Alan Robock

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EDUCATION:

B.A. in Meteorology, 1970 — University of Wisconsin, Madison
Honors: Phi Eta Sigma, Phi Kappa Phi, Honors Program, Graduated with Distinction

S.M. in Meteorology, 1974 — Massachusetts Institute of Technology
Thesis: "Spin-down of a Stratified, Rotating Fluid"
Advisor: Norman A. Phillips

Ph.D. in Meteorology, 1977 — Massachusetts Institute of Technology
Dissertation: "Climate Predictability and Simulation with a Global Climate Model"
Advisor: Edward N. Lorenz — Honors: NSF Graduate Fellow, Sigma Xi

EXPERIENCE:

Distinguished Professor, Department of Environmental Sciences, Rutgers University, July, 2003 – present. (Professor, January, 1998 – June, 2003)
Participation in a Virtual Service Pilot project of the Peace Corps, working with faculty at the Kalandang Taw Center for Peace Studies at Bukidnon State University, Malaybalay City, Philippines, September, 2024 – March, 2025.
Affiliate, Rutgers Center for Population-Level Bioethics, 2020 – 2024.
Director, Meteorology Undergraduate Program, Rutgers University, July, 2006 – June, 2015.
Director, Atmospheric Sciences Option, Environmental Sciences Graduate Program, Rutgers University, January, 1998 – December, 2007.
Associate Director, Center for Environmental Prediction, Rutgers University, July, 2005 – present. (Director, July, 2001 – June, 2005)
Visiting Miller Professor, Miller Institute for Basic Research in Science, University of California, Berkeley, February – April, 2023.
Visiting Fellow, Cooperative Institute for Research in Environmental Sciences, University of Colorado, Boulder, May – July, 2019.
Visiting Professor, Department of Earth and Environmental Sciences, Tulane University, New Orleans, Louisiana, November, 2018 – January, 2019.
Faculty Fellow, National Center for Atmospheric Research, Boulder, Colorado, August – November, 2011.
Visiting Scientist, Laboratoire de Météorologie Dynamique, Université Pierre et Marie Curie, Paris, France, January – June, 2005.
Member, Quaternary Studies Graduate Certificate Program, Rutgers University, September, 2000 – present.
Member, Environmental and Occupational Health Sciences Institute, Rutgers University, January, 1999 – June, 2004.
Professor, Dept. of Meteorology, Univ. of Maryland, July, 1996 – December, 1997. (Assistant Professor, August, 1977 – June, 1982; Associate Professor, July, 1982 – June, 1996)
Visiting Research Scientist, Princeton University, NOAA/Geophysical Fluid Dynamics Laboratory, September, 1994 – August, 1995.

Maryland State Climatologist, January, 1991 – December, 1997.
AAAS Congressional Science Fellow (Legislative Assistant, Congressman Bill Green (NY); and Research Fellow, Environmental and Energy Study Conf.), September, 1986 – August, 1987.
Fellow and Council Member, Cooperative Institute for Climate Studies, University of Maryland, June, 1984 – January, 1990.
Snow Forecaster, Montgomery County (Maryland) Public Schools, 1980 – 1981.
Research Scientist, Atm. Sci. Group, Lawrence Livermore Lab., California, Summer, 1973.
Peace Corps Volunteer, Philippines, 1970 – 1972. (Developed curricula and trained teachers of meteorology in the fishery vocational colleges.)

M.S. STUDENTS SUPERVISED: Donald Marks (1980), Dale Kaiser (1984), John Scialdone (1985), Peter Ahnert (1986), Andrew Vogelmann (1986), C. Adam Schlosser (1992), Jianping Mao (1992), Yuhe Liu (1992), Joanna Dionne (1993), Melissa P. Free (1993), Jared K. Entin (1996), Brad Fisher (1997), Sean Gray (1998), Shuang Qiu (1998), Juan Carlos Antuña (1998), Lifeng Luo (2000), Lori Thompson (now Sentman) (2001), Luke Oman (2003), Haibin Li (2005), Thomas Atkins (2005), Chaochao Gao (2005), Ben Kravitz (2009), Thomas W. Collow (2011), Lili Xia (2012), Mira Losic (now Berdahl) (2012), Corey J. Gabriel (2015), Brian Zambri (2017), Joshua Coupe (2019), Brendan Clark (2022), Nina Grant (2023), Mahjabeen Rahman (2023)

PH.D. STUDENTS SUPERVISED: Dian J. Gaffen (now Seidel) (1992), Jianping Mao (1995), C. Adam Schlosser (1995), Melissa P. Free (1996), Jared K. Entin (1998), Juan Carlos Antuña (2002), Lifeng Luo (2003), Luke Oman (2005), Haibin Li (2007), Chaochao Gao (2008), Elif Sertel (2008), Ben Kravitz (2011), Mira Berdahl (2014), Lili Xia (2014), Thomas W. Collow (2014), Corey J. Gabriel (2017), Brian Zambri (2017), Joshua Coupe (2020), Brendan Clark (2024), two current students (Nina Grant, Shu Xu)

POSTDOCS SUPERVISED: Suxia Liu, November, 1994 – September, 1995; G. Srinivasan, November, 1998 – October, 1999; Jared Entin, December, 1998 – February, 1999; S. Ramachandran, August, 1999 – February, 2000; Mingquan Mu, November, 2000 – May, 2003; Gonzalo Miguez-Macho, January, 2001 – February, 2005; Richard Anyah, September, 2005 – June, 2007; Luke Oman, February, 2006 – October, 2006; Elif Sertel, February, 2008 – August, 2008; Lili Xia, June, 2014 – December, 2017; Joanna Slawinska, May, 2015 – April, 2017; Brian Zambri, January, 2018 – June, 2018; Joshua Coupe, September, 2020 – September, 2021; Sam Rabin, September, 2021 – March, 2023; Jyoti Singh, November, 2021 – November, 2024.

HONORS:

Elected Fellow, American Meteorological Society, 1998.
Listed in *Who's Who in America*, 1999 – present.
Listed in *2000 Outstanding Scientists of the 20th Century*, 1999.
Listed in *Who's Who in the World*, 2000 – present.
Cook College Research Excellence Award, for active and original research documented by a series of research papers, 2001.
GCIP (GEWEX (Global Energy and Water Experiment) Continental-scale International Project) Program Management Award, "For his efforts in preparing useable soil moisture data sets and making them available to the GCIP Community," 2002.
Outstanding Scientific Research Paper Award from NOAA Office of Oceanic and Atmospheric Research, 2003.

Honored by the University Corporation for Atmospheric Research for advocacy on behalf of the scientific community above and beyond the call of duty, each year, 2004-2011.

Honored by *Web of Science* for a Highly Cited Article: "Since 2000, you have had 61 citations to your article, 'The Global Soil Moisture Data Bank.' This means that the number of citations your article received places it in the top 1% within its field according to *Essential Science Indicators*SM. Your work is highly influential among your colleagues in your field of study." (2005)

Honored by *Web of Science* for a Highly Cited Article: "Since 2000, you have had 87 citations to your article, 'Volcanic Eruptions and Climate.' This means that the number of citations your article received places it in the top 1% within its field according to *Essential Science Indicators*SM. Your work is highly influential among your colleagues in your field of study." (2005)

2nd place, *Weatherwise* 2005 Photo Contest. Winning photograph of polar stratospheric cloud taken August 29, 2004 in McMurdo, Antarctica, published in September/October 2005 *Weatherwise*, **58**, no. 5, pp. 46-47.

Editor's Award, *Journal of Hydrometeorology*, "for providing timely, insightful, and comprehensive reviews that have helped to ensure the publication of high quality research," presented at American Meteorological Society Annual Awards Banquet, February 1, 2006.

Antarctic Service Medal of the United States of America, March 1, 2006.

Rutgers University Board of Trustees Award for Excellence in Research, the university's highest honor for distinguished research contributions, May 4, 2006.

Member of the Intergovernmental Panel on Climate Change, which won the Nobel Peace Prize, December 10, 2007.

Bradley Prize for best talk of the year, Geological Society of Washington, December, 2007. "Your award consists of a silver bowl, with your name inscribed on it, and a check for $200."

Elected Fellow, American Association for the Advancement of Science, 2008.

Elected Fellow, American Geophysical Union, 2011.

2011 Editor's Citation for Excellence in Refereeing, *Journal of Geophysical Research–Atmospheres*, notified June 7, 2012.

American Meteorological Society Jule G. Charney Medal, January 7, 2015, "For fundamental contributions toward understanding the climatic effects of stratospheric aerosols from volcanoes and other potential sources, and the role of soil moisture in climate."

2015 Editor's Citation for Excellence in Refereeing, *Eos*, notified March 11, 2016.

Albert Nelson Marquis Lifetime Achievement Award, *Who's Who*, August 23, 2017.

Participant in the International Campaign to Abolish Nuclear Weapons, which won the Nobel Peace Prize, December 10, 2017.

Cassandra Award, January 17, 2018, "for his warnings on the climatic consequences of nuclear conflict."

Chancellor's Award for Global Impacts, Rutgers University, New Brunswick, September 24, 2020. "This honor carries an institutional award of $5,000."

Number 284 on Reuters Hot List of the world's top 1000 climate scientists, April 20, 2021.

Selected to give the Stephen Schneider Lecture at the Fall Meeting of the American Geophysical Union in December, 2021. "The Stephen Schneider Lecture is presented annually and recognizes outstanding scientific accomplishments in global environmental change and in communicating scientific results to the public. The lecture honors the life and work of climatologist Stephen Schneider, an extremely influential scientist who received extensive recognition for his research, policy and outreach efforts related to climate change."

Future of Life Award, August 6, 2022, "For reducing the risk of nuclear war by developing and popularizing the science of nuclear winter." The award includes a stipend of $50,000.
Global Peace and Health Award from the International Physicians for Prevention of Nuclear War and the Boston Chapter of Physicians for Social Responsibility, October 1, 2022.
Nominated for Arms Control Association 2022 Arms Control Person(s) of the Year (came in third out of ten).
Visiting Miller Professorship, Miller Institute for Basic Research in Science, University of California, Berkeley. "The purpose of the Visiting Miller Professorship is to bring promising or eminent scientists to the Berkeley campus on a short-term basis for collaborative research interactions within the Institute's interdisciplinary community." February through April, 2023.
Environmental Sciences Leader Award for 2023, Research.com, April 18, 2023, #146 in the world ranking and #74 in the United States.
Max von Laue Lecture, Meeting of the Condensed Matter Section of the German Physical Society, Berlin, Germany, March 19, 2024. (Invited)
Environmental Sciences Leader Award for 2024, Research.com, May 20, 2024, #158 in the world ranking and #80 in the United States.
Honored as a "2024 Highly Ranked Scholar – Lifetime, in All Fields of Scholarly Endeavor, as conferred by ScholarGPS in recognition of exceptional productivity, noteworthy impact and quality of scholarly work in the top 0.05% of scholars 30 million scholars worldwide."
Honored as a "2024 Highly Ranked Scholar – Lifetime, in the Specialty of Volcano, as conferred by ScholarGPS in recognition of exceptional productivity, noteworthy impact, and quality of scholarly work in the top 0.05% of scholars in the Specialty worldwide."
American Geophysical Union College of Fellows Distinguished Lecturer, 2025 – 2026.

EDITORIAL SERVICE:

Editor, *Journal of Climate and Applied Meteorology*, January, 1985 – December, 1987.
Editor, *Journal of Geophysical Research–Atmospheres*, April, 2000 – March, 2005. (Associate Editor, November, 1998 – April, 2000; February, 2013 – December, 2015)
Member of Editorial Board, *Atmospheric and Oceanographic Sciences Library*, Springer Publishing, January, 2006 – December, 2008.
Editor, *Reviews of Geophysics*, July, 2010 – December, 2018; January, 2023 – December, 2026. (Associate Editor, September, 1994 – December, 2000; February, 2006 – June, 2010; January, 2019 – December, 2022)

CONGRESSIONAL TESTIMONY:

1. Joint Economic Committee of Congress, May 5, 1986. (On "Meteorological aspects of the Chernobyl nuclear accident")
2. Senate Foreign Relations Committee, Subcommittee on International Economic Policy, Export and Trade Promotion, June 26, 1997. (On "Global Warming")
3. House Committee on Science, Subcommittee on Energy and Environment, October 7, 1997. (On "Global Warming: State of the Science")
4. House Committee on Science and Technology, November 5, 2009. (First Congressional hearing on geoengineering; On "Geoengineering: Assessing the Implications of Large-Scale Climate Intervention")

INVITED ACADEMIC VISITS:

National Center for Atmospheric Research, Boulder, Colorado, June, 1978; August-November, 2011.
State Hydrological Institute, Leningrad, USSR, August, 1981; July, 1984; December, 1989; March, 1991.
Computing Center, Academy of Sciences, Moscow, USSR, July, 1984; March, 1991.
Alexander von Humboldt University, Berlin, DDR, May, 1988.
Michigan Technological University, Houghton, April, 1990.
Earth System Science Center, Pennsylvania State University, University Park, February, 1992.
Commission of the European Communities Joint Research Centre, Ispra, Italy, May, 1993.
Tokyo Metropolitan University, July, 1993 (Japan Society for the Promotion of Science Research Fellow); July, 1998.
Quaternary Research Center and Volcano Systems Center, University of Washington, Seattle, March, 1995.
Institute for the Study of Planet Earth, University of Arizona, Tucson, March, 1996 (Visiting Scholar); February, 1997.
Max Planck Institut für Meteorologie, Hamburg, Germany, April, 1996; October, 1996; November, 2009.
Université Catholique de Louvain, Louvain-la-Neuve, Belgium, April, 1996 (Invited Professor).
University of New South Wales, Sydney, Australia, December, 1996.
North Carolina State University, Raleigh, February, 1998.
State University of New York, Stony Brook, April, 1998.
Queen's University, Belfast, Northern Ireland, June, 1998.
Institute of Geography, Academia Sinica, Beijing, August, 1998.
University of Bristol, Bristol, England, October, 2000.
McGill University, Montreal, Canada, January, 2001.
International Pacific Research Center, University of Hawaii, April, 2001; May, 2002.
Escuela Politécnica Nacional, Quito, Ecuador, May, 2001.
University of Copenhagen, Denmark, January, 2003.
University of Victoria, British Columbia, Canada, April, 2003.
University of Paris, January, 2004.
University of Maine, February, 2004.
The Pennsylvania State University, February, 2004; November, 2007.
Laboratoire de Météorologie Dynamique, Université Pierre et Marie Curie, Paris, France, January – June, 2005.
Royal Holloway, University of London, England, March, 2005.
University of Reading, England, March, 2005; June, 2010.
Hadley Centre for Climate Prediction and Research, Exeter, England, May, 2005.
University of Cambridge, Cambridge, England, May, 2005.
European Space Research and Technology Centre, European Space Agency, Noordwijk, Netherlands, May – June, 2005.
University of Texas, March, 2006.
University of Hawaii, August, 2006.
Istanbul Technical University, Turkey, January, 2008.
University of Virginia, April, 2008.
University of Oklahoma, April, 2008.
Purdue University, April, 2008.

University of Texas, April, 2008.
Jet Propulsion Lab/California Institute of Technology, February, 2009.
McGill University, Montreal, Canada, November, 2009.
Peking University, China, November, 2010.
University of Oklahoma, February, 2011.
King Abdullah University of Science and Technology, Thuwal, Saudi Arabia, March, 2011; January, 2016.
Florida State University, Tallahassee, April, 2011.
University of Alabama, Huntsville, February, 2012.
University of California, Davis, February, 2012.
Stanford University, Palo Alto, California, March, 2012.
University of California, Los Angeles, April, 2012.
University of Bergen, Norway, May, 2012.
Institute Pierre Simon Laplace, Paris, France, April, 2015.
University of Illinois, Champaign-Urbana, Illinois, February, 2016.
Universidad Nacional Autónoma de México, México City, México, March, 2016.
California Institute of Technology, Pasadena, California, April, 2016.
Lanzhou University, Lanzhou, China, July, 2016.
Beijing Normal University, Beijing, China, July, 2016.
Tulane University, New Orleans, Louisiana, November, 2018 – January, 2019.
University of Stockholm, Sweden, March, 2019.
University of Colorado, May – July, 2019.
University of California, Berkeley, February – April, 2023.

MEMBERSHIP IN PROFESSIONAL SOCIETIES:

American Meteorological Society, 1976 – present.
- – Member, Committee on Climate Variations, 1997 – 2003.
- – Member, Committee to draft a policy statement on geoengineering, 2008 – 2009.
- – Member, Committee to rewrite degree requirements for a B.S. in Meteorology, 2010.
- – Member, Commission on the Weather and Climate Enterprise (CWCE)/Board on Enterprise Communication (BEC) Committee on Improving Climate Change Communication, 2010 – 2014.
- – Member, Committee to revise policy statement on global warming, 2011 – 2012.
- – Member, Committee on Planned and Inadvertent Weather Modification, 2012 – 2018.
- – Member, Centennial Committee, 2015 – 2019.
- – Member, Volunteer Committee, 2017 – 2019.
- – Member, International Academic Volunteering Committee of the Board on Community Service, 2020 – present.
- – Member, Committee to revise policy statement on climate change, 2025 – 2026.

American Geophysical Union, 1978 – present.
- – Atmospheric Sciences Section
  - – Member, Executive Committee, 2000 – 2014.
  - – Chair, Climate Technical Committee, 2005 – 2006.
  - – Webmaster, 2006 – 2014.
  - – President-Elect, 2006 – 2008.
  - – President, 2008 – 2010.
  - – Past-President, 2010 – 2012.

– Kaufman Award Committee, Chair, 2010, 2011, 2012, Member, 2013, 2014.
– Holton Award Committee, Chair, 2010, 2011, 2012, 2014, Member, 2013.
– Member, Fellows and Nominations Committee, 2013 – 2023.
– Member, Council, 2006 – 2010, 2023 – 2024.
– Member, Meetings Committee, 2006 – 2008.
– Member, Future Focus Task Force, 2008 – 2009.
– Member, AGU Fellows Program Review Task Force, 2013 – 2014.
– Member, *Journal of Advances in Modeling Earth Systems* (JAMES) Editor-in-Chief Search Committee, 2014.
– Member, Committee to revise policy statement on climate intervention, 2017 – 2018.
– Member, College of Fellows, 2017 – present.
– Member, Steering Team, 2017 – 2019.
– Member, Executive Committee, 2019 – present.
– Chair, Engagement Committee, 2019 – 2020.
– Chair-Elect, 2021 – 2022.
– Chair, 2023 – 2024.
– Past Chair, 2025 – 2026.
– Member, Advisory Board for AGU's initiative towards development and adoption of an Ethical Framework for Climate Intervention Research, 2023 – 2024.

American Association for the Advancement of Science, 1975 – present.
– Member, Congressional Science Fellow Selection Committee, 1987.
– Atmospheric and Hydrospheric Sciences Section (Section W)
– Member, Electorate Nominating Committee, 1999 – 2002.
– Chair-Elect, 2009 – 2010.
– Chair, 2010 – 2011.
– Retiring Chair, 2011 – 2012.

International Association of Volcanism and Chemistry of the Earth's Interior, 2000 – present.
– Representative to the International Union of Geodesy and Geophysics (IUGG) Commission on Climatic and Environmental Change, 2019 – 2023.

UNIVERSITY CORPORATION FOR ATMOSPHERIC RESEARCH (UCAR):

Member representative for Rutgers University, 2001 – present.
Elected member of President's Advisory Committee for University Relations (PACUR; formerly University Relations Committee), 2005 – 2011.
– Member, subcommittee to review the NCAR/ASP Faculty Fellowship applications.
Elected to Members' Nominations Committee, 2011 – 2014.
Board of Trustees
– Elected member, 2012 – 2015.
– Member, Budget and Programs Committee, 2012 – 2015.
– Board representative to PACUR, 2013 – 2015.
– Chair, Board Nominations Committee, 2014 – 2015.
– Member, Governance Task Group, 2015 – 2022 (Co-Chair, 2018 – 2022).
Member, NCAR Non-NSF Proposal Review Panel, 2025

INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE PARTICIPATION:

Climate Change 1992, The Supplementary Report to the IPCC Scientific Assessment:
– Contributing Author, Chapter C, "Observed climate variability and change"

Climate Change 1994, Radiative Forcing of Climate Change:
– Contributing Author, Chapter 4, "Radiative Forcing"

Second Assessment Report:
– Contributing Author, Chapter 2, Working Group I, "Radiative forcing of climate change"
– Contributing Author, Chapter 4, Working Group I, "Climate processes"
– Contributing Author, Chapter 5, Working Group I, "Climate models - Evaluation"
– Contributing Author, Chapter 8, Working Group I, "Detection of climate change and attribution of causes"

Third Assessment Report:
– Contributing Author, Chapter 2, Working Group I, "Observed Climate Variability and Change"
– Contributing Author, Chapter 12, Working Group I, "Detection of Climate Change and Attribution of Causes"

Working Group I Workshop on Climate Sensitivity, Paris, France, July 26-29, 2004:
– Attended, made presentation, and published article in workshop report

Expert Meeting on Geoengineering, Lima, Peru, June 20-22, 2011:
– Attended, made presentation, and helped write workshop report

Fifth Assessment Report:
– Attended and participated in Synthesis Report Scoping Meeting, Liege, Belgium, August 25-27, 2010.
– Lead Author, Chapter 8, Working Group I, "Anthropogenic and Natural Radiative Forcing"
– Contributing Author, Chapter 5, Working Group I, "Information from Paleoclimate Archives"
– Contributing Author, Chapter 7, Working Group I, "Clouds and Aerosols"
– Contributing Author, Chapter 11, Working Group I, "Near-term Climate Change: Projections and Predictability"
– Contributing Author, Chapter 19, Working Group II, "Emergent Risks and Key Vulnerabilities"

All Assessment Reports:
– Many expert reviews of multiple chapters.

MEMBERSHIP ON STATE, NATIONAL, AND INTERNATIONAL PANELS:

Working Group VIII, US-USSR Agreement on Cooperation in the Field of Environmental Protection, 1979 – 1995.
NASA Climate Data System Advisory Committee, 1985 – 1990.
Climate Trends Panel, National Climate Program Office, NOAA, 1988 – 1989.
Joint Working Group on International Aerosol Climatology Project, 1989 – 1995.
Global Climate Upper Air Data Experts Group, NOAA, 1990 – 1991.
NASA GSFC DAAC User Working Group, 1991 – 1993.
Scientific Advisory Board, National Institute for Global Environmental Change (NIGEC), Great Plains Regional Center, 1992 – 2000.
International Association of Volcanism and Chemistry of the Earth's Interior (IAVCEI) and International Association for Meteorology and Atmospheric Sciences (IAMAS) Commission on Volcanism and the Earth's Atmosphere 1992 – 2012 (Secretary, 1992 – 2000; Leader, 2000 – 2004).
International Climate Commission of IAMAS, 1995 – present.

International Global Aerosol Chemistry project, Focused Aerosol Activity 8.4, "Upper Tropospheric and Stratospheric Aerosols," Coordinating Committee, 1995 – 1999.
Land Surface Working Group, Climate System Model, NCAR, 1997 – 1999.
International Satellite Land Surface Climatology Project (ISLSCP) Science Panel, 1997– 2003.
SPARC Working Group on Stratospheric Aspects of Climate Forcings, 1997 – 2013.
GEWEX Americas Prediction Project (GAPP) Data Management Committee, 2001 – 2006.
Advisory Council for the Consortium for Atlantic Regional Assessment (CARA) at Penn State University, 2003 – 2006.
International Commission on the Middle Atmosphere of IAMAS, 2003 – 2007.
National Ecological Observatory Network (NEON) Design Consortium, Science and Human Dimensions Committee, Climate Change Subcommittee, 2004 – 2005.
Technical Committee on Remote Sensing and Data Assimilation in Hydrology, European Geophysics Union, 2005 – 2006.
International Soil Moisture Working Group, 2006 – 2012.
Climate and Atmospheric Sciences Standing Committee, Science Advisory Board, New Jersey Department of Environmental Protection, 2010 – 2023.
Working Group on the Solar Radiation Management Governance Initiative, UK Royal Society, 2010 – 2015.
Project Advisory Board, European Trans-disciplinary Assessment of Climate Engineering (EuTRACE) Project, Institute for Advanced Sustainability Studies, Potsdam, Germany, 2011 – 2015.
World Meteorological Organization committee to recommend geoengineering policy, co-chair, 2014.
Scientific Advisory Panel, Exploring the Potential and Side Effects of Climate Engineering (EXPECT) Project, University of Oslo, Norway, 2014 – 2017.
Earth Observations Assessment (EOA 2016), performed by the White House Office of Science and Technology Policy, Ice Cores Panel, 2016.
Earth Observations Assessment (EOA 2016), performed by the White House Office of Science and Technology Policy, Atmospheric Climate Models Panel, 2016.
Earth Observations Assessment (EOA 2016), performed by the White House Office of Science and Technology Policy, Volcanic Eruptions and Their Impacts on Climate Panel, 2016.
Advisory Committee, Department of Science and Technology Centre of Excellence in Climate Modeling, Centre for Atmospheric Sciences, Indian Institute of Technology, Delhi, 2018 – present.
Member, International Union of Geodesy and Geophysics (IUGG) Commission on Climate and Environmental Change, 2019 – 2023.
Member, Geoengineering Modeling Research Consortium (GMRC), 2019 – present.
Advisory Committee for Geosciences, National Science Foundation, January 1, 2020 – December 31, 2022.
Member of Project Team, Physicists Coalition for Nuclear Threat Reduction, July, 2020 – present.
Research Collaborator, DEGREES Initiative (formerly the DECIMALS (Developing Country Impacts Modelling Analysis for SRM) Fund), 2021 – present.
National Academy of Sciences, Engineering, and Medicine committee, Research Agenda for Reducing the Climate Impact of Aviation-Induced Cloudiness and Persistent Contrails from Commercial Aviation, April 14, 2024 – May 28, 2024.

PARTICIPATION IN INTERNATIONAL EXPERIMENTS:

Atmospheric Model Intercomparison Project (AMIP), 1992 – 1997.
Leader of Diagnostic Subproject 11: Evaluation of soil moisture and continental water budget
Project on Intercomparison of Land-surface Parameterization Schemes (PILPS), 1992 – 2003.
Contributor of model simulations and validation data sets
Co-leader of PILPS Phase 2(d) project (grassland simulations for Valdai, Russia)
Member, International Coordinating Committee, 1999 – 2003
International Satellite Land Surface Climatology Project (ISLSCP), 1993 – 2003.
Contributor of validation data sets
Conductor of soil moisture intercomparisons
GCM Reality Intercomparison Project for SPARC (GRIPS), 1997 – 2002.
Co-leader of Task 3a, Intercomparison of Simulations of the 1991 Pinatubo Eruption
Atmospheric Radiation Measurement (ARM) Science Team, 1998 – 2000.
Participant in Single Column Modeling Intercomparison Project
Stratospheric Aerosol and Gas Experiment II (SAGE II) Science Team, 1999 – 2003.
Land Data Assimilation System (LDAS) Science Team, 1999 – 2003.
Soil Moisture and Ocean Salinity (SMOS) Validation and Retrieval Team, 2005 – 2010.
Northern Eurasian Earth Science Partnership Initiative (NEESPI) Science Team, 2005 – 2007.
Soil Moisture Active Passive (SMAP) Calibration/Validation Working Group, 2008 – 2014.
Geoengineering Model Intercomparison Project (GeoMIP), co-leader, 2010 – present.
The Network for Sustainable Climate Risk Management (SCRiM), 2012 – 2017.
Stratospheric Sulfur in Relation to Climate (SSiRC) Project, Scientific Steering Group, 2013 – 2022.
Model Intercomparison Project on the climatic response to Volcanic forcing (VolMIP), Scientific Steering Committee, 2015 – present.

BOOKS:

1. Robock, Alan, and Clive Oppenheimer, Eds., 2003: *Volcanism and the Earth's Atmosphere*, Geophysical Monograph 139, American Geophysical Union, Washington, DC, 360 pp.
2. Toon, Owen Brian, and Alan Robock, 2025: *Earth in Flames: How an Asteroid Killed the Dinosaurs, and How We Can Avoid a Similar Fate From Nuclear Winter*, Oxford University Press, 280 pp., doi:10.1093/9780197799734.003.0012, ISBN: 9780197799703.

REFEREED JOURNAL ARTICLES; h-index = 116 (Google Scholar), 88 (Scopus), 85 (Web of Science); Orcid: 0000-0002-6319-5656

1. Robock, Alan, 1975: On the eddy structure of hurricanes, *Quart. J. R. Met. Soc.*, **101**, 657-663.
2. Robock, Alan, 1976: Reply [to comments on above paper by J. S. A. Green and H. Riehl]. *Quart. J. R. Met. Soc.,* **102**, 453-455.
3. Bornstein, Robert D. and Alan D. Robock, 1976: Effects of variable and unequal time steps for advective and diffusive processes in simulations of the urban boundary layer. *Mon. Weather Rev*., **104**, 260-267.
4. Robock, Alan, 1978: Internally and externally caused climate change. *J. Atmos. Sci.*, **35**, 1111-1122.

5. Robock, Alan, 1979: The "Little Ice Age": Northern Hemisphere average observations and model calculations. *Science*, **206**, 1402-1404.
6. Robock, Alan, 1980: The seasonal cycle of snow cover, sea ice, and surface albedo. *Mon. Weather Rev.*, **108**, 267-285.
7. Robock, Alan, 1981: A latitudinally dependent volcanic dust veil index, and its effect on climate simulations. *J. Volcanol. Geotherm. Res.*, **11**, 67-80.
8. Robock, Alan, 1981: The Mount St. Helens volcanic eruption of 18 May 1980: Minimal climatic effect. *Science*, **212**, 1383-1384.
9. Robock, Alan and Clifford Mass, 1982: The Mount St. Helens volcanic eruption of 18 May 1980: Large short-term surface temperature effects. *Science*, **216**, 628-630.
10. Mass, Clifford and Alan Robock, 1982: The short-term influence of the Mount St. Helens volcanic eruption on surface temperature in the Northwest United States. *Mon. Weather Rev.*, **110**, 614-622.
11. Robock, Alan, 1982: The Russian surface temperature data set. *J. Appl. Meteorol.*, **21**, 1781-1785.
12. Robock, Alan, 1983: Global mean sea level: indicator of climate change? *Science*, **219**, 996.
13. Robock, Alan, 1983: Ice and snow feedbacks and the latitudinal and seasonal distribution of climate sensitivity. *J. Atmos. Sci.*, **40**, 986-997.
14. Robock, Alan and Michael Matson, 1983: Circumglobal transport of the El Chichón volcanic dust cloud. *Science*, **221**, 195-197.
15. Robock, Alan, 1983: The dust cloud of the century. *Nature*, **301**, 373-374. (Invited paper)
16. Robock, Alan, 1983: El Chichón provides test of volcanoes' influence on climate. *Nat. Weather Dig.*, **8**, 40-45.
17. Robock, Alan, 1984: Climate model simulations of the effects of the El Chichón eruption. *Geofísica Internacional*, **23**, 403-414.
18. Matson, Michael and Alan Robock, 1984: Satellite detection of the 1982 El Chichón eruptions and stratospheric dust cloud. *Geofísica Internacional*, **23**, 117-127.
19. Ropelewski, Chester F., Alan Robock and Michael Matson, 1984: Comments on "An apparent relationship between Eurasian spring snow cover and the advance period of the Indian summer monsoon." *J. Climate Appl. Met.*, **23**, 341-342.
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175. Florindo, Fabio, Annmarie G. Carlton, Paolo D'Odorico, Qingyun Duan, Jasper S. Halekas, Gesine Mollenhauer, Eelco J. Rohling, Robert G. Bingham, Emily E. Brodsky, Michel C. Crucifix, Andrew Gettelman, and Alan Robock, 2022: Thank you to our 2021 peer reviewers. *Rev. Geophys.*, **60**, e2022RG000779, doi:10.1029/2022RG000779.

176. Robock, Alan, 2022: AMS corporate funding, *Bull. Amer. Meteor. Soc.*, **103**, 88-90.

177. Robock, Alan, 2022: Member Spotlight, *Bull. Amer. Meteor. Soc.*, **103**, 698.

178. Visioni, Daniele, Alan Robock, Alistair Duffey, and Ilaria Quaglia, 2023: Process-level experiments and policy-relevant scenarios in future GeoMIP iterations. *Bull. Amer. Meteor. Soc.*, **104**, E501-E503, doi:10.1175/BAMS-D-22-0281.1.

179. Xia, Lili, and Alan Robock, 2023: *Implications for Africa of the use of nuclear weapons*, handed out at the African Regional Seminar on the Universalization of the TPNW [Treaty on the Prohibition of Nuclear Weapons], Pretoria, South Africa, January 30-31, 2023.

180. Florindo, Fabio, Valerio Acocella, Ann Marie Carlton, Paolo D'Odorico, Qingyun Duan, Andrew Gettelman, Jasper Halekas, Ruth Harris, Gesine Mollenhauer, Alan Robock, Claudine Stirling, and Yusuke Yokoyama, 2023: 60 years and beyond of *Reviews of Geophysics*, *Rev. Geophys.*, **61**, e2023RG000807, doi:10.1029/2023RG000807.

181. Florindo, Fabio, Valerio Acocella, Robert Bingham, Ann Marie Carlton, Paolo D'Odorico, Qingyun Duan, Andrew Gettelman, Jasper S. Halekas, Ruth Harris, Gesine Mollenhauer, Alan Robock, Claudine Stirling, and Yusuke Yokoyama, 2023: Expressing gratitude to reviewers: A message from the editors of *Reviews of Geophysics* for 2022. *Rev. Geophys.*, **61**, e2023RG000814, doi:10.1029/2023RG000814.

182. Visioni, Daniele, Alan Robock, Jim Haywood, Matthew Henry, and Alice Wells, 2023: A new era for the Geoengineering Model Intercomparison Project (GeoMIP): Meeting report for the 13th GeoMIP meeting held in Exeter, UK, 3-7 July, 2023. *Bull. Amer. Meteor. Soc.*, **104**, E1950–E1955, doi:10.1175/BAMS-D-23-0232.1.

183. Duan, Qingyun, Valerio Acocella, Ann Marie Carlton, Paolo D'Odorico, Fabio Florindo, Andrew Gettelman, Jasper Halakas, Ruth Harris, Gesine Mollenhauer, Alan Robock, Claudine Stirling, and Yusuke Yokoyama, 2024: Expressing gratitude to reviewers: A message from the editors of *Reviews of Geophysics* for 2023. *Rev. Geophys.*, **62**, e2024RG000844, doi:10.1029/2024RG000844.

184. AGU Editorial Network (I am one of 67 authors), 2024: Challenges facing scientific publishing in the field of Earth & space sciences, *AGU Advances*, **5**, e2024AV001334. doi:10.1029/2024AV001334.

185. Visioni, Daniele, Alan Robock, Douglas G. MacMartin, Ilaria Quaglia, Ezra Brody, and Jared Farley, 2024: The community-based road to CMIP7 in the Geoengineering Model Intercomparison Project (GeoMIP), *Bull. Amer. Meteor. Soc.*, **105**, E2324-E2329, doi:10.1175/BAMS-D-24-0274.1.

186. Duan, Qingyun, Valerio Acocella, Annmarie G. Carlton, Minhan Dai, Paolo D'Odorico, Joshua M. Feinberg, Fabio Florindo, Natalia Y. Ganushkina, Andrew Gettelman, Ruth A. Harris, Gesine Mollenhauer, Alan Robock, Claudine Stirling, and Yusuke Yokoyama, 2025: Expressing Gratitude to Reviewers: A Message From the Editors of *Reviews of Geophysics* for 2024. *Rev. Geophys.*, **63**, e2025RG000886, doi:10.1029/2025RG000886.

187. Visioni, Daniele, Alan Robock, Kelsey E. Roberts, Walker Lee, Matthew Henry, Alistair Duffey, Haruki Hirasawa, Oriana Chegwidden, and Hassaan Sipra, 2025: Finalizing experimental protocols for the Geoengineering Model Intercomparison Project (GeoMIP) contribution to CMIP7, *Bull. Amer. Meteor. Soc.*, **106**, E2029-E2035, doi:10.1175/BAMS-D-25-0191.1.

* papers also presented at conferences

BLOGS, OPINIONS, AND OP-EDS:

1. Robock, Alan, 2004: Global warming. Letter to the Editor, *Science Times* section, *New York Times*, September 7, 2004.
2. Robock, Alan, 2006: Bigger threat to Earth. (Letter to Editor about global warming) *New York Times*, Sept. 19, p. F4.
3. Mills, Michael J., Luke Oman, Alan Robock, and Owen B. Toon, 2006: Here's how "nuclear winter" might occur. (Guest Opinions) *Daily Camera*, Boulder, Colorado, Dec. 28.
4. Robock, Alan, 2007: Nuclear power's costs and perils (Letter to Editor), *Physics Today*, **60**, No. 1, 14.
5. O'Malley, Doug, and Alan Robock, 2007: Warming up to global action. *Bergen Record*. (Op-ed, Oct. 31).
6. Robock, Alan, 2010: "Want to halt global warming? Here are your choices…," essay distributed by Project Syndicate and published in many places, including *The Gulf Times* (Qatar), *The Scotsman*, *Taranaki Daily News*, *Taipei Times*, *Today's Zaman* (Turkey), *MMEGI* (Botswana), *The Daily Star* (Lebanon), *The Korea Herald*, *Frederiksburg News* (Virginia), *El Nacional* (Caracas, Venezula), *Daily News* (Egypt), *The New Times* (Rwanda), *Macau Daily Times*, *European Voice* (Belgium), *Dnevnik* (Bulgaria), *Capital Weekly* (Bulgaria), *Jornal De Negocios* (Portugal), *Infomediu Europa* (Romania), *The Guatemala Times*, *Al-Sabah Al-Jadeed* (Iraq), *Jordan Times*, *Al Ghad* (Jordan), *Al Watan Daily* (Kuwait), *Al Jarida* (Kuwait), *Khaleej Times* (United Arab Emirates), and *Alrroya Aleqtissadiya* (United Arab Emirates).
7. Helfand, Ira, and Alan Robock, 2013: No such thing as a safe number of nukes. CNN.com, http://us.cnn.com/2013/06/19/opinion/helfand-obama-nuclear-weapons/
8. Lessons of Volcanic Eruptions, AGU blog, (Invited paper), August 29, 2013.
9. Ban Nuclear Weapons; Saving Money and Saving the World, *Huffington Post*, February 20, 2014.
10. It's not too late to lessen impacts of global warming, Letter to Editor, *Asbury Park Press*, February 27, 2014.
11. Human Tipping Points: Why I'm Optimistic About Solutions to Global Warming and Nuclear Winter, *Huffington Post*, March 3, 2014.
12. President Obama, Say "No" to Keystone XL Pipeline, *Huffington Post*, March 6, 2014.
13. Ukraine and Nuclear Weapons, *Huffington Post*, March 22, 2014.
14. A Case Against Climate Engineering, *Huffington Post*, May 5, 2014.
15. Opinion: Global warming - It's real. It's here. Deal with it, *The Record*, May 11, 2014.
16. Nuclear Energy Is Not a Solution for Global Warming, *Huffington Post*, May 12, 2014.
17. Nuclear Weapons Are Much More Dangerous Than Global Warming, *Huffington Post*, December 1, 2014.

18. The CIA asked me about controlling the climate – this is why we should worry, *The Guardian*, February 17, 2015.
19. Prevention the only cure for nuclear weapons, Letter to the Editor, *Asbury Park Press*, August 6, 2015.
20. A Modest Proposal, *Huffington Post*, September 1, 2015.
21. Paris, Nuclear Weapons, and Suicide Bombing, *Huffington Post*, December 7, 2015.
22. Let's End the Peril of a Nuclear Winter, Op-ed, *New York Times*, February 11, 2016.
23. Transcript: Nuclear Winter Podcast with Alan Robock and Brian Toon, *Future of Life Institute*, October 31, 2016. Listen here. *Huffington Post* article by Ariel Conn here.
24. An open letter to President-elect Trump about nuclear weapons and nuclear winter, *Bulletin of Atomic Scientists*, November 11, 2016.
25. An open letter to President-elect Trump about nuclear weapons and nuclear winter, *Huffington Post*, January 10, 2017.
26. The Nuclear-Winter Debate, Letter to the Editor, *The New Yorker*, February 27, 2017.
27. U.S. must sign treaty on nuclear weapons ban, Letter to the Editor, *Asbury Park Press*, August 6, 2017.
28. UK must take lead role in de-escalating threat of nuclear war, Letter to the Editor, *The Guardian*, August 31, 2017.
29. Credit Smith for signing GOP's climate resolution, Featured Letter to the Editor, *Asbury Park Press*, October 14, 2017.
30. Geoengineering could have animals running for their lives, *Nature Ecology & Evolution*, January 22, 2018.
31. Guest post: Did bombing during second world war cool global temperatures?, *Carbon Brief*, October 31, 2018.
32. Let's not spend $1.7 trillion on our nukes, a group of N.J. professors say. Let's get rid of them, and the threat of a catastrophic war, by Zia Mian, Alan Robock and Sharon Weiner, *Star Ledger*, May 26, 2019.
33. Rutgers faculty say, "join us" as we hold a strike for the climate, urge Rutgers to lead the way, by Todd Wolfson, David M. Hughes, Naomi Klein, Robin Leichenko, Alan Robock, Mark Rodgers, Ethan Schoolman, Rachael Shwom, Genese Sodikoff, and Todd Vachon, *Star Ledger*, September 17, 2019.
34. Not Cool Ep 6: Alan Robock on geoengineering, podcast hosted by Ariel Conn from Future of Life Institute, September 17, 2019.
35. Dear President-Elect Biden, please start with the easiest problem to solve, op-ed in *The Star-Ledger* and NJ.com, October 18, 2020.
36. Modelling Armageddon: The effects of nuclear weapons on climate, with Owen B. Toon, and Richard P. Turco, 2021: *Open Access Government*, May 11, 2021.
37. Nuclear winter is not "fake news," *Aftenposten* (Oslo, Norway), May 30, 2021.

38. Wilson's article was interesting, but it left out one important factor: nuclear winter, Letter to the Editor, *Los Angeles Times*, August 7, 2023.
39. India and Pakistan Remind Us We Need to Stop the Risk of Nuclear War, with Lili Xia, *Scientific American*, May 8, 2025.
40. Saving the World from Bad Ideas: "We need nuclear weapons" is a very bad idea, podcast with Mark Lynas, May 8, 2025.

