

(Michael Oppenheimer)

CURRICULUM VITAE

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MICHAEL OPPENHEIMER

Albert G. Milbank Professor of Geosciences and International Affairs
and the High Meadows Environmental Institute, Princeton University

Director, Center for Policy Research on Energy and the Environment of the
School of Public and International Affairs, Princeton University

Associated Faculty of: Atmosphere and Ocean Sciences Program
Princeton Institute for International and Regional Studies
Andlinger Center for Energy and the Environment

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Other Professional Affiliations

Visiting Professor, NYU School of Law
Editor in Chief, *Climatic Change Letters*
Co-editor in Chief, *Climatic Change*
Science Advisor, Environmental Defense Fund
Review Editor, Intergovernmental Panel on Climate Change

Fields of Specialization

Physics and chemistry of the atmosphere; climate change, ozone depletion, acid deposition and air pollution: their effects on natural systems and society, and public policy responses.

Education

S.B. (Chemistry) M.I.T., 1966

Ph.D. (Chemical Physics) University of Chicago, 1970

Positions

1966-67 Teaching Assistant, University of Chicago

1971-73 Research Fellow, Harvard College Observatory

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1971-81 Astrophysicist, Harvard-Smithsonian Center for Astrophysics
1978-79 Visiting Astronomer, University of California, Santa Cruz
1981-96 Senior Scientist, Environmental Defense Fund (EDF)
1995 -2002 Manager, Global / Regional Air Program, EDF
1996 -2002 Chief Scientist, EDF
2002- Professor of Geosciences and International Affairs and the High Meadows
 Environmental Institute, Princeton University

Honors, Awards

1969 Danforth Tutor, University of Chicago
1969-70 Union Carbide Fellow, University of Chicago
1978-79 John Simon Guggenheim Memorial Foundation Fellow
1978-79 Morrison Fellow, University of California, Santa Cruz
1989 The Henry Draper Award of the Hudson River Fishermen's
 Association
1989-2001 Streisand Chair in Environmental Studies, EDF
2000 League of Conservation Voters, Environmental Leadership Award
2001 Environmental Action Coalition Green Star Award
2005-2006 Russell Sage Foundation Visiting Scholar
2007 New Species Award, African Rainforest Conservancy
2007 Participant in the Intergovernmental Panel on Climate Change,
 which won the Nobel Peace Prize in 2007
2009-10 Russell Sage Foundation Associate Scholar
2010 Heinz Award Winner
2010 First Stephen Schneider Memorial Lecturer, AGU
2010- Fellow, American Association for the Advancement of Science
2014 Linacre Lecturer, Oxford University
2014-15 Pace Academy Visiting Fellow, Pace University
2015 Agassiz Visiting Lecturer, Dept. Earth and Planetary Sciences, Harvard
 Univ.

Committees, Boards, and Panels

1982-90 Board of Directors, National Clean Air Coalition
1982 E.P.A. Lead Criteria Review Committee
1982-84 Acid Rain Advisory Committee, N.Y. State Department of
 Environmental Conservation
1982-86 Board of Directors, OSHA-Environmental Network
1983 Ad Hoc Committee to Review the National Acid Precipitation Assessment
 Program, White House Council on Environmental Quality
1985-90 Hudson River Panel, Hudson River Foundation
1986-88 Board of Directors, Environmental Planning Lobby
1987-88 E.P.A. Visibility Committee
1988-89 Panel on Greenhouse Warming, World Resources Institute
1988-95 Advisory Board, Pace University Center for Environmental Legal
 Studies

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1989-95 NASA Advisory Committee on the Atmospheric Effects of Stratospheric Aircraft

1989-97 Chairman, Science Advisory Panel, Climate Change Exhibition, American Museum of Natural History

1990-96 Advisory Board, Environmental Media Association

1990 Contributing Author, Intergovernmental Panel on Climate Change, First Assessment Report, WGII Chapter 5

1991-02 Board of Analysts, "Greenwire"

1991-92 National Steering Committee, Florida Global Warming Education Project, American Horizons

1991-94 Environmental Advisory Committee to New York Governor Mario Cuomo

1992-94 Visiting Committee, Cornell Center for the Environment, Cornell University

1994 Interim Advisory Committee, Princeton Environmental Institute, Princeton University

1995-99 National Academy of Sciences/National Research Council, Panel on the Atmospheric Effects of Aviation

1996 Contributing author, Intergovernmental Panel on Climate Change, Second Assessment Report, WGI Technical Summary and Chapter 8

1997-98 Technical Advisory Panel, H. John Heinz III Center

1998 Global Change Steering Committee, H. John Heinz III Center

1998-99 Scientific Advisory Board, The Riverkeeper

1999-02 Advisory Board, Earth and Environmental Studies Program, Montclair State College

2000-02 Executive Campaign Cabinet, Earth System Science Research Center, University of California, Irvine

2000-02 Advisory Council, Center for Environmental Policy, Bard College

2001 Lead author, Intergovernmental Panel on Climate Change, Third Assessment Report, WGI Technical Summary; Drafting Team, WGI Summary for Policy Makers

2001-05 Environment Jury, Heinz Awards, Heinz Foundation

2003-09 Trustee, Tri-State Transportation Coalition

2003-06 Steering Committee, Aldo Leopold Leadership Program

2003- Executive Committee, Cooperative Institute for Climate Science, Princeton University and NOAA Geophysical Fluid Dynamics Laboratory

2003-07 Science and Technology Council, Cummins, Inc.

2004-07 Lead Author, Intergovernmental Panel on Climate Change, Fourth Assessment Report, WGII Chapter 19

2005-06 Panel on Climate Variability and Change, National Research Council, National Academy of Sciences

2005-14 Executive Committee, Environmental Studies Program, Princeton University

2006-19 Executive Committee, Center for Information Technology Policy Policy, Princeton University

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2006-8 Chair, steering committee for Arctic Expedition for Climate Action (Lindblad Expeditions, Aspen Institute, National Geographic Society)

2007-8 Advisory Board, African Rainforest Conservancy

2007-09 Panel on Alternative Liquid Transportation Fuels, National Academy of Sciences

2007-8 Co-curator, *Climate Change: The threat to life and our energy future*, American Museum of Natural History

2007-9 Editorial Board, Environmental Research Letters

2008-19 Executive Committee, Program in Sustainable Energy, Princeton University

2008- Board of Directors, Climate Central

2008 Advisory Board to NJDEP commissioner on establishing an SAB

2009-12 Coordinating Lead Author, Intergovernmental Panel on Climate Change, Special Report on *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation*, Chapter 1; Drafting Author Summary for Policy Makers

2009-16 National Academies Board on Energy & Environmental Systems

2010-12 American Geophysical Union (AGU) Outreach Committee

2010-14 Coordinating Lead Author, Intergovernmental Panel on Climate Change, Fifth Assessment Report, WGII Ch. 19; Drafting Author, Summary for Policy Makers; Member Core Writing Team, Synthesis Report

2011-14 Advisory Board, Yale Climate and Energy Institute

2012- Sustainability Steering Committee, Princeton University

2012 AGU Climate Change Position Statement Panel

2012 AGU Journal Feasibility Study Task Force

2013-19 NYC Climate Change Panel, Mayor's Office

2015-19 AGU Climate Communication Prize Committee

2015- Science Advisor, Climate Communication

2015- Editorial Board, Journal of Extreme Events

2016 Co-coordinator, Climate Science Subgroup, Hillary Clinton Campaign

2016 AGU Panel on Statement on Scientists' Rights and Responsibilities

2016-2018 Andlinger Center Executive Committee, Princeton University

2017-20 AAAS Electorate Nominating Committee, Atm. & Hydro. Sci. Section

2017- Board of Directors, Climate Science Legal Defense Fund

2017-19 Coordinating Lead Author, Intergovernmental Panel on Climate Change, Special Report of Oceans, Cryosphere and Climate Change, Chapter 4.

