Ten Years and Three Billion Miles . . .

2007-2014

For most of the eight-year trek from Jupiter to Pluto, the craft will spin slowly in a state of "hibernation," signaling once a week to assure it's "sleeping peacefully." But for about 50 days each year, it will be awakened to conduct an intensive set of* * calibration and science observations.

Jupiter



February-March 2007:

If the spacecraft launches during the first three weeks of its launch window, it can fly by Jupiter and save up to three years of flight time with the slingshot-like gravity boost provided by this giant planet. (The timeline shown in this figure assumes a launch during the first 17 days of the window.)

days before the

Regular monitoring begins about 200 spacecraft's closest approach to Pluto.

Student Dust Counter (under spacecraft)

2017-2020

With NASA approval, the spacecraft will be directed toward one or more Kuiper Belt Objects beyond Pluto.



During the fly-by of Pluto, scientists expect a frenzied 24 hours of data gathering. At its closest, New Horizons will pass within 6,000 miles of the frozen dwarf

Alice: An ultraviolet imaging spectrometer used primarily to analyze the composition of Pluto's atmosphere.

LORRI: A high-resolution optical telescope and camera that will start monitoring Pluto regularly about 200 days out.

A combination optical/infrared instrument that will be used to provide color maps of the surfaces of Pluto and Charon, plus compositional and thermal. information on the surfaces.

PEPSSI: Particle detection instrument used to detect molecules and atoms escaping from Pluto's atmosphere.

SWAP: Particle instrument used to measure the properties of the solar wind around Pluto.

REX: Radio experiment to study Pluto's atmosphere by observing the bending of radio waves beamed up to the craft by giant antennas on Earth.

Student Dust Counter: Devised by undergrads at University of Colorado; will count dust particle impacts from Earth all the way into the Kuiper Belt.



January-February 2006:

New Horizons spacecraft due to launch from Cape Canaveral, Florida, during a 35-day "launch window."