Near and Mid UV Spectral Irradiance Modeling  
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I use a model for solar irradiance to produce a spectral (mid-and-near UV) solar irradiance time series over the 1991-2001 interval. The model takes location, area and timing of sunspot emergence as observed by USAF and NOAA (from 1976 up to now) and simulates their fragmentation and erosion into smaller magnetic structures, like faculae. It is then possible to follow the magnetic structures evolution with time and to calculate their individual contribution to the irradiance. The spectral irradiance is calculated by summing contributions from sunspots, faculae and the quiet sun. First, the irradiance deficit of sunspots is assumed to be 0.6% in the considered wavelengths. Second, the quiet sun flux is taken from Kurucz's synthetic spectrum. Finally, the faculae contribution is calculated using the Solanki-Unruh method. With those three components (quiet sun, sunspots and faculae), we can construct a spectral irradiance time series for a given wavelength and compare it to observations. We use UARS data at $\lambda=185$nm, 210nm, 255nm, 300 nm and 380 nm. We expect that our model flux will be below the observations because our quiet sun contribution is completely free of magnetic field, whereas the real quiet sun still has some magnetic structure, like the network. We will use this difference to estimate the network contribution to the spectral irradiance variations at different wavelengths and at different cycle phases.