

Curriculum Vitae

Jon E. Ahlquist

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General Information

University address: Earth, Ocean & Atmospheric Science
College of Arts and Sciences
Love Building 0404
Florida State University
Tallahassee, Florida 32306-4520

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Professional Preparation

- 1981 Ph.D., University of Wisconsin. Major: Meteorology. Supervisor: John Kutzbach.
- 1975 M.S., California Institute of Technology. Major: Planetary Science. Supervisor: Andrew Ingersoll.
- 1974 B.A., University of Northern Iowa. Major: Physics and Mathematics. Supervisor: Hsiao-hua Hsu.

Professional Experience

- 1987–present Associate Professor, Earth, Ocean & Atmospheric Science, Florida State University.
- 1981–1987 Assistant Professor, Earth, Ocean, and Atmospheric Science, Florida State University.

Honors, Awards, and Prizes

- Nominated for Distinguished Teaching Award, Florida State University (2019).
- 2019 MAX University Challenge, The Weather Company, owned by IBM (2019).
- 20th Anniversary Weathercasting Workshop Recognition plaque, Weathercasting alumni (2017).
- AMS/NWA Appreciation Plaque, North Florida Chapter of AMS/NWA (2017).
- Nominated for Martin Luther King, Jr., Award, Florida State University (2017).
- Nominated for Martin Luther King, Jr., Award, Florida State University (2016).
- \$10,000 account for weathercasting donated by Bryan Norcross, FSU Foundation (2014).

(\$10,000).

Plaque, FSU Weathercasting Alumni (2012).

Undergraduate Teaching Award, Florida State University (2011).

University Teaching Award, Florida State University (2005).

Appointed Director, NOAA/FSU Cooperative Institute for Tropical Meteorology (1999).

Teaching Incentive Program Award, Florida State University (1999).

University Teaching Award, Florida State University (1999).

Teaching Incentive Program Award, Florida State University (1994).

University Undergraduate Advising Award, Florida State University (1994).

Undergraduate Advising Award, College of Arts and Sciences, Florida State University (1990).

Summer Fellow, U.S. Air Force Summer Faculty Research Program (1986).

Winner of 4-year scholarship competition in physics, University of Northern Iowa (1970).

Fellowship(s)

Advanced Study Program post-doctoral fellowship at the National Center for Atmospheric Research (1981).

National Research Council post-doctoral fellowship (1981).

NSF graduate fellowship in atmospheric sciences (3 years) (1975–1978).

Erle C. Anthony fellowship, California Institute of Technology (1974).

Current Membership in Professional Organizations

American Meteorological Society

Sigma Xi

Teaching

Courses Taught

General Meteorology (MET2700)

Honors Work (MET4900)

Weathercasting (MET3940)

Directed Individual Study (MET4905)

Introduction to Atmospheric Dynamics (MET3300)

Introduction to the Atmosphere (MET1010)

Introductory Meteorology Laboratory (MET1010L)

Meteorology Internship (MET4945)

Directed Individual Study (MET5905)

Doctoral Seminar (MET6930)

Master's Seminar (MET5930)

Nexstar Broadcasting Inc (MET4945)

Applied Time Series Analysis (MET5090)

WFLA Weather (MET4945)
WCTV Weather (MET4945)
WCTV Weather Internship (MET4945)
Weather Channel Graphics (MET4945)
Selected Topics in Meteorology (MET4159)
Current Weather Discussion (MET3520)
Directed Individual Study (MET5906)
Advanced Dynamic Meteorology II (MET5312)
Atmospheric Dynamics II (MET4302)
Advanced Dynamic Meteorology I (MET5311)
Atmospheric Dynamics I (MET4301)

Curriculum Development

Revision of MET1010L Introductory Meteorology Laboratory to qualify for FSU Liberal Studies (2019)
Revision of undergraduate meteorology curriculum (2019)
Revision of MET1010 to address extensive changes in FSU's Liberal Studies requirements (2014)

Doctoral Committee Chair

Mackey, B. P., doctoral candidate.

Doctoral Committee Member

Honeyager, R. E., graduate. (2017).
Koorehpazan Dezfuli, A., graduate. (2011).
Peffer, L. T., graduate. (2011).
Ying, M., doctoral student. *Understanding Physics of Snowflakes and Snow Precipitation Process Using Spaceborne Microwave Measurements.*

Doctoral Committee University Representative

Towne, T. J., graduate. (2016).
Girimurugan, S., graduate. (2014).
Chowdhury, I., doctoral candidate.
Towne, T., doctoral student. *The Role of Prior Experience in Performance and Transfer within the Space Fortress Game.*
Girimurugan, B., doctoral student. *Nonlinear Multivariate Tests for High-Dimensional Data Using Wavelets with Applications in Genomics and Engineering.*

Master's Committee Chair

Dmitruk, G., graduate. (2020).
Wolf, L. S., graduate. (2009).

