Geophysical Research Abstracts Vol. 19, EGU2017-19364, 2017 EGU General Assembly 2017 © Author(s) 2017. CC Attribution 3.0 License.



Sentinel-1 mission scientific exploitation activities

Yves Iouis Desnos, Michael Foumelis, and Marcus Engdahl ESA ESRIN Frascati Italy

The Sentinel-1 mission is the European Imaging Radar Observatory for the Copernicus joint initiative of the European Commission (EC) and the European Space Agency (ESA). Sentinel-1 mission is composed of a constellation of two satellites, Sentinel-1A and Sentinel-1B (launched in April 2014 and April 2016, respectively), sharing the same orbital plane and featuring a short repeat cycle of 6 days optimised for Synthetic Aperture Radar (SAR) interferometry science and applications. The full operation capacity was achieved after the completion of the Sentinel-1B in-orbit commissioning on 14 September 2016. Sentinel-1 data are freely available via the ESA's Sentinels Scientific Data Hub since October 2014. The data uptake by the science community has been unprecedented and numerous results have been published to date. The objective of the current paper is to provide a brief overview of the latest ESA activities, in the frame of the Scientific Exploitation of Operational Missions (SEOM) programme, aimed to facilitate the scientific exploitation of Sentinel-1 mission as well as discuss future opportunities for research.