Solar Spectral Irradiance Variations

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The magnitude and the phase of the solar irradiance variations are strongly wavelength dependent. Strongest changes occur in the UV range, which is of prime interest for climate studies. The variability is much weaker in the visible and infrared ranges, and in some intervals it is in anti-phase with the solar cycle and the TSI changes. The magnitude of the variation and the wavelengths at which anti-phase variability occurs are, however, quite different in models and in various sets of observations, so that the results are somewhat controversial. We will discuss the most recent results of modelling efforts and confront these with different observational data.