

DENNIS L. HARTMANN

Personal Data

Address: Prof. Dennis L. Hartmann
Department of Atmospheric Sciences, Box 351640
University of Washington
Seattle, Washington 98195-1640
email: dhartm@uw.edu
<https://atmos.uw.edu/~dennis/>

Education

B.S., Mechanical Engineering, University of Portland 1971
Ph.D., Geophysical Fluid Dynamics, Princeton University 1975

Professional Experience

University of Washington, Department of Atmospheric Sciences, Assistant Professor, 1977-83; Associate Professor, 1983-88; Professor, 1988- ; Emeritus Professor, 2024- ;Chair 2002-2007 Quaternary Research Center, Adjunct Faculty, 1978-.
College of the Environment, Interim Dean, 2008-2010, 2021.
Visiting Scientist, European Centre for Medium Range Weather Forecasts, 1993-94
Visiting Professor, Department of Meteorology, University of Reading, 1993-94
Visiting Scientist, Laboratoire de Météorologie Dynamique, École Normale Supérieure, 1986
Visiting Scientist, Oxford University, Department of Atmospheric Physics, 1985
National Center for Atmospheric Research, Visiting Scientist, 1976-77.
McGill University, Department of Meteorology, Research Associate, 1975-76.
Princeton University, Geophysical Fluid Dynamics Program, Research Assistant, 1971-75

Honors and Awards

First in Graduating Class of 1971, School of Engineering, University of Portland.
Senior Fellow, Joint Institute for the Study of the Atmosphere and Ocean, 1984-2022.
NASA Group Achievement Award, ERBE Data Validation and Archival Team, May 1988
Fellow, American Meteorological Society, 1989
NASA Group Achievement Award, Airborne Antarctic Ozone Experiment, April 1989
Fellow, American Association for the Advancement of Science, 1992

Editors' Award for Exceptional Reviews, Journal of the Atmospheric Sciences, American Meteorological Society, 1992
Editors' Citation for Excellence in Refereeing for Geophysical Research Letters, American Geophysical Union, 1993.
Editors' Award for Exceptional Reviews, Journal of Climate, American Meteorological Society, 1996
Editors' Award for Exceptional Reviews, Journal of the Climate, American Meteorological Society, 1998
Aldo Leopold Leadership Fellow, Ecological Society of America, 1999
NASA Group Achievement Award, Earth Science Research Strategy Development Team, June 2001
Fellow of the American Geophysical Union, 2002
NASA Distinguished Public Service Medal, 2005
NASA Group Achievement Award, Aura Project, 2005
Haurwitz Lecturer, American Meteorological Society, 2011
The Carl-Gustaf Rossby Research Medal, American Meteorological Society, 2013
Elected to US National Academy of Sciences, 2016
Washington State Academy of Sciences, 2016
Roger Revelle Medal, American Geophysical Union, 2022.

Professional Associations, Learned and Technical Societies: Memberships and Offices (current activities in bold face type)

Member American Meteorological Society, 1972-

Member American Association for the Advancement of Science, 1980-

Member American Geophysical Union, 1991-

National Academy of Sciences, 2016-

Washington State Academy of Sciences, 2016-

Member AMS Committee on the Upper Atmosphere, 1978-83; Chairman, 1980-82.

Member NRC/NAS Panel on the Middle Atmosphere Program, 1981-1987, Chairman, 1984-87, *ex officio* Member, Committee on Solar Terrestrial Research/Board on Atmospheric Sciences and Climate, 1984-87.

Member American Meteorological Society Committee on Undergraduate Awards, 1983-85; Chairman, 1985.

Member NRC/NAS Committee on Earth Sciences/Space Science Board, 1987-90

Member, International Commission on Dynamical Meteorology, International Association for Meteorology and Atmospheric Physics, 1987-95.

Member NRC/NAS Panel on the Tropical Ocean-Global Atmosphere Program, 1990-1994.

AAAS Electorate Nominating Committee, Atmospheric and Hydrospheric Sciences, 1990-1993, Chair 1992

Member, AMS Committee on Climate Variations, 1993-1998

Member, AMS Nominating Committee, 1996

AAAS Section on Atmospheric and Hydrospheric Sciences, Chair-Elect 1997, Chair 1998, Past-Chair 1999.

