Christopher C. Hennon, Ph.D., CCM
Research and Consulting Meteorologist
Hennon Weather Services LLC
Asheville, NC 28801
Phone: (828) 283-3033
Email: chris@hennonweather.com
hennonweather.com

Education

1998 - 2003	Ph.D. (Atmospheric Science) Ohio State University, Atmospheric Science Program, Department of Geography, Columbus, OH
1994 – 1996	Master of Science (Atmospheric Science) Purdue University, Department of Earth and Atmospheric Sciences, West Lafayette, IN
1991 – 1994	Bachelor of Arts (Aeronautics/Mathematics) Miami University, Department of Physics, Oxford, OH *cum laude with honors*

Professional Employment

2024 - 2025	Senior Research Scientist Aeolus Capital Management, Ltd. Hamilton, Bermuda
2022 - 2024	Professor, Applied Meteorology, Department of Applied Aviation Sciences Embry Riddle Aeronautical University Prescott, AZ
2021 -	Founder and Consulting Meteorologist Hennon Weather Services LLC Asheville, NC
2017 - 2022	Professor, Department of Atmospheric Sciences University of North Carolina at Asheville Asheville, NC
2015 - 2022	Chair, Department of Atmospheric Sciences University of North Carolina at Asheville Asheville, NC
2014 - 2019	Cooperative Institute for Climate and Satellites (CICS) Visiting Research Scholar North Carolina State University Asheville, NC
2011 - 2017	Associate Professor, Department of Atmospheric Sciences University of North Carolina at Asheville Asheville, NC
2008 – 2018	Meteorological Consultant Acclimate, LLC Asheville, NC
2005 - 2011	Assistant Professor, Department of Atmospheric Sciences University of North Carolina at Asheville Asheville, NC

2004 - 2005	University Corporation for Atmospheric Research Visiting Scientist NOAA Tropical Prediction Center / National Hurricane Center, Miami, FL
2004 - 2005	Adjunct Faculty, Department of Chemistry, Physics, and Earth Sciences, Miami Dade College, Miami, FL
2003 - 2004	University Corporation for Atmospheric Research Post-Doctoral Fellow NOAA Tropical Prediction Center / National Hurricane Center, Miami, FL
2003	Instructor, Department of Geography Ohio State University, Columbus, OH
2003, 1998-2001	Graduate Instructor Ohio State University, Columbus, OH
2001 – 2002	Research Assistant, Polar Meteorology Group Byrd Polar Research Center, Ohio State University, Columbus, OH
1996 – 1998	Meteorologist / Software Engineer TASC, Inc., Reading, MA
1994 – 1996	Research and Teaching Assistant Purdue University, West Lafayette, IN

Funded Projects/Initiatives

2023 - 2024	"EAGER: North American Monsoon Prediction Using Causality Informed Machine Learning" National Science Foundation (Principal Investigator) $162,492
2023 - 2024	"Determining Tropical Cyclone Intensity Using Deep Learning" Embry-Riddle Aeronautical University (Principal Investigator) $16,400
2020 - 2022	"REU Site: Climate Change Science, Impacts, and Resilience" National Science Foundation (Co-Principal Investigator) $457,020
2014 – 2018	"ACES: A Scholarship Program for Atmospheric and Computer Science Scholars" National Science Foundation (Co-Principal Investigator) $613,609
2014 - 2016	"Cyclone Center: Toward a Global Reanalysis of the Tropical Cyclone Record" Risk Prediction Initiative (Principal Investigator) $25,340
2010 – 2015	"Improved Active/Passive Ocean Vector Wind Retrievals" NASA ROSES 2009 (Co-Investigator) $109,000 ($608,000 grant total)
2010	"Enhancing Data Sharing at the University of North Carolina at Asheville to Foster Interdisciplinary Education, Research, and Community Outreach" Unidata Equipment Awards (Principal Investigator) $16,000
2009 – 2011	"Enhancements to the Global Best Tracks Database (IBTrACS)" NOAA Climate Change Data and Detection (CCDD) Program (Collaborator) $18,000 ($269,000 grant total)

2006 – 2009   "Improved Ocean Vector Wind Retrievals in Extreme Wind Events"
                     NASA ROSES 2005 (Co-Investigator)
                     $121,500 ($502,000 grant total)

Refereed Publications

Hennon, C.C., A. Coleman, and A. Hill, 2022: Short-Term Weather Forecast Skill of Artificial Neural Networks. *Weather and Forecasting,* **37**, 1941-1951. DOI: https://doi.org/10.1175/WAF-D-22-0009.1

Phillips, C., D. Walshe, K.O. Regan, K. Strong, **C.C. Hennon**, K.R. Knapp, C. Murphy, and P.W. Thorne, 2018: Assessing Citizen Science Participation Skill for Altruism or University Course Credit: A Case Study Analysis Using Cyclone Center. *Citizen Science: Theory and Practice,* **3**, p. 6. DOI: http://doi.org/10.5334/cstp.111

