

6 Its shape resembles that of a diamond, and it is indeed something of a scientific treasure: Ryugu, an asteroid roughly one kilometer in size that rounds the sun once every 475 days, passing through Earth's orbit in the process. But don't worry, the cosmic rock doesn't pose any danger to us. It has been the subject of research for some years now – and has already received visitors. These include the Japanese space agency, who sent the Hayabusa 2 probe to the celestial body in 2014. After taking soil samples, the scout flew back and dropped off its “message-in-a-bottle” containing the precious cargo near the Australian town of Woomera in December 2020.

Five grams from the “Dragon Palace,” which is what “Ryugu” means in Japanese, ended up in labs on earth and were subjected to a thorough analysis in accordance with all standards of measurement. The material exhibits a loose, granular structure and shows obvious signs of prolonged reaction with water. Amino acids and other complex organic molecules were also found.

But where did Ryugu come from? Although it travels quite close to the sun, it probably originates from further afield. This is, at least, what studies conducted by the University of Göttingen and the Max Planck Institute for Solar System Research show. According to them, the Dragon Palace was born at the furthest edge of the solar system. The parent bodies of carbon-rich asteroids – including Ryugu – were formed there more than 4.5 billion years ago. As the gas and ice giants Jupiter, Saturn, Uranus, and Neptune got nearer, it was then flung on a chaotic voyage toward the sun.

The rotation of Ryugu
https://en.wikipedia.org/wiki/162173_Ryugu

ON LOCATION

