

The Infrared Atmospheric Sounding Interferometer-Next Generation (IASI-NG) L2 test data set is generated by the prototype processor IASI-NG-L2-IPP using IASI-NG L1D and L1C products, and MWS L1B product as input. This test data distribution includes the data in netCDF format and the Product Format Specification document (PFS V3D). The PFS gives an overview of all the L2 products, detailed format description including meta data description and the size of the data per orbit.

All EPS-SG product types generated by the EPS-SG Ground Segment are netCDF-4 files complying with the generic structure and data model set out in the (GPFS V3D), which is also made available with this release.

This version of the IASI-NG L2 Test Data is available to users for format familiarisation and system testing.

Test data is available for three simulated IASI-NG orbits:

- 1st orbit: 2007/09/12 from 08:43 to 10:21
- 2nd orbit: 2007/09/12 from 10:21 to 12:02
- 3rd orbit: 2008/02/23 from 08:46 to 10:28

They cover a variety of scene type for testing purposes (clear, cloudy, land, sea, snow/ice, day and night etc.). This version of test data is an example for a nominal global processing. MWS data is used as input only for the first orbit.

The L2 IASI test data contains:

1. Temperature and water vapour profiles as well as water vapour total column derived from IASI-NG and MWS. Both the all-sky first guess profile retrievals and the clear-sky only optimal estimation retrievals are provided.
2. All-sky first guess of surface pressure and skin temperature. Clear sky only surface emissivity and surface skin temperature from optimal estimation.
3. Fractional cloud cover, cloud top pressure and temperature, cloud phase, cloud liquid water amount, cloud drop effective radius at cloud top and aerosol dust indicator.
4. Total columns of nitrous oxide, methane and carbon dioxide.
5. SO₂ total column.
6. Nitric acid total column, nitric acid profile and associated error characteristics.
7. Ozone total column, ozone profile and associated error characteristics.
8. Carbon monoxide total column, carbon monoxide profile and associated error characteristics.

The following compressed file contains the IASI-NG L2 product:

Filename	MD5
IASING_L2.tar.gz	771be8a7e0f9b420c6d1dadcc130b60d

