

Rosetta Mission: Comets not Source of Earth's Water

Scientific question unanswered by space probe

The Associated Press Posted: Dec 11, 2014 9:58 AM ET Last Updated: Dec 11, 2014 9:58 AM ET

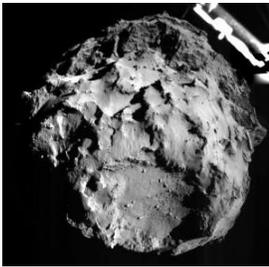
A note from Pastor Kevin Lea follows this article.

The mystery of where Earth's water came from got murkier Wednesday when some astronomers essentially eliminated one of the chief suspects: comets.

Over the past few months, the European Space Agency's Rosetta space probe closely examined the type of comet that some scientists theorized could have brought water to our planet 4 billion years ago. It found water, but the wrong kind. It was too heavy. One of the first scientific studies from the Rosetta mission found that the comet's water contains more of a hydrogen isotope called deuterium than water on Earth does.

"The question is who brought this water: Was it comets or was it something else?" asked Kathrin Altwegg of the University of Bern in Switzerland, lead author of a study published in the journal *Science*. Something else, probably asteroids, Altwegg concluded. But others disagree.

Many scientists have long believed that Earth had water when it first formed, but that it boiled off, so that the water on the planet now had to have come from an outside source.



Comet Theory

←Picture - European Space Agency/AP

The findings from Rosetta's mission to the duck-shaped comet 67P/Churyumov-Gerasimenko complicate not just the question of the origin of Earth's water but our understanding of comets.

Until now, scientists pretty much sorted comets into two types: near and far. The near ones, sometimes called the Jupiter family, originally come from the Kuiper Belt outside Neptune and Pluto. The far ones hail from the Oort Cloud, which is much farther out.

In 1986, a spacecraft came within about 645 kilometres of Halley's comet, an Oort Cloud comet, and analyzed its water. It proved to be heavier than Earth's. But three years ago, scientists examined the water in a Kuiper Belt comet, Hartley 2, and it was a perfect match for Earth's, so the comet theory was back, stronger than ever, Altwegg said.

The comet visited by Rosetta is a Kuiper Belt comet, but its water was even heavier than Halley's, Altwegg said. That shows that Kuiper Belt comets aren't as uniform as thought, and it once again complicates the issue of Earth's water. "That probably rules out Kuiper Belt comets from bringing water to Earth," she said.

University of Maryland astronomer Michael A'Hearn, who wasn't part of the research, called the results startling but said ...

To read this article in its entirety, go to:

<http://www.cbc.ca/news/technology/rosetta-mission-comets-not-source-of-earth-s-water-1.2869569>

Note from Pastor Kevin Lea: *For nearly a century, most scientists have convinced themselves (and have tried to convince everybody else) that the universe, solar system and all life on earth came about purely by chance over eons of time. If they were correct, then evidence would have confirmed their views long ago. But science projects like this one keep "shocking" and "surprising" them because the evidence shatters their expectations and leaves them dumbfounded for an alternate explanation that supports both their evolutionary premise **and** the evidence.*

However, Dr. Walt Brown has developed an alternative theory on the origin of comets (No. 1 Google hit out of half a million; www.creation-science.com) and the origin of Earth's radioactivity (No. 1 Google hit out of 7.5 million) that is completely consistent with what Rosetta has found. In fact, Dr. Brown predicted (in writing) that heavy water would be found on Comets and Mars (when they are able to sample the water still there) and explained why there could be variations in the concentrations from one comet to another. He also explains why our oceans contain deuterium and why the concentration is less than what will be found on most comets.

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 Comets](#) , [Origin of Asteroids](#) and [Origin of Earth's Radioactivity](#).