

# Curriculum Vita

## Clark Evans, Ph.D.

### Personal Information

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#### Current Address

NOAA/OAR/Global Systems Laboratory  
325 Broadway  
Boulder, CO 80305-3328

Last Updated: 12 July 2026

#### Contact Information

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<https://gsl.noaa.gov/about/profiles/clark-evans>

### Education

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|------|----------------------------------------------------------------------------------|
| 2009 | Ph.D., Florida State University, Meteorology                                     |
| 2006 | M.S., Florida State University, Meteorology                                      |
| 2004 | B.S. (Magna Cum Laude), Florida State Univ., Meteorology (Minors: Physics, Math) |

### Experience

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|--------------|-------------------------------------------------------------------------|
| 2024-present | Research Physical Scientist and Branch Chief, NOAA/OAR/GSL, Boulder, CO |
| 2021-2024    | Professor, UW-Milwaukee, Milwaukee, WI                                  |
| 2021-2024    | Chair, Atmospheric Science Program, UW-Milwaukee, Milwaukee, WI         |
| 2016-2021    | Associate Professor, UW-Milwaukee, Milwaukee, WI                        |
| 2014-2020    | Chair, Atmospheric Science Program, UW-Milwaukee, Milwaukee, WI         |
| 2011-2016    | Assistant Professor, UW-Milwaukee, Milwaukee, WI                        |
| 2009-2011    | Postdoctoral Fellow, UCAR/Advanced Study Program, Boulder, CO           |
| 2004         | Research Assistant, FSU/Florida Climate Center, Tallahassee, FL         |
| 2003-2004    | Undergraduate Research Assistant, Florida State Univ., Tallahassee, FL  |

#### Affiliate/Adjunct Scientific Positions

|              |                                                                                |
|--------------|--------------------------------------------------------------------------------|
| 2024-present | Adjunct Professor, UW-Milwaukee, Milwaukee WI                                  |
| 2019-2024    | Affiliate Faculty, Northwestern Mutual Data Science Institute, Milwaukee, WI   |
| 2018         | Visiting Scientist, NOAA/NWS/Storm Prediction Center, Norman, OK               |
| 2013         | Visiting Scientist, NCAR/Mesoscale and Microscale Meteorology Lab, Boulder, CO |
| 2012         | Visiting Scientist, NOAA/NWS/National Hurricane Center, Miami, FL              |

### Awards and Honors

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|      |                                                                                                                                                                                    |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2023 | Faculty Distinguished Public Service Award, UW-Milwaukee                                                                                                                           |
| 2021 | Office of Research/UWM Foundation Research Award, UW-Milwaukee                                                                                                                     |
| 2021 | Faculty Distinguished University Service Award, UW-Milwaukee                                                                                                                       |
| 2018 | Editors' Award, <i>Monthly Weather Review</i> and <i>Weather and Forecasting</i>                                                                                                   |
| 2018 | Invited Participant, Inaugural AMS Early Career Leadership Academy                                                                                                                 |
| 2009 | Ph.D. Poster Competition Winner, American Meteorological Society 23 <sup>rd</sup> Conf. on Weather Analysis and Forecasting/19 <sup>th</sup> Conf. on Numerical Weather Prediction |
| 2004 | Recipient, American Meteorological Society Father James B. Macelwane Undergraduate Research Award                                                                                  |

**2004**                      **Recipient**, American Meteorological Society/Industry/Government Graduate Fellowship (Sponsored by the Office of Naval Research)

**Publications**                      (*italicized* = advised student)

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A citation listing is available on my [Google Scholar](#) page. H-index: 15, i10-index: 21.

*DeYoung, C. P.*, and **C. Evans**, 2026: [Observations and High-Resolution Rapid Refresh model verification of the Lake Michigan warm-season marine atmospheric boundary layer](#). *Wea. Forecasting*, **41**, 961–978.

**Evans, C.**, C. R. Holt, and M. B. Smith, 2026: [Performance of a real-time North Atlantic tropical cyclone prediction system using the Model for Prediction Across Scales during the 2024 NOAA Hurricane Forecast Improvement Program Real-Time Experiment](#). *Wea. Forecasting*, in press.

**Evans, C.**, and K. M. Wood, 2026: [Weather phenomena: extratropical transitions](#). *Encyclopedia of Atmospheric Sciences (3<sup>rd</sup> Ed.)*, W. A. Robinson, Ed., Elsevier, **1**, 587–600.

Jensen, A. A., D. D. Turner, J. Guerra, S. G. Benjamin, **C. Evans**, D. J. Gagne, J. R. Minder, and J. B. Olson, 2026: Development and tests of machine-learned cloud droplet number concentration in a next-generation bulk microphysics scheme for operational applications. *Geosci. Model Dev.*, submitted.

Olson, J. B., and Coauthors, 2026: [A description of the MYNN-EDMF turbulence scheme](#). NOAA Tech. Memo. OAR GSL-77, 60 pp.

*Blount, D. V.*, **C. Evans**, I. L. Jirak, A. R. Dean, and S. Kravtsov, 2023: [An objective method for clustering observed vertical thermodynamic profiles by synoptic meteorological conditions](#). *Wea. Forecasting*, **38**, 1143–1156.

*Kaminski, A. N.*, and coauthors, 2023: [A 30-year climatology of northeastern United States atmospheric rivers](#). *J. Appl. Meteor. Climatol.*, **62**, 31–40.

*Prince, K. C.*, and **C. Evans**, 2022: [Convectively generated negative potential vorticity enhancing the jet stream through an inverse energy cascade during the extratropical transition of Hurricane Irma](#). *J. Atmos. Sci.*, **79**, 2901–2918.

*Sarro, G. M.*, and **C. Evans**, 2022: [An updated investigation of post-transformation intensity, structural, and duration extremes for extratropically transitioning North Atlantic tropical cyclones](#). *Mon. Wea. Rev.*, **150**, 2911–2933.

Schultz, D. M., and Coauthors, 2022: [How to be a more effective author](#). *Mon. Wea. Rev.*, **150**, 2819–2828.

*Prince, K. C.*, and **C. Evans**, 2020: [A climatology of indirect tropical cyclone interactions in the North Atlantic and western North Pacific basins](#). *Mon. Wea. Rev.*, **148**, 4035–4059.

*Schaffer, J. D.*, P. J. Roebber, and **C. Evans**, 2020: [Development and evaluation of an evolutionary programming-based tropical cyclone intensity model](#). *Mon. Wea. Rev.*, **148**, 1951–1970.

Schultz, D. M., and Coauthors, 2020: [Data availability principles and practice](#). *Mon. Wea. Rev.*, **148**, 4701–4702.

- Evans, C.**, S. J. Weiss, I. L. Jirak, A. R. Dean, and D. S. Nevius, 2018: [An evaluation of paired regional/convection-allowing forecast vertical thermodynamic profiles in warm-season, thunderstorm-supporting environments](#). *Wea. Forecasting*, **33**, 1547–1566.
- Nevius, D. S., and **C. Evans**, 2018: [The influence of vertical advection discretization in the WRF-ARW model on capping inversion representation in warm-season, thunderstorm-supporting environments](#). *Wea. Forecasting*, **33**, 1639–1660.
- Prince, K. C., and **C. Evans**, 2018: [A climatology of extreme South American Andean cold surges](#). *J. Appl. Meteor. Climatol.*, **57**, 2297–2315.
- Burlingame, B. M., **C. Evans**, and P. J. Roebber, 2017: [The influence of PBL parameterization on the practical predictability of convection initiation during the Mesoscale Predictability Experiment \(MPEX\)](#). *Wea. Forecasting*, **32**, 1161–1183.
- Evans, C.**, and Coauthors: 2017: [The extratropical transition of tropical cyclones. Part I: cyclone evolution and direct impacts](#). *Mon. Wea. Rev.*, **145**, 4317–4344.
- Grunzke, C. T., and **C. Evans**, 2017: [Predictability and dynamics of warm-core mesoscale vortex formation with the 8 May 2009 “super derecho” event](#). *Mon. Wea. Rev.*, **145**, 811–832.
- Keclik, A. M., **C. Evans**, P. J. Roebber, and G. S. Romine, 2017: [The influence of assimilated upstream, pre-convective dropsonde observations on ensemble forecasts of convection initiation during the Mesoscale Predictability Experiment](#). *Mon. Wea. Rev.*, **145**, 4747–4770.
- Karloski, J. M., and **C. Evans**, 2016: [Seasonal influences upon and long-term trends in the length of the Atlantic hurricane season](#). *J. Climate*, **29**, 273–292.
- Manion, A., **C. Evans**, T. L. Olander, C. S. Velden, and L. D. Grasso, 2015: [An evaluation of Advanced Dvorak Technique-derived tropical cyclone intensity estimates during extratropical transition using synthetic satellite imagery](#). *Wea. Forecasting*, **30**, 984–1009.
- Weisman, M. L., and Coauthors, 2015: [The Mesoscale Predictability Experiment \(MPEX\)](#). *Bull. Amer. Meteor. Soc.*, **96**, 2127–2149.
- Burghardt, B., **C. Evans**, and P. Roebber, 2014: [Assessing the predictability of convection initiation across the High Plains using an object-based approach](#). *Wea. Forecasting*, **29**, 403–418.
- Evans, C.**, D. F. Van Dyke, and T. Lericos, 2014: [How do forecasters utilize output from a convection-permitting ensemble forecast system? Case study of a high-impact precipitation event](#). *Wea. Forecasting*, **29**, 466–486.
- Evans, C.**, M. L. Weisman, and L. F. Bosart, 2014: [Development of an intense, warm-core mesoscale vortex associated with the 8 May 2009 “super derecho” convective event](#). *J. Atmos. Sci.*, **71**, 1218–1240.
- Weisman, M. L., **C. Evans**, and L. F. Bosart, 2013: [The 8 May 2009 “super derecho”: analysis of a realtime explicit convective forecast](#). *Wea. Forecasting*, **28**, 863–892.
- Evans, C.**, and Coauthors, 2012: [The PRE-Depression Investigation of Cloud-systems in the Tropics \(PREDICT\) field campaign: perspectives of early career scientists](#). *Bull. Amer. Meteor. Soc.*, **93**, 173–187.

- Evans, C., R. S. Schumacher, and T. J. Galarneau, Jr., 2011: [Sensitivity in the overland reintensification of Tropical Cyclone Erin \(2007\) to near-surface soil moisture characteristics](#). *Mon. Wea. Rev.*, **139**, 3848–3870.
- Evans, C., and R. E. Hart, 2008: [Analysis of the wind field evolution associated with the extratropical transition of Bonnie \(1998\)](#). *Mon. Wea. Rev.*, **136**, 2047–2065.
- Hart, R. E., J. L. Evans, and C. Evans, 2006: [Synoptic composites of the extratropical transition lifecycle of North Atlantic tropical cyclones: factors determining post-transition evolution](#). *Mon. Wea. Rev.*, **134**, 553–578.

## Funded Grants and Contracts

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I am the sole PI on all funded grants and contracts except where listed.

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| <b>2026-2028</b> | <b>National Oceanic and Atmospheric Administration</b><br>"FY26 Precipitation Prediction Grand Challenge Supplemental: Improving Precipitation Forecasts by Refining the Representation of Multi-Scale Moist Physical Processes." \$797,155; 5/1/26-4/30/28.                                                                                                           |
| <b>2026-2028</b> | <b>National Oceanic and Atmospheric Administration</b><br>"FY26 Precipitation Prediction Grand Challenge Supplemental: Leveraging TPOS/TEPEX-E Observations to Advance Upper-Ocean Mixing and Lower-Atmosphere Turbulence and Cloud Representations and Improve UFS Forecasts." \$425,149; 5/1/26-4/30/28.                                                             |
| <b>2026-2027</b> | <b>Federal Aviation Administration</b><br>"FY26-27 GSL Model Development and Enhancement." \$760,000 (\$260,000 to the Physics Branch led by C. Evans); 5/1/25-4/30/26. Co-PI; lead PI: T. Ladwig (GSL).                                                                                                                                                               |
| <b>2025-2028</b> | <b>National Oceanic and Atmospheric Administration</b><br>"Internal JTII: Enhancing the Unified Gravity Wave Physics Suite for Improved Scale-Awareness and Middle-Atmosphere Prediction in Global and Regional UFS Applications." \$697,733 (\$397,733 to NOAA/OAR/GSL); 7/1/25-6/30/28. Lead PI; co-PIs: F. Yang (NOAA/NWS/EMC), M. Toy (NOAA/OAR/GSL and CU/CIRES). |
| <b>2025-2026</b> | <b>Federal Aviation Administration</b><br>"FY25-26 GSL Model Development and Enhancement." \$675,000 (\$220,000 to the Physics Branch led by C. Evans); 5/1/25-4/30/26. Co-PI; lead PI: T. Ladwig (GSL).                                                                                                                                                               |
| <b>2024</b>      | <b>National Science Foundation</b><br>"AGS-FIRP Track 1: Learning by Doing: Observing the Lake Michigan Lake-Breeze Circulation." AGS-2347093; \$47,200 (\$22,270 to C. Evans); 3/1/24-8/31/24.                                                                                                                                                                        |
| <b>2023-2024</b> | <b>UWM Discovery and Innovation Grant</b><br>"Downstream Impacts of Extratropical Transition of Tropical Cyclones in a Changing Climate." \$112,717; 7/1/23-12/31/24. Co-PI; lead PI: S. Kravtsov (UWM).                                                                                                                                                               |

