Geophysical Research Abstracts Vol. 18, EGU2016-7364, 2016 EGU General Assembly 2016 © Author(s) 2016. CC Attribution 3.0 License.



Sentinel-2 Mission status

Bianca Hoersch (1), Olivier Colin (1), Ferran Gascon (1), Olivier Arino (1), Francois Spoto (2), Franco Marchese (3), Mike Krassenburg (2), and Benjamin Koetz (1)

(1) European Space Agency, Italy (bianca.hoersch@esa.int), (2) European Space Agency, Netherlands, (3) European Space Agency, Germany

Copernicus is a joint initiative of the European Commission (EC) and the European Space Agency (ESA), designed to establish a European capacity for the provision and use of operational monitoring information for environment and security applications.

Within the Copernicus programme, ESA is responsible for the development of the Space Component, a fully operational space-based capability to supply earth-observation data to sustain environmental information Services in Europe.

The Sentinel missions are Copernicus dedicated Earth Observation missions composing the essential elements of the Space Component. In the global Copernicus framework, they are complemented by other satellites made available by third-parties or by ESA and coordinated in the synergistic system through the Copernicus Data-Access system versus the Copernicus Services.

The Copernicus Sentinel-2 mission provides continuity to services relying on multi-spectral high-resolution optical observations over global terrestrial surfaces. Sentinel-2 capitalizes on the technology and the vast experience acquired in Europe and the US to sustain the operational supply of data for services such as forest monitoring, land cover changes detection or natural disasters management.

The Sentinel-2 mission offers an unprecedented combination of the following capabilities:

[U+25CB] Systematic global coverage of land surfaces: from 56°South to 84°North, coastal waters and Mediterranean sea;

[U+25CB] High revisit: every 5 days at equator under the same viewing conditions with 2 satellites;

[U+25CB] High spatial resolution: 10m, 20m and 60m;

[U+25CB] Multi-spectral information with 13 bands in the visible, near infra-red and short wave infra-red part of the spectrum;

[U+25CB] Wide field of view: 290 km.

The data from the Sentinel-2 mission are available openly and freely for all users with online easy access since December 2015.

The presentation will give a status report on the Sentinel-2 mission, and outlook for the remaining ramp-up Phase, the completion of the constellation and a view to ongoing evolutions, together with a view on data exploitation.