

## **ROGER ALVIN PIELKE**

### **Curriculum Vitae**

August 31, 2009

**BIRTHDATE:** October 22, 1946

#### **EDUCATION:**

- B.A., Towson State College, 1968
- M.S., Pennsylvania State University, 1969
- Ph.D., Pennsylvania State University, 1973

#### **EMPLOYMENT**

Senior Research Scientist, CIRES, University of Colorado, (November 2005-Present)  
Senior Research Associate, ATOC, University of Colorado, (November 2005-Present)  
Colorado State Climatologist (June 1, 1999 – June 30, 2006)  
Professor Emeritus, Dept. of Atmos. Sci., Colorado State University (2007– present)  
Adjunct Professor, Dept. of Civil and Env. Eng. at Duke University (7/03-6/06)  
Visiting Professor, Department of Atmospheric Sciences, University of Arizona, Tucson (October -- December 2004)  
Colorado State Climatologist (August 1999 -- present)  
Professor, Department of Atmospheric Science, Colorado State University (July 1985 -- 2007)  
Deputy Director, CIRA (Cooperative Institute for Research in the Atmosphere) (February 1, 1985 -- May 31, 1988)  
Associate Professor, Department of Atmospheric Science, Colorado State University (1982 -- June 1985; tenure granted September 1, 1984)  
Associate Professor, Department of Environmental Sciences, University of Virginia (1978-1981 - - 9 month full salaried; tenure granted September 1, 1978)  
Assistant Professor, Department of Environmental Sciences Center for Advanced Studies, University of Virginia (1974-1977 -- 12 month full salaried)  
Research Meteorologist, Experimental Meteorology Laboratory (1971 -- 1974) NOAA, Coral Gables, Florida. Grade GS12  
National Science Foundation Trainee, Pennsylvania State University (1968 -- 1971)  
Research Assistant, Pennsylvania State University (1968)

## REVIEWED PAPERS

- R-1 Pielke, R.A. and H.A. Panofsky, 1970: Turbulence characteristics along several towers. *Bound.-Layer Meteor.*, **1**, 115-130.
- R-2 Pielke, R.A., 1974: A three-dimensional numerical model of the sea breezes over south Florida. *Mon. Wea. Rev.*, **102**, 115-139.
- R-3 Pielke, R.A., 1974: A comparison of three-dimensional and two-dimensional numerical predictions of sea breezes. *J. Atmos. Sci.*, **31**, 1577-1585.
- R-4 Mahrer, Y. and R.A. Pielke, 1975: A numerical study of the air flow over mountains using the two-dimensional version of the University of Virginia Mesoscale Model. *J. Atmos. Sci.*, **32**, 2144-2155.
- R-5 Pielke, R.A. and Y. Mahrer, 1975: Representation of the heated-planetary boundary layer in mesoscale models with coarse vertical resolution. *J. Atmos. Sci.*, **32**, 2288-2308.
- R-6 Cotton, W.R., P.T. Gannon, and R.A. Pielke, 1976: Numerical experiments on the influence of the mesoscale circulations on the cumulus scale. *J. Atmos. Sci.*, **33**, 252-261.
- R-7 Simpson, R.G. and R.A. Pielke, 1976: Hurricane development and movement. Invited contribution to *Appl. Mechanics Rev.*, May, 601-609.
- R-8 Cotton, W.R. and R.A. Pielke, 1976: Weather modification and three-dimensional models. *Bull. Amer. Meteor. Soc.*, **57**, 788-796.
- R-9 Mahrer, Y. and R.A. Pielke, 1976: Numerical simulation of the airflow over Barbados. *Mon. Wea. Rev.*, **104**, 1392-1402.
- R-10 Pielke, R.A. and P. Mehring, 1977: Use of mesoscale climatology in mountainous terrain to improve the spatial representation of mean monthly temperatures. *Mon. Wea. Rev.*, **105**, 108-112.
- R-11 Pielke, R.A., 1977: Length of snow season across a portion of the northern Blue Ridge Mountains in Virginia. *Virginia J. Sci.*, **28**, 25-27.
- R-12 Pielke, R.A. and W.R. Cotton, 1977: A mesoscale analysis over south Florida for a high rainfall event. *Mon. Wea. Rev.*, **105**, 343-362.
- R-13 Pielke, R.A., 1977: An overview of recent work in weather forecasting and suggestions for future work - STAC scientific review. *Bull. Amer. Meteor. Soc.*, **58**, 506-519.
- R-14 Mahrer, Y. and R.A. Pielke, 1977: A numerical study of the airflow over irregular terrain. *Beitrag zur Physik der Atmosphere*, **50**, 98-113.
- R-15 Mahrer, Y. and R.A. Pielke, 1977: The effects of topography on sea and land breezes in a two-dimensional numerical model. *Mon. Wea. Rev.*, **105**, 1151-1162.
- R-16 Mahrer, Y. and R.A. Pielke, 1978: The meteorological effect of the changes in surface albedo and moisture. *Israel Meteorological Research Papers, (IMS)*, **2**, 55-70.
- R-17 Mahrer, Y. and R.A. Pielke, 1978: A test of an upstream spline interpolation technique for the advective terms in a numerical mesoscale model. *Mon. Wea. Rev.*, **106**, 818-830.
- R-18 Pielke, R.A. and Y. Mahrer, 1978: Verification analysis of the University of Virginia three-dimensional mesoscale model prediction over south Florida for 1 July 1973. *Mon. Wea. Rev.*, **106**, 1568-1589.
- R-19 Simpson, J., N.E. Westcott, R.J. Clerman, and R.A. Pielke, 1979: On cumulus mergers. *Arch. Meteor. Geophys. Bioklim., Ser. A.*, **29**, 1-40.
- R-20 Pielke, R.A., T. Styles, and R.M. Biondini, 1979: A study of the growing season in central and northern Virginia during this century. *Weatherwise*, **32**, 207-210.
- R-21 McNider, R.T. and R.A. Pielke, 1981: Diurnal boundary layer development over sloping terrain. *J. Atmos. Sci.*, **38**, 2198-2212.
- R-22 Pielke, R.A., 1981: An overview of our current understanding of the physical interactions between the sea- and land-breeze and the coastal waters. *Ocean Management*, **6**, 87-100.

- R-23 Pielke, R.A., 1981: The distribution of spruce in west-central Virginia before lumbering. *Castanea, The Journal of the Southern Appalachian Botanical Club*, Sept., 201-216.
- R-24 Segal, M., Y. Mahrer, R.A. Pielke, and R.T. McNider, 1981: A numerical mesoscale model study of the pollutant mean trajectories during the warm season over central Israel - preliminary results. *Israel Journal of Earth Sciences*, **30**, 1-11.
- R-25 Segal, M. and R.A. Pielke, 1981: Numerical model simulation of human biometeorological heat load conditions - summer day case study for the Chesapeake Bay area. *J. Appl. Meteor.*, **20**, 735-749.
- R-26 Pielke, R.A. and C.L. Martin, 1981: The derivation of a terrain-following coordinate system for use in a hydrostatic model. *J. Atmos. Sci.*, **38**, 1707-1713.
- R-26a Pielke, R.A. and C.L. Martin, 1983: Reply to Wong and Hage. *J. Atmos. Sci.*, **40**, 2879-2880.
- R-27 Segal, M., Y. Mahrer, and R.A. Pielke, 1982: Numerical study of wind energy characteristics over heterogeneous terrain - central Israel case study. *Bound.-Layer Meteor.*, **22**, 373-392.
- R-28 Segal, M., R.T. McNider, R.A. Pielke, and D.S. McDougal, 1982: A numerical model simulation of the regional air pollution meteorology of the greater Chesapeake Bay area - summer day case study. *Atmos. Environ.*, **16**, 1381-1397.
- R-29 Segal, M., Y. Mahrer, and R.A. Pielke, 1981: A numerical model study of plume fumigation during nocturnal inversion break-up. *Atmos. Environ.*, **16**, 513-519.
- R-30 McCumber, M.C. and R.A. Pielke, 1981: Simulation of the effects of surface fluxes of heat and moisture in a mesoscale numerical model - Part 1: Soil layer. *J. Geophys. Res.*, **86**, 9929-9938.
- R-31 Pielke, R.A., R.T. McNider, M. Segal, and Y. Mahrer, 1983: The use of a mesoscale numerical model for evaluations of pollutant transport and diffusion in coastal regions and over irregular terrain. *Bull. Amer. Meteor. Soc.*, **64**, 243-249.
- R-32 Segal, M., Y. Mahrer, and R.A. Pielke, 1982: Application of a numerical mesoscale model for the evaluation of seasonal persistent regional climatological patterns. *J. Appl. Meteor.*, **21**, 1754-1762.
- R-33 Segal, M., R.A. Pielke, and Y. Mahrer, 1982: Evaluation of on-shore pollutant recirculation over the Mediterranean coastal area of central Israel. *Israel J. Earth Sci.*, **31**, 39-46.
- R-34 Weidman, S. T. and R.A. Pielke, 1983: A more accurate method for the numerical solution of nonlinear partial differential equations. *J. Comput. Phys.*, **49**, 342-348.
- R-35 Segal, M., Y. Mahrer, and R.A. Pielke, 1983: A study of meteorological patterns associated with a lake confined by mountains - the Dead Sea case. *Quart. J. Roy. Meteor. Soc.*, **109**, 549-564.
- R-36 Segal, M., R.A. Pielke, and Y. Mahrer, 1983: On climatic changes due to a deliberate flooding of the Qattara depression (Egypt). *Climatic Change*, **5**, 73-83.
- R-37 Mizzi, A.P. and R.A. Pielke, 1984: A numerical study of the mesoscale atmospheric circulation observed during a coastal upwelling event on 23 August 1972. Part I: Sensitivity studies. *Mon. Wea. Rev.*, **112**, 76-90.
- R-38 Martin, C.L. and R.A. Pielke, 1983: The adequacy of the hydrostatic assumption in sea breeze modeling over flat terrain. *J. Atmos. Sci.*, **40**, 1472-1481.
- R-39 Pielke, R.A., H.A. Panofsky, and M. Segal, 1983: A suggested refinement for O'Brien's convective boundary layer eddy exchange coefficient formulation. *Bound.-Layer Meteor.*, **26**, 191-195.
- R-40 Artz, R., R.A. Pielke, and J. Galloway, 1985: Comparison of the ARL/ATAD constant level and the NCAR isentropic trajectory analyses for selected case studies. *Atmos. Environ.*, **19**, 47-63.
- R-41 Young, G.S. and R.A. Pielke, 1983: Application of terrain height variance spectra to mesoscale modeling. *J. Atmos. Sci.*, **40**, 2555-2560.

- R-42 Segal, M., Y. Mahrer, and R.A. Pielke, 1983: On some meteorological patterns at the Dead Sea area during advective Sharav situations. *Israel J. Earth Sci.*, **33**, 76-83.
- R-43 Segal, M. and R.A. Pielke, 1983: On the evaluation of the mixing layer during elevated plume fumigation. *J. Air Pollut. Control Assoc.*, **33**, 1190-1192.
- R-44 Young, G.S., R.A. Pielke, and R.C. Kessler, 1984: A comparison of the terrain height variance spectra of the Front Range with that of a hypothetical mountain. *J. Atmos. Sci.*, **41**, 1249-1250.
- R-45 McNider, R.T. and R.A. Pielke, 1984: Numerical simulation of slope and mountain flows. *J. Climate Appl. Meteor.*, **23**, 1441-1453.
- R-46 Ookouchi, Y., M. Segal, R.C. Kessler, and R.A. Pielke, 1984: Evaluation of soil moisture effects on the generation and modification of mesoscale circulations. *Mon. Wea. Rev.*, **112**, 2281-2292.
- R-47 Segal, M., Y. Mahrer, R.A. Pielke, and R.C. Kessler, 1985: Model evaluation of the summer daytime induced flows over southern Israel. *Israel J. Earth Sci.*, **34**, 39-46.
- R-48 Pielke, R.A., M. Segal, R.T. McNider, and Y. Mahrer, 1985: Derivation of slope flow equations using two different coordinate representations. *J. Atmos. Sci.*, **42**, 1102-1106.
- R-48a Pielke, R.A., M. Segal, R.T. McNider, and Y. Mahrer, 1993: Reply. *J. Atmos. Sci.*, **50**, 1446-1447.
- R-49 Segal, M. and R.A. Pielke, 1985: The effect of water temperature and synoptic winds on the development of surface flows over narrow, elongated water bodies. *J. Geophys. Res.*, **90**, 4907-4910.
- R-50 Segal, M. and R.A. Pielke, 1988: The extrapolation of vertical profiles of wind speed within the marine atmospheric surface layer using the p formula. *J. Appl. Meteor.*, **27**, 174-181.
- R-51 Pielke, R.A., 1985: The use of mesoscale numerical models to assess wind distribution and boundary layer structure in complex terrain. *Bound.-Layer Meteor.*, **31**, 217-231.
- R-52 Song, J.L., R.A. Pielke, M. Segal, R.W. Arritt, and R. Kessler, 1985: A method to determine non-hydrostatic effects within subdomains in a mesoscale model. *J. Atmos. Sci.*, **42**, 2110-2120.
- R-53 Mahrer, Y., M. Segal, and R.A. Pielke, 1985: Mesoscale modeling of wind energy over non-homogeneous terrain. *Bound.-Layer Meteor.*, **31**, 13-23.
- R-54 Segal, M., Y. Mahrer, R.A. Pielke, and Y. Ookouchi, 1985: Modeling transpiration patterns of vegetation along south and north facing slopes during the subtropical dry season. *Agric. Forest Meteor.*, **36**, 19-28.
- R-55 Kessler, R.C., D. Eppel, R.A. Pielke, and J. McQueen, 1985: A numerical study of the effects of a large sand-bar upon sea breeze development. *Arch. Meteor. Geophys. Bioklim.*, Series A, **34**, 3-26.
- R-56 Ookouchi, Y., M. Segal, R.A. Pielke, and Y. Mahrer, 1987: On the effect of soil wetness on thermal stress. *Int. J. Biometeor.*, **31**, 45-55.
- R-57 Song, J.L., R.A. Pielke, and M. Segal, 1986: Vectorizing a mesoscale meteorological model on the CYBER 205. *Environ. Software*, **1**, 10-16.
- R-58 Segal, M., J.F.W. Purdom, J.L. Song, R.A. Pielke, and Y. Mahrer, 1986: Evaluation of cloud shading effects on the generation and modification of mesoscale circulations. *Mon. Wea. Rev.*, **114**, 1201-1212.
- R-59 Lipton, A.E. and R.A. Pielke, 1986: Vertical normal modes of a mesoscale model using a scaled height coordinate. *J. Atmos. Sci.*, **43**, 1650-1655.
- R-60 Abbs, D.J. and R.A. Pielke, 1986: Thermally forced surface flow and convergence patterns over northeast Colorado. *Mon. Wea. Rev.*, **114**, 2281-2296.
- R-61 Arritt, R.W. and R.A. Pielke, 1986: Interactions of nocturnal slope flows with ambient winds. *Bound.-Layer Meteor.*, **37**, 183-195.

- R-62 Michaels, P.J., R.A. Pielke, J.S. McQueen, and D.E. Sappington, 1987: Composite climatology of Florida summer thunderstorms. *Mon. Wea. Rev.*, **115**, 2781-2791.
- R-63 Tremback, C.J., J. Powell, W.R. Cotton, and R.A. Pielke, 1985: The forward-in-time upstream advection scheme: Extension to higher orders. *Mon. Wea. Rev.*, **115**, 540-555.
- R-64 Yu, C-H. and R.A. Pielke, 1986: Mesoscale air quality under stagnant synoptic cold season conditions in the Lake Powell area. *Atmos. Environ.*, **20**, 1751-1762.
- R-65 Moran, M.D., R.W. Arritt, M. Segal, and R.A. Pielke, 1986: Modification of regional-scale pollutant dispersion by terrain- forced mesoscale circulations. *Transactions of the APCA Second International Specialty Conference on the Meteorology of Acidic Deposition*, Albany, New York, March 17-20, 1986, Air Pollution Control Association, Pittsburgh, Pennsylvania, 136-157.
- R-66 Arritt, R.W., R.T. McNider, and R.A. Pielke, 1987: Numerical model evaluation of the extension of the critical dividing streamline hypothesis to mesoscale two-dimensional terrain. *Atmos. Environ.*, **21**, 1905-1913.
- R-67 Pielke, R.A., R.W. Arritt, R.T. McNider, M. Segal, C-H. Yu, and W. Physick, 1986: Screening estimation of maximum 24-hour average pollution concentrations in mountain valleys during synoptic stagnation. 1986 Conference on Science in the National Parks. AWRASymposium Proceedings (see PSNT-61).
- R-68 Pielke, R.A., G. Kallos, and M. Segal, 1989: Horizontal resolution needs for adequate lower tropospheric profiling involved with atmospheric systems forced by horizontal gradients in surface heating. *J. Atmos. Oceanic Tech.*, **6**, 741-758.
- R-69 Pielke, R.A., M. Garstang, C. Lindsey, and J. Gusdorf, 1987: Use of a synoptic classification scheme to define seasons. *Theor. Appl. Climatol.*, **38**, 57-68.
- R-70 Segal, M., Y. Ookouchi, and R.A. Pielke, 1987: On the effect of steep slope orientation on the intensity of daytime upslope flow. *J. Atmos. Sci.*, **44**, 3587-3592.
- R-71 Abbs, D.J. and R.A. Pielke, 1987: Numerical simulations of orographic effects on NE Colorado snowstorms. *Meteor. Atmos. Phys.*, **37**, 1-10.
- R-72 Segal, M., C-H. Yu, and R.A. Pielke, 1988: Model evaluation of the impact of thermally induced valley circulations in the Lake Powell area on long-range pollutant transport. *J. Air Pollut. Control Assoc.*, **38**, 163-170.
- R-73 Pielke, R.A., 1988: Note: Relationship between numerical and physical models of atmospheric flow. *Environ. Software*, **3**, 39-41.
- R-74 Ye, Z.J., M. Segal, and R.A. Pielke, 1987: Effects of atmospheric thermal stability and slope steepness on the development of daytime thermally-induced upslope flow. *J. Atmos. Sci.*, **44**, 3341-3354.
- R-75 Pielke, R.A. and J.M. Cram, 1987: An alternate procedure for analyzing surface geostrophic winds and pressure over elevated terrain. *Weather and Forecasting*, **2**, 229-236.
- R-76 Pielke, R.A. and J.M. Cram, 1989: A terrain-following coordinate system -- Derivation of diagnostic relationships. *Meteor. Atmos. Phys.*, **40**, 189-193.
- R-77 Segal, M., C-H. Yu, R.W. Arritt, and R.A. Pielke, 1988: On the impact of valley/ridge thermally induced circulations on regional pollutant transport. *Atmos. Environ.*, **22**, 471-486.
- R-78 Segal, M., R.A. Pielke, R.W. Arritt, M.D. Moran, C-H. Yu, and D. Henderson, 1988: Application of a mesoscale atmospheric modeling system to the estimation of SO<sub>2</sub> concentrations from major elevated sources in southern Florida. *Atmos. Environ.*, **22**, 1319-1334.
- R-79 Avissar, R. and R.A. Pielke, 1989: A parameterization of heterogeneous land surfaces for atmospheric numerical models and its impact on regional meteorology. *Mon. Wea. Rev.*, **117**, 2113-2136.

- R-80 Flatau, P.J., R.A. Pielke, and W.R. Cotton, 1988: Application of symbolic algebra to the generation of coordinate transformations. *Environ. Software*, **3**, 158-161.
- R-81 Pielke, R.A. and N. Waage, 1987: A definition of normal weather. *Natl. Wea. Dig.*, **12**, 20-22.
- R-82 Arritt, R.W., R.A. Pielke, and M. Segal, 1988: Variations of sulfur dioxide deposition velocity resulting from terrain-forced mesoscale circulations. *Atmos. Environ.*, **22**, 715-723.
- R-83 Segal, M., R.A. Pielke, R.W. Arritt, and R.T. McNider, 1987: Comment on "Spatial switching between first-order closure schemes in a numerical mesoscale model". *Mon. Wea. Rev.*, **115**, 3200-3201.
- R-84 Segal, M., R. Avissar, M.C. McCumber, and R.A. Pielke, 1988: Evaluation of vegetation effects on the generation and modification of mesoscale circulations. *J. Atmos. Sci.*, **45**, 2268-2292.
- R-85 Vonder Haar, T.H., C. F. Shih, D. L. Randel, J.J. Toth, D.N. Allen, R.A. Pielke, and R. Green, 1987: The prototype Digital Weather Laboratory at Colorado State University. *Bull. Amer. Meteor. Soc.*, **68**, 230-236.
- R-86 Pielke, R.A., R.W. Arritt, M. Segal, M.D. Moran, and R.T. McNider, 1987: Mesoscale numerical modeling of pollutant transport in complex terrain. *Bound.-Layer Meteor.*, **41**, 59-74.
- R-87 McNider, R.T., M.D. Moran, and R.A. Pielke, 1988: Influence of diurnal and inertial boundary layer oscillations on long-range dispersion. *Atmos. Environ.*, **22**, 2445-2462.
- R-88 Segal, M., W. Schreiber, G. Kallos, R.A. Pielke, J.R. Garratt, J. Weaver, A. Rodi, and J. Wilson, 1989: The impact of crop areas in northeast Colorado on midsummer mesoscale thermal circulations. *Mon. Wea. Rev.*, **117**, 809-825.
- R-89 Avissar, R., M.D. Moran, R.A. Pielke, G. Wu, and R.N. Meroney, 1990: Operating ranges of mesoscale numerical models and meteorological wind tunnels for the simulation of sea and land breezes. *Bound.-Layer Meteor.*, Special Anniversary Issue, Golden Jubilee, **50**, 227-275.
- R-90 Hadfield, M.G., W.R. Cotton, and R.A. Pielke, 1988: Comments on "An analysis of closures for pressure-scalar covariances in the convective boundary layer". *J. Atmos. Sci.*, **45**, 1970-1972.
- R-91 Cram, J.M. and R.A. Pielke, 1989: Further comparison of two synoptic surface wind and pressure analysis methods. *Mon. Wea. Rev.*, **117**, 696-706.
- R-92 Lee, T.J., R.A. Pielke, R.C. Kessler, and J. Weaver, 1989: Influence of cold pools downstream of mountain barriers on downslope winds and flushing. *Mon. Wea. Rev.*, **117**, 2041-2058.
- R-93 Hu, Qi, E.R. Reiter, and R.A. Pielke, 1988: Analytic solutions to Long's model: A comparison of nonhydrostatic and hydrostatic cases. *Meteor. Atmos. Phys.*, **39**, 184-196.
- R-94 Dalu, G.A. and R.A. Pielke, 1989: An analytical study of the sea breeze. *J. Atmos. Sci.*, **46**, 1815-1825.
- R-95 Garratt, J.R., R.A. Pielke, W. Miller, and T.J. Lee, 1990: Mesoscale model response to random, surface-based perturbations -- A sea-breeze experiment. *Bound.-Layer Meteor.*, **52**, 313-334.
- R-96 Ye, Z., M. Segal, J.R. Garratt, and R.A. Pielke, 1989: On the impact of cloudiness on the characteristics of nocturnal downslope flows. *Bound.-Layer Meteor.*, **49**, 23-51.
- R-97 Stocker, R.A., R.A. Pielke, A.J. Verdon, and J.T. Snow, 1990: Characteristics of plume releases as depicted by balloon launchings and model simulations. *J. Appl. Meteor.*, **29**, 53-62.
- R-97a Pielke, R.A., R.A. Stocker, A.J. Verdon, and J.T. Snow, 1990: Reply. *J. Appl. Meteor.*, **29**, 1082.

- R-98 Ye, Z.J., J.R. Garratt, M. Segal, and R.A. Pielke, 1990: On the impact of atmospheric thermal stability on the characteristics of nocturnal downslope flows. *Bound.-Layer Meteor.*, **51**, 77-97.
- R-99 Lyons, W.A., R.A. Pielke, C.J. Tremback, R.L. Walko, D.A. Moon, and C.S. Keen, 1995: Modeling the impacts of mesoscale vertical motions upon coastal zone air pollution dispersion. *Atmos. Environ.*, **29**, 283-301.
- R-100 Dalu, G.A. and R.A. Pielke, 1990: An analytical study of the frictional response of coastal currents and upwelling to wind stress. *J. Geophys. Res., C*, Paper No. 89JC01376, **95**, 1523-1536.
- R-101 Wesley, D.A. and R.A. Pielke, 1990: Observations of blocking-induced convergence zones and effects on precipitation in complex terrain. *Atmos. Res.*, **25**, 235-276.
- R-102 Garratt, J.R. and R.A. Pielke, 1989: On the sensitivity of mesoscale models to surface-layer parameterization constants. *Bound.-Layer Meteor.*, **48**, 377-387.
- R-103 Pielke, R.A. and X. Zeng, 1989: Influence on severe storm development of irrigated land. *Natl. Wea. Dig.*, **14**, 16-17.
- R-104 Segal, M. J.R. Garratt, G. Kallos, and R.A. Pielke, 1989: The impact of wet soil and canopy temperatures on daytime boundary-layer growth. *J. Atmos. Sci.*, **46**, 3673-3684.
- R-105 Ye, Z., M. Segal, and R.A. Pielke, 1990: A comparative study of daytime thermally induced upslope flow on Mars and Earth. *J. Atmos. Sci.*, **47**, 612-628.
- R-106 Physick, W.L., D.J. Abbs, and R.A. Pielke, 1989: Formulation of the thermal internal boundary layer in a mesoscale model. *Bound.-Layer Meteor.*, **49**, 99-111.
- R-107 Pielke, R.A. and R. Avissar, 1990: Influence of landscape structure on local and regional climate. *Landscape Ecology*, **4**, 133-155.
- R-108 Segal, M., X. Jia, Z. Ye, and R.A. Pielke, 1990: On the effect of daytime surface evaporation on pollution dispersion. *Atmos. Environ.*, **24A**, 1801-1811.
- R-109 Zeng, X., R.A. Pielke, and R. Eykholt, 1990: Chaos in Daisyworld. *Tellus*, **42B**, 309-318.
- R-109a Zeng, X., R.A. Pielke, and R. Eykholt, 1992: Reply to Jascourt and Raymond. *Tellus*, **44B**, 247-248.
- R-110 Avissar, R. and R.A. Pielke, 1991: The impact of plant stomatal control on mesoscale atmospheric circulations. *Agric. Forest Meteor.*, **54**, 353-372.
- R-111 De Gregorio, S., R.A. Pielke, and G.A. Dalu, 1992: Feedback between a simple biosystem and the temperature of the earth. *J. Nonlinear Sci.*, **2**, 263-292.
- R-112 Segal, M., J.R. Garratt, R.A. Pielke, and Z. Ye., 1991: Scaling and numerical model evaluation of snow-cover effects on the generation and modification of daytime mesoscale circulations. *J. Atmos. Sci.*, **48**, 1024-1042.
- R-113 Segal, M., J.H. Cramer, R.A. Pielke, J.R. Garratt, and P. Hildebrand, 1991: Observational evaluation of the snow-breeze. *Mon. Wea. Rev.*, **119**, 412-424.
- R-114 Nicholls, M.E., R.A. Pielke, and W.R. Cotton, 1991: A two-dimensional numerical investigation of the interaction between sea-breezes and deep convection over the Florida peninsula. *Mon. Wea. Rev.*, **119**, 298-323.
- R-115 Dalu, G.A., R.A. Pielke, R. Avissar, G. Kallos, M. Baldi, and A. Guerrini, 1991: Linear impact of thermal inhomogeneities on mesoscale atmospheric flow with zero synoptic wind. *Ann. Geophys.*, **9**, 641-647.
- R-116 Segal, M., J.R. Garratt, R.A. Pielke, P. Hildebrand, F.A. Rogers, and J. Cramer, 1991: On the impact of snow cover on daytime pollution dispersion. *Atmos. Environ.*, **25B**, 177-192.
- R-117 Pielke, R.A., A. Song, P.J. Michaels, W.A. Lyons, and R.W. Arritt, 1991: The predictability of sea-breeze generated thunderstorms. *Atmosfera*, **4**, 65-78.
- R-118 Pielke, R.A., R.A. Stocker, R.W. Arritt, and R.T. McNider, 1991: A procedure to estimate worst-case air quality in complex terrain. *Environment International*, **17**, 559-574.

- R-119 Pielke, R.A., 1993: Weather words in American English regional dialects. *National Weather Digest*, **18**, 30-32.
- R-120 Pielke, R.A. and X. Zeng, 1994: Long-term variability of climate. *J. Atmos. Sci.*, **51**, 155-159.
- R-121 Stocker, R.A. and R.A. Pielke, 1990: Source attribution during WHITEX -- A modeling study. *Transactions, Visibility and Fine Particles*, Ed., C.V. Mathai, An A& WMA/EPA International Specialty Conference, Estes Park, Colorado. October 15-19, 1989, 831-844.
- R-122 Hadfield, M.G., W.R. Cotton, and R.A. Pielke, 1991: Large-eddy simulations of thermally-forced circulations in the convective boundary layer. Part I: A small-scale circulation with zero wind. *Bound.-Layer Meteor.*, **57**, 79-114.
- R-123 Wesley, D.A., J.F. Weaver, and R.A. Pielke, 1990: Heavy snowfall during an extreme arctic outbreak along the Colorado Front Range. *Natl. Wea. Dig.*, **15**, 2-19.
- R-124 Pielke, R.A., 1991: Overlooked scientific issues in assessing hypothesized greenhouse gas warming. *Environ. Software*, **6**, 100-107.
- R-125 Pielke, R.A. and T.J. Lee, 1991: Influence of sea spray and rainfall on the surface wind profile during conditions of strong winds. *Bound.-Layer Meteor.*, **55**, 305-308.
- R-126 Hadfield, M.G., W.R. Cotton, and R.A. Pielke, 1992: Large-eddy simulations of thermally forced circulations in the convective boundary layer. Part II: The effect of changes in wavelength and wind speed. *Bound.-Layer Meteor.*, **58**, 307-328.
- R-127 Nicholls, M.E., R.A. Pielke, and W.R. Cotton, 1991: Thermally forced gravity waves in an atmosphere at rest. *J. Atmos. Sci.*, **48**, 1869-1884.
- R-127a Nicholls, M.E., R.A. Pielke, and W.R. Cotton, 1993: Reply to comments on "Thermally forced gravity waves in an atmosphere at rest." *J. Atmos. Sci.*, **50**, 4102.
- R-128 Ye, Z., and R.A. Pielke, 1993: Atmospheric parameterization of evaporation from non-plant-covered surfaces. *J. Appl. Meteor.*, **32**, 1248-1258.
- R-129 Pielke, R.A., G. Dalu, J.S. Snook, T.J. Lee, and T.G.F. Kittel, 1991: Nonlinear influence of mesoscale land use on weather and climate. *J. Climate*, **4**, 1053-1069.
- R-130 Zeng, X., R.A. Pielke, and R. Eykholt, 1992: Estimating the fractal dimension and the predictability of the atmosphere. *J. Atmos. Sci.*, **49**, 649-659.
- R-130a Zeng, X., R.A. Pielke, and R. Eykholt, 1992: Corrigendum. *J. Atmos. Sci.*, **49**, 2571.
- R-131 Zeng, X., R. Eykholt, and R.A. Pielke, 1991: Estimating the Lyapunov-exponent spectrum from short time series of low precision. *Phys. Rev. Lett.*, **66**, 3229-3232.
- R-132 Cram, J.M., R.A. Pielke, and W.R. Cotton, 1992: Numerical simulation and analysis of a prefrontal squall line. Part I: Observations and basic simulation results. *J. Atmos. Sci.*, **49**, 189-208.
- R-133 Cram, J.M., R.A. Pielke, and W.R. Cotton, 1992: Numerical simulation and analysis of a prefrontal squall line. Part II: Propagation of the squall line as an internal gravity wave. *J. Atmos. Sci.*, **49**, 209-225.
- R-134 Lee, T.J. and R.A. Pielke, 1992: Estimating the soil surface specific humidity. *J. Appl. Meteor.*, **31**, 480-484.
- R-134a Lee, T.J. and R.A. Pielke, 1992: Corrigendum to "Estimating the Soil Surface Specific Humidity". *J. Appl. Meteor.*, **32**, 580.
- R-135 Shi, Y. and R.A. Pielke, 1992: Three-dimensional mesoscale modeling of meteorological fields over Zhujiang (Pearl) River Delta. *Acta Meteorologica Sinica*, **6**, 133-147.
- R-136 Pielke, R.A., D.S. Schimel, T.J. Lee, T.G.F. Kittel, and X. Zeng, 1993: Atmosphere-terrestrial ecosystem interactions: Implications for coupled modeling. *Ecological Modelling*, **67**, 5-18.
- R-137 Xian, Z. and R.A. Pielke, 1991: The effects of width of land masses on the development of sea breezes. *J. Appl. Meteor.*, **30**, 1280-1304.
- R-138 Pielke, R., M.E. Nicholls, R.L. Walko, T.A. Nygaard, and X. Zeng, 1997: Several unresolved issues in numerical modeling of geophysical flows. In: Numerical Methods in



- Atmospheric and Oceanic Modelling, The Andre J. Robert Memorial Volume, C.A. Lin, R. Laprise, and H. Ritchie, Eds., 557-581.
- R-139 Nicholls, M., R. Pielke, and R. Meroney, 1993: Large eddy simulation of microburst winds flowing around a building. *J. Wind Eng. and Indus. Aerodyn.*, **46 & 47**, 229-237.
- R-140 Dalu, G.A., M. Baldi, R.A. Pielke, T.J. Lee, and M. Colacino, 1991: Mesoscale vertical velocities generated by stress changes in the boundary layer: Linear theory. *Ann. Geophys.*, **9**, 648-653.
- R-141 Vidale, P.L., R.A. Pielke, A. Barr, L.T. Steyaert, 1997: Case study modeling of turbulent and mesoscale fluxes over the BOREAS region. *J. Geophys. Res.*, **102**, 29167-29188.
- R-142 Pielke, R.A. and M. Uliasz, 1993: Influence of landscape variability on atmospheric dispersion. *J. Air Waste Mgt.*, **43**, 989-994.
- R-143 Ziegler, C.L., T.J. Lee, and R.A. Pielke, 1997: Convective initiation at the dryline: A modeling study. *Mon. Wea. Rev.*, **125**, 1001-1026.
- R-144 Nair, U.S., M.R. Hjelmfelt, and R.A. Pielke, 1997: Numerical simulation of the June 9-10 1972 Black Hills storm using CSU RAMS. *Mon. Wea. Rev.*, **125**, 1753-1766.
- R-145 Zeng, X. and R.A. Pielke, 1993: Error-growth dynamics and predictability of surface thermally-induced atmospheric flow. *J. Atmos. Sci.*, **50**, 2817-2844.
- R-146 Walko, R.L., W.R. Cotton, and R.A. Pielke, 1992: Large-eddy simulations of the effects of hilly terrain on the convective boundary layer. *Bound.-Layer Meteor.*, **58**, 133-150.
- R-147 Poulos, G.S., and R.A. Pielke, 1994: A numerical analysis of Los Angeles basin pollution transport to the Grand Canyon under stably stratified, southwest flow conditions. *Atmos. Environ.*, **28**, 3329-3357.
- R-148 Dalu, G.A. and R.A. Pielke, 1993: Vertical heat fluxes generated by mesoscale atmospheric flow induced by thermal inhomogeneities in the PBL. *J. Atmos. Sci.*, **50**, 919-926.
- R-149 Glenn, E.P., C.N. Hodges, H. Lieth, R.A. Pielke, and L. Pitelka, 1992: Growing halophytes to remove carbon from the atmosphere. Invited contribution to *Environment*, **34**, 40-43.
- R-150 Pielke, R.A., J.H. Rodriguez, J.L. Eastman, R.L. Walko, and R.A. Stocker, 1993: Influence of albedo variability in complex terrain on mesoscale systems. *J. Climate*, **6**, 1798-1806.
- R-151 Rasmussen, R.M., M.K. Politovich, J. Marwitz, J. McGinley, J. Smart, W. Sand, G. Stossmeister, B. Bernstein, R. Pielke, D. Wesley, S. Rutledge, K. Elmore, E. Westwater, B. Stankov, and D. Burrows, 1992: Winter Icing and Storms Project (WISP). *Bull. Amer. Meteor. Soc.*, **73**, 951-974.
- R-152 Zeng, X., R.A. Pielke, and R. Eykholt, 1992: Extracting Lyapunov exponents from short time series of low precision. *Mod. Phys. Lett. B*, **6**, 55-75.
- R-153 Papineau, J., R.A. Pielke, and D.A. Wesley, 1994: A performance evaluation of the NGM and RAMS models for the 29-30 March 1991 Colorado Front Range Storm. *Nat. Wea. Digest*, **19**, 2-11.
- R-154 Pielke, R.A., J.S. Baron, T.G.F. Kittel, T.J. Lee, T.N. Chase, and J.M. Cram, 1992: Influence of landscape structure on the hydrologic cycle and regional and global climate. *Proceedings, "Managing Water Resources During Global Change"*, American Water Resources Association (AWRA), November 1-5, 1992, Reno, Nevada (see PSNT-245), 283-296.
- R-155 Pielke, R.A., W.R. Cotton, R.L. Walko, C.J. Tremback, W.A. Lyons, L.D. Grasso, M.E. Nicholls, M.D. Moran, D.A. Wesley, T.J. Lee, and J.H. Copeland, 1992: A comprehensive meteorological modeling system -- RAMS. *Meteor. Atmos. Phys.*, **49**, 69-91.
- R-156 Pielke, R.A., L.R. Bernardet, P.J. Fitzpatrick, S.C. Gillies, R.F. Hertenstein, A.S. Jones, X. Lin, J.E. Nachamkin, U.S. Nair, J.M. Papineau, G.S. Poulos, M.H. Savoie, and P.L.

- Vidale, 1995: Standardized test to evaluate numerical weather prediction algorithms. *Bull. Amer. Meteor. Soc.*, **76**, 46-48.
- R-157 Mihailovic, D.T., R.A. Pielke, B. Rajkovic, T.J. Lee, and M. Jetric, 1993: A resistance representation of schemes for evaporation from bare and partly plant-covered surfaces for use in atmospheric models. *J. Appl. Meteor.*, **32**, 1038-1054.
- R-158 Pielke, R.A., F. Bretherton, D. Schimel, and T.G.F. Kittel, 1992: Global forcing and regional interactions: Report on a climate system modeling program workshop. *EOS*, **73**, #49, **December 8, 1992**, 529-530.
- R-159 Pielke, R.A., T.J. Lee, E.P. Glenn, and R. Avissar, 1993: Influence of halophyte plantings in arid regions on local atmosphere structure. *Int. J. Biometeorology*, **37**, 96-100.
- R-160 Nicholls, M.E. and R.A. Pielke, 1994: Thermal compression waves. I: Total energy transfer. *Quart. J. Roy. Meteor. Soc.*, **120**, 305-332.
- R-161 Nicholls, M.E. and R.A. Pielke, 1994: Thermal compression waves. II: Mass adjustment and vertical transfer of total energy. *Quart. J. Roy. Meteor. Soc.*, **120**, 333-359.
- R-162 Kallos, G., P. Kassomenos, and R.A. Pielke, 1993: Synoptic and mesoscale weather conditions during air pollution episodes in Athens, Greece. *Bound.-Layer Meteor.*, **62**, 163-184.
- R-163 Zeng, X., R.A. Pielke, and R. Eykholt, 1993: Chaos theory and its applications to the atmosphere. *Bull. Amer. Meteor. Soc.*, **74**, 631-644.
- R-164 De Gregorio, S., R.A. Pielke, and G.A. Dalu, 1992: A delayed biophysical system for the earth climate. *J. Nonlinear Science*, **2**, 293-318.
- R-165 Pielke, R.A., J. Eastman, T.N. Chase, and T.G.F. Kittel, 1998: 1973-1996 trends in depth-averaged tropospheric temperature. *J. Geophys. Res.*, **103**, 16927-16933.
- R-165a Pielke, R. A., J. Eastman, T.N. Chase, J. Knaff, and T.G.F. Kittel, 1998: Correction to "1973-1996 trends in depth-averaged tropospheric temperature". *J. Geophys. Res.*, **103**, 28909-28911.
- R-166 Shaw, B.L., R.A. Pielke, and C.L. Ziegler, 1997: A three-dimensional numerical simulation of a Great Plains dryline. *Mon. Wea. Rev.*, **125**, 1489-1506.
- R-167 Cochran, L.S., R.A. Pielke, and E. Kovacs, 1992: Selected international receptor based air quality standards. *J. Air Waste Mgt. Assoc.*, **42**, 1567-1572.
- R-168 Zeng, X. and R.A. Pielke, 1993: What does a low-dimensional weather attractor mean? *Phys. Lett. A.*, **175**, 299-304.
- R-169 Pielke, R.A., X. Zeng, T.J. Lee, and G.A. Dalu, 1997: Mesoscale fluxes over heterogeneous flat landscapes for use in larger scale models. *J. Hydrology*, **190**, 317-336.
- R-170 Wesley, D., J. Weaver, and R. Pielke, 1991: Reply to comments on "Heavy snowfall during an Arctic outbreak along the Colorado Front Range". *Natl. Wea. Dig.*, **16**, 20-21.
- R-171 Baron, J., R.A. Pielke, W.J. Parton, D.S. Ojima, T. Kirchner, S.W. Running, T.G.F. Kittel, 1992: Dynamic land surface/atmospheric parameterization for the South Platte River drainage. *Proceedings, "Managing Water Resources During Global Change"*, American Water Resources Association (AWRA), November 1-5, 1992, Reno, Nevada (see PSNT-246), 273-282.
- R-172 Mukabana, J.R., and R.A. Pielke, 1996: Investigating the influence of synoptic-scale monsoonal winds and mesoscale circulations on diurnal weather patterns over Kenya using a mesoscale numerical model. *Mon. Wea. Rev.*, **124**, 224-243.
- R-173 Pielke, R.A., R.L. Walko, J.L. Eastman, W.A. Lyons, R.A. Stocker, M. Uliasz, and C.J. Tremback, 1992: Recent achievements in the meteorological modeling of local weather and air quality. *Trends in Atmospheric Science*, Invited manuscript, **1**, 287-307.
- R-174 Ye, Z. and R.A. Pielke, 1995: A parameterization of Bowen ratio with respect to soil moisture availability. *Adv. Atmos. Sci.*, **12**, 449-474.

- R-175 Pielke, R.A., T.J. Lee, J.H. Copeland, J.L. Eastman, C.L. Ziegler, and C.A. Finley, 1997: Use of USGS-provided data to improve weather and climate simulations. *Ecological Applications*, **7**, 3-21.
- R-176 Greene, E.M., G.E. Liston, and R.A. Pielke, 1999: Simulation of above treeline snowdrift formation using a numerical snow-transport model. *Cold Regions Sci. Tech.*, **30**, 135-144.
- R-177 Malm, W.C., K.A. Gebhart, H. Iyer, J.G. Watson, D. Latimer, R. Pielke, 1993: Response to "The WHITEX study and the role of the scientific community: A critique" by Gregory R. Markowski. *J. Air Waste Mgt. Assoc.*, **43**, 1128-1136.
- R-178 Chase, T.N., R.A. Pielke, Sr., T.G.F. Kittel, J.S. Baron, and T.J. Stohlgren, 1999: Potential impacts on Colorado Rocky Mountain weather due to land use changes on the adjacent Great Plains. *J. Geophys. Res.*, **104**, 16673-16690.
- R-179 Pielke, R.A., R.A. Stocker, J.L. Eastman, and G.S. Poulos, 1995: Comments on "A synoptic climatological analysis of air quality in the Grand Canyon National Park". *Atmos. Environ.*, **29**, 617-623.
- R-179a Pielke, R.A., R.A. Stocker, J.L. Eastman, and G.S. Poulos, 1995: Second response to comments on "A synoptic climatological analysis of air quality in the Grand Canyon National Park". *Atmos. Environ.* **29**, 623-638.
- R-180 Ziegler, C.L., W.J. Martin, R.A. Pielke, and R.L. Walko, 1995: A modeling study of the dryline. *J. Atmos. Sci.*, **52**, 263-285.
- R-181 Lee, T.J., R.A. Pielke, and P.W. Mielke, Jr., 1995: Modeling the clear-sky surface energy budget during FIFE87. *J. Geophys. Res.*, **100**, 25585-25593.
- R-182 Mihailovic, D.T., B. Rajkovic, L. Dekic, R.A. Pielke, T.J. Lee, and Z. Ye, 1995: The validation of various schemes for parameterizing evaporation from bare soil for use in meteorological models: A numerical study using in situ data. *Bound.-Layer Meteor.*, **76**, 259-289.
- R-183 Pielke, R.A., M.E. Nicholls, and A.J. Bedard, 1993: Using thermal compression waves to assess latent heating from clouds. *EOS*, **74**, 493.
- R-184 Pielke, R.A. and M. Uliasz, 1998: Use of meteorological models as input to regional and mesoscale air quality models - Limitations and strengths. *Atmos. Environ.*, **32**, 1455-1466.
- R-185 Walko, R.L., C.J. Tremback, R.A. Pielke, and W.R. Cotton, 1995: An interactive nesting algorithm for stretched grids and variable nesting ratios. *J. Appl. Meteor.*, **34**, 994-999.
- R-186 Otterman, J., J. Susskind, T. Brakke, D. Kimes, R.A. Pielke, and T.J. Lee, 1995: Inferring thermal infrared hemispheric emission from a sparsely vegetated surface by directional measurements. *Bound.-Layer Meteor.*, **74**, 163-180.
- R-187 Zeng, X., and R.A. Pielke, 1995: Further study on the predictability of landscape-induced atmospheric flow. *J. Atmos. Sci.*, **52**, 1680-1698.
- R-188 Dalu, G.A., R.A. Pielke, M. Baldi, and X. Zeng 1996: Heat and momentum fluxes induced by thermal inhomogeneities. *J. Atmos. Sci.*, **53**, 3286-3302.
- R-189 Snook, J.S. and R.A. Pielke, 1995: Diagnosing a Colorado heavy snow event with a nonhydrostatic mesoscale numerical model structured for operational use. *Wea. Forecasting*, **10**, 261-285.
- R-190 Taylor, C.M., R.J. Harding, R.A. Pielke, Sr., P.L. Vidale, R.L. Walko, and J.W. Pomeroy, 1998: Snow breezes in the boreal forest. *J. Geophys. Res.*, **103**, 23087-23101.
- R-191 Lyons, W.A., C.J. Tremback, and R.A. Pielke, 1995: Applications of the Regional Atmospheric Modeling System (RAMS) to provide input to photochemical grid models for the Lake Michigan Ozone Study (LMOS). *J. Appl. Meteor.*, **34**, 1762-1786.
- R-192 Pielke, R.A., R. Avissar, M. Raupach, H. Dolman, X. Zeng, and S. Denning, 1998: Interactions between the atmosphere and terrestrial ecosystems: Influence on weather and climate. *Global Change Biology*, **4**, 461-475.

- R-193 Chase, T.N., R.A. Pielke, T.G.F. Kittel, R. Nemani, and S.W. Running, 1996: The sensitivity of a general circulation model to global changes in leaf area index. *J. Geophys. Res.*, **101**, 7393-7408.
- R-194 Walko, R.L., L.E. Band, J. Baron, T.G.F. Kittel, R. Lammers, T.J. Lee, D.S. Ojima, R.A. Pielke, C. Taylor, C. Tague, C.J. Tremback, and P.L. Vidale, 2000: Coupled atmosphere-biophysics-hydrology models for environmental modeling. *J. Appl. Meteor.*, **39**, 931-944.
- R-195 Zeng, X. and R.A. Pielke, 1995: Landscape-induced atmospheric flow and its parameterization in large-scale numerical models. *J. Climate*, **8**, 1156-1177.
- R-196 Nemani, R.R., S.W. Running, R.A. Pielke, and T.N. Chase, 1996: Global vegetation cover changes from coarse resolution satellite data. *J. Geophys. Res.*, **101**, 7157-7162.
- R-197 Eastman, J.L. R.A. Pielke, and W.A. Lyons, 1995: Comparison of lake-breeze model simulations with tracer data. *J. Appl. Meteor.*, **34**, 1398-1418.
- R-198 Stohlgren, T.J., T.N. Chase, R.A. Pielke, T.G.F. Kittel, and J. Baron, 1998: Evidence that local land use practices influence regional climate and vegetation patterns in adjacent natural areas. *Global Change Biology*, **4**, 495-504.
- R-199 Pielke, R.A., and M.E. Nicholls, 1997: Use of meteorological models in computational wind engineering. *J. Wind Eng. Indus. Aerodyn.*, **67 & 68**, 363-372.
- R-200 Pielke, R.A. and P.L. Vidale, 1995: The boreal forest and the polar front. *J. Geophys. Res.*, **100**, 25755-25758.
- R-201 Takle, E.S., W.J. Gutowski, Jr., R.W. Arritt, Z. Pan, C.J. Anderson, R. Ramos da Silva, D. Caya, S.-C. Chen, F. Giorgi, J.H. Christensen, S.-Y. Hong, H.-M. Juang, J. Katzfey, W.M. Lapenta, R. Laprise, G.E. Liston, P. Lopez, J. McGregor, R.A. Pielke, Sr., and J.O. Roads, 1999: Project to Intercompare Regional Climate Simulations (PIRCS): Description and initial results. *J. Geophys. Res.*, **104**, 19443-19461.
- R-202 Moran, M.D. and R.A. Pielke, 1996: Evaluation of a mesoscale atmospheric dispersion modeling system with observations from the 1980 Great Plains mesoscale tracer field experiment. Part I: Data sets and meteorological simulations. *J. Appl. Meteor.*, **35**, 281-307.
- R-203 Moran, M.D. and R.A. Pielke, 1996: Evaluation of a mesoscale atmospheric dispersion modeling system with observations from the 1980 Great Plains mesoscale tracer field experiment. Part II: Dispersion simulations. *J. Appl. Meteor.*, **35**, 308-329.
- R-204 Poulos, G.S., J.E. Bossert, T.B. McKee, and R.A. Pielke, 2000: The interaction of katabatic flow and mountain waves. Part I: Observations and idealized simulations. *J. Atmos. Sci.*, **57**, 1919-1936.
- R-205 Copeland, J.H., R.A. Pielke, and T.G.F. Kittel, 1996: Potential climatic impacts of vegetation change: A regional modeling study. *J. Geophys. Res.*, **101**, 7409-7418.
- R-206 Eastman, J.L., R.A. Pielke, and D.J. McDonald, 1998: Calibration of soil moisture for large eddy simulations over the FIFE area. *J. Atmos. Sci.*, **55**, 1131-1140.
- R-207 Greene, E.M., G.E. Liston, and R.A. Pielke, Sr., 1999: Relationships between landscape, snowcover depletion, and regional weather and climate. *Hydrol. Proc.*, **13**, 2453-2466.
- R-208 Liston, G.E. and R.A. Pielke, 2001: A climate version of the Regional Atmospheric Modeling System. *Theor. Appl. Climatology*, **68**, 155-173.
- R-209 Pielke, R.A., R.L. Walko, L. Steyaert, P.L. Vidale, G.E. Liston, and W.A. Lyons, 1999: The influence of anthropogenic landscape changes on weather in south Florida. *Mon. Wea. Rev.*, **127**, 1663-1673.
- R-210 Pielke, R.A., 1998: Climate prediction as an initial value problem. *Bull. Amer. Meteor. Soc.*, **79**, 2743-2746.
- R-211 Pielke Sr., R.A. , T.N. Chase, T.G.F. Kittel, J. Knaff, and J. Eastman, 2001: Analysis of 200 mbar zonal wind for the period 1958-1997. *J. Geophys. Res.*, **106**, D21, 27287-27290.

- R-212 Pielke, R.A., G.E. Liston, J.L. Eastman, L. Lu, and M. Coughenour, 1999: Seasonal weather prediction as an initial value problem. *J. Geophys. Res.*, **104**, 19463-19479.
- R-213 Droegemeier, K.K., J.D. Smith, S. Businger, C. Doswell III, J. Doyle, C. Duffy, E. Foufoula-Georgiou, V. Krajewski, M. Lemone, C. Mass, R. Pielke Sr., P. Ray, S. Rutledge, and E. Zipser, 2000: Hydrological aspects of weather prediction and flood warnings: Report of the Ninth Prospectus Development Team of the U.S. Weather Research Program, *Bull. Amer. Meteor. Sci.*, **81**, 2665-2680.
- R-214 Chase, T.N., R.A. Pielke Sr., T.G.F. Kittel, R.R. Nemani, and S.W. Running, 2000: Simulated impacts of historical land cover changes on global climate in northern winter. *Climate Dynamics*, **16**, 93-105.
- R-215 Chase, T.N., R.A. Pielke, Sr., T.G.F. Kittel, M. Zhao, A.J. Pitman, S.W. Running, and R.R. Nemani, 2001: The relative climatic effects of landcover change and elevated carbon dioxide combined with aerosols: A comparison of model results and observations. *J. Geophys. Res., Atmospheres*, **106**, 31685-31691.
- R-216 Eugster, W., W.R. Rouse, R.A. Pielke Sr., J.P. McFadden, D.D. Baldocchi, T.G.F. Kittel, F.S. Chapin III, G.E. Liston, P.L. Vidale, E. Vaganov, and S. Chambers, 2000: Land-atmosphere energy exchange in Arctic tundra and boreal forest: available data and feedbacks to climate. *Global Change Biology*, **6**, 84-115.
- R-217 Finley, C.A., W.R. Cotton, and R.A. Pielke Sr., 2001: Numerical simulation of tornadogenesis in a high-precipitation supercell: Part I: Storm evolution and transition into a bow echo. *J. Atmos. Sci.*, **58**, 1597-1629.
- R-218 Liston, G.E., R.A. Pielke Sr., and E.M. Greene, 1999: Improving first-order snow-related deficiencies in a regional climate model. *J. Geophys. Res.*, **104**, 19559-19567.
- R-219 Costa, A.A., W.R. Cotton, R.L. Walko, and R.A. Pielke Sr., 2001: Coupled ocean-cloud-resolving simulations of the air-sea interaction over the equatorial western Pacific. *J. Atmos. Sci.*, **58**, 3357-3375.
- R-220 Derickson, R.G. and R.A. Pielke Sr., 2000: A preliminary study of Burgers Equation with symbolic computation. *J. Comput. Phys.*, **162**, 219-244.
- R-221 Pielke Sr., R.A., T. Stohlgren, W. Parton, J. Moeny, N. Doesken, L. Schell, and K. Redmond, 2000: Spatial representativeness of temperature measurements from a single site. *Bull. Amer. Meteor. Soc.*, **81**, 826-830.
- R-222 Pielke Sr., R.A. Sr., G.E. Liston, and A. Robock, 2000: Insolation-weighted assessment of Northern Hemisphere snow-cover and sea-ice variability. *J. Geophys. Res. Lett.*, **27**, 3061-3064.
- R-223 Nicholls, M.E. and R.A. Pielke Sr., 2000: Thermally-induced compression waves and gravity waves generated by convective storms. *J. Atmos. Sci.*, **57**, 3251-3271.
- R-224 Chase, T.N., R.A. Pielke Sr., J.A. Knaff, T.G.F. Kittel, and J.L. Eastman, 2000: A comparison of regional trends in 1979-1997 depth-averaged tropospheric temperatures. *Int. J. Climatology*, **20**, 503-518.
- R-225 Pielke Sr., R.A., 2002: Overlooked issues in the U.S. National Climate and IPCC assessments. *Climatic Change*, **52**, 1-11.
- R-226 Castro, C.L., T.B. McKee, and R.A. Pielke, Sr., 2001: The relationship of the North American monsoon to tropical and North Pacific sea surface temperatures as revealed by observational analyses. *J. Climate*, **14**, 4449-4473.
- R-227 Tao, W.-K., J. Halverson, R. Adler, M. Garstang, R. Houze, M. Lemone, R.A. Pielke Sr., and W. Woodley, 2002: The research of Dr. Joanne Simpson: Fifty years investigating hurricanes, tropical clouds and cloud systems. *AMS Meteorological Monograph*, **29**, No. 51, 1-16.
- R-228 Dalu, G.A., R.A. Pielke Sr., P.L. Vidale, and M. Baldi, 2000: Heat transport and weakening of the atmospheric stability induced by mesoscale flows. *J. Geophys. Res.*, **105**, 9349-9363.

