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Education and Training

1984	University of Maryland, College Park, Meteorology, M.S.
1978	State University of New York at Oswego, Secondary Education, Earth Sci. Conc., B.S.

Research and Professional Experience

2002–Present	Research Staff Member**.** Oak Ridge National Laboratory, Climate Change Science Institute, Environmental Sciences Division, Carbon Dioxide Information Analysis Center (CDIAC). Director of ORNL's National Extreme Events Data and Research Center (NEED). Within CDIAC, compile, quality assure, and analyze regional instrumental climate data with recent emphasis on U.S. record-setting daily maximum and minimum temperatures and decadal-scale cloudiness changes over China. Also, develop and maintain scientific/database content on the CDIAC website. In addition, develop and maintain metadata for DOE's Atmospheric Radiation Measurement (ARM) Data Archive at ORNL.
1993–2002	Research Associate**.** Oak Ridge National Laboratory, Environmental Sciences Division, Carbon Dioxide Information Analysis Center.
1990–1993	Research Associate. University of Tennessee, Knoxville. Research performed at ORNL's Carbon Dioxide Information Analysis Center.
1989–1990 1988–1989 1984–1988	Senior Systems Analyst. SMSR Corp., Landover, Maryland. Senior Programmer. Satellite Research Laboratory, NOAA, Camp Springs, Maryland Programmer/Analyst. NASA Goddard Space Flight Center, Greenbelt, Maryland

Publications

1. Kao, S.-C., M. J. Sale, M. Ashfaq, R. U. Martinez, D. P. Kaiser, Y. Wei, and N. S. Diffenbaugh. 2014. Projecting changes in annual hydropower generation using regional runoff data: An assessment of the United States federal hydropower plants. *Energy*, **80**,239–250, doi:10.1016/j.energy.2014.11.066.
2. T. C. Peterson, R. R. Heim, R. Hirsch, D. P. Kaiser, and coauthors. 2013. Monitoring and Understanding Changes in Heat Waves, Cold Waves, Floods and Droughts in the United States: State of Knowledge. *Bull. Amer. Meteor. Soc.*, **94**, 821-834, doi:10.1175/BAMS-D-12-00066.1.
3. Sale, M. J., S.-C. Kao, M. Ashfaq, D. P. Kaiser, R. Martinez, C. Webb, and Y. Wei. 2012. *Assessment of the effects of climate change on federal hydropower.* Oak Ridge National Laboratory Report ORNL/TM-2011/251.
4. Marino, G. P., D. P. Kaiser, L. Gu, and D. M. Ricciuto. 2011. Reconstruction of false spring occurrences over the southeastern United States, 1901–2007: an increasing risk of spring freeze damage? *Environ. Res. Lett.,* **6** 024015 doi:10.1088/1748-9326/6/2/024015.
5. Mao, J., X. Shi, L. Ma, D.P. Kaiser, Q. Li, and P.E. Thornton. 2010. Assessment of re-analysis daily extreme temperatures with China's homogenized historical dataset during 1979 to 2001 using Probability Density Functions. *J. Climate* **23**, 6605–6623, doi: http://dx.doi.org/10.1175/2010JCLI3581.1.
6. Gu, L., P. J. Hanson, W. M. Post, D. P. Kaiser, B. Yang, R. Nemani, S. G. Pallardy, and T. Myers. 2008. The 2007 eastern US spring freeze: Increased cold damage in a warming world? *Bioscience* **58**(3), doi:10.1641/B580301.
7. Qian, Y., W. Wang, L. R. Leung, and D. P. Kaiser. 2007. Variability of solar radiation under cloud-free skies in China: The role of aerosols. *Geophys. Res. Lett.* **34**, L12804, doi:10.1029/2006GL028800.
8. Qian, Y., D. P. Kaiser, L. R. Leung, and M. Xu. 2006. More frequent cloud-free sky and less surface solar

radiation in China from 1955 to 2000. *Geophys. Res. Lett.* **33**, L01812, doi:10.1029/2005GL024586.
9. Blasing, T. J., D. Scott, and D. Kaiser. 2003. Evidence for changes in a surface-air warming singularity in late winter over central North America. *Geophys. Res. Lett.* **30**(9), 1452, doi:10.1029/2002GL016807.
10. Kaiser, D. P., and Y. Qian. 2002. Decreasing trends in sunshine duration over China for 1954–1998: Indication of increased haze pollution? *Geophys. Res. Lett.* **29**(21), 2042, doi:10.1029/2002GL016057.
11. Folland, C., and T. Karl. 2001. *Observed Climate Variability and Change*, Chapter Two in *Climate Change 2001, The Scientific Basis*, Intergovernmental Panel on Climate Change, Cambridge University Press. (Invited contributor.)
12. Kaiser, D. P. 2000. Decreasing cloudiness over China: An updated analysis examining additional variables. *Geophys. Res. Lett.* **27**(15):2193–2196.
13. Kaiser, D. P. 1998. Analysis of total cloud amount over China, 1951–1994. *Geophys. Res. Lett.* **25**(19):3599–3602.
14. Shriner, D. S. et al. 1997. *North America*, Chapter Eight in Watson, R. T., M. C. Zinyowera, and R. H. Moss (eds.), *Regional Impacts of Climate Change, IPCC Special Report*, Cambridge University Press. (One of several lead authors of this chapter.)

Synergistic Activities

1. Director, ORNL's National Extreme Events Data and Research Center (NEED)
2. Climate Science Working Group of the U.S. National Climate Assessment: Session Chair, Forum on Trends and Causes of Observed Changes in Heat Waves, Cold Waves, Floods and Drought, 2011
3. Member of U.S. delegation: DOE-Chinese Academy of Science joint project on the "Study of the Greenhouse Effect"
4. Member of U.S. delegation: DOE-China Meteorological Administration joint project on the "Study of Regional Climate"
5. Data exchange coordinator: U.S.-Russia Agreement on Cooperation in the Field of Protection of the Environment and Natural Resources (Organized under the State Departments of U.S. and Russia) Working Group VIII: The Influence of Environmental Changes on Climate
6. American Meteorological Society, member; multiple times President of Smoky Mtn. Chapter of AMS

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Graduate and Postdoctoral Advisors and Advisees

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