

****Speakers and Presentation Titles TBD – Check back often for the latest updates to the agenda.****

Last Updated: 4/3/15

2015 Space Weather Workshop Agenda

Millennium Hotel Ballroom

Monday, April 13th

9:00 - 4:30 GOES-VW (NEXT) Requirements Session

5:00 - 7:00 Welcome Networking Session (NCAR Mesa Lab)

Tuesday, April 14

8:30 Conference Welcome
Brent Gordon, NOAA/SWPC

8:35 State of the Space Weather Prediction Center
Tom Berger, NOAA/SWPC

8:45 Space Weather in Boulder: A Brief History
Ernest Hilder, Former Director, SEC

9:10 Solar Maximum...We Hardly Knew Ye
Doug Biesecker, NOAA/SWPC

9:25 - 9:45 Break

9:45 - 11:15 Introduction to SWORM (Space Weather Operations, Research, and Mitigation Task Force)
Chair: William Murtagh, OSTP

9:45 Task Force Overview
SWORM Co-leads: Tammy Dickinson, OSTP / Louis Uccellini, NWS

10:00 - 11:15 PANEL: SWORM Goal Team Leads
Chair: William Murtagh, OSTP

11:15 - 12:15 DSCOVER
Chair: Alysha Reinard, CIRES

11:15 DSCOVER – Halfway to L1
Doug Biesecker, NOAA/SWPC

11:35 Instrumentation - Capabilities and Calibration Test Plans
Adam Szabo, NASA/GSFC

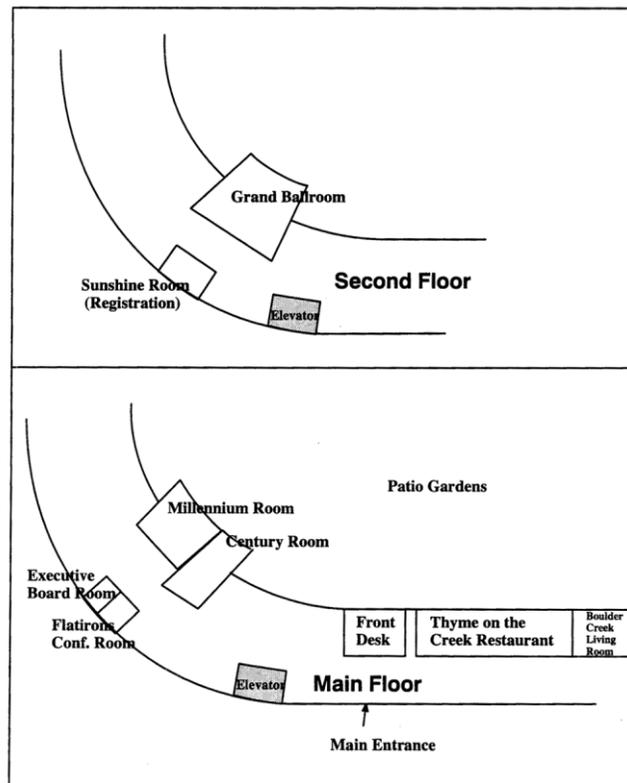
11:55 Space Weather Follow On
Pat Mulligan, NOAA/NESDIS

12:15 - 3:00 Lunch

1:00 - 3:00 Poster Session - General Space Weather Activities and Operational Services & Solar and Interplanetary Research and Applications (Two Groupings)

- 3:00 - 4:40** **Space and Ground Based Observations and Advances**
 Chair: Howard Singer, NOAA/SWPC
- 3:00** **GOES-VW Workshop Summary**
 Rodney Viereck, NOAA/SWPC
- 3:20** **Solar Data for Space Weather Forecasts from GONG**
 Frank Hill, NSO
- 3:40** **The Ionospheric Connection Explorer: ICON**
 Elsayed Talaat, NASA
- 4:00** **Imaging the Boundary Between Earth and Space - A Preview of Space Weather Data from the Global-scale Observations of the Limb and Disk (GOLD) Mission**
 Richard Eastes, University of Central Florida
- 4:20** **Impact of FORMOSAT-7/COSMIC-2 on Ionospheric Space Weather Monitoring**
 I-Te Lee, Central Weather Bureau
- 4:40** **Space Weather Ballooning**
 Tony Phillips, SpaceWeather.com
- 5:00** **End of Session**
- 5:30 - 7:30** **9th Annual SWPC - Commercial Space Weather Interest Group (CSWIG) / American Commercial Space Weather Association (ACSWA) Summit Meeting - by invitation**

