

MICHAEL J. VENTRICE, Ph.D.
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Woburn, MA, 01801

EDUCATION

University at Albany, Albany, NY

Doctor of Philosophy, December 2012

- Tropical Meteorology; Sub-Seasonal Tropical Cyclone Prediction Techniques; Tropical-Extratropical Interactions.

University at Albany, Albany, NY

Bachelor of Science – Atmospheric Science and Meteorology, May 2008

- Minor: Mathematics.
- Omicron Delta Kappa National Leadership Honor Society.

EXPERIENCE

Quantitative Researcher: Weather **DRW Holdings** April 2021 - Current

- Quantifying the weather risk in the natural gas, power, and commodities markets.

Software Engineer **The Weather Company, an IBM Business, Andover, MA** May 2017 – March 2021

- Development of client-facing and internal pipeline products in an agile environment.
- Lead engineer on seasonal and sub-seasonal probabilistic forecast systems.
- Experience with high performance computing systems.
- Data architecture experience.
- Effectively communicate complex science behind our products to clients and internal sales teams in a way that they can easily understand.
- Manage WSI Trader Sub-Seasonal Platform.
- Manage team of sub-seasonal forecasters in U.S. and U.K. offices.

Meteorological Scientist **The Weather Company, an IBM Business, Andover, MA** January 2013-April 2017

- Creator and Manager of the Sub-Seasonal Forecast Platform (U.S. and European markets).
- Bringing the needs of clients to company product managers and engineer teams for product development.
- Conduct/Assist in sales meetings on new products focused in energy trading.
- Short-term and medium-range weather forecaster for power/natural gas traders.
- Company weather blogger and webinar presenter.
- Co-author peer-reviewed literature on both academic and energy related topics.
- On-air television appearances that includes the Weather Channel, Al Jazeera America, Fox, and other media outlets throughout the U.S. and Canada.
- Often quoted in media outlets that include Bloomberg News, Washington Post, Mashable, Boston.com, Bostinno.com, LaRepublic.pe, the Examiner, Yahoo News, and International Business Times.
- Presenter at academic and energy-focused weather conferences.
- Verified Twitter Account (@MJVentrice).

Chair & Executive Board Member **AMS Board for Private Sector Meteorologists**, January 2016 – January 2019

- Elected Board Member for 3-year term.
- Elected Chair in 2018.
- Manage team of board members for year duties and hosted events.
- Lead author of the AMS BPSM's first ever published article (BAMS, March 2017).

Student Mentor **AMS Board for Private Sector Meteorologists**, February 2013 – Current

- Provide career advice with students who are interested in entering the private meteorology sector, focused in data analytics and or energy trading.

Research Assistant **Department of Atmospheric and Environmental Science, University at Albany, Albany, NY**, September 2008 – December 2012

- Researched tropical-extratropical interactions and tropical cyclone development processes under Christopher D. Thorncroft, Ph.D.
- Attended and presented topics of research at over a dozen national and local conferences, including NASA's GRIP and HS3 field campaigns.
- Invited speaker at the National Hurricane Center on Sub-Seasonal Prediction of Atlantic Hurricane activity.

Student Forecaster **NASA's HS3 Field Campaign**, August 2011-October 2012

- Forecasted the genesis and tracks of Atlantic tropical cyclones in real-time during 2012.

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- Led daily weather briefings during the campaign for strategic planning and pilots.
- Constructed flight plans and assisted in real-time flight maneuvering during dropsonde deployment.

Intern Citadel Investment Group, Chicago, IL, July 2010-September 2010

- Forecasted medium-range Atlantic tropical cyclone activity for traders to make a stance on oil futures and natural gas.
 - Researched the impact of convectively-coupled tropical waves on anomalous periods of Atlantic tropical cyclogenesis activity.
- Hydro-Meteorological Technician & Intern National Weather Service, Albany, NY, May 2007 – May 2008***
- Coordinated and performed daily weather balloon launches.
 - Supervised and instructed student interns during weather balloon launches.
 - Trained as a general forecaster programming with AWIPS and fabricated forecast discussions daily.

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 Tracking the MJO. *Mon. Wea. Rev.*, **142**, 1697-1715.
- Schreck, C.J. 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**, 1879-1894-1715.
- 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.

COMPUTER SKILLS

- Computer: Proficient in NCAR Command Language (NCL), Matlab, Shell, Slurm, Microsoft Office, GrADS. Python.

HONORS AND AWARDS

- IBM Outstanding Technical Achievement Award, 2019
- Forbes & Boston.com Top Twitter accounts to follow for weather information, 2016
- The Weather Company (Energy) Employee of the year, 2016
- "Geek of the Week" on The Weather Channel's series, *Weather Geeks*, 2015
- Max A. Eaton Prize – 29th Conference on Hurricanes and Tropical Meteorology, 2010
- University at Albany College of Arts and Science Featured Student, 2010
- Residential Life Staff Member of the Year, 2007