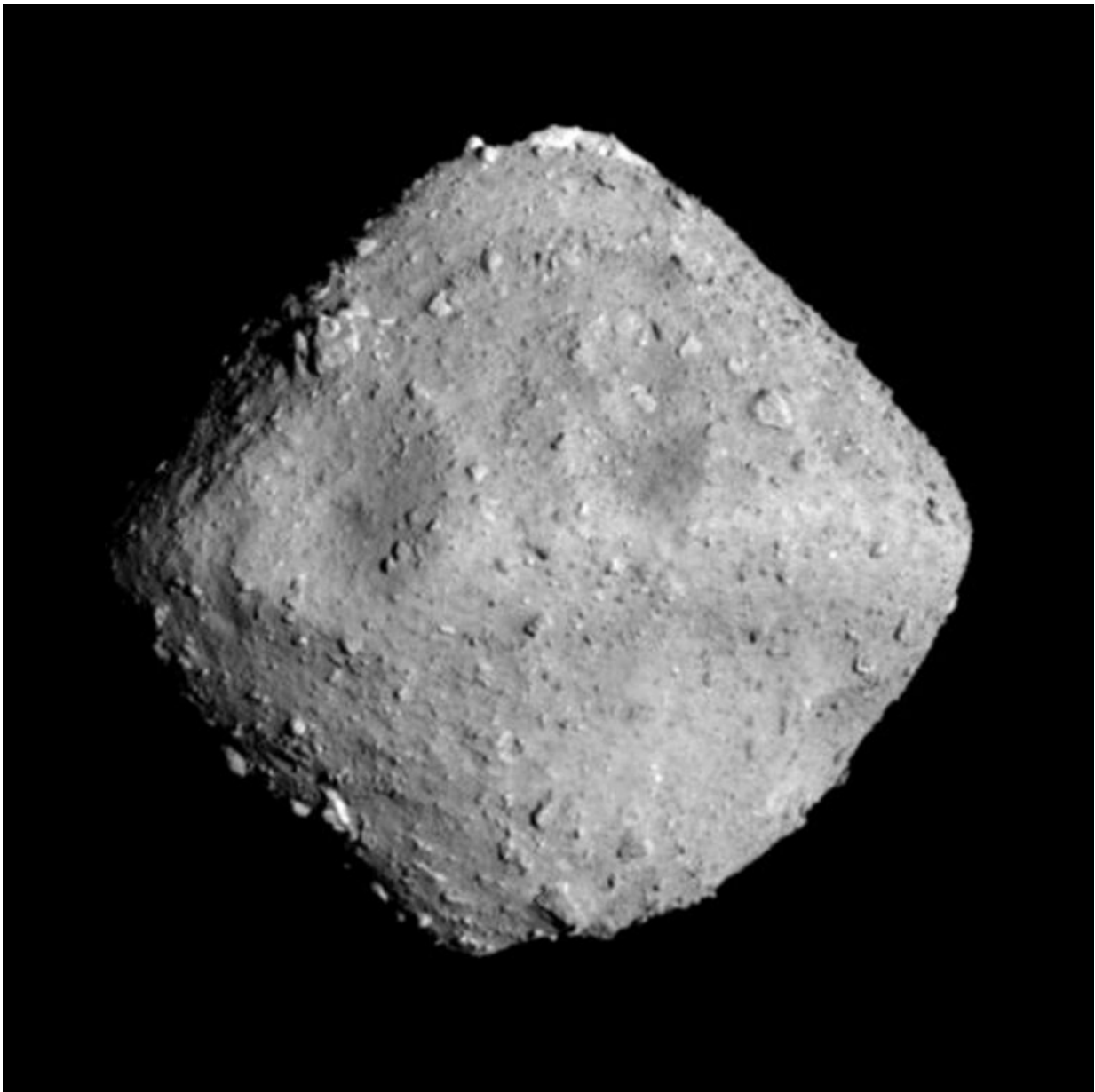


Japan's Hayabusa2 probe to land on asteroid on Feb 22

February 6 2019



Scientists hope samples from the Ryugu asteroid will shed light on the origins of the solar system

A Japanese probe sent to examine an asteroid in order to shed light on the origins of the solar system is expected to land on the rock later this month, officials said Wednesday.

The Japan Aerospace Exploration Agency (JAXA) said the Hayabusa2 probe is expected to touch down on the Ryugu asteroid at 8am local time on February 22.

"The landing point is decided and how we're going to land is confirmed, so we want to do our best to achieve this without making mistakes," JAXA project manager Yuichi Tsuda told reporters.

