

NOAA CLIMATE DIAGNOSTICS CENTER (CDC) PEER-REVIEWED SCIENTIFIC PUBLICATIONS FOR 2003

(CDC Authors Shown in Bold)

1. Ackerman, S. A., and **R. Pincus**, 2003: Radiation in the atmosphere: Observations and applications. In *Handbook of Weather, Climate, and Water: Dynamics, Climate, Physical Meteorology, Weather Systems, and Measurements*, T. D. Potter and B. R. Colman (Eds.), Wiley, 343-386.
2. Barker, H. W., G. L. Stephens, P. T. Partain, **J. W. Bergman**, B. Bonnel, K. Campana, E. E. Clothiaux, S. Clough, S. Cusack, J. Delamere, J. Edwards, K. F. Evans, Y. Fouquart, S. Freidenreich, V. Galin, Y. Hou, S. Kato, J. Li, E. Mlawer, J.-J. Morcrette, W. O'Hirok, P. Raisanen, V. Ramaswamy, B. Ritter, E. Rozanov, M. Schlesinger, K. Shibata, P. Sporyshev, Z. Sun, M. Wendisch, N. Wood, and F. Yang, 2003: Assessing 1D atmospheric solar radiative transfer models: Interpretation and handling of unresolved clouds. *J. Climate*, **16**, 2676-2699.
3. **Bergman, J. W.**, and **P. D. Sardeshmukh**, 2003: Usefulness of single column model diagnosis through short-term predictions. *J. Climate*, **16**, 3803-3819.
4. Bradley, R. S., M. K. Hughes, **H. F. Diaz**, 2003: Climate in Medieval time. *Science*, **302**, 404-405.
5. **Capotondi, A., M. A. Alexander**, and C. Deser, 2003: Why are there Rossby wave maxima in the Pacific at 10°S and 13°N? *J. Phys. Oceanogr.*, **33**, 1549-1563.
6. Carey, C., and **M. A. Alexander**, 2003: Climate change and amphibian declines: Is there a link? *Diversity and Distributions*, **9**, 111-121.
7. Deser, C., **M. A. Alexander**, and **M. S. Timlin**, 2003: Understanding the persistence of sea surface temperature anomalies in midlatitudes. *J. Climate*, **16**, 57-72.
8. **Diaz, H. F.** (Ed.), 2003: *Climate Variability and Change in High Elevation Regions: Past, Present and Future*, Kluwer Academic Publishers, 282 pp.
9. **Diaz, H. F.**, 2003: Biomes, river basins, and climate regions: Rational tools for water resource management. In *Climate and Water: Transboundary Challenges in the Americas*, H. F. Diaz and B. J. Morehouse (Eds.), Kluwer Academic Publishers, 221-235.
10. **Diaz, H. F., J. K. Eischeid**, C. Duncan, and R. S. Bradley, 2003: Variability of freezing levels, melting season indicators, and snow cover for selected high-elevation and continental regions in the last 50 year. *Climatic Change*, **59**, 33-52. Reprinted in *Climate Variability and Change in High Elevation Regions: Past, Present and Future*, H. Diaz (ed.), Kluwer Academic Publishers, 33-52.
11. **Diaz, H. F.**, M. Grosjean, and L. Graumlich, 2003: Climatic variability and change in high elevation regions: Past, present and future. *Climatic Change*, **59**, 1-4. Reprinted in *Climate Variability and Change in High Elevation Regions: Past, Present and Future*, H. Diaz (ed.), Kluwer Academic Publishers, 1-4.
12. **Diaz, H. F.**, and B. J. Morehouse (Eds.), 2003: *Climate and Water: Transboundary*

Challenges in the Americas, Kluwer Academic Publishers, 402 pp.

