# JAMES HLYWIAK

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University of Miami ⋄ Rosenstiel School of Marine and Atmospheric Sciences
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## EDUCATION

**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

**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

**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** | 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*

*Ocean Science*

## WORKSHOPS ATTENDED

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

## AWARDS

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*