

## VITA

### Jay Stanley Hobgood

#### POSITIONS

- 2015-2021. Coordinator of the Committee on Academic Misconduct, Ohio State University.
- 2013-2014. Faculty Fellow in the Office of Academic Affairs, Ohio State University
- 1992-2021. Associate Professor, Ohio State University
- 1995-2014. Director, Atmospheric Sciences Program, Ohio State University
- 1987-1992. Assistant Professor, Ohio State University
- 1979-1987. Assistant Professor, University of Nebraska-Lincoln
- 1978-1979. Graduate Teaching Associate, Ohio State University
- 1977-1978. Graduate Research Associate, Ohio State University
- 1974-1977. Graduate Teaching Associate, Ohio State University

#### EDUCATION

- Ph.D. 1984, Geography, Ohio State University
- M.A. 1976, Geography, Ohio State University
- B.A. 1974, Geography, Ohio State University

#### AWARDS

- 2010. Faculty Award for Distinguished University Service, Ohio State University
- 2001. Special Award, American Meteorological Society
- 1996. Alumni Distinguished Teaching Award, Ohio State University
- 1979. Huntington Award, Department of Geography, Ohio State University

## REFEREED JOURNAL ARTICLES

2012. “R. G. Mauk and J. S. Hobgood, “Tropical Cyclone Formation in Environments with Cool SST and High Wind Shear over the Northeastern Atlantic Ocean”, *Weather and Forecasting*, **27**, 1433-1448.
2011. M.C. Kruk, P.A. Hennon, E.J. Gibney, J. Hobgood and J. Weyman. “[Tropics] Tropical Cyclones 3) Eastern North Pacific Basin” (in .State of the Climate in 2010.] , *Bulletin of the American Meteorological Society*, **92**, S121-S123.
2007. K. Law and J.S. Hobgood, “A Statistical Model to Forecast Short-Term Hurricane Intensity, *Weather and Forecasting*, **22**, 967-980.
2005. C. Hennon, C. Marzban and J.S. Hobgood, “Improving Tropical Cyclogenesis Statistical Model Forecasts through the Application of a Neural Network Classifier”, *Weather and Forecasting*, **20**, 1073-1083.
2003. C. Hennon and J.S. Hobgood, “Forecasting Tropical Cyclogenesis over the Atlantic Basin Using Large-Scale Data”, *Monthly Weather Review*, **131**, 2927-2940.
2003. J.S. Hobgood, “The Maximum Potential Intensity of Tropical Cyclones Near Socorro Island Mexico”, *Weather and Forecasting*, **18**, 1129-1139.
2000. K.R. Petty and J.S. Hobgood, “Improving Tropical Cyclone Intensity Guidance in the Eastern North Pacific Ocean”, *Weather and Forecasting*, **15**, 233-244.
1998. J.S. Hobgood, “The Effects of Climatological and Persistence Variables over the Eastern North Pacific Ocean, *Weather and Forecasting*, **13**, 632-639.
1998. J.G.W. Kelley, J.S. Hobgood, K.W. Bedford, and D.J. Schwab, “Generation of Three-Dimensional Lake Model Forecasts for Lake Erie”, *Weather and Forecasting*, **13**, 659-687.
1997. L.D. Whitney and J.S. Hobgood, “The Relationship Between Sea Surface Temperatures and Maximum Intensities of Tropical Cyclones in the Eastern North Pacific Ocean”, *Journal of Climate*, **10**, 2921-2930.
1992. R.S. Cerveny and J.S. Hobgood, “Meteorological Implications of the First Voyage of Christopher Columbus”, *Bulletin of the American Meteorological Society*, **73**, 173-178.

