

JAMES W. HURRELL

Professor, Department of Atmospheric Science

Colorado State University

Fort Collins, CO 80523

e-mail: jhurrell@rams.colostate.edu

<https://www.atmos.colostate.edu/people/faculty/hurrell/>

PROFESSIONAL APPOINTMENTS:

Scott Presidential Chair of Environmental Science and Engineering, Colorado State Univ. (9/18-)

Director, National Center for Atmospheric Research (NCAR) (9/13-8/18)

NCAR Research Scientist (9/90-8/18; Senior Scientist 7/03-8/18; Senior Scientist Emeritus 12/19-)

PROFESSIONAL PREPARATION:

Univ. of Indianapolis	Indianapolis, IN	Mathematics and Earth/Space Science	B.S.	1984
Purdue University	West Lafayette, IN	Atmospheric Science	M.S.	1986
Purdue University	West Lafayette, IN	Atmospheric Science	Ph.D.	1990

RESEARCH EXPERIENCE

My research has focused on understanding the physical mechanisms of climate variability and change, with particular emphasis on large-scale atmosphere-ocean interactions and their impacts across the Earth system. My early work on the North Atlantic Oscillation helped establish its central role in shaping regional climate, ecosystems, and predictability, and has influenced research across multiple disciplines. Over the course of my career, I expanded this work to advance Earth system modeling, decadal prediction, climate attribution, and the development of community climate models that serve researchers worldwide. More recently, my research has increasingly integrated climate science with ecology, agriculture, and health, reflecting my commitment to science that both advances fundamental understanding and informs societal decision-making. Across these efforts, my goal has been to build scientific bridges—across disciplines, institutions, and international communities—to address the most pressing challenges in Earth system science.

PUBLICATIONS: ([Google Scholar](#): 52,401 citations, H index of 67; i10-Index of 117)

Key Publications (Selected)

1. Hurrell, J. W., 1995: Decadal trends in the North Atlantic Oscillation: Regional temperatures and precipitation. *Science*, **269**, 676-679.
2. Hurrell, J. W., 1996: Influence of variations in extratropical wintertime teleconnections on Northern Hemisphere temperatures. *Geophysical Research Letters*, **23**, 665-668.
3. Hurrell, J. W., Kushnir, Y., Ottersen, G., and Visbeck, M. (Eds.). (2003). *The North Atlantic Oscillation: Climatic Significance and Environmental Impact*, Geophysical Monograph Series, Vol. 134, American Geophysical Union, Washington, D. C.
4. Hurrell, J. W., M. Visbeck and co-authors, 2006: Atlantic Climate Variability and Predictability: A CLIVAR perspective. *Journal of Climate*, **19**, 5100-5121.
5. Hurrell, J. W., G. A. Meehl, D. Bader, T. Delworth, B. Kirtman, and B. Wielicki, 2009: A Unified Modeling Approach to Climate System Prediction. *Bulletin of the American Meteorological Society*, doi:10.1175/2009BAMS2752
6. Hurrell, J. W., and co-authors, 2013: The Community Earth System Model. *Bulletin of the American Meteorological Society*, 10.1175/BAMS-D-12-00121.1
7. Hart, W. S., J. W. Hurrell, A. R. Kaye, M. Chand, M. J. Keeling, and R. N. Thompson, 2025: Climate variability amplifies the need for vector-borne disease outbreak preparedness. *Proceedings of the National Academy of Sciences U.S.A., Biological Sciences – Ecology*, 122(34) e250731122

Professional Honors and Awards (Selected)

- Fellow, American Association for the Advancement of Science (2026)
- Highly Cited Researcher: Thomson-ISI (multiple years); Scholar GPS (2025, lifetime)

- Walter Scott, Jr. College of Engineering, Colorado State University, Art Corey Award for Outstanding International Contributions (2024)
- American Met. Society, Warren Washington Research and Leadership Medal (2021)
- Fridtjof Nansen Medal and Memorial Lecture, Norwegian Academy of Science and Letters (2011)
- Fellow, American Geophysical Union (2010)
- Fellow, American Meteorological Society (2006)
- Purdue University, College of Science Distinguished Alumnus Award (2006)
- Purdue Univ., Outstanding Alumnus Award, Dept. Earth and Atmospheric Science (2004)
- American Meteorological Society, Clarence Leroy Meisinger Award (2001)
- University of Indianapolis, Distinguished Alumnus Award, School of Science (2001)
- Fellow, Royal Meteorological Society (2000)

Invited and Keynote Scientific Talks

- 256 invited talks, including National Academies, Congressional testimonies, COP events, national and international laboratories and universities, conferences and workshops, corporate and public meetings.

Professional Memberships

- American Meteorological Society (1985-present)
- American Geophysical Union (1996-present)
- Royal Meteorological Society (2000-present)
- American Association for the Advancement of Science (2021-present)

Professional Service

Elected Roles

- President (President-Elect, Past President), AGU Atmospheric Sciences Section, 2017-2022
- Councilor, American Meteorological Society, 2008-2010.

External Committees (selected)

- Chair, NASEM Committee on Attribution of Extreme Weather and Climate Events, 2024-2026.
- Co-chair, Task Team on Early Warnings for All, WMO Research Board (TT-EW4All), 2024-present.
- Chair, Climate Intervention in an Earth Systems Science Framework: A Workshop (NASEM), 2023.
- Chair, Climate Intervention Task Team, World Climate Research Programme, 2021-2023.
- Member, Advisory Panel for Division of Earth and Life Sciences, NASEM, 2021-present.
- Member, AGU Finance and Investment Committee, 2021-2024.
- Member, AGU College of Fellows Mentoring Network, 2020-2024.
- Chair, Organizing Committee, NASEM Workshop on Earth Systems Predictability Research, 2020.
- Member, NASEM Committee on Developing a Research Agenda and Research Governance Approaches for Climate Intervention Strategies that Reflect Sunlight to Cool Earth, 2019-2021.
- Officer, Joint Scientific Committee, World Climate Research Programme, 2018-2024.
- Member, NOAA Earth System Science and Modeling (ESSM) Division Advisory Panel, 2017-2024.
- Chair, AGU Atmospheric Sciences Section Fellows Selection Committee, 2017-2018.
- Member, Climate Working Group, NOAA Science Advisory Board, 2013-2016.
- Chair, Scientific Organizing Committee: *WCRP Open Science Conference: Climate Research in Service to Society*, Denver, CO, 2010-2011.
- Member, NRC Comm. on a National Strategy for Advancing Climate Modeling, 2011-2013.
- Co-chair, International Climate Variability and Predictability Scientific Steering Group, 2007-2012.
- Member, International CLIVAR Atlantic Implementation Panel, 1999-2006.
- Co-chair, U.S. CLIVAR Atlantic Implementation Panel, 1999-2003.
- Co-chair, U.S. Climate Variability and Predictability Scientific Steering Committee, 1998-2005
- Member, AMS Committee on Meteorology and Oceanography of the Southern Hemisphere, 1995-98.