

No Speed Limit on Mars

April 7 2008



This image shows a perfectly functioning parachute with the canopy fully open at the opposite end of the wind tunnel after being fired from the cannon. Image credit: NASA

It's a good thing there's no speed limit on Mars, because the next parachute to fly to the red planet will deploy faster than you can legally drive on a California freeway.

The chute is designed to slow the Mars Science Laboratory as it rockets through the Martian atmosphere at more than twice the speed of sound and places a car-size rover on the surface. At its carefully selected landing area, the spacecraft's rover will use an advanced suite of instruments to assess whether the environment has ever been favorable for microbial life.

Engineers recently tested two parachute packing techniques in the



world's largest wind tunnel at NASA's Ames Research Center. They loaded each chute into a cannon and aimed it down the middle of the tunnel.

They then fired the cannon -- horizontally -- at 85 mph and let the parachute fly!

Finally, they looked for damage to line attachments and other parts. All four tests were successful. They are now reviewing a veritable "jet stream" of high-speed video data to select a final parachute design for the mission, scheduled for launch in the fall of 2009.

Source: NASA, by Linda Doran

Citation: No Speed Limit on Mars (2008, April 7) retrieved 8 May 2024 from https://phys.org/news/2008-04-limit-mars.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.