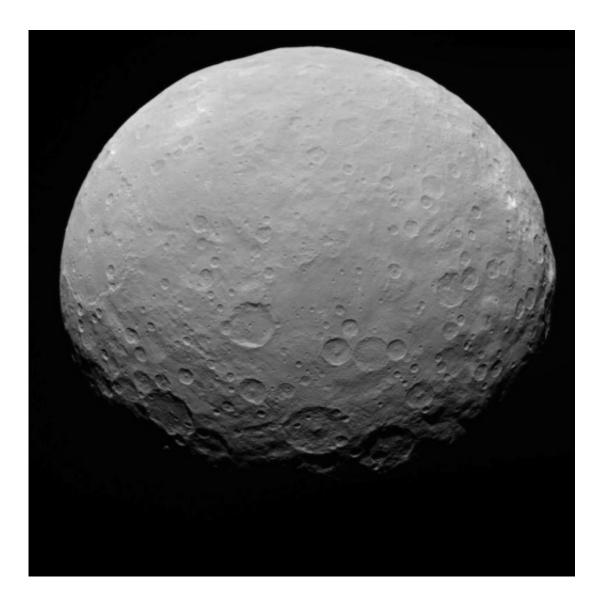


Layman help sought in solving dwarf planet mysteries

September 30 2015



A NASA image of dwarf planet Ceres, which circles the sun between Mars and Jupiter



Throwing open the doors to the hallowed halls of science, stumped researchers welcomed help from the public Wednesday in solving a number of nagging mysteries about dwarf planet Ceres.

NASA's space probe Dawn, which travelled seven-and-a-half years and some 4.9 billion kilometres to reach Ceres in March this year, is the first to orbit a dwarf planet.

The probe is seeking to learn more about the structure of Ceres, which circles the Sun between Mars and Jupiter, in a bid to better understand the formation of Earth and other planets.

But many of the features of Ceres have left researchers scratching their heads—including a six-kilometre (four-mile) high protrusion they have dubbed "Lonely Mountain".

"We're having difficulty understanding what made that mountain and we have been getting many suggestions from the public," Dawn's principal investigator Christopher Russell told reporters at a space conference in Nantes, western France.

One fan of the probe sent Russell an email saying the mountain reminded him of some ice structures he had seen in the woods years earlier while living in the US state of Arkansas.

"These ice structures started just poking out (of the ground). Each one of them had a rock or something like that protecting the surface, keeping it cool," Russell said in describing the ice.

"Maybe our lonely mountain was some sort of ice construct," the scientist said, adding: "We're taking suggestions like this very seriously."





Scientists hope to learn more about dwarf planet Ceres when space probe Dawn moves in closer, starting in October and into December

Russell said "many suggestions" have poured in from the public but did not provide an exact number.

First classified a planet, then an asteroid, then a "dwarf planet" with some traits of a moon—the more scientists learn about Ceres, the weirder it becomes.

"We have absolutely no idea what that... is due to," Russell said as he pointed to a blue ring on a map of the planet.

Later, of another unexplained attribute: "Again, I apologise, we haven't



solved the source of this white material. We think that it's salt."

Scientists hope to learn more when Dawn moves in closer—starting in October and into December—as the spacecraft will descend to its lowest and final orbit at an altitude 375 kilometres.

The probe will continue capturing images of Ceres and collecting higherresolution data.

It is due to stay in operation to mid-2016.

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Citation: Layman help sought in solving dwarf planet mysteries (2015, September 30) retrieved 17 April 2024 from <u>https://phys.org/news/2015-09-layman-sought-dwarf-planet-mysteries.html</u>

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