2018-21 Review Editor, Sixth Assessment Report, Intergovernmental Panel on Climate Change

2019- Advisory Board, Metcalf Institute for Marine and Environmental Reporting, URI, Advisory Board

2021- Member, Board of Directors, Trust for Governors Island, New York City

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2021-22 Member, Princeton University Faculty Panel on Fossil Fuel Dissociation

Membership in Professional Societies

American Association for the Advancement of Science
American Geophysical Union
American Meteorological Society
American Physical Society
International Glaciological Society

Current and Recent Sources of Research Support

Princeton School of Public and International Affairs (ongoing)
High Meadows Foundation (ongoing)
National Science Foundation Grants: *Risk Assessment and Risk Management: An Integrated Approach for Responding to Multiple Hazards from Tropical Cyclones in a Changing Climate* (2015-2020); *Responses to complex disruptive events: Cognition in a socio-political context* (2021-2023); *Large-scale CoPe: Megalopolitan Coastal Transformation Hub (MACH): Researching complex interactions between climate hazards and communities to inform governance of coastal risk* (2021-2026)

BIBLIOGRAPHY

Articles in Professional Journals

- 1971 Ultraviolet spectra of alkali halides in inert matrices (with R. S. Berry).
J. Chem. Phys., **54**, 5058.
- 1972 Collision matrix elements near a pseudocrossing of potential energy curves.
J. Chem. Phys., **57**, 3899.
- 1972 Non-resonant charge capture: $\text{Na}^+ + \text{Li} = \text{Na} + \text{Li}^+$ (with C. Bottcher).
J. Phys. B., **5**, 492.
- 1972 Eigenvalues of the $2p3p^3P$ and $2p3d^1\text{-}^3D$ bound states of the helium isoelectronic sequence (with H. Doyle and G. W. F. Drake). *Phys. Rev.*, **A5**, 26.
- 1972 The charge transfer spectrum of $(\text{LiNa})^+$ (with C. Bottcher and A. Dalgarno).

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- Chem. Phys. Lett.*, **15**, 24.
- 1972 The calculation of photoabsorption processes in helium (with A. Dalgarno and H. T. Doyle). *Phys. Rev. Lett.*, **29**, 1051.
- 1973 Chemiionization in interstellar clouds (with R. S. Berry and A. Dalgarno). *Ap. J. Lett.*, **183**, L21.
- 1973 The formation of formaldehyde in interstellar clouds (with A. Dalgarno and J. Black). *Nature*, **245**, 100.
- 1974 The chemistry of sulphur in interstellar clouds (with A. Dalgarno). *Ap. J.*, **187**, 231.
- 1974 The fractional ionization in dense interstellar clouds (with A. Dalgarno). *Ap. J.*, **192**, 29.
- 1974 Chemical heating in diffuse interstellar clouds (with A. Dalgarno). *Ap. J.*, **192**, 597.
- 1974 Configuration mixing effects on molecular dipole transition moments (with K. Docken). *Chem. Phys. Lett.*, **29**, 349.
- 1974 Hydrogen chloride in dense interstellar clouds (with A. Dalgarno, T. de Jong, and J. H. Black). *Ap. J. Lett.*, **192**, L37.
- 1975 The formation of CO and thermal balance in interstellar clouds (with A. Dalgarno). *Ap. J.*, **200**, 419.
- 1975 Comets and interstellar masers. *Nature*, **254**, 677.
- 1975 Gas phase chemistry in comets. *Ap. J.*, **196**, 251.
- 1975 A bound state expansion method for calculating resonance and non-resonance contributions to continuum processes: Theoretical development and application to the photoionization of helium (with H. Doyle and A. Dalgarno). *Phys. Rev.*, **A11**, 909.
- 1975 The formation of CH⁺ in interstellar clouds (with A. Dalgarno and J. H. Black). *Ap. J.*, **199**, 633.
- 1975 Metastable ²P oxygen ions in the daytime thermosphere (with several authors). *J. Geophys. Res.*, **80**, 1026.
- 1975 A bound state method for phase shifts in elastic scattering of electrons from atoms and ions (with A. Dalgarno and H. Doyle). *Chem. Phys. Lett.*, **32**, 6.
- 1976 An improved bound state method for calculating resonance eigenvectors and

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- properties (with H. Doyle). *Phys. Rev.*, **A13**, 665.
- 1976 Recombination of NO^+ in the ionosphere (with several authors). *Geophys. Res. Lett.*, **3**, 209.
- 1976 Molecular oxygen abundances in the thermosphere from the chemistry of the O_2^+ ion based on Atmosphere Explorer-C composition measurements (with A. Dalgarno and H. C. Brinton). *J. Geophys. Res.*, **81**, 4678.
- 1976 Ion chemistry of N_2^+ and the solar ultraviolet flux in the thermosphere (with A. Dalgarno and H. C. Brinton). *J. Geophys. Res.*, **81**, 3762.
- 1977 Isentropic instabilities in the interstellar gas. *Ap. J.*, **211**, 400.
- 1977 Association ionization and interstellar TiO and TiO^+ (with A. Dalgarno). *Ap. J.*, **212**, 683.
- 1977 Daytime chemistry of NO^+ from Atmosphere Explorer-C measurements (with A. Dalgarno, F. P. Trebino, L. H. Brace, H. C. Brinton and J. H. Hoffman). *J. Geophys. Res.*, **82**, 191.
- 1977 Indirect determinations of molecular oxygen densities in the daytime thermosphere from Atmosphere Explorer-C composition measurements (with K. Kirby-Docken). *J. Geophys. Res.*, **82**, 3503.
- 1977 Comparison of measured and calculated thermospheric molecular oxygen (with W. E. Potter, D. C. Kayser, H. C. Brinton and L. H. Brace). *J. Geophys. Res.*, **82**, 5243.
- 1977 Ion photochemistry of the thermosphere from Atmosphere Explorer-C measurements (with E. R. Constantinides, K. Kirby-Docken, G. A. Victor, A. Dalgarno and J. H. Hoffman). *J. Geophys. Res.*, **82**, 5485.
- 1978 An analysis of the coma of Comet Bennett 1970 II. *Ap. J.*, **225**, 1083.
- 1978 The EUV flux inferred from AE-C He^+ abundances (with S. Babeu, J. H. Hoffman and E. Breig). *Geophys. Res. Lett.*, **5**, 773.
- 1978 Evidence for shock chemistry in Orion (with C. Lada and T. W. Harquist). *Ap. J. Lett.*, **226**, L153.
- 1979 The effect of cosmic ray screening upon the stability of interstellar clouds (with B. Elmegreen and T. W. Hartquist). *Astron. Astrophys.*, **75**, 137.
- 1979 Photoionization and photoabsorption cross sections of thermospheric species: He,

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- O, N₂, and O₂ (with K. Kirby, S. Babeu, E. R. Constantinides and G. A. Victor). *Atomic Data and Nuclear Data Tables*, **23**, 63.
- 1980 Molecular diagnostics of interstellar shocks (with T. W. Hartquist and A. Dalgarno). *Ap. J.*, **236**, 182.
- 1980 Sodium D-line emission in Comet West (1975n) and the sodium source in comets. *Ap. J.*, **240**, 923.
- 1980 Chemical reactions and the nature of comets. *Accounts of Chemical Research*, **13**, 378.
- 1980 The effect of solar cycle ultraviolet flux variations on cometary gas (with C. J. Downey). *Ap. J. Lett.*, **241**, L123.
- 1981 EUV flux variations during solar cycle 21 from AE-E He⁺ abundances (with S. Babeu and H. C. Brinton). *J. Geophys. Res.*, **86**, 825.
- 1981 Ultraviolet absorption studies of H₂O and other species in Comet Halley with space telescope (with P. L. Smith and J. H. Black). *Icarus*, **47**, 441.
- 1982 Sulfur emissions. *Science (Letters)*, **217**, 586.
- 1983 The relationship of sulfur emissions to sulfate in precipitation. *Atmos. Environment*, **17**, 451.
- 1983 The relationship of sulfur emissions to sulfate in precipitation II. Gas phase processes. *Atmos. Environment*, **17**, 1489.
- 1984 The relationship of sulfur emissions to sulfate in precipitation III. Subregional budget analysis. *Atmos. Environment*, **18**, 403.
- 1985 An analysis of the sulfur budget and interstate sulfur transport for Colorado. *Atmos. Environment*, **19**, 1439.
- 1985 Acid deposition (with J. N. Galloway, G. E. Likens and S. A. Norton). *Science (Letters)*, **227**, 1154.
- 1985 Acid deposition, smelter emissions, and the linearity issue in the Western United States (with C. Epstein and R. Yuhnke). *Science*, **229**, 859.
- 1986 Acid deposition in the Western United States (with C. Epstein and R. Yuhnke). *Science (Letters)*, **233**, 10.
- 1986 Empirical relation between sulfur dioxide emissions and acid deposition derived from monthly data (with C. Epstein). *Nature*, **323**, 245.