- R-229 Eastman, J.L., M.B. Coughenour, and R.A. Pielke Sr., 2001: The effects of CO<sub>2</sub> and landscape change using a coupled plant and meteorological model. *Global Change Biology*, **7**, 797-815.
- R-230 Pielke Sr., R.A., 2001: Comment on "IPCC report cautiously warns of potentially dramatic climate change impacts." *EOS*, **82**, 394, 396.
- R-231 Pielke Sr., R.A., 2001: Influence of the spatial distribution of vegetation and soils on the prediction of cumulus convective rainfall. *Rev. Geophys.*, **39**, 151-177.
- R-232 Lu, L., R.A. Pielke Sr., G.E. Liston, W.J. Parton, D. Ojima, and M. Hartman, 2001: Implementation of a two-way interactive atmospheric and ecological model and its application to the central United States. *J. Climate*, **14**, 900-919.
- R-233 Eastman, J.L., M.B. Coughenour, and R.A. Pielke Sr., 2001: Does grazing affect regional climate. *J. Hydrometeor.*, **2**, 243-253.
- R-234 Pielke Sr., R.A., T. Stohlgren, L. Schell, W. Parton, N. Doesken, K. Redmond, J. Moeny, T. McKee, and T.G.F. Kittel, 2002: Problems in evaluating regional and local trends in temperature: An example from eastern Colorado, USA. *Int. J. Climatol.*, **22**, 421-434.
- R-235 Liston, G.E., J.P. McFadden, M. Sturm, and R.A. Pielke Sr., 2002: Modelled changes in arctic tundra snow, energy and moisture fluxes due to increased shrubs. *Global Change Biology*, **8**, 17-32.
- R-236 Darby, L.S., R.M. Banta, and R.A. Pielke Sr., 2002: Comparisons between mesoscale model terrain sensitivity studies and doppler lidar measurements of the sea breeze at Monterey Bay. *Mon. Wea. Rev.*, **130**, 2813-2838.
- R-237 Cotton, W.R., R.A. Pielke Sr., R.L. Walko, G.E. Liston, C. Tremback, H. Jiang, R.L. McAnelly, J.Y. Harrington, M.E. Nicholls, G.G. Carrio, and J.P. McFadden, 2003: RAMS 2001: Current status and future directions. *Meteor. Atmos. Phys.*, **82**, 5-29.
- R-238 Otterman, J., R. Atlas, S.-H. Chou, J.C. Jusem, R.A. Pielke Sr., T.N. Chase, J. Rogers, G.L. Russell, S.D. Schubert, Y.C. Sud, and J. Terry, 2002: Are more dominant North-Atlantic southwesterlies the forcing to early spring in Europe. *Int. J. Climate*, **22**, 743-750.
- R-239 Chase, T.N., J.A. Knaff, and R.A. Pielke Sr., 2003: Changes in global monsoon circulations since 1950. *Natural Hazards*, **29**, 229-254.
- R-240 Chapin, F.S. III, A.D. McGuire, J. Randerson, R. Pielke Sr., D. Baldocchi, S.E. Hobbie, N. Roulet, W. Eugster, E. Kasischke, E.B. Rastetter, and S.A. Running, 2000: Arctic and boreal ecosystems of western North America as components of the climate system. *Global Change Biology*, **6**, 211-223.
- R-241 Pielke Sr., R.A., 2001: Further comments on "The differentiation between grid spacing and resolution and their application to numerical modeling". *Bull. Amer. Meteor. Soc.*, **82**, 699.
- R-242 Costa, A.A., R.L. Walko, W.R. Cotton, R.A. Pielke Sr., and H. Jiang, 2001: SST sensitivities in multi-day TOGA-COARE cloud-resolving simulations. *J. Atmos. Sci.*, **58**, 253-268.
- R-243 McFadden, J.P., G.E. Liston, M. Sturm, R.A. Pielke Sr., and F.S. Chapin III, 2001: Interactions of shrubs and snow in Arctic tundra: Measurements and models. *Soil-Vegetation-Atmosphere Transfer Schemes and Large-scale Hydrological Models*, IAHS Press, Wallingford, Oxfordshire, UK, **270**, 317-325.
- R-244 Mihailovic, D.T., T.J. Lee, R.A. Pielke Sr., B. Lalic, I.D. Arsenic, B. Rajkovic, and P.L. Vidale, 2000: Comparison of different boundary layer surface schemes using single point micrometeorological field data. *Theor. Appl. Climatol.*, **67**, 135-151.
- R-245 Nair, U.S., R.O. Lawton, R.M. Welch, and R.A. Pielke Sr., 2003: Impact of land use on Costa Rican tropical montane cloud forests: Sensitivity of cumulus cloud field

- characteristics to lowland deforestation. *J. Geophys. Res. - Atmospheres*, **108**, 10.1029/2001JD001135.
- R-246 Chase, T.N., B. Herman, R.A. Pielke Sr., X. Zeng, and M. Leuthold, 2002: A proposed mechanism for the regulation of minimum midtropospheric temperatures in the Arctic. *J. Geophys. Res. - Atmospheres*, **107(D14)**, 10.1029/2001JD001425.
- R-247 Pielke Sr., R.A., 2003: Heat storage within the Earth system. *Bull. Amer. Meteor. Soc.*, **84**, 331-335.
- R-248 Pielke Sr., R.A., 2001: Carbon sequestration -- The need for an integrated climate system approach. *Bull. Amer. Meteor. Soc.*, **82**, 2021.
- R-249 Campos Velho, H.F., R.R. Rosa, F.M. Ramos, R.A. Pielke Sr., G. A. Degrazia, C. Rodrigues Neto, and A. Zanandrea, 2001: Multifractal model for eddy diffusivity and counter-gradient term in atmospheric turbulence. *Physica A*, **295**, 219-223.
- R-250 Chase, T.N., R.A. Pielke Sr., and C. Castro, 2003: Are present day climate simulations accurate enough for reliable regional downscaling? *Water Resources Update*, **124**, 26-34.
- R-251 Strack, J.E., R.A. Pielke Sr., and J. Adegoke, 2003: Sensitivity of model-generated daytime surface heat fluxes over snow to land-cover changes. *J. Hydrometeor.*, **4**, 24-42.
- R-252 Lawton, R.O., U.S. Nair, R.A. Pielke Sr., and R.M. Welch, 2001: Climatic impact of tropical lowland deforestation on nearby montane cloud forests. *Science*, **294**, 584-587. On *Science News* List of the Most Important Papers of 2001 under both the Earth Science and Environment and Ecology sections, Week of Dec. 22, 2001, Vol. 160, No. 25.
- R-253 Adegoke, J.O., R.A. Pielke Sr., J. Eastman, R. Mahmood, and K.G. Hubbard, 2003: Impact of irrigation on midsummer surface fluxes and temperature under dry synoptic conditions: A regional atmospheric model study of the U.S. High Plains. *Mon. Wea. Rev.*, **131**, 556-564.
- R-254 Hanamean, J.R. Jr., R.A. Pielke Sr., C.L. Castro, D.S. Ojima, B.C. Reed, and Z. Gao, 2003: Vegetation impacts on maximum and minimum temperatures in northeast Colorado. *Meteor. Appl.*, **10(3)**, 203-215.
- R-255 Sveinsson, O.G.B., J.D. Salas, D.C. Boes, and R.A. Pielke Sr., 2003: Modeling the dynamics of long-term variability of hydroclimatic processes. *J. Hydrometeor.*, **4**, 489-505.
- R-256 Pielke Sr., R.A., G.E. Liston, W.L. Chapman, and D.A. Robinson, 2003: Actual and insolation-weighted Northern Hemisphere snow cover and sea-ice between 1973-2002. *Climate Dynamics*, **22**, 591-595.
- R-257 Pielke Sr., R.A., 2003: Joanne Simpson -- An ideal model of mentorship *Meteor. Monograph.*, **29**, 17-24.
- R-258 Pielke Sr., R.A., G. Marland, R.A. Betts, T.N. Chase, J.L. Eastman, J.O. Niles, D. Niyogi, and S. Running, 2002: The influence of land-use change and landscape dynamics on the climate system- relevance to climate change policy beyond the radiative effect of greenhouse gases. *Phil. Trans. A*, Special Theme Issue, **360**, 1705-1719.
- R-259 Greenland, D., B.P. Hayden, J.J. Magnuson, S.V. Ollinger, R.A. Pielke Sr., and R.C. Smith, 2003: Long-term research on biosphere-atmosphere interactions. *BioScience*, **53**, 33-45.
- R-260 Rial, J., Pielke Sr., R.A., M. Beniston, M. Claussen, J. Canadell, P. Cox, H. Held, N. de Noblet-Ducoudré, R. Prinn, J. Reynolds, and J.D. Salas, 2003: Nonlinearities, feedbacks and critical thresholds within the earth's climate system. *Climatic Change*, **65**, 11-38.
- R-261 Baldi, M., G.A. Dalu, and R.A. Pielke Sr., 2007: Vertical velocities and available potential energy generated by landscape variability - theory. *J. Appl. Meteor. Climatology*, submitted.

- R-262 Anderson, C.J., R.W. Arritt, E.S. Takle, Z. Pan, W.J. Gutowski, Jr., F.O. Otieno, R. da Silva, D. Caya, J.H. Christensen, D. Lüthi, M.A. Gaertner, C. Gallardo, F. Giorgi, S.-Y. Hong, C. Jones, H.-M. H. Juang, J.J. Kitzfey, W.M. Lapenta, R. Laprise, J.W. Larson, G.E. Liston, J.L. McGregor, R.A. Pielke Sr., J.O. Roads, and J.A. Taylor, 2003: Hydrological processes in regional climate model simulations of the central United States flood of June-July 1993. *J. Hydrometeor.*, **4**, 584-598.
- R-263 Dalu, G.A., M. Baldi, R.A. Pielke Sr., and G. Leoncini, 2003: Mesoscale nonhydrostatic and hydrostatic pressure gradient forces: Theory and parameterization. *J. Atmos. Sci.*, **60**, 2249-2266.
- R-264 Pielke Jr., R.A., J. Abraham, E. Abrams, J. Block, R. Carbone, D. Chang, K. Droegemeier, K. Emanuel, E.W. Friday Jr., R. Gall, J. Gaynor, R. Getz, T. Glickman, B. Hoggatt, W.H. Hooke, E.R. Johnson, E. Kalnay, J. Kimpel, P. Kocin, B. Marler, R. Morss, R. Nathan, S. Nelson, R.A. Pielke Sr., M. Pirone, E. Prater, W. Qualley, K. Simmons, M. Smith, J. Thomson, and G. Wilson, 2003: The USWRP Workshop on the Weather Research needs of the private sector. *Bull. Amer. Meteor. Soc.*, **84**, ES53-ES67.
- R-265 Gero, A.F., A.J. Pitman, G.T. Narisma, C. Jacobson, and R.A. Pielke Sr., 2006: The impact of land cover change on storms in the Sydney Basin. *Global and Planetary Change*, **54**, 57-78.
- R-266 Ray, D.K., U.S. Nair, R.O. Lawton, R.M. Welch, and R.A. Pielke Sr., 2006: Impact of land use on Costa Rican tropical montane cloud forests. Sensitivity of orographic cloud formation to deforestation in the plains. *J. Geophys. Res.*, **111**, D02108, doi:10.1029/2005JD006096.
- R-267 Marland, G., R.A. Pielke, Sr., M. Apps, R. Avissar, R.A. Betts, K.J. Davis, P.C. Frumhoff, S.T. Jackson, L. Joyce, P. Kauppi, J. Katzenberger, K.G. MacDicken, R. Neilson, J.O. Niles, D. dutta S. Niyogi, R.J. Norby, N. Pena, N. Sampson, and Y. Xue, 2003: The climatic impacts of land surface change and carbon management, and the implications for climate-change mitigation policy. *Climate Policy*, **3**, 149-157.
- R-268 Davey, C.A., R.A. Pielke Sr., and K.P. Gallo, 2006: Differences between near-surface equivalent temperature and temperature trends for the eastern United States - Equivalent temperature as an alternative measure of heat content. *Global and Planetary Change*, **54**, 19-32.
- R-269 Niyogi, D., H.-I. Chang, V.K. Saxena, T. Holt, K. Alapaty, F. Booker, F. Chen, K.J. Davis, B. Holben, T. Matsui, T. Meyers, W.C. Oechel, R.A. Pielke Sr., R. Wells, K. Wilson, and Y. Xue, 2004: Direct observations of the effects of aerosol loading on the net ecosystem CO<sub>2</sub> exchanges over different landscapes. *Geophys. Res. Letts.*, **31**, L20506, doi:10.1029/2004GL020915.
- R-270 Tsukernik, M., R.G. Barry, T.N. Chase, M.C. Serreze, R.A. Pielke Sr., B. Herman, and X. Zeng, 2004: On the regulation of minimum mid-tropospheric temperatures in the Arctic. *Geophys. Res. Letts.*, **31**, L06112, doi:10.1029/2003GL018831.
- R-271 Chase, T.N., R.A. Pielke Sr., B. Herman, and X. Zeng, 2004: Likelihood of rapidly increasing surface temperatures unaccompanied by strong warming in the free troposphere. *Climate Res.*, **25**, 185-190.
- R-272 Marshall, C.H. Jr., R.A. Pielke Sr., L.T. Steyaert, and D.A. Willard, 2004: The impact of anthropogenic land cover change on warm season sensible weather and sea-breeze convection over the Florida peninsula. *Mon. Wea. Rev.*, **132**, 28-52.
- R-273 Matsui, T., S.M. Kreidenweis, R.A. Pielke Sr., B. Schichtel, H. Yu, M. Chin, D.A. Chu, and D. Niyogi, 2004: Regional comparison and assimilation of GOCART and MODIS aerosol optical depth across the eastern U.S. *Geophys. Res. Letts.*, **31**, L21101, doi:10.1029/2004GL021017.



- R-274 Davey, C.A., and R.A. Pielke Sr., 2005: Microclimate exposures of surface-based weather stations - implications for the assessment of long-term temperature trends. *Bull. Amer. Meteor. Soc.*, in press.
- R-275 Roy, S.S., R. Mahmood, D. Niyogi, M. Lei, S.A. Foster, K.G. Hubbard, E. Douglas, and R.A. Pielke Sr., 2007: Impacts of the agricultural Green Revolution - induced land use changes on air temperatures in India. *J. Geophys. Res. - Special Issue*, **112**, D21108, doi:10.1029/2007JD008834.
- R-276 Castro, C.L., and R.A. Pielke Sr., 2005: Dynamical downscaling: Assessment of value restored and added using the Regional Atmospheric Modeling System (RAMS). *J. Geophys. Res. - Atmospheres*, 110, No. D5, D05108, doi:10.1029/2004JD004721.
- R-277 Marshall, C.H. Jr., R.A. Pielke Sr., and L.T. Steyaert, 2004: Crop freezes and land use change in Florida *Nature*, 426, 29-30.
- R-278 Pielke Sr., R.A., and T.N. Chase, 2004: Technical Comment: Comment on "Contributions of anthropogenic and natural forcing to recent tropopause height changes." *Science*, **303**, 1771b.
- R-278a Santer, B.D., M.F. Wehner, T.M.L. Wigley, and R. Sausen, 2004: Technical Comment: "Response to Comment on "Contributions of anthropogenic and natural forcing to recent tropopause height changes." *Science*, 303, 1771c.
- R-279 Pielke Sr., R.A., D. Dutta S. Niyogi, T.N. Chase, and J.L. Eastman, 2003: A new perspective on climate change and variability: A focus on India. *Proc. Indian Natn. Sci. Acad.*, 69, No. 5, 585-602.
- R-280 Narisma, G.T., A.J. Pitman, J. Eastman, I.G. Watterson, R. Pielke Sr., and A. Beltran-Przekurat, 2003: The role of biospheric feedbacks in the simulation of the impact of historical land cover change on the Australian January climate. *Geophys. Res. Letts.*, **30**(22), 2168, doi:10.1029/2003GL018261.
- R-281 Marshall, C.H., R.A. Pielke Sr., L.T. Steyaert, 2004: Has the conversion of natural wetlands to agricultural land increased the incidence and severity of damaging freezes in south Florida. *Mon. Wea. Rev.*, **132**, 2243-2258.
- R-282 Strack, J.E., G.E. Liston, and R.A. Pielke Sr., 2004: Modeling snow depth for improved simulation of snow-vegetation-atmosphere interactions. *J. Hydrometeor.*, **5**, 723-734.
- R-283 Pitman, A.J., G.T. Narisma, R.A. Pielke Sr., and N.J. Holbrook, 2004: The impact of land cover change on the climate of southwest Western Australia. *J. Geophys. Res.*, **109**, D18109, doi:10.1029/2003JD004347.
- R-284 Peel, D., A.J. Pitman, L. Hughes, G. Narisma, and R.A. Pielke Sr., 2005: The impact of realistic biophysical parameters for eucalyptus on the simulation on the January climate of Australia. *Env. Modelling and Software*, **20**, **5**, 595-612, doi:10.1016/j.envsoft.2004.03.004.
- R-285 Pielke, R.A. Sr., N. Doesken, O. Bliss, T. Green, C. Chaffin, J.D. Salas, C. Woodhouse, J.L. Lukas, and K. Wolter, 2005: Drought 2002 in Colorado - An unprecedented drought or a routine drought? *Pure Appl. Geophys.*, Special Issue in honor of Prof. Singh, 162, 1455-1479, doi:10.1007/200024-005-2679-6.
- R-286 Baldi, M., G.A. Dalu, R.A. Pielke Sr., and F. Meneguzzo, 2005: Analytical evaluation of mesoscale fluxes and pressure field. *Environ. Fluid Mech.*, 5, 1-2, DOI: 10.1007/s10652-005-8089-6, 3-33.
- R-287 Matsui, T., H. Masunaga, R.A. Pielke Sr., and W-K. Tao, 2004: Impact of aerosols and atmospheric thermodynamics on cloud properties within the climate system. *Geophys. Res. Letts.*, **31**, No. 6, L06109, doi:10.1029/2003GL019287.
- R-288 Peters, D.P.C., R.A. Pielke Sr., B.T. Bestelmeyer, C.D. Allen, S. Munson-McGee, and K.M. Havstad, 2004: Cross-scale interactions, nonlinearities, and forecasting catastrophic events. *Proc. Natl. Acad. Sci.*, **101**, No. 42, 15130-15135.

- R-289 Campos Velho, H.F., R.R. Rosa, F.M. Ramos, R.A. Pielke Sr., and G.A. Degrazia, 2005: Representing intermittency in turbulent fluxes: An application to the stable atmospheric boundary layer. *Physica A*, 354, 88-94.
- R-290 Pielke, R.A. Sr., C. Davey, and J. Morgan, 2004: Assessing "global warming" with surface heat content. *Eos*, **85**, No. 21, 210-211.
- R-291 Nair, U.S., D.K. Ray, J. Wang, S.A. Christopher, T. Lyons, R.M. Welch, and R.A. Pielke Sr., 2007: Observational estimates of radiative forcing due to land use change in southwest Australia. *J. Geophys. Res.*, **112**, D09117, doi:10.1029/2006JD007505.
- R-292 Pielke R.A. Sr., and T. Vukicevic, 2005: Forum on modeling the atmospheric boundary layer. *Bull. Amer. Meteor. Soc.*, 86, 95-96.
- R-293 Hiemstra, C.A., G.E. Liston, R.A. Pielke Sr., and D. L. Birkenheuer, 2006: Comparing Local Analysis and Prediction Systems (LAPS) assimilations with observations. *Mon. Wea. Rev.*, 21, 1024-1040.
- R-294 Adegoke, J.O., R.A. Pielke Sr., and A.M. Carleton, 2007: Observational and modeling studies of the impacts of agriculture-related land use change on climate in the central U.S. *Agric. Forest Meteor., Special Issue*, Special Issue, 132, 203-215.
- R-295 Pielke, R.A. Sr., J.O. Adegoke, T.N. Chase, C.H. Marshall, T. Matsui, and D. Niyogi, 2007: A new paradigm for assessing the role of agriculture in the climate system and in climate change. *Agric. Forest Meteor., Special Issue*, 132, 203-215.
- R-296 Pielke Sr., R.A., T. Matsui, G. Leoncini, T. Nobis, U. Nair, E. Lu, J. Eastman, S. Kumar, C. Peters-Lidard, Y. Tian, and R. Walko, 2006: A new paradigm for parameterizations in numerical weather prediction and other atmospheric models. *National Wea. Digest*, **30**, 93-99.
- R-297 Beltrán-Przekurat, A., R.A. Pielke Sr., D.P.C. Peters, K.A. Snyder, and A. Rango, 2008: Modelling the effects of historical vegetation change on near surface atmosphere in the northern Chihuahuan Desert. *J. Arid Environments*, **72:10**, 1897-1910, doi:10.1016/j.jaridenv.2008.05.012.
- R-298 Matsui, T., H. Masunaga, S.M. Kreidenweis, R.A. Pielke Sr., W.-K. Tao, M. Chin, and Y.J. Kaufman, 2006: Satellite-based assessment of marine low cloud variability associated with aerosol, atmospheric stability, and the diurnal cycle. *J. Geophys. Res.*, **111**, D17204, doi:10.1029/2005JD006097.
- R-300 Douglas, E.M., D. Niyogi, S. Frolking, J.B. Yeluripati, R. A. Pielke Sr., N. Niyogi, C.J. Vörösmarty, and U.C. Mohanty, 2006: Changes in moisture and energy fluxes due to agricultural land use and irrigation in the Indian Monsoon Belt. *Geophys. Res. Letts*, **33**, doi:10.1029/2006GL026550.
- R-301 Davey, C., R.A. Pielke Sr., and T.N. Chase, 2008: Annual and seasonal tropospheric temperature trend comparisons of radiosonde and reanalysis data at regional scales. *Nat. Wea. Dig.*, in press
- R-302 Pielke Sr., R.A., and T. Matsui, 2005: Should light wind and windy nights have the same temperature trends at individual levels even if the boundary layer averaged heat content change is the same? *Geophys. Res. Letts.*, 32, No. 21, L21813, 10.1029/2005GL024407.
- R-303 Niyogi, D., H.-I. Chang, F. Chen, L. Gu, A. Kumar, S. Menon, and R.A. Pielke Sr., 2007: Potential impacts of aerosol-land-atmosphere interactions on the Indian monsoonal rainfall characteristics. *Natural Hazards*, Special Issue on Monsoons, Invited Contribution, DOI 10.1007/s11069-006-9085-y.
- R-304 Alpert, P., D. Niyogi, R.A. Pielke Sr., J.L. Eastman, Y.K. Xue, and S. Raman, 2006: Evidence for carbon dioxide and moisture interactions from the leaf cell up to global scales: Perspective on human-caused climate change. *Global and Planetary Change, Special Issue*, **54**, 202-208, <http://dx.doi.org/10.1016/j.gloplacha.2006.03.015>.

- R-305 Lin, J.C., T. Matsui, R.A. Pielke Sr., and C. Kummerow, 2006: Effects of biomass burning-derived aerosols on precipitation and clouds in the Amazon Basin: A satellite-based empirical study. *J. Geophys. Res.*, **111**, D19204, doi:10.1029/2005JD006884.
- R-306 Castro, C.L., R.A. Pielke Sr., and J. Adegoke, 2007: Investigation of the summer climate of the contiguous U.S. and Mexico using the Regional Atmospheric Modeling System (RAMS). Part I: Model climatology (1950-2002). *J. Climate*, **20**, 3844-3865.
- R-307 Castro, C.L., R.A. Pielke Sr., J. Adegoke, S.D. Schubert, and P.J. Pegion, 2007: Investigation of the summer climate of the contiguous U.S. and Mexico using the Regional Atmospheric Modeling System (RAMS). Part II: Model climate variability. *J. Climate*, **20**, 3866-3887.
- R-308 Truong, N.M., T.T. Tien, R.A. Pielke Sr., C.L. Castro, and G. Leoncini, 2009: A modified Kain-Fritsch scheme and its application for simulation of an extreme precipitation event in Vietnam. *Mon. Wea. Rev.*, accepted.
- R-309 Strack, J., R.A. Pielke Sr., and G. Liston, 2007: Arctic tundra shrub invasion and soot deposition: Consequences for spring snowmelt and near-surface air temperatures. *J. Geophys. Res.*, **112**, G04S44, doi:10.1029/2006JG000297.
- R-310 Chase, T.N., K. Wolter, R.A. Pielke Sr., and I. Rasool, 2006: Was the 2003 European summer heat wave unusual in a global context? *Geophys. Res. Lett.*, **33**, L23709, doi:10.1029/2006GL027470.
- R-310a Chase, T.N., K. Wolter, R.A. Pielke Sr., and Ichtiague Rasool, 2008: Reply to comment by W.M. Connolley on “Was the 2003 European summer heat wave unusual in a global context?” *Geophys. Res. Lett.*, **35**, L02704, doi:10.1029/2007GL031574.
- R-311 Pielke Sr., R.A., 2005: Land use and climate change. *Science*, **310**, 1625-1626.
- R-312 Matsui, T., and R.A. Pielke Sr., 2006: Measurement-based estimation of the spatial gradient of aerosol radiative forcing. *Geophys. Res. Lett.*, **33**, L11813, doi:10.1029/2006GL025974.
- R-313 Pielke, R.A. Sr., K. Wolter, O. Bliss, N. Doesken, and B. McNoldy, 2006: The July 2005 Denver heat wave: How unusual was it? *Nat. Wea. Dig.*, **31**, 24-35.
- R-314 Matsui, T., A. Beltran-Przekurat, R.A. Pielke Sr., D. Niyogi, and M. Coughenour, 2007: Continental-scale multi-objective calibration and assessment of Colorado State University Unified Land Model. Part I: Surface albedo. *J. Geophys. Res.*, **112**, G02028, doi:10.1029/2006JG000229.
- R-315 Pielke, R.A. Sr., J. Adegoke, A. Beltran-Przekurat, C.A. Hiemstra, J. Lin, U.S. Nair, D. Niyogi, and T.E. Nobis, 2007: An overview of regional land use and land cover impacts on rainfall. *Tellus B*, **59**, 587-601.
- R-316 Poulos, G.S., J.E. Bossert, T.B. McKee, and R.A. Pielke Sr., 2007: The interaction of katabatic flow and mountain waves. Part II: Case study analysis and conceptual model. *J. Atmos. Sci.*, **64**:6, 1857-1879.
- R-317 Pielke Sr., R.A., J. Adegoke, A. Beltran-Przekurat, C.A. Hiemstra, J. Lin, U.S. Nair, D. Niyogi, and T.E. Nobis, 2006: Impacts of regional land use and land cover on rainfall: An overview. *Hydrol. Sci. J.*, Climate Variability and Change—Hydrological Impacts (Proceedings of the Fifth FRIEND World Conference held at Havana, Cuba, November 2006), IAHS Publ. 308.
- R-318 Pielke Sr., R.A. J. Nielsen-Gammon, C. Davey, J. Angel, O. Bliss, N. Doesken, M. Cai., S. Fall, D. Niyogi, K. Gallo, R. Hale, K.G. Hubbard, X. Lin, H. Li, and S. Raman, 2007: Documentation of uncertainties and biases associated with surface temperature measurement sites for climate change assessment. *Bull. Amer. Meteor. Soc.*, **88**:6, 913-928.
- R-319 Castro, C.L. A. Beltrán-Przekurat, and R.A. Pielke Sr., 2009: Spatiotemporal variability of precipitation, soil moisture, and vegetation greenness in North America within the recent observational record. *J. Hydrometeor.*, accepted.

- R-320 Vukicevic, T., R.A. Pielke Sr., and A. Beltrán-Przekurat, 2009: New method for estimating the impact of heterogeneous forcing on atmospheric circulations. *J. Geophys. Res.*, 114, D07103, doi:10.1029/2008JD010418.
- R-321 Pielke Sr., R.A., C. Davey, D. Niyogi, S. Fall, J. Steinweg-Woods, K. Hubbard, X. Lin, M. Cai, Y.-K. Lim, H. Li, J. Nielsen-Gammon, K. Gallo, R. Hale, R. Mahmood, S. Foster, R.T. McNider, and P. Blanken, 2007: Unresolved issues with the assessment of multi-decadal global land surface temperature trends. *J. Geophys. Res.*, **112**, D24S08, doi:10.1029/2006JD008229.
- R-322 Pielke Sr., R.A., D. Stokowski, J.-W. Wang, T. Vukicevic, G. Leoncini, T. Matsui, C. Castro, D. Niyogi, C.M. Kishtawal, A. Biazar, K. Doty, R.T. McNider, U. Nair, and W.K. Tao, 2007: Satellite-based model parameterization of diabatic heating. *EOS*, **88**, No. 8, 20 February, 96-97.
- R-323 Mahmood, R., R.A. Pielke Sr., K.G. Hubbard, D. Niyogi, G. Bonan, P. Lawrence, B. Baker, R. McNider, C. McAlpine, A. Etter, S. Gameda, B. Qian, A. Carleton, A. Beltran-Przekurat, T. Chase, A.I. Quintanar, J.O. Adegoke, S. Vezhapparambu, G. Conner, S. Asefi, E. Sertel, D.R. Legates, Y. Wu, R. Hale, O.N. Frauenfeld, A. Watts, M. Shepherd, C. Mitra, V.G. Anantharaj, S. Fall, R. Lund, A. Nordfelt, P. Blanken, J. Du, H.-I. Chang, R. Leeper, U.S. Nair, S. Dobler, R. Deo, and J. Syktus, 2009: Impacts of land use land cover change on climate and future research priorities. *Bull. Amer. Meteor. Soc.*, accepted.
- R-324 Wu, Y., U.S. Nair, R.A. Pielke Sr., R.T. McNider, S.A. Christopher, and V. Anantharaj, 2009: Impact of land surface heterogeneity on mesoscale atmospheric dispersion. *Bound.-Layer Meteor.*, submitted.
- R-325 Rockel, B., C.L. Castro, R.A. Pielke Sr., H. von Storch, and G. Leoncini, 2008: Dynamical downscaling: Assessment of model system dependent retained and added variability for two different RCMs. *J. Geophys. Res.*, 113, D21107, doi:10.1029/2007JD009461.
- R-326 Leoncini, G., R.A. Pielke Sr., and P. Gabriel, 2008: From model based parameterizations to Lookup Tables: An EOF approach. *Wea. Forecasting*, **23**, 1127–1145.
- R-327 Schecter, D.A., M.E. Nicholls, J. Persing, A.J. Bedard Jr., and R.A. Pielke Sr., 2008: 2008: Infrasound emitted by tornado-like vortices: Basic theory and a numerical comparison to the acoustic radiation of a single-cell thunderstorm. *J. Atmos. Sci.*, 65, 685-713.
- R-328 Ray, D.K., R.A. Pielke Sr., and R.M. Welch, 2009: Importance of land use versus atmospheric information for regional climate simulations in frontier regions: Case study from Costa Rica. *J. Geophys.* **114**, doi:10.1029/2007JD009565.
- R-329 Fall, S., D. Niyogi, R.A. Pielke Sr., A. Gluhovsky, and E. Kalnay, 2009: Impacts of land surface properties on temperature trends using North American regional reanalysis over the USA. *Int. J. Climatol.*, DOI: 10.1002/joc.1996.
- R-330 Strack, J.E., R.A. Pielke Sr, and L.T. Steyaert, 2008: Sensitivity of summer near-surface temperatures and precipitation in the eastern United States to historical land cover changes since European settlement. *Water Resources Research*, **44**, W11401, doi:10.1029/2007WR00654.
- R-331 Douglas, E., A. Beltrán-Przekurat, D. Niyogi, R.A. Pielke, Sr., and C. J. Vörösmarty, 2009: The impact of agricultural intensification and irrigation on land-atmosphere interactions and Indian monsoon precipitation – A mesoscale modeling perspective. *Global Planetary Change*, doi:10.1016/j.gloplacha.2008.12.007, in press.
- R-332 Lo, J.C.-F., Z.-L. Yang, and R.A. Pielke Sr., 2008: Assessment of dynamical climate downscaling methods using the Weather Research and Forecasting (WRF) Model. *J. Geophys. Res.*, **113**, D09112, doi:10.1029/2007JD009216.

- R-333 Lin, X., R.A. Pielke Sr., K.G. Hubbard, K.C. Crawford, M. A. Shafer, and T. Matsui, 2007: An examination of 1997-2007 surface layer temperature trends at two heights in Oklahoma. *Geophys. Res. Letts.*, **34**, L24705, doi:10.1029/2007GL031652.
- R-334 Pielke Sr., R.A., 2008: A broader view of the role of humans in the climate system. *Physics Today*, **61**, Vol. 11, 54-55.
- R-335 Beltran-Przekurat, A., C.A. Marshall, and R.A. Pielke Sr., 2008: Ensemble re-forecasts of recent warm-season weather: Impacts of a dynamic 2 vegetation parameterization. *J. Geophys. Res. - Atmos.*, **113**, D24116, doi:10.1029/2007JD009480.
- R-336 Jamiyansharav, K., D. Ojima, R.A. Pielke Sr., W. Parton, J. Morgan, and Adriana Beltrán-Przekurat, 2008: Seasonal and interannual variability in surface energy partitioning in the Short Grass Steppe depending on the vegetation cover. *J. Appl. Meteor. Climatol.*, submitted.
- R-337 Wang, J.-W., K. Wang, R.A. Pielke, J.C. Lin, and T. Matsui, 2008: Does an atmospheric warming trend lead to a moistening trend over North America? *Geophys. Res. Letts.*, **35**, L18804, doi:10.1029/2008GL034564.
- R-338 Matsui, T., A. Beltrán-Przekurat, D. Niyogi, R.A. Pielke Sr., and M. Coughenour, 2008: Aerosol light scattering effect on terrestrial plant productivity and energy fluxes over the eastern U.S. *J. Geophys. Res. – Yoram J. Kaufman Symposium Issue*, **13**, D14S14, doi:10.1029/2007JD009658.
- R-339 Herman, B., M. Barlage, T.N. Chase, and R.A. Pielke Sr., 2008: Update on a proposed mechanism for the regulation of minimum mid-tropospheric and surface temperatures in the Arctic and Antarctic. *J. Geophys. Res.-Atmos.*, **113**, D24101, doi:10.1029/2008JD009799.
- R-340 Lei, M., D. Niyogi, C. Kishtawal, R. Pielke Sr., A. Beltrán-Przekurat, T. Nobis, and S. Vaidya, 2008: Effect of explicit urban land surface representation on the simulation of the 26 July 2005 heavy rain event over Mumbai, India. *Atmos. Chem. Phys. Discussions*, **8**, 8773–8816.
- R-341 Jamiyansharav, K., D. Ojima, and R.A. Pielke Sr., 2009: Exposure characteristics of the Mongolian weather stations. *Int. J. Climatology*, submitted.
- R-342 Christy, J.R., R.A. Pielke Sr., T.N. Chase, B. Herman, and J.J. Hnilo, 2009: Assessment of temperature trends in the troposphere deduced from thermal winds. In preparation.
- R-343 Beltran-Przekurat, A., R.A. Pielke Sr., J. Eastman, and M.B. Coughenour, 2009: Modeling the effects of land-use/land-cover changes on the near-surface atmosphere in southern South America. *Int. J. Climatol.*, submitted.
- R-344 Montandon, L.M., S. Fall, R.A. Pielke Sr., and D. Niyogi, 2009: Mean surface temperature trends are significantly affected by land cover bias in the Global Historical Climatology Network. *Int. J. Climatol.*, submitted.
- R-345 Klotzbach, P.J., R.A. Pielke Sr., R.A. Pielke Jr., and J.R. Christy, 2009: An alternative explanation for differential temperature trends at the surface and in the lower troposphere. *J. Geophys. Res.*, in press.
- R-346 Fall, S., N. Diffenbaugh, D. Niyogi, R.A. Pielke Sr., and G. Rochon, 2009: Temperature and equivalent temperature over the United States (1979 – 2005). *Int. J. Climatol.*, submitted.
- R-347 Pielke Sr., R.A., B.M. Herman, M.A. Brunke, and J.R. Christy, 2009: Assessment of the changes in the annual cycle of global warming and cooling. *Geophys. Res. Letts.*, submitted.
- R-348 Ray, D., R.A. Pielke Sr., U.S. Nair, and D. Niyogi, 2009: The roles of atmospheric and land surface data in dynamic regional downscaling, *J. Geophys. Res.*, submitted.
- R-349 Hossain, F., I. Jeyachandran, and R.A. Pielke Sr., 2009: Have large dams altered extreme precipitation patterns during the last Century? *Eos*, submitted.

- R-350 Alfieri, J., Xiao, X., Niyogi, D., Pielke, Sr., R. A., Chen, F., LeMone, M. A., 2009: Satellite-based modeling of transpiration and evaporation of grasslands and croplands in the Southern Great Plains, USA. *Global and Planetary Change*. **67**, 78–86.
- R-351 Hossain, F., I. Jeyachandran, and R.A. Pielke Sr., 2009: Dam safety effects due to human alteration of extreme precipitation. *Water Resources Research*, submitted.
- R-352 Kishtawal, C.M., D. Niyogi, M. Tewari, R.A. Pielke Sr., and J. Marshall Shepherd, 2009: Urbanization signature in the observed heavy rainfall climatology over India. *Int. J. Climatol.*, submitted.

## CHAPTERS IN BOOKS

- CB-1 Pielke, R.A., 1981: Mesoscale numerical modeling. Chapter in Volume 23, *Advances in Geophysics*, 186-344. (Editor B. Saltzman), Academic Press, New York, N.Y.
- CB-2 Pielke, R.A., 1982: The role of mesoscale numerical models in very short-range forecasting. *Nowcasting*, 207-221, (Editor K. Browning), Academic Press, New York, N.Y.
- CB-3 Pielke, R.A., 1985: Thermal and orographic mesoscale atmospheric systems - An essay. *Advances in Geophysics*, Volume 28B (the Joe Smagorinsky Festschrift), 203-222, Academic Press, New York, N.Y.
- CB-4 Pielke, R.A., C-H. Yu, R.W. Arritt, and M. Segal, 1984: Mesoscale air quality under stagnant conditions. *Air Pollution Effects on Parks and Wilderness Areas Conference*, May 20-23, 1984, Mesa Verde National Park, Colorado, 71-103.
- CB-5 Pielke, R.A. and M. Segal, 1986: Mesoscale circulations forced by differential terrain heating. *Mesoscale Meteorology and Forecasting*, P. Ray, Ed., AMS, Chapter 22, 516-548.
- CB-6 Forbes, G.S. and R.A. Pielke, 1985: Use of observational and model-derived fields and regime model output statistics in mesoscale forecasting. Presented at the Nowcasting Symposium at the IAMAP/IAPSO Joint Assembly, August 7, 1985, Honolulu, Hawaii. *ESA J.*, 207-225.
- CB-7 Pielke, R.A., M. Segal, R.W. Arritt, and M.D. Moran, 1987: Mesoscale influences on long range pollutant transport. In "Acid Deposition in Colorado - A Potential or Current Problem. Local Versus Long-Distance Transport into the State". R.A. Pielke, Ed. A compendium of papers presented at the CIRA Workshop on Acid Deposition in Colorado, Colorado State University, August 13-15, 1986 in Pingree Park, Colorado, 219-227 (see B-3).
- CB-8 Pielke, R.A., R.W. Arritt, M. Segal, M.D. Moran, and R.T. McNider, 1987: Mesoscale numerical modeling of pollutant transport in complex terrain. In "Interactions Between Energy Transformations and Atmospheric Phenomena. A Survey of Recent Research", M. Beniston and R.A. Pielke, Eds., D. Reidel Publishing Company, Dordrecht, Holland, 59-74.
- CB-9 Pielke, R.A., 1988: Evaluation of climate change using numerical models. In "Monitoring Climate for the Effects of Increasing Greenhouse Gas Concentrations. Proceedings of a Workshop". R.A. Pielke and T. Kittel, Eds., Cooperative Institute for Research in the Atmosphere (CIRA), Fort Collins, Colorado, August 1987, 161-172.
- CB-10 Paegle, J., R.A. Pielke, G.A. Dalu, W. Miller, J.R. Garratt, T. Vukicevic, G. Berri, and M. Nicolini, 1990: Predictability of flows over complex terrain. *AMS Meteorological Monograph on Atmospheric Processes over Complex Terrain*, William Blumen, Ed., **23**, 285-323.

- CB-11 Pielke, R.A. and R.A. Stocker, 1989: Air quality climatology of the WHITEX study area. Chapter 2 in *The National Park Service Report on the Winter Haze Intensive Tracer Experiment, Final Report*, December, 1989.
- CB-12 Stocker, R.A. and R.A. Pielke, 1989: Preliminary study of the use of a prognostic model to assess pollution transport during WHITEX. Chapter 7 in *The National Park Service Report on the Winter Haze Intensive Tracer Experiment, Final Report*, December, 1989.
- CB-13 Pielke, R.A. and R.A. Stocker, 1989: Climatology of extreme sulfate episodes. Chapter 8 in *The National Park Service Report on the Winter Haze Intensive Tracer Experiment, Final Report*, December, 1989.
- CB-14 Lee, T.J., R.A. Pielke, T.G.F. Kittel, and J.F. Weaver, 1993: Atmospheric modeling and its spatial representation of land surface characteristics. *Environmental Modeling with GIS*, M. Goodchild, B. Parks, and L.T. Steyaert, Eds. Oxford University Press, 108-122 (see PSNT-212).
- CB-15 Lyons, W.A., R.A. Pielke, W.R. Cotton, C.S. Keen, D.A. Moon, and N.R. Lincoln, 1992: Some considerations of the role of the land/lake breeze in causing elevated ozone levels in the southern Lake Michigan region. Chapter 9 in *Environmental Modeling*, P. Melli, and P. Zannetti, Eds. Computational Mechanics Publications, Southampton, UK, 151-171.
- CB-16 Pielke, R.A., G. Dalu, J.R. Garratt, T.G.F. Kittel, R.A. Stocker, T.J. Lee, and J.S. Snook, 1990: Influence of mesoscale landuse on weather and climate and its representation for use in large scale models. Indo-U.S. Seminar on "The Parameterization of Subgrid-Scale Processes in Dynamical Models of Medium-Range Prediction and Global Climate", Pune, India. August 6-10, 1990 (see PSNT-147), Wiley Eastern Limited, 537-586.
- CB-17 Pielke, R.A. and X. Zeng, 1994: Compounding of uncertainty in climate change scenarios. *Proceedings, Global Climate Change: Science, Policy, and Mitigation Strategies*, Air and Waste Management Association, Phoenix, Arizona, 5-8 April 1994, 393-401 (see PSNT-306).
- CB-18 Pielke, R.A., J. Eastman, L.D. Grasso, J. Knowles, M. Nicholls, R.L. Walko, and X. Zeng, 1995: Atmospheric vortices. In: *Fluid Vortices*, S. Green, Editor, Kluwer Academic Publishers, The Netherlands, 617-650.
- CB-19 Pielke, R.A., T.J. Lee, T.G.F. Kittel, T.N. Chase, J.M. Cram, and J.S. Baron, 1994: Effects of mesoscale vegetation distributions in mountainous terrain on local climate. In: *Mountain Environments in Changing Climates*, M. Beniston, Ed., Routledge Publishing Company, London and New York, 121-135.
- CB-20 Nicholls, M.E., R.A. Pielke, J.L. Eastman, C.A. Finley, W.A. Lyons, C.J. Tremback, R.L. Walko, and W.R. Cotton, 1995: Applications of the RAMS numerical model to dispersion over urban areas. In: *Wind Climate in Cities*, J.E. Cermak et al., Editors. Kluwer Academic Publishers, The Netherlands, 703-732.
- CB-21 Pielke, R.A., 1994: The status of mesoscale meteorological models. Chapter 3.3 in *Planning and Managing Regional Air Quality Modeling and Measurement Studies: A Perspective Through the San Joaquin Valley Air Quality Study and AUSPEX*. Lewis Publishers, Chelsea, Michigan, 435-463.
- CB-22 Walko, R.L. and R.A. Pielke, 1994: Simulations of PROJECT WIND cases with RAMS. Chapter 11 in *AMS Meteorological Monograph on Mesoscale Modeling of the Atmosphere*, R.A. Pielke and R.P. Pearce, Eds., 25, 97-122.
- CB-23 Pielke, R.A. Jr., and R.A. Pielke, Sr., 1995: Vulnerability to hurricanes along the U.S. Atlantic and Gulf Coasts: Considerations of the use of long-term forecasts. Chapter 8 in *Hurricanes: Climate and Socioeconomic Impacts*, Henry F. Diaz and Roger S. Pulwarty, Eds., Springer-Verlag, Berlin, Germany, 147-184.
- CB-24 Uliasz, M., R.A. Stocker, and R.A. Pielke, 1996: Regional modeling of air pollution transport in the southwestern United States. Chapter 5 in *Environmental Modeling, Volume III*, P. Zannetti, Ed., Computational Mechanics Publications, 145-181.

- CB-25 Lee, T.J. and R.A. Pielke Sr., 1996: GIS and atmospheric modeling: A case study. Chapter 45 in *GIS and Environmental Modeling: Progress and Research Issues*, M.F. Goodchild, L.T. Steyaert, B.O. Parks, C. Johnston, D. Maidment, M. Crane, and S. Glendening, Eds., GIS World Books, Fort Collins, CO, 239-242 (see PSNT-316).
- CB-26 Pielke, R.A. Sr., G. Dalu, J. Eastman, P.L. Vidale, and X. Zeng, 1998: Boundary layer processes and land surface interactions on the mesoscale. Chapter 7 in *Clear and Cloudy Boundary Layers*, A.A.M. Holtslag and P.G. Duynkerke, Eds., Royal Netherlands Academy of Arts and Sciences, PO Box 19121, 1000 G Amsterdam, The Netherlands, 155-176.
- CB-27 Pielke, R.A. Sr., G.E. Liston, L. Lu, and R. Avissar, 1999: Land-surface influences on atmospheric dynamics and precipitation. Chapter 6 in *Integrating Hydrology, Ecosystem Dynamics, and Biogeochemistry in Complex Landscapes*, J.D. Tenhunen and P. Kabat, Eds., John Wiley and Sons Ltd., 105-116.
- CB-28 Raupach, M.R., D.D. Baldocchi, H.-J. Bolle, L. Dümenil, W. Eugster, F.X. Meixner, J.A. Olejnik, R.A. Pielke Sr., J.D. Tenhunen, and R. Valentini, 1999: Group Report: How is the atmospheric coupling of land surfaces affected by topography, complexity in landscape patterning, and the vegetation mosaic? Chapter 9 in *Integrating Hydrology, Ecosystem Dynamics, and Biogeochemistry in Complex Landscapes*, J.D. Tenhunen and P. Kabat, Eds., John Wiley and Sons Ltd., 177-196.
- CB-29 Pielke Sr., R.A., 2002: Land-use/convection/regional climate. In: *Numerical Modeling of Tropical Mesoscale Processes*, S. Raman and U.C. Mohanty, Eds., New Delhi, India, submitted.
- CB-30 Pielke, R.A. Jr., and R.A. Pielke Sr., 2000: Introduction to Storms. Chapter 1 in Volume I of *Storms*, R.A. Pielke Jr. and R.A. Pielke Sr. Eds., Routledge Press, London, 3-10.
- CB-31 Chen, F., R.A. Pielke Sr. and K. Mitchell, 2001: Development and application of land-surface models for mesoscale atmospheric models: Problems and promises. In *Land-Surface Hydrology, Meteorology, and Climate: Observations and Modeling Water Science and Application*, V. Lakshmi, J. Alberston, and J. Schaake, Eds., American Geophysical Union, Volume 3, 107-135.
- CB-32 Pielke, R.A. Sr., and R. Avissar, 2001: Atmosphere/land surface biosphere. Section 4 in "Development and Calibration of Coupled Hydrological/Atmospheric Models. Report on The Value of Coupling in Hydrology (Pedosphere, Biosphere, Atmosphere)." Joint Project Between IHP-IHP-V and IGBP-BAHC.
- CB-33 Pielke, R.A. Sr. and L. Bravo de Guenni, Eds., 2004: How to evaluate vulnerability in changing environmental conditions. Chapter E In: *Vegetation, Water, Humans and the Climate: A New Perspective on an Interactive System*. Global Change - The IGBP Series, Springer, P. Kabat et al. Eds., 483-544.
- CB-34 Pielke, R.A. Sr., T.N. Chase, J. Eastman, L. Lu, G.E. Liston, M.B. Coughenour, D. Ojima, W.J. Parton, and T.G.F. Kittel, 2001: Land-atmosphere interactions. In: *Global Change and Protected Areas*, G. Visconti et al., Eds., Kluwer Academic Publishers, The Netherlands, 119-126.
- CB-35 Pielke, R.A. Sr., 2001: Earth system modeling -- An integrated assessment tool for environmental studies. In: Present and Future of Modeling Global Environmental Change: Toward Integrated Modeling, T. Matsuno and H. Kida, Eds., Terra Scientific Publishing Company, Tokyo, Japan, 311-337.
- CB-36 Pielke, R.A. Jr., and R.A. Pielke Sr., 2003: Hurricane as an extreme meteorological event. Chapter 42 in *Handbook of Weather, Climate, and Water*, T.D. Potter and B.R. Colman, Eds., Wiley-Interscience, John Wiley and Sons Inc., New York, NY, 789-805.
- CB-37 Pielke, R.A. Sr., 2004: Introduction. Chapter E.1 In: *Vegetation, Water, Humans and the Climate: A New Perspective on an Interactive System*. Global Change - The IGBP Series, P. Kabat et al. Eds., 483-484.



- CB-38 Pielke, R.A. Sr., G. Petschel-Held, P. Kabat, B. Bass, M.F. Hutchinson, V. Gupta, R.A. Pielke Jr., M. Claussen, and D.S. Ojima, 2004: Predictability and uncertainty. Chapter E.2 In: *Vegetation, Water, Humans and the Climate: A New Perspective on an Interactive System*. Global Change - The IGBP Series, Springer, P. Kabat et al., Eds., 485-490.
- CB-39 Bravo de Guenni, L., R.E. Schulze, R.A. Pielke Sr., and M.F. Hutchinson, 2004: The vulnerability approach. Chapter E.5 In: *Vegetation, Water, Humans and the Climate: A New Perspective on an Interactive System*. Global Change - The IGBP Series, Springer, P. Kabat et al., Eds., 499-514.
- CB-40 Pielke, R.A. Sr., 2004: Case studies. Chapter E.6 In: *Vegetation, Water, Humans and the Climate: A New Perspective on an Interactive System*. Global Change - The IGBP Series, Springer, P. Kabat et al., Eds., 515-536.
- CB-41 Pielke, R.A. Sr., and L. Bravo de Guenni, 2004: Conclusions. Chapter E.7 In: *Vegetation, Water, Humans and the Climate: A New Perspective on an Interactive System*. Global Change - The IGBP Series, Springer, P. Kabat et al., Eds., 537-538.
- CB-42 Salas, J.D., and R.A. Pielke Sr., 2003: Stochastic characteristics and modeling of hydroclimatic processes. Chapter 32 in *Handbook of Weather, Climate, and Water*, T.D. Potter and B.R. Colman, Eds., Wiley-Interscience, John Wiley and Sons Inc., New York, NY, 587-605.
- CB-43 Pielke Sr., R.A., G. Marland, R.A. Betts, T.N. Chase, J.L. Eastman, J.O. Niles, D. Niyogi, and S.W. Running, 2003: The influence of land-use change and landscape dynamics on the climate system: Relevance to climate-change policy beyond the radiative effect of greenhouse gases. Chapter 9 in *Capturing Carbon and Conserving Biodiversity: The Market Approach*, I.R. Swingland, Ed., Earthscan Publications Ltd., London, 157-172.
- CB-44 Pielke, R.A. Sr., and N.J. Doesken, 2008: Climate of the short grass steppe in the United States. In: *The Shortgrass Steppe: The Region and Research Sites*, W.K. Lauenroth and I.C. Burke, Eds., Oxford University Press, 14-29.
- CB-45 Avissar, R., C.P. Weaver, D. Werth, R.A. Pielke Sr., R. Rabin, A.J. Pitman, and M.A. Silva Dias, 2004: The regional climate. Chapter A.3 In: *Vegetation, Water, Humans and the Climate: A New Perspective on an Interactive System*. Global Change - The IGBP Series, P. Kabat et al., Eds., Springer, 21-32.
- CB-46 Salas, J.D., J.A. Ramirez, P. Burlando, and R.A. Pielke, Sr., 2003: Stochastic simulation of precipitation and streamflow processes. Chapter 33 in *Handbook of Weather, Climate, and Water*, T.D. Potter and B.R. Colman, Eds., Wiley-Interscience, John Wiley and Sons Inc., New York, NY, 607-640.
- CB-47 Salas, J.D., and R.A. Pielke Sr., 2003: Stochastic characteristics and modeling of hydroclimatic processes. Chapter 32 in *Handbook of Weather, Climate, and Water*, T.D. Potter and B.R. Colman, Eds., Wiley-Interscience, John Wiley and Sons Inc., New York, NY, 587-605.
- CB-48 Chase, T.N., R.A. Pielke Sr., and R. Avissar, 2007: Teleconnections in the Earth system. *Encyclopedia of Hydrological Sciences*, M. Anderson, Editor-in-Chief, John Wiley and Sons, United Kingdom, 2849-2862.
- CB-49 Niyogi, D. dutta S., R.A. Pielke Sr., K. Alapaty, J. Eastman, T. Holt, U.C. Mohanty, S. Raman, T.K. Roy, and Y.K. Xue, 2003: Challenges of land-surface processes in the tropics: Examples over the Indian subcontinent. In: *Weather and Climate Modeling*, S.V. Singh, S. Basu, and T.N. Krishnamurti, Eds., New Age International Limited Publishers, New Delhi, 132-145.
- CB-50 Pielke, R.A. Sr., C. Marshall, R.L. Walko, L.T. Steyaert, P.L. Vidale, G.E. Liston, W.A. Lyons, and T.N. Chase, 2005: The influence of anthropogenic landscape changes on weather in south Florida. Chapter 4.8 in *Coupled Models for the Hydrological Cycle* -

- Integrating Atmosphere, Biosphere and Pedosphere*, A. Bronstert, J. Carrera, P. Kabat, and S. Lütke-meier, Eds., Springer, 346 pp.
- CB-51 Peters, D.P.C., R.A. Pielke, Sr., B.T. Bestelmeyer, C.D. Allen, S. Munson-McGee, and K.M. Havstad, 2007: Spatial nonlinearities: Cascading Effects in the Earth Systems. The GCTE Synthesis. In: Canadell, J.G., D.E. Pataki, and L.F. Pitelka (eds.), *Terrestrial Ecosystems in a Changing World*. Springer, 165-174.
- CB-52 van der Molen, M.K., H.F. Vugts, L.A. Vrujinzeel, F.N. Scatena, R.A. Pielke, and L.J.M. Kroon, 2008: Mesoscale climate change due to lowland deforestation in the maritime tropics. In: *Mountains in the Mist, Science for conserving and managing Tropical Montane Cloud Forest*. L.A. Bruijnzeel, J. Juvik, F.N. Scatena, L.S. Hamilton and P. Bubb (Eds.). University of Hawaii Press, in press.
- CB-53 Nair, U.S., D.K. Ray, R.O. Lawton, R.M. Welch, R.A. Pielke Sr., and J. Calvo, 2008: The impact of deforestation on orographic cloud formation in a complex tropical environment. In: *Mountains in the Mist, Science for conserving and managing Tropical Montane Cloud Forest*. L.A. Bruijnzeel, J. Juvik, F.N. Scatena, L.S. Hamilton and P. Bubb (Eds.). University of Hawaii Press. in press.
- CB-54 Pielke Sr. R.A., and D. Niyogi, 2008: The role of landscape processes within the climate system. In: Otto, J.C. and R. Dikaum, Eds., *Landform - Structure, Evolution, Process Control: Proceedings of the International Symposium on Landforms organised by the Research Training Group 437. Lecture Notes in Earth Sciences*, Springer, Vol. 115, in press.
- CB-55 Beltrán-Przekurat, A., R.A. Pielke Sr., J.L. Eastman, G.T. Narisma, A.J. Pitman, M. Lei, and D. Niyogi, 2009: Using the Factor Separation Method for land-use land-cover change impacts on weather and climate process with the Regional Atmospheric Modeling System. In: *The Factor Separation Method in the Atmosphere-Applications and Future Prospects*, Cambridge University Press, submitted.

