



Disk-Integrated Polarization of the Moon in the Ultraviolet from SOLSTICE

M. Snow, G. Holsclaw, and W. McClintock

LASP, University of Colorado, Boulder, CO, United States (snow@lasp.colorado.edu)

We have obtained the first disk-integrated measurement of the lunar polarization in at ultraviolet wavelengths using the SOLar-STellar Irradiance Comparison Experiment (SOLSTICE). SOLSTICE is an instrument onboard the Solar Radiation and Climate Experiment (SORCE) and made measurements of the lunar irradiance from 2006 through 2010. In "lunar" mode, SOLSTICE is a scanning-grating monochromator with a wavelength-dependent sensitivity to polarization ($\sim 60\%$ for wavelengths longer than 250 nm). The set of lunar observations from SOLSTICE sample the full range of phase angles (-170 to +170 degrees) at a variety of orientations. We will show comparisons to polarization measurements in the visible as both a function of wavelength and of phase angle, and we will discuss the scientific merit of our dataset for understanding the lunar surface.