# Elinor R. Martin

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School of Meteorology University of Oklahoma Norman, OK, 73072

## **EDUCATION**

**Ph.D** Atmospheric Sciences

2011

Texas A&M University

Advisor: Dr. Courtney Schumacher

• Dissertation: Caribbean precipitation in observations and IPCC AR4 models

M.S. Atmospheric Science

2007

Colorado State University Advisor: Dr. Richard Johnson

> • Thesis: An observational and modeling study of atmospheric undular bores during the 2004 North American Monsoon Experiment

**B.Sc** (Hons) First Class: Meteorology with a year in Oklahoma

2005

University of Reading (University of Oklahoma)

#### PROFESSIONAL EXPERIENCE

Assistant Professor

2014 - Present

School of Meteorology, University of Oklahoma

Postdoctoral Research Associate

2011 - 2014

Department of Atmospheric and Environmental Sciences, University at Albany (SUNY)

Advisor: Dr. Chris Thorncroft

• Decadal variability and predictability of the West African Monsoon and downstream Atlantic hurricane activity

Graduate Research and Teaching Assistant

2008-2011

Department of Atmospheric Sciences, Texas A&M University

Graduate Research Assistant

2005-2007

Department of Atmospheric Science, Colorado State University

Undergraduate Research

2003-2004

Department of Meteorology, University of Reading (UK)

Advisor: Dr. Alan O'Neil

• Dissertation: Tropical winds and trace gases in the stratosphere

## PEER REVIEWED PUBLICATIONS

- **Martin, E. R.,** and C. Thorncroft 2014: Sahel rainfall in multimodel CMIP5 decadal hindcasts, Geophys. Res. Lett., 41, 2169–2175, doi:10.1002/2014GL059338.
- **Martin, E. R.**, C. Thorncroft and B.B.B. Booth 2013: The Multidecadal Atlantic SST Sahel Rainfall Teleconnection in CMIP5 Simulations. J. Climate, doi:10.1175/JCLI-D-13-00242.1, In Press.
- **Martin, E. R.**, and C. Thorncroft 2013: The impact of the AMO on the West African Monsoon Annual Cycle. Q. J. R. Meteorol. Soc., doi:10.1002/qj.2107, In Press.
- **Martin, E. R.**, and C. Schumacher 2012: The relationship between warm pool precipitation, sea surface temperature, and large-scale vertical motion in IPCC AR4 Models. J. Atmos. Sci., 69, 185-194.
- **Martin, E. R.**, and C. Schumacher, 2011: The Caribbean low-level jet and its relationship with precipitation in IPCC AR4 models. J. Climate, 24, 5935-5950.
- **Martin, E. R.**, and C. Schumacher, 2011: Modulation of Caribbean precipitation by the Madden-Julian Oscillation. J. Climate, 24, 813-824.
- **Martin, E. R.**, and R. H. Johnson, 2008: An observational and modeling study of an atmospheric internal bore during NAME 2004. Mon. Wea. Rev., 136, 4150–4167.

## **SELECTED CONFERENCE PRESENTATIONS**

- Martin, E.R., and C. Thorncroft, 2013: Sahel Rainfall in Multimodel CMIP5 Decadal Hindcasts. AGU Fall Meeting, San Francisco, CA, 9-13 December 2009. GC11D-1021.
- Thorncroft, C., **E.R. Martin** and B.B.B. Booth, 2013: The Multidecadal Atlantic SST Sahel Rainfall Teleconnection in CMIP5 Simulations. AGU Fall Meeting, San Francisco, CA, 9-13 December 2009. A13M-03.
- Booth, B., N. Dunstone, P. Halloran, T. Andrews, N. Bellouin, M. Ringer and **E.Martin**, 2012: Aerosol drivers of Atlantic SST variability. 3rd International Conference on Earth System Modelling, Hamburg, Germany, 17 21 September 2012.
- **Martin, E.R.,** and C. D. Thorncroft, 2012: Multi-Decadal Variability of West African Rainfall in Observations and CMIP5 Simulations. International workshop on interdecadal variability of the global monsoons, Nanjing, China, 10-12 September 2012.
- **Martin, E.R.,** and C. D. Thorncroft, 2012: Multi-Decadal Variability of West African Rainfall in Observations and CMIP5 Simulations. 4<sup>th</sup> International AMMA Conference,

Toulouse, France, 2-6 July 2012. Pr6B.2

**Martin, E.R.,** and C. D. Thorncroft, 2012: Multi-Decadal Variability of West African Rainfall in CMIP5 Simulations. AMS Hurricanes and Tropical Meteorology Conference, Ponte Vedra, FL, 16-20 April 2012. 10D.7

**Martin, E.R.,** and C. Schumacher, 2011: The relationship between Caribbean warm pool precipitation, sea surface temperature, and large-scale vertical motion in IPCC AR4 Models. World Climate Research Program Open Science Conference, Denver, CO, 24-28 October 2011.

**Martin, E.R.,** and C. Schumacher, 2010: Caribbean precipitation variability in observations and IPCC AR4 models. 35th NOAA Climate Diagnostics and Prediction Workshop, Raleigh, NC, 4-7 October 2010.

**Martin, E.R.,** 2010: Caribbean precipitation and the Madden-Julian Oscillation. 29th AMS Hurricanes and Tropical Meteorology Conference, Tucson, AZ, 10-14 May 2010. 8D.5

**Martin, E.R.,** and C. Schumacher, 2009: Caribbean precipitation variability and the Madden- Julian Oscillation. AGU Fall Meeting, San Francisco, CA, 14-18 December 2009.

**Martin, E.R.,** and C. Schumacher, 2009: Caribbean precipitation variability in observations and models. 3rd Graduate Climate Conference, University of Washington, 17-19 April 2009.

