## **Curriculum Vitae**

| A. NAME: Paul E. I   | Roundy                | DATE 28-Octobe               | er-2020       |
|--|-----------------------|------------------------------|---------------|
| Full Professor<br>DEPARTMENT: Atmospheric and Environmental Sciences |                       |                              |               |
| Office Address: University at Albany DAES-ES 339A                    |                       |                              |               |
| B. Earned Degrees  |                       |                              |               |
| <b>Institution</b>   | <b>Specialization</b> | <u>Degree</u>                | Date Received |
| Utah State University  | Physics               | Bachelor of Science May 1999 |               |
| The Pennsylvania<br>State University                                 | Meteorology           | PhD                          | August 2003   |

# C. All Previous Educational Employment

Cooperative Institute for Research in Environmental Sciences (CIRES), University of Colorado,

Boulder, postdoctoral research associate, Fall 2003-July 2006.

Assistant Professor, University at Albany, 2006-2012.

Associate Professor, University at Albany, 2012-2017.

Professor, University at Albany, 2018-

### **D.** Scholarly Activity (Bold indicates a student at the time the research was completed)

### 1. Refereed Book Chapters

Roundy, P. E., 2021: World Scientific Series on Asia-Pacific Weather and Climate: The

Multiscale Global Monsoon System, pp. 301-314, Chapter 24: The Association

between the Phase Speed of the Madden–Julian Oscillation and Atmospheric

Circulation https://doi.org/10.1142/9789811216602\_0024

# Roundy, P.E., Sakaeda, N., MacRitchie, K., and Gloeckler, L, 2016: Weather-climate

Interactions and MJO Influences. Climate Extremes: Patterns and

Mechanisms, Editors Wang, S., J.H. Yoon, C. Funk, and R

Gillies, AGU Geophysical Monograph Series, John Wiley & Sons Inc., Hoboken,

NJ, USA.

Roundy, P.E., 2011: Tropical extratropical interactions, in W.K.M. Lau and D. E.
Waliser, *Intraseasonal Variability in the Atmosphere-Ocean Climate System*.
Second edition. Springer, Praxis Publishing, Chichester, UK.

### 2. Refereed Articles

Roundy, P.E., 2023: Equatorial Rossby waves and their impacts on monsoon region deep convection, *MAUSAM*, **74**:2, 267–272.

Shaaban, A.A. & Roundy, P.E., 2023: On the interaction between Kelvin waves at different phase speeds and the background flow. *Quarterly Journal of the Royal Meteorological Society*, 149(751), 389–403. Available from: https://doi.org/10.1002/qj.4412

Knippertz, P., Gehne, M., Kiladis, G.N., Kikuchi, K., Rasheeda Satheesh, A., Roundy,
P.E., *et al.*: 2022: The intricacies of identifying equatorial waves. *Quarterly Journal of the Royal Meteorological Society*, 148( 747), 2814– 2852. Available
from: https://doi.org/10.1002/qj.4338

- Schultz, D. M., and Coauthors, 2022: How to Be a More Effective Author. *Mon. Wea. Rev.*, **150**, 2819–2828, https://doi.org/10.1175/MWR-D-22-0277.1.
- Roundy, P. E., 2022: Effect of Advection by Upper-Tropospheric Background Zonal Wind on MJO Phase Speed. J. Atmos. Sci., 79, 1859– 1864, https://doi.org/10.1175/JAS-D-21-0298.1.

Roundy, P.E., 2022: Quasi-biennial oscillation impacts on Madden–Julian oscillationassociated tropical–extratropical interactions and Kelvin waves. *Q J R Meteorol Soc*, 907–919. Available from: https://doi.org/10.1002/qj.4238

