

Irradiance Variations on Rotational Timescales: A Comparison Between *SORCE* Measurements and the *SATIRE* Model

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We compare the spectral irradiance variations observed with *SORCE/SIM* to the variations modeled using *SATIRE* for wavelengths spanning from 200 to 1600 nm during a number of solar rotations in 2004. The agreement between the measurements and the model is good at most wavelengths, in particular between 400 and 1300 nm, though the model fails below 220 nm as well as for some of the strong NUV lines.

The model allows us to disentangle the facular and spot contributions to the variability; this shows a shift from faculae-dominated variability in the NUV spot-dominated variability above approximately 400 nm.