

Curriculum Vitae

Robert West

Postdoctoral Associate
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Education

Florida State University, Tallahassee, FL, USA

Ph.D., Meteorology, 2020

Dissertation title: *An evaluation of non-Gaussian climate statistics*

Area of Study: Global non-Gaussian climate statistics within a stochastic framework

Adviser: Philip Sura

M.S., Meteorology, 2012

Thesis Title: *Power law behavior of atmospheric variability*

Area of Study: Distributions of extreme events in non-Gaussian climate data

Adviser: Philip Sura

B.S., Meteorology and Applied Mathematics, 2009

Research

Positions

Northern Gulf Institute, Mississippi State University and NOAA/AOML/PhOD, Miami, FL, USA

July 2020 - present: Postdoctoral Associate

Project: An enhanced seasonal landfalling hurricane outlook for the US East Coast and Gulf of Mexico

PIs: Andrew Mercer (MSU/NGI) and Hosmay Lopez (NOAA/AOML)

Florida State University, Dept. of Earth, Ocean and Atmospheric Science, Tallahassee, FL, USA

August 2009 - December 2013: Graduate Research Assistant (with Philip Sura)

May 2008 - August 2009: Undergraduate Researcher (with Ming Cai)

Interests

Computational modeling of climate variability and change
Changes in tropical cyclone activity
Statistical analysis and sub-seasonal to seasonal predictability of extreme events
Analysis and visualization of large geophysical datasets

Publications

Peer-Reviewed Journals

Hosmay Lopez, Robert West, Shenfu Dong, Gustavo Goni, Ben Kirtman, Sang-Ki Lee and Robert Atlas, “Early emergence of anthropogenically forced heat waves in the western United States and Great Lakes”, *Nature Climate Change*, **8**, 414–420 (2018), <https://doi.org/10.1038/s41558-018-0116-y>.

Submitted Papers

Robert West, Hosmay Lopez, Sang-Ki Lee, Andrew E. Mercer, Dongmin Kim, Gregory R. Foltz and Karthik Balaguru, “Seasonality of interbasin SST contributions to Atlantic tropical cyclone activity”, in review at *Geophysical Research Letters*. Preprint available at <https://doi.org/10.1002/essoar.10508478.1>.

Karthik Balaguru, Gregory R. Foltz, L. Ruby Leung, Wenwei Xu, Dongmin Kim, Hosmay Lopez and Robert West, “Increasing intensification of Atlantic hurricanes near the US coast”, in review at *Science*.

Manuscripts in Preparation

Robert West, Hosmay Lopez, Andrew E. Mercer and Sang-Ki Lee, “An enhanced seasonal land-falling hurricane outlook for the US East Coast and Gulf of Mexico”, in preparation.

Hosmay Lopez, Sang-Ki Lee, Dongmin Kim, Robert West and Ben Kirtman, “Modulation of North American heat waves by the tropical Atlantic Warm Pool”, in preparation.

Professional Activities

Conferences

Robert West, Hosmay Lopez, Sang-Ki Lee, Andrew E. Mercer, Dongmin Kim, Gregory R. Foltz and Karthik Balaguru, “Seasonality of interbasin SST contributions to Atlantic tropical cyclone activity”, *2021 AGU Fall Meeting*, 13-17 December 2021, Virtual, Talk.

Robert West, Hosmay Lopez, Sang-Ki Lee and Andrew E. Mercer, “Seasonality of interbasin SST contributions to Atlantic tropical cyclone activity”, *PIRATA-24/TAV*, 10-14 May 2021, Virtual, Poster.

Robert West and Philip Sura, “Power law behavior of atmospheric variability”, *26th Conference on Climate Variability and Change (AMS 2014)*, 2-6 February 2014, Atlanta, GA, USA, Talk.

Robert West and Philip Sura, “Power law behavior of atmospheric variability”, *IMA Annual Program Year Workshop: Stochastic Modeling of the Oceans and Atmosphere*, 11-15 March 2013, University of Minnesota, Twin Cities Campus, Minneapolis, MN, USA, Poster.

