

Large asteroid nears Earth for rare flyby

November 8 2011, by Kerry Sheridan

A big asteroid is set to make its closest flyby of Earth in 200 years on Tuesday, but there is no chance of a crash landing when it zips past our planet, NASA said.

Astronomers have aimed their telescopes to catch a glimpse of the 2005 YU55 asteroid, which is about as big as an aircraft carrier but will not be visible to the naked eye, when it passes at 6:28 pm (2328 GMT).

"Frankly, for anybody this is going to be really hard to see. This is 100 times more dim than what the human eye can see. You need a good telescope," said NASA spokeswoman Veronica McGregor.

The near-spherical, 1,300-foot (400-meter) in diameter asteroid often travels in the vicinity of Earth, Mars and Venus, but "the 2011 encounter with Earth is the closest it has come for at least the last 200 years," the US space agency said.

Other asteroids of this size pass by Earth frequently, though the last such event happened in 1976 and the next will not happen again until 2028 when an asteroid called 2001 WN5 will skim about halfway between the Moon and Earth.

This asteroid is expected to pass a bit further away; about .85 times the distance of the Moon to the Earth, or a distance of 202,000 miles (325,000 kilometers) from the center of the Earth.

The space rock's closest pass will be off the Pacific Coast of Central

America, southwest of Guatemala City, as it travels in a northwesterly direction, according to McGregor.

Skywatchers should be equipped with a telescope that has a minimum aperture of six to eight inches (15-20 centimeters), experts said.

"2005 YU55 is one of the potentially hazardous asteroids that make close approaches from time to time because their orbits either approach or intersect the orbit of the Earth," said Robert McMillan, an associate research scientist at the University of Arizona.

McMillan discovered the asteroid in 2005 as part of the university's Spacewatch Project, a solar-system-scanning group of scientists near Tucson, Arizona.

However, astronomers know from analyzing the trajectory of the asteroid that it will not hit Earth this time.

The asteroid's next closest pass is set to take place in 2094, at a distance of 167,000 miles (269,000 kilometers), according to forecasts.

"The observations will give us a piece of the puzzle, one we don't get many chances to see," said Don Yeomans of NASA's Jet Propulsion Laboratory.

"At one time, we thought these were the asteroids that delivered carbon and other elements to the early Earth, so they are pretty important."

NASA said radar observations from the Arecibo Planetary Radar Facility in Puerto Rico have already begun as the asteroid closes in.

Astronomers at the Clay Center Observatory in Brookline, Massachusetts, are training their 25-inch (64-centimeter) telescope to

track the asteroid and capture images of it.

NASA's Deep Space Network antenna in Goldstone, California grabbed radar images of the asteroid looking like a large gray egg, which were posted on the NASA website late Monday.

While the charcoal-colored asteroid's visit has scientists excited for the chance to get a closer look, most Earthlings probably will not notice a thing.

"The gravitational influence of the asteroid will have no detectable effect on Earth, including tides and tectonic plates," NASA said.

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