



## 2024 Space Weather Workshop Agenda

### *Times in MDT*

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#### Monday, April 15 - Pre-Workshop Events

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| 8:00 AM – 10:00 AM | <b>User Readiness for Space Weather Data from NOAA Program of Record-2025 Missions</b><br>Location: Pearl St. Ballroom LEFT “Walnut” and CENTER “Mall” |
| 8:00 AM - 8:05 AM  | <b><u>Welcoming Remarks</u></b><br>Jacob Inskeep, NOAA NESDIS  |
| 8:05 AM - 8:20 AM  | <b><u>COSMIC-2 Space Weather Products</u></b><br>Jan-Peter Weiss, NOAA NESDIS  |
| 8:20 AM - 8:35 AM  | <b><u>GOES-R User Readiness for Space Weather Products</u></b><br>Matthew Seybold, NOAA NESDIS   |
| 8:35 AM - 8:50 AM  | <b><u>NOAA Space Weather Observations from Lagrange 1</u></b><br>Dimitris Vassiliadis, NOAA NESDIS   |
| 8:50 AM - 9:05 AM  | <b><u>SWPC SWFO User Readiness</u></b><br>Steven Hill, NOAA SWPC   |
| 9:05 AM - 9:20 AM  | <b><u>SWFO Calibration / Validation and Reprocessing</u></b><br>William Rowland, NOAA NESDIS   |
| 9:20 AM - 9:35 AM  | <b><u>SWFO Archive</u></b><br>Nazila Merati, NOAA NESDIS   |
| 9:35 AM - 9:55 AM  | <b>Q&amp;A</b>   |

- 9:55 - 10:00 AM**      [Closing Remarks](#)  
Chris Pagán, NOAA NESDIS
- 10:00 AM - 12:00 PM**      [Coordination Group for Meteorological Satellites \(CGMS\) Data Access](#)  
Location: Pearl St. Ballroom LEFT “Walnut” and CENTER “Mall”
- 10:00 AM - 12:00 PM**      **DoD Space Weather Enterprise (by invitation only)**  
Location: Pearl St. Ballroom RIGHT “East-West”
- 1:00 PM - 5:00 PM**      **NOAA Space Weather Scales**  
Location: Pearl St. Ballroom
- 3:00 PM - 5:00 PM**      **Student Program (for students and invited participants)**  
Location: “Royal Arch” Meeting Room  
Organizers: Vincent Ledvina (University of Alaska)  
Bhagyashree Waghule (University of Colorado)
- 5:30 PM - 7:30 PM**      **Networking Session for Registered Space Weather Workshop Participants**  
Location: [NCAR Mesa Lab](#) – Limited round-trip transportation between Embassy Suites and Mesa Lab will be provided and is on a first come/first serve basis.

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**Tuesday, April 16**      Location: Pearl St. Ballroom

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- 8:30 AM - 8:40 AM**      **Opening Remarks and Welcome**  
Bill Murtagh, NOAA SWPC
- 8:40 AM - 9:00 AM**      [Space Weather Events and Impacts - Year in Review](#)  
Rachel Broemmelsiek, USAF 557th Weather Wing, 2d Weather Squadron (557 WW/2 WS)  
Shawn Dahl, NOAA Space Weather Prediction Center (SWPC)  
Maj Benjamin Pearson, USAF 557 WW/2 WS
- 9:00 AM - 9:35 AM**      [National Policy Initiatives](#)  
Co-Chairs: Genevieve Fisher, NASA HQ  
Bill Murtagh, NOAA SWPC
- 9:00 AM - 9:05 AM**      **Overview and Introductions**  
Bill Murtagh, NOAA SWPC
- 9:05 AM - 9:15 AM**      **Perspective from House Science Committee**  
Brent Blevins, U.S. House Committee on Science, Space, and Technology
- 9:15 AM - 9:25 AM**      **Perspective from the Office of Science and Technology Policy (OSTP)**  
Jinni Meehan, OSTP
- 9:25 AM - 9:35 AM**      **Panel & Audience Discussion**

