SPACE CLUB OF INDIA

WEEKLY SPACE NEWS BULLETIN

SPECIAL EDITION
23 November 2026

REPORTING PERIOD
17–23 November 2026

Inspiring the next generation of space pioneers

Theme: *The Space Race Accelerates: Constellations, National Security, Human Spaceflight and India's New Space Economy*

EXECUTIVE BRIEFING



A spacecraft above Earth's cloud cover. Photo: NASA, Unsplash

The week of 17–23 November shows how quickly space is moving from an exploration business to a strategic infrastructure sector. Three developments stand out.

EDITORIAL BY



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The future space race will not be won by the country that owns the most satellites.

Editorial perspective, page 5

FIRST: CONSTELLATION COMPETITION IS ACCELERATING
China added another batch of satellites to its national LEO broadband system, while the United States kept up a high tempo of national-security launches.

SECOND: SPACE IS AN INTELLIGENCE AND SECURITY DOMAIN
The USSF-317 and NROL-136 missions show the growing importance of proliferated satellite architectures for national security and intelligence.

THIRD: INDIA IS BUILDING A BROADER SPACE ECONOMY
Government-backed capital is reaching downstream space-data companies, while IN-SPACe supports applications such as 3D reconstruction of Indian cities.

Reports of another delay to the first uncrewed Gaganyaan mission underline an important lesson: human spaceflight must be driven by safety and systems maturity rather than calendar pressure.

THIS WEEK IN SPACE

1.	INDIA	Gaganyaan faces another possible delay
2.	INDIA	SatSure receives ₹60 crore from government-backed space fund
3.	INDIA	IN-SPACe backs satellite-based 3D urban mapping
4.	USA	Voyager 1 reaches the one-light-day milestone
5.	CHINA	Shijian-24 launched on Long March 2D
6.	USA	USSF-317 launches classified Space Force payload
7.	CHINA	SatNet adds nine LEO broadband satellites
8.	USA	NROL-136 strengthens proliferated intelligence architecture
9.	INDIA	Space economy moves towards orbital infrastructure and AI
10.	SPACE	Launch cadence and constellation competition accelerate

1. INDIA: MAJOR DEVELOPMENTS

GAGANYAAN'S FIRST UNCREWED MISSION MAY MOVE TO 2027

INDIA · ISRO

India's first uncrewed Gaganyaan mission, originally expected in December 2026, may now launch no earlier than February 2027, according to reports citing senior ISRO officials. Additional simulations, technical fine-tuning and validation work are reportedly being undertaken.

> **Why it matters:** *India should measure Gaganyaan by test maturity and reliability, not merely by launch dates.*

SATSURE RECEIVES ₹60 CRORE FROM GOVERNMENT-BACKED SPACE FUND

INDIA · SPACE CAPITAL

Indian space-tech company SatSure has raised approximately ₹60 crore ($7 million) from the government-backed Antariksh Venture Capital Fund. The investment forms part of a larger Series B funding round.

SatSure applies satellite imagery and artificial intelligence to banking, insurance, infrastructure, agriculture and government decision-making.

> **Why it matters:** *Government-backed capital is now reaching downstream space-data companies.*

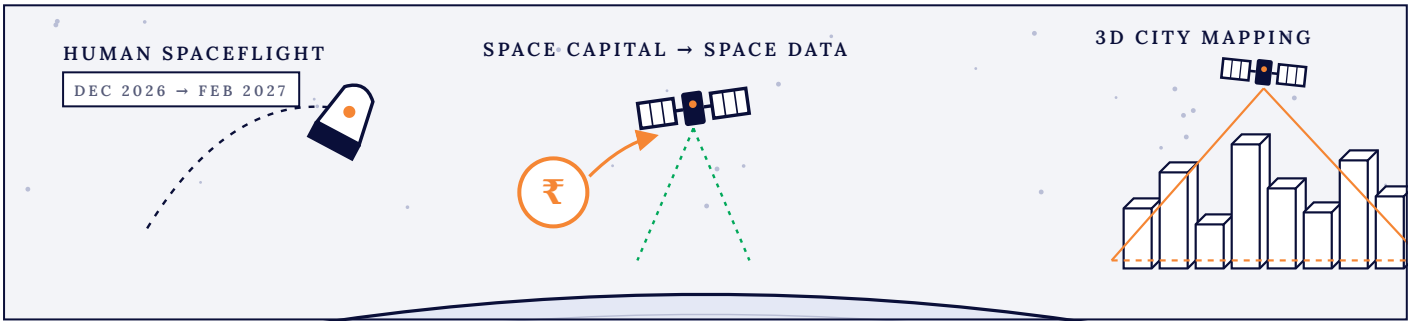
IN-SPACE BACKS SATELLITE-BASED 3D MAPPING OF INDIAN CITIES

INDIA · IN-SPACE

IN-SPACe selected Space Pixxel Technologies, KaleidEO Space Systems and Azista Industries to demonstrate high-resolution 3D reconstruction of Indian human settlements using satellite data and monocular imagery. Pilot projects include Bengaluru and Shimla.

