

# CURRICULUM VITAE

## HEATHER M. ARCHAMBAULT

Associate Director, NOAA Geophysical Fluid Dynamics Laboratory  
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### EDUCATION

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- 2011 Ph.D., Atmospheric Science  
University at Albany/SUNY, Albany, NY
- 2005 M.S., Atmospheric Science  
University at Albany/SUNY, Albany, NY
- 2002 B.S., Meteorology  
Pennsylvania State University, University Park, PA  
Minor: Global Business Strategies in the Earth, Energy, and Materials Industries

### POSITIONS HELD

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- Oct 2017–present Associate Director (Physical Scientist, ZP-1301-3)  
NOAA/OAR/Geophysical Fluid Dynamics Laboratory, Princeton, NJ
- Sep 2016–Sep 2017 Program Manager (Management and Program Analyst, ZA-0343-3)  
NOAA/OAR/Climate Program Office, Silver Spring, MD
- Sep 2014–Sep 2016 Program Manager (Program Specialist III)  
University Corporation for Atmospheric Research, Joint Office for Science  
Support [for NOAA/OAR/Climate Program Office, Silver Spring, MD]
- Sep 2011–Sep 2014 National Research Council Postdoctoral Research Fellow  
Dept. of Meteorology, Naval Postgraduate School, Monterey, CA

### SCIENTIFIC SERVICE

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Associate Editor – *Monthly Weather Review*, American Meteorological Society, 2014–present.

Program committee member – Lance Bosart Symposium, 97th American Meteorological Society Annual Meeting, Jan 2017.

Co-organizer – 17th Cyclone Workshop, Pacific Grove, CA, Oct 2015.

Working group member – “Structure and structure change: Advances in understanding extratropical transition”, 8th International Workshop on Tropical Cyclones, WMO/WWRP, Jeju, Korea, Dec 2014.

Invited guest of PANDOWAE (Predictability AND Dynamics Of Weather Systems in the Atlantic-European Sector) Research Group Young Scientists, Zurich, Switzerland, and Durbach, Germany, Mar 2013.

Invited speaker and participant – “The weather–climate intersection: Advances and challenges”. NCAR Advanced Study Program Summer Colloquium, Boulder, CO, Jun 2012.

Lead forecaster – *Pre-Depression Investigation of Cloud-systems in the Tropics (PREDICT)*, NSF field campaign, St. Croix, U.S. Virgin Islands, Sep 2010.

Forecaster – *THORPEX Pacific-Asian Regional Campaign (T-PARC)*, NSF field campaign, Monterey, CA, Aug 2008.

#### Session Chair

97th AMS Annual Meeting, Seattle, WA, Jan 2016.

17th Cyclone Workshop, Pacific Grove, CA, Oct 2015.

31st AMS Conf. on Hurricanes and Tropical Meteor., San Diego, CA, Apr 2014.

16th Cyclone Workshop, Sainte-Adèle, QC, Sep 2013.

93rd AMS Annual Meeting, Austin, TX, Jan 2013.

4th WWRP Int'l Workshop on Extratropical Transition, Sainte-Adèle, QC, May 2012.

30th AMS Conf. on Hurricanes & Tropical Meteor., Ponte Vedra Beach, FL, Apr 2012.

15th Cyclone Workshop, Pacific Grove, CA, Mar 2011.

14th Cyclone Workshop Sainte-Adèle, QC, Sep 2008.

#### **TEACHING AND MENTORSHIP**

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Instructor of Record, *Synoptic Laboratory I* (3 credit course). University at Albany/SUNY, Albany, NY, Sep–Dec 2008

Member of Ph.D. committee for Lawrence Gloeckler (Advisor: Paul Roundy), University at Albany/SUNY, Albany, NY, 2011–present.

Member of M.S. committee for Kevin Lupo (Advisors: Jason Cordeira and Eric Hoffman), Plymouth State University, 2015–2016.

#### **PROFESSIONAL SOCIETIES**

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American Meteorological Society

American Geophysical Union

#### **AWARDS AND FELLOWSHIPS**

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*American Meteorological Society Editors' Award – Monthly Weather Review*, 2017: “For frequent, exceptional, and in-depth reviews, with particular recognition for assisting the editors.”

*National Research Council Postdoctoral Fellowship*, Naval Postgraduate School, Sep 2011–Sep 2014.

*Award for Outstanding Poster Presentation*, Davos Atmosphere and Cryosphere Assembly, Davos, Switzerland, 2013.

*Travel awards*, International Association of Meteorology and Atmospheric Sciences and World Climate Research Programme International Commission on Dynamic Meteorology Workshop on the Dynamics and Predictability of High-Impact Weather and Climate Events, Kunming, China, Aug 2012.

*Distinguished Doctoral Dissertation Award*, The College of Arts and Sciences, University at Albany/SUNY, Albany, NY, 2012.

Narayan R. Gokhale Distinguished Research Scholarship Award, University at Albany/SUNY, Albany, NY, 2012.

Award for Outstanding Poster Presentation, WCRP US-CLIVAR Open Science Conference, Denver, CO., 2011.

Advanced Study Program Graduate Student Visitor Fellowship, Mesoscale and Microscale Meteorology Division, NCAR, Boulder, CO, Apr–Jul 2010

## REFEREED PUBLICATIONS

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Keller, J. H., C. M. Grams, M. Riemer, **H. M. Archambault**, L. F. Bosart, J. D. Doyle, J. L. Evans, T. J. Galarneau, K. S. Griffin, P. A. Harr, N. Kitabatake; R. McTaggart-Cowan, F. Pantillon; J. F. Quinting, C. A. Reynolds, E. A. Ritchie, R. D. Torn, and F. Zhang, 2017: The extratropical transition of tropical cyclones. Part II: Interaction with the midlatitude flow, downstream impacts and implications in predictability. *Mon. Wea. Rev.*, submitted.

