

71ST VIRTUAL UNISEC-GLOBAL MEETING · J-CUBE / KIBOCUBE SESSION

From KiboCUBE to Capability

How MIR-SAT1 shaped the space journey of Mauritius

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What I'll cover in the next 15 minutes

01

Mauritius in the New Space era A small island state, now an emerging space actor

02

The foundation: KiboCUBE & MIR-SAT1 How a 1U CubeSat opened the door to space

03

From satellite to national capability Ground station, skills and sovereign know-how

04

The Strategy: vision, mission & objectives Where the journey is taking Mauritius

05

Partnerships, benefits & the road ahead SIDS leadership and the path to a space agency

From 1st satellite to Artemis Accords, in 5 years

In 2021 Mauritius entered the New Space era. In just five years it has moved from launching its first satellite to joining the world's leading framework for peaceful space exploration.

JUN 2018

KiboCUBE win

Mauritius wins the 3rd round of the UNOOSA / JAXA KiboCUBE programme — its first ticket to space.

JUN 2021

MIR-SAT1 in orbit

The first Mauritian satellite is deployed from the ISS, marking entry into the New Space era.

JUL 2026

Artemis Accords

Mauritius becomes the 70th nation — and 7th African country — to sign the Artemis Accords.

THE FOUNDATION

KiboCUBE: a door to space

A UN-Japan partnership

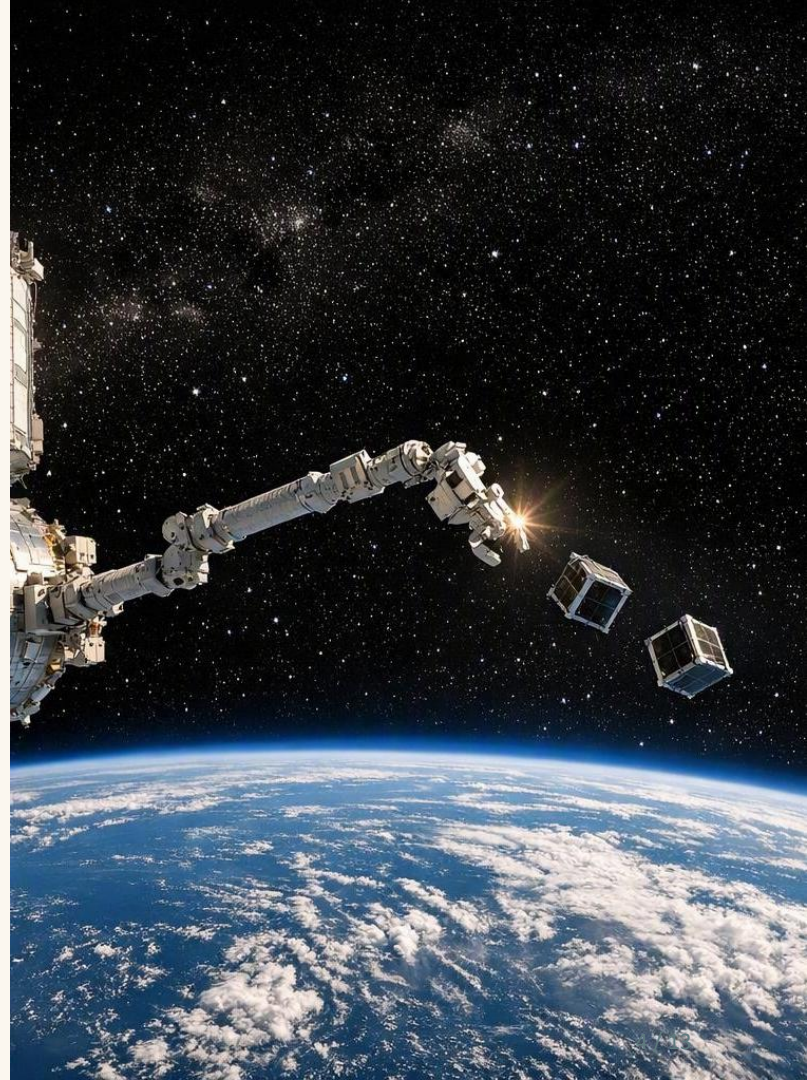
KiboCUBE is run by UNOOSA with JAXA. Since 2015 it has helped developing countries build and deploy their own CubeSats — for many, their first-ever satellite.

