

Jeremiah Otero Piersante

Moody's Insurance Solutions
199 West Gaines Street, Suite 105
Tallahassee, FL 32301
(585) 734-6586
piersanj@moodys.com

EDUCATION

- University at Albany – SUNY** Albany, NY 2020 – 2024
- Ph.D., Department of Atmospheric and Environmental Sciences (DAES)
 - Graduate Assistant; K. Corbosiero and R. Fovell research groups
- Relevant Coursework:*
- Atmospheric Predictability, Numerical Methods and Modeling, Observations and Theory of Tropical Cyclones
- Colorado State University (CSU)** Fort Collins, CO 2018 – 2020
- M.S. in Atmospheric Science
 - Graduate Research Assistant; K. Rasmussen and R. Schumacher research groups
- Relevant Coursework:*
- Mesoscale Meteorology, Radar Meteorology, Objective Analysis, Thermodynamics
- Hobart and William Smith Colleges (HWS)** Geneva, NY 2014 – 2018
- B.S. in Geoscience with concentration in Meteorology
 - B.A. in Spanish and Hispanic Studies
 - Minor: Mathematics
 - Study abroad: Seville, Spain: Fall 2015
 - Summa cum laude
- Relevant Coursework:*
- Synoptic-Dynamic Meteorology, Mesoscale & Severe Weather, Hydrometeorology, Polar Meteorology, Physics
- Brighton High School** Rochester, NY 2010 – 2014
- Class of 2014; high school diploma

WORK EXPERIENCE

Tropical Cyclone Modeler

- Moody's Insurance Solutions (RMS) Tallahassee, FL 2024 – Present
- Manage operations of HWind products for real-time and historic tropical cyclone events
 - Oversee analyst operational tasks and research projects
 - Enhance quality of HWind snapshots, footprints, and forecasts

Hurricane Research Intern

- Aeolus Capital Management Virtual 2021 – 2023
- Built real-time products to display the propensity for North Atlantic hurricane activity and landfall
 - Performed research to improve forecasting of landfalling hurricanes in North America

Graduate Assistant

- University at Albany – SUNY Albany, NY 2020 – 2024
- Ph.D. Dissertation: Diurnal pulsing in tropical cyclones (in progress)
 - Funded by Carson Carr Graduate Diversity Fellowship

Graduate Research Assistant

- Colorado State University Fort Collins, CO 2018 – 2020
- M.S. thesis: Synoptic through Mesoscale Environments of South American Thunderstorms

Atmospheric Researcher, SOARS Protégé

- National Center for Atmospheric Research (NCAR), Boulder, CO 2017 – 2018
- Understanding subtropical MCSs in Argentina using WRF (2018)

- Characteristics of hail events near the Sierras de Córdoba, Argentina (2017)
- Participated in weekly writing, communication, and data science workshops

Resident Assistant

Hobart and William Smith Colleges

Geneva, NY

2016 – 2018

- Provided paraprofessional advising to undergraduate students
- Developed and conducted programs on student issues, such as academic management, diversity and inclusion, etc.

Teaching Assistant

Hobart and William Smith Colleges

Geneva, NY

Spring 2017

- Aided in-class work and hosted weekly office hours for students enrolled in Introduction to Meteorology

Research Intern

Hobart and William Smith Colleges

Geneva, NY

Summer 2016

- Investigated the temporal and spatial distribution of warm-season stationary fronts in the US

COMPUTER SKILLS

- Programming and Software: Python, Bash, R, Fortran, MATLAB, ArcGIS, Statistical Package for the Social Science (SPSS)
- Numerical Modeling: Weather Research and Forecasting Model (WRF), Model for Prediction Across Scales (MPAS) Model Evaluation Tools (MET)
- Operating Systems: Linux/Unix, Macintosh and Windows

COMMUNITY INVOLVEMENT & LEADERSHIP

- AMS Committee on Tropical Meteorology and Tropical Cyclones – Student Representative: 2021 – 2023
- UAlbany DAES Faculty Committee – Student Representative: 2022 – 2024
- UAlbany DAES Inclusion and Diversity Committee – Student Representative: 2020 – 2022
- UAlbany DAES Undergraduate Tutor: 2021 – 2022
- AMS 19th Conference on Mountain Meteorology – Session Chair: 2020
- AMS Student Conference Planning Committee – Session Chair: 2020
- FORTCAST (CSU AMS Chapter) Board Member: 2019 – 2020
- Young Scientist Symposium on Atmospheric Research (YSSAR at CSU) Planning Committee: 2019
- AMS Membership: 2016 – Present
- Hobart Varsity Cross Country: 2014 – 2017; Co-Captain: 2017

STATEMENT ON DIVERSITY, EQUITY & INCLUSION (DEI)

Increased inclusion and diversity (of gender, race, and ability) correlate with increased productivity and overall success of scientific research and applications. We must remain cognizant of how boosting DEI at our workplace will ultimately enhance the quality of the work that we do. As a member of the DAES DEI committee, I have led various department-wide discussions on how to improve DEI across STEM fields. I carry my Puerto Rican heritage with pride and hope that I can help guide others from underrepresented backgrounds towards successful careers in STEM.