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| <b>2023</b>      | <b>Hamilton Family Foundation</b><br>"Observing the Lake Michigan Marine Atmosphere Boundary Layer." \$4,500; 1/1/23-12/31/23.                                                                                                                                                                                                     |
| <b>2022-2026</b> | <b>U.S. Department of Energy</b><br>"Establishing a Holistic Understanding of the Circulations of Mesoscale Convective System Stratiform Regions." Award #DE-SC0023057; \$716,831 (\$276,265 to C. Evans); 8/1/22-3/31/26. Co-PI; lead PI: R. Adams-Selin (AER).                                                                   |
| <b>2021-2023</b> | <b>National Science Foundation</b><br>"CC* Compute: A Balanced Cluster for Science and Engineering in the Great Lakes Region." OAC-2126229; \$400,000; 10/1/21-9/30/23. Co-PI; lead PI: P. Chang (UWM).                                                                                                                            |
| <b>2021-2022</b> | <b>Unidata Equipment Program</b><br>"Upgrading THREDDS and Deploying JupyterHub at the University of Wisconsin-Milwaukee to Support Education and Research." \$10,672; 6/1/21-5/31/22.                                                                                                                                             |
| <b>2019-2022</b> | <b>National Science Foundation</b><br>"Thermodynamics of Tropical Cyclone Overland Maintenance and Intensification." AGS-1911671; \$408,577; 6/1/19-5/31/22.                                                                                                                                                                       |
| <b>2019-2021</b> | <b>National Oceanic and Atmospheric Administration</b><br>"VORTEX-SE: Quantifying the Influence of Sea-Surface Temperature Uncertainty on Cool-Season Severe Weather Events." NA19OAR4590208; \$203,527; 9/1/19-8/31/21.                                                                                                           |
| <b>2018-2020</b> | <b>National Oceanic and Atmospheric Administration</b><br>"Round 3 of R2O Initiative – NOAA Testbeds: Evaluation of GFS-FV3 Vertical Profile and Thermodynamic Environment Fidelity." NA18NWS4680062; \$210,369 (\$190,369 to C. Evans); 9/1/18-8/31/20. Lead PI; co-PI: I. L. Jirak (NOAA/NWS/SPC).                               |
| <b>2018-2019</b> | <b>UWM Research Growth Initiative</b><br>"A Climatology of Indirect Tropical Cyclone Interactions." \$55,243; 7/2/18-7/1/19.                                                                                                                                                                                                       |
| <b>2017-2019</b> | <b>National Oceanic and Atmospheric Administration</b><br>"FY 2017 Joint Hurricane Testbed: Evolutionary programming for probabilistic tropical cyclone intensity forecasts." NA17OAR4590137; \$199,527; 7/1/17-6/30/19. Co-PI; lead PI: P. Roebber (UWM).                                                                         |
| <b>2015-2018</b> | <b>National Science Foundation</b><br>"Collaborative Research: SI2-SSI: Big Weather Web: A common and sustainable big data infrastructure in support of weather prediction research and education in universities." ACI-1450439; \$2,000,000 (\$164,381 to C. Evans); 8/1/15-7/31/18. Co-PI; lead PI: C. Maltzhan (UC-Santa Cruz). |
| <b>2015-2016</b> | <b>Unidata Equipment Program</b><br>"Deployment of AWIPS-II at the University of Wisconsin-Milwaukee." \$11,908, 6/1/15-5/31/16.                                                                                                                                                                                                   |

- 2014-2017      National Science Foundation**  
 "Numerical Assessment of the Practical and Intrinsic Predictability of Warm-Season Convection Initiation Using Mesoscale Predictability Experiment (MPEX) Data." AGS-1347545; \$456,206; 6/1/14-5/31/17. Lead PI; co-PI: P. Roebber (UWM).
- 2012-2013      UWM Graduate School Research Committee**  
 "An Assessment of Thunderstorm Development Forecast Successes and Failures from Very High Resolution Numerical Weather Forecasts." \$12,611; 7/1/12-6/30/13.
- 2012-2013      Unidata Equipment Program**  
 "Installation of RAMADDA, THREDDS, and LDM at UWM." \$7,177; 6/1/12-5/31/13. Co-PI; lead PI: P. Roebber (UWM).
- 2011-2012      COMET Partners Program**  
 "Extreme Precipitation Across the Tallahassee, FL NWS Forecast Area Associated with Tropical Storm Fay (2008): Physical Understanding and Ensemble-Based Forecast Utility." \$9,990; 7/13/11-8/31/12. Lead PI; co-PI: D. Van Dyke (NOAA/NWS).

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## Teaching Experience (\* = newly developed course; ^ = developed own materials)

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- Tropical Meteorology** (Atm Sci 470\*)  
 Spring 2024, Spring 2022, Spring 2020, Spring 2018, Spring 2016, Spring 2014, Spring 2012
- Numerical Weather Prediction** (Atm Sci 730\*)  
 Fall 2023, Fall 2021, Fall 2019, Fall 2017, Fall 2015, Fall 2012
- Introductory Atmospheric Science Seminar** (Atm Sci 101\*)  
 Fall 2023, Fall 2022
- Synoptic Meteorology II** (Atm Sci 361^)  
 Spring 2023, Spring 2019, Spring 2015, Spring 2013
- Synoptic Meteorology I** (Atm Sci 360^)  
 Fall 2022, Fall 2018, Fall 2014
- Mesoscale Meteorology** (Atm Sci 460^)  
 Spring 2017
- First-Year Seminar: Probability, Uncertainty, and Communication** (Atm Sci 194\*)  
 Fall 2016
- Survey of Meteorology** (Atm Sci 100^)  
 Spring 2014, Fall 2013
- Current Weather Discussion** (MET 3520^, Florida State University)  
 Spring 2008

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## Student Advisees

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### Graduate Advisees

**2023-2025      Kathryn Boyle**

M.S. 2025; co-advised by S. Kravtsov; now incoming Ph.D. student, North Carolina State Univ., Raleigh, NC

- 2022-2024 Collin DeYoung**  
M.S., 2024; now Instructor of Meteorology, Central Michigan Univ., Mt. Pleasant, MI
- 2021-2024 Ariel Tickner-Ernst**  
M.S., 2024; now Mitigation & Recovery Coordinator, Cumberland County, ME
- 2020-2021 Michelle Storm (née: Spencer)**  
M.S., 2021; Ph.D., 2025 at the Univ. of Oklahoma; now UCAR Advanced Study Program Postdoctoral Fellow, Boulder, CO
- 2019-2025 Dillon Blount**  
M.S., 2021; Ph.D. 2025; now Asst. Professor (tenure-track) at Ohio Univ., Athens, OH
- 2019-2024 Michael Vossen**  
M.S., 2021; Ph.D. (ABD) at time of departure; now Senior Project Professional with the Antea Group USA, St. Paul, MN
- 2017-2019 Jesse Schaffer**  
M.S., 2019; completed M.Ed. in 2022 at George Mason Univ.
- 2016-2022 Kevin Prince**  
M.S., 2018, Ph.D., 2022; now NRC Post-Doctoral Fellow, NRL, Monterey, CA
- 2016-2018 Aidan Kuroski**  
M.S., 2018; now Meteorologist with NWS, Milwaukee/Sullivan, WI
- 2016-2018 David Nevius**  
M.S., 2019; now Flight Superintendent with Delta Airlines, Atlanta, GA
- 2015-2017 Caitlin Cook (née: Crossett)**  
M.S., 2017; Ph.D., 2022 at the Univ. of Vermont; now Asst. Professor (tenure-track) at UNC-Asheville, Asheville, NC
- 2014-2016 Alexandra Kelly (née: Keclik)**  
M.S., 2016; now NWS Central Region IDSS/WCM Program Mgr., Kansas City, MO
- 2014-2016 Bryan Burlingame**  
M.S., 2016; now Chief Technology Officer with SparkPlug, Milwaukee, WI
- 2014-2016 Caleb Grunzke**  
M.S., 2016; now Meteorologist with NWS, Twin Cities/Chanhassen, MN
- 2013-2015 Juliana Karloski**  
M.S., 2015; now Educational Instructor with Space Center Houston, Houston, TX
- 2012-2014 Alex Manion**  
M.S., 2014; now Meteorologist with NWS, Detroit/Pontiac, MI
- 2011-2013 Brock Burghardt**  
M.S., 2013; Ph.D., 2017 at the Texas Tech Univ.; now Certified Consulting Meteorologist in private practice

#### UWM Undergraduate Student Advisees

|                     |                                    |                                                  |
|---------------------|------------------------------------|--------------------------------------------------|
| <b>2023-present</b> | <b>Kade Barkas</b>                 | (2026 UWM Senior Excellence in Research Awardee) |
| <b>2022-2024</b>    | <b>Drew Hickok</b>                 |                                                  |
| <b>2018-2021</b>    | <b>Anna Prince (née: Kaminski)</b> | (2021 AMS Father James B. Macelwane Awardee)     |
| <b>2018-2020</b>    | <b>Giorgio Sarro</b>               | (2020 AMS Father James B. Macelwane Awardee)     |
| <b>2018</b>         | <b>Marie Freres</b>                |                                                  |

#### NOAA/NCAR Student Advisees

|             |                             |                                                  |
|-------------|-----------------------------|--------------------------------------------------|
| <b>2026</b> | <b>Matt Oehler</b>          | (William M. Lapenta NOAA Student Intern Program) |
| <b>2025</b> | <b>Darri Stuber</b>         | (William M. Lapenta NOAA Student Intern Program) |
| <b>2010</b> | <b>Dereka Carroll-Smith</b> | (NSF NCAR SOARS)                                 |

#### Ph.D. Dissertation/M.S. Thesis Committee Member (all at UW-Milwaukee excepted where listed)

*Dissertations:* Andrew Westgate (2024), Ilijana Mastilovic (2023), Tim Thielke (2022), Austin Harris (2022), Brian Griffin (2016), Noriyuki Sugiyama (2015), Dawn Kopacz (2015)

*Theses:* Ander Ortiz (2025, Univ. of Arizona), Alex Moxon (2025), Skylar Gertonson (2025), Victoria Lang (2022), James Ryan (2020), Teresa Turner (2020), Andrew Westgate (2020), Christian Grimm (2018), Andrea Honor (2018), Cory Rothstein (2018), Tim Thielke (2018), Lily Chapman (2017), Russell Danielson (2017), Austin Harris (2016), Kaitlyn Heinlein (2016), Timm Uhlmann (2016), Justin Weber (2015), Josh Verbeten (2014), Joseph Pehoski (2013), Jeremy Duggan (2012), John Peters (2012), Marc Pilon (2012), Zach Uttech (2012)

#### Undergraduate Capstone Supervision

Drew Hickok (2024), Kyle Zur (2022), Anna Kaminski (2021), Giorgio Sarro (2020), Ashley Schils (2020), Devon Bernick (2019), Austin Scheib (2018), Mackenzie Nuthals (2017), Alec Muniz (2016), Lily Chapman (2015), Kyle Koval (2013), Karleisa Rogacheski (2013), Charles Smith (2013)

## **Professional Service**

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#### National/International Service

|                     |                                                                                       |
|---------------------|---------------------------------------------------------------------------------------|
| <b>2026-present</b> | <b>Member</b> , AMS Ad Hoc Community Modeling Committee                               |
| <b>2025-present</b> | <b>Member</b> , AMS Planning Commission                                               |
| <b>2025-present</b> | <b>Member</b> , AMS Awards Oversight Committee                                        |
| <b>2025-present</b> | <b>Assistant Chief Editor</b> , AMS Glossary                                          |
| <b>2025-present</b> | <b>Member</b> , Committee on AMS Positions and Statements                             |
| <b>2025-present</b> | <b>Member</b> , AMS Annual Meeting Oversight Committee ( <i>ex officio</i> )          |
| <b>2025</b>         | <b>Panelist</b> , UCAR Early Career Workshop                                          |
| <b>2024</b>         | <b>Panelist</b> , 23 <sup>rd</sup> Annual AMS Student Conference                      |
| <b>2023-present</b> | <b>Commissioner</b> , AMS Scientific and Technological Activities Commission          |
| <b>2023</b>         | <b>Chair</b> , Developmental Testbed Center Science Advisory Board                    |
| <b>2023</b>         | <b>Panelist</b> , AMS Town Hall on Open Science Expectations for Model-Based Research |
| <b>2022-2023</b>    | <b>Co-Chair</b> , AMS Future of Meetings Task Force                                   |
| <b>2022-2023</b>    | <b>Member</b> , AMS Future of Meetings Task Force                                     |
| <b>2021-2023</b>    | <b>Chair</b> , AMS Committee on Weather Analysis and Forecasting                      |
| <b>2021</b>         | <b>Chair</b> , AMS Weather Analysis and Forecasting Statement Revision Team           |
| <b>2021</b>         | <b>Member</b> , NCEP Strategic Planning Team                                          |
| <b>2021</b>         | <b>Member</b> , AMS 102 <sup>nd</sup> Annual Meeting Health and Safety Task Force     |
| <b>2021</b>         | <b>Panelist</b> , 20 <sup>th</sup> Annual AMS Student Conference                      |
| <b>2020-2022</b>    | <b>Chair</b> , AMS Annual Meeting Oversight Committee                                 |
| <b>2020-2023</b>    | <b>Member</b> , UCAR Membership Committee                                             |
| <b>2020-present</b> | <b>Member</b> , Developmental Testbed Center Science Advisory Board                   |