- 9:35 AM - 9:50 AM**      [Special Presentation: UK Science Policy](#)  
Sarah Beardsley, UK Science and Technologies Facilities Council
- 9:50 AM - 10:45 AM**      **Break and Poster Session: Solar and Interplanetary Research and Applications; and Aviation Radiation Research and Applications**
- 10:45 AM - 11:45 AM**      [PROSWIFT User Survey - Space Weather Advisory Group](#)  
Co-Chairs: Tammy Dickinson, Science Matters Consulting  
Amy Macpherson, NWS HQ
- 10:45 AM - 10:55 AM**      **Overview of PROSWIFT User-Survey Initiative**  
Tammy Dickinson, Science Matters Consulting
- 10:55 AM - 11:00 AM**      **Emergency Management**  
Seth Jonas, Lockheed Martin
- 11:00 AM - 11:05 AM**      **Space Traffic Management/Coordination**  
Delores Knipp, University of Colorado, Boulder
- 11:05 AM - 11:10 AM**      **Electric Power**  
Mark Olson, North American Electric Reliability Corporation (NERC)
- 11:10 AM - 11:20 AM**      **Human Spaceflight and Aviation**  
Kent Tobiska, Space Environment Technologies
- 11:20 AM - 11:25 AM**      **Research**  
Scott McIntosh, National Center for Atmospheric Research (NCAR)
- 11:25 AM - 11:45 AM**      **Panel & Audience Discussion**
- 11:45 AM - 12:15 PM**      **Poster Lightning Talks for Tuesday Posters: Solar and Interplanetary Research and Applications; and Aviation Radiation Research and Applications**  
Chair: Eric Adamson, NOAA SWPC
- [Far-Side Active Regions Based on Helioseismic and EUV Measurements: Toward a Global Index](#)  
Amr Hamada, National Solar Observatory
- [Identifying solar flare precursors in a forest of EUV signatures](#)  
Larisa Krista, CU CIRES/NOAA NCEI
- [QuickPUNCH: Observations for Space Weather Operations and Research](#)  
Daniel Seaton, Southwest Research Institute
- [Examining the Accuracy of The OMNI Data in Representing ICME Observations Near Earth and the Effect on Global Modeling](#)  
Epsen Fredrick, University of Texas at Arlington
- [Towards Predictive Uncertainty Quantification in Space Weather Simulations Through Surrogate Models for Dynamical Systems](#)  
Aniket Jivani, University of Michigan
- [Deep Learning-Based Analysis of Near-Real-time single-viewpoint Coronagraph Images using Neural Networks.](#)  
Harshita Gandhi, Aberystwyth University