**Martin, E.R.,** and R.H. Johnson, 2007: An observational and modeling study of an atmospheric internal bore during NAME 2004. AGU Joint Assembly, Acapulco, Mexico, 22-25 May 2007.

#### **INVITED PRESENTATIONS**

**Martin, E.R.**, 2014: "Understanding Decadal Rainfall Variability in West Africa using CMIP5 Models". Department of Atmospheric Sciences and Atmospheric Science Research Center Joint Colloquium, University at Albany, 24 March 2014

**Martin, E.R.**, 2014: "Understanding Decadal Rainfall Variability in West Africa using CMIP5 Models". Department of Geography and Earth Sciences, University of North Carolina at Charlotte, 20 February 2014

**Martin, E.R.**, 2014: "Understanding Decadal Rainfall Variability in West Africa using CMIP5 Models". Department of Environmental Sciences, University of Virginia, 12 February 2014

**Martin, E.R.**, 2014: "Understanding Decadal Rainfall Variability in West Africa using CMIP5 Models". School of Meteorology, University of Oklahoma, 30 January 2014

**Martin, E.R.** and O. Elison Timm, 2013: "Impacts of Climate Change: Overview of the National Climate Assessment". Sustainability week, SUNY Albany, 11 November 2013.

**Martin**, **E.R**., 2013: "West African Decadal Rainfall Variability: Links with SSTs in CMIP5 Models". Department of Meteorology, Penn State University, 21 January 2013.

**Martin, E.R.**, 2012: Multi-Decadal Variability of West African Rainfall in Observations and CMIP5 Simulations. Department of Geology and Geophysics, Yale University, 5 April 2012.

**Martin, E.R.,** 2011: Precipitation and the Caribbean low-level jet in IPCC AR4 models. Department of Atmospheric and Environmental Sciences, University at Albany, State University of New York, 18 February 2011.

# **FUNDING AWARDED**

Co-PI: "Caribbean Rainfall Variability and Climate Change". The UWI-SUNY Seed Fund for the Development of Joint Research or Instructional Proposals. \$5000 June 2013

UCAR travel funding for attending the International workshop on interdecadal variability of the global monsoons, Nanjing, China, 10-12 September 2012

### **TEACHING EXPERIENCE**

Guest Lecturer: Climate Variability and Change University at Albany: Fall 2012, Fall 2013

*Gave lectures and wrote exam questions on decadal climate variability* 

Guest Lecturer: Introduction to Atmospheric Sciences

Texas A&M University: Spring 2011

Lectures on radiation and atmospheric stability

Graduate Mentor: Student Operated ADRAD Project

Texas A&M University: Spring 2010

Supervised undergraduate students in forecasting, running a radar and launching radiosondes

Instructor: Introduction to Atmospheric Sciences Lab

Texas A&M University: Fall 2009

Lectured and ran 3 sections of labs, held office hours, grading labs and exams

Undergraduate Research Mentor: Advancing Hispanic Women in the Geosciences Texas A&M University: Summer 2008

Supervised student in a summer research project on Caribbean rainfall extremes

## **HONORS AND AWARDS**

Unocal Graduate Fellowship in Geosciences, 2010-2011 D Port Smythe Scholarship, 2010-2011 International Education Fee Scholarship, 2010 Regents Fellowship, 2008 Collegiate Recruitmental Supplemental Fellowship, 2005 Academic Achievement Award, 2005

# PROFESSIONAL DEVELOPMENT

- \* Minimal Marking for Maximum Impact & Teaching Unfamiliar Content. Institute for Teaching, Learning and Academic Leadership, SUNY Albany. Spring 2014
- \* Fostering Critical Inquiry in the Classroom. Institute for Teaching, Learning and Academic Leadership, SUNY Albany. Fall 2013
- \* College Teaching Symposium, SUNY Albany. August 2013
- \* Preparing for an Academic Career in the Geosciences: A Workshop for Graduate Students and Post-docs. On The Cutting Edge, National Association of Geoscience Teachers. Boulder, CO. July 7-10 2013
- \* What I Wish I'd Known... Advice for Future Faculty, You "Taught" It: How Do You Know If They Got It? & Teaching to the Whole Brain. Institute for Teaching, Learning and Academic Leadership, SUNY Albany. Spring 2013
- \* Safe Space Training I and II: Interactive cultural competency training on LGBTQ identities. SUNY Albany. 2012 & 2013
- \* NSF Open Day. SUNY Albany. 2011
- \* Mentoring Undergraduates in Research: A Workshop for Graduate Students. Texas A&M University. 2010
- \* The Craft of Grant Writing. Texas A&M University. 2008

## PROFESSIONAL AND UNIVERSITY SERVICE

Reviewer: National Science Foundation, Journal Geophysical Research – Atmospheres,

Geophysical Research Letters, Atmospheric and Oceanic Technology, Journal of Climate, Geophysical Research Letters, EOS, Environmental Research

Letters, Meteorology and Atmospheric Physics

Organizer: Departmental climate group (2012 – present), tropical group (2011-2012) Session Co-Chair: "CMIP5-I: Decadal Variability" and "CMIP5-II: Climate Change" at

4<sup>th</sup> International AMMA Conference, Toulouse, France, 4 July 2012

Member, Aggie Honor Council, 2009 – 2011

Dept. Representative, Graduate Student Council, 2008 – 2010

Secretary, Atmospheric Graduate Student Council, 2009 – 2010

Assistant Director, Student Research Week, 2008 - 2009

Graduate Student Representative, Department of Atmospheric Science, 2006-2007

## PROFESSIONAL SOCIETY MEMBERSHIPS

American Meteorological Society
American Geophysical Union

Royal Meteorological Society

National Association of Geoscience Teachers

2006 - Present
2010 - Present
2013 - Present