

Tuesday, March 22, 2016

[T301]

POSTER SESSION I: PLUTO:

NEW HORIZONS RESULTS FROM ATMOSPHERES TO ICES

6:00 p.m. Town Center Exhibit Area

Berry K. L. Sides S. C. Edmundson K. L. Sucharski T. L. Titus T. N. **POSTER LOCATION #1**
[Support for New Horizons Instruments Within ISIS3](#) [#2526]

A description of new extensions to USGS Astrogeology's Imaging Software for Imagers and Spectrometers (ISIS) developed to support the New Horizons mission.

Lisse C. M. McNutt R. L. Bagenal F. Stern S. A. Cravens T. E. et al. **POSTER LOCATION #2**
[The Puzzling Detection of Pluto in the X-Ray by Chandra](#) [#2449]

We used Chandra to detect Pluto from 0.3-0.6 keV at SNR > 5.5. The 3.7e-5 cps X-ray count rate is very high vs. CXE and solar X-ray scattering production models.

Hoey W. A. Yeoh S. K. Trafton L. M. Goldstein D. B. Varghese P. L. **POSTER LOCATION #3**
[Rarefied Gas Dynamic Simulation of Transfer and Escape in the Pluto-Charon System with the DSMC Method](#) [#3031]

High-resolution 3-D simulations of the atmospheric region above Pluto's exobase performed with Direct Simulation Monte Carlo techniques.

Porter S. B. Showalter M. R. Weaver H. A. Spencer J. R. Binzel R. P. et al. **POSTER LOCATION #4**
[Shapes and Poles of the Small Satellites of Pluto](#) [#2402]

Styx, Nix, Kerberos, and Hydra / Lumpy and sideways / Spin rapidly.

Robbins S. J. Singer K. N. Bray V. J. Schenk P. McKinnon W. B. et al. **POSTER LOCATION #5**
[A Consensus Crater Catalog of Pluto, Charon, and Nix](#) [#1756]

Pluto, Charon, Nix: / Lots of craters. Let me count / Them all! One ... two ... three ...

Zangari A. M. Singer K. N. Beyer R. A. Schenk P. M. Moore J. M. et al. **POSTER LOCATION #6**
[Have Stellar Occultations Probed Charon's Chasmata?](#) [#1535]

Did New Horizons / see what occultations caught / from the ground on Earth?

White O. L. Stern S. A. Weaver H. A. Olkin C. B. Ennico K. et al. **POSTER LOCATION #7**
[Geomorphological Mapping of the Encounter Hemisphere on Pluto](#) [#2479]

Geomorphological mapping of Pluto, which commenced in the Sputnik Planum region, is extended to the eastern and western extremities of the encounter hemisphere.

Singer K. N. White O. L. Schenk P. M. Moore J. M. McKinnon W. B. et al. **POSTER LOCATION #8**
[Pluto's Putative Cryovolcanic Constructs](#) [#2276]

New Horizons imaged two large mounds with deep central depressions that may represent a unique form of cryovolcanism.

Mount C. P. Desch S. J. **POSTER LOCATION #9**
[Thermal Modeling of Cryovolcanic Vents on Charon: Ascent vs. Freezing Timescales](#) [#2682]

We created a numerical thermal model to test the upper limit radius for a cryovolcanic conduit to completely freeze on a Charon-like body.

Ahrens C. J. McMahon Z. M. Chevrier V. F. Elwood Madden M. E. **POSTER LOCATION #10**
[Icy Composition Measurements in Simulated Pluto Conditions](#) [#1469]

The objective of our Pluto simulation cryo-chamber will provide spectral signatures of mixed gases-ices and hydrates.

Buie M. W. Stern S. A. Young L. A. Olkin C. B. Weaver H. A. et al. **POSTER LOCATION #11**
[Photometric Properties of Pluto](#) [#2927]

We provide an investigation of the surface albedo units on Pluto after geometric variations are removed. Global Hapke parameters are provided as well.

Grundy W. M. Binzel R. P. Cook J. C.
Cruikshank D. P. Dalle Ore C. M. et al. **POSTER LOCATION #12**
[Highest Spatial Resolution New Horizons LEISA Spectral-Imaging Scan of Pluto](#) [#2284]

We present results from the highest spatial resolution infrared spectral mapping of Pluto by New Horizons.

Cruikshank D. P. Clemett S. J. Grundy W. M.
Stern S. A. Olkin C. B. et al. **POSTER LOCATION #13**
[Pluto and Charon: The Non-Ice Surface Component](#) [#1700]

The non-ice component of Pluto's surface appears to be a colored tholin, which can be synthesized in the lab by radiolysis of a mix of CH₄, N₂, and CO ices.

Ennico K. Parker A. Howett C. A. J. Olkin C. B. Spencer J. R. et al. **POSTER LOCATION #14**
[Hemispherical Pluto and Charon Color Composition from New Horizons](#) [#1775]

New Horizons shows Pluto's encounter hemisphere coloring trends continue on far side. Charon (excluding red pole) remains spectrally neutral at lower latitudes.

Bierson C. J. Nimmo F. McKinnon W. B. **POSTER LOCATION #15**
[Testing for a Compositional Difference Between Pluto and Charon](#) [#2176]

We test if the observed density contrast between Pluto and Charon can be explained by differences in the porosity structure alone.

Hanley J. Stufflebeam T. Grundy W. Tegler S. Dillingham R. et al. **POSTER LOCATION #16**
[A Band for Detecting Carbon Monoxide Mixed with N₂](#) [#2438]

Carbon Monoxide / Can we detect on Triton / Mixed with Nitrogen?