

JONATHAN OVERPECK

SHORT CV/BIOGRAPHICAL SKETCH

PROFESSIONAL PREPARATION

1979 **AB in Geology** (Honors), Hamilton College, New York
1981 **MSc in Geological Sciences**, Brown University, Rhode Island
1985 **PhD in Geological Sciences**, Brown University, Rhode Island
1985-86 **Post-doctoral Research Scientist**, Columbia University jointly with the NASA Goddard Institute for Space Studies

PROFESSIONAL APPOINTMENTS (active in BOLD)

2017-present – Samuel A. Graham Dean, School for Environment and Sustainability, Univ. of Michigan
2017-present – Collegiate Professor, School for Environment and Sustainability, Univ. of Michigan
2017-present – Professor, Climate and Space Science and Engineering
2017-present - Adjunct Professor, Dept. of Geosciences, University of Arizona, Tucson
2016-2017 – *Director*, Institute of the Environment, University of Arizona, Tucson
2016-2017 – *Faculty Member*, Institute for Energy Solutions, University of Arizona, Tucson
2014-2017 – *Regents Professor*, Dept. of Geosciences, University of Arizona, Tucson
2014-2015 – *Acting Initiative Co-leader*, TRIF Water, Environmental and Energy Solutions Program, Univ. of Arizona
2009-2016 – *Founding Co-Director*, Institute of the Environment, Univ. of Arizona, Tucson
2008-present – *Faculty*, Center for Latin American Studies, University of Arizona, Tucson
2007-2011 – *Founding Director*, Translational Environmental Research Program (now part of the larger TRIF Water, Environmental and Energy Solutions Program), Univ. of Arizona
2006-present – *Affiliated Faculty Member* – James E. Rogers College of Law, Univ. of Arizona, Tucson
2004-present – *Joint Professor*, Dept. of Hydrology and Atmospheric Sciences, Univ. of Arizona, Tucson
1999-2008 – *Director*, Institute For the Study of Planet Earth, Univ. of Arizona, Tucson
1999-2014 – *Professor*, Dept. of Geosciences, Univ. of Arizona, Tucson
1992-00 – *Adj. Assoc. Professor*, Dept. of Geological Sciences, University of Colorado
1990-9 – *Fellow*, Institute for Arctic and Alpine Research, Univ. of Colorado
1992-9 – *Director (and Founder)*, World Data Center for Paleoclimatology, Boulder, Colorado
1990-9 – *Head (and Founder)*, NOAA Paleoclimatology Program, NGDC, Boulder
1991-7 – *Adjunct Research Scientist*, Lamont-Doherty Geological Observatory,
1986-90 – *Associate Research Scientist*, Lamont-Doherty Geological Observatory
1985-86 – *Post-doctoral Res. Scientist*, Lamont-Doherty Geological Observatory
1985 – *Teaching Fellow*, Stratigraphy and Sedimentation, Brown University

RESEARCH INTERESTS

Climate dynamics, paleoclimatology, climate modeling, climate variability, climate change, monsoon dynamics, ENSO dynamics, drought dynamics, sea level change, climate-vegetation-ecosystem dynamics, climate adaptation, natural resource management, stakeholder engagement and co-production of knowledge, climate change and law, environmental communication, environmental education.

SELECTED AWARDS AND HONORS

2015 – Elected AGU Fellow
2014 – Appointed Regents Professor, University of Arizona
2013 – Radical Center Award from the Quivira Coalition, NM – awarded to individuals “who have shown remarkable and enduring leadership in the difficult job of working in the radical center - the place where people are coming together to explore their common interests rather than argue their differences.”

