JAMES HLYWIAK

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University of Miami ⋄ Rosenstiel School of Marine and Atmospheric Sciences
4600 Rickenbacker Causeway ⋄ Miami, FL 33149

EDUCATION

University of Miami, Miami, FL *August 2016 - August 2021*
Ph.D in Meteorology and Physical Oceanography
Thesis Title: Modifications to the Tropical Cyclone Intensity and Wind Structure Resulting from Surface-Boundary Layer Interactions over Coastal and Inland Environments
Advisor: Dr. David S. Nolan, Ph.D.

Pennsylvania State University, State College, PA *August 2012 - May 2016*
B.S. in Meteorology - Atmospheric Science Option *3.79 GPA*
Minors in Mathematics and Marine Sciences

University of Southampton, Southampton, UK *Spring 2015*
Study Abroad Program, Marine Science Focus

PEER-REVIEWED PUBLICATIONS

Hlywiak, J. and D.S. Nolan, 2021. The Response of the Near-Surface Tropical Cyclone Wind Field to Inland Surface Roughness Length and Soil Moisture Content During and After Landfall. Journal of the Atmospheric Sciences https://doi.org/10.1175/JAS-D-20-0211.1

Hlywiak, J. and D.S. Nolan, 2019. The Influence of Oceanic Barrier Layers on Tropical Cyclone Intensity as Determined through Idealized, Coupled Numerical Simulations. J. Phys. Oceanogr., 49, 17231745, https://doi.org/10.1175/JPO-D-18-0267.1

Li, R., Palm, B.B., Ortega, A.M., **Hlywiak, J.**, Hu, W., Peng, Z., Day, D.A., Knote, C., Brune, W.H., De Gouw, J.A. and Jimenez, J.L., 2015. Modeling the radical chemistry in an oxidation flow reactor: Radical formation and recycling, sensitivities, and the OH exposure estimation equation. The Journal of Physical Chemistry A, 119(19), pp.4418-4432.

CONFERENCES

2021: 34th AMS Conference on Hurricanes and Tropical Meteorology - *Virtual Format*
Oral Presentation: Sensitivities of the decay of the near-surface tropical cyclone wind field to inland surface roughness and soil moisture

2019: European Geophysical Union, General Assembly - *Vienna, Austria*
Oral Presentation: The Influence of Oceanic Barrier Layers on Tropical Cyclone Intensity as Determined Through Idealized, Coupled Numerical Simulations

2018: 33rd AMS Conference on Hurricanes and Tropical Meteorology - *Ponte Vedra, FL*
Poster Presentation: Coupled 3D Numerical Simulations of the Effects of Ocean Salinity on Tropical Cyclone Intensity

COMPUTING SKILLS

Programming Languages	MATLAB, FORTRAN, Python, Julia (Working knowledge)
Numerical Modelling	Performance of and Module Development within the Weather, Research, and Forecasting Model (WRF)

TEACHING EXPERIENCES

Teaching Assistant, ATM 243: Weather Forecasting, University of Miami *Spring 2020*

Teaching Assistant, ATM 244: Tropical Meteorology and Forecasting, University of Miami *Fall 2018*

ARTICLE REVIEWS FOR

Geophysical Research Letters

Journal of the Atmospheric Sciences

Ocean Science

WORKSHOPS ATTENDED

Weather, Research, and Forecasting Model Tutorial, Boulder, CO. *Jan 2018*

AWARDS

University of Miami Fellowship *2016 - present*

Chi Epsilon Pi Meteorological Honors Society, Penn State Chapter *2015 - present*

Robert Case Memorial Scholarship *2015/16 Academic Year*

John G. Miller Scholarship *2013/14 Academic Year*

Penn State Freshman President's Award *Spring 2013*