Mission Status Report 4

Reference Period: 01-15 Dec. 2017

sentinel-5p

→ GLOBAL AIR MONITORING FOR COPERNICUS

Mission Status

Overall

- The mission is in Phase E1 (Commissioning Phase) since 16th October 2017 and progressing nominally.
- On 1st December a Sentinel-5 Precursor press event took place at the DLR in Germany. First Sentinel-5 Precursor images of various trace gases (e.g. air pollution) and cloud & aerosol information were shown. This event can be followed at: https://www.esa.int/Our_Activities/Observing_the_Earth/Copernicus/Sentinel-5P/Watch_live_Sentinel-5P_First_Light_event

Data availability and access

- In line with the Phase E1 planning the access to Sentinel-5 Precursor preoperational sample products (Level 1B and Level 2) is currently limited to Phase E1 support teams and algorithm developers. The PDGS Online Data Access (ODA) is used for the data dissemination.

Platform

- All platform subsystems performed nominally.

TROPOMI Payload

- Work is ongoing to try to reduce the occasional signal saturation that is observed in the radiance of cloudy scenes in tropical areas.

Ground Segment

- The status of both FOS and PDGS has been nominal. Routine scheduling, acquisition and processing tasks were performed without major anomalies.
- PDGS continues to plan orbit dumps only over Svalbard, yielding to some pass durations shorter than the nominal minimum length. In order to avoid a “constraint violation on the minimum X-band pass duration”, the constraint checking on the Mission Control System (MCS) has been deactivated.
- A consequence of having X-band pass durations shorter than the nominal minimum length is that there is a backlog of data to be downlinked, although this backlog is recovered during longer passes.
- On the 5th December data gaps were detected. Data were manually re-dumped successfully few hours later.

Level 1B / Level 2 processors

- KNMI (Level 1B) and DLR (Level 2) are working on updates of their respective processors.

Cal/Val Activities

- Preparation of Level 2 test sample data (for Cal/Val teams) with the latest DLR, KNMI and RAL processor versions is ongoing.

Outlook

- Solar occultation measurements are planned for orbit 931 (18th December) to enable the testing of the straylight correction in the NIR band (out-of-band spectral straylight verification).
- Provision of first Level 1B and Level 2 pre-operational sample products to Cal/Val teams.