Kerry Harrison Cook

Professor, Jackson School of Geosciences
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Education

Ph.D 1984, Atmospheric Sciences, North Carolina State University, Raleigh NC.

M.S. research, 1975-1977, Space Physics, Rice University, Houston TX.

B.S. 1975, Astronomy, Physics minor. Villanova University, Villanova PA.

Employment History

8/08-present: Professor, Department of Geological Sciences, Jackson School of Geosciences, The University of Texas at Austin

8/91-8/08: Assistant, Associate, Full Professor of Atmospheric Science, Department of Earth and Atmospheric Sciences, Cornell University, Ithaca, NY

2006 – 2008: Director of Graduate Studies for Atmospheric Science, Cornell

1999-2004: Director of Undergraduate Studies, Science of Earth Systems, Cornell

11/85-7/91: Research Scientist, Geophysical Fluid Dynamics Laboratory (GFDL), Princeton University/NOAA, Princeton NJ.

9/84 - 9/85: Postdoctoral Research Associate, Environmental Sciences Division, Oak Ridge National Laboratory, Oak Ridge TN

5/81 - 8/84: Global Change Research Fellow, Institute for Energy Analysis, Oak Ridge Associated Universities, Oak Ridge TN.

Professional Activities (Selected Current and Recent)

Editor, Journal of Climate (2011 – present)

Co-director, with Arlene Laing, of the NCAR/ISP Graduate Colloquium on African Climate and Weather, July 26-Aug 5, 2011

Editor, Earth System Dynamics (2009-2011)

American Meteorological Society, Committee on Communicating Climate Change

Member, US Atlantic Meridional Overturning Circulation Science Team, US CLIVAR Program

Meeting organization

- Workshop on the West African Monsoon System, AMMA meeting in Ouagadougou, Burkina Faso, July, 2009. Member of Scientific Organizing Committee
- Session on African Climate, Climate Variations and Change Conference, AMS Annual Meeting, January 2008
- Workshop on the West African Monsoon Modeling Experiment, AMS Annual Meeting, January 2008 with Yongkang Xue
- Workshop on African Drought, May 2008, ICTP Trieste, with Filippo Giorgi
- AGU Joint Assembly, May 2007: session on African and South American Hydroclimate, with Yongkang Xue and William Lau

• CLIVAR Workshop on the Predictability of Southern and East African Precipitation, Dar es Salaam, Tanzania, July 2006, with Chris Reason

UCAR Board of Trustees Budget and Planning Committee, Chair

UCAR Member's Nominating Committee, Chair 2005-6

UCAR University Relations Committee, 2004-2008, Chair 2007-2008

International Scientific Steering Committee of the African Monsoon Multidisciplinary Analysis (AMMA) program (2009 – 2012)

Public and university presentations on global warming, e.g.

- Climate Prediction for Austin (February 2012)
- Texas Master Naturalist Program (January 2011)
- Toward confident and useful climate change projections. Brown International Advanced Research Institutes (June 2011)
- Global Warming, The University of Texas Parent's Weekend, (October 2011)
- American Association of Physics Teachers/American Physical Society, luncheon speaker on Abrupt Climate Change (March 2010)
- TXESS Revolution Professional Development for Educators (October 2010)
- UT Austin Honors Colloquium (July 2010)
- Climate Change in Africa, LBJ School of Public Policy (November 2009)
- Climate Change basics Tech Session at Dept. Geological Sciences, UT Austin (October 2009)
- Rotary Club of Austin (June 2009)
- Climate Change in the Sahel, NPR's Earth and Sky (May 2009)
- Explore UT, Austin TX (March 2009)
- Boyce Thompson Institute, Cornell University. Effects of 21st century climate change on the Amazon rainforest (Apr 2008)
- Focus the Nation Teach In on Climate Change at Cornell (Feb 2008)
- Panels to discuss "An Inconvenient Truth" at Cornell Cinema and various local churches and civic groupsS
- Guest on "1370 Connection with Bob Smith". One hour call-in radio program on WXXI, the NPR affiliate in Rochester NY (2007)
- Cornell Engineering Graduate Student Association (October 2007)
- Cornell alumni functions in Ithaca and San Francisco (Cornell Silicon Valley Alumni Association)
- Panel on the Social Responsibility of Scientists, Physics Graduate Society, Cornell University (2007)