## BOOKS

- B-1 Pielke, R.A., 1984: *Mesoscale meteorological modeling*. Academic Press, New York, N.Y., 612 pp. (Translated into Chinese with corrections by the Chinese Meteorological Press, 1990.)
- B-2 Beniston, M. and R.A. Pielke, Editors, 1987: *Interactions between energy transformations and atmospheric phenomena. A survey of recent research*. Reprinted from *Boundary-Layer Meteorology*, Volume 41, Nos. 1-4 (1987), D. Reidel Publishing Company, Dordrecht, Holland, 426 pp.
- B-3 Pielke, R.A., Editor, 1987: *Acid deposition in Colorado - A potential or current problem, local versus long-distance transport into the state*. A compendium of papers presented at a workshop sponsored by the Cooperative Institute for Research in the Atmosphere, Colorado State University, Fort Collins, Colorado, August 1-15, 1986, 230 pp.
- B-4 Pielke, R.A. and T. Kittel, Editors, 1988: *Monitoring climate for the effects of increasing greenhouse gas concentrations*. A Compendium of Papers Presented at a Workshop Sponsored by the Cooperative Institute for Research in the Atmosphere, Pingree Park, Colorado, August 26-28, 1987.
- B-5 Pielke, R.A., 1990: *The Hurricane*. Routledge Press, London, England, 228 pp.
- B-6 Committee on Scholarly Communication with the People's Republic of China, 1992: *Grasslands and Grassland Sciences in Northern China*, Office of International Affairs, National Research Council, National Academy Press, Washington, D.C., 214 pp.
- B-7 Rotunno, R., J.A. Curry, C.W. Fairall, C.A. Friehe, W.A. Lyons, J.E. Overland, R.A. Pielke, D.P. Rogers, S.A. Stage, G.L. Geernaert, J.W. Nielsen, and W.A. Sprigg, 1992: *Coastal Meteorology - A Review of the State of the Science*. Panel on Coastal Meteorology, Committee on Meteorological Analysis, Prediction, and Research, Board on Atmospheric Sciences and Climate, Commission on Geosciences, Environment, and Resources, National Research Council, National Academy Press, Washington, D.C., 99 pp.
- B-8 Cotton, W.R. and R.A. Pielke, 1995: *Human Impacts on Weather and Climate*, Cambridge University Press, New York, 288 pp.
- B-9 Pielke, R.A., 1995: *A Primer on Weather and Climate*, in preparation.
- B-10 Pielke, R.A. and R.P. Pearce, Editors, 1994: *Mesoscale Modeling of the Atmosphere*. American Meteorological Society Monograph, Volume 25, 167 pp.
- B-11 Pielke, R.A., Jr. and R.A. Pielke, Sr., 1997: *Hurricanes: Their nature and impacts on society*. John Wiley and Sons, England, 279 pp.
- B-12 Pielke, R.A., Jr. and R.A. Pielke, Sr., Editors, 2000: *Storms, Volumes I and II*, Routledge Press, London.
- B-13 Pielke, R.A. Sr., 2002: *Mesoscale meteorological modeling*. 2nd edition. Academic Press, San Diego, 676 pp.
- B-14 Kabat, P., Claussen, M., Dirmeyer, P.A., J.H.C. Gash, L. Bravo de Guenni, M. Meybeck, R.A. Pielke Sr., C.J. Vorosmarty, R.W.A. Hutjes, and S. Lutkemeier, Editors, 2004: *Vegetation, water, humans and the climate: A new perspective on an interactive system*. Global Change - The IGBP Series, Springer, 566 pp.
- B-15 National Research Council, 2003: *Managing carbon monoxide pollution in meteorological and topographical problem areas*. The National Academies Press, Washington, DC, 196 pp.
- B-16 National Research Council, 2005: *Radiative forcing of climate change: Expanding the concept and addressing uncertainties*. Committee on Radiative Forcing Effects on Climate Change, Climate Research Committee, Board on Atmospheric Sciences and

- Climate, Division on Earth and Life Studies, The National Academies Press, Washington, D.C., 208 pp.
- B-17 Cotton, W.R. and R.A. Pielke, 2007: *Human impacts on weather and climate*, Cambridge University Press, 330 pp.

## NON-TECHNICAL PAPERS PUBLISHED

- NT-1 Pielke, R.A., 1975: The influence of the sea breeze on weather and man. *Weather*, **30**, 208-221.
- NT-2 Pielke, R.A., 1975: Ice fall from a clear sky in Fort Pierce, Florida. *Weatherwise*, **28**, 156-160.
- NT-3 Pielke, R.A., 1977: Summary of the sessions on problems in forecasting, AMS 57th Annual Meeting, *Bull. Amer. Meteor. Soc.*, **58**, 404-407.
- NT-4 Pielke, R.A., 1978: Another horizontal funnel cloud. *Bull. Amer. Meteor. Soc.*, **59**, 1168-1169.
- NT-5 Pielke, R.A., 1978: Air pollution - A national concern. *Bull. Amer. Meteor. Soc.*, **59**, 1461.
- NT-6 Reviewed Text Air Pollution and Human Health by L.B. Lave and E.P. Seskin, 1977, for the *Bull. Amer. Meteor. Soc.*, **60**, 804 (April 1978).
- NT-7 Pielke, R.A., 1979: Weatherwise queries.
- NT-8 The following articles were accepted for publication in an encyclopedia entitled The Academic American Encyclopedia by the Arete Publishing Company, Inc., Princeton, New Jersey. Approximate number of words in parentheses:
- Smog (150)
  - Weather Forecasting (1500)
  - Clouds (700)
  - Ocean-Atmosphere Interaction (1000)
  - Noctilucent Cloud (100)
  - Nacreous Cloud (100)
  - Beaufort Scale (250)
  - Rachel Carson (100)
  - Jacques-Yves Cousteau (250)
  - International Ice Patrol (100)
  - Stratus Clouds (200)
  - Cirrus Clouds (200)
  - Cumulonimbus Clouds (150)
  - Cumulus Clouds (200)
  - Front (in meteorology) (300)
  - Hadley Cell (150)
  - Hail and Hailstones (300)
  - Inversion (in meteorology) (200)
- NT-9 Nappo, C.J., J.Y. Caneill, R.W. Furman, F.A. Gifford, J.C. Kaimal, M.L. Kramer, T.J. Lockhart, M.M. Pendergast, R.A. Pielke, D. Randerson, J.H. Shreffler, and J.C. Wyngaard, 1982: The workshop on the representativeness of meteorological observations, June 1981, Boulder, Colorado. *Bull. Amer. Meteor. Soc.*, **63**, 761-764.
- NT-10 Pielke, R.A., 1983: Definition of mesoscale.
- NT-11 Pielke, R.A., 1984: Earth sciences: Atmospheric sciences - 1983, *Encyclopedia Britannica Yearbook of Science and the Future*, 279-282.
- NT-12 Pielke, R.A. and R.W. Arritt, 1984: A proposal to standardize models. *Bull. Amer. Meteor. Soc.*, **65**, 1082.
- NT-13 Pielke, R.A., 1984: COASTS announcement. *Bull. Amer. Meteor. Soc.*, **64**, 962.
- NT-14 Pielke, R.A., 1985: Earth sciences: Atmospheric science - 1984. *Encyclopedia Britannica Yearbook of Science and the Future*, 284-287.

- NT-15 Pielke, R.A., W.M. Frank, R.A. Maddox, and K.E. Trenberth, 1985: Editorial. *Mon. Wea. Rev.*, **113**, December, 1985.
- NT-16 Pielke, R.A., 1986: Earth sciences: Atmospheric sciences - 1985. *Encyclopedia Britannica Yearbook of Science and the Future*, 348-353.
- NT-17 Pielke, R.A., 1987: Earth sciences: Atmospheric sciences. *Encyclopedia Britannica*.
- NT-18 Pielke, R.A., 1986: Is it normal weather in Fort Collins today? *Triangle Review*, July 2, 1986.
- NT-19 Pielke, R.A., 1987: Earth science: Atmospheric science - 1986. *Encyclopedia Britannica Yearbook of Science and the Future*, 345-349.
- NT-20 Pielke, R.A., 1988: Earth science: Atmospheric science - 1987. *Encyclopedia Britannica Yearbook of Science and the Future*, 306-309.
- NT-21 Pielke, R.A. and R.G. Derickson, 1989: Cumulative effects of risk associated with environmental hazards, including air pollution. *Bull. Amer. Meteor. Soc.*, **70**, 788.
- NT-22 Gibbons, C., *et al.*, 1988: Final report and recommendations of Governor Roy Romer's Blue Ribbon Diesel Task Force.
- NT-23 Pielke, R.A., 1989: Earth science: Atmospheric science - 1988. *Encyclopedia Britannica Yearbook of Science and the Future*, 318-321.
- NT-24 Pielke, R.A., 1989: AMS Book Review of "Short- medium- range numerical weather prediction. *Bull. Amer. Meteor. Soc.*, **70**, 533-534.
- NT-25 Pielke, R.A., 1990: Earth science: Atmospheric science - 1989. *Encyclopedia Britannica Yearbook of Science and the Future*, 310-313.
- NT-26 Pielke, R.A., 1991: Earth science: Atmospheric science - 1990. *Encyclopedia Britannica Yearbook of Science and the Future*, 309-312.
- NT-27 Pielke, R.A., 1991: A recommended specific definition of "resolution". *Bull. Amer. Meteor. Soc.*, **72**, 1914.
- NT-28 Pielke, R.A., 1992: The warming mania. *Rocky Mountain News*, Sunday, September 27, 1992.
- NT-29 Pielke, R.A., 1992: Earth science: Atmospheric science - 1991. *Encyclopedia Britannica Yearbook of Science and the Future*, 311-314.
- NT-30 Pielke, R.A., 1993: Scientific input to policy and judicial decisions. *Bull. Amer. Meteor. Soc.*, **74**, 1929-1930.
- NT-31 Pielke, R.A., 1992: The winds of woe: Planning, research can help soften the blow. *Rocky Mountain News*, Sunday, December 13, 1992.
- NT-32 Pielke, R.A., 1993: Earth science: Atmospheric science - 1992. *Encyclopedia Britannica Yearbook of Science and the Future*, 316-319.
- NT-33 Pielke, R.A., 1993: Quality policy: Independent input would improve air commission. *Rocky Mountain News*, Sunday, February 28, 1993.
- NT-34 Pielke, R.A., 1993: What's normal? Almost anything when it comes to Colorado Weather. *Rocky Mountain News*, Sunday, June 13, 1993.
- NT-35 Pielke, R.A., 1994: Earth science: Atmospheric science - 1993. *Encyclopedia Britannica Yearbook of Science and the Future*, 315-318.
- NT-36 Pielke, R.A., 1995: Atmosphere-terrestrial ecosystem modeling. *Encyclopedia of Environmental Biology*, Volume 1, Academic Press, 139-145.
- NT-37 Pielke, R.A., 1994: Pristine visibility in Colorado. *Rocky Mountain News*, Sunday, March 27, 1994, 92.
- NT-38 Pielke, R.A., 1994: Don't rely on computer models to judge global warming. *The Christian Science Monitor*, Wednesday, August 24, 1994, 19.
- NT-39 Pielke, R.A., 1994: Modeling the effect of land surface on weather. *Engineering Review*, **7**, 19-21.
- NT-40 Pielke, R.A., 1994: The inside and out of air pollution. *Rocky Mountain News*, Sunday, October 23, 1994, 86A.

- NT-41 Pielke, R.A., 1995: Earth science: Atmospheric science - 1994. *Encyclopedia Britannica Yearbook of Science and the Future*, 344-348.
- NT-42 Pielke, R.A., 1995: Preface. IUGG Quadrennial Report, American Geophysical Union.
- NT-43 Pielke, R.A., 1998: Thunderstorm. Microsoft Encarta Encyclopedia.
- NT-44 Pielke, R.A., 1998: Rain shadow. Microsoft Encarta Encyclopedia.
- NT-45 Pielke, R.A., 1998: Tropical storms. Microsoft Encarta Encyclopedia.
- NT-46 Pielke, R.A., 1998: The need to assess uncertainty in air quality evaluations. *Atmos. Environ.*, **32**, 1467-1468.
- NT-47 Pielke, R.A., 1997: Reviewed *Boundary Layer Meteorology* by John R. Garratt and P.A. Taylor for the Australian Meteorological Magazine, **46**, 248-249.
- NT-48 Pielke, R.A., 1999: Tropical storms. Microsoft Encarta Encyclopedia.
- NT-50 Pielke, R.A. Sr., 2000: What is climate? *Colorado Climate*, **1**, No. 1, 1-2.
- NT-51 Pielke, R.A. Sr., 2000: Is our weather today "normal"? *Colorado Climate*, **1**, No. 1, 3.
- NT-52 Pielke, R.A. Sr., and N. Doesken, 2000: Growing season trends across eastern Colorado. *Colorado Climate*, **1**, No. 2, 3-4.
- NT-53 Pielke, R.A. Sr., 2000: Can we predict Colorado climate in the 21st Century? *Colorado Climate*, **1**, No. 2, 5.
- NT-54 Pielke, R.A. Sr., 2000: Atmosphere. Encyclopedia Britannica.
- NT-55 Pielke, R.A. Sr., 2000: Atmospheric sciences. Encyclopedia Britannica.
- NT-56 Pielke, R.A. Sr., 1999: Storm-chaser reaps the whirlwind. Review of "*Tornado Alley: Monster Storms of the Great Plains*" by Howard B. Bluestein. *Nature*, March 25, 1999, 304.
- NT-57 Pielke, R.A. Sr., 2001: Can a megadrought occur in Colorado? *Colorado Climate*, **1**, No. 4.
- NT-58 Herman, B.M., X. Zeng, T. Chase, R. Pielke Sr., 2002: More heat over greenhouse gases. *Physics Today*, **55**, 14.
- NT-59 Pielke, R.A. Sr., 2002: Mesoscale atmospheric modeling. *Encyclopedia of Physical Science and Technology*, Third Edition, Academic Press, Volume 9, 383-389.
- NT-60 Pielke, R.A. Sr., 2002: Feedbacks. Encyclopedia of Global Environmental Change. John Wiley and Sons.
- NT-61 Pielke, R.A. Sr., 2002: Convection. Encyclopedia of Global Environmental Change, John Wiley and Sons.
- NT-62 Pielke, R.A. Sr., 2002: Land cover and climate. Encyclopedia of Global Environmental Change. John Wiley and Sons.
- NT-63 Pielke, R.A. Sr., 2002: Planetary boundary layer. Encyclopedia of Global Environmental Change. John Wiley and Sons.
- NT-64 Pielke, R.A. Sr., 2003: Land/sea breeze. Encyclopedia of Atmospheric Sciences, J.R. Holton, J. Pyle and J.A. Curry, Eds., Elsevier Science, Academic Press, 1136-1140.
- NT-65 Pielke, R.A. Sr., 2002: Mesoscale meteorology: Models. Encyclopedia of Atmospheric Sciences, J.R. Holton, J. Pyle and J.A. Curry, Eds., Elsevier Science, Academic Press, 1261-1264.
- NT-66 Pielke, R.A. Sr., 2002: Foreword. In: *Hurricane! Coping with Disaster*. R. Simpson, R. Anthes, M. Garstang. Eds., American Geophysical Union, Special Publication, Vol. 55, Washington, D.C., pgs v-vi.
- NT-67 Gupta, V. (Chair), M. Moss, C. Duffy, R. Grossman, W. Krajewski, U. Lall, M. McCaffrey, B. Milne, R. Pielke Sr., K. Reckhow, and F. Swanson, 2001: Hydrology (Summary of the Water, Earth and Biota (WEB) Initiative as a 2000 Highlight for Geosciences). *Geotimes*, **46**, 25-26.
- NT-68 Pielke, R.A. Sr., N. Doesken, O. Bliss, and D. Staley, 2002: Blizzards in Northeastern Colorado. *Colorado Climate*, Spring 2002, Vol. 3, No. 2, 10-12,
- NT-69 Pielke, R.A. Sr., 2002: State Climatologists issue policy on climate change. *EOS*, **83**, 15.

- NT-70 Pielke, R.A. Sr., 2002: Question predictions: Research turns focus to long-term climate effects. In: 2002 Annual Report, Colorado Agricultural Experiment Station, Colorado State University, 12-13.
- NT-71 Pielke, R.A. Sr., and R. Waskom, 2003: Colorado drought of 2002 - Historic or routine? *Headwaters Magazine*, in press.
- NT-72 Ward, R., R. Pielke Sr., and J. Salas, Eds., 2003: Preface: Is global climate change research relevant to day-to-day water resources management? *Water Resources Update*, **124**, 1-3.
- NT-73 Pielke Sr., R.A., 2005: Foreword. Ecological Studies. In: Hazards, Solutions. Volume 10, Moscow, Max Press.
- NT-74 Mahmood, R., R.A. Pielke Sr., and K.G. Hubbard, 2007: Effects of human activities on the atmosphere. Meeting Report, Detecting the Atmospheric Response to the Changing Face of the Earth: A Focus on Human-Caused Regional Climate Forcings, Land-Cover/Land-Use Change, and Data Monitoring, Boulder, Colorado, 27-29 August 2007, Eos Trans. AGU, 88(52), 580, 10.1029/2007EO520007.
- NT-75 Pielke Sr., R.A., 2008: Global climate models - Many contributing influences. Citizen's Guide to Colorado Climate Change, Colorado Climate Foundation for Water Education, pp. 28-29.
- NT-76 Pielke Sr., R.A., 2009: Comment on "James Hurrell, Gerald A. Meehl, David Bader, Thomas L. Delworth, Ben Kirtman, and Bruce Wielicki, 2009: A Unified Modeling Approach to Climate System Prediction. Bull. Amer. Meteor. Soc., in press", Bull. Amer. Meteor. Soc., submitted.



## REPORTS

- RPT-1 Pielke, R.A., 1976: Inadvertent weather modification potentials due to microwave transmissions and the thermal heating at SPS rectenna sites. In consultation with M. Garstang, J. Simpson and R.H. Simpson for Lockheed Electronics Company, Inc.
- RPT-2 Pielke, R.A., 1983: An assessment of the trajectory contractor's methodology. Consulting report for the Air Impact Analysis and Planning Section, Wisconsin Department of Natural Resources.
- RPT-3 Pielke, R.A., 1984: Assessment of the Phase I report prepared by C.T. Main, Inc., Consulting report for the Air Impact Analysis and Planning Section, Wisconsin Department of Natural Resources.
- RPT-4 Pielke, R.A., 1984: Comments on overall study protocol for the south central coast cooperative aerometric monitoring program. Consulting report for Western Oil and Gas Association.
- RPT-5 Segal, M., R.T. McNider, and R.A. Pielke, 1985: Report on the use of a mesoscale primitive equation model in the design of the 1985 SCCAMP. Prepared for the Western Oil and Gas Association, June 1985.
- RPT-6 Segal, M., R.T. McNider, R.A. Pielke, and D. Abbs, 1985: Forecasting sea-breeze thunderstorms using a mesoscale numerical model - synopsis of modeling. Report prepared for R\*SCAN Corporation, Minneapolis, Minnesota.
- RPT-7 Lyons, W.A. and R.A. Pielke, 1985: Forecasting sea breeze thunderstorms using a mesoscale numerical model. Final Report, R\*SCAN Corporation, submitted to NASA, contract # NAS10-11142, August 1985.
- RPT-8 Pielke, R.A., 1986: Independent assessment of the Phase II report. Consulting report for the Air Impact Analysis and Planning Section, Wisconsin Department of Natural Resources.
- RPT-9 Pielke, R.A., 1987: Appellant's reply to the forest supervisors responsive statement. Affidavit of Roger A. Pielke. In ``Appeal of the Decision of the Forest Supervisor to Issue a Special Use Permit for the East Fork Valley Ski Area - San Juan National Forest. November 1987.
- RPT-10 Pielke, R.A., W. Lyons, and W. Gray, 1988: Assessment of knowledge relating to long-term changes in Florida's climate due to natural and anthropogenic climate perturbations on the global and local scales. Consulting report for South Florida Water Management District, West Palm Beach, Florida. March, 1988.
- RPT-11 Pielke, R.A. and W. Gray, 1988: Current level of knowledge regarding the predictability of changes in south Florida weather due to major natural large scale atmospheric perturbations. Consulting report for South Florida Water Management District, West Palm Beach, Florida. March, 1988.
- RPT-12 Pielke, R.A. and D.A. Wesley, 1988: A summary of atmospheric conditions associated with 48 high-pollution days in Fort Collins, Colorado (12/1/80-2/1/88), and additional recommended local data collection procedures. Consulting report for the City of Fort Collins.
- RPT-13 Pielke, R.A. and D.A. Wesley, 1988: A forecasting procedure for high-pollution episodes in Fort Collins, Colorado. Consulting report for the City of Fort Collins.
- RPT-14 Pielke, R.A., 1988: Numerical meteorological modeling as relevant to eastern, central, and southern Africa. Workshop on Numerical Weather Prediction over Eastern, Central, and Southern Africa. August 1-12, 1988, Nairobi, Kenya.
- RPT-15 Pielke, R.A., 1989: The status of subregional and mesoscale models for air quality and meteorology: Volume 2. Mesoscale meteorological models in the United States.

- Environment, Health, and Safety Report 009.5-90.4, December, Pacific Gas and Electric Company, San Ramon, California.
- RPT-16 Pielke, R.A., 1988: Implementation of select statistical evaluations. Consulting report for Systems Applications, Inc., San Rafael, California.
- RPT-17 Pielke, R.A. and M.D. Moran, 1989: Preliminary overview of the influence of mesoscale circulations on long-range transport and dispersion. Summary to Dr. George Hidy, President, Electric Research Power Institute, Palo Alto, California.
- RPT-18 Pielke, R.A., 1989: Summary of the February 23-24, 1989 Lawrence Berkeley Laboratory Heat Island Workshop. Prepared for Dr. Gordon Beals, Electric Research Power Institute, Palo Alto, California.
- RPT-19 Pielke, R.A., 1989: Recommendation regarding two-way interactive models. Prepared for the U.S. Army Atmospheric Sciences Laboratory, 16th Meeting of the Mesomet Advisory Panel, April 10-14, 1989.
- RPT-20 Anderson, L.G., J.J. Leto, P. Rolniak, J. Swanson. J.G. Milliken, R.A. Pielke, C.S. Smith, D.H. Stedman, G.C. Woodard, 1990: Benefits and costs of oxygenated fuels in Colorado. Milliken Research Group, Inc., Littleton, Colorado, 190 pp + appendices.
- RPT-21 Lyons, W.A., and R.A. Pielke, Co-Principal Investigators, 1990: Final Report: Predicting 3-D windflows at Cape Canaveral Air Force Station using a mesoscale numerical model. Phase I, Small Business Innovation Research Program prepared for US Air Force/AFSC, HQ Space Systems Division, Los Angeles, CA, Contract No. F4701-89-C-0052.
- RPT-22 Final Report of the Governor's Rocky Flats Scientific Panel on Monitoring Systems, October 1990. Submitted to Governor Romer, The U.S. Department of Energy, The Colorado Department of Health.
- RPT-23 Biggs, W.G., J. Cermak, R.A. Pielke, and R. Sievers, 1990: Attachment 4.1: Air committee report, Rocky Flats Scientific Panel on Monitoring Systems. October 1990, Submitted to Governor Romer.
- RPT-24 Pielke, R.A., 1990: Summary of "Meteorological Aspects of Mesoscale and Long-Range Pollution Transport". Proceedings of the International Association of Meteorology and Atmospheric Physics, August 1, 1989, Reading, England.
- RPT-25 Lyons, W.A., R.A. Pielke, M.G. Venne, and C.S. Keen, 1990: Meteorological factors affecting nuclear emergency response dose assessment codes in coastal Florida: St. Lucie. Executive summary prepared for Florida Power and Light, Juno Beach, Florida.
- RPT-26 Pielke, R.A. and R.A. Stocker, 1991: Climatology of Shenandoah National Park. Prepared for the National Park Service, Denver, Colorado.
- RPT-27 Stocker, R.A. M. Uliasz, and R.A. Pielke, 1991: Impact of local sources on Shenandoah National Park during an extended stagnation period. Prepared for the National Park Service, Denver, Colorado.
- RPT-28 Walko, R.L. and R.A. Pielke, 1992: Transport simulations of smoke particles from the Kuwait oil fires. Final Report, U.S. Army Research Office, Contract No. DAAL03-86-D-0001, Delivery Order 2446, Scientific Services Program, 80 pp.
- RPT-29 Walko, R.L., C.J. Tremback, and R.A. Pielke, 1991: Modifications of the Regional Atmospheric Modeling System coupling to an ocean model. September, 1991, Prepared by ASTeR Inc., 10 pp.
- RPT-30 Branscome, L.E., R.A. Pielke, J. Morel-Seytoux, and N.H. Crawford, 1991: Numerical modeling of atmospheric and hydrologic processes: Methods and approaches for operational application in OASIS Phase II. Prepared for the South Florida Water Management District, PO Box 24680, 3301 Gun Club Road, West Palm Beach, Florida, 33416, October 21,
- RPT-31 Pielke, R.A., 1991: Needs for accurate air pollution modeling for regulatory use. Prepared for Han van Dop, WMO, Geneva, Switzerland for use at the Round Table

- Discussion on Air Pollution Modeling for Regulatory Use at the 19th NATO/CCMS International Technical Meeting on Air Pollution Modeling and Its Application, Ierapetra, Crete, Greece, September 29-October 4, 1991.
- RPT-32 Nicholls, M.E. and R.A. Pielke, 1991: A numerical investigation of boundary layer development during FIFE. Prepared for Bob Grossman, CU, Boulder under a subcontract to ASTeR Inc. from NASA, September, 1991, 3 pp + appendices.
- RPT-33 Walko, R.L., and R.A. Pielke, 1990: Numerical studies of boundary layer transport with 1-, 2-, and 3-dimensional atmospheric models. Final report, Battelle, Research Triangle Park Office, North Carolina, Delivery Order 2131, July 1990, 99 pp.
- RPT-34 Mitchell, W., T.R. Gerholm, A. Arking, R. Balling, V. Gray, H. Ellsaesser, R. Lindzen, D. Hughes, G. Weber, R. Pielke, H. Linden, P. Michaels, and S.F. Singer, 1992: The Greenhouse debate continued: An analysis and critique of the IPCC climate assessment. The Science and Environmental Policy Project, ICS Press, San Francisco, California, May 1992.
- RPT-35 Ellingson, R.G., and R.A. Pielke, 1992: Report on Breakout IIA: Algorithms for atmospheric forcings at the surface, radiation, near-surface meteorology and precipitation. ISLSCP meeting, June 1992.
- RPT-36 Pielke, R.A., 1992: Summary of Session 4B: Planetary boundary layer and surface parameterization. Summary of presentations made at Session 4B of the Numerical Weather Prediction Conference, October, 1991. Prepared for Y.-H. Kuo, NCAR, Boulder, CO 80307.
- RPT-37 Walko, R.L. and R.A. Pielke, 1992: Numerical simulations of atmospheric flow at Mauna Kea and Cerro Pachon. Final report to Gemini 8-Meter Telescopes Project, Aura, Inc., 950 N. Cherry Avenue, Tucson, AZ 85726. Prepared by ASTeR Inc., PO Box 455, Fort Collins, Co 80522.
- RPT-38 Malm, W., K. Gebhart, D. Latimer, T. Cahill, R. Eldred, R. Pielke, R. Stocker, and J. Watson, 1989: National Park Service Report on the Winter Haze Intensive Tracer Experiment. Final Report, December 4, 1989.
- RPT-39 Burns, P., J. Davidson, D. McWhorter, C. Menoni, V. Murphy, R. Pielke, K. Reardon, C. Shackelford, P. Wilbur, and J. Cermak, 1993: Engineering College vision for year 2020 -- Contributions of Faculty Focus Group. April, 1993, 13 pp.
- RPT-40 Pielke, R.A., 1993: Summary: Mini-workshop on coupled land surface/hydrologic/atmospheric models. In: Report of the Proceedings of the Colloquium and Workshop on Multiscale Coupled Modeling, NASA Conference Publication 3217, S.E. Koch, Editor, 22-25 February, 1993, Calverton, MD, 112 pp.
- RPT-41 Pielke, R.A., S. Snedaker, M. Harwell, R. Twilly, C. Johnson, K. Poiani, R. Pulliam, and J. Dunning, 1993: Global climate change impacts on habitat. Prepared by the Scientific Review Committee, part of the SBI-EPA cooperative Agreement on Global Climate Change Impacts on Habitat.
- RPT-42 Stewart, R. and R. Pielke, 1993: Report of ICDM Working Group C. Report of IAMAP 93.
- RPT-43 Pielke, R.A., 1993: Selected research opportunities to investigate soil moisture and its influence on hydrological, ecological, and meteorological processes. Report at the NASA Soil Moisture Workshop, Pasadena, California, November 16, 1993.
- RPT-44 Pielke, R.A., 1993: Review of "Greenhouse-gas-induced climatic change: A critical appraisal of simulations and observations" by M.E. Schlesinger, Editor. *Earth Sci. Reviews - Book Reviews*, **35**, 329-330.
- RPT-45 Pielke, R.A., 1994: Issues and opportunities in atmospheric science as related to soil moisture. Discussion paper, Soil Moisture Workshop, 25-27 January, NASA, Tiburon, California.

- RPT-46 Baron, J., R.A. Pielke, D.S. Ojima, L.A. Band, T.G.F. Kittel, and W.J. Parton. Interpreting climate/ecosystem feedbacks on a regional scale: An example using the South Platte River Basin of Colorado.
- RPT-47 Pielke, R.A., 1995: NASA Project #NAG 5-2078, S-01 entitled ``Numerical Model Investigation of Area-Averaged Surface Fluxes During FIFE''. Final Report, January, 1995,
- RPT-48 Dabberdt, W.F., T.W. Schlatter, C.A. Davis, R.J. Fleming, R.M. Hodur, G.J. Holland, S.E. Koch, S.J. Lord, W.D. Neff, R.A. Pielke, L.J. Pietrafesa, D. Raymond, R.B. Smith, and D.S. Zrnich, 1996: Research Opportunities from Emerging Atmospheric Observing and Modeling Capabilities: Report of the Second Prospectus Development Team of the U.S. Weather Research Program. *Bull. Amer. Meteor. Soc.*, **77**, 305-323. Also NCAR Technical Note 419 + STR, USWRP P-2.
- RPT-49 Rotunno, R., L.J. Pietrafesa, J.S. Allen, B.R. Colman, C.M. Dorman, C.W. Kreitzberg, S.J. Lord, M.G. McPhee, G.L. Mellor, C.N.K. Mooers, P.P. Niiler, R.A. Pielke Sr., M.D. Powell, D.P. Rogers, J.D. Smith, and L. Xie, 1996: Report of the third prospectus development team of the U.S. Weather Program to NOAA and NSF. *Bull. Amer. Meteor. Soc.*, **77**, 1578-1585.
- RPT-50 Beniston, M., R.A. Pielke, K. Arpe, K. Keuler, R. Laprise, M.E. Mann, A. Rinke, and D.E. Parker, 1997: Summary Report: Workshop on High Resolution Climate Modeling. September 23-26, 1996, Wengen, Switzerland, *Eos*, **78**, 484.
- RPT-51 Pielke, R.A., 1996: Sowing the seeds of change? In: Distributed Active Archive Centers (DAACs) Supporting Earth Observing Science in 1995, L. Cheshire, M. Meshek, M. Parsons, and A. Varani, Eds., User Services, National Snow and Ice Data Center, Campus Box 449, University of Colorado, Boulder, CO 80309, 12-13.
- RPT-52 Pielke, R.A., 1997: Summary report on impact of historical landcover and landuse change on weather and climate, Years 1995, 1996, and 1997, Contract No.1434-94-A-1275. National Mapping Division, U.S. Geological Survey, Reston, VA 22092.
- RPT-53 Pielke, R.A. and P.L. Vidale, 1998: AFM-12 BOREAS final report on NASA Grant No. NAG-5-2302 entitled ``Modeling biosphere-atmosphere interactions at various scales in support of BOREAS''.
- RPT-54 Pielke, R., M. Nicholls, and A. Bedard, 1997: Task 15: Atmospheric compression waves. DoD Center for Geosciences - Phase II Annual Report (1995-1996) under Grant No. DAAH04-94-G-0420 to the U.S. Army Research Office, Research Triangle Park, NC 27709, 46-64.
- RPT-55 Andrews, J.T., G.H. Miller, W. Freeman, R.A. Pielke, G.E. Liston, 1997: Progress report on lake ice modelling and the paleoenvironment of the eastern Canadian Arctic over the last 21 Ka: A PALE/LAII SIMS. 3 pp.
- RPT-56 Lenihan, J.M., R. Neilson, R.A. Pielke Sr., L. Lu, G.E. Liston, S. Ogle, W. Reiners, D. Ojima, J. Detling, and T.G.F. Kittel, 2000: Multi-scale response of climate and vegetation to global change in the central grassland biogeographic region. In preparation.
- RPT-57 Duffy, C., R. Grossman, V. Gupta, W. Krajewski, U. Lall, B. Milne, R. Pielke Sr., K. Reckhow, and F. Swanson, 2000: A framework for reassessment of basic research and educational priorities in hydrologic sciences. Report of the Hydro-Geo-2000 Workshop, Albuquerque, New Mexico, January 31-February 1, 1999 to the NSF-GEO Directorate.
- RPT-58 Gupta, V., C. Duffy, R. Grossman, W. Krajewski, U. Lall, M. McCaffrey, B. Milne, R. Pielke Sr., K. Reckhow, and F. Swanson, 2000: A framework for reassessment of basic research and educational priorities in hydrologic sciences. Report of a Hydrology Workshop, Albuquerque, NM, January 31- February 1, 1999 to the NSF-GEO Directorate.

- RPT-59 Xian, Z., R.A. Pielke, Sr., and R.L. Grossman, 2000: Simulated soil moisture and sea surface temperature effects on landfalling tropical depressions during the southwest Asian monsoon.
- RPT-60 Pielke, R.A. Sr., 2000: *Frontiers: Modeling. XE - Extreme Events: Developing a Research Agenda for the 21st Century*, Report of the Workshop, Boulder, Colorado, June 7-9, 89-91.
- RPT-61 Pielke, R.A. Sr., 2000: Climate system as an initial value problem: An overview. Hydrology Panel Meeting, September, Boulder, Colorado.
- RPT-62 Iwasakai, T., R. Pielke Sr., Y. Fujiyoshi, K. Kuma, J. Leese, T. Matsuno, M. Moncrieff, M. Murakami, H. Niino, K. Ninomiya, A. Numaguti, K. Saito, Y. Sud, H. Uyeda, R. Wakimoto, Y. Xue, and M. Yoshizaki, 1999: Working Group I: Modeling cloud, heavy precipitation and land-surface processes. Joint Report from the U.S.-Japan Workshop on Global Change: Precipitation Systems/Processes and Their Variability in the Asian Pacific Region, November 16-18, 1999, Tokyo, Japan.
- RPT-63 Beniston, M., R.A. Pielke Sr., K. Arpe, K. Keuler, R. Laprise, M.E. Mann, A. Rinke, D.E. Parker, 1997: Climate modelers meet in Switzerland. *EOS*, November, 484.
- RPT-64 Pielke, R.A. Sr., N.J. Doesken, and J.D. Salas, 2001: Drought threat to Colorado water. *Colorado Water*, August 2001, 7-10.
- RPT-65 Pielke, R.A. Sr., M. Beniston, M. Claussen, P. Cox, H. Held, N. de Noblet-Ducoudré, R. Prinn, J.A. Rial, and J.D. Salas, 2001: Earth System Group Report based on background papers. Nonlinear Responses to Global Environmental Change: Critical Thresholds and Feedbacks, IGBP Nonlinear Initiative, May 26-29, Duke University, Durham, NC.
- RPT-66 Steyaert, L.T., R.A. Pielke Sr., and T.M. Cronin, 2001: The potential role of land cover change on biophysical processes, surface weather, and climate variability: Literature review. Open File Report Literature Review on USGS Project No. 1434-CR-97-AG-00025 Task 7 entitled "Human-Induced Land-Cover Change, Biophysical Responses, and Implications for Land Resource Management: Chesapeake Bay and South Florida Case Studies."
- RPT-67 Atmospheric Science Technical Group, 1996: Proposal for a research initiative to study vertical transport and mixing processes in the atmosphere. Report on the Proceedings of a Workshop held at NCAR, Boulder, CO, August 28-30, 1996.
- RPT-68 Baker, W., B. Haskins, B. Lau, J. Miller, R. Pielke Sr., A. Gasiewski, V. Irisov, S. Lord, J. North, and E. Westwater, 1997: Report of the Discipline Panel on Atmospheric Circulation Variables. In: *Climate Measurement Requirements for the National Polar-Orbiting Operational Environmental Satellite System (MPOESS) Workshop Report*, 27-29 February 1996, H. Jacobowitz, Ed., NOAA, College Park, MD., 50-55.
- RPT-69 Marland, G., R.A. Pielke Sr., M. Apps, R. Avissar, K.J. Davis, P. Frumhoff, S.T. Jackson, L. Joyce, P. Kauppi, K.G. MacDicken, J. O. Niles, D. Dutta S. Niyogi, R. J. Norby, N. Pena, N. Sampson, Y. Xue, R. Betts, and R. Neilson, 2002: An integrated view of carbon sequestration, land use, land cover, and climate. Aspen Global Change Institute.
- RPT-70 Eastman, J., R. Pielke Sr., T. Fountain, M. Nicholls, A. Townsend Peterson, and R. Waide, 2001: Fine-tuned atmospheric model simulates hurricanes to climate change. *EnVision*, 27, 16-17.
- RPT-71 National Research Council, 2002: The ongoing challenge of managing carbon monoxide pollution in Fairbanks, Alaska. The National Academies Press, Washington, DC, 134 pp.
- RPT-72 Committee on Carbon Monoxide Episodes in Meteorological and Topographical Problem Areas, 2003: Managing carbon monoxide pollution in meteorological and

- topographical problem areas. National Research Council of the National Academies, The National Academies Press, Washington, DC, 196 pp.
- RPT-73 Marland, G., and R.A. Pielke Sr., 2002: Forest management and global change: Near-term decisions and long-term outcomes. October 18-23, 2001, Aspen Global Change Institute, A Summary from the Workshop Chairs.
- RPT-74 External Advisory Panel, 2002: Report of the External Advisory Panel Visit and Symposium. April 18-19, 2002, University of New Mexico, Center for Advanced Studies, College of Arts and Sciences.
- RPT-75 LAII Steering Committee, 2002: Changes in the Arctic Land-Atmosphere System: The role of physical, biological, and biogeochemical couplings in the Arctic. ARCSS LAII Science Management Office Draft Plan.
- RPT-76 Pielke, R.A. Sr., 2002: Evolution of regional hydrologic processes within the climate system as an initial value problem: An overview. In: Report of a Workshop on Predictability and Limits-To-Prediction in Hydrologic Systems, National Research Council, Committee on Hydrologic Science (COHS), National Research Council, National Academy Press, Washington, DC, 98-100.
- RPT-77 Pielke, R.A. Sr., 2003: The U.S. National Climate Change Assessment: Do the climate models project a useful picture of regional climate? *Colorado Water*, 20, No. 2, 15-21.
- RPT-78 Arneeth, A., et al., 2003: Integrated land ecosystem - atmosphere processes study (ILEAPS): The IGBP-Land Atmosphere Project. In preparation.
- RPT-79 Pielke, Jr. , R. A. and R. A. Pielke, Sr. 2003. Fundamentals of Tropical Cyclones. *Asian Disaster Preparedness News*, **Vol. 9, No. 1.**, January-March.
- RPT-80 Sturm, M., F.S. Chapin III, M.E. Edwards, D.B. Griffith, H.P. Huntington, G.P. Kofinas, A.H. Lloyd, A.H. Lynch, B.J. Peterson, R.A. Pielke Sr., J.P. Schimel, M.c. Serreze, and G.R. Shaver, 2003: PACTS (Pan-Arctic Cycles, Transitions, and Sustainability): A Science Plan. Published by the Land-Atmosphere-Ice Interactions Science Management Office, PO Box 757740, University of Alaska, Fairbanks, Fairbanks, AK 99775-7740, 53 pp, January 2003.
- RPT-81 Marshall, C.H., R.A. Pielke Sr., L. Steyaert, and D. Willard, 2004: The impact of anthropogenic 20th Century land-use change on sea-breeze generated convective rainfall and sensible weather over the south Florida Peninsula. In: Topical Report on Everglades Land Surface History and Process Modeling, John W. Jones, Ed., in press.
- RPT-82 State of the Climate in 2002, 2003: A.M. Waple and J.H. Lawrimore, Eds., R.A. Pielke Sr. and C.L. Castro, Contributors, *Bull. Amer. Meteor. Soc.*, **84**, S1-S68.
- RPT-83 Pielke, R.A. Sr., 2003: The U.S. National Climate Change Assessment: Do the climate models project a useful picture of regional climate? *Colorado Water*, **20**, No. 2, 15-21.
- RPT-84 Stohlgren, T., W.L Baker, J. Baron, D. Binkley, T.G.F. Kittel, R.A. Pielke Sr., and T. Velben, 2004: Global change impacts in the Colorado Rockies biogeographical area: Final report, 1999-2003. June 1, 2004, 39 pp.

## NON-REVIEWED REPORTS

- NR-1 Panofsky, H.A., R.A. Pielke, and E. Mares, 1968: Structure of wind and temperature at Roundhill, South Dartmouth, Massachusetts. R & D Tech. Report ECOM-6862-F, October, 1968.
- NR-2 Pielke, R.A., 1970: Numerical simulation of acoustic-gravity wave propagation in a compressible, inviscid, planar, non-rotating atmosphere. Prepared as a contribution to the Students' Summary Report, Fellowship in Scientific Computing, Summer 1970, 8 pp.
- NR-3 Pielke, R.A., 1972: Comparison of a hydrostatic and anelastic dry shallow primitive equation model. 1972, NOAA Tech. Memo., ERL OD- 13, February, 1972, 42 pp.
- NR-4 Pielke, R.A., 1973: An observational study of cumulus convection patterns in relation to the sea breeze over south Florida. NOAA Tech. Memo., ERL OD-16, January, 1973, 81 pp.
- NR-5 Pielke, R.A., 1973: A three-dimensional numerical model of the sea breezes over south Florida. NOAA Tech. Memo., ERL WMPO-2, March 1973.
- NR-6 Pielke, R.A., 1974: 1973 Florida Area Cumulus Experiment (FACE): Operational and preliminary summary. NOAA Tech. Memo., ERL WMPO-12, 1974, 30-32 and Appendix G.
- NR-7 Pielke, R.A., 1975: A survey of fine-mesh modeling techniques. Open SESAME, Proceedings of the opening meeting at Boulder, Colorado, September 4-6, 1974. Edited by D.K. Lilly, June 1975 (transcribed talk from meeting).
- NR-8 Pielke, R.A. and Y. Mahrer, 1976: Verification analysis of a three-dimensional mesoscale model prediction over south Florida for July 1, 1973. University of Virginia report # UVA-ENV SCI-MESO- 1976-1, 30 pp.
- NR-9 Pielke, R.A., 1977: Workshop in the future of national atmospheric research, task group report - weather forecasting, analysis, and numerical prediction. Section II (pp. 12-17) of report held in Boston, Massachusetts August 17-18, 1977. Available from the American Meteorological Society, 45 Beacon Street, Boston, Massachusetts.
- NR-10 Garstang, M., C.I. Aspliden, G. Athey, J. Gusdorf, S. Nnaji, R.A. Pielke, and J.W. Snow, 1978: Coastal zone wind energy studies, Part I: Synthesis and results. Final report, January 1978. Work performed under Contract # EY-76-S-06-2344, 50 pp.
- NR-11 Garstang, M., C.I. Aspliden, G. Athey, J. Gusdorf, S. Nnaji, R.A. Pielke, and J.W. Snow, 1978: Coastal zone wind energy studies, Part II: Climatology. Final report, January 1978. Work performed under Contract # EY-76-S-06-2344, 188 pp.
- NR-12 Simpson, J., N.E. Westcott, R.J. Clerman, and R.A. Pielke, 1979: Cumulus mergers. NSF project report DES-75-03984. February 28, 1978. (see R-19).
- NR-13 Pielke, R.A., 1978: Mesoscale dynamical models to be used for local and regional forecasts. *Proceedings of Seminars 1978: The Interpretation and Use of Large-Scale Numerical Forecast Products*. European Center for Medium-Range Weather Forecasts, Shinfield Park, Reading, Berkshire, England RG2 9AX, 56-116.
- NR-14 McCumber, M.C., J.A. Schuh, R.T. McNider, R.A. Pielke, and Y. Mahrer, 1978: The University of Virginia mesoscale model, October 1978. University of Virginia report # UVA-ENV SCI-MESO-1978-1.
- NR-15 Pielke, R.A., 1979: The distribution of spruce in west-central Virginia before lumbering. University of Virginia report # UVA- ENV SCI-MESO-1979-1, October 1979, 30 pp.

- NR-16 Pielke, R.A. and E. Kennedy, 1980: Mesoscale terrain features, January 1980. Report # UVA-ENV SCI-MESO-1980-1, 29 pp.
- NR-17 Garstang, M., R.A. Pielke, and J.W. Snow, 1980: Coastal zone wind energy, Part I: Potential wind power density fields based on 3-D model simulations of the dominant wind regimes for three east and gulf coast areas. Final report on Contract B-93492-A-Q for the period 3/79-3/80.
- NR-18 Garstang, M., R.A. Pielke, and J.W. Snow, 1980: Coastal zone wind energy, Part II: Validation of the coastal zone wind power potential: A summary of the field experiment. Final report on Contract B-93492-A-Q for the period 3/79-3/80.
- NR-19 Garstang, M., R.A. Pielke, J. Gusdorf, C. Lindsey, and J.W. Snow, 1980: Coastal zone wind energy, Part III: A procedure to determine the wind power potential of the coastal zone. Final report on Contract B93492-A-Q for the period 3/79-3/80.
- NR-20 Garstang, M., S. Nnaji, R.A. Pielke, J. Gusdorf, C. Lindsey, and J.W. Snow, 1980: Coastal zone wind energy, Part I: Synoptic and mesoscale controls and distributions of coastal wind energy. DOE Contract DE-AS06-76ET20274, March 1980.
- NR-21 Garstang, M., R.A. Pielke, and J.W. Snow, 1980: A comparison of model predicted to observed winds in the coastal zone. Final report on Contract B-93492-A-Q for the period 3/80-10/80.
- NR-22 Garstang, M., R.A. Pielke, and J.W. Snow, 1980: Coastal zone wind energy. Draft final report on Battelle Contract B-93492-A-Q, October 1980.
- NR-23 McCumber, M.C. and R.A. Pielke, 1981: Windflow simulation over rough terrain. Draft final report. Dept. of Energy, Division of Solar Energy and Battelle-Northwest's Pacific Northwest Laboratory, 87 pp., plus appendices.
- NR-24 McNider, R.T. and R.A. Pielke, 1981: Impact of topographic circulations on the transport and dispersion of air pollutants. EPA report, EPA-600/S4-81-068, October, 1981, 12 pp.
- NR-25 McCumber, M.C., 1980: A numerical simulation of the influence of heat and moisture fluxes upon mesoscale circulations. Report # UVA-ENV SCI-MESO-1980-2.
- NR-26 Mahrer, Y., M. Segal, and R.A. Pielke, 1984: 1984 CIRA report.
- NR-27 McNider, R.T., R.A. Pielke, and R.W. Arritt, 1984: Investigation of the transport and diffusion of pollutants in complex terrain using a numerical model. EPA final report, Grant Number R-810471- 01-0, 48 pp.
- NR-28 McQueen, J.T. and R.A. Pielke, 1985: Sea breeze-induced mesoscale systems and severe weather. NASA project progress report, February.
- NR-29 Pielke, R.A. and M. Segal, 1985: NSF ATM-8414181 progress report and research plans. October, 1985.
- NR-30 Yu, C-H. and R.A. Pielke, 1985: Mesoscale air quality under stagnant synoptic cold season conditions in the Lake Powell area. Prepared for Donald Henderson, National Park Service, Contract NA81RAH00001, Amendment 17, Item 15, 125 pp.
- NR-31 McQueen, J.T. and R.A. Pielke, 1985: A numerical and climatological investigation of deep convective cloud patterns in south Florida. Atmospheric Science Paper # 389, Department of Atmospheric Science, Colorado State University, Fort Collins, Colorado, 177 pp.
- NR-32 Arritt, R.W. and R.A. Pielke, 1985: Numerical studies of thermally and mechanically forced circulations over complex terrain. Prepared for Donald Henderson, National Park Service, Contract NA81RAH00001, Amendment 17, Item 15, 201 pp.



- NR-33 Pielke, R.A., M. Segal, R.W. Arritt, and M.D. Moran, 1985: Mesoscale influences on long-range transport. EPRI progress report # 1 for the period 9/01/85 - 12/01/85.
- NR-34 Pielke, R.A., 1986: Mesoscale modeling and analysis. Contribution to the Hailswath II, 1985, Overview Document, 16-17.
- NR-35 Arritt, R.W., M. Segal, R.A. Pielke, Y. Mahrer, Y. Ookouchi, D.J. Abbs, R.C. Kessler, and J.T. McQueen, 1986: Numerical studies of terrain-forced mesoscale circulations. CAS/JSC Working Group on Numerical Experimentation, Research Activities in Atmospheric and Oceanic Modeling. Edited by G.J. Boer. Pages 5.27-5.28.
- NR-36 Pielke, R.A., M. Segal, R.W. Arritt, M.D. Moran, and D. Wesley, 1986: Terrain-forced influence on long-range atmospheric transport of gases and aerosols. EPRI 2nd quarter progress report, January, 1986.
- NR-37 Abbs, D.J. and R.A. Pielke, 1986: A numerical simulation of orographic effects on Colorado's 1982 Christmas Eve blizzard. CIRA Newsletter, Volume 1, No. 2, August 1986.
- NR-38 Pielke, R.A., P.J. Burns, A.T. Kirkpatrick, E.G. Thompson, M.N. Karim, S.R. Satish, and G.R. Johnson, 1986: College of Engineering Computer Committee Existing Resources and Needs. Prepared for the Dean of Engineering, Colorado State University.
- NR-39 Pielke, R.A., M. Segal, R.W. Arritt, R. Stocker, M.D. Moran, and D.A. Wesley, 1986: Terrain-forced influences on long-range atmospheric transport of gases and aerosols. EPRI 3rd quarter progress report, May, 1986.
- NR-40 Physick, W.L., 1986: Application of a mesoscale flow model in the irregular terrain of the Grand Canyon National Park. Prepared for Donald Henderson, National Park Service, Department of the Interior, Denver, Co 80225, Contract NA-85-RAH05045, Amendment 17, Item 15, R.A. Pielke and M. Segal, P.I., 98 pp.
- NR-41 Segal, M., R.A. Pielke, R.W. Arritt, M.D. Moran, C-H. Yu, and D. Henderson, 1986: Southern Florida air pollution climatology study and selected episodic impacts. Prepared for the Air Quality Division, National Park Service, Department of the Interior, Contract NA81RAH00001, Amendment 17, Item 15, 237 pp.
- NR-42 Pielke, R.A., M. Segal, R.W. Arritt, R. Stocker, M.D. Moran, and D.A. Wesley, 1987: Terrain forced influences on long-range atmospheric transport of gases and aerosols. EPRI 4th quarter progress report, September, 1986.
- NR-43 Lyons, W.A., R.A. Pielke, R.W. Arritt, and J.A. Schuh, 1986: The use of the P3DM mesoscale coastal model to evaluate transport and diffusion on the south shore of Lake Ontario. Final report prepared for the New York Power Authority, Environmental Programs, White Plains, New York and Niagara Mohawk Power, Nine Mile Point Nuclear Station, Lycoming, New York. October, 1986, 343 pp.
- NR-44 Pielke, R.A., M. Segal, R.W. Arritt, R.A. Stocker, M.D. Moran, and D.A. Wesley, 1987: Terrain-forced influence on long-range atmospheric transport of gases and aerosols. EPRI 5th quarter progress report, November, 1986.
- NR-45 Pielke, R.A., M. Segal, and J.L. Song, 1987: Semi-annual progress report on NASA Grant # NAG5-359. February, 1987.
- NR-46 Stout, J.E. and R.A. Pielke, 1987: Exhaust plumes from motor vehicles. Unpublished note.
- NR-47 Pielke, R.A. and W.R. Cotton, 1987: Atmospheric modeling. ARO semi-annual progress report, June 1987.
- NR-48 Pielke, R.A., M. Segal, and J-L. Song, 1987: Semi-annual progress report on NASA Grant # NAG5-359. August, 1987.

- NR-49 Pielke, R.A., M. Segal, R.W. Arritt, R. Stocker, M.D. Moran, and D.A. Wesley, 1986: Terrain-forced influence on long-range atmospheric transport of gases and aerosols. EPRI 6th quarter progress report, February, 1987.
- NR-50 Pielke, R.A., M. Segal, R.W. Arritt, R. Stocker, M.D. Moran, and D.A. Wesley, 1987: Terrain-forced influence on long-range atmospheric transport of gases and aerosols. EPRI 7th quarter progress report, May, 1987.
- NR-51 Pielke, R.A., M. Segal, R.W. Arritt, R. Stocker, M.D. Moran, and D.A. Wesley, 1987: Terrain-forced influence on long-range atmospheric transport of gases and aerosols. EPRI 8th quarter progress report, August, 1987.
- NR-52 Pielke, R.A., M. Segal, R.W. Arritt, R. Stocker, M.D. Moran, and D.A. Wesley, 1987: Terrain-forced influence on long-range atmospheric transport of gases and aerosols. EPRI 9th quarter progress report, November, 1987.
- NR-53 Pielke, R.A., M. Segal, and R.W. Arritt, 1987: Evaluation of surface thermal and moisture characteristics, and terrain configuration on the initiation and development of convective clouds. NSF 1st year progress report, October, 1987.
- NR-54 Pielke, R.A., R.W. Arritt, M. Segal, Z. Ye, D. Wesley, J.-L. Song, M.D. Moran, and R.T. McNider, 1987: Numerical studies of terrain forced mesoscale circulations and pollutant transport. *Research Activities in Atmospheric and Oceanic Modeling*, Report No. 10, October 1987, pg. 5.30. Ed. G.J. Boer.
- NR-55 Lyons, W.A., D.A. Moon, C.S. Keen, J.A. Schuh, R.A. Pielke, W.R. Cotton, and R.W. Arritt, 1987: Providing operational guidance for the development of sea breeze thunderstorms at the Kennedy Space Center: An experiment using a mesoscale numerical model. University of Minnesota Supercomputer Institute Publication # UMSI 87/92, December, 1987.
- NR-56 Lyons, W.A., D.A. Moon, C.S. Keen, J.A. Schuh, R.A. Pielke, W.R. Cotton, and R.W. Arritt, 1987: Conducting a "field program" on the southeast Florida coastline using a mesoscale numerical model. University of Minnesota Supercomputer Institute Publication # UMSI 87/93, December, 1987.
- NR-57 Cotton, W.R., M.G. Hadfield, R.A. Pielke, C.J. Tremback, and R.L. Walko, 1988: Large eddy simulations of plume transport and dispersion over flat and hilly terrain. Final report for EPRI Contract # 1630-53 (formerly # 1630-25), January 1, 1984 - June 30, 1987.
- NR-58 Pielke, R.A., M. Segal, R.W. Arritt, M.D. Moran, and D.A. Wesley, 1988: Terrain-forced influence on long-range atmospheric transport of gases and aerosols. EPRI 10th quarter progress report, February, 1988.
- NR-59 Song, J.L. and R.A. Pielke, 1988: The influence of deep cumulus convection of sea breeze dynamics over south Florida, Part I: Model development. Atmospheric Science Paper #426, Department of Atmospheric Science, Colorado State University, Fort Collins, Colorado.
- NR-60 Song, J.L. and R.A. Pielke, 1988: The influence of deep cumulus convection of sea breeze dynamics over south Florida, Part II: Model application. Atmospheric Science Paper #427, Department of Atmospheric Science, Colorado State University, Fort Collins, Colorado.
- NR-61 Pielke, R.A., 1986: Scientific rationale for temperature soundings as part of LASE. Prepared for Phase I of LASE.
- NR-62 Pielke, R.A. and W.R. Cotton, 1987: Atmospheric modeling. CIRA Newsletter, September 1987, Volume 2, Number 2, pgs. 5-7.

