



Validation of the the Finnish Meteorological Institute Odin/OSIRIS L2 products

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The Odin satellite launched on February 2001 carries two instruments: OSIRIS and SMR. Both instruments are used for aeronomy measurements, SMR makes astronomical measurements as well. In aeronomy mode both instruments use the limb scanning technique to retrieve vertical profiles of minor constituents in the middle atmosphere. Odin is a Swedish-led satellite project funded jointly by Sweden (SNSB), Canada (CSA), Finland (Tekes) and France (CNES).

OSIRIS (Optical Spectrograph and InfraRed Imaging System) measurements cover the altitude range from 7 to 60/120 km. The Level 1 processing of the OSIRIS data is done by the University of Saskatchewan. The Level 2 processing is done separately by teams in Canada and Finland using different retrieval methods. The Level 2 processing done by the Finnish Meteorological Institute (FMI) uses the Modified Onion Peeling (MOP) method. The aim of the processing is to simultaneously retrieve vertical profiles of ozone, NO₂, BrO, OClO, and aerosols, as well as the neutral air density profile.

We will present results from the validation of the FMI OSIRIS products against other satellite instruments (e.g. POAM, GOMOS), and various soundings.