**Statistical Relationships Between Solar Wind Parameters: Implications for Space Weather Forecasts**

Heather Elliott, Southwest Research Institute

**Assessment of Vulnerability of U.S. National Airspace System to Space Weather**

Michael Cook, The MITRE Corporation

- 12:15 PM - 1:30 PM**      **Lunch**
- 12:30 PM - 2:15 PM**      **SWPC Tour (for those pre-registered for the tour)**
- 1:30 PM - 2:30 PM**      **Building Resilience to Geomagnetic Storms in the U.S. and Canadian Power Grid**  
Co-Chairs: Jenn Gannon, Computational Physics, Inc.  
Jordan Guerra, CU CIRES/NOAA SWPC
- 1:30 PM - 1:35 PM**      **Overview and Introductions**  
Jordan Guerra, CU CIRES/NOAA SWPC
- 1:35 PM - 1:43 PM**      **Recent Developments at DOE to address GMD**  
Joe Blankenburg, Department of Energy
- 1:43 PM - 1:51 PM**      **Completion of the MT Survey and its Contribution to Geoelectric Field Calculations**  
Adam Schultz, Oregon State University
- 1:51 PM - 1:59 PM**      **Understanding the Impact of Space Weather on the Power Grid with Geoelectric Field Modeling**  
Christopher Balch, CU CIRES/NOAA SWPC
- 1:59 PM - 2:07 PM**      **UK Government & Industry Activities to Support Electricity Resilience**  
Abigail Clark, Department for Energy Security and Net Zero
- 2:07 PM - 2:15 PM**      **NERC Geomagnetically Induced Currents Database**  
Donna Pratt, North American Electric Reliability Corporation (NERC)
- 2:15 PM - 2:30 PM**      **Q&A**
- 2:30 PM - 2:45 PM**      **Special Presentation: Lessons from Department-Level Exercise at USDA**  
Dionne Mendoza, U.S. Department of Agriculture (USDA)
- 2:45 PM - 3:45 PM**      **Break and Poster Session: Solar and Interplanetary Research and Applications; and Aviation Radiation Research and Applications**
- 3:45 PM - 5:00 PM**      **Space Weather Services in Support of Aviation Operations**  
Co-Chairs: Sam Carlson, Federal Aviation Administration (FAA)  
Brent Gordon, NOAA SWPC
- 3:45 PM - 3:50 PM**      **Overview and Introductions**  
Brent Gordon, NOAA SWPC

- 3:50 PM - 3:58 PM**      [Nowcast of Aerospace Ionizing Radiation System \(NAIRAS\) Model](#)  
Chris Mertens, NASA
- 3:58 PM - 4:06 PM**      [Using REACH data in Support of Aviation](#)  
Kerry Lee, The Aerospace Corporation
- 4:06 PM - 4:14 PM**      **Aeronautical Regional Geospatial Observer System (ARGOS) Stratospheric Drone Flight Test for Use in Aviation Radiation Measurements**  
Justin Bailey, Space Environment Technologies
- 4:14 PM - 4:22 PM**      [Space Weather - Delta Air Lines Perspective](#)  
Stephanie Klipfel, Delta Air Lines  
Chris Schwartz, Delta Air Lines
- 4:22 PM - 4:30 PM**      [Space Weather: Meeting the Needs for Global Aviation Services](#)  
Rondeau Flynn, Allied Pilots Association
- 4:30 PM - 5:00 PM**      **Q&A**
- 5:00 PM - 5:30 PM**      **Poster Lightning Talks for Wednesday Posters: Ionosphere and Thermosphere Research and Applications**  
Chair: Simon Machin, UK Meteorological Office
- [AI-Based Ionospheric Scintillation Impact Prediction](#)  
                                 Ryan Kelly, Orion Space Solutions
- [Deep Learning-Based Solar Irradiance Prediction Model using the FISM2 Dataset During the Solar Flare Events](#)  
                                 Jeong-Heon Kim, Korea Astronomy and Space Science Institute
- [Space Weather Ionospheric Network Canada](#)  
                                 Chris Watson, University of New Brunswick
- [Geospace Dynamics Constellation: The Mission We Need for the New Era of Access to LEO](#)  
                                 Katherine Garcia-Sage, NASA Goddard Space Flight Center
- [Leveraging Data Assimilative Models for Enhanced Satellite Drag Predictions](#)  
                                 Martin Pilinski, University of Colorado, Boulder
- [Assessing the Relationship Between the Quasi-biennial Oscillation and D-region Electron Density](#)  
                                 Natalie Wirth, Air Force Institute of Technology
- [Agile Collaboration: Citizen Science as a Transdisciplinary Approach to Heliophysics](#)  
                                 Vincent Ledvina, University of Alaska

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**Wednesday, April 17**      Location: Pearl St. Ballroom

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- 8:15 AM - 8:30 AM**      [Today's Space Weather Forecast + Q&A](#)  
Shawn Dahl, NOAA SWPC  
Rachel Broemmelsiek, USAF 557th Weather Wing, 2d Weather Squadron  
(557 WW/2 WS)

