December 2023

CURRICULUM VITAE

Gerald A. Meehl

EDUCATION:

B.A. 1974 University of Colorado (With Distinction, Atmospheric Science)

M.A. 1978 University of Colorado (Climate Dynamics)

Ph.D. 1987 University of Colorado (Climate Dynamics)

RESEARCH POSITIONS:

2001 - Senior Scientist, Climate and Global Dynamics Laboratory, National Center for Atmospheric Research, Boulder, Colorado.

1993 - 2001 Scientist III, Climate and Global Dynamics Division, National Center for Atmospheric Research, Boulder, Colorado.

1990 - 1993 Scientist II, Climate and Global Dynamics Division, National Center for Atmospheric Research, Boulder, Colorado.

1987 - 1990 Associate Scientist IV, Climate and Global Dynamics Division, National Center for Atmospheric Research, Boulder, Colorado.

1982 - 1987 Associate Scientist III, Effects of Anthropogenic CO_2 on Climate Project, National Center for Atmospheric Research, Boulder, Colorado.

1979 - 1982 Support Scientist II, Effects of Anthropogenic CO_2 on Climate Project, National Center for Atmospheric Research, Boulder, Colorado.

1978 - 1979 Site manager at Bintulu, Sarawak, Malaysia; and at Kathmandu, Nepal; for the Rawinsonde Program as part of the International Monsoon Experiment (MONEX), National Center for Atmospheric Research.

1976 - 1978 Graduate Student Assistant, Atmospheric Analysis and Prediction Division, National Center for Atmospheric Research; Graduate Research Assistant, Institute for Arctic and Alpine Research, University of Colorado, Boulder, Colorado.

1975 - 1976 Field Team Member, Tropical Wind, Energetics, and Reference Level Experiment (TWERLE), Pago Pago, American Samoa; and Christchurch, New Zealand; National Center for Atmospheric Research.

1973 - 1975 Undergraduate Student Assistant, Atmospheric Analysis and Prediction Division, National Center for Atmospheric Research, Boulder, Colorado.

HONORS AND SOCIETIES:

Phi Beta Kappa, University of Colorado, 1974

Outstanding Student Paper Award, American Association for the Advancement of Science Meeting, Seattle, Washington, 1978

Nominee, Boettcher Foundation Fellowship, Graduate School, University of Colorado, 1985

Graduate Student Research and Creative Work Award, Graduate School, University of Colorado, 1987

Member, American Meteorological Society

Member, American Geophysical Union

Member, Pacific Science Association

Finalist, NCAR Outstanding Publication Award, 1990

Who's Who in Science and Engineering, 1993 – present

The Editor's Award, *Journal of Climate*, American Meteorological Society, 1999

Fellow, American Meteorological Society, 2006

The Walter Orr Roberts Lecture, Aspen Global Change Institute, Aspen CO, 2006

The Editor's Citation, *Geophysical Research Letters*, American Geophysical Union, 2006

2007 Nobel Peace Prize laureate as a member of the Intergovernmental Panel on Climate Change (IPCC) science team, for work as contributing author for the First Assessment Report (1990), lead author for the Second Assessment Report (1995), and coordinating lead author for the Third (2001) and Fourth (2007) Assessment Reports

Finalist, NCAR Outstanding Publication Award, 2007

The Jule G. Charney Award of the American Meteorological Society, 2009, "For outstanding collaborative contributions to modeling climate and its response to anthropogenic and natural forcings"

The Len Robock Lecture, University of Wisconsin, Madison, WI, 2010

Eos Research Spotlight, "Initialized decadal climate model projects reduced future warming", American Geophysical Union, 5 February 2013 (for Meehl et al., GRL, doi:10.1029/2012GL053423, 2012)

Eos Research Spotlight, "A modern Maunder Minimum would not stave off global warming", American Geophysical Union, 30 July 2013 (for Meehl et al., GRL doi:10.1002/grl.50361, 2013).

