

Tuesday, May 16, 2017
DUNES WORKSHOP INTRODUCTION, UPDATES, AND PRIORITIES
8:30 a.m. Zion Room

Chairs: **Timothy Titus**
 Matthew Chojnacki

8:30 a.m. Bryant G. *
 Introduction

8:35 a.m. Chojnacki M. *
 Special Issue Update

8:40 a.m. Titus T. N. *
 Goals and Objectives

Tuesday, May 16, 2017
IT FLOWS, NOT BLOWS — WATER ANALOGS AND INSIGHT
FOR VENUS, TITAN, AND MAYBE EVEN MARS
8:50 a.m. Zion Room

Chairs: Lynn Neakrase
Jacob Nienhuis

- 8:50 a.m. Rubin D. M. *
[*Comparison of Morphology, Dynamics, and Stratification of Eolian and Subaqueous Dunes*](#) [#3009]
This work is a review of similarities and differences of eolian and subaqueous dunes. It compares morphology, dynamics, and stratification of dunes in these two fluids.
- 9:20 a.m. Nienhuis J. H. * Perron J. T. Traykovski P. A.
[*Mechanics of Marine Ripples and Implications for Planetary Analogs*](#) [#3005]
We report on recent developments towards a firm mechanistic understanding of subaqueous ripple spacing that is essential for accurate ripple-derived (paleo) flow reconstructions of distant environments.
- 9:50 a.m. Neakrase L. D. V. Klose M.
[*Comparing Terrestrial Seafloor Dunes to Venusian Dunes*](#) [#3049]
Comparison of terrestrial subaqueous seafloor dunes morphology to Venusian dunes. We look at similarities in flow environment and how they relate to morphological similarities observed between the two environments.
- 10:10 a.m. Sutton S. L. F. * Nield E. V. Burr D. M. Bridges N. T. Smith J. K. Kok J. F.
Turney F. A. Marshall J. R.
[*Towards a Classification Scheme for Aeolian Fluid Ejection: Observations During High-Pressure Wind Tunnel Experiments*](#) [#3040]
We present a classification of aeolian fluid ejections and transport based on observations from high atmospheric density wind tunnel experiments in the Titan Wind Tunnel. Implications for transport on Venus and Titan are discussed.
- 10:30 a.m. Wang C. * Bristow N. Blois G. Christensen K. T. Anderson W.
[*Large-Eddy Simulation and Experimental Research of Proximal Deformed Barchan Dunes*](#) [#3013]
Large-eddy simulation and experimental measurements have been used on four different stages of two proximal deformed barchan dunes in high Reynolds number. Special fluid structure and sediment migration have been found in the flow channel area.
- 10:50 a.m. Sakimoto S. E. H. * Neakrase L. D. V. Klose M. Zimbelman J. R.
[*Computational Modeling of Terrestrial Sub-Aqueous and Venusian Near-Surface Particle Trajectories and Transport*](#) [#3051]
This study uses a Computational Fluid Dynamics (CFD) approach with commercial software to model particle trajectories within Venusian and sub-aqueous environments as a function of particle size, density, flow field velocity, and ambient conditions.
- 11:10 a.m. PANEL DISCUSSION
- 11:30 a.m. Lunch

Tuesday, May 16, 2017
SMALL BODIES — AEOLIAN PROCESSES AND BEDFORMS
ON PLANETARY BODIES WITH TRANSIENT ATMOSPHERES
1:00 p.m. Zion Room

