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ECMWF
Invited Talk
(Invited Talk)

The current impact of GPS-RO measurements in both the ECMWF NWP and climate reanalysis systems will be described. In the context of NWP, we will highlight the GPS-RO impact on the lower tropospheric humidity field, emphasising improvements in the fit to radiosonde humidity measurements when GPS-RO data are assimilated. We will also demonstrate that GPS-RO data are improving upper-level winds in the tropics.

It will be shown that the consistency of stratospheric reanalyses from different centres has improved since 2006, with the assimilation COSMIC, GRAS and other GPS-RO data. We will also present a new assessment of GPS/MET data from 1996-97 using the ECMWF reanalysis system. These results suggest that the GPS/MET bending angle uncertainty in the stratosphere is around 6 microradians during the "AS/ON" periods.

OSTS session

Regional and Global CAL/VAL for Assembling a Climate Data Record

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