

Satellite inspired hydrology in an uncertain future: a H SAF and HEPEX workshop



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Type: **Oral presentation**

Improving hydrological prediction through data assimilation: results from the IMPREX and eWaterCycle II projects

Wednesday, 27 November 2019 14:00 (30 minutes)

Improving sharpness/reliability of hydrological forecasts is key to increase the value of a warning service. Hydrological data assimilation is one possible way to increase the accuracy (and possibly reliability). Various studies in assimilation of various ECVs (water level, discharge, soil moisture) show that accuracy can be indeed be improved. Here, we show results from the H2020 IMPREX project on assimilation of lake levels and discharge into a hydrological model of the Rhine using OpenDA (www.openda.org) and an open source hydrological modelling framework wflow (<https://github.com/openstreams/wflow>). This tool is also used to assimilate available discharge measurements in the W3RA model connected with a kinematic wave subsurface routing model in NRT in an operational global flow forecasting system (GLOFFIS).

Within the ongoing eWatercycle II project in cooperation with the Dutch eScience Centre (<https://www.esciencecenter.nl/project/ewatercycle>) ii) we aim to enable joint assimilation of discharges and for instance soil moisture using local analysis, we hope to present first results from this work

Which session would you like to present in?

1. Impacts of hydrological uncertainty, hydrological forecasting and modelling

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