Curriculum Vitae

DAVID JOSEPH BODINE

Associate Professor

School of Meteorology
University of Oklahoma
120 David L. Boren Blvd., Suite 5339
Norman, OK 73072 USA

Phone: (913) 961-8162 Email: bodine@ou.edu

EDUCATION

Ph.D.	2014	Meteorology, University of Oklahoma, Norman, Oklahoma
		Title: Polarimetric radar observations and numerical simulations of tornadic debris
M.S.	2012	Electrical and Computer Engineering, University of Oklahoma, Norman, Oklahoma
M.S.	2009	Meteorology, University of Oklahoma, Norman, Oklahoma
B.S.	2007	Meteorology, University of Oklahoma, Norman, Oklahoma

PROFESSIONAL EXPERIENCE

2022 –	*Associate Professor*, School of Meteorology University of Oklahoma, Norman, Oklahoma
2016 –	*Research Scientist* Advanced Radar Research Center, Norman, Oklahoma
2014 – 2016	*Advanced Study Program Postdoctoral Fellow* National Center for Atmospheric Research, Boulder, Colorado
2014	*Postdoctoral Research Associate*, School of Meteorology University of Oklahoma, Norman, Oklahoma
2013	*Graduate Teaching Assistant*, School of Meteorology University of Oklahoma, Norman, Oklahoma
2012	*Summer Program Fellow, Japan Society for Promotion of Science* Disaster Prevention Research Institute, Kyoto University, Kyoto, Japan
2012	*Graduate Teaching Assistant*, School of Meteorology University of Oklahoma, Norman, Oklahoma
2007 – 2014	*Graduate Research Assistant*, School of Meteorology University of Oklahoma, Norman, Oklahoma
2006 – 2007	*Undergraduate Research Assistant*, School of Meteorology University of Oklahoma, Norman, Oklahoma

SCIENTIFIC GRANTS (PI)

1. D. Bodine (OU) and F. Lombardo (Univ. of Illinois), **NOAA** $314,493 ($688,574 total), *Large Eddy Simulation of Tornado-Structure Interaction: Pathways to Reducing Societal Impacts*, 08/01/23 – 07/31/26.

2. D. Bodine, and T.-Y. Yu, **Helios Remote Sensing Systems**, $95,601, *Radar-Based Wake Optimization of Off-Shore Wind Farms*, 08/03/22 – 08/02/23.

3. D. Bodine (OU), L. Orf, L. Frank, and V. Galinsky, **National Science Foundation**, $403,045 ($1,546,757 total), *Collaborative Research: Detection and Estimation of Multi-Scale Complex Spatiotemporal Processes in Tornadic Supercells from High-Resolution Simulations and Multiparameter Radar*, 07/15/21 – 07/14/25.

4. D. Bodine, and T.-Y. Yu, **Helios Remote Sensing Systems**, $56,038, *Radar-Based Wake Optimization of Off-Shore Wind Farms*, 07/01/21 – 12/31/21.

5. D. Bodine, and A. Reinhart, **NOAA**, $123,909, *VORTEX-SE: Evaluation of Structural Vulnerability in the Southeast United States using High-Resolution Tornado Simulations with Buildings and Terrain*, 09/01/19 – 08/31/22.

6. D. Bodine, B. L. Cheong, T. Y. Yu, R. D. Palmer, and A. Reinhart, **Weathernews, Inc.**, $249,170, *Using Observations, Simulations, and Artificial Intelligence to Develop a Lake-Effect Snow Prediction System*, 11/01/19 – 10/31/20.

7. D. Bodine, B. L. Cheong, T. Y. Yu, R. D. Palmer, and A. Reinhart, **Weathernews, Inc.**, $124,829, *Observation-Based Microphysics Classification and Cloud Activity for Lake-Effect Snow*, 06/01/19 – 09/30/19.

8. D. Bodine, B. L. Cheong, C. Fulton, R. D. Palmer, and S. M. Torres, **National Science Foundation**, $787,353, *Understanding the Relationship Between Tornadoes and Debris Through Observed and Simulated Radar Data*, 07/01/18 – 06/30/23.

9. D. Bodine, T. Yu, and N. Goodman, **Air Force**, $44,866, *SBIR: Bistatic Weather Radar*, 07/01/18 – 12/31/18.

10. D. Bodine, and A. Reinhart, **NOAA**, $192,612, *VORTEX-SE: Exploration of Terrain Effects on Tornado and Supercell Dynamics in the Southeast United States*, 09/01/17 – 08/31/19.

11. D. Bodine, **Nanowave, Inc.**, $204,217, *PX-10000 and a Local Radar Network for High-Impact Weather Studies and Radar System Evaluation*, 01/01/17 – 08/31/19.

SCIENTIFIC GRANTS (CO-PI, *student-led)

1. R. Palmer, D. Schvartzman Cohenca, D. Bodine, B. L. Cheong, C. Fulton, P.-E. Kirstetter, J. Salazar, M. Yeary, T.-Y. Yu, A. R. Segales Espinosa, **NOAA**, $2,320,079, *Phased Array Weather Radar: Research, Development, Implementation, and Science*, 03/26/25 – 02/28/26.

2. C. Homeyer, E. Mansell, C. Ziegler, Z. Lebo, D. Bodine, and T.-Y. Yu, **NSF** $2,129,687, *Collaborative Research: AGS-FIRP Track 3: In-situ Collaborative Experiment for the Collection of Hail In the Plains (ICECHIP)*, 09/01/24 - 08/31/28.

3. T.-Y. Yu, D. Bodine, P. E. Kirstetter, R. Palmer, D. Schvartzman, M. Yeary, B. Cheong, and H. Bluestein, **NSF**, $1,316,982, *AGS-CIF: Mobile Rapid Scanning Radar (RaXPol) for Enhancing Weather Radar Research and Hands-on Education*, 09/01/24 – 08/31/29.

4. P. Skinner, D. Schvartzman, D. Bodine, S. Emmerson, P.-E. Kirstetter, C. Fulton, and R. Palmer, **NOAA**, $569,396, *Development of Real-Time Multistatic Passive Radar Networks for Severe Weather Prediction*, 08/01/23 – 07/31/25.

5. R. Palmer, D. Schvartzman Cohenca, D. Bodine, B. L. Cheong, C. Fulton, P.-E. Kirstetter, J. Salazar, H. Sigmarsson, M. Yeary, T.-Y. Yu, G. Zhang, **NOAA**, $2,378,188, *Phased Array Weather Radar: Research, Development, Implementation, and Science*, 10/01/23 – 09/30/24.

6. T.-Y. Yu, D. Bodine, R. Palmer, J. Gebauer, P. Klein, **Metro Weather Co.**, $838,821, *Mobilize Metro Weather's Lidar System and Conduct Field Experiments to Demonstrate and Enhance System Performance for Scientific Discovery*, 08/14/23 – 09/30/25.

7. J. Kelly, D. Bodine, B. Cheong, **USGS**, $497,336, *Border Wall Aeroecology*, 08/14/23 – 09/30/25.

8. M. Schneider*, D. Bodine, B. Cheong, D. Schvartzman, **NOAA**, $119,769, *Rapid-Scan Observations of Mesovortices in Southeastern Linear Storms*, 04/01/23 – 03/31/24.

9. D. Schvartzman, T.-Y. Yu, D. Bodine, V. C. Chmielewski, M. Stock, **NSF**, $217,144, *Collaborative Research: EAGER: Initial Evaluation of Polarimetric Phased Array Radar for the Study of Storm Electrification and Lightning*, 04/01/23 – 09/30/24.

10. D. Schvartzman, R. Palmer, D. Bodine, P. Kirstetter, C. Fulton, P. Skinner, and S. Emmerson, **Australian Bureau of Meteorology**, $56,856, *Development of Multistatic Passive Radar Networks for S-band Weather Radars*, 01/01/23 – 12/31/23.

11. H. Bluestein, T.-Y. Yu, B. L. Cheong, D. J. Bodine, D. Schvartzman, **NSF**, $438,686, *Rapid-scan Polarimetric Radar Data Collection and Analysis of the Wind Field in Severe Convective Storms and Tornadoes*, 01/01/23 – 12/31/25.

12. R. Palmer, D. Schvartzman Cohenca, D. Bodine, B. L. Cheong, C. Fulton, P.-E. Kirstetter, J. Salazar, H. Sigmarsson, M. Yeary, T.-Y. Yu, G. Zhang, **NOAA**, $2,345,333, *The Horus Digital Polarimetric Phased Array Radar: Weather Observations and Further Enhancements*, 10/01/22 – 09/30/23.

13. G. McFarquhar, T.-Y. Yu, D. Bodine, D. Schvartzman Cohenca, **NASA**, $31,693, *Mobile RaXPol Radar for IMPACTS Field Campaign*, 02/01/22 – 03/31/22.

14. R. Palmer, D. Bodine, B. Cheong, C. Fulton, P. Kirstetter, J. Salazar, H. Sigmarsson, M. Yeary, T.-Y. Yu, G. Zhang, D. Schvartzman, **NOAA**, $2,001,553, *Single-Faced, Rotating, Digital Phased Array Radar: Innovation and Applications*, 10/01/21 – 09/30/22.

15. J. Kelly, D. Bodine, and B. L. Cheong, **The Nature Conservancy**, $49,639, *Radar Analysis of Bird Migration and Stopover in the Atchafalaya River Basin*, 10/01/21 – 08/31/23.

16. J. Kelly, D. Bodine, and B. L. Cheong, **USGS**, $48,311, *Radar Analysis of Bird Migration and Stopover in the Atchafalaya River Basin*, 08/19/21 – 08/18/26.

17. T. Y. Yu, R. D. Palmer, H. B. Bluestein, D. J. Bodine, and P.-E. Kirstetter, **National Science Foundation**, $601,235, *CIF: Mobile Rapid Scanning Radar for Enhancing Weather Radar Research and Education*, 08/15/21 – 08/14/24.

18. D. Schvartzman, R. Palmer, D. Bodine, P.-E. Kirstetter, T. Y. Yu, and B. L. Cheong, **Weathernews, Inc.** $45,034, *Lake Effect Snow II: Graupel and Hail Detection with C- and X- band radar measurements*, 07/01/21 – 06/30/22.

19. P. E. Kirstetter, J. Gourley, H. Vergara Arrieta, D. Bodine, B. L. Cheong, J. Vogel, J. Basara, Y. Derin, and K. Dee, **National Science Foundation**, $41,287, *Enhancing Communities Preparedness and Resilience to Post-Wildfire Hydrology in Mountainous Areas*, 01/15/21 – 06/30/21.

20. R. Palmer, C. Fulton, J. Salazar Cerrano, H. Sigmarsson, M. Yeary, T.-Y. Yu, B. L. Cheong, D. Bodine, and G. Zhang, **NOAA**, $2,000,911, *Exploitation of the Horus All-digital Polarimetric Phased Array Radar*, 07/01/20 – 06/30/21.

21. H. Bluestein, B. L. Cheong, and D. Bodine, **National Science Foundation**, $575,731, *Enhanced Radar Studies of Severe Convective Storms and Tornadoes*, 01/01/20 – 12/31/21.

22. P. Kirstetter, B. L. Cheong, D. Bodine, and T. Y. Yu, **Colorado Water Conservation Board**, $162,825, *Deployment of X-band Polarimetric Weather Radar for Hydrology*, 06/01/19 – 09/30/19.

23. P. Kirstetter, B. L. Cheong, D. Bodine, and T. Y. Yu, **Colorado Water Conservation Board**, $95,886, *Deployment of X-band Polarimetric Weather Radar for Hydrology*, 07/01/18 – 09/30/18.

24. M. Biggerstaff and D. Bodine, **NOAA**, $128,054, *Mobile Radar Operations to Support VORTEX-SE*, 03/01/17 – 02/28/18.

25. R. Palmer, D. Bodine, S. Torres, B. Cheong, and C. Fulton, **National Science Foundation**, $887,818, *Understanding Polarimetric Radar Tornadic Debris Signatures Using Modeling, Simulations, and Field Measurements*, 09/15/13 – 02/28/18.

