

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



Contribution ID: 32

Type: **Poster presentation**

The new H-SAF H67 and H68 precipitation products

H SAF MW-only precipitation products are based on the exploitation of all MW radiometers onboard LEO satellites. They provide Level 2 instantaneous precipitation rate, at a nominal resolution depending on the radiometer characteristics. MW-only gridded products, based on merged precipitation estimates available from the MW radiometer constellation, are also delivered.

Here we focus on two new H SAF MW-only products, H67 and H68. H68 is a NRT Level 3 product providing precipitation rate on a regular grid ($0.25^\circ \times 0.25^\circ$) at regular time intervals (30 minutes). It is based on instantaneous precipitation rates available from the H01, H02B, H18, H-AUX-17, H-AUX-20 products. At each 30-min interval, all overpasses of MW radiometers over the MSG full disk area are considered and a merging/intercalibration procedure is applied to provide one precipitation rate estimate in each grid-box. H67 is an offline Level 3 product, based on instantaneous precipitation rates available from the H68 product, providing daily precipitation for the past 24 hours every 6 hours on a $0.25^\circ \times 0.25^\circ$ grid. Applications of the new products to severe weather events over the MSG full disk are shown. Potential and limitations of these MW-only products are also discussed in perspective of the development of new blended MW/IR algorithms.

Which session would you like to present in?

1. Remote sensing, hydrological modelling and data assimilation

Primary authors: Dr MARRA, Anna Cinzia (Institute of Atmospheric Sciences and Climate, National Research Council (ISAC/CNR), Rome); Dr CASELLA, Daniele (Institute of Atmospheric Sciences and Climate, National Research Council (ISAC/CNR), Rome); Dr DIETRICH, Stefano (Institute of Atmospheric Sciences and Climate, National Research Council (ISAC/CNR), Rome); Dr D'ADDERIO, Leo Pio (Institute of Atmospheric Sciences and Climate, National Research Council (ISAC/CNR), Rome); Dr PANEGROSSI, Giulia (Institute of Atmospheric Sciences and Climate, National Research Council (ISAC/CNR), Rome); Dr SANÒ, Paolo (Institute of Atmospheric Sciences and Climate, National Research Council (ISAC/CNR), Rome)

Presenter: Dr SANÒ, Paolo (Institute of Atmospheric Sciences and Climate, National Research Council (ISAC/CNR), Rome)

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