

## Planet Uranus



If Earth is known as the Blue Planet because its atmosphere appears blue from space then Uranus should be known as the Green Planet. Pictures returned from space in 1985 and 1986 by NASA's Voyager 2 space probe show Uranus appears light blue-green when viewed from space. Uranus has spots similar to Jupiter and scientists believe these spots are swirling masses of gas moving at wind speeds similar a hurricane.

Uranus is a large planet with a diameter about four times the diameter of Earth. Uranus is the seventh planet away from the Sun in our solar system. Since Uranus is so far away from Earth, the third planet from the Sun, it wasn't discovered until 1781 when the latest telescopes of the day were powerful enough to view it. Even until the Twentieth Century, there wasn't much information available about Uranus. Only when Voyager 2 returned information about the planet did astronomers know much about this distant planet.

Like other planets, including Earth, Uranus has an elliptical orbit around the Sun. Uranus is so far away from the Sun that it takes Uranus about 84 Earth years to make one revolution around the Sun. One year on Uranus equals about 84 years on Earth. Yet a day on Uranus, the time it takes for the planet to rotate once on its axis is fast, is just 17 hours and 14 minutes in Earth time. Due to prevailing winds that blow at about 450 miles per hour, the atmosphere of Uranus in the southern hemisphere rotates even faster, making one rotation every 14 hours. This difference in rotational speed is possible because like other planets in the outer edges of the solar system, Uranus does not have a solid surface. Instead the surface is composed of gases.

A planet is tilted on its axis. For example, Earth is tilted at an angle of about  $23\frac{1}{2}$  degrees from perpendicular and Mars is tilted 25 degrees. Uranus, on the other hand, revolves around the Sun at a tilt angle of 98 degrees, just about on its side. Astronomers postulate that some large body about the size of Earth must have collided with Uranus when it was forming and radically changed its axis. Uranus has 21 known moons.

