

SPACE EXPLORATION SYMPOSIUM (A3)
Mars Exploration – Part 2 (3B)

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THE ROVER ENVIRONMENTAL METEOROLOGICAL STATION (REMS) ON BOARD MARS
SCIENCE LABORATORY (MSL)

Abstract

The aim of this paper is to present the design, development and expected performances of the REMS instrument to be flown as part of the Scientific Payload on the next NASA Rover Mission to Mars.

REMS instrument will perform measurements of temperature (ground surface and atmosphere ambient), 3D wind, pressure, humidity and UV radiation, through a system of different sensors distributed on the Rover Deck and Mast. These measurements will provide direct information of Mars ambient near-surface conditions and atmosphere dynamic processes.

REMS has completed its development, and the Flight Model, including Flight Spares for all the sensors, and will be delivered for integration in the MSL Rover by mid-2010.