

MISSION STATUS 13-28 August 2016

sentinel-3

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OVERALL MISSION

- The overall status of the spacecraft is nominal, with all subsystem performing nominally.
- All instruments are switched on and perform nominally:
 - OLCI is ON with mode switching between Normal and Silent as commanded via the Attitude and Orbit Control System (AOCS).
 - SRAL is ON and operated in 100% SAR mode (SAR Open Loop and SAR Closed Loop).
 - SLSTR is switched ON in On-Duty mode, with autonomous switching between Day and Night for what concerns Instrument Source Packet (ISP) generation.
 - MWR is ON in operational mode.
- A FPU trap anomaly re-occurred on SLSTR on 25 July 2016 at 03:44:04z. Immediate recovery actions were taken. Following the stabilisation of the SLSTR IR detector temperatures, assessments of the SLSTR Sea Surface Temperature (SST) product quality have concluded that similar SST quality can be expected from 1st August onwards, to that found prior to the anomaly on 25th July. The impact of the slight increase in SLSTR instrument detector temperature (~1K) on the quality of SLSTR radiances and the retrieved products is being assessed but the product quality appears to have reached an equivalent level as that seen prior to the anomaly.
- The Flight Operations Segment (FOS) is operating nominally.
- The Payload Data Ground Segment (PDGS) is operating broadly as expected in the initial part of the mission ramp-up phase, gradually moving towards full operational capacity. Some outages and data delays occurred due to recent upgrading of the PDGS systems in preparation of full operations. Level 0 production continues successfully for all instruments at the Core Ground Station in Svalbard and at EUMETSAT's marine centre. Level 1 and some preliminary level 2 data production continues at the Processing and Archiving Centres (PAC) and EUMETSAT's marine centre for all instruments.

MISSION MANAGEMENT

- The Sentinel-3A commissioning phase ended on 12th July with the successful passing of the In-Orbit Commissioning Review (IOCR). The mission is now in the ramp-up phase, moving towards full operational capacity at approximately IOCR + 9 months.
- The handover between ESA's Sentinel-3A development and operations teams took place on 13th July, followed by the handover of the responsibility for the routine operations of the spacecraft from ESA to EUMETSAT. The handover of the Marine PDGS from ESA to EUMETSAT will take place end of September, following the successful acceptance of the next version of the PDGS (v3).

DATA AVAILABILITY AND ACCESS

- Following the IOCR, some remaining issues affecting the released sample data products will need to be addressed. The release of the level 1 core data products to the general user community is foreseen for late September following the resolution of these issues.
- Some on-going issues are being encountered in the Online Data Access system which have caused delays and unavailability of data to users and are under investigation.
- The following sample data products are available to Sentinel-3A expert users:

Data product (*)	Released on	Available data
OLCI L1 (FR)	11 May	9 May - today
OLCI L2 over land (ESA)	20 June	20 June - today
OLCI L2 over ocean (EUMETSAT)	22 June	22 June - today
SLSTR L1	13 June	8 June - today
SLSTR L2 - LST (ESA)	20 June	9 June - today
SLSTR L2 - SST (EUMETSAT)	21 June	21 June - today
SRAL L1B (**)	15 June	6 April - 6 May (SAR), 9-12 April (LRM); 18 June- today
SRAL L2 over land (ESA)	15 June	6 April - 6 May (SAR), 9-12 April (LRM) 18 June- today
SRAL L2 over ocean (EUMETSAT)	15 June	6 April - 6 May (SAR), 9-12 April (LRM)

(*) SYN, AOD, FRP products to be released in ramp-up phase
(**) full L1A, L1BS available from PDGS v3 only

USER INTERACTION

- An expert user meeting engaging the Sentinel-3 validation team took place on 28-30 June at ESA-ESRIN. This meeting aimed to provide early access to sample data products to expert users and gather their feedback on data quality and data access early in the mission.
- The Sentinel-3 Quality Working Groups met for the first time on 28 June 2016, the next meeting is planned for December 2016.
- A Sentinel-3 Validation Team (S3VT) meeting is planned for 22-24 November 2016 at ESA-ESRIN, Frascati, Italy.

OUTLOOK

- Release of operationally qualified Level 1 core data products in late September 2016.
- Provision of additional SRAL Level 1 data products (L1A and L1BS) from end of September after deployment of new PDGS v3.
- Gradual release of Level 2 sample products over land and ocean, including the SYN products (beginning of 2017) and the new products on Aerosol Optical Depth (AOD) and Fire Radiative Power (FRP) in 2017.
- Implementation of the v3 of the PDGS, which will provide additional SRAL Level 1 data products.

