

SNS – SORCE News Source

Solar Radiation and Climate Experiment Monthly Newsletter

November 2004



The Inns at Mill Falls in New Hampshire's lakes region was the venue for the 2004 SORCE Science meeting.

SORCE Science Meeting ***Oct. 27-29 * Meredith, New Hampshire***

Approximately 75 scientists gathered for the 2004 SORCE Science Meeting held in a picturesque little town off beautiful Lake Winnepesaukee, New Hampshire's largest lake. The meeting – ***Decadal Variability in the Sun and Climate*** – focused on further understanding of the evidence for and mechanisms involved in decadal variability in the Sun and climate. Attendees enthusiastically shared information, ideas, and opinions over the 2-1/2 days.

With almost 60 abstracts submitted, the agenda consisted of both invited and contributed oral presentations, several keynote talks, 17 poster presentations, and a special science dinner presentation. The scientific organizing committee, Mark Baldwin from Northwest Research Associates, Greg Kopp from LASP, and Judith Lean from NRL, did an excellent job arranging an interesting and thought provoking program. The detailed agenda, abstracts, and many of the final presentations are available on the SORCE Meeting website – http://lasp.colorado.edu/sorce/2004ScienceMeeting/Meeting_Review.html.

The meeting began with Mark Baldwin, the first of 3 keynote speakers, presenting "*The Stratospheric Link Between the Sun and Climate*". Keynote speaker Vikram Mehta spoke the next morning on "*Decadal Climate Variability – Societal Impacts, Phenomena, Problems, and Prospects*". Time Magazine contributor and book author, Madeleine Nash, was the final keynote speaker with "*Chasing El Niño: A Science Writer's Walk on the Wild Side of Climate*".

The meeting was divided into four scientific sessions to address decadal variability in the Sun and climate:

1. Solar Radiation – Status of Current SORCE Measurements
2. Decadal Variability in the Atmosphere and Oceans
3. Mechanisms and Modes of Decadal Solar Variability
4. Climate Variability Modes (e.g. ENSO, NAO/AO, PDO) and Nonlinear Response



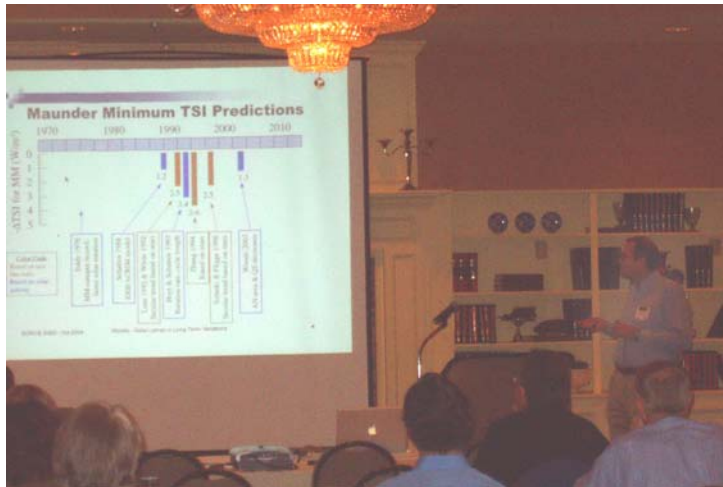
In spite of the lingering beautiful fall foliage, the science sessions were very well attended and there was excellent discussion. Approximately 75 scientists attended the meeting over the 2-1/2 days.



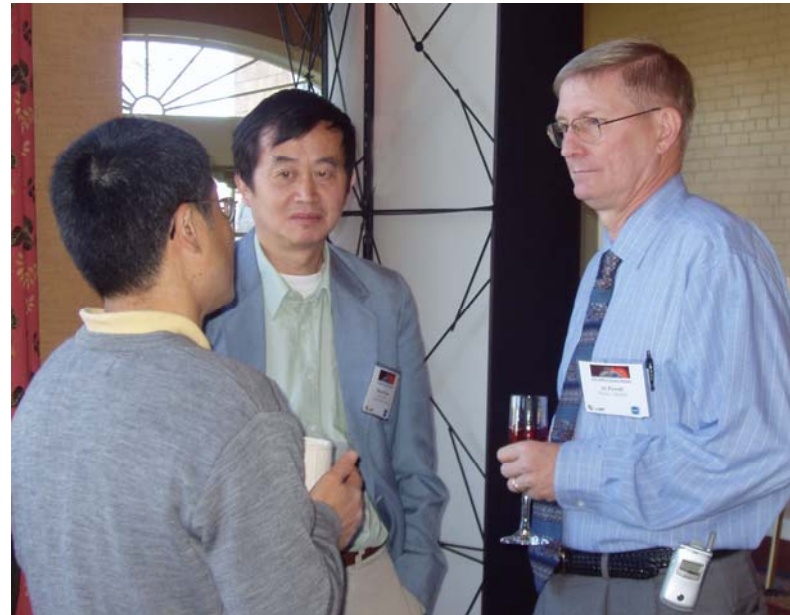
^^ **SORCE Co-Investigator Dick White** talks with **Joanna Haigh** (right) from Imperial College, UK, and **Amy Clement** from the Rosenstiel School of Marine and Atmospheric Sciences, Florida. All three gave oral presentations during the SORCE Meeting.

