

In July 2005 several ice dwarfs were discovered. Haumea even has two little moons.

distance to the Sun: diameter: sidereal period ('year'): inclination of orbit: number of moons:		6,452,500,000 km 1400 km approx. 283 years 28° 2	
class:	100 x larger:	cubewano	
distance (scale) 64.5 m	•	size (scole) 0.014 mm	(

## Haumea

The discovery of the large ice dwarf 2003 EL61 was announced on 29 July 2005. His nickname was 'Santa' because it was discovered just after Christmas 2004. On 17 September 2008 he received his official name and became the fifth member of the new class of dwarf planets. Like Makemake Haumea is is a **cubewano** and a **plutoid**.

The code 2003 EL61 contains the year and period of the discovery. The discovery was made in 2004, using pictures from 2003. After a discovery astronomers need time to determine the size and orbit of the object. For that purpose they use older pictures of the sky to see where it was before (in this case even 50 year old pictures!), a process called 'precovery'. The more of these earlier sightings the more accurate they can calculate an orbit. Astronomers need to be absolutely sure before telling the entire world about their discovery! Haumea has a strange egglike shape and is the fourth largest known ice dwarf, after Eris, Pluto and Makemake. He has at least two moons: Namaka (170 km) and Hi'iaka (310 km).

Scale 1:100 billion: 1 cm in scale model = 1 million km in reality. Abbrev.: d = days; m = min; h = hours; s = sec; dist. = distance