Master's Committee Cochair

Engelman, M. B., graduate. (2008).

Master's Committee Member

Skeen, C., graduate. (2020).
Ducker, J., graduate. (2016).
Seay, B. A., graduate. (2014).
Christophersen, J. A., graduate. (2013).
Riggi, A. G., graduate. (2013).
Honeyager, R. E., graduate. (2013).
Wagner, G. A., graduate. (2011).
Perron, M., graduate. (2010).
Lowry, M. R., graduate. (2009).
Peffer, L. T., graduate. (2009).

Bachelor's Committee Chair

Hollis, M., graduate. (2019). *Categorizing various types of atmospheric flow in multidecadal global weather data.*
Day, L., graduate. (2011). *A Case Study of 2010 Hurricane Karl to Evaluate the Precipitation Forecasts of the 2010 Global Ensemble Forecast System (GFS).*
Sliwinski, T., graduate. (2011). *A Case Study of a Hybrid Cyclone: 6-9 September 2009.*
Bogdanoff, A., graduate. (2008). *Global evolution of synoptic-scale vorticity maxima.*
Pawlak, D., graduate. (1994).
Brasseur, H., student.
Sala, C., student.

Bachelor's Committee Member

Anand, M., student. *Analysis of 1-3 December 2018 south Georgia and north Florida flooding event.*
Clear, V., student. *Analysis of lightning flash densities over Orlando, Florida.*

Supervision of Student Research Not Related to Thesis or Dissertation

Brasseur, H. (2019–present).

O'Donnell, G. (Aug 2018–Dec 2019).

Hollis, M. (2016–19).

Stow, J. (2017–18).

Xia, Z. (Aug 2015–Apr 2016).

Wu, D. (Aug 2013–Apr 2014).

Additional Teaching Not Reported Elsewhere

Ahlquist, J. E. (2019). *Invited speaker (all expenses paid) at World Meteorological Organization and Nanjing University of Information, Science, and Technology Symposium on Challenges of Contemporary Meteorology Education.*

Ahlquist, J. E. (2016). *Review transition of meteorology program at Abu Dhabi Polytechnic from quarter to semester system.*

Ahlquist, J. E. (2015). *Review meteorology program at Abu Dhabi Polytechnic, Abu Dhabi, United Arab Emirates.*

External PhD Committee Member

Ahlquist, J. E. (2019–2020). *External Committee Member for meteorology PhD candidate Mr. Himadri Baisya. Indian Institute of Technology, Bhubaneswar, India.*

Ahlquist, J. (2019–2020). *External meteorology PhD committee member for Himadri Basya. Indian Institute of Technology, Bhubaneswar, India.*

Technology Fee Grant for weathercasting graphics

Ahlquist, J. (2017–2022). *\$37,438 Technology Fee grant from Arts and Sciences to purchase graphics hardware and five years of data for MET3940 Weathercasting and the student-produced TV show "FSU Weather." Florida State University.*

