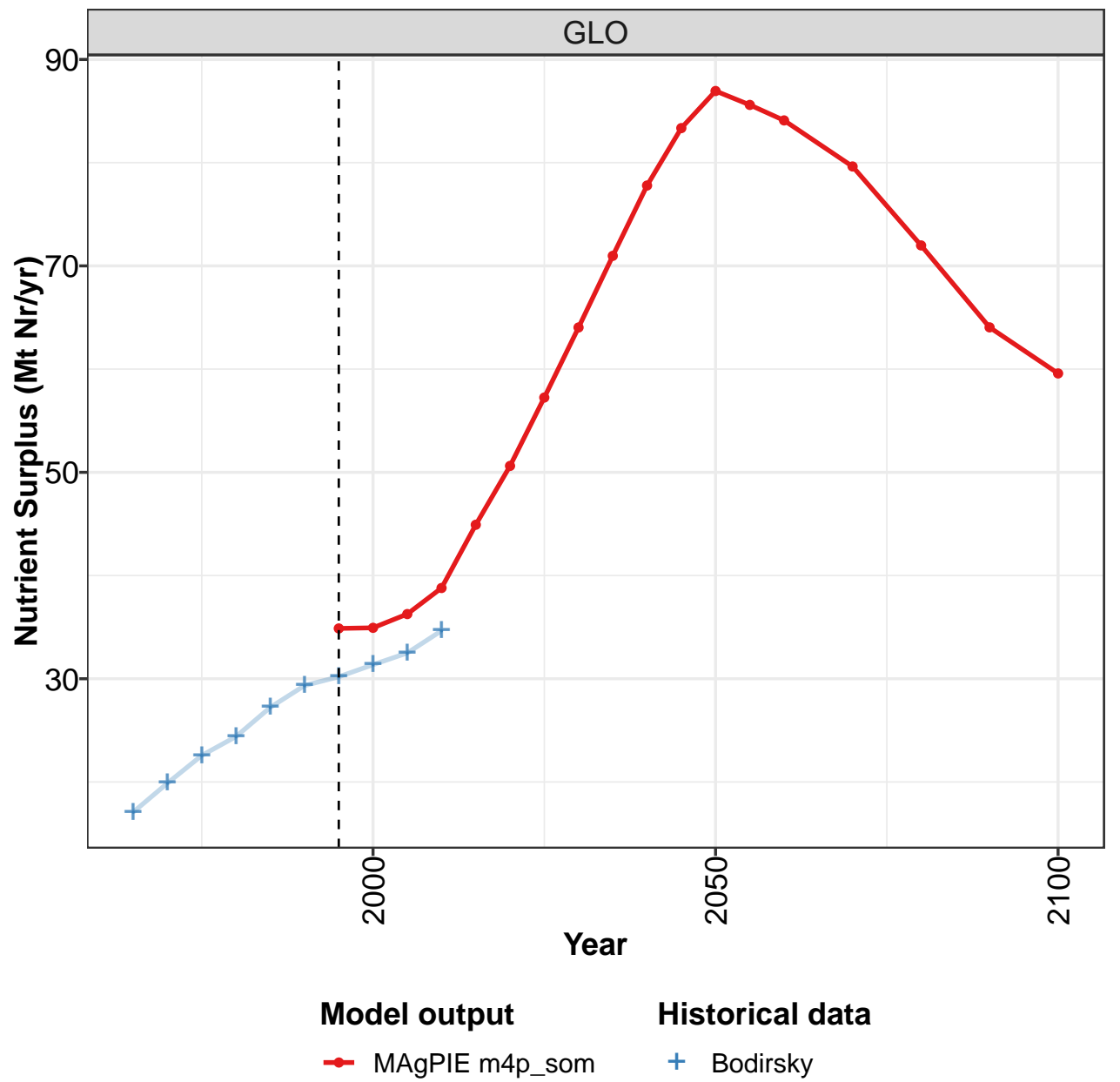
Table 1824: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Balance (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	22.5	24.7	27.3	29.1	32.1	34.4	35.4	37.5	39.3	42.1
CAZ	1.5	1.8	2.4	1.9	2.0	1.9	2.2	2.7	2.1	2.7
CHA	1.5	2.1	2.6	3.2	3.8	4.7	5.2	5.1	6.1	7.0
EUR	1.6	1.6	1.9	2.4	3.1	3.1	3.1	3.1	2.8	2.6
IND	3.4	3.3	3.4	3.5	3.6	3.6	3.7	4.5	5.1	5.5
JPN	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
LAM	3.5	3.8	4.1	4.3	4.7	5.0	5.2	5.4	5.7	5.9
MEA	0.8	0.7	0.9	1.0	1.1	1.2	1.5	1.5	1.7	1.8
NEU	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
OAS	2.1	2.2	2.3	2.5	2.8	3.3	3.4	3.8	4.2	4.7
REF	1.2	1.0	1.1	1.8	2.2	2.4	1.5	1.5	1.5	1.4
SSA	4.5	5.3	5.6	5.5	5.6	5.7	5.8	6.2	6.2	6.4
USA	2.1	2.3	2.5	2.7	3.0	3.2	3.5	3.4	3.7	3.7

Table 1825: Bodirsky — Resources—Nitrogen—Pasture Budget—Balance (Mt Nr/yr)

57.3.2 Balance—Nutrient Surplus

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

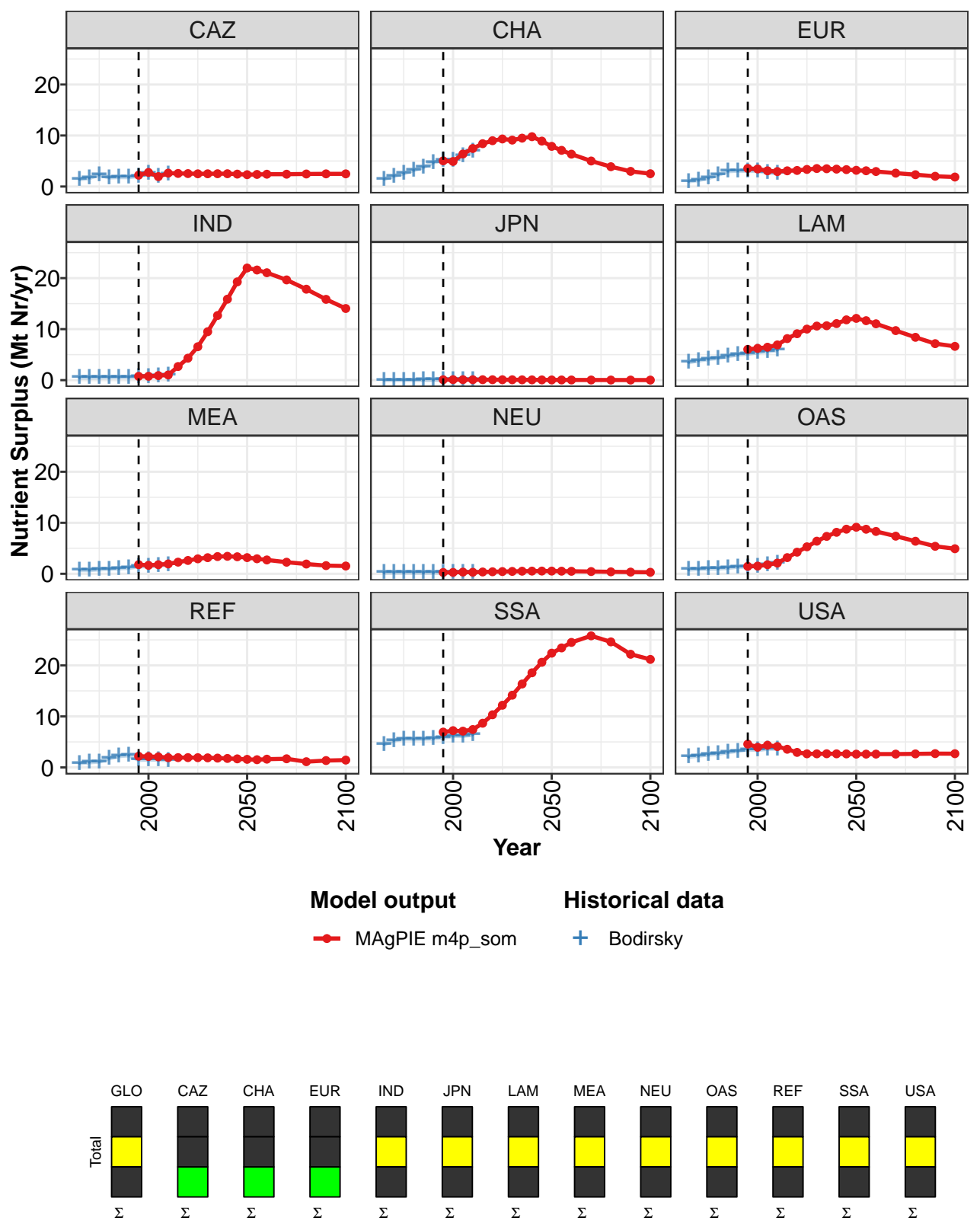


Figure 475: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Balance—Nutrient Surplus (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	34.9	34.9	36.3	38.8	44.9	50.6	57.2	64.0	71.0	77.8	83.3
CAZ	2.2	2.8	1.9	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.4
CHA	5.0	4.9	6.4	7.5	8.4	9.0	9.3	9.1	9.5	9.8	8.9
EUR	3.6	3.4	3.1	2.9	3.1	3.1	3.3	3.5	3.5	3.4	3.3
IND	0.7	0.8	0.9	1.0	2.7	4.3	6.6	9.5	12.7	15.9	19.3
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	6.0	6.2	6.5	6.9	8.1	9.1	10.0	10.6	10.7	11.1	11.8
MEA	1.8	1.7	1.8	1.9	2.3	2.6	2.9	3.2	3.4	3.4	3.3
NEU	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5
OAS	1.5	1.5	1.8	2.1	3.2	4.2	5.3	6.4	7.3	8.1	8.7
REF	2.2	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.7
SSA	6.9	7.2	7.1	7.4	8.7	10.3	12.2	14.2	16.4	18.6	20.6
USA	4.6	4.0	4.4	4.1	3.6	2.9	2.7	2.7	2.7	2.7	2.7

Table 1826: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Balance—Nutrient Surplus (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	86.9	85.6	84.1	79.6	72.0	64.0	59.6
CAZ	2.3	2.4	2.4	2.4	2.5	2.5	2.5
CHA	7.9	7.1	6.3	5.0	3.9	3.0	2.5
EUR	3.2	3.1	2.9	2.6	2.3	2.0	1.9
IND	22.0	21.6	21.1	19.7	17.8	15.8	14.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	12.1	11.7	11.1	9.7	8.4	7.2	6.6
MEA	3.2	2.9	2.7	2.3	1.9	1.6	1.5
NEU	0.5	0.5	0.5	0.4	0.4	0.3	0.3
OAS	9.1	8.7	8.3	7.4	6.4	5.4	4.9
REF	1.6	1.5	1.6	1.7	1.1	1.3	1.4
SSA	22.4	23.4	24.5	25.8	24.6	22.2	21.2
USA	2.6	2.6	2.6	2.6	2.7	2.7	2.7

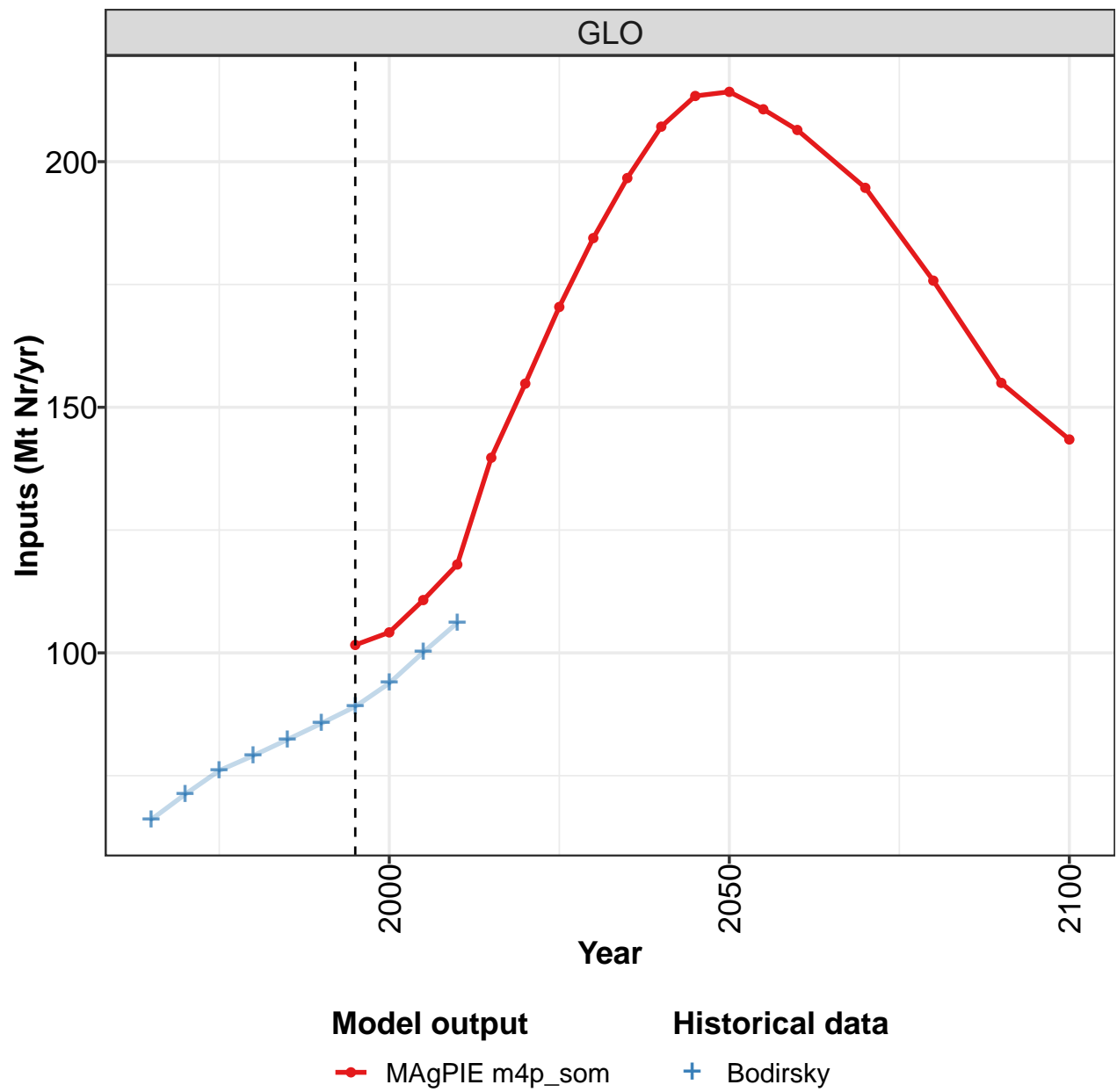
Table 1827: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Balance—Nutrient Surplus (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	17.1	19.9	22.6	24.4	27.2	29.3	30.2	31.4	32.5	34.7
CAZ	1.4	1.7	2.3	1.8	1.8	1.8	2.1	2.6	1.9	2.5
CHA	1.5	2.1	2.6	3.2	3.8	4.7	5.2	5.1	6.1	7.0
EUR	1.0	1.3	1.7	2.3	3.0	3.1	3.1	3.0	2.7	2.6
IND	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.8	0.9	1.1
JPN	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
LAM	3.5	3.8	4.1	4.3	4.7	5.0	5.2	5.4	5.7	5.9
MEA	0.7	0.7	0.9	0.9	1.1	1.2	1.5	1.5	1.6	1.8
NEU	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3
OAS	0.8	0.9	1.0	1.0	1.2	1.4	1.4	1.5	1.7	2.0
REF	0.8	1.0	1.1	1.8	2.2	2.4	1.5	1.5	1.5	1.4
SSA	4.5	5.3	5.6	5.5	5.6	5.7	5.8	6.2	6.2	6.4
USA	2.1	2.3	2.5	2.7	3.0	3.2	3.5	3.4	3.7	3.7

Table 1828: Bodirsky — Resources—Nitrogen—Pasture Budget—Balance—Nutrient Surplus (Mt Nr/yr)

57.3.3 Inputs

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

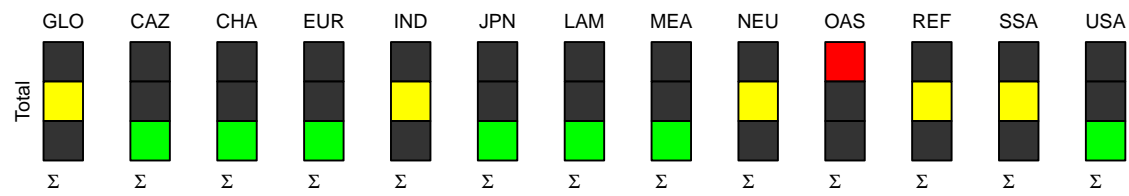
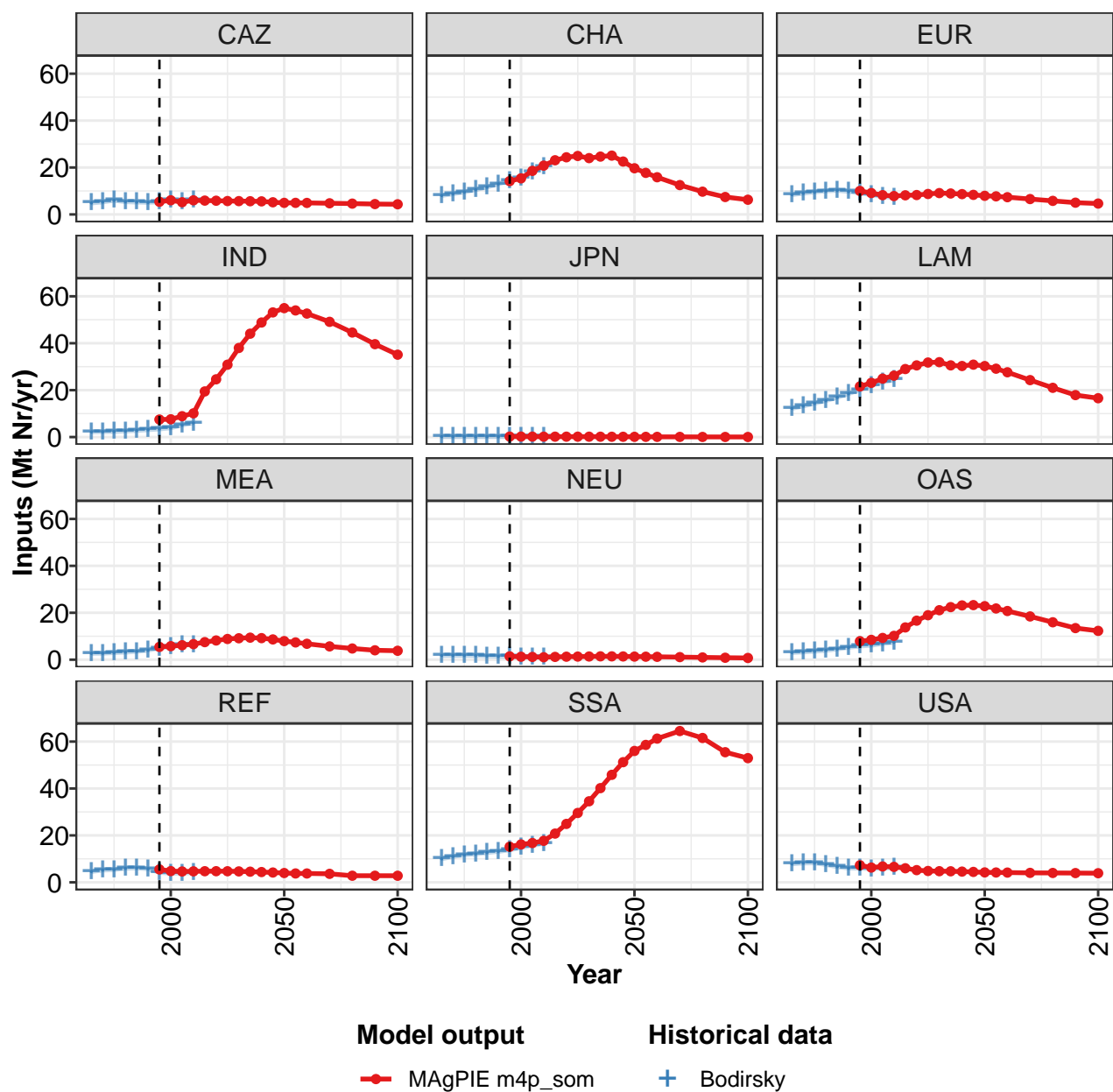


Figure 476: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Inputs (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	102	104	111	118	140	155	170	184	197	207	213
CAZ	5	6	5	6	6	6	6	6	6	6	5
CHA	14	15	19	21	23	24	25	24	25	25	23
EUR	10	9	8	8	8	8	9	9	9	9	8
IND	7	8	9	10	19	25	31	38	44	49	53
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	22	23	25	26	29	31	32	32	31	30	31
MEA	5	6	6	7	7	8	9	9	9	9	9
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	8	8	9	10	14	17	19	21	22	23	23
REF	6	5	5	5	5	5	5	5	5	4	4
SSA	15	16	17	18	21	25	30	35	40	46	51
USA	7	6	7	7	6	5	5	5	5	5	4

Table 1829: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Inputs (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	214	211	206	195	176	155	143
CAZ	5	5	5	5	5	4	4
CHA	20	18	16	13	10	7	6
EUR	8	8	7	7	6	5	5
IND	55	54	53	49	45	40	35
JPN	0	0	0	0	0	0	0
LAM	30	29	28	24	21	18	17
MEA	8	7	7	6	5	4	4
NEU	1	1	1	1	1	1	1
OAS	23	22	21	18	16	13	12
REF	4	4	4	4	3	3	3
SSA	56	59	61	65	62	55	53
USA	4	4	4	4	4	4	4

Table 1830: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Inputs (Mt Nr/yr) [PART 2/2]

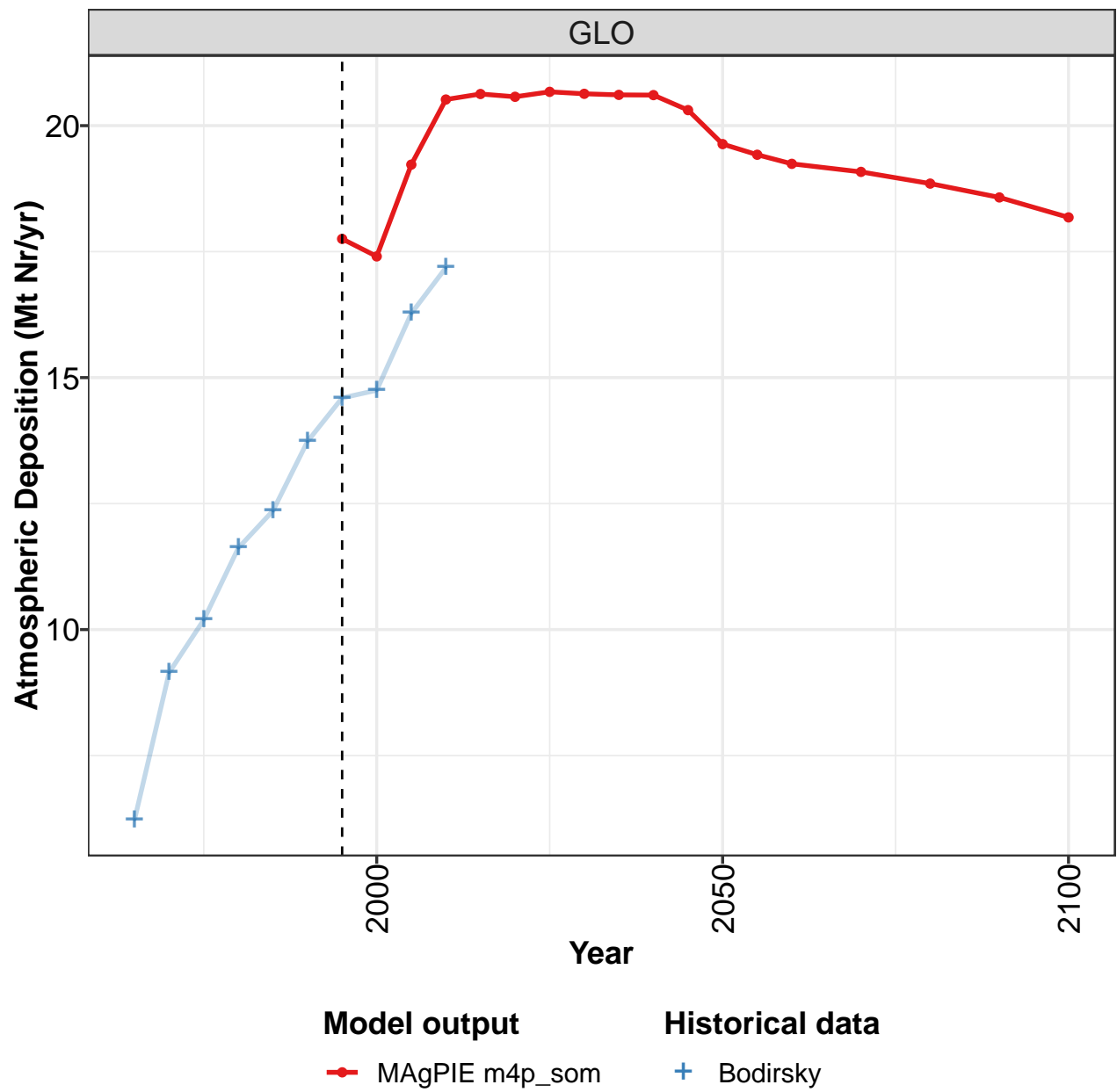
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	66	71	76	79	82	86	89	94	100	106
CAZ	5	5	6	5	5	5	5	6	5	6
CHA	8	9	10	11	12	13	14	16	18	20
EUR	8	9	10	10	10	10	9	8	8	7
IND	2	2	2	3	3	3	3	4	5	6
JPN	0	0	0	0	0	0	0	0	0	0
LAM	12	13	14	16	17	19	20	22	23	24
MEA	3	3	3	3	4	4	5	6	6	6
NEU	2	2	2	2	2	1	1	1	1	1
OAS	3	3	4	4	5	5	6	6	7	7
REF	5	5	5	6	6	6	4	4	4	4
SSA	10	11	12	12	13	13	14	15	16	17
USA	8	8	8	8	7	6	6	6	6	6

Table 1831: Bodirsky — Resources—Nitrogen—Pasture Budget—Inputs (Mt Nr/yr)



57.3.4 Inputs—Atmospheric Deposition

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

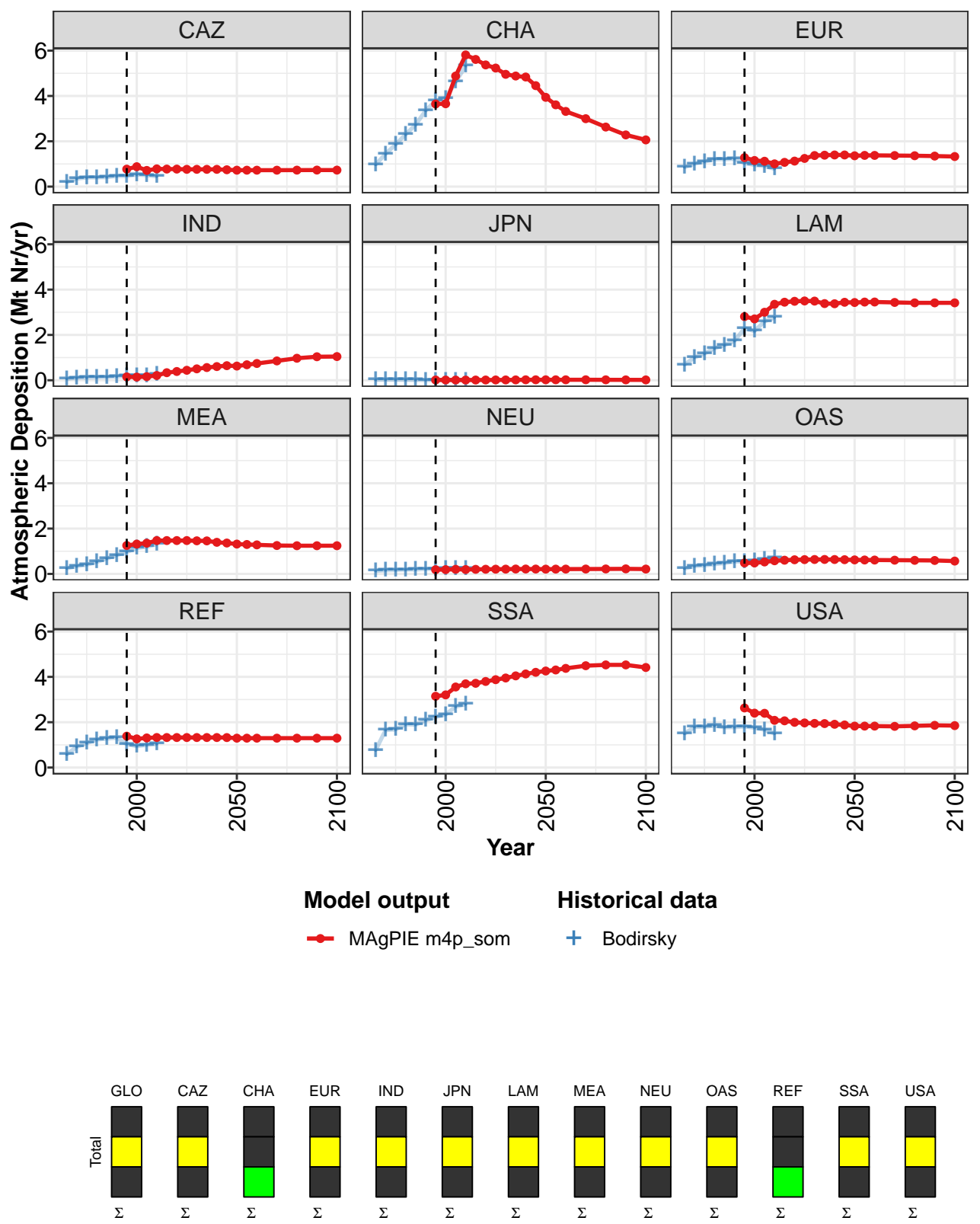


Figure 477: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Inputs—Atmospheric Deposition (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	17.8	17.4	19.2	20.5	20.6	20.6	20.7	20.6	20.6	20.6	20.3
CAZ	0.8	0.9	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7
CHA	3.6	3.7	4.9	5.8	5.6	5.4	5.2	5.0	4.9	4.8	4.5
EUR	1.3	1.2	1.1	1.0	1.1	1.1	1.2	1.4	1.4	1.4	1.4
IND	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.6	0.6	0.6
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	2.8	2.7	3.0	3.4	3.4	3.5	3.5	3.5	3.4	3.4	3.4
MEA	1.3	1.3	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.4
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
REF	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
SSA	3.1	3.2	3.6	3.7	3.7	3.8	3.9	4.0	4.0	4.1	4.2
USA	2.6	2.4	2.4	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9

Table 1832: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Inputs—Atmospheric Deposition (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	19.6	19.4	19.2	19.1	18.9	18.6	18.2
CAZ	0.7	0.7	0.7	0.7	0.7	0.7	0.7
CHA	3.9	3.6	3.3	3.0	2.6	2.3	2.1
EUR	1.4	1.4	1.4	1.4	1.4	1.3	1.3
IND	0.6	0.7	0.7	0.9	1.0	1.0	1.0
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	3.4	3.5	3.5	3.4	3.4	3.4	3.4
MEA	1.3	1.3	1.3	1.3	1.2	1.2	1.2
NEU	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	0.6	0.6	0.6	0.6	0.6	0.6	0.6
REF	1.3	1.3	1.3	1.3	1.3	1.3	1.3
SSA	4.3	4.3	4.4	4.5	4.5	4.5	4.4
USA	1.8	1.8	1.8	1.8	1.8	1.9	1.8

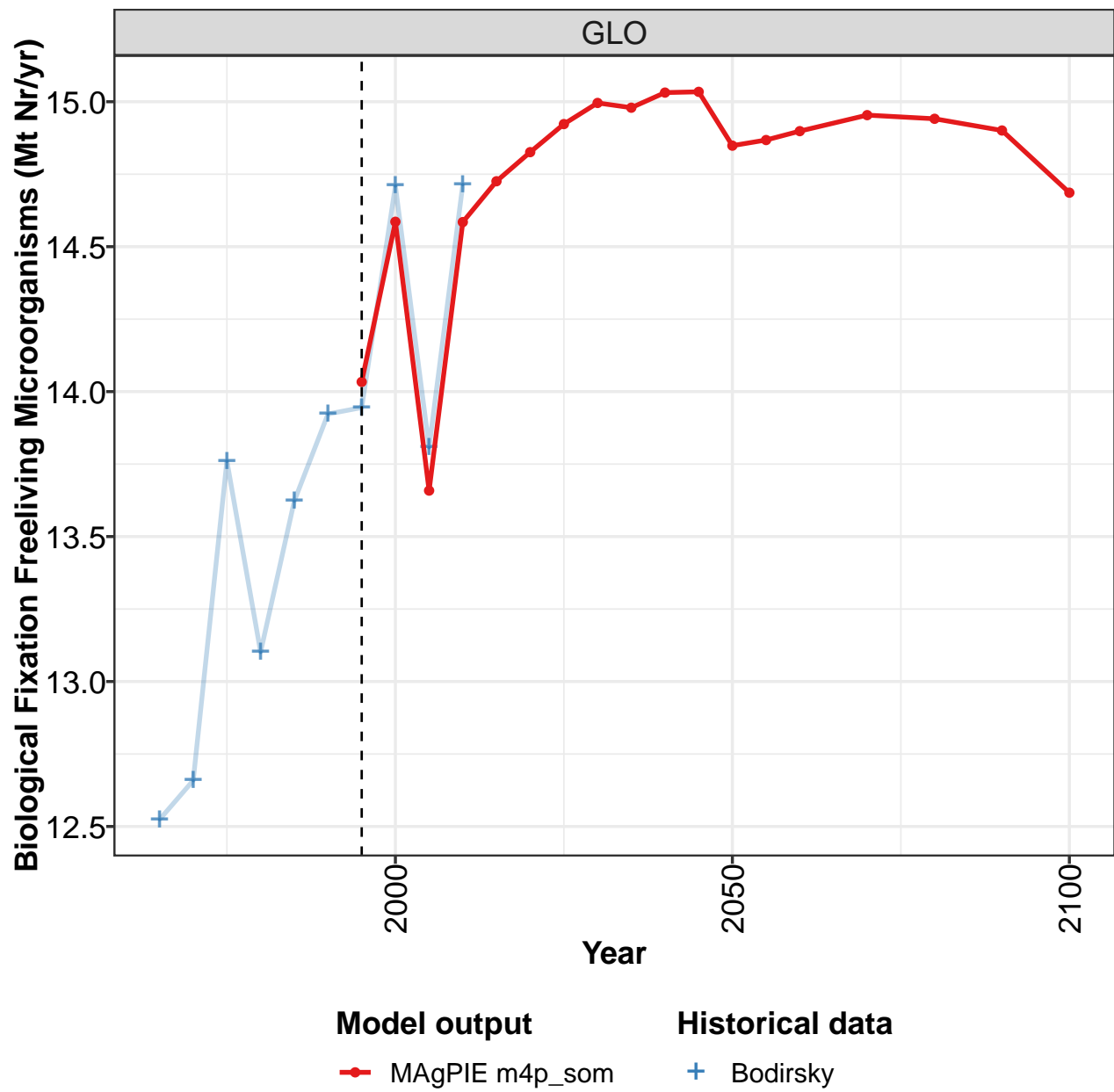
Table 1833: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Inputs—Atmospheric Deposition (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	6.2	9.1	10.2	11.6	12.4	13.7	14.6	14.7	16.3	17.2
CAZ	0.2	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5
CHA	1.0	1.4	1.9	2.3	2.7	3.4	3.8	3.9	4.6	5.3
EUR	0.9	1.0	1.1	1.2	1.2	1.2	1.0	1.0	0.9	0.8
IND	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	0.7	1.0	1.2	1.4	1.5	1.7	2.3	2.2	2.6	2.8
MEA	0.2	0.3	0.4	0.5	0.7	0.8	1.0	1.1	1.2	1.3
NEU	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
OAS	0.2	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.7
REF	0.6	0.9	1.1	1.2	1.3	1.3	1.0	0.9	1.0	1.0
SSA	0.8	1.7	1.7	1.9	1.9	2.1	2.2	2.3	2.7	2.8
USA	1.5	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.5

Table 1834: Bodirsky — Resources—Nitrogen—Pasture Budget—Inputs—Atmospheric Deposition (Mt Nr/yr)

57.3.5 Inputs—Biological Fixation Freelifving Microorganisms

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

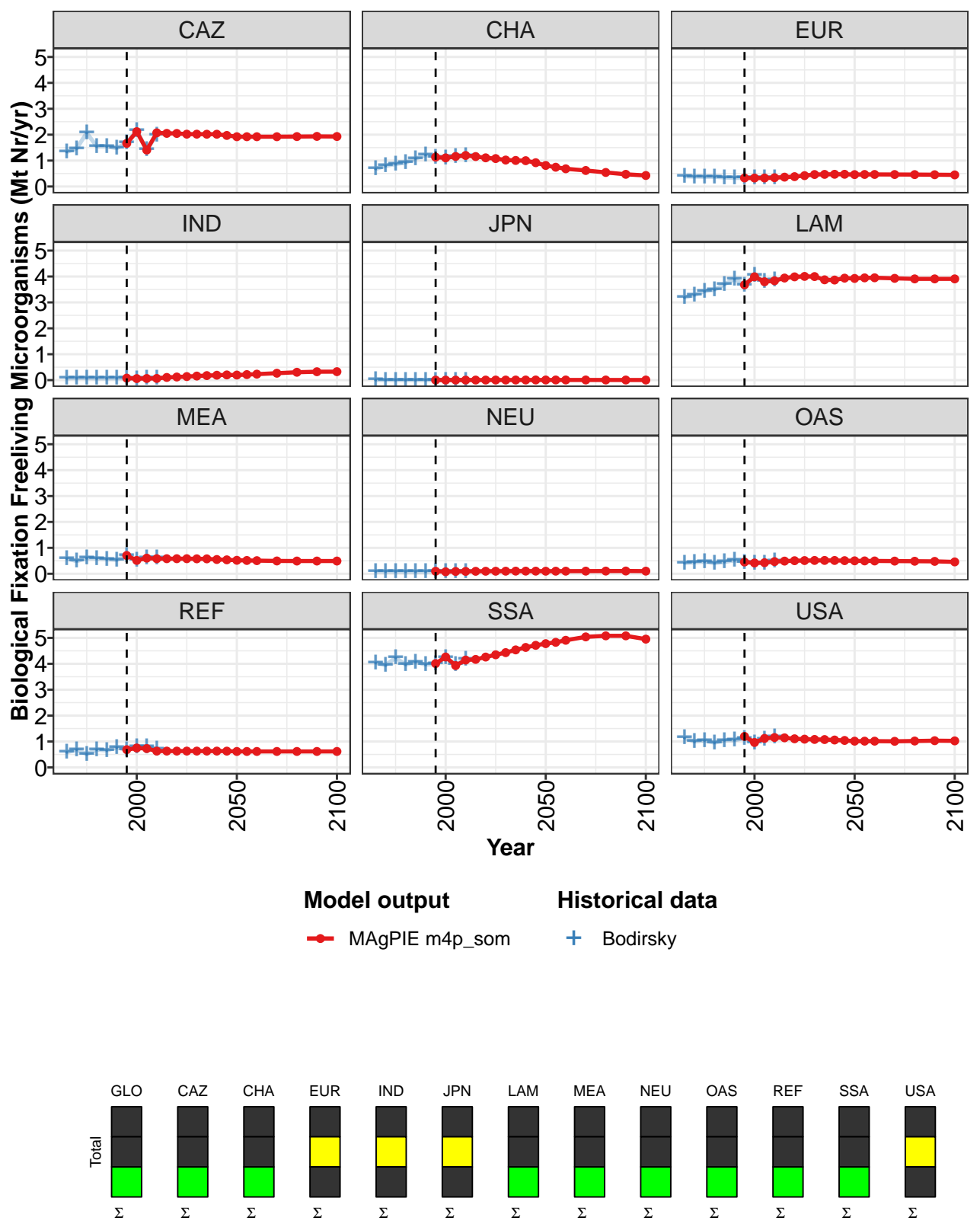


Figure 478: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Inputs—Biological Fixation Free-living Microorganisms (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	14.0	14.6	13.7	14.6	14.7	14.8	14.9	15.0	15.0	15.0	15.0
CAZ	1.7	2.1	1.4	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0
CHA	1.1	1.1	1.2	1.2	1.2	1.1	1.1	1.0	1.0	1.0	0.9
EUR	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5
IND	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	3.7	4.0	3.8	3.8	3.9	4.0	4.0	4.0	3.9	3.9	3.9
MEA	0.7	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
REF	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
SSA	4.0	4.3	3.9	4.1	4.2	4.3	4.3	4.4	4.5	4.6	4.7
USA	1.2	1.0	1.1	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.0

Table 1835: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Inputs—Biological Fixation Freely-living Microorganisms (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	14.8	14.9	14.9	15.0	14.9	14.9	14.7
CAZ	1.9	1.9	1.9	1.9	1.9	1.9	1.9
CHA	0.8	0.7	0.7	0.6	0.5	0.5	0.4
EUR	0.5	0.5	0.5	0.5	0.5	0.5	0.4
IND	0.2	0.2	0.2	0.3	0.3	0.3	0.3
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	3.9	3.9	4.0	3.9	3.9	3.9	3.9
MEA	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	0.5	0.5	0.5	0.5	0.5	0.5	0.5
REF	0.6	0.6	0.6	0.6	0.6	0.6	0.6
SSA	4.8	4.8	4.9	5.0	5.1	5.1	5.0
USA	1.0	1.0	1.0	1.0	1.0	1.0	1.0

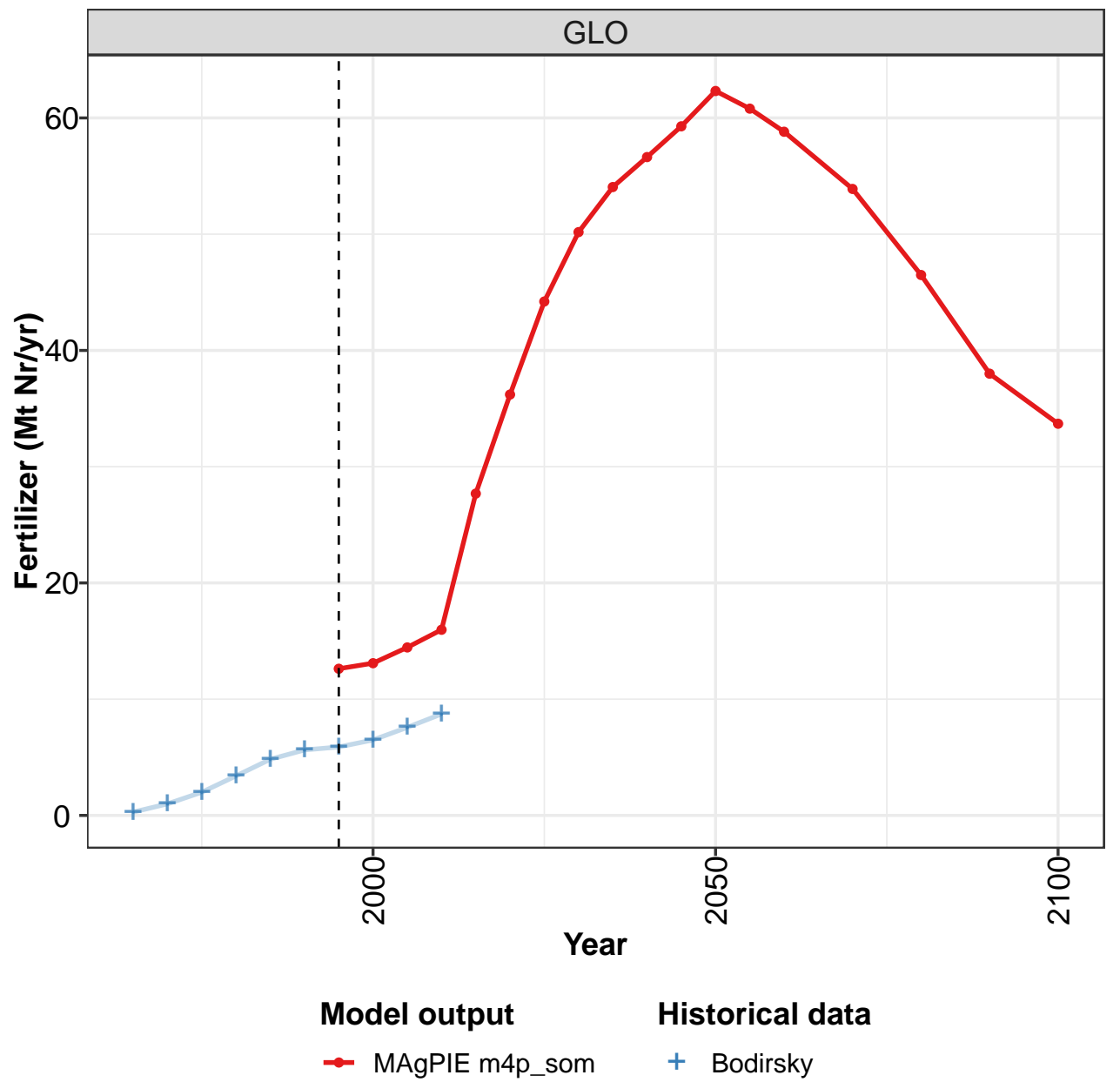
Table 1836: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Inputs—Biological Fixation Freely-living Microorganisms (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	12.5	12.7	13.8	13.1	13.6	13.9	13.9	14.7	13.8	14.7
CAZ	1.3	1.5	2.1	1.6	1.5	1.5	1.7	2.2	1.4	2.0
CHA	0.7	0.8	0.9	0.9	1.1	1.2	1.1	1.1	1.2	1.2
EUR	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3
IND	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	3.2	3.3	3.4	3.5	3.7	3.9	3.7	4.0	3.8	3.9
MEA	0.6	0.5	0.6	0.6	0.6	0.5	0.7	0.5	0.6	0.6
NEU	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OAS	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.4	0.4	0.5
REF	0.6	0.7	0.5	0.7	0.7	0.8	0.7	0.8	0.8	0.7
SSA	4.0	3.9	4.2	4.0	4.1	4.0	4.0	4.2	4.0	4.2
USA	1.1	1.0	1.0	1.0	1.0	1.1	1.1	1.0	1.1	1.2

Table 1837: Bodirsky — Resources—Nitrogen—Pasture Budget—Inputs—Biological Fixation Freely-living Microorganisms (Mt Nr/yr)

57.3.6 Inputs—Fertilizer

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

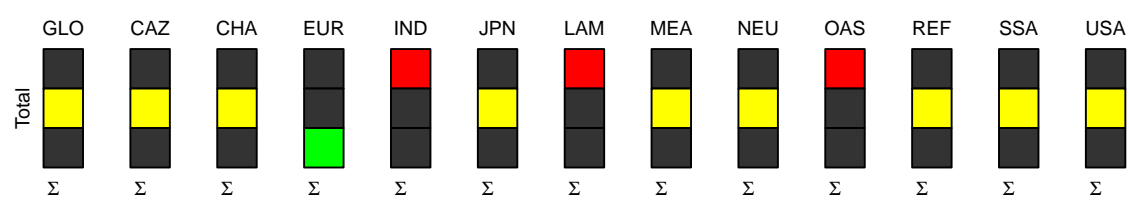
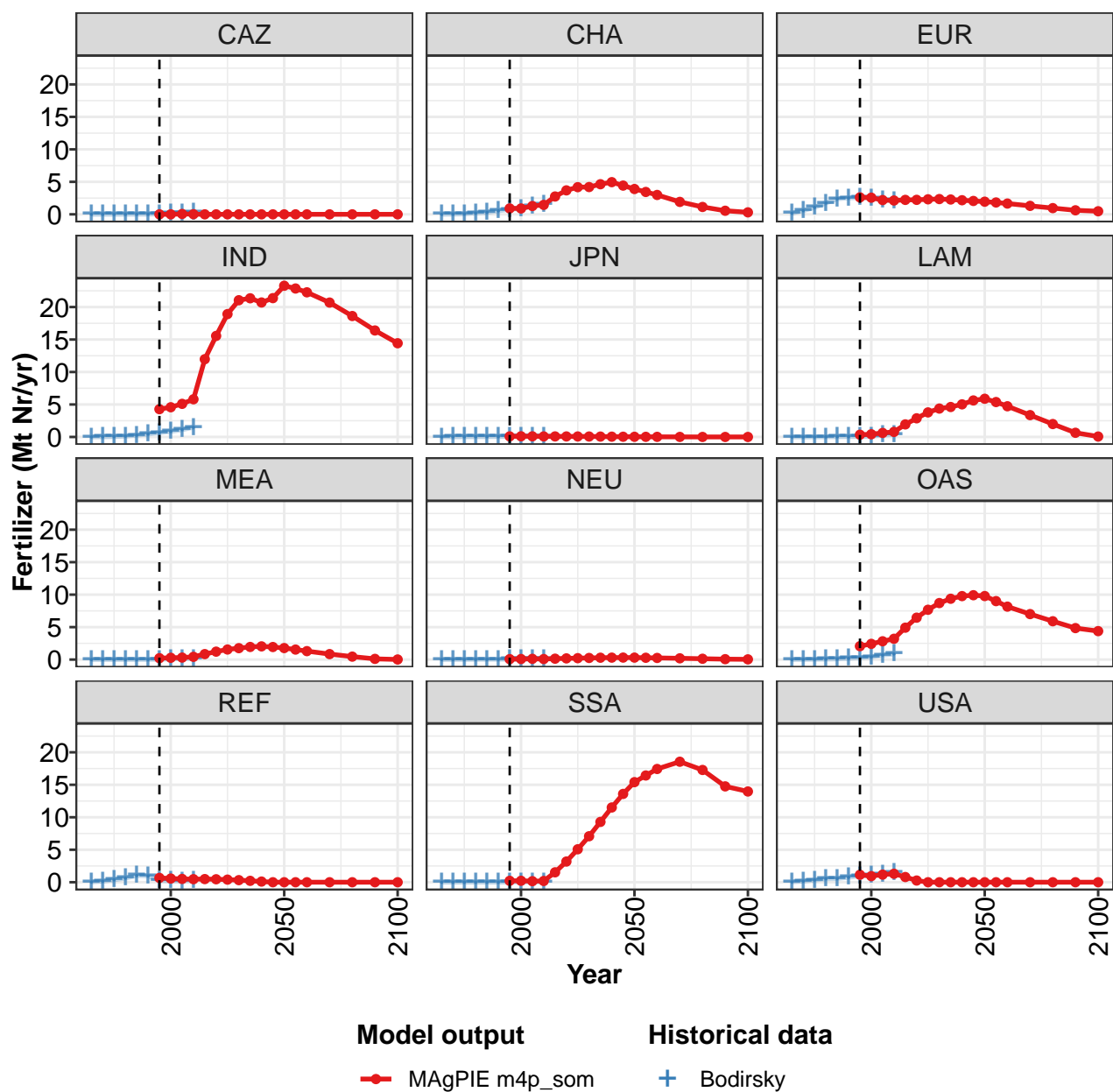


Figure 479: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Inputs—Fertilizer (Mt Nr/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	12.6	13.1	14.5	16.0	27.7	36.2	44.2	50.2	54.1	56.6	59.3
CAZ	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	0.9	0.9	1.3	1.5	2.7	3.7	4.2	4.2	4.6	5.0	4.4
EUR	2.6	2.6	2.2	2.1	2.2	2.2	2.3	2.4	2.3	2.2	2.1
IND	4.3	4.6	5.1	5.8	12.0	15.6	18.9	21.1	21.4	20.7	21.4
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0
LAM	0.3	0.4	0.6	0.8	1.9	2.9	3.8	4.4	4.6	5.0	5.6
MEA	0.2	0.3	0.3	0.4	0.8	1.2	1.6	1.8	1.9	2.0	1.9
NEU	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3
OAS	2.1	2.4	2.8	3.2	4.9	6.5	7.7	8.7	9.4	9.8	9.9
REF	0.7	0.6	0.5	0.5	0.5	0.5	0.4	0.3	0.2	0.1	0.0
SSA	0.2	0.2	0.2	0.2	1.5	3.2	5.1	7.1	9.3	11.5	13.6
USA	1.1	0.9	1.2	1.3	0.8	0.3	0.0	0.0	0.0	0.0	0.0

Table 1838: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Inputs—Fertilizer (Mt Nr/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	62.3	60.8	58.8	53.9	46.5	38.0	33.7
CAZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHA	3.9	3.4	3.0	1.9	1.1	0.6	0.3
EUR	1.9	1.8	1.7	1.3	1.0	0.6	0.5
IND	23.3	22.9	22.3	20.7	18.6	16.4	14.4
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	5.9	5.4	4.7	3.4	2.0	0.6	0.1
MEA	1.8	1.5	1.3	0.8	0.5	0.1	0.0
NEU	0.3	0.3	0.3	0.2	0.1	0.1	0.0
OAS	9.8	9.0	8.2	7.0	5.9	4.8	4.4
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	15.4	16.4	17.4	18.6	17.3	14.8	14.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

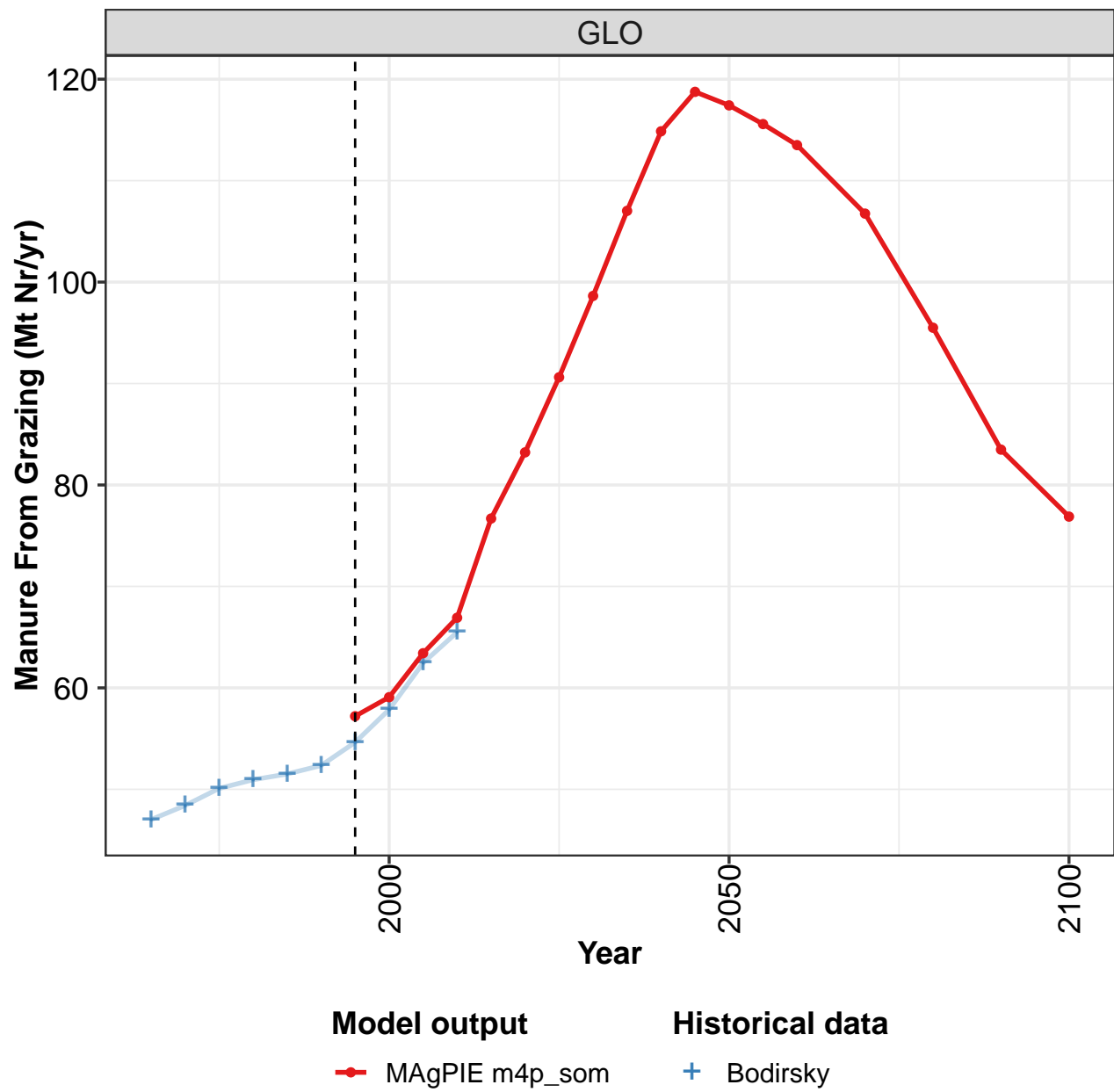
Table 1839: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Inputs—Fertilizer (Mt Nr/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.29	0.99	1.99	3.40	4.83	5.63	5.89	6.49	7.57	8.72
CAZ	0.00	0.00	0.00	0.01	0.01	0.02	0.08	0.16	0.25	0.30
CHA	0.01	0.03	0.07	0.21	0.31	0.54	0.77	0.86	1.28	1.53
EUR	0.17	0.56	1.07	1.74	2.40	2.53	2.57	2.53	2.15	2.10
IND	0.00	0.02	0.05	0.13	0.28	0.44	0.67	0.85	1.12	1.49
JPN	0.01	0.02	0.03	0.03	0.05	0.06	0.09	0.10	0.10	0.09
LAM	0.00	0.00	0.01	0.02	0.03	0.05	0.06	0.12	0.29	0.37
MEA	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.09	0.15	0.16
NEU	0.00	0.01	0.01	0.03	0.04	0.05	0.05	0.06	0.09	0.09
OAS	0.00	0.02	0.04	0.07	0.11	0.19	0.31	0.42	0.70	0.86
REF	0.04	0.16	0.37	0.63	1.03	0.98	0.26	0.21	0.20	0.26
SSA	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.03	0.03
USA	0.05	0.17	0.34	0.53	0.56	0.76	0.97	1.05	1.22	1.44

Table 1840: Bodirsky — Resources—Nitrogen—Pasture Budget—Inputs—Fertilizer (Mt Nr/yr)

57.3.7 Inputs—Manure From Grazing

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

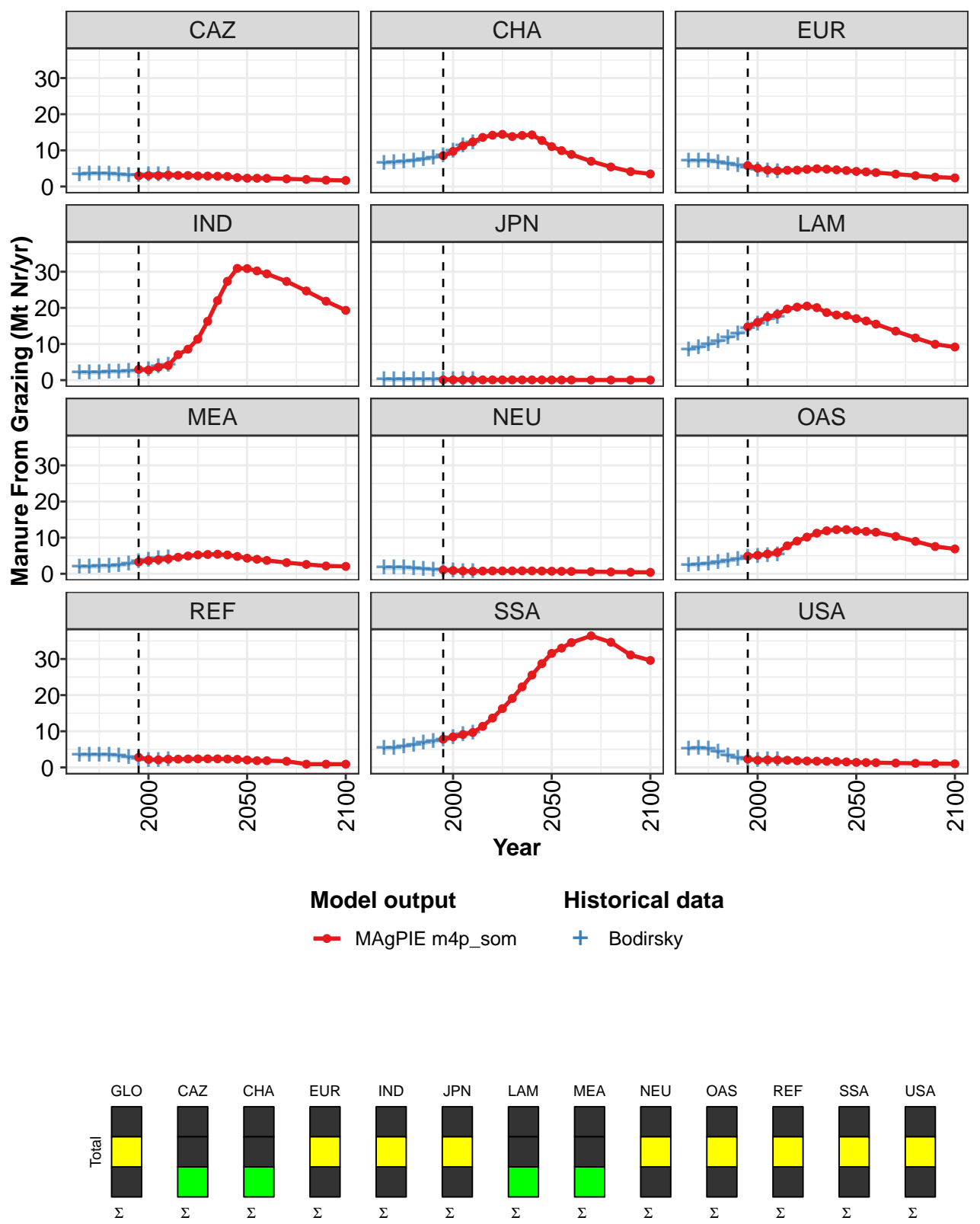


Figure 480: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Inputs—Manure From Grazing (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	57	59	63	67	77	83	91	99	107	115	119
CAZ	3	3	3	3	3	3	3	3	3	3	2
CHA	9	10	11	12	14	14	14	14	14	14	13
EUR	6	5	5	4	5	5	5	5	5	5	4
IND	3	3	4	4	7	9	11	16	22	27	31
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	15	16	17	18	20	20	20	20	19	18	18
MEA	3	4	4	4	5	5	5	5	5	5	5
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	5	5	5	6	8	9	10	11	12	12	12
REF	3	2	2	2	2	2	2	2	2	2	2
SSA	8	8	9	10	11	14	16	19	22	26	29
USA	2	2	2	2	2	2	2	2	2	2	2

Table 1841: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Inputs—Manure From Grazing (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	117	116	114	107	96	83	77
CAZ	2	2	2	2	2	2	2
CHA	11	10	9	7	5	4	3
EUR	4	4	4	3	3	3	2
IND	31	30	29	27	25	22	19
JPN	0	0	0	0	0	0	0
LAM	17	16	15	14	12	10	9
MEA	4	4	4	3	3	2	2
NEU	1	1	1	1	1	0	0
OAS	12	12	11	10	9	8	7
REF	2	2	2	2	1	1	1
SSA	32	33	35	36	35	31	30
USA	1	1	1	1	1	1	1

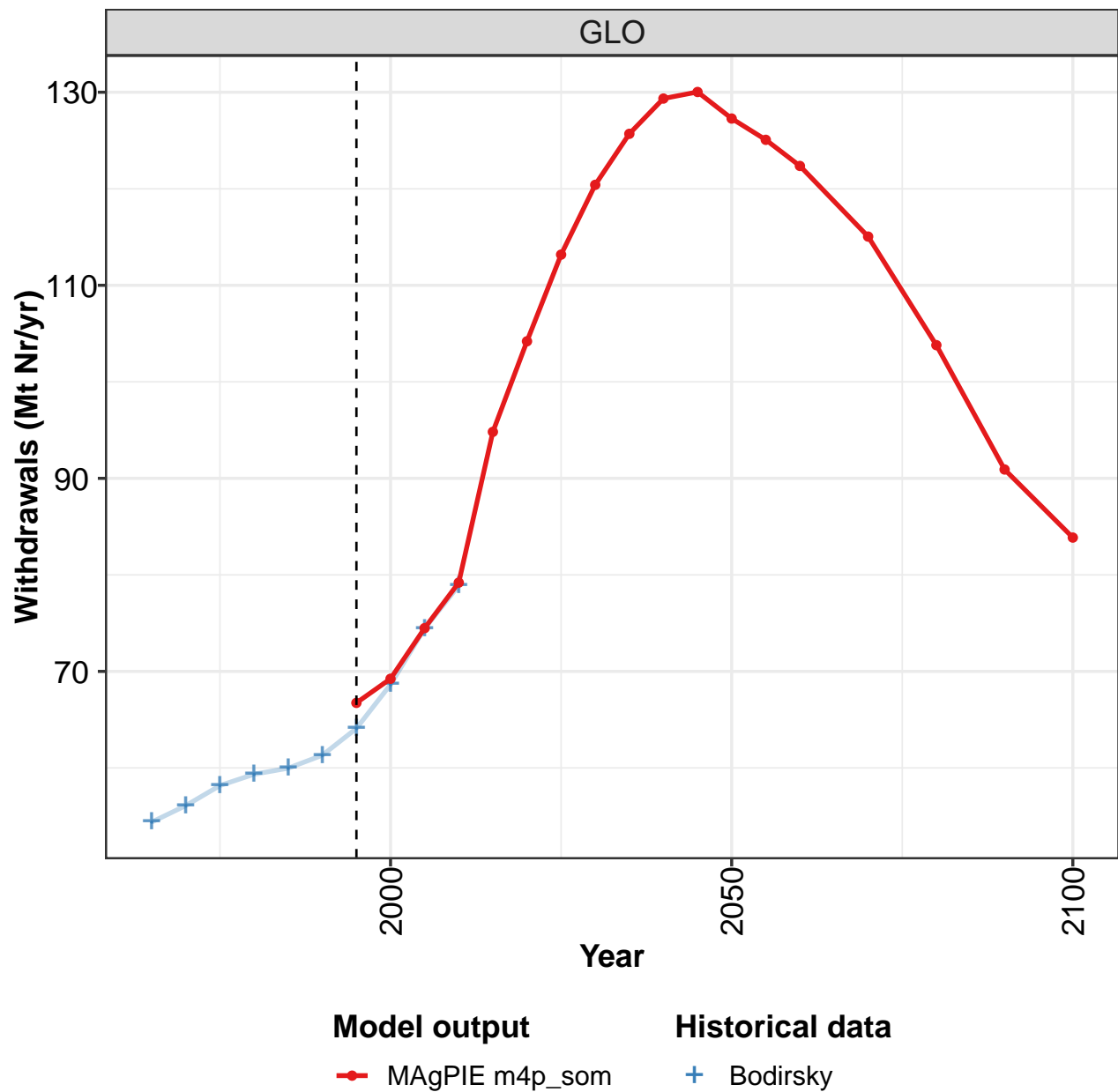
Table 1842: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Inputs—Manure From Grazing (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	47.0	48.4	50.1	50.9	51.5	52.3	54.6	57.9	62.5	65.5
CAZ	3.4	3.5	3.5	3.5	3.3	3.2	3.2	3.2	3.3	3.3
CHA	6.4	6.5	6.8	7.2	7.5	7.9	8.6	9.8	11.2	12.2
EUR	7.0	7.1	7.0	6.7	6.3	5.7	5.2	4.6	4.2	4.0
IND	2.1	2.1	2.1	2.3	2.3	2.4	2.5	2.8	3.8	4.3
JPN	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	8.4	8.9	9.8	10.6	11.7	12.8	14.2	15.6	16.7	17.4
MEA	1.9	1.9	2.0	2.1	2.3	2.7	3.3	3.8	4.2	4.4
NEU	1.6	1.6	1.6	1.5	1.3	1.1	1.0	0.8	0.7	0.6
OAS	2.4	2.5	2.7	3.1	3.5	4.0	4.5	4.7	5.1	5.4
REF	3.4	3.5	3.5	3.4	3.2	2.7	2.3	1.9	2.0	2.1
SSA	5.2	5.4	5.8	6.3	6.7	7.1	7.6	8.3	9.0	9.6
USA	5.2	5.3	5.1	4.3	3.3	2.5	2.1	2.0	2.1	2.1

Table 1843: Bodirsky — Resources—Nitrogen—Pasture Budget—Inputs—Manure From Grazing (Mt Nr/yr)

57.3.8 Withdrawals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

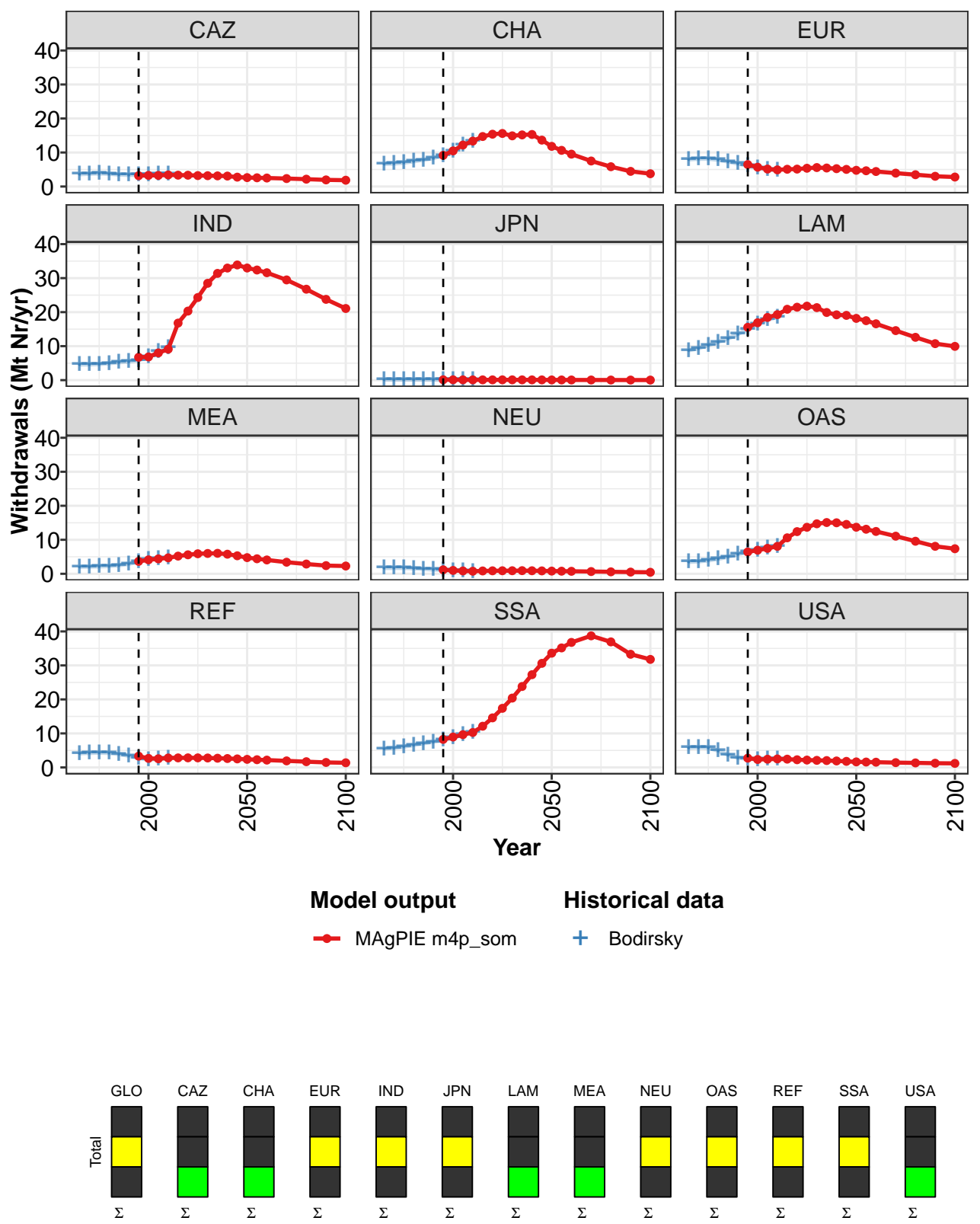


Figure 481: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Withdrawals (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	67	69	74	79	95	104	113	120	126	129	130
CAZ	3	3	3	3	3	3	3	3	3	3	3
CHA	9	10	12	13	15	15	16	15	15	15	14
EUR	6	6	5	5	5	5	5	6	5	5	5
IND	7	7	8	9	17	20	24	28	31	33	34
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	16	17	18	19	21	21	22	21	20	19	19
MEA	4	4	4	5	5	6	6	6	6	6	5
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	6	7	7	8	11	12	14	15	15	15	15
REF	3	3	3	3	3	3	3	3	3	3	3
SSA	8	9	10	10	12	15	17	20	24	27	31
USA	3	2	2	2	2	2	2	2	2	2	2

Table 1844: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Withdrawals (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	127	125	122	115	104	91	84
CAZ	3	3	3	2	2	2	2
CHA	12	11	10	8	6	4	4
EUR	5	5	4	4	3	3	3
IND	33	32	32	29	27	24	21
JPN	0	0	0	0	0	0	0
LAM	18	17	17	15	13	11	10
MEA	5	4	4	3	3	2	2
NEU	1	1	1	1	1	1	0
OAS	14	13	12	11	10	8	7
REF	2	2	2	2	2	1	1
SSA	34	35	37	39	37	33	32
USA	2	2	2	1	1	1	1

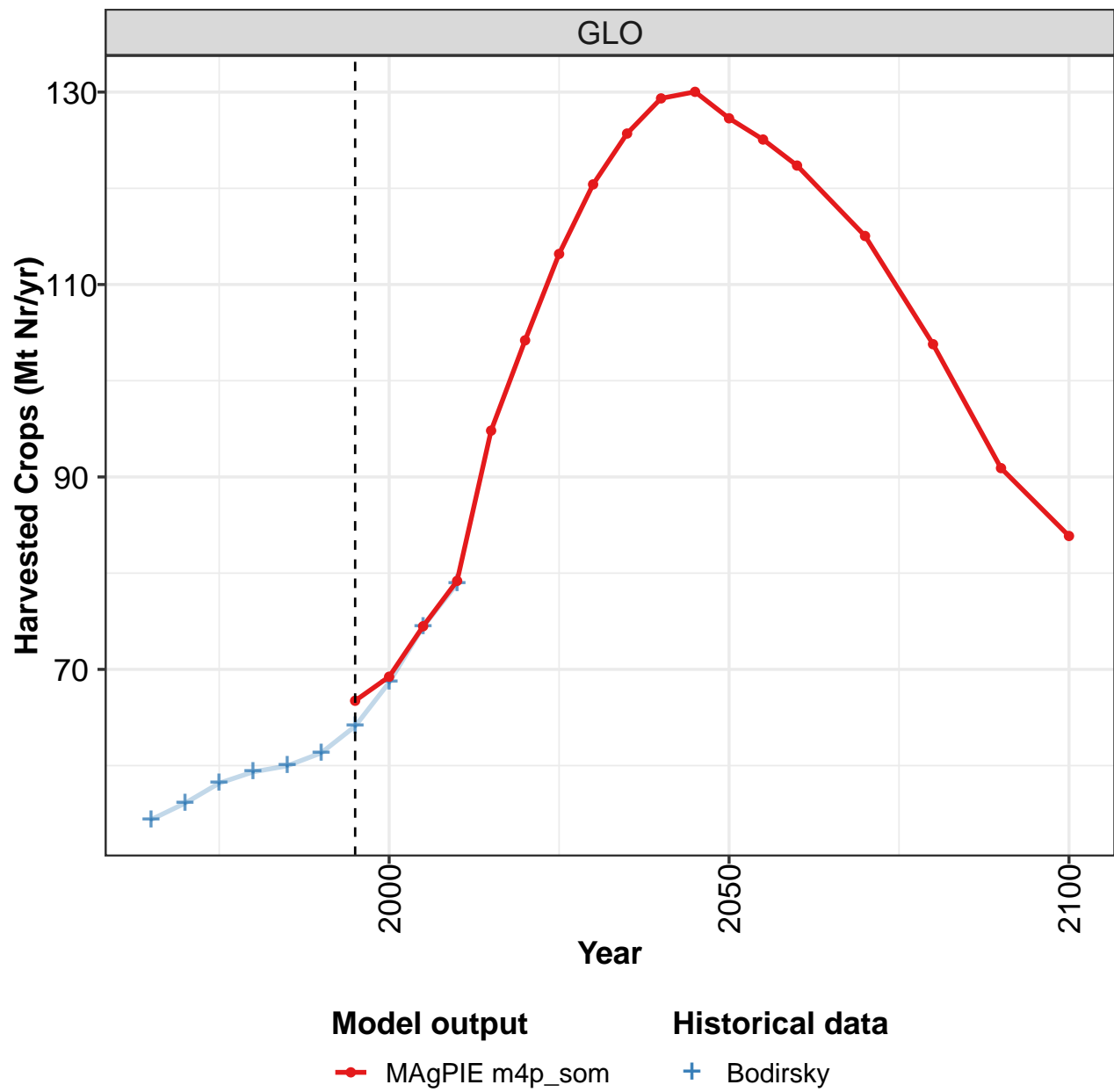
Table 1845: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Withdrawals (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	54.4	56.1	58.2	59.3	60.0	61.3	64.1	68.6	74.4	78.9
CAZ	3.6	3.7	3.8	3.7	3.5	3.4	3.4	3.6	3.7	3.7
CHA	6.6	6.7	7.0	7.4	7.8	8.3	9.1	10.5	12.2	13.3
EUR	8.0	8.1	8.2	7.9	7.3	6.7	6.1	5.4	4.9	4.7
IND	4.6	4.6	4.7	5.0	5.3	5.5	5.9	6.9	8.4	9.5
JPN	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	8.8	9.4	10.3	11.2	12.2	13.5	15.0	16.5	17.8	18.5
MEA	2.0	2.1	2.2	2.3	2.5	2.9	3.6	4.2	4.6	4.7
NEU	1.7	1.7	1.7	1.6	1.4	1.2	1.1	0.9	0.8	0.8
OAS	3.5	3.6	3.9	4.4	5.0	5.8	6.4	7.0	7.6	8.0
REF	4.2	4.2	4.3	4.2	3.9	3.4	2.8	2.4	2.4	2.7
SSA	5.5	5.7	6.1	6.6	7.1	7.5	8.0	8.7	9.6	10.2
USA	5.8	5.9	5.8	4.9	3.7	2.8	2.5	2.4	2.4	2.6

Table 1846: Bodirsky — Resources—Nitrogen—Pasture Budget—Withdrawals (Mt Nr/yr)

57.3.9 Withdrawals—Harvested Crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

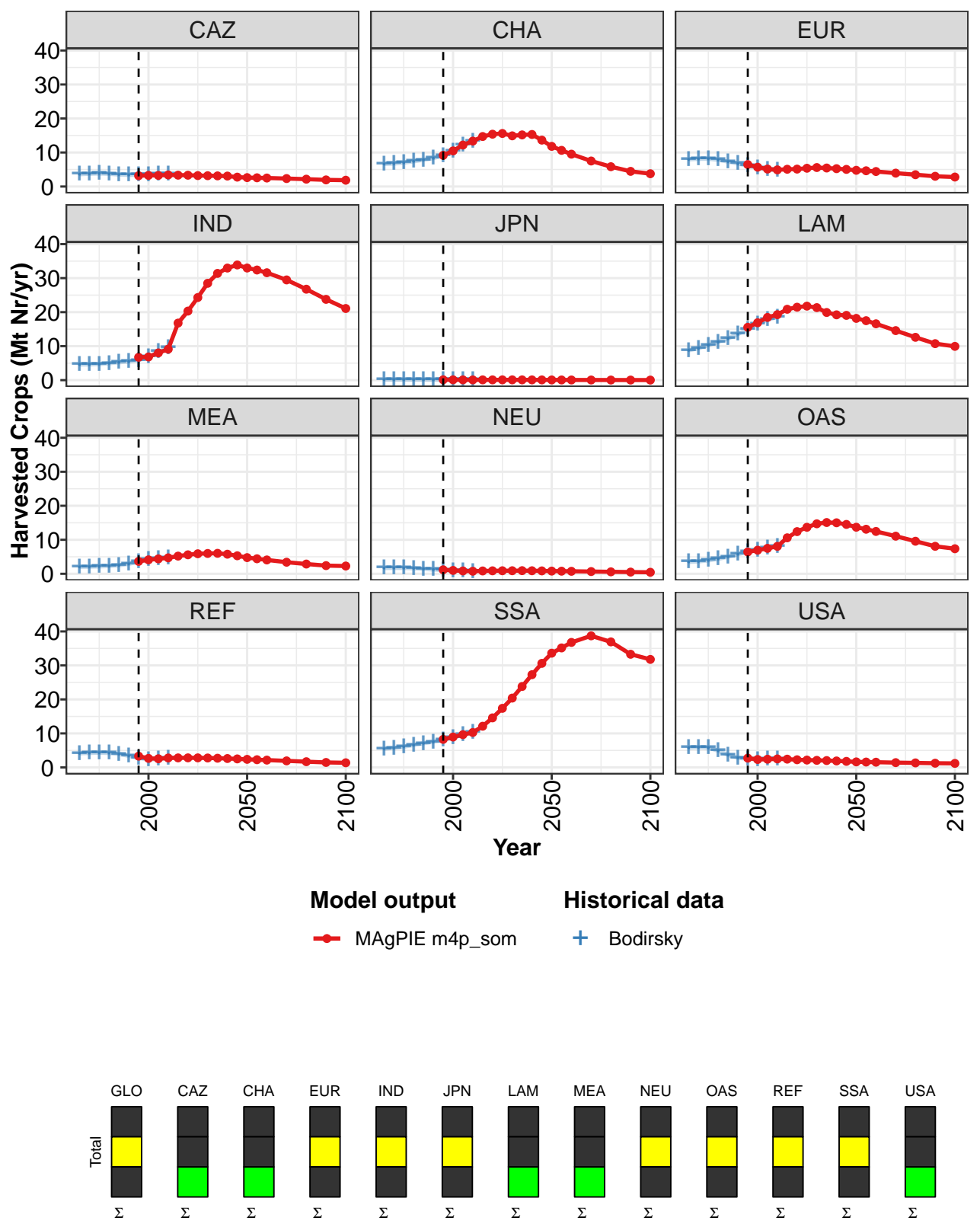


Figure 482: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Withdrawals—Harvested Crops (Mt Nr/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	67	69	74	79	95	104	113	120	126	129	130
CAZ	3	3	3	3	3	3	3	3	3	3	3
CHA	9	10	12	13	15	15	16	15	15	15	14
EUR	6	6	5	5	5	5	5	6	5	5	5
IND	7	7	8	9	17	20	24	28	31	33	34
JPN	0	0	0	0	0	0	0	0	0	0	0
LAM	16	17	18	19	21	21	22	21	20	19	19
MEA	4	4	4	5	5	6	6	6	6	6	5
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	6	7	7	8	11	12	14	15	15	15	15
REF	3	3	3	3	3	3	3	3	3	3	3
SSA	8	9	10	10	12	15	17	20	24	27	31
USA	3	2	2	2	2	2	2	2	2	2	2

Table 1847: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Withdrawals—Harvested Crops (Mt Nr/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	127	125	122	115	104	91	84
CAZ	3	3	3	2	2	2	2
CHA	12	11	10	8	6	4	4
EUR	5	5	4	4	3	3	3
IND	33	32	32	29	27	24	21
JPN	0	0	0	0	0	0	0
LAM	18	17	17	15	13	11	10
MEA	5	4	4	3	3	2	2
NEU	1	1	1	1	1	1	0
OAS	14	13	12	11	10	8	7
REF	2	2	2	2	2	1	1
SSA	34	35	37	39	37	33	32
USA	2	2	2	1	1	1	1

Table 1848: MAgPIE m4p\_som — Resources—Nitrogen—Pasture Budget—Withdrawals—Harvested Crops (Mt Nr/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	54.4	56.1	58.2	59.3	60.0	61.3	64.1	68.6	74.4	78.9
CAZ	3.6	3.7	3.8	3.7	3.5	3.4	3.4	3.6	3.7	3.7
CHA	6.6	6.7	7.0	7.4	7.8	8.3	9.1	10.5	12.2	13.3
EUR	8.0	8.1	8.2	7.9	7.3	6.7	6.1	5.4	4.9	4.7
IND	4.6	4.6	4.7	5.0	5.3	5.5	5.9	6.9	8.4	9.5
JPN	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LAM	8.8	9.4	10.3	11.2	12.2	13.5	15.0	16.5	17.8	18.5
MEA	2.0	2.1	2.2	2.3	2.5	2.9	3.6	4.2	4.6	4.7
NEU	1.7	1.7	1.7	1.6	1.4	1.2	1.1	0.9	0.8	0.8
OAS	3.5	3.6	3.9	4.4	5.0	5.8	6.4	7.0	7.6	8.0
REF	4.2	4.2	4.3	4.2	3.9	3.4	2.8	2.4	2.4	2.7
SSA	5.5	5.7	6.1	6.6	7.1	7.5	8.0	8.7	9.6	10.2
USA	5.8	5.9	5.8	4.9	3.7	2.8	2.5	2.4	2.4	2.6

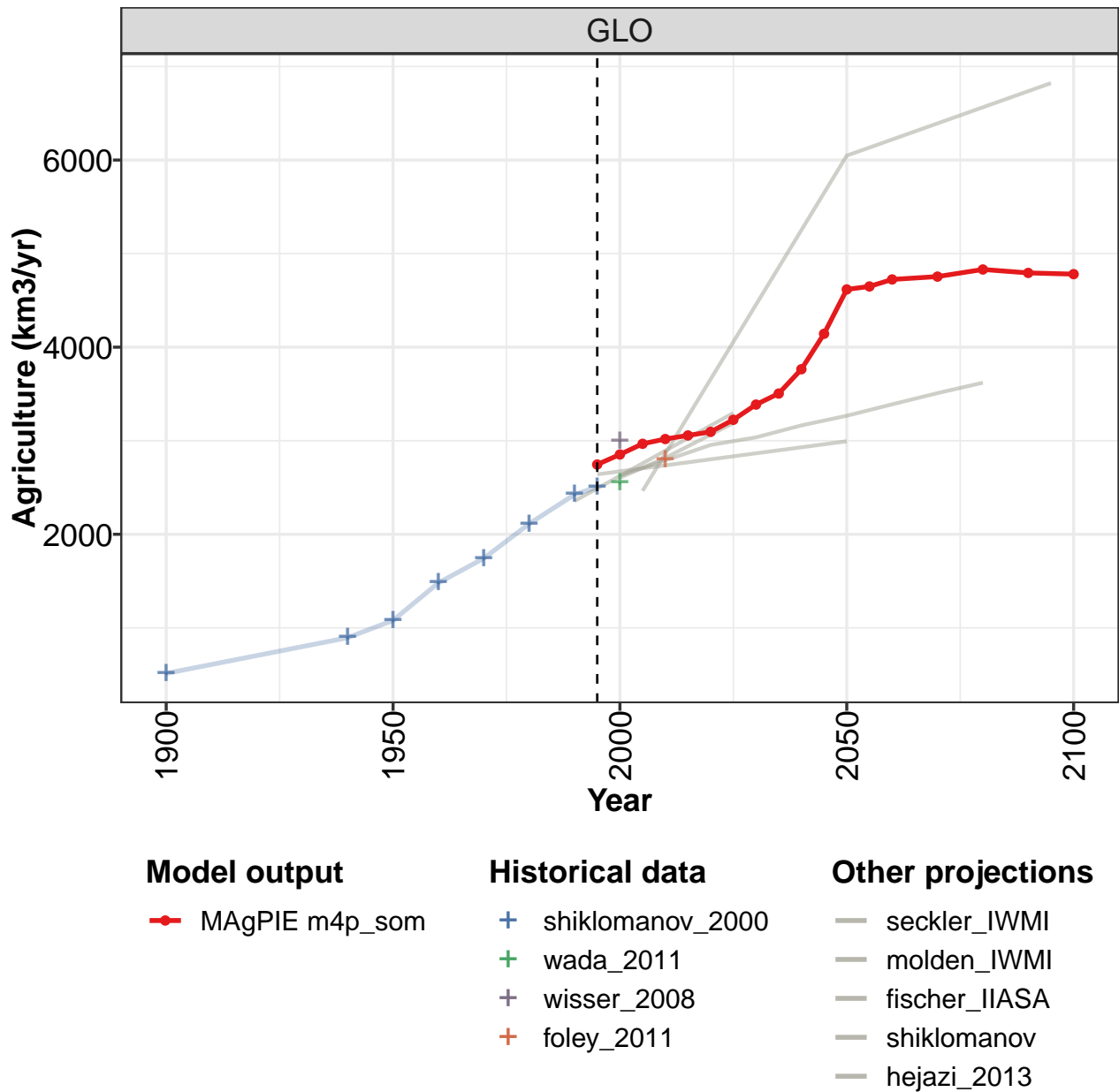
Table 1849: Bodirsky — Resources—Nitrogen—Pasture Budget—Withdrawals—Harvested Crops (Mt Nr/yr)

## 58 Water

### 58.1 Withdrawal

#### 58.1.1 Agriculture

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



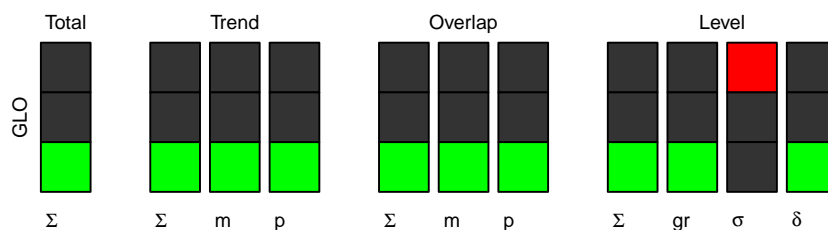


Figure 483: MAgPIE m4p\_som — Resources—Water—Withdrawal—Agriculture (km3/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	2746	2853	2967	3018	3057	3095	3224	3387	3505	3764	4143

Table 1850: MAgPIE m4p\_som — Resources—Water—Withdrawal—Agriculture (km3/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	4617	4649	4724	4755	4831	4794	4781

Table 1851: MAgPIE m4p\_som — Resources—Water—Withdrawal—Agriculture (km3/yr) [PART 2/2]

	1900	1940	1950	1960	1970	1980	1990	1995
GLO	513	895	1080	1481	1743	2112	2425	2504

Table 1852: shiklomanov\_2000 — Resources—Water—Withdrawal—Agriculture (km3/yr)

	2000
GLO	2548

Table 1853: wada\_2011 — Resources—Water—Withdrawal—Agriculture (km3/yr)

	2000
GLO	3000

Table 1854: wisser\_2008 — Resources—Water—Withdrawal—Agriculture (km3/yr)

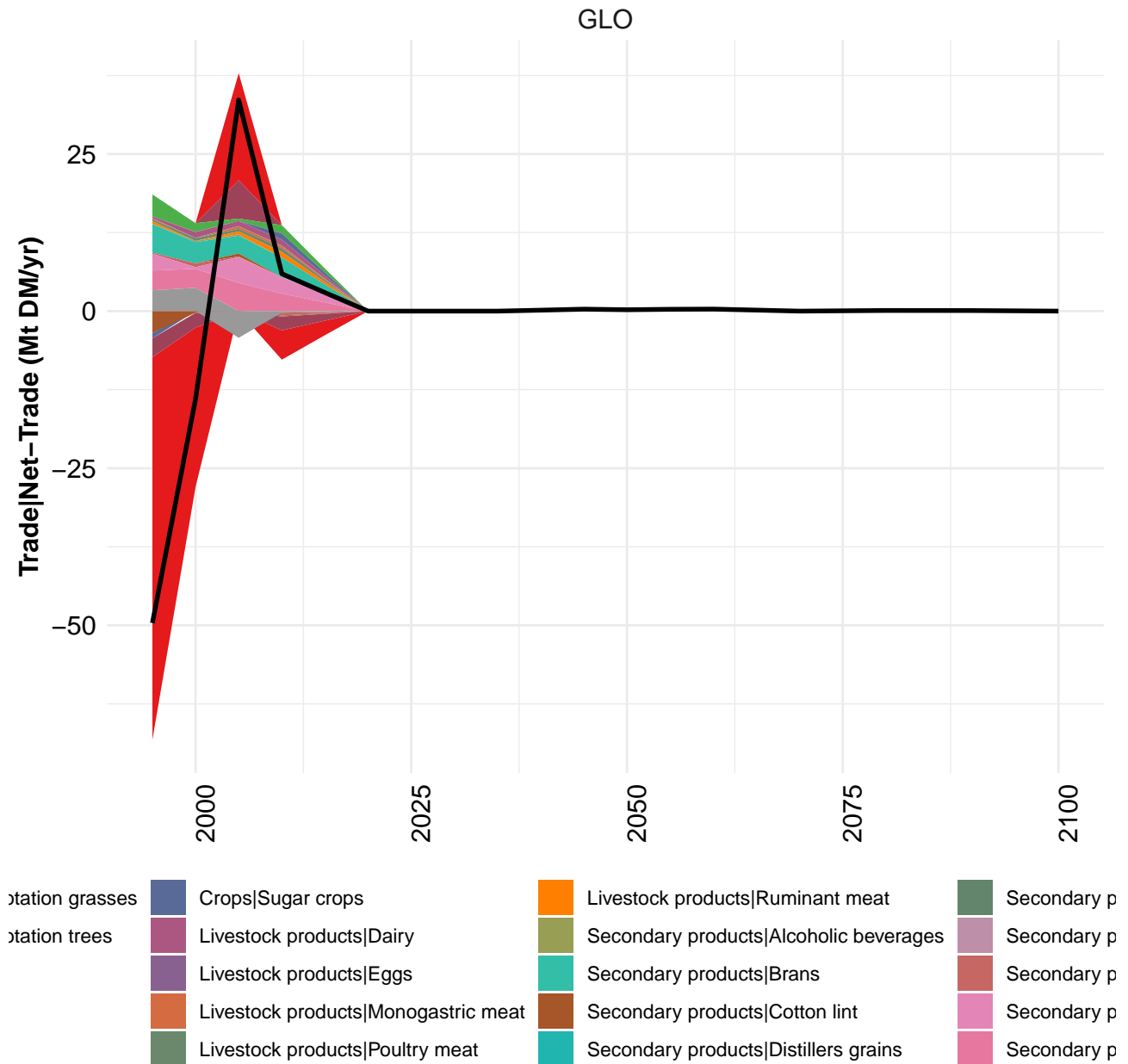
	2010
GLO	2800

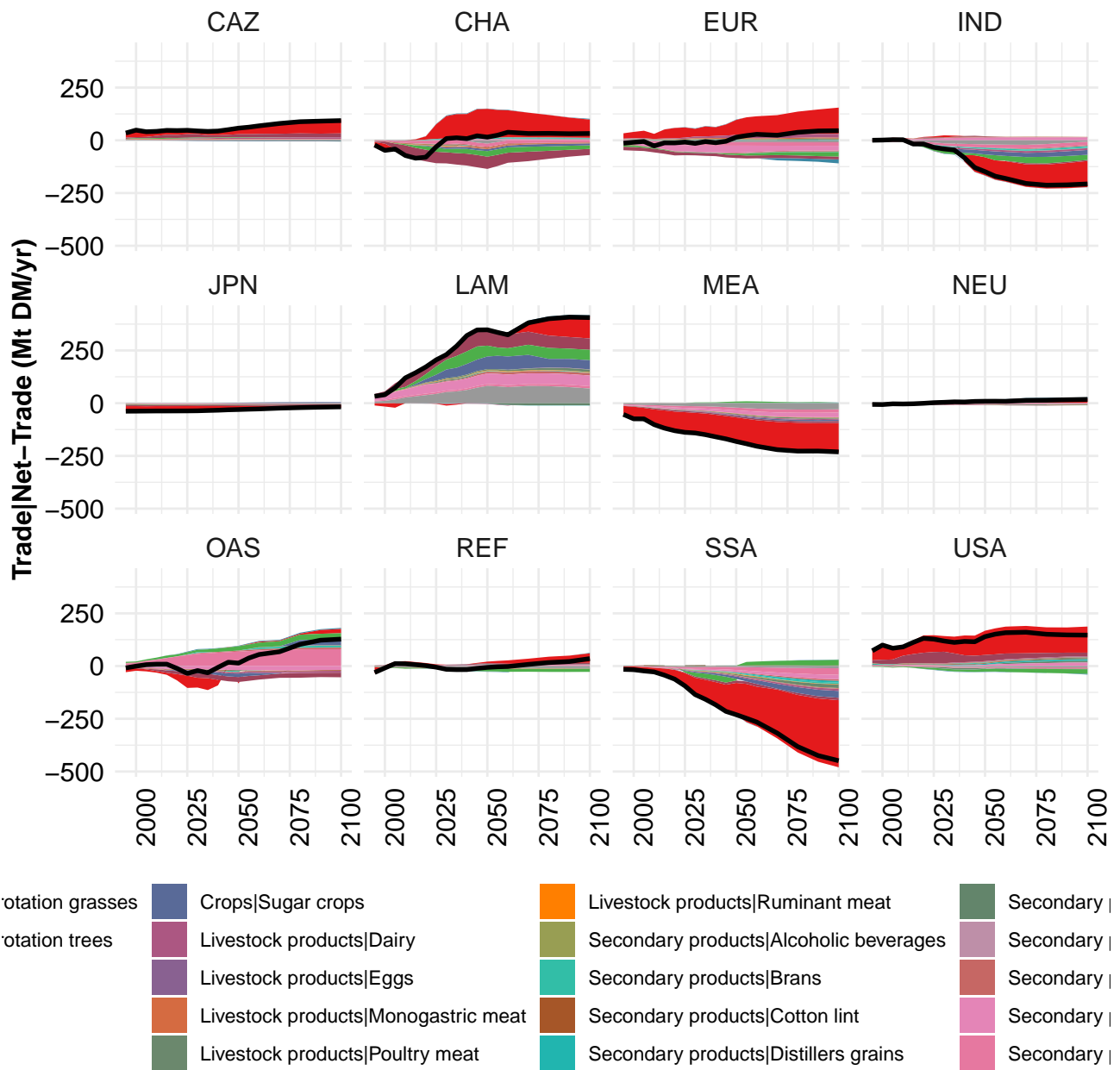
Table 1855: foley\_2011 — Resources—Water—Withdrawal—Agriculture (km3/yr)

## Part XV

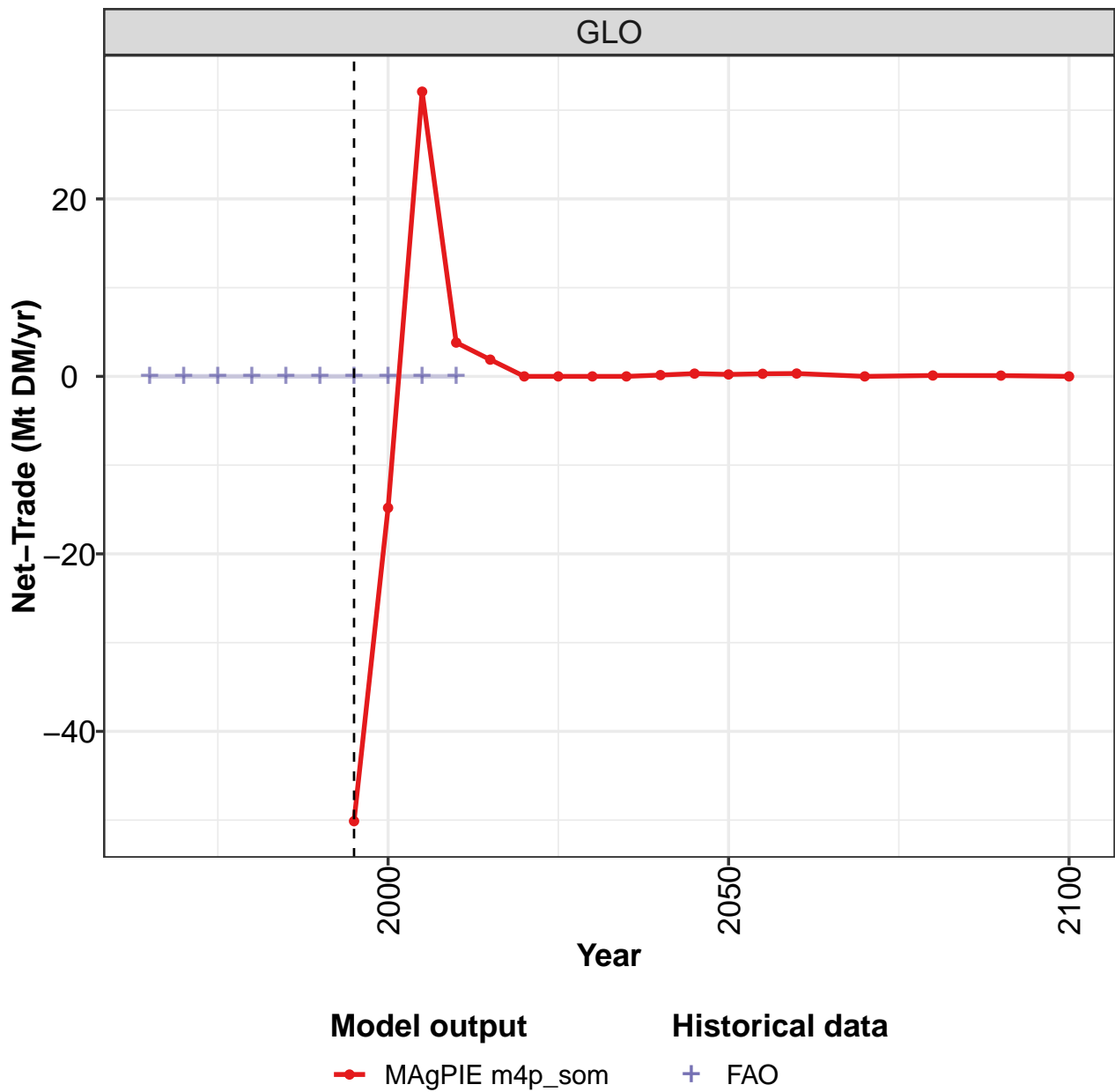
## Trade

## 59 Net-Trade





## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

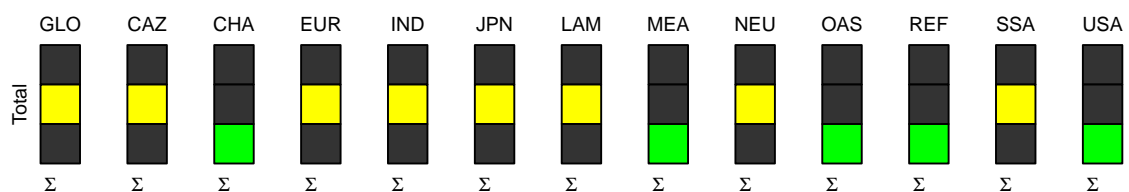
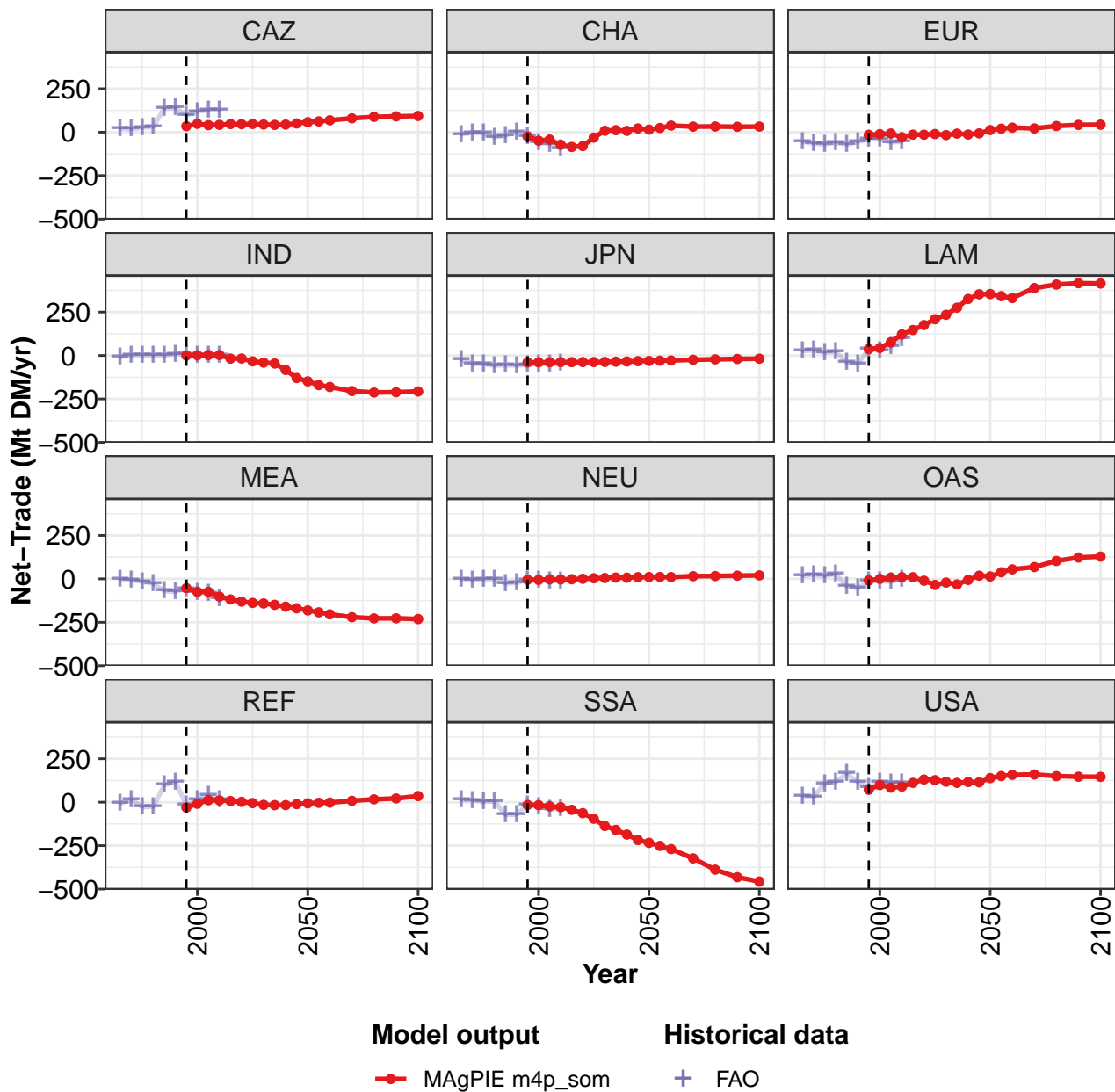


Figure 484: MAgPIE m4p\_som — Trade—Net-Trade (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-50	-15	32	4	2	0	-0	0	-0	0	0
CAZ	34	48	41	42	47	46	47	44	42	44	50
CHA	-24	-49	-43	-73	-85	-80	-31	8	12	8	21
EUR	-16	-11	-8	-29	-14	-15	-11	-17	-8	-14	-7
IND	0	1	3	3	-18	-17	-33	-41	-46	-83	-129
JPN	-40	-39	-39	-38	-38	-38	-38	-37	-36	-34	-32
LAM	37	43	76	122	147	175	209	234	275	326	353
MEA	-54	-74	-75	-102	-119	-131	-138	-142	-149	-160	-170
NEU	-5	-6	-3	-3	-2	0	3	5	7	7	10
OAS	-9	-0	7	10	10	-10	-35	-21	-32	-6	18
REF	-30	-9	11	11	7	2	-5	-15	-17	-17	-11
SSA	-16	-17	-23	-28	-44	-63	-95	-137	-159	-186	-218
USA	72	99	84	90	112	131	127	118	111	116	115

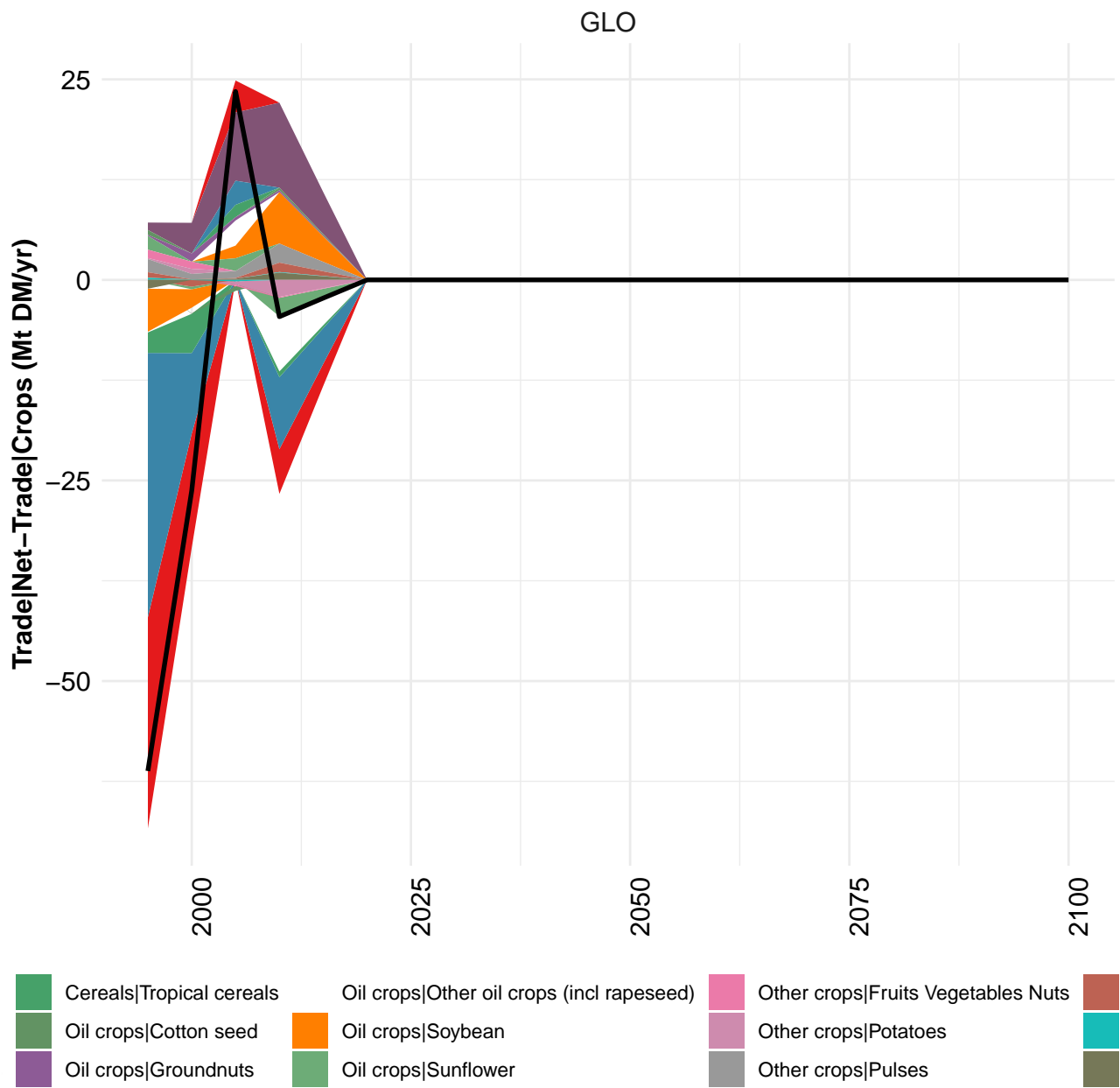
Table 1856: MAgPIE m4p\_som — Trade—Net-Trade (Mt DM/yr) [PART 1/2]

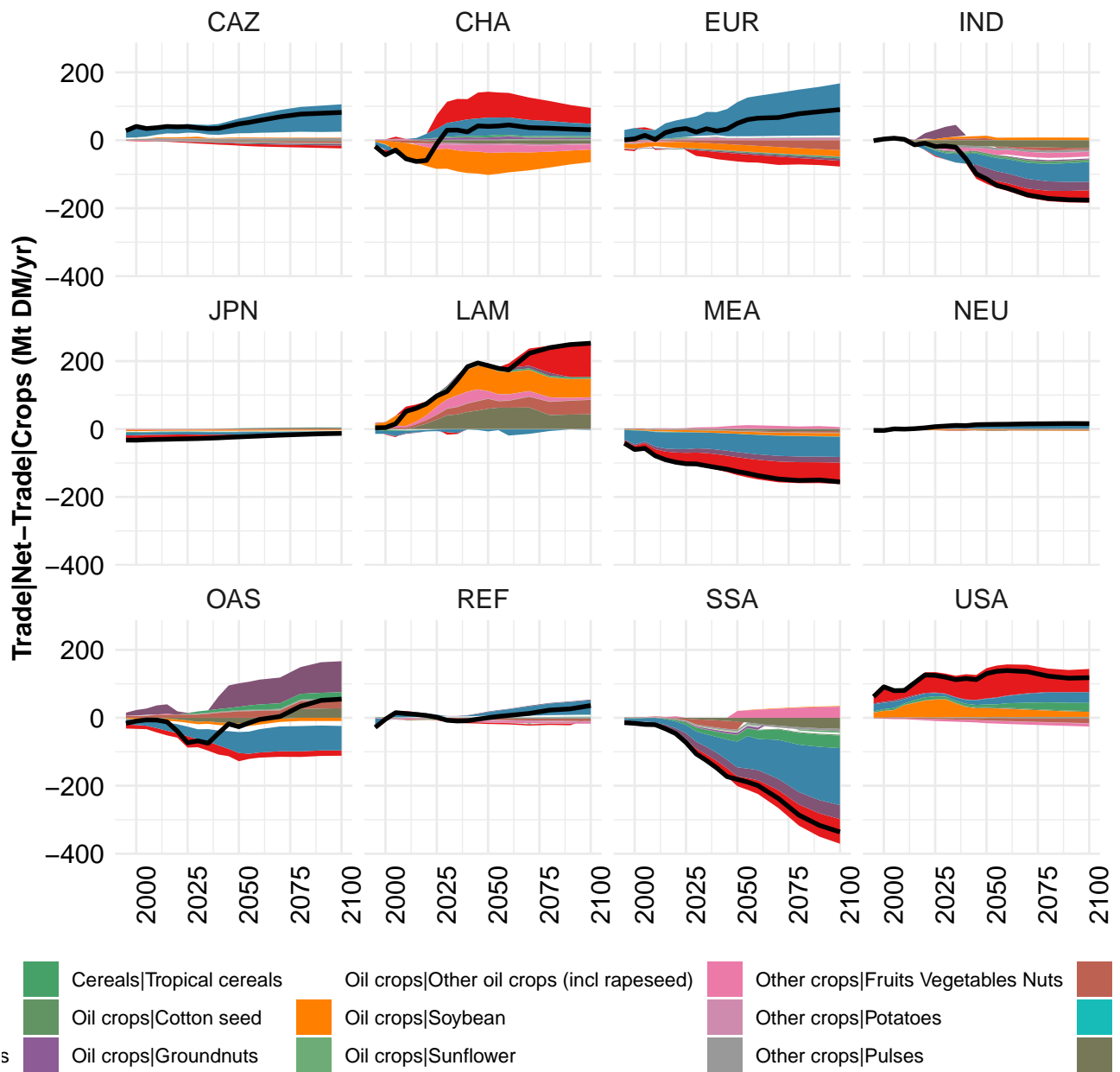
	2050	2055	2060	2070	2080	2090	2100
GLO	0	0	0	0	0	0	0
CAZ	58	62	69	80	88	91	93
CHA	15	24	38	32	33	31	32
EUR	12	20	26	22	36	42	43
IND	-149	-170	-181	-204	-213	-211	-207
JPN	-31	-30	-28	-25	-22	-20	-18
LAM	354	342	331	388	409	416	415
MEA	-182	-193	-204	-221	-228	-227	-231
NEU	11	11	10	15	16	18	20
OAS	14	38	55	68	103	123	128
REF	-6	-4	-2	8	17	22	35
SSA	-234	-252	-270	-323	-388	-432	-457
USA	139	151	157	160	150	147	146

Table 1857: MAgPIE m4p\_som — Trade—Net-Trade (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0	0	0	0	0	0	0	0	0	0
CAZ	21	19	26	31	136	141	98	119	128	128
CHA	-12	-3	-6	-27	-21	3	-25	-59	-69	-93
EUR	-54	-66	-70	-61	-71	-57	-39	-41	-58	-56
IND	-9	-0	2	-0	0	8	6	3	-1	3
JPN	-24	-47	-48	-58	-55	-58	-54	-50	-47	-42
LAM	26	30	17	22	-39	-47	35	29	52	97
MEA	-2	-7	-16	-28	-69	-74	-56	-80	-85	-111
NEU	-4	-6	-3	-1	-26	-23	-6	-10	-13	-11
OAS	17	23	16	28	-42	-53	-14	-12	-15	-3
REF	-8	16	-28	-26	98	116	-15	12	41	15
SSA	13	12	2	5	-74	-71	-15	-25	-43	-37
USA	36	31	107	116	163	115	84	113	109	109

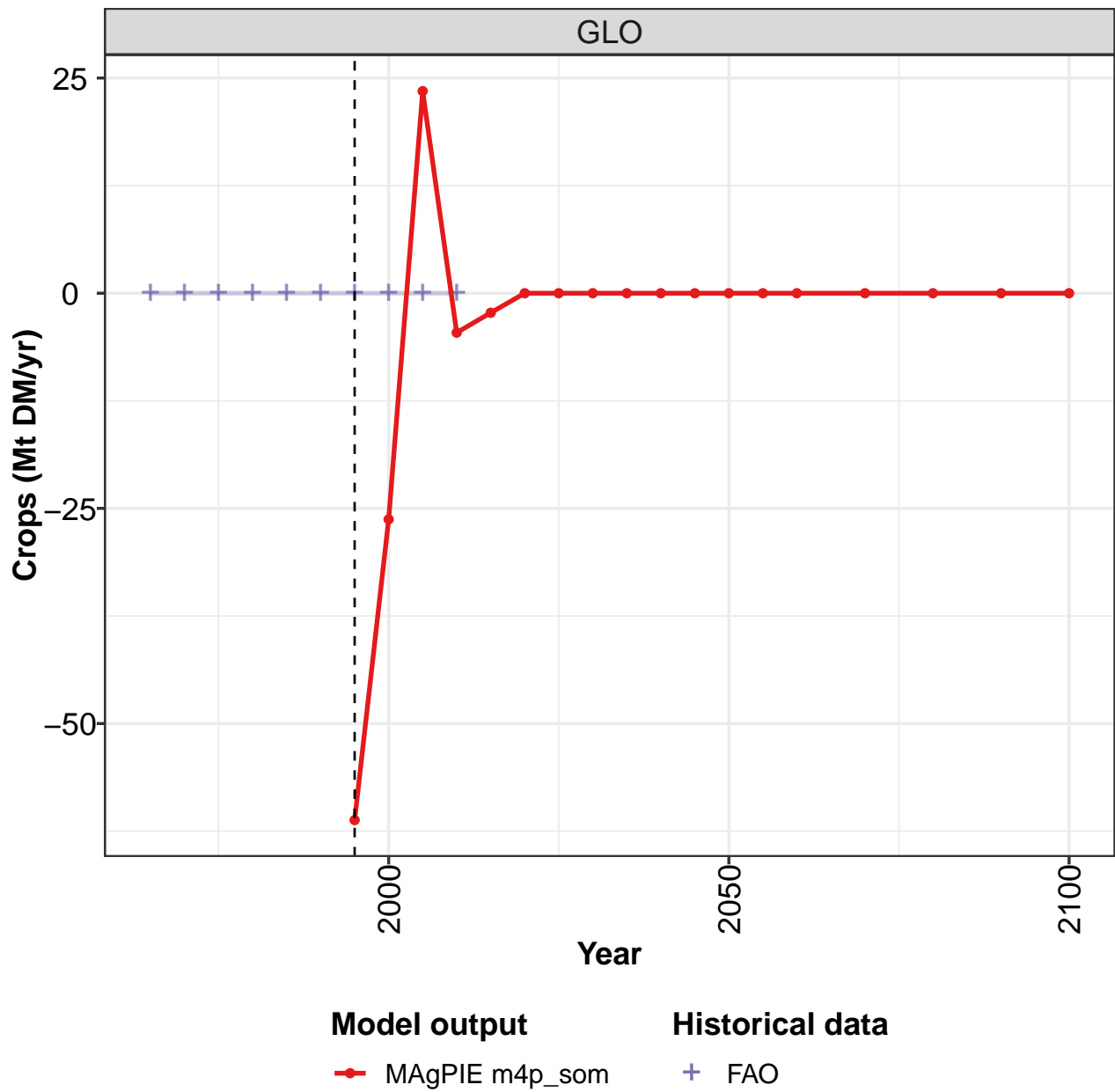
Table 1858: FAO — Trade—Net-Trade (Mt DM/yr)





