



Mission Status Report 170

Reference Period: 01-31 March 2021

sentinel-2

→ COLOUR VISION FOR COPERNICUS

Mission Status

- Despite the situation due to the COVID-19 pandemic, Sentinel-2 mission operations remained nominal.
- The mission is sensing systematically all land and water areas indicated [here](#), and the detailed mission acquisition plans are regularly published [here](#).
- Level-1C (top-of-atmosphere reflectance) and Level-2A (surface reflectance) products are available on [Copernicus Open Access Hub](#) and on [Data and Information Access Service \(DIAS\) platforms](#).
- On 30 March, a major improvement was introduced on the geometric quality of Sentinel-2 products, having now a more accurate absolute geolocation and multi-temporal registration. The improvement is in place over Europe and Africa and it will be progressively extended to the rest of the World in the coming months. Details on this improvement are available [here](#) and [here](#).
- The newly introduced Processing Baseline (03.00 for both Level-1C and Level-2A products) also includes the following improvements on the complete production:
 - Use of the new Copernicus DEM (Digital Elevation Model) at 90m resolution.
 - Improvement of the Level-1C cloud detection algorithm over high-altitude terrains.
 - Improvement of the Level-1C Technical Quality (TECQUA) mask accuracy.
 - Improvement of the Level-2A cloud probability layer near the boundary of the swath.
 - Improvement of the Level-2A topographic correction by using the Copernicus DEM @90m.
 - Correction of a light halo observed along Level-2A image boundaries, either at the edge of the swath or at the end of data-strips.
- Related to the improvements above, please also note that a new version of the stand-alone Level-2A processor (sen2cor version 2.9) is available online [here](#).
- Information on data quality is available in two reports, one for [L1C products](#) and one for [L2A products](#).
- Some Data Hub anomalies and outages impacted the availability of the data access during the period. Please refer to the [news](#) page for the list of the single events.
- A ground segment production issue occurred on the evening of 19 March and was resolved on the morning of 20 March.
- As a consequence of a contingency held at ground network level, the nominal availability of Copernicus Sentinel-2 Level-2A products was prevented on 13 March, and corrected in the following days.
- The following articles related to Sentinel-2 were published during the reporting period, highlighting the first two articles as related to Climate Change:
 - [Measuring shoreline retreat](#)
 - [Monitoring methane emissions from gas pipelines](#)
 - [Combination of Copernicus Sentinel-2 and PROBA-V data help illustrate river ice break-up](#)
 - [Copernicus Sentinel-2 brings students together for an online Remote Sensing course](#)
- Sentinel-2 videos and images have been published and are available [here](#).

Outlook

- To extend the provision of geometrically refined products over all regions worldwide.