CEOS MIM Database Quarterly Report
January 2024

@EOHandbook

The Earth Observation Handbook, prepared by the European Space Agency (ESA) in support of the Committee on Earth Observation Satellites (CEOS), presents the main capabilities of satellite Earth observations, their applications, and a comprehensive overview of present and planned civil space agency Earth observation satellite missions and their instruments. The database which serves as the foundation for the missions, instruments, and measurements information at the heart of the Handbook content is updated annually and is always available online at:

database.eohandbook.com

This document provides a summary of key mission activities from the past quarter (October to December, 2023), and the coming two quarters (January 2024 to June 2024).

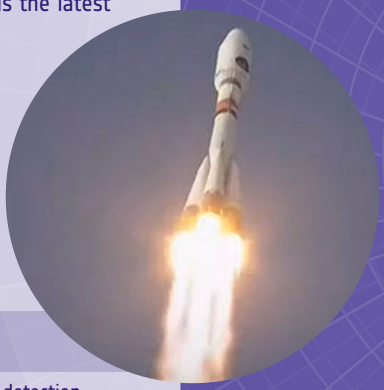
THEOS-2

Latest News

THEOS-2 was successfully launched on a Vega rocket from Kourou on 9 October 2023. The Geo-Informatics and Space Technology Development Agency of Thailand (GISTDA) mission carries a high resolution imager. It will be joined in a constellation by **THEOS-2A**, which will also have the ability for video capture.

The next in China's series of ocean monitoring satellites, **HY-1E**, was launched from Jiuquan Satellite Launch Center on November 16, 2023. The satellite carries the China Ocean Colour & Temperature Scanner (COCTS), a medium-resolution spectro-radiometer, as well as the Coastal Zone Imager (CZI), which is a multi-purpose radiometer imaging in the visible spectrum. The mission is the latest to join the **CEOS Ocean Colour Radiometry Virtual Constellation (OCR-VC)**.

Arctica-M N2 launched on December 16, 2023 onboard a Soyuz rocket from the Baikonur Cosmodrome into a highly elliptical orbit. The ROSKOSMOS / ROSHYDROMET mission will focus on meteorological measurements over the Arctic region, joining **Arctica-M N1**, which launched in February 2021.



Launch of Arctica-M N2

Upcoming Launches

Mission	Agencies	Launch	Purpose
INSAT-3DS	ISRO	January 2024	Planned as a spare for India's geostationary meteorological satellite series, carrying both imager and sounder instruments.
NORSAT-4	NOSA / NDRE	January 2024	Carries an AIS Receiver and a Low Light Imager (LLI) for performing vessel detection in low light conditions.
Meteor-M N2-4	ROSKOSMOS / ROSHYDROMET	February 2024	Next in the series of Russian hydrometeorology satellites.
NISAR	NASA / ISRO	February 2024	Dual-frequency SAR mission, with both L-band and S-band instruments.
PACE	NASA / NSO / SRON	February 2024	Plankton, Aerosol, Cloud ocean Ecosystem (PACE) mission to better understand how the ocean and atmosphere exchange carbon dioxide.
CO3D	CNES	March 2024	Will provide global Digital Surface Models of landmasses between +70° and -70° latitudes with a resolution of 1 m and in 3D.
Resurs-P N4	ROSKOSMOS	March 2024	Carries medium and high resolution multispectral imagers, as well as a hyperspectral imager.
RISAT-1B	ISRO	March 2024	C-Band SAR mission, for radar backscatter measurements of land, water and ocean surfaces for various applications.
Sentinel-1C	ESA / COM	March 2024	Third in the series of Sentinel-1 C-Band SAR missions. Part of the European Copernicus programme.
GOES-U	NOAA / NASA	April 2024	The fourth and final of the GOES-R series of geostationary meteorological satellites. To be positioned over the Americas.
AWS	ESA / EUMETSAT	June 2024	Protoflight satellite for a planned constellation of meteorological microsatellites, with frequent revisits over the Arctic and Antarctic polar regions.
EarthCARE	ESA / JAXA	June 2024	Carries lidar and radar instruments to study the relationship of clouds, aerosols and radiation.