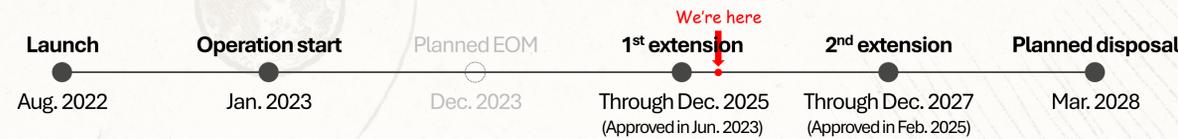




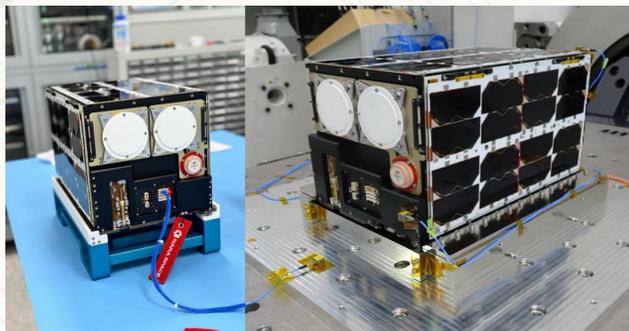
Danuri (KPLO: Korea Pathfinder Lunar Orbiter)

As the world's 7th lunar orbiter, Danuri(KPLO, Korea Pathfinder Lunar Orbiter) secures Korea's first deep-space technologies and foundation for future exploration.



Scientific Instruments

- LUTI (Lunar Terrain Imager) (KARI)
- ShadowCam (ASU, NASA)**
- PolCam (KHU, KASI, SaTReC)
- DTNPL(Delay/Distruption Tolerant Networking Payload) (ETRI)
- KPLO Gamma Ray Spectrometer (KIGAM)
- KPLO Magnetometer (KHU)



K-RadCube (Artemis-II)

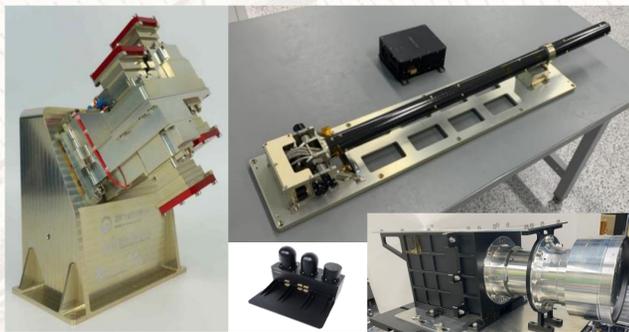
As an Artemis II rideshare payload, K-RadCube(Korea Radiation CubeSat) monitors space radiation environments within the Van Allen belts during its mission.

Mission objectives

- Monitor radiation environment across varying altitudes within the Van Allen belts
- Establish Highly Elliptical Orbit (HEO) via autonomous orbit-raising maneuvers
→ Support future crewed exploration by providing key insights into lunar radiation exposure

Specification

- Dimension / Mass: 365.08 mm × 237.25 mm × 222.17 mm (12U) / ~19 kg
- Payloads: K-RAD-PD, K-RAD-SS, K-RAD-SK



CLPS Participation

As a participant in NASA's CLPS initiative, KASA develops lunar science payloads to secure essential scientific data and assets for Korea's future exploration.

- LUSEM (Lunar Space Environment Monitor): Monitors high-energy particles at the Reiner Gamma swirl to investigate space weathering and lunar-magnetotail interactions.
- LVRad (Lunar Vehicle Radiation Dosimeter): Investigates the lunar radiation environment and subsurface water content using particle spectrometers and tissue-equivalent dosimeters
- LSMag (Lunar Surface Magnetometer): Measures lunar magnetic field variations and subsurface sources to explore current and ancient magnetism
- GrainCams: Utilizes dual cameras on a rover to observe the 3D microstructure of lunar soil and the behavior of levitating dust particles