**2020** **Panelist**, 8<sup>th</sup> Annual AMS Conference for Early Career Professionals  
**2019-present** **Editor**, *Monthly Weather Review*  
**2019-2022** **Member**, AMS Annual Meeting Oversight Committee  
**2018-2021** **Vice Chair**, AMS Committee on Weather Analysis and Forecasting  
**2018** **Rapporteur**, 9<sup>th</sup> WMO International Workshop on Tropical Cyclones  
**2018** **Organizer**, AMS Special Symposium on Impact-Based Decision Support Services  
**2017** **Member**, AMS 28<sup>th</sup> Conf. on WAF/24<sup>th</sup> Conf. on NWP Program Committee  
**2016-2023** **Member**, AMS Committee on Weather Analysis and Forecasting  
**2016** **Member**, AMS Max Eaton Award Selection Committee  
**2015** **Panelist**, 14<sup>th</sup> Annual AMS Student Conference  
**2015** **Member**, 17<sup>th</sup> Cyclone Workshop Science Committee  
**2014** **Member**, 8<sup>th</sup> WMO International Workshop on Tropical Cyclones Working Group  
**2013-2015** **Member**, AMS Weather Analysis and Forecasting Statement Revision Team  
**2013** **Panelist**, 1<sup>st</sup> Annual AMS Conference for Early Career Professionals  
**2012-2018** **Associate Editor**, *Monthly Weather Review*  
**2012** **Member**, AMS Max Eaton Award Selection Committee  
**2012** **Rapporteur**, 4<sup>th</sup> WMO International Workshop on Extratropical Transition  
**2010** **Member**, 7<sup>th</sup> WMO International Workshop on Tropical Cyclones Working Group  
**2010** **Member**, AMS 25<sup>th</sup> Conf. on Severe Local Storms Program Committee  
**2010** **Member**, AMS 29<sup>th</sup> Conf. on Hurricanes/Tropical Meteor. Program Committee

#### Institutional Service

**2026-present** **Chair**, NOAA/OAR/GSL High-Resolution Modeling Subcommittee  
**2025-present** **Chair**, NOAA/OAR/GSL Awards Committee  
**2024-present** **Member**, NOAA/OAR/GSL Science and Technology Council  
**2024-present** **Mentor**, CIRES Mentoring Program  
**2024-2025** **Member**, NOAA/OAR/GSL Modeling Summit Leadership Team  
**2023** **Lecturer**, UWM Admitted Student Days Mock Lecture Series  
**2022-2023** **Vice Chair**, UWM Freshwater Sciences Academic Program & Curr. Committee  
**2022-2023** **Member**, UWM Freshwater Sciences Dean Search & Screen Committee  
**2021-2024** **Member**, UWM Freshwater Sciences Academic Program & Curr. Committee  
**2021-2024** **Faculty Advisor**, The Climate Consensus at UWM  
**2021-2022** **Member**, UWM Freshwater Sciences Climate/Water Asst. Prof. Search Committee  
**2020-2024** **Member**, UWM Research Computing Steering Group  
**2020-2021** **Member**, 2030 Implementation Team Undergraduate Experience Working Group  
**2018-2020** **Member**, UWM Information Technology Policy Committee  
**2017-2019** **Recruitment Ambassador**, UWM College of Letters and Science  
**2017-2019** **Member**, UWM Mathematical Sciences Strategic Planning Committee  
**2017-2018** **Member**, UWM Mathematical Sciences Undergraduate Committee  
**2017-2018** **Member**, UWM Mathematical Sciences Department Manager Search Committee  
**2017-2018** **Member**, UWM Mathematical Sciences Merit Committee  
**2017-2018** **Chair**, UWM Mathematical Sciences Visiting Assistant Professor Search Committee  
**2016-2017** **Member**, UWM Mathematical Sciences Assessment Committee  
**2014-2023** **Coordinator**, UWM StormReady University Initiative  
**2014-2020** **Member**, UWM Mathematical Sciences Graduate Committee  
**2013-2014** **Chair**, UWM Mathematical Sciences Event Organizing Committee  
**2012-2024** **UCAR Member Representative**, UW-Milwaukee  
**2011-2024** **Local Manager**, WxChallenge Forecasting Competition  
**2011-2024** **Faculty Co-Advisor**, UWM Atmospheric Science Club  
**2011-2016** **Member**, UWM Mathematical Sciences Colloquium Committee  
**2011-2016** **Member**, UWM Mathematical Sciences Event Organizing Committee  
**2010-2011** **Organizer**, UCAR/NCAR/MMM 'Dynamics Happy Hour' Seminar Series  
**2009-2011** **Member**, UCAR/NCAR/ASP Seminar Organizing Committee

### Service to Other Universities

To maintain candidates' anonymity, tenure and promotion-related service in which I have engaged for other universities identifies the institution only by their Carnegie Classification.

|                  |                                                                                                  |
|------------------|--------------------------------------------------------------------------------------------------|
| <b>2026</b>      | <b>Reviewer</b> , Promotion to Professor (R1 Institution)                                        |
| <b>2024</b>      | <b>Reviewer</b> , Promotion to Professor (R1 Institution)                                        |
| <b>2024</b>      | <b>Reviewer</b> , Promotion to Professor (R2 Institution)                                        |
| <b>2023-2024</b> | <b>Chair and Member</b> , Western Kentucky Univ. Meteorology B.S. Review Committee               |
| <b>2023</b>      | <b>Reviewer</b> , Tenure and Promotion to Associate Professor (R1 Institution)                   |
| <b>2022</b>      | <b>Reviewer</b> , Promotion to Professor (Research Colleges and Universities)                    |
| <b>2019</b>      | <b>Reviewer</b> , Tenure and Promotion to Associate Professor (R2 Institution)                   |
| <b>2018</b>      | <b>Reviewer</b> , Tenure and Promotion to Associate Professor (R1 Institution)                   |
| <b>2016</b>      | <b>Reviewer</b> , Tenure and Promotion to Associate Professor (Research Colleges & Universities) |

### Community Service

|                     |                                                                                            |
|---------------------|--------------------------------------------------------------------------------------------|
| <b>2025-present</b> | <b>Member</b> , State of Colorado Natural Disaster Mitigation Enterprise Board             |
| <b>2025-present</b> | <b>Member</b> , High Plains Library District Friends & Foundation Board of Directors       |
| <b>2024</b>         | <b>Member</b> , Village of Grafton, WI Finance and Personnel Committee                     |
| <b>2023-2024</b>    | <b>Trustee</b> , Village of Grafton, WI                                                    |
| <b>2023-2024</b>    | <b>Member</b> , Village of Grafton, WI Board of Public Works                               |
| <b>2022-2023</b>    | <b>Vice President</b> , U.S.S. Liberty Memorial Public Library (Grafton, WI) Library Board |
| <b>2018-2020</b>    | <b>Participant</b> , ESWN Science-a-Thon #dayofscience                                     |
| <b>2016-2023</b>    | <b>Trustee</b> , U.S.S. Liberty Memorial Public Library                                    |
| <b>2015</b>         | <b>Member</b> , Village of Grafton, WI Bicycle and Pedestrian Plan Committee               |

### Journal and Proposal Reviewer

*Bulletin of the American Meteorological Society*

*Climate Dynamics*

*Developmental Testbed Center*

*Geophysical Research Letters*

*Journal of Applied Meteorology and Climatology*

*Journal of Climate*

*Journal of Geophysical Research-Atmospheres*

*Journal of Geophysical Research-Oceans*

*Journal of Operational Meteorology*

*Journal of the Atmospheric Sciences*

*Monthly Weather Review*

*National Environment Research Council (UK)*

*National Oceanic and Atmospheric Administration (USA; multiple programs)*

*National Science Foundation (USA)*

*Nature Communications*

*Quarterly Journal of the Royal Meteorological Society*

*U.S. Department of Energy Atmospheric System Research Program*

*Weather and Forecasting*

### Invited Professional Colloquia and Seminars

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|             |                                                                                 |
|-------------|---------------------------------------------------------------------------------|
| <b>2026</b> | <b>University of Colorado, Dept. of Atmospheric and Oceanic Sciences</b><br>TBD |
| <b>2026</b> | <b>Purdue Univ., Dept. of Earth, Atmospheric, and Planetary Sciences</b>        |

“NOAA/GSL Model Development and Forecasting Activities using MPAS for Future NOAA Operational Modeling Systems”

- 2024 Univ. of Arizona, Dept. of Hydrology and Atmospheric Sciences**  
“Real-Time High-Resolution Hurricane Prediction with the Model for Prediction Across Scales”
- 2024 NSF National Center for Atmospheric Research, Research Applications Laboratory**  
“Real-Time High-Resolution Hurricane Prediction with the Model for Prediction Across Scales”
- 2024 North Carolina State Univ., Dept. of Marine, Earth, and Atmospheric Sciences**  
“High-Impact Tropical and Midlatitude Weather Phenomena Across Scales” and  
“Moving MEAS Forward, Together: A Vision for Leadership and for the Dept. of Marine, Earth, and Atmospheric Sciences”
- 2023 NOAA Global Systems Laboratory**  
“Diagnosing Atmospheric Boundary Layer Analysis and Forecast Biases in Short-Range Numerical Weather Prediction Forecasts”
- 2023 National Science Foundation**  
“Perspectives on the CLD and PDM Programs and Diversity, Equity, and Inclusion”
- 2022 6<sup>th</sup> Midwest Student Conference on Atmospheric Research**  
“The Extratropical Transition of Tropical Cyclones (and Assorted Career Musings)”
- 2019 IOGP Metocean Committee**  
“Tropical Cyclone Impacts at Higher Latitudes in a Warming World”
- 2018 NOAA/NWS/Storm Prediction Center**  
“A Preliminary Evaluation of Paired Regional/Convection-Allowing Model-Forecast Vertical Profiles in Warm-Season, Thunderstorm-Supporting Environments”
- 2018 Northern Illinois Univ., Dept. of Geography**  
“The Rear-Inflow Jet Evolution of Idealized, Mature Mesoscale Convective Systems”
- 2018 Greater Milwaukee Chapter of the AMS**  
“The Harvey-Irma-Maria Hurricanes: An Atlantic Hurricane Season Retrospective”
- 2017 St. Cloud State Univ., Dept. of Atmospheric and Hydrologic Sciences**  
“The Rear-Inflow Jet Evolution of Idealized, Mature Mesoscale Convective Systems”
- 2016 Lyndon State College, Dept. of Atmospheric Sciences**  
“Understanding Trends in and Controls on Atlantic Hurricane Season Length”
- 2016 Univ. of Wisconsin-Madison, Dept. of Atmospheric and Oceanic Sciences**  
“On the Short- to Medium-range Predictability of Thunderstorm Formation”
- 2015 Greater Milwaukee Chapter of the AMS**  
“How do Forecasters Utilize Ensembles? Case Study of a High-Impact Event”
- 2014 Central Michigan Univ., Dept. of Earth and Atmospheric Sciences**

"The Predictability of Mesoscale Convective Phenomena"

- 2014**      **Omaha/Offutt Chapter of the AMS/NWA**  
"How do Forecasters Utilize Output from a Convection-Permitting Ensemble Forecast System? Case Study of a High-Impact Precipitation Event"
- 2014**      **Univ. of Georgia, Dept. of Geography**  
"Oklahoma's Tropical Storm: The Curious Case of T.S. Erin's Inland Reintensification"
- 2013**      **Greater Milwaukee Chapter of the AMS**  
"Anatomy of a Superstorm: Birth, Evolution, and Impacts of Hurricane Sandy (2012)"
- 2012**      **UW-Milwaukee, Atmospheric Science Club**  
Fall: "The 8 May 2009 'Super Derecho': A High-Impact Convective Event"  
Spring: "A Primer on Numerical Weather Prediction and Ensemble Modeling"
- 2011**      **Florida State Univ., Dept. of Earth, Ocean, and Atmospheric Science**  
"A Unique Pathway to Tropical Cyclogenesis: Tropical Storm Erin (2007)"
- 2010**      **UW-Milwaukee, Dept. of Mathematical Sciences**  
"A Unique Pathway to Tropical Cyclogenesis: Tropical Storm Erin (2007)"
- 2009**      **NCAR, Mesoscale and Microscale Meteorology Division**  
"The Thermodynamic Evolution of Recurving Tropical Cyclones"
- 2007**      **Bermuda Institute of Ocean Sciences, RPI Research Update**  
"Development of Anomalous Probability Forecasts for the Threat of Higher Latitude Hurricane Impacts"

