Research Interests

- Tornado vortex structure, tornadogenesis, kinematics of convective systems, hurricane boundary layer kinematics, single- and multi-Doppler radar and integrated observational analysis of high impact mesoscale phenomena

Relevant Appointments

- FARM Radar Facility Manager and Senior Scientist, University of Alabama Huntsville, Huntsville, AL (August 2024 – current)
    - *Conducts scientific research; Manages the DOW mobile radar and instrument facility (FARM)*
- High Impact Meteorological Studies, President (2022 – Present)
    - Expert Consulting
- Manager, Flexible Array of Radars and Mesonets (FARM) Facility, Adjunct Research Professor, University of Illinois, Urbana, IL (October 2020 – August 2024)
    - *Conducts scientific research; Manages the DOW mobile radar and instrument facility (FARM)*
- Research Scientist and DOW Facility Manager, Center for Severe Weather Research, Boulder, CO (2008 – October 2020)
    - *Grant writing; Research; Supervises and assists in DOW facility readiness for scientific and education projects, including management, planning, instrument testing and readiness, deployments, budgeting, and managing*

Education

- Ph.D., Atmospheric Science, Purdue University, West Lafayette, Indiana, 2009
    - Dissertation: *A comparison of radar observations to real data simulations of axisymmetric tornadoes*
- M.A.T., Teacher Education, Miami University, Oxford, Ohio, 2003
    - Thesis: *A study on the effects of inquiry-based instruction on the attitudes of future science teachers*
- M.S., Physics, Miami University, Oxford, Ohio, 2002
    - Thesis: *A laboratory investigation of the vertical velocities in and the effects of surface roughness on tornado-like vortices*
- B.S., Physics, Loyola University, Chicago, Illinois, 1999

Certifications

Certified Consulting Meteorologist

Grants Awarded

- Co-PI: *AGS-FIRP Track 2: Hurricane Boundary Layer Observation Study*, NSF Grant (09/2026 – 08/2029)
- PI: *AGS-CIF: Doppler On Wheels Network and Ruggedized Array of Pods/Poles (DOWNET),* NSF Grant (9/2024 – 8/2028).
- PI: *Boundary layer Evolution and Structure in Tornadoes (BEST)*, NSF Grant (3/2023 – 2/2027).
- PI/Co-PI: *Collaborative Research: Propagation, Evolution and Rotation in Linear Storms (PERiLS)*, NSF Grant (9/2021 – 8/2024).
- PI: *CIF: Community Instruments and Facilities: Mobile and Quickly Deployable Radars*, NSF Grant (9/2021 – 8/2024).
- PI: *RAPID: RAPID: Dual-Doppler Analysis of the Boundary Layer in Category-4 Hurricane Laura,* NSF Grant (2/2021 – 1/2022).
- PI: *RAPID: Collection and Analysis of Data in Major Landfalling Hurricanes (2017),* NSF Grant (9/14/2017 – 8/31/2018).

- PI: *Collaborative Research: An Integrated Understanding of the Initiation and Subsequent Dynamical and Microphysical Characteristics of Deep Convective Storms during RELAMPAGO,* NSF Grant (2017-2021).
- Co-PI: VORTEX-SE: Characterization of environmental influences on downdraft processes occurring in potentially tornadic storms in the Southeast United States. NOAA grant (10/1/16 – 9/30/18)
- Co-PI: VORTEX-SE: Improving radar wind retrievals and understanding local environmental influences on downdraft processes in potentially tornadic storms in the southeastern United States. NOAA grant. (10/1/17 – 9/30/19)
- Co-PI: VORTEX-SE Type 1: Characterization of storm structure and storm environments through the integration, improvement and analysis of multi-platform radar data (current proposal). NOAA Grant. (2018 –2020).
- Co-PI: *Construction of Mobile C-band, Narrow-Beam, Dual-Frequency, Dual-Polarization, High-Power Radar*. NSF Grant (2017-2018).
- Co-Principle Investigator: *Relating Overshooting Cloud Tops, Lightning, and Cloud Microphysics to Tornadogenesis: A Design Study for a NASA-led Field Campaign,* NASA Grant. (07/01/2015 – 6/30/2016)
- Principle Investigator: *Mechanisms for severe wind production in nocturnal and transitioning convection*, NSF Grant (09/01/2015 – 08/31/2018)
- Co-Principle Investigator: *Doppler On Wheels National Mobile Doppler Radar Facility*, NSF Grant (01/2014 – 12/19).
- Principle Investigator: *Collaborative Research: OWLeS*, NSF Grant AGS-0910737. (09/01/2013 – 08/31/2016)
- Principle Investigator: *Modeling and analysis of the landfalling hurricane boundary layer*, NSF grant AGS-0910737. (09/15/2009 – 08/31/2013)
- Co-Principle Investigator: *A Multi-platform Kinematic and Thermodynamic Study of Tornado Genesis, Structure, and Evolution*, NSF grant AGS-1211132. (08/15/2012 – 07/31/2015)
- Co-Principle Investigator: *Collaborative research: VORTEX2--multi-scale and multi-platform study of tornadoes, supercell thunderstorms, and their environments*, NSF grant AGS-0801041. (06/01/2008 – 05/31/2013)

