The TIM Trilogy

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The Total Irradiance Monitor (TIM) now has three versions on-orbit. The first of this modern-era total solar irradiance (TSI) measuring instrument was designed for the SORCE mission and has been producing data since early 2003. The TSI Calibration Transfer Experiment (TCTE), a refurbishment of a SORCE-era TIM, was launched in 2013 to provide overlap between the aging SORCE mission and the future Total and Spectral Solar Irradiance Sensor (TSIS). That "future" commenced in Dec. 2017 with the launch of the refined TSIS/TIM now on the ISS.

I will discuss the results from this trilogy of TIMs over their 15-year measurement period and summarize the performance of and the differences between the three instruments.