- 2013 – Awarded Thomas R. Brown Distinguished (Endowed) Chair, University of Arizona
- 2013 – Visiting Fellow, Victorian Centre For Climate Change Adaptation Research (VCCCAR), University of Melbourne, Australia (6 months)
- 2013 – Visiting Scientist, ARC Centre of Excellence for Climate System Sciences, University of Melbourne, Australia
- 2012 – Appointed Senior Fellow, U.S. Dept. of State, Energy and Climate Partnership of the Americas (through 2013)
- 2009 – Elected Fellow of the American Association for the Advancement of Science (AAAS)
- 2009 – Leading Edge Researcher Award, U. Arizona Office of Economic Development
- 2008 – NOAA Oceanic and Atmo. Research Outstanding Scientific Paper Award – shared
- 2007 – Nobel Peace Prize – contributed in leadership role as a Coordinating Lead Author of the Fourth Assessment of the Intergovernmental Panel on Climate Change (IPCC).
- 2007 – Shared winner of Atmospheric Science Librarians International’s Scientific and Technical Category for "high impact comprehensive publication" for *Climate Change 2007: The Physical Science Basis*.
- 2005 – Bjerknes Lecturer, American Geophysical Union
- 2005 – John Simon Guggenheim Fellowship Award
- 2004 – Birbal Shani Institute of Palaeobotany, Lucknow, India Prof. T.M. Harris Medal for 2004 (awarded for best Indian co-authored paper in field in 2004)
- 2001 – American Meteorological Society’s Walter Orr Roberts 2001 Award
- 1999 – US Department of Commerce Gold Medal
- 1996 – US Department of Commerce Outstanding Performance Award
- 1995 – National Geophysical Data Center Director Award
- 1994 – US Department of Commerce Bronze Medal
- 1991 – US Department of Commerce Unusually Outstanding Performance Award

SELECTED PROFESSIONAL ACTIVITIES

- Member**, National Academy of Science/NRC Board on Atmospheric Sciences and Climate (BASC) (2014-)
- Member**, Colorado River Research Group – an independent scholarly voice on the challenges faced by the river, its environment and its people
- Guest Editor**, Multi-issue Focus on 'Electricity, water and climate connections" *Environmental Research Letters* (2012-2014)
- Member**, National Academy of Science/NRC Board on Environmental Change and Society (BECS) (2012 -)
- Member, Scientific Advisory Committee**, Energy and Water in a Warming World Initiative – a partnership led by the Union of Concerned Scientists
- Organizing Committee**, "Adaptation Futures," 2012 International Conference on Climate Adaptation, Tucson, AZ
- Co-Principal Investigator**, US Department of Defense SERDP "Climate Change Impacts and Adaptation on Southwestern DoD Facilities (2012 to 2015)
- University Director**, US Dept. of Interior Southwest Climate Science Center (2011 to present)
- Lead Principal Investigator**, Climate Assessment For the Southwest (CLIMAS – part of the NOAA-funded Regional Integrated Sciences and Assessments Program – RISA) (2002-16)
- Lead Author**, IPCC Fifth Assessment Working Group 2, Chapter Four: Terrestrial and Inland Water Systems, and Summary for Policymakers (2010 – 2014)
- Congressional Testimony and Briefings**, Nine times in last five years
- Faculty**, The National Judicial College, Reno, NV (2009)
- Coordinating Lead Author**, IPCC Fourth Assessment Working Group I Chapter Six: Paleoclimate; **also co-author** of Summary for Policymakers and Technical Summary.
- Member**, National Academy of Sciences/NRC Committee on Ecological Impacts of Climate Change, 2008.

- Member**, U.S. Climate Change Science Program Federal Advisory Committee focused on “Climate change and the United States: Analysis of the effects and projections for the future – Unified Synthesis Product,” 2008
- Founding Co-Editor** (with M. Miller and B. Morehouse) of “*Summits: Environmental Science, Law, and Policy*” book series, University of Chicago Press (2007 -)
- Member**, Board of Reviewing Editors, *Science* (2006 to 2011)
- Member**, Committee charged with drafting society’s new Statement on Climate Change Impact, American Meteorological Society (2006 to 2007)
- Member**, NOAA Climate Working Group (2004 to 2008).
- Chair**, NSF Arctic System Science (ARCSS/ARCUS) Committee (2002 to 2006).
- Member**, National Academy of Science/NRC, Committee on Coping with Increasing Demands on Government Data Centers (2001 to 2003).
- Member**, National Academy of Sciences/NRC Committee (and workshop co-organizer) on Abrupt Climate Change: Science and Policy (2001-2002).
- Founding Co-Chair** (with J-C Duplessy), IGBP PAGES-WCRP CLIVAR Working Group (1995 – served as co-chair until 2004).
- Member**, IGBP PAGES (Past Global Changes) Scientific Steering (SSC) and Executive Committees (1993 to 1999; also served as **Vice Chairman** SSC 1998-99).
- Founding Director**, World Data Center for Paleoclimatology (1992 to 1999).
- Leader or Co-leader**, over 20 paleoclimate research field expeditions in North America, the Arctic, Monsoon Asia, Monsoon Africa, and South America (1986 to present); also scientist on two research cruises, including **Co-chief Scientist**, 1990 R/V Washington, Cruise PLUME 7, Cariaco Basin, Venezuela – the cruise that led to the prominence of Cariaco Basin paleo-records in abrupt change research.
- Organizer or Co-organizer**, over 30 regional, national and international workshops and conferences (1993 to present).

