

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



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Soil moisture products

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Soil moisture is a key parameter for environmental (e.g. flood, drought, fire) and weather prediction systems. The EUMETSAT H SAF products give information on both surface and root zone soil moisture. The ASCAT Surface Soil Moisture (SSM) products are produced globally in near real-time and represent the water content in the upper soil layer (< 2cm). The SSM products are distributed in two spatial resolutions (25/50km) for each Metop satellite. Beginning of every year a new Metop ASCAT Surface Soil Moisture (SSM) Climate Data Record (CDR) is generated by reprocessing all historic Metop ASCAT data in a consistent manner. During the year an offline extension of the latest ASCAT SSM CDR is also made available for users.

The ASCAT Root-zone Soil Moisture (RZSM) near real-time product is expressed as a liquid water index and is based on the assimilation of the ASCAT SSM products within the ECMWF/H SAF land data assimilation system. It is a global product available daily at 25km resolution for four layers of soil. Reprocessed versions of the RZSM NRT product are the multi-year time series RZSM CDR products covering the ERS/ASCAT scatterometer data record for the time period 1992-2018.

Which session would you like to present in?

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