Research and Original Creative Work

Publications

Refereed Journal Articles

- Teegavarapu, R., Aly, A., Pathak, C., Ahlquist, J., Fuelberg, H., & Hood, J. (2018). Infilling missing precipitation records using variants of spatial interpolation and data-driven methods: use of optimal weighting parameters and nearest neighbour-based corrections. *International Journal of Climatology*, 38, 776-793. doi:10.1002/joc.5209
- Krishnamurti, T., Rajendran, K., Kumar, T., Lord, S., Toth, Z., Zou, X., Cocke, S., Ahlquist, J., & Navon, I. (2003). Improved skill for the anomaly correlation of geopotential heights at 500 hPa. *Monthly Weather Review*, 131(6), 1082-1102. doi:10.1175/1520-0493(2003)131[1082:ISFTAC>2
- Zhang, S., Zou, X., & Ahlquist, J. (2001). Examination of numerical results from tangent linear and adjoint of discontinuous nonlinear models. *Monthly Weather Review*, 129(11), 2791-2804. doi:10.1175/1520-0493(2001)129[2791:EONRFT>2
- Ahlquist, J. (2000). Calendars and software. *Bulletin of the American Meteorological Society*, 81(1), 69-74. doi:10.1175/1520-0477(2000)081[0069:CAS>2.3.
- Zhang, S., Zou, X., Ahlquist, J. E., Navon, I. M., & Sela, J. (2000). Use of differentiable and nondifferentiable optimization algorithms for variational data assimilation. *Monthly Weather Review*, 128, 4031-4044.
- Sivillo, J., Ahlquist, J., & Toth, Z. (1997). An ensemble forecasting primer. *Weather and Forecasting*, 12(4), 809-818. doi:10.1175/1520-0434(1997)012[0809:AEFP>2.0
- SPANGLER, T., AHLQUIST, J., BLUESTEIN, H., ORVILLE, H., & WAKIMOTO, R. (1995). On the Future of Research-Intensive Universities and their Associated Atmospheric Science Programs. *Bulletin of the American Meteorological Society*, 76(5), 721-727.
- Ahlquist, J. E. (1993). Free software and information via computer network. *Bulletin of the American Meteorological Society*, 74, 377-386.
- Pfeffer, R., Ahlquist, J. E., et al. (1990). A study of baroclinic wave behavior over bottom topography using complex principal component analysis of experimental data. *Journal of Atmospheric Science*, 47, 67-81.
- Ahlquist, J. E., Mehta, V., Devanas, A., & Condo, T. (1990). Fluctuations in the monsoon seen through 25 years of Indian radiosonde data. *Mausam*, 41, 273-278.

- Ahlquist, J. E., Devanas, A., & Mehta, V. (1990). Intraseasonal zonal wind fluctuations seen through Indian radiosonde observations. *Meteorological and Atmospheric Physics*, 44, 11-28.
- Ahlquist, J. E. (1988). Application of fuzzy implication to probe nonsymmetric relations: Part II. *Fuzzy Sets and Systems*, 25(1), 87-95. doi:10.1016/0165-0114(88)90102-9
- AHLQUIST, J. (1988). Principal Component Analysis of Vector-Valued Functions of 4 Dimensions. *Mathematical and Computer Modelling*, 10(3), 175-182. doi:10.1016/0895-7177(88)90021-0
- Ahlquist, J. E. (1987). Application of fuzzy implication to probe nonsymmetric relations: Part I. *Fuzzy Sets and Systems*, 22(3), 229-244. doi:10.1016/0165-0114(87)90069-8
- MEHTA, V., & AHLQUIST, J. (1986). Interannual Variability of the 30-50 Day Activity in the Indian-Summer Monsoon. *Meteorology and Atmospheric Physics*, 35(3), 166-176. doi:10.1007/BF01026172
- AHLQUIST, J. (1985). Climatology of Normal Mode Rossby Waves. *Journal of the Atmospheric Sciences*, 42(19), 2059-2068. doi:10.1175/1520-0469(1985)042[2059:CONMRW>2
- AHLQUIST, J. (1982). Normal-Mode Global Rossby Waves - Theory and Observations. *Journal of the Atmospheric Sciences*, 39(2), 193-202. doi:10.1175/1520-0469(1982)039[0193:NMGRWT>2

Refereed Encyclopedia Entries

- Ahlquist, J. E. (1995). Meteorology and Climatology. In *Collier's Encyclopedia*. P.F. Collier.
- Ahlquist, J. E. (1987). Meteorology and Climatology. In *Collier's Encyclopedia*. P.F. Collier.

Refereed Proceedings

- Ahlquist, J. E. (2002). Weather and Climate Modeling. In S. V. Singh, S. Basu, & T. N. Krishnamurti (Eds.), *Indo-US Workshop on Weather and Climate Modeling* (pp. 37-49). New Delhi: New Age International Publishers.
- Ahlquist, J. E. (2001). Communicating the confidence in your forecast. In *30th Broadcast Conference on Broadcast Meteorology*. Minneapolis, MN.
- Ahlquist, J. E., & Sivillo, J. (1995). Short-range growth of linear perturbations. In *AMS 10th Conference on Atmospheric Waves and Stability* (pp. 241). Big Sky, MT.

Ahlquist, J. E., & Sivillo, J. (1994). Determining sensitivity to initial conditions: linear operator analysis versus mode breeding. In *Conference Preprints, AMS 10th NWP Conference* (pp. 216-217). Portland, OR.

