



The Measurement of the Solar Spectral Irradiance Variability during the Solar Cycle 24 using SOLAR/SOLSPEC on ISS

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Since April 2008, SOLAR/SOLSPEC measures the Solar Spectral Irradiance (SSI) from 166 nm to 3088 nm. The instrument is a part of the Solar Monitoring Observatory (SOLAR) payload, externally mounted on the Columbus module of the International Space Station. As the SSI is a key input for the validation of solar physics models, together with playing a role in the climate system and photochemistry of the Earth atmosphere, SOLAR/SOLSPEC spectral measurements becomes important. In this study, the in-flight operations and performances of the instrument -including the engineering corrections- will be presented for seven years of the SOLAR mission. Following an accurate absolute calibration, the SSI variability in the UV as measured by SOLAR/SOLSPEC in the course of the solar cycle 24 will be presented and compared to other instruments. The accuracy of these measurements will be also discussed here.