The Walter Orr Roberts Lecture, Aspen Global Change Institute, Aspen CO, 2014

Fellow, American Geophysical Union, 2014

Thomson Reuters Highly Cited Researcher Award, "In recognition of ranking among the top 1% of researchers for most cited documents in their specific field", 2014, 2015, 2016

Web of Science: 2017 Highly Cited Researcher, "for research that ranks among the top 1% of most cited works in climate science and during its year of publication, earning the mark of exceptional impact"

Web of Science: 2018 Highly Cited Researcher, "for research that ranks among the top 1% of most cited works in climate science and during its year of publication, earning the mark of exceptional impact"

Web of Science: 2019 Highly Cited Researcher, "for research that ranks among the top 1% of most cited works in climate science and during its year of publication, earning the mark of exceptional impact"

Web of Science: 2020 Highly Cited Researcher, "for exceptional research influence, demonstrated by the production of multiple highly-cited papers that rank in the top 1% by citations for field and year in the Web of Science"

Listed in "The World's Most Influential Scientific Minds: 2014", Thomson Reuters ScienceWatch, 2014

Listed in "The World's Most Influential Scientific Minds: 2015", Thomson Reuters ScienceWatch, 2015

Award selection of scientific research paper (Meehl et al., 2011, *Nature Climate Ch*ange) as "one of five most influential papers in the first five years of *Nature Climate Change"*, March 24, 2016 (http://www.nature.com/nclimate/journal/v6/n4/full/nclimate2973.html).

Finalist, NCAR Outstanding Publication Award, 2017

NCAR 2017 Climate and Global Dynamics Laboratory Publication Award (for: Meehl, G.A., A. Hu, J.M. Arblaster, J. Fasullo, and K.E. Trenberth, 2013: Externally forced and internally generated decadal climate variability associated with the Interdecadal Pacific Oscillation, *J. Climate*, **26**, 7298-7310, doi: http://dx.doi.org/10.1175/JCLI-D-12-00548.1)

NCAR Computational and Information Systems Laboratory 2018 Special Recognition Award "for his outstanding teamwork on the Mesa Lab Anemometer Project"

University Corporation for Atmospheric Research 2019 Distinguished Achievement Award, "For achieving high-impact, ground-breaking research on understanding the interplay between naturally occurring climate variability, and the long-term climate change from increasing human-produced greenhouse gases." December, 2019.

NCAR 2020 Climate and Global Dynamics Laboratory Special Recognition Award (for: Yeager, Meehl and co-authors, 2018: A large ensemble of initialized decadal prediction simulations using the Community Earth System Model. *Bull. Amer. Meteorol. Soc.*, **99**, 1867—1886, doi:10.1175/BAMS-D-17-0098.1)

Ranked #47 on Reuters Hot List of "world's 1000 top climate scientists…ranking 1,000 climate academics according to how influential they are", 2021, https://www.reuters.com/investigates/special-report/climate-change-scientists-list/

Community Earth System Model (CESM) Distinguished Achievement Award, June, 2021

The Sverdrup Gold Medal of the American Meteorological Society, 2023,
"For seminal work integrating observations, models, and theory to understand variability and change in the ocean and atmosphere"

PREVIOUS COMMITTEES AND APPOINTMENTS:

Tropical Ocean Global Atmosphere Coupled Ocean Atmosphere Response Experiment (TOGA COARE) Site Selection Advisory Committee, 1989

ENEA (Italy) Climate Advisory Group, 1990 – 1991

NCAR TOGA COARE Group, 1990 – 1993

World Climate Research Program (WCRP) Steering Group on Global Climate Modeling (SGGCM), June 1990 – October 1994

Climate Variability and Predictability Numerical Experimentation Group 2 (CLIVAR NEG-2), World Climate Research Program, 1994 – 1997

WCRP/CLIVAR Working Group on Coupled Models (WGCM), 1997 – 2016

Chairman, Coupled Model Intercomparison Project (CMIP) Panel, CLIVAR, World Climate Research Program, September 1995 – 2007

Chairman, Working Group on Coupled Models (WGCM) Climate Simulation Panel, September 2003 – 2007

NCAR Community Climate Model Coordinating Committee, 1990 – 1995

Model Evaluation Consortium for Climate Assessment (MECCA) Technical Committee, March 1991 – 1995

TOGA-COARE, Sounding Implementation Group, 1991 – 1993

Modeling and Diagnostics Review Panel, NOAA Climate and Global Change Program, 1991

International Scientific Oversight Team (ISOT), Townsville, Australia, TOGA-COARE, December 1992

