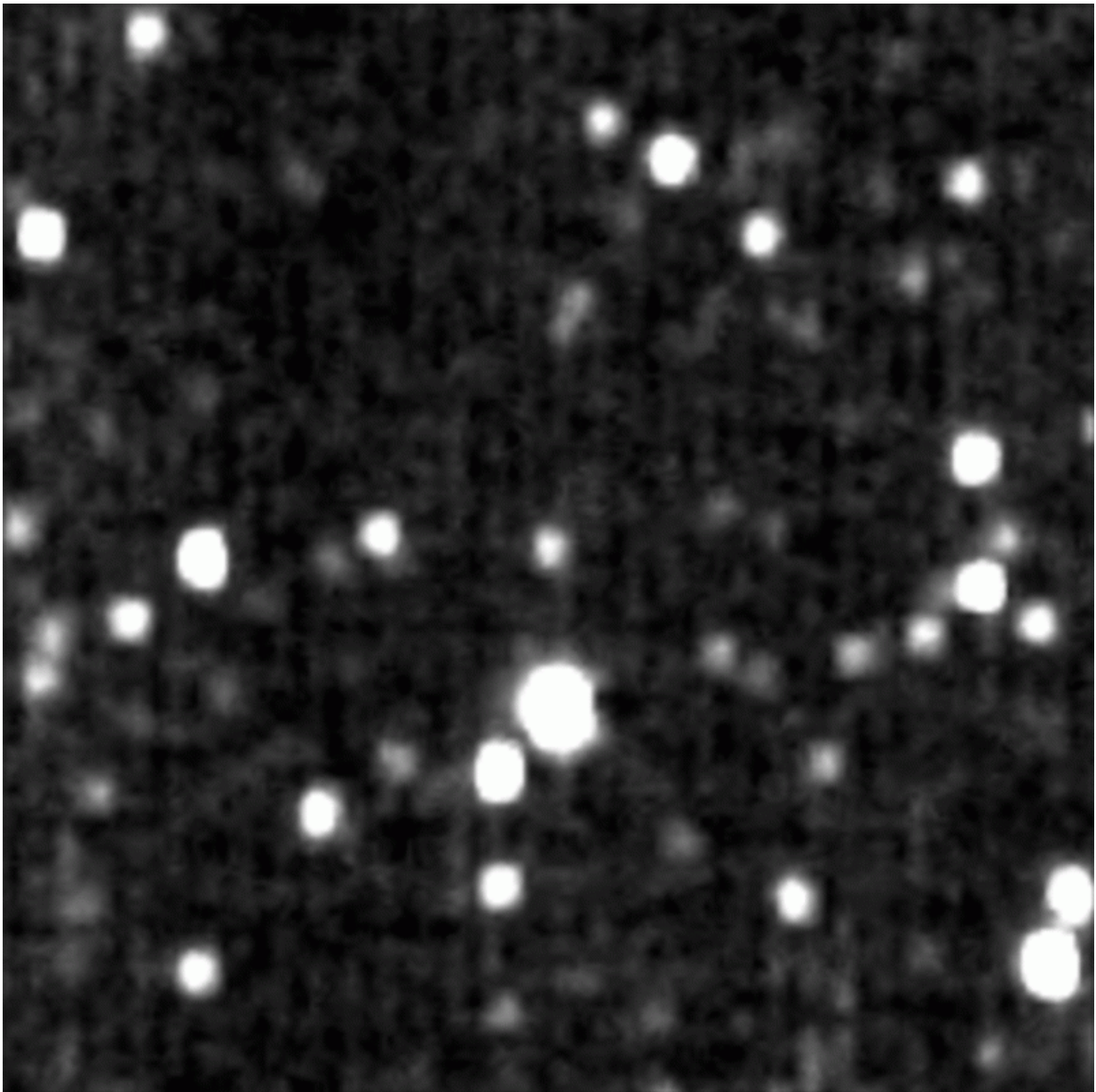


A distant close-up: New Horizons' camera captures a wandering Kuiper Belt object

December 7 2015, by Tricia Talbert



Credit: NASA/JHUAPL/SwRI

NASA's New Horizons spacecraft recently took the closest images ever of a distant Kuiper Belt object – demonstrating its ability to observe numerous such bodies over the next several years if NASA approves an extended mission into the Kuiper Belt.

In this short animation, consisting of four frames taken by the spacecraft's Long Range Reconnaissance Imager (LORRI) on Nov. 2, and spaced an hour apart, one can see this 90-mile (150-kilometer)-wide ancient body, officially called 1994 JR1, moving against a background of stars. When these images were made, 1994 JR1 was 3.3 billion miles (5.3 billion miles) from the sun, but only 170 million miles (280 million kilometers) away from New Horizons. This sets a record, by a factor of at least 15, for the closest-ever picture of a small body in the Kuiper Belt, the solar system's "third zone" beyond the inner, rocky planets and outer, icy gas giants.

Mission scientists plan to use images like these to study many more ancient Kuiper Belt objects from New Horizons if an extended mission is approved. New Horizons flew through the Pluto system on July 14, making the first close-up observations of Pluto and its family of five moons. The spacecraft is on course for a close flyby of another Kuiper Belt object, 2014 MU69, on Jan. 1, 2019.

Provided by NASA

Citation: A distant close-up: New Horizons' camera captures a wandering Kuiper Belt object (2015, December 7) retrieved 3 May 2024 from <https://phys.org/news/2015-12-distant-close-up-horizons-camera-captures.html>

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