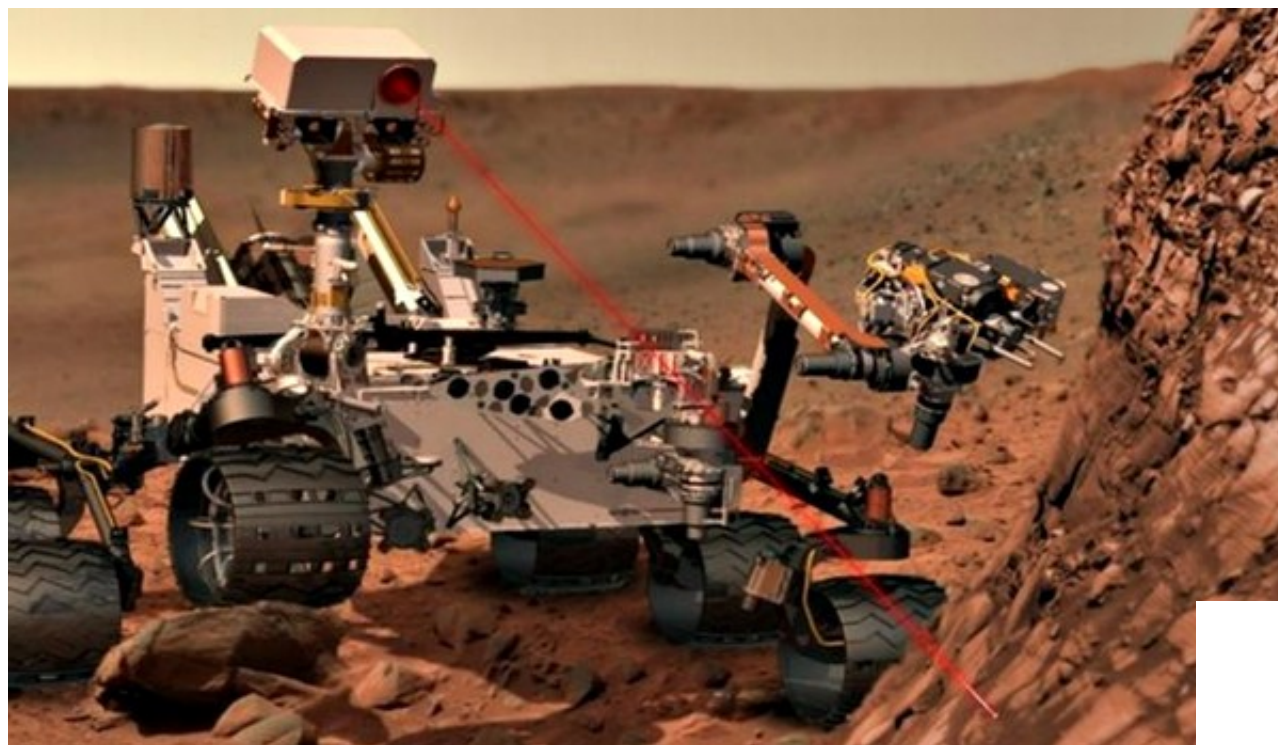


Mars found to be missing evidence of an atmosphere

MARS | APRIL 9, 2013 | BY: JOHNNY KELLY |



NASA's Curiosity rover finds limited evidence of an atmosphere remaining in Mars.

Credits: (NASA)

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The original gases which once filled the planet have escaped into [space](http://www.examiner.com/topic/space) (<http://www.examiner.com/topic/space>), scientists said at the [2013 European Geosciences Union General Assembly](http://www.equ2013.eu) (<http://www.equ2013.eu>) in Vienna, Austria on Monday (April 8), where scientists also

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provided other updates about the rover's recent discoveries.

Curiosity showed that a light variant of the gas argon is relatively depleted in Martian air, bolstering a longstanding belief that the Red Planet's current atmosphere, which is just one percent as thick as that of Earth, is a meager shell of its former self.

Curiosity used its Sample Analysis at Mars (SAM) instrument to gather information on a sample of Martian air and the ratio of two different argon isotopes, which are varieties of an element that have different numbers of neutrons in their atomic nuclei.

The instrument found that the lighter argon-36 is about four times as common as the heavier argon-38.

"We found arguably the clearest and most robust signature of atmospheric loss on Mars," said Sushil Atreya, a SAM co-investigator at the University of Michigan.

Curiosity landed inside Gale Crater back in early August, kicking off a two-year mission to determine if Mars could have ever supported microbial life.

Rover scientists have already achieved this goal, **[announcing last month that an area called Yellowknife Bay was a wet, habitable environment](http://www.examiner.com/article/rock-analysis-reveals-more-clues-support-of-life-on-mars-nasa-says)** (<http://www.examiner.com/article/rock-analysis-reveals-more-clues-support-of-life-on-mars-nasa-says>) billions of years ago.

Researchers want Curiosity to drill another hole in the area to confirm and build on what the rover has found.

But that won't happen until next month, as the team is sending no new commands to Curiosity for about four weeks, when Mars is passing behind the sun from Earth's perspective.

Curiosity is expected to pave the way for future Mars

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missions, including the first human exploration. President Obama has set a goal of sending an astronaut to Mars by the 2030s.

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