

Saturn and Its Rings

This Hubble image of Saturn shows off its magnificent ring system and one of its many moons.

The most prominent feature in this image is Saturn's rings, the raised lines that wrap around the planet. Saturn's ring system is composed of tens of thousands of rings, called ringlets. A wide gap called the "Cassini Division" is near the outer edge of the ring system.

Saturn's ring system is about 170,000 miles (274,000 km) wide but only about 30 feet (10 meters) thick. Astronomers suspect that the pieces that make up the rings may be the remnants of a shattered object, such as a comet or asteroid, from the most distant region of the solar system.

Solid lines distinguish the planet itself. Saturn has different layers of clouds in its atmosphere. By studying the atmosphere, scientists gain insight into the structure and types of gases in

the clouds.

The tiny raised dot on the lower left, beneath Saturn, is the icy moon, Dione. Saturn has more than 60 known moons.

The image was taken in 1998 with Hubble's Near Infrared Camera and Multi-Object Spectrometer.

**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/>**

