

Tuesday, March 22, 2016

[T317]

POSTER SESSION I: MARS LANDING SITES

6:00 p.m. Town Center Exhibit Area

Sweeney J. Warner N. H. Golombek M. P. Kirk R. Fergason R. et al. **POSTER LOCATION #257**
[Crater Degradation and Surface Erosion Rates at the InSight Landing Site, Western Elysium Planitia, Mars](#) [#1576]

Crater morphology and degradation timescales at the InSight landing site suggest low erosion rates and imply that infilling is the dominant degradational process.

Putzig N. E. Morgan G. A. Campbell B. A. Grima C. Smith I. B. et al. **POSTER LOCATION #258**
[Radar Properties of the Proposed InSight Landing Site in Western Elysium Planitia on Mars](#) [#1655]

We examine roughness, layering, and other properties of the InSight study area with observations from MRO's Shallow Radar (SHARAD) and Arecibo's S-band radar.

Golombek M. Warner N. Daubar I. J. Kipp D. Huertas A. et al. **POSTER LOCATION #259**
[Surface and Subsurface Characteristics of Western Elysium Planitia, Mars](#) [#1572]

Western Elysium Planitia is smooth, flat, with few rocks, and a broken up regolith suitable for landing InSight and penetrating ~5 m with the heat flow mole.

Golombek M. P. Grant J. A. Farley K. A. Williford K. Chen A. et al. **POSTER LOCATION #260**
[Downselection of Landing Sites Proposed for the Mars 2020 Rover Mission](#) [#2324]

Eight landing sites have been selected for further study for the Mars 2020 Rover based mostly on the science merits of 21 sites evaluated at an open workshop.

Ryan C. H. Tornabene L. L. Osinski G. R.
 Cannon K. M. Mustard J. F. et al.

POSTER LOCATION #261

[Geomorphological Mapping of the Hargraves Ejecta and Polygonal Terrain Associated with the Candidate Mars 2020 Landing Site, Nili Fossae Trough](#) [#2524]

Geomorphological mapping of the Mars 2020 potential landing site in Nili Fossae Trough was undertaken using HiRISE and CTX imagery.

Hurowitz J. A. Karunatillake S. Kerber L. Mischna M. **POSTER LOCATION #262**
[Volatile Insight on Global Circulation on Mars, with Implications for Mars 2020 Landing Sites](#) [#2008]

Settle's acid-fog hypothesis on GCMs and dilution of bulk soil by Cl and S. We also identify regions less suited for Mars 2020 from a habitability perspective.

Eckes S. Warner N. H. Gupta S. O'Shea M. Smith J. et al. **POSTER LOCATION #263**
[Timing of Fluvial Activity in the Xanthe Terra Region of Mars: Implications for Hypanis Delta, a Potential Landing Site for Mars2020](#) [#2196]

Fluvial activity at Xanthe Terra occurred over a broad period of Mars history from the Late Noachian to the Early Amazonian.

Sefton-Nash E. Bridges J. C. Kissick L. Butcher F. Donnelly P. et al. **POSTER LOCATION #264**
[Characterizing Rock Abundance at ExoMars Landing Site Candidates](#) [#1918]

We present preliminary rock count results and discuss techniques to characterize rock abundance and hazardous obstacles at ExoMars Rover landing site candidates.

Bridges J. C. Henson R. A. Vago J. L.
 Loizeau D. Williams R. M. E. et al.

POSTER LOCATION #265

[ExoMars Landing Site Characterisation and Selection](#) [#2170]

Oxia Planum, Aram Dorsum, Mawrth Vallis are the candidate sites for the ExoMars Rover. They contain clays, alluvial and deltaic environments.

Quantin C. Carter J. Thollot P. Broyer J. Davis J. et al. **POSTER LOCATION #266**
[Oxia Planum — The Landing Site for ExoMars 2018](#) [#2863]

Oxia Planum is a wide noachian clay bearing plain hosting younger fluvio-deltaic deposits which has been chosen by ESA as the landing site for Exomars 2018.

Carter J. Quantin C. Thollot P. Loizeau D. Ody A. et al. **POSTER LOCATION #267**
[Oxia Planum: A Clay-Laden Landing Site Proposed for the ExoMars Rover Mission: Aqueous Mineralogy and Alteration Scenarios](#) [#2064]

We investigate the mineralogy and propose aqueous alteration settings for Oxia Planum, one of the final landing sites for the ExoMars rover mission.

Balme M. R. Grindrod P. M. Sefton-Nash E. Davis J. M. Gupta S. et al. **POSTER LOCATION #268**
[Aram Dorsum: A Noachian Inverted Fluvial Channel System in Arabia Terra, Mars \(and Candidate ExoMars 2018 Rover Landing Site\)](#) [#2633]

Aram Dorsum, one of many inverted fluvial channels found in Arabia Terra, is an ExoMars Rover candidate landing site. This geological mapping details the area.

Gross C. Poulet F. Michalski J. Horgan B. Bishop J. L. **POSTER LOCATION #269**
[Mawrth Vallis — Proposed Landing Site for ExoMars 2018/2020](#) [#1421]

We present a short overview of the ExoMars landing ellipse proposed for Mawrth Vallis to strengthen the merits of this high-level astrobiological region.

Calef F. J. III Archer D. Clark B. Day M. Goetz W. et al. **POSTER LOCATION #270**
[Assessing Gale Crater as an Exploration Zone for the First Human Mission to Mars](#) [#2901]

We propose a ‘go where you know’ concept evaluating Gale crater as the first exploration zone for a human mission to Mars, assessing science and traversability.

Gallegos Z. E. Newsom H. E. **POSTER LOCATION #271**
[Mars’ Mesopotamia: A Previously Unexplored Region on the Eastern Rim of Hellas Basin with Prospects for Future Robotic and Human Missions](#) [#3033]

This study area offers intriguing geologic, astrobiologic, and resource potential. Future lander, rover, and human missions should target this exploration zone.