Pluto

The world with an icy heart

Pluto is a world of ice mountains, nitrogen plains and glaciers in the Kuiper Belt. Classified as a dwarf planet by the International Astronomical Union in 2006, it remains one of the most fascinating objects explored by New Horizons.

Type	Dwarf planet
Diameter	2,377 km
Mass (Earth = 1)	0.00218 Earth masses
Average distance	39.48 AU · 5.9 billion km on average
Orbital period	≈ 248 years
Rotation	6.39 days · retrograde
Temperature	≈ −232 °C
Main orbiting bodies	Charon, Nix, Hydra, Kerberos and Styx

Compare with Earth

Its diameter is less than one fifth of Earth's.

Understanding Pluto

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Composition and interior

Pluto is thought to have a rocky core surrounded by a water-ice mantle. Its surface includes frozen nitrogen, methane and carbon monoxide.

Atmosphere and environment

Pluto has a very thin atmosphere of nitrogen, methane and carbon monoxide. Some of these gases can freeze onto the surface as the dwarf planet moves farther from the Sun.

Exploration

New Horizons flew past Pluto in July 2015, revealing a world far more active and varied than expected: ice mountains, glaciers, atmospheric hazes and vast plains.

A remarkable fact

Sputnik Planitia forms the left part of the famous heart-shaped region. It contains moving ice and very few large craters, indicating a geologically young surface.

Sources and limitations

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