Three-dimensional settlement information can support urban planning, infrastructure development, disaster management, population assessment and national security.

> **Why it matters:** *This is the transition from satellite imagery to geospatial intelligence. Indian satellite data can become the foundation for an indigenous AI + geospatial economy.*



Human spaceflight, space capital and 3D city mapping. Illustration: Space Club of India

2. GLOBAL SPACE DEVELOPMENTS



Voyager 1 at one light-day, and new LEO constellations. Illustration: Space Club of India

VOYAGER 1 REACHES ONE LIGHT-DAY FROM EARTH

USA · NASA · 18 NOVEMBER

NASA's Voyager 1 reached a remarkable milestone on 18 November: the spacecraft became approximately one light-day from Earth, around 16 billion miles or 26 billion kilometres away. Launched in 1977, Voyager 1 remains the most distant human-made object.

Voyager is more than an exploration story. It is an extraordinary demonstration of long-duration spacecraft engineering, autonomous operations, communications and reliability.

> **Why it matters:** *As India prepares for more complex deep-space and human-spaceflight missions, Voyager's nearly half-century of operations offers lessons in designing systems that survive far beyond their original mission assumptions.*

CHINA LAUNCHES MYSTERIOUS SHIJIAN-24 SATELLITE

CHINA · LONG MARCH 2D · 19 NOVEMBER

China launched Shijian-24 aboard a Long March 2D from the Taiyuan Satellite Launch Center. The satellite entered a planned sun-synchronous orbit, but its precise mission objectives and manufacturer have not been publicly disclosed.

The continued launch of experimental and undisclosed spacecraft shows China's rapidly expanding space infrastructure.

> **Why it matters:** *India needs stronger Space Domain Awareness (SDA): the ability to identify, track and characterise spacecraft, not merely know their orbital positions.*

Source: Interesting Engineering

US SPACE FORCE LAUNCHES CLASSIFIED USSF-317 MISSION

USA · FALCON 9 · 21 NOVEMBER

SpaceX launched the classified USSF-317 mission from Vandenberg Space Force Base on a Falcon 9 on 21 November (UTC), a day after a scrubbed attempt. The payload and orbital destination were not publicly disclosed. The first stage landed on a drone-ship, another example of high-frequency reusable launch operations.

> **Why it matters:** *The important development is not simply the launch. It is the combination of rapid launch, reusable vehicles, classified payloads and proliferated space architectures, which is changing the meaning of assured access to space.*

Source: Space.com

CHINA ADDS NINE SATELLITES TO ITS LEO BROADBAND CONSTELLATION

CHINA · SATNET · 20 NOVEMBER

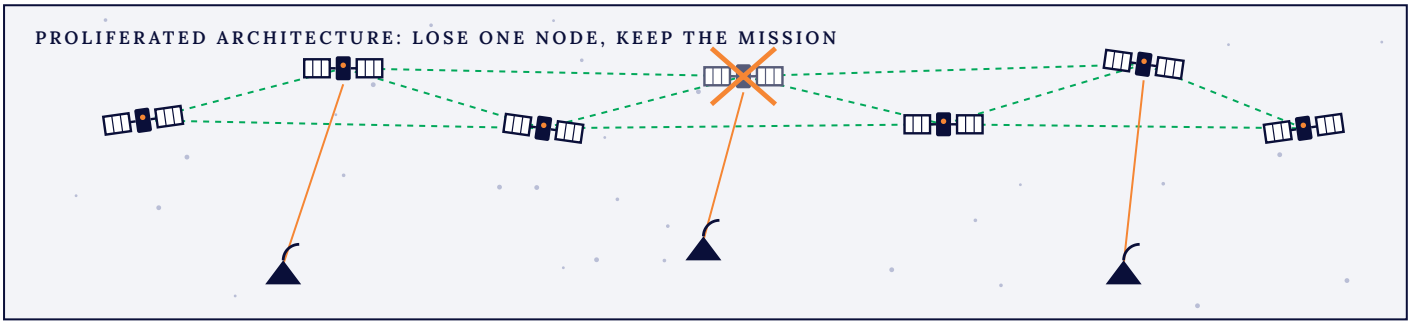
A Long March 8A deployed nine LEO communications satellites for China's SatNet constellation, which is expected eventually to comprise thousands of satellites.