CURRENT RESEARCH INTERESTS

High-temporal resolution radar studies of severe thunderstorms and tornadoes using phased array and dual-polarization radars

Understanding the impact of terrain and manmade structures on supercell and tornado dynamics

Assessment of the design tradeoffs and benefits of a future operational phased array radar network

Radar simulation using advanced electromagnetic scattering calculations and atmospheric models

Development of transformative phased array radar technology for atmospheric science research

Creating hands-on educational field experiences with mobile radars for diverse groups of undergraduate and graduate students

Machine learning applications to forecasting severe weather and winter precipitation using radar and satellite observations

FIELD EXPERIMENTS

NSF/NOAA Propagation, Evolution, and Rotation in Linear Systems, PI Team, 2023

NSF Experiment of Sea breeze Convection, Aerosols, Precipitation, and Environment (ESCAPE), Science Team, 2022

Radar coordinator for OU PX-1000 and RaXPol

ARRC Spring Field Experiment, 2017 – Present

Coordinate radar experiments for the Atmospheric Imaging Radar, PX-1000, PX-10k, EAGLE radar, and passive radars

VORTEX-SE, 2017

Radar operator for the Rapid X-band polarimetric radar (RaXpol)

Plains Elevated Convection At Night (PECAN), 2015

Coordinated disdrometer data collection

Designed dual-frequency, collocated mobile radar experiments

Served as an NCAR S-Pol radar scientist

Atmospheric Imaging Radar, 2011 – 2014

Served as field coordinator and driver during severe storm and tornado deployments

Helped assemble and test radar hardware

Hurricane Irene Field Project, 2011

Lead radar operator of the RaXpol

RaXPol Research Experiences for Undergraduates (REU) Field Project, 2011

Coordinated a 4-day experiment to collect tornado and supercell data

OU-PRIME, 2010 – 2011

Provided nowcast support for radar operations

Verification of the Origin of Rotation in Tornadoes EXperiment 2 (VORTEX2) Project, 2009 – 2010

Forecaster in the VORTEX2 Operations Center

Radar operator and scout vehicle driver for SMART-R

TEACHING ACTIVITIES

Undergraduate Courses Taught:

METR 2603 Severe and Unusual Weather - Spring 2025

METR 1313 Programming for Meteorology - Spring 2023, Fall 2023, Fall 2024

METR 2013 Introduction to Meteorology I - Spring 2012, Spring 2013

METR 2013 Introduction to Meteorology I - Fall 2013 (Recitation)

Graduate Courses Taught:

METR/ECE 5683 Weather Radar Applications - Spring 2024
METR/ECE 5673 Weather Radar Theory and Practice - 2016, 2021

Guest Lectures:

METR 5673 Weather Radar Theory - 2012, 2013, 2018, 2019, 2020, 2022, 2024
METR 5683 Weather Radar Applications - 2011, 2012, 2013, 2017
REU Talk on Radar Observations of Tornadoes - 2017
METR 5004 Fundamentals of Meteorology Principles of Radar - 2019 – 2023
CEES/GIS 5903 Remote Sensing/Hydrometeorology - 2019

POSTDOCTORAL FELLOWS SUPERVISED

Hyeri Kim

Alex Schueth

GRADUATE STUDENTS (CO-)SUPERVISED

Nathan Kuhr, M.S.

Robert Frost, M.S.

Emily Blumenauer, Ph.D.

Dominic Candela, Ph.D.

Brandon Cohen, Ph.D.

Rachael Cross, Ph.D.

Sam Emmerson, Ph.D.

Vitor Goede, Ph.D.

Laura Shedd, Ph.D.

Hsiu-Wei Hsu, Ph.D.

Min-Duan Tzeng, Ph.D.

Omitusa Oluwafemi, M.S. (completed 2024)

Brandon Cohen, M.S. (completed 2022)

Connor Pearson, M.S. (completed 2022)

Laura Shedd, M.S. (completed 2022)

Sam Emmerson, M.S. (completed 2022)

Rachael Cross, M.S. (completed 2021)

Morgan Schneider, M.S. (completed 2021)

Andrew Mahre, Ph.D. (completed 2020)

Clarice Dyson, M.S. (completed 2019)

Martin Satrio, M.S. (completed 2019)

Casey Griffin, Ph.D. (completed 2019)

GRADUATE COMMITTEES SERVED

Emily Blumenauer, M.S. (completed)

Maci Gibson, M.S. (completed)

Isabelle Jernigan, M.S.

Angela Mose, M.S. (completed)

Ameya Naik, M.S. (completed)

Tyler Pardun, M.S. (completed)

Erika Pruett, M.S.

Leah Swinney, M.S. (completed)

Austin Dixon, Ph.D.

Madeline Diedrichsen, Ph.D.

Billy Faletti, Ph.D.

Jonah Pehl, Ph.D.

Lauren Pounds, Ph.D.

Morgan Schneider, Ph.D.

Randall Summers, Ph.D.

UNDERGRADUATE STUDENTS SUPERVISED

William Thiesing, Undergraduate Research Assistant, 2023 – Present

Cory Schultz, NWC REU Program, 2023

Alex Searl and Jacob Teichman, Capstone, 2022

Matthew Cunningham, Cody Davis, and Kyle James, Capstone, 2022

Kyndra Buglione, NWC REU Program, 2022

Savannah Southward, Undergraduate Research Assistant, 2021 – 2024

Nicholas Price, NWC REU Program, 2021

Juan Mangual, NWC REU Program, 2021

Melanie Zambron, NWC REU Program, 2020

Emily McCutchan and Brendan Borroughs, Honors Thesis and Capstone, 2020

Kyle Pittman, NWC REU Program, 2019

Rachael Cross, Sam Emmerson, Cody Johnston, Capstone, 2018 – 2019

Alexandra Borunda, NWC REU Program, 2017

Erin Dougherty, UCAR SOARS Program, 2015

Anthony Torres, UCAR SOARS Program, 2015

David Hill, 2013

Alex Lyakhov, NWC REU Program, 2011

PROFESSIONAL AWARDS AND HONORS

Annual Award for Excellence in Research Grants, 2025

AMS Editor's Award, 2024

Journal of Applied Meteorology and Climatology

Excellent Award, A&GS Research Performance Awards, 2024

NASA Group Achievement Award, 2024

Annual Award for Excellence in Research Grants, 2024

Annual Award for Excellence in Research Grants, 2023

AMS Scientific and Technological Activities Commission Outstanding Early Career Award, 2022

"For prodigious influence on the field of radar meteorology via influential publications, management of field programs, and leadership through service on committees and boards, in conference planning and journal editing and review for AMS."

Annual Award for Excellence in Research Grants, 2022

Annual Award for Excellence in Research Grants, 2021

NSF/JSPS East Asia Pacific Summer Institute Fellowship, 2012

Tommy Craighead Award, University of Oklahoma, 2010

Best student paper in radar meteorology

Geotis Award for Best Student Presentation, 34th AMS Radar Conference, 2009

Alumni Fellowship, University of Oklahoma, 2009 – 2014

Outstanding Performance as a Graduate Student, University of Oklahoma, 2008

American Meteorological Society Graduate Fellowship, 2007 – 2008

Undergraduate Academic Achievement Award, 2007

Award for highest GPA in senior class

George S. Benton Scholarship, American Meteorological Society, 2006

Undergraduate Academic Achievement Award, 2006

Award for highest GPA in junior class

Study abroad at the University of Reading, 2006

PROFESSIONAL MEMBERSHIPS

Member of the American Meteorological Society

Member of the Institute of Electrical and Electronics Engineers

Member of the Japan Society for Promotion of Science Alumni Association

Member of the National Weather Association

PROFESSIONAL DEVELOPMENT

University of Oklahoma Teaching Scholar's Initiative: Digital Learning Regional Conference

UCAR/University of Colorado Teaching Methods Workshops Levels 1 and 2

UCAR Solicitation Analysis and Proposal Writing Session

PROFESSIONAL SERVICE

Program Committee, 41st International Conference on Radar Meteorology, 2025

Co-Chair, 40th Conference on Radar Meteorology, 2023

Program Committee, 11th European Conference on Radar Meteorology and Hydrology, 2022

Co-Chair, Symposium on Radar Science in the Service of Earth System Predictability, 102nd AMS Annual Meeting, 2022

Chair, Panel Session, Radar Research and Development for Operations: Research Aimed at Operations across the Development Life Cycle, 102nd AMS Annual Meeting, 2022

Co-Chair, Phased Array Radar Symposium, 99th AMS Annual Meeting, 2019

Chair, OU Local Organizing Committee, 5th International Symposium on Earth-Science Challenges, 2017

Associate Editor, Journal of Applied Meteorology and Climatology, 2017 – Present

Associate Editor, Monthly Weather Review, 2017 – Present

Member, AMS Committee on Radar Meteorology, 2017 – 2020

Session Chair, 37th Conference on Radar Meteorology, Norman, OK 14 – 18 September 2015

Panelist, Verification of the Origins of Rotation in Tornadoes Experiment 2 (VORTEX2) update session, 10th Annual AMS Student Conference, Seattle, WA, 22 – 23 Jan 2011

Reviewer for *Bulletin of the American Meteorological Society, Journal of Applied Meteorology and Climatology, Journal of Atmospheric and Oceanic Technology, Journal of Atmospheric Sciences, Monthly Weather Review, Journal of Geophysical Research Atmospheres, IEEE Trans. Geosci. Remote Sens., Quarterly Journal of the Royal Meteorological Society (not all inclusive)*

Proposal reviewer for National Science Foundation, NOAA, DOE

UNIVERSITY/DEPARTMENTAL SERVICE

Co-Chair, Search Committee for Social and/or Behavioral Sciences Faculty Position, 2024 – 2025

Member, Graduate College Academic Appeals Committee, 2024 – Present

Member, SoM Scholarship and Awards Committee, 2024 – Present

Chair, Mobile Radar Committee, 2021 – Present

Search Committee, NWC Librarian, College of Atmospheric and Geographic Sciences, 2021

Member, Library Advisory Committee, College of Atmospheric and Geographic Sciences, 2019 – Present

Manager of the Mobile Radar Facility, ARRC, 2018 – Present

Member, Distinguished Radar Lecture Series Committee, ARRC, 2017 – Present

REFEREED JOURNAL ARTICLES (* denotes first-author papers of students (co-)advised)

1. Cohen, B.*, D. Bodine, M. Yeary, J. Snyder, and H. Bluestein, 2025: Examining meteorological benefits of rapid-scan, fully digital phased array radar observations for detecting tornado formation and intensification. *J. Atmos. Oceanic Technol.*, in press.

2. Schneider, M.*, D. J. Bodine, S. Torres, R. D. Palmer, B. Cheong, C. Fulton, C. B. Griffin, T. Maruyama, and J. Lujan, 2025: A novel technique to correct debris-related bias in velocity measurements from tornadoes. *J. Atmos. Oceanic Technol.*, in press.

3. Wakimoto, R. M., D. J. Bodine, H. B. Bluestein, T. Greenwood, S. Emmerson, 2025: Kinematic structure of a tornado based on an analysis of lofted debris speeds, debris orientation, and mobile radar data. *Mon. Wea. Rev.*, in press.

4. Goede, V.*, D. Schvartzman, D. Bodine, V. Chmielewski, T.-Y. Yu, M.-D. Tzeng, E. Bruning, and M. Stock, 2025: Rapid sampling of spatial structure and polarimetric statistics of lightning observed with phased array radar. *Geophys. Res. Letters.*, **52**, e2024GL112193, https://doi.org/10.1029/2024GL112193.

5. Kollias, P., G. McFarquhar, E. Bruning, P. J. Demott, M. R. Kumjian, P. Lawson, Z. Lebo, T. Logan, K. Lombardo, M. Oue, G. Roberts, R. Shaw, S. van den Heever, M. Wolde, K. R. Barry, D. Bodine, R. Bruintjes, V. Chandrasekar, A. Dzambo, T. C. J. Hill, M. Jensen, F. Junyent, S. M. Kreidenweis, K. Lamer, E. P. Luke, A. Bansemer, C. McCluskey, L. Nichman, C. Nguyen, R. J. Patnaude, R. J. Perkins, H. Powers, K. Ranjbar, E. Roux, J. Snyder, B. P. Treserras, P. Tsai, N. A. Wales, C. Wolf, N. Allwayin, B. Ascher, J. Barr, Y. Hu, Y. Huang, M. Litzmann, Z. Mages, K. McKeown, S. Patil, E. Rosky, K. Tuftedal, M.-D. Tzeng, and Z. Zhu, 2025: Experiment of Sea Breeze Convection, Aerosols, Precipitation and Environment (ESCAPE). *Bull. Amer. Meteor. Soc.*, **106**, E310 – E332, https://doi.org/10.1175/BAMS-D-23-0014.1.

6. Wagner, M., M. Coniglio, E. Rasmussen, D. Bodine, M. Satrio, D. Candela, D. Kennedy, R. Moore, 2025: Harnessing UAS and high-resolution satellite imagery to better characterize wind damage and understand tornado behavior, *Bull. Amer. Meteor. Soc.*, **106**, E492-E508, https://doi.org/10.1175/BAMS-D-23-0234.1.

7. Bodine, D. J., and C. B. Griffin, 2024: Review of science enabled by rapid-scan weather radar. *Mon. Wea. Rev.*, **152**, 3 – 37, https://doi.org/10.1175/MWR-D-22-0324.1.

8. Kosiba, K., A. W. Lyza, R. J. Trapp, E. N. Rasmussen, M. Parker, M. I. Biggerstaff, S. W. Nesbitt, C. C. Weiss, J. Wurman, K. R. Knupp, B. Coffer, V. C. Chmielewski, D. T. Dawson, E. Bruning, T. M. Bell, M. C. Coniglio, T. A. Murphy, M. French, L. Blind-Doskocil, A. E. Reinhart, E. Wolff, M. E. Schneider, M. Silcott, E. Smith, J. Aikins, M. Wagner, P. Robinson, J. M. Wilczak, T. White, D. Bodine, M. R. Kumjian, S. M. Waugh, A. A. Alford, K. Elmore, P. Kollias, and D. D. Turner, 2024: The Propagation, Evolution, and Rotation in Linear Storms (PERiLS) Project. *Bull. Amer. Meteor. Soc.*, **105**, E1768 – E1799, https://doi.org/10.1175/BAMS-D-22-0064.1.

9. Ueki, A., M. Teshiba, D. Schvartzman, P.-E. Kirstetter, R. D. Palmer, K. Osa, T.-Y. Yu, B. Cheong, D. Bodine, 2024: Winter precipitation detection using C- and X-band radar measurements. *Remote Sens.*, **16**, 2630, https://doi.org/10.3390/rs16142630.

10. Cross, R. N.*, D. J. Bodine, R. D. Palmer, C. B. Griffin, B. Cheong, S. Torres, C. Fulton, J. Lujan, and T. Maruyama, 2023: Exploring tornado debris signature hypotheses using radar simulations and Large-Eddy Simulations. *J. Atmos. Oceanic Technol.*, **40**, 1199–1219, https://doi.org/10.1175/JTECH-D-22-0141.1.