SUPERVISOR/MANAGEMENT TRAINING EXPERIENCE

- 2016 - Active Shooter Training
- 2002 - Completed “Human Subjects” Training/Certification
- 1997 - NOAA Workshop for People with Disabilities
- 1996 - US Gov’t Senior Executive Service Approved Course:
“The Aspen Institute Executive Seminar for the Public Sector”
- 1995 - Department of Commerce Approved Management Course:
"Merit System Principles: Understanding and Applying Them"
- 1995 - Dept. of Commerce Approved Diversity Management Course: “Conflict Resolution”
- 1994 – Dept. of Commerce Approved Management Course:
"Improving Your Listening and Communication Skills"
- 1992 – Dept. of Commerce Approved Management Course: "Equal Employment Opportunity Training for Supervisors and Managers."
- 1992 – Dept. of Commerce Approved Management Course: "People Skills for Supervisors and Managers"

SELECTED PUBLICATIONS (from >200 total, *led by student)

Major Climate Assessments and Syntheses

- 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, C.B., et. al. (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1-32.
- Settele, J., R. Scholes, R. Betts, S. Bunn, P. Leadley, D. Nepstad, J.T. Overpeck, and M.A. Taboada, 2014: Terrestrial and inland water systems. *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. 271-359.
- Overpeck, J, G. Garfin, A. Jardine, D. Busch, D. Cayan, M. Dettinger, E. Fleishman, A. Gershunov, G. MacDonald, K. Redmond W. Travis, and B. H. Udall (2013). Chapter 1: Summary for Decision Makers. *In: Assessment of Climate Change in the Southwest United States: A Report Prepared for the National Climate Assessment.* (Garfin, G., et. al., eds.). A report by the Southwest Climate Alliance. Washington, DC: Island Press.
- Cayan, D. M. Tyree, K. E. Kunkel, C. Castro, A. Gershunov, J. Barsugli, A. Ray, J. Overpeck, M. Anderson, J. Russell, B. Rajagopalan, I. Rangwala, and P. Duffy. Review Editor: M. Barlow (2013). Chapter 6: The Southwest Climate of the Future—Projections of Mean Climate, *In: Assessment of Climate Change in the Southwest United States: A Report Prepared for the National Climate Assessment.* (Garfin, G., et. al., eds.). A report by the Southwest Climate Alliance. Washington, DC: Island Press.
- Gershunov A., B. Rajagopalan, J. Overpeck, K. Guirguis, D. Cayan, M. Hughes, M. Dettinger, C. Castro, R. Schwartz, M. Anderson, A. Ray, J. Barsugli, T. Cavazos, and M. Alexander. Review Editor: F. Dominguez (2013). Chapter 7: The Southwest Weather and Climate Extremes of the Future, *In: Assessment of Climate Change in the Southwest United States: A Report Prepared for the National Climate Assessment.* (Garfin, G., et. al., eds.). A report by the Southwest Climate Alliance. Washington, DC: Island Press
