Tobs.txt/Tobs_nnn.txt

Tobs.txt holds air temperature forcing data for HYPE. The file is located in the forcingdir 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 HYPE variable ID `temp` correspond to the data of the *Tobs.txt* file.

The file may have comment rows in the beginning of the file. These rows have to begin with `!!`. The first row read 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 [HH:MM], where hour and minutes are necessary if the timestep is shorter than one day. The date-time is the beginning of the timestep. It is possible to use another date-time format: yyyymmdd[HHMM]. It is expected for all forcing files, if `readformat 1` is set in info.txt.

The second to last columns are air temperature for all stations or subbasins. The ID number (first row) may be `tobsid` or `subid`. If `tobsid` 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. `tobsid` may be defined in ForcKey.txt.

Example snippet of *Tobs.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
...
```

For calibration of small model setups running time may be reduced by holding the forcing data in memory instead of reading the files for each time step. This option is set in info.txt (`readdaily N`).

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