# **SNS • SORCE News Source**



**Solar Radiation and Climate Experiment Monthly Newsletter** 

January 2005

### SORCE Team Celebrates Two Years and Takes A Look Back –

Two years of successful operation on-orbit! SORCE was launched on January 25, 2003 from Kennedy Space Center in Florida. The spacecraft, instruments, and ground systems are functioning flawlessly, according to Gary Rottman, SORCE Principal Investigator. "I could not be more proud of the SORCE team for getting us to



this point. This mission is providing improved SSI and TSI measurements like never before. My dream is to see one entire solar cycle measured with the SORCE instruments."

<< Gary Rottman celebrating SORCE's first year on-orbit at LASP in 2004. For 2005, he took that same outfit to celebrate the second anniversary in Mexico.

Tom Sparn, SORCE Program Manager, is also very pleased with the mission's progress. "It has been amazingly successful," say Tom. As someone looking out for SORCE's future, Tom views an extended mission



The LASP pit crew (Mike Anfinson, Paul Bay, Rick Kohnert, Tom Sparn, and Pete Withnell – left to right) just prior to hitting the road to deliver the instrument module to Orbital Sciences Corporation in Virginia, in the winter of 2002.



Launch Day – January 25, 2003, Cape Canaveral, Florida. LASP SORCE team members (Pete Withnell, Heather Reed-Withnell, Mike Anfinson, and David Gathright – left to right) pose next to the Kennedy Space Center entrance on launch day.

(beyond the 5-year goal) as a very exciting prospect for the overall mission.

"From an engineering standpoint, working on SORCE has been the most challenging and rewarding project in my career so far," says Pete Withnell, LASP systems engineer. Two years after launch he would like



At Orbital, LASP team members (Mike Anfinson, Zach Castleman, David Gathright, Heather Reed-Withnell, Dennis Baker, and Sherry McGlochlin - left to right) take a photo break before the final shipment of the bus and instruments to KSC in October 2002.

to say he is sleeping better, but due to a beautiful family addition (daughter Ashley), it just isn't true.



SORCE instrument scientists are extremely pleased with the SORCE mission. Clockwise from top left – Tom Woods (XPS), Greg Kopp (TIM), Jerry Harder (SIM), and Bill McClintock (SOLSTICE).

Tom Woods, SORCE Project Scientist, feels the most exciting moments in the last 2 years have been the launch, first light from the instruments, and more recently the new results concerning flare events and variability of the solar irradiance spectra. "The combination of great solar measurements by SORCE and the productive SORCE workshops have made for two wonderful years for the SORCE program," says Woods. "Also, considering that there are over 30 mechanisms in the SORCE instruments and that they all continue to work flawlessly is an engineering marvel."



And this says it all! Two years and counting! (Matt Triplett and David Crotser – left to right).



Tom Sparn, Bill Ochs, and Gary Rottman have reason to smile at this Pre-Launch Party at The Red Lion Inn just outside of Boulder in November 2002.

Rob Fulton, Spacecraft Program Manager from Orbital Sciences, sent congratulatory wishes saying, "Orbital remains extremely proud to have been part of a superb mission team that continues to deliver great performance and excellent science. The excellent performance of the mission to date is further proof that a PI-mode mission can be extremely valuable and cost-effective. I commend you and your entire organization for the success the LASP/GSFC/Orbital team has achieved with this mission."

**90,145 Hits to the SORCE Website**(Since 4/21/03, As of 1/14/05)

## SORCE Featured in "Solar Physics Topical Issue"

The SORCE team has been very busy over the past several months preparing approximately 18 individual papers to be published in *Solar Physics*. This special "topical issue" will be devoted exclusively to the SORCE mission, and will later be published in a hard cover version.

The papers will provide detailed information on the SORCE mission, goals, spacecraft, instruments, planning software and ground operations, data processing, early science results, and science implications. Each instrument has several papers which are addressing instrument concept, design, science requirements, calibration, performance, and science results.

As soon as preprints are available, an announcement will go out to the solar community. We are expecting this to be in late summer.



SORCE group photo taken October 15, 2001.

#### SORCE Science Meeting Update -

**2004** — A summary article of the SORCE Science Meeting in New Hampshire will be published in the November/December issue of EOS's The Earth Observer. A preview is on the SORCE website at:

http://lasp.colorado.edu/sorce/2004ScienceMeeting/Earth\_Observer\_Nov-Dec04\_SORCE.pdf

**2005** — The confirmed meeting dates are September 14-16, and the site will be **Durango**, **Colorado**. The 2005 meeting will vastly extend the time domain to paleoclimate and the very longest-term changes in the solar output. Everyone is welcome. The meeting will be held at the Doubletree Durango Hotel downtown. The changing aspen leaves should be spectacular at this time of year! Mark your calendars now.



Aspens outside of Durango in San Juan National Forest.

### Upcoming Meetings / Talks -

SORCE scientists plan to present papers or attend the following 2005 meetings:

Space Weather Week, April 5-8, Broomfield, Colorado

AGU Spring Meeting / AAS Solar Physics Division, May 23-27, New Orleans, Louisiana

Solar Variability and Earth Climate, June 27 - July 1 Monte Porzio Catone (Rome), Italy

IAGA General Assembly / IUGG, July 18-29, Toulouse, France

SPIE, July 31 - August 3, San Diego, California Characterization and Radiometric Calibration for Remote Sensing, August 23-25, Logan, Utah SORCE Science Meeting, Sept. 14-16,

Durango, Colorado



To submit information to this newsletter, please contact: vanessa.george@ lasp.colorado.edu.