11. Palmer, R. M., Yeary, D. Schvartzman, J. Salazar-Cerreno, C. Fulton, M. McCord, B. Cheong, D. Bodine, P. Kirstetter, H. Sigmarsson, T.-Y. Yu, D. Zrnic, R. Kelley, J. Meier, and M. Herndon, 2023: Horus – A fully digital polarimetric phased array radar for next-generation weather observations. *IEEE Trans. on Radar Sys.*, **1**, 96 – 117, https://doi.org/10.1109/TRS.2023.3280033.

12. Pearson, C.*, T. Y. Yu, D. Bodine, S. Torres, and A. Reinhart, 2023: A framework for comparisons of microburst precursor observations using an all-digital phased array weather radar. *J. Atmos. Oceanic Technol.*, **40**, 919 – 938, https://doi.org/10.1175/JTECH-D-22-0130.1.

13. Strand, A. I., E. S. Bridge, J. F. Kelly, P. M. Stepanian, D. J. Bodine, and J. R. Soto, 2023: A multi-sensor array for detecting and analyzing nocturnal avian migration. *PeerJ Life Env.*, **11**, e15622, https://doi.org/10.7717/peerj.15622.

14. Anderson, M., J. Buckles, D. Schneider, D. Bodine, A. Reinhart, M. Satrio, and T. Maruyama, 2022: Terrain effects on the Mountainburg, AR EF-2 tornado: 13 April 2018. *J. Oper. Meteor.*, **10**, 18 – 29, https://doi.org/10.15191/nwajom.2022.1002.

15. Huang, Y., X. Wang, A. Mahre, T. Yu, and D. Bodine, 2022: Impacts of assimilating future phased array radar clear-air radial velocity observations on convection initiation forecasts. *Mon. Wea. Rev.*, **150**, 1563 – 1583, https://doi.org/10.1175/MWR-D-21-0199.1.

16. Kollias, P., R. Palmer, D. Bodine, T. Adachi, H. Bluestein, J. Y. N. Cho, C. Griffin, J. Houser, P. E. Kirstetter, M. R. Kumjian, J. M. Kurdzo, W. C. Lee, E. P. Luke, S. Nesbitt, M. Oue, A. Shapiro, A. Rowe, J. Salazar, R. Tanamachi, K. Tuftedal, X. Wang, D. Zrnic, and B. P. Treserras, 2022: Science applications of phased array radars. *Bull. Amer. Meteor. Soc.*, **103**, E2370 – E2390, https://doi.org/10.1175/BAMS-D-21-0173.1.

17. Palmer, R., D. Bodine, P. Kollias, D. Schvartzman, D. Zrnic, P. Kirstetter, G. Zhang, T.-Y. Yu, M. Kumjian, B. Cheong, S. Collis, S. Frasier, C. Fulton, K. Hondl, J. Kurdzo, T. Ushio, A. Rowe, J. Salazar-Cerreno, S. Torres, M. Weber, and M. Yeary, 2022: A primer on phased array radar technology for the atmospheric sciences. *Bull. Amer. Meteor. Soc.*, **103**, E2391 – E2416, https://doi.org/10.1175/BAMS-D-21-0172.1.

18. Satrio, C. N.*, D. J. Bodine, R. D. Palmer, and C. Kuster, 2021: Multi-radar analysis of the 20 May 2013 Moore, OK supercell through tornadogenesis and intensification. *Atmos.*, **12**, 313, https://doi.org/10.3390/atmos12030313.

19. Shapiro, A., J. G. Gebauer, N. A. Dahl, D. J. Bodine, A. M. Mahre, and C. K. Potvin, 2021: Spatially variable advection correction of Doppler radial velocity data. *J. Atmos. Sci.*, **78**, 167 – 188, https://doi.org/10.1175/JAS-D-20-0048.1.

20. Alford, A. A., J. A. Zhang, M. I. Biggerstaff, P. Dodge, F. D. Marks, and D. J. Bodine, 2020: Transition of the hurricane boundary layer during the landfall of Hurricane Irene (2011). *J. Atmos. Sci.*, **77**, 3509 – 3531., https://doi.org/10.1175/JAS-D-19-0290.1.

21. Griffin, C. B.*, D. J. Bodine, and R. D. Palmer, 2020: Polarimetric radar observations of simultaneous tornadoes on 10 May 2010 near Norman, Oklahoma. *Mon. Wea. Rev.*, **148**, 477 – 497, https://doi.org/10.1175/MWR-D-19-0156.1.

22. Huang, Y., X. Wang, C. Kerr, A. Mahre, T.-Y. Yu, and D. Bodine, 2020: Impact of assimilating future clear-air radial velocity observations from phased array radar on supercell thunderstorm forecast: An observing system simulation experiment study. *Mon. Wea. Rev.*, **148**, 3825 – 3845, https://doi.org/10.1175/MWR-D-19-0391.1.

23. Mahre, W. A.*, T.-Y. Yu, and D. J. Bodine, 2020. A comparison of scan speedup strategies and their effect on rapid-scan weather radar data quality. *J. Atmos. Oceanic Technol.*, **37**, 1955 – 1972, https://doi.org/10.1175/JTECH-D-19-0216.1.

24. Satrio, M.*, D. J. Bodine, A. E. Reinhart, T. Maruyama, and F. T. Lombardo, 2020: Understanding how complex terrain impacts tornado dynamics using a suite of high-resolution numerical simulations. *J. Atmos. Sci.*, **77**, 3277 – 3300, https://doi.org/10.1175/JAS-D-19-0321.1.

25. Wakimoto, R. M., Z. Wienhoff, H. B. Bluestein, D. Bodine, and J. M. Kurdzo, 2020: Mobile radar observation of the evolving debris field compared with a damage survey of the Shawnee, Oklahoma tornado of 19 May 2013. *Mon. Wea. Rev.*, **148**, 1779 – 1803, https://doi.org/10.1175/MWR-D-19-0215.1.

26. Griffin, C. B.*, D. J. Bodine, J. M. Kurdzo, A. Mahre, and R. D. Palmer, 2019: High-temporal resolution observations of the 27 May 2015 Canadian, Texas, tornado using the Atmospheric Imaging Radar. *Mon. Wea. Rev.*, **147**, 873 – 891, https://doi.org/10.1175/MWR-D-18-0297.1.

27. Mahre, W. A.*, J. M. Kurdzo, D. Bodine, C. Griffin, R. D. Palmer, and T.-Y. Yu, 2018. Analysis of the 16 May 2015 Tipton, Oklahoma, EF-3 tornado at high spatiotemporal resolution using the Atmospheric Imaging Radar. *Mon. Wea. Rev.*, **146**, 2103 – 2124, https://doi.org/10.1175/MWR-D-17-0256.1.

28. Umeyama, A., B. L. Cheong, S. Torres, and D. Bodine, 2018. Orientation analysis of simulated tornadic debris. *J. Atmos. Oceanic Technol.*, **35**, 993 – 1010, https://doi.org/10.1175/JTECH-D-17-0140.1.

29. Griffin, C. B.*, D. J. Bodine, and R. D. Palmer, 2017: Kinematic and polarimetric radar observations of the 10 May 2010, OK tornadic debris signature. *Mon. Wea. Rev.*, **145**, 2723 – 2741, https://doi.org/10.1175/MWR-D-16-0344.1.

30. Bodine, D. J., and K. R. Rasmussen, 2017: Evolution of mesoscale convective system organizational structure and convective line propagation. *Mon. Wea. Rev.*, **145**, 3419 – 3440, https://doi.org/10.1175/MWR-D-16-0406.1.

31. Cheong, B. L., D. J. Bodine, C. J. Fulton, S. M. Torres, T. Maruyama, and R. D. Palmer, 2017: SimRadar: A polarimetric radar time-series simulator for tornadic debris studies. *IEEE Trans. on Geosci.*, **55**, 2858 – 2870, https://doi.org/10.1109/TGRS.2017.2655363.

32. Kurdzo, J. M., F. Nai, D. J. Bodine, T. A. Bonin, R. D. Palmer, B. L. Cheong, J. Lujan, A. Mahre, and A. D. Byrd, 2017: Observations of severe local storms and tornadoes with the Atmospheric Imaging Radar. *Bull. Amer. Meteor. Soc.*, **98**, 915 – 935, https://doi.org/10.1175/BAMS-D-15-00266.1.

33. Bodine, D., R. D. Palmer, T. Maruyama, C. J. Fulton, Y. Zhu, and B. L. Cheong, 2016: Simulated frequency dependence of radar observations of tornadoes. *J. Atmos. Oceanic Technol.*, **33**, 1825 – 1842., https://doi.org/10.1175/JTECH-D-15-0120.1

34. Bodine, D., T. Maruyama, R. D. Palmer, C. J. Fulton, H. B. Bluestein, and D. C. Lewellen, 2016: Sensitivity of tornado dynamics to soil debris loading. *J. Atmos. Sci.*, **73**, 2783 – 2801, https://doi.org/10.1175/JAS-D-15-0188.1.

35. Kurdzo, J. M., D. J. Bodine, B. L. Cheong, and R. D. Palmer, 2015: High-temporal resolution polarimetric X-band Doppler radar observations of the 20 May 2013 Moore, Oklahoma tornado. *Mon. Wea. Rev.*, **143**, 2711 – 2735, https://doi.org/10.1175/MWR-D-14-00357.1.

36. Bodine, D., R. D. Palmer, and G. Zhang, 2014: Dual-wavelength polarimetric radar analyses of tornadic debris signatures. *J. Appl. Meteor. Climatol.*, **53**, 242 – 261, https://doi.org/10.1175/JAMC-D-13-0189.1.

37. Bodine, D., M. R. Kumjian, R. D. Palmer, P. L. Heinselman, and A. Ryzhkov, 2013: Tornado damage estimation using polarimetric radar. *Wea. Forecasting*, **28**, 139 – 158, https://doi.org/10.1175/WAF-D-11-00158.1.

38. Isom, B., R. Palmer, R. Kelley, J. Meier, D. Bodine, M. Yeary, B. L. Cheong, Y. Zhang, T.-Y. Yu, and M. I. Biggerstaff, 2013: The Atmospheric Imaging Radar: Simultaneous volumetric observations using a Phased Array Weather Radar. *J. Atmos. Oceanic Technol.*, **30**, 655 – 675, https://doi.org/10.1175/JTECH-D-12-00063.1.

39. Shimose, K., M. Xue, R. D. Palmer, J. Gao, B. L. Cheong, and D. Bodine, 2013: Two-dimensional variational analysis of near-surface moisture from simulated radar refractivity-related phase change observations. *Adv. Atmos. Sci.*, **30**, 291 – 305, https://doi.org/10.1007/s00376-012-2087-7.

40. Bodine, D., D. Michaud, R. D. Palmer, P. L. Heinselman, J. Brotzge, N. Gasperoni, B. L. Cheong, M. Xue, and J. Gadong, 2011: Understanding radar refractivity: Sources of uncertainty. *J. Appl. Meteor. Climatol.*, **50**, 2543 – 2560, https://doi.org/10.1175/2011JAMC2648.1.

41. Palmer, R. D., D. Bodine, M. Kumjian, B. Cheong, G. Zhang, Q. Cao, H. B. Bluestein, A. Ryzhkov, T.-Y. Yu, and Y. Wang, 2011: The 10 May 2010 tornado outbreak in central Oklahoma: Potential for new science with high-resolution polarimetric radar. *Bull. Amer. Meteor. Soc.*, **92**, 871 – 891, https://doi.org/10.1175/2011BAMS3125.1.

42. Bodine, D., P. L. Heinselman, B. L. Cheong, R. D. Palmer, and D. Michaud, 2010: A case study on the impact of moisture variability on convection initiation using radar refractivity retrievals. *J. Appl. Meteor. Climatol.*, **49**, 1766 – 1778, https://doi.org/10.1175/2010JAMC2360.1.

43. Bodine, D., P. M. Klein, S. C. Arms, and A. Shapiro, 2009: Variability of surface air temperature over gently sloped terrain. *J. Appl. Meteor. Climatol.*, **48**, 1117 – 1141, https://doi.org/10.1175/2009JAMC1933.1.

44. Heinselman, P. L., B. L. Cheong, R. D. Palmer, D. Bodine, and K. D. Hondl, 2009: Radar refractivity retrievals from KTLX: Insights into operational benefits and limitations. *Wea. Forecasting*, **24**, 1345 – 1361, https://doi.org/10.1175/2009WAF2222256.1.

45. Shapiro, A., P. K. Klein, S. C. Arms, D. Bodine, and M. Carney, 2009: The Lake Thunderbird Micronet Project. *Bull. Amer. Meteor. Soc.*, **90**, 811 – 823, https://doi.org/10.1175/2008BAMS2727.1.

JOURNAL ARTICLES (in review; * denotes first-author papers of students (co-)advised)

1. Bluestein, H., J. A. Margraf, T. Greenwood, S. Emmerson, J. C. Snyder, L. J. Wicker, and D. J. Bodine, 2025: The Evolution of Cyclonic and Anticyclonic Tornadoes in the Selden, Kansas, Supercell of 24 May 2021: Rapid-Scan, Polarimetric, Mobile, X-Band, Doppler-Radar Observations. *Mon. Wea. Rev.*, accepted pending major revisions.