13. **Diaz, H. F.**, and B. J. Morehouse, 2003: *Climate and water in transboundary contexts: An introduction*. In *Climate and Water: Transboundary Challenges in the Americas*, H. F. Diaz and B. J. Morehouse (Eds.), Kluwer Academic Publishers, 3-24.
14. **Dole, R. M.**, 2003: Predicting climate variations in the American West: What are our prospects? In *Water and Climate in the Western United States*, W. M. Lewis, Jr. (Ed.), University Press of Colorado, 9-28.
15. Egger, J., K.-P. Hoinka, **K. Weickmann**, and H.-H. Huang, 2003: Angular momentum budgets based on NCEP and ECMWF reanalysis data: An intercomparison. *Mon. Wea. Rev.*, **131**, 2577-2585.
16. **Hamill, T. M.**, 2003: Adaptive observations. In *Encyclopedia of Atmospheric Sciences*, J. R. Holton, J. Pyle, and J. A. Curry (Eds.), Academic Press, 2537-2542.
17. **Hamill, T. M.**, C. Snyder, and **J. S. Whitaker**, 2003: Ensemble forecasts and the properties of flow-dependent analysis-error covariance singular vectors. *Mon. Wea. Rev.*, **131**, 1741-1758.
18. **Hamill, T. M.**, 2003: Evaluating forecasters' rules of thumb: A study of $d(\text{prog})/dt$. *Wea. Forecasting*, **18**, 933-937.
19. **Hendon, H. H.**, 2003: Indonesian rainfall variability: Impacts of ENSO and local air-sea interaction. *J. Climate*, **16**, 1775-1790.
20. Herrera, R. G., R. R. Garcia, M. R. Prieto, E. Hernandez, L. Gimeno, and **H. F. Diaz**, 2003: The use of Spanish historical archives to reconstruct climate variability. *Bul. Amer. Met. Soc.*, **84**, 1025-1035.
21. **Hoerling, M. P.**, and A. Kumar, 2003: The perfect ocean for drought. *Science*, **299**, 691-694.
22. **Hoerling, M. P.**, and A. Kumar, 2003: Seasonal and interannual weather prediction. In *Encyclopedia of Atmospheric Sciences*, J. R. Holton, J. Pyle, and J. A. Curry (Eds.), Academic Press, 2562-2567.
23. **Huang, H.-P., K. M. Weickmann**, and R. D. Rosen, 2003: Unusual behavior in atmospheric angular momentum during the 1965 and 1972 El Niños. *J. Climate*, **16**, 2526-2539.
24. King, M. D., W. P. Menzel, Y. J. Kaufman, D. Tanre, B.-C. Gao, S. Platnick, S. A. Ackerman, L. A. Remer, **R. Pincus**, and P. A. Hubanks, 2003: Cloud and aerosol properties, precipitable water, and profiles of temperature and water vapor from MODIS. *IEEE Trans. Geosci. Remote Sens.*, **41**, 442-458.
25. Kumar, A., and **M. P. Hoerling**, 2003: The nature and causes for the delayed atmospheric response to El Niño. *J. Climate*, **16**, 1391-1403.
26. Lee, M.-I., I.-S. Kang, and **B. E. Mapes**, 2003: Impacts of cumulus convection parameterization on aqua-planet AGCM simulations of tropical intraseasonal variability. *J. Met. Soc. Japan*, **81**, 963-992.
27. Li, S., W. A. Robinson, and **S. Peng**, 2003: Influence of the North Atlantic SST tripole

- on northwest African rainfall. *J. Geophys. Res.*, **108(D19)**, 10.1029/2002JD003130, 16 pp.
28. Loschnigg, J., G. A. Meehl, P. J. Webster, J. A. Arblaster, and **G. P. Compo**, 2003: The Asian monsoon, the tropospheric biennial oscillation, and the Indian Ocean Zonal Mode in the NCAR CSM. *J. Climate*, **16**, 1617-1642.
 29. **Mapes, B. E.**, T. T. Warner, M. Xu, and A. J. Negri, 2003: Diurnal patterns of rainfall in northwestern South America. Part I: Observations and context. *Mon. Wea. Rev.*, **131**, 799-812.
 30. **Mapes, B. E.**, T. T. Warner, and M. Xu, 2003: Diurnal patterns of rainfall in northwestern South America. Part III: Diurnal gravity waves and nocturnal convection offshore. *Mon. Wea. Rev.*, **131**, 830-844.
 31. **Mapes, B. E.**, P. E. Ciesielski, and R. H. Johnson, 2003: Sampling errors in rawinsonde-array budgets. *J. Atmos. Sci.*, **60**, 2697-2714.
 32. Miller, A. J., **M. A. Alexander**, G. J. Boer, F. Chai, K. Denman, D. J. Erickson III, R. Frouin, A. J. Gabric, E. A. Laws, M. R. Lewis, Z. Liu, R. Murtugudde, S. Nakamoto, D. J. Neilson, J. R. Norris, J. C. Ohlmann, R. I. Perry, N. Schneider, K. M. Shell, and A. Timmermann, 2003: Potential feedbacks between Pacific Ocean ecosystems and interdecadal climate variations. *Bull. Amer. Met. Soc.*, **84**, 617-633.
 33. **Newman, M.**, **G. P. Compo**, and **M. A. Alexander**, 2003: ENSO-forced variability of the Pacific Decadal Oscillation. *J. Climate*, **16**, 3853-3857.
 34. **Newman, M.**, **P. D. Sardeshmukh**, **C. R. Winkler**, **J. S. Whitaker**, 2003: A study of subseasonal predictability. *Mon. Wea. Rev.*, **131**, 1715-1732.
 35. **Peng, S.**, W. A. Robinson, and **S. Li**, 2003: Mechanisms for the NAO responses to the North Atlantic SST tripole. *J. Climate*, **16**, 1987-2004.
 36. **Penland, C.**, 2003: Noise out of chaos and why it won't go away. *Bull. Amer. Met. Soc.*, **84**, 921-925.
 37. **Penland, C.**, 2003: A stochastic approach to nonlinear dynamics: A review. *Bull. Amer. Met. Soc.* (electronic supplement), **84**, ES43-ES52.
 38. **Pincus, R.**, 2003: Wine, place, and identity in a changing climate. *Gastronomica*, **3**, 87-93.
 39. **Pincus, R.**, and S. A. Ackerman, 2003: Radiation in the atmosphere: Foundations. In *Handbook of Weather, Climate, and Water: Dynamics, Climate, Physical Meteorology, Weather Systems, and Measurements*, T. D. Potter and B. R. Colman (Eds.), Wiley, 301-342.
 40. **Pincus, R.**, H. W. Barker, and J.-J. Morcrette, 2003: A fast, flexible, approximate technique for computing radiative transfer in inhomogeneous cloud fields. *J. Geophys. Res.*, **108** (D13), 10.1029/2002JD003322, 5 pp.
 41. **Pulwarty, R. S.**, 2003: Transboundary river flow changes. In *Handbook of Weather, Climate, and Water: Atmospheric Chemistry, Hydrology, and Societal Impacts*, T. D. Potter and B. R. Colman (Eds.), Wiley, 865-884.