## **Invited Workshops and Meteorological Testbeds**

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- 2026**      **NOAA Numerical Weather Prediction Moonshot Workshop**  
NOAA National Center for Weather and Climate Prediction, College Park, MD
- 2x, last: 2026**      **NOAA Winter Weather Experiment**  
NOAA/NWS/NCEP/Weather Prediction Center, College Park, MD
- 2025**      **NOAA Flash Flood and Intense Rainfall Experiment**  
NOAA/NWS/NCEP/Weather Prediction Center, College Park, MD
- 13x, last: 2026**      **NOAA Hazardous Weather Testbed Spring Forecasting Experiment**  
NOAA/OAR/NSSL and NOAA/NWS/NCEP/SPC, Norman, OK
- 2024**      **Innovations in Open Science Planning Workshop: Community Expectations for a Geoscience Data Commons**  
NSF National Center for Atmospheric Research, Boulder, CO
- 2023**      **NCAR-NOAA Community Modeling Infrastructure Meeting**  
UCAR/NSF NCAR, Boulder, CO
- 2022**      **Mind the Gap 2 Workshop**

Natl. Science Foundation, Amer. Meteor. Society, and Univ. at Albany, Albany, NY

- 2022, 2020** **EarthCube Research Coordination Network "What About Model Data?" Workshops**  
Univ. of North Dakota, Grand Forks, ND and UCAR, Boulder, CO
- 2012** **"Shaping the Development of EarthCube to Enable Advances in Data Assimilation and Ensemble Prediction" Workshop**  
Unidata/National Science Foundation, Boulder, CO
- 2006** **"The Challenge of Convective Forecasting" Summer Colloquium**  
UCAR/Advanced Study Program, Boulder, CO

## Public Interviews, Presentations, and Web Stories

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- 2026** **American Meteorological Society** ([9 Apr 2026](#); importance of AMS volunteers)
- 2026** **Earth Prediction Innovation Center** ([March 2026](#); MPAS selection for NOAA NWP)
- 2025** **Global Systems Laboratory** ([25 Sept 2025](#); NOAA testbed evaluations of GSL tools)
- 2025** **Global Systems Laboratory** ([3 July 2025](#); story on GSL modeling advances)
- 2024** **DTC Transitions Newsletter** ([Spring 2024](#); Director's Corner article on AI modeling)
- 2024** **Ozaukee News Graphic** ([11 April 2024](#); weather monitoring station in Grafton, WI)
- 2023** **USA Today** ([20 October 2023](#); hurricane model interpretation)
- 2023** **Learning in Retirement Waukesha County** (13 September 2023; Wisconsin weather)
- 2023** **Grafton, WI Public Library** (9 September 2023; observing Wisconsin weather)
- 2023** **Brookfield, WI Public Library** (6 September 2023; observing Wisconsin weather)
- 2023** **Wisconsin Examiner** ([5 September 2023](#); August 2023 heat + climate adaptation)
- 2023** **WUWM Public Radio** ([13 June 2023](#); Wisconsin drought conditions)
- 2023** **WDJT-TV/CBS 58** ([16 March 2023](#); El Niño and Wisconsin weather)
- 2023** **WUWM Public Radio** ([3 February 2023](#); warm January weather + climate change)
- 2023** **Milwaukee Journal Sentinel** ([19 January 2023](#); warm January weather)
- 2023** **Milwaukee Journal Sentinel** ([5 January 2023](#); early-winter temperatures and snow)
- 2022** **UWM Report** ([10 November 2022](#); hurricane data resource)
- 2022** **Learning in Retirement Waukesha County** (17 October 2022; hurricane primer)
- 2022** **WISN-TV** (7 September 2022; "Rooftop Weather" interview)
- 2022** **Wall Street Journal** ([16 August 2022](#); early starting Atlantic hurricane seasons)
- 2022** **UWM Osher Lifelong Learning Institute** (21 February 2022; hurricane primer)
- 2021** **WUWM Public Radio** ([5 November 2021](#); summer weather and climate change)
- 2021** **350.org Milwaukee Chapter** ([14 September 2021](#); The Climate Consensus)
- 2021** **WUWM Public Radio** ([4 August 2021](#); derechos and wildfires)
- 2021** **UWM Research Magazine** ([16 March 2021](#); hurricane research)
- 2021** **UWM Today** ([18 February 2021](#); hurricane research)
- 2021** **UWM Alumni Association Master Chat** ([18 February 2021](#); hurricane primer)
- 2020** **WDJT-TV/CBS 58** ([13 December 2020](#); La Niña and Wisconsin winter weather)
- 2020** **WDJT-TV/CBS 58** ([14 June 2020](#); extreme rainfall in Wisconsin)
- 2020** **UWM Alumni Magazine** ([8 June 2020](#); Spring 2020 semester reflection)
- 2020** **Song-a-Day #4045** ([28 January 2020](#); songification of Evans et al. (2014) abstract)
- 2019** **AMS On The Air Podcast** ([18 June 2019](#); extratropical transition of tropical cyclones)
- 2019** **Developmental Testbed Center Newsletter** ([Spring 2019](#); vision for NWP research)
- 2019** **UWM Report** ([2 May 2019](#); weather balloon launch)
- 2019** **WISN-TV** (1 May 2019; weather balloon launch)
- 2019** **Ozaukee News Graphic** (14 March 2019; letter to the editor on weather vs. climate)
- 2019** **Ozaukee Press** (6 March 2019; letter to the editor on weather vs. climate)
- 2019** **DTC Transitions Newsletter** ([Spring 2019](#); Director's Corner article on the FV3 model)

|      |                                                                                                            |
|------|------------------------------------------------------------------------------------------------------------|
| 2018 | <b>UWM Letters &amp; Science InFocus</b> ( <a href="#">October 2018</a> ; Science-A-Thon participation)    |
| 2018 | <b>WDJT-TV/CBS 58</b> (14 September 2018; Hurricane Florence interview)                                    |
| 2018 | <b>Weather Underground</b> ( <a href="#">6 June 2018</a> ; Tropical Storm Alberto interview)               |
| 2018 | <b>UWM Report</b> ( <a href="#">19 April 2018</a> ; Atmospheric Science program changes)                   |
| 2018 | <b>UWM Today</b> ( <a href="#">19 April 2018</a> ; Innovative Weather and Atmospheric Science program)     |
| 2018 | <b>UWM Report</b> ( <a href="#">18 April 2018</a> ; late-ending winter weather in Wisconsin)               |
| 2018 | <b>Weather Underground</b> ( <a href="#">19 February 2018</a> ; Tropical Cyclone Kelvin interview)         |
| 2017 | <b>WISN-TV</b> (30 August 2017; Hurricane Harvey interview)                                                |
| 2017 | <b>Milwaukee Area Science Advocates</b> ( <a href="#">13 July 2017</a> ; "Actual Living Scientist" sketch) |
| 2017 | <b>UWM Atmospheric Science Promo</b> ( <a href="#">February 2017</a> ; undergraduate program)              |
| 2016 | <b>News@Unidata</b> ( <a href="#">23 May 2016</a> ; deployment of AWIPS II at UWM)                         |
| 2016 | <b>UWM PantherVision</b> (4 March 2016; El Niño impacts on Wisconsin weather)                              |
| 2016 | <b>The Daily Beast</b> ( <a href="#">15 January 2016</a> ; Hurricane Alex interview)                       |
| 2015 | <b>WITI-TV/FOX 6</b> ( <a href="#">25 February 2015</a> ; Milwaukee Air & Water Show weather)              |
| 2015 | <b>WITI-TV/FOX 6</b> ( <a href="#">24 February 2015</a> ; Lake Michigan ice cover)                         |
| 2015 | <b>WDJT-TV/CBS 58</b> (23 February 2015; Lake Michigan ice cover)                                          |
| 2014 | <b>UWM Report</b> ( <a href="#">20 November 2014</a> ; UWM StormReady University designation)              |
| 2012 | <b>UCAR News</b> ( <a href="#">2 July 2012</a> ; eastern United States derecho)                            |
| 2011 | <b>UCAR News</b> ( <a href="#">6 May 2011</a> ; Tropical Storm Erin research)                              |
| 2010 | <b>LiveScience</b> ( <a href="#">12 September 2010</a> ; central United States derecho)                    |
| 2010 | <b>UCAR News</b> ( <a href="#">18 August 2010</a> ; central United States derecho)                         |

## Presentations

(*underlined italics denotes student advisee*)

### **2026**

- Barkas, K., and **C. Evans**, 2026: Quantifying the overlap between severe-weather and hurricane seasons in the southeast United States. *Abstract, 21<sup>st</sup> Symp. on Societal Applications*, Houston, TX, Amer. Meteor. Soc., 11.4.
- Benjamin, S. G., E. P. James, D. D. Turner, A. A. Jensen, T. T. Ladwig, and **C. Evans**, 2026: Identifying and addressing causes for dry bias in NWP model initial conditions with impacts on clouds and precipitation forecasts. *Abstract, 22<sup>nd</sup> Conf. on Mountain Meteorology*, Madison, WI, Amer. Meteor. Soc., J7.2.
- Bernardet, L., and Coauthors, 2026: Integrating MPAS into NOAA. *Abstract, 2026 MPAS/WRF Users' Workshop*, Boulder, CO, NSF NCAR, 14.
- Blount, D. V., **C. Evans**, R. D. Adams-Selin, and H. C. Vagasky, 2026: Mesoscale convective system rear inflow contributions in numerical simulations. *Abstract, 32<sup>nd</sup> Conf. on Severe Local Storms*, Madison, WI, Amer. Meteor. Soc., 7B.4.
- Clark, A., and Coauthors, 2026: MPAS evaluations for severe weather forecasting during the 2026 NOAA/Hazardous Weather Testbed Spring Forecasting Experiment. *Abstract, 2026 MPAS/WRF Users' Workshop*, Boulder, CO, NSF NCAR, 18.
- Clark, A., and Coauthors, 2026: MPAS evaluations for severe weather forecasting during the 2026 NOAA/Hazardous Weather Testbed Spring Forecasting Experiment. *Abstract, 2026 Unifying Innovations in Forecasting Capabilities Workshop*, College Park, MD, Earth Prediction Innovation Center, TBD.
- Dowell, D., and Coauthors, 2026: Spring 2026 severe weather forecasting with experimental CONUS 3-km MPAS systems. *Abstract, 2026 MPAS/WRF Users' Workshop*, Boulder, CO, NSF NCAR, 17.
- Evans, C.**, S. Trahan, C. R. Holt, and L. Bernardet, 2026: Real-time global variable-resolution hurricane forecasts using the Model for Prediction Across Scales during the 2025 Hurricane Forecast Improvement Program. *Abstract, 16<sup>th</sup> Conf. on Transition of Research to Operations*, Houston, TX, Amer. Meteor. Soc., 14.2.
- Evans, C.**, S. Trahan, C. R. Holt, B. W. Green, and L. Bernardet, 2026: Real-time global variable-resolution hurricane forecasts using the Model for Prediction Across Scales during the 2025

