TMINobs.txt

TMINobs.txt holds daily minimum air temperature forcing data for HYPE. Minimum and maximum air temperature can only be used for models with daily time step (for now). Several of the available model options for potential evaporation depend on vapor pressures and net radiation, which may be calculated with the help of minimum and maximum air temperature data.

The file is located in the modeldir folder (set in info.txt). Air temperature (degree Celsius) has to be given for all timesteps, but longer time series is allowed. No missing values may exist. Program won't handle them. The *TMINobs-file* is read only if `readtminmaxobs` is set in info.txt.

The first row is column headings. It holds a text string (e.g. 'date', no spaces allowed) for the first column, and integers in the form of station or subbasin id numbers for the rest of the columns.

The first column is date-time. The default format is yyyy-mm-dd. The date-time is the beginning of the timestep. It is possible to use date-time format: yyyymmdd instead. It is expected for all forcing files if `readformat 1` is set in info.txt.

The second to last columns are minimum air temperature for all stations or subbasins. The ID number (first row) may be `tminobsid` or `subid`. If `tminobsid` is used, several subbasins may use the same temperature time series. `subid` is defined in GeoData.txt. The order of subbasins does not have to be same as in GeoData.txt. `tminobsid` may be defined in ForcKey.txt or GeoData.txt.

Example snippet of *TMINobs.txt* file:

```
date                 1234  1245
1990-01-01 00:00     0     0
1990-01-01 12:00     2.0   3.0
1990-01-02 00:00     -1.5  0.5
...
```

TMINobs_nnn.txt holds air temperature forcing data for sequence with seqnr nnn. For seqnr 0 *TMINobs.txt* is used.