

## LoadNN\_SLCNNN.txt

File with excess load for each land class. The load is provided as average daily mean load in a monthly time series. One file per substance and class is needed, except for T2 and water classes. NN in the file name stands for the substance code (IN=inorganic nitrogen, ON=organic nitrogen, SP=soluble phosphorus, PP=particulate phosphorus, OC=organic carbon, SS=suspended sediments, AE=algae nitrogen, T1=tracer) and NNN for the slc number. Unit is kg/km<sup>2</sup>/d for nutrients and OC, SS, AE. T1 has the general unit U/km<sup>2</sup>/d.

The excess load of classes is used when modelling soil substances with the [travel time soil model](#). For this model load is applied, substances released to water and both load and dissolved substances decay with a rate depending on substance, class, soil layer etc.

The file comes in two versions, one for typical monthly loads and one for time series of monthly loads. The two versions can not be combined in the same model setup. Soilleakage model 2 and 5 uses typical monthly loads, while soilleakage model 3 has time series of monthly load for the simulation period. Soilleakage model 4 uses constant loads, and these are read from a file with the the format of the first version with only one column with values. For both file types the first row is headings. For version 1, the first column is subid, the second to 13th column is monthly values. For version 2, the first column is time (year-month), the second column and onward is subbasins (subid). The data are monthly values, either for the month of this year or for this month every year. If T2 is simulated it does not use/need a load-file. If for soilleakage model 3 data are lacking for year-months in the beginning of the simulation, the first available year of data is used to fill up the space during the upspin period. The file is located in the `forcingdir` folder (which is set in [info.txt](#)).

Example of first version of file; LoadIN\_SLC001.txt:

SUBID	1	2	3	4	...	12
101 0	1	1	0			
202 1	1	1	0			
203 0	2	2	2			
...						

Example of second version of file; LoadIN\_SLC001.txt:

DATE	1	34	195	202	207	322
2002-01 0	1	1	0	3	0	
2002-02 0	1	1	0	3	0	
2002-03 0	2	2	0	3	0	
...						