

Curriculum Vitae
Emily M. Riley Dellaripa
Department of Atmospheric Science
Colorado State University
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EDUCATION

Ph.D., Meteorology and Physical Oceanography August 2013
University of Miami, Miami, FL
Advisor: Brian E. Mapes
Dissertation: *Examining the form-function relationship of convective organization and the larger scale with observations and models*

M.S., Meteorology and Physical Oceanography May 2009
University of Miami, Miami, FL
Advisor: Brian E. Mapes
Thesis: *A Global Survey of Clouds by CloudSat*

B.S., Meteorology, *cum laude* May 2006
Texas A&M University, College Station, TX

PROFESSIONAL EXPERIENCE

Research Scientist I November 2016 - Present
Department of Atmospheric Science, Colorado State University

Postdoctoral Fellow November 2013 – October 2016
Department of Atmospheric Science, Colorado State University

Postdoctoral Associate August 2013 – October 2013
Division of Meteorology and Physical Oceanography, University of Miami

Graduate Research Assistant August 2006 – July 2013
Division of Meteorology and Physical Oceanography, University of Miami

Volunteer Forecast Intern Summer 2005
National Weather Service (Houston/Galveston office), League City, TX

Forecast Intern Winter 2004 – 2005
Weather Research Center, Houston, TX

PUBLICATIONS

Riley Dellaripa, E. M., E. D. Maloney, and S. C. van den Heever, 2018: Wind-Flux Feedbacks and Convective Organization During the November 2011 MJO Event in a High-Resolution Model. *J. Atmos. Sci.*, **75**, 57-84, doi:10.1175/JAS-D-16-0346.1.

Dole, R. D. and Coauthors, 2017: Advancing Science and Services during the 2015-16 El Niño: The NOAA El Niño Rapid Response Field Campaign. *Bull. Amer. Meteor. Soc.*, EOR, doi: 10.1175/BAMS-D-16-0219.1.

Riley Dellaripa, E. M., and E. D. Maloney, 2015: Analysis of MJO Wind-Flux Feedbacks in the Indian Ocean Using RAMA Observations. *J. Meteor. Soc. Japan*, **93A**, 1-20, doi:10.2151/jmsj.2015-021.

Riley, E. M., B. E. Mapes, and S. N. Tulich, 2011: Clouds Associated with the Madden-Julian Oscillation: A New Perspective from *CloudSat*. *J. Atmos. Sci.*, **68**, 3032-3051.

Riley, E. M., and B. E. Mapes, 2009: Unexpected peak near -15°C in *CloudSat* echo top climatology. *Geophys. Res. Lett.*, **36**, L09819, doi: 10.1029/2009GL037558.

DISSERTATION AND THESIS

Riley, E. M., 2013: Examining the form-function relationship of convective organization and the larger scale with observations and models. Open Access Dissertations. Paper 1084.

Riley, E. M., 2009: A global survey of clouds by *CloudSat*. M.S. thesis, Division of Meteorology and Physical Oceanography, University of Miami, 134 pp.

PRESENTATIONS

Riley Dellaripa, E. M., C. Schumacher, A. Funk, T. Spanghel, M. Schroeder, E. D. Maloney: Improving Comparison Between GCM Output and Radar Observations.
Poster: *The Future of Cumulus Parameterization Workshop*, Delft, Netherlands. July 2017.

Riley Dellaripa, E. M., E. D. Maloney, and S. C. van den Heever: Diagnosing Moistening Processes of the November DYNAMO MJO by Cloud Resolving Model Simulations.
Talk: 32nd *Conference on Hurricanes and Tropical Meteorology*, San Juan, PR. April 2016.

Riley Dellaripa, E. M., E. D. Maloney, and S. C. van den Heever: The Importance of Wind-Flux Feedbacks During the November CINDY-DYNAMO MJO Event.
Talk: *EGU Meeting*, Vienna, Austria. April 2015.

Riley Dellaripa, E. M., and E. D. Maloney: Analysis of MJO wind-flux feedbacks in the Indian Ocean using RAMA Buoy Observations.

Talk: *AGU Fall Meeting*, San Francisco, CA. December 2014.

Invited Talk: *Young Scientist Symposium on Atmospheric Research*, Colorado State University. October 2014.

Riley, E. M., and E. D. Maloney: Analysis of the MJO-wind speed relationship in the Indian Ocean using observations.

Talk: *31st Conference on Hurricanes and Tropical Meteorology*, San Diego, CA. April 2014.

Riley, E. M., B. E. Mapes, and S. N. Tulich: The effects of organization on convective and large-scale interactions using cloud-resolving simulations with parameterized large-scale dynamics.

Talk: *Workshop on Tropical Dynamics and the MJO*, Honolulu, HI. January 2014.

Riley, E. M., B. E. Mapes, S. N. Tulich, and Z. Kuang: The role of organization in tropical large-scale, convective interactions.

Talk: *AGU Fall Meeting*, San Francisco, CA. December 2012.

Riley, E. M., and B. E. Mapes: Large-scale variations of isolated vs. organized convective cloud systems.

Poster: *1st Annual PAN-GASS Meeting*, Boulder, CO. September 2012.