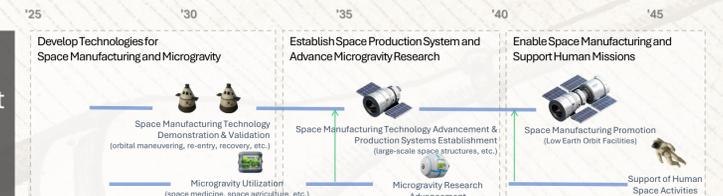
KPLL: Korea Pathfinder Lunar Lander

Korea Pathfinder Lunar Lander aims to secure independent lunar landing capabilities and establish a foundation for sustainable lunar surface exploration.

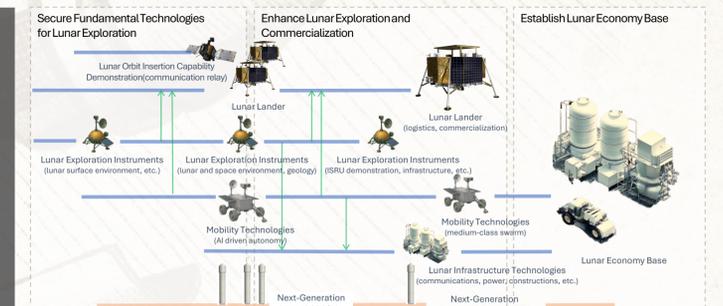
- Launch Schedule: 2032 via the Korea Next-generation Launch Vehicle (KSLV-III)
- Mission Objective: Demonstrate autonomous pin-point and soft landing
- Payload Capacity: Accommodates ~43kg of scientific instruments and rovers
- Specification
 - Dimension / Wet mass: 2,992 mm × 3,028 mm × 2,344 mm / ~1,800 kg
 - Payloads: To be determined by early 2026

Space Exploration Roadmap (2026)

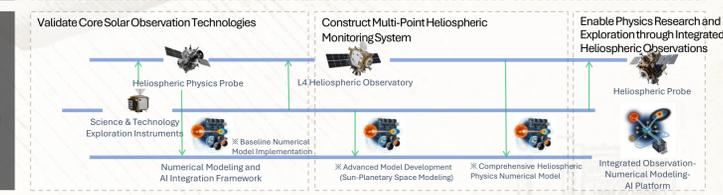
Low Earth Orbit & Microgravity



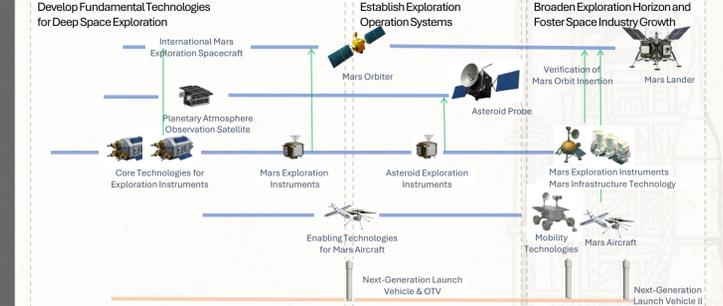
Lunar Exploration



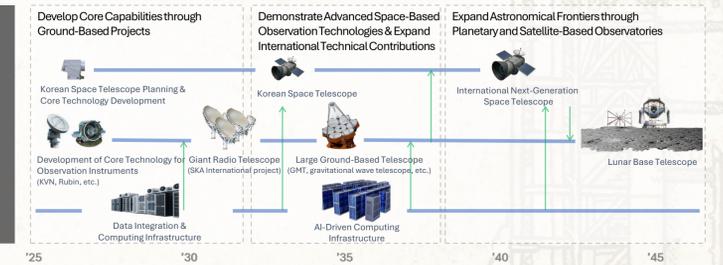
Sun & Space Science



Planetary Exploration



Astrophysics



Korea's Space Exploration Roadmap outlines a long-term strategic path to secure independent space capability and foster a lunar economy through an incremental series of missions to the Moon and Mars.