NCAR Climate Modeling, Analysis and Prediction (CMAP) Selection Committee, 1992

NCAR Atmosphere-Ocean-Sea-Ice Working Group, 1992 – 1994

NCAR Model Comparison Committee, January 1993 – 1994

Model Evaluation Consortium for Climate Assessment (MECCA) High Profile Option Committee, 1993 – 1994

NCAR Climate System Model Principal Investigators Group, 1994 – 2000

Climate Simulation Laboratory (CSL) Allocation Panel, 1995 – 2001

NCAR Working Group on Atmospheric Model Evaluation, 1995 – 1996

Climate System Model (CSM) Working Group on 20th – 21st Century Climate, 1997 – 1999

International Program Committee, Mission Earth: Modeling and Simulation for a Sustainable Global System, SCS Western MultiConference, 1996 – 1997

Panel on Climate Observing Systems' Status (PCOSS), Climate Research Committee (CRC), National Academy of Sciences National Research Council, January 1998 – January 1999

NCAR Internal Seasonal to Interannual (ISI) Working Group, 1998 – 2001

Steering Committee for Initial Assessment of the Consequences of Climate Variability and Change for the Pacific Islands, East-West Center, University of Hawaii, 1999 – 2009

Program Committee for DOE Workshop on Downscaling, February 2000 – April 2001

Program Committee for NASA Workshop on Decadal Climate Variability, February 2000 – January 2001

Organizing Committee for the International Workshop on the Implementation of CLIVAR Programmes in the Pacific, August 2000 – January 2001

AGU Committee on Global Environmental Change, July 2000 – 2003

U. S. CLIVAR Scientific Steering Committee, October 2001 – 2006

U.S. CLIVAR Predictability, Prediction and Applications Interface Panel, 2006—2010

Member, American Meteorological Society Air-Sea Interaction Committee, 2007 – 2010

Japan / U. S. Scientific Advisory Committee for the International Pacific Research Center at the University of Hawaii, Honolulu, 1997 – 2007

U.S. appointed Chair of the Scientific Advisory Committee for the International Pacific Research Center at the University of Hawaii, Honolulu, 2007 – 2010

Member, Blue Ribbon Panel to Review U.S. Climate Change Science Program (CCSP) Synthesis Report, 2008

Member, NCAR ESSL Restructuring Science Working Group, 2009

Co-chair, CCSM Climate Change Working Group, January 2000 – August 2011

Member, National Academy of Sciences/National Research Council Climate Research Committee (CRC), April, 2004 – June, 2008

Chairman, National Academy of Sciences/National Research Council Climate Research Committee (CRC), June, 2008 – October, 2011

Ex-officio Member, National Academy of Sciences/National Research Council Board on Atmospheric Sciences and Climate (BASC), June 2008— October 2011

Vice-chair, National Academy of Sciences/National Research Council Board on Atmospheric Sciences and Climate (BASC), October 2011—July 2016

U.S. CLIVAR Decadal Predictability Working Group Contributing Member, 2008—2012

Co-chair, WCRP Working Group on Coupled Models (WGCM), May 2004 – 2013

Member, WCRP Working Group on Coupled Models (WGCM), 2014

Member, Program Committee for the WCRP Open Science Conference, June 2010—October 2011

Chair, Organizing Committee of the World Climate Research Programme for the CMIP5 Climate Model Analysis Workshop, University of Hawaii, 2010—2012.

Member, Climate Model Expert Subgroup for the U.S. National Climate Assessment, March 2011—2013.

Member, Climate Working Group for the U.S. National Climate Assessment, June 2011—2013.

CGD Coordinator for the NCAR Annual Awards, 2011

Review Panel Member, Department of Energy Climate and Earth System Modeling: SciDAC and Climate Variability and Change, April, 2014

Member, American Geophysical Union Ambassador Award Committee, 2015-2017

Section Head, Climate Change Research Section, Climate and Global Dynamics Division, National Center for Atmospheric Research, August 2012—August 2013.