Smith, M. R., Smith, E. A., Ahlquist, J. E., & Oh, K. W. (1987). Interactive graphics demonstration of "MIDGET" using data from the Southwest-East Asian monsoon. In *Preprint Vol., Third International Conf. on Interactive Information and Processing Systems for Meteorology, Oceanography, and Hydrology*. New Orleans, LA.

Ahlquist, J. E. (1984). Dominant empirical modes at 850 and 200 mb over India throughout the year. In *Proceedings of the International FGGE Conference on the Tropics* (pp. II-14 - II-20). Tallahassee, FL.

Ahlquist, J. E. (1981). Dominant empirical modes in the Indian summer monsoon flow patterns at 850 mb. In *Proc. International Conf. on Early Results of FGGE and Large-scale Aspects of its Monsoon Experiments* (pp. 12-48 - 12-53). Tallahassee, FL.

Refereed Reviews

Ahlquist, J. E. (2008). Review of *Geographic Uncertainty in Environmental Security*. *EOS*, 89(26).

Ahlquist, J. E. (1996). Review of book *Predictability and nonlinear modeling in natural sciences and economics*. *Bulletin of the American Meteorological Society*.

Nonrefereed Journal Articles

Ahlquist, J. (2008). Review of "Geographic Uncertainty in Environmental Security". *EOS*, 89 no. 26, 237. doi:10.1029/2008EO260006

Nonrefereed Reports

Ahlquist, J. E. (1991). *Getting the most from your computer's disc and tape drives. (Primer for graduate students on managing large data sets.)*. Florida State University (19 pp.).

Ahlquist, J. E. (1990). *Documentation for ANIMATE. (Instructions for using the ANIMATE computer program, also written by the author, which displays animated graphics on a standard MS-DOS computer.)*. Florida State University (16 pp.).

Ahlquist, J. E. (1990). *Guide to a public domain implementation of T_EX and L^AT_EX for MS-DOS. (Overview, installation, and use of a public domain version of T_EX typesetting software.)*. Florida State University (30 pp.).

Ahlquist, J. E. (1987). *Weather forecast evaluation by decomposition of the wind field into barotropic and baroclinic components* (An evaluation of the Air Force's global weather forecasting model in terms of its ability to forecast external modes, as compared to the accuracy of a statistical model). Report to the U.S. Air Force. (30 pp.).

Ahlquist, J. E. (1986). *Weather forecast evaluation by decomposition of the wind field into rotational and divergent components* (An observational evaluation of the Air Force's global weather forecasting model in terms of its limited ability to forecast the divergent component of the wind). Report to the U.S. Air Force (20 pp.).

Ahlquist, J. E. (1985). *Forcing of normal mode Rossby waves* (Theoretical and observational study showing that the behavior of planetary-scale normal mode Rossby waves is consistent with excitation by random forcing). Report to NOAA (12 pp.).

Presentations

Invited Papers at Conferences

Ahlquist, J. E. (presented 2002, February). *Almost anything can be the leading singular vector*. Paper presented at the meeting of Indo-US Workshop on Weather and Climate Modeling, New Delhi, India. (International)

Invited Papers at Symposia

Ahlquist, J. (presented 2019, May). Learning through Lots of Homework. In *WMO-NUIST Symposium on the Challenges of Contemporary Meteorological Education*. Symposium conducted at the meeting of World Meteorological Organization, Nanjing Univ of Science, Info, & Tech, Nanjing, China. (International)

Refereed Presentations at Conferences

Ahlquist, J. E., & Allgood, A. (presented 2008, May). *Statistical corrections for NCEP ensemble precipitation forecasts: Final report*. Presentation at the meeting of Fourth NCEP/NWS Ensemble User Workshop, Laurel, MD. (National)

Ahlquist, J. E., & Allgood, A. (presented 2006, November). *Statistical corrections for NCEP ensemble precipitation forecasts: An update*. Presentation at the meeting of Third NCEP/NWS Ensemble User Workshop, Laurel, MD. (National)

Ahlquist, J. E., & Allgood, A. (presented 2006, March). *Statistical corrections for NCEP ensemble precipitation forecasts*. Presentation at Predictability, Observations, and Uncertainties in Geosciences, Florida State University. (Regional)

