

JAPAN DROPS NEW ROBOT ON ASTEROID

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A computer graphic image shows the Mobile Asteroid Surface Scout on the asteroid Ryugu. | Photo Credit: [JAXA/AP](#)

A Japanese probe launched a new observation robot towards an asteroid on Wednesday as it pursues a mission to shed light on the origins of the solar system.

The Hayabusa2 probe launched the French-German Mobile Asteroid Surface Scout, or MASCOT, towards the Ryugu asteroid's surface, the Japan Aerospace Exploration Agency (JAXA) said.

"We can confirm that the MASCOT separated from the spacecraft as planned," the agency said in a tweet on its official account.

"I'm doing it! I'm descending to Ryugu! Can't stop me now!" the lander's official Twitter account @MASCOT2018 added. The robot has safely landed, officials later confirmed.

"It is hugely significant to take data from the surface of an asteroid, we have high expectations for the scientific data," Hayabusa2 mission manager Makoto Yoshikawa said. The 10-kg box-shaped MASCOT is loaded with sensors. It can take images at multiple wavelengths, investigate minerals with a microscope, gauge surface temperatures and measure magnetic fields.

MASCOT's launch comes 10 days after the Hayabusa2 dropped a pair of MINERVA-II micro-rovers on the Ryugu asteroid. It was the first time that moving, robotic observation device have been successfully landed on an asteroid.

The rovers will take advantage of Ryugu's low gravity to jump around on the surface — travelling as far as 15 metres while airborne and staying in the air for as long as 15 minutes — to survey the asteroid's physical features with cameras and sensors. Unlike those machines, MASCOT will be largely immobile — it will "jump" just once on its mission, and it can turn on its sides. And while the rovers will spend several months on the asteroid, the MASCOT has a maximum battery life of just 16 hours, and will transmit the data it collects to the Hayabusa2 before running out of juice.

The Hayabusa2 is scheduled later this month to deploy an "impactor" that will explode above the asteroid, shooting a two-kilo copper object into it to blast a small crater on the surface.

The probe will then hover over the artificial crater and collect samples using an extended arm.

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