1991. J.N. Rayner, D.A. Howarth and J.S. Hobgood, "Dynamic Climatology: Its History and Future", *Physical Geography*, **12**, 207-219.
1991. J.A. Harrington, R.S. Cerveny and J.S. Hobgood, "Contests as Learning Experiences: The Role of Weather Forecasting Contests in Geography Programs", *Journal of Geography*, **90**, 27-31.
1989. J.S. Hobgood and J.N. Rayner, "A Test of Convective Parameterizations in a Tropical Cyclone Model", *Monthly Weather Review*, **117**, 1221-1226.
1988. R.S. Cerveny and J.S. Hobgood, "Ice-age Hurricanes and Tropical Storms", *Nature*, **333**, 243-245.
1986. J.S. Hobgood, "A Possible Mechanism for the Diurnal Oscillations of Tropical Cyclones", *Journal of the Atmospheric Sciences*, **43**, 2901-2922.
1986. J.S. Hobgood, "The Influence of Relative Humidity on the Development of Tropical Cyclones", *Physical Geography*, **7**, 282-291.
1986. S. Lavin, J.S. Hobgood, and P. Kramer, "Dot-density shading: A Technique for Mapping Continuous Climatic Data", *Journal of Climate and Applied Meteorology*, **25**, 679-690.

#### CHAPTERS IN EDITED BOOKS

2016. J. Hobgood, "Tropical climate/Hurricanes" in *The Encyclopedia of Geography: People, the Earth, Environment and Technology*, Wiley.
2011. J. Hobgood, "Climate Change, Climate Models and Geoengineering the Earth" in *Engineering Earth: The Impacts of Megaengineering Projects*, Stanley D. Brunn, ed. Springer Science & Business Media 2185-2200.
2005. J. Hobgood, "Tropical Cyclones" in *Encyclopedia of World Climatology*, John E. Oliver, ed., Springer, pp. 750-756.

#### CONFERENCES PROCEEDINGS AND PREPRINTS

1998. J.S. Hobgood, "A Comparison of Thermodynamic and Empirical Maximum Potential Intensities over the Eastern North Pacific Ocean", *Preprints of the Symposium on Tropical Cyclone Intensity Change*, 129-130.
1997. J.S. Hobgood, "The Effects of Climatological Factors on the Intensities of Tropical Cyclones over the Eastern North Pacific Ocean", *Preprints of*

*the 22<sup>nd</sup> Conference on Hurricanes and Tropical Meteorology*, 282-283.

1996. J.G.W. Kelley, D.J.S. Welsh, K.W. Bedford, J.S. Hobgood and B. Hoch, "High-resolution Short-term Lake Forecasts for Lake Erie", *Estuarine and Coastal Modeling IV, Proceedings of the 4<sup>th</sup> International Conference*, 367-378.
1994. Y.P. Chu, K.W. Bedford, C.J. Merry and J.S. Hobgood, "Impact of GOES Data on Surface Heat Flux Predictions", *National Conference on Hydraulic Engineering*, 212-216.
1994. J.G.W. Kelley, C.-C.J. Yen, K.W. Bedford, J.S. Hobgood and D.J. Schwab, "Coupled Lake Erie Air-Sea Storm Resolving Forecasts and Predictions, the Viento Project", *Estuarine and Coastal Modeling III, Proceedings of the 3<sup>rd</sup> International Conference*, 202-215.
1994. J.G.W. Kelley, C.-C.J. Yen, J.S. Hobgood, D.J. Schwab and K.W. Bedford, "Short-term Forecasts for Lake Erie", *Proceedings of the 1994 Hydraulic Engineering Conference*, 227-231.
1993. J.G.W. Kelley, J.S. Hobgood and C.D. Sawyer, "Mesoscale Rainfall Distribution in Southern New England Associated with Hurricane Bob (1991)", *Preprints of the 13<sup>th</sup> Conference on Weather Analysis and Forecasting*, 428-429.
1991. J.S. Hobgood and J.N. Rayner, "November/December Hurricanes in the 1980s", *Preprints of the 19<sup>th</sup> Conference on Hurricanes and Tropical Meteorology*, 367-368.
1989. R.S. Cerveny and J.S. Hobgood, "Ice-age Tropical Cyclones over the South Pacific Ocean", *Proceedings of the Third International Conference On Southern Hemisphere Meteorology and Oceanography*.
1984. J.S. Hobgood, "A Method for Including Radiative Fluxes in a Model Tropical Cyclone", *Modeling and Simulation Volume 15, Part: 1: Geography-Regional Sciences*, 315-319.
1977. J.S. Hobgood, "A Preliminary Experiment in Hurricane Prediction Using Interactive Computer Graphics", *Preprints of the 11<sup>th</sup> Conference on Hurricanes and Tropical Meteorology*, 413-415.