- 8:30 AM - 10:05 AM**      **The 2023 Space Weather Implementation Plan - Path to Execution**  
    Co-Chairs: Clinton Wallace, NOAA SWPC  
    LT Bryan Brasher, NOAA Corps/SWPC
- 8:30 AM - 8:35 AM**      **Overview and Introductions**  
    Clinton Wallace, NOAA SWPC
- 8:35 AM - 8:45 AM**      **Building a Space Weather Ready Nation**  
    Michael Farrar, Director, NOAA National Centers for Environmental Prediction
- 8:45 AM - 8:55 AM**      **Space Weather Observations in Support of an Operational Space Weather Capability**  
    Elsayed Talaat, Director Office of Space Weather Observations, NOAA National Environmental Satellite, Data, and Information Service (NESDIS)
- 8:55 AM - 9:05 AM**      **National Aeronautics and Space Administration (NASA)**  
    Peg Luce, Deputy Director, NASA Heliophysics Division, NASA HQ
- 9:05 AM - 9:15 AM**      **NSF Support for Space Weather Research, Observations, and Workforce Development**  
    Anne Johansen, Director, Division of Atmospheric and Geospace Sciences, NSF  
    Mangala Sharma, Geospace Cluster Coordinator, Division of Atmospheric and Geospace Sciences, NSF
- 9:15 AM - 9:25 AM**      **2023 Space Weather Implementation – USSF’s Path to Execution**  
    Col Marc Brock, Director of Combat Power, HQ Space Operations Command, U.S. Space Force (USSF)
- 9:25 AM - 9:35 AM**      **The Role of the US Geological Survey in Space Weather Monitoring and Hazard Characterization**  
    Gavin Hayes, Senior Science Advisor for Earthquake and Geologic Hazards, USGS
- 9:35 AM - 9:45 AM**      **Implementation through the Commercial Marketplace**  
    Jenn Gannon, Vice President of R&D, Computational Physics, Inc.
- 9:45 AM - 10:05 AM**      **Q&A**
- 10:05 AM - 10:55 AM**      **Break and Poster Session: Ionosphere and Thermosphere Research and Applications**
- 10:55 AM - 12:00 PM**      **Improving Space Weather Services for Satellite Operations**  
    Co-chairs: Jennifer Benson, USAF 557th Weather Wing, 2d Weather Squadron (557 WW/2 WS)  
    Janet Green, Space Hazard Applications
- 10:55 AM - 10:58 AM**      **Overview and Introductions**  
    Jennifer Benson, USAF 557th Weather Wing, 2d Weather Squadron (557 WW/2 WS)
- 10:58 AM - 11:06 AM**      **Recap of the 2023 Satellite Environment Testbed Exercise**  
    Tzu-Wei Fang, NOAA SWPC

- 11:06 AM - 11:14 AM [What is the Space Information Sharing and Analysis Center \(Space ISAC\)?](#)  
Hector Falcon, Space Information Sharing and Analysis Center (Space ISAC)
- 11:14 AM - 11:22 AM **Amazon Project Kuiper**  
Marco Concha, Amazon
- 11:22 AM - 11:30 AM [Maxar On-Orbit Operations and Future Needs](#)  
Catherine Keys, Maxar Space Systems
- 11:30 AM - 11:38 AM [The Spacecraft Anomaly Resolution Knowledgebase \(SPARK\) and Machine Intelligence for Space Weather \(MINTS\)](#)  
Alec Engell, NextGEN Federal Systems
- 11:38 AM - 11:46 AM [Thermospheric Forecasting for LEO Satellites](#)  
Ben McCrossan, Ensemble
- 11:46 AM - 12:00 PM **Q&A**
- 12:00 PM - 1:30 PM **Lunch and Other Activities:**  
**18<sup>th</sup> Annual NOAA-ACSWA Summit Meeting- invitation only**  
Location: “Baseline” Boardroom
- Student Speed Mentoring Lunch (for students and invited participants)**  
Location: “Royal Arch” Meeting Room  
Organizers: Vincent Ledvina (University of Alaska)  
                  Bhagyashree Waghule (University of Colorado)
- 1:30 PM - 2:30 PM [Space Weather Support for Human Habitation on the Moon and Beyond](#)  
Co-Chairs: Eddie Semones, NASA Space Radiation Analysis Group (SRAG)  
                  Robert Steenburgh, NOAA SWPC
- 1:30 PM - 1:35 PM **Overview and Introductions**  
Robert Steenburgh, NOAA SWPC
- 1:35 PM - 1:43 PM [NOAA SWPC Preparations for Artemis](#)  
Hazel Bain, CU CIRES/NOAA SWPC
- 1:43 PM - 1:51 PM [Space Radiation Analysis Group - Flight Rules for Operations](#)  
Steve Johnson, NASA Space Radiation Analysis Group (SRAG)
- 1:51 PM - 1:59 PM [Space Weather Support for Human Exploration: NASA Moon-to-Mars \(M2M\)](#)  
Carina Alden, NASA Goddard Space Flight Center, Moon-to-Mars Space Weather  
                  Analysis Office
- 1:59 PM - 2:07 PM [Analyzing Space Weather at Mars with MAVEN](#)  
Gina DiBraccio, NASA Goddard Space Flight Center, Heliophysics Science  
                  Division
- 2:07 PM - 2:15 PM **Space Weather Opportunities and Needs in NASA’s Moon to Mars Exploration Architecture**  
Jamie Favors, NASA HQ, Heliophysics Division