- Ahlquist, J. E. (presented 2005, February). *Lead Presentation: Adjusted probabilistic ensemble precipitation forecasts*. Presentation at MONEX and its Legacy, Indian Meteorology Society and the US University Corporation for Atmospheric Research. (International)
- Ahlquist, J. E. (presented 2005, February). *Review of UK Met Office ensemble forecasting workshop from October 2004*. Presentation at International Brainstorming Meeting on Modeling and Prediction over Indian Monsoon Region: Vision 2015, National Centre for Medium Range Weather Forecasting, New Delhi, India. (International)
- Ahlquist, J. E. (presented 2000, November). *Advances in ensemble forecasting*. Presentation at the meeting of SOO Workshop, Washington, D.C. (National)
- Ahlquist, J. E. (presented 1998, June). *Ensemble forecasting: What is it and what good is it?* Presentation at 27th Conference on Broadcast Meteorology, American Meteorological Society (AMS), St. Louis, MO. (National)
- Stefanova, L. B., & Ahlquist, J. E. (presented 1996, August). *Onset of blocking and teleconnection lows from small scale vorticity forcing*. Presentation at 11th NWP Conference, American Meteorological Society (AMS), Norfolk, VA. (National)
- Treadon, R., & Ahlquist, J. E. (presented 1992, March). *Low predictability of the onset of atmospheric blocks*. Presentation at the meeting of Eighth Southeastern Geophysical Fluid Dynamics Conference, Tallahassee, FL. (Regional)
- Ahlquist, J. E., & Allen, D. (presented 1989, April). *The structure and forcing of Rossby waves: Two atmospheric case studies*. Presentation at the meeting of Seventh Conference on Atmospheric and Oceanic Waves and Stability, San Francisco, CA. (National)
- Ahlquist, J. E., Mehta, V., Devanas, A., & Condo, T. (presented 1988, November). *Fluctuations in the monsoon seen through 25 years of Indian radiosonde data*. Presentation at the meeting of International Symposium on Monsoon - Understanding and Prediction, Pune, India. (International)
- Ahlquist, J. E. (presented 1985, March). *Climatology of normal mode Rossby waves*. Presentation at Fifth Conference on Atmospheric and Oceanic Waves and Stability, American Meteorological Society, New Orleans, LA. (National)
- Ahlquist, J. E. (presented 1985, January). *Intraseasonal fluctuations in 850 and 200 mb monsoon winds as determined by complex EOF analysis*. Presentation at the meeting of Indo-U.S. Workshop on Interannual Variability of Monsoon, New Delhi, India. (International)
- Mehta, V., & Ahlquist, J. E. (presented 1985). *Structure and propagation of 30–50 day activity in the monsoon during the summers of 1976–1980*. Presentation at Workshop on Monsoon Studies, Indian Institute of Technology, Kanpur, India. (International)

Invited Workshops

Ahlquist, J. E. (2002, January). *Challenges of choosing initial conditions for ensemble forecasting*. Workshop delivered at Indian Meteorological Society, Delhi Chapter. (International)

Refereed Workshops

Ahlquist, J. E. (2005). *Participant, workshop on quantitative precipitation estimation/forecasting*. Workshop delivered at National Weather Service, Norman, OK. (National)

Ahlquist, J. E. (1996, June). *Convener and instructor with most contact hours*. Workshop delivered at World Meteorological Organization Workshop on Tropical Meteorology, Tallahassee, FL. (International)

Digital Projects

Nonrefereed Digital Projects

Ahlquist, J. E. (Author). (1988–1991). *"Animate," a computer program in C that creates animated sequences of Tektronix plots on an IBM-compatible microcomputer* [Animated Movies].

Ahlquist, J. E. (Author). (1985). *Three computer-generated animated movies which depict the time evolution of atmospheric variables in the summer monsoon* [Geospatial Mapping]. National Science Foundation.

Contracts and Grants

Contracts and Grants Funded

Ahlquist, J. E. (2011–2011). *Weathercasting TV Studio - upgrade to digital equipment*. Funded by FSU Student Technology Fee Advisory Committee. Total award \$44,501.

Kemper, Kirby W (PI), Levenson, C. W., Balkwill, D. L., Telotte, J. C., Ahlquist, J. E., Van Engelen, R. A., Fadool, D. A., Li, H., Sinke, S. M., Hsieh, Yun-Hwa P, & Kim, D. (Aug 2007–Jul 2008). *Bess Ward Fellowship and Honors Thesis Award*. Funded by University Honors Program. Total award \$13,940.

Ahlquist, J. E. (Feb 2007–Sep 2007). *Wildfire Prediction, Mitigation, and Management Experiment*. Funded by Subcontract to FSU team from contract awarded by the State of Florida to AEGIS Technologies. Total award \$11,000.

