

# CEOS MIM Database Quarterly Report

April 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 (January – March, 2021) and the coming two quarters (April – September).

## Latest News

In the first quarter of 2021, three CEOS Agency Earth observation (EO) satellites were successfully launched, with six more launches expected in the second and third quarters.

INPE's **Amazonia-1** – the first EO satellite completely designed, integrated, tested and operated by Brazil – was successfully launched on 28 February, 2021. **Amazonia-1** is in a sun-synchronous orbit, and carries a wide-view optical imager, giving it a 5-day revisit rate that is well-suited to deforestation alerts for the cloud-covered Amazon.

Carried on the same Soyuz-2.1b launch, Russia's **Arctica-M N1** was also successfully deployed. This mission is Roscosmos' first to monitor the Arctic's climate and environment. With a highly elliptical orbit, it will linger over the Arctic and sample data every 15-30 minutes. It is the first of two such satellites to be launched, with the second set for launch in 2023.

South Korea's **CAS500-1** remote-sensing satellite was launched on 22 March, 2021. KARI developed the satellite alongside a group of industry partners, including Korea Aerospace Industries (KAI). The second in this series of satellites, CAS500-2, is expected to launch in May, 2021.

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.

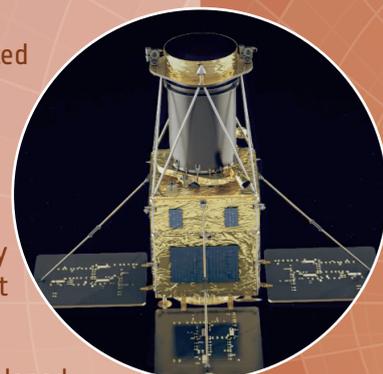
## Mission Launch / EOL Changes

The upcoming launch of ISRO's **GISAT** (a high-resolution geostationary imager) is expected in May. **GISAT** will build upon the trend of finer spatial resolution products from geostationary orbit, with its instruments covering visible and VNIR bands at 50m, hyperspectral VNIR at 192m, SWIR at 320m, and TIR at 1.5km.

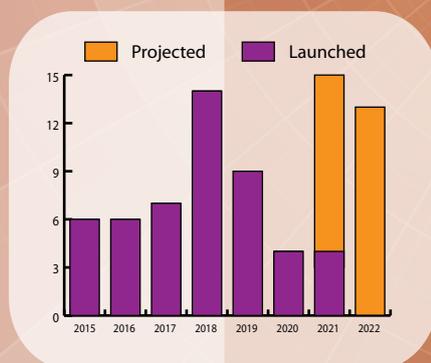
Launch of **Landsat 9** is now slated to occur in September 2021. The mission will provide continuity for Landsat 8, including via an improved operational-grade thermal instrument.



Soyuz-2.1b carrier rocket. Photo Credit: Twitter @roscosmos



CAS500-1. Photo Credit: KARI



CEOS Agency Launches 2015-2022

### Launched

#### Amazonia 1

INPE  
28 February 2021

#### Arctica-M N1

ROSKOSMOS / ROSHYDROMET  
28 February 2021

#### CAS500-1

KARI / KAI / NGII  
22 March 2021

#### NORSAT-3

NOSA / NDRE  
29 April 2021

### Upcoming

#### CAS500-2

KARI  
May 2021

#### GISAT

ISRO  
May 2021

#### Light-1

UAE SA / Khalifa University / NYUAD  
August 2021

#### Landsat 9

NASA / USGS  
September 2021

#### RISAT-1A

ISRO  
H2 2021

#### CSG-2

ASI / MoD (Italy)  
H2 2021