# VITA


## DEANNA A. HENCE

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**Education**

2011 PhD Atmospheric Sciences, University of Washington
2007 M.S. Atmospheric Sciences, University of Washington
2004 B.S. Atmospheric, Oceanic, and Space Sciences, University of Michigan

**Professional Experience**

2014- Assistant Professor, Department of Atmospheric Science, University of Illinois
*Expertise:* high-impact mesoscale meteorology (tropical and mid-latitude), mesoscale/synoptic-scale weather interactions, precipitation processes, cloud physics and dynamics, radar and satellite remote sensing
*Interests:* impacts of extreme weather on human systems, infrastructure, and public health; science and crisis/risk communication; science policy; science education; community engagement; diversity, equity, inclusion and justice in the geosciences. Developer of University of Illinois SOARS Satellite (UISOARS) mentorship-intensive research experience for minoritized and transfer undergraduate students.

2012-14 Post-doctoral Research Fellow, NASA Goddard Space Flight Center
*Supervisor: Scott Braun*
Topic: Examining the influences of large-scale conditions upon tropical cyclone structure with high-altitude airborne instrumentation.

2012 Post-doctoral Researcher, Department of Atmospheric Sciences, University of Washington
*Supervisor: Robert A. Houze, Jr.*
Topic: Using ground-based radar to categorize convective precipitation structure and kinematics within the changing large-scale conditions of the Madden-Julian Oscillation.

2004-11 Graduate Research Assistant, Department of Atmospheric Sciences, University of Washington
*Advisor: Robert A. Houze, Jr.*
Topic: The study of the precipitation and kinematic structure of hurricane eyewalls and rainbands using airborne and space-borne radar systems.

2004 SOARS Protégé, Atmospheric Technology Division (ATD), NCAR
*Research Mentors: Wen-Chau Lee, Jay Miller, Michael Bell*
Topic: Hail formation within a supercell sampled with airborne dual-Doppler radar.

2003 SOARS Protégé, Atmospheric Technology Division (ATD), NCAR
*Mentors: Wen-Chau Lee, Michael Bell*
Topic: Airborne dual-Doppler analysis of the kinematic structure of a supercell.

2002 Research Assistant, University of Michigan Research Experience for Undergraduates
*Mentor: Perry Samson, University of Michigan AOSS*

1999 Research Assistant, University of Michigan Undergraduate Research Opportunity Program
*Mentor: Kathleen Colling, University of Michigan School of Nursing*

**Grants and Fellowships**

Title: HDR Institute: Geospatial Understanding through an Integrative Discovery Environment
Sponsor: United States National Science Foundation
Period: 1 October 2021 – 30 September 2026
Amount: $15,000,000
Capacity: Co-Investigator, Engagement and Partnerships Lead

Title: RURAL: Resilient Urban Rural Analysis for Livability
Sponsor: University of Illinois Institute for Sustainability, Energy, and Environment
Period: 01 January 2021 – 31 December 2021
Amount: $30,000
Capacity: Co-Investigator

Title: CAREER: Investigating the upstream impacts of mountains on frontal precipitation using OLYMPEX observations
Sponsor: United States National Science Foundation
Period: 15 May 2020 – 14 May 2025
Amount: $914,180
Capacity: Principal Investigator

Title: The SOARS Program - Enhancing and expanding a successful model for building diversity in the atmospheric and related sciences
Sponsor: United States National Science Foundation
Period: 1 October 2016 – 30 September 2021
Amount: $3,897,541.00 ($28,401 to Hence)
Capacity: Co-Investigator

Title: Collaborative Research: An integrated understanding of the initiation and subsequent dynamical and microphysical characteristics of deep convective storms during RELAMPAGO
Sponsor: United States National Science Foundation
Period: 15 August 2017 – 14 August, 2021
Amount: $636,947 ($318,473.50 to Hence)
Capacity: Co-Investigator

Title: Influence of tropical cyclone and westerly wind burst interactions on MJO convection in the Indian Ocean using TRMM, QuikSCAT/ASCAT, and high-resolution simulations
Sponsor: United States National Aeronautics and Space Administration
Period: 15 January 2020 – 14 January 2023
Amount: $135,000
Capacity: Principal Investigator

