

EOS-02 satellite

April 14, 2022

In news– Recently, the Union Minister of State (Independent Charge) Science & Technology has said that the EOS-02 satellite will be launched in the second quarter of 2022.

About EOS-02 satellite-

- **EOS-02 is Technology demonstration satellite for various new technologies with applications that include agriculture, forestry, geology, hydrology,** miniaturised power electronics, reaction wheels etc. and forming the payload for SSLV-1.
- EOS-02 is based on Microsat-TD and is **intended to be used for cartographic applications at a cadastral level, urban and rural management,** coastal land use and regulation, utilities mapping, development and various other GIS applications.
- The satellite **carries two payloads:** a mid-wavelength and a long-wavelength infrared camera with a 6m resolution.
- It is planned to be launched on Small Satellite Launch Vehicle's maiden flight SSLV-D1 in July 2022.
- An anomaly in the Cryogenic Upper Stage led to failure of the **launch of the EOS-3 satellite.**
- **A National level Failure Analysis Committee (FAC)** consisting of experts from academia & ISRO was immediately **constituted to identify the causes of the anomaly** in the Cryogenic Upper Stage of GSLV, that led to mission abort and to recommend corrective actions for future missions.
- The committee has recommended improvements to enhance the robustness of the Cryogenic Upper Stage for future GSLV missions.
- The GSLV vehicle with the required modifications in the Cryogenic Upper Stage is expected to be ready by the third quarter of 2022.

Satellites included in the EOS series are as follows-

- EOS-01: Earth Observation satellite meant for Agriculture, Forestry & disaster management support.
- EOS-02: Technology demonstration satellite for various new technologies with applications that include agriculture, forestry, geology, hydrology etc. and forming the payload for SSLV-1.
- EOS-03 : First Agile Earth Observation satellite in Geostationary orbit and applications which include near real time imaging, quick monitoring of natural disasters, spectral signatures for agriculture, forestry etc.
- EOS-04 : Radar Imaging satellite meant to provide high quality images under all weather conditions for applications such as Agriculture, Forestry & Plantations, Soil Moisture & Hydrology and Flood Mapping.
- EOS-05 : Earth Observation Satellite in the Geostationary Orbit.
- EOS-06 : Earth Observation satellite meant for applications, which include ocean related services and advisories towards potential fishing zone forecast , ocean state forecast.

Further

reading:

<https://journalsofindia.com/small-satellite-launch-vehicle-sslv/>