

Uranus

The tilted giant

Uranus rotates almost on its side, possibly because of an ancient collision. Methane in its atmosphere absorbs red light and contributes to its blue-green colour.

Type	Ice giant
Diameter	50,724 km
Mass (Earth = 1)	14.5 Earth masses
Average distance	19.19 AU · 2.87 billion km
Orbital period	84 years
Rotation	17 h 14 min · retrograde
Temperature	≈ −195 °C
Main orbiting bodies	Titania, Oberon, Ariel, Umbriel and Miranda

Compare with Earth

Its diameter is almost 4 times Earth's.

Understanding Uranus

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Composition and interior

Uranus is an ice giant. Its interior is thought to contain a dense mixture of water, methane and ammonia around a small rocky core, beneath hydrogen and helium outer layers.

Atmosphere and environment

Methane in its atmosphere absorbs some red light and contributes to its blue-green colour. Uranus also has dark rings and many moons.

Exploration

Voyager 2 remains the only spacecraft to have flown past Uranus, in January 1986. Hubble and James Webb observe its clouds, auroras and changing rings.

A remarkable fact

Its axis is tilted by about 98 degrees: Uranus appears to roll along its orbit. Each season lasts nearly 21 Earth years.

Sources and limitations

NASA Science: <https://science.nasa.gov/uranus/facts/>

Online fact sheet: <https://systeme-solaire-3d.fr/en/uranus>

Values are rounded. The artistic view changes sizes and distances for readability. Check dated information before reusing it.