Deployed from the ISS

Winners build a 1U CubeSat and release it from the Kibo module's small-satellite deployer — a gentler, lower-cost path to orbit than a direct launch.

Mauritius wins, June 2018

A team led by MRIC won the 3rd round — the country's first opportunity to build and fly a national satellite.



THE FIRST MAURITIAN SATELLITE

Built and operated by Mauritius

1U

CubeSat

~410 km

Low Earth orbit

3 Jun 2021

Launched

22 Jun 2021

Deployed

- Designed with MRIC engineers and built with AAC Clyde Space (Glasgow), with the Mauritius Amateur Radio Society.
- Launched on a SpaceX Falcon 9 (CRS-22) from Kennedy Space Center, then deployed from the ISS Kibo module.
- Payload: longwave-infrared thermal imaging, an S-band high-speed data demonstration and an amateur-radio digipeater.



MIR-SAT1

Mauritius Imagery & Radiocommunication Satellite-1

The real payload was capability

National ground station

A ground station at Ebène controls and operates the satellite and can receive data from others.

FlatSat & simulation

A ground replica of the satellite lets engineers rehearse every command before it is sent to orbit.

Sovereign skills

Hands-on experience across design, assembly, integration, testing and operations now lives in-country.

A base for what's next

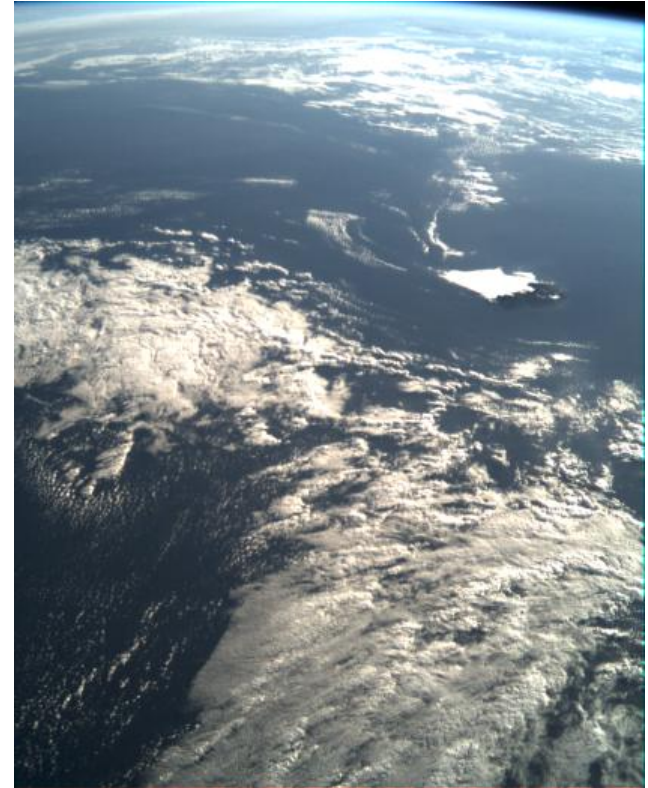
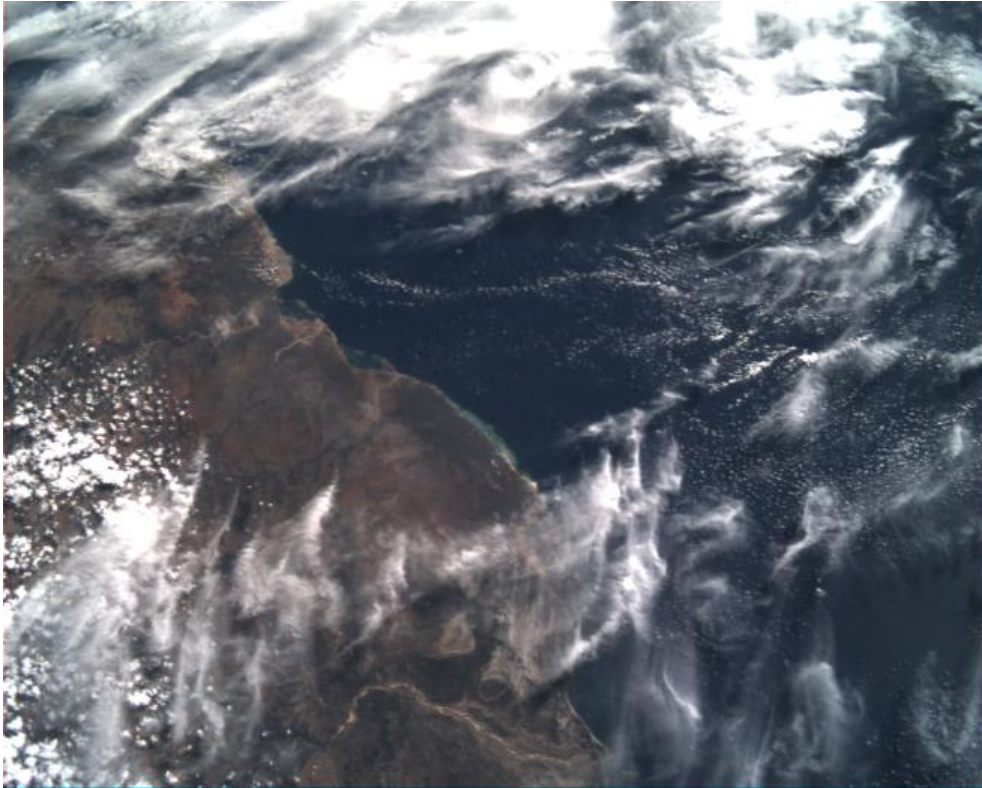
The know-how and tools are the launch-pad for future, more capable Mauritian CubeSats.