## 59.1 Crops

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

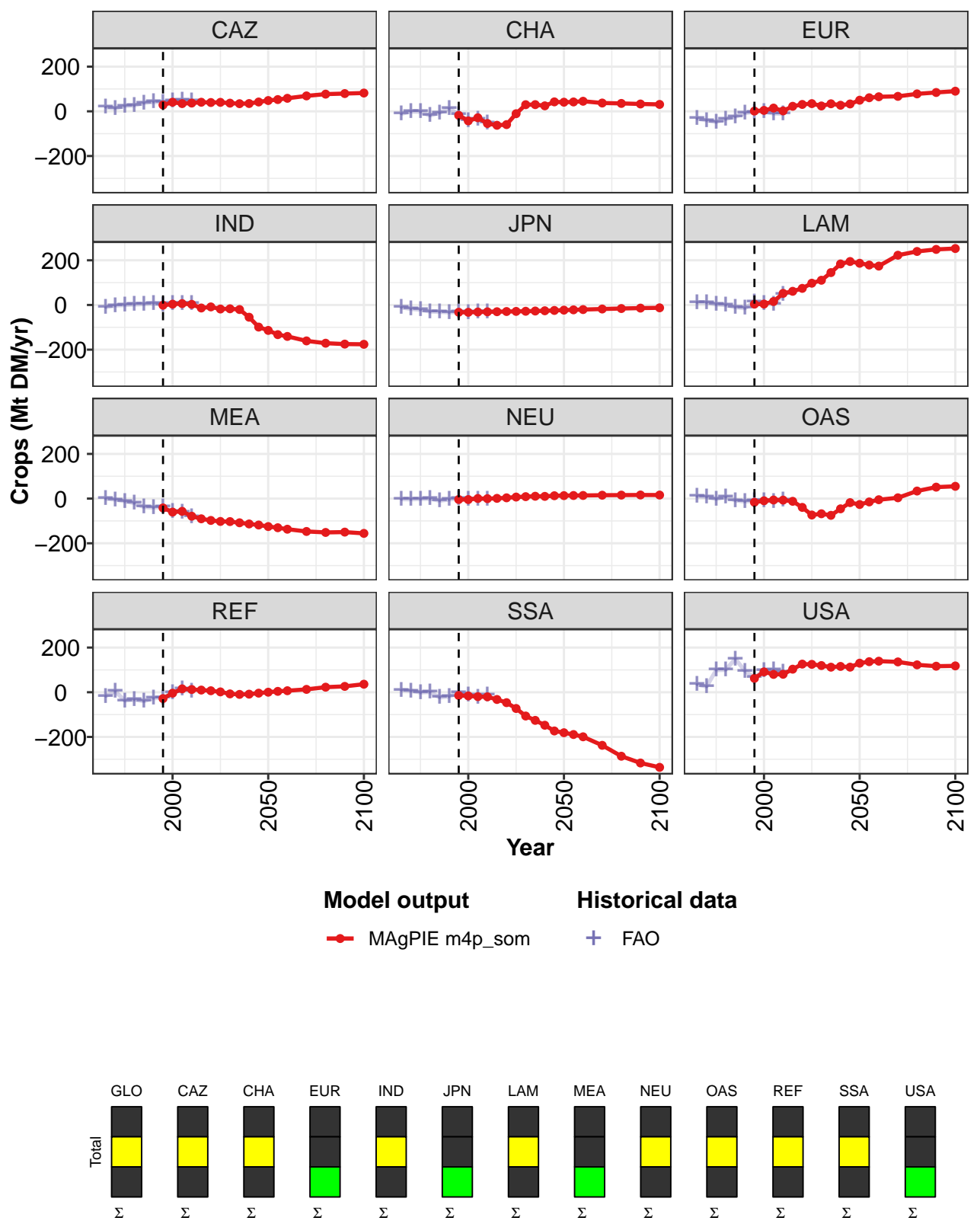


Figure 485: MAGPIE m4p\_som — Trade—Net-Trade—Crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-61	-26	23	-5	-2	0	-0	-0	-0	0	-0
CAZ	28	41	35	37	41	39	40	37	34	35	42
CHA	-18	-43	-29	-54	-62	-59	-11	30	30	25	42
EUR	1	4	15	2	23	31	35	24	34	27	33
IND	-1	4	6	3	-14	-9	-18	-17	-20	-55	-99
JPN	-33	-33	-31	-31	-30	-29	-29	-28	-27	-26	-24
LAM	4	4	15	52	61	74	97	111	145	184	195
MEA	-42	-60	-57	-79	-90	-98	-102	-103	-108	-113	-118
NEU	-4	-4	1	-0	1	4	7	9	11	10	13
OAS	-16	-10	-6	-7	-12	-39	-73	-68	-75	-46	-18
REF	-28	-4	15	12	10	7	2	-7	-10	-9	-4
SSA	-14	-16	-20	-20	-32	-47	-73	-106	-126	-148	-173
USA	62	91	80	80	103	126	125	120	112	116	112

Table 1859: MAgPIE m4p\_som — Trade—Net-Trade—Crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0	-0	0	0	0	-0	0
CAZ	48	53	58	69	77	79	82
CHA	41	42	45	37	35	33	31
EUR	50	61	65	67	78	84	90
IND	-114	-133	-141	-161	-171	-175	-176
JPN	-23	-22	-21	-18	-16	-14	-13
LAM	187	179	174	223	240	249	253
MEA	-125	-130	-137	-147	-151	-150	-156
NEU	13	14	14	15	16	16	16
OAS	-26	-15	-5	4	34	51	55
REF	0	4	7	13	23	26	36
SSA	-181	-189	-199	-238	-286	-317	-336
USA	130	137	139	136	123	117	118

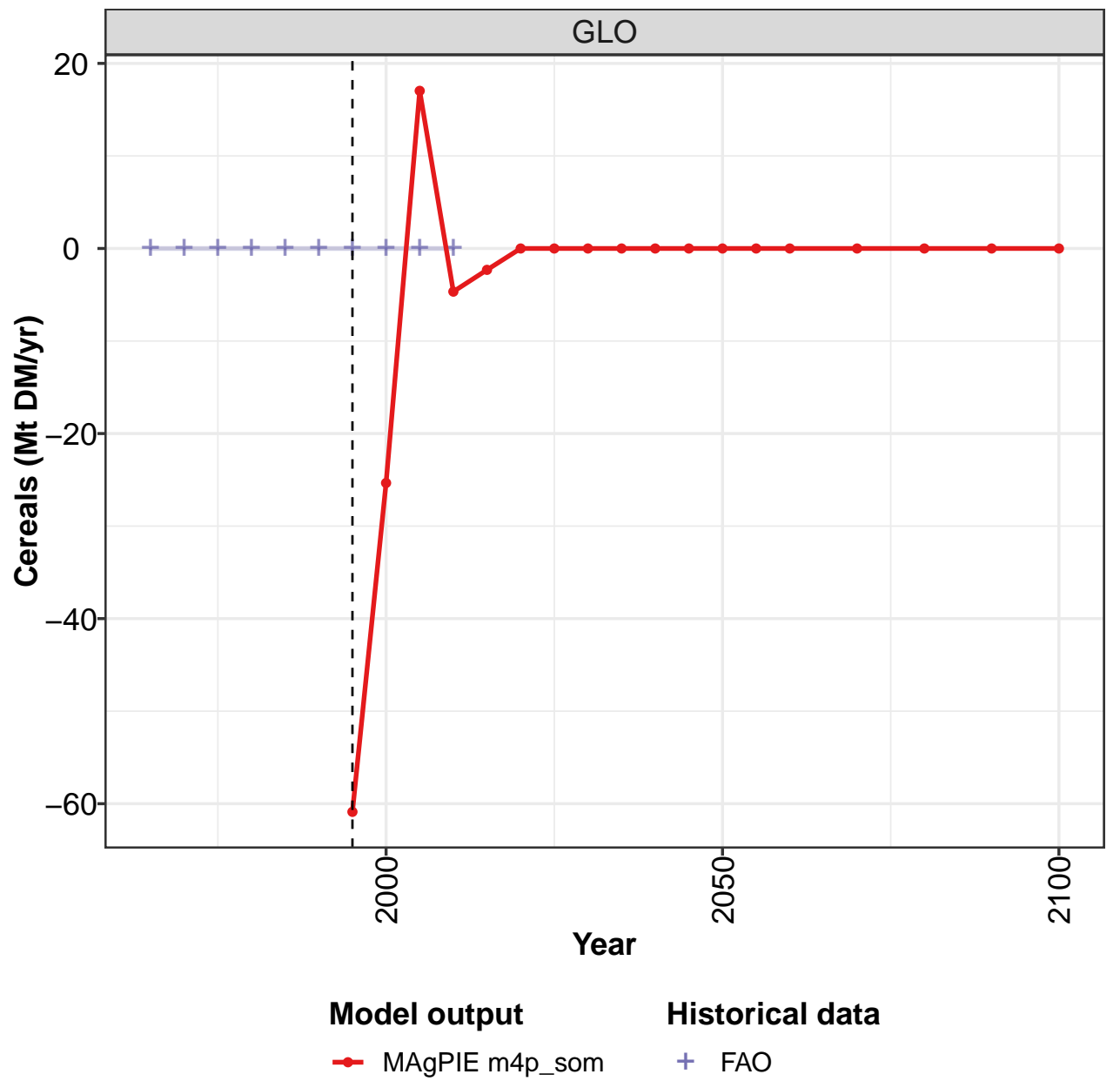
Table 1860: MAgPIE m4p\_som — Trade—Net-Trade—Crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0	0	0	0	0	0	0	0	0	0
CAZ	18	14	24	26	37	42	40	47	49	46
CHA	-11	-1	-2	-19	-7	13	-15	-41	-33	-52
EUR	-32	-40	-48	-34	-25	-8	-3	-1	-10	-11
IND	-10	-3	-1	2	4	8	1	6	5	6
JPN	-11	-18	-21	-30	-31	-33	-32	-33	-32	-31
LAM	12	11	2	-1	-10	-15	14	6	4	47
MEA	-0	-5	-12	-20	-38	-40	-37	-58	-59	-80
NEU	-3	-3	-2	-1	-9	-4	2	-2	-2	-2
OAS	10	8	-2	7	-8	-13	-9	-8	-13	-6
REF	-17	5	-37	-33	-40	-27	-24	-2	15	4
SSA	9	6	-1	1	-23	-19	-2	-11	-24	-14
USA	35	26	99	100	150	95	65	97	99	92

Table 1861: FAO — Trade—Net-Trade—Crops (Mt DM/yr)

59.1.1 Cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

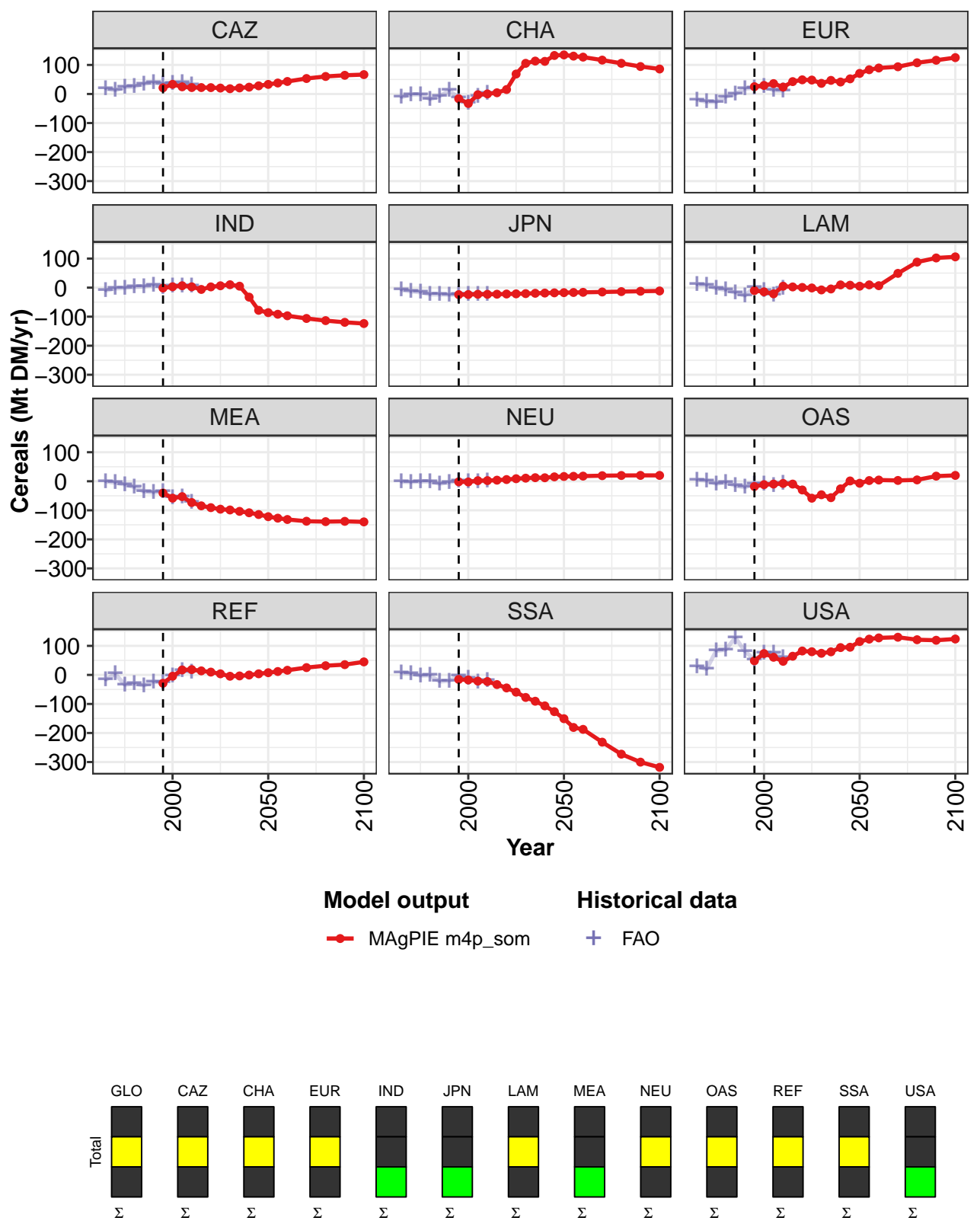


Figure 486: MAGPIE m4p\_som — Trade—Net-Trade—Crops—Cereals (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-61	-25	17	-5	-2	0	-0	-0	-0	0	-0
CAZ	21	33	25	22	22	22	20	18	21	24	28
CHA	-16	-33	-2	0	4	15	69	106	113	112	133
EUR	25	30	36	24	43	49	48	37	47	41	52
IND	-1	3	7	3	-6	3	6	10	5	-33	-78
JPN	-24	-24	-23	-23	-23	-22	-21	-21	-19	-19	-18
LAM	-10	-14	-21	5	2	1	-1	-8	-5	9	8
MEA	-41	-58	-53	-73	-85	-91	-96	-99	-104	-108	-114
NEU	-2	-2	2	2	4	6	9	11	12	12	15
OAS	-18	-12	-10	-8	-10	-30	-58	-46	-56	-26	1
REF	-29	-5	17	18	14	10	4	-5	-3	-0	4
SSA	-16	-17	-21	-23	-33	-45	-59	-78	-91	-107	-126
USA	49	74	61	47	64	82	80	74	80	94	95

Table 1862: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Cereals (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0	0	-0	0	0	0	-0
CAZ	33	38	43	53	60	64	67
CHA	135	130	127	117	106	95	86
EUR	71	84	89	94	108	116	125
IND	-86	-92	-97	-106	-114	-119	-124
JPN	-17	-17	-16	-15	-14	-12	-11
LAM	5	10	7	49	88	102	106
MEA	-122	-127	-132	-138	-139	-138	-140
NEU	16	17	18	19	20	20	20
OAS	-7	2	4	3	5	18	20
REF	8	12	16	25	32	35	45
SSA	-151	-181	-187	-231	-273	-300	-318
USA	115	123	128	130	121	119	124

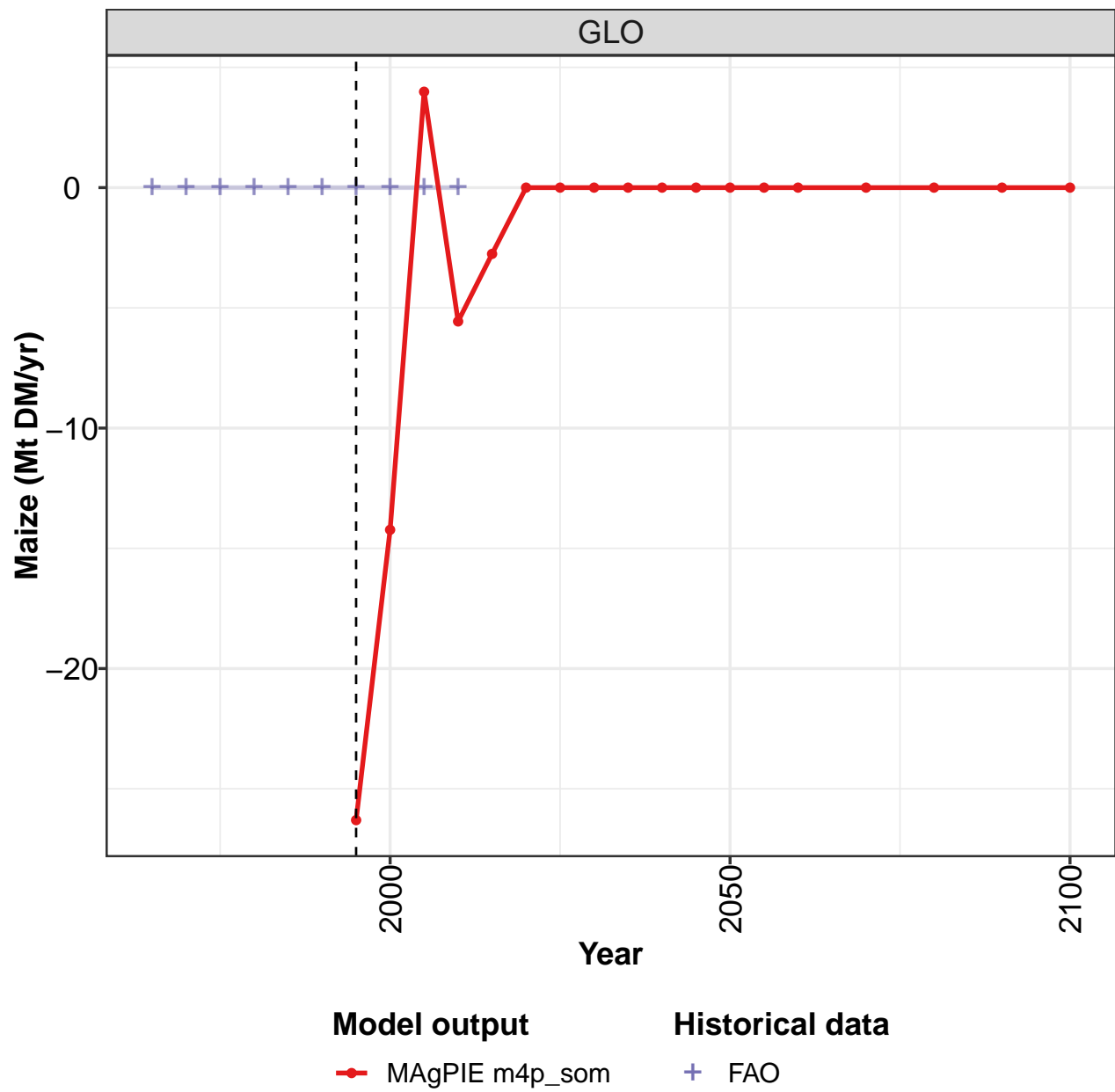
Table 1863: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0	0	0	0	0	0	0	0	0	0
CAZ	18	12	23	26	35	39	34	38	39	32
CHA	-11	-2	-1	-18	-8	12	-13	-31	-8	3
EUR	-20	-27	-27	-9	-0	18	22	26	12	11
IND	-10	-3	-1	2	4	9	1	5	6	6
JPN	-8	-13	-16	-23	-23	-25	-24	-24	-23	-23
LAM	10	9	-3	-8	-17	-28	1	-10	-25	-1
MEA	-1	-5	-11	-20	-36	-39	-36	-55	-54	-73
NEU	-2	-3	-1	-1	-9	-4	2	-1	-0	1
OAS	5	2	-9	-3	-16	-21	-10	-9	-14	-5
REF	-17	4	-34	-30	-37	-23	-27	-3	16	9
SSA	7	4	-3	-1	-23	-20	-3	-12	-24	-19
USA	29	20	83	87	128	82	53	76	75	59

Table 1864: FAO — Trade—Net-Trade—Crops—Cereals (Mt DM/yr)

59.1.2 Cereals—Maize

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

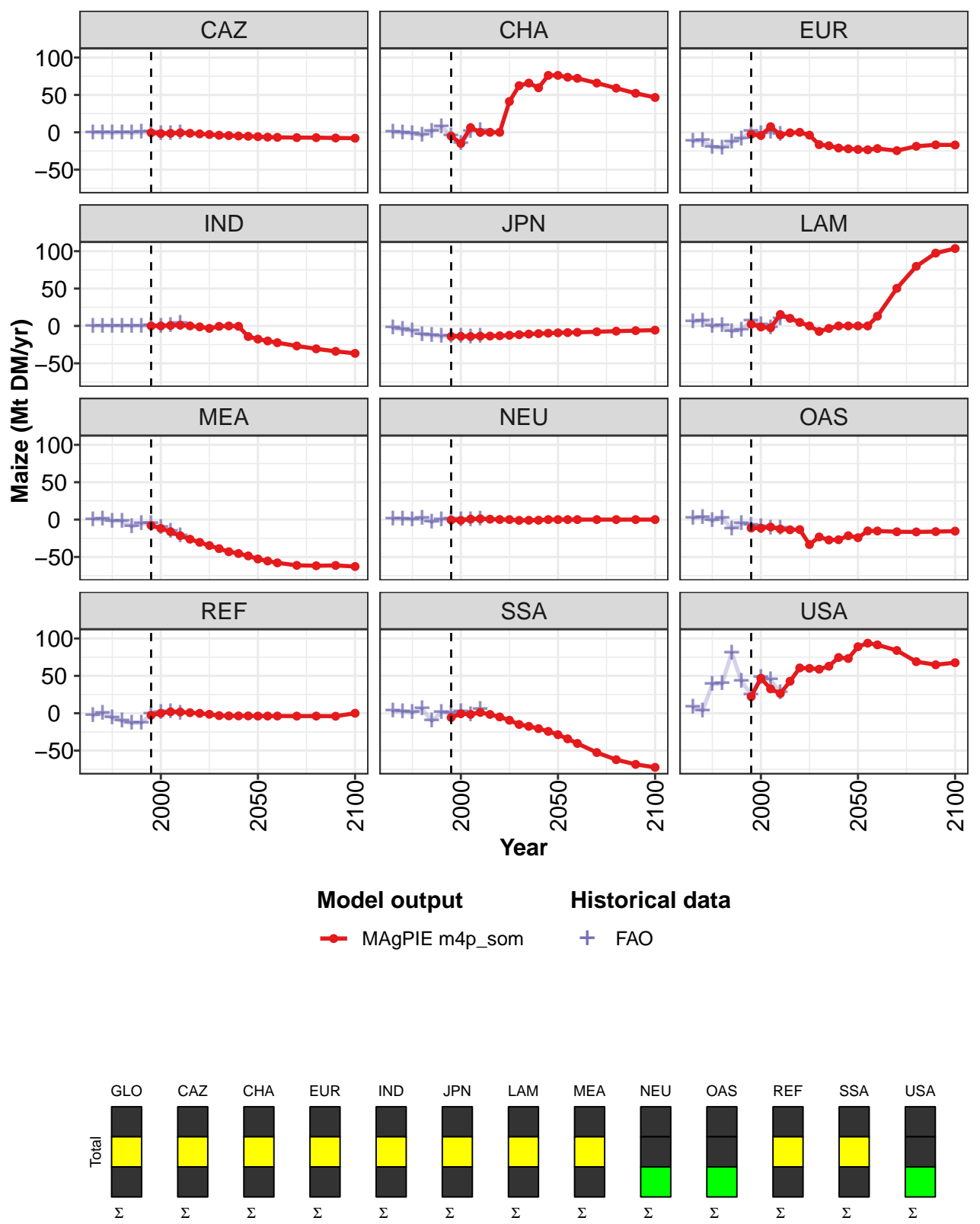


Figure 487: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Cereals—Maize (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-26	-14	4	-6	-3	0	-0	0	0	0	-0
CAZ	-1	-2	-1	-1	-1	-2	-3	-4	-4	-5	-5
CHA	-5	-15	6	0	0	0	41	62	66	60	76
EUR	-3	-4	8	-3	-1	0	-4	-17	-18	-21	-22
IND	0	0	1	1	0	-1	-3	-1	-0	-0	-14
JPN	-14	-14	-14	-14	-14	-13	-13	-12	-11	-10	-10
LAM	2	-1	-2	15	10	5	0	-7	-3	0	0
MEA	-8	-12	-16	-22	-26	-30	-35	-39	-43	-45	-49
NEU	-1	-1	1	1	1	0	-0	-1	-1	-1	-0
OAS	-11	-11	-10	-13	-14	-13	-33	-23	-27	-27	-22
REF	-3	0	2	2	1	-0	-1	-3	-4	-4	-4
SSA	-6	-1	-2	1	-2	-5	-9	-15	-18	-21	-24
USA	22	47	33	26	43	61	60	59	63	75	73

Table 1865: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Cereals—Maize (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0	0	0	0	0	-0	-0
CAZ	-6	-6	-7	-7	-7	-8	-8
CHA	76	74	72	66	59	52	47
EUR	-23	-23	-22	-25	-19	-17	-17
IND	-18	-20	-22	-27	-31	-34	-37
JPN	-9	-9	-9	-8	-7	-6	-6
LAM	0	-0	13	50	80	97	104
MEA	-53	-55	-58	-61	-62	-61	-63
NEU	0	0	0	-0	0	0	0
OAS	-24	-15	-15	-16	-17	-16	-15
REF	-4	-4	-4	-4	-4	-4	0
SSA	-29	-34	-40	-53	-62	-68	-72
USA	89	94	91	84	69	65	68

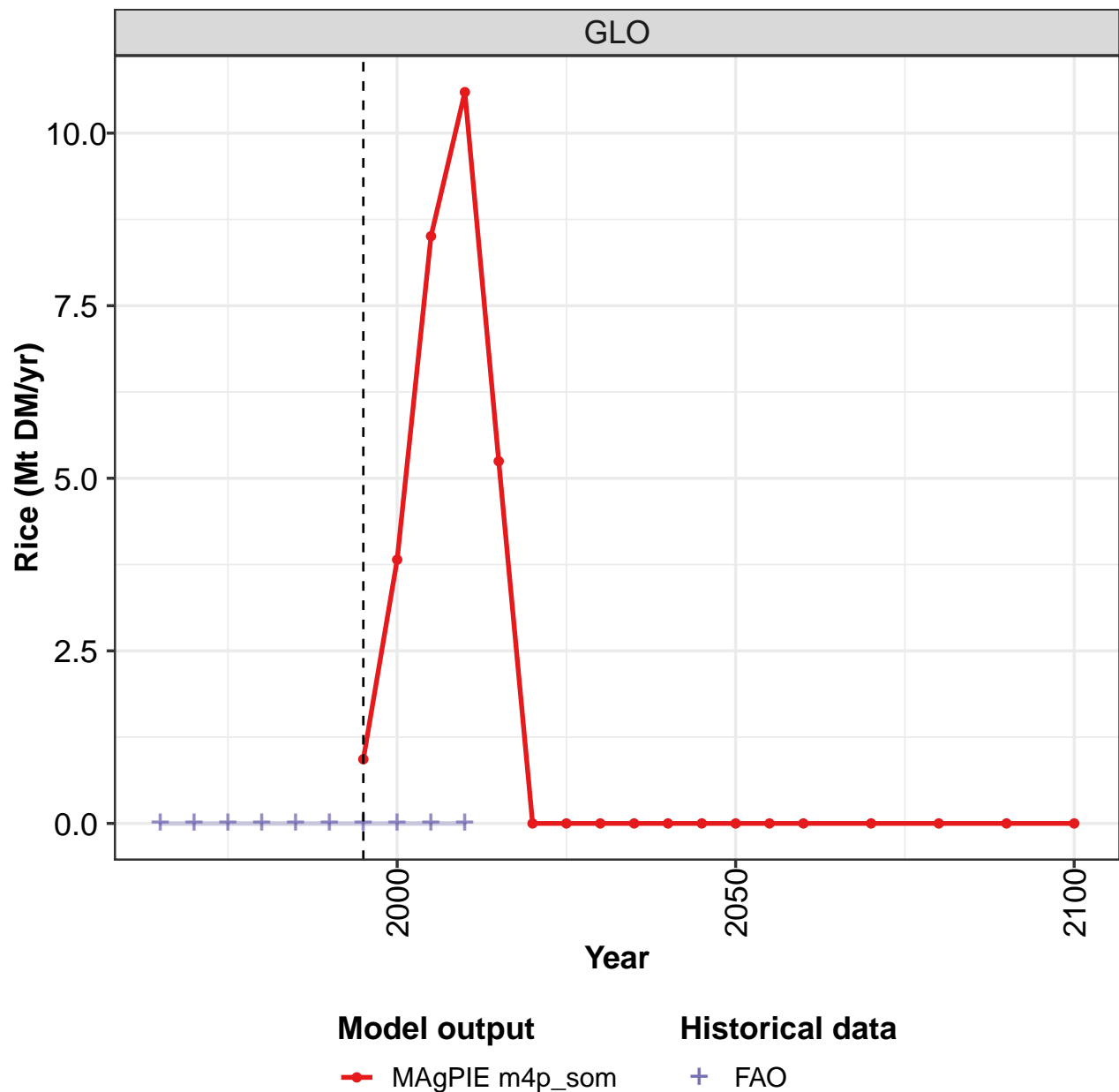
Table 1866: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Cereals—Maize (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAZ	-0.3	-0.3	-0.9	-0.2	-1.1	-0.1	-0.1	-1.5	-1.6	-0.6
CHA	0.1	-0.6	-1.6	-4.2	1.7	7.7	-4.6	-14.7	1.1	2.2
EUR	-12.2	-11.2	-19.7	-20.8	-13.1	-8.4	1.0	-2.1	0.3	-2.7
IND	-0.2	0.0	-0.1	0.0	-0.2	0.0	0.1	0.0	0.4	3.9
JPN	-2.9	-4.9	-6.7	-11.4	-12.6	-14.2	-14.0	-13.8	-14.2	-13.6
LAM	5.5	7.1	-0.9	0.5	-7.1	-5.2	6.5	1.4	-2.8	9.3
MEA	0.3	0.4	-2.0	-2.0	-9.3	-5.4	-5.7	-10.3	-15.8	-21.3
NEU	0.6	0.5	0.2	1.4	-3.3	-0.1	1.0	-0.1	-0.1	1.0
OAS	1.7	3.0	-1.6	1.9	-11.9	-5.3	-6.8	-9.7	-11.2	-11.7
REF	-3.0	-0.0	-6.3	-10.5	-13.4	-12.9	-1.5	0.9	1.7	0.4
SSA	2.6	2.4	0.6	5.9	-10.4	1.1	-0.4	2.2	-2.4	5.3
USA	7.9	3.5	38.9	39.3	80.7	42.7	24.6	47.8	44.5	27.7

Table 1867: FAO — Trade—Net-Trade—Crops—Cereals—Maize (Mt DM/yr)

59.1.3 Cereals—Rice

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

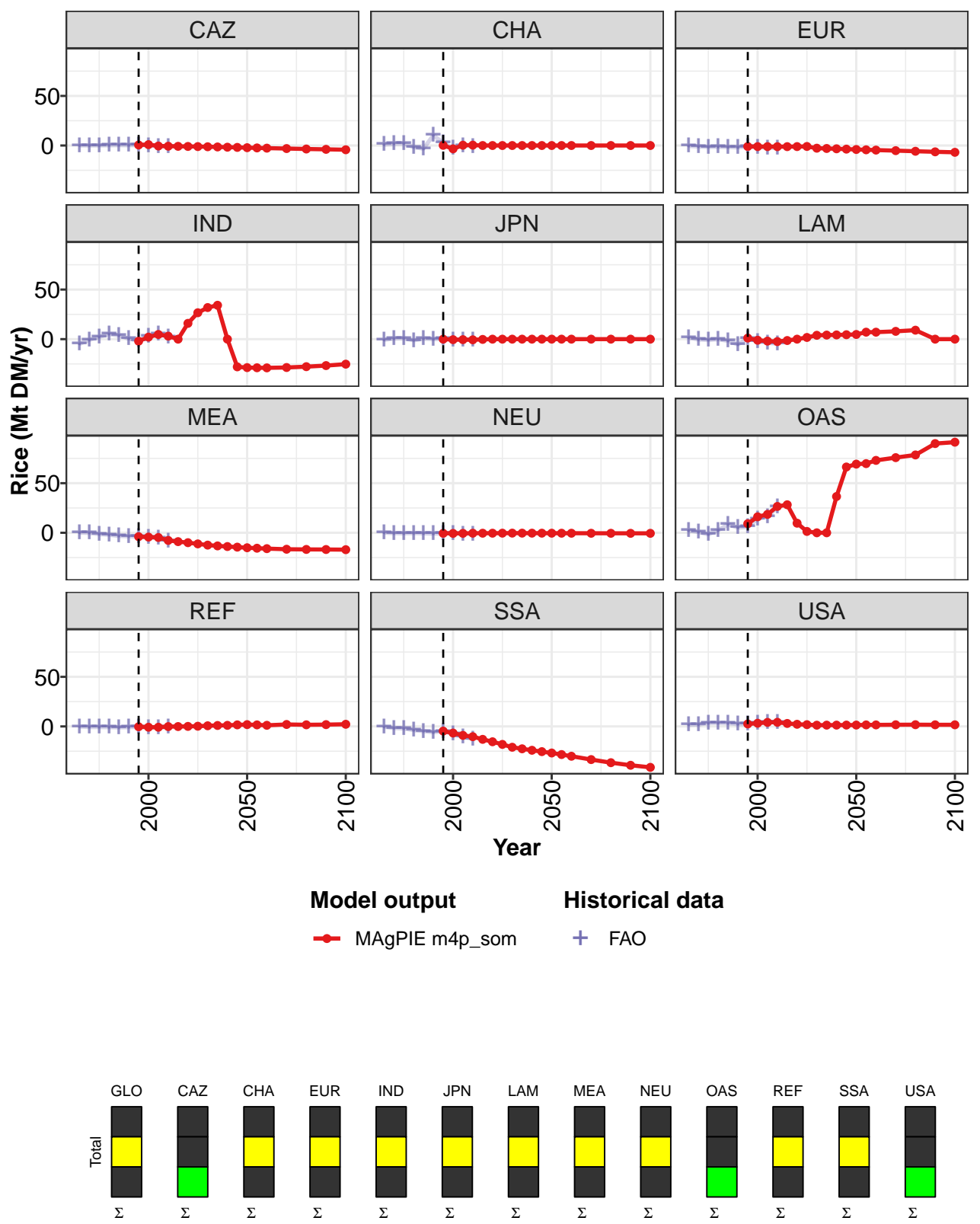


Figure 488: MAGPIE m4p\_som — Trade—Net-Trade—Crops—Cereals—Rice (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.9	3.8	8.5	10.6	5.2	0.0	0.0	0.0	-0.0	0.0	0.0
CAZ	0.5	0.9	-0.5	-0.7	-0.8	-0.9	-1.1	-1.3	-1.5	-1.7	-1.9
CHA	0.2	-3.4	0.3	0.4	0.0	0.0	-0.0	0.0	0.0	0.0	0.0
EUR	-1.0	-1.1	-1.1	-1.2	-1.1	-1.1	-1.0	-2.7	-3.0	-3.3	-3.6
IND	-2.0	2.1	4.7	3.0	0.0	15.9	26.6	31.9	34.2	0.0	-27.9
JPN	0.0	-0.5	-0.5	-0.6	-0.3	0.0	0.0	0.0	0.0	0.0	0.0
LAM	1.1	-1.1	-2.0	-2.4	-1.4	-0.0	1.7	3.9	4.1	4.3	4.5
MEA	-3.9	-4.3	-4.7	-7.7	-8.9	-10.0	-11.2	-12.4	-13.2	-13.9	-14.5
NEU	-0.5	-0.6	-0.6	-0.4	-0.4	-0.4	-0.4	-0.3	-0.3	-0.4	-0.4
OAS	9.1	16.1	18.6	26.6	28.3	9.7	1.4	0.0	0.0	36.6	66.3
REF	-0.3	-0.8	-0.8	-0.2	-0.1	0.0	0.2	0.7	1.0	1.1	1.6
SSA	-4.7	-6.7	-9.0	-10.3	-13.0	-15.5	-18.1	-21.0	-22.6	-24.0	-25.4
USA	2.5	3.2	4.1	4.2	3.0	2.2	1.8	1.3	1.3	1.3	1.4

Table 1868: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Cereals—Rice (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0	-0.0	0.0	0.0	0.0	0.0	0.0
CAZ	-2.2	-2.4	-2.7	-3.1	-3.5	-3.9	-4.3
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	-4.0	-4.3	-4.6	-5.2	-5.8	-6.4	-6.9
IND	-28.7	-28.8	-28.9	-28.6	-27.8	-26.7	-25.2
JPN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM	4.7	7.1	7.0	7.9	9.0	-0.0	-0.0
MEA	-15.1	-15.6	-16.0	-16.6	-16.8	-16.9	-17.0
NEU	-0.4	-0.4	-0.5	-0.5	-0.5	-0.5	-0.6
OAS	69.2	69.8	73.0	75.8	78.5	90.0	91.4
REF	1.8	1.6	1.1	2.0	1.6	1.8	2.2
SSA	-26.8	-28.4	-30.0	-33.4	-36.6	-39.2	-41.3
USA	1.4	1.5	1.5	1.7	1.7	1.6	1.6

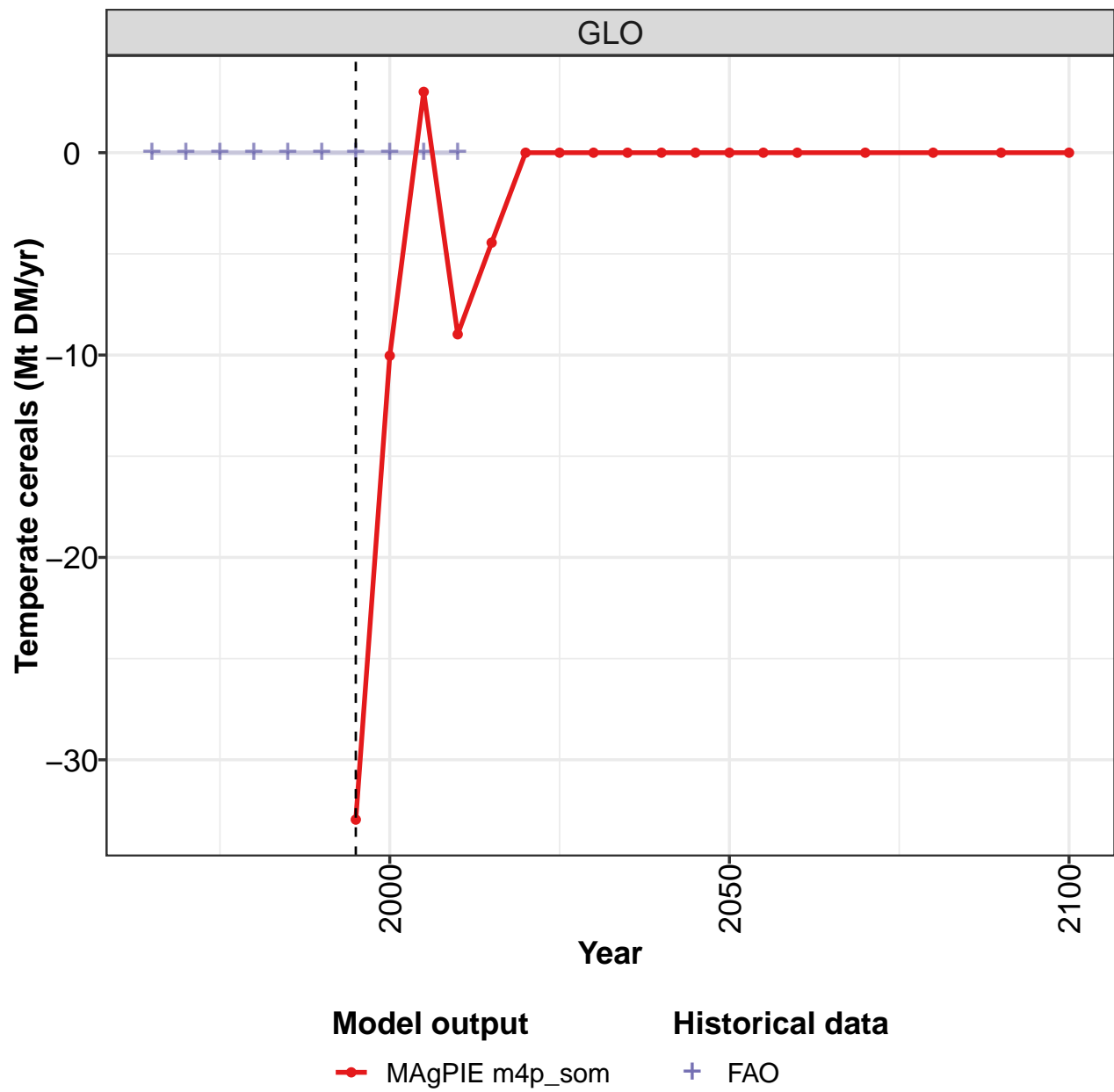
Table 1869: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Cereals—Rice (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAZ	0.0	-0.0	0.0	0.2	0.4	0.2	0.4	0.1	-0.7	-0.9
CHA	0.9	1.8	2.1	-1.7	-3.3	10.3	2.6	-2.8	0.0	-0.6
EUR	-0.4	-1.0	-1.4	-1.4	-1.6	-1.9	-1.1	-1.6	-2.2	-2.6
IND	-4.8	-0.8	2.3	5.1	3.6	0.4	-1.5	3.3	5.3	2.2
JPN	-0.8	0.6	0.9	-1.2	0.5	-0.0	0.3	-0.5	-0.6	-0.7
LAM	1.5	-0.4	-1.0	-0.2	-1.8	-5.4	0.8	-2.0	-3.7	-4.6
MEA	0.1	-0.2	-1.4	-2.1	-3.2	-3.5	-4.0	-4.7	-5.5	-8.6
NEU	0.1	-0.4	-0.6	-0.3	-0.6	-0.9	-0.6	-0.9	-1.1	-1.1
OAS	2.2	0.7	-1.6	2.6	8.4	5.2	6.0	14.0	16.2	25.9
REF	-0.2	-0.6	-0.7	-0.8	-1.0	-0.8	-0.4	-1.0	-1.2	-0.7
SSA	-0.3	-1.7	-2.1	-3.8	-4.7	-5.9	-4.8	-7.5	-10.8	-12.5
USA	1.7	1.9	3.3	3.5	3.2	2.2	2.4	3.5	4.4	4.2

Table 1870: FAO — Trade—Net-Trade—Crops—Cereals—Rice (Mt DM/yr)

59.1.4 Cereals—Temperate cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

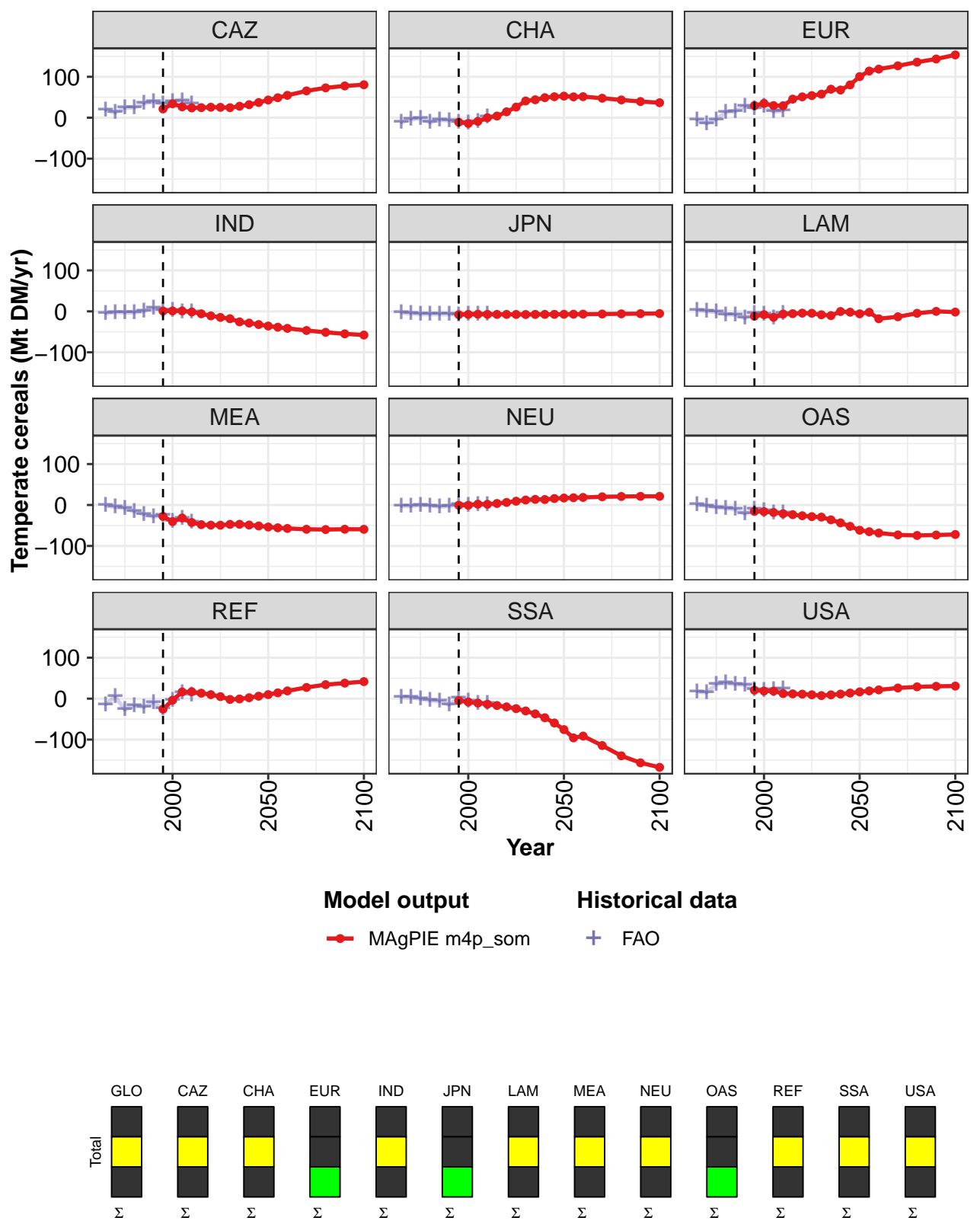


Figure 489: MAGPIE m4p\_som — Trade—Net-Trade—Crops—Cereals—Temperate cereals (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-33	-10	3	-9	-4	0	0	-0	-0	0	0
CAZ	21	34	27	24	25	26	25	25	28	32	37
CHA	-11	-14	-9	-0	4	14	26	41	44	49	51
EUR	30	35	30	29	45	51	54	58	70	68	80
IND	1	1	1	-1	-6	-11	-15	-18	-26	-29	-32
JPN	-8	-7	-7	-7	-7	-7	-8	-8	-7	-7	-7
LAM	-12	-8	-14	-7	-6	-4	-5	-8	-10	-0	-2
MEA	-28	-41	-32	-43	-48	-49	-49	-47	-47	-49	-51
NEU	-1	-1	2	2	4	6	9	12	14	13	16
OAS	-16	-16	-18	-21	-24	-26	-28	-30	-36	-44	-52
REF	-26	-4	16	17	13	10	5	-2	-1	2	6
SSA	-5	-8	-11	-14	-17	-20	-24	-30	-37	-47	-59
USA	21	19	18	12	12	11	9	8	9	11	14

Table 1871: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0	0	-0	0	0	0	-0
CAZ	43	49	55	66	73	78	81
CHA	53	51	51	48	43	40	37
EUR	100	114	119	127	136	143	153
IND	-36	-39	-42	-47	-51	-55	-58
JPN	-7	-7	-7	-6	-6	-6	-5
LAM	-6	-2	-18	-13	-5	-0	-2
MEA	-54	-56	-57	-59	-60	-59	-59
NEU	17	18	18	20	21	21	21
OAS	-62	-65	-68	-73	-74	-73	-72
REF	10	14	19	27	34	38	42
SSA	-76	-96	-91	-115	-140	-157	-168
USA	17	19	21	26	29	30	31

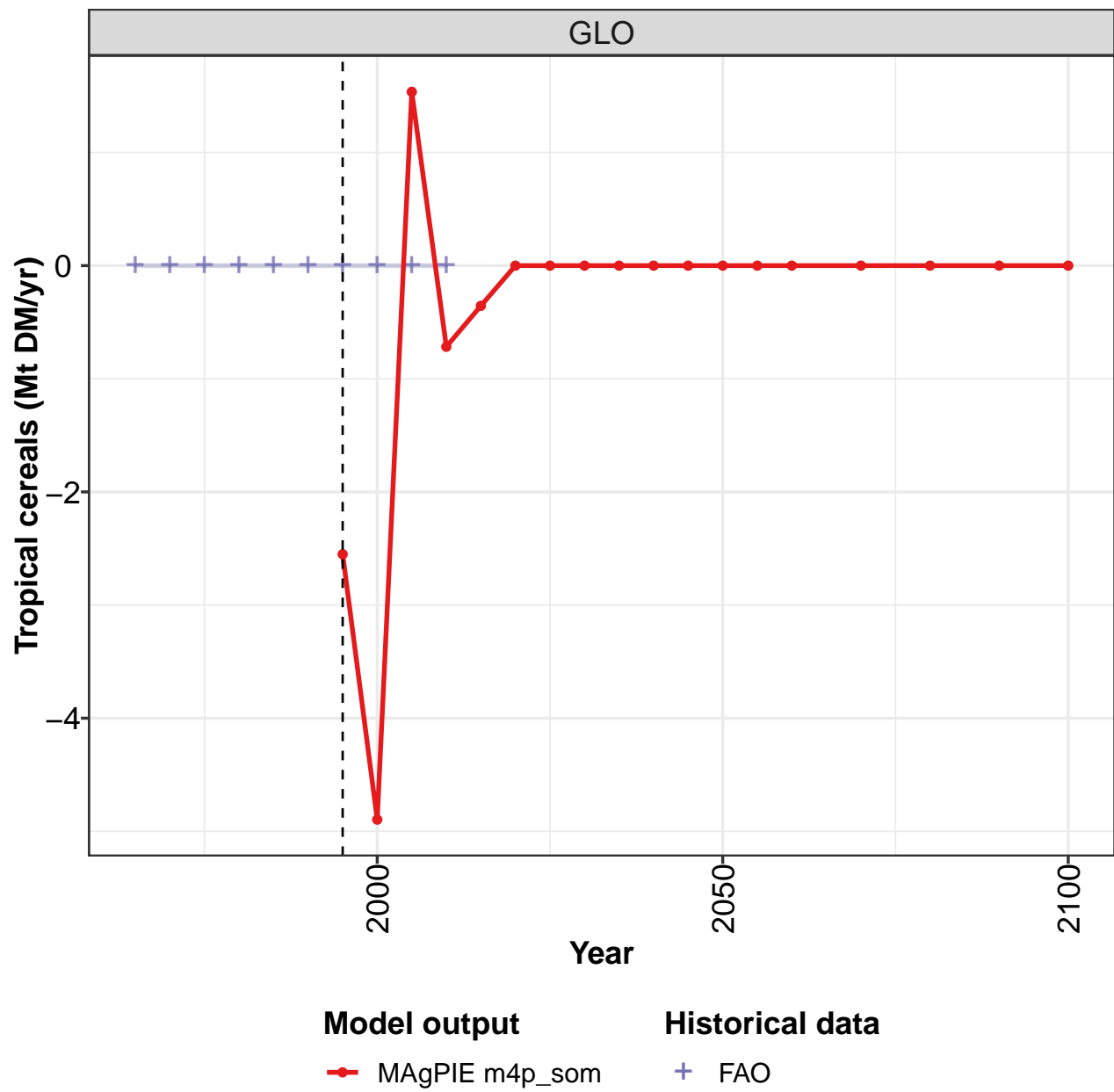
Table 1872: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Cereals—Temperate cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAZ	18.4	12.5	23.7	25.0	34.9	39.2	33.6	39.1	40.9	34.4
CHA	-11.4	-3.9	-1.8	-11.5	-5.4	-6.9	-10.9	-13.5	-8.8	1.7
EUR	-5.3	-14.2	-4.3	13.6	15.8	28.4	22.1	28.8	14.7	17.1
IND	-4.9	-2.1	-3.1	-3.0	0.6	8.1	2.0	1.9	-0.2	-1.4
JPN	-3.1	-5.3	-6.8	-7.0	-7.0	-7.3	-7.9	-7.5	-7.0	-7.3
LAM	2.9	0.3	-1.6	-7.7	-8.6	-16.7	-4.7	-6.0	-15.4	-4.6
MEA	-1.2	-5.1	-7.8	-16.1	-23.1	-28.5	-25.6	-39.6	-32.0	-41.9
NEU	-2.6	-2.9	-0.2	-1.6	-4.2	-3.1	1.6	0.1	1.2	0.6
OAS	0.5	-1.6	-5.6	-8.2	-10.7	-21.7	-9.4	-14.5	-18.9	-19.6
REF	-14.1	4.8	-27.1	-17.3	-20.7	-9.8	-25.0	-3.5	15.3	9.1
SSA	3.6	2.8	-0.3	-4.6	-6.5	-15.2	1.8	-6.1	-11.4	-11.8
USA	17.3	14.7	35.0	38.3	34.8	33.6	22.4	20.6	21.6	23.7

Table 1873: FAO — Trade—Net-Trade—Crops—Cereals—Temperate cereals (Mt DM/yr)

59.1.5 Cereals—Tropical cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

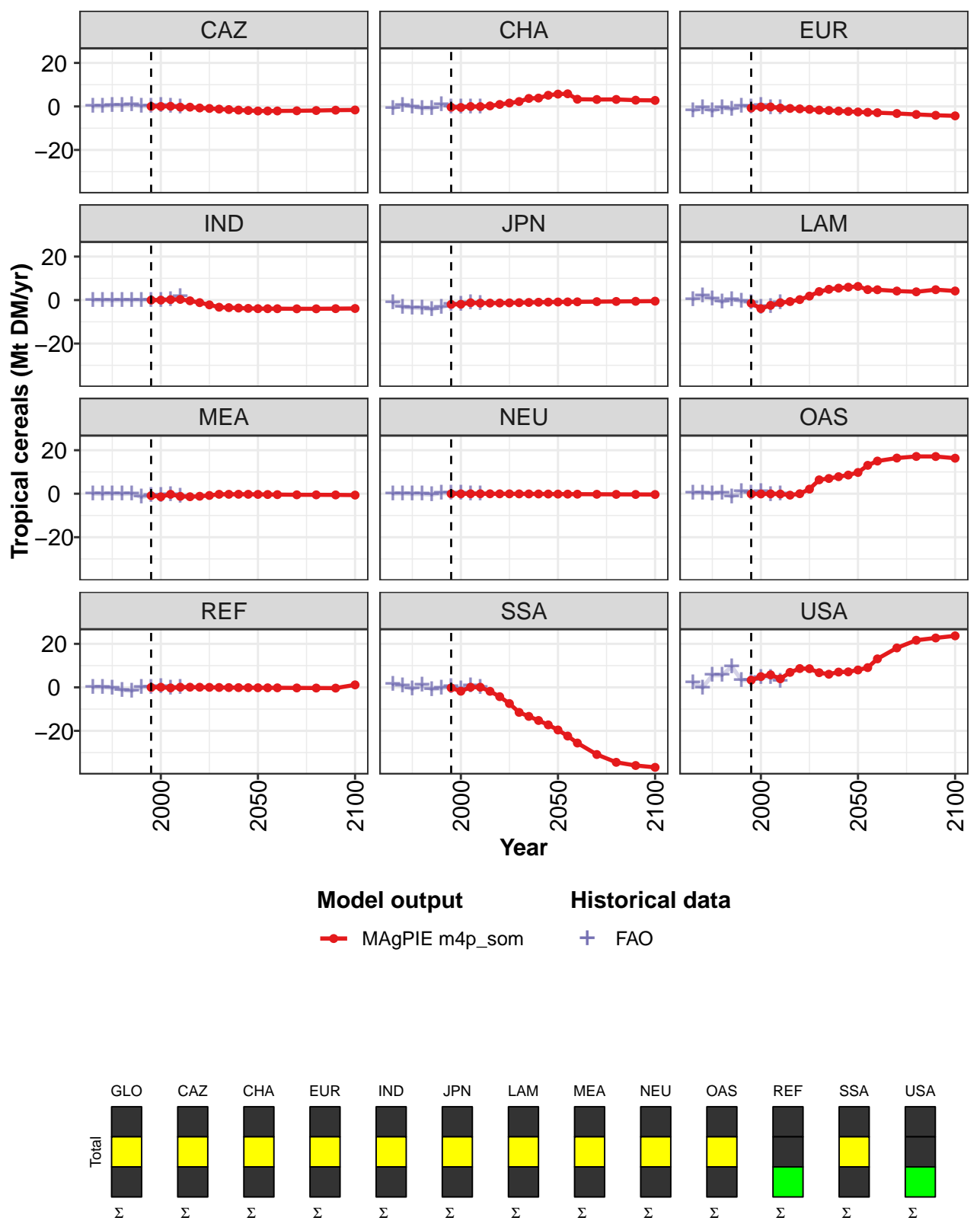


Figure 490: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Cereals—Tropical cereals (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-2.6	-4.9	1.5	-0.7	-0.4	0.0	0.0	0.0	-0.0	0.0	-0.0
CAZ	0.0	0.0	0.1	-0.3	-0.3	-0.7	-0.9	-1.2	-1.4	-1.7	-1.9
CHA	-0.4	-0.5	-0.0	-0.1	0.2	0.9	1.6	2.3	3.7	3.8	5.1
EUR	-0.7	-0.2	-0.2	-0.7	-0.9	-1.1	-1.3	-1.7	-1.9	-2.1	-2.3
IND	0.0	0.0	0.2	0.3	-0.3	-1.2	-2.2	-3.3	-3.5	-3.7	-3.8
JPN	-2.0	-1.9	-1.2	-1.4	-1.4	-1.3	-1.3	-1.2	-1.1	-1.0	-0.9
LAM	-1.5	-3.9	-2.4	-1.2	-0.7	0.2	1.8	3.9	5.0	5.5	5.9
MEA	-0.9	-1.4	-0.3	-1.2	-1.4	-1.2	-0.8	-0.3	-0.3	-0.2	-0.3
NEU	-0.0	-0.1	-0.0	-0.0	-0.0	-0.0	-0.1	-0.1	-0.1	-0.1	-0.1
OAS	-0.1	-0.1	-0.1	-0.1	-0.7	0.0	2.1	6.4	7.0	7.8	8.6
REF	-0.0	0.1	-0.3	0.1	0.1	0.1	-0.0	-0.1	-0.1	-0.1	-0.2
SSA	-0.2	-1.8	0.1	0.1	-1.8	-4.3	-7.5	-11.5	-13.3	-15.2	-17.3
USA	3.3	4.9	5.7	3.9	6.9	8.6	8.6	6.7	6.0	7.0	7.1

Table 1874: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	-0.0	0.0	0.0	0.0	0.0	0.0	-0.0
CAZ	-2.1	-2.1	-2.1	-2.0	-1.9	-1.7	-1.6
CHA	5.7	5.8	3.3	3.2	3.2	2.9	2.8
EUR	-2.5	-2.7	-2.9	-3.2	-3.7	-4.1	-4.3
IND	-3.9	-4.0	-4.0	-4.0	-4.0	-3.9	-3.9
JPN	-0.9	-0.8	-0.8	-0.7	-0.6	-0.6	-0.5
LAM	6.3	4.8	4.7	4.2	3.8	4.8	4.2
MEA	-0.3	-0.4	-0.4	-0.5	-0.5	-0.6	-0.6
NEU	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.4
OAS	9.8	13.1	15.0	16.4	17.1	17.1	16.3
REF	-0.2	-0.2	-0.2	-0.3	-0.3	-0.4	1.1
SSA	-19.6	-22.4	-25.6	-30.9	-34.5	-35.9	-36.8
USA	8.0	9.1	13.1	18.1	21.7	22.7	23.7

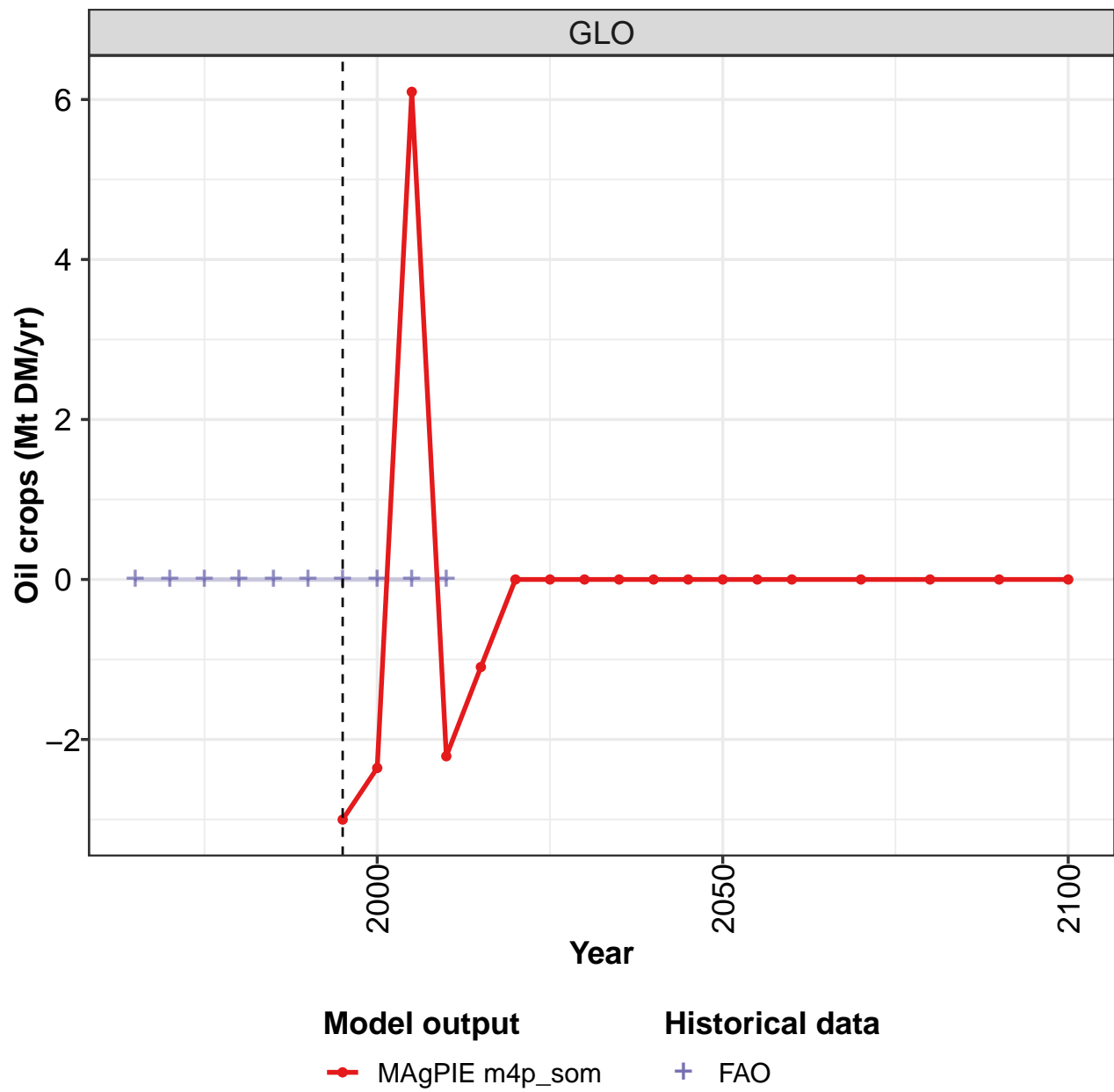
Table 1875: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Cereals—Tropical cereals (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	0.02	0.11	0.55	0.54	0.75	0.11	0.08	0.38	0.17	-0.34
CHA	-0.77	0.66	-0.08	-0.79	-0.81	0.84	-0.33	-0.36	-0.05	-0.07
EUR	-2.00	-0.64	-2.07	-0.66	-1.36	0.23	-0.31	0.42	-0.45	-0.63
IND	-0.04	-0.02	-0.18	0.00	-0.01	0.03	0.03	0.03	0.12	1.57
JPN	-1.25	-3.26	-3.51	-3.75	-4.22	-3.32	-1.99	-1.91	-1.25	-1.41
LAM	0.34	2.07	0.70	-0.85	0.30	-0.57	-1.08	-3.21	-2.82	-1.11
MEA	0.03	-0.16	0.03	-0.18	0.05	-1.57	-0.68	-0.85	-0.40	-1.17
NEU	-0.03	0.09	-0.15	-0.13	-0.45	0.28	0.12	0.26	-0.12	0.03
OAS	0.19	0.43	0.12	0.46	-1.35	1.00	0.40	0.91	-0.37	0.01
REF	0.03	0.09	-0.23	-1.23	-1.60	0.03	0.08	0.50	-0.33	0.06
SSA	1.28	0.80	-0.74	1.03	-0.90	-0.40	0.40	-0.66	0.85	0.16
USA	2.21	-0.16	5.57	5.55	9.59	3.34	3.29	4.47	4.65	2.90

Table 1876: FAO — Trade—Net-Trade—Crops—Cereals—Tropical cereals (Mt DM/yr)

59.1.6 Oil crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

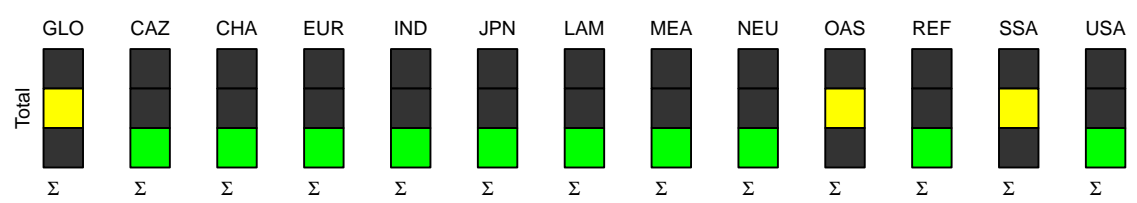
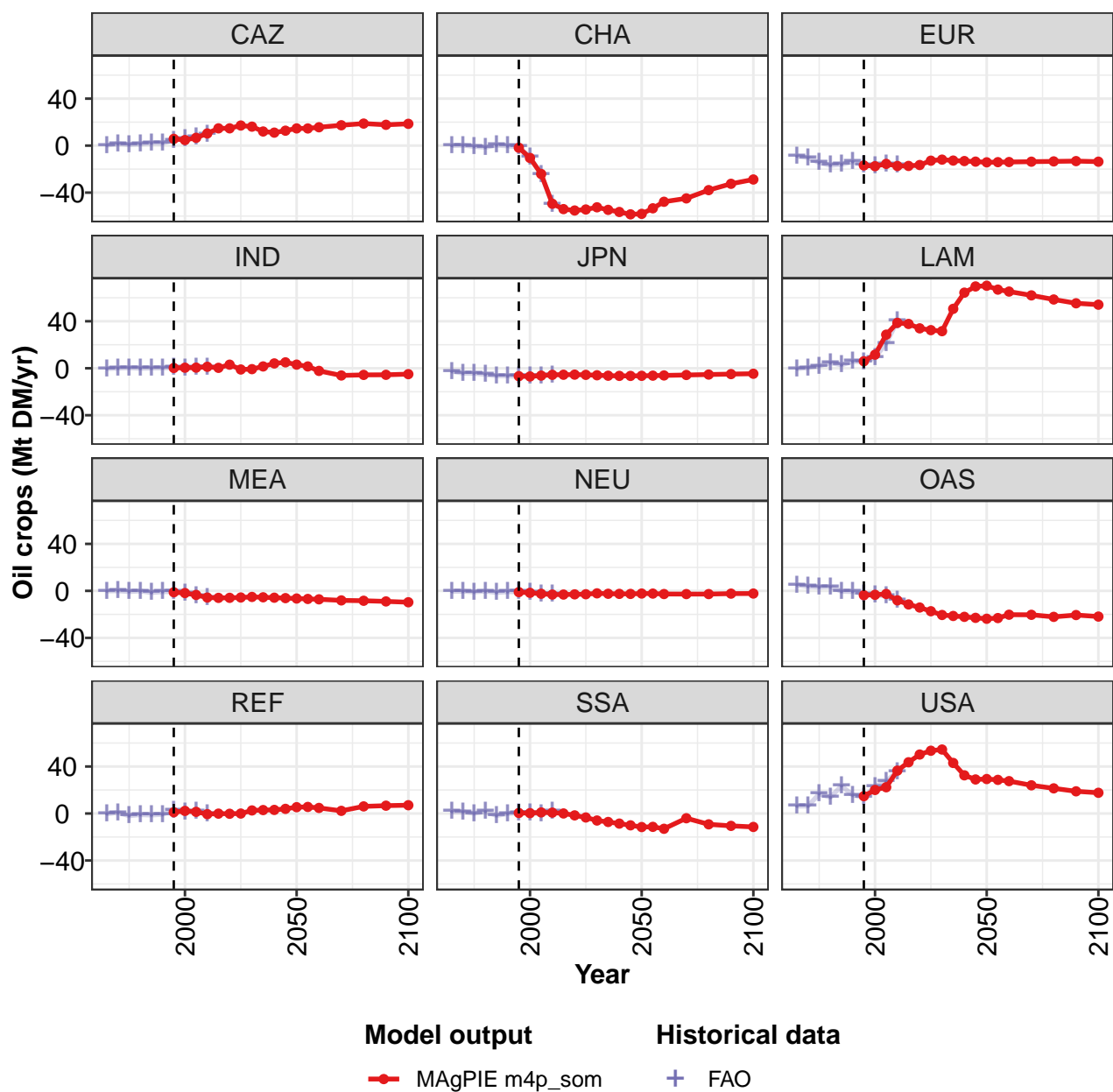


Figure 491: MAGPIE m4p\_som — Trade—Net-Trade—Crops—Oil crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-3.0	-2.4	6.1	-2.2	-1.1	0.0	-0.0	-0.0	-0.0	-0.0	0.0
CAZ	5.8	4.7	6.7	10.4	14.7	14.7	17.1	16.2	12.0	11.1	12.7
CHA	-1.8	-10.5	-24.1	-49.5	-54.0	-55.2	-54.4	-52.5	-54.7	-56.5	-58.5
EUR	-16.9	-17.5	-15.5	-17.3	-17.3	-16.5	-12.8	-11.9	-12.7	-13.1	-13.6
IND	0.2	0.5	0.5	1.2	0.4	3.1	-1.1	-0.7	1.6	4.1	5.0
JPN	-6.8	-7.0	-6.3	-5.6	-5.5	-5.4	-5.6	-6.0	-6.3	-6.5	-6.5
LAM	6.0	11.6	28.6	38.7	37.7	34.0	32.4	31.6	50.6	64.4	69.6
MEA	-1.2	-1.8	-3.4	-5.7	-5.9	-5.9	-5.6	-5.1	-5.5	-5.8	-6.2
NEU	-1.0	-1.7	-2.4	-3.1	-3.1	-2.9	-2.8	-2.1	-2.4	-2.5	-2.6
OAS	-3.7	-3.3	-2.6	-8.1	-11.5	-14.2	-17.3	-20.5	-21.4	-22.1	-22.9
REF	1.1	2.2	1.4	-0.5	-0.1	-0.2	-0.0	2.6	2.9	3.1	4.0
SSA	0.5	0.3	0.9	0.8	0.1	-1.6	-3.4	-6.0	-7.2	-8.6	-10.1
USA	14.8	20.1	22.4	36.5	43.6	50.2	53.5	54.5	43.1	32.5	29.0

Table 1877: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Oil crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0	-0.0	-0.0	-0.0	0.0	0.0	0.0
CAZ	14.7	14.6	15.6	17.3	18.8	17.7	18.6
CHA	-58.1	-53.4	-47.8	-44.9	-37.9	-32.5	-28.8
EUR	-14.2	-14.1	-14.0	-13.7	-13.4	-13.2	-13.7
IND	3.1	1.5	-2.3	-6.2	-5.7	-5.6	-5.0
JPN	-6.4	-6.3	-6.1	-5.7	-5.4	-5.0	-4.7
LAM	70.2	66.9	65.3	62.0	58.5	55.3	54.1
MEA	-6.5	-6.9	-7.2	-8.1	-8.4	-9.0	-9.7
NEU	-2.3	-2.3	-2.7	-2.7	-2.7	-2.3	-2.3
OAS	-23.7	-23.1	-20.3	-20.4	-22.1	-20.6	-21.9
REF	5.4	5.6	4.8	2.3	6.1	6.7	7.1
SSA	-11.5	-11.4	-13.0	-4.0	-9.2	-10.5	-11.4
USA	29.4	28.6	27.6	24.0	21.4	18.9	17.6

Table 1878: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Oil crops (Mt DM/yr) [PART 2/2]

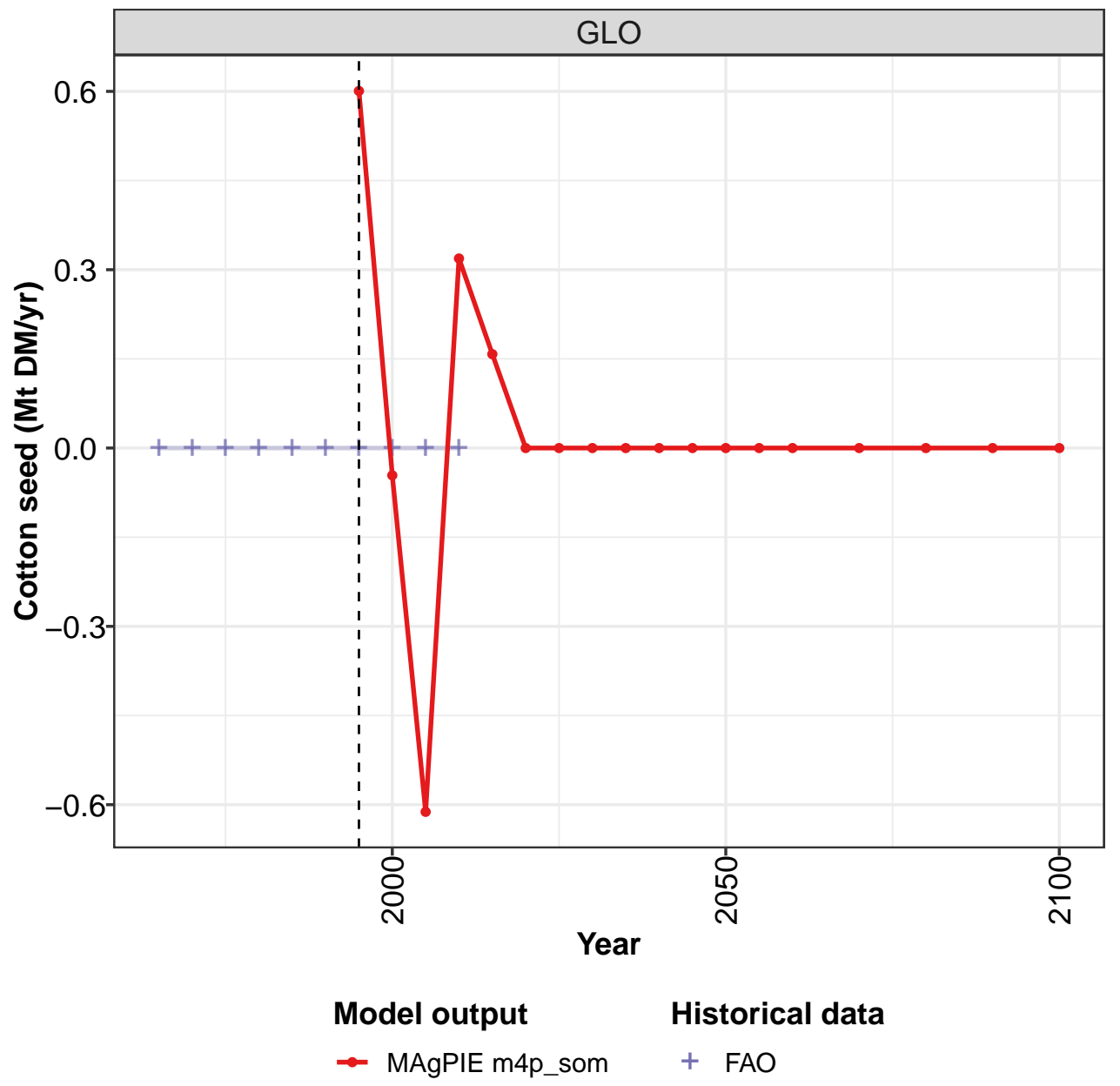
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAZ	0.3	1.6	0.9	1.3	2.2	2.1	4.7	6.0	7.4	9.6
CHA	-0.0	0.3	-0.7	-1.4	0.3	-0.4	-1.0	-9.8	-24.5	-49.7
EUR	-8.9	-10.2	-14.5	-16.8	-16.0	-13.8	-16.2	-17.3	-16.0	-16.8
IND	-0.4	0.0	0.4	-0.1	0.1	0.2	0.7	0.4	0.6	1.2
JPN	-2.6	-4.2	-4.4	-5.3	-6.4	-6.6	-6.7	-6.9	-6.3	-5.6
LAM	-0.4	0.5	2.0	4.7	2.8	5.8	5.3	9.0	21.1	40.2
MEA	-0.1	0.0	-0.7	-0.2	-1.5	-0.8	-0.8	-1.7	-3.9	-5.5
NEU	-0.5	-0.4	-0.9	-0.3	-1.5	-0.8	-0.8	-1.4	-2.8	-3.0
OAS	5.1	3.7	3.2	3.6	-0.4	-0.7	-2.5	-3.6	-4.3	-7.5
REF	-0.3	0.8	-2.0	-1.0	-1.4	-0.7	2.7	1.4	1.7	-0.5
SSA	1.6	1.5	0.1	1.7	-1.8	-0.1	0.8	0.8	-0.6	1.7
USA	6.3	6.3	16.7	13.8	23.5	15.7	13.8	23.2	27.3	35.9

Table 1879: FAO — Trade—Net-Trade—Crops—Oil crops (Mt DM/yr)



59.1.7
Oil crops—Cotton seed

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

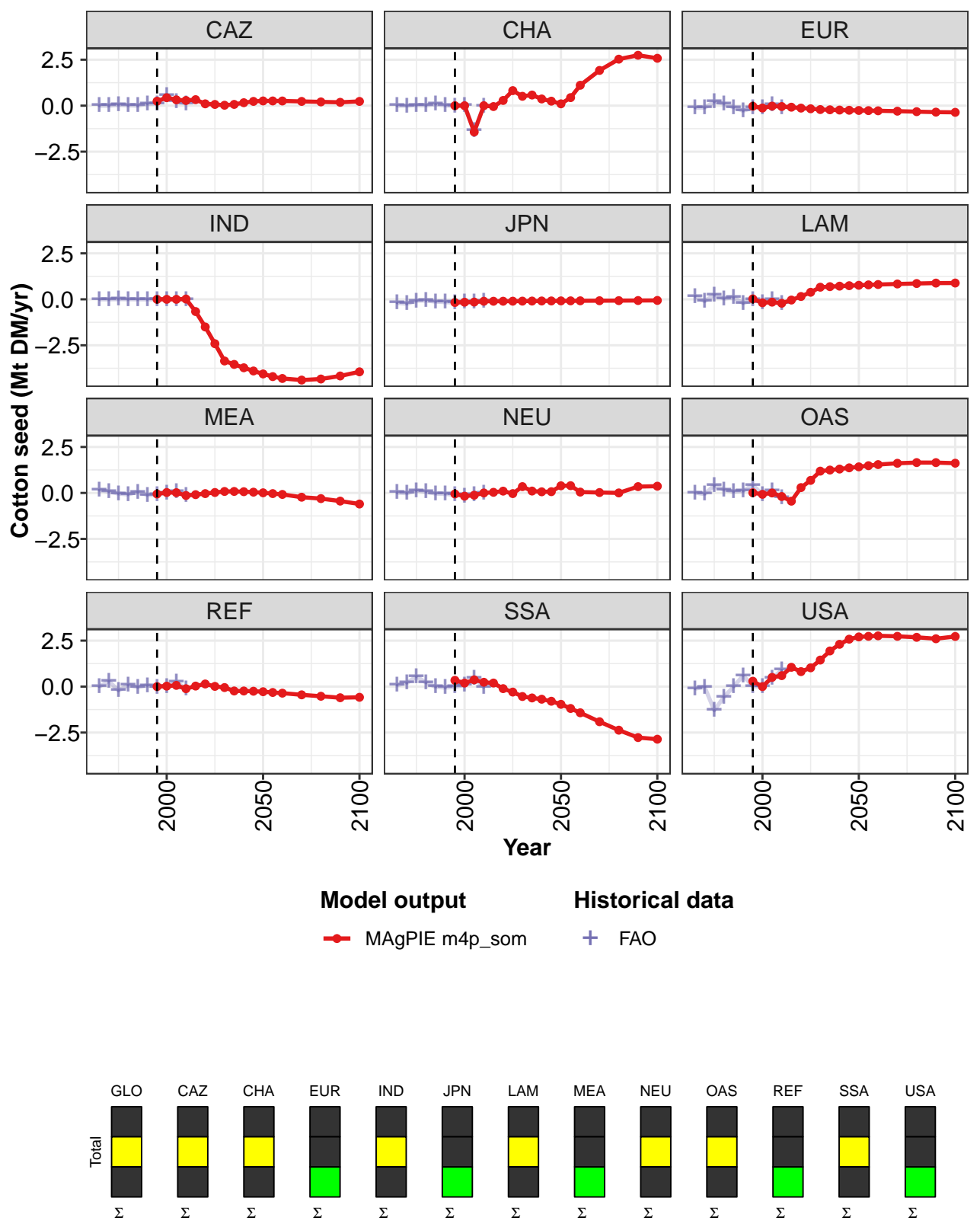


Figure 492: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Oil crops—Cotton seed (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.60	-0.05	-0.61	0.32	0.16	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	0.24	0.43	0.32	0.28	0.33	0.10	0.07	0.02	0.07	0.16	0.23
CHA	0.00	0.00	-1.43	0.00	-0.05	0.28	0.82	0.51	0.58	0.37	0.25
EUR	-0.03	-0.13	-0.02	-0.05	-0.08	-0.13	-0.17	-0.21	-0.22	-0.24	-0.25
IND	0.00	-0.00	0.00	0.02	-0.66	-1.50	-2.41	-3.35	-3.54	-3.72	-3.90
JPN	-0.17	-0.16	-0.15	-0.10	-0.10	-0.10	-0.10	-0.10	-0.09	-0.09	-0.09
LAM	0.02	-0.19	-0.16	-0.21	-0.04	0.15	0.38	0.66	0.69	0.72	0.74
MEA	-0.06	0.03	0.02	-0.14	-0.09	-0.04	0.03	0.08	0.08	0.07	0.04
NEU	-0.05	-0.17	-0.12	0.00	0.03	0.10	-0.03	0.35	0.10	0.06	0.07
OAS	0.01	-0.07	-0.00	-0.19	-0.45	0.29	0.68	1.19	1.25	1.30	1.37
REF	0.00	0.03	0.07	-0.11	0.03	0.14	0.01	-0.05	-0.24	-0.24	-0.25
SSA	0.34	0.19	0.37	0.24	0.19	-0.11	-0.30	-0.54	-0.62	-0.69	-0.80
USA	0.29	0.00	0.50	0.60	1.05	0.81	1.02	1.44	1.94	2.30	2.58

Table 1880: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00	-0.00	0.00	0.00	-0.00	-0.00	0.00
CAZ	0.26	0.26	0.26	0.23	0.21	0.18	0.23
CHA	0.10	0.44	1.11	1.92	2.53	2.74	2.58
EUR	-0.26	-0.27	-0.28	-0.30	-0.33	-0.35	-0.36
IND	-4.06	-4.20	-4.30	-4.39	-4.33	-4.17	-3.94
JPN	-0.08	-0.08	-0.08	-0.08	-0.07	-0.07	-0.06
LAM	0.76	0.79	0.80	0.83	0.86	0.88	0.89
MEA	0.01	-0.03	-0.08	-0.23	-0.31	-0.44	-0.60
NEU	0.39	0.40	0.05	0.02	0.00	0.35	0.37
OAS	1.42	1.48	1.54	1.62	1.65	1.65	1.62
REF	-0.28	-0.32	-0.36	-0.45	-0.53	-0.61	-0.58
SSA	-0.96	-1.19	-1.42	-1.91	-2.37	-2.77	-2.86
USA	2.70	2.74	2.76	2.73	2.68	2.60	2.73

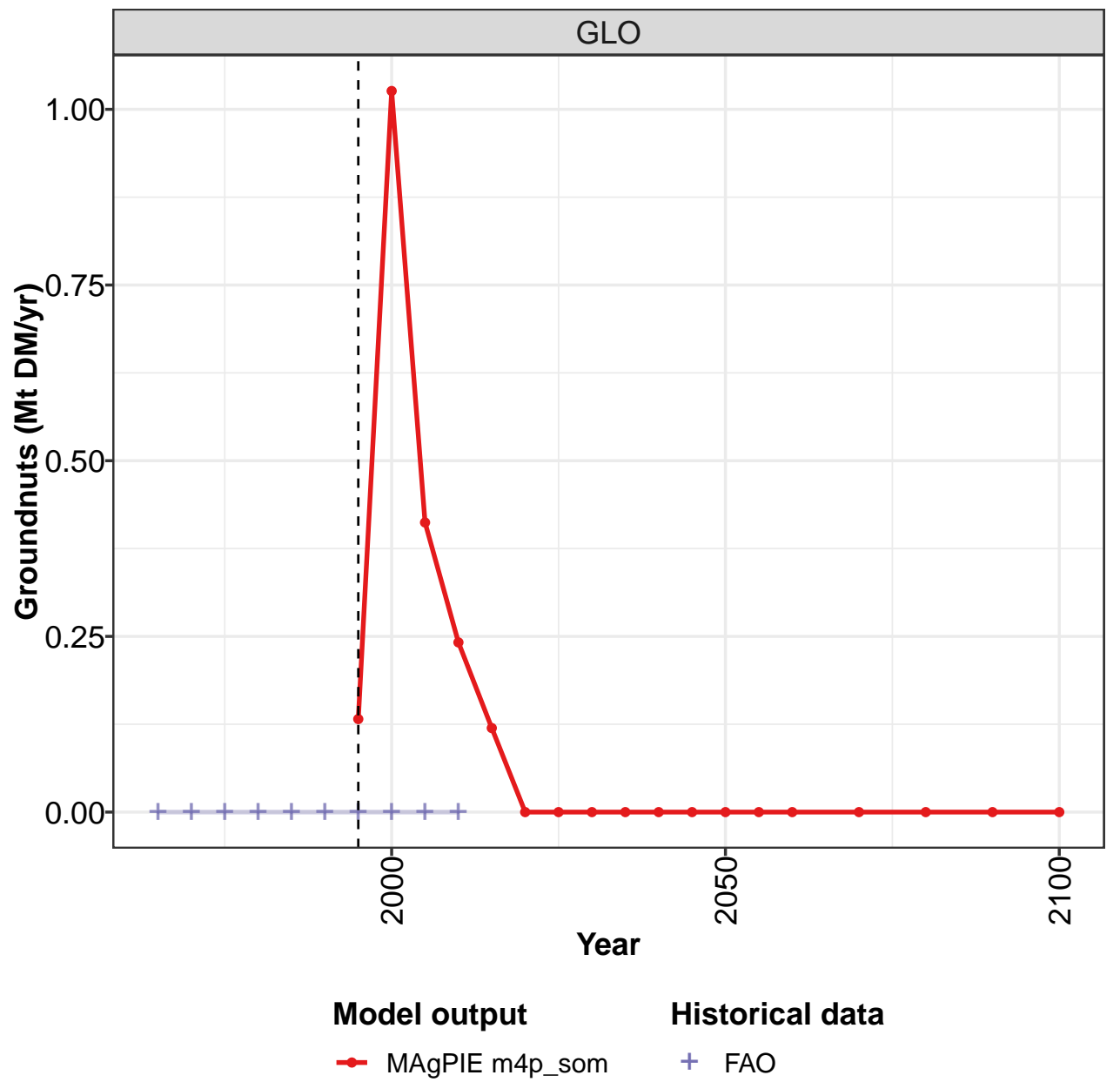
Table 1881: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Oil crops—Cotton seed (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAZ	-0.002	-0.002	0.044	0.018	-0.000	0.105	0.110	0.566	0.226	0.113
CHA	-0.002	-0.006	0.033	0.014	0.083	0.007	-0.011	-0.001	-1.367	-0.020
EUR	-0.120	-0.108	0.206	0.113	-0.093	-0.279	-0.113	-0.120	0.057	-0.088
IND	-0.000	-0.001	0.008	0.004	-0.002	-0.004	0.000	0.001	0.003	0.003
JPN	-0.193	-0.242	-0.083	-0.068	-0.127	-0.156	-0.177	-0.158	-0.147	-0.107
LAM	0.170	-0.104	0.253	0.038	0.100	-0.217	-0.019	-0.172	-0.030	-0.230
MEA	0.152	0.076	-0.038	-0.081	0.055	-0.114	-0.099	0.002	0.082	-0.126
NEU	0.021	-0.019	0.133	0.058	-0.036	-0.060	-0.088	-0.161	-0.073	-0.026
OAS	0.013	-0.062	0.408	0.174	0.073	0.108	0.423	-0.078	0.100	-0.262
REF	-0.001	0.295	-0.217	0.077	-0.027	0.064	-0.018	0.024	0.245	-0.119
SSA	0.075	0.192	0.550	0.216	-0.016	-0.058	-0.016	0.086	0.457	-0.034
USA	-0.113	-0.018	-1.296	-0.564	-0.010	0.604	0.009	0.012	0.446	0.895

Table 1882: FAO — Trade—Net-Trade—Crops—Oil crops—Cotton seed (Mt DM/yr)

59.1.8 Oil crops—Groundnuts

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

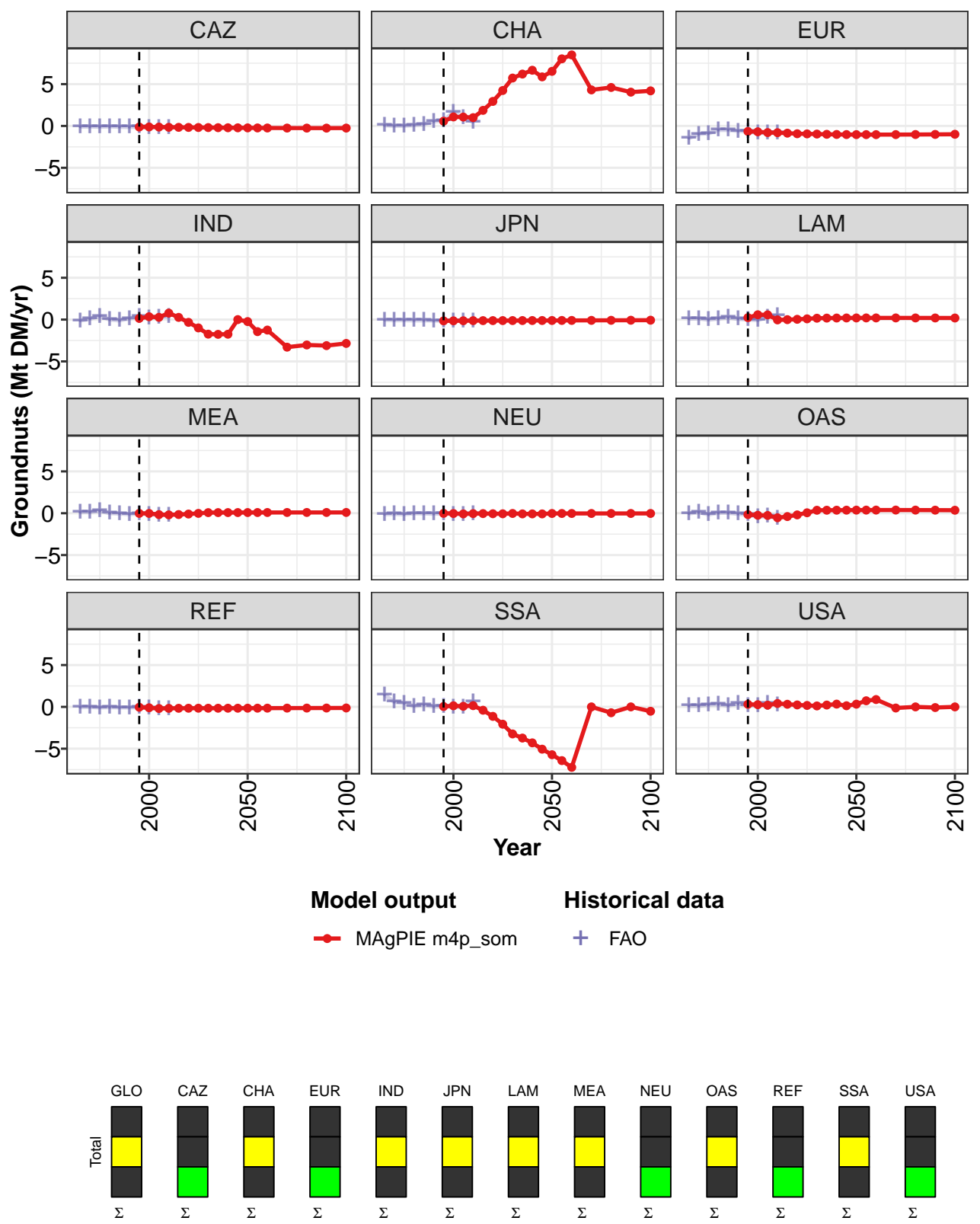


Figure 493: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Oil crops—Groundnuts (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.13	1.03	0.41	0.24	0.12	0.00	0.00	-0.00	-0.00	0.00	-0.00
CAZ	-0.13	-0.12	-0.13	-0.16	-0.17	-0.17	-0.18	-0.19	-0.20	-0.21	-0.22
CHA	0.57	1.08	1.06	0.99	1.86	2.93	4.24	5.73	6.20	6.66	5.87
EUR	-0.65	-0.70	-0.79	-0.80	-0.86	-0.93	-0.95	-0.97	-1.00	-1.01	-1.03
IND	0.15	0.34	0.27	0.77	0.26	-0.33	-0.99	-1.74	-1.76	-1.75	-0.00
JPN	-0.15	-0.15	-0.14	-0.13	-0.12	-0.12	-0.12	-0.12	-0.11	-0.11	-0.11
LAM	0.23	0.58	0.57	-0.04	-0.01	0.03	0.09	0.17	0.18	0.19	0.20
MEA	-0.02	-0.02	-0.17	-0.19	-0.15	-0.09	-0.02	0.07	0.08	0.08	0.08
NEU	-0.02	-0.03	-0.08	-0.05	-0.04	-0.06	-0.07	-0.03	-0.08	-0.08	-0.08
OAS	-0.16	-0.24	-0.27	-0.54	-0.40	-0.20	0.05	0.36	0.36	0.37	0.37
REF	-0.04	-0.11	-0.19	-0.17	-0.17	-0.16	-0.16	-0.16	-0.16	-0.16	-0.16
SSA	0.04	0.13	0.07	0.15	-0.40	-1.13	-2.07	-3.23	-3.73	-4.30	-5.06
USA	0.31	0.26	0.20	0.41	0.31	0.23	0.17	0.11	0.22	0.33	0.14

Table 1883: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00	0.00	0.00	0.00	0.00	0.00	-0.00
CAZ	-0.23	-0.24	-0.24	-0.25	-0.26	-0.26	-0.25
CHA	6.53	8.02	8.49	4.31	4.60	4.04	4.20
EUR	-1.03	-1.03	-1.04	-1.03	-1.02	-1.01	-0.99
IND	-0.24	-1.44	-1.25	-3.29	-3.03	-3.11	-2.85
JPN	-0.11	-0.10	-0.10	-0.09	-0.08	-0.08	-0.07
LAM	0.20	0.20	0.20	0.20	0.20	0.20	0.19
MEA	0.08	0.09	0.09	0.09	0.09	0.09	0.10
NEU	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03
OAS	0.37	0.38	0.38	0.38	0.38	0.37	0.36
REF	-0.16	-0.15	-0.15	-0.15	-0.14	-0.14	-0.13
SSA	-5.72	-6.42	-7.23	0.00	-0.70	0.00	-0.52
USA	0.32	0.73	0.88	-0.14	0.00	-0.08	0.00

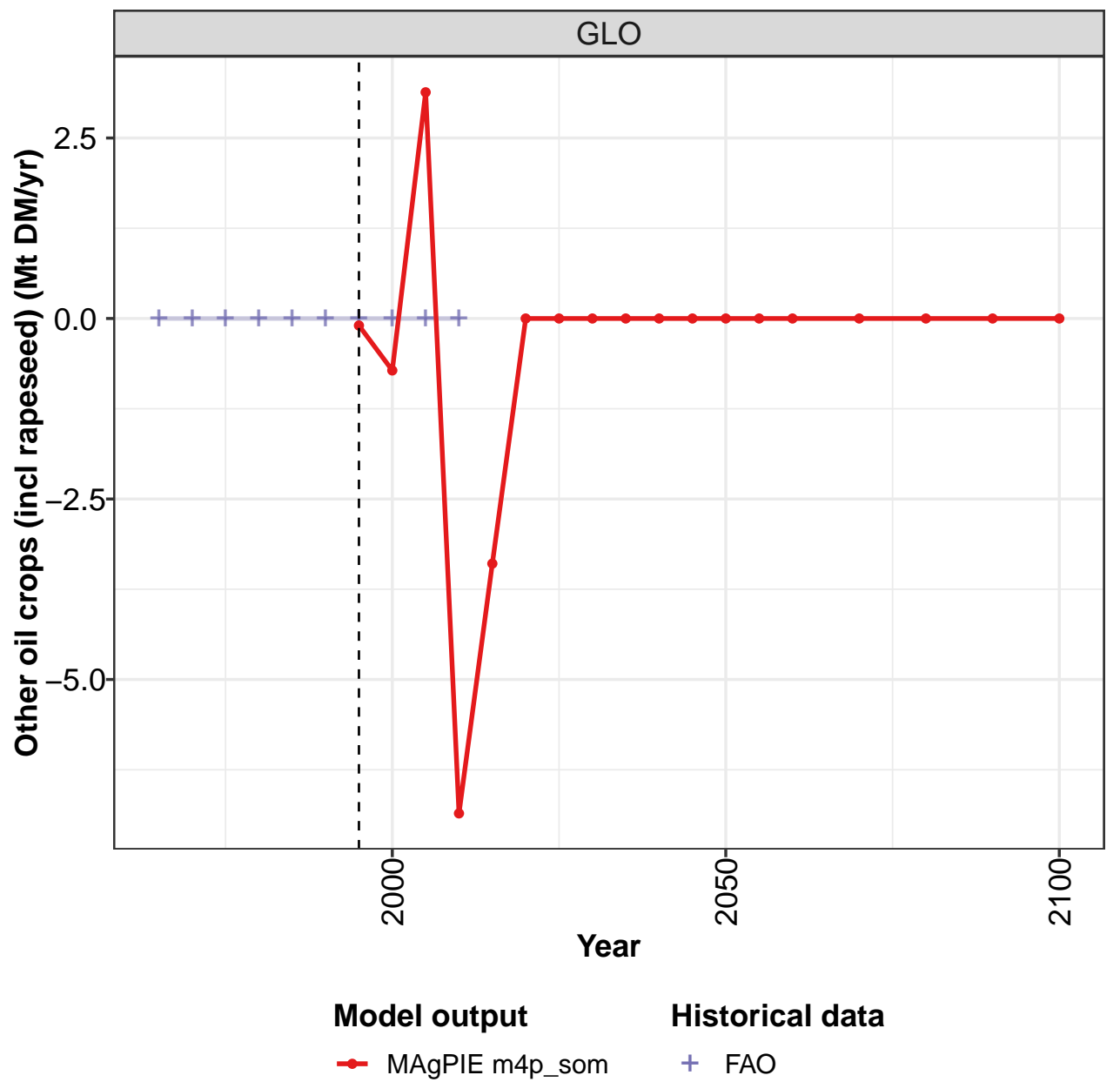
Table 1884: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Oil crops—Groundnuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	-0.09	-0.07	-0.10	-0.06	-0.11	-0.13	-0.13	-0.14	-0.14	-0.16
CHA	0.08	0.01	0.01	0.10	0.21	0.55	0.63	1.64	0.96	0.49
EUR	-1.46	-0.96	-0.88	-0.48	-0.49	-0.60	-0.67	-0.84	-0.84	-0.83
IND	-0.12	0.10	0.42	0.00	-0.11	0.14	0.35	0.20	0.29	0.36
JPN	-0.03	-0.08	-0.07	-0.09	-0.09	-0.12	-0.15	-0.15	-0.14	-0.13
LAM	0.10	0.14	-0.02	0.13	0.25	0.09	0.01	-0.08	0.34	0.49
MEA	0.13	0.14	0.28	0.01	-0.04	-0.11	-0.03	-0.11	-0.20	-0.22
NEU	-0.11	-0.09	-0.13	-0.01	-0.02	-0.07	-0.03	-0.10	-0.10	-0.06
OAS	-0.02	0.12	-0.14	0.05	0.05	-0.08	-0.18	-0.44	-0.35	-0.60
REF	-0.04	-0.01	-0.08	-0.04	-0.07	-0.08	-0.05	-0.15	-0.21	-0.19
SSA	1.44	0.58	0.44	0.09	0.26	0.03	0.07	0.01	-0.04	0.60
USA	0.11	0.12	0.27	0.31	0.16	0.38	0.17	0.17	0.44	0.25

Table 1885: FAO — Trade—Net-Trade—Crops—Oil crops—Groundnuts (Mt DM/yr)

59.1.9 Oil crops—Other oil crops (incl rapeseed)

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

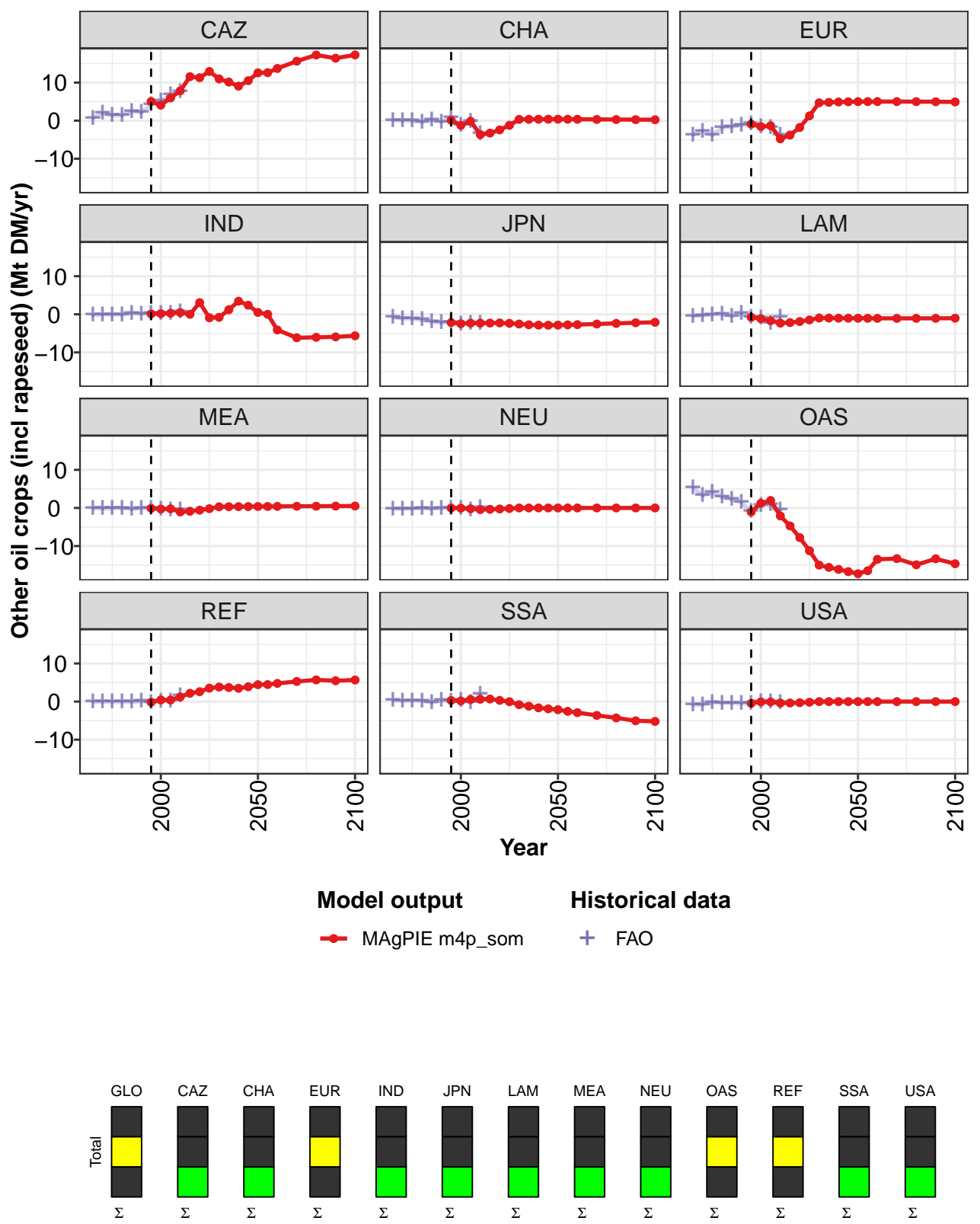


Figure 494: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-0.1	-0.7	3.1	-6.9	-3.4	0.0	-0.0	-0.0	-0.0	-0.0	0.0
CAZ	5.0	4.1	6.0	7.8	11.6	11.3	12.9	11.0	10.1	9.1	10.5
CHA	0.1	-1.2	-0.2	-3.7	-3.3	-2.4	-1.2	0.3	0.4	0.4	0.4
EUR	-0.9	-1.6	-1.3	-4.8	-3.8	-1.8	1.3	4.7	4.8	4.9	5.0
IND	0.1	0.2	0.3	0.5	0.0	3.1	-0.9	-0.8	1.2	3.4	2.4
JPN	-2.2	-2.5	-2.3	-2.3	-2.3	-2.3	-2.4	-2.5	-2.7	-2.8	-2.9
LAM	-0.8	-1.2	-1.7	-2.3	-2.2	-1.9	-1.5	-1.0	-1.0	-1.0	-1.0
MEA	-0.1	-0.3	-0.2	-1.0	-0.9	-0.6	-0.2	0.3	0.3	0.3	0.4
NEU	-0.0	-0.1	-0.2	-0.4	-0.4	-0.3	-0.1	0.0	0.0	0.0	0.0
OAS	-1.0	1.2	1.9	-2.1	-4.7	-7.8	-11.2	-15.0	-15.6	-16.1	-16.7
REF	-0.2	0.4	0.4	1.2	2.2	2.6	3.5	3.8	3.7	3.5	3.9
SSA	0.3	0.2	0.6	0.6	0.7	0.3	-0.0	-0.8	-1.2	-1.6	-1.9
USA	-0.5	-0.1	-0.1	-0.4	-0.4	-0.3	-0.2	0.0	0.0	0.0	0.0

Table 1886: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0	0.0	0.0	-0.0	0.0	0.0	0.0
CAZ	12.6	12.6	13.7	15.6	17.2	16.4	17.3
CHA	0.4	0.4	0.4	0.3	0.3	0.3	0.2
EUR	5.0	5.0	5.0	5.0	5.0	5.0	4.9
IND	0.5	0.0	-4.1	-6.2	-6.0	-5.9	-5.6
JPN	-2.8	-2.8	-2.7	-2.5	-2.4	-2.2	-2.1
LAM	-1.0	-1.0	-1.1	-1.1	-1.1	-1.1	-1.0
MEA	0.4	0.4	0.4	0.4	0.5	0.5	0.5
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	-17.3	-16.5	-13.5	-13.3	-14.9	-13.4	-14.6
REF	4.4	4.5	4.8	5.3	5.7	5.5	5.7
SSA	-2.1	-2.6	-2.9	-3.6	-4.3	-5.0	-5.2
USA	0.0	0.0	0.0	-0.0	0.0	0.0	0.0

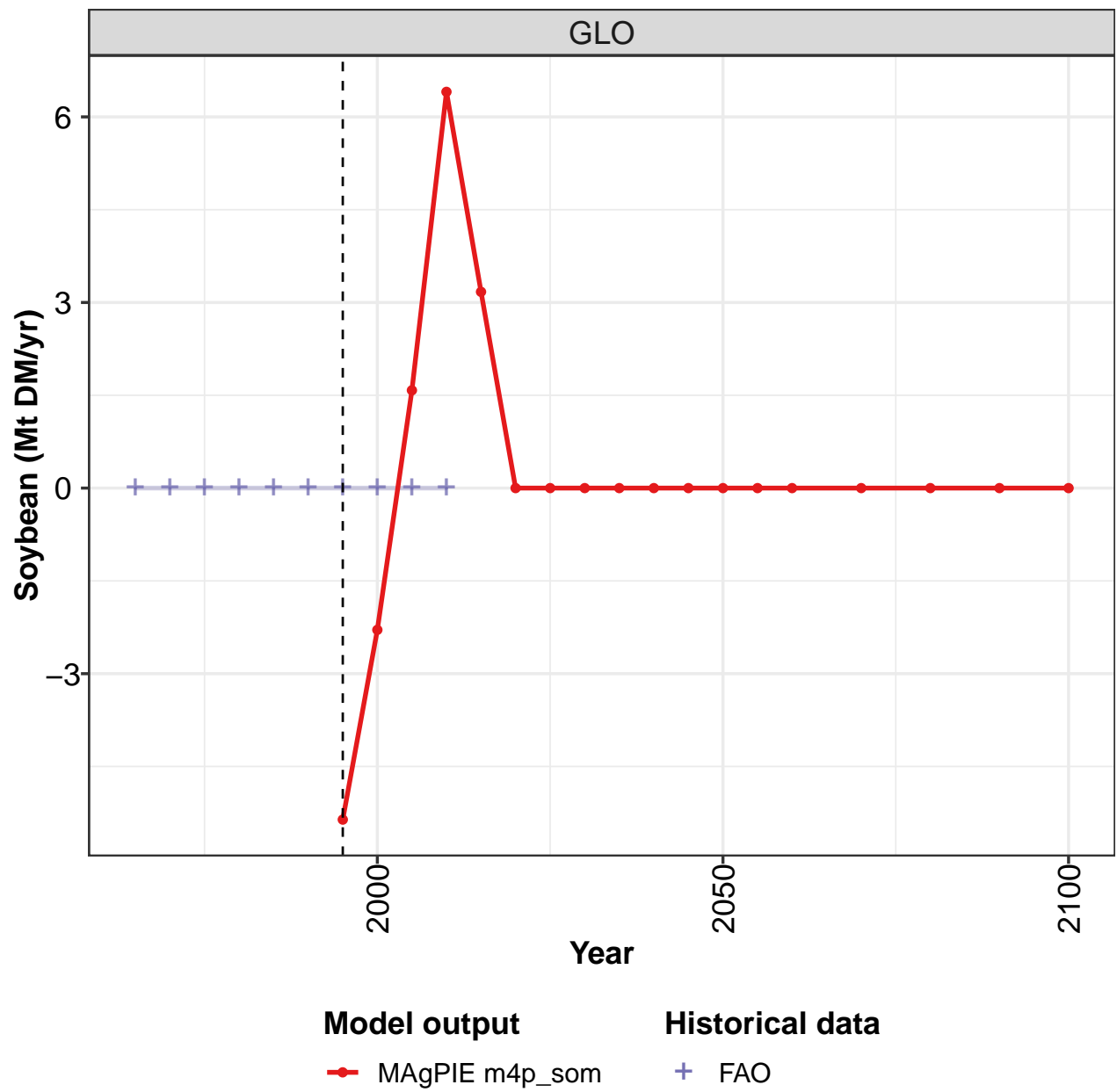
Table 1887: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	0.71	1.97	1.39	1.33	2.47	2.15	4.21	5.13	6.72	7.52
CHA	0.08	-0.03	-0.03	-0.33	0.23	-0.31	0.73	-1.22	-0.24	-3.47
EUR	-3.79	-2.69	-3.81	-1.84	-1.59	-1.10	-0.87	-1.57	-1.70	-3.83
IND	-0.24	-0.08	-0.05	-0.14	0.31	0.06	0.27	0.22	0.29	0.68
JPN	-0.79	-1.08	-1.19	-1.44	-1.91	-2.20	-2.15	-2.44	-2.32	-2.28
LAM	-0.49	-0.28	-0.05	0.02	-0.45	0.17	-0.73	-0.95	-2.36	-0.76
MEA	-0.08	-0.14	-0.11	-0.08	-0.32	-0.07	-0.09	-0.24	-0.48	-0.47
NEU	-0.22	-0.24	-0.20	-0.07	-0.24	-0.04	-0.01	-0.01	-0.41	0.02
OAS	5.37	3.24	4.08	2.84	2.31	1.45	-0.97	0.67	0.84	-0.58
REF	-0.05	-0.05	-0.11	-0.09	-0.13	0.08	-0.15	0.10	0.07	1.51
SSA	0.30	0.19	0.25	0.21	-0.29	0.32	0.23	0.38	-0.31	2.00
USA	-0.80	-0.83	-0.18	-0.40	-0.39	-0.51	-0.47	-0.08	-0.10	-0.34

Table 1888: FAO — Trade—Net-Trade—Crops—Oil crops—Other oil crops (incl rapeseed) (Mt DM/yr)

59.1.10 Oil crops—Soybean

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



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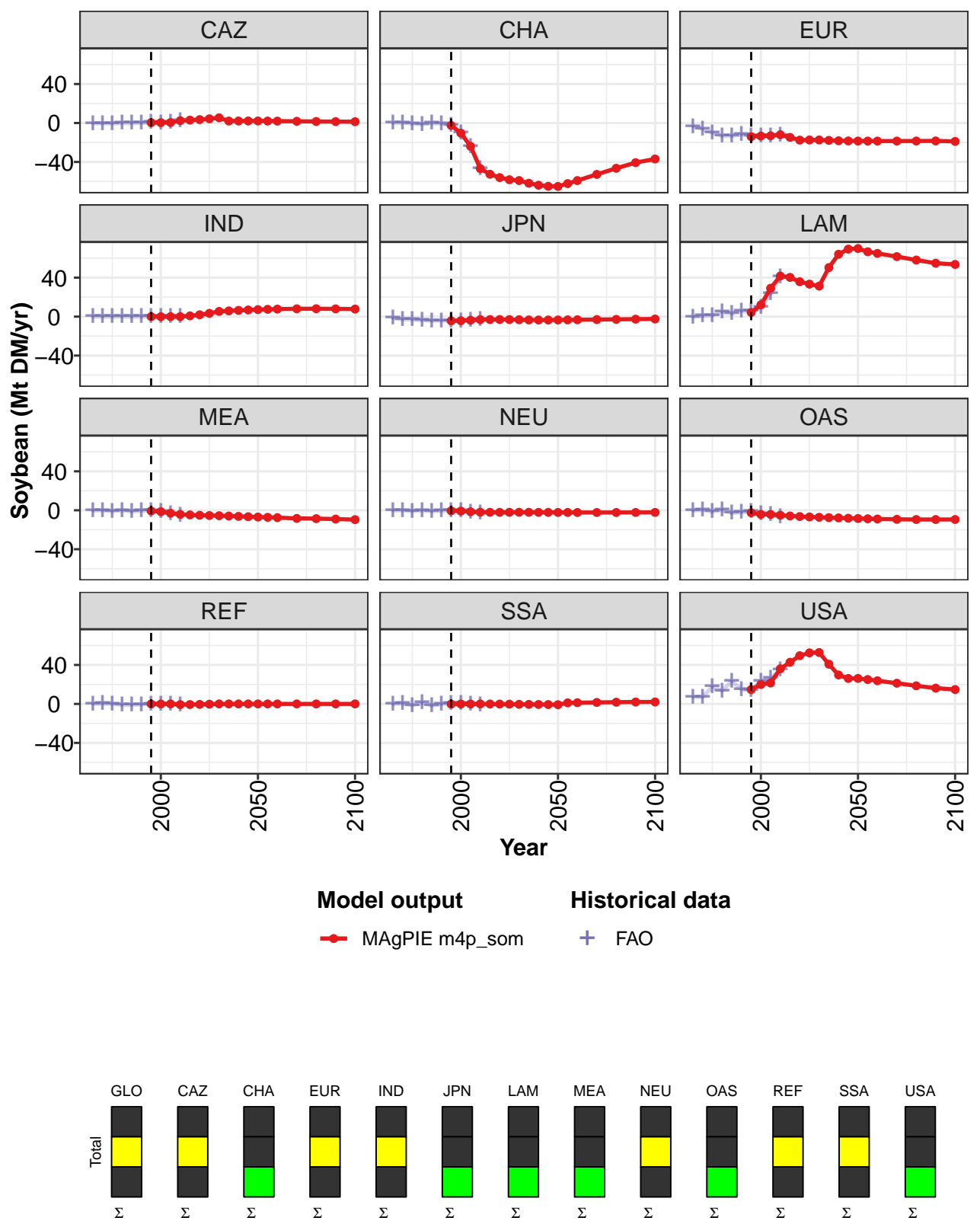


Figure 495: MAGPIE m4p\_som — Trade—Net-Trade—Crops—Oil crops—Soybean (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-5.4	-2.3	1.6	6.4	3.2	0.0	-0.0	0.0	0.0	0.0	0.0
CAZ	0.4	0.3	0.5	2.4	3.0	3.5	4.3	5.4	2.0	2.1	2.1
CHA	-2.5	-10.4	-23.9	-46.8	-52.6	-56.0	-58.2	-59.1	-61.8	-63.9	-65.0
EUR	-14.0	-13.4	-13.1	-12.0	-14.8	-17.6	-17.4	-17.4	-17.9	-18.2	-18.4
IND	0.0	-0.0	0.0	0.0	0.8	1.9	3.4	5.4	5.9	6.4	6.8
JPN	-4.3	-4.2	-3.7	-3.0	-3.0	-2.9	-3.0	-3.2	-3.4	-3.4	-3.4
LAM	4.3	12.1	29.2	41.7	40.3	35.9	33.4	31.4	50.4	64.1	69.3
MEA	-0.7	-1.4	-3.0	-4.2	-4.7	-5.1	-5.4	-5.6	-5.9	-6.3	-6.6
NEU	-0.6	-0.9	-1.5	-1.9	-2.1	-2.1	-2.1	-2.0	-2.1	-2.1	-2.2
OAS	-2.5	-4.2	-4.3	-5.1	-5.8	-6.4	-6.9	-7.2	-7.5	-7.8	-8.1
REF	-0.1	-0.1	0.0	-0.7	-0.6	-0.5	-0.3	0.0	0.0	0.0	0.0
SSA	-0.2	-0.1	-0.0	0.0	-0.1	-0.1	-0.3	-0.4	-0.5	-0.6	-0.7
USA	14.7	19.9	21.5	36.1	42.8	49.5	52.4	52.8	40.8	29.7	26.1

