

# ELEANOR MIDDLEMAS

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Sciences (CIRES)  
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## EDUCATION

Ph.D. in Meteorology and Physical Oceanography (2018)  
Rosenstiel School of Marine and Atmospheric Science (RSMAS), University of Miami

Bachelor of Science in Applied Mathematics (*high honor*, 2013)  
Georgia Institute of Technology

## RESEARCH APPOINTMENTS

- January 2019 - *present* · **Postdoctoral Fellow**, CIRES/University of Colorado, Boulder
  - Dr. Jennifer Kay's lab group
  - *Project*: The influence of cloud radiative feedbacks on polar climate change and variability
- August 2013 – December 2018 · **Ph.D. Student**, RSMAS at University of Miami
  - *Advisor*: Dr. Amy Clement
  - *Project*: The roles of cloud radiative feedbacks and ocean dynamics in climate variability
- May – October 2016 · **Research Assistant**, National Center for Atmospheric Research (NCAR)
  - *Advisor*: Dr. Brian Medeiros
  - *Project*: The role of shallow convective mixing on climate stability
- 2012 – 2013 · **Undergraduate Research Assistant**, Georgia Tech
  - *Advisor*: Dr. Kim Cobb
  - *Project*: Effects of an LGM sea level on climate as prescribed by SPEEDY AGCM
- 2011 · **Undergraduate Research Assistant**, Georgia Tech
  - *Advisor*: Dr. Jeanette Yen
  - *Project*: Hop-and-sink swimming kinematics of the water flea, *Daphnia pulicaria*

## HONORS & AWARDS

- 2019 - 2021 · CIRES Visiting Postdoctoral Fellowship
- 2018 · Outstanding Early Career Scientist Presentation, CFMIP Meeting
- 2018 · Travel Grant from ThinkSwiss at the Office of Science, Technology & Higher Education (OSTHE) at the Swiss Embassy in Washington D.C.
- 2017 · Rosenstiel School of Marine & Atmospheric Science Graduate Career Development Fund Award
- 2016 · CLIVAR Early Career Scientist Symposium Travel Award to conference in Qingdao, China
- 2013 – 2016 · National Science Foundation (NSF) Graduate Research Fellowship
- 2013 · Best Oral Presentation in College of Sciences, GT UROP Spring Symposium

- 2012 – 2013 · MCTP Scholarship from Georgia Tech department of Mathematics
- 2012 · Georgia Tech Presidential Undergraduate Research travel award to attend 2012 American Geophysical Union (AGU) conference in San Francisco, CA
- 2012 · Presidential Undergraduate Research Award (PURA) for summer research internship

## PUBLICATIONS

**Middlemas, E.**, A. Clement, and B. Medeiros, *in prep*: Contributions of atmospheric and oceanic feedbacks to subtropical northeastern sea surface temperature variability.

**Middlemas, E.**, A. Clement, B. Medeiros, and B. Kirtman, *in revision*, *J. Climate*: Cloud radiative feedbacks and El Nino Southern Oscillation.

**Middlemas, E.**, and A. Clement, 2016: Spatial patterns and frequency of unforced decadal-scale changes in global mean surface temperature in climate models. *J. Climate.*, 29 (17), 6245-6257, doi:10.1175/JCLI-D-15-0609.1

## PRESENTATIONS

*Cloud Radiative Feedbacks and El Nino Southern Oscillation in CESM*. Oral presentation: Cloud Feedback Model Intercomparison Project (CFMIP) Meeting on Clouds, Precipitation, Circulation, and Climate Sensitivity, Boulder, CO: October 16-19, 2018.

*Contributions of atmospheric and oceanic feedbacks to subtropical northeastern Pacific sea surface temperature variability*, Oeschger Centre for Climate Change Research Summer School 2018: Earth system variability through time, Grindelwald, Switzerland, August 26-31, 2018.

*Cloud Radiative Feedbacks and El Nino Southern Oscillation in CESM*. Oral presentation: American Geophysical Union Conference, New Orleans, LA: December 11-15, 2017.

*Using cloud-locking to assess the contribution of cloud radiative feedback to internal variability of sea surface temperatures: results in CAM5-slab (invited)*. Oral presentation: informal seminar at University of Colorado, Boulder, CO: September 6, 2017.

*Investigating cloud radiative effect's influence on global temperature variability with cloud-locking in CAM5*. Poster presentation: Gordon Research Conference, Bates College, Lewiston, ME: July 15-21, 2017.

*Implementing cloud-locking in CAM5-slab to explore impact on climate variability*. Poster presentation: 22<sup>nd</sup> Annual CESM Workshop, Boulder, CO: June 19-22, 2017.

