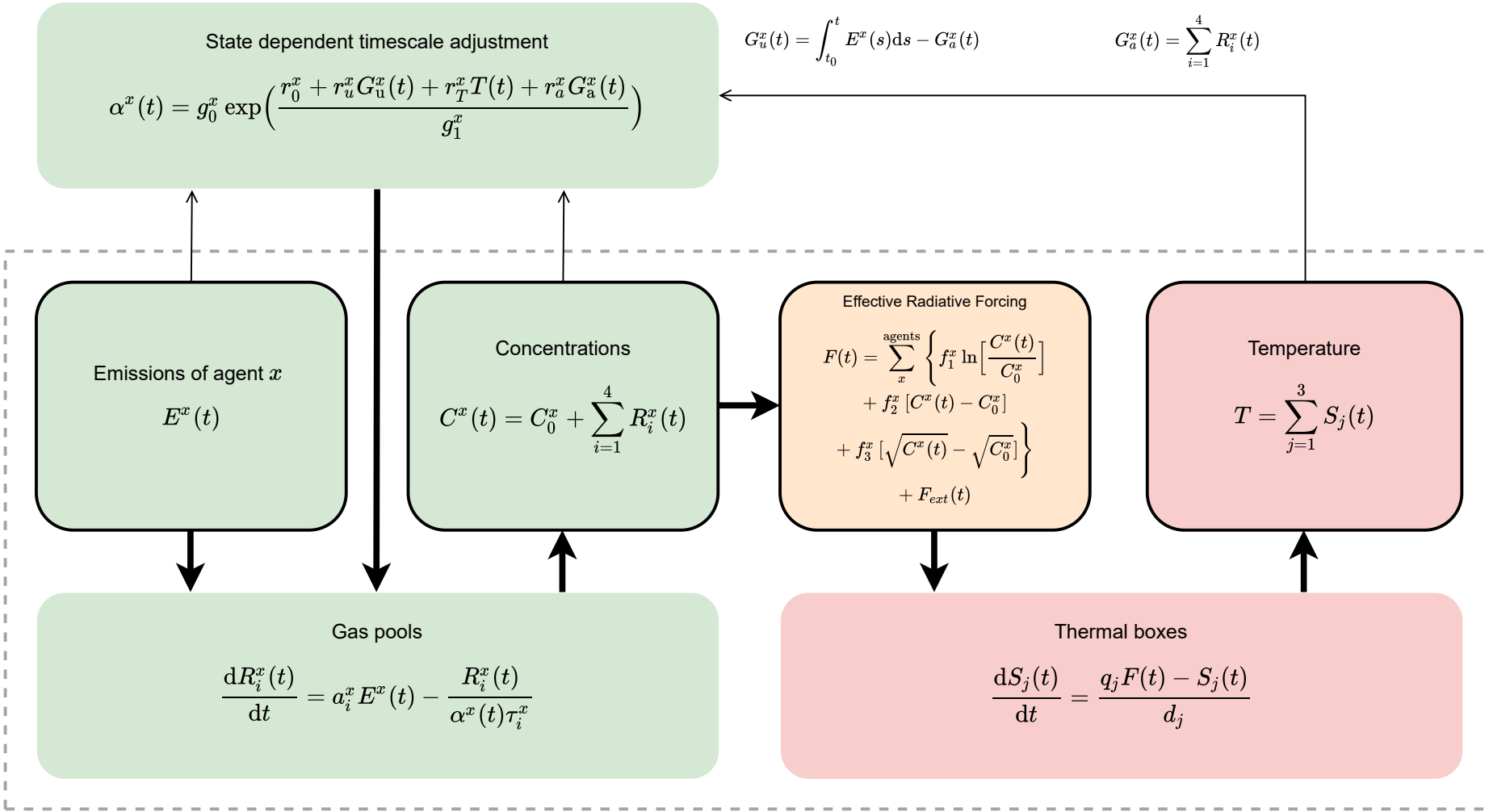
State dependent timescale adjustment
$\alpha^x(t) = g_0^x \exp\left(\frac{r_0^x + r_u^x G_u^x(t) + r_T^x T(t) + r_a^x G_a^x(t)}{g_1^x}\right)$
$G_u^x(t) = \int_{t_0}^{t} E^x(s)\mathrm{d}s - G_a^x(t)$
$G_a^x(t) = \sum_{i=1}^{4} R_i^x(t)$
Emissions of agent x
$E^x(t)$
Concentrations
$C^x(t) = C_0^x + \sum_{i=1}^{4} R_i^x(t)$
Effective Radiative Forcing
$F(t) = \sum_{x}^{\text{agents}} \left\{ f_1^x \ln\left[\frac{C^x(t)}{C_0^x}\right] + f_2^x \left[C^x(t) - C_0^x\right] + f_3^x \left[\sqrt{C^x(t)} - \sqrt{C_0^x}\right] \right\} + F_{ext}(t)$
Temperature
$T = \sum_{j=1}^{3} S_j(t)$
Gas pools
$\frac{\mathrm{d}R_i^x(t)}{\mathrm{d}t} = a_i^x E^x(t) - \frac{R_i^x(t)}{\alpha^x(t)\tau_i^x}$
Thermal boxes
$\frac{\mathrm{d}S_j(t)}{\mathrm{d}t} = \frac{q_j F(t) - S_j(t)}{d_j}$