Table 1889: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Oil crops—Soybean (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0	0.0	-0.0	0.0	0.0	0.0	0.0
CAZ	2.1	2.0	1.9	1.8	1.6	1.4	1.3
CHA	-65.1	-62.2	-59.1	-52.7	-46.5	-40.7	-36.9
EUR	-18.5	-18.5	-18.6	-18.6	-18.5	-18.4	-18.9
IND	7.2	7.5	7.7	8.0	8.1	8.0	7.8
JPN	-3.4	-3.3	-3.2	-3.0	-2.8	-2.6	-2.4
LAM	69.9	66.6	64.9	61.6	58.1	54.8	53.6
MEA	-6.9	-7.3	-7.5	-8.3	-8.6	-9.0	-9.6
NEU	-2.2	-2.2	-2.3	-2.3	-2.3	-2.2	-2.2
OAS	-8.4	-8.7	-8.9	-9.3	-9.5	-9.5	-9.4
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	-0.8	1.1	1.2	1.5	1.8	2.0	2.0
USA	26.2	25.0	23.8	21.3	18.6	16.2	14.8

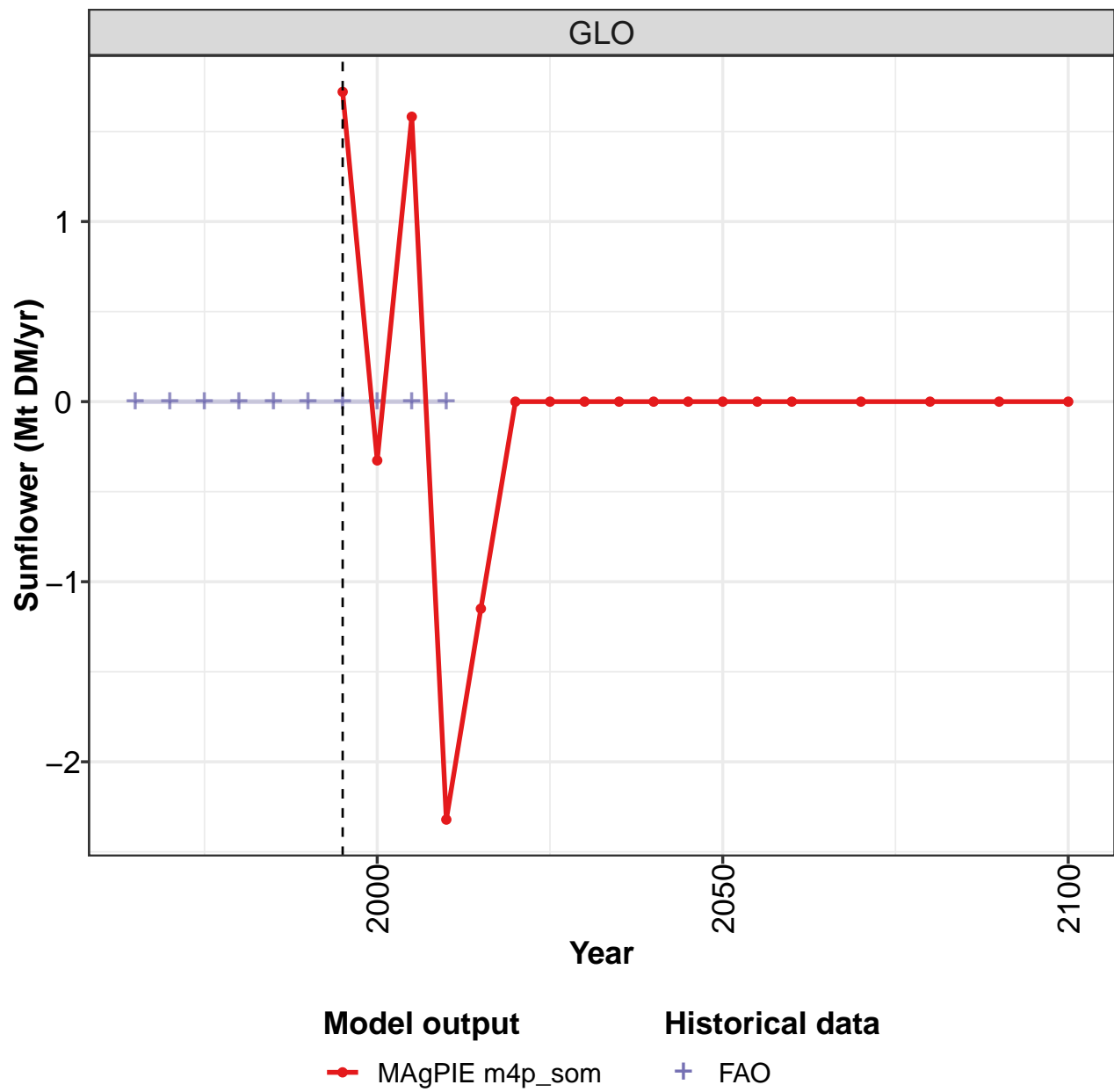
Table 1890: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Oil crops—Soybean (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAZ	-0.3	-0.3	-0.5	-0.2	-0.2	-0.0	0.5	0.4	0.6	2.1
CHA	-0.2	0.3	-0.8	-1.2	-0.2	-0.6	-2.4	-10.3	-23.9	-46.8
EUR	-3.5	-6.1	-10.0	-13.3	-13.4	-11.8	-13.1	-13.1	-13.0	-12.6
IND	-0.0	0.0	-0.0	0.0	-0.1	-0.0	0.0	-0.1	-0.0	0.1
JPN	-1.6	-2.8	-3.0	-3.7	-4.3	-4.1	-4.2	-4.2	-3.7	-3.1
LAM	-0.2	0.7	1.4	4.7	3.0	5.6	5.7	9.3	23.4	40.6
MEA	-0.3	-0.0	-1.0	-0.1	-1.2	-0.5	-0.2	-1.2	-3.1	-4.8
NEU	-0.2	-0.0	-0.8	-0.2	-1.1	-0.6	-0.2	-0.6	-1.5	-2.3
OAS	-0.3	0.4	-1.5	0.3	-2.9	-2.1	-1.5	-3.8	-4.6	-6.4
REF	-0.0	0.3	-0.0	-1.0	-1.2	-0.6	0.2	0.1	0.1	-1.0
SSA	-0.3	0.5	-1.4	1.1	-1.7	-0.3	0.9	0.4	-0.4	-1.1
USA	7.1	7.1	17.6	13.5	23.2	15.0	14.2	23.1	26.2	35.2

Table 1891: FAO — Trade—Net-Trade—Crops—Oil crops—Soybean (Mt DM/yr)

59.1.11 Oil crops—Sunflower

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



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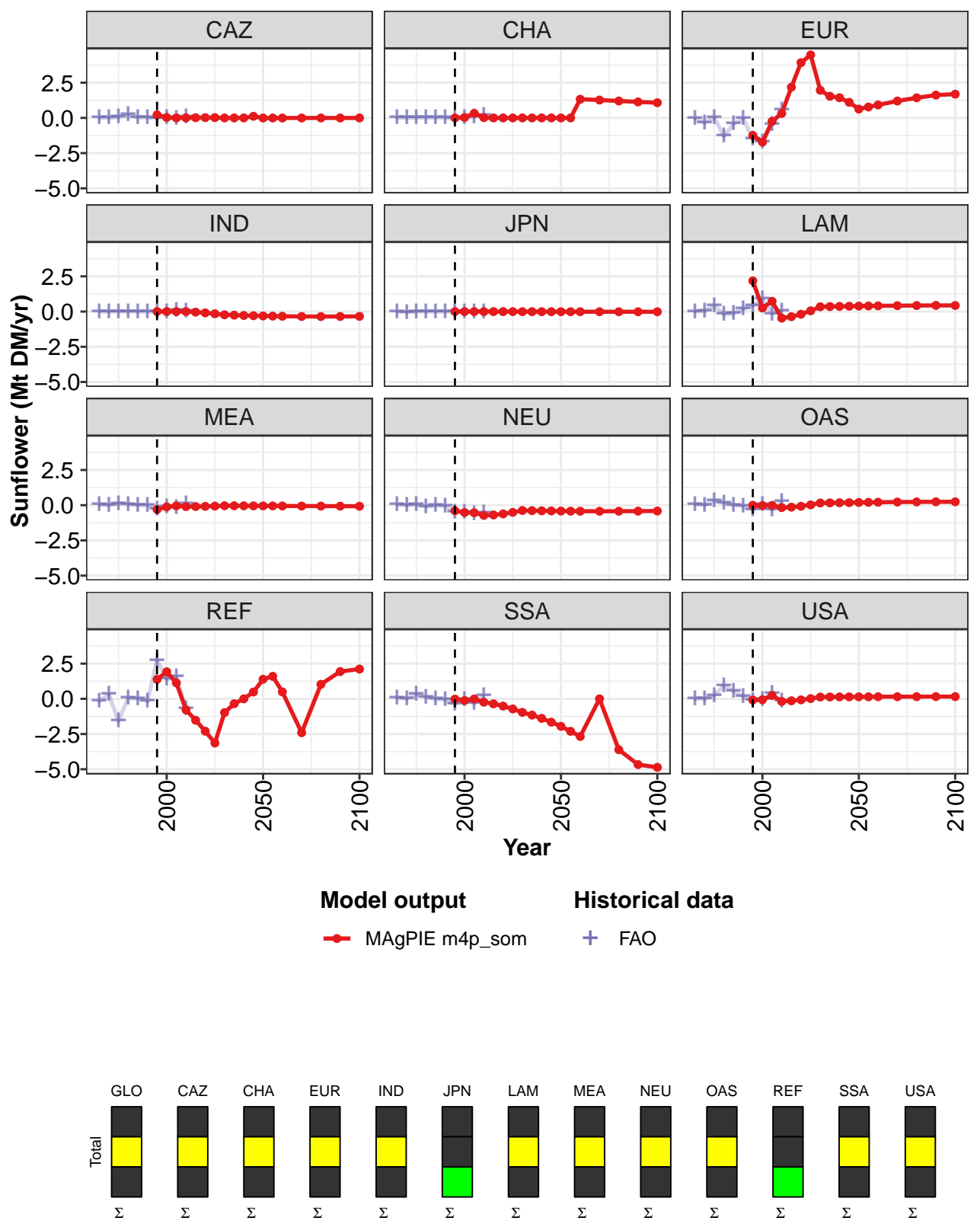


Figure 496: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Oil crops—Sunflower (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.72	-0.33	1.58	-2.32	-1.15	0.00	0.00	-0.00	-0.00	0.00	0.00
CAZ	0.22	0.03	0.00	0.00	0.02	0.02	0.02	0.00	-0.00	0.00	0.12
CHA	0.00	0.03	0.32	0.02	0.00	0.00	0.00	0.00	-0.00	0.00	-0.00
EUR	-1.24	-1.72	-0.24	0.32	2.18	3.93	4.47	1.96	1.54	1.43	1.11
IND	0.00	0.00	0.00	0.00	-0.04	-0.09	-0.16	-0.23	-0.25	-0.28	-0.29
JPN	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.01	-0.01	-0.01	-0.01	-0.01
LAM	2.18	0.25	0.73	-0.47	-0.37	-0.19	0.05	0.34	0.35	0.37	0.38
MEA	-0.31	-0.12	-0.05	-0.10	-0.09	-0.08	-0.06	-0.04	-0.04	-0.04	-0.05
NEU	-0.39	-0.52	-0.53	-0.72	-0.69	-0.62	-0.51	-0.38	-0.39	-0.40	-0.41
OAS	-0.00	-0.03	-0.01	-0.17	-0.14	-0.08	0.02	0.16	0.17	0.17	0.18
REF	1.38	1.92	1.14	-0.78	-1.52	-2.30	-3.14	-0.98	-0.35	0.00	0.49
SSA	-0.02	-0.12	-0.01	-0.24	-0.35	-0.52	-0.72	-0.96	-1.15	-1.38	-1.66
USA	-0.09	-0.06	0.24	-0.18	-0.14	-0.07	0.02	0.13	0.13	0.14	0.14

Table 1892: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00	-0.00	0.00	0.00	0.00	0.00	0.00
CAZ	-0.01	-0.01	-0.00	-0.00	-0.00	-0.00	-0.00
CHA	0.00	0.00	1.33	1.27	1.20	1.14	1.08
EUR	0.63	0.78	0.92	1.20	1.43	1.62	1.69
IND	-0.31	-0.32	-0.34	-0.35	-0.35	-0.35	-0.34
JPN	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
LAM	0.39	0.40	0.41	0.42	0.43	0.43	0.43
MEA	-0.05	-0.05	-0.05	-0.06	-0.06	-0.07	-0.07
NEU	-0.42	-0.42	-0.43	-0.43	-0.43	-0.42	-0.41
OAS	0.19	0.20	0.21	0.22	0.23	0.24	0.24
REF	1.39	1.60	0.49	-2.40	1.03	1.94	2.11
SSA	-1.95	-2.31	-2.67	0.00	-3.61	-4.67	-4.86
USA	0.14	0.15	0.15	0.15	0.16	0.16	0.16

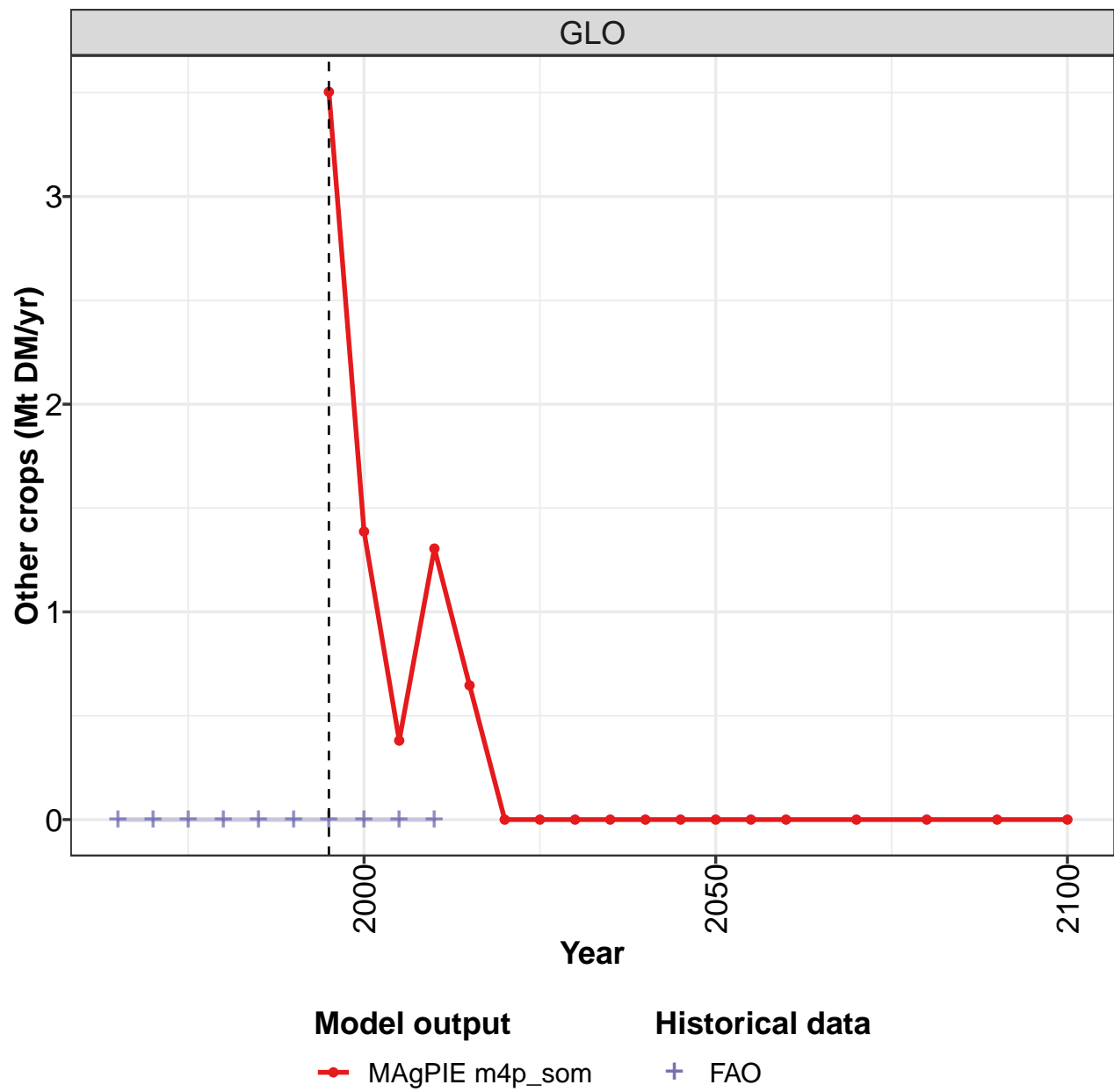
Table 1893: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Oil crops—Sunflower (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	0.01	0.01	0.06	0.21	0.04	0.04	-0.01	0.05	-0.00	0.05
CHA	0.01	0.00	0.03	0.02	0.01	0.01	-0.02	0.03	0.08	0.16
EUR	-0.05	-0.34	0.01	-1.30	-0.43	-0.04	-1.48	-1.71	-0.47	0.56
IND	0.00	0.00	0.01	0.00	0.00	0.00	-0.01	0.00	0.09	0.01
JPN	-0.00	-0.05	0.00	0.00	-0.00	-0.00	-0.01	-0.00	-0.01	0.01
LAM	-0.00	0.03	0.42	-0.20	-0.15	0.18	0.40	0.89	-0.16	0.05
MEA	0.03	0.01	0.13	0.08	0.00	-0.01	-0.30	-0.09	-0.18	0.10
NEU	0.04	-0.01	0.05	-0.10	-0.02	-0.08	-0.48	-0.48	-0.62	-0.57
OAS	0.07	0.01	0.31	0.16	-0.00	-0.05	-0.34	0.04	-0.32	0.28
REF	-0.17	0.31	-1.56	0.05	0.02	-0.18	2.72	1.40	1.56	-0.72
SSA	0.08	0.02	0.31	0.14	-0.02	-0.05	-0.37	-0.05	-0.33	0.24
USA	-0.00	0.00	0.24	0.93	0.55	0.18	-0.09	-0.06	0.37	-0.17

Table 1894: FAO — Trade—Net-Trade—Crops—Oil crops—Sunflower (Mt DM/yr)

59.1.12 Other crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

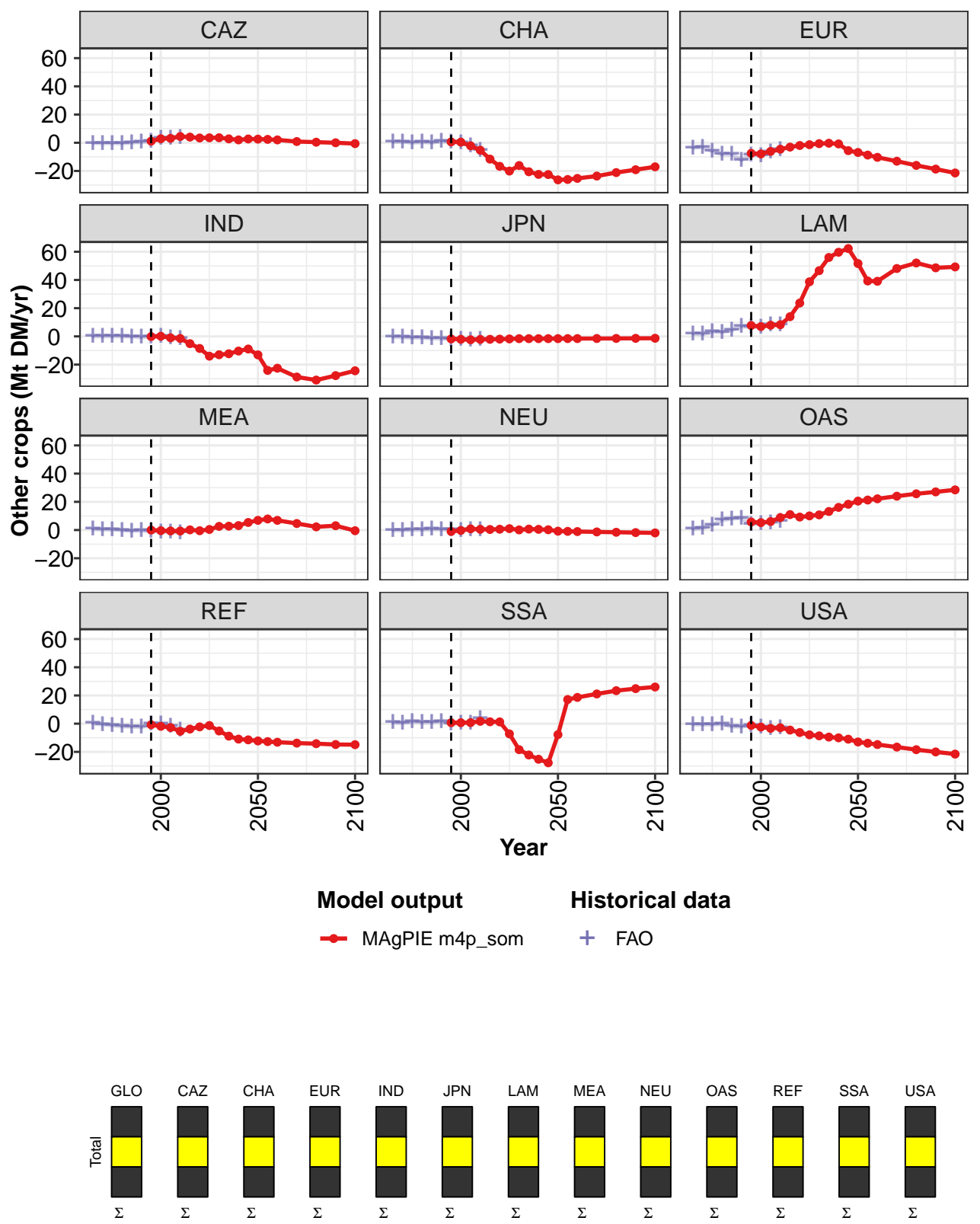


Figure 497: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Other crops (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	3.5	1.4	0.4	1.3	0.6	0.0	0.0	-0.0	-0.0	0.0	-0.0
CAZ	1.2	2.8	3.1	4.4	4.0	3.4	3.5	3.6	2.8	2.0	2.7
CHA	0.6	0.5	-2.1	-5.3	-11.6	-16.7	-20.1	-16.1	-20.6	-22.4	-22.5
EUR	-7.5	-7.9	-6.1	-4.6	-3.1	-1.9	-1.4	-0.6	-0.3	-0.8	-5.6
IND	-0.1	0.1	-1.0	-1.5	-5.1	-8.5	-14.0	-13.0	-12.3	-10.4	-8.9
JPN	-1.8	-2.1	-2.4	-2.1	-2.0	-1.9	-1.8	-1.6	-1.6	-1.6	-1.6
LAM	7.7	7.0	7.9	8.3	14.0	23.6	38.7	46.6	56.0	59.7	62.3
MEA	-0.0	-0.4	-0.6	-0.7	0.1	-0.5	0.4	2.6	2.7	3.2	5.4
NEU	-1.0	-0.3	0.8	0.5	0.4	0.6	1.0	0.1	0.7	0.5	0.2
OAS	5.7	5.3	6.0	8.8	10.9	9.2	10.0	10.7	13.2	16.1	18.3
REF	-0.8	-1.9	-2.7	-5.4	-3.8	-2.3	-1.3	-5.2	-8.8	-10.9	-11.5
SSA	0.7	0.7	0.8	1.7	1.4	1.3	-7.2	-18.4	-22.2	-25.2	-27.7
USA	-1.2	-2.4	-3.3	-2.9	-4.5	-6.3	-7.9	-8.6	-9.5	-10.0	-11.0

Table 1895: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Other crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0
CAZ	2.6	2.4	2.0	0.9	0.4	-0.0	-0.6
CHA	-26.3	-26.0	-25.3	-23.6	-21.1	-19.1	-17.1
EUR	-6.9	-8.7	-10.3	-13.1	-16.1	-18.7	-21.4
IND	-13.1	-24.1	-22.6	-28.8	-31.0	-27.8	-24.4
JPN	-1.6	-1.6	-1.5	-1.5	-1.4	-1.4	-1.3
LAM	51.7	39.3	39.1	48.1	52.1	48.6	49.3
MEA	6.9	7.8	6.9	4.6	2.3	3.1	-0.5
NEU	-0.8	-0.9	-1.1	-1.3	-1.6	-1.8	-2.0
OAS	20.5	21.3	22.1	24.0	25.7	27.0	28.5
REF	-12.2	-12.7	-13.2	-13.8	-14.2	-14.8	-14.9
SSA	-7.8	17.1	18.6	21.1	23.4	24.8	26.0
USA	-13.0	-13.9	-14.8	-16.6	-18.4	-20.0	-21.6

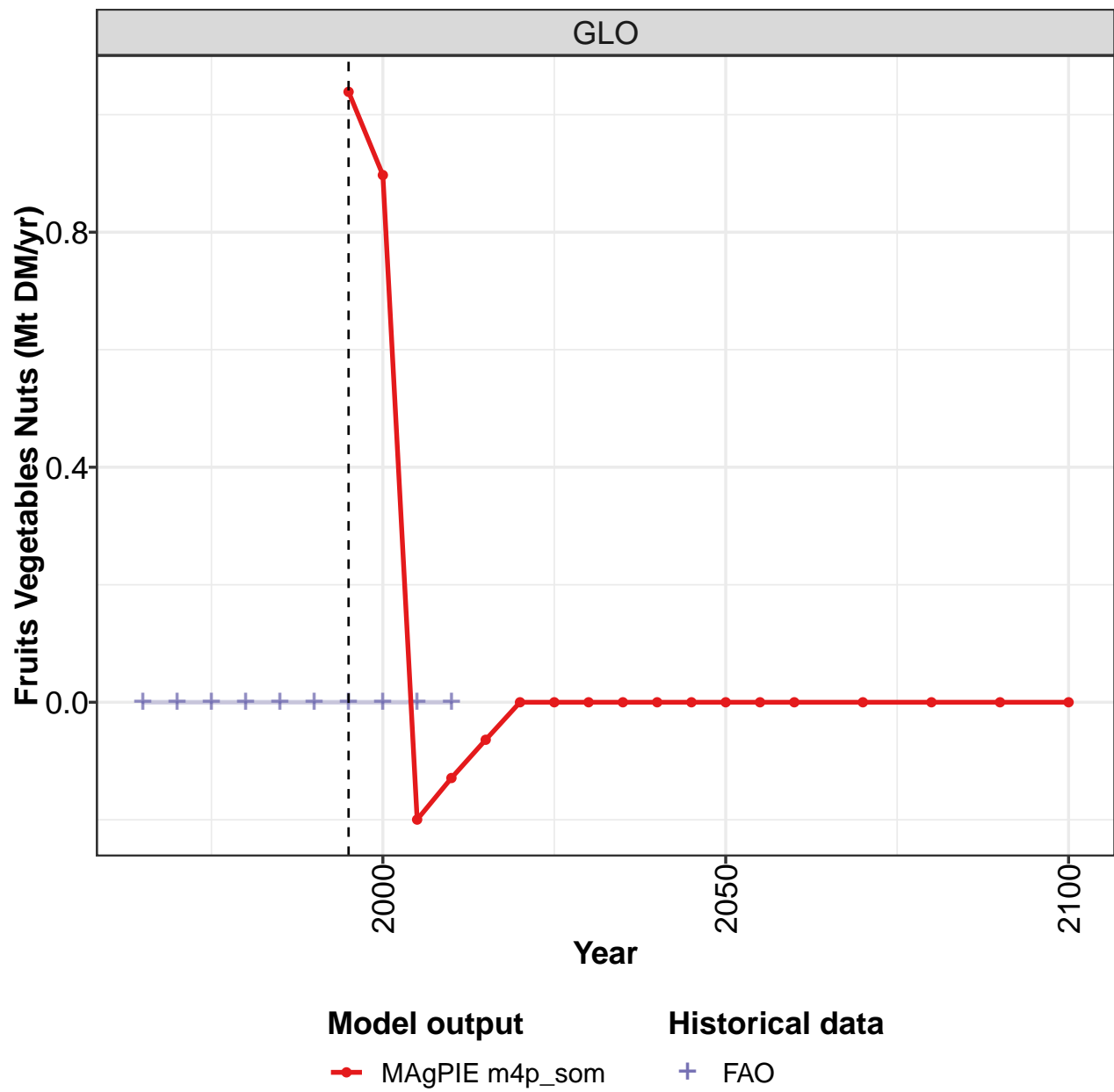
Table 1896: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Other crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	-0.23	-0.24	-0.31	-0.38	0.15	0.54	1.28	3.02	3.20	3.91
CHA	0.50	0.72	0.05	0.48	0.12	1.12	0.32	0.11	-1.87	-5.13
EUR	-3.50	-3.06	-6.01	-8.25	-8.22	-12.35	-8.48	-9.26	-6.43	-4.81
IND	0.06	0.09	0.10	0.08	-0.11	-0.61	-0.18	0.12	-0.88	-1.22
JPN	-0.32	-0.57	-0.93	-0.88	-1.42	-1.52	-1.78	-2.08	-2.36	-2.12
LAM	1.87	1.61	3.26	2.99	4.42	7.11	6.59	6.83	8.11	8.29
MEA	0.67	0.48	0.40	-0.08	-0.54	-0.41	-0.84	-1.13	-1.32	-1.94
NEU	-0.15	-0.10	0.11	0.23	0.58	0.53	0.18	-0.08	0.43	0.25
OAS	0.74	1.48	3.64	7.13	8.09	8.60	4.13	4.67	5.34	6.18
REF	0.17	-0.43	-1.19	-1.90	-2.08	-2.50	-0.15	-0.37	-1.66	-4.26
SSA	0.69	0.59	1.47	0.87	1.03	1.59	0.03	0.33	0.62	3.74
USA	-0.49	-0.56	-0.59	-0.29	-2.01	-2.10	-1.09	-2.16	-3.18	-2.88

Table 1897: FAO — Trade—Net-Trade—Crops—Other crops (Mt DM/yr)

59.1.13 Other crops—Fruits Vegetables Nuts

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

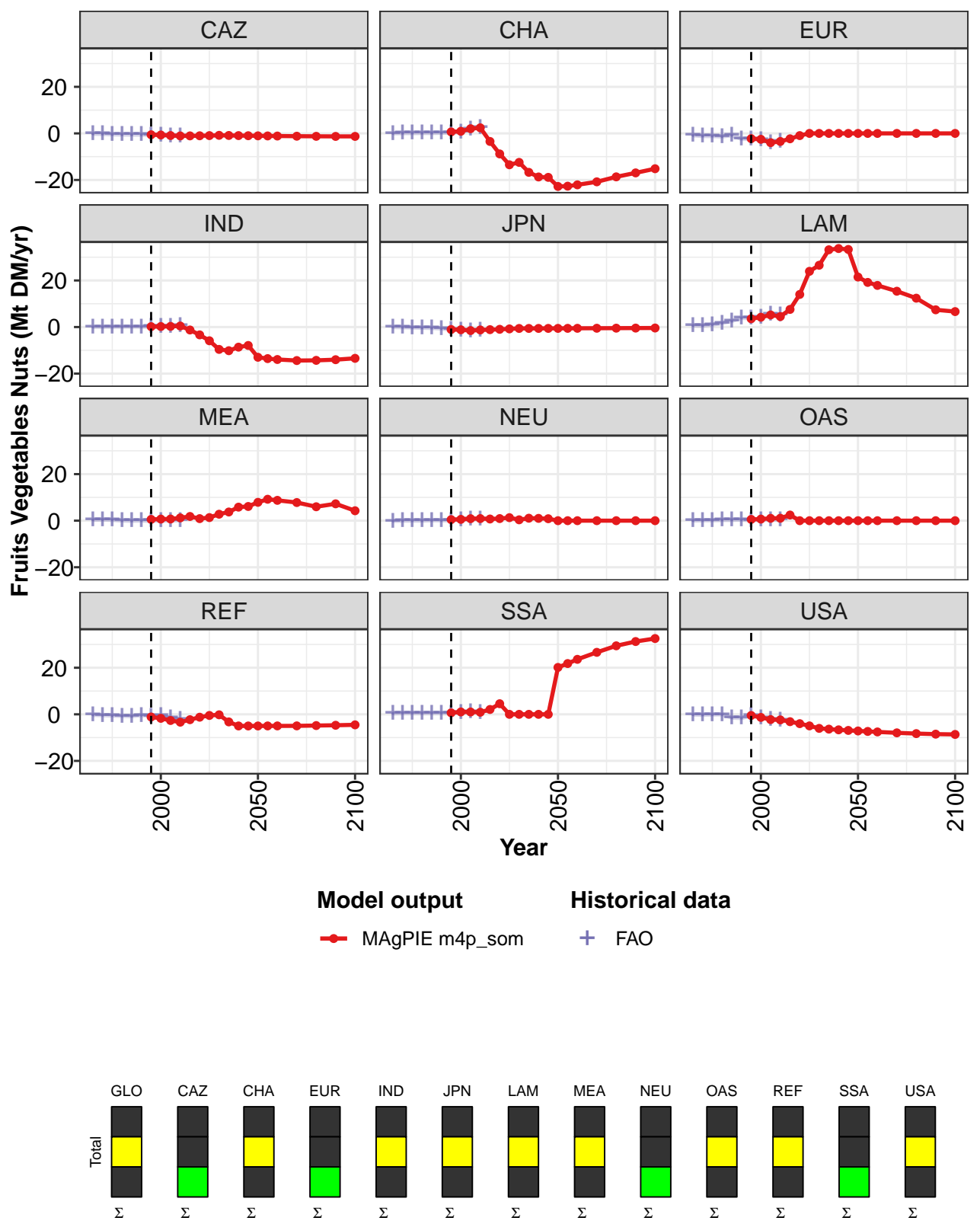


Figure 498: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.0	0.9	-0.2	-0.1	-0.1	0.0	0.0	-0.0	0.0	0.0	0.0
CAZ	-0.6	-0.7	-0.9	-1.1	-1.1	-1.0	-0.9	-0.8	-0.9	-0.9	-1.0
CHA	0.6	0.9	2.0	2.4	-3.5	-8.8	-13.5	-12.4	-16.7	-18.7	-18.9
EUR	-2.2	-2.5	-4.0	-3.5	-2.3	-0.9	0.0	0.0	0.0	0.0	0.0
IND	0.2	0.2	0.3	0.5	-1.3	-3.4	-5.9	-9.6	-10.2	-8.6	-7.9
JPN	-1.1	-1.2	-1.5	-1.3	-1.1	-1.0	-0.8	-0.6	-0.6	-0.6	-0.6
LAM	3.6	4.2	5.2	4.5	7.6	14.0	23.9	26.5	33.2	33.7	33.3
MEA	0.5	0.7	0.7	1.2	1.8	0.9	1.3	2.8	3.7	5.8	6.1
NEU	0.5	0.6	0.9	0.9	0.7	0.9	1.3	0.4	1.1	1.0	0.8
OAS	0.5	0.7	1.0	1.1	2.4	0.0	0.0	0.0	0.0	0.0	0.0
REF	-1.1	-1.7	-2.6	-3.4	-2.3	-1.2	-0.5	-0.2	-3.3	-5.0	-5.0
SSA	0.6	1.0	1.0	0.9	2.1	4.6	0.0	0.0	-0.0	0.0	0.0
USA	-0.5	-1.3	-2.3	-2.4	-3.2	-4.0	-5.0	-6.0	-6.4	-6.7	-6.9

Table 1898: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0	0.0	0.0	0.0	0.0	-0.0	0.0
CAZ	-1.0	-1.1	-1.1	-1.2	-1.3	-1.3	-1.3
CHA	-22.8	-22.7	-22.1	-20.8	-18.7	-17.0	-15.2
EUR	-0.0	0.0	0.0	0.0	0.0	0.0	-0.0
IND	-13.0	-13.6	-13.9	-14.4	-14.3	-14.0	-13.4
JPN	-0.6	-0.6	-0.5	-0.5	-0.5	-0.4	-0.4
LAM	21.5	19.2	17.9	15.4	12.4	7.4	6.6
MEA	7.9	9.2	8.7	7.8	6.0	7.2	4.3
NEU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OAS	0.0	-0.0	0.0	0.0	0.0	0.0	0.0
REF	-5.0	-5.0	-5.0	-5.0	-4.8	-4.7	-4.5
SSA	20.1	21.8	23.6	26.6	29.4	31.3	32.6
USA	-7.1	-7.3	-7.6	-8.0	-8.3	-8.5	-8.6

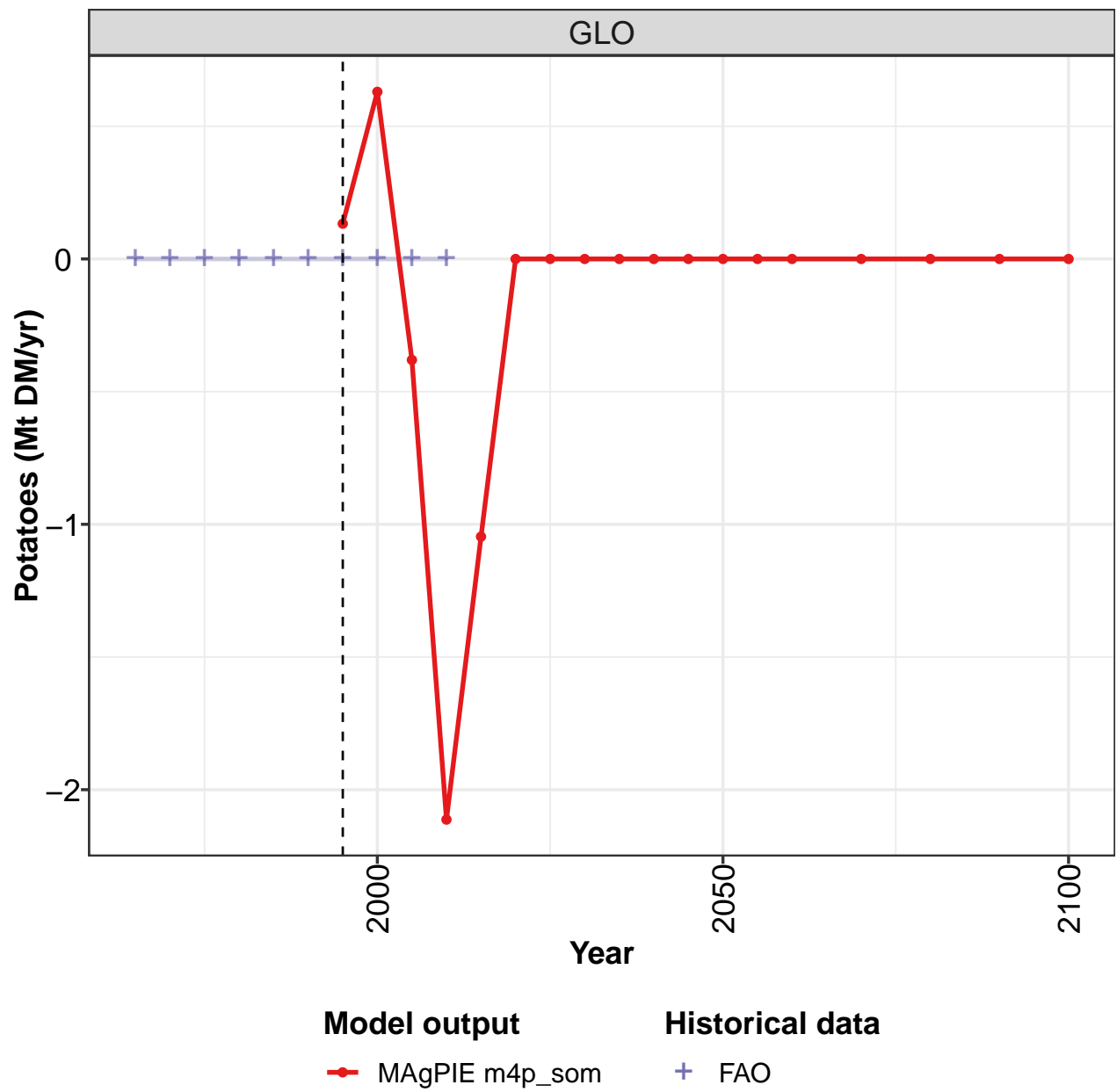
Table 1899: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	-0.20	-0.22	-0.42	-0.50	-0.54	-0.54	-0.62	-0.71	-0.90	-1.08
CHA	0.02	0.10	0.11	0.15	0.16	0.24	0.39	0.61	1.88	2.48
EUR	-0.84	-1.13	-1.16	-1.33	-0.77	-2.37	-2.37	-2.71	-3.91	-3.43
IND	0.05	0.06	0.09	0.13	0.16	0.12	0.18	0.21	0.38	0.60
JPN	-0.03	-0.09	-0.19	-0.31	-0.41	-0.63	-1.05	-1.18	-1.49	-1.23
LAM	0.69	0.61	1.07	1.71	2.58	3.91	3.79	4.27	5.48	5.18
MEA	0.35	0.48	0.35	0.05	-0.05	0.05	-0.06	0.05	0.09	0.16
NEU	-0.11	-0.01	0.02	0.00	0.19	0.15	0.18	0.35	0.61	0.71
OAS	0.04	0.18	0.18	0.28	0.34	0.43	0.21	0.33	0.53	0.27
REF	-0.25	-0.35	-0.53	-0.70	-0.81	-0.35	-0.66	-0.62	-1.51	-2.17
SSA	0.40	0.60	0.58	0.53	0.59	0.61	0.56	0.74	1.04	0.92
USA	-0.13	-0.23	-0.09	-0.02	-1.43	-1.61	-0.55	-1.33	-2.19	-2.41

Table 1900: FAO — Trade—Net-Trade—Crops—Other crops—Fruits Vegetables Nuts (Mt DM/yr)

59.1.14 Other crops—Potatoes

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

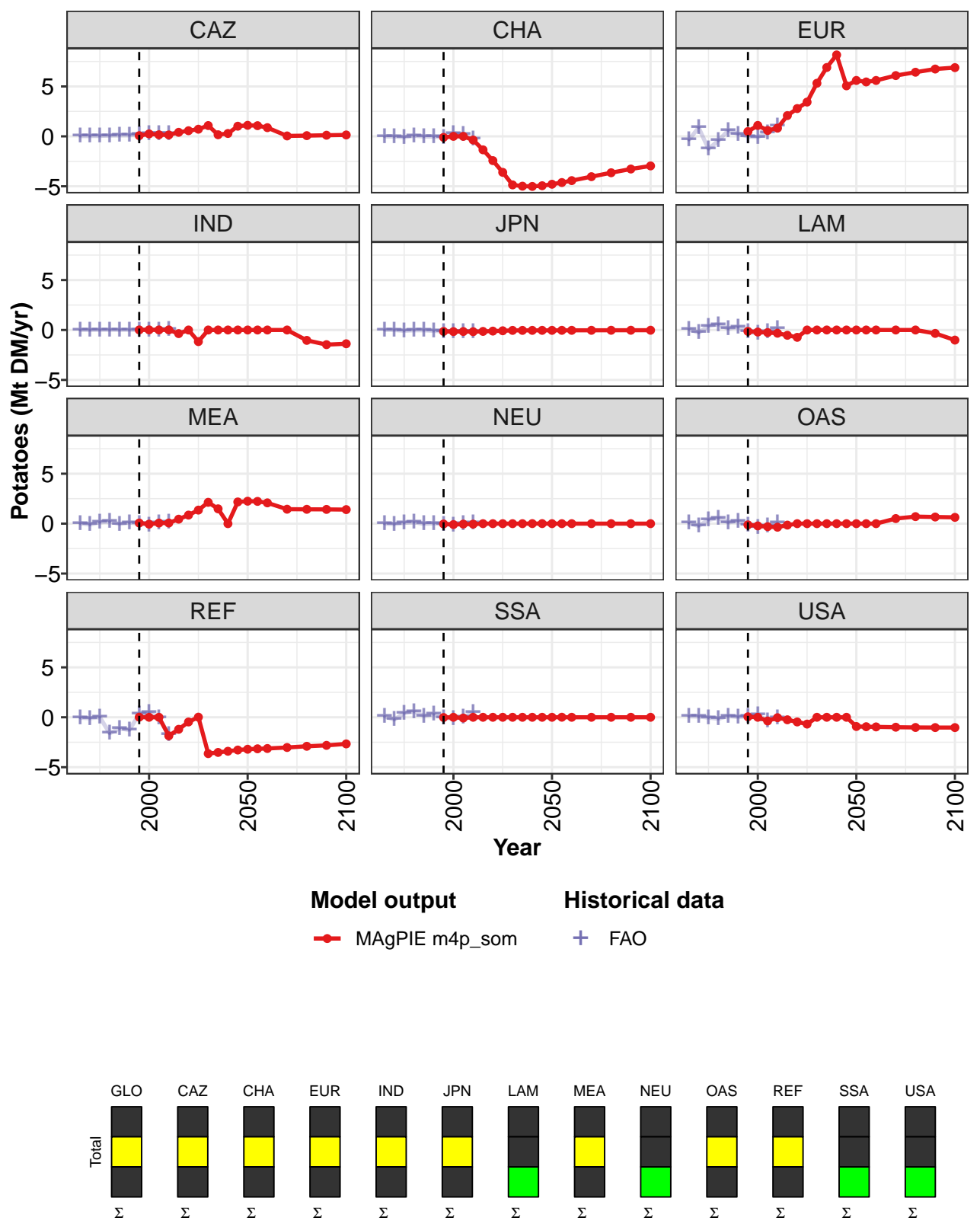


Figure 499: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Other crops—Potatoes (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.13	0.63	-0.38	-2.11	-1.05	-0.00	-0.00	0.00	-0.00	0.00	0.00
CAZ	0.07	0.25	0.16	0.14	0.40	0.57	0.72	1.08	0.16	0.29	1.02
CHA	-0.10	0.00	0.00	-0.36	-1.35	-2.43	-3.60	-4.86	-4.99	-5.01	-4.94
EUR	0.48	1.09	0.59	0.82	2.08	2.79	3.43	5.32	6.90	8.16	5.06
IND	0.01	0.01	0.01	0.01	-0.36	0.00	-1.16	0.00	0.00	0.00	0.00
JPN	-0.14	-0.16	-0.15	-0.17	-0.14	-0.11	-0.08	-0.04	-0.04	-0.04	-0.04
LAM	-0.13	-0.20	-0.26	-0.32	-0.53	-0.73	0.00	0.00	0.00	0.00	0.00
MEA	0.06	-0.05	0.06	0.07	0.45	0.86	1.36	2.13	1.48	0.00	2.17
NEU	-0.03	-0.09	-0.05	-0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	-0.12	-0.23	-0.30	-0.36	-0.15	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.01	0.00	0.00	-1.86	-1.20	-0.47	0.01	-3.64	-3.52	-3.40	-3.28
SSA	-0.02	0.00	-0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
USA	0.05	0.00	-0.37	-0.04	-0.25	-0.47	-0.68	0.00	0.00	0.00	0.00

Table 1901: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Other crops—Potatoes (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00	-0.00	0.00	0.00	0.00	0.00	0.00
CAZ	1.11	1.07	0.87	0.04	0.07	0.11	0.14
CHA	-4.80	-4.62	-4.43	-4.04	-3.64	-3.27	-2.96
EUR	5.60	5.45	5.60	6.09	6.42	6.74	6.89
IND	0.00	0.00	0.00	0.00	-1.04	-1.47	-1.38
JPN	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02
LAM	0.00	0.00	0.00	0.00	0.00	-0.34	-1.01
MEA	2.25	2.23	2.08	1.45	1.43	1.43	1.41
NEU	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OAS	0.00	0.00	0.00	0.51	0.70	0.66	0.63
REF	-3.20	-3.16	-3.13	-3.03	-2.91	-2.81	-2.66
SSA	0.00	0.01	0.00	0.00	0.00	0.00	0.00
USA	-0.92	-0.94	-0.96	-0.99	-1.02	-1.03	-1.03

Table 1902: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Other crops—Potatoes (Mt DM/yr) [PART 2/2]

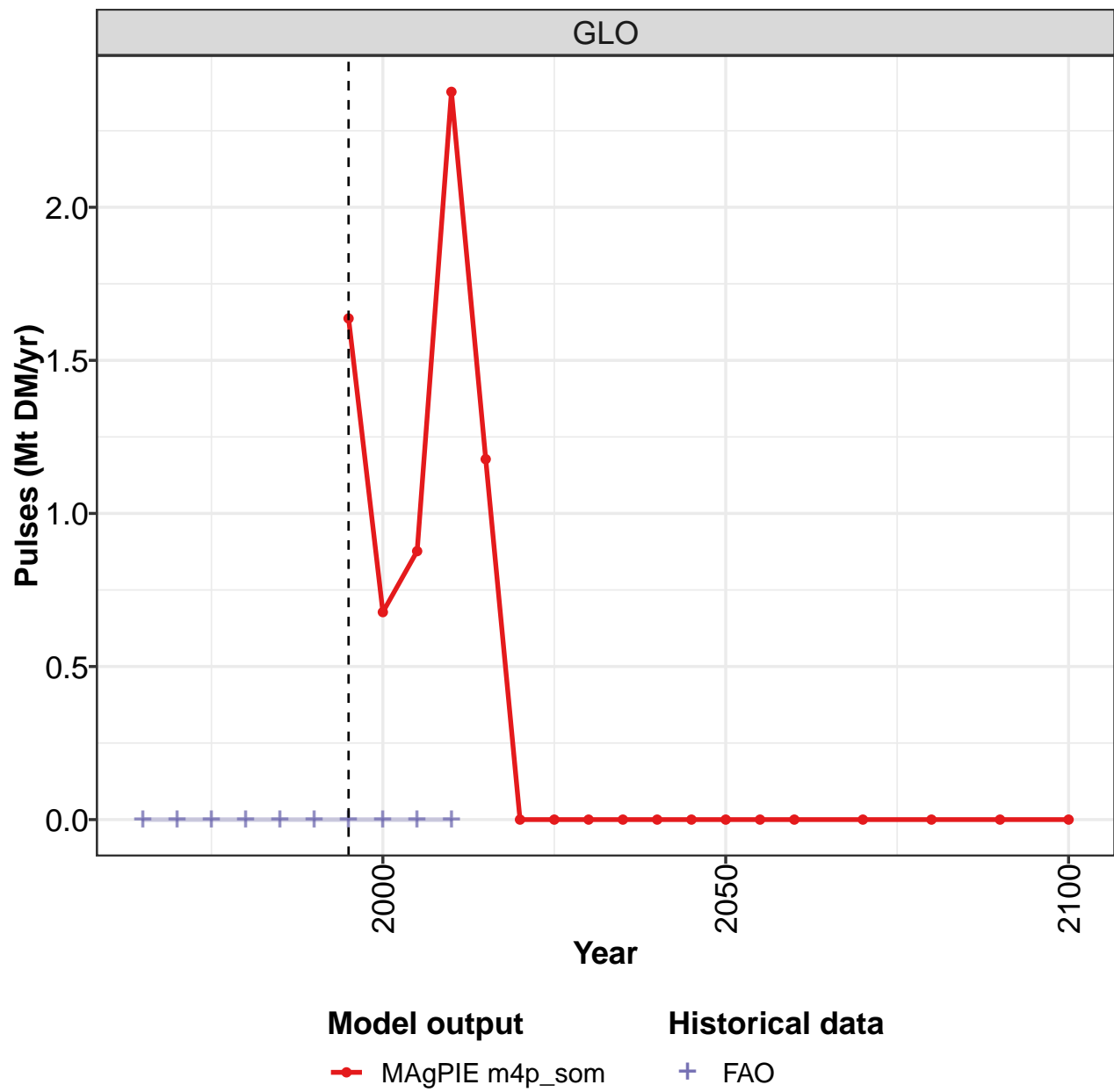
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	0.02	0.03	0.04	0.08	0.10	0.11	0.18	0.31	0.29	0.26
CHA	-0.01	-0.01	-0.09	0.06	-0.01	-0.03	-0.08	0.29	0.20	-0.28
EUR	-0.36	0.87	-1.27	-0.42	0.58	0.23	-0.00	-0.07	0.35	1.02
IND	0.00	-0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.02	0.05
JPN	0.01	-0.00	-0.08	-0.03	-0.03	-0.08	-0.14	-0.16	-0.15	-0.16
LAM	0.09	-0.27	0.41	0.56	0.14	0.30	-0.18	-0.35	-0.16	0.12
MEA	0.04	-0.09	0.13	0.20	-0.03	0.10	0.02	-0.11	0.08	0.16
NEU	-0.00	-0.04	0.07	0.14	-0.02	0.03	-0.05	-0.13	-0.02	0.09
OAS	0.06	-0.24	0.38	0.57	0.12	0.27	-0.14	-0.35	-0.22	0.07
REF	-0.04	-0.09	0.01	-1.61	-1.12	-1.27	0.33	0.46	-0.04	-1.76
SSA	0.09	-0.23	0.41	0.59	0.14	0.30	-0.05	-0.13	0.01	0.47
USA	0.11	0.08	-0.04	-0.15	0.13	0.03	0.11	0.22	-0.37	-0.05

Table 1903: FAO — Trade—Net-Trade—Crops—Other crops—Potatoes (Mt DM/yr)



59.1.15 Other crops—Pulses

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

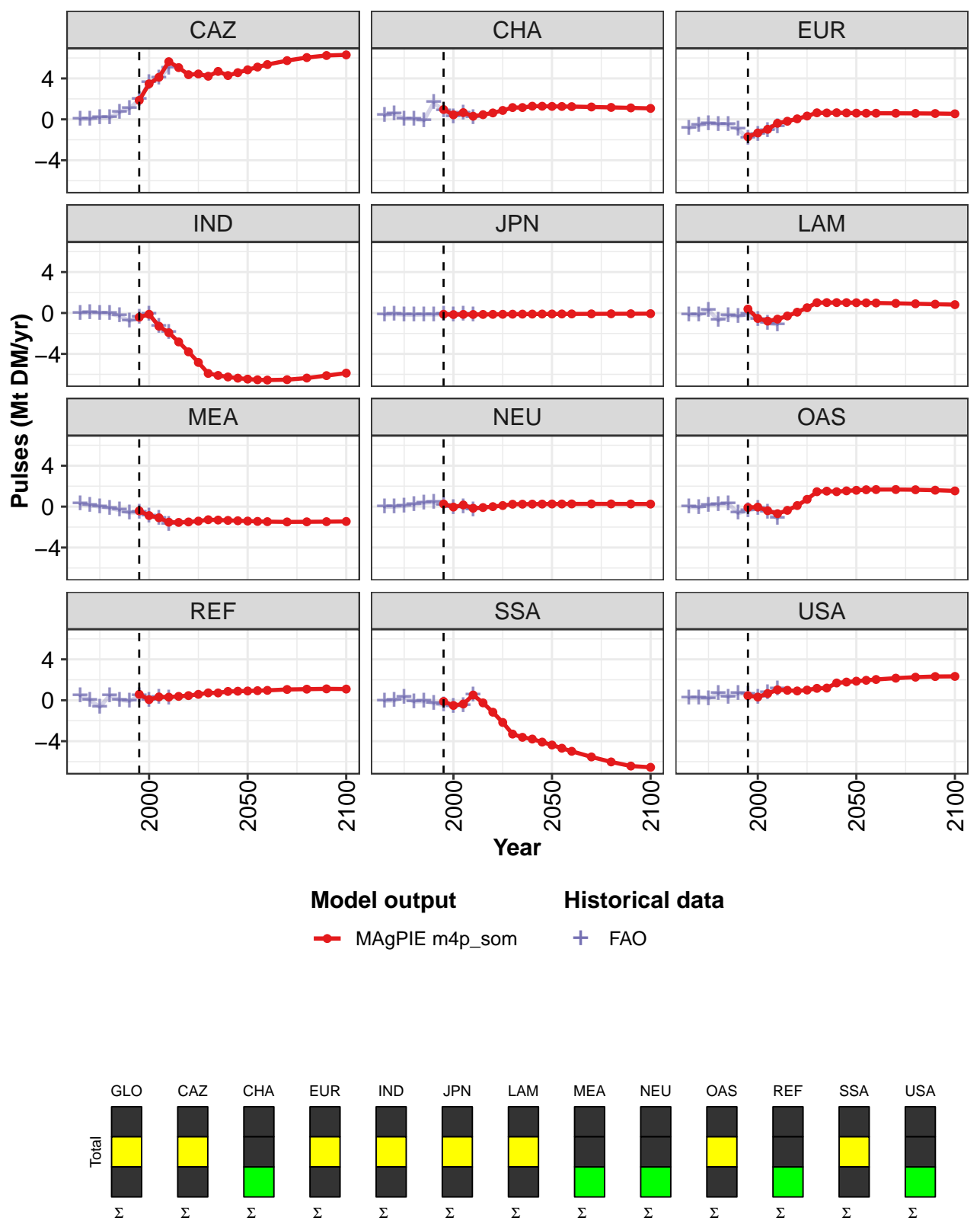


Figure 500: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Other crops—Pulses (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.64	0.68	0.88	2.38	1.18	-0.00	0.00	0.00	0.00	0.00	0.00
CAZ	1.86	3.47	4.11	5.64	5.06	4.37	4.44	4.22	4.69	4.28	4.57
CHA	0.96	0.44	0.66	0.31	0.46	0.63	0.87	1.16	1.16	1.29	1.28
EUR	-1.70	-1.33	-0.97	-0.38	-0.18	0.05	0.33	0.64	0.62	0.65	0.62
IND	-0.42	-0.13	-1.29	-1.92	-2.83	-3.80	-4.83	-5.91	-6.11	-6.25	-6.37
JPN	-0.13	-0.15	-0.14	-0.15	-0.14	-0.13	-0.13	-0.12	-0.11	-0.11	-0.10
LAM	0.39	-0.53	-0.79	-0.60	-0.29	0.08	0.51	1.01	1.02	1.02	1.01
MEA	-0.42	-0.87	-1.09	-1.52	-1.54	-1.50	-1.41	-1.28	-1.31	-1.35	-1.38
NEU	0.26	-0.04	0.16	-0.16	-0.09	0.00	0.11	0.24	0.24	0.25	0.25
OAS	-0.08	-0.05	-0.40	-0.69	-0.36	0.10	0.71	1.46	1.51	1.46	1.54
REF	0.58	0.06	0.33	0.31	0.38	0.46	0.58	0.72	0.72	0.86	0.88
SSA	-0.12	-0.51	-0.36	0.51	-0.25	-1.16	-2.17	-3.30	-3.62	-3.79	-4.09
USA	0.45	0.32	0.66	1.03	0.97	0.91	1.00	1.17	1.19	1.69	1.78

Table 1904: MAGPIE m4p\_som — Trade—Net-Trade—Crops—Other crops—Pulses (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	-0.00	-0.00	0.00	0.00	0.00	-0.00	0.00
CAZ	4.84	5.11	5.35	5.74	6.04	6.24	6.30
CHA	1.27	1.26	1.25	1.21	1.17	1.12	1.07
EUR	0.61	0.60	0.60	0.59	0.58	0.57	0.54
IND	-6.46	-6.53	-6.56	-6.52	-6.36	-6.12	-5.88
JPN	-0.10	-0.10	-0.09	-0.09	-0.08	-0.07	-0.07
LAM	1.00	0.99	0.98	0.94	0.90	0.86	0.82
MEA	-1.41	-1.44	-1.47	-1.50	-1.48	-1.47	-1.45
NEU	0.26	0.26	0.26	0.27	0.26	0.26	0.25
OAS	1.60	1.65	1.67	1.67	1.65	1.61	1.54
REF	0.91	0.94	0.97	1.06	1.09	1.12	1.10
SSA	-4.38	-4.69	-4.99	-5.54	-6.03	-6.43	-6.56
USA	1.87	1.95	2.03	2.16	2.26	2.32	2.33

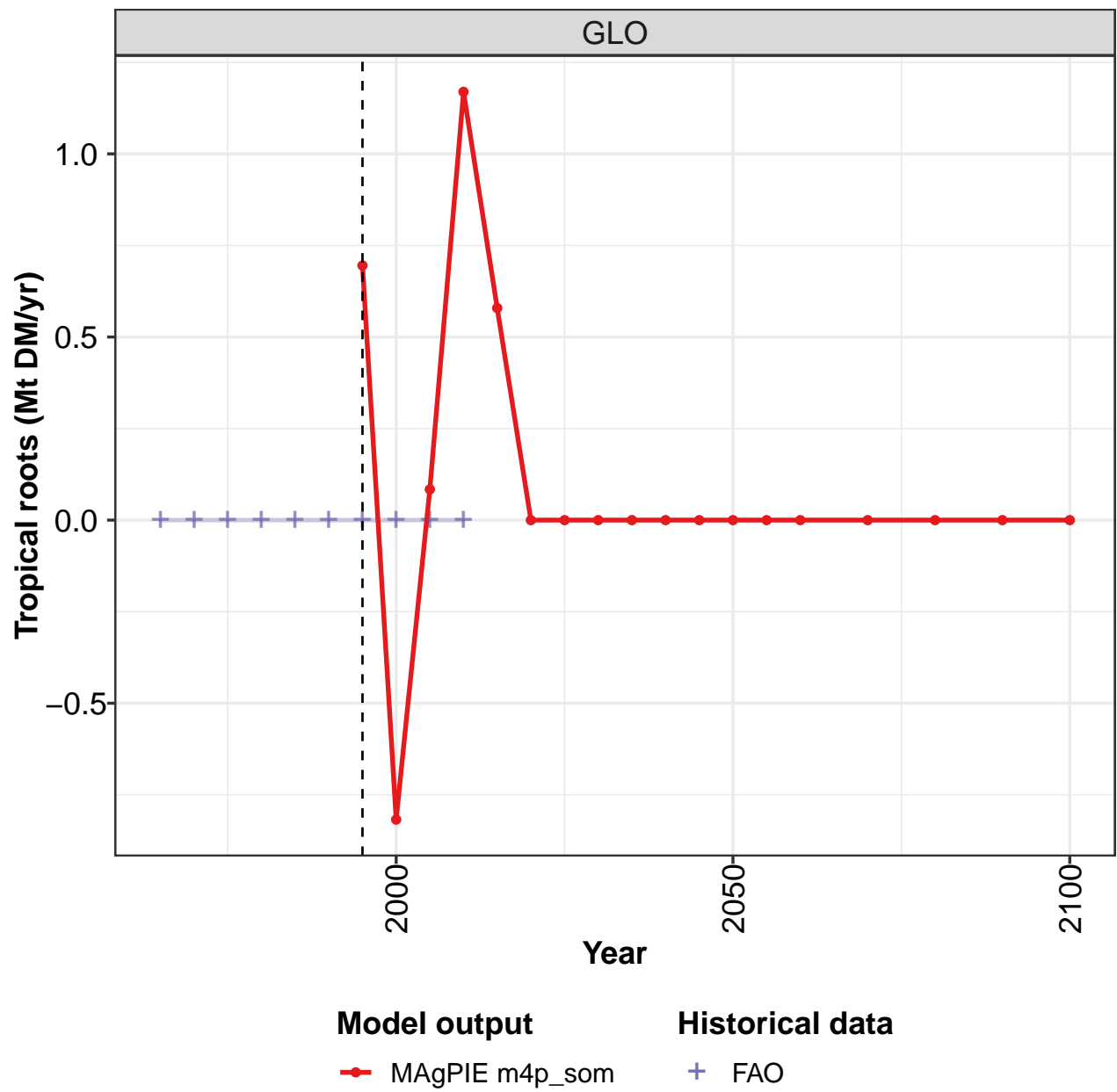
Table 1905: MAGPIE m4p\_som — Trade—Net-Trade—Crops—Other crops—Pulses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	0.01	0.04	0.16	0.17	0.70	1.06	1.93	3.60	4.03	5.02
CHA	0.37	0.58	0.04	0.03	-0.11	1.64	0.84	0.25	0.63	0.19
EUR	-0.86	-0.61	-0.39	-0.48	-0.50	-0.98	-1.86	-1.43	-1.10	-0.71
IND	-0.00	0.03	0.00	-0.07	-0.28	-0.78	-0.41	-0.10	-1.29	-1.89
JPN	-0.15	-0.12	-0.16	-0.20	-0.15	-0.16	-0.13	-0.16	-0.14	-0.16
LAM	-0.19	-0.22	0.28	-0.72	-0.26	-0.33	-0.12	-0.66	-0.99	-1.12
MEA	0.26	0.12	0.01	-0.15	-0.34	-0.58	-0.56	-0.93	-1.15	-1.72
NEU	-0.03	-0.00	0.07	0.20	0.38	0.43	0.17	-0.09	-0.01	-0.31
OAS	-0.03	-0.09	0.16	0.20	0.31	-0.63	-0.39	-0.16	-0.51	-1.15
REF	0.44	0.03	-0.66	0.47	0.03	-0.07	0.42	-0.03	0.32	0.20
SSA	-0.06	-0.02	0.31	-0.13	-0.09	-0.28	-0.48	-0.62	-0.51	0.55
USA	0.23	0.26	0.19	0.68	0.32	0.68	0.58	0.33	0.72	1.08

Table 1906: FAO — Trade—Net-Trade—Crops—Other crops—Pulses (Mt DM/yr)

59.1.16 Other crops—Tropical roots

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



Figure 501: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Other crops—Tropical roots (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.7	-0.8	0.1	1.2	0.6	0.0	-0.0	-0.0	-0.0	0.0	-0.0
CAZ	-0.2	-0.2	-0.2	-0.3	-0.4	-0.5	-0.7	-0.9	-1.2	-1.6	-1.9
CHA	-0.9	-0.9	-4.8	-7.6	-7.2	-6.1	-3.9	-0.0	0.0	0.0	-0.0
EUR	-4.0	-5.1	-1.8	-1.5	-2.7	-3.8	-5.1	-6.6	-7.9	-9.6	-11.3
IND	0.1	0.0	0.0	0.0	-0.7	-1.4	-2.1	2.5	4.0	4.5	5.3
JPN	-0.4	-0.6	-0.6	-0.6	-0.6	-0.7	-0.8	-0.8	-0.9	-0.9	-0.9
LAM	3.9	3.5	3.8	4.7	7.2	10.3	14.3	19.0	21.7	24.9	28.0
MEA	-0.2	-0.2	-0.3	-0.5	-0.6	-0.7	-0.9	-1.0	-1.2	-1.3	-1.5
NEU	-1.7	-0.7	-0.1	-0.2	-0.2	-0.3	-0.4	-0.5	-0.6	-0.8	-0.9
OAS	5.4	4.8	5.7	8.8	9.0	9.1	9.3	9.3	11.7	14.6	16.7
REF	-0.2	-0.2	-0.4	-0.5	-0.7	-1.0	-1.4	-2.1	-2.8	-3.4	-4.1
SSA	0.2	0.2	0.2	0.3	-0.5	-2.1	-5.1	-15.1	-18.6	-21.4	-23.6
USA	-1.2	-1.4	-1.3	-1.5	-2.1	-2.7	-3.3	-3.8	-4.3	-5.1	-5.9

Table 1907: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0	0.0	0.0	0.0	0.0	-0.0	0.0
CAZ	-2.3	-2.7	-3.1	-3.7	-4.5	-5.1	-5.8
CHA	0.0	0.0	0.0	-0.0	0.0	-0.0	0.0
EUR	-13.1	-14.8	-16.5	-19.8	-23.1	-26.0	-28.8
IND	6.3	-4.0	-2.1	-7.9	-9.2	-6.2	-3.7
JPN	-0.9	-0.9	-0.9	-0.9	-0.9	-0.8	-0.8
LAM	29.2	19.1	20.2	31.8	38.8	40.7	42.8
MEA	-1.8	-2.1	-2.5	-3.1	-3.7	-4.1	-4.7
NEU	-1.1	-1.2	-1.3	-1.6	-1.8	-2.1	-2.3
OAS	18.9	19.6	20.5	21.8	23.3	24.8	26.3
REF	-5.0	-5.5	-6.0	-6.9	-7.5	-8.4	-8.8
SSA	-23.5	0.0	0.0	0.0	0.0	0.0	0.0
USA	-6.8	-7.5	-8.3	-9.8	-11.4	-12.8	-14.2

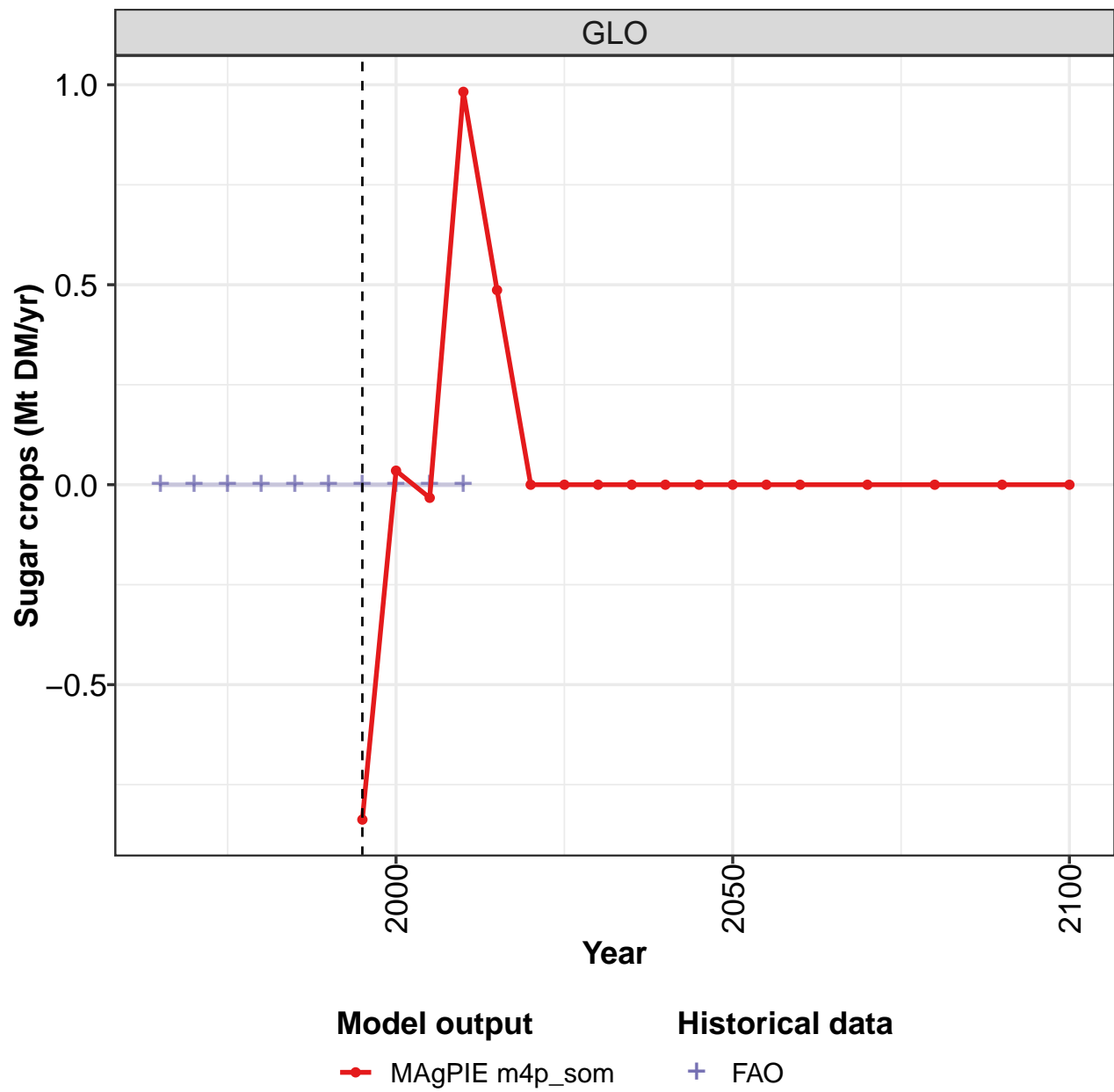
Table 1908: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Other crops—Tropical roots (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	-0.06	-0.09	-0.09	-0.13	-0.11	-0.09	-0.21	-0.18	-0.22	-0.29
CHA	0.11	0.06	-0.01	0.25	0.09	-0.72	-0.82	-1.03	-4.58	-7.52
EUR	-1.44	-2.19	-3.19	-6.02	-7.53	-9.24	-4.26	-5.06	-1.77	-1.70
IND	0.00	0.00	0.00	-0.00	0.01	0.04	0.03	0.01	0.01	0.02
JPN	-0.15	-0.36	-0.50	-0.34	-0.83	-0.64	-0.45	-0.58	-0.57	-0.58
LAM	1.28	1.47	1.50	1.43	1.96	3.23	3.08	3.57	3.78	4.11
MEA	0.02	-0.03	-0.09	-0.19	-0.11	0.02	-0.24	-0.13	-0.34	-0.55
NEU	-0.01	-0.04	-0.04	-0.11	0.04	-0.08	-0.12	-0.21	-0.15	-0.24
OAS	0.66	1.62	2.91	6.08	7.32	8.54	4.45	4.85	5.53	6.99
REF	0.01	-0.01	-0.00	-0.06	-0.18	-0.80	-0.23	-0.17	-0.42	-0.52
SSA	0.26	0.24	0.16	-0.12	0.39	0.95	-0.01	0.32	0.08	1.79
USA	-0.71	-0.68	-0.65	-0.79	-1.04	-1.21	-1.23	-1.39	-1.34	-1.50

Table 1909: FAO — Trade—Net-Trade—Crops—Other crops—Tropical roots (Mt DM/yr)

59.1.17 Sugar crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

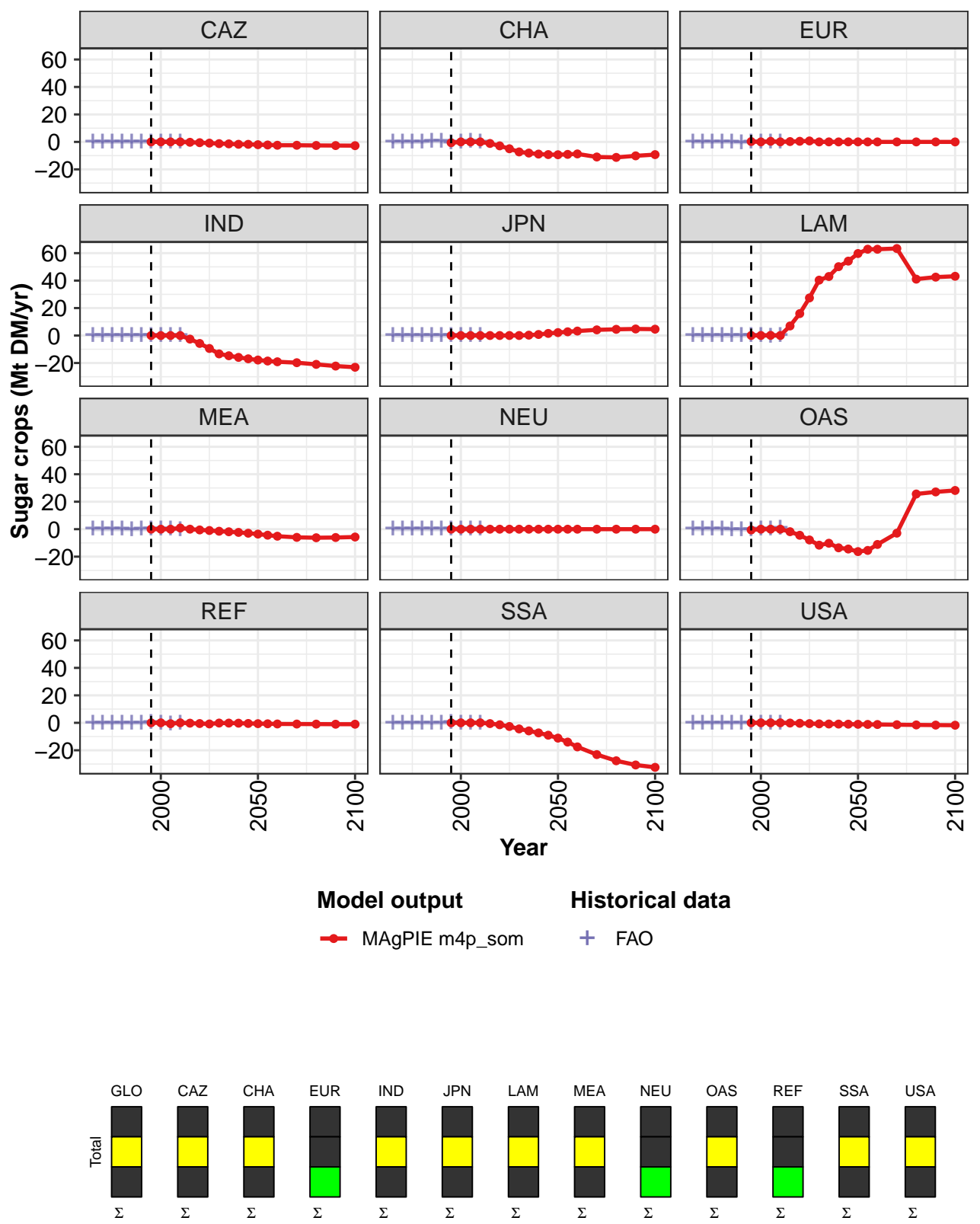


Figure 502: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Sugar crops (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-0.8	0.0	-0.0	1.0	0.5	-0.0	0.0	0.0	0.0	-0.0	-0.0
CAZ	0.0	-0.0	-0.0	0.0	-0.3	-0.6	-0.9	-1.3	-1.4	-1.7	-1.8
CHA	-0.6	0.0	0.0	0.0	-1.1	-2.9	-5.0	-7.3	-8.1	-8.9	-9.2
EUR	0.3	-0.0	0.4	0.0	0.3	0.4	0.7	-0.0	0.0	-0.0	0.0
IND	0.0	-0.0	0.0	0.0	-2.6	-5.8	-9.4	-13.4	-14.7	-15.9	-16.9
JPN	0.0	0.0	-0.0	-0.0	0.0	0.0	0.0	0.0	0.3	0.8	1.5
LAM	0.0	0.0	0.1	0.0	7.0	16.0	27.4	40.3	43.0	50.2	54.2
MEA	0.0	0.0	0.0	0.8	0.0	-0.5	-0.9	-1.5	-1.9	-2.3	-2.9
NEU	0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
OAS	-0.6	0.0	0.0	0.0	-1.8	-4.4	-7.8	-11.6	-10.2	-13.6	-14.4
REF	0.0	0.0	-0.6	0.0	-0.3	-0.5	-0.8	-0.2	-0.2	-0.3	-0.5
SSA	0.0	0.0	0.0	0.0	-0.6	-1.4	-2.7	-4.4	-5.9	-7.3	-9.0
USA	0.0	0.0	-0.0	0.0	-0.2	-0.3	-0.6	-0.8	-0.9	-0.9	-1.0

Table 1910: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Sugar crops (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0	-0.0	-0.0	-0.0	0.0	0.0	0.0
CAZ	-2.0	-2.2	-2.4	-2.5	-2.6	-2.7	-2.7
CHA	-9.3	-9.1	-8.7	-11.0	-11.3	-10.1	-9.3
EUR	0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
IND	-17.8	-18.5	-19.1	-19.8	-21.0	-22.2	-23.1
JPN	2.1	2.7	3.3	4.1	4.5	4.8	4.6
LAM	59.7	62.9	62.8	63.3	41.1	42.5	43.2
MEA	-3.6	-4.4	-5.1	-6.0	-6.2	-6.1	-5.7
NEU	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
OAS	-16.3	-15.5	-11.1	-2.9	25.6	27.1	28.2
REF	-0.6	-0.7	-0.8	-0.9	-0.9	-1.0	-1.0
SSA	-11.1	-14.0	-17.5	-23.1	-27.6	-30.7	-32.4
USA	-1.1	-1.1	-1.2	-1.4	-1.5	-1.7	-1.8

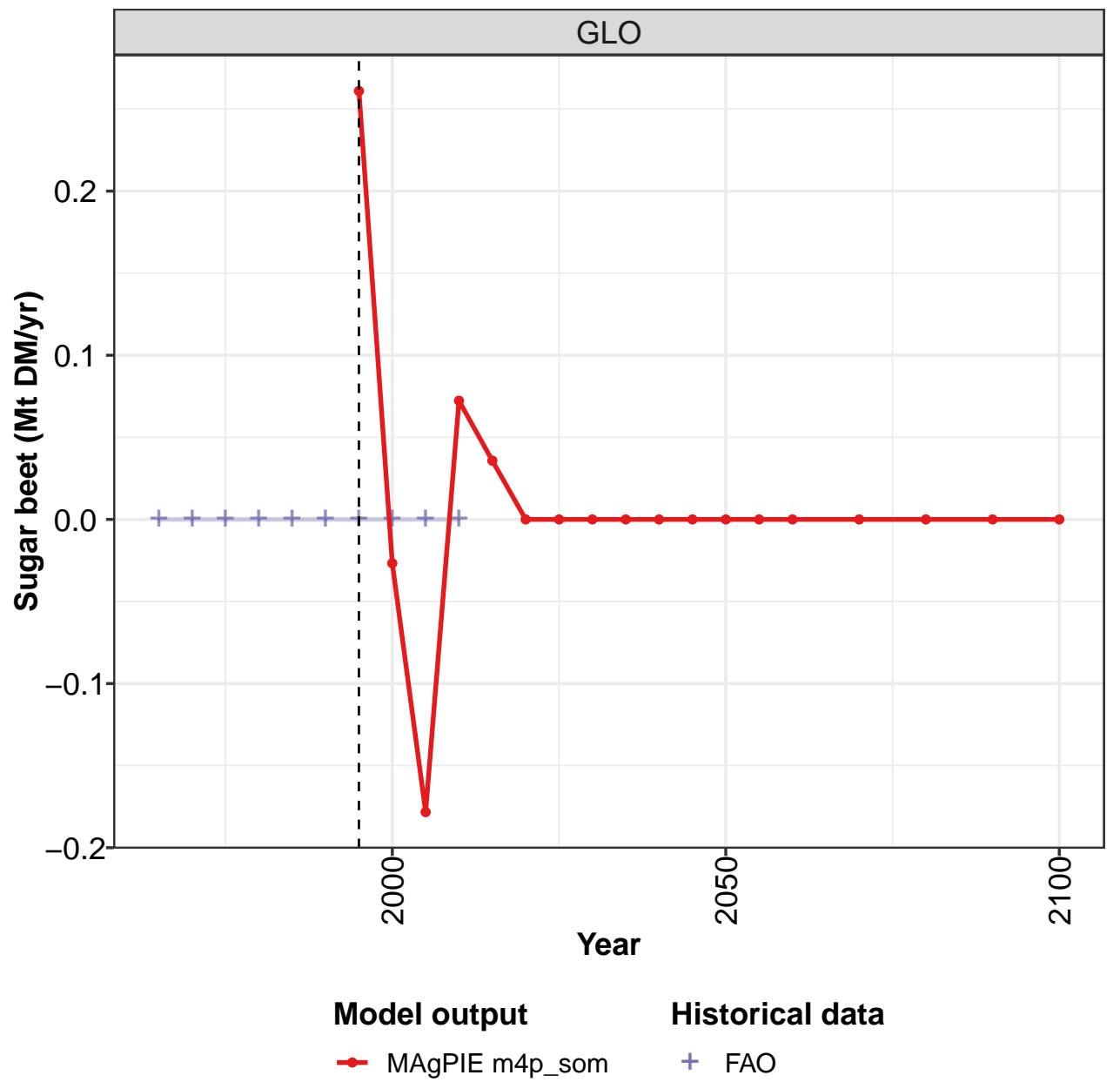
Table 1911: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Sugar crops (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAZ	0.004	0.000	-0.001	-0.002	-0.016	0.000	0.017	-0.001	0.001	-0.020
CHA	-0.269	-0.002	-0.003	-0.002	0.715	0.406	-0.526	-0.001	0.784	-0.016
EUR	0.091	0.001	0.014	0.036	-0.093	-0.304	0.235	-0.080	0.106	-0.236
IND	0.001	0.000	-0.000	-0.000	-0.003	0.000	0.003	0.000	0.000	-0.004
JPN	0.001	0.000	-0.000	-0.000	-0.003	0.000	0.003	-0.000	0.000	-0.004
LAM	0.053	0.011	0.002	-0.007	-0.165	0.026	0.170	0.052	-0.256	-0.098
MEA	0.016	-0.000	-0.004	-0.009	-0.066	0.000	0.071	-0.003	0.002	-0.086
NEU	0.026	0.016	0.012	0.023	-0.015	0.011	0.058	-0.020	0.006	0.008
OAS	0.044	-0.006	0.006	-0.000	-0.137	-0.117	-0.373	-0.004	0.009	0.617
REF	-0.007	-0.018	-0.017	-0.023	-0.056	-0.019	0.177	0.062	-0.658	0.056
SSA	0.039	-0.000	-0.008	-0.018	-0.159	0.000	0.172	-0.009	0.007	-0.202
USA	0.001	0.000	-0.000	0.002	-0.002	-0.002	-0.007	0.003	-0.001	-0.017

Table 1912: FAO — Trade—Net-Trade—Crops—Sugar crops (Mt DM/yr)

59.1.18 Sugar crops—Sugar beet

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

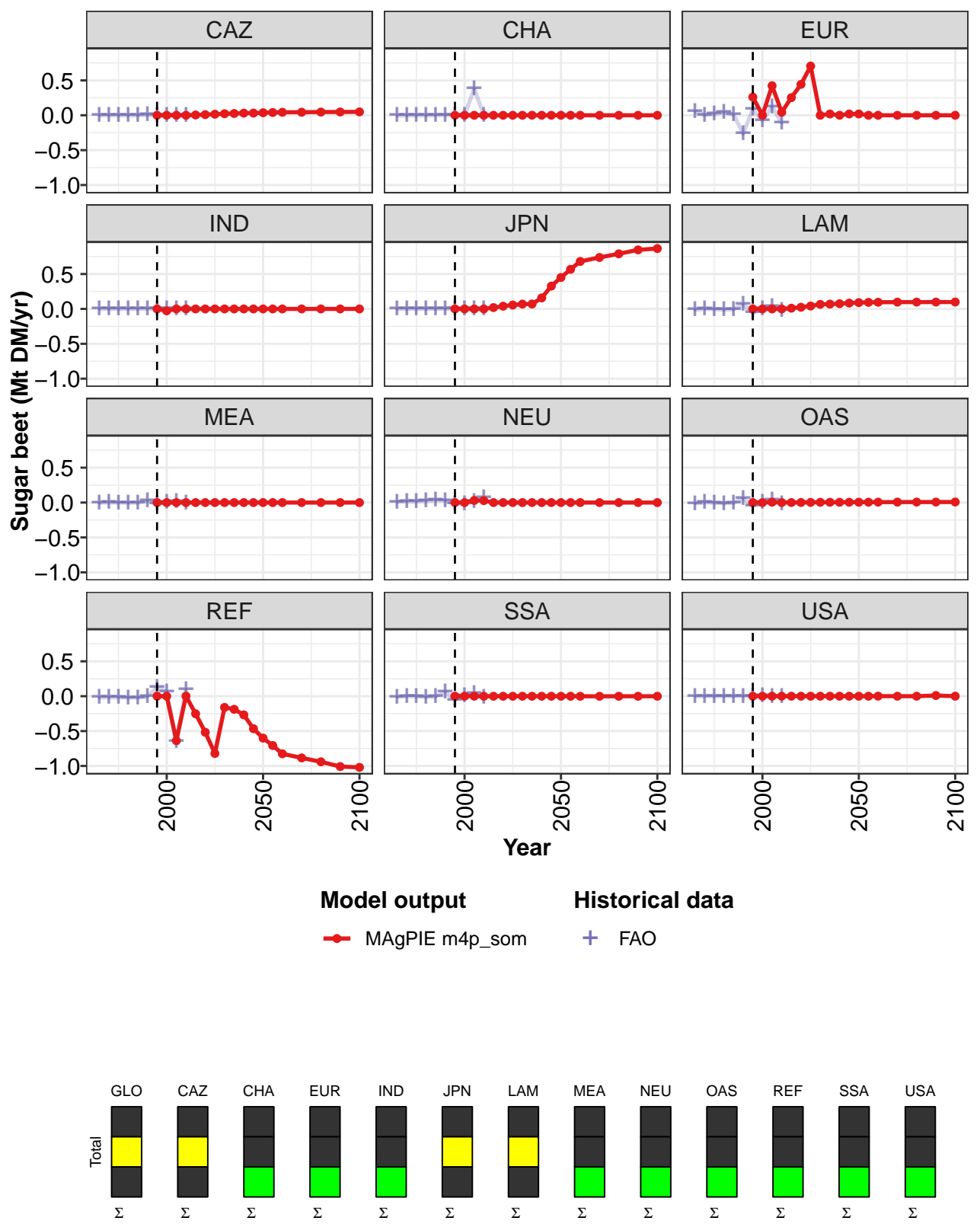


Figure 503: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Sugar crops—Sugar beet (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.261	-0.027	-0.178	0.072	0.036	0.000	0.000	0.000	0.000	0.000	-0.000
CAZ	0.000	0.000	0.000	0.000	0.005	0.009	0.015	0.023	0.026	0.031	0.031
CHA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	-0.000	-0.000
EUR	0.261	0.000	0.423	0.043	0.253	0.444	0.705	0.000	0.018	-0.000	0.019
IND	0.000	-0.027	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.000	0.000	-0.000	0.000	0.019	0.039	0.056	0.069	0.070	0.158	0.327
LAM	-0.000	0.000	0.000	0.000	0.011	0.024	0.042	0.065	0.069	0.075	0.084
MEA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.030	0.028	0.000	0.000	0.000	-0.000	-0.000	-0.000	0.000
OAS	0.000	0.000	0.005	0.000	0.001	0.001	0.002	0.004	0.004	0.004	0.005
REF	0.000	0.000	-0.637	0.001	-0.252	-0.517	-0.821	-0.161	-0.188	-0.267	-0.466
SSA	0.000	0.000	0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.001
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.000	0.000	0.000	0.000

Table 1913: MAGPIE m4p\_som — Trade—Net-Trade—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	-0.000	0.000	-0.000	0.000	0.000	0.000	-0.000
CAZ	0.036	0.040	0.043	0.044	0.046	0.048	0.049
CHA	0.000	0.000	0.000	0.000	0.000	0.000	-0.000
EUR	0.019	0.000	0.000	0.000	0.000	0.000	-0.000
IND	0.000	0.000	0.000	0.000	0.000	0.000	0.000
JPN	0.451	0.568	0.681	0.738	0.790	0.846	0.865
LAM	0.090	0.094	0.096	0.097	0.098	0.098	0.099
MEA	-0.000	0.000	0.000	0.000	0.000	0.000	0.000
NEU	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OAS	0.005	0.006	0.006	0.007	0.007	0.008	0.008
REF	-0.601	-0.707	-0.826	-0.884	-0.940	-1.008	-1.020
SSA	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
USA	0.000	0.000	0.001	0.000	0.000	0.010	0.000

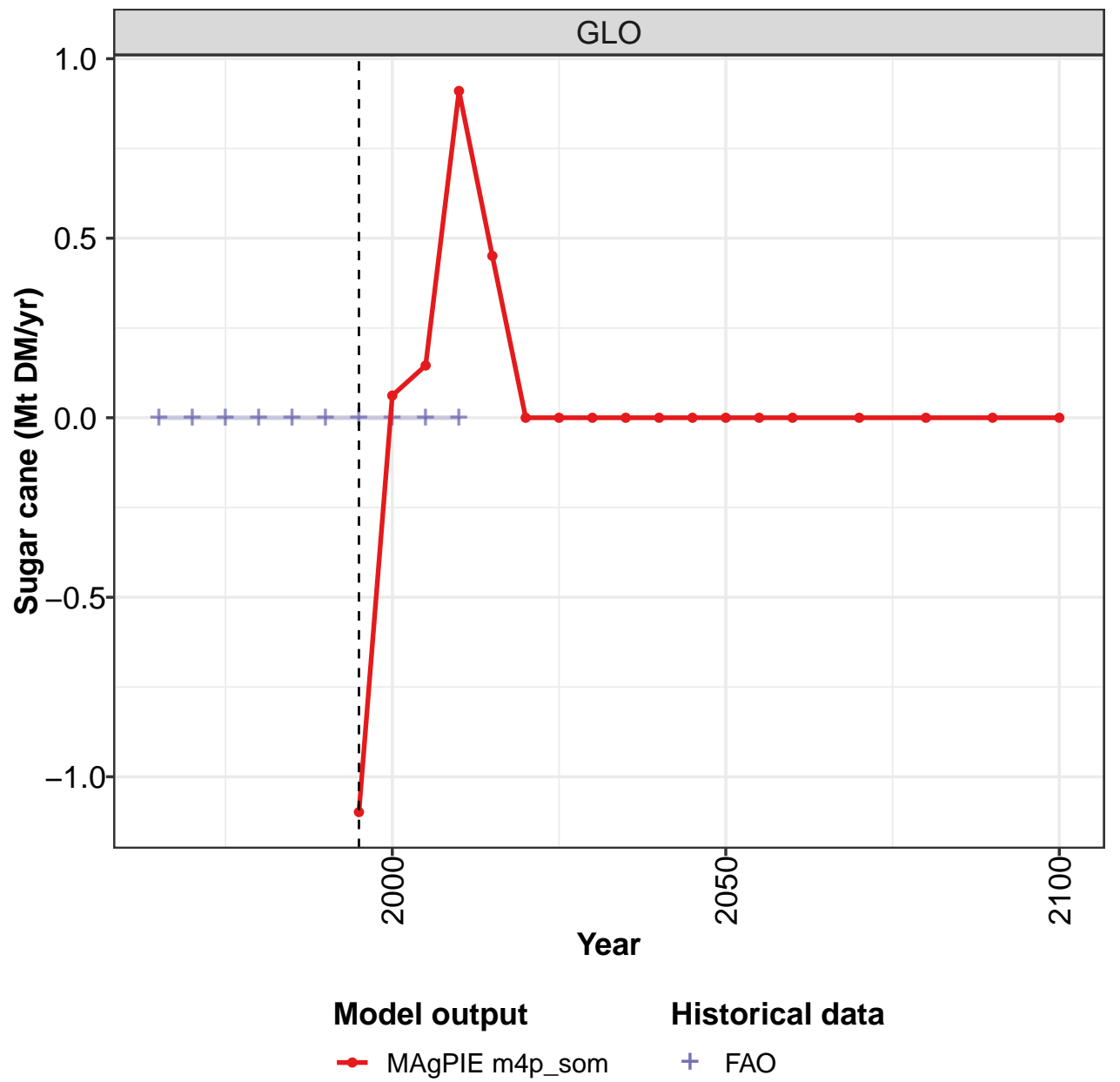
Table 1914: MAGPIE m4p\_som — Trade—Net-Trade—Crops—Sugar crops—Sugar beet (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAZ	-0.001	0.000	-0.000	-0.001	-0.001	0.006	-0.005	0.000	0.004	-0.001
CHA	-0.004	-0.003	-0.003	-0.001	-0.001	0.005	-0.005	0.001	0.382	-0.001
EUR	0.057	0.001	0.018	0.040	0.009	-0.262	0.086	-0.072	0.123	-0.110
IND	-0.000	0.000	-0.000	-0.000	-0.000	0.001	-0.001	0.000	0.001	-0.000
JPN	-0.000	0.000	-0.000	-0.000	-0.000	0.001	-0.001	0.000	0.001	-0.000
LAM	-0.013	0.001	-0.004	-0.013	-0.006	0.068	-0.057	0.006	0.039	-0.016
MEA	-0.005	0.000	-0.002	-0.005	-0.003	0.026	-0.022	0.002	0.014	-0.009
NEU	0.010	0.016	0.014	0.025	0.033	0.031	-0.013	-0.016	0.015	0.068
OAS	-0.012	0.001	-0.003	-0.012	-0.006	0.061	-0.051	0.005	0.035	-0.014
REF	-0.019	-0.018	-0.016	-0.021	-0.020	-0.004	0.124	0.065	-0.651	0.100
SSA	-0.012	0.001	-0.004	-0.013	-0.006	0.064	-0.053	0.005	0.036	-0.015
USA	-0.000	0.000	-0.000	0.002	0.001	0.001	-0.001	0.003	0.001	0.000

Table 1915: FAO — Trade—Net-Trade—Crops—Sugar crops—Sugar beet (Mt DM/yr)

59.1.19 Sugar crops—Sugar cane

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

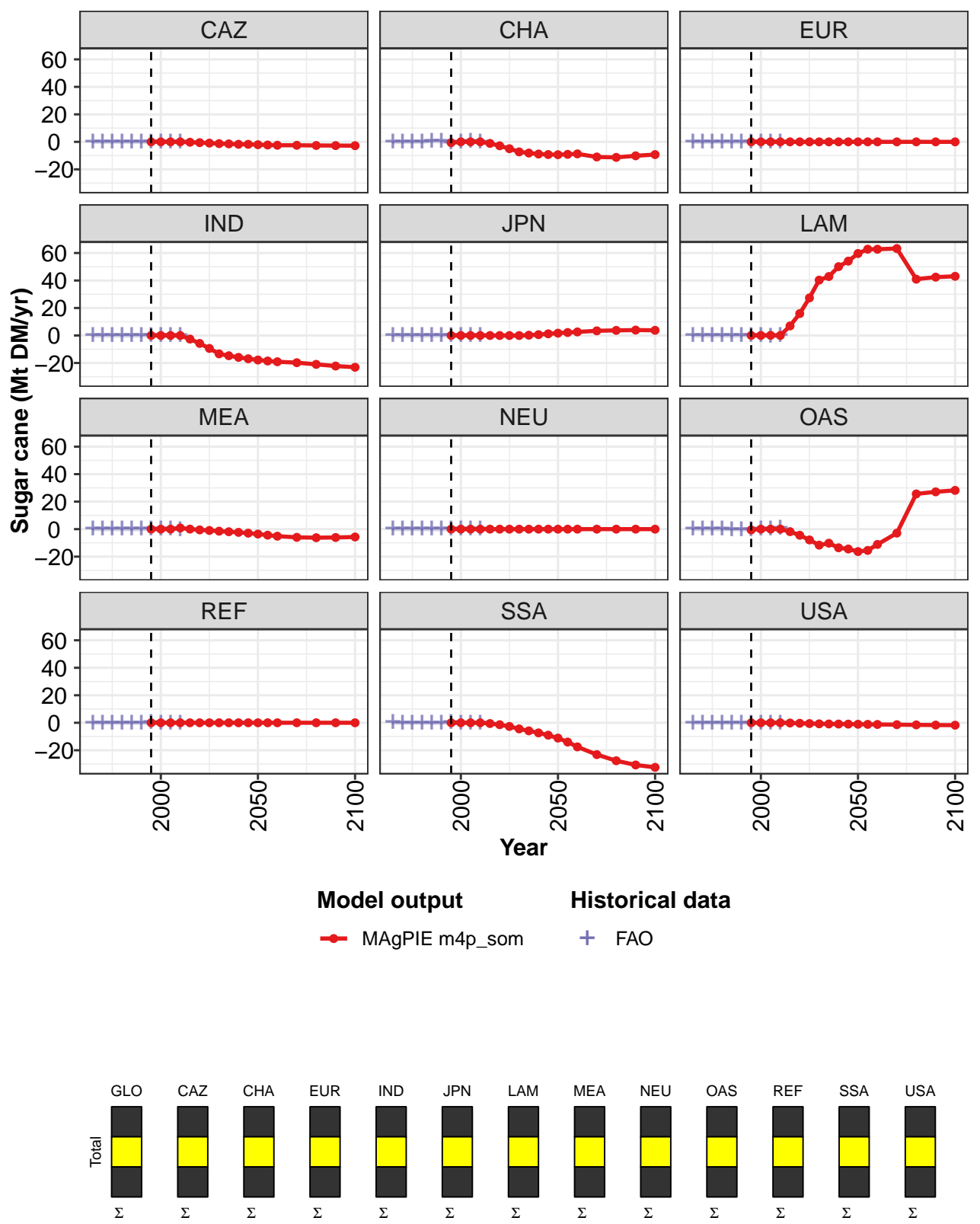


Figure 504: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Sugar crops—Sugar cane (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-1.1	0.1	0.1	0.9	0.5	-0.0	0.0	0.0	0.0	-0.0	0.0
CAZ	0.0	-0.0	-0.0	0.0	-0.3	-0.6	-0.9	-1.3	-1.5	-1.8	-1.8
CHA	-0.6	0.0	0.0	0.0	-1.1	-2.9	-5.0	-7.3	-8.1	-8.9	-9.2
EUR	0.0	-0.0	0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
IND	0.0	0.0	0.0	0.0	-2.6	-5.8	-9.4	-13.4	-14.7	-15.9	-16.9
JPN	0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0	-0.0	0.2	0.6	1.2
LAM	0.0	0.0	0.1	0.0	7.0	15.9	27.3	40.3	42.9	50.1	54.1
MEA	0.0	0.0	0.0	0.8	0.0	-0.5	-0.9	-1.5	-1.9	-2.3	-2.9
NEU	0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
OAS	-0.6	0.0	0.0	0.0	-1.8	-4.4	-7.8	-11.6	-10.2	-13.6	-14.4
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	0.0	0.0	0.0	0.0	-0.6	-1.4	-2.7	-4.4	-5.9	-7.3	-9.0
USA	0.0	0.0	-0.0	0.0	-0.2	-0.3	-0.6	-0.8	-0.9	-0.9	-1.0

Table 1916: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0	-0.0	0.0	-0.0	0.0	0.0	0.0
CAZ	-2.1	-2.3	-2.5	-2.5	-2.6	-2.7	-2.8
CHA	-9.3	-9.1	-8.7	-11.0	-11.3	-10.1	-9.3
EUR	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
IND	-17.8	-18.5	-19.1	-19.8	-21.0	-22.2	-23.1
JPN	1.7	2.2	2.6	3.4	3.7	3.9	3.8
LAM	59.6	62.8	62.7	63.2	41.0	42.4	43.1
MEA	-3.6	-4.4	-5.1	-6.0	-6.2	-6.1	-5.7
NEU	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
OAS	-16.3	-15.5	-11.1	-2.9	25.6	27.1	28.2
REF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSA	-11.1	-14.0	-17.5	-23.1	-27.6	-30.7	-32.4
USA	-1.1	-1.1	-1.2	-1.4	-1.5	-1.7	-1.8

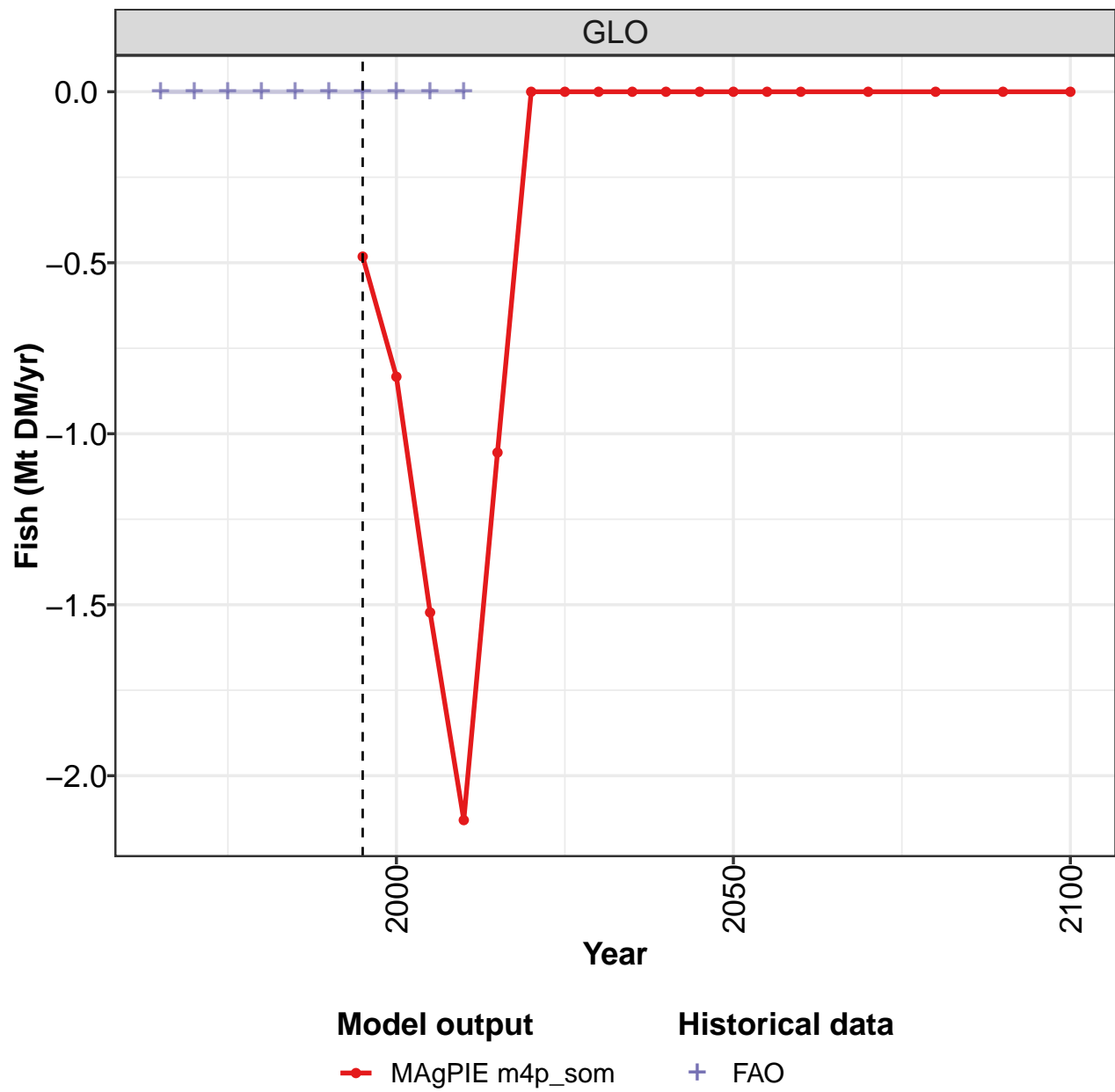
Table 1917: MAgPIE m4p\_som — Trade—Net-Trade—Crops—Sugar crops—Sugar cane (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAZ	0.005	-0.000	-0.001	-0.001	-0.015	-0.006	0.022	-0.001	-0.003	-0.018
CHA	-0.265	0.000	-0.000	-0.001	0.716	0.401	-0.521	-0.001	0.402	-0.015
EUR	0.034	-0.001	-0.004	-0.004	-0.102	-0.043	0.150	-0.008	-0.017	-0.126
IND	0.001	0.000	-0.000	-0.000	-0.003	-0.001	0.004	0.000	-0.001	-0.004
JPN	0.001	0.000	-0.000	-0.000	-0.003	-0.001	0.004	-0.000	-0.001	-0.004
LAM	0.066	0.010	0.005	0.007	-0.158	-0.042	0.227	0.046	-0.294	-0.082
MEA	0.021	-0.001	-0.002	-0.004	-0.063	-0.026	0.093	-0.005	-0.012	-0.076
NEU	0.016	-0.000	-0.002	-0.002	-0.048	-0.020	0.071	-0.004	-0.009	-0.059
OAS	0.056	-0.007	0.009	0.012	-0.131	-0.179	-0.322	-0.009	-0.026	0.631
REF	0.012	-0.000	-0.001	-0.001	-0.036	-0.015	0.053	-0.003	-0.007	-0.044
SSA	0.051	-0.001	-0.004	-0.005	-0.153	-0.064	0.225	-0.014	-0.030	-0.186
USA	0.001	0.000	-0.000	-0.000	-0.003	-0.003	-0.006	0.000	-0.002	-0.017

Table 1918: FAO — Trade—Net-Trade—Crops—Sugar crops—Sugar cane (Mt DM/yr)

59.2 Fish

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

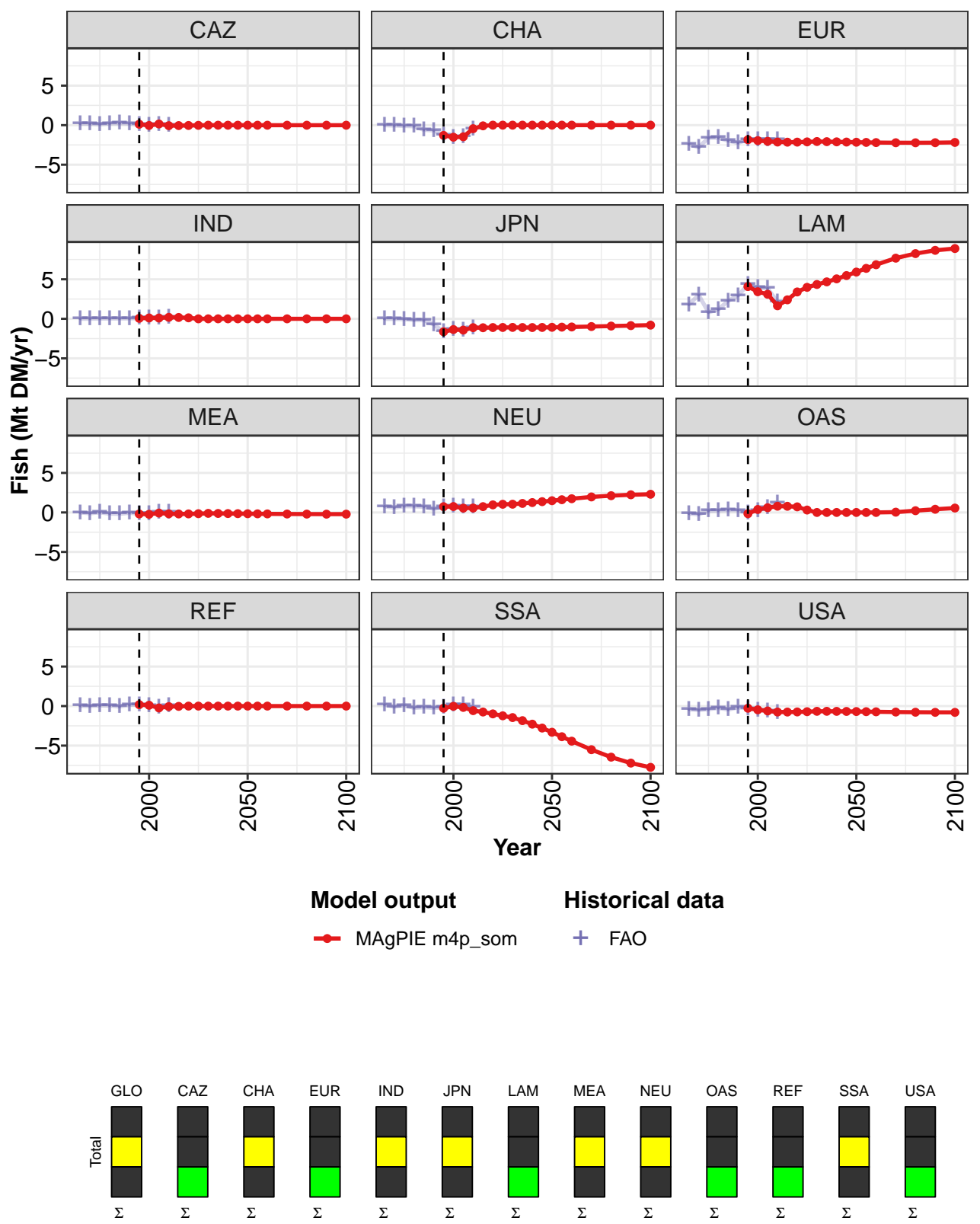


Figure 505: MAgPIE m4p\_som — Trade—Net-Trade—Fish (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-0.48	-0.83	-1.52	-2.13	-1.05	0.00	-0.00	0.00	-0.00	0.00	0.00
CAZ	0.12	-0.04	0.15	-0.06	-0.05	-0.04	-0.02	-0.01	-0.01	-0.01	-0.01
CHA	-1.29	-1.52	-1.47	-0.44	-0.09	0.00	0.00	0.00	0.00	0.00	0.00
EUR	-1.84	-1.95	-2.04	-2.13	-2.15	-2.14	-2.11	-2.07	-2.08	-2.11	-2.13
IND	0.06	0.11	0.10	0.19	0.17	0.13	0.00	0.00	0.00	0.00	0.00
JPN	-1.64	-1.36	-1.42	-1.12	-1.13	-1.10	-1.09	-1.09	-1.10	-1.10	-1.09
LAM	4.08	3.43	3.10	1.65	2.40	3.40	3.98	4.34	4.67	5.05	5.47
MEA	-0.19	-0.23	-0.08	-0.17	-0.19	-0.18	-0.16	-0.11	-0.13	-0.14	-0.15
NEU	0.73	0.75	0.55	0.56	0.74	0.96	1.04	1.04	1.14	1.25	1.36
OAS	-0.16	0.37	0.60	0.79	0.78	0.71	0.31	0.00	0.00	0.00	0.00
REF	0.18	0.11	-0.23	-0.06	-0.04	0.00	0.00	0.00	0.00	0.00	0.00
SSA	-0.27	-0.03	-0.17	-0.57	-0.75	-0.99	-1.23	-1.45	-1.84	-2.28	-2.78
USA	-0.27	-0.47	-0.61	-0.75	-0.75	-0.74	-0.71	-0.66	-0.66	-0.66	-0.68

Table 1919: MAgPIE m4p\_som — Trade—Net-Trade—Fish (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00	0.00	-0.00	-0.00	0.00	0.00	-0.00
CAZ	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
CHA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUR	-2.16	-2.18	-2.20	-2.22	-2.23	-2.22	-2.18
IND	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JPN	-1.08	-1.05	-1.03	-0.98	-0.92	-0.86	-0.80
LAM	5.91	6.38	6.84	7.67	8.25	8.66	8.89
MEA	-0.16	-0.17	-0.18	-0.20	-0.21	-0.21	-0.22
NEU	1.49	1.61	1.74	1.96	2.12	2.23	2.30
OAS	0.00	0.00	0.00	0.04	0.22	0.40	0.56
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	-3.31	-3.87	-4.43	-5.51	-6.46	-7.21	-7.75
USA	-0.69	-0.71	-0.72	-0.75	-0.78	-0.79	-0.80

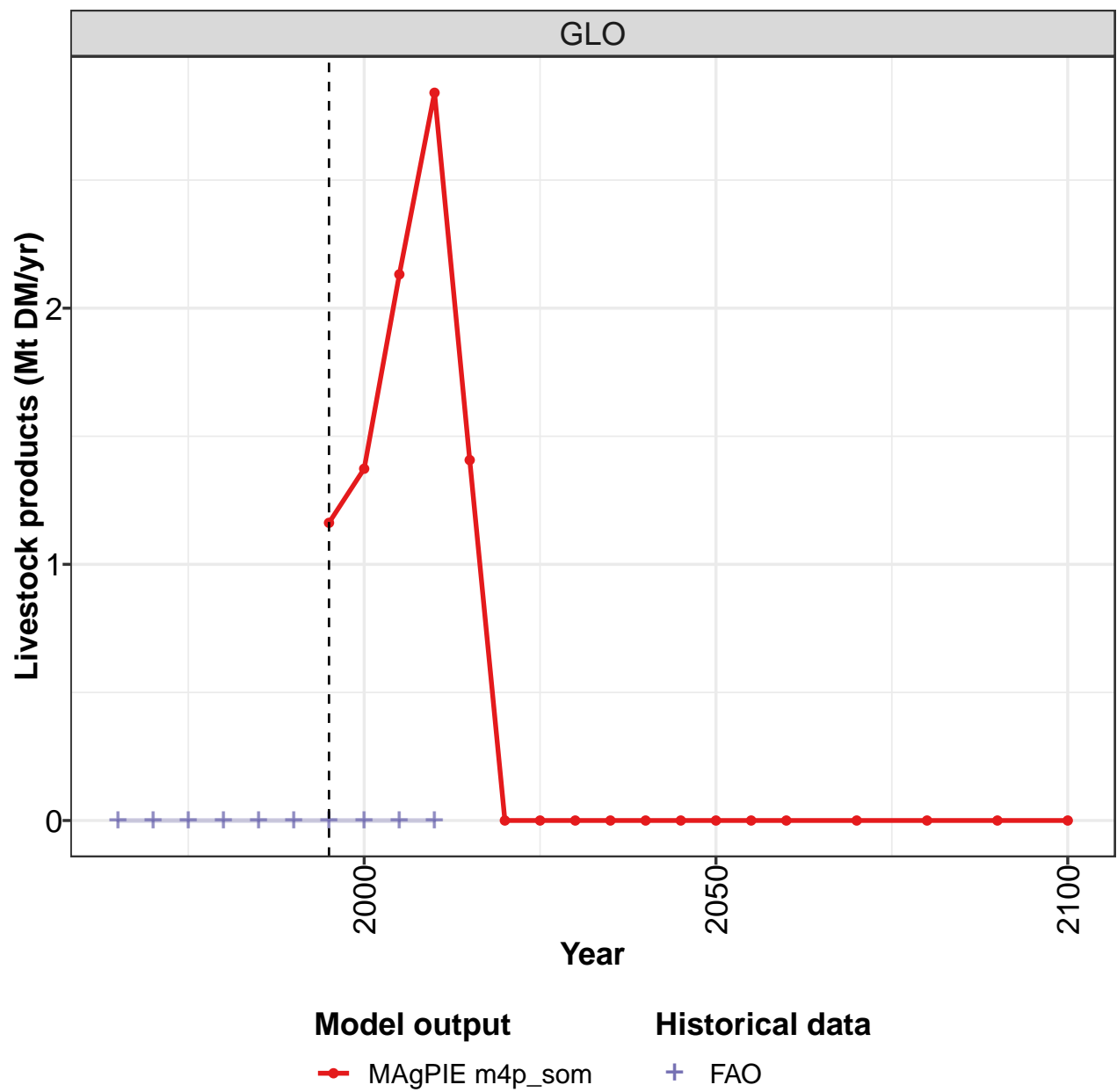
Table 1920: MAgPIE m4p\_som — Trade—Net-Trade—Fish (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	0.20	0.18	0.12	0.22	0.24	0.21	0.06	-0.02	0.08	-0.02
CHA	-0.01	-0.05	-0.10	-0.14	-0.59	-0.66	-1.27	-1.53	-1.44	-0.47
EUR	-2.38	-2.81	-1.61	-1.59	-1.97	-2.24	-1.80	-1.86	-1.84	-1.86
IND	0.01	0.01	0.02	0.03	0.03	0.04	0.08	0.14	0.12	0.25
JPN	-0.02	-0.01	-0.05	-0.17	-0.18	-0.72	-1.64	-1.35	-1.42	-1.10
LAM	1.80	3.01	0.82	1.18	2.28	2.94	4.32	3.95	3.83	2.15
MEA	-0.02	-0.11	0.00	-0.16	-0.18	-0.05	-0.16	-0.17	0.05	0.01
NEU	0.76	0.60	0.79	0.77	0.71	0.45	0.71	0.82	0.70	0.75
OAS	-0.14	-0.24	0.21	0.26	0.30	0.28	-0.04	0.28	0.59	1.17
REF	0.02	0.01	0.08	0.06	-0.06	0.16	0.18	0.07	-0.16	0.03
SSA	0.18	-0.09	0.11	-0.23	-0.16	-0.24	-0.17	0.15	0.14	-0.14
USA	-0.41	-0.50	-0.39	-0.24	-0.43	-0.17	-0.28	-0.49	-0.63	-0.78

Table 1921: FAO — Trade—Net-Trade—Fish (Mt DM/yr)