Field Activities

- In-situ Collaborative Experiment for the Collection of Hail In the Plains (ICECHIP), 2025
    - Scientific Steering Committee
    - Radar Coordination
- Boundary layer Evolution and Structure in Tornadoes (BEST), 2023, 2024
    - Principle Investigator and Co-Coordinator
    - Radar Operator
- Collaborative Research: Propagation, Evolution and Rotation in Linear Storms (PERiLS), 2022, 2023
    - Lead NSF Scientist
    - Radar Coordinator
    - FARM Facility Project Scientist
- Lake-Effect Electrification and the Impacts of Wind Turbines on Electrification East of Lake Ontario (LEE), 2023
    - FARM Facility Project Scientist
- The Winter Precipitation Type Research Multiscale Experiment (WINTRE MIX), 2022
    - FARM Facility Project Scientist
- Hurricanes at Landfall (HAL), 2004, 2008, 2012, 2017, 2019, 2020, 2024
    - Principle Investigator (2012, 2017, 2020)
    - Navigator, Radar operator, DOW Facility Project Scientist (2012, 2017, 2020)

- Radar Observations of Fire Weather, 2016, 2020
    - DOW Facility Project Scientist, Radar operator
- Tornadic Winds: In situ and Radar observations at Low-levels (TWIRL), 2016, 2017, 2019, 2020
    - Principle Investigator and Co-Coordinator
    - DOW Facility Project Scientist, Radar operator
- Remote sensing of Electrification, Lightning, And Mesoscale/Microscale Processes with Adaptive Ground Observations (RELAMPAGO), 2018
    - Principle Investigator
    - DOW Facility Project Scientist
- Great Plaines Irrigation Experiment (GRAINEX), 2018
    - DOW Facility Project Scientist
- Seeded and Natural Orographic Wintertime clouds - the Idaho Experiment (SNOWIE), 2017
    - DOW Facility Project Scientist
- The Olympic Mountains Experiment (OLYPMEX), 2015
    - DOW Facility Project Scientist
- Plains Elevated Convection at Night (PECAN), 2015
    - Principle Investigator, Project-wide Radar Coordinator (July)
    - DOW Facility Project Scientist
- Ontario Winter Lake-effect Systems (OWLeS), 2013-14
    - Principle Investigator, Executive Committee Member
    - Radar Coordinator
    - DOW Facility Project Scientist
- Radar Observations of Tornadoes and Thunderstorms (ROTATE), 2004-08, 2011-14
    - Navigator, driver, forecaster, radar operator, data manager
    - DOW Facility Project Scientist (2011 – 2014)
- AgI Seeding Cloud Impact Investigation (ASCII), 2012
    - DOW Facility Project Scientist, Radar Operator
- Long-Lake Axis-Parallel lake-effect storms project (LLAP), 2010-11
    - DOW Facility Project Scientist, Radar Operator
- The Second Verification of the Origins in Tornadoes Experiment (VORTEX2), 2009-10
    - Principle Investigator
    - DOW Facility Project Scientist, Radar Operator, in situ Tornado Pod coordinator
- Convective and Orographically-Induced Precipitation Study (COPS), 2007
    - Radar operator, driver, data manager