>>

Gary Rottman, SORCE Principal Investigator, talks with **Paul Simon** and **Dominique Crommelynck** from the Royal Meteorological Institute of Belgium. This international meeting was represented by 5 countries – US, UK, Canada, Belgium, and Switzerland.



^^ During Session 3, **Tom Woods**, LASP's SORCE Project Scientist, explains the *Estimated UV Decrease During the Maunder Minimum*.



<< **Al Powell** from NOAA catches up with colleagues, **Shaopeng Huang**, University of Michigan (left) and **Shuntai Zhou**, NOAA (center). The informal discussions during this meeting added greatly to the value of the formal presentations..



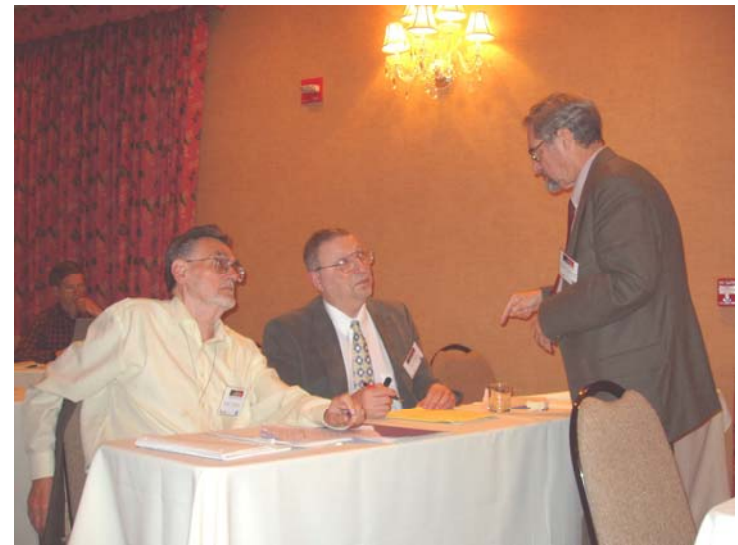
^^ Marty Snow, LASP's SOLSTICE scientist discusses his poster on *Measuring the Solar Magnesium II Index* with Dora Preminger, Stephen Walton, and Delores Knipp (left to right). Seventeen posters were featured during two days, with a special poster reception late Wednesday afternoon.



<< Judith Lean, science meeting program chair, and Sultan Hameed take a break. Dr. Hameed gave a talk entitled *Response of the Atmospheric Centers of Action to the Solar Cycle in the East and West Phases of the Quasi-Biennial Oscillation*.

>>

Hans Mayr (left) and Ken Schatten (center) both gave very interesting talks as the group explored decadal variability. Dominique Crommelynck stops to discuss their presentations.



^^ Peter Foukal, Claus Fröhlich, and Bob Cahalan, NASA's SORCE Project Scientist, (left to right) take advantage of one of the breaks to elaborate on specific solar variability issues. Peter and Claus both gave talks in the Mechanisms and Modes of Decadal Variability Session. Bob chaired Session 1.



>>
 LASP SORCE team members, Jerry Harder and Erik Richard, analyze SIM science data. Jerry presented *Solar Spectral Variability as Measured by SIM* in the opening SORCE session.



^^ Murry Salby from PAOS at the University of Colorado and Chris Pankratz from LASP prepare for Murry's presentation on *Evidence of the Solar Cycle in the Circulation of the Stratosphere and Its Influence on the Troposphere*. Chris had a poster presentation on the *SORCE Science Data Processing and Availability*.



<< Peter Pilewskie and Bill McClintock (left to right) from LASP were very involved with the 2004 SORCE Meeting. Bill presented an overview of the SOLSTICE instrument in Session 1 and Peter chaired Session 4.



^^ Rodney Viereck from NOAA's Space Environment Center makes a point with Matt DeLand and Marty Snow, while discussing Marty's poster, *The Role of Spectral Resolution in Measuring the Solar Magnesium II Index*.

This SORCE Science Meeting provided a productive and pleasing forum to explore *Decadal Variability in the Sun and Climate*. The next SORCE Meeting is tentatively scheduled in the September 2005 timeframe in southwest Colorado. Details will follow in later Newsletters. The next meeting will vastly extend the time domain to paleoclimate and the very longest-term changes in the solar output.

In the meantime SORCE, the spacecraft and all instruments continue their flawless operation and return data of exceptional quality. Likewise VIRGO, ACRIM III, TIMED-SEE, UARS SOLSTICE and SUSIM, ERBE, and SBUV continue to return valuable solar irradiance data, and from these ever expanding data sets we gain more detailed knowledge about the Sun and its effect on our atmosphere and climate. Nevertheless our communities cannot remain complacent, for although there are plans for some future measurement programs, most noticeable the distant NPOESS and PICARD, it is unlikely that today's observing programs will still be operational at the time of these future missions. Without another near-term mission – one that would need to be started very soon – there will be an inevitable “gap” in the data records. The attendees of this meeting see this as a major concern and will continue to look for opportunities within NASA and NOAA, as well as within International Space Agencies, to insure the continuity of these solar data sets.

Upcoming Meetings / Talks –

SORCE scientists plan to present papers or attend the following 2004 meetings:

AGU Fall Meeting, Dec. 13-17, San Francisco, California

78,568
Hits to the SORCE Website
(Since 4/21/03, As of 11/19/04)