Recent invited presentations:

- International Union of Geodesy and Geophysical Meeting, Melbourne, Australia, July 2011
- BIARI Institute on Climate Change and its Impacts, Brown University, June 2011
- Workshop on Climate Change and African Political Stability, LBJ School of Public Policy, The University of Texas at Austin (May 2011)
- Workshop on Coupled Ocean-Atmosphere-Land Processes in the Tropical Atlantic, March 2011

- Workshop on Northern Africa: Past, Present, and Future Climate Changes, Maximum Planck Institute, Hamburg, GR, February 2011
- Annual Meeting of the American Meteorological Society, Seattle WA, January (2011)
- Department of Energy PI meeting on Climate Change and Variability, Greenbelt, MD, March 2010
- Africa Conference on Developing Country's Vulnerability of Climate Change, International Center for Theoretical Physics, University of Botswana, Gaborone, Botswana, 19-23 April 2010
- American Meteorological Society, Conference on Tropical Meteorology and Climate, Tucson AZ May 2010
- Africa Conference on developing country's Vulnerability of Climate Change, International Center for Theoretical Physics, University of Botswana, Gaborone, Botswana, 19-23 April 2010
- University of Miami, Rosensteil School of Marine and Atmospheric Sciences, April 16, 2010
- 3rd International AMMA Conference, Ouagadougou, Burkina Faso (July 2009)
- NASA Goddard (Sept 2009)
- African Water Resources Workshop, Centre for Energy Studies, University of Cambridge (Oct 2009)
- UCLA, Dept. of Civil and Environmental Engineering (April 2009)
- Texas A&M, Dept. of Atmospheric Science (May 2009)
- Conference on Climate Change: Global Risks, Challenges, and Decisions, Copenhagen (March 2009)
- NOAA's 33rd Climate Diagnostics and Prediction Workshop, CLIVAR Drought Workshop CLIVAR drought workshop, Lincoln, Nebraska (October 2008)
- 55th Annual NSF Systematics Symposium, Missouri Botanical Garden: Climate Change and Biodiversity in Africa and Madagascar 17-18 October 2008.
- Keynote invited lecture, Goldschmidt Conference on Geochemistry, Vancouver, BC, July 2008 (declined)
- NSF-USDA funded International Workshop on Supercomputing Applications in Climate Sciences and Remote Sensing, Cairo Egypt May 2008
- University of Michigan, Ann Arbor, Department of Geological Science Smith lecture series, November 2007
- Workshop on the Response of North African Ecosystems to Abrupt Climate Change, Bremen, Germany, November 2007
- University of Nebraska, Lincoln, Department of Geosciences seminar, September 2007
- Institute for the Study of Continents Workshop, Cornell (September 2007)
- Geoscience Academics in the Northeast Writing Retreat, July 2007
- Florida State University, Department of Meteorology, March 2007
- Workshop on Sahel Climate Change, Columbia University, March 2007

- 3rd WGNE Workshop on Systematic Errors in Climate and NWP Models, Sa n Francisco, February 2007
- One Day University, Global Climate Change lecturer (declined)
- Women in Math, Science and Engineering Symposium, Florida State University, March 2007
- AGU Fall 2006 meeting, session on "Past Climate Variability From the Last Glacial Maximum to the Holocene in South America and Surrounding Regions"
- African Monsoon Multidisciplinary Analysis Program, SOP Debriefing and Preparation of Process Studies, Toulouse, France, November 2006
- CLIVAR Workshop on Climate and Weather Prediction for Southern and Eastern Africa, Dar es Salaam, Tanzania, July 2006
- Also recent seminars at the Climate Prediction Center, University of Maryland, NASA Goddard, Georgia Tech, Duke University, University of Wisconsin, Columbia University, and Cornell

National Geographic World Atlas, 2005, contributing writer

US-African Monsoon Multidisciplinary Analysis (AMMA) Science Team

External review team for the Department of Earth and Atmosphere Sciences, Iowa State University, March 2006

Steering Committee, West African Monsoon Modeling and Evaluation

Tenure and promotion evaluations for University of Botswana, University of Texas at Austin, University of Cape Town, Florida State University, SUNY Albany, University of Michigan, and the International Research Institute for Climate and Society

