

CEOS MIM Database Quarterly Report

July 2021

@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:

<http://database.eohandbook.com>

Below is a summary of key mission activities from the recent quarter (April – June, 2021) and the coming two quarters (July – December).

Latest News

In the second quarter of 2021, four CEOS Agency EO satellites were successfully launched, with around 20 launches expected in the third and fourth quarters.

The launch of **NORSAT-3** on Vega occurred on 29 April, 2021. **NORSAT-3** carries an AIS receiver, as well as the Navigation Radar Detector instrument to test the detection and identification of maritime navigation radars.

Three satellites were launched in the last quarter by Chinese agencies: **HY-2D** (ocean dynamics), **FY-3E** (polar-orbiting met satellite) and **FY-4B** (geostationary met satellite).

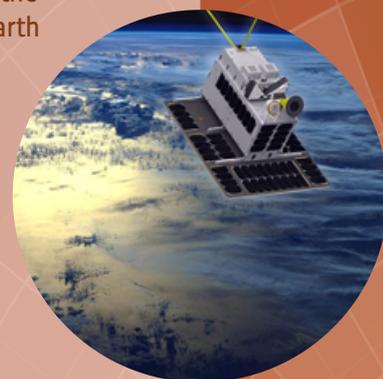
HY-2D was launched on 19 May 2021 by a Long March-4B rocket, and will form a constellation with the HY-2B and HY-2C satellites to build an all-weather and round-the-clock dynamic ocean environment monitoring system. The constellation will also support the nation's marine disasters early warning system.

FY-4B was launched on 3 June 2021 by a Long March-3B rocket, and is the first of China's new-generation meteorological satellites in geostationary orbit. Forming a network with FY-4A, **FY-4B** is equipped with a rapid imager, which improves measurement resolution to 250 meters and accelerates scan imaging of the Earth when compared to its predecessor.

Mission Launch / EOL Changes

The Vietnam-made micro-satellite **NanoDragon** is set for launch in September. It will operate at an orbit of 520km, with its main task to integrate an Automatic Identification System used for the purpose of tracking and monitoring vessels at sea.

The meteorological mission of South Korea's **Communication, Oceanography and Meteorology Satellite (COMS)** ended on 1 April 2021. This was the first flight unit of South Korea's geostationary meteorological programme, and allowed for intensive monitoring of extreme weather conditions by observing the Korean peninsula with a maximum 8-minute interval.



NORSAT-3. Image by UTIAS/SFL



HY-2D launch. Photo by Wang Jiangbo / chinadaily.com.cn



NanoDragon satellite nears completion. Photo by VNVC.

Launched

NORSAT-3
NOSA / NDRE
29 April 2021

HY-2D
NSOAS / CAST
19 May 2021

FY-4B
NSMC-CMA / NRSCC
2 June 2021

FY-3E
NSMC-CMA / NRSCC
4 July 2021

Upcoming

GISAT
ISRO
August 2021

Light-1
UAE SA / KU / NYUAD
August 2021

Meteor-M N2-3
ROSKOSMOS / ROSHYDROMET
August 2021

Landsat 9
NASA / USGS
September 2021

NanoDragon
VAST
September 2021

OCEANSAT-3
ISRO
December 2021

GOES-T
NOAA / NASA
December 2021

RISAT-1A
ISRO
Q4 2021