

Ten Years and Three Billion Miles . . .

January–February 2006:
New Horizons spacecraft due to launch from Cape Canaveral, Florida, during a 35-day “launch window.”

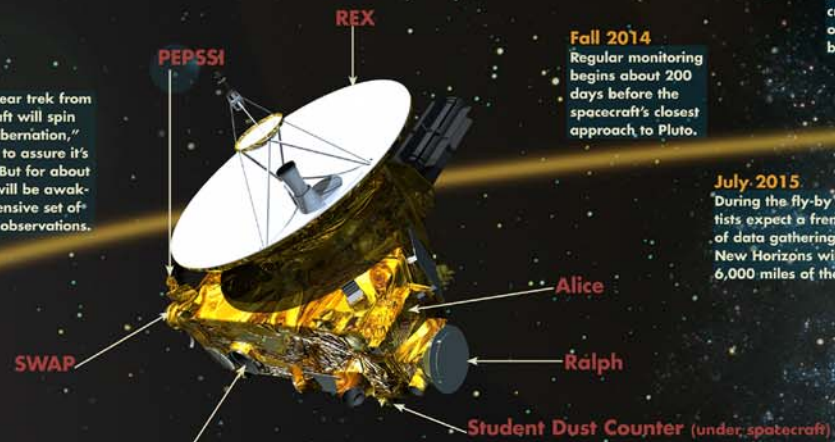
February–March 2007:
If the spacecraft launches during the first three weeks of its launch window, it can fly by Jupiter and save up to three years of flight time with the slingshot-like gravity boost provided by this giant planet. (The timeline shown in this figure assumes a launch during the first 17 days of the window.)

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.

Fall 2014
Regular monitoring begins about 200 days before the spacecraft’s closest approach to Pluto.

July 2015
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.

2017–2020.
With NASA approval, the spacecraft will be directed toward one or more Kuiper Belt Objects beyond Pluto.



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.

Ralph: 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.