

Tuesday, March 22, 2016

[T319]

POSTER SESSION I: MARTIAN MINERALOGY FROM ORBIT AND ON THE SURFACE

6:00 p.m. Town Center Exhibit Area

Clark R. N. Swayze G. A. Murchie S. L.

Seelos F. P. Viviano-Beck C. E. et al.

POSTER LOCATION #291

[Mapping Water and Water-Bearing Minerals on Mars with CRISM](#) [#2900]

We have analyzed over 200 CRISM scenes, and find diverse signatures of water using the 2-micron absorption.

Seelos F. P. Viviano-Beck C. E. Morgan M. F. Romeo G. Aiello J. J. et al. POSTER LOCATION #292

[CRISM Hyperspectral Targeted Observation PDS Product Sets — TERs and MTRDRs](#) [#1783]

Targeted Empirical Records (TERs) and Map-projected Targeted Reduced Data Records (MTRDRs) — High level CRISM targeted observation data product sets.

Pan C. Rogers A. D.

POSTER LOCATION #293

[Olivine-Rich Basalt Outcrops in the Subsurface of Western Noachis Terra, Mars, and Geological Implications](#) [#1528]

Olivine-rich outcrops found in Ladoon Valles and Uzboi Vallis, suggesting they may be widespread and form a continuous unit in Valles Marineris and Ares Vallis.

Brown A. J. Viviano-Beck C. E. Bishop J. L.

Cabrol N. A. Andersen D. et al.

POSTER LOCATION #294

[A Serpentinization Origin for Jezero Crater Carbonates](#) [#2165]

Using CRISM, we investigated spectral signatures of carbonates in Jezero Crater and conclude they are more like Nili Fossae brethren than previously suspected.

Jain N. S. Chauhan P. Rajashekhar P.

POSTER LOCATION #295

[Evidences of Aqueous past of Ladon Valles Region on Mars Through Morphology and Mineralogy](#) [#1114]

Mineralogy, geomorphology and morphometric analysis of Ladon valleys, Mars.

Robertson K. Wiseman S.

POSTER LOCATION #296

[Determining the Mineralogy of the Polyhydrated Sulfate Class in Capri Chasma Using Radiative Transfer Modeling](#) [#2270]

We perform radiative transfer modeling of DISORT corrected CRISM spectra from Capri Chasma to model the spectral variations in the polyhydrated sulfate class.

Weitz C. M. Bishop J. L. Tornabene L. Mest S. C. Grant J. A. et al.

POSTER LOCATION #297

[Disrupted Hydrated Deposits in Southeastern Noctis Labyrinthus: Possible Displaced Subsurface Materials from Oudemans Crater?](#) [#1610]

We have identified disrupted hydrated materials that could represent subsurface target rocks that were displaced northward during formation of Oudemans crater.

Smith I. B. Viviano-Beck C. E. Chojnacki M. Quantin C. Putzig N. E.

POSTER LOCATION #298

[Characterization of Layered Deposits at the Valles Marineris Plateau With Multiple Instruments](#) [#2725]

We detect and characterize altered layered deposits near Valles Marineris rim with a suite of instruments looking towards analogs with other sites.

Matiella Novak M. A. Viviano-Beck C. Seelos K. Buczkowski D.

POSTER LOCATION #299

[Looking for Volcanic Ash Deposits Within the Interior Layered Deposits of Valles Marineris, Mars — Physical and Chemical Characteristics of Ash Falls and Flows](#) [#2752]

We investigate the presence of volcanic ash falls within the Interior Layered Deposits of Valles Marineris, Mars.

Pascuzzo A. C. Mustard J. F. **POSTER LOCATION #300**

[Determining the Composition of Various Martian Central Mounds](#) [#2758]

Survey and compositional analyses of martian craters containing large central mound sedimentary deposits to help in determining their various origins.

Edwards C. S. Rogers A. D. **POSTER LOCATION #301**

[Evaluating Flat-Crater Floor Fill Compositions: Insights into Volcanic and Sedimentary Processes](#) [#2273]

Infilled craters on Mars have diverse histories, exhibiting compositions and morphologies consistent with unaltered volcanic fill to altered sedimentary fill.

