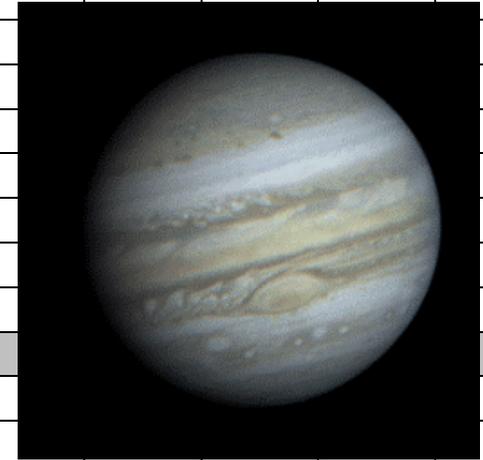
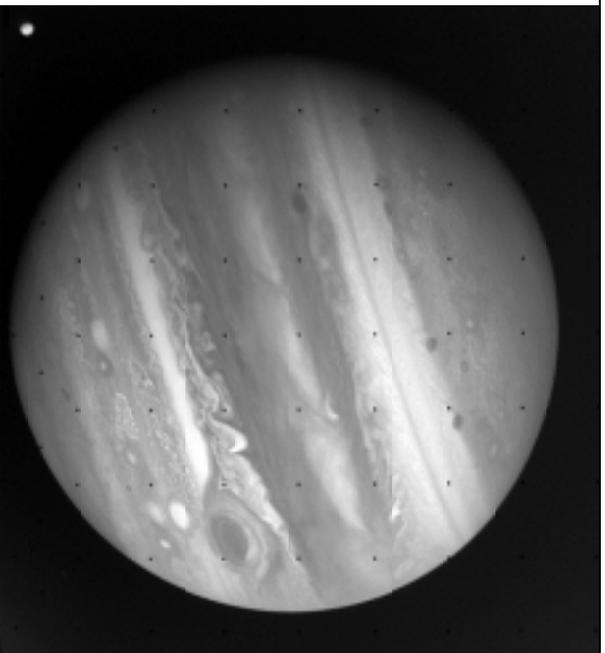


## Fast Facts About Jupiter

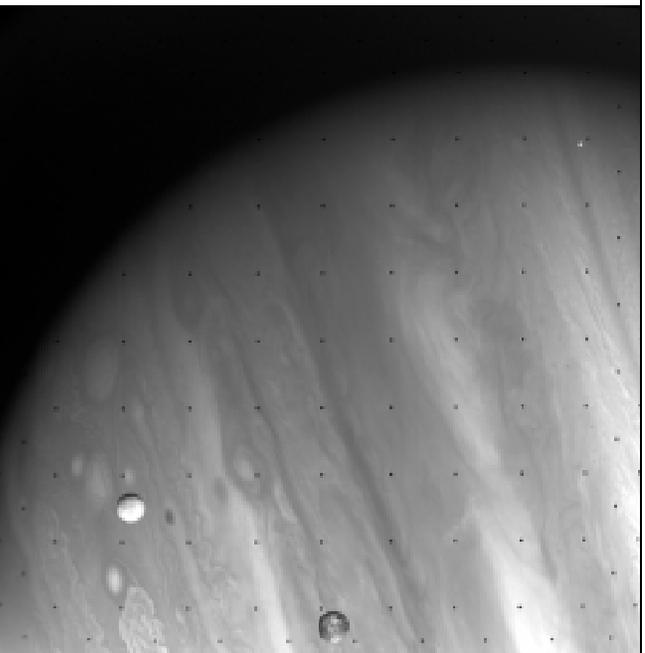
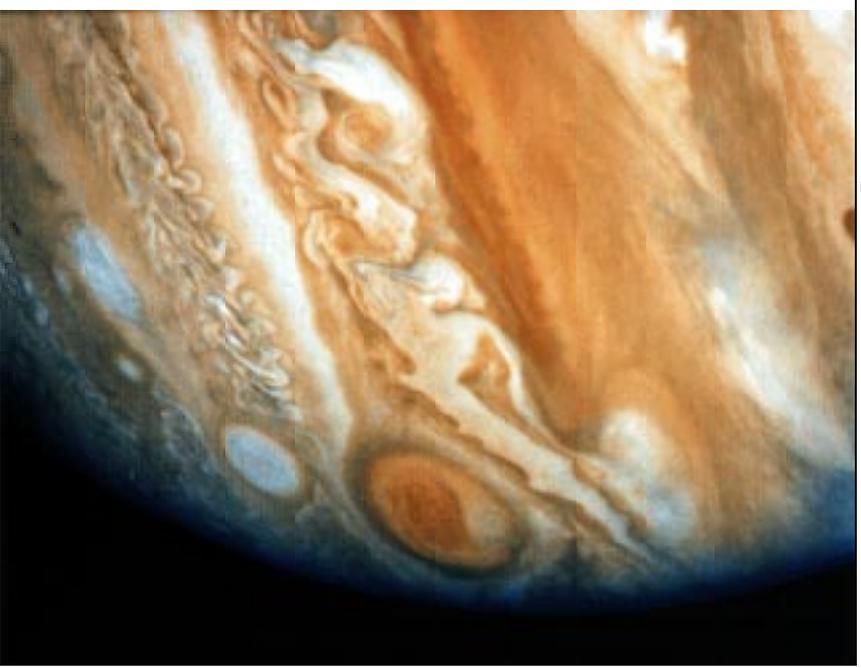
<b>Planetary Parameters</b>		Ratio (Jupiter/Earth)									
Planet Type	Gas Giant (unlike a solid, rocky planet like Earth)										
Average Distance from Sun (kilometer)	778,330,000 as compared to Earth's 149,600,000	5.20									
Equatorial Diameter (kilometer)	142,984 as compared to Earth's 12,756	11.21									
Mass (10 <sup>24</sup> kilogram)	1,899 as compared to Earth's 5.9736	317.90									
Volume (10 <sup>10</sup> kilometer <sup>3</sup> )	143,128 as compared to Earth's 108.321	1,321.30									
Average Density (gram/centimeter <sup>3</sup> )	1.33 as compared to Earth's 5.52	0.24									
Surface Gravity (meter/second <sup>2</sup> )	23.12 as compared to Earth's 9.78	2.36									
Magnetic Field (gauss-Rh <sup>3</sup> )	4.28 as compared to Earth's 0.3076	The magnetic field is 13.9 times as strong as Earth's and pours billions of watts into Earth's magnetic field each day.									
<b>Orbital Parameters</b>											
Year Length (One Orbit Around the Sun)	11.86 Earth years										
Day Length (One Rotation on its Axis)	9.92 Earth hours										
Inclination of Axis (degrees)	3.12 compared to Earth's 23.45										
<b>Atmosphere and Climate</b>											
Average Surface Temperature (C)	-144 as compared to Earth's 14.8										
Maximum Temperature (C)											
Minimum Temperature (C)	-148 (at the top of the clouds) as compared to Earth's -33										
Atmospheric Pressure at Surface	Far above 100 bar (Earth = 1 bar). This pressure exerts a force of 0.16 kg/m <sup>3</sup> at 1 bar compared to Earth's atmosphere which exerts a force of 1.217 kg/m <sup>3</sup> at 1 bar (sea level)										
Major Atmospheric Gasses	90% Hydrogen, 10% Helium, 3,000 ppm Methane, 260 ppm Ammonia, 4 ppm Water Vapor										
<b>Planetary Features</b>											
General Overview	Red Spot is a storm that has lasted at least 300 years. Jupiter contains nearly 2/3 of the solar system's planetary mass. In composition, it resembles a small star. It's interior pressure may reach 100 million times Earth's surface pressure.										
Core Composition	Slush or liquid										
Known Moons/Rings	4 large and 12 small moons, several rings so thin they were only discovered when Voyagers 1 and 2 visited Jupiter.										
<b>Visits to Jupiter</b>											
1950-79	1973: Pioneer 10 (US), flyby, imaged cloud tops and moons; 1974: Pioneer 11 (US), flyby, imaged polar regions; 1979: Voyager 1 (US), flyby, discovered faint ring and three moons; 1979: Voyager 2 (US), flyby, detailed images of ring and Io volcanism.										
1980-99	1995: After a six-year journey from Earth, the Galileo orbiter (US) arrives at Jupiter. Galileo's instruments study Jupiter's weather, atmosphere, magnetic field, composition, and internal structure. After successfully completing its initial mission, Galileo's mission was extended, enabling it to study Jupiter's rings, moons, and magnetosphere.										