Title: Investigating the structure of convective thunderstorm systems in the central Indian Ocean influenced by the Madden-Julian Oscillation
Sponsor: Campus Research Board, University of Illinois Urbana-Champaign
Period: 11 December 2018 – 31 July 2020
Amount: $29,405
Capacity: Principal Investigator

Title: High-Resolution WRF Simulations of Tropical Convection and associated Cold Pools in the Indian Ocean
Sponsor: XSEDE; United States National Science Foundation
Period: 31 December 2017 – 31 June 2019
Amount: Computing Allocation
Capacity: Principal Investigator

Title: The University of Illinois DOW Education, Research, and Outreach (UIDOW) Project
Sponsor: United States National Science Foundation
Period: 23 February – 16 March, 2016
Amount: Facility Grant
Capacity: Principal Investigator

2012-14 NASA Postdoctoral Research Fellowship
2006-9 NASA Earth System Science Fellowship
2004-5 Graduate Opportunity Program Research Assistantship
2004-5 Graduate School Top Scholar Award recipient
Graduate Diversity Fellow

**Peer-Reviewed Publications**

Thayer, J.T. and D.A. Hence, 2022: Transition of large-scale environmental conditions and characteristics of four rainfall types observed by S-PolKa during the MJO-1 active phase of DYNAMO/CINDY/AMIE. J. Geophys. Res.-Atmos, accepted. https://doi.org/10.1029/2021JD036188

Fischer, E., B. Bloodhart, K.L. Rasmussen, I.B. Pollack, M.G. Hastings, E. Marin-Spiotta, A.R. Desai, J.P. Schwarz, S. Nesbitt, D.A. Hence, 2021: Leveraging Field-Campaign Networks for Collaborative Change around Sexual Harassment. Bull. Amer. Met. Soc., 102(11), E2137-E2150. https://doi.org/10.1175/BAMS-D-19-0341.1

Rasmussen, K.L., M. Burt, A. Rowe, R. Haacker, J. Maertens, D.A. Hence, L. Luna, and S. Nesbitt, 2021: Enlightenment strikes! Broadening graduate school training through field campaign participation. Bull. Amer. Met. Soc., 102(10), E1987-E2001. https://doi.org/10.1175/BAMS-D-20-0062.1

Nesbitt, S.W., P.V. Salio, E. Ávila, P. Bitzer, L. Carey, V. Chandrasekar, W. Deierling, F. Dominguez, M. E. Dillon, C. M. Garcia, D. Gochis, S. Goodman, D.A. Hence, K. A. Kosiba, M. R. Kumjian, T. Lang, L. Medina Luna, J. Marquis, R. Marshall, L.A. McMurdie, E. Lima Nascimento, K.L. Rasmussen, R. Roberts, A.K. Rowe, J.J. Ruiz, E.F.M.T. São Sabbas, A. C. Saulo, R.S. Schumacher, Y.Garcia Skabar, L.A. Toledo Machado, R. J. Trapp, A. Varble, J.Wilson, J. Wurman, E.J. Zipser, I. Arias, H. Bechis, and M.A. Grover, 2021: A storm safari in Argentina: proyecto RELAMPAGO. Bull. Amer. Met. Soc., 02(8), E1621-E1644. https://doi.org/10.1175/BAMS-D-20-0029.1

Schumacher, R.S., D.A. Hence, S.W. Nesbitt, R.J. Trapp, K.A. Kosiba, J. Wurman, P. Salio, M. Rugna, A.C. Varble, and N.R. Kelly, 2021: Convective-storm environments in subtropical South America from high-frequency soundings during RELAMPAGO-CACTI. Mon. Wea. Rev., 149, 1439–1458, https://doi.org/10.1175/MWR-D-20-0293.1.

Trapp, R. J, K.A. Kosiba, J.N. Marquis, M.R. Kumjian, S.W. Nesbitt, J. Wurman, P. Salio, M.A. Grover, P. Robinson, and D.A. Hence, 2020: Multiple-platform and multiple-Doppler radar observations of a supercell thunderstorm in South America during RELAMPAGO. *Bull. Amer. Met. Soc., in press*. doi:https://doi.org/10.1175/MWR-D-20-0125.1.

