

# Making Ultraviolet Spectro-Polarimetry Polarization Measurements with the MSFC Solar Ultraviolet Magnetograph Sounding Rocket

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This paper will describe the Marshall Space Flight Center's Solar Ultraviolet Magnetograph Investigation (SUMI) sounding rocket program. This paper will concentrate on SUMI's VUV optics, and discuss their spectral, spatial and polarization characteristics. While SUMI's first flight (7/30/2010) met all of its mission success criteria, there are several areas that will be improved for its second and third flights. This paper will emphasize the MgII linear polarization measurements and describe the changes that will be made to the sounding rocket and how those changes will improve the scientific data acquired by SUMI.

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