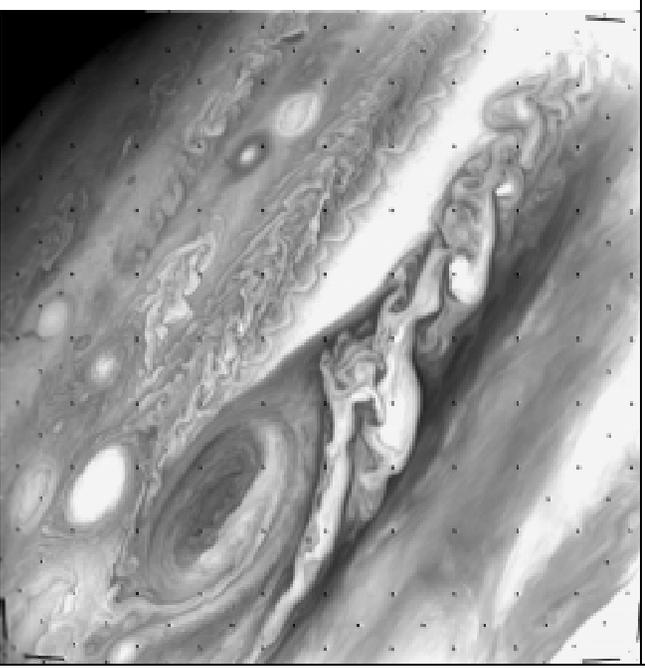
## Some Views of the Planet Jupiter



Jupiter is comprised of gas. Had it been four times larger, it would have had enough gravity to compress its gas, start the process of nuclear fusion, and become our solar system's second sun. Even though it is the solar system's largest planet, it only takes about ten hours to make one complete rotation. This fast spin creates banding and other features in the flowing gasses. These patterns change in response to the atmosphere's incessant churning.



Io and Europa, the two innermost of Jupiter's 16 moons, are seen passing between Jupiter and the Voyager 1 spacecraft. Io, the darker of these two moons, is the most active volcanic body in the solar system. Europa's surface is mostly water ice, and there is strong evidence that it may be covering an ocean of liquid water or slushy ice.



The Red Spot is a hurricane-like storm twice the diameter of Earth that has lasted over 300 years. The gasses swirl counterclockwise around this "eye," and Jupiter's typical banding pattern is broken into turbulent eddies that drift away from the Red Spot. Below the Red Spot are smaller storms, creating bright white vortices of ammonia ice. The white oval below the Red Spot has lasted over 40 years.