Garg, P., Nesbitt, S.W., Lang, T.J., Chronis, T., Thayer, J.D., Hence, D.A., 2020: Identifying tropical mesoscale oceanic cold pools in space-borne scatterometer data. *J. Geophys. Res.-Atmos., 125, e2019JD031812.* doi:https://doi.org/10.1029/2019JD031812

Hence, D. A. and R. A. Houze, Jr., 2012: Vertical structure of tropical cyclone rainbands as seen by the TRMM Precipitation Radar. J. Atmos. Sci, 69, 2644-2661.

Hence, D. A. and R. A. Houze, Jr., 2012: Vertical structure of tropical cyclones with concentric eyewalls as seen by the TRMM Precipitation Radar. J. Atmos. Sci, 69, 1021-1036.

Hence, D. A. and R. A. Houze, Jr., 2011: Vertical structure of hurricane eyewalls as seen by the TRMM Precipitation Radar. J. Atmos. Sci., J. Atmos. Sci., 68, 1637-1652.

Hence, D. A. and R. A. Houze, Jr., 2008: Kinematic structure of convective-scale elements in the rainbands of Hurricanes Katrina and Rita (2005). J. Geophys. Res., 113, D15108.

**Invited Contributions to Books**

Hence, D., 2015: A Global Dataset for Precipitation Looking Back at TRMM and Forward to GPM. Encyclopedia of GIS, Springer International Publishing, Cham, 1–8.

**Non-Refereed Publications**

Hence, D., 2004: Wind structure and its impact on hail production: A VORTEX '95 case study using airborne Doppler radar. Earth, Wind, Sea, and Sky: Protégé Abstracts Significant Opportunities in Atmospheric Research and Science, University Corporation for Atmospheric Research, Boulder, CO.

Hence, D., 2004: Wind structure and its impact on hail production: A VORTEX '95 case study using airborne Doppler radar. SOARS® Protégé Research Papers Summer 2004, University Corporation for Atmospheric Research, Boulder, CO.

Hence, D., 2003: Investigation of conceptual hail-formation models using airborne Doppler radar. Earth, Wind, Sea, and Sky: Protégé Abstracts Significant Opportunities in Atmospheric Research and Science, University Corporation for Atmospheric Research, Boulder, CO.

Hence, D., 2003: Investigation of conceptual hail-formation models using airborne Doppler radar. SOARS® Protégé Research Papers Summer 2003, University Corporation for Atmospheric Research, Boulder, CO.

**Honors and Awards**

2022 Larine Y. Cowan Make A Difference Award for Teaching and Mentoring in Diversity, University of Illinois Urbana-Champaign
2022 Lincoln Excellence for Assistant Professors, University of Illinois Urbana-Champaign
2018 Arnold O. Beckman Research Award, University of Illinois Urbana-Champaign
2017 Kavli Frontiers of Science Fellow, National Academy of Sciences,
2017 Thompson Lecturer, Advanced Study Program, National Center for Atmospheric Research
2016 NASA Group Achievement Award, NASA Hurricane and Severe Storm Sentinel (HS3) Experiment
2015 Invited participant, NSF Expert Witness Training Academy
2009 NSF-funded participant, AMS Summer Policy Colloquium

**Students Mentored, Including:**

PhD. Hodo Orok (in progress), Jeffrey Thayer, Calvin M. Elkins
M.S. Pranjali Borse (in progress), Scott James, Jeffrey Thayer, Shaowen Amy Chen
B.S. Janae Sparks (in progress), Briana Bragg, Rebekka Delaney (UISOARS, U. Illinois), Brandon Garcia (UISOARS, U. Illinois), Megan Geyer (Capstone Research, U. Illinois), Jasmine Lara (Capstone Research, U. Illinois), Adam Dwyer (Capstone Research, U. Illinois), Brittany Welch (Capstone Research, U. Illinois), Jeremiah Pieresante (SOARS), Alexis Hunzinger (Capstone Research, U. Illinois), Daniel Orlandi (Southern Illinois U/Federal University of Rio de Janeiro), Tia Lerud (U. Washington), Tyler Burns (U. Washington)