Professional Activities

- Editor in Chief, Weather and Forecasting (2025 - current)
- Committee Member, AMS Radar Scientific and Technological Activities Commission (2019 - 2025)
- Co-Chair, Radar R2O Symposium, AMS Annual Meeting (2025)
- Editor, Weather and Forecasting (2017 - 2024)
- Co-Chair, Physical Sciences, Vortex Southeast (2018 - 2020)
- Steering Committee Member, Vortex Southeast (2016 - 2020)
- Co-Chair, Organized Convection and Severe Phenomena, AMS 39th International Conference on Radar Meteorology (2019)
- Chief Scientist, RELAMPAGO Project (December 2018)
- Subcommittee Member, Organized Convection and Severe Phenomena, AMS 38th Conference on Radar Meteorology (2017)
- Committee Member, AMS 28th Conference on Severe Local Storms (2016)
- Conference Planning Committee Member, Vortex Southeast (2016)
- Associate Editor, Weather and Forecasting (2014 - 2016)

- Executive Committee Member, OWLeS Project (2013-14)
- Co-Chair, AMS 27th Conference on Severe Local Storms (2014)
- Committee Member, AMS Severe Local Storms Scientific and Technological Activities Commission (2013 - 2018)
- Reviewer of manuscripts for various professional journals including Monthly Weather Review, Bulletin of the American Meteorological Society, Journal of Atmospheric and Oceanic Technology, and Journal of Applied Meteorology and Climatology, Geophysical Research Letters
- Reviewer of proposals for the Physical and Dynamical Meteorology Division of the National Science Foundation
- Session Chair for various conference including 41st Conference in Radar Meteorology, 35th Conference in Radar Meteorology, 25th Conference on Severe Local Storms, 6th European Conference on Radar Meteorology and Hydrology, 5th European Conference on Severe Local Storms

Outreach Activities (Subset)

- Invited Speaker, TN Computer Science Momentum Expedition (December 2025)
- Invited Speaker, Cornell Weather Conference (September 2025)
- AMS Project Atmospheric (July 2025, July 2026)
- Invited Speaker, National Chaser Summit (February 2025)
- Weather Brains Podcast (February 2025)
- AMS Webinar: Breaking News Event: On the Ground (& In a DOW) For Hurricane Helene (September 2024)
- Panelist: AMS Webinar: Make Your Weather Passion a Reality: A Panel Discussion With the Experts (September 2024)
- AMS Webinar, DOW insights from 2024 tornadoes, including the Greenfield, IA EF4 (July 2024)
- Storm Front Freaks, Podcast (June 2024)
- Invited Speaker, 14th Annual Meteorological Symposium, Ohio University (March 2024)
- Invited Speaker, SEI Tornado Workshop (March 2024)
- Invited Speaker, ASCE Panel, AMS Annual Meeting (January 2024)
- Invited Speaker, Northeastern Storm Conference (March 2023)
- Girls Who Chase Podcast (Fall 2022)
- Invited Speaker, AMS Webinar Series on PERiLS (August 2022)
- Weather Geeks Podcast (April 2022)
- Invited Speaker, Carolina Weather Group (January 2022)
- Invited Speaker, Midwest Student Conference on Atmospheric Research (September 2021)
- Mid-Atlantic ChaserCon Webinar (November 2020)
- Wild Weather, Denver Museum of Nature and Science (April 2020)
- Girls & Science, Denver Museum of Nature and Science (March 2020)
- AMS on the Air, Podcast (January 2020)
- Weather Geeks, Podcast (May 2019)
- Invited Speaker, Benson Lecture, Miami University (March 2019)
- CoCoRaHS WxTalk Webinar (March, October 2019)
- Invited Speaker, X-STEM, Travis AFB (March 2019)
- Facilitated Advance Studies Institutes (ASI) Student Participation in DOW facility activities during RELAMPAGO (Fall 2018)
- Invited Speaker, University of North Dakota, Grand Forks, ND (April 2018)
- Invited Speaker, Wind Related Disasters and Mitigation, Sendai, Japan (March 2018)
- Invited Speaker, University of Arizona, Tucson, AZ (October 2017)
- Invited Speaker, 19th High Plains Conference (August 2017)
- Invited Speaker, Central Michigan University and Local AMS Chapter (2017)
- Invited Speaker, AMS Symposium on Severe Local Storms, Seattle, WA (2017)
- Invited Speaker, ChaserCon, Denver, CO (2011, 2013, 2017, 2018)

