

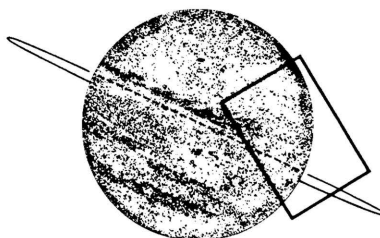


National Aeronautics and  
Space Administration

**Jet Propulsion Laboratory  
California Institute of Technology  
Pasadena, California**

**Voyager 2-46A  
P-21779  
July 13, 1979**

Jupiter's faint ring system, about 10 kilometers (6 miles) thick and 6,500 kilometers (4,000 miles) wide, is shown in this color composite as two light orange lines protruding outward to the right from Jupiter's limb. This picture was taken of Jupiter's dark side through orange and violet filters while Voyager 2 was traveling through the planet's shadow. The multiple images of Jupiter's bright limb are evidence of the spacecraft's motion during these long exposures. The Voyager 2 spacecraft was at a range of 1,450,000 kilometers (900,000 miles) and about two degrees below the plane of the ring. The upper ring image was cut short by Jupiter's shadow on the ring.



**Artist's rendition of Jupiter's ring**

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### **The Voyager Project**

Two unmanned spacecraft, Voyager 1 and 2, completed highly successful fly-through encounters of the Jovian system on March 5 and July 9, 1979, respectively. The twin spacecraft, now millions of miles beyond Jupiter, are en route to rendezvous with Saturn in November 1980 and August 1981. Voyager 2 may be placed on a trajectory passing Saturn that permits a Uranus encounter in early 1986. Both spacecraft eventually will escape the solar system into interstellar space.

Each spacecraft weighed 820 kg (1,800 lb) at launch and is equipped with eleven scientific instruments that perform a wide range of planetary observations. Voyager 2 was launched from Cape Canaveral, Florida, on August 20, 1977. Voyager 1, flying a shorter, faster trajectory, was launched on September 5, 1977. Communication with each spacecraft is achieved through a worldwide network of deep space tracking stations located in California, Australia, and Spain.

The more significant Jovian findings were the discovery of a ring system encircling Jupiter, erupting volcanos on the Galilean satellite Io, the large differences in appearance and evolution of the surfaces of Jupiter's four planet-size moons, superbolts of lightning and immense auroras in the planet's violently churning atmosphere, and the complex interactions of Jupiter's magnetosphere with the solar wind and Jupiter's satellites.

The Voyager Project was assigned to the Jet Propulsion Laboratory by the National Aeronautics and Space Administration's Office of Space Science as part of NASA's planetary exploration program.