The HYPE wiki pages

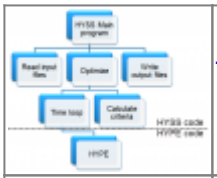
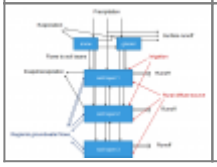
Welcome to the HYPE wiki pages. HYPE is an open source dynamic integrated rainfall-runoff and nutrient transfer model developed and maintained by the Swedish Meteorological and Hydrological Institute (SMHI).

HYPE is short for *HY*drological *P*redictions for the *E*nvironment. This wiki provides documentation for the HYPE model.

Available documentation

HYPE model description on this wiki. As exported pdf-file.

HYPE file reference on this wiki. As exported pdf-file.

	The structure of the HYPE code. Download pdf-file with an overview of HYPE code structure.
	Detailed code description. Webpages describing Fortran-files, modules, data types and all procedures with their arguments and calls.
	HYPE water balance. Download pdf-file with description of the special water balance output. The file gives an overview of all water flows in HYPE.

NOTE: File reference pages and more technical parts are under development.

How to run HYPE

HYPE does not provide a graphical user interface. Users provide model set-up options and input data to HYPE using input text files. Model outputs are returned as text files as well. The compiled HYPE executable is run by double-clicking (on Windows) or by call from a command line (Windows or Linux). A system installation is not required. When invoked from the command line, HYPE takes two command line arguments: The search path to the folder where the info.txt file with model setup arguments is stored which is mandatory, and a sequence number which is optional.

flag	**argument**
-infodir *or* -i	path
-sequence *or* -s	seqnr
flag	**argument**
-infodir *or* -i	path
-sequence *or* -s	seqnr

The path can either be given as an absolute address or relative from the folder in which the program is started. The path may have a maximum of 200 characters and need surrounding apostrophes 'path' if blanks are included in the path. The search path should end with a slash. The sequence number is an integer between 0 and 999. The sequence number determines which forcing files to use. Seqnr 0 uses forcing files without sequence number. If no argument is found, the program tries to find a file filedir.txt in the starting folder and read the path to info.txt there. It is also possible to give the path as the only argument without the -i flag.

Tutorials

Tutorials can be found on the tutorial page on the HYPE wiki. The collection will be expanded as more introductions are written. Some popular tutorials are:

- Short version on using HYPE

- HYPE set-up tutorial

- Updating with discharge and other observations