- Role Model, Girls and Science, Denver Museum of Nature and Science, Denver CO (5 March 2016)
- Invited Speaker, The Sixth Annual Great Lakes Atmospheric Science Symposium, Oswego, NY (17 October 2015)
- Invited Speaker, NWA Severe Storm and Doppler Radar Conference, Ankeny, IA (26 March 2015)
- Invited Speaker, 24th Annual DuPage Advanced Severe Weather Seminar, Wheaton, IL (14 March 2015)
- Invited Speaker, Severe Weather Symposium, Lawrence, KS (7 March 2015)
- Invited Speaker, TEDx, Phoenix, AZ (26 April 2015)
- Invited Speaker at the 16th Annual High Plains AMS/NWS Conference, Hastings, NE (Aug. 5, 2014)
- Guest Lecture and DOW data collection, SOARS Academy, Boulder, CO (June 17-19, 2014)
- Invited Speaker, Meteorology Club's Colloquia Series, California University of Pennsylvania (March 25, 2014)
- Invited speaker at X-Stem, Washington, D. C. (April 2014)
- Organized and presented at OWLeS Open House, Penn Yan Airport, NY (Dec. 5, 2013)
- Invited speaker at TEDYouth, New Orleans, LA (November 16, 2013)
- Lead teacher workshops (both remotely and onsite) on integrating weather observations and technology in the K-12 classroom (2012-2013)
- Participated in Denver Museum of Science and Nature's nationwide education program entitled "Scientists in Action" (2012, 2014)
- Participated in an iTwixie discussion of Storm Chasing for tween girls (May 2012)
- Invited speaker at the USA Science and Engineering Festival (April 2012, 2014)
- Interviewed for Washington Post article that highlighted VORTEX2 research (April 2012)
- Speaker at the Radar Meteorology Student Discussion at the 35th Conference on Radar Meteorology
- Participated in nationwide public and grade school education and outreach associated with the Tornado Alley IMAX film by visiting schools, museums, and local media to discuss tornado science and severe weather research (2011-13)
- Participated in the USA Science and Engineering Festival, Washington D.C., which involved 2 days of public outreach with the DOWs (October 2010, 2012, 2016)
- Traveled to community and technical colleges (IL, WY, CO) as part of the UCAR Careers in Science to discuss career options for students interested in weather (2010, 2011)
- Blogger, National Science Foundation VORTEX2 blog (2010)

Media Activities

- Interviewed by various local and national media outlets regarding severe weather and severe weather research (e.g., Washington Post, National Geographic, National Geographic Kids, The Weather Channel, BBC, Discovery Channel, Mashable, The Verge, AccuWeather, Fox News, 60Minutes, NBC Nightly News, The Guardian)

Service on Graduate Committees

- Michael Sessa (UIUC) (PhD) (2024)
- Edward Wolff (UIUC) (MS) (2023)
- Leanne (UIUC) (MS) (2023)
- Seth Goodnight (UIUC) (MS) (2022)
- Kyle Pennington (UAH) (MS) (2017)
- Mallie Toth (Purdue) (MS) (2012)

Teaching Experience

- Instructor, University of Colorado (Fall 2015)
- Teaching Assistant, Purdue University, Department of Earth and Atmospheric Sciences (2006-2008)
- Teaching Assistant, Miami University, Department of Physics (1999-2003)

- Laboratory Assistant, Loyola University, Department of Physics (1998-99)

Honors and Awards

- Recipient of the Purdue University Graduate Student Award for Outstanding Teaching (2007)
- Selected participant, NCAR colloquium (2006): "The Challenges of Convective Forecasting."
- Best Poster Presentation, Student Research Expo (2006), Dept. of EAS, Purdue University
- Purdue Research Foundation (PRF) Research Grant (2005-2006)
- Best Oral Presentation, Student Research Expo (2004), Dept. of EAS, Purdue University
- Recipient of the Frederick N. Andrews Fellowship (2003-2005), Purdue University
- Recipient of the College of Arts and Sciences Graduate Student Teaching Award (2002-03), Miami University
- Recipient of the Outstanding Graduate Student Researcher Award (2001-02), Dept. of Physics, Miami University
- Recipient of the American Association of Physics Teachers Outstanding Graduate Assistant Award (2001-02)
- Recipient of the Outstanding Graduate Student Teacher Award (2000-01), Dept. of Physics, Miami University
- Sigma Pi Sigma (Physics Honors Society)
- Phi Kappa Phi