**Teaching Experience**

2021- Climate and Global Change, ATMS 140, Spring Semester, University of Illinois
2020- Weather Hazard Risk Communication, ATMS 491, Fall Semester, University of Illinois
2017-20 Severe and Hazardous Weather, ATMS 120, Fall/Spring Semesters, University of Illinois
2018 Professional Development, ATMS 571, Fall Semester, University of Illinois
2016 Radar Remote Sensing, ATMS 410, Spring Semester, University of Illinois
2015-17 Physical Meteorology, ATMS 504, Fall Semester, University of Illinois
2005 Teaching Assistant, Atmospheric Sciences 101. Professor: Robert A. Houze, Jr.

**Other Education Experience**

2019 IB 532 (Global Change and Sustainability): Guest lecturer, Spring Semester, University of Illinois
2018 Professional Development Coordinator, RELAMPAGO Advanced Study Institute
2018 Organizer, American Geophysical Union Sharing Science Workshop, University of Illinois Urbana-Champaign
2018 Participant and Reviewer for new training module, National Science Foundation Expert Witness Training Academy

2016 Guest Lecturer, Managing a Changing Climate, South Central Climate Science Center, University of Oklahoma
2009 Informal science education professional development, Portal to the Public

**Field Experience**

2018 Remote Sensing of Electrification, Lightning, and Mesoscale/Microscale Processes with Adaptive Ground Observations (RELAMPAGO)
Duties: co-PI; Mobile Sounding Network team lead; served as Science Director and Severe Weather Team Lead; directed mission planning and execution.

2016 OLYMPEX Ground Validation Experiment
Duties: NPol scientist; daily NPol data synthesis and writing of NPol science summaries

2012-14 Hurricane and Severe Storm Sentinel Experiment (HS3)
Duties: Mission Scientist; member of inner-core flight module development team; assisted in coordination of scientific operations; monitored in-flight weather conditions for Global Hawk.

2011 Dynamics of the Madden-Julian Oscillation (DYNAMO)
Duties: S-PolKa scientific PI representative; coordinated S-PolKa science operations; conducted daily S-Polka data synthesis and writing of S-PolKa science summaries.

2005 Rainband and Intensity Change Experiment (RAINEX)
Duties: In-flight radar scientist and communications; operations center communications, data analysis, and production of quick-look products.

2003 Bow Echo and MCV Experiment (BAMEX)

**Scientific and Academic Community Service, including:**

2021- Chapter Author, 5th National Climate Assessment, U.S. Global Change Research Program

2015- Panelist, NASA Panel Review

2015- Panelist, NSF Panel Review

2011- Reviewer, Monthly Weather Review, Journal of the Atmospheric Sciences, Quarterly Journal of the Royal Meteorological Society, Journal of Geophysical Research, National Science Teachers Association

2019- Member, Predictability and Processes Team and Citizen Science Working Group, World Meteorological Organization High Impact Weather (HIWeather) Project

2021 Organizer, "Inclusively Excellent Student Leadership" Workshop, Department of Atmospheric Sciences, University of Illinois

2021 Organizer, "Mentoring for Equity and Inclusion" Workshop, Department of Atmospheric Sciences, University of Illinois

2018-19 Member, Science Program Committee, 13th Conference on Mesoscale Convective Systems and High-Impact Weather in East Asia (ICMCS-XIII)

2017-21 Member, Commission on the Weather, Water, and Climate Enterprise Steering Committee, American Meteorological Society

2016-20 Associate Editor, Monthly Weather Review, American Meteorological Society

2020 Organizer, Inclusive Lab Leaders, University of Illinois

2020 Panel Member, "The Past, Present, and Future of the LGBTQ+ Geoscience Community", 11th Annual CORIOLIS reception, AMS Annual Meeting, Boston, MA, January 2020.

