

Tuesday, March 11, 2008
POSTER SESSION I: MARS POLAR (AND VAST)
6:30 p.m. Fitness Center

Schmidt F. Douté S. Schmitt B. Vincendon M. Langevin Y. Bibring J.-P. OMEGA Team
Symmetric Accumulation of the Seasonal South Polar Cap of Mars [#1812]
 This study of the South Seasonal Polar Cap of Mars shows with a radiative balance model that the net accumulation is symmetrical around the geographic south pole.

Douté S. Schmidt F. Schmitt B. Langevin Y. Vincendon M. Bibring J.-P. OMEGA Team
Physical Characterization of the South Seasonal Cap of Mars During Recession from OMEGA Observations [#1736]
 We analyze with statistical techniques and physical models a collection of OMEGA spectral images covering the South Seasonal Polar Cap during recession. The principal goal is to classify the cap into spectral units which physical and structural properties are evaluated.

Ivanov A. B. THEMIS Science Team
Three Consecutive Years Seasonal Cap Retreat Observations in THEMIS Investigation [#2187]
 This work presents results of Mars seasonal cap retreat observations performed over three martian years using the THEMIS instrument. We will put these data in context of other observations as well as analyze some details of CO₂ sublimation using OMEGA and CRISM data.

Reiss D. Hoffmann H. Scholten F. Hiesinger H. Matz K.-D. Neukum G.
Summer Observations of the Martian North Polar Residual Cap by the High Resolution Stereo Camera (HRSC) in 2004/2005 and 2006 [#1858]
 We tracked the seasonal and interannual albedo changes of the Martian North Polar Residual (NRC) cap using the Lambert albedo derived from High Resolution Stereo Camera (HRSC) image data of the summer seasons 2004/2005 (LS ~120°~160°) and 2006 (LS ~90°~150°).

Green R. O. Murchie S. L. CRISM Team
Water Ice Spectral Signatures and Grain Size Estimates in the Northern Polar Layered Deposits from MRO CRISM Measurements [#2322]
 The Compact Reconnaissance Infrared Spectrometer for Mars (CRISM) is carried onboard the NASA Mars Reconnaissance Orbiter (MRO). In this work, a portion of the northern polar region is examined with CRISM spectral measurements at full spatial resolution.

Heggy E. Clifford S. M. Cosmidis J. Humeaux A. Boisson J. Morris R. V.
Goelectrical Model of the Martian North Polar Layered Deposits [#2471]
 We present a parametric dielectric map of the NPLD to constrain the estimation of the dust content and type in the ice host material.

Zeng Z. Putzig N. E. Xie H. Birnbaum S. J. Ackely S. F. Liu L.
Evidence of Fractures in NPLD and Their Significance to the Formation of Martian Polar Spiral Troughs [#2179]
 Evidence from fractures and fracture-controlled troughs in the NPLD based on interpretation of MOC images and radar sounding data reinforce the interpretation that spiral troughs on the martian polar ice caps are controlled by vortex fractures.

Seelos K. D. Seelos F. P. Titus T. N. Murchie S. L. CRISM Team
CRISM Observations of Persistent Water Ice Deposits in the Northern Plains of Mars [#1885]
 CRISM multispectral coverage of the north polar region is used to locate the southernmost extent of late summer water ice. Outliers are common to as far south as 67°.

Langevin Y. Vincendon M. Poulet F. Bibring J.-P. Gondet B. Douté S. Encrenaz T.
Weak Signatures of Water Ice at High Northern Latitudes: Aerosols, Frosts and Ice Outcrops [#2134]
From OMEGA observations, it is possible to identify outcrops of perennial ice contaminated by dust by discriminating from other possible origins of weak water ice absorption features at high northern latitudes.

Levy J. S. Head J. W. III Marchant D. R.
Origin and Arrangement of Boulders on the Martian Northern Plains: Assessment of Emplacement and Modification Environments [#1172]
We analyze HiRISE images of the martian northern plains to evaluate hypotheses for the origin and arrangement of boulder piles and crater-oriented boulder “halos” in Vastitas Borealis. Dry, cold-desert, and periglacial processes are evaluated.

Skinner J. A. Jr. Tanaka K. L. Fergason R.
Evidence for and Implications of Liquefaction in the Vastitas Borealis Marginal Unit in Southern Utopia Planitia, Mars [#2418]
We present geomorphological and thermophysical observations of the Vastitas Borealis marginal unit in southern Utopia Planitia. Based on these observations, we interpret that the currently-mapped margin formed through seismically-induced liquefaction.