FloodData.txt

This file contains definitions for HYPE's floodplain module, see process descriptions in the glaciers section of the HYPE model description. Floodplains can be simulated for main river class and outlet lake class, and can vary in size within its class area fraction.

FloodData.txt is a tab-separated file located in the modeldir folder. Sub-basins with glaciers are listed row-wise. The first row contains a column header with variable names. Variable 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. The columns may be in any order. A value must exist for every column and row, i.e. empty cells are not allowed. Maximum 50 columns is allowed in the file.

Example for a *FloodData.txt* file with a main river floodplain in subbasin 37:

```
SUBID FPFMR FYMMR FLMRR FLMRP RCRFP RCFPR
37    0.95  1.8   0.32  2.25  0.82  0.60
```

All *FloodData.txt* variables are described in the table below.

Variable ID	Unit	Description
subid	-	subbasin ID (integer) (mandatory)
fpfol	-	fraction of outlet lake slc-area that is floodplain (0-1)
fpfmr	-	fraction of main river slc-area that is floodplain (0-1)
floll	*m*	flooding threshold level for outlet lake to floodplain flow
flolp	*m*	flooding threshold level for floodplain to outlet lake flow
flmrr	*m*	flooding threshold level for main river to floodplain flow
flmrp	*m*	flooding threshold level for floodplain to main river flow
rclfp	-	recession coefficient for outlet lake to floodplain flow (0-1)
rcfpl	-	recession coefficient for floodplain to outlet lake flow (0-1)
rcrfp	-	recession coefficient for main river to floodplain flow (0-1)
rcfpr	-	recession coefficient for floodplain to main river flow (0-1)
fymol	*m*	water level at maximum areal extent of outlet lake floodplain
fymmr	*m*	water level at maximum areal extent of main river floodplain