## RESEARCH REPORTS

1993. K. Bedford, A. Brown, W. Carlson, P. Buerger, J. Hobgood, J. Kelley, S.F. May, F. Phillips, S. Spencer, K. Varadhan, D. Wintringham, J. Yen,

*Online Steering of Scientific Simulations Using the NASA ACTS: A Report On the Viento Project, OSU-ACCAD-1/93-TR3.*

1981. A.V. Douglas and J.S. Hobgood, *Short-term Climate Forecast Models*, Final Project Report for the Nebraska Public power District.

#### RESEARCH GRANTS

1988. K.W. Bedford and J.S. Hobgood, “COPE: An Image-based Analysis and Forecasting System for Coastal Planning, Engineering and Design.”
1980. J.S. Hobgood, “Short-range Weather Forecasting Model”.

#### SELECTED PRESENTATIONS

2018. “The Myth That Tropical Cyclones Can’t Form Near the Equator”, presented at the *33<sup>rd</sup> Conference on Hurricanes and Tropical Meteorology*.
2018. “An Experimental Wind Intensity Size Index”, poster presented at the *33<sup>rd</sup> Conference on Hurricane and Tropical Meteorology*.
2016. “The Myth That Tropical Cyclones Can’t Form Near the Equator”, presented at the *112<sup>th</sup> Annual Meeting of the Association of American Geographers*.
2015. “An Experimental Hurricane Wind Intensity Size Index”, presented at the *111<sup>th</sup> Annual Meeting of the Association of American Geographers*.
2014. “Rapid Intensification of Tropical Cyclones: A Comparison of Flight Level and Surface Winds”, presented at the *31<sup>st</sup> Conference on Hurricanes and Tropical Meteorology*.
2014. “Rapid Intensification of Tropical Cyclones: A Comparison of Flight Level and Surface Winds”, presented at the *110<sup>th</sup> Annual Meeting of the Association of American Geographers*.
2012. “Rapid Intensification of Tropical Cyclones and Changes in the Drag Coefficient”, presented at the *30<sup>th</sup> Conference on Hurricanes and Tropical Meteorology*.
2012. “Rapid Intensification of Tropical Cyclones”, presented at the *108<sup>th</sup> Annual Meeting of the Association of American Geographers*.
2011. Gelber, B., J. Hobgood, and P. Lore, “Extreme Weather”, invited panel discussion presented at the Columbus Metropolitan Club.

2010. "Ike and the Windstorm over Ohio", presented at the *29<sup>th</sup> Conference on Hurricanes and Tropical Meteorology*.
2010. "Hurricane Ike (2008) and the Windstorm over Ohio", presented at the *106<sup>th</sup> Annual Meeting of the Association of American Geographers*.
2009. "Tropical Cyclone Activity in a Changing Climate", invited webinar presented to the *Casualty Actuarial Society's Climate Change Committee*.
2008. "A Reexamination of the Relationship Between Central Pressure and Maximum Sustained Wind Speed", presented at the *28<sup>th</sup> Conference on Hurricanes and Tropical Meteorology*.
2008. "Characteristics of Category 5 Hurricanes", presented at the *104<sup>th</sup> Annual Meeting of the Association of American Geographers*.
2008. "Characteristics of Category 5 Hurricanes", presented at the *Department of Homeland Security Hurricane Mitigation Workshop*.
2007. "Factors Leading to the Quiet 2006 Atlantic Hurricane Season", presented at the *103<sup>rd</sup> Annual Meeting of the Association of American Geographers*.
2006. "A Comparison of Hurricanes Katrina (2005) and Camille (1969), presented at the *27<sup>th</sup> Conference on Hurricanes and Tropical Meteorology*.
2006. "A Record Atlantic Hurricane Season", presented at the *102<sup>nd</sup> Annual Meeting of the Association of American Geographers*.
2005. "Florida Hurricanes in 2004", presented at the *101<sup>st</sup> Annual Meeting of the Association of American Geographers*.
2004. "Spatial and Temporal Distribution of Tropical Cyclones over the Atlantic and Eastern North Pacific Oceans", presented at the *26<sup>th</sup> Conference on Hurricanes and Tropical Meteorology*.
2004. "Tropical Cyclone Frequency over the Atlantic and Eastern North Pacific", presented at the *100<sup>th</sup> Annual Meeting of the Association of American Geographers*.
2003. "Rapid Intensification of Tropical Cyclones Over the Atlantic Ocean, presented at the *99<sup>th</sup> Annual Meeting of the Association of American Geographers*.
2003. "Tropical Storm Barry (2001): A Case of Short-Term Rapid Intensification", presented at the *57<sup>th</sup> Interdepartmental Hurricane*