Peer-Reviewed Publications

- Wurman, J., **K. A. Kosiba,** and P. Robinson, 2026: The Greenfield, Iowa, Tornado (2024): Wind-Damage Relationships, Novel LDR Dual-Polarization Analysis, and Integrated DOW/Video Analysis of Turbine Destruction. *Bull. Amer. Meteor. Soc.*, *In Review.*
- Blackford, A., U. S. Nair, J. Wurman, **K. A, Kosiba**, D. Roueche, K. Finley, J. Houser, C. Phillips, A. Kaulfus, and B. Freitag, 2026: High-Resolution Satellite Imagery Analysis of Terrain Effects on Tornadic Wind Damage. *Geophys. Res. Lett.*, *In Review.*
- Melanson, S., M. Parker, P. Robinson, **K. A. Kosiba**, S. W. Nesbitt, R. J. Trapp, J. Wurman, M. I. Biggerstaff, and A. Reinhart, 2026: Dual-Doppler Time Series of QLCS Mesovortices Observed during PERiLS. *Mon. Wea. Rev.*, *In Review*.
- Blind-Doskocil, L., R. J. Trapp, S. W. Nesbitt, M. D. Parker, **K. A. Kosiba**, J. Wurman, J. Aikins, and P. Robinson, 2025: Characteristics of Tornadic and Nontornadic QLCS Mesovortices Observed Using Radar and Pod Data from PERiLS. *Wea. Forecasting*, **40**, 2179–2197, https://doi.org/10.1175/WAF-D-24-0200.1.
- Silcott, M. K., M. D. Parker, **K. A. Kosiba**, S. W. Nesbitt, R. J. Trapp, J. Wurman, and C. C. Weiss, 2025: Properties of Cold Pools from PERiLS 2022–23. *Mon. Wea. Rev.*, **153**, 2085–2106, https://doi.org/10.1175/MWR-D-24-0280.1.
- **Kosiba, K. A.,** J. Wurman, and P. Robinson, 2025: The Near-Surface Boundary Layer of Hurricane Laura (2020) at Landfall. *Geophys. Res. Lett.*, 52, e2025GL114746, https://doi.org/10.1029/2025GL114746
- Wurman, J., **K. A. Kosiba**, and P. Robinson, 2025: Atmospheric and Insect Responses to a Total Solar Eclipse. *Bull. Amer. Meteor. Soc.*, **106**, E809-E828, https://doi.org/10.1175/BAMS-D-24-0165.1
- Wolff, E. C., R. J. Trapp, S. W. Nesbitt, M. D. Parker, **K. A. Kosiba**, and J. Wurman, 2025: On Discrete Convective Updrafts and Tornadoes in Quasi-Linear Convective Systems. *Wea. Forecasting*, **40**, 1065–1083, https://doi.org/10.1175/WAF-D-24-0080.1.
- **Kosiba, K. A**., Lyza, A. W., Trapp, R. J., Rasmussen, E. N., Parker, M., Biggerstaff, M. I., Nesbitt, S. W., Weiss, C. C., Wurman, J., Knupp, K. R., Coffer, B., Chmielewski, V. C., Dawson, D. T., Bruning, E., Bell, T. M., Coniglio, M. C., Murphy, T. A., French, M., Blind-Doskocil, L., Reinhart, A. E., Wolff, E., Schneider, M. E., Silcott, M., Smith, E., Aikins, J., Wagner, M., Robinson, P., Wilczak, J. M., White, T., Bodine, D., Kumjian, M. R., Waugh, S. M., Alford, A. A., Elmore, K., Kollias, P., and Turner, D. D., 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.