CONFERENCES ORGANIZED:

1. International Workshop on Climatic Variability and Climate Changes in Venezuela and the Caribbean Region, Mérida, Venezuela, April 23-27, 1990. (Member of Organizing Committee)
2. Workshop on the Impacts of Climate Change on New Jersey, Rutgers University, February 23, 2001.
3. Workshop on Modeling Current and Future NYC Metro Area Meteorological Distributions, Rutgers University, March 2, 2001.
4. Lidar Measurement in Latin America Workshop, Camagüey, Cuba, March 6-8, 2001. (Member of Program Committee)
5. AGU Chapman Conference on Volcanism and the Earth's Atmosphere, Thera, Greece, June 17-21, 2002.
6. Second Lidar Measurement in Latin America Workshop, Camagüey, Cuba, February 15 – March 1, 2003. (Member of Program Committee)
7. GeoMIP Workshop, Rutgers University, New Brunswick, New Jersey, February 10-12, 2011.
8. Keck Institute for Space Sciences Study Conference on Monitoring of Geo-Engineering Effects and Their Natural and Anthropogenic Analogues, California Institute of Technology, Pasadena, May 24-26, 2011.
9. Sixth Lidar Measurement in Latin America Workshop, La Paz, Bolivia, September, 2011. (Member of International Organizing Committee)
10. Problems of Adaptation to Climate Change, Moscow, Russia, November 7-9, 2011. (Member of International Organizing Committee)
11. Keck Institute for Space Sciences Study Conference on Monitoring of Geo-Engineering Effects and Their Natural and Anthropogenic Analogues, California Institute of Technology, Pasadena, November 15-18, 2011.
12. GeoMIP Workshop, University of Exeter, UK, March 30-31, 2012.
13. AGU Chapman Conference on Volcanism and the Atmosphere, Selfoss, Iceland, June 10-16, 2012.
14. GeoMIP Workshop, Institute for Advanced Sustainability Studies, Potsdam, Germany, April 15-16, 2013.
15. AGU Chapman Conference on Communicating Climate Science: A Historic Look to the Future, Colorado, June 8-13, 2013. (Member of Program Committee)

16. Fourth GeoMIP Workshop, Laboratoire de Météorologie Dynamique, Paris, France, April 24-25, 2014.
17. Climate Engineering Conference 2014, Berlin, Germany, August 18-21, 2014 (Member of Advisory Group)
18. Early Career Summer Workshop on Geoengineering, National Center for Atmospheric Research, Boulder, Colorado, July 20-24, 2015.
19. Fifth GeoMIP Workshop, National Center for Atmospheric Research, Boulder, Colorado, July 22-23, 2015.
20. Sixth GeoMIP Workshop, University of Oslo, Oslo, Norway, June 21-22, 2016.
21. Gordon Research Conference on Climate Engineering: Radiation Management Climate Engineering: Technology, Modeling, Efficacy, and Risks; Newry, Maine; July 23-28, 2017. (Co-Chair)
22. Seventh GeoMIP Workshop, Newry, Maine, July 27, 2017. (Co-Chair)
23. Climate Engineering Conference 2017, Berlin, Germany, October 9-12, 2017. (Member of Advisory Group)
24. AGU Chapman Conference, Stratospheric Aerosol in the Post-Pinatubo Era: Processes, Interactions, and Importance, Puerto de la Cruz, Tenerife, Canary Islands, Spain, March 18-23, 2018. (Member of Program Committee)
25. Eighth GeoMIP Workshop, ETH (Eidgenössische Technische Hochschule, Swiss Federal Institute of Technology), Zurich, Switzerland, April 16-17, 2018. (Co-Chair)
26. International Conference on the Management of Energy, Climate and Air for a Sustainable Society (MECAS2018), Havana, Cuba, July 4-6, 2018. (Member of the International Scientific Committee)
27. Ninth GeoMIP Workshop, Beijing Normal University, Beijing, China, August 14-17, 2019. (Co-Chair)
28. Tenth GeoMIP Workshop, online, July 15, 2020. (Co-Chair)
29. Eleventh GeoMIP Workshop, online, July 8-9, 2021. (Co-Chair)
30. Stratospheric Sulfur and its Role in Climate Workshop, online, September 27-29, 2021. (Member of Steering Committee)
31. Climate Engineering Conference 2021, Berlin, Germany, October, 2021. (Member of Advisory Group)
32. Twelfth GeoMIP Workshop, Newry, Maine, June 30, 2022. (Co-Chair)
33. Thirteenth GeoMIP Workshop, Exeter, UK, July 3-7, 2023. (Co-Chair)
34. Fourteenth GeoMIP Workshop, Ithaca, NY, July 10-12, 2024. (Co-Chair)
35. Fifteenth GeoMIP Workshop, Cape Town, South Africa, May 16, 2025. (Co-Chair)

CONFERENCE SESSIONS CONVENED:

1. "Modeling Results from PILPS," 14th AMS Conference on Hydrology, Dallas, Texas, January 10-15, 1999.

2. "Volcanic Eruptions and Climate," AGU Fall Meeting, San Francisco, California, December 13-17, 1999.
3. "Ten Years of Science from the 1991 Mount Pinatubo Volcano Eruption," All Union Session, AGU Fall Meeting, San Francisco, California, December 10-14, 2001.
4. "Regional Climate Modeling," AGU Fall Meeting, San Francisco, California, December 6-10, 2002.
5. "Volcanism and the Earth's Atmosphere," XXIII General Assembly of the International Union of Geodesy and Geophysics, Sapporo, Japan, June 30 – July 11, 2003.
6. "Volcanism and the Earth's Atmosphere," IAVCEI General Assembly, Pucón, Chile, November 14-19, 2004.
7. "Methods in Regional Climate Modeling," AGU Fall Meeting, San Francisco, California, December 13-17, 2004.
8. "Northern Eurasia Regional Climate and Environmental Change," AGU Fall Meeting, San Francisco, California, December 13-17, 2004.
9. "Multi Scale Soil Moisture Estimation Using Field Instrumentation, Remote Sensing and Modeling, EGU General Assembly, Vienna, Austria, April 2-6, 2006.
10. "Environmental Impact of Continental Volcanism," IAVCEI International Conference on Continental Volcanism, Guangzhou, China, May 14-18, 2006.
11. "Environmental Consequences of Regional Nuclear Conflicts," AGU Fall Meeting, San Francisco, California, December 11-15, 2006.
12. "Twenty-Five Years After El Chichón: Volcanic Aerosols and Their Climatic Effects," AGU Joint Assembly, Acapulco, México, May 22-25, 2007.
13. "The Fellows Speak," AGU Joint Assembly, Acapulco, México, May 22-25, 2007.
14. "Geoengineering," AGU Fall Meeting, San Francisco, California, December 10-14, 2007.
15. "Charney Lecture," AGU Joint Assembly, Ft. Lauderdale, Florida, May 27-30, 2008.
16. "The Fellows Speak," AGU Joint Assembly, Ft. Lauderdale, Florida, May 27-30, 2008.
17. "Volcanism and the Earth's Atmosphere," IAVCEI General Assembly, Reykjavik, Iceland, August 18-22, 2008.
18. "Geoengineering to Counteract Global Warming?" AGU Fall Meeting, San Francisco, California, December 15-19, 2008.
19. "Bjerknes Lecture," AGU Fall Meeting, San Francisco, California, December 15-19, 2008.
20. "Charney Lecture," AGU Joint Assembly, Toronto, Canada, May 24-27, 2009.
21. "The Fellows Speak," AGU Joint Assembly, Toronto, Canada, May 24-27, 2009.
22. "Bjerknes Lecture," AGU Fall Meeting, San Francisco, California, December 14-18, 2009.
23. "Can Geoengineering Save Us from Global Warming?" AAAS 2010 Annual Meeting, San Diego, California, February 18-22, 2010.
24. "Geoengineering," EGU General Assembly, Vienna, Austria, May 3-7, 2010.

25. "Can We Counteract Global Warming?" AGU Fall Meeting, San Francisco, California, December 13-17, 2010.
26. "Bjerknes Lecture," AGU Fall Meeting, San Francisco, California, December 13-17, 2010.
27. "Charney Lecture," AGU Fall Meeting, San Francisco, California, December 13-17, 2010.
28. "New START and Nuclear Winter: Climatic Consequences of the Nuclear Weapons Agreement," AAAS 2011 Annual Meeting, Washington, DC, February 17-21, 2011.
29. "Geoengineering: What are the Potentials for Climate Intervention, Carbon Scrubbing, and other Approaches to Moderate Climate Change and its Impacts?" XXV IUGG General Assembly, Melbourne, Australia, June 27 – July 8, 2011.
30. "Geoengineering to Counteract Global Warming?" WCRP Open Science Conference, Denver, Colorado, October 24-28, 2011.
31. "Climate Engineering and Carbon Sequestration Monitoring," AGU Fall Meeting, San Francisco, California, December 3-7, 2012.
32. "New Atmospheric Sciences Fellows Presentations," AGU Fall Meeting, San Francisco, California, December 3-7, 2012.
33. "Forecasting the weather and climate effects of volcanic eruptions," IAVCEI General Assembly 2013, Kagoshima, Japan, July 20-24, 2013.
34. "Progress in the Geoengineering Model Intercomparison Project (GeoMIP)," Climate Engineering Conference 2014, Berlin, Germany, August 18-21, 2014.
35. "Weather and Climate Effects of Volcanic Eruptions," 26th General Assembly of the International Union of Geodesy and Geophysics, Prague, Czech Republic, June 22 – July 2, 2015.
36. "Climate variability and external forcings of the Common Era with special focus on the role of volcanic eruptions," Our Common Future under Climate Change, UNESCO Headquarters, Paris, France, July 7-10, 2015.
37. "Climate Intervention: Evaluating its Risks, Benefits, and Potential," Our Common Future under Climate Change, UNESCO Headquarters, Paris, France, July 7-10, 2015.
38. "Conflict and Climate Change," Our Common Future under Climate Change, UNESCO Headquarters, Paris, France, July 7-10, 2015.
39. "Are We Ready to Observe the Next Large Volcanic Eruption?" Union Session, AGU Fall Meeting, San Francisco, California, December 14-18, 2015.
40. "Twenty-Five Years of Science from the 1991 Mount Pinatubo Volcano Eruption," AGU Fall Meeting, San Francisco, California, December 12-16, 2016.
41. "Multi-disciplinary Assessments of Radiation Management Geoengineering," AGU Fall Meeting, San Francisco, California, December 12-16, 2016.
42. "Volcanic ash and gas: Generation, transport and impacts on infrastructure, aviation, and climate," IAVCEI 2017 Scientific Assembly, Portland, Oregon, August 14-18, 2017.
43. "Solar Geoengineering Benefits and Risks: Modeling, Impacts, Analogs, Engineering, Ethics, and Governance," American Geophysical Union Fall Meeting, San Francisco, California, December 9-13, 2019.

44. "Climatic and Food Security Impacts of Nuclear War," American Geophysical Union Fall Meeting, San Francisco, California, December 9-13, 2019.
45. "Aerosol Approaches to Climate Engineering," Robert Dickinson Symposium, American Meteorological Society Annual Meeting, Boston, Massachusetts, January 12-16, 2020.
46. "New Generation of Scientists I," American Geophysical Union Fall Meeting, New Orleans, Louisiana, December 13-17, 2021.
47. "Solar Radiation Modification for Climate Intervention," American Geophysical Union Fall Meeting, San Francisco, California, December 11-15, 2023.

PAPERS PRESENTED AT CONFERENCES:

1. Bornstein, Robert D., and Alan D. Robock, 1974: Effects of variable and unequal time steps in the simulation of the urban boundary layer using the two-dimensional version of the URBMET model. *Bull. Amer. Met. Soc.*, **55**, 1410. (AMS Annual Meeting, 1975)
2. Robock, Alan, 1977: Sunspots and climate: model experiments. *EOS*, **58**, 1120. (AGU Fall Meeting, San Francisco, December 5-9, 1977)
3. The performance of a seasonal global climatic model. (Invited paper; JOC Study Conference on Climate Models: Performance, Intercomparison and Sensitivity Studies, National Academy of Sciences, Washington, April 3-7, 1978)
4. Stochastic forcing of an energy-balance climate model. (Invited paper; Workshop on Estimating and Interpreting Climatic Spectra, Boulder, October 9-12, 1978)
5. Robock, Alan, 1978: A seasonal global surface albedo parameterization. *EOS*, **59**, 1083. (AGU Fall Meeting, San Francisco, December 4-8, 1978. Also served as session chairman.)
6. Solar-climate modeling. (Invited paper; Solar-Terrestrial Workshop, Los Alamos Scientific Laboratory, New Mexico, June 26-29, 1979)
7. On the causes of climate change during the past 400 years. (Invited paper; Soviet-American Symposium on Climate Modeling, Climate Change and Statistics, Tbilisi, USSR, October 15-22, 1979)
8. Robock, Alan, 1979: The seasonal cycle of snow cover, sea ice, and surface albedo. *Bull. Amer. Met. Soc.*, **60**, 846. (Symposium on High Latitude Climate Systems, Boston, November 6-8, 1979)
9. The response of an energy-balance climate model to latitudinally dependent volcanic dust. (XVII General Assembly of the International Union of Geodesy and Geophysics, Canberra, Australia, December 2-15, 1979)
10. The use of snow and ice data in energy balance climate modeling. (Invited paper; Snow Watch Workshop, NSF, Washington, October 2-3, 1980)
11. The effect of the Mt. St. Helens volcanic eruption on climate. (First Conference on Climate Variations of the American Meteorological Society, San Diego, January 19-23, 1981)
12. Volcanic eruptions and climate change. (Third Scientific Assembly of the International Association of Meteorology and Atmospheric Physics, Hamburg, FRG, August 17-28, 1981)

13. Robock, Alan, 1981: The latitudinal and seasonal distribution of climate sensitivity. *EOS*, **62**, 885. (AGU Fall Meeting, San Francisco, December 7-11, 1981)
14. Energy balance climate model calculations of the effects of the El Chichón eruption. (Seventh Climate Diagnostics Workshop, NOAA/CAC, Boulder, October 18-22, 1982)
15. Northern Hemisphere snow cover and surface temperature. (with Peter R. Ahnert; Seventh Climate Diagnostics Workshop, NOAA/CAC, Boulder, October 18-22, 1982)
16. Satellite detection of the 1982 El Chichón eruptions and stratospheric cloud. (with Michael Matson; Seventh Climate Diagnostics Workshop, NOAA/CAC, Boulder, October 18-22, 1982)
17. Robock, Alan, 1982: Energy balance model calculations of the El Chichón climate effect. *EOS*, **63**, 902. (Invited paper; AGU Fall Meeting, San Francisco, December 7-15, 1982)
18. A review of the atmospheric effects of the El Chichón eruption of 4 April 1982. (Invited paper: Second Conference on Climate Variations of the American Meteorological Society, New Orleans, January 10-14, 1983)
19. The sea ice/thermal inertia feedback: determinant of the latitudinal and seasonal distribution of climate sensitivity. (Second Conference on Climate Variations of the American Meteorological Society, New Orleans, January 10-14, 1983. Also served as session chairman.)
20. Robock, Alan, 1984: Snow and ice feedbacks and climate sensitivity. *Annals of Glaciology*, **5**, 225. (International Glaciological Society Symposium on Ice and Climate Modelling, Evanston, June 27-July 1, 1983)
21. Detecting the El Chichón climate effect. (XVIII General Assembly of the International Union of Geodesy and Geophysics, Hamburg, FRG, August 15-27, 1983)
22. Search for volcanic and CO_2 signals in surface air temperature data. (Second International Meeting on Statistical Climatology, Lisbon, Portugal, September 26-30, 1983)
23. Effects of concurrent snow and cloud cover on planetary albedo. (with Dale Kaiser, XXV COSPAR Meeting, Symposium on Space Observations for Climate Studies, Graz, Austria, June 25-29, 1984)
24. Detection of volcanic, CO_2 and ENSO signals in surface air temperature. (XXV COSPAR Meeting, Symposium on Space Observations for Climate Studies, Graz, Austria, June 25-29, 1984)
25. Climatic effects of volcanism. (Invited paper; 188th National Meeting of the American Chemical Society, Philadelphia, August 27-31, 1984)
26. The effect of anomalous snow cover on the general circulation of the atmosphere using a simple climate model. (with James W. Tauss; Ninth Climate Diagnostics Workshop, NOAA/CAC, Oregon State University, Corvallis, October 22-26, 1984)
27. Nuclear winter: energy balance climate model finds large long-lasting effects. (Beijing International Symposium on Climate, Beijing, China, October 30-November 3, 1984)
28. Volcanic signal in surface air temperature. (Beijing International Symposium on Climate, Beijing, China, October 30-November 3, 1984)

29. Detection of volcanic, CO_2 and ENSO signals in surface air temperature. (Third Conference on Climate Variations of the American Meteorological Society, Los Angeles, January 8-11, 1985) (pp. 78-80 in extended abstracts volume)
30. Nuclear winter. (Invited paper; Fourth Women's Leadership Conference, Washington, June 13-15, 1985)
31. Effects of snow cover and tropical forcing on mid-latitude monthly mean circulation. (with James W. Tauss; First WMO Workshop on the Diagnosis and Prediction of Monthly and Seasonal Atmospheric Variation Over the Globe, University of Maryland, College Park, July 29 – August 2, 1985)
32. Nuclear winter: dirty snow effects on snow-albedo feedback depend on precipitation rate. (with Andrew Vogelmann and Robert Ellingson, IAMAP/IAPSO Joint Assembly, Honolulu, August 5-26, 1985)
33. Climatic consequences of nuclear war (Invited paper; 13th International Congress of Biochemistry, Amsterdam, August 29, 1985)
34. Comparison of Northern Hemisphere snow cover data sets (with John Scialdone; Snow Watch 1985: Workshop on CO_2/Snow Interaction, University of Maryland, College Park, October 28-30, 1985)
35. Effects of snow cover and tropical forcing on mid-latitude monthly mean circulation (with James W. Tauss; Snow Watch 1985: Workshop on CO_2/Snow Interaction, University of Maryland, College Park, October 28-30, 1985)
36. Robock, Alan and John Scialdone, 1985: Comparison of Northern Hemisphere snow cover data sets. *EOS*, **66**, 899. (AGU Fall Meeting, San Francisco, December 9-13, 1985)
37. Surface temperature effects of forest fire smoke plumes. (DNA Global Effects Program Technical Meeting, NASA/Ames, February 25-27, 1986)
38. Dirty snow effects are of small climatic consequence in nuclear winter scenarios. (with Andrew M. Vogelmann and Robert G. Ellingson; DNA Global Effects Program Technical Meeting, NASA/Ames, February 25-27, 1986)
39. Nuclear winter: simulations of climate following nuclear war. (Invited paper; Society for Computer Simulation Eastern Simulation Conference, Norfolk, VA, March 10, 1986)
40. Climatic consequences of nuclear war. (Nuclear War Education Conference, Arlington, Virginia, April 12, 1986)
41. Surface temperature effects of forest fire smoke plumes. (Invited paper; DNA Global Effects Program Technical Meeting, Mission Research Corporation, Santa Barbara, California, April 7-9, 1987)
42. Surface temperature effects of forest fire smoke plumes. (XIX General Assembly of the International Union of Geodesy and Geophysics, Vancouver, August 9-22, 1987)
43. Atmospheric science issues in Congress. (Twelfth Climate Diagnostics Workshop, NOAA/CAC, Salt Lake City, Utah, October 12-16, 1987)
44. Cooling from Canadian forest fires. (Invited paper; United Nations/SCOPE-ENUWAR Workshop, Geneva, Switzerland, November 16-20, 1987)

45. Robock, Alan, 1987: The sea ice/thermal inertia feedback, *EOS*, **68**, 1227. (Invited paper; AGU Fall Meeting, San Francisco, December 7-11, 1987)
46. China, California conflagrations cause cooling. (Invited paper; SCOPE-ENUWAR Workshop, Moscow, USSR, March 21-26, 1988)
47. Cooling from 1987 forest fires. (Invited paper; DNA Global Effects Program Technical Meeting, Mission Research Corporation, Santa Barbara, CA, April 19-21, 1988)
48. Volcanoes and climate. (Invited paper; Symposium on Climate and Geosciences, NATO, Louvain-la-Neuve, Belgium, May 22-27, 1988)
49. Climate and public policy in the United States Congress. (Invited paper; Symposium on Climate and Geosciences, NATO, Louvain-la-Neuve, Belgium, May 22-27, 1988)
50. Nuclear winter. (Invited paper; Summer Institute for University Faculty, "Regional Conflict and Global Security: The Nuclear Dimension," University of Wisconsin, Madison, June 17-24, 1988)
51. Nuclear winter – model results and observational analogues. (Invited paper; 16th Nordic Meteorologists' Meeting, Reykjavik, Iceland, August 6-9, 1988)
52. Public policy implications of nuclear winter. (Invited paper; The Alva and Gunnar Myrdal Foundation and the Royal Academy of Sciences Conference on Environmental Consequences of Nuclear War – Scientific Consensus and Global Policy Implications, Stockholm, Sweden, August 20-22, 1988)
53. Global climate change. (Invited paper; Global Climate Change Conference, Cornell University/National Governor's Association, New York City, February 28 - March 3, 1989)
54. The volcanic contribution to climate change of the past 100 years. (Invited paper; DOE Workshop on Greenhouse-Gas-Induced Climatic Change: A Critical Appraisal of Simulations and Observations, University of Massachusetts, Amherst, May 8-12, 1989)
55. The greenhouse effect. (Invited paper: Transportation Research Board Executive Committee Meeting, National Research Council, National Academy of Sciences, Traverse City, Michigan, June 8-9, 1989)
56. Atmospheric effects of the 1988 Yellowstone smoke. (Fifth Scientific Assembly of the International Association of Meteorology and Atmospheric Physics, Reading, England, July 31 - August 11, 1989)
57. Creating climate change scenarios for effects analysis. (Invited paper; EPA Scenarios Advisory Meeting, National Center for Atmospheric Research, Boulder, Colorado, August 31 - September 1, 1989)
58. GCM greenhouse warming scenarios for Africa. (Invited paper; Second PAN-EARTH Workshop on Effects of Climate Change with Emphasis on Sub-Saharan Africa, Saly, Senegal, September 11-15, 1989)
59. NCDS in a university setting – the Maryland experience. (Invited paper; NASA Climate Data System Workshop, NASA/GSFC, Greenbelt, Maryland, September 20-22, 1989)

60. Climatological importance of smoke in the atmosphere. (International Workshop on Space Observations of Tropospheric Aerosols and Complementary Measurements, International Radiation Commission, Hampton, Virginia, November 15-18, 1989)
61. Forest fire smoke effects on surface air temperature. (Invited paper; AGU Chapman Conference on Global Biomass Burning: Atmospheric, Climatic and Biospheric Implications, Williamsburg, Virginia, March 19-23, 1990)
62. Theoretical aspects of GCMs. (Invited paper; International Workshop on Climatic Variability and Climate Changes in Venezuela and the Caribbean Region, Mérida, Venezuela, April 23-27, 1990. Also served on organizing committee.)
63. Scaling methodology. (Invited paper; International Workshop on Climatic Variability and Climate Changes in Venezuela and the Caribbean Region, Mérida, Venezuela, April 23-27, 1990)
64. Volcanic effects on climate. (Invited paper; NASA Volcano Climate Workshop, College Park, June 17-18, 1990)
65. Volcanic dust veil indices. (Seventh AMS Conference on Radiation, San Francisco, July 23-27, 1990)
66. Using computers to model the environment. (Invited paper; Association for Computing Machinery Conference on Computers and the Quality of Life, George Washington University, Washington, September 13-16, 1990)
67. Impact of global change on agriculture and ecology. (Invited paper; 39th Annual Meeting of the American Society of Tropical Medicine and Hygiene, New Orleans, LA, November 4-8, 1990)
68. Robock, Alan, 1991: Solar variations and climate change: a review. *EOS*, **72**, 222. (Invited paper; AGU Spring Meeting, Baltimore, MD, May 28 – June 1, 1991)
69. Gaffen, Dian J., William P. Elliott and Alan Robock, 1991: Assessing the spatial resolution of the global radiosonde network for tropospheric water vapor studies. *EOS*, **72**, 83. (presented by Gaffen; AGU Spring Meeting, Baltimore, MD, May 28 - June 1, 1991)
70. Nuclear winter. (Invited paper; International Physicians for the Prevention of Nuclear War 10th World Congress, Stockholm, Sweden, June 27-30, 1991)
71. The volcanic signal in the global temperature record. (Invited paper; NASA Greenhouse Effect Detection Experiment (GEDEX) Atmospheric Temperature Workshop, Columbia, MD, July 9-11, 1991)
72. An improved volcanic dust veil index and the volcanic signal in global climate. (Fifth AMS Conference on Climate Variations, Denver, October 14-18, 1991)
73. Robock, Alan, 1991: Climatic effects of the Mt. Pinatubo eruption. *EOS Supplement, AGU 1991 Fall Meeting*, 65. (AGU Fall Meeting, San Francisco, December 9-13, 1991. Also served as session chairman.)
74. Gaffen, Dian J., William P. Elliott and Alan Robock, 1991: The annual cycle of tropospheric water vapor. *EOS Supplement, AGU 1991 Fall Meeting*, 148. (presented by Gaffen; AGU Fall Meeting, San Francisco, December 9-13, 1991)

75. Climatic effects of volcanic eruptions. (with Yuhe Liu and Jianping Mao; Invited paper: AGU Chapman Conference on Climate, Volcanism and Global Change, Hilo, Hawaii, March 23-27, 1992)

76. Global climate changes due to volcanic eruptions: analysis of GCM results. (presented by Yuhe Liu; AGU Chapman Conference on Climate, Volcanism and Global Change, Hilo, Hawaii, March 23-27, 1992)

77. Impact of volcanic eruptions on surface air temperature and precipitation. (presented by Jianping Mao; AGU Chapman Conference on Climate, Volcanism and Global Change, Hilo, Hawaii, March 23-27, 1992)

78. Schlosser, Adam, Alan Robock, Konstantin Ya. Vinnikov, and Nina A. Speranskaya, 1992: Soil moisture simulations with a 15-cm bucket model – comparisons with ground truth. *EOS Supplement, AGU 1992 Spring Meeting*, 111. (presented by Schlosser; AGU Spring Meeting, Montreal, May 12-16, 1992)

79. Robock, Alan, Adam Schlosser, Konstantin Ya. Vinnikov, and Nina A. Speranskaya, 1992: Comparison of soil moisture simulations with SiB and with a 15-cm bucket model. *EOS Supplement, AGU 1992 Spring Meeting*, 111. (AGU Spring Meeting, Montreal, May 12-16, 1992)

80. Relative effects of El Chichón and the ’82-’83 El Niño on continental climate. (with Karl E. Taylor and Yuhe Liu, presented by Taylor; Second International Conference on Modelling of Global Change and Variability, Hamburg, Germany, September 7-11, 1992)

81. Detecting variability and trends in tropospheric humidity using radiosonde data. (with Dian J. Gaffen and William P. Elliott, presented by Gaffen; Yale Mintz Memorial Symposium on Climate and Climate Change, Jerusalem, December 28-31, 1992)

82. New variables in parameterization of surface hydrology processes in climate models. (with Konstantin Ya. Vinnikov, C. Adam Schlosser, and Nina A. Speranskaya, presented by Vinnikov; AMS Conference on Hydroclimatology: Land-Surface/Atmosphere Interactions on Global and Regional Scales, Anaheim, California, January 17-22, 1993)

83. Nuclear winter update: is the theory still valid? (Invited paper; International Conference on Sustainable Development Strategies and Global/Regional/Local Impacts on Atmospheric Composition and Climate, New Delhi, India, January 25-30, 1993)

84. Use of GCM output in the creation of climate change scenarios for impact analysis. (Invited paper; International Conference on Sustainable Development Strategies and Global/Regional/Local Impacts on Atmospheric Composition and Climate, New Delhi, India, January 25-30, 1993)

85. General circulation model outputs and their utilization in climate change impact analysis scenarios: case study – Venezuela. (Invited paper: International Workshop on Climate Variability, Global Change, and their Impacts in Latin America and the Caribbean, San José, Costa Rica, March 1-5, 1993)

86. Validation of humidity, moisture fluxes and soil moisture in GCMs. (Invited paper: AMIP Meeting, Bologna, Italy, May 10-12, 1993)

87. Stenchikov, Georgy L. and Alan Robock, 1993: Causes of diurnal asymmetry in climate change as calculated with a new radiative-convective model. *EOS Supplement, AGU*

1993 Spring Meeting, 77. (presented by Stenchikov; AGU Spring Meeting, Baltimore, Maryland, May 24-28, 1993)

88. Robock, Alan and Melissa Free, 1993: Use of ice cores in construction of a volcanic index. *EOS Supplement, AGU 1993 Spring Meeting*, 88-89. (AGU Spring Meeting, Baltimore, Maryland, May 24-28, 1993)
89. Modeling of El Chichón cloud induced atmospheric reaction (with G. Stenchikov, Y. Liu, and K. Taylor; presented by G. Stenchikov; Fourth Workshop on the Community Climate Model, NCAR, Boulder, Colorado, June 28 - July 1, 1993)
90. Climatic effects of the 1991 Mt. Pinatubo eruption. (Invited paper; 6th IAMAP and 4th IAHS Joint International Conference, Yokohama, Japan, July 11-23, 1993)
91. Verification of soil moisture simulations with SSiB and a 15-cm bucket model by comparison with Russian observations. (Invited paper; with C. Adam Schlosser, Yongkang Xue, Konstantin Ya. Vinnikov, and Nina A. Speranskaya; 6th IAMAP and 4th IAHS Joint International Conference, Yokohama, Japan, July 11-23, 1993)
92. Long-term data sets of soil moisture and other hydrology parameters from the former Soviet Union. (Invited paper; with Konstantin Ya. Vinnikov, Nina A. Speranskaya, and C. Adam Schlosser; 6th IAMAP and 4th IAHS Joint International Conference, Yokohama, Japan, July 11-23, 1993)
93. Winter warming from large explosive volcanoes (Invited paper: Gordon Research Conference on the Impact of Volcanism on Climate, Henniker, New Hampshire, July 26-30, 1993; also served as Discussion Leader)
94. Modeling aerosol-cloud-radiation interactions using an improved radiative-convective model (with Georgiy L. Stenchikov; presented by Georgiy L. Stenchikov; Gordon Research Conference on the Impact of Volcanism on Climate, Henniker, New Hampshire, July 26-30)
95. The impact of pre-industrial anthropogenic activities on global climate. (Invited paper; Polluted or Pristine? Scientific, Cultural, and Policy Implications of Pre-Industrial Anthropogenic Impact on the Global Carbon Cycle, East-West Center, Honolulu, Hawaii, September 17-19, 1993)
96. Observed effects of aerosols on the diurnal cycle of surface air temperature. (International NOAA/DOE MINIMAX Workshop, College Park, September 27-30, 1993)
97. Diurnal asymmetry of the surface air temperature response of radiative-convective model calculations CO_2 and aerosol forcing: cloud and boundary layer process feedbacks. (with Georgiy L. Stenchikov and presented by him; International NOAA/DOE MINIMAX Workshop, College Park, September 27-30, 1993)
98. Volcanoes and climate: Climate model and observational studies, and use of ice cores in construction of a volcanic index. (Invited paper; with Melissa P. Free; International Geosphere-Biosphere Program (IGBP) PAGES - INQUA COT Meeting "Climatic Impact of Explosive Volcanism," Tokyo, Japan, December 1-2, 1993)
99. Robock, Alan, Karl E. Taylor, Georgy L. Stenchikov, and Yuhe Liu, 1993: GCM test of a possible mechanism for El Niño triggering by the El Chichón ash cloud. *EOS Supplement, AGU 1993 Fall Meeting*, 114. (Invited paper; AGU Fall Meeting, San

Francisco, December 6-10, 1993. Also served as convenor of session and session chairman.)

100. Stenchikov, Georgy L. and Alan Robock, 1993: Climatic effects due to water vapor amount increase in the stratosphere after the Pinatubo eruption. *EOS Supplement, AGU 1993 Fall Meeting*, 114. (Invited paper; presented by Stenchikov; AGU Fall Meeting, San Francisco, December 6-10, 1993.)

101. Robock, Alan, 1993: AMIP soil moisture validation – poor simulations over northern Asia. *EOS Supplement, AGU 1993 Fall Meeting*, 160. (AGU Fall Meeting, San Francisco, December 6-10, 1993)

102. Global warming: How much? How soon? How do we know? (Invited paper; 5th Conference on the Intersections of Particle and Nuclear Physics, St. Petersburg, Florida, May 31-June 6, 1994)

103. Improved soil moisture simulations with SSiB and a 15-cm bucket model incorporating Russian observations. (with C. Adam Schlosser, Konstantin Ya. Vinnikov, Yongkang Xue, and Nina A. Speranskaya; European Conference on the Global Energy and Water Cycle, London, England, July 18-22, 1994)

104. The volcanic signal in surface temperature observations. (with Jianping Mao, and presented by him; International Symposium on Global Change in Asia and the Pacific Region, Beijing, China, August 8-10, 1994)

105. Soil moisture spinup in the AMIP experiments. (Invited paper; Meeting on Problems in Initializing Soil Wetness, Center for Ocean-Land-Atmosphere Studies, Calverton, Maryland, August 19, 1994)

106. Temporal and spatial autocorrelation of midlatitude soil moisture measurements. (Invited paper; with Konstantin Ya. Vinnikov, and presented by him; Meeting on Problems in Initializing Soil Wetness, Center for Ocean-Land-Atmosphere Studies, Calverton, Maryland, August 19, 1994)

107. In situ soil moisture data. (Invited paper, with Konstantin Ya. Vinnikov, and presented by him; GEWEX Global Soil Wetness Workshop, Longmont, Colorado, October 4-6, 1994)

108. Surface temperature effects of the 1991 Pinatubo eruption: winter warming and summer cooling. (Invited paper: NATO Advanced Research Workshop on "The Effects of the Mt. Pinatubo Eruption on the Atmosphere and Climate," Rome, Italy, September 26-30, 1994)

109. The volcanic record in ice cores for the past 2000 years. (Invited paper; with Melissa P. Free; NATO Advanced Research Workshop on "Climatic Variations and Forcing Mechanisms of the Past 2000 Years," Il Ciocco, Italy, October 3-7, 1994)

110. Analysis and modeling of the hydrological cycle using Russian data. (Invited paper; with Konstantin Vinnikov; GCIP Science Review and Science Panel, NCAR, Boulder, November 1-4, 1994)

111. Temporal and spatial variability of mid-latitude soil moisture. (with Konstantin Vinnikov and Nina Speranskaya; given by Konstantin Vinnikov; Nineteenth Climate Diagnostics Workshop, University of Maryland, College Park, Maryland, November 14-18, 1994)

112. Winter warming from volcanic eruptions. (with Jianping Mao; given by Jianping Mao; Nineteenth Climate Diagnostics Workshop, University of Maryland, College Park, Maryland, November 14-18, 1994)

113. El Niños and large volcanic eruptions: no relationship in general, but El Chichón may be an exception. *EOS Supplement, AGU 1994 Fall Meeting*, 121. (Invited paper; AGU Fall Meeting, San Francisco, California, December 5-9, 1994)

114. Soil moisture simulations for high latitudes compared to observations: improvements by considering water table and winter condensation effects. *EOS Supplement, AGU 1994 Fall Meeting*, 127. (with Konstantin Vinnikov, Jared Entin, and Nina A. Speranskaya; AGU Fall Meeting, San Francisco, California, December 5-9, 1994)

115. Midlatitude soil moisture: temporal and spatial statistical structure. *EOS Supplement, AGU 1994 Fall Meeting*, 106. (with Konstantin Vinnikov and Nina A. Speranskaya; given by Konstantin Vinnikov; AGU Fall Meeting, San Francisco, California, December 5-9, 1994)

116. Effects of Pinatubo aerosol microphysical transformations on aerosol optical parameters and forcing. *EOS Supplement, AGU 1994 Fall Meeting*, 101. (with Georgiy L. Stenchikov; given by Georgiy L. Stenchikov; AGU Fall Meeting, San Francisco, California, December 5-9, 1994)

117. Validation of humidity, moisture fluxes, and soil moisture in GCMs–AMIP Diagnostic Subproject 11. (Invited paper; with C. Adam Schlosser, Konstantin Vinnikov, Suxia Liu, Nina Speranskaya, Dian J. Gaffen, Richard D. Rosen, David A. Salstein, and James D. Boyle; First AMIP Scientific Conference, Monterey, California, May 15-19, 1995)

118. Comparison of GCM and MSU Temperatures for the AMIP experiment (1979-1988)–AMIP Diagnostic Subproject 19. (Invited paper; with Justin J. Hnilo, John R. Christy, and Jianping Mao; First AMIP Scientific Conference, Monterey, California, May 15-19, 1995)

119. Gravimetric observations of soil moisture data set for ISLSCP Global Soil Wetness Validation Subprogram. (Invited paper; with Konstantin Ya. Vinnikov, presented by Konstantin Ya. Vinnikov; ISLSCP Scientific Panel Meeting, NASA, Greenbelt, Maryland, June 15-16, 1995)

120. Validation and intercomparison of multiyear biosphere and bucket model offline simulations for a typical midlatitude grassland catchment. (with C. Adam Schlosser, Konstantin Ya. Vinnikov, Nina A. Speranskaya, and Yongkang Xue; presented by C. Adam Schlosser; XXI Scientific Assembly of the IUGG, Boulder, Colorado, July 2-14, 1995)

121. Temporal and spatial variation of soil moisture in China. (with Suxia Liu and Konstantin Ya. Vinnikov; presented by Suxia Liu; XXI Scientific Assembly of the IUGG, Boulder, Colorado, July 2-14, 1995)

122. A new volcanic index based on ice cores. (Invited paper; with Melissa P. Free; XXI Scientific Assembly of the IUGG, Boulder, Colorado, July 2-14, 1995)

123. Modeling past temperature variations using a new volcanic index. (Invited paper; with Melissa P. Free; presented by Melissa P. Free; XXI Scientific Assembly of the IUGG, Boulder, Colorado, July 2-14, 1995)

124. Soil moisture observations: Ground truth (literally) for evaluation of remote sensing. (with Konstantin Ya. Vinnikov, Nina A. Speranskaya, C. Adam Schlosser, Suxia Liu, Jared Entin, and Vladimir Zabelin; XXI Scientific Assembly of the IUGG, Boulder, Colorado, July 2-14, 1995)
125. Use of Valdai, Russia, data for next PILPS Phase 2c experiment (with C. Adam Schlosser, Konstantin Ya. Vinnikov, and Nina A. Speranskaya; XXI Scientific Assembly of the IUGG, Boulder, Colorado, July 2-14, 1995)
126. Modeling of climatic effects and vertical distribution of AEROCE-observed gases and aerosols (Invited presentation; with Georgiy L. Stenchikov and Russell R. Dickerson; presented by Georgiy L. Stenchikov, AEROCE Workshop, Miami, Florida, November 18-19, 1995)
127. Modeling land surface processes in a variety of climates in China (with Jared Entin and Suxia Liu; presented by Jared Entin; AGU Fall Meeting, San Francisco, California, December 11-15, 1995)
128. Gravimetric observations of soil moisture: ground truth for calibration of satellite derived indices (with Konstantin Ya. Vinnikov, Manfred Owe, and Bhaskar Choudhury; presented by Konstantin Vinnikov and myself; AGU Fall Meeting, San Francisco, California, December 11-15, 1995)
129. Comparison of possible solar, volcanic, and anthropogenic climate effects for 1400 to the present using an upwelling-diffusion energy-balance climate model (with Melissa P. Free; presented by Melissa P. Free; AGU Fall Meeting, San Francisco, California, December 11-15, 1995)
130. Evaluation of multi-year regional scale simulations of soil moisture (with Konstantin Ya. Vinnikov, Jared Entin, and C. Adam Schlosser; Second International Conference on the Global Energy and Water Cycle, Washington, DC, June 17-21, 1996)
131. Regional scale variations of soil moisture (with Konstantin Ya. Vinnikov, Jared Entin, Vladimir Zabelin, Nina A. Speranskaya, and Suxia Liu; presented by Konstantin Ya. Vinnikov; Second International Conference on the Global Energy and Water Cycle, Washington, DC, June 17-21, 1996)
132. On validation of the snow sub-model of the Biosphere-Atmosphere Transfer Scheme with Russian snow cover and meteorological observational data (with Zong-Liang Yang, Robert E. Dickinson, and Kostya Ya. Vinnikov; presented by Zong-Liang Yang; Second International Conference on the Global Energy and Water Cycle, Washington, DC, June 17-21, 1996)
133. Modeling and remote sensing of regional scale soil moisture variations in Asia (with Konstantin Ya. Vinnikov, Jared Entin, C. Adam Schlosser, Vladimir Zabelin, Nina A. Speranskaya, and Suxia Liu; 1996 Western Pacific Geophysics Meeting, Brisbane, Australia, July 23-27, 1996)
134. Global soil moisture data set from gravimetric observations for evaluation of satellite-based remote sensing of soil moisture (with Konstantin Ya. Vinnikov; Third International Workshop on Application of Remote Sensing to Hydrology, Greenbelt, Maryland, October 16-18, 1996)

135. Soil moisture data set and its application (with Konstantin Ya. Vinnikov Jared Entin, Adam Schlosser, Nina Speranskaya, Vladimir Zabelin, and Suxia Liu.; presented by Konstantin Ya. Vinnikov; GCIP PI Workshop, Huntsville, Alabama, November 19, 1996)

136. ECHAM4 GCM simulations of the climatic response to the 1991 Pinatubo eruption - Winter warming confirmed (with Ingo Kirchner, Hans-F. Graf and Georgiy L. Stenchikov; First SPARC General Assembly, Melbourne, Australia, December 2-6, 1996)

137. Radiative forcing of climate from the 1991 Pinatubo eruption (with Georgiy L. Stenchikov, Ingo Kirchner, and Hans-F. Graf; presented by Georgiy L. Stenchikov; First SPARC General Assembly, Melbourne, Australia, December 2-6, 1996)

138. Solar, volcanic, and anthropogenic effects on climate from 1400 to the present (with Melissa P. Free, Rosanne D'Arrigo, and Gordon Jacoby; presented by Melissa P. Free; AGU Fall Meeting, San Francisco, California, December 15-19, 1996)

139. Limits of natural variations in global and regional climate as compared to observed climatic trends (with Konstantin Ya. Vinnikov; presented by Konstantin Ya. Vinnikov; AGU Fall Meeting, San Francisco, California, December 15-19, 1996)

140. Comparison of modeled temperatures based on solar, volcanic and trace gas forcings with a hemispheric tree-ring temperature reconstruction. (with Rosanne D'Arrigo, Gordon Jacoby, and Melissa P. Free; presented by Rosanne D'Arrigo; AGU Fall Meeting, San Francisco, California, December 15-19, 1996)

141. Evaluation of Global Soil Wetness model calculations with observed soil moisture data. (with Konstantin Vinnikov, Jared Entin, Vladimir Zabelin, and Suxia Liu; 13th AMS Conference on Hydrology, Long Beach, California, February 2-7, 1997)

142. Global Soil Wetness validation strategy. (with A. J. Dolman, P. Kabat, H. Matsuyama, T. Oki, and K. Y. Vinnikov; presented by A. J. Dolman; 13th AMS Conference on Hydrology, Long Beach, California, February 2-7, 1997)

143. Volcanic aerosol perturbation experiments. (Invited presentation; with Georgiy L. Stenchikov, Hans-F Graf, Ingo Kirchner, and Juan Carlos Antuña; presented by Georgiy L. Stenchikov; GCM-Reality Intercomparison Project for SPARC (GRIPS) Workshop, Berlin, Germany, March 3-5, 1997)

144. Results from PILPS 2d Valdai experiment. (with C. Adam Schlosser, Konstantin Ya. Vinnikov, Nina A. Speranskaya, and Andrew Slater; AGU Spring Meeting, Baltimore, Maryland, May 27-30, 1997)

145. Radiative forcing of aerosols. (NASA Mini-Workshop on Aerosols and Climate, GISS, New York, June 2-3, 1997)

146. Effects of seasonal freezing on soil moisture. (with Konstantin Ya. Vinnikov; International Symposium on Physics, Chemistry, and Ecology of Seasonally Frozen Soils, University of Alaska Fairbanks, June 10-12, 1997)

147. Radiative forcing of climate from the 1991 Mount Pinatubo volcanic eruption. (with Georgiy L. Stenchikov, Ingo Kirchner, Hans-F. Graf, Juan Carlos Antuña, R. G. Grainger, Alyn Lambert, and Larry Thomason; presented by Hans-F. Graf; 7th IAMAS International Conference, Melbourne, Australia, July 1-9, 1997)

148. General circulation model simulations of the climatic response to the 1991 Mount Pinatubo volcanic eruption. (with Ingo Kirchner, Georgiy L. Stenchikov, Hans-F. Graf, and Juan Carlos Antuña; presented by Hans-F. Graf; 7th IAMAS International Conference, Melbourne, Australia, July 1-9, 1997)

149. Preliminary results from PILPS Phase 2d: Analysis of modeled soil-water and snow processes for an 18-year period at a midlatitude grassland catchment. (with C. Adam Schlosser, Andrew J. Pitman, and Andrew Slater; presented by Andrew J. Pitman; 7th IAMAS International Conference, Melbourne, Australia, July 1-9, 1997)

150. Global warming: Must we act now? (Invited paper; The Costs of Kyoto, Implications of Climate Change Policy, National Press Club, Washington, DC, July 15, 1997)

151. ECHAM-4 climate model simulation of winter warming from the 1991 Mount Pinatubo volcanic eruption (Invited paper; with Hans-F. Graf, Georgiy L. Stenchikov, Ingo Kirchner, and Juan Carlos Antuña; Tsukuba International Workshop on Stratospheric Change and its Role in Climate and on the ATMOS-C1 Satellite Mission, Tsukuba, Japan, October 20-22, 1997)

152. Evaluating soil moisture modeling (GEWEX Continental Scale International Project PI Workshop, NCAR, Boulder, November 5-6, 1997)

153. Solar, volcanic, and anthropogenic influences on climate (Invited paper; Climate Changes - Causes and Consequences, European Academy for Environmental Affairs, Bonn, Germany, November 10-11, 1997)

154. Climate model simulation of winter warming following the 1991 Mount Pinatubo volcanic eruption (with Ingo Kirchner, Hans-F. Graf, Georgiy L. Stenchikov, and Juan Carlos Antuña; AGU Fall Meeting, San Francisco, California, December 8-12, 1997)

155. The warming of the past century in the context of the Little Ice Age (with Melissa Free; AGU Fall Meeting, San Francisco, California, December 8-12, 1997)

156. Soil moisture monitoring using SMMR microwave observations calibrated with in situ soil moisture observations from Illinois, USA (with Konstantin Vinnikov, Shuang Qiu, and Manfred Owe; presented by Konstantin Vinnikov; AGU Fall Meeting, San Francisco, California, December 8-12, 1997)

157. Spectral optical characteristics and radiative forcing from the Mount Pinatubo aerosol cloud (with Georgiy L. Stenchikov, Juan Carlos Antuña, Ingo Kirchner, Hans-F. Graf, R. G. Grainger, Alyn Lambert, and Larry Thomason; AGU Fall Meeting, San Francisco, California, December 8-12, 1997)

158. Observed spatial and temporal scales of soil moisture variations in the extratropics (with Jared Entin and Konstantin Vinnikov; AGU Fall Meeting, San Francisco, California, December 8-12, 1997)

159. The Mongolian soil moisture data set, and its application to observed trends and scales of soil moisture variations in Asia (with Konstantin Vinnikov, Jared K. Entin, and A. Namkhai; Ninth American Meteorological Society Symposium on Global Change, Phoenix, Arizona, January 11-16, 1998)

160. The role of natural variability in observed global and regional climatic trends (with Konstantin Vinnikov and David Robinson; presented by Konstantin Vinnikov; Ninth

American Meteorological Society Symposium on Global Change, Phoenix, Arizona, January 11-16, 1998)

161. Dynamical response (winter warming) to Pinatubo aerosols in ECHAM-4 (GRIPS Workshop, Greenbelt, Maryland, March 3-6, 1998)

162. The stratospheric thermal response to Pinatubo aerosol and ozone depletion (with G. Stenchikov, I. Kirchner, H.-F. Graf, and Juan Carlos Antuña; presented by G. Stenchikov; GRIPS Workshop, Greenbelt, Maryland, March 3-6, 1998)

163. The study of regional climate and chemical processes with single column models (with Georgiy Stenchikov, Sean Gray, and Michael Gamazaychikov, ARM Science Team Workshop, Tucson, Arizona, March 24-26, 1998)

164. The Pinatubo aerosol forcing estimated with ECHAM4 and the simulated climate response (with Ingo Kirchner, Hans-F. Graf, and Georgiy L. Stenchikov; presented by Ingo Kirchner; EGS meeting, Nice, France, April 20-24, 1998)

165. The role of advective fluxes in the diurnal cycle of surface air temperature in the Great Plains (with Sean M. Gray, Georgiy Stenchikov and Wanchun Chen; presented by Sean Gray; AGU Spring Meeting, Boston, Massachusetts, May 26-29, 1998)

166. Soil moisture data for the Mississippi River basin (with Konstantin Y. Vinnikov and Jared Entin, and Pedro Viterbo; GCIP Mississippi River Climate Conference, St. Louis, Missouri, June 8-12, 1998)

167. Observed spatial and temporal scales of soil moisture variations (with Jared Entin, Konstantin Y. Vinnikov, and Pedro Viterbo; presented by Jared Entin; GCIP Mississippi River Climate Conference, St. Louis, Missouri, June 8-12, 1998)

168. Optimal design of surface networks and remote sensing resolution for observations of soil moisture (with Konstantin Y. Vinnikov, Shuang Qiu, and Jared Entin; presented by Konstantin Y. Vinnikov; GCIP Mississippi River Climate Conference, St. Louis, Missouri, June 8-12, 1998)

169. Evaluation of the utility of using SMMR satellite microwave observations for retrieving soil moisture data (with Konstantin Y. Vinnikov, Shuang Qiu, Jared Entin, Manfred Owe, Bhaskar Choudhury, and Eni Njoku; presented by Konstantin Y. Vinnikov; GCIP Mississippi River Climate Conference, St. Louis, Missouri, June 8-12, 1998)

170. Observed land surface hydrology variations of the past 30 years (with Nina A. Speranskaya, Konstantin Y. Vinnikov, and Natalia K. Grib; presented by Nina A. Speranskaya; 9th Global Warming International Conference & Expo, Hong Kong, June 8-10, 1998)

171. The volcanic signal in surface temperature observations (with Jianping Mao; presented by Jianping Mao; 9th Global Warming International Conference & Expo, Hong Kong, June 8-10, 1998)

172. Using soil moisture observations to evaluate land surface models (ECMWF and WCRP/GEWEX Workshop on Modelling and Data Assimilation for Land-Surface Processes, Reading, UK, June 29 - July 2, 1998)

173. Radiative forcing and climate response from the 1991 Mt. Pinatubo aerosol cloud (with G. Stenchikov, I. Kirchner, and H.-F. Graf; presented by G. Stenchikov; International Aerosol Symposium, St. Petersburg, Russia, July 6-9, 1998)

174. The ARM SCM intercomparison study – overview and results for Case 1 (with R. T. Cederwall, D. A. Randall, S. K. Krueger, D. Cripe, S. J. Ghan, S. F. Iacobellis, S. A. Klein, U. Lohmann, R. C. J. Somerville, G. Stenchikov, S. Xie, K.-M. Xu, J. J. Yio, and M. H. Zhang; presesented by R. T. Cederwall; GCSS-WGNE Workshop at ECMWF: Cloud Processes and Cloud Feedbacks in Large-scale Models, November 9-13, 1998)

175. Observational validation of GSWP model calculations (Invited paper; 14th AMS Conference on Hydrology, Dallas, Texas, January 10-15, 1999).