- Kaufman, D.S., D. P. Schneider, N. P. McKay, C. M. Ammann, R. S. Bradley, K. R. Briffa, G. H. Miller, B. L. Otto-Bleisner, J. T. Overpeck, B.M. Vinther and Arctic Lakes 2k Project Members (2009). Recent Warming Reverses Long-Term Arctic Cooling. *Science* 325, 1236-1239.
- Karl, T.R., J. M. Melillo, and T. C. Peterson, (eds.). *Global Climate Change Impacts in the United States*, Cambridge University Press, (2009). (author, released at White House press conference).
- Jones P.D., K.R. Briffa, T.J. Osborn, J.M. Lough, T.D. van Ommen, B.M. Vinther, J. Luterbacher, E. R. Wahl, F.W. Zwiers, M.E. Mann, G.A. Schmidt, C. M. Ammann, B.M. Buckley, K. M. Cobb, J. Esper, H. Gooose, N. Graham, E. Jansen, T. Kiefer, C. Kull, M. Küttel, E. Mosley-Thompson, J.T. Overpeck, N. Riedwyl, M. Schulz, A. W. Tudhope, R. Villalba, H. Wanner, E. Wolff and E. Xoplaki (2009). High-resolution paleoclimatology of the last millennium: a review of current status and future prospects. *The Holocene* 19, 3-49.
- IPCC, 2007: Summary for Policymakers. *In: Climate Change 2007: The Physical Science Basis.* Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. (Solomon, S. et al., eds). Cambridge University Press. Cambridge. Pages 1-18.
- Solomon, S. and others. Technical Summary. *In: Climate Change 2007: The Physical Science Basis.* Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. (Solomon, S. et al., eds). Cambridge University Press. Cambridge. Pages 19-91.
- Jansen, E., J.T. Overpeck and 47 others. (2007). Chapter 6: Paleoclimate. *In: Climate Change 2007: The Physical Science Basis.* Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. (Solomon, S. et al., eds). Cambridge University Press. Cambridge. Pages 433-497.
- Overpeck J.T. and J.E. Cole. (2006). Abrupt change in the Earth's climate system. *Ann. Rev. Environment and Resources* 31, 1-31.
- Overpeck, J.T., M. Strum, J.A. Francis, D.K. Perovich, M.C. Serreze and 18 others. (2005). Arctic system on trajectory to new, seasonally ice-free state. *EOS* 86, 309-313.
- National Research Council (2003). *Government Data Centers: Meeting Increasing Demands*, 56 pp., National Academy Press, Washington, D.C., (Overpeck is a co-author).
- Alley, R.B., J. Marotzke, W.D. Nordhaus, J.T. Overpeck, D.M. Peteet, R.A. Pielke, Jr., R.T. Pierrehumbert, P.B. Rhines, T.F. Stocker, L.D. Talley and J.M. Wallace. (2003). Abrupt Climate Change. *Science* 299: 2005-2010.
- National Research Council, *Abrupt Climate Change: Inevitable Surprises*, 182 pp., National Academy Press, Washington, D.C., (2002). (Overpeck is a co-author).
- Overpeck, J.T. and 17 others. (1997). Arctic Environmental Change of the Last Four Centuries. *Science* 278: 1251-1256.
- Overpeck, J.T. (1995). Paleoclimatology and Climate System Dynamics. *Reviews of Geophysics* 33 (supplement): 863-871.