Chairs: Philippe Claudin
Matt Telfer

- 1:00 p.m. Tirsch D. * Otto K. A. Mottola S. Hviid S. Jaumann R. Jorda L. Kührt E.
Matz K.-D. Preusker F.
[What's New on the Wind Tails on 67P/Churyumov-Gerasimenkow?](#) [#3011]
We search and classify wind tails associated with boulders on the comet 67P/Churyumov-Gerasimenkow and deduce the source region of the air-fall particles from the shape and direction of the bedforms.
- 1:20 p.m. Jia P. Andreotti B. Claudin P. *
[Giant Ripples on Comet 67P Sculpted by Thermal Wind](#) [#3010]
Recent photos of comet 67P have revealed astonishing dune-like patterns. How can vapor outgassing produce a flow along the surface dense enough to transport grains? We explain the emergence and size of these bedforms, which are due to thermal winds.
- 1:40 p.m. Kreslavsky M. A. *
[Gas of Dust Particles: A Possible Mechanism of Aeolian Features Formation on Kilometer-Size Bodies](#) [#3047]
Thermal motion of micron-size dust particles on kilometer-size bodies forms a dust “atmosphere” potentially capable of producing aeolian bedforms. This might explain ripples and other aeolian features on 67P/Churyumov-Gerasimenko.
- 2:00 p.m. Telfer M. W. * Parteli E. J. R. Radebaugh J.
[Evidence Supporting Aeolian Depositional Origin of Landforms of Sputnik Planum, Pluto, from New Horizons Imagery](#) [#3061]
We describe dunes on Pluto, and suggest they result from availability of granular solids and local wind regime at the margin of an icecap and mountain range.
- 2:20 p.m. PANEL DISCUSSION
- 2:40 p.m. Break

Tuesday, May 16, 2017
DUNE MORPHOLOGY AND RESPONSE TO WIND REGIME
3:00 p.m. Zion Room

Chairs: Claire Newman
Simone Silvestro

- 3:00 p.m. Narteau C. * Gao X. Rozier O.
[*Morphodynamics of Dome Dunes Under Unimodal Wind Regimes*](#) [#3032]
Dome dunes are individual sand piles with a rounded shape and no slip face. Using numerical simulations and satellite imagery, we show how dome dunes can be used to provide a reliable source of information about local wind regimes.
- 3:20 p.m. Tsoar H. * Parteli E. J. R.
[*The Implications of Symmetric and Asymmetric Barchans on Mars*](#) [#3003]
Barchan dunes may undergo a transition to a seif dune under a bimodal wind regime. Understanding the barchan-seif dune transition is important for the research of dune field evolution and for the investigation of planetary climate and wind regimes.
- 3:40 p.m. Jackson D. W. T. * Cooper J. A. G. Green A. Beyers M. Wiles E. Benallack K.
[*CFD Airflow Modelling Over Reversing Transverse Ridges, Mpekwani Beach, South Africa*](#) [#3025]
Reversing dunes are relatively rare aeolian landforms on Earth with low net migration rates. Usually locked within a defined spatial area under bi-directional wind regimes, how and why these dunes move is examined using 3D CFD airflow modelling.
- 4:00 p.m. Fernandez-Cascales L. Lucas A. * Rodriguez S. Narteau C. Spiga A.
[*From Martian Dunes to Martian Winds*](#) [#3026]
We've studied two dunefields on Mars near the north pole. From the dune orientations, which depend on the local coverage in dune material, we were able to estimate the direction and strength ratio of the two main winds blowing in the two sites.
- 4:20 p.m. Lian Y. * Newman C. E. McDonald G. D. Richardson M. I. Malaska M. J.
[*The Impact of Surface Properties and Dune Formation Hypothesis on Predicted Dune Transport and Orientations in the Aeolis Research Titan GCMs*](#) [#3045]
We use Aeolis Research Titan GCMs to investigate the effect of wind stresses and topography on Titan's dune transport and orientations at low latitudes, where the observations suggest the net transport of dune materials is predominantly westward.
- 4:40 p.m. PANEL DISCUSSION

Tuesday, May 16, 2017
FIELD TRIP LOGISTICS AND POSTER ADS
5:00 p.m. Zion Room

Chairs: Timothy Titus
Gerald Bryant

5:00 p.m. Bryant *
Field Trip Logistics

5:20 p.m. Titus *
Poster Lightening Ads

Tuesday, May 16, 2017
POSTER SESSION:
BEDFORM MORPHOLOGY: ORIGINS, ACTIVITY, ANALOGS, PROPERTIES
6:00 p.m. Zion Room

Bernhardson M. Alexanderson H.