176. Evaluation of Global Soil Wetness Project soil moisture simulations and implications for land-surface modeling (with Jared K. Entin and K. Y. Vinnikov; presented by Jared K. Entin; 14th AMS Conference on Hydrology, Dallas, Texas, January 10-15, 1999.)

177. PILPS Phase 2(d): Simulations of a boreal grassland hydrology at Valdai, Russia (Invited paper; with C. Adam Schlosser, A. Slater, A. J. Pitman, K. Ya. Vinnikov, A. Henderson-Sellers, and N. A. Speranskaya; presented by C. Adam Schlosser; 14th AMS Conference on Hydrology, Dallas, Texas, January 10-15, 1999. Also served as convenor of session and session chair)

178. PILPS 2(d): The representation of snow processes in land-surface schemes (Invited paper; with Andrew J. Slater, C. A. Schlosser, A. J. Pitman, A. Henderson-Sellers, K. Ya. Vinnikov, and N. A. Speranskaya; presented by Andrew J. Slater; 14th AMS Conference on Hydrology, Dallas, Texas, January 10-15, 1999. Also served as convenor of session and session chair)

179. Partition of snowmelt into runoff and infiltration in PILPS 2(d) (Invited paper; with K. Y. Vinnikov, Lifeng Luo and N. A. Speranskaya; 14th AMS Conference on Hydrology, Dallas, Texas, January 10-15, 1999)

180. Opportunity for more PILPS Phase 2 experiments using Russian water balance stations (Invited paper; with Konstantin Y. Vinnikov and N. A. Speranskaya; presented by Konstantin Y. Vinnikov; 14th AMS Conference on Hydrology, Dallas, Texas, January 10-15, 1999. Also served as convenor of session and session chair)

181. Detection of global warming in observed trends in Northern Hemisphere snow cover and sea ice areas (with Konstantin Y. Vinnikov, R. J. Stouffer, J. E. Walsh, D. A. Robinson, V. F. Zakharov, and D. Garrett; presented by Konstantin Y. Vinnikov; 10th AMS Symposium on Global Change Studies, Dallas, Texas, January 10-15, 1999)

182. Can we use the climate response to volcanic eruptions to estimate climate sensitivity? (with Melissa P. Free; presented by Melissa P. Free; 10th AMS Symposium on Global Change Studies, Dallas, Texas, January 10-15, 1999)

183. Summer desiccation as a global warming fingerprint (with K. Y. Vinnikov, J. K. Entin, R. J. Stouffer, V. Zabelin, and A. Namkhai; 10th AMS Symposium on Global Change Studies, Dallas, Texas, January 10-15, 1999)

184. The role of solar and volcanic forcing in the Little Ice Age (with Melissa P. Free; presented by Melissa P. Free; 10th AMS Symposium on Global Change Studies, Dallas, Texas, January 10-15, 1999)

185. Stratospheric control of climate (Invited paper; IPCC Detection/Attribution Workshop, College Station, Texas, January 15-16, 1999).

186. The diurnal cycle over the Great Plains (Invited paper; with Georgiy L. Stenchikov; NIGEC Regional Integrated Assessment Workshop, NCAR, Boulder, Colorado, February 4-5, 1999)

187. PILPS Phase 2(d) update and proposal for more Phase 2 projects (Invited paper; PILPS International Strategy Forum, Honolulu, Hawaii, February 23-26, 1999. Also served as session chair.)

188. Test of midlatitude cumulus ensembles and diurnal cycle of advection, temperature, and moisture simulated by regional and global models with ARM data (with Georgiy Stenchikov, Ernesto Hugo Berbery, Sean Gray, and Wanchun Chen; presented by Georgiy Stenchikov; ARM Science Team Meeting, San Antonio, Texas, March 23-26, 1999)

189. The diurnal cycle over the Great Plains (Invited paper; with Georgiy L. Stenchikov; presented by Georgiy L. Stenchikov; Principal Investigator's Workshop, Great Plains Regional Center for Global Environmental Change, March 29-30, 1999)

190. Soil moisture observations for evaluation of Global Soil Wetness Project simulations (with Govindarajan Srinivasan, Konstantin Vinnikov, Jared Entin, Vladimir Zabelin, Suxia Liu, A. Namkhai, and T. Adyasuren; Third International Scientific Conference on the Global Energy and Water Cycle, Beijing, China, June 16-19, 1999)

191. Radiative forcing of the Pinatubo aerosol cloud as calculated by four GCMS with different radiative schemes (with Georgiy Stenchikov, Hans-F. Graf, Ingo Kirchner, Brian Soden, Richard Wetherald, V. Ramaswamy, S. Ramachandran, Natalia Andronova, Michael Schlesinger, E. Rozanov, and F. Yang; 10th AMS Conference on Atmospheric Radiation, Madison, Wisconsin, June 28 – July 2, 1999)

192. Climate responses to radiative forcing following the 1991 Mount Pinatubo volcanic eruption: Winter warming and summer cooling (with Georgiy Stenchikov, Hans-F. Graf, Ingo Kirchner, Brian Soden, Richard Wetherald, V. Ramaswamy, and S. Ramachandran; 10th AMS Conference on Atmospheric Radiation, Madison, Wisconsin, June 28 – July 2, 1999)

193. Evaluation of revised AMIP I soil moisture simulations (session chair; with G. Srinivasan and Konstantin Y. Vinnikov; XXII Scientific Assembly of the IUGG, Birmingham, UK, July 19-30, 1999)

194. Evaluation of PILPS 2(d) hydrological simulations at Valdai, Russia (Invited paper; with Lifeng Luo, Konstantin Y. Vinnikov, Jared K. Entin, and Nina A. Speranskaya; XXII Scientific Assembly of the IUGG, Birmingham, UK, July 19-30, 1999)

195. Intercomparison of climate model simulations of the response to the 1991 Pinatubo volcanic eruption (Invited paper; with Georgiy L. Stenchikov; XXII Scientific Assembly of the IUGG, Birmingham, UK, July 19-30, 1999)

196. Scales and trends of observed soil moisture variations, and predicted future variations (with Konstantin Y. Vinnikov; XXII Scientific Assembly of the IUGG, Birmingham, UK, July 19-30, 1999)

197. Detection and attribution of anthropogenic global warming using observed trends in Northern Hemisphere snow cover and sea ice areas (with Konstantin Y. Vinnikov, Ronald J. Stouffer, John Walsh, Claire Parkinson, Donald Cavalieri, David A. Robinson, Victor Zakharov, and Donald Garrett; XXII Scientific Assembly of the IUGG, Birmingham, UK, July 19-30, 1999)
198. The Global Soil Moisture Data Bank (XXII Scientific Assembly of the IUGG, Birmingham, UK, July 19-30, 1999)
199. Plans for future PILPS Phase 2 experiments (Invited paper; XXII Scientific Assembly of the IUGG, Birmingham, UK, July 19-30, 1999)
200. SAGE II validation with a global lidar network (Invited paper; with Juan Carlos Antuña and Georgiy L. Stenchikov; SAGE II Science Team Meeting, Hampton University, Hampton, Virginia, August 16-17, 1999)
201. Uncertainties of predicted global warming (Invited presentation and panel discussion; Dixy Lee Ray Memorial Symposium II, Washington, DC, September 1, 1999)
202. Global soil moisture data set and techniques for land surface model evaluation (Invited paper; GEWEX/INSU International Workshop on Modeling Land Surface Atmosphere Interactions and Climate Variability, Gif-sur-Yvette, France, October 7, 1999)
203. PILPS Phase 2 experiments (Invited paper; Joint session of the CAS/JSC Working Group on Numerical Experimentation (WGNE) and the GEWEX Modelling and Prediction Panel (GMPP), Naval Research Laboratory, Monterey, California, October 25-29, 1999)
204. AMIP revisit experiments (Invited paper; Joint session of the CAS/JSC Working Group on Numerical Experimentation (WGNE) and the GEWEX Modelling and Prediction Panel (GMPP), Naval Research Laboratory, Monterey, California, October 25-29, 1999)
205. GRIPS Pinatubo intercomparisons (Invited paper; Joint session of the CAS/JSC Working Group on Numerical Experimentation (WGNE) and the GEWEX Modelling and Prediction Panel (GMPP), Naval Research Laboratory, Monterey, California, October 25-29, 1999)
206. Northern Hemisphere snow cover trends and global warming (Invited paper; International Arctic Research Center Workshop, GFDL, Princeton, New Jersey, November 2-3, 1999)
207. The snow-soil moisture-monsoon relationship (Invited paper; 7th U.S.-Japan Workshop on Global Climate Change, "Precipitation Systems/Processes and Their Variability in the Asia Pacific Region," Tokyo, November 16-18, 1999)
208. The collaborative GCIP Land Data Assimilation System (LDAS) project (with E. F. Wood, K. Vinnikov, D. Tarpley, J. C. Schaake, G. O'Donnell, K. Mitchell, C. Marshall, D. Lohmann, D. Lettenmaier, P. Houser, F. Habets, J. Entin, Q. Duan, and B. Cosgrove; AGU Fall Meeting, San Francisco, California, December 13-17, 1999)
209. Winter warming following volcanic eruptions: observations and climate model simulations of forced Arctic Oscillation patterns (with Georgiy L. Stenchikov, S. Ramachandran, and V. Ramaswamy; AGU Fall Meeting, San Francisco, California, December 13-17, 1999)
210. Improved Mount Pinatubo aerosol data set using lidar measurements (with Juan Carlos Antuña and Georgiy L. Stenchikov; presented by Juan Carlos Antuña; AGU Fall Meeting, San Francisco, California, December 13-17, 1999; session convenor and chair)

211. Comparison of the climatic response to the 1991 Pinatubo eruption as calculated by ECHAM4 and SKYHI (With Georgiy L. Stenchikov, S. Ramachandran, Juan Carlos Antuña, V. Ramaswamy, Hans-F. Graf and Ingo Kirchner; presented by Georgiy Stenchikov; AGU Fall Meeting, San Francisco, California, December 13-17, 1999)

212. Water partition in a seasonally snow covered region; Results from the PILPS 2(d) experiment at Valdai, Russia (with Lifeng Luo, G. Srinivasan, Konstantin Y. Vinnikov, Jared K. Entin, and PILPS Modeling Groups; presented by Lifeng Luo; AGU Fall Meeting, San Francisco, California, December 13-17, 1999)

213. Role of volcanic and solar forcings in decade to century-scale climate variability (Invited paper; with Melissa Free; presented by Melissa Free; AGU Fall Meeting, San Francisco, California, December 13-17, 1999)

214. The missing Pinatubo aerosols: A global lidar-SAGE II comparison (with Juan Carlos Antuña and Georgiy L. Stenchikov; AMS Symposium on Lidar Atmospheric Monitoring, Long Beach, California, January 9-14, 2000)

215. Detection and attribution of anthropogenic global warming using Northern Hemisphere sea ice extent (with Konstantin Y. Vinnikov, Ronald J. Stouffer, John E. Walsh, Claire L. Parkinson, Donald J. Cavalieri, John F. B. Mitchell, Donald Garrett, and Victor F. Zakharov; presented by Konstantin Y. Vinnikov; 11th AMS Symposium on Global Change; Long Beach, California, January 9-14, 2000)

216. The collaborative GCIP Land Data Assimilation System (LDAS) project and supportive NCEP uncoupled land-surface model initiatives (with K. Mitchell, C. Marshall, D. Lohmann, M. Ek, Y. Lin, P. Grunmann, P. Houser, E. Wood, J. Schaake, D. Lettenmaier, D. Tarpley, W. Higgins, R. Pinker, B. Cosgrove, J. Entin, and Q. Duan; presented by K. Mitchell; 15th AMS Conference on Hydrology; Long Beach, California, January 9-14, 2000; also served as Session Chair)

217. Soil moisture observations for LDAS evaluation (with Lifeng Luo and Konstantin Vinnikov; 15th AMS Conference on Hydrology, Long Beach, California, January 9-14, 2000; also served as Session Chair)

218. Intercomparison study of GCM simulations of climate impact of the 1991 Mt. Pinatubo volcanic eruption (with Georgiy Stenchikov, S. Ramachandran, Juan Carlos Antuña, V. Ramaswamy, Hans-F. Graf, and Ingo Kirchner; presented by Georgiy Stenchikov; GRIPS Workshop, University of Toronto, March 13-15, 2000)

219. PINMIP (Pinatubo Model Intercomparison Project) (GRIPS Workshop, University of Toronto, March 13-15, 2000)

220. Evaluation of Land-surface Data Assimilation Schemes simulations of soil moisture in the GCIP region (GCIP/GAPP PI Workshop, Potomac, Maryland, March 27-28, 2000)

221. A model study of the effect of Pinatubo volcanic aerosols on stratospheric temperatures, (with V. Ramaswamy, S. Ramachandran, and G. Stenchikov; presented by V. Ramaswamy; Cess Symposium; May 2000)

222. Global in situ measurements of soil moisture (Invited paper; GEWEX/BAHC International Workshop on Soil Moisture Monitoring, Analysis and Prediction, Norman, Oklahoma, May 16-18, 2000)

223. Oklahoma Mesonet soil moisture observations for 1998: Visualization, quality control, and analysis of scales (with Lifeng Luo, Karen Humes, Konstantin Vinnikov, Jeff Basara, and Ronald Elliott; presented by Lifeng Luo; GEWEX/BAHC International Workshop on Soil Moisture Monitoring, Analysis and Prediction, Norman, Oklahoma, May 16-18, 2000)

224. Winter warming following volcanic eruptions: Observations and climate model simulations of forced arctic oscillation patterns (with Georgiy Stenchikov, S. Ramachandran, Juan Carlos Antuña, V. Ramaswamy, Hans-F. Graf and Ingo Kirchner; IAVCEI General Assembly, Bali, Indonesia, July 17-22, 2000)

225. GCM simulation of climate impact of the 1991 Mt. Pinatubo volcanic eruption (with Georgiy Stenchikov, S. Ramachandran, Juan Carlos Antuña, V. Ramaswamy, Hans-F. Graf, and Ingo Kirchner; presented by Georgiy Stenchikov; International Radiation Symposium 2000, St. Petersburg, Russia, July 24-29, 2000)

226. Detection and attribution of anthropogenic global warming using observed trends in Northern Hemisphere soil moisture, snow cover and sea ice areas *and* Land surface modeling in regions with seasonally frozen soil (Invited paper; with Konstantin Vinnikov; NSF Arctic System Science (ARCSS) Hydrology Workshop, Santa Barbara, California, September 18-20, 2000)

227. Tropospheric responses in GCM simulations of the impact of the 1991 Mt Pinatubo eruption (with G. L. Stenchikov, V. Ramaswamy, and S. Ramachandran; Second SPARC General Assembly, Mar del Plata, Argentina, November 6-10, 2000)

228. Radiative forcing and stratospheric responses in GCM simulations of the impact of the 1991 Mt. Pinatubo eruption (with G. L. Stenchikov, V. Ramaswamy, and S. Ramachandran; Second SPARC General Assembly, Mar del Plata, Argentina, November 6-10, 2000)

229. SAGE II measurements of Mount Pinatubo aerosols: tropical and midlatitude validation with a lidar network (with Juan Carlos Antuña and G. L. Stenchikov; Second SPARC General Assembly, Mar del Plata, Argentina, November 6-10, 2000)

230. Radiative impact of the Mt Pinatubo volcanic eruption: Lower stratospheric response (with S. Ramachandran, V. Ramaswamy, and G. L. Stenchikov; Second SPARC General Assembly, Mar del Plata, Argentina, November 6-10, 2000)

231. The snow-soil moisture-monsoon relationship (Invited paper; 8th U.S.-Japan Workshop on Global Climate Change, "Pacific-Asian and North America monsoon climate variability, global impacts and inter-relationships," Greenbelt, Maryland, November 28-30, 2000)

232. Soil moisture variations in Oklahoma (with Lifeng Luo, Konstantin Vinnikov, Karen Humes, Ronald Elliott, and Jeffery Basara; presented by Lifeng Luo; AGU Fall Meeting, San Francisco, California, December 15-19, 2000)

233. Water partition in a seasonally snow covered region; Results from the PILPS 2(d) experiment at Valdai, Russia (with Lifeng Luo and Konstantin Y. Vinnikov; AGU Fall Meeting, San Francisco, California, December 15-19, 2000)

234. SKYHI simulations of interactive effects of Mt. Pinatubo volcanic aerosols and the QBO (with G. Stenchikov, K. Hamilton, M. D. Schwarzkopf, V. Ramaswamy, and S.

Ramachandran; presented by G. Stenchikov; AGU Fall Meeting, San Francisco, California, December 15-19, 2000)

235. SKYHI simulations of interactive effects of Mt. Pinatubo volcanic aerosols, QBO, and ozone changes (Invited presentation; with Georgiy L. Stenchikov; presented by Georgiy L. Stenchikov; GRIPS Workshop, Max Planck Institute for Meteorology, Hamburg, Germany, February 26-28, 2001)

236. Use of lidar aerosol measurements in climate modeling (Invited presentation; with Georgiy L. Stenchikov; Workshop on Lidar Measurement in Latin America, Camagüey, Cuba, March 6-8, 2001; also served as workshop organizer and session chair)

237. Model assessment of observed contemporary trends in Arctic climate (Invited presentation; with Konstantin Y. Vinnikov, David A. Robinson, Richard L. Armstrong, Ronald J. Stouffer, Thomas L. Delworth, Anthony J. Broccoli, and Keith W. Dixon; presented by Konstantin Y. Vinnikov; Second Wadati Conference on Global Change and Polar Climate, Tsukuba, Japan, March 7-9, 2001)

238. Evaluation of Land Data Assimilation System simulations of soil moisture in the GCIP region (Invited presentation, with Lifeng Luo and Konstantin Y. Vinnikov, GAPP PI Workshop, Potomac, Maryland, April 30 – May 2, 2001)

239. Recent results from the GAPP Land Data Assimilation System Project (LDAS) (Invited presentation, with Ken Mitchell, D. Lohmann, P. Houser, J. Schaake, E. Wood, D. Lettenmaier, M. Ek, D. Tarpley, R. Pinker, P. Grunmann, Q. Duan, W. Higgins, and H. van den Dool; presented by Ken Mitchell; GAPP PI Workshop, Potomac, Maryland, April 30 – May 2, 2001)

240. SAGE II validation with a global lidar network (Invited presentation, with Juan Carlos Antuña and Georgiy Stenchikov, SAGE II Science Team Meeting, Hampton, Virginia, May 3-4, 2001)

241. QBO and Pinatubo aerosol effects on stratospheric temperatures (with Georgiy Stenchikov, Kevin Hamilton, Dan Schwarzkopf, V. Ramaswamy, and S. Ramachandran; presented by Georgiy Stenchikov; SAGE II Science Team Meeting, Hampton, Virginia, May 3-4, 2001)

242. The observed relationship between snow cover, soil moisture, and the Asian monsoon (with Mingquan Mu, Konstantin Vinnikov, and David Robinson; 8th Scientific Assembly of IAMAS, Innsbruck, Austria, July 10-18, 2001)

243. Snow cover, soil moisture, and the Asian monsoon (with Mingquan Mu and participating AMIP II modeling groups; 8th Scientific Assembly of IAMAS, Innsbruck, Austria, July 10-18, 2001)

244. SKYHI simulations of Arctic Oscillation response to variations of the lower stratospheric temperature caused by volcanic aerosols and the Quasi-Biennial Oscillation (with Georgiy Stenchikov, Kevin Hamilton, Daniel Schwarzkopf, V. Ramaswamy, and S. Ramachandran; presented by Georgiy Stenchikov; 8th Scientific Assembly of IAMAS, Innsbruck, Austria, July 10-18, 2001)

245. Design of the American LIdar NEtwork (ALINE) for stratospheric aerosol observations (with Juan Carlos Antuña, Minard L. Hall, Patricia Mothes, John E. Barnes, Barclay

Clemesha, Dale Simonich, and Craig Tepley; NDSC (Network for Detection of Stratospheric Change) 2001 Symposium, Arcachon, France, September 24-27, 2001)

246. Use of lidar aerosol measurements in climate modeling (with Georgiy Stenchikov; NDSC 2001 Symposium, Arcachon, France, September 24-27, 2001)

247. Climatic effects of the 1991 Mt. Pinatubo volcanic eruption (Invited presentation; with Georgiy L. Stenchikov; AGU Fall Meeting, San Francisco, California, December 10-14, 2001; also convened session and served as session chair)

248. Interaction of volcanic aerosols, ozone changes, and the Quasi-Biennial Oscillation determine the atmospheric response to the June 15, 1991 Pinatubo eruption (Invited presentation; with Georgiy L. Stenchikov, Kevin Hamilton, M. Daniel Schwarzkopf, V. Ramaswamy, and S. Ramachandran; presented by Georgiy L. Stenchikov; AGU Fall Meeting, San Francisco, California, December 10-14, 2001; also convened session and served as session chair)

249. Diagnosis of climate model simulations by downscaling with a high-resolution regional model (with Gonzalo Miguez Macho, Georgiy L. Stenchikov, and Christopher Weaver; presented by Gonzalo Miguez Macho; AGU Fall Meeting, San Francisco, California, December 10-14, 2001)

250. A new technique to estimate the diurnal and seasonal cycles of climatic trends, with applications to temperature and sea ice (with Konstantin Y. Vinnikov, D. J. Cavalieri, and C. L. Parkinson; presented by Konstantin Y. Vinnikov; AMS Annual Meeting, Orlando, Florida, January 13-17, 2002)

251. Northern Hemisphere snow cover extent and global warming: observed and simulated variations (with Konstantin Y. Vinnikov, D. A. Robinson, R. L. Armstrong, D. J. Cavalieri, C. L. Parkinson, R. J. Stouffer, T. L. Delworth, K. W. Dixon, A. J. Broccoli, J. M. Gregory, G. M. Flato, N. C. Grody, B. H. Ramsay, P. Romanov, and A. N. Basist; presented by Konstantin Y. Vinnikov; AMS Annual Meeting, Orlando, Florida, January 13-17, 2002)

252. Evaluation of LDAS land surface models with observed forcing and hydrology (with Lifeng Luo, K. E. Mitchell, P. R. Houser, J. C. Schaake, E. F. Wood, D. P. Lettenmaier, D. Lohmann, B. Cosgrove, Q. Duan, R. T. Pinker, W. Higgins, and D. Tarpley; presented by Lifeng Luo; AMS Annual Meeting, Orlando, Florida, January 13-17, 2002)

253. Evaluation of streamflow and snowpack simulations in the land surface models of the Land Data Assimilation System (LDAS) project (with Dag Lohmann, K. E. Mitchell, P. R. Houser, J. C. Schaake, E. F. Wood, D. Tarpley, R. W. Higgins, R. T. Pinker, D. P. Lettenmaier, B. Cosgrove, Q. Duan, J. Sheffield, and L. Luo; presented by Dag Lohmann; AMS Annual Meeting, Orlando, Florida, January 13-17, 2002)

254. Downscaled regional climate simulations for the Mid-Atlantic states using RAMS (with Gonzalo Miguez-Macho and G. Stenchikov; AMS Annual Meeting, Orlando, Florida, January 13-17, 2002)

255. The observed relationship between snow cover, soil moisture, and the Asian monsoon (with M. Mu, K. Y. Vinnikov, and D. A. Robinson; presented by M. Mu; AMS Annual Meeting, Orlando, Florida, January 13-17, 2002)

256. Another statistical look at LDAS soil moisture fields (with John C. Schaake, Q. Duan, K. E. Mitchell, P. R. Houser, E. F. Wood, D. P. Lettenmaier, B. Cosgrove, D. Lohmann, R. Pinker, J. Sheffield, and D. Tarpley; presented by John C. Schaake; AMS Annual Meeting, Orlando, Florida, January 13-17, 2002)

257. Atmospheric responses and stratosphere-troposphere interactions forced by the 1991 Mt. Pinatubo eruption (with Georgiy Stenchikov; presented by Georgiy Stenchikov; GRIPS Workshop, Tsukuba, Japan, March 12-15, 2002)

258. Update on PINMIP (with Georgiy Stenchikov; presented by Georgiy Stenchikov; GRIPS Workshop, Tsukuba, Japan, March 12-15, 2002)

259. Evaluation of N-LDAS land surface models with observed forcing and hydrology (with the N-LDAS team; European Geophysical Society XXVII General Assembly, Nice, France, April 21-26, 2002)

260. The observed relationship between snow cover, soil moisture, and the Indian summer monsoon (with M. Mu, K. Y. Vinnikov, and D. Robinson; European Geophysical Society XXVII General Assembly, Nice, France, April 21-26, 2002)

261. The North American Land Data Assimilation System (N-LDAS) project (with K. Mitchell, P. R. Houser, E. F. Wood, J. Schaake, D. P. Lettenmaier, D. Lohmann, W. Higgins, R. Pinker, and D. Tarpley; presented by D. P. Lettenmaier; European Geophysical Society XXVII General Assembly, Nice, France, April 21-26, 2002)

262. Evaluation of North American LDAS land surface models with observed surface fluxes, soil moisture, and soil temperature (with Lifeng Luo, Kenneth E. Mitchell, Paul R. Houser, Eric F. Wood, John C. Schaake, Dennis P. Lettenmaier, Brian A. Cosgrove, Q. Duan, Dag Lohmann, J. Sheffield, Wayne Higgins, Rachel T. Pinker, Dan Tarpley, Kenneth C. Crawford, and Jeffrey B. Basara; Mississippi River Climate and Hydrology Conference, New Orleans, Louisiana, May 13-17, 2002)

263. Validation of North American LDAS retrospective forcing with station observations and model experiments (with Lifeng Luo, Kenneth E. Mitchell, Paul R. Houser, Eric F. Wood, John C. Schaake, Dennis P. Lettenmaier, Dag Lohmann, Brian A. Cosgrove, Q. Duan, J. Sheffield, Jesse Meng, Wayne Higgins, Rachel T. Pinker, Dan Tarpley, Kenneth C. Crawford, and Jeffrey B. Basara; presented by Lifeng Luo; Mississippi River Climate and Hydrology Conference, New Orleans, Louisiana, May 13-17, 2002)

264. Real-time and retrospective forcing in the North American Land Data Assimilation System (N-LDAS) project (with Brian A. Cosgrove, Dag Lohmann, Kenneth E. Mitchell, Paul R. Houser, Eric F. Wood, John Schaake, Dennis P. Lettenmaier, Lifeng Luo, Qingyun Duan, Justin Sheffield, Jesse Meng, Wayne Higgins, Rachel Pinker, Dan Tarpley, and Ying Lin; presented by Paul Houser; Mississippi River Climate and Hydrology Conference, New Orleans, Louisiana, May 13-17, 2002)

265. Progress to Derive Improved Surface Radiation Budgets for the Global Energy and Water Cycle Experiment (GEWEX) Continental-Scale International Project and the GEWEX Americas Prediction Project (GCIP/GAPP) (with Rachel T. Pinker., J. Dan Tarpley, Kenneth Mitchell, Xu Li, Tzveta Kassabova, Hongqing Liu, Istvan Laszlo, Paul R. Houser, Eric F. Wood, John Schaake, Alan Robock, Dennis P. Lettenmaier, Wayne Higgins, Brian A. Cosgrove, Dag Lohmann, Justin Sheffield, Lifeng Luo, Q. Duan, and

the North America LDAS Team; presented by Rachel Pinker; Mississippi River Climate and Hydrology Conference, New Orleans, Louisiana, May 13-17, 2002)

266. Cloud Detection and Snow Mapping in Reprocessing of GCIP/GAPP Radiative Fluxes (with Xu Li, Rachel T. Pinker, Kenneth Mitchell, Paul R. Houser, Eric F. Wood, John Schaake, Dennis Lettenmaier, J. Dan Tarpley, Wayne Higgins, and the North American LDAS Team; presented by Rachel Pinker; Mississippi River Climate and Hydrology Conference, New Orleans, Louisiana, May 13-17, 2002)

267. An estimate of the sensitivity of large-scale model simulations to the mosaic-of-tiles approach to land-atmosphere coupling: A case study over the GCIP region (with L. Luo, C. P. Weaver, and R. Avissar; presented by L. Luo; Mississippi River Climate and Hydrology Conference, New Orleans, Louisiana, May 13-17, 2002)

268. Validation of North American-LDAS modeled energy budgets (with Eric F. Wood, Jesse Meng, Fengua Wen, Kenneth Mitchell, Paul R. Houser, John Schaake, Dennis P. Lettenmaier, Dag Lohmann, Brian Cosgrove, Qingyun Duan, Justin Sheffield, Lifeng Luo, Wayne Higgins, Rachel Pinker, and Dan Tarpley; presented by Eric F. Wood; Mississippi River Climate and Hydrology Conference, New Orleans, Louisiana, May 13-17, 2002)

269. An Intercomparison of North American LDAS Soil Moisture Fields (with John Schaake, Qingyun Duan, Kenneth Mitchell, Paul Houser, Eric Wood, Dennis Lettenmaier, Brian Cosgrove, Dag Lohmann, Lifeng Luo, Justin Sheffield, Wayne Higgins, Rachel Pinker, and Dan Tarpley; presented by John Schaake; Mississippi River Climate and Hydrology Conference, New Orleans, Louisiana, May 13-17, 2002)

270. The GAPP/GCIP Multi-institution North American Land Data Assimilation System (N-LDAS) (with Kenneth E. Mitchell, P. Houser, J. Schaake, E. Wood, D. Lettenmaier, D. Lohmann, B. Cosgrove, Q. Duan, J. Sheffield, L. Luo, W. Higgins, D. Tarpley, R. Pinker, and J. Meng; presented by Kenneth E. Mitchell; Mississippi River Climate and Hydrology Conference, New Orleans, Louisiana, May 13-17, 2002)

271. Lidar-derived aerosol extinction dataset for aerosol data assimilation for the Mt. Pinatubo eruption (with Juan Carlos Antuña and Georgiy L. Stenchikov; presented by Juan Carlos Antuña; AGU Spring Meeting, Washington, DC, May 27-31, 2002)

272. The American Lidar Network (ALINE) for Stratospheric Aerosol Observations; Next Step: A Stratospheric Aerosol Observatory on the Equator (Invited presentation; Lidar Working Group of the Network for Detection of Stratospheric Change, Observatoire d'Haute Provence, France, June 10-13, 2002)

273. Mt. Pinatubo as a Test of Climatic Feedback Mechanisms (Invited presentation; Chapman Conference on Volcanism and the Earth's Atmosphere; Thera, Greece, June 17-21, 2002; also organized conference and served as session chair)

274. Arctic Oscillation Response to the 1991 Mount Pinatubo Eruption (Invited presentation; with Georgiy Stenchikov, V. Ramaswamy, M. Daniel Schwarzkopf, Kevin Hamilton, and S. Ramachandran; presented by Georgiy Stenchikov; Chapman Conference on Volcanism and the Earth's Atmosphere; Thera, Greece, June 17-21, 2002)

275. Mt. Pinatubo Stratospheric Aerosols in the Tropics: Comparison of SAGE II and Lidars (with Juan Carlos Antuña, Georgiy Stenchikov, Larry W. Thomason, John E Barnes, and

Jun Zhou; presented by Juan Carlos Antuña; Chapman Conference on Volcanism and the Earth's Atmosphere; Thera, Greece, June 17-21, 2002)

276. Comparison of SAGE II Aerosol Measurements with Lidars Following the 1991 Mount Pinatubo Eruption (with Juan Carlos Antuña and Georgiy Stenchikov; presented by Juan Carlos Antuña; International Laser Radar Conference, Québec City, Québec, Canada, July 8-12, 2002)

277. Toward a Lidar Network in Latin America (with Juan Carlos Antuña, Pablo O. Canziani, Barclay Clemesha, Francisco Zaratti, and Errico Armandillo; presented by Juan Carlos Antuña; International Laser Radar Conference, Québec City, Québec, Canada, July 8-12, 2002)

278. The "LIPAZ" Lidar Project (with Francesco Zaratti, Ricardo Forno, Flavio Ghezzi, Errico Armandillo, Giorgio Fiocco, Juan Carlos Antuña, Pablo O. Canziani, and Barclay Clemesha; presented by Errico Armandillo; International Laser Radar Conference, Québec City, Québec, Canada, July 8-12, 2002)

279. Downscaling climate anomalies from a GCM using RAMS (with Gonzalo Miguez-Macho and Georgiy Stenchikov; presented by Gonzalo Miguez-Macho; Fifth RAMS User Workshop, Thera, Greece, September 29 – October 3, 2002)

280. Engineering RAMS to produce improved climate simulations for the mid-Atlantic states of the U.S. (with Gonzalo Miguez-Macho and Georgiy Stenchikov; presented by Gonzalo Miguez-Macho; Fifth RAMS User Workshop, Thera, Greece, September 29 – October 3, 2002)

281. AMIP forcing: Inclusion of tropospheric and stratospheric aerosols and greenhouse gases (AMIP Workshop "Toward Innovative Climate Model Diagnostics," Toulouse, France, November 12-16, 2002)

282. Snow cover, soil moisture, and the Asian summer monsoon (AMIP Workshop "Toward Innovative Climate Model Diagnostics," Toulouse, France, November 12-16, 2002)

283. Southern Hemisphere annular mode response to the 1991 Mount Pinatubo eruption (with G. Stenchikov, V. Ramaswamy, M. D. Schwarzkopf, K. Hamilton, S. Ramachandran, and L. Oman; presented by G. Stenchikov; AGU Fall Meeting, December 6-10, 2002)

284. Modeling the present climate and future climate anomalies over North America using RAMS (with Gonzalo Miguez Macho and Georgiy L. Stenchikov; presented by Gonzalo Miguez Macho; AGU Fall Meeting, December 6-10, 2002)

285. High latitude soil moisture observations to study climate variations and to evaluate climate models (Invited presentation; with Konstantin Vinnikov, Lifeng Luo, and Mingquan Mu; AGU Fall Meeting, December 6-10, 2002)

286. The New Jersey TOWER (Invited presentation; Urban Atmospheric Observatory Workshop, New York City, January 27-28, 2003)

287. Snow cover, soil moisture, and the Asian summer monsoon (with Mingquan Mu, Konstantin Y. Vinnikov, and David A. Robinson; 14th AMS Symposium on Global Change and Climate Variations, Long Beach, California, February 9-13, 2003)

288. The Global Soil Moisture Data Bank: An update including new United States stations (Invited presentation; with Lifeng Luo, Mingquan Mu, and Konstantin Vinnikov; AMS

Symposium on Observing and Understanding the Variability of Water in Weather and Climate, Long Beach, California, February 9-13, 2003)

289. Analysis of diurnal and seasonal cycles in climatic trends for records with changes of observation times (with Konstantin Vinnikov and Alan Basist; presented by Konstantin Vinnikov; 14th AMS Symposium on Global Change and Climate Variations, Long Beach, California, February 9-13, 2003)

290. The relationship between cloudiness and surface temperature (with Konstantin Vinnikov, Norman Grody, and Alan Basist; presented by Konstantin Vinnikov; 12th AMS Conference on Satellite Meteorology and Oceanography, Long Beach, California, February 9-13, 2003)

291. Analysis of water balance simulation of Land Data Assimilation System (with John Schaake, Qingyun Duan, Kenneth Mitchell, Paul Houser, Eric Wood, Dennis Lettenmaier, Brian Cosgrove, Dag Lohmann, Lifeng Luo, Justin Sheffield, Wayne Higgins, Rachel Pinker, and Dan Tarpley; presented by John Schaake; 17th AMS Conference on Hydrology, Long Beach, California, February 9-13, 2003)

292. Evaluation of streamflow and snowpack simulations in the land surface models of the North American Land Data Assimilation (N-LDAS) Project (with Dag Lohmann, Kenneth Mitchell, Paul R. Houser, Eric F. Wood, John Schaake, Dennis Lettenmaier, Brian Cosgrove, III, Ming Pan, Qingyun Duan, Justin Sheffield, Lifeng Luo, Jesse Meng, Wayne Higgins, Rachel Pinker, and Dan Tarpley; presented by Dag Lohmann; 17th AMS Conference on Hydrology, Long Beach, California, February 9-13, 2003)

293. GCIP Water and Energy Budget Synthesis (WEBS) (with J. Roads, Richard Lawford, E. Bainto, Ernesto Berbery, S Chen, B. Fekete, K. Gallo, Andrew Grundstein, Wayne Higgins, Masao Kanamitsu, Witold Krajewski, Venkat Lakshmi, Daniel Leathers, D. Lettenmaier, L. Luo, Edwin Maurer, Tilden Meyers, D Miller, Kenneth Mitchell, Thomas Mote, Rachel Pinker, Thomas Reichler, David Robinson, J Smith, G. Srinivasan, Konstantin Vinnikov, T. Vonder Haar, C. Vorosmarty, S. Williams, and Evgeney Yarosh; presented by John Roads; 17th AMS Conference on Hydrology, Long Beach, California, February 9-13, 2003)

294. Comparisons of soil moisture data from in situ measurements and global hydrological model outputs (with G. Ramillien, A. Cazenave, and P. C. D. Milly; presented by G. Ramillien; EGS-AGU-EUG Joint Assembly, Nice, France, April 7-11, 2003)

295. Evaluation of the North American Land Data Assimilation System over the Southern Great Plains during the warm season (with Lifeng Luo, Eric F. Wood, Fenghua Wen, Kenneth E. Mitchell, Paul R. Houser, John C. Schaake, Dag Lohmann, Brian Cosgrove, Justin Sheffield, Qingyun Duan, R. Wayne Higgins, Rachel T. Pinker, J. Dan Tarpley, Jeffery B. Basara, and Kenneth C. Crawford; EGS-AGU-EUG Joint Assembly, Nice, France, April 7-11, 2003)

296. Overview and validation work of the North American Land Data Assimilation System (NLDAS) (with Dag Lohmann, Kenneth E. Mitchell, Paul R. Houser, Eric F. Wood, John C. Schaake, Brian Cosgrove, Qingyun Duan, Justin Sheffield, Ming Pan, Lifeng Luo, Jesse Meng, R. Wayne Higgins, Rachel T. Pinker, and J. Dan Tarpley; presented by Dag Lohmann; EGS-AGU-EUG Joint Assembly, Nice, France, April 7-11, 2003)

297. An inter-comparison of soil moisture fields in the North American Land Data Assimilation System (NLDAS) (with John C. Schaake, Qingyun Duan, Kenneth E. Mitchell, Paul R. Houser, Eric F. Wood, Dennis Lettenmaier, Dag Lohmann, Brian Cosgrove, Justin Sheffield, Lifeng Luo, R. Wayne Higgins, Rachel T. Pinker, and J. Dan Tarpley; presented by John C. Schaake; EGS-AGU-EUG Joint Assembly, Nice, France, April 7-11, 2003)

298. Assessment of snow modeling in the North American Land Data Assimilation System (NLDAS) (with Ming Pan, Eric F. Wood, Justin Sheffield, Fenghua Wen, Kenneth E. Mitchell, Paul R. Houser, John C. Schaake, Dag Lohmann, Brian Cosgrove, Qingyun Duan, Lifeng Luo, and Bruce H. Ramsay; presented by Eric Wood; EGS-AGU-EUG Joint Assembly, Nice, France, April 7-11, 2003)

299. Mechanisms of Forced Arctic Oscillation Response to Volcanic Eruptions (Invited presentation; The Role of the Stratosphere in Tropospheric Climate, Whistler, British Columbia, Canada, April 29 – May 2, 2003)

300. Analysis of Stratospheric and Tropospheric Impacts from the Mount Pinatubo Eruption in the GFDL R30 and GISS GCMs (with Luke Oman, Georgiy L. Stenchikov, Brian Soden, and Richard Wetherald; presented by Luke Oman; The Role of the Stratosphere in Tropospheric Climate, Whistler, British Columbia, Canada, April 29 – May 2, 2003)

301. Arctic Oscillation Response to the 1991 Pinatubo Eruption in the SKYHI GCM with a Realistic Quasi-Biennial Oscillation (Invited presentation; with Georgiy L. Stenchikov, Kevin Hamilton V. Ramaswamy, and M. Daniel Schwarzkopf; XXIII General Assembly of the International Union of Geodesy and Geophysics, Sapporo, Japan, June 30 – July 11, 2003)