- Sussman, H.S., A Dai, P. E. Roundy, 2021: The controlling factors of urban heat in Bengaluru, India, Urban Climate, 38, 100881, ISSN 2212-0955, https://doi.ort/10.1016/j.uclim.2021.100881.
- Jiang, Y., Zhou, L., Roundy, P. E., Hua, W., & Raghavendra, A. (2021). Increasing influence of Indian Ocean Dipole on precipitation over Central Equatorial Africa. *Geophysical Research Letters*, 48, e2020GL092370. https://doi.org/10.1029/2020GL092370
- Shaaban, A.A. & Roundy, P.E.(2021) Upward and downward atmospheric Kelvin waves over the Indian Ocean. *Q J R Meteorol Soc*, 147(739), 3154–3179. Available from: https://doi.org/10.1002/qj.4122
- Gahtan, J. and Roundy, PE 2020. Meridional Movement of Geopotential Height
   Anomalies in the Subtropics and the Relationship to the Base State Flow. Q J R
   Meteorol Soc. Accepted Author Manuscript. doi:10.1002/qj.3937
- Roundy, PE., 2020. Interpretation of the spectrum of eastward-moving tropical convective anomalies. *Q J R Meteorol Soc*. 146: 795– 806. https://doi.org/10.1002/qj.3709
- Ong, H, Roundy, PE. Linear effects of nontraditional Coriolis terms on intertropical convergence zone forced large-scale flow. Q J R Meteorol Soc. 2019; 145: 2445–2453. https://doi.org/10.1002/qj.3572
- **Ong, H**, Roundy, PE. Nontraditional hypsometric equation. *Q J R Meteorol Soc*. 2020; 146: 700– 706. https://doi.org/10.1002/qj.3703
- Ong, H., and P. E. Roundy, The compressional beta-effect: Analytical solution, numerical benchmark, and data analysis. J. Atmos. Sci., doi: https://doi.org/10.1175/JAS-D-20-0124.1.

Gloeckler, L. C., and P. E. Roundy, 2019: On Relationships between Nonrecurving Western North Pacific Tropical Cyclones, the Madden–Julian Oscillation, and the East Asian Subtropical Jet. J. Atmos. Sci., 76, 893– 917, https://doi.org/10.1175/JAS-D-18-0230.1.

Gloeckler, L.C. and P.E. Roundy, 2019: A Statistical Analysis of Relationships between Western North Pacific Tropical Cyclones and Extratropical Circulation Patterns Accompanying the Madden–Julian Oscillation. J. Atmos. Sci., 76, 583– 604, https://doi.org/10.1175/JAS-D-18-0228.1

- Gahtan, J. and P. Roundy, 2019: Extratropical Influence on 200-hPa Easterly Acceleration over the Western Indian Ocean Preceding Madden–Julian Oscillation Convective Onset. J. Atmos. Sci., 76, 265–284, https://doi.org/10.1175/JAS-D-18-0069.1
- Gahtan, J. and P. Roundy, 2019: Extratropical Influence on 200-hPa Easterly Acceleration over the Western Indian Ocean Preceding Madden–Julian Oscillation Convective Onset. J. Atmos. Sci., 76, 265–284, https://doi.org/10.1175/JAS-D-18-0069.1
- Sulca J, Vuille M, Roundy P, et al. 2018: Climatology of extreme cold events in the central Peruvian Andes during austral summer: origin, types and teleconnections. Q J R Meteorol Soc 144:2693–2714. https://doi.org/10.1002/qj.3398

Raghavendra, A., P.E. Roundy, and L. Zhou, 2019: Trends in Tropical Wave Activity from the 1980s to 2016. *J. Climate*, **32**, 1661–1676, https://doi.org/10.1175/JCLI-D-18-0225.1

- Roundy, P. E. 2018:, A wave-number frequency wavelet analysis of convectively coupled equatorial waves and the MJO over the Indian Ocean. Q.J.R. Meteorol. Soc., 144: 333-343. doi:10.1002/qj.3207
- Roundy, P. E., 2017: A Wavenumber Frequency Wavelet Analysis of Convectively Coupled Equatorial Waves and the MJO over the Indian Ocean. Q. J. Roy. Meteorol. Soc. Accepted.
- Schiraldi, N. J. and P.E. Roundy, 2017: Seasonal-to-Subseasonal Model Forecast Performance during Agricultural Drought Transition Periods in the U.S. Corn Belt. *Mon. Wea. Rev.*, 145, 3687–3708, https://doi.org/10.1175/MWR-D-17-0026.1
- Roundy, P. E., 2017: Diagnosis of Seasonally Varying Regression Slope Coefficients and Application to the MJO. *Q. J. Roy. Meteorol. Soc.* 143: 1946–1952. doi:10.1002/qj.3054
- Shaaban, A., and P. E. Roundy 2017: OLR perspective on the Indian Ocean Dipole with application to East African precipitation. Q.J.R. Meteorol. Soc., 143: 1828–1843. doi:10.1002/qj.3045.
- Schiraldi, N.J. and P.E. Roundy, 2017: The Evolution of Agricultural Drought Transition Periods in the U.S. Corn Belt. Mon. Wea. Rev., 145, 451–472, doi: 10.1175/MWR-D-16-0225.1.
- Sakaeda, N., and Roundy, P. E. 2016: Gross moist stability and the Madden–Julian Oscillation in reanalysis data. Q.J.R. Meteorol. Soc., 142: 2740–2757. doi:10.1002/qj.2865
- MacRitchie, K. and Roundy, P. E., 2016: The two-way relationship between the Madden–Julian oscillation and anticyclonic wave breaking. *Q.J.R. Meteorol. Soc.*,

