

***Mission Status Report 131***

***Reference Period: 16-31 Mar. 2023***

***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.

Operational Products availability and access

* Level 1B Radiance/Irradiance, Level 2 Methane, Tropospheric Ozone (Offline); Aerosol Absorbing Index, Aerosol Layer Height, Carbon Monoxide, Cloud, Formaldehyde, Nitrogen Dioxide, Ozone Profile, Sulphur Dioxide, and Total Ozone products (Offline and Near Real Time) are available to the public via the Copernicus Sentinel-5 Precursor Data Hub – <https://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 Flight Operations Segment (FOS) and Payload Data Ground Segment (PDGS) has been nominal. Routine scheduling, acquisition, processing and dissemination tasks were performed without major anomalies.
* The full mission reprocessing of the Level 1B and all Level 2 data sets has been completed. Due to some problems, the Tropospheric Ozone reprocessing will be re-done (it takes less than one day).

Level 1B / Level 2 processors

* The Sulphur Dioxide processor is being upgraded to include the Sulphur Dioxide Layer Height information into the product. It is planned to put this processor into operations during July 2023.

Cal/Val Activities

* The routine validation activities continued nominally for all products, including the reprocessed products.

PAL Activities

* Six pre-operational products (Aerosol Optical Thickness, Bromine Monoxide, Glyoxal, Sun-Induced Fluorescence, Water Vapour, and a Sulphur Dioxide product using the new Covariance-Based Retrieval Algorithm (COBRA)) are being provided to the public via <https://data-portal.s5p-pal.com>.

***Outlook***

* The reprocessed datasets for the Absorbing Aerosol Index, Carbon Monoxide, Cloud, Total Ozone, Aerosol Layer Height, Methane, and Nitrogen Dioxide products were published between 5th December 2022 and mid-March 2023. The publication of the reprocessed Level 1B product is ongoing and will be completed by the end of April. If product quality checks reveal no issues, it is foreseen to conclude the reprocessed datasets public release by end of April, with the publication of Sulphur Dioxide, Formaldehyde, Ozone Profile and the Tropospheric Ozone products.

 *Report prepared by the ESA Sentinel-5 Precursor Team*