- Ahlquist, Jon E (PI). (Dec 2005–Nov 2006). *Ph.D. Research Experience in Meteorology - work with four doctoral students from King Mongkut's University of Technology Thonburi*. Funded by Commission of Higher Education of the Government of Thailand. Total award \$26,000.
- Ahlquist, J. E. (2005–2005). *Donation of software, data, and support through "WSI On Campus" program for weathercasting graphics*. Funded by WSI Corporation. Total award \$100,000.
- Ahlquist, J. E. (Oct 2003–Sep 2007). *Improvements in the Operational Forecasting of Precipitation and Hydrology at Three Scales: NCEP HPC, County Warning Area, and the Local Basin Scale*. Funded by National Oceanic and Atmospheric Administration. Total award \$371,290.
- Ahlquist, J. E. (2002–2002). *Improving the representativeness of weather forecasts*. Funded by FSU Committee on Faculty Research Support. Total award \$7,329.
- Ahlquist, J. E. (2001–2001). *Donation of computer hardware, software, data, and support through "WSI On Campus" program for weathercasting graphics*. Funded by WSI Corporation. Total award \$100,000.
- Ahlquist, J. E. (2001–2001). *Endowment pledged to weathercasting*. Funded by FSU Alumnus George Winterling. Total award \$100,000.
- Ahlquist, J. E. (Apr 2000–Sep 2001). *Cooperative Institute for Tropical Meteorology (CITM)*. Funded by National Oceanic and Atmospheric Administration (NOAA). Total award \$125,000.
- Ahlquist, J. E. (Mar 1999–Sep 2000). *Cooperative Institute for Tropical Meteorology (CITM)*. Funded by National Oceanic and Atmospheric Administration (NOAA). Total award \$125,000.
- Ahlquist, J. E. (Mar 1998–Dec 1998). *Cooperative Institute for Tropical Meteorology (CITM)*. Funded by National Oceanic and Atmospheric Administration (NOAA). Total award \$150,000.
- Ahlquist, J. E. (May 1997–Apr 1998). *Regional ensemble forecasting*. Funded by FSU Council on Research and Creativity. Total award \$6,000.
- Ahlquist, J. E. (Mar 1993–Sep 1997). *Seasonal cycle transitions and the NCAR Community Climate Model, version 2*. Funded by FSU Contracts and Grants. Total award \$4,500.
- Ahlquist, J. E. (Mar 1993–Sep 1997). *Seasonal cycle transitions and the NCAR Community Climate Model, version 2*. Funded by National Science Foundation (NSF). Total award \$267,728.

Ahlquist, J. E. (1993–1993). *Undergraduate meteorology computer lab*. Funded by FSU College of Arts and Sciences. Total award \$180,000.

Ahlquist, J. E. (May 1992–Aug 1992). *Climate change and the seasonal cycle*. Funded by FSU Contracts and Grants. Total award \$8,000.

Ahlquist, J. E. (1989–1989). *Four laser printers for FSU's student microcomputer labs*. Funded by FSU Office of Contracts and Grants. Total award \$12,349.

Ahlquist, J. E. (Jan 1988–Dec 1991). *Linearity and nonlinearity in planetary scale waves*. Funded by National Science Foundation (NSF). Total award \$109,400.

Ahlquist, J. E. (Jan 1987–Dec 1987). *Weather forecast evaluation by decomposition of the wind field into barotropic and baroclinic components*. Funded by US Air Force/Universal Energy Systems, Inc. Total award \$20,000.

Ahlquist, J. E. (Apr 1986–Apr 1986). *Microcomputer equipment for the production of animated movies of meteorological data*. Funded by Florida State University. Total award \$4,390.

Smith, E., & Ahlquist, J. E. (May 1985–Dec 1987). *Radiative controls and heat sources/sinks within the Southwest-East Asian monsoon*. Funded by National Science Foundation (NSF). Total award \$219,349.

Ahlquist, J. E. (Jul 1983–Aug 1986). *Large-scale, intraseasonal fluctuations in the Indian summer monsoon and their interannual variability*. Funded by National Science Foundation (NSF). Total award \$68,900.

Ahlquist, J. E. (Jun 1983–Nov 1984). *Climatology of observed normal modes*. Funded by National Oceanic and Atmospheric Administration. Total award \$10,430.

Ahlquist, J. E. (1982–1982). *Weather variability during India's summer rainy season*. Funded by Florida State University Summer Grant. Total award \$6,000.