142: 2159–2167. doi:10.1002/qj.2809

Sakaeda, N., and P. E. Roundy, 2016: The Intraseasonal Atmospheric Angular Momentum Associated with MJO Convective Initiations. Q. J. Royal Meteorol. Soc. In Press. DOI: 10.1002/qj.2740

Sakaeda, N., and P. E. Roundy, 2016: The Development of Upper-Tropospheric Geopotential Height Anomaly in the Western Hemisphere during MJO Convective Initiations. Q. J. R. Meteorol. Soc. 142: 942–956, January 2016 B DOI:10.1002/qj.2696

- Sakaeda, N., and P. E. Roundy, 2015: The Development of Upper-Tropospheric Wind over the Western Hemisphere in Association with MJO Convective Initiation. J. Atmos. Sci., 72, 3138-3160.
- Roundy, P. E., 2015: On the Interpretation of EOF Analysis of ENSO, Atmospheric Kelvin Waves, and the MJO. J. Climate. 28, 1148-1165.
- Sakaeda, N., and P. E. Roundy, 2015: The Role of Interactions between Multiscale Circulations on the Observed Zonally Averaged Zonal Wind Variability Associated with the Madden–Julian Oscillation. J. Atmos. Sci., DOI: http://dx.doi.org/10.1175/JAS-D-13-0304.1
- Roundy, P. E., 2014a: Regression analysis of zonally narrow components of the Madden-Julian Oscillation. J. Atmos. Sci., DOI: http://dx.doi.org/10.1175/JAS-D-13-0288.1
- Roundy, P. E., 2014b: Some Aspects of Western Hemisphere Circulation and the Madden–Julian Oscillation. J. Atmos. Sci., 71, 2027-2039. doi: http://dx.doi.org/10.1175/JAS-D-13-0210.1

- Gottschalck, J., P. E. Roundy, C. J. Schreck III, A. Vintzileos, and C. Zhang, 2013: Large-Scale Atmospheric and Oceanic Conditions during the 2011-12 DYNAMO Field Campaign. *Mon. Wea. Rev.*, 141, 4173-4196.
- Thompson, D. B., and P. E. Roundy, 2013: The Relationship between the Madden-Julian Oscillation and U.S. Violent Tornado Outbreaks in the Spring. *Mon. Wea. Rev.*, 141, 2087-2095.
- Gloeckler, L. C., and P. E. Roundy, 2013: Modulation of the Extratropical Circulation by Combined Activity of the Madden-Julian Oscillation and Equatorial Rossby Waves During Boreal Winter. *Mon. Wea. Rev.*, 141, 1347-1357. doi: http://dx.doi.org/10.1175/MWR-D-12-00179.1
- Roundy, P. E., 2012a: The Spectrum of Convectively Coupled Kelvin Waves and the Madden–Julian Oscillation in Regions of Low-Level Easterly and Westerly Background Flow. J. Atmos. Sci., 69, 2107–2111.
- Roundy, P. E., 2012b: Observed Structure of Convectively Coupled Waves as a Function of Equivalent Depth: Kelvin Waves and the Madden–Julian Oscillation. J. Atmos. Sci., 69, 2097–2106.
- MacRitchie, K., and P.E. Roundy, 2012: Potential vorticity accumulation following atmospheric Kelvin waves in the active convective region of the MJO. J. Atmos. Sci., 69, 908–914.
- Roundy, P.E., 2012: Tracking and prediction of large-scale organized tropical convection by spectrally focused two-step space-time EOF analysis. *Q. J. Roy. Meteorol. Soc.*, 138, 919-931.