Knapp, K.R., J. Matthews, J.P. Kossin, and **C.C. Hennon**, 2016: Identification of Tropical Cyclone Storm Types Using Crowd Sourcing. *Monthly Weather Review,* **144,** 3783-3798. DOI: http://dx.doi.org/10.1175/MWR-D-16-0022.1

Hennon, C.C., K.R. Knapp, C.J. Schreck III, S.E. Stevens, J.P. Kossin, P.W. Thorne, P.A. Hennon, M.C. Kruk, J. Rennie, J-M Gadea, M. Striegl, and I. Carley, 2015: Cyclone Center: Can Citizen Scientists Improve Tropical Cyclone Intensity Records? *Bulletin of the American Meteorological Society,* **96**, 591-607. DOI: http://dx.doi.org/10.1175/BAMS-D-13-00152.1

Alsweiss, S., R. Hanna, P. Laupattarakasem, W.L. Jones, **C.C. Hennon**, and R. Chen, 2014: A Non-MLE Approach for Satellite Scatterometer Wind Vector Retrievals in Tropical Cyclones. *Remote Sensing*, **6**, 4133-4148, DOI: http://dx.doi.org/10.3390/rs6054133

Hennon, C.C., P.P. Papin, C.M. Zarzar, J.R. Michael, J.A. Caudill, C.R. Douglas, W.C. Groetsema, J.H. Lacy, Z.D. Maye, J.L. Reid, M.A. Scales, M.D. Talley, and C.N. Helms, 2013: Tropical Cloud Cluster Climatology, Variability, and Genesis Productivity. *Journal of Climate,* **26**, 3046-3066. DOI: http://dx.doi.org/10.1175/JCLI-D-12-00387.1

Hennon, C.C., 2012: Citizen Scientists Analyzing Tropical Cyclone Intensities. *EOS*, **93**, No. 40, 2 October 2012, pp. 285, 287. DOI: http://dx.doi.org/10.1029/2012EO400002

Hennon, C.C., C.N. Helms, K.R. Knapp, and A.R. Bowen, 2011: An Objective Algorithm for Tracking Tropical Cloud Clusters: Implications for Tropical Cyclogenesis Prediction. *Journal of Atmospheric and Oceanic Technology,* **28**, 1007-1018. DOI: http://dx.doi.org/10.1175/2010JTECHA1522.1

Knapp, K.R., S. Ansari, C.L. Bain, M.A. Bourassa, M.J. Dickinson, C. Funk, C.N. Helms, **C.C. Hennon**, C.D. Holmes, G.J. Huffman, J.P. Kossin, H-T Lee, A. Loew, and G. Magnusdottir, 2011: Globally Gridded Satellite (GridSat) Observations for Climate Studies. *Bulletin of the American Meteorological Society,* **92**, 893-907. DOI: http://dx.doi.org/10.1175/2011BAMS3039.1

Laupattarakasem, P., W.L. Jones, **C.C. Hennon**, J.R. Allard, and A.R. Harless, 2010: Improved Hurricane Ocean Vector Winds using SeaWinds Active/Passive Retrievals. *IEEE Transactions on Geoscience and Remote Sensing,* **48**, 1-15. DOI: http://dx.doi.org/10.1109/TGRS.2010.2043110

Brennan, M., **C.C. Hennon**, and R. Knabb, 2009: The Operational Use of QuikSCAT Ocean Vector Winds at the National Hurricane Center, *Weather and Forecasting,* **24**, 621-645. DOI: http://dx.doi.org/10.1175/2008WAF2222188.1

Adams, I.S., **C.C. Hennon**, W.L. Jones, and K. Ahmad, 2006: Evaluation of Hurricane Ocean Vector Winds from WindSat. *IEEE Transactions on Geoscience and Remote Sensing,* **44**, No. 3, 656-667. DOI: http://dx.doi.org/10.1109/TGRS.2005.862506

Hennon, C.C., C. Marzban, and J.S. Hobgood, 2005: Improving Tropical Cyclogenesis Statistical Model Forecasts through the Application of a Neural Network Classifier. *Weather and Forecasting,* **20**, 1073-1083. DOI: http://dx.doi.org/10.1175/WAF890.1

Hennon, C.C., and J.S. Hobgood, 2003: Forecasting tropical cyclogenesis over the Atlantic Basin using large-scale data. *Monthly Weather Review,* **131**, 2927-2940. DOI: http://dx.doi.org/10.1175/1520-0493(2003)131<2927:FTCOTA>2.0.CO;2

