

2014 SORCE Science Meeting -- Program Speakers

(as of Nov. 14, 2013)

Speakers are listed alphabetically within each session.

Session 1. Role of the Sun in Climate Change during the SORCE Mission

William Ball, Imperial College London, UK

SSI and Stratospheric Ozone: A new assessment of the relationship using Bayesian Inference

Cassandra Bolduc, Université de Montréal, Canada

Modelling Stratospheric Ozone Variability with the MOnTeCarlo SSI Model (MOCASSIM)

Robert Cahalan, NASA GSFC, Greenbelt, Maryland

After 11 Years with SORCE – What’s New? What’s Next?

Josefino Comiso, NASA GSFC, Greenbelt, Maryland

Sea Ice Changes in Recent Decades

Joanna Haigh, Imperial College London, UK

Sun-Climate Solar Cycle Effects and Climate Change – A Review

Aimee Merkel, Laboratory for Atmospheric and Space Physics (LASP), University of Colorado, Boulder

Further Evidence of Solar Cycle Variability in Middle Atmospheric Ozone and the Importance of Incorporating SSI in Atmospheric Modeling

Martin Mlynchak, NASA Langley Research Center, Hampton, Virginia

Influence of Solar Variability on the Structure, Composition, and Energy Balance of the Atmosphere from 2002 to 2014

Anna Shapiro, Physikalisch-Meteorologisches Observatorium Davos, World Radiation Center (PMOD/WRC), Switzerland

The Stratospheric Response to a Discrepancy of the SSI Data

Tamas Varnai, NASA GSFC, Greenbelt, Maryland; and University of Maryland, Baltimore County

Advances in Understanding 3D Interactions between Sunlight and the Atmosphere during the SORCE Mission

Session 2. SSI Measurements

David Bolsée, Belgium Institute for Space Aeronomy, Brussels

Accurate Determination of the TOA Solar Spectral NIR Irradiance Using a Primary Standard Source and Bouguer-Langley Technique

Gaël Cessateur, PMOD/WRC, Switzerland

THE PREMOS/PICARD Radiometer: An overview after 3 years of observations

Matthew DeLand, Science Systems and Applications, Inc. (SSAI), Lanham, Maryland

Solar Cycle 24 Variability Observed by Aura OMI

Jerry Harder, LASP, University of Colorado, Boulder

Observations of Solar Variability in the 240-2400 nm Range using SORCE SIM

Jeff Morrill, Naval Research Laboratory (NRL), Washington, DC
Title coming soon...

Christian Muller, Belgium Institute for Space Aeronomy, Brussels
Full Solar Rotations Observed by the SOLAR Payload on the ISS in December 2013 and June 2014

Werner Schmutz, PMOD/WRC, Switzerland
Variations of Near-UV and Visual Solar Spectral Irradiance as Measured by VIRGO/SoHO and PREMOS/Picard

G rard Thuillier, Laboratoire Atmosph res, Milieux, Observations Spatiales (LATMOS) / Centre National de la Recherche Scientifique (CNRS), France
SOLSPEC: Recent results and status

Tom Woods, LASP, University of Colorado, Boulder
Reference Solar Spectra for Earth Science Research

Session 3. Decadal and Longer Sun-Climate Variations

J rg Beer, Eawag: Swiss Federal Institute for Environmental Science and Technology, D bendorf, Switzerland
Solar Variations and Climate Change: The view from ice cores

Roger-Maurice Bonnet, International Space Science Institute (ISSI), Bern, Switzerland
Review and Discussion of Past and Future Climates, of their Astronomical, Solar, and Anthropogenic Forcing. Strategies for Future Space and Modeling Research

Gerald North, Texas A&M University, College Station
Paleoclimatic Analysis of Solar Cycle Imprint on Greenland Surface Temperatures

Alexander Ruzmaikin, NASA Jet Propulsion Laboratory (JPL), California Institute of Technology, Pasadena
Sun-Climate Variations on Centennial Time Scales

Sami Solanki, Max Planck Institute for Solar System Research, G ttingen, Germany
Towards the Next Generation of Solar Irradiance Reconstruction Models

Guoyong Wen, NASA GSFC, Greenbelt, MD; GESTAR, Morgan State University, Baltimore, Maryland
Climate Responses to Spectral Solar Forcing in GISS GCMAM

Dong Wu, NASA GSFC, Greenbelt, Maryland
The $s=0$ Atmospheric Oscillations in 35-Year MERRA Zonal Wind and Temperature

Session 4. TSI Measurements and Composites

Jean-Fran ois Cossette, Universit  de Montr al, Canada
Cyclic Thermal Signature in a Global MHD Simulation of Solar Convection

Wolfgang Finsterle, PMOD/WRC, Switzerland
Of Straying Photons, Shiny Apertures, and an Inconstant Solar Constant – Advances in TSI Radiometry

Claus Fr hlich, PMOD/WRC, Switzerland
New and Improved Version of the VIRGO TSI and PMOD Composite

Greg Kopp, LASP, University of Colorado, Boulder
"Variability" in the TSI Over the SORCE Mission – and Beyond

Jae N. Lee, JCET, Univ. of Maryland, Baltimore County; NASA GSFC, Greenbelt, Maryland
Rotational Variations in Total Solar Irradiance Observations: From SORCE/TIM, ACRIM/ACRIM III, and SoHO/VIRGO

