

**21ST WORKSHOP ON ANTARCTIC METEOROLOGY AND CLIMATE
HILTON GARDEN INN CHARLESTON WATERFRONT/DOWNTOWN
45 LOCKWOOD DRIVE, CHARLESTON, SC
JUNE 16 – 18 2026**

Monday, 15 June 2026

1800-2000 Informal Icebreaker
45 Waterside at the Hilton Garden Inn
(In case of inclement weather: Peninsula Pre-Function)

Tuesday, 16 June 2026

0830-0900 Registration
Peninsula Pre-Function

0900-0920 Opening Remarks and Information
Bruce Carter, NIWC LANT
Shore C2ISR and Integration Department Head

0920-0940 Our Antarctic Community / Personal Introductions
Michael Johnson, NIWC LANT Polar Programs

Session 1: Policy and Operations
Chair: Bella Onsi, NIWC LANT Polar Programs

0940-1000 An update on the activities of the WMO's Antarctic Advisory Group and GCW
(Recorded)
Steve Colwell

1000-1020 Break
Peninsula Pre-Function

1020-1040 Climatological Support and Data Acquisition in the Antarctic: Operations of the 14th
Weather Squadron
Jason Patla, David Kofron, and Samat Siwek

1040-1100 NPP Meteorology 2026: Overview, Plans, and Goals
Michael Johnson

1100-1120 Forecast Watches, Warnings and Advisories for McMurdo Station and its Airfields
Paul Gulli

1120-1300 Lunch

Session 2: Observations and Data

Chair: Brian Rakoczy, The Ohio State University

- 1300-1320 Automatic Weather Station field season review 2025-26
Lee Welhouse
- 1320-1340 An Overview of AWS Servicing at Halley and Rothera Research Stations During the 2025/26 Season (Recorded)
Sabina Kucieba, Steve Colwell, and Alice Clement
- 1340-1400 The Madison Automatic Weather Station: Next-Generation Development and Operational Successes
Forbes A. Filip
- 1400-1420 NPP Meteorological Systems
Matt Frazier and Bella Onsi
- 1420-1440 Break
Peninsula Pre-Function
- 1440-1500 Quality Control Procedures for an Antarctic Automatic Weather Station Network (Virtual)
Sophie Orendorf, Taylor Ziegler, David Mikolajczyk, Linda Keller, and Matthew Lazzara
- 1500-1520 Observational Data Availability at South Pole Station and Impact on Forecasting Operations
Jenna Palmer
- 1520-1540 Portable Doppler Radar (PDR) Project
Ragen Willaford-Menefee
- 1540-1600 AMRDC Observational Data Update (Virtual)
David Mikolajczyk, Matthew Lazzara, Caleb Cullum, Sophie Orendorf, Taylor Ziegler, Lee Welhouse, and Karissa Shannon
- 1600-1620 Polar Potpourri: Status and the Near-Future of AWS and AMRDC projects
Matthew A. Lazzara, Andy Kurth, Forbes Filip, David Mikolajczyk, Matthew Noojin, Sophie Orendorf, Karissa Shannon, Lee Welhouse, and Taylor Ziegler
- 1620-1630 End-of-Day Remarks

Wednesday, 17 June 2026

- 0830-0900 Registration
Peninsula Pre-Function

Session 3A: Numerical Modeling (AM)

Chair: Jenna Palmer, NPP / CAG

- 0900-0920 AMPS Update -- June 2026
Kevin W. Manning and Jordan G. Powers
- 0920-0940 Performance of Polar WRF in the Polar Regions and Transition to a Regional Earth System Model
David H. Bromwich, Lesheng Bai, Keith M. Hines, Saurav dey Shuvo, and Rui Sun
- 0940-1000 A Polar WRF and Unified Model Study of an Atmospheric River Event at Davis, Antarctica
Keith M. Hines, Sonya Fiddes, Simon Alexander, David H. Bromwich, Mariana Fontolan Litell, Sheng-Hung Wang, and Zhangcheng Pei
- 1000-1020 Break
Peninsula Pre-Function
- 1020-1040 Evaluation of AI-Based Weather Forecasts over the Southern Polar Region
Brian Rakoczy, Saurav Dey Shuvo, David Bromwich, Sheng-Hung Wang
- 1040-1100 Characterization of Drifting and Blowing Snow at PEA Station and Validation of the CRYOWRF Model (Virtual)
Lorena Accossato, Rainette Engbers, and Michael Lehning
- 1100-1120 Antarctic Winter Numerical Forecast Improvement from Enhanced... Radiosondes (YOPP-SH)
Mariana Fontolan Litell, David H. Bromwich, Jordan G. Powers, Kevin W. Manning, and Sheng-Hung Wang
- 1120-1340 Lunch
(WAMC Organizing Committee Planning Meeting)