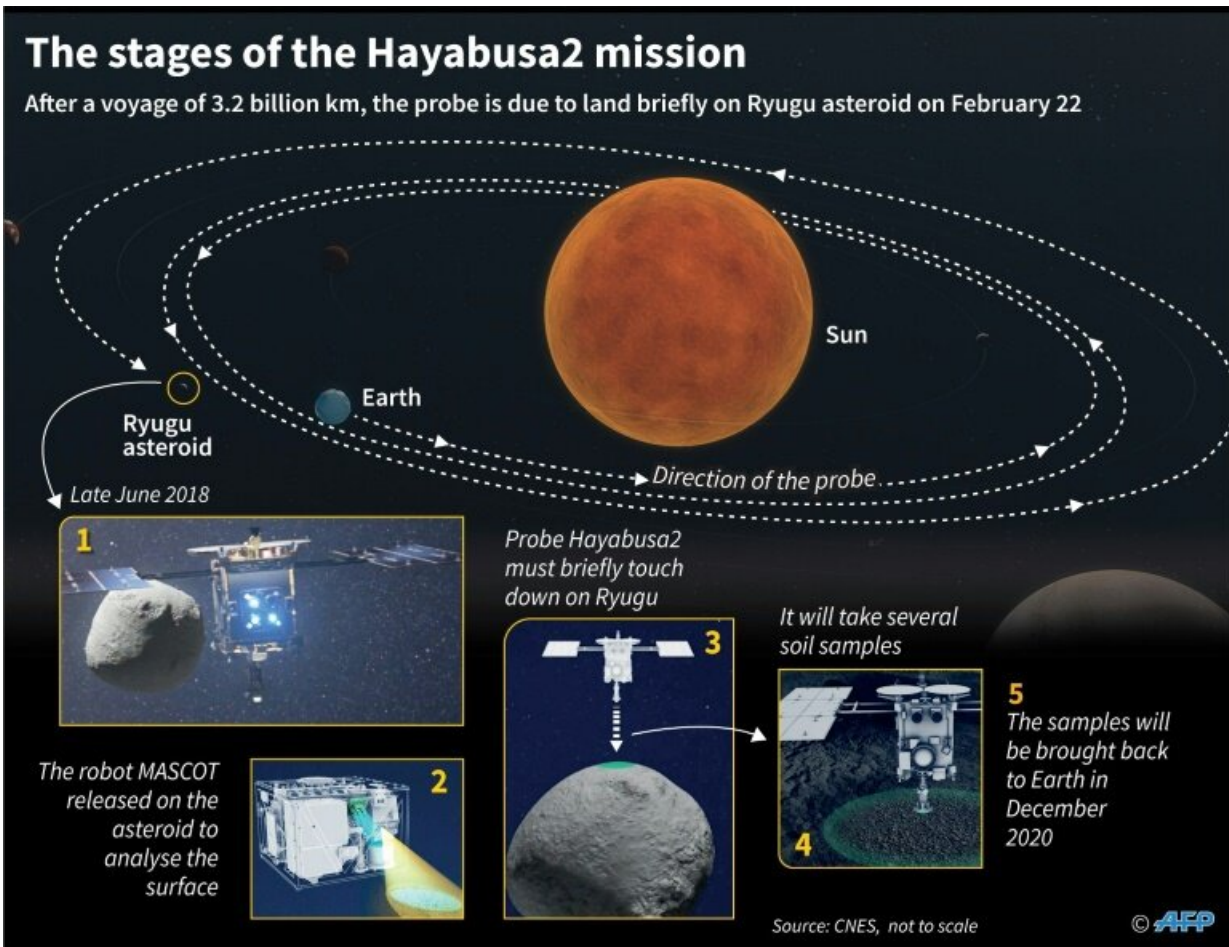
The announcement comes after the agency in October delayed the touchdown for several months, saying they needed more time to prepare the landing as the latest data showed the asteroid's surface was more rugged than expected.

Scientists are already receiving data from other probes deployed on the surface of the asteroid.

In October, JAXA successfully landed a new 10-kilogramme (22-pound) observation robot known as MASCOT—"Mobile Asteroid Surface Scout."

Loaded with sensors, the robot can take images at multiple wavelengths, investigate minerals with a microscope, gauge surface temperatures and measure magnetic fields.

Hayabusa2, about the size of a large fridge and equipped with solar panels, is the successor to JAXA's first asteroid explorer, Hayabusa, which is Japanese for falcon.



Main stages of the Hayabusa2 space mission to study the asteroid Ryugu

The Hayabusa2 mission, which costs around 30 billion yen (\$260 million), was launched in December 2014 and will return to Earth with its samples in 2020.

Photos of Ryugu—which means "Dragon Palace" in Japanese, a castle at

the bottom of the ocean in an ancient Japanese tale—show an asteroid shaped a bit like a spinning top with a rough surface.

By collecting samples from it, scientists hope to answer some fundamental questions about life and the universe, including whether elements from space helped give rise to life on Earth.

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