302. Climatic Impacts of Volcanic Gas Emissions (Invited presentation; with Georgiy L. Stenchikov; XXIII General Assembly of the International Union of Geodesy and Geophysics, Sapporo, Japan, June 30 – July 11, 2003)

303. Decadal Soil Moisture Variations in The Ukraine: 45 Years of In Situ Observations Compared to Climate Model Simulations and NCEP/NCAR and ERA40 Reanalyses (with Mingquan Mu, Konstantin Y. Vinnikov, Iryna Trofimova, Tatiana Adamenko, Pedro Viterbo, and Thomas Atkins; XXIII General Assembly of the International Union of Geodesy and Geophysics, Sapporo, Japan, June 30 – July 11, 2003)

304. Stratospheric and Tropospheric Forcing of the Arctic Oscillation by the 1991 Mt. Pinatubo Eruption (Invited presentation; with Georgiy L. Stenchikov, Kevin Hamilton, V. Ramaswamy, M. Daniel Schwarzkopf; presented by Kevin Hamilton; XXIII General Assembly of the International Union of Geodesy and Geophysics, Sapporo, Japan, June 30 – July 11, 2003)

305. Volcanic eruptions and climate: Winter warming and summer cooling (Invited presentation: Gordon Research Conference on Solar Radiation and Climate, New London, New Hampshire, July 13-18, 2003)

306. A Study of Interactive Climate Effects of Volcanic Radiative Forcing and QBO (with G. Stenchikov, K. Hamilton, V. Ramaswamy, and M. D. Schwarzkopf; presented by G. Stenchikov; Gordon Research Conference on Solar Radiation and Climate, New London, New Hampshire, July 13-18, 2003)

307. Contributions of Jim Angell to the Study of the Effects of Volcanic Eruptions on Climate (Invited presentation: Jim Angell 80th Birthday Symposium, Silver Spring, Maryland, November 4, 2003)

308. Land surface model evaluation using a new soil moisture and hydrology data set from Boissy-le-Châtel, France (with Thomas Atkins and Cécile Loumagne; presented by Thomas Atkins; AGU Fall Meeting, December 8-12, 2003)

309. The Impact of the 1991 Pinatubo Volcanic Eruption on Climate Using a Vertically Resolved Stratospheric Aerosol Data Set Derived from SAGE II Observations (with Georgiy L. Stenchikov, Kevin Hamilton, V. Ramaswamy, M. Daniel Schwarzkopf, Arlindo da Silva, and Larry Thomason; presented by Georgiy L. Stenchikov; presented by Thomas Atkins; AGU Fall Meeting, December 8-12, 2003)

310. Comparing the Climatic Impact from Low Latitude versus High Latitude Volcanic Eruptions (with Luke Oman and Georgiy L. Stenchikov; presented by Luke Oman; AGU Fall Meeting, December 8-12, 2003)

311. Soil Moisture Estimation Using Surface Backscattering Coefficients Observed by the Tropical Rain Measurement Mission Precipitation Radar (with Shinta Seto, Lifeng Luo, Taikan Oki, Toshio Iguchi, and Katumi Musiake; AGU Fall Meeting, December 8-12, 2003)

312. Effects of Global Warming on Drought Frequency and Duration in the Northeast United States (with Chaochao Gao; presented by Chaochao Gao; AGU Fall Meeting, December 8-12, 2003)

313. Land Surface Model Evaluation Using a New Soil Moisture Data Set from Boissy-le-Châtel, France (with Thomas Atkins and Cécile Loumagne; presented by Thomas Atkins; 18th AMS Conference on Hydrology, Seattle, Washington, January 12-15, 2004)

314. Evaluation of ERA40 and CEP/DOE-Reanalysis II (R2) sing Soil Moisture Observations from China for 1981-1999 (with Haibin Li, Suxia Liu, Xinggou Mo, and Pedro Virterbo; presented by Haibin Li; 18th AMS Conference on Hydrology, Seattle, Washington, January 12-15, 2004)

315. Soil Moisture Estimation Using Surface Backscattering Coefficients Observed by the Tropical Rain Measurement Mission (TRMM) Precipitation Radar (with Shinta Seto, Lifeng Luo, Taikan Oki, Toshio Iguchi, and Katumi Musiake; 18th AMS Conference on Hydrology, Seattle, Washington, January 12-15, 2004)

316. Nuclear Winter Update (Invited presentation, NPRI Symposium – Three Minutes To Midnight: The Impending Threat of Nuclear War, Washington, DC, January 25-27, 2004)

317. The Global Soil Moisture Data Bank (Invited presentation, Northern Eurasian Earth Science Partnership Initiative (NEESPI) Data Workshop, St. Petersburg, Russia, February 23-26, 2004)

318. Tree Rings and Volcanic Eruptions (Invited presentation, Tree Rings and Climate: Sharpening the Focus, Tucson, Arizona, April 6-9, 2004)

319. Panel Discussion (Invited presentation, Tree Rings and Climate: Sharpening the Focus, Tucson, Arizona, April 6-9, 2004)

320. Soil moisture observations for validation of remote sensing, with an example using retrievals from the Tropical Rain Measurement Mission Precipitation Radar (Invited presentation, with S. Seto, L. Luo, T. Oki, and T. Iguchi, European Geosciences Union 1st General Assembly, Nice, France, April 25-30, 2004)
321. Detection of the effects of volcanic eruptions on climate (with Georgiy Stenchikov; 9th International Meeting on Statistical Climatology, Cape Town, South Africa, May 24-28, 2004)
322. Use of observations from the Mt. Pinatubo eruption to estimate climate sensitivity (with Piers Forster; IPCC Working Group I Workshop on Climate Sensitivity, Paris, France, July 26-29, 2004)
323. Global Volcanic Forcing for the Last 2000 Years Derived From Multiple Ice Core Records (with Chaochao Gao, Caspar Ammann, and Philippe Naveau; presented by Chaochao Gao; IAVCEI General Assembly, Pucón, Chile, November 15-19, 2004)
324. Interaction of Climate Impacts of Volcanic Eruptions and ENSO (with G. Stenchikov, V. Ramaswamy, and M. D. Schwarzkopf; presented by G. Stenchikov; IAVCEI General Assembly, Pucón, Chile, November 15-19, 2004)
325. Climatic Response to High Latitude Volcanic Eruptions (with L. Oman and G. L. Stenchikov; presented by L. Oman; IAVCEI General Assembly, Pucón, Chile, November 15-19, 2004)
326. Climate Model Simulations of the Effects of the 1783-1784 Laki Eruption (with Luke Oman, Georgiy L. Stenchikov, and Thorvaldur Thordarson; IAVCEI General Assembly, Pucón, Chile, November 15-19, 2004. Also served as session chair.)
327. Land surface model evaluation using a new soil moisture dataset from Kamennaya Steppe, Russia (with T. Atkins and N. Speranskaya; presented by T. Atkins; AGU Fall Meeting, San Francisco, California, December 13-17, 2004)
328. Spectral Nudging to Eliminate the Effects of Domain Position and Geometry in Regional Climate Model Simulations (with G. Miguez-Macho and G. L. Stenchikov; presented by G. Miguez-Macho; AGU Fall Meeting, San Francisco, California, December 13-17, 2004)
329. Forty Five Years of Observed Soil Moisture in the Ukraine: No Summer Desiccation (Yet) (with M. Mu, K. Y. Vinnikov, I. V. Trofimova, and T. I. Adamenko; presented by G. Miguez-Macho; AGU Fall Meeting, San Francisco, California, December 13-17, 2004)
330. The Peace Corps – A Career Enhancing Opportunity (Fourth Annual AMS Student Conference, San Diego, California, January 8-9, 2005)
331. Evaluation of Reanalysis Soil Moisture Simulations Using Newly Updated Soil Moisture Observations from the Ukraine and China (with H. Li, M. Mu, and K. Y. Vinnikov; 19th AMS Conference on Hydrology and 16th AMS Conference on Climate Variability and Change; San Diego, California, January 10-13, 2005)
332. Latitudinal distribution of temperature trends at the surface and in the troposphere (with Konstantin Y. Vinnikov, N. Grody, M. D. Goldberg, R. J. Stouffer, and P. D. Jones; presented by Norman Grody; 16th AMS Conference on Climate Variability and Change; San Diego, California, January 10-13, 2005)

333. Tree Ring Records Underestimate Volcanic Cooling (16th AMS Conference on Climate Variability and Change; San Diego, California, January 10-13, 2005)

334. Climate response over North America to a simultaneous El Niño and volcanic eruption (with Megan E. Linkin, G. L. Stenchikov, and W. Stern; presented by Megan E. Linkin; 16th AMS Conference on Climate Variability and Change; San Diego, California, January 10-13, 2005)

335. Non-uniform root distribution in a land surface model to improve soil moisture and surface flux simulations (with Thomas Atkins; presented by Thomas Atkins; 19th AMS Conference on Hydrology; San Diego, California, January 10-13, 2005)

336. Evaluation of IPCC soil moisture simulations using observations for the second half of the 20th Century (with Haibin Li; presented by Haibin Li; International Workshop on IPCC Model Analysis, Honolulu, Hawaii, March 1-4, 2005)

337. Volcanic Impact on Arctic Oscillation and Stratosphere-Troposphere Dynamic Interaction in the IPCC Historic Runs (with G. Stenchikov, K. Hamilton, R. Stouffer, B. Santer, and V. Ramaswamy; presented by G. Stenchikov; International Workshop on IPCC Model Analysis, Honolulu, Hawaii, March 1-4, 2005)

338. Evaluation of Reanalysis Soil Moisture Simulations Using Newly Updated Soil Moisture Observations from the Ukraine and China (Invited presentation; with H. Li, M. Mu, and K. Y. Vinnikov; European Geosciences Union General Assembly, Vienna, Austria, April 24-29, 2005. Also served as session chair.)

339. The impact of water table dynamics on climate (with G. Miguez-Macho, Y. Fan, and C. P. Weaver; presented by G. Miguez-Macho; European Geosciences Union General Assembly, Vienna, Austria, April 24-29, 2005)

340. The volcanic eruption signal in ice cores (Invited presentation; Carlsberg Foundation Ice Core Dating Conference, Copenhagen, Denmark, August 15-17, 2005)

341. Global Warming and New Jersey Water Resources (Invited presentation; New Jersey Environmental Leaders Meeting, Princeton University, October 12, 2005)

342. Global Warming (Invited presentation, Nuclear Policy Research Institute workshop on Nuclear Power and Global Warming, Airlie House, Warrenton, Virginia, November 7-8, 2005)

343. Evaluation of Soil Moisture Ocean Salinity satellite retrievals of soil moisture using in situ soil moisture observations (First Meeting of the SMOS Validation and Retrieval Team, Ávila, Spain, November 21-24, 2005)

344. Effects of Aerosols on the Carbon Cycle and on Soil Moisture (Invited presentation; with H. Li; AGU Fall Meeting, San Francisco, California, December 5-9, 2005)

345. From Solar Dimming to Solar Brightening: Observations, Modeling, Impacts (Invited presentation; with M. Wild, A. Ohmura, J. Feichter, P. Stier, and H. Li; presented by M. Wild; AGU Fall Meeting, San Francisco, California, December 5-9, 2005)

346. Evaluation of IPCC AR4 Soil Moisture Simulations for the Second Half of the 20th Century (with H. Li and M. Wild; presented by H. Li; AGU Fall Meeting, San Francisco, California, December 5-9, 2005)

347. The 1452 A.D. Kuwae Eruption Signal Derived from Multiple Ice Core Records: Greatest Eruption over the Past 700 Years (with C. Gao, S. Self, J. Witter, J. Steffenson, H. Clausen, M. Siggaard-Andersen, S. Johnsen, P. A. Mayewski, and C. Ammann; presented by C. Gao; AGU Fall Meeting, San Francisco, California, December 5-9, 2005)

348. Modeling the Sulfate Deposition to the Greenland Ice Sheet From the Laki Eruption (with L. Oman, G. Stenchikov, T. Thordarson, and C. Gao; presented by L. Oman; AGU Fall Meeting, San Francisco, California, December 5-9, 2005)

349. The Global Soil Moisture Data Bank - Benchmark Soil Moisture Observations (with Haibin Li and Konstantin Y. Vinnikov; AGU Fall Meeting, San Francisco, California, December 5-9, 2005)

350. A Strategy for a Global In-Situ Soil Moisture Network (with Peter J. van Oevelen, Tom J. Jackson, D Entekhabi, and Yann H. Kerr; presented by Peter J. van Oevelen; AGU Fall Meeting, San Francisco, California, December 5-9, 2005)

351. Effects of solar dimming on soil moisture trends (with Haibin Li; presented by Haibin Li; 18th American Meteorological Society Conference on Climate Variations, Atlanta, Georgia, January 29 – February 2, 2006)

352. The effect of vegetation type on the seasonal and diurnal cycles of soil temperature (with Thomas Atkins; presented by Thomas Atkins; 18th American Meteorological Society Conference on Climate Variations, Atlanta, Georgia, January 29 – February 2, 2006)

353. Seasonal and Diurnal Cycles in Climate Change and Variability (with Konstantin Y. Vinnikov and N. C. Grody; presented by Konstantin Y. Vinnikov; 18th American Meteorological Society Conference on Climate Variations, Atlanta, Georgia, January 29 – February 2, 2006)

354. Using soil moisture observations to study climate variations, to evaluate climate models, and as ground truth for remote sensing (Invited presentation: International Soil Moisture Working Group Workshop, Noordwijk, Netherlands, March 28-29, 2006)

355. Atmospheric volcanic loading derived from bipolar ice cores (with C. Gao, L. Oman, and G. Stenchikov; European Geosciences Union General Assembly, Vienna, Austria, April 3-7, 2006)

356. Effects of solar dimming on soil moisture trends (with H. Li; European Geosciences Union General Assembly, Vienna, Austria, April 3-7, 2006)

357. Volcanism and Climate Change (Invited plenary lecture; IAVCEI International Conference on Continental Volcanism, Guangzhou, China, May 14-18, 2006)

358. Volcanic Forcing of Climate over the Past 2000 Years: An Improved Ice Core Based Index for Climate Models (with Chaochao Gao, presented by Chaochao Gao; IAVCEI International Conference on Continental Volcanism, Guangzhou, China, May 14-18, 2006)

359. Comparing Climatic Response to Low and High Latitude Volcanic Eruptions (with Luke Oman and Georgiy Stenchikov; IAVCEI International Conference on Continental Volcanism, Guangzhou, China, May 14-18, 2006)

360. Climate system response to the Toba mega eruption (Invited presentation, with Caspar Ammann and Samuel Levis, presented by Caspar Ammann; IAVCEI International Conference on Continental Volcanism, Guangzhou, China, May 14-18, 2006)

361. Volcanic Test of Arctic Oscillation Variability in the IPCC AR4 Climate Models (Invited presentation, with Georgiy Stenchikov, Kevin Hamilton, Ronald J. Stouffer, V. Ramaswamy, Ben Santer, and Hans-F. Graf; IAVCEI International Conference on Continental Volcanism, Guangzhou, China, May 14-18, 2006)

362. Volcanic Eruptions and the Environment: The Historic Record (Invited presentation, Euroscience Open Forum, Munich, Germany, July 15-19, 2006)

363. Geoengineering with volcanic eruptions (Invited presentation; with Luke Oman and Georgiy Stenchikov, Managing Solar Radiation Workshop, Moffett Field, California, November 18-19, 2006)

364. Global warming (Invited presentation; CDC NCEH/ATSDR 7th National Environmental Health Conference, Atlanta, Georgia, December 5, 2006)

365. The role of groundwater reservoir in continental water cycle: Observations and modeling (Invited presentation; with Ying Fan, Gonzalo Miguez-Macho, Christopher Weaver, and Robert Walko; presented by Ying Fan; AGU Fall Meeting, San Francisco, California, December 11-15, 2006)

366. Groundwater control on soil moisture at continental scales (with Gonzalo Miguez-Macho, Ying Fan, Christopher Weaver, and Robert Walko; presented by Gonzalo Miguez-Macho; AGU Fall Meeting, San Francisco, California, December 11-15, 2006)

367. Groundwater control on land surface fluxes, boundary layer structure, and precipitation (with Richard Anyah, Christopher Weaver, Gonzalo Miguez-Macho, and Ying Fan; presented by Richard Anyah; AGU Fall Meeting, San Francisco, California, December 11-15, 2006)

368. Volcanic Forcing of Climate over the Past 1500 Years: An Improved Ice-Core-Based Index for Climate Models (with Chaochao Gao and Caspar Ammann; presented by Chaochao Gao; AGU Fall Meeting, San Francisco, California, December 11-15, 2006)

369. Can Volcanic Eruptions Produce Ice Ages or Mass Extinctions? (Invited presentation; with Caspar Amman, Luke Oman, Drew Shindell, and Georgiy Stenchikov; AGU Fall Meeting, San Francisco, California, December 11-15, 2006)

370. Modeling the Climate Response of the Laki Eruption - Benjamin Franklin was Right (Invited presentation; with Luke Oman, Georgiy Stenchikov, and Thorvaldur Thordarson; presented by Luke Oman; AGU Fall Meeting, San Francisco, California, December 11-15, 2006)

371. Consequences of Regional Scale Nuclear Conflicts and Acts of Individual Nuclear Terrorism (with Owen B. Toon, Richard Turco, Charles Bardeen, Luke Oman, and Georgiy Stenchikov; presented by Owen B. Toon; AGU Fall Meeting, San Francisco, California, December 11-15, 2006)

372. Potential Fuel Loadings, Fire Ignitions, and Smoke Emissions from Nuclear Bursts in Megacities (with Richard Turco, Owen B. Toon, Charles Bardeen, Luke Oman, and

Georgiy Stenchikov; presented by Richard Turco; AGU Fall Meeting, San Francisco, California, December 11-15, 2006)

373. Regional Simulations of Stratospheric Lofting of Smoke Plumes (Invited presentation; with Georgiy Stenchikov and Michael Fromm; presented by Georgiy Stenchikov; AGU Fall Meeting, San Francisco, California, December 11-15, 2006)

374. Climatic Consequences of Regional Nuclear Conflicts (with Luke Oman, Georgiy Stenchikov, Owen B. Toon, Charles Bardeen, and Richard Turco; presented by Luke Oman; AGU Fall Meeting, San Francisco, California, December 11-15, 2006)

375. Nuclear Winter Revisited: Still the Most Dangerous Potential Environmental Consequence of Human Actions (with Luke Oman and Georgiy Stenchikov; AGU Fall Meeting, San Francisco, California, December 11-15, 2006)

376. Modeling verifies the widespread effects of the 1783-84 Laki eruption (with Thor Thordarson, Luke Oman, Georgiy Stenchikov, and Chaochao Gao; presented by Thor Thordarson; Volcanic and Magmatic Studies Group Winter 2007 Meeting, Oxford, England, January 4-5, 2007)

377. Global Warming and the Impact on Coastal Communities (Invited presentation; Southeast Regional Offshore Wind Power Symposium, Charleston, South Carolina, February 26-27, 2007)

378. The 1982 El Chichón Volcanic Eruption: A Review of the Aerosol Cloud Distribution and Observed Climatic Effects (Also served as Session Chair; AGU Joint Assembly, Acapulco, México, May 21-25, 2007)

379. Can volcanic eruptions produce ice ages or mass extinctions? (with Caspar Amman, Luke Oman, Drew Shindell, and Georgiy Stenchikov; International Union of Geodesy and Geophysics XXIV General Assembly, Perugia, Italy, July 2-13, 2007)

380. Mechanism of Climate Warming after Supervolcano Eruptions (with Luke Oman and Georgiy Stenchikov; presented by Georgiy Stenchikov; International Union of Geodesy and Geophysics XXIV General Assembly, Perugia, Italy, July 2-13, 2007)

381. Climatic consequences of nuclear conflict – nuclear winter is still a threat (Invited presentation; Nuclear Weapons: The Final Pandemic Preventing Proliferation and Achieving Abolition, Royal Society of Medicine, London, England, October 3-4, 2007)

382. Global Warming (Invited presentation; Preparing for Climate Change Liability, New Orleans, Louisiana, November 29-30, 2007)

383. Volcanic Eruptions and Climate: Sulfates are More Important Than Halogens in Producing Climate Change (Invited presentation; AGU Fall Meeting, San Francisco, California, December 10-14, 2007)

384. Climate Model Simulations of Tropical and Polar Stratospheric Aerosol Injection: Cooling but Drought (Also served as Session Chair; with Luke Oman and Georgiy Stenchikov; AGU Fall Meeting, San Francisco, California, December 10-14, 2007)

385. Defining New Roles for Scientific Professional Organizations in Society? (Invited presentation; AGU Fall Meeting, San Francisco, California, December 10-14, 2007)

386. Regional Climate Modeling over the Marmara Region, Turkey, with Improved Land Cover Data (with Elif Sertel; presented by Elif Sertel; AGU Fall Meeting, San Francisco, California, December 10-14, 2007)

387. Geoengineering: Climate Model Simulations and Why it May be a Bad Idea (Invited presentation; 8th National Conference on Science, Policy, and the Environment, Washington, DC, January 16-18, 2008)

388. Smoke and mirrors: Is geoengineering a solution to global warming? (with Luke Oman and Georgiy Stenchikov; 20th American Meteorological Society Conference on Climate Variability and Change, New Orleans, Louisiana, January 20-24, 2008)

389. Solar dimming and soil moisture trends (Invited presentation; Global Dimming and Brightening Workshop, Ein Gedi, Israel, February 10-14, 2008)

390. Climatic consequences of nuclear conflict (Invited presentation; Nuclear Weapons – The Greatest Peril to Civilization, A conference to imagine our world without them, Yale University, New Haven, Connecticut, February 21-22, 2008)

391. Incorporating Water Table Dynamics in Climate Modeling: Groundwater Influence on Coupled Land-Atmosphere Variability (with Richard Anyah, Christopher P. Weaver, Gonzalo Miguez-Macho, and Ying Fan; 2008 AGU Joint Assembly, Ft. Lauderdale, Florida, May 27-30, 2008)

392. Volcanic Forcing of Climate over the Past 1500 Years: An Improved Ice-Core-Based Index for Climate Models (with Chaochao Gao and Caspar Ammann; IAVCEI General Assembly, Reykjavik, Iceland, August 18-22, 2008)

393. Twenty Reasons Why Geoengineering May Be a Bad Idea (Invited presentation; 16th Biennial AMS/AGU Joint Heads and Chairs Meeting, National Center for Atmospheric Research, Boulder, Colorado, October 16-17, 2008)

394. Acid Deposition From Stratospheric Geoengineering With Sulfate Aerosols (with Ben Kravitz, Luke Oman, and Georgiy Stenchikov; presented by Ben Kravitz; AGU Fall Meeting, San Francisco, California, December 15-19, 2008)

395. The Practicality of Geoengineering (with Allison Marquardt, Ben Kravitz, and Georgiy Stenchikov; AGU Fall Meeting, San Francisco, California, December 15-19, 2008)

396. Climate Effects of the 2008 Okmok and Kasatochi Eruptions (Invited presentation; with Ben Kravitz, Luke Oman, Georgiy Stenchikov, and Allison Marquardt; presented by Ben Kravitz; AGU Fall Meeting, San Francisco, California, December 15-19, 2008)

397. The Global Soil Moisture Data Bank and Scales of Soil Moisture Variations with Applications to Network Design (Invited presentation; Soil Moisture and Soil Temperature Observations and Applications: A Joint U.S. Climate Reference Network (USCRN) – National Integrated Drought Information System (NIDIS) Workshop, Oak Ridge, Tennessee, March 3-5, 2009)

398. The Many Problems with Geoengineering Using Stratospheric Aerosols (Invited presentation; American Physical Society April Meeting, Denver, Colorado, May 2-5, 2009)

399. Arctic Stratospheric Geoengineering with Spring or Summer Injections (Invited presentation; with Allison Marquardt, Ben Kravitz, and Georgiy Stenchikov; AGU Joint Assembly, Toronto, Canada, May 24-27, 2009)

400. Observational Evidence of the Impact of Groundwater Pumping on Streamflow: The High Plains Aquifer, USA. (With M. Deniz Kustu and Ying Fan; presented by M. Deniz Kustu; AGU Joint Assembly, Toronto, Canada, May 24-27, 2009)

401. The Need for Organized Research on Geoengineering Using Stratospheric Aerosols (Invited presentation; Geoengineering Options to Respond to Climate Change: Steps to Establish a Research Agenda, National Academy of Sciences, Washington, DC, June 15-16, 2009)

402. Impact of land cover change on the summer climate of the Marmara Region, Turkey (With Elif Sertel and Cankut Ormeci; presented by Elif Sertel; Global Conference on Global Warming 2009, Istanbul, Turkey, July 5-9, 2009)

403. Geoengineering with stratospheric aerosols: Climate model simulations, injection options, and concerns (Invited presentation; Gordon Research Conference: Radiation & Climate, New London, New Hampshire, July 5-10, 2009)

404. Geoengineering with stratospheric sulfate aerosols in the boreal spring (with Ben Kravitz, Allison Marquardt, and Georgiy Stenchikov; presented by Ben Kravitz; Gordon Research Conference: Radiation & Climate, New London, New Hampshire, July 5-10, 2009)

405. Volcanic Eruptions and Climate (Keynote Lecture; NOAA National Weather Service, Northeast Regional Operational Workshop XI, Albany, New York, November 4, 2009)

406. A Proposal for Standardized Geoengineering Experiments for CMIP5 (Invited presentation; Strategic Workshop on Geoengineering Research, Hamburg, Germany, November 25-26, 2009)

407. Great Plains irrigation produces enhanced summer precipitation in the Midwest (with Anthony DeAngelis, Ying Fan, M. Deniz Kustu, and David A. Robinson; AGU Fall Meeting, San Francisco, California, December 14-18, 2009)

408. North American Land Data Assimilation (NLDAS) Data: 30 Years of Hourly Gridded Precipitation, Surface Meteorology and Fluxes, Soil Moisture, Runoff, and Snow Cover Available at the NASA Goddard GES DISC (with David Mocko and 19 others; presented by David Mocko; AGU Fall Meeting, San Francisco, California, December 14-18, 2009)

409. Effects of the Time of Year on Climate Impacts Due to Volcanic Eruptions (with Ben Kravitz and Georgiy L. Stenchikov; presented by Ben Kravitz; AGU Fall Meeting, San Francisco, California, December 14-18, 2009)

410. Effects of Stratospheric Geoengineering on the South Asian Monsoon (Invited presentation; UNEP Sponsored International Expert Workshop on Emerging Issues in Climate Change, "State of Tropospheric Temperature, Pollution, Snow, Melting Glaciers and Potential Impact on Monsoon and High Altitude Vegetation in the Himalayas-Tibet Plateau," New Delhi, India, December 28-29, 2009)

411. Great Plains irrigation produces enhanced summer precipitation in the Midwest (with Anthony DeAngelis, Ying Fan, M. Deniz Kustu, and David A. Robinson; 90th American Meteorological Society Annual Meeting, Atlanta, Georgia, January 17-21, 2010)

412. Peace Corps Masters International program at Rutgers (International Forum of Meteorological Societies Global Meeting One, Atlanta, Georgia, January 19-20, 2010)
413. A Proposal for Standardized Geoengineering Experiments for CMIP5 (Asilomar International Conference on Climate Intervention Technologies, Pacific Grove, California, March 22-26, 2010)
414. The Geoengineering Model Intercomparison Project (GeoMIP) (with Ben Kravitz; European Geosciences Union General Assembly 2010, Vienna, Austria, May 3-7, 2010)
415. Effects of the 2009 Sarychev Volcanic Eruption on Climate (Invited presentation; with Ben Kravitz and Adam Bourassa; European Geosciences Union General Assembly 2010, Vienna, Austria, May 3-7, 2010)
416. Stratospheric Geoengineering: Climate Modeling, Risks, and Benefits (Invited lecture; Governing Climate Engineering – A Transdisciplinary Summer School, Max-Planck-Institute for Comparative Public Law and International Law, Heidelberg, Germany, July 12-16, 2010)
417. Climatic Consequences of Nuclear Conflict (Invited lecture; Workshop on the Consequences for the Climate of the Planet of a Nuclear War," Havana, Cuba, September 14-15, 2010)
418. Risks of Using Stratospheric Aerosols for Geoengineering (Invited presentation; 29th Annual Conference of the American Association for Aerosol Research, Portland, Oregon, October 25-29, 2010)
419. Ethical Principles for Field Testing SRM (Invited presentation; Workshop on the Ethics of Solar Radiation Management, Missoula, Montana, October 18-20, 2010)
420. Risks of Using Stratospheric Aerosols for Geoengineering (Invited presentation; Beijing Forum – The Harmony of Civilizations and Prosperity for All, Commitments and Responsibilities for a Better World, Beijing, China, Nov. 5-7, 2010)
421. Regional Climate Modeling of Volcanic Eruptions and the Arctic Climate System: A Baffin Island Case Study (with Mira Losic; presented by Mira Losic; AGU Fall Meeting, San Francisco, California, December 13-17, 2010)
422. Evaluation of temporal and spatial patterns of SMOS soil moisture retrievals using in situ soil observations over the central United States (with Thomas W. Collow; presented by Thomas W. Collow; AGU Fall Meeting, San Francisco, California, December 13-17, 2010)
423. Effects of Stratospheric Sulfate Geoengineering on Food Supply in China (with Lili Xia; presented by Lili Xia; AGU Fall Meeting, San Francisco, California, December 13-17, 2010)
424. Stratospheric geoengineering with black carbon aerosols (with Ben Kravitz; presented by Ben Kravitz; AGU Fall Meeting, San Francisco, California, December 13-17, 2010)
425. Regional Responses to Stratospheric Geoengineering: The Need for GeoMIP (Geoengineering Model Intercomparison Project) (Invited presentation; with Ben Kravitz; AGU Fall Meeting, San Francisco, California, December 13-17, 2010)

426. Geoengineering and adaptation (AGU Fall Meeting, San Francisco, California, December 13-17, 2010)
427. Using Soil Moisture Ocean Salinity (SMOS) retrievals to study the Mississippi River basin water budget (with Thomas W. Collow; American Meteorological Society Annual Meeting, Seattle, Washington, January 23-27, 2011)
428. Geoengineering (Invited lecture; Stratospheric Processes and their Relation to Climate (SPARC) Scientific Steering Group Meeting, Pune, India, February 1-5, 2011)
429. Two myths about nuclear winter ("New START and Nuclear Winter: Climatic Consequences of the Nuclear Weapons Agreement," AAAS 2011 Annual Meeting, Washington, DC, February 17-21, 2011)
430. Regional Climate Modeling of Volcanic Eruptions and the Arctic Climate System: A Baffin Island Case Study (with Mira Losic; presented by Mira Losic; 41st Annual Arctic Workshop, Montreal, Canada, March 2-4, 2011)
431. Smoke and mirrors: Is geoengineering a solution to global warming? (Invited lecture; Working Group on Fate of Mountain Glaciers in the Anthropocene, Pontifical Academy of Sciences, Vatican City, Italy, April 2-4, 2011)
432. Impact of global solar dimming on atmospheric dynamics and precipitation using NCAR-Community Earth System Model (CESM1) (with S. Tilmes, J.-F. Lamarque, M. Mills, D. Marsh, J. Hurrell, and B. Kravitz; presented by S. Tilmes; European Geosciences Union General Assembly 2011, Vienna, Austria, April 4-8, 2011)
433. Using in situ soil moisture observations to evaluate SMOS soil moisture retrievals (with Thomas Collow; Second SMAP Cal/Val Workshop, Oxnard, California, May 3-5, 2011)
434. Geoengineering Risks (Invited talk; Keck Institute for Space Sciences Study Conference on Monitoring of Geo-Engineering Effects and Their Natural and Anthropogenic Analogues, California Institute of Technology, Pasadena, May 24-26, 2011)
435. Geoengineering Potentials and Myths (Invited talk; Workshop on Climate, Society, and Technology, Beckman Center of the National Academies, Irvine, California, June 7-8, 2011)
436. Solar Radiation Management Concerns (Invited talk: IPCC Expert Meeting on Geoengineering, Lima, Peru, June 20-22, 2011)
437. Science and Technology of Solar Radiation Management (Invited talk: IPCC Expert Meeting on Geoengineering, Lima, Peru, June 20-22, 2011)
438. Climatic consequences of nuclear conflict (Invited talk: Severe Atmospheric Aerosol Events Conference, Hamburg, Germany, August 11-12, 2011)
439. Steve Schneider and Nuclear Winter (Invited talk: 2011 Stephen Henry Schneider Symposium, Boulder, Colorado, August 24-27, 2011)
440. GeoMIP (Invited presentation; 15th Session of the Working Group on Coupled Modelling, October 19-21, 2011, Boulder Colorado)
441. Geoengineering Model Intercomparison Project (GeoMIP) update (with Ben Kravitz and Olivier Boucher; WCRP Open Science Conference, Denver, Colorado, October 24-28, 2011)

442. Agricultural feedbacks on stratospheric sulfate geoengineering (with Lili Xia; presented by Lili Xia; WCRP Open Science Conference, Denver, Colorado, October 24-28, 2011)
443. Use of a regional climate model to infer impacts of volcanic eruptions on Baffin Island climate (with Mira Losic; presented by Mira Losic; WCRP Open Science Conference, Denver, Colorado, October 24-28, 2011)
444. Stratospheric geoengineering with black carbon aerosols (with Ben Kravitz; WCRP Open Science Conference, Denver, Colorado, October 24-28, 2011)
445. Smoke and Mirrors: Is Geoengineering a Solution to Global Warming? (Invited plenary talk; International Scientific Conference on Problems of Adaptation to Climate Change, Moscow, Russia, November 7-9, 2011)
446. Potential threats and future challenges of geoengineering (Invited presentation; "Geoengineering the Climate, An Issue for Peace and Security Studies?" International Workshop, University of Hamburg, Germany, November 10-11, 2011)
447. Toba Eruption Simulations with 74 ka B.P. Forcing (AGU Fall Meeting, San Francisco, California, December 5-9, 2011)
448. Inferring Impacts of Volcanic Eruptions on Baffin Island Climate Using a Regional Climate Model (with Mira Losic; presented by Mira Losic; AGU Fall Meeting, San Francisco, California, December 5-9, 2011)
449. Impacts of Geoengineering and Nuclear War on Chinese Agriculture (with Lili Xia; presented by Lili Xia; AGU Fall Meeting, San Francisco, California, December 5-9, 2011)
450. Climatic Consequences of Nuclear Conflict (Invited presentation; AGU Fall Meeting, San Francisco, California, December 5-9, 2011)
451. Monitoring of Geoengineering Effects and their Natural and Anthropogenic Analogues (with Riley M. Duren, Graeme L. Stephens, and Douglas G. MacMynowski; presented by Riley M. Duren; AGU Fall Meeting, San Francisco, California, December 5-9, 2011)
452. The Sublime Pleasures of Reviewing Manuscripts (Invited presentation; AGU Fall Meeting, San Francisco, California, December 5-9, 2011)
453. Using Soil Moisture Observations to Study Climate Variations and to Evaluate Climate Models (Invited presentation; Joint Meeting of the Second International Soil Sensing Technology Conference, the Soil Physics Technical Committee Annual Meeting, and the ASA Sensor-based Water Management Community, Honolulu, Hawaii, January 3-7, 2012)
454. Using Soil Moisture Observations as Ground Truth for Remote Sensing (Invited presentation; with Thomas H. Collow; Joint Meeting of the Second International Soil Sensing Technology Conference, the Soil Physics Technical Committee Annual Meeting, and the ASA Sensor-based Water Management Community, Honolulu, Hawaii, January 3-7, 2012)
455. Smoke and Mirrors: Is Geoengineering a Solution to Global Warming? (Invited presentation; Science and Humanities Conference, Mexican Academy of Sciences, Mexico City, January 18-20, 2012)

456. The difficulty in evaluating Soil Moisture Ocean Salinity (SMOS) satellite retrievals of soil moisture over the central United States with currently available in situ observations (with Thomas Collow; presented by Thomas Collow; AMS Annual Meeting, New Orleans, Louisiana, January 22-26, 2012)

457. The Geoengineering Model Intercomparison Project (GeoMIP) (Invited presentation; 19th Stratospheric Processes and their Relation to Climate (SPARC) Scientific Steering Group (SSG) Meeting, Zurich, Switzerland, February 8, 2012)

458. Volcanic Perturbations to the Stratospheric Aerosol Layer in the Last Decade: OSIRIS Measurements (with Adam E. Bourassa, William Randel, Terry Deshler, Doug Degenstein, and E. J. Llewellyn; AGU Chapman Conference on Volcanism and the Atmosphere, Selfoss, Iceland, June 10-16, 2012)

459. Volcanic eruptions as an analog for geoengineering (Invited presentation; AGU Chapman Conference on Volcanism and the Atmosphere, Selfoss, Iceland, June 10-16, 2012)

460. Impacts of Volcanic Eruptions on Baffin Island Climate Using a Regional Climate Model (with Mira Losic; presented by Mira Losic; AGU Chapman Conference on Volcanism and the Atmosphere, Selfoss, Iceland, June 10-16, 2012)

461. Simulation of Little Ice Age Initiation on Baffin Island Using Coupled Model Intercomparison Project/Paleoclimate Modeling Intercomparison Project (CMIP5/PMIP3) Models (with Mira Berdahl; presented by Mira Berdahl; AGU Fall Meeting, San Francisco, California, December 3-7, 2012)

462. Volcanic Eruptions and Climate (Invited presentation; AGU Fall Meeting, San Francisco, California, December 3-7, 2012)

463. Impacts of Stratospheric Sulfate Geoengineering on Chinese Agricultural Production (with Lili Xia; presented by Lili Xia; AGU Fall Meeting, San Francisco, California, December 3-7, 2012) (also chaired session)

464. Climate model response from the Geoengineering Model Intercomparison Project (GeoMIP) (with Ben Kravitz and 21 others; presented by Ben Kravitz; AGU Fall Meeting, San Francisco, California, December 3-7, 2012) (also chaired session)

465. Climatic impacts of nuclear war (Invited presentation; International Campaign to Abolish Nuclear Weapons (ICAN) Civil Society Forum, Oslo, Norway, March 2-3, 2013)

466. Agriculture Impacts of Regional Nuclear Conflict (with Lili Xia, Michael Mills, and Owen Brian Toon; presented by Lili Xia; European Geosciences Union General Assembly 2013, Vienna, Austria, April 7-12, 2013)

467. Climatic Consequences and Agricultural Impact of Regional Nuclear Conflict (with Michael Mills, Owen Brian Toon, and Lili Xia; European Geosciences Union General Assembly 2013, Vienna, Austria, April 7-12, 2013)

468. Impacts of Balancing CO_2 Increases with Solar Insolation Reductions (from the GeoMIP G2 scenario) on Chinese Agricultural Production (with Lili Xia; presented by Lili Xia; GeoMIP Workshop, Institute for Advanced Sustainability Studies, Potsdam, Germany, April 15-16, 2013)

469. Trying to Tell the World about Nuclear Winter – Denial Ain't Just a River in Egypt (AGU Chapman Conference on Communicating Climate Science: A Historic Look to the Future, Colorado, June 8-13, 2013)
470. No persistent North Atlantic Cooling during the Little Ice Age in Paleoclimate Modeling Intercomparison Project 3 Last Millennium Simulations (with Mira Berdahl; IAVCEI 2013 Scientific Assembly, Kagoshima, Japan, July 20-24, 2013)
471. Volcanic eruptions as an analog for geoengineering (IAVCEI 2013 Scientific Assembly, Kagoshima, Japan, July 20-24, 2013)
472. Stratospheric Sulfur Geoengineering – Benefits and Risks (Invited presentation; Stratospheric Sulfur and its Role in Climate Workshop, Atlanta, Georgia, October 28-31, 2013) (also chaired session)
473. Volcanic eruptions as analogs for geoengineering and nuclear winter (Keynote speaker; Invited presentation; Statistics and Climate Workshop, University of Oslo, Oslo, Norway, November 11-12, 2013)
474. Geoengineering (Invited presentation; WMO Commission for Atmospheric Sciences, Technical Conference "Responding to the environmental stressors of the 21st century," Antalya, Turkey, November 18-19, 2013)
475. New Results from the Geoengineering Model Intercomparison Project (GeoMIP) (with Ben Kravitz; AGU Fall Meeting, San Francisco, California, December 9-13, 2013)
476. Communicating Certainty About Nuclear Winter (AGU Fall Meeting, San Francisco, California, December 9-13, 2013)
477. Impacts on Chinese Agriculture of Geoengineering and Smoke from Fires Ignited by Nuclear War (with Lili Xia; presented by Lili Xia; Fall Meeting, San Francisco, California, December 9-13, 2013)
478. The Geoengineering Model Intercomparison Project (GeoMIP), a CMIP5 Coordinated Experiment (with Ben Kravitz; 94th American Meteorological Society Annual Meeting, Atlanta, Georgia, February 3-7, 2014)
479. Direct Insertion of SMOS Soil Moisture Products into a Numerical Weather Forecast Model (with Thomas Collow; presented by Thomas Collow; 94th American Meteorological Society Annual Meeting, Atlanta, Georgia, February 3-7, 2014)
480. The Role of Vegetation Cover on Convective Precipitation Development over the United States Great Plains (with Thomas Collow; presented by Thomas Collow; 94th American Meteorological Society Annual Meeting, Atlanta, Georgia, February 3-7, 2014)
481. How Nuclear Winter Got Into the IPCC Report for the First Time (94th American Meteorological Society Annual Meeting, Atlanta, Georgia, February 3-7, 2014)
482. Impact of the Use of Nuclear Weapons on Climate and Agriculture (Invited presentation; Second Conference on the Humanitarian Impact of Nuclear Weapons, Nayarit, Mexico, February 13-14, 2014)
483. Stratospheric Sulfur Geoengineering - Benefits and Risks (Invited presentation; Physics of Sustainable Energy III, University of California, Berkeley, March 8-9, 2014)

484. Impacts of Geoengineering on Agriculture and Ecosystems (with Lili Xia: Fourth GeoMIP Workshop, Paris, France, April 24-25, 2014)

485. The Geoengineering Model Intercomparison Project (GeoMIP) (Invited presentation; Exploring the Potential and Side Effects of Climate Engineering (EXPECT) Project Meeting, Oslo, Norway, June 2-3, 2014)

486. An introduction to the Geoengineering Model Intercomparison Project (GeoMIP) (with Ben Kravitz; presented by Ben Kravitz; Climate Engineering Conference 2014, Berlin, Germany, August 18-21, 2014)

487. The Past Decade of Climate Engineering Research (Invited presentation; Climate Engineering Conference 2014, Berlin, Germany, August 18-21, 2014)

488. The Moral Hazard of Geoengineering (Invited presentation; Climate Engineering Conference 2014, Berlin, Germany, August 18-21, 2014)

489. GeoMIP6 Draft Proposal for Discussion (Climate Engineering Conference 2014, Berlin, Germany, August 18-21, 2014)

490. Will Climate Engineering Worsen a Climate Emergency? (Climate Engineering Conference 2014, Berlin, Germany, August 18-21, 2014)

491. Nuclear Famine: The Threat to Humanity from Nuclear Weapons (Invited presentation; International Physicians for the Prevention of Nuclear War World Student Congress, Astana, Kazakhstan, August 25-26, 2014)

492. Nuclear Famine: The Threat to Humanity from Nuclear Weapons (Invited presentation; International Physicians for the Prevention of Nuclear War 21st World Congress, Astana, Kazakhstan, August 27-29, 2014)

493. High Latitude Volcanic Eruptions and Climate (Invited presentation; "High-latitude volcanic eruptions and climate: Filling the gaps" Workshop, Stockholm University, Sweden, November 5-7, 2014)

494. Volcanic Eruptions as an Analog for Stratospheric Geoengineering (Invited presentation; "High-latitude volcanic eruptions and climate: Filling the gaps" Workshop, Stockholm University, Sweden, November 5-7, 2014)

495. Understanding responses to geoengineering with natural and anthropogenic analogs (Invited presentation; The World Science Summit on Climate Engineering: Future Guiding Principles and Ethics, U.S. National Academy of Sciences, Washington, DC, December 2-3, 2014)

496. Climate Curriculum Modules on Volcanic Eruptions, Geoengineering, and Nuclear Winter (AGU Fall Meeting, San Francisco, California, December 15-19, 2014)

497. Global Famine after a Regional Nuclear War (Invited presentation; with Lili Xia, Michael J. Mills, Andrea Stenke, and Ira Helfand; AGU Fall Meeting, San Francisco, California, December 15-19, 2014)

498. Impacts on Global Agriculture of Stratospheric Sulfate Injection (with Lili Xia; AGU Fall Meeting, San Francisco, California, December 15-19, 2014)