- 2:15 PM - 2:30 PM Q&A
- 2:30 PM - 3:20 PM **Break and Poster Session: Ionosphere and Thermosphere Research and Applications**
- 3:20 PM - 4:05 PM **Observing and Modeling the Ionosphere: Supporting Communications and Navigation**  
 Co-Chairs: Tim Fuller-Rowell, CU CIRES/NOAA SWPC  
 Jim Spann, NOAA NESDIS
- 3:20 PM - 3:25 PM **Overview and Introductions**  
 Tim Fuller-Rowell, CU CIRES/NOAA SWPC
- 3:25 PM - 3:33 PM **New GDGPS Products for High-Precision Real-Time GNSS Applications to Support Public and Scientific Users**  
 Attila Komjathy, NASA Jet Propulsion Laboratory
- 3:33 PM - 3:41 PM **Ionosphere TEC and Scintillation Observations Using Spaceborne GNSS Reflectometry**  
 Brian Breitsch, University Colorado, Boulder
- 3:41 PM - 3:49 PM **Using GNSS receivers on SmallSat Platforms for Ionospheric Specification**  
 Rebecca Bishop, The Aerospace Corporation
- 3:49 PM - 4:05 PM Q&A
- 4:05 PM - 4:45 PM **Space Weather Workforce Development**  
 Co-Chairs: Mark Miesch, CU CIRES/NOAA SWPC  
 Dan Welling, University of Michigan
- 4:05 PM - 4:10 PM **Overview and Introductions**  
 Dan Welling, University of Michigan
- 4:10 PM - 4:18 PM **GlobalMindED - Creating a Capable, Diverse Talent Pipeline**  
 Brian Ysasaga, Lockheed Martin and GlobalMindED
- 4:18 PM - 4:26 PM **Space Weather for a Sustainable Future - Thoughts of a UNOOSA Space4Women Mentor**  
 Alessandra Pacini, NOAA National Centers for Environmental Information (NCEI)
- 4:26 PM - 4:34 PM **Toward Space Weather Curriculum for High School Physics: Building a Three-Dimensional Unit Storyline aligned with Next-Generation Science Standards**  
 Erin Furtak, University of Colorado, Boulder
- 4:34 PM - 4:45 PM Q&A
- 4:45 PM - 5:00 PM **Special Presentation: Space Weather - Perspective of the Department of Homeland Security**  
 Mona Harrington, Assistant Director for the National Risk Management Center (NRMC)



5:00 PM - 5:30 PM

**Poster Lightning Talks for Thursday Posters: Geospace/Magnetosphere Research and Applications; Space Weather Policy and General Space Weather Contributions**

