



2024 Space Weather Workshop Agenda

Times in MDT

Monday, April 15 - Pre-Workshop Events

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

- 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.

Tuesday, April 16 Location: Pearl St. Ballroom

- 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: Gene 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

Wednesday, April 17 Location: Pearl St. Ballroom

- 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:**
18th 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

Thursday, April 18

Location: Pearl St. Ballroom

8:30 AM - 9:45 AM

[Centers Advancing Research to Operations](#)

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

8:30 AM - 8:35 AM

Overview and Introductions

Gene 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**

Friday, April 19 Location: Pearl St. Ballroom

- 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