

# Curriculum Vita

## Clark Evans

### Personal Information

---

#### Current Address

UWM School of Freshwater Sciences  
600 E. Greenfield Ave.  
Milwaukee, WI 53204

#### Contact Information

**E-Mail:** [evans36@uwm.edu](mailto:evans36@uwm.edu)  
**Web:** <https://people.uwm.edu/evans36/>  
**Twitter:** [@ClarkEvansWx](https://twitter.com/ClarkEvansWx)

**Last Updated:** 15 January 2023

### Education

---

2009            **Ph.D., Florida State University, Meteorology**  
2006            **M.S., Florida State University, Meteorology**  
2004            **B.S. (Magna Cum Laude), Florida State University, Meteorology**

### Professional Positions

---

#### Formal Appointments

2021-present   **Professor**, Univ. of Wisconsin-Milwaukee, Milwaukee, WI  
2021-present   **Atmospheric Science Program Chair**, Univ. of Wisconsin-Milwaukee, Milwaukee, WI  
2016-2021       **Associate Professor**, Univ. of Wisconsin-Milwaukee, Milwaukee, WI  
2014-2020       **Atmospheric Science Program Chair**, Univ. of Wisconsin-Milwaukee, Milwaukee, WI  
2011-2016       **Assistant Professor**, Univ. of Wisconsin-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/Visiting Appointments

2019-present   **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

---

2021            **Office of Research/UWM Foundation Research Award**, Univ. of Wisconsin-Milwaukee  
2021            **Faculty Distinguished University Service Award**, Univ. of Wisconsin-Milwaukee  
2018            **Editors' Award**, *Monthly Weather Review* and *Weather and Forecasting*  
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)

## Peer-Reviewed Publications *(italicized = advised student)*

---

A citation listing is available on my [Google Scholar](#) page.

*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*, accepted pending revisions.*

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

*Vossen, M. P., and C. Evans, 2023: Thermodynamics of overland tropical cyclone intensity change in weakly/non-baroclinic environments. *J. Atmos. Sci.*, in revision.*

*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.*

- Kecklik, 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 \(MPLEX\)](#). *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**

---

- 2022-2025**      **U.S. Department of Energy**  
 “Establishing a Holistic Understanding of the Circulations of Mesoscale Convective System Stratiform Regions.” Award #DE-SC0023057; \$716,831 (\$276,265 to UWM); 8/1/22-7/31/25. Co-PI; lead PI: R. Adams-Selin (AER).
- 2021-2023**      **National Science Foundation**

"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.

- 2021-2022 Unidata Equipment Program**  
"Upgrading THREDDS and Deploying JupyterHub at the University of Wisconsin-Milwaukee to Support Education and Research." \$10,672; 6/1/21-5/31/22.
- 2019-2022 National Science Foundation**  
"Thermodynamics of Tropical Cyclone Overland Maintenance and Intensification." AGS-1911671; \$408,577; 6/1/19-5/31/22.
- 2019-2021 National Oceanic and Atmospheric Administration**  
"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.
- 2018-2020 National Oceanic and Atmospheric Administration**  
"Round 3 of R2O Initiative – NOAA Testbeds: Evaluation of GFS-FV3 Vertical Profile and Thermodynamic Environment Fidelity." NA18NWS4680062; \$210,369 (\$190,369 to UWM); 9/1/18-8/31/20. Lead PI; co-PI: I. L. Jirak (NOAA/NWS/SPC).
- 2018-2019 UWM Research Growth Initiative**  
"A Climatology of Indirect Tropical Cyclone Interactions." \$55,243; 7/2/18-7/1/19.
- 2017-2019 National Oceanic and Atmospheric Administration**  
"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.
- 2015-2018 National Science Foundation**  
"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 UWM); 8/1/15-7/31/18. Co-PI; lead PIs: C. Maltzhan (UC-Santa Cruz).
- 2015-2016 Unidata Equipment Program**  
"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.
- 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.
- 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).

