Hubble Finds Bright Clouds on Uranus

Uranus is the seventh planet from the Sun. It is a gas planet with rings, like Saturn, but is about half the size of Saturn. It orbits the Sun at over 19 times the distance between Earth and the Sun. It takes 84 years for Uranus to complete one orbit.

This view shows Uranus surrounded by its four major rings and by 10 of its 17 known satellites. The rings appear as concentric ovals surrounding the planet. The outermost ring is the most prominent. Because of the viewing angle, the rings separate into four discrete ridges only at the top and bottom of the ovals. Find two of the satellites close to the bottom two corners of the box surrounding the image. The other satellites are scattered outside the planet's rings.

Raised bumps on the right edge of the round planet are bright clouds discovered by Hubble. The largest of these is brighter than any other cloud ever seen on Uranus.

The planet's atmosphere displays bands of varying colors. The brightest band is a raised curve to the left of the planet's center and is a high haze or cloud layer. There are clouds near this band that circle the planet at more than 300 miles per hour (500 kilometers per hour).

Notice that the bands and the rings seem to run vertically instead of horizontally. This is because Uranus is a 'tipped' planet. It spins on an axis that is tilted more than any other solar system planet. The result is that Uranus spins on its side. Many astronomers believe that Uranus was tipped over when another object collided with it billions of years ago.

For more information on Tactile Astronomy projects from the Space Telescope Science Institute in Baltimore, Maryland, go to the following page at the Web site, Amazing Space: http://amazing-space.stsci.edu/tactile-astronomy/