Tuesday, March 22, 2016 [T302]
POSTER SESSION I: CERES UNVEILED: COMPLETELY NAKED
6:00 p.m. Town Center Exhibit Area

Williams D. A. Buczkowski D. L. Mest S. C.
Scully J. E. C. Jaumann R. et al. ***POSTER LOCATION #17***
Geologic Mapping Campaign for Ceres from NASA Dawn Mission **[#1515]**
In this presentation we discuss the geologic mapping campaign for Ceres being done as part of NASA's Dawn mission.

Ruesch O. McFadden L. A. Hiesinger H. Scully T. Kneissl T. et al. ***POSTER LOCATION #18***
Geologic Mapping of the Ac-H-1 Quadrangle of Ceres from NASA's Dawn Mission **[#2050]**
We present the geologic map of the north pole area of Ceres.

Pasckert J. H. Hiesinger H. Williams D. A.
Crown D. A. Mest S. C. et al. ***POSTER LOCATION #19***
Geologic Mapping of the Ac-H-2 Coniraya Quadrangle of Ceres from NASA's Dawn Mission **[#1450]**
We report on our geologic mapping results for the Coniraya Quadrangle at Ceres based on Dawn's Framing Camera mosaics from the High Altitude Mapping Orbit.

Kneissl T. Schmedemann N. Neesemann A.
Williams D. A. Crown D. A. et al. ***POSTER LOCATION #20***
Geologic Mapping of the Ac-H-3 Dantu Quadrangle of Ceres from NASA's Dawn Mission **[#1967]**
We discuss the results of the Dawn mission-based geologic mapping of the quadrangle Ac-H-3 Dantu on (1) Ceres.

Scully J. E. C. Raymond C. A. Williams D. A.
Buczkowski D. L. Mest S. C. et al. ***POSTER LOCATION #21***
Geologic Mapping of the Ac-H-4 Ezinu Quadrangle of Ceres from NASA's Dawn Mission **[#1627]**
We map a region of Ceres from 21–66 °N, 180–270 °E. Key geologic features are linear features; Occator, Ezinu, Datan, and Geshtin craters; and Erntedank Planum.

Hughson K. H. G. Russell C. T. Williams D. A.
Buczkowski D. L. Mest S. C. et al. ***POSTER LOCATION #22***
Geologic Mapping of the Ac-H-5 Fejokoo Quadrangle of Ceres from NASA's Dawn Mission **[#1556]**
We present the Low Altitude Mapping Orbit-based geologic map of Ceres' Ac-H-5 Fejokoo quadrangle (21–66 °N and 270–360 °E) and discuss its geologic evolution.

Krohn K. Jaumann R. Tosi F. Nass A. Otto K. A. et al. ***POSTER LOCATION #23***
Geologic Mapping of the Ac-H-6 Quadrangle of Ceres from NASA's Dawn Mission: Changes in Composition **[#1977]**
In this abstract we discuss the geologic evolution of the Ac-H-6 Haulani Quadrangle.

Williams D. A. Mest S. C. Kneissl T. Pasckert J. H. Hiesinger H. et al. ***POSTER LOCATION #24***
Geologic Mapping of the Ac-H-7 Kerwan Quadrangle of Ceres from NASA Dawn Mission **[#1522]**
In this presentation we present a geologic map of the Ac-H-7 Kerwan quadrangle of dwarf planet Ceres and discuss the geologic evolution of this region.

Frigeri A. De Sanctis M. C. Ammannito E.
Carrozzo G. Williams D. et al. ***POSTER LOCATION #25***
Geologic Mapping of the AC-H-08 Nawish Quadrangle of Ceres from NASA's Dawn Mission **[#2271]**
Herein we present geologic mapping of the Ac-H-08 Nawish quadrangle of Ceres, based on the first scientific orbit data from NASA's Dawn mission.

Buczkowski D. L. Williams D. A. Scully J. E. C.
Mest S. C. Crown D. A. et al. ***POSTER LOCATION #26***
Geologic Mapping of the Ac-H-9 Occator Quadrangle of Ceres from NASA's Dawn Mission **[#1255]**
We present the geology of the Ac-H-9 Occator quadrangle of Ceres, located between 22°S–22°N and 216–288°E.