499. Climate sensitivity of DSSAT under different agriculture practice scenarios in China (with Lili Xia; presented by Lili Xia; AGU Fall Meeting, San Francisco, California, December 15-19, 2014)

500. The El Niño Southern Oscillation and Solar Geoengineering (with Corey Gabriel; presented by Corey Gabriel; AGU Fall Meeting, San Francisco, California, December 15-19, 2014)

501. Multi-Decadal Global Cooling and Unprecedented Ozone Loss Following a Regional Nuclear Conflict (with Michael J. Mills, Owen B. Toon, and Julia M. Lee-Taylor; presented by Michael J. Mills; AGU Fall Meeting, San Francisco, California, December 15-19, 2014)

502. Volcanic eruptions as an analog for stratospheric geoengineering (Invited presentation; American Association for the Advancement of Science Annual Meeting, San Jose, California, February 12-16, 2015)

503. Volcanic Aerosols, Climate, and Stratospheric Geoengineering (Invited presentation; Volcanoes, Climate, and Society; Bicentenary of the Great Tambora Eruption, Bern, Switzerland, April 7-10, 2015)

504. Volcanic Eruptions and Seasonal to Decadal Prediction: Winter Warming, Summer Monsoon Precipitation, ENSO, and Oceanic Variability (Invited presentation; Workshop on Decadal Climate Predictions: Improving our Understanding of Processes and Mechanisms to make Better Predictions, Aspen Global Change Institute, Aspen, Colorado, June 7-12, 2015)

505. Volcanic eruptions as an analog for stratospheric geoengineering: Are we prepared for the next large volcanic eruption? (26th General Assembly of the International Union of Geodesy and Geophysics, Prague, Czech Republic, June 26 – July 2, 2015)

506. Global agricultural impact from the G4 Specified Stratospheric Aerosols (G4SSA) GeoMIP Simulation using the CESM-CAM4 climate model (with Lili Xia, Simone Tilmes, Peter Lawrence, and Danica Lombardozzi; presented by Lili Xia; 26th General Assembly of the International Union of Geodesy and Geophysics, Prague, Czech Republic, June 26 – July 2, 2015)

507. Two Possible Future Climate Scenarios for AgMIP-GGCMI – Sulfate Injection Climate Intervention and Regional Nuclear War (with Lili Xia and Joshua Elliott; presented by Lili Xia; Our Common Future under Climate Change, Paris, France, July 7-10, 2015)

508. Volcanic Eruptions as an Analog for Stratospheric Geoengineering (Invited Presentation; Our Common Future under Climate Change, Paris, France, July 7-10, 2015)

509. Nuclear Famine: The Threat to Humanity from Nuclear Weapons (Our Common Future under Climate Change, Paris, France, July 7-10, 2015)

510. Stratospheric Geoengineering Impacts on El Niño/Southern Oscillation (with Corey Gabriel, presented by Corey Gabriel; Fifth GeoMIP Workshop, National Center for Atmospheric Research, Boulder, Colorado, July 22-23, 2015)

511. Solar radiation change from G4-SSA and its agricultural impact (with Lili Xia, presented by Lili Xia; Fifth GeoMIP Workshop, National Center for Atmospheric Research, Boulder, Colorado, July 22-23, 2015)

512. What we can learn from the next large volcanic eruption (Fifth GeoMIP Workshop, National Center for Atmospheric Research, Boulder, Colorado, July 22-23, 2015)

513. Impacts from the G4 Specified Stratospheric Aerosols (G4SSA) GeoMIP simulation on climate, chemistry, and agriculture, using the CESM-CAM4chem model (with S. Tilmes, L. Xia, M. Mills, A. Robock, D. Lombardozzi, P. Lawrence, A. Badger, and CESM-CAM4-chem modeling group; presented by S. Tilmes; IGAC/SPARC Chemistry-Climate Model Initiative (CCMI) Workshop, Rome, Italy, October 7-9, 2015)

514. What We Can Learn from the Next Large Volcanic Eruption (AGU Fall Meeting, San Francisco, California, December 14-18, 2015)

515. Stratospheric sulfate geoengineering impacts on global agriculture (with Lili Xia, Peter Lawrence, and Danica Lombardozzi; presented by Lili Xia; AGU Fall Meeting, San Francisco, California, December 14-18, 2015)

516. Geoengineering (Invited talk (via Skype); International Workshop on Climate Engineering: Toward (non-)Research Collaboration in the Asia-Pacific region, University of Tokyo, Tokyo, Japan, March 22-23, 2016)

517. Sulfate Injection Geoengineering Impact on Agriculture (Invited talk; with Lili Xia; presented by Lili Xia; International Workshop on Climate Engineering: Toward (non-)Research Collaboration in the Asia-Pacific region, University of Tokyo, Tokyo, Japan, March 22-23, 2016)

518. Climate Consequences of Nuclear War (Invited talk; Reducing the Dangers of Nuclear War, Massachusetts Institute of Technology, Cambridge, Massachusetts, April 2, 2016)

519. Strengthening the connection between efforts to avert climate change and efforts to avert nuclear war (Invited talk; Reducing the Dangers of Nuclear War, Massachusetts Institute of Technology, Cambridge, Massachusetts, April 2, 2016)

520. Volcanic Eruptions and Climate: Outstanding Research Issues (Invited presentation; with Brian Zambri and Joanna Slawinska; European Geosciences Union General Assembly 2016, Vienna Austria, April 17-22, 2016)

521. Volcanic Impacts on the Atlantic Multidecadal Oscillation and Initiation of the Little Ice Age (with Joanna Slawinska, Robert Tomas, and Dimitrios Giannakis; European Geosciences Union General Assembly 2016, Vienna Austria, April 17-22, 2016)

522. The Model Intercomparison Project on the climatic response to volcanic forcing (VolMIP) (with Davide Zanchettin, Claudia Timmreck, Myriam Khodri, Gabi Hegerl, Anja Schmidt, Matthew Toohey, Francesco S.R. Pausata, Benjamin Black, Oliver Bothe, Jason M. English, Edwin Gerber, Hans F. Graf, Allegra N. LeGrande, Graham Mann, Timothy Osborn, Steven J. Phipps, Christoph C. Raible, Angelo Rubino, Björn Stevens, Didier Swingedouw, Kostas Tsigaridis, and Qiong Zhang; presented by Claudia Timmreck; European Geosciences Union General Assembly 2016, Vienna Austria, April 17-22, 2016)

523. Reconstruction of the Tambora forcing with global aerosol models: Challenges and limitations (with Myriam Khodri, Davide Zanchettin, Claudia Timmreck, William Ball, Susanne E. Bauer, Slimane Bekki, Sandip Dhomse, Hans Graf, Allegra N. LeGrande, Graham Mann, Marion Marchand, Lauren Marshall, Michael Mills, Ulrike Niemeier, Virginie Poulain, Alan Robock, Anja Schmidt, Andrea Stenke, Matt Toohey, Kostas

Tsigaridis, Fiona Tummon; presented by Myriam Khodri; European Geosciences Union General Assembly 2016, Vienna Austria, April 17-22, 2016)

524. Winter Warming and Summer Monsoon Reduction after Volcanic Eruptions in Coupled Model Intercomparison Project 5 Climate Models (Stratospheric Sulfur and its Role in Climate (SSiRC) Workshop, Potsdam, Germany, April 25-28, 2016)

525. Winter Warming and Summer Monsoon Reduction after Volcanic Eruptions in Coupled Model Intercomparison Project 5 Climate Models (Invited presentation; with Brian Zambri and Joanna Slawinska; First Workshop on Volcanic Impacts and Society, Lamont-Doherty Earth Observatory, Columbia University, Palisades, New York, June 6-8, 2016)

526. Forcing-Dependent Winter Warming and Summer Monsoon Reduction after Volcanic Eruptions in the Goddard Institute for Space Studies E2-R Climate Model (with Brian Zambri; presented by Brian Zambri; First Workshop on Volcanic Impacts and Society, Lamont-Doherty Earth Observatory, Columbia University, Palisades, New York, June 6-8, 2016)

527. Relevance of Volcanic Eruptions for Decadal to Centennial Fluctuations of Last Millennium's Arctic Sea Ice Extent (with Joanna Slawinska; presented by Joanna Slawinska; First Workshop on Volcanic Impacts and Society, Lamont-Doherty Earth Observatory, Columbia University, Palisades, New York, June 6-8, 2016)

528. A comparison of sulfate injection geoengineering and solar reduction geoengineering (with Lili Xia and Simone Tilmes, presented by Lili Xia; Sixth GeoMIP Workshop, University of Oslo, Oslo, Norway, June 21-22, 2016)

529. The G4Foam Experiment: Global Climate Impacts of Regional Ocean Albedo Modification (with Corey Gabriel and Lili Xia, presented by Corey Gabriel; Sixth GeoMIP Workshop, University of Oslo, Oslo, Norway, June 21-22, 2016)

530. Ethical Aspects of Climate Engineering (Invited presentation; Sixth GeoMIP Workshop, University of Oslo, Oslo, Norway, June 21-22, 2016)

531. State of climate geoengineering investigation (Invited presentation; Climate Geoengineering Governance Meeting, Carnegie Council for Ethics in International Affairs, New York, New York, September 25, 2016)

532. Exxon and AGU; Denying Deniers A Platform (Invited presentation; AGU Fall Meeting, San Francisco, California, December 12-16, 2016)

533. Climate Curriculum Modules on Volcanic Eruptions, Geoengineering, and Nuclear Winter (AGU Fall Meeting, San Francisco, California, December 12-16, 2016)

534. New AgMIP Scenarios: Impacts of Volcanic Eruptions, Geoengineering, or Nuclear War on Agriculture (with Lili Xia; AGU Fall Meeting, San Francisco, California, December 12-16, 2016)

535. Impacts of Solar Radiation Management on Surface Ozone (with Lili Xia, Peer Nowack and Simone Tilmes; presented by Lili Xia; AGU Fall Meeting, San Francisco, California, December 12-16, 2016)

536. Dangerous Climate Velocities from Geoengineering Termination: Potential Biodiversity Impacts (with Christopher Trisos, Jessica Gurevitch, Giuseppe Amatulli, Lili Xia, and

Brian Zambri; presented by Christopher Trisos; AGU Fall Meeting, San Francisco, California, December 12-16, 2016)

537. The G4Foam Experiment: Global Climate Impacts of Regional Ocean Albedo Modification (with Corey J. Gabriel and Lili Xia; presented by Corey J. Gabriel; AGU Fall Meeting, San Francisco, California, December 12-16, 2016)

538. Modeling Climate Impacts of the 1783-1784 Laki Eruption in Iceland (with Brian Zambri, Michael Mills, and Anja Schmidt; presented by Brian Zambri; AGU Fall Meeting, San Francisco, California, December 12-16, 2016)

539. Investigating Evolution of Sulfur Species as Sources of Inter-model Variability in the VolMIP-Tambora Aerosol Climate Model Ensemble (with Margot Clyne, Michael .J Mills, J. F. Lamarque, Davide Zanchettin, Myriam Khodri, Claudia Timmreck, Matthew Toohey, Ulrike Niemeier, William Ball, Eugene Rozanov, Andrea Stenke, Fiona Tummon, Graham Mann, Sandip Dhomse, Lauren Marshall, and Anja Schmidt; presented by Margot Clyne; AGU Fall Meeting, San Francisco, California, December 12-16, 2016)

540. Relevance of Volcanic Eruptions for Decadal to Centennial Fluctuations of the Last Millennium's Arctic Sea Ice Extent (with Joanna Slawinska, Lili Xia, and Brian Zambri; presented by Joanna Slawinska; AGU Fall Meeting, San Francisco, California, December 12-16, 2016)

541. Recent Work: Volcanic Eruptions and Climate (Invited presentation; Scientific Steering Group Meeting, Stratospheric Sulfur in Relation to Climate (SSiRC) Project, Bern, Switzerland, January 30 – February 2, 2017)

542. Climatic and Agricultural Impacts of Nuclear War (Invited presentation; Workshop: U.S. Engagement in the Humanitarian Consequences of Nuclear Weapons Debate, Stanford University, Stanford, California, February 10-11, 2017)

543. Impacts of Solar Radiation Management on Surface Ozone (with Lili Xia, Peter Nowack, and Simone Tilmes; presented by Lili Xia; CESM Winter Group Meeting, Boulder, Colorado, February 27-March 3, 2017)

544. Geoengineering research (Invited presentation; Forum on U.S. Solar Geoengineering Research, Washington, DC, March 23-24, 2017)

545. Climate disruption from limited nuclear war (Invited presentation; Toward a Fundamental Change in Nuclear Weapons Policy Conference, United States Capitol Visitor Center, Washington, DC, April 27, 2017)

546. Climate effects of large-scale nuclear war (Invited presentation; Toward a Fundamental Change in Nuclear Weapons Policy Conference, United States Capitol Visitor Center, Washington, DC, April 27, 2017)

547. The 1783-1784 CE Laki eruption: Earth system impacts & future research directions (Invited presentation; with Anja Schmidt, Brian Zambri, and Michael Mills; presented by Anja Schmidt; 2nd Volcanic Impacts on Climate and Society (VICS) Workshop, Zaragoza, Spain, May 9, 2017)

548. Volcanic sulfate deposition from 1815 Mt. Tambora (with Lauren Marshall, Anja Schmidt, Matthew Toohey, Ken S. Carslaw, Graham W. Mann, Michael Sigl, Myriam Khodri,

Claudia Timmreck, Davide Zanchettin, William Ball, Slimane Bekki, Sandip Dhomse, Jean-Francois Lamarque, Allegra LeGrande, Michael J. Mills, Ulrike Niemeier, Virginie Poulain, Eugene Rozanov, Andrea Stenke, Timofei Sukhodolov, Simone Tilmes, Kostas Tsigaridis, and Fiona Tummon; presented by Lauren Marshall; PAGES 5th Open Science Meeting, Zaragoza, Spain, May 9-13, 2017)

549. Volcanic Eruptions as Historical Actors in Chinese Dynastic Collapse (with Chaochao Gao, Francis Ludlow, Al Matthews, Alexander Stine, Yuqing Pan, and Michael Sigl; presented by Francis Ludlow; PAGES 5th Open Science Meeting, Zaragoza, Spain, May 9-13, 2017)

550. Volcanic Eruptions as the Cause of the Little Ice Age (with Joanna Slawinska; PAGES 5th Open Science Meeting, Zaragoza, Spain, May 9-13, 2017)

551. Sources of inter-model variability in the VolMIP-Tambora experiment (with Margot Clyne, Michael Mills, Jean-Francois Lamarque, Myriam Khodri, Graham Mann, Lauren Marshall, Anja Schmidt, Claudia Timmreck, Matthew Toohey, Fiona Tummon, and Davide Zanchettin; presented by Margot Clyne; PAGES 5th Open Science Meeting, Zaragoza, Spain, May 9-13, 2017)

552. Modeling Climate Impacts of the 1783-1784 Laki Eruption in Iceland (with Brian Zambri, Alan Robock, Anja Schmidt, and Michael Mills; presented by Brian Zambri; PAGES 5th Open Science Meeting, Zaragoza, Spain, May 9-13, 2017)

553. Agricultural Impacts of Volcanic Eruptions, Geoengineering, and Nuclear War (Invited presentation; with Lili Xia; AgMIP-IIASA International Workshop, Global Gridded Crop Model Initiative side meeting, Laxenburg, Austria, June 15-16, 2017)

554. Stratospheric Sulfate Geoengineering Impacts on Agriculture and Air Pollution (Invited presentation; with Lili Xia, Simone Tilmes, Danica Lombardozzi, Peter Lawrence, Peer J. Nowack, and Joshua Elliott, presented by Lili Xia; Gordon Research Conference on Climate Engineering; Newry, Maine, July 23-28, 2017)

555. Dangerous consequences of geoengineering implementation and termination for species and ecological systems (with Jessica Gurevitch, Christopher Trisos, Giuseppe Amatulli, Brian Zambri, and Lili Xia; presented by Jessica Gurevitch; Ecological Society of America Annual Meeting, Portland, Oregon, August 6-11, 2017)

556. Volcanic Eruptions as the Cause of the Little Ice Age (with Joanna Slawinska, IAVCEI 2017 Scientific Assembly, Portland, Oregon, August 14-18, 2017)

557. Modeling Climate Impacts of the 1783-1784 Laki Eruption in Iceland (with Brian Zambri, Anja Schmidt, and Michael Mills; presented by Brian Zambri; IAVCEI 2017 Scientific Assembly, Portland, Oregon, August 14-18, 2017)

558. Multi-model comparison of the volcanic sulfate deposition from the 1815 Mt. Tambora eruption (with Lauren Marshall, Anja Schmidt, Matthew Tsigaridis, Ken Carslaw, Graham Mann, Michael Mills, Jean-Francois Lamarque, Fiona Tummon, Simone Tilmes, Sandip Dhomse, Davide Zanchettin, Myriam Khodri, Claudia Timmreck, Michael Sigl, William Ball, Slimane Bekki, Allegra LeGrande, Ulrike Niemeier, Virginie Poulain, Eugene Rozanov, Andrea Stenke, and Kostas Tsigaridis; presented by Lauren Marshall; IAVCEI 2017 Scientific Assembly, Portland, Oregon, August 14-18, 2017)

559. El Niño-Southern Oscillation Response to Tropical Stratospheric Volcanism (Invited presentation; with Myriam Khodri, Takeshi lzumo, Jerome Vialard, Serge Janicot, Christophe Cassou, Matthieu Lengaigne, Juliette Mignot, Guillaume Gastineau, Eric Guilyardi, and Michael J. McPhaden; presented by Myriam Khodri; IAVCEI 2017 Scientific Assembly, Portland, Oregon, August 14-18, 2017)

560. The Geoengineering Model Intercomparison Project: History, accomplishments, limitations, and future directions (Climate Engineering Conference 2017, Berlin, Germany, October 9-12, 2017)

561. SRM impacts on ground level ozone (with Lili Xia, Peer Nowack, and Simone Tilmes; Climate Engineering Conference 2017, Berlin, Germany, October 9-12, 2017)

562. Impacts of solar geoengineering on agriculture and ecosystems (Impacts World 2017, Potsdam, Germany, October 11-13, 2017)

563. Climate Impacts of Explosive Volcanism (Invited Keynote Lecture, Symposium on "The Coldest Centuries in 8000 Years: The Little Ice Age Causes and Human Consequence," University of Colorado, Boulder, November 3-4, 2017)

564. Volcanic Eruptions as the Cause of the Little Ice Age (with Brian Zambri; presented by Brian Zambri; AGU Fall Meeting, New Orleans, Louisiana, December 11-15, 2017)

565. Impacts of Stratospheric Black Carbon on Agriculture (with Lili Xia and Joshua Elliott; presented by Lili Xia; AGU Fall Meeting, New Orleans, Louisiana, December 11-15, 2017)

566. Impacts of Stratospheric Sulfate Geoengineering on PM2.5 (with Lili Xia, Simone Tilmes, Michael J Mills, Jadwiga Richter, Ben Kravitz, and Douglas MacMartin; AGU Fall Meeting, New Orleans, Louisiana, December 11-15, 2017)

567. How Can Tropical Explosive Volcanic Eruptions Trigger El Niño? (with Myriam Khodri, Takeshi Izumo, Jérôme Vialard, Serge Janicot, Christophe Cassou, Matthieu Lengaigne, Eric Guilyardi, Guillaume Gastineau, Juliette Mignot, Nicolas Lebas, and Michael J McPhaden; presented by Myriam Khodri; AGU Fall Meeting, New Orleans, Louisiana, December 11-15, 2017)

568. AGU-JpGU Great Debate (Invited presentation; AGU Fall Meeting, New Orleans, Louisiana, December 11-15, 2017)

569. Panel Discussion on Geoengineering (Invited presentation; AGU Fall Meeting, New Orleans, Louisiana, December 11-15, 2017)

570. Stratospheric Sulfur Geoengineering - Benefits and Risks (Invited presentation; AMS 98th Annual Meeting, Austin, Texas, January 7-11, 2018)

571. New Nuclear Winter Simulations with the Whole Atmosphere Community Climate Model 4 (WACCM4) (with Joshua Coupe, Charles G. Bardeen, and Owen B. Toon; presented by Joshua Coupe; AMS 98th Annual Meeting, Austin, Texas, January 7-11, 2018)

572. The Causes of the Little Ice Age (Invited presentation; Volcanic Impacts on Climate and Society (VICS) Workshop, Tucson, Arizona, January 12-14, 2018)

573. Modeling Climate Impacts of the 1783-1784 Laki Eruption in Iceland (with Brian Zambri, Anja Schmidt, and Michael J. Mills; presented by Brian Zambri; Volcanic Impacts on Climate and Society (VICS) Workshop, Tucson, Arizona, January 12-14, 2018)

574. The Causes of the Little Ice Age (with Brian Zambri; European Geosciences Union General Meeting 2018; Vienna, Austria, April 9-13, 2018)

575. How Can Tropical Explosive Volcanic Eruptions Trigger El Niño? (with Myriam Khodri, Takeshi Izumo, Jérôme Vialard, Serge Janicot, Christophe Cassou, Matthieu Lengaigne, Juliette Mignot, Guillaume Gastineau, Eric Guilyardi, Nicolas Lebas, and Michael J. McPhaden; presented by Myriam Khodri; European Geosciences Union General Meeting 2018; Vienna, Austria, April 9-13, 2018)

576. Modeling Climate Impacts of the 1783-1784 Laki Eruption in Iceland (with Brian Zambri, Anja Schmidt, and Michael Mills; presented by Brian Zambri; European Geosciences Union General Meeting 2018; Vienna, Austria, April 9-13, 2018)

577. Simulation of self-lofting of smoke in the stratosphere from the "mother of all pyroCb" British Columbia injection on August 12, 2017 (with Charles Bardeen, Joshua Coupe, O. Brian Toon, Michael Fromm, and David Peterson; European Geosciences Union General Meeting 2018; Vienna, Austria, April 9-13, 2018)

578. Simulated aerosol size as leading cause of inter-model disagreement within the VolMIP-Tambora pre-study (with Margot Clyne, Jean-Francois Lamarque, Michael Mills, Brian Toon, Myriam Khodri, Davide Zanchettin, Claudia Timmreck, Anja Schmidt, Matthew Toohey, Lauren Marshall, William Ball, Nicolas Bellouin, Mohit Dalvi, Sandip Dhomse, Graham Mann, Ulrike Niemeier, Eugene Razanov, Andrea Stenke, and Fiona Tummon; presented by Margo Clyne; European Geosciences Union General Meeting 2018; Vienna, Austria, April 9-13, 2018)

579. Great Debate: Low-risk geo-engineering: are techniques available now? (Invited presentation; European Geosciences Union General Meeting 2018; Vienna, Austria, April 9-13, 2018)

580. Introduction to GeoMIP (Eighth GeoMIP Workshop, ETH (Eidgenössische Technische Hochschule, Swiss Federal Institute of Technology), Zurich, Switzerland, April 16-17, 2018)

581. G4Foam and G4SSA experiments - Are others interested? (Eighth GeoMIP Workshop, ETH (Eidgenössische Technische Hochschule, Swiss Federal Institute of Technology), Zurich, Switzerland, April 16-17, 2018)

582. Are Climate Scientists Ready to Observe and Model the Next Big Volcanic Eruption? (Invited presentation; Asia Oceania Geosciences Society 15th Annual Meeting, Honolulu, Hawaii, June 3-8, 2018)

583. The Causes of the Little Ice Age (Invited presentation, with Brian Zambri; presented by Brian Zambri; Asia Oceania Geosciences Society 15th Annual Meeting, Honolulu, Hawaii, June 3-8, 2018)

584. Ocean Impacts of Nuclear Winter: Preliminary Results (with Cheryl S. Harrison, Nikki Lovenduski, Charles Bardeen, Josh Coupe, Clay Tabor, and Brian Toon; presented by Cheryl S. Harrison; Effects of Climate Change on the World's Oceans, 4th International Symposium, Washington, DC, June 4-8, 2018)

585. Economic Analysis of Agricultural Impacts of Nuclear War between India and Pakistan: The Case of 5 Tg of Soot (with Gal Hochman, Hainan Zhang, Lili Xia, Saketh Aleti, Dominique van der Mensbrugghe, and Jonas Jägermeyr; presented by Gal Hochman; 2018 Northeast Agricultural and Resource Economics Association Annual Meeting, Philadelphia, Pennsylvania, June 9-12, 2018)

586. Economic Analysis of Climatic and Agricultural Impacts of Nuclear War (with Hainan Zhang, Gal Hochman, Lili Xia, Jonas Jägermeyr, Saketh Aleti, and Dominique van der Mensbrugghe; presented by Hainan Zhang; 21st Annual Conference on Global Economic Analysis, Cartagena, Columbia, June 13-15, 2018)

587. Modeling Nuclear Winter in CESM & A predictive fisheries catch metric for CMIP6-OMIP Earth System models (with Cheryl Harrison, Phil Neubauer, Nikki Lovenduski, Jessica Luo, Samantha Stevenson, Chuck Bardeen, Brian Toon, Josh Coupe, and Clay Tabor; presented by Cheryl Harrison; 2018 CESM Workshop, Boulder, Colorado, June 18-20, 2018)

588. Geoengineering is Not a Solution to Global Warming for the Caribbean and Tropical Societies (Key speaker; International Conference on the Management of Energy, Climate and Air for a Sustainable Society (MECAS2018); Havana, Cuba, July 4-6, 2018)

589. Impacts of Stratospheric Sulfate Geoengineering on PM2.5 (with Lili Xia, Simone Tilmes, Michael Mills, Jadwiga Richter, Ben Kravitz, and Douglas MacMartin; SPARC (Stratosphere-troposphere Processes And their Role in Climate) 2018 General Assembly, Kyoto, Japan, October 1-5, 2018)

590. Volcanic Eruptions and Climate (Invited presentation: Workshop on the 30th Anniversary of the Grupo Óptica Atmosférica de Camagüey (GOAC), Camagüey, Cuba, October 23-26, 2018)

591. Climatic and Humanitarian Impacts of Nuclear War (Invited presentation: Workshop on the 30th Anniversary of the Grupo Óptica Atmosférica de Camagüey (GOAC), Camagüey, Cuba, October 23-26, 2018)

592. Stratospheric Sulfur Geoengineering – Benefits and Risks (Invited presentation; Annual Meeting of the Unión Geofísica Mexicana, Puerto Vallarta, México, October 27 – November 2, 2018)

593. Climatic and Humanitarian Impacts of Nuclear War (Invited presentation; Annual Meeting of the Unión Geofísica Mexicana, Puerto Vallarta, México, October 27 – November 2, 2018)

594. Aerosol Evolution and Global Stratospheric Circulation Impacts of the 1783–1784 Laki Volcanic Eruption in Iceland (AGU Fall Meeting, Washington, DC, December 10-14, 2018)

595. Ethics of Nuclear Winter and Climate Intervention (Geoengineering) Research and of Making Policy Recommendations (AGU Fall Meeting, Washington, DC, December 10-14, 2018)

596. Impacts on Agriculture from Surface Ozone and Ultraviolet Radiation Changes Due to Stratospheric Sulfate Injection (with Lili Xia, Simone Tilmes and Danica L. Lombardozzi; presented by Lili Xia; AGU Fall Meeting, Washington, DC, December 10-14, 2018)

597. Nuclear Winter Temperature Patterns Driven By Extreme Stratospheric Circulation Changes (with Joshua Livingston Coupe, Charles Bardeen, and Brian Toon; presented by Joshua Coupe; AGU Fall Meeting, Washington, DC, December 10-14, 2018)

598. Economic Analysis of Climatic and Agricultural Impacts of Nuclear War (with Hainan Zhang, Gal Hochman, Lili Xia, Jonas Jägermeyr, Saketh Aleti, and Dominique van der Mensbrugghe; presented by Hainan Zhang; AGU Fall Meeting, Washington, DC, December 10-14, 2018)

599. PyroCb smoke rises and persists in the global stratosphere: Constraints on injected smoke mass, black carbon abundance, and ozone reaction rates with organic coatings (with Pengfei Yu, Owen B. Toon, Charles Bardeen, Yunqian Zhu, Robert W. Portmann, Troy D. Thornberry, Sean M. Davis, Eric T. Wolf, Karen Hepler Rosenlof, David A. Peterson, and Michael D. Fromm; presented by Pengfei Yu; AGU Fall Meeting, Washington, DC, December 10-14, 2018)

600. Rapid Expansion of Nuclear Arsenals by Pakistan and India Threatens Regional and Global Catastrophes (with Owen B. Toon, Charles Bardeen, Roy J. Peterson, and Lili Xia; presented by Owen B. Toon; AGU Fall Meeting, Washington, DC, December 10-14, 2018)

601. A regional nuclear conflict has global implications for food security (with Jonas Jägermeyr, Lili Xia, Michael Joseph Puma, Joshua Wright Elliott, and Christoph Mueller; presented by Jonas Jägermeyr; AGU Fall Meeting, Washington, DC, December 10-14, 2018)

602. Stratospheric sulfur geoengineering – Benefits and risks (Workshop on Climate Extremes: New Ideas for Quantifying Changes and Improving Resilience, Riederalp, Switzerland, March 19-23, 2019)

603. Discussion Session On Geoengineering (with Jim Haywood; Workshop on Climate Extremes: New Ideas for Quantifying Changes and Improving Resilience, Riederalp, Switzerland, March 19-23, 2019)

604. Causes of the Climate Response to the 1783–1784 Laki Volcanic Eruption in Iceland (with Brian Zambri, Michael J. Mills, and Anja Schmidt; Fourth Volcanic Impacts on Climate and Society (VICS) Workshop: The Common Era and Beyond, Cambridge, United Kingdom, April 13-16, 2019)

605. Climatic and Agricultural Impacts of Nuclear War (with Gal Hochman, Hainan Zhang, Saketh Aleti, Lili Xia, and Dominique van der Mensbrugghe; presented by Gal Hochman; Northeast Agricultural and Resource Economics Association 2019 Annual Meeting, Portsmouth, New Hampshire, June 9-12, 2019)

606. Introduction to Solar Geoengineering (Invited presentation; International Symposium on Climate Geoengineering, Rio de Janeiro, Brazil, June 10-11, 2019)

607. Benefits and Risks of Solar Geoengineering (Invited presentation; International Symposium on Climate Geoengineering, Rio de Janeiro, Brazil, June 10-11, 2019)

608. Climatic and Agricultural Impacts of Nuclear War (with Gal Hochman, Hainan Zhang, Saketh Aleti, Lili Xia, and Dominique van der Mensbrugghe; presented by Gal Hochman; Global Trade Analysis Project 22nd Annual Conference on Global Economic Analysis, Warsaw, Poland, June 19-21, 2019)

609. Climatic and Agricultural Impacts of Nuclear War (Invited presentation; with Gal Hochman, Hainan Zhang, Saketh Aleti, Lili Xia, and Dominique van der Mensbrugghe; presented by Gal Hochman; International Agricultural Trade Research Consortium Symposium, "Trading for good – Agricultural trade in the context of climate change adaptation and mitigation: synergies, obstacles and possible solutions," Seville, Spain, June 23-25, 2019)

610. Rapid Expansion of Nuclear Arsenals by Pakistan and India Threatens Regional and Global Catastrophes: Sources of Uncertainty for Climate Effects (Invited presentation; with Owen Brian Toon, Charles Bardeen, Lili Xia, Hans Kristensen, Matthew McKinzie, Jerry Peterson, Cheryl Harrison, Nicole Lovenduski, Richard Turco; presented by Owen Brian Toon; Science to Understand Megafire Interactions with the Atmosphere Workshop, Los Alamos National Laboratory, Los Alamos, New Mexico, July 15-16, 2019)

611. Volcanic Eruption Signals in Large Ensembles (The Large Ensembles Workshop, National Center for Atmospheric Research, Boulder, Colorado, July 24-26, 2019)

612. Solar Radiation Management through Stratospheric Aerosols (Invited presentation; NCAR/UCAR Climate Intervention Strategies Workshop 2019, Boulder, Colorado, July 30-31, 2019)

613. Impacts and Risks of Solar Climate Interventions on Human and Environmental Systems (Invited presentation; Developing a Research Agenda and Research Governance Approaches for Climate Intervention Strategies that Reflect Sunlight to Cool Earth Workshop, National Academies of Science, Engineering, and Medicine, University of Colorado, Boulder, August 7-8, 2019)

614. Impacts of Sulfate Injection Geoengineering on PM2.5 (with Lili Xia, Simone Tilmes, Michael Mills, Jadwiga Richter, Ben Kravitz, Douglas G. MacMartin, and Daniele Visioni; Ninth GeoMIP Workshop, Beijing Normal University, Beijing, China, August 14-17, 2019)

615. Great Debate: Utility, Ethics, and Feasibility of Geoengineering (Invited presentation; Ninth GeoMIP Workshop, Beijing Normal University, Beijing, China, August 14-17, 2019)

616. Redistribution of malaria risk by solar geoengineering as a model for health impacts in developing countries (with Colin J. Carlson, Shweta Bansal, Rita Colwell, Mohammad Sharif Hossain, Mohammed Mofizur Rahman, Christopher Trisos, and Mohammad Shafiul Alam; presented by Colin J. Carlson, American Society of Tropical Medicine and Hygiene 68th Annual Meeting, National Harbor, Maryland, November 20-24, 2019)

617. Agriculture Responses To Nuclear Winter (with Lili Xia and Charles Bardeen; AGU Fall Meeting, San Francisco, California, December 9-13, 2019)

618. A Large, Sustained El Niño-Like Response To Nuclear Conflict (with Joshua Livingston Coupe, Samantha Stevenson, Nicole S. Lovenduski, Cheryl S. Harrison, Charles Bardeen, and Brian Toon; presented by Joshua Livingston Coupe; AGU Fall Meeting, San Francisco, California, December 9-13, 2019)

619. Rapid Expansion of Nuclear Arsenals by Pakistan and India Portends Regional and Global Catastrophes (with Owen B. Toon, Charles Bardeen, Lili Xia, Hans Kristensen, Matthew McKinzie, Roy J. Peterson, Cheryl S. Harrison, Nicole S. Lovenduski, and Richard P.

Turco; presented by Owen B. Toon; AGU Fall Meeting, San Francisco, California, December 9-13, 2019)

620. Influence of smoke composition on climate effects from fires following nuclear war (Invited presentation; with Charles Bardeen, Owen B. Toon, Douglas Edward Kinnison, Pengfei Yu, and Francis Vitt; presented by Charles Bardeen; AGU Fall Meeting, San Francisco, California, December 9-13, 2019)

621. Impacts of Nuclear War on Terrestrial Carbon Processes (with Lili Xia, Charles Bardeen, and Nicole S. Lovenduski; presented by Lili Xia; AGU Fall Meeting, San Francisco, California, December 9-13, 2019)

622. A new ocean state after nuclear winter (with Cheryl S. Harrison, Tyler Rohr, Alice K. DuVivier, Elizabeth Maroon, Charles Bardeen, Nicole S. Lovenduski, Owen B. Toon, Joshua Livingston Coupe, Philipp Neubauer, Samantha Stevenson, and Jessica Stevens; presented by Cheryl S. Harrison; AGU Fall Meeting, San Francisco, California, December 9-13, 2019)

623. A regional nuclear conflict has global implications for food security (with Jonas Jägermeyr, Lili Xia, Joshua Wright Elliott, Christoph Mueller, Christian Folberth, Nikolay Khabarov, Wenfeng Liu, Sam S. Rabin, Michael Joseph Puma, Alison Heslin, Charles Bardeen, Owen B Toon, Ian Foster, and Florian Zabel; presented by Jonas Jägermeyr; AGU Fall Meeting, San Francisco, California, December 9-13, 2019)

624. The importance of trade to food security: The case of the extreme climatic effect caused by a regional nuclear conflict (with Gal Hochman, Hainan Zhang, Saketh Aleti, Lili Xia, and Dominique van der Mensbrugghe; presented by Hainan Zhang; AGU Fall Meeting, San Francisco, California, December 9-13, 2019)

625. Robust winter warming over the Northern Hemisphere continents under stratospheric sulfate geoengineering (with Amy H. Butler, Antara Banerjee, and Lorenzo M Polvani; presented by Antara Banerjee; AGU Fall Meeting, San Francisco, California, December 9-13, 2019)

626. Rapid Expansion of Nuclear Arsenals by Pakistan and India Portends Regional and Global Catastrophes (with Owen Brian Toon, C. G. Bardeen, L. Xia, H. Kristensen, M. McKinzie, R. J. Peterson, C. Harrison, N. S. Lovenduski, and R. Turco; presented by Brian Toon; American Meteorological Society 100th Annual Meeting, January 12-17, 2020)

627. Volcanic Eruption Signals in Large Ensembles (American Meteorological Society 100th Annual Meeting, January 12-17, 2020)

628. Geoengineering Model Intercomparison Project (GeoMIP) Progress Report and Future Plans (with Ben Kravitz; American Meteorological Society 100th Annual Meeting, January 12-17, 2020)

629. Quantifying the Contributions of the Stratospheric and Tropospheric Pathways toward the Acceleration of the Stratospheric Polar Vortex after Nuclear War (with Joshua L. Coupe, C. Bardeen, and O. B. Toon; presented by Joshua Coupe; American Meteorological Society 100th Annual Meeting, January 12-17, 2020)

630. Sulfate Geoengineering Impacts on Agriculture (with Lili Xia, Rutgers, J. Jägermeyr, and S. Tilmes; presented by Lili Xia; American Meteorological Society 100th Annual Meeting, January 12-17, 2020)

631. Modeling the response of crops to rapid cooling from stratospheric aerosols (with Lili Xia; International Crop Modelling Symposium (iCROPM2020), Montpellier, France, February 3-6, 2020)

632. Nuclear Weapons 101: Risks, consequences and solutions (Invited presentation; ICAN Paris Forum: How to ban bombs and influence people, Paris, France, February 14-15, 2020)

633. Workshop: Assembling your team (Invited presentation; ICAN Paris Forum: How to ban bombs and influence people, Paris, France, February 14-15, 2020)

634. A Large, Sustained El Niño-Like Response to Nuclear Conflict (with Joshua L. Coupe, Samantha Stevenson, Nicole S Lovenduski, Cheryl S Harrison, Charles Bardeen, and Brian Toon; presented by Samantha Stevenson; Ocean Sciences Meeting, San Diego, California, February 16-21, 2020)

635. A new ocean state after nuclear winter (with Cheryl S. Harrison, Tyler Rohr, Alice K. DuVivier, Elizabeth Maroon, Nicole S. Lovenduski, Charles Bardeen, Samantha Stevenson, Owen B. Toon, Joshua L. Coupe, Jessica Stevens, Philipp Neubauer, and Victor Rangel; presented by Cheryl S. Harrison; Ocean Sciences Meeting, San Diego, California, February 16-21, 2020)

636. Climatic and Humanitarian Impacts of Nuclear War (Invited presentation; via Skype; The Humanitarian Consequences and Risks of Nuclear Weapons, Expert Meeting; International Committee of the Red Cross (ICRC) and the International Federation of Red Cross and Red Crescent Societies (IFRC), Geneva, Switzerland, March 2, 2020)

637. Potential ecological impacts of climate intervention by solar radiation management (with Jessica Gurevitch, Phoebe Zarnetske, Janet Franklin, Peter M. Groffman, Cheryl Harrison, Jessica Hellmann, Forrest M. Hoffman, Shan Kothari, Simone Tilmes, Jin Wu, Lili Xia, Daniele Visioni, and Chang-En Yang; presented by Jessica Gurevitch; Ecological Society of America Annual Meeting, Online, August 3-6, 2020)

638. Effects of Stratospheric Sulfate Injection on Tropopause Height (with Laura de la Torre Ramos, Petr Šácha, Simone Tilmes, and Juan A. Añel; presented by Laura de la Torre Ramos; American Geophysical Union Fall Meeting, Online, December 7-14, 2020)

639. Diffuse radiation impact on vegetation under Geoengineering Model Intercomparison Project G6 experiments (with Lili Xia, Simone Tilmes and Ben Kravitz; presented by Lili Xia; American Geophysical Union Fall Meeting, Online, December 7-14, 2020)

640. Stratospheric Aerosol Climate Intervention Designed to Minimize Negative Impacts (Invited presentation; with Lili Xia; American Geophysical Union Fall Meeting, Online, December 7-14, 2020)

641. Marine wild-capture fisheries after nuclear war (with Kim Scherrer, Cheryl S, Harrison, Ryan Heneghan, Eric D, Galbraith, Charles Bardeen, Joshua L, Coupe, Jonas Jägermeyr, Nicole S, Lovenduski, August Luna, Jessica Stevens, Samantha Stevenson, Owen B, Toon, and Lili Xia; presented by Kim Scherrer; American Geophysical Union Fall Meeting, Online, December 7-14, 2020)

642. Global Agricultural Impacts of Stratospheric Aerosol Intervention With An Overshoot Scenario (with Lili Xia, Jonas Jägermeyr, and Simone Tilmes; American Geophysical Union Fall Meeting, Online, December 7-14, 2020)

643. A new ocean state after abrupt cooling events (with Cheryl S. Harrison, Tyler Rohr, Alice K. DuVivier, Elizabeth Maroon, Scott D. Bachman, Charles Bardeen, Joshua L. Coupe, Victoria Garza, Nicole S. Lovenduski, Philipp Neubauer, Victor Rangel, Jessica Stevens, Samantha Stevenson, and Owen B. Toon; presented by Cheryl S. Harrison; American Geophysical Union Fall Meeting, Online, December 7-14, 2020)

644. The threat of nuclear winter ("Reducing the Threat of Nuclear War: Invest in Minds not Missiles" Conference, Massachusetts Peace Action, Online, January 23, 2021)

645. Climatic and humanitarian impacts of nuclear war (Invited presentation; Workshop on Ending Nuclear Weapons Before They End Us; Back from the Brink and International Campaign to Abolish Nuclear Weapons; Online; March 4, 2021)

646. Climatic and humanitarian impacts of nuclear war (Invited presentation; Stanford Existential Risks Conference; Online; April 17-18, 2021)

647. Economic incentives modify agricultural impacts of a regional nuclear war concerning food insecurity and famine (presented by Gal Hochman; with Gal Hochman, Hainan Zhang, Lili Xia, Saketh Aleti, Dominique Y. van der Mensbrugghe, and Jonas Jägermeyr; Western Economic Association 96th Annual Conference; Online; June 27 – July 1, 2021)

648. Beyond impact: Ecology helping to guide scenarios of climate intervention (with Jessica Hellmann, Janet Franklin, Jessica Gurevitch, Cheryl Harrison, Jonathan Knott, Simone Tilmes, Daniele Visioni, Lili Xia and Phoebe L. Zarnetske; presented by Jessica Hellmann; Ecological Society of America Annual Meeting; Online; August 2-6, 2021)

649. Global modeling of impact-relevant stratospheric aerosol climate intervention scenarios (with Simone Tilmes, Douglas E. MacMartin, Jan T. M. Lenaerts, Leo van Kampenhout, Laura Muntjewerf, Lili Xia, Cheryl Harrison, Kristen M. Krumhardt, Michael J. Mills, and Ben Kravitz; presented by Simone Tilmes; Ecological Society of America Annual Meeting; Online; August 2-6, 2021)

650. Winter warming from tropical volcanic eruptions (Stratospheric Sulfur and its Role in Climate Workshop, Online, September 27-29, 2021)

651. Steve Schneider and Nuclear Winter (Invited presentation; American Geophysical Union Fall Meeting, New Orleans, Louisiana, December 13-17, 2021)

652. Global Famine After Nuclear War (with Lili Xia, Kim Scherrer, Cheryl S. Harrison, Jonas Jägermeyr, Charles Bardeen, Owen B. Toon, and Ryan Heneghan; American Geophysical Union Fall Meeting, New Orleans, Louisiana, December 13-17, 2021)

653. Collapse of Antarctic Sea Ice in Climate Model Simulations of Soot Injection into the Stratosphere (with Joshua Livingston Coupe, Cheryl S. Harrison, Alice K. DuVivier, Elizabeth Maroon, Laura Landrum, Scott D. Bachman, and Charles Bardeen; presented by Joshua Livingston Coupe; American Geophysical Union Fall Meeting, New Orleans, Louisiana, December 13-17, 2021)

654. Impacts of Climate-Crop Model Coupling on Predictions of Agricultural Production and Climate with Global Warming and Stratospheric Geoengineering (with Brendan Clark,

Lili Xia, Jadwiga Richter, Peter Lawrence, Danica L. Lombardozzi, and Daniele Visioni; presented by Brendan Clark; American Geophysical Union Fall Meeting, New Orleans, Louisiana, December 13-17, 2021)

