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Sentinel data for UK users

A new online resource is set to give British end users a head start in exploiting the most ambitious Earth Observation programme ever mounted. Terri Freemantle explains

The UK Space Agency and the Satellite Applications Catapult have formally announced the launch of a jointly-funded and developed, online data hub through which UK end-users can access data from the Copernicus Programme's Earth Observation Sentinel satellites.

The data hub - Sentinel Data Access Service (SEDAS) - was created to help organisations optimise and exploit the vast amount of satellite data currently generated by the Sentinel satellites. Through its web-based interface (http://sedas.satapps.org/), end-users can learn about, discover and analyse Earth observation (EO) data, download news and educational content, and participate in discussion forums as well as view details of EO-themed events happening in the UK and continental Europe.

Open to all

SEDAS is available to both expert and non-expert user communities, enabling organisations and individuals with all levels of experience to access, use and benefit from the EO data.

Accessed via a registration page (see image), the SEDAS interface currently enables access to Sentinel-1A and -1B C-band synthetic aperture radar (SAR) data. For Sentinel-1, SEDAS currently supports Single-Look Complex (SLC) and Ground Range Detected (GRD) data.

Data can be searched for by location, using a manually-drawn shape or by uploading a shape file to define an area of interest, it is also possible specify a specific time period. The resulting data can be downloaded and, in addition, details of data scheduled to be collected over the next fortnight will also be provided to facilitate forward planning.

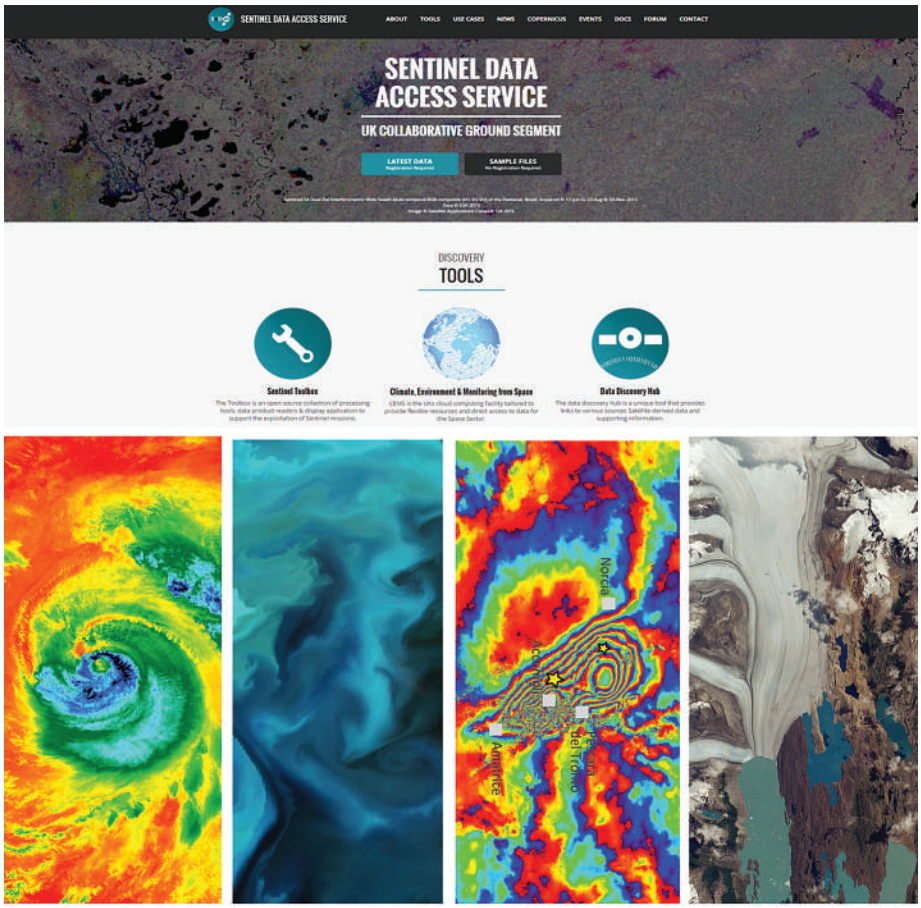
Sentinel-2A data will be available on SEDAS from late October and will provide wide-area, multispectral data covering 13 spectral bands (443 nm–2190 nm) with a swath width of 290 km and spatial resolutions of 10 m (4 visible and near-infrared bands), 20 m (6 red-edge/shortwave-infrared bands) and 60 m (3 atmospheric correction bands) respectively. Sentinel-2 data can be used to aid efforts in tackling deforestation, monitoring food security, rapid disaster monitoring and coastal pollution, amongst others. The satellite provides global coverage of the Earth's land surface every ten days (reduced to 5-days with the upcoming launch of Sentinel-2B in 2017) making the data of great value in ongoing studies, and operational services.

Immediate access

Currently, SEDAS can provide immediate access to a 30-day rolling archive of data. As a future enhancement, it will be possible to include requests for data outside of the archive period. The ability to batch download large quantities of Sentinel data at one time will facilitate operational use of the data for techniques such as time series analysis and change detection for applications including; measuring ground subsidence, assessing agricultural productivity and monitoring urban growth. We hope it will encourage an increased uptake of Copernicus data in operational service provision by UK industry and academia.

For more information and to register as a SEDAS user, please visit http://sedas.satapps.org/

SEDAS was funded by the UK Space Agency and the Satellite Applications Catapult and developed in collaboration with GeoCento, Deimos UK, Airbus and the Catapult.



Sentinel data delivered via the Copernicus programme provides a unified system through which vast amounts of data are fed into a range of thematic information services. These services are designed to benefit the environment, the way we live, support humanitarian needs, and aid effective policy-making for a more sustainable future. Sample Sentinel data © *European Space Agency*