Manuscripts

Emanuel, K., P. Caroff, S. Delgado, C. Guard, M. Guishard, **C.C. Hennon**, J. Knaff, K. Knapp, J. Kossin, C. Schreck, C. Velden, and J. Vigh, 2018: On the Desirability and Feasibility of a Global Reanalysis of Tropical Cyclones. *Bulletin of the American Meteorological Society,* **99**, 427-429.
DOI: https://journals.ametsoc.org/doi/10.1175/BAMS-D-17-0226.1

Hennon, C.C., and E. Wright, 2017: Modern Tropical Cyclone Wind Observation and Analysis. Hurricanes and Climate Change, Vol. 3 (Chapter 4), Springer, Jennifer Collins and Kevin Walsh, Editors, pp. 91-115, ISBN 978-3-319-47594-3. http://www.springer.com/us/book/9783319475929

Hennon, C.C., 2006: Tropical Meteorology – A First Course. *Course Textbook* (unpublished), Department of Atmospheric Sciences, University of North Carolina at Asheville, 147 pp.

Hennon, C.C., 2003: Investigating Probabilistic Forecasting of Tropical Cyclogenesis over the North Atlantic Using Linear and Non-linear Classifiers. Dissertation, Department of Geography, The Ohio State University, 164 pp. http://library.ohio-state.edu/record=b5637263~S7

Hennon, C.C., and D.G. Vincent, 1996: Climatology during the TOGA-COARE Intensive Observing Period (November 1992 – February 1993) compared to a recent climatology (1985-1990). Purdue University, 95 pp.

Hennon, C.C., 1996: Large-scale Atmospheric Conditions for TOGA-COARE IOP Compared to a Recent Climatology. Masters Thesis, Department of Earth and Atmospheric Sciences, Purdue University, 149 pp.

Conference Proceedings

Hennon, C.C., and C. Algeri, 2024: Tropical Cyclone Intensity via Deep Learning. *36th Conference on Hurricanes and Tropical Meteorology,* American Meteorological Society, Long Beach, CA. https://ams.confex.com/ams/36Hurricanes/mediafile/Manuscript/Paper442588/15D.6_hennon_preprint.pdf

Schroeder, R., R. AlMomani, **C.C. Hennon**, C. James, I. Jarrells, M. Novak, and C. Thomas, 2024: North American Monsoon Prediction Using Causality Informed Machine Learning. *In Preparation, 21st Conference on Mountain Meteorology,* American Meteorological Society, Boise, ID.

Hennon, C.C., A. Coleman, and A. Hill, 2021: Employing Neural Networks on Dynamical and Statistical Guidance Products to Minimize Short-Range Forecast Error. *20th Conference on Artificial Intelligence for Environmental Science,* American Meteorological Society, New Orleans, LA.

Hennon, C.C., 2014: Crowd Sourcing Science. *International Workshop on Tropical Cyclones (IWTC)-VIII,* World Meteorological Organization, Jeju, South Korea. http://www.wmo.int/pages/prog/arep/wwrp/new/documents/SF1c_CrowdSourcingScience.pdf

Hennon, C.C., C.N. Helms, and K.R. Knapp, 2010: Toward a Global Climatology of Tropical Cloud Clusters. *29th Conference on Hurricanes and Tropical Meteorology,* American Meteorological Society, Tucson, AZ. https://ams.confex.com/ams/pdfpapers/167841.pdf

Laupattarakasem, P., W. L. Jones, **C.C. Hennon**, P. Black, J.R. Allard, and A.R. Harless, 2008: Q-Winds satellite hurricane wind retrievals and H*Wind comparisons. *28th Conference on Hurricanes and Tropical Meteorology,* American Meteorological Society, Orlando, FL. https://ams.confex.com/ams/pdfpapers/137942.pdf

Ruf, C.S., A.M. Mims, and **C.C. Hennon**, 2008: The Dependence of the Microwave Emissivity of the Ocean on Hurricane Force Wind Speed. *28th Conference on Hurricanes and Tropical Meteorology,* American Meteorological Society, Orlando, FL. https://ams.confex.com/ams/pdfpapers/136616.pdf

Jones, W.L., P.G. Black, S.S. Chen, R.E. Hood, J.W. Johnson, C.S. Ruf, A. Mims, and **C.C. Hennon**, 2008: Next Generation Airborne Hurricane Imaging Radiometer (HIRad) – Improved Forecast Skill with Wide Field Imagery. *Tropical Meteorology Special Symposium,* American Meteorological Society, New Orleans, LA. https://ams.confex.com/ams/pdfpapers/134825.pdf

Hennon, C.C., D. Long, and F. Wentz, 2006: Validation of QuikSCAT Wind Retrievals in Tropical Cyclone Environments. *14th Conf. on Satellite Meteorology and Oceanography,* American Meteorological Society, Boston, MA. https://ams.confex.com/ams/pdfpapers/99478.pdf

Adams, I., **C.C. Hennon**, W.L. Jones, and K. Ahmad, 2005: Hurricane Wind Vector Measurements from WindSat Polarimetric Radiometer. *IGARRS 2005,* IEEE, New York, NY, Vol. 6, pp 4014-4017.