NCAR Appointments Review Group (ARG), 2010-2011
NCAR Appointments Review Group (ARG), Vice-chair, 2013-2014
NCAR Appointments Review Group (ARG), Chair, 2014-2015
NCAR Appointments Review Group (ARG), 2015-2016

Member, CMIP Panel, WCRP Working Group on Coupled Models (WGCM), 2004—January 2021

Co-chair, WCRP Modeling Advisory Council (WMAC), January 2015—March 2021

Co-chair, Community Earth System Model (CESM) Climate Variability and Change Working Group, August 2011 – 2020

Associate Editor, *Journal of Climate*, September 2005 – 2020

CURRENT COMMITTEES AND APPOINTMENTS:

Member, Department of Energy Biological and Environmental Research Advisory Committee (BERAC), December, 2014—present

Section Head, Climate Change Research Section, Climate and Global Dynamics Laboratory, National Center for Atmospheric Research, February 2014—present.

Member, UCAR Climate Council, December 2010—present.

Member, Decadal Climate Prediction Panel, WCRP/CLIVAR Working Group on Coupled Models (WGCM), 2009—present

Visiting Senior Fellow, University of Hawaii Joint Institute for Marine and Atmospheric Research, 1995 – present

Chief Scientist and PI for the DOE/UCAR Cooperative Agreement, CATALYST, 2015—present

Editorial Board Member, *Current Opinion in Environmental Sustainability,* 2009—present

Member, NSF-Owned Facilities NCAR Ad Hoc Panel, 2016—present

OTHER ACTIVITIES:

Co-principal investigator (with Warren Washington), "Enhanced Research Program on the Long-Range Climatic Effects of Increasing Carbon Dioxide," Department of Energy grant, 1979 – 2015

Participant in "Intercomparison of Coupled General Circulation Models for Tropical Air-Sea Interaction," 1989 – 1992

Participant in "Intercomparison of Monsoon Climatologies in Climate Models," Monsoon Numerical Experimentation Group (MONEG), 1990 – 1994

Scientific visitor, Bureau of Meteorology Research Centre (BMRC), Melbourne, Australia, April – May 1991

Invited Lecture Series, Iowa State University, 1991

Convener and co-chairman, Aspen Global Change Institute Summer Session, "The Coupled Climate System and Global Change," 3 – 14 August 1992

Co-principal investigator (with George Kiladis and Klaus Weickmann), "Synoptic-Scale Convective Events and Westerly Wind Bursts in the Western Pacific," National Science Foundation grant, 1992 – 2000

TOGA COARE site evaluation survey, Kapingamarangi atoll (equatorial western Pacific), March 1992

TOGA COARE field operations headquarters contributor, Townsville, Australia, December 1992

TOGA COARE site visit, Nauru (equatorial western Pacific), December 1992

Invited observer, Central Equatorial Pacific Experiment (CEPEX), Nadi, Fiji, March 1993

Guest Editor, *Global and Planetary Change*, 1993 – 1995

Co-coordinator (with Ulrich Cubasch), IPCC Regional Climate Intercomparison, 1993 –1994

Co-convener (with Ulrich Cubasch), "IPCC Working Group I Regional Climate Evaluation Workshop," Macquarie University, Sydney, Australia, 7 – 9 February 1994

Session Chairman, "General Circulation," TOGA COARE Workshop, Toulouse, France, 1 – 7 August 1994

Convener, Workshop on Global Coupled General Circulation Models, Scripps Institution of Oceanography, La Jolla, California, 10 – 12 October 1994

Chairman, Working Group 1, "Verification of surface fluxes in coupled climate models," WCRP Workshop on Surface Fluxes, Reading, United Kingdom, October 1995

NCAR Climate and Global Dynamics Division seminar coordinator, September 1995 – May 1996

Session Chair, Technical Session 3: Regional Models, SCS Western MultiConference, Phoenix, Arizona, 13 January 1997

Session Chair, Plenary Session, SCS Western MultiConference, Phoenix, Arizona, 14 January 1997

Contributor to revised version of "Glossary of Meteorology," T. Broccoli, Ed., January 1997

NCAR Climate and Global Dynamics Division Weather and Climate Map Room Coordinator, 1998 – 2003

Co-convener, Aspen Global Change Institute Summer Session II, "Climate Extremes: Changes, Impacts, and Projections," 7 – 14 August 1998, Aspen, Colorado

Convener, "The Coupled Model Intercomparison (CMIP) Workshop," 14 – 15 October 1998, Melbourne, Australia

Convener, "Workshop on Analyses of Climate Model Simulations for the IPCC AR4," 1 – 4 March 2005, Honolulu, Hawaii

