

## **SORCE Solar Irradiance Data Products**

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The SORCE Science Data System produces Total Solar Irradiance (TSI) and Spectral Solar Irradiance (SSI) data products on a daily basis, which are formulated using measurements from the four primary instruments on board the SORCE spacecraft. The TIM instrument provides measurements of the TSI, whereas the SIM, SOLSTICE, and XPS instruments collectively provide measurements of the solar irradiance spectrum from 1 nm to 2700 nm (excluding 31-115nm, which is measured by the TIMED SEE experiment). The Science Data System utilizes raw spacecraft and instrument telemetry, calibration data, and other ancillary information to produce a variety of data products that have been corrected for all known instrumental and operational factors. Since launch of the SORCE spacecraft in January 2003, science processing algorithms have continued to mature, and “Level 3” data products are routinely being produced and delivered to the public via the SORCE web site and the Goddard Earth Sciences (GES) Distributed Active Archive Center (DAAC).