

Tuesday, March 17, 2015
POSTER SESSION I: ROSETTA
 6:00 p.m. Town Center Exhibit Area

[T631]

Luspay-Kuti A. Haessig M. Fuselier S. A. Balsiger H. Calmonte U. et al. **POSTER LOCATION #405**
[Subsurface Temperature of Comet 67P/C-G from ROSINA/DFMS? \[#2947\]](#)

Based on the time variation of coma volatiles, the shallow subsurface nucleus temperature in the winter hemisphere of 67P may be estimated.

Noviello J. L. Asphaug E. **POSTER LOCATION #406**
[Block Mapping and Analysis on Cometary Nuclei: Identifying and Quantifying Surface Change Due to Outgassing \[#2873\]](#)

We present a potential method for analyzing images taken by the OSIRIS camera on Rosetta that focus on obtaining information about the seismology of the comet.

von Allmen P. Lee S. Hofstadter M. Biver N. Bockelee-Morvan D. et al. **POSTER LOCATION #407**
[Spatial and Temporal Variations of the Near-Surface Thermal Properties of 67P/Churyumov-Gerasimenko Obtained from Continuum Observations with Microwave Instrument on the Rosetta Orbiter \(MIRO\) \[#2798\]](#)

Spatial inhomogeneities of near-surface thermal properties are derived from microwave observations and numerical modeling.

Lee S. von Allmen P. Hofstadter M. Beaudin G. Biver N. et al. **POSTER LOCATION #408**
[Local and Diurnal Variation of Water Outgassing on Comet 67P/Churyumov-Gerasimenko Nucleus Observed from Rosetta/MIRO \[#2716\]](#)

Rosetta/MIRO has observed the coma of Comet 67P, which shows a strong variability of outgassing activity with time of day and with location on nucleus.

Poulet F. Bibring J.-P. Langevin Y. Pilorget C. Carter J. et al. **POSTER LOCATION #409**
[Local Sculptures at PHILAE Landing site as Seen by PHILAE/CIVA: Clues to Primordial Accretion Process? \[#2450\]](#)

From the analysis of CIVA images, we investigate the different physical processes that may have sculpted the local landforms observed at the landing site.

ElShafie A. Heggy E. **POSTER LOCATION #410**
[How Hard is the Surface of Comet Nucleus? A Case Study for Comet 67P/Churyumov-Gerasimenko \[#2444\]](#)

We try to constrain the surface hardness of C67 from the multiple observed bounces of Philae lander during the landing phase.

A'Hearn M. F. Agarwal J. Bertaux J.-L.
 Bodewits D. Cremonese G. et al. **POSTER LOCATION #411**
[Imaging the Gas from 67P/Churyumov-Gerasimenko \[#2347\]](#)

We will present the first images of the gas around 67P/C-G.

Cravens T. E. Madanian H. Rahmati A.
 Golledge B. Robertson I. P. et al. **POSTER LOCATION #412**
[Electrons Near the Nucleus of Comet 67P/CG at 3 AU: Model Comparisons with Rosetta Data \[#2199\]](#)

Electrons in the cometary coma near the nucleus of Comet 67P/Churyumov-Gerasimenko measured by the Rosetta IES (Ion and Electron Sensor) are discussed.

Tosi F. Capria M. T. Capaccioni F. Filacchione G. Erard S. et al. **POSTER LOCATION #413**
[Thermal Maps and Properties of Comet 67P as Derived from Rosetta/VIRTIS Data \[#2156\]](#)

We present temperature maps and properties of Comet 67P as observed by Rosetta/VIRTIS under different illumination conditions and different local solar times.

Ciarniello M. Capaccioni F. Filacchione G. Erard S. Leyrat C. et al. **POSTER LOCATION #414**
[Comet 67P/CG as Seen by VIRTIS-M Onboard Rosetta: Photometric Correction](#) [#2114]
 We present a photometric correction for hyperspectral data of Comet 67P/CG acquired by VIRTIS-M onboard Rosetta.

Quirico E. Moroz L. V. Beck P. Schmitt B. Arnold G. et al. **POSTER LOCATION #415**
[Composition of Comet 67P/Churyumov-Gerasimenko Refractory Crust as Inferred from VIRTIS-M/Rosetta Spectro-Imager](#) [#2092]
 We address the interpretation of VIRTIS spectra of the refractory surface of Comet 67P/CG.

Vincent J.-B. Bodewits D. Besse S. Sierks H. A'Hearn M. et al. **POSTER LOCATION #416**
[A Glimpse into the Underworld: Active Pits on 67P](#) [#2041]
 Circular pits are detected on 67P: produced like sinkholes, they provide a glimpse into the inner nucleus and trace the evolutionary history of the comet.

De Sanctis M. C. Capaccioni F. Filacchione G.
 Ciarniello M. Raponi A. et al. **POSTER LOCATION #417**
[Detection of Transient Water Ice on Comet 67P/Churyumov-Gerasimenko](#) [#2021]
 VIRTIS observes the cyclic replenishment of water ice, due to the illumination changes, on the comet's surface.