Jones, W.L., I.S. Adams, and **C.C. Hennon**, 2005: Hurricane Wind Vector Measurements from WindSat Polarimetric Radiometer. *59th Inter-Departmental Hurricane Conference,* Jacksonville FL.

Hennon, C.C., 2004: A Statistical Model for Forecasting Tropical Cyclogenesis over the Atlantic Basin. 26th Conference on Hurricanes and Tropical Meteorology, American Meteorological Society, Boston, MA, pp. 76-77. https://ams.confex.com/ams/pdfpapers/75273.pdf

Hines, K.M., **C.C. Hennon**, and D.H. Bromwich, 2003: Antarctic Sea Ice and a West Pacific Teleconnection in the NCAR Community Atmosphere Model. *7th Conference on Polar Meteorology and Oceanography*, American Meteorological Society, Hyannis, MA. https://ams.confex.com/ams/7POLAR/webprogram/Paper61530.html

Hennon, C.C., 2002: Prospects for Operational Tropical Cyclogenesis Forecasting. *25th Conference on Hurricanes and Tropical Meteorology*, American Meteorological Society, Boston, MA, pp. 224-225. https://ams.confex.com/ams/pdfpapers/36725.pdf

Hennon, C.C., 2000: A Climatology of Hurricane Maximum Potential Intensity in the Atlantic Basin. *24th Conference on Hurricanes and Tropical Meteorology*, American Meteorological Society, Boston, MA, pp. 7-8.

Hennon, C.C., and D.G. Vincent, 1997: Large-scale Atmospheric Conditions during TOGA-COARE IOP Compared to a Recent Climatology. *7th Conference on Climate Variations*, American Meteorological Society, Boston, MA, pp. 292-295.

Poster Presentations (* = Presenting Author)

Hennon, C.C.*, A. Coleman, and A. Hill, 2021: Employing Neural Networks on Dynamical and Statistical Guidance Products to Minimize Short-Range Forecast Error. *20th Conference on Artificial Intelligence for Environmental Science,* P1009, American Meteorological Society, New Orleans, LA.

Miller, D.K.*, M. Cameron, C.M. Godfrey, J.D. Brock, and **C.C. Hennon**, 2020: Findings and Mysteries of the ACES S-STEM Project on Undergraduate Atmospheric Science Students at a Public Liberal Arts University. *29th Conference on Education,* P1268, American Meteorological Society, Boston, MA.

Miller, D.K.*, M. Cameron, C.M. Godfrey, J.D. Brock, and **C.C. Hennon**, 2018: Impacts of the NSF-Funded ACES S-STEM Project on Atmospheric Sciences Students at a Public Liberal Arts University. *27th Symposium on Education,* P127, American Meteorological Society, Austin, TX.

Hennon, C.C.*, M. Kruk, K.R. Knapp, C. Schreck III, J.P. Kossin, and P. Thorne, 2016: Determining Uncertainty In Historical Tropical Cyclone Intensity Analyses. *32nd Conference on Hurricanes and Tropical Meteorology,* American Meteorological Society, San Juan, Puerto Rico.

Hennon, C.C.*, K.R. Knapp, C.J. Schreck III, S.E. Stevens, and J.P. Kossin, 2015: Cyclone Center.org: Crowd Sourcing Hurricane Intensity. Poster 634, *20th Conference on Satellite Meteorology and Oceanography,* American Meteorological Society, Phoenix, AZ.

Hennon, C.C.*, K.R. Knapp, C.J. Schreck III, S.E. Stevens, and J.P. Kossin, 2013: Cyclone Center: Using Crowd Sourcing to Determine Tropical Cyclone Intensity. Poster IN23B-1426, *American Geophysical Union Annual Meeting,* San Francisco, CA.

Hennon, C.C., K.R. Knapp, P.A. Hennon, J. Kossin, M. Kruk, J. Rennie, C. Schreck, L. Stevens, S. Stevens, and P. Thorne*, 2012: CycloneCenter.org: Crowd Sourcing to Improve the Global Tropical Cyclone Record. *Extreme Meteorological Events Workshop*, Environmental Change Institute, University of Oxford, England.

Hennon, C.C.*, C.N. Helms, and K.R. Knapp, 2010: Toward a Global Climatology of Tropical Cloud Clusters. *29th Conference on Hurricanes and Tropical Meteorology,* American Meteorological Society, Tucson, AZ.

