

## Outregions.txt

This file contains information about output regions. Output regions are used to average subbasin results to larger areas, e.g. grid squares. The average is calculated based on subbasin and weights defined in this file *Outregions.txt*. For example if you want to have the average snow over three subbasins you give them weight according to their area fraction of the region. If you want other region, e.g. only part of the subbasin area to be included, you give other weights. The regional average is calculated simply based on given weight and the subbasin value.

*Outregions.txt* is a tab-separated file located in the [modeldir](#) folder. Output regions are listed row-wise. The first row contains a column header with column names. Column names are not case-sensitive (max. 10 characters, no spaces). Columns with headings unknown to HYPE are skipped while reading the file, but must not longer than ten characters. Columns containing character strings, e.g. descriptive meta-data, must not exceed a length of 100 characters. A value must exist for every column and row, i.e. empty cells are not allowed. Set subid and weight to zero if the number of subbasins included are less for one or more regions.

Example of a *Outregions.txt* file:

```
outregid xcoord ycoord subid_1 weight_1 subid_2 weight_2 subid_3 weight_3
1         5.5    4.4    748      0.5    22524   0.5      0        0
2         6.5    3.4   4869     0.4    22538   0.3     4790    0.3
```

Columns of the file is compiled to the table below.

Code	Requirement	Description
outregid	mandatory	output region id, must not over lap with subids
xcoord	optional	coordinate
ycoord	optional	coordinate
zcoord	optional	coordinate, could be elevation above sea level
subid_N	mandatory	subid of included subbasins, N is numbered 1 and up, set zero if not used
weight_N	mandatory	weight of the subid with corresponding N