Tuesday, March 2, 2010
PLANETARY AEOLIAN PROCESSES: DUNES, DUST, AND DEVILS
3:15 p.m. Waterway Ballroom 4

Chairs: **Jani Radebaugh**
Matt Golombek

3:15 p.m. Radebaugh J. * Lorenz R. D. Lancaster N. Savage C. J. Wall S. D. Stofan E. R. Lunine J. I. Kirk R. L. Le Gall A.
Winds and Sand Transport Patterns on Titan from Dune Interactions with Topography **[#2513]**
Dunes on Titan interact with topographic obstacles, leading to features like those seen in the Namib and Saharan deserts. These results are correlated with studies of wind directions from dune morphologies, not with current GCM model wind directions.

3:30 p.m. Edgar L. A. * Grotzinger J. P. Hayes A. G. Squyres S. Bell J. III
Large-Scale Eolian Bedforms and Stratigraphic Architecture at Victoria Crater, Meridiani Planum, Mars **[#2626]**
Victoria Crater exposes cliffs up to ~15 m high, revealing thick bedsets (3–7 m) of large-scale cross-bedding, interpreted as fossil eolian dunes.

3:45 p.m. Michaels T. I. * Fenton L. K.
Characterizing the Sensitivity of Daytime Turbulent Activity and Aeolian Erosion Potential on Mars with the MRAMS LES **[#1955]**
Daily aeolian erosion potential is preliminarily characterized for two landing sites on Mars (VL1 and Phoenix), using a turbulence-resolving model.

4:00 p.m. Chojnacki M. * Burr D. M. Moersch J.
Recent Dune Changes at Endeavour Crater, Meridiani Planum, Mars, from Orbital Observations **[#2326]**
Here we present orbit-based evidence that aeolian bedforms in Endeavour crater, Meridiani Planum, Mars, have been active (erosion) in the span of the past decade. Also we suggest these modest dunes are not in equilibrium with their environment.

4:15 p.m. Silvestro S. * Fenton L. K. Vaz D . A.
Ripple Migration and Small Modifications of Active Dark Dunes in Nili Patera (Mars) **[#1820]**
We present the first evidence of widespread ripple migration on Mars detected from orbit. The movement of the ripples, together with other morphological changes, indicates that sand saltation can occur on Mars in present-day atmospheric conditions.

4:30 p.m. Golombek M. * Robinson K. McEwen A. Bridges N. Ivanov B. Tornabene L. Sullivan R.
Constraints on Ripple Migration at Meridiani Planum from Observations of Fresh Craters by Opportunity and HiRISE **[#2373]**
The most recent phase of ripple migration at Meridiani Planum from Opportunity observations of a fresh crater cluster and HiRISE observations of fresh rayed craters occurred between ~100 ka and ~300 ka.