

Japan space agency says its lunar spacecraft is on the moon but is still 'checking its status'

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A SpaceX Falcon 9 rocket, with a payload including two lunar rovers from Japan and the United Arab Emirates, lifts off from Launch Complex 40 at the Cape Canaveral Space Force Station in Cape Canaveral, Fla., on Dec. 11, 2022. But later in April 2023, the spacecraft from a Japanese company apparently crashed while attempting to land on the moon. Japan now hopes to make the world's first "pinpoint landing" on the moon early Saturday, Jan. 20, 2024, joining a modern push for lunar contact with roots in the Cold War-era space race between the United States and the Soviet Union. Credit: AP Photo/John Raoux, File

Japan's space agency said early Saturday that its spacecraft is on the moon, but is still "checking its status." More details will be given at a news conference, officials said.

The Smart Lander for Investigating Moon, or SLIM, came down onto the [lunar surface](#) at around 12:20 a.m. Tokyo time Saturday (1520 GMT Friday). No astronauts were onboard the spacecraft.

If SLIM landed successfully, Japan would become the fifth country to accomplish the feat after the United States, the Soviet Union, China and India.

As the spacecraft descended, the Japan Aerospace Exploration Agency's mission control said that everything was going as planned and later said that SLIM was on the lunar surface. But there was no mention of whether the [landing](#) was successful.

Mission control kept repeating that it was "checking its status" and that more information would be given at a news conference. It wasn't immediately clear when the news conference would start.

SLIM, nicknamed "the Moon Sniper," started its descent at midnight Saturday, and within 15 minutes it was down to about 10 kilometers (six miles) above the lunar surface, according to the space agency, which is known as JAXA.

At an altitude of five kilometers (three miles), the lander was in a vertical descent mode, then at 50 meters (165 feet) above the surface, SLIM was supposed to make a parallel movement to find a safe landing spot, JAXA said.

About a half-hour after its presumed landing, JAXA said that it was still checking the status of the lander.

SLIM, which was aiming to hit a very small target, is a lightweight spacecraft about the size of a passenger vehicle. It was using "pinpoint landing" technology that promises far greater control than any previous moon landing.

While most previous probes have used landing zones about 10 kilometers (six miles) wide, SLIM was aiming at a target of just 100 meters (330 feet).

The project was the fruit of two decades of work on precision technology by JAXA.



This time exposure photo shows a SpaceX Falcon 9 rocket, with a payload including two lunar rovers from Japan and the United Arab Emirates, launching from Launch Complex 40 at the Cape Canaveral Space Force Station in Cape Canaveral, Fla., on Dec. 11, 2022. But later in April 2023, the spacecraft from a Japanese company apparently crashed while attempting to land on the moon. Japan now hopes to make the world's first "pinpoint landing" on the moon early Saturday, Jan. 20, 2024, joining a modern push for lunar contact with roots in the Cold War-era space race between the United States and the Soviet Union. Credit: AP Photo/John Raoux, File

The mission's main goal is to test new landing technology that would allow moon missions to land "where we want to, rather than where it is easy to land," JAXA has said. If the landing was a success, the spacecraft will seek clues about the origin of the moon, including analyzing minerals with a special camera.

The SLIM, equipped with a pad to cushion impact, was aiming to land near the Shioli crater, near a region covered in volcanic rock.

The closely watched mission came only 10 days after a moon mission by a U.S. [private company](#) failed when the spacecraft [developed a fuel leak](#) hours after the launch.

SLIM was launched on a Mitsubishi Heavy H2A rocket in September. It initially orbited Earth and entered lunar orbit on Dec. 25.

Japan hopes a success will help regain confidence for its space technology after a number of failures. A spacecraft designed by a Japanese company crashed during a lunar landing attempt in April, and a new flagship rocket failed its debut launch in March.

JAXA has a track record with difficult landings. Its Hayabusa2 spacecraft, launched in 2014, touched down twice on the 900-meter-long (3,000-foot-long) asteroid Ryugu, collecting samples that were returned to Earth.

Experts say a success of SLIM's pinpoint landing, especially on the moon, would raise Japan's profile in the global space technology race.

Takeshi Tsuchiya, aeronautics professor at the Graduate School of Engineering at the University of Tokyo, said it was important to confirm the accuracy of landing on a targeted area for the future of moon explorations.

"It is necessary to show the world that Japan has the appropriate technology in order to be able to properly assert Japan's position in lunar development," he said. The [moon](#) is important from the perspective of explorations of resources, and it can also be used as a base to go to other planets, like Mars, he said.

SLIM is carrying two small autonomous probes—lunar excursion vehicles LEV-1 and LEV-2, which will be released just before landing.

LEV-1, equipped with an antenna and a camera, is tasked with recording SLIM's landing. LEV-2, is a ball-shaped rover equipped with two cameras, developed by JAXA together with Sony, toymaker Tomy and Doshisha University.

JAXA will broadcast a livestream of the landing, while space fans will gather to watch the historic moment on a big screen at the agency's Sagamihara campus southwest of Tokyo.

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