- NR-63 Pielke, R.A. and M. Segal, 1987: Application of our contract work to NPS regulatory needs. Prepared for Donald Henderson, National Park Service, Air Quality Office, Denver, Colorado.
- NR-64 Pielke, R.A., 1987: Evaluation of the 1987-88 metro Denver brown cloud air pollution study. Volume I: Program Plan and NOAA Meteorological Tasks. Prepared for the Denver Chamber of Commerce, Denver, Colorado.
- NR-65 Pielke, R.A., 1988: Written testimony on Senate Bill 98.
- NR-66 Lyons, W., D. Moon, J. Schuh, C. Keen, L. Newman, T. Nelson, R. Pielke, W. Cotton, R. Arritt, and R. Fisher, 1988: Conducting a 'Field Program' on the southeast Florida coastline using a mesoscale numerical model. *Control Data World*, **5**, 10-13.
- NR-67 McCumber, M. and R.A. Pielke, 1983: Simulation of the effects of surface fluxes of heat and moisture in a mesoscale numerical model - Vegetation. Unpublished note.
- NR-68 Pielke, R.A., M. Segal, R.W. Arritt, and M.D. Moran, 1987: Influence of terrain-forced mesoscale systems in long-range transport of airborne gases and aerosols. *Proceedings of the EPRI Air Quality Modeling Contractors Meeting*, February 25-27, 1986, Menlo Park, California, C-71 -- C-78 (see PSNT-57).
- NR-69 Pielke, R.A., M. Segal, R.W. Arritt, M.D. Moran, and D.A. Wesley, 1988: Terrain-forced influence on long-range atmospheric transport of gases and aerosols. EPRI 11th quarter progress report, May, 1988.
- NR-70 Arritt, R.W., 1988: Numerical modeling of the effect of local source emissions on air quality in and around Shenandoah National Park. Prepared for Donald Henderson, National Park Service, Contract NA81RAH00001, Amendment 17, Item 15, R.A. Pielke, Co-Principal Investigator.
- NR-71 Pielke, R.A., M. Segal, R.W. Arritt, M.D. Moran, and D.A. Wesley, 1988: Terrain-forced influence on long-range atmospheric transport of gases and aerosols. EPRI 12th quarter progress report, August, 1988.
- NR-72 Pielke, R.A., M. Segal, W.R. Cotton, and M. Nicholls, 1988: Semi-annual progress report on NASA Grant # NAG5-359. August, 1988.
- NR-73 Wesley, D.A. and R.A. Pielke, 1988: Studies of precipitation processes in Colorado High Plains upslope snowstorms. *Army Environ. Science*, **7**, 12-16.
- NR-74 Lyons, R.A. and R.A. Pielke, 1988: Operational forecasting of Florida sea breeze thunderstorms using a mesoscale numerical model. Final report on NASA Contract NAS10-11321, Small business innovation research (SBIR) solicitation 84-1 Phase II, RSCAN, Minneapolis, Minnesota.
- NR-75 Moran, M.D., D.A. Wesley, and R.A. Pielke, 1989: A synoptic climatology of eastern North America with mesoscale resolution. Atmospheric Science Paper #476, Department of Atmospheric Science, Colorado State University, Fort Collins, Colorado, 101 pp + appendices.
- NR-76 Pielke, R.A., M. Segal, M.D. Moran, and D.A. Wesley, 1988: Terrain-forced influence on long-range atmospheric transport of gases and aerosols. EPRI 13th quarter progress report, December, 1988.
- NR-77 Pielke, R.A., 1988: Synoptic Weather Lab Notes. Department of Atmospheric Science Class Report #1, Colorado State University, Fort Collins, CO 207 pp. + appendices, Revised 1995.
- NR-78 Pielke, R.A. and M. Segal, 1988: Evaluation of surface thermal and moisture characteristics, and terrain configuration on the initiation and development of convective clouds. NSF 2nd year progress report, October, 1988.

- NR-79 Grossman, P.A., 1989: Kernel density estimation applied to a Lagrangian particle model. Report on subcontract No. G-1211-1 between Colorado State University and Chisholm Institute of Technology under NOAA contract No. NA85RAH05045 for the project entitled "Mesoscale Modeling".
- NR-80 Zeng, X., R.A. Pielke, and R. Eykholt, 1989: Chaotic behaviors in Daisyworld and in the Atmosphere. *Research Activities in Atmospheric and Oceanic Modeling*, Ed. G.J. Boer.
- NR-81 Nicholls, M.E., R.A. Pielke, and W.R. Cotton, 1990: Sea breeze-induced mesoscale systems and severe weather. Final Report on NASA Grant No. NAG5-359, June, 1990.
- NR-82 Pielke, R.A., 1990: Evaluation of surface thermal and moisture characteristics, and terrain configuration on the initiation and development of convective clouds. Final Report on NSF Grant No. ATM-8616662, July, 1990.
- NR-83 Pielke, R.A., G. Dalu, J.R. Garratt, T.G.F. Kittel, R.A. Stocker, T.J. Lee, and J.S. Snook, 1990: Influence of landscape variability on heat fluxes. *Research Activities in Atmospheric and Oceanic Modeling*, Ed. G.J. Boer.
- NR-84 Zeng, X., R.A. Pielke, and R. Eykholt, 1990: Estimating the fractal dimensions and predictability of the atmosphere. *Research Activities in Atmospheric and Oceanic Modeling*, Ed. G.J. Boer, pg 2.9.
- NR-85 Pielke, R.A., 1991: 1st Year Progress Report on NSF Grant No. ATM-8915265 entitled "Investigation of the Influence of Surface Heat and Moisture Fluxes on Mesoscale Climate and Weather". February, 1991.
- NR-86 Meroney, R.N. and R.A. Pielke, 1991: Wind tunnel and numerical modeling of coastal marine flows. Ocean and Atmospheric Physics Division, 1990 Programs, Office of the Chief of Naval Research, Arlington, VA 22217-5000, MM62-MM64.
- NR-87 Pielke, R.A. and M.E. Nicholls, 1991: Task 7: Numerical modeling of air flow. Fall TAAC Summary Report, October, 1991.
- NR-88 Poulos, G.S., R.A. Pielke, D. Henderson, and R.A. Stocker, 1991: An objective forecast scheme for prescribed burns in the Grand Canyon National Park. Prepared for Mark Scruggs, National Park Service, Air Quality Division, PO Box 25287, Denver, CO 80225, 113 pp + appendices.
- NR-89 Henry, S.L. Grant, 1991: Impact of inferred latent heating rates on predictions of convective storms. Atmospheric Science Paper No. 487, Colorado State University, W.R. Cotton and R.A. Pielke, Co-P.I.s, 127 pp.
- NR-90 Moran, M.D., 1991: Notes to accompany a video cassette of computer-generated movies of mesoscale atmospheric flows over complex terrain. Atmospheric Science Paper No. 481, Colorado State University, R.A. Pielke, P.I., 16 pp.
- NR-91 Cram, J.M., 1990: Numerical simulation and analysis of the propagation of a prefrontal squall line. Atmospheric Science Paper No. 471, Colorado State University, R.A. Pielke, P.I., 332 pp.
- NR-92 Xian, Z., 1991: A 2-D model study of the influence of the surface on mesoscale convection during the Indian monsoon. Atmospheric Science Paper No. 485, Colorado State University, R.A. Pielke, P.I., 110 pp.
- NR-93 Wesley, D.A., 1991: An investigation of the effects of topography on Colorado Front Range winter storms. Atmospheric Science Paper No. 489, Colorado State University, R.A. Pielke, P.I., 197 pp.

- NR-94 Poulos, G.S., 1992: The potential effect of Los Angeles Basin pollution on Grand Canyon air quality. Atmospheric Science Paper No. 490., Colorado State University, R.A. Pielke, P.I., 154 pp.
- NR-95 Eastman, J.L., W.A. Lyons, and R.A. Pielke, 1993: Final report on EPA Grant #R816486 entitled 'The impact of Lake Michigan upon summer regional oxidant precursor concentrations in the lower Lake Michigan basin'. April 13, 1993.
- NR-96 Pielke, R.A. and Z. Zeng, 1993: Long-term variability of climate. *Research Activities in Atmospheric and Oceanic Modeling*, Report No. 18, Ed. G.J. Boer, pp. 7.43-7.44.
- NR-97 Eastman, J.L. and R.A. Pielke, 1993: SERON modeling study report. January 20, 1993.
- NR-98 Lee, Tsengdar J., 1992: The impact of vegetation on the atmospheric boundary layer and convective storms. Atmospheric Science Paper No. 509, Colorado State University, R.A. Pielke, P.I., 137 pp.
- NR-99 Moran, Michael D., 1992: Numerical modelling of mesoscale atmospheric dispersion. Atmospheric Science Paper No. 513, Colorado State University, R.A. Pielke, P.I., 758 pp.
- NR-100 Rodriguez, Humberto, 1992: Influence of mesoscale variations in land surface albedo on large-scale averaged heat fluxes. Atmospheric Science Paper No. 514, Colorado State University, R.A. Pielke, P.I., 70 pp.
- NR-101 Papineau, John M., 1992: A performance evaluation of the NGM and RAMS models for the 29-30 March 1991 Front Range storm. Atmospheric Science Paper No. 515, Colorado State University, R.A. Pielke, P.I., 73 pp.
- NR-102 Mihailovic, D.T., R.A. Pielke, M. Jeftic, and T.J. Lee, 1993: A biophysical scheme (UNICOS) for use in different scale atmospheric models: An extended abstract. *Research Activities in Atmospheric and Oceanic Modeling*, Report No. 18, January 1993, pg. 4.46-4.48. Ed. G.J. Boer.
- NR-103 Chase, T.N., R.A. Pielke, T.G.F. Kittel, and J.H. Copeland, 1993: Final report on UCAR Contract #S9292 entitled 'Regional atmospheric simulations for the Niwot Ridge LTER'. September 22, 1993, 8 pp.
- NR-104 Eastman, Joseph L., 1993: A numerical study and tracer evaluation of transport and diffusion in a lake breeze. Atmospheric Science Paper No. 531, Colorado State University, R.A. Pielke, P.I., 112 pp.
- NR-105 Anglo, E.G. and R.A. Pielke, 1993: A numerical study of the impact of land use modification on local rainfall over Manila. Atmospheric Science Paper No. 538, Colorado State University.
- NR-106 Coskun, M., 1992: Flushing of a two-dimensional valley as function of Froude number and surface heating. M.S. paper, Plan B., R.A. Pielke, P.I., 70 pp.
- NR-107 Zeng, X. and R.A. Pielke, 1994: On the parameterization of mesoscale fluxes in large-scale models. *Research Activities in Atmospheric and Oceanic Modeling*, Report No. 19, Ed. G.J. Boer, pp. 4.47-4.48.
- NR-108 Snook, J.S., 1993: An investigation of Colorado Front Range winter storms using a nonhydrostatic mesoscale numerical model designed for operational use. Atmospheric Science Paper No. 541, Colorado State University, R.A. Pielke, P.I., 373 pp.
- NR-109 Mukabana, J.R., 1993: Numerical simulation of the influence of the large-scale monsoon flow on the diurnal weather patterns over Kenya. Atmospheric Science Paper No. 542, Colorado State University, R.A. Pielke, P.I., 211 pp.
- NR-110 Coughenour, M.B., T.G.F. Kittel, R.A. Pielke, and J. Eastman, 1993: Grassland/atmosphere response to changing climate: Coupling regional and local scales.

- Final Report prepared for the U.S. Department of Energy, Agreement No. DE-FG02-90ER60932, 59 pp + figures.
- NR-111 Pielke, R.A. and P.L. Vidale, 1995: The boreal forest and the polar front. *Research Activities in Atmospheric and Oceanic Modelling*, A. Staniforth, Editor, pp. 7.53-7.54.
- NR-112 Copeland, J.H., 1995: Impact of soil moisture and vegetation distribution on July 1989 climate using a regional climate model. Atmospheric Science Paper No. 574, Colorado State University, R.A. Pielke, P.I., 124 pp.
- NR-113 Shaw, B.L., 1995: The effect of soil moisture and vegetation heterogeneity on a Great Plains dryline: A numerical study. Atmospheric Science Paper No. 576, Colorado State University, R.A. Pielke, P.I., 93 pp.
- NR-114 Shaw, B.L., R.A. Pielke, and C.L. Ziegler, 1995: The effect of soil-moisture heterogeneity on a Great Plains dryline. *Research Activities in Atmospheric and Oceanic Modelling*, Report No. 21, A. Staniforth, Editor, pp. 4.35-4.36.
- NR-115 Chase, T.N., 1995: M.S. Thesis: The sensitivity of a general circulation model to large scale vegetation changes. Atmospheric Science Paper No. 581, Colorado State University, R.A. Pielke, P.I., 57 pp.
- NR-116 Pielke, R.A., T. Chase, J. Copeland, L. Steyaert, P.L. Vidale, and C. Ziegler, 1996: Summary of recent research activities. *Research Activities in Atmospheric and Oceanic Modelling*, A. Staniforth, Editor.
- NR-117 Pielke, R.A., J.H. Copeland, T.G.F. Kittel, and G.E. Liston, 1995: Projecting climate and vegetation change for the central grasslands biogeographic region: Regional climate change scenarios. CEGR-1 Regional Climate Modeling Project, Year 3 Annual Report.
- NR-118 Pielke, R.A., and T.G.F. Kittel, 1995: COLR-2 quarterly report on climate change in the Colorado Rocky Mountains: Bounding changes in regional climate. Report to the National Biological Survey.
- NR-119 Pielke, R.A., P.L. Vidale, J. Eastman, and T.G.F. Kittel, 1995: Modeling biosphere-atmosphere interactions at various scales in support of BOREAS. Annual progress report to the Office of Space Science and Applications, National Aeronautics and Space Administration, Washington, DC 20546.
- NR-120 Pielke, R.A., T.N. Chase, J.H. Copeland, T.G.F. Kittel, and G.E. Liston, 1995: COLR-2 Annual report on climate change in the Colorado Rocky Mountains: Bounding projected changes in Regional Climate. Report to the National Biological Survey.
- NR-121 Zeng, X., 1992: Chaos theory and its application in the atmosphere. Atmospheric Science Paper No. 504, Colorado State University, R.A. Pielke, P.I., 177 pp.
- NR-122 Pielke, R.A., G.E. Liston, L. Lu, P.L. Vidale, R.L. Walko, T.G.F. Kittel, W.J. Parton, and C.B. Field, 1997: Coupling of land and atmospheric models over the GCIP area - CENTURY, RAMS, and SiB2C. *Research Activities in Atmospheric and Oceanic Modelling*, A. Staniforth, Editor, 7.51-7.53.
- NR-123 Pielke, R.A., P.L. Vidale, J.L. Eastman, G.E. Liston, R.L. Walko, G. Dalu, A. Barr, and C. Ziegler, 1997: Influence of landscape on boundary layer atmospheric processes. *Research Activities in Atmospheric and Oceanic Modelling*, A. Staniforth, Editor, 4.33-4.35.
- NR-124 Finley, C., 1997, Numerical simulation of intense multi-scale vortices generated by supercell thunderstorms. Atmospheric Science Paper No. 640, Atmospheric Science Department, Colorado State University, 297 pp.
- NR-125 Greene, E.M., 1999: Simulation of alpine snow distributions in the northern Colorado Rocky Mountains using a numerical snow-transport model. M.S. Thesis, Atmospheric Science Paper No. 684, Colorado State University, R.A. Pielke Sr., P.I., 79 pp.

- NR-126 Chase, T.N., 1999: The role of historical land-cover changes as a mechanism for global and regional climate change. Ph.D. Dissertation, Atmospheric Science Paper No. 685, Colorado State University, R.A. Pielke Sr., P.I., 117 pp.
- NR-127 Eastman, J.L., 1999: Analysis of the effects of CO<sub>2</sub> and landscape change using a coupled plant and meteorological model. Ph.D. Dissertation, Atmospheric Science Paper No. 686, Colorado State University, R.A. Pielke Sr., P.I., 148 pp.
- NR-128 Lu, L., 1999: Implementation of a two-way interactive atmospheric and ecological model and its application to the central United States. Ph.D. Dissertation, Atmospheric Science Paper No. 687, Colorado State University, R.A. Pielke Sr., P.I., 134 pp.
- NR-129 Pielke, R.A. Sr. and L. Guenni, 1999: Vulnerability assessment of water resources to changing environmental conditions. *IGBP Newsletter*, **39**, 21-23.
- NR-130 Pitman, A., R. Pielke Sr., R. Avissar, M. Claussen, J. Gash, and H. Dolman, 1999: The role of the land surface in weather and climate: Does the land surface matter. *IGBP Newsletter*, **39**, 4-11.
- NR-131 Walko, R.L., L.E. Band, J. Baron, T.G.F. Kittel, R. Lammers, T.J. Lee, R.A. Pielke Sr., C. Taylor, C. Tague, C.J. Tremback, and P.L. Vidale, 1998: Coupled atmosphere-terrestrial ecosystem-hydrology models for environmental modeling. Department of Atmospheric Science Class Report #9, Colorado State University, Fort Collins, CO, 53 pp.
- NR-132 Hanamean, J.R., 2001: Vegetation impacts on maximum and minimum temperatures in northeast Colorado. M.S. Thesis, Atmospheric Science Paper No. 708, Colorado State University, R.A. Pielke Sr., P.I., 67 pp.
- NR-133 Strack, J.E., 2001: Sensitivity of model-generated daytime surface heat fluxes over snow to land-cover changes. M.S. Thesis, Atmospheric Science Paper No. 709, Colorado State University, R.A. Pielke Sr., P.I., 65 pp.
- NR-134 Darby, L.S., 2001: The sea breeze at Monterey Bay: Comparisons between lidar measurements and two-dimensional numerical simulations. M.S. Thesis, Atmospheric Science Paper No. 710, Colorado State University, R.A. Pielke Sr., P.I., pp.
- NR-135 Nair, U.S., 2002: Climatic impact of lowland deforestation on tropical montane cloud forests in Costa Rica. Ph.D. Dissertation, Atmospheric Science Paper No. 750, Colorado State University, R.A. Pielke Sr., P.I., 129 pp.
- NR-136 Pielke, R.A. Sr., H.J. Schellnhuber, and D. Sahagian, 2003: Nonlinearities in the Earth system. *IGBP Newsletter*, **55**, 11-15.
- NR-137 Pielke, R.A. Sr., 2003: Land use affects climate "as much as El Niño does". *Climate Science Forum*, Spring 2003, Vol. 2, No. 1, 1-3.
- NR-138 Matsui, T., G. Leoncini, R.A. Pielke Sr., and U.S. Nair, 2004: A New Paradigm for Parameterization in Atmospheric Models: Application to the New Fu-Liou Radiation Code. Atmospheric Science Paper No. 747, Colorado State University, Fort Collins, CO 80523, 32 pp.
- NR-139 Pielke, R.A. Sr., 2004: A broader perspective on climate change is needed. *IGBP Newsletter*, **59**, 16-19.
- NR-140 Marshall, C.H., 2004: Simulated impacts of anthropogenic land-cover change on the mesoscale climate of the Florida Peninsula. Atmospheric Science Paper No. 756, Colorado State University, Fort Collins, CO 80523, 142 pp.
- NR-141 Knowles, J.B., and R.A. Pielke Sr., 2005: The Southern Oscillation and its effect on tornadic activity in the United States. Atmospheric Science Paper No. 755, Colorado State University, Fort Collins, CO 80523, 15 pp.

- NR-142 Pielke, R.A. Sr., 2005: Minority report. Comments provided to the NRC Review Committee of the U.S. Climate Change Science Program's Synthesis and Assessment Product on Temperature Trends in the Lower Atmosphere. Atmospheric Science Paper No. , Colorado State University, Fort Collins, CO 80523, 9 pp.
- NR-143 Pielke Sr., Roger A., 2005: Public Comment on CCSP Report "Temperature Trends in the Lower Atmosphere: Steps for Understanding and Reconciling Differences". 88 pp including appendices.
- NR-144 Pielke Sr., R.A., G. Leoncini, T. Matsui, D. Stokowski, J.-W. Wang, T. Vukicevic, C.L. Castro, D. Niyogi, C.M. Kishtawal, A. Biazar, K. Doty, R.T. McNider, U. Nair, and W.-K. Tao, 2006: Development of generalized parameterization of diabatic heating for use in weather and climate models. Atmospheric Science Paper No. 776, Colorado State University, Fort Collins, CO 80523, 14 pp.
- NR-145 Jamiyansharav, K., D. Ojima, and R.A. Pielke Sr., 2006: Exposure characteristics of the Mongolian weather stations. Atmospheric Science Paper No. 779, Colorado State University, Fort Collins, CO 80523, 75 pp.
- NR-146 Pielke Sr. R.A., 2006: The partnership of weather and air quality - An essay. Atmospheric Science Paper No. 770, Colorado State University, Fort Collins, CO 80523, 44 pp.
- NR-147 Davey, C.A., and R.A. Pielke Sr., 2006: Comparing station density and reported temperature trends for land-surface sites. *Unpublished report*.
- NR-148 Pielke Sr., R.A., 2008: Global climate models - Many contributing influences. Citizen's Guide to Colorado Climate Change, Colorado Climate Foundation for Water Education, pp. 28-29.
- NR-149 Pielke Sr., Roger A., 2008: A Broader View of the Role of Humans in the Climate System is Required In the Assessment of Costs and Benefits of Effective Climate Policy. Written Testimony for the Subcommittee on Energy and Air Quality of the Committee on Energy and Commerce Hearing "Climate Change: Costs of Inaction" – Honorable Rick Boucher, Chairman. June 26, 2008, Washington, DC, 52 pp.



## PAPERS IN PREPRINT VOLUMES

- PPR-1 Cotton, W.R., P.T. Gannon, and R.A. Pielke, 1974: Numerical experiments on the influence of the mesoscale circulations on the cumulus scale, *Proceedings of the AMS Conference on Cloud Physics*, October 21-24, Tucson, Arizona, 424-429.
- PPR-2 Pielke, R.A., 1976: Models of mesoscale systems. *Proceedings of the Conference on Meteorology over the Gulf of Mexico*, January 14-16, 13 pg. (Invited paper).
- PPR-3 Pielke, R.A., 1976: Use of model results and satellite imagery to improve local weather forecasts over south Florida during the summer. *Preprint Volume of the Sixth AMS Conference on Weather Forecasting and Analysis*, May 10-13, Albany, New York, 28-33 (Invited paper).
- PPR-4 Mahrer, Y., and R.A. Pielke, 1976: Numerical simulation of the airflow over Barbados. *Preprint Volume of the Sixth AMS Conference on Weather Forecasting and Analysis*, May 10-13, Albany, New York, 84-88 (see R-9).
- PPR-5 Cotton, W.R., R.L. George, and R.A. Pielke, 1976: The evolution of cumulonimbus systems in relation to low-level thermally driven mesoscale systems. *Preprint Volume of the International Conference on Cloud Physics*, July 26-30, Boulder, Colorado, 304-307.
- PPR-6 Reid, J.D., L.O. Grant, R.A. Pielke, and Y. Mahrer, 1976: Observations and numerical modeling of seeding agent delivery from ground based generators to orographic cloud base. *Preprint Volume of the International Weather Modification Conference*, August 26, Boulder, Colorado, 521-527.
- PPR-7 Mahrer, Y. and R.A. Pielke, 1976: A numerical study of the air flow over irregular terrain. *Preprint Volume of the DMG/AMS International Conference on Simulation of Large Scale Atmospheric Processes*, August 30-September 4, Homburg, Germany (see R-14).
- PPR-8 Pielke, R.A., R. Biondini, and G. Mullen, 1977: Rainfall in the EML (Experimental Meteorology Laboratory) target area as a function of synoptic parameters. *Preprint Volume of the Fifth Conference on Probability and Statistics in Atmospheric Sciences*, November 15-18, Las Vegas, Nevada, 196-200.
- PPR-9 Snow, J.W., M. Garstang, R.A. Pielke, and H. Cooper, 1978: The wind potential of the coastal zone. *Proceedings of the Third U.S. National Conference on Wind Engineering Research*, Division of Continuing Education, University of Florida, Gainesville, Florida, February, 23 pg.
- PPR-10 Pielke, R.A., 1978: The role of man and machine in the weather service of the future. *Preprint Volume of the American Meteorological Society Conference on Weather Forecasting and Analysis and Aviation Meteorology*, October 16-19, Silver Spring, Maryland, 271-272.
- PPR-11 Garstang, M., R.A. Pielke, C. Aspliden, and J.W. Snow, 1978: Offshore wind power model estimates. *Preprint Volume of the Second International Symposium on Wind Energy Systems*, October 3-6, Amsterdam, Netherlands, B4-33-B4-48.
- PPR-12 McNider, R.T. and R.A. Pielke, 1979: Applications of the University of Virginia mesoscale model to air pollutant transport. *Preprint Volume of the Fourth AMS Symposium on Turbulence, Diffusion and Air Pollution*, January 15-18, Reno, Nevada, 397-404.
- PPR-13 McNider, R.T., R.A. Pielke, and J.M. Simpson, 1979: Investigation of the spatial and temporal variation of cloud condensation nuclei over south Florida using a numerical

- model. *Seventh AMS Conference on Inadvertent and Planned Weather Modification*, October 8-12, Banff, Alberta, Canada.
- PPR-14 McNider, R.T. and R.A. Pielke, 1980: Modeling the transport and diffusion of air pollutants using a prognostic mesoscale model. Institute National de Recherche, Chimique Applique, B.P. No. 1, 91710, Vert-le-Petit, France, *Fourteenth International Symposium on Atmospheric Pollution*, May.
- PPR-15 McNider, R.T., S.R. Hanna, and R.A. Pielke, 1980: Sub-grid scale plume dispersion in coarse resolution mesoscale models. *Proceedings of the Second Joint Conference on Applications of Air Pollution Meteorology*, AMS, New Orleans, Louisiana, 424-429.
- PPR-16 Segal, M., Y. Mahrer, R.A. Pielke, and D.S. McDougal, 1980: Quantitative assessment of air quality in the greater Chesapeake Bay area using a three-dimensional mesoscale atmospheric model. *Proceedings of the Symposium on Intermediate Range Atmospheric Transport Processes and Technology Assessment*, October 1-3, Gatlinburg, Tennessee, 105-115.
- PPR-17 McNider, R.T. and R.A. Pielke, 1980: Nocturnal jet development over sloping terrain and implications for pollutant transport. *Proceedings of the Symposium on Intermediate Range Atmospheric Transport Processes and Technology Assessment*, October 1-3, Gatlinburg, Tennessee, 247-255.
- PPR-18 Segal, M., Y. Mahrer, and R.A. Pielke, 1980: A numerical model study of plume fumigation during nocturnal inversion break-up. *Proceedings of the Symposium on Intermediate Range Atmospheric Transport Processes and Technology Assessment*, October 1-3, Gatlinburg, Tennessee, 257-266.
- PPR-19 McNider, R.T., S.R. Hanna, and R.A. Pielke, 1981: Numerical simulation of the transport and dispersion of pollutants in slope and mountain-valley flows. *Proceedings of the Atlanta Conference on Turbulence and Air Pollution*, AMS, March 9-13, 220-221.
- PPR-20 Pielke, R.A., 1981: The use of mesoscale meteorological and climatological information in nowcasting and short range prediction. *Proceedings of the IAMAP Symposium Nowcasting: Mesoscale Observation and Short-Range Prediction*, August 25-28, Homburg, Germany, 223-229.
- PPR-21 Pielke, R.A., R.T. McNider, C.L. Martin, and M. Segal, 1981: Thermal driven effects and the parameterization of boundary layer diffusion. *Proceedings of the Workshop on the Parameterization of Mixed Layer Diffusion*, October 20-23, Las Cruces, New Mexico, 193- 207.
- PPR-22 McNider, R.T. and R.A. Pielke, 1981: Numerical simulation of slope and mountain flows. *Proceedings of the Conference on Mountain Meteorology*, AMS, Steamboat Springs, Colorado, November 7-12, 93-100.
- PPR-23 Segal, M., Y. Mahrer, and R.A. Pielke, 1982: Quantitative evaluation of onshore pollutant recirculation over the Mediterranean coastal area of central Israel. *Proceedings of the Third Conference on Application of Air Pollution Meteorology*, AMS, January, San Antonio, Texas, 102-105.
- PPR-24 McNider, R.T., K.J. Anderson, and R.A. Pielke, 1982: Numerical simulation of plume impaction. *Proceedings of the Third Conference on Application of Air Pollution Meteorology*, AMS, January, San Antonio, Texas, 126-129.
- PPR-25 Segal, M., Y. Mahrer, and R.A. Pielke, 1982: A three-dimensional numerical model study of summer meteorological patterns over the southeastern coasts of the Mediterranean Sea. *Proceedings of the First International Conference on Meteorology and Air/Sea Interaction of the Coastal Zone*, May 10-14, The Hague, Netherlands, 162-166.

- PPR-26 Pielke, R.A., 1982: Mesoscale atmospheric circulations related to the coast - a summary. *Proceedings of the First International Conference on Meteorology and Air/Sea Interaction of the Coastal Zone*, May 10-14, The Hague, Netherlands, 154-161. (Invited paper).
- PPR-27 McNider, R.T., A.P. Mizzi, and R.A. Pielke, 1982: Numerical investigation of low level jets in coastal zones. *Proceedings of the First International Conference on Meteorology and Air/Sea Interactions of the Coastal Zone*, May 10-14, The Hague, Netherlands, 190-195.
- PPR-28 Pielke, R.A., 1982: Terrain-induced mesoscale systems - a definition. *Proceedings of the Symposium on Mesoscale Meteorological Studies (CIMMS)*, Norman, Oklahoma, July 1-2, 1982, 135-151.
- PPR-29 Hjelmfelt, M.R., W.A. Lyons, and R.A. Pielke, 1983: Mesoscale spiral vortex embedded within a Lake Michigan snow squall band: Observations and model simulation. *Proceedings of the First Conference on Mesoscale Meteorology*, Norman, Oklahoma, May 31-June 3, 1983.
- PPR-30 Segal, M., R.A. Pielke, and Y. Mahrer, 1984: Evaluation of surface sensible heat flux effects on the generation and modification of mesoscale circulations. *Proceedings of the Nowcasting II Symposium*, September 3-7, Norrkoping, Sweden, 263-269.
- PPR-31 Bader, D.C., R.A. Pielke, and T.B. McKee, 1984: A simple scheme for the computation of sub-grid scale diffusion in atmospheric dispersion models. *Proceedings of the Fourth Joint Conference on Applications of Air Pollution Meteorology*, October 15-19, Portland, Oregon, 20-23.
- PPR-32 Arritt, R.W. and R.A. Pielke, 1984: Numerical investigations of terrain induced mesoscale circulations and pollutant transport in the Shenandoah Valley. *Proceedings of the Third Conference on Mountain Meteorology*, AMS, October 15- 19, Portland, Oregon, 1-4.
- PPR-33 Arritt, R.W. and R.A. Pielke, 1985: The influence of turbulent kinetic energy diffusion on the development of nocturnal slope flows. *Proceedings of the Seventh Symposium on Turbulence and Diffusion*, November 12-15, Boulder, Colorado, 308-311.
- PPR-34 Vonder Haar, T.H., C.F. Shih, D.L. Randel, A. Meade, J.J. Toth, D.N. Allen, R.A. Pielke, and R.H. Johnson, 1986: The prototype digital weather laboratory at Colorado State University. *Second International Conference on Interactive Information and Processing Systems for Meteorology, Oceanography and Hydrology (IIPS)*, AMS, January 13-17, Miami, Florida.
- Moran, M.D., R.W. Arritt, M. Segal, and R.A. Pielke, 1986: Modification of regional-scale pollutant dispersion by terrain- forced mesoscale circulations. *APCA Specialty Conference on the Meteorology of Acidic Deposition*, March 17-20, 1986, Albany, New York (see PSNT-58).
- PPR-35 Lyons, W.A., J.A. Schuh, R.A. Pielke, and M.Segal, 1986: Forecasting sea breeze thunderstorms at the Kennedy Space Center using the prognostic three-dimensional mesoscale model. *Eleventh Conference on Weather Forecasting and Analysis*, June 1986, Kansas City, Missouri.
- PPR-36 Arritt, R.W., R.A. Pielke, R.T. McNider, and D. Henderson, 1986: Numerical studies of thermally and mechanically forced circulations over complex terrain. *79th Annual Meeting, Air Pollution Control Association*, June 22-27, 1986, Minneapolis, Minnesota, Paper No. 86-8.3, 20 pp.

- PPR-37 Pielke, R.A., J.L. Song, M. Segal, P.J. Michaels, W.A. Lyons, and R.W. Arritt, 1986: The predictability of sea breeze generated thunderstorms. *Proceedings of the WMO International Workshop on Rain-Producing Systems in the Tropics and the Extra-Tropics*, July 21-25, 1986, San Jose, Costa Rica, 101-107.
- PPR-38 Arritt, R.W., M. Segal and R.A. Pielke, 1986: The use of numerical simulation to assess dry deposition velocities for sulfur dioxide. *Proceedings of the Fifth Joint Conference on Applications of Air Pollution Meteorology*, November 18-21, 1986, Research Triangle Park, North Carolina, 159-162.
- PPR-39 Tremback, C., G. Tripoli, R.W. Arritt, W.R. Cotton, and R.A. Pielke, 1986: The regional atmospheric modeling system. *Envirosoft 86 Conference*, November 19-21, 1986, Newport Beach, California. Appears in the Proceedings of the International Conference on Development and Application of Computer Techniques to Environmental Studies, Los Angeles, California, 601-607.
- PPR-40 Pielke, R.A., M. Segal, R. Arritt, C-H. Yu, and R.T. McNider, 1985: Influence of distant as opposed to local pollution transport on wilderness air quality. *Proceedings of the National Wilderness Research Conference: Issues, State-of-Knowledge, Future Directions*. July 23-26, 1985, Fort Collins, Colorado, 62-72.
- PPR-41 Pielke, R.A., R.W. Arritt, M. Segal, M.D. Moran, and R.T. McNider, 1987: Mesoscale numerical modeling of pollutant transport in complex terrain. *Proceedings of the International Conference on Energy Transformations and Interactions with Small and Mesoscale Atmospheric Processes*, March 2-6, 1987, Ecole Polytechnique Federale de Lausanne, Switzerland, 59-74 (see CB-8).
- PPR-42 Lyons, W.A., J.A. Schuh, D. Moon, R.A. Pielke, W.R. Cotton, and R.W. Arritt, 1987: Short range forecasting of sea breeze generated thunderstorms at the Kennedy Space Center: A real-time experiment using a primitive equation mesoscale numerical model". *Symposium on Mesoscale Analysis and Forecasting, Incorporating Nowcasting*, August 17-19, 1987, Vancouver, British Columbia, Canada, 503-508. (see PSNT-66).
- PPR-43 Pielke, R.A., 1987: The challenge of using mesoscale data in mesoscale models. *Proceedings of the Symposium on Mesoscale Analysis and Forecasting, Incorporating Nowcasting*, August 17-19, 1987, Vancouver, British Columbia, Canada. ESA, 651-652 (see PSNT-69).
- PPR-44 Pielke, R.A. and J.M. Cram, 1987: An improved method of analyzing surface geostrophic winds and pressure. *Proceedings of the Symposium on Mesoscale Analysis and Forecasting, Incorporating Nowcasting*, August 17-19, 1987, Vancouver, British Columbia, Canada, 565-567 (see PSNT-70).
- PPR-45 Pielke, R.A., M.D. Moran, M. Segal, D.A. Wesley, and T.B. McKee, 1987: Opportunities for nowcasting air pollution episodes and accidental toxic and radioactive releases. *Proceedings of the Symposium on Mesoscale Analysis and Forecasting, Incorporating Nowcasting*, August 17-19, 1987. Vancouver, British Columbia, Canada, 463-470 (see PSNT-71).
- PPR-46 Pielke, R.A., 1987: Overview of model physics. *Proceedings of the Workshop and Panel Meeting of the U.S. Army Advisory Panel on Mesometeorology*, May 12-14, 1987, Risø National Laboratory, Roskilde, Denmark, (see PSNT-72), 1-4.
- PPR-47 Cram, J.M and R.A. Pielke, 1987: The importance of synoptic forcing and mesoscale terrain to a numerical simulation of an orographically-induced system. *Proceedings of the 3rd AMS Conference on Mesoscale Processes*, August 21-26, 1987. Vancouver, British Columbia, Canada, 118-119 (see PSNT-76).

- PPR-48 Moran, M.D., R.T. McNider, and R.A. Pielke, 1987: Diurnal influences on mesoscale atmospheric dispersion. *Proceedings of the Third AMS Conference on Mesoscale Processes*, August 21-26, 1987. Vancouver, British Columbia, Canada, 220-221 (see PSNT-65).
- PPR-49 Lyons, W.A., D.A. Moon, J.A. Schuh, C.S. Keen, L.E. Newman, T.E. Nelson, R.A. Pielke, W.R. Cotton, R.W. Arritt, and R.G. Fisher, 1988: Conducting a 'field program' on the southeast Florida coastline using a mesoscale numerical model. *Preprints of the 4th Conference on Meteorology and Oceanography of the Coastal Zone*. February 1-5, 1988, AMS, Anaheim, California, 107-112 (see PSNT-78).
- PPR-50 Arritt, R.W., G.S. Young and R.A. Pielke, 1987: An estimation of the Denver convergence zone using a mesoscale model. *Proceedings of the Fourth Conference on Mountain Meteorology*, American Meteorology Society, 151-155 (see PSNT-68).
- PPR-51 Wesley, D.A. and R.A. Pielke, 1988: Simulations of blocked upslope flow along the Colorado Front Range. *Report of the 2nd International Cloud Modeling Workshop, WMO/TD No. 268*, August 8-12, 1988, Toulouse, France, WMO (see PSNT-116), 317-322.
- PPR-52 Lyons, W.A., D.A. Moon, C.S. Keen, J.A. Schuh, R.A. Pielke, W.R. Cotton, and R.W. Arritt, 1988: Providing operational guidance for the development of sea breeze thunderstorms at the Kennedy Space Center: An experiment using a mesoscale numerical model. *Preprints, 15th Conference on Severe Local Storms*, February 22-26, 1988, AMS, Baltimore, Maryland, J125-J132, (see PSNT-79).
- PPR-53 Pielke, R.A., M. Segal, and G. Kallos, 1988: Resolution needs for adequate lower tropospheric profiling involved with thermally-forced atmospheric systems. *Proceedings of the Symposium on Lower Tropospheric Profiling: Needs and Technologies*, May 31-June 3, 1988, Boulder, Colorado, 5-7, (see PSNT-87).
- PPR-54 Hadfield, M.G., W.R. Cotton, and R.A. Pielke, 1988: Large-eddy simulations of convective boundary layer circulations driven by microscale surface features. *Preprints, Eighth Symposium on Turbulence and Diffusion*, American Meteorological Society, April 25-29, 1988, San Diego, California, 33-36 (see PSNT-82).
- PPR-55 Lyons, W.A., D.A. Moon, C.S. Keen, J.A. Schuh, R.A. Pielke, W.R. Cotton, and R.W. Arritt, 1988: Short range forecasting of sea breeze convective storms at the Kennedy Space Center: Applications of remote sensing and mesoscale numerical models. *Preprints of the 4th International Conference on Interactive Information and Processing Systems for Meteorology, Oceanography and Hydrology*. February 1-5, 1988, AMS, Anaheim, California, 268-275 (see PSNT-77).
- PPR-56 Wesley, D.A., M.J. Weissbluth, R.A. Pielke, and W.R. Cotton, 1988: Microphysical and dynamical interactions in Colorado Front Range upslope storms. *Proceedings, 10th International Cloud Physics Conference*, August 15-20, 1988, Bad Homburg, Germany (see PSNT-84), Volume I, 359-361.
- PPR-57 Pielke, R.A., 1988: Description of the synoptic mesoscale and local meteorological factors associated with the buildup of air pollution. *Proceedings of The Brown Cloud Forum*, University of Denver Atmospheric Sciences Center Technical Paper 1988-1 in cooperation with U.S. Senator Bill Armstrong. February 8, 1988, Denver, Colorado (see PSNT-85), 169-192.
- PPR-58 Stocker, R.A., R.A. Pielke, and C.J. Tremback, 1988: A preliminary comparison of the WHITEX field study with synoptic model-derived trajectory results. *Proceedings of the 81st APCA Annual Meeting & Exhibition*, Dallas Convention Center, Dallas, Texas, June 19-24, 1988 (see PSNT-86).

- PPR-59 Lyons, W.A., R.A. Pielke, D.A. Moon, and J.A. Schuh, 1988: Dispersion of toxic gases in complex sea/land breezes: A new technique using a linked mesoscale numerical model and Lagrangian particle model (U)\*. 1988 JANNAF Safety and Environmental Protection Subcommittee Meeting, Naval Postgraduate School, May 23-27, 1988, Monterey, California (see PSNT-88).
- PPR-60 Pielke, R.A., W.A. Lyons, M.D. Moran, and R.T. McNider, 1988: An improved procedure to estimate dispersion in complex terrain. *Proceedings, American Nuclear Society Topical Meeting on "Emergency Response: Planning, Technologies, and Implementation"*. September 26-28, 1988, Charleston, South Carolina (see PSNT-92), 11-5, pgs. 1-6.
- PPR-61 Miller, W.F., R.A. Pielke, M. Garstang, and S. Greco, 1988: Simulations of the mesoscale circulation in the Able II region. *Proceedings of the Fifth Brazilian Congress of Meteorology*. November 5-11, 1988, Rio de Janeiro, Brazil.
- PPR-62 Pielke, R.A., 1988: Mesoscale modeling. *Proceedings, CIRA Satellite Research Workshop*, September 21-23, 1988, Pingree Park, Colorado (see PSNT-93), 80-113.
- PPR-63 Lee, T.J., J.F. Weaver, and R.A. Pielke, 1990: Numerical predictions and nowcasting of downslope windstorms along the Colorado Front Range. *Proceedings, 5th Conference on Mountain Meteorology*, June 25-29, 1990, Boulder, Colorado, AMS, Boston (see PSNT-119), 81-84.
- PPR-64 Pielke, R.A. and R. Avissar, 1989: Use of mesoscale meteorological modeling as an assessment of summer urban heat islands. *Proceedings, Workshop on Saving Energy and Reducing Atmospheric Pollution by Controlling Summer Heat Islands*. February 23-24, 1989, Lawrence Berkeley Laboratory, Berkeley, California, 176-184.
- PPR-65 Avissar, R. and R.A. Pielke, 1989: The impact of plant stomatal control on mesoscale atmospheric circulations. *Proceedings of the Workshop on Stomatal Resistance Formulation and Its Application to Modeling of Transpiration*, Penn State university, University Park, Pennsylvania, April 10-13, 1989 (see PSNT-124), 47-54.
- PPR-66 Pielke, R.A., 1989: A review of procedures to validate mesoscale numerical weather prediction models. *Proceedings of the 11th Conference on Probability and Statistics in Atmospheric Sciences*, Monterey, California, October 1-5, 1989 (see PSNT-114), 183-185.
- PPR-67 Pielke, R.A., 1989: Responder to "Regional air pollution with special emphasis on Europe by F.B. Smith". IAMAP 1989, Presidents' Lectures, July 31. First Scientific Session, Reading, England (see PSNT-128).
- PPR-68 McCoy, M.C., R.A. Pielke, and P.W. Mielke, Jr., 1989: An application of multi-response randomized block permutation procedures (MRBP) to the evaluation of numerical weather prediction models. *Proceedings of the 11th Conference on Probability and Statistics in Atmospheric Sciences*, Monterey, California, October 1-5, 1989 (see PSNT-129), 192-195.
- PPR-69 Wesley, D.A. and R.A. Pielke, 1989: Evidence of a blocking-induced cold pool and its effect on snowfall distributions. *Preprints, 12th Conference on Weather Analysis and Forecasting*, AMS, Monterey, California, October 2-6, 1989, (see PSNT-98), 378-383.
- PPR-70 Pielke, R.A., X. Zeng, and R. Eykholt, 1990: Application of chaos theory to atmospheric predictability. *EOS, The Front Range Branch AGU Annual Meeting*, Boulder, Colorado. February 5-6, 1990 (see PSNT-136), 720.
- PPR-71 Pielke, R.A., 1990: Overlooked scientific issues in assessing hypothesized greenhouse gas warming. *Proceedings, 1990 Electric Utility Business Environment Conference and Exhibition*, Denver, Colorado. March 7-9, 1990 (see PSNT-138), 199-208. Also appeared

- in *The Greenhouse Debate Continued: An Analysis and Critique of the IPCC Climate Assessment*, S. Fred Singer, Editor, Attachment 10.
- PPR-72 Walko, R.L., W.R. Cotton, and R.A. Pielke, 1990: Large eddy simulation of the CBL over hilly terrain. *Proceedings, Ninth Symposium on Turbulence and Diffusion*, Roskilde, Denmark. April 30 -- May 3, 1990 (see PSNT-144).
- PPR-73 Wesley, D.A., R.A. Pielke, J.F. Weaver, and R.L. McAnelly, 1990: Low-level stable layers, blocking, and locally heavy snowfall. *Proceedings, 16th Conference on Severe Local Storms*, AMS, Kananaskis Provincial Park, Alberta, Canada, October 22-26, 1990 (see PSNT-152).
- PPR-74 Moran, M.D., R.A. Pielke, and R.T. McNider, 1990: Temporal and spatial resolution requirements for regional-scale dispersion models. *Proceedings, 18th International Technical Meeting of NATO-CCMS on Air Pollution Modeling and Its Application*, Vancouver, Canada. May 13-17, 1990 (see PSNT-146), Volume 2, 419-428.
- PPR-75 Lyons, W.A., D.A. Moon, J.L. Eastman, C.S. Keen, M.G. Venne, R.A. Pielke, W.R. Cotton, R.L. Walko, and C.J. Tremback, 1990: A new approach to predicting dispersion of toxic gas clouds in complex coastal wind fields at Cape Canaveral/Kennedy Space Center. Paper No. 90-79.5, *83rd Annual Meeting & Exhibition*, Pittsburgh, Pennsylvania, June 24-29, 1990 (see PSNT-148).
- PPR-76 Pielke, R.A., G. Dalu, J. Weaver, J. Lee, and J. Purdom, 1990c: Influence of landuse on mesoscale atmospheric circulation. *Extended Abstracts Volume, Fourth Conference on Mesoscale Processes*, Boulder, Colorado, June 25-29, 1990, AMS, Boston (see PSNT-149), 226-227.
- PPR-77 Nicholls, M.E., W.R. Cotton, and R.A. Pielke, 1990: The formation of deep gravity waves by a mesoscale convective system. *Proceedings, Fourth Conference on Mesoscale Processes*, Boulder, Colorado. June 25-29, 1990 (see PSNT-150).
- PPR-78 Dalu, G.A., M. Baldi, R.A. Pielke, and A. Guerrini, 1990: Flow and particle trajectories over terrain thermal inhomogeneities. *Proceedings, 18th International Technical Meeting of NATO-CCMS on Air Pollution Modeling and Its Application*, Vancouver, Canada. May 13-17, 1990 (see PSNT-153), Volume 1, 301-308.
- PPR-79 Pielke, R.A., W.A. Lyons, R.T. McNider, M.D. Moran, D.A. Moon, R.A. Stocker, R.L. Walko, and M. Uliasz, 1991: Regional and mesoscale meteorological modeling as applied to air quality studies. Presented at the 18th NATO-CCMS International Technical Meeting on Air Pollution Dispersion Modeling and Its Application, Vancouver, Canada. May 13-17, 1990. In: *Air Pollution Modeling and Its Application VIII*, H. van Dop and D.G. Steyn, Eds., Plenum Press, New York, 1991, (see PSNT-154), 259-289.
- PPR-80 Uliasz, M. and R.A. Pielke, 1991: Application of the receptor oriented approach in mesoscale dispersion modeling. In *Air Pollution Modeling and Its Application VII*, H. Van Dop and D.G. Steyn, Eds., Plenum Press, New York and London, 399-408 (see PSNT-155).
- PPR-81 Pielke, R.A., G. Dalu, M.D. Moran, M. Uliasz, T.J. Lee, and R.A. Stocker, 1991: Impacts of land surface characteristics on atmospheric dispersion. *Preprints, Seventh Joint Conference on Applications of Air Pollution Meteorology with AWMA*, New Orleans, Louisiana, AMS, January 14-18, 1991 (see PSNT-158), 302-307.
- PPR-82 Uliasz, M. and R.A. Pielke, 1990: Receptor-oriented Lagrangian-Eulerian model of mesoscale air pollution dispersion. *Proceedings, 3rd International Conference on Development and Application of Computer Techniques to Environmental Studies*, Montreal, Canada, September 11-13, 1990 (see PSNT-159), 57-68.

- PPR-83 Pielke, R.A., T.J. Lee, J. Weaver, and T.G.F. Kittel, 1990: Influence of vegetation on the water and heat distribution over mesoscale sized areas. *Preprints, 8th Conference on Hydrometeorology*, Kananaskis Provincial Park, Alberta, Canada, October 22-26, 1990 (see PSNT-140), 46-49.
- PPR-84 Dalu, G.A., M. Segal, T.J. Lee, and R.A. Pielke, 1988: Atmospheric waves induced by change in surface roughness. *Proceedings, 2nd International Conference on Computer Techniques in Environmental Studies*, Porto Carras, Greece, September 1988, 550-570.
- PPR-85 Dalu, G.A., P.J. Flatau, R.A. Pielke, and G.L. Stephens, 1990: Horizontal structure of cirrus clouds -- Analytical theory. *Proc. 1990 AMS Conference on Cloud Physics*, San Francisco, California, July 23-27, 1990 (see PSNT-164), 613-616.
- PPR-86 Lyons, W.A., D.A. Moon, and R.A. Pielke, 1990: Modeling transport and diffusion in complex sea breeze wind fields. *Proc., American Nuclear Society 1990 Winter Meeting*, Washington, D.C., November 12-16, 1990 (see PSNT-175).
- PPR-87 Holt, E.H., R.A. Pielke, R.L. Walko, S.A. Lucas, and W.D. Ohmstede, 1991: Methodology for modeling extreme effects of aerosol particles transported on a regional scale. *Preprints, Seventh Joint Conference on Applications of Air Pollution Meteorology with AWMA*, New Orleans, Louisiana, AMS, January 14-18, 1991 (see PSNT-176), 131-134.
- PPR-88 Lyons, W.A., R.A. Pielke, J.L. Eastman, D.A. Moon, C.S. Keen, and N.R. Lincoln, 1991: Mesoscale numerical model evaluations of the meteorological factors associated with elevated ozone levels in the southern Lake Michigan region. *Preprints, Seventh Joint Conference on Applications of Air Pollution Meteorology with AWMA*, New Orleans, Louisiana, AMS, January 14-18, 1991 (see PSNT-177), 164-167.
- PPR-89 Lyons, W.A., D.A. Moon, M.G. Venne, C.S. Keen, N.R. Lincoln, R.A. Pielke, W.R. Cotton, C.J. Tremback, and R.L. Walko, 1991: Real-time forecasting of the impacts of accidental releases of radionuclides into complex coastal zone mesoscale regimes using the Advanced Regional Atmospheric Modeling System (ARAMS). *Preprints, Seventh Joint Conference on Applications of Air Pollution Meteorology with AWMA*, New Orleans, Louisiana, AMS, January 14-18, 1991 (see PSNT-178), 205-208.
- PPR-90 Lincoln, N.R., M.T. Johnson, C. Carlson, W.A. Lyons, D.A. Moon, C.S. Keen, R.A. Pielke, and W.R. Cotton, 1991: Visualizations of forecasts and simulations produced by a three-dimensional mesoscale numerical model (The Advanced Regional Atmospheric Modeling System). *Preprints, Seventh International Conference on Interactive Information and Processing System for Meteorology, Oceanography, and Hydrology*, AMS, New Orleans, Louisiana, January 13-18, 1991 (see PSNT-179).
- PPR-91 Stocker, R.A. and R.A. Pielke, 1991: Complex interactions of regional and mesoscale circulations on the Colorado plateau. *Preprints, Seventh AMS/AWMA Joint Conference on Applications of Air Pollution Meteorology*, New Orleans, Louisiana, AMS, January 14-18, 1991 (see PSNT-180), 197-201.
- PPR-92 Lyons, W.A., C.S. Keen, R.A. Pielke, W.R. Cotton, D.A. Moon, and N.R. Lincoln, 1991: A prototype real-time forecasting system for mesoscale dispersion in land/lake breezes. *Proc. Third Topical Meeting on Emergency Response and Preparedness*, Chicago, Illinois, April 16-19, 1991 (see PSNT-181).
- PPR-93 Uliasz, M. and R.A. Pielke, 1991: Lagrangian-Eulerian dispersion modeling system for real-time mesoscale applications. *Proc. Third Topical Meeting on Emergency Response and Preparedness*, Chicago, Illinois, April 16-19, 1991 (see PSNT-182).
- PPR-94 Pielke, R.A., J. Weaver, T. Kittel, and J. Lee, 1990: Use of NDVI for mesoscale modeling. *Proc. Workshop on the "Use of Satellite-Derived Vegetation Indices in*



- Weather and Climate Prediction Models*", Camp Springs, Maryland. February 26-27, 1990, 83-85 (see PSNT-137).
- PPR-95 Lyons, W.A., D.A. Moon, J.L. Eastman, C.S. Keen, N.R. Lincoln, R.A. Pielke, and W.R. Cotton, 1990: Some considerations of the role of the land/lake breeze in causing elevated ozone levels in the southern Lake Michigan region. *Proc., IBM Summer Institute on Environmental Modeling*, Oberlech, Austria, July 16-22, 1990 (see PSNT-188).
- PPR-96 W.R. Cotton, R.L. Walko, K.R. Costigan, P.J. Flatau, and R.A. Pielke, 1990: Using RAMS in LES mode -- From inhomogeneous surfaces to cirrus clouds. *Lecture Notes in Engineering*, Large Eddy Simulation Workshop, St. Petersburg, Florida, December 19-21, 1990 (see PSNT-189).
- PPR-97 Zeng, X., R.A. Pielke, and R. Eykholt, 1991: Computation of Lyapunov exponents and its application in the atmosphere. *EOS*, AGU 1991 Spring Meeting, Baltimore, Maryland, May 28-June 1, 1991 (see PSNT-190).
- PPR-98 Lyons, W.A., R.A. Pielke, R.L. Walko, C.J. Tremback, and C.S. Keen, 1991: Predicting air pollution dispersion in complex mesoscale flows using a mesoscale numerical model and a Lagrangian particle dispersion model. *Proceedings, 84th Annual Meeting and Exhibition*, Vancouver, British Columbia, Canada, June 16-21, 1991 (see PSNT-191).
- PPR-99 Lyons, W.A., J.L. Eastman, R.A. Pielke, C.J. Tremback, D.A. Moon, and N.R. Lincoln, 1991: The mesometeorology of ozone episodes in the lower Lake Michigan air quality region. *Proceedings, 84th Annual Meeting and Exhibition*, Vancouver, British Columbia, Canada, June 16-21, 1991 (see PSNT-192).
- PPR-100 Pielke, R.A., X. Zeng, J. Copeland, W.R. Cotton, and M. Uliasz, 1991: Predictability of atmospheric structure -- Relevance for determining temporal and spatial resolution of tropospheric profiling. *Proceedings, Second Symposium on Tropospheric Profiling: Needs and Technologies*, Boulder, Colorado, September 9-13, 1991 (see PSNT-194).
- PPR-101 Snook, J.S. and R.A. Pielke, 1991: Investigation of winter-time diurnal precipitation variation over mountainous terrain. *Proceedings, Ninth Conference on Numerical Weather Prediction*, Denver, Colorado, October 14-18, 1991 (see PSNT-195).
- PPR-102 Wesley, D.A. and R.A. Pielke, 1991: Nested simulations of a winter storm: The influence of topography on the snowfall distribution. *Proceedings, Ninth Conference on Numerical Weather Prediction*, Denver, Colorado, October 14-18, 1991 (see PSNT-196).
- PPR-103 Pielke, R.A., X. Zeng, and R.L. Walko, 1991: The predictability of atmospheric features in response to heterogeneous heating. *Proceedings, Ninth Conference on Numerical Weather Prediction*, Denver, Colorado, October 14-18, 1991 (see PSNT-197).
- PPR-104 Mukabana, J.R. and R.A. Pielke, 1991: Numerical simulation of the effects of monsoon winds on the weather patterns over Kenya: A case study during the "long rains" season. *Proceedings, Ninth Conference on Numerical Weather Prediction*, Denver, Colorado, October 14-18, 1991 (see PSNT-198).
- PPR-105 Nicholls, M.E. and R.A. Pielke, 1991: Mass adjustment and energy transport by thermal compression waves. *Proceedings, Ninth Conference on Numerical Weather Prediction*, Denver, Colorado, October 14-18, 1991 (see PSNT-199).
- PPR-106 Copeland, J.H., R.A. Pielke, and W.R. Cotton, 1991: The effect of four-dimensional data density on assimilation for a shallow-water model with the adjoint method: Preliminary results. *Proceedings, Ninth Conference on Numerical Weather Prediction*, Denver, Colorado, October 14-18, 1991 (see PSNT-200).

