SMHI

Major changes in the HYPE code over time

The Table shows the major development of the HYPE code since the year 2010. Abbreviations and full code descriptions are found in the HYPE Documentation and Wiki. More detailed information is found in ReleaseNotes for separate HYPE versions. Small changes and debugging is only mentioned for the most frequently used model versions.

Year	HYPE version	Major changes (see latest version in HYPE Documentation and Wiki)
2016	4.12.0	Dynamic flood plains (FloodData.txt)
	4.11.0	Seasonal variation of point source emissions
2015	4.10.9	Debugging based on experiences using E-HYPE version 3.1.2
	4.10.7	dynamic growing seasons for crops, parameter regions for Water Quality
	4.10.6	psim, icpe
	4.10.0	Regulation of reservoirs (DamData.txt), Regression parameters (reg_par.txt, CatchDes.txt, CatchGroup.txt)
2014	4.9.0	Routine for aquifers (AquiferData.txt)
	4.8.3	Debugging of WAR
	4.8.0	Extracting daily water balance as output, inserting two types of glaciers
	4.7.0	River channel classes, separation of point sources (PointSourceData.txt)
	4.6.0	File format of initial conditions (state_saveYYYYMMDD.txt)
2013	4.5.0	New routine for water temperature (T2), parameter optimisation: DEMC and QuasiNewton, new forcing data (SF-, SW-, TMIN- and TMAXobs.txt)
	4.4.0	Up-dating of Nitrogen and Phosphorus vs observations, elevation correction of input data for temperature (ForcKey.txt, ForcData.txt)
	4.3.1	Speeding up the calculations
	4.3.0	Performance criteria of Kling-Gupta efficiency and mean absolute errors
	4.2.0	Regulation schemes for local basins within lakes, bifurcation file (BranchData.txt), flag of sequences
2012	4.1.0	Auto Regressive up-dating of model errors for forecast initialisation
	4.0.0	HYSS adjusted for 1 hour time steps
	3.7.0	smdf
	3.6.0	Irrigation (MgmtData.txt), Automatic calibration based on Brent and Monte Carlo-optimisation of parameter values (qNstartpar.txt)
2011	3.5.0	Correction parameters for input data (forcing)
	3.4.0	Separation of forcing data to be subbasin specific
	3.3.0	Dynamic glaciers
	3.2.0	Separation of water volumes in lakes (FLP/SLP), lake specific parameters
2010	3.0.0	Lake specific information (LakeData.txt), separation of lakes into lake basins, internal load of substances in lakes
	2.0.0	Extraction of selected area (pmsf.txt), up-dating to downstream gauges
	1.0.0	Model for Organic Carbon (OC)