- Ventrice, M.J., C. D. Thorncroft, and P. E. Roundy, 2011: The Madden-Julian Oscillation's influence on African easterly waves and downstream tropical cyclogenesis. *Mon. Wea. Rev.*, **139**, 2704–2722.
- Roundy, P. E., and M. A. Janiga, 2011: Analysis of vertically propagating convectively coupled equatorial waves using observations and a non-hydrostatic Boussinesq model on the equatorial beta plane. *Q. J. Roy. Meteor. Soc.*, **138**, 1004-1017.
- Verhagen, L., and P. E. Roundy, 2010: Analysis of coupling between an oceanic Kelvin wave and atmospheric convection during the winter of 1986. J. Climate, 23, 6353-6364.
- Roundy, P. E., and L. Verhagen, 2010: Variations of the flow of the global atmosphere associated with a composite convectively coupled oceanic Kelvin wave. J. *Climate*, 23, 4192-4201.
- Roundy, P. E., K. MacRitchie, J. Asuma, and T. Melino, 2010: Modulation of the Global Atmospheric Circulation by Combined Activity in the Madden Julian Oscillation and the El Niño/Southern Oscillation During Boreal Winter. J. Climate, 23, 4045-4059.
- Lin, Jia-Lin, T. Qian, H. Han, P. Roundy, and Y. Zheng, 2009: Intraseasonal variation of winter precipitation over the western United States simulated by 14 IPCC AR4 Coupled GCMs. J. Clim., 23, 3094-3119.
- Lin, Jia-Lin, T. Shinoda, B. Liebmann, T. Qian, W. Han, P. Roundy, J. Zhou, Y. Zheng, 2009: Intraseasonal Variability Associated with Summer Precipitation Over South America Simulated by 14 WRCP CMIP3 Coupled GCMs *Mon. Wea. Rev.*, **137**, 2931-2954.
- Roundy, P. E., and C. J. Schreck III, 2009: A combined wave-number-frequency and time-extended EOF approach for tracking the progress of modes of large-scale organized tropical convection. Q. J. Roy. Met. Soc., 135, 161-173.

- Roundy, P. E., C. J. Schreck III, M. A. Janiga, 2009: Contributions of convectively coupled equatorial Rossby waves and Kelvin waves to the Real-time multivariate MJO indices. *Mon. Wea. Rev.*, 137, 469-478.
- Kiladis, G. N., M. C. Wheeler, P. T. Haertel, K. H. Straub, and P. E. Roundy, 2009: Convectively coupled equatorial waves. *Rev. of Geophys.*, **47** RG2003, 1-42.
- Roundy, P. E., and **J. R. Kravitz**, 2009: The association of the evolution of intraseasonal oscillations to ENSO phase. *J. Climate*, **22**, 381-395.
- Shinoda, T., P. E. Roundy, and G. N. Kiladis, 2008: Statistical representation of equatorial waves and tropical instability waves in the Pacific Ocean. *Atmospheric Research*, 94, 37-44.
- Roundy, P. E., 2008: Analysis of convectively coupled Kelvin waves in the Indian Ocean MJO. J. Atmos. Sci.. 65,1342-1359.
- Shinoda, T., P. E. Roundy, and G. N. Kiladis, 2008: Variability of intraseasonal Kelvin waves in the equatorial Pacific Ocean. *J. Phys. Oceanogr.*, 38, 921-944.
- Roundy, P. E., and G. N. Kiladis 2007: Analysis of a reconstructed Kelvin wave dynamic height dataset for the period 1974-2005. *J. Climate*, **20**, 4341-4355.
- Roundy P. E., and G. N. Kiladis, 2006: Observed relationships between oceanic Kelvin waves and atmospheric forcing. *J. Climate*, **19**, 5253-5272.
- Frank, W. M., and P. E. Roundy, 2006: The relationship between tropical waves and tropical cyclogenesis. *Mon. Wea. Rev.*, **134**, 2397-2417.
- Roundy, P.E., and W.M. Frank, 2004c: Applications of a multiple linear regression model to the analysis of relationships between eastward-and westward-moving intraseasonal modes. *J. Atmos. Sci.*, **61**, 3041-3048.
- Roundy, P.E., and W.M. Frank, 2004b: Effects of low-frequency wave interactions on intraseasonal oscillations. J. Atmos. Sci., 61, 3025-3040.
- Roundy P. E., and W. M. Frank, 2004: A climatology of waves in the equatorial region. J. Atmos. Sci., 61, 2105-2132.

