

# NASA SPACECRAFT APPROACHES ASTEROID BENNU, SNAPS FIRST PIC

Relevant for: Science & Technology | Topic: Space Technology & related matters

This image taken from NASA on August 24, 2018, the asteroid Bennu is seen from an image obtained from the OSIRIS-REx spacecraft | Photo Credit: [AFP](#)

Two years after launching from Florida, a NASA spacecraft is closing in on an ancient asteroid, Bennu, for a sample of space dust that could reveal clues to the start of life in the solar system.

The spacecraft, OSIRIS-REx — Origins, Spectral Interpretation, Resource Identification, Security-Regolith Explorer — has even snapped its first, blurry picture of the cosmic body, which is about the size of a small mountain, about 500 meters in diameter. The spacecraft is designed to circle Bennu, and reach out with a robotic arm to "high-five" its surface, then return the sample it collects to Earth in 2023.

The first images of Bennu were taken on August 17 at a distance of 2.3 million kilometers from the \$800 million spacecraft. "This is the closest we have even been to Bennu," said Dante Laretta, OSIRIS-REx principal investigator at the University of Arizona, Tucson. "This is significant in that we are now in the vicinity of the asteroid, closer than we have ever been even during the close approaches of the asteroid to the Earth."

Bennu was chosen from the some 500,000 asteroids in the solar system because it orbits close to Earth's path around the sun, it is the right size for scientific study, and is one of the oldest asteroids known to NASA. Astronomers say it poses a slight risk — a one in 2,700 chance — of colliding with Earth in 2135.

It is also a carbon-rich asteroid, the kind of cosmic body that may have delivered life-giving materials to Earth billions of years ago. The OSIRIS-REx mission is not the first to ever visit an asteroid and attempt a sample return — Japan has done it before and Europe has managed to land on a comet. But it is the first asteroid-sample-return mission for NASA, and it aims to bring back the biggest sample ever, on the order of 60 grams.

In December, the spacecraft will begin a detailed survey of asteroid's surface, which NASA has defined as "arrival" at the asteroid. Orbital insertion is expected on December 31. The sample, however, will not be taken until July 2020.

Sign up to receive our newsletter in your inbox every day!

Please enter a valid email address.

Black-naped hares use wind farm more than forests

Our existing notification subscribers need to choose this option to keep getting the alerts.

**END**

Downloaded from [crackIAS.com](http://crackIAS.com)

© **Zuccess App** by [crackIAS.com](http://crackIAS.com)