Overpeck, J.T., L.C. Peterson, N. Kipp, J. Imbrie, and D. Rind. (1989). Climatic change in the low-latitude North Atlantic region during the last deglaciation. *Nature* 338: 553-557.

Papers focused on Drought Dynamics and Water Management

- Stevenson, S., J.T. Overpeck, J. Fasullo, S. Coats, L. Parsons, T. Ault, B. Otto-Bliesner, G. Loope and J. Cole (2017). Dynamical Controls on Last Millennium Hydroclimate Extremes. *J. of Climate* (in review).
- Udall, B. and J. Overpeck (2017). The 21st Century Colorado River hot drought and implications for the future. *Water Resources Research* 10.1002/2016WR019638
- *Routson CC, Overpeck JT, Woodhouse CA, Kenney WF (2016) Three Millennia of Southwestern North American Dustiness and Future Implications. *PLoS ONE* 11(2): e0149573.
- *Routson, C.C., C.A. Woodhouse, J.T. Overpeck, J.L. Betancourt, N.P. McKay. (2016). Teleconnected Ocean Forcing of Western North American Droughts and Pluvials During the Last Millennium. *Quaternary Science Reviews* 146: 238-250.
- Donat, M.G., A.D. King, J.T. Overpeck, L.V. Alexander, I. Durre, and D. Karoly (2015). Extreme summer heat during 1930s US Dust Bowl related to anomalous atmospheric flow in spring. *Climate Dynamics* DOI 10.1007/s00382-015-2590-5.
- *Ault, T.R. J. E. Cole, J. T. Overpeck, G. T. Pederson and D. M. Meko (2014). Assessing the risk of persistent drought using climate model simulations and paleoclimate data. *Journal of Climate* 27: 7529-7549.
- Rogers, J., K. Averyt, S. Clemmer, M. Davis, F. Flores-Lopez, P. Frumhoff, D. Kenney, J. Macknick, N. Madden, J. Meldrum, J. Overpeck, S. Sattler, E. Spanger-Siegrfried, and D. Yates (2013). *Water-smart power: Strengthening the U.S. electricity system in a warming world*. Cambridge, MA: Union of Concerned Scientists.
- Vano, J.A. B. Udall, D.R. Cayan, J.T. Overpeck, L.D. Brekke, T. Das, H.C. Hartmann, H. G. Hidalgo; M. Hoerling, G. J. McCabe, K. Morino, R. S. Webb, K. Werner, D. P. Lettenmaier (2014). Understanding Uncertainties in Future Colorado River Streamflow, *Bulletin of the American Meteorology Society*: 95: 59-78.
- *Ault, T. R., J. E. Cole, J. T. Overpeck, G. T. Pederson, S. St George, B. Otto-Bliesner, C. A. Woodhouse, and C. Deser (2013), The Continuum of Hydroclimate Variability in Western North America during the Last Millennium, *Journal of Climate*, 26(16), 5863-5878.
- Overpeck, J.T. (2013). The challenge of hot drought. *Nature* 503: 350-351.
- *Weiss, J.L., J.L. Betancourt, J.T. Overpeck (2012) Climatic limits on foliar phenology during major droughts in the Southwestern U.S.A., *J. Geophys. Res.*, doi:10.1029/2012JG001993 (in press).
- *Weiss J.L, J.T. Overpeck, J.E. Cole (2012) Warmer led to drier: Dissecting the 2011 drought in the Southern U.S. *Southwest Climate Outlook* 11(3), 3-4.
- *Routson C.C., C. A. Woodhouse and J. T. Overpeck (2011). Second century megadrought in the Rio Grande headwaters, Colorado: How unusual was medieval drought? *Geophysical Research Letters* 38, L22703, doi:10.1029/2011GL050015.
- Overpeck, J. and B. Udall (2010). Dry Times Ahead. *Science* 328:1642-1643.
- *Conroy J. L., J.T. Overpeck, J.E. Cole and M. Steinitz-Kannan (2009). Variable oceanic teleconnections to Western North American drought over the last 1200 years. *Geophysical Research Letters* (36 L17703 10.1029/2009gl039558
- Scholz, C.A, T.C. Johnson, A.S. Cohen, J.W. King, J.A. Peck, J.T. Overpeck, M.R. Talbot, E.T. Brown, L. Kalindekafeh, P.Y.O. Amoakoi, R.P. Lyons, T.M. Shanahan, I.S. Castaneda, C.W. Heile, S.L. Forman, L.R. McHarguek, K.R. Beuning, J.Gomez, and J.Pierson (2007). East African megadroughts between 135 and 75 thousand years ago and bearing on early-modern human origins. *Proc. of the National Academy of Sciences* 104, 16416-16421.

- Cole, J.E., J.T. Overpeck and E.R. Cook (2002). Multiyear La Niña events and persistent drought in the contiguous United States. ***Geophysical Research Letters*** 29, 10.1029/2001GL013561.
- Mangan, J.M, J.T. Overpeck, R.S. Webb, C. Wessman, and A.F.H. Goetz (2004). Response of Nebraska Sand Hills natural vegetation to drought, fire, grazing, and plant functional type shifts as simulated by the CENTURY model. ***Climatic Change*** 63: 49-90.
- Woodhouse, C.A. and J.T. Overpeck (1998). 2000 years of drought variability in the Central United States. ***Bulletin of the American Meteorological Society*** 79: 2693-2714.

