



Mission Status Report 66

Reference Period: 01-15 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 without major anomalies.
- On 4th July an anomaly in the acquisition of irradiance and radiance measurements of orbit 14113 resulted in data gaps during NRT processing for the orbits 14113 to 14131. The orbit 14113 could be recovered using the backup acquisition system and all the data were generated in OFFL mode without any data gaps.

Level 1B / Level 2 processors

- The generation of the Diagnostic Data Set (DDS) by the PDGS for verification/validation of the new DLR/UPAS processor was finalized by 6th July.

Cal/Val Activities

- The routine validation activities continued nominally for the publicly released products.
- The Mission Performance Center (MPC) team has verified the quality of the DDS produced by the PDGS using the new DLR/UPAS processor.

COVID-19

- To support the ESA/EC COVID-19 dashboard – race.esa.int – and the ESA/JAXA/NASA trilateral COVID-19 dashboard – eodash-trilateral.eox.at - on the topic Air Quality a higher Level product (2 weekly averages of Nitrogen Dioxide measurements) is being generated operationally – maps.s5p-pal.com – using the Sentinel-5 Precursor Product Algorithm Laboratory (PAL) infrastructure.

Outlook

- It is planned to activate a new version of DLR/UPAS L2 processors within the PDGS on 16th July 2020 in order to improve the quality of the Total Ozone, Sulphur Dioxide, Formaldehyde and Cloud products.