59.3 Livestock products

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

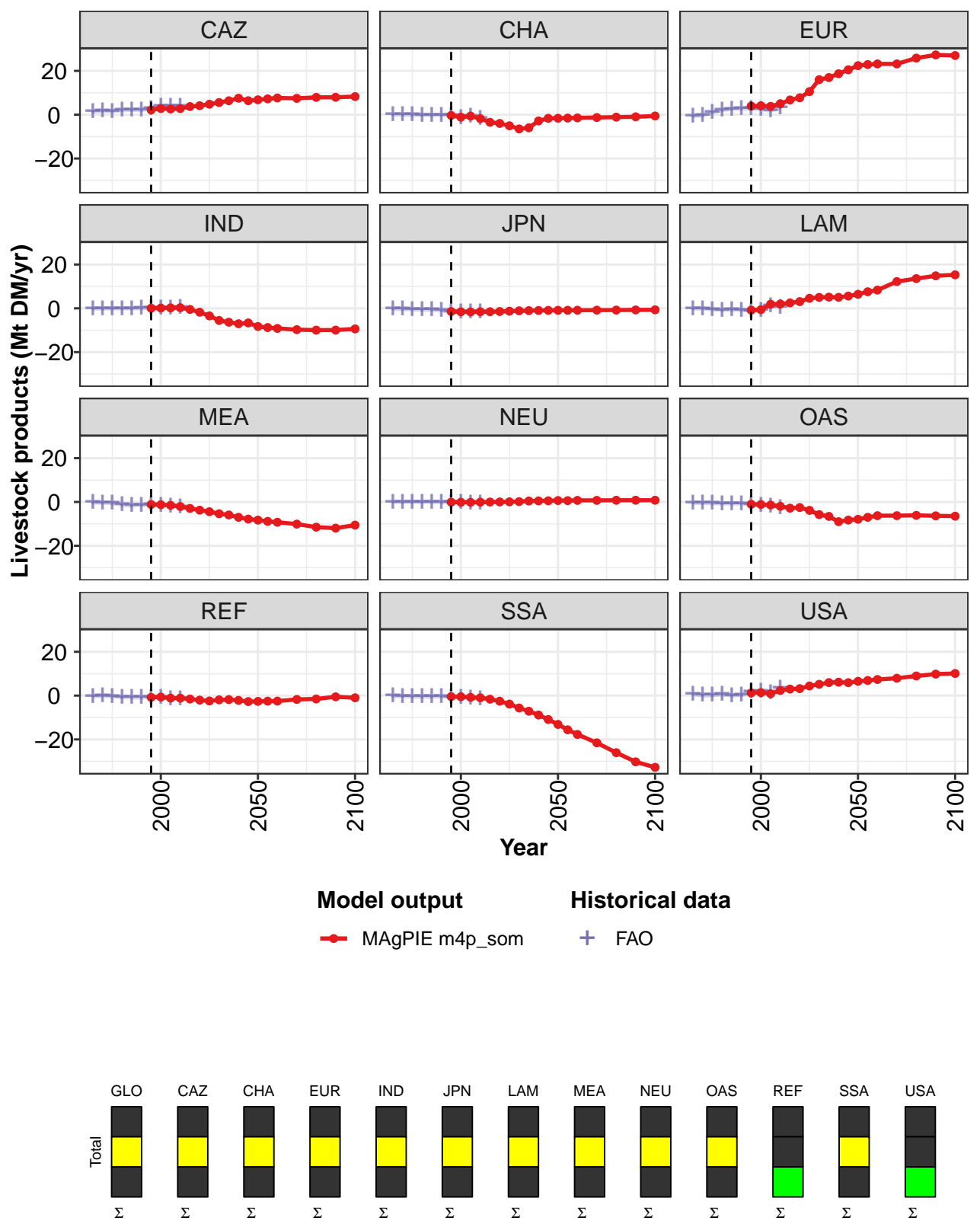


Figure 506: MAgPIE m4p\_som — Trade—Net-Trade—Livestock products (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.2	1.4	2.1	2.8	1.4	0.0	-0.0	0.0	0.0	0.0	-0.0
CAZ	2.2	2.8	2.6	2.8	3.7	4.1	4.8	5.6	6.4	7.5	6.4
CHA	-0.3	-1.1	-0.6	-1.8	-3.5	-4.0	-5.1	-6.5	-6.0	-2.8	-1.7
EUR	3.9	4.1	3.8	5.0	6.7	7.7	10.5	16.0	17.0	18.7	20.5
IND	0.1	0.1	0.2	0.3	-0.5	-1.8	-3.4	-5.5	-6.3	-7.0	-6.7
JPN	-1.5	-1.6	-1.6	-1.6	-1.5	-1.5	-1.3	-1.1	-1.0	-1.0	-0.9
LAM	-0.8	-0.6	1.9	2.0	2.5	3.1	4.6	5.0	5.1	5.0	5.6
MEA	-1.2	-1.3	-1.5	-2.1	-2.9	-3.7	-4.4	-5.4	-5.9	-7.0	-7.8
NEU	-0.1	-0.1	-0.2	-0.1	-0.0	0.0	0.1	0.2	0.4	0.5	0.5
OAS	-1.1	-1.2	-1.4	-2.0	-2.8	-2.5	-3.8	-5.8	-6.6	-9.0	-8.3
REF	-0.8	-0.7	-1.1	-1.1	-1.6	-2.1	-2.4	-1.9	-1.8	-2.2	-2.7
SSA	-0.5	-0.5	-0.8	-1.0	-1.6	-2.6	-3.9	-5.6	-7.1	-8.9	-10.9
USA	1.2	1.4	0.9	2.3	3.0	3.2	4.4	5.2	5.9	6.1	5.9

Table 1922: MAgPIE m4p.som — Trade—Net-Trade—Livestock products (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0	-0.0	0.0	-0.0	0.0	0.0	0.0
CAZ	6.8	7.2	7.6	7.5	7.9	8.0	8.3
CHA	-1.6	-1.5	-1.5	-1.3	-1.1	-1.0	-0.6
EUR	22.4	22.9	23.2	23.2	25.8	27.3	27.0
IND	-8.3	-8.8	-9.2	-9.7	-10.0	-9.9	-9.4
JPN	-0.9	-0.9	-0.9	-0.8	-0.8	-0.7	-0.7
LAM	6.4	7.6	8.3	12.2	13.6	14.8	15.3
MEA	-8.3	-8.9	-9.3	-10.1	-11.5	-12.0	-10.6
NEU	0.7	0.6	0.7	0.7	0.8	0.8	0.8
OAS	-7.9	-7.0	-6.2	-6.3	-6.1	-6.3	-6.5
REF	-2.6	-2.5	-2.5	-1.7	-1.5	-0.5	-1.0
SSA	-13.1	-15.6	-17.7	-21.6	-26.1	-30.2	-32.7
USA	6.5	6.9	7.4	7.9	9.0	9.8	10.1

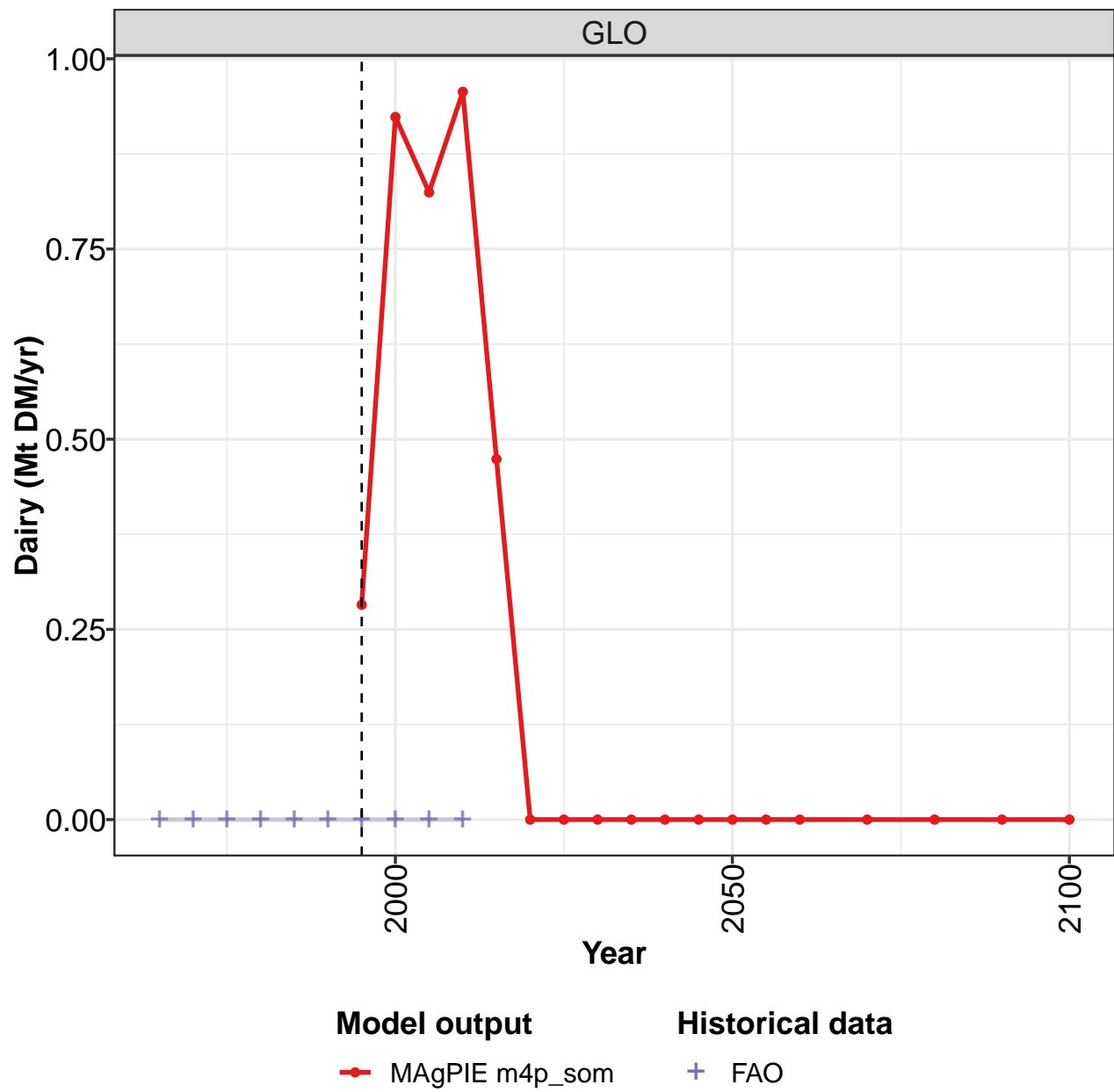
Table 1923: MAgPIE m4p.som — Trade—Net-Trade—Livestock products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	1.41	1.69	1.61	2.05	2.19	2.08	2.84	3.74	3.97	3.92
CHA	0.03	-0.02	-0.10	-0.15	-0.15	-0.10	-0.33	-1.14	-0.70	-1.80
EUR	-0.62	-0.30	1.09	2.06	2.66	2.79	2.71	2.52	1.91	3.23
IND	-0.08	-0.07	-0.05	-0.03	-0.03	0.03	0.07	0.17	0.34	0.38
JPN	-0.24	-0.34	-0.43	-0.61	-0.65	-0.90	-1.46	-1.59	-1.63	-1.56
LAM	-0.13	-0.04	-0.43	-0.79	-0.54	-0.71	-1.18	-1.02	1.16	0.57
MEA	-0.24	-0.30	-0.58	-1.25	-1.64	-1.36	-1.25	-1.39	-1.73	-2.29
NEU	-0.01	-0.03	-0.00	-0.01	0.03	-0.14	-0.21	-0.22	-0.30	-0.28
OAS	-0.39	-0.47	-0.55	-0.69	-0.64	-0.68	-1.29	-1.47	-1.84	-2.49
REF	-0.23	-0.05	-0.29	-0.71	-0.80	-0.85	-0.80	-0.70	-1.31	-1.51
SSA	-0.20	-0.22	-0.41	-0.47	-0.49	-0.39	-0.70	-0.78	-1.23	-1.57
USA	0.70	0.15	0.15	0.61	0.05	0.24	1.60	1.89	1.37	3.41

Table 1924: FAO — Trade—Net-Trade—Livestock products (Mt DM/yr)

59.3.1 Dairy

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

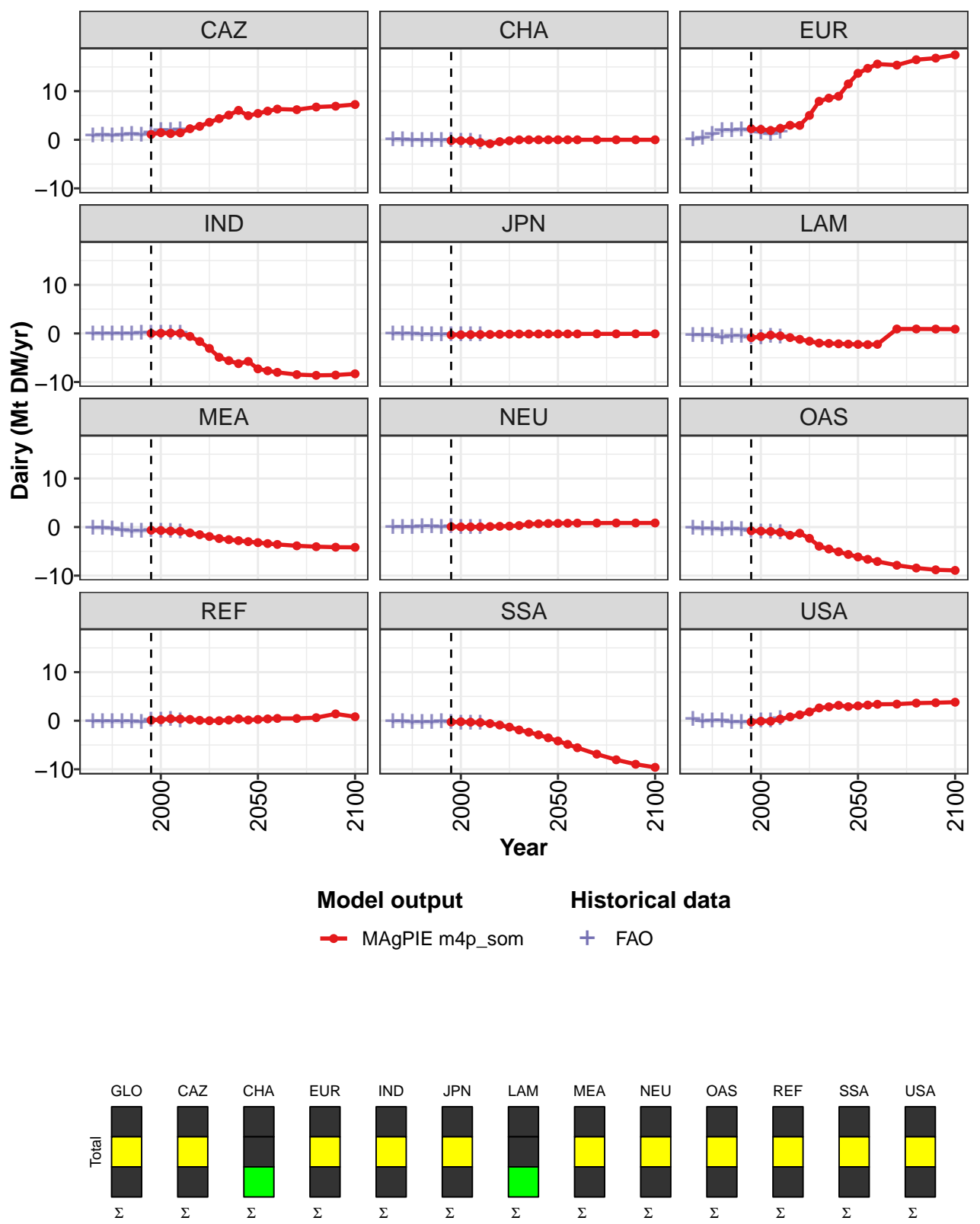


Figure 507: MAGPIE m4p\_som — Trade—Net-Trade—Livestock products—Dairy (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.3	0.9	0.8	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
CAZ	1.1	1.5	1.3	1.4	2.3	2.8	3.6	4.4	5.1	6.1	5.0
CHA	-0.2	-0.2	-0.2	-0.6	-0.8	-0.4	-0.2	0.0	0.0	0.0	0.0
EUR	2.3	2.1	1.9	2.3	3.0	3.0	5.0	7.9	8.6	9.0	11.5
IND	0.0	0.0	0.1	0.0	-0.6	-1.7	-3.1	-4.9	-5.6	-6.2	-5.8
JPN	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1
LAM	-0.9	-0.7	-0.3	-0.5	-0.9	-1.2	-1.6	-2.0	-2.1	-2.1	-2.2
MEA	-0.6	-0.7	-0.8	-0.9	-1.2	-1.6	-1.9	-2.4	-2.6	-2.8	-3.0
NEU	0.1	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.6	0.7	0.7
OAS	-0.8	-0.8	-0.9	-1.1	-1.7	-1.3	-2.3	-3.9	-4.5	-5.1	-5.6
REF	0.1	0.2	0.4	0.3	0.3	0.1	0.0	-0.0	0.1	0.4	0.1
SSA	-0.3	-0.2	-0.3	-0.4	-0.6	-0.9	-1.3	-1.9	-2.4	-2.9	-3.5
USA	-0.3	-0.1	-0.1	0.3	0.8	1.2	1.8	2.6	2.9	3.2	2.9

Table 1925: MAGPIE m4p\_som — Trade—Net-Trade—Livestock products—Dairy (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0	-0.0	0.0	0.0	0.0	0.0	0.0
CAZ	5.4	5.9	6.3	6.2	6.7	6.9	7.3
CHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUR	13.7	14.7	15.6	15.4	16.5	16.8	17.5
IND	-7.3	-7.7	-8.0	-8.5	-8.6	-8.6	-8.3
JPN	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
LAM	-2.3	-2.3	-2.2	0.9	0.9	0.9	0.9
MEA	-3.2	-3.4	-3.6	-3.9	-4.0	-4.1	-4.2
NEU	0.8	0.8	0.8	0.8	0.8	0.8	0.8
OAS	-6.2	-6.6	-7.1	-7.9	-8.4	-8.8	-8.9
REF	0.3	0.4	0.5	0.5	0.6	1.4	0.8
SSA	-4.2	-4.9	-5.6	-6.9	-8.0	-9.0	-9.6
USA	3.0	3.2	3.4	3.4	3.6	3.7	3.8

Table 1926: MAGPIE m4p\_som — Trade—Net-Trade—Livestock products—Dairy (Mt DM/yr) [PART 2/2]

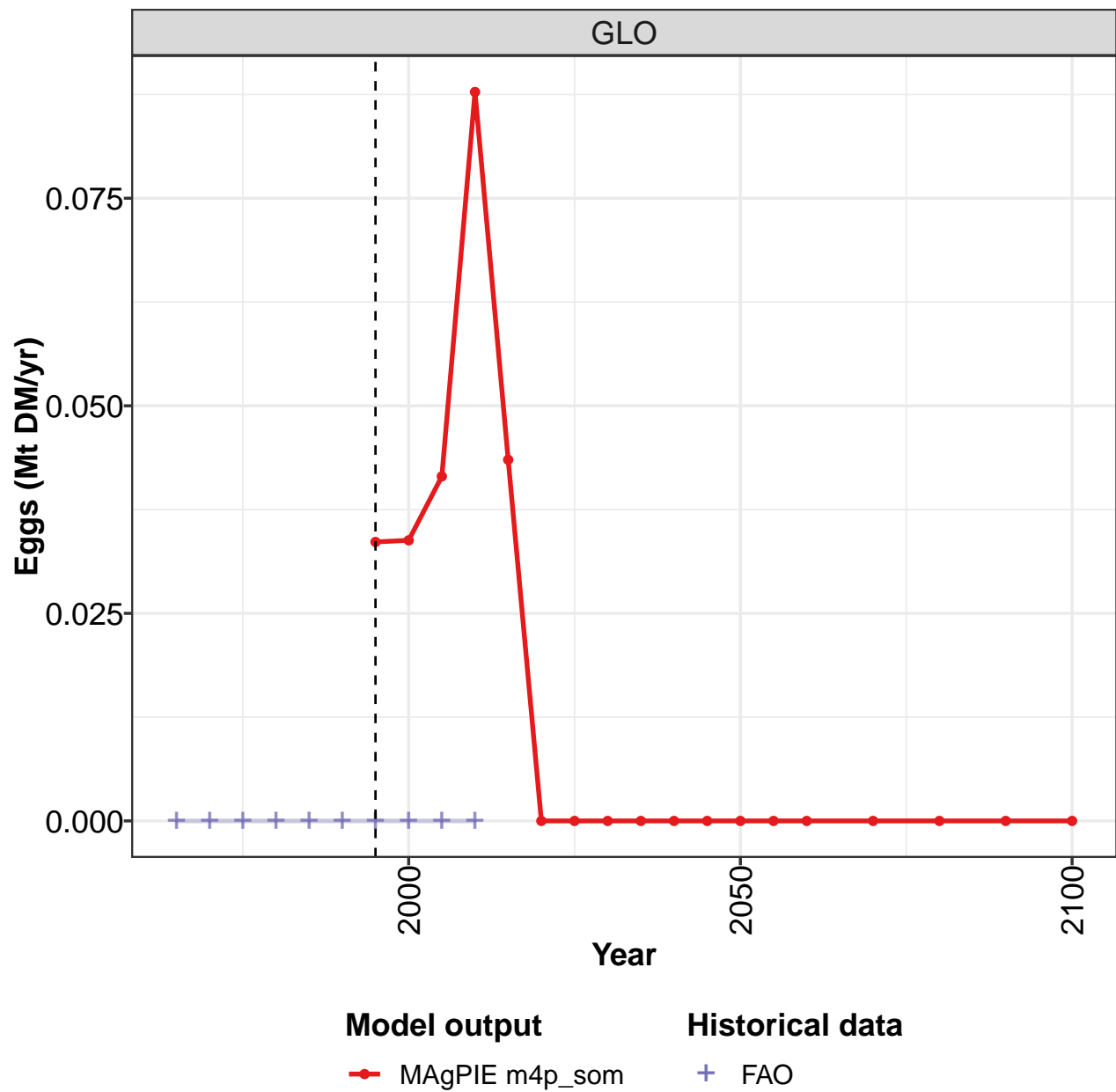
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	0.83	0.96	0.89	1.01	1.18	0.98	1.49	1.98	1.89	2.05
CHA	-0.02	-0.03	-0.06	-0.09	-0.13	-0.14	-0.17	-0.21	-0.21	-0.59
EUR	0.08	0.38	1.10	1.86	1.90	2.07	1.87	1.45	1.15	1.57
IND	-0.05	-0.04	-0.05	-0.04	-0.05	-0.00	-0.00	0.04	0.12	0.04
JPN	-0.10	-0.10	-0.13	-0.27	-0.27	-0.24	-0.31	-0.27	-0.24	-0.22
LAM	-0.33	-0.34	-0.44	-0.84	-0.61	-0.63	-0.94	-0.82	-0.49	-0.67
MEA	-0.14	-0.16	-0.34	-0.64	-0.89	-0.80	-0.68	-0.79	-0.90	-0.92
NEU	-0.03	0.01	0.00	0.05	0.06	0.01	0.02	-0.01	-0.01	-0.02
OAS	-0.28	-0.30	-0.42	-0.50	-0.40	-0.47	-0.82	-1.03	-1.06	-1.23
REF	-0.12	-0.14	-0.16	-0.22	-0.21	-0.27	0.14	0.19	0.29	0.05
SSA	-0.17	-0.13	-0.36	-0.32	-0.30	-0.18	-0.32	-0.42	-0.46	-0.56
USA	0.32	-0.10	-0.03	-0.01	-0.28	-0.34	-0.29	-0.10	-0.08	0.50

Table 1927: FAO — Trade—Net-Trade—Livestock products—Dairy (Mt DM/yr)



59.3.2 Eggs

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

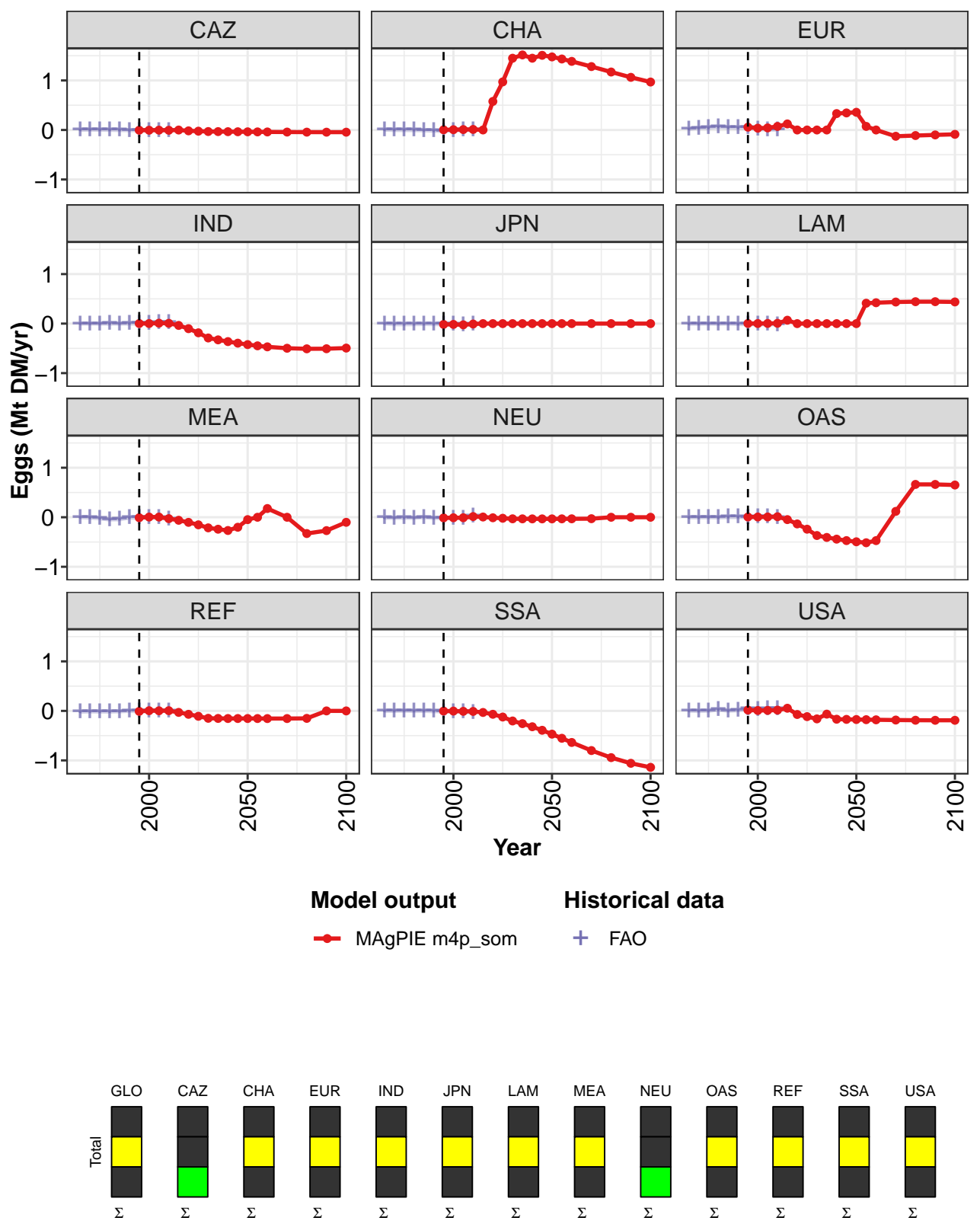


Figure 508: MAgPIE m4p\_som — Trade—Net-Trade—Livestock products—Eggs (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.03	0.03	0.04	0.09	0.04	-0.00	-0.00	-0.00	0.00	0.00	0.00
CAZ	-0.00	-0.00	-0.00	-0.01	-0.00	-0.02	-0.02	-0.03	-0.03	-0.03	-0.04
CHA	0.00	0.01	0.01	0.01	0.00	0.58	0.97	1.45	1.52	1.45	1.51
EUR	0.06	0.04	0.04	0.07	0.12	0.00	0.00	0.00	0.00	0.33	0.34
IND	0.00	0.00	0.01	0.01	-0.04	-0.10	-0.19	-0.29	-0.33	-0.36	-0.39
JPN	-0.02	-0.02	-0.02	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.00	0.00	0.01	0.07	0.00	0.00	0.00	0.00	0.00	0.00
MEA	-0.01	0.00	0.00	-0.03	-0.06	-0.10	-0.15	-0.21	-0.24	-0.27	-0.20
NEU	-0.01	-0.01	-0.01	0.01	0.01	-0.01	-0.02	-0.03	-0.03	-0.03	-0.03
OAS	0.01	0.01	0.01	0.01	-0.05	-0.13	-0.24	-0.37	-0.41	-0.44	-0.47
REF	-0.01	0.00	0.00	0.00	-0.03	-0.07	-0.11	-0.15	-0.15	-0.15	-0.15
SSA	-0.00	-0.00	-0.01	-0.01	-0.03	-0.07	-0.12	-0.20	-0.26	-0.32	-0.39
USA	0.02	0.01	0.01	0.02	0.05	-0.07	-0.12	-0.16	-0.07	-0.17	-0.17

Table 1928: MAgPIE m4p\_som — Trade—Net-Trade—Livestock products—Eggs (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00	0.00	0.00	0.00	-0.00	0.00	0.00
CAZ	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04
CHA	1.48	1.43	1.39	1.28	1.17	1.06	0.97
EUR	0.36	0.07	0.00	-0.13	-0.11	-0.10	-0.09
IND	-0.42	-0.45	-0.47	-0.50	-0.51	-0.51	-0.49
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.00	0.41	0.42	0.44	0.44	0.44	0.44
MEA	-0.05	0.00	0.18	0.00	-0.33	-0.27	-0.10
NEU	-0.03	-0.03	-0.03	-0.03	0.00	0.00	0.00
OAS	-0.50	-0.51	-0.47	0.12	0.66	0.66	0.65
REF	-0.15	-0.15	-0.15	-0.15	-0.15	0.00	0.00
SSA	-0.47	-0.55	-0.64	-0.80	-0.94	-1.06	-1.14
USA	-0.17	-0.18	-0.18	-0.18	-0.19	-0.19	-0.19

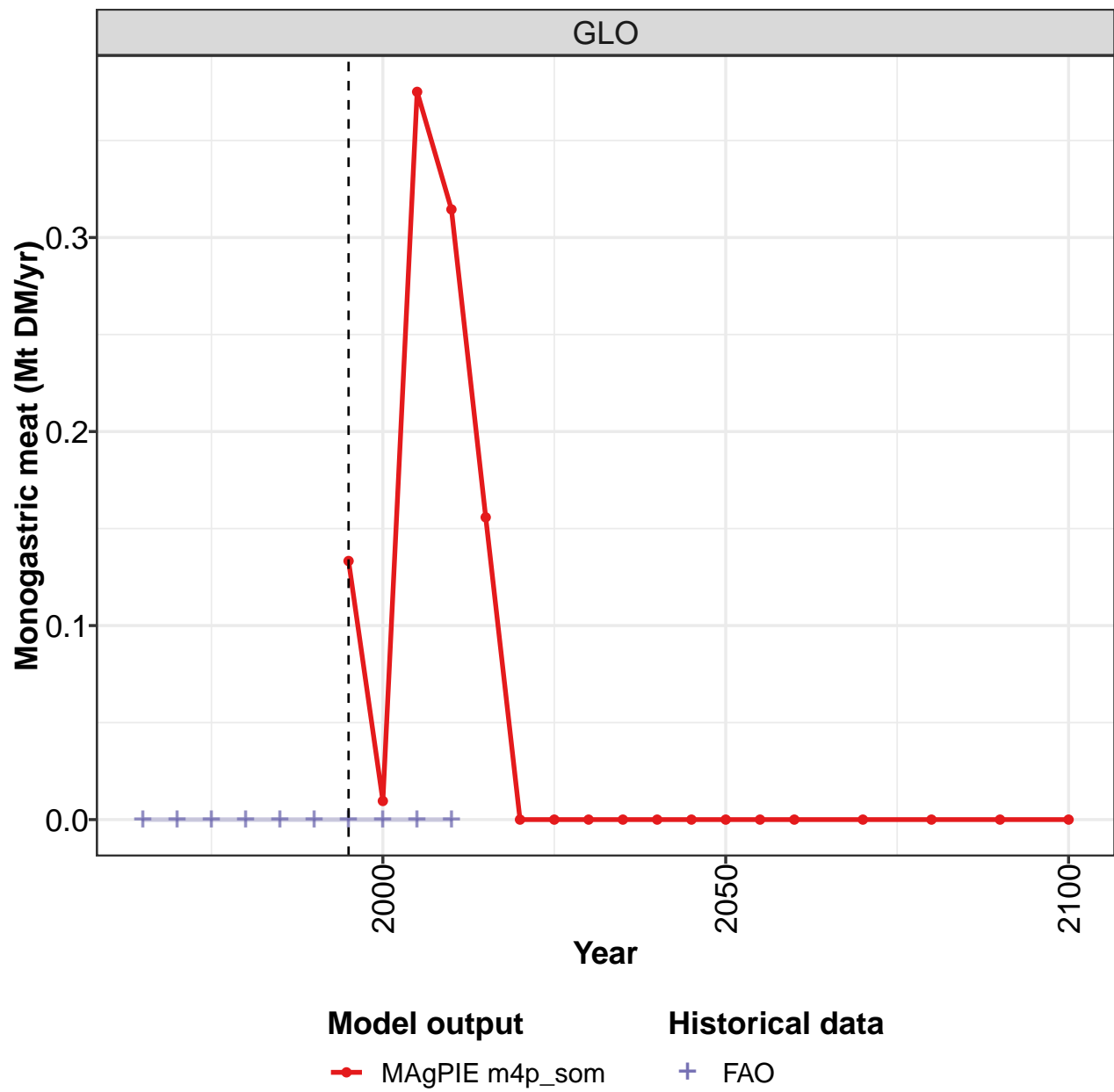
Table 1929: MAgPIE m4p\_som — Trade—Net-Trade—Livestock products—Eggs (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CAZ	0.0022	0.0067	0.0044	0.0028	-0.0010	-0.0037	-0.0054	-0.0055	-0.0053	-0.0094
CHA	0.0062	-0.0003	-0.0020	-0.0028	-0.0060	-0.0145	-0.0205	-0.0071	-0.0013	0.0000
EUR	0.0218	0.0422	0.0452	0.0647	0.0515	0.0447	0.0450	0.0191	0.0078	0.0076
IND	0.0000	0.0000	-0.0001	0.0007	0.0000	0.0012	0.0054	0.0084	0.0285	0.0209
JPN	-0.0003	-0.0120	-0.0127	-0.0104	-0.0069	-0.0095	-0.0129	-0.0133	-0.0245	-0.0114
LAM	-0.0036	-0.0033	-0.0003	-0.0046	-0.0003	-0.0083	-0.0098	-0.0146	-0.0121	-0.0152
MEA	0.0007	-0.0073	-0.0212	-0.0454	-0.0413	-0.0088	-0.0112	-0.0046	-0.0060	-0.0400
NEU	-0.0100	-0.0117	-0.0091	-0.0116	0.0032	-0.0143	-0.0159	-0.0133	-0.0136	0.0229
OAS	-0.0023	-0.0015	0.0016	-0.0029	0.0043	0.0047	0.0027	0.0099	0.0091	0.0040
REF	-0.0186	-0.0116	-0.0140	-0.0151	-0.0084	0.0010	-0.0069	0.0007	-0.0025	0.0012
SSA	-0.0004	0.0004	0.0048	-0.0021	0.0006	-0.0057	-0.0092	-0.0113	-0.0199	-0.0325
USA	0.0044	-0.0015	0.0034	0.0267	0.0041	0.0133	0.0387	0.0313	0.0399	0.0519

Table 1930: FAO — Trade—Net-Trade—Livestock products—Eggs (Mt DM/yr)

59.3.3 Monogastric meat

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

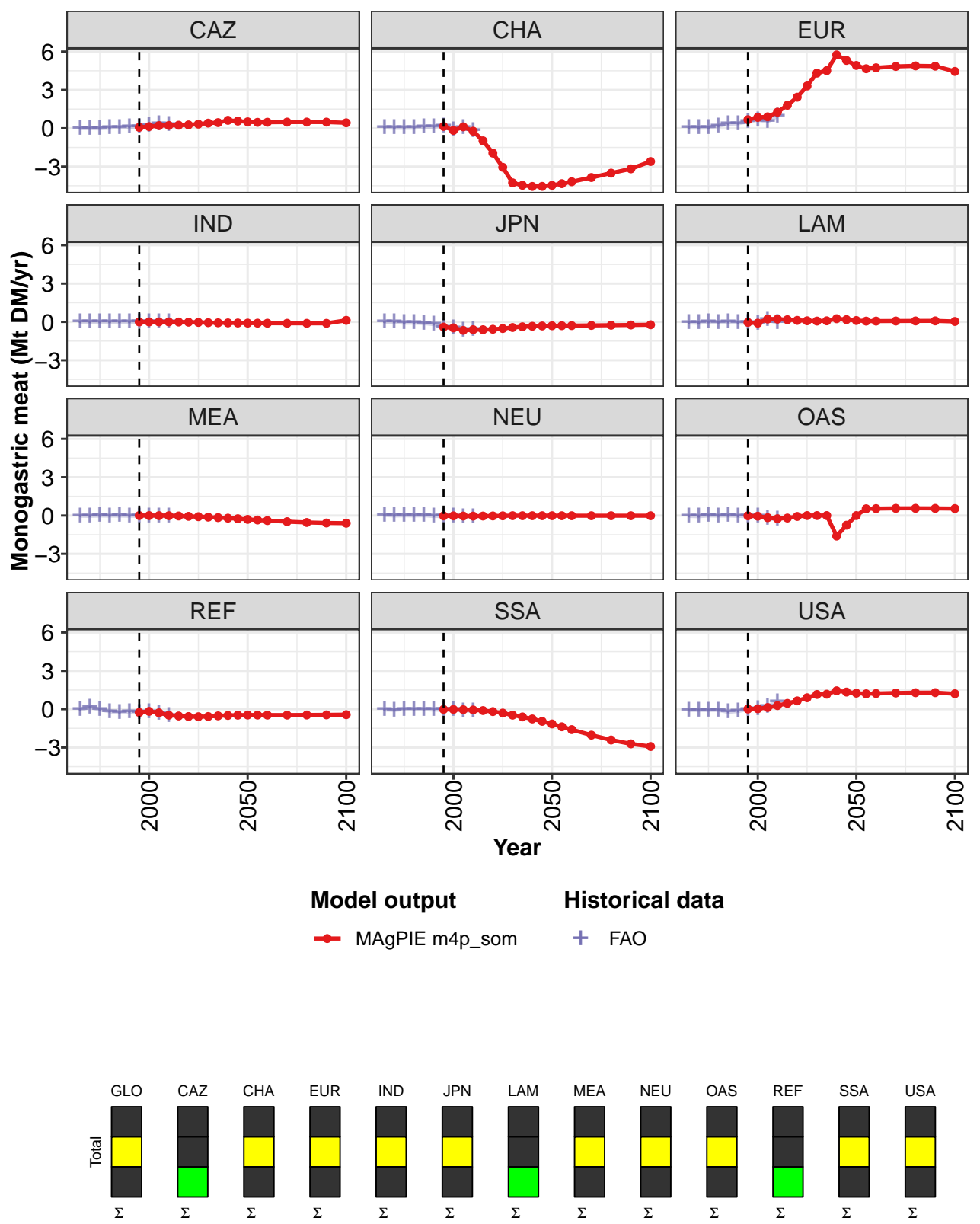


Figure 509: MAgPIE m4p\_som — Trade—Net-Trade—Livestock products—Monogastric meat (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.13	0.01	0.38	0.31	0.16	0.00	0.00	-0.00	0.00	0.00	-0.00
CAZ	0.07	0.13	0.21	0.22	0.24	0.26	0.32	0.40	0.44	0.62	0.56
CHA	0.15	-0.17	0.11	-0.23	-0.98	-1.94	-3.06	-4.27	-4.46	-4.55	-4.55
EUR	0.67	0.85	0.90	1.26	1.80	2.43	3.31	4.32	4.51	5.74	5.31
IND	0.00	0.00	0.00	0.00	-0.01	-0.02	-0.04	-0.06	-0.07	-0.08	-0.09
JPN	-0.41	-0.47	-0.66	-0.61	-0.61	-0.58	-0.52	-0.44	-0.38	-0.34	-0.32
LAM	-0.04	-0.10	0.22	0.22	0.17	0.12	0.09	0.07	0.09	0.25	0.18
MEA	-0.00	-0.00	-0.01	-0.01	-0.03	-0.06	-0.09	-0.12	-0.16	-0.20	-0.25
NEU	-0.02	-0.02	-0.04	-0.04	-0.04	-0.03	-0.02	-0.01	-0.01	-0.01	-0.01
OAS	-0.02	-0.05	-0.17	-0.24	-0.19	-0.07	0.00	0.00	0.00	-1.60	-0.75
REF	-0.26	-0.17	-0.28	-0.47	-0.53	-0.58	-0.59	-0.58	-0.52	-0.49	-0.47
SSA	-0.02	-0.02	-0.04	-0.06	-0.11	-0.19	-0.31	-0.47	-0.61	-0.77	-0.95
USA	0.01	0.03	0.13	0.28	0.45	0.65	0.89	1.15	1.17	1.44	1.34

Table 1931: MAgPIE m4p\_som — Trade—Net-Trade—Livestock products—Monogastric meat (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00	-0.00	0.00	-0.00	-0.00	-0.00	0.00
CAZ	0.50	0.46	0.47	0.48	0.49	0.48	0.43
CHA	-4.47	-4.33	-4.18	-3.85	-3.51	-3.18	-2.60
EUR	4.92	4.66	4.73	4.84	4.88	4.86	4.45
IND	-0.09	-0.10	-0.10	-0.11	-0.11	-0.11	0.12
JPN	-0.30	-0.30	-0.29	-0.27	-0.26	-0.24	-0.22
LAM	0.11	0.06	0.06	0.07	0.08	0.08	0.04
MEA	-0.30	-0.35	-0.39	-0.48	-0.54	-0.58	-0.60
NEU	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
OAS	0.00	0.53	0.55	0.56	0.57	0.56	0.55
REF	-0.46	-0.46	-0.46	-0.46	-0.45	-0.45	-0.43
SSA	-1.16	-1.38	-1.60	-2.03	-2.41	-2.71	-2.92
USA	1.25	1.20	1.23	1.26	1.29	1.29	1.21

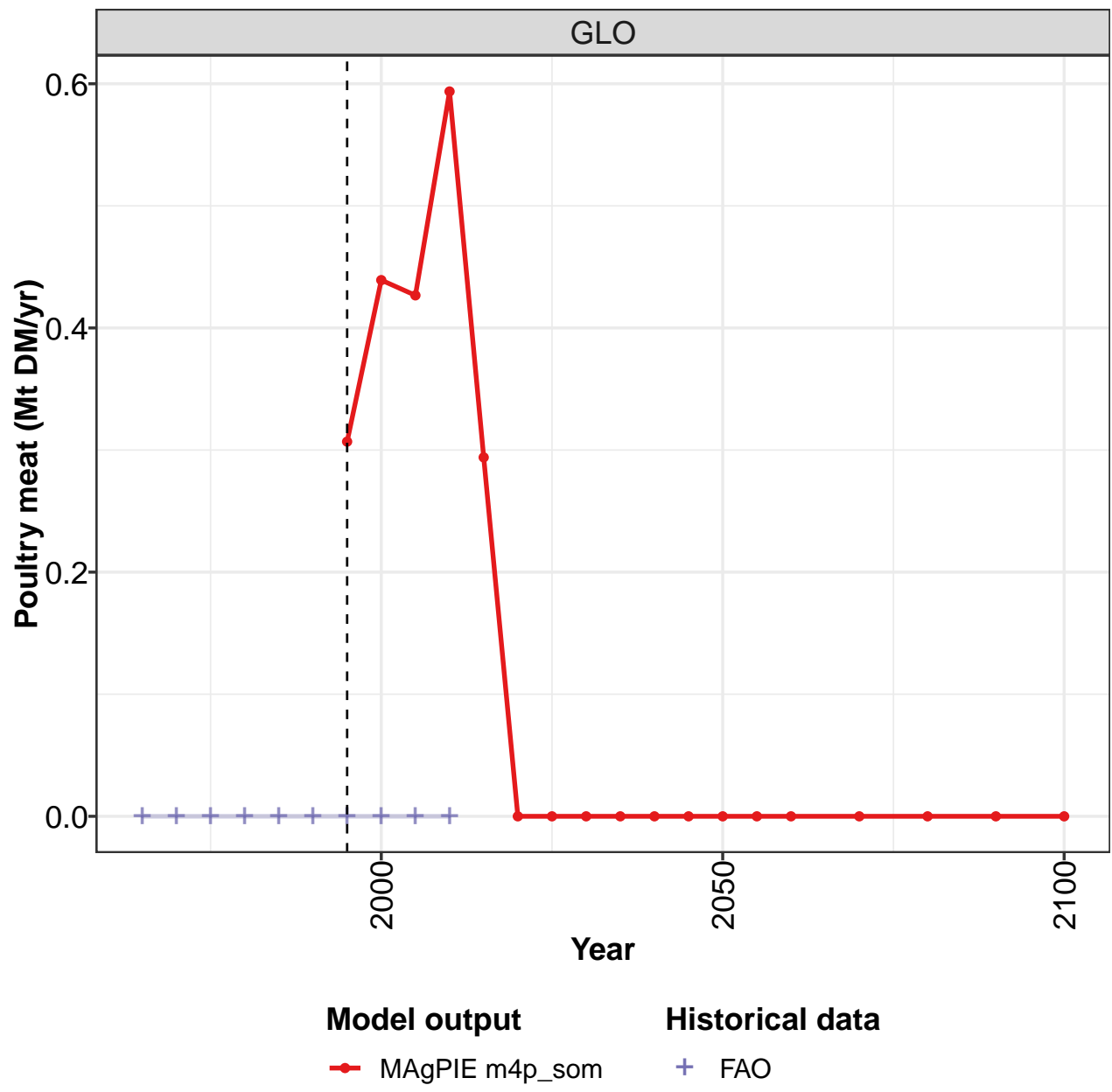
Table 1932: MAgPIE m4p\_som — Trade—Net-Trade—Livestock products—Monogastric meat (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAZ	0.006	0.008	-0.001	0.049	0.084	0.122	0.139	0.252	0.381	0.328
CHA	0.075	0.038	0.038	0.046	0.095	0.137	0.210	-0.143	0.080	-0.199
EUR	0.052	0.048	0.055	0.196	0.348	0.385	0.527	0.669	0.537	0.962
IND	-0.001	-0.001	0.000	0.000	0.000	-0.000	0.000	-0.000	-0.001	-0.001
JPN	-0.001	-0.009	-0.061	-0.054	-0.093	-0.167	-0.405	-0.469	-0.658	-0.605
LAM	-0.039	-0.068	0.005	-0.023	-0.003	-0.051	-0.064	-0.087	0.168	-0.048
MEA	-0.012	-0.023	0.003	-0.002	0.001	-0.011	-0.014	-0.005	-0.038	-0.037
NEU	0.051	0.006	0.024	0.012	0.027	-0.032	-0.034	-0.024	-0.061	-0.064
OAS	-0.025	-0.052	0.010	-0.001	0.006	-0.024	-0.047	-0.056	-0.229	-0.290
REF	-0.022	0.168	-0.021	-0.165	-0.254	-0.186	-0.273	-0.177	-0.309	-0.480
SSA	-0.025	-0.055	0.009	-0.004	0.000	-0.031	-0.042	-0.024	-0.115	-0.128
USA	-0.061	-0.060	-0.062	-0.053	-0.211	-0.144	0.003	0.063	0.244	0.562

Table 1933: FAO — Trade—Net-Trade—Livestock products—Monogastric meat (Mt DM/yr)

59.3.4 Poultry meat

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

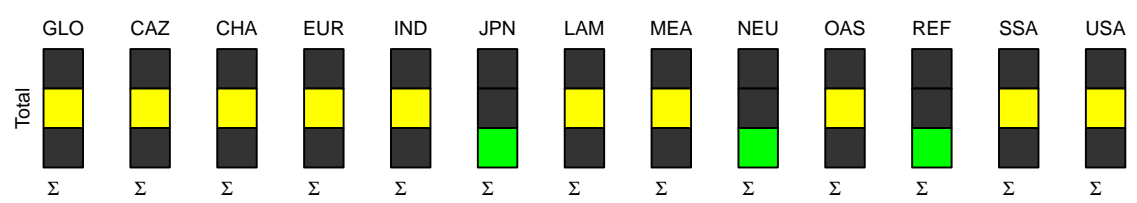
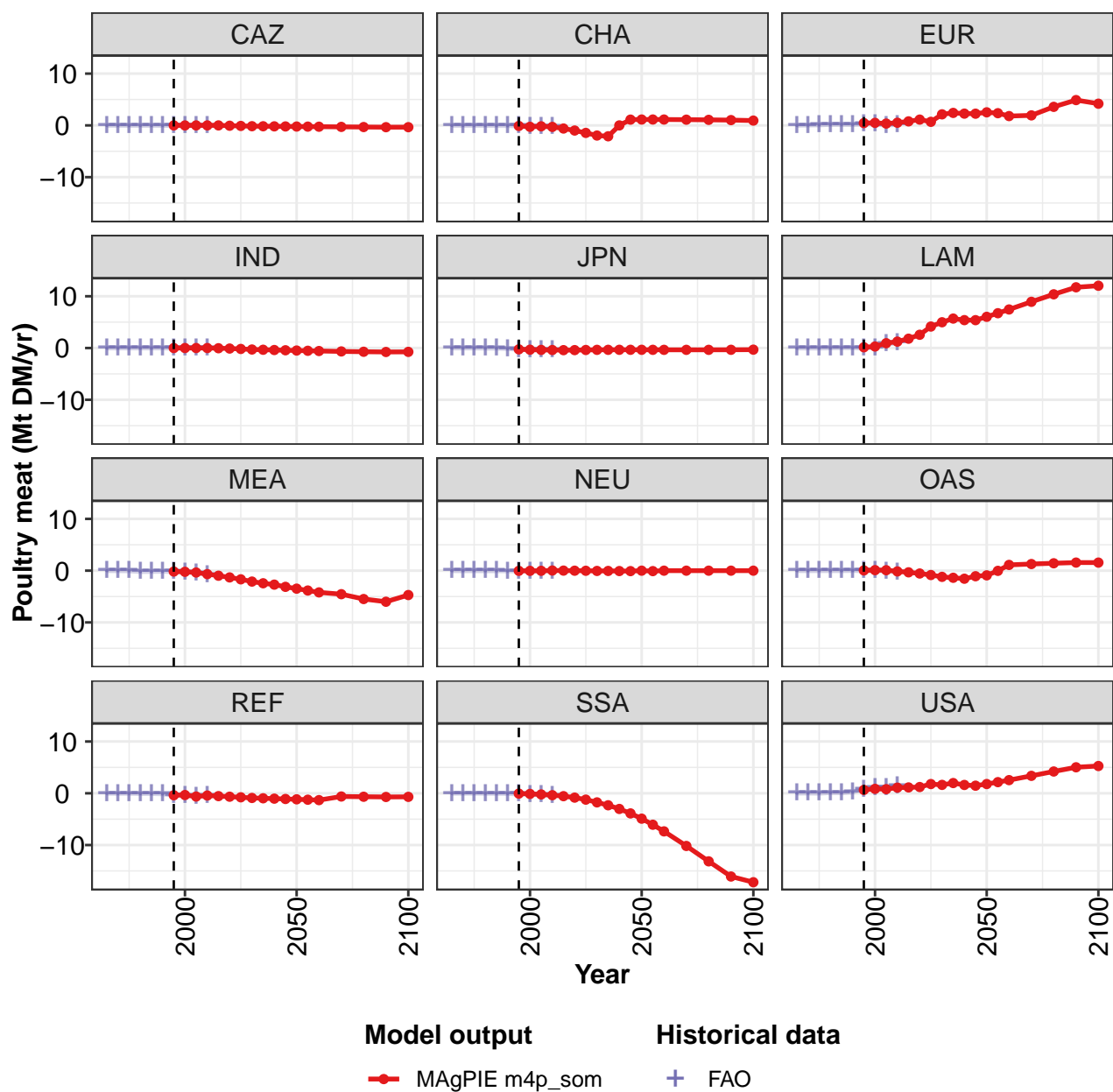


Figure 510: MAgPIE m4p\_som — Trade—Net-Trade—Livestock products—Poultry meat (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.3	0.4	0.4	0.6	0.3	-0.0	-0.0	0.0	0.0	0.0	-0.0
CAZ	0.0	-0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2
CHA	-0.1	-0.3	-0.2	-0.3	-0.6	-1.0	-1.4	-2.0	-2.1	0.0	1.1
EUR	0.5	0.5	0.4	0.5	0.8	1.1	0.7	2.1	2.4	2.3	2.3
IND	0.0	0.0	0.0	0.0	-0.0	-0.1	-0.2	-0.3	-0.3	-0.4	-0.4
JPN	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.3	-0.3	-0.3	-0.3
LAM	0.1	0.3	0.9	1.2	1.8	2.6	4.2	5.0	5.7	5.4	5.4
MEA	-0.2	-0.2	-0.4	-0.7	-1.0	-1.3	-1.7	-2.1	-2.4	-2.7	-3.1
NEU	-0.0	-0.0	-0.0	0.0	0.0	-0.0	-0.0	-0.1	-0.1	-0.1	-0.1
OAS	0.1	0.1	0.1	-0.1	-0.3	-0.5	-0.8	-1.2	-1.4	-1.6	-1.1
REF	-0.4	-0.3	-0.6	-0.4	-0.5	-0.7	-0.8	-0.9	-1.0	-1.0	-1.1
SSA	-0.1	-0.1	-0.2	-0.4	-0.6	-0.8	-1.2	-1.8	-2.3	-3.0	-3.9
USA	0.7	0.9	0.8	1.1	1.1	1.2	1.8	1.6	2.0	1.6	1.5

Table 1934: MAgPIE m4p\_som — Trade—Net-Trade—Livestock products—Poultry meat (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0	0.0	0.0	-0.0	0.0	0.0	0.0
CAZ	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3
CHA	1.1	1.1	1.1	1.1	1.1	1.0	0.9
EUR	2.5	2.4	1.8	1.9	3.6	4.9	4.2
IND	-0.5	-0.5	-0.6	-0.7	-0.7	-0.8	-0.7
JPN	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
LAM	6.0	6.7	7.5	8.9	10.4	11.7	12.0
MEA	-3.5	-3.8	-4.2	-4.5	-5.5	-6.0	-4.7
NEU	0.0	-0.1	0.0	0.0	0.0	0.0	0.0
OAS	-0.9	-0.0	1.1	1.3	1.4	1.6	1.6
REF	-1.2	-1.2	-1.3	-0.6	-0.7	-0.7	-0.7
SSA	-4.9	-6.1	-7.4	-10.2	-13.1	-16.1	-17.2
USA	1.8	2.2	2.5	3.4	4.2	5.0	5.3

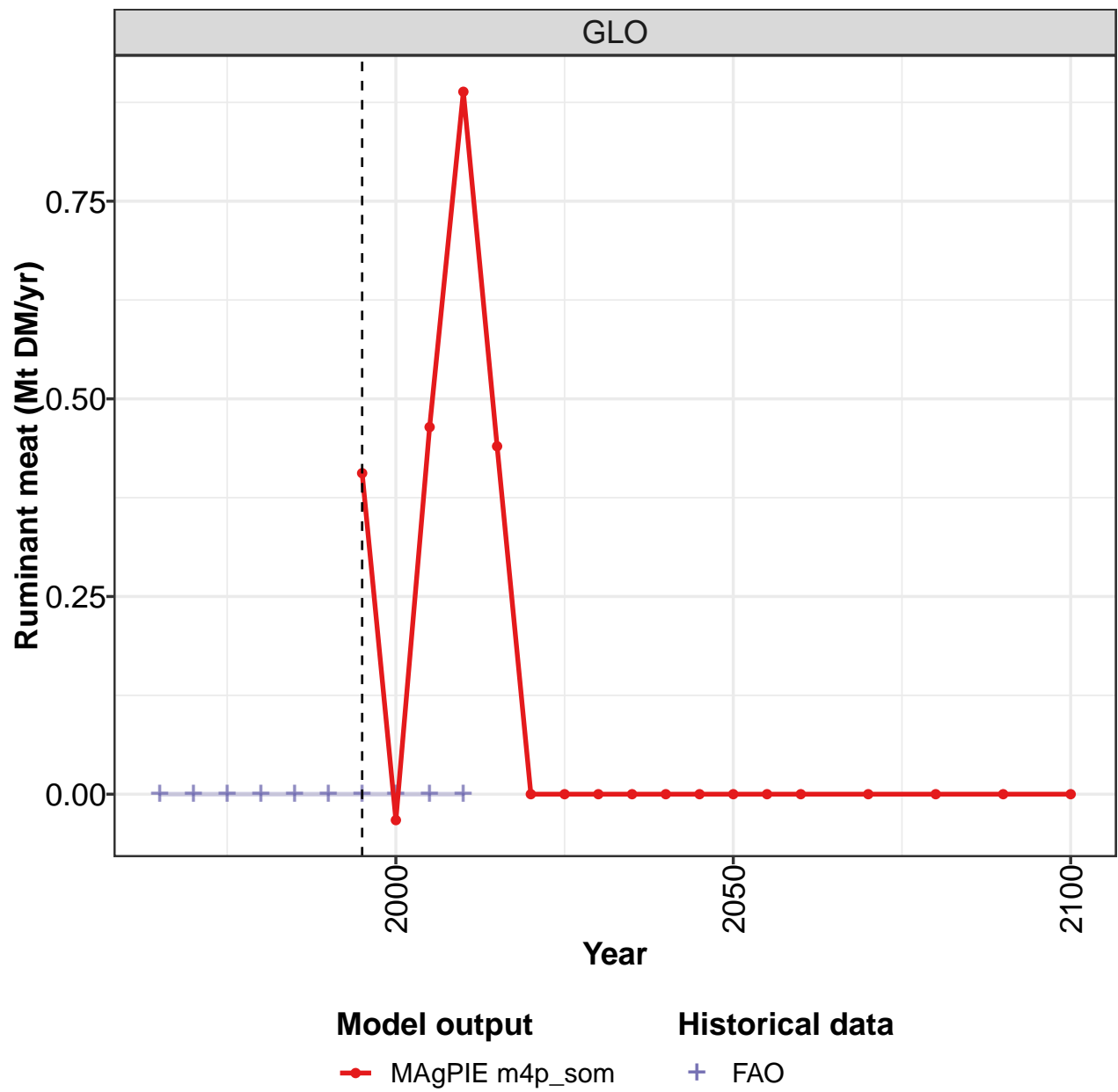
Table 1935: MAgPIE m4p\_som — Trade—Net-Trade—Livestock products—Poultry meat (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	-0.00	0.00	-0.01	-0.00	-0.01	-0.01	-0.01	-0.01	-0.00	-0.02
CHA	-0.00	-0.01	-0.00	-0.01	-0.03	-0.05	-0.11	-0.28	-0.16	-0.27
EUR	0.00	0.06	0.09	0.19	0.20	0.18	0.30	0.30	0.01	0.22
IND	0.00	-0.00	0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00
JPN	-0.00	-0.00	-0.01	-0.03	-0.04	-0.12	-0.25	-0.33	-0.37	-0.39
LAM	-0.00	-0.02	-0.02	0.02	0.06	0.05	-0.01	0.06	0.80	0.95
MEA	-0.00	-0.01	-0.03	-0.19	-0.17	-0.13	-0.19	-0.26	-0.40	-0.72
NEU	-0.01	-0.02	-0.02	-0.03	-0.02	-0.04	-0.05	-0.06	-0.05	-0.04
OAS	-0.00	-0.01	-0.00	-0.01	-0.01	0.03	-0.01	-0.01	-0.04	-0.25
REF	-0.01	-0.03	-0.02	-0.07	-0.06	-0.12	-0.39	-0.35	-0.64	-0.46
SSA	0.00	-0.01	0.00	-0.02	-0.03	-0.05	-0.12	-0.21	-0.30	-0.48
USA	0.03	0.04	0.01	0.14	0.10	0.26	0.84	1.16	1.16	1.46

Table 1936: FAO — Trade—Net-Trade—Livestock products—Poultry meat (Mt DM/yr)

59.3.5 Ruminant meat

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

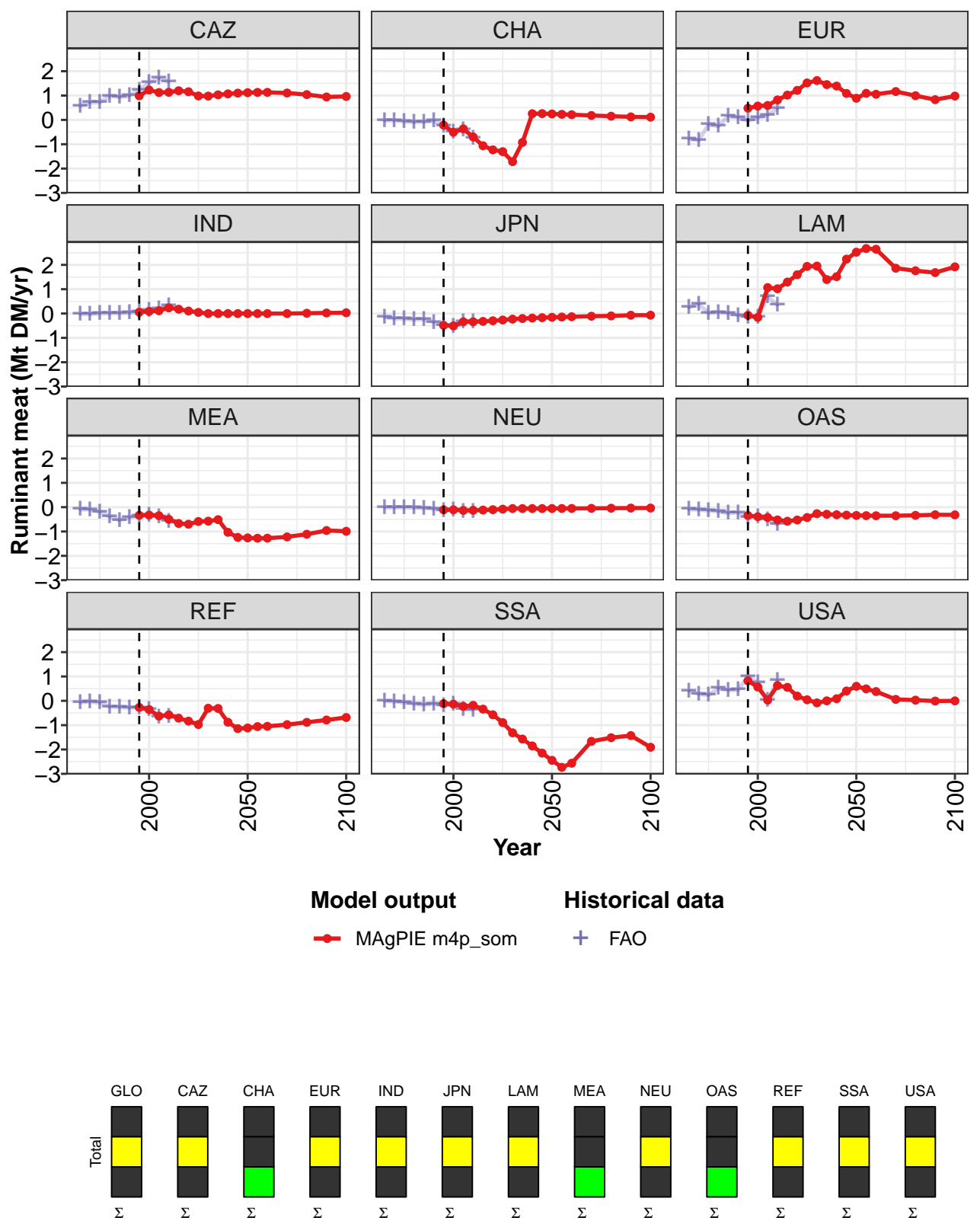


Figure 511: MAgPIE m4p\_som — Trade—Net-Trade—Livestock products—Ruminant meat (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.41	-0.03	0.46	0.89	0.44	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	0.99	1.23	1.13	1.14	1.20	1.16	0.98	0.98	1.03	1.07	1.10
CHA	-0.22	-0.51	-0.37	-0.70	-1.06	-1.23	-1.30	-1.72	-0.93	0.25	0.26
EUR	0.48	0.57	0.59	0.82	1.02	1.21	1.52	1.62	1.45	1.39	1.09
IND	0.06	0.09	0.12	0.23	0.18	0.10	0.05	-0.00	0.00	0.00	0.00
JPN	-0.48	-0.51	-0.34	-0.34	-0.32	-0.30	-0.27	-0.23	-0.21	-0.19	-0.17
LAM	-0.07	-0.16	1.07	1.02	1.29	1.59	1.94	1.95	1.40	1.52	2.24
MEA	-0.33	-0.32	-0.35	-0.50	-0.67	-0.70	-0.59	-0.57	-0.51	-1.03	-1.24
NEU	-0.11	-0.11	-0.13	-0.13	-0.12	-0.10	-0.08	-0.06	-0.06	-0.06	-0.06
OAS	-0.34	-0.39	-0.42	-0.52	-0.58	-0.53	-0.43	-0.27	-0.29	-0.31	-0.33
REF	-0.27	-0.36	-0.63	-0.58	-0.71	-0.83	-0.97	-0.31	-0.31	-0.88	-1.14
SSA	-0.12	-0.14	-0.23	-0.18	-0.34	-0.57	-0.89	-1.31	-1.57	-1.85	-2.15
USA	0.82	0.57	0.03	0.63	0.56	0.19	0.04	-0.08	0.00	0.09	0.40

Table 1937: MAgPIE m4p\_som — Trade—Net-Trade—Livestock products—Ruminant meat (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00	-0.00	0.00	0.00	0.00	0.00	-0.00
CAZ	1.12	1.13	1.13	1.11	1.04	0.94	0.96
CHA	0.25	0.23	0.21	0.18	0.15	0.12	0.11
EUR	0.89	1.09	1.05	1.17	0.99	0.83	0.98
IND	0.00	0.00	0.00	0.00	0.01	0.02	0.03
JPN	-0.16	-0.14	-0.13	-0.11	-0.10	-0.07	-0.07
LAM	2.52	2.67	2.64	1.86	1.76	1.68	1.92
MEA	-1.26	-1.28	-1.27	-1.22	-1.11	-0.96	-0.99
NEU	-0.06	-0.05	-0.05	-0.05	-0.04	-0.04	-0.04
OAS	-0.34	-0.35	-0.35	-0.35	-0.34	-0.31	-0.32
REF	-1.12	-1.06	-1.05	-0.98	-0.88	-0.79	-0.69
SSA	-2.45	-2.73	-2.56	-1.67	-1.52	-1.43	-1.91
USA	0.60	0.49	0.38	0.06	0.03	-0.01	-0.00

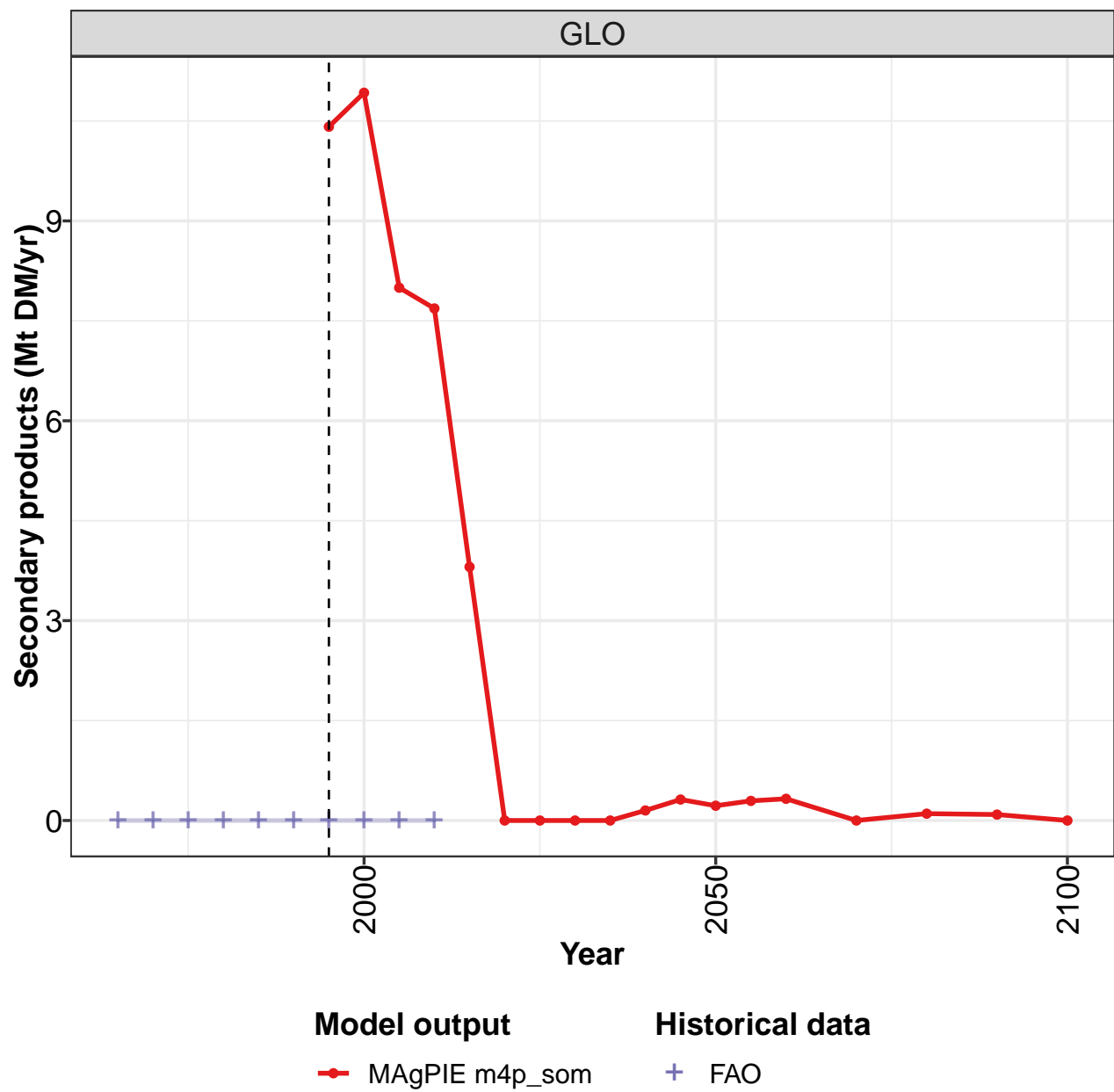
Table 1938: MAgPIE m4p\_som — Trade—Net-Trade—Livestock products—Ruminant meat (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	0.58	0.71	0.72	0.99	0.93	0.99	1.22	1.53	1.71	1.57
CHA	-0.03	-0.02	-0.07	-0.09	-0.08	-0.03	-0.24	-0.50	-0.40	-0.74
EUR	-0.77	-0.84	-0.20	-0.26	0.15	0.10	-0.03	0.09	0.20	0.47
IND	-0.02	-0.03	-0.00	0.01	0.02	0.03	0.07	0.12	0.19	0.32
JPN	-0.14	-0.21	-0.22	-0.25	-0.23	-0.35	-0.48	-0.51	-0.34	-0.34
LAM	0.25	0.39	0.02	0.06	0.02	-0.07	-0.15	-0.16	0.69	0.35
MEA	-0.09	-0.10	-0.20	-0.39	-0.54	-0.42	-0.36	-0.32	-0.38	-0.57
NEU	-0.01	-0.01	-0.00	-0.03	-0.04	-0.07	-0.14	-0.10	-0.16	-0.19
OAS	-0.09	-0.10	-0.14	-0.18	-0.25	-0.22	-0.42	-0.39	-0.52	-0.72
REF	-0.07	-0.04	-0.08	-0.25	-0.26	-0.29	-0.27	-0.37	-0.65	-0.63
SSA	-0.01	-0.03	-0.07	-0.13	-0.16	-0.12	-0.20	-0.13	-0.34	-0.37
USA	0.41	0.28	0.23	0.52	0.44	0.45	1.00	0.73	0.01	0.84

Table 1939: FAO — Trade—Net-Trade—Livestock products—Ruminant meat (Mt DM/yr)

59.4 Secondary products

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

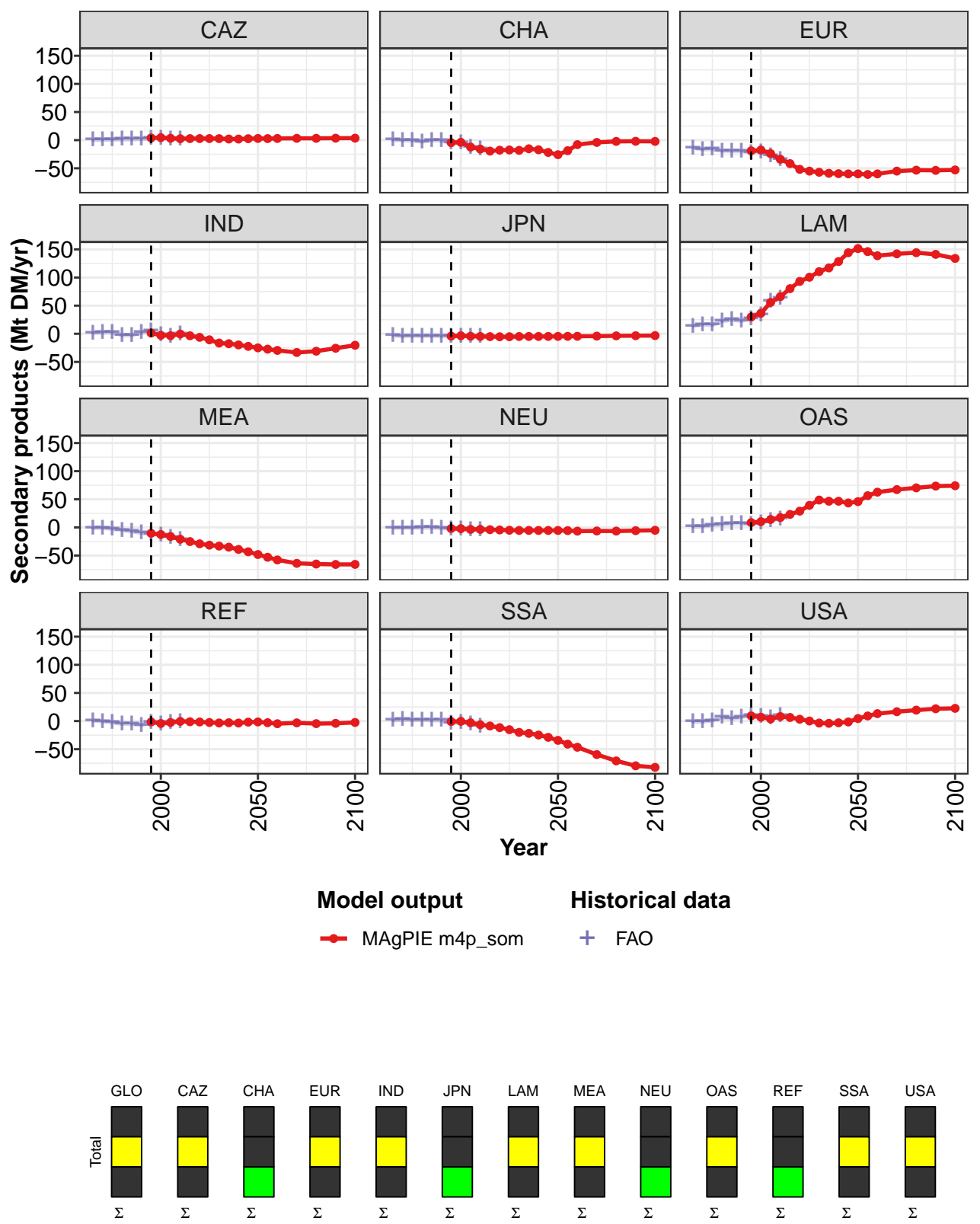


Figure 512: MAgPIE m4p\_som — Trade—Net-Trade—Secondary products (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	10	11	8	8	4	-0	0	0	0	0	0
CAZ	4	4	3	3	3	3	3	3	2	2	3
CHA	-4	-4	-12	-16	-19	-18	-17	-18	-15	-17	-22
EUR	-19	-18	-24	-34	-42	-52	-55	-57	-59	-60	-60
IND	1	-3	-3	-0	-4	-6	-11	-16	-18	-20	-22
JPN	-4	-3	-4	-5	-5	-5	-5	-5	-5	-5	-5
LAM	30	36	56	66	80	93	101	111	117	129	144
MEA	-10	-13	-16	-21	-25	-29	-32	-33	-35	-39	-43
NEU	-2	-2	-4	-3	-4	-4	-5	-5	-5	-5	-5
OAS	9	10	14	18	23	29	39	49	47	47	44
REF	-1	-4	-2	-1	-1	-2	-2	-3	-3	-3	-2
SSA	-1	-0	-3	-7	-9	-12	-15	-20	-22	-25	-29
USA	9	7	4	8	6	3	0	-4	-4	-3	-2

Table 1940: MAgPIE m4p\_som — Trade—Net-Trade—Secondary products (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0	0	0	0	0	0	-0
CAZ	3	3	3	3	3	3	4
CHA	-26	-19	-8	-4	-2	-2	-2
EUR	-60	-61	-60	-55	-53	-54	-53
IND	-25	-27	-30	-33	-31	-26	-20
JPN	-5	-5	-4	-4	-4	-3	-3
LAM	152	146	139	142	144	141	134
MEA	-48	-53	-58	-64	-65	-66	-66
NEU	-5	-6	-7	-6	-6	-6	-5
OAS	46	56	63	67	70	73	74
REF	-2	-3	-5	-3	-5	-4	-2
SSA	-34	-41	-47	-60	-71	-80	-82
USA	5	9	13	17	19	22	23

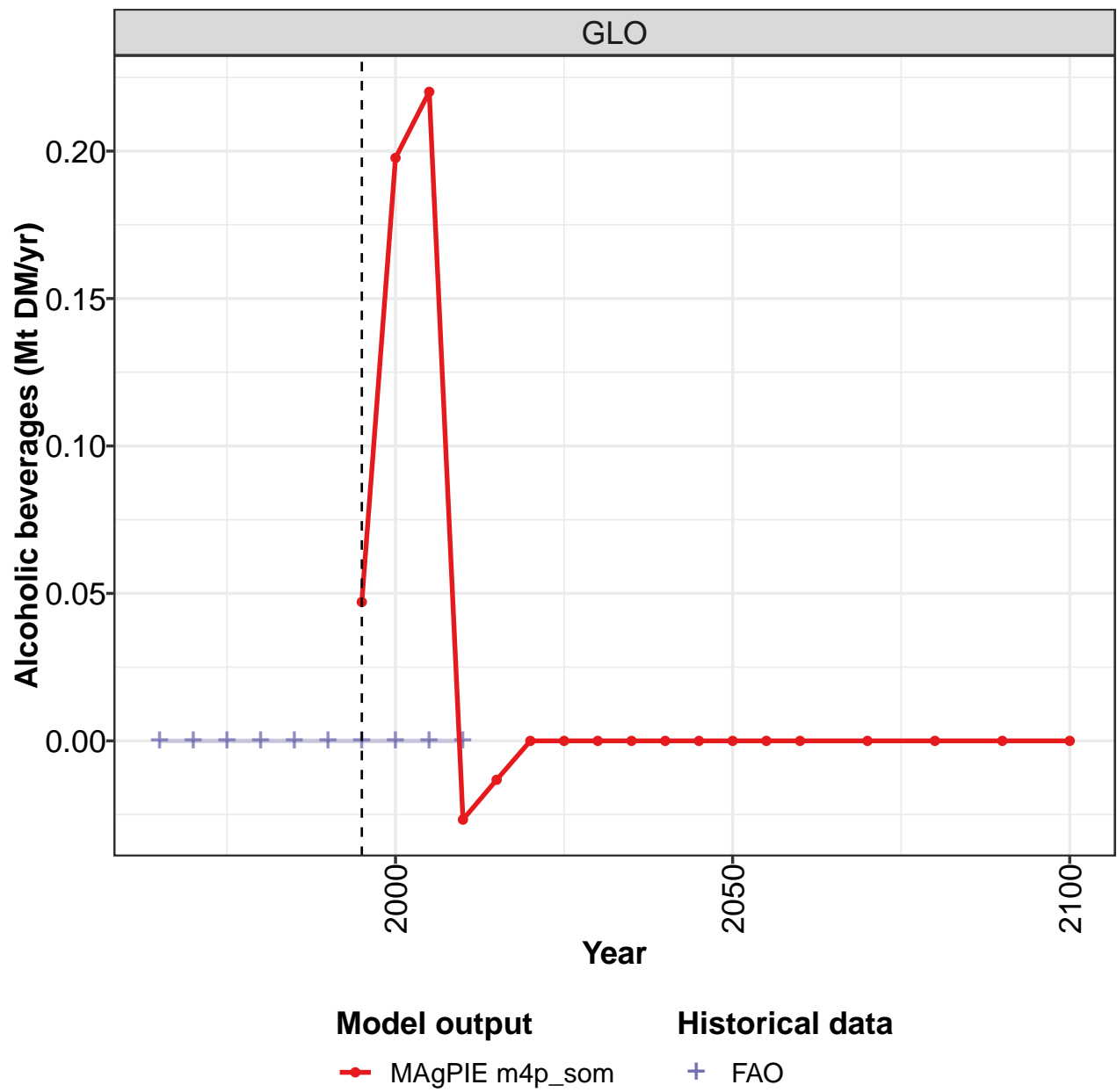
Table 1941: MAgPIE m4p\_som — Trade—Net-Trade—Secondary products (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAZ	0.2	0.8	0.9	1.7	1.6	2.2	3.3	4.0	2.1	2.2
CHA	0.4	-0.4	-0.8	-2.8	-0.2	-1.1	-4.8	-4.4	-12.7	-15.8
EUR	-13.4	-16.5	-15.7	-19.1	-19.3	-19.6	-21.8	-21.3	-28.1	-34.7
IND	1.7	2.5	2.7	-2.4	-2.8	2.1	5.5	-1.1	-3.8	0.0
JPN	-3.0	-4.6	-3.9	-4.0	-4.0	-4.5	-4.2	-3.6	-4.4	-4.8
LAM	13.9	16.7	15.5	22.3	24.9	23.0	26.9	33.6	57.7	62.8
MEA	-1.1	-0.8	-2.6	-4.7	-7.1	-9.7	-11.8	-13.7	-16.8	-21.8
NEU	-0.6	-0.6	-0.6	-0.3	-0.4	-1.2	-2.8	-3.2	-3.9	-3.9
OAS	1.3	2.0	4.0	5.4	6.9	7.6	5.1	8.6	12.0	15.7
REF	0.9	-0.7	-2.3	-5.0	-5.2	-7.2	-2.3	-5.2	-2.9	-1.2
SSA	1.3	2.7	1.8	2.1	1.3	1.2	-3.4	-2.7	-4.6	-8.4
USA	-1.4	-1.1	1.1	6.8	4.2	7.2	10.1	8.9	5.4	10.0

Table 1942: FAO — Trade—Net-Trade—Secondary products (Mt DM/yr)

59.4.1 Alcoholic beverages

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

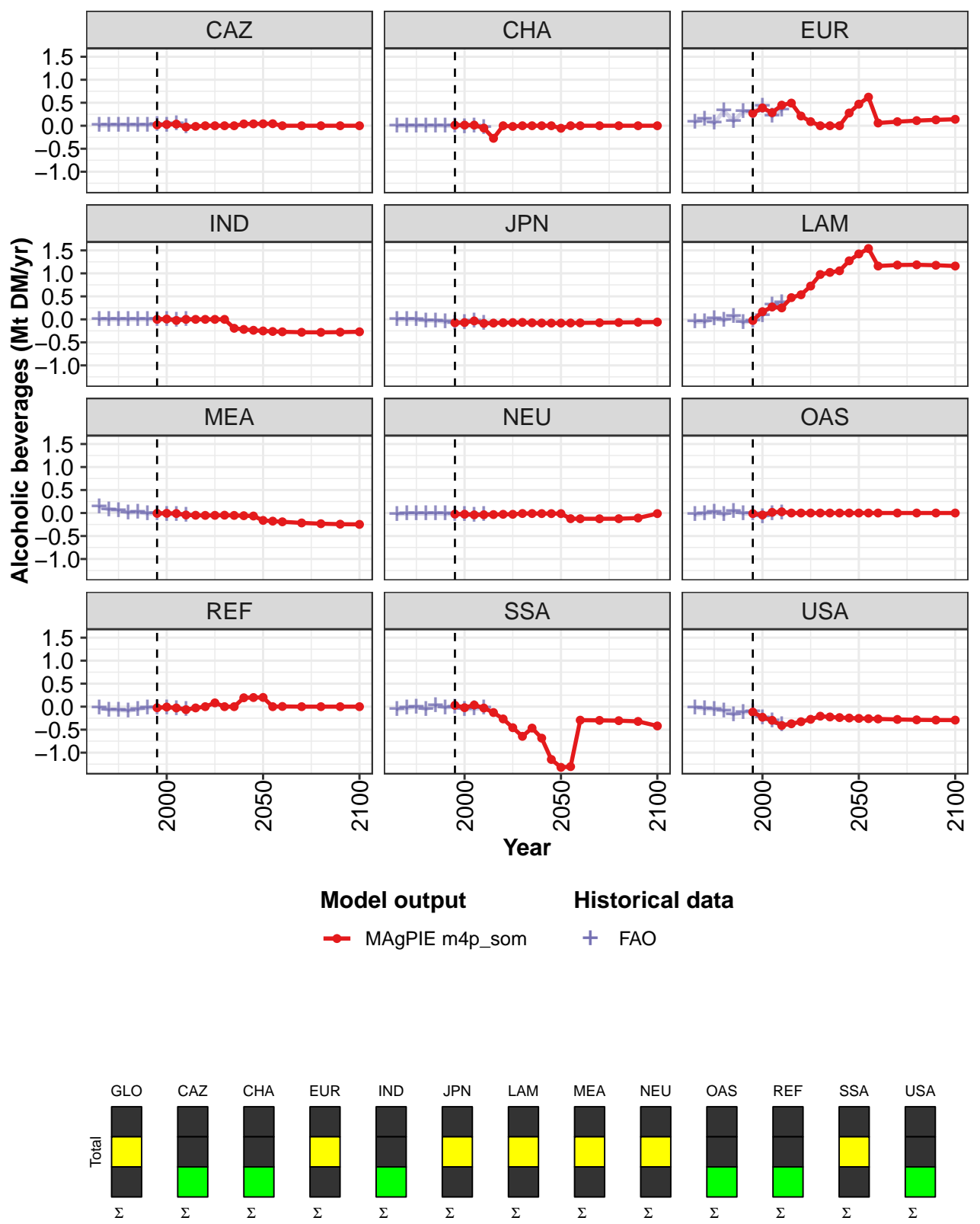


Figure 513: MAgPIE m4p\_som — Trade—Net-Trade—Secondary products—Alcoholic beverages (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.05	0.20	0.22	-0.03	-0.01	0.00	0.00	-0.00	0.00	-0.00	0.00
CAZ	0.02	0.03	0.04	-0.03	-0.01	0.00	0.00	0.00	0.00	0.04	0.04
CHA	0.01	0.01	0.01	-0.05	-0.27	0.00	-0.02	0.00	0.00	0.00	0.00
EUR	0.27	0.39	0.28	0.45	0.49	0.21	0.09	0.00	0.00	0.00	0.28
IND	0.00	0.01	-0.02	0.00	0.00	0.00	0.00	0.00	-0.19	-0.22	-0.24
JPN	-0.07	-0.07	-0.03	-0.09	-0.08	-0.07	-0.07	-0.07	-0.07	-0.08	-0.08
LAM	-0.02	0.17	0.27	0.25	0.47	0.53	0.72	0.98	1.02	1.06	1.27
MEA	-0.01	-0.01	-0.01	-0.04	-0.05	-0.05	-0.05	-0.05	-0.05	-0.06	-0.06
NEU	-0.02	-0.03	-0.04	-0.04	-0.03	-0.03	-0.03	-0.01	-0.01	-0.01	-0.01
OAS	-0.01	-0.04	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	-0.02	-0.01	-0.03	-0.07	-0.03	0.00	0.08	0.00	0.00	0.19	0.20
SSA	0.03	-0.02	0.04	-0.03	-0.13	-0.27	-0.46	-0.65	-0.47	-0.68	-1.15
USA	-0.12	-0.23	-0.30	-0.41	-0.37	-0.33	-0.28	-0.21	-0.22	-0.24	-0.25

Table 1943: MAgPIE m4p\_som — Trade—Net-Trade—Secondary products—Alcoholic beverages (Mt DM/yr)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00	0.00	0.00	0.00	0.00	-0.00	-0.00
CAZ	0.04	0.04	-0.00	0.00	0.00	0.00	0.00
CHA	-0.05	0.00	0.00	0.00	0.00	0.00	0.00
EUR	0.47	0.62	0.06	0.09	0.11	0.13	0.14
IND	-0.25	-0.26	-0.27	-0.28	-0.28	-0.28	-0.27
JPN	-0.08	-0.08	-0.08	-0.07	-0.07	-0.06	-0.06
LAM	1.42	1.54	1.16	1.18	1.19	1.18	1.16
MEA	-0.16	-0.18	-0.19	-0.22	-0.23	-0.24	-0.25
NEU	-0.01	-0.12	-0.12	-0.13	-0.12	-0.11	-0.01
OAS	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REF	0.20	0.00	0.00	0.00	0.00	0.00	0.00
SSA	-1.32	-1.30	-0.29	-0.30	-0.30	-0.32	-0.42
USA	-0.26	-0.26	-0.27	-0.28	-0.29	-0.29	-0.29

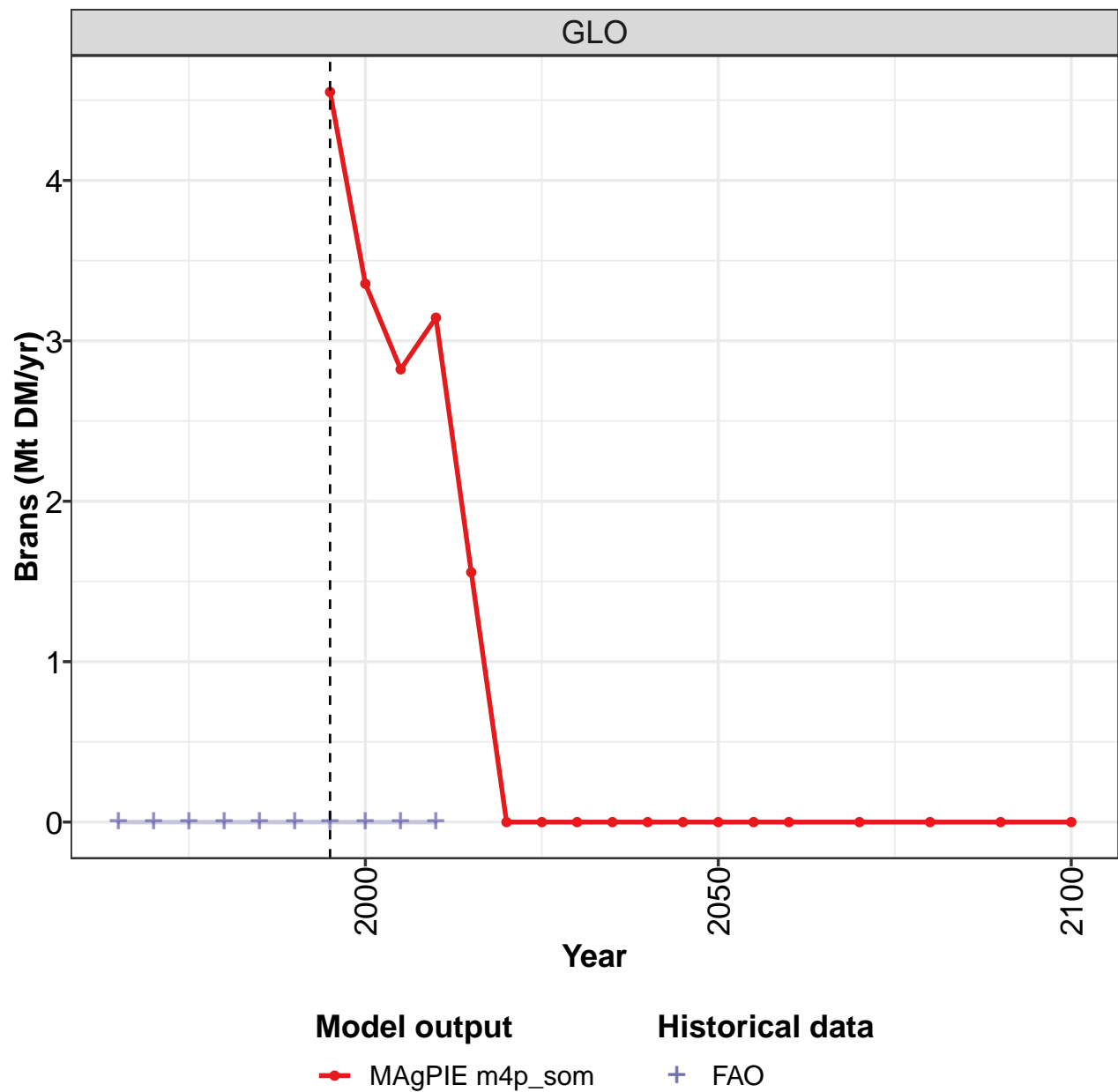
Table 1944: MAgPIE m4p\_som — Trade—Net-Trade—Secondary products—Alcoholic beverages (Mt DM/yr)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAZ	0.005	0.012	0.016	0.014	0.014	0.018	0.022	0.020	0.038	-0.029
CHA	-0.006	-0.003	-0.001	-0.009	0.002	-0.003	-0.009	-0.013	-0.012	-0.029
EUR	0.079	0.145	0.056	0.325	0.100	0.309	0.299	0.426	0.205	0.343
IND	-0.001	-0.000	0.000	-0.001	0.001	0.002	0.001	0.006	-0.023	0.000
JPN	-0.001	-0.001	-0.004	-0.030	-0.031	-0.053	-0.078	-0.069	-0.033	-0.089
LAM	-0.054	-0.054	0.012	-0.022	0.062	-0.066	-0.036	0.088	0.318	0.364
MEA	0.141	0.077	0.057	0.007	0.020	-0.010	-0.011	-0.023	-0.030	-0.041
NEU	-0.025	-0.014	-0.014	-0.016	-0.008	-0.021	-0.026	-0.038	-0.054	-0.034
OAS	-0.037	-0.014	0.016	-0.037	0.042	-0.010	-0.020	-0.082	-0.018	0.001
REF	-0.024	-0.070	-0.075	-0.089	-0.058	-0.019	-0.027	-0.018	-0.036	-0.065
SSA	-0.060	-0.033	-0.006	-0.053	0.028	-0.020	-0.003	-0.060	-0.049	-0.026
USA	-0.019	-0.046	-0.057	-0.088	-0.171	-0.126	-0.112	-0.237	-0.305	-0.396

Table 1945: FAO — Trade—Net-Trade—Secondary products—Alcoholic beverages (Mt DM/yr)

59.4.2 Brans

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

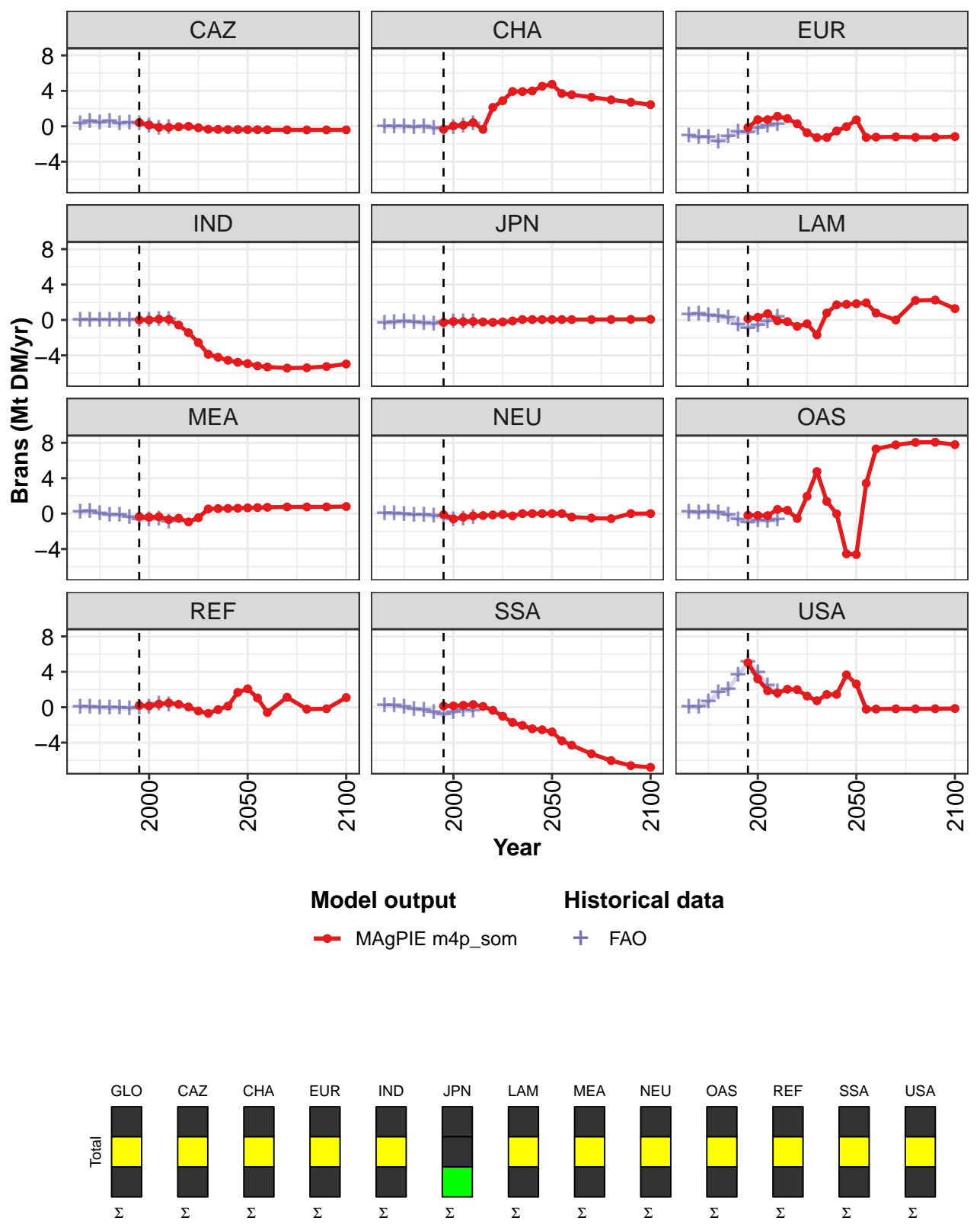


Figure 514: MAGPIE m4p\_som — Trade—Net-Trade—Secondary products—Brans (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	4.55	3.36	2.82	3.14	1.56	-0.00	-0.00	0.00	0.00	-0.00	0.00
CAZ	0.42	0.15	-0.11	-0.11	-0.06	0.00	-0.16	-0.33	-0.34	-0.36	-0.36
CHA	-0.33	0.05	0.13	0.42	-0.34	2.14	2.89	3.94	3.92	4.00	4.53
EUR	-0.13	0.75	0.75	1.13	0.88	0.29	-0.73	-1.27	-1.26	-0.53	-0.04
IND	0.00	-0.00	0.09	0.06	-0.57	-1.44	-2.56	-3.87	-4.22	-4.55	-4.78
JPN	-0.29	-0.18	-0.20	-0.17	-0.23	-0.28	-0.23	-0.11	0.05	0.05	0.05
LAM	0.14	0.30	0.71	-0.10	-0.19	-0.72	-0.44	-1.69	0.78	1.71	1.76
MEA	-0.34	-0.40	-0.35	-0.68	-0.53	-0.94	-0.47	0.52	0.56	0.58	0.61
NEU	-0.12	-0.60	-0.41	-0.26	-0.22	-0.16	-0.09	-0.26	0.00	-0.00	-0.00
OAS	-0.19	-0.21	-0.23	0.48	0.37	-0.55	1.95	4.75	1.39	-0.03	-4.55
REF	0.21	0.15	0.36	0.48	0.32	0.03	-0.42	-0.69	-0.27	0.13	1.68
SSA	0.14	0.15	0.22	0.30	0.09	-0.35	-1.02	-1.72	-2.05	-2.44	-2.54
USA	5.03	3.20	1.86	1.61	2.04	1.99	1.26	0.73	1.44	1.45	3.65

Table 1946: MAgPIE m4p\_som — Trade—Net-Trade—Secondary products—Brans (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.00	0.00	-0.00	0.00	0.00	0.00	0.00
CAZ	-0.37	-0.38	-0.39	-0.40	-0.41	-0.41	-0.40
CHA	4.74	3.70	3.57	3.28	2.99	2.72	2.45
EUR	0.74	-1.25	-1.22	-1.19	-1.23	-1.24	-1.16
IND	-4.93	-5.19	-5.31	-5.43	-5.40	-5.26	-4.98
JPN	0.04	0.04	0.04	0.05	0.05	0.06	0.08
LAM	1.83	1.94	0.78	-0.01	2.20	2.25	1.28
MEA	0.65	0.68	0.71	0.76	0.75	0.76	0.80
NEU	0.00	0.00	-0.40	-0.50	-0.57	0.00	0.00
OAS	-4.62	3.43	7.31	7.76	8.04	8.07	7.79
REF	2.08	1.05	-0.59	1.13	-0.22	-0.18	1.09
SSA	-2.79	-3.79	-4.29	-5.26	-6.03	-6.60	-6.79
USA	2.62	-0.22	-0.21	-0.18	-0.19	-0.17	-0.15

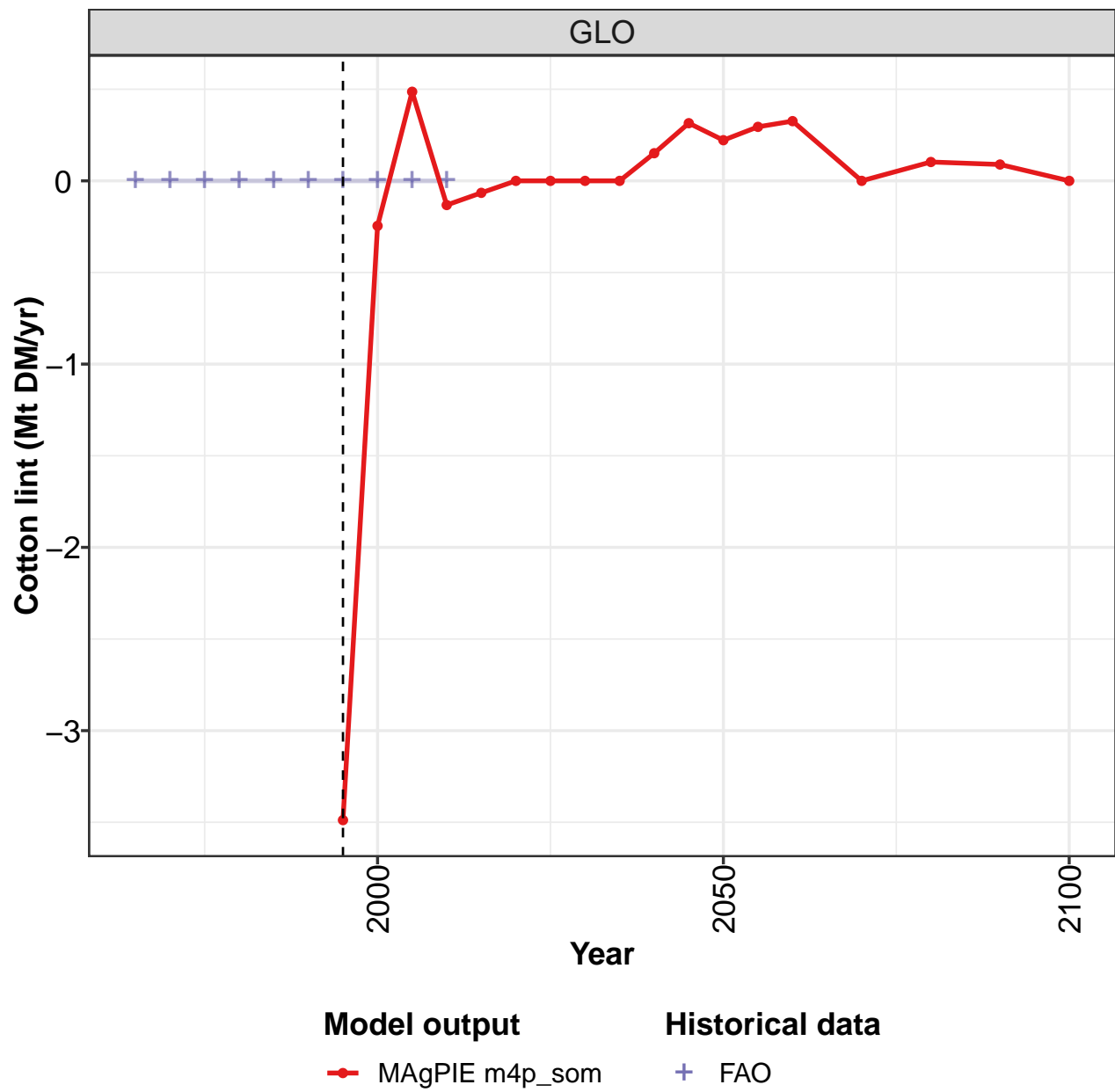
Table 1947: MAgPIE m4p\_som — Trade—Net-Trade—Secondary products—Brans (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	0.26	0.54	0.39	0.54	0.28	0.39	0.31	0.05	-0.17	-0.17
CHA	-0.01	-0.06	-0.08	-0.11	-0.04	-0.24	-0.28	-0.12	0.00	0.34
EUR	-1.11	-1.28	-1.25	-1.73	-1.16	-0.69	-0.76	-0.19	0.04	0.23
IND	0.00	0.01	-0.00	-0.01	-0.02	-0.02	-0.02	-0.00	0.10	0.04
JPN	-0.37	-0.32	-0.19	-0.25	-0.39	-0.44	-0.30	-0.20	-0.21	-0.19
LAM	0.57	0.64	0.47	0.42	0.25	-0.51	-0.95	-0.61	-0.16	0.29
MEA	0.18	0.26	-0.00	-0.19	-0.17	-0.40	-0.71	-0.67	-0.61	-0.97
NEU	0.03	-0.02	-0.07	-0.14	-0.14	-0.29	-0.39	-0.73	-0.57	-0.46
OAS	0.17	0.12	0.17	0.09	-0.18	-0.67	-1.03	-0.81	-0.85	-0.73
REF	0.02	-0.02	-0.03	-0.09	-0.09	-0.16	-0.09	0.01	0.33	0.31
SSA	0.21	0.15	-0.02	-0.20	-0.35	-0.61	-0.86	-0.58	-0.36	-0.44
USA	0.04	-0.02	0.61	1.68	2.02	3.61	5.07	3.86	2.46	1.75

Table 1948: FAO — Trade—Net-Trade—Secondary products—Brans (Mt DM/yr)

59.4.3 Cotton lint

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

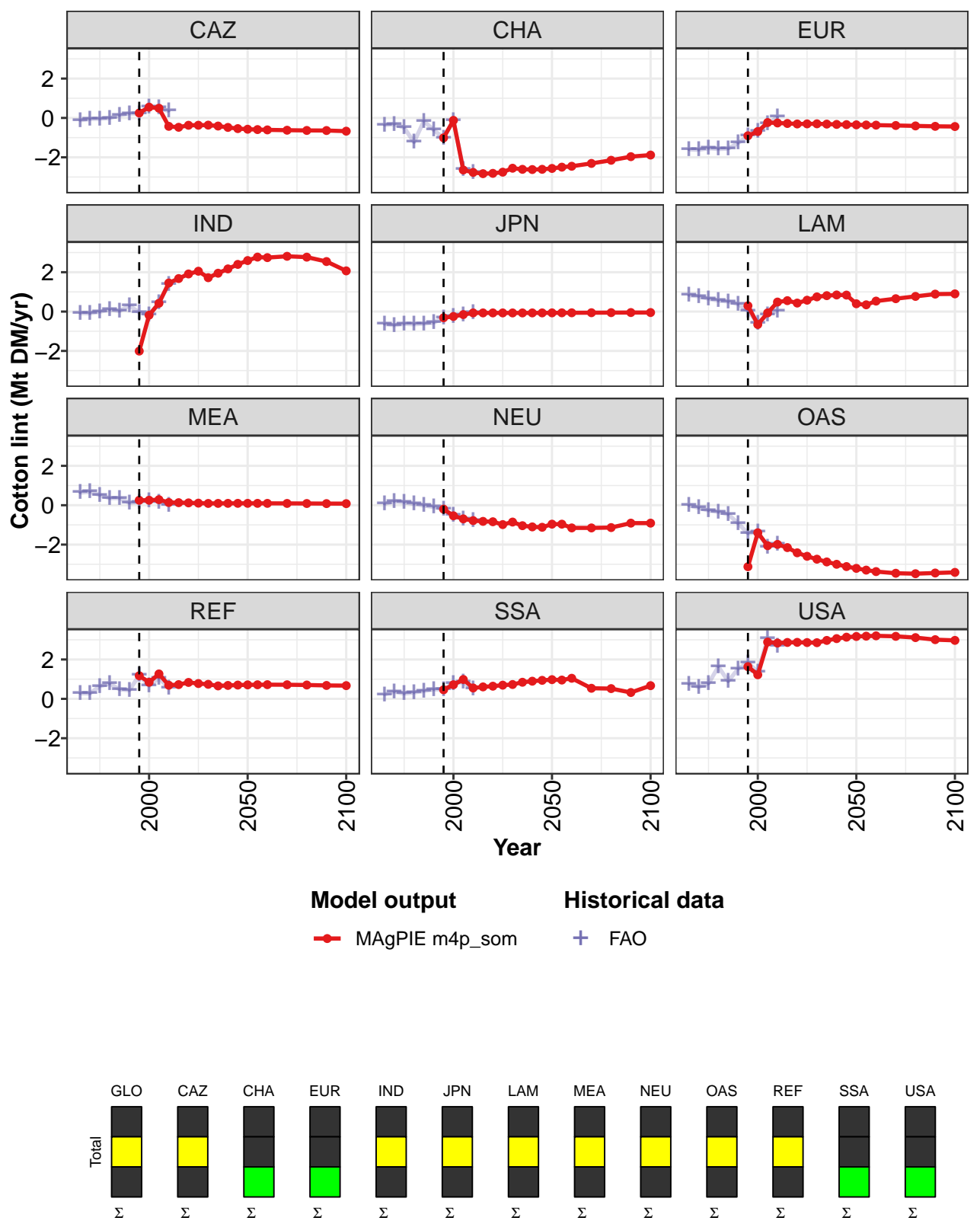


Figure 515: MAgPIE m4p\_som — Trade—Net-Trade—Secondary products—Cotton lint (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	-3.49	-0.25	0.49	-0.13	-0.07	0.00	0.00	-0.00	0.00	0.15	0.31
CAZ	0.25	0.55	0.49	-0.43	-0.47	-0.37	-0.37	-0.36	-0.41	-0.48	-0.54
CHA	-1.01	-0.12	-2.64	-2.77	-2.83	-2.81	-2.75	-2.55	-2.61	-2.62	-2.61
EUR	-0.90	-0.69	-0.24	-0.26	-0.28	-0.31	-0.30	-0.30	-0.31	-0.33	-0.34
IND	-2.01	-0.18	0.42	1.45	1.68	1.91	2.05	1.72	1.95	2.17	2.40
JPN	-0.31	-0.25	-0.15	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07
LAM	0.29	-0.66	-0.07	0.48	0.56	0.43	0.58	0.75	0.81	0.84	0.84
MEA	0.25	0.25	0.28	0.14	0.13	0.12	0.11	0.09	0.09	0.10	0.10
NEU	-0.20	-0.54	-0.69	-0.78	-0.82	-0.84	-0.98	-0.86	-1.04	-1.10	-1.12
OAS	-3.12	-1.40	-2.06	-1.99	-2.15	-2.42	-2.59	-2.74	-2.88	-3.00	-3.12
REF	1.18	0.84	1.27	0.69	0.73	0.84	0.78	0.74	0.66	0.68	0.70
SSA	0.46	0.72	0.98	0.55	0.61	0.64	0.70	0.73	0.84	0.90	0.94
USA	1.64	1.22	2.88	2.84	2.87	2.87	2.86	2.85	2.97	3.06	3.13

Table 1949: MAgPIE m4p\_som — Trade—Net-Trade—Secondary products—Cotton lint (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.22	0.29	0.33	-0.00	0.10	0.09	-0.00
CAZ	-0.57	-0.59	-0.61	-0.62	-0.64	-0.64	-0.67
CHA	-2.57	-2.50	-2.45	-2.31	-2.15	-1.97	-1.88
EUR	-0.35	-0.36	-0.37	-0.38	-0.41	-0.43	-0.44
IND	2.59	2.77	2.74	2.81	2.77	2.54	2.07
JPN	-0.06	-0.06	-0.06	-0.06	-0.05	-0.05	-0.05
LAM	0.40	0.34	0.53	0.65	0.77	0.89	0.90
MEA	0.10	0.10	0.09	0.09	0.09	0.08	0.08
NEU	-0.96	-0.96	-1.15	-1.15	-1.14	-0.91	-0.91
OAS	-3.21	-3.30	-3.37	-3.46	-3.48	-3.44	-3.41
REF	0.71	0.72	0.72	0.72	0.70	0.68	0.67
SSA	0.98	0.96	1.05	0.54	0.52	0.32	0.67
USA	3.17	3.19	3.20	3.18	3.11	3.01	2.97

Table 1950: MAgPIE m4p\_som — Trade—Net-Trade—Secondary products—Cotton lint (Mt DM/yr) [PART 2/2]

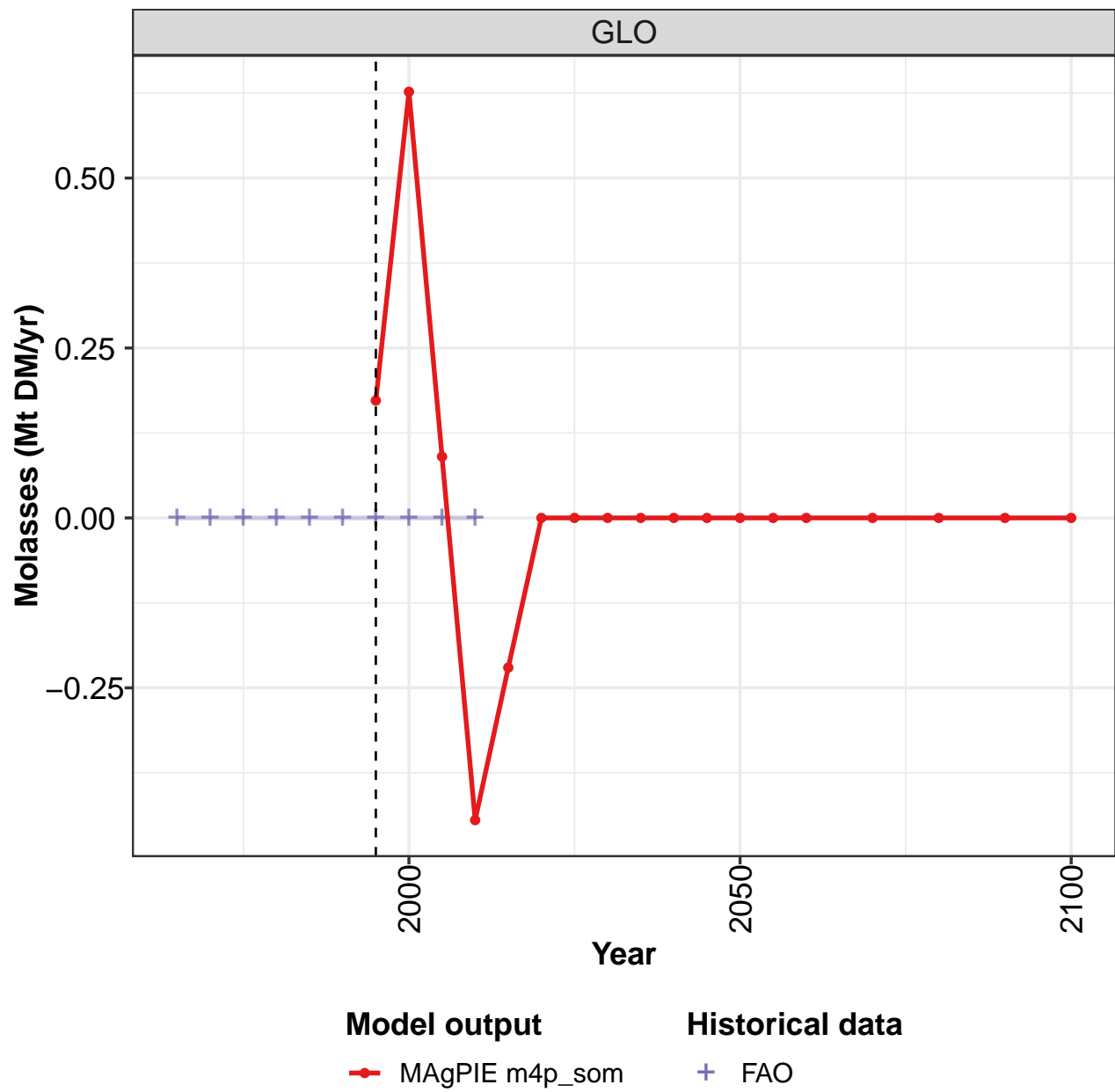
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	-0.12	-0.05	-0.04	-0.01	0.14	0.23	0.22	0.58	0.51	0.35
CHA	-0.36	-0.32	-0.50	-1.23	-0.16	-0.62	-1.02	-0.12	-2.62	-2.76
EUR	-1.60	-1.62	-1.54	-1.58	-1.56	-1.27	-0.92	-0.66	-0.30	0.04
IND	-0.07	-0.09	-0.01	0.10	0.03	0.30	-0.04	-0.18	0.46	1.38
JPN	-0.63	-0.69	-0.62	-0.65	-0.61	-0.56	-0.31	-0.25	-0.15	-0.07
LAM	0.83	0.78	0.65	0.55	0.51	0.37	0.05	-0.58	-0.17	0.04
MEA	0.64	0.68	0.52	0.36	0.36	0.12	0.16	0.24	0.17	0.01
NEU	0.07	0.20	0.14	0.07	-0.02	-0.09	-0.21	-0.50	-0.71	-0.77
OAS	-0.01	-0.13	-0.27	-0.34	-0.46	-0.92	-1.43	-1.35	-2.14	-1.96
REF	0.28	0.28	0.64	0.77	0.48	0.44	1.20	0.66	1.05	0.57
SSA	0.22	0.37	0.26	0.32	0.40	0.48	0.48	0.80	0.85	0.50
USA	0.76	0.60	0.77	1.64	0.89	1.53	1.84	1.36	3.05	2.67

Table 1951: FAO — Trade—Net-Trade—Secondary products—Cotton lint (Mt DM/yr)



