

Xoregobs.txt

The file is used for introducing time series of output region variables into the model. The time series are observations used for evaluation of the model, e.g. rgrswe snow water equivalent.

The file is located in the `otherobsdir` folder set in [info.txt](#). If the path is not set, the file is searched for in `forcingdir`. 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 should be given as -9999.

The first row(s) may be comment rows. These rows have to start with `!!`. At least one comment row is needed. The first row, not a comment row, gives the variable names. For the first column, the date column, the name "date" can be used (no name may not be omitted). The third row gives which output region (`outregid` in [Outregions.txt](#)) the column's data is given for. The date column may in this case belong to subbasin 0 (may not be omitted). The first column is date in format `yyyy-mm-dd [HH:MM]`. If set in [info.txt](#) that matlab-format should be read (`readformat 1`) the date format is `yyyymmdd[HHMM]`. Second to last columns are data columns.

Observation variables that can be given in *Xobs.txt* are tabled [here](#). They are a selection of the complete [HYPE variables](#). The outregion version of the variables can be given in *Xoregobs.txt* by extending the name of the variable with 'rg' in the beginning (e.g. `rswe` correspond to outregion variable `rgrswe`). Some regional variables give result that is not meaningful (e.g. `rgwstr`).

Column **Agg.**, in table for *Xobs* variables, indicates the type of aggregation of the variables. The type determines how the variable is treated when asked for as an output variable or in a criterion calculation. The `meanperiod` of the output/criterion determines the period over which the variables values will be aggregated. They will be averaged, weight-averaged or summed according to the type of aggregation. Similarly variable values in *Xoregobs.txt* represent either averages, weighted averages, or sums over the timestep.