- Hurricane Forecast Improvement Program Real-time Experiment. *Abstract*, 2026 MPAS/WRF Users' Workshop, Boulder, CO, NSF NCAR, 26.
- Evans, C.**, S. Trahan, C. R. Holt, B. W. Green, and L. Bernardet, 2026: Real-time global variable-resolution hurricane forecasts using the Model for Prediction Across Scales during the 2025 and 2026 Hurricane Forecast Improvement Program. *Abstract*, 30<sup>th</sup> Conf. on Numerical Weather Prediction, Madison, WI, Amer. Meteor. Soc., P.TBD.
- Evans, C.**, C. R. Alexander, L. Bernardet, T. T. Ladwig, M. Hu, D. Dowell, and T. I. Alcott, 2026: NOAA/GSL model development and forecasting activities toward RRFSv2 using MPAS. *Abstract*, 16<sup>th</sup> Conf. on Transition of Research to Operations, Houston, TX, Amer. Meteor. Soc., J4.1.
- Evans, C.**, C. R. Alexander, L. Bernardet, T. T. Ladwig, M. Hu, D. Dowell, R. Ahmadov, and G. Ge, 2026: NOAA/GSL model development and forecasting activities using MPAS for future NOAA operational modeling systems. *Abstract*, 2026 MPAS/WRF Users' Workshop, Boulder, CO, NSF NCAR, 15.
- Evans, C.**, C. R. Alexander, L. Bernardet, T. T. Ladwig, M. Hu, D. Dowell, R. Ahmadov, and G. Ge, 2026: NOAA/GSL model development and forecasting activities using MPAS for future NOAA operational modeling systems. *Abstract*, 2026 Unifying Innovations in Forecasting Capabilities Workshop, College Park, MD, Earth Prediction Innovation Center, TBD.
- Evans, C.**, C. R. Alexander, L. Bernardet, T. T. Ladwig, M. Hu, D. Dowell, R. Ahmadov, and G. Ge, 2026: NOAA/GSL model development and forecasting activities using MPAS for future NOAA operational modeling systems. *Abstract*, 30<sup>th</sup> Conf. on Numerical Weather Prediction, Madison, WI, Amer. Meteor. Soc., 9.1.
- Ge, G., and Coauthors, 2026: Developing the prototype MPAS- and JEDI-based Atmospheric River Prediction System. *Abstract*, 2026 MPAS/WRF Users' Workshop, Boulder, CO, NSF NCAR, 27.
- Jensen, A. A., G. Ge, M. Barlage, **C. Evans**, and J. B. Olson, 2026: An evaluation of TEMPO microphysics in MPAS for atmospheric river prediction. *Abstract*, 30<sup>th</sup> Conf. on Numerical Weather Prediction, Madison, WI, Amer. Meteor. Soc., 3.2.
- Kavulich, Jr., M., K. Newman, M. Harrold, **C. Evans**, and D. Dowell, 2026: Evaluating MPAS-based RRFS prototype forecasts using METplus. *Abstract*, 30<sup>th</sup> Conf. on Numerical Weather Prediction, Madison, WI, Amer. Meteor. Soc., 3.2.
- Ladwig, T. T., and Coauthors, 2026: Rapid Refresh Forecast System (RRFS) research to support aviation hazards forecasts. *Abstract*, 26<sup>th</sup> Conf. on Aviation, Range, and Aerospace Meteorology, Houston, TX, Amer. Meteor. Soc., J9.4.
- Li, H., and Coauthors, 2026: Improving the aerosol representation and microphysics coupling in NOAA's RRFSv2 numerical weather prediction model with MPAS dynamical core. *Abstract*, 2026 MPAS/WRF Users' Workshop, Boulder, CO, NSF NCAR, 24.
- Li, H., and Coauthors, 2026: Improving the aerosol representation and microphysics coupling in NOAA's RRFSv2 numerical weather prediction model with MPAS dynamical core. *Abstract*, 2026 Unifying Innovations in Forecasting Capabilities Workshop, College Park, MD, Earth Prediction Innovation Center, TBD.
- Mantovani, J. A., Jr., and Coauthors, 2026: Evaluation of MPAS Atmosphere with NOAA/GSL-led physics for simulating midlatitude mesoscale convective systems. *Abstract*, 2026 MPAS/WRF Users' Workshop, Boulder, CO, NSF NCAR, 19A.
- Olson, J. B., X. Sun, B. Adler, L. Bianco, A. Jensen, D. D. Turner, **C. Evans**, J. Sedlar, and K. Balmes, 2026: HRRR/RRFS physics development for improved marine clouds in WFIP3. *Abstract*, 2026 MPAS/WRF Users' Workshop, Boulder, CO, NSF NCAR, 58.
- Olson, J. B., X. Sun, B. Adler, L. Bianco, A. Jensen, D. D. Turner, **C. Evans**, J. Sedlar, and K. Balmes, 2026: HRRR/RRFS physics development for improved marine clouds in WFIP3. *Abstract*, 30<sup>th</sup> Conf. on Numerical Weather Prediction, Madison, WI, Amer. Meteor. Soc., 11.1.
- Smith, M., **C. Evans**, N. Babij, R. Pierce, I. McGinnis, G. Padmanabhan, and J. A. Hamilton, 2026: Predictability of rapid intensification in the 2024 and 2025 Atlantic hurricane seasons: using METplus to verify model performance. *Abstract*, 16<sup>th</sup> Conf. on Transition of Research to Operations, Houston, TX, Amer. Meteor. Soc., 15A.3.

- Stuber, D. A., **C. Evans**, I. Jankov, and D. S. Abdi, 2026: Implicit learning of surface physics in data-driven models: an evaluation using 2-m temperature. *Abstract, 25<sup>th</sup> Conf. on Artificial Intelligence for Env. Sci.*, Houston, TX, Amer. Meteor. Soc., 8A.5.
- Sun, X., J. B. Olson, B. Adler, L. Bianco, **C. Evans**, and D. D. Turner, 2026: Characterizing sea-breeze events using observations and model simulations during WFIP3. *Abstract, 30<sup>th</sup> Conf. on Numerical Weather Prediction*, Madison, WI, Amer. Meteor. Soc., 11.2.
- Sun, X., J. Olson, L. Bianco, B. Adler, D. Turner, J. Sedlar, A. Jensen, and **C. Evans**, 2026: A comparison of MPAS and WRF-ARW forecasts of coastal/marine case studies during WFIP3. *Abstract, 2026 MPAS/WRF Users' Workshop*, Boulder, CO, NSF NCAR, 59.
- Toy, M. D., **C. Evans**, J. Beck, W. Skamarock, and S. Bhimireddy, 2026: Preventing computational instabilities and spurious precipitation features in the lateral boundaries of high-resolution regional MPAS. *Abstract, 2026 MPAS/WRF Users' Workshop*, Boulder, CO, NSF NCAR, P3.
- Trahan, S., **C. Evans**, and C. Holt, 2026: Global variable resolution hurricane model: troubles and revelations. *Abstract, 2026 MPAS/WRF Users' Workshop*, Boulder, CO, NSF NCAR, P16.

## **2025**

- Adams-Selin, R. D., H. Vagasky, D. V. Blount, and **C. Evans**, 2025: Low-frequency gravity waves within mesoscale convective system stratiform regions. *Abstract, 4<sup>th</sup> Symp. on Mesoscale Processes*, New Orleans, LA, Amer. Meteor. Soc., 9.5.
- Adams-Selin, R. D., H. Vagasky, D. V. Blount, and **C. Evans**, 2025: Low-frequency gravity waves within mesoscale convective system stratiform regions. *Abstract, 2025 ARM/ASR Joint User Facility and PI Meeting*, Rockville, MD, US Dept. of Energy, 3.45.
- Barkas, K. R., and **C. Evans**, 2025: Toward quantifying the overlap between severe weather and hurricane seasons in the southeast United States. *Abstract, 24<sup>th</sup> Student Conf.*, New Orleans, LA, Amer. Meteor. Soc., S31.
- Blount, D. V., **C. Evans**, and R. D. Adams-Selin, 2025: A preliminary analysis of the contributions of line-end vortices, gravity waves, and environmental flow to mesoscale convection system rear inflow and stratiform region structure in numerical simulations. *Abstract, 4<sup>th</sup> Symp. on Mesoscale Processes*, New Orleans, LA, Amer. Meteor. Soc., 9.4.
- Blount, D. V., **C. Evans**, R. D. Adams-Selin, and H. Vagasky, 2025: An analysis of the contributions of line-end vortices and gravity waves to mesoscale convective system rear inflow and stratiform region structure in numerical simulations. *Abstract, 2025 ARM/ASR Joint User Facility and PI Meeting*, Rockville, MD, US Dept. of Energy, 3.47.
- Boyle, K. G., **C. Evans**, and S. Kravtsov, 2025: Downstream effects of Northern Hemisphere extratropical transition in a future climate. *Abstract, 38<sup>th</sup> Conf. on Climate Variability and Change*, New Orleans, LA, Amer. Meteor. Soc., 897.
- Clark, A., and coauthors, 2025: MPAS evaluations for severe weather forecasting during the 2025 NOAA/Hazardous Weather Testbed Spring Forecasting Experiment. *Abstract, Joint MPAS/WRF Users Workshop 2025*, Boulder, CO, Natl. Cen. for Atmos. Res., 4.5.
- Evans, C.**, 2025: Performance of a real-time, high-resolution Model for Prediction Across Scales (MPAS) forecast system during HFIP 2024. *Abstract, 2025 Tropical Cyclone Operations and Research Forum*, Lakeland, FL, Natl. Oceanic and Atmos. Administration, 3.4.
- Evans, C.**, C. R. Alexander, L. R. Bernardet, T. T. Ladwig, M. Hu, D. C. Dowell, and T. I. Alcott, 2025: NOAA/GSL model development and forecasting activities using MPAS. *Abstract, Joint MPAS/WRF Users Workshop 2025*, Boulder, CO, Natl. Cen. for Atmos. Res., 3.1.
- Evans, C.**, C. R. Alexander, L. R. Bernardet, T. T. Ladwig, M. Hu, D. C. Dowell, and T. I. Alcott, 2025: NOAA/GSL model development and forecasting activities using MPAS. *Abstract, Unifying Innovations in Forecasting Capabilities Workshop*, Boulder, CO, Earth Prediction Innovation Center.
- Evans, C.**, L. R. Bernardet, M. D. Toy, J. B. Olson, A. A. Jensen, W. C. Skamarock, and M. J. Duda, 2025: Integration of additional community physics parameterizations into the MPAS-Atmosphere model. *Abstract, Joint MPAS/WRF Users Workshop 2025*, Boulder, CO, Natl. Cen. for Atmos. Res., P27.

- Evans, C.**, L. Bengtsson, A. Jensen, S. Trahan, N. Wang, M. Barlage, G. Grell, and E. Grell, 2025: Modeling system advancements for atmospheric river applications. *NOAA Atmospheric River Workshop*, virtual, Natl. Oceanic and Atmos. Administration, 5.1.
- Hamilton, J., M. Smith, R. Pierce, N. Babij, I. McGinnis, G. Padmanabhan, M. Wandishin, **C. Evans**, D. Turner, and S. Weygandt, 2025: Use of MATS (Model Assessment Tool Suite) for rapid-prototyping model refinement. *NOAA Atmospheric River Workshop*, virtual, Natl. Oceanic and Atmos. Administration, 6.2.
- Jensen, A. A., J. B. Olson, and **C. Evans**, 2025: Development updates to the Thompson-Eidhammer Microphysics Parameterization for Operations (TEMPO). *Abstract, Joint MPAS/WRF Users Workshop 2025*, Boulder, CO, Natl. Cen. for Atmos. Res., 6B.1.
- Li, H., R. Ahmadov, A. A. Jensen, J. Schnell, J. B. Olson, M. Zhang, and **C. Evans**, 2025: A pilot study of improving the aerosol representation in NOAA's RRFsv2 numerical weather prediction model with the MPAS dynamical core. *Abstract, 2025 AGU Fall Meeting*, New Orleans, LA, Amer. Geophys. Union, A31H - Poster.
- Olson, J. B., W. M. Angevine, X. Sun, D. Turner, and **C. Evans**, 2025: Updates to the MYNN-EDMF PBL scheme to improve operational forecasting applications. *Abstract, Joint MPAS/WRF Users Workshop 2025*, Boulder, CO, Natl. Cen. for Atmos. Res., 6A.1.

## **2024**

- Blount, D. V., **C. Evans**, R. D. Adams-Selin, and H. Vagasky, 2024: A preliminary analysis of line-end vortex contributions to rear-to-front flow in observed and modeled mesoscale convective systems. *Abstract, 24<sup>th</sup> Symp. on Meteor. Obs. and Instrumentation*, Baltimore, MD, Amer. Meteor. Soc.
- Blount, D. V., **C. Evans**, and R. D. Adams-Selin, 2024: A preliminary analysis of the contributions of line-end vortices, gravity waves, and environmental flow to mesoscale convection system rear inflow and stratiform region structure in numerical simulations. *Abstract, 31<sup>st</sup> Conf. on Severe Local Storms*, Virginia Beach, VA, Amer. Meteor. Soc.
- DeYoung, C. P., and **C. Evans**, 2024: A preliminary assessment of the HRRR's ability to predict the Great Lakes lake-breeze front and marine atmospheric boundary layer. *Abstract, 22<sup>nd</sup> Symp. on the Coastal Environment*, Baltimore, MD, Amer. Meteor. Soc., 1.3.
- Evans, C.**, 2024: Tropical cyclone forecasts at GSL using MPAS. *Abstract, 2024 HFIP Annual Meeting*, Miami, FL, Natl. Oceanic and Atmos. Administration, 3C.4.
- Hickok, A. O., M. P. Vossen, and **C. Evans**, 2024: Towards an updated climatology of overland tropical cyclone maintenance and intensification in non-/weakly baroclinic environments. *Abstract, 6<sup>th</sup> Spec. Symp. on Tropical Meteor. and Trop. Cyclones*, Baltimore, MD, Amer. Meteor. Soc.
- Hickok, A. O., M. P. Vossen, and **C. Evans**, 2024: Towards an updated climatology of overland tropical cyclone maintenance and intensification in non-/weakly baroclinic environments. *Abstract, 16<sup>th</sup> UWM Undergraduate Research Symposium*, Milwaukee, WI.
- Hickok, A. O., M. P. Vossen, and **C. Evans**, 2024: Towards an updated climatology of overland tropical cyclone maintenance and intensification in non-/weakly baroclinic environments. *Abstract, 36<sup>th</sup> Conf. on Hurricanes and Tropical Meteorology*, Long Beach, CA, Amer. Meteor. Soc.
- Vossen, M. P., and **C. Evans**, 2024: Thermodynamics of overland tropical cyclone intensity change in weakly/non-baroclinic environments. *Abstract, 36<sup>th</sup> Conf. on Hurricanes and Tropical Meteorology*, Long Beach, CA, Amer. Meteor. Soc.