2. Emmerson, S.*, R. Palmer, D. Bodine, D. Schvartzman, P. Kirstetter, and C. Fulton, 2025: Observations of severe convection with multistatic weather radar. *J. Atmos. Oceanic Technol.*, accepted pending minor revisions.

3. Kim, H.*, and D. J. Bodine, 2025: Utilizing radar observations to automate classification of boundary layer organizational mode using convolutional neural networks. *J. Artificial Intell. Earth Sys.*, in review.

4. Shedd, L.*, D. Bodine, A. Reinhart, D. Schvartzman, 2024: Meteorological benefits and applications of S-band, rapid-scanning, dual-polarization radar on hail producing storms. *Wea. Forecasting*, in review.

5. Tzeng, M.-D.*, T.-Y. Yu, D. J. Bodine, D. Schvartzman, 2025: Spectral polarimetry for ice crystal alignment during cloud electrification. *IEEE Geosci. Remote Sens., in review.*

JOURNAL ARTICLES (in preparation; * denotes first-author papers of students (co-)advised)

1. E. J. Blumenauer*, A. A. Alford, D. J. Bodine, P.-E. Kirstetter, R. Clark, and A. Reinhart, 2025: Evaluating the Feasibility of Phased Array Radar-Derived Quantitative Precipitation Estimation Using the NSSL?s Advanced Technology Demonstrator. *Geo. Res. Lett.*, in prep.

2. S. Emmerson*, D. Bodine, P. Skinner, R. Palmer, D. Schvartzman, and P.-E. Kirstetter, 2025: Observations and Analysis of a Tornadic Circulation in Central Oklahoma with Bistatic Weather Radar. *Geo. Res. Lett.*, in prep.

BOOK CHAPTERS

1. Bodine, D., and J. Kurdzo, 2018: Ground-based radar technologies for tornado observations. *Remote Sensing of Clouds and Precipitation*, C. Andronache, Ed., Springer Intl. Pub., 65 – 112.

2. Bodine, D., B. L. Cheong, and R. D. Palmer, 2023: End-to-end simulations of dual-polarization tornado debris signatures. *Advances in Weather Radar, Vol. 2: Precipitation science, scattering and processing algorithms*, V. Bringi, K. Mishra, and M. Thurai, Ed., IET press.

REFEREED CONFERENCE PAPERS

1. Bodine, D. J., J. M. Kurdzo, C. B. Griffin, R. D. Palmer, B. Isom, F. Nai, A. Mahre, M. Yeary, and T.-Y. Yu, 2022: Overview of a decade of field experiments with the Atmospheric Imaging Radar. *2022 IEEE Radar Conf.*, New York, NY.

2. Cheong, B. L., D. Bodine, Y. Zhu, C. Fulton, S. Torres, T. Maruyama, and R. Palmer, 2015: Understanding tornadic debris echoes using a radar time-series emulator, *2015 IEEE International Radar Conf.*, Arlington, VA.

3. Isom, B., R. Palmer, R. Kelley, J. Meier, D. Bodine, M. Yeary, B. L. Cheong, Y. Zhang, T.-Y. Yu, and M. Biggerstaff, 2011: The Atmospheric Imaging Radar (AIR) for high-resolution observations of severe weather, *2011 IEEE Radar Conf.*, Kansas City, MO.

4. Isom, B., R. Palmer, R. Kelley, J. Meier, and D. Bodine, 2012: The Atmospheric Imaging Radar: System validation and observations of severe weather, *IEEE Radar Conf.*, Atlanta, GA.

5. Kurdzo, J. M., R. D. Palmer, F. Nai, D. J. Bodine, and B. L. Cheong, 2015: Meteorological data results from the atmospheric imaging radar. *2015 IEEE International Radar Conf.*, Arlington, VA.

6. Salazar-Cerreno, J. L., D. Schvartzman, D. Bodine, R. Palmer, J. McDaniel, M. Yeary, N. Aboserwal, B. L. Cheong, T.-Y. Yu, 2022: A dual-Doppler Ka-band mobile radar architecture with rapid-scanning volumetric imaging for earth systems science. *2022 IEEE Radar Conf.*, New York, NY.

CONFERENCE PRESENTATIONS

* denotes first-authored presentations of students co-advised, ˆ denotes student award

1. Alford, A., J. A. Zhang, M. I. Biggerstaff, P. P. Dodge, F. D. Marks, D. J. Bodine, and G. D. Carrie, Examining the coastal transition of the hurricane boundary layer during Hurricane Irene (2011), *34th Conf. on Hurricanes and Tropical Meteorology*, New Orleans, LA, May 10 – 13, 2021.

2. Bluestein, H. B., D. Schvartzman, T.-Y. Yu, J. A. B. Margraf, D. J. Bodine, and B. L. Cheong, Can we advance our understanding of supercell dynamics and microphysics using spectral polarimetry?, *30th Conf. on Severe Local Storms*, Santa Fe, New Mexico, October 24 – 28, 2022.

3. Bodine, D., P. Klein, S. Arms, E. Fedorovich, and A. Shapiro, Variability of surface air temperature over gently-sloped terrain, *7th Annual AMS Student Conf.*, AMS Annual Meeting, New Orleans, LA, January 20 – 24, 2008.

4. Bodine, D., P. L. Heinselman, B. L. Cheong, R. D. Palmer, and D. Michaud, Convective initiation and storm evolution forecasting applications using radar refractivity retrievals, *24th Conf. on Severe Local Storms*, Savannah, GA, October 27 – 31, 2008.

5. Bodine, D., B. L. Cheong, P. L. Heinselman, R. D. Palmer, and D. Michaud, Radar refractivity applications for convective initiation forecasting and observations of the convective boundary layer, *25th Conf. on IIPS*, AMS Annual Meeting, Phoenix, AZ, January 11 – 15, 2009.

6. Bodine, D., R. D. Palmer, B. M. Isom, and B. L. Cheong, A new frontier for mobile weather radar – The Atmospheric Imaging Radar: Meteorological implications and requirements, *34th Conf. on Radar Meteorology*, Williamsburg, VA, October 5 – 9, 2009.

7. Bodine, D., R. D. Palmer, B. L. Cheong, P. L. Heinselman, D. S. Michaud, and G. Zhang, Can high-resolution surface moisture fields be retrieved in supercells?, *34th Conf. on Radar Meteorology*, Williamsburg, VA, October 5 – 9, 2009.

8. Bodine, D., P. L. Heinselman, R. D. Palmer, B. L. Cheong, and D. S. Michaud, Survey of applications of radar refractivity retrievals, *34th Conf. on Radar Meteorology*, Williamsburg, VA, October 5 – 9, 2009.

9. Bodine, D., P. L. Heinselman, R. D. Palmer, B. L. Cheong, and D. Michaud, Applications of radar refractivity retrievals, *International Symposium on Radar and Modeling Studies of the Atmosphere*, Kyoto, Japan, November 10 – 13, 2009.

10. Bodine, D., R. Palmer, C. Ziegler, and P. Heinselman, High-resolution radar observations during tornadogenesis from OU-PRIME on 10 May 2010, *25th Conf. on Severe Local Storms*, Denver, CO, October 11 – 15, 2010.

11. Bodine, D., R. Palmer, M. Kumjian, and A. Ryzhkov, High-resolution OU-PRIME radar observations of a prolific tornado-producing supercell on 10 May 2010, *25th Conf. on Severe Local Storms*, Denver, CO, October 11 – 15, 2010.

12. Bodine, D., M. Kumjian, and R. D. Palmer, High-resolution polarimetric radar observations by OU-PRIME during the 10 May 2010 tornado outbreak in central Oklahoma, *27th Conf. on IIPS*, AMS Annual Meeting, Seattle, WA, January 24 – 27, 2011.

13. Bodine, D., M. R. Kumjian, and R. D. Palmer, High-resolution polarimetric observations of tornadoes from OU-PRIME during central Oklahoma tornado outbreaks, *Intl. Symp. on Earth Science Challenges*, Norman, OK, September 14 – 16, 2011.

14. Bodine, D., M. R. Kumjian, A. J. Smith, R. D. Palmer, A. V. Ryzhkov, and P. L. Heinselman, High-resolution polarimetric observations of an EF4 tornado on 10 May 2010 from OU-PRIME, *35th Conf. on Radar Meteorology*, Pittsburgh, PA, September 26 – 30, 2011.

15. Bodine, D., M. R. Kumjian, A. J. Smith, R. D. Palmer, A. Ryzhkov, and P. L. Heinselman, Tornado detection and damage estimation using polarimetric radar, *28th Conf. on IIPS*, AMS Annual Meeting, New Orleans, LA, January 22 – 26, 2012.

16. Bodine, D., T. Maruyama, and R. D. Palmer, Investigation of debris and precipitation in tornadoes using a Large-Eddy Simulation model and polarimetric radar observations, *29th Conf. on EIPT*, AMS Annual Meeting, Austin, TX, January 6 – 10, 2013.

17. Bodine, D., T. Maruyama, and R. D. Palmer, Perspectives from a research experience during the National Science Foundation East Asia Pacific Summer Institute, *12th Annual Student Conf.*, AMS Annual Meeting, Austin, TX, January 6 – 10, 2013.

18. Bodine, D., T. Maruyama, R. D. Palmer, C. Fulton, and H. B. Bluestein, Examination of debris loading effects on tornado dynamics using a Large-Eddy Simulation model and W-band mobile radar observations, *27th Conf. on Severe Local Storms*, Madison, WI, November 3 – 7, 2014.

19. Bodine, D., R. D. Palmer, T. Maruyama, C. Fulton, and B. L. Cheong, Dual-frequency simulations of radar observations of tornadoes, *27th Conf. on Severe Local Storms*, Madison, WI, November 3 – 7, 2014.

20. Bodine, D., R. D. Palmer, T. Maruyama, C. Fulton, Y. Zhu, and B. L. Cheong, Simulated frequency dependence of radar observations of tornadoes, *37th Conf. on Radar Meteorology*, Norman, OK, September 14 – 18, 2015.

21. Bodine, D., and K. L. Rasmussen, Mobile disdrometer observations of nocturnal mesoscale convective systems during PECAN, *2015 AGU fall Meeting*, San Francisco, CA, December 14 – 18, 2015.

22. Bodine, D. J., and K. L. Rasmussen, Fixed and mobile disdrometer observations during PECAN, *37th Conf. on Radar Meteorology*, Norman, OK, September 14 – 18, 2015.

23. Bodine, D. J., K. L. Rasmussen, K. Friedrich, J. Wurman, K. Kosiba, and P. A. Kucera, Drop-size distribution measurements in mesoscale convective systems during PECAN, *28th Conf. on Severe Local Storms*, Portland, OR, November 7 – 11, 2016.

24. Bodine, D. J., C. B. Griffin, and K. L. Rasmussen, Examination of the relationships between polarimetric radar signatures and kinematic processes using high-resolution WRF simulations, *38th Conf. on Radar Meteorology*, Chicago, IL, August 28 – Sept 1, 2017.

25. Bodine, D. J., J. M. Kurdzo, B. L. Cheong, and K. L. Rasmussen, PX-1000 observations of mesoscale convective systems during PECAN, *38th Conf. on Radar Meteorology*, Chicago, IL, August 28 – Sept 1, 2017.

26. Bodine, D. J., K. L. Rasmussen, K. Friedrich, J. Wurman, K. Kosiba, and P. A. Kucera, Drop-size distribution observations from PECAN in mesoscale convective system convective regions, *Spec. Symp. Plains Elevated Convection At Night*, 98th Annual Meeting, Austin, Texas, January 8 – 11, 2018.

27. Bodine, D. J., K. L. Rasmussen, K. Friedrich, J. Wurman, K. Kosiba, and P. A. Kucera, Drop-size distribution observations from PECAN in mesoscale convective system stratiform regions, *Spec. Symp. Plains Elevated Convection At Night*, 98th Annual Meeting, Austin, Texas, January 8 – 11, 2018.

28. Bodine, D. J., J. M. Kurdzo, B. L. Cheong, and K. L. Rasmussen, PX-1000 observations of mesoscale convective systems during PECAN, *Spec. Symp. Plains Elevated Convection At Night*, 98th Annual Meeting, Austin, Texas, January 8 – 11, 2018.

29. Bodine, D. J., C. B. Griffin, and K. L. Rasmussen, Simulated radar observations from WRF simulations of tornadic supercells on 20 May 2013 and 31 May 2013, *34th Conf. on EIPT*, 98th Annual Meeting, Austin, Texas, January 8 – 11, 2018.

30. Bodine, D. J., A. E. Reinhart, M. A. Satrio, T. Maruyama, and F. T. Lombardo, Investigation of the impact of terrain and buildings on tornado dynamics using high-resolution simulations, *29th Conf. on Severe Local Storms*, Stowe, Vermont, October 21 – 26, 2018.

31. Bodine, D. J., J. M. Kurdzo, C. B. Griffin, A. Mahre, J. Lujan, R. D. Palmer, T. Y. Yu, and B. M. Isom, Overview of the Atmospheric Imaging Radar and seven years of phased-array radar field experiments, Phased Array Radar Symposium, *99th AMS Annual Meeting*, Phoenix, AZ, January 6 – 10, 2019.

32. Bodine, D. J., C. Dyson, R. Palmer, B. Cheong, C. Nicholls, J. Miller, M. Teshiba, and A. Ueki, EAGLE radar: An extremely low cost, multi-beam, rapid-scan X-band radar for weather radar networks, *39th Int. Conf. on Radar Meteorology*, Nara, Japan, September 16 – 20, 2019.