Session 3B: Numerical Modeling (PM)

Chair: Mariana Fontolan Litell, The Ohio State University

- 1340-1400 MPAS-A Performance in the Polar Regions
David H. Bromwich, Lesheng Bai, and Qian Xu
- 1400-1420 Drivers of observed winter–spring sea-ice and snow thickness at a coastal site in East Antarctica (Virtual)
Ricardo Fonseca, Diana Francis, Narendra Nelli, Petra Heil; Jonathan Wille, Irina Gorodetskaya, and Robert Massom
- 1420-1440 Break
Peninsula Pre-Function

- 1440-1500 Contrasting Radiative Regimes in Antarctica: Empirical and ARDL Modeling and Attribution of Global Solar Radiation Losses at Dome C and Horseshoe Island (Virtual)
Erhan Arslan
- 1500-1520 Analysis of an Antarctic Atmospheric Mass Loss Event (MPAS)
Jordan Powers
- 1520-1540 March 2022 East Antarctic heatwave under different background climate conditions (Model simulations)
Xun Zou, Edward Blanchard-Wrigglesworth, Zhenhai Zhang, Matthew R. Mazloff, Benjamin Moore, Dan Lubin, Matthew A. Lazzara, Irina V. Gorodetskaya, Jason M. Cordeira, Matthew Simpson, Brian Kawzenuk, Jinxi Li, Lanhao Yang, Penny M. Rowe, and F. Martin Ralph
- 1540-1600 Presentation: Polar Coupled Analysis and Prediction for Services (PCAPS) (Virtual)
Daniela Liggett

Special Discussion:

- 1600-1620 Discussion: Operational Meteorology Coordination
Michael Johnson & Paul Gulli
- 1620-1630 End-of-Day Remarks

Thursday, 18 June 2026

- 0830-0900 Registration
Peninsula Pre-Function

Session 4: Forecasting and Climatic Studies

Chair: Regan Willaford-Menefee, NIWC LANT Polar Programs

- 0900-0920 A 30-Year Satellite Derived Climatology of Landfalling Antarctic Cloud Mass Meridional Transport Events (Virtual)
Jonathan Chambers, Matthew Lazzara, Hannah Zanowski, David Mikolajczyk, Caleb Cullum, and Mary Reinhardt
- 0920-0940 Heatwaves in the East Antarctic interior amplified by climate change (Virtual)
Naoyuki Kurita, David H. Bromwich, and Matthew A. Lazzara
- 0940-1000 How much do extreme snow events contribute to the mass of the Antarctic Ice Sheet? (Virtual)
Karissa Shannon, Tristan L'Ecuyer, and Marian Mateling
- 1000-1020 Break
Peninsula Pre-Function

- 1020-1040 Revisiting the extraordinary katabatic wind regime at Terra Nova Bay, Antarctica
Brian Rakoczy, David Bromwich, Matthew Lazzara, and Paolo Grigioni
- 1040-1100 A November Snow Event at McMurdo Station (Radar Justification)
John R. Michael
- 1100-1120 Use of Tall Tower Data in Operational Forecasting
Bella Onsi
- 1120-1300 Lunch
- Session 5: Technology Discussions and Conclusion**
Chair: Michael Johnson, NIWC LANT Polar Programs
- 1300-1600 Discussion: Meteorological Observations and Data: A Workshop Discussion
Matthew A. Lazzara
- Discussion: AWS Technology
- Discussion: DBRS Technology
- 1600-1630 End of Meeting Remarks, Announcements, and Action Items
Michael Johnson