

Thursday, October 29, 2015

HIGH-LATITUDE I

10:00 a.m. Lecture Hall

- 10:00 a.m. Head J. W. III * Dickson J. Milliken R. Scott D. Johnson B. Marchant D. Levy J. Kinch K. Hvidberg C. Forget F. Boucher D. Mikucki J. Fastook J. Klaus K.
[Mars Human Science Exploration and Resource Utilization: The Dichotomy Boundary Deuteronilus Mensae Exploration Zone](#) [#1033]
Deuteronilus Mensae EZ combines: 1) Fundamental MEPAG scientific objectives; 2) Samples from the Noachian, Hesperian and Amazonian); 3) ISRU access to abundant water ice mapped by SHARAD; 4) Civil engineering to reduce reliance on Earth supplies.
- 10:15 a.m. Rice J. W. Jr. * Crown D. A. Feldman W. C. Pathare A. V. Feustel A. J. Gertsch L. S.
[Manned Mars Mission Exploration Zone: Eastern Rim of Hellas Impact Basin](#) [#1038]
Our proposed 200 km diameter Exploration Zone centered near 40°S; 104°E is located along the eastern rim of the Hellas basin which will allow astronauts to study and collect very ancient deep seated materials which were excavated in the impact event.
- 10:30 a.m. Levy J. S. * Holt J. W.
[A Human Landing Site on the Hellas Rim: Ancient Craters, Flowing Water, and Abundant Ice](#) [#1037]
Hellas basin rim/Ancient highlands and lavas/Lots of ice to drink.
- 10:45 a.m. Plaut J. J. *
[A Resource-Rich, Scientifically Compelling Exploration Zone for Human Missions at Deuteronilus Mensae, Mars](#) [#1044]
The Deuteronilus Mensae region of Mars is promising as a potential landing site for human exploration because it contains vast, readily accessible deposits of water ice in a setting of key scientific importance.
- 11:00 a.m. INTEGRATING DISCUSSION
- 11:20 a.m. *Break*
- 11:35 a.m. Mangold N. * Dehouck E. Poulet F. Ansan V. Le Mouélic S.
[Ismenius Cavus: Ancient Lake Deposits and Clay Minerals Surrounded by Amazonian Glaciers](#) [#1027]
Landing site at the bottom of a 600 m deep paleolake nearby thick clay-rich sediments at lake bottom and deltaic deposits. Strong exobiological interest including ice-rich glacial landforms as water resource in same location.
- 11:50 a.m. Gallegos Z. E. * Newsom H. E.
[A Human Exploration Zone on the East Rim of Hellas Basin, Mars: Mesopotamia](#) [#1035]
This abstract highlights a previously unexplored area in the Hellas Planitia region of Mars. The exploration zone proposed offers scientifically compelling regions of interest, as well as abundant resources for reoccurring human missions.
- 12:05 p.m. Stillman D. E. * Grimm R. E. Robbins S. J. Michaels T. I. Enke B. L.
[Hale Crater — Ancient Water Science, Contemporary Water Resource](#) [#1028]
Hale has easy access to liquid water via RSL. Scientifically the site has a rich history of water via outflow channel, fluidized ejecta, hydrothermal activity, gullies, and RSL. Lastly, the site would allow age dating of Aryge and Hale crater.

12:20 p.m. Hill J. R. * Christensen P. R.

[Western Noachis Terra Chloride Deposits: Aqueous Minerals with High Astrobiological Preservation Potential](#) [#1021]

The chloride deposits located in western Noachis Terra represent the closest occurrence of chloride deposits to glacier-like forms separated by traversable terrain and located within the human exploration zone latitude and elevation constraints.

12:35 p.m. INTEGRATING DISCUSSION

12:55 p.m. *Lunch*