Contracts and Grants Denied

Kegman, I. (2014). *Advanced Data Assimilation and Mesoscale and Transport & Dispersion (ADAMTD) Modeling, Solicitation No. FA7022-13-R-0002*. Submitted to Air Force Technical Applications Center (AFTAC).

Children's Books

Ahlquist, J. E. (2012). Technical consultant on *Gross Science Projects* by Jody Lynn Wheeler-Toppen, published by Capstone Publishers for young teenage readers.

- Ahlquist, J. E. (2011). Technical consultant on *Where Does the Sun Go at Night?* by Amy S. Hansen, published by Capstone Publishers, for young children.
- Ahlquist, J. E. (2010). Technical consultant on *Anatomy of a Tornado* by Terri Dougherty, published by Capstone Publishers, for young teenage readers.
- Ahlquist, J. E. (2008). Technical consultant on four storybooks for young children on spring, summer, fall, and winter, published by Picture Window Books, Mankato, MN..
- Ahlquist, J. E. (2005). Revised articles on seasons, spring, summer, fall, and winter for *World Book Encyclopedia*, to appear in 2008 edition.

Weathercasting activities for FSU Cable TV and for WFSU-TV

- Ahlquist, J. E. (2002). *Created and manage weekday evening television program, "FSU Weather," produced by FSU Meteorology students for FSU's cable TV channel 4, seen via Comcast throughout Leon, Gadsden, and Wakulla Counties. Runs 30 minutes/day each fall and spring semester and 15 minutes/day each summer. FSU Cable TV.*
- Ahlquist, J. E. (1998). *Organized weather coverage of Hurricane Earl for WFSU-TV using student weathercasters, providing weathercasts for the evenings before landfall and 100% of the video for WFSU-TV for 14 hours as the hurricane approached the Florida Panhandle and ultimately made landfall toward Tallahassee. WFSU-TV.*
- Ahlquist, J. E. (1998–2002). *Directed weathercasting operations for "FSU Live," a Monday through Thursday information program about FSU created by the FSU Department of Communications. Our students produced weathercasts for each of these programs from our basement studio which were carried through a fiber optic link to the FSU Broadcast Center where the rest of the program was produced. FSU Cable TV.*
- Ahlquist, J. E. (1996). *created weathercasting operations for FSU's cable TV channel in which students present short weathercasts each evening. This was the first programming created specifically for this cable outlet. These operations continue throughout the year, beginning the second week of each term and running through the last week of classes, including summers. FSU Cable TV.*

Service

Florida State University

FSU University Service

Chair, Teaching Evaluation Committee (2017–2022).

Committee member, GPC subcommittee to review MS in science teaching (2018).

Meteorology Department Senator, Faculty Senate (2010–2011).

College of Arts and Sciences Representative, University Library Committee (2006–2008).

Meteorology Department Senator, Faculty Senate (2004–2008).

Member, Dean's Advisory Committee for Computing within the College of Arts and Sciences (2004).

Transition of AMS journal subscriptions from paper to electronic form, FSU Library (2003).

Member, Sabbatical Review Committee (1993–1995).

Member, Award Committee, University-level Teaching Incentive Program (1994).

Member, Committee to review Molecular Biophysics Ph.D. Program (1991).

Member, Grants Advisory Committee, FSU Foundation (1990–1991).

FSU College Service

Host, Arts and Sciences Dean's Advisory Committee in the Meteorology Department, for weathercasting (2002).

Accompanied College of Arts and Sciences Dean to presentation to FSU Alumni in Miami area, FSU Meteorology Department (2001).

Member, Award Committee, College of Arts and Science Teaching Fellowships (1998).

Member, Award Committee, College of Arts and Science Teaching Fellowships (1984).

FSU Department Service

Undergraduate Program Director, Department of Meteorology (2007–present).

Chair, Undergraduate Program (1999–present).

Founder and manager, "FSU Weather" live half-hour TV show broadcast weeknights (1996–present).

Departmental Liaison, University Honors Program (1990–present).

Departmental Liaison, FSU Library (1988–present).

Member, Undergraduate Program (1981–present).

Member, Ad Hoc Committee to Review Instruments Course (2018–present).

Member, Ad Hoc Curriculum Review (2018–present).

Faculty Advisor, Local Student Chapter of American Meteorological Society (2012).

Mentor to Junior Faculty, Department of Meteorology (2011).

Member, Capital Equipment Priorities Committee (1997–2010).

Chair, Computing Committee (1990–2010).