2019 Co-chair, Tropical Cyclones: Observations, Modeling and Predictability, AGU Fall Meeting, San Francisco, CA

2018-19 Member, High Impact Weather Prediction Project (HIW), Weather Research Science Working Group, Interagency Weather Research Coordination Committee, Office of the Federal Coordination for Meteorology

2018 Session Organizer, "Only" but Never Alone: Thriving in STEM with Intersecting Identities, National Out in STEM (oSTEM) Conference, Chicago, IL
2017 Faculty Advisor, Midwest Student Conference on Atmospheric Research
2017 Co-chair, Results from Recent Field Campaigns III: OLYMPEX, 28th Conference on Weather Analysis and Forecasting / 24th Conference on Numerical Weather Prediction, 2017 AMS Annual Meeting, Seattle, WA.
2016-17 Diversity Advocate, Graduate Admissions Committee, Department of Atmospheric Sciences, University of Illinois.
2016 Panelist, LGBTQA in Academia, oSTEM Chapter Meeting
2015 Presenter, Effective Scientific Communication, STEM-FEM Alliance, University of Illinois
2015 Panelist, The Perspectives of Underrepresented Women in STEM, STEM-FEM Alliance, University of Illinois
2015-16 Council for Equity and Access, University of Illinois
2015-16 Judge, School of Earth, Society and the Environment Research Review, University of Illinois
2014-17 Curriculum Committee, Department of Atmospheric Sciences, University of Illinois
2014 Presenter, Effective Oral Presentation, ATMS 571 Professional Development

**Public Engagement, including:**
2022 Participant, Climate Risk Luncheon, British Consulate-General
2022 "From clouds to currents, what is the water cycle?", Smithsonian Voices
2022 "How the Earth's tile creates short, cold January days", The Conversation
2021 "What can the tornadoes that ravaged Kentucky tell us about what's coming next?", Slate
2021 "Inside Nature's Fury", Illinois Storied
2021 Guest, Brains On!, Minnesota Public Radio
2020 Guest, Deep Convection with Adam Sobel
2019 Scientist Presenter, "28 Days….Weeks…Months Later", National Academies of Science Producers Retreat, Deer Valley, Utah
2019 Presenter, "The Intersection of Meteorology and Information Technology", Black Data Processing Associates Bloomington-Normal Chapter
2018 RELAMPAGO Public Engagement, Cordoba and Villa Carlos Paz, Argentina
2018 Guest, "Monster Hurricane", The 21st, Illinois Public Media, October 2018
2018 "Monster hurricanes: Why have recent storms been so huge?", Illinois News Bureau, October 2018.
2018 "Hurricane Florence is going to slow down. That's not good.", New York Times, September 2018.
2018 "Hurricanes are lingering longer. That makes them more dangerous.", New York Times, June 2018.
2018 "With a seat at the table, Black meteorologists make huge impacts.", Medium, June 2018.
2018-19 Speaker, Englehart 4th Grade Classroom, Peach Elementary, Arlington TX
2017 Organizer and StoryTeller, University of Illinois StoryCollider, Urbana, IL, October 2017
2016 Doppler on Wheels and Severe Weather Safety Campus Engagement Event, University of Illinois,
2015-16,19 Guest, Brains On! Podcast, Minnesota Public Radio, "Could it rain lemonade?", "How does wind work?"
2013-14 Participant, HS3 Educational Classroom Connections, Global Hawk Operational Center-East, NASA Wallops Flight Facility
2013 Presenter, Hurricanes, NASA, and HS3, NASA GSFC Summer Professional Development Training for Educators: Natural Hazards
2011 Presenter, Paws-on Science, Pacific Science Center

2008-10 Member, GO-MAP Student Advisory Board
2009 Presenter, Earth Revealed: A View of our Planet from Space, Pacific Science Center
2008 Presenter, Ron McNair Camp-in, Pacific Science Center
2007-9 Co-founder and coordinator, UW Atmospheric Sciences Women's Group
2007-8 Member, Presidents Advisory Committee on Women
2005-7 Coordinator and frequent presenter, UW Atmospheric Sciences Graduate Student Outreach
2005-7 Activity leader, NOAA Science Camp, National Weather Service Seattle Weather Forecast Office
2005-7 Volunteer, National Weather Service Seattle Weather Forecast Office

**Membership in Professional Organizations**

2003- American Meteorological Society
2007- American Geophysical Union
2015- American Association for the Advancement of Science

**Scholarly Presentation**

*Oral, including:*

Hence, D.A., J.D. Thayer, M. Geyer and J. Lara, 2020: Multiscale interactions of tropical convection in the Indian Ocean. The Pennsylvania State University, virtual, October 2020.

