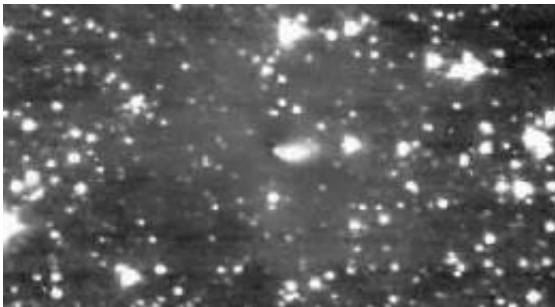


# EPOXI comet mission may face multiple jets

## Nov. 4 (w/ Video)

November 2 2010, By DC Agle

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The Deep Impact spacecraft's High- and Medium-Resolution Imagers (HRI and MRI) have captured multiple jets emanating from comet Hartley 2 turning on and off while the spacecraft is 8 million kilometers (5 million miles) away from the comet.

Two movies derived from images taken by the two cameras aboard NASA's EPOXI mission spacecraft show comet Hartley 2 is, as expected, quite active, and it provides information on the nucleus's rotation. The spacecraft has been imaging Hartley 2 almost daily since Sept. 5, in preparation for its scheduled Nov. 4 flyby of the comet.

"The [comet](#) brings us new surprises every day," said Michael A'Hearn, EPOXI principal investigator from the University of Maryland, College Park. "The data we have received to this point have been tremendous. It is forcing us to rethink what we know about cometary science, and we are still days away from encounter."

On Oct. 26, the spacecraft's two cameras, a High-Resolution Imager (HRI), and a Medium-Resolution-Imager (MRI), caught two jets firing off the comet's surface over a 16-hour period. The spacecraft captured these images from a distance of about 8 million kilometers (5 million miles) away. The data lead mission scientists to believe that both jets originate from similar latitudes on the comet's nucleus.

"These movies are excellent complements of one and other and really provide some excellent detail of how a comet's jets operate," said A'Hearn. "Observing these jets from EPOXI provides an entirely different viewpoint from what is available for Earth-based observers and will ultimately allow a proper three-dimensional reconstruction of the environment surrounding the nucleus."

The name EPOXI is a combination of the names for the two extended mission components: the extrasolar planet observations, called Extrasolar Planet Observations and Characterization (EPOCh), and the flyby of comet Hartley 2, called the Deep Impact Extended Investigation (DIXI). The spacecraft will continue to be referred to as "Deep Impact." The [Deep Impact](#) mission successfully deployed a projectile into the path of [comet Tempel 1](#) in 1995. The [spacecraft](#) is being "recycled" for the comet Hartley 2 flyby.

**More information:** For more information about EPOXI visit [www.nasa.gov/epoxi](http://www.nasa.gov/epoxi) and [epoxi.umd.edu/](http://epoxi.umd.edu/).

Provided by JPL/NASA

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