STUDY NOTES · BASIC CONCEPT

All Details about ISRO's first mission of 2026. PSLV-C62 / EOS-N1

Science & Technology

26 Jan 2014

ISRO's first mission of 2026, the PSLV-C62 / EOS-N1 launch, took place on January 12, 2026, from the Satish Dhawan Space Centre in Sriharikota, Andhra Pradesh.

The mission lifted off at approximately 10:17–10:18 AM IST using the Polar Satellite Launch Vehicle (PSLV) in its DL variant (PSLV-DL), marking the 64th flight of the reliable "workhorse" rocket.

BECOME IAS
AI Powered UPSC Preparation by ZINKPOT

Primary Payload

1. EOS-N1 (also known as Anvesha): An advanced Earth observation satellite developed by the Defence Research and Development Organisation (DRDO).
2. It features hyperspectral imaging technology, enabling high-resolution detection of materials, troop movements, terrain changes, crop patterns, and environmental monitoring from hundreds of kilometers away.
3. Designed for strategic surveillance, national security, border monitoring, agriculture, and urban mapping.

Co-Passenger Payloads

1. The mission carried a total of 15–16 co-passenger satellites (reports vary slightly on exact count), including International payloads from countries like Spain (Kestrel Initial Technology Demonstrator or KID — a small-scale re-entry capsule prototype for controlled atmospheric re-entry testing, planned to splash down in the South Pacific Ocean).
2. Various Indian CubeSats and small satellites from startups, universities, and entities (e.g., OrbitAID Aerospace's AayulSAT — India's first on-orbit satellite refuelling demo; others from Dhruva Space, Space Kidz India, CV Raman Global University, Assam Don Bosco University, etc.).
3. Additional experiments for propellant transfer, satellite servicing, AI-image labs, and orbital tech demos.
4. This was a commercial mission managed by NewSpace India Limited (NSIL), ISRO's commercial arm, highlighting India's growing role in global small-satellite rideshare launches.

Mission Outcome

Unfortunately, the launch encountered a significant anomaly toward the end of the third stage (PS3), leading to a deviation in the flight path and roll rates disturbance. ISRO confirmed the issue shortly after liftoff, stating: The mission could not proceed as planned, resulting in failure to place the satellites into their intended polar sun-synchronous orbit.

This echoes a similar third-stage issue in the previous PSLV-C61 mission (May 2025, which failed to deploy EOS-09).

ISRO has initiated a detailed failure analysis of telemetry and propulsion data. The payloads, including the strategic Anvesha satellite, are presumed lost or unrecoverable.

This setback comes despite high expectations for a strong start to 2026, following ISRO's successes in 2025 and preparations for upcoming missions like Gaganyaan. The PSLV remains one of the world's most trusted launch vehicles historically, with records like launching 104 satellites in a single mission (2017).

BECOME IAS
AI-Powered UPSC Preparation by ZINKPOT