(Michael Oppenheimer)

- 1987 Stratospheric sulphate production and the photochemistry of the Antarctic circumpolar vortex. *Nature*, **328**, 702.
- 1988 Restoration of the Chesapeake Bay: A Multi-State Institutional Challenge (with J. T. B. Tripp). *Maryland Law Review*, **47**, 425.
- 1989 Climate change and environmental pollution: physical and biological interactions. *Climatic Change*, **15**, 255.
- 1989 Developing policies for responding to climate change. *Climatic Change* **15**, 1-4.
- 1991 Atmospheric nitrate deposition and the Chesapeake Bay estuary (with D. C. Fisher). *Ambio*, **20**, 102.
- 1991 Carbon dioxide and temperature (with J. B. Marston, R. M. Fujita and S. R. Gaffin). *Nature* (Scientific Correspondence), **349**, 573.
- 1993 Pondering greenhouse policy. *Science* (Letters), **259**, 1382.
- 1994 Reservoir timescales for anthropogenic CO₂ in the atmosphere (with B. C. O'Neill, S. R. Gaffin, and F. N. Tubiello). *Tellus*, **46B**, 378.
- 1995 Impulse-response functions and anthropogenic CO₂ (with F. N. Tubiello). *J. Geophysical Res. Lett.*, **22**, 413.
- 1995 Comment on "The lifetime of excess atmospheric carbon dioxide" by Berrien Moore III and B. H. Braswell (with S. R. Gaffin and B. C. O'Neill). *Global Biogeochemical Cycles*, **9**, 167.
- 1997 Measuring time in the greenhouse: an editorial essay (with B. C. O'Neill and S. R. Gaffin). *Climatic Change*, **37**, 491.
- 1998 Global warming and the stability of the West Antarctic ice sheet. *Nature*, **393**, 325.
- 1998 Long-term scenarios for aviation: demand and emissions of CO₂ and NO_x (with A. Vedantham). *J. Energy Policy* **26**, 625.
- 2000 Counting the cost of deforestation (with R. Bonnie, S. Schwartzman, and J. Bloomfield). Perspectives: Environmental Policy, *Science* **288**, 1763-1764.
- 2002 Book Review: *The Carbon War: Global Warming and the End of the Oil Era*. *Climatic Change*, **54**, 497-505

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- 2002 Dangerous climate impacts and the Kyoto Protocol (with B.C. O'Neill). *Science* **296**, 1971-2.
- 2003 On past temperatures and anomalous late-20th century warmth (with 12 co-authors). *Eos* **84**, 256-8.
- 2003 Response (to comments on, On past temperatures and anomalous late-20th century warmth, with 12 co-authors). *Eos* **84**, 473-4.
- 2003 Book Review: *Atmospheric Pollution: History, Science, and Regulation*. *Physics Today* **56**, 65-66.
- 2004 The West Antarctic Ice Sheet and Long Term Climate Policy (with R.B. Alley). *Climatic Change*, **64**, 1-10.
- 2004 Climate Change Impacts Sensitive to Path to Stabilization (with B.C. O'Neill). *Proc. Nat. Acad. Sci.* **101**, 16411–16416, doi_10.1073_pnas.0405522101.
- 2004 Book Review: *The Discovery of Global Warming*. *J. Environmental Hist.*, **9**, 327-8.
- 2004 The influence of climate on in-stream removal of nitrogen (with S.D. Donner and C.J. Kucharik). *Geophys. Res. Letters*, **31**, L20509, doi:10.1029/2004GL020477.
- 2005 Ice Sheets, Global Warming, and Article 2 of the UNFCCC (with R.B. Alley). *Climatic Change* **68**, 257-267.
- 2005 Global Assessment of Coral Bleaching and Required Rates of Adaptation under Climate Change (with S.D. Donner, W.J. Skirving, C.M. Little, and O. Hoegh-Guldberg). *Global Change Biology*, **11**, 1–15, doi: 10.1111/j.1365-2486.2005.01073.x
- 2005 Article 2 of the UNFCCC: Historical Origins, Recent Interpretations (with A. Peterson). *Climatic Change* **73**, 195-226.
- 2005 Attribution of Regional Radiative Forcing Due to Tropospheric Ozone: A Step Toward Climate Credit for Reductions in Emissions of Ozone Precursors (with V. Naik, D. Mauzerall, L. Horowitz, D. Schwarzkopf, V. Ramaswamy). *J. Geophys. Res.*, **110**, D24306, doi:10.1029/2005JD005908
- 2005 Avoiding Dangerous Anthropogenic Interference with the Climate System (with K. Keller, M. Hall, S.-R. Kim, and D. F. Bradford). *Climatic Change* **73**, 227-238
- 2005 Defining Dangerous Anthropogenic Interference: The Role of Science, The Limits of Science. *Risk Analysis* **25**, 1-9

(Michael Oppenheimer)

- 2006 Interim Targets and the Climate Treaty Regime (with Brian C. O’Neill, & Annie Petsonk). *Climate Policy* **5**, 639-645.
- 2006 Global Warming: The Psychology of Long Term Risk (with A. Todorov). *Climatic Change*, **77**, 1–6, DOI: 10.1007/s10584-006-9086-6.
- 2006 Science and Environmental Policy: The Role of Nongovernmental Organizations, *Social Research*, **73**, 881-90.
- 2006 Coral Reefs Reduce Tsunami Impact in Model Simulations (with C. Kunkel and R. Hallberg). *Geophys. Res. Lett.* **33**, L23612, doi:10.1029/2006GL027892.
- 2006 Learning and Climate Change (with many authors), *Climate Policy* **6**, 585–589.
- 2007 Model-based Assessment of the Role of Human-induced Climate Change in the 2005 Caribbean Coral Bleaching Event (with S.D. Donner and T.R. Knutson). *Proc Natl Acad Sci*, doi:10.1073/pnas.0610122104
- 2007 A “Manhattan Project” for Climate Change? (C-J Yang, M Oppenheimer), *Climatic Change* **80**, 199-204, 10.1007/s10584-006-9202-7.
- 2007 On the Sensitivity of Radiative Forcing from Biomass Burning Aerosols and Ozone to Location of Emissions (V.Naik, et al), *Geophys. Res. Letters*, **34**, L03818, doi:10.1029/2006GL028149.
- 2007 Carbon Trading over Taxes (B. Chameides, M Oppenheimer), *Science*, **315**, 1670.
- 2007 The regrets of procrastination in climate policy (K. Keller, et al), *Environmental Research Letters*, **2**, 024004 (4pp) doi:10.1088/1748-9326/2/2/024004.
- 2007 The Limits of Consensus (M Oppenheimer et al), *Science* **317**, 1505-6.
- 2007 The Economics of the Thermohaline Circulation – A Problem with Multiple Thresholds of Unknown Locations (with E. Nævdal). *Resource and Energy Economics* **29**, 262-283.
- 2007 Towards a New Generation of Ice Sheet Models (CM Little et al), *Eos* **88**, 578-9.
- 2008 Learning about ozone depletion (PJ Crutzen and M Oppenheimer), *Climatic Change* **89**, 143-154 DOI 10.1007/s10584-008-9400-6.
- 2008 The potential impacts of sea level rise on the coastal region of New Jersey, USA (MP Cooper, MD Beevers, M Oppenheimer), *Climatic Change* **90**, 475–492, DOI 10.1007/s10584-008-9422-0.

