



opernicus

sentinel-1

Mission Status Report 99 Reference Period: 22 March 2016 – 28 March 2016

→ RADAR VISION FOR COPERNICUS

Mission status

- The Sentinel-1A routine operations are on-going
- Sentinel-1 data can be accessed from: <u>https://sentinels.copernicus.eu</u>
- 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 being completed. 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: <u>https://sentinels.copernicus.eu/web/sentinel/missions/sentinel-1/observation-scenario/acquisition-segments</u>
- 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-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
- 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 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. On Saturday 26 March, a major power loss that occurred at the UK-PAC centre in Newport has temporary interrupted the Sentinel-1 Fast24h operations and delayed the associated on-line data access
- 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 and SM data acquired over land are systematically produced to level 1 SLC. More information at: <u>https://sentinels.copernicus.eu/web/sentinel/missions/sentinel-1/production-scenario</u>
- By 24 March, a total of 28,136 users have self-registered on the Sentinels Scientific Data Hub; 3,845,161 product download have been made by users, corresponding to 4.64 PB of data. At the time of publishing this report, 464,000 Sentinel-1A products are available on-line for download, representing 587 TB of data. Statistics of last 24 hours are available in real time at the Data Hub home page (https://scihub.copernicus.eu).
- The overall operations mission performance is nominal

Outlook

- Continuation of routine mission operations
- Launch of Sentinel-1B on 22 April 2016 on a Soyuz launcher from Kourou, French Guiana.