Co-convener, "IPCC Working Group I Workshop on Climate Sensitivity", Paris, France, July 26-29, 2004

Lead author, U.S. Climate Change Science Program (CCSP) Report on Temperature Trends in the Atmosphere, 2004 – 2006

Co-convener, Aspen Global Change Institute Summer Session, "Climate Change and Climate Extremes," 15 – 21 July 2005, Aspen, Colorado

Co-coordinator, U.S. Climate Change Science Program (CCSP) Report on Weather and Climate Extremes in a Changing Climate, 2005 – 2008

Writing team member, AMS statement on climate change, July 2006-January 2007

Convener, Aspen Global Change Institute Summer Session, "Earth System Models," July 2006, Aspen, Colorado

Convener, Aspen Global Change Institute Summer Session, "Climate Extremes: the CCSP3.3 report," June 2007, Aspen, Colorado

Co-chair, "DOE Grand Challenges Workshop", Washington, D.C., March, 2008

Convener, Aspen Global Change Institute Summer Session, "Decadal Prediction: Is it Possible, What are the Scientific Issues, and How Would Those Predictions be Used?" June 2008, Aspen, Colorado

Chair, program committee, "Joint IPCC-WCRP-IGBP Workshop: New Science Directions and Activities Relevant to the IPCC AR5", University of Hawaii, Honolulu, Hawaii, 3—6 March, 2009

Convener, Aspen Global Change Institute Summer Session, "Making Sense of the Multi-Model Decadal Prediction Experiments from CMIP5", June 2011, Aspen, Colorado

Science Organizing Committee, WCRP Open Science Conference, Denver, CO, October, 2011

Convener, WCRP CMIP5 Model Analysis Workshop, University of Hawaii, March 5-9, 2012

Co-Convener and co-chair, Aspen Global Change Institute Summer Session, "Science for Climate Change Adaptation: Enhancing Decision-Support Capacities in a Rapidly Changing World", August 2012, Aspen, Colorado

Convener, Aspen Global Change Institute Summer Session, "Planning for CMIP6", August 2013, Aspen, Colorado

Co-convener, Aspen Global Change Institute Summer Session, "Scenarios for CMIP6", August 2014, Aspen, Colorado

Co-convener, Aspen Global Change Institute Summer Session, "Frontiers of Global Change Science", August 2014, Aspen, Colorado

Convener and co-chair, Aspen Global Change Institute Summer Session, "Next steps in decadal climate prediction", June 2015, Aspen, Colorado

Convener and co-chair, Aspen Global Change Institute Summer Session, "When the rain stops: Drought on subseasonal and longer timescales", September 2018, Aspen, Colorado

Co-convener and co-chair, Aspen Global Change Institute Summer Session, "Exploring the frontiers in Earth system modelling with machine learning and big data", June 2022, Aspen, Colorado

IPCC ACTIVITIES:

Contributing author, Chapter 6, "Time-dependent Greenhouse-gas-induced Climate Change", IPCC 1990, First Assessment Report, 1988-1990

Lead author, Chapter 6, "Climate Models - Projections of Future Climate," IPCC 1996 Second Assessment Report (SAR), 1993 – 1996

Coordinating Lead Author, Chapter 9, "Projections of Future Climate Change," IPCC Third Assessment Report (TAR), 1998 – 2001

Coordinating Lead Author, Chapter 10, "Global Climate Projections," IPCC Fourth Assessment Report (AR4), May 2004 – 2007

Lead Author, Chapter 11, "Near-term Climate Change: Projections and Predictability", IPCC Fifth Assessment Report (AR5), 2010—2013

Member of author team for IPCC AR5 Summary for Policymakers and Technical Summary, 2011-2013

GRADUATE STUDENT COMMITTEES:

Ph. D. Board of Examiners for P. K. Mohanty, Indian Institute of Technology, Delhi, India, 1996 – 1997

Ph. D. Board of Examiners for Arun Chakraborty, Indian Institute of Technology, Delhi, India, 1998

Master's Thesis Committee for Jin-Ho Yoon, Iowa State University, 1999

Master's Thesis Committee for Julie Arblaster, University of Colorado, 1999

Ph. D. Thesis Committee for David Lawrence, University of Colorado, 1999

Ph. D. Thesis Committee for Christina O. Clark, University of Colorado, 1999 – 2001

