

## MISSION STATUS : 20 November 2018

## sentinel-3

→ A BIGGER PICTURE FOR COPERNICUS

### SENTINEL-3B

Copernicus Sentinel-3B, launched on 25 April 2018, has completed its commissioning phase, with the In-Orbit Commissioning Review (IOCR) successfully completed on 17 October 2018 at ESA-ESRIN. The first Sentinel-3B SLSTR Level 1 data have been officially released on 12 November 2018. The release of SRAL and OLCI Level 1 data is planned for end November/ beginning December 2018, respectively. The level 2 data release is planned for late 2018/early 2019. Note that sample data for all instruments were already released to the Sentinel-3 Validation Team since June (except for the L2 SLSTR which was released in November). The Tandem position was reached on 6 June 2018, placing Sentinel-3B 30 seconds in front of Sentinel-3A and the tandem phase was completed on 16 October with the start of the second drift phase. This currently on-going final drift will move Sentinel-3B to its expected nominal orbital position 140 degree in front of Sentinel-3A and should be completed by 22<sup>nd</sup> November after which on 28<sup>th</sup> November the handover of the spacecraft operations to EUMETSAT will take place.

### SENTINEL-3A

#### OVERALL MISSION

- The overall status of the Sentinel-3A spacecraft is nominal, with all subsystems performing nominally.
- All instruments, including OLCI, SRAL, SLSTR and MWR, are switched on and performing well.
- The Flight Operations Segment (FOS) is operating nominally.
- The Payload Data Ground Segment (PDGS) for Land and Marine are operating as expected.
- Since October 2017 Sentinel-3A is in routine operations, having reached full operational capacity.
- The joint ESA-EUMETSAT mission management activities continue nominally.

#### DATA AVAILABILITY AND ACCESS

- All Level 1 and Level 2 core data products have been released.
- Level 2 synergy products have officially been released in October 2018.
- The definition and implementation of the two new core data products, as requested by the European Commission, namely the Aerosol Optical Depth (AOD) and Fire Radiative Power (FRP) is on-going. The AOD IPF is in the process of being accepted and then a period of scientific validation will be performed once the product quality is confirmed the product will be released to users. For the FRP the IPF delivery is expected in November and will follow a similar process. The products are thus likely to be available at the earliest in Q1 2019.
- Reprocessing activities are on-going. For SRAL, a full mission reprocessing (starting from 1 March 2016) has been completed for both the Land and the Marine products and the Land products have been made available to the Sentinel-3 Validation Team members. Based on positive feedback from the Sentinel-3 Validation Team the Land products release is scheduled to take place in Q4 2018. The Marine products are already available to all users on CODAREP. For SLSTR, Level 1 and 2 data reprocessing started in June 2018 and was completed in September 2018, including an updated cloud masking. The release is planned for Q4 2018. For OLCI a full mission reprocessing from 25th of April 2016 has been carried out and made available to users in September 2018.
- The Sentinel GNSS L1B RINEX user product for the Sentinel-1, -2 and -3A satellites is available from the Copernicus Data Hub service.
- A new interactive website, [www.altimetry-hydro.eu](http://www.altimetry-hydro.eu), offers the possibility to display OLTC elevation tables on-board Sentinel-3 SRAL altimeters.
- An update of the on-board OLTC tables for both Sentinel-A and -3B to improve the monitoring of rivers and lakes water surface has been completed. This update will increase the number of included targets (more than 30.000 new virtual stations). The upload to Sentinel-3B is planned shortly as part of the commissioning phase activities and following its successful validation it is planned also to update Sentinel-3A with the same mask.
- A new website comprising all information for the Sentinel-3 Validation Team is now available on [www.s3vt.org](http://www.s3vt.org).
- For more information on data access see: <http://copernicus.eu/data-access>

#### USER INTERACTION

- The next Sentinel Validation Team Meeting will take place 7-9 May 2019 at ESA-ESRIN. News will be published on [www.s3vt.org](http://www.s3vt.org)
- The next Sentinel-3 Quality Working Groups will take place for
  - QWG Altimetry: 22-23 November 2018 (ESRIN)
  - OLCI QWG: 29-30 November 2018
  - SLSTR QWG 4-5 February 2019 (EUMETSAT).

#### OUTLOOK

Full official release of all Sentinel-3B level 1 and level 2 data products.