Mission Status Report 140

Reference Period: 08-28 Sep 2018

sentinel-2

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Mission Status

- The Sentinel-2 mission is performing global and systematic acquisitions with 5-day revisit.
- The Sentinel-2 acquisition plans are published at:

  https://sentinels.copernicus.eu/web/sentinel/missions/sentinel-2/acquisition-plans
- The observation scenario has been executed with an average MSI sensing time per orbit of 18 minutes for Sentinel-2A and 20.5 minutes for Sentinel-2B.

- The routine production of Level-1C top-of-atmosphere products is available in all the Data Hubs.
- Level-2A operational production is available over Euro-Mediterranean region since 26 of March 2018. Level-2A products are available on the Copernicus Open Access Hub, the Copernicus Services Data Hub and the Collaborative Data Hub. More details are available on this link.
- Update on Sentinel-2 L2A products was implemented to optimise the encoding of the quality bands (SCL, CLD, SNW, PVI, TCI) over 8 bits instead of 16 bits, in line with the Sentinel-2 L1C products. All L2A products generated as of 19 September 2018 feature this change.
- The latest data quality information is available in two reports, one for L1C products and one for L2A products.

- To date, a total of 181,212 users have self-registered on the Copernicus Open Access Hub.
- About 6.27 millions products are available for download, cumulating a total volume of 3.25 Petabytes. Overall, a total volume of 29.5 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.
- Due to a configuration issue at ground segment level, a set of Sentinel-2B products was published with an incorrect file name. These products will be removed and replaced with the correct file name (the list of impacted products is provided here).

- The space segment, with Sentinel-2A and -2B satellites, is in a stable and nominal state.
- A routine decontamination activity of the Sentinel-2A MSI took place over a continuous period of 24-hours between 15 and 16 September, from 07:00 to 07:00 UTC. During this temporal window, no MSI acquisition took place.
- The Flight Operations Segment (FOS), ensuring the monitoring, control and commanding of the satellites, is operating nominally.
- The European Data Relay System (EDRS) service is being used operationally for both Sentinel-2A and Sentinel-2B.
- Due to a Sentinel-2A Optical Communication Payload (OCP) unavailability between the 20th and the 24th of September causing the loss of the Sentinel-2A data downloaded through the European Data Relay System (EDRS), the Observation Scenario has been temporally reduced during that period.
- 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), Wide Area Network (WAN) and Data Access Hubs.

- A special issue in the Remote Sensing of Environment journal on "Science and Applications with Sentinel-2" is available online here. This special issue has been jointly edited by ESA and the European Commission (EC) Joint Research Centre (JRC). Additional papers will be progressively published as they are accepted.
- The following five DIAS platforms started operations on 21 June 2018: https://mundiwebservices.com/, https://sobloo.eu/, https://www.onda-dias.eu/ , https://creodias.eu/ and https://www.wekeo.eu/ .

Outlook

- As of 8 October 2018, a new Processing Baseline (02.09) will be deployed for Sentinel-2 Level-2A products. Detailed information about the changes implemented can be found here.
- New batch of L1C product evolutions (e.g. tile sensing time, detectors footprint mask) by October 2018.
- Start of Level-2A worldwide production during Q4 2018.
- Completion of the conversion of the archive into single-tile format by Q4 2018.