

Biggest asteroid in 35 years swings close to Earth

November 9 2011, By ALICIA CHANG, AP Science Writer



Lance Benner, research scientist at JPL displays a recent image of asteroid 2005 YU55 near the 230-foot wide radio telescope at the Goldstone Deep Space facility in Ft. Irwin, Calif., is seen, Monday, Nov 7, 2011. The radio telescope has been tracking asteroid 2005 YU55. At closest approach, the quarter-mile-wide space rock will pass within 202,000 miles of our planet at 6:28 p.m. Eastern time Tuesday. (AP Photo/Orange County Register, Leonard Ortiz) MAGS OUT; LOS ANGELES TIMES OUT

(AP) -- An asteroid as big as an aircraft carrier zipped by Earth on Tuesday in the closest encounter by such a massive space rock in more than three decades. Scientists ruled out any chance of a collision but turned their telescopes skyward to learn more about the object known as 2005 YU55.

Its closest approach to Earth was pegged at a distance of 202,000 miles



at 6:28 p.m. EST. That's just inside the moon's orbit; the average distance between Earth and the moon is 239,000 miles.

The last time a large cosmic interloper came that close to Earth was in 1976, and experts say it won't happen again until 2028.

Scientists at NASA's <u>Deep Space Network</u> in the California desert have tracked the quarter-mile-wide <u>asteroid</u> since last week as it approached from the direction of the sun at 29,000 mph.

Astronomers and amateur skygazers around the world kept watch, too.

The Clay Center Observatory in Brookline, Mass., planned an all-night viewing party so children and parents could peer through research-grade telescopes and listen to lectures. The asteroid can't be detected with the naked eye.

For those without a telescope, the observatory streamed video of the flyby live on Ustream, attracting several thousand viewers. The asteroid appeared as a white dot against a backdrop of stars.

"It's a fantastic opportunity to educate the public that there are things out in space that we need to be aware of," including this latest <u>flyby</u>, said observatory director Ron Dantowitz.

Dantowitz added: "It will miss the Earth. We try to mention that in every breath."

If an asteroid that size would hit the planet, Purdue University professor Jay Melosh calculated the consequences. The impact would carve a crater four miles across and 1,700 feet deep. And if it slammed into the ocean, it would trigger 70-foot-high <u>tsunami waves</u>.



Since its discovery six years ago, scientists have been monitoring the spherical, coal-colored asteroid as it slowly spins through space and were confident it posed no danger.

Asteroids are leftovers from the formation of the solar system some 4.5 billion years ago. Scientists believe their growth was stunted by Jupiter's gravitational pull and never had the chance to become full-fledged planets. Pieces of asteroids periodically break off and make fiery plunges through the atmosphere as meteorites.

Don Yeomans, who heads NASA's Near <u>Earth</u> Object Program, said 2005 YU55 is the type of asteroid that humans may want to visit because it contains carbon-based materials and possibly frozen water.

With the space shuttle program retired, the Obama administration wants astronauts to land on an asteroid as a stepping stone to Mars.

"This would be an ideal object," Yeomans said.

More information: NASA's Near-Earth Object Program: http://neo.jpl.nasa.gov

Ustream: http://www.ustream.tv/channel/clay-center-observatory

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