The competition for LEO is no longer simply between companies such as Starlink and other commercial operators. It is increasingly a competition between national satellite architectures that could create competing global connectivity ecosystems.

> **Why it matters:** *This strengthens the case for India to accelerate its own LEO communications, satellite-to-device and secure government connectivity.*

Source: Space Launch Now

3. SPACE SECURITY AND DEFENCE



A proliferated constellation keeps working when one satellite is lost. Illustration: Space Club of India

NROL-136 ADDS TO AMERICA'S PROLIFERATED INTELLIGENCE ARCHITECTURE

USA · NRO · 22 NOVEMBER

SpaceX launched NROL-136, carrying an undisclosed number of intelligence-gathering satellites for the US National Reconnaissance Office, another step in the NRO's proliferated architecture approach.

Space intelligence once depended on a small number of extremely capable satellites. The new model is **many satellites → distributed capability → resilience → rapid replenishment**.

> **Why it matters:** *India's military ISR architecture needs not just larger and more capable satellites, but distributed constellations that can survive loss, degradation or attack.*

SPACE SECURITY IS BECOMING A CONSTELLATION PROBLEM

ANALYSIS

This week's US and Chinese launches show a broader change. Space security is moving from protecting individual satellites towards protecting networks of satellites, ground stations, links, data and users.

India's space-security architecture must therefore integrate:

SPACE DOMAIN AWARENESS | CYBER SECURITY
ELECTRONIC WARFARE | SECURE COMMS | PNT | ISR
GROUND INFRASTRUCTURE | SATELLITE REDUNDANCY
RAPID LAUNCH & REPLENISHMENT

> **Bottom line:** *The future battlefield will not depend on one satellite. It will depend on the resilience of the entire space-enabled network.*

4. TECHNOLOGY AND COMMERCIAL SPACE

INDIA'S SPACE ECONOMY MOVES DOWNSTREAM

INDIA · SPACE ECONOMY

India's space story is moving beyond launch vehicles and spacecraft. SatSure, IN-SPACe-supported urban mapping and growing interest in orbital infrastructure point to a much larger opportunity:

SPACE → DATA → AI → APPLICATIONS → SERVICES → ECONOMIC VALUE

The next generation of Indian space companies may not build rockets. They may build AI models, geospatial platforms, satellite analytics, digital twins, autonomous systems, navigation applications, insurance platforms and defence intelligence products.

> **Why it matters:** *This is where a large part of India's future space economy could emerge.*

INDIA LOOKS TOWARDS ORBITAL INFRASTRUCTURE

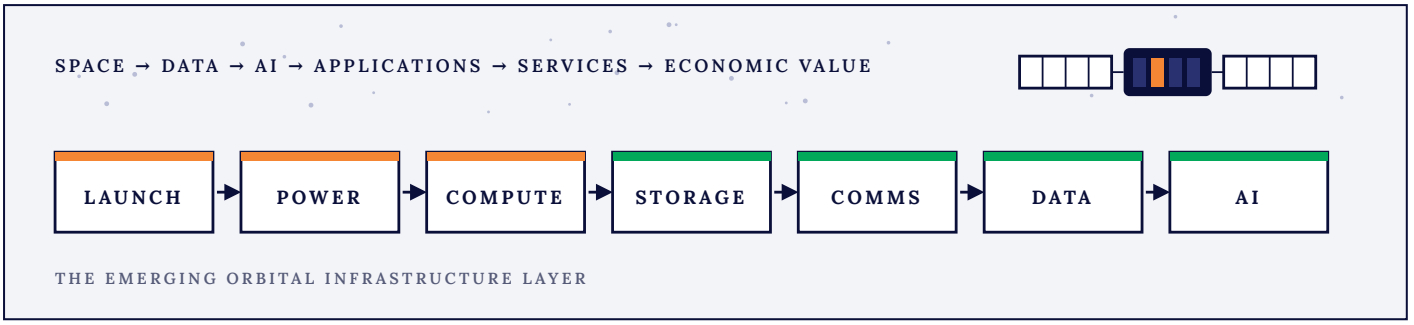
INDIA · AGNIKUL COSMOS

Agnikul Cosmos has announced plans for an Andhra Pradesh facility to manufacture units for future orbital data-centre infrastructure, with an initial proposed investment of around ₹510 crore. The concept reflects a wider global trend: moving selected computing and data-processing functions into space.