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- 2008 Atmospheric stabilization and the timing of carbon mitigation (BK Mignone et al), *Climatic Change* **88**, 251-265. DOI 10.1007/s10584-007-9391-8.
- 2008 Book Review: An outspoken scientist, *Nature Reports Climate Change*,
Published online: 16 January 2008|doi:**10.1038**/climate.2008.3
- 2008 A closer look at the IPCC report-Response (M Oppenheimer, BC O'Neill,
M Webster, S Agrawala), *Science* **319**, 410 (*in Letters*)
- 2008 The boundaries of the thinkable: environmentalism in the early twenty-first century
(P Tetlock and M Oppenheimer), *Dedalus* **137**, 59–70.
- 2008 A physical science perspective on disaster: through the prism of global warming
(M Oppenheimer), *Social Research* **75**, 659-668.
- 2008 Negative learning (M Oppenheimer, BC O'Neill, M Webster),
Climatic Change **89**, 155-172 DOI 10.1007/s10584-008-9405-1.
- 2009 Climate change and plant invasions: restoration opportunities ahead?
(BA Bradley, M Oppenheimer, DS Wilcove), *Global Change Biology*, **15**,
1511–1521, doi: 10.1111/j.1365-2486.2008.01824.x.
- 2009 Assessing dangerous climate change through an update of the Intergovernmental
Panel on Climate Change (IPCC) “reasons for concern” (J Smith et al),
Proc Natl Acad Sci **106**, 4133-4137 (<http://www.pnas.org/content/106/11/4133.full>).
- 2009 Climate change increases risk of plant invasion in the Eastern United States
(B Bradley, D Wilcove, M Oppenheimer), *Biological Invasions*,
DOI 10.1007/s10530-009-9597-y.
- 2009 Ice shelf morphology and the efficiency of basal melting (CM Little,
A Gnanadesikan, M Oppenheimer), *J. Geophysical Res.* **114**, C12007,
doi:10.1029/2008JC005197.
- 2009 Probabilistic assessment of sea level during the Last Interglacial stage (RE Kopp et al),
Nature **462**, 963-868, doi:10.1038/nature08686.
- 2009 Toward ethical norms and institutions for geo-engineering research (D Morrow,
R Kopp, M Oppenheimer), *Environ. Res. Lett.* **4**, p.1-8,
doi:10.1088/1748-9326/4/4/045106.
- 2009 A force to fight global warming (WR Turner, M Oppenheimer, DS
Wilcove), *Nature* **462**, 278-9.

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- 2009 Fixing a critical climate accounting error (T Searchinger et al), *Science* **326**, 527–528, DOI: 10.1126/science.1178797.
- 2009 *Climatic Change Letters* inaugural editorial (SH Schneider, M Oppenheimer), *Climatic Change* **97**, 1–2, DOI 10.1007/s10584-009-9751-7.
- 2010 Climate change: Helping Nature survive the human response (WR Turner et al), *Conservation Letters* **3**, 304-312 doi: 10.1111/j.1755-263X.2010.00128.x.
- 2010 Nitrogen cycling and feedbacks in a global dynamic land model, (S Gerber et al), *Global Biogeochem. Cycles*, **24**, GB1001, doi:10.1029/2008GB003336.
- 2010 Urbanization, climate change and flood policy in the United States (AA Ntelekos et al), *Climatic Change* **103**, 597-616 [DOI 10.1007/s10584-009-9789-6].
- 2010 Climatic change letters: a modest effort to address a gigantic problem, *Climatic Change* **100**, 7-10, DOI 10.1007/s10584-010-9837-2 (editorial).
- 2010 Carbon Calculations to Consider-Response (Searchinger et al), *Science* **327**, 781 [DOI: 10.1126/science.327.5967.781-a] (in Letters).
- 2010 Bioenergy: Counting on Incentives-Response (Searchinger et al), *Science* **327**, 1200-1201 [DOI: 10.1126/science.327.5970.1200-a] (in Letters).
- 2010 Linkages among climate change, crop yields and Mexico–US cross-border migration (S Feng, A Krueger, M Oppenheimer), *Proc Natl Acad Sci*, **107**, 14257–14262 www.pnas.org/cgi/doi/10.1073/pnas.1002632107.
See also www.pnas.org/cgi/doi/10.1073/pnas.1212226109 for Correction.
- 2011 Characterizing uncertainty in expert panel assessments (J O’Reilly, et al), *WIREs Clim Change* **2**, 728–743 DOI: 10.1002/wcc.135
- 2011 Exploring high-end scenarios for local sea level rise to develop flood protection strategies for a low-lying delta - the Netherlands as an example (CA Katsman, et al), *Climatic Change* **109**, 617-645 DOI: 10.1007/s10584-011-0037-5
- 2011 The Politics and Policy of Carbon Capture and Storage: Framing an Emergent Technology (K Backstrand, J Meadowcroft, M Oppenheimer), *Global Environmental Change*, **21**, 275–281 doi:10.1016/j.gloenvcha.2011.03.008
- 2011 Evaluation, Characterization, and Communication of Uncertainty by the Intergovernmental Panel on Climate Change (G Yohe, M Oppenheimer), *Climatic Change* **108**:629–639 DOI 10.1007/s10584-011-0176-8
- 2012 Predicting how adaptation to climate change could affect ecological

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- conservation: secondary impacts of shifting agricultural suitability (B Bradley et al), *Diversity and Distributions*, **18**, 425-437
<http://onlinelibrary.wiley.com/doi/10.1111/j.1472-4642.2011.00875.x/pdf>
- 2012 The Rapid Disintegration of Predictions: Climate Science, Bureaucratic Institutions, and the West Antarctic ice sheet (J O'Reilly, N Oreskes, M Oppenheimer), *Social Studies of Science* **42**, 709-731 DOI: 10.1177/0306312712448130, at
<http://sss.sagepub.com/content/early/2012/06/26/0306312712448130>
- 2012 On the coupled response to ice shelf basal melting (CM Little, D Goldberg, A Gnanadesikan, M Oppenheimer), *Journal of Glaciology* **58**, 203-215
doi: 10.3189/2012JoG11J037
- 2012 Climate Change Impacts: Accounting for the Human Response (M Oppenheimer), *Climatic Change* **117**, 439-449 (2013); DOI 10.1007/s10584-012-0571-9
- 2012 Physically-based Assessment of Hurricane Surge Threat under Climate Change (N Lin, K Emanuel, M Oppenheimer, E Vanmarcke), *Nature Climate Change* **2**, 462-467
DOI: 10.1038/NCLIMATE1389
- 2012 Simulation of ocean-land ice interactions through a strongly thermally-forced ice shelf, Part 1: Model description and behavior (Goldberg et al), *J. Geophys. Res. E*,
DOI: 10.1029/2011JF002246
- 2012 Simulation of ocean-land ice interactions through a strongly thermally-forced ice shelf, Part 2: Sensitivity to external forcings (Goldberg et al), *J. Geophys. Res. E*,
DOI: 10.1029/2011JF002247
- 2012 Applying statistical models of the climate-migration relationship (S Feng, M Oppenheimer), *PNAS* **109**, E2915 www.pnas.org/cgi/doi/10.1073/pnas.1212226109
- 2013 Climate change prediction: erring on the side of least drama? (Brysse et al),
Global Environmental Change, **23**, 327-337
<http://dx.doi.org/10.1016/j.gloenvcha.2012.10.008>
- 2013 A probabilistic assessment of sea level variations within the Last Interglacial stage (R Kopp et al), *Geophysical Journal International. Geophysical Journal International* **193**, 711– 716 doi: 10.1093/gji/ggt029
- 2013 Projected climate impacts to South African maize and wheat production in 2055: A comparison of empirical and mechanistic modeling approaches (L Estes et al), *Global Change Biology* doi: 10.1111/gcb.12325
- 2013 Building a More Effective Global Climate Regime through a Bottom-Up Approach (with RB Stewart and B Rydek), *Stanford Environmental Law Journal* **32**, 341-392.

