

Variable	Meaning	Unit
m_A	Atmospheric CO ₂ carbon	Gt C
m_L	Land biomass carbon	Gt C
m_S	Dissolved inorganic C perturbation in ocean mixed layer	Gt C
ΔDIC	Perturbation of dissolved inorganic C concentration in mixed layer	$\mu\text{mol kg}^{-1}$
$p_{A/S}^{\text{CO}_2}$	Atmospheric or ocean surface CO ₂ pressure	ppm
RF	Radiative forcing	W m^{-2}
ΔT	Global mean surface (ocean) temperature perturbation	$^{\circ}\text{C}$
ΔT^{eq}	Equilibrium ΔT for current RF	$^{\circ}\text{C}$
e	CO ₂ emissions	Gt C yr^{-1}
f_O	Air–sea C flux	Gt C yr^{-1}
f_{deep}	Net C flux from mixed layer to the deep ocean	Gt C yr^{-1}
f_{NPP}	NPP	Gt C yr^{-1}
f_{decay}	Decay of terrestrial biomass C	Gt C yr^{-1}
f_O^{H}	Air–sea heat flux	W
$f_{O \text{ deep}}^{\text{H}}$	Net heat flux from mixed layer to the deep ocean	W