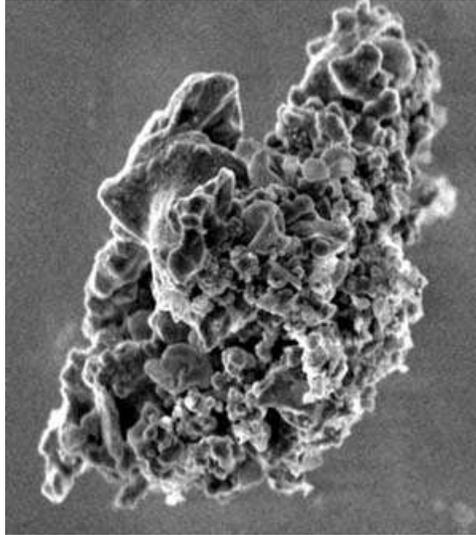


# SPACE DUST BRINGS WATER AND ORGANICS TO PLANETS SIMULTANEOUSLY



*Space dust is a mover and shaper of the solar system.*

Researchers have discovered a surprising characteristic of interplanetary space dust; it seeds planets with necessary components for life. Interplanetary dust particles found in space allows water and organic compounds (containing carbon) to be delivered to the Earth and other planets. The researchers made the discovery by using a very high powered transmission electron microscope to directly view space dust, as well as the water created through the reaction of dust and solar wind. The research team's members came from many different universities and laboratories, including the University of Hawai'i at Mānoa's School of Ocean and Earth Science and Technology (SOEST), Lawrence Livermore National Laboratory, Lawrence Berkeley National Laboratory, and University of California – Berkeley.



*A particle of interplanetary space dust. [www2.astronomy.com](http://www2.astronomy.com)*

The discovery marks the first time scientists have been able to prove that water and organics can be delivered to planets simultaneously. The water and organics transported by interplanetary space dust make up all that is needed for life as we know it to thrive and eventually evolve into complex organisms.

Space dust originates from comets, asteroids, and the leftover elements from the creation of the solar system (it's a very messy and chaotic process). All planets in our solar system, including our own, are constantly being bathed in this space dust. Before the dust mixes with our atmosphere though it is bombarded by hydrogen ions found in solar wind. The ion attack knocks around the atoms composing the silicate minerals of the interplanetary space dust. This leaves behind free floating oxygen that readily bonds with hydrogen to create H<sub>2</sub>O. In this way space water is created.

Hope Ishii, new Associate Researcher in the Hawai‘i Institute of Geophysics and Planetology (HIGP) at UH Mānoa’s SOEST and co-author of the study is very excited about the find, stating that,

*It is a thrilling possibility that this influx of dust has acted as a continuous rainfall of little reaction vessels containing both the water and organics needed for the eventual origin of life on Earth and possibly Mars.*



*Celebrities pay top dollar for 12 ounces of moon water. [afewofjustinsfavoritethings.blogspot.com](http://afewofjustinsfavoritethings.blogspot.com)*

There’s no reason to believe that this process of solar rain is not taking place in other solar systems as well.

Another mystery this study may help solve concerns our closest celestial neighbor, the moon. Because the moon contains a great deal of silicate material that is directly bombarded by interplanetary space dust and solar wind, this study may explain how OH and ice water formed and continue to be found on the moon.

The researchers are very clear however that this study does not account for all of the water found on Earth. Ishi states that,

*In no way do we suggest that it was sufficient to form oceans, for example.*

*However, the relevance of our work is not the origin of the Earth's oceans but that we have shown continuous, co-delivery of water and organics intimately intermixed.*

The researchers are planning further studies which will estimate the amount of water delivered to Earth by interplanetary space dust.

Solar wind, solar dust, solar rain: these terms give life to the solar system as a whole and present the Earth as a single hill or knoll in an incredibly expansive solar ecosystem. I hope one day we are able to leave our hill and pioneer into the greater galactic jungle.

Source: <http://wondergressive.com/space-dust-water-organics-to-planets/>