59.4.4 Molasses

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

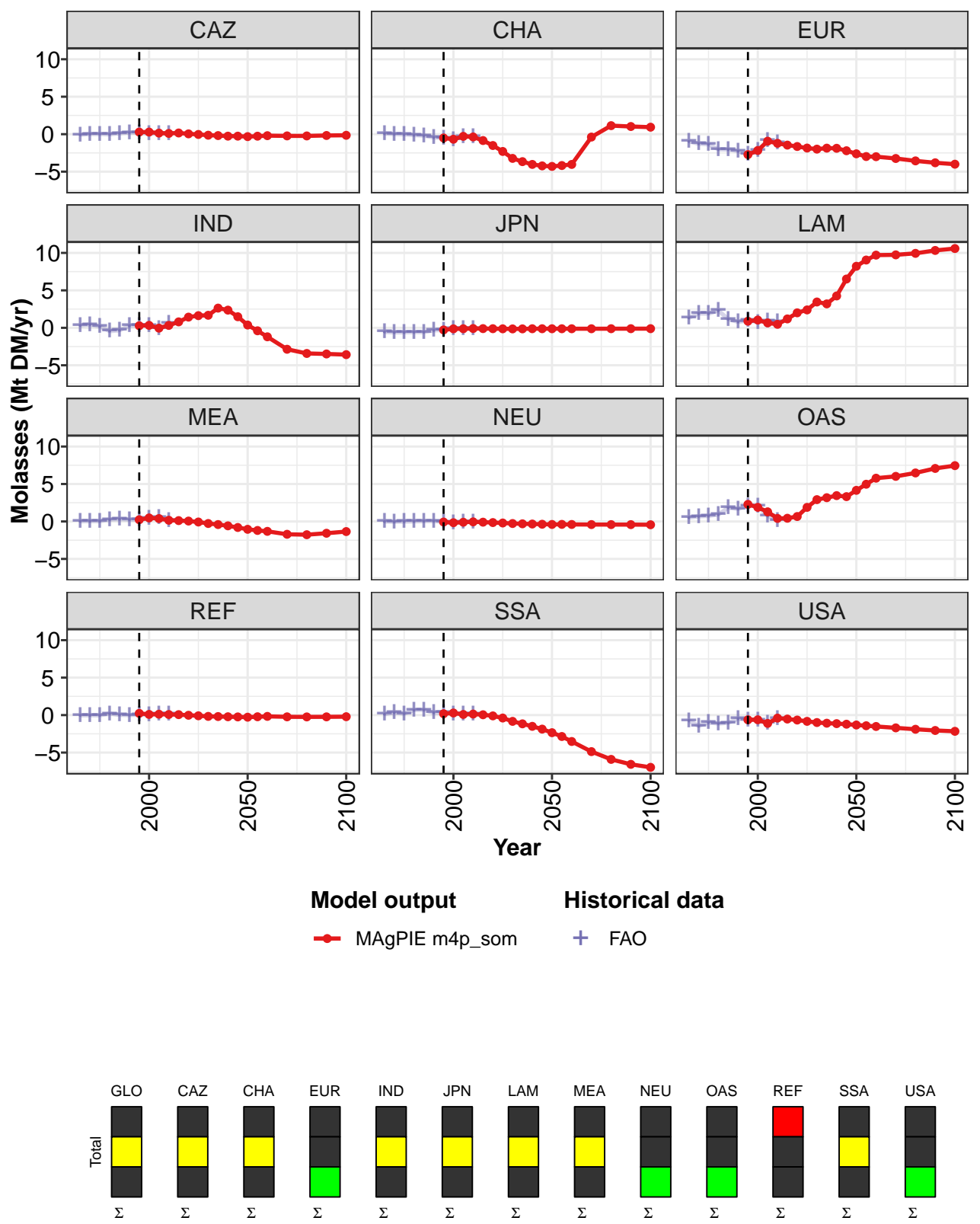


Figure 516: MAGPIE m4p\_som — Trade—Net-Trade—Secondary products—Molasses (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.2	0.6	0.1	-0.4	-0.2	0.0	-0.0	0.0	-0.0	0.0	0.0
CAZ	0.3	0.3	0.1	0.1	0.2	0.0	-0.0	-0.1	-0.2	-0.3	-0.3
CHA	-0.5	-0.7	-0.3	-0.4	-0.8	-1.5	-2.3	-3.2	-3.7	-4.0	-4.2
EUR	-2.7	-2.2	-0.9	-1.2	-1.5	-1.6	-1.8	-2.0	-1.9	-1.9	-2.2
IND	0.3	0.3	-0.0	0.3	0.8	1.4	1.6	1.7	2.6	2.4	1.5
JPN	-0.3	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
LAM	0.9	1.0	0.7	0.5	1.2	2.0	2.4	3.4	3.2	4.3	6.5
MEA	0.2	0.5	0.4	0.2	0.1	0.1	-0.1	-0.3	-0.4	-0.6	-0.8
NEU	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	-0.2	-0.3	-0.3	-0.3	-0.4
OAS	2.3	1.9	1.3	0.4	0.4	0.7	1.9	2.9	3.2	3.5	3.3
REF	0.2	0.1	0.1	0.1	0.1	-0.0	-0.1	-0.2	-0.2	-0.2	-0.2
SSA	0.2	0.3	0.1	0.1	0.0	-0.1	-0.4	-0.8	-1.2	-1.5	-1.9
USA	-0.6	-0.6	-1.1	-0.4	-0.5	-0.7	-0.8	-1.0	-1.1	-1.1	-1.2

Table 1952: MAgPIE m4p\_som — Trade—Net-Trade—Secondary products—Molasses (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0	0.0	-0.0	0.0	0.0	0.0	-0.0
CAZ	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.1
CHA	-4.3	-4.2	-4.0	-0.4	1.1	1.0	0.9
EUR	-2.6	-3.0	-3.0	-3.2	-3.6	-3.8	-4.0
IND	0.4	-0.4	-1.2	-2.9	-3.4	-3.5	-3.6
JPN	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
LAM	8.2	9.0	9.7	9.7	9.9	10.3	10.6
MEA	-1.0	-1.2	-1.3	-1.7	-1.8	-1.6	-1.3
NEU	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
OAS	4.2	5.0	5.8	6.0	6.5	7.1	7.5
REF	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
SSA	-2.3	-2.9	-3.5	-4.9	-5.9	-6.6	-7.0
USA	-1.3	-1.4	-1.5	-1.7	-1.9	-2.0	-2.2

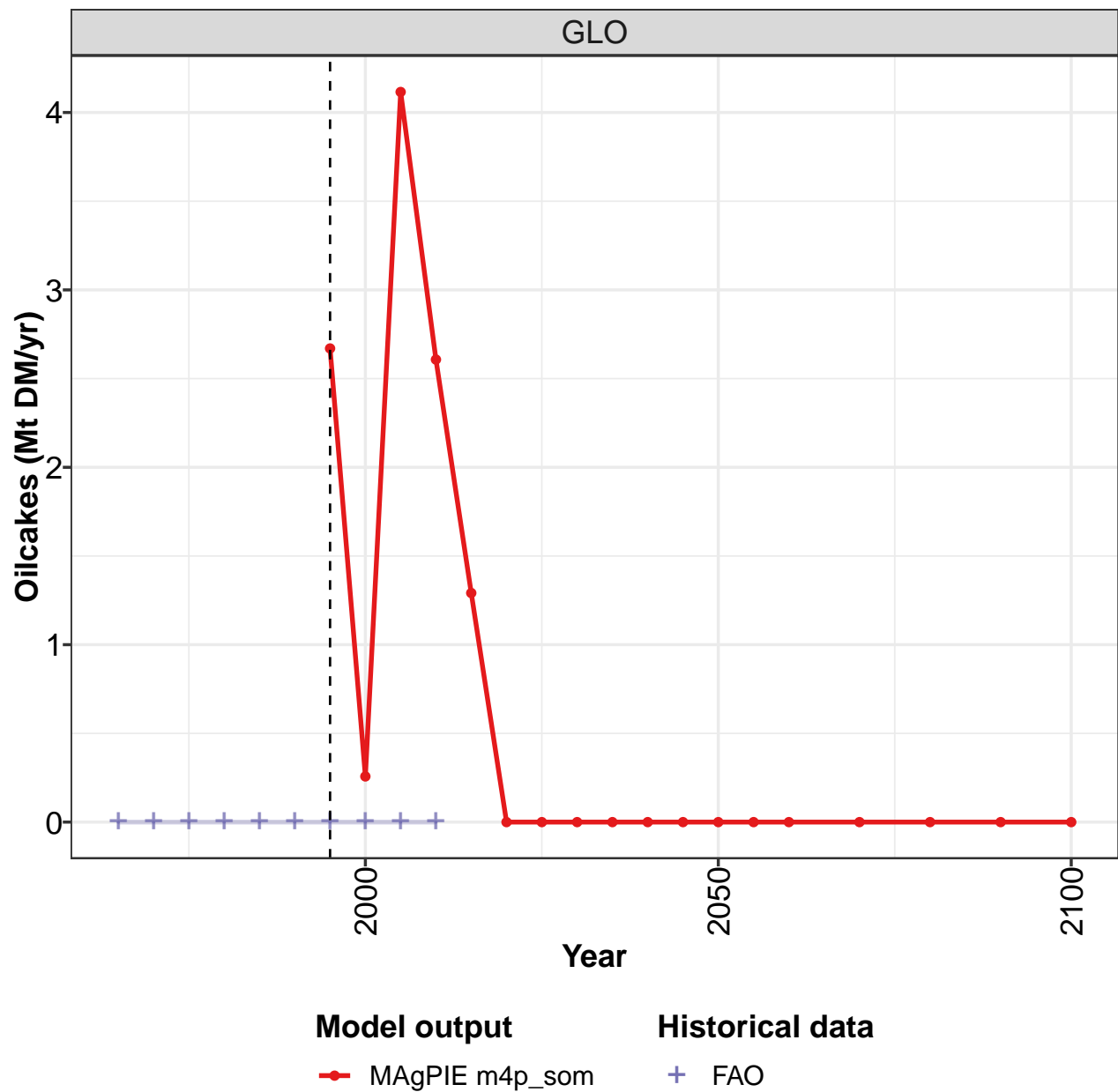
Table 1953: MAgPIE m4p\_som — Trade—Net-Trade—Secondary products—Molasses (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CAZ	-0.08	0.01	0.02	-0.03	0.13	0.21	0.17	0.08	0.09	0.04
CHA	0.08	0.01	-0.03	-0.13	-0.19	-0.44	-0.51	-0.69	-0.30	-0.37
EUR	-0.97	-1.27	-1.36	-2.02	-2.05	-2.27	-2.66	-2.14	-0.87	-1.15
IND	0.32	0.44	0.17	-0.45	-0.34	0.27	0.33	0.29	-0.05	0.57
JPN	-0.55	-0.61	-0.60	-0.57	-0.57	-0.35	-0.28	-0.14	-0.12	-0.09
LAM	1.32	1.91	1.90	2.30	1.16	0.78	0.99	0.77	0.93	0.80
MEA	0.02	0.04	0.04	0.25	0.31	0.24	0.23	0.39	0.51	0.17
NEU	-0.02	-0.06	-0.02	0.01	0.04	0.06	-0.08	-0.19	-0.10	-0.02
OAS	0.51	0.68	0.74	0.92	1.84	1.67	2.08	2.06	0.74	0.15
REF	-0.03	-0.03	-0.04	0.20	0.03	0.00	0.06	0.01	0.17	0.17
SSA	0.12	0.34	0.19	0.66	0.69	0.31	0.31	0.17	0.10	0.16
USA	-0.72	-1.46	-1.00	-1.13	-1.04	-0.48	-0.63	-0.62	-1.10	-0.42

Table 1954: FAO — Trade—Net-Trade—Secondary products—Molasses (Mt DM/yr)

59.4.5 Oilcakes

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

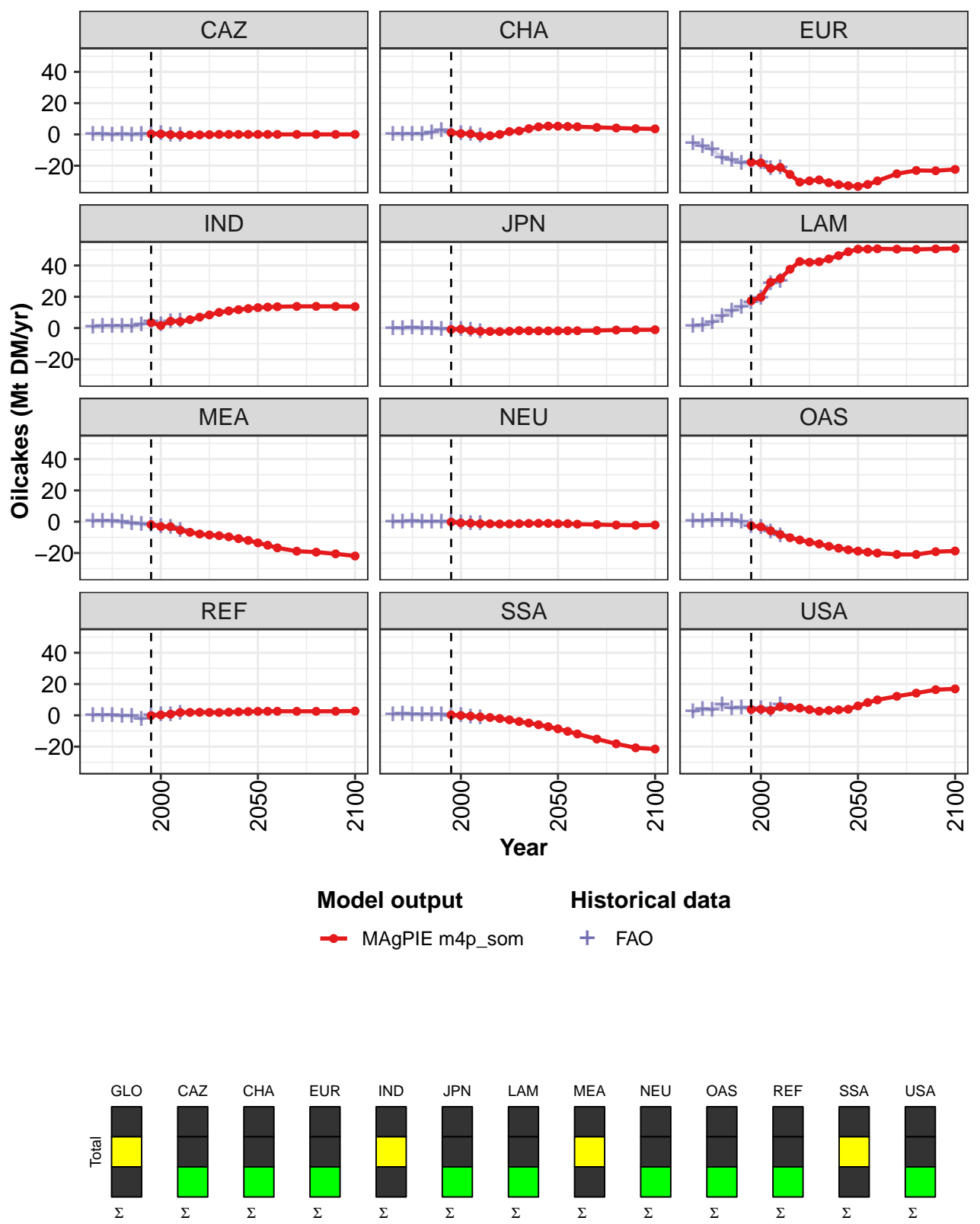


Figure 517: MAGPIE m4p\_som — Trade—Net-Trade—Secondary products—Oilcakes (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	2.7	0.3	4.1	2.6	1.3	0.0	0.0	-0.0	0.0	0.0	0.0
CAZ	0.3	0.3	-0.1	-0.5	-0.4	-0.3	-0.2	0.0	0.0	-0.0	0.0
CHA	1.1	0.6	0.4	-1.1	-0.8	0.0	1.8	2.2	3.7	4.8	5.3
EUR	-17.8	-18.2	-21.7	-21.1	-25.6	-30.5	-29.7	-29.1	-30.9	-32.1	-32.8
IND	3.5	1.7	4.3	4.1	5.4	7.0	8.4	10.0	11.0	11.8	12.4
JPN	-0.9	-0.7	-1.5	-2.1	-2.2	-2.3	-2.0	-1.6	-1.7	-1.8	-1.8
LAM	17.4	19.7	29.3	31.7	37.6	42.5	42.0	42.4	44.2	46.3	48.8
MEA	-1.9	-3.1	-3.2	-5.4	-6.8	-7.9	-8.5	-8.9	-9.7	-10.8	-12.0
NEU	-0.2	-0.8	-0.9	-1.2	-1.3	-1.5	-1.4	-1.3	-1.1	-1.0	-1.1
OAS	-2.5	-3.3	-5.8	-8.2	-10.2	-11.7	-13.1	-14.2	-15.7	-16.9	-18.0
REF	-0.2	0.3	0.8	1.8	1.9	2.0	1.9	1.8	2.0	2.2	2.4
SSA	0.3	-0.1	-0.5	-1.0	-1.4	-2.0	-2.9	-4.0	-4.9	-6.0	-7.3
USA	3.7	3.9	3.2	5.5	5.2	4.7	3.7	2.7	3.2	3.6	3.9

Table 1955: MAgPIE m4p.som — Trade—Net-Trade—Secondary products—Oilcakes (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0	-0.0	-0.0	0.0	-0.0	0.0	0.0
CAZ	-0.0	0.0	0.0	0.0	0.0	-0.0	-0.0
CHA	5.3	5.1	4.9	4.5	4.1	3.7	3.5
EUR	-33.2	-32.0	-29.7	-25.2	-23.0	-23.2	-22.4
IND	13.1	13.4	13.6	13.8	13.9	13.9	13.7
JPN	-1.8	-1.7	-1.7	-1.6	-1.3	-1.2	-1.1
LAM	50.4	50.5	50.6	50.5	50.3	50.6	50.8
MEA	-13.5	-15.0	-16.7	-18.9	-19.5	-20.5	-21.9
NEU	-1.3	-1.3	-1.6	-1.8	-2.1	-2.3	-2.1
OAS	-18.8	-19.5	-20.1	-21.0	-21.0	-19.2	-18.7
REF	2.5	2.6	2.6	2.6	2.6	2.6	2.8
SSA	-8.6	-10.2	-11.9	-15.2	-18.2	-20.8	-21.5
USA	6.0	8.2	9.9	12.2	14.2	16.4	16.9

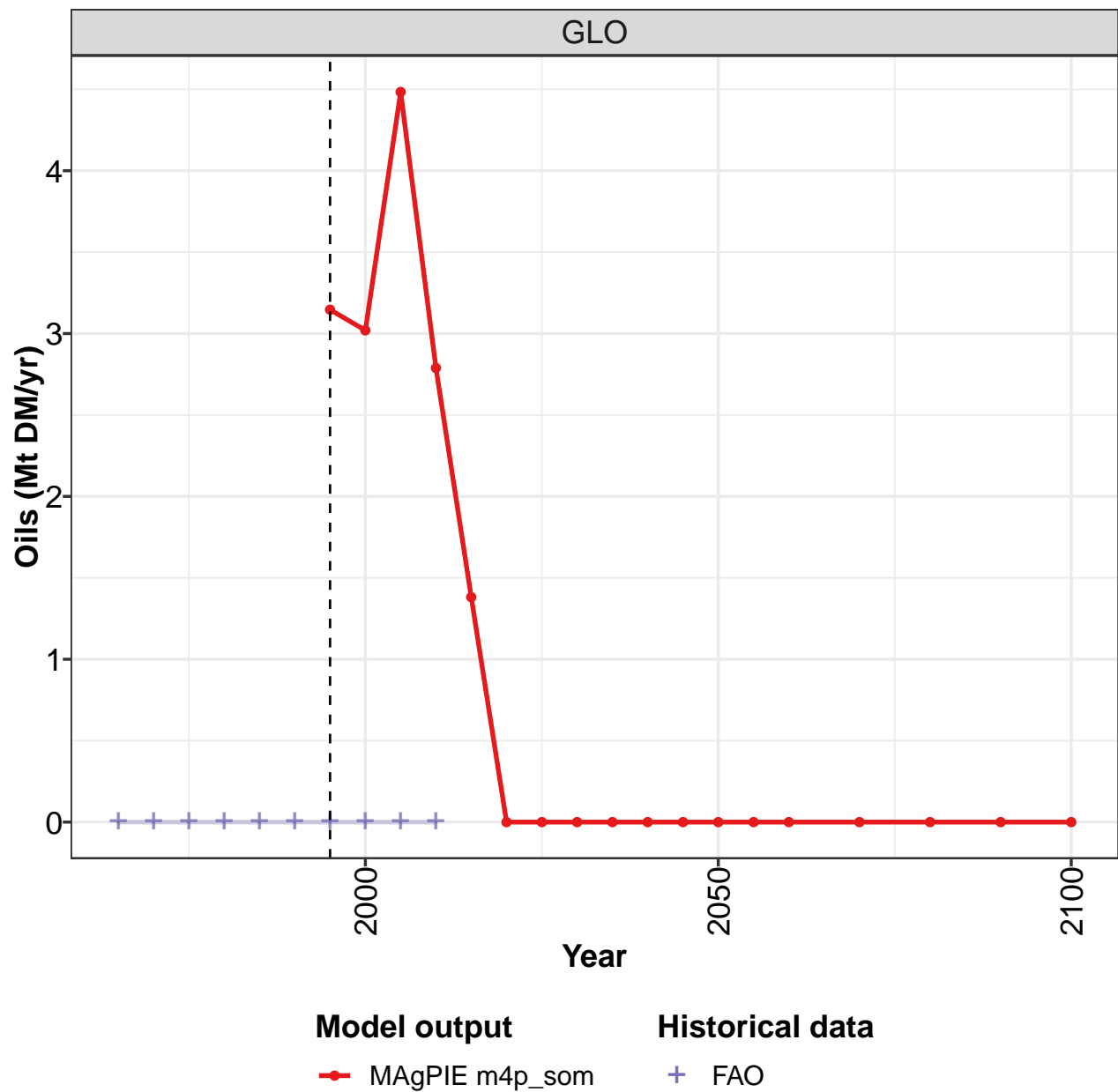
Table 1956: MAgPIE m4p.som — Trade—Net-Trade—Secondary products—Oilcakes (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAZ	0.0	-0.1	-0.2	-0.1	-0.3	-0.2	-0.0	0.3	-0.2	-0.5
CHA	0.0	0.0	0.0	0.0	1.3	2.7	0.8	0.3	-0.0	-1.0
EUR	-5.6	-7.7	-9.7	-15.0	-16.6	-18.2	-18.0	-18.2	-22.0	-21.1
IND	0.8	1.0	1.1	1.0	0.9	2.3	4.0	2.0	4.0	4.6
JPN	-0.1	-0.3	-0.1	-0.3	-0.2	-0.7	-0.9	-0.7	-1.5	-2.0
LAM	1.4	1.8	3.5	7.5	10.9	13.5	16.4	19.1	28.5	29.7
MEA	0.3	0.4	0.2	-0.3	-1.1	-1.7	-2.2	-3.1	-3.6	-5.8
NEU	-0.1	0.0	0.2	-0.0	0.0	-0.1	-0.4	-0.7	-1.2	-1.4
OAS	0.5	0.5	0.7	0.6	0.7	-0.3	-3.1	-3.4	-6.7	-9.0
REF	0.0	-0.0	-0.0	-0.4	-0.4	-2.3	-0.3	0.2	0.5	1.6
SSA	0.6	0.7	0.6	0.3	0.3	0.4	-0.5	-0.1	-1.3	-1.5
USA	2.2	3.8	3.5	6.8	4.5	4.6	4.1	4.3	3.5	6.5

Table 1957: FAO — Trade—Net-Trade—Secondary products—Oilcakes (Mt DM/yr)

59.4.6 Oils

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

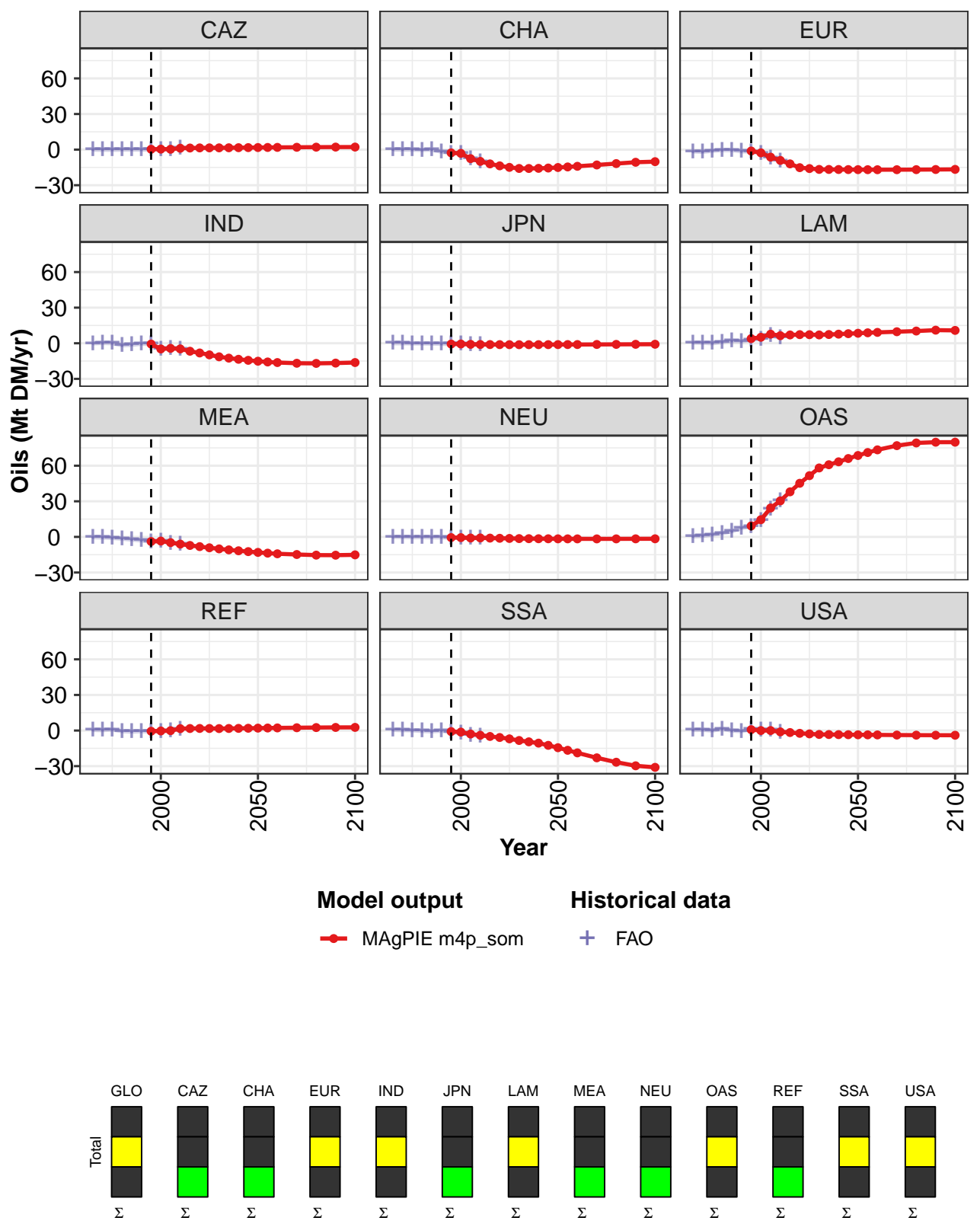


Figure 518: MAgPIE m4p\_som — Trade—Net-Trade—Secondary products—Oils (Mt DM/yr)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	3.1	3.0	4.5	2.8	1.4	0.0	0.0	-0.0	0.0	0.0	0.0
CAZ	0.3	0.4	0.3	1.2	1.4	1.5	1.5	1.5	1.6	1.6	1.7
CHA	-2.7	-3.1	-7.6	-9.9	-12.0	-13.7	-15.0	-15.9	-15.9	-15.8	-15.5
EUR	-1.2	-2.7	-6.3	-9.1	-12.0	-15.2	-15.9	-16.7	-16.7	-16.8	-16.8
IND	-0.7	-4.8	-4.3	-4.7	-6.7	-8.2	-9.8	-11.4	-12.5	-13.5	-14.4
JPN	-0.7	-0.6	-0.9	-1.0	-1.1	-1.1	-1.2	-1.2	-1.2	-1.2	-1.1
LAM	3.9	5.0	7.7	6.4	7.0	7.3	7.2	7.0	7.4	7.7	8.1
MEA	-3.9	-3.5	-4.8	-6.1	-7.2	-8.2	-9.1	-10.1	-10.9	-11.7	-12.4
NEU	-0.6	-0.6	-0.9	-0.9	-1.0	-1.2	-1.3	-1.4	-1.5	-1.5	-1.6
OAS	9.3	14.5	24.4	30.4	38.0	45.2	51.6	58.1	60.8	63.3	66.0
REF	-0.6	-0.3	-0.1	1.6	1.7	1.8	1.7	1.7	1.7	1.8	1.9
SSA	-0.9	-1.3	-2.9	-4.0	-5.0	-5.8	-7.0	-8.4	-9.5	-10.6	-12.5
USA	0.8	0.0	0.0	-1.1	-1.7	-2.3	-2.8	-3.3	-3.4	-3.4	-3.5

Table 1958: MAgPIE m4p\_som — Trade—Net-Trade—Secondary products—Oils (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0	-0.0	0.0	0.0	0.0	0.0	-0.0
CAZ	1.8	1.8	1.9	2.0	2.1	2.1	2.2
CHA	-15.1	-14.6	-14.0	-12.9	-11.8	-10.6	-10.1
EUR	-16.9	-16.9	-16.9	-16.9	-16.9	-16.8	-16.6
IND	-15.1	-15.8	-16.2	-16.8	-17.0	-16.7	-16.2
JPN	-1.1	-1.1	-1.1	-1.0	-0.9	-0.9	-0.8
LAM	8.4	8.8	9.2	9.7	10.3	11.1	10.8
MEA	-13.1	-13.7	-14.2	-14.8	-15.4	-15.4	-15.1
NEU	-1.6	-1.6	-1.7	-1.7	-1.7	-1.6	-1.6
OAS	68.6	71.1	73.4	76.9	79.2	79.8	79.8
REF	2.0	2.1	2.2	2.4	2.5	2.6	2.7
SSA	-14.5	-16.6	-18.8	-23.0	-26.7	-29.7	-31.0
USA	-3.6	-3.6	-3.7	-3.8	-3.9	-3.9	-3.9

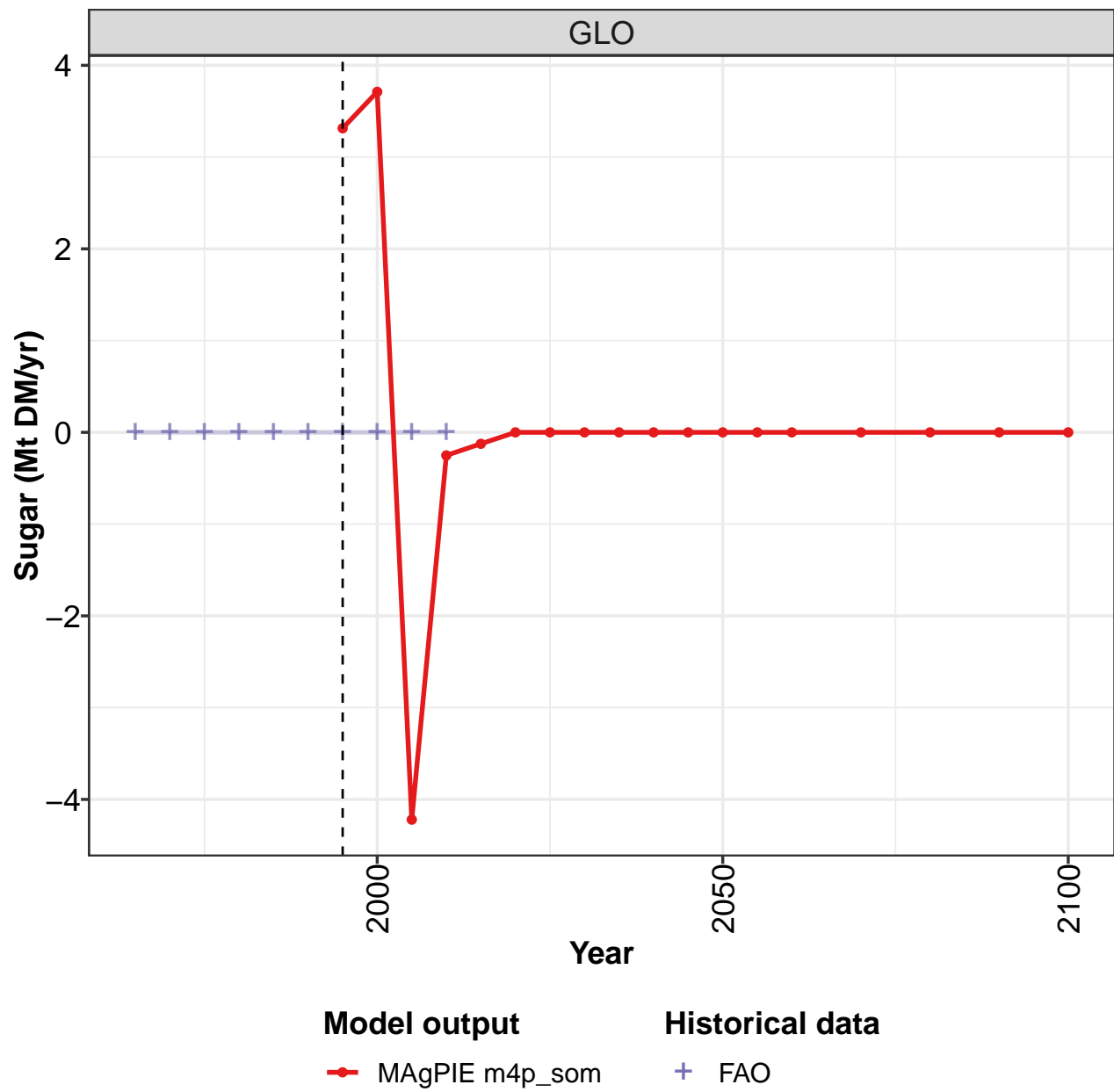
Table 1959: MAgPIE m4p\_som — Trade—Net-Trade—Secondary products—Oils (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAZ	-0.1	-0.1	-0.2	-0.1	-0.0	-0.1	0.2	0.3	0.2	1.3
CHA	0.0	-0.0	-0.1	-0.3	0.0	-1.8	-2.8	-3.2	-7.6	-9.9
EUR	-1.6	-1.9	-1.1	-0.5	-0.5	-1.5	-1.6	-3.0	-7.0	-9.3
IND	-0.2	0.2	0.0	-1.7	-1.3	-0.5	-0.6	-4.8	-4.3	-4.8
JPN	-0.0	-0.0	-0.2	-0.2	-0.3	-0.5	-0.7	-0.6	-0.9	-1.0
LAM	0.5	0.4	-0.1	1.0	1.9	1.7	2.9	3.5	6.4	4.7
MEA	-0.3	-0.5	-0.9	-1.5	-2.3	-3.0	-4.2	-3.8	-5.2	-6.3
NEU	-0.1	-0.1	-0.3	-0.2	-0.4	-0.4	-0.8	-0.8	-1.2	-1.1
OAS	0.4	0.9	1.9	3.2	4.6	7.5	8.6	14.0	23.3	30.7
REF	0.5	0.3	0.8	-0.6	-1.0	-0.6	-0.7	-0.5	-0.3	1.4
SSA	0.5	0.3	0.2	-0.4	-0.7	-0.2	-1.5	-1.9	-3.8	-4.6
USA	0.4	0.6	-0.0	1.5	-0.1	-0.5	1.2	0.7	0.5	-1.1

Table 1960: FAO — Trade—Net-Trade—Secondary products—Oils (Mt DM/yr)

59.4.7 Sugar

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

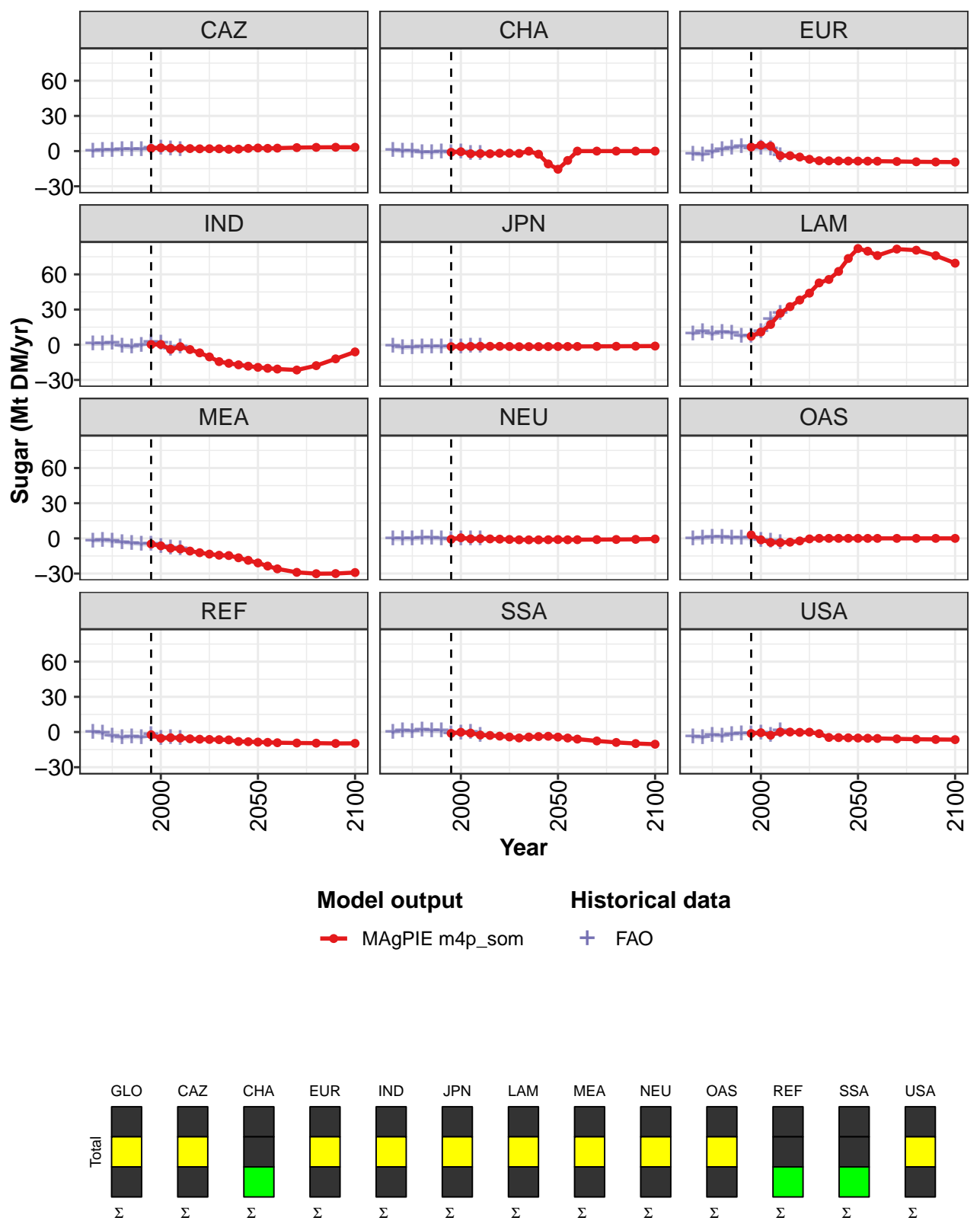


Figure 519: MAGPIE m4p\_som — Trade—Net-Trade—Secondary products—Sugar (Mt DM/yr)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	3.3	3.7	-4.2	-0.3	-0.1	0.0	0.0	0.0	0.0	0.0	-0.0
CAZ	2.4	2.8	2.5	2.3	2.2	2.0	2.0	2.0	1.6	1.7	2.3
CHA	-1.0	-0.5	-2.3	-2.1	-2.2	-1.8	-1.8	-2.0	-0.0	-2.7	-10.9
EUR	3.5	5.1	4.2	-3.9	-3.9	-5.1	-7.0	-8.2	-8.3	-8.4	-8.5
IND	0.2	0.3	-4.0	-1.7	-4.1	-6.9	-10.4	-14.4	-15.8	-17.1	-18.3
JPN	-1.6	-1.6	-1.4	-1.3	-1.3	-1.4	-1.5	-1.7	-1.6	-1.6	-1.6
LAM	7.2	10.9	17.3	26.9	32.5	38.1	44.0	52.7	55.7	62.5	73.6
MEA	-4.8	-6.3	-8.4	-9.0	-10.8	-12.2	-13.4	-14.4	-14.6	-16.5	-18.7
NEU	-0.8	0.5	-0.4	-0.2	-0.5	-0.6	-0.9	-1.2	-1.2	-1.2	-1.1
OAS	2.9	-1.2	-3.4	-3.5	-3.2	-2.2	-0.4	-0.0	0.0	0.0	0.0
REF	-2.3	-5.3	-4.9	-5.2	-5.8	-6.1	-6.3	-6.5	-6.7	-8.1	-8.3
SSA	-1.1	-0.2	-0.9	-2.5	-2.9	-3.5	-4.2	-5.1	-4.3	-3.8	-3.6
USA	-1.2	-0.6	-2.7	0.0	0.0	-0.3	-0.1	-1.4	-4.6	-4.8	-4.9

Table 1961: MAgPIE m4p\_som — Trade—Net-Trade—Secondary products—Sugar (Mt DM/yr) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	0.0	-0.0	-0.0	0.0	0.0	0.0	-0.0
CAZ	2.7	2.3	2.5	3.0	3.2	3.3	3.3
CHA	-15.5	-8.0	0.0	0.0	0.0	0.0	0.0
EUR	-8.5	-8.6	-8.6	-8.8	-9.1	-9.3	-9.4
IND	-19.2	-20.1	-20.7	-21.5	-17.8	-12.0	-6.1
JPN	-1.5	-1.5	-1.5	-1.4	-1.3	-1.2	-1.1
LAM	82.0	79.8	76.0	81.6	80.6	76.0	69.5
MEA	-20.9	-23.6	-26.0	-28.9	-30.1	-30.0	-29.1
NEU	-1.0	-1.2	-1.1	-1.0	-0.9	-0.8	-0.5
OAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REF	-8.6	-8.8	-9.1	-9.4	-9.5	-9.7	-9.7
SSA	-4.3	-5.1	-6.0	-7.6	-8.9	-9.8	-10.4
USA	-5.1	-5.3	-5.5	-5.8	-6.1	-6.4	-6.5

Table 1962: MAgPIE m4p\_som — Trade—Net-Trade—Secondary products—Sugar (Mt DM/yr) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAZ	0.2	0.6	0.9	1.3	1.4	1.6	2.4	2.6	1.7	1.2
CHA	0.7	-0.1	-0.1	-1.0	-1.1	-0.6	-1.0	-0.6	-2.2	-2.1
EUR	-2.5	-2.9	-0.8	1.5	2.4	4.1	1.9	2.4	1.9	-3.8
IND	0.7	1.0	1.4	-1.4	-2.0	-0.3	1.9	1.6	-4.0	-1.8
JPN	-1.3	-2.6	-2.2	-2.0	-1.8	-1.9	-1.7	-1.6	-1.4	-1.3
LAM	9.4	11.2	9.0	10.6	10.1	7.3	7.6	11.3	21.9	27.0
MEA	-2.1	-1.7	-2.6	-3.3	-4.2	-5.0	-5.1	-6.7	-8.1	-8.9
NEU	-0.6	-0.6	-0.5	0.1	0.0	-0.2	-1.0	-0.2	-0.1	-0.2
OAS	-0.2	0.0	0.8	1.0	0.3	0.3	0.0	-1.9	-2.3	-3.5
REF	0.1	-1.2	-3.6	-4.8	-4.1	-4.6	-2.4	-5.6	-4.6	-5.2
SSA	-0.4	0.8	0.6	1.6	1.0	0.9	-1.3	-1.0	0.0	-2.5
USA	-4.1	-4.6	-2.7	-3.5	-1.9	-1.4	-1.3	-0.6	-2.8	1.0

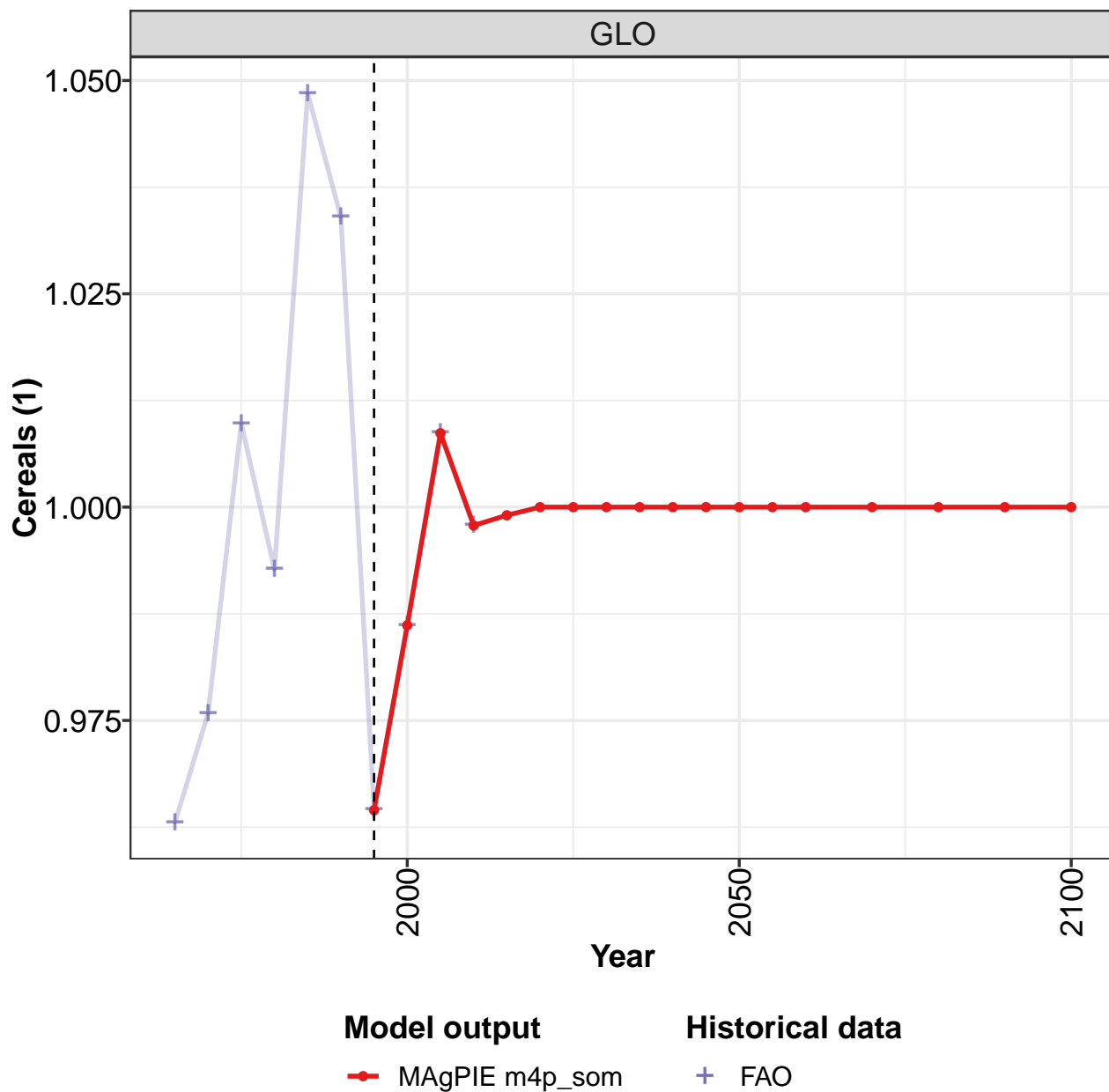
Table 1963: FAO — Trade—Net-Trade—Secondary products—Sugar (Mt DM/yr)

## 60 Self-sufficiency

### 60.1 Crops

#### 60.1.1 Cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

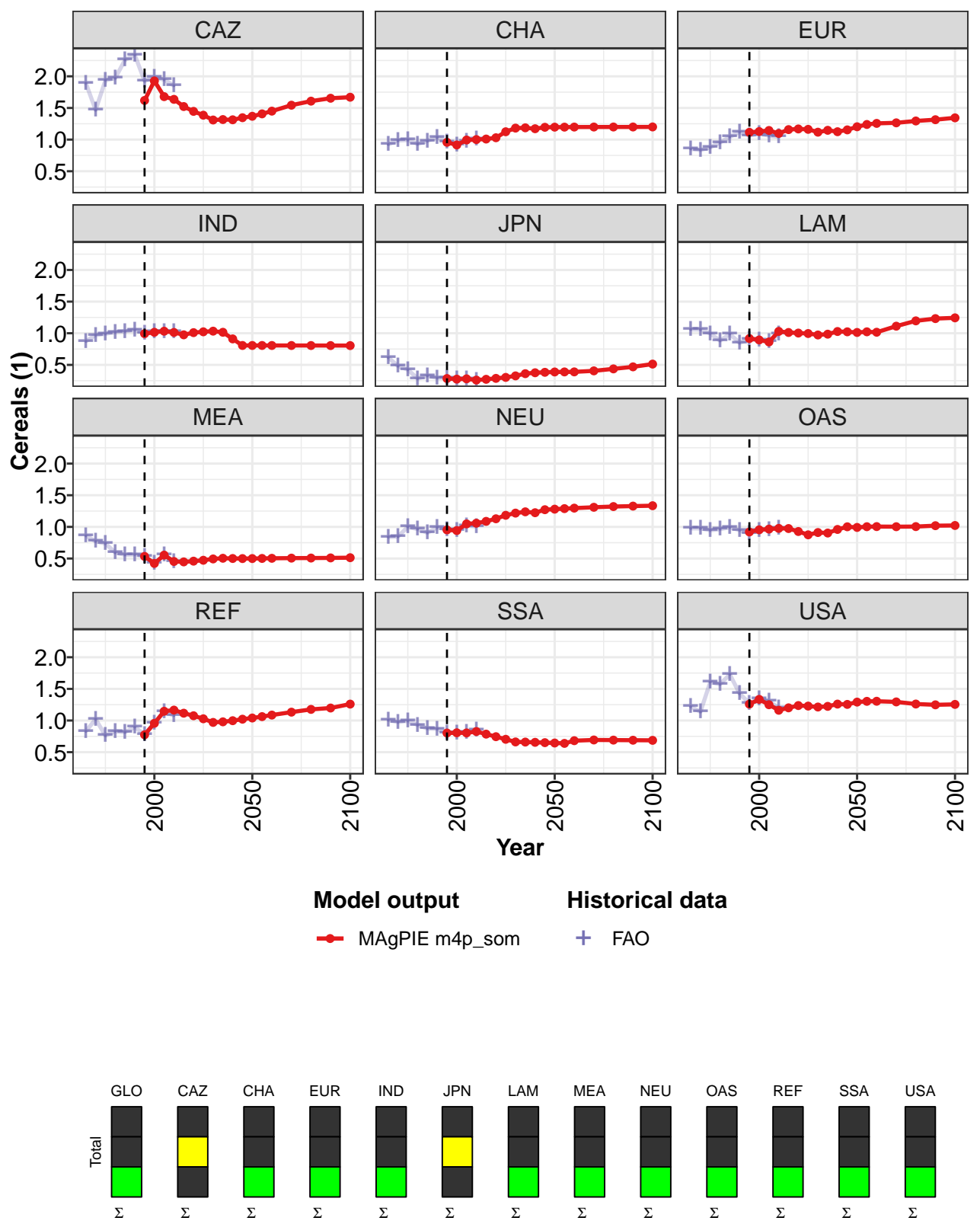


Figure 520: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Cereals (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.96	0.99	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.62	1.93	1.68	1.64	1.52	1.45	1.39	1.31	1.32	1.31	1.35
CHA	0.96	0.92	0.99	1.00	1.01	1.03	1.12	1.18	1.19	1.17	1.19
EUR	1.11	1.13	1.14	1.10	1.16	1.17	1.16	1.12	1.15	1.12	1.15
IND	0.99	1.02	1.03	1.01	0.98	1.01	1.02	1.03	1.02	0.91	0.81
JPN	0.28	0.27	0.28	0.26	0.27	0.29	0.30	0.33	0.36	0.38	0.38
LAM	0.92	0.89	0.86	1.03	1.01	1.00	1.00	0.97	0.99	1.03	1.02
MEA	0.53	0.42	0.55	0.45	0.45	0.46	0.47	0.49	0.50	0.50	0.50
NEU	0.95	0.94	1.05	1.06	1.09	1.13	1.18	1.22	1.24	1.22	1.27
OAS	0.92	0.95	0.97	0.98	0.97	0.93	0.87	0.91	0.90	0.96	1.00
REF	0.78	0.96	1.15	1.16	1.12	1.08	1.03	0.97	0.98	1.00	1.02
SSA	0.80	0.81	0.80	0.83	0.79	0.74	0.70	0.66	0.66	0.66	0.65
USA	1.26	1.33	1.25	1.16	1.20	1.24	1.23	1.21	1.22	1.26	1.25

Table 1964: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Cereals (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.37	1.41	1.45	1.54	1.61	1.65	1.67
CHA	1.20	1.20	1.20	1.20	1.20	1.20	1.20
EUR	1.20	1.24	1.26	1.27	1.29	1.31	1.34
IND	0.81	0.81	0.81	0.81	0.81	0.81	0.81
JPN	0.39	0.39	0.39	0.41	0.44	0.47	0.51
LAM	1.01	1.02	1.02	1.11	1.20	1.23	1.24
MEA	0.50	0.50	0.50	0.51	0.51	0.51	0.51
NEU	1.28	1.29	1.30	1.31	1.32	1.33	1.33
OAS	0.99	1.00	1.00	1.00	1.00	1.02	1.02
REF	1.04	1.06	1.09	1.13	1.18	1.20	1.26
SSA	0.64	0.64	0.68	0.69	0.69	0.69	0.69
USA	1.29	1.30	1.30	1.29	1.26	1.25	1.25

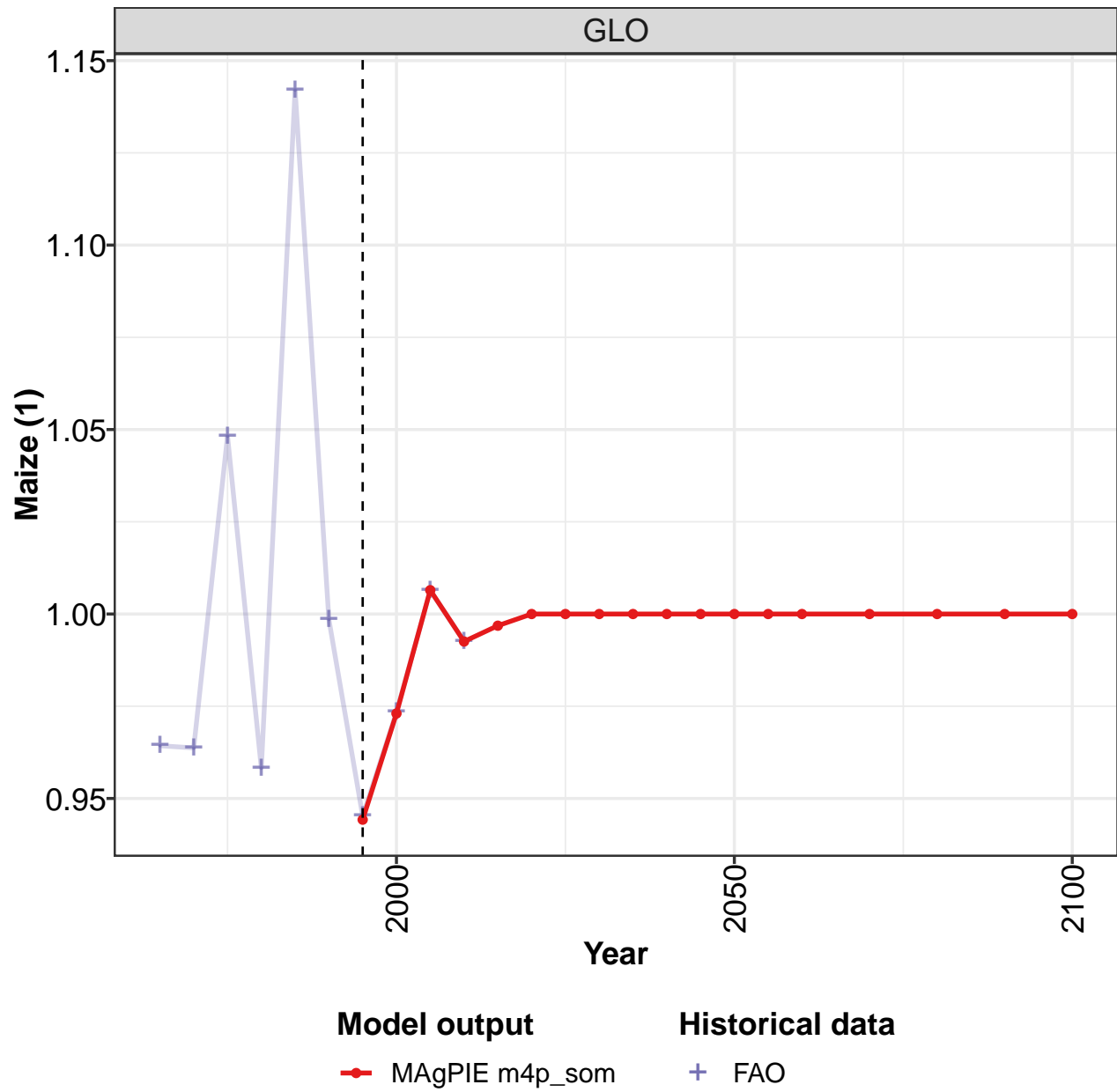
Table 1965: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Cereals (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.96	0.98	1.01	0.99	1.05	1.03	0.96	0.99	1.01	1.00
CAZ	1.89	1.47	1.94	1.97	2.26	2.34	1.93	1.98	1.95	1.85
CHA	0.92	0.99	0.99	0.93	0.98	1.04	0.96	0.92	0.98	1.01
EUR	0.85	0.84	0.88	0.95	1.04	1.12	1.06	1.10	1.06	1.04
IND	0.87	0.97	0.99	1.02	1.03	1.05	1.00	1.03	1.03	1.03
JPN	0.62	0.48	0.42	0.28	0.33	0.29	0.29	0.27	0.28	0.26
LAM	1.06	1.06	1.00	0.88	0.99	0.85	0.90	0.89	0.86	0.99
MEA	0.86	0.77	0.74	0.59	0.56	0.56	0.53	0.42	0.56	0.46
NEU	0.84	0.85	1.00	0.97	0.91	0.99	0.95	0.94	1.02	1.01
OAS	0.98	0.98	0.95	0.96	0.99	0.95	0.90	0.94	0.96	0.98
REF	0.83	1.02	0.76	0.83	0.82	0.90	0.78	0.96	1.14	1.08
SSA	1.01	0.98	1.00	0.93	0.87	0.87	0.80	0.81	0.81	0.85
USA	1.22	1.14	1.61	1.57	1.73	1.43	1.27	1.34	1.30	1.20

Table 1966: FAO — Trade—Self-sufficiency—Crops—Cereals (1)

60.1.2 Cereals—Maize

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

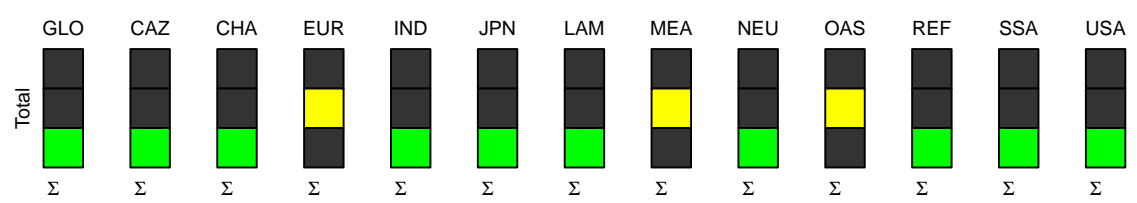
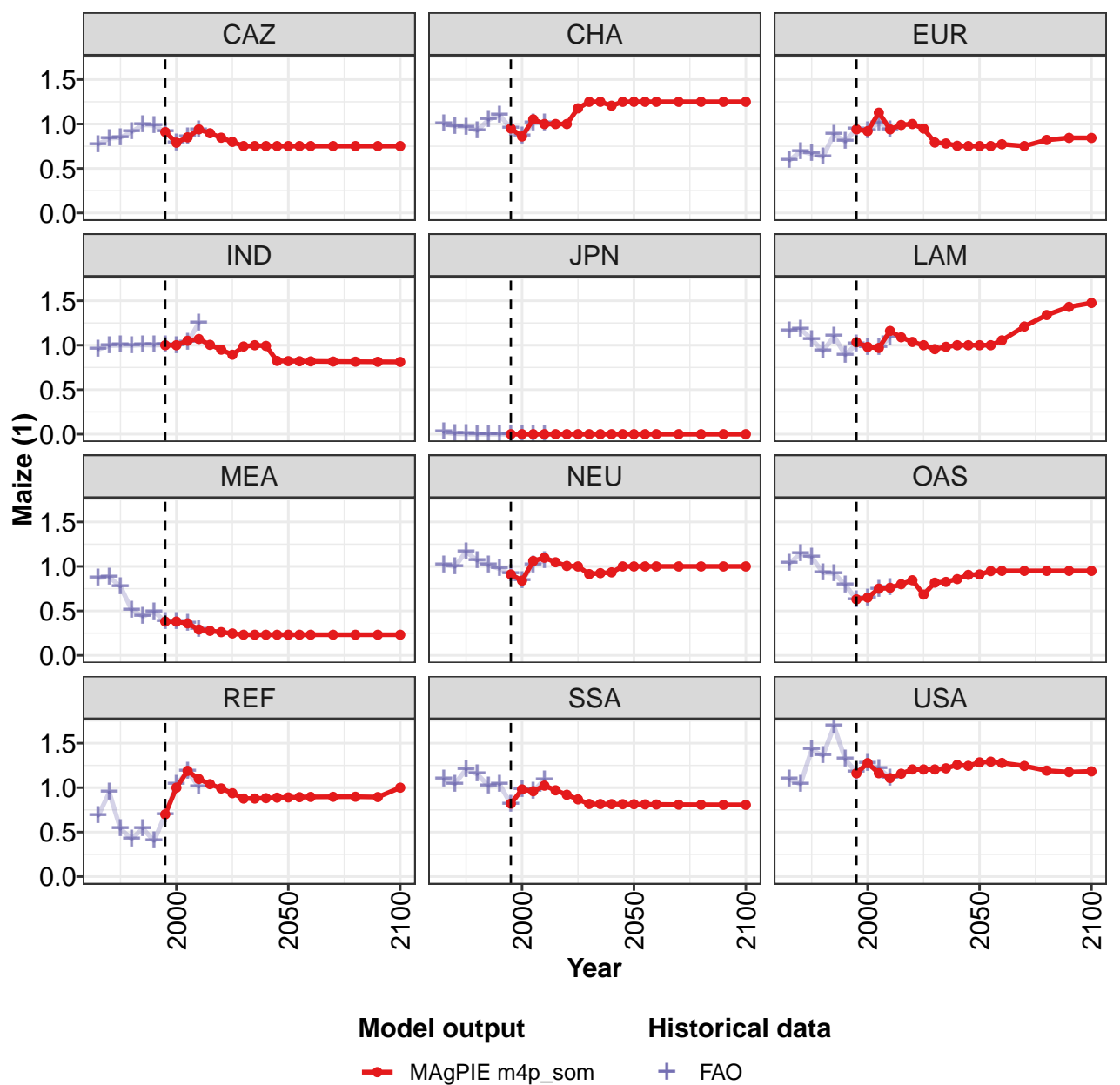


Figure 521: MAGPIE m4p\_som — Trade—Self-sufficiency—Crops—Cereals—Maize (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.94	0.97	1.01	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	0.91	0.79	0.85	0.94	0.90	0.85	0.80	0.75	0.75	0.75	0.75
CHA	0.95	0.86	1.05	1.00	1.00	1.00	1.18	1.25	1.25	1.21	1.25
EUR	0.94	0.92	1.13	0.94	0.99	1.00	0.95	0.79	0.78	0.76	0.75
IND	1.00	1.00	1.05	1.07	1.00	0.95	0.89	0.99	1.00	0.99	0.82
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	1.03	0.98	0.97	1.16	1.09	1.04	1.00	0.96	0.98	1.00	1.00
MEA	0.38	0.38	0.36	0.29	0.28	0.26	0.25	0.23	0.23	0.23	0.23
NEU	0.91	0.84	1.06	1.10	1.05	1.01	1.00	0.91	0.92	0.93	1.00
OAS	0.63	0.65	0.75	0.76	0.80	0.84	0.68	0.82	0.83	0.86	0.91
REF	0.70	1.00	1.19	1.10	1.04	0.99	0.94	0.88	0.88	0.88	0.89
SSA	0.82	0.98	0.96	1.02	0.97	0.92	0.87	0.82	0.82	0.81	0.81
USA	1.16	1.28	1.16	1.11	1.16	1.20	1.20	1.20	1.22	1.26	1.25

Table 1967: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Cereals—Maize (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	0.75	0.75	0.75	0.75	0.75	0.75	0.75
CHA	1.25	1.25	1.25	1.25	1.25	1.25	1.25
EUR	0.75	0.75	0.77	0.75	0.82	0.84	0.84
IND	0.82	0.82	0.82	0.82	0.81	0.81	0.81
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	1.00	1.00	1.05	1.21	1.34	1.43	1.48
MEA	0.23	0.23	0.23	0.23	0.23	0.23	0.23
NEU	1.00	1.00	1.00	1.00	1.00	1.00	1.00
OAS	0.91	0.95	0.95	0.95	0.95	0.95	0.95
REF	0.89	0.89	0.90	0.90	0.90	0.89	1.00
SSA	0.81	0.81	0.81	0.81	0.81	0.81	0.81
USA	1.28	1.29	1.28	1.24	1.19	1.17	1.18

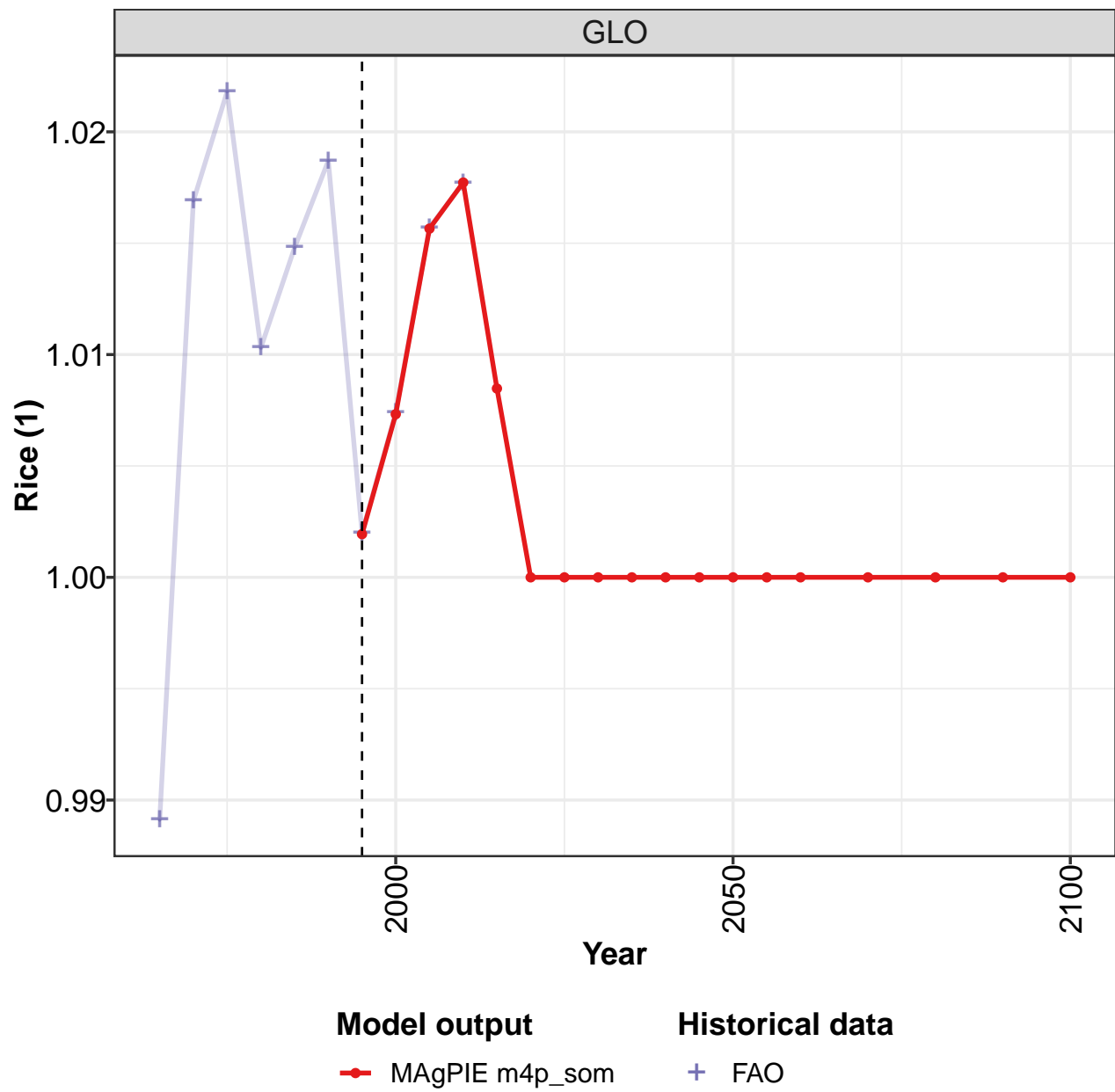
Table 1968: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Cereals—Maize (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.96	0.96	1.05	0.96	1.14	1.00	0.95	0.97	1.01	0.99
CAZ	0.77	0.84	0.85	0.91	0.99	0.99	0.91	0.79	0.85	0.94
CHA	1.00	0.98	0.97	0.93	1.05	1.10	0.95	0.86	1.01	1.01
EUR	0.59	0.69	0.67	0.63	0.89	0.80	0.94	0.92	1.02	0.94
IND	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.03	1.25
JPN	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	1.16	1.18	1.07	0.93	1.10	0.89	1.01	0.98	0.97	1.09
MEA	0.87	0.88	0.77	0.51	0.44	0.49	0.38	0.38	0.36	0.29
NEU	1.02	1.00	1.17	1.06	1.01	0.97	0.91	0.84	1.02	1.06
OAS	1.03	1.15	1.10	0.93	0.92	0.79	0.63	0.65	0.75	0.76
REF	0.68	0.95	0.54	0.43	0.54	0.40	0.70	1.03	1.19	1.01
SSA	1.10	1.04	1.21	1.15	1.02	1.04	0.82	0.98	0.96	1.09
USA	1.09	1.04	1.43	1.36	1.69	1.32	1.17	1.27	1.22	1.11

Table 1969: FAO — Trade—Self-sufficiency—Crops—Cereals—Maize (1)

60.1.3 Cereals—Rice

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

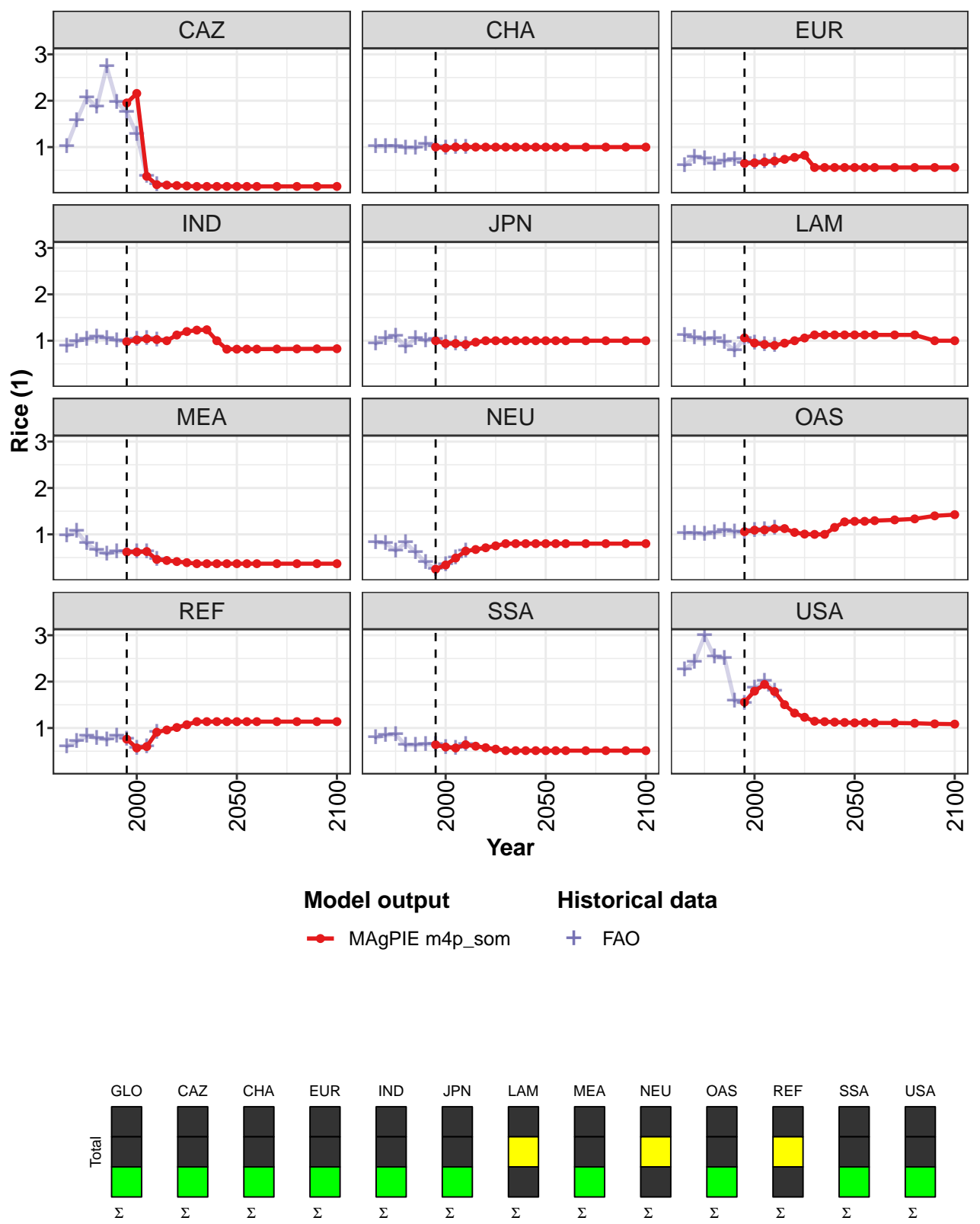


Figure 522: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Cereals—Rice (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.00	1.01	1.02	1.02	1.01	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.95	2.16	0.37	0.19	0.18	0.17	0.16	0.15	0.15	0.15	0.15
CHA	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
EUR	0.65	0.66	0.68	0.70	0.74	0.78	0.82	0.56	0.56	0.56	0.56
IND	0.98	1.02	1.04	1.02	1.00	1.12	1.20	1.23	1.24	1.00	0.82
JPN	1.00	0.94	0.94	0.92	0.97	1.00	1.00	1.00	1.00	1.00	1.00
LAM	1.06	0.95	0.92	0.90	0.95	1.00	1.06	1.12	1.12	1.12	1.13
MEA	0.62	0.62	0.63	0.46	0.44	0.41	0.39	0.37	0.37	0.37	0.37
NEU	0.25	0.34	0.49	0.64	0.67	0.71	0.75	0.80	0.80	0.80	0.80
OAS	1.06	1.09	1.10	1.12	1.12	1.04	1.01	1.00	1.00	1.15	1.27
REF	0.76	0.57	0.60	0.91	0.96	1.01	1.07	1.14	1.14	1.14	1.14
SSA	0.64	0.59	0.57	0.64	0.61	0.58	0.54	0.51	0.51	0.51	0.51
USA	1.56	1.79	1.94	1.79	1.50	1.32	1.23	1.15	1.14	1.13	1.12

Table 1970: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Cereals—Rice (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	0.15	0.15	0.15	0.15	0.15	0.15	0.15
CHA	1.00	1.00	1.00	1.00	1.00	1.00	1.00
EUR	0.56	0.56	0.56	0.56	0.56	0.56	0.56
IND	0.82	0.82	0.82	0.82	0.82	0.83	0.83
JPN	1.00	1.00	1.00	1.00	1.00	1.00	1.00
LAM	1.12	1.12	1.12	1.13	1.13	1.00	1.00
MEA	0.37	0.37	0.37	0.37	0.37	0.37	0.37
NEU	0.80	0.80	0.80	0.80	0.80	0.80	0.80
OAS	1.28	1.28	1.30	1.31	1.33	1.40	1.43
REF	1.14	1.14	1.14	1.14	1.14	1.14	1.14
SSA	0.51	0.51	0.51	0.51	0.51	0.51	0.51
USA	1.11	1.12	1.11	1.11	1.10	1.09	1.08

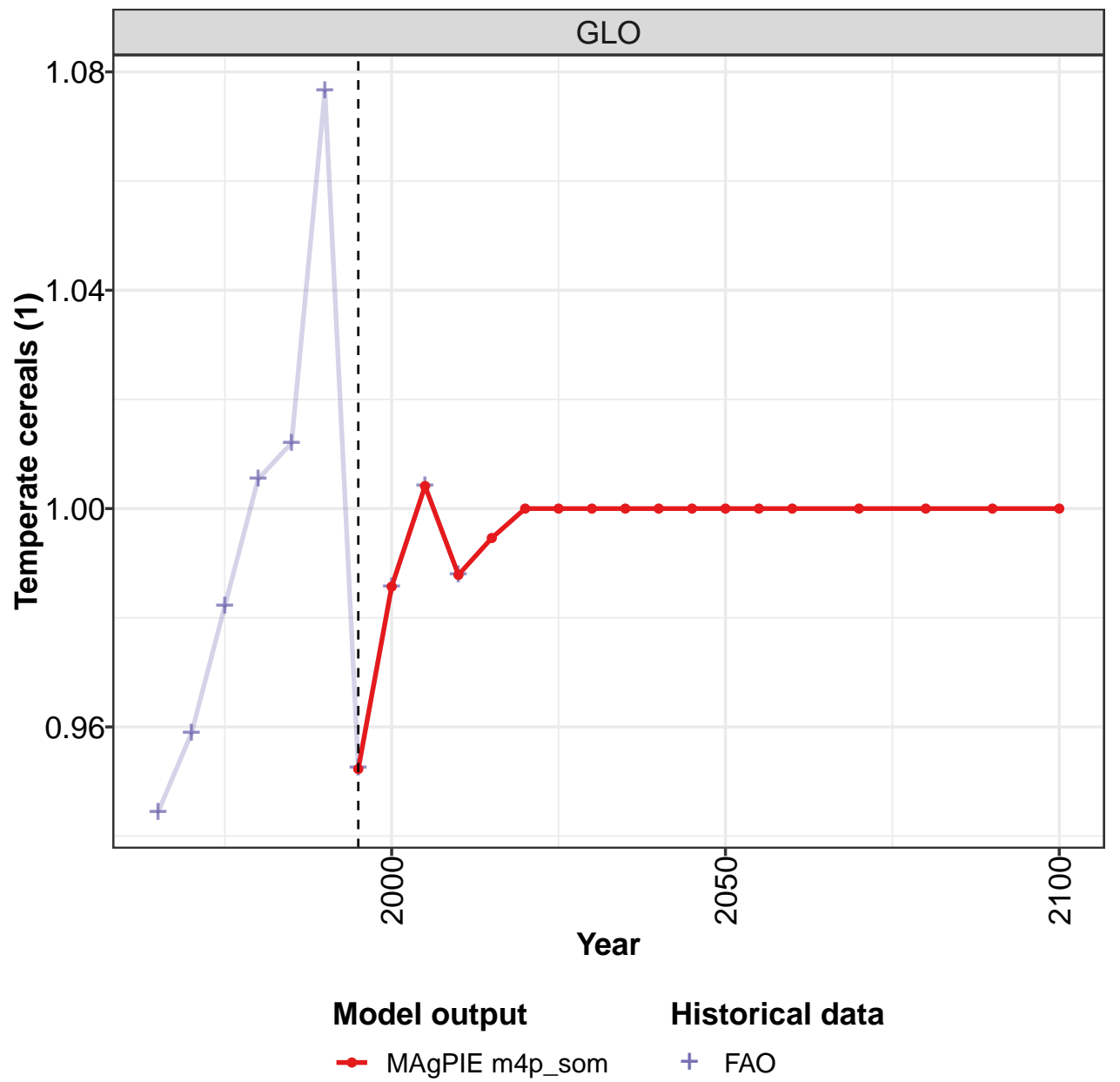
Table 1971: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Cereals—Rice (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.99	1.02	1.02	1.01	1.01	1.02	1.00	1.01	1.02	1.02
CAZ	1.01	1.57	2.07	1.86	2.73	1.97	1.76	1.28	0.37	0.19
CHA	1.01	1.02	1.02	0.99	0.98	1.07	1.02	0.98	1.00	1.00
EUR	0.60	0.79	0.75	0.64	0.70	0.73	0.65	0.66	0.68	0.70
IND	0.89	0.99	1.04	1.08	1.05	1.00	0.98	1.03	1.05	1.02
JPN	0.93	1.06	1.09	0.87	1.06	1.00	1.04	0.94	0.94	0.92
LAM	1.11	1.06	1.04	1.04	0.97	0.79	1.06	0.95	0.92	0.90
MEA	0.97	1.07	0.80	0.66	0.58	0.63	0.62	0.62	0.63	0.46
NEU	0.83	0.81	0.65	0.82	0.62	0.39	0.25	0.34	0.49	0.64
OAS	1.03	1.02	1.00	1.03	1.08	1.05	1.04	1.09	1.09	1.13
REF	0.60	0.71	0.82	0.78	0.75	0.83	0.76	0.56	0.60	0.91
SSA	0.79	0.84	0.86	0.63	0.63	0.65	0.64	0.59	0.57	0.64
USA	2.26	2.43	2.99	2.53	2.50	1.59	1.53	1.85	2.02	1.80

Table 1972: FAO — Trade—Self-sufficiency—Crops—Cereals—Rice (1)

60.1.4 Cereals—Temperate cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

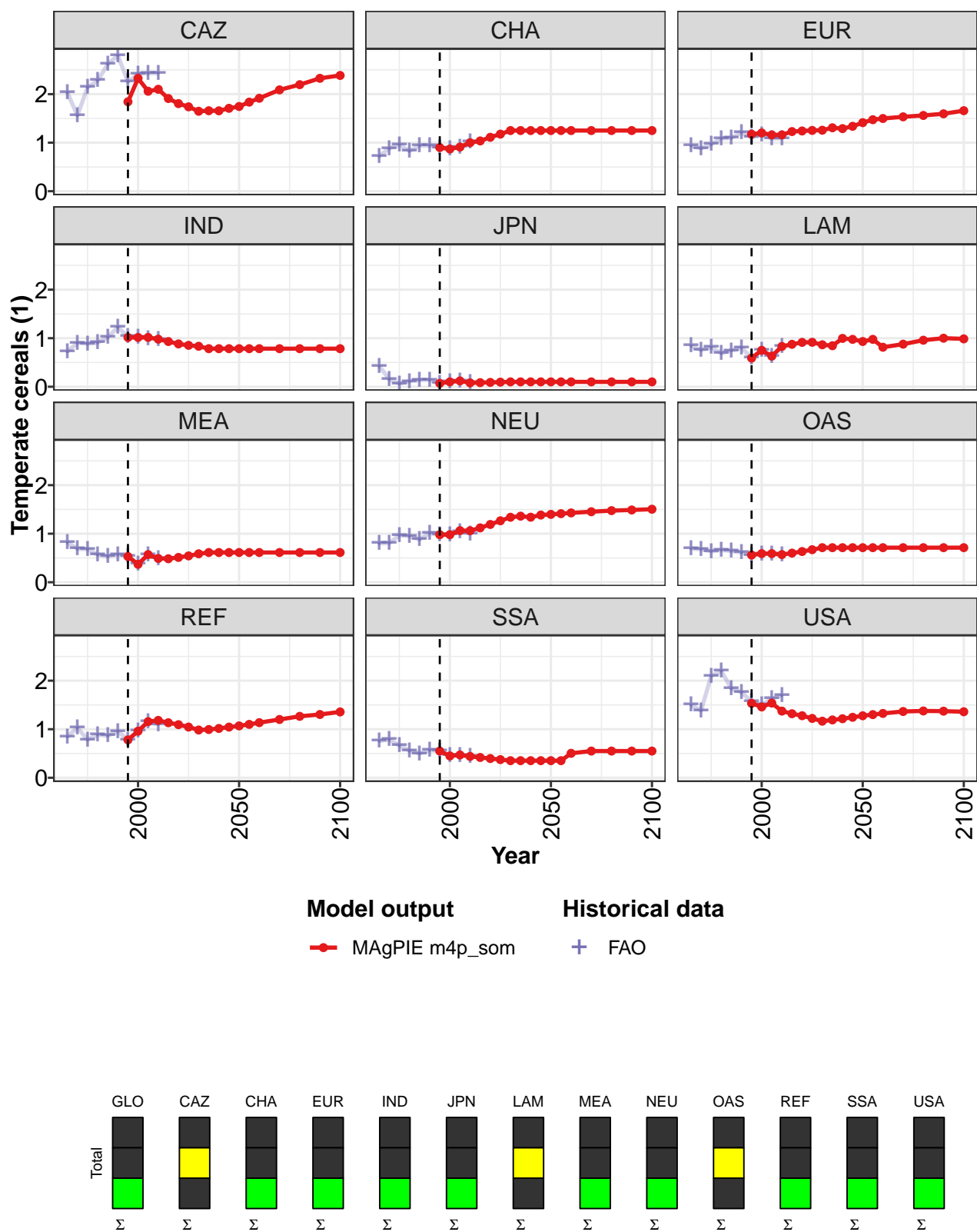


Figure 523: MAGPIE m4p\_som — Trade—Self-sufficiency—Crops—Cereals—Temperate cereals (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.95	0.99	1.00	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.84	2.33	2.06	2.10	1.91	1.81	1.74	1.65	1.66	1.66	1.71
CHA	0.90	0.87	0.91	1.00	1.04	1.11	1.18	1.25	1.25	1.25	1.25
EUR	1.18	1.20	1.16	1.16	1.23	1.24	1.25	1.26	1.31	1.29	1.34
IND	1.01	1.02	1.02	0.98	0.93	0.88	0.85	0.83	0.78	0.78	0.78
JPN	0.07	0.10	0.12	0.08	0.08	0.09	0.09	0.10	0.10	0.10	0.10
LAM	0.59	0.75	0.63	0.83	0.87	0.91	0.92	0.86	0.84	1.00	0.98
MEA	0.53	0.37	0.57	0.49	0.48	0.51	0.54	0.59	0.61	0.61	0.61
NEU	0.98	0.98	1.06	1.06	1.12	1.19	1.27	1.34	1.36	1.34	1.38
OAS	0.56	0.59	0.59	0.57	0.60	0.63	0.67	0.71	0.71	0.71	0.71
REF	0.78	0.96	1.16	1.18	1.13	1.09	1.04	0.98	0.99	1.02	1.04
SSA	0.55	0.45	0.47	0.44	0.42	0.40	0.37	0.35	0.35	0.35	0.35
USA	1.53	1.46	1.54	1.37	1.32	1.28	1.22	1.17	1.19	1.22	1.25

Table 1973: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Cereals—Temperate cereals (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.75	1.84	1.91	2.09	2.20	2.33	2.39
CHA	1.25	1.25	1.25	1.25	1.25	1.25	1.25
EUR	1.41	1.47	1.50	1.53	1.56	1.60	1.66
IND	0.78	0.78	0.78	0.78	0.78	0.78	0.78
JPN	0.10	0.10	0.10	0.10	0.10	0.10	0.10
LAM	0.93	0.98	0.81	0.88	0.96	1.00	0.99
MEA	0.61	0.61	0.61	0.61	0.61	0.61	0.61
NEU	1.40	1.41	1.43	1.45	1.48	1.49	1.50
OAS	0.71	0.71	0.71	0.71	0.71	0.71	0.71
REF	1.07	1.10	1.14	1.20	1.27	1.30	1.36
SSA	0.35	0.35	0.50	0.55	0.55	0.55	0.55
USA	1.28	1.30	1.33	1.37	1.38	1.37	1.36

Table 1974: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Cereals—Temperate cereals (1) [PART 2/2]

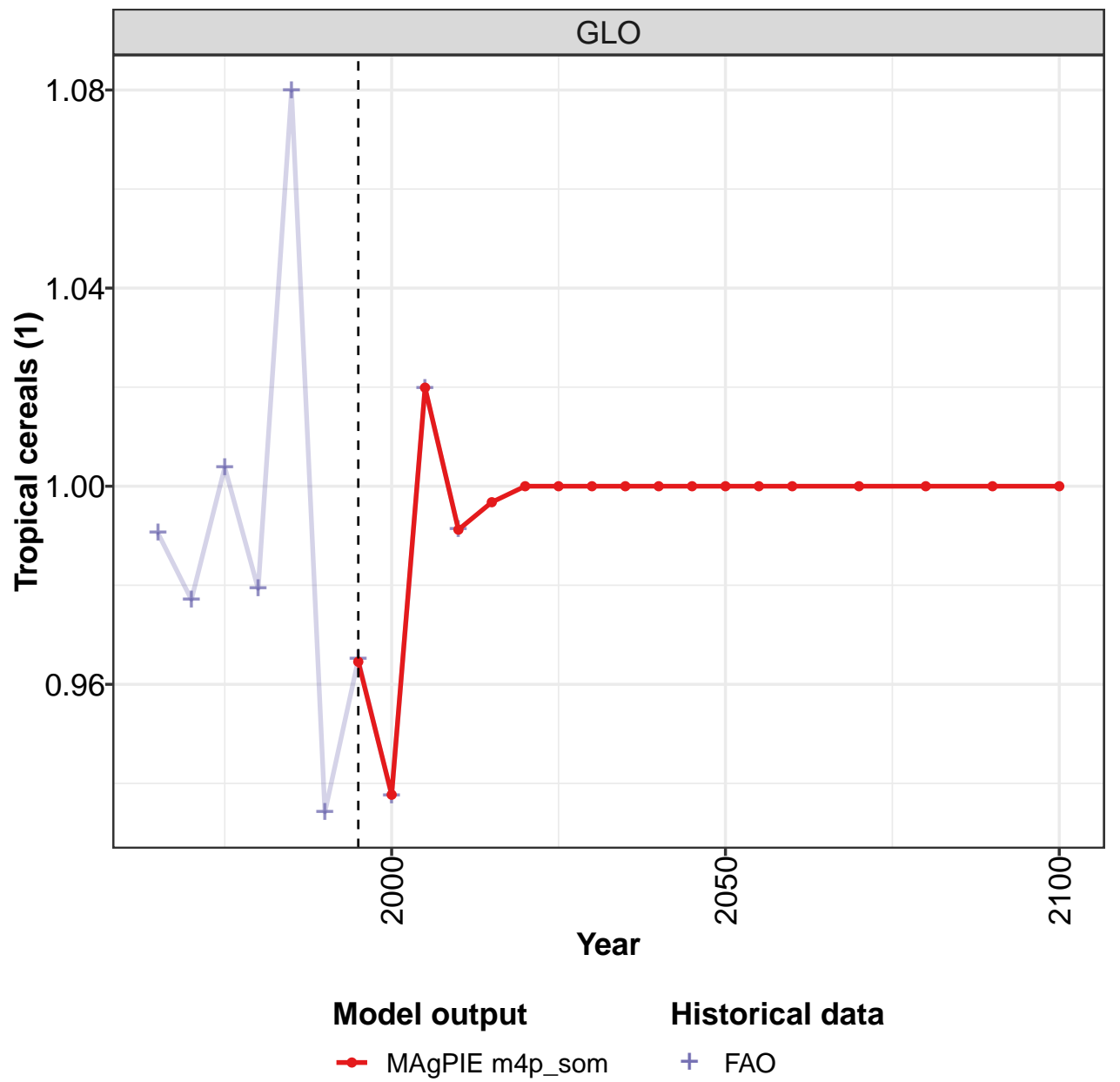
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.94	0.96	0.98	1.01	1.01	1.08	0.95	0.99	1.00	0.99
CAZ	2.03	1.56	2.14	2.28	2.62	2.80	2.25	2.42	2.43	2.43
CHA	0.72	0.88	0.96	0.83	0.94	0.94	0.90	0.87	0.91	1.02
EUR	0.94	0.88	0.96	1.09	1.10	1.21	1.11	1.16	1.08	1.09
IND	0.72	0.90	0.89	0.91	1.02	1.23	1.03	1.03	1.00	0.98
JPN	0.43	0.16	0.06	0.11	0.14	0.14	0.07	0.10	0.12	0.08
LAM	0.84	0.75	0.81	0.69	0.74	0.81	0.59	0.75	0.63	0.83
MEA	0.82	0.69	0.68	0.57	0.53	0.57	0.53	0.37	0.57	0.49
NEU	0.80	0.81	0.97	0.95	0.88	1.01	0.98	0.98	1.04	1.00
OAS	0.69	0.68	0.64	0.66	0.64	0.61	0.56	0.59	0.59	0.57
REF	0.84	1.03	0.78	0.89	0.86	0.96	0.78	0.96	1.15	1.10
SSA	0.75	0.78	0.67	0.55	0.50	0.57	0.55	0.45	0.47	0.44
USA	1.50	1.38	2.10	2.20	1.84	1.76	1.57	1.50	1.63	1.70

Table 1975: FAO — Trade—Self-sufficiency—Crops—Cereals—Temperate cereals (1)



60.1.5
Cereals—Tropical cereals

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

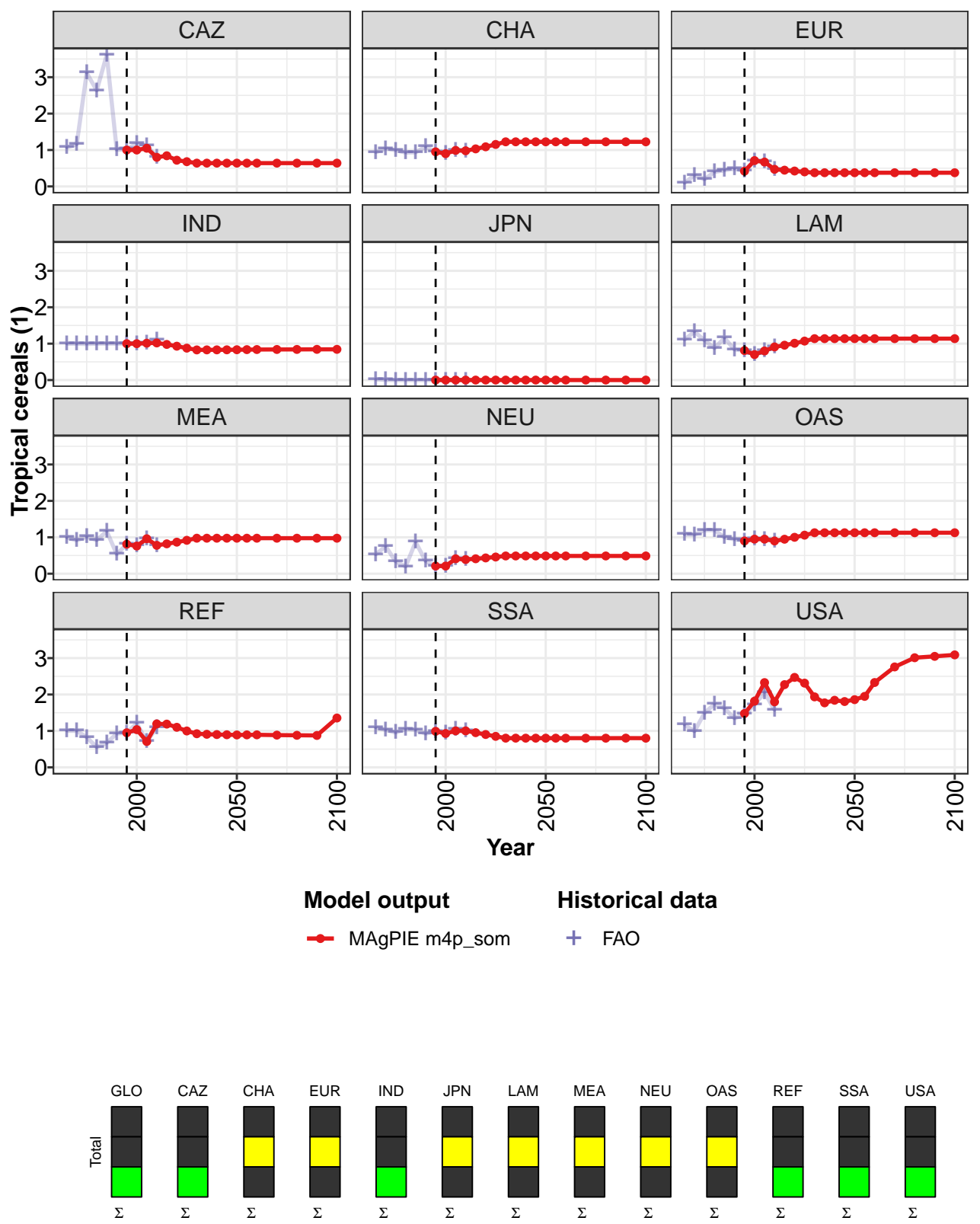


Figure 524: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Cereals—Tropical cereals (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.96	0.94	1.02	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.00	1.00	1.05	0.80	0.84	0.72	0.68	0.64	0.64	0.64	0.64
CHA	0.95	0.90	0.99	0.98	1.03	1.09	1.15	1.23	1.23	1.22	1.22
EUR	0.42	0.71	0.67	0.47	0.45	0.42	0.40	0.38	0.38	0.38	0.38
IND	1.00	1.00	1.01	1.02	0.98	0.93	0.88	0.83	0.83	0.83	0.83
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	0.81	0.70	0.80	0.91	0.96	1.01	1.07	1.14	1.14	1.14	1.14
MEA	0.81	0.76	0.96	0.78	0.82	0.87	0.92	0.97	0.98	0.98	0.97
NEU	0.21	0.21	0.41	0.39	0.41	0.43	0.46	0.49	0.49	0.49	0.49
OAS	0.90	0.95	0.95	0.90	0.95	1.00	1.06	1.12	1.12	1.12	1.12
REF	0.95	1.04	0.71	1.19	1.19	1.10	1.00	0.92	0.91	0.90	0.90
SSA	0.99	0.93	1.00	1.00	0.95	0.90	0.85	0.80	0.80	0.80	0.80
USA	1.48	1.82	2.33	1.80	2.27	2.47	2.31	1.94	1.77	1.84	1.81

Table 1976: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Cereals—Tropical cereals (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	0.64	0.64	0.64	0.64	0.64	0.64	0.64
CHA	1.23	1.23	1.23	1.23	1.22	1.23	1.23
EUR	0.38	0.38	0.38	0.38	0.38	0.38	0.38
IND	0.83	0.84	0.84	0.84	0.84	0.84	0.84
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	1.14	1.14	1.14	1.14	1.14	1.14	1.14
MEA	0.98	0.98	0.97	0.98	0.98	0.97	0.98
NEU	0.49	0.49	0.49	0.49	0.49	0.49	0.49
OAS	1.12	1.12	1.12	1.12	1.13	1.12	1.12
REF	0.89	0.89	0.89	0.89	0.88	0.88	1.36
SSA	0.80	0.80	0.80	0.80	0.80	0.80	0.80
USA	1.86	1.95	2.33	2.76	3.01	3.05	3.09

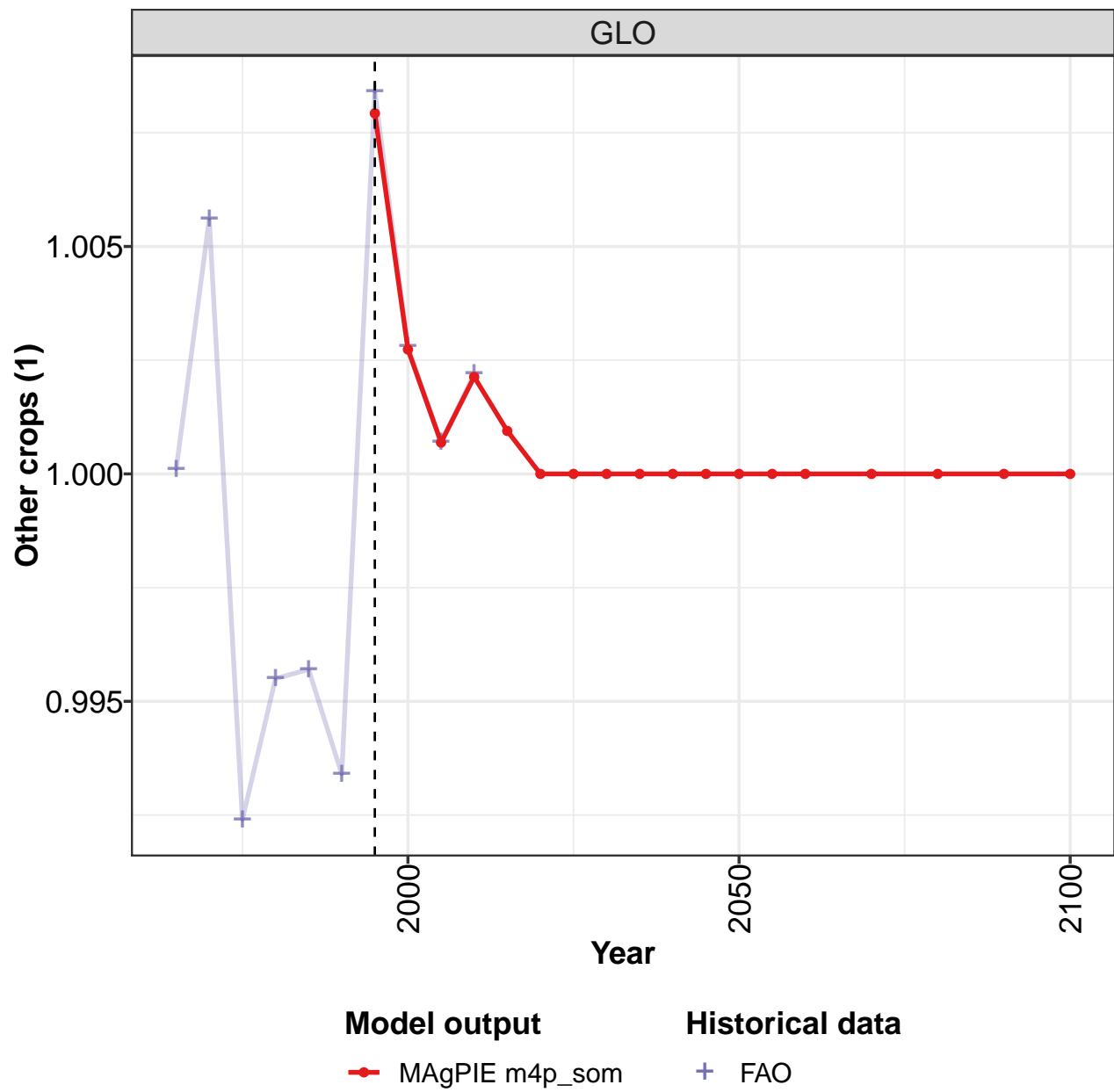
Table 1977: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Cereals—Tropical cereals (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.99	0.98	1.00	0.98	1.08	0.93	0.96	0.94	1.02	0.99
CAZ	1.07	1.15	3.12	2.63	3.61	1.00	1.03	1.18	1.12	0.80
CHA	0.94	1.04	0.99	0.93	0.94	1.09	0.95	0.91	0.99	0.98
EUR	0.09	0.31	0.19	0.40	0.44	0.49	0.42	0.71	0.67	0.47
IND	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.01	1.10
JPN	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	1.11	1.33	1.09	0.88	1.15	0.84	0.81	0.70	0.80	0.91
MEA	0.99	0.92	1.01	0.92	1.17	0.53	0.81	0.76	0.96	0.78
NEU	0.52	0.75	0.34	0.19	0.87	0.34	0.21	0.21	0.41	0.39
OAS	1.08	1.07	1.20	1.20	0.99	0.95	0.90	0.95	0.95	0.90
REF	1.00	1.00	0.83	0.55	0.67	0.93	0.95	1.21	0.71	1.09
SSA	1.09	1.03	0.95	1.05	1.03	0.92	0.99	0.93	1.04	1.00
USA	1.17	0.99	1.49	1.74	1.62	1.34	1.46	1.72	2.06	1.57

Table 1978: FAO — Trade—Self-sufficiency—Crops—Cereals—Tropical cereals (1)

60.1.6 Other crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

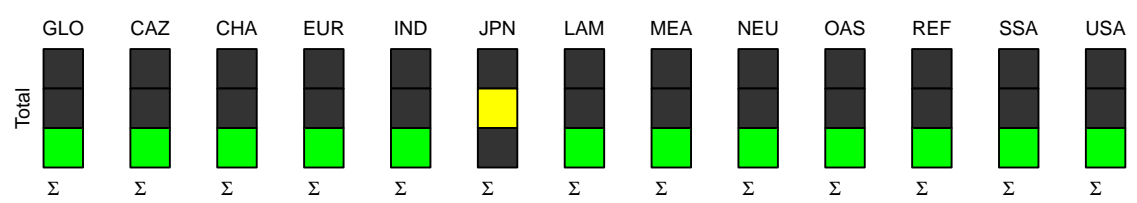
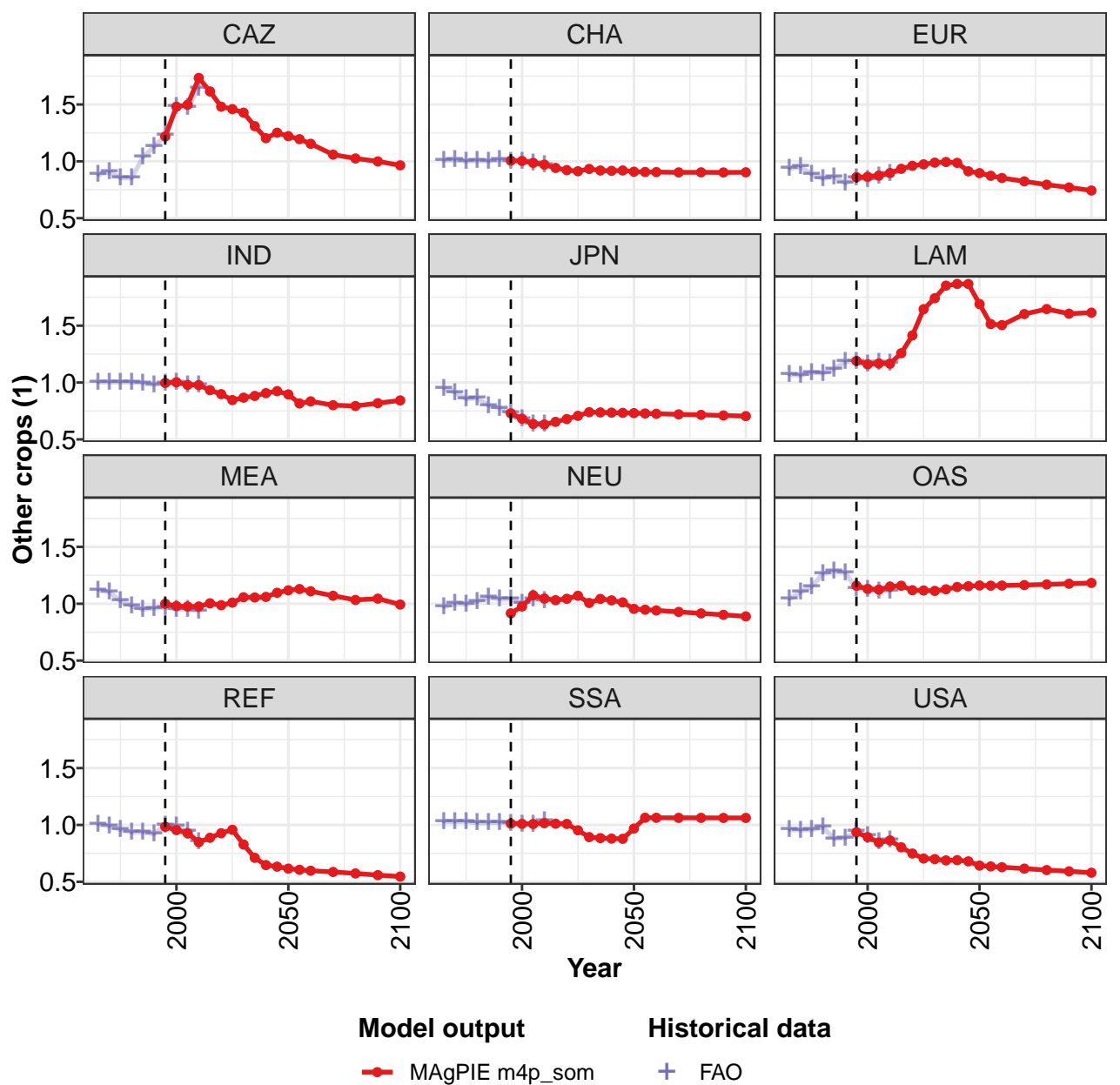


Figure 525: MAGPIE m4p\_som — Trade—Self-sufficiency—Crops—Other crops (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.22	1.48	1.50	1.73	1.61	1.48	1.46	1.43	1.31	1.20	1.25
CHA	1.01	1.00	0.99	0.97	0.94	0.92	0.91	0.93	0.92	0.92	0.92
EUR	0.86	0.86	0.87	0.90	0.93	0.96	0.97	0.99	0.99	0.99	0.91
IND	1.00	1.00	0.98	0.98	0.93	0.90	0.85	0.87	0.88	0.91	0.92
JPN	0.73	0.68	0.64	0.63	0.65	0.68	0.71	0.74	0.74	0.74	0.73
LAM	1.19	1.16	1.17	1.17	1.26	1.41	1.65	1.74	1.85	1.87	1.87
MEA	1.00	0.98	0.98	0.98	1.00	0.99	1.01	1.06	1.06	1.06	1.10
NEU	0.92	0.98	1.07	1.05	1.03	1.04	1.07	1.01	1.04	1.03	1.01
OAS	1.16	1.13	1.12	1.15	1.16	1.12	1.12	1.11	1.13	1.15	1.15
REF	0.98	0.95	0.93	0.85	0.89	0.93	0.96	0.83	0.71	0.65	0.63
SSA	1.01	1.01	1.01	1.02	1.01	1.01	0.95	0.89	0.88	0.88	0.88
USA	0.94	0.89	0.85	0.86	0.80	0.75	0.70	0.70	0.69	0.69	0.68

Table 1979: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Other crops (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.22	1.19	1.15	1.06	1.03	1.00	0.96
CHA	0.91	0.91	0.91	0.90	0.90	0.90	0.90
EUR	0.90	0.87	0.85	0.82	0.79	0.77	0.74
IND	0.90	0.82	0.83	0.80	0.79	0.82	0.84
JPN	0.73	0.73	0.73	0.72	0.72	0.71	0.70
LAM	1.69	1.51	1.51	1.60	1.65	1.61	1.61
MEA	1.12	1.13	1.11	1.07	1.03	1.04	0.99
NEU	0.96	0.95	0.94	0.93	0.92	0.90	0.89
OAS	1.16	1.16	1.16	1.16	1.17	1.18	1.18
REF	0.62	0.61	0.60	0.59	0.57	0.56	0.55
SSA	0.97	1.06	1.06	1.06	1.06	1.06	1.06
USA	0.64	0.64	0.63	0.62	0.60	0.59	0.58

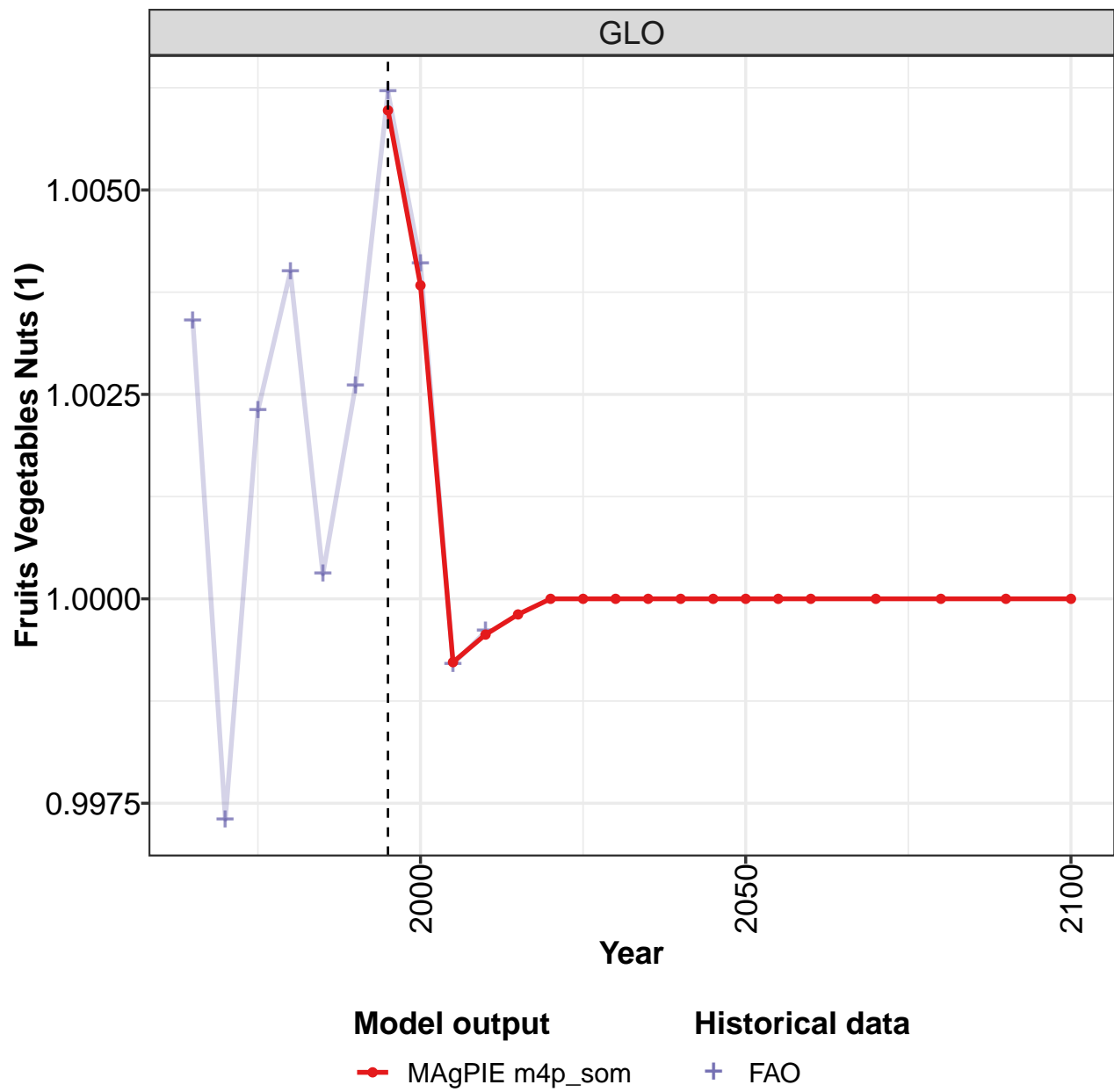
Table 1980: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Other crops (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.00	1.01	0.99	1.00	1.00	0.99	1.01	1.00	1.00	1.00
CAZ	0.88	0.91	0.85	0.85	1.04	1.13	1.23	1.48	1.47	1.64
CHA	1.01	1.01	1.00	1.01	1.00	1.01	1.00	1.00	0.99	0.97
EUR	0.94	0.95	0.89	0.85	0.86	0.81	0.85	0.84	0.87	0.90
IND	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.98	0.98
JPN	0.95	0.91	0.86	0.86	0.80	0.78	0.73	0.68	0.64	0.63
LAM	1.07	1.06	1.09	1.08	1.12	1.18	1.18	1.16	1.17	1.17
MEA	1.12	1.10	1.03	0.98	0.95	0.96	0.97	0.95	0.95	0.94
NEU	0.97	1.00	1.00	1.02	1.06	1.04	1.04	1.00	1.04	1.03
OAS	1.04	1.10	1.15	1.26	1.29	1.27	1.14	1.12	1.11	1.11
REF	1.01	0.99	0.96	0.93	0.94	0.92	1.00	0.99	0.94	0.85
SSA	1.03	1.03	1.03	1.02	1.02	1.02	1.01	1.01	1.01	1.04
USA	0.96	0.96	0.96	0.98	0.88	0.88	0.94	0.90	0.85	0.86

Table 1981: FAO — Trade—Self-sufficiency—Crops—Other crops (1)

60.1.7
Other crops—Fruits Vegetables Nuts

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

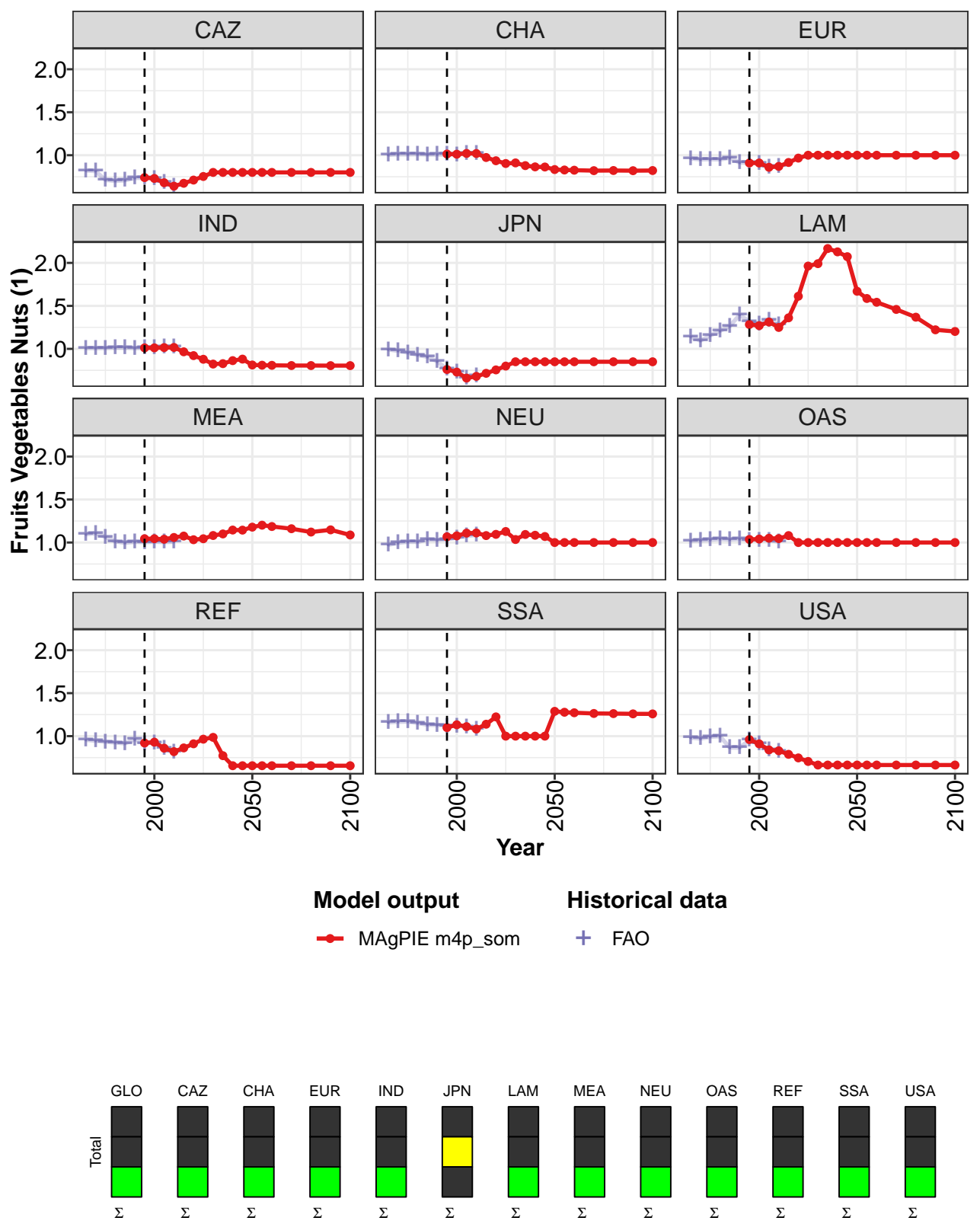


Figure 526: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Other crops—Fruits Vegetables Nuts (1)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	0.74	0.73	0.68	0.64	0.67	0.71	0.75	0.80	0.80	0.80	0.80
CHA	1.01	1.01	1.02	1.02	0.97	0.94	0.90	0.91	0.88	0.86	0.86
EUR	0.91	0.91	0.86	0.87	0.92	0.97	1.00	1.00	1.00	1.00	1.00
IND	1.01	1.01	1.01	1.02	0.97	0.92	0.88	0.82	0.83	0.86	0.88
JPN	0.76	0.73	0.66	0.68	0.72	0.76	0.80	0.85	0.85	0.85	0.85
LAM	1.28	1.27	1.31	1.25	1.36	1.61	1.96	1.99	2.17	2.13	2.07
MEA	1.04	1.04	1.04	1.06	1.08	1.03	1.04	1.08	1.10	1.15	1.14
NEU	1.07	1.08	1.11	1.11	1.08	1.09	1.13	1.03	1.09	1.08	1.07
OAS	1.04	1.04	1.05	1.05	1.08	1.00	1.00	1.00	1.00	1.00	1.00
REF	0.92	0.93	0.86	0.82	0.86	0.91	0.96	0.99	0.77	0.66	0.66
SSA	1.10	1.13	1.11	1.08	1.14	1.22	1.00	1.00	1.00	1.00	1.00
USA	0.96	0.91	0.84	0.83	0.79	0.75	0.71	0.66	0.66	0.66	0.66

