



## Fall AGU Meeting, Dec. 5-9



One of San Francisco's highlights is their Golden Gate Bridge, which opened in 1937. Photo by Kira Snow.

Many of the SORCE scientists and team members attended the AGU Fall Meeting in San Francisco, California in early December. They participated in sessions covering numerous aspects of the SORCE mission including data access, current scientific findings, and future activities.

- Tom Woods – Oral Contributed – *Contributions of the Solar Ultraviolet Irradiance to the Total Solar Irradiance During Large Flares*
- Gary Rottman – Oral Invited – *Long-term Observational Record of Solar Irradiance*
- Jerry Harder – Poster – *The Spectral Composition of TSI as Measured by the SORCE SIM Solar Spectral Radiometer*
- Erik Richard – Oral Contributed – *The TSIS Sensors: Results and Instrument Analysis for the SORCE SIM Instrument*



Erik Richard presented results and instrument analysis of the SIM instrument for the future NPOESS Project.

- Greg Kopp – Oral Invited – *The TSIS Sensors: Current SORCE Results and Progress Toward NPOESS*
- Greg Kopp – Oral Contributed – *The Absolute Accuracy of Space-Borne TSI Instruments: A Summary From the July 2005 TSI Accuracy Workshop*
- Marty Snow – Poster – *The LASP Interactive Solar IRradiance Datacenter (LISIRD)*
- Chris Pankratz – Poster – *SORCE Solar Irradiance Data Products*
- Juan Fontenla – Poster – *The Solar Radiation Physical Modeling (SRPM) Project*

**160,751**

**Hits to the SORCE Website**

*(Since 4/21/03, As of 12/19/05)*

## Solar Physics “SORCE Issue” Available Electronically –

The special issue of *Solar Physics* featuring 18 SORCE papers is available electronically on the Solar Physics website – the links are provided below. The issue is the August 2005, volume 230, issue 1-2, papers include:

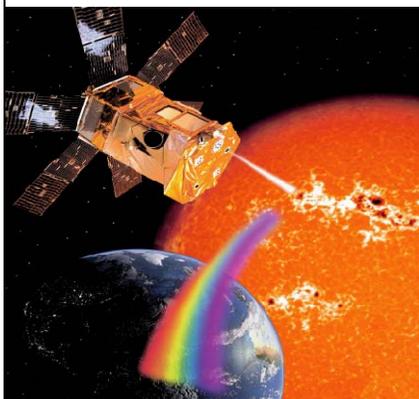
Anderson, Donald E. and Robert F. Cahalan, “The Solar Radiation and Climate Experiment (SORCE) Mission for the NASA Earth Observing System (EOS)”, *Solar Physics*, **203**, 1-2, 3-6, 2005.  
<http://dx.doi.org/10.1007/s11207-005-1592-6>

Harder, Jerald, George Lawrence, Juan Fontenla, Gary Rottman, and Thomas Woods, “The Spectral Irradiance Monitor: Scientific Requirements, Instrument Design, and Operation Modes”, *Solar Physics*, **203**, 1-2, 141-167, 2005.  
<http://dx.doi.org/10.1007/s11207-005-5007-5>

Harder, Jerald W., Juan Fontenla, George Lawrence, Thomas Woods, and Gary Rottman, “The Spectral Irradiance Monitor: Measurement Equations and Calibration”, *Solar Physics*, **203**, 1-2, 169-203, 2005.  
<http://dx.doi.org/10.1007/s11207-005-1528-1>

## The Solar Radiation and Climate Experiment (SORCE)

Mission Description and Early Results



The SORCE special issue of *Solar Physics* is available electronically now. The printed version, as well as a bound version will be available in January 2006. Look for the August issue, volume 230.

Spectral Irradiance Monitor (SIM): Early Observations”, *Solar Physics*, **203**, 1-2, 205-224, 2005.

<http://dx.doi.org/10.1007/s11207-005-1530-7>

Snow, Martin, William E. McClintock, Gary Rottman, and Thomas N. Woods, “Solar Stellar Irradiance Comparison Experiment II (SOLSTICE II): Examination of the Solar Stellar Comparison Technique”, *Solar Physics*, **203**, 1-2, 295-324, 2005.

<http://dx.doi.org/10.1007/s11207-005-8763-3>

Snow, Martin, William E. McClintock, Thomas N. Woods, Oran R. White, Jerald W. Harder, and Gary Rottman, “The Mg II Index from SORCE”, *Solar Physics*, **203**, 1-2, 325-344, 2005.

<http://dx.doi.org/10.1007/s11207-005-6879-0>

Sparn, Thomas P., Gary Rottman, Thomas N. Woods, Brian D. Boyle, Richard Kohnert, Sean Ryan, and Randall Davis, “The SORCE Spacecraft and Operations”, *Solar Physics*, **203**, 1-2, 71-89, 2005.

<http://dx.doi.org/10.1007/s11207-005-1584-6>

Woods, Thomas N., Gary Rottman, and Robert Vest, “XUV Photometer System (XPS): Overview and Calibrations”, *Solar Physics*, **203**, 1-2, 345-374, 2005.