[*Inland Dunes of Sweden, an Aeolian Archive*](#) [#3030]

The largest continuous dune field in Sweden, Bonåsheden has been investigated concerning its geochronology and geomorphology. The dunes were mainly formed by north-westerly winds shortly after the deglaciation of this part of Sweden (ca 10.5 ka).

Urso A. C. Chojnacki M. McEwen A. Dundas C.

[*Ripple-Like Features on Recurring Slope Lineae \(RSL\) Fans in Valles Marineris, Mars*](#) [#3059]

We explored the active ripples at RSL sites. These climbing ripples may be linked to RSL formation causing fading or sourced by the linea.

Boyd A. S. Burr D. M. Tran L. T.

[*Investigating Sand Sources and Origins in Aeolis Dorsa, Mars, via Quantitative GIS Techniques*](#) [#3016]

We are mapping sand deposits and aeolian features in Aeolis Dorsa, Mars, while also developing and applying new GIS techniques to analyze their distribution. The results will be used to test multiple hypotheses for regional sand sources and origins.

Scheidt S. P. Bonnefoy L. E. Sutton S. Whelley P. Hamilton C. W. deWet A. P.

[*Remote Sensing Analysis of Askja Pumice Megaripples in the Vikursundar, Iceland as an Analog for Martian Transverse Aeolian Ridges*](#) [#3020]

We provide analysis of remote sensing data for these unique megaripples found in Iceland. Although other aeolian gravel ripples have been suggested as terrestrial analog for TARs on Mars, these are unique because of the Mars analog environment.

Bridges N. T. de Silva S. L. Spagnuolo M. G. Zimelman J. R.

[*The Argentinean Puna as an Aeolian Mars Analog: Summary of Recent Results and Future Plans*](#) [#3036]

The Argentinean Puna is an ideal analog laboratory for aeolian landscapes on Mars. Initial results have provided fundamental insights into how aeolian terrains form on Mars. We discuss results so far and future plans.

Carson H. Fenton L. K. Michaels T. I.

[*Using Atmospheric Modeling to Pinpoint Ripple Migration Timing in Meridiani Planum During the Last 400 ky*](#) [#3053]

The sun breathed the wind / The wind waved back with ripples / But how long ago?

Vaz D. A. Silvestro S. Sarmiento P. T. K. Cardinale M.

[*Linking Ripples and Dune Morphodynamics on Mars*](#) [#3012]

We present an integrated survey of ripples and dunes on Herschel Crater. We characterize and assign a morphodynamic meaning to different sets of ripples, which can be correlated with specific dune settings and wind regimes.

Yizhaq H. Katra I. Kok J. F. Silvestro S.

[*A New Mechanism for the Transverse Instability of Megaripples and Implication for Martian Bedforms*](#) [#3007]

Differences in sinuosity between normal and megaripples are due to grain size segregation. Accumulations of coarse particles allow further growth of the ripple, thus decreasing their migration rate and encouraging further accumulation of coarse grains.

Hoover R. H. Putzig N. E. Fenton L. K. Courville S.

[*Thermophysical Characterization of Southern Hemisphere Dunes On Mars*](#) [#3063]

Investigating thermophysical properties of southern hemisphere dunes on Mars as a way to identify subsurface volatiles.

Putzig N. E.

[*A SHARAD's Eye View of Martian Dunes*](#) [#3054]

SHARAD has been observing dunes on Mars for over ten years. While many dunes severely scatter the radar signals, others allow them to penetrate, revealing internal layering and underlying surfaces, some of which are related to subsurface ice.

Lucas A. Rodriguez S. Narteau C. Charnay B. Rozier O.

[*Wind Regime, Sediment Flux, and Bedform Response on Titan*](#) [#3027]

Linear dunes observed within the equatorial sand seas on Titan are investigated from remote-sensing associated to predictions of global circulation models allowing sediment transport estimations and fine geomorphology analysis.

Lewis R. C. Bishop B. Radebaugh J. Christiansen E. H.

[*A Comparative Analysis of Sediment Transport and Deposition Trends of the Sand Seas of Earth and Titan*](#) [#3041]

The analysis of linear dune widths and spacings according to elevation and other variables such as proximity to sand sea margin on Earth and Titan provide better understanding of sediment transport and deposition patterns in sand seas.

