

Tuesday, March 8, 2011
POSTER SESSION I: SEASONAL ICE PROCESSES
6:00 p.m. Town Center Exhibit Area

Milkovich S. M. Byrne S. Russell P. S. Herkenhoff K. E.

[*Variations in Surface Texture of the North Polar Residual Cap of Mars*](#) [#1816]

Using two-dimensional FFT analysis, we characterize and map variations in the surface texture of the north polar residual ice cap to investigate the factors (distance from the pole, wind direction, and strength, etc.) at work in resurfacing the deposit.

Milkovich S. M. Plaut J. J.

[*Preliminary Examination of Layer Texture Within the South Polar Layered Deposits, Mars*](#) [#1833]

Variations in surface texture of layers within the south polar layered deposits may be a useful proxy for layer composition. The texture-based stratigraphy of the Promethei Lingula region will be compared with radar profiles of the area.

Hansen C. J. McEwen A. Mellon M. Portyankina G. Thomas N.

[*Year 3 of HiRISE Observations of Southern Spring on Mars*](#) [#1651]

Year 3 of HiRISE images of seasonal CO₂ sublimation show substantial year-to-year variability in the onset of gas jets evidenced by fan-shaped deposits of fine material on top of the seasonal layer of ice. The locations of the ruptures however are similar.

Mount C. Titus T. N.

[*Spatial and Temporal Density Analysis of the Mars Northern Seasonal Ice Cap*](#) [#1054]

Time-dependent density variations in CO₂ ices may indicate the depositional processes responsible for the formation of the seasonal polar cap.

Mellon M. T. Hansen C. J. Cull S. C. Arvidson R. E. Searls M. L.

[*Martian Seasonal CO₂ Frost Indicating Decameter-Scale Variability in Buried Water Ice*](#) [#1900]

Understanding the current distribution of ground ice is a fundamental part of deciphering how this ice was emplaced. We examine the seasonal defrosting of CO₂ observed by HiRISE as an indicator of decameter-scale ground-ice heterogeneity.

Horvath A. Bérczi Sz. Kereszturi A. Sik A. Szathmáry E.

[*Observation of a Transitional Reversal During the Seasonal Defrosting of DDS at the Southern Polar Region of Mars*](#) [#1688]

We observed a transitional reversal in the advancing dark dune spot (DDS) defrosting process in spring. After this interruption the defrosting process continued till the summer total defrosting of the surface in the Inca City Region of Mars.