655. Potential Ecological Impacts of Climate Intervention with Solar Radiation Modification (Invited presentation; with Phoebe L. Zarnetske, Jessica Gurevitch, Janet Franklin, Jessica Hellmann, Lili Xia, Shan Kothari, Daniele Visioni, Cheryl S. Harrison, Cheng-En Yang, Jin Wu, Peter M Groffman, Simone Tilmes, Forrest M. Hoffman, Brendan Clar4, Jonathan Knott and Kim Scherrer; presented by Phoebe L. Zarnetske; American Geophysical Union Fall Meeting, New Orleans, Louisiana, December 13-17, 2021)

656. Natural Vegetation Responses in Geoengineering Model Intercomparison Project (GeoMIP) G6 Experiments (with Lili Xia, Simone Tilmes, Daniele Visioni, Ben Kravitz, Jin Wu, Shan Kothari, Cheng-En Yang, Forrest M. Hoffman, Phoebe L. Zarnetske, Janet Franklin, Jessica Gurevitch, Brendan Clark, and Jyoti Singh; presented by Lili Xia; American Geophysical Union Fall Meeting, New Orleans, Louisiana, December 13-17, 2021)

657. Feeding the World after Nuclear War: Agricultural Production Shocks as a Threat to Global Food Security (Invited presentation; Global Nuclear Effects Conference, Washington, DC, online, June 1-2, 2022)

658. Stratospheric Sulfur Geoengineering – Benefits and Risks (Invited keynote presentation; Gordon Research Conference on Climate Engineering, Newry, Maine, June 26 – July 1, 2022)

659. Impacts of Nuclear War and Stratospheric Geoengineering on Agriculture (Invited presentation, 2022 Penn State Emergency Food Resilience Symposium, State College, Pennsylvania, online, August 10, 2022)

660. Governance of Climate Intervention (Invited presentation, Workshop on Imagining Environmental Governance in the Anthropocene, Rutgers University, New Brunswick, New Jersey, September 8, 2022)

661. Global Famine after Nuclear War (Invited Plenary Lecture, Fall 2022 Meeting, Division of Nuclear Physics, American Physical Society, New Orleans, Louisiana, October 27-30, 2022)

662. GeoMIP (Invited presentation, Designing Scenarios for Climate Intervention Strategies Workshop, Boulder, Colorado, October 31 – November 2, 2022)

663. Global Famine after Nuclear War (with Lili Xia, Kim Scherrer, Cheryl S Harrison, and Jonas Jägermeyr; American Geophysical Union Fall Meeting, Chicago, Illinois, December 12-16, 2022)

664. How Can Nuclear Winter Science Inform Policy Again? (American Geophysical Union Fall Meeting, Chicago, Illinois, December 12-16, 2022)

665. Panel Discussion: Climate Intervention and Global Climate Change: Technological and Ethical Considerations - A Conversation of Candid Perspectives (Invited presentation, American Geophysical Union Fall Meeting, Chicago, Illinois, December 12-16, 2022)

666. Improving the relationship of photosynthesis and stomatal conductance to chronic ozone exposure in the ozone damage function of Community Land Model 5 (with Jyoti Singh,

Danica L. Lombardozzi, Ella Walmsley, and Lili Xia; presented by Jyoti Singh; American Geophysical Union Fall Meeting, Chicago, Illinois, December 12-16, 2022)

667. Impacts of Stratospheric Aerosol Intervention on Surface Air Pollutants (with Lili Xia, Jadwiga Richter, Daniele Visioni, and Simone Tilmes; presented by Lili Xia; American Geophysical Union Fall Meeting, Chicago, Illinois, December 12-16, 2022)

668. Indian Agricultural Impacts under GeoMIP G6 Experiments (with Nina Grant, Lili Xia, and Jyoti Singh; presented by Nina Grant; American Geophysical Union Fall Meeting, Chicago, Illinois, December 12-16, 2022)

669. Impacts of Ultraviolet Flux from Stratospheric Aerosol Intervention on Agricultural Production (with Mahjabeen Rahman and Lili Xia; presented by Mahjabeen Rahman; American Geophysical Union Fall Meeting, Chicago, Illinois, December 12-16, 2022)

670. Net Ecosystem Production Responses to Individual Climate Forcings Under Stratospheric Aerosol Climate Intervention (with Brendan Clark and Lili Xia; presented by Brendan Clark; American Geophysical Union Fall Meeting, Chicago, Illinois, December 12-16, 2022)

671. The Model Intercomparison Project on the Climatic Response to Volcanic Forcing (VolMIP): Status and Future Perspectives of the Initiative (with Davide Zanchettin, Myriam Khodri, Gabriele C. Hegerl, Kirstin Krüger, Francesco S. R. Pausata, Anja Schmidt, and Matthew Toohey; presented by Davide Zanchettin; American Geophysical Union Fall Meeting, Chicago, Illinois, December 12-16, 2022)

672. Land use change trajectories under stratospheric aerosol intervention (with Sam S. Rabin, Peter Alexander, Almut Arneth, and Lili Xia; presented by Sam S. Rabin; American Geophysical Union Fall Meeting, Chicago, Illinois, December 12-16, 2022)

673. Potential future agricultural production under stratospheric aerosol intervention with adaptive crop calendars (with Sam S. Rabin, Danica L. Lombardozzi, Bill Sacks, Sara Minoli, and Lili Xia; presented by Sam S. Rabin; American Geophysical Union Fall Meeting, Chicago, Illinois, December 12-16, 2022)

674. Benefits and Risks of Stratospheric Geoengineering (Invited presentation; Workshop on Anticipating Future Debates on Climate Intervention, Center for Global Security Research, Lawrence Livermore National Laboratory, Livermore, California, March 14-15, 2023)

675. Introduction to Climate Change and Geoengineering (Invited presentation; Thirteenth GeoMIP Workshop, Exeter, UK, July 3-7, 2023)

676. Nuclear Winter: Global famine after nuclear war (Invited presentation; Workshop on The Increasing Danger of Nuclear Weapons: How Physicists Can Help Reduce the Threat, International Center for Theoretical Physics, Trieste, Italy, October 23-25, 2023)

677. Global Famine After Nuclear War (Invited presentation; Conference on Nuclear Weapons and International Law: The Renewed Imperative in Light of the Russian Invasion of Ukraine, New York State Bar Association, online, November 8, 2023)

678. Trying to Inform Nuclear Policy with Nuclear Winter Theory (AGU Fall Meeting, San Francisco, California, December 11-15, 2023)

679. The Geoengineering Model Intercomparison Project (GeoMIP): Past Successes, Future Plans, and How You Can Participate (with Daniele Visioni; presented by Daniele Visioni; AGU Fall Meeting, San Francisco, California, December 11-15, 2023)

680. Sensitivity of Rice to Ultraviolet Radiation from Stratospheric Aerosol Intervention (with Mahjabeen Rahman and Lili Xia; presented by Mahjabeen Rahman; AGU Fall Meeting, San Francisco, California, December 11-15, 2023)

681. Stratospheric Aerosol Climate Intervention Could Negatively Impact Crop Nutritional Quality (with Brendan Clark, Lili Xia, and Jonas Jägermeyr; presented by Brendan Clark; AGU Fall Meeting, San Francisco, California, December 11-15, 2023)

682. Impacts on Indian Agriculture Due to Solar Climate Intervention Using Crop Suitability and Agroclimatic Indices (with Nina Grant, Lili Xia, and Jyoti Singh; presented by Nina Grant; AGU Fall Meeting, San Francisco, California, December 11-15, 2023)

683. Representation of Diffuse Radiation in Climate Models under Stratospheric Aerosol Intervention (with Lili Xia and T. C. Chakraborty; presented by Lili Xia; AGU Fall Meeting, San Francisco, California, December 11-15, 2023)

684. Impacts of Surface Ozone on Crops in Global Warming and Climate Intervention Scenarios (with Jyoti Singh and Lili Xia; presented by Jyoti Singh; AGU Fall Meeting, San Francisco, California, December 11-15, 2023)

685. Benefits, Risks and Concerns of Stratospheric Aerosol Intervention; Gordon Research Conference on Climate Engineering, Il Ciocco, Italy, February 18-23, 2024)

686. Stratospheric aerosol climate intervention may negatively impact crop nutritional quality (with Brendan Clark, Lili Xia, Sam Rabin, Jonas Jägermeyr, and Jose Guarin; presented by Brendan Clark; Gordon Research Conference on Climate Engineering, Il Ciocco, Italy, February 18-23, 2024)

687. Stratospheric Aerosol Climate Intervention Impacts on Crop Protein (with Brendan Clark, Lili Xia, Sam Rabin, Jonas Jägermeyr, and Jose Guarin; presented by Brendan Clark; Gordon Research Conference on Climate Engineering, Il Ciocco, Italy, February 18-23, 2024)

688. Impacts of Solar Climate Intervention on Indian Rice and Wheat Using Agroclimatic Indices (with Nina Grant, Lili Xia, and Jyoti Singh; presented by Nina Grant; Gordon Research Conference on Climate Engineering, Il Ciocco, Italy, February 18-23, 2024)

689. Agricultural impacts of Solar Radiation Modification (with Jyoti Singh, Lili Xia, Brendan Clark, Nina Grant, Sam Rabin, and Mahjabeen Rahman; presented by Jyoti Singh; Gordon Research Conference on Climate Engineering, Il Ciocco, Italy, February 18-23, 2024)

690. Global famine after nuclear war (Invited Max von Laue Lecture, Meeting of the Condensed Matter Section of the German Physical Society, Berlin, Germany, March 17-22, 2024)

691. Global famine after nuclear war (Invited presentation, Society of Environmental Journalists' 33rd Annual Conference, Philadelphia, Pennsylvania, April 3-7, 2024)

692. Global famine after nuclear war (Invited presentation, Third Annual Conference, Alva Myrdal Centre for Nuclear Disarmament, Uppsala University, Sweden, June 18, 2024, via Zoom)

693. Welcome to the 14th annual GeoMIP workshop (Fourteenth GeoMIP Workshop, Ithaca, NY, July 10-12, 2024)

694. Frontiers of Geophysics Plenary Panel: Climate Intervention Research Issues and Opportunities: Navigating a Thoughtful and Inclusive Path Forward (Invited participation: AGU Annual Meeting, Washington, DC, December 9-13, 2024)

695. Impacts of Strastospheric Aerosol Injection on Thermosteric and Dynamic Sea Level using CESM2 model (with Frederic Kpedonou Bonou, Aubains Hounsou-Gbo, Nathanael Dossa, Maiella Toupe, Marcel Kouakou, Toussaint Mitchodigni, Arnaud Kouekam, Zacharie Sohou, Ben Kravitz, Daniele Visioni and Mari R Tye; presented by Frederic Kpedonou Bonou; AGU Annual Meeting, Washington, DC, December 9-13, 2024)

696. A Global Gridded Crop Model Intercomparison of Maize Production and Protein Content Stratospheric Sulfate Aerosol Climate Intervention (with Brendan Clark, Sam S. Rabin, Jonas Jägermeyr, and José Guarin; presented by Brendan Clark; AGU Annual Meeting, Washington, DC, December 9-13, 2024)

697. Impacts of Stratospheric Aerosol Intervention on Urban Climate (with Lili Xia, Walker Lee, Matthew Henry, Ben Kravitz, Shingo Watanabe, and Jessica Gurevitch; presented by Lili Xia; AGU Annual Meeting, Washington, DC, December 9-13, 2024)

698. Can stratospheric aerosol intervention save coffee and chocolate from climate change? (with Nina Grant, Lili Xia, and James R Kiniry; presented by Nina Grant; AGU Annual Meeting, Washington, DC, December 9-13, 2024)

699. Enhancing Climate Forcing Data for Crop Models: Addressing Challenges in Downscaling and Bias Correction under Climate Intervention and Nuclear Winter Scenarios (with Lili Xia, Jyoti Singh, and Nina Grant; AGU Annual Meeting, Washington, DC, December 9-13, 2024)

700. History of Nuclear Winter Theory (105th Annual Meeting of the American Meteorological Society, New Orleans, Louisiana, January 12-16, 2025)

701. Winter Warming in Northern Eurasia Following the 1783 Laki Volcanic Eruption: the Role of a Persistent Cold-Season Aerosol Cloud (with Linshan Yang, Chaochao Gao, Fei Liu, Weiyi Sun, and Deliang Chen; presented by Chaochao Gao; Future Atmospheric Science Forum, Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, April 17-20, 2025)

702. The Benefits and Risks of Stratospheric Sulfur Geoengineering, An Update (Degrees Global Forum on SRM, Cape Town, South Africa, May 12-16, 2025)

703. Can stratospheric aerosol intervention save coffee and chocolate from climate change? (with Nina Grant, Lili Xia, Brendan Clark, and Jim Kiniry; presented by Nina Grant; Degrees Global Forum on SRM, Cape Town, South Africa, May 12-16, 2025)

704. Welcome to the 15th Annual GeoMIP Workshop (Fifteenth GeoMIP Workshop, Cape Town, South Africa, May 16, 2025)

705. Global Famine After Nuclear War (Nobel Laureate Assembly for the Prevention of Nuclear War, University of Chicago, Chicago, Illinois, July 14-16, 2025)

706. Panel on Effects of Nuclear War (Nobel Laureate Assembly for the Prevention of Nuclear War, University of Chicago, Chicago, Illinois, July 14-16, 2025)

707. Dorothy Hodgkin Lecture: Preventing Global Famine after Nuclear War (Invited keynote lecture, The 63rd Pugwash Conference on Science and World Affairs, "80 Years after the Atomic Bombing; Time for Peace, Dialogue and Nuclear Disarmament," Hiroshima, Japan, November 1-5, 2025) https://pugwash.org/2025/11/01/63rd-pugwash-conference-in-hiroshima-80-years-after-the-atomic-bombing-time-for-peace-dialogue-and-nuclear-disarmament/#jp-carousel-15384

708. Sulfur Exposure for Airplane Passengers from Low-altitude High-latitude Stratospheric Aerosol Injection (AGU25, American Geophysical Union Annual Meeting, New Orleans, Louisiana, December 15-19, 2025)

709. Comparing Machine Learning and Traditional Downscaling Methods for Climate Projections Under Stratospheric Aerosol Intervention (with Nina Grant, Charles Lee, Lili Xia, and Zhao Zhang; presented by Nina Grant; AGU25, American Geophysical Union Annual Meeting, New Orleans, Louisiana, December 15-19, 2025)

710. Keeping Coffee and Chocolate on the Table in a Warming World (with Nina Grant, Lili Xia, and James Kiniry; presented by Nina Grant; AGU25, American Geophysical Union Annual Meeting, New Orleans, Louisiana, December 15-19, 2025)

711. Impacts of nuclear war on global vegetation and human health from enhanced surface ultraviolet radiation (with Shu Xu, Lili Xia, Charles Bardeen, Sasha Madronich, and Soko Setoguchi; presented by Shu Xu; AGU25, American Geophysical Union Annual Meeting, New Orleans, Louisiana, December 15-19, 2025)

712. Assessing Global and Regional Sea Level Responses to Stratospheric Aerosol Injection Using the Community Earth System Model Version 2 (CESM2) (with Frédéric Bonou, Aubains Hounsou-Gbo, Nathanael Dossa, Maiella Toupe, Marcel Kouakou, Arnaud Kouekam, Toussaint Mitchodigni, Zacharie Sohou, Ben Kravitz, Daniele Visioni, and Mari Tye; presented by Frédéric Bonou; AGU25, American Geophysical Union Annual Meeting, New Orleans, Louisiana, December 15-19, 2025)

INVITED LECTURES (since 1984):

1. Department of Meteorology, University of Maryland, College Park, MD, April 26, 1984. (On "Nuclear winter - consequences of nuclear war")
2. University of East Anglia, Norwich, UK, June 19, 1984. (On "Nuclear winter - consequences of nuclear war")
3. Computing Center, USSR Academy of Sciences, Moscow, July 4, 1984. (On "Nuclear winter - consequences of nuclear war")
4. State Hydrological Institute, Leningrad, USSR, July 12, 1984. (On "Nuclear winter - consequences of nuclear war")
5. Second Biennial Conference on the Fate of the Earth, Washington, D.C., September 19-23, 1984. (On "Nuclear winter - consequences of nuclear war")
6. Department of Physics, University of Maryland, Baltimore Campus, September 24, 1984. (On "Nuclear winter - consequences of nuclear war")
7. Daytona Beach Community College, Daytona Beach, Florida, October 12, 1984. (On "Nuclear winter - consequences of nuclear war")

8. Institute of Meteorology, Nanjing, China, November 10, 1984. (On "Nuclear winter - consequences of nuclear war")
9. Royal Observatory, Hong Kong, November 14, 1984. (On "Nuclear winter - consequences of nuclear war")
10. Philippine Atmospheric, Geophysical and Astronomical Services Administration, Quezon City, Philippines, November 16, 1984. (On "Nuclear winter - consequences of nuclear war")
11. University of Wisconsin, Madison, June 24, 1985. (On "Climatic consequences of nuclear war")
12. Institute of Geophysics, Bergen, Norway, August 23, 1985. (On "Climatic consequences of nuclear war")
13. Royal Netherlands Meteorological Institute, De Bilt, Netherlands, August 30, 1985 (On "Climatic consequences of nuclear war")
14. University of Wisconsin, Madison, November 1, 1985. (On "Climatic consequences of nuclear war")
15. University of Rhode Island, Kingston, November 6, 1985. (On "Climatic consequences of nuclear war")
16. Department of Meteorology, San José State University, San José, California, February 24, 1986. (On "Climatic consequences of nuclear war")
17. Michigan Technological University, Houghton, Michigan, October 26, 1986. (On "Climatic consequences of nuclear war")
18. Michigan Technological University, Houghton, Michigan, October 27, 1986. (On "Climatic consequences of nuclear war")
19. Westinghouse Research Laboratories, Pittsburgh, Pennsylvania, November 6, 1986. (On "Climatic consequences of nuclear war")
20. Brookdale Community College, Lincroft, New Jersey, November 26, 1986. (On "Climatic consequences of nuclear war")
21. Department of Meteorology, San José State University, San José, California, December 10, 1986. (On "Climatic consequences of nuclear war")
22. West Maryland College, Westminster, Maryland, April 20, 1987. (On "Climatic consequences of nuclear war")
23. Institute for Meteorology and Geophysics, Alexander von Humboldt University, Berlin, DDR, May 31, 1988. (On "Nuclear winter - consequences of nuclear war")
24. Geophysics Institute, University of Stockholm, Sweden, August 24, 1988. (On "Nuclear winter analogs")
25. Foreign Policy Institute, Johns Hopkins University, Washington, DC, October 12, 1988. (On "A Soviet-American Peace Corps")
26. Physics Department, American University, Washington, DC, February 22, 1989. (On "Nuclear winter")

27. National Association of Home Builders Annual Meeting, Washington, DC, May 19, 1989. (On "Greenhouse warming")
28. National Geographic Society, Washington, DC, June 2, 1989. (On "Greenhouse Warming")
29. NOAA/NASA Summer Institute in Atmospheric Science, College Park, Maryland, July 14, 1989. (On "Nuclear winter")
30. Science, Technology, and Society Seminar, University of Maryland, October 12, 1989. (On "Nuclear Winter")
31. Laboratory for Plasma Research, University of Maryland, October 31, 1989. (On "Greenhouse warming and nuclear winter")
32. Georgetown University Environmental Club, Washington, DC, November 7, 1989. (On "Greenhouse warming")
33. Northwestern University, Physics Department, Evanston, Illinois, November 13, 1989. (On "Nuclear Winter")
34. Purdue University, Department of Earth and Atmospheric Sciences, West Lafayette, Indiana, November 14, 1989. (On "Nuclear winter")
35. State Hydrological Institute, Leningrad, USSR, December 8, 1989. (On "Nuclear Winter")
36. American Association for the Advancement of Science, Washington, DC, January 5, 1990. (On "Life after fellowships," presentation to 40 current Science Fellows.)
37. Michigan Technological University, Department of Geological Engineering, Geology and Geophysics, Houghton, Michigan, April 2, 1990. (On "Nuclear winter")
38. Michigan Technological University, Department of Geological Engineering, Geology and Geophysics, Houghton, Michigan, April 2, 1990. (On "Volcanoes and climate")
39. Michigan Technological University, Symposium on Global Warming and the Future, Houghton, Michigan, April 3, 1990. (On "Greenhouse warming")
40. Physics Department, James Madison University, Harrisonburg, Virginia, September 14, 1990. (On "Nuclear winter")
41. Physics Department, Dickinson College, Carlisle, Pennsylvania, October 15, 1990. (On "Nuclear winter")
42. State Hydrological Institute, Leningrad, USSR, March 21, 1991. (On "Environmental effects of the Gulf War")
43. Computing Center, USSR Academy of Sciences, Moscow, March 26, 1991. (On "Environmental effects of the Gulf War")
44. Geological Society of Washington, Cosmos Club, Washington, DC, April 24, 1991. (On "Greenhouse warming")
45. National Institute of Standards and Technology, Gaithersburg, Maryland, June 7, 1991. (On "Global warming")

46. Earth System Science Center, Pennsylvania State University, University Park, Feb. 12, 1992. (On "Climatic effect of the Mt. Pinatubo eruption")
47. Climate Analysis Center, NOAA, Camp Springs, Maryland, April 28, 1992. (On "Soil moisture observations and calculations")
48. Geophysical Fluid Dynamics Laboratory, NOAA, Princeton University, Princeton, New Jersey, May 4, 1992. (On "Observed and simulated variability of soil moisture")
49. American Geophysical Union press conference on Chapman Conference on Volcanoes and Climate, National Press Club, Washington, DC, May 18, 1992.
50. Department of Meteorology, University of Wisconsin, Madison, October 30, 1992. (On "Volcanoes and climate")
51. National Research Council, National Academy of Sciences, Washington, DC, December 2, 1992. (On "Volcanoes and climate")
52. Scientific Colloquium, NASA Goddard Space Flight Center, Greenbelt, Maryland, March 26, 1993. (On "Volcanoes and climate")
53. Commission of the European Communities Joint Research Centre, Ispra, Italy, May 13, 1993. (On "Nuclear winter update – Is the theory still valid?")
54. Institute of Geography, Academy of Sciences, Beijing, China, July 2, 1993. (On "Soil moisture data and simulations")
55. Department of Geophysics, Peking University, Beijing, China, July 3, 1993. (On "Volcanoes and climate")
56. Department of Geography, University of Tokyo, Japan, July 9, 1993. (On "Volcanoes and climate")
57. Department of Geography, Tokyo Metropolitan University, Japan, July 24, 1993. (On "Volcanoes and climate")
58. Department of Mineral Sciences, Smithsonian Institution, Washington, DC, December 16, 1993. (On "Volcanoes and climate")
59. US Naval Academy, Annapolis, February 7, 1994. (On "Volcanoes and climate")
60. Max-Planck-Institut für Meteorologie, Hamburg, Germany, July 13, 1994. (On "Observed effects of volcanoes in surface temperature and ice core records")
61. Geophysical Fluid Dynamics Laboratory, NOAA, Princeton University, Princeton, New Jersey, October 11, 1994. (On "Soil moisture simulations with a bucket and SSiB as compared to Russian observations")
62. Geophysical Fluid Dynamics Laboratory, NOAA, Princeton University, Princeton, New Jersey, October 25, 1994. (On "Volcanoes and climate")
63. US Naval Academy, Annapolis, January 23, 1995. (On "Volcanoes and climate")
64. Quaternary Research Center, University of Washington, Seattle, March 7, 1995. (On "Observed effects of volcanoes on surface temperature")
65. Volcano Systems Center, University of Washington, Seattle, March 8, 1995. (On "A mechanism for El Niño triggering by the El Chichón ash cloud")

66. Panel on Atmospheric Effects of Aviation, National Research Council, National Academy of Sciences, Washington, DC, July 31, 1995. (On "Volcanic stratospheric aerosols and climate")
67. Department of Hydrology and Water Resources, University of Arizona, Tucson, March 18, 1996. (On "Remote sensing of soil moisture")
68. Institute for the Study of Planet Earth, Laboratory of Tree-Ring Research, and Departments of Atmospheric Sciences and Hydrology and Water Resources, University of Arizona, Tucson, March 18, 1996. (On "Soil moisture observations and modeling")
69. Institute for the Study of Planet Earth and Laboratory of Tree-Ring Research, University of Arizona, Tucson, March 20, 1996. (On "Volcanic eruptions and climate change")
70. Max Planck Institut für Meteorologie, Hamburg, Germany, April, 11, 1996. (On "Soil moisture observations and modeling")
71. Max Planck Institut für Meteorologie, Hamburg, Germany, April, 12, 1996. (On "Winter warming from volcanic eruptions - AMIP confirmation")
72. Université Catholique de Louvain, Louvain-la-Neuve, Belgium, April, 17, 1996 (On "Volcanic eruptions and climate change")
73. Université Catholique de Louvain, Louvain-la-Neuve, Belgium, April, 19, 1996 (On "Soil moisture observations for remote sensing and modeling")
74. Université Catholique de Louvain, Louvain-la-Neuve, Belgium, April, 24, 1996 (On "Volcanic eruptions and El Niño")
75. NASA Goddard DAAC, Greenbelt, Maryland, July 16, 1996 (On "Soil moisture data sets")
76. Flinders University, Adelaide, Australia, July 31, 1996 (On "Volcanic eruptions and climate")
77. New Zealand Meteorological Service, Wellington, New Zealand, August 5, 1996 (On "Volcanic eruptions and climate")
78. US Naval Academy, Annapolis, September 18, 1996. (On "Volcanic eruptions and climate")
79. Undersecretary of Commerce for Atmospheres and Oceans James Baker, November 15, 1996. (On "Stratospheric control of climate")
80. University of New South Wales, Sydney, Australia, December 12, 1996. (On "Remote sensing and modeling of soil moisture")
81. US Naval Academy, Annapolis, February 17, 1997. (On "Volcanic eruptions and climate")
82. University of Maryland, Baltimore County, March 12, 1997. (On "Volcanic eruptions and climate")
83. Brookdale Community College, Lincroft, New Jersey, March 27, 1997. (On "Global warming")
84. Rutgers University, Department of Environmental Sciences, April 18, 1997. (On "Climate model evaluation and remote sensing using soil moisture observations")

85. Rutgers University, Department of Environmental Sciences, April 21, 1997. (On "Modeling and observational studies of the effects of volcanic eruptions on climate")
86. US Senate Foreign Relations Committee, Subcommittee on International Economic Policy, Export and Trade Promotion, June 26, 1997. (On "Global warming: The scientific consensus")
87. University of Delaware, Department of Geography, October 3, 1997. (On "Volcanic eruptions and climate: summer cooling and winter warming")
88. US Naval Academy, Annapolis, October 6, 1997. (On "Volcanic eruptions and climate")
89. US House of Representatives Committee on Science, Subcommittee on Energy and Environment, October 7, 1997. (On "Global warming: State of the science")
90. University of Tokyo, October 23, 1997. (On "Soil moisture observations for remote sensing and model evaluation")
91. Japan Meteorological Agency Headquarters, Tokyo, October 23, 1997. (On "Remote sensing of soil moisture" and "Climate model simulations of winter warming from the 1991 Mt. Pinatubo eruption")
92. Meteorological Research Institute, Japan Meteorological Agency, Tsukuba, October 24, 1997. (On "Remote sensing of soil moisture using SMMR microwave observations")
93. Prince George's Community College, Bowie, Maryland, October 31, 1997. (On "Volcanic eruptions and climate")
94. North Carolina State University, Raleigh, February 2, 1998. (On "Volcanic eruptions and climate")
95. University of Maryland, Department of Chemistry, February 16, 1998. (On "Principles of climatology")
96. State University of New York, Stony Brook, April 1, 1998. (On "Soil moisture observations for model validation, climate analysis and remote sensing")
97. George Mason University, April 10, 1998. (On "Detection of global warming" and debate with S. Fred Singer)
98. Queen's University, Belfast, Northern Ireland, June 24, 1998. (On "Winter warming and summer cooling from volcanic eruptions")
99. Tokyo Metropolitan University, July 28, 1998. (On "Winter warming and summer cooling from volcanic eruptions" and "Soil moisture observations for remote sensing, model evaluation and climate analysis")
100. Institute of Geography, Academy of Sciences, Beijing, China, August 6, 1998. (On "Global soil moisture: model validation and remote sensing")
101. Ministry of Nature and the Environment, Ulaanbaatar, Mongolia, August 13, 1998. (On "Winter warming and summer cooling from volcanic eruptions")
102. University of Wisconsin, Department of Atmospheric and Oceanic Sciences, October 9, 1998. (On "Soil moisture observations for remote sensing, model evaluation, and climatic analysis")

103. Lamont Doherty Earth Observatory, Columbia University, Palisades, NY, October 27, 1998. (On "Stratospheric control of climate")
104. Geology Museum, Rutgers University, New Brunswick, New Jersey, January 30, 1999. (On "Summer cooling and winter warming from volcanic eruptions")
105. Brookdale Community College, Lincroft, New Jersey, April 15, 1999 (On "Global warming")
106. Goddard Institute for Space Studies, Columbia University, New York City, February 4, 2000 (On "Winter warming following volcanic eruptions: Observations and climate model simulations of forced Arctic Oscillation patterns")
107. Environmental and Occupational Health Sciences Institute, Rutgers University, March 9, 2000 (On "Global warming: How much? How soon? How do we know?")
108. NASA Goddard Space Flight Center, Greenbelt, Maryland, June 12, 2000 (On "Volcanic Eruptions and Climate: Winter Warming and Summer Cooling")
109. NASA Goddard Space Flight Center, Greenbelt, Maryland, June 14, 2000 (On "Evidence in Support of Anthropogenic Impacts on Climate")
110. Hong Kong Observatory, July 14, 2000 (On "Volcanic Eruptions and Climate: Winter Warming and Summer Cooling")
111. University of Tokyo, August 4, 2000 (On "Volcanic Eruptions and Climate: Winter Warming and Summer Cooling" and "Using Soil Moisture Observations to Study Climate Variations, to Evaluate Climate Models, and as Ground Truth for Remote Sensing")
112. Royal Meteorological Society, London, England, October 18, 2000 (On "Volcanic Eruptions and Climate: Winter Warming and Summer Cooling")
113. Hadley Centre for Climate Research, Meteorological Office, Bracknell, England, October 19, 2000 (On "Volcanic Eruptions and Climate: Winter Warming and Summer Cooling")
114. University of Bristol, Bristol, England, October 20, 2000 (On "Volcanic Eruptions and Climate: Winter Warming and Summer Cooling")
115. Department of Geology Colloquium, Rutgers University, October 25, 2000 (On "Volcanic Eruptions and Climate: Winter Warming and Summer Cooling")
116. Centre for Climate & Global Change Research, McGill University, Montreal, Canada, January 10, 2001 (On "Volcanic Eruptions and Climate: Winter Warming and Summer Cooling")
117. International Pacific Research Center, University of Hawaii, Honolulu, April 19, 2001 (On "Volcanic Eruptions and Climate: Winter Warming and Summer Cooling")
118. Department of Physics & Astronomy, University of Hawaii, Hilo, April 20, 2001 (On "Volcanic Eruptions and Climate: Winter Warming and Summer Cooling")
119. International Pacific Research Center, University of Hawaii, Honolulu, April 23, 2001 (On "Using Soil Moisture Observations to Study Climate Variations, to Evaluate Climate Models, and as Ground Truth for Remote Sensing")

120. Escuela Politécnica Nacional, Quito, Ecuador, May 23, 2001 (On "Volcanic Eruptions and Climate: Winter Warming and Summer Cooling")
121. Laboratoire de Météorologie Dynamique du CNRS, Paris, France, September 28, 2001 (On "Using Soil Moisture Observations to Study Climate Variations, to Evaluate Climate Models, and as Ground Truth for Remote Sensing")
122. Institute for Marine and Coastal Science, Rutgers University, January 28, 2002 (On "Volcanic Eruptions and Climate: Winter Warming and Summer Cooling")
123. Sustainability Education Center, New York City, February 9, 2002 (On "Global Warming")
124. Geophysical Fluid Dynamics Laboratory, Princeton University, February 21, 2002 (On "Volcanic Eruptions and Climate: Winter Warming and Summer Cooling")
125. Department of Meteorology, University of Maryland, February 28, 2002 (On "Volcanic Eruptions and Climate: Winter Warming and Summer Cooling")
126. COMET Program, National Center for Atmospheric Research, Boulder, Colorado, March 27, 2002 (On "Volcanic Eruptions and Climate: Winter Warming and Summer Cooling")
127. Department of Earth Sciences, Millersville University, Millersville, Pennsylvania, April 4, 2002 (On "Volcanic Eruptions and Climate: Winter Warming and Summer Cooling")
128. International Research Institute, Lamont-Doherty Earth Observatory, Palisades, New York, April 10, 2002 (On "Volcanic Eruptions and Climate: Winter Warming and Summer Cooling")
129. International Pacific Research Center, University of Hawaii, Honolulu, May 28, 2002 (On "The relationship between snow cover, soil moisture, and the Indian summer monsoon: observations and model simulations")
130. International Pacific Research Center, University of Hawaii, Honolulu, May 30, 2002 (On "Mt. Pinatubo as a Test of Climatic Feedback Mechanisms")
131. The Icelandic Meteorological Society, Reykjavík, Iceland, August 28, 2002 (On "Volcanic eruptions and climate")
132. Nordic Academy for Advanced Study (NorFA) Summer School, "Environmental effects of large volcanic eruptions on the Northern Hemisphere," Skaftafell, Iceland, August 30, 2002. (On "Frequency of large volcanic eruptions in the Northern Hemisphere")
133. Meteorological Research Institute, Seoul, Korea, September 23, 2002 (On "The relationship between snow cover, soil moisture, and the Indian summer monsoon: observations and model simulations")
134. Seoul National University, Seoul, Korea, September 25, 2002 (On "Mt. Pinatubo as a test of climatic feedback mechanisms")
135. Korean Meteorological Administration, Seoul, Korea, September 25, 2002, (On "Mt. Pinatubo as a test of climatic feedback mechanisms")
136. Climate Change Forum, Seoul, Korea, September 27, 2002 (On "Global warming")

137. NOAA Aeronomy Laboratory, Boulder, Colorado, October 9, 2002 (On "Mt. Pinatubo as a test of climatic feedback mechanisms")
138. University of Copenhagen, January 6, 2003 (On "Volcanic Eruptions and Climate: Winter Warming and Summer Cooling")
139. University of Victoria, Victoria, British Columbia, Canada, April 28, 2003 (On "Volcanic Eruptions and Climate: Winter Warming and Summer Cooling")
140. Special Libraries Association 2003 Annual Meeting, New York City, June 11, 2003 (On "Global Warming")
141. NASA/UMBC Graduate Student Summer Program, Goddard Space Flight Center, Greenbelt, Maryland, June 13, 2003 (On "Impacts of Volcanic Eruptions on Climate")
142. Dalhousie University, Halifax, Nova Scotia, Canada, July 29, 2003 (On "Volcanic Eruptions and Climate: Winter Warming and Summer Cooling")
143. University of Paris, France, January 5, 2004 (On "Using Soil Moisture Observations to Study Climate Variations, to Evaluate Climate Models, and as Ground Truth for Remote Sensing")
144. Cemagref, Antony, France, January 6, 2004 (On "Using Soil Moisture Observations to Study Climate Variations, to Evaluate Climate Models, and as Ground Truth for Remote Sensing")
145. University of Maine, February 5, 2004 (On "Volcanic Eruptions and Climate: Winter Warming and Summer Cooling")
146. Pennsylvania State University, February 12, 2004 (On "Volcanic Eruptions and Climate: Winter Warming and Summer Cooling")
147. Pennsylvania State University, February 13, 2004 (On "Using Soil Moisture Observations to Study Climate Variations, to Evaluate Climate Models, and as Ground Truth for Remote Sensing")
148. McMurdo Station, Antarctica, September 5, 2004 (On "Global Warming")
149. McMurdo Station, Antarctica, October 3, 2004 (On "Volcanic Eruptions and Climate")
150. University of Chile, Santiago, November 10, 2004 (On "Volcanic Eruptions and Climate")
151. Royal Holloway, University of London, England, March 3, 2005 (On "Volcanic Eruptions and Climate")
152. University of Reading, England, March 4, 2005 (On "Volcanic Eruptions and Climate")
153. Laboratoire de Météorologie Dynamique, Ecole Normale Supérieur, Paris, France, March 10, 2005 (On "Volcanic Eruptions and Climate")
154. Laboratoire de Météorologie Dynamique, Université Pierre et Marie Curie, Paris, France, March 29, 2005 (On "Evaluation of Reanalysis and IPCC Soil Moisture Simulations Using Newly Updated Soil Moisture Observations from the Ukraine, China, and Illinois")
155. Hadley Centre for Climate Prediction and Research, UK Met Office, Exeter, England, May 10, 2005 (On "Evaluation of Reanalysis Soil Moisture Simulations Using Newly Updated Soil Moisture Observations from the Ukraine and China")

156. Hadley Centre for Climate Prediction and Research, UK Met Office, Exeter, England, May 11, 2005 (On "Comparing Climatic Response to Low and High Latitude Volcanic Eruptions")
157. University of Cambridge, England, May 17, 2005 (On "Comparing Climatic Response to Low and High Latitude Volcanic Eruptions")
158. Laboratoire des Sciences du Climat et de l'Environnement, Commissariat à L'énergie Atomique, Saclay, France, June 28, 2005 (On "Evaluation of Reanalysis Soil Moisture Simulations Using Newly Updated Soil Moisture Observations from the Ukraine and China" and "Volcanic Eruptions and Climate")
159. Hurricane Katrina Teach-In, Rutgers University, October 26, 2005 (On "Global warming produces stronger hurricanes")
160. Department of Earth and Environmental Science, Univ. of Pennsylvania, Philadelphia, November 4, 2005 (On "Using Soil Moisture Observations to Study Climate Variations, to Evaluate Climate Models, and as Ground Truth for Remote Sensing")
161. University of Texas, Austin, March 2, 2006 (On "Comparing Climatic Response to Low and High Latitude Volcanic Eruptions")
162. University of Texas, Austin, March 3, 2006 (On "Using Soil Moisture Observations to Study Climate Variations, to Evaluate Climate Models, and as Ground Truth for Remote Sensing")
163. Laboratoire de Météorologie Dynamique, Université Pierre et Marie Curie, Paris, France, March 13, 2006 (On "Comparing Climatic Response to Low and High Latitude Volcanic Eruptions")
164. Brookdale Community College, Lincroft, New Jersey, March 23, 2006 (On "Global Warming")
165. University of Warsaw, Poland, March 31, 2006 (On "Global Warming")
166. University of Warsaw, Poland, March 31, 2006 (On "Using Soil Moisture Observations to Study Climate Variations, to Evaluate Climate Models, and as Ground Truth for Remote Sensing")
167. Zhejiang University, Hangzhou, China, May 24, 2006 (On "Climatic consequences of regional nuclear conflict")
168. University of Hawaii, Honolulu, August 1, 2006 (On "Climatic consequences of regional nuclear conflict")
169. University of Hawaii, Honolulu, August 3, 2006 (On "Climatic response to high latitude eruptions")
170. University of Maryland, College Park, August 31, 2006 (On "Climatic consequences of regional nuclear conflict")
171. University of Colorado, Boulder, September 27, 2006 (On "Climatic consequences of regional nuclear conflict")
172. University of Colorado, Boulder, September 27, 2006 (On "Comparing Climatic Response to Low and High Latitude Volcanic Eruptions")

173. Princeton University, Princeton, New Jersey, October 18, 2006 (On "Climatic consequences of regional nuclear conflict")
174. University of Iowa, Iowa City, November 10, 2006 (On "Comparing Climatic Response to Low and High Latitude Volcanic Eruptions")
175. University of Iowa, Iowa City, November 10, 2006 (On "Climatic consequences of regional nuclear conflict")
176. Université Pierre et Marie Curie, Paris, France, January 9, 2007 (On "Can Volcanic Eruptions Produce Ice Ages or Mass Extinctions?")
177. Brookdale Community College, Lincroft, New Jersey, February 15, 2007 (On "Climatic consequences of nuclear war")
178. Princeton University, Princeton, New Jersey, March 5, 2007 (On "Climatic consequences of regional nuclear conflict")
179. Camagüey Meteorological Center, Camagüey, Cuba, March 12, 2007 (On "Climatic consequences of regional nuclear conflict")
180. Millersville University, Millersville, Pennsylvania, March 22, 2007 (On "Global Warming")
181. United Nations Headquarters, New York, April 3, 2007 (On "The Science of Global Warming"; United Nations Global Compact U.S. Network Meeting: "Managing Climate Change")
182. Ohio University, Athens, Ohio, April 17, 2007 (On "Global Warming")
183. Universidad Nacional Autónoma de México, Mexico City, May 28, 2007 (On "Global Warming")
184. Universidad Nacional Autónoma de México, Mexico City, May 28, 2007 (On "Comparing Climatic Response to Low and High Latitude Volcanic Eruptions")
185. United Nations Headquarters, New York, June 7, 2007 (On "Global Warming The IPCC Fourth Assessment"; Non-governmental organizations briefing)
186. Brainstorming Retreat, "The Role of the United Nations in Climate Change: Exploring the Way Forward from Now to Bali and Beyond," Rye Brook, New York, June 23, 2007 (On "Scientific Evidence of Climate Change"; Invited by Indonesian Mission to the United Nations)
187. Rainforest Alliance, New York City, September 12, 2007 (On "Will Reforestation Help Solve Global Warming?")
188. Geological Society of Washington, Cosmos Club, Washington, DC, October 24, 2007 (On "Climatic Consequences of Nuclear Conflicts – Nuclear Winter is Still a Threat;" won the Bradley Prize for best talk of the year, Geological Society of Washington)
189. The Pennsylvania State University, State College, Pennsylvania, November 12, 2007 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
190. The Pennsylvania State University, State College, Pennsylvania, November 13, 2007 (On "Climatic Consequences of Nuclear Conflict")

191. Istanbul Technical University, Turkey, January 8, 2008 (On "Using Soil Moisture Observations to Study Climate Variations, to Evaluate Climate Models, and as Ground Truth for Remote Sensing")
192. Istanbul Technical University, Turkey, January 9, 2008 (On "Climatic Consequences of Nuclear Conflicts – Nuclear Winter is Still a Threat")
193. Istanbul Technical University, Turkey, January 9, 2008 (On "Comparing Climatic Response to Low and High Latitude Volcanic Eruptions")
194. United Nations Headquarters, New York, February 1, 2008 (On "Global Warming" to Committee on Teaching About the United Nations Conference)
195. American Museum of Natural History, New York City, February 7, 2008 (On "Volcanic Eruptions and Climate")
196. Laboratoire de Météorologie Dynamique, Université Pierre et Marie Curie, Paris, France, March 19, 2008 (On "The Science and Politics of Geoengineering")
197. University of Virginia, Charlottesville, April 3, 2008 (Moore Lecture, on "Climatic Consequences of Nuclear Conflict")
198. University of Virginia, Charlottesville, April 3, 2008 (On "The Science and Politics of Geoengineering: Smoke and Mirrors?")
199. NASA Langley Research Center, Hampton, Virginia, April 4, 2008 (On "The Science and Politics of Geoengineering: Smoke and Mirrors?")
200. National Severe Storms Laboratory/National Weather Center/University of Oklahoma, Norman, April 7, 2008 (On "Solar Dimming and Soil Moisture Trends")
201. National Severe Storms Laboratory/National Weather Center/University of Oklahoma, Norman, April 8, 2008 (On "The Science and Politics of Geoengineering: Smoke and Mirrors?")
202. National Severe Storms Laboratory/National Weather Center/University of Oklahoma, Norman, April 8, 2008 (On "Climatic Consequences of Nuclear Conflict")
203. Purdue University, West Lafayette, Indiana, April 10, 2008 (On "Volcanic Eruptions and Climate")
204. Purdue University, West Lafayette, Indiana, April 10, 2008 (On "Climatic Consequences of Nuclear Conflict")
205. University of Texas, Austin, April 16, 2008 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
206. University of Texas, Austin, April 16, 2008 (On "Climatic Consequences of Nuclear Conflict: Nuclear Winter is Still a Threat")
207. U.S. House of Representatives, June 13, 2008 (On "Climatic consequences of nuclear conflict") (To Congressional staff, sponsored by AAAS Center for Science, Technology and Security Policy)
208. Princeton University, Princeton, New Jersey, June 17, 2008 (On "Climatic consequences of nuclear conflict")

209. Rutgers University Distinguished Faculty Talk Series, October 6, 2008 (On "Human Emissions of Particles to the Stratosphere from Geoengineering or Nuclear Winter: A Bad and a Very Bad Idea")
210. State University of New York, Stony Brook, October 22, 2008 (On "Climatic consequences of nuclear conflict")
211. Princeton University, Princeton, New Jersey, October 24, 2008 (On "Twenty reasons why geoengineering may be a bad idea")
212. Washington College, Chestertown, Maryland, October 29, 2008 (Sigma Xi Distinguished Lecture, on "Smoke and Mirrors: Is Geoengineering Solution to Global Warming?")
213. Purchase College, State University of New York, Purchase, New York, November 11, 2008 (Sigma Xi Distinguished Lecture, on "Climatic Consequences of Nuclear Conflict")
214. American Meteorological Society's Environmental Science Seminar Series, Russell Senate Office Building, Washington, DC, November 21, 2008 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
215. University of Colorado, Boulder, Colorado, January 30, 2009 (Distinguished Lecture Series, on "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
216. NASA Jet Propulsion Laboratory, Pasadena, California, February 23, 2009 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
217. California Institute of Technology, Pasadena, California, February 24, 2009 (On "Climatic Consequences of Nuclear Conflict")
218. Oak Ridge National Laboratory, Oak Ridge, Tennessee, March 5, 2009 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
219. Laboratoire de Météorologie Dynamique, Université Pierre et Marie Curie, Paris, France, March 17, 2009 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
220. South Dakota State University, Brookings, South Dakota, March 30, 2009 (Sigma Xi Distinguished Lecture, on "Global warming is real, and what you can do about it")
221. South Dakota State University, Brookings, South Dakota, March 30, 2009 (Sigma Xi Distinguished Lecture, on "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
222. University of South Dakota, Vermillion, South Dakota, March 31, 2009 (Sigma Xi Distinguished Lecture, on "Global warming is real, and what you can do about it")
223. University of South Dakota, Vermillion, South Dakota, March 31, 2009 (Sigma Xi Distinguished Lecture, on "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
224. Brookdale Community College, Lincroft, New Jersey, April 2, 2009 (On "Global warming and global conflict")
225. University of North Carolina, Asheville, North Carolina, April 6, 2009 (Sigma Xi Distinguished Lecture, on "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")

226. NOAA National Climatic Data Center, Asheville, April 7, 2009 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
227. Appalachian State University, Boone, North Carolina, April 7, 2009 (Sigma Xi Distinguished Lecture, on "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
228. Appalachian State University, Boone, North Carolina, April 8, 2009 (Sigma Xi Distinguished Lecture, on "Climatic Consequences of Nuclear Conflict")
229. Harvey Mudd College, Claremont, California, April 10, 2009 (On "Climatic Consequences of Nuclear Conflict")
230. Northern Michigan University, Marquette, Michigan, April 14, 2009 (Sigma Xi Distinguished Lecture, on "Global warming is real, and what you can do about it")
231. Kirksville College of Osteopathic Medicine, Kirksville, Missouri, April 16, 2009 (Sigma Xi Distinguished Lecture, on "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
232. Truman State University, Kirksville, Missouri, April 16, 2009 (Sigma Xi Distinguished Lecture, on "Climatic Consequences of Nuclear Conflict")
233. Board on Atmospheric Science and Climate, National Academy of Sciences, Washington, DC, April 20, 2009 (On "Are we ready for the next volcanic eruption?")
234. Lafayette College, Easton, Pennsylvania, April 21, 2009 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
235. Carnegie Mellon University, April 22, 2009 (Sigma Xi Distinguished Lecture, on "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
236. Ramapo College, Mahwah, New Jersey, April 23, 2009 (Sigma Xi Distinguished Lecture, on "Global warming is real, and what you can do about it")
237. Quinnipiac University, Hamden, Connecticut, April 30, 2009 (Sigma Xi Distinguished Lecture, on "Climatic Consequences of Nuclear Conflict")
238. University of Wisconsin, Madison, September 25, 2009 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
239. Sierra Club, Philadelphia, Pennsylvania, November 16, 2009 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
240. McGill University, Montreal, Canada, November 18, 2009 (On "Climatic Consequences of Nuclear Conflict")
241. McGill University, Montreal, Canada, November 19, 2009 (Lorne Trottier Public Science Symposium; on "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
242. McGill University, Montreal, Canada, November 20, 2009 (On "Volcanic eruptions and climate change")
243. Environmental Defense Fund Science Day, Sausalito, California, February 3, 2010 (On "The Effects of Stratospheric Geoengineering on Regional Climate")
244. University of Ottawa, Canada, March 4, 2010 (On "Volcanic eruptions and climate")

245. United Nations Headquarters, New York City, April 8, 2010 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?"; Invited by Unitarian Universalist United Nations Office)
246. Oregon State University, Corvallis, April 19, 2010 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
247. AAAS Forum on Science and Technology Policy, Washington, DC, May 13, 2010 (On "Is Geoengineering a Solution to Global Warming?")
248. University of Reading, England, June 17, 2010 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
249. National Academy of Sciences, Washington, DC, October 13, 2010 (On "Assessing the Implications of Large-scale Climate Intervention")
250. University of Montana, Missoula, October 18, 2010 (On "Should We Engineer the Climate? The Science of Solar Radiation Management")
251. Peking University, Beijing, China, November 7, 2010 (On "Smoke and mirrors: Is geoengineering a solution to global warming?")
252. University of Washington, Seattle, January 21, 2011 (On "Smoke and mirrors: Is geoengineering a solution to global warming?")
253. Princeton University Science, Technology, and Environmental Policy (STEP) Seminar, Princeton, New Jersey, February 14, 2011 (On "Smoke and mirrors: Is geoengineering a solution to global warming?")
254. University of Oklahoma, School of Geology and Geophysics, Norman, Oklahoma, February 24, 2011 (On "Smoke and mirrors: Is geoengineering a solution to global warming?")
255. University of Oklahoma, School of Geology and Geophysics, Norman, Oklahoma, February 25, 2011 (On "Volcanic eruptions and climate")
256. University of Oklahoma, School of Meteorology, Norman, Oklahoma, February 25, 2011 (On "Climatic Consequences of Nuclear Conflict")
257. University of Oklahoma, School of Meteorology, Norman, Oklahoma, February 25, 2011 (On "Smoke and mirrors: Is geoengineering a solution to global warming?")
258. City College of New York, New York City, March 2, 2011 (On "Climatic Consequences of Nuclear Conflict")
259. NOAA Geophysical Fluid Dynamics Laboratory, Princeton, New Jersey, March 3, 2011 (On "Smoke and mirrors: Is geoengineering a solution to global warming?")
260. NASA Goddard Space Flight Center, Greenbelt, Maryland, March 4, 2011 (On "Smoke and mirrors: Is geoengineering a solution to global warming?")
261. King Abdullah University of Science and Technology, Thuwal, Saudi Arabia, March 15, 2011 (On "Smoke and mirrors: Is geoengineering a solution to global warming?")
262. Florida State University, Tallahassee, Florida, April 18, 2011 (On "Smoke and mirrors: Is geoengineering a solution to global warming?")