33. Bodine, D. J., B. Cheong, T. Maruyama, C. Fulton, S. Torres, R. Palmer, H. Bluestein, A. Umeyama, J. Lujan, Z. Wienhoff, and C. Griffin, SimRadar – A U.S.-Japan collaborative effort to develop a polarimetric radar simulator for tornado studies, *39th Int. Conf. on Radar Meteorology*, Nara, Japan, September 16 – 20, 2019.

34. Bodine, D. J., J. Salazar, J. McDaniel, C. R. Homeyer, R. D. Palmer, P. E. Kirstetter, M. Yeary, G. McFarquhar, J. F. Kelly, B. M. Isom, P. Kollias, and M. R. Kumjian, Next-generation cloud radars: How do we obtain rapid three-dimensional observations of clouds?, *20th Symp. Metr. Obs. Instr.*, 100th AMS Annual Meeting, Boston, MA, January 12 – 16, 2020.

35. Bodine, D. J., C. B. Griffin, S. M. Torres, B. L. Cheong, R. D. Palmer, and C. Fulton, Review of operational applications of polarimetric tornado debris signatures, *36th Conf. on EIPT*, 100th AMS Annual Meeting, Boston, MA, January 12 – 16, 2020.

36. Bodine, D. J., T. Y. Yu, P. Kirstetter, H. B. Bluestein, R. D. Palmer, M. Yeary, B. Cheong, and M. D. Tzeng, The mobile Rapid-scan X-band Polarimetric Radar (RaXPol) as a Community Instrument Facility: Providing high-temporal resolution, dual-polarization observations for atmospheric science research and education, *38th Conf. on EIPT*, 102nd AMS Annual Meeting, Houston, TX, January 24 – 27, 2022.

37. Bodine, D. J., E. Pillar-Little, E. N. Smith, T. Bell, B. G. Illston, M. Laufersweiler, A. Schilling, D. S. LaDue, A. N. Marmo, and J. B. Basara, Supporting student skill building while exploring convergent research through a hands-on experience with scientific instrumentation, *31th Conf. on Education*, 102nd AMS Annual Meeting, Houston, TX, January 23 – 27, 2022.

38. Bodine, D. J., M. Satrio, Z. B. Wienhoff, A. E. Reinhart, F. T. Lombardo, D. M. Rhee, and T. Maruyama, Understanding complex terrain effects on tornado dynamics using tree-fall observations and high-resolution simulations, *30th Conf. on Severe Local Storms*, Santa Fe, New Mexico, October 24 – 28, 2022.

39. Bodine, D. J., P. Kirstetter, T.-Y. Yu, R. Palmer, and L. Shedd, Centimeter-wavelength rapid-scan radar technologies: A paradigm shift for sampling of microphysical and dynamical processes in deep convection,14th Int. Precip. Conf., Norman, OK, June 6 – 9, 2023.

40. Bodine, D. J., T. Y. Yu, Y. Wen, A. Alruzuq, P. Kirstetter, Y. Derin, L. Shedd, B. K. Cohen, M. Morowski, M. D. Tzeng, E. D. Mullens, S. Mullens, H. B. Bluestein, R. D. Palmer, and B. L. Cheong, The research and educational activities with the mobile rapid scan X-band polarimetric (RaXPol) radar as an NSF Community Instrument Facility, *40th Conf. on Radar Meteor.*, Minneapolis, MN, August 28 – Sept 1, 2023.

41. Bodine, D. J., D. Schvartzman, M. D. Tzeng, B. L. Cheong, H. Bluestein, R. D. Palmer, and T.-Y. Yu, High-temporal resolution observations of a tornadic supercell near Cole, Oklahoma on 19 April 2023, *40th Conf. on Radar Meteor.*, Minneapolis, MN, August 28 – Sept 1, 2023.

42. Bodine, D. J., H. B. Bluestein, J. A. Margraf, T. Greenwood, S. W. Emmerson, and B. L. Cheong, Examining the relationship between debris characteristics and polarimetric signatures using high-resolution mobile radar data, photogrammetry, and electromagnetic scattering simulations, *40th Conf. on Radar Meteor.*, Minneapolis, MN, August 28 – Sept 1, 2023.

43. Borunda, A.*, C. B. Griffin, and D. J. Bodine, Dual-wavelength polarimetric radar analysis of the 20 May 2013 Moore, OK, tornado, *19th Symp. Metr. Obs. Instr.*, 98th Annual Meeting, Austin, Texas, January 8 – 11, 2018.

44. Cheong, B. L., D. Bodine, T. Maruyama, C. Fulton, S. Torres and R. Palmer, A radar-cross-section database driven radar time-series simulator, *8th European Conf. on Radar in Meteorology and Hydrology*, Garmisch-Partenkirchen, Germany, September 1 – 5, 2014.

45. Cheong, B. L., D. Bodine, Y. Zhu, C. Fulton, S. Torres, T. Maruyama, and R. Palmer, Emulating polarimetric radar signals from tornadic debris using a radar-cross-section library, *12th European Radar Conf.*, Paris, France, September 9 – 11, 2015.

46. Cheong, B. L., D. J. Bodine, C. Fulton, S. Torres, T. Maruyama, and R. D. Palmer, A GPU-accelerated polarimetric radar time-series emulator, *37th Conf. on Radar Meteorology*, Norman, OK, September 14 – 18, 2015.

47. Cheong, B. L., D. J. Bodine, C. J. Fulton, S. M. Torres, T. Maruyama, and R. D. Palmer, SimRadar: A radar simulator to investigate dual-pol characteristics of tornadic debris, *33rd Conf. on EIPT*, 97th Annual Meeting, Seattle, WA, January 23 – 26, 2017.

48. Cheong, B. L., D. Bodine, C. Dyson, R. Palmer, C. Nicholls, J. Miller, The PX-10k: A polarimetric X-band transportable radar for rapid-scan weather observations, *39th Int. Conf. on Radar Meteorology*, Nara, Japan, September 16 – 20, 2019.

49. Cheong, B. L., D. J. Bodine, M. E. Schneider, R. N. Cross, C. J. Fulton, S. M. Torres, R. D. Palmer, and T. Maruyama, Emulating arbitrary tornado debris fluxes using "SimRadar", *36th. Conf. on EIPT*, 100th AMS Annual Meeting, Boston, MA, January 12 – 16, 2020.

50. Cohen, B. K.*, D. J. Bodine, M. Yeary, J. C. Snyder, and H. B. Bluestein, Examining meteorological benefits of rapid-scan, dual-polarization, all-digital PAR observations for detecting tornado formation and intensification, *38th Conf. on EIPT*, 102nd AMS Annual Meeting, Houston, TX, January 23 – 27, 2022.

51. Cohen, B. K.*, D. J. Bodine, M. Yeary, J. C. Snyder, and H. B. Bluestein, Evaluating benefits and capabilities of phased array radar scanning modes for detecting tornado formation and intensification, *30th Conf. on Severe Local Storms*, Santa Fe, New Mexico, October 24 – 28, 2022.

52. Cohen, B. K.*, D. J. Bodine, M. Yeary, J. C. Snyder, and H. B. Bluestein, Comparing benefits and operational capabilities of long-range data and phased array radar scanning modes for tornadic and non-tornadic supercells, *39th Conf. on EIPT*, 103rd AMS Annual Meeting, Denver, CO, January 9 – 13, 2023.

53. Cohen, B. K.*, D. J. Bodine, M. Yeary, J. C. Snyder, and H. B. Bluestein, Evaluating the benefit and utility of all-digital PAR imaging modes for tornadic and non-tornadic supercells using synthetic PAR data, *40th Conf. on Radar Meteor.*, Minneapolis, MN, August 28 – Sept 1, 2023.

54. Cohen, B. K.*, D. J. Bodine, M. Yeary, J. C. Snyder, D. Schvartzman, C. M. Kuster, T. J. Schuur, J. B. Boettcher, and A. Alford, Intercomparisons of radial velocity signatures from initial all-digital Horus PAR observations with fixed-site weather radars, *40th Conf. on Radar Meteor.*, Minneapolis, MN, August 28 – Sept 1, 2023.

55. Cohen, B. K.*, D. J. Bodine, J. Snyder, D. Schvartzman, C. Kuster, T. Schuur, J. Boettcher, A. Alford, and M. Yeary, Intercomparisons of radial velocity measurements from initial all-digital Horus PAR observations with fixed-site weather radars, *40th Conf. on EIPT*, 104th AMS Annual Meeting, Baltimore, MA, January 28 – February 1, 2024.

56. Cross, R.*, D. J. Bodine, B. Cheong, R. Palmer, C. Fulton, S. Torres, C. Griffin, J. Lujan, and T. Maruyama, Exploring observational tornado debris signature hypotheses using radar simulations and Large-Eddy Simulations, *37th Conf. on EIPT*, 101st AMS Annual Meeting, New Orleans, LA, January 10 – 14, 2021.

57. Cross, R. N.*, D. J. Bodine, B. Cheong, R. Palmer, C. Fulton, S. Torres, C. Griffin, M. E. Schneider, J. Lujan, and T. Maruyama, Analyzing observational tornado debris signature hypotheses using radar simulations and Large-Eddy Simulations, *38th Conf. on EIPT*, 102nd AMS Annual Meeting, Houston, TX, January 24 – 27, 2022.

58. Cross, R. N.*, D. J. Bodine, B. Cheong, R. D. Palmer, C. Fulton, S. M. Torres, C. Griffin, M. E. Schneider, J. Lujan, and T. Maruyama, A radar simulation and Large-Eddy Simulation approach to exploring observational tornado debris signature hypotheses, *30th Conf. on Severe Local Storms*, Santa Fe, New Mexico, October 24 – 28, 2022.

59. Cross, R. N.*, D. J. Bodine, L. Orf, L. R. Frank, and V. Galinsky, Development of a dual-polarization radar simulator and statistical techniques to compare weakly and strongly tor-

nadic supercells from very high-resolution numerical simulations, *30th Conf. on Severe Local Storms*, Santa Fe, New Mexico, October 24 – 28, 2022.

60. Cross, R. N.*, D. J. Bodine, L. Orf, L. R. Frank, and V. Galinsky, Development of a dual-polarization radar simulator to compare weakly and strongly tornadic supercells from very high-resolution numerical simulations, *39th Conf. on EIPT*, 103rd AMS Annual Meeting, Denver, CO, January 9 – 13, 2023.

61. Cross, R. N.*, D. J. Bodine, L. Orf, L. R. Frank, and V. Galinsky, Development of a dual-polarization radar emulator to compare weakly and strongly tornadic supercells from ensembles of high-resolution numerical simulations, *40th Conf. on Radar Meteor.*, Minneapolis, MN, August 28 – Sept 1, 2023.

62. Dalman, D., R. Tanamachi, P. E. Saunders, B. L. Cheong, D. J. Bodine, H. B. Bluestein, and Z. B. Weinhoff, Cataloging rapid scan observations of ZDR columns in supercells, *29th Conf. on Severe Local Storms*, Stowe, VT, October 22 – 26, 2018.

63. Dao, T. D., Y. Wen, Z. Li, W. Qian, M. D. Tzeng, T. Y. Yu, and D. J. Bodine, Intercomparison of ground-based Raxpol mobile radar and WSR-88D operational radar with the GPM spaceborne radar during Hurricane Ian. *23rd Student Conf.*, 104th AMS Annual Meeting, Baltimore, MA, January 28 – February 1, 2024.

64. Dougherty, E.*, K. L. Rasmussen, and D. J. Bodine, Structural characteristics of nocturnal mesoscale convective systems in the U.S. Great Plains as observed during the PECAN field campaign, *2015 AGU Fall Meeting*, San Francisco, CA, December 14 – 18, 2015.

65. Dringus, A. R., D. Schvartzman, V. C. Chmielewski, D. J. Bodine, E. C. Bruning, M. Stock, and T. Y. Yu, Automated identification of storm electrification signatures using polarimetric radar observations, *24th Symp. Meteor. Obs. Instr.*, 104th AMS Annual Meeting, Baltimore, MA, January 28 – February 1, 2024.

66. Dyson, C. N.*, D. J. Bodine, and R. D. Palmer, High-temporal resolution X-band polarimetric radar analysis of the 20 May 2013 Moore, Oklahoma supercell during tornadogenesis and tornado intensification, *29th Conf. on Severe Local Storms*, Stowe, VT, October 22 – 26, 2018.

67. Dyson, C. N.*, D. J. Bodine, R. D. Palmer, and C. Kuster, High-temporal-resolution X-Band polarimetric radar analysis of the 20 May 2013 Moore, Oklahoma, supercell during tornadogenesis and tornado intensification, *Severe Local Storms Symp.*, 100th AMS Annual Meeting, Boston, MA, January 12 – 16, 2020.

68. Emmerson, S. W.*, R. Palmer, D. J. Bodine, C. Fulton, A. Byrd, P. S. Skinner, and C. Curtis, Demonstrating the capabilities of a low-cost passive weather radar system through observations and simulations: Can 3D winds be retrieved from NEXRAD and a future operational PAR? *37th Conf. on EIPT*, 101st AMS Annual Meeting, New Orleans, LA, January 10 – 14, 2021.

69. Emmerson, S.*, R. D. Palmer, D. J. Bodine, P. Skinner, and C. Fulton, Minimizing sidelobe contamination in multistatic weather radar systems through sidelobe whitening and optimal network layouts, *38th Conf. on EIPT*, 102nd AMS Annual Meeting, Houston, TX, January 24 – 27, 2022.