Member, CLIVAR Panel on African Variability, World Climate Research Programme, World Meteorological Organization, Geneva (2001-2006)

Advisory Board, NCAR's Climate and Global Dynamics Division (2005)

Committee on Weather and Climate of the Southern Hemisphere (2000-2006)

NSF External Reviewer of the Climate and Global Dynamics Division at the National Center for Atmospheric Research (1996, 2002)

Reviews for numerous journals, and reviews and panels for proposals submitted to NSF, NOAA, National Geographic, and NASA

University Community Activities (Current and Recent, Selected)

Faculty Search Committee, Orbits and Controls positions, Dept. Aerospace Engineering and Engineering Mechanics, Cockrell School of Engineering, UT Austin

Climate System Science Education and Research Group, UT Austin, Education and Research Group Director, 2008-2009

University of Texas Faculty Council, Departmental representation, 2010

Cornell University Nominations and Elections Committee, 2006 – 2008

Cornell Academic Programs and Policy Committee 2005 - 2008

University Corporation for Atmospheric Research (UCAR), Cornell representative (1999 - present)

Graduate Field Memberships: Atmospheric Sciences, Geological Sciences, Computational Science and Engineering

Cornell Academic Programs and Policy Committee 2005 - 2008

Departmental Diversity Committee, 2006 – present, chair

Science of Earth Systems Curriculum Committee, 2003 - present

Atmosphere Science Curriculum Committee, 1991 - present

Engineering College Committee on Energy and the Environment (2004)

Cornell Health Careers Program, faculty evaluator (2004-2006)

Task Force on the Future of Computing and Information Science at Cornell, 1999-2000 (Appointed by Provost)

University Faculty Senate, 1996-1999 (Elected through departmental vote)

Honors and Awards

American Meteorology Society, Fellow

Board of Trustees, University Corporation for Atmospheric Research, 2008present, elected by University Member Representatives to UCAR

Executive Committee, Board on Oceans and Atmosphere, National Association of State Universities and Land-Grant Colleges (2007 - present)

Who's Who in Science and Engineering, 2008-present

Who's Who of American Women, 2008-present

Merrill Presidential Scholar Award, Outstanding Educator, 2007

Carl Becker House, Faculty Fellow, Cornell, 2007-2008

University Faculty Executive Committee, 1997-2003 (university-wide election)

Merrill Presidential Scholar Award, Outstanding Educator, 2003

DOE Global Change Fellow, 1981-1984

Graduate Degrees Supervised

As major professor:

Gang Zhang (PhD student)

Naresh Neupane (PhD student)

Meredith Brown (MS, 2012)

James Favors (PhD student, 2010/2011)

Bing Pu (PhD 2010) Current position, Research Associate, The University of Texas

Christina Patricola (M.S. 2007; PhD 2010) Current position, Research Associate, Texas A&M

Samson Hagos (M.S. 2004, PhD 2007). Current position, Research Scientist, Pacific Northwest National Laboratory

Jen-shan Hsieh (Ph.D. May 2005). Current position: Research Associate at Texas A&M

Torsten Duffy, M.S. May 2000. Current position: Weather prediction modeling manager at Naval Research Lab.

Edward. K. Vizy, M.S. 1999, Ph.D. 2003. (NASA Graduate Student Fellowship) Current position: Research Associate at UT Austin.

Corinne M. Carter, M.S. 1999 (NSF Graduate Fellowship). Current position: Computer programmer at Raytheon

Lesley L. Greene, M.S. 1997. (NASA Graduate Student Fellowship) Current position: Actor.

John C.-H. Chiang, M.S. Physics 1996. Current position: Associate Professor at University of California, Berkeley.

John D. Lenters, M.S. 1994, PhD 1996. Current position: Associate Professor, University of Nebraska, Department of Geosciences

Todd D. Ringler, PhD 1996. Current position: Research scientist, Los Alamos National Laboratory, Theoretical Division, Fluid Dynamics Group

Other Supervisory (Current and recent)

Research Associates: Dr. Edward K Vizy, Research Associate, 2003-20012

Dr. Julien Cretat, Postdoctoral Research associate, 2012-2014)

Dr. Nancy Saltzmann, Research Associate, 2001-2003

Undergraduate researchers: Zachary Launer (Cornell), Jennifer Newman (Cornell), Nathan Wolf (UT Austin)