Richard Willson, ACRIM Principal Investigator, Coronado, California
ACRIM3 Characterization by the LASP/TRF and the Total Solar Irradiance Database

Session 5. SSI Composites, Proxies, Models

Serena Criscuoli, National Solar Observatory (NSO), Sacramento Peak, Sunspot, New Mexico
Interpretation of SIM Measurements from Analysis of 3D MHD Simulations

Thierry Dudok de Wit, LPC2E / Centre National de la Recherche Scientifique (CNRS) & University of Orléans, France
Multi-Wavelength Solar Radio Observations and their use as Solar Proxies for Upper Atmospheric Modeling

Juan Fontenla, NorthWest Research Associates, Boulder, Colorado
The UV SSI of the Sun Compared to Cooler Stars, Similarities and Differences

Margit Haberreiter, PMOD/WRC, Switzerland
SOLID – a European Project towards a Comprehensive Solar Irradiance Data Exploitation

Matthieu Kretschmar, LPC2E, CNRS University of Orléans, France
Assessment of Solar Irradiance Datasets for the SOLID Project

Natalie Krivova, Max-Planck-Institut für Sonnensystemforschung, Katlenburg-Lindau, Germany
Modelling Solar Irradiance with SATIRE

Micha Schöll, LPC2E, CNRS University of Orléans, France
First Steps Towards a Homogeneous Solar Spectral Irradiance Data Set: Selection, merging and quality assessment

Alexander Shapiro, PMOD/WRC, Switzerland
How to Constrain the Spectral Profile of the Solar Irradiance Variability?

Martin Snow, LASP, University of Colorado, Boulder
The Magnesium II Index: 35 Years and Counting

Rich Stolarski, Johns Hopkins University, Baltimore, Maryland
The Impact of Solar Spectral Irradiance Variations on Stratospheric Composition: Theory and observations

Ken Tapping, National Research Council, D.R.A.O., Penticton, BC, Canada
The Continuing Deviation between the Sunspot Number and F10.7 Activity Indices

Anatoliy Vuiets, LPC2E, CNRS University of Orléans, France
What Can We Learn from SORCE about the Contribution of Different Magnetic Structures to the Solar Spectral Irradiance?

Session 6. Legacy of SORCE and Future Directions after SORCE

Pål Brekke, Norwegian Space Centre, Oslo, Norway

NORSAT-1: Total Solar Irradiance, Space Weather, and Ship Detection

Peter Pilewskie, Dept. of Atmospheric and Oceanic Sciences and LASP, University of Colorado, Boulder

TSIS Status

Mark Rast, Dept. of Astrophysical and Planetary Sciences and LASP, University of Colorado, Boulder

The Case for a Radiometric Imager, and How to Build One

Gary Rottman, LASP, University of Colorado, Boulder

The Historical Development of SORCE

Brian Soden, Rosenstiel School for Marine and Atmospheric Science (RSMAS), University of Miami, Florida

Climate Feedbacks

Graeme Stephens, NASA Jet Propulsion Laboratory (JPL) and California Institute of Technology, Pasadena

Future of Total Solar Irradiance Measurements

Yukihiro Takahashi, Hokkaido University, Sapporo, Japan

Micro-Satellite as an Alternative Vehicle

Poster Session

Stéphane Beland, LASP, University of Colorado, Boulder

SORCE SIM Data Version 19

Gary Chapman, San Fernando Observatory, California State University, Northridge

The Declining Strength of Recent Sunspot Cycles

Angela Cookson, San Fernando Observatory, California State University, Northridge

Using Ground-Based Ca II K Images as a Proxy for Shorter UV

Thierry Dudok de Wit, LPC2E, CNRS University of Orléans, France

How to Make Composites out of Multiple Observations

Thierry Dudok de Wit, LPC2E, CNRS University of Orléans, France

The Impulse Response of the Solar Spectral Irradiance: What does it tell us about the solar spectral variability?

Wolfgang Finsterle PMOD/WRC

CLARA – A Compact and Light-Weight Absolute Radiometer

Claus Fröhlich, PMOD/WRC, Switzerland

Understanding Long-term Changes of the VIRGO Radiometer and Sunphotometer in Space

Shashi K. Gupta, Science Systems and Applications Inc. (SSAI), Lanham, Maryland

Projection of SORCE Total Solar Irradiance Measurements 5-10 Days Forward for Near Real-Time Applications

Doug Lindholm, LASP, University of Colorado, Boulder

SORCE Solar Irradiance Data Products and the LASP Interactive Solar Irradiance Data Center (LISIRD)

Courtney Peck, Dept. of Physics and LASP, University of Colorado, Boulder

The Role of the Solar Center-to-Limb Variation in Deduced Photometric Trends

Erik Richard, LASP, University of Colorado, Boulder

A Compact Solar Spectral Irradiance Monitor for Future Small Satellite and CubeSat Science Opportunities

Nicola Scafetta, ACRIM team

Empirical Evidences for a Planetary Gravitational/Electromagnetic Modulation of Total Solar Irradiance Satellite Measurements

Nicola Scafetta, ACRIM team

Discussion on Climate Oscillations: CMIP5 general circulation models versus vs. a semi-empirical harmonic model based on astronomical cycles

Martin Snow, LASP, University of Colorado, Boulder

SORCE Undergraduate Research Program