70. Emmerson, S.*, R. D. Palmer, D. J. Bodine, P. Skinner, and C. Fulton, Observations of severe convection with multistatic weather radar, *30th Conf. on Severe Local Storms*, Santa Fe, New Mexico, October 24 – 28, 2022.

71. Emmerson, S.*, R. D. Palmer, D. J. Bodine, P. Skinner, P. E. Kirstetter, and C. Fulton, Exploring bistatic polarimetry through simulations, *39th Conf. on EIPT*, 103rd AMS Annual Meeting, Denver, CO, January 9 – 13, 2023.

72. Emmerson, S.*, R. D. Palmer, D. J. Bodine, D. Schvartzman, P. Skinner, P.-E. Kirstetter, Simulations of polarimetric bistatic scattering at multiple frequencies, *40th Conf. on Radar Meteor.*, Minneapolis, MN, August 28 – Sept 1, 2023.

73. Emmerson, S.*ˆ , R. D. Palmer, D. J. Bodine, D. Schvartzman, P. Kirstetter, P. S. Skinner, Validation of multistatic wind retrievals using a vertically pointing mobile radar, *40th Conf. on Radar Meteor.*, Minneapolis, MN, August 28 – Sept 1, 2023.

74. Frank, L., V. L. Galinsky, L. Orf, and D. Bodine, Detection and estimation of multi-scale complex spatiotemporal processes in tornadic supercells from multiparameter radar simulations and observations, *Severe Local Storms Symp.*, 100th AMS Annual Meeting, Boston, MA, January 12 – 16, 2020.

75. Frank, L. R., V. Galinsky, D. J. Bodine, R. Cross, and L. Orf, On the predictability of tornadoes, *30th Conf. on Severe Local Storms*, Santa Fe, New Mexico, October 24 – 28, 2022.

76. Gebauer, J. G., A. Shapiro, C. Potvin, N. Dahl, D. Bodine, A. Mahre, M. Biggerstaff, and A. Alford, Impact of rapid-scan radar data on vertical velocity retrievals from dual-Doppler analysis, *39th Int. Conf. on Radar Meteorology*, Nara, Japan, September 16 – 20, 2019.

77. Gourley, J. J., K. W. Howard, R. D. Palmer, P. E. Kirstetter, D. J. Bodine, B. L. Cheong, and C. Marshall, Use of unconventional weather radars on airborne platforms to fill in operational radar data voids, *99th AMS Annual Meeting*, Phoenix, AZ, January 6 – 10, 2019.

78. Griffin, C. B.*, D. J. Bodine, and R. D. Palmer: Kinematic observations of tornadic debris signatures in two supercells during the 10 May 2010 Oklahoma tornado outbreak. *18th Sym. on Metr. Obs. and Inst.*, AMS Annual Meeting, New Orleans, LA, January 11 – 14, 2016.

79. Griffin, C. B.*, D. Bodine, J. M. Kurdzo, A. Mahre, R. D. Palmer, J. Lujan Jr., and A. D. Byrd, High-temporal resolution observations of the 23 May 2016 Woodward, OK, tornadic supercell using the Atmospheric Imaging Radar, *28th Conf. on Severe Local Storms*, Portland, OR, November 7 – 11, 2016.

80. Griffin, C. B.*, D. Bodine, J. M. Kurdzo, and R. D. Palmer, High-temporal resolution observations of the 27 May 2015 Canadian, Texas, tornado using the Atmospheric Imaging Radar, *28th Conf. on Severe Local Storms*, Portland, OR, November 7 – 11, 2016.

81. Griffin, C. B.*, D. Bodine, and R. D. Palmer, Kinematic observations of the 10 May 2010 Moore, OK tornadic debris signature, *28th Conf. on Severe Local Storms*, Portland, OR, November 7 – 11, 2016.

82. Griffin, C. B.*, D. J. Bodine, J. M. Kurdzo, A. Mahre, R. D. Palmer, J. Lujan Jr., and A. Byrd, High-temporal resolution observations of severe convective storms using the Atmospheric Imaging Radar, *Spec. Sym. on Severe Local Storms*, 97th Annual Meeting, Seattle, WA, January 23 – 26, 2017.

83. Griffin, C. B.*, D. J. Bodine, J. M. Kurdzo, A. Mahre, R. D. Palmer, J. Lujan Jr., and A. Byrd, Kinematic and polarimetric observations of tornadic debris in the 10 May 2010 Norman, OK supercell, *Spec. Sym. on Severe Local Storms*, 97th Annual Meeting, Seattle, WA, January 23 – 26, 2017.

84. Griffin, C. B.*, D. Bodine, J. M. Kurdzo, A. Mahre, R. D. Palmer, J. Lujan Jr., and A. Byrd, High-temporal resolution observations of 27 May 2015 Canadian, Texas, tornado using the Atmospheric Imaging Radar, *38th Conf. on Radar Meteorology*, Chicago, IL, August 28 – Sept 1, 2017.

85. Griffin, C. B.*, D. J. Bodine, J. Lujan Jr., A. Mahre, J. M. Kurdzo, and R. D. Palmer, High-temporal-resolution observations from the 2017 Atmospheric Imaging Radar field campaign, *Symp. Metr. Obs. Instr.*, 98th Annual Meeting, Austin, Texas, 8 – 11 January 2018.

86. Griffin, C. B.*, D. J. Bodine, J. M. Kurdzo, A. Mahre, and R. D. Palmer, High-temporal-resolution observations of the 27 May 2015 Canadian, Texas tornado using the Atmospheric Imaging Radar, *34th Conf. on EIPT*, 98th Annual Meeting, Austin, Texas, 8 – 11 January 2018.

87. Griffin, C. B.*, D. J. Bodine, and J. Lujan Jr., High-temporal resolution observations of weak-echo reflectivity bands and momentum surges in the 16 May 2017 Wheeler, Texas, Tornado, *29th Conf. on Severe Local Storms*, Stowe, Vermont, 21 – 26 October 2018.

88. Griffin, C. B.*, D. J. Bodine, and R. D. Palmer, Polarimetric and kinematic analyses of simultaneous tornado debris signatures during the 10 May 2010 tornado outbreak, *29th Conf. on Severe Local Storms*, Stowe, Vermont, 21 – 26 October 2018.

89. Griffin, C. B.*, D. J. Bodine, and R. D. Palmer, Polarimetric and kinematic analysis of simultaneous tornado debris signatures during the 10 May 2010 tornado outbreak, *35th Conf. on EIPT*, *99th AMS Annual Meeting*, Phoenix, AZ, January 6 – 10, 2019.

90. Griffin, C.*, D. Bodine, J. Lujan, and R. Palmer, High-temporal resolution observations of weak-echo reflectivity bands in the 16 May 2017 Wheeler, Texas, tornado, *39th Int. Conf. on Radar Meteorology*, Nara, Japan, September 16 – 20, 2019.

91. Griffin, C.*, D. Bodine, A. Mahre, J. Kurdzo, and R. Palmer, High-temporal resolution observations of tornadogenesis using the Atmospheric Imaging Radar, *39th Int. Conf. on Radar Meteorology*, Nara, Japan, September 16 – 20, 2019.

92. Griffin, C. B.*, D. J. Bodine, A. Mahre, J. M. Kurdzo, J. Lujan, and R. D. Palmer, High-temporal-resolution observations of tornadogenesis and tornado decay using the Atmospheric Imaging Radar, Phased Array Radar Symposium, *99th AMS Annual Meeting*, Phoenix, AZ, January 6 – 10, 2019.

93. Griffin, C. B.*^ , D. J. Bodine, A. Mahre, J. M. Kurdzo, J. Lujan, and R. D. Palmer, High-temporal-resolution observations of weak-echo reflectivity bands and momentum surges in the 16 May 2017 Wheeler, Texas, tornado, Phased Array Radar Symposium, *99th AMS Annual Meeting*, Phoenix, AZ, January 6 – 10, 2019.

94. Griffin, C. B.*, D. J. Bodine, A. Mahre, and R. D. Palmer, High-temporal-resolution observations of tornadogenesis using the Atmospheric Imaging Radar, *Severe Local Storms Symposium*, 100th AMS Annual Meeting, Boston, MA, January 12 – 16, 2020.

95. Gasperoni, N., M. Xue, R. Palmer, J. Gao, B. L. Cheong, and D. Bodine, Impact of assimilating radar-derived refractivity measurements on forecasts of convective initiation, *International Symposium on Earth Science Challenges*, Norman, OK, September 14 – 16, 2011.

96. Heinselman, P., B. Cheong, R. Palmer, D. Bodine, and K. Hondl, Assessment of refractivity retrievals by forecasters, *24th. Conf on IIPS*, AMS Annual Meeting, New Orleans, LA, January 20 – 24, 2008.

97. Heinselman, P., B. Cheong, R. Palmer, and D. Bodine, Radar refractivity retrievals from KTLX: Benefits and limitations to operational forecasting, *4th Symp. on Policy and Socio-Economic Research*, AMS Annual Meeting, Phoenix, AZ, January 11 – 15, 2009.

98. Huang, Y., X. Wang, C. Kerr, A. Mahre, T. Y. Yu, and D. J. Bodine, Impact of assimilating clear-air radial velocity observations on the forecasting of supercell thunderstorm: An Observing System Simulation Experiment study, *30th Conf. Wea. Analysis Forecasting*, 100th AMS Annual Meeting, Boston, MA, January 12 – 16, 2020.

99. Hutton, P., C. Griffin, and D. J. Bodine, Examining circulation over varying spatial scales for the May 31st, 2013 El Reno tornado, *22nd Annual Student Conf.*, 103rd AMS Annual Meeting, Denver, CO, January 9 – 13, 2023.

100. Isom, B. M., R. D. Palmer, M. B. Yeary, J. Meier, R. Kelley, B. L. Cheong, D. Bodine, R. J. Doviak, Y. Zhang, T. Y. Yu, M. Biggerstaff, and R. M. May, A new frontier for mobile radar – the Atmospheric Imaging Radar: Design specifications and experimental functionality, *34th Conf. on Radar Meteor.*, Williamsburg, VA, October 5 – 9, 2009.

101. Isom, B., R. Palmer, R. Kelley, J. Meier, D. Bodine, M. Yeary, B. L. Cheong, Y. Zhang, T.-Y. Yu, and M. Biggerstaff, The Atmospheric Imaging Radar for high-resolution observations of severe weather, *Intl. Symp. on Earth Science Challenges*, Norman, OK, September 14 – 16, 2011.

102. Klein, P. M., D. Bodine, S. Arms, and A. Shapiro, Variability of surface air temperature over gently-sloped terrain, *18th Symposium on boundary layers and turbulence*, Stockholm, Sweden, June 9 – 13, 2008.

103. Kuhr, N. M.*, T. Y. Yu, D. J. Bodine, S. M. Torres, and C. M. Kuster, Characterization and detection of downburst precursor signatures using adaptive scanning strategies from all-digital phased array radar (PAR), *40th Conf. on EIPT*, 104th AMS Annual Meeting, Baltimore, MA, January 28 – February 1, 2024.

104. Kurdzo, J. M., F. Nai, D. J. Bodine, R. D. Palmer, and S. M. Torres, Volumetric supercell and tornado analysis with six-second temporal resolution using the Atmospheric Imaging Radar, *29th Conf. on EIPT*, AMS Annual Meeting, Austin, TX, January 6 – 10, 2013.

105. Kurdzo, J. M., B. L. Cheong, D. J. Bodine, and R. D. Palmer, 2014: The 20 May Newcastle-Moore, Oklahoma EF-5 Tornado: High temporal resolution observations using the PX-1000. *Special Symposium on Severe Local Storms: The Current State of the Science and Understanding Impacts*, AMS Annual Meeting, Atlanta, GA, February 2 – 6, 2014.

106. Kurdzo, J. M., B. L. Cheong, R. D. Palmer, F. Nai, D. J. Bodine, G. Zhang, and S. M. Torres: Waveform design applications for observations of severe local storms and tornadoes, *30th Conf. on EIPT*, AMS Annual Meeting, Atlanta, GA, February 2 – 6, 2014.

107. Kurdzo, J. M., D. J. Bodine, B. L. Cheong, and R. D. Palmer: High temporal resolution polarimetric radar observations of the 20 May 2013 Newcastle-Moore, Oklahoma EF-5 tornado using the PX-1000. *27th Conf. on Severe Local Storms*, Madison, WI, November 3 – 7, 2014.

108. Kirstetter, P. E., R. D. Palmer, D. J. Bodine, C. R. Homeyer, T. Y. Yu, M. I. Biggerstaff, H. B. Bluestein, S. M. Cavallo, B. L. Cheong, Y. Jung, J. McDaniel, N. Sakaeda, J. Salazar, X. Wang, M. B. Yeary, J. J. Gourley, K. Howard, W. A. Petersen, S. Tanelli, A. Martini, and N. Viltard, Stratospheric Observations of Convection and Precipitation, *20th Symp. Metr. Obs. Instr.*, 100th AMS Annual Meeting, Boston, MA, January 12 – 16, 2020.

109. Kurdzo, J. M., D. J. Bodine, B. L. Cheong, and R. D. Palmer: Polarimetric X-band radar observations of a failed occlusion in the 20 May 2013 Moore, Oklahoma EF5 tornado. *31st Conf. on EIPT*, AMS Annual Meeting, Phoenix, AZ, January 4 – 8, 2015.

