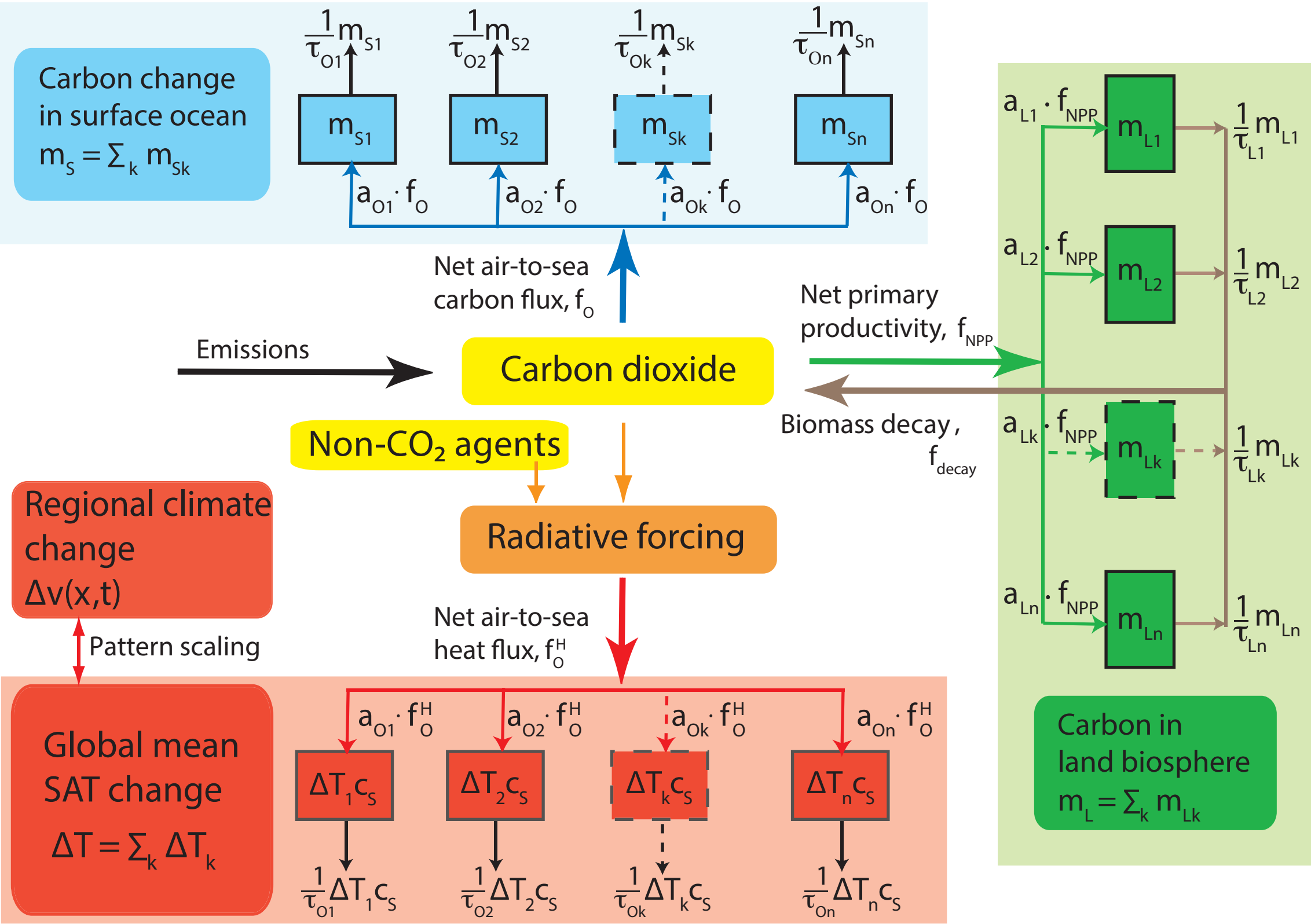
Carbon change in surface ocean
$m_S = \sum_k m_{Sk}$
$\frac{1}{\tau_{O1}} m_{S1}$
$\frac{1}{\tau_{O2}} m_{S2}$
$\frac{1}{\tau_{Ok}} m_{Sk}$
$\frac{1}{\tau_{On}} m_{Sn}$
m_{S1}
m_{S2}
m_{Sk}
m_{Sn}
$a_{O1} \cdot f_O$
$a_{O2} \cdot f_O$
$a_{Ok} \cdot f_O$
$a_{On} \cdot f_O$
Net air-to-sea carbon flux, f_O
Emissions
Carbon dioxide
Net primary productivity, f_{NPP}
Biomass decay, f_{decay}
Non-CO_2 agents
Radiative forcing
Regional climate change $\Delta v(x,t)$
Pattern scaling
Net air-to-sea heat flux, f_O^H
Global mean SAT change
$\Delta T = \sum_k \Delta T_k$
$a_{O1} \cdot f_O^H$
$a_{O2} \cdot f_O^H$
$a_{Ok} \cdot f_O^H$
$a_{On} \cdot f_O^H$
$\Delta T_1 c_S$
$\Delta T_2 c_S$
$\Delta T_k c_S$
$\Delta T_n c_S$
$\frac{1}{\tau_{O1}} \Delta T_1 c_S$
$\frac{1}{\tau_{O2}} \Delta T_2 c_S$
$\frac{1}{\tau_{Ok}} \Delta T_k c_S$
$\frac{1}{\tau_{On}} \Delta T_n c_S$
$a_{L1} \cdot f_{NPP}$
$a_{L2} \cdot f_{NPP}$
$a_{Lk} \cdot f_{NPP}$
$a_{Ln} \cdot f_{NPP}$
m_{L1}
m_{L2}
m_{Lk}
m_{Ln}
$\frac{1}{\tau_{L1}} m_{L1}$
$\frac{1}{\tau_{L2}} m_{L2}$
$\frac{1}{\tau_{Lk}} m_{Lk}$
$\frac{1}{\tau_{Ln}} m_{Ln}$
Carbon in land biosphere
$m_L = \sum_k m_{Lk}$