Chair, American Geophysical Union, Atmospheric Section, Fellow Nominating Committee, 2005 and 2006
Member, University Corporation for Atmospheric Research, Board of Trustees, 2007-2014, Chair 2010-13.
Chair, Search Committee for the President of the University Corporation for Atmospheric Research, 2011.
Coordinating Lead Author, IPCC 5th Assessment, Chapter 2. Member writing team for the Technical Summary and compilation team for the summary for Policymakers.
Revelle Committee, American Geophysical Union, 2017-2020, Chair 2019.
Awards Nomination Committee, American Meteorological Society, 2020-

Professional Associations, Learned and Technical Societies: Services

Associate Editor, Journal of the Atmospheric Sciences, an American Meteorological Society journal, 1983-93.
Associate Editor, Journal of Geophysical Research (Atmospheres), an American Geophysical Union journal, 1985-88.
Editorial Board, Contributions to Atmospheric Physics, a German Meteorological Society journal, 1987-1999.
Graduate Program Coordinator, Department of Atmospheric Sciences, University of Washington, 1983-89.
Program Chairman, Third AMS Conference on the Upper Atmosphere, San Diego, 1981.
Convenor, IAMAP Symposium, "Prediction of Transitions in the Climate System on Interannual Time Scales," Vancouver, Canada, 1987.
AAAS, Electorate Nominating Committee of the Section on Atmospheric and Hydrospheric Sciences, 1990-93.
Convenor, IAMAP Symposium, "Large-Scale Atmospheric Flow and Variability", IUGG, Vienna, Austria, 1991.
Convenor, IAMAS Symposium, "Clouds, Climate and Land Surface Processes", IUGG, Boulder, Colorado, 1995.
Organizing Committee, WCRP Conference on "Polar Processes and Global Climate", Rosario, Washington, 3-6 November 1997
Organizing Committee, First International Conference on Asian Monsoon and Pollution over the Monsoon Environment, New Delhi, December 1997
Board of Reviewing Editors, Science Magazine, AAAS, 2002-2011
Associate Editor, Journal of Climate, 2004-
AGU, A Section Fellows Nominating Committee, , 2004-6, Chair, 2005&2006
Editor, Journal of the Atmospheric Sciences, 2007-2010
Editor, Proceedings of the National Academy of Sciences, 2016-
American Meteorological Society, Atmospheric Science Awards Committee, 2017-2020.
American Geophysical Union, Revelle Medal Committee, 2017-2019.
Awards Nominating Committee, American Meteorological Society, 2020-
NOAA Climate and Global Change Postdoc Program Committee, 2020-2022, Chair 2022.

Committees, Review Panels and Science Teams

NASA Biennial Reviews of the Stratosphere, 1977, 1979, 1981.
Earth Radiation Budget Experiment Science Team, 1980-1992.
TOGA Proposal Review Panel, 1985.
NASA/WMO Ozone Trends Committee, 1987-88, Co-Chair, Antarctic Ozone Hole Subcommittee.
'The Miracle Planet' Television Series, Science Advisory Panel, 1988.
NASA Earth Observing System Interdisciplinary Investigation Review Panel V: Oceans and Ice, 1988.
NOAA Operational Measurements for Global Change, 1992-1994
Chair, Atmospheres Panel of the Earth Observing System Investigator Working Group, 1992-1995
Member, Science Executive Committee, Earth Observing System, 1992-95
External Review Committee, Division of Physical Sciences, University of Chicago, 1993.
Earth System Science and Applications Advisory Committee, NASA Headquarters, Office of Mission to Planet Earth, 1994-2002.
Visiting Committee Chairperson, Department of Atmospheric Sciences, Colorado State University, December 1994.
GEWEX Scientific Steering Group, World Climate Research Program, 1995-98.
NOAA NPOESS Climate Requirements Workshop, Section Chair, 27-29 Feb. 1996
Organizing Committee, Indian Meteorological Society's International Conference, 11/97
Global Climate Observing System Workshop, Panel, Asheville, N.C., 10 January 1995
Review Committee, Climate Diagnostic Center, NOAA, Boulder, Co. 4/97
Science Advisory Committee, Center for Ocean-Land-Atmosphere Studies/IGES, 1998-, Chair, 1999-.
Review Panel, Cooperative Institute for Arctic Research, University of Alaska-Fairbanks, 16-17 September 1998.
Review Panel, Atmospheric Sciences Division, Radiation Sciences Program, NASA Langley Research Center, 3-5 November, 1998
Review Panel, Earth Sciences Directorate, NASA Goddard Space Flight Center, 26-27 May 1999
Selection Committee, NOAA Global Change Post Doc Program, 2000-2002, Chair, 2002
External Review Committee, University of Colorado, Program in Atmospheric and Oceanic Sciences, September 2001
NOAA Council on Long Term Climate Monitoring, 2001-2002
Review Panel Chair, National Center for Atmospheric Research, Climate and Global Change Division, October 2001
Swiss National Centre of Competence in Research – NCCR Climate, Advisory Committee, 2001-2004.
National Research Council, Climate Research Committee, 2001-2003
NRC Panel on Climate Change Feedbacks, Chair, 2001-2003
National Science Foundation, Advisory Committee for Geosciences, 2002-2004
Advisory Board, College of Oceanic and Atmospheric Sciences, Oregon State University, 2002-2007