263. NASA Jet Propulsion Laboratory, Pasadena, California, May 2, 2011 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
264. Mayors for Peace Seminar on Ecological and Humanitarian Consequences of Nuclear Warfare, Geneva, Switzerland, May 17, 2011 (On "Catastrophic Climate Change")
265. Keck Institute for Space Studies, California Institute of Technology, Pasadena, May 23, 2011 (On "Volcanic Aerosols as an Analog for Geoengineering")
266. University of Colorado, Boulder, Colorado, September 23, 2011 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
267. National Center for Atmospheric Research, Boulder, Colorado, September 27, 2011 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
268. Colorado State University, Fort Collins, Colorado, September 29, 2011 (On "Climatic Consequences of Nuclear Conflict")
269. National Oceanic and Atmospheric Administration, Boulder, Colorado, November 2, 2011 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
270. University of California – Berkeley, January 25, 2012 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
271. University of Alabama – Huntsville, February 1, 2012 (On "Volcanic Eruptions and Climate")
272. University of California – Davis, February 15, 2012 (On "Climatic Consequences of Nuclear Conflict")
273. San José State University, San José, California, March 14, 2012 (On "Climatic Consequences of Nuclear Conflict")
274. Carnegie Institution, Stanford University, Palo Alto, California, March 20, 2012 (On "Climatic Consequences of Nuclear Conflict")
275. Hadley Centre, British Met Office, Exeter, UK, March 29, 2012 (On "Climatic Consequences of Nuclear Conflict")
276. University of California, Los Angeles, April 4, 2012 (On "Climatic Consequences of Nuclear Conflict")
277. Bjerknes Centre for Climate Research, University of Bergen, Norway, May 21, 2012 (On "Climatic Consequences of Nuclear Conflict")
278. Center for International Security and Cooperation, Stanford University, Palo Alto, California, July 12, 2012 (On "Climatic Consequences of Nuclear Conflict")
279. Dalhousie University, Halifax, Nova Scotia, Canada, September 21, 2012 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
280. Dalhousie University, Halifax, Nova Scotia, Canada, September 21, 2012 (2012 E. W. Guptill Memorial Lecture, on "Climatic Consequences of Nuclear Conflict")
281. University of Sydney, Australia, January 25, 2013 (On "Climatic Consequences of Nuclear Conflict")

282. Institute for Advanced Sustainability Studies, Potsdam, Germany, February 1, 2013 (On "Climatic Consequences of Nuclear Conflict")
283. Yale University, New Haven, Connecticut, February 11, 2013 (On "Climatic Consequences of Nuclear Conflict")
284. Harvard University, Cambridge, Massachusetts, February 12, 2013 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
285. Princeton University, Princeton, New Jersey, February 19, 2013 (On "Climatic Consequences of Nuclear Conflict")
286. University of Oslo, Oslo, Norway, March 6, 2013 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
287. University of Oslo, Oslo, Norway, March 6, 2013 (On "Climatic Consequences of Nuclear Conflict")
288. University of Havana, Cuba, March 9, 2013 (On "Volcanic Eruptions and Climate")
289. Extreme Cuban Climate (XCUBE) Project Meeting, Havana, Cuba, March 10, 2013 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
290. Pennsylvania State University, State College, Pennsylvania, March 27, 2013 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
291. Institute for Advanced Sustainability Studies, Potsdam, Germany, April 16, 2013 (Panel Discussion, "Mind the Gap – Climate Engineering between Models and Reality")
292. American Institute of Chemical Engineers–Metro New York Section, Seventh Annual Energy & Resources Conference, New York City, May 30, 2013 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
293. Research Center for Nuclear Weapons Abolition, Nagasaki University, Nagasaki, Japan, July 17, 2013 (On "Climatic Consequences and Agricultural Impact of Regional Nuclear Conflict")
294. Nagasaki National Peace Memorial Hall for Atomic Bomb Victims, Nagasaki, Japan, July 18, 2013 (On "Nuclear Famine: The Threat to Humanity From Nuclear Weapons")
295. Massachusetts Institute of Technology, Cambridge, Massachusetts, August 7, 2013 (On "Debating the Future of Solar Geoengineering")
296. Harvard University, Cambridge, Massachusetts, August 8, 2013 (On "Debating the Future of Solar Geoengineering")
297. Brookhaven National Laboratory, Upton, New York, August 12, 2013 (On "Smoke and Mirrors: Is Geoengineering a Solution to Global Warming?")
298. National Academy of Sciences, Committee on Geoengineering Climate: Technical Evaluation and Discussion of Impacts, Washington, D.C., September 10, 2013 (On "Volcanic Eruptions As an Analog for Stratospheric Geoengineering")
299. Total, Paris, France, December 26, 2013 (On, "The IPCC Fifth Assessment and Geoengineering")

300. Institute for Advanced Sustainability Studies, Potsdam, Germany, January 28, 2014 (On "Geoengineering Research and the Geoengineering Model Intercomparison Project (GeoMIP)")
301. University of California, Berkeley, March 11, 2014 (On "Climatic Consequences and Agricultural Impact of Regional Nuclear Conflict")
302. University of Delaware, Newark, March 14, 2014 (On "Climatic Consequences and Agricultural Impact of Regional Nuclear Conflict")
303. Brookdale Community College, Lincroft, New Jersey, March 24, 2014 (On "Nuclear Famine: Climatic Consequences and Agricultural Impact of Regional Nuclear Conflict")
304. University of Santiago de Compostela, Spain, April 21, 2014 (On "Stratospheric Sulfur Geoengineering – Benefits and Risks")
305. University of Maryland, College Park, May 1, 2014 (On "Nuclear Famine: The Threat to Humanity from Nuclear Weapons")
306. U.S. Climate Action Network Webinar, "Geoengineering 101," May 29, 2014 (On "Geoengineering (Climate Engineering)")
307. Bjerknes Centre for Climate Research, University of Bergen, Norway, June 10, 2014 (On "Stratospheric Sulfur Geoengineering – Benefits and Risks")
308. Princeton Plasma Physics Laboratory, Princeton University, Princeton, New Jersey, June 18, 2014 (On "Climatic Consequences of Nuclear Conflict")
309. MeMoVolc/NordVulk Summer School "Magmatic volatiles: From generation to atmospheric loading," Stórutjarnir, Iceland, July 4, 2014 (On "Volcanic Eruptions and Climate")
310. Fifth Interdisciplinary Summer School on Climate Engineering "Why do researchers disagree about Climate Engineering?" Heidelberg, Germany, July 28, 2014 (Briefing on "Climate model investigations of solar radiation management: The Geoengineering Model Intercomparison Project (GeoMIP)")
311. Fifth Interdisciplinary Summer School on Climate Engineering "Why do researchers disagree about Climate Engineering?" Heidelberg, Germany, July 30, 2014 (On "The Chaotic Climate System")
312. Fifth Interdisciplinary Summer School on Climate Engineering "Why do researchers disagree about Climate Engineering?" Heidelberg, Germany, July 30, 2014 (Lecture on "Climate model investigations of solar radiation management: The Geoengineering Model Intercomparison Project (GeoMIP)")
313. Marc's Place Coffee House, New Brunswick, New Jersey, September 6, 2014 (On "Global Warming")
314. Marc's Place Coffee House, New Brunswick, New Jersey, January 24, 2015 (On "Nuclear Winter: The Fallout from Nuclear War")
315. New Jersey Chapter of the American Society of Landscape Architects Annual Meeting, Atlantic City, New Jersey, January 25, 2015 (On "How Climate Change is Affecting Our Built/Natural Environment")

316. Princeton University, Princeton, New Jersey, February 6, 2015 (On "Nuclear Famine: The Threat to Humanity from Nuclear Weapons")
317. Helen Caldicott Foundation Symposium 2015: The Dynamics of Possible Nuclear Extinction, New York, New York, February 28, 2015 (On "Nuclear Winter: Climatic Effects of Nuclear War, Catastrophic Threats to the Global Food Supply")
318. 16th Swiss Global Change Day, University of Bern, Bern, Switzerland, April 1, 2015 (On "Volcanic eruptions: Can they serve as an analog for stratospheric geoengineering?")
319. ETH (Eidgenössische Technische Hochschule, Swiss Federal Institute of Technology), Zurich, Switzerland, April 2, 2015 (On "Nuclear Famine: The Threat to Humanity from Nuclear Weapons")
320. Institute Pierre Simon Laplace, Paris, France, April 17, 2015 (On "Volcanic Eruptions and Climate: Outstanding Research Issues")
321. 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, United Nations, New York, New York, April 28, 2015 (On "Nuclear Famine: The Threat to Humanity from Nuclear Weapons")
322. Rutgers Public Health Research Institute, Newark, New Jersey, May 5, 2015 (On "Global Warming")
323. Falconer Natural History Lecture, Atmospheric Sciences Research Center, State University of New York, Albany (On "Geoengineering (climate engineering) is not a solution to the global warming problem")
324. Activities Unlimited (retired men's group), Haworth, New Jersey, May 6, 2015 (On "Global Warming")
325. Earth Institute, Columbia University, New York, New York, June 3, 2015 (On "Geoengineering – Benefits and Risks: Sunblock With Consequences")
326. Princeton University, Princeton, New Jersey, June 23, 2015 (On "Climatic Consequences of Nuclear Conflict: Nuclear Winter Still a Threat")
327. University of Wisconsin Alumni Association, France Chapter, Paris, France, July 4, 2015 (On "Will the COP21 in Paris this December finally solve the global warming problem?")
328. Early Career Summer Workshop on Geoengineering, National Center for Atmospheric Research, Boulder, Colorado, July 20-24, 2015 (On "Benefits and risks of SRM – what we can learn from analogs and models")
329. 3rd Annual Summer School on Sustainable Climate Risk Management, Penn State University, State College, Pennsylvania, August 3-7, 2015 (On "Global warming")
330. 3rd Annual Summer School on Sustainable Climate Risk Management, Penn State University, State College, Pennsylvania, August 3-7, 2015 (On "Climate modeling")
331. 3rd Annual Summer School on Sustainable Climate Risk Management, Penn State University, State College, Pennsylvania, August 3-7, 2015 (On "Geoengineering")
332. Courant Institute of Mathematical Sciences, New York University, New York City, October 7, 2015 (On "Nuclear Famine: The Threat to Humanity from Nuclear Weapons")

333. AGU Author Webinar: How to Publish Your Research, Wiley Publishing, Hoboken, New Jersey, October 9, 2015 (On "How to prepare your paper for submission") https://www.brighttalk.com/webcast/11201/170453

334. Ignite VIII, National Center for Atmospheric Research, Boulder, Colorado, October 14, 2015 (On "Volcanic sunsets")

335. Department of Atmospheric and Oceanic Sciences, University of Wisconsin, Madison, October 30, 2015 (On "Nuclear Famine: The Threat to Humanity from Nuclear Weapons")

336. International Research Institute, Lamont-Doherty Earth Observatory, Columbia University, Palisades, New York, November 4, 2015 (On "Volcanic Eruptions and Climate: Outstanding Research Issues")

337. University of Oslo, Oslo, Norway, January 6, 2016 (On "The G4-Specified Stratospheric Aerosol Experiment")

338. King Abdullah University of Science and Technology, Thuwal, Saudi Arabia, January 12, 2016 (On "Stratospheric Sulfur Geoengineering – Benefits and Risks")

339. University of Illinois, Urbana-Champaign, February 18, 2016 (On "Stratospheric Sulfur Geoengineering – Benefits and Risks")

340. University of California, Santa Cruz, February 27, 2016 (On "Geoengineering and Climate Change")

341. Universidad Nacional Autónoma de México, Mexico City, Mexico, March 7, 2016 (On "Stratospheric Sulfur Geoengineering – Benefits and Risks")

342. Universidad Nacional Autónoma de México, Mexico City, Mexico, March 8, 2016 (On "Nuclear Famine: The Threat to Humanity from Nuclear Weapons")

343. Imperial College, London, England, March 18, 2016 (On "Nuclear Famine: The Threat to Humanity from Nuclear Weapons")

344. University of Cambridge, Cambridge, England, March 21, 2016 (On "Stratospheric Sulfur Geoengineering – Benefits and Risks")

345. Royal Society of Chemistry, London, England, March 22, 2016 (On "Smoke and Mirrors Not the Solution to Global Warming")

346. Eleventh Annual Rutgers Energy Institute Energy Symposium, May 4, 2016 (On "Risks from Geoengineering (Solar Radiation Management)")

347. Lanzhou University, Lanzhou, China, July 7, 2016 (On "Global warming is real, and what you can do about it")

348. Lanzhou University, Lanzhou, China, July 8, 2016 (On "Volcanic Eruptions and Climate: Outstanding Research Issues")

349. Lanzhou University, Lanzhou, China, July 10, 2016 (On "Nuclear Famine: The Threat to Humanity From Nuclear Weapons")

350. Lanzhou University, Lanzhou, China, July 11, 2016 (On "Stratospheric Sulfur Geoengineering – Benefits and Risks")

351. Beijing Normal University, Beijing, China, July 15, 2016 (On "Human Emissions of Particles to the Stratosphere from Geoengineering or Nuclear War: A Bad Idea and A Very Bad Idea")
352. 4th Annual Summer School on Sustainable Climate Risk Management, Penn State University, State College, Pennsylvania, August 15-19, 2016 (On "Global warming")
353. 4th Annual Summer School on Sustainable Climate Risk Management, Penn State University, State College, Pennsylvania, August 15-19, 2016 (On "Climate modeling")
354. 4th Annual Summer School on Sustainable Climate Risk Management, Penn State University, State College, Pennsylvania, August 15-19, 2016 (On "Geoengineering")
355. Montclair State University, Montclair, New Jersey, January 17, 2017 (On "Nuclear Famine: The Threat to Humanity from Nuclear Weapons")
356. Princeton Plasma Physics Laboratory, Princeton University, Princeton, New Jersey, April 19, 2017 (On "The Effects of Nuclear War on Climate and Agriculture")
357. Drobny Capital, Southampton, New York, June 22, 2017 (On "Nuclear winter")
358. International Physicians for Prevention of Nuclear War, United Nations, New York, New York, June 27, 2017 (On "Climate effects of limited and large-scale nuclear war")
359. Pacific Northwest National Laboratory, Richland, Washington, August 18, 2017 (On "Climatic and Humanitarian Impacts of Nuclear War")
360. Department of Environmental Sciences, Rutgers University, September 8, 2017 (On "Did Smoke from Burning Japanese Cities in 1945 Cause Global Cooling?")
361. Department of Landscape Architecture, Rutgers University, September 13, 2017 (On "Climatic and Humanitarian Impacts of Nuclear War")
362. Unitarian Universalist United Nations Office, New York, New York, September 24, 2017 (On "Climatic and Humanitarian Impacts of Nuclear War") Also sponsored by All Souls Nuclear Disarmament Task Force, All Souls Peace and Justice Task Force, NGO Committee on Disarmament, Peace and Security, and Peace Action New York State.
363. Sierra Club, Central Jersey Group, Mercer County Community College, West Windsor, New Jersey, November 8, 2017 (On "Climatic and Humanitarian Impacts of Nuclear War")
364. Science Café, Rutgers University, December 4, 2017 (On "The Science of Nuclear Warfare and its Consequences")
365. Tulane University, New Orleans, Louisiana, December 18, 2017 (On "Climatic and Humanitarian Impacts of Nuclear War")
366. University of Arizona, Tucson, January 12, 2018 (On "Climatic and Humanitarian Impacts of Nuclear War")
367. Global Flashpoints Forum, New York, New York, January 17, 2018 (On "Nuclear War with North Korea: The Cold Science")
368. Science and Global Security Program, Princeton University, Princeton, New Jersey, February 21, 2018 (On "Environmental and Human Impacts of Nuclear War: A New Research Program")

369. Cooperative Institute for Research in Environmental Sciences (CIRES) Distinguished Lecture, University of Colorado, Boulder, April 5, 2018 (On "Climatic and Humanitarian Impacts of Nuclear War")
370. Centre for Complex Systems Studies, University of Utrecht, Netherlands, November 30, 2018 (On "Climatic and Humanitarian Impacts of Nuclear War")
371. Centre for Complex Systems Studies, University of Utrecht, Netherlands, December 3, 2018 (On "Climate Impacts of the 1783-1784 Laki Eruption in Iceland")
372. Centre for Complex Systems Studies, University of Utrecht, Netherlands, December 4, 2018 (On "Stratospheric Sulfur Geoengineering - Benefits and Risks")
373. Department of Earth and Environmental Sciences, Tulane University, New Orleans, Louisiana, January 18, 2019 (On "Stratospheric Sulfur Geoengineering - Benefits and Risks")
374. Coastal Louisiana Chapter of the American Meteorological Society, Louisiana State University, Baton Rouge, Louisiana, January 24, 2019 (On "Stratospheric Sulfur Geoengineering - Benefits and Risks")
375. Department of Hydrology and Atmospheric Sciences, University of Arizona, Tucson, February 14, 2019 (On "Stratospheric Sulfur Geoengineering - Benefits and Risks")
376. New Jersey Institute of Technology, Newark, New Jersey, February 25, 2019 (On "Climatic and Humanitarian Impacts of Nuclear War")
377. Department of Atmospheric Science, Colorado State University, Fort Collins, March 11, 2019 (Via Zoom, on "Stratospheric Sulfur Geoengineering - Benefits and Risks")
378. Department of Meteorology, Stockholm University, Sweden, March 26, 2019 (On "Climatic and Humanitarian Impacts of Nuclear War")
379. Swedish Institute of International Affairs, Stockholm, Sweden, March 27, 2019 (On "Climatic and Humanitarian Impacts of Nuclear War")
380. Swedish Meteorological and Hydrological Institute, Norrköping, Sweden, March 28, 2019 (On "Stratospheric Sulfur Geoengineering - Benefits and Risks")
381. University of Valladolid, Spain, April 25, 2019 (On "Climate Impacts of the 1783-1784 Laki Eruption in Iceland")
382. Museum of Science, Valladolid, Spain, April 25, 2019 (On "Climatic and Humanitarian Impacts of Nuclear War" – en español)
383. University of Valladolid, Spain, April 26, 2019 (On "Stratospheric Sulfur Geoengineering - Benefits and Risks")
384. University of São Paulo, Brazil, June 12, 2019 (On "The Physics of Modeling the Climatic and Humanitarian Impacts of Nuclear War")
385. University of São Paulo, Brazil, June 13, 2019 (On "Stratospheric Sulfur Geoengineering - Benefits and Risks")
386. National Center for Atmospheric Research, Boulder, Colorado, June 24, 2019 (On "Climatic and Humanitarian Impacts of Nuclear War")

387. Cooperative Institute for Research in Environmental Sciences, University of Colorado, Boulder, July 11, 2019 (On "Stratospheric Sulfur Geoengineering - Benefits and Risks")

388. NOAA Earth System Research Laboratory, Boulder, Colorado, July 29, 2019 (On "Stratospheric Sulfur Geoengineering - Benefits and Risks")

389. University of Wisconsin Law School, Madison, October 4, 2019 (via Zoom, on "Climate Intervention (Geoengineering)")

390. Coalition for Peace Action, Princeton, New Jersey, November 10, 2019 (On "Nuclear Winter")

391. Rensselaer Polytechnic Institute, Troy, New York, November 13, 2019 (On "Stratospheric Sulfur Geoengineering - Benefits and Risks")

392. Tulane University, New Orleans, Louisiana, February 27, 2020 (On "Volcanic Eruptions and Climate")

393. Soka Gakkai International, Culture of Peace Distinguished Lecture, New York City, March 4, 2020 (On "Climatic and Humanitarian Impacts of Nuclear War")

394. Lamont-Doherty Earth Observatory, Division of Ocean and Climate Physics, Palisades, New York, March 6, 2020 (On "Climatic and Humanitarian Impacts of Nuclear War")

395. Colorado State University, Fort Collins, April 6, 2020 (via Google Hangouts, on "Geoengineering (Climate Intervention) by Reflecting Sunlight")

396. Asbury Park Green Expo Virtual Speaker Series, September 3, 2020 (via Zoom, on "Global Warming and What You Can Do About It")

397. International Centre for Climate Change and Development, Dhaka, Bangladesh, September 20, 2020 (via Zoom, on "Stratospheric Sulfur Geoengineering - Benefits and Risks")

398. Department of Physics, University of Tennessee, Knoxville, September 21, 2020 (via Zoom, on "Climatic and Humanitarian Impacts of Nuclear War")

399. Department of Physics, University of Alabama, Tuscaloosa, September 30, 2020 (via Zoom, on "Climatic and Humanitarian Impacts of Nuclear War")

400. Department of Physics, Virginia Polytechnic Institute and State University (Virginia Tech), Blacksburg, October 9, 2020 (via Zoom, on "Climatic and Humanitarian Impacts of Nuclear War")

401. American Geophysical Union, Global Environmental Change Section, webinar "Two approaches for mitigating global climate change: Solar radiation management and greenhouse gas emissions reduction," October 16, 2020 (via Zoom, on "Stratospheric Sulfur Geoengineering – Benefits and Risks")

402. Department of Physics, University of Massachusetts, Amherst, October 20, 2020 (via Zoom, on "Climatic and Humanitarian Impacts of Nuclear War")

403. Program in Arms Control & Domestic and International Security, University of Illinois, Urbana-Champaign, November 4, 2020 (via Zoom, on "Climatic and Humanitarian Impacts of Nuclear War")

404. Princeton Energy Conference 2020, Princeton University, Princeton, New Jersey, November 14, 2020 (via Zoom, on "Geoengineering")
405. Department of Physics, University of Missouri, Columbia, February 22, 2021 (via Zoom, on "Climatic and Humanitarian Impacts of Nuclear War")
406. Department of Physics, Oklahoma State University, Stillwater, March 3, 2021 (via Zoom, on "Climatic and Humanitarian Impacts of Nuclear War")
407. Chemistry Department, Rutgers University, Piscataway, NJ, March 10, 2021 (via Zoom, on "Climatic and Humanitarian Impacts of Nuclear War")
408. Department of Human Ecology, Rutgers University, New Brunswick, NJ, March 10, 2021 (via Zoom, "Governance of Research on Solar Radiation Management")
409. Colorado State University, Fort Collins, March 24, 2021 (via Zoom, on "Stratospheric Sulfur Geoengineering – Benefits and Risks")
410. Tulane University, New Orleans, Louisiana, April 7, 2021 (via Zoom, on "Stratospheric Sulfur Geoengineering – Benefits and Risks")
411. University of Oslo, Norway, April 15, 2021 (via Zoom, on "Stratospheric Sulfur Geoengineering – Benefits and Risks")
412. Department of Human Ecology, Rutgers University, New Brunswick, NJ, April 21, 2021 (via Zoom, on "Stratospheric Sulfur Geoengineering – Benefits and Risks")
413. Ecofest, New York City College of Technology, City University of New York, April 22, 2021 (via Zoom, on "Stratospheric Sulfur Geoengineering – Benefits and Risks")
414. Nuclear Threat Initiative workshop on Global, Long-Term Nuclear Effects – Agriculture and Food Security, May 11, 2021 (via Zoom, on "Nuclear Effects on Agriculture and Food Security")
415. Nuclear Weapons, Climate Change, and Human Survival event, NGO Committee on Disarmament, Peace and Security, May 11, 2021 (via Zoom, on "Climatic and Humanitarian Impacts of Nuclear War")
416. Friends of Oak Ridge National Laboratory, Oak Ridge, Tennessee, May 18, 2021 (via Zoom, on "Climatic and Humanitarian Impacts of Nuclear War")
417. Nuclear Weapons and Arms Control Working Group, U.S. House of Representatives, June 10, 2021 (via Zoom, on "Climatic and Humanitarian Impacts of Nuclear War")
418. The Real World Effects of Nuclear Weapons, webinar hosted by the Physicists Coalition for Nuclear Threat Reduction, July 13, 2021 (via Zoom, on "Nuclear Winter: Effects of Nuclear War on Climate and Food")
419. Department of Physics, University of Illinois, Champaign-Urbana, September 15, 2021 (via Zoom, on "Climatic and Humanitarian Impacts of Nuclear War")
420. Department of Environmental Sciences, Rutgers University, October 22, 2021 (via Zoom, on "Global famine after nuclear war")
421. We Rotary Club of International Peace, October 25, 2021 (via Zoom, on "Global famine after nuclear war")

422. Department of Physics, Oregon State University, Corvallis, November 15, 2021 (via Zoom, on "Global famine after nuclear war")

423. Anant Fellowship for Climate Action, New Delhi, India, November 23, 2021 (via Zoom, on "Stratospheric Sulfur Geoengineering – Benefits and Risks")

424. Department of Physics, University of Kansas, Lawrence, January 24, 2022 (via Zoom, on "Global famine after nuclear war")

425. Department of Physics, Howard University, Washington, DC, January 26, 2022 (via Zoom, on "Global famine after nuclear war")

426. Department of Physics, Appalachian State University, Boone, North Carolina, March 2, 2022 (via Zoom, on "Global famine after nuclear war")

427. Department of Geography & Spatial Sciences, University of Delaware, Newark, March 18, 2022 (On "Global famine after nuclear war")

428. Department of Atmospheric and Oceanic Sciences, University of Wisconsin, Madison, March 21, 2022 (via Zoom, on "Global famine after nuclear war") https://youtu.be/OIUD-Vy3yb8

429. Geoengineering Modeling Research Consortium, Massachusetts Institute of Technology, Cambridge, Massachusetts, March 31, 2022 (via Zoom, on "Climate Intervention Lessons from Nuclear Winter Research")

430. Colorado State University, Fort Collins, April 4, 2022 (via Zoom, on "Stratospheric Sulfur Geoengineering – Benefits and Risks")

431. ATLAS Symposium, Department of Earth and Atmospheric Sciences, University of Alberta, Edmonton, Canada, April 6, 2022 (Keynote Speaker, via Zoom, on "Global famine after nuclear war")

432. Universidad Nacional Autónoma de México, Mexico City, Mexico, April 20, 2022 (via Zoom, on "Global famine after nuclear war")

433. Earth Week Webinar on "The Ecology of War," Coalition for Peace Action, Princeton, New Jersey, April 24, 2022 (via Zoom, on "Nuclear War: Instant Climate Change and Global Famine")

434. White House Council of Economic Advisors and Office of Science and Technology Policy, April 26, 2022 (via Zoom, on "Climatic Consequences of Nuclear War")

435. Alex Van Someren, the UK Cabinet Office's Chief Scientific Adviser for National Security, July 18, 2022 (via Zoom, on "Climatic Consequences of Nuclear War")

436. International Physicians for Prevention of Nuclear War Webinar, August 15, 2022 (via Zoom, on "Global Famine After Nuclear War")

437. Side Event on Humanitarian Consequences of Nuclear Weapons, Tenth Review Conference of the Non-Proliferation Treaty, United Nations, New York, August 17, 2022 (On "Global Famine after Nuclear War")

438. Billions at Risk of Starvation: Nuclear Famine Report Briefing (Twitter Space and Twitch, hosted by International Physicians for the Prevention of Nuclear War, August 22, 2022, on "Global famine after nuclear war"), https://m.twitch.tv/videos/1569300940

439. 2022 Future of Life Award Ceremony, Brooklyn, New York, August 6, 2022 (Invited panel discussion on "The Science of Nuclear Winter")

440. Princeton School on Science and Global Security, Princeton University, Princeton, New Jersey, October 18, 2022 (Invited presentation, on "Global Famine After Nuclear War")

441. Rutgers University Science Café, New Brunswick, New Jersey, October 21, 2022 (via Zoom, on "Global Famine After Nuclear War")

442. Regional Symposium on Climate Change, Planetary, and Human Health: Challenges and Opportunities, Rutgers University, New Brunswick, New Jersey, October 28, 2022 (On "Climate Science Globally and Locally")

443. Reducing the Threat of Nuclear War: Social and Economic Costs of the Current Nuclear Weapons Buildup Webinar, Massachusetts Peace Action, January 21, 2023 (via Zoom, on "Global Famine After Nuclear War")

444. Senator Ed Markey's staff, January 27, 2023 (via Zoom, on "Global Famine After Nuclear War")

445. Department of Physics, University of California, Berkeley, February 13, 2023 (On "Global Famine After Nuclear War")

446. Miller Institute of Basic Science, University of California, Berkeley, February 14, 2023 (On "Global Famine After Nuclear War")

447. Department of Earth and Planetary Science, University of California, Berkeley, February 16, 2023 (On "Benefits and Risks of Stratospheric Geoengineering")

448. Department of Meteorology and Climate Science, San José State University, San José, California, February 23, 2023 (On "Global Famine After Nuclear War")

449. National Academies of Sciences, Medicine, and Engineering, Independent Study on Potential Environmental Effects of Nuclear War Meeting #1, February 24, 2023 (via Zoom, on "Global Famine After Nuclear War" and panel discussion)

450. National Atmospheric Release Advisory Center, Lawrence Livermore National Laboratory, Livermore, California, March 8, 2023 (On "Global Famine After Nuclear War")

451. Lawrence Berkeley National Laboratory, Berkeley, California, March 16, 2023 (On "Global Famine After Nuclear War")

452. Department of Earth and Climate Sciences, San Francisco State University, San Francisco, California, March 28, 2023 (On "Global Famine After Nuclear War")

453. EPRI's 26th Energy and Climate Research Seminar, Washington, DC, May 11, 2023 (On "Volcanic eruptions in a changing climate")

454. Intitiatives pour le désarmement nucléaire (Initiatives for nuclear disarmament) Workshop on Nuclear Weapons: Consequences for Climate and Humanity, French Senate, Paris, May 30, 2023 (On "Global Famine After Nuclear War")

455. Covering the Atomic File – Interactive Workshop for Journalists to Bring Better Reporting to Renewed Nuclear Tensions, Albuquerque, New Mexico, June 8, 2023 (On "Global Famine After Nuclear War")

456. Physicists Coalition for Nuclear Threat Reduction, November 22, 2023 (Webinar via Zoom, on "Global Famine After Nuclear War")

457. Reducing the Threat of Nuclear War 2024 Online Conference, Massachusetts Peace Action, January 13, 2024 (Webinar via Zoom, on "Global Famine After Nuclear War")

458. International Campaign to Abolish Nuclear Weapons Germany, Berlin, March 20, 2024 (On "Global Famine After Nuclear War")

459. Solar Radiation Modification Expert Workshop of the Science Advice for Policy by European Academies (SAPEA) Working Group of the European Commission, March 21, 2024 (Via Zoom, Invited Keynote Address on "Overview of the SAPEA Evidence Review Report, with observations on strengths, possible limitations and gaps")

460. Department of Physics and Astronomy, Rutgers University, April 3, 2024 (On "Climate modeling")

461. Nuclear Weapons and Climate Change: A Youth Forum, Students for Nuclear Disarmament, online, August 10, 2024 (On "Nuclear Winter")

462. Physicists Coalition for Nuclear Threat Reduction, September 18, 2024 (Next-Generation Fellowship Seminar via Zoom, on "Global Famine After Nuclear War")

463. Geoengineering in Crisis: The Princeton Workshop on Geoengineering Ethics and Governance, Princeton, New Jersey, September 20, 2024 (On "Stratospheric Sulfur Geoengineering – Benefits and Risks")

464. Princeton University Energy Association, The Defining Decade Conference, September 28, 2024 (Fireside Chat with Professor Robert Socolow on Geoengineering and Nuclear Winter)

465. Princeton Plasma Physics Laboratory, Princeton, New Jersey, October 16, 2024 (On "Global Famine After Nuclear War")

466. University of Pennsylvania, Department of Physics. Philadelphia, Pennsylvania, November 6, 2024 (On "Global Famine After Nuclear War")

467. Cosmos Club's Climate Change Mitigation and Adaptation Group, Washington, DC, January 7, 2025 (Via Zoom, on "Stratospheric Sulfur Geoengineering – Benefits and Risks")

468. Victoria University of Wellington, New Zealand, February 10, 2025 (Public Lecture, on "Global Famine After Nuclear War")

469. Department of Physics and Astronomy, Stony Brook University, Stony Brook, New York, March 4, 2025 (On "Global Famine After Nuclear War")

470. Rutgers AAUP-AFT Retiree Assembly, New Brunswick, New Jersey, March 18, 2025 (Via Zoom, on "Stratospheric Sulfur Geoengineering – Benefits and Risks")

471. The Richard P. and Linda S. Turco Climate Lecture, Rutgers University, New Brunswick, New Jersey, April 14, 2025 (On "Global Famine After Nuclear War")

472. Princeton E-filliates Retreat, "Confronting Reality: Climate Goals and Decarbonization," Princeton, New Jersey, June 10, 2025 (On "Stratospheric Sulfur Geoengineering – Benefits and Risks" and Panel on "Is There a Plan B?")

473. Cosmos Club, Washington, DC, September 9, 2025 (On "Global Famine After Nuclear War")
474. Naval War College, Newport, Rhode Island, September 18, 2025 (On "Global Famine After Nuclear War")
475. George Mason University, Fairfax, Virginia, September 24, 2025 (On "Global Famine After Nuclear War")
476. Colorado State University, Fort Collins, Colorado, October 9, 2025 (On "Global Famine After Nuclear War")
477. Kalamazoo College, Kalamazoo, Michigan, November 14, 2025 (Via Zoom, on "Global Famine After Nuclear War")
478. Pennsylvania State University, State College, Pennsylvania, November 20, 2025 (Via Zoom, on "Global Famine After Nuclear War")
479. University of Arizona, December 3, 2025 (Via Zoom, on "Global Famine After Nuclear War")

In the 1980s, Dr. Robock made over 100 presentations on the subject of Nuclear Winter to high schools, colleges, universities, community groups, scientific organizations, and in television and radio interviews, including the first lectures on nuclear winter in the People's Republic of China, Hong Kong, the Philippines, Norway, the Netherlands, and Leningrad, USSR.

INVITED PARTICIPATION IN NATIONAL WORKSHOPS AND INTERNATIONAL SYMPOSIA:

1. JOC Study Conference on Climate Models: Performance, Intercomparison and Sensitivity Studies, National Academy of Sciences, Washington, April 3-7, 1978.
2. Workshop on Estimating and Interpreting Climatic Spectra, NSF, Boulder, October 9-12, 1978.
3. Solar-Terrestrial Workshop, DOE, Los Alamos, June 26-29, 1979.
4. Soviet-American Symposium on Climate Modeling, Climate Change and Statistics, Tbilisi, USSR, October 15-22, 1979.
5. Snow Watch Workshop, NSF, Washington, October 2-3, 1980.
6. Cloud/Climate Workshop, NASA/GISS, New York City, October 29-31, 1980.
7. Workshop on Solar Constant Variations, NASA/GLAS, Greenbelt, MD, November 5-7, 1980.
8. Mt. St. Helens Eruption: Its Atmospheric Effects and Potential Climatic Impact, NASA/U.S. Climate Program, Washington, November 18-21, 1980.
9. Climate Modeling Workshop, NSF, Boulder, April 6-8, 1981.
10. Sixth Climate Diagnostics Workshop, NOAA/CAC, Palisades, NY, October 14-16, 1981.
11. Seventh Climate Diagnostics Workshop, NOAA/CAC, Boulder, October 18-22, 1982.

12. Eighth Joint Meeting of Working Group VIII, US-USSR Agreement on Cooperation in the Field of Environmental Protection, National Academy of Sciences, Washington, January 24-25, 1983.
13. Eighth Climate Diagnostics Workshop, NOAA/CAC, Toronto, October 17-21, 1983.
14. ISLSCP (International Satellite Land Surface Climatology Project) Experimental Design Working Group Meeting, NASA/GSFC, Greenbelt, MD, March 7-9, 1984.
15. SOA (State-of-the-Art) Meeting on Climatic Effects and First Detection, DOE, Arlington, VA, April 30 – May 2, 1984.
16. Nuclear Deterrence: New Risks, New Opportunities, University of Maryland, College Park, September 5-7, 1984.
17. Conference on Large Scale Fire Phenomenology, National Bureau of Standards, Gaithersburg, MD, September 10-13, 1984.
18. First Pilot Climate Data System Workshop, NASA/GSFC, Greenbelt, MD, October 17, 1984.
19. Ninth Climate Diagnostics Workshop, NOAA/CAC, Oregon State University, Corvallis, October 22-26, 1984.
20. Tenth Joint Meeting of Working Group VIII, US-USSR Agreement on Cooperation in the Field of Environmental Protection, University of Maryland, College Park, February 6, 1985.
21. Symposium on Nuclear Winter: Current Assessment and Implications, National Academy of Sciences, Washington, March 26-27, 1985.
22. First WMO Workshop on the Diagnosis and Prediction of Monthly and Seasonal Atmospheric Variation Over the Globe, University of Maryland, College Park, July 29 – August 2, 1985.
23. Scientific Committee on Problems of the Environment (SCOPE) General Assembly, National Academy of Sciences, Washington, September 12, 1985.
24. International Symposium on the Medical Implications of Nuclear War, Institute of Medicine, National Academy of Sciences, Washington, September 20-22, 1985.
25. Snow Watch 1985: Workshop on CO_2/Snow Interaction, University of Maryland, College Park, October 28-30, 1985.
26. Second Pilot Climate Data System Workshop, NASA/GSFC, Greenbelt, MD, January 29-30, 1986.
27. DNA Global Effects Program Technical Meeting, NASA/Ames, Moffett Field, CA, February 25-27, 1986.
28. Resources for the Future Seminar on the Policy Aspects of Climate Forecasting, National Academy of Sciences, Washington, March 4, 1986.
29. Nuclear Winter: Strategic and Diplomatic Implications, Virginia Polytechnic Institute, Blacksburg, Virginia, March 6, 1986.

