

**Thursday, March 13, 2008**  
**POSTER SESSION II: ANALOGS: WEIRD PLACES!**  
**6:30 p.m. Fitness Center**

Kargel J. S. Crowley J. K. de Souza Filho C. R. Hook S. J. Marion G. M.

*Divergence of Parallel Worlds: Evidence from Aqueous Chemical Deposits on Early Earth and Mars* [#2366]

The early histories of Earth and Mars included some parallelism of aqueous environments. Oxides and carbonates from the Wittenoom formation (Western Australia) mark a revolution in Earth environmental history started but not completed by Mars.

Bourke M. C. Ewing R. Finnegan D. C. McGowan H. A.

*Migration Rates of Niveo-Aeolian Dunes in Antarctica: Implications for Martian Dunes* [#2166]

Sand dunes in Antarctica have lower rates of migration due to the presence of niveo-aeolian deposits. These deposits however do not deter dune movement on Earth or we would suggest, on Mars.

Whiteman C. D. Kring D. A. Hoch S. W.

*Diurnal Evolution of Atmospheric Structure within Meteor Crater, Arizona: Implications for Microniches on Mars* [#1405]

The seasonal and diurnal evolution of atmospheric wind and temperature structure in Arizona's Meteor Crater are analyzed to infer potential meteorological effects on the formation of microniches in martian craters.

Kirkland L. E. Herr K. C. Adams P. M.

*Why Landers Should Explore Fresh, Small Craters on Mars* [#2152]

Small, fresh craters at the Nevada Test Site are unique, high quality test beds to develop exploration techniques for new craters spotted on Mars by Malin et al. The NTS craters provide data to determine the optimum crater size for exploration.

Wynne J. J. Titus T. N. Drost C. A. Toomey R. S. III Peterson K.

*Annual Thermal Amplitudes and Thermal Detection of Southwestern U.S. Caves: Additional Insights for Remote Sensing of Caves on Earth and Mars* [#2459]

We analyzed temperature data of nine caves in the southwestern U.S. using Fourier analysis to characterize thermal behavior, and line graphs to identify optimal times of detection in the thermal infrared. This work furthered our understanding of cave thermal behavior.

Davila A. F. Gómez-Silva B. de los Rios A. Olivares H. McKay C. P. Wierzchos J.

*Microbial Survival in Hyper-Arid Environments: Extracting Water from Atmospheric Humidity* [#1105]

Endolithic cyanobacteria inhabiting halite crusts in extreme hyper-arid environments benefit from mineral deliquescence, which is an efficient mechanism to trap air moisture and enable photosynthetic activity.