Stratospheric Processes And their Role in Climate (WCRP-SPARC) Science Steering Group, 2003-2007

Chair, Committee of Visitors for NSF Lower Atmosphere Program, Sept. 2004

Co-Editor, International Geophysics Series, Academic Press, 2005-

Swiss National Centre of Competence in Research – NCCR Climate, Board of Directors, 2005-2012.

Member, NRC Committee for “Review of the US Climate Change Science Program’s Synthesis and Assessment Product on Temperature Trends in the Lower Atmosphere”, 2005

Member, Science Advisory Board, NOAA Climate Test Bed, 2005-2008

Board on Atmospheric Sciences and Climate, National Research Council, 2005-2008

Chair, Science Advisory Board, Climate and Global Dynamics Division, NCAR, 2005-2006

Chair, External Review Committee for the Department of Atmospheric, Oceanic and Space Sciences, University of Michigan, Oct. 31-Nov. 2, 2005

External Review Committee, Cooperative Institute for Research in Environmental Sciences, University of Colorado, Boulder September 14-15, 2006

Member, NRC Committee on “Scientific Accomplishments of Earth Observations from Space”, 2006-2007.

Member, NSF Working Group to Develop the NSF Geosciences Directorate Plan, 2006-2008

Chair, Board of Directors for Canadian SPARC-CFCAS program, 2006-2010

NASA Senior Mission Review Panel, April 2007

NASA MEASURES Review Panel, July 2007

Chair, Review Committee, Department of Biology, University of Washington, May 2008

Visiting Committee, Division of Environment, Hong Kong University of Science and Technology, February 2009.

Visiting Committee, Department of Atmospheric Sciences, Texas A&M University, March 30-April 1, 2009.

Department of Energy, Climate Modeling Review, D.C., April 27-28, 2009

NASA Earth Science Division, Senior Mission Review, D.C., May 12-14, 2009.

Board of Natural Resources, Washington State Department of Natural Resources, 2009-2010.

Geophysical Fluid Dynamics Laboratory Review, NOAA, June 30-July 2, 2009, Princeton, New Jersey

Department of Environmental Sciences Review, ETH Zurich, Switzerland, April 11-16, 2010.

School of Meteorology, University of Oklahoma, External Reviewer, February 2011.

Science Advisory Board, NCAR Earth Systems Lab, 2010-14

Committee on America’s Climate Choices, National Research Council, 2010-2012.

Search Committee for Director of NCAR Earth Systems Lab, 2011

Member, UCAR Board of Trustees, 2009-2014.

Chair, Board of Trustees, University Corporation for Atmospheric Research, 2011-2013

Chair, NRC Committee to Assess NASA’s Earth Science Program, 2011-2012

Chair, Search Committee for President of UCAR, 2011

External Review Committee Chair, Department of Atmospheric Sciences, University of Arizona, March 2014
External Review Committee, Department of Atmospheric and Environmental Sciences, State University of New York at Albany, May 2014
External Review Committee, Department of Earth and Atmospheric Sciences, Cornell University, April 2016
External Review Committee, Department of Atmospheric and Oceanic Science, University of Colorado, Boulder, April 2017.
Member, Steering Committee for 2017-2027 NRC Decadal Survey for Earth Science and Applications from Space. 2016-2018
External Review Committee, College of Oceanic, Earth and Atmospheric Sciences, Oregon State University, Corvallis, 22-24 January 2018.
Chair, Review Committee, Department of Environmental Systems Science, ETH-Zurich, 26-30 November 2018.
External Review Committee, Department of Atmospheric and Oceanic Sciences, UCLA, Los Angeles, 30 January – 1 February 2019.
Member Selection Committee for NOAA Global Change Postdocs, 2020-2022, Chair 2022.
Member, NAS Committee on “*Lessons-Learned in the Implementation of NASA's Earth Venture Class*”, 2021
Member, Independent Review Board, NASA's Earth System Observatory, 2022.
Scientific Advisory Board of the Max Planck Institute for Meteorology, 2023-2026
Associate Editor, PNAS Nexus, 2024-

