variables	explanation	unit
YEAR	year of simulation	
*****	***class level***	*****
LAYER	forest layer	
HEIGHT	tree height	meter
AGE	average age	year
SPECIES	name	
GPP	gross primary production	gC/m2/year
AR	autotrophic respiration	gC/m2/year
NPP	net primary production	gC/m2/year
Y(%)	annual net production effiency (aut resp/gpp)	%
LAI	annual PEAK lai	m2/m2
AVDBH	avg dbh	cm
CC	canopy cover	frac/cell
DBHDC	effective dbh/crown diameter ratio	ratio
Ntree	number of trees	tree
VEG_D	number of vegetative days	days/year
CET	canopy evapotranspiration	mm/m2/year
CLE	canopy latent heat	W/m2
WRes	reserve biomass (starch and sugar)	t/ha
WS	stem biomass toal live + dead	tC/ha
WSL	live "respiring"stem biomass	tC/ha
WSD	dead stem biomass	tC/ha
PWL	leaf biomass at Peak LAI	tC/ha
PWFR	fine root biomass at Peak LAI	tC/ha
WCR	coarse root biomass toal live + dead	tC/ha
WCRL	live "respiring" coarse root biomass	tC/ha
WCRD	dead coarse root biomass	tC/ha
WBB	branch toal live + dead	tC/ha
WBBL	live "respiring" branch biomass	tC/ha
WBBD	dead branch biomass	tC/ha
SAR	stem aut respiration	gC/m2 year
LAR	leaf aut resp	gC/m2 year
FAR	fine root aut resp	gC/m2 year
CRAR	coarse root aut resp	gC/m2 year
BBAR	branch aut resp	gC/m2 year
*****	***cell level***	*****
gpp	gross primary production	gC/m2 year
npp	net primary production	gC/m2 year
ar	autotrophic respiration	gC/m2 year
y(%)	annual net production effiency-y (aut resp/gpp)	%
et	cell evapotransiration (canopy + soil)	mm/m2/year
le	cell latent heat (canopy + soil)	W/m2
asw	cell available soil water	mm/m2
*****	**********	*****

note: variables are updated at the enf of the year

dead = non respiring