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Poster
High Cadence Solar Spectral Irradiance Modeling

Building on the empirical irradiance model of Coddington et al. (2025), we are investigating converting it from daily averages (i.e. climate) to 1-minute cadence (space weather). The essential inputs will be facular brightening from the Magnesium II index GOES-R/EXIS EUVS-C (McClintock et al. 2025), and a high cadence proxy for sunspot darkening. In this study, we are modeling the far ultraviolet spectrum which only depends on the facular brightening, so the sunspot darkening can be neglected.

Initial results show that during flare eruptions, the slope of the correlation between the FUV and MgII index changes from the daily-average slope.
Poster session day
Wednesday, April 29, 2026
Poster location
30
Meeting homepage
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