

Curriculum Vitae

Michael J. Ventrice

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EDUCATION

- **Ph.D. in Atmospheric Science and Meteorology**, University at Albany, Albany, NY, December 2012. Focused in Tropical Meteorology.
- **Bachelor of Science in Atmospheric Science and Meteorology**, University at Albany, Albany, NY, May 2008. Graduated Cum Laude.

PROFESSIONAL PROFILE

- January 2012-Current **Operational Scientist**, The Weather Company, an IBM Business, Andover, MA. Pseudo operational/research role for the Energy Team. Creator and lead-forecaster of the Sub-Seasonal Forecast Product. Other operational responsibilities: Forecaster of U.S. temperatures for all time periods (short-to-medium range and main Sub-Seasonal forecaster for U.S. and Europe); Conduct weather briefings and webinars for clients; Atlantic tropical cyclogenesis consulting with the Weather Channel and the National Hurricane Center. Research responsibilities: Invention of cutting-edge weather products that then are productized and sold to WSI clients as part of the Premium Weather Package (sub-seasonal to seasonal predictors are the focal point). Travel and conduct sale pitches to energy clients across the U.S. and Canada regarding the products that I have created. Conduct oral presentations at National Weather and Energy conferences; Co-author peer-reviewed literature on both academic and energy related topics. Media-related responsibilities: Weather blogger for WSI customers and public spheres including sporadic guest blogging appearances on Weather Underground for Jeff Masters; On-air television appearances that includes the Weather Channel, Al Jazeera America, Fox, and other local media outlets in New England; Often quoted in media outlets that include The Wire, Bloomberg News, Washington Post, Mashable, Boston.com, Bostinno.com, LaRepublic.pe, the Examiner, Yahoo News, and International Business Times.
- February 2013-Current **Student Mentor and Executive Board Member**, AMS Board for Private Sector Meteorologists. Provide career advice with students who are interested in entering the private meteorology sector, focused in the energy and natural gas markets. Newly elected board member for the AMS BPSM group.
- September 2008-December 2012 **Graduate Research Assistant**, University at Albany, Albany, NY. Researched convectively coupled Kelvin waves and the Madden Julian Oscillation in respect to global circulation patterns and influences on tropical cyclogenesis. Organized and led departmental tropical research meetings and tropical map discussions. Programming experience with NCL and some Matlab.
- August 2011-August 2012 **Student Forecaster**, NASA's HS3 Field Campaign. One of six student forecasters focusing on the genesis and intensification of Atlantic tropical cyclones during the 2011 dry run. Led daily weather briefings, aided in constructing flight plans for the participating Global Hawk pilots. Will participate in the 2012 field campaign (Wallops Island, VA) as a student forecaster. Developing a flight plan for a sampling a convectively-coupled Kelvin wave passage.

- July 2010-September 2010 **Intern**, Citadel Corporation, Chicago, IL.
Forecasted intraseasonal tropical cyclone activity during the 2010 hurricane season. Traders would utilize the forecast to trade oil and natural gas. Performed research pertaining to the influence of tropical waves on hurricane activity over the Atlantic.
- September 2007-May 2008 **Hydro-Meteorological Technician**, National Weather Service, Albany, NY.
Coordinated and performed daily weather balloon launches. Constructed data into thermodynamical charts. Corresponded with lead forecasters during severe weather events. Supervised and instructed student interns during weather balloon launches. Issued public products such as the SCD, RTP, RWS, Hail Algorithm, and Freezing Levels. Assembled regional short-term forecasts.
- May 2007-September 2007 **Student Intern**, National Weather Service, Albany, NY.
Trained as a general forecaster programming with AWIPS and fabricated forecast discussions daily. Surveyed regional rivers and streams in the Schoharie River Valley, NY and calculated river flood level stages with the lead hydrologist. Assisted in issuing regional short-term forecasts for the Greater Capital Region of New York.
- April 2006-May 2007 **Resident Assistant**, University at Albany, Albany, NY.
Acted as a first responder as a Resident Assistant on duty. Assisted as a community builder and a role model. Produced educational programs for students. Coordinated events and organized housing development plans for participants during the 2007 Albany Summer Special Olympics.

