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Voyager 1-19
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Voyager 1 took this photo of Jupiter and two of its satellites (Io, left, and Europa, right) on February 13, 1979. Io is about 350,000 kilometers (220,000 miles) above Jupiter's Great Red Spot; Europa is about 600,000 kilometers (375,000 miles) above Jupiter's clouds. Although both satellites have about the same brightness, Io's color is very different from Europa's. Preliminary evidence suggests color variations within and between the polar regions. Io's surface composition is unknown, but scientists believe it may be a mixture of salts and sulfur. Europa is less strongly colored, although still relatively dark at short wavelengths. Markings on Europa are less evident than on the other satellites, although this picture shows darker regions toward the trailing half of the visible disk. Jupiter is about 20 million kilometers (12.4 million miles) from the spacecraft. At this resolution (about 400 kilometers or 250 miles), there is evidence of circular motion in Jupiter's atmosphere. While the dominant large-scale motions are west to east, small-scale movement includes eddy-like circulation within and between the bands. This photo was produced from three black-and-white images taken from blue, green, and orange filters and assembled by the Image Processing Lab at the Jet Propulsion Laboratory. JPL manages and controls the Voyager Project for NASA's Office of Space Science.

The Voyager Project

Two unmanned spacecraft, Voyagers 1 and 2, are now on their way to study our giant outer planets, Jupiter and Saturn, and 11 of their major satellites, several of which are larger than our own Moon.

The Voyager Project was assigned to the Jet Propulsion Laboratory as part of the National Aeronautics and Space Administration program of planetary exploration. JPL communicates with the spacecraft through a worldwide network of deep space tracking stations located in California, Australia, and Spain.

Voyager 2 was launched from Florida on August 20, 1977; Voyager 1, which flies a faster trajectory to reach the planets first, was launched on September 5, 1977.

At Jupiter, Voyager 1 made its closest approach on March 5, 1979. Voyager 2, whose more cautious trajectory will avoid much of Jupiter's intense radiation, will make its closest approach on July 9, 1979. Satellites being studied are Amalthea, Io, Europa, Ganymede, and Callisto. Jupiter's Great Red Spot will be photographed and studied intensively by both spacecraft.