

# sentinel-1

→ RADAR VISION FOR COPERNICUS

## Mission Status Report 57

Reference Period: 26 May 2015 – 1 June 2015

### Mission status

- The Sentinel-1A operational qualification phase is on-going. The first yearly Routine Operations Review is planned on 9 June 2015
- The opening of the Sentinel-1 data flow to all users took place on 3<sup>rd</sup> October. Data can be accessed from: <https://sentinels.copernicus.eu>
- 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 (Antarctica excluded) before the end of the ramp-up phase. The dedicated campaign for Antarctica ice sheet monitoring has started and will run till early October 2015 indicatively. See an overview of the observation scenario at: <https://sentinels.copernicus.eu/web/sentinel/missions/sentinel-1/observation-scenario>
- The detailed observation plan in the form of instrument acquisition segments is published on Sentinel Online at: <https://sentinels.copernicus.eu/web/sentinel/missions/sentinel-1/observation-scenario/acquisition-segments>
- The use of Sentinel-1A data by the Copernicus Marine Environment Monitoring Service for sea-ice and iceberg monitoring activities is on-going
- Sentinel-1 products were used by authorities in Alaska for monitoring a major flood. More information at: <https://sentinel.esa.int/web/sentinel/missions/sentinel-1/news/-/article/sentinel-1-monitors-alaskan-flood>
- 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 typically
- A planned satellite unavailability took place on 28 May from 06:30 UTC to 13:30 UTC in order to perform an on-board maintenance activity. No SAR acquisitions were performed during this period
- The Sentinel-1A – Alphasat TDP-1 inter-orbit link characterisation phase is on-going
- 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 are systematically processed to Level-1 SLC products are gradually being extended. The SLC production scenario description has been updated and can be consulted at: <https://sentinels.copernicus.eu/web/sentinel/missions/sentinel-1/production-scenario>
- By 28 May, a total of 7461 users have self-registered; 1,071,399 product download have been made by users, corresponding to 1,31 PB of data. At the time of publishing this report, about 145,000 products are available on-line for download
- The overall operations mission performance is nominal

### Outlook

- Continuation of ramp-up mission operations

