

Entity/ Group	Quantity or parameter	Type	Freq.	COUP		LPJ-GUESS		JULES	
				Units	Importance	Units	Importance	Units	Importance
		In = input, Va=validation		Importance - 0 low, 1 medium, 2 high					
Basics	Site name	ID	once	text	2	text	2	text	2
	Treatment name	ID	once	text	2	text	2	text	2
	Site Latitude	In	once	decimal degree	2	decimal degree	2	decimal degree	2
	Site Longitude	In	once	decimal degree	2	decimal degree	2	decimal degree	2
	Elevation	In	once		0		0		0
	Vegetation Type	In	once		0	text (PFT)	1	text (PFT or species)	1
	Management history (description)	In	Annual	text	1	text	1		0
	Start/end plant growing season/fumigation period	In	Annual		0		0		0
Climate	Soil temperature - mean annual	In	Annual		0		0		0
	Air temperature - mean annual	In	Annual		0		0		0
	Air temperature - daily / monthly	In	Daily/monthly	daily, °C	2	daily, °C	2		0
	Air temperature - hourly	In	Hourly	°C	2		0	°C	2
	Air temperature minimum - daily	In	Daily		0	°C	2		0
	Air temperature maximum - daily	In	Daily		0	°C	2		0
	Air temperature - July maximum	In	Annual		0		0		0
	Air temperature - January minimum	In	Annual		0		0		0
	Leaf temperature	In	Hourly		0		0		0
	Precipitation flux - annual	In	Annual		0		0		0
	Precipitation flux - daily	In	Daily		0	mm/d	2		0
	Precipitation flux - hourly	In	Hourly	mm/hr	2		0	mm/hr	2
	Runoff flux (precipitation surplus) - annual	In	Annual		0		0		0
	Relative humidity	In	Daily		0		0		0
	Vapour pressure deficit	In	Hourly		0		0	kg/kg	2
	PAR flux	In	Daily/monthly	W/m2	2	W/m2	2		0
	Heat flux density	In	Hourly		0		0	W/m2	2
	Air pressure	In	Hourly		0		0		0
	Wind speed - hourly	In	Hourly	m/s	2		0	m/s	2
	Wind speed - daily	In	Daily		0		0		0
Turbulent Stress	In	Hourly		0		0		0	
Deposition	Ozone concentration - daily	In	Daily		0		0		0
	Ozone concentration - hourly	In	Hourly		0		0		0
	CO2 concentration - daily	In	Daily	ppm	2	ppm	2	ppm	2
	CO2 concentration - hourly	In	Hourly		0		0		0
	NH ₃ deposition flux	In	Annual	gN/m2/yr	2	gN/m2/yr	2		0
	NO _x deposition flux	In	Annual	gN/m2/yr	2	gN/m2/yr	2		0
	NH ₃ atmospheric concentration	In	Daily		0		0		0
Soil	Soil depth above which properties & stocks are recorded - e.g. solution sampling depth	In	once	m	2		0		0
	Organic horizon thickness	In	once	m	2		0		0
	Soil bulk density	In	Annual		2		0		0
	Soil texture	In	once	pF/soil layer	2		1		1
	Soil water content	In	Annual mean		0		0		0
	Cation exchange capacity	In	once		0		0		0
Veget	Canopy height	In	Annual		0	m	1	m	1
	Max rooting depth	In	Annual		0	m	1	m	1
Soil	Soil C stock	Va	once	gC/m2	2	gC/m2	1	gC/m2	1
	Soil N stock	Va	once	gN/m2	2	gN/m2	1	gN/m2	1
	Soil solution pH	Va	Annual		0		0		0
	Soil slurry pH	Va	Annual		0		0		0
	Soil respiration C flux	Va	Bi-weekly	any	1	any	1		0
	Mineral N leaching flux	Va	Monthly	gN/m2/yr	1	gN/m2/yr	1		0
	Dissolved organic N flux	Va	Annual		0		0		0
	Dissolved organic C flux	Va	Annual		0		0		0
	Annual runoff flux (precipitation surplus)	Va	Annual	mm/yr	1	mm/yr	1		0
	Soil water content	Va	Daily	%	2		0		0
	soil water status (volumetric or potential)	Va	Hourly		0		0		0
	Soil surface evaporation	Va	Hourly		0		0		0
	Transpiration	Va	Hourly	any	1		0		0
	Stomatal conductance	Va	Hourly	any	1		0		0
	Sap flow data	Va	Hourly		0		0		0

Vegetation	Leaf water potential	Va	Hourly	any	1		0		0
	Pre-dawn leaf water potential	Va	Hourly		0		0		0
	Litter production C flux	Va	Annual		1	gC/m2/yr	1		0
	Litter production N flux	Va	Annual	gN/m2/yr	1	gN/m2/yr	1		0
	Litter C content	Va	Annual	gC/g dm	1	gC/g dm	2		0
	Litter N content	Va	Annual	gC/g dm	1	gC/g dm	2		0
	Photosynthesis net C flux - daily / monthly	Va	Daily/monthly	gC/m2/yr	0	gC/m2/yr	2		0
	Photosynthesis net C flux - hourly	Va	Hourly	any	1		0		0
	Plant respiration	Va	Hourly	any	1	any	1		0
	Shoot biomass	Va	Hourly		0		0		0
	Shoot total peak C stock	Va	Annual	any	1		0		0
	Shoot total peak C stock, by plant functional type	Va	Annual		0		0		0
	Shoot total peak N stock	Va	Annual	any	1		0		0
	Crop yield	Va	Annual	gC/m2/yr	1	gC/m2/yr	2		0
	Wood C stock	Va	Annual	gC/m2	2	gC/m2	2		0
	Wood C/N	Va	Annual	ratio	1	ratio	2	ratio	2
	Leaf biomass	Va	Hourly		1		0		0
	Leaf C stock	Va	Annual max	gC/m2	2	gC/m2	2		0
	Leaf C/N	Va	Annual	ratio	1	ratio	2	ratio	2
	Root biomass	Va	Hourly	gC/m2	1		0		0
	Root C stock	Va	Annual max	gC/m2	2	gC/m2	2		0
	Root N stock	Va	Annual	gN/m2	1	gN/m2	1		0
	Root C/N	Va	Annual	ratio	2	ratio	2	ratio	2
	Evaporation	Va	Daily or yearly	mm/yr	2	mm/yr	2		0
	Evaporation over grass	Va	Annual		0		0		0
	Canopy height	Va	Annual	m	1	m	1		0
	LAI	Va	Annual		2		2		2
Floristics	Species present	Va	Annual		0		0		0
	Cover of present species	Va	Annual		0		0		0
	Tree type/ composition	Va	once		0	e.g., relative LAI cover	1	PFT	1