

Thursday, May 21, 2015
SEDIMENT FLUX AND COMPOSITION
1:00 p.m. Lookout Room

*Sediment Flux and Composition from Mars and Earth, as Determined from Remote Sensing,
 In-Situ Studies, and Numerical Modeling.*

Chairs: Christy Swann
Shannon MacKenzie

- 1:00 p.m. Lucas A. * Narteau C. Rodriguez S. Courrech du Pont S. Rozier O. Spiga A.
 Callot Y. Garcia A.
[*Estimation of Sand Flux from Linear Dunes Using High-Precision Satellite Measurements and Numerical Modelling*](#) [#8025]
 We present here high-resolution satellite imagery analysis coupled with numerical modelling in order to assess sand fluxes at the crest of linear dunes. We will then discuss the implication in terms of landscape dynamics and climatic conditions.
- 1:30 p.m. Runyon K. D. * Bridges N. T.
[*Internal Boundary Layer Control for Sediment Flux in Herschel Crater, Mars*](#) [#8021]
 Flux predictions compared against flux measurements from HiRISE change detection campaign.
- 2:00 p.m. Swann C. M. * Ewing R. C. Sherman D. J.
[*Wind-Blown Sand on Mars: Preliminary Results of Transport Intermittency and Thresholds from Wind-Tunnel Simulations*](#) [#8056]
 This research presents thresholds for surface creep and saltation movement in a simulated martian environment.
- 2:30 p.m. BREAK
- 3:00 p.m. Redsteer M. H. * Hayward R. K.
[*A Field Comparison of Basalt vs. Quartz Sediment Transport in the Grand Falls Dune Field, Northeastern Arizona, USA*](#) [#8019]
 We describe the distribution and sorting of sediment in the Grand Falls Dune field, and provide field measurements of transport rates for vesicular basaltic ash vs. fine grained quartz, as well as size and spacing of quartz-rich vs basaltic dunes.
- 3:30 p.m. Fenton L. K. * Bishop J. L. King S. Lafuente B.
[*Dunes Creating an Abrupt Increase in Gypsum Grain Concentration Along a Transport Pathway at White Sands National Monument, NM, USA*](#) [#8017]
 Gypsum is so light;/ Strong winds make granules saltate. / Heavies can't keep up!
- 4:00 p.m. Horgan B. * Seelos F.
[*Using Mineralogy to Trace Sand Sources and Transport Histories in the North Polar Sand Sea, Mars*](#) [#8054]
 Minerals and glass / Over three billion years of / Blowing in the wind.
- 4:30 p.m. DISCUSSION