The Washington Post

Back to previous page

Asteroid 2055 YU55 passes close by Earth; how close did it get?

Wednesday, November 9, 3:01 PM

An asteroid that scientists have been watching and awaiting for years passed close to Earth on Tueday night, but how close a call was it? As Elizabeth Flock reported:

An <u>asteroid</u> the size of an aircraft carrier missed Earth by only 200,000 miles as it flew by Tuesday night — the closest an asteroid has been to Earth in 200 years

Asteroid 2005 YU55, as it has been dubbed, streaked by at about 30,000 mph, but some scientists and lucky amateur astronomers caught a glimpse in their telescopes, where they saw strange structures on the asteroid's dark-colored surface.

Scientists around the world took the opportunity to get a close look at the asteroid and examine it for traces of water. As AP <u>explained</u>:

Scientists at NASA's Deep Space Network in the California desert have tracked the quarter-mile-wide asteroid 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.

FISHER INVESTMENTS**

10 Questions to Consider When Buying an Annuity

If you have a \$500,000 portfolio, you have a lot at stake. Before buying an annuity, make sure you understand all the details of what you're getting into. Download "Annuity Basics" by Forbes columnist Ken Fisher's firm and and find out which questions you should ask first. Act now!





1 of 3 11/09/2011 04:35 PM

"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 flyby, said observatory director Ron Dantowitz.

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

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 Earth 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.

What would happen if an asteroid the size of 2005 YU55 hit the Earth? Brad Plumer <u>explained</u> the potential damage and a nifty tool for estimating asteroid impact damage.

Jay Melosh, an atmospheric scientist at Purdue, has created a <u>nifty little "impact calculator"</u> that lets you figure out the consequences of a large asteroid hitting the Earth. If the asteroid of the moment, YU55, were to enter the Earth's atmosphere at 11 miles per second, it would burn up, and the remaining chunks would, on impact, create a crater four miles wide and 1,700 feet deep.

"Sixty miles away from the impact site the heat from the fireball would cause extensive first-degree burns," the Purdue team <u>notes</u>. "The seismic shaking would knock down chimneys and the blast wave would shatter glass windows." The asteroid could technically wipe out a city the size of Chicago, although the chances of hitting a city are pretty small. If it landed in the ocean, it'd create tsunami waves 60 feet high.

Fortunately, we probably don't have to worry about another asteroid this size moseying near Earth until 2028. NASA's <u>Near Earth Object program</u> has been tracking objects in our vicinity that are more than six-tenths of a mile in diameter — the dangerous ones, basically — and now claim to have discovered more than 90 percent of them. Of course, sometimes these objects can creep up pretty quickly: YU55 was only discovered in 2005, by the University of Arizona's <u>Spacewatch Project</u>.

More from The Washington Post

Budget pressures squeeze the dream of Mars explorers

Fight rages over James Webb Space Telescope

2 of 3 11/09/2011 04:35 PM

Asteroid visitor to Earth will be bigger than most

Sponsored Links

Retirement Planning

Save today, retire later. Find your best Retirement options. finddu.com $% \label{eq:finddu} % \label{eq:finddu}$

Mom is 50, Looks 30

Mom Reveals \$5 Wrinkle Therapy That Makes Botox Doctors Furious! http://lifestyleforwomen.net

2.6% Mortgage Refinance

No Hidden Fees - 3.14% APR. Calculate New Payment. No SSN req DeltaPrimeRefinance.com

Buya link here

© The Washington Post Company

3 of 3 11/09/2011 04:35 PM