*Conference.*

- 2002. “MPI, Shear and Rapid Intensification of Hurricanes”, presented at the 25<sup>th</sup> *Conference on Hurricanes and Tropical Meteorology*.
- 2002. “Are There Thresholds for the Onset of Rapid Intensification of Hurricanes”, presented at the 98<sup>th</sup> *Annual Meeting of the Association of American Geographers*.
- 2001. “Potential Intensities of Eastern North Pacific Tropical Cyclones from Reanalysis Data”, presented at the 97<sup>th</sup> *Annual meeting of the Association of American Geographers*.
- 2001. “Are There Thresholds for the Onset of Rapid Intensification”, presented at the 55<sup>th</sup> *Interdepartmental Hurricane Conference*.
- 2000. “Minimum Potential Pressures of Tropical Cyclones over the Eastern North Pacific Ocean”, presented at the 24<sup>th</sup> *Conference on Hurricanes and Tropical Meteorology*.
- 2000. “Maximum Potential Intensities of Tropical Cyclones”, presented at the 96<sup>th</sup> *Annual Meeting of the Association of American Geographers*.
- 1999. “Maximum Potential Intensities of Tropical Cyclones Near Socorro Island, Mexico”, presented at the 95<sup>th</sup> *Annual Meeting of the Association Of American Geographers*.
- 1999. “The Maximum Potential Intensity of Tropical Cyclones Near Socorro Island, Mexico”, presented at the 23<sup>rd</sup> *Conference on Hurricanes and Tropical Meteorology*.
- 1998. “A Comparison of Thermodynamic and Empirical Maximum Potential Intensities over the Eastern North Pacific Ocean”, presented at the *Symposium on Tropical Cyclone Intensity Change*.
- 1998. “Maximum Potential Intensities of Tropical Cyclones over the Eastern North Pacific Ocean”, presented at the 94<sup>th</sup> *Annual Meeting of the Association of American Geographers*.
- 1997. “The Effects of Climatological Factors on the Intensities of Tropical Cyclones over the Eastern North Pacific Ocean”, presented at the 22<sup>nd</sup> *Conference on Hurricanes and Tropical Meteorology*.
- 1997. “Factors Affecting the Intensities of Eastern Pacific Tropical Cyclones”, presented at the 93<sup>rd</sup> *Annual Meeting of the Association of American Geographers*.

