

sentinel-1

→ RADAR VISION FOR COPERNICUS

Mission Status Report 43

Reference Period: 17 February 2015 – 23 February 2015

Mission status

- The Sentinel-1A operational qualification phase is on-going. The first yearly Routine Operations Review is planned end 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 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 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
- Specific actions have been taken to support two activations from the International Charter Space and Major Disasters for floods in Australia following Cyclones Marcia and Lam
- The Sentinel-1A spacecraft is in a stable state, operating in Nominal Mission Mode (NMM), with all sub-systems working on prime units
- An unplanned unavailability of the satellite occurred on 19 February at 13:29 UTC. Nominal satellite operations were resumed on 20 February at 09:22 UTC
- 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 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 Centres (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 interruptions of the service in the coming days (see <https://scihub.esa.int/twiki/do/view/SciHubNews/News00015>).
By 19 February:
 - A total of 5284 users have self-registered
 - Since the opening of the regular data flow on 3 October:
 - about 47000 products currently available on-line for download
 - 316104 product download have been made by users, corresponding to about 430 TB of data
- The overall operations mission performance is nominal

Outlook

- Continuation of ramp-up mission operations