Chair, Atmospheric Dynamics Committee (1987–2005).

Mentor to Junior Faculty, Department of Meteorology (2000–2004).

Undergraduate Program Director, Department of Meteorology (1999–2002).

Member, Faculty Affairs Committee (1997–2002).

Member, Dean's Advisory Committee on Departmental Chair (2001).

Chair, Tropical Meteorology Faculty Search Committee (2001).

Member, Dean's Advisory Committee on Departmental Chair (1997).

Chair, General and Applied Meteorology Committee (1990–1997).

Chair, Departmental Accountability Committee (1992–1994).

Coordinator, Departmental Chair Search Advisory Committee (1993).

Member, Computing Committee (1987–1990).

Founder and Manager, Departmental Weather Forecasting Contest (1983–1990).

Faculty Advisor, Local Student Chapter of American Meteorological Society (1982–1990).

Chair, Seymour Hess Committee for best Ph.D. Dissertation (1988).

Member, Atmospheric Dynamics Committee (1981–1987).

Member, Seymour Hess Award Committee for best Ph.D. Dissertation (1985).

Chair, Graduate Program (1983–1984).

Member, "Ad hoc" Committee for Departmental Review (1983).

Chair, Undergraduate Program (1982–1983).

Undergraduate Program Director, Department of Meteorology (1981–1982).

The Profession

Guest Reviewer for Refereed Journals

Quarterly Journal Royal Meteorological Society (2019–present).

Tellus (2019–present).

Reviewer for Textbooks

Introduction to Weather and Climate Science (2019).

Florida Weather Book (2016).

Weather and Climate (2014).

Fundamentals of Weather and Climate, 2nd ed (2010).

Atmospheric Science for Chemistry and Physics (2006).

The Atmosphere and Its Geography (2004).

Service to Professional Associations

Judge for national high school mathematical modeling competition, Moody's Mega Math Challenge, Society for Industrial and Applied Mathematics (SIAM) (2015).

Judge for national high school mathematical modeling competition, Moody's Mega Math Challenge, Society for Industrial and Applied Mathematics (SIAM) (2014).

Judge for national high school mathematical modeling competition, Moody's Mega Math Challenge, Society for Industrial and Applied Mathematics (SIAM) (2013).

Judge for national high school mathematical modeling competition, Moody's Mega Math Challenge, Society for Industrial and Applied Mathematics (SIAM) (2012).

Judge for national high school mathematical modeling competition, Moody's Mega Math Challenge, Society for Industrial and Applied Mathematics (SIAM) (2011).

Judge for national high school mathematical modeling competition, Moody's Mega Math Challenge, Society for Industrial and Applied Mathematics (SIAM) (2010).

Member of "Ad hoc" Committee on Uncertainty in Forecasts (ACUF), American Meteorological Society (2007–2010).

Member of "Ad hoc" committee to implement the new Certified Broadcast Meteorologist program, American Meteorological Society (2003).

Member of Board on Broadcast Meteorology, American Meteorological Society (1999–2001).

Member of University Relations Committee, University Corporation for Atmospheric Research (1990–1993).

Co-founder and member of committee to publish meteorological data in electronic form, University Corporation for Atmospheric Research (1991–1992).

Member of Board of Meteorological and Oceanographic Education, American Meteorological Society (1985–1988).

Service to Other Universities

40-80 letters of recommendation per year on behalf of students, *Various universities and businesses* (2014–present).

External reviewer for meteorology program as Abu Dhabi Polytechnic switches from a quarter to a semester system, *Abu Dhabi Polytechnic, United Arab Emirates* (2016).

External reviewer for new undergraduate program to grant AA through BS meteorology degrees, *Abu Dhabi Polytechnic, United Arab Emirates* (2015).

The Community

Judge, Capital Regional Science and Engineering Fair (1985–2015).

Performer, Tallahassee Bach Parley (1981–2005).

Five lectures on meteorology, Raa Middle School (2002).

Twice weekly assistant, String Instrument Program, Sealy Elementary School, Tallahassee (2000–2001).

Guest Lecturer, various local public schools (1981–2001).

Weekly tutor, Sealy Elementary School (1997–1998).

Member of Board of Directors, Tallahassee Bach Parley (a non-profit cultural organization to promote Baroque music) (1988–1996).

Consultation

South and Southwest Florida Water Management Districts. One of three technical advisors for a project to estimate missing values in approximately 100 years of daily rainfall records for stations in the southern half of Florida (2007–2008).