Tuesday, May 16, 2017
POSTER SESSION: DATA MANAGEMENT
6:00 p.m. Zion Room

Neakrase L. D. V. Huber L. Chanover N. Beebe R. Johnson J.

[Submitting Data to the PDS: Data Management Plans, Derived Data, and More](#) [#3015]

NASA's PDS offers a range of services for aiding scientists in the preparation of data management plans and eventual submission of derived data to the PDS. Communication with the relevant discipline node is the key to a successful archive.

Nield E. V. Burr D. B. Neakrase L. D. V.

[Archiving Experimentally Derived Threshold Wind Speed Data in PDS4](#) [#3014]

We are creating a systematic, centralized, and searchable archive of old, new, and future threshold data from wind tunnel experiments and welcome additional contributions from the community.

Tuesday, May 16, 2017
POSTER SESSION: GRAINS ALOFT AND ON THE GROUND
6:00 p.m. Zion Room

Hayward R. K. Titus T. N. Bogle R.

[*Mars Aeolian Analog: Multi-Layer Saltation Sensor*](#) [#3004]

Research at Grand Falls will characterize saltation and sand transport when two sediment populations are involved, arrive at sediment estimates for bimodal sand populations on Earth and Mars, and field test a multi-layer solid-state saltation sensor.

Sunda A. M. Hawyard R. K. Titus T. N.

[*An Analysis of Grain Size Distribution of Mobilized Sand at the Grand Falls Dune Site*](#) [#3017]

The Grand Falls dune study site is located 40 miles northeast of Flagstaff, Arizona on the Navajo Reservation; dunes are composed of fine-grain quartz sand and coarse-grain basalt sand.

Raack J. Reiss D. Balme M. R. Taj-Eddine K. Ori G. G.

[*In Situ Sampling of Terrestrial Dust Devils and Implications for Mars*](#) [#3006]

We report on first very detailed in situ sampling of relative dust devil particle loads and their vertical grain size distributions in heights up to 4 m.

Reiss D.

[*Orbital Observations of Terrestrial Dust Devils*](#) [#3029]

Terrestrial dust devils have not yet been observed directly in satellite imagery. Here we report about orbital dust devil observations in the Taklamakan desert. Results are compared to orbital dust devil studies in Amazonis Planitia on Mars.

Bristow C. S. Moller T.

[*Dust Production from Saltation of Aeolian Basalt Sands: Analogue for Mars*](#) [#3034]

We have measured the amount of dust produced by basalt sand in a saltation chamber. The results indicate that saltation of basalt sand is a viable method for the production of dust on Mars.

Charles H. R. Titus T. N. Hayward R. K.

[*The Mars Global Digital Dune Database: Exploring Dune Field Mineral Composition*](#) [#3060]

The Mars Global Digital Dune Database (MGD3) is a comprehensive compilation of the properties of martian dune fields. The next planned release will add mineral composition data for the larger dune fields in the equatorial and south polar regions.

Lorenz R. D. Horst S. He C.

[*Do Titan's Dunes Glow in the Dark?*](#) [#3018]

Titan's carbon sands / May fluoresce pretty colors / When hit by UV.

Yu X. Hörst S. M. He C. McGuiggan P. Bridges N. T.

[*Direct Measurement of Interparticle Adhesion of Titan Aerosol Analogs \('Tholin'\) Using Atomic Force Microscopy*](#) [#3048]

First direct measurements of interparticle forces between Titan aerosol/sand analog ('tholin') particles. Inform future theoretical and experimental studies of threshold wind speed.

Tuesday, May 16, 2017
POSTER SESSION: INSTRUMENTATION
6:00 p.m. Zion Room

Barnes J. W. Turtle E. P. Trainer M. Lorenz R. D. MacKenzie S. M.

[Dragonfly: A New Frontiers Titan Dune Lander](#) [#3044]

Rotorcraft lander / In Titan's organic sands / Is there life out there?

Williams D. A. Smith J. K.

[NASA's Planetary Aeolian Laboratory: Status and Update](#) [#3002]

This presentation provides a status update on the operational capabilities and funding plans by NASA for the Planetary Aeolian Laboratory located at NASA Ames Research Center, including details for those proposing future wind tunnel experiments.

