

Tuesday, March 20, 2018

[T251]

EARLY MARS SURFACE PROCESSES II: ALLUVIAL FANS AND PALEOLAKES**1:30 p.m. Waterway Ballroom 1**

**Chairs: Sharon Wilson
Samantha Peel**

- 1:30 p.m. Wilson S. A. * Howard A. D. Grant J. A.
[Alluvial Fans in Roddy Crater on Mars](#) [#2649]
Mapping and analysis of alluvial fans and other landforms in Roddy provides insight into the processes affecting fan development and the associated climate.
- 1:45 p.m. Morgan A. M. * Wilson S. A. Howard A. D. Craddock R. A. Grant J. A.
[Global Distribution of Alluvial Fans and Deltas on Mars](#) [#2219]
Alluvial fans and deltas on Mars are far more widespread than previously reported. Alluvial fans likely formed from snowmelt during the mid to late Hesperian.
- 2:00 p.m. Davis J. M. * Balme M. Grindrod P. M. Fawdon P. Gupta S.
[Inverted Palaeolakes in Arabia Terra, Mars: Evidence for Fluctuating Erosion and Deposition in the Noachian](#) [#1902]
We have mapped and characterized palaeolakes in Arabia Terra, Mars, and found evidence for fluctuating periods of fluvial erosion and deposition in the Noachian.
- 2:15 p.m. Goudge T. A. * Fassett C. I. Mohrig D.
[Characterizing the Record of Paleolake Outlet Canyon Incision on Mars](#) [#1574]
Open lakes on Mars / How did outlet canyons form? / Overflow flooding!
- 2:30 p.m. Peel S. E. * Burr D. M.
[Paleo-Lakes in Central Pits, Mars: An Update](#) [#1004]
Valleys terminate into the pits of 96 central pit craters. We use CTX, DEMs, THEMIS TI, and CRISM targeted data to test if these pits once hosted paleo-lakes.
- 2:45 p.m. Shoemaker E. S. * Baker D. M. H. Carter L. M.
[Radar Sounding of Open Basin Lakes on Mars](#) [#1612]
SHARAD observations in open basin lakes on Mars suggest a rough subsurface and volumetric scattering are more significant attenuators of the radar signal.