

In orbit validation of IASI-NG: strategy and objectives

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ABSTRACT

Developed by Airbus Defense and Space under CNES overall responsibility in partnership with Eumetsat, the Infrared Atmospheric Sounding Interferometer New Generation (IASI-NG) is a key payload element of the second generation of European meteorological polar-orbit satellites (METOP-SG). IASI-NG instrument has been designed to ensure continuity the IASI acquisitions, while improving by a factor two compared to IASI with regards to spectral resolution and radiometric error.

To reach these high level objectives the instrument as well as the ground segment must be perfectly tuned and characterize so the in orbit activities will be focused on:

- Tuning of the instrument
- Tuning of the L1 processing
- Complete characterization of the instrument behavior
- Data quality assessment.

These activities will be done in 3 phases, starting by the low level instrument tuning and finishing by the fine characterization of L1 products:

- SIOV: in orbit verification dedicated to the functional check and first tuning of the instrument
- CALVAL part A: first performance evaluation of the instrument and first tuning of the L1 products
- CALVAL part B: tandem flight with IASI for intercalibration, fine tuning and final validation of all the L1 products.

The objectives of this presentation will be to explain the strategy followed in orbit for IASI-NG validation. It will explain the rationale and the main objectives of each phase.