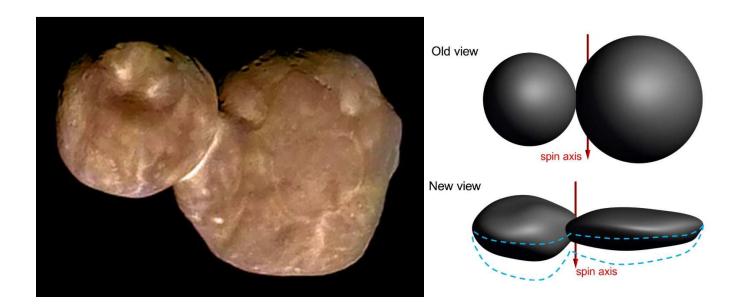
## Facts About Ultima Thule



## **Basic Information About Ultima Thule**

- 1. 2014 MU69, nicknamed Ultima Thule, is a trans-Neptunian object located in the Kuiper belt.
- 2. It is a contact binary 31 km (19 mi) long, composed of two joined bodies 19 km (12 mi) and 14 km (9 mi) across that are nicknamed "Ultima" and "Thule", respectively.
- 3. Ultima Thule is 4 billion miles from the sun and takes 298 years to complete one orbit of the Sun.
- 4. The image above of Ultima Thule was taken by the *New Horizons* spacecraft on its flyby on January 1, 2019. Later data indicated that the body was rather flattened rather than spherical.
- 5. Shows a relatively smooth face unmarred by impact craters.
- 6. That lack of impact scars suggests that the Kuiper Belt, a reservoir of ancient space rocks beyond the orbit of Neptune, has fewer small objects than scientists expected.
- 7. Ultima Thule is thought to be among the oldest and least-altered objects in the solar system.
- 8. So far there is no evidence for an atmosphere, dust production, or gas production.
- 9. Ultima Thule is not like Pluto (the inner most member of the Kuiper belt) and is not comet-like (i.e. coma present); some comets originate in the Kuiper belt.
- 10. The albedo of Ultima Thule is only 0.10; It reflects just 10% of the light that hits it.
- 11. The color of Ultima Thule may come from radiation altering exotic ice, frozen material like methane or nitrogen rather than water. There may also be a variety of organic molecules present.
- 12. The rotation period of Ultima Thule is about 15 hours.
- 13. The shape is enough to lend credence to the idea that planetary bodies grow up by the slow clumping of small rocks.
- 14. Ultima Thule was discovered by the Hubble Space Telescope in June, 2014.
- 15. The New horizons spacecraft is now on its way to another object in the Kuiper belt and will reach that target in the early 2020s.