External Support (Current* and Recent)

- * NSF, Geography, Collaborative Research: Climate Forecasting, Adaptation Backcasting: Coupling human response to climate change in Malawi (2011)
- * DOE, Changes in Intense Precipitation Events in West Africa and the central U.S. under Global Warming (2011-2014)
- * DOD, subcontract through LBJ School, Modeling Climate Change and Population Vulnerability in Africa (2010-2011)
- * NSF Climate and Large-scale Dynamics, Northern Africa Monsoon Systems: Basic Dynamics, Interannual and Decadal Variations (2011-2014)
- DOE, Program on Abrupt Climate Change, Influence of Atlantic SST thresholds on continental climates: Development and application of a coupled atmosphere/ocean/vegetation regional climate model (2008-2012)
- NSF DRICOMP Program, Hydrodynamics of the Caribbean low-level jet and its relationship to drought (2007-2008)
- NSF, Climate Dynamics and Large-scale Dynamic Meteorology: Understanding the seasonal cycle of rainfall over northern Africa (2005-2009).
- NASA Oceans and Ice Program, The Influence of the Amazon and Orinoco River Plumes on Tropical Atlantic Climate, in collaboration with Duke University Geoscience Dept and University of South Florida Oceanography Dept. (2006-2009)
- NSF. Evaluation of the Great Plains Low-level Jet and its Relationship to Mid-West Precipitation in Coupled GCM Simulations of the 20th and 21st Centuries (2007-2008)
- International Center for Theoretical Physics, Trieste, Italy. Workshop on African Drought (2007 -2008)
- NASA NAMMA Program: Using AMMA and satellite observations to improve simulation of tropical Atlantic cyclogenesis. (2007 2009)
- NASA Graduate Student Research Program: Understanding the evolution of the boreal summer rainy season over East Africa. (Emily Riddle, 2006-2009)
- National Science Foundation, Small Grants for Exploratory Research, Sensitivity of the West African monsoon to Gulf of Guinea SSTs (2004-2005).
- National Science Foundation, Paleoclimate Section of the Atmospheric Science Division: "Mesoscale Modeling of Tropical Paleoclimate". (2002 2005)

Publications (* indicates papers written with my graduate students)

2012

- Cook, K.H., G.A. Meehl, and J.M. Arblaster, 2012: Monsoon regimes and processes in CCSM4, Part 2: African and American monsoon systems. *Journal of Climate*, **25**, 2609-2621.
- Cook, K.H., and E.K. Vizy, 2012: Impact of climate change on mid-21st century growing seasons in Africa. *Climate Dyn*amics, online first, **10.1007/s00382-012-1324-1**. http://www.springerlink.com/openurl.asp?genre=article&id=doi:10.1007/s00382
 - http://www.springerlink.com/openurl.asp?genre=article&id=doi:10.1007/s00382-012-1324-1
- *Patricola, C. M., and K. H. Cook, 2012a: Regional climate simulations of central U.S. climate for the mid-21st century: Projections. Provisionally accepted for *Climate Dyn*.
- *Patricola, C. M., and K. H. Cook, 2012b: Regional climate simulations of central U.S. climate for the mid-21st century: Processes. Accepted for *Climate Dyn*.
- *Pu, B., E.K. Vizy, and K.H. Cook, 2012: Warm season response over North America to a shutdown of the Atlantic meridional overturning circulation and CO₂ increases. J Climate, in press.
- *Pu, B., and K.H. Cook, 2012: Role of the West African westerly jet in Sahel rainfall variations. *J. Climate*, in press.
- Vizy, E.K. and K.H. Cook, 2012. Mid-21st century changes in extreme events over Northern and Tropical Africa, J. Climate. http://journals.ametsoc.org/doi/abs/10.1175/JCLI-D-11-00693.1

2011

*Patricola, C. M., and K. H. Cook, 2011: Sub-Saharan Northern African climate at the end of the 21st century: Forcing factors and climate change processes. *Climate Dynamics*, **37**, 1165-1188.

