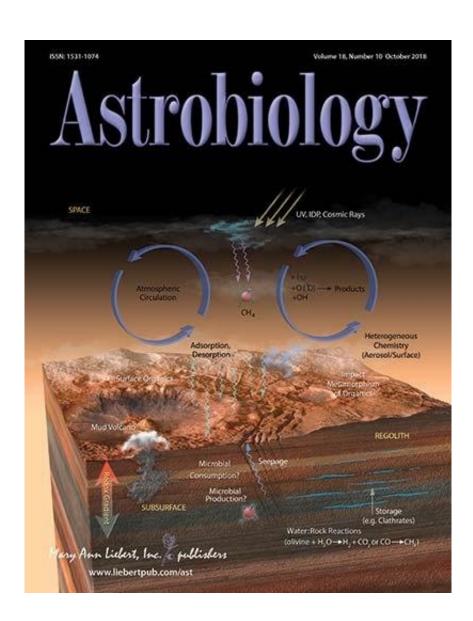


New study supports survival of microbes and organic compounds in space

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research programs. Credit: Mary Ann Liebert, Inc., publishers

Environmental data collected from an exposure panel exposed to the space environment for one year suggests that microbes and organic compounds present in the exposure panel would be able to survive, supporting the possibility of interplanetary migration of microbes and organic compounds. A description of the study and the resulting environmental data is published in *Astrobiology*, a peer-reviewed journal from Mary Ann Liebert, Inc., publishers.

The article entitled "Environmental Data and Survival Data of Deinococcus aetherius from the Exposure Facility of the Japan Experimental Module of the International Space Station Obtained by the Tanpopo Mission," was coauthored by Akihiko Yamagishi, Tokyo University of Pharmacy and Life Sciences (Japan) and a team of Japanese researchers from Japan Aerospace Exploration Agency (Kanagawa), Nagaoka University of Technology, National Institutes for Quantum and Radiological Science and Technology (Chiba), and Kobe University.

As part of the Tanpopo space mission, the Exposure Facility of the Japan Experimental Module of the International Space Station used a specially developed Exposure Panel to expose the microbe Deinococcus aetherius and <u>organic compounds</u> to the space environment. After one year they measured key environmental factors in the Exposure Panel on which the survival of microbes and organic factors would depend: temperature, radiation dosimeter, and VUV dosimeter.

More information: Akihiko Yamagishi et al, Environmental Data and Survival Data of Deinococcus aetherius from the Exposure Facility of the Japan Experimental Module of the International Space Station



Obtained by the Tanpopo Mission, *Astrobiology* (2018). DOI: 10.1089/ast.2017.1751

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