110. Kurdzo, J. M., F. Nai, D. J. Bodine, R. D. Palmer, J. Lujan Jr., A. Mahre, and A. Byrd, Observations of severe local storms and tornadoes with the Atmospheric Imaging Radar, *37th Conf. on Radar Meteorology*, Norman, OK, September 14 – 18, 2015.

111. Kurdzo, J. M., F. Nai, D. J. Bodine, R. D. Palmer, B. L. Cheong, J. Lujan Jr., A. Mahre, and A. D. Byrd: High-resolution X-band volumetric observations of Spring 2015 tornadoes with the Atmospheric Imaging Radar. *32nd Conf. on EIPT*, AMS Annual Meeting, New Orleans, LA, January 11 – 14, 2016.

112. Kurdzo, J. M., A. Mahre, D. J. Bodine, R. D. Palmer, and T. Y. Yu, X-band radar observations of the 16 May 2015 Tipton, Oklahoma EF3 tornado using the Atmospheric Imaging Radar, *28th Conf. on Severe Local Storms*, Portland, OR, November 7 – 11, 2016.

113. Kurdzo, J. M., D. J. Bodine, A. Mahre, F. Nai, C. B. Griffin, and R. D. Palmer, Filling the vertical gap in severe local storms research: New opportunities using vertically continuous radar imaging, *Spec. Sym. on Severe Local Storms*, 97th Annual Meeting, Seattle, WA, January 23 – 26, 2017.

114. Lombardo, F. T., Z. B. Wienhoff, D. J. Bodine, D. M. Rhee, S. M. Moon, A. E. Reinhart, T. Maruyama, and M. Satrio, Topographic effects on wind speed estimation in tornadoes. *Wind Speed Est. Symp.*, 104th AMS Annual Meeting, Baltimore, MA, January 28 – February 1, 2024.

115. Margraf, J. A. B., H. B. Bluestein, T. Greenwood, S. Emmerson, B. Cheong, D. J. Bodine, and T.-Y. Yu, The evolution of the wind field in the Selden Kansas tornado of 24 May 2021 based on data from a rapid-scan, mobile, polarimetric, Doppler radar, *30th Conf. on Severe Local Storms*, Santa Fe, New Mexico, October 24 – 28, 2022.

116. Marsh, P. T., D. Bodine, K. H. Goebbert, C. M. Shafer, and M. J. Laufersweiler, A student centered, student led, volunteer forecasting organization at the University of Oklahoma, *7th Annual Student Conf.*, AMS Annual Meeting, New Orleans, LA, January 20 – 24, 2008.

117. Michaud, D. S., R. D. Palmer, D. Bodine, P. L. Heinselman, and B. L. Cheong, A new clutter censoring technique – updates on radar refractivity retrieval, *34th Conf. on Radar Meteorology*, Williamsburg, VA, October 5 – 9, 2009.

118. Michaud, D. S., R. D. Palmer, D. Bodine, P. L. Heinselman, B. L. Cheong, and P. B. Chilson, Updates on radar refractivity retrieval – quality control improvements and the 2009 Field

Experiment to determine causes of bias, *26th. Conf. on IIPS*, AMS Annual Meeting, Atlanta, GA, January 17 – 21, 2010.

119. Michaud, D. S., R. D. Palmer, D. Bodine, P. L. Heinselman, J. Brotzge, N. A. Gasperoni, B. L. Cheong, M. Xue, and J. Gao, Understanding radar refractivity, *27th. Conf. on IIPS*, AMS Annual Meeting, Seattle, WA, January 24 – 27, 2011.

120. Mahre, A.*, J. M. Kurdzo, D. J. Bodine, C. B. Griffin, R. D. Palmer, and T. Y. Yu, Analysis of the 16 May 2015 Tipton, Oklahoma EF-3 tornado at high spatiotemporal resolution using the Atmospheric Imaging Radar, *38th Conf. on Radar Meteorology*, Chicago, IL, August 28 – Sept 1, 2017.

121. Mahre, A.*, J. M. Kurdzo, D. J. Bodine, C. B. Griffin, R. D. Palmer, and T. Y. Yu, Analysis of the 16 May 2015 Tipton, Oklahoma EF-3 tornado at high spatiotemporal resolution using the Atmospheric Imaging Radar, *34th Conf. on EIPT*, 98th Annual Meeting, Austin, Texas, January 8 – 11, 2018.

122. Mahre, A.*, T. Y. Yu, and D. J. Bodine, Development of scanning strategies to meet operational needs of the multimission phased array radar, *34th Conf. on EIPT*, 98th Annual Meeting, Austin, Texas, January 8 – 11, 2018.

123. Mahre, A*. T. Y. Yu, and D. J. Bodine, Assessment of the benefits of rapid scanning for an MPAR/SENSR system, *35th Conf. on EIPT*, *99th AMS Annual Meeting*, Phoenix, AZ, January 6 – 10, 2019.

124. Mahre, A.*, C. B. Griffin, D. J. Bodine, J. M. Kurdzo, and R. D. Palmer, Using the Atmospheric Imaging Radar to study vortex dynamics and debris processes, Phased Array Radar Symposium, *99th AMS Annual Meeting*, Phoenix, AZ, January 6 – 10, 2019.

125. Mahre, A.*, C. B. Griffin, Z. B. Wienhoff, H. B. Bluestein, J. B. Houser, J. C. Snyder, and D. J. Bodine, A study on oscillations in low-level tornado couplet intensity, *99th AMS Annual Meeting*, Phoenix, AZ, January 6 – 10, 2019.

126. Mahre, A.*, K. Pittman, T.-Y. Yu, and D. Bodine, Assessing the benefits of a rapid-scanning phased array weather radar, *39th Int. Conf. on Radar Meteorology*, Nara, Japan, September 16 – 20, 2019.

127. Mahre, A.*, T.-Y. Yu, and D. J. Bodine, A comparison of scan speedup strategies and their effect on rapid-scan weather radar data quality, *36th Conf. on EIPT*, 100th AMS Annual Meeting, Boston, MA, January 12 – 16, 2020.

128. Mahre, A.*, T.-Y. Yu, and D. J. Bodine, Quantifying the benefits of a simulated rapid-scan weather radar for severe storm observations, *36th Conf. on EIPT*, 100th AMS Annual Meeting, Boston, MA, January 12 – 16, 2020.

129. Mahre, A.*, T.-Y. Yu, D. J. Bodine, and L. Orf, Assessing scan update times for tornado observations using a simulated rapid-scan polarimetric weather radar, 101st AMS Annual Meeting, New Orleans, LA, January 10 – 14, 2021.

130. Mangual-Pagan, J. P.*, D. J. Bodine, and L. Reames, Comparing the forecasting performance of the UFS and WRF models during high-impact severe weather events, *31st Conf. on WAF and 27th Conf. on NWP*, 102nd AMS Annual Meeting, Houston, TX, January 23 – 27, 2022.

131. Mose, A., P. Skinner, S. W. Emmerson, K. H. Knopfmeier, D. J. Bodine, and R. D. Palmer, Observing System Simulation Experiments on Assimilation of Multistatic Passive Radar Network Observations into the Warn-on-Forecast System to Improve Short-Term Prediction of Thunderstorm Hazards, *27th Conf. Int. Obs. Assim. Sys.*, 103rd AMS Annual Meeting, Denver, CO, January 9 – 13, 2023.

132. Nai, F., R. D. Palmer, S. M. Torres, J. M. Kurdzo, and D. Bodine, High-resolution tornado observations using the Atmospheric Imaging Radar, *29th Conf. on EIPT*, AMS Annual Meeting, Austin, TX, January 6 – 10, 2013.

133. Nai, F., J. M. Kurdzo, D. Bodine, R. Palmer, and S. Torres, Weather observations using the Atmospheric Imaging Radar and adaptive beamforming, *36th Conf. on Radar Meteorology*, Breckenridge, CO, September 16 – 20, 2013.

134. Omitusa, O.*, and D. Bodine, Characterizing the effects of intra-urban land cover heterogeneity on convective precipitation in Houston, Texas, *22nd Symp. Coastal Env.*, 104th AMS Annual Meeting, Baltimore, MA, January 28 – February 1, 2024.

135. Palmer, R., B. Isom, R. Kelley, J. Meier, D. Bodine, M. Yeary, B. L. Cheong, Y. Zhang, T.-Y. Yu, and M. Biggerstaff, The Atmospheric Imaging Radar (AIR) for high-resolution observations of severe weather, *Digital Hurricane Consortium's Field Planning and Impacts Workshop*, Norman, OK, June 28 – 29, 2010.

136. Palmer, R., Y. Zhang, M. Yeary, B. Cheong, M. Biggerstaff, T.-Y. Yu, X. Wang, G. Zhang, R. Doviak, B. Isom, D. Bodine, H. Suarez, R. Kelley, and J. Meier, Progress on the Atmospheric Imaging Radar 3D at the University of Oklahoma, *Sixth European Conference on Radar in Meteorology and Hydrology*, Sibiu, Romania, September 6 – 9, 2010.

137. Palmer, R. D., D. J. Bodine, P. Kirstetter, C. Fulton, M. Yeary, B. Cheong, J. Salazar, T. Y. Yu, M. I. Biggerstaff, H. B. Bluestein, N. Goodman, P. Heinselman, C. R. Homeyer, J. Kelly, D. S. LaDue, E. R. Martin, J. McDaniel, G. M. McFarquhar, A. McGovern, J. Metcalf, J. Redemann, J. Ruyle, A. Ryzhkov, N. Sakaeda, S. T. Salesky, D. Schvartzman, A. Shapiro, H. Sigmarsson, S. Torres, X. Wang, N. Yussouf, L. D. Carey, P. Gatlin, M. Kumjian, L. D. White, S. W. Nesbitt, and A. K. Rowe, Transportable phased array radar: Meeting weather community needs, *38th Conf. on EIPT*, 102nd AMS Annual Meeting, Houston, TX, January 23 – 27, 2022.

138. Palmer, R. D., D. Schvartzman, D. J. Bodine, B. Cheong, C. Fulton, P. Kirstetter, J. L. Salazar-Cerreno, H. Sigmarsson, M. Yeary, T.-Y. Yu, Horus – An all-digital phased array weather radar developed at the University of Oklahoma, *38th Conf. on EIPT*, 102nd AMS Annual Meeting, Houston, TX, January 23 – 27, 2022.

139. Palmer, R. D., M. Yeary, D. Schvartzman, J. Salazar, C. Fulton, M. McCord, B. L. Cheong, D. J. Bodine, P. Kirstetter, H. Sigmarsson, T.-Y. Yu, D. S. Zrnic, R. Kelley, J. Meier, M. Herndon, Horus – A fully digital polarimetric phased array radar for next-generation weather observations, *40th Conf. on Radar Meteor.*, Minneapolis, MN, August 28 – Sept 1, 2023.

140. Pardun, T. J., A. E. Reinhart, M. C. Coniglio, and D. J. Bodine, An investigation between tornadic and non-tornadic QLCS vortices using blended MRMS products, *40th Conf. on Radar Meteor.*, Minneapolis, MN, August 28 – Sept 1, 2023.

141. Pearson, C. B.*, T. Y. Yu, D. J. Bodine, and S. Torres, Assessing scanning strategies with all-digital phased array weather radars for characterization and detection of microbursts, *38th Conf. on EIPT*, 102nd AMS Annual Meeting, Houston, TX, January 24 – 27, 2022.

142. Pittman, K.*, A. Mahre, C. B. Griffin, D. Bodine, J. M. Kurdzo, and V. A. Gensini, Analysis of tornadogenesis failure using rapid-scan data from the Atmospheric Imaging Radar, *Severe Local Storms Symp.*, 100th AMS Annual Meeting, Boston, MA, January 12 – 16, 2020.

143. Putnam, B. J., M. Xue, Y. Jung, G. Zhang, and D. J. Bodine, Assimilation of polarimetric radar data to improve the microphysical state of tornadic supercells on 10 May 2010 using the Ensemble Kalman filter, *37th Conf. on Radar Meteorology*, Norman, OK, September 14 – 18, 2015.

144. Rasmussen, K. L., and D. Bodine, Evolution of mesoscale convective system organizational structure and convective line propagation, *Spec. Symp. Plains Elevated Convection At Night*, 98th Annual Meeting, Austin, Texas, January 8 – 11, 2018.

145. Reinhart, A. E., D. J. Bodine, and F. T. Lombardo, The impact of terrain on supercells using idealized numerical simulations, *29th Conf. on Severe Local Storms*, Stowe, VT, October 22 – 26, 2018.

146. Salazar, J., D. Bodine, J. McDaniel, C. R. Homeyer, R. D. Palmer, M. Yeary, P. E. Kirstetter, G. M. McFarquhar, J. F. Kelly, B. M. Isom, P. Kollias, M. R. Kumjian, and S. Tanelli, A new Ka-band Imaging PAR Concept for 4D-volume rapid scan for cloud observations, *36th Conf. on EIPT*, 100th AMS Annual Meeting, Boston, MA, January 12 – 16, 2020.

147. Salazar-Cerreno, J., R. D. Palmer, D. J. Bodine, J. McDaniel, C. R. Homeyer, B. Cheong, D. Schvartzman, G. M. McFarquhar, B. Isom, T. Y. Yu, J. Kelly, M. Yeary, M. Kumjian, P. Kollias, P. Kirstetter, S. Tanelli, J. Redemann, M. D. Fromm, C. B. Clements, S. M. Loria-Salazar, A. Shapiro, L. Leon, S. J. Frasier, S. M. Ellis, R. Rodriguez, and F. Miranda, A progress report on the design of a dual-Doppler 3D mobile Ka-band rapid-scanning volume imaging radar for earth system science, *38th Conf. on EIPT*, 102nd AMS Annual Meeting, Houston, TX, January 23 – 27, 2022.