2010

- Cook, K. H., and E. K. Vizy, 2010: Hydrodynamics of the Caribbean low-level jet and its relationship to precipitation. *J. Climate*, **23**, 1477-1494.
- Vizy, E. K., and K. H. Cook, 2010: Influence of the Amazon/Orinoco plume on the summertime Atlantic climate. *J. Geophys. Res. Atmospheres*, **23**, Art. No. D21112.
- *Pu, B., and K.H. Cook, 2010: Dynamics of the West African westerly jet. *J. Climate*, 23, 6263-6276.
- Druyan, L., J. Feng, K. H. Cook, Y. Xue, M. Fulakeza, S. M. Hagos, A. Konare, W. Moufouma-Okia, D. P. Rowell, and E. K. Vizy, 2010: The WAMME regional model intercomparison study. *Climate Dynamics*, DOI 10.1007/s00382-009-0676-7.
- *Patricola, C. M., and K. H. Cook, 2010: Northern African climate at the end of the 21st century: Integrated application of regional and global climate models. *Climate Dyn.*, 35, 193-212.

- Vizy, E. K., and K. H. Cook, 2009: Tropical storm development from African easterly waves in the eastern Atlantic: A comparison of two successive waves using a regional model as part of NASA AMMA 2006. *J. Atmos. Sci.*, 66, 3313-3334.
- Cook, K. H., 2009: South American climate variability and change: Remote and regional forcing processes. In *Past Climate Variability in South America and Surrounding Regions: From the last Glacial Maximum to the Holocene*. F. Vimeux, F. Sylvestre, and M. Khodri, Eds., Springer.
- Vizy, E. K., and K. H. Cook, 2009: A mechanism for African monsoon breaks: Mediterranean cold air surges. *J. Geophys. Res.*, **114**, D01104, doi:10.1029/2008JD010654.
- Cook, K.H., and E.K. Vizy 2009: The Caribbean low-level jet: Regional dynamics and its relationship to precipitation. U.S. CLIVAR Variations, Vol. 6, No. 3, 9-11.
- *Hagos, S. M., and K. H. Cook, 2009: Development of a coupled regional model and its application to the study of interactions between the West African monsoon and the eastern tropical Atlantic Ocean. *J. Climate*, **22**, 2591-2604
- Forward for text: *Global Warming* by Natalie Goldstein. Facts on File, Global Issues Series.

2008

- Cook, K. H., 2008: Mysteries of Sahel droughts. *Nature Geoscience*, 1, 647-648.
- Cook, K. H., E. K. Vizy, Z. S. Launer, and C. M. Patricola, 2008: Springtime intensification of the Great Plains low-level jet and Midwest precipitation in GCM simulations of the 21st century. *J. Climate*, **21**, 6321-6340.
- *Patricola, C.M., and K.H. Cook, 2008: Atmosphere/vegetation feedbacks: A mechanism for abrupt climate change over Northern Africa. *Journal of Geophysical Research Atmospheres* . **113**, D18102.
- *Hagos, S. M., and K. H. Cook, 2008: Ocean warming and late 20th century Sahel drought and recovery. *J. Climate*, **21**, 3797-3814.
- *Hsieh, J.-S. and K.H. Cook, 2008: On the instability of the African easterly jet and the generation of African Waves: Reversals of the potential vorticity gradient. *J. Atmospheric Sci.*, **65**, 2130-2151.
- *Riddle, E.E., and K.H. Cook, 2008: Abrupt rainfall transitions over the Greater Horn of Africa: Observations and regional model simulations. *Journal of Geophysical Research Atmospheres* . **113**, D15109.
- Cook, K.H., and E.K. Vizy 2008: Effects of 21st c. climate change on the Amazon rain forest. *J Climate*, 21, 542-560.

2007

*Hagos, S.M., and K.H. Cook, 2007: Dynamics of the West African monsoon jump. *J. Climate*, **20**, 5264-5284.

- Vizy, E.K., and K.H., Cook, 2007: Relationship between Amazon and high Andes precipitation. *Journal of Geophysical Research Atmospheres*, 112 (D7): Art. No. D07107.
- *Patricola, C.M., and K.H. Cook, 2007: Dynamics of the West African Monsoon under mid-Holocene precessional forcing: Regional climate model simulations. *J. Climate*, **20**, 694-716.
- *Hsieh, J-.S. and K.H. Cook, 2007: A study of the energetics of African easterly waves using a regional climate model. *J. Atmospheric Sci.*, **64**,421-440.

