



DATA SHEET

SOLAR SYSTEM: HAUMEA

Haumea is a member of a group of objects that orbit in an area of the solar system beyond the orbit of Neptune (30-50 AU) called the Kuiper Belt. This distant debris zone is populated with frozen, rocky bodies which formed early in the history of our solar system about 4.5 Gya, and are known as Kuiper Belt/transneptunian objects, or plutoids.

Haumea is an oval-shaped object with a radius of about 620 km (just under 10 times smaller than Earth). It has two moons, Namaka and Hi'iaka. A day on Haumea lasts only four Earth hours, making it one of the fastest rotating large objects in our solar system. The fast rotation may account for its elongated, rugby ball like shape.

SOME FACTS ABOUT HAUMEA

- 1 Haumea is 43 Astronomical Units (AU) from the Sun (6 452 000 000 km).
- 2 Planetary scientists believe Haumea is made of rock with a crust of water ice. Its density is estimated to be 1.885 g cm³, one of the densest in the Kuiper Belt.
- 3 It takes sunlight 6 hours to travel from the Sun to Haumea.
- 4 The mean orbital velocity of Haumea is 16 191 km h⁻¹.
- 5 It is possible a massive impact billions of years ago which initiated its spin and created its moons. A surface feature, the Dark Red Spot, may be an impact crater.
- 6 Haumea has two known satellites: Namaka is the inner moon, and larger Hi'iaka is the outer moon. Hi'iaka and Namaka have orbital periods of 49 and 18 days and masses about 0.5 and 0.05% that of Haumea, respectively. The two satellites are coated in water ice. Hi'iaka has a fast rotational period of about 9.8 hours.
- 7 Haumea has a ring about 70 km wide and is at a radius of 2 287 km from its surface. The ring is in the same plane with Haumea's equator and the orbit of Hi'iaka.