Invited Papers at National and International Scholarly Meetings

International Symposium on Middle Atmosphere Dynamics and Transport, 1980.
Fourth Biennial Ewing Symposium, "Climate Processes: Sensitivity to Solar Irradiance and CO₂," Columbia University, 1982.
IAMAP/IUGG, Hamburg FRG, Symposium, "Interdependence of Clouds, Radiation Trace Substances and Climate", 1983.
American Meteorological Society Fifth Conference on Atmospheric Radiation, Baltimore, MD, 1984.
Cospar Topical Meeting on Early Results from the ISCCP, ERBE and SAGE, Toulouse, France, 1986.
Annual Meeting of the Joint Scientific Committee of the World Climate Research Program, Lisbon, Portugal, 1986.
NATO Workshop on the Middle Atmosphere of the Southern Hemisphere, San Francisco, CA, 15-17 April 1989.
NATO Advanced Study Workshop, "Model Ecosystems and their Changes", 5 lectures, Maratea, Italy, 4-8 September 1989.
IAMAP Symposium on Aerosol-Cloud-Climate Interactions, "The Radiative Effects of Clouds", Vienna, Austria, 19 August 1991.

Workshop on Clouds and Remote Sensing, GFDL Princeton University, "Clouds and Climate: Recent Results from ERBE, ISCCP and SSM/I", Princeton, New Jersey, 3-4 October 1991.

IEEE Topical Symposium on Combined Optical-Microwave Earth and Atmosphere Sensing, Leadoff speaker "Earth-Atmosphere-Ocean Interaction Studies", Albuquerque, NM, March, 1993.

NAS GOALS Study Conference, "Interannual climate variability", Honolulu, Hawaii, March, 1993.

Royal Meteorological Society Dynamic Problems Group, "General Circulation Theory", Bracknell, England, 25th March 1994.

Royal Meteorological Society Conference on the Physics of Climate, The Royal Society, London, 29-30 October 1997

Gordon Conference on Solar Radiation and Climate, Invited Speaker, 25-29 June 2000

International Radiation Symposium, Invited Speaker, St. Petersburg, Russia, 24-29 July 2000

International Workshop on Global Change: Connection to the Arctic, Invited Speaker, Sendai, Japan, 23 August 2000.

Pan American PI meeting, "Tropical intraseasonal variability", Potomac, Maryland, 6 September 2000.

IAMAS/ICMA Symposium on Middle Atmosphere Chemistry, Transport and Radiation, Innsbruck, Austria, 13 July 2001.

IAMAS Symposium on Radiative Forcing and Climate Feedbacks, Innsbruck, Austria, 17 July 2001.

NERC Clouds, Water Vapour and Climate Thematic Programme, Annual Meeting, Manchester, UK, June 12-13, 2002.

NCCR Summer Climate School, Grindelwald, Switzerland, September, 2002

European Geophysical Society, Symposium on Clouds and Radiation, Nice, France, 9 April, 2003

European Geophysical Society, SPARC-IGAC Symposium on climate-Chemistry Interactions, Nice, France, 7 April, 2003

Gordon Conference on Solar Radiation and Climate, Colby-Sawyer College, July 13-18, 2003

SPARC Science Steering Group Meeting, Frankfurt Germany, September 22-26 2003

ARM Annual Meeting, Invited lecture, Albuquerque, New Mexico, 24 March, 2004.

BASC Summer Study on Climate Processes invited talk: "Advice for the Future", Woods Hole, MA July 12-13, 2004

SPARC General Assembly, Victoria, Canada, August 2-6, 2004

NCCR Summer School, Ticino, Switzerland, August 30-September 3, 2004

Clouds Climate Process Team All-Hands Meeting, Talaris Conference Center, Seattle, 21 October 2004.

IAMAS Meeting, Beijing China, August 2005

James Holton Symposium, AMS Annual Meeting, Jan. 30, 2005

Korean Meteorological Society Meeting on Climate Change and Impacts, Seoul, Korea, March 21, 2007.