## **Teaching Experience** (\* = new course; ^ = course material developed by Evans)

---

**Synoptic Meteorology II** (Atm Sci 361^)  
Spring 2023, Spring 2019, Spring 2015, Spring 2013

**Introductory Atm Sci Seminar** (Atm Sci 101\*)  
Fall 2022

**Synoptic Meteorology I** (Atm Sci 360^)  
Fall 2022, Fall 2018, Fall 2014

**Tropical Meteorology** (Atm Sci 470\*)  
Spring 2022, Spring 2020, Spring 2018, Spring 2016, Spring 2014, Spring 2012

**Numerical Weather Prediction** (Atm Sci 730\*)  
Fall 2021, Fall 2019, Fall 2017, Fall 2015, Fall 2012

**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

## **Advised Students**

---

### Graduate Researchers

<b>2022-present</b>	<b>Collin DeYoung</b>	(M.S. expected 2024)
<b>2021-present</b>	<b>Ariel Tickner-Ernst</b>	(M.S. expected 2023)
<b>2020-2021</b>	<b>Michelle Spencer</b>	(M.S., 2021, now pursuing Ph.D. at Univ. of Oklahoma)
<b>2019-present</b>	<b>Dillon Blount</b>	(M.S., 2021; Ph.D. expected 2025)
<b>2019-present</b>	<b>Michael Vossen</b>	(M.S., 2021; Ph.D. expected 2025)
<b>2017-2019</b>	<b>Jesse Schaffer</b>	(M.S.; M.Ed. 2022, George Mason Univ.)
<b>2016-2022</b>	<b>Kevin Prince</b>	(M.S., 2018, Ph.D. 2022; now NRC Post-Doc Fellow)
<b>2016-2018</b>	<b>Aidan Kuroski</b>	(M.S.; now with NWS, Milwaukee/Sullivan, WI)
<b>2016-2018</b>	<b>David Nevius</b>	(M.S.; now with Delta Airlines, Atlanta, GA)
<b>2015-2017</b>	<b>Caitlin Crossett</b>	(M.S.; Ph.D. 2022, Univ. of Vermont)
<b>2014-2016</b>	<b>Alexandra Keclik (Kelly)</b>	(M.S.; now with NWS, Kansas City, MO)
<b>2014-2016</b>	<b>Bryan Burlingame</b>	(M.S.; now with SocialSweet, Inc., Milwaukee, WI)
<b>2014-2016</b>	<b>Caleb Grunzke</b>	(M.S.; now with NWS, Twin Cities/Chanhassen, MN)
<b>2013-2015</b>	<b>Juliana Karloski</b>	(M.S.; now with Space Center Houston, Houston, TX)
<b>2012-2014</b>	<b>Alex Manion</b>	(M.S.; now with NWS, Detroit/Pontiac, MI)

**2011-2013 Brock Burghardt** (M.S.; Ph.D. 2017, Texas Tech Univ.)

Undergraduate Researchers

**2023-present Kade Barkas**  
**2022-present Drew Hickok**  
**2018-2021 Anna Kaminski** (2021 AMS Father James B. Macelwane Awardee)  
**2018-2020 Giorgio Sarro** (2020 AMS Father James B. Macelwane Awardee)  
**2018 Marie Freres**  
**2010 Dereka Carroll-Smith** (as SOARS Research Mentor at NCAR)

Graduate Dissertation/Thesis Committee Member

*Dissertations:* Tim Thielke (2022), Austin Harris (2022), Brian Griffin (2016), Noriyuki Sugiyama (2015), Dawn Kopacz (2015)

*Theses:* 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

Kyle Zur (2022), Ashley Schils (2020), Devon Bertrick (2019), Austin Scheib (2018), Mackenzie Nuthals (2017), Alec Muniz (2016), Lily Chapman (2015), Kyle Koval (2013), Karleisa Rogacheski (2013), Charles Smith (2013)

## **Professional Service**

---

National/International Service (Excludes Conference Session Chairing/Organizing)

**2023-present Commissioner**, AMS Scientific and Technological Activities Commission  
**2023 Panelist**, AMS Town Hall on Open Science Expectations for Model-Based Research  
**2022-present Co-Chair**, AMS Future of Meetings Taskforce  
**2022-present Member**, AMS Future of Meetings Taskforce  
**2021-2023 Chair**, AMS Committee on Weather Analysis and Forecasting  
**2021 Chair**, AMS Weather Analysis and Forecasting Statement Revision Team  
**2021 Member**, NCEP Strategic Planning Team  
**2021 Member**, AMS 102<sup>nd</sup> Annual Meeting Health and Safety Task Force  
**2021 Panelist**, 20<sup>th</sup> Annual AMS Student Conference  
**2020-2022 Chair**, AMS Annual Meeting Oversight Committee  
**2020-present Member**, UCAR Membership Committee  
**2020-present Member**, 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, 2012 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** **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