Chair: Aspen Davis, CU CIRES/NCEI

**[Estimating the Impact of the Magnetometer Network on the SWPC Geoelectric Field Model](#)**

Jordan Guerra, CU CIRES/NOAA SWPC

**[Revamping Models of Energetic Electron Precipitation Based on Realistic NOAA/POES Response Functions](#)**

Weichao Tu, West Virginia University

**[Global Geomagnetic Perturbation Forecasting with Quantified Uncertainty Using Deep Gaussian Process](#)**

Hongfan Chen, University of Michigan

**[Multi-model Ensemble Forecasts of Ground Magnetic Perturbations](#)**

Kathryn Wilbanks, University of Michigan

**[Towards An Australian Centre of Excellence in Space Weather](#)**

Iver Cairns, University of Sydney

**[I-ALiRT System for Forecasting Space Weather](#)**

Laura Sandoval, Laboratory for Atmospheric and Space Physics

**[Automatically Labelled EUV and X-Ray Incident Solarflare Catalog](#)**

Jorge Padiá, Vanderbilt University

7:00 PM - 9:00 PM

**[Banquet and After-dinner Presentation: Human Space Exploration & Space Weather Effects](#)**

Speaker: Tonya Ladwig, Vice President, Human Space Exploration and Orion Program Manager, Lockheed Martin Space

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**Thursday, April 18**

Location: Pearl St. Ballroom

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8:30 AM - 9:45 AM

**[Centers Advancing Research to Operations](#)**

Co-Chairs: Michele Cash, NOAA SWPC  
Genevieve Fisher, NASA HQ

8:30 AM - 8:35 AM

**Overview and Introductions**

Genevieve Fisher, NASA HQ

8:35 AM - 8:45 AM

**[CLEAR: Center for All-Clear SEP Forecast](#)**

Lulu Zhao, University of Michigan

8:45 AM - 8:55 AM

**[Space Weather Research and Technology Applications \(SPARTA\) Center of Excellence](#)**

Keith Groves, Boston College

8:55 AM - 9:05 AM

**[Space Weather Operational Readiness Development \(SWORD\) Center](#)**

Thomas Berger, University of Colorado, Boulder

- 9:05 AM - 9:15 AM [Center of Excellence for Advanced Forecasting of Drag for Enhanced, Sustainable, and Conscientious Space Operations](#)  
Piyush Mehta, West Virginia University
- 9:15 AM - 9:25 AM [Center for Geospace Storms](#)  
Mike Wiltberger, National Center for Atmospheric Research, High Altitude Observatory
- 9:25 AM - 9:45 AM **Q&A**
- 9:45 AM - 10:45 AM **Break and Poster Session: Geospace/Magnetosphere Research and Applications; Space Weather Policy and General Space Weather Contributions**
- 10:45 AM - 11:00 AM [Special Presentation: Upcoming Space Weather Tabletop Exercise at APL](#)  
Ian Cohen, Johns Hopkins University Applied Physics Laboratory (APL)
- 11:00 AM - 12:10 PM [Space Weather Research to Operations: NSF-NASA Space Weather with Quantified Uncertainties \(SWQU\)](#)  
Co-Chairs: Jamie Favors, NASA HQ  
Mangala Sharma, NSF
- 11:00 AM - 11:05 AM **Overview and Introductions**  
Mangala Sharma, NSF
- 11:05 AM - 11:15 AM [Improving Space Weather Predictions with Data-Driven Models of the Solar Atmosphere and Inner Heliosphere](#)  
Nikolai Pogorelov, University of Alabama in Huntsville
- 11:15 AM - 11:25 AM [NextGen Space Weather Modeling Framework Using Data, Physics and Uncertainty Quantification](#)  
Xun Huan, University of Michigan
- 11:25 AM - 11:35 AM [A Flexible Community-based Upper Atmosphere Ensemble Prediction System](#)  
Aaron Ridley, University of Michigan
- 11:35 AM - 11:45 AM [Forecasting Small-Scale Plasma Structures in the Earth's Ionosphere-Thermosphere System](#)  
Tim Fuller-Rowell, CU CIRES/NOAA SWPC
- 11:45 AM - 11:55 AM [Ensemble Learning for Accurate and Reliable Uncertainty Quantification](#)  
Rebecca Morrison, University of Colorado, Boulder
- 11:55 AM - 12:10 PM **Q&A**
- 12:10 PM - 1:30 PM **Lunch**
- 12:30 PM - 2:15 PM **SWPC Tour (for those pre-registered for the tour)**

