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

4:20  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.

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

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