

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



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The H SAF H64 soil moisture-precipitation integrated product: development and preliminary results

State-of-the-art satellite rainfall products are often the only way for measuring precipitation in remote areas of the world. Currently, one of the major issues impacting the quality of these products is related to the estimation of light precipitation that causes an underestimation of the total amount of rainfall. With the purpose of estimating rainfall using satellite soil moisture (SM) data, the SM2RAIN method was recently developed. Through HSAF, SM2RAIN approach together with H23 rainfall product are used for the development of the H64 integrated product. SM estimates obtained through HSAF products are used to estimate rainfall through SM2RAIN, and then merged with H23 precipitation estimates through a nudging scheme. H64 has been designed to combine the two different approaches in order to provide a more reliable rainfall product, that can be used in an operational framework. Preliminary results show that H64 can efficiently reproduce the observed rainfall during a 4-year period, providing a useful and reliable source of information. This first assessment provides very useful insights about the development of a near-real time rainfall product based.

Which session would you like to present in?

1. Remote sensing, hydrological modelling and data assimilation

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