



Mission Status Report 424 Reference Period: 1st to 30st of April 2023

sentinel-1

→ RADAR VISION FOR COPERNICUS

Mission status

- The Copernicus Sentinel-1A operations went on routinely during the reporting period.
- The Sentinel-1A spacecraft is in a stable state, operating in Nominal Mission Mode. No S/C anomalies are to report during this month.
- The Flight Operations Segment (FOS) ensured the monitoring, control and commanding of the satellites nominally.
 Orbit control maneuvers (OCM) are performed nominally once a week. During the reporting period two events, not leading to Collision Avoidance Maneuver (CAM), were closely watched on S-1A and S-1B with closest approach on 2023-04-15 16:54 and 2023-04-12 11:45.
- Ground Segment operations have continued smoothly as part of the on-going Payload Data Ground Segment (PDGS) service operations. Between the 12th and 13th of April the product timeliness has been temporarily degraded.
- X-Band data acquisitions were routinely performed over MatePra, Svalbard, Maspalomas and Neustrelitz X-band core stations. The acquired data is circulated within the PDGS for systematic production and archiving.
- <u>The Copernicus Data Space Ecosystem</u> has been rolled-out in its first version and is operating in parallel to the legacy system.
- The Copernicus Sentinel Operations Dashboard has gone live on 20 April 2023 to keep users and stakeholders up to date with the latest information about satellite data made available. Further details available here.
- The spacecraft and downlink planning has been made successfully:
 - The use of the EDRS-A service by Sentinel-1A is on-going as part of the routine operations.
 - The detailed observation plan in the form of instrument acquisition segments has been <u>published</u>.
 - Wave Mode data is acquired globally over open oceans, systematically processed to Level-2 OCN products, and made available to CMEMS for operational assimilation.
 - Specific planning actions were performed to support Tropical Cyclones over ILSA
- S-1A Data Quality is nominal and is being checked routinely by the S-1 Mission Performance Center.
- The following articles related to Sentinel-1 were published during the reporting period:
 - Introducing World Cereal
 - How much water do we use for irrigation?
 - 10 remarkable Earth facts

Latest news

• Other news regarding Sentinel-1 can be found here.

Sentinel-1B disposal

- S-1B Pitch slew attitude characterisation is going nominally:
- The S/C entered and returned for the Pitch Slew attitude in 18/04. Telemetry was aligned with expectation and allows to proceed with the characterisation:
 - 24/04: return to the Pitch slew attitude.
 - 25/04: 200 seconds OCM performed nominally. Results aligned with expectations.
 - 04/05: 400 seconds OCM performed nominally. Results aligned with expectations.





