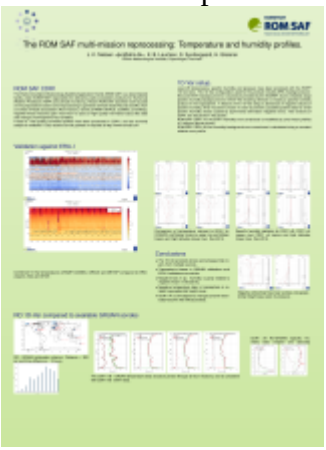
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Poster
The Radio Occultation Meteorology Satellite Application Facility (ROM SAF) is a decentralized facility under EUMETSAT responsible for delivering radio occultation products for Numerical Weather Prediction (NWP) and climate monitoring. Recent ROM SAF activities have focused on the preparations toward a full reprocessing to generate Climate Data Records (CDRs) from a number of Radio Occultation (RO) missions, namely CHAMP, GRACE, COSMIC, and Metop. Together these missions span more than 15 years of high-quality information about the state and change of atmospheric key variables.

Level 2B temperature, specific humidity and pressure have been produced with the ROPP 1D-Var tools. The 1D-Var configuration used for this product includes ERA-I background profiles and ERA-I background error covariance provided by the ECMWF. Due to relatively large specific humidity background error STDV the resulting retrieval is virtually a specific humidity product in the troposphere. A feature of the 1D-Var setup is allowance of negative values of specific humidity, which has been chosen in order to prevent a possible positive bias for small specific humidity values caused by asymmetric elimination of negative errors.

Several validation and comparison studies are being performed on the level 2B CDR, including comparison to all collocated profiles from the GCOS Reference Upper-Air Network, GRUAN, (v2.0), validation against IASI brightness temperatures, comparison to RO Level 2B retrievals from WEGC and validation against ERA-Interim. In this presentation results from GRUAN and ERA-I validations are shown.



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