- 1:30 PM - 2:30 PM**      **Space Weather: New and Future Observations and Data Access to Advance Understanding and Forecasting**  
    Co-Chairs: Carrie Black, NSF  
    Erin Lynch, NOAA NESDIS
- 1:30 PM - 1:35 PM**      **Overview and Introductions**  
    Erin Lynch, NOAA NESDIS
- 1:35 PM - 1:43 PM**      **GONG and ngGONG Status**  
    Alexei Pevtsov, National Solar Observatory
- 1:43 PM - 1:51 PM**      **I-ALiRT (IMAP Active Link for Real-Time)**  
    David McComas, Princeton University
- 1:51 PM - 1:59 PM**      **Owens Valley Radio Observatory Long Wavelength Array (OVRO-LWA) and the 14 December Radio Event**  
    Dale Gary, New Jersey Institute of Technology
- 1:59 PM - 2:08 PM**      **Overview of NOAA Space Weather Products at the NCEI**  
    Laurel Rachmeler, NOAA National Centers for Environmental Information (NCEI)
- 2:08 PM - 2:16 PM**      **Future Solar Magnetograph Observations from Space**  
    Neal Hurlburt, Lockheed Martin
- 2:16 PM - 2:30 PM**      **Q&A**
- 2:30 PM - 3:30 PM**      **Break and Poster Session: Geospace/Magnetosphere Research and Applications; Space Weather Policy and General Space Weather Contributions**
- 3:30 PM - 4:30 PM**      **Advances in Space Weather Modeling, Observations and Services - I**  
    Co-Chairs: Maj Austin Gibbons, USAF/NOAA SWPC  
    Howard Singer, NOAA SWPC
- 3:30 PM - 3:35 PM**      **Overview and Introductions**  
    Howard Singer, NOAA SWPC
- 3:35 PM - 3:43 PM**      **The Community Coordinated Modeling Center Role in Advancing the R2O Pipeline**  
    Masha Kuznetsova, NASA
- 3:43 PM - 3:51 PM**      **Space Weather Support for the James Webb Space Telescope Launch**  
    Joseph Minow, NASA
- 3:51 PM - 3:59 PM**      **SWIMMR Results**  
    Ian McCrea, UK Science and Technologies Facilities Council
- 3:59 PM - 4:07 PM**      **Space Weather Advances within ESA's Space Safety Programme**  
    Alexi Glover, European Space Agency (ESA)
- 4:07 PM - 4:15 PM**      **Korean Space Weather Center (KSWC)**  
    Kichang Yoon, KSWC

- 4:15 PM - 4:30 PM **Q&A**
- 4:30 PM - 5:30 PM **Advances in Space Weather Modeling, Observations and Services - II**  
Co-Chairs: Janet Barzilla, Leidos/NASA Space Radiation Analysis Group  
Charlotte Martinkus, CU CIRES/SWPC
- 4:30 PM - 4:35 PM **Overview and Introductions**  
Janet Barzilla, Leidos/NASA Space Radiation Analysis Group
- 4:35 PM - 4:45 PM **Global High-Resolution MHD Simulations of Interplanetary CMEs and their Geoeffective Properties**  
Elena Provornikova, Johns Hopkins University Applied Physics Laboratory
- 4:45 PM - 4:55 PM **Creating an SEP Forecast for Cislunar Space**  
Wally Lang, Ensemble
- 4:55 PM - 5:05 PM **Space Charging Environment in Cislunar Space and Impacts to Gateway**  
Linda Parker, Space Weather Solutions
- 5:05 PM - 5:15 PM **Solar Cycle of Radiation Measurements on the Surface of Mars**  
Don Hassler, Southwest Research Institute
- 5:15 PM - 5:30 PM **Q&A**

