

About COPERNICUS SENTINEL-3



WHAT?

With a suite of cutting-edge instruments, Sentinel-3 measures systematically Earth's oceans, land, rivers and lakes, land ice, sea-ice and atmosphere, to monitor and understand long term and large-scale global dynamics

INSTRUMENTS?

The spacecraft carries four main instruments: OLCI: Ocean and Land Colour Instrument SLSTR: Sea and Land Surface Temperature Radiometer SRAL: SAR Radar Altimeter MWR: Microwave Radiometer

APPLICATIONS?

A versatile mission that supports many applications, main ones include: measuring sea and lake surface topography; sea and land surface temperature; sea-ice and land ice elevation and ocean and land surface colour to support ocean forecasting systems, environmental monitoring and climate monitoring; and wildfire monitoring. The mission is jointly operated by ESA and EUMETSAT to deliver operational ocean and land observation services



OLCI

MWR

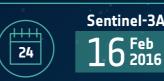
SLSTR

SRAL

BENEFITS?

Core services relate to:

Numerical Ocean Prediction; Global Land Monitoring Applications; Open Ocean and Sea-Ice and Land Ice Monitoring; Coastal Zone Monitoring; Atmospheric Services; Climate Change Monitoring; Environmental Policy and Law; Maritime Safety and Security; and Support to European Security, Humanitarian and Emergency Services





Both were taken into orbit on a Rockot launcher from Plesetsk Cosmodrome, Russia

WHERE?

WHEN?

Both satellites were designed and built by a consortium of around **100 companies**, under the leadership of Thales Alenia Space, France. The mission is the result of close collaboration between ESA, the European Commission, EUMETSAT, France's CNES space agency, industry, service providers and data users

DATA AND USERS?

Since the start of dissemination of Sentinel-3A data in October 2016 and until September 2021, users have downloaded **132.068.986** Sentinel-3 products, corresponding to a total volume of **35,64 PiB**. The archive exploitation ratio was **1:11**, meaning that users have downloaded 11 times the number of Sentinel-3 published products.

Data are exploited by various users: Copernicus Services, public institutions, scientists, researchers and commercial companies

WHAT'S NEXT?

Continuity over the coming years will be ensured by the launch of additional satellites (Sentinel-3C and Sentinel-3D). Furthermore, a new generation of Sentinel-3 satellites is being prepared, to take up the relay from the first generation

DATA ACCESS https://scihub.copernicus.eu/