Table 1982: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Other crops—Fruits Vegetables Nuts (1)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	0.80	0.80	0.80	0.80	0.80	0.80	0.80
CHA	0.83	0.83	0.83	0.82	0.82	0.82	0.82
EUR	1.00	1.00	1.00	1.00	1.00	1.00	1.00
IND	0.81	0.81	0.81	0.81	0.81	0.80	0.81
JPN	0.85	0.85	0.85	0.85	0.85	0.85	0.85
LAM	1.67	1.59	1.54	1.46	1.37	1.22	1.20
MEA	1.18	1.20	1.19	1.16	1.12	1.15	1.09
NEU	1.00	1.00	1.00	1.00	1.00	1.00	1.00
OAS	1.00	1.00	1.00	1.00	1.00	1.00	1.00
REF	0.66	0.66	0.66	0.66	0.66	0.66	0.66
SSA	1.29	1.28	1.27	1.26	1.26	1.26	1.26
USA	0.66	0.66	0.66	0.66	0.66	0.66	0.66

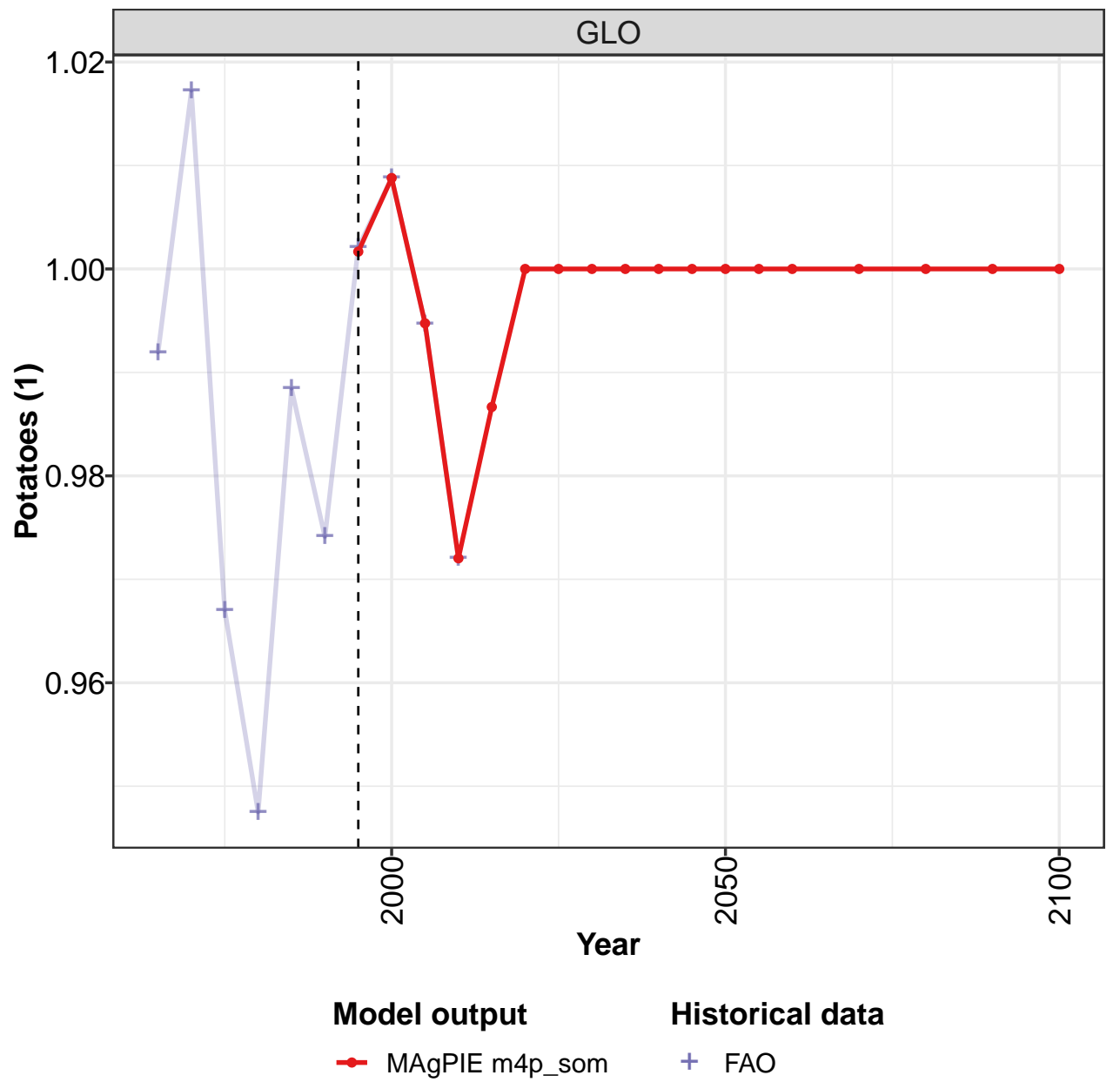
Table 1983: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Other crops—Fruits Vegetables Nuts (1)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.01	1.00	1.00	1.00
CAZ	0.82	0.82	0.71	0.70	0.71	0.73	0.74	0.73	0.68	0.64
CHA	1.00	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.02	1.02
EUR	0.96	0.95	0.95	0.95	0.97	0.91	0.91	0.91	0.86	0.87
IND	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.02	1.02
JPN	0.99	0.98	0.96	0.93	0.91	0.85	0.76	0.73	0.66	0.68
LAM	1.14	1.09	1.16	1.21	1.26	1.40	1.32	1.29	1.33	1.28
MEA	1.09	1.11	1.06	1.01	0.99	1.01	1.00	1.01	1.00	1.01
NEU	0.97	0.99	1.01	1.01	1.03	1.03	1.04	1.06	1.08	1.09
OAS	1.02	1.02	1.03	1.04	1.03	1.04	1.03	1.03	1.02	1.01
REF	0.96	0.95	0.93	0.92	0.92	0.96	0.92	0.93	0.86	0.82
SSA	1.16	1.17	1.17	1.15	1.13	1.13	1.12	1.12	1.11	1.08
USA	0.98	0.97	0.99	1.00	0.87	0.86	0.96	0.91	0.84	0.83

Table 1984: FAO — Trade—Self-sufficiency—Crops—Other crops—Fruits Vegetables Nuts (1)

60.1.8 Other crops—Potatoes

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

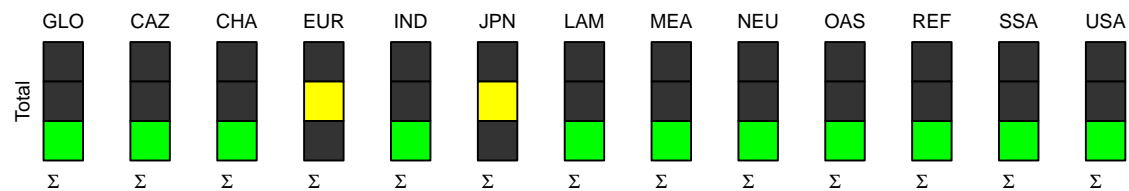
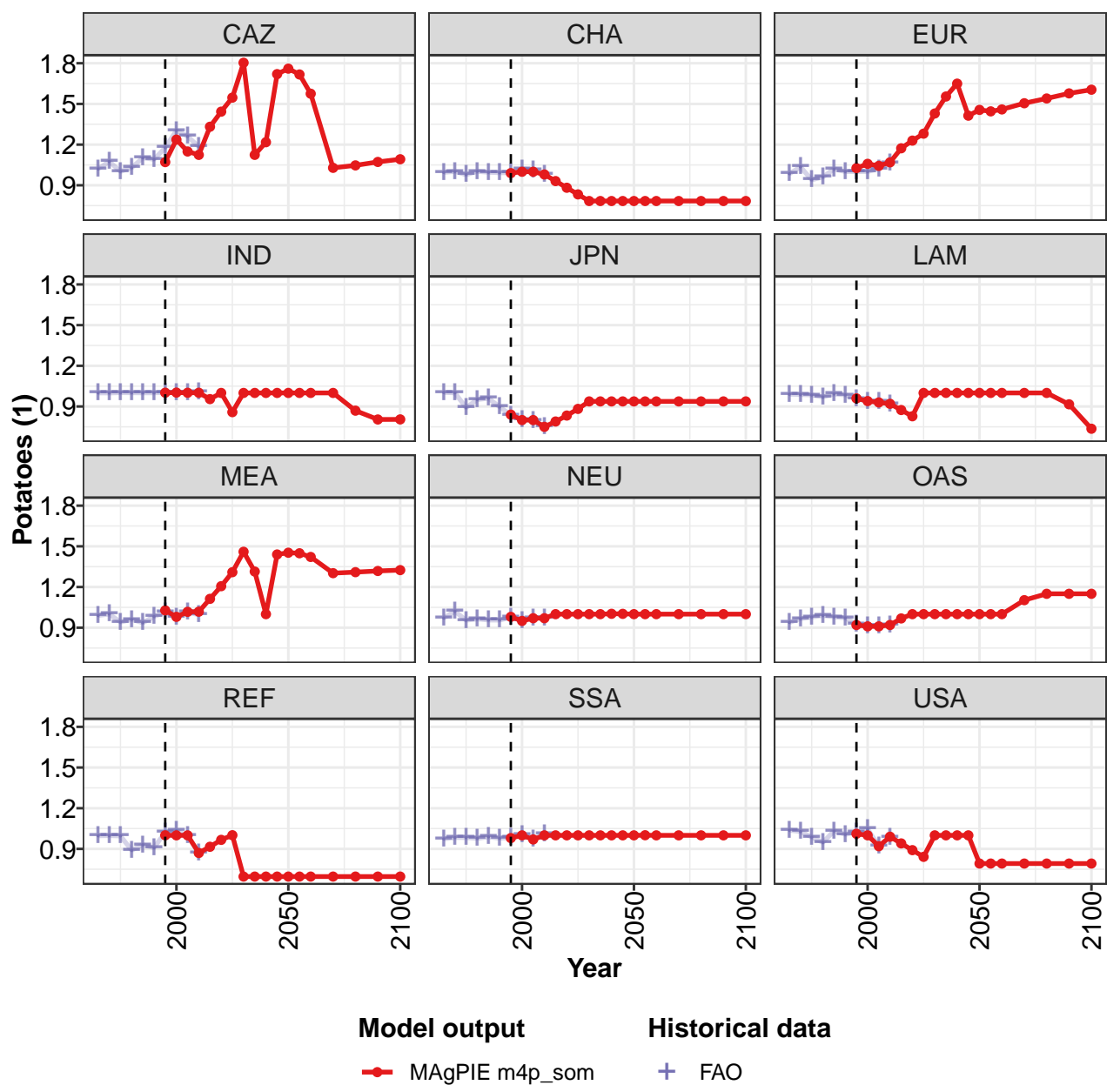


Figure 527: MAGPIE m4p\_som — Trade—Self-sufficiency—Crops—Other crops—Potatoes (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.00	1.01	0.99	0.97	0.99	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.07	1.24	1.15	1.12	1.33	1.44	1.55	1.80	1.12	1.22	1.72
CHA	0.99	1.00	1.00	0.98	0.93	0.88	0.83	0.78	0.78	0.78	0.78
EUR	1.03	1.06	1.04	1.07	1.17	1.23	1.28	1.43	1.55	1.65	1.41
IND	1.00	1.00	1.00	1.00	0.95	1.00	0.86	1.00	1.00	1.00	1.00
JPN	0.84	0.80	0.80	0.75	0.79	0.83	0.88	0.94	0.94	0.94	0.94
LAM	0.96	0.94	0.93	0.92	0.87	0.83	1.00	1.00	1.00	1.00	1.00
MEA	1.03	0.98	1.02	1.02	1.11	1.21	1.31	1.46	1.31	1.00	1.44
NEU	0.98	0.95	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00
OAS	0.92	0.91	0.91	0.92	0.97	1.00	1.00	1.00	1.00	1.00	1.00
REF	1.00	1.00	1.00	0.87	0.92	0.97	1.00	0.70	0.70	0.70	0.70
SSA	0.98	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
USA	1.01	1.00	0.92	0.99	0.94	0.89	0.84	1.00	1.00	1.00	1.00

Table 1985: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Other crops—Potatoes (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.76	1.72	1.58	1.03	1.05	1.07	1.09
CHA	0.78	0.78	0.78	0.78	0.78	0.78	0.78
EUR	1.46	1.45	1.46	1.51	1.54	1.58	1.60
IND	1.00	1.00	1.00	1.00	0.87	0.80	0.80
JPN	0.94	0.94	0.94	0.94	0.94	0.94	0.94
LAM	1.00	1.00	1.00	1.00	1.00	0.92	0.74
MEA	1.45	1.45	1.42	1.30	1.31	1.32	1.32
NEU	1.00	1.00	1.00	1.00	1.00	1.00	1.00
OAS	1.00	1.00	1.00	1.10	1.15	1.15	1.15
REF	0.70	0.70	0.70	0.70	0.70	0.70	0.70
SSA	1.00	1.00	1.00	1.00	1.00	1.00	1.00
USA	0.79	0.79	0.79	0.79	0.79	0.79	0.79

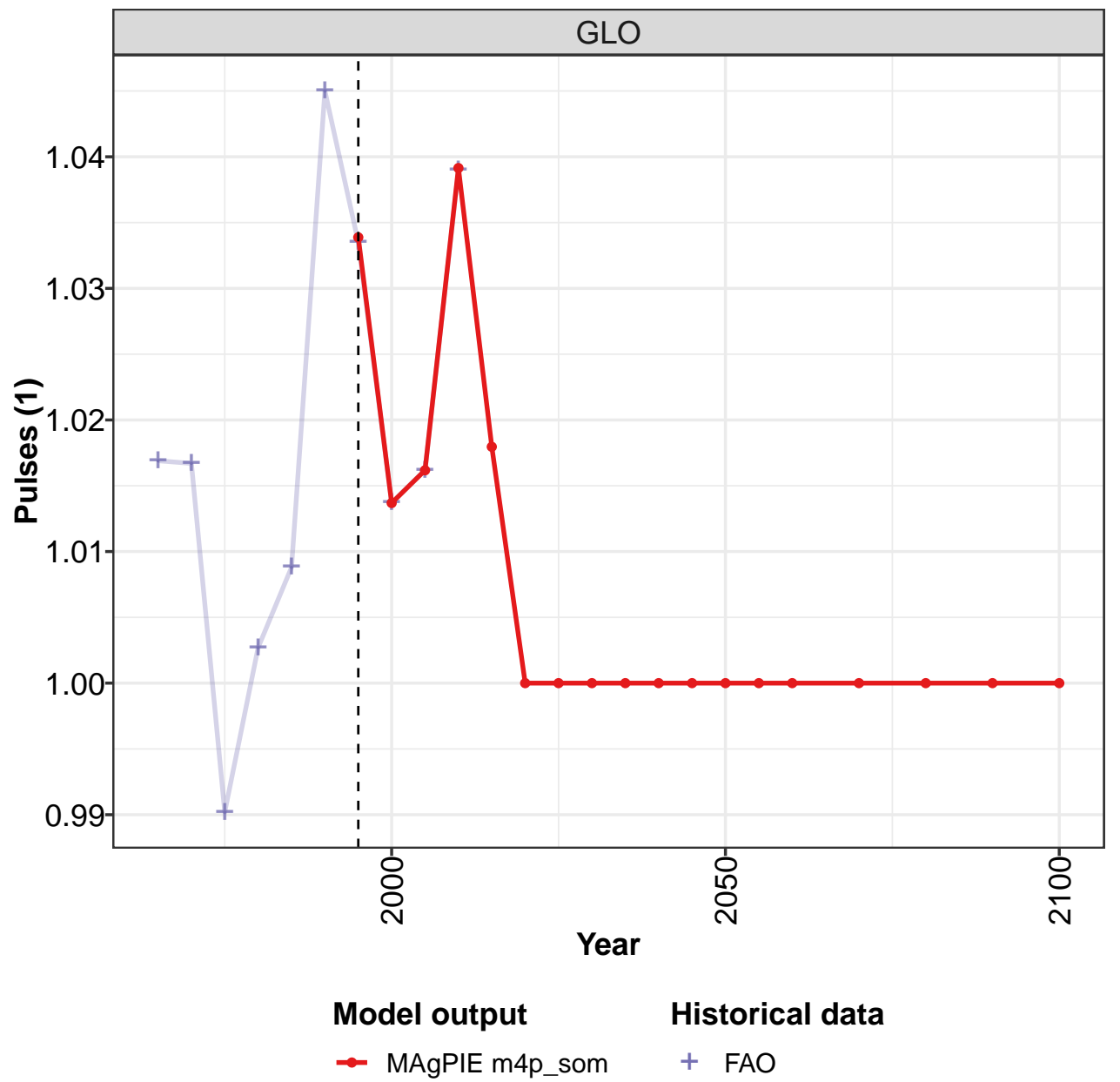
Table 1986: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Other crops—Potatoes (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.99	1.02	0.97	0.95	0.99	0.97	1.00	1.01	0.99	0.97
CAZ	1.02	1.08	1.00	1.03	1.10	1.09	1.18	1.30	1.26	1.18
CHA	1.00	1.00	0.98	1.00	1.00	0.99	0.99	1.02	1.01	0.98
EUR	0.98	1.04	0.94	0.96	1.02	1.00	1.00	1.00	1.02	1.06
IND	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.01
JPN	1.00	1.00	0.89	0.95	0.96	0.90	0.84	0.80	0.80	0.75
LAM	0.99	0.99	0.99	0.97	0.99	0.99	0.96	0.94	0.93	0.92
MEA	0.99	1.00	0.94	0.96	0.94	0.98	1.01	0.98	1.01	1.00
NEU	0.97	1.02	0.95	0.96	0.96	0.96	0.98	0.95	0.97	0.97
OAS	0.94	0.97	0.98	0.99	0.98	0.97	0.92	0.91	0.91	0.92
REF	1.00	1.00	1.00	0.89	0.93	0.91	1.02	1.03	1.00	0.87
SSA	0.97	0.98	0.98	0.98	0.99	0.98	0.98	1.00	0.97	1.01
USA	1.04	1.03	0.99	0.95	1.03	1.01	1.02	1.05	0.92	0.99

Table 1987: FAO — Trade—Self-sufficiency—Crops—Other crops—Potatoes (1)

60.1.9 Other crops—Pulses

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

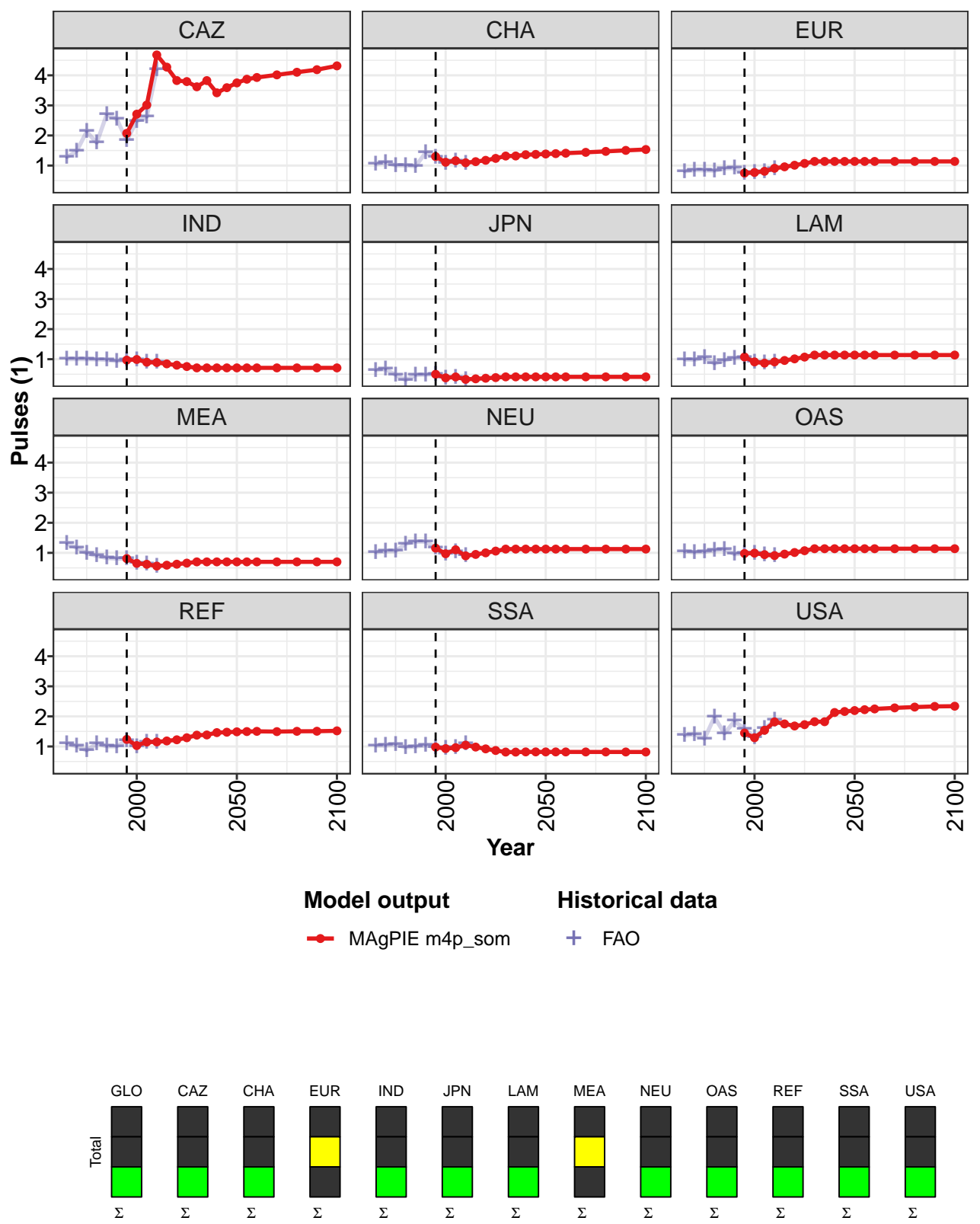


Figure 528: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Other crops—Pulses (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.03	1.01	1.02	1.04	1.02	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	2.07	2.71	3.01	4.68	4.27	3.83	3.79	3.62	3.83	3.42	3.59
CHA	1.30	1.11	1.16	1.09	1.13	1.17	1.24	1.32	1.32	1.36	1.37
EUR	0.75	0.77	0.81	0.91	0.96	1.01	1.07	1.14	1.14	1.14	1.14
IND	0.97	0.99	0.90	0.89	0.85	0.80	0.76	0.71	0.71	0.71	0.71
JPN	0.50	0.38	0.41	0.33	0.35	0.37	0.39	0.41	0.41	0.41	0.41
LAM	1.07	0.91	0.87	0.91	0.96	1.01	1.07	1.14	1.14	1.14	1.14
MEA	0.81	0.65	0.62	0.56	0.59	0.62	0.66	0.70	0.70	0.70	0.70
NEU	1.16	0.97	1.10	0.90	0.95	1.00	1.06	1.12	1.12	1.12	1.12
OAS	0.98	0.99	0.94	0.91	0.96	1.01	1.07	1.14	1.14	1.14	1.14
REF	1.24	1.03	1.15	1.15	1.18	1.22	1.29	1.38	1.38	1.46	1.48
SSA	0.98	0.93	0.96	1.05	0.98	0.92	0.87	0.81	0.81	0.82	0.82
USA	1.45	1.29	1.54	1.82	1.75	1.68	1.73	1.82	1.82	2.13	2.16

Table 1988: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Other crops—Pulses (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	3.75	3.87	3.93	4.02	4.10	4.19	4.31
CHA	1.38	1.40	1.41	1.44	1.47	1.50	1.53
EUR	1.14	1.14	1.14	1.14	1.14	1.14	1.14
IND	0.71	0.71	0.71	0.71	0.71	0.71	0.71
JPN	0.41	0.41	0.41	0.41	0.41	0.41	0.41
LAM	1.14	1.14	1.14	1.14	1.14	1.14	1.14
MEA	0.70	0.70	0.70	0.70	0.70	0.70	0.70
NEU	1.12	1.12	1.12	1.12	1.12	1.12	1.12
OAS	1.14	1.14	1.14	1.14	1.14	1.14	1.14
REF	1.49	1.50	1.50	1.49	1.50	1.51	1.52
SSA	0.82	0.82	0.82	0.82	0.82	0.82	0.82
USA	2.19	2.22	2.25	2.28	2.31	2.33	2.34

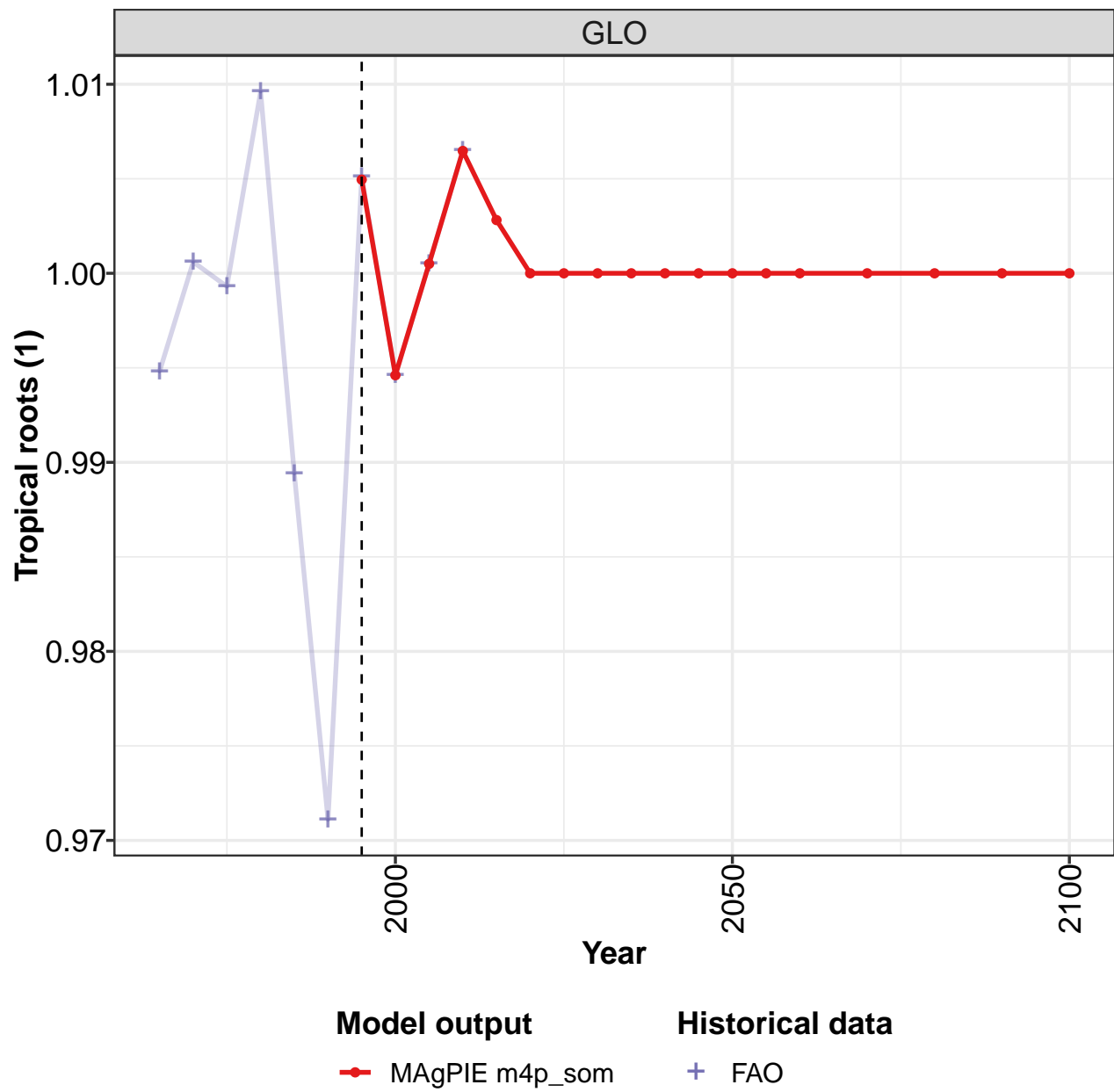
Table 1989: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Other crops—Pulses (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.02	1.02	0.99	1.00	1.01	1.04	1.03	1.01	1.02	1.04
CAZ	1.27	1.48	2.13	1.75	2.70	2.55	1.84	2.48	2.62	4.19
CHA	1.05	1.10	1.01	1.00	0.98	1.43	1.27	1.06	1.16	1.07
EUR	0.81	0.85	0.84	0.83	0.90	0.91	0.75	0.77	0.81	0.91
IND	1.00	1.00	1.00	0.99	0.98	0.94	0.97	0.99	0.90	0.89
JPN	0.63	0.67	0.48	0.31	0.47	0.49	0.50	0.38	0.41	0.33
LAM	0.99	0.98	1.05	0.85	0.96	1.03	1.05	0.91	0.87	0.91
MEA	1.31	1.17	0.98	0.90	0.83	0.80	0.81	0.65	0.62	0.56
NEU	1.02	1.05	1.06	1.30	1.37	1.37	1.17	0.97	1.03	0.90
OAS	1.05	1.02	1.04	1.08	1.12	0.95	0.98	0.99	0.94	0.91
REF	1.09	1.01	0.87	1.10	1.01	1.00	1.19	1.00	1.15	1.15
SSA	1.03	1.03	1.07	0.97	1.00	1.04	0.98	0.93	0.96	1.09
USA	1.36	1.40	1.26	1.98	1.43	1.84	1.59	1.30	1.59	1.87

Table 1990: FAO — Trade—Self-sufficiency—Crops—Other crops—Pulses (1)

60.1.10 Other crops—Tropical roots

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

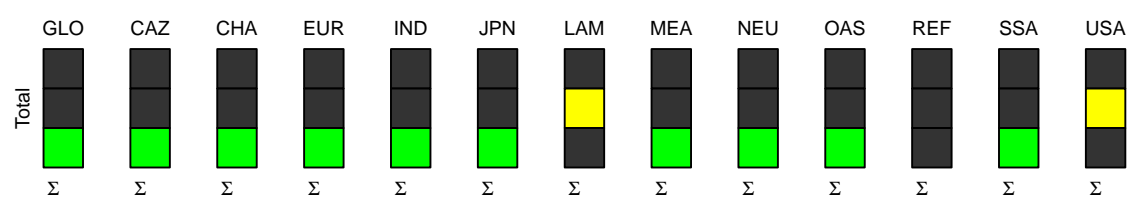
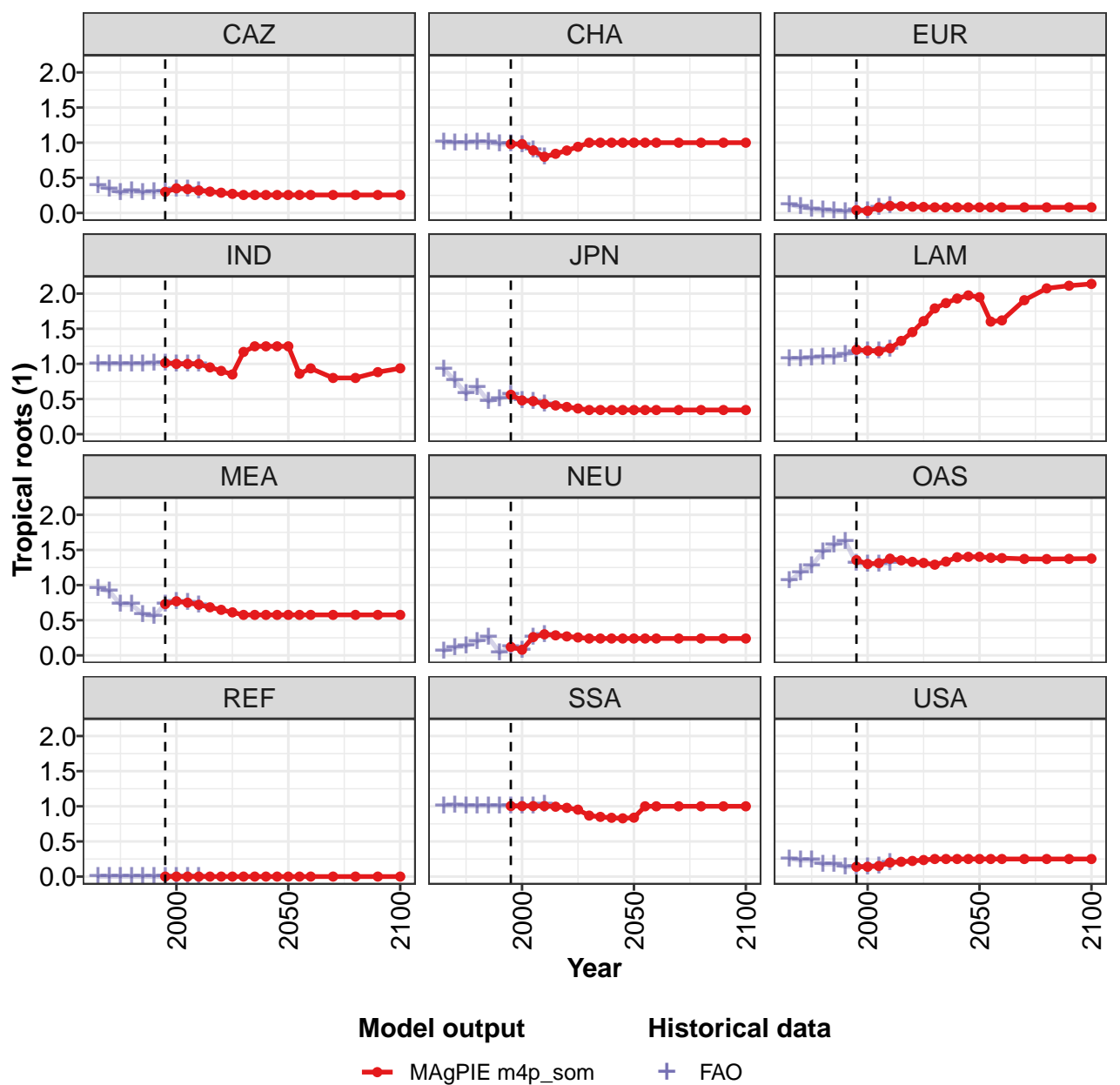


Figure 529: MAGPIE m4p\_som — Trade—Self-sufficiency—Crops—Other crops—Tropical roots (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.00	0.99	1.00	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	0.30	0.35	0.34	0.32	0.30	0.29	0.27	0.26	0.26	0.26	0.26
CHA	0.98	0.98	0.89	0.80	0.84	0.89	0.94	1.00	1.00	1.00	1.00
EUR	0.04	0.03	0.08	0.10	0.09	0.09	0.09	0.08	0.08	0.08	0.08
IND	1.01	1.00	1.00	1.00	0.95	0.90	0.85	1.17	1.25	1.25	1.25
JPN	0.56	0.48	0.47	0.43	0.41	0.39	0.37	0.34	0.34	0.34	0.34
LAM	1.20	1.19	1.18	1.22	1.33	1.45	1.61	1.79	1.87	1.93	1.98
MEA	0.73	0.77	0.75	0.72	0.68	0.65	0.61	0.58	0.58	0.58	0.58
NEU	0.12	0.08	0.26	0.30	0.28	0.27	0.26	0.24	0.24	0.24	0.24
OAS	1.36	1.30	1.31	1.38	1.35	1.33	1.32	1.29	1.33	1.40	1.40
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	1.00	1.00	1.00	1.00	0.99	0.98	0.95	0.87	0.85	0.84	0.83
USA	0.14	0.14	0.15	0.20	0.21	0.22	0.24	0.25	0.25	0.25	0.25

Table 1991: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Other crops—Tropical roots (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	0.26	0.26	0.26	0.26	0.26	0.26	0.26
CHA	1.00	1.00	1.00	1.00	1.00	1.00	1.00
EUR	0.08	0.08	0.08	0.08	0.08	0.08	0.08
IND	1.25	0.86	0.94	0.80	0.80	0.88	0.94
JPN	0.34	0.34	0.34	0.34	0.34	0.34	0.34
LAM	1.95	1.60	1.62	1.91	2.07	2.11	2.14
MEA	0.58	0.58	0.58	0.58	0.58	0.58	0.58
NEU	0.24	0.24	0.24	0.24	0.24	0.24	0.24
OAS	1.40	1.39	1.38	1.37	1.37	1.37	1.38
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	0.84	1.00	1.00	1.00	1.00	1.00	1.00
USA	0.25	0.25	0.25	0.25	0.25	0.25	0.25

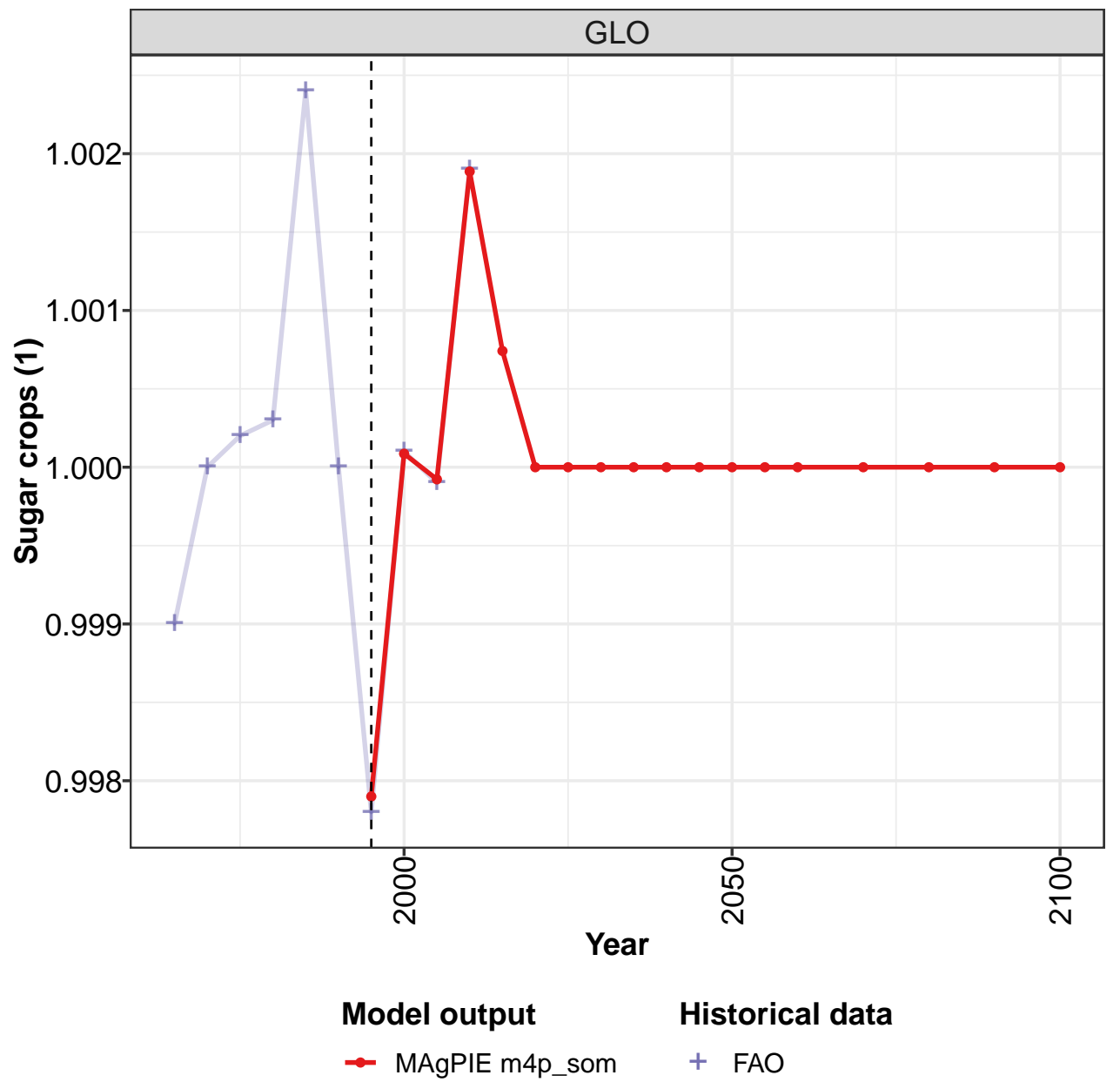
Table 1992: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Other crops—Tropical roots (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.99	1.00	1.00	1.01	0.99	0.97	1.01	0.99	1.00	1.01
CAZ	0.39	0.35	0.28	0.31	0.29	0.30	0.30	0.35	0.34	0.32
CHA	1.00	1.00	1.00	1.01	1.00	0.98	0.98	0.98	0.89	0.80
EUR	0.12	0.09	0.05	0.04	0.03	0.02	0.04	0.03	0.08	0.10
IND	1.00	1.00	1.00	1.00	1.00	1.00	1.01	1.00	1.00	1.00
JPN	0.93	0.76	0.58	0.67	0.47	0.51	0.56	0.48	0.47	0.43
LAM	1.08	1.08	1.09	1.10	1.10	1.13	1.17	1.18	1.18	1.21
MEA	0.95	0.91	0.72	0.72	0.58	0.56	0.73	0.77	0.75	0.72
NEU	0.06	0.11	0.13	0.20	0.25	0.04	0.12	0.08	0.26	0.30
OAS	1.06	1.18	1.28	1.47	1.57	1.62	1.31	1.29	1.30	1.31
REF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSA	1.01	1.01	1.01	1.00	1.01	1.01	1.00	1.00	1.00	1.03
USA	0.25	0.23	0.23	0.18	0.18	0.14	0.14	0.14	0.15	0.20

Table 1993: FAO — Trade—Self-sufficiency—Crops—Other crops—Tropical roots (1)

60.1.11 Sugar crops

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale. ## geom\_path: Each group consists of only one observation. Do you need to adjust the group## aesthetic?

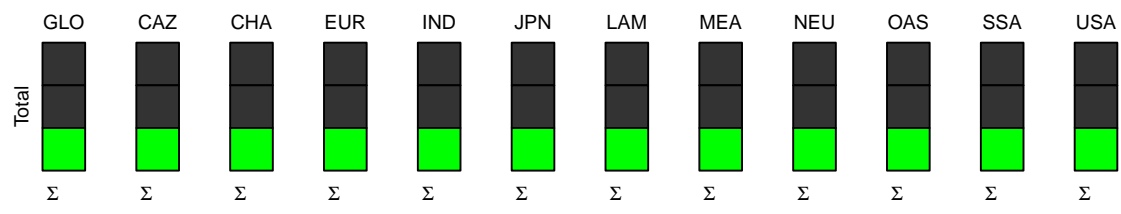
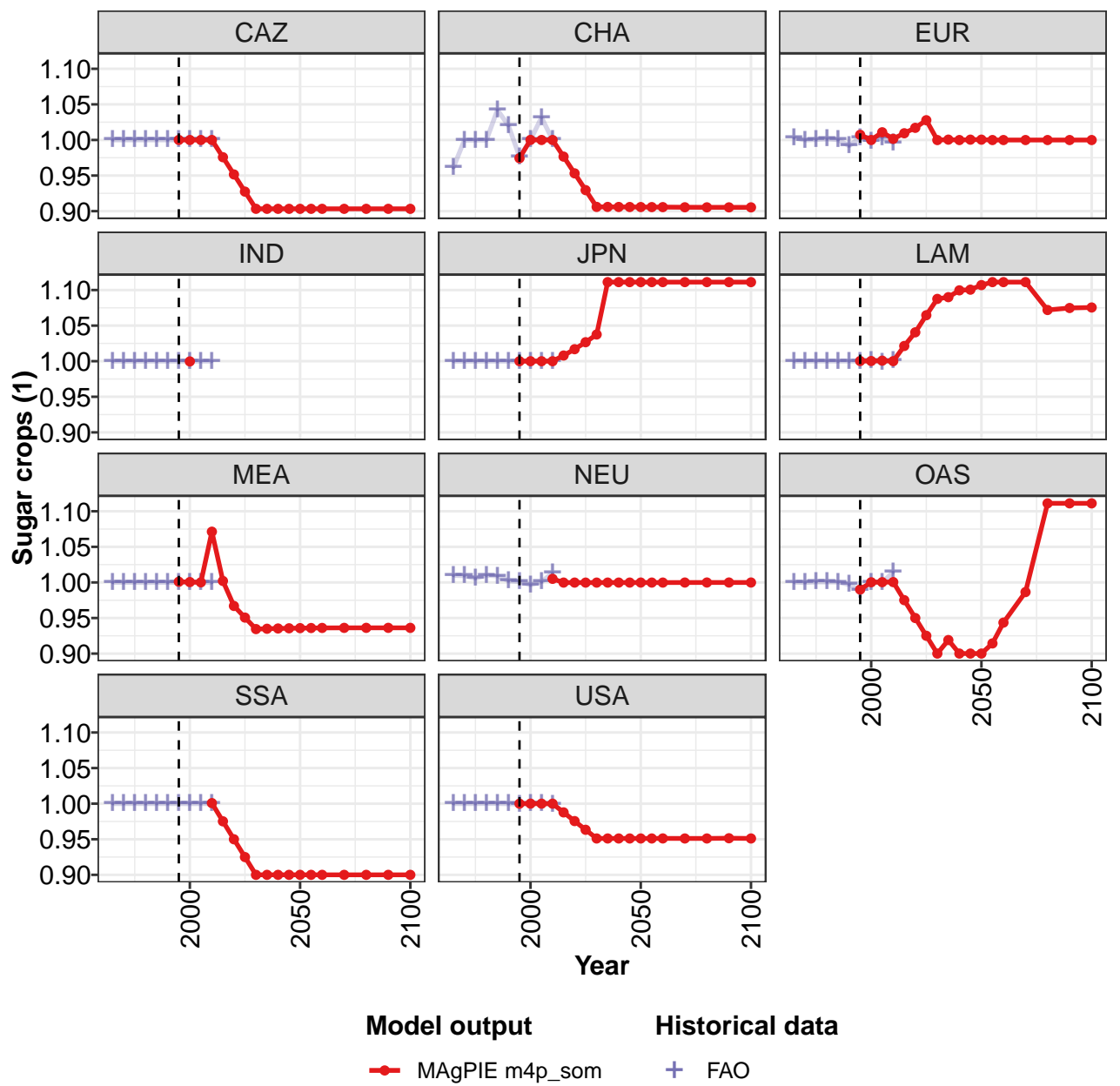


Figure 530: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Sugar crops (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1	1	1	1	1	1	1	1	1	1	1
CAZ	1	1	1	1	1	1	1	1	1	1	1
CHA	1	1	1	1	1	1	1	1	1	1	1
EUR	1	1	1	1	1	1	1	1	1	1	1
IND		1									
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	1	1	1	1	1	1	1	1	1	1	1
MEA	1	1	1	1	1	1	1	1	1	1	1
NEU				1	1	1	1	1	1	1	1
OAS	1	1	1	1	1	1	1	1	1	1	1
SSA				1	1	1	1	1	1	1	1
USA	1	1	1	1	1	1	1	1	1	1	1

Table 1994: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Sugar crops (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1	1	1	1	1	1	1
CAZ	1	1	1	1	1	1	1
CHA	1	1	1	1	1	1	1
EUR	1	1	1	1	1	1	1
IND							
JPN	1	1	1	1	1	1	1
LAM	1	1	1	1	1	1	1
MEA	1	1	1	1	1	1	1
NEU	1	1	1	1	1	1	1
OAS	1	1	1	1	1	1	1
SSA	1	1	1	1	1	1	1
USA	1	1	1	1	1	1	1

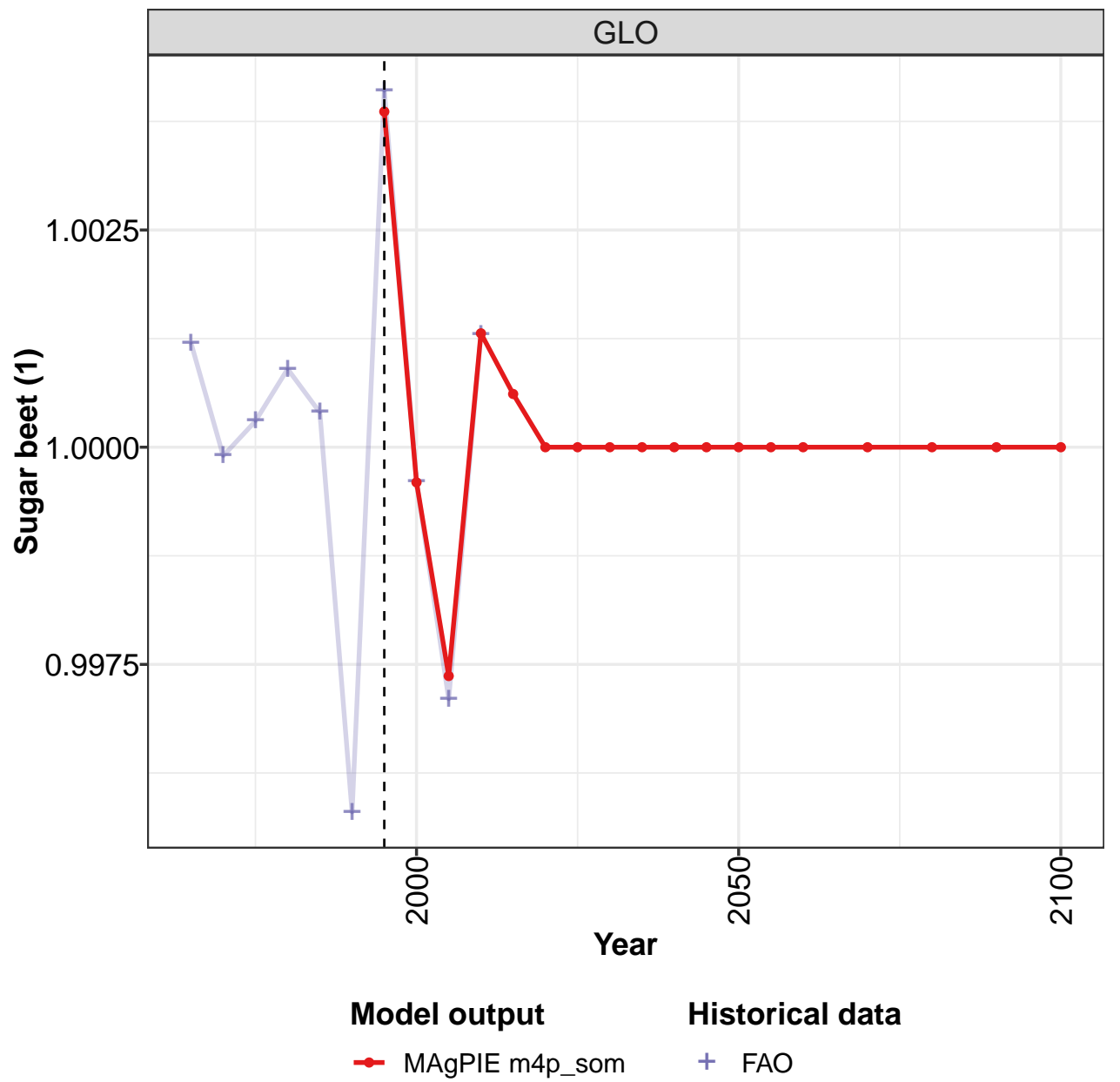
Table 1995: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Sugar crops (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CHA	0.96	1.00	1.00	1.00	1.04	1.02	0.98	1.00	1.03	1.00
EUR	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00
IND	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
JPN	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
LAM	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MEA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
NEU	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00	1.00	1.01
OAS	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.01
SSA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
USA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Table 1996: FAO — Trade—Self-sufficiency—Crops—Sugar crops (1)

60.1.12
Sugar crops—Sugar beet

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale. ## geom\_path: Each group consists of only one observation. Do you need to adjust the group## aesthetic?

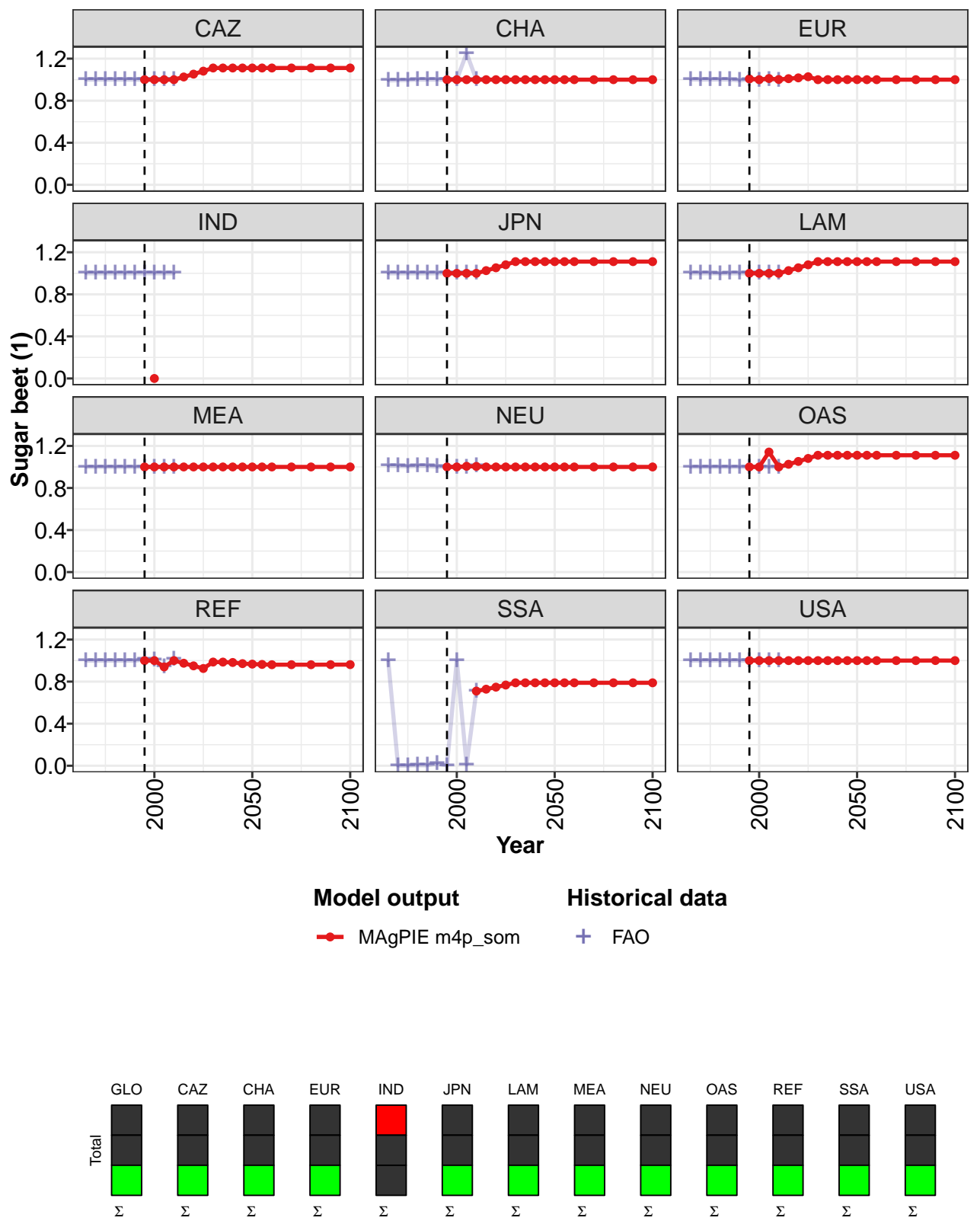


Figure 531: MAGPIE m4p\_som — Trade—Self-sufficiency—Crops—Sugar crops—Sugar beet (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1	1	1	1	1	1	1	1	1	1	1
CAZ	1	1	1	1	1	1	1	1	1	1	1
CHA	1	1	1	1	1	1	1	1	1	1	1
EUR	1	1	1	1	1	1	1	1	1	1	1
IND		0									
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	1	1	1	1	1	1	1	1	1	1	1
MEA	1	1	1	1	1	1	1	1	1	1	1
NEU	1	1	1	1	1	1	1	1	1	1	1
OAS	1	1	1	1	1	1	1	1	1	1	1
REF	1	1	1	1	1	1	1	1	1	1	1
SSA				1	1	1	1	1	1	1	1
USA	1	1	1	1	1	1	1	1	1	1	1

Table 1997: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Sugar crops—Sugar beet (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1	1	1	1	1	1	1
CAZ	1	1	1	1	1	1	1
CHA	1	1	1	1	1	1	1
EUR	1	1	1	1	1	1	1
IND							
JPN	1	1	1	1	1	1	1
LAM	1	1	1	1	1	1	1
MEA	1	1	1	1	1	1	1
NEU	1	1	1	1	1	1	1
OAS	1	1	1	1	1	1	1
REF	1	1	1	1	1	1	1
SSA	1	1	1	1	1	1	1
USA	1	1	1	1	1	1	1

Table 1998: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Sugar crops—Sugar beet (1) [PART 2/2]

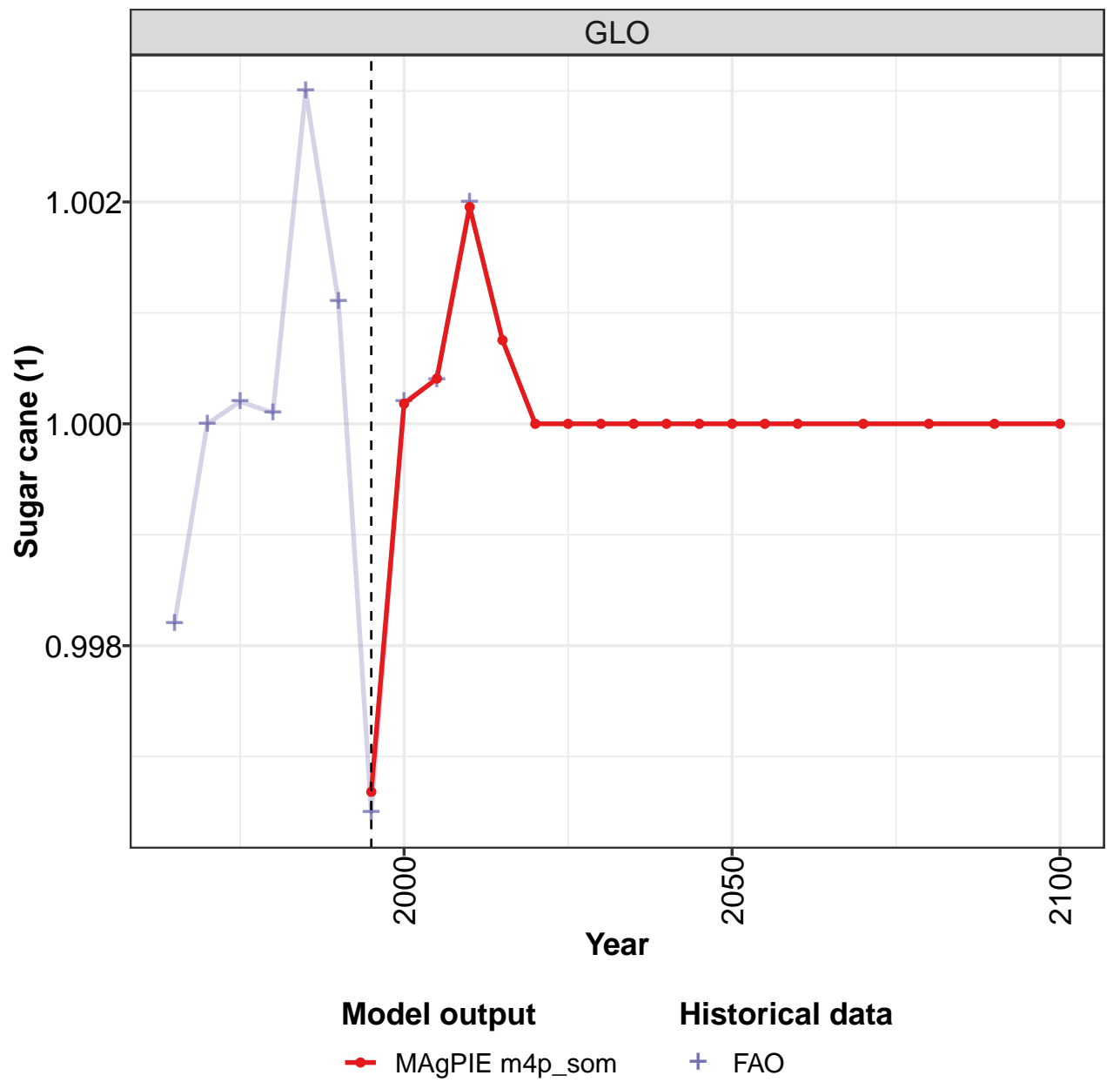
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CHA	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.25	1.00
EUR	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00
IND	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
JPN	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
LAM	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MEA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
NEU	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00	1.00	1.01
OAS	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
REF	1.00	1.00	1.00	1.00	1.00	1.00	1.01	1.01	0.94	1.01
SSA	1.00	0.00	0.00	0.01	0.00	0.02	0.00	1.00	0.01	0.71
USA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Table 1999: FAO — Trade—Self-sufficiency—Crops—Sugar crops—Sugar beet (1)



60.1.13
Sugar crops—Sugar cane

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

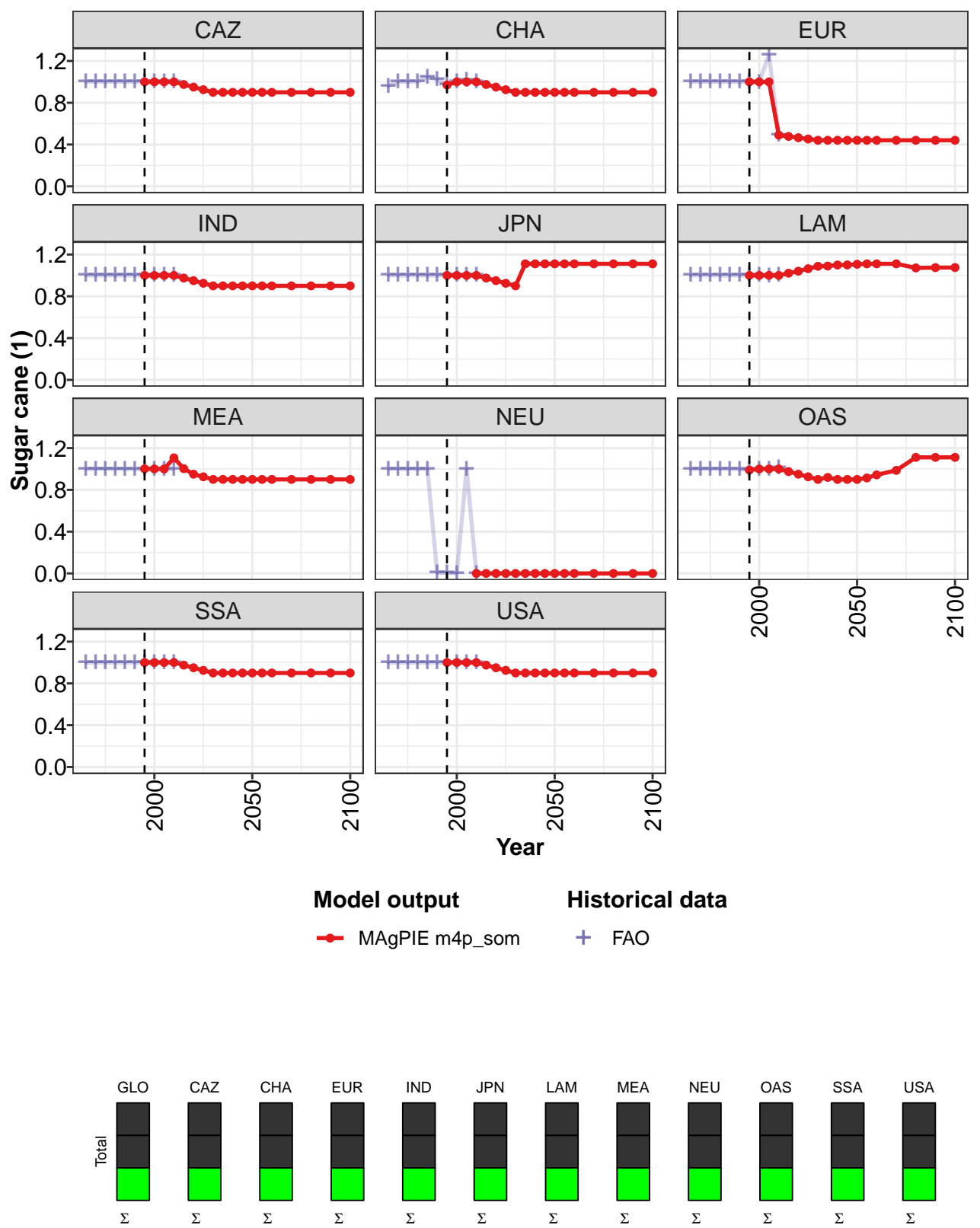


Figure 532: MAGPIE m4p\_som — Trade—Self-sufficiency—Crops—Sugar crops—Sugar cane (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1	1	1	1	1	1	1	1	1	1	1
CAZ	1	1	1	1	1	1	1	1	1	1	1
CHA	1	1	1	1	1	1	1	1	1	1	1
EUR	1	1	1	0	0	0	0	0	0	0	0
IND	1	1	1	1	1	1	1	1	1	1	1
JPN	1	1	1	1	1	1	1	1	1	1	1
LAM	1	1	1	1	1	1	1	1	1	1	1
MEA	1	1	1	1	1	1	1	1	1	1	1
NEU				0	0	0	0	0	0	0	0
OAS	1	1	1	1	1	1	1	1	1	1	1
SSA	1	1	1	1	1	1	1	1	1	1	1
USA	1	1	1	1	1	1	1	1	1	1	1

Table 2000: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Sugar crops—Sugar cane (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1	1	1	1	1	1	1
CAZ	1	1	1	1	1	1	1
CHA	1	1	1	1	1	1	1
EUR	0	0	0	0	0	0	0
IND	1	1	1	1	1	1	1
JPN	1	1	1	1	1	1	1
LAM	1	1	1	1	1	1	1
MEA	1	1	1	1	1	1	1
NEU	0	0	0	0	0	0	0
OAS	1	1	1	1	1	1	1
SSA	1	1	1	1	1	1	1
USA	1	1	1	1	1	1	1

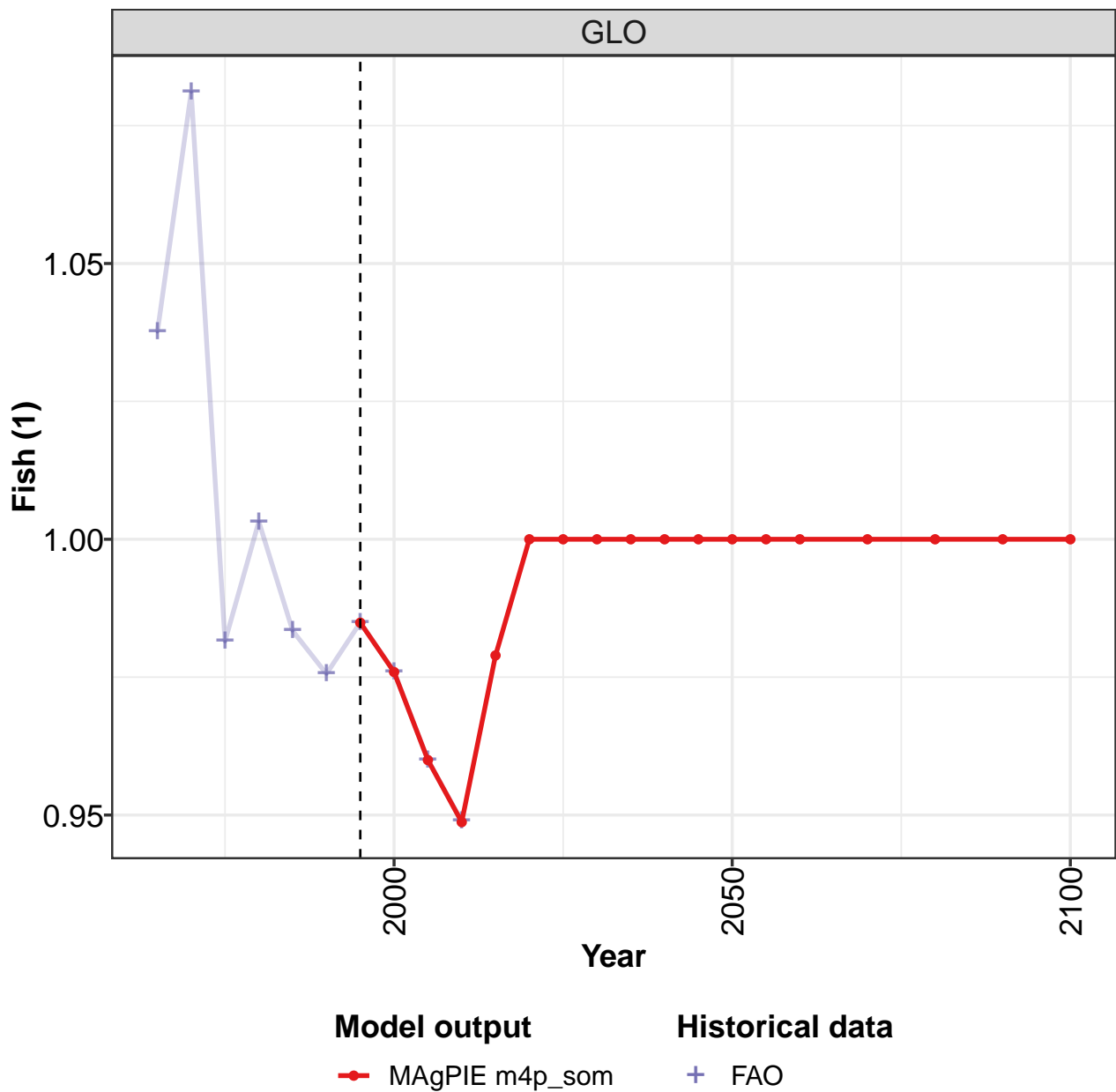
Table 2001: MAgPIE m4p\_som — Trade—Self-sufficiency—Crops—Sugar crops—Sugar cane (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CHA	0.96	1.00	1.00	1.00	1.05	1.02	0.97	1.00	1.02	1.00
EUR	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.26	0.49
IND	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
JPN	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
LAM	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MEA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
NEU	1.00	1.00	1.00	1.00	1.00	0.01	0.01	0.00	1.00	0.00
OAS	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.01
SSA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
USA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Table 2002: FAO — Trade—Self-sufficiency—Crops—Sugar crops—Sugar cane (1)

## 60.2 Fish

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

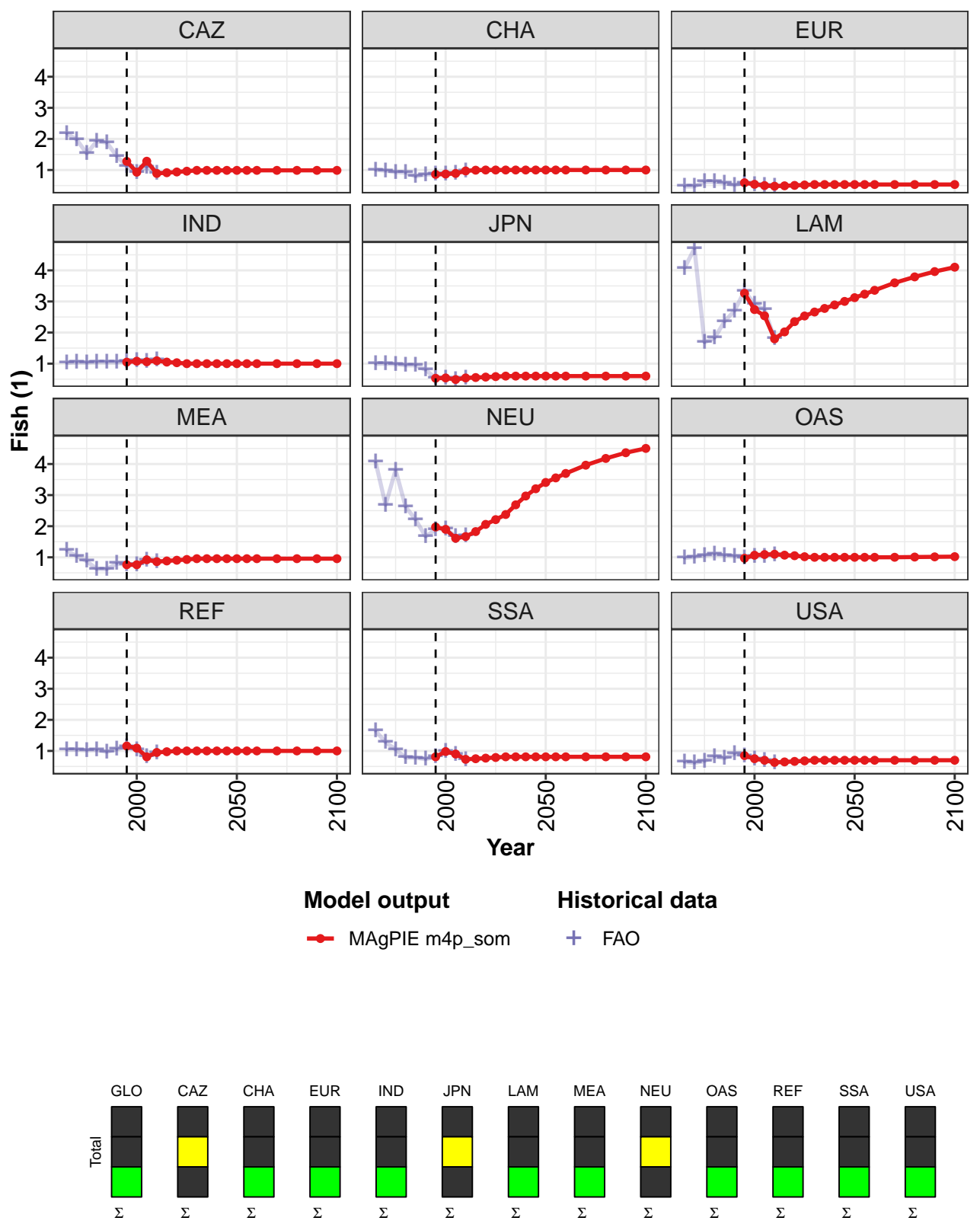


Figure 533: MAGPIE m4p\_som — Trade—Self-sufficiency—Fish (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.98	0.98	0.96	0.95	0.98	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.28	0.93	1.28	0.89	0.91	0.94	0.96	0.99	0.99	0.99	0.99
CHA	0.86	0.87	0.89	0.97	0.99	1.00	1.00	1.00	1.00	1.00	1.00
EUR	0.59	0.54	0.50	0.48	0.49	0.51	0.52	0.53	0.53	0.53	0.53
IND	1.05	1.08	1.06	1.09	1.05	1.03	1.00	1.00	1.00	1.00	1.00
JPN	0.53	0.54	0.49	0.54	0.55	0.57	0.58	0.60	0.60	0.60	0.60
LAM	3.26	2.74	2.54	1.80	2.02	2.35	2.53	2.66	2.78	2.89	3.00
MEA	0.76	0.76	0.92	0.86	0.88	0.91	0.93	0.96	0.96	0.96	0.96
NEU	1.97	1.90	1.61	1.67	1.83	2.06	2.21	2.38	2.69	2.97	3.20
OAS	0.97	1.07	1.09	1.10	1.07	1.05	1.02	1.00	1.00	1.00	1.00
REF	1.16	1.09	0.81	0.95	0.97	1.00	1.00	1.00	1.00	1.00	1.00
SSA	0.81	0.98	0.90	0.73	0.75	0.77	0.79	0.81	0.81	0.81	0.81
USA	0.85	0.75	0.70	0.63	0.65	0.66	0.68	0.70	0.70	0.70	0.70

Table 2003: MAgPIE m4p\_som — Trade—Self-sufficiency—Fish (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	0.99	0.99	0.99	0.99	0.99	0.99	0.99
CHA	1.00	1.00	1.00	1.00	1.00	1.00	1.00
EUR	0.53	0.53	0.53	0.53	0.53	0.53	0.53
IND	1.00	1.00	1.00	1.00	1.00	1.00	1.00
JPN	0.60	0.60	0.60	0.60	0.60	0.60	0.60
LAM	3.12	3.24	3.36	3.60	3.79	3.96	4.10
MEA	0.96	0.96	0.96	0.96	0.96	0.96	0.96
NEU	3.41	3.55	3.70	3.96	4.18	4.36	4.50
OAS	1.00	1.00	1.00	1.00	1.01	1.01	1.02
REF	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SSA	0.81	0.81	0.81	0.81	0.81	0.81	0.81
USA	0.70	0.70	0.70	0.70	0.70	0.70	0.70

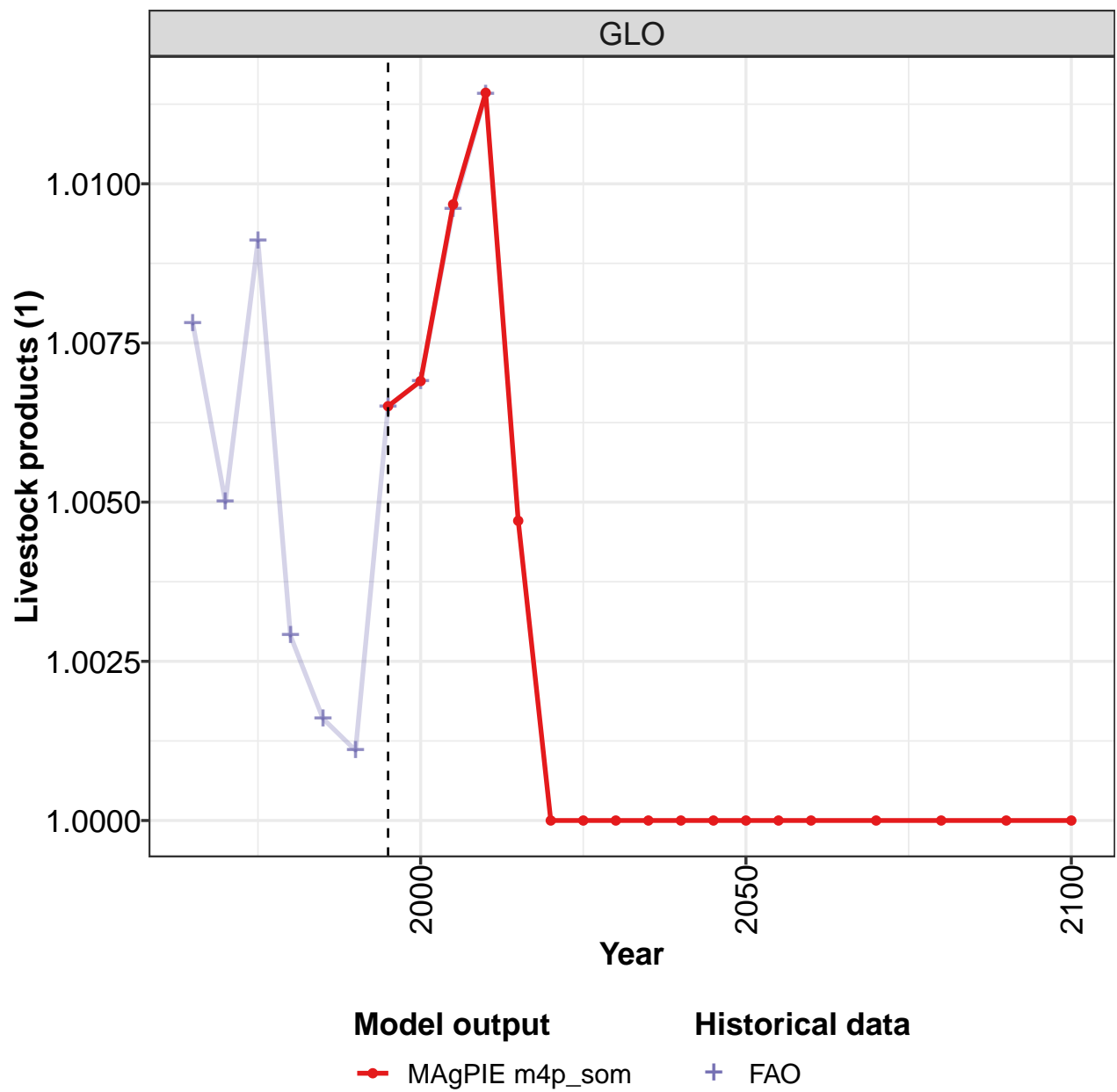
Table 2004: MAgPIE m4p\_som — Trade—Self-sufficiency—Fish (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.04	1.08	0.98	1.00	0.98	0.98	0.98	0.98	0.96	0.95
CAZ	2.18	1.98	1.53	1.92	1.88	1.45	1.12	0.93	1.10	0.89
CHA	1.00	0.98	0.93	0.92	0.79	0.85	0.86	0.87	0.89	0.97
EUR	0.47	0.47	0.62	0.62	0.57	0.51	0.59	0.54	0.50	0.48
IND	1.02	1.04	1.03	1.05	1.05	1.04	1.07	1.10	1.07	1.12
JPN	0.99	1.00	0.98	0.95	0.95	0.80	0.53	0.54	0.49	0.54
LAM	4.07	4.70	1.68	1.82	2.36	2.70	3.34	2.91	2.73	1.81
MEA	1.22	1.04	0.87	0.62	0.62	0.80	0.76	0.76	0.92	0.86
NEU	4.07	2.69	3.81	2.62	2.21	1.67	1.89	1.92	1.67	1.70
OAS	0.97	1.01	1.06	1.10	1.06	1.04	0.97	1.02	1.04	1.09
REF	1.04	1.04	1.02	1.03	0.97	1.05	1.14	1.03	0.81	0.95
SSA	1.65	1.28	1.05	0.78	0.78	0.73	0.81	0.98	0.90	0.73
USA	0.64	0.61	0.67	0.82	0.76	0.90	0.85	0.75	0.70	0.63

Table 2005: FAO — Trade—Self-sufficiency—Fish (1)

60.3 Livestock products

## Scale for 'colour' is already present. Adding another scale for 'colour', which will##  
 replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

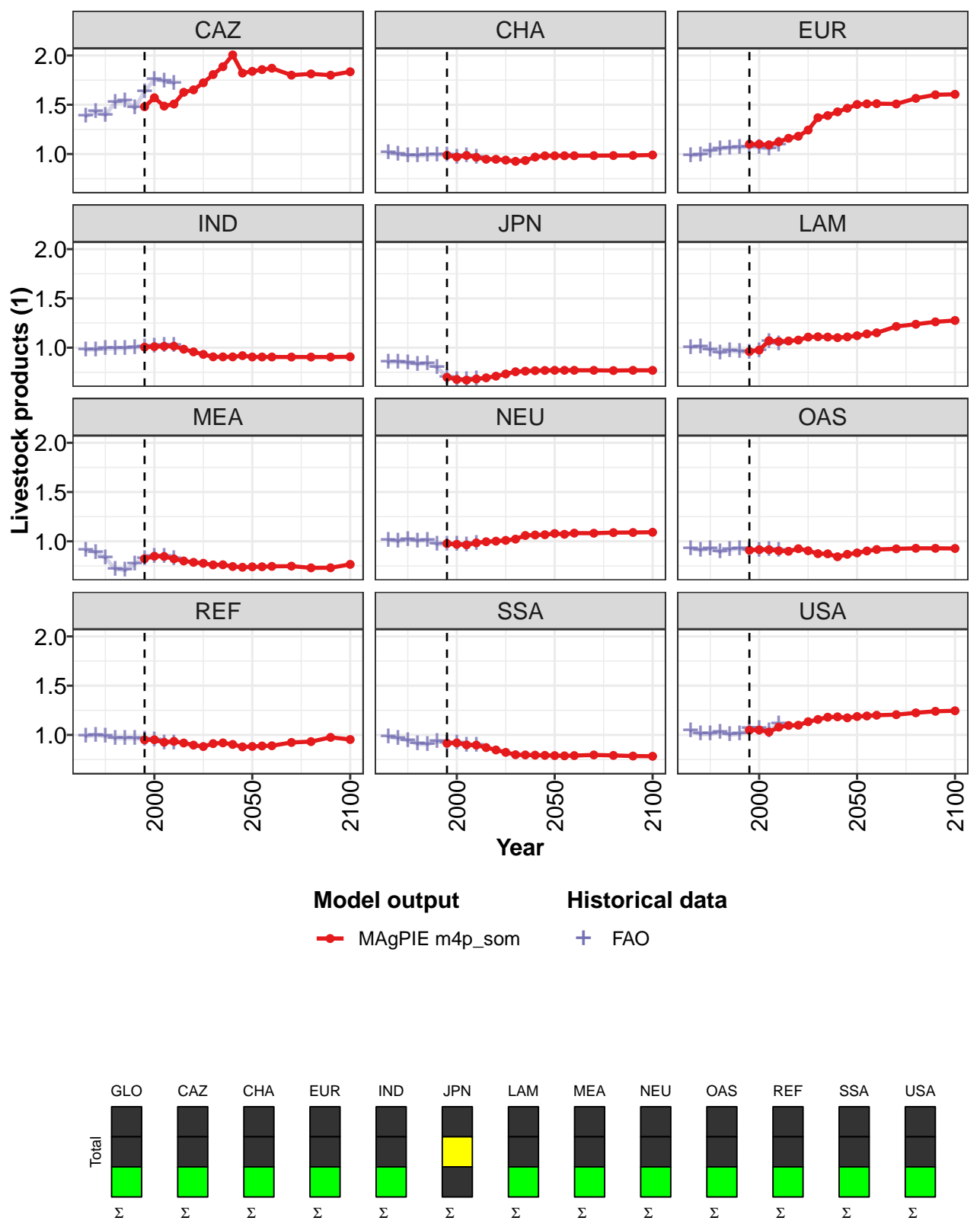


Figure 534: MAGPIE m4p\_som — Trade—Self-sufficiency—Livestock products (1)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.01	1.01	1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.48	1.57	1.49	1.51	1.63	1.65	1.72	1.81	1.89	2.01	1.82
CHA	0.99	0.97	0.99	0.97	0.95	0.95	0.94	0.93	0.93	0.97	0.98
EUR	1.10	1.10	1.09	1.12	1.16	1.18	1.24	1.37	1.39	1.43	1.46
IND	1.01	1.01	1.01	1.02	0.98	0.96	0.93	0.91	0.91	0.91	0.92
JPN	0.70	0.68	0.67	0.68	0.69	0.71	0.73	0.76	0.76	0.77	0.77
LAM	0.96	0.98	1.07	1.06	1.07	1.08	1.11	1.11	1.11	1.10	1.11
MEA	0.82	0.85	0.85	0.82	0.80	0.79	0.78	0.76	0.76	0.74	0.74
NEU	0.98	0.97	0.96	0.98	1.00	1.00	1.01	1.02	1.06	1.06	1.07
OAS	0.91	0.91	0.91	0.90	0.90	0.92	0.90	0.87	0.87	0.84	0.87
REF	0.95	0.95	0.93	0.93	0.92	0.90	0.88	0.91	0.92	0.90	0.88
SSA	0.92	0.92	0.90	0.90	0.87	0.85	0.82	0.80	0.80	0.79	0.79
USA	1.05	1.05	1.03	1.08	1.10	1.10	1.13	1.16	1.18	1.18	1.17

Table 2006: MAgPIE m4p\_som — Trade—Self-sufficiency—Livestock products (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.84	1.86	1.87	1.80	1.81	1.80	1.83
CHA	0.98	0.98	0.98	0.98	0.98	0.99	0.99
EUR	1.50	1.51	1.51	1.51	1.57	1.60	1.61
IND	0.91	0.91	0.91	0.90	0.90	0.90	0.91
JPN	0.77	0.77	0.77	0.77	0.77	0.77	0.77
LAM	1.12	1.14	1.15	1.22	1.24	1.26	1.28
MEA	0.74	0.74	0.75	0.75	0.73	0.73	0.77
NEU	1.08	1.07	1.08	1.08	1.09	1.09	1.09
OAS	0.88	0.90	0.92	0.92	0.93	0.93	0.93
REF	0.88	0.89	0.89	0.92	0.93	0.98	0.95
SSA	0.79	0.79	0.79	0.80	0.79	0.79	0.78
USA	1.19	1.19	1.20	1.21	1.22	1.24	1.25

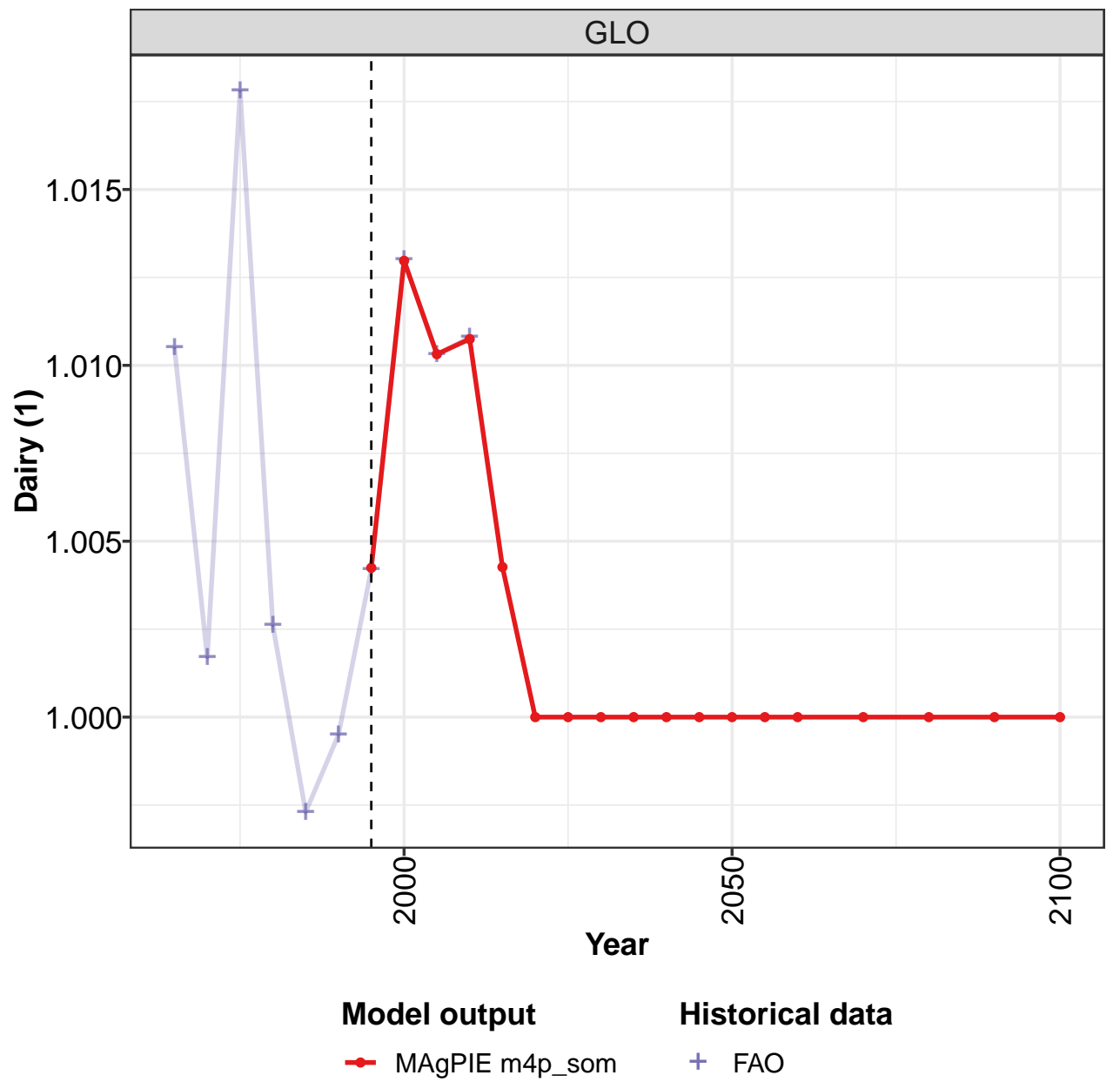
Table 2007: MAgPIE m4p\_som — Trade—Self-sufficiency—Livestock products (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.01	1.00	1.01	1.00	1.00	1.00	1.01	1.01	1.01	1.01
CAZ	1.38	1.43	1.40	1.52	1.54	1.47	1.63	1.76	1.74	1.72
CHA	1.01	1.00	0.99	0.98	0.99	0.99	0.99	0.97	0.98	0.97
EUR	0.98	0.99	1.03	1.05	1.06	1.07	1.07	1.07	1.05	1.09
IND	0.98	0.98	0.99	0.99	1.00	1.00	1.01	1.01	1.02	1.02
JPN	0.85	0.86	0.85	0.83	0.84	0.80	0.70	0.68	0.67	0.68
LAM	1.00	1.01	0.98	0.95	0.97	0.96	0.96	0.97	1.06	1.04
MEA	0.91	0.89	0.83	0.72	0.71	0.77	0.83	0.85	0.85	0.82
NEU	1.01	1.00	1.02	1.01	1.01	0.97	0.97	0.97	0.96	0.98
OAS	0.93	0.91	0.92	0.89	0.92	0.93	0.91	0.91	0.91	0.91
REF	0.99	1.00	0.99	0.97	0.96	0.97	0.95	0.95	0.92	0.92
SSA	0.98	0.97	0.94	0.91	0.91	0.93	0.92	0.92	0.90	0.90
USA	1.04	1.01	1.01	1.03	1.00	1.01	1.06	1.07	1.05	1.11

Table 2008: FAO — Trade—Self-sufficiency—Livestock products (1)

60.3.1 Dairy

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

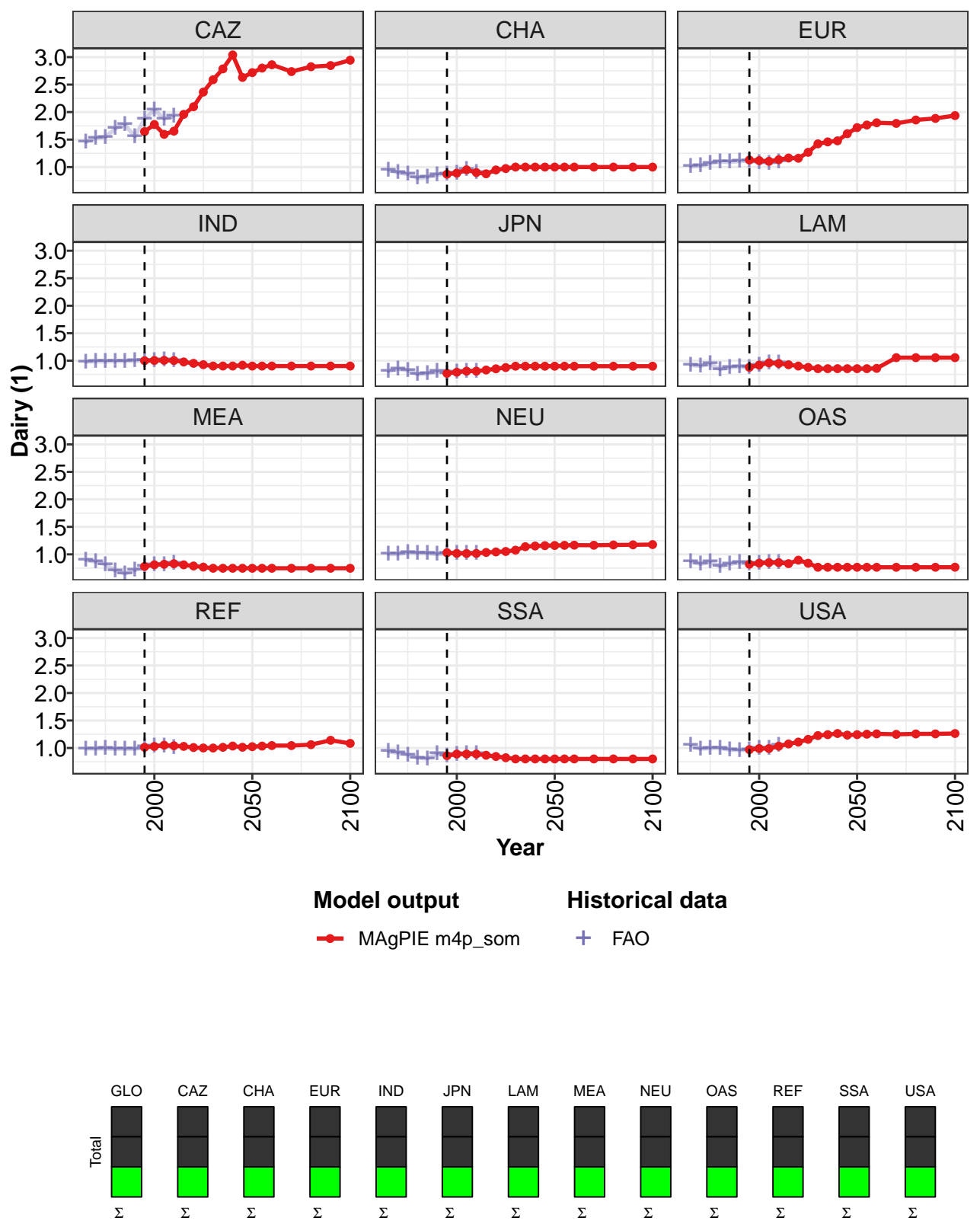


Figure 535: MAGPIE m4p\_som — Trade—Self-sufficiency—Livestock products—Dairy (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.00	1.01	1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.64	1.77	1.60	1.65	1.96	2.10	2.36	2.59	2.79	3.04	2.63
CHA	0.87	0.89	0.95	0.90	0.88	0.95	0.97	1.00	1.00	1.00	1.00
EUR	1.13	1.12	1.11	1.13	1.16	1.16	1.27	1.42	1.46	1.48	1.61
IND	1.00	1.00	1.01	1.00	0.98	0.95	0.93	0.90	0.90	0.90	0.92
JPN	0.77	0.79	0.81	0.81	0.83	0.85	0.88	0.90	0.90	0.90	0.90
LAM	0.88	0.92	0.96	0.95	0.93	0.90	0.88	0.85	0.85	0.86	0.85
MEA	0.78	0.81	0.82	0.83	0.81	0.79	0.77	0.75	0.75	0.75	0.75
NEU	1.03	1.02	1.02	1.02	1.03	1.04	1.05	1.08	1.14	1.15	1.16
OAS	0.82	0.84	0.85	0.85	0.83	0.89	0.84	0.77	0.77	0.77	0.77
REF	1.01	1.03	1.05	1.04	1.03	1.01	1.00	1.00	1.01	1.04	1.01
SSA	0.86	0.89	0.89	0.89	0.87	0.85	0.82	0.80	0.80	0.80	0.80
USA	0.97	0.99	0.99	1.03	1.07	1.11	1.16	1.23	1.24	1.26	1.23

Table 2009: MAgPIE m4p\_som — Trade—Self-sufficiency—Livestock products—Dairy (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	2.72	2.80	2.86	2.74	2.83	2.85	2.94
CHA	1.00	1.00	1.00	1.00	1.00	1.00	1.00
EUR	1.72	1.76	1.81	1.79	1.86	1.89	1.94
IND	0.90	0.90	0.90	0.90	0.90	0.90	0.90
JPN	0.90	0.90	0.90	0.90	0.90	0.90	0.90
LAM	0.86	0.85	0.86	1.06	1.06	1.06	1.06
MEA	0.75	0.75	0.75	0.75	0.75	0.75	0.75
NEU	1.16	1.16	1.17	1.17	1.17	1.17	1.18
OAS	0.77	0.77	0.77	0.77	0.77	0.77	0.77
REF	1.02	1.03	1.04	1.04	1.06	1.14	1.08
SSA	0.80	0.80	0.80	0.80	0.80	0.80	0.80
USA	1.24	1.25	1.26	1.25	1.26	1.26	1.26

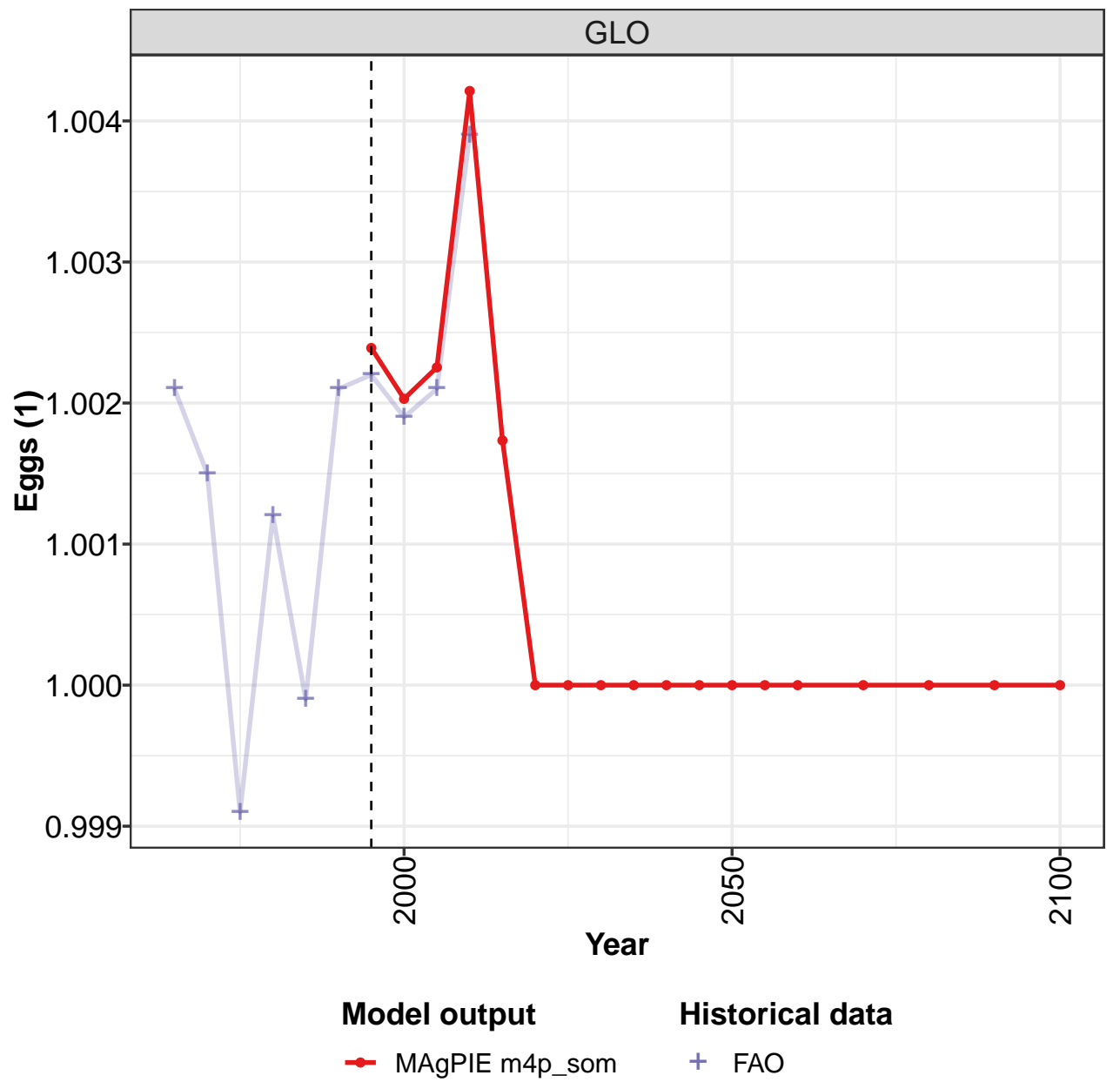
Table 2010: MAgPIE m4p\_som — Trade—Self-sufficiency—Livestock products—Dairy (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.01	1.00	1.02	1.00	1.00	1.00	1.00	1.01	1.01	1.01
CAZ	1.46	1.53	1.54	1.70	1.77	1.55	1.87	2.04	1.87	1.92
CHA	0.95	0.90	0.87	0.80	0.82	0.86	0.87	0.89	0.95	0.90
EUR	1.01	1.02	1.07	1.10	1.09	1.11	1.11	1.09	1.07	1.10
IND	0.98	0.99	0.99	0.99	0.99	1.00	1.00	1.00	1.01	1.00
JPN	0.81	0.85	0.82	0.75	0.77	0.80	0.77	0.79	0.81	0.81
LAM	0.92	0.90	0.94	0.84	0.88	0.89	0.88	0.92	0.96	0.95
MEA	0.90	0.86	0.82	0.70	0.65	0.71	0.78	0.81	0.82	0.83
NEU	1.00	1.01	1.03	1.03	1.02	1.00	1.02	1.02	1.02	1.02
OAS	0.87	0.83	0.86	0.78	0.83	0.85	0.82	0.84	0.85	0.85
REF	0.99	0.99	0.99	0.98	0.98	0.98	1.02	1.03	1.04	1.01
SSA	0.94	0.91	0.88	0.82	0.81	0.90	0.86	0.89	0.89	0.89
USA	1.05	0.98	1.00	1.00	0.97	0.96	0.97	0.99	0.99	1.05

Table 2011: FAO — Trade—Self-sufficiency—Livestock products—Dairy (1)

60.3.2
Eggs

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



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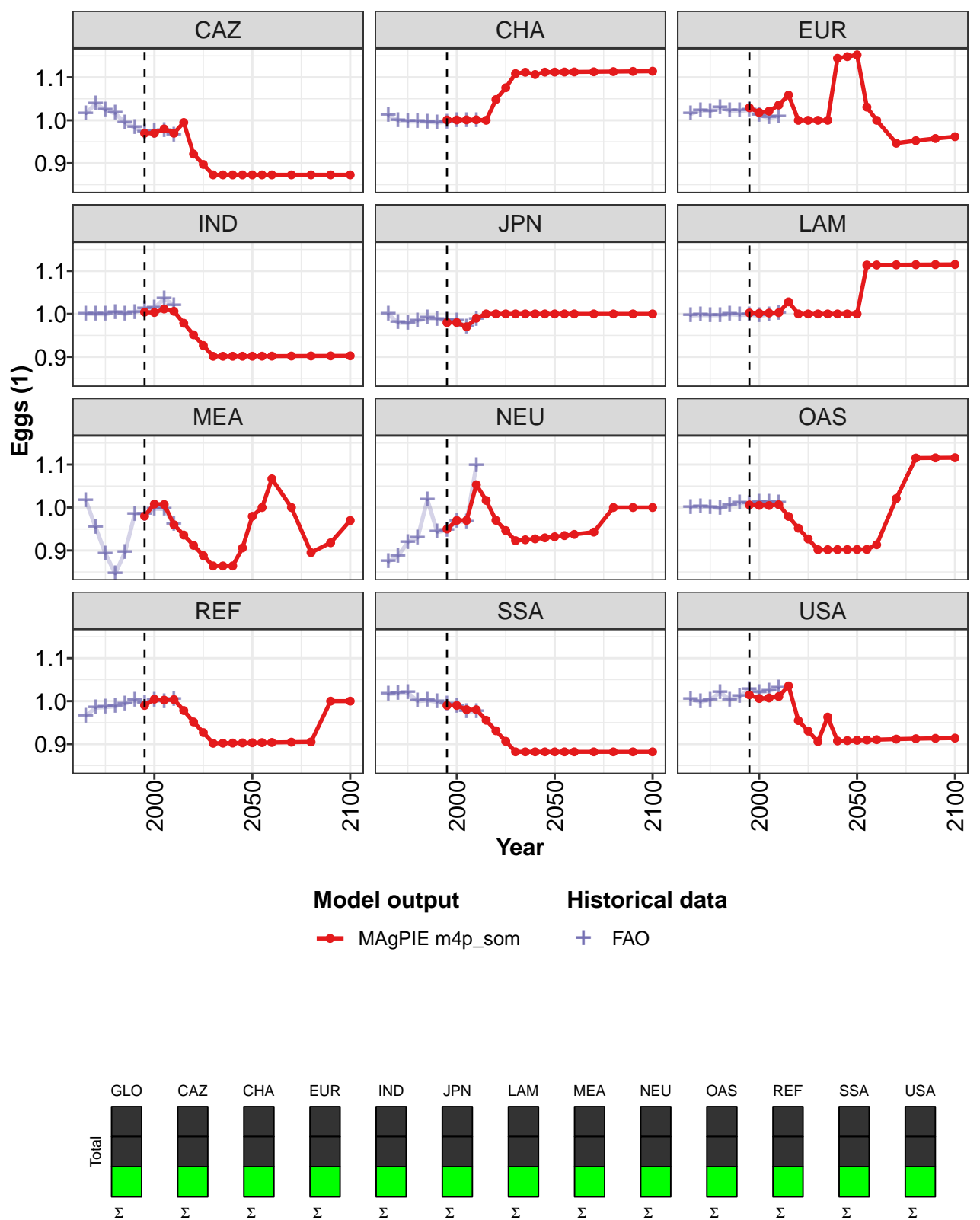


Figure 536: MAgPIE m4p\_som — Trade—Self-sufficiency—Livestock products—Eggs (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	0.97	0.97	0.98	0.97	0.99	0.92	0.90	0.87	0.87	0.87	0.87
CHA	1.00	1.00	1.00	1.00	1.00	1.05	1.08	1.11	1.11	1.11	1.11
EUR	1.03	1.02	1.02	1.04	1.06	1.00	1.00	1.00	1.00	1.14	1.15
IND	1.00	1.00	1.01	1.01	0.98	0.95	0.93	0.90	0.90	0.90	0.90
JPN	0.98	0.98	0.97	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
LAM	1.00	1.00	1.00	1.00	1.03	1.00	1.00	1.00	1.00	1.00	1.00
MEA	0.98	1.01	1.01	0.96	0.94	0.91	0.89	0.86	0.86	0.86	0.91
NEU	0.95	0.97	0.97	1.05	1.02	0.97	0.95	0.92	0.92	0.93	0.93
OAS	1.01	1.01	1.00	1.01	0.98	0.95	0.93	0.90	0.90	0.90	0.90
REF	0.99	1.00	1.00	1.00	0.98	0.95	0.93	0.90	0.90	0.90	0.90
SSA	0.99	0.99	0.98	0.98	0.96	0.93	0.91	0.88	0.88	0.88	0.88
USA	1.01	1.01	1.01	1.01	1.04	0.95	0.93	0.91	0.96	0.91	0.91

Table 2012: MAgPIE m4p\_som — Trade—Self-sufficiency—Livestock products—Eggs (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	0.87	0.87	0.87	0.87	0.87	0.87	0.87
CHA	1.11	1.11	1.11	1.11	1.11	1.11	1.11
EUR	1.15	1.03	1.00	0.95	0.95	0.96	0.96
IND	0.90	0.90	0.90	0.90	0.90	0.90	0.90
JPN	1.00	1.00	1.00	1.00	1.00	1.00	1.00
LAM	1.00	1.11	1.11	1.11	1.11	1.11	1.12
MEA	0.98	1.00	1.07	1.00	0.90	0.92	0.97
NEU	0.93	0.93	0.94	0.94	1.00	1.00	1.00
OAS	0.90	0.90	0.91	1.02	1.12	1.12	1.12
REF	0.90	0.90	0.90	0.90	0.91	1.00	1.00
SSA	0.88	0.88	0.88	0.88	0.88	0.88	0.88
USA	0.91	0.91	0.91	0.91	0.91	0.91	0.91

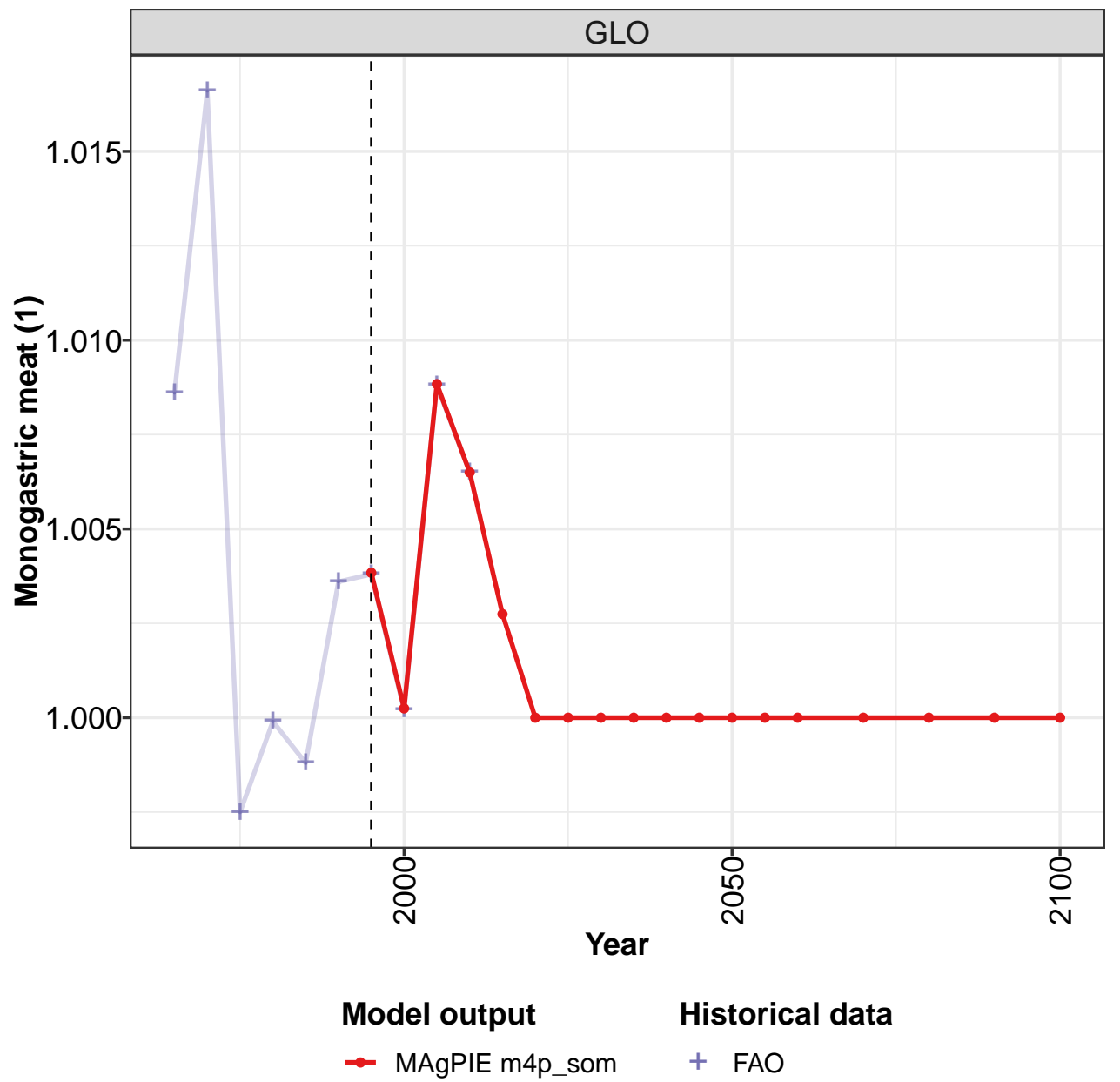
Table 2013: MAgPIE m4p\_som — Trade—Self-sufficiency—Livestock products—Eggs (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.02	1.04	1.02	1.02	0.99	0.98	0.97	0.97	0.98	0.97
CHA	1.01	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00
EUR	1.01	1.02	1.02	1.03	1.02	1.02	1.02	1.01	1.01	1.01
IND	1.00	1.00	1.00	1.00	1.00	1.00	1.01	1.01	1.04	1.02
JPN	1.00	0.98	0.98	0.98	0.99	0.99	0.98	0.98	0.97	0.99
LAM	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MEA	1.02	0.95	0.89	0.85	0.90	0.98	0.98	1.00	1.00	0.96
NEU	0.87	0.89	0.92	0.93	1.02	0.94	0.95	0.97	0.97	1.10
OAS	1.00	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01
REF	0.97	0.98	0.99	0.99	0.99	1.00	0.99	1.00	1.00	1.00
SSA	1.02	1.02	1.02	1.00	1.00	1.00	0.99	0.99	0.98	0.98
USA	1.00	1.00	1.00	1.02	1.00	1.01	1.03	1.02	1.02	1.03

Table 2014: FAO — Trade—Self-sufficiency—Livestock products—Eggs (1)

60.3.3 Monogastric meat

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

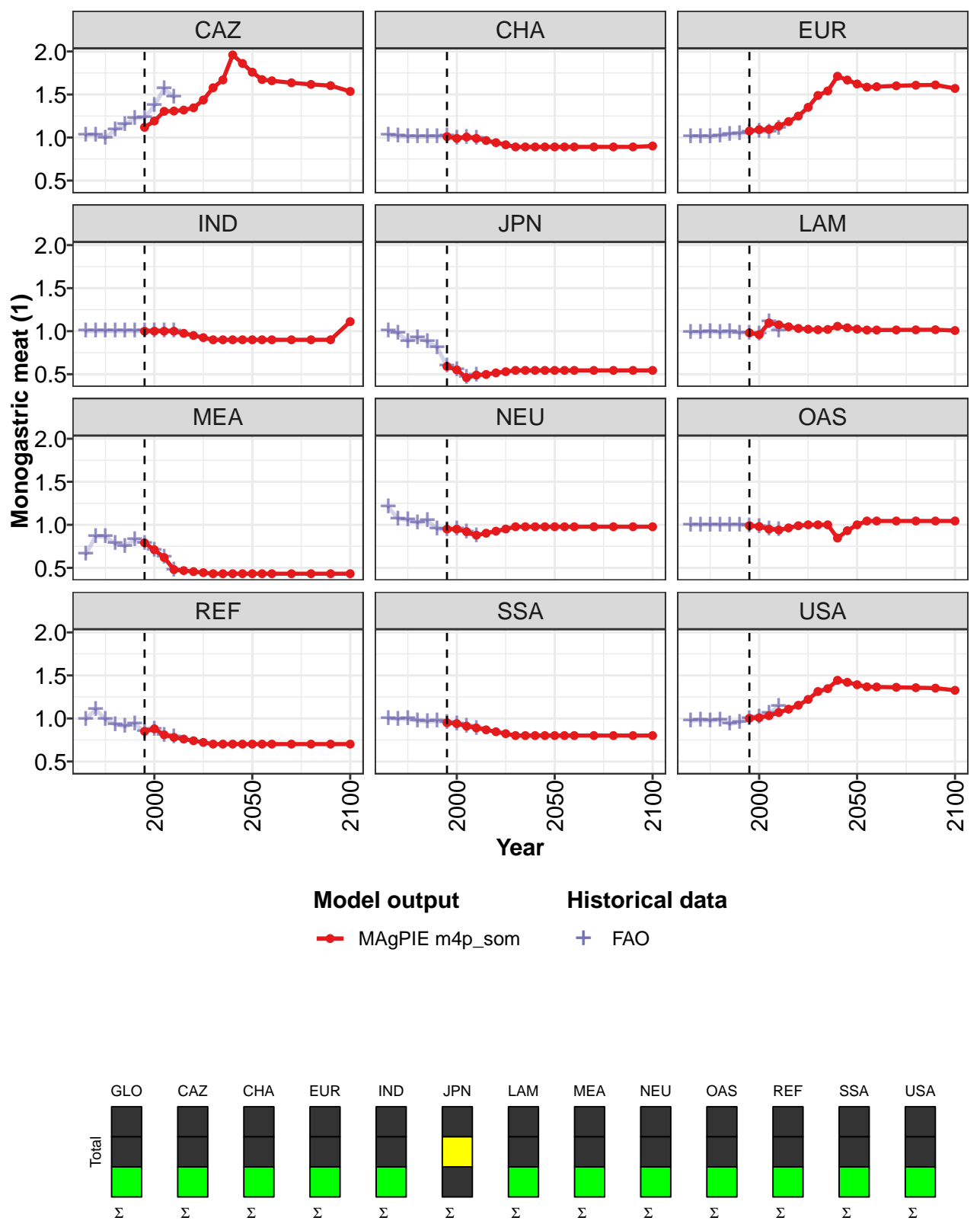


Figure 537: MAgPIE m4p\_som — Trade—Self-sufficiency—Livestock products—Monogastric meat (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.00	1.00	1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.12	1.19	1.30	1.31	1.32	1.35	1.44	1.58	1.67	1.96	1.86
CHA	1.01	0.99	1.01	0.99	0.97	0.94	0.92	0.89	0.89	0.89	0.89
EUR	1.08	1.09	1.10	1.13	1.19	1.25	1.35	1.49	1.54	1.71	1.67
IND	1.00	1.00	1.00	1.00	0.97	0.95	0.93	0.90	0.90	0.90	0.90
JPN	0.59	0.55	0.46	0.49	0.50	0.52	0.53	0.54	0.54	0.54	0.54
LAM	0.98	0.96	1.10	1.07	1.05	1.03	1.02	1.02	1.02	1.06	1.04
MEA	0.79	0.71	0.62	0.48	0.47	0.46	0.44	0.43	0.43	0.43	0.43
NEU	0.95	0.95	0.92	0.88	0.90	0.93	0.95	0.98	0.98	0.98	0.98
OAS	0.99	0.98	0.95	0.94	0.96	0.99	1.00	1.00	1.00	0.85	0.93
REF	0.85	0.88	0.81	0.78	0.76	0.74	0.72	0.70	0.70	0.70	0.70
SSA	0.95	0.94	0.91	0.89	0.87	0.85	0.82	0.80	0.80	0.80	0.80
USA	1.00	1.01	1.03	1.07	1.11	1.15	1.22	1.31	1.35	1.44	1.42

