

Selected Publications
Weather and Climate Impact Assessment Science Initiative

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2004

Ammann CM, Kiehl JT, Zender CS, Otto-Bliesner BL, Bradley RS. Coupled simulations of the 20th century including external forcing. *Journal of Climate*, in press

Downton M, Morss R, Wilhelmi O, Crandell M, Grunfest E. Flood-related decisions and scientific uncertainty: Estimates of extreme precipitation in the Colorado Front Range. In preparation

Feddema J, Bonan G, Mearns LO, Oleson K, Washington W, Meehl J. A comparison of a GCM response to historical anthropogenic land cover change and model sensitivity to uncertainty in present day land cover representations. In preparation, *Climate Dynamics*

Lytle D, Wahl E. "The Effect of Sample Size and Analog Threshold Levels on the Quality of Paleoclimate and Paleovegetation Reconstructions Using the Modern Analog Technique", *The Holocene*, in press.

Katz, R.W., G.S. Brush, and M.B. Parlange, 2004: "Statistics of extremes: Modeling ecological disturbances." *Ecology*, in press

Meehl GA, Tebaldi C. 2004. More intense, more frequent and longer lasting heat waves in the 21st century. *Science*, in press

Meehl GA, Tebaldi C, Nychka D. 2004. Changes in frost days in simulations of 21st century climate. *Climate Dynamics*, in press

Meehl GA, Washington WM, Ammann C, Arblaster JM, Wigley TML, Tebaldi C. 2004. Combinations of natural and anthropogenic forcings and 20th century climate. *J. Climate*, in press.

Morss R, Wilhelmi O, Downton M, Grunfest G. Flood risk, uncertainty, and information for decision-making: Lessons learned from an interdisciplinary project. *Bull. Am. Met. Soc.*, submitted.

Naveau P, Jomelli V, Cooley D, Rabatel A. Extreme value theory in lichenometry and paleoclimate. Submitted, *Quaternary Research*

Naveau P, Schneider U. Threshold selection for modeling exceedances over high thresholds. Manuscript in prep.

Pocernich, M. Wolff, C, Fowler, T. 2004. Statistical models of aircraft icing. In: Proceedings of the 17th Conference on Probability and Statistics in the Atmospheric Sciences, AMS Annual Meeting, Seattle, WA.

Tebaldi, C, Mearns LO, Nychka D, and Smith RW. Regional probabilities of precipitation change: A Bayesian analysis of multimodel simulations. In preparation for submission to Geophys. Res. Let.

Tebaldi C, Nychka D, Mearns LO. 2004. From global mean responses to regional signals of climate change: simple pattern scaling, its limitations (or lack of) and the uncertainty in its results. In: Proceedings of the 17th Conference on Probability and Statistics in the Atmospheric Sciences, AMS Annual Meeting, Seattle, WA.

Tebaldi C, Smith RL, Nychka D, Mearns LO. Quantifying uncertainty in Projections of Regional Climate Change: a Bayesian Approach to the Analysis of Multimodel Ensembles, Journal of Climate, in press.

UCAR Quarterly 2004. Web Watch: Extreme Statistics: A new toolkit helps profile the far ends of weather. Features Rick Katz and the Extremes Toolkit.

Wahl E, 2004. A General Framework for Determining Cutoff Values to Select Pollen Analogs with Dissimilarity Metrics in the Modern Analog Technique. Review of Palaeobotany and Palynology, in press

Wahl ER, Ammann C. Stationarity and Fidelity of Simulated El Niño-Southern Oscillation Climate Proxies over the Last Millenium in Forced Transient AOGCM Output. In prep. To be submitted to Climate Dynamics

Wahl E, 2004. Assigning Climate Values to Pollen Surface Sample Sites and Validating Modern Analog Climate Reconstructions in the Southern California Region. *Madroño*, 50:4, in press

2003

Adams JB, Mann ME, Ammann CM. 2003: Proxy evidence for an El Niño-like response to volcanic forcing. *Nature* 426, 274-278.

Ammann CM, Meehl GA, Washington WM, Zender CS. 2003. A monthly and latitudinally varying volcanic forcing dataset in simulations of the 20th century climate. *Geophys. Res. Lett.*, 30(12), 1657, doi:10.1029/2003GL016875.

Ammann CM, Naveau P. 2003. Multi-decadal periodicity in tropical explosive volcanism and its influence on climate. *Geophys. Res. Lett.*, 30(5), 1210, doi:10.1029/2002GL016388.

- Brooks, H. E., J. W. Lee, and J. P. Craven, 2003: The spatial distribution of severe thunderstorm and tornado environments from global reanalysis data. *Atmos. Res.*, 67-68, 73-94.
- Downton M., H. Cullen, R. Morss, O. Wilhelmi, B. Rajagopalan, 2003: Problems of climate variability and uncertainty in flood hazard planning for the Colorado Front Range. In: *Proceedings of the 17th Conference on Hydrology, AMS Annual Meeting, Long Beach, CA.*
- Gavin, D, Oswald WW, Wahl E, Williams J. 2003. A Statistical Approach for Evaluating Distance Metrics and Analog Assignments for Pollen Records. *Quaternary Research*, 60:3, 356-367
- Naveau P, Ammann CM, Oh H-S, Guo W. 2003. An automatic statistical methodology to extract pulse-like forcing factors in climatic time series: Application to volcanic events. In: Robock, A. and C. Oppenheimer (Eds.): *Volcanism and the Earth's Atmosphere. Geophysical Monograph.*
- Nychka N, Tebaldi C. 2003. Comment on "Calculation of Average, Uncertainty Range and Reliability of Regional Climate Changes from AOGCM Simulations via the "Reliability Ensemble Averaging" (REA) method" *Journal of Climate: Vol. 16, No. 5, pp. 883-884.*