

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



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Type: **Poster presentation**

On the use of EUMETSAT-H SAF soil moisture records for monitoring flood and drought periods 2011 to 2018 in Central Europe

Central Europe is faced actually by a long lasting drought period starting in year 2011. The preliminary peak was reached in 2018 leading to a severe agricultural drought long lasting low water periods in all rivers of Central Europe and serious economic losses. It was becoming obvious that there is an increasing need for improving drought monitoring and seasonal meteorological and hydrological forecasting services. On the other side the dry spells were interrupted by one severe large river flood event in May/June 2013 covering all rivers in Central Europe and a series of very intense convective events leading to flash floods such as these in 2016 or 2018. Therefore, improvements of forecasting services for small scale hydro-meteorological and hydrological events were asked for, too. In all of these events the role of soil moisture becomes obvious. The soil moisture products of EUMETSAT Satellite Application Facility on Support to Operational Hydrology and Water Management (H SAF) offers a wide range of data products which can support the increasing demands mentioned above. Examples will be given for the use of H SAF soil moisture products SM-DAS-2 and SM-DAS-3 as components of a monitoring system with special regard on hydrological extreme events.

Which session would you like to present in?

1. Impacts of hydrological uncertainty, hydrological forecasting and modelling

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