El-Maarry M. R. Thomas N. Marchi S. Massironi M. OSIRIS Team **POSTER LOCATION #418**
[Surface Fractures on Comet 67P/Churyumov-Gerasimenko](#) [#1836]
 We present a summary of the various fractures that have been observed on the surface of Comet 67P using OSIRIS images and discuss their mode of formation.

El-Maarry M. R. Thomas N. Giacomini L. Massironi M. Pajola M. et al. **POSTER LOCATION #419**
[Regional Geomorphology of Comet 67P/Churyumov-Gerasimenko Using the OSIRIS Camera Onboard Rosetta](#) [#1829]
 We present an overview of the regional morphology of Comet 67P using OSIRIS images and describe the various terrains and units as well as notable features.

Filacchione G. Capaccioni F. Tosi F. Erard S. De Sanctis M. C. et al. **POSTER LOCATION #420**
[Compositional Maps of 67P/CG Nucleus by Rosetta/VIRTIS-M](#) [#1756]
 Compositional maps of 67P/Churyumov-Gerasimenko comet nucleus are derived from VIRTIS-M VIS-IR hyperspectral data acquired during August–September 2014.

Thomas N. Davidsson B. El-Maarry M. R.
 Gracia Berna A. Hviid S. F. et al. **POSTER LOCATION #421**
[Evidence and Modelling of Dust Transport on the Nucleus of Comet 67P/Churyumov-Gerasimenko](#) [#1712]
 Rosetta/OSIRIS imaging shows evidence of dust transport across the surface of the nucleus. The presentation will show evidence and models of the phenomena.

Marchi S. Rickman H. Massironi M. Marzari F. El-Maari M. R. et al. **POSTER LOCATION #422**
[The Geomorphology of Comet 67P: Implications for the Past Collisional Evolution and Formation](#) [#1532]
 OSIRIS camera onboard Rosetta showed Comet 67P complex surface, characterized by fractures and layering. We discuss their implications for 67P formation.

Basilevsky A. T. Mall U. Keller H. U. Skorov Yu. V. **POSTER LOCATION #423**
[NavCam Observations of the Hathor Cliff and Hapi Area on the Nucleus of Comet 67p/Churyumov-Gerasimenko](#) [#1152]
 Images of comet 67P nucleus taken by Rosetta NavCam show several types of downslope material movement and the meters to tens of meters inhomogeneity of nucleus material.

Ulamec S. Biele J. Gaudon P. Salatti M. Maibaum M. et al. **POSTER LOCATION #424**
[Philaë: First Landing on a Comet](#) [#1121]

The paper will give a summary of the actual landing and operations of the Rosetta Lander, Philae, on comet 67P/Churyumov-Gerasimenko.

Taylor M. G. G. T. Altobelli N. Alexander C. Jansen F. Berthelemy M. et al. **POSTER LOCATION #425**
[Rosetta Mission Status Update](#) [#1985]

Overview of the Rosetta mission, past, present, and future.

Rahmati A. Cravens T. E. Madanian H. Burch J. L. Goldstein R. et al. **POSTER LOCATION #426**
[Pickup Cometary Ions at Comet 67P/C-G: Comparison of Test Particle Models with Rosetta IES Data](#) [#2519]

The flux and density of the heavy pickup cometary ions are calculated with a test particle code and compared with IES data.

Plettemeier D. Statz C. Abraham J. Ciarletti V. Hahnel R. et al. **POSTER LOCATION #427**
[Insights Gained from CONSERT Measurements During Philae's Descent onto 67P/C-G's Surface](#) [#2388]

The scientific objective of the CONSERT instrument onboard Rosetta is the dielectric characterization of the nucleus of Comet 67P/Churyumov-Gerasimenko.

Stenzel O. J. Varmuza K. Engrand C. Ferriere L. Brandstätter F. et al. **POSTER LOCATION #428**
[Using Meteorite Samples as a Test for Correlation Based Analysis of SIMS Data from Cometary Grains](#) [#2200]

Correlation analysis is used to examine time of flight SIMS spectra from meteorite samples for comparison with Rosetta COSIMA data.

Merouane S. Hilchenbach M. COSIMA Team **POSTER LOCATION #429**
[Exploring Alteration of Grains in Cometary Comae Induced by Electrical Charging](#) [#2106]

We aim to characterize the alteration of grains in the coma of 67P/CG during their way from the comet nucleus to their collection by the Rosetta-COSIMA instrument.

Brouet Y. Levasseur-Regourd A. C. Encrenaz P. Sabouroux P. Heggy E. et al. **POSTER LOCATION #430**
[Broadband Permittivity Measurements on Porous Planetary Soil Simulants, in Relation with the Rosetta Mission](#) [#1809]

Permittivity measurements have been made between 50 MHz and 190 GHz on porous samples in order to support microwave experiments involved in the Rosetta mission.

Combi M. R. Fougere N. Tenishev V. Bieler A. Altwegg K. et al. **POSTER LOCATION #431**
[The Distribution of Gases in the Coma of Comet 67P/Churyumov-Gerasimenko from Rosetta Measurements](#) [#1714]

We study Rosetta measurements of the highly tenuous gas coma of 67P/Churyumov-Gerasimenko using a 3D fully kinetic DSMC Adaptive Mesh Particle Simulator model.