

China lands a spacecraft on the moon's far side to collect rocks for study

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In this photo released by Xinhua News Agency, technical personnel work at the Beijing Aerospace Control Center (BACC) in Beijing, Sunday, June 2, 2024. A Chinese spacecraft landed on the far side of the moon Sunday to collect soil and rock samples that could provide insights into differences between the less-explored region and the better-known near side. Credit: Jin Liwang/Xinhua via AP

A [Chinese spacecraft](#) landed on the far side of the moon Sunday to collect soil and rock samples that could provide insights into differences between the less-explored region and the better-known near side.

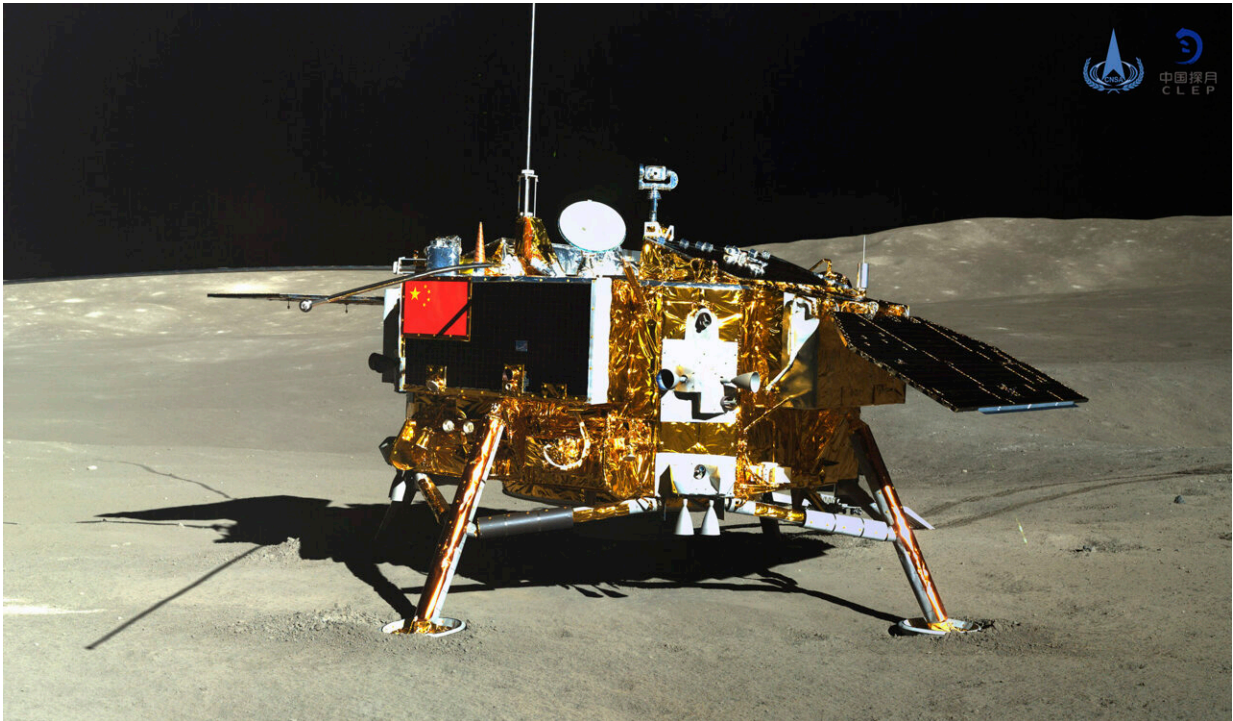
The landing module touched down at 6:23 a.m. Beijing time in a huge crater known as the South Pole-Aitken Basin, the China National Space Administration said.

The mission is the sixth in the Chang'e moon exploration program, which is named after a Chinese moon goddess. It is the second designed to bring back samples, following the Chang'e 5, which did so from the near side in 2020.

The moon program is part of a growing rivalry with the U.S.—still the leader in space exploration—and others, including [Japan](#) and India. China has put its own space station in orbit and regularly [sends crews](#) there.

The emerging global power aims to put a person on the moon before 2030, which would make it the second nation after the United States to do so. America is planning to land astronauts on the moon again—for the first time in more than 50 years—though NASA [pushed the target date back](#) to 2026 earlier this year.

U.S. efforts to use private-sector rockets to launch spacecraft have been repeatedly delayed. Last-minute computer trouble [nixed the planned launch](#) of Boeing's first astronaut flight Saturday.



This photo provided on Jan. 12, 2019, by the China National Space Administration via Xinhua News Agency shows the lunar lander of the Chang'e-4 probe in a photo taken by the rover Yutu-2 on Jan. 11. China is preparing to launch a lunar probe Friday, May 3, 2024, that would land on the far side of the moon and return with samples that could provide insights into geological and other differences between the less-explored region and the better-known near side. Credit: China National Space Administration/Xinhua News Agency via AP, File

Earlier Saturday, a Japanese billionaire [called off his plan](#) to orbit the moon because of uncertainty over the development of [a mega rocket](#) by SpaceX. NASA is planning to use the rocket to send its astronauts to the moon.

In China's current mission, the lander is to use a mechanical arm and a drill to gather up to 2 kilograms (4.4 pounds) of surface and

underground material over about two days.

An ascender atop the lander will then take the samples in a metal vacuum container back to another module that is orbiting the moon. The container will be transferred to a reentry capsule that is due to return to Earth in the deserts of China's Inner Mongolia region about June 25.

Missions to the moon's far side are more difficult because it doesn't face the Earth, requiring a relay satellite to maintain communications. The terrain is also more rugged, with fewer flat areas to land.

The South Pole-Aitken Basin, an impact crater created more than 4 billion years ago, is 13 kilometers (8 miles) deep and has a diameter of 2,500 kilometers (1,500 miles), according to a report by China's Xinhua News Agency.

It is the oldest and largest of such craters on the moon, so may provide the earliest information about it, Xinhua said, adding that the huge impact may have ejected materials from deep below the surface.

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