Tuesday, May 16, 2017
POSTER SESSION: IT FLOWS, NOT BLOWS — WATER ANALOGS
6:00 p.m. Zion Room

Williams K. E. Geissler P. E.

[*Subaqueous Antidunes on the Surface of Venus?*](#) [#3038]

In this work we proceed under the working hypothesis that aeolian antidunes may exist beneath the atmosphere of Venus. We use characteristics of transverse dunes from the Al-Uzza Undae region of Venus to constrain the properties of antidunes.

Wednesday, May 17, 2017
FIELD TRIP: ZION NATIONAL PARK AND CORAL PINK SAND DUNES
7:30 a.m. Holland Building

All-day field trip led by Dr. Gerald Bryant, Field Institute Director at Dixie State University.

The field trip will include multiple stops in Zion National Park, followed by a moderate hike into the Coral Pink Sand Dunes. Initial roadside stops will focus on process and event interpretations of extensive cross-sectional exposures of ancient eolian dune deposits. The final destination will provide the opportunity to explore an active dunefield that has developed against topographic barriers in response to predominantly westerly transport winds.

Participants should bring field gear, including a small backpack (day pack), personal first aid kit, a sun hat, sunscreen/chap-stick, canteen or CamelBak bladder, bandanas (2), gloves (if desired), and shoes appropriate for hiking on sand.

The trip is expected to last approximately 9.5 hours, which includes approximately 4 hours of travel (roundtrip). Charter buses will depart at 7:30 a.m. from the Holland Building. A box breakfast with juice and a box lunch with bottled water will be provided to each pre-registered participant.

Thursday, May 18, 2017
GALE CRATER SAND DUNES: IN SITU OBSERVATIONS FROM MARS
8:25 a.m. Zion Room

Session dedicated to the memory of Nathan T. Bridges

Chairs: David Rubin
James Zimbelman

- 8:25 a.m. Introduction and dedication of the session
- 8:30 a.m. Bridges N. T. Ehlmann B. L. Achilles C. Cousin A. Edwards C. Ewing R. Johnson J. Lapotre M. Newman C. * O'Connell-Cooper C. Rubin D. Sullivan R.
[*Investigation of the Bagnold Dunes by the Curiosity Rover: Summary of Results from the First Investigation of an Active Dune Field on Another Planet*](#) [#3031]
Results from the first phase of Bagnold Dune Campaign are presented. We report on remote sensing studies, current processes, structures, grain characteristics, compositions, and mineralogies, and discuss implications for sand sources and transport mechanisms.
- 8:50 a.m. Rubin D. M. * Banham S. G. Gupta S. Anderson R. B. Bridges N. A. Edgar L. A. Lewis K. W. Newman C. E.
[*Long-Term Changes in Direction of Sand-Transporting Winds in Gale Crater, Mars*](#) [#3042]
We have interpreted eolian sand-transport directions in three deposits spanning much of the evolution of Gale Crater: Eolian cross-strata within the upper formation of Mt. Sharp and in the Stimson sandstone, and in the active Bagnold dunes.
- 9:10 a.m. Cornwall C. * Bourke M. C. Jackson D. W. T. Cooper J. A. G.
[*Grainflow Morphologies and High Resolution Airflow Modeling of Bagnold Dunes, Gale Crater, Mars*](#) [#3019]
We present a comparison between terrestrial field observations and images of the Namib dune slipface on Mars as well as an investigation of complex wind patterns on the Namib dune that may influence grainflow behavior and dune migration.
- 9:30 a.m. Silvestro S. * Vaz D. A. Yizhaq H. Popa C. Deniskina N. Esposito F.
[*Large Ripples in Gale Crater \(Mars\): Morphology and Dynamic*](#) [#3023]
Large ripples morphology and dynamic in the MSL landing site is different from terrestrial impact ripples.
- 9:50 a.m. Banham S. G. * Gupta S. Rubin D. M. Watkins J. A. Sumner D. Y. Grotzinger J. P. Lewis K. W. Edgett K. S. Edgar L. A. Stack K. M. Bell J. Ewing R. C. Day M. D. Lapotre M. G. A.
[*Anatomy of an Ancient Aeolian Sandstone on Mars: The Stimson Formation in Gale Crater*](#) [#3039]
The Stimson formation, Gale Crater, is interpreted to represent a dry aeolian dune system. Water played no role in the accumulation of this unit.
- 10:10 a.m. Newman C. E. * Richardson M. I. Gómez-Elvira J. Marin M. Navarro S. Torres J. Viúdez-Moreiras D. Day M. Kocurek G. A.
[*Dune and Wind Observations and Predictions in Gale Crater on Mars*](#) [#3058]
Recently the MSL rover provided the first in situ wind data for planetary dunes, which is invaluable for understanding how the dunes formed and as ground truth for validating models. We will present results and model predictions of winds and dunes.