Ph.D. Thesis Committee Examiner, Christopher Rolfe Godfred-Spenning, University of Melbourne, Australia, 2006

Ph.D. Thesis Committee Examiner, Caroline Ummenhofer, University of New South Wales, Sydney, Australia, 2008

Ph.D. Thesis committee, Laurie Trenary, University of Colorado, 2008 – 2012

Ph.D. Thesis Committee Examiner, Julie Arblaster, University of Melbourne, Australia, 2009 – 2013

PhD Thesis Committee, Jih-Wang Wang, University of Colorado, 2009— 2012

Ph.D. Thesis Committee, Howard Diamond, Auckland University, 2014

Master's Thesis Committee, Lauren Schmeisser, Amsterdam University, 2014

Ph.D. Thesis Committee, Jessica Kenigson, University of Colorado, 2014-2019

Ph.D. Thesis Committee, Jason West, University of Colorado, 2014-2020

Ph.D. Thesis Committee, Wengui Liang, Stony Brook University, 2020-2023

Ph.D. Thesis Committee, William Kamp, University of Colorado, 2022-present

Ph.D. Thesis Committee, Erin Guderian, University of Colorado, 2022-present

Reviewer of journal articles (roughly 15 to 20 per year) submitted for publication in *Journal of Climate, Climate Dynamics, Journal of the Atmospheric Sciences, Climatic Change, Journal of Geophysical Research, Science, Nature, Nature Geoscience, Nature Climate Change, Proceedings of the National Academy of Science, Journal of Physical Oceanography, Geophysical Research Letters, Bulletin of the American Meteorological Society, Quarterly Journal of the Royal Meteorological Society, Monthly Weather Review, Japan Meteorological Society Journal, Tellus*

Reviewer of scientific proposals submitted to NSF, NOAA, NASA, DOE, Australian Research Council, National Environmental Research Council (U.K.)

PUBLICATIONS

1. THESES

1. Meehl, G. A., 1978: *Tropical Teleconnections to the Seesaw in Winter Temperatures between Greenland and Northern Europe.* NCAR Cooperative Master's Thesis No. 51, INSTAAR Occasional Paper No. 28, University of Colorado, Boulder, Colorado, 110pp.

2. Meehl, G. A., 1987: *Interactions between the Asian Monsoons, the Tropical Pacific, and the Southern Hemisphere Midlatitudes.* NCAR Cooperative Ph. D. Thesis No. 106, University of Colorado, Boulder, Colorado, 172pp.

2. NCAR TECHNICAL REPORTS AND NOTES

1. Meehl, G. A., R. B. McBeth, W. C. Bolhofer, and S. Unninayar, 1980: *U. S. Monsoon Experiment (MONEX) Rawinsonde/Radiometersonde System.* NCAR Technical Note, NCAR/TN-164+EDD, National Center for Atmospheric Research, Boulder, Colorado, 51pp.

2. Meehl, G. A., 1980: *Observed World Ocean Seasonal Surface Currents on a 5° Grid*. NCAR Technical Note, NCAR TN/IA-159+STR, National Center for Atmospheric Research, Boulder, Colorado, 23pp.

3. Meehl, G. A., 1984: Soil moisture, a simple mixed layer ocean, and the Southern Hemisphere semiannual oscillation in the NCAR Community Climate Model. *Studies in Climate,* H. van Loon, Ed., NCAR Technical Note, NCAR/TN 227+STR, National Center for Atmospheric Research, Boulder, Colorado, NTIS #PB84 196385, 115–150.

3. NONREFEREED PUBLICATIONS

1. Washington, W. M., and G. A. Meehl, 1981: Coupled and uncoupled atmosphere-ocean general circulation model experiments on summer and winter monsoon. In: *International Conference on Early Results of FGGE and Large-Scale Aspects of the Monsoon Experiments, Condensed Papers and Meeting Report,* Tallahassee, Florida, 12–17 January 1981, World Meteorological Organization, Geneva, Switzerland, 4–20 to 4–29.

2. Washington, W. M., and G. A. Meehl, 1983: A summary of recent NCAR general circulation experiments on climatic effects of doubled and quadrupled amounts of CO_2. In: *Proceedings of U.S. Department of Energy CO_2 Research Conference on Carbon Dioxide, Science, and Consensus,* Coolfont Conference Center, Berkeley Springs, West Virginia, 19–23 September 1982, U. S. Department of Energy Conference 820970, District Category UC-11, Washington, D. C., III.177–III.192.

