

## New Horizons hits first major milestone

The New Horizons Mission to Pluto has reached its first major milestone, a six-month voyage past Jupiter. The craft, on course to the distant "dwarf planet" Pluto, began taking pictures and taking scientific readings of Jupiter on Jan. 8, NASA announced. It will finish its up-close visit to our largest planet in June.

Before it was classified as a "dwarf planet," Pluto was the only planet yet to be visited. The main goal is still to reach Pluto by July 2015, but Jupiter's mysterious gaseous makeup and massive hulk drew scientists in to test the craft's instruments on a worthy subject. The space battery powering the onboard instruments is a radioisotope thermoelectric generator (RTG), assembled at Idaho National Laboratory (INL). Seven imaging, temperature and atmospheric measurement tools collect the data as New Horizons zooms past Jupiter. All the instruments run on less than 200 watts of power and will make about 700 observations.

Jupiter will slingshot New Horizons through its gravitational pull and offer readings and images as a test run for the probe. The slingshot effect, called a gravity assist, will boost New Horizons' speed to roughly 47,000 miles per hour.

The encounter's first day of action, Jan. 8, sent back black-and-white images of the giant planet and an infrared glimpse of the icy moon Callisto. New Horizons will take detailed scans of Jupiter's violent, stormy atmosphere and powerful magnetic field, look into Jupiter's faint ring system, map the composition and topography of the moons Io, Europa, Ganymede and Callisto and glance at volcanic activity on Io. An added bonus to the schedule includes the first-ever trip down the long "tail" of Jupiter's magnetic field, which trails tens of millions of miles beyond the planet.

Photo: New Horizons launch

**New Horizons launches from Cape Canaveral on Jan. 19, 2006.**

In another eight-and-a-half years, New Horizons will take never-before-seen images and data from Pluto and its surroundings, like its largest moon Charon and the Kuiper Belt. The 3-billion-mile trip will span a total of nine-and-a-half years.

A key contribution to those observations is the INL-built RTG, the first ever assembled at the lab. The RTG was assembled at INL's Space and Security Power Systems Facility (SSPSF) at the Materials and Fuels Complex (MFC) in just nine months. Nearly 80 INL employees contributed to its completion.

More information about [New Horizons](#).

General Contact:  
Teri Ehresman, (208) 526-7785,

[Feature Archive](#)

**The RTG developed by INL uses nuclear power to warm and provide electricity to the spacecraft's instruments.**