## **2023**

- Adams-Selin, R. D., **C. Evans**, H. C. Vagasky, and D. V. Blount, 2023: Identification of low-frequency gravity waves within mesoscale convective system stratiform regions. *Abstract, 2023 Joint ARM User Facility and ASR PI Meeting*, Rockville, MD, US Dept. of Energy, 4.48.
- Blount, D. V., **C. Evans**, and R. D. Adams-Selin, 2023: A preliminary analysis of low-frequency gravity wave, line-end vortex, and environmental flow contributions to rear-to-front flow in

- observed MCSs. *Abstract, 3<sup>rd</sup> Symp. on Mesoscale Processes*, Denver, CO, Amer. Meteor. Soc., 283.
- Blount, D. V., **C. Evans**, R. D. Adams-Selin, and H. Vagasky, 2023: A preliminary analysis of low-frequency gravity wave, line-end vortex, and environmental flow contributions to rear-to-front flow in observed MCSs. *Abstract, 20<sup>th</sup> Conf. on Mesoscale Processes*, Madison, WI, Amer. Meteor. Soc., 7.2.
- Brown, G. R. H., and coauthors, 2023: The Climate Consensus network – empowering current and future scientists to engage in climate outreach within our universities. *Abstract, 32<sup>nd</sup> Conf. on Education*, Denver, CO, Amer. Meteor. Soc., 74.
- DeYoung, C. P., and **C. Evans**, 2023: A preliminary assessment of the HRRR's ability to predict the Great Lakes lake-breeze front and marine atmospheric boundary layer. *Abstract, 2023 Great Lakes Operational Meteorology Workshop*, Madison, WI.
- DeYoung, C. P., and **C. Evans**, 2023: A preliminary assessment of the High-Resolution Rapid Refresh model's ability to predict the Great Lakes lake-breeze front and marine atmospheric boundary layer. *Abstract, 32<sup>nd</sup> Conf. on Weather Analysis and Forecasting*, Madison, WI, Amer. Meteor. Soc., 86.
- Hickok, A. O., M. P. Vossen, and **C. Evans**, 2023: Towards an updated climatology of overland tropical cyclone maintenance and intensification in non-/weakly baroclinic environments. *Abstract, 22<sup>nd</sup> Annual Student Conference*, Denver, CO, Amer. Meteor. Soc., S253.
- Hickok, A. O., M. P. Vossen, and **C. Evans**, 2023: Towards an updated climatology of overland tropical cyclone maintenance and intensification in non-/weakly baroclinic environments. *Abstract, 15<sup>th</sup> UWM Undergraduate Research Symposium*, Milwaukee, WI.
- Hickok, A. O., M. P. Vossen, and **C. Evans**, 2023: Towards an updated climatology of overland tropical cyclone maintenance and intensification in non-/weakly baroclinic environments. *Abstract, 32<sup>nd</sup> Conf. on Weather Analysis and Forecasting*, Madison, WI, Amer. Meteor. Soc., 106.
- Prince, K. C., and **C. Evans**, 2023: Convectively generated negative potential vorticity enhancing the jet stream through an inverse energy cascade during the extratropical transition of Hurricane Irma. *Abstract, 5<sup>th</sup> Spec. Symp. on Tropical Meteorology and Tropical Cyclones*, Denver, CO, Amer. Meteor. Soc., 14.4.
- Vagasky, H., R. D. Adams-Selin, **C. Evans**, and D. V. Blount, 2023: Observations of convectively generated gravity waves within the stratiform region of mesoscale convective systems. *Abstract, 20<sup>th</sup> Conf. on Mesoscale Processes*, Madison, WI, Amer. Meteor. Soc., 32.
- Vossen, M. P., and **C. Evans**, 2023: Thermodynamics of overland tropical cyclone intensity change in weakly/non-baroclinic environments. *Abstract, 5<sup>th</sup> Spec. Symp. on Tropical Meteorology and Tropical Cyclones*, Denver, CO, Amer. Meteor. Soc., 8.4.

## **2022**

- Adams-Selin, R. D., J. Mascio, and **C. Evans**, 2022: Establishing a holistic understanding of the circulations of mesoscale convective system stratiform regions. *Abstract, 2022 Joint ARM/ASR PI Meeting*, Rockville, MD, 4.58.
- Blount, D. V., **C. Evans**, I. L. Jirak, A. Dean, and S. Kravtsov, 2022: An objective vertical thermodynamic profile shape classification method: formulation and application to forecast verification. *Abstract, 31<sup>st</sup> Conf. on Weather Analysis and Forecasting/27<sup>th</sup> Conf. on Numerical Weather Prediction*, Houston, TX, Amer. Meteor. Soc., J14.1.
- Hanrahan, J., and coauthors, 2022: Building capacity for climate change outreach: supporting, encouraging, and inspiring scientists within our academic institutions. *Abstract, 2022 Earth Educators Rendezvous*, Minneapolis, MN, Natl. Assoc. of Geoscience Teachers.
- Hanrahan, J., and coauthors, 2022: Creating a multi-institution outreach network to improve climate literacy. *Abstract, 10<sup>th</sup> Symp. on the Weather, Water, and Climate Enterprise*, Houston, TX, Amer. Meteor. Soc., 274.
- Hanrahan, J., and coauthors, 2022: The Climate Consensus network – creating capacity for climate outreach within our universities. *Abstract, AGU Fall Meeting*, Chicago, IL, ED15C-0376.

- Metz, N. D., and coauthors, 2022: Atmospheric rivers over the Northeast United States. *Abstract, AGU Fall Meeting*, Chicago, IL, A55M-1275.
- Prince, K. C., **C. Evans**, and S. Kravtsov, 2022: A case-study analysis of convective-scale contributions to tropical cyclones' interactions with the midlatitude waveguide. *Abstract, 35<sup>th</sup> Conf. on Hurricanes and Tropical Meteorology*, New Orleans, LA, Amer. Meteor. Soc., 13C.3.
- Prince, K. C., **C. Evans**, and S. Kravtsov, 2022: A case-study analysis of convective-scale contributions to tropical cyclones' interactions with the midlatitude waveguide. *Abstract, MeteoXchange ECS Conference*, Virtual/Online, Germany Federal Ministry of Education and Research, 5.1.
- Prince, K., and **C. Evans**, 2022: The importance of convective-scale processes in a recent tropical cyclone-midlatitude waveguide interaction. *Abstract, 31<sup>st</sup> Conf. on Weather Analysis and Forecasting/27<sup>th</sup> Conf. on Numerical Weather Prediction*, Houston, TX, Amer. Meteor. Soc., J9.1.
- Spencer, M. R., and **C. Evans**, 2022: The influence of mesoscale sea-surface temperature uncertainty on short-range forecasts of cold-season southeast United States severe weather events. *Abstract, 19<sup>th</sup> Conf. on Mesoscale Processes*, Houston, TX, Amer. Meteor. Soc., 11.5.
- Spencer, M. R., and **C. Evans**, 2022: The influence of mesoscale sea-surface temperature uncertainty on short-range forecasts of cold-season southeast United States severe weather events. *Abstract, 30<sup>th</sup> Conf. on Severe Local Storms*, Santa Fe, NM, Amer. Meteor. Soc., 407141.
- Vossen, M. P., and **C. Evans**, 2022: An investigation of thermodynamic maintenance and intensification mechanisms of tropical cyclones over land. *Abstract, 31<sup>st</sup> Conf. on Weather Analysis and Forecasting/27<sup>th</sup> Conf. on Numerical Weather Prediction*, Houston, TX, Amer. Meteor. Soc., 1A.5.
- Vossen, M. P., and **C. Evans**, 2022: Thermodynamics of overland tropical cyclone intensity change in weakly/non-baroclinic environments. *Abstract, 35<sup>th</sup> Conf. on Hurricanes and Tropical Meteorology*, New Orleans, LA, Amer. Meteor. Soc., 14B.5.

## **2021**

- Blount, D. V., **C. Evans**, I. L. Jirak, and A. Dean, 2021: Verifying GFS short-range-forecast vertical thermodynamic profiles using an objective profile-shape classification method. *Abstract, 11<sup>th</sup> Conf. on Transition of Research to Operations*, New Orleans, LA, Amer. Meteor. Soc., 5A.7.
- Kaminski, A. N., and **C. Evans**, 2021: Toward a satellite-based cyclone classification routine: a modern 3-yr climatology of North Atlantic and western North Pacific extratropical cyclones. *Abstract, 20<sup>th</sup> Student Conference*, New Orleans, LA, Amer. Meteor. Soc., 26.
- Kaminski, A. N., and **C. Evans**, 2021: A modern 3-year climatology of North Atlantic and Western North Pacific extratropical cyclones. *Abstract, 13<sup>th</sup> UWM Undergraduate Research Symposium*, Milwaukee, WI.
- McDermid, S., and coauthors, 2021: Creating a multi-institution outreach network to improve climate literacy. *Abstract, 2021 AGU Fall Meeting*, New Orleans, LA, Amer. Geophys. Union, SY45F-0818.
- Prince, K. C., and **C. Evans**, 2021: Physical sensitivities in key processes associated with a tropical-cyclone/midlatitude-waveguide interaction. *Abstract, Mesoscale Processes Across Scales: Engaging with Communities in the Physical and Social Sciences*, New Orleans, LA, Amer. Meteor. Soc., 351.
- Prince, K., and **C. Evans**, 2021: A climatology of indirect tropical cyclone interactions in the North Atlantic and western North Pacific basins. *Abstract, 34<sup>th</sup> Conf. on Hurricanes and Tropical Meteorology*, New Orleans, LA, Amer. Meteor. Soc., 14C.3.
- Sarro, G. M., and **C. Evans**, 2021: An investigation of post-transition intensity, structural, and timing extremes for extratropically transitioning tropical cyclones. *Abstract, 34<sup>th</sup> Conf. on Hurricanes and Tropical Meteorology*, New Orleans, LA, Amer. Meteor. Soc., 145.

- Spencer, M. R., and **C. Evans**, 2021: The influence of mesoscale sea-surface temperature uncertainty on short-range forecasts of cold-season southeast United States severe weather events. *Abstract, Mesoscale Processes Across Scales: Engaging with Communities in the Physical and Social Sciences*, New Orleans, LA, Amer. Meteor. Soc., 1.6.
- Vossen, M. P., and **C. Evans**, 2021: An investigation of thermodynamic maintenance/intensification mechanisms of tropical cyclones over land. *Abstract, 4<sup>th</sup> Spec. Symp. on Tropical Meteorology and Tropical Cyclones*, New Orleans, LA, Amer. Meteor. Soc., 11.1.
- Vossen, M. P., and **C. Evans**, 2021: A preliminary investigation of the thermodynamics supporting non-/weakly baroclinic tropical cyclone overland maintenance and intensification. *Abstract, 34<sup>th</sup> Conf. on Hurricanes and Tropical Meteorology*, New Orleans, LA, Amer. Meteor. Soc., 93.

## **2020**

- Blount, D. V., **C. Evans**, I. L. Jirak, and A. R. Dean, 2020: An evaluation of vertical thermodynamic profiles and derived stability parameters from parallel FV3- and spectral-model GFS forecasts. *Abstract, 30<sup>th</sup> Conf. on Weather Analysis and Forecasting/26<sup>th</sup> Conf. on Numerical Weather Prediction*, Boston, MA, Amer. Meteor. Soc., 146.
- Blount, D. V., **C. Evans**, I. L. Jirak, and A. R. Dean, 2020: An evaluation of vertical thermodynamic profiles and derived stability parameters from parallel FV3- and spectral-model GFS forecasts. *Abstract, UFS Users Workshop*, Boulder, CO, Natl. Oceanic and Atmos. Administration.
- Cordeira, J. M., A. Kaminski, N. D. Metz, M. Duncan, K. Bachli, M. Ericksen, I. Glade, C. Roberts, and **C. Evans**, 2020: A climatology of atmospheric rivers over the northeast US. *Abstract, 33<sup>rd</sup> Conf. on Climate Variability and Change*, Boston, MA, Amer. Meteor. Soc., 6A.3.
- Kaminski, A. N., N. D. Metz, J. M. Cordeira, M. Duncan, K. Bachli, M. Ericksen, I. Glade, C. Roberts, and **C. Evans**, 2020: A climatology of atmospheric rivers over the northeast United States. *Abstract, 12<sup>th</sup> UWM Undergraduate Research Symposium*, Milwaukee, WI.
- Metz, N. D., J. M. Cordeira, and **C. Evans**, 2020: A multi-year, multi-institution collaborative research project developed during the Northeast Partnership for Atmospheric and Related Sciences (NEPARS) REU program. *Abstract, 29<sup>th</sup> Conf. on Education*, Boston, MA, Amer. Meteor. Soc., 1252.
- Prince, K., and **C. Evans**, 2020: A climatology of indirect tropical cyclone interactions. *Abstract, 30<sup>th</sup> Conf. on Weather Analysis and Forecasting/26<sup>th</sup> Conf. on Numerical Weather Prediction*, Boston, MA, Amer. Meteor. Soc., 12D.4.
- Sarro, G. M., and **C. Evans**, 2020: An investigation of post-transition intensity, structural, and timing extremes for extratropically transitioning tropical cyclones. *Abstract, 19<sup>th</sup> Student Conference*, Boston, MA, Amer. Meteor. Soc., S246.
- Sarro, G. M., and **C. Evans**, 2020: An investigation of post-transition extremes for extratropically transitioning tropical cyclones. *Abstract, 12<sup>th</sup> UWM Undergraduate Research Symposium*, Milwaukee, WI.
- Schaffer, J., P. J. Roebber, and **C. Evans**, 2020: Using evolutionary programming to generate improved tropical cyclone intensity forecasts. *Abstract, 19<sup>th</sup> Conf. on Artificial Intelligence and its Applications to the Environmental Sciences*, Boston, MA, Amer. Meteor. Soc., J43.5.
- Schaffer, J., P. J. Roebber, and **C. Evans**, 2020: Using evolutionary programming to generate improved tropical cyclone intensity forecasts. *Abstract, 74<sup>th</sup> Interdepartmental Hurricane Conference*, Lakeland, FL, Natl. Oceanic and Atmos. Administration, 9.7.

