

sentinel-1

→ RADAR VISION FOR COPERNICUS

Mission Status Report 42

Reference Period: 10 February 2015 – 16 February 2015

Mission status

- The Sentinel-1A operational qualification phase is on-going, the first yearly Routine Operations Readiness Review is planned in May 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 initial ramp-up observation scenario is being implemented, including in particular coverage of a first set of Copernicus Services areas of interest, of European land and coastal waters, of a set of 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 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 to maintain the target orbital tube 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 operations qualification has started and Sentinel-1 operational products qualification is being pursued as planned.
- Operations are performed regularly at the DLR Processing and Archiving Centre (PAC) and at the UK PAC. All other PDGS operational services (i.e. Mission Performance, Precise Orbit Determination, Wide Area Network) are operating nominally.
- The distribution of generated SAR SM, IW and EW L0 & L1 user products is on going. The regular products flow is available for download by any user. With the automatic query and download capability offered to users, the number of search and download has drastically increased, occasionally affecting the data access operations. Few actions have been identified to further protect the service and ensure reliable performances. Implementation of these actions may lead to few limited interruption of the service for the coming two weeks (see <https://scihub.esa.int/twiki/do/view/SciHubNews/News00015>). By 16 February:
 - A total of 5170 users have self-registered.
 - Following the opening of the regular data flow on 3 October:
 - About 40000 products are currently available on-line for download.
 - A total of 280013 product download have been made by users, corresponding to about 381 TB of data.
- The overall mission performance operations is nominal

Outlook

- Continuation of ramp-up mission operations