Hence, D.A., 2020: Investing high-impact convective systems from human-scale to mesoscale. Indiana State University, Terre Haute, IN, March 2020

Thayer, J.D. and D. A. Hence, 2020: Tropical Cyclone Interactions with the Madden–Julian Oscillation in the Indian Ocean. Tropical Meteorology and Tropical Cyclones Symposium, AMS Annual Meeting, Boston, MA, January 2020.

Hence, D.A., 2019: Tropical cyclones in the Madden-Julian Oscillation: multiscale interactions of tropical convection." Atmospheric and Oceanic Sciences Colloquium Series, University of Wisconsin, December 2019

Schumacher, R.S., D.A. Hence, N.R. Kelly, K.A. Kosiba, S.W. Nesbitt, R.J. Trapp, and J. Wurman, 2020: High-Frequency Mobile Soundings in Convective Environments during RELAMPAGO: Overview and Preliminary Findings. 30th Conference on Weather Analysis and Forecasting (WAF)/26th Conference on Numerical Weather Prediction (NWP), AMS Annual Meeting, Boston, MA, January 2020.

Hence, D.A., C.M. Elkins and S.A. Chen, 2019: Environmental characteristics of hail processes in central Argentina. RELAMPAGO Data Analysis Workshop, Buenos Aires, Argentina, November 2019.

Thayer, J.D and D.A Hence, 2019: Tropical Cyclone Interactions with the Madden-Julian Oscillation in the Indian Ocean. Fall Meeting of the American Geophysical Union, San Francisco, CA, December 2019.

Thayer, J.D, D.A. Hence, M. Geyer and J. Lara, 2019: Interactions of Tropical Cyclones with the Westerly Wind Burst and the Madden-Julian Oscillation in the Indian Ocean. TAHOPE Planning Workshop, Taipei, Taiwan, October 2019.

Elkins, C. and D.A. Hence, 2019: Weather Warning Processes in Argentina during RELAMPAGO. 5th Conference on Weather Warnings and Communications, San Diego, CA, June 2019.

Thayer, J. D, D.A. Hence, P. Garg and S.W. Nesbitt, 2019: Multiscale Atmospheric Conditions in the Evolution of Convective Organization during MJO-1 of DYNAMO/CINDY/AMIE. 13th International Conference on Mesoscale Convective Systems and High Impact Weather in East Asia, Naha, Okinawa, Japan, March 2019.

Hence, D.A., 2018: Science by and for all: Broadening pathways into the atmospheric sciences." Warren Washington Legacy Symposium, The Pennsylvania State University, State College, PA, September 2018

Hence, D.A., 2018: Going Deep: Examining the multi-scale interactions of deep convection with remote sensing. Colloquium in Climate Science, School of Engineering and Applied Science, Columbia University, New York, New York, March 2018

Hence, D.A., 2018: Dancing in-between: weather research across scales." School for Earth, Society and the Environment Research Review, University of Illinois Urbana-Champaign, Urbana, IL, February 2018

Hence, D.A., 2017: Science By and for All: Challenges and some possible solutions towards broadening pathways into the Atmospheric Sciences, Invited Seminar, Thompson Lecture Series, National Center for Atmospheric Research, May 2017

Hence, D.A., 2017: Do you feel me? Investigating multi-scale interactions in the evolution of tropical convection, Invited Seminar, Thompson Lecture Series, National Center for Atmospheric Research, May 2017

Hence, D.A., 2017: Remote-sensing multi-scale interactions in the evolution of tropical convection", Atmospheric and Oceanic Sciences Colloquium Series, University of Wisconsin, March 2017

Thayer, J.D, D.A. Hence and B.F. Jewett, 2017: The Role of Multiscale Atmospheric Conditions in the Evolution of Convective Organization during MJO-1 of DYNAMO/CINDY/AMIE. American Meteorological Society, 97th Annual Meeting, Seattle, WA.

Hence, D.A. and A.C. Didlake, Jr., 2017: Flying in Circles: The Ongoing Contributions of RAINEX to the Understanding of Tropical Cyclone Rainbands. American Meteorological Society, 97th Annual Meeting, Seattle, WA.

