Solar EUV variability from FISM and SDO/EVE during solar minimum, active, and flaring time periods.

The Living With a Star (LWS) Focus Science Team has identified three periods of different solar activity levels for which they will be determining the Earth's Ionosphere and Thermosphere response. Not only will the team be comparing individual models (e.g. FLIP, TIMEGCM, GLOW) outcome driven by the various levels of solar activity, but the models themselves will also be compared. These models all rely on the input solar EUV (0.1-190 nm) irradiance to drive the variability. The Flare Irradiance Spectral Model (FISM) and the EUV Variability Experiment (EVE) onboard provide the Solar Dynamics Observatory (SDO) provide the most accurate quantification of these irradiances. Presented and discussed are how much the solar EUV irradiance changes during these three scenarios, both as a function of activity and wavelength.