- 10:30 a.m. Richardson M. I. * Newman C. E.
[*Preliminary Large Eddy Simulation \(LES\) of the Flow Over Martian Dunes Using MarsWRF and HiRISE DTM Topography*](#) [#3055]
In this presentation we will describe preliminary Large Eddy Simulations (LES) of the air flow over barchan dunes on Mars.
- 10:50 a.m. Bristow N. R. * Wang C. Blois G. Best J. Anderson W. Christensen K. T.
[*Experimental Measurements of Turbulent Flow Structure Associated with Colliding Barchan Dunes*](#) [#3046]
Presented here are experimental measurements of turbulent flow structure around laterally offset barchan dunes in a collision process, where we use fixed-bed models in a refractive index matching flume to perform particle image velocimetry of the flow.
- 11:10 a.m. PANEL DISCUSSION
- 11:30 a.m. Lunch

Thursday, May 18, 2017
AEOLIAN MORPHOLOGY: DUNES AND BEYOND
1:00 p.m. Zion Room

Chairs: Hezi Yizhaq
Shannon MacKenzie

- 1:00 p.m. Zimbelman J. R. * Foroutan M.
[*Transverse Aeolian Ridges: Mars Spacecraft Data Analyses and a New Earth Analog*](#) [#3037]
Curiosity rover provided the first close-up study of a martian TAR when it crossed a large aeolian bedform at Dingo Gap. Observations are similar to Rocknest, but distinct from megaripples crossed by Opportunity. New TAR analog; Lut Desert of Iran.
- 1:20 p.m. Cardenas B. T. * Kocurek G. Mohrig D.
[*The Jurassic Page Sandstone: Coupling Aeolian Stratigraphic Architecture to Water Table and Sea Level Fluctuations*](#) [#3050]
The stratigraphic architecture of the Jurassic Page Sandstone records signals of water table fluctuations, which were controlled by sea level fluctuations in the adjacent Carmel Sea. These methods are applicable to aeolian deposits on Mars.
- 1:40 p.m. Radebaugh J. * Bishop B. Lewis C. Nartean C. Rodriguez S. Gao X.
Christiansen E. H. Lorenz R. D.
[*The Namib Sand Sea as an Analogue for the Belet Sand Sea, Titan: Winds and Dune-Forming Processes*](#) [#3057]
Namib winds blow strong / Titan winds form giant dunes / Correlate we can.
- 2:00 p.m. Kerber L. *
[*Controls on the Morphology of Yardangs*](#) [#3022]
Yardangs are important indicators of wind erosion on planetary surfaces. This presentation outlines the variables that contribute to yardang formation in the terrestrial environment.
- 2:20 p.m. PANEL DISCUSSION
- 2:40 p.m. Break

Thursday, May 18, 2017
INTERACTIONS BETWEEN AEOLIAN AND OTHER PROCESSES
3:00 p.m. Zion Room

