

## Lunar night puts Japan's lander back to sleep

February 1 2024



Japan's SLIM lunar lander seen in an image credited to JAXA, Takara Tomy, Sony Group Corporation and Doshisha University.

After a brief awakening, Japan's moon lander is out of action again but will resume its mission if it survives the two-week lunar night, the space agency said Thursday.



The unmanned Smart Lander for Investigating Moon (SLIM) touched down last month at a wonky angle that left its <u>solar panels</u> facing the wrong way.

As the sun's angle shifted, it came back to life for two days this week and carried out scientific observations of a crater with its high-spec camera.

"After completing operation from 1/30 (to) 1/31, #SLIM entered a two-week dormancy period during the long lunar night," space agency JAXA said on X, formerly Twitter.

"Although SLIM was not designed for the harsh lunar nights, we plan to try to operate again from mid-February, when the sun will shine again on SLIM's solar cells."

JAXA said SLIM was able to "successfully complete observations... as originally planned" with its multiband spectroscopic camera and could study more target areas than initially expected.

The <u>space agency</u> also on Thursday posted a black-and-white photo of the rocky surface taken by the spacecraft.

It followed other grainy images sent back from the mission to investigate an exposed area of the moon's mantle, the inner layer usually deep beneath its crust.

SLIM, dubbed the "Moon Sniper" for its precision landing technology, touched down within its target landing zone on January 20.

The feat was a boon for Japan's space program after a string of recent failures, making the nation only the fifth to achieve a "soft landing" on the moon, after the United States, the Soviet Union, China and India.



But during its descent, the craft suffered engine problems and ended up on its side, meaning the solar panels were facing west instead of up.

Russia, China and other countries from South Korea to the United Arab Emirates are also trying their luck to reach the moon.

US firm Astrobotic's Peregrine <u>lunar lander</u> began leaking fuel after takeoff in January, dooming its mission. It likely burned up in the Earth's atmosphere on its return.

NASA has also postponed plans for crewed lunar missions under its Artemis program.

© 2024 AFP

Citation: Lunar night puts Japan's lander back to sleep (2024, February 1) retrieved 29 April 2024 from <a href="https://phys.org/news/2024-02-lunar-night-japan-lander.html">https://phys.org/news/2024-02-lunar-night-japan-lander.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.