## **2019**

- Cuhel, R., A. Scheib, C. Aguilar, and **C. Evans**, 2019: Match-mismatch: El Niño and a coincident derecho stimulate yellow perch recruitment in a previously decimated Lake Michigan fishery. *2019 Aquatic Sciences Meeting*, San Juan, PR, Assoc. for the Sciences of Limnology and Oceanography, AS005-3.
- Evans, C.**, 2019: Quantifying the influence of sea-surface temperature uncertainty on cool-season severe weather events. *VORTEX-SE 2019 Investigator Meeting*, Huntsville, AL, NOAA, T6.

- Kaminski, A. N., M. N. Duncan, N. D. Metz, J. M. Cordeira, and **C. Evans**, 2019: A climatology of atmospheric rivers in the northeastern United States. *Abstract, 11<sup>th</sup> UWM Undergraduate Research Symposium*, Milwaukee, WI, 92.
- Prince, K., and **C. Evans**, 2019: A climatology of indirect tropical cyclone interactions in the Atlantic basin. *Abstract, Special Symposium on Mesoscale Meteorological Extremes: Understanding, Prediction, and Projection*, Phoenix, AZ, Amer. Meteor. Soc., 1.23.
- Prince, K., and **C. Evans**, 2019: A climatological analysis of indirect tropical cyclone interactions in the North Atlantic and Northwest Pacific basins. *Abstract, 19<sup>th</sup> Cyclone Workshop*, Seeon, Germany, 4.4.
- Sarro, G. M., and **C. Evans**, 2019: An investigation of intensity, structural, and timing extremes for tropical cyclones that become extratropical. *Abstract, 11<sup>th</sup> UWM Undergraduate Research Symposium*, Milwaukee, WI, 163.
- Schaffer, J., P. J. Roebber, and **C. Evans**, 2019: Using evolutionary programming to generate improved tropical cyclone intensity forecasts. *Abstract, 18<sup>th</sup> Conf. on Artificial Intelligence and its Applications to the Environmental Sciences*, Phoenix, AZ, Amer. Meteor. Soc., 4B.1.
- Schaffer, J., P. J. Roebber, and **C. Evans**, 2019: Using evolutionary programming to generate improved tropical cyclone intensity forecasts. *Abstract, 73<sup>rd</sup> Interdepartmental Hurricane Conference*, Miami, FL, Natl. Oceanic and Atmos. Administration, 9.2.

## **2018**

- Evans, C.**, and R. McTaggart-Cowan, 2018: Extratropical transition. *9<sup>th</sup> Intl. Workshop on Tropical Cyclones*, Honolulu, HI, World Meteorological Organization, 4.3.
- Evans, C.**, S. J. Weiss, and I. L. Jirak, 2018: A preliminary evaluation of paired regional/convection-allowing model-forecast vertical profiles in warm-season, thunderstorm-supporting environments. *Abstract, 29<sup>th</sup> Conf. on Weather Analysis and Forecasting/25<sup>th</sup> Conf. on Numerical Weather Prediction*, Denver, CO, Amer. Meteor. Soc., 10A.5.
- Evans, C.**, S. J. Weiss, I. L. Jirak, A. R. Dean, and D. S. Nevius, 2018: An evaluation of paired regional/convection-allowing model-forecast vertical profiles in warm-season, thunderstorm-supporting environments. *Abstract, 29<sup>th</sup> Conf. on Severe Local Storms*, Stowe, VT, Amer. Meteor. Soc., 5.5.
- Kurosaki, A., and **C. Evans**, 2018: A preliminary investigation of the conditional practical predictability of the 31 May 2013 Oklahoma heavy-rain-producing mesoscale convective system. *Abstract, 3<sup>rd</sup> Symposium on Multi-Scale Predictability: Data-model Integration and Uncertainty Quantification for Climate and Earth System Monitoring and Prediction*, Austin, TX, Amer. Meteor. Soc., 367.
- Kurosaki, A., and **C. Evans**, 2018: An investigation of the conditional practical predictability of the 31 May 2013 heavy-rain-producing mesoscale convective system. *Abstract, 29<sup>th</sup> Conf. on Weather Analysis and Forecasting/25<sup>th</sup> Conf. on Numerical Weather Prediction*, Denver, CO, Amer. Meteor. Soc., P344592.
- Kurosaki, A., and **C. Evans**, 2018: An investigation of the conditional practical predictability of the 31 May 2013 heavy-rain-producing mesoscale convective system. *Abstract, 29<sup>th</sup> Conf. on Severe Local Storms*, Stowe, VT, Amer. Meteor. Soc., 6B.2.
- Nevius, D. S., and **C. Evans**, 2018: The influence of vertical advection discretization in the WRF-ARW model on capping inversion representation in warm-season, thunderstorm-supporting environments. *Abstract, 29<sup>th</sup> Conf. on Weather Analysis and Forecasting/25<sup>th</sup> Conf. on Numerical Weather Prediction*, Denver, CO, Amer. Meteor. Soc., 12B.4.
- Schaffer, J., P. J. Roebber, and **C. Evans**, 2018: Using evolutionary programming to generate improved tropical cyclone intensity forecasts. *Abstract, 72<sup>nd</sup> Interdepartmental Hurricane Conference*, Miami, FL, Natl. Oceanic and Atmos. Administration, 5.2.
- Schaffer, J., P. J. Roebber, and **C. Evans**, 2018: Using evolutionary programming to generate improved tropical cyclone intensity forecasts. *Ext. Abstract, 33<sup>rd</sup> Conf. on Hurricanes and Tropical Meteorology*, Ponte Vedra Beach, FL, Amer. Meteor. Soc., 7B.5.
- Schaffer, J., P. J. Roebber, and **C. Evans**, 2018: Using evolutionary programming to generate improved tropical cyclone intensity forecasts. *Abstract, 29<sup>th</sup> Conf. on Weather Analysis and*

Forecasting/25<sup>th</sup> Conf. on Numerical Weather Prediction, Denver, CO, Amer. Meteor. Soc., 9A.4.

## **2017**

Crossett, C., and **C. Evans**, 2017: An examination of the dynamics of a rear-inflow jet associated with an idealized mesoscale convective system. *Abstract, 28<sup>th</sup> Conf. on Weather Analysis and Forecasting/24<sup>th</sup> Conf. on Numerical Weather Prediction*, Seattle, WA, Amer. Meteor. Soc., 10B.2.

**Evans, C.**, and coauthors, 2017: The extratropical transition of tropical cyclones: cyclone evolution and direct impacts. *Abstract, 18<sup>th</sup> Cyclone Workshop*, Sainte-Adele, QC.

Grunzke, C., and **C. Evans**, 2017: Predictability and dynamics of warm-core mesoscale vortex formation with the 8 May 2009 "Super Derecho" event. *Abstract, 28<sup>th</sup> Conf. on Weather Analysis and Forecasting/24<sup>th</sup> Conf. on Numerical Weather Prediction*, Seattle, WA, Amer. Meteor. Soc., 9B.3.

Schumacher, R. S., and coauthors, 2017: The legacy of the 2006 NCAR ASP colloquium, "The Challenge of Convective Forecasting," (a little more than) 10 years later. *Abstract, Lance Bosart Symposium*, Seattle, WA, Amer. Meteor. Soc., 306965.

## **2016**

Crossett, C., and **C. Evans**, 2016: An examination of the dynamics of a rear-inflow jet associated with an idealized mesoscale convective system. *Abstract, 28<sup>th</sup> Conf. on Severe Local Storms*, Portland, OR, Amer. Meteor. Soc., 15A.5.

**Evans, C.**, T. L. Olander, C. S. Velden, and R. E. Hart, 2016: A proposed adjustment for the Advanced Dvorak Technique during extratropical transition. *Abstract, 32<sup>nd</sup> Conf. on Hurricanes and Tropical Meteorology*, San Juan, PR, Amer. Meteor. Soc., 17C.3.

**Evans, C.**, B. Burghardt, B. Burlingame, A. Keclik, and P. Roebber, 2016: On the short- to medium-range predictability of thunderstorm formation. *Abstract, Special Symposium on Seamless Weather and Climate Prediction: Expectations and Limits of Multi-Scale Predictability*, New Orleans, LA, Amer. Meteor. Soc., 2.2.

Grunzke, C., and **C. Evans**, 2016: Practical and intrinsic predictability of warm-core mesoscale vortex formation with the 8 May 2009 "Super Derecho" event. *Abstract, Special Symposium on Seamless Weather and Climate Prediction: Expectations and Limits of Multi-Scale Predictability*, New Orleans, LA, Amer. Meteor. Soc., 894.

Grunzke, C., and **C. Evans**, 2016: Practical and intrinsic predictability of warm-core mesoscale vortex formation with the 8 May 2009 "Super Derecho" event. *Abstract, 20<sup>th</sup> Severe Storms and Doppler Radar Conference*, Ankeny, IA, Central Iowa NWA, 7.1.

Grunzke, C., and **C. Evans**, 2016: Predictability and dynamics of warm-core mesoscale vortex formation with the 8 May 2009 "Super Derecho" event. *Abstract, 28<sup>th</sup> Conf. on Severe Local Storms*, Portland, OR, Amer. Meteor. Soc., 13A.1.

Keclik, A. M., **C. Evans**, P. J. Roebber, and G. Romine, 2016: The influence of assimilated targeted observations upon ensemble forecasts of convection initiation during the Mesoscale Predictability Experiment. *Abstract, 28<sup>th</sup> Conf. on Severe Local Storms*, Portland, OR, Amer. Meteor. Soc., 11B.4.

Keclik, A. M., **C. Evans**, P. J. Roebber, G. Romine, and R. D. Torn, 2016: The influence of assimilating targeted observations upon ensemble forecasts of convection initiation. *Abstract, Special Symposium on Seamless Weather and Climate Prediction: Expectations and Limits of Multi-Scale Predictability*, New Orleans, LA, Amer. Meteor. Soc., 896.

## **2015**

Burlingame, B. M., **C. Evans**, P. J. Roebber, G. Romine, and R. D. Torn, 2015: Planetary boundary layer parameterization's control on ensemble forecasts of convection initiation. *Abstract, 27<sup>th</sup> Conf. on Weather Analysis and Forecasting/23<sup>rd</sup> Conf. on Numerical Weather Prediction*, Chicago, IL, Amer. Meteor. Soc., 1B.5.

- Evans, C.**, D. F. Van Dyke, and T. Lericos, 2015: How do forecasters utilize output from a convection-permitting ensemble forecast system? Case study of a high-impact precipitation event. *Abstract, 5<sup>th</sup> Conf. on Transition of Research to Operations*, Phoenix, AZ, Amer. Meteor. Soc., 818.
- Grunzke, C., and **C. Evans**, 2015: A preliminary investigation into the practical and intrinsic predictability of the 8 May 2009 "Super Derecho" event. *Abstract, 17<sup>th</sup> Cyclone Workshop*, Pacific Grove, CA, 11.4.
- Karloski, J. M., and **C. Evans**, 2015: Seasonal influences upon and long-term trends in the length of the Atlantic hurricane season. *Abstract, 27<sup>th</sup> Conf. on Weather Analysis and Forecasting/23<sup>rd</sup> Conf. on Numerical Weather Prediction*, Chicago, IL, Amer. Meteor. Soc., 4B.1.
- Keclik, A. M., **C. Evans**, P. J. Roebber, G. Romine, and R. D. Torn, 2015: The influence of assimilating targeted observations upon ensemble forecasts of convection initiation. *Abstract, 27<sup>th</sup> Conf. on Weather Analysis and Forecasting/23<sup>rd</sup> Conf. on Numerical Weather Prediction*, Chicago, IL, Amer. Meteor. Soc., 1B.4.

