

sentinel-1

→ RADAR VISION FOR COPERNICUS

Mission Status Report 46

Reference Period: 10 March 2015 – 16 March 2015

Mission status

- The Sentinel-1A operational qualification phase is on-going. The first yearly Routine Operations Review is planned early June 2015
- The opening of the Sentinel-1 data flow to all users took place on 3rd October. Data can be accessed from: <https://sentinel.esa.int>
- The implementation of the ramp-up observation scenario is on-going, including in particular the coverage of a first set of Copernicus Services areas of interest, of European land and coastal waters, of a set of global tectonic/volcanic areas, as well as of other specific targets worldwide for various applications. The observation plan is gradually complemented with observations outside the above areas to achieve a full mapping of all land areas worldwide before the end of the ramp-up phase. See an overview at: <https://sentinel.esa.int/web/sentinel/missions/sentinel-1/observation-scenario>
- The detailed observation plan in the form of instrument acquisition segments are published on Sentinel Online at: <https://sentinel.esa.int/web/sentinel/missions/sentinel-1/observation-scenario/acquisition-segments>
- The use of Sentinel-1A data by the pre-operational precursor of the Copernicus Marine Environment Monitoring Service MyOcean for sea-ice and iceberg monitoring activities is on-going
- The Sentinel-1A spacecraft is in a stable state, operating in Nominal Mission Mode (NMM), with all sub-systems working on prime units
- The Flight Operations Segment (FOS) ensuring the monitoring, control and commanding of the satellite is operating nominally. Orbit control manoeuvres are performed once a week
- X-Band data acquisitions are routinely performed over Matera, Svalbard and Maspalomas X-band core stations
- The acquired data are circulated within the PDGS, systematically processed to Level-0 and Level-1 products and archived. Level-2 product operational qualification is on-going
- Operations are performed regularly at the Processing and Archiving Centres (DLR-PAC and UK-PAC). All other PDGS operational services (i.e. Mission Performance, Precise Orbit Determination, Wide Area Network) are operating nominally
- The areas where acquired data is systematically processed to Level-1 SLC products have been extended on 4 March and additional evolutions are being implemented. The current SLC production can be consulted at: <https://sentinel.esa.int/web/sentinel/missions/sentinel-1/production-scenario>
- On 18 March, a slight change in the Level-1 and 2 product format specification will be introduced. More details at: <https://sentinel.esa.int/web/sentinel/news/-/article/sentinel-1-product-format-change-from-18-march-2015>
- By 12 March:
 - A total of 5676 users have self-registered
 - Since the opening of the regular data flow on 3 October:
 - about 69000 products are currently available on-line for download
 - 448293 product download have been made by users, corresponding to 580 TB of data
- The overall operations mission performance is nominal

Outlook

- Continuation of ramp-up mission operations
- Start of the Sentinel-1A – Alphasat TDP-1 inter-orbit link characterisation phase