- Lachenmeier, E., R. Mahmood, C. Phillips, U. Nair, E. Rappin, R. A. Pielke, W. Brown, S. Oncley, J. Wurman, **K. Kosiba**, A. Kaulfus, J. Santanello, E. Kim, P. Lawston-Parker, M. Hayes, and T. E. Franz, 2024: Irrigated Agriculture Significantly Modifies Seasonal Boundary Layer Atmosphere and Lower-Tropospheric Convective Environment. J*. Appl. Meteor. Climatol*., **63**, 245–262, https://doi.org/10.1175/JAMC-D-23-0020.1
- Lombardo, F., Z. B. Wienhoff, M. Refan, J. Wurman, **K. Kosiba**, and M. Levitan, 2024: Properties of Tornado Wind Speed Profiles for Wind Load Design. *J. Struct. Eng*., Accepted.
- Juliano, T. W., Lareau, N., Frediani, M. E., Shamsaei, K., Eghdami, M., **Kosiba, K**., Wurman, J., DeCastro, A., Kosović, B., and Ebrahimian, H., 2023: Toward a Better Understanding of Wildfire Behavior in the Wildland-Urban Interface: A Case Study of the 2021 Marshall Fire. *Geophysical Research Letters*, **50**, e2022GL101557, https://doi.org/10.1029/2022GL101557.
- **Kosiba, K.,** and J. Wurman, 2023: The strongest winds in tornadoes are very near the ground. *Communications Earth & Environment*, **4**, 50, https://doi.org/10.1038/s43247-023-00716-6.
- Minder, J. R., and **Coauthors**, 2023: P-type Processes and Predictability: The Winter Precipitation Type Research Multiscale Experiment (WINTRE-MIX). *Bull. Amer. Meteor. Soc.*, https://doi.org/10.1175/BAMS-D-22-0095.1.
- Nesbitt, S. W., Salio, P. V., Ávila, E., Bitzer, P., Carey, L., Chandrasekar, V., Deierling, W., Dominguez, F., Dillon, M. E., Garcia, C. M., Gochis, D., Goodman, S., Hence, D. A., **Kosiba, K. A.**, Kumjian, M. R., Lang, T., Luna, L. M., Marquis, J., Marshall, R., McMurdie, L. A., Nascimento, E. L., Rasmussen, K. L., Roberts, R., Rowe, A. K., Ruiz, J. J., São Sabbas, E. F., Saulo, A. C., Schumacher, R. S., Skabar, Y. G., Machado, L. A. T., Trapp, R. J., Varble, A., Wilson, J., Wurman, J., Zipser, E. J., Arias, I., Bechis, H., & Grover, M. A. (2021). A storm safari in Subtropical South America: proyecto RELAMPAGO, *Bull. Amer. Meteor. Soc.,* https://doi.org/10.1175/BAMS-D-20-0029.1.
- Wurman, J., **Kosiba, K. A.**, Pereira, B., Robinson, P., Frambach, A., Gilliland, A., White, T., Aikins, J., Trapp, R. J., Nesbitt, S., Hanshaw, M. N, and J. Lutz, 2021: The FARM (Flexible Array of Radars and Mesonets). *Bull. Amer. Meteor. Soc.,* https://doi.org/10.1175/BAMS-D-20-0285.1
- Wurman, J., **Kosiba, K. A.**, White, T., and P. Robinson, 2021: Supercell Tornadoes are Much Stronger and Wider than Damage-Based Ratings Indicate**.** *PNAS,* https://doi.org/10.1073/pnas.2021535118*.*
- Rappin, E., R. Mahmood, U. Nair, R. A. Pielke Sr., W. Brown, S. Oncley, J. Wurman, **K. Kosiba**, A, Kaulfus, C. Phillips, E. Lachenmeier, J. Santanello Jr., E. Kim, and P. Lawston-Parker, 2020: The Great Plains Irrigation Experiment (GRAINEX), *Bull. Amer. Meteor. Soc.,* https://doi.org/10.1175/BAMS-D-20-0041.1
- Schumacher, R., D. A. Hence, S. W. Nesbitt, R. J. Trapp, **K. A. Kosiba**, J. Wurman, P. Salio, M. Runga, A. Varble, N. R. Kelly, 2020: Convective-storm environments in subtropical South America from high-frequency soundings during RELAMPAGO-CACTI. *Mon. Wea. Rev***.,** https://doi.org/10.1175/MWR-D-20-0293.1.
- Trapp, J., Hence, D., **Kosiba, K**., Kumjian, M., Marquis, J., Nesbitt, S., P. Salio, and J. Wurman, 2020: Multiple-platform, and multiple-Doppler radar observations of a supercell thunderstorm in South America during RELAMPAGO. *Mon. Wea. Rev***., 148,** 3225 – 3241**.**
- **Kosiba, K. A.**, J, Wurman, K. Knupp, K. Pennington, and P. Robinson, 2020: Ontario Winter Lake-effect Systems (OWLeS): Bulk characteristics and kinematic evolution of misovortices in long-lake-axis-parallel snowbands. *Mon. Wea. Rev.,* **148**, 131-157.
- Fernández Cabán, P. L., Alford, A. A., Bell, M, Biggerstaff, M. I., Carrie, G. D., Hirth, B., **Kosiba, K**.; Phillips, B. M., Schroeder, J. L., Waugh, S. M, Williford, C. E., Wurman, J., Masters, F. J., 2019: Observing Hurricane Harvey's Eyewall at Landfall. *Bull. Amer. Meteor. Soc.,***100,** 759 - 775
- Wurman, J., and **K. Kosiba**, 2018: The role of small-scale vortices in enhancing surface winds and damage in Hurricane Harvey (2017). *Mon. Wea. Rev.*, **146**, 713–722.
- Refan, M., H. Hangan, J. Wurman, and **K. Kosiba**, 2017: Doppler radar-derived wind field of five tornado events with application to engineering simulations. *Engineering Structures,* **148**. 509-521.