- PPR-107 Zeng, X., R.A. Pielke, and R. Eykholt, 1991: Chaos and predictability for mesoscale systems. *Proceedings, Ninth Conference on Numerical Weather Prediction*, Denver, Colorado, October 14-18, 1991 (see PSNT-201), 742-743.
- PPR-108 Lee, T.J. and R.A. Pielke, 1991: The impact of vegetation on severe convective storms. *Proceedings, Ninth Conference on Numerical Weather Prediction*, Denver, Colorado, October 14-18, 1991, (see PSNT-202), 242-244.
- PPR-109 Lyons, W.A., R.A. Pielke, J.L. Eastman, and C.J. Tremback, 1991: Applications of a nested grid mesoscale model to understanding the impacts of mesoscale flow discontinuities upon regional air pollution dispersion. *Proceedings, Ninth Conference on Numerical Weather Prediction*, Denver, Colorado, October 14-18, 1991 (see PSNT-203).
- PPR-110 Lyons, W.A., C.S. Keen, R.A. Pielke, W.R. Cotton, C.J. Tremback, R.L. Walko, N.R. Lincoln, and D.A. Moon, 1991: The impact of wind discontinuities and associated zones of strong vertical motions upon the mesoscale dispersion of toxic airborne contaminants on coastal zones. *1991 JANNAF Safety and Environmental Protection Subcommittee*, NASA/Kennedy Space Center, Kennedy Space Center, Florida, July 22-26, 1991 (see PSNT-204).
- PPR-111 Lyons, W.A., R.A. Pielke, W.R. Cotton, C.J. Tremback, R.L. Walko, N.R. Lincoln, and D.A. Moon, 1992: Operational mesobeta-scale numerical weather forecasting: A goal within reach. *Proceedings, 8th International Conference on Interactive Information and Processing Systems for Meteorology, Oceanography, and Hydrology*, American Meteorological Society, Atlanta, Georgia, January 5-10, 1992 (see PSNT-206).
- PPR-112 Pielke, R.A., R.A. Stocker, G. Poulos, and M. Uliasz, 1992: Influence of mesoscale circulations on long-range transport in the Grand Canyon area. Ierapetra, Crete, Greece, September 29-October 4, 1991, In: *Air Pollution Modeling and Its Application IX*, H. van Dop and G. Kallos, Eds., Plenum Press, New York, (see PSNT-207), 553-563.
- PPR-113 Dalu, G.A., M. Baldi, R.A. Pielke, and G. Kallos, 1992: Atmospheric flow and fluxes over complex terrain, sub-grid parameterization analytical theory. Ierapetra, Crete, Greece, September 29-October 4, 1991. In: *Air Pollution Modeling and its Application IX*, H. van Dop and G. Kallos, Eds. Plenum Press, New York, (see PSNT-208), 623-630.
- PPR-114 Stocker, R.A., R.A. Pielke, and M. Uliasz, 1991: Impact of local sources during stagnant conditions in Shenandoah National Park. *19th NATO/CCMS International Technical Meeting on Air Pollution Modeling and Its Application*, Ierapetra, Crete, Greece, September 29-October 4, 1991 (see PSNT-209), 177-184.
- PPR-115 Uliasz, M. and R.A. Pielke, 1992: Receptor-oriented dispersion modeling: Extension to nonlinear pollution chemistry. Ierapetra, Crete, Greece, September 29-October 4, 1991, In: *Air Pollution Modeling and Its Application IX*, H. van Dop and G. Kallos, Eds., Plenum Press, New York, (see PSNT-210), 171-178.
- PPR-116 Uliasz, M. and R.A. Pielke, 1992: Effect of land surface representation on simulated mesoscale pollution dispersion. Ierapetra, Crete, Greece, September 29-October 4, 1991, In: *Air Pollution Modeling and Its Application IX*, H. van Dop and G. Kallos, Eds., Plenum Press, New York, (see PSNT-211), 163-170.
- PPR-117 Lee, T.J., R.A. Pielke, T.G.F. Kittel, and J.F. Weaver, 1991: Atmospheric modeling and its spatial representation of land surface characteristics. *Proc., First International Conference/Workshop on Integrating Geographic Information Systems and Environmental Modeling*, Invited contribution, September, 1991, Boulder, Colorado (see PSNT-212 and CB-14).

- PPR-118 Zeng, X., R.A. Pielke, and R. Eykholt, 1991: Extracting Lyapunov exponents from short time series of low precision. *EOS*, AGU 1991 Spring Meeting, Baltimore, Maryland, May 28-June 1, 1991 (see PSNT-226).
- PPR-119 Lyons, W.A., R.A. Pielke, and J.L. Eastman, 1991: The use of a mesoscale prognostic model in the design of an oxidant field monitoring program and as input to a photochemical grid model. *EOS*, AGU 1991 Fall Meeting, San Francisco, California, December 9-13, 1991 (see PSNT-227).
- PPR-120 Lyons, W.A., R.L. Walko, M.E. Nicholls, R.A. Pielke, W.R. Cotton, C.S. Keen, and A.I. Watson, 1992: Observational and numerical modeling investigations of Florida thunderstorms generated by multi-scale surface thermal forcing. *Preprints, 5th Conference on Mesoscale Processes*, AMS, Atlanta, Georgia, January 5-10, 1992 (see PSNT-229), 85-90.
- PPR-121 Ziegler, C.L., W. Martin, R.A. Pielke, and R. Walko 1992: A modeling study of the dryline environment. *em Preprints, 5th Conference on Mesoscale Processes*, AMS, Atlanta, Georgia, January 5-10, 1992 (see PSNT-230), 203-208.
- PPR-122 Lee, T.J., R.A. Pielke, and P.W. Mielke, Jr., 1992: Optimizing the land ecosystem-atmosphere feedback model using MRBP. *Preprints, 12th Conference on Probability and Statistics*, June 22-26, 1992, AMS, Toronto, Ontario, Canada (see PSNT-239), 101-104.
- PPR-123 Uliasz, M., and R.A. Pielke, 1992: Source- and receptor oriented approaches as complementary tools in dispersion modeling. *Preprints, 10th Symposium on Turbulence and Diffusion*, September 29 - October 2, 1992, AMS, Portland, Oregon (see PSNT-248), Paper No. P3.5, 218-221.
- PPR-124 Stocker, R.A., M. Uliasz, and R.A. Pielke, 1992: The origins of elevated background tracer measurements during the MOHAVE field study. *Preprints, 10th Symposium on Turbulence and Diffusion*, September 29 - October 2, 1992, AMS, Portland, Oregon (see PSNT-249), Paper No. J7.7, 183-188.
- PPR-125 Zeng, X., and R.A. Pielke, 1992: Effect of surface inhomogeneities on coherent structures, diffusion, and predictability in the atmospheric boundary layer. *Preprints, 10th Symposium on Turbulence and Diffusion*, September 29 - October 2, 1992, AMS, Portland, Oregon (see PSNT-250), 238-241.
- PPR-126 Zeng, X., and R.A. Pielke, 1992: Influence of complex terrain on coherent structures, diffusion, and atmospheric predictability. *Preprints, 10th Symposium on Turbulence and Diffusion*, September 29 - October 2, 1992, AMS, Portland, Oregon (see PSNT-251), Paper No. J4.3, 68-71.
- PPR-127 Nicholls, M.E., R.A. Pielke, and R.N. Meroney, 1992: Large eddy simulation of microburst winds flowing around a building. *Proc., First International Symposium on Computational Wind Engineering*, August 21-24, 1992, Tokyo, Japan (see PSNT-252).
- PPR-128 Pielke, R.A., T.J. Lee, T.G.F. Kittel, J.S. Baron, T.N. Chase, and J.M. Cram, 1993: The effect of mesoscale vegetation on the hydrologic cycle and regional and global climate. *Preprints, Conference on Hydroclimatology: Land-Surface/Atmosphere Interactions on Global and Regional Scales*, AMS, January 17-22, 1993, Anaheim, California (see PSNT-254), 82-87.
- PPR-129 Lyons, W.A., R.A. Pielke, W.R. Cotton, C.J. Tremback, M. Uliasz, R.L. Walko, S. Randell, and W. Thorson, 1993: An interactive operational emergency response dispersion system using a mesoscale numerical prognostic model. *Preprints, 9th International Conference on Interactive Systems for Meteorology, Oceanography, and Hydrology*, AMS, January 17-22, 1993, Anaheim, California (see PSNT-255).

- PPR-130 Pielke, R.A., G. Dalu, T.J. Lee, and H. Rodriguez, J. Eastman, and T.G.F. Kittel, 1993: Mesoscale parameterization of heat fluxes due to landscape variability for use in general circulation models. In: *Exchange Processes at the Land Surface for a Range of Space and Time Scales*. H.-J. Bolle, R.A. Feddes, and J.D. Kalma, Eds., Proceedings of an international symposium held at Yokohama, Japan, 13-16 July 1993, International Association of Hydrological Sciences Publication #212, IAHS Press, Wallingford, UK (see PSNT-257), 331-342.
- PPR-131 Wesley, D.A., and R.A. Pielke, 1992: Precipitation development in the 30-31 March 1988 Front Range snowstorm: Model simulations including detailed microphysics. *Preprints, 11th International Conference on Clouds and Precipitation*, AMS, August 17-21, 1992, Montreal, Canada (see PSNT-259).
- PPR-132 Lyons, W.A., R.A. Pielke, W.R. Cotton, C.J. Tremback, M. Uliasz, R.L. Walko, S. Randell, W. Thorson, and D.K. Struck, 1992: Design of a prototype operational mesoscale air toxics dispersion system using a numerical prognostic model. *Proc., JANNAF, Safety and Environmental Protection Conference*, August 10-14, Naval Postgraduate School, California (see PSNT-241).
- PPR-133 Uliasz, M., R.A. Stocker, and R.A. Pielke, 1993: Numerical modeling of atmospheric dispersion during the MOHAVE field study. In: *Air Pollution '93*, P. Zannetti, C.A. Brebbia, J.E. Carcia Gardea, and G.A. Milian, Eds., Computational Mechanics Publications, Boston, *First International Conference on Air Pollution*, Monterey, Mexico, February 16-18, 1993, 209-216 (see PSNT-266).
- PPR-134 Uliasz, M. and R.A. Pielke, 1993: Implementation of a Lagrangian particle dispersion model for mesoscale and regional air quality studies. In: *Air Pollution '93*, P. Zannetti, C.A. Brebbia, J.E. Carcia Gardea, and G.A. Milian, Eds., Computational Mechanics Publications, Boston, *First International Conference on Air Pollution*, Monterey, Mexico, February 16-18, 1993, 157-164 (see PSNT-267).
- PPR-135 Uliasz, M., R.A. Pielke, and R.A. Stocker, 1993: Numerical modeling of air pollution transport in southwestern United States using source- and receptor-oriented techniques. *86th Annual Meeting and Exhibition*, Denver, Colorado, June 14-18, 1993 (see PSNT-274).
- PPR-136 Stocker, R.A., M. Uliasz, and R.A. Pielke, 1993: The origins of elevated background tracer measurements during the MOHAVE field study. *86th Annual Meeting and Exhibition*, Denver, Colorado, June 14-18, 1993 (see PSNT-275).
- PPR-137 Eastman, J.L., R.A. Pielke, and W.A. Lyons, 1993: Numerical study of the effects of grid spacing on dispersion and tracer evaluation. *86th Annual Meeting and Exhibition of the Air & Waste Management Association*, Paper No. 93-TP-26B.06. Denver, Colorado, June 14-18, 1993. Air & Waste Management Association, Pittsburgh, PA. 12 pp. (see PSNT-276).
- PPR-138 Zeng, X. and R.A. Pielke, 1993: Predictability and chaos in atmospheric coherent structures. *IAMAP-IAHS '93 Joint International Meeting, The Sixth Scientific Assembly of the International Association of Meteorology and Atmospheric Physics*, Yokohama, Japan, July 11-23, 1993 (see PSNT-277).
- PPR-139 Lyons, W.A., R.A. Pielke, W.R. Cotton, C.J. Tremback, G. Thompson, 1993: An operational mesoscale sea breeze forecasting system. *5th Conference on Aviation Weather Systems*, AMS, Vienna, Virginia, August 2-6, 1993 (see PSNT-278).
- PPR-140 Lyons, W.A., R.A. Pielke, C.J. Tremback, and G. Thompson, 1993: Evaluation of mesoscale prognostic models. *13th Conference on Weather Analysis and Forecasting*, AMS, Vienna, Virginia, August 2-6, 1993 (see PSNT-279).

- PPR-141 Pielke, R.A., M. Uliasz, C.A. Finley, and T.J. Lee, 1993: Influence of land-surface variability on the dispersion of atmospheric pollution. *20th International Technical Meeting on Air Pollution Modelling and Its Application*, Valencia, Spain, November 29-December 3, 1993 (see PSNT-280).
- PPR-142 Lyons, W.A., R.A. Pielke, M. Uliasz, C.J. Tremback, and R.L. Walko, 1993: The applications of new technologies to modeling mesoscale dispersion in coastal zones and complex terrain. Invited paper in: *Air Pollution '93*, P. Zannetti, C.A. Brebbia, J.E. Carcia Gardea, and G.A. Milian, Eds., Computational Mechanics Publications, Boston, *First International Conference on Air Pollution*, February 23-25, 1993, Monterrey, Mexico, 35-86 (see PSNT-253).
- PPR-143 Lyons, W.A., R.A. Pielke, W.R. Cotton, C.J. Tremback, M. Uliasz, R.L. Walko, S. Randell, and W. Thorson, 1993: Design of a prototype operational emergency response dispersion system using a mesoscale numerical prognostic model. 4th Topical Meeting on Emergency Preparedness and Response, American Nuclear Society, April 25-29, 1993, Long Island, New York (see PSNT-256).
- PPR-144 Lyons, W.A., R.A. Pielke, W.R. Cotton, C.S. Keen, and D.A. Moon, 1992: Final results of an experiment in operational forecasting of sea breeze thunderstorms using a mesoscale numerical model. *Preprints, Symposium on Weather Forecasting*, AMS, January 5-10, 1992, Atlanta, Georgia, 181-188 (see PSNT-287).
- PPR-145 Finley, C.A., and R.A. Pielke, 1993: Possible effects of land use variability on atmospheric mesoscale circulations and pollutant dispersion. *Proc., American Nuclear Society Topical Meeting on Environmental Transport and Dosimetry*, Charleston, South Carolina, August 31-September 3, 1993, 7-10 (see PSNT-292).
- PPR-146 Schimel, D.S., T.G.F. Kittel, D.S. Ojima, F. Giorgi, A. Metherell, R.A. Pielke, C.V. Cole, and J.G. Bromberg, 1994: Models, methods, and tools for regional models of the response of ecosystems to global change. *Proceedings, Sustainable Land Management for the 21st Century*, Volume 2: Plenary Papers, R.C. Wood and J. Dumanski (Eds.), Agricultural Institute of Canada, Ottawa, Lethbridge, Alberta, June 1993 (see PSNT-293), 227-238.
- PPR-147 Zeng, X. and R.A. Pielke, 1993: Predictability and fractals of surface forced atmospheric systems. *IAMAP-IAHS '93 Joint International Meeting, The Sixth Scientific Assembly of the International Association of Meteorology and Atmospheric Physics*, Yokohama, Japan, July 11-23, 1993 (see PSNT-294).
- PPR-148 Lyons, W., R.A. Pielke, M. Uliasz, C.J. Tremback, and R.L. Walko, 1993: New technologies for modeling mesoscale transport and diffusion in coastal zones and complex terrain. *Proc., American Nuclear Society Topical Meeting on Environmental Transport and Dosimetry*, Charleston, South Carolina, August 31-September 3, 1993, 3-6 (see PSNT-297).
- PPR-149 Pielke, R.A., J. Baron, T. Chase, J. Copeland, T.G.F. Kittel, T.J. Lee, R. Walko, and X. Zeng, 1996: Use of mesoscale models for simulation of seasonal weather and climate change for the Rocky Mountain States. *Proceedings, Second International Conference/Workshop on Integrating GIS and Environmental Modeling*. Breckenridge, Colorado, September 26-29, 1993, 99-104 (see PSNT-299).
- PPR-150 Lyons, W.A., C.J. Tremback, R.A. Pielke, and J.L. Eastman, 1994: Applications of the Regional Atmospheric Modeling System (RAMS) to provide input to photochemical grid models for the Lake Michigan Ozone Study (LMOS). *Proceedings, 8th Joint Conference on Applications of Air Pollution Meteorology*, Air and Waste Management Association and American Meteorological Society, Nashville, Tennessee, 23-28 January 1994 (see PSNT-302), 151-152.

- PPR-151 Uliasz, M., R.A. Stocker, and R.A. Pielke, 1994: Lagrangian particle modeling of air pollution transport in Southwestern United States. *Proceedings, 8th Joint Conference on Applications of Air Pollution Meteorology*, Air and Waste Management Association and American Meteorological Society, Nashville, Tennessee, 23-28 January 1994, 104-111, (see PSNT-303).
- PPR-152 Moran, M.D. and R.A. Pielke, 1994: Delayed shear enhancement in mesoscale atmospheric dispersion. *Proceedings, 8th Joint Conference on Applications of Air Pollution Meteorology*, Air and Waste Management Association and American Meteorological Society, Nashville, Tennessee, 23-28 January 1994 (see PSNT-304).
- PPR-153 Copeland, J.H., R.A. Pielke, and T.G.F. Kittel, 1994: Assessing climate and vegetation change for the Central Grasslands biogeographic region. *Proceedings, 6th Conference on Climate Variations*, 74th AMS Annual Meeting, Nashville, Tennessee, 23-28 January 1994, 411-413 (see PSNT-305).
- PPR-154 Nair, U.S., M.R. Hjelmfelt, and R.A. Pielke, 1995: Numerical simulation of the June 9-10, 1972 Black Hills storm using CSU RAMS. *Seventh Conf. Mountain Meteorology*, AMS, Boston, 16-21 July 1995, Breckenridge, Colorado, 51-56 (see PSNT-364).
- PPR-155 Zeng, X. and R.A. Pielke, 1994: Land surface effects on regional climate. *Proceedings, Global Climate Change: Science, Policy, and Mitigation Strategies*, Air and Waste Management Association, Phoenix, Arizona, 5-8 April 1994 (see PSNT-307).
- PPR-156 Pielke, R.A., 1994: Wind field modeling. *Proceedings, International Specialty Conference on "Aerosols and Atmospheric Optics": Radiation Balance and Visual Air Quality"*, Air and Waste Management Association, 26-30 September 1994, Snowbird, Utah (see PSNT-308).
- PPR-157 Lyons, W.A., C.J. Tremback, R.L. Walko, R.A. Pielke, and W.R. Cotton, 1994: Design of an operational forecasting system for localized and sea breeze thunderstorms at the Kennedy Space Center. *Proceedings, 8th Joint Conference on Applications of Air Pollution Meteorology*, Air and Waste Management Association and American Meteorological Society, Nashville, Tennessee, 23-28 January 1994 (see PSNT-311).
- PPR-158 Lyons, W.A., J.L. Eastman, R.A. Pielke, A. Biazar, and R. McNider, 1994: A preliminary climatology of lightning-generated NO<sub>x</sub> and numerical simulations of its redistribution by deep convection. *Proceedings, Conference on Atmospheric Chemistry*, American Meteorological Society, Nashville, Tennessee, 23-28 January 1994 (see PSNT-312).
- PPR-159 Mukabana, J.R. and R.A. Pielke, 1993: Three-dimensional modeling of the large-scale flows and their scale-interaction with the local mesoscale circulations over Kenya. *Proc., African Meteor. Soc., AMS*, February 8-12, 1993, Nairobi, Kenya (see PSNT-315).
- PPR-160 Lyons, W.A., R.A. Pielke, W.R. Cotton, C.J. Tremback, R.L. Walko, M. Uliasz, and J.I. Ibarra, 1994: Recent applications of the RAMS meteorological and the HYPACT dispersion models. In: *Air Pollution Modeling and Its Application X*, S.-V. Gryning and M.M. Millán, Eds., Plenum Press, New York, 19-26.
- PPR-161 Lee, T.J. and R.A. Pielke, 1994: The impact of vegetation on convective storms. *Preprints, 21st Conference on Agricultural and Forest Meteorology*, AMS, Boston, March 7-11, 1994, San Diego, California (see PSNT-323), 299-302.
- PPR-162 Zeng, X. and R.A. Pielke, 1994: A generalized boundary layer theory over inhomogeneous terrain. *Preprints, 6th Conference on Mesoscale Processes*, AMS, Boston, July 18-22, 1994, Portland, Oregon (see PSNT-325), J32-J35.
- PPR-163 Lee, T.J. and R.A. Pielke, 1994: Attempting an explicit simulation of a supercell storm. *Preprints, 6th Conference on Mesoscale Processes*, AMS, Boston, July 18-22, 1994, Portland, Oregon, (see PSNT-326), 594-595.

- PPR-164 Ziegler, C.L., T.J. Lee, and R.A. Pielke, 1994: Simulations of the dryline with a 3-D mesoscale model. *Preprints, 6th Conference on Mesoscale Processes*, AMS, Boston, July 18-22, 1994, Portland, Oregon (see PSNT-327), 273-277.
- PPR-165 Lyons, W.A., C.J. Tremback, R.A. Pielke, and I. Baker, 1994: Observations and modeling of shallow lake breeze circulations on Lake Michigan. *Preprints, 6th Conference on Mesoscale Processes*, AMS, Boston, July 18-22, 1994, Portland, Oregon (see PSNT-328).
- PPR-166 Pielke, R.A., J.H. Copeland, T.N. Chase, and T.G.F. Kittel, 1994: Development of regional climate scenarios using mesoscale model output. *EOS*, 1994 AGU Spring Meeting, May 23-27, Baltimore, Maryland (see PSNT-330), 99.
- PPR-167 Copeland, J.H., T.N. Chase, R.A. Pielke, and T.G.F. Kittel, 1994: Sensitivity of the United States summer climatology to vegetation distribution as revealed by a regional climate model. *EOS*, 1994 AGU Spring Meeting, May 23-27, Baltimore, Maryland (see PSNT-331), 99.
- PPR-168 Walko, R.L., C.J. Tremback, W.R. Cotton, and R.A. Pielke, 1994: Improvements to an existing two-way interactive grid nesting scheme. *Sixth Conference on Mesoscale Processes*, July 18-22, Portland, AMS, Boston, (see PSNT-337), 90-93.
- PPR-169 Uliasz, M., R.A. Stocker, and R.A. Pielke, 1994: Numerical modeling of air pollution transport in the southwestern United States. *AWMA/AGU International Specialty Conference on Aerosols and Atmospheric Optics: Radiation Balance and Visual Air Quality*, September 26-30, (see PSNT-335) Snowbird, Utah.
- PPR-170 Copeland, J.H., R.A. Pielke, T.G.F. Kittel, 1994: Impacts of vegetation and soil moisture distribution on regional summertime climate as revealed by a regional climate model. *EOS*, 1994 AGU Fall Meeting, December 5-9, 1994, San Francisco, California, (see PSNT-342).
- PPR-171 Chase, T.N., R.A. Pielke, and T.G.F. Kittel, 1994: Actual vs. potential vegetation: Does it affect climate? *EOS*, 1994 AGU Fall Meeting, December 5-9, 1994, San Francisco, California, (see PSNT-343).
- PPR-172 Walko, R.L., R.A. Pielke, L.E. Band, R. Lammers, C. Tague, J. Baron, and T.G.F. Kittel, 1994: Coupled ecosystem models for simulating the transport of groundwater. *EOS*, 1994 AGU Fall Meeting, December 5-9, 1994, San Francisco, California, (see PSNT-343).
- PPR-173 Pielke, R.A., G.E. Liston, L. Lu, P.L. Vidale, R.L. Walko, T.G.F. Kittel, W.J. Parton, and C.B. Field, 1997: Coupling of land and atmospheric models over the GCIP area -- CENTURY, RAMS, and SiB2C. *13th Annual Conference on Hydrology*. 77th AMS Annual Meeting, 2-7 February 1997, Long Beach, California (see PSNT-388), 92-96.
- PPR-174 Lyons, W.A., C.J. Tremback, R.L. Walko, M.E. Nicholls, I. Baker, W. Thorson, R.A. Pielke, and W.R. Cotton, 1995: Towards operational thunderstorm forecasting at the Kennedy Space Center using the parallelized version of RAMS on a workstation cluster. *6th Conference on Cloud Physics*, AMS, Boston, 15-20 January, Dallas Texas (see PSNT-346).
- PPR-175 Nicholls, M.E., and R.A. Pielke, 1995: A numerical investigation of the effect of vertical wind shear on tropical cyclone intensification. *21st Conference on Hurricanes and Tropical Meteorology*, AMS, Boston, April 24-28, Miami, Florida, 339-341 (see PSNT-347).
- PPR-176 Pielke, R.A., L. Band, J. Baron, T. Chase, J.L. Eastman, B. Shaw, R.L. Walko, and C. Ziegler, 1995: Influence of landscape heterogeneity on rainfall temporal and spatial

- patterns. *5th International Conference on Precipitation, Space-Time Variability and Dynamics of Rainfall*, June 14-16, Elounda, Crete, Greece (see PSNT-348).
- PPR-177 Stocker, R.A., M. Uliasz, and R.A. Pielke, 1994: The validation of the RAMS/NGM meteorological fields used in the MOHAVE field study. *AWMA/AGU International Specialty Conference on Aerosols and Atmospheric Optics: Radiation Balance and Visual Air Quality*, September 26-30, Snowbird, Utah (see PSNT-335).
- PPR-178 Steyaert, L.T., F.G. Hall, B.C. Reed, D.E. Knapp, T.R. Loveland, P.J. Sellers, and R.A. Pielke, 1995: Investigating landscape disturbance patterns and associated vegetation succession in the Boreal Forest with multitemporal 1-km AVHRR data. *Biomass Burning and Global Change Conference*, AGU, Williamsburg, VA, March (see PSNT-354).
- PPR-179 Baron, J., R. Pielke, and B. Parton, 1993: Dynamic land surface/atmospheric parameterization at different spatial scales in the Colorado Rocky Mountains. Pacific Institute for Studies in Development, Environment, and Security, *Proceedings, Workshop on the Use of Hydrological Models for Evaluating the Impacts of Climate Change in Snowmelt Water Supply Basins*. Santa Fe, New Mexico, April 20-22, 1993 (see PSNT-359).
- PPR-180 Pielke, R.A. and P.L. Vidale, 1995: The boreal forest and the polar front. *Summary Report and Proceedings, International GEWEX Workshop on Cold-Season/Region Hydrometeorology*, 22-26 May 1995, Banff, Alberta, Canada (see PSNT-362), IGPO Publication Series No. 15, 202.
- PPR-181 Pielke, R.A., P.L. Vidale, J.L. Eastman, and A. Barr, 1996: The boreal forest - tundra contrast influence on weather. *22nd Conf. Agriculture and Forest Meteorology*, AMS, Boston, 28 January - 2 February 1996, Atlanta, Georgia, 98-101 (see PSNT-364).
- PPR-182 Pielke, R.A., T.N. Chase, P.L. Vidale, C.L. Ziegler, G.E. Liston, R.L. Walko, L.T. Steyaert, J.H. Copeland, and T.G.F. Kittel, 1996: Landscape effects on the hydrologic cycle. *Proc., 2nd International Scientific Conference on the Global Energy and Water Cycle*, 17-21 June 1996, Washington, DC (see PSNT-366).
- PPR-183 Pielke, R.A., T.N. Chase, T.G.F. Kittel, G.E. Liston, L. Lu, L. Steyaert, and C. Ziegler, 1996: Influence of landscape changes on regional climate. *Workshop on High Resolution Climate Modeling*, 23-26 September, 1996, Wengen, Switzerland (see PSNT-367).
- PPR-184 Liston, G.E., R.A. Pielke, T.G.F. Kittel, L. Lu, and J.H. Copeland, 1996: Formulating the Regional Atmospheric Modeling System (RAMS) for use in Regional Climate Studies. *3rd Annual CPER Symposium*, 11 January 1996, Fort Collins, CO (see PSNT-368).
- PPR-185 Avissar, R., W. Brutsaert, P.C.D. Milly, M. Parlange, and R. Pielke, 1994: Section II.4. Meteorology. *Soil Moisture: Report of a Workshop*. Tiburon, California, 25-27 January 1994, 16-17.
- PPR-186 Peterka, J.A., L.S. Cochran, R.A. Pielke and M.E. Nicholls, 1996: Progress in modelling external atmospheric flows around buildings. *CFD Modeling Techniques for Large Structures and Facilities, 1996 ASME Fluids Engineering Division Summer Meeting*, 7-11 July 1996, San Diego, CA, FED-Vol. 238, 535-539. (see PSNT-369).
- PPR-187 Eastman, J.L., Nicholls, M.E., and R.A. Pielke, 1996: A numerical simulation of Hurricane Andrew. *Second International Symposium on Computational Wind Engineering*, Sponsored by the Japan Association for Wind Engineering and the U.S. Wind Engineering Research Council, 4-8 August 1996, Fort Collins, CO (see PSNT-370).



- PPR-188 Ziegler, C.L., T.J. Lee, and R.A. Pielke, 1996: Simulations of deep, moist convection at the dryline with a 3-D mesoscale model. *18th Conference on Severe Local Storms*, San Francisco, CA, 19-23 February 1996, AMS, Boston, MA (see PSNT-371).
- PPR-189 Baron, J.S., D.S. Ojima, M.D. Hartman, T.G.F. Kittel, R.B. Lammers, L.E. Band, and R.A. Pielke, 1997: The influence of land cover and temperature change on hydrological and ecosystem dynamics in the South Platte River Basin. *Water Resources Education, Training, and Practice: Opportunities of the Next Century*, American Water Resources Association Technical Publication Series TPS-97-1, 29 June - 3 July 1997, 279-286 (see PSNT-403).
- PPR-190 Nicholls, M.E., J.L. Eastman, and R.A. Pielke, 1996: A numerical simulation of Hurricane Hugo. *Second International Symposium on Computational Wind Engineering*, 4-8 August 1996, Fort Collins, CO (see PSNT-372).
- PPR-191 Chase, T.N., R.A. Pielke, and T.G.F. Kittel, 1995: Possible impacts on Colorado Rocky Mountain Hydrology due to land use changes in the adjacent Great Plains. *Rocky Mountain Hydrological Research Center 50th Anniversary Annual Meeting*, 22-23 September, 1995, Estes Park, CO (see PSNT-373).
- PPR-192 Pielke, R.A., 1995: Data base requirements for meteorological modeling. International Workshop on Global Databases and Global Land 1 km base elevation (GLOBE) project. 30 May - 2 June, 1995, Boulder, CO, 29 (see PSNT-375).
- PPR-193 Eastman, J.L., 1995: Numerical simulation of Hurricane Andrew - Rapid intensification. *21st Conference on Hurricanes and Tropical Meteorology*, 24-28 April 1995, Miami, Florida, AMS, Boston, 111-113.
- PPR-194 Copeland, J.H., T. Chase, J. Baron, T.G.F. Kittel, and R.A. Pielke, 1993: Impacts of vegetation change on regional climate and downscaling of GCM output to the regional scale. In: *Regional Impacts of Global Climate Change: Assessing Change and Response at the Scales that Matter*. S.J. Ghan et al. (Eds.), 32nd Hanford Symposium on Health and the Environment, October 19-21, 1993, Battelle Press, Richland, WA, 199-212 (see PSNT-380).
- PPR-195 Pielke, R.A., P.L. Vidale, J.L. Eastman, G.E. Liston, R.L. Walko, G. Dalu, A. Barr, and C. Ziegler, 1997: Influence of landscape on boundary layer atmospheric processes. *Symposium on the Boundary Layers and Turbulence (Land-Surface)*. 77th AMS Annual Meeting, 2-7 February 1997, Long Beach, California (see PSNT-389), 10-14.
- PPR-196 Baron, J.S., D.S. Ojima, M.D. Hartman, T.G.F. Kittel, R.B. Lammers, L.A. Band, and R.A. Pielke, 1996: The influence of spatial patterns of land cover and use on hydrological and ecosystem dynamics at the mountain plains interface in the Central United States. *Proc., IGBP/BAHC-LUCC Joint Inter-Core Projects Symposium on Interactions between the Hydrological Cycle and Land Use/Cover*, 4-7 November 1996, Kyoto, Japan, 50-53 (see PSNT-394).
- PPR-197 Cochran, L.S., R.A. Pielke, and E. Kovacs, 1996: International air quality standards. *Proceedings, Riesgos Ambientales Para La Salud En La Ciudad De Mexico*, O.R. Serrano and G.P. Rodriguez, Eds., Programa Universitario de Medio Ambiente, 68-82.
- PPR-198 Eugster, W., W.R. Rouse, R.A. Pielke Sr., J.P. McFadden, D.D. Baldocchi, T.G.F. Kittel, F.S. Chapin III, G.E. Liston, P.L. Vidale, E. Vaganov, and S. Chambers, 1999: Arctic tundra and boreal forest surface energy balance: Data and feedbacks to climate. *European Geophysical Society Conference*, Hague, The Netherlands, Geophys. Res. Abstracts, 1, 570 (see PSNT-428).

- PPR-199 Poulos, G.S., T.B. McKee, J.E. Bossert, and R.A. Pielke, 1996: Assessing the interaction of mountain waves and katabatic flows using a mesoscale model. Norfolk, VA, Paper 7A.4, August 1996 (see PSNT-415).
- PPR-200 Poulos, G.S., R.A. Pielke, and J.E. Bossert, 1996: An evaluation of a proposed solution to pressure gradient force errors in terrain-following coordinates. Paper No. 6B.14 (see PSNT-416).
- PPR-201 Poulos, G.S. J.E. Bossert, T.B. McKee, and R.A. Pielke, 1996: The mutual evolution of mountain waves and katabatic flow. *Preprints, 7th Conference on Mesoscale Processes*, Paper No. 9B4, Reading, England, 9-13 September 1996 (see PSNT-417).
- PPR-202 Poulos, G.S., T.B. McKee, J.E. Bossert, and R.A. Pielke, 1996: Dynamic processes in undisturbed katabatic flows. *Preprints, 7th Conference on Mesoscale Processes*, Paper No. P7B.10, Reading, England, 9-13 September 1996 (see PSNT-418).
- PPR-203 Chase T.N., R.A. Pielke, T.G.F. Kittel, R. Nemani, and S. Running, 1997: The effect of realistic, historical land cover change on a GCM climate. AGU 1997 Fall Meeting, San Francisco, CA, 8-12 December 1997 (see PSNT-419).
- PPR-204 Ojima, D., R. Pielke, W. Parton, M. Hartman, L. Lu, and R. Kelly, 1997: Biosphere-atmosphere linkage: Terrestrial ecosystem feedback to regional climate in central United States. AGU 1997 Fall Meeting, San Francisco, CA, 8-12 December 1997 (see PSNT-420).
- PPR-205 Pielke, R.A., L. Lu., G.E. Liston, B. Parton, D. Ojima, and M. Hartman, 1997: The simulation of atmosphere and ecosystem interactions over the Great Plains. AGU 1997 Fall Meeting, San Francisco, CA, 8-12 December 1997 (see PSNT-421).
- PPR-206 Lu, L., G.E. Liston, B. Parton, D. Ojima, M. Hartman, R. Pielke, 1997: A coupled atmospheric and ecological modeling system and its application to the Great Plains. AGU 1997 Fall Meeting, San Francisco, CA, 8-12 December 1997 (see PSNT-422).
- PPR-207 Liston, G.E., 1997: Modeling subgrid-scale snow distributions in regional atmospheric and hydrologic models. AGU 1997 Fall Meeting, San Francisco, CA, 8-12 December 1997 (see PSNT-423).
- PPR-208 Uliasz, M. and R.A. Pielke, Sr. 1998: Validation of regional transport simulations using a tracer of opportunity and controlled tracers. *10th Joint Conference on the Application of Air Pollution Meteorology with the Air and Waste Management Association*, 11-16 January 1998, Phoenix, AZ (see PSNT-424).
- PPR-209 Pielke, R.A., C. Ziegler, P.L. Vidale, G.E. Liston, E. Greene, J. Eastman, and T. Chase 1998: Influence of landscape structure on the prediction of cumulus convective rainfall. *6th International Conference on Precipitation: Predictability of Rainfall at the Various Scales*. 29 June - 1 July 1998, Mauna Lani Bay, Kohala Coast, Hawaii (see PSNT-425).
- PPR-210 Pielke, R.A. Sr., 1998: Role of land-cover as a driving force for regional climate change. Book of abstracts GCTE-BAHC-LUCC Workshop. Wageningen, Holland, 14-19 November 1997 (see PSNT-414).
- PPR-211 Costa, A.A., W.R. Cotton, R.A. Pielke Sr., and H. Jiang, 1999: Modeling the interaction between the ocean mixed-layer and deep convection at the western Pacific warm pool. *Proceedings, Conference on the TOGA Coupled Ocean-Atmosphere Response Experiment (COARE)*, Boulder, CO 7-14 July 1998, WCRP-107, WMO/TDF-No. 940, 375-376 (see PSNT-426).
- PPR-212 Chase, T.N., R.A. Pielke, Sr., M. Zhao, A.J. Pitman, T.G.F. Kittel, R.R. Nemani, and S.W. Running, 1999: The global effects of tropical heating anomalies resulting from

- landcover changes. *Preprints, Eighth Conference on Climate Variation*, 13-17 September, Denver, CO, 213-217.
- PPR-213 Pielke, Sr., R.A., T.N. Chase, J. Eastman, L. Lu, G.E. Liston, M.B. Coughenour, D. Ojima, W.J. Parton, T.G.F., Kittel, 1999: Land-atmosphere interactions. *Preprints, Eighth Conference on Climate Variation*, 13-17 September, Denver, CO, 161-165.
- PPR-214 Pielke, R.A. Sr., T.N. Chase, J. Eastman, L. Lu, G.E. Liston, M.B. Coughenour, D. Ojima, W.J. Parton, T.G.F., Kittel, 1999: Land-atmosphere interactions. *GEWEX/INSU International Workshop on Modelling Land-Surface Atmosphere Interactions and Climate Variability*, 4-8 October, Gif-Sur-Yvette, France, 39-42.
- PPR-215 Pielke, R.A. Sr., T.N. Chase, J. Eastman, L. Lu, G.E. Liston, M.B. Coughenour, D. Ojima, W.J. Parton, T.G.F., Kittel, 1999: Land-atmosphere interactions. *Proc., Global Change and Protected Areas*. L'Aquila, Italy, 8-13 September 1999.
- PPR-216 Gutowski Jr., W.J., R.W. Arritt, E.S. Takle, Z. Pan, C.J. Anderson, D. Caya, S.-C. Chen, J.H. Christensen, S.-Y. Hong, H.-M.H. Juang, J.J. Katzfey, W.M. Lapenta, R. Laprise, G. Liston, P. Lopez, J. McGregor, F. Otieno, R.A. Pielke Sr., J.O. Roads, and R. Silva, 1999: Lessons from the Project to Intercompare Regional Climate Simulations (PIRCS). *Workshop on Regional Climate Prediction and Downscaling Techniques for South America*, Petropolis, Brazil, September 8-10 1999.
- PPR-217 Arritt, R.W., W.J. Gutowski, E.S. Takle, Z. Pan, C.J. Anderson, F. Otieno, R. da Silva, D. Caya, S.-C. Chen, J.H. Lapenta, R. Laprise, G. Liston, J.L. McGregor, R.A. Pielke Sr., and J.O. Roads, 2000: Project to Intercompare Regional Climate Simulations (PIRCS): Simulation of the 1993 flood over the central US. *15th Conference on Hydrology, 80th AMS Annual Meeting*, Long Beach, CA, January 9-14, 2000, 80-83.
- PPR-218 Pielke, R.A. Sr., 2000: Overlooked issues in the U.S. National Climate and IPCC assessments. *Preprints, 11th Symposium on Global Change Studies, 80th AMS Annual Meeting*, Long Beach, CA, January 9-14, 2000, 32-35.
- PPR-219 Castro, C.L., T.B. McKee, and R.A. Pielke Sr., 2000: The climatology and interannual variability of the North American monsoon as revealed by the NCEP/NCAR Reanalysis. *Preprints, 11th Symposium on Global Change Studies, 80th AMS Annual Meeting*, Long Beach, CA, January 9-14, 2000, 168-171.
- PPR-220 Nair, U.S., R.M. Welch, R.O. Lawton, and R.A. Pielke Sr., 2000: Influence of surface characteristics on the development of cumulus cloud fields. *15th Conference on Hydrology, AMS Annual Meeting*, Long Beach, CA, January 9-14, 84-86.
- PPR-221 Liston, G.E., J.P. McFadden, and R.A. Pielke Sr., 2001: Arctic Alaska climate simulations using the Regional Atmospheric Modeling System. *2nd Wadati Conference on Global Change and the Polar Climate*, March 7-9, Tsukuba Science City, Japan, 141-144.
- PPR-222 Darby, L.S., R.M. Banta, and R.A. Pielke Sr., 2001: Comparisons between lidar measurements and model simulations of the sea breeze at Monterey Bay. *9th AMS Conference on Mesoscale Processes*, July 30- August 2, 2001, Ft. Lauderdale, FL.
- PPR-223 Nair, U.S., R.M. Welch, R.O. Lawton, and R.A. Pielke Sr., 2000: Impact of land use on Costa Rican regional climate. Volume 5, Institute of Electrical and Electronics Engineers (IEEE) International Geoscience and Remote Sensing Symposium (IGARSS) 2000, Interactive Session 2: Land Cover Change, July 26, Honolulu, Hawaii, 1993-1995.
- PPR-224 Velho, H.F.C., R.R. Rosa, F.M. Ramos, R.A. Pielke Sr., G.A. Degrazia, C. Rodrigues Neto, and A. Zanandrea, 2000: Multifractal model for eddy diffusivity and counter-gradient term in atmospheric turbulence. *Conference on Complex Systems and Stat. Physics*, Elsevier, October, Maceio City, Brasil.

- PPR-225 Greco, S., S.A. Wood, G.D. Emmitt, M. Nicholls, and R.A. Pielke Sr., 2000: Lidar simulations over Hurricane Bonnie using CAMEX-3 data, a lidar simulation model, and numerical model analyses. *24th Conference on Hurricanes and Tropical Meteorology*, AMS, 29 May - 2 June, Fort Lauderdale, FL, 360-361.
- PPR-226 Nicholls, M.E., R.A. Pielke Sr., S. Greco, and R.A. Pielke Sr., 2000: An investigation of the impact of including CAMEX-3 data on high resolution Hurricane Bonnie simulations. *24th Conference on Hurricanes and Tropical Meteorology*, AMS, 29 May - 2 June, Fort Lauderdale, FL, 362-363.
- PPR-227 Castro, C.L., R.A. Pielke Sr., and G.E. Liston, 2000: The relationship and response of the North American monsoon to tropical and North Pacific sea surface temperatures. *Postprint Volume, 2nd Southwest Weather Symposium*, 21-22 September, Tucson, Arizona.
- PPR-228 Strack, J.E., G.E. Liston, and R.A. Pielke Sr., 2001: The effects of land use change on snowcover and the resulting influences on weather and regional climate. *Proc., 12th AMS Symposium on Global Change and Climate Variations*, 14-18 January, Albuquerque, New Mexico, 169-170.
- PPR-229 Nair, U.S., R.M. Welch, R.O. Lawton, and R.A. Pielke Sr., 2001: Impact of land surface heterogeneity on the spatial organization of cumulus clouds. *Proc., 12th AMS Symposium on Global Change and Climate Variations*, 14-18 January, Albuquerque, New Mexico, 102-104.
- PPR-230 Campos Velho, H.F., R.A. Pielke Sr., M.R. Moraes, G.A. Degrazia, and M. Uliasz, 1998: Numerical comparison for different turbulent models on near-source diffusion. *X Congresso Brasileiro De Meteorologia, VIII Congresso Da Flismet*, 26-30 October, Brasil.
- PPR-231 Arritt, R.W., C.J. Anderson, W.J. Gutowski, E.S. Takle, Z. Pan, F. Otieno, M. de Castro, D. Caya, S.-C. Chen, J.H. Christensen, O.B. Christensen, M. Fox-Rabinovitz, M.A. Gaertner, F. Giorgi, G. Grell, S.-Y. Hong, C. Jones, H.-M.H. Juang, J.J. Katzfey, W.M. Lapenta, R. Laprise, J.W. Larson, G. Liston, D. Luethi, P. Marbaix, J.L. McGregor, R.A. Pielke Sr., J.O. Roads, M. Rummukainen, and J.A. Taylor, 2001: Multi-model ensemble and intercomparison for the 1993 flood over the central U.S.A. European Geophysical Society XXVI General Assembly, Session NH2.01, Meteorological and Hydrological Hazards: Diagnosis, Modelling and Forecasting Extreme Rainfall Events and Storms, March 25-30, Nice, France.
- PPR-232 Marroquin, A., and R.A. Pielke Sr., 2001: Influence of surface heterogeneities on boundary layer dynamics and secondary coherent wind circulations. *9th AMS Conference on Mesoscale Processes*, July 30 - August 2, Ft. Lauderdale, Florida, 230-233.
- PPR-233 Greene, E.M., G.E. Liston, and R.A. Pielke Sr., 1998: Simulations of above treeline snowdrift formation using a numerical snow-transport model. International Snow Science Workshop, 27 September - 1 October, Sunriver, Oregon, 272-278.
- PPR-234 Greene, E.M., G.E. Liston, and R.A. Pielke Sr., 1998: Investigating relationships between landscape, snowcover depletion and weather and climate using an atmospheric modeling system. International Conference on Snow Hydrology, 6-9 October, Brownsville, Vermont.
- PPR-235 Costa, A.A., W.R. Cotton, and R.A. Pielke Sr., 1999: Barrier-layer/warm layer: Simulation of the influence of clouds and precipitation at the tropical ocean mixed-layer. *Proceedings, AMS 13th Symposium on Boundary Layers and Turbulence*, 79th AMS Annual Meeting, 1-15 January, Dallas, TX, 50-53.

- PPR-236 Costa, A.A., W.R. Cotton, R.A. Pielke Sr., and H. Jiang, 1999: Combined ocean-cloud resolving modeling of the western Pacific warm pool coupled system. *Proceedings, 23rd Conference on Hurricanes and Tropical Meteorology, 79th AMS Annual Meeting, 10-15 January, Dallas, TX, 648-651.*
- PPR-237 Pielke, R.A. Sr., G.E. Liston, and L. Lu, 1999: Climate prediction as an initial value problem. *Proceedings, 14th Annual Conference on Hydrology. 79th AMS Annual Meeting, 10-15 January, Dallas, Texas, 357-360.*
- PPR-238 Pan, Z., R.W. Arritt, W.J. Gutowski Jr., E.S. Takle, C.J. Anderson, F. Otieno, R. da Silva, D. Caya, S.-C., Chen, J.H. Christensen, D. Luethi, M. Fox-Rabinovitz, M.A. Gaertner, F. Giorgi, G. Grell, S.-Y. Hong, C. Jones, H.-M. H. Juang, J.J. Katzfey, W.M. Lapenta, R. Laprise, G. Liston, J.L. McGregor, R.A. Pielke Sr., J.O. Roads, and J. Taylor, 2002: on PIRCS models' precipitation parameterization efficiency: Consistency of dynamics with rainfall. *Proceedings, 13th AMS Symposium on Global Change and Climate Variations, January 13-17, Orlando, FL, 53-56.*
- PPR-239 Adegoke, J.O., R.A. Pielke Sr., J.L. Eastman, R. Mahmood, and K.G. Hubbard, 2002: Modeling the impact of irrigation on mid-summer surface energy budget and the convective boundary layer (CBL) in the U.S. High Plains. *Joint with the 16th Conference on Hydrology and the 13th Symposium on Global Change and Climate Variations, January 13-17, Orlando, FL, J138-J141.*
- PPR-240 Marshall, C.H. Jr., R.A. Pielke Sr., L.T. Steyaert, T.M. Cronin, D.A. Willard, J.W. Jones, T.J. Smith III, and J.R. Irons, 2002: Impact of land-use management practices in Florida on the regional climate of south Florida and the Everglades. *Preprints, Joint Session 8: Surface/Atmosphere Interactions: Joint AMS Session with the 16th Conference on Hydrology and the 13th Symposium on Global Change and Climate Variations, January 13-17, Orlando, FL, J156-158.*
- PPR-241 Davey, Christopher A., N. J. Doesken, R. J. Leffler, and R. A. Pielke, Sr., 2002: Differences between rooftop and standard ground-based temperatures. *Preprints: 6th Symposium on Integrated Observing Systems, January 13-17, Orlando, FL, 229-232.*
- PPR-242 Angel, J.R., G. Taylor, R. Pielke Sr., J. Grymes, and D. Stooksbury, 2002: The crucial role of State Climatologists in National climate services. *Preprints, 13th Conference on Applied Climatology, January 13-17, Orlando, FL.*
- PPR-243 Niyogi, D. dutta S., R.A. Pielke Sr., J. Eastman, S. Raman, T. Holt, K. Alapaty, U.C. Mohanty, Y.K. Xue, and T.K. Roy, 2002: Land surface processes in the tropics: Examples over the Indian Subcontinent. *Proceedings, Indo-US Forum's Workshop on Weather and Climate, 6-9 February, 2002, New Delhi, India.*
- PPR-244 Stephens, G., R.A. Pielke Sr., and D. Krumm, 2002: Application of GLOBE protocols to the study of land-atmospheric climate feedbacks. *7th Annual GLOBE Conference, July 21-26, Chicago, IL, 32-37.*
- PPR-245 Steyaert, L.T., and R.A. Pielke Sr., 2002: Using LANDSAT-derived land cover, reconstructed vegetation, and atmospheric mesoscale modeling in environmental and global change research. 53rd International Astronautical Conference, The World Space Conference, Paper IAC-02-B.4.03, October 10-19, Houston, TX.
- PPR-246 Finley, C.A., W.R. Cotton, and R.A. Pielke Sr., 2002: Tornadogenesis in a simulated HP supercell. *Preprints, 21st AMS Conference on Severe Local Storms, 12-16 August, San Antonio, TX.*
- PPR-247 Doesken, N.J., O.A. Bliss, and R.A. Pielke Sr., 2002: "Colorado Climate": A magazine dedicated to applied climatology: Session 11, Advances in Climate Services

- (Parallel with Session 10) 13th AMS Conference on Applied Climatology, May 12-16, Portland, OR.
- PPR-248 Niyogi, D., C. Crabbe, V.K. Saxena, K. Wilson, K. Alapaty, R. Pielke Sr., J. Eastman, and Y. Xue, 2002: Effect of regional aerosol loading on the terrestrial NPP estimates over the southeastern United States. Session 10, Micro- and Mesoscale Climatology (Parallel with Session 11), 13th AMS Conference on Applied Climatology. May 12-16, Portland, OR.
- PPR-249 Pielke, R.A. Sr., and R.N. Chase, 2003: A proposed new metric for quantifying the climatic effects of human-caused alterations to the global water cycle. *Preprints, Symposium on Observing and Understanding the Variability of Water in Weather and Climate, 83rd AMS Annual Meeting*, February 9-13, Long Beach, CA.
- PPR-250 Pielke, R.A. Sr., 2003: Diverse contributions of Robert H. Simpson and Joanne Simpson to science and society. *Symposium on Observing and Understanding the Variability of Water in Weather and Climate, 83rd AMS Annual Meeting*, February 9-13, Long Beach, CA.
- PPR-251 Pielke, R.A. Sr., 2003: The U.S. National Climate Change Assessment: Do the climate models project a useful picture of regional climate. Water, Climate, and Uncertainty: Implications for Western Water Law, Policy, and Management. 24th Summer Conference of the Natural Resources Law Center, University of Colorado School of Law, Boulder, CO, 11-13 June 2003.
- PPR-252 Doesken, N., and R.A. Pielke Sr., 2003: Seasonal precipitation differences in Colorado. *Proc., The High Plains No-Till 15th Annual Winter Conference*. Sponsored by the Colorado Conservation Tillage Association in cooperation with the National Sunflower Association, February 4-5, Island Grove Park, Greeley, CO.
- PPR-253 Doesken, N., and R.A. Pielke Sr., 2004: The drought of 2002 in Colorado. *84th AMS Annual Meeting, 14th Conference on Applied Climatology*, January 11-15, Seattle, WA.
- PPR-254 Arritt, R.W., C.J. Anderson, E.S. Takle, Z. Pan, W.J. Gutowski, Jr., F.O. Otieno, R. da Silva, D. Caya, J.H. Christensen, D. Luthi, M.A. Gaertner, C. Gallardo, S.-Y. Hong, C. Jones, H.-M.H. Juang, J. J. Katzfey, W.M. Lapenta, R. Laprise, J.W. Larson, G.E. Liston, J.L. McGregor, R.A. Pielke Sr., J.O. Roads and J.A. Taylor, 2004: Ensemble methods for seasonal limited area forecasts. Presented at 20th Conference on Weather Analysis and Forecasting/16th Conference on Numerical Weather Prediction, American Meteorological Society, 12-16 January 2004, Seattle, Washington.
- PPR-255 Nicholls, M.E., R.A. Pielke Sr., and A. Bedard, 2004: Preliminary numerical simulations of infrasound generation processes by severe weather using a fully compressible numerical model. *22nd Conference on Severe Local Storms*, AMS, 4-8 October 2004, Hyannis, MA.
- PPT-256 Matsui, T., H. Masunaga, R. Pielke Sr., and W.-K. Tao, 2004: Effects of aerosols and thermodynamics on the global distribution of TRMM-derived warm cloud properties. *14th International Conference on Clouds and Precipitation*, 18-23 July, Bologna, Italy.
- PPR-257 Hiemstra, C.A., and R.A. Pielke Sr., 2004: Using GLOBE and other observations to validate meteorological models. 8th Annual Globe Conference, July 25-30, Boulder, CO.
- PPR-258 Davey, C.A., and R.A. Pielke Sr., 2005: Alternative metrics for measuring surface heating trends. *15th AMS Conference on Applied Climatology, Session 2, Climate Trends and Variability*, June 19-23, Savannah, GA.
- PPR-259 Adegoke, J., S. Vezhapparambu, C.L. Castro, R.A. Pielke Sr., and A.M. Carleton. 2006: Influence of variations in low-level moisture and soil moisture on the organization of summer convective systems in the US Midwest. *86th Annual AMS Meeting, 18th Conference on Climate Variability and Change*, January 28-February 3, Atlanta, GA.

PPR-260 Wesley, D.A., R.A. Pielke Sr., S. Jascourt, W. Bua, D. Barjenbruch, E. Szoke, and G. Poulos, 2007: Initial analysis of model guidance for the Colorado Front Range Barrage of snowstorms Nov. 2006-Feb. 2007. *22nd AMS Conference on Weather Analysis and Forecasting*, June 25-29, Park City, UT.

## PAPERS PRESENTED AT MEETINGS

(Underlined name indicates that the oral presentation was by an individual other than R.A. Pielke.)