## **2014**

- Burlingame, B. M., **C. Evans**, P. J. Roebber, G. Romine, and R. D. Torn, 2014: A preliminary investigation into the influence of initial condition and planetary boundary layer parameterization uncertainty upon the intrinsic predictability of convection initiation. *Abstract, 27<sup>th</sup> Conf. on Severe Local Storms*, Madison, WI, Amer. Meteor. Soc., 51.
- Evans, C.**, 2014: A look at convection initiation through the eyes of MPEX. *MPEX Workshop*, Madison, WI, NCAR, 5.
- Evans, C.**, and R. S. Schumacher, 2014: The influence of the low-level jet upon the overland reintensification of Tropical Storm Erin (2007). *Abstract, 26<sup>th</sup> Conf. on Weather Analysis and Forecasting/22<sup>nd</sup> Conf. on Numerical Weather Prediction*, Atlanta, GA, Amer. Meteor. Soc., 574.
- Evans, C.**, and R. S. Schumacher, 2014: The predictability and dynamics of the overland reintensification of Tropical Storm Erin (2007). *Abstract, 31<sup>st</sup> Conf. on Hurricanes and Tropical Meteorology*, San Diego, CA, Amer. Meteor. Soc., 8D.8.
- Keclik, A. M., B. M. Burlingame, **C. Evans**, P. J. Roebber, G. Romine, and R. D. Torn, 2014: A preliminary investigation into the practical predictability of convection initiation during the Mesoscale Predictability Experiment (MPEX). *Abstract, 27<sup>th</sup> Conf. on Severe Local Storms*, Madison, WI, Amer. Meteor. Soc., 64.
- Manion, A., **C. Evans**, T. Olander, and C. Velden, 2014: An evaluation of Advanced Dvorak Technique-derived intensity estimate errors and biases during extratropical transition utilizing synthetic satellite imagery. *Abstract, 31<sup>st</sup> Conf. on Hurricanes and Tropical Meteorology*, San Diego, CA, Amer. Meteor. Soc., 13C.2.
- Manion, A., **C. Evans**, J. Sears, C. Velden, and T. Olander, 2014: An evaluation of Advanced Dvorak Technique-derived intensity estimate errors and biases during the extratropical transition of tropical cyclones. *Abstract, 26<sup>th</sup> Conf. on Weather Analysis and Forecasting/22<sup>nd</sup> Conf. on Numerical Weather Prediction*, Atlanta, GA, Amer. Meteor. Soc., 8.6.

## **2012**

- Burghardt, B., **C. Evans**, and P. Roebber, 2012: An investigation into the short-range predictability of convection initiation: model verification and case study analyses. *Abstract, 26<sup>th</sup> Conf. on Severe Local Storms*, Nashville, TN, Amer. Meteor. Soc., 15.3.
- Evans, C.**, 2012: Factors influencing extreme precipitation associated with Tropical Storm Fay (2008) across north Florida and southwest Georgia. *Abstract, 30<sup>th</sup> Conf. on Hurricanes and Tropical Meteorology*, Ponte Vedra Beach, FL, Amer. Meteor. Soc., P1.9.
- Evans, C.**, and R. E. Hart, 2012: The thermodynamic evolution of an extratropically transitioning cyclone. *Proceedings, 4<sup>th</sup> Intl. Workshop on Extratropical Transition*, Sainte-Adele, Quebec, World Meteor. Org., 4.2.

- Evans, C.**, M. L. Weisman, and L. F. Bosart, 2012: Analysis of the development of the intense warm-core mesovortex associated with the 8 May 2009 central United States "Super Derecho" event. *Abstract, 26<sup>th</sup> Conf. on Severe Local Storms*, Nashville, TN, Amer. Meteor. Soc., 8B.6.
- Evans, C.**, and coauthors, 2012: The PRE-Depression Investigation of Cloud-Systems in the Tropics (PREDICT) field campaign: perspectives of early career scientists. *Abstract, 30<sup>th</sup> Conf. on Hurricanes and Tropical Meteorology*, Ponte Vedra Beach, FL, Amer. Meteor. Soc., S1.3.
- Evans, C.**, and coauthors, 2012: The PRE-Depression Investigation of Cloud-Systems in the Tropics (PREDICT) field campaign: educational perspectives of early career scientists. *Abstract, 21<sup>st</sup> Conf. on Education*, New Orleans, LA, Amer. Meteor. Soc., P108.
- Van Dyke, D. F., **C. Evans**, and T. Lericos, 2012: Convection-resolving ensemble-based forecasts of extreme precipitation associated with landfalling tropical cyclones: assessment of skill and utility in the operational forecasting process. *Abstract, 30<sup>th</sup> Conf. on Hurricanes and Tropical Meteorology*, Ponte Vedra Beach, FL, Amer. Meteor. Soc., 5C.1.
- Weisman, M. L., **C. Evans**, G. Romine, and K. Manning, 2012: The 29 June 2012 derecho: analysis of a 3 km WRF-ARW forecast and comparisons to the 8 May 2009 derecho event. *Abstract, 26<sup>th</sup> Conf. on Severe Local Storms*, Nashville, TN, Amer. Meteor. Soc., 8B.5.

## **2011**

- Carroll, D., and **C. Evans**, 2011: Model verification of intense mesoscale convective vortices at the surface: simulation of Tropical Storm Erin (2007). *Abstract, 10<sup>th</sup> Annual Student Conference*, Seattle, WA, Amer. Meteor. Soc., S92.
- Cordeira, J. M., H. M. Archambault, K. S. Griffin, L. F. Bosart, and **C. Evans**, 2011: Early career scientist involvement in the PRE-Depression Investigation of Cloud-systems in the Tropics (PREDICT) field experiment. *Abstract, 36<sup>th</sup> Northeastern Storms Conference*, Taunton, MA.
- Evans, C.**, R. S. Schumacher, and T. J. Galarneau, Jr., 2011: Quantification of the processes driving the overland reintensification of Tropical Storm Erin (2007). *Abstract, 24<sup>th</sup> Conf. on Weather Analysis and Forecasting/20<sup>th</sup> Conf. on Numerical Weather Prediction*, Seattle, WA, Amer. Meteor. Soc., 15B.1.
- Evans, C.**, M. L. Weisman, and L. F. Bosart, 2011: Mesoscale vortex development mechanisms associated with the 8 May 2009 central United States derecho. *Abstract, 15<sup>th</sup> Cyclone Workshop*, Pacific Grove, CA, 16.
- Weisman, M. L., **C. Evans**, and L. F. Bosart, 2011: The 8 May 2009 "super derecho": analysis of a 3 km WRF-ARW real-time forecast. *Abstract, 15<sup>th</sup> Cyclone Workshop*, Pacific Grove, CA, 15.

## **2010**

- Evans, C.**, and R. E. Hart, 2010: The thermodynamic evolution of extratropically transitioning tropical cyclones. *Extended Abstract, 29<sup>th</sup> Conf. on Hurricanes and Tropical Meteorology*, Tucson, AZ, Amer. Meteor. Soc., P1.42.
- Evans, C.**, R. S. Schumacher, and T. J. Galarneau, Jr., 2010: The overland reintensification of North Atlantic Tropical Cyclone Erin (2007): physical and dynamical characteristics. *Extended Abstract, 29<sup>th</sup> Conf. on Hurricanes and Tropical Meteorology*, Tucson, AZ, Amer. Meteor. Soc., 15C.1.
- Evans, C.**, R. S. Schumacher, and T. J. Galarneau, Jr., 2010: The role of convective organization and the low-level jet in the overland reintensification of Tropical Storm Erin (2007). *Abstract, 25<sup>th</sup> Conf. on Severe Local Storms*, Denver, CO, Amer. Meteor. Soc., P3.6.
- Evans, C.**, M. L. Weisman, and L. F. Bosart, 2010: Vortex development mechanisms associated with the 8 May 2009 Central United States derecho event. *Abstract, 25<sup>th</sup> Conf. on Severe Local Storms*, Denver, CO, Amer. Meteor. Soc., 3B.5.
- Schumacher, R. S., **C. Evans**, and T. J. Galarneau, Jr., 2010: Influences of the diurnal cycle and the low-level jet on the reintensification of Tropical Cyclone Erin (2007). *Abstract, 29<sup>th</sup> Conf. on Hurricanes and Tropical Meteorology*, Tucson, AZ, Amer. Meteor. Soc., 15C.2.

Weisman, M. L., **C. Evans**, and L. F. Bosart, 2010: The 8 May 2009 "super derecho": analysis of a 3 km WRF-ARW realtime forecast. *Abstract, 25<sup>th</sup> Conf. on Severe Local Storms*, Denver, CO, Amer. Meteor. Soc., 3B.4.

## **2009**

**Evans, C.**, 2009: Experiences with an ensemble of real-time mesoscale WRF simulations across the southeast United States. *Abstract, 23<sup>rd</sup> Conf. on Weather Analysis and Forecasting/19<sup>th</sup> Conf. on Numerical Weather Prediction*, Omaha, NE, Amer. Meteor. Soc., JP3.7.

**Evans, C.**, T. J. Galarneau, Jr., and R. Schumacher, 2009: Factors contributing to sensitivity in the observed overland reintensification of TC Erin (2007) over Oklahoma. *Abstract, 23<sup>rd</sup> Conf. on Weather Analysis and Forecasting/19<sup>th</sup> Conf. on Numerical Weather Prediction*, Omaha, NE, Amer. Meteor. Soc., JP2.3.

**Evans, C.**, and R. E. Hart, 2009: Understanding the thermodynamic evolution of the tropical cyclone warm core during the extratropical transition process. *Abstract, 23<sup>rd</sup> Conf. on Weather Analysis and Forecasting/19<sup>th</sup> Conf. on Numerical Weather Prediction*, Omaha, NE, Amer. Meteor. Soc., 6B.5.

## **2008**

**Evans, C.**, 2008: Analysis of the wind field expansion associated with the extratropical transition of Bonnie (1998). *Extended Abstract, 28<sup>th</sup> Conf. on Hurricanes and Tropical Meteorology*, Orlando, FL, Amer. Meteor. Soc., 9C.1.

**Evans, C.**, and R. E. Hart, 2008: Daily to seasonal higher latitude North Atlantic tropical cyclone threat prediction. *Abstract, 28<sup>th</sup> Conf. on Hurricanes and Tropical Meteorology*, Orlando, FL, Amer. Meteor. Soc., P2A.6.

**Evans, C.**, and R. E. Hart, 2008: Analysis of the wind field evolution associated with the extratropical transition of Bonnie (1998). *Abstract, Tropical Meteorology Special Symposium*, New Orleans, LA, Amer. Meteor. Soc., JP3.44.

## **2007**

**Evans, C.**, and R. E. Hart, 2007: Understanding the wind field evolution associated with the extratropical transition of tropical cyclone Bonnie (1998). *Abstract, 1<sup>st</sup> Intl. Summit on Hurricanes and Climate Change*, Crete, Greece, Aegean Conferences.

## **2006**

**Evans, C.**, 2006: Dynamics of the wind field expansion with extratropically transitioning tropical cyclones. *Extended Abstract, 27<sup>th</sup> Conf. on Hurricanes and Tropical Meteorology*, Monterey, CA, Amer. Meteor. Soc., 4A.6.

**Evans, C.**, and R. E. Hart, 2006: Medium-range to seasonal precursor conditions to higher latitude landfalls of extratropically transitioning hurricanes. *Extended Abstract, 27<sup>th</sup> Conf. on Hurricanes and Tropical Meteorology*, Monterey, CA, Amer. Meteor. Soc., P6.2.

Hart, R. E., J. L. Evans, and **C. Evans**, 2006: Synoptic composites of the extratropical transition lifecycle of North Atlantic tropical cyclones: factors determining post-transition evolution. *Extended Abstract, 27<sup>th</sup> Conf. on Hurricanes and Tropical Meteorology*, Monterey, CA, Amer. Meteor. Soc., P6.10.

## **2005**

**Evans, C.**, 2005: Diagnosis of banded precipitation features associated with tropical cyclones during the extratropical transition process. *Extended Abstract, 21<sup>st</sup> Conf. on Weather Analysis and Forecasting/17<sup>th</sup> Conf. on Numerical Weather Prediction*, Washington, D.C., Amer. Meteor. Soc., P1.4.

**Evans, C.**, and R. E. Hart, 2005: Towards a better understanding of and ability to forecast the wind field expansion during the extratropical transition process. *Extended Abstract, 21<sup>st</sup> Conf. on Weather Analysis and Forecasting/17<sup>th</sup> Conf. on Numerical Weather Prediction*, Washington, D.C., Amer. Meteor. Soc., P1.17.

- Hart, R. E., and **C. Evans**, 2005: Short-term and long-term indicators of enhanced Atlantic tropical cyclone threat at higher latitudes. *Proceedings, 3<sup>rd</sup> Intl. Workshop on Extratropical Transition*, Perth, Australia.
- Hart, R. E., J. L. Evans, and **C. Evans**, 2005: Synoptic composites of the ET lifecycle of North Atlantic TCs: Factors determining post-transition evolution. *Proceedings, 3<sup>rd</sup> Intl. Workshop on Extratropical Transition*, Perth, Australia.
- Hart, R. E., J. L. Evans, and **C. Evans.**, 2005: Synoptic composites of the extratropical transition lifecycle of North Atlantic tropical cyclones: factors determining post-transition evolution. *Extended Abstract, 21<sup>st</sup> Conf. on Weather Analysis and Forecasting/17<sup>th</sup> Conf. on Numerical Weather Prediction*, Washington, D.C., Amer. Meteor. Soc., 6B.3.

## **Professional Memberships & Honor Societies**

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|---------------------|--------------------------------------------------|
| <b>2010-2012</b>    | American Geophysical Union                       |
| <b>2005</b>         | Chi Epsilon Pi, Florida State University Chapter |
| <b>2004</b>         | Phi Beta Kappa, Alpha Chapter of Florida         |
| <b>2003</b>         | National Society of Collegiate Scholars          |
| <b>2002-present</b> | American Meteorological Society                  |