

## This Day in History... January 19, 2006

### Launch of New Horizons Probe

On January 19, 2006, the New Horizons interplanetary space probe was launched on a mission that included studying Pluto. The mission was inspired in part by a postage stamp!

In the early 1900s, Percival Lowell suggested that there was a ninth planet in the solar system that was causing changes to the orbits of Uranus and Neptune. After several years of observations, Pluto was officially “discovered” on February 18, 1930.

In 1989, the Voyager mission completed a flyby of Neptune. Two years later, the USPS issued a set of stamps (US #2568-77) featuring each of the planets with the spacecraft that explored it. But one stamp stood out. Picturing a lone planet, it proclaimed, “Pluto: Not Yet Explored.” The statement was taken as a challenge.



*Stamp features a composite of four images taken by the New Horizons spacecraft.*

NASA created the New Horizons mission with plans to explore Pluto, its moons, and objects beyond them. The New Horizons probe was launched from Cape Canaveral, Florida at 7 p.m. on January 19, 2006, just seven months before Pluto was reclassified as a dwarf planet. The fastest spacecraft ever built, New Horizons traveled to Pluto at an astounding 96,000 miles per hour.

The probe carried several artifacts into space. These included a US flag, a Florida state quarter (which honors space exploration), and the 1991 stamp that inspired the mission. Eight months after its launch, New Horizons approached Jupiter. With its superior cameras, the probe captured the most detailed pictures of the planet to date. It also studied clouds, storm activities, the planet’s rings, and more. New Horizons also received a gravity assist from Jupiter as it flew by, increasing its speed and shortening its journey to Pluto by three years.

New Horizons reached Pluto on July 14, 2015. The same day, the probe began transmitting back the first batch of data, including the first up-close images we have ever seen of Pluto. Journeying more than 2.6 billion miles from Earth, the probe transmitted data at a very slow rate, so scientists continued to receive new data about Pluto for more than a year. The mission allowed them to calculate Pluto’s exact diameter, view mountains, plains, and ice caps, and see the planet has a reddish hue from the compounds in its atmosphere. They also found that Pluto’s atmosphere is being blown into space by solar winds, creating a tail of plasma. Because of Pluto’s nearly round shape, scientists suspect the now-frozen planet once had a warm subsurface and a liquid ocean.

All this new data revealed that Pluto has been changing for much of its existence, contrary to what scientists have long believed. The images showed curious cone-shaped mountains with craters in the center and a potential nitrogen-spewing ice volcano, the only one of its kind to be discovered in our solar system.

After its mission to Pluto was complete, New Horizons continued on to study objects in the Kuiper Belt. The probe is still functional and expected to continue operating into the late 2030s.



*The stamp that inspired the New Horizons mission.*



*This stamp pictures an artists' rendering of the New Horizons spacecraft in flight.*

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