- Mulholland, J. P., J. Frame, S. Nesbitt, S. Steiger, **K. Kosiba**, J. Wurman, 2017: Observations of Misovortices Within A Long Lake-Axis-Parallel Lake-Effect Snow Band During The OWLeS Project. *Mon. Wea. Rev.* **145***,* 265–3291.
- Geerts, B., D. Parsons, C. Ziegler, T. Weckworth, D. Turner, J. Wurman, **K. Kosiba**, R. Rauber, M. Parker, R. Schumacher, M. Coniglio, K. Haghi, M. Biggerstaff, P. Klein, W. Gallus, B. Demoz, K. Knupp, R. Ferrare, X. Wang, J. Hanesiak, J. Pinto, J. Moore, 2017: The 2015 Plains Elevated Convection At Night (PECAN) field project. *Bull. Amer. Meteor. Soc.,* **98**, 767–786.
- Kristovich, D. A. R., R. D. Clark, J. Frame, B. Geerts, K. R. Knupp, **K. A. Kosiba**, N. F. Laird, N. D. Metz, J. Minder, T. D. Sikora, W. J. Steenburgh, S. M. Steiger, J. Wurman, G. S. Young; 2017: "The Ontario Winter Lake-effect Systems (OWLeS) Field Project. *Bull. Amer. Meteor. Soc.*, **98**, 315–332.
- Wakimoto, R.M., N.T. Atkins, K.M. Butler, H.B. Bluestein, K. Thiem, J.C. Snyder, J. Houser, **K. Kosiba**, J. Wurman, 2016: Aerial Damage Survey of the 2013 El Reno Tornado Combined with Mobile Radar Data. *Mon. Wea. Rev*., **144**, 1749-1776.
- Klees, A.M., Y.P. Richardson, P.M. Markowski, J. Wurman, and **K. Kosiba**, 2016: Comparison of the Tornadic and Nontornadic Supercells Intercepted by VORTEX2 on 10 June 2010. *Mon. Wea. Rev.*, **144**, 3201–3231.
- Marquis, J., Y. Richardson, P. Markowski, J. Wurman, and **K. Kosiba**, 2016: An Investigation of the Goshen County, Wyoming, Tornadic Supercell of 5 June 2009 Using EnKF Assimilation of Mobile Mesonet and Radar Observations. Part II: mesocyclone-scale processes affecting tornado formation, maintenance, and decay. *Mon. Wea. Rev.,* **144**, 3441-3463.
- Bell, M. M., R. A. Ballard, M. Bauman, A. M. Foerster, A. Frambach, **K. A. Kosiba**, W-.C. Lee, S. L. Rees, and J. Wurman, 2015: The Hawaiian Educational Radar Opportunity (HERO).
- Wurman, J., **K. Kosiba**, P. Robinson, T. Marshall, 2014: The Role of Multiple-Vortex Tornado Structure in Causing Storm Researcher Fatalities. *Bull. Amer. Meteor. Soc.*, **95**, 31–45.
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