

UPCOMING SPACE MISSIONS

Smart Lander for Investigating Moon



2023 August

Japanese Aerospace Exploration Agency

• The Smart Lander for Investigating Moon (SLIM) is a Japanese Aerospace Exploration Agency (JAXA) mission designed to demonstrate accurate lunar landing techniques by a small explorer, with the objective of acceleration of the study of the Moon and planets using lighter exploration systems.

OSIRIS-Rex



2023 September

NASA

• The OSIRIS-REx (Origins, Spectral Interpretation, Resource Identification, Security, Regolith Explorer) mission is designed to return a sample of material from near-Earth carbonaceous asteroid Bennu. OSIRIS-REx launched on 08 September 2016 at 23:05 UT (7:05 p.m. EDT) and reached Bennu in December 2018. It mapped the asteroid and a sampling site, "Nightingale", in a crater in the northern hemisphere, has been selected. It sampled the site in October 2020, departed the asteroid in May 2021, and will return the sample to Earth in September 2023.

Psyche

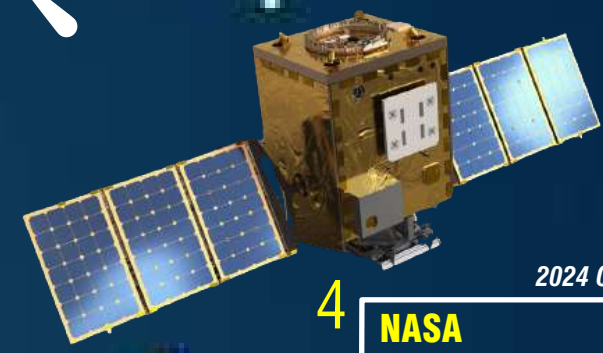


2023 October

NASA

• Psyche is a NASA Discovery mission designed to rendezvous with a metallic asteroid, 16 Psyche, in the main asteroid belt and study it from orbit. To achieve these objectives, the spacecraft will carry a multispectral imager, gamma-ray and neutron spectrometer, magnetometer, and an X-band gravity investigation.

Lunar Trailblazer

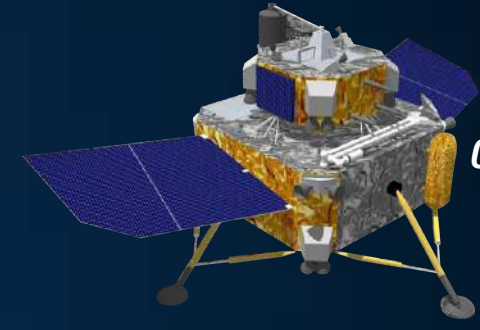


2024 Q1

NASA

• Lunar Trailblazer is a small (Class D) mission to orbit the Moon and study the form, abundance, and distribution of lunar water and its relation to geology.

Chang'e 6

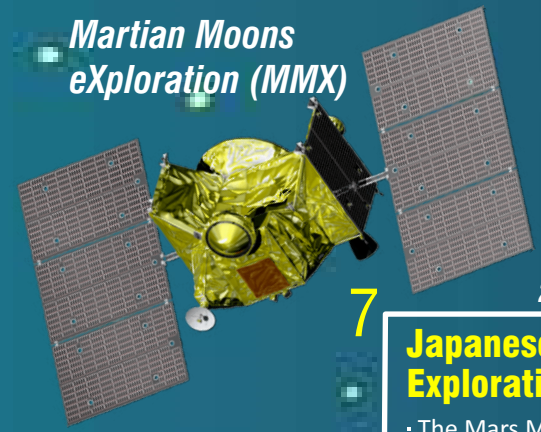


2024 May

China National Space Administration

• The Chang'e 6 mission is a planned lander designed to return samples from the lunar south pole. It was designed as a backup for Chang'e 5.

Martian Moons eXploration (MMX)

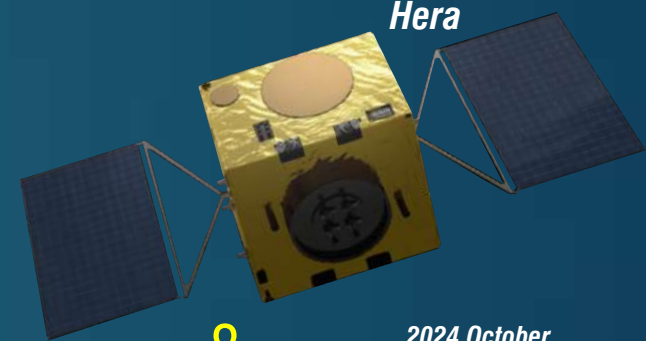


2024 September

Japanese Aerospace Exploration Agency(JAXA)

• The Mars Moon eXploration (MMX) mission is a JAXA (Japan) spacecraft planned to launch in the mid-2020s to study the martian moon Phobos and collect a sample from the surface for return to Earth.

Hera



2024 October

ESA(European Space Agency)

• Hera is a European Space Agency (ESA) mission to visit the asteroid Didymos and its moon Dimorphos as part of the NASA/ESA Asteroid Impact and Deflection Assessment (AIDA) collaboration.

Europa Clipper

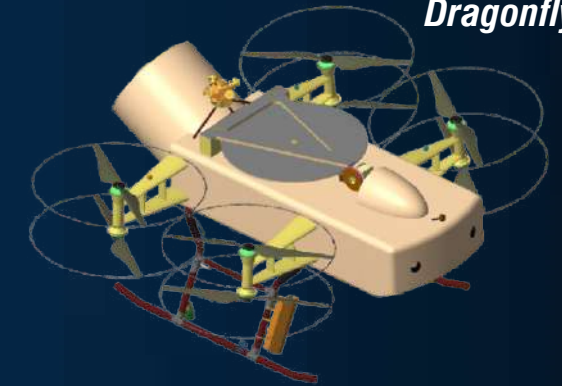


2024 October

NASA

• The Europa Clipper mission will enter an orbit around Jupiter that will allow for many close flybys of Jupiter's moon Europa. The mission's purpose is to collect data about Europa during each pass in order to establish its habitability.

Dragonfly



2026

NASA

• Dragonfly is a rotorcraft mission to explore Saturn's moon Titan by making flights to various sites separated by tens of kilometers and making measurements over a period of more than two years. The primary goal is to explore the chemistry and habitability of multiple surface sites covering a large area.

BepiColombo



2024 September

ESA(European Space Agency)

• BepiColombo is a European Space Agency (ESA) Cornerstone mission to Mercury. The mission involves two components: the Mercury Planetary Orbiter (MPO) and the Mercury Magnetospheric Orbiter (MMO, named Mio).