AGU Fall Meeting, Session on Studying Climate Dynamics with Idealized Atmospheric GCMs, December 12, 2007

AMS Annual Meeting, The Hobbs Symposium, *Clouds, Climate and Global Change*. (invited). 24 January 2008.

AMS Annual Meeting, Climate: *Zonal Jet Structure and the Leading Mode of Variability*. (invited). 25 January 2008.

AGU Fall Meeting, Invited talk, Dec. 2009

AGU, Atmospheric Circulations and Climate Change, “Climate feedbacks and the increase of poleward energy transport in AR4 simulations.” San Francisco, CA, Dec. 15, 2010 (invited)

AGU, Session on Challenges in Understanding and Modeling Global-Regional Climate Connections, “Dynamic and Thermodynamic Feedbacks and the Spatial Response to Climate Change”. San Francisco, CA, Dec. 17, 2010 (invited)

ISSI Workshop, Observing and Modelling Earth’s Energy Flows, “High Cloud Radiative Processes and Climate Change”, Bern, Switzerland, January 10-14, 2011 (invited)

Harvard/MIT Workshop on Convection, Water Vapor and Climate, March 27-29, 2012.

Royal Society Discussion Meeting, “What’s New in Climate Science?” London, England 2-3 October 2013.

Latsis Symposium on Atmosphere and Climate Dynamics, ETH Zurich, 18-20 June 2014

Shukla Symposium, Rockville, Maryland, 23-24 April 2015

Fall AGU 2015: Invited Talk, The Tropical Pacific and Sub-Arctic Weather in North America

Fall AGU 2015: Invited Talk, Shortwave Cloud Feedback and the Response of the Atmospheric Circulation to Warming

AMS Annual Meeting 2017, Invited Talk, History of Radiation Budget Measurement.

Invited Speaker, AGU session Coupling of Cloud Processes with the Large-Scale Atmospheric Circulation, December, 2016

Keynote Speaker, Santa Fe Conference on Climate Change, Santa Fe, NM, Feb. 6-10, 2017.

AMS Annual Meeting, Austin, Texas, Two invited talks and one contributed talk, Jan. 8-10, 2018.

Invited Talk at AGU Fall Meeting, 10-13 December, 2018, Washington, DC.

Invited Talk at AGU Fall Meeting, San Francisco, December 12 2019.

Invited Talk on Cloud Feedback Virtual Seminar Series, 2021

Invited Talk, “From Spectroscopy to Climate”, Princeton University, August, 2022

Invited Talk, Cloud Feedback Virtual Seminar Series, 2023.

Other Invited Lectures

Explanation and Prediction in Quaternary Sciences, Quaternary Research Center, UW 1980.

Spectrum Series, History of the Pacific Northwest since the Ice Age, UW, 1980.

UCLA, Department of Atmospheric Sciences, 1981.

6th Annual NASA Summer Visiting Scientist Seminar Series, 1983.

Princeton University, Geophysical Fluid Dynamics Laboratory, 1983.

Northwest Convention of Science Fiction Writers, "Global Warming", 1983.
University of Washington, Department of Physics, "CO₂ Warming", 1983.
Institute for Atmospheric Physics, Academia Sinica, Beijing, November 1984.
Department of Applied Mathematics and Theoretical Physics, Cambridge University, UK, October 1985.
Department of Meteorology, Reading University, UK, October 1985.
Department of Atmospheric Physics, Oxford University, UK, October 1985.
Institut für Meteorologie und Geophysik, University of Cologne, FRG, November 1985.
Meteorological Office, Bracknell, UK, November 1986.
Department of Physics and Atmospheric Science, Imperial College, London, UK, November 1985.
Rutherford Laboratory, UK, December 1985.
European Center for Medium Range Forecasting, Reading, UK, January 1986.
Royal Meteorological Society Meeting on Atmospheric Radiation, London, January 1986.
Laboratoire de Météorologie Dynamique, École Normale Supérieure, Paris, March 1986.
Institut für Meteorologie, Free University of Berlin, May 1986.
National Center for Atmospheric Research, Summer Colloquium on "Dynamics of Low-Frequency Phenomena in the Atmosphere", July 1987
Institute for Environmental Studies, Global Climate Change Seminar Series, "Climate Sensitivity and the Limits of Modeling", November 1988.
JASON Group, La Jolla, CA, "Climate Modeling and Sensitivity: Global Warming Predictions", January 1989
Department of Geological Sciences, University of Chicago, "Dynamical Aspects of the Antarctic Ozone Hole", January 1989
Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA, "Climate Processes over the Oceans", January 1990
Department of Atmospheric, Oceanic and Space Sciences, University of Michigan, Ann Arbor, "Clouds, Radiation and Climate", May 1990.
Department of Atmospheric Sciences, Oregon State University, Corvallis, October 1990.
Division of Applied Sciences, Harvard University, February 1991.
Summer Workshop on the Marine Biosphere, Three lectures on the atmosphere and physical climate modeling. Friday Harbor, Washington, 22-23 July 1991.
Reading University, Department of Meteorology, Reading, England, 17 October 1993
Koninklijk Nederlands Meteorologisch Instituut, de Bilt, Netherlands, 18 November, 1993.
Oxford University, Department of Atmospheric Physics, England, 3 February 1994.
Cambridge University, Department of Applied Mathematics and Theoretical Physics, 11 February 1994.
Reading University, Department of Meteorology, Five Lecture Series, May-June, 1994
Goddard Laboratory for Atmospheres, Invited talk, 7 September 1994,
EOS Investigator Working Group Meeting, Baltimore, MD, 20 October 1994
ETH, Zurich, 27 October 1997
NASA Climate and Radiation Branch, GSFC, 18 March 1998.

