

2015 Space Weather Workshop Agenda (With Presentations)

Millennium Hotel Ballroom

updated: 4/26/15

Monday, April 13

9:00 - 4:50 GOES-VW (NEXT) Requirements Session

5:00 - 7:00 Welcome Networking Session (NCAR Mesa Lab – 1850 Table Mesa Drive)
Buses depart the Millennium Hotel at 4:45 p.m. & 5:00 p.m.

Tuesday, April 14

8:30 Conference Welcome
Brent Gordon, NOAA/SWPC

8:35 [State of the Space Weather Prediction Center](#)
Tom Berger, NOAA/SWPC

New: [March 17th St. Patrick's Day Storm Presentation](#)

8:45 [Space Weather in Boulder: A Brief History](#)
Ernest Hilder, Former Director, Space Environment Center

9:10 [Solar Maximum...We Hardly Knew Ye](#)
Doug Biesecker, NOAA/SWPC

9:25 - 9:45 Break

9:45 - 11:15 [Space Weather National Strategy](#) (Not available at this time)
Chair: William Murtagh, Office of Science and Technology Policy

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

10:00 - 11:15 Panel: Goal Team Leads
Seth Jonas, STPI; Sarah Ellis Peed, DHS; Tom Berger, SWPC; Chris Cannizzaro, DOS

11:15 - 12:15 [DSCOVR](#)
Chair: Alysha Reinard, CIRES

11:15 [DSCOVR – Halfway to L1](#)
Doug Biesecker, NOAA/SWPC

11:35 [Instrumentation - Capabilities and Calibration Test Plans](#)
Adam Szabo, NASA/GSFC

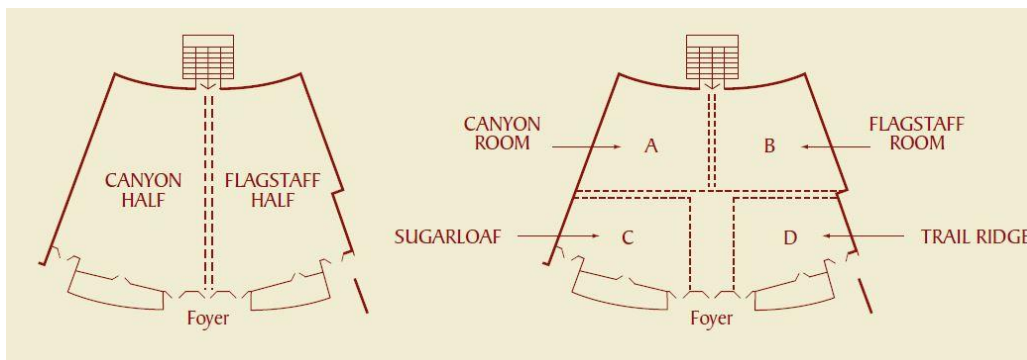
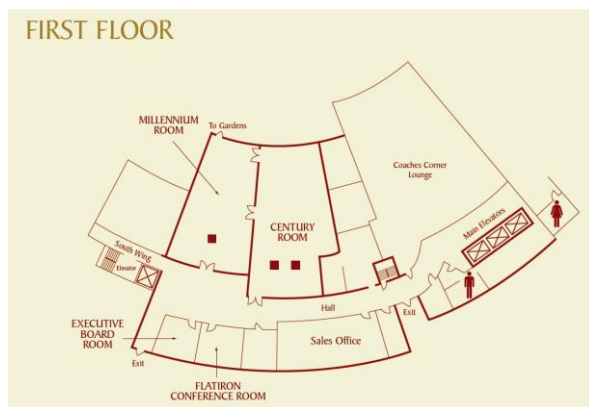
11:55 Space Weather Follow-on (Not available at this time)
Pat Mulligan, NOAA/NESDIS

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: Rodney Viereck, NOAA/SWPC
- 3:00** **GOES-VW Workshop Summary**
 Howard Singer, NOAA/SWPC
- 3:20** **Solar Data for Space Weather Forecasts from GONG**
 Frank Hill, National Solar Observatory
- 3:40** **The Ionospheric Connection Explorer: ICON**
 Elsayed Talaat, NASA/Heliophysics
- 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 - Taiwan
- 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**

Millennium Hotel Meeting Rooms



Wednesday, April 15

8:30 - 8:40 **Space Weather Morning Forecast Brief**
Dave Marshall, 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/Heliophysics

10:45 [Space Weather Research at the National Science Foundation](#)
Vladimir Papitashvili, NSF

11:00 [Department of Defense Space 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**