Semazzi, F.H.M., S. Byrd, L. Bernstein, G. Comstock, M. Correa, J. Fountain, J.Fox, **C.C. Hennon*,** and co-authors, 2010: Developing an Interdisciplinary Graduate Program in Climate Change and Society. *19th Symposium On Education,* American Meteorological Society, Atlanta, GA.

Helms, C.N., **C.C. Hennon*,** and K.R. Knapp, 2009: Augmenting Global Best Track Databases with Tropical Cloud Clusters. World Meteorological Organization *IBTrACS Users Workshop,* National Climatic Data Center, Asheville, NC.

Jones, W.L.*, P. Laupattarakasem, and **C.C. Hennon**, 2009: "Q-Winds OVW Retrievals in Extreme Wind Events". 2009 NASA Ocean Vector Winds Science Team Meeting (May 2009), Boulder, CO. https://coaps.fsu.edu/scatterometry/meeting/docs/2009_may/abstracts/posters/jones2.pdf

Helms, C.N.*, **C.C. Hennon**, and K.R. Knapp, 2008: An Objective Algorithm for the Detection and Tracking of Tropical Convective Cloud Clusters. *28th Conference on Hurricanes and Tropical Meteorology,* American Meteorological Society, Orlando, FL. https://ams.confex.com/ams/28Hurricanes/techprogram/paper_138235.htm

Jones, W.L.*, P.G. Black, S.S. Chen, R.E. Hood, J.W. Johnson, C.S. Ruff, A. Mims, and **C.C. Hennon**, 2008: "Next Generation Airborne Hurricane Imaging Radiometer (HIRad) – Improved Forecast Skill with Wide Field Imagery". *Tropical Meteorology Special Symposium, 20th Conference on Climate Variability and Change*, American Meteorological Society, New Orleans, LA. https://ams.confex.com/ams/88Annual/techprogram/paper_134825.htm

Hennon, C.C.*, J.R. Allard, and A.R. Harless, 2007: Using Objective Analyses (H*Wind) in Tropical Cyclone Wind Verification. *2007 EUMETSAT Meteorological Satellite Conference and 15th Conference on Satellite Meteorology and Oceanography,* American Meteorological Society, Amsterdam, Netherlands.

Mims, A.*, C. Ruf, and **C.C. Hennon**, 2007: WindSat Emissivity Sensitivity to Near Surface Wind Field in a Tropical Cyclone. *Michigan Space Grant Regional Conference,* Purdue University, West Lafayette, IN.

Hennon, C.C., D.G. Long*, and F.J. Wentz, 2006: Validation of QuikSCAT Wind Retrievals in Hurricanes. *27th Conference on Hurricanes and Tropical Meteorology (Monterey, CA),* American Meteorological Society, Boston, MA.

Hennon, C.C.*, 2001: Representation of Incipient Tropical Cyclone Cloud Clusters in the NCEP/NCAR Reanalysis, *Association of American Geographers*, New York, NY.

Conference and Meeting Presentations (* = Presenting Author)

Hennon, C.C.*, and C. Algeri, 2024: Tropical Cyclone Intensity via Deep Learning. *36th Conference on Hurricanes and Tropical Meteorology,* American Meteorological Society, Long Beach, CA.

Hennon, C.C.*, C. Ihnat, K. Knapp, and C. Schreck, 2018: "New Developments in Crowd Sourcing Tropical Cyclone Intensity Estimates". *33rd Conference on Hurricanes and Tropical Meteorology,* Ponte Verde, FL.

Emanuel, K.*, P. Caroff, S. Delgado, C. Guard, M. Guishard, **C.C. Hennon**, J. Knaff, K. Knapp, J. Kossin, C. Schreck, C. Velden, and J. Vigh, 2018: "Should We Undertake a Global Reanalysis of Tropical Cyclones?" *33rd Conference on Hurricanes and Tropical Meteorology,* Ponte Vedra, FL.

Hennon, C.C.*, 2017: "Cyclone Center: A Community Reanalysis". *Global Tropical Cyclone Reanalysis Workshop,* Asheville, NC.

Thorne, P.*, **C.C. Hennon** and co-authors, 2015: "Cyclone Center: Insights on Historical Tropical Cyclones from Citizen Volunteers". *2015 American Geophysical Union Annual Meeting*, San Francisco, CA. https://agu.confex.com/agu/fm15/meetingapp.cgi/Paper/67471

Hennon, C.C.*, 2014: "Cyclone Center: Using Citizen Science to Reconcile Global Tropical Cyclone Intensity". *Risk Prediction Initiative (RPI) Research Update Workshop*, Hamilton, Bermuda (September 2014).