Department of Chemistry and Chemical Biology, Harvard University, “The Tropical Atmosphere and Climate Change”, 22 September 1998
University of Alaska Fairbanks, (2 invited lectures) 23 and 25 March 1999.
University of Maryland, Department of Meteorology, 27 April 1999.
NRC Committee on Earth Sciences, Presentation on remote sensing requirements for NPOESS, Washington, D.C. 26-27 July 1999.
University of Arizona, Department of Atmospheric Sciences, 12 November 1999
UCLA Department of Atmospheric Sciences, 2 February 2000
Global Environmental Chemistry, UW, Sudden Climate Change, 9 February 2000
US CLIVAR Panel, “Measurements of Clouds and Radiation”, San Diego, 15 Feb. 2000
University of Alaska Fairbanks, (2 invited lectures), 29 February – 2 March 2000
PAOS, University of Colorado and CDC NOAA, Boulder, Colorado, Invited Lecture, 4-5 May 2000.
IGCR, Frontier Research System for Global Change, Three invited lectures, Tokyo, Japan, 18, 20, and 21 August, 2000
UC Davis, Global Change Speaker Series, April 6, 2001
Aeronomy Laboratory, Boulder, Colorado, September 22, 2001
Kuehnast Lecture Series, University of Minnesota, Global Climate Change: Uncertainties, Risks, and Values in Determining Public Policy, October 11, 2002.
Berkeley Atmospheric Sciences Symposium, UC Berkeley, November 8, 2002.
UW Internal Science Symposium on Data Intensive Science, “Understanding Climate Sensitivity”, March 1, 2003
Harris Lecture, Department of Atmospheric Sciences, Texas A&M University, February 18, 2003
Swiss National Center for Competence in Research – Climate, Zurich, Switzerland, August 26, 2003
College of Ocean and Atmospheric Sciences, Oregon State University, Invited lecture, 10 February, 2004
Research Exposed, Seminar Discussion, UW, OU Library, February 18, 2004.
Dynamics Seminar, Department of Atmospheric Sciences, UW, 8 April 2004.
CalTech, Division of Geophysical and Planetary Sciences, Invited Lecture, Athenaeum, LA, April 19, 2004
Goddard Space Flight Center, Laboratory for Atmospheres, Distinguished Lecturer Series, Greenbelt, MD, April 22, 2004
First Robert D. Cess Distinguished Lecture, Institute for Terrestrial and Planetary Atmospheres, SUNY Stony Brook, April 23, 2004.
Workshop on Land Surface Processes and Radiation, Lijiang, China August 2005
College of Atmospheric Sciences, Lanzhou University, Lanzhou, China, August 2005
Weather Bureau Office, Xi’An, China, August 2005
GFDL 50th Anniversary Celebration, Princeton University, September 6, 2005
Bob Dickinson 40th Anniversary Celebration at Georgia Tech University, October 16-17, 2005
UC Irvine, Department of Earth System Science, November 30, 2005
ETH Zurich, Institut for Atmospheric and Climate Science, Feb. 21, 2006
Wallingford Community Center, Seattle, March 3, 2006