<http://dx.doi.org/10.1007/s11207-005-4119-2>

Woods, Thomas N. and Gary Rottman, “XUV Photometer System (XPS): Solar Variations during the SORCE Mission”, *Solar Physics*, **203**, 1-2, 375-387, 2005.

<http://dx.doi.org/10.1007/s11207-005-2555-7>

Kopp, Greg and George Lawrence, “The Total Irradiance Monitor (TIM): Instrument Design”, *Solar Physics*, **203**, 1-2, 91-109, 2005.

<http://dx.doi.org/10.1007/s11207-005-7446-4>

Kopp, Greg, Karl Heuerman, and George Lawrence, “The Total Irradiance Monitor (TIM): Instrument Calibration”, *Solar Physics*, **203**, 1-2, 111-127, 2005.

<http://dx.doi.org/10.1007/s11207-005-7447-3>

Kopp, Greg, George Lawrence, and Gary Rottman, “The Total Irradiance Monitor (TIM): Science Results”, *Solar Physics*, **203**, 1-2, 129-140, 2005.

<http://dx.doi.org/10.1007/s11207-005-7433-9>

Lean, Judith, Gary Rottman, Jerald Harder, and Greg Kopp, “SORCE Contributions to New Understanding of Global Change and Solar Variability”, *Solar Physics*, **203**, 1-2, 27-53, 2005.

<http://dx.doi.org/10.1007/s11207-005-1527-2>

McClintock, William E., Gary J. Rottman, and Thomas N. Woods, “Solar Stellar Irradiance Comparison Experiment II (SOLSTICE II): Instrument Concept and Design”, *Solar Physics*, **203**, 1-2, 225-258, 2005.

<http://dx.doi.org/10.1007/s11207-005-7432-x>

McClintock, William E., Martin Snow, and Thomas N. Woods, “Solar Stellar Irradiance Comparison Experiment II (SOLSTICE II): Pre-Launch and On-Orbit Calibrations”, *Solar Physics*, **203**, 1-2, 259-294, 2005.

<http://dx.doi.org/10.1007/s11207-005-1585-5>

Pankratz, Christopher K., Barry G. Knapp, Randy A. Reukauf, Juan Fontenla, Michael A. Dorey, Lillian M. Connelly, and Ann K. Windnagel, “The SORCE Science Data System”, *Solar Physics*, **203**, 1-2, 389-413, 2005.

<http://dx.doi.org/10.1007/s11207-005-5008-4>

Pilewskie, Peter, Gary Rottman, and Erik Richard, “An Overview of the Disposition of Solar Radiation in the Lower Atmosphere: Connections to the SORCE Mission and Climate Change”, *Solar Physics*, **203**, 1-2, 55-69, 2005.

<http://dx.doi.org/10.1007/s11207-005-2379-5>

Rottman, Gary, “The SORCE Mission”, *Solar Physics*, **203**, 1-2, 7-25, 2005.

<http://dx.doi.org/10.1007/s11207-005-8112-6>

Rottman, Gary, Jerald Harder, Juan Fontenla, Thomas Woods, Oran R. White, and George M. Lawrence, “The



Rosario Resort, Orcas Island, San Juan Islands off the west coast of Washington state.

## Date and Place Set for 2006 SORCE Science Meeting –

*Earth’s Radiative Energy Budget Related to SORCE* is the topic of the next SORCE Science Meeting. The 2.5 day meeting will focus on radiative forcing, feedbacks, and climate response. Specifically the meeting will address:

- The Earth’s radiative energy budget: Top of the atmosphere radiative balance and imbalance, albedo and “global dimming”, energy budgets at the surface and within the troposphere and stratosphere.

- Radiative forcings: Solar, greenhouse gases, O<sub>3</sub>, aerosols (natural and anthropogenic, direct and indirect), measurements and models.
- Climate responses and feedbacks: Hydrological cycle, ice feedbacks (albedo and ocean salinity), climate sensitivity, slow versus rapid responses, linear versus nonlinear responses.
- Role of the biosphere: Response to solar variations, feedbacks through surface albedo and clouds.

Logistical details are in the planning stages yet, but mark your calendar now. The dates are Wednesday – Friday, **September 20-22, 2006**. There are tentative plans for a smaller Calibration Workshop on the Tuesday before the meeting.

The meeting will be at Rosario Resort and Spa on Orcas Island in the **San Juan Islands** off the coast of Washington state. People will need to fly into Seattle, Washington, and then catch a seaplane which will take you directly to the Rosario Resort Marina.

Additional details will be available in March 2006, so check the **SORCE Meeting** website periodically for updates.



***Upcoming Meetings / Talks –  
SORCE scientists plan to present papers or attend  
the following 2006 meetings:***

Glory Science Advisory Team Meeting, Jan. 17-18,  
Boulder, Colorado

International Living With a Star Meeting, Feb. 19-24,  
Goa, India

SCOSTEP STP-11, March 6-10, Rio de Janeiro, Brazil

Measurement Science Conference, Feb. 28 - March 3,  
Anaheim, California

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