

PSTIMESeries.txt

The time series can be daily, monthly or yearly; PSDailySeries.txt, PSMonthlySeries.txt or PSYearlySeries.txt. The file is used for introducing time series of point sources or abstractions into the model. The point sources and abstractions are defined in the file [PointSourceData.txt](#), while the time series data is given in this file. The file is used when readpstime is set in [info.txt](#)

The file is located in the modeldir folder. File should include a continuous time period of values for each time step, which doesn't need to cover the whole simulation time period. Missing values (-9999) are allowed for concentrations when the flow is zero, but zero concentration works as well.

The first row gives the variable names. For the first column, the date column, the name "date" can be used (may not be omitted). The second row gives which pointsource (psid in [PointSourceData.txt](#)) the column's data is given for. The date column may in this case belong to psid 0 (may not be omitted). The first column is date in format yyyy-mm-dd or yyyyymmdd (or yyyy-mm, yyyyymm, yyyy if monthly or yearly time series). No time is permitted. Second to last columns are data columns.

Variables that can be given are tabled below. Flow is mandatory, while concentrations is optional columns. Missing concentration variables are set to zero. Flow should be larger than or equal to zero.

Note that the units are not always the same as for constant point sources in [PointSourceData.txt](#).

Variable ID	Unit	Description
flow	m^3/s	point source discharge or abstraction
INconc	mg/l	inorganic nitrogen concentration of point source discharge
ONconc	mg/l	organic nitrogen concentration of point source discharge
SPconc	mg/l	soluble phosphorus concentration of point source discharge
PPconc	mg/l	particulate phosphorus concentration of point source discharge
OCconc	mg/l	dissolved organic carbon concentration of point source discharge
SSconc	mg/l	suspended sediment concentration of point source discharge
AEconc	mg/l	algae nitrogen concentration of point source discharge
DSconc	mg/l	dissolved silica concentration of point source discharge
ASconc	mg/l	algae silica concentration of point source discharge
T1conc	uU/l	tracer concentration of point source discharge
T2conc	degree Celsius	temperature of point source discharge

Example of PointSourceData.txt for time series point sources: first row: a waste water point source, second row an abstraction from the main river and its inflow.

```
subid psid ps_type ps_source
567 1 1 3
668 2 -1 3
```