Mission Status Report 67

Reference Period: 16-31 Jul. 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.

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 though some anomalies occur.
- The new version of the DLR/UPAS L2 processors was activated within the PDGS on 16th July 2020 in order to improve the quality of the Total Ozone, Sulphur Dioxide, Formaldehyde and Cloud products.
- Due to a problem with the acquisition of the irradiance data measured during orbit 14323, the processing of orbits 14368 - 14376 in Near Real Time on 22nd July and 14315 - 14329 in Offline on 18th/19th July) resulted in degraded data quality (minor for CO and HCHO).
- Due to a ground segment anomaly the near real time processing and dissemination of orbits 14432 (26th July) to 14441 (27th July) has not been performed. Orbit 14438 was lost also in Offline production.
- Due to a problem with the acquisition of the irradiance data measured during orbit 14398, the Near Real Time processing resulted in:
  - Lost Data for the Carbon Monoxide product on 24th July: obits 14411 (50%), 14412 (100%), 14413 (50%)
  - Degraded quality for the rest of the products (minor for Formaldehyde) in orbits 14411 - 14412
  - Degraded quality for the Formaldehyde, Sulphur Dioxide, Total Ozone and Cloud and O3 products on 27th July

Level 1B / Level 2 processors

- The generation of the Diagnostic Data Set (DDS) by the PDGS for verification/validation of the planned new version 2 for all processors (Level 1B and Level 2) has started on 24th July.

Cal/Val Activities

- The routine validation activities continued nominally for the publicly released products.