



Mission Status Report 75

Reference Period: 16-30 Nov. 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 17th November, 15% of orbit 16051 and 85% of orbit 16052 were lost due to acquisition problems.

Level 1B / Level 2 processors

- The verification/validation of the Diagnostic Data Set (DDS) processed by the PDGS has not identified any problems with the version 02.01.xx of the Level 1 and some Level 2 processors foreseen to be released during April 2021. These results were discussed and evaluated during the 3rd Mission Performance Centre (MPC) Progress meeting on 23rd/24th November.

Cal/Val Activities

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

Outlook

- An update of the Copernicus Sentinel-5P operation system is planned on 2nd/3rd December. This includes:
 - An update of the nitrogen dioxide (NO₂) product (new processor version 01.04.00), improving the underestimation of tropospheric NO₂ measurements performed especially during anthropogenic emission situations.
 - A bug fix for a problem in the Ozone Tropospheric product (new processor version 02.01.04), that affected only few measurements, will be implemented as well.
- The next Copernicus Sentinel-5P Quality Working Group Meeting is planned during 3rd December.