

HysIS

June 24, 2020

HysIS, the country's first **hyperspectral imaging satellite** for advanced Earth observation. It is launched with about 30 small satellites of foreign customers on the PSLV launcher, numbered C-43.

About HysIS and its significance:

- The primary goal of HysIS is **to study the Earth's surface in visible, near-infrared and shortwave infrared regions** of the electromagnetic spectrum.
- HysIS will be ISRO's first **full-scale working satellite** with this capability. While the technology has been around, not many space agencies have working satellites with hyperspectral imaging cameras as yet.
- A hyperspectral imaging camera in space can provide **well-defined images** that can help to identify objects on Earth far more clearly than regular optical or remote sensing cameras.
- The technology will be an added advantage of watching over India from space for a **variety of purposes such as defence, agriculture, land use, minerals and so on.**
- HysIS **carries two payloads**, the first in the Visible Near Infrared (VNIR) spectral and the second in the Shortwave Infrared Range (SWIR) spectral range .