





NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Jupiter's Red Spot, the shadow of the moon Io, and the surface cloud structure are shown in this photograph taken at 11:02 p.m. PST, on December 1 as NASA's Pioneer spacecraft approached the planet from a distance of 2,500,000 kilometers (1,550,000 miles). Signals from the spacecraft at encounter take 46 minutes to reach Earth. Nothing is small about this giant planet, unless it is the length of its day. With an equatorial diameter of 143,000 kilometers (88,900 miles), it is two and one-half times as massive as all the other planets put together. It radiates more energy than it receives from the Sun, its Red Spot 48,000 kilometers (30,000 miles) across could swallow several Earths, it has 12 moons, and Io, the third largest, is nearly as big as our own Moon. Its short day of 10 Earth hours with its long year of 12 Earth years gives it 10,500 Jovian days in one Jovian year.