1996. "Maximum Intensities of Hurricanes in the Eastern North Pacific Ocean", presented at the *92<sup>nd</sup> Annual Meeting of the Association of American Geographers*.
1995. "The Relationship Between Sea Surface Temperature and the Maximum Intensity of Hurricanes in the Eastern North Pacific Ocean", presented At the *21<sup>st</sup> Conferences on Hurricanes and Tropical Meteorology*.
- 1994, "An Improved Numerical Model of a Tropical Cyclone", presented at the *90<sup>th</sup> Annual Meeting of the Association of American Geographers*.
1993. "Mesoscale Rainfall Distribution in Southern New England Associated with Hurricane Bob (1991)", presented at the *13<sup>th</sup> Conference on Weather Analysis and Forecasting*.
1993. "Is there a Correlation Between the Frequencies of Tropical Cyclones in the Atlantic Ocean and in the Eastern North Pacific Ocean", presented at *20<sup>th</sup> Conference on Hurricanes and Tropical Meteorology*.
1993. "Are We Entering a Period of More Intense Atlantic Hurricanes", presented at the *89<sup>th</sup> Annual Meeting of the Association of American Geographers*.
1992. "Climatological Aspects of the First Voyage of Christopher Columbus", presented at the *27<sup>th</sup> International Geographical Congress*.
1992. "Feasibility of Using Short-Range Meteorological Predictions in the Lake Erie Information System", presented at the *35<sup>th</sup> Conference of the International Association for Great lakes Research*.
1992. "Climatological Aspects of the First Voyage of Christopher Columbus", presented at the *88<sup>th</sup> Annual Meeting of the Association of American Geographers*.
1991. "November/December Hurricanes in the 1980s", presented at the *19<sup>th</sup> Conference on Hurricanes and Tropical Meteorology*.
1991. "Late Season (November/December) Hurricanes in the 1980s", presented at the *87<sup>th</sup> Annual Meeting of the Association of American Geographers*.
1989. "Animation of a Simulated Tropical Cyclone", presented at the *18<sup>th</sup> Conference on Hurricanes and Tropical Meteorology*.
1989. "Animation of a Simulated Tropical Cyclone", presented at the *85<sup>th</sup> Annual Meeting of the Association of American Geographers*.



1988. "Ice-age Hurricanes and Tropical Storms", presented at the *First Ohio Supercomputer Symposium on Supercomputing*.
1988. "Computer Animation of a Simulated Tropical Cyclone", presented at the *43<sup>rd</sup> Meeting of the Southeastern Division of the Association of American Geographers*.
1988. "Potential Tropical Cyclone Development During the Ice Age", presented at the *84<sup>th</sup> Annual Meeting of the Association of American Geographers*.
1987. "A Five-layer Tropical Cyclone Model", presented at the *83<sup>rd</sup> Annual Meeting of the Association of American Geographers*.
1986. "Parameterizing the effects of Cumuli in a Tropical Cyclone Model", presented at the *82<sup>nd</sup> Annual Meeting of the Association of American Geographers*.
1985. "Cartographic Representation of Continuous Data Using Dot Density Shading", presented at the *81<sup>st</sup> Annual Meeting of the Association of American Geographers*.
1984. "A Possible Mechanism for the Diurnal Oscillation of Tropical Cyclones", presented at the *80<sup>th</sup> Annual Meeting of the Association of American Geographers*.
1983. "A Method for Including Radiative Fluxes in a Model Tropical Cyclone", presented at the *15<sup>th</sup> Annual Pittsburgh Conference on Modeling and Simulation*.
1983. "Diurnal Oscillations in a Three-Dimensional Tropical Cyclone Model", presented at the *79<sup>th</sup> Annual Meeting of the Association of American Geographers*.
1982. "Inclusion of Radiative Fluxes in Tropical Cyclone Model", presented at the *78<sup>th</sup> Annual Meeting of the Association of American Geographers*.
1981. "An Attempt to Simulate Diurnal Oscillation of Tropical Cyclones", presented at the *77<sup>th</sup> Annual Meeting of the Association of American Geographers*.
1980. "A Model Designed to Simulate Diurnal Oscillation of Tropical Cyclones", presented at the *76<sup>th</sup> Annual Meeting of the Association of American Geographers*.

1979. “Tropical Cyclones Forecasting and Interactive Computer Graphics”, presented at the *12<sup>th</sup> Conference on Hurricanes and Tropical Meteorology*.
1978. “An Experimental Model of Hurricane Prediction Using Interactive Computer Graphics”, presented at the *74<sup>th</sup> Annual Meeting of the Association of American Geographers*.
1978. “The Recognition of Weather Map Symbols”, presented at the *74<sup>th</sup> Annual Meeting of the Association of American Geographers*.
1977. “A Preliminary Experiment in Hurricane Prediction Using Interactive Computer Graphics”, presented at the *11<sup>th</sup> Conference on Hurricanes And Tropical Meteorology*.
1977. “An Examination of the Sensitivity of the Three-Dimensional Tropical Cyclone Model to Changes in Surface Parameterizations”, presented at *The 73<sup>rd</sup> Annual Meeting of the Association of American geographers*.
1975. “The Use of a Circularly Symmetric Tropical Cyclone Model to Simulate the Development of a Cold Core Seedling”, presented at the *71<sup>st</sup> Annual Meeting of the Association of American Geographers*.