## **3.** Selected Conference Reprints and Seminars

**Gahtan, J**, and P. E. Roundy: AMS Annual Meeting 986 Influence of the MJO and Extratropical Wavetrains on Int... January 25, 2017

- **Gloeckler, L. C.**, and P. E. Roundy: AMS Annual Meeting J6.3 Relationships between Tropical Cyclones and Madden–Juli... January 25, 2017
- **Findlay, E.**, and P. E. Roundy: AMS Annual Meeting 523 Empirical Orthogonal Function Analysis of Rossby Haurwit... January 24, 2017
- Roundy, P. E., AMS Annual Meeting 2.2 MJO Phase Speed and Blocking January 23, 2017
- **Gahtan, J**., and P. E. Roundy: AMS Annual Meeting 349 Subtropical and Extratropical Precursors to Western Indi... January 23, 2017
- Ragavendra, A., and coauthors: AMS Annual Meeting 355 MJO Phase Speed and Rainfall Variability Over the Congo ... January 23, 2017
- Roundy, P. E.: AGU Annual Meeting A23O-07: The effects of blocking in the subtropics on the ph... December 13, 2016
- Schiraldi, N., and P. E. Roundy: AGU Annual Meeting H13P-04 The Evolution of Drought Transition Periods in the U... December 12, 2016
- Schiraldi, N., and P. E. Roundy: 32nd Conference on Hurricanes and Tropical Meteorology An Analysis of Tropical Moisture Transport During Agricultur... April 2016
- Sakaeda, N., and P. E. Roundy: 32nd Conference on Hurricanes and Tropical Meteorology Assessment of Gross Moist Stability and its Relationship to ... April 2016
- Gahtan, J., and P. E. Roundy: 32nd Conference on Hurricanes and Tropical Meteorology Extratropical Convective Precursors to Initiation of MJO Con... April 2016
- Sakaeda, N., and P. E. Roundy: 32nd Conference on Hurricanes and Tropical Meteorology Gross Moist Stability and its Relationship to the MJO in Rea... April 2016
- Gloeckler, L. and P. E. Roundy: 32nd Conference on Hurricanes and Tropical Meteorology Relative Feedbacks between the Madden–Julian Oscillation and tropical cyclones... April 2016
- Roundy, P. E.: 32nd Conference on Hurricanes and Tropical Meteorology Western Hemisphere Extratropical Circulation and the Indian Ocean MJO ... April 22, 2016
- Roundy, P. E.: 3rd Conference on GPS Radio Occultation Interactions between Circulation and Convection in the MJO March 10, 2016

- Roundy, P. E., AMS Annual Meeting Interactions Between the MJO, the Extratropics, and Tropical... January 2016
- **Gloeckler, L**. and P. E. Roundy: Annual Meeting Tropical Cyclone Contributions to Madden–Julian Oscillation-... January 2016
- **Findlay, E.,** and P. E. Roundy: AMS Annual Meeting 522 Empirical Orthogonal Function Analysis of Various Angular momentum waves... January 24, 2016
- Roundy, P. E., AGU Annual Meeting Weather Climate Interactions and Extreme Events in the Climate System... December 2015
- MacRitchie, K, and P. E. Roundy: Conference on hurricanes and tropical meteorology Anticyclonic Wavebreaking Modulated by the MJO April 2, 2014
- Roundy, P. E., 2009: Modulation of the global response to the Madden Julian Oscillation by the El Niño/Southern Oscillation. IAMAS-IAPSO-IACS Joint Assembly, MOCA-2009, Montreal, Canada, July 19-29.
- Roundy, P. E., 2007: The influence of the Madden-Julian Oscillation on the 1982-1983 and 1986-1987 El Niño events. The International Union of Geodesy and Geophysics. 2007, Perugia Italy.
- Roundy, P. E., 2007: Roles of the MJO in the development of Oceanic Kelvin waves and ENSO. 19<sup>th</sup> Conference on Climate Variability and Change. American Meteorological Society Annual Meeting.
- Roundy, P. E., 2006: The role of equatorial Rossby waves in westerly wind bursts. 26<sup>th</sup> Conference on Hurricanes and Tropical Meteorology, American Meteorological Society.
- Roundy, P. E., and G. N. Kiladis, 2005: The nonlinear character of MJO/Oceanic Kelvin wave interactions about the ENSO cycle. 15th Conference on Atmospheric and Oceanic Fluid Dynamics
- Frank, W. M. and P. E. Roundy, 2004: Relationships between tropical waves and cyclogenesis. 26<sup>th</sup> Conference on Hurricanes and Tropical Meteorology, American Meteorological Society.
- Roundy, P. E., 2004: Kelvin wave amplification facilitated by air-sea interactions during El Niño development. 13th Conference on Interactions of the Sea and Atmosphere. American Meteorological Society
- Roundy, P. E., 2001: Tropical precipitable water climatology for equatorial waves. 11<sup>th</sup> Conference on Satellite Meteorology and Oceanography. American Meteorological Society.