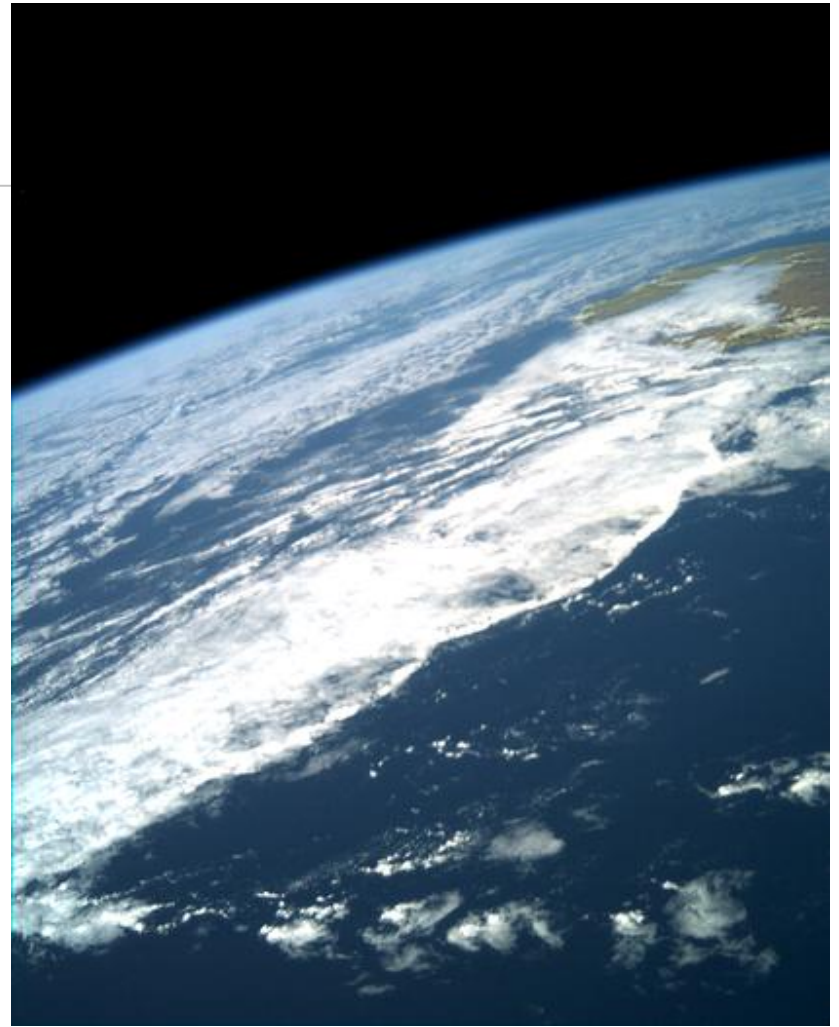
MRIC Ground Station Fully functional



Photos Taken by MIR-SAT1



Photos Taken by MIR-SAT1



Punching above our weight, together

Since MIR-SAT1, Mauritius has built partnerships with leading space agencies and now aims at turning its lived SIDS experience into a distinct voice in global space affairs.

KEY SPACE PARTNERS

JAXA

ISRO

MBRSC

NASA

UNOOSA

SIDS for Space Alliance

A platform envisioned by Mauritius for island states to share knowledge, coordinate capacity building, and jointly explore space technologies for their shared challenges.

Artemis Accords – 70th signatory

In July 2026 Mauritius joined the Accords, committing to peaceful, transparent and sustainable space — and a seat in shaping global space governance.

The Mauritius Space Strategy 2036

MAURITIUS SPACE STRATEGY 2036

A national strategy, led by MRIC

Building on the momentum of MIR-SAT1, MRIC has formulated a national Space Strategy to guide the next phase of the country's space-sector development.

VISION

To harness space technologies to improve lives, protect the environment, and amplify the voice of SIDS — positioning Mauritius as a regional hub for sustainable, data-driven decision-making and innovation.

MISSION

To deliver operational Earth-observation services, build sovereign capabilities, and grow a space-enabled innovation economy through capacity building, strategic infrastructure, and international partnerships.

Six objectives that turn vision into capability

01

Develop national expertise

Training, upskilling and academic partnerships in EO and satellite engineering.

02

Expand use of satellite data

Evidence-based decisions for environment, agriculture, oceans and disasters.

03

Foster collaborative research

Joint R&D across government, academia, industry and partners.

