Geophysical Research Abstracts,
Vol. 10, EGU2008-A-09145, 2008
SRef-ID: 1607-7962/gra/EGU2008-A-09145
EGU General Assembly 2008

Mg-rich mineralogy and K-spar west of Caloris Basin on Mercury's surface

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Mid-infrared spectral imaging from 8.2 to 12.7 micrometers of Mercury were obtained during daytime observations 7 – 11 April 2006 using Boston University's Mid-InfraRed Spectrometer and Imager (MIRSI) at NASA's InfraRed Telescope Facility (IRTF) on Mauna Kea, Hawaii. Spectral unmixing results for north mid-latitude locations near $\sim$120 degrees E and $\sim$150 degrees E longitude indicate Mg-rich chemistry, K-spar (orthoclase or sanidine), and Ca- and Mg-rich garnet. However, one region is more mafic (primarily enstatite) than the other (primarily labradorite). Results from spectral deconvolution from several other longitudes and from northern and southern high latitudes will be presented. These results add to previous results that identified labradorite and pyroxene in plains adjacent to the crater Homer.