Papers focused on Monsoon Dynamics

- *Conroy, J.L., A.M. Hudson, J.T. Overpeck, K-b Liu, L. Wang and J.E. Cole. (2017). The primacy of multidecadal to centennial variability over late-Holocene forced change of the Asian Monsoon on the southern Tibetan Plateau. ***Earth and Planetary Science Letters*** doi: 10.1016/j.epsl.2016.10.044.
- Otto-Bliesner B.L., J.M. Russell, P.U. Clark, Z. Liu J.T. Overpeck, B. Konecky, P. deMenocal, S.E. Nickolson, F. He, Z. Lu (2014). Coherent changes of northern and eastern equatorial Africa rainfall during the last deglaciation. ***Science*** 346: 1223-1227.
- * Shanahan, T.M., N.P. McKay, K.A. Hughen, J.T. Overpeck, B. Otto-Bliesner, C.W. Heil, J. King, C.A. Scholz, J. Peck (2014). The time-transgressive termination of the African Humid Period. ***Nature Geoscience*** 8: 140-144.
- *Parsons, L.A., Yin, J., Overpeck, J.T., Stouffer, R.J., Malyshev, S. (2013). Influence of the Atlantic Meridional Overturning Circulation on the South American Monsoon Rainfall and Carbon Balance, ***Geophysical Research Letters*** 41: 1–6, doi:10.1002/2013GL058454
- * Conroy J.L., J.T. Overpeck, J.E. Cole, K-b Liu, L. Wang and M.N. Ducea (2013). "Dust and temperature influences on glaciofluvial sediment deposition in southwestern Tibet during the last millennium, ***Global and Planetary Change*** 107: 132-144.
- * Shanahan, T.M., J.W. Beck, J.T. Overpeck, N. McKay, J.E. Pigati, J.A. Peck, C. Scholz, J. King. (2012). Late Quaternary sedimentological and climate changes at Lake Bosumtwi Ghana: new constraints from laminae analysis and radiocarbon age modeling: ***Palaeogeography, Palaeoclimatology, Palaeoecology***: 361: 49-60.* Conroy, J.L and J.T. Overpeck. (2011). Regionalization of present-day precipitation in the greater monsoon region of Asia, ***Journal of Climate*** 24: 4073-4095
- *Shanahan, T., J.T. Overpeck, K. Anchukaitis, J.W. Beck, J.E. Cole, D. Dettman, J. Peck, C.A. Scholz, and J.W. King (2009). Atlantic forcing of persistent drought in West Africa ***Science*** 324: 377-380.
- *Shanahan, T., J.T. Overpeck, C.A. Scholz, J. W. Beck, J. Peck and J.W. King (2008). Abrupt changes in the water balance of tropical West Africa during the late Quaternary. ***Journal of Geophysical Research-Atmospheres*** 13, D12108
- Gupta, A.K., Anderson, D.M. and J.T. Overpeck (2003). Abrupt Holocene change in the Indian Ocean SW Monsoon and their links to the North Atlantic. ***Nature*** 421: 354-357.
- Anderson, D.M., J.T. Overpeck and A.K. Gupta (2002). Increase in the Southwest Asian Monsoon during the past four centuries. ***Science*** 279: 596-599.
- *Morrill, C. J.T. Overpeck and J.E. Cole (2002). A synthesis of abrupt changes in the Asian summer monsoon since the last deglaciation. ***The Holocene*** 13: 465-476.

Papers focused on Ice Sheet Dynamics and Sea Level

- Otto-Bliesner, B. L., N. Rosenbloom, E. J. Stone, N.P. McKay, D. J. Lunt, E. C. Brady, and J. T. Overpeck (2013). How warm was the Last Interglacial? New model-data comparisons, ***Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*** , 371 doi: 10.1098/rsta.2013.0097
- Strauss, B.H. Re. Ziemlinski, J. L. Weiss, and J. T. Overpeck (2012). Tidally-adjusted estimates of topographic vulnerability to sea level rise and flooding for the contiguous United States. ***Environmental Research Letters*** doi:10.1088/1748-9326/7/1/014033.
- Yin, J., J. T. Overpeck, S. M. Griffies, A. Hu, J. L. Russell and R. J. Stouffer (2011). Different magnitudes of

- projected subsurface ocean warming around Greenland and Antarctica. *Nature Geoscience* 4: 524-528.
- *McKay N. P., J.T. Overpeck, B.L Otto-Bliesner. (2011). The role of ocean thermal expansion in Last Interglacial sea level rise, *Geophysical Research Letters* 38: L14605, doi:10.1029/2011GL048280
- *Weiss, J.L. J.T. Overpeck and B.H. Strauss. (2011). Implications of recent sea level rise science for low-elevation areas in coastal cities of the conterminous U.S.A. Climatic Change DOI 10.1007/s10584-011-0024-x
- Overpeck, J.T. and J.L. Weiss (2009). Projections of future sea level becoming more dire. *Proceedings of the National Academy of Sciences* 106: 21461–21462
- CAPE_Last_Interglacial_Project_Members (2006). Last Interglacial Arctic Warmth Confirms Polar Amplification of Climate Change. *Quaternary Science Reviews* 25, 1383-1400.
- Overpeck, J. T., Otto-Bliesner, B. L., Kiehl, J. T., Miller, G. H., and Alley, R. (2006). Paleoclimatic evidence for future ice sheet instability and rapid sea-level rise. *Science* 311, 1747-50.
- Otto-Bliesner, B. L., Marshall, S. J., Overpeck, J. T., Miller, G. H., Hu, A. X., and CAPE-Project-Members. (2006). Simulating arctic climate warmth and icefield retreat in the last interglaciation. *Science* 311, 1751-1753.

