Thursday, March 15, 2007
POSTER SESSION II: MARS AEOLIAN GEOMORPHOLOGY
6:30 p.m. Fitness Center

Greeley R. Pinet P. Williams D. A. Butler-Freeman C. Neakrase L. D. V. Neukum G.
Dectection of Martian Variable Features as a Function of Image Filter: HRSC Comparisons **[#1376]**
Variable features were defined for albedo patterns on Mars that appeared, disappeared, or changed shape as a function of time, as seen on Mariner 9 images.

Hayward R. K. Mullins K. F. Fenton L. K. Titus T. N. Bourke M. C. Colaprete T.
Hare T. Christensen P. R.
Mars Digital Dune Database: Progress and Application **[#1360]**
The Mars Digital Dune Database provides a comprehensive and quantitative view of the geographic distribution of dune fields between 65°N to 65°S latitude. The database encompasses ~550 dune fields, covering ~70,000 km^2.

Fenton L. K. Hayward R. K. Mullins K. F. Titus T. N. Colaprete T.
Mars Digital Dune Database: More Preliminary Science Results **[#1486]**
Preliminary results from compiling the Mars Digital Dune Database show that 1) terrestrial deserts are far greater in size than martian deserts and 2) Ames GCM wind stresses correlate to many, but not all, measured dune and dune field orientations.

Shockey K. M. Zimbelman J. R.
Sand Dunes Across the Dichotomy Boundary of Mars **[#1328]**
MOC images were searched for aeolian ripples or dunes in a region from 60°S to 60°N latitude and 0° to 10°W longitude. The majority of dunes were observed to be close to the dichotomy boundary between the northern and southern hemispheres.

Kereszturi A. Sik A. Horvath A. Reiss D. Jaumann R. Neukum G.
Season-dependent Behavior of Dark Dune Spots on Mars **[#1864]**
Based on HRSC, MOC, and TES data, we identified two phases of Dark Dune Spot development: diffuse spots with carbon dioxide, and confined spots with probably water ice cover.

Neakrase L. D. V. Greeley R. Scire A. Zink A. Abel M. Shakkottai P.
Particle Threshold as a Function of Surface Type: Preliminary Laboratory Experiments **[#1397]**
Laboratory experiments examining the role of surface type in aeolian particle detachment threshold. Experiments focus on the removal of particles from surrogate spacecraft materials for use in biocontamination scenarios.

Neakrase L. D. V. Greeley R. Iversen J. D. Eddlemon E. E.
Dust Devils in the Laboratory: Effects of Surface Roughness on Vortex Parameters **[#1402]**
Laboratory experiments investigating the effects of roughness on dust devil vortices and implications for Earth and Mars.

Chittenden J. D. Sears D. W. G. Chevrier V.
Effect of Wind on the Stability of Water Ice Under Martian Conditions **[#1253]**
In order to quantify the effect of wind on the stability of water ice, we have measured the effect of low velocity winds (0–2.5 m/s) under martian conditions.