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**Friday, April 19** Location: Pearl St. Ballroom

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- 8:30 AM - 10:00 AM **Space Weather Innovation Projects**  
Co-Chairs: Irfan Azeem, NOAA NESDIS  
Nai-Yu Wang, NOAA NESDIS
- 8:30 AM - 8:35 AM **Overview and Introductions**  
Nai-Yu Wang, NOAA NESDIS
- 8:35 AM - 8:45 AM **TRITON: Tiny Remote-sensing Instrument for the Thermospheric Oxygen and Nitrogen**  
Bruce Fritz, U.S. Naval Research Laboratory
- 8:45 AM - 8:55 AM **Using Commercial Satellite Constellation Data to Drive Thermospheric Density Forecast Capabilities**  
Eric Sutton, University of Colorado Space Weather Technology, Research, and Education Center (SWxTREC)
- 8:55 AM - 9:05 AM **Solar Sail Fabrication for Solar Cruiser Project**  
Pat Mulligan, The MITRE Corporation
- 9:05 AM - 9:15 AM **Compact Vector Helium magnetometer (CVHM) Development**  
Paul Loto'aniu, CU CIRES/NOAA NCEI

- 9:15 AM - 9:25 AM**      [AI, Data and Their Application to SW Forecasting](#)  
Madhulika Guhathakurta, NASA HQ
- 9:25 AM - 9:35 AM**      [Space Weather Array Prompt Experiment \(SWAP-E\) Cubesat Constellation](#)  
Hank Voss, NearSpace Launch, Inc.
- 9:35 AM - 10:00 AM**      **Q&A**
- 10:00 AM - 10:20 AM**      **Break**
- 10:20 AM - 10:50 AM**      [Induced Current Susceptibility and Resilience](#)  
Co-Chairs: Mike Hartinger, Space Science Institute  
Bhagyashree Waghule, University of Colorado, SWx TREC
- 10:20 AM - 10:23 AM**      **Overview and Introductions**  
Bhagyashree Waghule, University of Colorado, SWx TREC
- 10:23 AM - 10:31 AM**      [Geomagnetic Induction in Submarine Cables](#)  
David Boteler, Natural Resources Canada
- 10:31 AM - 10:39 AM**      [Space Weather Modeling for the Solar Tsunamis Project](#)  
Pauline Dredger, University of Michigan
- 10:39 AM - 10:47 AM**      [Mapping Magnetic Superstorms](#)  
Jeffrey Love, U.S. Geological Survey (USGS)
- 10:47 AM - 10:55 AM**      **Q&A**
- 10:55 AM - 11:50 AM**      [Citizens & Scientists: Tackling Space Weather Together](#)  
Co-Chairs: Mike Cook, The MITRE Corporation  
Vincent Ledvina, University of Alaska, Fairbanks
- 10:50 AM - 10:58 AM**      **Overview and Introductions**  
Mike Cook, The MITRE Corporation
- 10:58 AM - 11:08 AM**      [Aurora Apps: The Good, The Bad, and The Ugly](#)  
Tanya Melnik, Upper Midwest Aurora Chasers
- 11:08 AM - 11:18 AM**      [Communicating Space Weather to the Non-Expert and the Public](#)  
Tamitha Skov, Millersville University
- 11:18 AM - 11:28 AM**      [Innovative solutions to meet the space weather challenge: EZIE, EZIE-Mag, SuperMAG](#)  
Jesper Gjerloev, Johns Hopkins University Applied Physics Laboratory
- 11:28 AM - 11:38 AM**      [Special Presentation - Solar Cycle Prediction](#)  
Mark Miesch, CU CIRES/NOAA SWPC
- 11:38 AM - 11:50 AM**      **Q&A**

**Meeting Conclusion**

**11:50 AM - 12:00 PM**

**Closing Remarks**

Howard Singer, NOAA SWPC