

2

**Diameter:**

950 km

**Mass:**

$8.96 \times 10^{20}$  kg (0.01 Moons)

**Orbit Distance:**

413,700,000 km (2.8 AU)

**Orbit Period:**

1,680 days (4.6 years)

**Surface Temperature:**

-105°C

**Moons:**

None

**Discovery Date:**

1st January 1801

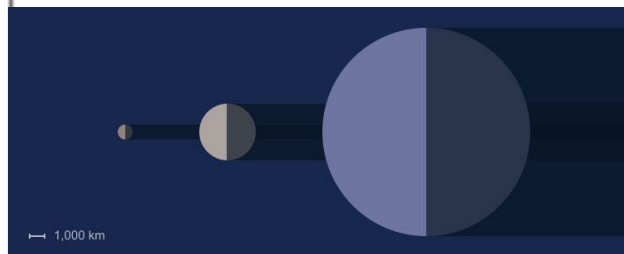
**Discovered By:**

Giuseppe Piazzi

6



# CERES



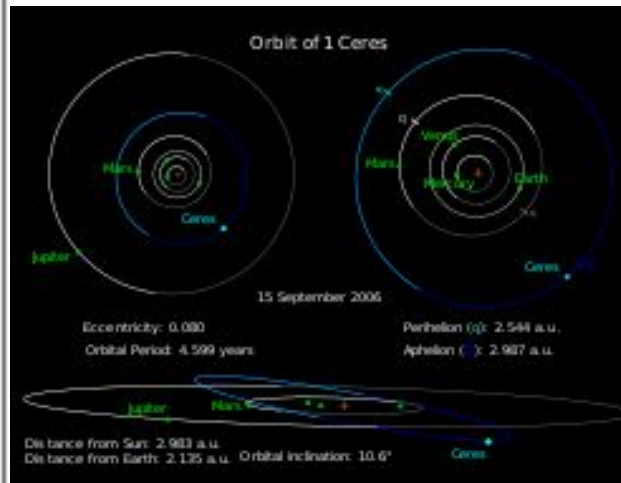
1

**Ceres has a mysterious white spot.** This can be seen in both the old Hubble images and the more recent photos taken by the Dawn spacecraft on its approach. **Every second Ceres loses 6kg of its mass in steam.** Plumes of water vapour shooting up from Ceres' surface were observed by the Herschel Space Telescope.

3

The categorization of Ceres has changed more than once and has been the subject of some disagreement. Johann Elert Bode believed Ceres to be the "missing planet" he had proposed to exist between Mars and Jupiter, at a distance of 419 million km (2.8 AU) from the Sun. Ceres was assigned a planetary symbol, and remained listed as a planet in astronomy books and tables (along with 2 Pallas, 3 Juno, and 4 Vesta) for half a century.

4



## Orbit Of Ceres

5

Mercury, Venus, Earth, and Mars can all appear to cross the Sun, or transit it, from a vantage point on Ceres. The most common transits are those of Mercury, which usually happen every few years, most recently in 2006 and 2010. The most recent transit of Venus was in 1953, and the next will be in 2051; the corresponding dates are 1814 and 2081 for transits of Earth, and 767 and 2684 for transits of Mars.