

# CEOS MIM Database Quarterly Report

April 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 (January to March, 2024), and the coming two quarters (April to September, 2024).

## Latest News

After an impressive 17 years and 8 months of observations, **CloudSat** ended its scientific operations on December 20, 2023. The spacecraft's orbit was lowered and passivated on March 20, 2024, and the mission is now in Mission Closeout Phase until September 30, 2025. In this phase, all algorithms will be finalised, and the final dataset will be reprocessed and archived.

NASA's **Plankton, Aerosol, Cloud, ocean Ecosystem (PACE)** mission successfully launched on February 8, 2024 from Cape Canaveral on a SpaceX Falcon 9 rocket. The mission will investigate how the ocean and atmosphere exchange carbon dioxide, as well as how aerosols might fuel phytoplankton growth in the surface ocean. PACE carries the Ocean Colour Instrument (OCI), Hyper-Angular Rainbow Polarimeter (HARP2) and Spectro-Polarimeter for Exploration (SPEXone). **First light images** from the mission were released on April 11.

The next Indian geostationary meteorological satellite, **INSAT-3DS**, launched on February 17, 2024. The mission carries an imager and sounder, and will augment the meteorological services provided by the currently operational **INSAT-3D** and **INSAT-3DR** satellites. **First light images** were released on March 11.

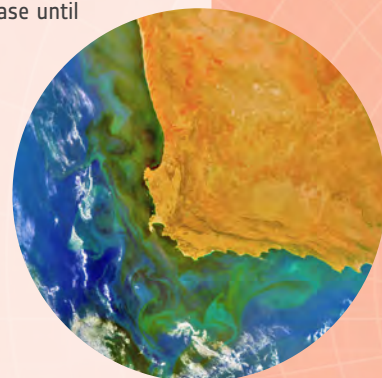
**Meteor-M N2-4**, the next in Russia's series of low Earth orbiting meteorological satellites, launched from the Vostochny Cosmodrome on a Soyuz-2.1b launch vehicle on February 29, 2024. This is the 6th flight unit of the Meteor-M series, which will operate in a sun-synchronous orbit at an altitude of 832 km.

## Upcoming Launches

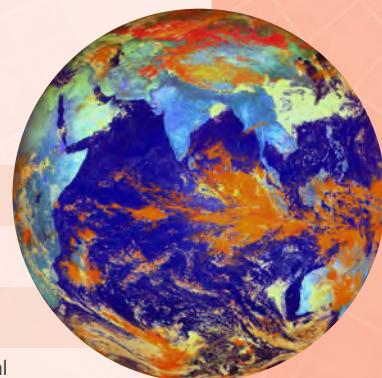
Mission	Agencies	Launch	Purpose
LOTUSat 1	VAST	May 2024	Vietnamese X-band SAR mission, to support disaster risk reduction and climate change mitigation.
EarthCARE	ESA / JAXA	May 2024	Carries lidar and radar instruments to study the relationship of clouds, aerosols and radiation.
Kondor-FKA N2	ROSKOSMOS	June 2024	Second in the series of Russian S-band SAR satellites.
GOES-U	NOAA / NASA	June 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 microsats, with frequent revisits over the Arctic and Antarctic polar regions.
KOMPSAT-6	KARI	August 2024	X-band SAR mission, with resolution up to 0.5m.
PREFIRE	NASA	August 2024	Seeks to reduce uncertainty in polar energy fluxes and the processes that influence them. Mission consists of twin cubesats with identical long wave spectrometers.



CloudSat



First light image from PACE



First light image from INSAT-3DS