3. Washington, W. M., and G. A. Meehl, 1984: Using climate models to investigate global habitability issues. In: *Proceedings of AIAA 22nd Aerospace Sciences Meeting,* Reno, Nevada, 9–12 January 1984.

4. Meehl, G. A., and W. M. Washington, 1985: Tropical response to a doubling of CO_2 with an atmospheric GCM coupled to a simple mixed layer ocean model. In: *Proceedings of Third Conference on Climate Variations: Symposium on Contemporary Climate 1850 – 2100,* Los Angeles, California, 8–11 January 1985, American Meteorological Society, Boston, Massachusetts, 130–131.

5. Meehl, G. A., 1985: The global climate system. *Planet Earth and the New Geoscience,* V. Schmidt, Ed., University External Studies Program, University of Pittsburgh, 244–245.

6. Meehl, G. A., 1985: Climates and climate models. *Planet Earth and the New Geoscience,* V. Schmidt, Ed., University External Studies Program, University of Pittsburgh, 296–297.

7. Meehl, G. A., 1987: Interactions between the tropics and Southern Hemisphere mid-latitudes: Observations and GCM simulations. In: *Preprint Volume Second International Conference on Southern Hemisphere Meteorology,* Wellington, New Zealand, 1–6 December 1986, American Meteorological Society, Boston, Massachusetts, 217–220.

8. Meehl, G. A., and W. M. Washington, 1988: Climate simulation pathology in a freely coupled ocean-atmosphere GCM. In: *Preprint Volume Seventh Conference on Ocean-Atmosphere Interaction,* Anaheim, California, 1–5 February 1988, American Meteorological Society, Boston, Massachusetts, 30–33.

9. Meehl, G. A., 1989: Southern oscillation phenomena in a coupled ocean-atmosphere GCM. In: *Proceedings of the Thirteenth Annual Climate Diagnostics Workshop,* Cambridge, Massachusetts, 31 October–4 November 1988, U. S. Department of Commerce, Washington, D. C., 289–291.

10. Meehl, G. A., 1990: The Southern Oscillation in a coupled GCM: Implications for climate sensitivity and climate change. In: *Preprint Volume Third International Conference on Southern Hemisphere Meteorology,* Buenos Aires, Argentina, 13–17 November 1989, American Meteorological Society, Boston, Massachusetts, 315–318.

11. Meehl, G. A., 1990: ENSO and CO_2 climate change in a coupled ocean-atmosphere GCM. In: *Proceedings of the Fourteenth Annual Climate Diagnostics Workshop,* La Jolla, California, 16–20 October 1989, U. S. Department of Commerce, Washington, D. C., 41–46.

12. Meehl, G. A., 1991: A mechanism for the biennial signals in the coupled ocean-atmosphere system in the tropical Indian and Pacific regions. In: *Proceedings of the Fifteenth Annual Climate Diagnostics Workshop,* Asheville, North Carolina, 29 October–2 November 1990, U. S. Department of Commerce, Washington, D. C., 81–86.

13. Meehl, G. A., 1991: A reexamination of the mechanism of the semiannual oscillation in the Southern Hemisphere. In: *Fifth Conference on Climate Variations,* 14–18 October 1991, American Meteorological Society, Boston, Massachusetts, 105–108.

14. Meehl, G. A., 1991: Simulated Indian summer monsoon climatology: Influence of land surface conditions. Simulation of Interannual and Intraseasonal Monsoon Variability, WCRP-68, WMO/TD-No. 470, World Meteorological Organization, Geneva, Switzerland, 2.101–2.107.

15. Meehl, G. A., 1992: Book review of *Climate-Ocean Interaction,* M. E. Schlesinger, Ed. *Bulletin of the American Meteorological Society,* **73**, 208–212.

16. Meehl, G. A., and D. S. Schimel, 1993: 1992 Aspen Global Change Institute (AGCI) Summer Session II: The coupled climate system and global change. *EOS, Transactions,* **74**, 2 and 14.