### 4. Book reviews:

UCAR Online Tropical Textbook, Chapter 5.

### 6. Computer Software Developed:

Various systems for statistical prediction of probabilities of extreme weather events are available (or are becoming available) on Dr. Roundy's tropical waves page at http://www.atmos.albany.edu/facstaff/roundy/waves

### 7. Consultancies

Served as a consultant and advisor for up to 3 energy investment firms 2007-2016. They have asked not to be identified (i.e., no publicity).

### 8. Grants (In all awards, Paul E. Roundy served as sole PI):

A small grant from a private energy investment firm (\$2,200) provided graduate assistant support during 2008 for graduate student Joseph R. Kravitz. 01-Aug-2008 to 01-Sep-2008

NSF Award Number 0850642, Analysis of Coupling between Oceanic Kelvin Waves and Atmospheric Convection, and Its Impacts on Weather over the Tropical Pacific, \$353,566. 01-Jun-2009 to 31-May-2013

NSF Award Number 1128779, Analysis of the influence of convectively coupled atmospheric waves and extratropical Rossby waves on the structure and evolution of the observed Madden Julian Oscillation. \$502,671. NSF Program Manager Anjuli S. Bamzai. 15-Nov-2011 to 31-Oct-2015

EarthRisk Technologies, \$8,000 to fund summer research work of graduate students Lawrence Gloeckler and Nicholas Schiraldi, 2013. 23-May-2013 to 23-Aug-2013

NSF Award Number 1358214, The Madden Julian Oscillation, Tropical Cyclones, and Extratropical Circulation Responses, \$396,969. NSF Program Manager Anjuli S. Bamzai. 01-Apr-2014 to 31-Mar-2017.

NOAA Climate Program Office: Precursor Conditions to Onset and Breakdown of Agricultural Drought over the United States Corn Belt Region. \$225,000. 01-Sep-2014 to 30-Aug-2017

NSF Award Number 1560627, Intraseasonal Extratropical Precursors to the Indian Ocean Madden-Julian Osciliation (MJO) Proximate to Africa, \$486,419.00. 15-Jul-2016 to 30-Jun-2019.

NSF Award Number 1757342, Effects of Background Wind on the Eastward Propagation of Madden Julian Oscillation (MJO). \$357,566

## E. Teaching

ATM 521 Tropical Meteorology, Spring 2007

ATM 523 Large-Scale Dynamics of the Tropics, Spring 2009 and 2011, new course

ATM 315 Fall 2007-2011: Quantitative Methods in Geophysics

ENV 315 Fall 2012-2016: Environmental Statistics

ATM 562 Numerical Methods in Atmospheric Science, Spring 2008

ATM561 Applied Data Analysis in Atmospheric and Environmental Sciences, Spring 2010

### F. Service

# **Professional Community:**

World Meteorological Organization Monsoon Working Group beginning January 2017 NOAA Drought Task Force beginning 2016

Program Co-Chair, 2016 AMS Conference on Hurricanes and Tropical Meteorology

Editor, Monthly Weather Review, Beginning November 2011

Assessor of the synoptic to planetary scale conditions for "Dynamics of the Madden Julian Oscillation": Observational experiment over the Indian Ocean during fall 2011

Associate editor for Monthly Weather Review 2005-2011

AMS STAC Committee on Hurricanes and Tropical Meteorology, Fall 2009-2014

Program Committee, 28th Conference on Hurricanes and Tropical Meteorology,

American Meteorological Society, 2007-2008

Weekly participant in the NOAA MJO-GTH (global threats-hazards) conference call for prediction of the status and impacts of global weather and climate hazards in the tropics Provide daily to weekly assessments of the state of waves in the tropical atmosphere for

the DYNAMO project (an observational experiment in the Indian Ocean basin fall 2011)

