



Mission Status Report 72

Reference Period: 01-15 Oct. 2020

sentinel-5p

→ GLOBAL AIR MONITORING
FOR COPERNICUS

Mission Status

Overall

- The mission, in Phase E2 (Operations Phase) since 24th April 2018, has reached routine operations capacity at the beginning of March 2019. Routine operations have not been affected by COVID-19.

Data availability and access

- Level 1B Radiance/Irradiance, Methane, Tropospheric Ozone (Offline); Carbon Monoxide, Formaldehyde, Nitrogen Dioxide, Sulphur Dioxide, Total Ozone, Aerosol Absorbing Index, Aerosol Layer Height and Cloud products (Offline and NRT) are available to the public via the Copernicus Sentinel-5 Precursor Data Hub – s5phub.copernicus.eu.

Platform

- All platform subsystems performed nominally.
- Two Orbit Control Manoeuvres (OCM) were performed on 1st (between 08:29 - 11:24) and 6th October (between 15:25 - 16:19) with the aim of re-synchronizing Sentinel-5P to S-NPP satellite.

TROPOMI Payload

- The TROPOMI instrument continues measuring in nominal operations baseline with a 360 orbit repeat cycle and since 6th August 2019 with a spatial resolution of about 5.5 km along-track and 3.5 km across-track.

Ground Segment

- The status of both FOS and PDGS has been nominal. Routine scheduling, acquisition, processing and dissemination tasks were performed without major anomalies.
- Due to the OCM of 1st October:
 - Part of the orbit 15379 (45%) in NRT was lost for all products. Offline production was not affected.
 - Formaldehyde data quality was decreased (visible stripes) for the orbits 15379-15380.
- On 5th October, part of the orbit 15432 (10%) was lost due to acquisition errors.

Level 1B / Level 2 processors

- The generation of the Offline Diagnostic Data Set (DDS) by the PDGS for verification/validation of the new version 2 of all processors (Level 1B and Level 2) has finished. The NRT DDS production, foreseen only for the Ozone and Cloud products, is progressing well (~40%) and foreseen to finish by mid-November.

Cal/Val Activities

- The routine validation activities continued nominally for the publicly released products.
- The verification/validation of the Offline DDS is progressing and no problems have been identified so far.

Outlook

- The Sentinel-5P Validation Team (S5PVT) meeting will take place (via video/tele conference) on 20-21 October addressing, among others, the status of the Sentinel-5P Validation campaigns and the uncertainty characterization of the recently released DLR UPAS products.
- The first OMI - TROPOMI Workshop will take place (via video/tele conference) from 27 to 29 October with the aim of assessing the consistency of the OMI-TROPOMI datasets, which is of key importance for the users of both data streams.