

## 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 17<sup>th</sup> 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

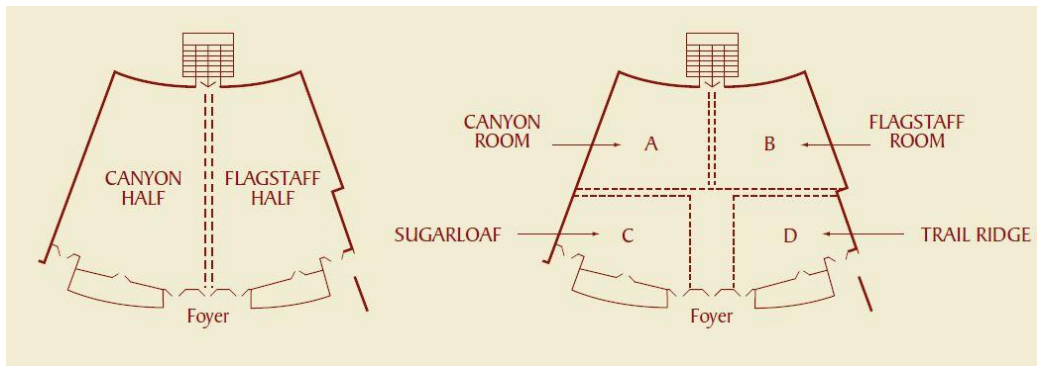
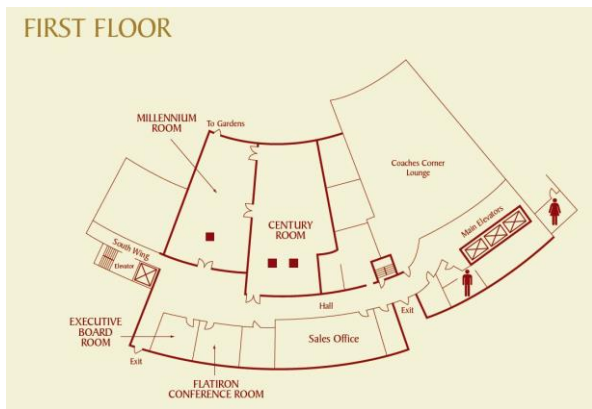
**11:55** Space Weather Follow-on (Not available at this time)  
Pat Mulligan, NOAA/NESDIS

**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**    **9<sup>th</sup> 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>
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## 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**