### University

FRAP-A Review Committee, 2014-2015 and 2015-2016

### College

Chair, Faculty Development Committee, College of Arts and Sciences, 2012-2013

#### Department

Chair Graduate Recruitment Committee 2015-

Chair of 2020 Initiative Faculty Search Committee for DAES 2013-2014

Member of 2020 Initiative Faculty Search Committee for DAES 2012-2013

Chair of 2020 Initiative Faculty Search Committee for DAES 2011-2012

DAES Tropical Map Discussion Wednesdays

DAES Graduate Committee Fall 2006-present

Participant in the DAES Weather and Climate Blog, Times Union newspaper

#### Public

Organizer of the Capitol Region Math and Science Club for home schooled elementary and middle school aged children Review Panelist, National Science Foundation and NOAA

### G. Selected Invited Seminars:

- The Madden Julian Oscillation: Observed Associations with the Extratropics. World Meteorological Organization meeting on Monsoons, Singapore, November 2017.
- The Madden Julian Oscillation: Observed Associations with the Extratropics. Penn State University Department of Meteorology Colloquium, January 11, 2017.
- NDA-EarthSat Meeting, October 13, 2016: Towards Understanding Application of the MJO to Subseasonal Weather Prediction
- George Mason University and Office of Naval Research, June 2016: MJO Interactions with Subtropics and Mid Latitudes

College of Saint Rose Science Colloquium Series, October 23, 2013: The Relationship between Rainfall in the Tropics and Temperature at Higher Latitudes

MIT Weekly Seminar Series, September 2011, Cambridge Massachusetts

- NCAR-ISP African Weather And Climate Colloquium 2011 Seminar Boulder Colorado
- NCAR-ISP African Weather And Climate Colloquium 2011 Lead Practicum on

Equatorial Wave Modes, Boulder Colorado

- Roundy, P. E., 2009: Convectively Coupled Internal Waves of the Free Troposphere. Banff International Research Station, Conference on Multiscale Interactions in the Tropics, April 30.
- Stony Brook University February 2008: Relationships between oceanic and atmospheric Kelvin waves, the MJO, and mid latitude weather.
- Lamont-Doherty Earth Observatory March 2008: Relationships between oceanic and atmospheric Kelvin waves, the MJO, and mid latitude weather.
- Richfield Springs Symposium (high school physics students), 2007: The El Niño/Southern Oscillation.

New York University 2007: Convectively Coupled Kelvin Waves.

- NCAR IMAGe Theme of the Year: The role of tropical intraseasonal oscillations in the El Niño/Southern Oscillation, Boulder, Colorado, March 3, 2006.
- NCAR/IMAGe Theme of the Year, Interactions between the Madden-Julian Oscillation and equatorial Rossby waves, Boulder, Colorado, October 2005.

### H. Graduate Students Advised

Joseph R. Kravitz, (under advisement 2007-2008)

Lynn Gribble Verhagen (MS 2010) (Under advisement 2008-2010)

Kyle MacRitchie (Under Advisement Fall 2009-2014 PhD completed)

Robert M. Setzenfand (*NSF Graduate Research Fellowship Recipient*. Under advisement Fall 2010-present)

Naoko Sakaeda (Under Advisement Fall 2010-PhD Completion 2015)

Lawrence Gloeckler (Under Advisement Fall 2011-present)

Eric Adamchick (MS completed 2015)

Ahmed Lasheen Shabaan (MS completed 2015, PhD began Fall 2016)

Nicholas Schiraldi (PhD Defended 2017)

Jennifer Gahtan (2013-present, Prospectus Passed 2016) Ernesto Findlay (2014-present) Kaitlyn Krzyzaniak (2016-present) Lukas Stewart (Fall 2017-) Hing Ong (Spring 2018-)

# I. Undergraduate Research Advisees

Lawrence Gloeckler (2010-2011), "The association between the Madden Julian Oscillation, equatorial Rossby waves, and the extratropical circulation" Nicholas Schiraldi (Fall 2011)

# J. Doctoral Committee Service (Partial List)

Carl Schreck (PhD completed 2010) Kay Shelton (PhD completed 2011) Michael J. Ventrice (2010-2011, Completed 2014) Victor Torres (2014-present)

# K. Service as Master's Thesis Second Reader (Partial List)

Timothy Melino (2010)

Dana K. McGlone (2011)

Juan Sulca (2015)

# L. Educational Training Activities

UAlbany Faculty Fall Retreat (ITLAL) 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017

Various ITLAL training activities, especially 2008, 2009, and 2010

UAlbany CLUE Fellowship http://www.albany.edu/academics/clue.fellows.shtml