148. Salazar, J. L., D. J. Bodine, R. D. Palmer, D. Schvartzman, J. McDaniel, P. E. Kirstetter, C. R. Homeyer, B. Cheong, T. Y. Yu, M. Yeary, and P. Kollias, the impact mmWave fast scanning phased array radar for atmospheric science, 14th Int. Precip. Conf., June 6 – 9, 2024.

149. Salazar, J. D. Bodine, R. Palmer, D. Schvartzman, J. McDaniel, P. Kirstetter, C. Homeyer, B. L. Cheong, T.-Y. Yu, M. Yeary, and P. Kollias, Advancing atmospheric science with a state-of-the-art mmWave phased array radar technology, *40th Conf. on Radar Meteor.*, Minneapolis, MN, August 28 – Sept 1, 2023.

150. Satrio, M. A.*, D. J. Bodine, A. Rinehart, and T. Maruyama, The effects of translation and surface roughness on tornado structure and flow, *17th Annual Student Conf.*, 98th Annual Meeting, Austin, Texas, January 8 – 11, 2018.

151. Satrio, M. A.*, D. J. Bodine, A. E. Reinhart, and T. Maruyama, The effects of varying surface roughness, translation velocity and swirl ratio on an idealized tornado, *29th Conf. on Severe Local Storms*, Stowe, VT, October 22 – 26, 2018.

152. Satrio, M. A.*, D. J. Bodine, A. E. Reinhart, T. Maruyama, and F. T. Lombardo, Understanding how complex terrain impacts tornado dynamics using a suite of high-resolution numerical simulations, *Severe Local Storm Symp.*, 100th AMS Annual Meeting, Boston, MA, January 12 – 16, 2020.

153. Schneider, M. E.*, D. J. Bodine, S. Torres, H. B. Bluestein, R. Palmer, B. Cheong, C. Fulton, and J. Lujan, Quantifying debris-related bias in tornado wind velocity measurements, *37th Conf. on EIPT*, 101st AMS Annual Meeting, New Orleans, LA, January 10 – 14, 2021.

154. Schneider, M. E.*, D. J. Bodine, S. Torres, R. D. Palmer, B. Cheong, C. Fulton, C. Griffin, H. B. Bluestein, T. Maruyama, R. Cross, and J. Lujan, A novel technique to correct debris-related bias in velocity measurements from tornadoes, *38th Conf. on EIPT*, 102nd AMS Annual Meeting, Houston, TX, January 23 – 27, 2022.

155. Schneider, M. E.*, D. J. Bodine, R. D. Palmer, S. M. Torres, B. L. Cheong, C. Fulton, C. Griffin, H. B. Bluestein, R. Cross, J. Lujan, and T. Maruyama, Mitigating the effects of debris on Doppler velocity measurements in tornadoes, *30th Conf. on Severe Local Storms*, Santa Fe, New Mexico, October 24 – 28, 2022.

156. Schneider, M. E.*, D. J. Bodine, R. D. Palmer, S. Torres, B. Cheong, C. Fulton, C. Griffin, H. B. Bluestein, and R. Cross, A novel technique to correct debris centrifuging bias in Doppler velocity measurements of tornadoes, *40th Conf. on Radar Meteor.*, Minneapolis, MN, August 28 – Sept 1, 2023.

157. Schneider, M. E.*, D. J. Bodine, B. Cheong, and D. Schvartzman, Rapid-scan radar observations of two QLCSs during the PERiLS 2023 field campaign, *40th Conf. on Radar Meteor.*, Minneapolis, MN, August 28 – Sept 1, 2023.

158. Schvartzman, D., R. D. Palmer, D. S. Zrnic, A. V. Ryzhkov, D. J. Bodine, M. Yeary, P. Kirstetter, T.-Y. Yu, Polarimetric weather observations with the fully digital Horus radar, *40th Conf. on Radar Meteor.*, Minneapolis, MN, August 28 – Sept 1, 2023.

159. Schultz, C., D. Schvartzman, V. C. Chmielewski, T. Y. Yu, D. J. Bodine, and M. Stock, Investigation of lightning and storm electrification processes using a phased array radar and lightning mapping array, *40th Conf. on EIPT*, 104th AMS Annual Meeting, Baltimore, MA, January 28 – February 1, 2024.

160. Shapiro, A., J. G. Gebauer, N. A. Dahl, D. J. Bodine, A. Mahre, C. K. Potvin, Spatially variable advection correction of Doppler radial velocity data, *39th Int. Conf. on Radar Meteorology*, Nara, Japan, September 16 – 20, 2019.

161. Shedd, L.*, D. J. Bodine, A. E. Reinhart, and H. B. Bluestein, Exploring meteorological benefits of rapid-scanning, dual-polarization radar for hail-producing storms, *38th Conf. on EIPT*, 102nd AMS Annual Meeting, Houston, TX, January 24 – 27, 2022.

162. Shedd, L.*, D. Bodine, A. E. Reinhart, and H. B. Bluestein, Rapid-scan, dual-polarization radar observations of hail-producing storms, *30th Conf. on Severe Local Storms*, Santa Fe, New Mexico, October 24 – 28, 2022.

163. Shedd, L.*, D. Bodine, A. E. Reinhart, and D. Schvartzman, Polarimetric, S-band, rapid-scan meteorological observations and applications of hail-producing storms, *39th Conf. on EIPT*, 103rd AMS Annual Meeting, Denver, CO, January 9 – 13, 2023.

164. Shedd, L.*, D. Bodine, D. Schvartzman, A. Reinhart, J. Snyder, K. Ortega, Polarimetric signatures and MRMS algorithms with the fully-digital Horus radar on hail producing storms, *40th Conf. on Radar Meteor.*, Minneapolis, MN, August 28 – Sept 1, 2023.

165. Shedd, L.*, D. Bodine, A. Reinhart, D. Schvartzman, J. Snyder, K. Ortega, I. Giammanco, J. Sorber, H. Bluestein, Rapid-scan, polarimetric radar observations and ground validation of a hail-producing supercell in Colorado, *40th Conf. on Radar Meteor.*, Minneapolis, MN, August 28 – Sept 1, 2023.

166. Shedd, L.*, D. Bodine, D. Schvartzman, A. E. Reinhart, J. Snyder, and K. Ortega, Polarimetric observations and MRMS algorithms with the all-digital Horus radar on hail producing storms, *40th Conf. on EIPT*, 104th AMS Annual Meeting, Baltimore, MA, January 28 – February 1, 2024.

167. Shimose, K., M. Xue, R. D. Palmer, J. Gao, B. L. Cheong, and D. J. Bodine, Two-dimensional variational analysis of near-surface moisture from simulated radar refractivity-related phase change observations, *13th Conf. on Integrated Observing and Assimilation Systems*, AMS Annual Meeting, Phoenix, AZ, January 11 – 15, 2009.

168. Skinner, P. S., S. Emmerson, D. Schvartzman, D. Bodine, P. Kirstetter, R. D. Palmer, T. Lindley, and C. Fulton, Development of real-time, multistatic radar networks for severe weather prediction, 104th AMS Annual Meeting, Baltimore, MA, January 28 – February 1, 2024.

169. Southward, S. J.*, D. J. Bodine, R. Cross, Tornadic debris signature and debris fallout analysis of the 10–11 December 2021 EF4 tornado, *40th Conf. on Radar Meteor.*, Minneapolis, MN, August 28 – Sept 1, 2023.

170. Southward, S. J.*, D. J. Bodine, R. Cross, Tornadic debris signature and debris fallout analysis of the 10–11 December 2021 EF4 tornado, *40th Conf. on EIPT*, 104th AMS Annual Meeting, Baltimore, MA, January 28 – February 1, 2024.

171. Torres, A. D.*, K. L. Rasmussen, and E. Dougherty, Comparison of ground- and space-based radar observations with disdrometer measurements, *2015 AGU fall Meeting*, San Francisco, CA, December 14 – 18, 2015.

172. Tzeng, M.-D.*, T.-Y. Yu, D. Bodine, and D. Schvartzman, Spectral polarimetry analysis for detection and tracking of ice alignment signatures in thunderstorms, *40th Conf. on Radar Meteor.*, Minneapolis, MN, August 28 – Sept 1, 2023.

173. Ueki, A., M. S. Teshiba, D. J. Bodine, T.-Y. Yu, B. L. Cheong, and R. D. Palmer, Networking observations with rapid-scanning radars and dual-pol radars for the applications of snow retrieval and cloud development, *39th Int. Conf. on Radar Meteorology*, Nara, Japan, September 16 – 20, 2019.

174. Ueki, A., M. Teshiba, K. Osa, D. Schvartzman, R. D. Palmer, T.-Y. Yu, B. Cheong, P. E. Kirstetter, and D. J. Bodine, Challenges in detection of graupel in Japan using dual-frequency radar techniques, *40th Conf. on Radar Meteor.*, Minneapolis, MN, August 28 – Sept 1, 2023.

175. Wagner, M., M. Satrio, M. C. Coniglio, E. Rasmussen, T. Maruyama, D. J. Bodine, A. E. Reinhart, Understanding the role of terrain on tornado behavior using Large-Eddy Simulation and observational damage information. *23rd Symp. Met. Obs. Instr.*, 103rd AMS Annual Meeting, Denver, CO, January 9 – 13, 2023.

176. Wagner, M. A., D. Candela, E. Rasmussen, and D. J. Bodine, Comparisons of close-range radar observations with UAS-based damage analysis of the 11 May 2023 Cole OK tornado, *Est. Wind Speeds Symp.*, 104th AMS Annual Meeting, Baltimore, MA, January 28 – February 1, 2024.

177. Wang, E.*, D. J. Bodine, J. M. Kurdzo, J. Barham, C. Bowman, and P. Pietrycha, Polarimetric characteristics of tornadic debris fallout during the 28 May 2019 Lawrence/Kansas City, Kansas, tornado, *Severe Local Storm Symp.*, 100th AMS Annual Meeting, Boston, MA, January 12 – 16, 2020.

178. Wienhoff, Z. B., H. B. Bluestein, L. J. Wicker, D. J. Bodine, B. L. Cheong, D. W. Reif, and N. Dahl, An investigation of the relationship between Doppler vortex signatures and polarimetric debris signatures in damaging tornadoes, *29th Conf. on Severe Local Storms*, Stowe, VT, October 22 – 26, 2018.

179. Wienhoff, Z. B., H. B. Bluestein, D. Bodine, B. L. Cheong, D. Reif, N. Dahl, and T. Greenwood, An investigation of tornadic debris signatures in damaging tornadoes using observations and simulations of Doppler spectra, *39th Int. Conf. on Radar Meteorology*, Nara, Japan, September 16 – 20, 2019.

180. Wienhoff, Z. B., F. T. Lombardo, D. J. Bodine, A. E. Reinhart, J. B. Nevill, A. Zaldivar De Alba, D. M. Rhee, and T. Maruyama, Investigating the interaction of tornadoes and structures, and the future of tornado-resilient communities, *30th Conf. on Severe Local Storms*, Santa Fe, New Mexico, October 24 – 28, 2022.

181. Yu, T.-Y., D. J. Bodine, P. Kirstetter, H. B. Bluestein, R. D. Palmer, M. Yeary, and B. Cheong, The mobile Rapid scan X-band Polarimetric Radar (RaXPol) as a Community Instrument Facility: Enhancing learning experiences in radar meteorology and engineering, *31st Conf. on Education*, 102nd AMS Annual Meeting, Houston, TX, January 23 – 27, 2022.

182. Yu, T.-Y., C. Pearson, D. J. Bodine, S. M. Torres, and A. E. Reinhart, A framework for the systematic assessment of microburst precursor observations using an all-digital phased array weather radar, *39th Conf. on EIPT*, 103rd AMS Annual Meeting, Denver, CO, January 9 – 13, 2023.

183. Yu, T.-Y., Y. Wen, D. J. Bodine, A. Alruzuq, P. Kirstetter, Y. Derin, L. Shedd, B. Cohen, M. Borowski, M.-D. Tzeng, E. D. Mullens, S. Mullens, R. D. Palmer, and B. Cheong, The mobile rapid scan X-band polarimetric (RaXPol) radar as a community instrument facility: Virtual radar experiment for sea breeze observations to enhance student learning, *39th Conf. on EIPT*, 103rd AMS Annual Meeting, Denver, CO, January 9 – 13, 2023.

184. Yu, T.-Y., D. Schvartzman, M. D. Tzeng, D. J. Bodine, E. C. Bruning, V. C. Chimelewski, and M. Stock, High-temporal resolution observations of cloud electrification with spectral polarimetry, *40th Conf. on Radar Meteor.*, Minneapolis, MN, August 28 – Sept 1, 2023.

185. Yu, T.-Y., C. B. Pearson, D. J. Bodine, S. Torres, N. Kuhr, and C. M. Kuster, Assessment of scanning strategies on the characterization and detection of downburst and its precursors with all-digital polarimetric phased array radar, *40th Conf. on Radar Meteor.*, Minneapolis, MN, August 28 – Sept 1, 2023.

186. Zambron, M. A.*, D. J. Bodine, and A. E. Reinhart, Tornadoes in the Southeast United States: Investigating the relationship between radar-measured intensity, damage, and terrain, *37th Conf. on EIPT*, 101st AMS Annual Meeting, New Orleans, LA, January 10 – 14, 2021.