

GRAS ON METOP: THE FIRST OPERATIONAL RADIO OCCULTATION INSTRUMENT

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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). This 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 give an overview of MetOp in general and of GRAS in particular. The different system components of the GRAS processing chain will be introduced. Operational level 1B monitoring, validation with co-located ECMWF profiles, as well as first results from the Level 2 processing by the GRAS SAF, will be shown.