Chairs: Jason Barnes
Heather Charles

- 3:00 p.m. Hansen C. J. * Diniega S. Hayne P. Portyankina G.
[*Mars' North Polar Erg — Sculpted by Wind and Dry Ice*](#) [#3056]
Wind and seasonal dry ice sculpt the dunes of Mars in the polar regions. Does snowfall play a role in driving sand avalanches and the development of new alcoves? Interannual variability suggests this may be the case.
- 3:20 p.m. Portyankina G. * Hansen C. J. Aye K.-M.
[*Seasonal Small-Scale Phenomena on Martian Polar Dunes*](#) [#3052]
We report on four martian years of high resolution observations of seasonal activity on martian polar dunes.
- 3:40 p.m. McElwaine J. N. * Diniega S. Hansen C. J. Bourke M. Nield J.
[*The Formation of Martian Dune Gullies by Dry Ice — Experiments and Modelling*](#) [#3035]
Long narrow gullies have been observed to form in the spring on martian dunes. We present experiments and modelling to show that they may have been formed by blocks of dry ice.
- 4:00 p.m. Liu B. * Coulthard T.
[*In Dynamic Equilibrium: The Autogenic Landform Change in a Fluvial-Aeolian Interacting Field*](#) [#3001]
A cellular aeolian/dune model and fluvial model are applied to simulate interacting process. Whilst various interacting behaviours have been observed in the simulations, an unexpected cyclic large scale landscape change is noticed.
- 4:20 p.m. Malaska M. J. * Lopes R. M. C. Radebaugh J. Kerber L. Solomonidou A.
[*What is the Ultimate Fate of Titan's Dune Sands?*](#) [#3021]
Dark Titan dune sands / Continue beyond sand seas / How far do they go?
- 4:40 p.m. PANEL DISCUSSION

Friday, May 19, 2017
GRAINS AND SEDIMENT TRANSPORT: ENDING WITH BEGINNINGS
8:30 a.m. Zion Room

Chairs: Stephen Sutton
Rosalyn Hayward

- 8:30 a.m. Lorenz R. D. *
[*In-Situ Measurement of the Saltation Threshold of Titan's Sands with Downwash from a Rotorcraft Lander*](#) [#3043]
Let's go do a test / Spin fans, blow sand on Titan / To get threshold speed.
- 8:50 a.m. Rodriguez S. * Le Mouélic S. Barnes J. W. Charnay B. Kok J. F. Lorenz R. D. Radebaugh J. Narteau C. Cornet T. Bourgeois O. Lucas A. Rannou P. Griffith C. A. Coustenis A. Appéré T. Hirtzig M. Sotin C. Soderblom J. M. Brown R. H. Bow J. Vixie G. Maltagliati L. Courrech du Pont S. Jauman R. Stephan K. Baines K. H. Buratti B. J. Clark R. N. Nicholson P. D.
[*Singular Activity Over Titan's Equatorial Dunefields at Equinox*](#) [#3024]
We detect events over Titan's equatorial dune fields that might be dust storms, indicating that strong winds can blow during equinoxes and that underlying dunes can be currently active.
- 9:10 a.m. MacKenzie S. M. * Barnes J. W.
[*A New Candidate Sand Source in Titan's Equatorial Region?*](#) [#3062]
Searching for sources / Of Titan's organic sands / Is that a playa?
- 9:30 a.m. Titus T. N. * Hayward R. K. Bogle R.
[*Grand Falls Dune Field — Sediment Flux Measurement and Analysis at a Mars Analog Site*](#) [#3008]
A suite of instruments (sediment catchers, anemometers, and a saltation sensor) have been located at the Grand Falls Dune Field site for three years. The data from this site have been used to estimate the size of sediment flux for several events.
- 9:50 a.m. Chojnacki M. * Banks M. E. Urso A. C.
[*Global Extremes in Martian Bedform Migration and Sand Flux Rates*](#) [#3033]
Results demonstrate substantial geographic heterogeneity in dune sediment fluxes across the planet. Geographic and temporal variations will be discussed.
- 10:10 a.m. PANEL DISCUSSION

Friday, May 19, 2017
WORKSHOP HIGHLIGHTS, GOALS, AND PUBLICATIONS
10:30 a.m. Zion Room

Chair: Timothy Titus

10:30 a.m. Session Chairs *
Session Chair Syntheses

11:10 a.m. Titus T.*
EOS, Special Issue, and a Goals Document

11:30 a.m. Titus T.*
Next Workshop Location and Timing