



About Copernicus Sentinel-1...

WHAT?

The first in the Copernicus Sentinel series, a constellation of two identical radar imagery satellites in the same orbit, providing an all-weather, day-and-night supply of images of Earth's surface

APPLICATIONS

Main applications include:

• Monitoring sea ice and icebergs • monitoring of land ice (glaciers, ice sheets, ice caps) • river and lake ice monitoring • oil spills and ships • marine winds & waves • land-use change, agriculture, deforestation Iand deformation • and support to emergency management such as floods and earthquakes

DATA AND USERS

As of end 2020, about 6 million products have been generated and made available for download, culminating a total of 10 Petabytes. More than 30 million Sentinel-1 product downloads have been made by users, representing nearly 40 **Petabytes**. Data are exploited by various users: Copernicus Services, public institutions, scientists, commercial companies





Services relate to:

 Monitoring of Arctic sea-ice extent mapping • maritime surveillance (oil spill monitoring, ship detection, illegal fisheries) • monitoring land-surface for motion risks including subsidence, landslides • understanding of Earth processes (earthquakes, volcanoes) • monitoring of infrastructure • mapping for forest, water and soil management • and mapping to support humanitarian aid and crisis situations

BENEFITS

WHEN?

Sentinel-1A was launched on 3 April 2014 and Sentinel-1B on 25 April 2016. Both were taken into orbit on a Soyuz rocket, from Europe's Spaceport in French Guiana

WHERE?



Designed and built by a consortium of around 60 companies led by Thales Alenia Space and Airbus Defence and Space

WHAT'S NEXT?

Continuity over the coming years will be ensured by the launch of additional satellites (Sentinel-1C and Sentinel-1D). Furthermore, a new generation of Sentinel-1 satellites is being prepared, to take up the relay from the first generation

DATA ACCESS

https://scihub.copernicus.eu/