



Meetings

SORCE Science Team Meeting July 9, 10, 11, 2001 at the Laboratory for Atmospheric and Space Physics, University of Colorado, Boulder, Colorado has been postponed.

HESSI Launch, June 7, Kennedy Space Center

SORCE Fairing Fit Check, June 18, Chandler, Arizona

FOG ACS Review, June 28, Orbital, Dulles, Virginia

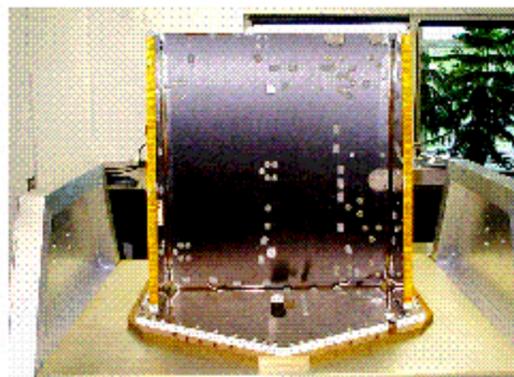
SORCE scientists plan to present papers or attend the following 2001 meetings:

- Joint AGU Meeting and AAS Solar Physics Division Meeting, May-June 2001 Boston, Massachusetts
- Workshop on the Evolving Sun and Its Influence on Planetary Environments June 2001 Granada, Spain
- International Solar Cycle Studies 2001-Solar Variability, Climate and Spaceweather June 2001 Longmont, Colorado
- IAGA Session on Solar Variability August 2001 Hanoi, Vietnam
- Calcon 2001 September 2001 Logan, Utah
- NewRAD October 2001 Gaithersburg, Maryland

SORCE May 2001 Project Summary

The SORCE Program is on schedule and within budget. Launch is scheduled for July 31, 2002. No descopes are required at this time, but removal of the FOG "gyros" ACS component from the SORCE spacecraft is still under consideration. A review will be held June 28, 2001 at Orbital to evaluate the potential descope. The ECP (engineering change proposal) to remove the gyros is currently under assessment. SORCE Red Team development continues to evolve. The statement of work for Orbital and the Aerospace Corporation are in a budget discussion phase. To date, Red Team activity has been funded by contingency accounts. SORCE continues to closely monitor and adjust schedules for instrument fabrication and to meet variable program needs. Schedule optimization has become limited.

The spacecraft bench was shipped from the vendor to Orbital, April 23, 2001 for structure testing. The structure tests were successful and the bus was received at LASP May 22, 2001. The 15-week late delivery of the bench was remedied by creative instrument integration rescheduling.



SORCE Spacecraft Bench

The bench has been mounted on the Flotron in the LASP clean room and awaits instrument integration. Continuing concerns for the SORCE program include the depletion of contingency funds due to unforeseen parts costs, the potential ICESat/SORCE launch conflict, large coupled loads to the SORCE instruments, large coupled to the spacecraft, and the late delivery of the SORCE transceiver from Alenia. All potential problems are in the process of review and mitigation.

SORCE Instrument Status

XPS is complete but nevertheless it appears that a faulty part discovered during initial testing may have been a generic problem and a total change out of the FPGA may follow. All TIM mechanical parts are in house, electrical TIM parts are 98% complete. SOLSTICE A and B parts are 96% complete. Microprocessor Unit parts are 75% complete and electrical parts are 33% complete. MU Software coding is 95% complete for TIM and XPS, SOLSTICE is 70% complete, and SIM is 20% complete. The draft revision of the GDRD (general design requirements document) is under evaluation as well as the Observatory I&T (integration and test) plan.

SORCE Science Update

Dr. Gary Rottman reported on SORCE Science Team Activities. He attended the recent CERES Science Team Meeting in Hampton, Virginia, and delivered a SORCE presentation. Dr. Rottman noted and commented on the synergy between the CERES mission and SORCE.

The SORCE Science Team meeting that had been scheduled for July 9, 10, 11, 2001 has been postponed until October 2001.

Unfortunately, the SORCE instrument delivery schedule now overlaps the meeting time in July. Extramural activity on the part of the instrument teams could impact instrument development.



The SORCE Science team meeting may be held in conjunction with the NewRAD 2001 meeting on the East Coast. A winter meeting is also being considered, and may be held after the observatory delivery to Orbital, perhaps in conjunction with the Fall AGU meeting.

SORCE Systems Status

Launch vehicle wing and fillet assemblies are complete and will ship to Vandenberg in June. The fairing alignment and fit check is scheduled for June 18 at Chandler, Arizona.

LASP/NASA/Orbital will observe the HESSI launch operations June 7 at Kennedy Space Center in order to prepare for the SORCE launch and launch activities.

The spacecraft structure and instrument module are complete and the instrument bench was delivered to LASP May 22, 2001. Environmental test levels for bench-mounted items are expected by the beginning of June. The instrument module harness has been routed and ring-out is almost complete. The instrument model has now been installed on the MGSE (mechanical ground support equipment). The bus power simulator fabrication is in process and should be finished in June 2001. The SORCE FMEA (failure modes and effect analysis), FTA (fault tree analysis) and PRA (probable risk assessment) status follow. The PRA draft results were delivered May 17, 2001. Overall, the Aerospace Corporation Red Team has determined that SORCE risks are acceptable.

Power, mass and memory budgets are sufficient.

ORBITAL Status

Random vibration and shock/separation testing of the primary structure has been completed, the instrument mechanical preparation and bake out was completed at GSFC and the bench was delivered to LASP. The harness is ready for safe-to-mate and integration and test. Fabrication of the LVPS (low

voltage power supply) for the APE EDU (attitude power electronics engineering development unit) was completed and the unit is in test. The battery thermal vac testing has been done and the battery is now in post-environmental test. The Star Traker, Fine Sun Sensor EDU (engineering development units) were delivered and are currently in test, processor loading measurement is underway and the "gyroless" ECP (engineering change proposal) has been submitted.



**SORCE
Shock and Vibe Test
Orbital Sciences Corp.**