

Pioneer

Pioneer was the first to fly beyond Mars' orbit, through the asteroid belt, and close to Jupiter. During the passage by Jupiter, Pioneer 10 obtained the first close-up images of the planet, charted Jupiter's intense radiation belts, located the planet's magnetic field, and discovered that Jupiter is predominantly a gas planet. Long before and after flying by Jupiter, Pioneer 10 transmitted data on the magnetic fields, energetic particle radiation, and dust populations in interplanetary space.

Pioneer 11 was the first mission to explore Saturn and the second spacecraft in humanity's early studies of the outer solar system.

