

# Bad weather forces Japan's space agency to delay launch of second test-flight of flagship rocket

February 13 2024, by Mari Yamaguchi

---



An H3 rocket lifts off from Tanegashima Space Center in Kagoshima, southern Japan on March 7, 2023. Japan's space agency on Tuesday, Feb. 13, 2024, postponed the second test flight of its new flagship rocket H3 series that was planned for this week because of bad weather forecasts at the launch site, as space officials scramble to ensure a successful liftoff a year after a failed debut flight. Credit: Kyodo News via AP

Japan's space agency on Tuesday postponed the launch of a second test flight of its new flagship rocket H3 series planned for this week because of bad weather forecast at the launch site. The delay comes as Japanese space officials scramble to ensure a successful liftoff, a year after the rocket's failed debut flight.

Thunder and strong wind were predicted at the launch site on the Tanegashima Space Center in southern Japan, according to Masashi Okada, H3 project manager at Japan Aerospace Exploration Agency, or JAXA. The launch was initially planned for Thursday.

The agency will decide a new launch date as early as Wednesday, he said.

The upcoming launch is considered a key test after Japan's failed debut flight last March, when the rocket had to be destroyed, along with the advanced land observation satellite, or ALOS-3, it was carrying.

The fiasco triggered disappointment and uncertainty about [Japan's space exploration plans](#), concerns that were compounded after a spacecraft designed by a Japanese company crashed during a lunar landing attempt in April.

JAXA and its main contractor Mitsubishi Heavy Industries have since identified and mitigated the possible electrical issues that led to the failure to ignite H3 rocket's second-stage engine, and carefully rehearsed for the upcoming second test flight.

"We had a year of turbulence, but we have taken all possible measures we could," Okada said.

Okada said the main mission goal is to put the rocket into the intended trajectory.

JAXA also aims to place the rocket's payloads into the planned orbit but this time, the H3 will carry a 2.6-metric ton mockup of the ALOS satellite, called VEP-4, instead of the real thing.

It will also carry two observation microsattellites—one developed by Canon Electronics that can capture still and moving images with high speed processing, and another, co-developed by Seiren and several other companies and universities.

The launch of the H3 rocket had already been held up more than two years due to an engine development delay. The rocket is Japan's first new series in more than two decades, was developed at a cost of 220 billion yen (about \$1.5 billion) by JAXA and Mitsubishi Heavy Industries as a cheaper and more globally competitive successor to Japan's trademark H-2A, which is set to retire after its upcoming 50th launch.

H3 can carry larger payloads than H-2A at half the launch costs and has a newly developed hydrogen-fueled main engine.

Expectations are running high after JAXA's historic precision moon landing last month of its spacecraft launched from the H-2A rocket, with hopes that it would show Japan's competitiveness with the United States and rival China. Earlier in January, the 48th H-2A rocket successfully placed a spy satellite into its planned orbit.

Mitsubishi's H3 project manager Mayuki Niitsu said there is a growing demand for rockets that can stably launch satellite constellations.

"We hope to achieve success of the second H3 [rocket](#) and show our

capability to our potential customers," he said and added that H3 could be competitive with major global players, such as SpaceX.

© 2024 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed without permission.

Citation: Bad weather forces Japan's space agency to delay launch of second test-flight of flagship rocket (2024, February 13) retrieved 28 April 2024 from <https://phys.org/news/2024-02-bad-weather-japan-space-agency.html>

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.