17. Meehl, G. A., 1993: CO_2 climate change in the Southern Hemisphere. In: *Fourth International Conference on Southern Hemisphere Meteorology and Oceanography,* 29 March–2 April 1993, Hobart, Australia, American Meteorological Society, Boston, Massachusetts, 345–348.

18. Meehl, G. A., 1993: Coupled land-ocean-atmosphere processes and a biennial mechanism in the tropical Indian and Pacific regions. In: *Fourth International Conference on Southern Hemisphere Meteorology and Oceanography,* 29 March–2 April 1993, Hobart, Australia, American Meteorological Society, Boston, Massachusetts, 402–403.

19. Gates, W. L., U. Cubasch, G. A. Meehl, J. F. B. Mitchell, and R. J. Stouffer, 1993: An intercomparison of selected features of the control climates simulated by coupled ocean-atmosphere general circulation models. World Climate Research Program, World Meteorological Organization, Geneva, Switzerland, WCRP-82, WMO/TD-No. 574, 46pp.

20. Meehl, G. A., 1994: Changes of variability of the Asian summer monsoon in a climate with increased CO_2. In: *Fifth Symposium on Global Change Studies,* 23–29 January 1994, Nashville, Tennessee, American Meteorological Society, Boston, Massachusetts, 390–393.

21. Meehl, G. A., 1994: Coupled land-ocean-atmosphere processes and a biennial mechanism in the south Asian monsoon region. In: *Proceedings of the Eighteenth Annual Climate Diagnostics Workshop,* 1–5 November 1993, Boulder, Colorado, U. S. Department of Commerce, Washington, D. C., 17–20.

22. Weickmann, K. M., D. S. Gutzler, G. N. Kiladis, G. A. Meehl, and M. Wheeler, 1994: The eastward shift of convection and sea surface temperature during TOGA COARE. In: *Sixth Conference on Climate Variations,* 23–28 January 1994, Nashville, Tennessee, American Meteorological Society, Boston, Massachusetts, J28–J31.

23. Kiladis, G. N., G. A. Meehl, M. Wheeler, K. M. Weickmann, and D. S. Gutzler, 1994: Synoptic-scale circulation associated with deep convection over the TOGA COARE large-scale array. In: *Sixth Conference on Climate Variations,* 23–28 January 1994, Nashville, Tennessee, American Meteorological Society, Boston, Massachusetts, J32–J36.

24. Meehl, G. A., D. S. Gutzler, G. N. Kiladis, K. M. Weickmann, and M. Wheeler, 1994: A comparison of the November 1989 westerly wind burst event with the December 1992 event during TOGA COARE. In: *Sixth Conference on Climate*

Variations, 23–28 January 1994, Nashville, Tennessee, American Meteorological Society, Boston, Massachusetts, J37–J39.

25. Meehl, G. A., 1994: Changes of tropical interannual variability due to increased CO_2 in a global coupled climate model. *Global Climate Change: Science, Policy, and Mitigation Strategies,* C. V. Mathai, and G. Stenslund, Eds., Air and Waste Management Association, 342–351.

26. Cubasch, U., G. A. Meehl, and Z. -C. Zhao, 1994: Evaluation of regional climate simulations. Intergovernmental Panel on Climate Change and Model Evaluation Consortium for Climate Assessment. Electric Power Research Institute, P. O. Box 10412, Palo Alto, California, 71pp.

27. Washington, W. M., G. A. Meehl, and T. W. Bettge, 1995: Global simulations with 1° sea-ice and ocean model components: Present and future prospects. In: *Proceedings of Fourth Conference on Polar Meteorology and Oceanography,* 15–20 January 1995, Dallas, Texas, American Meteorological Society, Boston, Massachusetts, (J9)10–(J9)13.

28. Meehl, G. A., and W. M. Washington, 1995: Cloud-albedo feedback and the super greenhouse effect in a global coupled GCM. In: *Proceedings of Symposium on the Regulation of Sea-Surface Temperatures and Warming of the Tropical Ocean-Atmosphere System,* 15–20 January 1995, Dallas, Texas, American Meteorological Society, Boston, Massachusetts, 96–100.

29. Meehl, G. A., 1995: Climate sensitivity and cloud albedo feedback in a global coupled ocean–atmosphere GCM. *Climate Sensitivity to Radiative Perturbations: Physical Mechanisms,* H. Le Treut, Ed., *NATO ASI Series I*, **34**, 231–237.

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