NCAR Thorpex Summer Retreat, Boulder, Colorado, July 11, 2006
Goddard Lecture, NASA Goddard Space Flight Center, June 30, 2006
University of Toronto Center for Global Change Science, October 17, 2006
Canadian-Sparc PI workshop, Toronto, Canada, December 4, 2006
School of Earth and Atmospheric Sciences, Seoul National University, March 20, 2007
Department of Earth and Planetary Sciences, Harvard University, October 15-17, 2009
Columbia University, Lamont Doherty Earth Institute, October 15, 2010
ETH, Zurich, Institut for Atmospheric and Climate Science, October 20, 2010.
Taiwan Weather Bureau, Taipei, Taiwan, Nov. 4, 2010
National Taiwan University, Taipei, Taiwan, Nov. 5, 2010
AGU, Atmospheric Circulations and Climate Change, Dec. 15, 2010
AGU, Challenges in Understanding and Modeling Global-Regional Climate Connections, Dec. 17, 2010
ISSI Workshop, Observing and Modelling Earth's Energy Flows, Bern, Switzerland, January 10-14, 2011
Geophysical Fluid Dynamics Laboratory, NOAA/Princeton Univ., Princeton, NJ, March 10, 2011.
Department of Meteorology, Reading University, Reading, UK, Distinguished visiting Lecturer, September 30-October 4, 2013.
Cuyler Endowed Lecture, Jackson School of Geosciences, University of Texas at Austin, March 2014
Monster Seminar, North West Fisheries Science Center, Seattle, Washington 24 April 2014.
University of Wisconsin, Dept of Atmospheric and Oceanic Sciences, Invited Lecture, May 4, 2015
Autonomous University of Mexico (UNAM), "Panorama Actual de las Ciencias Atmosféricas 2014", Invited Lecture, August 22, 2014 Mexico, City,
Program in Climate Change, Summer Institute, Invited Lecture, Friday Harbor, WA 15 September 2014.
Atmospheric Sciences Colloquium, University of Washington, 10 October 2014
Graduate Climate Conference, Keynote Lecturer, Pack Forest, WA, October 31, 2014
Physical Oceanography Seminar, University of Washington, 3 December 2014.
Dynamics Seminar, Dept. of Atmospheric Sciences, University of Washington, 22 January 2015
Institute for Systems Biology Town Hall 2015, "Tipping Points in Environment and Climate", Invited Panelist for presentation and Q&A with biologists. March 18, 2015, Town Hall Seattle.
Department of Atmospheric and Oceanic Sciences, University of Wisconsin, Invited Speaker, 4-5 May 2015.
NCAR Summer School, Invited Speaker, 6-10 July 2015.
MIT, Dept. of Earth, Atmospheric and Planetary Sciences, September 29, 2015
Columbia University, Dept. of Earth and Environmental Sciences, September 30, 2015
Geophysical Fluid Dynamics Laboratory, 60th Anniversary Celebration, Invited Speaker, 2-3 November 2015.

Keynote Speaker, Berkeley Atmospheric Sciences Symposium, UC Berkeley, Feb. 18-19, 2016
DOE meeting on Regional Climate Change Modeling, Rockville, MD, Nov 29-Dec 1, 2016.
Atmospheric and Oceanic Sciences at the Courant Institute of Mathematical Sciences, New York University, 26-27 April 2017.
PNL, Atmospheric Physics Group, Invited Speaker, Kennewick, WA, 31 May-2 June 2017.
PCC Workshop on Climate, invited. Seattle, Feb. 8-9 2018.
Invited Talk at HeldFest, Isaac Held's retirement symposium. October 28-31, 2018, Princeton University.
Invited Lecture, Harvard University, April 8, 2019.
Invited Lecture, Princeton Center for Theoretical Sciences, "From Spectroscopy to Climate: Radiative Constraints on the General Circulation", June 8-10, 2020.
Invited Lecture, ECS and Cloud Feedback Virtual Seminar, Sept. 3, 2020.