Hence, D.A. and S.A. Braun, 2015: Hurricane Nadine's interaction with the SAL as seen in COAMPS-TC simulations. NASA HS3 Science Team Meeting, May Science Team Meeting, Mountain View, CA.

Hence, D.A. and S.A. Braun, 2014: Interactions between dry air and Hurricane Nadine (2012). NASA HS3 Science Team Meeting, May Science and Planning Meeting, Mountain View, CA.

Hence, D.A. and S.A. Braun, 2014: Interactions between dry air and Hurricane Nadine (2012). American Meteorological Society, 31st Conference on Hurricanes and Tropical Meteorology, San Diego, CA.

Hence, D.A., 2013: Interactions between dry air and Hurricane Nadine. Invited Seminar, Department of Atmospheric Sciences, University of Arizona, Tucson, AZ.

Hence, D.A., 2013: Interfaces between dry air and Hurricane Nadine. Invited Seminar, Department of Atmospheric Sciences, University of Illinois, Urbana, IL.

Hence, D.A., 2013: The interfaces between dry air and Hurricane Nadine. Young Scientist Forum, NASA Goddard Space Flight Center, Greenbelt, MD.

Hence, D.A., 2013: The interfaces between dry air and Hurricane Nadine. Code 612 Lab Meeting, NASA Goddard Space Flight Center, Greenbelt, MD.

Hence, D.A., 2013: Interfaces between dry air and Hurricane Nadine. HS3 Science Team Meeting, May Science and Planning Meeting, Mountain View, CA.

Hence, D.A., 2013: Influences upon tropical cyclone precipitation structure. Invited Seminar, School of Marine and Atmospheric Sciences, Stony Brook University, Stony Brook, NY.

Hence, D.A., 2013: Influences upon tropical cyclone precipitation structure. Atmospheric Sciences Colloquia, Department of Atmospheric Sciences, University of Illinois, Urbana, IL.

Hence, D.A. and R.A. Houze, Jr., 2012: The vertical structure of tropical cyclone rainbands as seen by the TRMM Precipitation Radar. American Meteorological Society, 30th Conference on Hurricanes and Tropical Meteorology, Jacksonville, FL.

Hence, D.A., 2012: Influences upon tropical cyclone precipitation structure. Invited Seminar, Department of Atmospheric and Environmental Sciences, University at Albany, Albany, NY.

Hence, D.A. and R.A. Houze, Jr., 2012: The vertical structure of tropical cyclone precipitation as seen by the TRMM Precipitation Radar. American Meteorological Society, 92nd Annual Meeting, New Orleans, LA.

Hence, D. A. and R. A. Houze, Jr, 2010: Vertical distribution of radar reflectivity in eyewalls observed by TRMM. American Meteorological Society, 29th Conference on Hurricanes and Tropical Meteorology, Tucson, AZ.

Hence, D. A. and R. A. Houze, Jr., 2008: Three-dimensional precipitation structure of tropical cyclones. American Meteorological Society, 28th Conference on Hurricanes and Tropical Meteorology, Orlando, FL.

Hence, D. A., 2008: Three-dimensional precipitation structure of tropical cyclones. Clouds and Precipitation Seminar, Department of Atmospheric Sciences, University of Washington, Seattle, WA.

Hence, D. A., Houze, R. A. and S. R. Brodzik, 2008: The 3-D reflectivity structure of intense Atlantic hurricanes as seen by the TRMM PR. National Aeronautics and Space Administration, 3rd Tropical Rainfall Measurement Mission Conference, Las Vegas, NV.

Hence, D.A., 2007: The structure of rainbands in hurricanes Katrina and Rita. Clouds and Precipitation Seminar, Department of Atmospheric Sciences, University of Washington, Seattle, WA.

Hence, D.A. and R. Houze, 2006: Rainband structures observed in RAINEX. American Meterological Society, 27th Conference on Hurricanes and Tropical Meteorology, Monterey, CA.

Hence, D.A., 2005: Hurricane eyewalls and rainbands: observations from TRMM PR and RAINEX. Clouds and Precipitation Seminar, Department of Atmospheric Sciences, University of Washington, Seattle, WA.

