

**Tuesday, March 13, 2007**  
**POSTER SESSION I: MARS RECONNAISSANCE ORBITER:**  
**NEW WAYS OF STUDYING THE RED PLANET**  
**6:30 p.m. Fitness Center**

Becker K. J. Anderson J. A. Sides S. C. Miller E. A. Eliason E. M. Keszthelyi L. P.

*Processing HiRISE Images Using ISIS3* [#1779]

The USGS ISIS3 software system is being used to process images returned from the MRO/HiRISE instrument. This abstract and accompanying poster describes the sequence of ISIS applications applied to these data.

Kirk R. L. Howington-Kraus E. Rosiek M. R. Cook D. Anderson J. Becker K. Archinal B. A. Keszthelyi L. King R. McEwen A. S. HiRISE Team

*Ultrahigh Resolution Topographic Mapping of Mars with HiRISE Stereo Images: Methods and First Results* [#1428]

The HiRISE camera will obtain ~1000 large stereopairs of Mars at 30 cm/pix. We describe the process of generating meter-resolution digital topographic models from these and show early results, including the Opportunity rover site at Victoria Crater.

Mazarico E. Zuber M. T. Lemoine F. G. Smith D. E.

*Atmospheric Structure of the Martian Atmosphere near 250 km Altitude from Mars Reconnaissance Orbiter Radio Tracking Data* [#1715]

We measure the density of the martian atmosphere near 250 km altitude, using precise orbit determination of the Mars Reconnaissance Orbiter spacecraft. We obtain more frequent estimates than what was possible in the past with MGS and Mars Odyssey.

Seu R. Phillips R. Flamini E. Biccari D. Giacomoni E. Cutigni M. Provenziani M. Fuga O. Catallo C. Croce A. Guelfi M. Fois F. Mecozzi R. Croci R. Poletti M. Ravasi D. Molteni M. Marras P. Tattarletti B. Vicari D. Di Placido A. Morlupi A. Bonaventura F. Paternò T. Alberti G. Mattei S. Papa C.

*SHOC: The SHARAD Operational Center* [#1809]

Task of the SHARAD operations team is to plan the instrument observations, process and analyze the received signals coming from the radar, detect and interpret subsurface echoes and distribute the results to the scientific community.

Parker T. J. McEwen A. S. Kirk R. L. Bridges N. T.

*HiRISE Captures the Viking and Mars Pathfinder Landing Sites* [#2368]

The HiRISE camera on the Mars Reconnaissance Orbiter has acquired very high resolution images of all the successful lander missions to Mars that are sufficiently detailed as to conclusively place the landers and much of the associated EDL hardware.