Travel in Foreign Countries for Professional Purposes

Research Associate, McGill University, Montreal, Quebec 1975-76.
IAMAP Symposium "Dynamics of the Atmospheric General Circulation", Reading, UK, 3-7 August 1981.
ERBE Science Team Meeting, Paris, France 15-18 September 1982.
IAMAP/IUGG Symposia, Hamburg, FRG, 21-26 August 1983.
IAMAP Symposium on Large-scale Dynamics, Paris, France, 30 August-3 September 1983.
Beijing International Symposium on Climate, Beijing, PRC, 30 October-3 November 1984.
Sabbatical Visitor, Department of Atmospheric Physics, Oxford University, UK, 1 August 1985 -31 January 1986.
Sabbatical Visitor, Laboratoire de Météorologie Dynamique, École Normale Supérieure, Paris, France, 1 February - 31 July 1986.
IAMAP/IUGG Symposia, Vancouver, Canada, 11-14 August 1987.
Airborne Antarctic Ozone Experiment, Punta Arenas, Chile, 21 August-14 September 1987.
NATO Advanced Study Workshop, "Model Ecosystems and their Changes", 5 lectures, Maratea, Italy, 4-8 September 1989
IUGG General Assembly, Vienna, Austria, 16-24 August 1991.
Sabbatical year, 16 August 1993-15 August 1994, at ECMWF and Reading University, Reading, England
IAMAS Conference, Melbourne, Australia, 1-9 July 1997.
ETH, Zurich, Switzerland, 26-27 October 1997
Royal Meteorological Society Conference on the Physics of Climate, The Royal Society, London, 29-30 October 1997
European Geophysical Society General Assembly, Nice, France, 24-29 April 2000.
International Radiation Symposium, St. Petersburg, Russia, 24-29 July 2000

Frontier Climate Research System and IARC Workshop, Tokyo and Sendai, Japan 16-25 August, 2000.

IAMAS General Assembly, Innsbruck, Austria, 10-18 July 2001.

NERC Clouds and Climate Annual Meeting, Manchester, UK, 12-16 June, 2002.

NCCR Climate Summer Workshop, Grindelwald, Switzerland, 5-14 September 2002.

European Geophysical Society Meeting, Nice, France, 7-11 April, 2003.

NCCR Climate Review, Zurich and Bern Switzerland, 25-28 August 2003.

SPARC SSG Meeting, Frankfurt Germany, 22-25 September 2003.

IAMAS Symposium, Beijing, China, Also talks in Lijiang, Lanzhou and Xi'An, August 1-19, 2005

NCCR Climate Review, Bern Switzerland, ETH Zurich, Feb. 20-21, 2006

SPARC UTLS Workshop, Victoria, Canada, June 12-15, 2006.

NCCR Climate Review, Zurich Switzerland, Feb. 2007

Korean Meteorological Society Meeting on Climate Change and Impacts, Seoul, Korea, March 21, 2007.

Ernst Strüngmann Forum on Perturbed Clouds, Frankfurt Institute of Advanced Studies, Frankfurt, Germany, 1-8 March 2008.

NCCR Climate Review, Bern, Switzerland, Feb. 22-24, 2009

Hong Kong University of Science and Technology, Review, Hong Kong, March 1-4, 2009

University of Toronto, Canada, March 10-11, 2009

Department of Environmental Sciences Review, ETH Zurich, Switzerland, April 11-16, 2010.

Taiwan Weather Bureau, Taipei, Taiwan, Nov. 4, 2010

National Taiwan University, Department of Atmospheric Sciences, Taipei, Taiwan, Nov. 5, 2010

Intergovernmental Panel on Climate Change, Kunming, China, Nov. 7-11, 2010.

International Space Sciences Institute, Bern, Switzerland, January 10-14, 2011

Intergovernmental Panel on Climate Change, Brest, France, July 10-17, 2011.

Intergovernmental Panel on Climate Change, Marrakech, Morocco, April 14-20, 2012.

Intergovernmental Panel on Climate Change, Hobart, Tasmania, January 13-19, 2013

Intergovernmental Panel on Climate Change, Stockholm, Sweden, September 18-27, 2013

Reading University, Reading, UK, September 28-October 5, 2013.

Latsis Symposium 2014, Zurich, Switzerland, 18-21 June 2014.

Autonomous University of Mexico (UNAM), “Panorama Actual de las Ciencias Atmosféricas 2014”, Invited Lecture, August 22, 2014 Mexico, City,

ETH Zurich, Departmental Review, 24 November – 1 December 2018

Max Planck Institute for Meteorology, Scientific Advisory Board, 13-16 November 2023

Books

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Wallace, John. M., David S. Battisti, David W.J. Thompson and Dennis L. Hartmann, The Atmospheric General Circulation, Cambridge University Press, 406pp., 2023

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