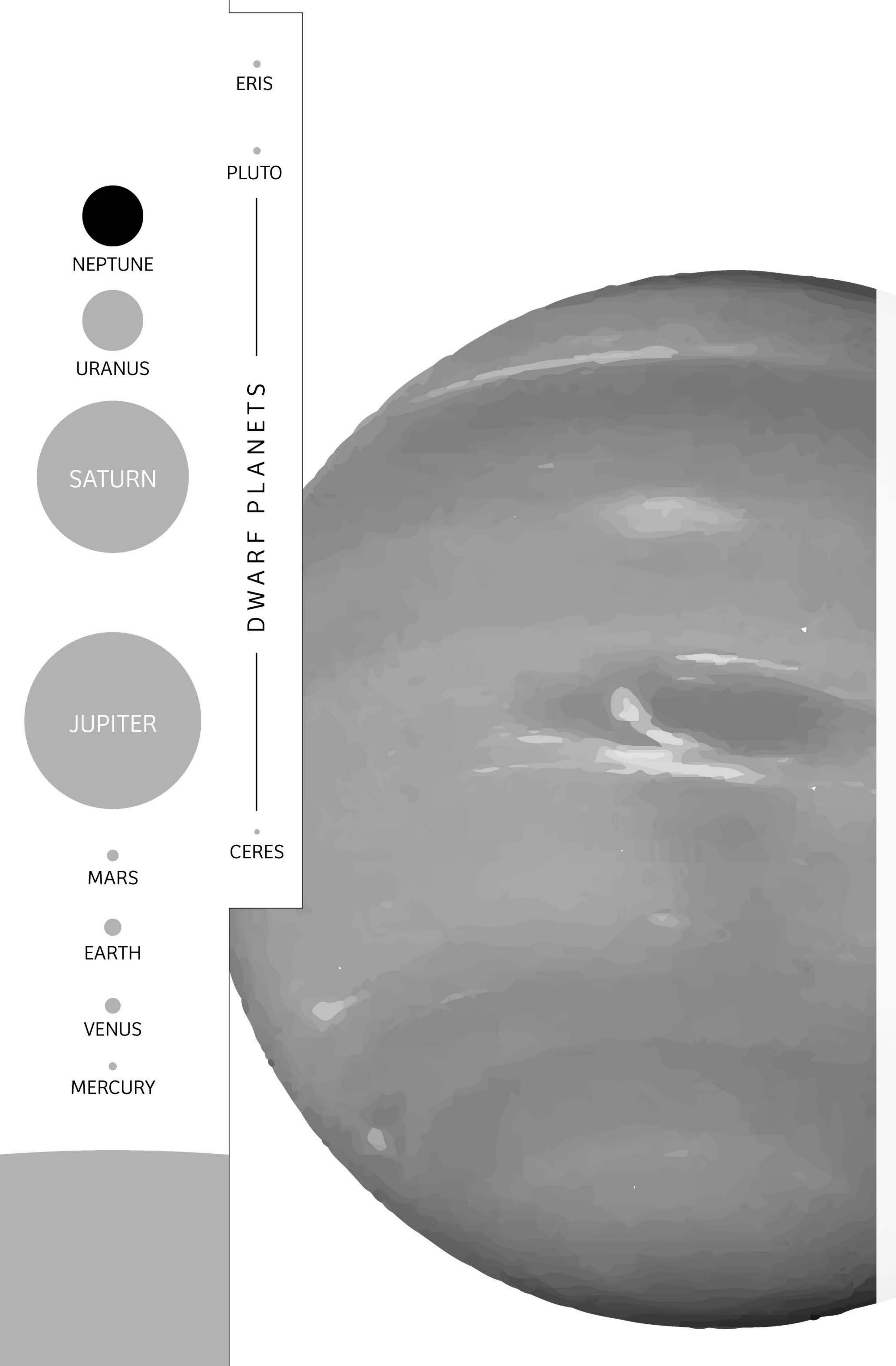


SUN

NEPTUNE: THE EIGHTH PLANET FROM THE SUN: A GAS GIANT



Neptune was discovered by Galle and d'Arrest in 1846 near the positions predicted by mathematicians John Couch Adams, of Cambridge, and Urbain LeVerrier after observations of Uranus showed that its motion apparently didn't obey Newton's laws of gravity. Amazingly, Neptune was first observed by Galileo in 1612, who recorded it as a star that had moved, but did not identify it as a planet.

Neptune's atmosphere is predominately hydrogen and helium with a mixture of methane, water and ammonia. The cloud tops show patterned belts similar to those of Jupiter and Saturn, but much fainter. Winds on Neptune have been measured at 2,000 km/hr making them the fastest in the solar system.

NEPTUNE STATISTICS

Diameter: 50,538 km (4.0 x Earth)

Mass: 17.2 x Earth

Mean distance from the Sun: 30.07 AU*

(4,500 million km)

Orbital period (sidereal**): 164.79 Earth years

Rotational period

(retrograde): 18 hrs 26 mins

Moons: 13

Rings: yes (Radius 40,000-60,000 km)
Inclination of equator to orbit: 28 degrees
Composition: Rock and ices, 15% hydrogen

and a little helium

FASCINATING FACT: Neptune has a storm known as the Great Dark Spot (in the centre of the image) which is about as big as Earth.

^{*} One Astronomical Unit (AU) = mean distance of the Earth from the Sun.

^{**} Sidereal time is time kept with respect to distant stars.