- PSNT-1 Pielke, R.A., 1973: Numerical model of the sea breezes over south Florida. Presented at the AMS Conference, January 29-February 2, 1973, St. Petersburg, Florida.
- PSNT-2 Pielke, R.A. and W.R. Cotton, 1973: On the role of the mesoscale sea breeze circulations in organizing cumulus convection over south Florida. Presented at the Eighth Technical Conference on Hurricanes and Tropical Meteorology of the AMS, May 14-17, 1973, Key Biscayne, Florida.
- PSNT-3 Pielke, R.A., 1973: Cumulus activities in relation to sea breeze convergence zones over south Florida. Presented at the WMO/IAMAP Symposium on Mesoscale Representation and Fine-Mesh Modeling, May 14-18, 1973, Reading, England.
- PSNT-4 Pielke, R.A., 1973: A three-dimensional numerical model of the sea breezes over south Florida. Presented as an invited participant to Phase II of the Coastal Upwelling Experiment Workshop, August 1973.
- PSNT-5 Pielke, R.A., 1974: Fine-mesh modeling techniques - a survey. Presented at SESAME Opening, September 4-6, 1974, Boulder, Colorado. Chaired the session on Boundary Layer Processes.
- PSNT-6 Cotton, W.R., R.A. Pielke, and P.T. Gannon, 1974: Numerical experiments on the influence of the mesoscale circulation on the cumulus scale. Presented at the AMS Conference on Cloud Physics, October 21-24, 1974, Tucson, Arizona.
- PSNT-7 Pielke, R.A. and W.R. Cotton, 1975: One day in the life of the Florida sea breeze. Presented at the AMS Conference on Regional and Mesoscale Modeling, Analysis and Prediction, May 6-9, 1975, Las Vegas, Nevada.
- PSNT-8 Mahrer, Y. and R.A. Pielke, 1975: The numerical study of the air flow over mountains using the EML/UVA (Experimental Meteorology Laboratory/University of Virginia) mesoscale model. Presented at the AMS Conference on Regional and Mesoscale Modeling, Analysis and Prediction, May 6-9, 1975, Las Vegas, Nevada.
- PSNT-9 Pielke, R.A., 1975: The Experimental Meteorology Laboratory/University of Virginia (EML/UVA) mesoscale model results. Presented at the AMS Conference on Regional and Mesoscale Modeling, Analysis and Prediction, May 6-9, 1975, Las Vegas, Nevada.
- PSNT-10 Pielke, R.A. and Y. Mahrer, 1975: Effect of topography on the sea breeze. Presented at the AMS Conference on Hurricanes and Tropical Meteorology, May 26-30, 1975, Key Biscayne, Florida.
- PSNT-11 Pielke, R.A., 1976: Models of mesoscale systems. Invited presentation at the Conference on Meteorology over the Gulf of Mexico, January 14-16, 1976 at the Earl Rudder Conference Center, Texas A & M University, College Station, Texas.
- PSNT-12 Pielke, R.A., 1976: Use of model results and satellite imagery to improve local weather forecasts over south Florida during the summer. Invited presentation at the AMS Conference on Weather Forecasting and Analysis, May 10-13, 1976, Albany, New York.
- PSNT-13 Pielke, R.A. and Y. Mahrer, 1976: Use of a numerical prediction model to study mountain winds. Presented at the Joint Scientific Meeting on Mountain Meteorology and Biometeorology, June 10-14, 1976, Interlaken, Switzerland.



- Three-dimensional mesoscale model results and their verification against observations. Invited seminar given January 9, 1976, at the Geophysical Fluid Dynamics Lab in Princeton, New Jersey.
- Mesoscale Numerical Modeling. Invited lecturer at the Freie University of Berlin, in Berlin, West Germany, and at the French Meteorological Office in Paris, France, June 1976.
- PSNT-14 Pielke, R.A., Y. Mahrer, and W.R. Cotton, 1976: Recent modeling and observational studies of the mesoscale circulation over south Florida during the summer. Presented at the Tenth Technical AMS Conference on Hurricane and Tropical Meteorology, July 6-9, 1976, Charlottesville, Virginia.
- PSNT-15 Cotton, W.R., R.A. Pielke, and R.L. George, 1976: The evolution of cumulonimbus systems in relation to low-level thermally-driven mesoscale systems. Invited presentation at the International Conference on Cloud Physics, July 26-30, 1976, Boston, Massachusetts.
- PSNT-16 Pielke, R.A. and Y. Mahrer, 1977: Mesoscale model predictions forced by geographic features. Presented at the 1977 Omaha Conference on Numerical Weather Prediction, April 1977, Omaha, Nebraska.
- PSNT-17 Mahrer, Y. and R.A. Pielke, 1977: Terrain and thermal effects on mesoscale circulations. Presented at the 1977 Omaha Conference on Numerical Weather Prediction, April 1977, Omaha, Nebraska.
- PSNT-18 Reid, J.D., L.O. Grant, R.A. Pielke, and Y. Mahrer, 1976: Observations and numerical modeling of seeding agent delivery from ground based generators to orographic cloud base. Presented at the International Weather Modification Conference, August 2-6, 1976, Boulder, Colorado.
- PSNT-19 Pielke, R.A., 1977: Scientific review of recent work in weather forecasting and analysis. Presented invited paper in my capacity as Chairman of the AMS Committee on Weather Forecasting and Analysis at the 1977 Annual Meeting of the AMS, January 1977 in Tucson, Arizona. Also organized two days of the Conference which were devoted to Problems in Forecasting. Agenda of Conference is reported on pp. 1301-1304 of the *Bull. Amer. Meteor. Soc.*, **57**, October, 1976.
- PSNT-20 Pielke, R.A., 1977: Sea breeze and orographic modeling at the University of Virginia. Invited presentation at the National Hurricane and Experimental Meteorology Lab, May 25, 1977, Coral Gables, Florida.
- PSNT-21 Pielke, R.A., 1977: Role of modeling in determining the area of effect - relevant recent work. Invited presentation at the Precipitation Enhancement Project (PEP) Meeting, November 17, 1977.
- Our climate - Is it changing? Invited speaker to the Science Museum Association of Roanoke, Roanoke, Virginia, January 10, 1978.
- PSNT-22 Pielke, R.A., 1978: The weather as news: Forecasts and outlooks. Presented at the Southern Newspaper Publishers Association Workshop (SNPA), May 7-10, 1978, College Station, Texas.
- PSNT-23 Pielke, R.A., 1978: Recent work using the University of Virginia mesoscale model. Invited presentation at the Techniques Development Lab, National Weather Service, May 25, 1978, Silver Spring, Maryland.
- PSNT-24 Pielke, R.A., 1978: Mesoscale dynamical models. Invited presentation at the European Center for Medium Range Forecasting Seminar entitled The Interpretation and Use of Large-Scale Numerical Forecast Products, September 4-8, 1978, Shinfield Park, England.

- PSNT-25 Pielke, R.A., 1978: The future roles of people and machines in weather forecasting. Presented at the American Meteorological Society Conference on Weather Forecasting and Analysis and Aviation Meteorology, October 16-19, 1978, Silver Spring, Maryland. Chaired the session entitled General Forecasting.
- PSNT-26 The role of man and machine in the weather service of the future. Invited presentation at the AMS Conference on Weather Forecasting and Analysis and Aviation Meteorology, October 16-19, 1978, Silver Spring, Maryland. Presented during a panel discussion on Man and Machine in Weather Forecasting Systems - The Future.
- PSNT-27 Pielke, R.A., 1978: Mesoscale dynamical models to be used for local and regional forecasts. Presented at the University of Veracruz, November 1978, Xalapa, Mexico.
- PSNT-28 Pielke, R.A., 1979: Mesoscale climatology and its relation to vegetation in Shenandoah National Park. Invited presentation at the Fourth Annual Shenandoah Research Symposium, May 4, 1979, Skyland, Shenandoah National Park.
- PSNT-29 Pielke, R.A., 1979: Non-seeding approaches to the modification of summertime cumulus. Presented at the NOAA Workshop on Weather Modification, May 16-18, 1979, Pingree Park, Colorado.
- PSNT-30 Pielke, R.A., 1979: Momentum, mass and heat exchange of plant communities (lecture notes). Presented at the University of Veracruz, July 29-August 30, 1979, Xalapa, Mexico.
- PSNT-31 Pielke, R.A., 1979: An overview of our current understanding of the physical interactions between the sea- and land-breeze and the coastal waters. Invited keynote presentation and Acting Convener of the session Dynamic Interaction of the Sea-Breeze with Coastal Waters at the XVII General Assembly, International Union of Geodesy and Geophysics, December 2-15, 1979, Canberra, Australia (see R-22).
- PSNT-32 Pielke, R.A., 1980: Who opposes wilderness? Invited presentation at the Virginia Wilderness Workshop, February 9, 1980, Charlottesville, Virginia.
- PSNT-33 McNider, R.T. and Pielke, R.A., 1980: Modeling the transport and diffusion of air pollutants using a prognostic mesoscale model. Presented at the Fourteenth International Symposium on Atmospheric Pollution, May 1980, Vert-le-Petit, France.
- PSNT-34 Pielke, R.A., 1980: The influence of the planetary boundary layer on mesoscale systems. Invited presentation at the Minisymposium on Mesoscale Phenomena and Their Interactions, Geophysical Fluid Dynamics Lab, September 29-October 1, 1980, Princeton, New Jersey.
- PSNT-35 Segal, M., R.A. Pielke, and Y. Mahrer, 1980: Quantitative assessment of air quality in the greater Chesapeake Bay area using a three-dimensional mesoscale atmospheric model. Presented at the Symposium on Intermediate Range Atmospheric Transport Processes and Technology Assessment, October 1-3, 1980, Gatlinburg, Tennessee.
- PSNT-36 McNider, R.T., and R.A. Pielke, 1980: Nocturnal jet development over sloping terrain and implications for pollutant transport. Presented at the Symposium on Intermediate Range Atmospheric Transport Processes and Technology Assessment, October 1-3, 1980, Gatlinburg, Tennessee.
- PSNT-37 Segal, M., Y. Mahrer, and R.A. Pielke, 1980: A numerical model study of plume fumigation during nocturnal inversion break-up. Presented at the Symposium on Intermediate Range Atmospheric Transport Processes and Technology Assessment, October 1-3, 1980, Gatlinburg, Tennessee (see R-29).
- PSNT-38 McCumber, M.C. and R.A. Pielke, 1980: Modeling surface heat fluxes over south Florida. Presented at the Thirteenth AMS Technical Conference on Hurricanes and Tropical Meteorology, December 1-5, 1980, Miami Beach, Florida.

- PSNT-39 Pielke, R.A., 1980: Mesoscale modeling. Invited presentation at a workshop on Transport and Removal Processes of Atmospheric Particles, December 15-17, 1980, Bologna, Italy.
- PSNT-40 McNider, R.T., S.R. Hanna, and R.A. Pielke, 1981: Numerical simulation of the transport. Presented at the Fifth American Meteorological Society Symposium on Turbulence, Diffusion and Air Pollution, March 9-13, 1981.
- PSNT-41 Pielke, R.A., 1981: The use of mesoscale meteorological and climatological information in nowcasting and short-range prediction. In Nowcasting: Mesoscale Observations and Short-Range Prediction. Proceedings of the International IAMAP Symposium, August 25-28, 1981, Homburg, Germany.
- PSNT-42 Pielke, R.A., R.T. McNider, C.L. Martin, and M. Segal, 1981: Thermal driven effects and the parameterization of boundary layer diffusion. Presented at the Workshop on the Parameterization of Mixed Layer Diffusion, October 20-23, 1981, Las Cruces, New Mexico.
- PSNT-43 Pielke, R.A., 1981: Mesoscale numerical modeling of planetary boundary flows. Presented at Lawrence Livermore Laboratories, November 2, 1981, Livermore, California.
- PSNT-44 Pielke, R.A., 1982: Terrain-induced mesoscale systems. Invited one-hour presentation at the Symposium on Mesoscale Modeling sponsored by the Cooperative Institute for Mesoscale Meteorological Studies, University of Oklahoma, June 1-2, 1982, Norman, Oklahoma.
- PSNT-45 Pielke, R.A., 1982: An overview of coastal atmospheric transport processes. Keynote address presented at the July 13-15, 1982 Workshop on Coastal Atmospheric Transport Processes, Brookhaven National Laboratory, Upton, New York.
- PSNT-46 Pielke, R.A. and R.T. McNider, 1982: Investigation of the transport and diffusion of pollutants in complex terrain using a numerical model. Invited presentation at the EPA Jamboree, July 27-28, 1982 in Southern Pines, North Carolina. Presented the same talk on July 27 at the Meteorology Section of EPA in Research Triangle Park, North Carolina.
- PSNT-47 Pielke, R.A., 1982: Mesoscale numerical modeling of transport and diffusion of atmospheric pollutants in non-homogeneous terrain. Invited presentation at the Fluid Mechanics and Wind Engineering Program Seminar, October 20, 1982, Colorado State University, Fort Collins, Colorado.
- PSNT-48 Pielke, R.A., M.R. Hjelmfelt, and W.A. Lyons, 1983: Mesoscale spiral vortex embedded within a Lake Michigan snow squall band: Observations and model simulation. Presented at the First Conference on Mesoscale Meteorology, May 31-June 3, 1983, Norman, Oklahoma.
- PSNT-49 Pielke, R.A. and A. Mizzi, 1983: A numerical study of the mesoscale atmospheric circulation observed during a coastal upwelling event on August 23, 1972. Presented at the First Conference on Mesoscale Meteorology, May 31- June 3, 1983, Norman, Oklahoma.
- Flow Field modeling. Presented at the Workshop on Dispersion in Complex Terrain, May 17-20, 1983, Keystone, Colorado.
- Mesoscale controls in the Nelspruit area. Presented at the Workshop on Weather Modification in South Africa, June 23-25, 1983, Charlottesville, Virginia.
- Presented 7 hours of lecture on mesoscale modeling at the Course on Mesoscale Meteorology, June 1983. The course was sponsored by the Nordic Council and the Swedish Meteorological and Hydrological Institute (SMHI), Kisa, Sweden.

- Review of existing models. Presented at the AMS/EPA Specialty Conference on Modeling the Air Quality and the Non-homogeneous, Non-stationary Urban Boundary Layer, October 31-November 4, 1983, Baltimore, Maryland.
- PSNT-50 Pielke, R.A., 1984: The operational use of mesoscale models. Presented to the New Zealand Meteorological Service, February 3, 1984.
- PSNT-51 Pielke, R.A., 1984: Three-dimensional modeling of real world mesoscale atmospheric systems - an historical perspective and review. Presented at the International Conference on Mesoscale Meteorology, February 6-10, 1984, Melbourne, Australia. I was Chairman of the session on Numerical Mesoscale Modeling.
- Modeling local air pollution impacts in complex terrain. Presented with C-H. Yu and R. Arritt at the Conference on Air Pollution Effects on Parks and Wilderness Areas, May 20-23, 1984, Mesa Verde National Park, Colorado.
- Mesoscale meteorological modeling - some recent work. Seminar presented at the Department of Mathematics, Monash University, June 20, 1984, Victoria, Australia.
- PSNT-52 Pielke, R.A., 1984: A description of CSU-RAMS and its relation to other mesoscale models. Presented at the workshop entitled Mesoscale Models and their Application to General Meteorological Problems at CSIRO, June 26, 1984, Aspendale, Australia.
- Mesoscale modeling. Presented at the School of Environmental and Life Sciences, Murdoch University, July 10, 1984, Perth, Western Australia.
- Mesoscale circulations forced by differential terrain heating. A one hour lecture presented at the AMS Intensive Course on Mesoscale Meteorology and Forecasting, July 8-20, 1984, Boulder, Colorado (see CB-5).
- Evaluation of surface sensible heat flux effects on the generation and modification of mesoscale circulations. Presented at the Nowcasting II Symposium, September 3-7, 1984, Norrköping, Sweden (see PPR-30).
- The proposed Colorado State University nested grid model. Presented at Goddard Space Flight Center (W.R. Cotton, second author), November 30, 1984 in Greenbelt, Maryland as part of a Numerical Modeling Workshop on Nested Grid Models.
- Supercomputer research in mesoscale, convective and microscale meteorology. Presented at NCAR, January 31, 1985 in Boulder, Colorado as part of NSF site visit.
- PSNT-53 Pielke, R.A., 1985: The mesoscale connection - modeling. Presented at Hailswath II, April 2, 1985, Boulder, Colorado.
- Sea breeze-induced mesoscale systems and severe weather. Presented at the Mesoscale Atmospheric Processes Research Program Science Review, May 14-16, 1985 at Goddard Space Flight Center, Greenbelt, Maryland.
- Applications of near-real time modeling with super-computer. Presented at the CIRA Research Retreat, June 19-22, 1985.
- Influence of distant as opposed to local pollution transport on wilderness air quality by R.A. Pielke, M. Segal, R. Arritt, C-H. Yu and R.T. McNider. Presented at the National Wilderness Research Conference, July 23-25, 1985, Fort Collins, Colorado (see PPR-40).
- PSNT-54 Lyons, W.A., J.A. Schuh, R.A. Pielke, and W.H. Highlands, 1985: Validation of mesoscale numerical sea breeze thunderstorm forecasts over Florida using LPATS - Lightning Position and Tracking System. Presented at the Conference on Aerospace and Range Meteorology, August 27-29, 1985, Huntsville, Alabama.
- PSNT-55 Pielke, R.A., 1985: Preliminary modeling objectives for the Proposed Cooperative Oceanographic-Atmospheric Transport Study (COASTS). Presentation made at a COASTS Workshop, November 11, 1985, Boulder, Colorado.

- Arritt, R.W. and R.A. Pielke, 1985: The influence of turbulent kinetic energy diffusion on the development of nocturnal slope flows. Presented at the Seventh Symposium on Turbulence and Diffusion, November 12-15, 1985, Boulder, Colorado (see PPR-33).
- Vonder Haar, T., D. Randel, C. Fan-Shih, D. Allen, and R.A. Pielke, 1986: The Prototype Digital Weather Laboratory at Colorado State University. Presented at the Second International Conference on Interactive Information and Processing Systems for Meteorology, Oceanography, and Hydrology of the American Meteorological Society, January 13-17, 1986, Miami, Florida (see PPR-34).
- PSNT-56 Pielke, R.A., 1986: Use of the CSU 205 to perform efficient mesoscale atmospheric modeling. Presentation to the NSF site visit at the CSU Supercomputing Resource Center, January 29, 1986, Fort Collins, Colorado.
- PSNT-57 Pielke, R.A., M. Segal, R.W. Arritt, and M.D. Moran, 1986: Influence of terrain-forced mesoscale systems in long-range transport of airborne gases and aerosols. Presented at the EPRI Modeling Contractors Meeting, February 25-27, 1986, Menlo Park, California.
- PSNT-58 Moran, M.D., R.W. Arritt, M. Segal, and R.A. Pielke, 1986: Modification of regional-scale pollutant dispersion by terrain- forced mesoscale circulations. Presented at the APCA Specialty Conference on the Meteorology of Acidic Deposition, March 17-20, 1986, Albany, New York.
- PSNT-59 Lyons, W.A., J.A. Schuh, R.A. Pielke, and M. Segal, 1986: Forecasting sea breeze thunderstorms at the Kennedy Space Center using the prognostic three-dimensional mesoscale model. Presented at the Eleventh Conference on Weather Forecasting and Analysis, June, 1986, Kansas City, Missouri.
- PSNT-60 Lyons, W.A., R.G. Fisher, and R.A. Pielke, 1986: Numerical flow visualization: A new technique for nuclear emergency response and mesoscale pollution transport studies. Presented at the 79th Annual Meeting and Exhibition of the Air Pollution Control Association, June 22-27, 1986, Minneapolis, Minnesota.
- PSNT-61 Pielke, R.A., R.W. Arritt, R.T. McNider, M. Segal, C-H. Yu, and W. Physick, 1986: Screening estimation of maximum 24-hour average pollution concentrations in mountain valleys during synoptic stagnation. Presented at a poster session during the National Park Service Symposium, July 1986, Fort Collins, Colorado (see R-67).
- PSNT-62 Yu, C-H. and R.A. Pielke, 1986: Mesoscale air quality under stagnant synoptic cold season conditions in the Lake Powell area. Presented at the RMSS/APCA Visibility Specialty Conference, September 8-10, 1986 in Grand Teton National Park, Wyoming.
- PSNT-63 Pielke, R.A., M. Segal, R.W. Arritt, and M.D. Moran, 1986: Mesoscale influences on long range pollutant transport. Presented at the CIRA Workshop on Acid Deposition in Colorado, Colorado State University, August 13-15, 1986 in Pingree Park, Colorado.
- Presented 2-3 hour seminars on mesoscale numerical modeling at the following institutes and universities during a scientific exchange visit to the People's Republic of China at the invitation of Academia Sinica, September 23 - October 7, 1986:

- Institute of Atmospheric Physics, Academia Sinica, Beijing (September 26, 1986)
- National Meteorological Center of the State Meteorological Administration, Beijing (September 27, 1986)
- Department of Geophysics, Beijing University, Beijing (September 27, 1986)
- Guangxi Zhuang Autonomous Regional Meteorological Science Research Institute, Guilin (September 29, 1986)
- Guangdong Institute of Tropical Marine Meteorology, Guangzhou (October 1, 1986)
- Department of Meteorology, Nanjing University, Nanjing (October 3, 1986)

- Meteorological Institute of the Chinese Air Force, Nanjing (October 4, 1986)
- Shanghai Meteorological Bureau, Shanghai (October 6, 1986)

- PSNT-64 Moran, M.D., R.W. Arritt, M. Segal, R.A. Pielke, R.T. McNider, and D.A. Wesley, 1986: Mesoscale influences on pollutant transport and dispersion. Presented at the American Meteorological Society Advanced Studies Institute on the Chemical and Meteorological Aspects of Atmospheric Source-Receptor Relationships, October 21-24, 1986 in Oak Ridge, Tennessee.
- Presented six one-hour lectures on mesoscale meteorology at a short course on Air Pollution - Simulation and Modeling and Measurement Strategies, Los Angeles, California, February 4, 1987.
- PSNT-65 Moran, M.D., R.T. McNider, and R.A. Pielke, 1987: Diurnal influences on mesoscale atmospheric dispersion. Presented at the Third AMS Conference on Mesoscale Processes, August 21-26, 1987. Vancouver, British Columbia, Canada.
- PSNT-66 Lyons, W.A., J.A. Schuh, D. Moon, R.A. Pielke, W.R. Cotton, and R.W. Arritt: Short range forecasting of sea breeze generated thunderstorms at the Kennedy Space Center: A real time experiment using a primitive equation mesoscale numerical model. Presented at the Symposium on Mesoscale Analysis and Forecasting, Incorporating Nowcasting, August 17-19, 1987. Vancouver, British Columbia, Canada (see PPR-42).
- PSNT-67 Stocker, R.A. and R.A. Pielke, 1987: Dispersion characteristics of plume releases as depicted by balloon launchings. Presented at the IAMAP Symposium on Dynamics and Monitoring of Pollution, August 1987. Vancouver, British Columbia, Canada.
- PSNT-68 Arritt, R.W., G.S. Young, and R.A. Pielke, 1987: An estimation of the Denver convergence zone using a mesoscale model. Presented at the Fourth Conference on Mountain Meteorology, August 25-28, 1987, Seattle, Washington.
- PSNT-69 Pielke, R.A., 1987: The challenge of using mesoscale data in mesoscale models. Presented at the Symposium on Mesoscale Analysis and Forecasting, Incorporating Nowcasting, August 17-19, 1987. Vancouver, British Columbia, Canada (see PPR-43).
- PSNT-70 Pielke, R.A. and J.M. Cram, 1987: An improved method of analyzing surface geostrophic winds and pressure. Presented at the Symposium on Mesoscale Analysis and Forecasting, Incorporating Nowcasting, August 17-19, 1987. Vancouver, British Columbia, Canada (see PPR- 44).
- PSNT-71 Pielke, R.A., M.D. Moran, M. Segal, D.A. Wesley, and T.B. McKee, 1987: Opportunities for nowcasting air pollution episodes and accidental toxic and radioactive releases. Presented at the Symposium on Mesoscale Analysis and Forecasting, Incorporating Nowcasting, August 17-19, 1987. Vancouver, British Columbia, Canada (see PPR-45).
- PSNT-72 Pielke, R.A., 1987: Overview of model physics. Presented at the Workshop and Panel Meeting of the U.S. Army advisory Panel on Mesometeorology at Risø National Laboratory, May 12-15, 1987. Roskilde, Denmark (see PPR-46).
- PSNT-73 Ye, Z.J., M. Segal, and R.A. Pielke, 1987: Evaluation of daytime thermally induced upslope flow on Mars. Presented at the IAMAP Symposium M-8, Dynamics of Flow Over Topography, Session C, Monday, August 17, 1987, poster session, Vancouver, British Columbia, Canada.
- PSNT-74 Avisar, R., M. Segal, J. Weaver, and R.A. Pielke, 1987: Thermally induced circulations resulting from non-uniform surface characteristics across meso-beta domains - satellite and model evaluations. Presented at the IAMAP Symposium on Surface Energy

- Fluxes, Model Observations, Symposium M1, August 11-14, 1987. Vancouver, British Columbia, Canada.
- PSNT-75 Avisar, R., Y. Mahrer, M. Segal, and R.A. Pielke, 1987: Nowcasting of radiative frosts using atmosphere-soil-plant mesoscale models. Presented at the IAMAP Symposium on Mesoscale Analysis and Forecasting, Incorporating Nowcasting, Symposium M5, August 19, 1987, poster session, Vancouver, British Columbia, Canada.
- PSNT-76 Cram, J.M. and R.A. Pielke, 1987: The importance of synoptic forcing and mesoscale terrain to a numerical simulation of an orographically-induced system. Presented at the 3rd AMS Conference on Mesoscale Processes, August 21-26, 1987, Vancouver, British Columbia, Canada (see PPR-47).
- PSNT-77 Lyons, W.A., D.A. Moon, C.S. Keen, J.A. Schuh, R.A. Pielke, W.R. Cotton, and R.W. Arritt, 1988: Short range forecasting of sea breeze convective storms at the Kennedy Space Center: Applications of remote sensing and mesoscale numerical models. Presented at the 4th Conference on Interactive Information and Processing Systems for Meteorology, Oceanography and Hydrology. February 1-5, 1988, AMS, Anaheim, California.
- PSNT-78 Lyons, W.A., D.A. Moon, J.A. Schuh, C.S. Keen, L.E. Newman, T.E. Nelson, R.A. Pielke, W.R. Cotton, R.W. Arritt, and R.G. Fisher, 1988: Conducting a 'field program' on the southeast Florida coastline using a mesoscale numerical model. Presented at the 4th Conference on Meteorology and Oceanography of the Coastal Zone. February 1-5, 1988, AMS, Anaheim, California (see PPR-49).
- PSNT-79 Lyons, W.A., D.A. Moon, C.S. Keen, J.A. Schuh, R.A. Pielke, W.R. Cotton, and R.W. Arritt, 1988: Providing operational guidance for the development of sea breeze thunderstorms at the Kennedy Space Center: An experiment using a mesoscale numerical model. Presented at the 15th Conference on Severe Local Storms, February 1988, AMS, Baltimore, Maryland (see PPR-52).
- PSNT-80 Weissbluth, M.J., Wesley, D.A., R.A. Pielke, and W.R. Cotton, 1987: A numerical study of dammed flow over complex terrain. Presented at the IAMAP Symposium on Mesoscale Analysis and Forecasting, Incorporating Nowcasting, Symposium M8, August 17-19, 1987, Vancouver, British Columbia, Canada.
- PSNT-81 Verdon, A.J., Jr., and R.A. Pielke, 1987: National balloon launch. Presented at the 17th Conference on Broadcast Meteorology of the American Meteorological Society, June 25-28, 1987, Reno, Nevada.
- PSNT-82 Hadfield, M.G., W.R. Cotton, and R.A. Pielke, 1988: Large-eddy simulations of convective boundary layer circulations driven by microscale surface features. Presented at the Eighth Symposium on Turbulence and Diffusion. April 25-29, 1988, San Diego, California (see PPR-54).
- PSNT-83 Pielke, R.A., 1987: The use of a synoptic climatological classification scheme and mesoscale modeling to assess climatic change. Presented at the CIRA Workshop on Monitoring Climate for the Effects of Increasing Greenhouse Gas Concentrations. August 26- 28, 1987, Pingree Park, Colorado.
- PSNT-84 Wesley, D.A., M.J. Weissbluth, R.A. Pielke, and W.R. Cotton, 1988: Microphysical and dynamical interactions in Colorado Front Range upslope storms. Presented at the 10th International Cloud Physics Conference. August 15-20, 1988. Bad Homburg, Federal Republic of Germany (see PPR-56).
- PSNT-85 Pielke, R.A., 1988: Description of the synoptic mesoscale and local meteorological factors associated with the buildup of air pollution. Presented at A Brown Cloud Forum -

- Session III: Understanding the Causes. The University of Denver in cooperation with U.S. Senator Bill Armstrong. February 8, 1988, Denver, Colorado (see PPR-57).
- PSNT-86 Stocker, R.A., R.A. Pielke, and C.J. Tremback, 1988: A preliminary comparison of the WHITEX field study with synoptic model-derived trajectory results. The 81st APCA Annual Meeting & Exhibition, Dallas Convention Center, Dallas, Texas, June 19-24, 1988 (see PPR-58).
- PSNT-87 Pielke, R.A., M. Segal, and G. Kallos, 1988: Resolution needs for adequate lower tropospheric profiling involved with thermally-forced atmospheric systems. Presented at the Symposium on Lower Tropospheric Profiling: Needs and Technologies, May 31-June 3, 1988, Boulder, Colorado (see PPR-53).
- PSNT-88 Lyons, W.A., R.A. Pielke, D.A. Moon, and J.A. Schuh, 1988: Dispersion of toxic gases in complex sea/land breezes: A new technique using a linked mesoscale numerical model and Lagrangian particle model (U). 1988 JANNAF Safety and Environmental Protection Subcommittee Meeting, Naval Postgraduate School, May 23-27, 1988, Monterey, California (see PPR-59).
- PSNT-89 Moran, M.D., R.T. McNider, and R.A. Pielke, 1988: Mesoscale atmospheric dispersion: A comparison of tracer observations and numerical predictions. 22nd CMOS Annual Congress, June 7-10, 1988, Hamilton, Ontario, Canada.
- PSNT-90 Wesley, D.A., M.D. Moran, and R.A. Pielke, 1988: A mesoscale climatology for eastern North America. 22nd CMOS Annual Congress, June 7-10, 1988, Hamilton, Ontario, Canada.
- PSNT-91 Avissar, R. and R.A. Pielke, 1988: Land/atmosphere interactions: Mechanism, simulations, and observations. Annual Workshop in Earth System Science: "The Global Water Cycle - Past, Present, and Future". July 25-29, 1988, Penn State University, University Park, Pennsylvania.
- PSNT-92 Pielke, R.A., W.A. Lyons, M.D. Moran, and R.T. McNider, 1988: An improved procedure to estimate dispersion in complex terrain. American Nuclear Society Topical Meeting "Emergency Response: Planning, Technologies, and Implementation". September 26-28, 1988, Charleston, South Carolina.
- PSNT-93 Pielke, R.A., 1988: Mesoscale modeling as related to satellite research and operational use. CIRA Satellite Research Workshop, September 21-23, 1988, Pingree Park, Colorado (see PPR-62).
- PSNT-94 Pielke, R.A., 1988: Parameterization of the boundary layer in models. A Short Course on Air Pollution Simulation Modeling and Measurement Strategies. AeroVironment Inc., Monrovia (Los Angeles), California, March 21-25, 1988.
- PSNT-95 Pielke, R.A., 1988: Methods of numerical modeling. A Short Course on Air Pollution Simulation Modeling and Measurement Strategies. AeroVironment Inc., Monrovia (Los Angeles), California, March 21-25, 1988.
- PSNT-96 Pielke, R.A., 1988: Model evaluation. A Short Course on Air Pollution Simulation Modeling and Measurement Strategies. AeroVironment Inc., Monrovia (Los Angeles), California, March 21-25, 1988.
- PSNT-97 Pielke, R.A., 1988: A quantitative study of Florida convection. Mesoscale Atmospheric Processes Research Program Science Review. NASA/Goddard Space Flight Center, May 25-27, 1988.
- PSNT-98 Wesley, D.A. and R.A. Pielke, 1989: Evidence of a blocking-induced cold pool and its effect on snowfall distributions. 12th Conference on Weather Analysis and Forecasting, AMS, Monterey, California, October 2-6, 1989 (see PPR-69).



- PSNT-99 Pielke, R.A., 1988: Fundamentals. Numerical Modeling of Mesoscale Processes: Dynamics, Clouds Physics and Air Pollution, A Short Course. Lausanne, Switzerland, June 27-July 1, 1988.
- PSNT-100 Pielke, R.A., 1988: Numerics. Numerical Modeling of Mesoscale Processes: Dynamics, Clouds Physics and Air Pollution, A Short Course. Lausanne, Switzerland, June 27-July 1, 1988.
- PSNT-101 Pielke, R.A. and W.R. Cotton, 1988: Physical processes: Parameterization. Numerical Modeling of Mesoscale Processes: Dynamics, Clouds Physics and Air Pollution, A Short Course. Lausanne, Switzerland, June 27-July 1, 1988.
- PSNT-102 Pielke, R.A., 1989: Key issues of mesoscale modeling over the next 10 years. Workshop on Needs and Opportunities for Observations and Numerical Modeling of Weather Systems, at the International Association of Meteorology and Atmospheric Physics Conference, Reading, England, August 11-12, 1989.
- PSNT-103 Pielke, R.A., 1988: Numerical meteorological modeling as relevant to eastern, central, and southern Africa. Workshop on Numerical Weather Prediction over Eastern, Central, and Southern Africa. August 1-12, 1988, Nairobi, Kenya.
- PSNT-104 Pielke, R.A., 1989: Influence of landscape structure on local and regional climate. 4th Annual Landscape Ecology Symposium, "Linking Landscape Structure to Ecosystem Processes". Invited plenary talk, March 15-18, 1989, Fort Collins, Colorado.
- PSNT-105 Pielke, R.A., 1988: Numerical modeling of flow over rugged terrain. Workshop on Current Directions in Atmospheric Processes over Complex Terrain, October 24-28, 1988, Park City, Utah.
- PSNT-106 Lyons, W.A., D.A. Moon, T.E. Nelson, J.R. Eastman, R.A. Pielke, and W.R. Cotton, 1988: Using lightning data to evaluate operational mesoscale numerical model forecasts of Florida sea breeze thunderstorms. 1988 Fall Meeting of the American Geophysical Union. December 5-9, 1988, San Francisco, California.
- PSNT-107 Avisar, R.A. and R.A. Pielke, 1988: A parameterization of the subgrid-scale forcing of heterogeneous land surfaces for atmospheric numerical models. 1988 Fall Meeting of the American Geophysical Union. December 5-9, 1988, San Francisco, California.
- PSNT-108 Avisar, R., R.A. Pielke, and Y. Mahrer, 1989: A numerical model for operational forecasting in agriculture. Conference on Agriculture and Forest Meteorology, March 1989, Charleston, South Carolina.
- PSNT-109 Pielke, R.A., 1989: Influence of vegetation on PBL structure over summer urban heat islands. Conference on Saving Energy and Reducing Atmospheric Pollution by Controlling Summer Heat Islands. February 23-24, 1989, Berkeley, California.
- PSNT-110 Pielke, R.A., 1988: Interpretation and diagnosis of LES model predicted data. ARO Workshop on Large Eddy Simulations, November 2-4, 1988, Breckenridge, Colorado.
- PSNT-111 Wesley, D.A. and R.A. Pielke, 1989: Heavy snowfall associated with a severe arctic outbreak along the east slope of the Colorado Rockies. Symposium on Mesoscale Phenomena: Analysis and Forecasting at the International Association of Meteorology and Atmospheric Physics Conference, Reading, England, July 31 -- August 11, 1989.
- PSNT-112 Pielke, R.A., 1989: Critique of model physics for southeastern ozone simulation. SERON Modeling Workshop, Huntsville, Alabama, April 27-28, 1989.
- PSNT-113 Pielke, R.A., M.D. Moran, R.A. Stocker, and R.T. McNider, 1989: Influence of mesoscale circulation on long-range transport of pollution. Symposium on Meteorological Aspects of Tropospheric Air Quality at the International Association of

- Meteorology and Atmospheric Physics Conference, Reading, England, July 31 -- August 11, 1989.
- PSNT-114 Pielke, R.A., 1989: A review of procedures to validate mesoscale numerical weather prediction models. Presented at the 11th Conference on Probability and Statistics in Atmospheric Sciences, Monterey, California, October 1-5, 1989 (see PPR-66).
- PSNT-115 Pielke, R.A. and R. Avissar, 1989: Influence of spatial gradients of vegetation and snow cover on mesoscale circulations. Symposium on Global Energy and Water Fluxes at the International Association of Meteorology and Atmospheric Physics Conference, Reading, England, July 31 -- August 11, 1989.
- PSNT-116 Wesley, D.A. and R.A. Pielke, 1988: Simulations of blocked upslope flow along the Colorado Front Range. 2nd International Cloud Modeling Workshop, August 8-12, 1988, Toulouse, France, WMO (see PPR-51).
- PSNT-117 Avissar, R. and R.A. Pielke, 1989: A technique to assimilate and represent subgrid-scale land heterogeneities in mesoscale numerical models. The Second Workshop on Regional Data Assimilation. March 6-9, 1989, Norman, Oklahoma.
- PSNT-118 Pielke, R.A., X. Zeng, G. Dalu, and R. Eykholt, 1989: Chaos as a result of feedback between climate and the biosphere. AGU 1989 Spring Meeting, May 7-12, Baltimore, Maryland. *EOS Transactions*, **70**, 296.
- PSNT-119 Lee, T.J., J.F. Weaver, and R.A. Pielke, 1990: Numerical predictions and nowcasting of downslope windstorms along the Colorado Front Range. 5th Conference on Mountain Meteorology, June 25-29, 1990, Boulder, Colorado, AMS, Boston (see PPR-63), 81-84.
- PSNT-120 Pielke, R.A., 1989: Use of synoptic climatology and numerical modeling to characterize the influence of terrain-forced mesoscale circulations on the long-range transport of pollution. EPRI Contractor's Report, February 22, 1989, EPRI Headquarters, Palo Alto, California.
- PSNT-121 Pielke, R.A., 1989: Dispersion modeling. NSF Colorado Day, University of Denver, February 27, 1989.
- PSNT-122 Pielke, R.A., 1989: Recommendations to improve air quality in Fort Collins. Fort Collins Third Annual Natural Resources Symposium, City of Fort Collins, Natural Resources Division, April 20, 1989, Fort Collins, Colorado.
- PSNT-123 Pielke, R.A., 1989: Landscape influences on mesoscale climate and weather. Presentation at the National Center for Atmospheric Research (NCAR), March, 1989, Boulder, Colorado.
- PSNT-124 Avissar, R. and R.A. Pielke, 1989: The impact of plant stomatal control on mesoscale atmospheric circulations. Presented at the Workshop on Stomatal Resistance Formulation and Its Application to Modeling of Transpiration, Penn State University, University Park, Pennsylvania, April 10-13, 1989 (see PPR-65).
- PSNT-125 Pielke, R.A., 1989: Influence of land use on mesoscale climate and weather. Presented at the Center for the Analysis and Prediction of Storms, University of Oklahoma, Norman, Oklahoma, June 20, 1989.
- PSNT-126 Pielke, R.A., 1989: Influence of land use and irrigation on local climate. Presented at the Department of Atmospheric Science, Oregon State University, Corvallis, Oregon, May 30, 1989.
- PSNT-127 Pielke, R.A., 1989: Predictability of climate and mesoscale motions. Presented at the Department of Atmospheric Science, Oregon State University, Corvallis, Oregon, May 31, 1989.

- PSNT-128 Pielke, R.A., 1989: Responder to "Regional air pollution with special emphasis on Europe by F.B. Smith". IAMAP 1989, Presidents' Lectures, July 31. First Scientific Session, Reading, England (see PPR-67).
- PSNT-129 McCoy, M.C., R.A. Pielke, and P.W. Mielke, Jr., 1989: An application of multi-response randomized block permutation procedures (MRBP) to the evaluation of numerical weather prediction models. Presented at the 11th Conference on Probability and Statistics in Atmospheric Sciences, Monterey, California, October 1-5, 1989 (see PPR-68).
- PSNT-130 Pielke, R.A. and X. Zeng, 1989: Application of chaos theory to Daisyworld model and climate predictability. Presented at NOAA, Boulder, Colorado, July 27, 1989.
- PSNT-131 Parton, W.J., R.A. Pielke, I. Burke, and T.G.F. Kittel, 1989: Working across scales in grassland ecosystems. Presented at the 74th Annual ESA Meeting, University of Toronto, Ontario. August 6-10, 1989.
- PSNT-132 Pielke, R.A., 1989: Atmosphere/biosphere interactions at regional scales. Presented at the Norton Laird Forum on Global Change, College of Forestry and Natural Resources, Colorado State University, Fort Collins, Colorado. September 26, 1989.
- PSNT-133 Pielke, R.A. and R.A. Stocker, 1989: Source attribution during WHITEX -- A modeling study. Presented at the AWMA/EPA International Specialty Conference on Visibility and Fine Particles, Estes Park, Colorado. October 15-19, 1989.
- PSNT-134 Pielke, R.A., 1990: Influence of landscape on weather and climate. Hydro-Ecosystems Seminar Series, 1989-1990, Fort Collins, Colorado. January 9, 1990.
- PSNT-135 Pielke, R.A., 1990: Influence of landuse on mesoscale climate and weather. University of Wyoming, Department of Atmospheric Science Colloquium, Laramie, Wyoming. January 16, 1990.
- PSNT-136 Pielke, R.A., X. Zeng, and R. Eykholt, 1990: Applications of chaos theory to atmospheric predictability. The Front Range Branch AGU Annual Meeting, Boulder, Colorado. February 5-6, 1990 (see PPR-70).
- PSNT-137 Pielke, R.A., J. Weaver, T. Kittel, and J. Lee, 1990: Use of NDVI for mesoscale modeling. Workshop on the "Use of Satellite-Derived Vegetation Indices in Weather and Climate Prediction Models", Camp Springs, Maryland. February 26-27, 1990 (see PPR-96).
- PSNT-138 Pielke, R.A., 1990: Overlooked scientific issues in assessing hypothesized greenhouse gas warming. 1990 Electric Utility Business Environment Conference and Exhibition, Denver, Colorado. March 7-9, 1990 (see PPR-71).
- PSNT-139 Pielke, R.A., 1991: Procedures to utilize science to regulate outdoor air quality in Colorado. Invited presentation to the Colorado Center for Environmental Management Workshop on Hazardous Waste and Environmental Restoration, University of Denver, Colorado, May 22, 1991.
- PSNT-140 Pielke, R.A., T.J. Lee, J. Weaver, and T.G.F. Kittel, 1990: Influence of vegetation on the water and heat distribution over mesoscale sized areas. 8th Conference on Hydrometeorology, Kananaskis Provincial Park, Alberta, Canada, October 22-26, 1990 (see PPR-83).
- PSNT-141 Lyons, W.A., D.A. Moon, J.L. Eastman, C.S. Keen, M.G. Venne, R.A. Pielke, R.L. Walko, and C.J. Tremback, 1990: A new approach to predict dispersion of hazardous gas clouds in complex coastal wind fields at Cape Canaveral/Kennedy Space Center. Air and Waste Management Association, 83rd Annual Meeting, Pittsburgh, Pennsylvania. June 24-29, 1990.

- PSNT-142 Lyons, W.A., D.A. Moon, J.L. Eastman, C.S. Keen, M.G. Venne, R.A. Pielke, R.L. Walko, and C.J. Tremback, 1990: Improved modeling of the impacts of accidental releases of radionuclides into complex land/lake breeze circulations. Air and Waste Management Association, 83rd Annual Meeting, Pittsburgh, Pennsylvania. June 24-29, 1990.
- PSNT-143 Lyons, W.A., D.A. Moon, J.L. Eastman, N.R. Lincoln, C.S. Keen, R.A. Pielke, R.L. Walko, and C.J. Tremback, 1990: Evaluation of the potential for using mesoscale numerical models to predict dispersion of hazardous gas clouds in complex coastal wind fields. JANNAF, Safety and Environmental Protection Subcommittee, Lawrence Livermore Laboratory, California. June 18-22, 1990.
- PSNT-144 Walko, R.L., W.R. Cotton, and R.A. Pielke, 1990: Large eddy simulation of the CBL over hilly terrain. Ninth Symposium on Turbulence and Diffusion, Roskilde, Denmark. April 30 -- May 3, 1990 (see PPR-72).
- PSNT-145 Pielke, R.A., 1990: Influence of irrigation and other landuse practices on precipitation and other aspects of local climate. Colorado State University Sustainable Agriculture Seminar, Fort Collins, Colorado, May 2, 1990.
- PSNT-146 M.D. Moran, R.A. Pielke, and R.T. McNider, 1990: Temporal and spatial resolution requirements for regional-scale dispersion models. 18th International Technical Meeting of NATO-CCMS on Air Pollution Modeling and Its Application, Vancouver, Canada. May 13-17, 1990 (see PPR-74).
- PSNT-147 Pielke, R.A., G. Dalu, J.R. Garratt, T.G.F. Kittel, R.A. Stocker, T.J. Lee, and J.S. Snook, 1990: Influence of mesoscale landuse on weather and climate and its representation for use in large scale models. Indo-U.S. Seminar on "The Parameterization of Subgrid-Scale Processes in Dynamical Models of Medium-Range Prediction and Global Climate", Pune, India. August 6-10, 1990 (see CB-16).
- PSNT-148 Lyons, W.A., D.A. Moon, J.L. Eastman, C.S. Keen, M.G. Venne, R.A. Pielke, W.R. Cotton, R.L. Walko, and C.J. Tremback, 1990: A new approach to predicting dispersion of toxic gas clouds in complex coastal wind fields at Cape Canaveral/Kennedy Space Center. 83rd Annual Meeting & Exhibition, Pittsburgh, Pennsylvania, June 24-29, 1990 (see PPR-75).
- PSNT-149 Pielke, R.A., G. Dalu, J. Weaver, J. Lee, and J. Purdom, 1990: Influence of landuse on mesoscale atmospheric circulation. Fourth Conference on Mesoscale Processes, Boulder, Colorado, June 25-29, 1990, AMS, Boston (see PPR-76), 226-227.
- PSNT-150 Nicholls, M.E., W.R. Cotton, and R.A. Pielke, 1990: The formation of deep gravity waves by a mesoscale convective system. Fourth Conference on Mesoscale Processes, Boulder, Colorado. June 25-29, 1990 (see PPR-77).
- PSNT-151 Lyons, W.A., D.A. Moon, C.S. Keen, and R.A. Pielke, 1990: Towards the development of regional lightning potential forecasts for Florida using a mesoscale numerical model. 16th Conference on Severe Local Storms, AMS, Kananaskis Provincial Park, Alberta, Canada, October 22-26, 1990.
- PSNT-152 Wesley, D.A., R.A. Pielke, J.F. Weaver, and R.L. McAnelly, 1990: Low-level stable layers, blocking, and locally heavy snowfall. 16th Conference on Severe Local Storms, AMS, Kananaskis Provincial Park, Alberta, Canada, October 22-26, 1990 (see PPR-73).
- PSNT-153 Dalu, G.A., M. Baldi, R.A. Pielke, and A. Guerrini, 1990: Flow and particle trajectories over terrain thermal inhomogeneities. 18th NATO-CCMS International Technical Meeting on Air Pollution Modeling and Its Application, Vancouver, Canada. May 13-17, 1990 (see PPR-78).

- PSNT-154 Pielke, R.A., W.A. Lyons, R.T. McNider, M.D. Moran, D.A. Moon, R.A. Stocker, R.L. Walko, and M. Uliasz, 1990: Regional and mesoscale meteorological modeling as applied to air quality studies. 18th NATO-CCMS International Technical Meeting on Air Pollution Dispersion Modeling and Its Application, Vancouver, Canada. May 13-17, 1990 (see PPR-79).
- PSNT-155 Uliasz, M. and R.A. Pielke, 1990: Application of the receptor oriented approach in mesoscale dispersion modeling. 18th NATO-CCMS International Technical Meeting on Air Pollution Dispersion Modeling and Its Application, Vancouver, Canada. May 13-17, 1990 (see PPR-80).
- PSNT-156 Pielke, R.A., 1990: Research report Task 7. CSU/TTU CPWE TAAC Meeting, February 22-23, 1990, Fort Collins, Colorado.
- PSNT-157 Pielke, R.A., 1990: Modeling activities for URI. Mesomet Advisory Panel Conference, Traben Trarbach, FRG, April 23-27, 1990.
- PSNT-158 Pielke, R.A., G. Dalu, M.D. Moran, M. Uliasz, T.J. Lee, and R.A. Stocker, 1991: Impacts of land surface characteristics on atmospheric dispersion. Seventh Joint Conference on Applications of Air Pollution Meteorology with AWMA, New Orleans, Louisiana, AMS, January 14-18, 1991 (see PPR-81).
- PSNT-159 Uliasz, M. and R.A. Pielke, 1990: Receptor-oriented Lagrangian-Eulerian model of mesoscale air pollution dispersion. Third International Conference on Development and Application of Computer Techniques to Environmental Studies, Montreal, Canada, September 11-13, 1990 (see PPR-82).
- PSNT-160 Pielke, R.A., 1990: National Park Service Presentation on WHITEX. Federal Liaison Group to the NAS BEST Committee on Haze in National Parks and Wilderness Areas, Grand Canyon National Park, March 29, 1990.
- PSNT-161 Pielke, R.A., 1990: A review of the parameterization schemes for physical processes in mesoscale models. Centre for Atmospheric Science, IIT, Delhi, India, July 30, 1990.
- PSNT-162 Pielke, R.A., 1990: Importance and relevance of mesoscale studies for numerical weather prediction in the tropics. Centre for Atmospheric Science, IIT, Delhi, India, July 31, 1990.
- PSNT-163 Pielke, R.A., 1990: Influence of landscape on local, regional, and global weather and climate. Centre for Atmospheric Science, IIT, Delhi, India, August 3, 1990.
- PSNT-164 Dalu, G.A., P.J. Flatau, R.A. Pielke, and G.L. Stephens, 1990: Horizontal structure of cirrus clouds -- Analytical theory. 1990 AMS Conference on Cloud Physics, San Francisco, California, July 23-27, 1990 (see PPR-85).
- PSNT-165 Pielke, R.A., 1990: Overview of CSU's mesoscale wind field model. IMPROVE Data Retreat, Crested Butte, July 1-3, 1990.
- PSNT-166 Pielke, R.A., 1990: Atmospheric modeling and 4DDA progress. ARO Advisory Panel Meeting, Center for Geosciences, Fort Collins, Colorado, September 12-14, 1990.
- PSNT-167 Pielke, R.A., 1990: RAMS: the CSU model for meso/regional scale dispersion. Workshop on the Army Regional Aerosol Transport Simulation (ARATS), Camberley, England, October 29-30, 1990.
- PSNT-168 Pielke, R.A., 1990: Alternative approaches to meteorological model evaluation. Workshop on the Army Regional Aerosol Transport Simulation (ARATS), Camberley, England, October 29-30, 1990.

- PSNT-169 Pielke, R.A., 1990: Model simulations and their comparison with data for pollution producing conditions along the Front Range. ASCOT Planning Meeting and Mini-Workshop, Boulder, Colorado, June 28, 1990.
- PSNT-170 Pielke, R.A., 1990: The application of mesoscale models to link simple ecosystem models to weather and climate models. Forest/Climate Interactions: Scale Transition from Individual Leaves to the Global. Workshop sponsored by the National Center for Atmospheric Research and the USDA Forest Service, Boulder, Colorado, September 25 & 27, 1990.
- PSNT-171 Pielke, R.A., 1990: Mesoscale influences on climate change. Long-Term Ecological Research Network (LTER) All Scientist Meeting, Estes Park, Colorado, September 25-30, 1990.
- PSNT-172 Pielke, R.A., X. Zeng, and R. Eykholt, 1991: Chaos theory and the application in the atmosphere and in Daisyworld. Twenty-Fifth Annual CMOS Congress, Winnipeg, Manitoba, Canada, June 4-7, 1991.
- PSNT-173 Lyons, W.A., R.A. Pielke, and J.L. Eastman, 1990: Initial estimates of the contribution of the land/lake breeze circulation to causing elevated ozone levels in the southern Lake Michigan region. 2nd Interdisciplinary Conference on Urban Air Quality, The National Air Quality Center, Boulder, Colorado, October 29-31, 1990.
- PSNT-174 Pielke, R.A., 1990: Landscape effects on global climate. Towards a Balanced View of Global Change: Development of a Research Agenda, Laboratory of Climatology, Arizona State University, Phoenix, Arizona, October 14-16, 1990.
- PSNT-175 Lyons, W.A., D.A. Moon, and R.A. Pielke, 1990: Modeling transport and diffusion in complex sea breeze wind fields. American Nuclear Society 1990 Winter Meeting, Washington, D.C., November 12-16, 1990 (see PPR-86).
- PSNT-176 Holt, E.H., R.A. Pielke, R.L. Walko, S.A. Lucas, and W.D. Ohmstede, 1991: Methodology for modeling extreme effects of aerosol particles transported on a regional scale. Seventh Joint Conference on Applications of Air Pollution Meteorology with AWMA, New Orleans, Louisiana, AMS, January 14-18, 1991 (see PPR-87).
- PSNT-177 Lyons, W.A., R.A. Pielke, J.L. Eastman, D.A. Moon, C.S. Keen, and N.R. Lincoln, 1991: Mesoscale numerical model evaluations of the meteorological factors associated with elevated ozone levels in the southern Lake Michigan region. Seventh Joint Conference on Applications of Air Pollution Meteorology with AWMA, New Orleans, Louisiana, AMS, January 14-18, 1991 (see PPR-88).
- PSNT-178 Lyons, W.A., D.A. Moon, M.G. Venne, C.S. Keen, N.R. Lincoln, R.A. Pielke, W.R. Cotton, C.J. Tremback, and R.L. Walko, 1991: Real-time forecasting of the impacts of accidental releases of radionuclides into complex coastal zone mesoscale regimes using the Advanced Regional Atmospheric Modeling System (ARAMS). Seventh Joint Conference on Applications of Air Pollution Meteorology, New Orleans, Louisiana, AMS, January 14-18, 1991 (see PPR-89).
- PSNT-179 Lincoln, N.R., M.T. Johnson, C. Carlson, W.A. Lyons, D.A. Moon, C.S. Keen, R.A. Pielke, and W.R. Cotton, 1991: Visualizations of forecasts and simulations produced by a three-dimensional mesoscale numerical model (The Advanced Regional Atmospheric Modeling System). Seventh International Conference on Interactive Information and Processing System for Meteorology, Oceanography, and Hydrology, AMS, New Orleans, Louisiana, January 13-18, 1991 (see PPR-90).
- PSNT-180 Stocker, R.A. and R.A. Pielke, 1991: Complex interactions of regional and mesoscale circulations on the Colorado plateau. Seventh Joint Conference on

- Applications of Air Pollution Meteorology, New Orleans, Louisiana, AMS, January 14-18, 1991 (see PPR-91).
- PSNT-181 Lyons, W.A., Lyons, W.A., C.S. Keen, R.A. Pielke, W.R. Cotton, D.A. Moon, and N.R. Lincoln, 1991: A prototype real-time forecasting system for mesoscale dispersion in land/lake breezes. Third Topical Meeting on Emergency Response and Preparedness, Chicago, Illinois, April 16-19, 1991 (see PPR-92).
- PSNT-182 Uliasz, M. and R.A. Pielke, 1991: Lagrangian-Eulerian dispersion modeling system for real-time mesoscale applications. Third Topical Meeting on Emergency Response and Preparedness, Chicago, Illinois, April 16-19, 1991 (see PPR-93).
- PSNT-183 Lyons, W.A. and R.A. Pielke, 1991: Predicting air pollution dispersion in complex mesoscale flows using a mesoscale prognostic model and a Lagrangian particle dispersion model. Air & Waste Management Association, 85th Annual Meeting and Exhibition, Vancouver, B.C., Canada, June 16-21, 1991.
- PSNT-184 Lyons, W.A. and R.A. Pielke, 1991: The mesometeorology of ozone episodes in the lower Lake Michigan basin. Air & Waste Management Association, 85th Annual Meeting and Exhibition, Vancouver, B.C., Canada, June 16-21, 1991.
- PSNT-185 Pielke, R.A., G. Dalu, J.S. Snook, T.J. Lee, and T.G.F. Kittel, 1991: Nonlinear influence of mesoscale landuse on weather and climate. International Association of Meteorology and Atmospheric Physics of the International Union of Geodesy and Geophysics, Vienna, Austria, August 11-21, 1991.
- PSNT-186 Pielke, R.A., 1991: Overview of modeling as related to halophyte (salt-tolerant vegetation) effects on weather and climate. UCAR, Boulder, Colorado in connection with the University of Arizona Environmental Research Laboratory Visit to UCAR and NCAR in Boulder, Colorado, January 7, 1991.
- PSNT-187 Lyons, W.A., D.A. Moon, R.A. Pielke, and W.R. Cotton, 1990: A revolution in the making: The impact of "personal supercomputers" on regional and city-scale weather prediction. IBM Summer Institute on Environmental Modeling, Oberlech, Austria, July 16-22, 1990.
- PSNT-188 Lyons, W.A., D.A. Moon, J.L. Eastman, C.S. Keen, N.R. Lincoln, R.A. Pielke, and W.R. Cotton, 1990: Some considerations of the role of the land/lake breeze in causing elevated ozone levels in the southern Lake Michigan region. IBM Summer Institute on Environmental Modeling, Oberlech, Austria, July 16-22, 1990 (see PPR-95).
- PSNT-189 W.R. Cotton, R.L. Walko, K.R. Costigan, P.J. Flatau, and R.A. Pielke, 1990: Using RAMS in LES mode -- From inhomogeneous surfaces to cirrus clouds. Lecture Notes in Engineering, Large Eddy Simulation Workshop, St. Petersburg, Florida, December 19-21, 1990 (see PPR-96).
- PSNT-190 Zeng, X., R.A. Pielke, and R. Eykholt, 1991: Computation of Lyapunov exponents and its application in the atmosphere. AGU 1991 Spring Meeting, Baltimore, Maryland, May 28-June 1, 1991 (see PPR-97).
- PSNT-191 Lyons, W.A., R.A. Pielke, R.L. Walko, C.J. Tremback, and C.S. Keen, 1991: Predicting air pollution dispersion in complex mesoscale flows using a mesoscale numerical model and a Lagrangian particle dispersion model. 84th Annual Meeting and Exhibition, Vancouver, British Columbia, Canada, June 16-21, 1991 (see PPR-98).
- PSNT-192 Lyons, W.A., J.L. Eastman, R.A. Pielke, C.J. Tremback, D.A. Moon, and N.R. Lincoln, 1991: The mesometeorology of ozone episodes in the lower Lake Michigan air quality region. Proceedings, 84th Annual Meeting and Exhibition, Vancouver, British Columbia, Canada, June 16-21, 1991 (see PPR-99).

