

Asteroid That Flew Past Earth Has Moon

January 27, 2015

Source: NASA/Jet Propulsion Laboratory

A note from Pastor Kevin Lea follows this article

Summary: Scientists working with NASA's 230-foot-wide (70-meter) Deep Space Network antenna at Goldstone, California, have released the first radar images of asteroid 2004 BL86. The images show the asteroid, which made its closest approach on Jan. 26, 2015 at 8:19 a.m. PST (11:19 a.m. EST) at a distance of about 745,000 miles (1.2 million kilometers, or 3.1 times the distance from Earth to the moon), has its own small moon.



←Still image of a movie of asteroid 2004 BL86 that was generated from data collected by NASA's Deep Space Network antenna at Goldstone, California, on Jan. 26, 2015. The full movie is available at:

<http://www.jpl.nasa.gov/video/details.php?id=1357>

Credit: NASA/JPL-Caltech

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distance of about 745,000 miles (1.2 million kilometers, or 3.1 times the distance from Earth to the moon), has its own small moon.

The 20 individual images used in the movie were generated from data collected at Goldstone on Jan. 26, 2015. They show the primary body is approximately 1,100 feet (325 meters) across and has a small moon approximately 230 feet (70 meters) across. In the near-Earth population, about 16 percent of asteroids that are about 655 feet (200 meters) or larger are a binary (the primary asteroid with a smaller asteroid moon orbiting it) or even triple systems (two moons). The resolution on the radar images is 13 feet (4 meters) per pixel.

The trajectory of asteroid 2004 BL86 is well understood. Monday's flyby was the closest approach the asteroid will make to Earth for at least the next two centuries. It is also the closest a known asteroid this size will come to Earth until asteroid 1999 AN10 flies past our planet in 2027. Asteroid 2004 BL86 was discovered on Jan. 30, 2004, by the Lincoln Near-Earth Asteroid Research (LINEAR) survey in White Sands, New Mexico.

Radar is a powerful technique for studying an asteroid's size, shape, rotation state, surface features and surface roughness, and for improving the calculation of asteroid orbits. Radar measurements of asteroid distances and velocities often enable computation of asteroid orbits much further into the future than if radar observations weren't available.

NASA places a high priority on tracking asteroids and protecting our home planet from them. In fact, the U.S. has the most robust and productive survey and detection program for discovering near-Earth objects (NEOs). To date, U.S. assets have discovered over 98 percent of the known NEOs.

In addition to the resources NASA puts into understanding asteroids, it also partners with other U.S. government agencies, university-based astronomers, and space science institutes across the country, often with grants, interagency transfers and other contracts from NASA, and also with international space agencies and institutions that are working to track and better understand these objects.

NASA's Near-Earth Object Program at NASA Headquarters, Washington, manages and funds the search, study and monitoring of asteroids and comets whose orbits periodically bring them close to Earth. JPL manages the Near-Earth

Object Program Office for NASA's Science Mission Directorate in Washington. JPL is a division of the California Institute of Technology in Pasadena.

In 2016, NASA will launch a robotic probe to one of the most potentially hazardous of the known NEOs...

To read this article in its entirety, go to:

<http://www.jpl.nasa.gov/news/news.php?feature=4459>

Note from Pastor Kevin Lea: *Scientists were shocked in 1993 when for the first time they saw a moon orbiting an asteroid. The Galileo spacecraft had discovered a tiny moon called Dactyl orbiting the large asteroid Ida.*

At the time, the Galileo scientists struggled to come up with a working hypothesis for how Ida could have an orbiting satellite, something that seems impossible because of the very small "Hill sphere" or gravitational attraction that an asteroid, with its small mass, possesses. They correctly stated that, "it is virtually impossible that the moon is a captured object, something created completely separately from Ida that happened to wander near the asteroid and be caught by its gravitational field. According to the laws of celestial mechanics, such an event would deflect the smaller object, but it would not be captured into orbit unless a third force of some kind slowed it down." <http://solarviews.com/eng/ida.htm>.

Now, 22 years later, scientists have found that 17% (more than 245) of the asteroids this size have an orbiting moon (or moons). This observed fact is very problematic for those with a big bang frame of reference for their assumed origin of asteroids and comets.

However, these discoveries of moons orbiting hundreds of asteroids and comets are perfectly consistent with Dr. Walt Brown's theory on their origins. Those with some orbital and nuclear physics background should be able to follow and appreciate what Dr. Brown proposes. You can read about his theory online at: [Origin of Asteroids](#), [Origin of Comets](#) and [Origin of Earth's Radioactivity](#).

Listen to Dr. Walt Brown discuss recent findings with Pastor Bob Enyart during the [January 30, 2015 broadcast of Science Radio](#).