

Voyager Program Overview

The Voyager program consists of two robotic probes, Voyager 1 and Voyager 2, launched in 1977 to study the outer Solar System and interstellar space. Both spacecraft are still operational and continue to send data back to Earth.

Voyager 1 and Voyager 2 were designed to take advantage of a rare planetary alignment that occurs only once every 176 years. This alignment allowed the spacecraft to visit Jupiter, Saturn, Uranus, and Neptune using gravity assists.

Key achievements include the first detailed images of Jupiter's moons, the discovery of active volcanoes on Io, the complex ring system of Saturn, and the Great Dark Spot on Neptune. Both spacecraft carry the Golden Record, a phonograph record containing sounds and images selected to portray the diversity of life and culture on Earth.

Voyager 1 entered interstellar space in 2012, becoming the first human-made object to do so. Voyager 2 followed in 2018. Both spacecraft continue to operate and send data about the interstellar medium.

The Voyager missions represent one of NASA's greatest achievements in planetary exploration. The spacecraft have traveled farther than any other human-made objects and continue to provide valuable data about the outer reaches of our solar system and the interstellar medium beyond.

The mission has revolutionized our understanding of the outer planets and their moons, revealing complex geological processes, atmospheric dynamics, and magnetic field interactions that were previously unknown. The data collected by the Voyager spacecraft continues to be analyzed by scientists worldwide.