



## **Global Flood Forecasting Information System (GLOFFIS)**

Albrecht Weerts (1)

(1) Deltares, Inland Water Systems - Operational Water Management, Delft, Netherlands (albrecht.weerts@deltares.nl), (2) Hydrology and Quantitative Water Management group, Wageningen University & Research

The Global Flood Forecasting and Information System (GLOFFIS) model is an operational ensemble flood forecasting system setup by Deltares, based on Delft-FEWS (Werner et al., 2013) in an open experimental ICT facility. GLOFFIS runs multiple global hydrological models (W3RA and PCRGLOB-WB) and several high resolution local models (wflow\_sbm, wflow\_hbv, etc) for various locations (e.g. Peru, Colombia, Bolivia, Canada, Rhine, de Scheldt, Ganges, Myanmar, Mekong) using a variety of mostly freely available input data source. Since the beginning of 2017, we added streamflow data assimilation using daily observations across Europe to improve the estimate of the initial state of the coarse 0.5 degree wflow\_wr3a+routing model using OpenDA at the start of the forecast. We will explain the system, setup, input data, and show results for the flood situation January 2018 across Europe. The system is used for research and for operational monitoring & forecasting services. Some results are disseminated via [www.globalfloodforecast.com](http://www.globalfloodforecast.com).

Werner, M., Schellekens, J., Gijsbers, P., van Dijk, M., van den Akker, O., and Heynert, K.: The Delft-FEWS flow forecasting system, *Environ. Modell. Softw.*, 40, 65–77, doi:10.1016/j.envsoft.2012.07.010, 2013.