2006

- Cook, K.H., and E. K. Vizy, 2006: Coupled model simulations of the West African monsoon system: 20th century simulations and 21st century predictions. *Journal of Climate*, **19**, 3681-3703.
- Cook, K.H., and E. K. Vizy, 2006: South American climate during the Last Glacial Maximum: Delayed onset of the South American monsoon. *J. Geophy. Res. Atmospheres*, 111, D02110, doi:10.1029/2005JD005980.

2005

- *Hagos, S.M. and K.H. Cook, 2005. Influence of surface processes over Africa on the Atlantic marine ITCZ and South American precipitation. *J. Climate*, **18**, pages 4993-5010.
- Vizy, E. K., and K. H. Cook, 2005: Evaluation of Last Glacial Maximum sea surface temperature reconstructions through their influence on South American climate, J. Geophys. Res., 110, D11105, doi:10.1029/2004JD005415.
- Ward, M.N., K.H. Cook, A. Diedhiou, A. Giannini, A. Kamga, P.J. Lamb, A.B. Mohamed, A. Nassor, C. Thorncroft, 2005: Seasonal-to-decadal predictability and prediction of West African climate. CLIVAR Exchanges, 9, No. 3 14-17.
- *Hsieh, J.-S. and K.H. Cook, 2005: Generation of African easterly wave disturbances: Relationship to the African easterly jet. *Mon. Wea. Rev.*, **133**, 1311-1327.
- Cook, K.H., 2005. Hadley Circulation Dynamics: Seasonality and the Role of Continents. <u>The Hadley Circulation: Past, Present, and Future</u>. In Advances in Global Change Research, Vol. 21, Kluwer Academic Press. H.F. Diaz and R.S. Bradley, eds., 511 p.

2004

*Cook, K.H., J.-S.Hseih, and S.M. Hagos, 2004: The Africa/South America intercontinental teleconnection. *J. Climate*, **17**, 2851-2865.

2003

- Cook, K.H., N. Neary, and E.K. Vizy, 2003: Mesoscale modeling of the African Humid Period. CLIVAR Exchanges, **8**, 27-28.
- Vizy, E. K., and K. H. Cook, 2003: Connections between the summer East African and Indian rainfall regimes, *J. Geophys. Res.*, 108 (D16), 4510, doi:10.1029/2003JD003452.

- Cook, K.H., 2003: Role of continents in driving the Hadley cells. *J. Atmospheric Sciences*, **60**, 957-976.
- *Cook, K.H., X. Yang, C.M. Carter, and B.N. Belcher, 2003: A modeling system for studying climate controls on mountain glaciers with application to the Patagonian Icefields. *Climatic Change*, **56**, 339-367.
- Cook, K.H., 2003: "Reply to Comments on 'The south Indian convergence zone and interannual rainfall variability over southern Africa' and the question of ENSO's influence on southern Africa.", *J. Climate*, **16**, 563-565.
- Nogues-Paegle, J., C.R. Mechoso, R. Fu, E.H. Berbery, W.C. Chao, T.C. Chen, K.H. Cook, A.F. Diaz, D. Enfield, R. Ferreira, A.M. Grimm, V. Kousky, B. Liebmann, J. Marengo, K. Mo, J.D. Neelin, J. Paegle, A.W. Robertson, A. Seth, C.S. Vera, J. Zhou, 2003: Progress in Pan American CLIVAR research: Understanding the South American monsoon. *Meteorologica*, 27, 3-32.

2002

- *Cook, K.H, and J.-S Hsieh, 2002: Teleconnection between Africa and South America. *Bull. Amer. Meteorological Soc.*, **83** (3), 359-360
- *Vizy, E. K., and K. H. Cook, 2002: Development and application of a mesoscale climate model for the tropics: Influence of sea surface temperature anomalies on the West African monsoon, *J. Geophys. Res.- Atmos.*, 107(D3), 10.1029/2001JD000686, 2002.

2001

- *Vizy, E. K., and K. H. Cook, 2001: Mechanisms by which Gulf of Guinea and eastern North Atlantic sea surface temperature anomalies can influence African rainfall. *J. Climate*, **14**, 795-821.
- Cook, K.H., 2001: A Southern Hemisphere wave response to ENSO with implications for southern Africa precipitation. *J. of Atmospheric Science*, **15**, 2146–2162.

