

Mission Status Report 6

Reference Period: 19 - 25 Mar 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 now in nominal measurement mode:
 - SRAL is switched ON, with mode switched between LRM Close Loop (CL) and SAR CL. Regular calibrations are scheduled using the same mode switch.
 - SLSTR cool-down has been successfully performed. The cool-down operation started on 21 March reaching about 36 hours later the cold finger target temperatures of 77K+/-5. After successful switch on of all channels SLSTR is now operating in its nominal (ON-DUTY) mode.
 - OLCI is switched ON in Normal Mode.
 - MWR is switched ON in Measurement Mode.
 - DORIS is switched ON in Measurement Mode with DIODE Routine Navigation.
- Extensive calibration exercises are on-going to verify the performance of all instruments. In particular
 - For OLCI a spectral campaign has been performed, measuring data during day and night over the pacific in non-relaxed mode (all 46 micro-bands). Analysis is on-going. The spectral campaign will be repeated next week having the nominal offset compensation loop disabled.
 - For SLSTR the fine tuning of Detector Unit temperature settings is on-going. The measurements allowing the analysis of the scan cycle stability will be performed next with the inclusion of all channels.
 - For the MWR and for SRAL operating in LRM CL and SAR CL the first preliminary calibration data analysis confirms good performance..

Ground Segment

- The FOS ground segment is nominal. Contacts scheduling is nominal with 10 passes per day over Kiruna, Svalbard or Troll, and EUMETSAT continues to listen in.
- The first OOP (Out of Plan) maneuver has been successfully performed on 21 March to keep the satellite on its +/- 1 km ground track
- 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.
- 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

- Users will be informed about the availability of sample data and their distribution in due time.