mapXXXX.txt

HYPE map output files are one of the standard result files for time series output from HYPE, the other are time output files (like map output files, but transposed), basin output files and region output files.

Map output files each contain results for a single HYPE variable for all modelled sub-basins. They are mainly intended to be joined to a GIS map of sub-basins in order to plot results. All values of map output variables are saved in memory until the end of the simulation, it should therefore not be used to write many periods of aggregated values. If the model and the output are large the available memory may limit the program. If you want output for every time step of the model it is suggested to use time output files instead. To write map output files, specify a `mapoutput` for the variables of interest in the info.txt file.

Example snippet of a info.txt file:

```
!! map outputs for measured and simulated discharge
mapoutput variable rout cout
mapoutput meanperiod 4
mapoutput decimals 5
```

Map output files are written to the resultdir folder. **XXXX** in the file name is substituted by the variable ID (same ID as used in info.txt, for example *mapCOUT.txt*. All HYPE variable IDs are described in the **list of HYPE variables**.

Map output files contain comma-separated data with column-wise time periods and row-wise sub-basins, corresponding to attribute tables of sub-basin maps. The first row contains a text comment. It briefly describes the HYPE variable which is contained in the file. Row two contains column headings. The first column contains sub-basin IDs (SUBID), following columns contain model results of the given variable for the requested time period. Missing values are given as -9999.

Example structure of a map output file *mapCOUT.txt* with annual discharge averages for a two-year model run:

```
 This is a file with comp outflow olake in m3/s for GIS mapping
SUBID,1999,2000
4472,0.228,0.301
3762,0.364,0.442
3753,0.561,0.641
3361,0.070,0.055
3427,0.100,0.092
 ...,  ...,  ...
```

When ensemble or sequence simulations are made, the results from simulations (I = 1 .. *n* or I = sequence number > 0) are written to files named *mapXXXX_00I.txt*, where *n* is defined by `num_ens` in optpar.txt. Alternatively, if a Monte Carlo simulation is done with task set to write all simulations (`task WS` in optpar.txt) files will be named *XXXXXXX_000000I.txt*. In this case up to 9999999 simulations can be saved.