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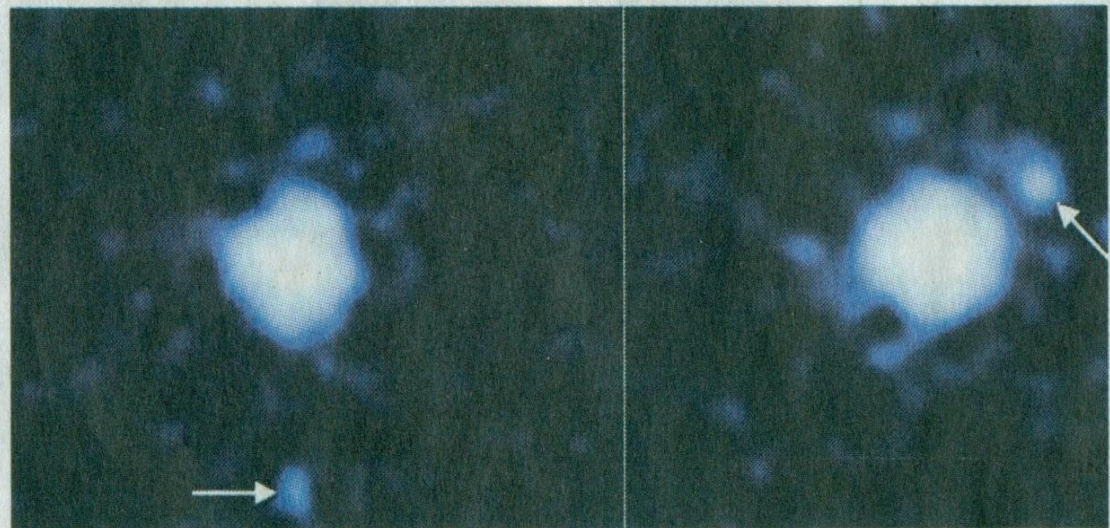
NASA's Hubble Telescope spots moon around third largest dwarf planet

Scientists have discovered a new moon orbiting the third largest dwarf planet that resides in the frigid outskirts in our solar system.

With this discovery, most of the known dwarf planets in the Kuiper Belt larger than 965 kilometres across have companions. These bodies provide insight into how moons formed in the young solar system.

The combined power of three space observatories, including NASA's Hubble Space Telescope, has helped uncover the moon orbiting the dwarf planet 2007 OR10 in the Kuiper Belt, a realm of icy debris left over from our solar system's formation 4.6 billion years ago.

"The discovery of satellites around all of the known large dwarf planets — except for Sedna — means that at the time these bodies formed billions of years ago, collisions must have been more frequent, and that's a constraint on the formation mod-



Moon seen far away from the dwarf planet circa 2009 v/s recent pic where a moon can be seen in it's proximity —NASA

els," said Csaba Kiss of the Konkoly Observatory in Hungary.

"If there were frequent collisions, then it was quite easy to form these satellites," said Kiss, lead author of the study published in *The Astrophysical Journal Letters*.

The objects most likely slammed into each other more often because they inhabited a crowded region.

The team uncovered the moon in archival images of 2007 OR10 taken by the Hubble Telescope.

Observations taken of the dwarf planet by NASA's Kepler Space Telescope first tipped off the astronomers of the possibility of a moon circling it.

Kepler revealed that 2007 OR10 has a slow rotation period of 45 hours. "Typical rotation periods for Kuiper Belt Objects are under 24 hours," Kiss said. — PTI