

sentinel-1

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Mission Status Report 52

Reference Period: 21 April 2015 – 27 April 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 3rd October. Data can be accessed from: <https://sentinel.esa.int>
- The implementation of the ramp-up observation scenario is on-going, 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 is 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 Copernicus Marine Environment Monitoring Service for sea-ice and iceberg monitoring activities is on-going
- Nepal earthquake and Calbuco volcano eruption: as part of the standard observation plan over global tectonic and volcanic areas and the systematic regional SLC processing, a number of pre-seismic SLC products covering the area affected by the M7.8 earthquake that occurred on 25 April in Nepal have been made regularly available to all users. Similarly, a number of SLC products before the eruption of the Calbuco Volcano in Chile on 22 April have also been published. In order to maximise the contribution of Sentinel-1A in the monitoring of these major events, some additional acquisitions have been planned over these areas during the coming weeks on top of the ones already included in the default observation plan. The new planning has been published on Sentinel Online. The associated SLC products will nominally be made available for user download through the scientific data hub
- 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
- 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://sentinel.esa.int/web/sentinel/missions/sentinel-1/production-scenario>
- By 23 April, a total of 6493 users have self-registered; 728080 product download have been made by users, corresponding to about 900 TB of data. At the time of publishing this report, about 108950 products are available on-line for download
- The overall operations mission performance is nominal

Outlook

- Continuation of ramp-up mission operations