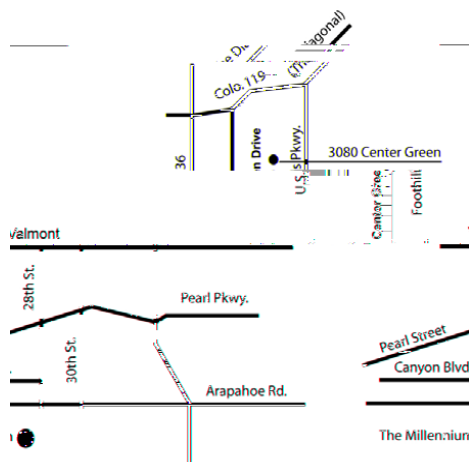
- 3:00 - 3:20** [Superflares on Solar Type Stars and Their Implications on the Possibility of Superflares on the Sun](#)
Kazunari Shibata, Kyoto University
- 3:20 - 5:00** [Space Weather Impacts: Emerging Issues in Aviation](#)
Chair: Robert Rutledge, NOAA/SWPC
- 3:20** [NIOSH Aircrew Studies](#)
CAPT Barbara Grajewski, U.S. Public Health Service
- 3:40** [Rockwell Collins GLOBALink Voice Services / Impact of Solar Event on HF Comms](#)
Hugh Pat Guido and Anthony Abate, Aeronautical Radio, Incorporated (ARINC)
- 4:00** [EURADOS Activities on Space Weather Effects: Comparison of Codes Assessing Radiation Exposure of Aircraft Crew During Solar Energetic Particle Events](#)

[AVIDOS 2.0 – Aviation Dosimetry Service at ESA’s Space Weather Portal](#)
Peter Beck, Seibersdorf Laboratories
- 4:20** [Establishment of Requirements for Space Weather Information Service by the International Civil Aviation Organization \(ICAO\)](#)
Terry Onsager, NOAA/SWPC
- 4:40** [Economic Impact and Effectiveness of Radiation Exposure Mitigation Measures During a Ground Level Enhancement](#)
Daniel Matthiä, German Aerospace Center (DLR)
- 5:00** **End of Session**
- 6:00 - 8:30** **Banquet Dinner at UCAR Center Green Auditorium**
Bus transportation available

Special Guest Speaker:

Dr. Sandy MacDonald

Director, NOAA’s Earth System Research Laboratory
“Science on a Sphere”



Available Shuttle Bus to the Banquet:

There will be one 50 person bus departing the Millennium Hotel at 5:45 pm for anyone who wishes to ride to UCAR Center Green. The bus will depart the UCAR Center Green for the Millennium Hotel at 8:50 pm.

Parking:

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

<p>UCAR Center Green Campus Building 1 3080 Center Green Drive Boulder, CO 80301</p>

Thursday, April 16

- 8:30 - 8:40** **Space Weather Morning Forecast Brief**
Meghan Stockman, SWPC Space Weather Forecasting Office
- 8:40 - 10:20** **Space Weather Impacts: Power Grid**
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, Pennsylvania-New Jersey-Maryland Interconnection (PJM)
- 9:20** **Electric Power Grid Impacts of GMDs**
Tom Overbye, University of Illinois
- 9:40** **Assessing the Impact of Space Weather on the Electric Power Grid Based on Insurance Claims for Industrial Electrical Equipment**
Karel Schrijver, Lockheed Martin
- 10:00** **Information Needed from GMD Forecasters**
Trevor Gaunt, University of Cape Town
- 10:20 - 10:40** **Break**
- 10:40 - 12:00** **Research to Operations (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, Developmental Testbed Center - NCAR
- 11:20** **Advancements in Empirical Geomagnetic Field Modeling During the THEMIS and Van Allen Probes Era**
Grant Stephens, Johns Hopkins University Applied Physics Laboratory
- 11:40** **Ensemble Assimilation Using First-Principles Models as a Tool for Three-Day Space Weather Forecasts**
Geoff Crowley, Atmospheric and Space Technology Research Associates (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: Terry Onsager, NOAA/SWPC
- 3:20** **Predicting Space Weather: Impact on Fugro Offshore Precise Positioning Services**
Yahya Memarzadeh, Fugro Worldwide

- 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 Rabiou, Nigerian National Space Research and Development Agency
- 4:20** [ESA SSA Space Weather Service System](#)
Juha-Pekka Luntama, European Space Agency (ESA)
- 4:40** [UK Met Office Update](#)
Mark Gibbs, UK Met Office
- 5:00** **End of Session**

Friday, April 17

- 8:30 - 8:40** **Space Weather Morning Forecast Brief**
Meghan Stockman, SWPC Space Weather Forecasting Office
- 8:40 - 10:00** **Research to Operations (R2O) and Modeling (Continued)**
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
- 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, Air Force Research Laboratory
- 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**