

More Soil Delivered to Phoenix Lander Lab

September 17 2008



This image, taken by NASA's Phoenix Mars Lander's Surface Stereo Imager, documents the delivery of a soil sample from the "Snow White" trench to the Wet Chemistry Laboratory. A small pile of soil is visible on the lower edge of the second cell from the top. This deck-mounted lab is part of Phoenix's Microscopy, Electrochemistry and Conductivity Analyzer (MECA). The delivery was made on Sept. 12, 2008, which was Sol 107 (the 107th Martian day) of the mission, which landed on May 25, 2008. (NASA/JPL-Caltech/University of Arizona/Texas A&M University)

Scientists working on the Phoenix Mars Mission are analyzing soil delivered to the spacecraft's Wet Chemistry Laboratory.

Preliminary analysis of this soil confirms that it is alkaline, and composed of salts and other chemicals such as perchlorate, sodium, magnesium, chloride and potassium.

This information validates prior results from that same location, said Michael Hecht of NASA's Jet Propulsion Laboratory, Pasadena, Calif., the lead scientist for the Microscopy, Electrochemistry and Conductivity Analyzer, or MECA.

The Wet Chemistry Laboratory mixes Martian soil with an aqueous solution from Earth as part of a process to identify soluble nutrients and other chemicals in the soil.

In the coming days, the Phoenix team will also fill the final four of eight single-use ovens on another soil-analysis instrument, the Thermal and Evolved Gas Analyzer, or TEGA. The team's strategy is to deliver as many samples as possible before the power produced by Phoenix's solar panels declines due to the end of the Martian summer.

The Phoenix Mission is led by the University of Arizona, Tucson, on behalf of NASA. Project management of the mission is by NASA's Jet Propulsion Laboratory, Pasadena, Calif. Spacecraft development is by Lockheed Martin Space Systems, Denver.

Provided by NASA

Citation: More Soil Delivered to Phoenix Lander Lab (2008, September 17) retrieved 19 April 2024 from <https://phys.org/news/2008-09-soil-phoenix-lander-lab.html>

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