Table 2015: MAgPIE m4p\_som — Trade—Self-sufficiency—Livestock products—Monogastric meat (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.76	1.67	1.66	1.64	1.62	1.60	1.54
CHA	0.89	0.89	0.89	0.89	0.89	0.89	0.90
EUR	1.62	1.59	1.59	1.60	1.61	1.61	1.57
IND	0.90	0.90	0.90	0.90	0.90	0.90	1.11
JPN	0.54	0.54	0.54	0.54	0.54	0.54	0.54
LAM	1.02	1.01	1.01	1.01	1.02	1.02	1.01
MEA	0.43	0.43	0.43	0.43	0.43	0.43	0.43
NEU	0.98	0.98	0.98	0.98	0.98	0.98	0.98
OAS	1.00	1.04	1.04	1.04	1.04	1.04	1.04
REF	0.70	0.70	0.70	0.70	0.70	0.70	0.70
SSA	0.80	0.80	0.80	0.80	0.80	0.80	0.80
USA	1.39	1.37	1.37	1.36	1.36	1.35	1.33

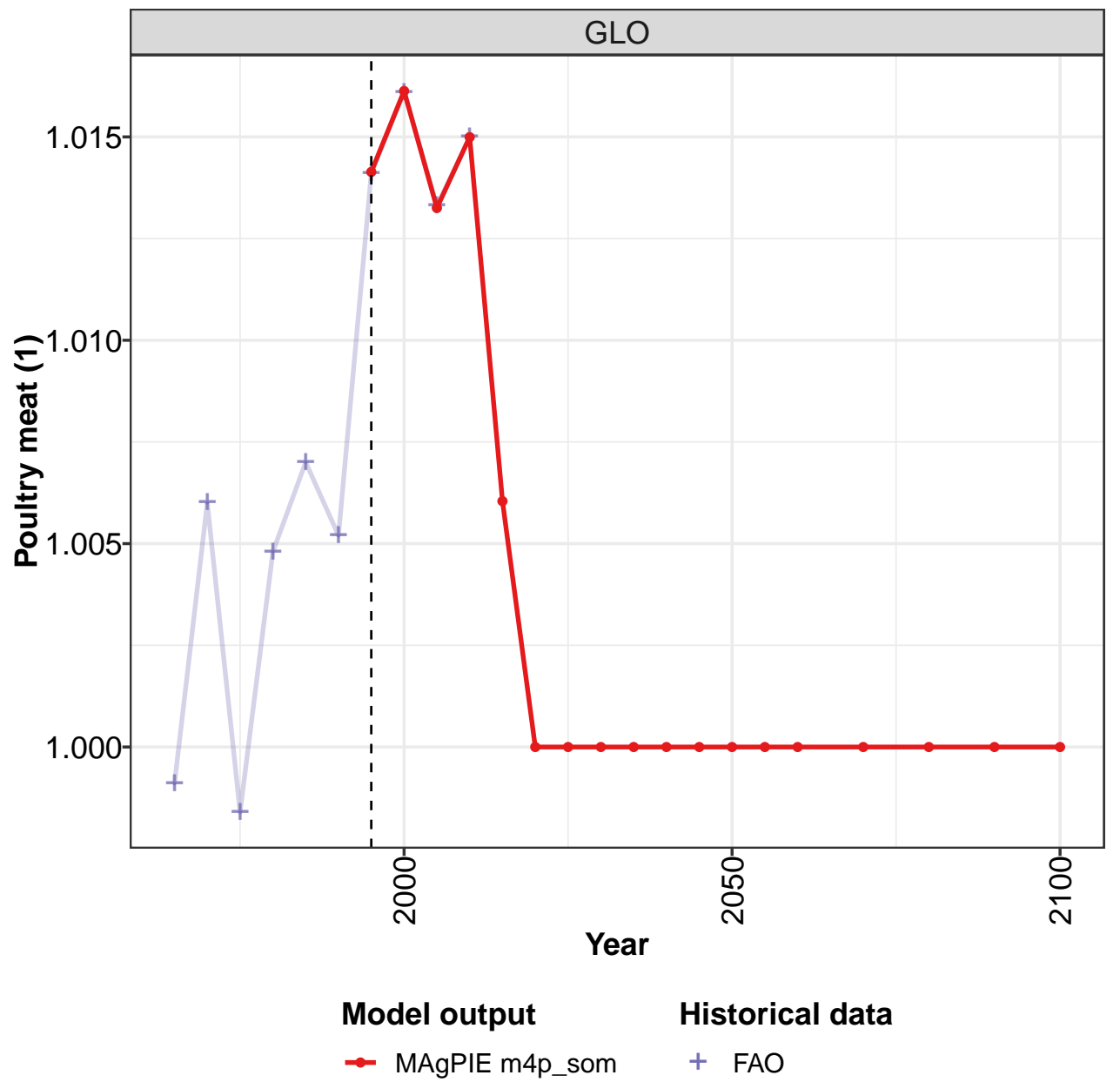
Table 2016: MAgPIE m4p\_som — Trade—Self-sufficiency—Livestock products—Monogastric meat (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.01	1.02	1.00	1.00	1.00	1.00	1.00	1.00	1.01	1.01
CAZ	1.03	1.03	1.00	1.09	1.15	1.23	1.23	1.37	1.57	1.47
CHA	1.03	1.02	1.01	1.01	1.01	1.01	1.02	0.99	1.00	0.99
EUR	1.01	1.01	1.01	1.02	1.04	1.04	1.06	1.07	1.06	1.11
IND	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
JPN	1.00	0.98	0.88	0.93	0.88	0.81	0.59	0.55	0.46	0.49
LAM	0.98	0.99	1.00	0.98	0.99	0.98	0.98	0.96	1.11	1.01
MEA	0.66	0.87	0.86	0.78	0.75	0.83	0.79	0.71	0.62	0.48
NEU	1.21	1.07	1.06	1.03	1.05	0.95	0.95	0.95	0.92	0.88
OAS	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.98	0.95	0.94
REF	0.99	1.10	0.99	0.93	0.91	0.94	0.85	0.88	0.81	0.78
SSA	1.00	0.99	1.00	0.97	0.96	0.97	0.95	0.94	0.91	0.89
USA	0.97	0.98	0.97	0.98	0.94	0.96	1.00	1.02	1.06	1.14

Table 2017: FAO — Trade—Self-sufficiency—Livestock products—Monogastric meat (1)

60.3.4
Poultry meat

*## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.*



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

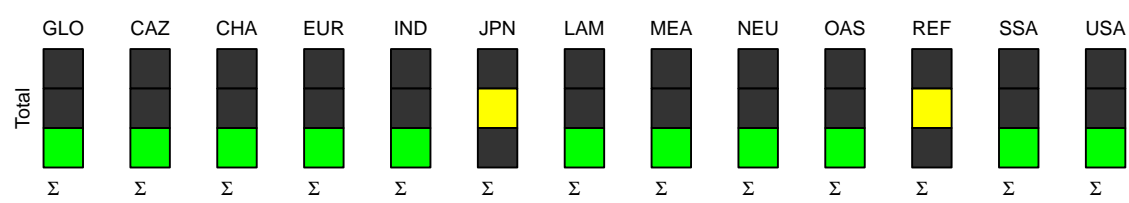
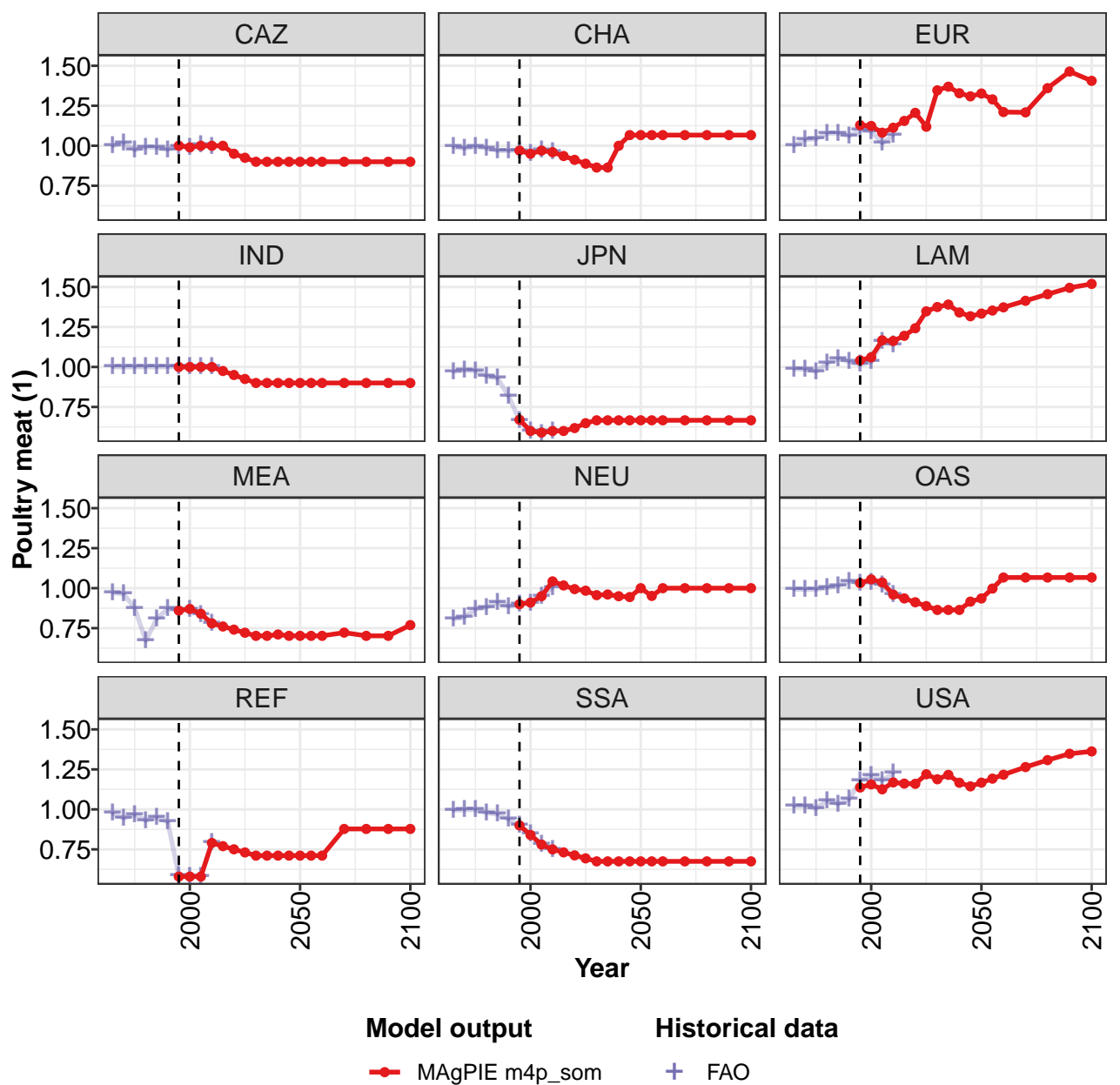


Figure 538: MAGPIE m4p\_som — Trade—Self-sufficiency—Livestock products—Poultry meat (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.01	1.02	1.01	1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.00	0.99	1.00	1.00	1.00	0.95	0.92	0.90	0.90	0.90	0.90
CHA	0.97	0.95	0.97	0.96	0.94	0.91	0.89	0.86	0.86	1.00	1.07
EUR	1.13	1.12	1.08	1.11	1.16	1.21	1.12	1.35	1.37	1.33	1.31
IND	1.00	1.00	1.00	1.00	0.97	0.95	0.93	0.90	0.90	0.90	0.90
JPN	0.67	0.60	0.59	0.60	0.60	0.62	0.65	0.67	0.67	0.67	0.67
LAM	1.04	1.06	1.17	1.16	1.19	1.24	1.35	1.37	1.39	1.34	1.32
MEA	0.86	0.87	0.84	0.78	0.76	0.74	0.72	0.70	0.70	0.71	0.70
NEU	0.90	0.91	0.95	1.04	1.02	0.99	0.98	0.96	0.96	0.95	0.94
OAS	1.03	1.05	1.04	0.96	0.94	0.91	0.89	0.86	0.86	0.86	0.92
REF	0.58	0.58	0.58	0.79	0.77	0.75	0.73	0.71	0.71	0.71	0.71
SSA	0.90	0.84	0.78	0.75	0.73	0.71	0.69	0.68	0.68	0.68	0.68
USA	1.14	1.16	1.13	1.17	1.16	1.16	1.22	1.19	1.22	1.17	1.14

Table 2018: MAgPIE m4p\_som — Trade—Self-sufficiency—Livestock products—Poultry meat (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	0.90	0.90	0.90	0.90	0.90	0.90	0.90
CHA	1.07	1.07	1.07	1.07	1.07	1.07	1.07
EUR	1.33	1.29	1.21	1.21	1.36	1.46	1.41
IND	0.90	0.90	0.90	0.90	0.90	0.90	0.90
JPN	0.67	0.67	0.67	0.67	0.67	0.67	0.67
LAM	1.33	1.35	1.37	1.41	1.45	1.49	1.52
MEA	0.70	0.70	0.70	0.72	0.70	0.70	0.77
NEU	1.00	0.95	1.00	1.00	1.00	1.00	1.00
OAS	0.94	1.00	1.07	1.07	1.07	1.07	1.07
REF	0.71	0.71	0.71	0.88	0.88	0.88	0.88
SSA	0.68	0.68	0.68	0.68	0.68	0.68	0.68
USA	1.17	1.19	1.22	1.26	1.31	1.35	1.36

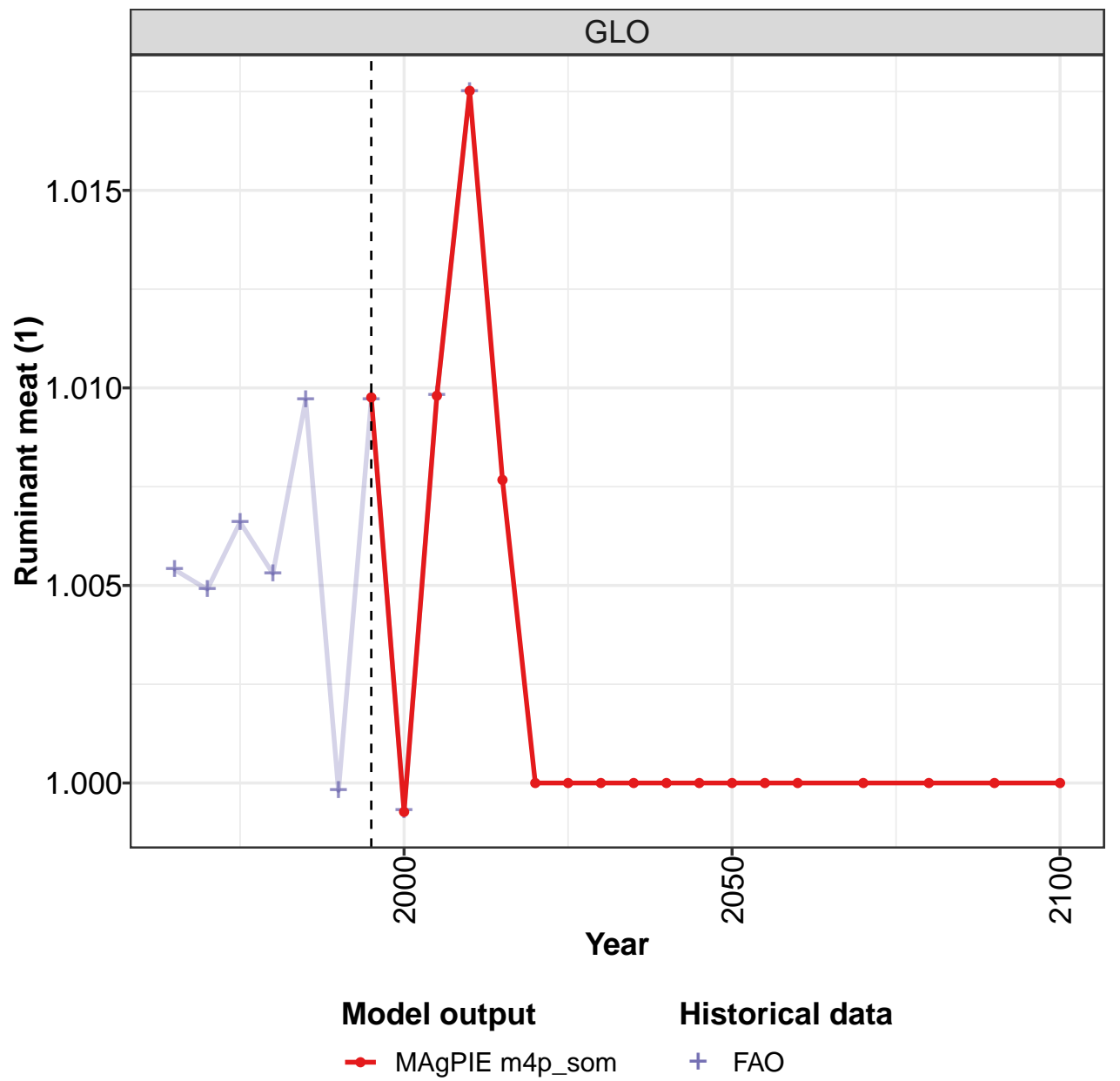
Table 2019: MAgPIE m4p\_som — Trade—Self-sufficiency—Livestock products—Poultry meat (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.00	1.01	1.00	1.00	1.01	1.01	1.01	1.02	1.01	1.01
CAZ	1.00	1.02	0.97	0.99	0.99	0.98	1.00	0.99	1.00	1.00
CHA	0.99	0.98	1.00	0.99	0.97	0.97	0.97	0.95	0.97	0.96
EUR	1.00	1.04	1.04	1.08	1.08	1.06	1.10	1.09	1.02	1.07
IND	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
JPN	0.97	0.98	0.98	0.94	0.93	0.82	0.67	0.60	0.58	0.60
LAM	0.99	0.98	0.97	1.02	1.05	1.03	1.02	1.03	1.16	1.14
MEA	0.97	0.96	0.88	0.67	0.81	0.87	0.86	0.87	0.84	0.78
NEU	0.81	0.82	0.87	0.88	0.91	0.89	0.90	0.91	0.95	1.00
OAS	0.99	0.99	0.99	1.00	1.01	1.04	1.03	1.04	1.02	0.96
REF	0.98	0.94	0.97	0.93	0.95	0.92	0.58	0.58	0.58	0.79
SSA	0.99	1.00	1.00	0.98	0.97	0.94	0.90	0.84	0.78	0.75
USA	1.02	1.02	1.01	1.05	1.03	1.06	1.18	1.21	1.18	1.23

Table 2020: FAO — Trade—Self-sufficiency—Livestock products—Poultry meat (1)

60.3.5 Ruminant meat

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

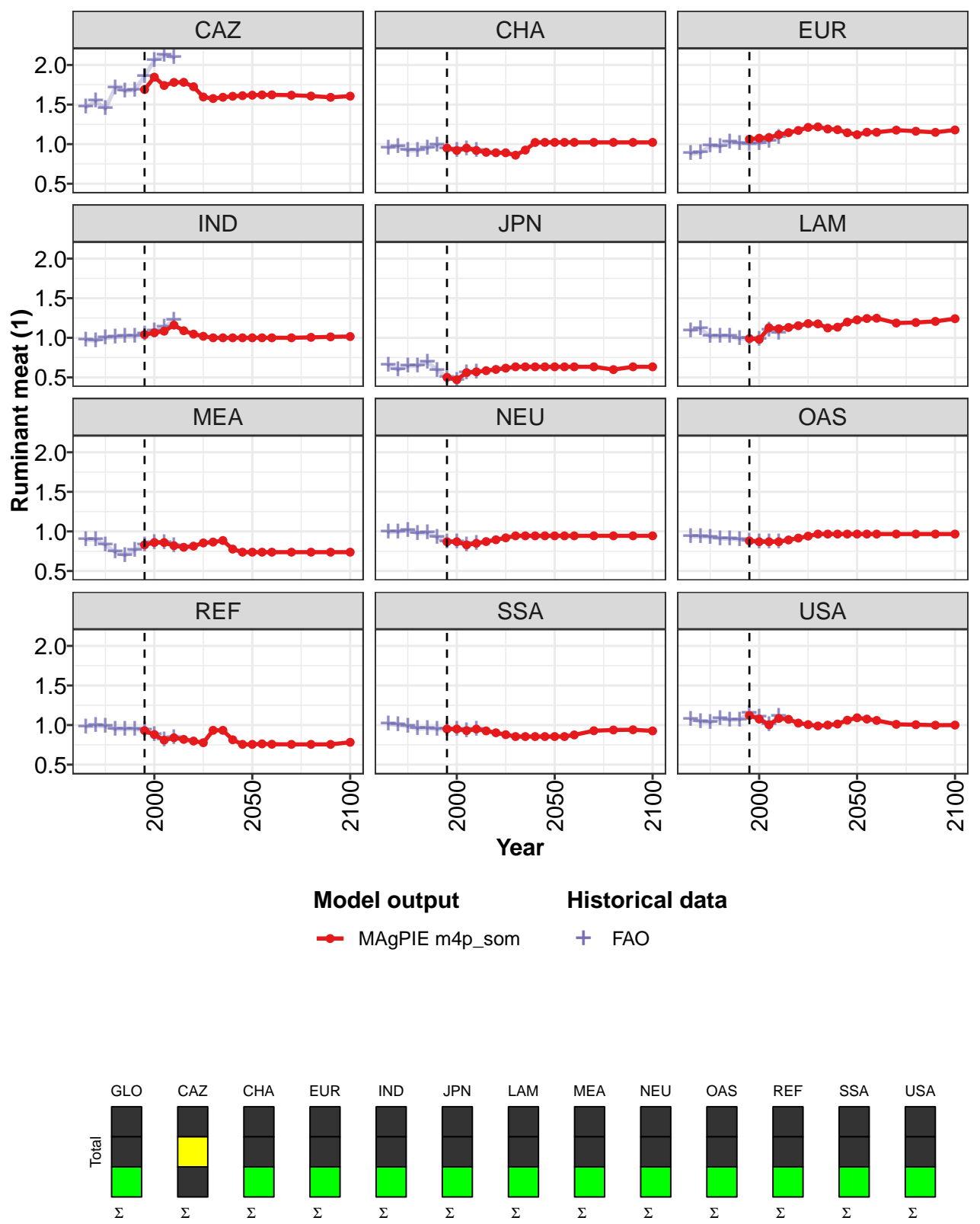


Figure 539: MAGPIE m4p\_som — Trade—Self-sufficiency—Livestock products—Ruminant meat (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.01	1.00	1.01	1.02	1.01	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.69	1.85	1.74	1.78	1.78	1.73	1.60	1.58	1.59	1.60	1.61
CHA	0.95	0.92	0.95	0.92	0.90	0.89	0.89	0.86	0.92	1.02	1.02
EUR	1.06	1.08	1.08	1.12	1.15	1.17	1.21	1.22	1.19	1.18	1.14
IND	1.04	1.06	1.08	1.16	1.09	1.05	1.02	1.00	1.00	1.00	1.00
JPN	0.50	0.47	0.56	0.57	0.58	0.60	0.62	0.63	0.63	0.63	0.63
LAM	0.99	0.98	1.13	1.11	1.13	1.15	1.18	1.18	1.12	1.13	1.20
MEA	0.83	0.86	0.86	0.82	0.80	0.81	0.85	0.87	0.89	0.78	0.74
NEU	0.87	0.87	0.83	0.85	0.87	0.89	0.92	0.94	0.94	0.94	0.94
OAS	0.88	0.87	0.87	0.87	0.89	0.92	0.94	0.97	0.97	0.97	0.97
REF	0.93	0.88	0.81	0.84	0.82	0.80	0.78	0.93	0.93	0.81	0.76
SSA	0.95	0.95	0.93	0.95	0.93	0.90	0.88	0.86	0.85	0.85	0.85
USA	1.12	1.08	1.00	1.08	1.07	1.03	1.01	0.99	1.00	1.01	1.06

Table 2021: MAgPIE m4p\_som — Trade—Self-sufficiency—Livestock products—Ruminant meat (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.62	1.62	1.62	1.62	1.61	1.59	1.61
CHA	1.02	1.02	1.02	1.02	1.02	1.02	1.02
EUR	1.12	1.15	1.15	1.18	1.16	1.15	1.18
IND	1.00	1.00	1.00	1.00	1.01	1.01	1.02
JPN	0.63	0.63	0.63	0.63	0.60	0.63	0.63
LAM	1.23	1.24	1.25	1.19	1.19	1.21	1.24
MEA	0.74	0.74	0.74	0.74	0.74	0.74	0.74
NEU	0.94	0.94	0.94	0.94	0.94	0.94	0.94
OAS	0.97	0.97	0.97	0.97	0.97	0.97	0.97
REF	0.76	0.76	0.76	0.76	0.76	0.76	0.78
SSA	0.85	0.86	0.88	0.93	0.94	0.94	0.93
USA	1.09	1.08	1.06	1.01	1.00	1.00	1.00

Table 2022: MAgPIE m4p\_som — Trade—Self-sufficiency—Livestock products—Ruminant meat (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.01	1.00	1.01	1.01	1.01	1.00	1.01	1.00	1.01	1.02
CAZ	1.47	1.54	1.45	1.71	1.67	1.68	1.86	2.06	2.13	2.09
CHA	0.96	0.97	0.92	0.92	0.95	0.99	0.95	0.92	0.95	0.92
EUR	0.88	0.89	0.98	0.97	1.02	1.01	1.00	1.01	1.04	1.08
IND	0.97	0.96	1.00	1.01	1.02	1.02	1.05	1.09	1.13	1.22
JPN	0.66	0.60	0.64	0.64	0.70	0.59	0.50	0.47	0.56	0.57
LAM	1.09	1.11	1.02	1.02	1.02	0.99	0.99	0.98	1.09	1.06
MEA	0.90	0.90	0.83	0.74	0.70	0.77	0.83	0.86	0.86	0.82
NEU	0.99	0.99	1.02	0.98	0.98	0.92	0.87	0.87	0.83	0.85
OAS	0.94	0.93	0.93	0.91	0.91	0.90	0.88	0.87	0.87	0.87
REF	0.98	0.99	0.98	0.95	0.95	0.95	0.93	0.88	0.81	0.84
SSA	1.01	1.00	0.98	0.96	0.96	0.95	0.95	0.95	0.93	0.95
USA	1.07	1.04	1.03	1.08	1.06	1.07	1.15	1.10	1.00	1.11

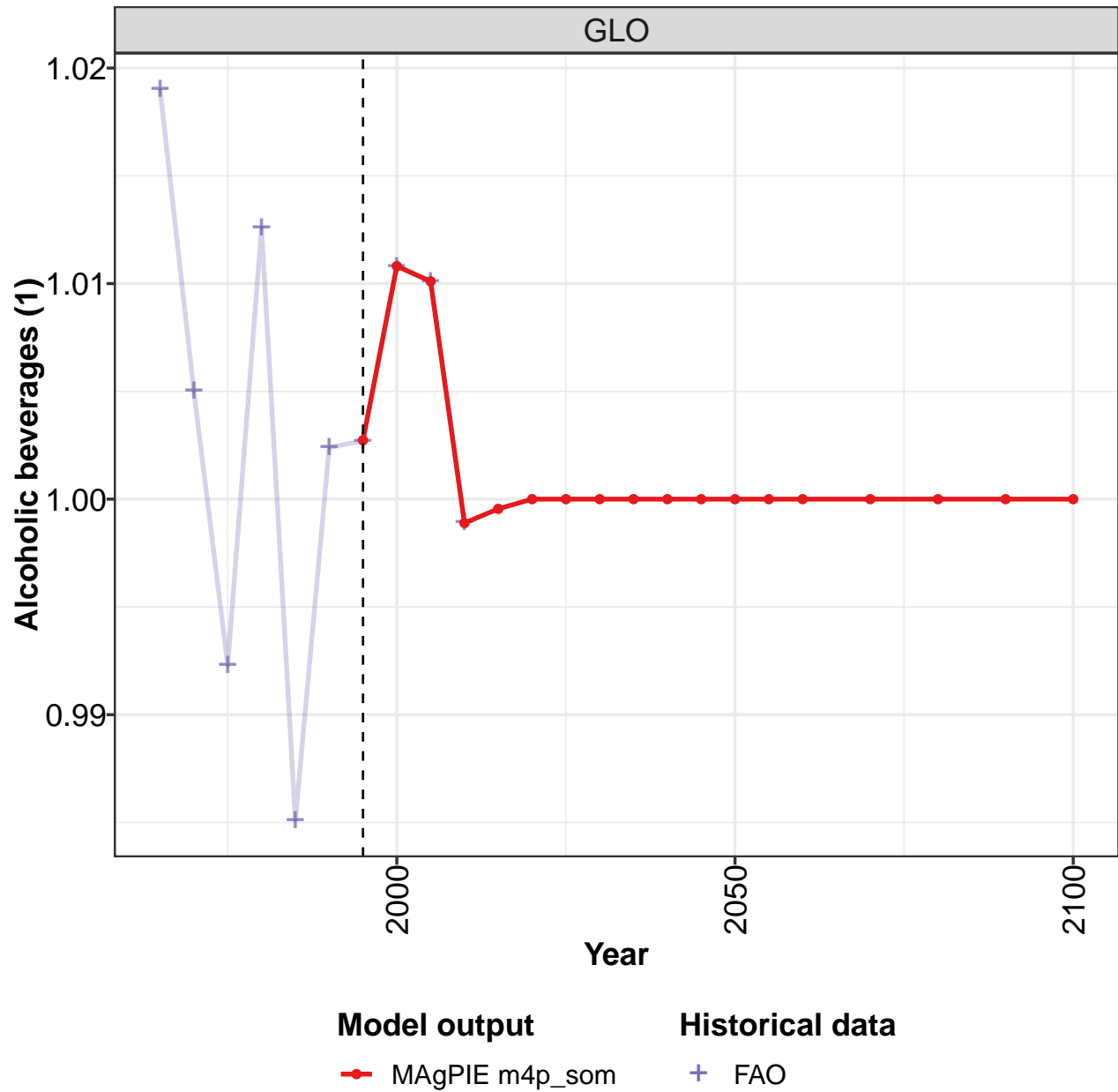
Table 2023: FAO — Trade—Self-sufficiency—Livestock products—Ruminant meat (1)



60.4 Secondary products

60.4.1 Alcoholic beverages

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

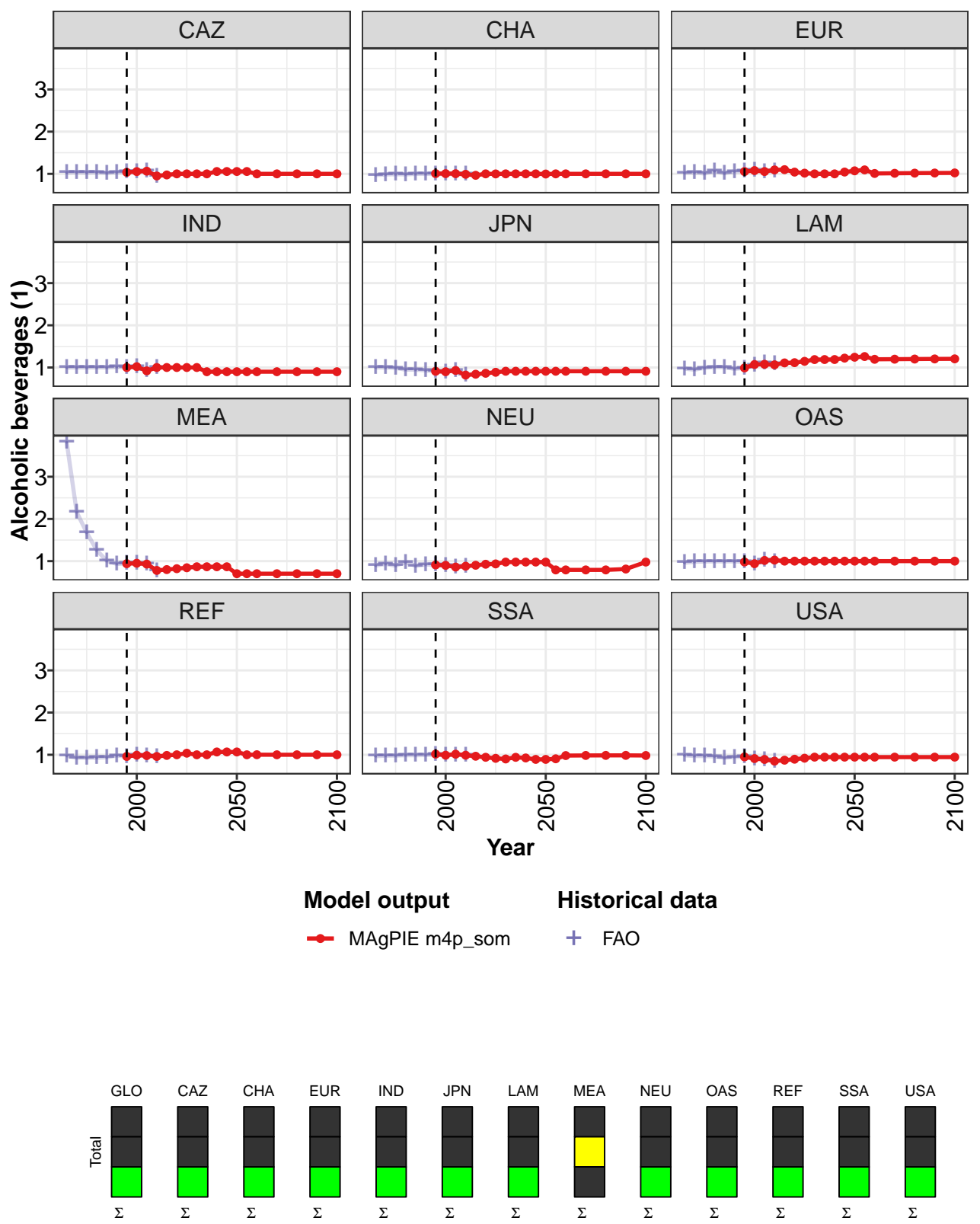


Figure 540: MAGPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Alcoholic beverages (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.00	1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.04	1.05	1.06	0.95	0.97	1.00	1.00	1.00	1.00	1.06	1.06
CHA	1.01	1.01	1.00	0.99	0.97	1.00	1.00	1.00	1.00	1.00	1.00
EUR	1.05	1.08	1.06	1.09	1.10	1.04	1.02	1.00	1.00	1.00	1.04
IND	1.00	1.02	0.92	1.00	1.00	1.00	1.00	1.00	0.90	0.90	0.90
JPN	0.91	0.90	0.93	0.82	0.84	0.86	0.89	0.91	0.91	0.91	0.91
LAM	0.99	1.07	1.08	1.06	1.11	1.11	1.15	1.19	1.19	1.19	1.22
MEA	0.94	0.95	0.93	0.78	0.80	0.82	0.84	0.87	0.87	0.87	0.87
NEU	0.91	0.90	0.86	0.88	0.90	0.93	0.93	0.98	0.98	0.98	0.98
OAS	0.98	0.94	1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.00	1.00
REF	0.96	0.99	0.98	0.96	0.98	1.00	1.04	1.00	1.00	1.07	1.07
SSA	1.02	0.99	1.01	0.99	0.97	0.94	0.92	0.90	0.94	0.92	0.89
USA	0.95	0.91	0.89	0.85	0.87	0.89	0.92	0.94	0.94	0.94	0.94

Table 2024: MAgPIE m4p.som — Trade—Self-sufficiency—Secondary products—Alcoholic beverages (1)  
[PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.06	1.06	1.00	1.00	1.00	1.00	1.00
CHA	1.00	1.00	1.00	1.00	1.00	1.00	1.00
EUR	1.07	1.09	1.01	1.01	1.02	1.02	1.02
IND	0.90	0.90	0.90	0.90	0.90	0.90	0.90
JPN	0.91	0.91	0.91	0.91	0.91	0.91	0.91
LAM	1.24	1.26	1.19	1.20	1.20	1.20	1.20
MEA	0.70	0.70	0.70	0.70	0.70	0.70	0.70
NEU	0.98	0.79	0.79	0.79	0.79	0.81	0.98
OAS	1.00	1.00	1.00	1.00	1.00	1.00	1.00
REF	1.07	1.00	1.00	1.00	1.00	1.00	1.00
SSA	0.89	0.91	0.98	0.98	0.99	0.99	0.98
USA	0.94	0.94	0.94	0.94	0.94	0.94	0.94

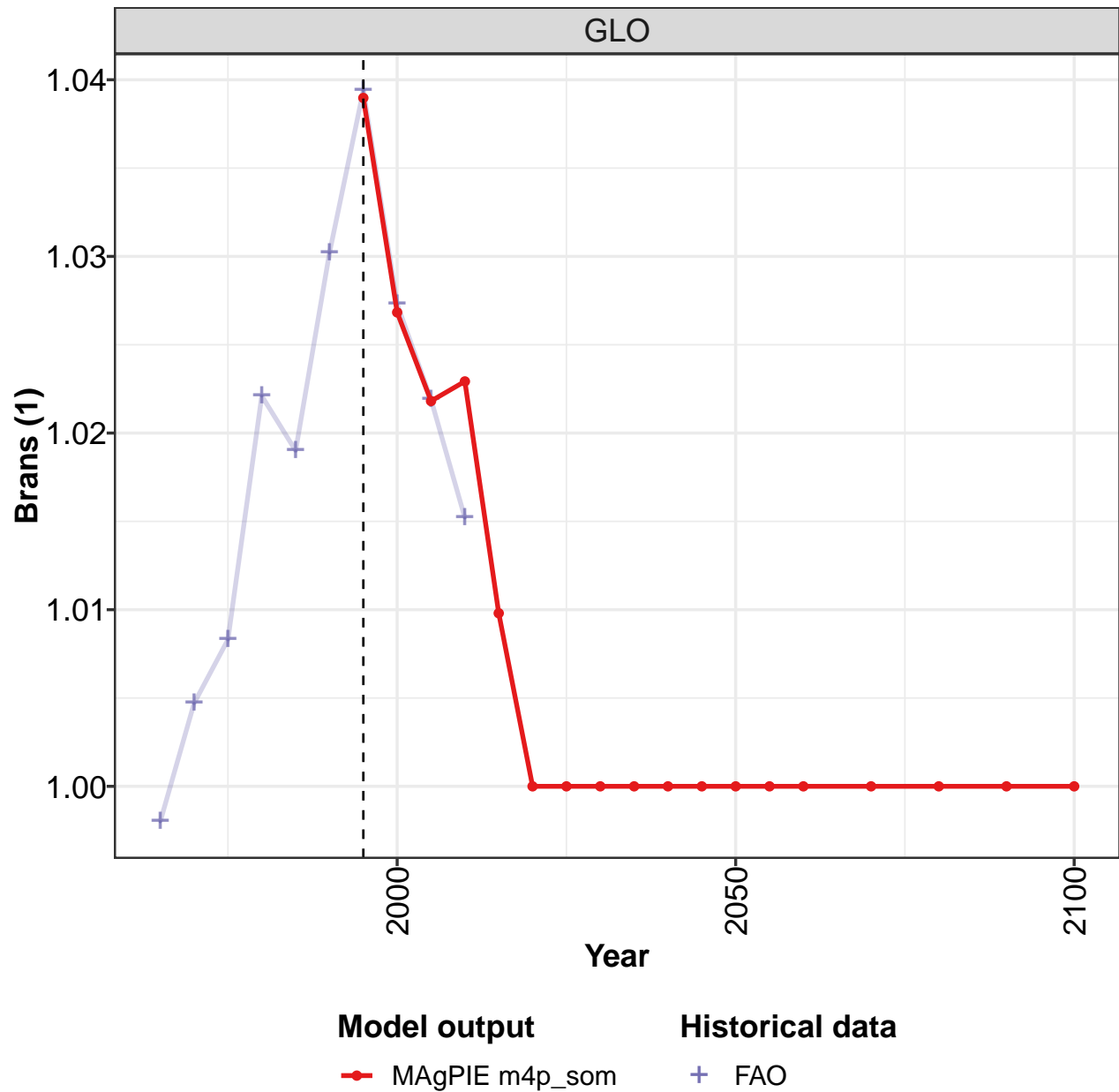
Table 2025: MAgPIE m4p.som — Trade—Self-sufficiency—Secondary products—Alcoholic beverages (1)  
[PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.02	1.00	0.99	1.01	0.99	1.00	1.00	1.01	1.01	1.00
CAZ	1.03	1.04	1.03	1.04	1.02	1.04	1.05	1.05	1.08	0.95
CHA	0.97	0.98	0.99	0.99	1.00	1.00	1.00	1.00	1.00	0.99
EUR	1.02	1.03	1.01	1.06	1.01	1.06	1.06	1.09	1.05	1.07
IND	1.00	1.00	1.00	1.00	1.00	1.01	1.00	1.02	0.92	1.00
JPN	1.00	1.00	0.99	0.95	0.95	0.93	0.91	0.90	0.93	0.82
LAM	0.97	0.95	0.99	1.01	1.01	0.97	0.99	1.06	1.10	1.09
MEA	3.82	2.16	1.68	1.26	1.01	0.93	0.94	0.95	0.93	0.78
NEU	0.90	0.93	0.89	0.98	0.89	0.92	0.91	0.90	0.86	0.88
OAS	0.96	0.98	0.99	1.00	0.99	1.00	0.98	0.94	1.03	1.00
REF	0.98	0.93	0.93	0.93	0.94	0.98	0.96	0.99	0.98	0.96
SSA	0.97	0.98	0.98	0.99	0.99	0.99	1.00	0.99	1.00	0.99
USA	0.99	0.97	0.97	0.96	0.93	0.95	0.95	0.91	0.89	0.85

Table 2026: FAO — Trade—Self-sufficiency—Secondary products—Alcoholic beverages (1)

60.4.2 Brans

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

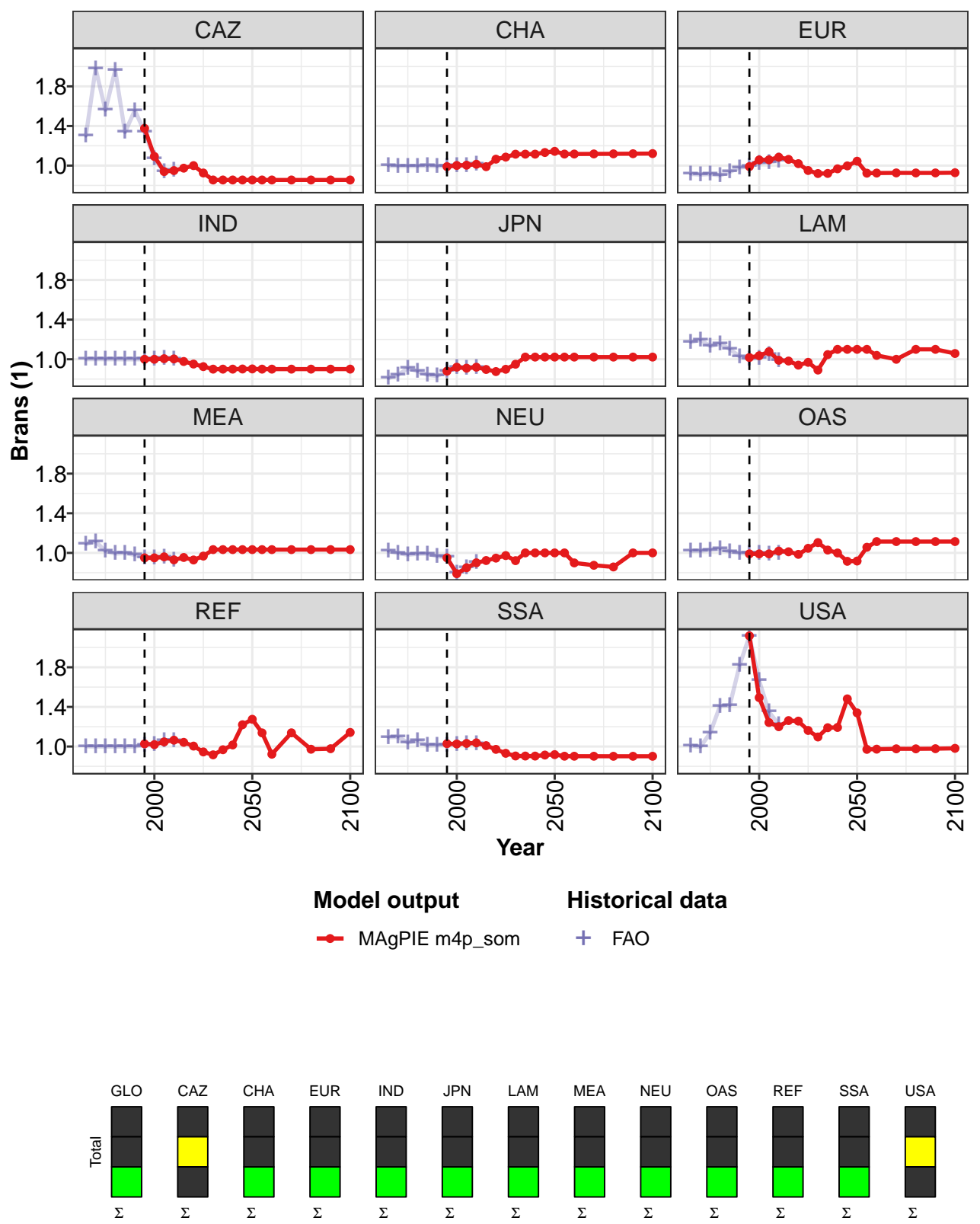


Figure 541: MAGPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Brans (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.04	1.03	1.02	1.02	1.01	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.38	1.09	0.94	0.95	0.97	1.00	0.93	0.85	0.85	0.85	0.85
CHA	0.99	1.00	1.00	1.01	0.99	1.07	1.09	1.12	1.12	1.12	1.13
EUR	0.99	1.06	1.06	1.09	1.06	1.02	0.95	0.92	0.92	0.97	1.00
IND	1.00	1.00	1.01	1.00	0.98	0.95	0.93	0.90	0.90	0.90	0.90
JPN	0.88	0.92	0.91	0.92	0.90	0.88	0.90	0.95	1.02	1.02	1.02
LAM	1.02	1.04	1.08	0.99	0.98	0.94	0.97	0.89	1.05	1.10	1.10
MEA	0.95	0.95	0.96	0.93	0.95	0.93	0.97	1.03	1.03	1.03	1.03
NEU	0.95	0.79	0.85	0.90	0.92	0.95	0.97	0.92	1.00	1.00	1.00
OAS	0.99	0.99	0.99	1.02	1.01	0.99	1.05	1.10	1.03	1.00	0.92
REF	1.03	1.02	1.05	1.06	1.04	1.00	0.95	0.92	0.97	1.02	1.22
SSA	1.03	1.03	1.03	1.04	1.01	0.97	0.93	0.90	0.90	0.90	0.91
USA	2.12	1.49	1.24	1.20	1.26	1.26	1.16	1.10	1.19	1.19	1.48

Table 2027: MAgPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Brans (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	0.85	0.85	0.85	0.85	0.85	0.85	0.86
CHA	1.14	1.12	1.12	1.12	1.12	1.12	1.12
EUR	1.04	0.92	0.93	0.93	0.93	0.93	0.93
IND	0.90	0.90	0.90	0.90	0.90	0.90	0.90
JPN	1.02	1.02	1.02	1.02	1.02	1.02	1.02
LAM	1.10	1.10	1.04	1.00	1.10	1.10	1.06
MEA	1.03	1.03	1.03	1.03	1.03	1.03	1.03
NEU	1.00	1.00	0.90	0.88	0.86	1.00	1.00
OAS	0.92	1.06	1.11	1.11	1.11	1.11	1.11
REF	1.28	1.14	0.92	1.14	0.97	0.98	1.14
SSA	0.92	0.90	0.90	0.90	0.90	0.90	0.90
USA	1.34	0.97	0.97	0.98	0.98	0.98	0.98

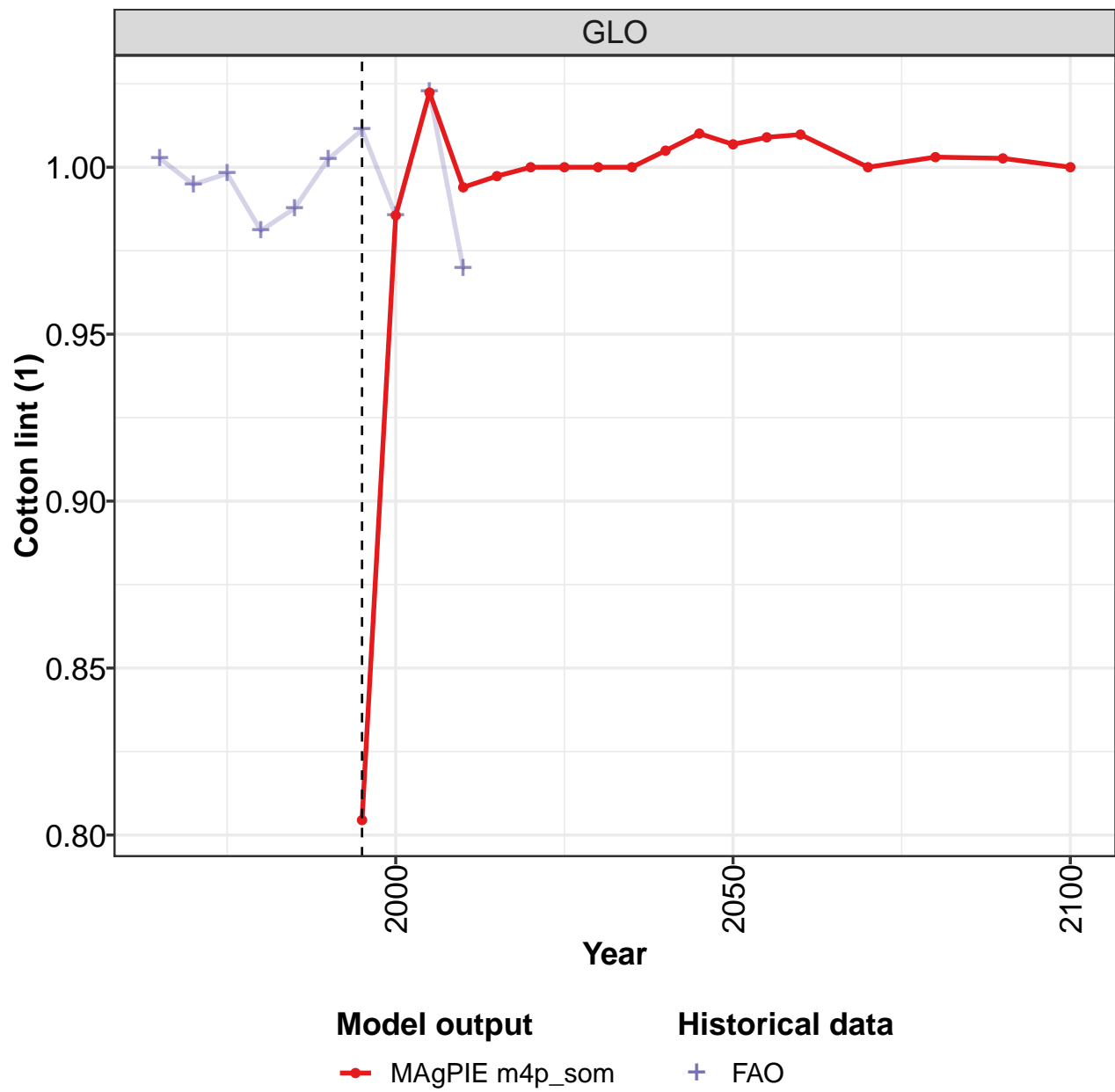
Table 2028: MAgPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Brans (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.00	1.00	1.01	1.02	1.02	1.03	1.04	1.03	1.02	1.02
CAZ	1.30	1.98	1.56	1.96	1.34	1.56	1.34	1.07	0.94	0.95
CHA	1.00	1.00	1.00	1.00	1.00	0.99	0.99	1.00	1.00	1.01
EUR	0.92	0.91	0.91	0.90	0.94	0.98	0.99	1.02	1.03	1.05
IND	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.01	1.00
JPN	0.81	0.84	0.91	0.88	0.84	0.83	0.88	0.92	0.91	0.92
LAM	1.17	1.20	1.13	1.16	1.10	1.03	1.00	1.01	1.05	0.99
MEA	1.09	1.12	1.02	0.99	1.00	0.98	0.95	0.95	0.96	0.93
NEU	1.02	1.00	0.98	0.99	0.99	0.97	0.95	0.79	0.85	0.90
OAS	1.02	1.02	1.03	1.04	1.01	1.00	0.99	0.99	0.99	1.00
REF	1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.06	1.06
SSA	1.09	1.10	1.04	1.06	1.01	1.01	1.02	1.02	1.03	1.03
USA	1.01	1.00	1.14	1.41	1.42	1.82	2.11	1.66	1.35	1.22

Table 2029: FAO — Trade—Self-sufficiency—Secondary products—Brans (1)

60.4.3 Cotton lint

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

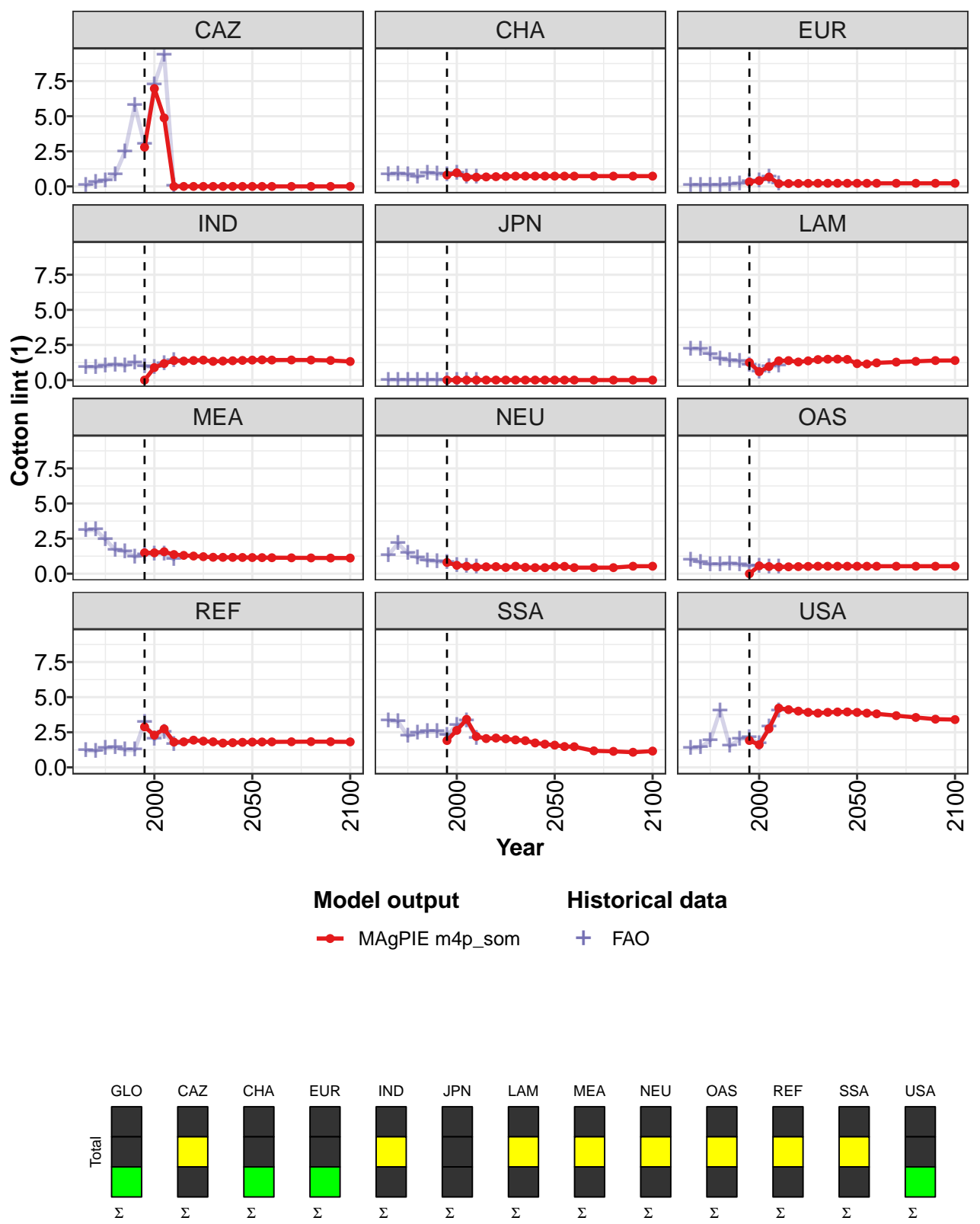


Figure 542: MAGPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Cotton lint (1)



	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	0.80	0.99	1.02	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.01
CAZ	2.80	6.97	4.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.81	0.97	0.66	0.66	0.68	0.69	0.71	0.73	0.73	0.73	0.73
EUR	0.32	0.41	0.67	0.20	0.21	0.21	0.22	0.22	0.22	0.22	0.22
IND	0.00	0.89	1.18	1.39	1.35	1.39	1.42	1.33	1.35	1.38	1.40
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	1.25	0.60	0.96	1.37	1.39	1.29	1.37	1.46	1.48	1.49	1.47
MEA	1.49	1.49	1.56	1.37	1.31	1.26	1.21	1.17	1.17	1.16	1.16
NEU	0.80	0.60	0.53	0.48	0.49	0.51	0.44	0.53	0.45	0.43	0.43
OAS	0.00	0.56	0.51	0.48	0.49	0.51	0.52	0.53	0.53	0.53	0.53
REF	2.88	2.29	2.74	1.80	1.82	1.94	1.87	1.82	1.73	1.76	1.78
SSA	1.91	2.63	3.42	2.20	2.05	2.08	2.03	1.96	1.90	1.74	1.65
USA	1.91	1.61	2.76	4.22	4.11	4.01	3.92	3.86	3.92	3.94	3.95

Table 2030: MAgPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Cotton lint (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.01	1.01	1.01	1.00	1.00	1.00	1.00
CAZ	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CHA	0.73	0.73	0.73	0.73	0.73	0.73	0.73
EUR	0.22	0.22	0.22	0.22	0.22	0.22	0.22
IND	1.42	1.44	1.43	1.43	1.43	1.40	1.32
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	1.17	1.14	1.23	1.28	1.33	1.39	1.39
MEA	1.15	1.14	1.14	1.13	1.12	1.12	1.11
NEU	0.52	0.52	0.43	0.43	0.43	0.53	0.53
OAS	0.53	0.53	0.53	0.53	0.53	0.53	0.53
REF	1.80	1.81	1.81	1.82	1.83	1.83	1.81
SSA	1.58	1.48	1.47	1.18	1.14	1.08	1.16
USA	3.91	3.86	3.81	3.68	3.55	3.43	3.40

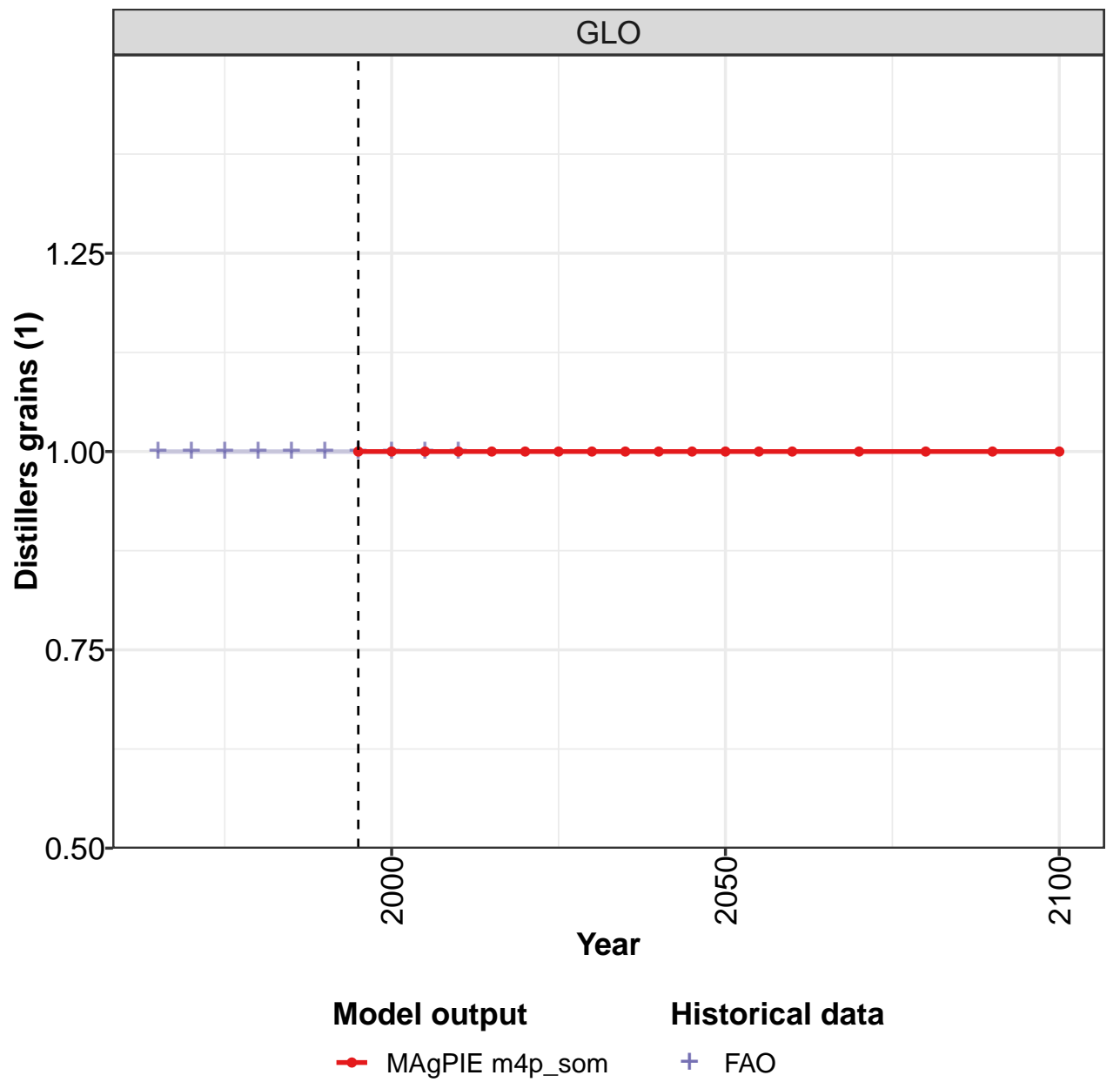
Table 2031: MAgPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Cotton lint (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.00	0.99	1.00	0.98	0.99	1.00	1.01	0.99	1.02	0.97
CAZ	0.06	0.28	0.41	0.84	2.47	5.75	2.98	7.25	9.37	0.00
CHA	0.84	0.87	0.81	0.66	0.96	0.87	0.81	0.97	0.66	0.66
EUR	0.09	0.09	0.09	0.09	0.12	0.18	0.32	0.41	0.67	0.20
IND	0.92	0.90	0.99	1.09	1.02	1.25	0.98	0.89	1.20	1.37
JPN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAM	2.21	2.20	1.82	1.52	1.37	1.33	1.08	0.60	0.96	1.01
MEA	3.08	3.13	2.44	1.70	1.59	1.20	1.34	1.41	1.43	1.00
NEU	1.31	2.16	1.45	1.13	0.94	0.87	0.80	0.60	0.53	0.48
OAS	0.99	0.79	0.67	0.66	0.71	0.63	0.55	0.56	0.51	0.48
REF	1.19	1.17	1.37	1.43	1.23	1.23	3.22	1.99	2.48	1.65
SSA	3.34	3.25	2.23	2.44	2.53	2.55	2.30	2.99	3.32	2.09
USA	1.35	1.43	1.91	4.02	1.51	2.01	2.10	1.68	2.88	4.02

Table 2032: FAO — Trade—Self-sufficiency—Secondary products—Cotton lint (1)

60.4.4 Distillers grains

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

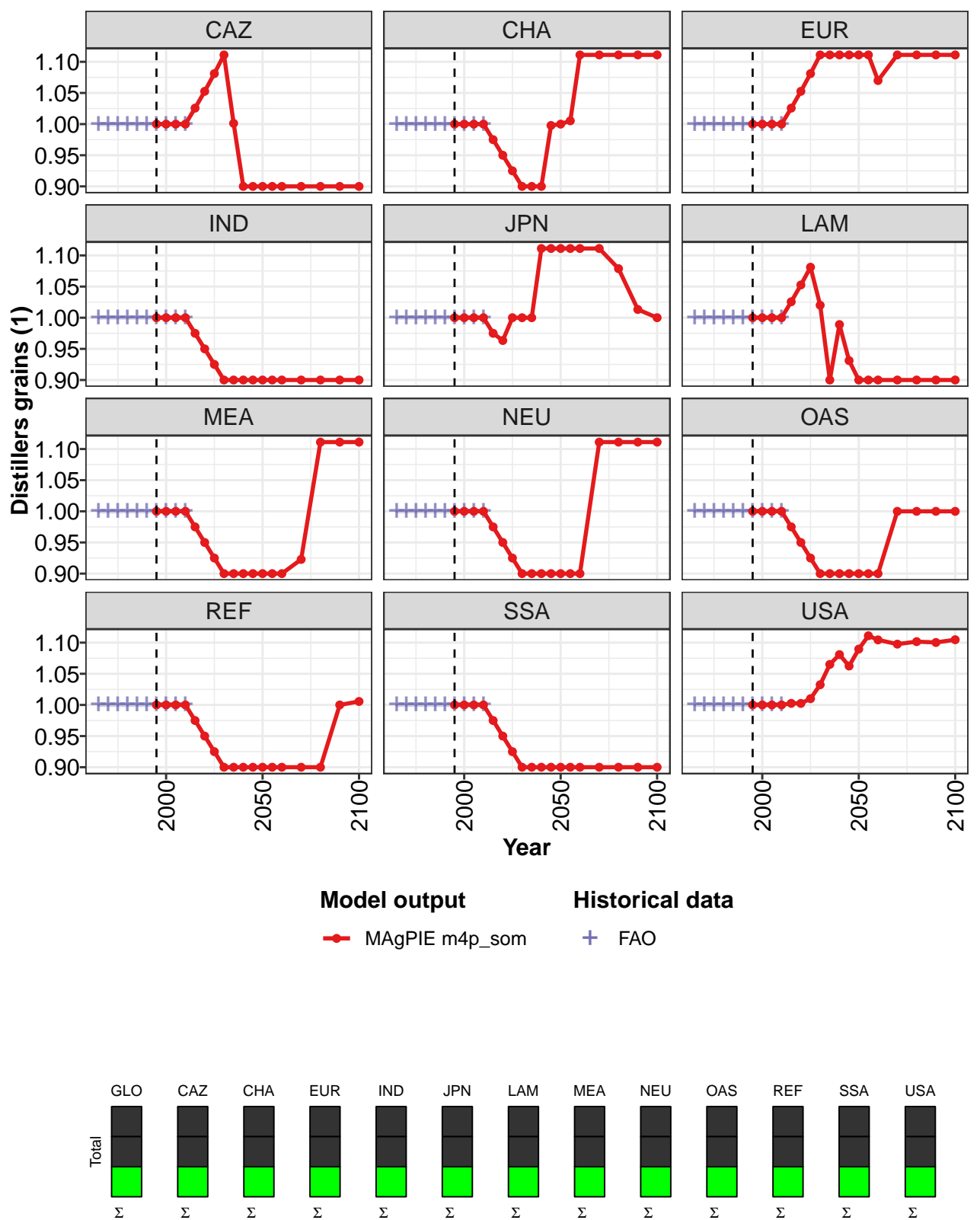


Figure 543: MAgPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Distillers grains (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.00	1.00	1.00	1.00	1.03	1.05	1.08	1.11	1.00	0.90	0.90
CHA	1.00	1.00	1.00	1.00	0.97	0.95	0.93	0.90	0.90	0.90	1.00
EUR	1.00	1.00	1.00	1.00	1.03	1.05	1.08	1.11	1.11	1.11	1.11
IND	1.00	1.00	1.00	1.00	0.97	0.95	0.93	0.90	0.90	0.90	0.90
JPN	1.00	1.00	1.00	1.00	0.97	0.96	1.00	1.00	1.00	1.11	1.11
LAM	1.00	1.00	1.00	1.00	1.03	1.05	1.08	1.02	0.90	0.99	0.93
MEA	1.00	1.00	1.00	1.00	0.97	0.95	0.93	0.90	0.90	0.90	0.90
NEU	1.00	1.00	1.00	1.00	0.97	0.95	0.92	0.90	0.90	0.90	0.90
OAS	1.00	1.00	1.00	1.00	0.97	0.95	0.93	0.90	0.90	0.90	0.90
REF	1.00	1.00	1.00	1.00	0.98	0.95	0.93	0.90	0.90	0.90	0.90
SSA	1.00	1.00	1.00	1.00	0.97	0.95	0.93	0.90	0.90	0.90	0.90
USA	1.00	1.00	1.00	1.00	1.00	1.00	1.01	1.03	1.07	1.08	1.06

Table 2033: MAgPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Distillers grains (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	0.90	0.90	0.90	0.90	0.90	0.90	0.90
CHA	1.00	1.01	1.11	1.11	1.11	1.11	1.11
EUR	1.11	1.11	1.07	1.11	1.11	1.11	1.11
IND	0.90	0.90	0.90	0.90	0.90	0.90	0.90
JPN	1.11	1.11	1.11	1.11	1.08	1.01	1.00
LAM	0.90	0.90	0.90	0.90	0.90	0.90	0.90
MEA	0.90	0.90	0.90	0.92	1.11	1.11	1.11
NEU	0.90	0.90	0.90	1.11	1.11	1.11	1.11
OAS	0.90	0.90	0.90	1.00	1.00	1.00	1.00
REF	0.90	0.90	0.90	0.90	0.90	1.00	1.01
SSA	0.90	0.90	0.90	0.90	0.90	0.90	0.90
USA	1.09	1.11	1.10	1.10	1.10	1.10	1.10

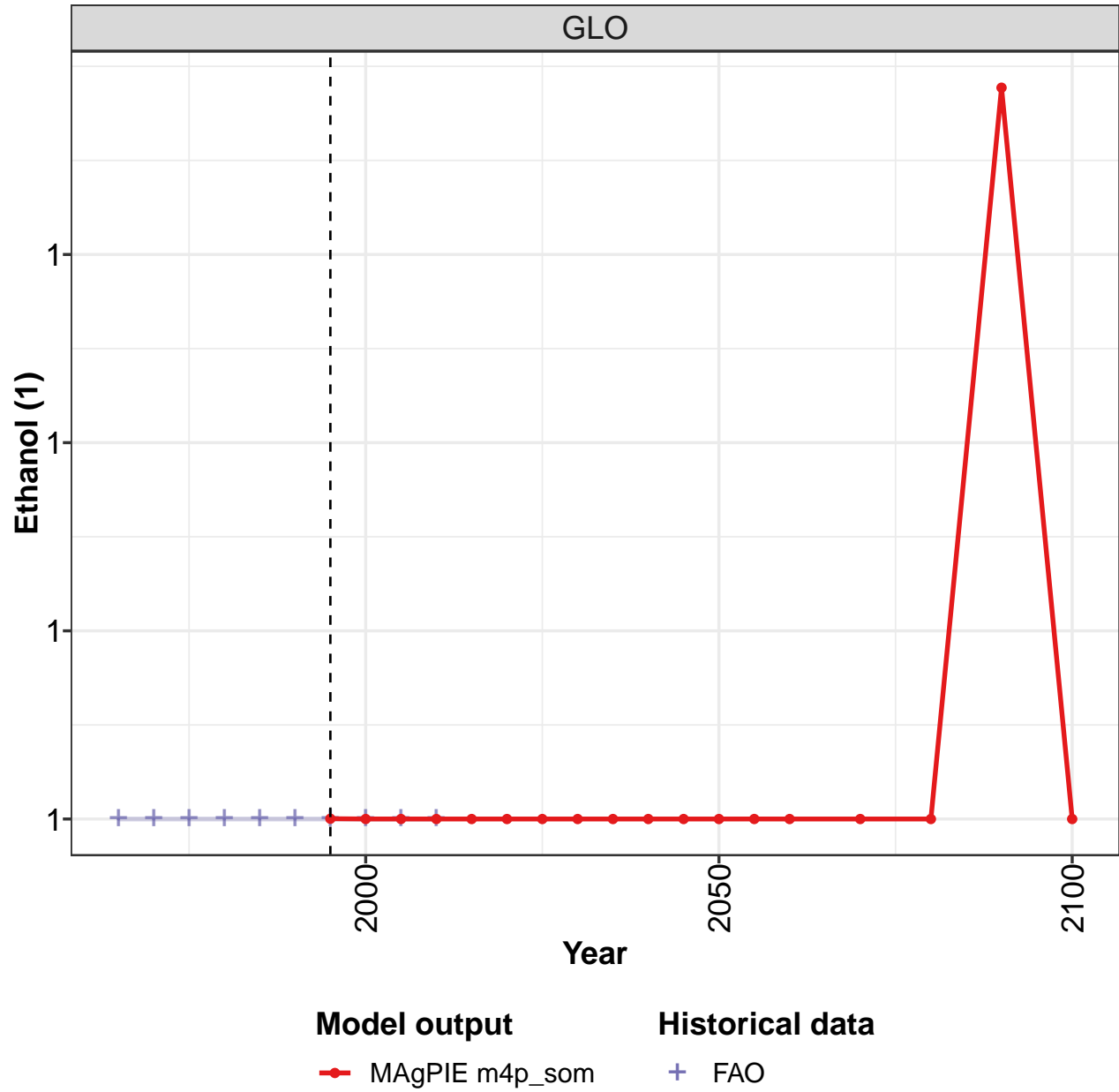
Table 2034: MAgPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Distillers grains (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
CAZ	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
CHA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EUR	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
IND	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
JPN	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
LAM	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
MEA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
NEU	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
OAS	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
REF	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
SSA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
USA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Table 2035: FAO — Trade—Self-sufficiency—Secondary products—Distillers grains (1)

60.4.5 Ethanol

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

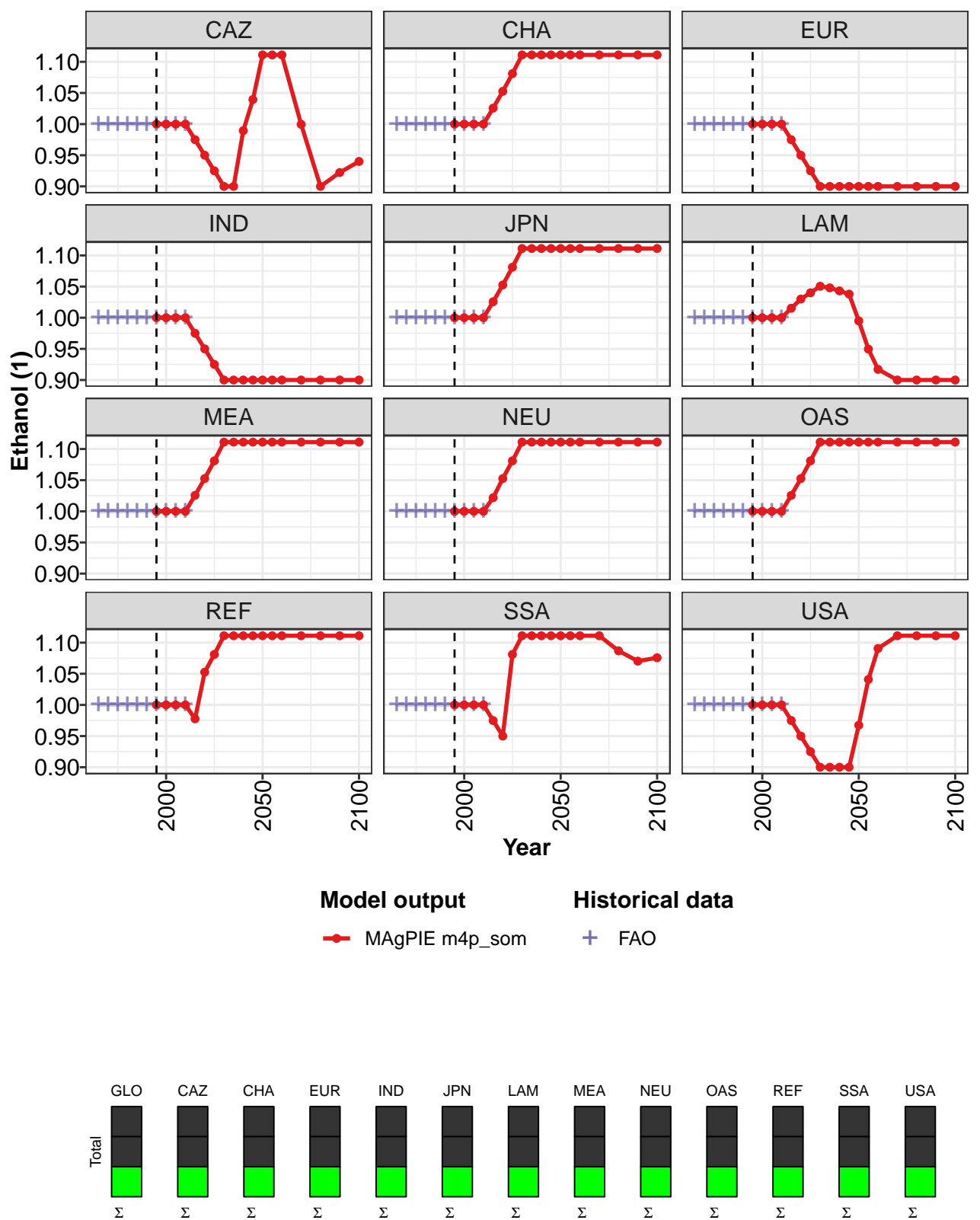


Figure 544: MAGPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Ethanol (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.00	1.00	1.00	1.00	0.97	0.95	0.93	0.90	0.90	0.99	1.04
CHA	1.00	1.00	1.00	1.00	1.03	1.05	1.08	1.11	1.11	1.11	1.11
EUR	1.00	1.00	1.00	1.00	0.97	0.95	0.93	0.90	0.90	0.90	0.90
IND	1.00	1.00	1.00	1.00	0.97	0.95	0.93	0.90	0.90	0.90	0.90
JPN	1.00	1.00	1.00	1.00	1.03	1.05	1.08	1.11	1.11	1.11	1.11
LAM	1.00	1.00	1.00	1.00	1.02	1.03	1.04	1.05	1.05	1.04	1.04
MEA	1.00	1.00	1.00	1.00	1.03	1.05	1.08	1.11	1.11	1.11	1.11
NEU	1.00	1.00	1.00	1.00	1.02	1.05	1.08	1.11	1.11	1.11	1.11
OAS	1.00	1.00	1.00	1.00	1.03	1.05	1.08	1.11	1.11	1.11	1.11
REF	1.00	1.00	1.00	1.00	0.98	1.05	1.08	1.11	1.11	1.11	1.11
SSA	1.00	1.00	1.00	1.00	0.98	0.95	1.08	1.11	1.11	1.11	1.11
USA	1.00	1.00	1.00	1.00	0.97	0.95	0.93	0.90	0.90	0.90	0.90

Table 2036: MAgPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Ethanol (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.11	1.11	1.11	1.00	0.90	0.92	0.94
CHA	1.11	1.11	1.11	1.11	1.11	1.11	1.11
EUR	0.90	0.90	0.90	0.90	0.90	0.90	0.90
IND	0.90	0.90	0.90	0.90	0.90	0.90	0.90
JPN	1.11	1.11	1.11	1.11	1.11	1.11	1.11
LAM	0.99	0.95	0.92	0.90	0.90	0.90	0.90
MEA	1.11	1.11	1.11	1.11	1.11	1.11	1.11
NEU	1.11	1.11	1.11	1.11	1.11	1.11	1.11
OAS	1.11	1.11	1.11	1.11	1.11	1.11	1.11
REF	1.11	1.11	1.11	1.11	1.11	1.11	1.11
SSA	1.11	1.11	1.11	1.11	1.09	1.07	1.08
USA	0.97	1.04	1.09	1.11	1.11	1.11	1.11

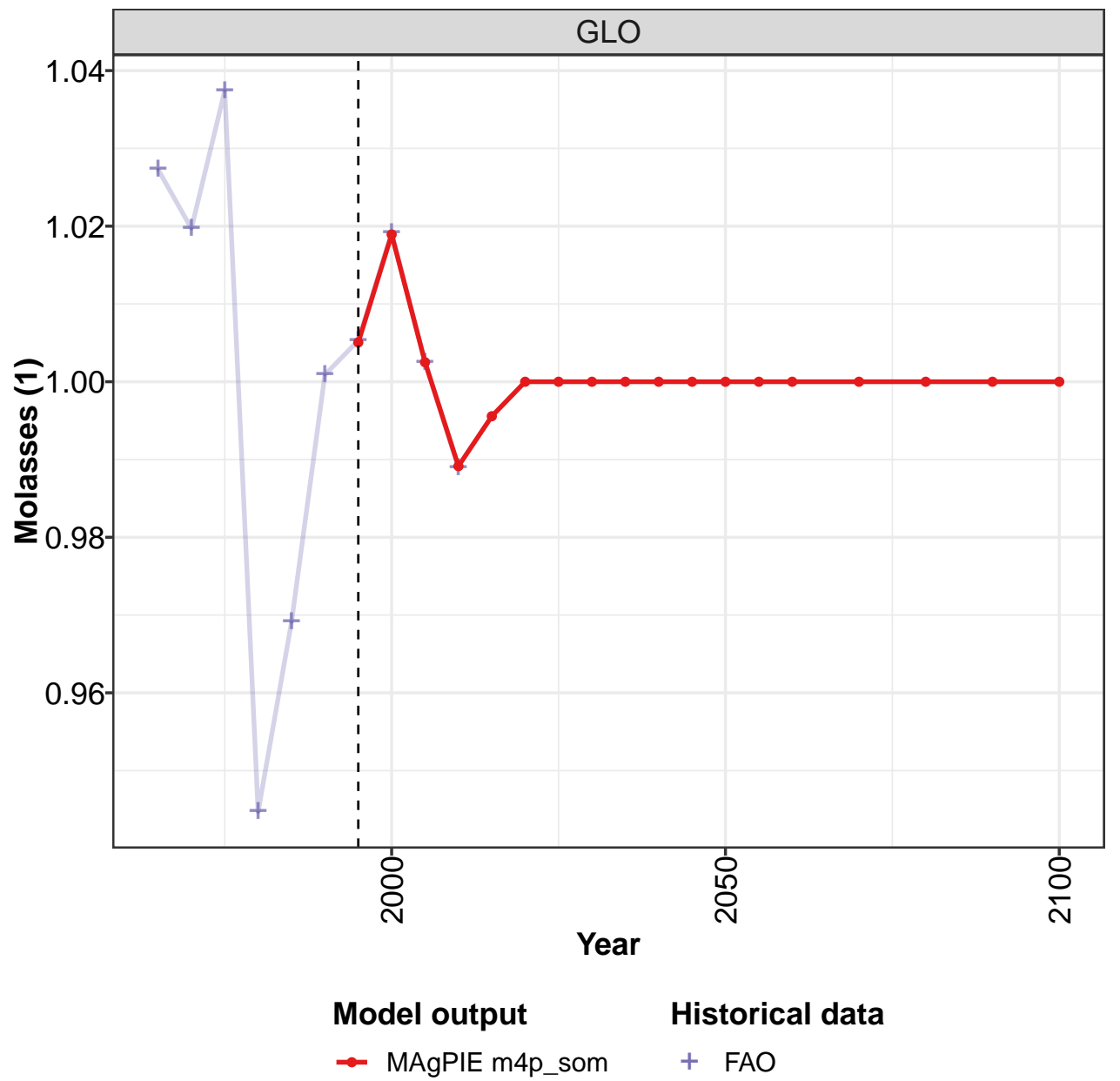
Table 2037: MAgPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Ethanol (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
CAZ	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
CHA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EUR	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
IND	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
JPN	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
LAM	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
MEA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
NEU	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
OAS	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
REF	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
SSA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
USA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Table 2038: FAO — Trade—Self-sufficiency—Secondary products—Ethanol (1)

60.4.6 Molasses

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.





## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

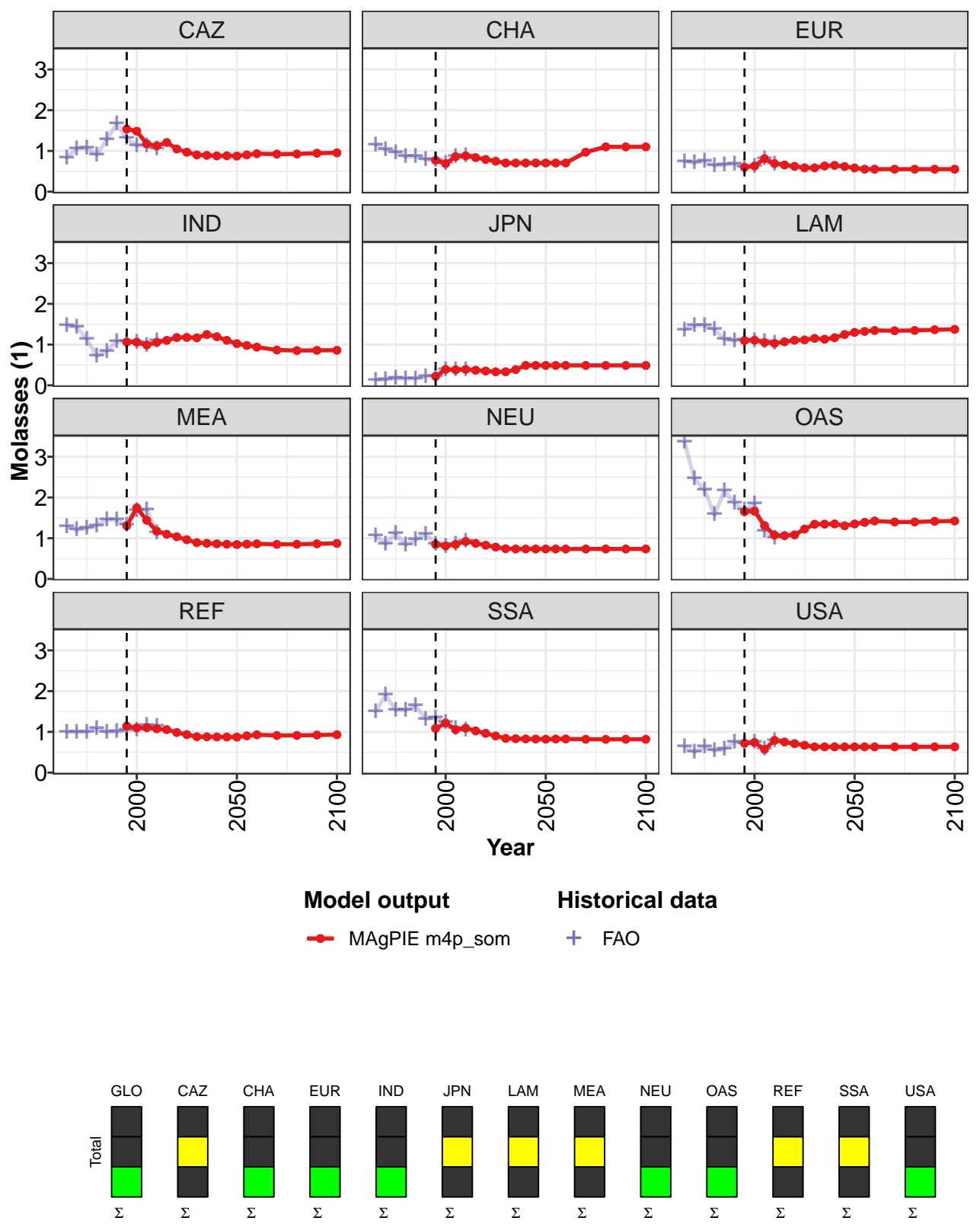


Figure 545: MAgPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Molasses (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.01	1.02	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.54	1.48	1.17	1.12	1.21	1.05	0.97	0.90	0.89	0.88	0.88
CHA	0.77	0.69	0.86	0.88	0.84	0.79	0.75	0.70	0.70	0.70	0.70
EUR	0.60	0.63	0.81	0.69	0.66	0.62	0.59	0.58	0.63	0.65	0.62
IND	1.06	1.06	0.99	1.06	1.10	1.17	1.18	1.16	1.25	1.19	1.10
JPN	0.22	0.39	0.38	0.39	0.37	0.35	0.33	0.33	0.39	0.49	0.49
LAM	1.10	1.11	1.05	1.03	1.07	1.11	1.12	1.15	1.13	1.17	1.25
MEA	1.31	1.75	1.44	1.17	1.10	1.04	0.96	0.89	0.88	0.86	0.85
NEU	0.85	0.81	0.85	0.92	0.87	0.83	0.78	0.74	0.74	0.74	0.74
OAS	1.65	1.66	1.31	1.08	1.06	1.08	1.22	1.34	1.35	1.35	1.31
REF	1.14	1.10	1.10	1.07	1.06	0.98	0.93	0.88	0.88	0.88	0.87
SSA	1.08	1.22	1.06	1.09	1.02	0.96	0.90	0.84	0.83	0.83	0.82
USA	0.72	0.74	0.57	0.79	0.75	0.71	0.67	0.63	0.63	0.63	0.63

Table 2039: MAgPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Molasses (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	0.87	0.90	0.93	0.92	0.92	0.94	0.95
CHA	0.70	0.70	0.70	0.97	1.10	1.10	1.10
EUR	0.58	0.55	0.55	0.55	0.55	0.55	0.55
IND	1.02	0.98	0.94	0.87	0.85	0.86	0.86
JPN	0.49	0.49	0.49	0.49	0.49	0.49	0.49
LAM	1.30	1.32	1.35	1.34	1.35	1.36	1.37
MEA	0.84	0.85	0.86	0.85	0.85	0.86	0.87
NEU	0.74	0.74	0.74	0.74	0.74	0.74	0.74
OAS	1.35	1.39	1.42	1.40	1.40	1.42	1.42
REF	0.87	0.90	0.93	0.91	0.91	0.92	0.93
SSA	0.82	0.82	0.83	0.82	0.82	0.82	0.82
USA	0.63	0.63	0.63	0.63	0.63	0.63	0.63

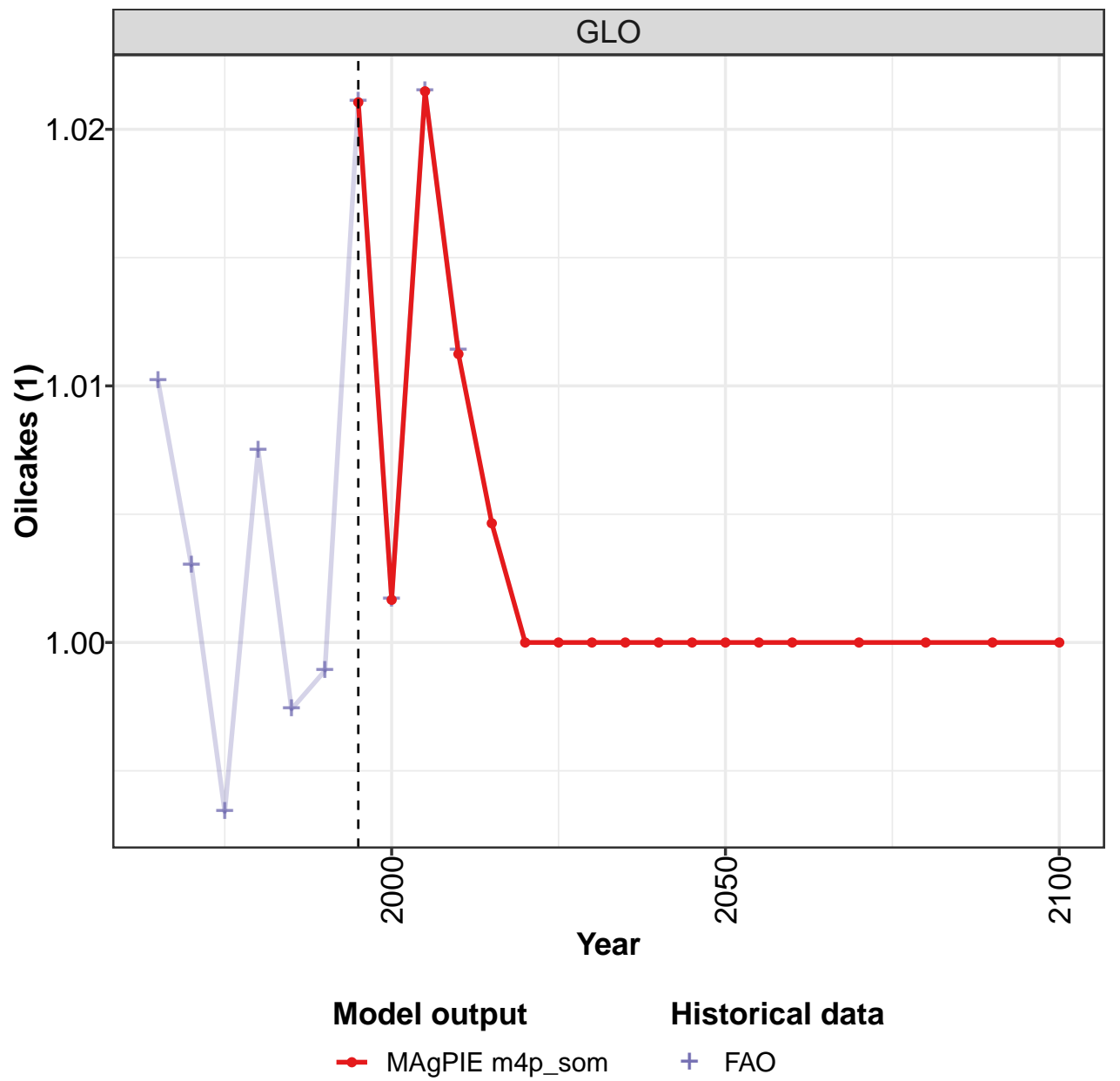
Table 2040: MAgPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Molasses (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.03	1.02	1.04	0.94	0.97	1.00	1.01	1.02	1.00	0.99
CAZ	0.83	1.05	1.08	0.91	1.27	1.67	1.31	1.12	1.13	1.05
CHA	1.15	1.04	0.97	0.86	0.86	0.79	0.77	0.69	0.86	0.88
EUR	0.74	0.71	0.76	0.64	0.66	0.68	0.60	0.63	0.81	0.69
IND	1.47	1.43	1.13	0.72	0.84	1.08	1.08	1.05	0.99	1.10
JPN	0.13	0.14	0.17	0.17	0.16	0.22	0.22	0.39	0.38	0.39
LAM	1.37	1.46	1.47	1.37	1.13	1.10	1.11	1.09	1.07	1.05
MEA	1.29	1.20	1.24	1.31	1.46	1.45	1.31	1.67	1.70	1.14
NEU	1.07	0.85	1.11	0.84	0.97	1.10	0.85	0.81	0.85	0.92
OAS	3.36	2.46	2.18	1.58	2.16	1.86	1.70	1.85	1.18	1.01
REF	0.99	0.99	1.00	1.08	1.00	1.00	1.04	1.04	1.16	1.15
SSA	1.50	1.90	1.54	1.53	1.64	1.32	1.35	1.23	1.08	1.04
USA	0.64	0.51	0.63	0.55	0.58	0.75	0.72	0.74	0.57	0.79

Table 2041: FAO — Trade—Self-sufficiency—Secondary products—Molasses (1)

60.4.7 Oilcakes

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

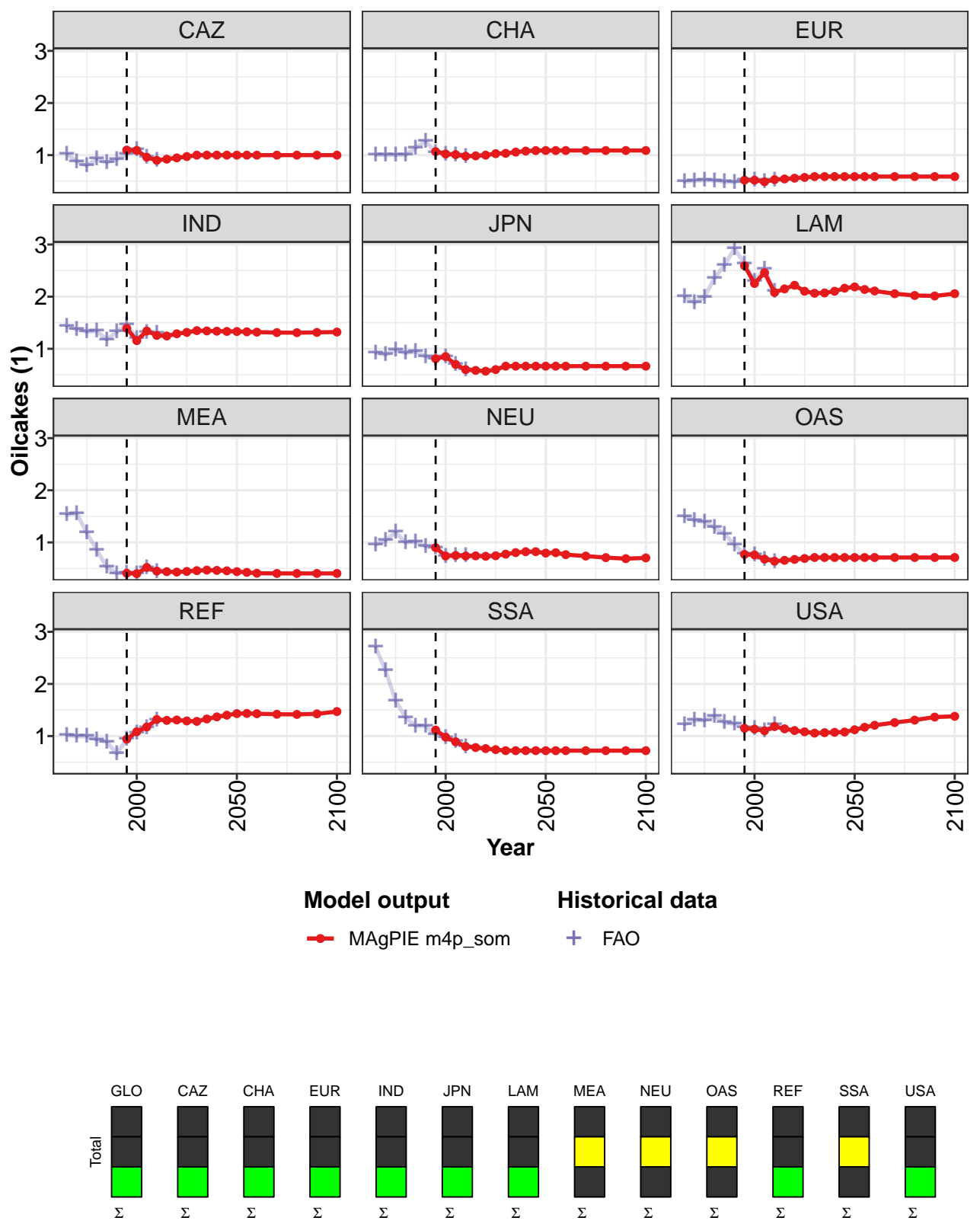


Figure 546: MAgPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Oilcakes (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.02	1.00	1.02	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.10	1.09	0.96	0.90	0.92	0.95	0.97	1.00	1.00	1.00	1.00
CHA	1.07	1.02	1.01	0.98	0.99	1.00	1.03	1.03	1.06	1.08	1.09
EUR	0.52	0.52	0.49	0.53	0.54	0.56	0.57	0.59	0.59	0.59	0.59
IND	1.39	1.16	1.34	1.26	1.25	1.29	1.31	1.35	1.34	1.34	1.33
JPN	0.81	0.85	0.70	0.60	0.58	0.57	0.60	0.67	0.67	0.67	0.67
LAM	2.59	2.25	2.46	2.08	2.15	2.22	2.10	2.07	2.07	2.10	2.16
MEA	0.41	0.40	0.52	0.45	0.44	0.43	0.44	0.46	0.47	0.46	0.46
NEU	0.90	0.74	0.75	0.74	0.74	0.73	0.74	0.78	0.80	0.82	0.82
OAS	0.77	0.76	0.68	0.64	0.66	0.67	0.69	0.71	0.71	0.71	0.71
REF	0.94	1.08	1.17	1.32	1.30	1.31	1.29	1.28	1.33	1.37	1.40
SSA	1.12	0.98	0.89	0.80	0.78	0.76	0.74	0.72	0.72	0.72	0.72
USA	1.15	1.13	1.10	1.18	1.14	1.11	1.08	1.06	1.07	1.07	1.08

Table 2042: MAgPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Oilcakes (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CHA	1.09	1.09	1.09	1.09	1.09	1.09	1.09
EUR	0.59	0.59	0.59	0.59	0.59	0.59	0.59
IND	1.33	1.33	1.32	1.31	1.31	1.31	1.32
JPN	0.67	0.67	0.67	0.67	0.67	0.67	0.67
LAM	2.19	2.14	2.11	2.06	2.02	2.01	2.06
MEA	0.44	0.43	0.41	0.41	0.41	0.41	0.41
NEU	0.79	0.80	0.77	0.74	0.71	0.69	0.70
OAS	0.71	0.71	0.71	0.71	0.71	0.71	0.71
REF	1.43	1.43	1.43	1.42	1.42	1.43	1.47
SSA	0.72	0.72	0.72	0.72	0.72	0.72	0.72
USA	1.12	1.17	1.21	1.26	1.31	1.36	1.38

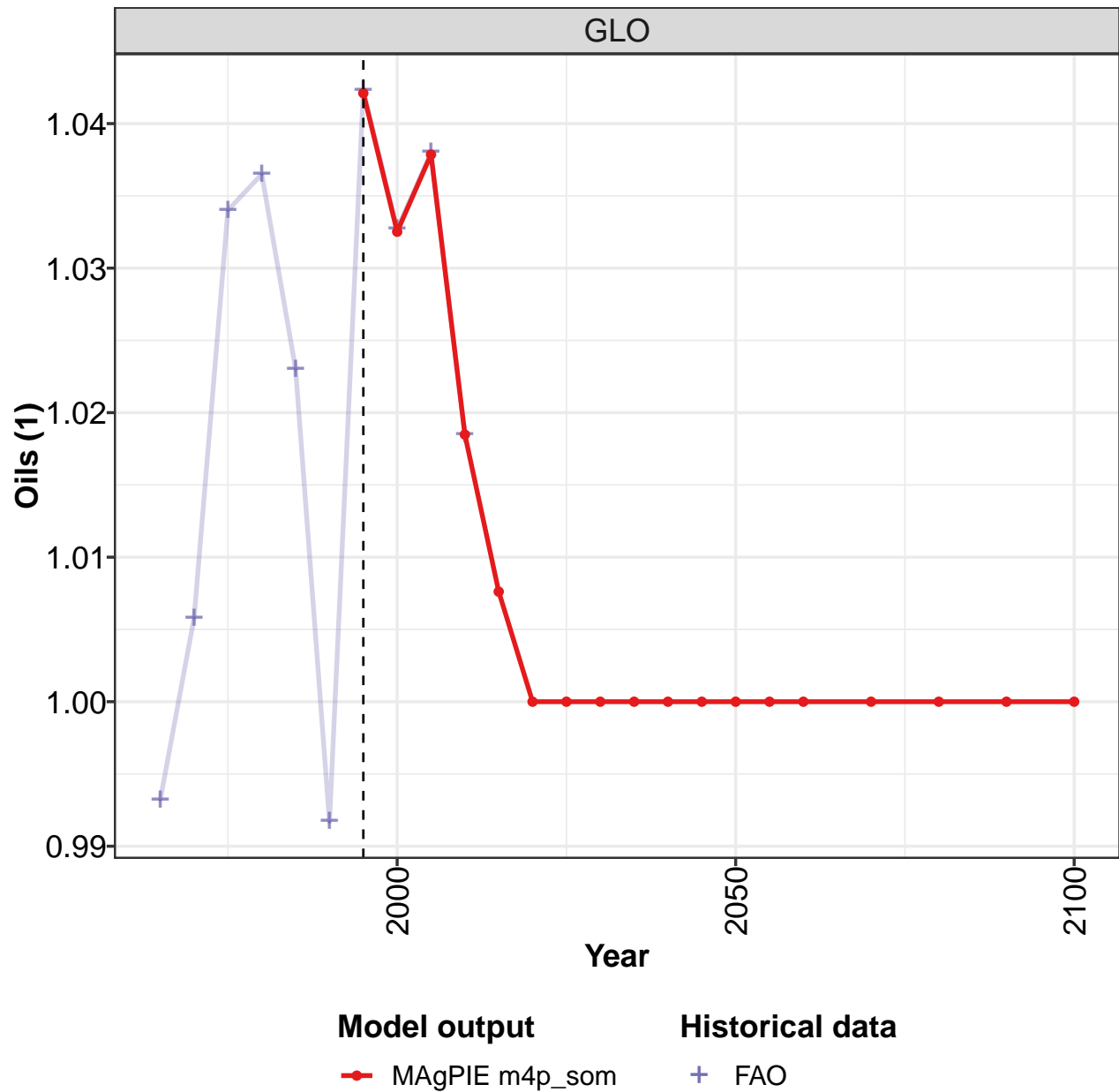
Table 2043: MAgPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Oilcakes (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.01	1.00	0.99	1.01	1.00	1.00	1.02	1.00	1.02	1.01
CAZ	1.03	0.88	0.80	0.93	0.86	0.92	1.01	1.11	0.96	0.90
CHA	1.01	1.00	1.00	1.00	1.14	1.27	1.06	1.01	1.00	0.98
EUR	0.49	0.51	0.52	0.51	0.49	0.48	0.52	0.52	0.49	0.53
IND	1.43	1.37	1.32	1.34	1.18	1.32	1.47	1.20	1.31	1.29
JPN	0.92	0.89	0.98	0.92	0.95	0.85	0.81	0.85	0.70	0.60
LAM	2.00	1.88	1.99	2.36	2.60	2.92	2.63	2.30	2.52	2.10
MEA	1.53	1.56	1.19	0.86	0.53	0.41	0.41	0.40	0.52	0.45
NEU	0.95	1.03	1.20	1.00	1.01	0.92	0.90	0.74	0.75	0.74
OAS	1.50	1.42	1.39	1.28	1.16	0.96	0.77	0.76	0.68	0.64
REF	1.02	0.99	0.99	0.93	0.89	0.66	0.94	1.06	1.16	1.30
SSA	2.70	2.26	1.68	1.35	1.19	1.19	1.02	0.98	0.89	0.80
USA	1.22	1.30	1.30	1.39	1.26	1.23	1.16	1.14	1.11	1.22

Table 2044: FAO — Trade—Self-sufficiency—Secondary products—Oilcakes (1)

60.4.8 Oils

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

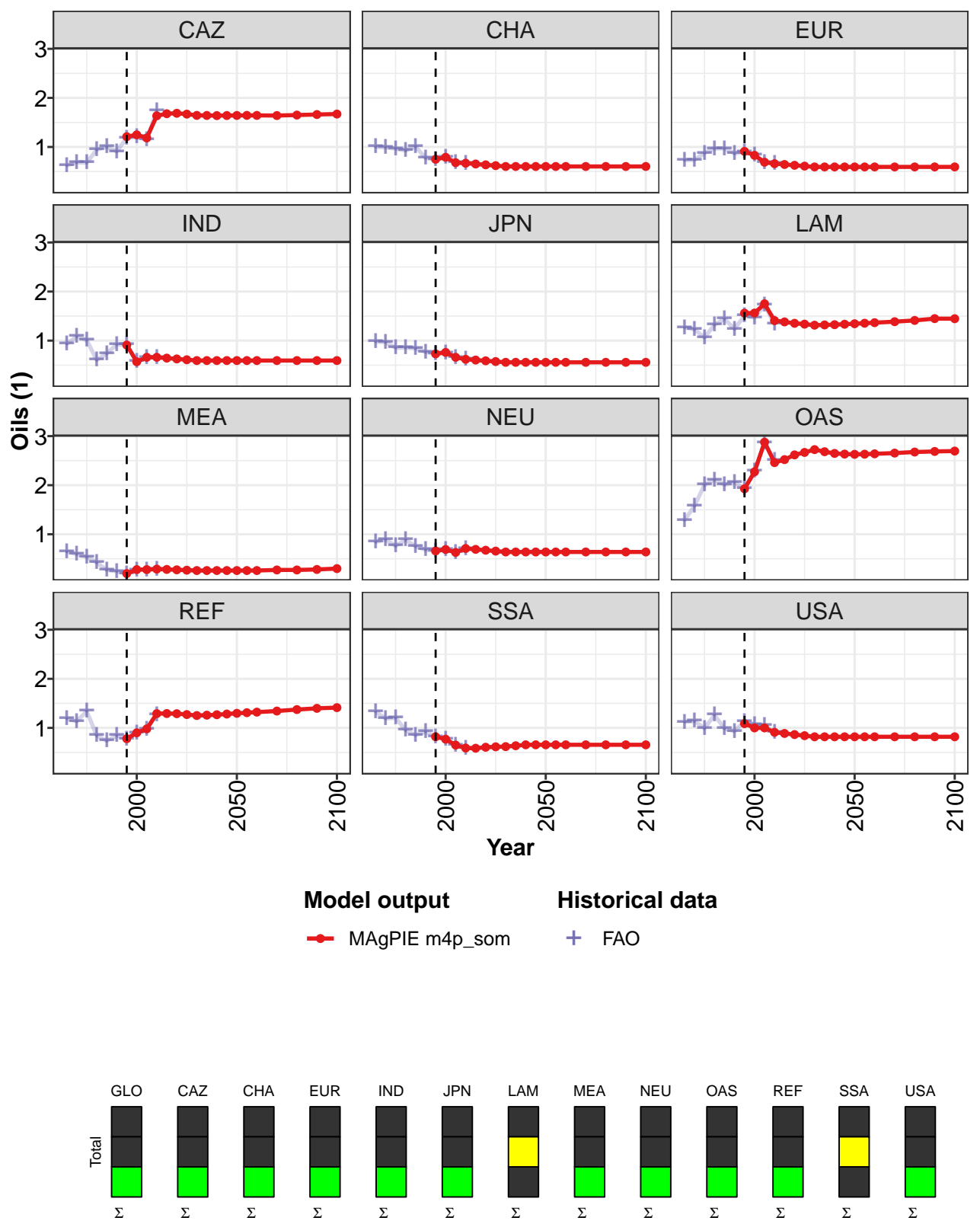


Figure 547: MAgPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Oils (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.04	1.03	1.04	1.02	1.01	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.21	1.25	1.18	1.63	1.68	1.69	1.67	1.64	1.64	1.64	1.64
CHA	0.75	0.79	0.68	0.67	0.65	0.64	0.62	0.60	0.60	0.60	0.60
EUR	0.91	0.83	0.69	0.66	0.64	0.63	0.61	0.59	0.59	0.59	0.59
IND	0.91	0.57	0.66	0.66	0.64	0.63	0.61	0.59	0.59	0.59	0.59
JPN	0.73	0.76	0.66	0.62	0.60	0.59	0.57	0.56	0.56	0.56	0.56
LAM	1.56	1.56	1.75	1.41	1.38	1.35	1.34	1.31	1.32	1.32	1.33
MEA	0.20	0.28	0.28	0.29	0.28	0.28	0.27	0.26	0.26	0.26	0.26
NEU	0.66	0.69	0.63	0.71	0.69	0.67	0.66	0.64	0.64	0.64	0.64
OAS	1.93	2.27	2.88	2.46	2.52	2.62	2.67	2.73	2.68	2.65	2.63
REF	0.78	0.90	0.98	1.29	1.29	1.29	1.27	1.25	1.26	1.27	1.28
SSA	0.82	0.77	0.65	0.59	0.59	0.61	0.61	0.62	0.64	0.66	0.66
USA	1.09	1.00	1.00	0.91	0.89	0.86	0.84	0.82	0.82	0.82	0.82

Table 2045: MAgPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Oils (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.64	1.64	1.64	1.64	1.65	1.66	1.67
CHA	0.60	0.60	0.60	0.60	0.60	0.60	0.60
EUR	0.59	0.59	0.59	0.59	0.59	0.59	0.59
IND	0.59	0.59	0.59	0.59	0.59	0.59	0.59
JPN	0.56	0.56	0.56	0.56	0.56	0.56	0.56
LAM	1.34	1.35	1.37	1.39	1.41	1.45	1.45
MEA	0.26	0.26	0.26	0.27	0.27	0.28	0.30
NEU	0.64	0.64	0.64	0.64	0.64	0.64	0.64
OAS	2.63	2.63	2.64	2.65	2.68	2.69	2.70
REF	1.30	1.31	1.32	1.34	1.37	1.40	1.41
SSA	0.66	0.66	0.66	0.66	0.66	0.66	0.66
USA	0.82	0.82	0.82	0.82	0.82	0.82	0.82

Table 2046: MAgPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Oils (1) [PART 2/2]

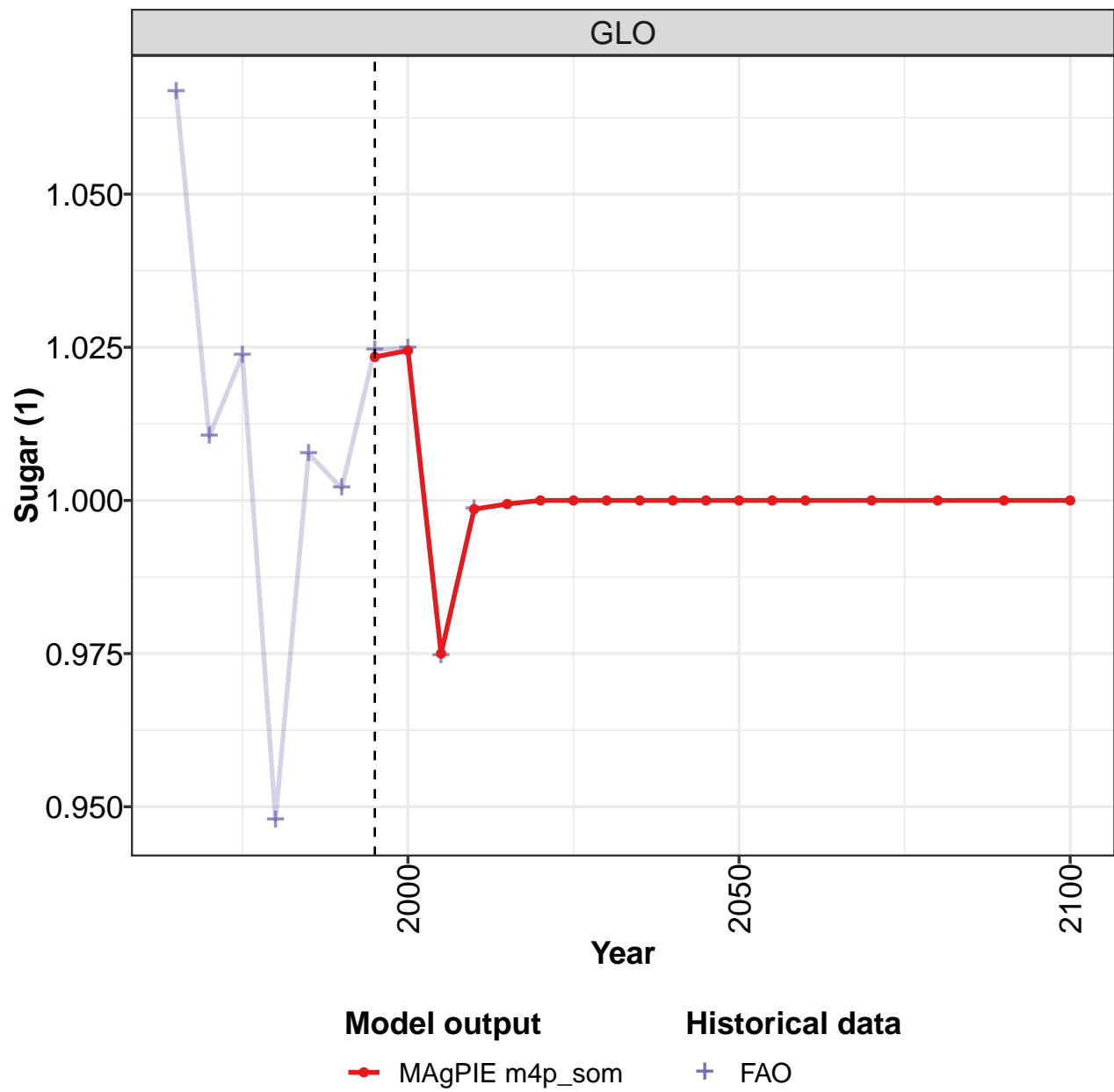
	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	0.99	1.01	1.03	1.04	1.02	0.99	1.04	1.03	1.04	1.02
CAZ	0.62	0.69	0.68	0.94	1.00	0.91	1.19	1.21	1.14	1.75
CHA	1.00	0.99	0.97	0.93	1.01	0.77	0.75	0.79	0.68	0.67
EUR	0.73	0.74	0.88	0.97	0.97	0.86	0.91	0.83	0.69	0.66
IND	0.93	1.08	1.01	0.60	0.74	0.92	0.91	0.57	0.66	0.66
JPN	0.98	0.97	0.85	0.86	0.84	0.77	0.73	0.76	0.66	0.62
LAM	1.27	1.23	1.06	1.32	1.44	1.24	1.51	1.47	1.73	1.34
MEA	0.65	0.59	0.54	0.42	0.27	0.24	0.20	0.28	0.28	0.29
NEU	0.84	0.89	0.76	0.89	0.75	0.68	0.66	0.69	0.63	0.71
OAS	1.28	1.58	2.01	2.11	2.01	2.06	1.93	2.29	2.86	2.50
REF	1.19	1.13	1.34	0.84	0.74	0.84	0.78	0.90	0.98	1.27
SSA	1.33	1.19	1.21	0.95	0.85	0.92	0.82	0.77	0.65	0.59
USA	1.12	1.14	0.99	1.26	0.99	0.93	1.14	1.07	1.05	0.91

Table 2047: FAO — Trade—Self-sufficiency—Secondary products—Oils (1)



60.4.9 Sugar

## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.