University-Level Service

**2022-present** **Member**, School of Freshwater Sciences Dean Search & Screen Committee  
**2021-present** **Faculty Advisor**, The Climate Consensus at UWM  
**2020-present** **Member**, UWM Research Computing Steering Group  
**2020-2021** **Member**, 2030 Implementation Team Undergraduate Experience Working Group  
**2018-2020** **Member**, UWM Information Technology Policy Committee  
**2014** **Coordinator**, UWM StormReady Initiative (renewed in 2017 and 2020)  
**2012-present** **UCAR Member Representative**, Univ. of Wisconsin-Milwaukee  
**2011-present** **Local Manager**, WxChallenge Forecasting Competition  
**2011-present** **Faculty Co-Advisor**, UWM Atmospheric Science Club

Department/School/College-Level Service

**2022-present** **Co-Chair**, UWM Freshwater Sciences Academic Program & Curriculum Committee  
**2021-present** **Member**, UWM Freshwater Sciences Academic Program & Curriculum Committee  
**2021-2022** **Member**, UWM Freshwater Sciences Climate/Water Asst. Prof. Search Committee  
**2017-2019** **Student 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  
**2014-2020** **Member**, UWM Mathematical Sciences Graduate Committee  
**2013-2014** **Chair**, UWM Mathematical Sciences Event Organizing Committee  
**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

Community Service

**2022-present** **Vice President**, U.S.S. Liberty Memorial Public Library (Grafton, WI) Library Board  
**2018-2020** **Participant**, ESWN Science-a-Thon #dayofscience  
**2016-present** **Trustee**, U.S.S. Liberty Memorial Public Library (Grafton, WI) Library Board  
**2014-2015** **Member**, 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)*  
*National Science Foundation (USA)*  
*Nature Communications*  
*Quarterly Journal of the Royal Meteorological Society*  
*Weather and Forecasting*

I have also been a reviewer for two tenure and promotion to Associate Professor cases in external Atmospheric Science programs.

## **Invited Professional Colloquia and Seminars**

---

- |             |  |
|-------------|--|
| <b>2022</b> | <b>6<sup>th</sup> Midwest Student Conference on Atmospheric Research</b><br>"The Extratropical Transition of Tropical Cyclones (and Assorted Career Musings)"                                      |
| <b>2019</b> | <b>IOGP Metocean Committee</b><br>"Tropical Cyclone Impacts at Higher Latitudes in a Warming World"  |
| <b>2018</b> | <b>NOAA/NWS/Storm Prediction Center</b><br>"A Preliminary Evaluation of Paired Regional/Convection-Allowing Model-Forecast Vertical Profiles in Warm-Season, Thunderstorm-Supporting Environments" |
| <b>2018</b> | <b>Northern Illinois Univ., Dept. of Geography</b><br>"The Rear-Inflow Jet Evolution of Idealized, Mature Mesoscale Convective Systems"  |
| <b>2018</b> | <b>Greater Milwaukee Chapter of the AMS</b><br>"The Harvey-Irma-Maria Hurricanes: An Atlantic Hurricane Season Retrospective"  |
| <b>2017</b> | <b>St. Cloud State Univ., Dept. of Atmospheric and Hydrologic Sciences</b><br>"The Rear-Inflow Jet Evolution of Idealized, Mature Mesoscale Convective Systems"                                    |
| <b>2016</b> | <b>Lyndon State College, Dept. of Atmospheric Sciences</b><br>"Understanding Trends in and Controls on Atlantic Hurricane Season Length"   |
| <b>2016</b> | <b>Univ. of Wisconsin-Madison, Dept. of Atmospheric and Oceanic Sciences</b><br>"On the Short- to Medium-range Predictability of Thunderstorm Formation"   |
| <b>2015</b> | <b>Greater Milwaukee Chapter of the AMS</b><br>"How do Forecasters Utilize Ensembles? Case Study of a High-Impact Event"   |
| <b>2014</b> | <b>Central Michigan Univ., Dept. of Earth and Atmospheric Sciences</b><br>"The Predictability of Mesoscale Convective Phenomena"   |
| <b>2014</b> | <b>Omaha/Offutt Chapter of the AMS/NWA</b><br>"How do Forecasters Utilize Output from a Convection-Permitting Ensemble Forecast System? Case Study of a High-Impact Precipitation Event"           |
| <b>2014</b> | <b>Univ. of Georgia, Dept. of Geography</b><br>"Oklahoma's Tropical Storm: The Curious Case of T.S. Erin's Inland Reintensification"   |
| <b>2013</b> | <b>Greater Milwaukee Chapter of the AMS</b>  |



“Anatomy of a Superstorm: Birth, Evolution, and Impacts of Hurricane Sandy (2012)”

- 2012**      **Univ. of Wisconsin-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**      **Univ. of Wisconsin-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**

---

- 2022**      **NOAA Hazardous Weather Testbed Spring Forecasting Experiment (10 times in total)**  
NOAA/NSSL and NOAA/NWS/SPC, Norman, OK
- 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

### **Presentations** *(advised student)*

---

#### **2023**

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.