## PROFESSIONAL SERVICE

1. National Service
  - 1995- . Members Representative, University Corporation for Atmospheric Research.
  - 2016. Panel reviewer, NOAA Office of Education (OEd) Educational Partnership Program (EPP) with Minority Serving Institutions (MSI)
2. State Service
  - 1988-1989. Member, Computer Graphics Equipment Committee, Ohio Supercomputer Center.
3. University Service
  - 2013-2014. Faculty Fellow, Office of Academic Affairs, Ohio State University.
  - 2013- . Member, Speakers Committee, Department of Geography, Ohio State University.

- 1995- 2014. Director, Atmospheric Sciences Program, Ohio State University.
- 2011- . Member, Faculty Awards Committee, Graduate School, Ohio State University
- 2012. Member, Enhancing the Student Learning Experience Arts and Sciences Strategic Plan Working Group, Ohio State University
- 2008-2011. Member, Council on Academic Affairs (CAA), Ohio State University.
- 2010-2011. Co-chair, Council on Academic Affairs, Ohio State University
- 2009-2010. Chair, Council on Academic Affairs, Ohio State University.
- 2009-2012. Member, Executive Coordinating Committee for Semester Conversion, Ohio State University.
- 2009. Chair, CAA Subcommittee B, Ohio State University
- 2008-2009. Member, Environmental Sciences Task Force (ESTF), Ohio State University.
- 2008-2009. Chair, ESTF Survey of Existing Programs Working Group, Ohio State University.
- 2007-2009. Member, College of Social and Behavioral Sciences Curriculum Committee, Ohio State University.
- 2008-2009. Chair, College of Social and Behavioral Sciences Curriculum Committee, Ohio State University.
- 2004-2007. Member, Arts and Sciences Faculty Senate, Ohio State University.
- 2005-2008. Member, Arts and Sciences Committee on Curriculum and Instruction (CCI), Ohio State University.
- 2007-2008 Chair, CCI Subcommittee B, Ohio State University.
- 2006-2007. Chair, CCI Subcommittee C, Ohio State University.

- 2006-2007. Member, Task Force on the Requirements for the B.S. Degree, Ohio State University.
- 1996-2012. Faculty Adviser, Meteorology Club, Ohio State University.
- 2006-2012. Member, Undergraduate Curriculum Committee, Department of Geography, Ohio State University.
- 2001-2009. Coordinator, Workshop for new Teaching Associates in Geography, Ohio State University.
- 2002-2007. Member, Speakers Committee, Department of Geography, Ohio State University.
- 2001-2002. Course Coordinator for Geography 120, Ohio State University.
- 1996-1998. Member, Alumni Distinguished Teaching Awards Committee, Ohio State University.
- 1994-1995. Chair, Graduate Committee, Atmospheric Sciences Program, Ohio State University.
- 1991-1993. Alternate, Research and Graduate Council, Ohio State University.
- 1990-1993. Member, Instructional Computing Advisory Committee, Ohio State University.
- 1985-1987. Chair, Curriculum Committee, Department of Geography, University of Nebraska-Lincoln.
- 1984-1987. Course Coordinator for Geography 251, Meteorology Laboratory, University of Nebraska-Lincoln.
- 1984-1987. Chief Undergraduate Adviser for B.S. Degree in Meteorology/Climatology, University of Nebraska-Lincoln.
- 1982-1987. Member, Curriculum Committee, Department of Geography, University of Nebraska-Lincoln.
- 1984-1985. Chair, Search Committee, Department of Geography, University of Nebraska-Lincoln.

MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS

Member, Association of American Geographers.

Member, American Meteorological Society.