## Scale for 'colour' is already present. Adding another scale for 'colour', which will## replace the existing scale.

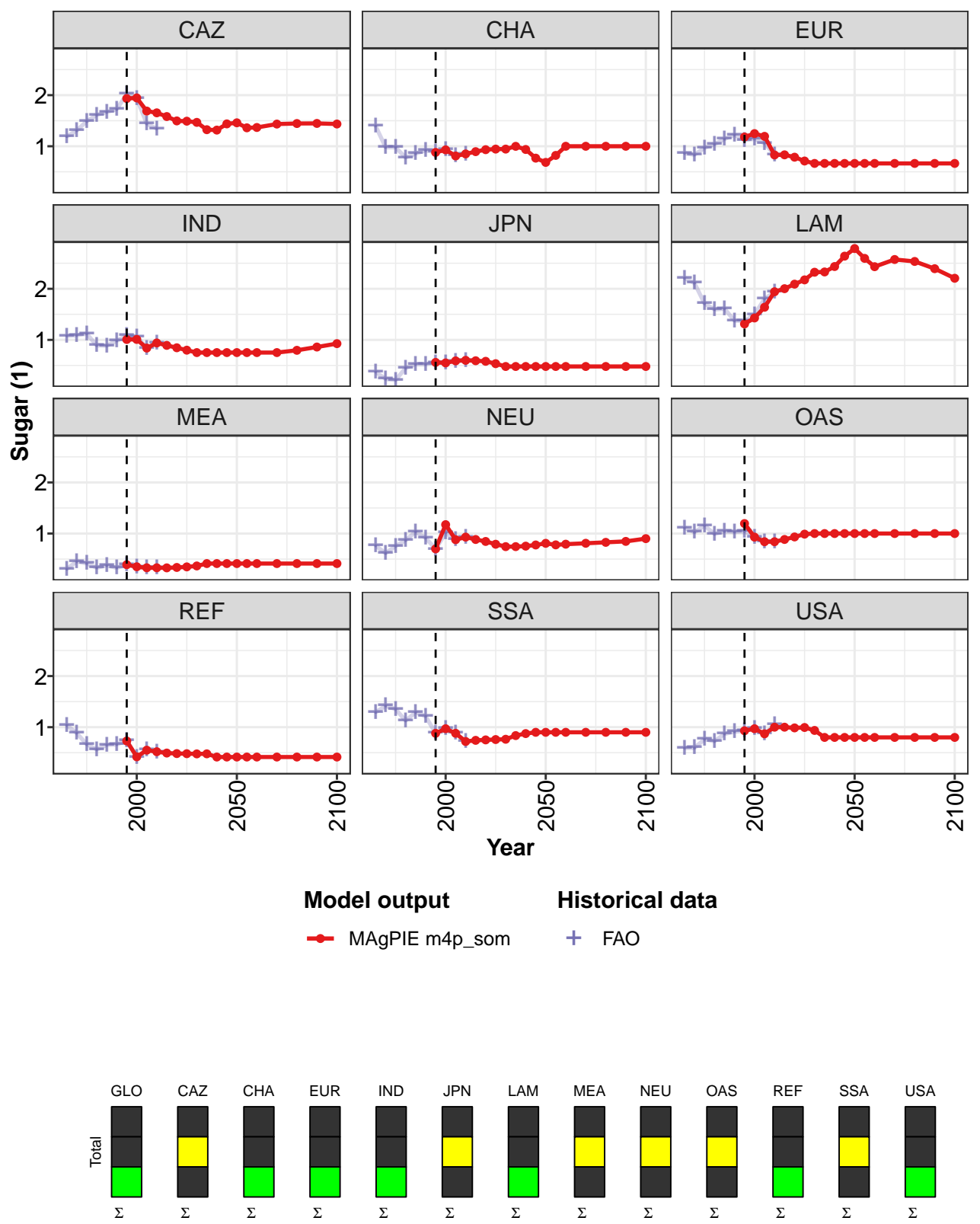


Figure 548: MAGPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Sugar (1)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045
GLO	1.02	1.02	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.93	1.95	1.69	1.65	1.58	1.50	1.49	1.47	1.32	1.32	1.44
CHA	0.88	0.93	0.81	0.85	0.89	0.93	0.94	0.94	1.00	0.94	0.77
EUR	1.18	1.25	1.19	0.83	0.83	0.79	0.71	0.66	0.66	0.66	0.66
IND	1.01	1.01	0.84	0.94	0.89	0.85	0.80	0.75	0.75	0.75	0.75
JPN	0.56	0.55	0.59	0.60	0.59	0.58	0.53	0.48	0.48	0.48	0.48
LAM	1.31	1.43	1.64	1.94	2.00	2.09	2.17	2.32	2.33	2.44	2.64
MEA	0.39	0.35	0.33	0.33	0.33	0.34	0.35	0.37	0.41	0.41	0.41
NEU	0.70	1.17	0.88	0.93	0.88	0.85	0.79	0.74	0.74	0.75	0.78
OAS	1.20	0.93	0.84	0.84	0.88	0.93	0.99	1.00	1.00	1.00	1.00
REF	0.73	0.42	0.55	0.52	0.49	0.48	0.48	0.48	0.48	0.42	0.42
SSA	0.88	0.97	0.88	0.72	0.74	0.75	0.76	0.76	0.84	0.87	0.90
USA	0.93	0.97	0.87	1.00	1.00	0.99	0.99	0.94	0.80	0.80	0.80

Table 2048: MAgPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Sugar (1) [PART 1/2]

	2050	2055	2060	2070	2080	2090	2100
GLO	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CAZ	1.46	1.36	1.37	1.43	1.44	1.45	1.44
CHA	0.68	0.82	1.00	1.00	1.00	1.00	1.00
EUR	0.66	0.66	0.66	0.66	0.66	0.66	0.66
IND	0.75	0.75	0.75	0.75	0.80	0.86	0.93
JPN	0.48	0.48	0.48	0.48	0.48	0.48	0.48
LAM	2.79	2.60	2.43	2.57	2.54	2.39	2.21
MEA	0.41	0.41	0.41	0.41	0.41	0.41	0.41
NEU	0.81	0.78	0.79	0.81	0.83	0.85	0.90
OAS	1.00	1.00	1.00	1.00	1.00	1.00	1.00
REF	0.42	0.42	0.42	0.42	0.42	0.42	0.42
SSA	0.90	0.90	0.90	0.90	0.90	0.90	0.90
USA	0.80	0.80	0.80	0.80	0.80	0.80	0.80

Table 2049: MAgPIE m4p\_som — Trade—Self-sufficiency—Secondary products—Sugar (1) [PART 2/2]

	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
GLO	1.07	1.01	1.02	0.95	1.01	1.00	1.02	1.02	0.97	1.00
CAZ	1.19	1.31	1.49	1.61	1.67	1.73	2.02	1.93	1.44	1.34
CHA	1.40	0.98	0.98	0.78	0.86	0.92	0.88	0.93	0.81	0.85
EUR	0.86	0.83	0.97	1.04	1.14	1.22	1.12	1.14	1.06	0.83
IND	1.08	1.09	1.12	0.89	0.89	0.98	1.09	1.06	0.84	0.94
JPN	0.38	0.24	0.21	0.45	0.52	0.52	0.56	0.55	0.59	0.60
LAM	2.21	2.11	1.71	1.60	1.61	1.38	1.37	1.50	1.80	1.94
MEA	0.30	0.45	0.42	0.33	0.38	0.33	0.39	0.35	0.33	0.33
NEU	0.76	0.61	0.76	0.87	1.04	0.91	0.70	1.01	0.88	0.93
OAS	1.11	1.03	1.16	0.99	1.04	1.03	1.04	0.93	0.84	0.84
REF	1.04	0.88	0.67	0.56	0.65	0.66	0.73	0.42	0.55	0.52
SSA	1.29	1.42	1.35	1.13	1.29	1.21	0.88	0.97	0.88	0.72
USA	0.59	0.60	0.76	0.73	0.87	0.91	0.93	0.97	0.87	1.05

Table 2050: FAO — Trade—Self-sufficiency—Secondary products—Sugar (1)

**Part XVI****Trade Value****61 Exports****62 Imports****63 Net-Exports**

## Part XVII

# Statistics

### 64 Traffic Lights

#### 64.1 Total

	green	yellow	red	NA.
total	271	255	11	11
relative	49%	47%	2%	2%

Table 2051: Global

	green	yellow	red	NA.
total	2959	2801	153	494
relative	46%	44%	2%	8%

Table 2052: Regional

#### 64.2 Trend

	green	yellow	red	NA.
total	243	138	156	11
relative	44%	25%	28%	2%

Table 2053: Global

	green	yellow	red	NA.
total	2751	1489	1665	502
relative	43%	23%	26%	8%

Table 2054: Regional

#### 64.3 Overlap

	green	yellow	red	NA.
total	492	42	3	11
relative	90%	8%	1%	2%

Table 2055: Global

	green	yellow	red	NA.
total	5162	600	85	560
relative	81%	9%	1%	9%

Table 2056: Regional

#### 64.4 Level

	green	yellow	red	NA.
total	307	131	93	17
relative	56%	24%	17%	3%

Table 2057: Global

	green	yellow	red	NA.
total	2860	2081	834	632
relative	45%	32%	13%	10%

Table 2058: Regional

## 65 Ignored data

Variables of data and validation data that only contain a mix of 0 and NA values and are ignored.

```
## Demand|Agricultural Supply Chain Loss|Crop residues (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Crop residues|Straw (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Fish (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Forage (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Forest products (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Forest products|Wood fuel (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Pasture (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Bioenergy|Crops (Mt DM/yr)
## Demand|Bioenergy|Crops|Cereals (Mt DM/yr)
## Demand|Bioenergy|Crops|Cereals|Maize (Mt DM/yr)
## Demand|Bioenergy|Crops|Cereals|Rice (Mt DM/yr)
## Demand|Bioenergy|Crops|Cereals|Temperate cereals (Mt DM/yr)
## Demand|Bioenergy|Crops|Cereals|Tropical cereals (Mt DM/yr)
## Demand|Bioenergy|Crops|Oil crops (Mt DM/yr)
## Demand|Bioenergy|Crops|Oil crops|Cotton seed (Mt DM/yr)
## Demand|Bioenergy|Crops|Oil crops|Groundnuts (Mt DM/yr)
## Demand|Bioenergy|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Bioenergy|Crops|Oil crops|Other oil crops (incl rapeseed) (Mt DM/yr)
## Demand|Bioenergy|Crops|Oil crops|Soybean (Mt DM/yr)
## Demand|Bioenergy|Crops|Oil crops|Sunflower (Mt DM/yr)
## Demand|Bioenergy|Crops|Other crops (Mt DM/yr)
## Demand|Bioenergy|Crops|Other crops|Fruits Vegetables Nuts (Mt DM/yr)
## Demand|Bioenergy|Crops|Other crops|Potatoes (Mt DM/yr)
## Demand|Bioenergy|Crops|Other crops|Pulses (Mt DM/yr)
## Demand|Bioenergy|Crops|Other crops|Tropical roots (Mt DM/yr)
## Demand|Bioenergy|Crops|Sugar crops (Mt DM/yr)
## Demand|Bioenergy|Crops|Sugar crops|Sugar beet (Mt DM/yr)
## Demand|Bioenergy|Crops|Sugar crops|Sugar cane (Mt DM/yr)
## Demand|Bioenergy|Fish (Mt DM/yr)
## Demand|Bioenergy|Forage (Mt DM/yr)
## Demand|Bioenergy|Forest products (Mt DM/yr)
## Demand|Bioenergy|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Bioenergy|Forest products|Wood fuel (Mt DM/yr)
## Demand|Bioenergy|Livestock products (Mt DM/yr)
## Demand|Bioenergy|Livestock products|Dairy (Mt DM/yr)
## Demand|Bioenergy|Livestock products|Eggs (Mt DM/yr)
## Demand|Bioenergy|Livestock products|Monogastric meat (Mt DM/yr)
## Demand|Bioenergy|Livestock products|Poultry meat (Mt DM/yr)
## Demand|Bioenergy|Livestock products|Ruminant meat (Mt DM/yr)
## Demand|Bioenergy|Pasture (Mt DM/yr)
## Demand|Bioenergy|Secondary products|Alcoholic beverages (Mt DM/yr)
## Demand|Bioenergy|Secondary products|Brans (Mt DM/yr)
## Demand|Bioenergy|Secondary products|Cotton lint (Mt DM/yr)
## Demand|Bioenergy|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Bioenergy|Secondary products|Microbial protein (Mt DM/yr)
```

```

## Demand|Bioenergy|Secondary products|Molasses (Mt DM/yr)
## Demand|Bioenergy|Secondary products|Oilcakes (Mt DM/yr)
## Demand|Bioenergy|Secondary products|Sugar (Mt DM/yr)
## Demand|Domestic Balanceflow|Bioenergy crops (Mt DM/yr)
## Demand|Domestic Balanceflow|Crop residues (Mt DM/yr)
## Demand|Domestic Balanceflow|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Demand|Domestic Balanceflow|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Demand|Domestic Balanceflow|Crop residues|Straw (Mt DM/yr)
## Demand|Domestic Balanceflow|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Domestic Balanceflow|Forage (Mt DM/yr)
## Demand|Domestic Balanceflow|Forest products (Mt DM/yr)
## Demand|Domestic Balanceflow|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Domestic Balanceflow|Forest products|Wood fuel (Mt DM/yr)
## Demand|Domestic Balanceflow|Pasture (Mt DM/yr)
## Demand|Domestic Balanceflow|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Domestic Balanceflow|Secondary products|Ethanol (Mt DM/yr)
## Demand|Domestic Balanceflow|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Feed|Bioenergy crops (Mt DM/yr)
## Demand|Feed|Forest products (Mt DM/yr)
## Demand|Feed|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Feed|Forest products|Wood fuel (Mt DM/yr)
## Demand|Feed|Livestock products|Monogastric meat (Mt DM/yr)
## Demand|Feed|Secondary products|Alcoholic beverages (Mt DM/yr)
## Demand|Feed|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Food|Bioenergy crops (Mt DM/yr)
## Demand|Food|Crop residues (Mt DM/yr)
## Demand|Food|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Demand|Food|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Demand|Food|Crop residues|Straw (Mt DM/yr)
## Demand|Food|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Food|Forage (Mt DM/yr)
## Demand|Food|Forest products (Mt DM/yr)
## Demand|Food|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Food|Forest products|Wood fuel (Mt DM/yr)
## Demand|Food|Pasture (Mt DM/yr)
## Demand|Food|Secondary products|Cotton lint (Mt DM/yr)
## Demand|Food|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Food|Secondary products|Ethanol (Mt DM/yr)
## Demand|Food|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Food|Secondary products|Oilcakes (Mt DM/yr)
## Demand|Material|Bioenergy crops (Mt DM/yr)
## Demand|Material|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Demand|Material|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Demand|Material|Crops|Cereals|Maize (Mt DM/yr)
## Demand|Material|Crops|Cereals|Temperate cereals (Mt DM/yr)
## Demand|Material|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Material|Crops|Sugar crops|Sugar cane (Mt DM/yr)
## Demand|Material|Forage (Mt DM/yr)
## Demand|Material|Pasture (Mt DM/yr)
## Demand|Material|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Material|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Processing|Bioenergy crops (Mt DM/yr)
## Demand|Processing|Crop residues (Mt DM/yr)
## Demand|Processing|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Demand|Processing|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Demand|Processing|Crop residues|Straw (Mt DM/yr)
## Demand|Processing|Crops|Other crops|Pulses (Mt DM/yr)
## Demand|Processing|Fish (Mt DM/yr)
## Demand|Processing|Forage (Mt DM/yr)
## Demand|Processing|Forest products (Mt DM/yr)

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## Demand|Processing|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Processing|Forest products|Wood fuel (Mt DM/yr)
## Demand|Processing|Livestock products (Mt DM/yr)
## Demand|Processing|Livestock products|Dairy (Mt DM/yr)
## Demand|Processing|Livestock products|Eggs (Mt DM/yr)
## Demand|Processing|Livestock products|Monogastric meat (Mt DM/yr)
## Demand|Processing|Livestock products|Poultry meat (Mt DM/yr)
## Demand|Processing|Livestock products|Ruminant meat (Mt DM/yr)
## Demand|Processing|Pasture (Mt DM/yr)
## Demand|Processing|Secondary products|Alcoholic beverages (Mt DM/yr)
## Demand|Processing|Secondary products|Cotton lint (Mt DM/yr)
## Demand|Processing|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Processing|Secondary products|Ethanol (Mt DM/yr)
## Demand|Processing|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Processing|Secondary products|Oilcakes (Mt DM/yr)
## Demand|Seed|Crop residues (Mt DM/yr)
## Demand|Seed|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Demand|Seed|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Demand|Seed|Crop residues|Straw (Mt DM/yr)
## Demand|Seed|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Seed|Crops|Sugar crops|Sugar beet (Mt DM/yr)
## Demand|Seed|Forage (Mt DM/yr)
## Demand|Seed|Forest products (Mt DM/yr)
## Demand|Seed|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Seed|Forest products|Wood fuel (Mt DM/yr)
## Demand|Seed|Pasture (Mt DM/yr)
## Demand|Seed|Secondary products (Mt DM/yr)
## Demand|Seed|Secondary products|Alcoholic beverages (Mt DM/yr)
## Demand|Seed|Secondary products|Brans (Mt DM/yr)
## Demand|Seed|Secondary products|Cotton lint (Mt DM/yr)
## Demand|Seed|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Seed|Secondary products|Ethanol (Mt DM/yr)
## Demand|Seed|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Seed|Secondary products|Molasses (Mt DM/yr)
## Demand|Seed|Secondary products|Oilcakes (Mt DM/yr)
## Demand|Seed|Secondary products|Oils (Mt DM/yr)
## Demand|Seed|Secondary products|Sugar (Mt DM/yr)
## Emissions|NH3|Land|Agriculture|Agricultural Soils|Decay of Crop Residues (Mt NH3/yr)
## Emissions|NH3|Land|Agriculture|Agricultural Soils|Soil Organic Matter Loss (Mt NH3/yr)
## Emissions|NO2|Land|Agriculture|Agricultural Soils|Decay of Crop Residues (Mt NO2/yr)
## Emissions|NO2|Land|Agriculture|Agricultural Soils|Soil Organic Matter Loss (Mt NO2/yr)
## Production|Secondary products|Microbial protein (Mt DM/yr)
## Trade|Net-Trade|Secondary products|Microbial protein (Mt DM/yr)

```

Data contains only a mix of 0 and NA values and is ignored, but validation data contains other values.

```

## Costs|MainSolve|GHG Emissions (million US$05/yr)
## Costs|MainSolve|P Fertilizer (million US$05/yr)
## Costs|MainSolve|Reward for Afforestation (million US$05/yr)
## Demand|Domestic Balanceflow|Bioenergy crops|Short rotation grasses (Mt DM/yr)
## Demand|Domestic Balanceflow|Bioenergy crops|Short rotation trees (Mt DM/yr)
## Demand|Domestic Balanceflow|Crops|Sugar crops|Sugar cane (Mt DM/yr)
## Demand|Domestic Balanceflow|Secondary products|Molasses (Mt DM/yr)
## Demand|Feed|Bioenergy crops|Short rotation grasses (Mt DM/yr)
## Demand|Feed|Bioenergy crops|Short rotation trees (Mt DM/yr)
## Demand|Feed|Livestock products|Poultry meat (Mt DM/yr)
## Demand|Food|Bioenergy crops|Short rotation grasses (Mt DM/yr)
## Demand|Food|Bioenergy crops|Short rotation trees (Mt DM/yr)
## Demand|Food|Crops|Oil crops|Cotton seed (Mt DM/yr)
## Demand|Material|Bioenergy crops|Short rotation grasses (Mt DM/yr)

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## Demand|Material|Bioenergy crops|Short rotation trees (Mt DM/yr)
## Demand|Processing|Bioenergy crops|Short rotation grasses (Mt DM/yr)
## Demand|Processing|Bioenergy crops|Short rotation trees (Mt DM/yr)
## Demand|Seed|Fish (Mt DM/yr)
## Demand|Seed|Livestock products (Mt DM/yr)
## Demand|Seed|Livestock products|Dairy (Mt DM/yr)
## Demand|Seed|Livestock products|Eggs (Mt DM/yr)
## Demand|Seed|Livestock products|Monogastric meat (Mt DM/yr)
## Demand|Seed|Livestock products|Poultry meat (Mt DM/yr)
## Demand|Seed|Livestock products|Ruminant meat (Mt DM/yr)
## Food Consumption Value|Bioenergy crops (million US$05/yr)
## Food Consumption Value|Crop residues (million US$05/yr)
## Food Consumption Value|Forage (million US$05/yr)
## Food Consumption Value|Pasture (million US$05/yr)
## Food Expenditure Share|Bioenergy crops (% of GDP)
## Food Expenditure Share|Crop residues (% of GDP)
## Food Expenditure Share|Forage (% of GDP)
## Food Expenditure Share|Pasture (% of GDP)
## Prices|GHG Emission|CH4 (US$2005/tCH4)
## Prices|GHG Emission|CO2 (US$2005/tCO2)
## Prices|GHG Emission|N2O (US$2005/tN2O)
## Production|Bioenergy crops|Short rotation trees (Mt DM/yr)
## Production|Forest products (Mt DM/yr)
## Production|Forest products|Industrial roundwood (Mt DM/yr)
## Production|Forest products|Wood fuel (Mt DM/yr)
## Resources|Land Cover|Cropland|Bioenergy crops|Short rotation grasses|irrigated (million ha)
## Resources|Land Cover|Cropland|Bioenergy crops|Short rotation trees (million ha)
## Resources|Land Cover|Cropland|Bioenergy crops|Short rotation trees|irrigated (million ha)
## Resources|Land Cover|Cropland|Bioenergy crops|Short rotation trees|rainfed (million ha)
## Resources|Land Cover|Cropland|Bioenergy crops|irrigated (million ha)
## Resources|Land Cover Change|Forest|Plantations|Forestry (million ha wrt 1995)
## Resources|Land Cover Change|Urban Area (million ha wrt 1995)

```

Validation data contains only a mix of 0 and NA values and is ignored, but data contains other values.

```

## Demand|Agricultural Supply Chain Loss|Bioenergy crops (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Secondary products|Cotton lint (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Secondary products|Ethanol (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Secondary products|Oilcakes (Mt DM/yr)
## Demand|Bioenergy|Bioenergy crops (Mt DM/yr)
## Demand|Feed|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Feed|Secondary products|Cotton lint (Mt DM/yr)
## Demand|Feed|Secondary products|Ethanol (Mt DM/yr)
## Demand|Processing|Secondary products|Oils (Mt DM/yr)
## Demand|Seed|Bioenergy crops (Mt DM/yr)
## Production|Bioenergy crops (Mt DM/yr)
## Productivity|Yield|Bioenergy crops (t DM/ha)
## Trade|Net-Trade|Bioenergy crops (Mt DM/yr)
## Trade|Net-Trade|Secondary products|Distillers grains (Mt DM/yr)
## Trade|Net-Trade|Secondary products|Ethanol (Mt DM/yr)

```

## 66 Non-Matching Data

### 66.1 Model outputs

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## Household Expenditure|Food|Food Expenditure Share (USD/USD)
## Demand|Food|Bioenergy crops|Short rotation grasses (Mt DM/yr)

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## Demand|Food|Bioenergy crops|Short rotation trees (Mt DM/yr)
## Demand|Feed|Bioenergy crops|Short rotation grasses (Mt DM/yr)
## Demand|Feed|Bioenergy crops|Short rotation trees (Mt DM/yr)
## Demand|Processing|Bioenergy crops|Short rotation grasses (Mt DM/yr)
## Demand|Processing|Bioenergy crops|Short rotation trees (Mt DM/yr)
## Demand|Material|Bioenergy crops|Short rotation grasses (Mt DM/yr)
## Demand|Material|Bioenergy crops|Short rotation trees (Mt DM/yr)
## Demand|Bioenergy|Bioenergy crops|Short rotation grasses (Mt DM/yr)
## Demand|Bioenergy|Bioenergy crops|Short rotation trees (Mt DM/yr)
## Demand|Seed|Bioenergy crops|Short rotation grasses (Mt DM/yr)
## Demand|Seed|Bioenergy crops|Short rotation trees (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Bioenergy crops|Short rotation grasses (Mt DM/yr)
## Demand|Agricultural Supply Chain Loss|Bioenergy crops|Short rotation trees (Mt DM/yr)
## Demand|Domestic Balanceflow|Bioenergy crops|Short rotation grasses (Mt DM/yr)
## Demand|Domestic Balanceflow|Bioenergy crops|Short rotation trees (Mt DM/yr)
## Production|Bioenergy crops|Short rotation grasses (Mt DM/yr)
## Production|Bioenergy crops|Short rotation trees (Mt DM/yr)
## Trade|Net-Trade|Bioenergy crops|Short rotation grasses (Mt DM/yr)
## Trade|Net-Trade|Bioenergy crops|Short rotation trees (Mt DM/yr)
## Trade|Self-sufficiency|Bioenergy crops|Short rotation grasses (1)
## Resources|Land Cover|Forest|Plantations|Forestry (million ha)
## Resources|Land Cover|Forest|Plantations|Afforestation (million ha)
## Resources|Land Cover Change|Forest|Plantations|Forestry (million ha wrt 1995)
## Resources|Land Cover Change|Forest|Plantations|Afforestation (million ha wrt 1995)
## Resources|Land Cover|Forest|Natural Forest|Primary Forest|Protected (million ha)
## Resources|Land Cover|Forest|Natural Forest|Secondary Forest|Protected (million ha)
## Resources|Land Cover|Other Land|Protected (million ha)
## Resources|Land Cover|Cropland|Bioenergy crops|Short rotation grasses (million ha)
## Resources|Land Cover|Cropland|Bioenergy crops|Short rotation trees (million ha)
## Resources|Land Cover|Cropland|Forage|rainfed (million ha)
## Resources|Land Cover|Cropland|Forage|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Cereals|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Cereals|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Cereals|Maize|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Cereals|Maize|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Cereals|Rice|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Cereals|Rice|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Cereals|Temperate cereals|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Cereals|Temperate cereals|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Cereals|Tropical cereals|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Cereals|Tropical cereals|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|Cotton seed|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|Cotton seed|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|Groundnuts|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|Groundnuts|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|Oilpalms|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|Oilpalms|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|Other oil crops (incl rapeseed)|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|Other oil crops (incl rapeseed)|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|Soybean|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|Soybean|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|Sunflower|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Oil crops|Sunflower|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Sugar crops|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Sugar crops|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Sugar crops|Sugar beet|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Sugar crops|Sugar beet|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Sugar crops|Sugar cane|rainfed (million ha)

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## Resources|Land Cover|Cropland|Crops|Sugar crops|Sugar cane|irrigated (million ha)
## Resources|Land Cover|Cropland|Bioenergy crops|rainfed (million ha)
## Resources|Land Cover|Cropland|Bioenergy crops|irrigated (million ha)
## Resources|Land Cover|Cropland|Bioenergy crops|Short rotation grasses|rainfed (million ha)
## Resources|Land Cover|Cropland|Bioenergy crops|Short rotation grasses|irrigated (million ha)
## Resources|Land Cover|Cropland|Bioenergy crops|Short rotation trees|rainfed (million ha)
## Resources|Land Cover|Cropland|Bioenergy crops|Short rotation trees|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Other crops|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Other crops|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Other crops|Tropical roots|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Other crops|Tropical roots|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Other crops|Fruits Vegetables Nuts|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Other crops|Fruits Vegetables Nuts|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Other crops|Potatoes|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Other crops|Potatoes|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|Other crops|Pulses|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|Other crops|Pulses|irrigated (million ha)
## Resources|Land Cover|Cropland|Crops|rainfed (million ha)
## Resources|Land Cover|Cropland|Crops|irrigated (million ha)
## Resources|Nitrogen|Cropland Budget|Inputs|Manure (Mt Nr/yr)
## Resources|Nitrogen|Cropland Budget|Inputs|Manure From Stubble Grazing (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Other Land (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Anaerobic lagoon (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Liquid slurry (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Solid storage (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Dry lot (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Daily spread (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Anaerobic digester (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Pit storage longer than a month (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Pit storage less than a month (Mt Nr/yr)
## Productivity|Yield|Bioenergy crops|Short rotation grasses (t DM/ha)
## Productivity|Yield|Forage|rainfed (t DM/ha)
## Productivity|Yield|Forage|irrigated (t DM/ha)
## Productivity|Yield|Crops|Cereals|rainfed (t DM/ha)
## Productivity|Yield|Crops|Cereals|irrigated (t DM/ha)
## Productivity|Yield|Crops|Cereals|Maize|rainfed (t DM/ha)
## Productivity|Yield|Crops|Cereals|Maize|irrigated (t DM/ha)
## Productivity|Yield|Crops|Cereals|Rice|rainfed (t DM/ha)
## Productivity|Yield|Crops|Cereals|Rice|irrigated (t DM/ha)
## Productivity|Yield|Crops|Cereals|Temperate cereals|rainfed (t DM/ha)
## Productivity|Yield|Crops|Cereals|Temperate cereals|irrigated (t DM/ha)
## Productivity|Yield|Crops|Cereals|Tropical cereals|rainfed (t DM/ha)
## Productivity|Yield|Crops|Cereals|Tropical cereals|irrigated (t DM/ha)
## Productivity|Yield|Crops|Oil crops|rainfed (t DM/ha)
## Productivity|Yield|Crops|Oil crops|irrigated (t DM/ha)
## Productivity|Yield|Crops|Oil crops|Cotton seed|rainfed (t DM/ha)
## Productivity|Yield|Crops|Oil crops|Cotton seed|irrigated (t DM/ha)
## Productivity|Yield|Crops|Oil crops|Groundnuts|rainfed (t DM/ha)
## Productivity|Yield|Crops|Oil crops|Groundnuts|irrigated (t DM/ha)
## Productivity|Yield|Crops|Oil crops|Oilpalms|rainfed (t DM/ha)
## Productivity|Yield|Crops|Oil crops|Oilpalms|irrigated (t DM/ha)
## Productivity|Yield|Crops|Oil crops|Other oil crops (incl rapeseed)|rainfed (t DM/ha)
## Productivity|Yield|Crops|Oil crops|Other oil crops (incl rapeseed)|irrigated (t DM/ha)
## Productivity|Yield|Crops|Oil crops|Soybean|rainfed (t DM/ha)
## Productivity|Yield|Crops|Oil crops|Soybean|irrigated (t DM/ha)
## Productivity|Yield|Crops|Oil crops|Sunflower|rainfed (t DM/ha)
## Productivity|Yield|Crops|Oil crops|Sunflower|irrigated (t DM/ha)
## Productivity|Yield|Crops|Sugar crops|rainfed (t DM/ha)
## Productivity|Yield|Crops|Sugar crops|irrigated (t DM/ha)
## Productivity|Yield|Crops|Sugar crops|Sugar beet|rainfed (t DM/ha)

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## Productivity|Yield|Crops|Sugar crops|Sugar beet|irrigated (t DM/ha)
## Productivity|Yield|Crops|Sugar crops|Sugar cane|rainfed (t DM/ha)
## Productivity|Yield|Crops|Sugar crops|Sugar cane|irrigated (t DM/ha)
## Productivity|Yield|Bioenergy crops|rainfed (t DM/ha)
## Productivity|Yield|Bioenergy crops|Short rotation grasses|rainfed (t DM/ha)
## Productivity|Yield|Crops|Other crops|rainfed (t DM/ha)
## Productivity|Yield|Crops|Other crops|irrigated (t DM/ha)
## Productivity|Yield|Crops|Other crops|Tropical roots|rainfed (t DM/ha)
## Productivity|Yield|Crops|Other crops|Tropical roots|irrigated (t DM/ha)
## Productivity|Yield|Crops|Other crops|Fruits Vegetables Nuts|rainfed (t DM/ha)
## Productivity|Yield|Crops|Other crops|Fruits Vegetables Nuts|irrigated (t DM/ha)
## Productivity|Yield|Crops|Other crops|Potatoes|rainfed (t DM/ha)
## Productivity|Yield|Crops|Other crops|Potatoes|irrigated (t DM/ha)
## Productivity|Yield|Crops|Other crops|Pulses|rainfed (t DM/ha)
## Productivity|Yield|Crops|Other crops|Pulses|irrigated (t DM/ha)
## Productivity|Yield|Crops|rainfed (t DM/ha)
## Productivity|Yield|Crops|irrigated (t DM/ha)
## Productivity|Yield-increasing technological change (%/yr)
## Emissions|CO2|Land (Mt CO2/yr)
## Emissions|CO2|Land|Land-use Change|Positive (Mt CO2/yr)
## Emissions|CO2|Land|Land-use Change|Negative (Mt CO2/yr)
## Emissions|CO2|Land|Climate Change (Mt CO2/yr)
## Emissions|CO2|Land lowpass=1 (Mt CO2/yr)
## Emissions|CO2|Land|Land-use Change lowpass=1 (Mt CO2/yr)
## Emissions|CO2|Land|Land-use Change|Positive lowpass=1 (Mt CO2/yr)
## Emissions|CO2|Land|Land-use Change|Negative lowpass=1 (Mt CO2/yr)
## Emissions|CO2|Land|Climate Change lowpass=1 (Mt CO2/yr)
## Emissions|CO2|Land lowpass=2 (Mt CO2/yr)
## Emissions|CO2|Land|Land-use Change lowpass=2 (Mt CO2/yr)
## Emissions|CO2|Land|Land-use Change|Positive lowpass=2 (Mt CO2/yr)
## Emissions|CO2|Land|Land-use Change|Negative lowpass=2 (Mt CO2/yr)
## Emissions|CO2|Land|Climate Change lowpass=2 (Mt CO2/yr)
## Emissions|CO2|Land lowpass=3 (Mt CO2/yr)
## Emissions|CO2|Land|Land-use Change lowpass=3 (Mt CO2/yr)
## Emissions|CO2|Land|Land-use Change|Positive lowpass=3 (Mt CO2/yr)
## Emissions|CO2|Land|Land-use Change|Negative lowpass=3 (Mt CO2/yr)
## Emissions|CO2|Land|Climate Change lowpass=3 (Mt CO2/yr)
## Emissions|CO2|Land|Cumulative (Gt CO2)
## Emissions|CO2|Land|Cumulative|Land-use Change (Gt CO2)
## Emissions|CO2|Land|Cumulative|Land-use Change|Positive (Gt CO2)
## Emissions|CO2|Land|Cumulative|Land-use Change|Negative (Gt CO2)
## Emissions|CO2|Land|Cumulative|Climate Change (Gt CO2)
## Emissions|CH4|Land|Agriculture|Enteric fermentation (Mt CH4/yr)
## Costs|MainSolve (million US$05/yr)
## Costs|MainSolve|Input Factors (million US$05/yr)
## Costs|MainSolve|Land Conversion (million US$05/yr)
## Costs|MainSolve|Transport (million US$05/yr)
## Costs|MainSolve|TC (million US$05/yr)
## Costs|MainSolve|N Fertilizer (million US$05/yr)
## Costs|MainSolve|P Fertilizer (million US$05/yr)
## Costs|MainSolve|GHG Emissions (million US$05/yr)
## Costs|MainSolve|Reward for Afforestation (million US$05/yr)
## Costs|MainSolve|MACCS (million US$05/yr)
## Costs|MainSolve|AEI (million US$05/yr)
## Costs|MainSolve|Trade (million US$05/yr)
## Costs|MainSolve|Forestry (million US$05/yr)
## Costs|MainSolve|Processing (million US$05/yr)
## Costs|MainSolve|Punishment overrated cropland difference (million US$05/yr)
## Costs|MainSolve w/o GHG Emissions (million US$05/yr)
## Prices|Land|Cropland (US$05/ha)

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## Prices|Water|Agriculture (Index 2005=100)
## Trade Value|Net-Exports|Fish (million US$05/yr)
## Trade Value|Net-Exports|Crops|Cereals (million US$05/yr)
## Trade Value|Net-Exports|Crops|Sugar crops (million US$05/yr)
## Trade Value|Net-Exports|Bioenergy crops (million US$05/yr)
## Trade Value|Net-Exports|Crops|Other crops (million US$05/yr)
## Trade Value|Net-Exports|Livestock products (million US$05/yr)
## Trade Value|Net-Exports|Secondary products (million US$05/yr)
## Trade Value|Exports|Fish (million US$05/yr)
## Trade Value|Exports|Crops|Cereals (million US$05/yr)
## Trade Value|Exports|Crops|Sugar crops (million US$05/yr)
## Trade Value|Exports|Bioenergy crops (million US$05/yr)
## Trade Value|Exports|Crops|Other crops (million US$05/yr)
## Trade Value|Exports|Livestock products (million US$05/yr)
## Trade Value|Exports|Secondary products (million US$05/yr)
## Trade Value|Imports|Fish (million US$05/yr)
## Trade Value|Imports|Crops|Cereals (million US$05/yr)
## Trade Value|Imports|Crops|Sugar crops (million US$05/yr)
## Trade Value|Imports|Bioenergy crops (million US$05/yr)
## Trade Value|Imports|Crops|Other crops (million US$05/yr)
## Trade Value|Imports|Livestock products (million US$05/yr)
## Trade Value|Imports|Secondary products (million US$05/yr)
## Food Consumption Value|Fish (million US$05/yr)
## Food Consumption Value|Forage (million US$05/yr)
## Food Consumption Value|Pasture (million US$05/yr)
## Food Consumption Value|Crops|Cereals (million US$05/yr)
## Food Consumption Value|Crops|Oil crops (million US$05/yr)
## Food Consumption Value|Crops|Sugar crops (million US$05/yr)
## Food Consumption Value|Bioenergy crops (million US$05/yr)
## Food Consumption Value|Crops|Other crops (million US$05/yr)
## Food Consumption Value|Crops (million US$05/yr)
## Food Consumption Value|Livestock products (million US$05/yr)
## Food Consumption Value|Secondary products (million US$05/yr)
## Food Consumption Value|Crop residues (million US$05/yr)
## Food Expenditure Share|Fish (% of GDP)
## Food Expenditure Share|Forage (% of GDP)
## Food Expenditure Share|Pasture (% of GDP)
## Food Expenditure Share|Crops|Cereals (% of GDP)
## Food Expenditure Share|Crops|Oil crops (% of GDP)
## Food Expenditure Share|Crops|Sugar crops (% of GDP)
## Food Expenditure Share|Bioenergy crops (% of GDP)
## Food Expenditure Share|Crops|Other crops (% of GDP)
## Food Expenditure Share|Crops (% of GDP)
## Food Expenditure Share|Livestock products (% of GDP)
## Food Expenditure Share|Secondary products (% of GDP)
## Food Expenditure Share|Crop residues (% of GDP)

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## 66.2 Validation data

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## Emissions|CH4|Land|Land-use Change (Mt CH4/yr)
## Emissions|CO2|Land|Agriculture (Mt CO2/yr)
## Emissions|N2O|Land|Land-use Change (Mt N2O/yr)
## Resources|Carbon Stocks|Litter Carbon (Mt C)
## Resources|Carbon Stocks|Vegetation Carbon (Mt C)
## Income (US$05 MER/cap/yr)
## Income (million US$05 MER/yr)
## Income (million US$05 PPP/yr)
## Nutrition|Calorie Supply (NA)

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## Nutrition|Calorie Supply|Bioenergy crops (NA)
## Nutrition|Calorie Supply|Crop residues (NA)
## Nutrition|Calorie Supply|Crops (NA)
## Nutrition|Calorie Supply|Fish (NA)
## Nutrition|Calorie Supply|Forage (NA)
## Nutrition|Calorie Supply|Forest products (NA)
## Nutrition|Calorie Supply|Livestock products (NA)
## Nutrition|Calorie Supply|Pasture (NA)
## Nutrition|Calorie Supply|Secondary products (NA)
## Nutrition|Calorie Supply|Crop residues|Non fibrous crop residues (NA)
## Nutrition|Calorie Supply|Crop residues|Other fibrous crop residues (NA)
## Nutrition|Calorie Supply|Crop residues|Straw (NA)
## Nutrition|Calorie Supply|Crops|Cereals (NA)
## Nutrition|Calorie Supply|Crops|Oil crops (NA)
## Nutrition|Calorie Supply|Crops|Other crops (NA)
## Nutrition|Calorie Supply|Crops|Sugar crops (NA)
## Nutrition|Calorie Supply|Crops|Cereals|Maize (NA)
## Nutrition|Calorie Supply|Crops|Cereals|Rice (NA)
## Nutrition|Calorie Supply|Crops|Cereals|Temperate cereals (NA)
## Nutrition|Calorie Supply|Crops|Cereals|Tropical cereals (NA)
## Nutrition|Calorie Supply|Crops|Oil crops|Cotton seed (NA)
## Nutrition|Calorie Supply|Crops|Oil crops|Groundnuts (NA)
## Nutrition|Calorie Supply|Crops|Oil crops|Oilpalms (NA)
## Nutrition|Calorie Supply|Crops|Oil crops|Other oil crops (incl rapeseed)
## Nutrition|Calorie Supply|Crops|Oil crops|Soybean (NA)
## Nutrition|Calorie Supply|Crops|Oil crops|Sunflower (NA)
## Nutrition|Calorie Supply|Crops|Other crops|Fruits Vegetables Nuts (NA)
## Nutrition|Calorie Supply|Crops|Other crops|Potatoes (NA)
## Nutrition|Calorie Supply|Crops|Other crops|Pulses (NA)
## Nutrition|Calorie Supply|Crops|Other crops|Tropical roots (NA)
## Nutrition|Calorie Supply|Crops|Sugar crops|Sugar beet (NA)
## Nutrition|Calorie Supply|Crops|Sugar crops|Sugar cane (NA)
## Nutrition|Calorie Supply|Forest products|Industrial roundwood (NA)
## Nutrition|Calorie Supply|Forest products|Wood fuel (NA)
## Nutrition|Calorie Supply|Livestock products|Dairy (NA)
## Nutrition|Calorie Supply|Livestock products|Eggs (NA)
## Nutrition|Calorie Supply|Livestock products|Monogastric meat (NA)
## Nutrition|Calorie Supply|Livestock products|Poultry meat (NA)
## Nutrition|Calorie Supply|Livestock products|Ruminant meat (NA)
## Nutrition|Calorie Supply|Secondary products|Alcoholic beverages (NA)
## Nutrition|Calorie Supply|Secondary products|Brans (NA)
## Nutrition|Calorie Supply|Secondary products|Cotton lint (NA)
## Nutrition|Calorie Supply|Secondary products|Distillers grains (NA)
## Nutrition|Calorie Supply|Secondary products|Ethanol (NA)
## Nutrition|Calorie Supply|Secondary products|Microbial protein (NA)
## Nutrition|Calorie Supply|Secondary products|Molasses (NA)
## Nutrition|Calorie Supply|Secondary products|Oilcakes (NA)
## Nutrition|Calorie Supply|Secondary products|Oils (NA)
## Nutrition|Calorie Supply|Secondary products|Sugar (NA)
## Resources|Nitrogen|Cropland Budget|Inputs|Manure Recycled from Confinements (Mt Nr/yr)
## Emissions|CH4|Land|Agriculture|Enteric Fermentation (Mt CH4/yr)
## Emissions|N2O|Agriculture (Mt N2O/yr)
## Emissions|N2O|Agriculture|Agricultural Soils (Mt N2O/yr)
## Emissions|N2O|Agriculture|Animal waste management (Mt N2O/yr)
## Emissions|N2O|Agriculture|Agricultural Soils|Decay of crop residues (Mt N2O/yr)
## Emissions|N2O|Agriculture|Agricultural Soils|Inorganic Fertilizers (Mt N2O/yr)
## Emissions|N2O|Agriculture|Agricultural Soils|Manure applied to Croplands (Mt N2O/yr)
## Emissions|N2O|Agriculture|Agricultural Soils|Pasture (Mt N2O/yr)
## Emissions|N2O|Agriculture|Agricultural Soils|Soil organic matter loss (Mt N2O/yr)
## Nutrition|Calorie Supply|Crops|Cereals|Maize (kcal/capita/day)

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## Nutrition|Calorie Supply|Crops|Cereals|Rice (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Cereals|Temperate cereals (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Cereals|Tropical cereals (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Oil crops|Groundnuts (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Oil crops|Other oil crops (incl rapeseed) (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Oil crops|Soybean (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Oil crops|Sunflower (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Other crops|Fruits Vegetables Nuts (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Other crops|Potatoes (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Other crops|Pulses (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Other crops|Tropical roots (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Sugar crops|Sugar beet (kcal/capita/day)
## Nutrition|Calorie Supply|Crops|Sugar crops|Sugar cane (kcal/capita/day)
## Nutrition|Calorie Supply|Livestock products|Dairy (kcal/capita/day)
## Nutrition|Calorie Supply|Livestock products|Eggs (kcal/capita/day)
## Nutrition|Calorie Supply|Livestock products|Monogastric meat (kcal/capita/day)
## Nutrition|Calorie Supply|Livestock products|Poultry meat (kcal/capita/day)
## Nutrition|Calorie Supply|Livestock products|Ruminant meat (kcal/capita/day)
## Nutrition|Calorie Supply|Secondary products|Alcoholic beverages (kcal/capita/day)
## Nutrition|Calorie Supply|Secondary products|Brans (kcal/capita/day)
## Nutrition|Calorie Supply|Secondary products|Molasses (kcal/capita/day)
## Nutrition|Calorie Supply|Secondary products|Oils (kcal/capita/day)
## Nutrition|Calorie Supply|Secondary products|Sugar (kcal/capita/day)
## Nutrition|Dietary Composition|Vegetables Fruits and Nuts Share (kcal/kcal)
## Household Expenditure|Food|Expenditure Share (USD/USD)
## Household Expenditure|Food|Expenditure Share|Crops (USD/USD)
## Household Expenditure|Food|Expenditure Share|Crops|Cereals (USD/USD)
## Household Expenditure|Food|Expenditure Share|Crops|Oil crops (USD/USD)
## Household Expenditure|Food|Expenditure Share|Crops|Other crops (USD/USD)
## Household Expenditure|Food|Expenditure Share|Crops|Sugar crops (USD/USD)
## Household Expenditure|Food|Expenditure Share|Fish (USD/USD)
## Household Expenditure|Food|Expenditure Share|Livestock products (USD/USD)
## Household Expenditure|Food|Expenditure Share|Secondary products (USD/USD)
## Trade|Net-Trade|Crop residues (Mt DM/yr)
## Trade|Net-Trade|Forage (Mt DM/yr)
## Trade|Net-Trade|Forest products (Mt DM/yr)
## Trade|Net-Trade|Pasture (Mt DM/yr)
## Trade|Net-Trade|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Trade|Net-Trade|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Trade|Net-Trade|Crop residues|Straw (Mt DM/yr)
## Trade|Net-Trade|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Trade|Net-Trade|Forest products|Industrial roundwood (Mt DM/yr)
## Trade|Net-Trade|Forest products|Wood fuel (Mt DM/yr)
## Trade|Self-sufficiency|Bioenergy crops (1)
## Trade|Self-sufficiency|Forest products (1)
## Trade|Self-sufficiency|Forest products|Industrial roundwood (1)
## Trade|Self-sufficiency|Forest products|Wood fuel (1)
## Trade|Self-sufficiency|Secondary products (1)
## Trade|Self-sufficiency|Secondary products|Microbial protein (1)
## Demand|Feed|Feed for Aquaculture (Mt DM/yr)
## Demand|Feed|Feed for Dairy (Mt DM/yr)
## Demand|Feed|Feed for Eggs (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Bioenergy crops (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crop residues (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Fish (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Forage (Mt DM/yr)

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## Demand|Feed|Feed for Aquaculture|Forest products (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Livestock products (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Pasture (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Secondary products (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crop residues|Straw (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Cereals (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Oil crops (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Other crops (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Sugar crops (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Cereals|Maize (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Cereals|Rice (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Cereals|Temperate cereals (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Cereals|Tropical cereals (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Oil crops|Cotton seed (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Oil crops|Groundnuts (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Oil crops|Other oil crops (incl rapeseed) (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Oil crops|Soybean (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Oil crops|Sunflower (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Other crops|Fruits Vegetables Nuts (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Other crops|Potatoes (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Other crops|Pulses (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Other crops|Tropical roots (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Sugar crops|Sugar beet (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Crops|Sugar crops|Sugar cane (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Forest products|Wood fuel (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Livestock products|Dairy (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Livestock products|Eggs (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Livestock products|Monogastric meat (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Livestock products|Poultry meat (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Livestock products|Ruminant meat (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Secondary products|Alcoholic beverages (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Secondary products|Brans (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Secondary products|Cotton lint (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Secondary products|Ethanol (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Secondary products|Molasses (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Secondary products|Oilcakes (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Secondary products|Oils (Mt DM/yr)
## Demand|Feed|Feed for Aquaculture|Secondary products|Sugar (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Bioenergy crops (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Crop residues (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Crops (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Fish (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Forage (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Forest products (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Livestock products (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Pasture (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Secondary products (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Crop residues|Straw (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Crops|Cereals (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Crops|Oil crops (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Crops|Other crops (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Crops|Sugar crops (Mt DM/yr)

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## Demand|Feed|Feed for Dairy|Crops|Cereals|Maize (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Crops|Cereals|Rice (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Crops|Cereals|Temperate cereals (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Crops|Cereals|Tropical cereals (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Crops|Oil crops|Cotton seed (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Crops|Oil crops|Groundnuts (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Crops|Oil crops|Other oil crops (incl rapeseed) (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Crops|Oil crops|Soybean (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Crops|Oil crops|Sunflower (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Crops|Other crops|Fruits Vegetables Nuts (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Crops|Other crops|Potatoes (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Crops|Other crops|Pulses (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Crops|Other crops|Tropical roots (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Crops|Sugar crops|Sugar beet (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Crops|Sugar crops|Sugar cane (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Forest products|Wood fuel (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Livestock products|Dairy (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Livestock products|Eggs (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Livestock products|Monogastric meat (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Livestock products|Poultry meat (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Livestock products|Ruminant meat (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Secondary products|Alcoholic beverages (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Secondary products|Brans (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Secondary products|Cotton lint (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Secondary products|Ethanol (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Secondary products|Molasses (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Secondary products|Oilcakes (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Secondary products|Oils (Mt DM/yr)
## Demand|Feed|Feed for Dairy|Secondary products|Sugar (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Bioenergy crops (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crop residues (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Fish (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Forage (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Forest products (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Livestock products (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Pasture (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Secondary products (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crop residues|Straw (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Cereals (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Oil crops (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Other crops (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Sugar crops (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Cereals|Maize (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Cereals|Rice (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Cereals|Temperate cereals (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Cereals|Tropical cereals (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Oil crops|Cotton seed (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Oil crops|Groundnuts (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Oil crops|Other oil crops (incl rapeseed) (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Oil crops|Soybean (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Oil crops|Sunflower (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Other crops|Fruits Vegetables Nuts (Mt DM/yr)

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## Demand|Feed|Feed for Eggs|Crops|Other crops|Potatoes (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Other crops|Pulses (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Other crops|Tropical roots (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Sugar crops|Sugar beet (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Crops|Sugar crops|Sugar cane (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Forest products|Wood fuel (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Livestock products|Dairy (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Livestock products|Eggs (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Livestock products|Monogastric meat (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Livestock products|Poultry meat (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Livestock products|Ruminant meat (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Secondary products|Alcoholic beverages (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Secondary products|Brans (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Secondary products|Cotton lint (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Secondary products|Ethanol (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Secondary products|Molasses (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Secondary products|Oilcakes (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Secondary products|Oils (Mt DM/yr)
## Demand|Feed|Feed for Eggs|Secondary products|Sugar (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Bioenergy crops (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crop residues (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crops (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Fish (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Forage (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Forest products (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Livestock products (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Pasture (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Secondary products (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crop residues|Straw (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crops|Cereals (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crops|Oil crops (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crops|Other crops (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crops|Sugar crops (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crops|Cereals|Maize (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crops|Cereals|Rice (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crops|Cereals|Temperate cereals (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crops|Cereals|Tropical cereals (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crops|Oil crops|Cotton seed (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crops|Oil crops|Groundnuts (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crops|Oil crops|Other oil crops (incl rapeseed) (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crops|Oil crops|Soybean (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crops|Oil crops|Sunflower (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crops|Other crops|Fruits Vegetables Nuts (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crops|Other crops|Potatoes (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crops|Other crops|Pulses (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crops|Other crops|Tropical roots (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crops|Sugar crops|Sugar beet (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Crops|Sugar crops|Sugar cane (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Forest products|Wood fuel (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Livestock products|Dairy (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Livestock products|Eggs (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Livestock products|Monogastric meat (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Livestock products|Poultry meat (Mt DM/yr)

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## Demand|Feed|Feed for Monogastric meat|Livestock products|Ruminant meat (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Secondary products|Alcoholic beverages (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Secondary products|Brans (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Secondary products|Cotton lint (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Secondary products|Ethanol (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Secondary products|Molasses (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Secondary products|Oilcakes (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Secondary products|Oils (Mt DM/yr)
## Demand|Feed|Feed for Monogastric meat|Secondary products|Sugar (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Bioenergy crops (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crop residues (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crops (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Fish (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Forage (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Forest products (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Livestock products (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Pasture (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Secondary products (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crop residues|Straw (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crops|Cereals (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crops|Oil crops (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crops|Other crops (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crops|Sugar crops (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crops|Cereals|Maize (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crops|Cereals|Rice (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crops|Cereals|Temperate cereals (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crops|Cereals|Tropical cereals (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crops|Oil crops|Cotton seed (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crops|Oil crops|Groundnuts (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crops|Oil crops|Other oil crops (incl rapeseed) (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crops|Oil crops|Soybean (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crops|Oil crops|Sunflower (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crops|Other crops|Fruits Vegetables Nuts (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crops|Other crops|Potatoes (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crops|Other crops|Pulses (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crops|Other crops|Tropical roots (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crops|Sugar crops|Sugar beet (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Crops|Sugar crops|Sugar cane (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Forest products|Wood fuel (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Livestock products|Dairy (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Livestock products|Eggs (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Livestock products|Monogastric meat (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Livestock products|Poultry meat (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Livestock products|Ruminant meat (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Secondary products|Alcoholic beverages (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Secondary products|Brans (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Secondary products|Cotton lint (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Secondary products|Ethanol (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Secondary products|Molasses (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Secondary products|Oilcakes (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Secondary products|Oils (Mt DM/yr)
## Demand|Feed|Feed for Poultry meat|Secondary products|Sugar (Mt DM/yr)

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## Demand|Feed|Feed for Ruminant meat|Bioenergy crops (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crop residues (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crops (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Fish (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Forage (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Forest products (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Livestock products (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Pasture (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Secondary products (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crop residues|Non fibrous crop residues (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crop residues|Other fibrous crop residues (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crop residues|Straw (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crops|Cereals (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crops|Oil crops (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crops|Other crops (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crops|Sugar crops (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crops|Cereals|Maize (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crops|Cereals|Rice (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crops|Cereals|Temperate cereals (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crops|Cereals|Tropical cereals (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crops|Oil crops|Cotton seed (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crops|Oil crops|Groundnuts (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crops|Oil crops|Other oil crops (incl rapeseed) (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crops|Oil crops|Soybean (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crops|Oil crops|Sunflower (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crops|Other crops|Fruits Vegetables Nuts (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crops|Other crops|Potatoes (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crops|Other crops|Pulses (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crops|Other crops|Tropical roots (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crops|Sugar crops|Sugar beet (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Crops|Sugar crops|Sugar cane (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Forest products|Industrial roundwood (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Forest products|Wood fuel (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Livestock products|Dairy (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Livestock products|Eggs (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Livestock products|Monogastric meat (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Livestock products|Poultry meat (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Livestock products|Ruminant meat (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Secondary products|Alcoholic beverages (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Secondary products|Brans (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Secondary products|Cotton lint (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Secondary products|Distillers grains (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Secondary products|Ethanol (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Secondary products|Microbial protein (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Secondary products|Molasses (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Secondary products|Oilcakes (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Secondary products|Oils (Mt DM/yr)
## Demand|Feed|Feed for Ruminant meat|Secondary products|Sugar (Mt DM/yr)
## Demand|Processing|Distiilling (Mt DM/yr)
## Demand|Processing|Extracting (Mt DM/yr)
## Demand|Processing|Fermentation (Mt DM/yr)
## Demand|Processing|Refining (Mt DM/yr)
## Demand|Processing|Distiilling|Crops (Mt DM/yr)
## Demand|Processing|Distiilling|Crops|Cereals (Mt DM/yr)
## Demand|Processing|Distiilling|Crops|Sugar crops (Mt DM/yr)
## Demand|Processing|Distiilling|Crops|Cereals|Maize (Mt DM/yr)
## Demand|Processing|Distiilling|Crops|Cereals|Temperate cereals (Mt DM/yr)
## Demand|Processing|Distiilling|Crops|Sugar crops|Sugar cane (Mt DM/yr)
## Demand|Processing|Extracting|Crops (Mt DM/yr)

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## Demand|Processing|Extracting|Crops|Oil crops (Mt DM/yr)
## Demand|Processing|Extracting|Crops|Oil crops|Cotton seed (Mt DM/yr)
## Demand|Processing|Extracting|Crops|Oil crops|Groundnuts (Mt DM/yr)
## Demand|Processing|Extracting|Crops|Oil crops|Oilpalms (Mt DM/yr)
## Demand|Processing|Extracting|Crops|Oil crops|Other oil crops (incl rapeseed) (Mt DM/yr)
## Demand|Processing|Extracting|Crops|Oil crops|Soybean (Mt DM/yr)
## Demand|Processing|Extracting|Crops|Oil crops|Sunflower (Mt DM/yr)
## Demand|Processing|Fermentation|Crops (Mt DM/yr)
## Demand|Processing|Fermentation|Secondary products (Mt DM/yr)
## Demand|Processing|Fermentation|Crops|Cereals (Mt DM/yr)
## Demand|Processing|Fermentation|Crops|Other crops (Mt DM/yr)
## Demand|Processing|Fermentation|Crops|Cereals|Rice (Mt DM/yr)
## Demand|Processing|Fermentation|Crops|Cereals|Temperate cereals (Mt DM/yr)
## Demand|Processing|Fermentation|Crops|Cereals|Tropical cereals (Mt DM/yr)
## Demand|Processing|Fermentation|Crops|Other crops|Fruits Vegetables Nuts (Mt DM/yr)
## Demand|Processing|Fermentation|Crops|Other crops|Potatoes (Mt DM/yr)
## Demand|Processing|Fermentation|Crops|Other crops|Tropical roots (Mt DM/yr)
## Demand|Processing|Fermentation|Secondary products|Brans (Mt DM/yr)
## Demand|Processing|Fermentation|Secondary products|Molasses (Mt DM/yr)
## Demand|Processing|Fermentation|Secondary products|Sugar (Mt DM/yr)
## Demand|Processing|Refining|Crops (Mt DM/yr)
## Demand|Processing|Refining|Crops|Cereals (Mt DM/yr)
## Demand|Processing|Refining|Crops|Sugar crops (Mt DM/yr)
## Demand|Processing|Refining|Crops|Cereals|Maize (Mt DM/yr)
## Demand|Processing|Refining|Crops|Sugar crops|Sugar beet (Mt DM/yr)
## Demand|Processing|Refining|Crops|Sugar crops|Sugar cane (Mt DM/yr)
## Production|Secondary Products|Alcoholic beverages|Brans (Mt DM/yr)
## Production|Secondary Products|Alcoholic beverages|Fruits Vegetables Nuts (Mt DM/yr)
## Production|Secondary Products|Alcoholic beverages|Molasses (Mt DM/yr)
## Production|Secondary Products|Alcoholic beverages|Potatoes (Mt DM/yr)
## Production|Secondary Products|Alcoholic beverages|Rice (Mt DM/yr)
## Production|Secondary Products|Alcoholic beverages|Sugar (Mt DM/yr)
## Production|Secondary Products|Alcoholic beverages|Temperate cereals (Mt DM/yr)
## Production|Secondary Products|Alcoholic beverages|Tropical cereals (Mt DM/yr)
## Production|Secondary Products|Alcoholic beverages|Tropical roots (Mt DM/yr)
## Production|Secondary Products|Brans|Maize (Mt DM/yr)
## Production|Secondary Products|Brans|Rice (Mt DM/yr)
## Production|Secondary Products|Brans|Temperate cereals (Mt DM/yr)
## Production|Secondary Products|Brans|Tropical cereals (Mt DM/yr)
## Production|Secondary Products|Distillers grains|Maize (Mt DM/yr)
## Production|Secondary Products|Distillers grains|Temperate cereals (Mt DM/yr)
## Production|Secondary Products|Ethanol|Maize (Mt DM/yr)
## Production|Secondary Products|Ethanol|Sugar cane (Mt DM/yr)
## Production|Secondary Products|Ethanol|Temperate cereals (Mt DM/yr)
## Production|Secondary Products|Molasses|Sugar beet (Mt DM/yr)
## Production|Secondary Products|Molasses|Sugar cane (Mt DM/yr)
## Production|Secondary Products|Oilcakes|Cotton seed (Mt DM/yr)
## Production|Secondary Products|Oilcakes|Groundnuts (Mt DM/yr)
## Production|Secondary Products|Oilcakes|Oilpalms (Mt DM/yr)
## Production|Secondary Products|Oilcakes|Other oil crops (incl rapeseed) (Mt DM/yr)
## Production|Secondary Products|Oilcakes|Soybean (Mt DM/yr)
## Production|Secondary Products|Oilcakes|Sunflower (Mt DM/yr)
## Production|Secondary Products|Oils|Cotton seed (Mt DM/yr)
## Production|Secondary Products|Oils|Groundnuts (Mt DM/yr)
## Production|Secondary Products|Oils|Maize (Mt DM/yr)
## Production|Secondary Products|Oils|Oilpalms (Mt DM/yr)
## Production|Secondary Products|Oils|Other oil crops (incl rapeseed) (Mt DM/yr)
## Production|Secondary Products|Oils|Rice (Mt DM/yr)
## Production|Secondary Products|Oils|Soybean (Mt DM/yr)
## Production|Secondary Products|Oils|Sunflower (Mt DM/yr)

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## Production|Secondary Products|Sugar|Maize (Mt DM/yr)
## Production|Secondary Products|Sugar|Sugar beet (Mt DM/yr)
## Production|Secondary Products|Sugar|Sugar cane (Mt DM/yr)
## Resources|Land Cover (million ha wrt 1995)
## Resources|Nitrogen|Cropland Budget|Inputs|Manure From Grazing (Mt Nr/yr)
## Resources|Nitrogen|Pasture Budget|Balance|Balanceflow (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure Collected As Fuel|Dairy (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure Collected As Fuel|Eggs (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure Collected As Fuel|Monogastric meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure Collected As Fuel|Poultry meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure Collected As Fuel|Ruminant meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure From Grazing|Dairy (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure From Grazing|Eggs (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure From Grazing|Monogastric meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure From Grazing|Poultry meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure From Grazing|Ruminant meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure From Stubble Grazing|Dairy (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure From Stubble Grazing|Eggs (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure From Stubble Grazing|Monogastric meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure From Stubble Grazing|Poultry meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure From Stubble Grazing|Ruminant meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Dairy (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Eggs (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Monogastric meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Poultry meat (Mt Nr/yr)
## Resources|Nitrogen|Manure|Manure In Confinements|Ruminant meat (Mt Nr/yr)
## Emissions|BC|Land| (Mt BC/yr)
## Emissions|BC|Land|Agriculture (Mt BC/yr)
## Emissions|BC|Land|Biomass Burning (Mt BC/yr)
## Emissions|BC|Land|Agriculture|Agricultural Soils (Mt BC/yr)
## Emissions|BC|Land|Agriculture|Animal Waste Management (Mt BC/yr)
## Emissions|BC|Land|Agriculture|Enteric Fermentation (Mt BC/yr)
## Emissions|BC|Land|Agriculture|Other (Mt BC/yr)
## Emissions|BC|Land|Agriculture|Rice (Mt BC/yr)
## Emissions|BC|Land|Biomass Burning|Agricultural Waste Burning (Mt BC/yr)
## Emissions|BC|Land|Biomass Burning|Deforestation Fires (Mt BC/yr)
## Emissions|BC|Land|Biomass Burning|Forest Fires (Mt BC/yr)
## Emissions|BC|Land|Biomass Burning|Peat Fires (Mt BC/yr)
## Emissions|BC|Land|Biomass Burning|Savannah Fires (Mt BC/yr)
## Emissions|CO|Land| (Mt CO/yr)
## Emissions|CO|Land|Agriculture (Mt CO/yr)
## Emissions|CO|Land|Biomass Burning (Mt CO/yr)
## Emissions|CO|Land|Agriculture|Agricultural Soils (Mt CO/yr)
## Emissions|CO|Land|Agriculture|Animal Waste Management (Mt CO/yr)
## Emissions|CO|Land|Agriculture|Enteric Fermentation (Mt CO/yr)
## Emissions|CO|Land|Agriculture|Other (Mt CO/yr)
## Emissions|CO|Land|Agriculture|Rice (Mt CO/yr)
## Emissions|CO|Land|Biomass Burning|Agricultural Waste Burning (Mt CO/yr)
## Emissions|CO|Land|Biomass Burning|Deforestation Fires (Mt CO/yr)
## Emissions|CO|Land|Biomass Burning|Forest Fires (Mt CO/yr)
## Emissions|CO|Land|Biomass Burning|Peat Fires (Mt CO/yr)
## Emissions|CO|Land|Biomass Burning|Savannah Fires (Mt CO/yr)
## Emissions|NH3-N|Land| (Mt NH3-N/yr)
## Emissions|NH3-N|Land|Agriculture (Mt NH3-N/yr)
## Emissions|NH3-N|Land|Biomass Burning (Mt NH3-N/yr)
## Emissions|NH3-N|Land|Agriculture|Agricultural Soils (Mt NH3-N/yr)
## Emissions|NH3-N|Land|Agriculture|Animal Waste Management (Mt NH3-N/yr)
## Emissions|NH3-N|Land|Agriculture|Enteric Fermentation (Mt NH3-N/yr)
## Emissions|NH3-N|Land|Agriculture|Other (Mt NH3-N/yr)
## Emissions|NH3-N|Land|Agriculture|Rice (Mt NH3-N/yr)

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## Emissions|NH3-N|Land|Biomass Burning|Agricultural Waste Burning (Mt NH3-N/yr)
## Emissions|NH3-N|Land|Biomass Burning|Deforestation Fires (Mt NH3-N/yr)
## Emissions|NH3-N|Land|Biomass Burning|Forest Fires (Mt NH3-N/yr)
## Emissions|NH3-N|Land|Biomass Burning|Peat Fires (Mt NH3-N/yr)
## Emissions|NH3-N|Land|Biomass Burning|Savannah Fires (Mt NH3-N/yr)
## Emissions|NH3|Land| (Mt NH3/yr)
## Emissions|NH3|Land|Biomass Burning (Mt NH3/yr)
## Emissions|NH3|Land|Agriculture|Enteric Fermentation (Mt NH3/yr)
## Emissions|NH3|Land|Agriculture|Other (Mt NH3/yr)
## Emissions|NH3|Land|Agriculture|Rice (Mt NH3/yr)
## Emissions|NH3|Land|Biomass Burning|Agricultural Waste Burning (Mt NH3/yr)
## Emissions|NH3|Land|Biomass Burning|Deforestation Fires (Mt NH3/yr)
## Emissions|NH3|Land|Biomass Burning|Forest Fires (Mt NH3/yr)
## Emissions|NH3|Land|Biomass Burning|Peat Fires (Mt NH3/yr)
## Emissions|NH3|Land|Biomass Burning|Savannah Fires (Mt NH3/yr)
## Emissions|NMHC|Land| (Mt NMHC/yr)
## Emissions|NMHC|Land|Agriculture (Mt NMHC/yr)
## Emissions|NMHC|Land|Biomass Burning (Mt NMHC/yr)
## Emissions|NMHC|Land|Agriculture|Agricultural Soils (Mt NMHC/yr)
## Emissions|NMHC|Land|Agriculture|Animal Waste Management (Mt NMHC/yr)
## Emissions|NMHC|Land|Agriculture|Enteric Fermentation (Mt NMHC/yr)
## Emissions|NMHC|Land|Agriculture|Other (Mt NMHC/yr)
## Emissions|NMHC|Land|Agriculture|Rice (Mt NMHC/yr)
## Emissions|NMHC|Land|Biomass Burning|Agricultural Waste Burning (Mt NMHC/yr)
## Emissions|NMHC|Land|Biomass Burning|Deforestation Fires (Mt NMHC/yr)
## Emissions|NMHC|Land|Biomass Burning|Forest Fires (Mt NMHC/yr)
## Emissions|NMHC|Land|Biomass Burning|Peat Fires (Mt NMHC/yr)
## Emissions|NMHC|Land|Biomass Burning|Savannah Fires (Mt NMHC/yr)
## Emissions|NO2-N|Land| (Mt NO2-N/yr)
## Emissions|NO2-N|Land|Agriculture (Mt NO2-N/yr)
## Emissions|NO2-N|Land|Biomass Burning (Mt NO2-N/yr)
## Emissions|NO2-N|Land|Agriculture|Agricultural Soils (Mt NO2-N/yr)
## Emissions|NO2-N|Land|Agriculture|Animal Waste Management (Mt NO2-N/yr)
## Emissions|NO2-N|Land|Agriculture|Enteric Fermentation (Mt NO2-N/yr)
## Emissions|NO2-N|Land|Agriculture|Other (Mt NO2-N/yr)
## Emissions|NO2-N|Land|Agriculture|Rice (Mt NO2-N/yr)
## Emissions|NO2-N|Land|Biomass Burning|Agricultural Waste Burning (Mt NO2-N/yr)
## Emissions|NO2-N|Land|Biomass Burning|Deforestation Fires (Mt NO2-N/yr)
## Emissions|NO2-N|Land|Biomass Burning|Forest Fires (Mt NO2-N/yr)
## Emissions|NO2-N|Land|Biomass Burning|Peat Fires (Mt NO2-N/yr)
## Emissions|NO2-N|Land|Biomass Burning|Savannah Fires (Mt NO2-N/yr)
## Emissions|NO2|Land| (Mt NO2/yr)
## Emissions|NO2|Land|Biomass Burning (Mt NO2/yr)
## Emissions|NO2|Land|Agriculture|Enteric Fermentation (Mt NO2/yr)
## Emissions|NO2|Land|Agriculture|Other (Mt NO2/yr)
## Emissions|NO2|Land|Agriculture|Rice (Mt NO2/yr)
## Emissions|NO2|Land|Biomass Burning|Agricultural Waste Burning (Mt NO2/yr)
## Emissions|NO2|Land|Biomass Burning|Deforestation Fires (Mt NO2/yr)
## Emissions|NO2|Land|Biomass Burning|Forest Fires (Mt NO2/yr)
## Emissions|NO2|Land|Biomass Burning|Peat Fires (Mt NO2/yr)
## Emissions|NO2|Land|Biomass Burning|Savannah Fires (Mt NO2/yr)
## Emissions|NO3-N|Land| (Mt NO3-N/yr)
## Emissions|NO3-N|Land|Agriculture (Mt NO3-N/yr)
## Emissions|NO3-N|Land|Biomass Burning (Mt NO3-N/yr)
## Emissions|NO3-N|Land|Agriculture|Agricultural Soils (Mt NO3-N/yr)
## Emissions|NO3-N|Land|Agriculture|Animal Waste Management (Mt NO3-N/yr)
## Emissions|NO3-N|Land|Agriculture|Enteric Fermentation (Mt NO3-N/yr)
## Emissions|NO3-N|Land|Agriculture|Other (Mt NO3-N/yr)
## Emissions|NO3-N|Land|Agriculture|Rice (Mt NO3-N/yr)
## Emissions|NO3-N|Land|Biomass Burning|Agricultural Waste Burning (Mt NO3-N/yr)

```

```

## Emissions|N03-N|Land|Biomass Burning|Deforestation Fires (Mt N03-N/yr)
## Emissions|N03-N|Land|Biomass Burning|Forest Fires (Mt N03-N/yr)
## Emissions|N03-N|Land|Biomass Burning|Peat Fires (Mt N03-N/yr)
## Emissions|N03-N|Land|Biomass Burning|Savannah Fires (Mt N03-N/yr)
## Emissions|N03Land| (Mt N03-/yr)
## Emissions|N03Land|Biomass Burning (Mt N03-/yr)
## Emissions|N03Land|Agriculture|Enteric Fermentation (Mt N03-/yr)
## Emissions|N03Land|Agriculture|Other (Mt N03-/yr)
## Emissions|N03Land|Agriculture|Rice (Mt N03-/yr)
## Emissions|N03Land|Biomass Burning|Agricultural Waste Burning (Mt N03-/yr)
## Emissions|N03Land|Biomass Burning|Deforestation Fires (Mt N03-/yr)
## Emissions|N03Land|Biomass Burning|Forest Fires (Mt N03-/yr)
## Emissions|N03Land|Biomass Burning|Peat Fires (Mt N03-/yr)
## Emissions|N03Land|Biomass Burning|Savannah Fires (Mt N03-/yr)
## Emissions|OC|Land| (Mt OC/yr)
## Emissions|OC|Land|Agriculture (Mt OC/yr)
## Emissions|OC|Land|Biomass Burning (Mt OC/yr)
## Emissions|OC|Land|Agriculture|Agricultural Soils (Mt OC/yr)
## Emissions|OC|Land|Agriculture|Animal Waste Management (Mt OC/yr)
## Emissions|OC|Land|Agriculture|Enteric Fermentation (Mt OC/yr)
## Emissions|OC|Land|Agriculture|Other (Mt OC/yr)
## Emissions|OC|Land|Agriculture|Rice (Mt OC/yr)
## Emissions|OC|Land|Biomass Burning|Agricultural Waste Burning (Mt OC/yr)
## Emissions|OC|Land|Biomass Burning|Deforestation Fires (Mt OC/yr)
## Emissions|OC|Land|Biomass Burning|Forest Fires (Mt OC/yr)
## Emissions|OC|Land|Biomass Burning|Peat Fires (Mt OC/yr)
## Emissions|OC|Land|Biomass Burning|Savannah Fires (Mt OC/yr)
## Emissions|S02|Land| (Mt S02/yr)
## Emissions|S02|Land|Agriculture (Mt S02/yr)
## Emissions|S02|Land|Biomass Burning (Mt S02/yr)
## Emissions|S02|Land|Agriculture|Agricultural Soils (Mt S02/yr)
## Emissions|S02|Land|Agriculture|Animal Waste Management (Mt S02/yr)
## Emissions|S02|Land|Agriculture|Enteric Fermentation (Mt S02/yr)
## Emissions|S02|Land|Agriculture|Other (Mt S02/yr)
## Emissions|S02|Land|Agriculture|Rice (Mt S02/yr)
## Emissions|S02|Land|Biomass Burning|Agricultural Waste Burning (Mt S02/yr)
## Emissions|S02|Land|Biomass Burning|Deforestation Fires (Mt S02/yr)
## Emissions|S02|Land|Biomass Burning|Forest Fires (Mt S02/yr)
## Emissions|S02|Land|Biomass Burning|Peat Fires (Mt S02/yr)
## Emissions|S02|Land|Biomass Burning|Savannah Fires (Mt S02/yr)
## Emissions|N20|Land|Land Use Change (Mt N20/yr)
## Emissions|NH3|Land|Land Use Change (Mt NH3/yr)
## Emissions|NO2|Land|Land Use Change (Mt NO2/yr)
## Emissions|N03Land|Land Use Change (Mt N03-/yr)
## Emissions|CO2|Land|Land Use Change (Mt CO2/yr)
## Resources|Land Cover|Other Natural Land (million ha)
## Resources|Land Cover|Forest|Forestry|Harvested Area (million ha)
## Resources|Land Cover|Other Arable Land (million ha)
## Resources|Land Cover (million ha wrt 2005)
## Resources|Land Cover Change|Cropland (million ha wrt 2005)
## Resources|Land Cover Change|Forest (million ha wrt 2005)
## Resources|Land Cover Change|Other Land (million ha wrt 2005)
## Resources|Land Cover Change|Pastures and Rangelands (million ha wrt 2005)
## Resources|Land Cover Change|Cropland|Bioenergy crops (million ha wrt 2005)
## Resources|Land Cover Change|Forest|Managed Forest (million ha wrt 2005)
## Resources|Land Cover Change|Forest|Natural Forest (million ha wrt 2005)
## Resources|Land Cover Change|Other Natural Land (million ha wrt 2005)
## Resources|Land Cover Change|Urban Area (million ha wrt 2005)
## Resources|Land Cover Change|Forest|Forestry|Harvested Area (million ha wrt 2005)
## Resources|Land Cover Change|Other Arable Land (million ha wrt 2005)

```



```
## Prices|Agriculture|Microbial protein (US$05/tDM)
## Prices|Agriculture|Industrial roundwood (US$05/tDM)
## Prices|Agriculture|Short rotation trees (US$05/tDM)
## Prices|Agriculture|Wood fuel (US$05/tDM)
```

## Part XVIII

# Run Information

## 67 Calibration

### 67.1 Yield calibration factors

	CAZ	CHA	EUR	IND	JPN	LAM	MEA	NEU	OAS	REF	SSA	USA
crops	0.32	0.86	0.73	0.84	0.83	0.57	0.66	0.72	0.70	0.85	0.63	0.60
pasture	0.96	1.00	1.06	0.96	0.99	1.03	1.01	1.07	1.00	1.17	1.02	0.98

### 67.2 Land use change in 1995 (reshuffling)

Table 2059: Land use change cropland 1995 (Mio. ha)

	CAZ	CHA	EUR	IND	JPN	LAM	MEA	NEU	OAS	REF	SSA	USA	GLO
expansion	4.84	1.50	0.55	3.26	0.13	5.57	0.02	0.12	11.89	0.11	0.02	13.23	41.24
contraction	-0.43	-4.02	-0.49	-4.40	-0.10	-0.97	-13.70	-2.96	-14.38	-0.38	-0.50	-26.76	-69.08
net changes	4.41	-2.52	0.06	-1.13	0.03	4.61	-13.68	-2.84	-2.49	-0.26	-0.48	-13.53	-27.83
gross changes	5.27	5.52	1.04	7.66	0.23	6.54	13.71	3.08	26.27	0.49	0.52	39.99	110.32

## 68 Model settings

### 68.1 Code settings

```
## ### GIT revision ###
## fd0a8cf96ae0fcee6c0e82d55bcbbae054f25b8c
##
## ### Modifications ###
##
## On branch magpie4paper
## Your branch is up-to-date with jpd/magpie4paper.
##
## Changes not staged for commit:
##
##   (use "git add <file>..." to update what will be committed)
##
##   (use "git checkout -- <file>..." to discard changes in working directory)
##
##
## modified:   main.gms
## modified:   scripts/output/comparison/magpie4paper.R
##
## modified:   scripts/start/magpie4paper.R
##
## Untracked files:
##
##   (use "git add <file>..." to include in what will be committed)
##
```

```

##
## comparison_validation_2018094050.log
## comparison_validation_2018094050.pdf
## figure/
##
## log_out-11157596.err
## log_out-11157597.err
## log_out-11434551.err
## mag4paperResults/
##
##
## no changes added to commit (use "git add" and/or "git commit -a")
##
##
##
## ### MODULE SETUP ###
## $setglobal drivers aug17
## $setglobal land feb15
##
## $setglobal costs default
## $setglobal interest_rate reg_feb18
##
## $setglobal tc endo_jun18
## $setglobal yields dynamic_aug18
##
## $setglobal food anthropometrics_jan18
## $setglobal demand sector_may15
##
## $setglobal production flexreg_apr16
## $setglobal residues flexreg_apr16
##
## $setglobal processing coupleproducts_feb17
## $setglobal trade selfsuff_reduced
##
## $setglobal crop endo_jun13
## $setglobal past endo_jun13
##
## $setglobal forestry affore_vegc_dec16
## $setglobal urban static
##
## $setglobal natveg dynamic_may18
## $setglobal factor_costs mixed_feb17
##
## $setglobal landconversion global_static_aug18
## $setglobal transport gtap_nov12
##
## $setglobal area_equipped_for_irrigation endo_apr13
##
## $setglobal water_demand agr_sector_aug13
##
## $setglobal water_availability total_water_aug13
## $setglobal climate static
##
## $setglobal nr_soil_budget exoeff_aug16
## $setglobal nitrogen ipcc2006_sep16
##
## $setglobal carbon normal_dec17
## $setglobal methane ipcc2006_flexreg_apr16
##
## $setglobal phosphorus off

```

```
## $setglobal awms ipcc2006_aug16
##
## $setglobal ghg_policy price_sep16
## $setglobal maccs on_sep16
##
## $setglobal carbon_removal off_sep16
## $setglobal som cellpool_aug16
##
## $setglobal bioenergy standard_flexreg_may17
## $setglobal material exo_flexreg_apr16
##
## $setglobal livestock fbask_jan16
## $setglobal disag_lvst foragebased_aug18
##
## $setglobal optimization nlp_apr17
```

## 68.2 Dataset

```
##
##
## Used data set: isimip_rcp-IPSL_CM5A_LR-rcp2p6-co2_rev34_c200_690d3718e151be1b450b394c1064b1c5.tgz
##
## md5sum: b88ddae2ac42d76603bd988337115c64
##
## Repository: /p/projects/landuse/data/input/archive
##
##
## Used data set: rev4.14_690d3718e151be1b450b394c1064b1c5_magpie.tgz
##
## md5sum: a049d482a1a9766c843b671a1b69b9f1
##
## Repository: /p/projects/rd3mod/inputdata/output
##
##
## Used data set: rev4.14_690d3718e151be1b450b394c1064b1c5_validation.tgz
##
## md5sum: 9d67c5c2f80429f00967e9a2e6d9c34f
##
## Repository: /p/projects/rd3mod/inputdata/output
##
##
## Used data set: additional_data_rev3.58.tgz
## md5sum: 75798c6d2670497a92ae2a3fb5a7e6ee
##
## Repository: /p/projects/landuse/data/input/archive
##
##
## Used data set: calibration_H12_c200_12Sep18.tgz
##
## md5sum: 0a7d88e902918eb6a5263faaf066cc5d
##
## Repository: /p/projects/landuse/data/input/calibration
##
## Low resolution: c200
##
## High resolution: 0.5
##
## Total number of cells: 200
##
```

```
## Number of cells per region:
##
##   CAZ   CHA   EUR   IND   JPN   LAM   MEA   NEU   OAS   REF   SSA   USA
##
##    28    24    10     7     3    53    17     8    22     7    11    10
##
##
## Regionscode: 690d3718e151be1b450b394c1064b1c5
##
## Regions data revision: 4.14
##
##
## lpj2magpie settings:
##
## * LPJmL data folder: /p/projects/landuse/data/input/lpj_input/isimip_rcp/IPSL_CM5A_LR/rcp2p6/co2
##
## * Additional input folder: /p/projects/landuse/data/input/other/rev34
## * Revision: 34
##
## * Call: lpj2magpie(input_folder = path(cfg$lpj_input_folder, gsub("-", "/", cfg$input)), input2_
##
##
## aggregation settings:
## * Input resolution: 0.5
## * Output resolution: c200
##
## * Input file: /p/projects/landuse/data/input/archive/isimip_rcp-IPSL_CM5A_LR-rcp2p6-co2_rev34_0.5.tg
##
## * Output file: /p/projects/landuse/data/input/archive/isimip_rcp-IPSL_CM5A_LR-rcp2p6-co2_rev34_c200_
##
## * Regionscode: 690d3718e151be1b450b394c1064b1c5
## * (clustering) n-repeat: 5
##
## * (clustering) n-redistribute: 0
##
## * Call: aggregation(input_file = lpj2magpie_file, regionmapping = paste0("../", cfg$regionmappin
##
##
##
##
## Last modification (input data): Tue Oct 16 16:46:11 2018
```

## 68.3 R Information

```
## R version 3.3.2 (2016-10-31)
## Platform: x86_64-pc-linux-gnu (64-bit)
## Running under: SUSE Linux Enterprise Server 12 SP2
##
## locale:
## [1] C
##
## attached base packages:
## [1] grid      stats      graphics  grDevices  utils      datasets  base
##
## loaded via a namespace (and not attached):
## [1] Rcpp_0.12.18    digest_0.6.15    lcode_2.137.0    mime_0.5
## [5] plyr_1.8.4      R6_2.2.2         xtable_1.8-2     magrittr_1.5
```

```
## [9] magclass_4.91.0    stringi_1.2.2    reshape2_1.4.3    data.table_1.12.0
## [13] tools_3.3.2        stringr_1.3.1    shiny_1.0.5        httpuv_1.3.5
## [17] htmltools_0.3.6    methods_3.3.2
```

```
## [1] "/p/projects/rd3mod/R/libraries/main"
## [2] "/p/system/packages/R/3.3.2/lib64/R/library"
```

```
##          BBmisc          BH          BatchJobs          BiocInstaller
##          "1.11"          "1.66.0-1"          "1.6"          "1.24.0"
##          CVST          DBI          DEoptimR          DRR
##          "0.2-1"          "1.0.0"          "1.0-8"          "0.0.3"
##          DT          DiagrammeR          EnvStats          FNN
##          "0.4"          "1.0.0"          "2.3.0"          "1.1"
##          FactoMineR          Formula          GGally          Gmisc
##          "1.36"          "1.2-3"          "1.4.0"          "1.4.1"
##          Hmisc          IDPmisc          ISOcodes          Lahman
##          "4.0-2"          "1.1.18"          "2018.06.29"          "6.0-0"
##          LandMark          LearnBayes          Lmoments          MASS
##          "1.1.0"          "2.15.1"          "1.2-3"          "7.3-50"
##          NLP          NMF          PIKTools          R.matlab
##          "0.1-10"          "0.20.6"          "1.1"          "3.6.1"
##          R.methodsS3          R.oo          R.utils          R6
##          "1.7.1"          "1.21.0"          "2.5.0"          "2.2.2"
##          RANN          RCurl          RISmed          RJSONIO
##          "2.5.1"          "1.95-4.8"          "2.1.7"          "1.3-0"
##          RSQLite          RSpecra          RandomFields          RandomFieldsUtils
##          "2.1.1"          "0.13-1"          "3.1.50"          "0.3.25"
##          Rcpp          RcppArmadillo          RcppOctave          RcppParallel
##          "0.12.18"          "0.7.700.0.0"          "0.18.1"          "4.3.20"
##          RcppRoll          Rook          Rtsne          Rttf2pt1
##          "0.2.2"          "1.1-1"          "0.13"          "1.3.7"
##          SDMTTools          SPEI          SQUAREM          SnowballC
##          "1.1-221"          "1.6"          "2017.10-1"          "0.5.1"
##          SpatialPack          TH.data          WDI          XML
##          "0.3"          "1.0-8"          "2.5"          "3.98-1.5"
##          abind          aqfig          ar5data          areaplot
##          "1.4-5"          "0.8"          "1.7.1"          "1.2-0"
##          arm          assertr          assertthat          automap
##          "1.9-3"          "2.5"          "0.2.0"          "1.0-14"
##          backports          bfast          bibliometrix          bibtex
##          "1.1.2"          "1.5.7"          "2.0.0"          "0.4.2"
##          bindr          bindrcpp          bit64          blob
##          "0.1.1"          "0.2.2"          "0.9-7"          "1.1.1"
##          brew          broom          burdensharing          callr
##          "1.0-6"          "0.4.2"          "1.4.25"          "1.0.0"
##          caret          cellranger          citation          classInt
##          "6.0-80"          "1.1.0"          "0.2.1"          "0.1-23"
##          cli          clipr          coda          coin
##          "1.0.0"          "0.4.0"          "0.19-1"          "1.2-2"
##          colorRamps          commonmark          compare          corpcor
##          "2.3"          "1.5"          "0.2-6"          "1.6.9"
##          corrplot          countrycode          covr          cowplot
##          "0.84"          "1.00.0"          "3.1.0"          "0.9.2"
##          cowsay          crayon          crosstalk          curl
##          "0.6.0"          "1.3.4"          "1.0.0"          "2.3"
##          d3Network          data.table          data.tree          dbplyr
```

##	"0.5.2.1"	"1.12.0"	"0.7.4"	"1.2.1"
##	ddalpha	deldir	demystas	dendextend
##	"1.3.3"	"0.1-15"	"1.3.11"	"1.5.2"
##	desc	devtools	digest	dimRed
##	"1.2.0"	"1.13.3"	"0.6.15"	"0.1.0"
##	diptest	doMC	doMPI	doSNOW
##	"0.75-7"	"1.3.5"	"0.2.2"	"1.0.16"
##	dotCall64	downloader	dplyr	dtplyr
##	"0.9-5.2"	"0.4"	"0.7.6"	"0.0.2"
##	dummies	e1071	easyNCDF	ellipse
##	"1.5.6"	"1.6-8"	"0.0.4"	"0.4.1"
##	estimability	evaluate	expm	extrafont
##	"1.3"	"0.10.1"	"0.999-2"	"0.17"
##	extrafontdb	factoextra	fail	faodata
##	"1.0"	"1.0.4"	"1.3"	"1.09"
##	fdrtool	fields	fitdistrplus	flashClust
##	"1.2.15"	"8.10"	"1.0-9"	"1.01-2"
##	flexmix	forcats	forecast	forestplot
##	"2.3-14"	"0.2.0"	"8.0"	"1.7.2"
##	formatR	fortunes	fpc	fracdiff
##	"1.5"	"1.5-4"	"2.1-10"	"1.4-2"
##	futile.logger	futile.options	gclus	gdalUtils
##	"1.4.3"	"1.0.1"	"1.3.1"	"2.0.1.14"
##	gdata	gdistance	gdx	gdxrrw
##	"2.18.0"	"1.2-2"	"1.50.0"	"1.0.2"
##	gdxtools	geOR	geodata	geometry
##	"0.0.0.9000"	"1.7-5.2"	"1.56"	"0.3-6"
##	geosphere	ggforce	ggm	ggplot2
##	"1.5-7"	"0.1.3"	"2.3"	"3.0.0"
##	ggpubr	ggraph	ggrepel	ggsci
##	"0.1.4"	"1.0.2"	"0.8.0"	"2.9"
##	ggsignif	git2r	givemeall	glasso
##	"0.4.0"	"0.21.0"	"0.02"	"1.8"
##	glodato	glue	gmodels	gmp
##	"1.12"	"1.2.0"	"2.16.2"	"0.5-13.1"
##	goftest	gower	goxygen	gplots
##	"1.1-1"	"0.1.2"	"0.21.3"	"3.0.1"
##	gridBase	gstat	gsW	guidr
##	"0.4-7"	"1.1-5"	"1.0-5"	"0.0.5.0000"
##	gvlma	haven	hms	htmlTable
##	"1.0.0.2"	"1.1.0"	"0.4.2"	"1.12"
##	htmltools	htmlwidgets	httpuv	httr
##	"0.3.6"	"1.2"	"1.3.5"	"1.3.1"
##	huge	hydroGOF	hydroTSM	iamc
##	"1.2.7"	"0.3-10"	"0.5-1"	"0.24.0"
##	igraph	influenceR	intervals	inum
##	"1.2.1"	"0.1.0"	"0.15.1"	"1.0-0"
##	ipred	irlba	jpeg	jsonlite
##	"0.9-6"	"2.3.2"	"0.1-8"	"1.5"
##	kernlab	knitr	ks	lambda.r
##	"0.9-26"	"1.20"	"1.11.2"	"1.1.9"
##	later	lattice	lava	lavaan
##	"0.7.2"	"0.20-35"	"1.6.1"	"0.6-1"
##	lazyeval	leaflet	leaps	libcoin
##	"0.2.1"	"1.1.0"	"3.0"	"1.0-1"
##	limes	lme4	lmomco	lmtree
##	"0.19.2"	"1.1-17"	"2.2.7"	"0.9-36"
##	lpSolve	lpjclass	lsmeans	lubase
##	"5.6.13"	"1.13.0.9001"	"2.25-5"	"1.06"
##	lubridate	lucode	ludata	luplayground

##	"1.7.4"	"2.137.0"	"1.43.3"	"1.05"
##	luplot	luscale	lusweave	mFilter
##	"3.49.0"	"2.14.0"	"1.46.0"	"0.1-3"
##	madrat	magclass	magic	magpie
##	"1.55.0"	"4.91.0"	"1.5-8"	"0.2266.1"
##	magpie4	magpieflexreg	magpiesets	magrittr
##	"1.33.1"	"0.0036"	"0.36.3"	"1.5"
##	mapdata	markdown	matlab	matrixcalc
##	"2.3.0"	"0.8"	"1.0.2"	"1.0-3"
##	mclust	memoise	mgcv	mi
##	"5.3"	"1.0.0"	"1.8-23"	"1.0"
##	mice	microbenchmark	mip	misc3d
##	"2.30"	"1.4-4"	"0.118.1"	"0.8-4"
##	mlapi	mnormt	modelr	modeltools
##	"0.1.0"	"1.5-5"	"0.1.1"	"0.2-21"
##	moinput	mrfood	mrregression	mrvalidation
##	"9.181.0"	"0.7.3"	"3.11.0"	"1.31.4"
##	multcomp	multicool	mvtnorm	ncdf4
##	"1.4-8"	"0.1-10"	"1.0-8"	"1.16"
##	network	nitrogen	nleqslv	nnls
##	"1.13.0"	"1.0.3"	"3.3.2"	"1.4"
##	nonparaeff	nortest	numDeriv	nycflights13
##	"0.5-8"	"1.0-4"	"2016.8-1"	"0.2.2"
##	oce	openssl	openxlsx	osmar
##	"0.9-23"	"0.9.6"	"4.0.0"	"1.1-7"
##	pROC	pan	pander	party
##	"1.12.1"	"1.4"	"0.6.0"	"1.3-1"
##	partykit	pastecs	pbapply	pbivnorm
##	"1.2-0"	"1.3-18"	"1.3-4"	"0.6.0"
##	piam	pikcluster	pillar	pkgconfig
##	"0.8.2"	"0.04"	"1.2.3"	"2.0.1"
##	pkgmaker	plogr	plot3D	plotly
##	"0.22"	"0.2.0"	"1.1"	"4.5.6"
##	plotrix	plyr	png	polspline
##	"3.6-4"	"1.8.4"	"0.1-7"	"1.1.12"
##	polyclip	prabclus	prettyunits	processx
##	"1.6-1"	"2.2-6"	"1.0.2"	"3.1.0"
##	prodlm	profvis	progress	proto
##	"2018.04.18"	"0.3.3"	"1.1.2"	"1.0.0"
##	pse	psych	purrr	pwt
##	"0.4.7"	"1.6.12"	"0.2.4"	"7.1-1"
##	qgraph	quadprog	qualV	quanteda
##	"1.4.2"	"1.5-5"	"0.3-2"	"1.3.4"
##	quitte	randomForest	randomForestExplainer	raster
##	"0.3072.0"	"4.6-14"	"0.9"	"2.5-8"
##	rasterVis	readr	readstata13	readxl
##	"0.41"	"1.1.1"	"0.9.0"	"1.0.0"
##	recipes	registry	rematch	remind
##	"0.1.2"	"0.3"	"1.0.1"	"36.91.0"
##	remulator	reprex	reshape	reshape2
##	"1.16.0"	"0.1.1"	"0.8.7"	"1.4.3"
##	reticulate	rfPermute	rgdal	rgenoud
##	"1.10"	"2.1.5"	"1.2-5"	"5.7-12.4"
##	rgeos	rgexf	rhdf5	rjson
##	"0.3-17"	"0.15.3"	"2.18.0"	"0.2.15"
##	rlang	rmarkdown	rms	rmsfact
##	"0.2.0"	"1.9"	"5.1-0"	"0.0.3"
##	rngtools	robustbase	rootSolve	roxygen2
##	"1.2.4"	"0.92-7"	"1.7"	"6.0.1"
##	rpart	rpart.plot	rprojroot	rscopus

##	"4.1-13"	"2.1.2"	"1.3-2"	"0.5.11"
##	rsm	rstudioapi	rvest	rworldmap
##	"2.8"	"0.7"	"0.3.2"	"1.3-6"
##	rworldextra	sandwich	satellite	scales
##	"1.01"	"2.4-0"	"0.2.0"	"0.5.0"
##	scatterplot3d	selectr	sem	sendmailR
##	"0.3-38"	"0.3-1"	"3.1-8"	"1.2-1"
##	sensitivity	sfsmisc	shiny	shinycssloaders
##	"1.15.0"	"1.1-2"	"1.0.5"	"0.2.0"
##	shinyresults	shinythemes	slam	sna
##	"0.17.3"	"1.1.1"	"0.1-40"	"2.4"
##	snow	soiltexture	sourcetools	sp
##	"0.4-2"	"1.4.1"	"0.1.5"	"1.3-1"
##	spData	spacetime	spacyr	spam
##	"0.2.8.3"	"1.2-0"	"0.9.91"	"1.4-0"
##	sparsepp	spatstat	spatstat.data	spatstat.utils
##	"0.2.0"	"1.55-1"	"1.2-0"	"1.8-0"
##	spdep	splanCS	statnet.common	stopwords
##	"0.6-11"	"2.01-40"	"3.3.0"	"0.9.0"
##	stringdist	stringi	stringr	strucchange
##	"0.9.4.4"	"1.2.2"	"1.3.1"	"1.5-1"
##	swfscMisc	tensor	testthat	text2vec
##	"1.2"	"1.5"	"2.0.0"	"0.4.0"
##	tibble	tidyr	tidyselect	tidyverse
##	"1.4.2"	"0.8.1"	"0.2.4"	"1.2.1"
##	tiff	timeDate	tinytex	tm
##	"0.1-5"	"3012.100"	"0.5"	"0.7-1"
##	trafficlight	trefoil	trimcluster	tseries
##	"1.13.0"	"0.01"	"0.1-2"	"0.10-38"
##	tweenr	txtplot	udunits2	units
##	"0.1.5"	"1.0-3"	"0.13"	"0.6-2"
##	urca	uroot	utf8	validation
##	"1.3-0"	"2.0-9"	"1.1.4"	"1.195"
##	vcd	viridis	viridisLite	visNetwork
##	"1.4-3"	"0.5.1"	"0.3.0"	"2.0.4"
##	webshot	weights	whisker	withr
##	"0.4.0"	"0.85"	"0.3-2"	"2.1.2"
##	xml2	xtable	xts	yaImpute
##	"1.1.1"	"1.8-2"	"0.9-7"	"1.0-29"
##	yaml	zip	zlibbioc	zoo
##	"2.2.0"	"1.0.0"	"1.20.0"	"1.8-1"
##	BH	Formula	KernSmooth	MASS
##	"1.62.0-1"	"1.2-1"	"2.23-15"	"7.3-45"
##	Matrix	MatrixModels	ModelMetrics	R6
##	"1.2-8"	"0.4-1"	"1.1.0"	"2.2.0"
##	RColorBrewer	Rcpp	RcppEigen	Rmpi
##	"1.1-2"	"0.12.10"	"0.3.2.9.1"	"0.6-6"
##	SparseM	TH.data	abind	acepack
##	"1.76"	"1.0-8"	"1.4-5"	"1.4.1"
##	assertthat	backports	base	base64enc
##	"0.1"	"1.0.5"	"3.3.2"	"0.1-3"
##	bdsmatrix	bit	bitops	boot
##	"1.3-2"	"1.1-12"	"1.0-6"	"1.3-18"
##	caTools	car	cffdrs	checkmate
##	"1.17.1"	"2.1-4"	"1.7.5"	"1.8.2"
##	chron	class	cluster	codetools
##	"2.3-50"	"7.3-14"	"2.0.6"	"0.2-15"
##	colorspace	compiler	crayon	data.table
##	"1.3-2"	"3.3.2"	"1.3.2"	"1.10.4"
##	datasets	dichromat	digest	doMPI



```
##          "3.3.2"          "2.0-0"          "0.6.12"          "0.2.1"
##      doParallel      evaluate      fastmatch      foreach
##          "1.0.10"          "0.10"          "1.1-0"          "1.4.3"
##      foreign      fwi.fbp      gdtools      ggplot2movies
##          "0.8-67"          "1.7"          "0.1.4"          "0.0.1"
##      grDevices      graphics      grid      gridExtra
##          "3.3.2"          "3.3.2"          "3.3.2"          "2.2.1"
##      gtable      gtools      hexbin      highr
##          "0.2.0"          "3.5.0"          "1.27.1"          "0.6"
##      htmlTable      htmltools      htmlwidgets      iterators
##          "1.9"          "0.3.5"          "0.8"          "1.0.8"
##      jsonlite      knitr      labeling      lattice
##          "1.3"          "1.15.1"          "0.3"          "0.20-35"
##      latticeExtra      lazyeval      lme4      magrittr
##          "0.6-28"          "0.2.0"          "1.1-12"          "1.5"
##      mapproj      maps      maptools      markdown
##          "1.2-4"          "3.1.1"          "0.9-2"          "0.7.7"
##      methods      mgcv      mime      minqa
##          "3.3.2"          "1.8-17"          "0.5"          "1.2.4"
##      mlbench      mmap      multcomp      munsell
##          "2.1-1"          "0.6-12"          "1.4-6"          "0.4.3"
##      mvtnorm      ncd4      nlme      nloptr
##          "1.0-6"          "1.15"          "3.1-131"          "1.0.4"
##      nnet      parallel      pbkrtest      plyr
##          "7.3-12"          "3.3.2"          "0.4-7"          "1.8.4"
##      praise      quantreg      raster      reshape2
##          "1.0.0"          "5.29"          "2.5-8"          "1.4.2"
##      rex      rmarkdown      rpart      rprojroot
##          "1.1.1"          "1.4"          "4.1-10"          "1.2"
##      sandwich      scales      sp      spatial
##          "2.3-4"          "0.4.1"          "1.2-4"          "7.3-11"
##      spatial.tools      splines      stats      stats4
##          "1.4.8"          "3.3.2"          "3.3.2"          "3.3.2"
##      stringi      stringr      survival      svglite
##          "1.1.3"          "1.2.0"          "2.41-2"          "1.2.0"
##      tcltk      testthat      tibble      tools
##          "3.3.2"          "1.0.2"          "1.3.0"          "3.3.2"
##      utils      withr      yaml      zoo
##          "3.3.2"          "1.0.2"          "2.1.14"          "1.7-14"
```

### start\_functions

```
## R version 3.3.2 (2016-10-31)
## Platform: x86_64-pc-linux-gnu (64-bit)
## Running under: SUSE Linux Enterprise Server 12 SP2
##
## locale:
## [1] C
##
## attached base packages:
## [1] grid      methods      stats      graphics      grDevices      utils      datasets      base
##
## other attached packages:
## [1] magpie4_1.33.1  gdx_1.50.0      gdxrrw_1.0.2    lrcode_2.137.0  magclass_4.91.0
##
## loaded via a namespace (and not attached):
## [1] httr_1.3.1      maps_3.1.1      tidyr_0.8.1      jsonlite_1.5
## [5] viridisLite_0.3.0  splines_3.3.2    Formula_1.2-3    shiny_1.0.5
```

```
## [9] assertthat_0.2.0      sp_1.3-1             rworldmap_1.3-6      latticeExtra_0.6-28
## [13] lusweave_1.46.0       nonparaeff_0.5-8     qualV_0.3-2          pillar_1.2.3
## [17] backports_1.1.2       lattice_0.20-35      glue_1.2.0           luscale_2.14.0
## [21] digest_0.6.15         RColorBrewer_1.1-2   checkmate_1.8.2      colorspace_1.3-2
## [25] htmltools_0.3.6       httpuv_1.3.5         Matrix_1.2-8         plyr_1.8.4
## [29] pkgconfig_2.0.1       trafficlight_1.13.0  purrr_0.2.4          xtable_1.8-2
## [33] scales_0.5.0          htmlTable_1.12       tibble_1.4.2         ggplot2_3.0.0
## [37] nnet_7.3-12           lazyeval_0.2.1       survival_2.41-2      magrittr_1.5
## [41] mime_0.5              maptools_0.9-2       xml2_1.1.1           foreign_0.8-67
## [45] mip_0.118.1           tools_3.3.2          data.table_1.12.0    stringr_1.3.1
## [49] plotly_4.5.6          munsell_0.4.3        cluster_2.0.6        bindrcpp_0.2.2
## [53] luplot_3.49.0         rlang_0.2.0          quitte_0.3072.0      rstudioapi_0.7
## [57] htmlwidgets_1.2       spam_1.4-0           base64enc_0.1-3      gtable_0.2.0
## [61] reshape2_1.4.3        R6_2.2.2             gridExtra_2.2.1      knitr_1.20
## [65] dplyr_0.7.6           magpiesets_0.36.3    bindr_0.1.1          Hmisc_4.0-2
## [69] KernSmooth_2.23-15    stringi_1.2.2        Rcpp_0.12.18         fields_8.10
## [73] rpart_4.1-13          acepack_1.4.1        tidyselect_0.2.4
```

```
## [1] "/p/projects/rd3mod/R/libraries/main"
## [2] "/p/system/packages/R/3.3.2/lib64/R/library"
```

```
##          BBmisc              BH              BatchJobs          BiocInstaller
##          "1.11"              "1.66.0-1"          "1.6"              "1.24.0"
##          CVST                DBI              DEoptimR              DRR
##          "0.2-1"              "1.0.0"          "1.0-8"              "0.0.3"
##          DT                  DiagrammeR          EnvStats              FNN
##          "0.4"                "1.0.0"          "2.3.0"              "1.1"
##          FactoMineR          Formula          GGally              Gmisc
##          "1.36"              "1.2-3"          "1.4.0"              "1.4.1"
##          Hmisc              IDPmisc          ISOcodes              Lahman
##          "4.0-2"              "1.1.18"          "2018.06.29"          "6.0-0"
##          LandMark            LearnBayes          Lmoments              MASS
##          "1.1.0"              "2.15.1"          "1.2-3"              "7.3-50"
##          NLP                  NMF              PIKTools              R.matlab
##          "0.1-10"              "0.20.6"          "1.1"              "3.6.1"
##          R.methodsS3          R.oo              R.utils              R6
##          "1.7.1"              "1.21.0"          "2.5.0"              "2.2.2"
##          RANN                RCurl              RISmed              RJSONIO
##          "2.5.1"              "1.95-4.8"          "2.1.7"              "1.3-0"
##          RSQLite              RSpectra          RandomFields          RandomFieldsUtils
##          "2.1.1"              "0.13-1"          "3.1.50"              "0.3.25"
##          Rcpp                RcppArmadillo      RcppOctave            RcppParallel
##          "0.12.18"            "0.7.700.0.0"          "0.18.1"              "4.3.20"
##          RcppRoll            Rook              Rtsne              Rttf2pt1
##          "0.2.2"              "1.1-1"          "0.13"              "1.3.7"
##          SDMTTools            SPEI              SQUAREM              SnowballC
##          "1.1-221"            "1.6"              "2017.10-1"          "0.5.1"
##          SpatialPack          TH.data            WDI                  XML
##          "0.3"                "1.0-8"          "2.5"              "3.98-1.5"
##          abind                aqfig              ar5data              areaplot
##          "1.4-5"              "0.8"              "1.7.1"              "1.2-0"
##          arm                  assertr            assertthat            automap
##          "1.9-3"              "2.5"              "0.2.0"              "1.0-14"
##          backports            bfast              bibliometrix          bibtex
##          "1.1.2"              "1.5.7"          "2.0.0"              "0.4.2"
##          bindr                bindrcpp            bit64                blob
```

##	"0.1.1"	"0.2.2"	"0.9-7"	"1.1.1"
##	brew	broom	burdensharing	callr
##	"1.0-6"	"0.4.2"	"1.4.25"	"1.0.0"
##	caret	cellranger	citation	classInt
##	"6.0-80"	"1.1.0"	"0.2.1"	"0.1-23"
##	cli	clipr	coda	coin
##	"1.0.0"	"0.4.0"	"0.19-1"	"1.2-2"
##	colorRamps	commonmark	compare	corpcor
##	"2.3"	"1.5"	"0.2-6"	"1.6.9"
##	corrplot	countrycode	covr	cowplot
##	"0.84"	"1.00.0"	"3.1.0"	"0.9.2"
##	cowsay	crayon	crosstalk	curl
##	"0.6.0"	"1.3.4"	"1.0.0"	"2.3"
##	d3Network	data.table	data.tree	dbplyr
##	"0.5.2.1"	"1.12.0"	"0.7.4"	"1.2.1"
##	ddalpha	deldir	demystas	dendextend
##	"1.3.3"	"0.1-15"	"1.3.11"	"1.5.2"
##	desc	devtools	digest	dimRed
##	"1.2.0"	"1.13.3"	"0.6.15"	"0.1.0"
##	diptest	doMC	doMPI	doSNOW
##	"0.75-7"	"1.3.5"	"0.2.2"	"1.0.16"
##	dotCall64	downloader	dplyr	dtplyr
##	"0.9-5.2"	"0.4"	"0.7.6"	"0.0.2"
##	dummies	e1071	easyNCDF	ellipse
##	"1.5.6"	"1.6-8"	"0.0.4"	"0.4.1"
##	estimability	evaluate	expm	extrafont
##	"1.3"	"0.10.1"	"0.999-2"	"0.17"
##	extrafontdb	factoextra	fail	faodata
##	"1.0"	"1.0.4"	"1.3"	"1.09"
##	fdrtool	fields	fitdistrplus	flashClust
##	"1.2.15"	"8.10"	"1.0-9"	"1.01-2"
##	flexmix	forcats	forecast	forestplot
##	"2.3-14"	"0.2.0"	"8.0"	"1.7.2"
##	formatR	fortunes	fpc	fracdiff
##	"1.5"	"1.5-4"	"2.1-10"	"1.4-2"
##	futile.logger	futile.options	gclus	gdalUtils
##	"1.4.3"	"1.0.1"	"1.3.1"	"2.0.1.14"
##	gdata	gdistance	gdx	gdxrrw
##	"2.18.0"	"1.2-2"	"1.50.0"	"1.0.2"
##	gdxtools	geoR	geodata	geometry
##	"0.0.0.9000"	"1.7-5.2"	"1.56"	"0.3-6"
##	geosphere	ggforce	ggm	ggplot2
##	"1.5-7"	"0.1.3"	"2.3"	"3.0.0"
##	ggpubr	ggraph	ggrepel	ggsci
##	"0.1.4"	"1.0.2"	"0.8.0"	"2.9"
##	ggsignif	git2r	givemeall	glasso
##	"0.4.0"	"0.21.0"	"0.02"	"1.8"
##	glodato	glue	gmodels	gmp
##	"1.12"	"1.2.0"	"2.16.2"	"0.5-13.1"
##	goftest	gower	goxygen	gplots
##	"1.1-1"	"0.1.2"	"0.21.3"	"3.0.1"
##	gridBase	gstat	gsW	guidr
##	"0.4-7"	"1.1-5"	"1.0-5"	"0.0.5.0000"
##	gvlma	haven	hms	htmlTable
##	"1.0.0.2"	"1.1.0"	"0.4.2"	"1.12"
##	htmltools	htmlwidgets	httpuv	httr
##	"0.3.6"	"1.2"	"1.3.5"	"1.3.1"
##	huge	hydroGOF	hydroTSM	iamc
##	"1.2.7"	"0.3-10"	"0.5-1"	"0.24.0"
##	igraph	influenceR	intervals	inum

##	"1.2.1"	"0.1.0"	"0.15.1"	"1.0-0"
##	ipred	irlba	jpeg	jsonlite
##	"0.9-6"	"2.3.2"	"0.1-8"	"1.5"
##	kernlab	knitr	ks	lambda.r
##	"0.9-26"	"1.20"	"1.11.2"	"1.1.9"
##	later	lattice	lava	lavaan
##	"0.7.2"	"0.20-35"	"1.6.1"	"0.6-1"
##	lazyeval	leaflet	leaps	libcoin
##	"0.2.1"	"1.1.0"	"3.0"	"1.0-1"
##	limes	lme4	lmomco	lmtest
##	"0.19.2"	"1.1-17"	"2.2.7"	"0.9-36"
##	lpSolve	lpjclass	lsmeans	lubase
##	"5.6.13"	"1.13.0.9001"	"2.25-5"	"1.06"
##	lubridate	lucode	ludata	luplayground
##	"1.7.4"	"2.137.0"	"1.43.3"	"1.05"
##	luplot	luscale	lusweave	mFilter
##	"3.49.0"	"2.14.0"	"1.46.0"	"0.1-3"
##	madrat	magclass	magic	magpie
##	"1.55.0"	"4.91.0"	"1.5-8"	"0.2266.1"
##	magpie4	magpieflexreg	magpiesets	magrittr
##	"1.33.1"	"0.0036"	"0.36.3"	"1.5"
##	mapdata	markdown	matlab	matrixcalc
##	"2.3.0"	"0.8"	"1.0.2"	"1.0-3"
##	mclust	memoise	mgcv	mi
##	"5.3"	"1.0.0"	"1.8-23"	"1.0"
##	mice	microbenchmark	mip	misc3d
##	"2.30"	"1.4-4"	"0.118.1"	"0.8-4"
##	mlapi	mnormt	modelr	modeltools
##	"0.1.0"	"1.5-5"	"0.1.1"	"0.2-21"
##	moinput	mrfood	mrregression	mrvalidation
##	"9.181.0"	"0.7.3"	"3.11.0"	"1.31.4"
##	multcomp	multicool	mvtnorm	ncdf4
##	"1.4-8"	"0.1-10"	"1.0-8"	"1.16"
##	network	nitrogen	nleqslv	nnls
##	"1.13.0"	"1.0.3"	"3.3.2"	"1.4"
##	nonparaeff	nortest	numDeriv	nycflights13
##	"0.5-8"	"1.0-4"	"2016.8-1"	"0.2.2"
##	oce	openssl	openxlsx	osmar
##	"0.9-23"	"0.9.6"	"4.0.0"	"1.1-7"
##	pROC	pan	pander	party
##	"1.12.1"	"1.4"	"0.6.0"	"1.3-1"
##	partykit	pastecs	pbapply	pbivnorm
##	"1.2-0"	"1.3-18"	"1.3-4"	"0.6.0"
##	piam	pikcluster	pillar	pkgconfig
##	"0.8.2"	"0.04"	"1.2.3"	"2.0.1"
##	pkgmaker	plogr	plot3D	plotly
##	"0.22"	"0.2.0"	"1.1"	"4.5.6"
##	plotrix	plyr	png	polspline
##	"3.6-4"	"1.8.4"	"0.1-7"	"1.1.12"
##	polyclip	prabclus	prettyunits	processx
##	"1.6-1"	"2.2-6"	"1.0.2"	"3.1.0"
##	prodlim	profvis	progress	proto
##	"2018.04.18"	"0.3.3"	"1.1.2"	"1.0.0"
##	pse	psych	purrr	pwt
##	"0.4.7"	"1.6.12"	"0.2.4"	"7.1-1"
##	qgraph	quadprog	qualV	quanteda
##	"1.4.2"	"1.5-5"	"0.3-2"	"1.3.4"
##	quitte	randomForest	randomForestExplainer	raster
##	"0.3072.0"	"4.6-14"	"0.9"	"2.5-8"
##	rasterVis	readr	readstata13	readxl

##	"0.41"	"1.1.1"	"0.9.0"	"1.0.0"
##	recipes	registry	rematch	remind
##	"0.1.2"	"0.3"	"1.0.1"	"36.91.0"
##	remulator	reprex	reshape	reshape2
##	"1.16.0"	"0.1.1"	"0.8.7"	"1.4.3"
##	reticulate	rfPermute	rgdal	rgenoud
##	"1.10"	"2.1.5"	"1.2-5"	"5.7-12.4"
##	rgeos	rgexf	rhdf5	rjson
##	"0.3-17"	"0.15.3"	"2.18.0"	"0.2.15"
##	rlang	rmarkdown	rms	rmsfact
##	"0.2.0"	"1.9"	"5.1-0"	"0.0.3"
##	rngtools	robustbase	rootSolve	roxygen2
##	"1.2.4"	"0.92-7"	"1.7"	"6.0.1"
##	rpart	rpart.plot	rprojroot	rscopus
##	"4.1-13"	"2.1.2"	"1.3-2"	"0.5.11"
##	rsm	rstudioapi	rvest	rworldmap
##	"2.8"	"0.7"	"0.3.2"	"1.3-6"
##	rworldxtra	sandwich	satellite	scales
##	"1.01"	"2.4-0"	"0.2.0"	"0.5.0"
##	scatterplot3d	selectr	sem	sendmailR
##	"0.3-38"	"0.3-1"	"3.1-8"	"1.2-1"
##	sensitivity	sfsmisc	shiny	shinycssloaders
##	"1.15.0"	"1.1-2"	"1.0.5"	"0.2.0"
##	shinyresults	shinythemes	slam	sna
##	"0.17.3"	"1.1.1"	"0.1-40"	"2.4"
##	snow	soiltexture	sourcetools	sp
##	"0.4-2"	"1.4.1"	"0.1.5"	"1.3-1"
##	spData	spacetime	spacyr	spam
##	"0.2.8.3"	"1.2-0"	"0.9.91"	"1.4-0"
##	sparsepp	spatstat	spatstat.data	spatstat.utils
##	"0.2.0"	"1.55-1"	"1.2-0"	"1.8-0"
##	spdep	splanCS	statnet.common	stopwords
##	"0.6-11"	"2.01-40"	"3.3.0"	"0.9.0"
##	stringdist	stringi	stringr	strucchange
##	"0.9.4.4"	"1.2.2"	"1.3.1"	"1.5-1"
##	swfscMisc	tensor	testthat	text2vec
##	"1.2"	"1.5"	"2.0.0"	"0.4.0"
##	tibble	tidyr	tidyselect	tidyverse
##	"1.4.2"	"0.8.1"	"0.2.4"	"1.2.1"
##	tiff	timeDate	tinytex	tm
##	"0.1-5"	"3012.100"	"0.5"	"0.7-1"
##	trafficlight	trefoil	trimcluster	tseries
##	"1.13.0"	"0.01"	"0.1-2"	"0.10-38"
##	tweenr	txtplot	udunits2	units
##	"0.1.5"	"1.0-3"	"0.13"	"0.6-2"
##	urca	uroot	utf8	validation
##	"1.3-0"	"2.0-9"	"1.1.4"	"1.195"
##	vcd	viridis	viridisLite	visNetwork
##	"1.4-3"	"0.5.1"	"0.3.0"	"2.0.4"
##	webshot	weights	whisker	withr
##	"0.4.0"	"0.85"	"0.3-2"	"2.1.2"
##	xml2	xtable	xts	yaImpute
##	"1.1.1"	"1.8-2"	"0.9-7"	"1.0-29"
##	yaml	zip	zlibbioc	zoo
##	"2.2.0"	"1.0.0"	"1.20.0"	"1.8-1"
##	BH	Formula	KernSmooth	MASS
##	"1.62.0-1"	"1.2-1"	"2.23-15"	"7.3-45"
##	Matrix	MatrixModels	ModelMetrics	R6
##	"1.2-8"	"0.4-1"	"1.1.0"	"2.2.0"
##	RColorBrewer	Rcpp	RcppEigen	Rmpi

##	"1.1-2"	"0.12.10"	"0.3.2.9.1"	"0.6-6"
##	SparseM	TH.data	abind	acepack
##	"1.76"	"1.0-8"	"1.4-5"	"1.4.1"
##	assertthat	backports	base	base64enc
##	"0.1"	"1.0.5"	"3.3.2"	"0.1-3"
##	bdsmatrix	bit	bitops	boot
##	"1.3-2"	"1.1-12"	"1.0-6"	"1.3-18"
##	caTools	car	cffdrs	checkmate
##	"1.17.1"	"2.1-4"	"1.7.5"	"1.8.2"
##	chron	class	cluster	codetools
##	"2.3-50"	"7.3-14"	"2.0.6"	"0.2-15"
##	colorspace	compiler	crayon	data.table
##	"1.3-2"	"3.3.2"	"1.3.2"	"1.10.4"
##	datasets	dichromat	digest	doMPI
##	"3.3.2"	"2.0-0"	"0.6.12"	"0.2.1"
##	doParallel	evaluate	fastmatch	foreach
##	"1.0.10"	"0.10"	"1.1-0"	"1.4.3"
##	foreign	fwi.fbp	gdtools	ggplot2movies
##	"0.8-67"	"1.7"	"0.1.4"	"0.0.1"
##	grDevices	graphics	grid	gridExtra
##	"3.3.2"	"3.3.2"	"3.3.2"	"2.2.1"
##	gtable	gtools	hexbin	highr
##	"0.2.0"	"3.5.0"	"1.27.1"	"0.6"
##	htmlTable	htmltools	htmlwidgets	iterators
##	"1.9"	"0.3.5"	"0.8"	"1.0.8"
##	jsonlite	knitr	labeling	lattice
##	"1.3"	"1.15.1"	"0.3"	"0.20-35"
##	latticeExtra	lazyeval	lme4	magrittr
##	"0.6-28"	"0.2.0"	"1.1-12"	"1.5"
##	mapproj	maps	maptools	markdown
##	"1.2-4"	"3.1.1"	"0.9-2"	"0.7.7"
##	methods	mgcv	mime	minqa
##	"3.3.2"	"1.8-17"	"0.5"	"1.2.4"
##	mlbench	mmap	multcomp	munsell
##	"2.1-1"	"0.6-12"	"1.4-6"	"0.4.3"
##	mvtnorm	ncdf4	nlme	nloptr
##	"1.0-6"	"1.15"	"3.1-131"	"1.0.4"
##	nnet	parallel	pbkrtest	plyr
##	"7.3-12"	"3.3.2"	"0.4-7"	"1.8.4"
##	praise	quantreg	raster	reshape2
##	"1.0.0"	"5.29"	"2.5-8"	"1.4.2"
##	rex	rmarkdown	rpart	rprojroot
##	"1.1.1"	"1.4"	"4.1-10"	"1.2"
##	sandwich	scales	sp	spatial
##	"2.3-4"	"0.4.1"	"1.2-4"	"7.3-11"
##	spatial.tools	splines	stats	stats4
##	"1.4.8"	"3.3.2"	"3.3.2"	"3.3.2"
##	stringi	stringr	survival	svglite
##	"1.1.3"	"1.2.0"	"2.41-2"	"1.2.0"
##	tcltk	testthat	tibble	tools
##	"3.3.2"	"1.0.2"	"1.3.0"	"3.3.2"
##	utils	withr	yaml	zoo
##	"3.3.2"	"1.0.2"	"2.1.14"	"1.7-14"

model.run

## 69 Runtime information

```
## magpie.gms          : 0h 51m 37s
```