

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



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Soil moisture products: Quality assessment and hydrovalidation

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H SAF provides satellite-derived products of precipitation, soil moisture and snow. These products are continuously validated to guarantee optimal performance. Various soil moisture (SM) products are distributed in near real-time, namely, the surface SM product derived from the radar backscattering coefficients measured by the Advanced Scatterometer (ASCAT) on-board the series of Metop satellites (H101 –H16 –H102 –H103), the disaggregated Surface SM product (H08) derived from the global ASCAT NRT product (H16), and, the root zone SM index product (H14), based on H102/H103 data assimilation in the ECMWF Land Data Assimilation System.

In the last 5 years, the validation of SM has included both product validation and hydrological validation. The product validation has considered both the classical validation against ground-based observations and Triple Collocation, while the hydrological validation has been used to assess the product ability to improve the prediction of hydrological extremes in different European basins and, with the main purpose of using the products in an operational context.

We present the summary of the validation of H SAF soil moisture products trying to highlight products benefits and limitations, and identify the open issues that should be addressed in the next phases of H SAF project.

Which session would you like to present in?

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