

Tuesday, March 11, 2008
POSTER SESSION I: MARS, YOU ARE HERE: LANDING SITES AND IMAGERY
6:30 p.m. Fitness Center

Beyer R. A. HiRISE Team

HiRISE Photoclinometry of Proposed MSL Landing Sites [#2485]

This presentation will include additional 2–5 m roughness results for the six top MSL landing sites based on HiRISE data obtained since the last MSL workshop.

Griffes J. L. Grant J. A. Golombek M. Vasavada A. McEwen A. S. HiRISE Team

HiRISE Observations of Potential Mars Science Laboratory Landing Sites [#1886]

A HiRISE analysis of the six potential MSL landing sites under consideration: Nili Fossae Trough, Holden Crater, Mawrth Vallis, Eberswalde Crater, Northern Meridiani, and Miyamoto Crater.

Seelos F. P. Barnouin-Jha O. S. Murchie S. L.

MRO CRISM Systematic Investigation of the MSL Candidate Landing Sites [#2041]

A series of standardized CRISM spectral analysis products have been assembled for each of the MSL candidate landing sites. The systematic products allow for a direct comparison of the strength of the observed mineralogical spectral signatures.

Golombek M. Grant J. A. Vasavada A. R. Watkins M. Noe Dobrea E. Z. Griffes J. L. Parker T.

Downselection of Landing Sites for the Mars Science Laboratory [#2181]

Six landing sites remain under consideration for the Mars Science Laboratory after the Second Landing Site Workshop and a subsequent project meeting. The downselection process, definition of the sites, and subsequent activities are discussed.

Martin P. D. Castillo M.

Possible Martian Landing Sites to be Considered for Future European Exploration Missions [#1794]

A new, iterative consolidation process results in the identification of suitable areas on Mars that may be considered as a first set of study zones as part of the science-driven and success-oriented selection process for future Mars landings.

Sutter B. Lauer H. V. Jr. Golden D. C. Ming D. W. Boynton W. V.

Phoenix Lander's Thermal Evolved Gas Analyzer: Differential Scanning Calorimeter and Mass Spectrometer Database Development [#2178]

Phoenix Lander's Thermal Evolved Gas Analyzer (TEGA) database of Mars analog materials is being developed to assist in interpretation of Phoenix TEGA data during and after mission operations. Preliminary results of database development will be presented.

Lauer H. V. Jr. Ming D. W. Sutter B. Golden D. C. Morris R. V. Boynton W. V.

The 2007 Mars Phoenix Thermal Evolved-Gas Analysis: The Role of an Organic Free Blank in the Search for Organics [#2038]

Our objective in this report is to describe some of the considerations used in selecting the OFB material and then report on the processing and analysis of the final candidate materials.

Schorghofer N.

The History of Ice at the Phoenix Mars Landing Site [#1479]

A model of the evolution of subsurface ice layers is applied to the proposed Phoenix landing site. For all climate scenarios considered, soil pores are almost completely filled with ice and a massive ice sheet only exists at greater depths.

Li R. Di K. Hwangbo J. W. Chen Y.

Rigorous Photogrammetric Processing of HiRISE Stereo Images and Topographic Mapping at Mars Exploration Rover Landing Sites [#1864]

We developed the rigorous photogrammetric model necessary for HiRISE stereo image processing and used it for topographic mapping in the Mars Exploration Rover (MER) 2003 mission.

Castano R. Estlin T. Anderson R. C. Gaines D. Bornstein B. Judd M.

Opportunistic Detection and Measurement of Novel Rocks [#2260]

The Onboard Autonomous Science Investigation System (OASIS) evaluates geologic data gathered by a planetary rover. The capability to identify novel terrain features as well as integration with Visual Target Tracking have recently been demonstrated.

Song Y. H.

Automated Rock Segmentation for Mars Exploration Rover Imagery [#2043]

In this paper, a general framework for automated rock detection using texture-based multi-resolution image segmentation and active contours for boundary refinement based on level set method is developed and implemented into Mars rover imagery.

Gulick V. C. Ishikawa S.

Improving High-Resolution Image Analysis: Results for Remote Science Exploration [#2527]

Testing new algorithms for improving image analysis for future Mars surface exploration.