Evans, C., K. M. Wood, S. D. Aberson, **H. M. Archambault**, S. M. Milrad, L. F. Bosart, K. L. Corbosiero, C. A. Davis, J. R. Dias Pinto, J. Doyle, C. Fogarty, T. J. Galarneau, C. M. Grams, K. S. Griffin, J. Gyakum, R. E. Hart, N. Kitabatake, H. S. Lentink, R. McTaggart-Cowan, W. Perrie, J. F. Quinting, C. A. Reynolds, M. Riemer, E. A. Ritchie, Y. Sun, and F. Zhang, 2017: The extratropical transition of tropical cyclones. Part I: Cyclone evolution and direct impacts. *Mon. Wea. Rev.*, **145**, 4317–4344.

Bosart, L. F., B. J. Moore, J. M. Cordeira, and **H. M. Archambault**, 2016: The interactions of North Pacific tropical, midlatitude, and polar disturbances resulting in linked extreme weather events over North America in October 2007. *Mon. Wea. Rev.*, **145**, 1245–1273.

Grams, C. M., and **H. M. Archambault**, 2016: The key role of diabatic outflow in amplifying the midlatitude flow: A representative case study of weather systems surrounding western North Pacific extratropical transition. *Mon. Wea. Rev.*, **144**, 3847–3869.

**Archambault, H. M.**, D. Keyser, L. F. Bosart, C. A. Davis, and J. M. Cordeira, 2015: A composite perspective of the extratropical flow response to recurving western North Pacific tropical cyclones. *Mon. Wea. Rev.*, **143**, 1122–1141.

Harr, P. A., and **H. M. Archambault**, 2015: Dynamics, predictability, and high-impact weather associated with the extratropical transition of tropical cyclones. *Dynamics and Predictability of Large-Scale, High-Impact Weather and Climate Events*, J. Li, R. Swinbank, H. Volkert, and R. Grotjahn, Eds., Special Publications of the International Union of Geodesy and Geophysics, Cambridge University Press, 153–167.

**Archambault, H. M.**, L. F. Bosart, D. Keyser, and J. M. Cordeira, 2013: A climatological analysis of the extratropical flow response to recurving western North Pacific tropical cyclones. *Mon. Wea. Rev.*, **141**, 2325–2346.

Metz, N. D., **H. M. Archambault**, A. F. Srock, T. J. Galarneau, Jr., and L. F. Bosart, 2013: A comparison of South American and African preferential pathways for extreme cold events. *Mon. Wea. Rev.*, **141**, 2066–2086.

Bosart, L. F., J. M. Cordeira, T. J. Galarneau, Jr., B. J. Moore, and **H. M. Archambault**, 2012: An analysis of multiple predecessor rain events ahead of tropical cyclones Ike and Lowell (10–15 September 2008). *Mon. Wea. Rev.*, **140**, 1081–1107.

Evans, C., **H. M. Archambault**, 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.

**Archambault, H. M.**, D. Keyser, and L. F. Bosart, 2010: Relationships between large-scale regime transitions and major cool-season precipitation events in the northeastern United States. *Mon. Wea. Rev.*, **138**, 3454–3473.

**Archambault, H. M.**, L. F. Bosart, D. Keyser, and A. Ayyer, 2008: Influence of large-scale flow regimes on cool-season precipitation in the northeastern United States. *Mon. Wea. Rev.*, **136**, 2945–2963.

#### **INVITED SEMINARS AND PRESENTATIONS**

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- Nov 2017 “Diabatic influence of recurving tropical cyclones on the midlatitude atmospheric circulation”. Geophysical Fluid Dynamics Laboratory, Princeton, NJ.
- May 2015 “Tropical cyclone–extratropical flow interactions over the western North Pacific: Dynamics and remote impacts”. Final PANDOWAE Symposium, Karlsruhe, Germany.
- May 2013 “The synoptic-scale environment and predictability of a predecessor rain event over northeastern Japan”. Department of Atmospheric and Oceanic Sciences, University of Wisconsin–Madison, Madison, WI.
- Mar 2013 “Dynamics and predictability of a predecessor rain event associated with recurving Tropical Cyclone Roke (2011)”. Institute for Atmospheric and Climate Science, Swiss Federal Institute of Technology (ETH), Zurich, Switzerland.
- Mar 2013 “Distinct heavy precipitation events in advance of recurving western North Pacific tropical cyclones”. Johannes Gutenberg-Universität Mainz, Mainz, Germany.
- Jul 2012 “The extratropical flow response to recurving tropical cyclones over the western North Pacific”. Naval Research Laboratory, Monterey, CA.
- Jun 2012 “The large-scale flow response to strong interactions between recurving western North Pacific tropical cyclones and the extratropical flow”. *The weather–climate intersection: Advances and challenges*, NCAR Advanced Study Program Summer Colloquium, Boulder, CO.
- Apr 2011 “Recurving western North Pacific tropical cyclones as precursors to flow reconfigurations and extreme weather events over North America”. School of Meteorology, University of Oklahoma, Norman, OK.
- Jun 2010 “Large-scale flow reconfigurations over North America associated with recurving western North Pacific tropical cyclones”. NOAA Earth System Research Laboratory/Physical Sciences Division, Boulder, CO.