Preliminary Results of the MOSES II 2015 Flight

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Abstract

The Multi-Order Extreme Ultraviolet Spectrograph is a slitless spectrograph which aims to for simultaneous spatial-spectral imaging of the solar transition region. This is accomplished through a multilayer concave diffraction grating which produces three overlappograms for the spectral orders $m = 0, \pm 1$. Since the multilayer coating provides a narrow passband, the three images may be compared to determine doppler shifts and identify explosive events in the Solar Transition Region.

Here, we examine the preliminary results of MOSES II, the instrument's second flight which was launched on a sounding rocket from White Sands Missile Range, NM in August 2015. The instrument was partially damaged during the ascent, leading to incomplete data. However we present the preliminary results of observed doppler shifts of the Si XI line within an active region. This was achieved through ???Richardson-Lucy Deconvolution??? Put results here.