Platz T. Nathues A. Sizemore H. G. Ruesch O. Hoffmann M. et al. ***POSTER LOCATION #27***
Geological Mapping of the Ac-H-10 Rongo and Ac-H-15 Zadeni quadrangles of Ceres from NASA's Dawn Mission **[#2595]**
We present geological maps of Ceres' quadrangles Rongo and Zadeni and highlight the geological evolution of Ceres inferred from these regions.

Schulzeck F. Krohn K. Jaumann R.
Williams D. A. Buczkowski D. L. et al. ***POSTER LOCATION #28***
Geologic Mapping of the Ac-H-11 Sintana Quadrangle of Ceres from NASA's Dawn Mission **[#1955]**
We will present an updated geologic map and interpretation of the Ac-H-11 Sintana quadrangle of Ceres with new data from the Dawn spacecraft.

Mest S. C. Williams D. A. Crown D. A.
Yingst R. A. Buczkowski D. L. et al. ***POSTER LOCATION #29***
Geologic Mapping of the Ac-H-12 Toharu Quadrangle of Ceres from NASA's Dawn Mission **[#1561]**
Geologic mapping of the Toharu Quadrangle of Ceres using Dawn FC image data reveals the surface is dominated by smooth and rugged terrains, and impact craters.

Sizemore H. G. Williams D. A. Platz T. Mest S. C. Yingst R. A. et al. ***POSTER LOCATION #30***
Geologic Mapping of the Ac-H-13 Urvara Quadrangle of Ceres from NASA's Dawn Mission **[#1599]**
The Dawn Science Team is conducting a geologic mapping campaign for Ceres. In this abstract we discuss the geologic evolution of the Ac-H13 Urvara Quadrangle.

Crown D. A. Yingst R. A. Mest S. C. Platz T. Sizemore H. G. et al. ***POSTER LOCATION #31***
Geologic Mapping of the Ac-H-14 Yalode Quadrangle of Ceres from NASA's Dawn Mission **[#1602]**
The surface geology and geologic evolution of the Yalode Quadrangle of Ceres are discussed based on geologic mapping using Dawn Mission data.

Roatsch Th. Kersten E. Matz K.-D. Preusker F. Scholten F. et al. ***POSTER LOCATION #32***
High Resolution Ceres HAMO Atlas Derived from Dawn FC Images **[#1436]**
The Ceres HAMO atlas was produced in a scale of 1:750,000 and consists of 15 tiles. The proposed nomenclature was approved by IAU and applied to the atlas.

Yingst R. A. Crown D. A. Sizemore H. G.
Mest S. C. Berman D. C. et al. ***POSTER LOCATION #33***
Urvara and Yalode Basins: Stratigraphic Markers in the Geologic Record of Ceres **[#1787]**
Basins on Ceres / Markers of stratigraphy / Or merely old holes?

Wagner R. J. Schmedemann N. Stephan K. Jaumann R. Kneissl T. et al. ***POSTER LOCATION #34***
Stratigraphy of (1) Ceres from Geologic and Topographic Mapping and Crater Counts Using Images of the Dawn FC2 Camera **[#2156]**
In this paper we use image and topographic data of the Dawn FC2 camera from dwarf planet (1) Ceres to map geologic units and to carry out crater counts.

Neesemann A. Kneissl T. Schmedemann N.
Walter S. H. G. Michael G. G. et al. ***POSTER LOCATION #35***
Size-Frequency Distributions of km to Sub-km Sized Impact Craters on Ceres **[#2936]**
We investigate size-frequency distributions of km to sub-km sized impact craters on Ceres and exemplify prospects for absolute model age estimates.

Preusker F. Scholten F. Matz K.-D. Elgner S. Jaumann R. et al. ***POSTER LOCATION #36***
Dawn at Ceres — Shape Model and Rotational State **[#1954]**
We have used several thousand images acquired with the Dawn FC to reconstruct the surface and to determine the rotational state of dwarf planet Ceres.

Travis B. J. Feldman W. C. ***POSTER LOCATION #37***
Ceres Model Suggests Large Scale Topography May Reflect Early Time Internal Convection **[#2762]**
Numerical modeling of internal dynamics in Ceres suggests that large scale hydrothermal convection occurred and could sustain large scale surface topography.

Neumann W. O. Breuer D. Spohn T. ***POSTER LOCATION #38***
Differentiation of Ceres and Her Present-Day Thermal State **[#2307]**
We calculate differentiation of Ceres, assess how water separation and convection influence the temperature, and draw conclusions about the presence of liquids.

