

NASA: Mars missing most of its atmosphere

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Once a warmer, wetter world, the Red Planet looks to have lost a lot of its ancient atmosphere, finds a NASA Curiosity rover experiment.



(Photo: NASA)

NASA's Curiosity rover results confirm that Mars has lost most of its atmosphere, on its way to becoming a cold, dry planet.

In experimental results reported Monday at a European geoscience meeting in Vienna, Austria, a look at the Martian air by the \$2.5 billion rover finds evidence that as much as 90% of the original atmosphere there has dissipated into space over the planet's lifetime. "It was still red, but it means that Mars once was a warmer, wetter world," says rover team scientist Sushil Atreya of the University of Michigan. "It was also a more habitable world, essentially four billion years ago."

The rover showed much less light argon gas than is normal for the solar system in the Martian air, suggesting that much of it "sputtered" off the top of the atmosphere there over time, Atreya says, along with carbon dioxide and water vapor that formed the bulk of the atmosphere there.

The thin air on Mars, about one thousand times less dense than Earth's atmosphere, does still generate dust storms and "whirlwinds," the rover's results show. NASA personnel largely canceled their attendance at the meeting, Atreya noted, due to federal budget cuts for travel.