

OPERATIONAL PROCESSING OF GRAS RADIO OCCULTATION DATA AT EUMETSAT

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The MetOp satellite is the first operational European satellite for meteorology and climate in low Earth orbit. It is part of the European-US Initial Joint Polar-Orbiting Operational Satellite System (IJPS). The first of a total of three MetOp satellites was launched in October 2006. The MetOp series will cover 14 years in the mid morning orbit at 9:30 hours local solar time from an orbit of about 820km. Among other instruments, MetOp carries the GRAS radio occultation one.

Level 1B data (which include also bending angle over impact parameter) from GRAS on MetOp is provided to the user community within 2 hours and 15 minutes from sensing time, either through the satellite based EUMETCast system, or the GTS system. Level 2 data such as profiles of refractivity, temperature, and humidity is provided within 3 hours from the GRAS SAF, also through EUMETCast and GTS.

The presentation will cover the operational aspects of GRAS data processing. It includes the GRAS Support Network (GSN) that provides GPS orbits, GPS clocks, and ground station data. It will also cover monitoring of Level 0, 1A, and 1B data; where level 1B monitoring is performed using a 1DVar with ECMWF forecast profiles.