

TSIS-2 and Beyond

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Following the successful implementation of TSIS-1 on the International Space Station, the follow-on mission, TSIS-2, will continue the space-based solar irradiance record without interruption. While TSIS-2 utilizes the same instrument design and observation concept dating back to SORCE, continuity of the long-term data record requires an updated, agile and flexible approach to these making these measurements.

Miniaturization of the SIM and TIM instruments is being demonstrated through the ESTO Projects CSIM-FD and CTIM-FD with on-orbit verifications of these designs enabling smaller, lower cost missions beyond TSIS-2. This reduces the risk to the TSIS Climate Data Record through leveraging all aspects of the mission with LASP's existing instrument and CubeSat spacecraft designs, satellite operations center, and takes advantage of the increasing number of launch opportunities for small spacecraft.