(Michael Oppenheimer)

- 2013 Quantum Cascade Laser-based Sensing for Carbon Sequestration Leakage Monitoring (M Escarra et al), *IEEE Sensors Journal*, DOI 10.1109/JSEN.2013.2253731
- 2013 Comparing mechanistic and empirical model projections of crop suitability and productivity: Implications for ecological forecasting (Estes et al), *Global Ecology and Biogeography*, <http://onlinelibrary.wiley.com/doi/10.1111/geb.12034/pdf>.
- 2013 Probabilistic framework for assessing the ice sheet contribution to sea level change (CM Little, NM Urban, M Oppenheimer), *PNAS* **110**, 3264-69
<http://www.pnas.org/content/110/9/3264.full.pdf+html>
- 2013 Upper bounds on twenty-first-century Antarctic ice loss assessed using a probabilistic framework (CM Little, M Oppenheimer, NM Urban), *Nature Climate Change* **3**, 654-659 doi:10.1038/nclimate1845
<http://www.nature.com/nclimate/journal/vaop/ncurrent/full/nclimate1845.html>
- 2013 Norms and Abnormal Problems: Behaviors, Values, and Global Problems (A Kinzig et al), *BioScience* **63**,164-175 <http://www.jstor.org/stable/info/10.1525/bio.2013.63.3.5>
- 2013 A New Strategy for Global Climate Protection (RB Stewart, M Oppenheimer, B Rudyk), *Climatic Change* **120**, 1-12 DOI 10.1007/s10584-013-0790-8
<http://link.springer.com/article/10.1007/s10584-013-0790-8/fulltext.html>
- 2014 On the Design of an International Governance Framework for Geoengineering (ID Lloyd, M Oppenheimer), *Global Environmental Politics* **14**:2, May 2014, doi:10.1162/GLEP_a_00228
- 2014 Using Changes in Agricultural Value to Quantify Future Climate-Induced Risk to Conservation (Estes et al), *Conservation Biology*, DOI: 10.1111/cobi.12205
- 2014 The Effectiveness of Cool and Green Roofs as Urban Heat Island Mitigation Strategies (D Li, E Bou-Zeid, M Oppenheimer), *Environ. Res. Lett.* **9** (2014) 055002
[doi:10.1088/1748-9326/9/5/055002](http://dx.doi.org/10.1088/1748-9326/9/5/055002)
- 2014 Estimating the Spatially Varying Responses of Corn Yields to Weather Variations Using Geographically Weighted Panel Regression (Cai, Yu, and Oppenheimer), *Journal of Agricultural and Resource Economics*, **39**, 230–252.
- 2014 Nonlinear permanent migration response to climatic variations but minimal response to disasters (P Bohra- Mishra, M Oppenheimer, and S Hsiang), *PNAS* **27**, 9780-85
www.pnas.org/cgi/doi/10.1073/pnas.1317166111
- 2014 The Ethics of Scientific Communication under Uncertainty (R Keohane, M Lane, M Oppenheimer) *Politics, Philosophy, and Economics*, 1-26

(Michael Oppenheimer)

DOI: 10.1177/1470594X14538570

<https://journals.sagepub.com/doi/full/10.1177/1470594x14538570>

- 2014 Probabilistic 21st and 22nd century sea-level projections at a global network of tide gauge sites (RE Kopp et al), *Earth's Future* **2**, 383-406
<http://onlinelibrary.wiley.com/doi/10.1002/2014EF000239/abstract>
- 2014 Improve economic models of climate change (Revesz et al), *Nature*, **508**, 173-175
- 2014 International Migration Desires Related to Subjective Well-Being (R Cai et al), *IZA Journal of Migration*, 2014, 3:8 doi:10.1186/2193-9039-3-8,
<http://www.izajom.com/content/3/1/8>
- 2014 Warming goal: still the best indicator (M Oppenheimer), *Nature (Correspondence)* **514**, 434.
- 2015 Uncertainty in 21st century CMIP5 sea level projections (Little et al), *JClim* **28**, 838-852
DOI: 10.1175/JCLI-D-14-00453.1.
- 2015 Developing country finance in a post-2020 global climate agreement
(P Hannam, Z Liao, SJ Davis, M Oppenheimer), *Nature Climate Change* **5**, 983–987 doi:10.1038/nclimate2731.
- 2015 Joint projections of US east coast sea level and storm surge (Little et al),
Nature Climate Change **5**, 1114-1121 DOI: 10.1038/NCLIMATE2801.
- 2015 New York City Panel on Climate Change 2015 Report Chapter 2: Sea Level Rise and Coastal Storms (Horton et al) *Proc NY Acad Sci*, **36**, 1336–44 doi: 10.1111/nyas.12593
- 2015 Adapting to Climate Change: Rising Seas, Limiting Risks (M Oppenheimer)
Social Research **82**, 673-680.
- 2015 Push renewables to spur carbon pricing (Wagner et al), *Nature* **525**, 27-29.
- 2016 Expert Judgment and Uncertainty Quantification for Climate Change (M Oppenheimer, CM Little, RM Cooke), *Nature Climate Change*, **6**, 445-451.
- 2016 Climate Variability and International Migration: The Importance of the Agricultural Linkage (R Cai et al), *J Environ Econ Management* **79**, 135-151
<http://dx.doi.org/10.1016/j.jeem.2016.06.005>.
- 2016 The Science of Climate Change (M Oppenheimer, JK Anttila-Hughes),
Future of Children **26**, 13-30.

(Michael Oppenheimer)

- 2016 Climate Change and Migration in the Philippines (Bohra-Mishra et al), *Population and Environment*, **38**, 286–308 <http://rdcu.be/mFnI>.
- 2016 Mapping the climate change challenge (Hallegatte et al), *Nature Climate Change*, **6**, 663-668.
- 2016 The Influence of Climate Variability on Internal Migration Flows in South Africa (Mastrorillo et al), *Global Environmental Change* **39**, 155-169.
- 2016 Beyond the Climate Dead End Through Pledge and Review? (RO Keohane and M Oppenheimer). *Politics and Governance* **4**, 142-151 doi: 10.17645/pag.v4i3.634.
- 2016 Make climate-change assessments more relevant (Hallegatte, Mach, et al). *Nature*, <http://www.nature.com/news/make-climate-change-assessments-more-relevant-1.20155>
- 2016 Allowances for evolving coastal flood risk under uncertain local sea-level rise (Buchanan et al). *Climatic Change* **137**, 347–36.
- 2016 How high will the seas rise? (M Oppenheimer, RB Alley), *Science* **354**, 1375-77.
- 2017 Key Risks of Climate Change: The IPCC Reasons for Concern, (O’Neill et al), *Nature Climate Change* **7**, 28-37 <http://rdcu.be/ohnY>
- 2017 Climate response to the meltwater runoff from Greenland Ice Sheet: evolving sensitivity to discharging locations (Liu et al), *Climate Dynamics*, <https://link.springer.com/article/10.1007/s00382-017-3980-7>
- 2017 Leakage risks of geologic CO2 storage and the impacts on the global energy system and climate mitigation" (Deng et al), *Climatic Change*, **144**, 151–163 DOI 10.1007/s10584-017-2035-8
- 2017 Unmask temporal tradeoffs in climate policy debates (I Ocko et al), *Science* **356**, 492-93.
- 2017 Social Cost of Carbon: Global Imperative (Revesz et al, Letter to the Editor). *Review of Environmental Economics and Policy* **11**, 172–173 doi:10.1093/reep/rew022
- 2017 The Intergovernmental Panel on Climate Change: Challenges and Opportunities_ (Vardy et al), *Ann. Rev. Environment and Resources* **42**, 55-75. <http://www.annualreviews.org/doi/full/10.1146/annurev-enviro-102016-061053>
- 2017 Amplification of flood frequencies with local sea level rise and emerging flood regimes (M Buchanan, M Oppenheimer, R Kopp), *Environ. Res. Lett.* **12** <https://doi.org/10.1088/1748-9326/aa6cb3>

(Michael Oppenheimer)