Riley, E. M., B. E. Mapes, and Z. Kuang: Examining the form-function relationship of convective organization using a CSRM with parameterized large-scale dynamics.

Talk: *30th Conference on Hurricanes and Tropical Meteorology*, Ponte Vedra, FL. April 2012.

Student Seminar: MPO RSMAS – University of Miami, Miami, FL. April 2012.

Riley, E. M., B. E. Mapes, and Z. Kuang: Isolating the effects of mesoscale organization on the large-scale wave, deep convection interaction.

Talk: *14th Conference on Mesoscale Processes*, Los Angeles, CA. August 2011.

Student Seminar: MPO RSMAS – University of Miami, Miami, FL. April 2011.

Riley, E. M., and B. E. Mapes: Clouds Associated with the MJO: A new perspective from CloudSat.

Poster: *A-Train Symposium*, New Orleans, LA. October 2010.

Poster: *Monsoon Intraseasonal Variability Modeling Workshop*, Busan, South Korea. June 2010.

Talk: *29th Conference on Hurricanes and Tropical Meteorology*, Tucson, AZ. May 2010.

Riley, E. M., and B. E. Mapes: Cloud Modulation by the MJO.

Student Seminar: MPO RSMAS – University of Miami, Miami, FL. March 2010.

Talk: *MOCA-09 (IAMAS/IAPSO/IACS Joint Assembly)*, Montreal, Canada. July 2009.

Riley, E. M., P. Zuidema, B. E. Mapes, and D. Painemal: Subtropical Stratocumulus Observed by CloudSat.

Talk and Poster: 4th PAN-GCSS Meeting, Toulouse, France. June 2008.

Poster: 2008 AGU Joint Assembly, Ft. Lauderdale, FL. May 2008.

Riley, E. M., and B. E. Mapes: Bimodal peak in tropical mid-level layer clouds observed by CloudSat.

Poster: 4th PAN-GCSS Meeting, Toulouse, France. June 2008.

Talk: 28th Conference on Hurricanes and Tropical Meteorology, Orlando, FL. April 2008.

Student Seminar: MPO RSMAS – University of Miami, Miami, FL. April 2008.

TEACHING EXPERIENCE

Teaching Assistant

Spring 2010

MSC303 – Meteorological Instrumentation, University of Miami

WORKSHOPS ATTENDED

- The Future of Cumulus Parametrization. Delft, Netherlands. July 2017.
- Workshop on Tropical Dynamics and the MJO. Honolulu, HI. January 2014.
- Preparing for an Academic Career in the Geosciences. Boulder, CO. July 2013.
- CMMAP (Center for Multiscale Modeling of Atmospheric Processes) Team Meeting. January 2013, 2014, 2015, and August 2013, 2014, 2015
- Workshop on Modeling Monsoon Intraseasonal Variability. Busan, South Korea. June 2010.
- Wave-Convection Workshop. Harvard, Cambridge, MA. October 2009.
- UCAR Undergraduate Leadership Workshop. Boulder, CO. June 2005.

FIELD PROGRAM EXPERIENCE

- NOAA El Nino Rapid Response Field Campaign 2016
Duties: Forecast briefing participant for daily flight missions from 19 January – 4 March 2016
- NSF/JAMSTEC Dynamics of the Madden-Julian Oscillation (DYNAMO)/CINDY20011, Addu Atoll, Maldives.
Advisor: Dr. Courtney Schumacher, Texas A&M University
Duties: Graduate participant – Helped run and maintain the Shared Mobile Atmospheric Research and Teaching Radar (SMART-R) during November 2011
- Student Operated ADRAD (Aggie Doppler Radar) Project, College Station, TX, 2006.
Advisor: Dr. Courtney Schumacher, Texas A&M University

Duties: Undergraduate participant – Group leader for daily forecasts, and running and maintaining ADRAD

- Texas Air Quality Study II (TexAQS II), Houston, TX, Summer 2005.

Advisor: Dr. Larry Carey, Texas A&M University

Duties: Undergraduate participant – Helped run and maintain SMART-R

PROFESSIONAL AFFILIATIONS

American Geophysical Union (AGU)

American Meteorological Society (AMS)

SERVICE AND LEADERSHIP

Judge: Senior Division, Colorado Science and Engineering Fair 2017

Max Eaton Committee 2014 (*31st Conference on Hurricanes and Tropical Meteorology*)

Reviewer: Journal of Geophysical Research-Atmospheres

– 2015 Editors' Citation for Excellence in Refereeing

Geophysical Research Letters

Journal of the Atmospheric Sciences

Monthly Weather Review

Quarterly Journal of the Royal Meteorological Society

Climate Dynamics

Dynamics of Atmospheres and Oceans

IEEE Transactions on Geoscience and Remote Sensing

Student Representative, Rosenstiel School of Marine and Atmospheric Science (RSMAS)

Graduate Academic Committee (GAC), 2010 – 2012.

Graduate Student Association (GSA) Senator representing RSMAS-MPO, 2007 – 2008.

SKILLS

Experience with data formats including HDF, HDF-EOS, NetCDF, and binary

Interactive Data Language (IDL)

Unix

Fortran

Perl

Python