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## NASA spacecraft captures farthest images away from Earth

With its Long Range Reconnaissance Imager (LORRI), New Horizons has observed several Kuiper Belt objects (KBOs) and dwarf planets at unique phase angles, as well as Centaurs at extremely high phase angles to search for forward-scattering rings or dust. These December 2017 false-color images of KBOs 2012 HZ84 (left) and 2012 HE85 are, for now, the farthest from Earth ever captured by a spacecraft. They're also the closest-ever images of Kuiper Belt objects. Credits: NASA/JHUAPL/SwRI | Photo Credit: NASA

NASA's New Horizons probe has captured the farthest images from Earth by a spacecraft, surpassing Voyager 1's record of clicking a picture when it was 6.06 billion kilometres away from our planet.

The routine calibration frame of the "Wishing Well" galactic open star cluster, made by the Long Range Reconnaissance Imager (LORRI) on December 5 last year, was taken when New Horizons was 6.12 billion kilometres from Earth, NASA has said.

That picture was part of a composite of 60 images looking back at the solar system, on February 14, 1990, when Voyager was 6.06 billion kilometres from Earth.

Voyager 1's cameras were turned off shortly after that portrait, leaving its distance record unchallenged for more than 27 years.

"LORRI broke its own record just two hours later with images of Kuiper Belt objects 2012 HZ84 and 2012 HE85 - further demonstrating how nothing stands still when you are covering more than 1.1 million kilometres of space each day," researchers have said.

Kuiper Belt is a disc-shaped region beyond Neptune that extends from about 30 to 55 astronomical units from the Sun.

New Horizons is the fifth spacecraft to speed beyond the outer planets and so many of its activities have set distance records, NASA has said.

On December 9, it carried out the most-distant course- correction manoeuvre ever, as the mission team guided the spacecraft towards a close encounter with a Kuiper Belt objects (KBO) named 2014 MU69 on January 1, 2019.

That New Year's flight past MU69 will be the farthest planetary encounter in history, happening one billion miles beyond the Pluto system - which New Horizons famously explored in July 2015, according to NASA.

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