**Meeting Rooms
 at the Millennium Hotel**



Wednesday, April 15

8:30 - 8:40 **Space Weather Morning Forecast Brief**
SWPC Space Weather Forecasting Office

8:40 - 10:10 **Commercial Space Weather Interest Group (CSWIG)/
American Commercial Space Weather Association (ACSWA)
Roundtable Session: “Growing the Space Weather Enterprise”**

Featured Speakers:

Major General Steve Denker, Director, Integrated Air, Space, Cyberspace and ISR Operations, Air Force Space Command
Space Weather - Key Element to Space Domain Awareness

Dr. David Chenette, President and CEO, Celdex Space, LLC
Success and Challenges in Government-Industry Partnering

Dr. Conrad C. Lautenbacher, Jr., Chief Executive Officer, GeoOptics, Inc.
Growing the Space Weather Enterprise: Building a Committed Partnership

Panel: Featured Speakers

Moderator and Organizer:

Dr. Devrie Intriligator, Director, Space Plasma Laboratory, Carmel Research Center, Inc.

10:10 - 10:30 **Break**

10:30 - 12:00 **Panel: Agency Activities**
Chair: Tom Berger, NOAA/SWPC

10:30 **NASA Heliophysics Division**
Lika Guhathakurta, NASA/Helio

10:45 **Space Weather Research at the National Science Foundation**
Vladimir Papitashvili, NSF

11:00 **United States Air Force Weather**
Ralph Stoffler, AFW

11:15 **National Weather Service**
Bill Lapenta, NOAA/NWS

11:30 **NESDIS**
Greg Mandt, NOAA/NESDIS

11:45 **Question and Answer Session**

12:00 - 3:00 **Lunch**

1:00 - 3:00 **Poster Session - Ionosphere Research and Applications**

3:00 - 3:20 **Superflares on Solar type Stars and Their Implications on the Possibility of Superflares on the Sun**

Kazunari Shibata, Kyoto University

3:20 - 4:40 **Space Weather Impacts: Emerging Issues in Aviation**

Chair: Robert Rutledge, NOAA/SWPC

3:20 **NIOSH Aircrew Studies**
Barbara Grajewski, USPHS

3:40 **Rockwell Collins GLOBALink Voice Services / Impact of Solar Event on HF Comms**
Hugh Pat Guido and Anthony Abate, ARINC

4:00 **EURADOS Activities on Space Weather Effects: Comparison of Codes Assessing Radiation Exposure of Aircraft Crew during Solar Energetic Particle Events**
Peter Beck, Seibersdorf Laboratories

4:20 **Establishment of requirements for space weather information service by the International Civil Aviation Organization (ICAO)**
Raul Romero, ICAO

4:40 - 5:00 **Space Weather Impacts: Power Grid (Introduction)**

Chair: Chris Balch, NOAA/SWPC

4:40 **Assessing the Impact of Space Weather on the Electric Power Grid Based on Insurance Claims for Industrial Electrical Equipment**
Karel Schrijver, Lockheed Martin

5:00 **End of Session**

6:00 - 8:30 **Banquet Dinner at UCAR Center Green Auditorium**

Special Guest Speaker:
Dr. Sandy MacDonald
Director, NOAA's Earth System Research Laboratory

“Science on a Sphere”

3080 Center Green Drive
Boulder, CO 80301



Available Shuttle Bus to the Banquet:

There will be a CU Shuttle Bus departing the Millennium Hotel for anyone who wishes to ride to the UCAR Center Green Auditorium. The bus will depart the hotel at 5:45, 6:00, and 6:15. It will also make three return trips back to the hotel after the event.

Parking:

Free parking is available at the UCAR Center Green Campus for those who wish to drive personal vehicles.

