

Curriculum Vitae

**Michael J. Ventrice**

The Weather Company (IBM), Andover, MA

Email: [Michael.Ventrice@us.ibm.com](mailto:Michael.Ventrice@us.ibm.com) or [Mike.Ventrice@gmail.com](mailto:Mike.Ventrice@gmail.com)

**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.

**PROFESSIONAL PROFILE**

---

- 2017 - Current **Software Engineer**, The Weather Company, an IBM Business, Andover, MA.  
Team member that works on the creation of pipeline products throughout IBM and assists in projects involving the optimization of weather.com forecasts in an agile environment, while still supporting the WSI Trader Platform. Experienced coder in Matlab & NCL, Python, Bash, Slurm.
- 2012 – 2017 **Meteorological Scientist**, Weather Services International, Andover MA  
*Operational Responsibilities:* Creator and lead-forecaster for the Sub-Seasonal Forecast Product. Experienced 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.  
*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).  
*Sales Engineer Responsibilities:* Conduct/Assist sales meetings for energy cliental across North America & Europe markets.
- 2016 - Current **Chair and Executive Board Member, AMS Board for Private Sector Meteorologists.**  
3-year term elected board member for the AMS BPSM group. Elected chair for 2017-2018, in which I manage a team of board members for yearly duties and hosted events.
- 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.

## **CONFERENCE PRESENTATIONS**

---

- 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.
- Ventrice, M.J. 2018: **New ENSO Identification: Applications for Seasonal Prediction**. AMS 2018.
- Ventrice, M.J. 2018: **Student Breakout Session: Private Sector**, Invited Speaker. AMS 2018.
- Ventrice, M.J., 2019: **Student Breakout Session: Private Sector**, Invited Speaker. AMS 2019.
- Ventrice, M.J., 2019: **Europe's, "Beast from the East" (February 2018): Predictability at Subseasonal Leads**. AMS 2019.
- Ventrice, M.J., 2019: **Seasonal Forecasts: A Shift Towards Probabilistic at the Weather Company, an IBM Business**. NCEP Users Workshop, 2019.

## HONORS AND AWARDS

---

- IBM Outstanding Technical Achievement Award, 2019
- Forbes & Boston.com Top Twitter accounts to follow for weather information, 2016
- The Weather Company's Energy Employee of the Year, 2016
- "Geek of the Week" on The Weather Channel's series, *Weather Geeks*; May 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

## 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.
- **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.
- S.J. Camargo, J. Camp, R.L. Elsberry, P.A. Gregory, P.J. Klotzbach, C.J. Schreck, A.H. Sobel, **M.J. Ventrice**, F. Vitart, Z. Wang, M.C. Wheeler, M. Yamaguchi, and R. Zhan, 2019. Tropical cyclone prediction on subseasonal time-scales. *Tropical Cyclone Research and Review*, **8(3)**, 150-165, doi: 10.6057/2019TCRR03.04.