King S. D. Bland M. T. Fu R. Park R. Castillo-Rogez J. et al. ***POSTER LOCATION #39***
3D Spherical Convection Modeling of the Interior of Ceres **[#1699]**
Inner turmoil grows / beautiful symmetry gone / heat escapes to space.

Jordan J. S. Hesse M. A. ***POSTER LOCATION #40***
Analogue Benchmark for Simplified Planetary Differentiation Models **[#1167]**
Analogue ice-sand slurry column experiments are conducted to benchmark development of numeric planetary accretion models.

Hendrix A. R. Vilas F. Li J.-Y. ***POSTER LOCATION #41***
Ceres' Ultraviolet Signatures and Compositional Clues **[#2844]**
We present results from recent HST/STIS UV measurements of Ceres.

Zambon F. De Sanctis M. C. Tosi F. Longobardo A. Ciarniello M. et al. ***POSTER LOCATION #42***
Identification and Distribution of the Different Spectral Units on Ceres. Results from Survey and HAMO Phase **[#2049]**
We analyzed data from the VIR spectrometer onboard Dawn to define different spectral units on Ceres. We search for a link between spectral and geological units.

Palomba E. Longobardo A. De Sanctis M. C.
Ammannito E. Carrozzo F. G. et al. ***POSTER LOCATION #43***
Compositional Characteristics of Ceres Bright Spots **[#2198]**
In this work a catalogue of the Bright Spots present on the Ceres surface is built and a thorough spectral and compositional analysis is performed.

Zolensky M. E. Chan Q. H. S. Gounelle M. Fries M. ***POSTER LOCATION #44***
Bright Stuff on Ceres = Sulfates and Carbonates on CI Chondrites **[#2174]**
We contend that observations of chondritic materials in the lab shed light on the nature of the bright spots on Ceres.

De Angelis S. Manzari P. De Sanctis M. C. Ammannito E. Di Iorio T. ***POSTER LOCATION #45***
VIS-IR Spectral Trends in Brucite — Clay Minerals — Carbonate Mixtures **[#1222]**
Brucite-carbonate-clay mixtures have been analyzed using VIS-IR reflectance spectroscopy. Diagnostic band parameters have been analyzed.

Bu C. Rodriguez Lopez G. Dukes C. A. McFadden L. A. Li J.-Y. et al. ***POSTER LOCATION #46***
Optical Effects Due to Hydration and Dehydration of Salts: Laboratory Measurements with Applications to Ceres **[#3061]**
Laboratory experiments to measure effects of hydration/dehydration on optical spectra for several salts to compare with observations of Ceres' bright spots.

Longobardo A. Palomba E. De Sanctis M. C.
Ciarniello M. Tosi F. et al. ***POSTER LOCATION #47***
Average Photometric Properties of Ceres Spectral Parameters **[#2239]**
The average photometric behavior of spectral parameters that describe the Ceres surface is obtained by analyzing VIR data at low spatial resolution.

Hoffmann M. Nathues A. Platz T. Schaefer M. Thangjam G. S. et al. ***POSTER LOCATION #48***
The Sub-Surface Distribution of Volatiles on Ceres **[#1980]**
An inventory and description of volatile-rich exposures at impact craters of Ceres is presented, based on diagnostic visual and NIR color ratios from Dawn FC.

von der Gathen I. Jaumann R. Krohn K. Buczkowski D. L. Elgner S. et al. ***POSTER LOCATION #49***
Deformational Features on Ceres' Surface Compared to Other Planetary Bodies **[#1961]**
Deformational features, especially fractures, have been studied on Ceres' surface and have been compared to those on icy satellites and the Moon.

Sizemore H. G. Platz T. Schorghofer N. Mest S. C. Crown D. A. et al. ***POSTER LOCATION #50***
Preliminary Constraints on the Volumetric Concentration of Shallow Ground Ice on Ceres from Geomorphology **[#1628]**
We describe preliminary global searches for pits, scarps, and deflation features associated with sublimation or more energetic gas-phase volatile loss on Ceres.

Yamashita N. Prettyman T. H. ***POSTER LOCATION #51***
Data Processing Pipeline for Dawn's Gamma Ray and Neutron Detector at Ceres **[#2968]**
We present data processing steps required for accurate determination of elemental concentrations using Dawn's Gamma Ray and Neutron Detector at Ceres.