Hennon, C.C.*, and coauthors, 2014: "Toward a Homogeneous Global Tropical Cyclone Intensity Record". *31st Conference on Hurricanes and Tropical Meteorology* (April 2014), American Meteorological Society, San Diego, CA. https://ams.confex.com/ams/31Hurr/webprogram/Paper245064.html

Laupattarakasem, P.*, S. Alsweiss, W.L. Jones, and **C.C. Hennon**, 2011: A Novel Ocean Vector Winds Retrieval Technique for Tropical Cyclones. *IGARRS 2011,* IEEE, Vancouver, Canada.

Hood, R.E.*, R. Atlas, P. Black, S.S. Chen, **C.C. Hennon**, J.W. Johnson, W.L. Jones, T.L. Miller, C.S. Ruff, and E.W. Uhlhorn, 2008: "An overview of the Hurricane Imaging Radiometer (HIRad)". *28th Conference on Hurricanes and Tropical Meteorology* (April 2008), American Meteorological Society, Orlando, FL. https://ams.confex.com/ams/28Hurricanes/techprogram/paper_138363.htm

Laupattarakasem, P.*, W.L. Jones, **C.C. Hennon**, P. Black, J. Allard, and A. Harless, 2008: "Q-Winds Satellite Hurricane Wind Retrievals and H*Wind Comparisons". *28th Conference on Hurricanes and Tropical Meteorology* (April 2008), American Meteorological Society, Orlando, FL. https://ams.confex.com/ams/28Hurricanes/techprogram/paper_137942.htm

Miller, T.L.*, R. Atlas, P. Black, S.S. Chen, **C.C. Hennon**, and coauthors, 2008: "Simulation of the Impact of New Ocean Surface Wind Measurements on H*Wind Analyses". *28th Conference on Hurricanes and Tropical Meteorology* (April 2008), American Meteorological Society, Orlando, FL. https://ams.confex.com/ams/28Hurricanes/techprogram/paper_138352.htm

Ruf, C.S.*, A.M. Mims, and **C.C. Hennon**, 2008: "The Dependence of the Microwave Emissivity of the Ocean on Hurricane Force Wind Speed". *28th Conference on Hurricanes and Tropical Meteorology* (April 2008), American Meteorological Society, Orlando, FL. https://ams.confex.com/ams/28Hurricanes/techprogram/paper_136616.htm

Jones, W.L.*, P. Laupattarakasem, and **C.C. Hennon** and co-authors, 2008: "Improved OVW Retrievals in Extreme High Wind Events Using QuikSCAT, 2008 NASA Ocean Vector Winds Science Team Meeting (November 2008), Seattle, WA. https://coaps.fsu.edu/scatterometry/meeting/docs/2008/new/jones.pdf

Jones, W.L., P. Laupattarakasem, **C.C. Hennon***, J.Allard, and A. Harless, 2007: "Improved SeaWinds Active/Passive Hurricane Wind Speed Retrievals and H-Wind Comparisons". NASA Ocean Vector Winds Science Team Symposium (September 2007), Amsterdam, The Netherlands.

Adams, I.S.*, Z. Jelenak, **C.C. Hennon**, and W.L. Jones, 2006: "Evaluation of WindSat Ocean Vector Wind Retrievals In Tropical Cyclones". *27th Conference on Hurricanes and Tropical Meteorology*, American Meteorological Society, Monterrey, CA. https://ams.confex.com/ams/27Hurricanes/techprogram/paper_108925.htm

Hennon, C.C.*, 2005: "Issues in Surface Wind Vector Validation in Tropical Cyclones", NASA Ocean Vector Winds Science Team Meeting, Seattle, WA (March 2005).

Hennon, C.C.*, 2004: "Comparison of QuikSCAT and WindSat Wind Vectors in Hurricane Fabian (2003)", WindSat Cal/Val and Science Meeting (November 2004).

Hennon, C.C.*, 2004: "Impacts and Challenges of Integrating QuikSCAT into TPC Operations". Southern Region Marine Conference, Miami, FL (March 2004).

Hennon, C.C.*, 2003: "Probabilistic Tropical Cyclogenesis Forecasting". *3rd Conference on Artificial Intelligence*, American Meteorological Society (February 2003).

Hennon, C.C.*, 2002: "Prospects for Operational Tropical Cyclogenesis Forecasting." *25th Conference on Hurricanes and Tropical Meteorology*, American Meteorological Society, San Diego, CA (May 2002). https://ams.confex.com/ams/25HURR/techprogram/paper_36725.htm

Hennon, C.C.*, 2000: "A Climatology of Hurricane Maximum Potential Intensity in the Atlantic Basin." *24th Conference on Hurricanes and Tropical Meteorology*, American Meteorological Society, Ft. Lauderdale, FL (June 2000). https://ams.confex.com/ams/last2000/webprogram/Paper12624.html

Hennon, C.C.*, 2000: "The Next Generation of the OSU Weather Website." *4th Annual Ohio State Severe Weather Symposium*, Columbus, OH (April 2000).

