

# Tobs.txt/Tobs\_nnn.txt

*Tobs.txt* holds air temperature forcing data for HYPE. 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 [HYPE variable ID](#) temp correspond to the data of the *Tobs.txt* file.

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 [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.