2000

Cook, K.H., 2000: The South Indian Convergence Zone and interannual rainfall variability over southern Africa. *J. Climate*, **13**, 3789-3804.

1999 and earlier

- Cook, K.H., 1999: Generation of the African Easterly jet and its role in determining West African precipitation. *J. Climate*, **12**, 1165-1184.
- *Ringler, T.D., and K.H.Cook, 1999: Understanding the seasonality of orographically forced stationary waves: Interaction between mechanical and thermal forcing. *J. Atmospheric Science*, **56**, 1154-1174.
- *Lenters, J.D., and K.H.Cook, 1999: Summertime Precipitation Variability in South America: Role of the Large-scale Circulation. *Mon. Wea. Rev.*, 127, 409-431.
- Cook , K.H., 1997: Large-scale atmospheric dynamics and Sahelian precipitation. *J of Climate.*, **10**, 1137-1152.

- *Ringler, T.D., and K.H.Cook, 1997: Factors controlling nonlinearity in mechanically-forced stationary waves over orography. *J. Atmos. Sci*, **54**, 2612-2629.
- *Nayvelt, L., K.H.Cook, and P.J.Gierasch, 1997: Modeling and observations of Martian stationary waves. *J. Atmospheric Science*, **8**, 986-1013.
- *Lenters, J.D., and K.H.Cook, 1997: On the origin of the Bolivian high and related circulation features of the South American climate. *J. Atmospheric Science*, **54**, 656-677.
- *Lenters, J.D., and K.H.Cook, 1995: Simulation and diagnosis of the regional South American precipitation climatology. *J. Climate*, **8**, 2988-3005.
- *Ringler, T.D., and K.H.Cook, 1995: Orographically-induced stationary waves: Dependence on latitude. *J. Atmos. Sci.*, **52**, 2548-2560.
- *Lenters, J.D., K.H.Cook and T.D.Ringler, 1995: Comments on "On the influence of the Andes on the general circulation of the Southern Hemisphere". *J. Climate.*, **8**, 2113-2115.
- Cook, K.H., 1995. Understanding perturbations of the intertropical convergence zone over tropical continents. In <u>Global Precipitation and Climate Change</u>,
 M. Desbois and F.Desalmund, eds. NATO ASI Series I: Global Environmental Change, Vol. 26.
- Cook, K.H., 1994. Mechanisms by which surface drying perturbs tropical precipitation fields. *J. of Climate*, 7, 400-413.
- Cook, K.H., 1993: Predicting Climate Change: The State of the Art, in <u>Technology, Development and the Global Environment</u>. W.J.Makofske, ed. HarperCollins Press.
- Cook, K. H. and I. M. Held, 1992: The time-mean response of the atmosphere to large-scale orography. *J. Atmos. Sci.*, 49, 525-539.
- Cook, K.H., 1991: The Challenge of Global Climate Change. In <u>Environmental Issues: The Master Lecture Series</u>. Institute for Environmental Studies, Ramapo College of New Jersey. W. Makofske, H. Horowitz, E. Karlin and P. McConnell, eds.
- Cook, K. H. and A. Gnanadesikan, 1991: Effects of saturated and dry land surfaces on the tropical circulation and precipitation in a general circulation model. *J. Climate*, 4, 873-889.
- Cook, K. H., 1990: The atmosphere's response to the ice sheets of the last glacial maximum. *Annals of Glaciology*, 14, 32-38.
- Cook, K. H. and I.M. Held, 1988: Stationary waves of the ice age climate. *J. Climate*, 1, 807-819.
- Neelin, J. D., I. M. Held, and K. H. Cook, 1987: Evaporation-wind feedback and low-frequency variability in the tropical atmosphere. *J. Atmos. Sci.*, 44, 2342-2348.
- W.C. Clark, K.H. Cook, G. Marland, A.M. Weinberg, R.M. Rotty, et al., 1982: The carbon dioxide question: Perspectives for 1982. In <u>Carbon Dioxide</u> Review: 1982, W.C. Clark, ed., Oxford University Press, New York.
- W. L. Gates, K. H. Cook, and M. E. Schlesinger, 1981: Preliminary analysis of experiments on the climate effects of increased CO2 with an atmospheric general circulation model and a climatological ocean, 1981. *J. Geophys. Res.*, 86, 6385-6393.