

sentinel-2

Mission Status Report 129

Reference Period: 14-27 Apr 2018

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Mission Status

- The Sentinel-2 mission is performing global and systematic acquisitions with 5-day revisit.
- The Sentinel-2 acquisition scenario is published at:
<https://sentinels.copernicus.eu/web/sentinel/missions/sentinel-2/acquisition-plans>
- The acquisition scenario has been executed with an average MSI sensing time per orbit of 19.75 minutes for Sentinel-2A and 20.3 minutes for Sentinel-2B.
- A collision avoidance manoeuvre took place on 17 April to avoid a close approach for Sentinel-2A. The chaser object was a Zenit-2 fragmentation debris (1992-093HE), a Rocket Fragmentation Debris that had an RCS (radar cross section) of 0.0031 m². The manoeuvre caused the loss of 5 OCP/EDRS links, due to the constraint of having the laser terminal parked during manoeuvres.

- Level-2A operational production is available over Euro-Mediterranean region since 26th of March 2018). Level-2A products are available on the Copernicus Open Access Hub and the Copernicus Services Data Hub. More details are available on this [link](#).
- The routine production of Level-1C top-of-atmosphere products is available in all the Data Hubs.
- To date, a total of 146,679 users have self-registered on the Copernicus Open Access Hub.
- About 3.78 millions products are available for download, cumulating a total volume of 2.1 Petabytes. Overall, a total volume of 17.75 Petabytes has been downloaded by the user communities from the Copernicus Open Access Hub, the Copernicus Services Data Hub, the Collaborative Data Hub and the International Hub.

- The latest data quality report is published at:
<https://sentinels.copernicus.eu/webde/sentinel/missions/sentinel-2/data-quality-report>
- Land Products Validation and Evolution (LPVE) workshop was held from 27 February to 01 March 2018 at ESA/ESRIN in Frascati (Italy). Presentations will be made available at:
<https://nikal.eventsair.com/QuickEventWebsitePortal/lpve-conference-2018/esa-conference>
- ESA organised the 2nd Mapping Water Bodies from Space Conference from 27 to 28 March at ESA/ESRIN. Presentations and further information are available at: <http://mwbs2018.esa.int/>

- The Flight Operations Segment (FOS), ensuring the monitoring, control and commanding of the satellites, is operating nominally.
- The Payload Data Ground Segment (PDGS) is operating nominally through its different operational services, i.e. Core Ground Stations (CGS), Processing and Archiving Centres (PAC), Mission Performance Centre (MPC), Precise Orbit Determination (POD), Payload Data Management Centre (PDMC) and Wide Area Network (WAN).
- X-band data acquisitions are routinely performed by the PDGS over Matera, Maspalomas and Svalbard core stations. The acquired data is systematically processed to Level-0 and Level-1 products, circulated, and archived.
- There was an anomaly on the Data Hub infrastructure on 24 April 2018 between 9:30 and 14:15 UTC. The incident was triggered by the combination of a problem on the switches interconnecting the servers to the storage, and by a fault on the switches failover mechanism.
- The European Data Relay System (EDRS) service is being used operationally for both Sentinel-2A and Sentinel-2B.

Outlook

- 5th Sentinel-2 Quality Working Group (QWG) meeting at ESA/ESRIN premises on 12-13 June 2018.
- New batch of L1C product evolutions (e.g. tile sensing time, detectors footprint mask) by June 2018.
- Sentinel-2 Constellation Mission Operations Review with board meeting on 27 June 2018 at ESA/ESRIN premises.
- Copernicus Data and Information Access Services (DIAS) operational by June 2018.
- Start of Level-2A worldwide production by July 2018.
- Completion of the conversion of the archive into single-tile format by Q3 2018.
- Production of L1C products geometrically refined using the Global Reference Image (GRI) and an upgraded Digital Elevation Model (DEM) by Q1 2019.