

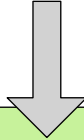
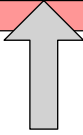
CLIMATE

Surface Air Temperature Change



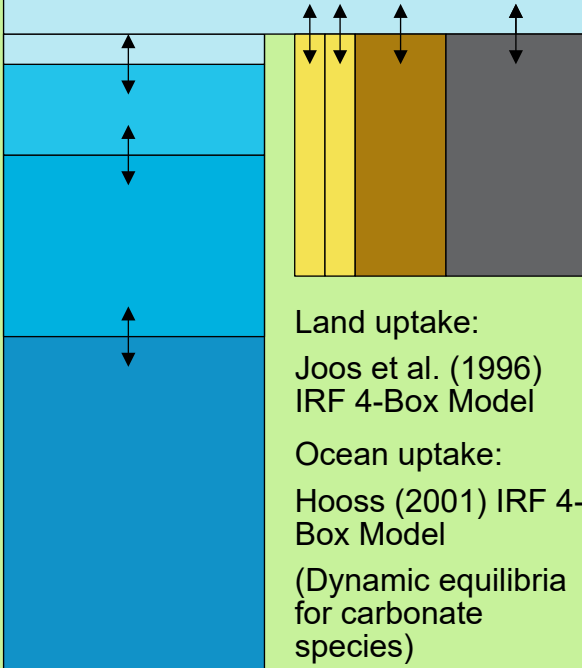
DOECLIM, land-ocean EBM
(Kriegler, 2005)

Total Radiative Forcing



CARBON CYCLE

Atmosphere



Land uptake:

Joos et al. (1996)
IRF 4-Box Model

Ocean uptake:

Hooss (2001) IRF 4-
Box Model
(Dynamic equilibria
for carbonate
species)

ATMOSPHERIC CHEMISTRY

Methane & Nitrous Oxide

SF₆ & 29 Halocarbons

Tropo-/Stratospheric Ozone

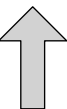
Sulfate/Carbonaceous Aerosols
(direct/indirect)

Stratospheric Water Vapour



Hydroxyl Radical (OH)

NO_x, CO, VOC



Emissions of Greenhouse Gases & Related Agents