

sentinel-1

→ RADAR VISION FOR COPERNICUS

Mission Status Report 34

Reference Period: 25 November 2014 – 1 December 2014

Mission status

- The Sentinel-1A operational qualification phase is on-going
- 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. 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
- Sentinel-1A responded to the activation EMSR111 from the Copernicus Emergency Management Service related to a volcanic eruption at Fogo Island (Cape Verde). Scientists could generate an interferogram helping to monitor ground movements. See more at: http://www.esa.int/Our_Activities/Observing_the_Earth/Copernicus/Sentinel-1/Fogo_volcano_on_Sentinel_s_radar
- The Sentinel-1A spacecraft is in a stable state, operating in Nominal Mission Mode (NMM), with all sub-systems working on prime units
- The acquisition and tracking phase campaign between the Sentinel-1A OCP and the Alphasat TDP-1 payload has been successfully completed. The communication phase characterisation tests are on-going. The first inter-orbit link transmission of SAR data between S1A and TDP-1 was successfully performed. More details at: http://www.esa.int/Our_Activities/Observing_the_Earth/Copernicus/Sentinel-1/Laser_link_offers_high-speed_delivery
- X-Band data acquisitions are routinely performed over Matera and Svalbard stations. Acquired data are circulated within the PDGS, systematically processed to Level-0 and Level-1 products and archived
- The gradual integration of the Maspalomas X-band core station and of the DLR Processing and Archiving Centre into Sentinel-1 operations is planned to be completed in December
- Sentinel-1 Level-1 products available to users are preliminary calibrated. Sentinel-1 operational products qualification is being pursued as planned
- The distribution of generated SAR SM, IW and EW L0 & L1 user products is on-going. A subset of the regular products flow is available for download by any user. By 27th November:
 - A total of 3670 users have self-registered
 - Since the opening of the regular data flow on 3 October:
 - 6508 products have been made available for download
 - 37324 product download have been made by users, corresponding to about 57 TB of data
- The overall operations mission performance is nominal

Outlook

- Continuation of ramp-up mission operations

