Solar Spectral Irradiance (SSI)

SSI Climate Data Record Specifications

• Global coverage

• Daily Product, Monthly and Annual Average Product

• 1610-1881 (annual-average), 1882-present (daily & monthly- and annually-averaged)

• Updated Quarterly

**Inputs to the *SSI* Climate Data Record**

• Solar Activity Indices (Mg II index & USAF White Light sunspot regions)

• Wavelength-dependent linear regression coefficients

**Some Uses of the *SSI* Climate Data Record**

• Improve understanding of surface, atmosphere and ocean responses to spectral distribution of solar energy and its variability

\* General Circulation Climate Modeling

\* National and International Climate Change Assessments (e.g., IPCC)  
• Atmospheric Chemistry Assimilation Modeling

• Community Radiative Transfer Modeling

• Ozone data processing

• Testing and calibrating advanced-technology photovoltaic cells