If AI-driven data processing grows exponentially, the space economy may develop its own infrastructure layer:

LAUNCH → POWER → COMPUTE → STORAGE → COMMS → DATA → AI

Why it matters: *India has an opportunity to participate in this emerging value chain rather than remain only a launch or satellite supplier.*



From launch to AI: the value chain of the space economy. Illustration: Space Club of India

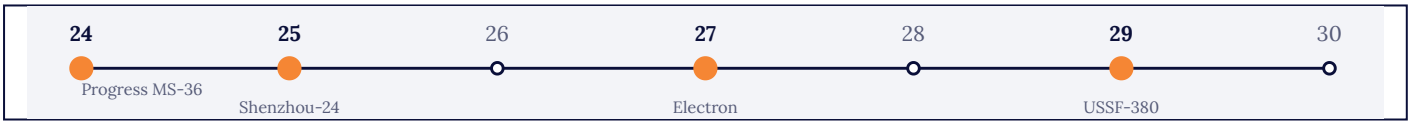
5. STRATEGIC ASSESSMENT

For Space Club of India, five larger lessons emerge from this week's developments.

STRATEGIC AREA	WHAT IT MEANS FOR INDIA
Human spaceflight	Safety and systems maturity must take precedence over launch deadlines.
Constellations	India needs distributed, resilient satellite architectures.
Space security	SDA must evolve from tracking objects to understanding behaviour.
Space economy	Downstream AI, data and geospatial applications deserve greater investment.
Assured access	Reusable and rapid-launch capability will increasingly become strategic infrastructure.

The unit of space power is moving from the satellite to the network. A satellite can be attacked, jammed, hacked or disabled. A resilient network can absorb losses and continue the mission.

6. WHAT TO WATCH: 24–30 NOVEMBER 2026



24 November	**Progress MS-36.** Russian Soyuz 2.1b cargo mission to resupply the International Space Station. Current launch target 05:03 UTC.
25 November	**Shenzhou-24.** Crewed Long March 2F/G mission to China's space station. A Pakistani astronaut is expected to take part, a significant development in China's space diplomacy and Pakistan–China strategic cooperation.
27 November	**Rocket Lab Electron.** StriX Launch 14 / "Night Owls Never Sleep", carrying a synthetic-aperture radar satellite for Japan's Synspective. SAR + small launchers + commercial Earth observation is a combination to watch.
29 November	**USSF-380** is among the missions currently listed.

Launch dates can move. Treat these as current targets, not guaranteed launch dates.

7. EDITORIAL PERSPECTIVE

LT GEN PJS PANNU · PVSM, AVSM, VSM (RETD.) · FOUNDER, SPACE CLUB OF INDIA

THE NEW SPACE RACE IS ABOUT NETWORKS, NOT ROCKETS

The future space race will not be won by the country that owns the most satellites. It will be won by the country whose space architecture can continue to function when the satellites are challenged.

The space race has entered a new phase. For decades, the central question was simple: who can put a satellite into orbit? Today, that is no longer enough. The real question is: who can build and operate an integrated space network that remains functional under stress?

The United States is demonstrating this through proliferated intelligence architectures and high-frequency national-security launches. China is building large LEO communication constellations at increasing speed. Commercial companies are turning satellite data into AI-enabled services. Human spaceflight is expanding beyond a handful of traditional space powers.

India must move from a satellite-centric space programme to a network-centric space power. That means building:



Constellations that can survive disruption.



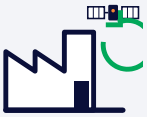
Communications that can operate through contested environments.



Navigation systems that remain sovereign.



ISR that provides persistent awareness.



An industrial base that can rapidly replace damaged or lost assets.

INDIA'S SHIFT

SATELLITE-CENTRIC → NETWORK-CENTRIC

space power

SOURCES AND CHECKING

Key sources include ISRO / Department of Space, NASA, Arianespace, Reuters, Spaceflight Now, Space.com, Interesting Engineering, Space Launch Now and current launch-tracking databases.

Front-page photograph: NASA, via Unsplash under the Unsplash licence. Illustrations: Space Club of India.