Sessa A. M. Parra S. A. Wray J. J. Irwin R. P. III Maxwell T. A. et al. **POSTER LOCATION #302**

[Compositional Mapping of Noachian Impact Crater Floors on Mars](#) [#2391]

Martian crater floors / Infrared spectra reveal / Diverse minerals.

Hood D. R. Judice T. Karunatillake S. Rogers D. Dohm J. et al. **POSTER LOCATION #303**

[Assessing the Geologic Evolution of Greater Thaumasia, Mars with Chemistry and Mineralogy](#) [#2737]

Regions surrounding Thaumasia Planum, Mars are examined using chemical and mineralogical data, assessing composition and potential evolution models.

Susko D. Karunatillake S. Hood D. R. Barbato A. **POSTER LOCATION #304**

[Investigations into the Source of K and Th Decoupling Across Terrestrial Bodies](#) [#2749]

K and Th tend to couple together on Mars and the Moon, but decouple on Earth. Terrestrial rocks are analyzed to determine potential sources of decoupling.

Ruff S. W. Morris R. V. **POSTER LOCATION #305**

[Evidence for Mixed Magnesium and Iron Carbonates in the Comanche Outcrops of the Columbia Hills, Mars](#) [#2896]

Comanche outcrops display TIR spectral features of mixed Mg/Fe carbonates probably from evaporative precipitation of fluids that soaked Algonquin-like rocks.

Farrand W. H. Johnson J. R. Bell J. F. III Mittlefehldt D. W. **POSTER LOCATION #306**

[VNIR Multispectral Observations of Rocks at Spirit of St. Louis Crater and Marathon Valley on the Rim of Endeavour Crater Made by the Opportunity Rover Pancam](#) [#1983]

Multispectral observations by the Opportunity Pancam at Spirit of St. Louis and Marathon Valley indicate evidence of aqueous alteration at Endeavour Crater.

Carter J. Gondet B. Langevin Y. **POSTER LOCATION #307**

[MSL Homing in on a Large Smectite Clay Deposit: An Orbital Perspective](#) [#1899]

Orbital detections of smectite clays in close proximity to MSL offer near-term perspectives that would improve both in situ analyses and orbital remote sensing.

Johnson J. R. Cloutis E. Fraeman A. A.

Ehlmann B. L. Wiens R. C. et al.

POSTER LOCATION #308

[Chemcam Passive Reflectance Spectroscopy of Recent Drill Tailings, Hematite-Bearing Rocks, and Dune Sands](#) [#1155]

ChemCam reflectance spectra (400–840 nm) documented recent drill tailings, hematite-like features in outcrops, and olivine-bearing sands in the Bagnold Dunes.

Le Deit L. Mangold N. Forni O. Cousin A. Lasue J. et al. **POSTER LOCATION #309**

[The Potassic Sedimentary Rocks in Gale Crater, Mars as Seen by ChemCam Onboard Curiosity](#) [#1163]

We present a synthesis of the chemical composition of the potassium-rich rocks at Cooperstown and Kimberley according to their stratigraphic unit and facies.

Gasda P. J. Delapp D. M. McInroy R. E.

Wiens R. C. Bridges J. C. et al.

POSTER LOCATION #310

[Identification of Fresh Feldspars in Gale Crater Using ChemCam](#) [#1604]

Identification of feldspar grains in float rocks and conglomerates in Gale Crater, Mars ChemCam dataset supported by modeling and experimental LIBS studies.

Bultel B. Quantin C. Andreani M. Klein F.

POSTER LOCATION #311

[Storage of Water and CO₂ in the Martian Crust by Serpentinization and Carbonation](#) [#2384]

We present and quantify a mechanism to store water and CO₂ in the martian crust.

Peters G. H. Anderson R. C. Abbey W. Beegle L. Carey E. M. et al.

POSTER LOCATION #312

[Relative Strengths of Rocks Drilled at Mars' Gale Crater](#) [#1640]

The Sample Acquisition/Sample Preparation and Handling (SA/SPaH) system aboard Curiosity rover may be used to determine the relative strength of rocks.