- 2017 Evolving understanding of Antarctic ice-sheet physics and ambiguity in probabilistic sea-level projections (R Kopp et al), *Earth's Future*, **5**, 1217–1233. doi:10.1002/2017EF000663 <http://rdcu.be/EW7I>.
- 2017 Building Blocks: A Strategy for Near-term Action within the New Global Climate Framework (RB Stewart, M Oppenheimer, B Rudyk), *Climatic Change* **144**, 1–13 DOI 10.1007/s10584-017-1932-1.
- 2017 Estimating Economic Damage from Climate Change in the United States (Hsiang et al), *Science* **356**, 1362-1369 at <http://science.sciencemag.org/content/356/6345/1362.full>
- 2017 Evaluating Tropical Cyclone Size in Reanalysis Datasets using QuikSCAT Data (Schenkel et al), *Journal of Climate* **30**, 8745-62
- 2017 Influence of Risk Factors and Past Events on Flood Resilience in Coastal Megacities: Comparative Analysis of NYC and Shanghai (Xian et al). *Science of the Total Environment*, **610–611**, 1251–1261, <https://doi.org/10.1016/j.scitotenv.2017.07.229>
- 2018 Interactions between Urban Heat Islands and Heat Waves (Zhao et al). *Environ. Res. Letters*, <https://doi.org/10.1088/1748-9326/aa9f73>
- 2018 Lifetime Evolution of Outer Tropical Cyclone Size and Structure as Diagnosed from Reanalysis and Climate Model Data (Schenkel et al). *JCLim.*, <https://doi.org/10.1175/JCLI-D-17-0630.1>
- 2018 Extreme sea level implications of 1.5 °C, 2.0 °C, and 2.5 °C temperature stabilization targets in the 21st and 22nd century (Rasmussen et al). *Environ. Res. Letters*, **13**, <https://doi.org/10.1088/1748-9326/aaac87>
- 2018 Emissions are still rising: ramp up the cuts (Figueres et al). *Nature* **564**, 27-30
- 2019 Values, Bias, and Stressors Affect Intentions to Adapt to Coastal Flood Risk: A Case Study from New York City (M Buchanan, M Oppenheimer, Parris). *Weather, Climate and Society* **11**, 809-821. <https://doi.org/10.1175/WCAS-D-18-0082.1>
- 2019 Temporally Compound Heat Wave Events and Global Warming: An Emerging Hazard (J Baldwin et al), *Earth's Future*, **7**. <https://doi.org/10.1029/2018EF000989>
- 2019 Ice sheet contributions to future sea level rise from structured expert judgement (Bamber et al), *PNAS*, <https://www.pnas.org/cgi/doi/10.1073/pnas.1817205116>
- 2019 Migration, Intensification, and Diversification as Adaptive Strategies (Bell, A, Calvo-Hernandez, C, & Oppenheimer, M). *Socio-Environmental Systems Modeling*, **1**, 1–18. <https://doi.org/10.18174/sesmo.2019a16102>

(Michael Oppenheimer)

- 2019 Meeting the looming policy challenge of sea-level change and human migration (Wrathall et al). *Nature Climate Change* **9**, 898–901 doi:10.1038/s41558-019-0640-4
- 2019 New York Panel on Climate Change 2019 Report: Sea level rise (Gornitz et al). *Annals of the New York Academy of Sciences* **1439**, 71-94
- 2019 New York Panel on Climate Change 2019 Report: Coastal flooding (Orton et al). *Annals of the New York Academy of Sciences* **1439**, 95-114
- 2020 Antarctic Ice Sheet and emission scenario controls on 21st-century extreme sea-level changes (Frederikse et al). *Nature Communications*, **11**, 1-11, <https://rdcu.be/b0wGX>.
- 2020 A flood damage allowance framework for coastal protection with deep uncertainty in sea-level rise (Rasmussen et al). *Earth's Future*, <http://dx.doi.org/10.1029/2019EF001340>
- 2020 Understanding and managing connected extreme events (Raymond et al). *Nature Climate Change*, <https://doi.org/10.1038/s41558-020-0790-4>.
- 2020 Enhancing New York City's Resilience to Sea Level Rise and Increased Coastal Flooding (Gornitz et al). *Urban Climate*, **33** <https://doi.org/10.1016/j.uclim.2020.100654>
- 2020 Effect of Border Policy on Exposure and Vulnerability to Climate Change (H Benveniste, M Oppenheimer, M Fleurbaey. *PNAS*, <https://doi.org/10.1073/pnas.2007597117>
- 2020 As the world burns. *Foreign Affairs*, Nov/Dec <https://www.foreignaffairs.com/articles/world/2020-10-13/world-burns>
- 2021 Global multi-model projections of local urban climates (Zhao et al). *Nature Climate Change*, <https://doi.org/10.1038/s41558-020-00958-8>
- 2021 Evaluating the economic cost of coastal flooding (Desmet et al), *American Economic Journal: Macroeconomics* 13(2): 444–486 <https://doi.org/10.1257/mac.20180366>
- 2021 Migration towards Bangladesh coastlines projected to increase with sea-level rise through 2100 (Bell et al). *Environ. Res. Letters*, <https://iopscience.iop.org/article/10.1088/1748-9326/abdc5b/meta>
- 2021 The political complexity of coastal flood risk reduction: lessons for climate adaptation public works in the U.S. (Rasmussen et al). *Earth's Future*, <https://doi.org/10.1029/2020EF001575>

(Michael Oppenheimer)

- 2021 Environmental integrity of emissions reductions depends on scale and systemic changes, not sector of origin (Schwartzman et al), *Environmental Res. Letters*, <https://doi.org/10.1088/1748-9326/ac18e8>
- 2021 Risk Transfer Policies Facilitate Smallholder Farmer Climate Adaptation (Chocquette-Levy et al), *Nature Climate Change*, <https://rdcu.be/cBOBA>
- 2021 Acting rapidly to deploy readily available methane mitigation measures by sector can immediately slow global warming (Ocko et al), *Environ Res Lett.*, **16** 054042 https://iopscience.iop.org/article/10.1088/1748-9326/abf9c8?fbclid=IwAR3xY1Rj-7WbYvwsyLLCuf7Nrfic78n_1z689elw0gYkfyGM3TsgmJEUzt8)
- 2021 Assessing Habitability and Human Mobility (Horton et al). *Science* **372**, 1279-1283 <https://science.sciencemag.org/content/372/6548/1279>
- 2021 Whatever works: the long and winding road toward climate action (M. Oppenheimer), *NYU Environmental Law Journal*, 29, 619-638.
- 2022 Popular extreme sea level metrics can better communicate impacts (Rasmussen et al). *Climatic Change* 170:30 <https://doi.org/10.1007/s10584-021-03288-6>
- 2022 Indicate separate contributions of long-lived and short-lived greenhouse gases in emission Targets (Allen et al). *npj Climate and Atmospheric Science* (2022) 5:5_ <https://doi.org/10.1038/s41612-021-00226-2>
- 2022 Coastal flood protection megaprojects in an era of sea-level rise: politically feasible strategies or Army Corps fantasies? (Rasmussen et al). *J. Water Resources Plan. Manage* <https://ascelibrary.org/doi/epdf/10.1061/%28ASCE%29WR.1943-5452.0001613>
- 2022 Climate change increases resource-constrained international immobility (Benveniste, Oppenheimer, Fleurbaey). *Nature Climate Change* <https://www.nature.com/articles/s41558-022-01401-w>
- 2022 Correlation between sea-level rise and aspects of future tropical cyclone activity in CMIP6 models (Lockwood et al). *Earth's Future* <http://dx.doi.org/10.1029/2021EF002462>
- 2022 Sea-level rise risks and adaptation benefits in low-lying coastal areas (Magnan et al). *Scientific Reports*, <https://www.nature.com/articles/s41598-022-14303-w>
- 2022 Complex climate and network effects on internal migration in South Africa revealed by a network model (Xiao et al). *Population & Environment*, <https://rdcu.be/cEvm9>; <https://link.springer.com/article/10.1007/s11111-021-00392-8>

(Michael Oppenheimer)

