

Appendix

Divergent responses of NPP to climate factors among forest types at interannual and inter-monthly scales: An empirical study on four typical forest types in subtropical China

Table S.1 Ecophysiological parameters of the forest types used in the model

Parameter	Units	ENF	EBF	Bambo o
annual leaf and fine root turnover fraction	1/year	0.26	0.5	0.675**
annual live wood turnover fraction	1/year	0.7	0.7	0.7
annual whole-plant mortality fraction	1/year	0.005	0.005	0.005
annual fire mortality fraction	1/year	0.005	0.002	0.005
(ALLOCATION) new fine root C: new leaf C	ratio	1.4	1.2**	1
(ALLOCATION) new stem C: new leaf C	ratio	2.2	2.2	1.8
(ALLOCATION) new live wood C: new total wood C	ratio	0.071	0.16	0.1
(ALLOCATION) new croot C: new stem C	ratio	0.29	0.3	0.42
(ALLOCATION) current growth proportion	prop.	0.5	0.5	0.5
C: N of leaves	kg C/kg N	39.2*	32.44*	41.73*
C: N of leaf litter, after retrain location	kg C/kg N	93	49	93
C: N of fine roots	kg C/kg N	63*	57.18*	72.9*
C: N of live wood	kg C/kg N	63*	57.18*	72.9*
C: N of dead wood	kg C/kg N	823*	400*	729
leaf litter labile proportion	DIM	0.31	0.32	0.32
leaf litter cellulose proportion	DIM	0.45	0.44	0.44
leaf litter lignin proportion	DIM	0.24	0.24	0.24
fine root labile proportion	DIM	0.34	0.3	0.3
fine root cellulose proportion	DIM	0.44	0.45	0.45
fine root lignin proportion	DIM	0.22	0.25	0.25
dead wood cellulose proportion	DIM	0.71	0.76	0.76
dead wood lignin proportion	DIM	0.29	0.24	0.24
canopy water interception coefficient	1/LAI/d	0.045	0.01**	0.041

canopy light extinction coefficient	DIM	0.51	0.7	0.2698**
all-sided to projected leaf area ratio	DIM	2.6	2	2
canopy average specific leaf area (projected area basis)	m ² /kg C	8.2*	13.2*	13.28*
ratio of shaded SLA: sunlit SLA	DIM	2	2	2
fraction of leaf N in Rubisco	DIM	0.08	0.06	0.06
maximum stomatal conductance (projected area basis)	m/s	0.006	0.005	0.006**
cuticular conductance (projected area basis)	m/s	0.0000 6	0.0000 1	0.00001
boundary layer conductance (projected area basis)	m/s	0.09	0.01	0.01
leaf water potential: start of conductance reduction	MPa	-0.65	-0.6	-0.6
leaf water potential: complete conductance reduction	MPa	-2.5	-3.9	-3.9
vapor pressure deficit: start of conductance reduction	Pa	610	1800	930
vapor pressure deficit: complete conductance reduction	Pa	3100	4100	4100

Note: * represents parameters derived from field measurements in this study; ** represents parameters derived from references; unlabeled parameters are derived from default values given by the study of White et al. [40].