Brown, G. R. H., and coauthors, 2022: 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.

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.

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.

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 Atmospheric Radiation Measurement (ARM) User Facility/Atmospheric System Research (ASR) Principal Investigators Meeting*, Rockville, MD, P4.58.

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.
- Kuroski, 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.
- Kuroski, 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.
- Kuroski, 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. Galarnau, 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, 27th 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, 27th 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, 27th 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.

## **Public Interviews and Presentations**

---

<b>2023</b>	<b>Milwaukee Journal Sentinel</b> ( <a href="#">5 January 2023</a> ; early-winter temperatures and snow)
<b>2022</b>	<b>UWM Report</b> ( <a href="#">10 November 2022</a> ; hurricane data resource)
<b>2022</b>	<b>Learning in Retirement Waukesha County</b> (17 October 2022; hurricane primer)
<b>2022</b>	<b>WISN-TV</b> (7 September 2022; "Rooftop Weather" interview)
<b>2022</b>	<b>Wall Street Journal</b> ( <a href="#">16 August 2022</a> ; early-starting Atlantic hurricane seasons)
<b>2022</b>	<b>UWM Osher Lifelong Learning Institute</b> (21 February 2022; hurricane primer)
<b>2021</b>	<b>WUWM Public Radio</b> ( <a href="#">5 November 2021</a> ; summer weather and climate change)
<b>2021</b>	<b>350.org Milwaukee Chapter</b> ( <a href="#">14 September 2021</a> ; The Climate Consensus)
<b>2021</b>	<b>WUWM Public Radio</b> ( <a href="#">4 August 2021</a> ; derechos and wildfires)
<b>2021</b>	<b>UWM Research Magazine</b> ( <a href="#">16 March 2021</a> ; hurricane research)
<b>2021</b>	<b>UWM Today</b> ( <a href="#">18 February 2021</a> ; hurricane research)
<b>2021</b>	<b>UWM Alumni Association Master Chat</b> ( <a href="#">18 February 2021</a> ; hurricane primer)
<b>2020</b>	<b>WDJT-TV/CBS 58</b> ( <a href="#">13 December 2020</a> ; La Nina and Wisconsin winter weather)
<b>2020</b>	<b>WDJT-TV/CBS 58</b> ( <a href="#">14 June 2020</a> ; 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)  
**2018** **UWM Letters & Science InFocus** ([October 2018](#); Science-A-Thon participation)  
**2018** **WDJT-TV/CBS 58** (14 September 2018; Hurricane Florence interview)  
**2018** **Weather Underground** ([6 June 2018](#); Tropical Storm Alberto interview)  
**2018** **UWM Report** ([19 April 2018](#); Atmospheric Science program changes)  
**2018** **UWM Today** ([19 April 2018](#); Innovative Weather and Atmospheric Science program)  
**2018** **UWM Report** ([18 April 2018](#); late-ending winter weather in Wisconsin)  
**2018** **Weather Underground** ([19 February 2018](#); Tropical Cyclone Kelvin interview)  
**2017** **WISN-TV** (30 August 2017; Hurricane Harvey interview)  
**2017** **Milwaukee Area Science Advocates** ([13 July 2017](#); "Actual Living Scientist" sketch)  
**2017** **UWM Atmospheric Science Promo** ([February 2017](#); undergraduate program)  
**2016** **News@Unidata** ([23 May 2016](#); deployment of AWIPS II at UWM)  
**2016** **UWM PantherVision** (4 March 2016; El Nino impacts on Wisconsin weather)  
**2016** **The Daily Beast** ([15 January 2016](#); Hurricane Alex interview)  
**2015** **WITI-TV/FOX 6** ([25 February 2015](#); Milwaukee Air & Water Show weather)  
**2015** **WITI-TV/FOX 6** ([24 February 2015](#); Lake Michigan ice cover)  
**2015** **WDJT-TV/CBS 58** (23 February 2015; Lake Michigan ice cover)  
**2014** **UWM Report** ([20 November 2014](#); UWM StormReady University designation)  
**2012** **UCAR News** ([2 July 2012](#); eastern United States derecho)  
**2011** **UCAR News** ([6 May 2011](#); Tropical Storm Erin research)  
**2010** **LiveScience** ([12 September 2010](#); central United States derecho)  
**2010** **UCAR News** ([18 August 2010](#); central United States derecho)

## Professional Memberships & Honor Societies

---

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