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Education

1978 B.S. Zoology, Arkansas State University
1981 M.S. Biology, Arkansas State University
1986 Ph.D. Ecology, University of Tennessee, Knoxville

Research interests

Terrestrial ecosystems as part of the global Earth system, ecosystem and land-surface processes at landscape, regional, and global scales, climate-ecosystem feedbacks, carbon and water cycle modeling, land-use change, spatially structured population dynamics and modeling, theory of scale and system organization in ecology, model sensitivity and uncertainty analysis, model evaluation.

Employment History

1992-present Research Staff Member, Environmental Sciences Division, Oak Ridge National Laboratory
1987-1992 Research Associate, Environmental Sciences Division, Oak Ridge National Laboratory

Selected Publications

Amthor, J.S., J. M. Chen, J.S. Clein, S.E. Frolking, M.L. Goulden, R.F. Grant, J.S. Kimball, A.W. King, A.D. McGuire, N.T. Nikolov, C.S. Potter, S. Wang and S.C. Wofsy. 2001. Boreal forest CO₂ and evapotranspiration predicted by nine ecosystem process models: inter-model comparisons and relationships to field measurements. *Journal of Geophysical Research* 106:33,623-33,648.

Potter, C.S., S. Wang, N.T. Nikolov, A.D. McGuire, J. Liu, A.W. King, J.S. Kimball, R.F. Grant, S.E. Frolking, J. Clein, J.M. Chen and J.S. Amthor. 2001. Comparison of boreal ecosystem model sensitivity to variability in climate and forest site parameters. *Journal of Geophysical Research* 106:33,671-33,688.

King, A.W., W.M. Post and S.D. Wullschleger. 1997. The potential response of terrestrial carbon storage to changes in climate and atmospheric CO₂. *Climatic Change* 35:199-227.

King, A.W., W.R. Emanuel, S.D. Wullschleger and W.M. Post. 1995. In search of the missing carbon sink: a model of terrestrial biospheric response to land-use change and atmospheric CO₂. *Tellus* 47B:501-519.

- King, A.W., R.V. O'Neill and D.L. DeAngelis. 1989. Using ecosystem models to predict regional CO₂ exchange between the atmosphere and the terrestrial biosphere. *Global Biogeochemical Cycles* 3:337-361.
- Jager, H.I., T.L. Ashwood, B.L. Jackson and A.W. King. 2000. Spatial uncertainty analysis of ecological models. *Proceedings of the 4th International Conference on Integrating GIS and Environmental Modeling (GIS/EM4): Problems, Prospects, and Research Needs*. Banff, Alberta, Canada, September 2-8, 2000.
- Jager, H.I., W.W. Hargrove, C.C. Brandt, A.W. King, R.J. Olson, J.M.O. Scurlock and K.A. Rose. 2000. Constructive contrasts between modeled and measured climate responses over a regional scale. *Ecosystems* 3:396-411.
- Post, W.M., A. King and S.D. Wullschleger. 1997. Historical variations in terrestrial biospheric carbon storage. *Global Biogeochemical Cycles* 11:99-109.
- King, A.W., W.R. Emanuel and W.M. Post. 1992. Projecting future concentrations of atmospheric CO₂ with global carbon cycle models: simulating historical changes in atmospheric CO₂. *Environmental Management* 16:91-108.
- Post, W.M., T.-H. Peng, W.R. Emanuel, A.W. King, V.H. Dale and D.L. DeAngelis. 1990. The global carbon cycle. *American Scientist* 78:310-326.