IASI on Metop : In-Flight Calibration Plan

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The Infrared Atmospheric Sounding Interferometer (IASI) is a key payload element of the METOP series of European meteorological polar-orbit satellites. It is developed jointly by CNES and EUMETSAT. It has been designed for operational meteorological soundings with a very high level of accuracy (Specifications on Temperature accuracy : 1K for 1 km and 10 % for humidity) and also for estimating and monitoring trace gases on a global scale. The IASI system includes the 3 instruments, a data processing software integrated in the EPS ground segment and a technical expertise centre (TEC) implemented in CNES Toulouse.

The first IASI model is planned to be launched in April 2006. This paper presents the CNES plan for the in-flight calibration and monitoring of the IASI performance (Instrument and processing up to Level 1, i.e. radiances computation) that will be performed by the TEC. A companion paper in this conference presents the results of the on-ground calibration of the instrument.