

# **JPL SCIENCE HIGHLIGHT: Science Mission Directorate (SMD)**

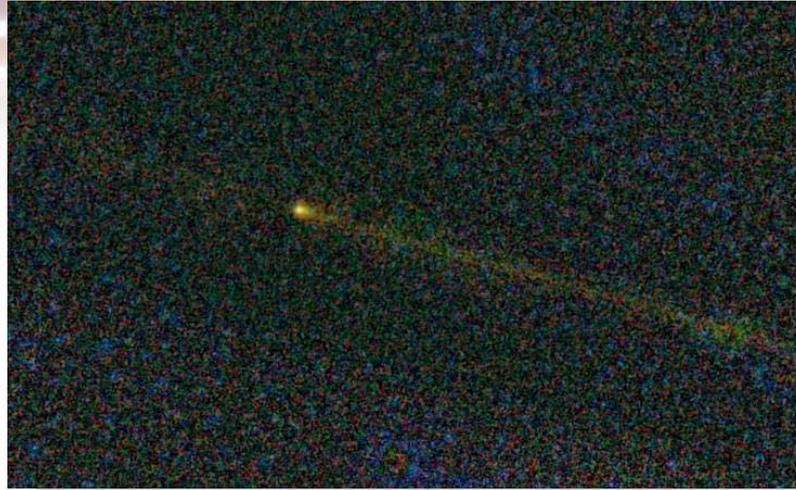
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## **JPL Science Highlight: Planetary Program Support**

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# WISE Captures Key Images that will help EPOXI Mission's Comet Encounter



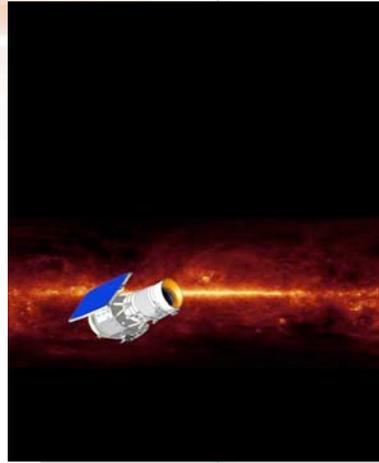
This visitor from deep space, seen here by NASA's Wide-field Infrared Survey Explorer, or WISE, is comet Hartley 2 -- the destination for NASA's EPOXI mission.

NASA's Wide-field Infrared Survey Explorer, or WISE, caught a glimpse of the comet that the NASA's EPOXI mission will visit on November 4, 2010. The WISE observation will help the EPOXI team put together a large-scale picture of the comet, known as Hartley 2.

WISE's infrared vision provides data that complement what EPOXI will see with its visible-light and near-infrared instruments. It's as if WISE can see an entire country, and EPOXI will visit its capital.

The term EPOXI is a combination of the names for the two extended mission components: the Extrasolar Planet Observations and Characterization (EPOCH), and the Hartley 2 flyby, called the Deep Impact eXtended Investigation (DIXI).

# WISE Captures Key Images that will help EPOXI Mission's Comet Encounter (Cont'd)



## Implications:

WISE's view of Hartley 2 was taken on May 10, 2010. It gives astronomers a unique look at the comet, complementing what other telescopes can see. Because WISE scanned the whole sky, it captured the most extensive view of Hartley 2's trail, the dusty path left by the comet on its repeated journey around the sun.

## Significance to Solar System Exploration:

On November 4, the EPOXI mission, which uses the already "in flight" Deep Impact flyby spacecraft, will reach its closest approach to Hartley 2. The spacecraft will examine the dusty, icy body in detail as it flies by, providing the best, extended view of a comet in history. WISE and several other ground- and space-based telescopes are participating in the viewing, working together to tackle mysteries about our solar system's origins that are frozen inside comets.