

Juno to probe Jupiter's secrets

NASA's Juno spacecraft is the first to look beneath Jupiter's dense cloud cover in an effort to shed light on the giant planet's origins and evolution

Solar array: 9m long – largest ever deployed in space – to provide power in low light conditions

Payload: Nine instruments to study atmosphere, gravity, magnetic field and possible existence of solid core

MISSION TIMELINE

Launch
Aug 2011

Earth fly-by
Oct 2013

Deep space manoeuvres
Sep 2012

Jupiter arrival
Jul 2016 – probe enters polar orbit for 20-month science mission

Mission end: Feb 2018 – Juno de-orbits and crashes into Jupiter

JUPITER

Earth to scale

■ **Diameter:** 142,000km (11 times size of Earth)

■ **Volume:** 1,320 Earths could fit inside Jupiter

■ **Distance from sun**
780 million km. Takes 12 Earth years to orbit sun

■ **Length of day:** 10 hours

■ **Average temperature**
–145°C (at top of clouds)

■ **Composition:** Hydrogen 90%, Helium 10%

■ **Known moons:** 67