

sentinel-1

Mission Status Report 90

Reference Period: 19 January 2016 – 25 January 2016

→ RADAR VISION FOR COPERNICUS

Mission status

- The Sentinel-1A routine operations are on-going
- Sentinel-1 data can be accessed from: <https://sentinels.copernicus.eu>
- The observation scenario supports the systematic coverage of a first set of Copernicus Services areas of interest, of European land and coastal waters, of global tectonic/volcanic areas, as well as of other specific targets worldwide for various applications. The observation plan also includes regular mapping of all land areas worldwide. The dedicated campaign for Greenland ice sheet monitoring is on-going. An overview of the observation scenario is available 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 operational use of Sentinel-1A data by the Copernicus Marine Environment Monitoring Service for sea-ice and iceberg monitoring activities is on-going
- The European Maritime Safety Agency (EMSA) is gradually introducing in the CleanSeaNet service the use of Sentinel-1 imagery in quasi-real time. Preliminary operations with first EMSA local stations are on-going
- The Sentinel-1 Constellation Ground Segment Readiness Review is on-going. The main objective of the review is to verify that the necessary ground segment configuration is in place to operate Sentinel-1B in parallel to the on-going Sentinel-1A routine operations
- The Sentinel-1B Flight Acceptance Review is on-going (launch planned in April 2016)
- The Sentinel-1A spacecraft is in a stable state, operating in Nominal Mission Mode (NMM). 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 Payload Data Ground Segment (PDGS), systematically processed to Level-0 and Level-1 products and archived
- Wave Mode data are regularly acquired over open oceans, systematically processed to Level-2 OCN products and made available. Sentinel-1 IW and EW Level-2 OCN products over regional ocean areas are available on the Scientific Data Hub. The operational qualification of Level-2 OCN products is on-going (geophysical validation of the Radial Surface Velocity component)
- 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
- Since 21 July 2015, 100% of the IW data acquired over land are systematically produced to level 1 SLC, as shown at: <https://sentinels.copernicus.eu/web/sentinel/missions/sentinel-1/production-scenario>
- By 21 January, a total of 20,839 users have self-registered on the Sentinels Scientific Data Hub; 3,219,550 product download have been made by users, corresponding to 3.83 PB of data. At the time of publishing this report, more than 395,000 Sentinel-1A products are available on-line for download, representing 496 TB of data. Statistics of last 24 hours are available in real time at the Data Hub home page (<https://scihub.copernicus.eu>)
- An failure within the Data Centre hosting the Sentinel Data Hubs has caused the interruption of the open Sentinels data dissemination on Friday 22 January at 12:30 UTC. The access to the SciHub services has been restored on Saturday 23 January at 10:00 UTC, products publication started to be gradually restored on all Data Hubs on Monday 25 January at 8:53 UTC. More information at (see News section): <https://scihub.copernicus.eu>
- The overall operations mission performance is nominal

Outlook

- Continuation of routine mission operations

