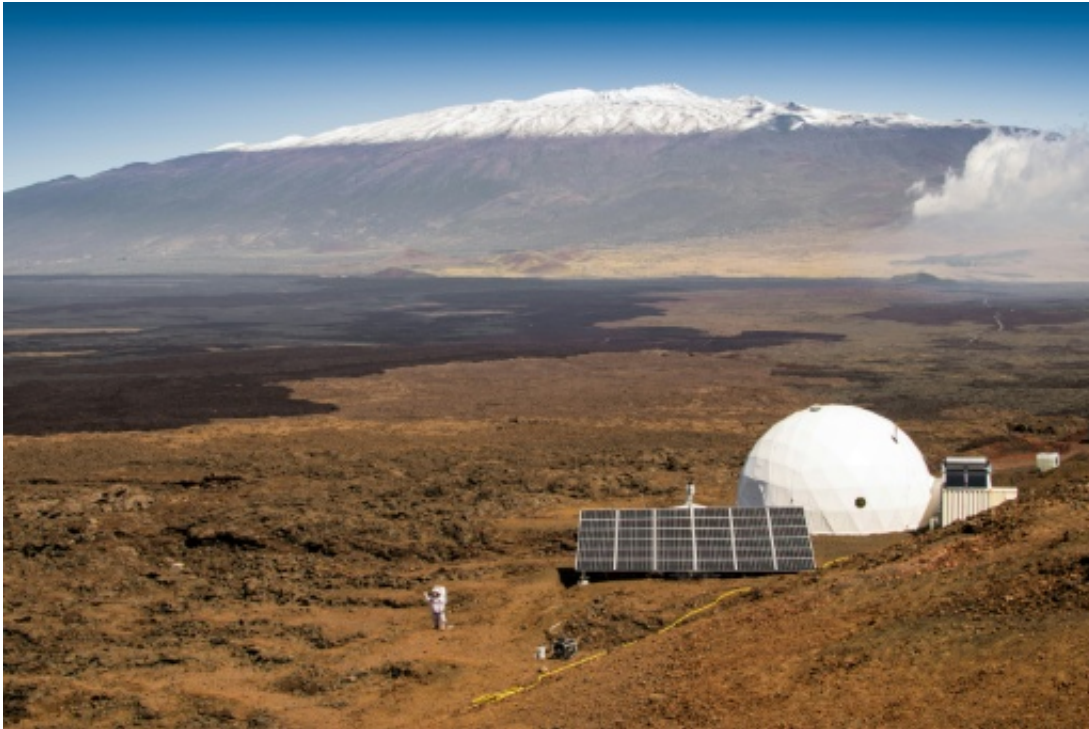


Year-long Mars isolation experiment in Hawaii ends

August 29 2016



The HI-SEAS habitat on the northern slope of Mauna Loa in Hawaii where six people lived in isolation for a year in a NASA experiment to prepare for a journey to Mars

Six people who were isolated on a remote site in Hawaii for one year to help NASA plan for a mission to Mars emerged from their dome Sunday, happy to breathe fresh air and meet new people.

The team was based on the barren northern slope of the Mauna Loa volcano, and spent their time inside a dome 36 feet (11 meters) in diameter and 20 feet tall.

The experiment shows that "a mission to Mars in the close future is realistic," said French astrobiologist Cyprien Verseux in a Periscope interview by organizers posted on Twitter.

"The technical and psychological problems can be overcome," he said.

Video footage of the team as they emerged shows the three men and three women looking a bit bewildered as they met and posed for selfies with visitors and well-wishers. Organizers gave them fresh fruit and vegetables.

The most challenging aspect of the experiment was the monotony—"we were always in the same place, always with the same people", Verseux said.

His advice to new volunteers on a similar isolation experiment: "Bring books."

Another mission member, American Tristan Bassingthwaite, agreed, urging future participants to bring "lots of books."

Salsa, antidote to boredom

Bassingthwaite said that [team members](#) engaged in hobbies such as salsa dancing and playing the ukelele to stave off the boredom.

"If you can work on something that is self developmental... you will not go crazy," he said.

Team members could venture outside only in spacesuits, and Bassingthwaite said that the 'astronauts' removed a vast amount of garbage from the flanks of the volcano in their excursions.

Christiane Heinicke from Germany said that her main experiment was extracting water from the ground - and the volcanic soil on Mauna Loa is very similar in mineral composition to the Martian soil.

"You can actually get water from a ground that is seemingly dry," she told the organizers in a video also on Periscope. "The implication is that you could get water from Mars."

The crew also included a pilot, a doctor/journalist and a soil scientist.

The dome was located in an abandoned quarry far from animals and vegetation. The team locked themselves in on August 28, 2015.

The men and women had their own small rooms, with space for a sleeping cot and desk, and spent their days eating food like powdered cheese and canned tuna.

The dome had composting toilets and showers, and was powered by solar energy. Team members had limited Internet access.

NASA can currently send a robot to the Red Planet in eight months, but astronauts traveling to Mars face a trip lasting between one and three years.

NASA is studying how these long-term isolation scenarios play out on Earth—in a program called Hawaii Space Exploration Analog and Simulation (HI-SEAS)—before pressing on toward Mars, which the US space agency hopes to reach sometime in the 2030s.

The first HI-SEAS experiment involved studies about cooking on Mars and was followed by a four-month and an eight-month cohabitation mission.

Two more HI-SEAS missions are planned starting in January 2017 and 2018. Both are scheduled to last eight months, and organizers are already looking for volunteers.

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