UCAR Center Green Campus
Building 1
3080 Center Green Drive
Boulder, CO 80301

DRAFT

Thursday, April 16

- 8:30 - 8:40** **Space Weather Morning Forecast Brief**
SWPC Space Weather Forecasting Office
- 8:40 - 10:40** **Space Weather Impacts: Power Grid (continued)**
Chair: Chris Balch, NOAA/SWPC
- 8:40** **Solar Shield: Update and Path Forward**
Antti Pulkkinen, NASA/GSFC
- 9:00** **NERC Reliability Standards for Geomagnetic Disturbances**
Frank Koza, PJM
- 9:20** **System Impact Modeling**
Tom Overbye, University of Illinois
- 9:40** **SUNBURST Network**
Rich Lordan, EPRI
- 10:00** **Information Needed from GMD Forecasters**
Trevor Gaunt, University of Cape Town
- 10:20 - 10:40** **Break**
- 10:40 - 12:00** **R2O and Modeling**
Chair: Michele Cash, CIRES
- 10:40** **Space Weather Prediction Testbed: Status and Update**
Rodney Viereck, NOAA/SWPC
- 11:00** **Developmental Testbed Center: Facilitating R2O for Numerical Weather Prediction**
Louisa Nance, DTC NCAR
- 11:20** **Advancements in Empirical Geomagnetic Field Modeling During the THEMIS and Van Allen Probes Era**
Grant Stephens, JHAPL
- 11:40** **Ensemble Assimilation Using First-Principles Models as a Tool for Three-Day Space Weather Forecasts**
Geoff Crowley, ASTRA
- 12:00 - 3:00** **Lunch**
- 1:00 - 3:00** **Poster Session - Magnetosphere Research and Applications**
- 3:00 - 3:20** **Space Weather Journal Overview and Prospectus**
Delores Knipp, Space Weather Journal
- 3:20 - 5:00** **International Coordination of Space Weather Activities**
Chair: Howard Singer, NOAA/SWPC
- 3:20** **Predicting Space weather: Impact on Fugro Offshore Precise Positioning Services**
Yahya Memarzedeh, Fugro

- 3:40** **International Committee on Global Navigation Satellite Systems (ICG)**
Shafa Gadimova, Office for Outer Space Affairs (UN)
- 4:00** **State of GNSS in Africa: Applications, Observational Infrastructures, Research Implications and Prospects**
Babatunde Rabi, Nigerian National Space Research and Development Agency
- 4:20** **ESA SSA Space Weather Service System**
Juha-Pekka Luntama, ESA
- 4:40** **UK Met Office Update**
Mark Gibbs, UK Met Office
- 5:00** **End of Session**

DRAFT

Friday, April 17

- 8:30 - 8:40** **Space Weather Morning Forecast Brief**
SWPC Space Weather Forecasting Office
- 8:40 - 10:00** **Space Weather Modeling**
Chair: Howard Singer, NOAA/SWPC
- 8:40** **Community Coordinated Modeling Center: Pioneering the Path from Research to Operations**
Masha Kuznetsova, NASA/CCMC
- 9:00** **Transitioning the SWMF Geospace Model into Operations at the National Weather Service**
George Millward, CIRES/SWPC
- 9:20** **Integrated Dynamics in Earth's Atmosphere - IDEA**
Rodney Viereck, NOAA/SWPC
- 9:40** **WSA/ADAPT (Air Force Data Assimilative Photospheric Flux Transport)**
Nick Arge, AFRL
- 10:00 - 10:20** **Break**
- 10:20 - 11:40** **Space Weather: The Future**
Chair: Rodney Viereck, NOAA/SWPC
- 10:20** **Carrington L5 Mission**
Markos Trichas, Airbus Defense and Space
- 10:40** **Opportunities in the First Solar Maximum with Social Media**
Elizabeth MacDonald, NASA
- 11:00** **USGS Induction Hazard Science**
Jeff Love, USGS
- 11:20** **Four-Year Plan for World Meteorological Organization Space Weather Activities**
Terry Onsager, NOAA/SWPC
- 11:40** **Closing Remarks**
Tom Berger, NOAA/SWPC
- 12:00** **End of Conference**