- 2022 Ice sheet and climate processes driving the uncertainty in projections of future sea level rise: a structured expert judgement approach (Bamber et al). *Earth's Future*, <https://doi.org/10.1029/2022EF002772>
- 2022 Using Neural Networks to Predict Hurricane Storm Surge and to Assess the Sensitivity of Surge to Storm Characteristics (Lockwood et al). *JGR: Atmospheres* 127, e2022JD037617. <https://doi.org/10.1029/2022JD037617>
- 2023 Communicating projection uncertainty and ambiguity in sea-level assessment (Kopp et al). *Nature Climate Change*, <https://doi.org/10.1002/essoar.10511663.1> in press
- 2023 The Timing of Decreasing Coastal Flood Protection Due to Sea-Level Rise (Hermans et al). *Nature Climate Change* 13 | doi:10.1038/s41558-023-01616-5 <https://rdcu.be/c8jUz>
- 2023 Cooperative food bank: a collective insurance regime to govern food insecurity and nitrogen pollution under climate change (Liao, et al), Submitted to *Environ. Res Letters*
- 2023 Models of Sub-national U.S. Quasi-Governmental Organizations: Implications for Climate Adaptation Governance (Nix et al), Submitted to *Climatic Change*
- 2023 Pro-Social Preferences Improve Climate Risk Management in Subsistence Farming Communities (Chocquette-Levy et al), submitted to *Nature Sustainability*

Working Papers

Authorship of IPCC and NAS/NRC Reports

- 1990 *Climate Change: the IPCC Scientific Assessment* [First Assessment Report, Contributing Author, WGII Chapter 5] (Cambridge University Press, Cambridge, UK)
- 1996 *Climate Change 1995: The Science of Climate Change*. Contribution of Working Group I to the *Second Assessment Report of the Intergovernmental Panel on Climate Change*, Chapter 8, "Detection of Climate Change and Attribution of Causes," and Technical Summary (Cambridge University Press, Cambridge, UK). [Contributing Author].
- 1997 *The Atmospheric Effects of Stratospheric Aircraft Project: An Interim Review of Science and Progress*, **National Research Council Panel Report** (National Academy Press, Washington, DC).
- 1998 *A Review of NASA's Atmospheric Effects of Stratospheric Aircraft Project*, **National Research Council Panel Report** (National Academy Press, Washington, DC).

(Michael Oppenheimer)

- 2001 *Climate Change 2001: The Science of Climate Change*. Contribution of Working Group I to the *Third Assessment Report of the Intergovernmental Panel on Climate Change*, Chapter 11, “Changes in Sea Level,” (Cambridge University Press, Cambridge, UK) [Contributing Author]
- 2001 *Climate Change 2001: The Science of Climate Change*. Contribution of Working Group I to the Third Assessment Report of the *Intergovernmental Panel on Climate Change*, Technical Summary [Lead Author] and Summary for Policymakers [Drafting Team] (Cambridge University Press, Cambridge, UK).
- 2007 Assessing Key Vulnerabilities and the Risks from Climate Change (SH Schneider et al), in *Climate Change 2007: Impacts, Adaptation and Vulnerability*. Contribution of Working Group II to the *Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, 779-810. [Lead Author]
- 2007 Technical Summary. *Climate Change 2007: Impacts, Adaptation and Vulnerability (M Parry et al)*. Contribution of Working Group II to the *Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, 23-78. [Lead Author]
- 2007 IPCC, 2007: Summary for Policymakers. In: *Climate Change 2007: Impacts, Adaptation and Vulnerability*. Contribution of Working Group II to the *Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, 7-22. [Drafting Team]
- 2007 Climate Variability and Change (**National Research Council** Panel Report), in *Earth Science and Applications from Space: National Imperatives for the Next Decade and Beyond* (National Academy Press, Washington, DC), Ch.9.
- 2009 *Liquid Transportation Fuels from Coal and Biomass*, Report of the Panel on Alternative Liquid Transportation Fuels, **National Research Council** (National Academies Press, Washington, DC).
- 2011 *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation, Special Report of the Intergovernmental Panel On Climate Change*. Summary for Policy Makers [Drafting Team member]
- 2012 **Lavell, A., M. Oppenheimer, C. Diop, J. Hess, R. Lempert, J. Li, R. Muir-Wood, and S. Myeong**, 2012: Climate change: new dimensions in disaster risk, exposure, vulnerability, and resilience. In: *Managing the Risks of Extreme Events and Disasters to Advance*

(Michael Oppenheimer)

- Climate Change Adaptation [Field, C.B., V. Barros, T.F. Stocker, D. Qin, D.J. Dokken, K.L. Ebi, M.D. Mastrandrea, K.J. Mach, G.-K. Plattner, S.K. Allen, M. Tignor, and P.M. Midgley (eds.)]. *A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change (IPCC)*. Cambridge University Press, Cambridge, UK, and New York, NY, USA, pp. 25-64. [Coordinating Lead Author]
- 2014 **Oppenheimer, M.**, M. Campos, R. Warren, J. Birkmann, G. Luber, B. O’Neill, and K. Takahashi, 2014: Emergent risks and key vulnerabilities. In: *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Field, C.B., et al (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp.1039-1099. [Coordinating Lead Author]
- 2014 **IPCC**, 2014: Summary for policymakers. In: *Climate Change 2014: Impacts, Adaptation, And Vulnerability Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Field, et al (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1-32 [Drafting Author]
- 2014 **IPCC**, 2014 *Synthesis Report of the Fifth Assessment, Intergovernmental Panel on Climate Change* [Core Writing Team]
- 2019 **Oppenheimer, M.**, B.C. Glavovic , J. Hinkel, R. van de Wal, A.K. Magnan, A. Abd-Elgawad, R. Cai, M. Cifuentes-Jara, R.M. DeConto, T. Ghosh, J. Hay, F. Isla, B. Marzeion, B. Meyssignac, and Z. Sebesvari, 2019: Sea Level Rise and Implications for Low-Lying Islands, Coasts and Communities. In: *IPCC Special Report on the Ocean and Cryosphere in a Changing Climate* [H.-O. Pörtner, D.C. Roberts, V. Masson-Delmotte, P. Zhai, M. Tignor, E. Poloczanska, K. Mintenbeck, A. Alegría, M. Nicolai, A. Okem, J. Petzold, B. Rama, N.M. Weyer (eds.)]. In press. [Coordinating Lead Author]
- 2019 **IPCC**, 2019: Summary for Policymakers. In: *IPCC Special Report on the Ocean and Cryosphere in a Changing Climate* [H.-O. Pörtner, D.C. Roberts, V. Masson-Delmotte, P. Zhai, M. Tignor, E. Poloczanska, K. Mintenbeck, M. Nicolai, A. Okem, J. Petzold, B. Rama, N. Weyer (eds.)]. In press. [Drafting Author]

Book Chapters (also see IPCC and NAS/NRC Reports, above)

- 1986 The Implications of Health and Environmental Effects for Policy (with D. J. Dudek), in *Effects of Changes in Stratospheric Ozone and Global Climate*, Vol. 1, U.S. E.P.A.
- 1989 Vulnerable Ecosystems, in *Ozone Depletion: Health and Environmental Consequences* (John Wiley & Sons, Chichester, UK) Ch. 9.

(Michael Oppenheimer)

- 1990 The Atmosphere and the Future of the Biosphere: Points of Interactive Disturbance, in *The Earth in Transition: Patterns and Processes of Biotic Impoverishment* (Cambridge University Press, New York) p.111.
- 2003 Global Warming: The Intersection of Long-Term Goals and Near-Term Policy (with A. Petsonk), in *Michel, D. (ed.), Climate Policy for the 21st Century: Meeting the Long-Term Challenge of Global Warming*, Center for Transatlantic Relations, Johns Hopkins University, Washington, pp.79-112.
- 2005 Emissions Pathways to Avoid Dangerous Climate Change: A Transatlantic View (with C. Jaeger) in *Options for Future Climate Policy: Transatlantic Perspectives*, German Institute for International and Security Affairs, Berlin.
- 2007 How Warm is Too Warm: Avoiding Dangerous Climate Change, in International Science School lecture series, University of Sydney, Australia.
- 2007 What is the economic value of information about climate thresholds? (with several authors), in: *Human-induced Climate Change: An Interdisciplinary Assessment*, ed. Michael Schlesinger, H. Kheshgi, J. Smith, F. de la Chesnaye, J. M. Reilly, T. Wilson and C. Kolstad. Published by Cambridge University Press. Cambridge University Press 2007.
- 2009 Understanding the causes and implications of climate change, in *Climate Finance: Regulatory and Funding Strategies for Climate Change and Global Development* R Stewart, B Kingsbury, B Rudyk, eds, NYU press, at www.climatefinance.org.
- 2011 Political legitimacy in decisions about experiments in solar radiation management (DR Morrow, RA Kopp, M Oppenheimer), in *Climate Change Geoengineering: Philosophical Perspectives, Legal Issues, and Governance Frameworks* (William C.G. Burns & Andrew Strauss, editors, 2011, Cambridge University Press)
- 2011 Climate Change and World Cities, in *Rising Currents: Projects for New York's Waterfront*, MOMA (New York).
- 2015 Opening Commentary, *America's Climate Future* in Houser et al, *Economic Risks of Climate Change*, Columbia University Press, New York.
- 2015 A building blocks strategy for global climate change, in *Towards a Workable and Effective Climate Regime* (S Barrett, C Carraro, and J de Melo, eds), Shamdasani Publishing Services Ltd., UK, chapter 15. At voxeu.org/content/towards-workable-and-effective-climate-regime
- 2022 *The Discovery of Climate Change*, in The Climate Book, Greta Thunberg (Penguin, 2022)