42. **Pulwarty, R. S.**, 2003: Climate and water in the West: Science, information, and decision-making. *Water Resources Update*, **124**, 4-12.
43. **Quan, X.-W., H. F. Diaz, C.-B. Fu**, 2003: Interdecadal change in the Asia-Africa summer monsoon and its associated changes in global atmospheric circulation. *Global and Planetary Change*, **37**, 171-188.
44. **Ray, A. J.**, 2003: Reservoir management in the interior West: The influence of climate variability and functional linkages of water. In *Climate and Water: Transboundary Challenges in the Americas*, H. F. Diaz and B. J. Morehouse (Eds.), Kluwer Academic Publishers, 193-217.
45. Robinson, W. A., S. Li, and **S. Peng**, 2003: Dynamical nonlinearity in the atmospheric response to Atlantic sea surface temperature anomalies. *Geophys. Res. Lett.*, **30(20)**, 10.1029/2003GL018416, 4 pp.
46. **Sardeshmukh, P. D., C. Penland**, and **M. Newman**, 2003: Drifts induced by multiplicative red noise with application to climate. *Europhys. Lett.*, **63**, 498-504.
47. Snyder, C., and **T. M. Hamill**, 2003: Leading Lyapunov vectors of a turbulent baroclinic jet in a quasigeostrophic model. *J. Atmos. Sci.*, **60**, 683-688.
48. Snyder, C., **T. M. Hamill**, and S. B. Trier, 2003: Linear evolution of error covariances in a quasigeostrophic model. *Mon. Wea. Rev.*, **131**, 189-205.
49. **Sun, D.-Z.**, 2003: A possible effect of an increase in the warm-pool SST on the magnitude of El Niño warming. *J. Climate*, **16**, 185-205.
50. **Sun, D.-Z., J. Fasullo, T. Zhang, and A. Roubicek**, 2003: On the radiative and dynamical feedbacks over the equatorial Pacific cold tongue. *J. Climate*, **16**, 2425-2432.
51. Tippett, M. K., J. L. Anderson, C. H. Bishop, **T. M. Hamill**, and **J. S. Whitaker**, 2003: Ensemble square root filters. *Mon. Wea. Rev.*, **131**, 1485-1490.
52. Warner, T. T., **B. E. Mapes**, and M. Xu, 2003: Diurnal patterns of rainfall in northwestern South America. Part II: Model simulations. *Mon. Wea. Rev.*, **131**, 813-829.
53. **Weickmann, K.**, 2003: Mountains, the global frictional torque, and the circulation over the Pacific-North American Region. *Mon. Wea. Rev.*, **131**, 2608-2622.
54. **Woodruff, S. D., S. J. Worley, J. A. Arnott, H. F. Diaz, J. D. Elms, M. Jackson, S. J. Lubker**, and D. E. Parker, 2003: COADS updates and the blend with the UK Met Office Marine Data Bank. In *Advances in the Applications of Marine Climatology*, WMO/TD-No. 1081 (JCOMM Technical Report No. 13), WMO, 3-10.
55. **Wolter, K., S. J. Lubker, and S. D. Woodruff**, 2003: Quality control in recent and pending COADS Releases. In *Advances in the Applications of Marine Climatology*, WMO/TD-No. 1081 (JCOMM Technical Report No. 13), WMO, 116-123.