Invited Presentations

Hennon, C.C., 2020: "Climate Change 101". *Invited Presentation, Brevard Lions Club,* Brevard, NC (March 2020).

Hennon, C.C., 2018: "How to Advance Hurricane Science by Laying on Your Couch". *Invited Presentation, The Ohio State University,* Columbus, OH (March 2018).

Hennon, C.C., 2018: "How to Advance Hurricane Science by Laying on Your Couch". *Invited Presentation, Ohio University 9th Annual Meteorological Symposium,* Athens, OH (March 2018).

Hennon, C.C., 2018: "How to Advance Hurricane Science by Laying on Your Couch". *Invited Presentation, Lyndon State College,* Lyndon, NH (February 2018).

Hennon, C.C., and K.R. Knapp, 2016: "Toward a Global Homogeneous Tropical Cyclone Data Record". *Invited Speaker, NOAA National Hurricane Center and Hurricane Research Division,* Miami, FL (October 2016).

Hennon, C.C.*, 2015: "Climate Change Observations and Projections for the Southeast United States". *2015 Blue Ridge Parkway Research and Science Symposium*, Asheville, NC (April 2015).

Hennon, C.C.*, 2015: "Chasing Ice" (Panel Discussion Member). Sponsored by the UNC Asheville Divestment Coalition, Asheville, NC (April 2015).

Hennon, C.C.*, 2015: "Cyclone Center: Why You Should Care that Historical Tropical Cyclone Data Are Poor and What You Can Do About It". *American Meteorological Society Asheville Chapter Meeting*, Asheville, NC (April 2015).

Hennon, C.C.*, 2014: "Cyclone Center and Tropical Cyclones". *Google Hangout Broadcast with KOCO-TV,* Oklahoma City, OK (July 2014).

Hennon, C.C.*, 2013: "Cyclone Center: Making Grandparents into Scientists", *UNC Asheville Brown Bag Seminar*, Asheville, NC (September 2013).

Hennon, C.C.*, 2011: "Climate Change and Tropical Cyclones: An Increasing Threat to North Carolina?" *AB-Tech Institute for Climate Education*, Asheville, NC (October 2011).

Hennon, C.C.*, 2006: "Season on Edge: The Historic 2005 Atlantic Hurricane Season". *9th Atmospheric Science Librarians International Conference*, American Meteorological Society, Atlanta, GA (February 2006).

Hennon, C.C.*, 2004: "WindSat Mission and Wind Vector Retrievals in Tropical Cyclones", *Tropical Prediction Center/National Hurricane Center Seminar*, Miami, FL (December 2004).

Hennon, C.C.*, 2003: "Objective Forecasting of Tropical Cyclogenesis". *Tropical Prediction Center/National Hurricane Center Seminar*, Miami, FL (December 2003).

Hennon, C.C.*, 2002: "Forecasting Tropical Cyclogenesis Using Large-Scale Data." *Ohio State University Geography Colloquium Series*, Columbus, OH (December 2002).

Hennon, C.C.*, 2002: "Forecasting Tropical Cyclogenesis: Current Approaches and Future Possibilities." *NASA Goddard Space Flight Center Mesoscale Atmospheric Processes Branch* (September 2002).

Hennon, C.C.*, 2001: "A Probabilistic Real-Time Prediction Scheme for Tropical Cyclogenesis over the Atlantic Basin." *Ohio State University Geography Colloquium Series*, Columbus, OH (May 2001).

Hennon, C.C.*, 2000: "Weather Data Ingest and Visualization at Ohio State." *American Meteorological Society Dayton Chapter seminar series*, Dayton, OH (November 2000).

Hennon, C.C.*, 1999: "New Capabilities for Interactive Weather Data Analysis and Visualization." *Ohio State Atmospheric Science Program Seminar*, Columbus, OH (October 1999).

Student Research Projects Mentored

Published or Presented, Independent Projects (not class-related):

Coleman, A., and A. Hill, 2021: Short-term weather forecast skill of artificial neural networks. Poster presentation, *20th Conference on Artificial Intelligence for Environmental Science,* P1009, American Meteorological Society, New Orleans, LA.

Beaudet, F., 2018: Improving the prediction of daily maximum temperatures using a neural network. Presentation, UNC Asheville Spring Research Symposium, Asheville, NC.

Mulderrig, C., 2018: Climate change in India: An analysis of future precipitation rates. Presentation, UNC Asheville Spring Research Symposium, Asheville, NC.

O'Donnell, S., 2018: Case study analysis of ozone concentrations in Houston, TX during Hurricane Harvey. Paper, *UNC Asheville Journal*, Presented at 2018 UNC Asheville Spring Research Symposium.

