

The Four Flight Total Irradiance Monitors

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The first Total Irradiance Monitor (TIM) launched on NASA's SORCE mission in 2003 and proved to be the most accurate and stable instrument on orbit for measuring the total solar irradiance (TSI) thanks to its new instrument layout and improved calibrations. The TIM's design improvements over the older classical radiometers led to its selection on subsequent missions including NASA's Glory (2011), NOAA's TSI Calibration Transfer Experiment (2013), and NASA's upcoming series of Total and Spectral Solar Irradiance Sensors. I will summarize the status of and differences between each of these TIMs.