

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



Contribution ID: 13

Type: **Oral presentation**

Projected Advances in the Remote Sensing of Precipitation

Tuesday, 26 November 2019 11:30 (30 minutes)

The talk will review the current status of satellite and surface networks capable of providing precipitation with high space/time resolution with a view towards the future. While ground based radar networks continue to see systematic although measured progress, there will be a rapid increase in satellite capabilities both in terms of microwave sensors made possible by new Cube- and MicroSat technology, as well increased sampling frequency from the next generation of geostationary VIS/IR sensors. This will stress our ability to create general products that satisfy broad user categories with varying requirements for resolution, quality and stability. Instead it will likely require the production of more focused products such as hydrology. A second emerging trend is for satellite algorithms, through maturation and the recent increased use of machine learning, to fully exploit the available information content. This will likely lead to greater emphasis being placed on error estimation, while existing challenges, posed by such conditions as drizzle and orographic precipitation is requiring greater model input leading to more synergistic frameworks.

Which session would you like to present in?

1. Remote sensing, hydrological modelling and data assimilation

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Session Classification: Session 1: Remote sensing, hydrological modelling and data assimilation

Track Classification: H SAF and HEPEX joint workshop on "Satellite inspired hydrology for an uncertain future"