

# JAMES HLYWIAK

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

## EDUCATION

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**University of Miami, Miami, FL**

*August 2016 - Present*

Ph.D. Candidate, Meteorology and Physical Oceanography

Projected Thesis Title: Boundary Layer-Surface Interactions within Tropical Cyclones near Land

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

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**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

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**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

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**Programming Languages**  
**Numerical Modelling**

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

## TEACHING EXPERIENCES

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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

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*Geophysical Research Letters*

*Journal of the Atmospheric Sciences*

## **WORKSHOPS ATTENDED**

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Weather, Research, and Forecasting Model Tutorial, Boulder, CO.

*Jan 2018*

## **AWARDS**

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University of Miami Fellowship

*2016 - 2018*

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*