yyyy_ss.txt

These output files hold modelled annual load results. *yyyy* stands for a year during the simulation period and *ss* stands for one of the HYPE-modelled nitrogen (IN, ON) and phosphorus (PP, SP) species (an actual file name would be e.g. *2001_IN.txt*). The files contain modelled annual nutrient loads before and after retention/removal along the modelled nutrient transport pathways.

yyyy_ss.txt are tab-separated files written to the resultdir folder if requested in output options of info.txt. The first row contains a column header with variable names. The following rows contain values for all variables, in one row per sub-basin.

The table below describes all variables written column-wise in *yyyy_ss.txt*. Variables with a *_nn* in header suffix are calculated for each SLC class separately, with *nn* numbers corresponding to numbers in GeoClass.txt, so that the total number of columns varies depending on the number of SLC classes in the model set-up. Point source variable with a *NN* in header suffix are currently eight in total follow each other in order.

Variable ID	Unit	Description
`subid`	-	sub-basin identification number
`WetAtm_nn`	*kg/year*	gross load in wet atmospheric deposition on SLC class area in the sub-basin
`DryAtm_nn`	*kg/year*	gross load in dry atmospheric deposition on SLC class area in the sub-basin
`Fertil_nn`	*kg/year*	gross load in fertilizer application on SLC class area in the sub-basin
`PDecay_nn`	*kg/year*	gross load from plant residues on SLC class area in the sub-basin
`RuralA_nn`	*kg/year*	gross load from rural household source fraction which is routed into lowest soil layer (see parameter *locsoil* in par.txt), land SLC classes only
`GrwSln_nn`	*kg/year*	gross load from groundwater flows into lowest soil layer (regional groundwater routine 1, see code `deepground` in info.txt model options, land SLC classes only)
`IrrSrc_nn`	*kg/year*	gross load in irrigation water, land SLC classes only
`Runoff_nn`	*kg/year*	total load in runoff to local stream, including soil runoff, tile drainage, and surface runoff, land SLC classes only
`RzLay3_nn`	*kg/year*	load in runoff from root zone, including soil runoff, tile drainage, surface runoff, and percolation to layer 3, land SLC classes only
`RfLay3_nn`	*kg/year*	load in runoff from third soil layer to local stream, including soil runoff and tile drainage, land SLC classes only
`RuralB`	*kg/year*	gross load from rural household source fraction which is routed into local stream (see parameter *locsoil* in par.txt)
`PointNN`	*kg/year*	gross load in point source type NN, eight columns with NN=01-08 (see description in PointSourceData.txt)
`Rgrwmr`	*kg/year*	gross load from groundwater flows into main river (regional groundwater routine 2, see code `deepground` in info.txt model options)
`Wtrans`	*kg/year*	load from water transfer (given in MgmtData) into main river
`Rgrvol`	*kg/year*	gross load from groundwater flows into outlet lake if GeoData.txt variable //grwolake// > 0 (regional groundwater routine 1, see code `deepground` in info.txt model options)
`A`	*kg/year*	load to local stream from all SLC classes
`B`	*kg/year*	part of load to local stream from all SLC classes that bypasses the internal wetland

Variable ID	Unit	Description
C	*kg/year*	part of load to local stream from all SLC classes that goes into the internal wetland
D	*kg/year*	load in fraction of load to local stream that has passed through internal wetland
E	*kg/year*	load to local stream after internal wetlands
F	*kg/year*	load in local stream after internal wetlands and from rural household source local stream fraction (E + RuralB)
G	*kg/year*	load in local stream (F) after including the effect of local river wetlands (defined in GeoData.txt, see also wetlands in model description)
H	*kg/year*	load after passage of local streams but before internal lakes
I	*kg/year*	load in fraction of local stream discharge that bypasses local lakes (see variable icatch in GeoData.txt
J	*kg/year*	load in fraction of local stream discharge that passes through local lakes (see variable icatch in GeoData.txt
K	*kg/year*	load in fraction of local stream discharge that has passed through local lakes
L	*kg/year*	net load in local stream after local lake passage (J + K)
MA	*kg/year*	total load to main river, consisting of: net load of local stream, upstream load, point source loads (Urban1-3), water transfers (Wtrans) and groundwater load (Rgrwmr)
M	*kg/year*	total load to main river, consisting of: net load of local stream, upstream load, point source loads (Urban1-3), water transfers (Wtrans) and groundwater load (Rgrwmr), as well as abstractions for irrigation etc.
N	*kg/year*	load to main river after including the effect of main river wetlands (defined in GeoData.txt, see also wetlands in model description)
O	*kg/year*	load in main river, after river passage (river nutrient proesses)
P	*kg/year*	load in main river, after outlet wetland
Q	*kg/year*	load in main river with added inflow from lakebasins and regional ground water sources (Rgrwmr)
R	*kg/year*	net load in main river after outlet lake passage
S	*kg/year*	load in bifurcation branch (see BranchData.txt)