04

Strengthen global partnerships

Deeper cooperation, technology transfer and shared standards.

05

Stimulate space entrepreneurship

An ecosystem for start-ups, downstream apps and data analytics.

06

Build a sustainable capability

A financially self-sustaining, revenue-generating national capability.

EXPECTED BENEFITS

Value in the near term – and for the long game

SHORT TERM

Next 5–10 years

- STEM as a pull factor — inspiring the next generation of scientists and engineers.
- Space-based EO advising policy on oceans, fisheries and disaster resilience.
- Ground-Station-as-a-Service, using the island's geostrategic Indian Ocean position.
- Engaging the Mauritian space diaspora through advisory and fellowship schemes.

LONG TERM

10–20 years

- A national space agency to coordinate, regulate and drive space activities.
- A regional climate- and environment-data hub serving fellow SIDS.
- An active, constructive voice in global space governance and equity.
- A sustainable, revenue-generating national space enterprise.

THE WAY FORWARD

Turning vision into a standing capability

01

Institutionalise

Establish a national space agency — with local institutions, international partners and the diaspora — to lead and coordinate.

02

Fund sustainably

Blend government investment, public-private partnerships and international programmes: NASA, ESA, UNOOSA and ISRO.

03

Integrate & deliver

Connect space assets to national data systems so services reach agriculture, oceans, disaster and climate resilience.

A SHARED HORIZON

To use space to improve lives, protect the environment, and amplify the voice of SIDS in shaping humanity's future beyond Earth.

Thank you — and thank you to UNOOSA, JAXA and the KiboCUBE community.

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