Symbol	Variable	unit
A_r	Relative abundance	unitless
B	Total plant carbon	$KgCm^{-2}$
B_T	Total grid cell biomass	$KgCm^{-2}$
B_Z	Carbon content in a compartment	$KgCm^{-2}$
C_a	Atmospheric CO_2 concentration	ppmv
C_{initZ}	Initial carbon content in a plant comparment	$KgCm^{-2}$
C_{press}	Partial CO_2 pressure at leaf interior	Pa
C_r	Canopy resistance	sm^{-1}
c_{sru}	Water uptake capacity	$mmH_2OkgC^{-1}day^{-1}$
D	Atmospheric demand for transpiration	mmH_2Oday^{-1}
E_{pot}	Potential evapotranspiration	mmH_2Oday^{-1}
E_{vap}	Evapotranspiration	mmH_2Oday^{-1}
f_1	leaf level gross photosynthesis	$molCO_2m^{-2}s^{-1}$
f_2	Michaelis-Menten constant for CO_2	Pa
f_3	Michaelis-Menten constant for O_2	Pa
f_4	Function for upscaling the leaf level photosynthesis to the canopy level	unitless
f_5	Water stress factor	unitless
g_1	Conductance sensibility to the carbon assimilation	$kPa^{1/2}$
g_{pot}	Canopy potential conductance	mms^{-1}
GPP	Gross primary productivity	$kgCm^{-2}yr^{-1}$
g_s	Stomatal conductance	$molCO_2m^{-2}s^{-1}$
h	Relative humidity	gkg^{-1}
H_y	Actual soil water content in a grid cell	mm
IPAR	Incident photosynthetic active radiation	$Einm^{-2}s^{-1}$
J_C	Rubisco carboxilation limiting factor for photosynthesis	$molCO_2m^{-2}s^{-1}$
J_E	Electron limiting factor for photosynthesis	$molCO_2m^{-2}s^{-1}$
J_L	Light limiting factor for photosynthesis	$molCO_2m^{-2}s^{-1}$
L	Water supply for transpiration	mmH_2Oday^{-1}
LAI	Leaf area index	unitless
nc	N:C ratio	unitless
NPP	Net primary productivity	$kgCm^{-2}yr^{-1}$
NPP_{grid}	Net primary productivity of a grid cell	$kgCm^{-2}yr^{-1}$

NPP_{pot}	Potential net primary productivity	$kgCm^{-2}yr^{-1}$
PAR	Shortwave radiation	$Einm^{-2}s^{-1}$
P_r	Precipitation	mmm^{-1}
P_{surf}	Surface water vapor pressure	atm
r	Leaf level moisture deficit	$kgkg^{-1}$
R_a	Autotrophic respiration	$kgCm^{-2}yr^{-1}$
R_g	Growth respiration	$kgCm^{-2}yr^{-1}$
R_m	Maintenance respiration	$kgCm^{-2}yr^{-1}$
r_{max}	Saturated mixing ratio	$kgkg^{-1}$
R_{off}	Runoff	mmH_2O
SLA	Specific leaf area	$m^{-2}KgC$
T	Temperature	ºC
T_{soil}	Soil temperature	ºC
V_m	Rubisco carboxilation rate	$molCO^2m^{-2}s^{-1}$
VPD	Deficit of vapor pressure on the leaf surface	kPa
w_{press}	Partial pressure of water vapor	hPa
w_{saty}	Degree of water soil saturation	unitless
Γ́	Photorespiration compensation point	Pa