

Abstract Submitted
for the APR13 Meeting of
The American Physical Society

Lunar Reconnaissance Orbiter (LRO) Lyman Alpha Mapping Project (LAMP) Maps of the Permanently Shaded Regions (PSR) at the Lunar Poles PAUL ROJAS, St. Mary's University, San Antonio, Texas, KURT RETHERFORD, RANDALL GLADSTONE, Southwest Research Institute, San Antonio, Texas, ALAN STERN, ANTHONY EGAN, Southwest Research Institute, Boulder, Colorado, PAUL MILES, Southwest Research Institute, San Antonio, Texas, JOEL PARKER, DAVID KAUFMANN, Southwest Research Institute, Boulder, Colorado, DAVID HORVATH, THOMAS GREATHOUSE, MAARTEM VERSTEEG, Southwest Research Institute, San Antonio, Texas, ANDREW STEFFL, Southwest Research Institute, Boulder, Colorado, JOEY MUKHERJEE, MICHAEL DAVIS, DAVID SLATER¹, AMANDA BAYLESS, Southwest Research Institute, San Antonio, Texas, PAUL FELDMANN, John Hopkins University, Baltimore, Maryland, DANA HURLEY, John Hopkins University Applied Physics, Laurel, Maryland, WAYNE PRYOR, Central Arizona College, Coolidge, Arizona, AMANDA HENDRIX, Jet Propulsion Laboratory, California Institute of Technology, Pasadena, California — The Lyman Alpha Mapping Project (LAMP) instrument on-board LRO is a UV spectrograph covering the spectral range of 57-196 nm. We present Lyman-alpha and far-UV albedo maps of the north and south poles. These maps indicate that the coldest, permanently shadowed regions (PSR) in deep polar craters have significantly lower Lyman-alpha albedo than the surrounding regions, which is best explained by a high surface porosity there - possibly related to the accumulation of volatile frosts.

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Date submitted: 16 Jan 2013

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