Other papers focused on Climate Dynamics and Abrupt Change

- Yin, J, J.T. Overpeck, C. Peyser and R. Stouffer. (2018). Big Jump of Record Warm Global Mean Surface Temperature in 2014-2016 Related to Unusually Large Oceanic Heat Releases. *Geophys. Res. Lett* 10.1002/2017GL076500.
- Dee, S.G., L.A. Parsons, G. Loope, T.R. Ault, J. Emile-Geay, J.T. Overpeck. (2017). Improved spectral comparisons of paleoclimate models and observations via proxy system modeling: implications for multi-decadal variability. *Earth and Planetary Science Letters* (submitted).
- *Parsons, L.A., G R. Loope, J. T. Overpeck, T. R. Ault, R. Stouffer and J. E. Cole (2017). Temperature and precipitation variance in CMIP5 simulations and paleoclimate records of the last millennium. *Journal of Climate* 30: 8885-8912.
- Overpeck, J.T. G.A. Meehl, S. Bony, D. R. Easterling (2011). Climate Data Challenges in the 21st Century. *Science* 331: 700-702.
- *Conroy J. L., A. Restrepo, J.T. Overpeck, M. Steinitz-Kannan, J.E. Cole, M B. Bush and P. A. Colinvaux (2009). Unprecedented recent warming of surface temperatures in the eastern tropical Pacific Ocean. *Nature Geoscience* 2, 46-50; plus featured as issue “Backstory”.
- *Hughen, K, S. Lehman, J. Southon, J. Overpeck, O. Marchal, C. Herring and J. Turnbull (2004). ¹⁴C Activity and Global Carbon Cycle Changes Over the Past 50,000 years. *Science* 303, 202-207.
- *Hughen, K.A., J.R. Southon, S.J. Lehman, and J.T. Overpeck (2000). Synchronous radiocarbon and climate shifts during deglaciation. *Science* 290: 1951-1954.
- *Urban, F.E., J.E. Cole and J.T. Overpeck (2000). Influence of mean climate change on variability in a 155-year tropical Pacific coral record. *Nature* 407, 989-993.
- Overpeck, J.T. and R.S. Webb (2000). Non-glacial rapid climate events: past and future. *Proc. of the National Academy of Sciences* 97: 1335-1338.
- *Black, D.E., L.C. Peterson, J.T. Overpeck, A. Kaplan, M. Evans and M. Kashgarian (1999). Eight Centuries of North Atlantic Atmosphere-Ocean Variability. *Science* 286: 1709-1713.
- *Hughen, K.A., J.T. Overpeck, S.J. Lehman, M. Kashgarian, L.C. Peterson, and R. Alley (1998). Deglacial ¹⁴C calibration, activity and climate from a marine varve record. *Nature* 391: 65-68.
- *Hughen, K.A., J.T. Overpeck, L.C. Peterson, and S. Trumbore (1996). Abrupt deglacial climatic change in the tropical Atlantic. *Nature* 380: 51-54.

Climate – Biosphere - Atmosphere Interactions, including Conservation Biology

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Social media and on-line outreach publications

- Twitter: **@TucsonPeck** (more than 5100 followers - tweeting primarily about issues related to climate variability, climate change, climate impacts, climate adaptation, climate solution choices).
- Founding Member, Colorado River Research Group: Non-partisan policy reports (7 since 2014) on water and ecosystem sustainability. <http://www.coloradoriverresearchgroup.org/publications.html>:
- "Innovations in Agricultural Water Conservation and Use: Fertile Ground for Lasting Solutions" (June 2017).
 - "Climate Change and the Colorado River: What We Already Know" (October 2016)
 - "Tribes and Water in the Colorado River Basin" (2016).
 - "Prioritizing Management and Protection of the Colorado River's Environmental Resources" (2016)
 - "A Look at the Interim Guidelines at Their Mid-Point: How Are We Doing?" (2015)
 - "The Case for Conservation" (2015)
 - "The First Step in Repairing the Colorado River's Broken Water Budget" (2015)
 - "Charting a New Course for the Colorado River: A Summary of Guiding Principles." (2014)