

Thursday, March 22, 2018

[R637]

**POSTER SESSION II: MARTIAN STRATIGRAPHY AND STRUCTURE****6:00 p.m. Town Center Exhibit Area**

Van Patter A. Fueten F. Stesky R. Flahaut J. Hauber E. **POSTER LOCATION #602**  
[\*Layer Attitudes and Unconformities Within the Interior Layered Deposit, Ophir Chasma, Mars\*](#) [#1127]

Attitudes of layers of the Interior Layered Deposit are measured with CTX and HiRISE DEMs. Multiple units are identified in several locations.

Burden A. Fueten F. Stesky R. Flahaut J. Hauber E. **POSTER LOCATION #603**  
[\*Stratigraphy and Attitude Measurements of Interior Layer Deposits in East Candor Chasma, Valles Marineris, Mars\*](#) [#1180]

Layer attitudes of the central interior layer deposits in East Candor Chasma, Valles Marineris indicate major unconformities.

Borden R. M. Burr D. M. **POSTER LOCATION #605**  
[\*Analysis of Small-Scale Wrinkle Ridges in Aeolis Dorsa, Mars\*](#) [#1003]

In this work we analyze small (<40 km in length) wrinkle ridges in a sedimentary basin on Mars to understand contractional tectonics on a local scale.

Shelton A. Hughes C. G. **POSTER LOCATION #606**  
[\*Looking at Xanthe Terra, Mars: Structural History by Mapping Linear Features Using CTX Imagery\*](#) [#2501]

Mapping lineations in Xanthe Terra can tell us about Mars' geologic history.

Luzzi E. Rossi A. P. Pozzobon R. Oehler D. Z. Etiopie G. **POSTER LOCATION #607**  
[\*Becquerel Crater Radial Faults: A Possible Target for Methane Seepage Investigations\*](#) [#1494]

Normal radial faults on ELDs in Becquerel Crater (Mars), potentially linked with diapirism and often associated on Earth with methane seepage.

Vargas L. Fueten F. Walmsley J. Stesky R. Hauber E. **POSTER LOCATION #608**  
[\*The Subsurface Structure of Large Wrinkle Ridges, Valles Marineris, Mars\*](#) [#1035]

Elastic models using Valles Marineris' wall structures suggest that large ridges on Ophir Planum are wrinkle ridges.

Ruj T. Komatsu G. **POSTER LOCATION #609**  
[\*Origin of Extensional Structures in the Noachis-Sabaea Region, Mars: Alternative Hypotheses\*](#) [#1664]

Schematic and hypothetical modelling for the Noachian aged crustal structures, driven by endogenic/exogenic or a combination of both mechanisms.

Sarkar R. Singh P. Edgett K. S. Ghosh D. Porwal A. **POSTER LOCATION #610**  
[\*Structural Characterization of Juventae Chasma and the Light-Toned Mounds\*](#) [#2241]

This work is aimed at describing the structural attributes of Juventae Chasma and the light-toned mounds within it.

Kling C. L. Byrne P. K. Wyrick D. Y. Wegmann K. W. **POSTER LOCATION #611**  
[\*Spatial and Temporal Relationships of Pit Craters and Graben Within Noctis Labyrinthus, Mars\*](#) [#2829]

Noctis Labyrinthus / Geometry is key to / Know the past structure.

Quinn D. P. Ehlmann B. L. **POSTER LOCATION #612**  
[\*Water-Lain Sulfates and Episodic Fluvial Sedimentation and Erosion Spanning the Middle Noachian to Early Amazonian, Northeast Syrtis Major\*](#) [#1840]

The layered sulfates at NE Syrtis Major anchor a multistage sedimentary history in the presence of surface water at the edge of Isidis Basin.

Schmidt G. Pondrelli M. Salese F. Rossi A.

**POSTER LOCATION #613**

[\*Distribution, Stratigraphy, and Layer Thicknesses of Intra-Crater Deposits in Western Arabia Terra, Mars\*](#) [#1916]

By analyzing intra-crater deposits' stratigraphy, mineralogy, and their geographical distribution, the depositional history of Arabia Terra is constrained.

De Hon R. A.

**POSTER LOCATION #614**

[\*Crater-Fill on Mars: Sediment Traps and Long Term Stratigraphic Record\*](#) [#1328]

Martian craters are natural closed basins that contain a variety of secondary floor materials that record changing depositional environments.