Robert West and Philip Sura, “Power law behavior of atmospheric variability”, *11th Annual AMS Student Conference and Career Fair, AMS 2012*, 22-26 January 2012, New Orleans, LA, USA, Poster.

Workshops

Participant, *AOML-NOAA/NWS/OPC Virtual Workshop*, 16 September 2021.

Participant, *NCCOS-AOML Joint Virtual Symposium*, 23-25 February 2021.

Participant, *AOML-NESDIS/STAR Virtual Workshop*, 2 February 2021.

Participant, *AOML-GFDL Science Connections Workshop*, 12-13 August 2020.

Seminars and Other Talks

“Seasonality of interbasin SST contributions to Atlantic tropical cyclone activity”, *AOML/PhOD Seminar*, 21 September 2021, Virtual.

“An evaluation of non-Gaussian climate statistics”, *AOML/PhOD Seminar*, 15 April 2020, Virtual.

“Non-Gaussian climate variability within a stochastic framework”, *FSU Meteorology Seminar Series*, 21 November 2019, Florida State University, Tallahassee, FL, USA.

“Power law behavior of atmospheric variability”, *2013 EOAS Graduate Symposium*, 15 November 2013, Florida State University, Tallahassee, FL, USA.

Teaching Experience

Florida State University, Dept. of Earth, Ocean and Atmospheric Science, Tallahassee, FL, USA

Instructor, <i>Introduction to the Atmosphere</i>	Spring 2015
Instructor, <i>Introduction to the Atmosphere</i>	Fall 2014
Instructor, <i>Introductory Meteorology Laboratory</i>	Summer 2014
Teaching Assistant, <i>Meteorological Computations</i> (with Philip Sura)	Spring 2014
Teaching Assistant, <i>Atmospheric Physics II</i> (with Mark Bourassa)	Spring 2014

Teaching Assistant, <i>Atmospheric Physics I</i> (with Robert Ellingson)	Fall 2013
Teaching Assistant, <i>Atmospheric Dynamics II</i> (with Ming Cai)	Spring 2013
Teaching Assistant, <i>Meteorological Computations</i> (with Philip Sura)	Spring 2010
Teaching Assistant, <i>Physical Climatology</i> (with Ming Cai)	Fall 2009

Service

Organizer, PhOD Science Discussion Seminar Series, August 2021-present.
 Co-chair, “Extreme weather and climate events” session, *PIRATA-24/TAV*, 10-14 May 2021.
 FSU Meteorology Graduate Student Representative, 2011-2012.
 Vice-President of Chi Epsilon Pi (Meteorology Honor Society), FSU Chapter, 2011-2012.

Professional Memberships

Member, American Meteorological Society (AMS).
 Member, American Geophysical Union (AGU).

Awards and Honors

Member of Pi Mu Epsilon (Mathematics Honor Society), inducted 2009.
 Member of Chi Epsilon Pi (Meteorology Honor Society), inducted 2008.
 All Atlantic Coast Conference (ACC) Academic Honor Roll, Virginia Tech, 2005-2006.

Industry Experience

Risk Management Solutions (RMS), Tallahassee, FL, USA

October 2017 - January 2019: Modeler

Developed tropical cyclone wind hazard products and data visualizations for RMS clients.

April 2017 - October 2017: Senior Analyst

Developed a Python library to automate the retrieval, standardization and storage of remotely sensed, *in situ* and model data for tropical cyclone objective analyses.

October 2015 - April 2017: Meteorological Analyst

Performed real-time objective wind analyses for Atlantic and Eastern Pacific hurricanes.

HWind Scientific, Tallahassee, FL, USA

March 2015 - October 2015: Atmospheric Scientist

Developed software to retrieve, format and assimilate model data into analysis products.

Technical Skills

Operating Systems: Linux, Unix, macOS, Windows

Programming Languages: Python, Fortran, Julia, \LaTeX

Software and Libraries: NumPy, SciPy, pandas, xarray, Jupyter, NetCDF, LAPACK/BLAS, Git

Software Development

SGSDist.jl

<https://github.com/brwst/SGSDist.jl>

A Julia implementation of the stochastically generated skewed (SGS) distribution, including parameter estimation and Markov process generation.