

**Solar spectral irradiance variations which depend on sunspots, faculae and quiet-regions areas**

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Sunspots, faculae and quiet-regions contribute to solar spectral irradiance variations. However, there are not enough measurements and data of the solar spectral irradiance at the top of the atmosphere. The SORCE satellite which was launched in January 2003 measures 115-1600nm solar spectra. We tried to estimate independent the spectral irradiance of three components (sunspot, facular and quiet-region) from data of the SORCE satellite in order to reconstruct longer spectral irradiance variations. We firstly tried estimating the spectral irradiance of these three components from SORCE data of July 2004. We also used data of SOHO/MDI and Big Bear Solar Observatory for estimating filling factors of sunspots, faculae and quiet-regions. As a result, the spectral irradiance of sunspots shows lower than that of faculae and quiet-regions. And, a peak of the spectral irradiance of sunspots is shifted to longer wavelength. These are consistent with that sunspots are cooler than other components. On the contrary, the spectral irradiance of faculae is higher than that of sunspots and quiet-regions. This fact is consistent with that faculae are hotter than other components. We will report more certain spectral irradiance which is obtained from more SORCE data at the presentation.