Neptune

A world of powerful winds

Neptune is the Solar System's outermost planet. Despite its distance from the Sun, its atmosphere has some of the fastest winds ever measured on a planet.

Type	Ice giant
Diameter	49,244 km
Mass (Earth = 1)	17.1 Earth masses
Average distance	30.07 AU · 4.50 billion km
Orbital period	164.8 years
Rotation	16 h 6 min
Temperature	≈ −200 °C
Main orbiting bodies	Triton, Nereid and Proteus

Compare with Earth

Sunlight takes more than 4 hours to reach it.

Understanding Neptune

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Composition and interior

Neptune probably has a rocky core surrounded by a deep mixture of water, methane and ammonia, beneath outer layers dominated by hydrogen and helium.

Atmosphere and environment

Its atmosphere also contains methane and has the fastest winds measured on any planet, sometimes exceeding 2,000 km/h. Dark storms appear and disappear there.

Exploration

Voyager 2 flew past Neptune in 1989 and remains the only spacecraft to have visited it. Hubble and James Webb now observe its storms, rings and seasons.

A remarkable fact

Triton, its largest moon, orbits in the opposite direction to Neptune's rotation. This retrograde orbit suggests it was once a Kuiper Belt object that Neptune captured.

Sources and limitations

NASA Science: https://science.nasa.gov/neptune/facts/
Online fact sheet: https://systeme-solaire-3d.fr/en/neptune
Values are rounded. The artistic view changes sizes and distances for readability. Check dated information before reusing it.