CONFERENCE PRESENTATIONS

- Ventrice, M. J., and C. D. Thorncroft, 2009: **The Madden Julian Oscillation over tropical Africa and its Influence on Downstream Tropical Cyclogenesis**, Northeast Regional Tropical Storm Conference.
- Ventrice, M. J., 2010: **The Role of Guinea Highlands Convection on Tropical Cyclogenesis**, 29th AMS Conference on Hurricanes and Tropical Meteorology.
- Ventrice, M. J., and C. D. Thorncroft, 2011: **The role of convectively-coupled Kelvin waves on tropical cyclogenesis over the tropical Atlantic**, Northeast Regional Tropical Storm Conference.
- Ventrice, M. J., Brammer, A., and C. D. Thorncroft, 2011: **The role of convectively-coupled Kelvin waves during the 2010 Atlantic Hurricane Season**, Genesis and Rapid Intensification Processes (GRIP) Meeting.
- Ventrice, M. J., and C. D. Thorncroft, 2012: **A convectively coupled atmospheric Kelvin wave's impact on African easterly wave activity**, 30th AMS Conference on Hurricanes and Tropical Meteorology.
- Ventrice, M. J., and C. D. Thorncroft, 2012: **Kelvin waves and tropical cyclones**, NASA's Hurricane and Severe Storm Sentinel (HS3) Meeting.
- Ventrice, M. J., and C. D. Thorncroft, 2012: **Analysis of Kelvin waves during the GRIP field campaign**, GRIP Meeting.
- Ventrice, M. J. 2014: **The Madden Julian Oscillation: Identification**, 2014: AMS Annual Meeting.
- Ventrice, M. J. 2014: **The 2013-2014 Winter in Review**, 2014: Weather Risk Management Association (WRMA) Conference.
- Ventrice, M. J. 2014: **Kelvin Waves and Atlantic Tropical Cyclones**, 2014: Guest Speaker at the National Hurricane Center.
- Ventrice, M.J., 2015: **Conversation with the Professionals**. AMS 2015 Annual Meeting.
- Ventrice, M. J. 2015: **How do we know when the Madden Julian Oscillation is actually impacting mid-latitude circulation?** AMS 2015 Annual Meeting.

- E. S. Blake and M. J. Ventrice, 2015: **Influence of the Madden-Julian Oscillation and Convectively-Coupled Kelvin Waves on tropical cyclone cyclogenesis over the eastern north Pacific and Atlantic Ocean basins.** AMS 2015 Annual Meeting.
- Ventrice, M.J., 2016: **WSI's New Sub-Seasonal Forecasting Process.** AMS 2016 Annual Meeting.
- Ventrice, M.J., 2016: **The Role of Pacific Variability on the Previous Two, and Current Winter.** Invited Speaker at the Weather and Climate Summit, Breckenridge, CO.

CONFERENCE POSTER PRESENTATIONS

- **The Madden Julian Oscillation's influence over tropical Africa and its impact on downstream tropical cyclogenesis,** Tropical Meteorology, American Meteorological Society, May 2010.
- **A relationship between convectively-coupled atmospheric Kelvin waves and Atlantic tropical cyclogenesis,** Genesis and Rapid Intensification Processes (GRIP) Conference, June 2011.

HONORS AND AWARDS

- "Geek of the Week" on The Weather Channel's series, *Weather Geeks*; May 2015
- The Weather Company (Energy) Employee of the Year, 2015.
- University at Albany College of Arts and Science Featured Student, 2010
- Max A. Eaton Prize, 29th Conference on Hurricanes and Tropical Meteorology, Tucson, AZ May 2010
- Residential Life Staff Member of the Year, 2007
- Member of the Omicron Delta Kappa Society

PUBLICATIONS

- Ventrice, M. J., C.D. Thorncroft, and P.E. Roundy, 2011: The Madden Julian Oscillation's influence on African easterly waves and downstream tropical cyclogenesis. *Mon. Wea. Rev.*, **139**, 2704-2722.
- Ventrice, M. J., C. D. Thorncroft, and M. A. Janiga, 2012a: Atlantic tropical cyclogenesis: A three-way interaction between an African easterly wave, diurnally varying convection, and a convectively-coupled atmospheric Kelvin wave. *Mon. Wea. Rev.*, **140**, 1108-1124.
- Ventrice, M. J., C. D. Thorncroft, and C. J. Schreck III, 2012b: Impacts of convectively coupled Kelvin waves on environmental conditions for Atlantic tropical cyclogenesis. *Mon. Wea. Rev.*, **140**, 2198-2214.
- Ventrice, M. J., and C. D. Thorncroft, 2013: A convectively coupled equatorial Kelvin wave's impact on African easterly wave activity. *Mon. Wea. Rev.*, **141**, 1910-1924
- Ventrice, M. J., M. C. Wheeler, H. H. Hendon, C. J. Schreck III, C. D. Thorncroft, and G. N. Kiladis, 2013: A modified multivariate Madden Julian Oscillation index using velocity potential. *Mon. Wea. Rev.*, **141**, 4197-4210.
- Kiladis, G.N., J. Dias, K. H. Straub, M. C. Wheeler, S. N. Tulich, K. Kikuchi, K. M. Weickmann, M. J. Ventrice, 2014: A Comparison of OLR and Circulation-Based Indices for Tacking the MJO, *Mon. Wea. Rev.*, **142**, 1697-1715
- C. J. Schreck III, S. Bennett, J. M. Cordeira, J. Crouch, J. Dissen, A. L. Lang, D. Margolin, A. O'Shay, J. Rennie, and M. J. Ventrice, 2015: Natural Gas Prices and the Extreme Winters of 2011/12 and 2013/14: Causes, Indicators, and Interactions, *Bull. Am. Met. Soc.*, **96**, 1879-1894.