

Curriculum Vitae

**Michael J. Ventrice**

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**EDUCATION**

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- **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**

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- January 2012-Current **Meteorological Scientist**, The Weather Company, IBM Business, Andover, MA.  
*Operational Responsibilities:* Creator and lead-forecaster for the Sub-Seasonal Forecast Product. Forecaster of U.S. temperatures for all time periods (short-to-medium range and seasonal for U.S. and Europe); Effectively communicate complex weather information to energy and natural gas traders on a daily basis.  
*Research Responsibilities:* Invention of cutting-edge weather forecast 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). Conduct oral presentations at National Weather and Energy conferences; Co-author peer-reviewed literature on both academic and energy related topics.  
*Sales Engineer Responsibilities:* Conduct/Assist sales meetings for energy cliental across the U.S. and Canada.  
*Product Management/Software Engineer Responsibilities:* Sub-Seasonal and Seasonal Diagnostic Tools/Graphics.  
*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. Verified Twitter Account (@MJVentrice).
- 2016-Current **Executive Board Member**, AMS Board for Private Sector Meteorologists. 3-year term elected board member for the AMS BPSM group, in charge of social media activities. Creator and Editor of Professional Highlight of the Week. Lead author of the AMS BPSM's first ever published article (BAMS, March 2017).
- February 2013-Current **Student Mentor**, AMS BPSM Mentorship Program. Provide career advice with students who are interested in entering the private meteorology sector, focused in the energy and natural gas markets.
- 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. Presented research at National Conferences.

- 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**

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- Ventrice, M. J., and C. D. Thorncroft, 2009: **The Madden Julian Oscillation over tropical African 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.
- Ventrice, M.J., 2016: **Weeks 3-5, sub-monthly volatility, skillful, automated subseasonal guidance that can be used as a platform for all forms of business**. Invited Speaker at the S2S Extremes Workshop, Washington D.C.
- Shultz J., M., Ventrice M., Fritz A., Johnson N.F., Escarfuller S., Westbrook D., Rechkemmer A., 2017. **Disaster Complexity: South Pacific Origins of the Blizzard of 2016**. Presented at: WADDEM Congress on Disaster and Emergency Medicine. Lessons from the Field/Natural Disasters. Toronto, Canada. 26 April 2017.

## CONFERENCE POSTER PRESENTATIONS

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- **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

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- "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, 29<sup>th</sup> Conference on Hurricanes and Tropical Meteorology, Tucson, AZ May 2010
- Residential Life Staff Member of the Year, 2007
- Inducted into Omicron Delta Kappa Society

## PUBLICATIONS

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- 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.
- Ventrice, M.J. and W. C. Alston, 2017: Introducing and Preparing Students for Private-Sector Roles through Mentorship, *Bull. Am. Met. Soc.*, **Mar 2017**, 609-610.