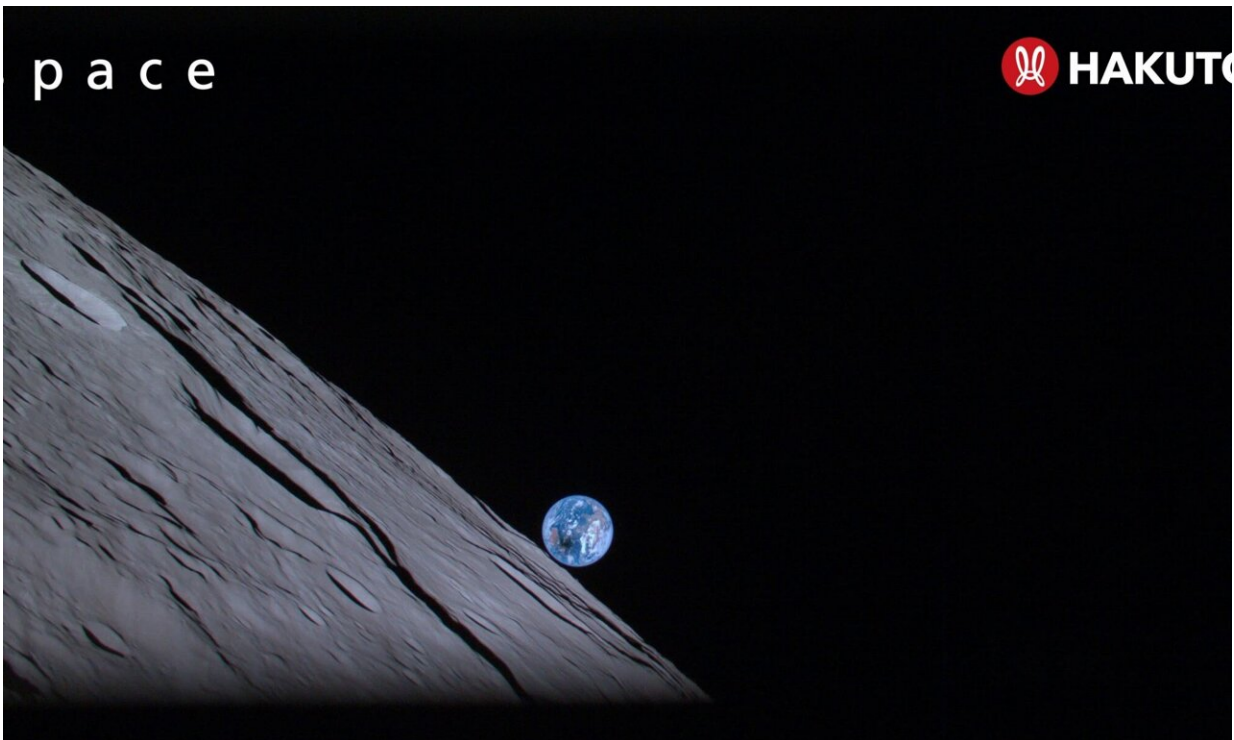


Hakuto-R spacecraft just captured its own stunning version of 'Earthrise'

April 25 2023, by Nancy Atkinson



The Hakuto-r lunar lander took this 'Earthrise'-like image from its current location in lunar orbit. Credit: ispace

The Hakuto-R lunar lander, currently in orbit around the moon, just captured a beautiful "Earthrise"-like image, and one with an interesting side note. The Mission 1 lander, from the Tokyo-based commercial company ispace, took the image during the time of the April 20 solar

eclipse, where totality was visible in Australia; and so the photo includes a perfect view of the shadow of the moon passing above the Land Down Under.

The spacecraft was approximately 100 km (60 miles) above the [lunar surface](#) when it took the photo.

"We've received another incredible photo from the camera onboard our Mission 1 lander!" ispace Tweeted this morning.

Earth and the [moon](#) are seen with stunning clarity, showcasing the lander-mounted camera's abilities.

This could be a big week for Hakuto-R, as its landing on the moon could come as soon as today, Tuesday, April 25 at 16:40 (UTC)/12:40 (EST). This is the earliest targeted landing date, but it could change depending on how the checkouts proceed.

The Hakuto-R mission launched on Dec. 11, 2022 along with the Lunar Flashlight mission on a SpaceX Falcon 9 rocket. Ispace is aiming to become the first commercial company to have an uncrewed [lunar lander](#) touch down safely on the moon. Hakuto-R was originally designed for the Google Lunar XPrize. But it got a chance to launch only in 2022, long after the competition was over.

The launch trajectory took the spacecraft on a journey approximately 1.4 million km (879,000 miles) into [deep space](#) before it successfully entered [lunar orbit](#) on March 21, 2023 after a several-minute controlled burn.

The ispace Series 1 Lunar Lander stands about 2.3 meters tall (7.5 ft) and has four landing legs, and fully fueled with its payload, it weighs roughly 1000 kg (2,200 lbs). The main body is an octagonal prism, 1.6

meters high and about 1.6 meters (5.25 X 5.25 ft) across its widest diameter. It has one main landing thruster and six assist thrusters. Its electronics are powered by [solar panels](#).

The startup is planning a second lunar lander mission perhaps in 2024, depending on the success of this first mission. In addition to launching lunar landers, the company aims to one day deploy satellites around the moon. Ispace says it is negotiating with multiple companies for transporting payloads to the lunar surface, as well as carrying payloads to orbit around the moon.

Provided by Universe Today

Citation: Hakuto-R spacecraft just captured its own stunning version of 'Earthrise' (2023, April 25) retrieved 10 April 2024 from <https://phys.org/news/2023-04-hakuto-r-spacecraft-captured-stunning-version.html>

<p>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.</p>
--