*Unforced decadal-scale changes in temperature in climate models*. Poster presentation: Model Hierarchies Workshop, Princeton University, NJ: November 2-4, 2016.

*Unforced decadal-scale changes in temperature in climate models*. Poster presentation: CLIVAR Open Science Conference, Qingdao, China: September 18-25, 2016.

*Unforced decadal-scale changes in temperature in climate models*. Poster presentation: 21<sup>st</sup> Annual CESM Workshop, Breckenridge, CO: June 20-23, 2016.

*Unforced decadal-scale global mean warming and cooling in climate models*. Oral

presentation: 9<sup>th</sup> Graduate Climate Conference, Woods Hole Oceanographic Institution at the Massachusetts Institute of Technology, Woods Hole, MA: November 6-8, 2015.

*Unforced decadal-scale global mean warming and cooling in a hierarchy of models.* Oral presentation: 4<sup>th</sup> CLIVAR Workshop on the Evaluation of ENSO in Climate Models: ENSO in a Changing Climate, Paris, France: July 8-10, 2015.

*Unforced decadal-scale global mean warming and cooling in a hierarchy of models.* Oral presentation: AMS Annual Meeting, Phoenix, AZ: January 4-8, 2015.

*The effect of lowered sea level on climate in the Indo-Pacific region as simulated by the SPEEDY AGCM.* Oral presentation: Georgia Tech Undergraduate Research Opportunities Program (UROP) Spring Symposium, Atlanta, GA: April 13, 2013.

*The effect of lowered sea level on climate in the Indo-Pacific region as simulated by the SPEEDY AGCM.* Poster presentation: AGU Fall Meeting, San Francisco, CA: December 3-7, 2012.

## **PROFESSIONAL ACTIVITIES**

- 2017 – present · Reviewer for Journal of Climate
- 2018 – present · Regional Representation for North America, Young Earth System Scientists (YESS)
- 2014 – present · Member, American Meteorological Society
- 2013 – present · Member, American Geophysical Union
- 2014 – 2015 · Secretary, RSMAS Marine Science Graduate Student Organization

## **EXPERIMENTAL & FIELD RESEARCH EXPERIENCE**

- 2016 – present · Running NCAR's Community Earth System Model (CESM) with a variety of different configurations, namelist changes, and radiation code changes
- 2016 · Coupled Model Intercomparison Project analysis workshop in Boulder, CO
- 2014 · Attended CESM tutorial at National Center for Atmospheric Research in Boulder, Colorado
- 2012 · Ran ensembles of SPEEDY model
- Assisted in collecting cave dripwater in Gunung National Park, Sarawak, Malaysian Borneo

## **TEACHING & TUTORING EXPERIENCE**

- 2017 –2018 · Research mentor for MAST academy high school student for a project about the North Atlantic Oscillation's impact on European climate
- 2016 - 2017 · Led various MATLAB tutorials for multiple graduate-level courses and seminar series
- 2017 · Technical Advisor for "The Carver Lifesavers", a middle school team for the Internet Science and Technology Fair
- 2015 – 2017 · Personal tutor for various high school and college students in Miami
- Spring 2016 · Teaching Assistant for ATM303: Atmospheric Observations, taught by Dr. Bruce Albrecht
- 2014 – 2015 · Taught science class for two days about climate science as part of the program "Scientists in the Classroom" with middle school teacher Mrs.

- Bertha Vasquez at George Washington Carver Middle School in Coconut Grove, FL.
- Spring 2015 · Teaching Assistant for MSC/ATM118: Current Weather Topics, taught by Dr. Shuyi Chen
  - 2011 – 2013 · Peer Tutor for Georgia Tech Athletic Association in Biology I & II, Chemistry I & II, Calculus I-III, and Linear Algebra

### **SYNERGISTIC ACTIVITIES**

- 2016 – 2017 · Co-organizer of Career Development Workshop titled “Developing the Right Mindset for Success in a Young Academic Career”
- 2014 – 2017 · Bartender at Wetlab (on RSMAS Campus)
  - Served as Cane Contact for incoming RSMAS Graduate Students
- 2016 · Served on climate expert panel for Beneath the Waves screening during Ocean Awareness Week at University of Miami
- 2015 – 2016 · Co-organized the annual RSMAS auction with 3 other Ph.D. students, raising ~\$20k for the Student Travel Fund
- 2013 · Gave a short talk climate on science to elementary through high school students at MCA Academy, Coconut Grove, FL
- 2013 · Gave a short talk on climate modeling to students in an Oceanography course at Arabia Mountain High School, Lithonia, GA
- 2010 – 2013 · Held various leadership positions of Alpha Phi Omega, co-ed community service fraternity, performing a variety of services for the community