- PSNT-193 Holt, E.H., S.A. Luces, R.A. Pielke, and R.L. Walko, 1991: Transport and dispersion of the smoke plume from the Kuwait oil fires. Scientific Conference on Obscuration and Aerosol Research, Edgewood, Maryland, June 24-27, 1991.
- PSNT-194 Pielke, R.A., X. Zeng, J. Copeland, W.R. Cotton, and M. Uliasz, 1991: Predictability of atmospheric structure -- Relevance for determining temporal and spatial resolution of tropospheric profiling. Second Symposium on Tropospheric Profiling: Needs and Technologies, Boulder, Colorado, September 9-13, 1991 (see PPR-100).
- PSNT-195 Snook, J.S. and R.A. Pielke, 1991: Investigation of winter-time diurnal precipitation variation over mountainous terrain. Ninth Conference on Numerical Weather Prediction, Denver, Colorado, October 14-18, 1991 (see PPR-101).
- PSNT-196 Wesley, D.A. and R.A. Pielke, 1991: Nested simulations of a winter storm: The influence of topography on the snowfall distribution. Ninth Conference on Numerical Weather Prediction, Denver, Colorado, October 14-18, 1991 (see PPR-102).
- PSNT-197 Pielke, R.A., X. Zeng, and R.L. Walko, 1991: The predictability of atmospheric features in response to heterogeneous heating. Ninth Conference on Numerical Weather Prediction, Denver, Colorado, October 14-18, 1991 (see PPR-103).
- PSNT-198 Mukabana, J.R. and R.A. Pielke, 1991: Numerical simulation of the effects of monsoon winds on the weather patterns over Kenya: A case study during the "long rains" season. Ninth Conference on Numerical Weather Prediction, Denver, Colorado, October 14-18, 1991 (see PPR-104).
- PSNT-199 Nicholls, M.E. and R.A. Pielke, 1991: Mass adjustment and energy transport by thermal compression waves. Ninth Conference on Numerical Weather Prediction, Denver, Colorado, October 14-18, 1991 (see PPR-105).
- PSNT-200 Copeland, J.H., R.A. Pielke, and W.R. Cotton, 1991: The effect of four-dimensional data density on assimilation for a shallow-water model with the adjoint method: Preliminary results. Ninth Conference on Numerical Weather Prediction, Denver, Colorado, October 14-18, 1991 (see PPR-106).
- PSNT-201 Zeng, X., R.A. Pielke, and R. Eykholt, 1991: Chaos and predictability for mesoscale systems. Ninth Conference on Numerical Weather Prediction, Denver, Colorado, October 14-18, 1991 (see PPR-107).
- PSNT-202 Lee, T.J. and R.A. Pielke, 1991: The impact of vegetation on severe convective storms. Ninth Conference on Numerical Weather Prediction, Denver, Colorado, October 14-18, 1991 (see PPR-108).
- PSNT-203 Lyons, W.A., R.A. Pielke, J.L. Eastman, and C.J. Trembach, 1991: Applications of a nested grid mesoscale model to understanding the impacts of mesoscale flow discontinuities upon regional air pollution dispersion. Ninth Conference on Numerical Weather Prediction, Denver, Colorado, October 14-18, 1991 (see PPR-109).
- PSNT-204 Lyons, W.A., C.S. Keen, R.A. Pielke, W.R. Cotton, C.J. Trembach, R.L. Walko, N.R. Lincoln, and D.A. Moon, 1991: The impact of wind discontinuities and associated zones of strong vertical motions upon the mesoscale dispersion of toxic airborne contaminants on coastal zones. *1991 JANNAF Safety and Environmental Protection Subcommittee*, NASA/Kennedy Space Center, Kennedy Space Center, Florida, July 22-26, 1991 (see PPR-110).
- PSNT-205 Pielke, R.A., G. Dalu, T.G.F. Kittel, T.J. Lee, D.S. Ojima, and X. Zeng, 1991: Influence of land surface heat and moisture fluxes on climate and weather. *46th Annual Meeting of the Soil and Water Conservation Society "Living with the Land"*, Lexington, Kentucky, August 4-7, 1991.



- PSNT-206 Lyons, W.A., R.A. Pielke, W.R. Cotton, C.J. Tremback, R.L. Walko, N.R. Lincoln, and D.A. Moon, 1992: Operational mesobeta-scale numerical weather forecasting: A goal within reach. 8th International Conference on Interactive Information and Processing Systems for Meteorology, Oceanography, and Hydrology, American Meteorological Society, Atlanta, Georgia, January 5-10, 1992 (see PPR-111).
- PSNT-207 Pielke, R.A., R.A. Stocker, G. Poulos, and M. Uliasz, 1991: Influence of mesoscale circulations on long range transport in the Grand Canyon area. 19th NATO/CCMS International Technical Meeting on Air Pollution Modeling and Its Application, Ierapetra, Crete, Greece, September 29-October 4, 1991 (see PPR-112).
- PSNT-208 Dalu, G.A., M. Baldi, R.A. Pielke, and G. Kallos, 1991: Atmospheric flow and fluxes over complex terrain, sub-grid parameterization analytical theory. 19th NATO/CCMS International Technical Meeting on Air Pollution Modeling and Its Application, Ierapetra, Crete, Greece, September 29-October 4, 1991 (see PPR-113).
- PSNT-209 Stocker, R.A., R.A. Pielke, and M. Uliasz, 1991: Impact of local sources during stagnant conditions in Shenandoah National Park. 19th NATO/CCMS International Technical Meeting on Air Pollution Modeling and Its Application, Ierapetra, Crete, Greece, September 29-October 4, 1991 (see PPR-114).
- PSNT-210 Uliasz, M. and R.A. Pielke, 1991: Receptor-oriented dispersion modeling: Extension to nonlinear pollution chemistry. 19th NATO/CCMS International Technical Meeting on Air Pollution Modeling and Its Application, Ierapetra, Crete, Greece, September 29-October 4, 1991 (see PPR-115).
- PSNT-211 Uliasz, M. and R.A. Pielke, 1991: Effect of land surface representation on simulated mesoscale pollution dispersion. 19th NATO/CCMS International Technical Meeting on Air Pollution Modeling and Its Application, Ierapetra, Crete, Greece, September 29-October 4, 1991 (see PPR-116).
- PSNT-212 Lee, T.J., R.A. Pielke, T.G.F. Kittel, and J.F. Weaver, 1991: Atmospheric modeling and its spatial representation of land surface characteristics. First International Conference/Workshop on Integrating Geographic Information Systems and Environmental Modeling, Invited contribution, September, 1991, Boulder, Colorado (see PPR-117).
- PSNT-213 Pielke, R.A., 1991: Reassessment of requirements for GCMs, Mesoscale models. ISLSCP Meeting, March 19-20.
- PSNT-214 Pielke, R.A., 1991: Air quality research. Colorado Center for Environmental Management Workshop on Working Together for a Cleaner Colorado. Phipps Conference Center, May 22, 1991.
- PSNT-215 Pielke, R.A., 1991: Importance of surface features on weather and climate. 1991 CIRA Research Retreat, Pingree Park, CO, June 26-28, 1991.
- PSNT-216 Pielke, R.A., 1991: 4-D data assimilation. Presentation to Dr. Richard Chait, Chief Scientist, Headquarters, Army Materiel Command, Alexandria, Virginia. CIRA Building, Foothills Campus, Colorado State University, July 24, 1991.
- PSNT-217 Kittel, T.G.F., T.J. Lee, and R.A. Pielke, 1991: Mesoscale atmospheric modeling and BOREAS: Principles, utility, and research needs. NASA Pre-BOREAS Modeling Workshop, Flathead Lake, MT, August 19-20, 1991.
- PSNT-218 Pielke, R.A., 1991: The use of mesoscale models to estimate rainfall in the South Florida Water Management District. September 3-4, 1991, South Water Management District Headquarters, West Palm Beach, Florida.
- PSNT-219 Pielke, R.A., 1991: Varied physiography. Presented at the ARO/URI Site Visit, September 6, 1991, Colorado State University.

- PSNT-220 Pielke, R.A., 1991: Dispersion concentrations. Presented at the ARO/URI Site Visit, September 6, 1991, Colorado State University.
- PSNT-221 Pielke, R.A., 1991: Predictability. Presented at the ARO/URI Site Visit, September 6, 1991, Colorado State University.
- PSNT-222 Pielke, R.A., 1991: Field experiments. Presented at the ARO/URI Site Visit, September 6, 1991, Colorado State University.
- PSNT-223 Pielke, R.A., 1991: Regional interactions -- what are the issues? Global Forcing and Regional Interactions Workshop, Pingree Park, Colorado, October 21-23, 1991.
- PSNT-224 Pielke, R.A., 1991: Unresolved atmospheric greenhouse issues. Fall 1991 Fluid Mechanics/Hydraulics and Wind Engineering Seminar Series. November 20, 1991, Lory Student Center, Colorado State University.
- PSNT-225 Pielke, R.A., 1991: Mathematical modeling in atmospheric science. Department of Physics Colloquium, December 2, 1991, Colorado State University.
- PSNT-226 Pielke, R.A., X. Zeng, and R. Eykholt, 1991: Extracting Lyapunov exponents from short time series of low precision. AGU 1991 Spring Meeting, Baltimore, Maryland, May 28-June 1, 1991 (see PPR-118).
- PSNT-227 Lyons, W.A., R.A. Pielke, and J.L. Eastman, 1991: The use of a mesoscale prognostic model in the design of an oxidant field monitoring program and as input to a photochemical grid model. AGU 1991 Fall Meeting, San Francisco, California, December 9-13, 1991 (see PPR-119).
- PSNT-228 Kallos, G., P. Kassomenos, and R.A. Pielke, 1991: Anatomy of the air pollution problem in Athens, Greece. Presented at the 35th OHOLO Conference in Eilat, Israel, October 29 - November 6, 1991.
- PSNT-229 Lyons, W.A., R.L. Walko, M.E. Nicholls, R.A. Pielke, W.R. Cotton, C.S. Keen, and A.I. Watson, 1992: Observational and numerical modeling investigations of Florida thunderstorms generated by multi-scale surface thermal forcing. 5th Conference on Mesoscale Processes, AMS, Atlanta, Georgia, January 5-10, 1992 (see PPR-120).
- PSNT-230 Ziegler, C.L., W. Martin, R.A. Pielke, and R. Walko 1992: A modeling study of the dryline environment. 5th Conference on Mesoscale Processes, AMS, Atlanta, Georgia, January 5-10, 1992 (see PPR-121).
- PSNT-231 Pielke, R.A., 1992: Influence of landscape structure on atmospheric circulations. January 16, 1992, University of Alaska at Fairbanks.
- PSNT-232 Pielke, R.A., 1992: The use of meteorological models in ecosystem studies. January 17, 1992, University of Alaska at Fairbanks.
- PSNT-233 Pielke, R.A., 1992: Overview of research related to TERRA. TERRA Climate Scenario Workshop, March 3, 1992, NCAR, Boulder, Colorado.
- PSNT-234 Pielke, R.A., 1992: Climatic changes in the Colorado Rocky Mountains: Projected changes in regional climate. LVWS/WEBB/COLR Planning Meeting, March 24-25, 1992, McLaren Hall, Rocky Mountain National Park, Colorado.
- PSNT-235 Pielke, R.A., 1992: Colloquium. April 21, 1992, Colorado School of Mines, Physics Department, Golden, Colorado.
- PSNT-236 Pielke, R.A., 1992: Landscape effects on weather and climate -- Is its effect as large as the greenhouse effect? NASA Laboratory for Atmospheres, May 12, 1992, Goddard Space Flight Center, Greenbelt, Maryland.
- PSNT-237 Papineau, J., R. Pielke, and D. Wesley, 1992: A performance evaluation of the NGM and RAMS models for the March 29-30, 1991 Front Range storm. WISP Analysis Meeting, June 3, 1992, Boulder, Colorado.

- PSNT-238 Wesley, D., B. Bernstein, and R. Pielke, 1992: Snowbands associated with a terrain-generated convergence zone during the Winter Icing and Storms Project. WISP Analysis Meeting, June 3, 1992, Boulder, Colorado.
- PSNT-239 Lee, T.J., R.A. Pielke, and P.W. Mielke, Jr., 1992: Optimizing the land ecosystem-atmosphere feedback model using MRBP. 12th Conference on Probability and Statistics, June 22-26, 1992, AMS, Toronto, Ontario, Canada (see PPR-122).
- PSNT-240 Pielke, R.A., W.R. Cotton, C.J. Tremback, R.L. Walko, and W.A. Lyons, 1992: Regional and mesoscale atmospheric modeling. Institute for Mathematics and Its Applications, July 8, 1992, University of Minnesota, Minneapolis.
- PSNT-241 Lyons, W.A., R.A. Pielke, W.R. Cotton, C.J. Tremback, M. Uliasz, R.L. Walko, S. Randell, W. Thorson, and D.K. Struck, 1992: Design of a prototype operational mesoscale air toxics dispersion system using a numerical prognostic model. JANNAF, Safety and Environmental Protection Conference, August 10-14, Naval Postgraduate School, California (see PPR-132).
- PSNT-242 Stocker, R.A., and R.A. Pielke, 1992: A climatology of the desert southwest with specific emphasis on the Great Basin and Rocky Mountains. Front Range AGU Meeting, February 10, 1992, NCAR, Boulder, Colorado.
- PSNT-243 Dalu, G.A., R.A. Pielke, and M. Baldi, 1992: Atmospheric linear response to hilly terrain and to thermal and stress surface inhomogeneities. Front Range AGU Meeting, February 10, 1992, NCAR, Boulder, Colorado.
- PSNT-244 Wesley, D.A., and R.A. Pielke, 1992: Synoptic conditions and other features associated with a common terrain-generated convergence zone during the 1991 Winter Icing and Storms Project (WISP). 1992 AGU, CGU, and MSA Joint Spring Meeting, May 12-15, 1992, Montreal, Canada.
- PSNT-245 Pielke, R.A., J.S. Baron, T.G.F. Kittel, T.J. Lee, T.N. Chase, and J.M. Cram, 1992: Influence of landscape structure on the hydrologic cycle and regional and global climate. *Proceedings, "Managing Water Resources During Global Change"*, American Water Resources Association (AWRA), November 1-5, 1992, Reno, Nevada (see R-154).
- PSNT-246 Baron, J., R.A. Pielke, W.J. Parton, D.S. Ojima, T. Kirchner, S.W. Running, T.G.F. Kittel, 1992: Dynamic land surface/atmospheric parameterization for the South Platte River drainage. *Proceedings, "Managing Water Resources During Global Change"*, American Water Resources Association (AWRA), November 1-5, 1992, Reno, Nevada (see PSNT-246).
- PSNT-247 Holt, E.H., S. Luces, A. Peters, J. Barnes, R. Pielke, R. Walko, S. Limaye, T. Henmi, R. Dumais, R. Sutherland, H. Apsimon, I. Lowles, D. Johnson, and R. Maryon, 1992: Model intercomparisons using the Kuwait smoke plume as a tracer. Poster Presentation, 1992 European Aerosol Conference, September 6-11, 1992, Oxford, United Kingdom.
- PSNT-248 Uliasz, M., and R.A. Pielke, 1992: Source- and receptor oriented approaches as complementary tools in dispersion modeling. 10th Symposium on Turbulence and Diffusion, September 29 - October 2 1992, AMS, Portland, Oregon (see PPR-123).
- PSNT-249 Stocker, R.A., M. Uliasz, and R.A. Pielke, 1992: The origins of elevated background tracer measurements during the MOHAVE field study. 10th Symposium on Turbulence and Diffusion, September 29 - October 2 1992, AMS, Portland, Oregon (see PPR-124).
- PSNT-250 Zeng, X., and R.A. Pielke, 1992: Effect of surface inhomogeneities on coherent structures, diffusion, and predictability in the atmospheric boundary layer. 10th

- Symposium on Turbulence and Diffusion, September 29 - October 2 1992, AMS, Portland, Oregon (see PPR-124).
- PSNT-251 Zeng, X., and R.A. Pielke, 1992: Influence of complex terrain on coherent structures, diffusion, and atmospheric predictability. *Preprints, 10th Symposium on Turbulence and Diffusion*, September 29 - October 2, 1992, AMS, Portland, Oregon (see PPR-126).
- PSNT-252 Nicholls, M.E., R.A. Pielke, and R.N. Meroney, 1992: Large eddy simulation of microburst winds flowing around a building. International Symposium on Computational Wind Engineering, August 21-24, 1992, Tokyo, Japan (see PPR-127).
- PSNT-253 Lyons, W.A., R.A. Pielke, M. Uliasz, C.J. Tremback, and R.L. Walko, 1993: The applications of new technologies to modeling mesoscale dispersion in coastal zones and complex terrain. First International Conference on Air Pollution, February 23-25, 1993, Monterrey, Mexico (see PPR-142).
- PSNT-254 Pielke, R.A., T.J. Lee, T.G.F. Kittel, J.S. Baron, T.N. Chase, and J.M. Cram, 1993: The effect of mesoscale vegetation on the hydrologic cycle and regional and global climate. Conference on Hydroclimatology: Land-Surface/Atmosphere Interactions on Global and Regional Scales, AMS, January 17-22, 1993, Anaheim, California (see PPR-128).
- PSNT-255 Lyons, W.A., R.A. Pielke, W.R. Cotton, C.J. Tremback, M. Uliasz, R.L. Walko, S. Randell, and W. Thorson, 1993: An interactive operational emergency response dispersion system using a mesoscale numerical prognostic model. 9th International Conference on Interactive Systems for Meteorology, Oceanography, and Hydrology, AMS, January 17-22, 1993, Anaheim, California (see PPR-129).
- PSNT-256 Lyons, W.A., R.A. Pielke, W.R. Cotton, C.J. Tremback, M. Uliasz, R.L. Walko, S. Randell, and W. Thorson, 1993: Design of a prototype operational emergency response dispersion system using a mesoscale numerical prognostic model. 4th Topical Meeting on Emergency Preparedness and Response, American Nuclear Society, April 25-29, 1993, Long Island, New York (see PPR-143).
- PSNT-257 Pielke, R.A., G. Dalu, T.J. Lee, and H. Rodriguez, J. Eastman, and T.G.F. Kittel, 1993: Mesoscale parameterization of heat fluxes due to landscape variability for use in general circulation models. Joint Scientific Assembly of the International Association of Meteorology and Atmospheric Physics and the International Association of Hydrological Sciences, July 11-13, 1993, Yokohama, Japan (see PPR-130).
- PSNT-258 Lyons, W.A., R.A. Pielke, C.J. Tremback, R.L. Walko, and M. Uliasz, 1992: The applications of new technologies in modeling mesoscale dispersion in coastal zones and complex terrain. IUPPA, September, 1992, Montreal, Quebec.
- PSNT-259 Wesley, D.A., and R.A. Pielke, 1992: Precipitation development in the 30-31 March 1988 Front Range snowstorm: Model simulations including detailed microphysics. Poster Presentation, 11th International Conference on Clouds and Precipitation, AMS, August 17-21, 1992, Montreal, Canada (see PPR-131).
- PSNT-260 Pielke, R.A., 1992: Influence of landscape inhomogeneities on atmospheric boundary layer structure and mesoscale circulations. International Workshop for "Exploration and Development of a Land Surface-Atmosphere Interaction Experiment in the Inner Mongolia Grasslands", June 29 - July 1, 1992, Boulder, Colorado.
- PSNT-261 Pielke, R.A., 1992: Climate models. 1992 AGCI Summer Session I, Fresh Water, Land, and Biologic Interactions: Changes and Impacts, July 19-August 1, 1992.

- PSNT-262 Kittel, T., R. Pielke, F. Giorgi, T. Chase, J. Cram, and J. Baron, 1992: Climatic change regional scenarios for the Colorado Rocky Mountains. Niwot Ridge LTER Research Workshop, Nederland, CO, August 22, 1992.
- PSNT-263 Pielke, R.A., 1992: Landuse changes and regional climate effects in mountain regions. International Conference on Mountain Environments in Changing Climates, Davos, Switzerland, October 11-16, 1992. Keynote Address.
- PSNT-264 Pielke, R.A., 1992: Influence of landscape variability on dispersion. Invited presentation at the University of Athens, October 19, 1992, Greece.
- PSNT-265 Pielke, R.A., 1992: Influence of landscape structure on the hydrologic cycle in regional and global climate. Fall 1992 Seminar Series on Water Resources Science and Engineering. October 29, 1992, Colorado State University, Department of Civil Engineering.
- PSNT-266 Uliasz, M., R.A. Stocker, and R.A. Pielke, 1993: Numerical modeling of atmospheric dispersion during the MOHAVE field study. International Symposium on Air Pollution 93, Monterrey, Mexico, February 16-18, 1993 (see PPR-133).
- PSNT-267 Uliasz, M. and R.A. Pielke, 1993: Implementation of Lagrangian particle dispersion model for mesoscale and regional air quality studies. International Symposium on Air Pollution 93, Monterrey, Mexico, February 16-18, 1993 (see PPR-134).
- PSNT-268 Pielke, R.A., 1993: Current and related problems of PBL parameterization in mesoscale models. Coupled Mesoscale Modeling Colloquium and Workshop, NASA, Calverton, Maryland, February 22-25, 1993.
- PSNT-269 Pielke, R.A., 1993: Parameterization of mesoscale effects in larger scale models -- Current status. Brown bag lunch seminar, Department of Atmospheric Science, Colorado State University, February 26, 1993.
- PSNT-270 Lyons, W.A., R.L. Walko, M. Uliasz, R.A. Pielke, and J.I. Ibarra 1993: Evaluation of numerical simulations of mesoscale flow regimes in complex terrain. Front Range Branch AGU Annual Meeting, Golden, Colorado, February 8-10, 1993.
- PSNT-271 Zeng, X. and R.A. Pielke, 1993: Some chaos applications to the atmosphere. Front Range Branch AGU Annual Meeting, Golden, Colorado, February 8-10, 1993.
- PSNT-272 Pielke, R.A., T.J. Lee, T.N. Chase, and J.M. Cram, 1993: Influence of land use changes along the Colorado Front Range on local weather and climate. Front Range Branch AGU Annual Meeting, Golden, Colorado, February 8-10, 1993.
- PSNT-273 Pielke, R.A., 1993: Experiences of a scientist on a policy making commission. Front Range Branch AGU Annual Meeting, Golden, Colorado, February 8-10, 1993.
- PSNT-274 Uliasz, M., R.A. Pielke, and R.A. Stocker, 1993: Numerical modeling of air pollution transport in southwestern United States using source- and receptor-oriented techniques. 86th Annual Meeting and Exhibition, Denver, Colorado, June 14-18, 1993 (see PPR-135).
- PSNT-275 Stocker, R.A., M. Uliasz, and R.A. Pielke, 1993: The origins of elevated background tracer measurements during the MOHAVE field study. 86th Annual Meeting and Exhibition, Denver, Colorado, June 14-18, 1993 (see PPR-136).
- PSNT-276 Eastman, J.L., R.A. Pielke, and W.A. Lyons, 1993: Numerical study of the effects of grid spacing on dispersion and tracer evaluation. 86th Annual Meeting and Exhibition, Denver, Colorado, June 14-18, 1993 (see PPR-137).
- PSNT-277 Zeng, X. and R.A. Pielke, 1993: Predictability and chaos in atmospheric coherent structures. IAMAP-IAHS '93 Joint International Meeting, The Sixth Scientific Assembly

- of the International Association of Meteorology and Atmospheric Physics, Yokohama, Japan, July 11-23, 1993.
- PSNT-278 Lyons, W.A., R.A. Pielke, W.R. Cotton, C.J. Tremback, G. Thompson, 1993: An operational mesoscale sea breeze forecasting system. 5th Conference on Aviation Weather Systems, AMS, Vienna, Virginia, August 2-6, 1993 (see PPR-139).
- PSNT-279 Lyons, W.A., R.A. Pielke, C.J. Tremback, and G. Thompson, 1993: Evaluation of mesoscale prognostic models. 13th Conference on Weather Analysis and Forecasting, AMS, Vienna, Virginia, August 2-6, 1993 (see PPR-140).
- PSNT-280 Pielke, R.A., M. Uliasz, C.A. Finley, and T.J. Lee, 1993: Influence of land-surface variability on the dispersion of atmospheric pollution. 20th International Technical Meeting on Air Pollution Modelling and Its Application, Valencia, Spain, November 29-December 3, 1993 (see PPR-141) presented by G. Kallos.
- PSNT-281 Falkner, M.B., T.G.F. Kittel, J. Detling, J. Lenihan, R. Neilson, D. Ojima, R.A. Pielke, W. Reiners, and T.J. Stohlgren, 1993: Understanding coupled climatic and ecosystem responses to global climate change in the Central Grasslands. 1993 Ecological Society of America Meeting, Madison, Wisconsin, August 2-4, 1993.
- PSNT-282 Pielke, R.A., 1993: Use of meteorological models to estimate the transport and dispersion of atmospheric aerosols. 1993 Annual Meeting of the American Association for Aerosol Research, Chicago, Illinois, October 11, 1993.
- PSNT-283 Pielke, R.A., 1993: Overview of research on air quality and landscape effects on weather and climate. NOAA, Air Resources Laboratory, Silver Spring, Maryland, March 24, 1993.
- PSNT-284 Schimel, D.S., T.G.F. Kittel, D.S. Ojima, F. Giorgi, A. Metherell, R.A. Pielke, C.V. Cole, and J.G. Bromberg, 1993: Methods, models and tools for spatial and temporal integration: Understanding the interaction of climate and land cover. Sustainable Land Management for the 21st Century, Lethbridge, Alberta, Canada, June 1993.
- PSNT-285 Pielke, R.A., 1993: An overview of atmospheric/hydrologic/land surface modeling. Coupled Mesoscale Modeling Colloquium and Workshop, NASA, Calverton, Maryland, February 22-25, 1993.
- PSNT-286 Pielke, R.A., 1993: Overview of research and RAMS applications to the Colorado - Mexico City Air Quality Initiative. Colorado International Trade Office, Denver, Colorado, March 5, 1993 (presented in Spanish).
- PSNT-287 Lyons, W.A., R.A. Pielke, W.R. Cotton, C.S. Keen, and D.A. Moon, 1992: Final results of an experiment in operational forecasting of sea breeze thunderstorms using a mesoscale numerical model. Symposium on Weather Forecasting, AMS, January 5-10, 1992, Atlanta, Georgia, (see PPR-144).
- PSNT-288 Pielke, R.A., and X. Zeng, 1993: Influence of atmospheric-ecosystem feedbacks on predictability. NCAR Geophysical Turbulence Program Workshop on Predictability and Chaos, September 7-10, 1993, Boulder, Colorado.
- PSNT-289 Lyons, W.A., J.L. Eastman, R.A. Pielke, R.T. McNider, and A. Biazer, 1993: The impacts of convective clouds on atmospheric chemistry and mesoscale air pollution dispersion. AGU Spring Meeting, Baltimore, Maryland.
- PSNT-290 Pielke, R.A., 1993: Advance in regional/mesoscale meteorological modeling. Workshop on the Use of Hydrological Models for Evaluating the Impacts of Climate Change in Snowmelt Water Supply Basins, Santa Fe, New Mexico, April 20-22, 1993.
- PSNT-291 Pielke, R.A., 1993: Boundary layer evolution; land use effects on CAPE/CIN. National Weather Service Forecast Office Spring Weather Workshop, Presented twice -- May 4, 1993 and May 5, 1993.

- PSNT-292 Finley, C.A., and R.A. Pielke, 1993: Possible effects of land use variability on atmospheric mesoscale circulations and pollutant dispersion. American Nuclear Society Topical Meeting on Environmental Transport and Dosimetry, Charleston, South Carolina, August 31-September 3, 1993 (see PPR-145).
- PSNT-293 Schimel, D.S., T.G.F. Kittel, D.S. Ojima, F. Giorgi, A. Metherell, R.A. Pielke, C.V. Cole, and J.G. Bromberg, 1993: Models, methods, and tools for regional models of the response of ecosystems to global change. Sustainable Land Management for the 21st Century, Lethbridge, Alberta, June 1993 (see PPR-146).
- PSNT-294 Zeng, X. and R.A. Pielke, 1993: Predictability and fractals of surface forced atmospheric systems. IAMAP-IAHS '93 Joint International Meeting, The Sixth Scientific Assembly of the International Association of Meteorology and Atmospheric Physics, Yokohama, Japan, July 11-23, 1993 (see PPR-147).
- PSNT-295 Pielke, R.A., 1993: Synoptic classification. Workshop on Technical Methods for Examining "Clean Air Corridors" (CAC), August 16-18, 1993, Reno, Nevada.
- PSNT-296 Pielke, R.A., 1993: Overview of climate change studies. Forest Service National Modeling Activity, August 23-27, 1993, Fort Collins, Colorado.
- PSNT-297 Lyons, W., R.A. Pielke, M. Uliasz, C.J. Tremback, and R.L. Walko, 1993: New technologies for modeling mesoscale transport and diffusion in coastal zones and complex terrain. American Nuclear Society Topical Meeting on Environmental Transport and Dosimetry, Charleston, South Carolina, August 31-September 3, 1993 (see PPR-148).
- PSNT-298 Pielke, R.A., 1993: Recent advancements in atmospheric transport modeling. Plenary Session, American Nuclear Society Topical Meeting on Environmental Transport and Dosimetry, Charleston, South Carolina, September 1, 1993
- PSNT-299 Pielke, R.A., J. Baron, T. Chase, J. Copeland, T.G.F. Kittel, T.J. Lee, R. Walko, and X. Zeng, 1993: Use of mesoscale models for simulation of seasonal weather and climate change for the Rocky Mountain States. Second International Conference/Workshop on Integrating GIS and Environmental Modeling. Breckenridge, Colorado, September 26-29, 1993 (see PPR-149).
- PSNT-300 Baron, J., R.A. Pielke, L.A. Band, S.W. Running, T.G.F. Kittel, D.S. Ojima, and W.J. Parton, 1993: Modeling land surface-atmospheric interactions in the South Platte River Basin. 1993 South Platte Forum: Seeing an Integrated Approach to Watershed Management in the South Platte Basin. October 27-28, 1993.
- PSNT-301 Zeng, X. and R.A. Pielke, 1993: Aggregation of subgrid-scale land surface processes. AGU 1993 Fall Meeting, December 6-10, 1993, San Francisco, California.
- PSNT-302 Lyons, W.A., C.J. Tremback, R.A. Pielke, and J.L. Eastman, 1994: Applications of the Regional Atmospheric Modeling System (RAMS) to provide input to photochemical grid models for the Lake Michigan Ozone Study (LMOS). 8th Joint Conference on Applications of Air Pollution Meteorology, Air and Waste Management Association and American Meteorological Society, Nashville, Tennessee, 23-28 January 1994 (see PPR-150).
- PSNT-303 Uliasz, M., R.A. Stocker, and R.A. Pielke, 1994: Lagrangian particle modeling of air pollution transport in southwestern United States. 8th Joint Conference on Applications of Air Pollution Meteorology, Air and Waste Management Association and American Meteorological Society, Nashville, Tennessee, 23-28 January 1994 (see PPR-151).
- PSNT-304 Moran, M.D. and R.A. Pielke, 1994: Delayed shear enhancement in mesoscale atmospheric dispersion. 8th Joint Conference on Applications of Air Pollution

- Meteorology, Air and Waste Management Association and American Meteorological Society, Nashville, Tennessee, 23-28 January 1994 (see PPR-152).
- PSNT-305 Copeland, J.H., R.A. Pielke, and T.G.F. Kittel, 1994: Assessing climate and vegetation change for the Central Grasslands biogeographic region. 6th Conference on Climate Variations, 74th AMS Annual Meeting, Nashville, Tennessee, 23-28 January 1994 (see PPR-153).
- PSNT-306 Pielke, R.A. and X. Zeng, 1994: Compounding of uncertainty in climate change scenarios. Global Climate Change: Science, Policy, and Mitigation Strategies, Air and Waste Management Association, Phoenix, Arizona, 5-8 April 1994 (see CB-17).
- PSNT-307 Zeng, X. and R.A. Pielke, 1994: Land surface effects on regional climate. Global Climate Change: Science, Policy, and Mitigation Strategies, Air and Waste Management Association, Phoenix, Arizona, 5-8 April 1994 (see PPR-155).
- PSNT-308 Pielke, R.A., 1994: Wind field modeling. International Specialty Conference on "Aerosols and Atmospheric Optics: Radiation Balance and Visual Air Quality", Air and Waste Management Association, 26-30 September 1994, Snowbird, Utah (see PPR-156).
- PSNT-309 Pielke, R.A., 1993: Meteorological models to estimate aerosol transport and dispersion. Tutorial presented at the 1993 Annual Meeting of the American Association for Aerosol Research. October 11, 1993, Oak Brook, Illinois.
- PSNT-310 Pielke, R.A., 1993: Procedure to parameterize small-scale land variability for use in larger scale modeling and analysis. FIFE Conference, October 13-15, 1993, Kansas State Union Conference Center, Manhattan, Kansas.
- PSNT-311 Lyons, W.A., C.J. Tremback, R.L. Walko, R.A. Pielke, and W.R. Cotton, 1994: Design of an operational forecasting system for localized and sea breeze thunderstorms at the Kennedy Space Center. 8th Joint Conference on Applications of Air Pollution Meteorology, Air and Waste Management Association and American Meteorological Society, Nashville, Tennessee, 23-28 January 1994 (see PPR-157).
- PSNT-312 Lyons, W.A., J.L. Eastman, R.A. Pielke, A. Biazar, and R. McNider, 1994: A preliminary climatology of lightning-generated NO<sub>x</sub> and numerical simulations of its redistributing by deep convection. Conference on Atmospheric Chemistry, American Meteorological Society, Nashville, Tennessee, 23-28 January 1994 (see PPR-158).
- PSNT-313 Copeland, J.H., T.N. Chase, R.A. Pielke, and T.G.F. Kittel, 1993: Simulation of a multiyear July climatology for the central grasslands with a regional climate model. AGU 1993 Fall Meeting, December 6-10, 1993, San Francisco, California.
- PSNT-314 Chase, T.N., J.H. Copeland, R.A. Pielke, T.G.F. Kittel, and J. Baron, 1993: Scale interactions and climate change in the Colorado Rockies. AGU 1993 Fall Meeting, December 6-10, 1993, San Francisco, California.
- PSNT-315 Mukabana, J.R. and R.A. Pielke, 1993: Three-dimensional modeling of the large-scale flows and their scale-interaction with the local mesoscale circulations over Kenya. African Meteor. Soc., February 8-12, 1993, Nairobi, Kenya (see PPR-159).
- PSNT-316 Lee, T.J. and R.A. Pielke, 1993: GIS and atmospheric modeling: A case study. Second International Conference/Workshop on Integrating GIS and Environmental Modeling. Breckenridge, Colorado, September 26-29, 1993 (see PPR-160).
- PSNT-317 Pielke, R.A., 1994: Issues and opportunities in atmospheric science as related to soil moisture. Soil Moisture Workshop, 25-27 January, NASA, Tiburon, California.
- PSNT-318 Pielke, R.A., 1994: Utilization of RAMS in research and applied studies. Second RAMS Users Workshop, February 15-17, Fort Collins, Colorado.



- PSNT-319 Zeng, X. and R.A. Pielke, 1994: Landscape-induced atmospheric flow and its parameterization in large-scale numerical models. Second RAMS Users Workshop, February 15-17, Fort Collins, Colorado.
- PSNT-320 Pielke, R.A., 1994: Methods and uncertainties. EPA Global Climate Change Impacts on Habitats Program. January 11-14, 1994, Athens, Georgia.
- PSNT-321 Pielke, R.A. and T.J. Lee, 1994: The use of USGS land surface datasets in CSU Regional Atmospheric Modeling System (RAMS). Workshop on Test and Evaluation of the USGS 1-km AVHRR-Land Cover Characteristics Data for the Conterminous United States: Results and Recommendations. April 18-20, 1994, U.S. Geological Survey, EROS Data Center, Sioux Falls, South Dakota.
- PSNT-322 Pielke, R.A., 1994: The impact of mesoscale heterogeneity on exchange processes in the atmospheric boundary layer. The Tucson Workshop on Aggregated Descriptions of Heterogeneous Land Covers, March 23-24, 1994, Tucson, Arizona.
- PSNT-323 Lee, T.J. and R.A. Pielke, 1994: The impact of vegetation on convective storms. 21st Conference on Agricultural and Forest Meteorology, AMS, Boston, March 7-11, 1994, San Diego, California (see PPR-161).
- PSNT-324 Pielke, R.A., 1995: Use of prognostic meteorological models to assess the transport and dispersion of atmospheric emissions. Workshop on OB/OD Dispersion Modeling and Atmospheric Measurement Needs, Boulder, Colorado, February 15-16, 1995.
- PSNT-325 Zeng, X. and R.A. Pielke, 1994: A generalized boundary layer theory over inhomogeneous terrain. 6th Conference on Mesoscale Processes, AMS, Boston, July 18-22, 1994, Portland, Oregon (see PPR-162).
- PSNT-326 Lee, T.J. and R.A. Pielke, 1994: Attempting an explicit simulation of a supercell storm. 6th Conference on Mesoscale Processes, AMS, Boston, July 18-22, 1994, Portland, Oregon (see PPR-163).
- PSNT-327 Ziegler, C.L., T.J. Lee, and R.A. Pielke, 1994: Simulations of the dryline with a 3-D mesoscale model. Preprints, 6th Conference on Mesoscale Processes, AMS, Boston, July 18-22, 1994, Portland, Oregon (see PPR-164).
- PSNT-328 Lyons, W.A., C.J. Tremback, R.A. Pielke, and I. Baker, 1994: Observations and modeling of shallow lake breeze circulations on Lake Michigan. *Preprints, 6th Conference on Mesoscale Processes*, AMS, Boston, July 18-22, 1994, Portland, Oregon (see PPR-165).
- PSNT-329 Ojima, D.S., D.S. Schimel, W.J. Parton, S. Archer, L. Band, J.S. Baron, B. Brown, K. Hibbard, T.G.F. Kittel, R.A. Pielke, S.W. Running, C. Wessman, and X. Xiao, 1994: Biospheric interactions with the hydrosphere and atmosphere. First Global Change and Terrestrial Ecosystems Science Conference, May 23-27, 1994, Marine Biological Laboratory, Woods Hole, Massachusetts.
- PSNT-330 Pielke, R.A., J.H. Copeland, T.N. Chase, and T.G.F. Kittel, 1994: Development of regional climate scenarios using mesoscale model output. 1994 AGU Spring Meeting, May 23-27, Baltimore, Maryland (see PPR-166).
- PSNT-331 Copeland, J.H., T.N. Chase, R.A. Pielke, and T.G.F. Kittel, 1994: Sensitivity of the United States summer climatology to vegetation distribution as revealed by a regional climate model. 1994 AGU Spring Meeting, May 23-27, Baltimore, Maryland (see PPR-167).
- PSNT-332 Copeland, J.H., R.A. Pielke, and T.G.F. Kittel, 1994: The sensitivity of regional climate to surface characteristics. International GCIP/MAGS Workshop on Scaling in Hydrometeorological/Hydrological Processes and Models. September 19-23, 1994, Victoria, British Columbia.

- PSNT-333 Zeng, X. and R.A. Pielke, 1994: Impact of landscape variability on regional climate. International Symposium on Global Change in Asia and the Pacific Regions. Beijing.
- PSNT-334 Uliasz, M., R.A. Stocker, and R.A. Pielke, 1994: Numerical modeling of air pollution transport in the southwestern United States. AWMA/AGU International Specialty Conference on Aerosols and Atmospheric Optics: Radiation Balance and Visual Air Quality, September 26-30, Snowbird, Utah.
- PSNT-335 Stocker, R.A., M. Uliasz, and R.A. Pielke, 1994: The validation of the RAMS/NGM meteorological fields used in the MOHAVE field study. AWMA/AGU International Specialty Conference on Aerosols and Atmospheric Optics: Radiation Balance and Visual Air Quality, September 26-30, Snowbird, Utah (see PPR-177).
- PSNT-336 Pielke, R.A., 1994: Topographic effects. Presented at the Unidata Program Center Workshop on Teaching Mesoscale Meteorology in the Age of the Modernized Weather Service. Sponsored by the NSF and COMET, June 13-17, 1994.
- PSNT-337 Walko, R.L., C.J. Tremback, W.R. Cotton, and R.A. Pielke, 1994: Improvements to an existing two-way interactive grid nesting scheme. Sixth Conference on Mesoscale Processes, July 18-22, Portland, AMS, Boston, (see PPR-168), 90-93.
- PSNT-338 Lyons, W.A., R.A. Pielke, W.R. Cotton, C.J. Tremback, R.L. Walko, and M. Uliasz, 1994: Recent applications of the RAMS meteorological and the HYPACT dispersion models. 9th EUMAC Workshop, Clermont-Ferrand, Franc, October 3-4.
- PSNT-339 Pielke, R.A., M.E. Nicholls, T.A. Nygaard, and X. Zeng, 1994: Unresolved issues in numerical modeling of geophysical flows. Invited presentation, Andre J. Robert Memorial Symposium on Numerical Methods in Atmospheric and Oceanic Sciences, Montreal, Canada October 5-7, 1994.
- PSNT-340 Pielke, R.A., 1994: Use of land-surface analyses and its importance to weather and climate. Invited presentation, CCRS Seminar Series, October 5-7, 1994, Ottawa, Canada.
- PSNT-341 Pielke, R.A., 1994: Mesoscale modeling. Joint GCIP/ISLSCP Modeling Workshop, November 2, Boulder, Colorado.
- PSNT-342 Copeland, J.H., R.A. Pielke, T.G.F. Kittel, 1994: Impacts of vegetation and soil moisture distribution on regional summertime climate as revealed by a regional climate model. 1994 AGU Fall Meeting, December 5-9, 1994, San Francisco, California, (see PPR-170).
- PSNT-343 Chase, T.N., R.A. Pielke, and T.G.F. Kittel, 1994: Actual vs. potential vegetation: Does it affect climate? 1994 AGU Fall Meeting, December 5-9, 1994, San Francisco, California, (see PPR-171).
- PSNT-344 Walko, R.L., R.A. Pielke, L.E. Band, R. Lammers, C. Tague, J. Baron, and T.G.F. Kittel, 1994: Coupled ecosystem models for simulating the transport of groundwater. *EOS*, 1994 AGU Fall Meeting, December 5-9, 1994, San Francisco, California, (see PPR-172).
- PSNT-345 Pielke, R.A., 1996: Use of meteorological models as input to air quality models -- limitations and strengths. Plenary Talk, 5th International Conference on Atmospheric Sciences and Applications to Air Quality. 18-20 June 1996, University of Washington, Seattle, Washington.
- PSNT-346 Lyons, W.A., C.J. Tremback, R.L. Walko, M.E. Nicholls, I. Baker, W. Thorson, R.A. Pielke, and W.R. Cotton, 1995: Towards operational thunderstorm forecasting at the Kennedy Space Center using the parallelized version of RAMS on a workstation cluster. 6th Conference on Cloud Physics, AMS, Boston, 15-20 January, Dallas Texas (see PPR-174).

- PSNT-347 Nicholls, M.E., and R.A. Pielke, 1995: A numerical investigation of the effect of vertical wind shear on tropical cyclone intensification. *21st Conference on Hurricanes and Tropical Meteorology*, AMS, Boston, April 24-28, Miami, Florida (see PPR-175).
- PSNT-348 Pielke, R.A., L. Band, J. Baron, T. Chase, J.L. Eastman, B. Shaw, R.L. Walko, and C. Ziegler, 1995: Influence of landscape heterogeneity on rainfall temporal and spatial patterns. *5th International Conference on Precipitation, Space-Time Variability and Dynamics of Rainfall*, June 14-16, Elounda, Crete, Greece (see PPR-176).
- PSNT-349 Ye, Z. and R.A. Pielke, 1994: Estimating subgrid and grid scale fluxes in a numerical model simulation. Poster Presentation at the 1994 Western Pacific Geophysics Meeting.
- PSNT-350 Ye, Z. and R.A. Pielke, 1994: A parameterization of Bowen ratio with respect to soil moisture availability. Poster Presentation at the 1994 Western Pacific Geophysics Meeting.
- PSNT-351 Pielke, R.A., 1994: Conceptual plan for LTER study. October 26, 1994, LTER Conceptual Framework Meeting, Fort Collins, Colorado.
- PSNT-352 Pielke, R.A., 1995: Ecological Modeling. Third Annual SBI-EPA Habitat Meeting. Lafayette, LA, January 3-5, 1995.
- PSNT-353 Pielke, R.A., 1994: Landscape effects on weather and climate. Department of Meteorology, San Jose State University, San Jose, California, December 5, 1994.
- PSNT-354 Steyaert, L.T., F.G. Hall, B.C. Reed, D.E. Knapp, T.R. Loveland, P.J. Sellers, and R.A. Pielke, 1995: Investigating landscape disturbance patterns and associated vegetation succession in the Boreal Forest with multitemporal 1-km AVHRR data. Biomass Burning and Global Change Conference, AGU, Williamsburg, VA, March (see PPR-178).
- PSNT-355 Pielke, R.A. and P.L. Vidale, 1995: The boreal forest and the polar front. IUGG XXI General Assembly, July 2-14, 1995, Boulder, Colorado.
- PSNT-356 Nicholls, M.E., R.A. Pielke, and A.J. Bedard, 1995: A technique for measuring thunderstorm intensity using thermal compression waves. IUGG XXI General Assembly, July 2-14, 1995, Boulder, Colorado.
- PSNT-357 Dalu, G.A., M. Baldi, R.A. Pielke, and X. Zeng, 1995: Heat and momentum fluxes induced by thermal inhomogeneities. IUGG XXI General Assembly, July 2-14, 1995, Boulder, Colorado.
- PSNT-358 Chase, T.N., T.G.F.Kittel, R.A. Pielke, J.H. Copeland, and J. Baron, 1995: Colorado Rocky Mountain climate: Trends and sensitivities. Ecological Society of America, Snowbird, Utah, August 1995.
- PSNT-359 Baron, J., R. Pielke, and B. Parton, 1993: Dynamic land surface/atmospheric parameterization at different spatial scales in the Colorado Rocky Mountains. Pacific Institute for Studies in Development, Environment, and Security, Workshop on the Use of Hydrological Models for Evaluating the Impacts of Climate Change in Snowmelt Water Supply Basins. Santa Fe, New Mexico, April 20-22, 1993 (see PPR-179).
- PSNT-360 Pielke, R.A., T.J. Lee, J.H. Copeland, J.L. Eastman, C.L. Ziegler, and C.A. Finley, 1995: Use of USGS-provided data to improve weather and climate simulations. Poster presentation at the Central Plains Experimental Range Second Annual Symposium sponsored by the USDA Agricultural Research Service and Colorado State University Long-Term Ecological Research Project, Fort Collins, CO, January 13, 1995.
- PSNT-361 Welker, J.M., C. Yonker, G. Kelly, and R. Pielke, 1995: A conceptual framework for the CPER-LTER that links the biological, atmospheric, and geological sciences. Poster presentation at the Central Plains Experimental Range Second Annual Symposium

- sponsored by the USDA Agricultural Research Service and Colorado State University Long-Term Ecological Research Project, Fort Collins, CO, January 13, 1995.
- PSNT-362 Pielke, R.A. and P.L. Vidale, 1995: The boreal forest and the polar front. Abstracts, 21st Annual General Meeting of the Canadian Geophysical Union, May 22-26, 1995, Banff, Alberta, Canada (see PPR-180).
- PSNT-363 Pielke, R.A., 1995: The use of landscape data to improve numerical weather prediction. Applied Research and Technology Interchange Effort (ARTIE), Third Annual Seminar, March 30, 1995, Greeley, Colorado.
- PSNT-364 Nair, U.S., M.R. Hjelmfelt, and R.A. Pielke, 1995: Numerical simulation of the June 9-10, 1972 Black Hills storm using CSU RAMS. Seventh Conf. Mountain Meteorology, AMS, Boston, 16-21 July 1995, Breckenridge, Colorado (see PPR-154).
- PSNT-365 Pielke, R.A., P.L. Vidale, J.L. Eastman, and A. Barr, 1996: The boreal forest - tundra contrast influence on weather. *22nd Conf. Agriculture and Forest Meteorology*, AMS, Boston, 28 January - 2 February 1996, Atlanta, Georgia (see PPR-181).
- PSNT-366 Pielke, R.A., T.N. Chase, P.L. Vidale, C.L. Ziegler, G.E. Liston, R.L. Walko, L.T. Steyaert, J.H. Copeland, and T.G.F. Kittel, 1996: Landscape effects on the hydrologic cycle. Presented at the 2nd International Scientific Conference on the Global Energy and Water Cycle, 17-21 June 1996, Washington, DC (see PPR-182).
- PSNT-367 Pielke, R.A., T.N. Chase, G.E. Liston, L. Lu, L. Steyaert, and C. Ziegler, 1996: Influence of landscape changes on regional climate. Workshop on High Resolution Climate Modeling, 23-26 September, 1996, Wengen, Switzerland (see PPR-183).
- PSNT-368 Liston, G.E., R.A. Pielke, T.G.F. Kittel, L. Lu, and J.H. Copeland, 1996: Formulating the Regional Atmospheric Modeling System (RAMS) for use in Regional Climate Studies. 3rd Annual CPER Symposium, 11 January 1996, Fort Collins, CO (see PPR-184).
- PSNT-369 Cochran, L., J. Peterka, R. Pielke and M. Nicholls, 1996: Progress in modelling external atmospheric flows around buildings. CFD Modeling Techniques for Large Structures and Facilities, 1996 ASME Fluids Engineering Division Summer Meeting, 7-11 July 1996, San Diego, CA (see PPR-186).
- PSNT-370 Nicholls, M.E., J.L. Eastman, and R.A. Pielke, 1996: A numerical simulation of Hurricane Andrew. Second International Symposium on Computational Wind Engineering, 4-8 August 1996, Fort Collins, CO (see PPR-187).
- PSNT-371 Ziegler, C.L., T.J. Lee, and R.A. Pielke, 1996: Simulations of deep, moist convection at the dryline with a 3-D mesoscale model. 18th Conference on Severe Local Storms, San Francisco, CA, 19-23 February 1996, AMS, Boston, MA (see PPR-188).
- PSNT-372 Nicholls, M.E., J.L. Eastman, and R.A. Pielke, 1996: A numerical simulation of Hurricane Hugo. Second International Symposium on Computational Wind Engineering, 4-8 August 1996, Fort Collins, CO (see PPR-190).
- PSNT-373 Chase, T.N., R.A. Pielke, and T.G.F. Kittel, 1995: Possible impacts on Colorado Rocky Mountain Hydrology due to land use changes in the adjacent Great Plains. Rocky Mountain Hydrological Research Center 50th Anniversary Annual Meeting, 22-23 September, 1995, Estes Park, CO (see PPR-191).
- PSNT-374 Uliasz, M., R.A. Stocker, and R.A. Pielke, 1995: Modeling of the regional air pollution transport in southwestern United States using CSU RAMS and Lagrangian particle dispersion model. 21st International Technical Meeting on Air Pollution Modelling and Its Application, 6-10 November 1995, Baltimore, MD.