Hence, D.A., 2004: Wind structure and its impact on hail production: A VORTEX '95 case study using airborne Doppler radar. SOARS® Protégé Colloquium, University Corporation for Atmospheric Research, Boulder, CO.

Hence, D.A., 2003: Investigation of conceptual hail-formation models using airborne Doppler radar. SOARS® Protégé Colloquium, University Corporation for Atmospheric Research, Boulder, CO.

*Posters:*

Thayer, J.D. and D. A. Hence, 2020: Tropical Cyclone Interactions with the Madden–Julian Oscillation in the Indian Ocean. Tropical Meteorology and Tropical Cyclones Symposium, AMS Annual Meeting, Boston, MA, January 2020.

Garcia, B.A., R. M. Rauber and D. A. Hence, 2020: Frontal Precipitation Enhancement Upstream of the Olympic Mountains during OLYMPEX IOP1. 19th Annual Student Conference, AMS Annual Meeting, Boston, MA, January 2020.

Geyer, M. and J. Lara and D. A. Hence, 2020: Indian Ocean Basin Tropical Cyclones and Their Effect on the Madden–Julian Oscillation. 19th Annual Student Conference, AMS Annual Meeting, Boston, MA, January 2020.

Kosiba, K.A.,,J. Wurman, S. W. Nesbitt, R. J. Trapp, M. R. Kumjian, R. S. Schumacher, and D. A. Hence, 2020: Overview of CSWR RELAMPAGO Radar and Surface Observations. 20th Symposium on Meteorological Observation and Instrumentation, Boston, MA, January 2020.

Garcia, B.A., D. A. Hence and R. M. Rauber, 2019: Frontal Precipitation Enhancement Upstream of the Olympic Mountains during OLYMPEX IOP1. 3rd Midwest Student Conference on Atmospheric Research, Urbana, IL, September 2019.

Thayer, J. and D.A. Hence, 2018: Role of Multiscale Atmospheric Conditions in the Evolution of Convective Organization during MJO-1 of DYNAMO/CINDY/AMIE. American Meteorological Society, 33rd Conference on Hurricanes and Tropical Meteorology, Ponte Vedra, FL, April 2018. *Winner Outstanding Student Poster Presentation

Thayer, Jeffrey D. and D.A. Hence, 2018: Role of Multiscale Atmospheric Conditions in the Evolution of Convective Organization during MJO-1 of DYNAMO/CINDY/AMIE. WCRP Grand Challenge on Clouds, Circulation and Climate Sensitivity: 2nd Meeting on Monsoons and Tropical Rain Belts, Trieste, Italy.

R. Haacker, T. Mayo, R.L. Batchelor, and D.A. Hence, "SOARS: The next generation of leaders is here!" American Meteorological Society, 98th Annual Meeting, Austin, TX, January 2018.

Thayer, J. and D.A. Hence, 2017: The Role of Multiscale Atmospheric Conditions in the Evolution of Convective Organization during MJO-1 of DYNAMO/CINDY/AMIE. 1st Midwest Student Conference on Atmospheric Research, Urbana, IL, October 2017.

Hence, D.A. and A. Hunzinger, "Precipitation and Propagation Characteristics of Narrow Cold-Frontal Rainbands during the OLYMPEX Field Campaign." American Meteorological Society, 97th Annual Meeting, Seattle, WA January 2017.

Hence, D.A. and S. Braun, "Impacts of the presence of dry air upon Hurricane Nadine (2012)". American Meteorological Society, 15th Mesoscale Conference, Portland, OR, August 2013.

Hence, D.A., T. Lerud and R.A. Houze, Jr., "Vertical Structure of Tropical Cyclones undergoing Eyewall Replacement Cycles as seen by the TRMM PR." NASA Precipitation Measurement Mission Science Team Meeting, 2010 Annual Meeting, Seattle, WA, November 2010.

Hence, D.A., R.A. Houze, Jr. and S. Brodzik, "Three-dimensional structure of intense Atlantic hurricanes as seen by the TRMM PR." NASA Precipitation Measurement Mission Science Team Meeting, 2008 Annual Meeting, Ft. Collins, CO, August 2008.

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