(Michael Oppenheimer)

2022 *The Challenge*, in Democracy in a Hotter Time (MIT Press, 2023), submitted

2022 *Adaptation: Necessity vs. Reality*, in Climate Change and What Must Be Done, Philip Clayton, ed. Sponsored by Templeton Foundation, submitted

Books, Journal Volumes

- 1989 Guest Editor, *Climatic Change* **vol. 15** Special Issue. *Greenhouse Gas Emissions: Environmental Consequences and Policy Responses*.
- 1990 *Dead Heat: The Race Against The Greenhouse Effect* (with R. H. Boyle). (Basic Books, New York).
- 2006 Guest Editor, *Climatic Change* **vol. 77**, Nos.1-2 Special Issue: Global Warming: The Psychology of Long Term Risk.
- 2011 Guest Editor, Special Issue on Carbon Capture and Storage, *Global Environmental Change*.
- 2019 *Discerning Experts: The Practices of Scientific Assessment for Environmental Policy* (Oppenheimer et al), University of Chicago Press, March 2019

Other Publications

- 1978 What are comets made of? *Natural History*, **87**, 42.
- 1980 The comet syndrome (with L. Haimson). *Natural History*, **89**, 54.
- 1984 Reducing Acid Rain: The Scientific Basis for an Acid Rain Control Policy. Environmental Defense Fund, New York (also appeared as “Reducing Acid Rain in Eastern North America: The Scientific Basis for an Acid Rain Control Policy” in *Journal of Law Reform, University of Michigan*, **19**, 989 (1986).
- 1984 Safeguarding Acid-Sensitive Waters in the Intermountain West (with R. Yuhnke). Environmental Defense Fund, New York.
- 1985 Is There Scientific Consensus on Acid Rain? Report of Ad Hoc Committee on Acid Rain: Science and Policy.
- 1986 Thresholds for Acidification: A Framework for Policy and Research. Environmental Defense Fund, New York.

(Michael Oppenheimer)

- 1986 New York City's Water Supply: Acid Deposition, Inorganic Pollution, and the Catskill Reservoirs (with J. Ceraso, C. B. Epstein, and S. L. Clark). Environmental Defense Fund, New York.
- 1988 Global Lessons From The Ozone Hole. Environmental Defense Fund, New York.
- 1988 Polluted Coastal Waters: The Role of Acid Rain (with D. Fisher, J. Ceraso, and Matthew). Environmental Defense Fund, New York.
- 1988 Contributor to Developing Policies For Responding To Climatic Change, World Meteorological Organization.
- 1994 Aircraft Emissions and the Global Atmosphere: Long-term Scenarios (with A. Vedantham.) Environmental Defense Fund, New York.
- 1995 The Way Things *Really* Are: Debunking Rush Limbaugh on the Environment (with L. Haimson and D. Wilcove). Environmental Defense Fund, New York.
- 1995 Context, Connection, and Opportunity in Environmental Problem Solving. *Environment Magazine*, **10**.
- 1996 A Moment of Truth: Correcting the Scientific Errors in Gregg Easterbrook's A Moment on the Earth, Part One (with D. S. Wilcove and M. J. Bean). Environmental Defense Fund, New York.
- 1996 A Moment of Truth: Correcting More Errors in Gregg Easterbrook's A Moment on the Earth, Part Two (with L. Blum, et al.). Environmental Defense Fund, New York.
- 1999 Contributing author, Common Questions About Climate Change. United Nations Environment Programme and World Meteorological Organization.
- 1999 Sustainability And Renewal of Civil Infrastructure: An Environmental Perspective (with Michael Replogle). Presented at a conference organized by the Institute for Civil Infrastructure Systems; New York University.
- 2003 Climate Change: The Case for Long Term Targets, prepared for *High-Level Transatlantic Dialogue on Climate Change*, German Institute for International and Security Affairs and the Brookings Institution, October 17.
- 2003 Global Climate Change, prepared for *Old Rules and New Threats*, Council on Foreign Relations, September 19.
- 2004 Reinvigorating the Kyoto System and Beyond: Maintaining the Fundamental Architecture, Meeting Long-Term Goals, prepared for *Leaders' Summit on Post-Kyoto Architecture: Toward an L20?* (with A. Petsonk), Council on Foreign Relations,

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September 20-21.

- 2005 The Latest Myths and Facts on Global Warming (with James D. Wang), Environmental Defense.
- 2005 Future of Sea Level Rise and the New Jersey Coast: Assessing Potential Impacts and Opportunities (With M.J.P. Cooper and M. Beevers) November 16, 2005
- 2006 Linked Regimes to Solve the Timing Problem for Global Warming (with A. Petsonk), Prepared for the conference on Nesting and Overlapping Institutions, School of Public and International Affairs, Princeton University, 24 February 2006.
- 2007 Report of the Ice Sheet Modeling Workshop (with many authors), 8 January 2007
- 2008 Exploring high-end climate change scenarios for flood protection of the Netherlands (Vellinga et al), a report to the Delta Committee of the Netherlands, September.
- 2011 What Roles Can Scientists Play in Public Discourse?, *Eos* **92**, 133-134
- 2011 Obituary: Stephen Henry Schneider, *Physics Today*, January, pp.66-7
- 2012 Climate Change, Crop Yields, and Internal Migration in the United States (S Feng, M Oppenheimer, W Schlenker), submitted to *J Environ Econ Management* NBER working paper 17734 at <http://www.nber.org/papers/w17734>.
- 2013 Climate Risk Information 2013, NYC Panel on Climate Change, NYC Mayor's Office June
- 2014 Plug methane leaks in the booming natural gas industry, *Scientific American*, April 4.
- 2015 What Role for Scientists? (N Oreskes, D Jamieson, M Oppenheimer, in *Sustainable Humanity, Sustainable Nature, Our Responsibility*, P.S. Dasgupta, V Ramanathan, and M Sanchez Sorondo, eds., Pontifical Academy of Sciences and Pontifical Academy of Social Sciences, Proceedings of a Joint Workshop, p.617-649
- 2015 Science and Policy: Crossing the Boundary (D Jamieson, N Oreskes, M Oppenheimer), *Bulletin of the Atomic Scientists*, **71**, 53-58 DOI: 10.1177/0096340214563675 <http://thebulletin.sagepub.com>
- 2017 Rethinking Approaches to Climate Change Policy (S Barrett et al), Social Science Research Center. https://s3.amazonaws.com/ssrc-cdn1/crmuploads/new_publication_3/%7B393FD942-01CE-E711-80C9-005056AB0BD9%7D.pdf

(Michael Oppenheimer)

2019 Scientists Have Been Underestimating the Pace of Climate Change (Oreskes, Oppenheimer, Jamieson). *Scientific American*, August 19.

2022 Scientists' Amicus brief to US Supreme Court in the matter of *WVa v. EPA*

2022 Scientists' Amicus brief to US Court of Appeals for the DC Circuit in the matter of *Concerned Household Electricity Consumer Council et al v. EPA*