

Mission Status Report #18

Reference Period: 11 - 17 June 2016

sentinel-3

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Mission status

- The overall mission status is nominal.
- All instruments are ON using the nominal side and are providing data as expected at this stage in commissioning.
- The satellite is in the nominal orbit with a ground track within the +/- 1km band around its reference.
- The X-Band ground station in Svalbard continues to successfully acquire data.
- The in orbit Cal/Val phase is on-going as planned.

Satellite

- All subsystems and units are operating nominally.
- The spacecraft (S/C) is in NORMAL mode, the high bit rate for telemetry and Attitude and Orbit Control System (AOCS) is in NOMINAL mode (geodetic with yaw steering).
- All instruments are functioning well and are in nominal measurement modes. In summary:
 - SRAL is operating in 100% SAR mode.
 - SLSTR is operating in nominal (ON-DUTY) mode except for 12-14 June, due to an anomaly regarding the cooling of the infrared detectors, most likely initiated by a radiation effect. The instrument was restarted and nominal operations resumed again on 14 June 16:35 UTC.
 - OLCI is operating in Normal Mode with a second occurrence of the camera 2 interruption (first occurrence on 6 April) on 14 June. The situation was recovered on 15 June 7:55 UTC (OLCI cycled to Stand-By and back to Normal). The issue is under investigation.
 - MWR is operating in Measurement Mode.
 - GNSS is operating in Measurement Mode.
 - DORIS is operating in Measurement Mode providing routine navigation input to SRAL.
- Extensive calibration activities are on-going to verify the performance of all instruments. In particular:
 - For OLCI the calibration activities continue. The release of OLCI data to expert users has started on 11 May.
 - For SLSTR the functional and performance tests show that the instrument is working as expected. The various calibration activities continue as planned. The release of the first SLSTR L1B data to Expert Users has started on 13 of June.
 - For SRAL, the calibration activities continue with a focus on the validation of the updated OLTC.
 - For MWR calibration is continuing nominally.
 - For the topographic instruments (SRAL, MWR, GNSS, DORIS) the release of the data (Level 1 and 2) to expert users has started on 15 of June.

Ground Segment

- The FOS ground segment is nominal. Contacts scheduling is nominal with 10 passes per day (Monday to Friday) over Kiruna, Svalbard or Troll (reduced to 6 during week-end).
- EUMETSAT is taking 2 of the 10 passes per day (Monday to Friday) during which selected commanding of S3A Spacecraft by EUMETSAT FOS continues successfully as part of its validation in view of the later handover of operations from ESA to EUMETSAT.
- Commanding in Secure mode continues successfully.
- The Payload Data Ground Segment commissioning continues as planned.
- The Core Ground station (CGS) service is nominal.
- Housekeeping telemetry (HK TM) circulation to ESA and EUMETSAT FOS is nominal.
- Level 0 production continues successfully for all instruments at the Core Ground Station in Svalbard and at EUMETSAT's marine centre. Level 1 data production continues at the Processing and Archiving Centres (PAC) and EUMETSAT's marine centre for all instruments.
- Mission planning continues successfully providing updates of the Nominal Payload Planning File (NPPF) to allow the on-board commanding of data download to the X-band station.

Outlook

- The S-3A Cal/Val phase continues, with extensive calibration activities ongoing.

User interface and communication

- At present the following sample data for expert users are available: OLCI L1 and L2 Land, SLSTR L1 and L2 Land (LST), SRAL L1 and L2.
- Users will be informed about the availability of additional sample data and their distribution in due time.