Clark, W.M., 2016: Modeling tropical cyclone damage risk using parametric wind profiles and real-time forecast advisories. Presentation, NOAA National Hurricane Center and Hurricane Research Division, Miami, FL.

Wright, E., 2015: Exploring a Global Climatology of Tropical Cyclone Eye Sizes. Presentation, UNC Asheville Spring Research Symposium, Asheville, NC.

Turnau, R., 2015: Improving Atlantic Hurricane Intensity Forecasts Using Neural Networks. Presentation, UNC Asheville Spring Research Symposium, Asheville, NC.

Hargrove, Z., 2012: Lightning and Tropical Tornadogenesis. Preprints, *2012 BigSURS Conference*.

Hargrove, Z., 2011: Validating a New Algorithm for Wind Vector Retrievals in Tropical Cyclones. Presentation, UNC Asheville Spring Research Symposium, 2012 BigSURS Conference (Winthrop University).

Papin, P.P., 2011: Using the Rossby Radius of Deformation as a Forecasting Tool for Tropical Cyclogenesis. Preprints, *25th National Conference on Undergraduate Research*, Ithaca College, Ithaca, NY. Presentation, 2010 UNC Asheville Spring Research Symposium.

Helms, C.N., 2009: An Objective Algorithm for the Identification of Convective Tropical Cloud Clusters in Geostationary Infrared Imagery. Paper, *UNC Asheville Journal,* Presented at 2008 UNC Asheville Spring Research Symposium and 2009 Big South Undergraduate Research Symposium.

Ross, L., 2009: Developing 'First-Guess' Wind Fields for Tropical Cyclone Analyses in H*Wind. Preprints, *23rd National Conference on Undergraduate Research,* University of Wisconsin-La Crosse, La Crosse, WI.

Stone, M., 2008: Asheville Air Quality. Presentation, UNC Asheville Spring Research Symposium, Asheville, NC.

Allard, J.R., 2007: Using H*Wind to Improve Satellite-Based Wind Measurements in Tropical Cyclones. Poster, UNC Asheville Spring Research Symposium, Asheville, NC.

Cromer, B., 2007: Oceanic and Atmospheric Forcings of Tropical Cyclone Rapid Intensification in the Gulf of Mexico During the 2005 Atlantic Hurricane Season. Presentation, UNC Asheville Spring Research Symposium, Asheville, NC.

Erb, M.P., 2006: A Case Study of Hurricane Katrina: Rapid Intensification in the Gulf of Mexico. Preprints, *20th National Conference on Undergraduate Research,* Asheville, NC.

Harless, A.R., 2006: Tropical Cyclone Hyperactivity in the Eastern and Central Caribbean Sea During the 2005 Atlantic Hurricane Season. Preprints, *20th National Conference on Undergraduate Research,* Asheville, NC.

Published Work (class related):

Hennon, C.C., P.P. Papin, C.M. Zarzar, J.R. Michael, J.A. Caudill, C.R. Douglas, W.C. Groetsema, J.H. Lacy, Z.D. Maye, J.L. Reid, M.A. Scales, M.D. Talley, and C.N. Helms, 2013: Tropical Cloud Cluster Climatology, Variability, and Genesis Productivity. *Journal of Climate,* **26**, 3046-3066.
DOI: http://dx.doi.org/10.1175/JCLI-D-12-00387.1

Reviewed Papers

Bulletin of the American Meteorological Society (1)
Climate Dynamics (2)
International Journal of Climatology (1)
Geophysical Research Letters (1)
Journal of Applied Meteorology (1)
Journal of Climate (1)
Journal of Geophysical Research – Atmospheres (2)
Monthly Weather Review (5)
National Science Foundation Grant Proposal (1)
Remote Sensing (1)
Risk Analysis: An International Journal (1)
Transactions on Geoscience and Remote Sensing (1)
Weather and Forecasting (1)

Professional Memberships

1996 –   American Meteorological Society
2003 – 2019   American Geophysical Union

Awards, Honors, and Professional Certifications

2024   Innovative Teaching Award, College of Aviation, Embry-Riddle Aeronautical University

2020   Certified Consulting Meteorologist (#747, American Meteorological Society)

2016   The Scholarly and Creative Achievement Award (UNC Asheville)
              Recognition of scholarship achievements from 2011-2016

2012   Faculty/Staff National Champion, WxChallenge Forecast Competition (Miami, FL)

2004   NOAA Gold Medal (Team Award, Hurricane Isabel support)

2003, 2002   Council of Graduate Students (OSU) Professional Development Fund award

2001, 1999   American Meteorological Society student travel grant

1998   Selected participant, University Corporation for Atmospheric Research Advanced Study
              Program "Hurricanes at Landfall"

1994   Commencement speaker, Miami University, Oxford, OH

1991   Chapman scholar