SCHOLARSHIPS AND AWARDS

- Carson Carr Graduate Diversity Fellowship (UAlbany): 2020 – Present
- Walter Scott, Jr. Graduate Fellowship (CSU): 2018
- Goldwater Scholar Honorable Mention: 2017
- David Sankey Minority Scholarship in Meteorology: 2017
- Arnold Scholar-Athlete (HWS): 2017
- Druid Award for Leadership (HWS): 2015
- Elizabeth Blackwell Pioneer in Science Scholarship (HWS): 2014 – 2018
- IBERO Hispanic Scholarship: 2014

PUBLICATIONS

Piersante, J. O., K. L. Corbosiero, and R. G. Fovell, 2023: Simulated diurnal pulses in Hurricane Dorian (2019). *Mon. Wea. Rev.*, **151**, 2869–2882, <https://doi.org/10.1175/MWR-D-23-0049.1>.

Piersante, J. O., K. L. Rasmussen, R. S. Schumacher, A. K. Rowe, and L. A. McMurdie, 2021a: A synoptic evolution comparison of the smallest and largest MCSs in Subtropical South America between spring and summer. *Mon. Wea. Rev.*, **149**, 1943–1966, <https://doi.org/10.1175/MWR-D-20-0208.1>.

Piersante, J. O., Russ. S. Schumacher, and K. L. Rasmussen, 2021b: Comparison of biases in warm-season WRF forecasts in North and South America. *Wea. Forecasting*, **36**, <https://doi.org/10.1175/WAF-D-20-0062.1>.

PRESENTATIONS

AMS Conference on Meso. Met. (talk)	Madison, WI	July 2023
• Decomposing Forcing Mechanisms and Impacts of Simulated Diurnal Pulses		
Northeast Tropical Workshop (talk)	Albany, NY	June 2023
• Decomposing Forcing Mechanisms and Impacts of Simulated Diurnal Pulses		
AMS Conference on Trop. Met. (talk)	New Orleans, LA	May 2022
• Simulated Diurnal Pulse Characteristics in Hurricane Dorian (2019)		
AMS Conference on Trop. Met. (talk)	Virtual	May 2021
• Diurnal Pulsing within Recent Atlantic Basin Tropical Cyclones as Seen by HRRR Forecasts and Analyses		
AMS Conference on Mtn. Met. (talk)	Virtual	July 2020
• The Synoptic Evolution of MCSs East of the Andes Mountains in Subtropical South America between Spring and Summer		
AMS Annual Conference (talk)	Boston, MA	January 2020
• Biases in Warm-Season WRF Forecasts: North America vs. Subtropical South America		
AMS Mesoscale Conference (poster)	Savannah, GA	July 2019
• Biases among Mesoscale Model Parameterizations: North America vs. Subtropical South America		
AMS Annual Conference (talk & poster)	Phoenix, AZ	January 2019
• Understanding subtropical MCSs in Argentina using WRF		
North American Hail Workshop (talk)	Boulder, CO	August 2018
• Characteristics of hail events near the Sierras de Córdoba, Argentina		
SOARS Colloquium (talk & poster)	Boulder, CO	August 2018
• Understanding subtropical MCSs in Argentina using WRF		
Northeastern Storm Conference (talk)	Saratoga, NY	March 2018
• Characteristics of hail events near the Sierras de Córdoba, Argentina		
AMS Student Conference (poster)	Austin, TX	January 2018
• Warm-season stationary fronts east of the Rocky Mountains: interannual and intraseasonal distribution and variability		
SOARS Colloquium (talk & poster)	Boulder, CO	August 2017
• Characteristics of hail events near the Sierras de Córdoba, Argentina		
Northeastern Storm Conference (talk)	Saratoga, NY	March 2017
• Warm-season stationary fronts east of the Rocky Mountains: interannual and intraseasonal distribution and variability		
AMS Student Conference (poster)	Seattle, WA	January 2017
• Warm-season stationary fronts east of the Rocky Mountains: interannual and intraseasonal distribution and variability		
HWS Family Weekend (poster)	Geneva, NY	September 2016

- Warm-season stationary fronts east of the Rocky Mountains: interannual and intraseasonal distribution and variability