30. Scientists, Educators and the Strategic Defense Initiative, Union of Concerned Scientists, Washington, DC February 22-24, 1987.
31. DNA Global Effects Program Technical Meeting, Mission Research Corporation, Santa Barbara, California, April 7-9, 1987.
32. AAAS Committee on Science, Engineering and Public Policy, Washington, DC, June 11, 1987.
33. National Research Council Committee on Global Change, National Academy of Sciences, Washington, DC, June 11, 1987.
34. Environmental Problems and Policies in Eastern Europe, Wilson Center, Smithsonian Institution, Washington, DC, June 15-16, 1987.
35. Twelfth Climate Diagnostics Workshop, NOAA/CAC, Salt Lake City, Utah, October 12-16, 1987.
36. Twelfth Joint Meeting of Working Group VIII, US-USSR Agreement on Cooperation in the Field of Environmental Protection, GFDL, Princeton, New Jersey, October 19-21, 1987.
37. United Nations/ENUWAR (SCOPE project: Environmental Consequences of Nuclear War) Workshop, Geneva, Switzerland, November 16-20, 1987.
38. SCOPE-ENUWAR Workshop, Moscow, USSR, March 21-26, 1988.
39. DNA Global Effects Program Technical Meeting, Mission Research Corporation, Santa Barbara, CA, April 19-21, 1988.
40. Symposium on Climate and Geosciences, NATO, Louvain-la-Neuve, Belgium, May 22-27, 1988.
41. Summer Institute for University Faculty, Regional Conflict and Global Security: The Nuclear Dimension, University of Wisconsin, Madison, June 17-24, 1988.
42. 16th Nordic Meteorologists' Meeting, Reykjavík, Iceland, August 6-9, 1988.
43. Conference on Environmental Consequences of Nuclear War – Scientific Consensus and Global Policy Implications, Alva and Gunnar Myrdal Foundation and Royal Academy of Sciences, Stockholm, Sweden, August 20-22, 1988.
44. Climate Trends Workshop, National Climate Program Office, National Academy of Sciences, Washington, DC, September 7-9, 1988.
45. Strategic Planning Seminar: The Drought of 1988 and Beyond; National Climate Program Office, Resources for the Future, and National Academy of Sciences; Washington, DC; October 18, 1988.
46. Thirteenth Climate Diagnostics Workshop, NOAA/CAC, Cambridge, Massachusetts, October 31 – November 4, 1988.
47. Global Climate Change Conference, Cornell University/National Governor's Association, New York City, February 28 – March 3, 1989.
48. PAN-EARTH Case Study Coordinators Cornell Workshop, Cornell University, Ithaca, New York, March 6-8, 1989.

49. Forum on Global Change and Our Common Future; National Academy of Sciences, Smithsonian Institution, and American Association for the Advancement of Science; Washington, DC; May 2-3, 1989.
50. DOE Workshop on Greenhouse-Gas-Induced Climatic Change: A Critical Appraisal of Simulations and Observations, University of Massachusetts, Amherst, May 8-12, 1989.
51. Transportation Research Board Executive Committee Meeting, National Research Council, National Academy of Sciences, Traverse City, Michigan, June 8-9, 1989.
52. EPA Scenarios Advisory Meeting, National Center for Atmospheric Research, Boulder, Colorado, August 31 – September 1, 1989.
53. Second PAN-EARTH Workshop on Effects of Climate Change with Emphasis on Sub-Saharan Africa, Saly, Senegal, September 11-15, 1989.
54. NASA Climate Data System Workshop, NASA/GSFC, Greenbelt, Maryland, September 20-22, 1989.
55. International Workshop on Space Observations of Tropospheric Aerosols and Complementary Measurements, International Radiation Commission, Hampton, Virginia, November 15-18, 1989.
56. AGU Chapman Conference on Global Biomass Burning: Atmospheric, Climatic and Biospheric Implications, Williamsburg, Virginia, March 19-23, 1990.
57. International Workshop on Climatic Variability and Climate Changes in Venezuela and the Caribbean Region, Mérida, Venezuela, April 23-27, 1990. (Member of Organizing Committee)
58. NASA Volcano Climate Workshop, College Park, June 17-18, 1990. (Invited to lead the session on Radiation/Climate Modeling)
59. Global Change Science and Research in China, Committee on Scholarly Communication with the People's Republic of China, National Academy of Sciences, Washington, DC, July 10, 1990.
60. Association for Computing Machinery Conference on Computers and the Quality of Life, George Washington University, Washington, DC, September 13-16, 1990.
61. Fifteenth Climate Diagnostics Workshop, NOAA/CAC, Asheville, North Carolina, October 29 – November 2, 1990.
62. 39th Annual Meeting of the American Society of Tropical Medicine and Hygiene, New Orleans, Louisiana, November 4-8, 1990.
63. The Regions and Global Warming: Impacts and Response Strategies, Center for Growth Studies, Houston Advanced Research Center, The Woodlands, Texas, March 3-6, 1991.
64. AGU Spring Meeting, Baltimore, Maryland, May 28 - June 1, 1991.
65. International Physicians for the Prevention of Nuclear War 10th World Congress, Stockholm, Sweden, June 27-30, 1991.
66. NASA Greenhouse Effect Detection Experiment (GEDEX) Atmospheric Temperature Workshop, Columbia, Maryland, July 9-11, 1991.

67. First Demetra Meeting on Global Change, Chianciano Terme, Italy, October 28 – November 1, 1991.
68. NASA GSFC DAAC User Working Group Workshop, College Park, Maryland, December 2-3, 1991.
69. AGU Chapman Conference on Climate, Volcanism and Global Change, Hilo, Hawaii, March 23-27, 1992.
70. NOAA Operational Measurements Science Review Meeting, Greenbelt, Maryland, May 27-28, 1992.
71. PILPS Planning Meeting, Columbia, Maryland, June 24-26, 1992.
72. American Association of State Climatologists Annual Meeting, Bowling Green, Kentucky, August 6-7, 1992.
73. AMIP Diagnostic Subprojects Meeting, Livermore, California, November 16-17, 1992.
74. NASA GSFC DAAC User Working Group Workshop, Greenbelt, Maryland, December 14-15, 1992.
75. International Conference on Sustainable Development Strategies and Global/Regional/Local Impacts on Atmospheric Composition and Climate, New Delhi, India, January 25-30, 1993. (Member of International Organizing Committee)
76. ISLSCP (International Satellite Land Surface Climatology Project) Data Set Meeting, NASA/GSFC, Greenbelt, Maryland, February 18-19, 1993.
77. International Workshop on Climate Variability, Global Change, and their Impacts in Latin America and the Caribbean, San José, Costa Rica, March 1-5, 1993.
78. PAN-EARTH Workshop on Climate Change Scenarios for Impacts on Mangrove Ecosystems, University of Miami, Florida, March 10, 1993.
79. AMIP Meeting, Bologna, Italy, May 10-12, 1993.
80. AGU Spring Meeting, Baltimore, Maryland, May 24-28, 1993.
81. 6th IAMAP and 4th IAHS Joint International Conference, Yokohama, Japan, July 11-23, 1993.
82. Gordon Research Conference on the Impact of Volcanism on Climate, Henniker, New Hampshire, July 26-30, 1993. (Discussion Leader)
83. Polluted or Pristine? Scientific, Cultural, and Policy Implications of Pre-Industrial Anthropogenic Impact on the Global Carbon Cycle, East-West Center, Honolulu, Hawaii, September 17-19, 1993.
84. International NOAA/DOE MINIMAX Workshop, College Park, September 27-30, 1993. (Local Organizer)
85. NASA GSFC DAAC User Working Group Workshop, Greenbelt, Maryland, November 17-18, 1993.
86. International Geosphere-Biosphere Program (IGBP) PAGES–INQUA COT Meeting Climatic Impact of Explosive Volcanism, Tokyo, Japan, December 1-2, 1993. (Working Group leader)

87. AGU Fall Meeting, San Francisco, California, December 6-10, 1993. (Convenor of special session and session chair)
88. US-Russian Earth Sciences Joint Working Group Meeting, NASA HQ, Washington, DC, April 25-27, 1994.
89. USGCRP Workshop on Earth System Modeling, NSF HQ, Washington, DC, May 1-4, 1994.
90. 5th Conference on the Intersections of Particle and Nuclear Physics, St. Petersburg, Florida, May 31-June 6, 1994.
91. European Conference on the Global Energy and Water Cycle, London, July 18-22, 1994.
92. American Association of State Climatologists Annual Meeting, Madison, Wisconsin, July 28-29, 1994.
93. Workshop on Paleocalibration of Climate Sensitivity, NOAA HQ, Silver Spring, Maryland, August 15-17, 1994.
94. Meeting on Problems in Initializing Soil Wetness, Center for Ocean-Land-Atmosphere Studies, Calverton, Maryland, August 19, 1994.
95. NATO Advanced Research Workshop on "The Effects of the Mt. Pinatubo Eruption on the Atmosphere and Climate," Rome, Italy, September 26-30, 1994.
96. NATO Advanced Research Workshop on "Climatic Variations and Forcing Mechanisms of the Past 2000 Years," Il Ciocco, Italy, October 3-7, 1994.
97. GCIP Science Review and Science Panel, NCAR, Boulder, November 1-4, 1994.
98. Nineteenth Climate Diagnostics Workshop, University of Maryland, College Park, Maryland, November 14-18, 1994. (Session chair)
99. AGU Fall Meeting, San Francisco, California, December 5-9, 1994.
100. First AMIP Scientific Conference, Monterey, California, May 15-19, 1995.
101. XXI Scientific Assembly of the IUGG, Boulder, Colorado, July 2-14, 1995. (Co-Convenor of Joint Symposium; Session Chair of 2 sessions)
102. NASA Aerosol Interdisciplinary Program Workshop, Columbia, Maryland, October 30-November 1, 1995. (Working Group Coordinator)
103. GCIP Coupled Modeling Workshop, NOAA HQ, Silver Spring, Maryland, May 9-10, 1996.
104. Principal Investigators Workshop, Great Plains Regional Center for Global Environmental Change, Nebraska City, Nebraska, October 9-10, 1996.
105. NASA Mini-Workshop on Aerosols and Climate, GISS, New York, June 2-3, 1997.
106. ISLSCP (International Satellite Land Surface Climatology Project) Science Panel Meeting, NOAA HQ, Silver Spring, Maryland, July 10-11, 1997.
107. The Costs of Kyoto, Implications of Climate Change Policy, National Press Club, Washington, DC, July 15, 1997.
108. Global Climate Change Workshop, Annapolis Center, Annapolis, Maryland, July 17-18, 1997.

109. American Association of State Climatologists Annual Meeting, Prescott, Arizona, August 7-9, 1997.
110. Tsukuba International Workshop on Stratospheric Change and its Role in Climate and on the ATMOS-C1 Satellite Mission, Tsukuba, Japan, October 20-22, 1997. (Session Chair)
111. GEWEX Continental Scale International Project PI Workshop, NCAR, Boulder, November 5-6, 1997
112. Climate Changes – Causes and Consequences**,** European Academy for Environmental Affairs, Bonn, Germany, November 10-11, 1997.
113. GRIPS Workshop, Greenbelt, Maryland, March 3-6, 1998.
114. ARM Science Team Workshop, Tucson, Arizona, March 24-26, 1998.
115. Global Hydrologic Validation Workshop, Princeton University, Bedminster, New Jersey, April 5-7, 1998.
116. GEWEX Continental Scale International Project Workshop on Vision for 2000-2005, Silver Spring, Maryland, April 20-21, 1998.
117. Principal Investigators Workshop, Great Plains Regional Center for Global Environmental Change, Lincoln, Nebraska, April 29-30, 1998.
118. Workshop on Land Surface Representation in Global Climate Models, GISS, New York, May 14-15, 1998.
119. GCIP Mississippi River Climate Conference, St. Louis, Missouri, June 8-12, 1998. (Member of Program Committee, Session Convenor, and Session Chair)
120. ECMWF and WCRP/GEWEX Workshop on Modelling and Data Assimilation for Land-Surface Processes, Reading, UK, June 29 - July 2, 1998.
121. 14th AMS Conference on Hydrology, Dallas, Texas, January 10-15, 1999. (Session Convenor and Session Chair
122. IPCC Detection/Attribution Workshop, Texas A&M University, College Station, Texas, January 15-16, 1999.
123. NIGEC Regional Integrated Assessment Workshop, NCAR, Boulder, Colorado, February 4-5, 1999.
124. PILPS International Strategy Forum, Honolulu, Hawaii, February 23-26, 1999. (Session Chair)
125. XXII Scientific Assembly of the IUGG, Birmingham, UK, July 19-30, 1999. (Session Chair)
126. SAGE II Science Team Meeting, August 16-17, 1999.
127. GEWEX/INSU International Workshop on Modeling Land-Surface Atmosphere Interactions and Climate Variability, Gif-sur-Yvette, France, October 4-8, 1999. (Rapporteur of Working Group)
128. Joint session of the CAS/JSC Working Group on Numerical Experimentation (WGNE) and the GEWEX Modelling and Prediction Panel (GMPP), Naval Research Laboratory, Monterey, California, October 25-29, 1999.

129. International Arctic Research Center Workshop, GFDL, Princeton, New Jersey, November 2-3, 1999.
130. 7th U.S.-Japan Workshop on Global Climate Change, "Precipitation Systems/Processes and Their Variability in the Asia Pacific Region," Tokyo, November 16-18, 1999. (Co-Chair of Working Group)
131. GRIPS Workshop, University of Toronto, March 13-15, 2000.
132. GCIP/GAPP PI Workshop, Potomac, Maryland, March 27-28, 2000.
133. GAPP Science Plan Workshop, Potomac, Maryland, March 28-29, 2000. (Served as rapporteur)
134. GEWEX/BAHC International Workshop on Soil Moisture Monitoring, Analysis and Prediction, Norman, Oklahoma, May 16-18, 2000.
135. NSF Arctic System Science (ARCSS) Hydrology Workshop, Santa Barbara, California, September 18-20, 2000.
136. 8th U.S.-Japan Workshop on Global Climate Change, "Pacific-Asian and North America monsoon climate variability, global impacts and inter-relationships," Greenbelt, Maryland, November 28-30, 2000.
137. Coordinated Enhanced Observing Period (CEOP) International Workshop, Greenbelt, Maryland, February 27 – March 1, 2001.
138. Workshop on Lidar Measurement in Latin America, Camagüey, Cuba, March 6-8, 2001.
139. GAPP PI Workshop, Potomac, Maryland, April 30 – May 2, 2001.
140. SAGE II Science Team Meeting, May 3-4, 2001.
141. Coastal Research Agenda Workshop, New Jersey Department of Environmental Protection, Trenton, New Jersey, June 8, 2001.
142. Mid-Atlantic Regional Assessment (MARA) Workshop, State College, Pennsylvania, June 18-19, 2001.
143. Lidar Working Group of the Network for Detection of Stratospheric Change, Observatoire d'Haute Provence, France, June 10-13, 2002.
144. Chapman Conference on Volcanism and the Earth's Atmosphere, Thera, Greece, June 17-21, 2002.
145. Cooperative Program for Operational Meteorology, Education, and Training (COMET) New Approaches to Meteorology Education Course for University Faculty, Boulder, Colorado, August 12-16, 2002.
146. Nordic Academy for Advanced Study (NorFA) Summer School, "Environmental effects of large volcanic eruptions on the Northern Hemisphere," Skaftafell, Iceland, August 28 – September 3, 2002.
147. Climate Change Forum, Seoul, Korea, September 27, 2002.
148. Urban Atmospheric Observatory Workshop, New York City, January 27-28, 2003.
149. The Role of the Stratosphere in Tropospheric Climate, Whistler, British Columbia, Canada, April 29 – May 2, 2003.

150. Gordon Research Conference on Solar Radiation and Climate, New London, New Hampshire, July 13-18, 2003.
151. Reconciling Vertical Temperature Trends Workshop, Asheville, North Carolina, October 28-30, 2003.
152. Jim Angell 80th Birthday Symposium, Silver Spring, Maryland, November 4, 2003.
153. SPARC Workshop on Understanding Seasonal Temperature Trends in the Stratosphere, Silver Spring, Maryland, November 5, 2003.
154. NPRI Symposium – Three Minutes to Midnight: The Impending Threat of Nuclear War, Washington, DC, January 25-27, 2004.
155. Northern Eurasian Earth Science Partnership Initiative (NEESPI) Data Workshop, St. Petersburg, Russia, February 23-26, 2004.
156. Tree Rings and Climate: Sharpening the Focus, Tucson, Arizona, April 6-9, 2004.
157. IPCC Working Group I Workshop on Climate Sensitivity, Paris, France, July 26-29, 2004.
158. CAHMDA (Catchment-scale Hydrological Modeling and Data Assimilation)-II International Workshop on the Terrestrial Water Cycle: Modeling and Data Assimilation across Catchment Scales, Princeton, New Jersey, October 25-27, 2004.
159. National Ecological Observatory Network (NEON) Design Consortium, Science and Human Dimensions Committee Meeting, Marina del Rey, California, January 4-6, 2005.
160. National Ecological Observatory Network (NEON) Design Consortium, Science and Human Dimensions Committee Meeting, Boston, Massachusetts, March 15-17, 2005.
161. National Ecological Observatory Network (NEON) Design Consortium, Science and Human Dimensions Committee Meeting, Estes Park, Colorado, June 7-9, 2005.
162. NCAR Strategic Planning Retreat, Boulder, Colorado, July 25-26, 2005.
163. *WMO Scientific Assessment of Ozone Depletion: 2006*, Chapter 6 Author's Meeting, Boulder, Colorado, October 14-16, 2005.
164. International Soil Moisture Working Group Workshop, Noordwijk, Netherlands, March 28-29, 2006.
165. *WMO Scientific Assessment of Ozone Depletion: 2006*, Chapter 6 Author's Meeting, Vienna, Austria, April 8, 2006.
166. *WMO Scientific Assessment of Ozone Depletion: 2006*, Panel Review Meeting, Les Diablerets, Switzerland, June 19-23, 2006.
167. Managing Solar Radiation Workshop, Moffett Field, California, November 18-19, 2006.
168. United Nations Global Compact U.S. Network Meeting: "Managing Climate Change," United Nations Headquarters, New York, April 3, 2007.
169. Brainstorming Retreat, "The Role of the United Nations in Climate Change: Exploring the Way Forward from Now to Bali and Beyond," Rye Brook, New York, June 23, 2007.
170. Nuclear Weapons: The Final Pandemic, Preventing Proliferation and Achieving Abolition, Royal Society of Medicine, London, England, October 3-4, 2007.

171. Global Dimming and Brightening Workshop, Ein Gedi, Israel, February 10-14, 2008.
172. Nuclear Weapons – The Greatest Peril to Civilization, A conference to imagine our world without them, Yale University, New Haven, Connecticut, February 21-22, 2008.
173. Greater Horn of Africa Regional Model Intercomparison Project (AFRMIP) First Planning Meeting, Rutgers University, March 27-28, 2008.
174. NASA Goddard Institute for Space Studies AR5 Science Workshop, New York City, November 18, 2008.
175. Soil Moisture and Soil Temperature Observations and Applications: A Joint U.S. Climate Reference Network (USCRN) – National Integrated Drought Information System (NIDIS) Workshop, Oak Ridge, Tennessee, March 3-5, 2009.
176. NASA Soil Moisture Active and Passive (SMAP) Algorithms and Calibration/Validation Workshop, Oxnard, California, June 9-11, 2009.
177. Geoengineering Options to Respond to Climate Change: Steps to Establish a Research Agenda, National Academy of Sciences, Washington, DC, June 15-16, 2009.
178. Gordon Research Conference: Radiation & Climate, New London, New Hampshire, July 5-10, 2009.
179. Strategic Workshop on Geoengineering Research, Max Planck Institute for Meteorology, Hamburg, Germany, November 25-26, 2009.
180. UNEP-Sponsored International Expert Workshop on Emerging Issues in Climate Change, "State of Tropospheric Temperature, Pollution, Snow, Melting Glaciers and Potential Impact on Monsoon and High Altitude Vegetation in the Himalayas-Tibet Plateau," New Delhi, India, December 28-29, 2009.
181. Asilomar International Conference on Climate Intervention Technologies, Pacific Grove, California, March 22-26, 2010.
182. Governing Climate Engineering – A Transdisciplinary Summer School, Max-Planck-Institute for Comparative Public Law and International Law, Heidelberg, Germany, July 12-16, 2010.
183. Intergovernmental Panel on Climate Change AR5 Synthesis Report Scoping Meeting, Liege, Belgium, August 25-27, 2010.
184. Workshop on the Consequences for the Climate of the Planet of a Nuclear War, Havana, Cuba, September 14-15, 2010.
185. Government-University-Industry Research Roundtable (GUIRR), National Academy of Sciences, Washington, DC, October 12-13, 2010.
186. Workshop on the Ethics of Solar Radiation Management, Missoula, Montana, October 18-20, 2010.
187. Beijing Forum – The Harmony of Civilizations and Prosperity for All, Commitments and Responsibilities for a Better World, Beijing, China, Nov. 5-7, 2010.
188. Intergovernmental Panel on Climate Change (IPCC) Working Group I First Lead Author Meeting for the Fifth Assessment Report, Kunming, China, November 8-11, 2010.

189. 18th Stratospheric Processes and their Relation to Climate (SPARC) Scientific Steering Group (SSG) Meeting, Pune, India, February 1-5, 2011.
190. GeoMIP Workshop, Rutgers University, New Brunswick, New Jersey, February 10-12, 2011.
191. Solar Radiation Management Governance Initiative conference, Royal Society's Kavli Centre, Milton Keynes, United Kingdom, March 22-24, 2011.
192. Working Group on Fate of Mountain Glaciers in the Anthropocene, Pontifical Academy of Sciences, Vatican City, Italy, April 2-4, 2011.
193. Second SMAP Cal/Val Workshop, Oxnard, California, May 3-5, 2011.
194. Keck Institute for Space Sciences Study Conference on Monitoring of Geo-Engineering Effects and Their Natural and Anthropogenic Analogues, California Institute of Technology, Pasadena, May 24-26, 2011.
195. Workshop on Climate, Society, and Technology, Beckman Center of the National Academies, Irvine, California, June 7-8, 2011.
196. Intergovernmental Panel on Climate Change (IPCC) Expert Meeting on Geoengineering, Lima, Peru, June 20-22, 2011.
197. Intergovernmental Panel on Climate Change (IPCC) Working Group I Second Lead Author Meeting for the Fifth Assessment Report, Brest, France, July 25-29, 2011.
198. Testifying on Climate Science: Finding Fresh Approaches, Boulder, Colorado, August 24, 2011.
199. AAAS delegation visit to Havana, Cuba, to enhance scientific cooperation, December 12-16, 2011.
200. GeoMIP Workshop, University of Exeter, UK, March 30-31, 2012.
201. Intergovernmental Panel on Climate Change (IPCC) Working Group I Third Lead Author Meeting for the Fifth Assessment Report, Marrakech, Morocco, April, 16-19, 2012.
202. Extreme Cuban Climate (XCUBE) Project Kick-off Meeting, Bergen, Norway, May 22, 2012.
203. AGU Chapman Conference on Volcanism and the Atmosphere, Selfoss, Iceland, June 10-16, 2012.
204. Intergovernmental Panel on Climate Change (IPCC) Working Group I Fourth Lead Author Meeting for the Fifth Assessment Report, Hobart, Tasmania, Australia, January 12-17, 2013.
205. Project Advisory Board meeting for the European Trans-disciplinary Assessment of Climate Engineering (EuTRACE) project at the Institute for Advanced Sustainability Studies, Potsdam, Germany, January 30-31, 2013.
206. International Campaign to Abolish Nuclear Weapons (ICAN) Civil Society Forum, Oslo, Norway, March 2-3, 2013.
207. Conference on the Humanitarian Impact of Nuclear Weapons, Oslo, Norway, March 4-5, 2013.

208. Extreme Cuban Climate (XCUBE) Project Meeting, Havana, Cuba, March 9-12, 2013.
209. GeoMIP Workshop, Institute for Advanced Sustainability Studies, Potsdam, Germany, April 15-16, 2013.
210. Project Advisory Board meeting for the European Trans-disciplinary Assessment of Climate Engineering (EuTRACE) project at the Institute for Advanced Sustainability Studies, Potsdam, Germany, January 28-31, 2014.
211. Second Conference on the Humanitarian Impact of Nuclear Weapons, Nayarit, Mexico, February 13-14, 2014.
212. Fourth GeoMIP Workshop, Laboratoire de Météorologie Dynamique, Paris, France, April 24-25, 2014.
213. Exploring the Potential and Side Effects of Climate Engineering (EXPECT) Project Meeting, Oslo, Norway, June 2-3, 2014.
214. MeMoVolc/NordVulk Summer School "Magmatic volatiles: From generation to atmospheric loading," Stórutjarnir, Iceland, July 1-5, 2014.
215. Fifth Interdisciplinary Summer School on Climate Engineering "Why do researchers disagree about Climate Engineering?" Heidelberg, Germany, July 28 – August 1, 2014.
216. "High-latitude volcanic eruptions and climate: Filling the gaps" Workshop, Stockholm University, Sweden, November 5-7, 2014.
217. The World Science Summit on Climate Engineering: Future Guiding Principles and Ethics, U.S. National Academy of Sciences, Washington, DC, December 2-3, 2014.
218. Workshop on Decadal Climate Predictions: Improving our Understanding of Processes and Mechanisms to Make Better Predictions, Aspen Global Change Institute, Aspen, Colorado, June 7-12, 2015.
219. Fifth GeoMIP Workshop, National Center for Atmospheric Research, Boulder, Colorado, July 22-23, 2015.
220. 3rd Annual Summer School on Sustainable Climate Risk Management, Penn State University, State College, Pennsylvania, August 3-7, 2015.
221. Exploring the Potential and Side Effects of Climate Engineering (EXPECT) Project Meeting, Oslo, Norway, January 5-6, 2016.
222. Stratospheric Sulfur and its Role in Climate (SSiRC) Steering Group Meeting, Potsdam, Germany, April 28, 2016.
223. Exploring the Potential and Side Effects of Climate Engineering (EXPECT) Project Meeting, Oslo, Norway, June 20, 2016.
224. Sixth GeoMIP Workshop, University of Oslo, Oslo, Norway, June 21-22, 2016.
225. International Geoengineering Workshop, Beijing Normal University, Beijing, China, July 18-20, 2016.
226. Workshop on Low Environmental Impact SRM Experiments, Institute for Advanced Sustainability Studies, Potsdam, Germany, September 7, 2016. (by video conferencing)

227. The Forum for Climate Engineering Assessment at American University (FCEA) workshop on legislation for outdoor geoengineering experiments, Washington, DC, September 14, 2016. (by video conferencing)
228. Climate Geoengineering Governance Meeting, Carnegie Council for Ethics in International Affairs, New York, New York, September 25, 2016.
229. Scientific Steering Group Meeting, Stratospheric Sulfur in Relation to Climate Project (SSiRC), Bern, Switzerland, January 30 – February 2, 2017.
230. Workshop: U.S. Engagement in the Humanitarian Consequences of Nuclear Weapons Debate, Stanford University, February 10-11, 2017.
231. Forum on U.S. Solar Geoengineering Research, Washington, DC, March 23-24, 2017.
232. AgMIP-IIASA International Workshop, Global Gridded Crop Model Initiative side meeting, Laxenburg, Austria, June 15-16, 2017.
233. Gordon Research Conference on Climate Engineering: Radiation Management Climate Engineering: Technology, Modeling, Efficacy, and Risks; Newry, Maine; July 23-28, 2017. (Co-Chair)
234. Seventh GeoMIP Workshop, Newry, Maine, July 27, 2017. (Co-Chair)
235. Volcanic Impacts on Climate and Society (VICS) Workshop, Tucson, Arizona, January 12-14, 2018.
236. Eighth GeoMIP Workshop, ETH (Eidgenössische Technische Hochschule, Swiss Federal Institute of Technology), Zurich, Switzerland, April 16-17, 2018. (Co-Chair)
237. Scientific Steering Group Meeting, Stratospheric Sulfur in Relation to Climate Project (SSiRC), Bern, Switzerland, May 14-17, 2018.
238. Planetary Management Symposium Series: Climate Engineering, Arizona State University, Tempe, February 11-13, 2019.
239. Workshop on Climate Extremes: New Ideas for Quantifying Changes and Improving Resilience, Riederalp, Switzerland, March 19-23, 2019.
240. Fourth Volcanic Impacts on Climate and Society (VICS) Workshop: The Common Era and Beyond, Cambridge, United Kingdom, April 13-16, 2019.
241. NOAA Earth Systems Laboratory Global Monitoring Annual Conference, Boulder, Colorado, May 21-22, 2019.
242. International Symposium on Climate Geoengineering, Rio de Janeiro, Brazil, June 10-11, 2019.
243. NCAR/UCAR Climate Intervention Strategies Workshop 2019, Boulder, Colorado, July 30-31, 2019.
244. Developing a Research Agenda and Research Governance Approaches for Climate Intervention Strategies that Reflect Sunlight to Cool Earth Workshop, National Academies of Science, Engineering, and Medicine, University of Colorado, Boulder, August 7-8, 2019.
245. Ninth GeoMIP Workshop, Beijing Normal University, August 14-17, 2019. (Co-Chair)

246. Sunlight Reflection Briefing: Research in Emergency Medicine for Climate, webinar hosted by SilverLining, June 18, 2020 (Panelist)
247. Tenth GeoMIP Workshop, online, July 15, 2020. (Co-Chair)
248. Eleventh GeoMIP Workshop, online, July 8-9, 2021. (Co-Chair)
249. Nuclear Threat Initiative Workshop on Global Effects of a Nuclear Weapons Exchange on Critical Infrastructure, Trade and Sustainable Development, September 15, 2021.
250. Twelfth GeoMIP Workshop, Newry, Maine, June 30, 2022. (Co-Chair)
251. Designing Scenarios for Climate Intervention Strategies Workshop, National Center for Atmospheric Research, Boulder, Colorado, October 31 – November 2, 2022)
252. Berkeley Atmospheric Sciences Center Symposium, University of California, Berkeley, February 24, 2023.
253. EPRI's 26th Energy and Climate Research Seminar, Washington, DC, May 10-11, 2023.
254. Covering the Atomic File – Interactive Workshop for Journalists to Bring Better Reporting to Renewed Nuclear Tensions, Albuquerque, New Mexico, June 7-10, 2023.
255. Thirteenth GeoMIP Workshop, Exeter, UK, July 3-7, 2023. (Co-Chair)
256. Workshop on The Increasing Danger of Nuclear Weapons: How Physicists Can Help Reduce the Threat, International Center for Theoretical Physics, Trieste, Italy, October 23-25, 2023.
257. Nuclear Threat Initiative Workshop on "Rethinking U.S. Nuclear Policy: Understanding and Incorporating the Global Effects of Nuclear Conflict," online, November 2, 2023.
258. Fourteenth GeoMIP Workshop, Ithaca, New York, July 10-12, 2024. (Co-Chair)
259. Climate Conundrum: Bridging the Gap Between Science and Security, American Academy of Arts and Sciences, Cambridge, Massachusetts, May 14-15, 2024.
260. Nuclear Weapons and Climate Change: A Youth Forum, Students for Nuclear Disarmament, online, August 10, 2024.
261. Expert Roundtable on Solar Radiation Modification of the Scientific Advisory Board of the UN Secretary-General, December 16, 2024.
262. Princeton E-filliates Retreat, "Confronting Reality: Climate Goals and Decarbonization," Princeton, New Jersey, June 10, 2025.
263. Nobel Laureate Assembly for the Prevention of Nuclear War, University of Chicago, Chicago, Illinois, July 14-16. 2025.
264. 63rd Pugwash Conference on Science and World Affairs, "80 Years after the Atomic Bombing; Time for Peace, Dialogue and Nuclear Disarmament," Hiroshima, Japan, November 1-5, 2025.

GRANTS:

1. NASA, NSG-5209, "Multidisciplinary Research Program in Atmospheric Science," August 1, 1977 – December 31, 1980, $1,006,396. (My portion of this grant supported my work on climate research.)

2. NSF, ATM-7918215, "Climate Change Caused by Natural Variation and Volcanic Dust as Simulated by a Seasonal Model," October 15, 1979 – March 31, 1982, $85,177.
3. NOAA/NESS, NA79AA-D-00094, NA80-AAD00035, "Collaborative Research in Satellite Meteorology," June 15, 1979 – March 31, 1982, $128,547. (My portion of this grant supported my work on snow cover.)
4. NOAA/CAC, NA81AA-H-00023, "Collaborative Research Agreement, 1980-1983," $238,534. (My portion of this grant supported my work on satellite observed reflectance.)
5. NSF, ATM-8213194, "Numerical Model Studies of Climate Variability," November 1, 1982 – June 30, 1986, $174,000.
6. NOAA/CICS, NA84AA-H-00026, "Block Funding for Cooperative Institute for Climate Studies," 1984-1988, $2,524,637. (My portion of this grant supported my work on snow cover data sets. It also supported my work on surface temperature effects of forest fire smoke, with funding from the Defense Nuclear Agency.)
7. AAAS Congressional Science Fellowship, September 1, 1986 – August 31, 1987, $28,000.
8. NOAA, NA87AA-D-CP003, "Surface Temperature Effects of Forest Fire Smoke Plumes," December 1, 1986 – April 30, 1988, $100,000. (Funding from the Defense Nuclear Agency.)
9. NASA, GSFC874S NCA5110, "Instructional Use of NASA's Climate Data System (NCDS)," March 1, 1989 – February 28, 1990, $20,000.
10. NSF, ATM-8920590, "The Volcanic Signal in Global Climate," April 1, 1990 – April 30, 1994, $300,000.
11. USDA Forest Service Cooperative Agreement, PSW900081CA, "Verification of Monthly Mean Forecasts of Temperature, Precipitation, Dewpoint and Wind in the Continental United States," July 1, 1990 – December 31, 1991, $46,326. (With Bill Klein)
12. NOAA, NA90AADAC804, "Analysis and Modeling of Soviet Soil Moisture Data," September 1, 1990 – August 31, 1992, $130,000.
13. NASA, NAG 5-1835, "Climate Model Calculations of the Effects of Volcanoes on Global Climate," December 1, 1991 – November 30, 1996, $439,000.
14. NOAA Climate and Global Change Program, NA36GPO311, "Analysis and Modeling of the Hydrological Cycle Using Russian Data," August 1, 1993 – July 31, 1995, $290,000.
15. DOE Office of Energy Research, DE-FG02-93ER61691.A000, "Validation of Soil Moisture in GCMs – AMIP Diagnostic Subproject 11," September 1, 1993 – August 31, 1998, $148,500.
16. NOAA Climate and Global Change Program, NA56GPO212, "Midlatitude Land Surface Processes: Modeling and Analysis in Support of GCIP Using American, Russian, and Chinese Data," May 1, 1995 – April 30, 1999, $445,000.
17. NSF Climate Dynamics Program, ATM-9528201, ATM-9996063, "Climatic Effects of Volcanic Eruptions," March 1, 1996 – February 28, 2000, $165,000.
18. NASA, NAGW-4912, "Climatic Effects of Volcanic Eruptions," December 1, 1995 – February 28, 1997, $55,000.

19. NOAA Climate and Global Change Program, NA66GPO438, "Limits of Natural Variations in Global and Regional Climate as Compared to Observed Climatic Trends," July 1, 1996 – June 30, 1999, $150,000. (Konstantin Ya. Vinnikov, P.I.)
20. DOE Great Plains National Institute for Global Environmental Change, "The Diurnal Cycle over the Great Plains in the Future: Mechanisms and Spatial Distribution," July 1, 1996 – June 30, 2000, $215,000. (Georgiy L. Stenchikov, P.I.)
21. NASA Mission to Planet Earth, NAGW5227, "Global Soil Moisture Data Set From Satellite and Gravimetric Observations for Climatic Studies and Evaluation of the Hydrological Aspects of Climate Models," July 1, 1996 – July 14, 1997, $97,300. (Konstantin Ya. Vinnikov, P.I.)
22. NASA, NAG-53739, "Climatic Effects of Volcanic Eruptions," March 1, 1997 – February 28, 1999, $110,000.
23. NASA Mission to Planet Earth, NAG-55161, "Global Soil Moisture Data Set From Satellite and Gravimetric Observations for Climatic Studies and Evaluation of the Hydrological Aspects of Climate Models," July 15, 1997 – July 14, 1999, $100,000. (Konstantin Ya. Vinnikov, P.I.)
24. NASA, NAG-57913, "Climatic Effects of Volcanic Eruptions," March 1, 1999 – December 31, 1999, $46,000. (Georgiy L. Stenchikov, P.I.)
25. NASA Earth Science Enterprise, NAG 1-2154, "SAGE II Validation with a Global Lidar Network," January 1, 1999 – December 31, 2002, $253,933.
26. NOAA Climate and Global Change Program, GC99-443b, "Evaluation of Land Surface Data Assimilation System Simulations of Soil Moisture in the GCIP Region," September 1, 1999 – August 31, 2003, $225,000.
27. NASA Earth Science Enterprise, NAG 5-9792, "Volcanic Eruptions and Climate," August 1, 2000 – July 31, 2003, $180,000.
28. NSF Climate Dynamics, ATM-9988419, "Volcanic Eruptions and Climate," April 1, 2000 – March 31, 2004, $270,000.
29. NOAA Climate and Global Change Program, "Sea Ice and Snow Cover as Parameters for Detection, Attribution, and Monitoring of Anthropogenic Climate Change," June 1, 2000 – May 31, 2003, $270,000. (Konstantin Y. Vinnikov, P.I.)
30. NASA Earth Science Enterprise, "Reanalysis for Stratospheric Trace Gas Studies," June 1, 2000 – May 31, 2003, $493,560. (Steven Pawson, P.I.)
31. Inter-American Institute for Global Change Research, "Characterization of stratospheric and upper tropospheric aerosols over Central and South America," February 1, 2000 – January 31, 2001, $29,923. (Pablo Canziani, P.I., Juan Carlos Antuña, Co-P.I.)
32. New Jersey Department of Environmental Protection, SR-00-048, "Assessment of the Consequences of Climate Change for New Jersey," July 1, 2000 – March 31, 2002, $60,000.
33. NSF, ATM-0083165, "Collaborative Research on the Snow-Soil Moisture-Monsoon Relationship," August 1, 2000 – July 31, 2003, $194,516.

34. World Meteorological Organization, Support for Workshop on Lidar Measurement in Latin America, Camagüey, Cuba, March, 2001, $2000.
35. U.S. Department of Education, "Interdisciplinary Graduate Education in Environmental Biology, Chemistry and Physics," September 1, 2001 – August 31, 2004, $731,754 ($519,426 from U.S. Dept. of Education, and $212,328 matching funds from Rutgers.)
36. Cook College, Rutgers University, "Assessment of the Consequences of Climate Change for New Jersey," November 1, 2001 – June 30, 2002, $5,000.
37. NASA Goddard Institute for Space Physics, NCC5-553, "Research in Regional and Global Climate Variability," April 1, 2001 – March 31, 2003, $1,514,060. [Support for Center for Environmental Prediction]
38. NSF, "Support for AGU Chapman Conference, Volcanism and the Earth's Atmosphere," June, 2002, $18,000.
39. NASA, "Support for AGU Chapman Conference, Volcanism and the Earth's Atmosphere," June, 2002, $10,000.
40. IAVCEI, "Support for AGU Chapman Conference, Volcanism and the Earth's Atmosphere," June, 2002, $3,000.
41. New Jersey Department of Environmental Protection, SR-02-082, "Impacts of Climate Change on New Jersey Water Resources," June 1, 2002 – November 30, 2003, $90,000.
42. NOAA OGP, NA03-OAR-4310057, "Evaluation and Development of the Land Data Assimilation System (LDAS) Using Observations," March 1, 2003 – February 28, 2007, $240,000.
43. Inter-American Institute for Global Change Research, "Support for Second Workshop on Lidar Measurement in Latin America," February 17, 2003 – February 27, 2003, $3,000. (Juan Carlos Antuña, Co-P.I.)
44. NOAA OGP, NA03-OAR-4310155, "Volcanic Forcing of Climate over the Past 2000 Years: An Improved Ice-Core-Based Index for Climate Models," August 1, 2003 – July 31, 2007, $299,336.
45. NSF Climate Dynamics, ATM-0313592, "Collaborative Research on the Climatic Effects of the 1783-1784 Laki Volcanic Eruption," August 1, 2003 – July 31, 2007, $486,789.
46. NASA Terrestrial Hydrology and Global Water Cycle Program, NNG04GF18G, "Soil Moisture Data Rescue from Russia and China," April 1, 2004 – March 31, 2006, $26,537.
47. NSF Climate Dynamics, ATM-0351280 and NASA Office of Earth Science, NNG05GB06G, "Stratospheric Aerosol Data Assimilation for Climate Studies," March 1, 2004 – February 28, 2007, $524,000. (Georgiy L. Stenchikov, P.I.)
48. New Jersey Department of Environmental Protection, SR03-073, "Regional Climate Change and Impact on New Jersey Water Resources," March 1, 2004 – June 30, 2005, $50,000.
49. NSF Water Cycle, ATM-0450334, "Coupled Climatic-Hydrologic Change in the Terrestrial Water Cycle of North America in the 20th and 21st Centuries: Natural Variability and Anthropogenic Impacts," March 1, 2005 – February 28, 2011, $818,564.

50. European Space Agency, "Evaluation of Soil Moisture Ocean Salinity satellite retrievals of soil moisture using in situ soil moisture observations from the Ukraine, Mongolia, China, and the United States," July 1, 2005 – , access to data, but no funds.
51. U.S. Department of Education, "Interdisciplinary Graduate Education in Environmental Science and Engineering," August 15, 2006 – August 14, 2009, $633,360. (Daniel Giménez, P.I.)
52. NSF Climate Dynamics, ATM-0730452, "Collaborative Research in Evaluation of Suggestions to Geoengineer the Climate System Using Stratospheric Aerosols and Sun Shading," February 1, 2008 – January 31, 2013, $622,275. (Includes $5000 Research Experience for Undergraduates supplement and $67,846 supplement to support graduate student.)
53. NSF Climate Dynamics, ATM-0730463, "Modeling Climate Variability and Change of the Greater Horn of Africa," October 1, 2007 – September 30, 2010, $382,602. (Richard Anyah, P.I.) [Anyah took the years 2 and 3 support with him the University of Connecticut.]
54. New Jersey Agricultural Experiment Station, Internal Hatch Awards Program, "The Global Soil Moisture Data Bank and Geoengineering," January 8, 2008 – June 30, 2008, $5,000.
55. Rutgers Climate and Environmental Change Initiative, "Regional Scale Climate Change Prediction and its Meaning for Social-Institutional Adaptation in Rajasthan, India," September 25, 2008 – June 30, 2009, $10,000. (Trevor Birkenholtz, P.I.)
56. EPA, EPA-RD-83454701-0, "Observational, laboratory, and modeling studies of the impacts of climate change on allergic disease," April 1, 2010 – March 31, 2013, $900,000 ($42,256 my part). (Leonard Bielory, P.I.)
57. NSF Arctic System Science, ARC-0908834, "Regional Climate Modeling of Volcanic Eruptions and the Arctic Climate System," August 1, 2009 – July 31, 2013, $342,401.
58. NASA, NNX09AJ99G, "Soil Moisture Observations for SMAP Calibration and Validation," May 19, 2009 – May 18, 2013, $222,745.
59. Keck Institute for Space Studies, California Institute of Technology, "Monitoring of geo-engineering effects and their natural and anthropogenic analogues," January 1, 2011 – April 30, 2012, $55,127. (Graeme Stephens, P.I.)
60. NSF Climate and Large-Scale Dynamics, AGS-1157525, "Impacts of Geoengineering Using Stratospheric Aerosols," June 1, 2012 – November 30, 2016, $568,933.
61. NSF, GEO-1240507, "What are Sustainable Climate-Risk Management Strategies?" September 24, 2012 – September 23, 2017, $11,910,966 ($565,762 my part). (co-P.I., Klaus Keller, P.I.)
62. Brookhaven National Laboratory, Contract 210367, "Sensitivity of convective precipitation development over the Southern Great Plains to patterns of soil moisture," October 1, 2012 – April 30, 2014, $78,429.
63. NSF, AGS-1430051, "Decadal Prediction Following Volcanic Eruptions," September 1, 2014 – August 31, 2019, $758,938.

64. NSF, AGS-1617844, "Impacts of Climate Engineering Using Stratospheric Aerosols," September 15, 2016 – August 31, 2020, $718,276.

65. Open Philanthropy Project, "Environmental and Human Impacts of Nuclear War," March 22, 2017 – December 31, 2021, $2,982,206.

*66. Open Philanthropy Project, "Environmental and Human Impacts of Nuclear War," March 26, 2020 – October 1, 2026, $3,000,000.

*67. NSF, AGS-2017113, "Stratospheric Aerosol Climate Intervention Designed to Minimize Negative Impacts," July 1, 2020 – December 31, 2025, $753,708.

68. NSF, ENG-2028541, "Collaborative Research: Global Agricultural Impacts of Stratospheric Aerosol Climate Intervention," October 1, 2020 – March 31, 2024, $319,644. (co-P.I., Lili Xia, P.I.)

*69. SilverLining's Safe Climate Research Initiative, Gift to study solar climate intervention, $400,000, August 20, 2020, plus $100,000, February 24, 2021.

*70. Future of Life Institute, "Impacts of Nuclear War on Agriculture and Global Food Security," $500,000, September 1, 2023 – August 31, 2026.

*Current grants

January 22, 2026