- PSNT-375 Pielke, R.A., 1995: Data base requirements for meteorological modeling. International Workshop on Global Databases and Global Land 1 km base elevation (GLOBE) project. 30 May - 2 June, 1995, Boulder, CO, 29 (see PPR-192).
- PSNT-376 Pielke, R.A., 1996: Effects of mesoscale circulations on regional climate. UCAR Joint International Climate Projects/Planning Office Workshop, 6 March 1996, Boulder, CO.
- PSNT-377 Pielke, R.A., 1995: Influence of land surface processes on atmospheric structure and dynamics. Environmental Technology Laboratory, NOAA, 10 April 1995, Boulder, CO.
- PSNT-379 Pielke, R.A., 1996: Interdisciplinary proposals. CASES Science Chair's Meeting on Implementing Early Research Opportunities at the CASES Site, 22-23 February 1996, Boulder, CO.
- PSNT-380 Copeland, J.H., T. Chase, J. Baron, T.G.F. Kittel, and R.A. Pielke, 1993: Impacts of vegetation change on regional climate and downscaling of GCM output to the regional scale. 32nd Hanford Symposium on Health and the Environment, October 19-21, 1993, Battelle Press, Richland, WA, 199-212 (see PPR-194).
- PSNT-381 Nicholls, M.E., J.L. Eastman, and R.A. Pielke, 1996: A numerical simulation of Hurricane Hugo. 2nd International Symposium on Computational Wind Engineering. CWE 96, August 4-8 1996, Colorado State University, Fort Collins, Colorado.
- PSNT-382 Pielke, R.A., 1996: Use of meteorological models in computational wind engineering. 2nd International Symposium on Computational Wind Engineering. CWE 96, August 4-8 1996, Colorado State University, Fort Collins, Colorado.
- PSNT-383 Pielke, R.A., T.N. Chase, P.L. Vidale, C.L. Ziegler, G.E. Liston, R.L. Walko, L.T. Steyaert, J.H. Copeland, and T.G.F. Kittel, 1996: Landscape effects on the hydrologic cycle. 2nd International Conference on the Global Energy and Water Cycle. 17-21 June 1996, Washington, D.C.
- PSNT-384 Kenner, S.J., M.R. Hjelmfelt, U.S. Nair, and R.A. Pielke, 1996: Atmospheric and surface hydrologic simulation of an extreme flood event. 2nd International Conference on the Global Energy and Water Cycle. 17-21 June 1996, Washington, D.C.
- PSNT-385 Pielke, R.A., 1996: Physical mesoscale responses to the land surface. 1996 ASP Summer Colloquium. NCAR, July 15-26, 1996, Boulder, Colorado.
- PSNT-386 Pielke, R.A., 1996: Ecosystem on Atmosphere I: Mesoscale. Workshop on Bidirectional Ecosystem-Atmosphere Interactions. 8-11 July 1996, Sao Jose dos Campos, Brazil.
- PSNT-387 Pielke, R.A., 1996: The influence of landscape on weather and climate -- How important is it? Department of Atmospheric Science Seminar, 31 October 1996, Colorado State University, Fort Collins, Colorado.
- PSNT-388 Pielke, R.A., G.E. Liston, L. Lu, P.L. Vidale, R.L. Walko, T.G.F. Kittel, W.J. Parton, and C.B. Field, 1997: Coupling of land and atmospheric models over the GCIP area -- CENTURY, RAMS, and SiB2C. 13th Annual Conference on Hydrology. 77th AMS Annual Meeting, 2-7 February 1997, Long Beach, California (see PPR-173).
- PSNT-389 Pielke, R.A., P.L. Vidale, J.L. Eastman, G.E. Liston, R.L. Walko, G. Dalu, A. Barr, and C. Ziegler, 1997: Influence of landscape on boundary layer atmospheric processes. Symposium on the Boundary Layers and Turbulence (Land-Surface). 77th AMS Annual Meeting, 2-7 February 1997, Long Beach, California (see PPR-195).
- PSNT-390 Pielke, R.A., 1996: Changing climate; what do we know about it, and how important is it compared to other human perturbations in the Great Plains? Rangeland

- Resources Research Unit, Central Plains Experimental Range Field Day, 12 September 1996, Nunn, Colorado.
- PSNT-391 Pielke, R.A., 1996: Atmospheric-hydrologic-ecological interactions and feedbacks - preliminary results. Department of Atmospheric Sciences, Institute of Atmospheric Physics, The University of Arizona, 6 December 1996, Tucson, Arizona.
- PSNT-392 Pielke, R.A., 1996: Short- and long-term landscape-atmospheric interactions at local scales. LTER Meeting and Regionalization Workshop, 2-6 October 1996, Harvard Forest, Petersham, Massachusetts.
- PSNT-393 Pielke, R.A., 1996: Use of RAMS for weather and climate modeling. September 1996, ETH, Zurich, Switzerland.
- PSNT-394 Baron, J.S., D.S. Ojima, M.D. Hartman, T.G.F. Kittel, R.B. Lammers, L.A. Band, and R.A. Pielke, 1996: The influence of spatial patterns of land cover and use on hydrological and ecosystem dynamics at the mountain plains interface in the Central United States. IGBP/BAHC-LUCC Joint Inter-Core Projects Symposium on Interactions between the Hydrological Cycle and Land Use/Cover, 4-7 November 1996, Kyoto, Japan, 50-53 (see PPR-196).
- PSNT-395 Pielke, R.A., 1996: Model requirements and potential biases due to sampling. Carbon-America Meeting, 13-14 June 1996, Boulder, Colorado.
- PSNT-396 Cochran, L.S., R.A. Pielke, and E. Kovacs, 1996: International air quality standards. Riesgos Ambientales Para La Salud En La Ciudad De Mexico, Programa Universitario de Medio Ambiente.
- PSNT-397 Pielke, R.A., 1996: Physical mesoscale responses to the land surface. July 15, 1996, NCAR Colloquium.
- PSNT-398 Nicholls, M. and R.A. Pielke, 1997: Presentation of results. CAMEX3 Planning Workshop, Biscayne Bay Marriott Hotel, Miami, FL, 31 March - 2 April 1997.
- PSNT-399 Pielke, R.A., 1997: Interactions of landscape structure (treeline and fires) with climate. National Center for Ecological Analysis and Synthesis, Extrapolation of Arctic and Boreal Processes that Feedback to Climate. Workshop 1: Changes in Vegetation and Energy Balance, Energy Balance Feedbacks to Climate, April 7.
- PSNT-400 Pielke, R.A., 1997: The use of models in the design of field campaigns. AGU Spring Meeting, 27-30 May 1997, Baltimore, MD.
- PSNT-401 M. Nicholls, Pielke, R.A., and J.L. Eastman, 1997: Numerical simulation of Hurricane Hugo. Poster Session P1, Modeling of Tropical Cyclones, 22nd Conference on Hurricanes and Tropical Meteorology, Fort Collins CO, 19-23 May 1997.
- PSNT-402 Eastman, J.L., R.A. Pielke, and M. Nicholls, 1997: Coupled atmospheric ocean model simulation of Hurricane Andrew. Session 8C: Data Assimilation, Initialization, and Forecasting, 22nd Conference on Hurricanes and Tropical Meteorology, Fort Collins, CO, 19-23 May 1997.
- PSNT-403 Baron, J.S., D.S. Ojima, M.D. Hartman, T.G.F. Kittel, R.B. Lammers, L.E. Band, and R.A. Pielke, 1997: The influence of land cover and temperature change on hydrological and ecosystem dynamics in the South Platte River Basin. Water Resources Education, Training, and Practice: Opportunities of the Next Century, American Water Resources Association, 29 June - 3 July 1997, 279-286 (see PPR-198).
- PSNT-404 Pielke, R., 1997: Invited presentation in Session 4, Theme 3: Feedback mechanism of land surface changes to regional water cycle processes. International Workshop on Global Change and Terrestrial Environment in Monsoon Asia, Tsukuba, Japan 15-16 May 1997.

- PSNT-405 Pielke, R.A., 1997: Presentation at the CIRA 1997 Ongoing Research Retreat. Pingree Park, CO, 30 July - 1 August 1997.
- PSNT-406 Pielke, R.A. and T. Chase, 1997: Synthesis of climate change in the Rocky Mountains. Case Study: Colorado Front Range. Flathead Lake Biological Station, Symposium, Human-Induced Environmental Change in the Rocky Mountains, 17-21 September 1997.
- PSNT-407 Pielke, R.A., J. Eastman, L. Steyaert, D. Ojima, P.L. Vidale, R. Walko and L. Lu, 1997: Influence of forest cover in the eastern United States on regional climate. Past, Present, and Future Climate Variability and Extremes: The Impacts on Forests. Wengen 97 Workshops on Global Change Research, Institute of Geography, University of Fribourg, Switzerland, 22-26 September 1997.
- PSNT-408 Pielke, R.A., 1997: Mesoscale studies. COMET, 13 August 1997, Boulder, CO.
- PSNT-409 Pielke, R.A. Sr. and R.A. Pielke, Jr. 1997: Hurricane research. COMET, 12 September 1997, Boulder, CO.
- PSNT-410 Liston, G.E., and R.A. Pielke, 1997: Parameterizing subgrid-scale snow-cover heterogeneities for use in regional and global climate models. GCIP PIs meeting, Boulder, CO, 5 November 1997.
- PSNT-411 Otterman, J. E. Anyamba, R. Pielke, and J. Susskind, 1997: Dependence of atmospheric parameters on the underlying-surface temperature: Analysis of measurements from NOAA-10 for the Amazonia region.
- PSNT-412 Pielke, R.A., G. Dalu, J. Eastman, P.L. Vidale, and X. Zeng, 1997: Mesoscale modeling: Boundary layer processes and land-surface interactions. Colloquium of the Royal Netherlands Academy of Arts and Sciences on Clear and Cloudy Boundary Layers, Amsterdam, The Netherlands, 26-29 August 1997.
- PSNT-413 Eis, K.E. and R. Pielke, 1997: Passive sensing and specification of thunderstorms on the battlefield. Battlespace Atmospheric Conference, 2 December 1997, San Diego, California.
- PSNT-414 Pielke, R.A. Sr., 1998: Role of land-cover as a driving force for regional climate change. Book of abstracts GCTE-BAHC-LUCC Workshop. Wageningen, Holland, 14-19 November 1997 (see PPR-210).
- PSNT-415 Poulos, G.S., T.B. McKee, J.E. Bossert, and R.A. Pielke, 1996: Assessing the interaction of mountain waves and katabatic flows using a mesoscale model. Norfolk, VA, August 1996, Paper 7A.4 (see PPR-199).
- PSNT-416 Poulos, G.S., R.A. Pielke, and J.E. Bossert, 1996: An evaluation of a proposed solution to pressure gradient force errors in terrain-following coordinates. Paper No. 6B.14 (see PPR-200).
- PSNT-417 ; Poulos, G.S. J.E. Bossert, T.B. McKee, and R.A. Pielke, 1996: The mutual evolution of mountain waves and katabatic flow. Preprints, 7th Conference on Mesoscale Processes, Paper No. 9B4, Reading, England, 9-13 September 1996 (see PPR-201).
- PSNT-418 Poulos, G.S., T.B. McKee, J.E. Bossert, and R.A. Pielke, 1996: Dynamic processes in undisturbed katabatic flows. Preprints, 7th Conference on Mesoscale Processes, Reading, England, 9-13 September 1996, Paper No. P7B.10 (see PPR-202).
- PSNT-419 Chase, T.N., R.A. Pielke, T.G.F. Kittel, R. Nemani, and S. Running, 1997: The effect of realistic, historical land cover change on a GCM climate. AGU 1997 Fall Meeting, San Francisco, CA, 8-12 December 1997 (see PPR-203).
- PSNT-420 Ojima, D., R. Pielke, W. Parton, M. Hartman, L. Lu, and R. Kelly, 1997: Biosphere-atmosphere linkage: Terrestrial ecosystem feedback to regional climate in

- central United States. AGU 1997 Fall Meeting, San Francisco, CA, 8-12 December 1997 (see PPR-204).
- PSNT-421 Pielke, R.A., L. Lu., G.E. Liston, B. Parton, D. Ojima, and M. Hartman, 1997: The simulation of atmosphere and ecosystem interactions over the Great Plains. AGU 1997 Fall Meeting, San Francisco, CA, 8-12 December 1997 (see PPR-205).
- PSNT-422 Lu, L., G.E. Liston, B. Parton, D. Ojima, M. Hartman, R. Pielke, 1997: A coupled atmospheric and ecological modeling system and its application to the Great Plains. AGU 1997 Fall Meeting, San Francisco, CA, 8-12 December 1997 (see PPR-206).
- PSNT-423 Liston, G.E., 1997: Modeling subgrid-scale snow distributions in regional atmospheric and hydrologic models. AGU 1997 Fall Meeting, San Francisco, CA, 8-12 December 1997 (see PPR-207).
- PSNT-424 Uliasz, M. and R.A. Pielke, Sr. 1997: Validation of regional transport simulations using a tracer of opportunity and controlled tracers. 10th Joint Conference on the Application of Air Pollution Meteorology with the Air and Waste Management Association, 11-16 January 1998, Phoenix, AZ (see PPR-208).
- PSNT-425 Pielke, R.A., C. Ziegler, P.L. Vidale, G.E. Liston, E. Greene, J. Eastman, and T. Chase, 1998: Influence of landscape structure on the prediction of cumulus convective rainfall. 6th International Conference on Precipitation: Predictability of Rainfall at the Various Scales. 29 June - 1 July 1998, Mauna Lani Bay, Kohala Coast, Hawaii.
- PSNT-426 Costa, A.A., W.R. Cotton, R.A. Pielke Sr., and H. Jiang, 1999: Modeling the interaction between the ocean mixed-layer and deep convection at the western Pacific warm pool. Proceedings, Conference on the TOGA Coupled Ocean-Atmosphere Response Experiment (COARE), Boulder, CO 7-14 July 1998, WCRP-107, WMO/TDF-No. 940, 375-376 (see PPR-211).
- PSNT-427 Gutowski, W.J. Jr., R.L. Wilby, E.S. Takle, R.W. Arritt, Z. Pan, C.J. Anderson, R. Silva, D. Caya, S.-C. Chen, J.H. Christensen, S.-Y. Hong, H.-M.H. Juang, J.J. Katzfey, W.M. Lapenta, R. Laprise, G. Liston, P. Lopez, J. McGregor, R. Pielke Sr., and J.O. Roads, 1999: A comparison of statistical and dynamical downscaling for hydrologic analysis. Presented at the AGU Spring Meeting, Statistical Downscaling for Climate Change Impact Assessment Session, Boston, MA, May 31 - June 4.
- PSNT-428 Eugster, W., W.R. Rouse, R.A. Pielke Sr., J.P. McFadden, D.D. Baldocchi, T.G.F. Kittel, F.S. Chapin III, G.E. Liston, P.L. Vidale, E. Vaganov, and S. Chambers, 1999: Arctic tundra and boreal forest surface energy balance: Data and feedbacks to climate. Presented at the EGS Conference, Hague, The Netherlands, Geophys. Res. Abstracts, 1, 570 (see PPR-221).
- PSNT-429 Pielke, R.A. Sr., 1999: The role of irrigation and other aspects of landuse in influencing regional climate and weather. CIRES, University of Colorado, February 26, 1999.
- PSNT-430 Pielke, R.A. Sr., 1999: Land-use patterns and climate change, science and policy. National Forum for Agriculture, Iowa State University, March 1-2, 1999.
- PSNT-431 Pielke, R.A. Sr., 1999: Climate change - Can we predict it?. Institute for the Study of Planet Earth, The University of Arizona, Tucson AZ, April 5, 1999.
- PSNT-432 Pielke, R.A. Sr., 1999: Land surface biophysical and biogeochemical processes as a major driver of regional and global weather and climate. Center for Ocean-Land-Atmosphere Studies, Calverton, MD, April 22, 1999.
- PSNT-433 Doesken, N.J., T.B. McKee, and R.A. Pielke Sr., 1999: The U.S. Cooperative Observer Network - Problems and opportunities for local and regional climate monitoring.



- NOAA Climate Monitoring and Diagnostics Laboratory Annual Meeting, Boulder, CO, May 12-13, 1999.
- PSNT-434 Pielke, R.A. Sr., G.E. Liston, and L. Lu, 1999: Coupling atmospheric, ecologic, and hydrologic processes in a regional climate model. GCIP PIs Meeting, University of Maryland, College Park, MD, May 17-18, 1999.
- PSNT-435 Liston, G.E., and R.A. Pielke Sr., 1999: Parameterizing subgrid-scale snow-cover heterogeneities for use in regional and global climate models. GCIP PIs Meeting, University of Maryland, College Park, MD, May 17-18, 1999.
- PSNT-436 Pielke, R.A. Sr., 1999: Use of coupled atmospheric-land surface models to access regional climate. Workshop on Land-surface Modeling and Application for Mesoscale Models, NCAR, Boulder, CO, June 24-25, 1999.
- PSNT-437 Pielke, R.A. Sr., 1999: The analysis of temperature trends in Colorado and elsewhere using NCEP Reanalysis Data. National Climatic Data Center, Asheville, NC, July 22, 1999.
- PSNT-438 Pielke, R.A., T. Chase, J. Eastman, G. Liston, L. Lu, and R. Walko, 1999: The role of land surface processes in regional and global climate. Climatic and Environmental Change Session at the Global Change and Protected Areas International Symposium. L'Aquila, Italy, 8-13 September 1999.
- PSNT-439 Pielke, R.A. and M. Uliasz, 1999: The assessment of uncertainty in air pollution evaluations. Climatic and Environmental Change Session at the Global Change and Protected Areas International Symposium. L'Aquila, Italy, 8-13 September 1999.
- PSNT-440 Pielke, R.A. Sr., 1999: Landscape change and vegetation/soil dynamics -- a role in environmental change that is more important than the radiative effect of increased CO<sub>2</sub>. Sigma Xi Seminar, Colorado State University, Fort Collins, CO, September 17, 1999.
- PSNT-441 Pielke, R.A. Sr., 1999: The impact of land-use on climate. GEWEX/INSU International Workshop on Modelling Land-Surface Atmosphere Interactions and Climate Variability, 4-8 October, Gif-Sur-Yvette, France.
- PSNT-442 Pielke, R.A. Sr., 1999: Effect of landscape on weather and climate. University of Wyoming, October 29, 1999.
- PSNT-443 Pielke, R.A. Sr., 1999: Atmosphere-ecosystem interactions. SGS Site Review, Fort Collins, CO, July 12, 1999.
- PSNT-444 Pielke, R.A. Sr., 2000: The role of the land surface in weather and climate. ESA meeting, Fall 2000.
- PSNT-445 Pielke, R.A. Sr., 1999: Heterogeneous LES modeling. Center for Geosciences/Atmospheric Research Annual Review, October 27-29, TAMASAG Meeting Facility, Colorado.
- PSNT-446 Pielke, R.A. Sr., 1999: The Experimental Meteorology Lab and University of Virginia Years with Joanne Simpson -- An ideal model of mentorship. Symposium on Cloud Systems, Hurricanes, and TRMM: Celebration of Dr. Joanne Simpson's Career - The First 50 Years. December 1-3, 1999. NASA Goddard Space Flight Center.
- PSNT-447 Pielke, R.A. Sr., W.R. Cotton, A.A. Costa, J.L. Eastman, G.E. Liston, R.L. Walko, M.B. Coughenour, D.S. Ojima, W.J. Parton, and M. Hartman, 2000: Use of RAMS as a component in modeling the Earth's climate system. 4th RAMS Users Workshop, 22-24 May, Center for Environmental Prediction, Cook College, Rutgers University, New Brunswick, New Jersey.
- PSNT-448 Liston, G.E., and R.A. Pielke Sr., 2000: Accounting for subgrid snow distributions in RAMS. 4th RAMS Users Workshop, 22-24 May, Center for Environmental Prediction, Cook College, Rutgers University, New Brunswick, New Jersey.

- PSNT-449 Eastman, J.L., R.E. Waide, R.A. Pielke Sr., R. Walko, and T. Fountain, 2000: Coupling parallel RAMS to an explicit photosynthesis plant model. 4th RAMS Users Workshop, 22-24 May, Center for Environmental Prediction, Cook College, Rutgers University, New Brunswick, New Jersey.
- PSNT-450 Castro, C.L., R.A. Pielke, Sr., and G.E. Liston, 2000: The response of the North American monsoon to boundary and regional forcing mechanisms as simulated by ClimRAMS: A proposed NOAA/PACS study. 4th RAMS Users Workshop, 22-24 May, Center for Environmental Prediction, Cook College, Rutgers University, New Brunswick, New Jersey.
- PSNT-451 Marin, S., J.A. Ramirez, B. Walko, and R.A. Pielke Sr., 2000: Using CSU RAMS to simulate seasonal and daily precipitation in Colombia. 4th RAMS Users Workshop, 22-24 May, Center for Environmental Prediction, Cook College, Rutgers University, New Brunswick, New Jersey.
- PSNT-452 Pielke, R.A. Sr., 2000: Landscape heterogeneity and thunderstorms. University of Virginia, Department of Environmental Sciences, February 10.
- PSNT-453 Pielke, R.A. Sr., 2000: Land use - Climate interactions at regional scales. Panel discussion on integration of national activities into BAHC/IGBP, ISLSCP/GEWEX, LBA or other relevant regional initiatives. Joint IGBP-BAHC and WCRP/GEWEX-ISLSCP Meetings, April 10-15, Caracas, Venezuela.
- PSNT-454 Guenni, L., and R.A. Pielke Sr., 2000: Scenario development and vulnerability analysis. Panel discussion on integration of national activities into BAHC/IGBP, ISLSCP/GEWEX, LBA or other relevant regional initiatives. Joint IGBP-BAHC and WCRP/GEWEX-ISLSCP Meetings, April 10-15, Caracas, Venezuela.
- PSNT-455 Pielke, R.A. Sr., 2000: The role of land surface processes in cumulus convective rainfall: Implications for weather and climate. March 30, NASA Goddard Space Flight Center, Greenbelt, Maryland.
- PSNT-456 Pielke, R.A. Sr., 2000: Accuracy of meteorology and dispersion modeling. TASET Smoke Management Workshop. Lory Student Center, Colorado State University, Fort Collins, CO, February 3.
- PSNT-457 Pielke, R.A. Sr., 2000: Representativeness of data. American Association of State Climatologists. August 7-9, Logan, Utah.
- PSNT-458 Pielke, R.A. Sr., 2000: The role of landscape in the Earth's climate system. August 30, EROS Data Center, Sioux Falls, South Dakota.
- PSNT-459 Chase, T.N., R.A. Pielke Sr., M. Zhao, A.J. Pitman, T.G.F. Kittel, R.R. Nemani, and S.W. Running, 2000: Global climate effects of heating anomalies resulting from tropical landcover change. 11th Symposium on Global Change, AMS, 9-14 January 2000, Long Beach, California.
- PSNT-460 Pielke, R.A. Sr., W. Cotton, C. Tremback, and R. Walko, 2000: RAMS. Short Course on Mesoscale Atmospheric Modeling by Original Model Developers, January 9, AMS Committee on Weather Analysis and Forecasting, Long Beach, California.
- PSNT-461 Pielke, R.A. Sr., 2000: Biological aspects of the hydrological cycle: Regional vulnerability issues. Hydrology Days, April 5, Colorado State University, Fort Collins, Colorado.
- PSNT-462 Castro, C.L., R.A. Pielke Sr., and G.E. Liston, 2000: The relationship and response of the North American monsoon to tropical and North Pacific sea surface temperatures. Pan American PI Meeting, Bolger Center, September 6-8, Potomac, Maryland.
- PSNT-463 Pielke, R.A. Sr., 2000: Earth system modeling: An integrated assessment tool for environmental studies. 14th Toyota Conference. The present and future of Modeling Global Environmental Change -- Toward Integrated Modeling. October 3-6, Mikkabi, Shizuoka, Japan.

- PSNT-464 Pielke, R.A. Sr., 2000: Evolution of regional hydrologic processes within the climate system as an initial value problem: An overview. Workshop on Predictability and Limit of Prediction for Hydrologic Systems, National Research Council, Committee on Hydrologic Science (COHS), September 21-22, Boulder, Colorado.
- PSNT-465 Pielke, R.S. Sr., 2000: CDC overview of Water Year 2000. Workshop on Weather and Climate, Reservoir Operations, and Endangered Fish in the Upper Colorado Basin, October 19th, NOAA-CIRES Climate Diagnostics Center and the NOAA-University of Colorado Western Water Assessment, Boulder, Colorado.
- PSNT-466 Pielke, R.A. Sr., and A. Marroquin, 2000: Link between local landscape heterogeneities and climate: CART-RAMS simulations. Center for Geosciences/Atmospheric Research Annual Review, Colorado State University, Fort Collins, Colorado, October 24-27, TAMASAG, Colorado.
- PSNT-467 Pielke, R.A. Sr., and D.S. Ojima, 2000: The value of long-term earth system measurements - the CASES example. Invited Abstract. AGU 2000 Fall Meeting, December 15-19, San Francisco, California.
- PSNT-468 Pielke, R.A. Sr., and T.N. Chase, 2000: Why is the land surface so important within the climate system? Invited Abstract. AGU 2000 Fall Meeting, December 15-19, San Francisco, California.
- PSNT-469 Kabat, P., M. Claussen, R. Avissar, C. Nobre, M. Meybeck, C. Vorosmarty, R. Schulze, J. Gash, R. Pielke, P. Dirmeyer, R. Hutjes, and S. Lutkemeier, 2000: Invited Abstract. AGU 2000 Fall Meeting, December 15-19, San Francisco, California.
- PSNT-470 Nicholls, M.E., and R.A. Pielke Sr., 2000: October, November, and December CAMEX Report. Presentation to Simpson Weather Associates. February 3, 2000.
- PSNT-471 Liston, G.E., and R.A. Pielke Sr., 2000: Parameterizing subgrid-scale snow-cover heterogeneities for use in regional and global climate models. NOAA/GCIP PI's Meeting, March 27-28, Potomac, Maryland.
- PSNT-472 Liston, G.E., J.P. McFadden, and R.A. Pielke Sr., 2000: Arctic Alaska climate simulations using the Regional Atmospheric Modeling System. Arctic Regional Climate Model Intercomparison (ARCMIP) Project Meeting, International Arctic Research Center (IARC), September 13-15, Fairbanks, Alaska.
- PSNT-473 McFadden, J.P., G.E., Liston, and R.A. Pielke Sr., 2000: Simulations of Arctic land-atmosphere feedbacks using a regional climate system model. AGU 2000 Fall Meeting, December 15-19, San Francisco, California.
- PSNT-474 Pielke, R.A. Sr., G.E. Liston, L. Lu, J.L. Eastman, D.S. Ojima, W.J. Parton, and M. Hartman, 2000: Implementation of a two-way interactive atmospheric and ecological model and its application to the central United States. NOAA/GCIP PI's Meeting, March 27-28, Potomac, Maryland.
- PSNT-475 Eastman, J., R. Waide, M. Coughenour, and Pielke, R.A. Sr., 2000: The effects of CO<sub>2</sub> and landuse change using synchronously coupled meteorological and plant models. 2000 ESA Annual Meeting, Communicating and Advancing Ecology, August 6-10, Snowbird, Utah.
- PSNT-476 Beltran, A., R.A. Pielke Sr., G. Liston, J.L. Eastman, and M.B. Coughenour, 2000: Land-atmosphere interactions over southern South American using a coupled plant and atmospheric model. LTER All Scientists Meeting 2000, August 6-10, Snowbird, Utah.
- PSNT-477 Chase, T.N., J. Knaff, and R.A. Pielke Sr., 2000: Trends in global monsoon circulations: Evidence for a diminished hydrological cycle? 12th AMS Symposium on Global Change and Climate Variations, 14-18 January, Albuquerque, New Mexico.
- PSNT-478 Castro, C.L., R.A. Pielke, Sr., and G.E. Liston, 2001: The response of the North American monsoon to boundary and regional forcing mechanisms as simulated by RAMS. NASA/NOAA GAPP and Hydrology PI's Meeting. 30 April - 4 May, Potomac, MD.

- PSNT-479 Liston, G.E., and R.A. Pielke Sr., 2001: Parameterizing subgrid-scale snow-cover heterogeneities for use in regional and global climate models, Phase II. NASA/NOAA GAPP and Hydrology PI's Meeting. 30 April - 4 May, Potomac, MD.
- PSNT-480 Chase, T.N., J.A. Knaff, and R.A. Pielke Sr., 2001: Changes in global monsoon circulations: Evidence for a diminishing hydrological cycle? AGU Spring Meeting, May 29-June 2, Boston, MA.
- PSNT-481 Pielke, R.A. Sr., 2001: Human landscape changes -- their role in changing climate. AAAS Annual Meeting and Science Innovation Exhibition. Session on Life Science and the Science of Life, Earth System Science: The Quiet Revolution, February 15-20, 2001, San Francisco, CA.
- PSNT-482 Pielke, R.A. Sr., 2001: Issues in downscaling applications. Regional Climate Research: Needs and Opportunities Workshop. Co-Sponsored by the U.S. National Science Foundation and Department of Energy, April 2-4, NCAR Mesa Lab, Boulder, CO.
- PSNT-483 Pielke, R.A. Sr., 2001: Multifactoral regional-scale modeling. The National Academies Committee on Global Change Research, April 27, Washington, D.C.
- PSNT-484 Pielke, R.A. Sr., 2001: Landcover change and its relevance to climate change. Invited Presentation, Weather Modification Association Annual Meeting, April 26, Oklahoma City, OK.
- PSNT-485 Liston, G.E., M. Sturm, J.P. McFadden, C.H. Racine, P.Q. Olsson, R.A. Pielke Sr., and J. Holmgren, 2001: Sensitivity of snow distribution, sublimation, and melt processes to changes in Arctic vegetation. 13th Northern Research Basins Symposium and Workshop, August 19-24, Saariselka Finland, and Murmansk, Russia.
- PSNT-486 Pielke, R.A. Sr., 2001: Climate change - The need for a new perspective. Plenary Session I: Stepping Out-Of-The Box - Identifying Key Problems and Questions - Creating Awareness. Workshop on Earth Systems Engineering. Toward Developing Sustainable Engineering Solutions in a Complex Natural World, University of Colorado Engineering Center, Boulder, Colorado, October 4-6.
- PSNT-487 Pielke, R.A. Sr., 1998: Land cover as a driving force. Rocky Mountain/Great Basin Climatology-Hydrology Focus-Group Meeting. Santa Barbara, CA, September 13.
- PSNT-488 Pielke, R.A. Sr., 1998: Is landuse change a more important driver of climate than anthropogenic increases in CO<sub>2</sub>? LTER Brown Bag Seminar, CSU Lory Student Center, Fort Collins, CO, September 23.
- PSNT-489 Lu, L., R.A. Pielke Sr., G.E. Liston, W. Parton, D. Ojima, and M. Hartmann, 1998: Validation and sensitivity of the coupled RAMS/CENTURY modeling system. AGU Fall Meeting, Session H09, The Influence of Landscape and Land Use on Climate Variability and Change on the Regional and Global Scales, San Francisco, CA, December 6-10.
- PSNT-490 Pielke, R.A. Sr., 1998: When does landscape and its complexity matter. Dahlem Workshop on Integrating Hydrology, Ecosystem Dynamics, and Biogeochemistry in Complex Landscapes, Berlin, January 18-23.
- PSNT-491 Pielke, R.A. Sr., 1998: Land surface-atmospheric interactions on the regional and seasonal time scales. LSA-NW Detailed Design Workshop, EROS Data Center, Sioux Falls, SD, October 14-16.
- PSNT-492 Lu, L., R.A. Pielke Sr., G.E. Liston, B. Parton, D. Ojima, and M. Hartman, 1998: Simulating two-way interactions between atmosphere and ecosystem over the Great Plains. 4th Annual Shortgrass Steppe Symposium, January 14, Fort Collins, Colorado.
- PSNT-493 Pielke, R.A. Sr., and T.N. Chase, 1998: Role of land-cover as a driving force in global climate. AGU Fall Meeting, San Francisco, CA, December 6-10.

- PSNT-494 Liston, G. E., R. A. Pielke, Sr., D. K. Hall, and E. M. Greene, 1998: Assimilating observed snow-distribution products in a regional climate model. GCIP Mississippi River Climate Conference, June 8-12, St. Louis, Missouri.
- PSNT-495 Liston, G. E., R. A. Pielke, Sr., L. Lu, and E. M. Greene, 1998: Central U.S. climate simulations using the regional atmospheric modeling system. GCIP Mississippi River Climate Conference, June 8-12, St. Louis, Missouri.
- PSNT-496 McFadden, J.P., G.E. Liston, M. Sturm, R.A. Pielke Sr., F.S. Chapin, III, 2001: Interactions of shrubs and snow in arctic tundra: measurements and models. IAHS Symposium on Soil, Vegetation, Atmosphere Transfer Schemes and Large-Scale Hydrological Models, 18-27 July, Maastricht, The Netherlands.
- PSNT-497 Pielke, R.A. Sr., 2000: Climate changes - are they real and what does it mean to ranchers? 2nd Robert E. Taylor Beef Symposium, Fort Collins, CO, December 12-13, 2000.
- PSNT-498 Pielke, R.A. Sr., 1997: The role of land cover as a driving force for regional climate change. Aspen Global Change Institute Summer Session I, Elements of Change, July 7-17, Aspen, CO.
- PSNT-499 Castro, C.L., R.A. Pielke Sr., and G.E. Liston, 2002: Simulation of the North American monsoon in different Pacific SST regimes using RAMS. 13th AMS Symposium on Global Change and Climate Variations, Poster Session, January 13-17, Orlando, FL.
- PSNT-500 Pielke, R.A. Sr., 2001: National and regional environmental assessments: A new paradigm based on integrated earth system modeling. Global Change Open Science Conference. Amsterdam, The Netherlands, 10-13 July.
- PSNT-501 Pielke, R.A. Sr., 2001: Land cover changes - A major perturbation to the earth's climate system. Global Change Open Science Conference. Amsterdam, The Netherlands, 10-13 July.
- PSNT-502 Pielke, R.A. Sr., 2001: Walter Orr Robert's Public Lecture: Colorado Rocky Mountain climate: Where we have been and where we are going. Aspen Global Change Institute, Forest Management and Global Change: Near-Term Decisions and Long-Term Outcomes, October 18-23, 2001, Aspen, CO.
- PSNT-503 Pielke, R.A. Sr., 2001: The forest as an integral component of the climate system. Aspen Global Change Institute, Forest Management and Global Change: Near-Term Decisions and Long-Term Outcomes, October 18-23, 2001, Aspen, CO.
- PSNT-504 Pielke, R.A. Sr., and A. Marroquin, 2001: Large eddy simulation: Variable scale boundary-layer research. Annual review of the DoD Center for Geosciences/Atmospheric Research (CG/AR) at Colorado State University, December 11-13, White Sands Missile Range, NM.
- PSNT-505 Pielke, R.A. Sr., 2001: Satellite revised temperatures. American Association of State Climatologists Annual Meeting, August 6-8, Omaha, NE.
- PSNT-506 Pielke, R.A. Sr., 2001: Heating within the climate system. American Association of State Climatologists Annual Meeting, August 6-8, Omaha, NE.
- PSNT-507 Pielke, R.A. Sr., 2001: Colorado climate and climate change. Kiwanis Club of Poudre Golden K, August 14, Fort Collins, CO.
- PSNT-508 Adegoke, J.O., K. Gallo, R.A. Pielke Sr., L. Steyaert, and W. Kustas, 2001: A regional modeling study of the influence of urban land cover change on the lower atmosphere in the Washington DC-Baltimore area. AGU Fall Meeting, December 10-14, San Francisco, CA.
- PSNT-509 Castro, C.L., Pielke, R.A., Sr., and Liston, G.E., 2001: Simulation of the North American Monsoon in Different Pacific SST Regimes Using RAMS. 26th Climate Diagnostics and Prediction Workshop. Scripps Institute of Oceanography, La Jolla, California. October 22-26, 2001.

- PSNT-510 Vukicevic, T., M. Zupanski, D. Zupanski, T. Greenwald, A. Jones, T. Vonder Haar, D. Ojima, and R. Pielke Sr., 2002: Regional atmospheric modeling and data assimilation research system. 13th AMS Symposium on Global Change and Climate Variations, Poster Session 3, Emerging role of data assimilation in the oceans, land surface, atmospheric chemistry, hydrology, and the water cycle January 13-17, Orlando, FL.
- PSNT-511 McFadden, J.P., G.E. Liston, and R.A. Pielke Sr., 2002: Land-atmosphere feedbacks in a heterogeneous Arctic region: Measurements and models. 98th Annual Meeting of the Association of American Geographers (AAG), Los Angeles, CA, March 19-23, 2002.
- PSNT-512 Coughenour, M., S. Goslee, and R.A. Pielke Sr., 2002: Meeting in the middle: Bottom-up and top-down scaling approaches. IALE Symposium on Current Landscape-Scale Issues in Ecology: The Right Tools for the Job, 17th Annual Symposium International Association for Landscape Ecology United States Regional Association April 23-27, Lincoln, NE.
- PSNT-513 Pielke, Sr., R.A., T.N. Chase, J.L. Eastman, and M. Coughenour, 2002: Human influences on the global climate system - The first order effect of landuse change and the landscape dynamics. Invited Presentation. Joint Session 8: Surface/Atmosphere Interactions: Joint AMS Session with the 16th Conference on Hydrology and the 13th Symposium on Global Change and Climate Variations, January 13-17, Orlando, FL.
- PSNT-514 Angel, J.R., G. Taylor, R. Pielke Sr., J. Grymes, and D. Stooksbury, 2002: The crucial role of the State Climatologist in National Climate services. Session 11: Advances in Climate Services (Parallel with Session 10), 13th AMS Conference on Applied Climatology, May 12-16, Portland, OR.
- PSNT-515 Pielke, R.A. Sr., 2002: Land use change and impact on weather and climate. Presented at the Dean's Advisory Panel Meeting, April 12, CIRA, CSU, Fort Collins, CO.
- PSNT-516 Salas, J.D., O.G.B. Sveinsson, and R.A. Pielke Sr., 2002: Persistence of annual streamflows induced by basin storage and weather. AGU Hydrology Days 2002, April 1-4, Colorado State University, Fort Collins, CO.
- PSNT-517 Salas, J.D., and R.A. Pielke Sr., 2002: Drought analysis and properties by stochastic methods. AGU Hydrology Days 2002, April 1-4, Colorado State University, Fort Collins, CO.
- PSNT-518 Pielke, R.A. Sr., 2002: Overlooked issues in the U.S. National Climate and IPCC Assessments. Center for Advanced Studies External Advisory Panel Visit, April 18, The University of New Mexico.
- PSNT-519 Rutledge, S.A., W. Petersen, W.R. Cotton, R.A. Pielke Sr., G.E. Liston, S. Saleeby, and C.L. Castro, 2002: RAMS investigations of the North American monsoon. Fifth VAMOS Panel Meeting, March, University of Costa Rica, San Jose, Costa Rica.
- PSNT-520 Pielke, R.A. Sr., 2002: Land surface processes and analyses in weather and climate. Keynote Presentation, August 12, GIS in Climate, Weather, and Impacts Workshop, NCAR, Boulder, CO.
- PSNT-521 Chase, T.N., R.A. Pielke Sr., and C. Castro, Are current generation climate change simulations accurate enough for reliable regional downscaling. Integrated Trans-boundary Water Management. A Special Joint Conference of the UCOWER, WRTI, CEIWR, and NGWA, July 23-27, Traverse City, MI.
- PSNT-522 Pielke, R.A. Sr., 2002: Understanding Colorado's climate changes. Who's Running this Ecosystem? The 13th Annual South Platte Forum, October 23-25, 2002, Raintree Plaza, Longmont, CO.
- PSNT-523 Pielke, R.A. Sr., 2002 The coupling of water with other components of the earth's climate system: The role of vegetation. Featured Presentation. 2002 AGU Spring Meeting, Washington Convention Center, 28-31 May, Washington, DC.
- PSNT-524 Niyogi, D., C. Crabbe, V.K. Saxena, S. Raman, K. Wilson, K. Alapaty, R.A. Pielke, Sr., J. Eastman, and Y. Xue, 2002: Does regional aerosol loading affect terrestrial carbon

- exchange? 2002 AGU Spring Meeting, Washington Convention Center, 28-31 May, Washington, DC.
- PSNT-525 Nair, U.S., R.M. Welch, T.L. Sever, D. Irwin, and R.A. Pielke Sr., 2002: Numerical modeling study into the climatic impact of deforestation associated with the fall of Mayan Empire. 2002 AGU Spring Meeting, Washington Convention Center, 28-31 May, Washington, DC.
- PSNT-526 Pielke, R.A. Sr., 2002: Atmosphere-land surface interactions in semi-arid regions. The American Geophysical Union Chapman Conference on Eco-Hydrology of Semiarid Landscapes: Interactions and Processes, 9-13 September, Taos, New Mexico.
- PSNT-527 Pielke, R.A. Sr., 2002: Ecosystem processes as a component of global climate variability and change. Natural Resource Ecology Fall 2002 Seminar Series "Future Directions of Global Ecosystem Science", Colorado State University, October 4, Fort Collins, Colorado.
- PSNT-528 Castro, C.L., W.Y.Y. Cheng, A.B. Beltran, C.H. Marshall, R.A. Pielke Sr., and W.R. Cotton, 2002: The incorporation of the Kain-Fritsch cumulus parameterization scheme in RAMS with a terrain-adjusted trigger function. Fifth RAMS Users Workshop, 29 September - October 3, Santorini Island, Greece.
- PSNT-529 Beltran, A., R.A. Pielke Sr., J.L. Eastman, and M.B. Coughenour, 2002: Atmosphere-biosphere interactions over southern South American using RAMS coupled with a plant model GEMTM. Fifth RAMS Users Workshop, Poster Presentation, 29 September - October 3, Santorini Island, Greece.
- PSNT-530 Dalu, G.A., M. Baldi, and R.A. Pielke Sr., 2002: Subgrid parameterization of mesoscale fluxes and pressure field. Fifth RAMS Users Workshop, 29 September - October 3, Santorini Island, Greece.
- PSNT-531 Pielke, R.A. Sr., 2002: Planning for drought in Colorado. The City Club of Denver, Brown Palace Hotel, December 10, Denver, CO.
- PSNT-532 Adegoke, J.O., K.P. Gallo, and R.A. Pielke Sr., 2002: Exploring new pathways for investigating climate-biosphere feedback processes: Integrating fine resolution satellite land cover data sets into mesoscale climate models. Session 5C, Emerging Technologies: Human, 15th AMS Conference on Biometeorology/Aerobiology and 16th Congress of Biometeorology, 28 October-1 November, Kansas City, MO.
- PSNT-533 Pielke, R.A. Sr. and N. Doesken, 2002: Climate history leading up to 2002 drought. Colorado Drought Conference: Managing Water Supply and Demand in the Time of Drought. Lory Student Center, Colorado State University, December 4, Fort Collins, CO.
- PSNT-534 Pielke, R.A. Sr., 2002: Update on water resources and forecasts. President's Community Relations Committee, Ammons Hall, Colorado State University Oval, December 6, Fort Collins, CO.
- PSNT-535 Pielke, R.A. Sr., 2002: A new currency to assess climate change based on heat. College of Natural Resources Brown Bag Seminar, April 4, Colorado State University, Fort Collins, CO.
- PSNT-536 Pielke, R.A. Sr., 2002: Climatology: November-December precipitation and temperature, SPI, Colorado Palmer index. Drought Task Force, January 24, Colorado Office of Emergency Management, Golden, CO.
- PSNT-537 Pielke, R.A. Sr. and N. Doesken, 2003: The drought. Agricultural Experiment Station Research Center Conference, January 16, Lory Student Center Senate Chambers, Colorado State University, Fort Collins, CO.
- PSNT-538 Pielke, R.A. Sr., 2003: Diverse contributions of Robert H. Simpson and Joanne Simpson to science. The Simpsons Symposium, 83rd AMS Annual Meeting, February 9-13, Long Beach, CA.

- PSNT-539 Wolter, K., R.A. Pielke Sr., M. Hoerling, S. Jain, and N. Doesken, 2003: Climate assessment of the 1999-2002 drought in Colorado. Impacts of Water Variability: Benefits and Challenges, 83rd AMS Annual Meeting, February 9-13, Long Beach, CA.
- PSNT-540 Chase, T.N., B. Herman, R.A. Pielke Sr., X. Zeng, M. Tsukernik, and M. Leuthold, 2003: A proposed mechanism for the regulation of minimum mid-tropospheric temperatures in the Arctic. 12th Conference on Interactions of the Sea and Atmosphere, 83rd AMS Annual Meeting, February 9-13, Long Beach, CA.
- PSNT-541 Pielke, R.A. Sr., 2003: The Colorado drought 2001-2003: A growing concern. CSU College of Engineering Alumni Reception, March 6, Denver, CO.
- PSNT-542 Pielke, R.A. Sr., 2003: Preparing for a changing climate: The potential consequences of climate variability and change. 15th Annual Ag Conference, April 17, 2003, Colorado Springs, CO.
- PSNT-543 Pielke, R.A. Sr., 2003: Coupling numerical with physical models. CG/AR Annual Review, DoD Center for Geosciences/Atmospheric Research at Colorado State University, January 7-9, Adelphi Laboratory Center, MD.
- PSNT-544 Pielke, R.A. Sr., and G. Leoncini, 2003: Analysis of nonlinear/linear, hydrostatic/non-hydrostatic high-resolution RAMS simulations. CG/AR Annual Review, DoD Center for Geosciences/Atmospheric Research at Colorado State University, January 7-9, Adelphi Laboratory Center, MD.
- PSNT-545 Pielke, R.A. Sr., G.E. Liston, C.L. Castro, J.L. Eastman, L. Lu, C.H. Marshall, and J.E. Strack, 2002: The use of the Regional Atmospheric Modeling System (RAMS) to investigate the impact of land surface processes in the GAPP/GCIP region. The GEWEX Americas Prediction Project (GAPP) and the American Meteorological Society (AMS) Mississippi River Climate and Hydrology Conference, May 13-17, New Orleans, LA.
- PSNT-546 Pielke, R.A. Sr., 2003: Top ten overlooked issues in climate change science. Climate and Radiation Branch Seminar, NASA/Goddard Space Flight Center, June 4, Greenbelt, MD.
- PSNT-547 Marshall, C.H., and R.A. Pielke Sr., 2003: The utility of a dynamic vegetation parameterization as part of ensemble numerical forecasts of seasonal weather. GAPP 2003 PIs Meeting, July 21-24, Seattle, WA.
- PSNT-548 Liston, G.E., and R.A. Pielke Sr., 2003: Parameterizing subgrid-scale snowcover heterogeneities for use in regional and global climate models. Poster for NOAA 5-Year Review, November 5-6, Fort Collins, CO.
- PSNT-549 Pielke, R.A. Sr., 2003: Drought in Colorado: Where are we in 2003. AGU Hydrology Days 2003, March 31-April 2, Fort Collins, CO.
- PSNT-550 Pielke, R.A. Sr., and N. Doesken, 2003: Drought in Colorado - Past, present, future. Workshop on Assessing the Impacts of Prolonged Severe Drought on Aquatic Ecosystems and Water Quality of the South Platte River Basin, Colorado, April 3-4, Colorado State University, Fort Collins, CO.
- PSNT-551 Pielke, R.A. Sr., 2003: The Colorado drought in the SGS LTER region: 2002-2003. LTER Brown Bag Seminar, March 5, Plant Sciences, Colorado State University, Fort Collins, CO.
- PSNT-552 Pielke, R.A. Sr., 2003: Drought into the future. National Western Stock Show, A Can Do Landscape Drought Conference on "Dealing with Drought: Saving Water Now, Planning for Its Future", April 15, Colorado State University, Fort Collins, CO.
- PSNT-553 Pielke, R.A. Sr., 2003: Drought update. Presented at the Northern Colorado Business Report's Northern Colorado Summit. Session entitled "High and Dry: Surviving the Current Drought, Planning for the Next One". April 22, 2003, Fort Collins, CO.
- PSNT-554 Doesken, N., and R.A. Pielke Sr., 2003: Drought in southeast Colorado. March 5, 2003, SE Colorado Grazing Conference, Rocky Ford, CO.



- PSNT-555 Doesken, N., and R.A. Pielke Sr., 2003: Drought perspectives. April 19, 2003, SWU Meeting, Aims Community College, Greeley, CO.
- PSNT-556 Pielke, R.A. Sr., 2003: Drought. January 28, 2003. Water Availability Task Force meeting, Camp George West, Golden, CO.
- PSNT-557 Doesken, N., and R.A. Pielke Sr., 2003: Colorado's 2003 moisture outlook. Presented at Ag Outlook Forum, February 20, 2003, Renaissance Hotel, Denver, CO.
- PSNT-558 Doesken, N., and R.A. Pielke Sr., 2003: 2003 moisture outlook. February 25, 2003, Extension In-Service Program, Colorado State University, Fort Collins, CO.
- PSNT-559 Pielke, R.A. Sr., and N. Doesken, 2003: Drought update. May 14, 2003, Water Availability Task Force Meeting, Camp George West, Golden, CO.
- PSNT-560 Castro, C.L., and R.A. Pielke Sr., 2003: Diagnosing the effect of ENSO and PDO associated summer teleconnections on the North American monsoon with a regional climate model. GAPP 2003 PIs Meeting, July 21-24, Seattle, WA.
- PSNT-561 Peters, D., R. Pielke Sr., B. Bestelmeyer, and C. Allen, 2003: Spatial nonlinearities and cascading effects across landscapes in the Earth system. Land Open Science Meeting, "Global Change and the Terrestrial Human Environment System", December 2-5, 2003, Morelia, Mexico.
- PSNT-562 Burke, I.C., W.K. Lauenroth, J.A. Morgan, A.R. Mosier, and R.A. Pielke Sr., 2003: Carbon management, land use and global change: Feedbacks among carbon, nutrient and water cycles. Invited symposium presentation, 88th Ecological Society of America Annual Meeting, August 3-8, Savannah, Georgia.
- PSNT-563 Pielke, R.A., Sr., 2003: Development of Earth system models to assess the predictability of nonlinear responses/switches. 3rd IGBP Congress, Connectivities in the Earth System, 19-24 June, Banff, Canada.
- PSNT-564 Pielke, R.A., Sr., 2003: The limitations of models and observations. COMET Symposium on Planetary Boundary Layer Processes, September 12, 2003, Boulder, Colorado.
- PSNT-565 Pielke, R.A., Sr., 2003: Ten overlooked issues in the IPCC and US National Assessments of climate change. Department of Atmospheric Sciences, The University of Arizona, October 16, 2003, Tucson, Arizona.
- PSNT-566 Pielke, R.A., Sr., 2003: Unanswered questions. Workshop on Vertical Temperature Trends, Panel Questions 5: How well can the observed changes be reconciled with our understanding of the causes of temperature change and does this increase or decrease our confidence about the human impact on global climate change? Asheville, North Carolina, October 27-29, 2003.
- PSNT-567 Pielke, R.A., Sr., 2003: Ten Overlooked Issues in the IPCC and US National Assessments of Climate Change. Civil and Environmental Engineering Department, Duke University, Raleigh, North Carolina, October 29, 2003.
- PSNT-568 Pielke, R.A., Sr., 2003: Observed Point-Specific Surface Temperatures Are Poor Indicators of Global Temperature Change and Surface Radiative Forcing. National Research Council Committee on Radiative Forcing Effects on Climate, Washington, DC, December 17-18, 2003.
- PSNT-569 Hiemstra, C., G.E. Liston, and R.A. Pielke Sr., 2003: Comparing local analysis prediction system (LAPS) diagnoses with observations. AGU Meeting Session CO6: Monitoring, Measuring, and Modeling Snow Processes, Poster Presentation, December 8-12, San Francisco, CA.
- PSNT-570 Pielke, R.A. Sr., 2003: Drought history and predictions. 2003 National Grasslands Managers Meeting, May 13-15, Greeley, CO.
- PSNT-571 Pielke, R.A. Sr., W.R. Cotton, B. Walko, and C. Tremback, 2003: RAMS - Overview of Model Description. Presented at the DoD/ARL Forum on Modeling the Atmospheric Boundary Layer, May 22, 2003, Fort Collins, CO.

- PSNT-572 Pielke, R.A. Sr., and C.L. Castro, 2003: Diagnosing the effect of ENSO and PDO summer teleconnections on the North American monsoon with RAMS. Poster presentation at the DoD/ARL Forum on Modeling the Atmospheric Boundary Layer, May 19-23, 2003, Fort Collins, CO.
- PSNT-573 Liston, G.E., and R.A. Pielke, 2003: Parameterizing subgrid-scale snowcover. Poster presentation at the DoD/ARL Forum on Modeling the Atmospheric Boundary Layer, May 19-23, 2003, Fort Collins, CO.
- PSNT-574 Cotton, W.R., R. Lawford, S.M. Saleeby, C.L. Castro, R.A. Pielke Sr., M.G. Bosilovich, W.-Y. Sun, S.D. Schubert, J. Paegle, J. Nogues-Paegle, K.C. Mo, O. Yildez, A.P. Burros, M.J. Fennessy, and J. Shukla, 2003: What have we learned from NOAA GCIP, GAPP, and CLIVAR/PACS supported research on the warm seasons of 1988 and 1993 extreme precipitation years in regard to seasonal variations in precipitation. GHP9 (GEWEX Hydrometeorology Panel), September 22-26, 2003, Luneburg, Germany.
- PSNT-575 Castro, C.L., and R.A. Pielke Sr., 2004: Diagnosing the effect of ENSO and PDO teleconnections on the North American Summer Climate. 84th AMS Annual Meeting, 15th Symposium on Global change and Climate Variations, January 7-16, Seattle, WA.
- PSNT-576 Pielke, R.A. Sr., 2004: Drought update. Monthly climate report. Colorado Water Availability Task Force Meeting. January 21, NOAA-CIRES Climate Diagnostics Center, Boulder, CO.
- PSNT-577 Niyogi, D.S., and R.A. Pielke, 2004: Integrated regional climate study with a focus on the land-use land-cover change and associated changes in hydrological cycles in the southeastern United States. Presented at the LCLUC Science Team Meeting, January 20-22, Adelphi, MD.
- PSNT-576 Pielke, R.A. Sr., T.N. Chase, and C.A. Davey, 2004: Unresolved issues in surface and tropospheric temperature trends. U.S. Climate Change Science Program (CCSP) Exeter Workshop, September 13-17, Exeter, England.
- PSNT-577 Pielke, R.A. Sr., 2004: The regional climate. Panel, Speaker Series on "Water in the Sustainable Landscape: Conservation and Beyond", Sponsored by the Department of Horticulture and Landscape Architecture, CSU Institute for the Built Environment, and the Colorado Water Resources Research Institute. Colorado State University, February 2, Fort Collins, CO.
- PSNT-578 Pielke, R.A. Sr., and T. Vukicevic, 2004: Highlights of the May'03 Forum on Modeling the Atmospheric Boundary Layer. Annual Review of the DoD Center for Geosciences/Atmospheric Research (CG/AR at Colorado State University, January 21-22, CIRA, Colorado State University, Fort Collins, CO.
- PSNT-579 Pielke, R.A. Sr., 2004: Drought update. Colorado Water Availability Task Force Meeting. February 23, Denver, CO.
- PSNT-580 Pielke, R.A. Sr., 2004: Overlooked issues in the climate change debate. Lions Club Meeting, March 4, Fort Collins, CO.
- PSNT-581 Pielke, R.A. Sr., 2004: Drought update. Colorado Water Availability Task Force Meeting. April 13, Thornton Civic Center, Thornton, CO.
- PSNT-582 Pielke, R.A. Sr., 2004: Drought update. Colorado Water Availability Task Force Meeting. May 17, Thornton Civic Center, Thornton, CO.
- PSNT-583 Pielke, R.A. Sr., 2004: Overlooked issues in the climate change debate. Sertoma Club, June 30, Loveland, CO.
- PSNT-584 Pielke, R.A., Sr., 2004: Ten overlooked issues in the IPCC and US National Assessments of climate change. Harvard University, Cambridge, Massachusetts, February 6, 2004.
- PSNT-585 Beltran-Przekurat, A. and R. A. Pielke Sr., 2004: Springtime simulations over southeastern South America using a coupled plant-soil-atmosphere model GEMRAMS.

- LTER Brown Bag Seminar, Colorado State University, Fort Collins, Colorado, February 18, 2004.
- PSNT-586 Pielke, R.A., Sr., 2004: Ten overlooked issues in the IPCC and US National Assessments of climate change. NASA/Goddard Space Flight Center, March 26, Greenbelt, MD.
- PSNT-587 Pielke, R.A., Sr., 2004: Land-cover change impacts on regional meteorology. EROS Data Center, April 22, Sioux Falls, SD.
- PSNT-588 Pielke, R.A., Sr., 2004: Limitations of models and observations. COMET COMAP Symposium on Planetary Boundary Processes 04-1, June 25, Boulder, CO.
- PSNT-589 Pielke, R.A., Sr., 2004: Assessment of 2004 water year. Colorado Organic Conference and Trade Show. March 2, Brighton, CO.
- PSNT-590 Pielke, R.A., Sr., and O. Bliss, 2004: Drought update. Colorado Water Availability Task Force Meeting, DOW Building, July 27, Denver, CO.
- PSNT-591 Pielke, R.A., Sr., 2004: Drought update. Colorado Water Availability Task Force Meeting, Colorado State University, September 21, Fort Collins, CO.
- PSNT-592 Pielke, R.A. Sr., 2004: Slow onset disasters: Planning challenges and issues of public engagement. 29th Annual Workshop on Hazards Research and Applications. Slow Onset Disasters: Planning Challenges and Issues of Public Engagement, July 13, Boulder, CO.
- PSNT-593 Dalu, G.A., M. Gaetani, R.A. Pielke Sr., M. Baldi, and G. Maracchi, 2004: Regional variability of the ITCZ and of the Hadley Cell. European Geosciences Union, 1st General Assembly, Nice, France, April 25-30, 2004.
- PSNT-594 Pielke, R.A. Sr., D. Parker, and D. Reynolds, 2004: Question 6 - What measures can be taken to better reconcile observed changes with present understanding? CCSP Synthesis Product Lead Author's Meeting. Chicago, IL, August 5-6, 2004.
- PSNT-595 Pielke, R.A., Sr., D. Parker, D. Reynolds, T. Chase, and J. Willis, 2004: What measures can be taken to improve the understanding of observed changes? U.S. Climate Change Science Program Workshop on Profiles of Vertical Temperature Trends, Exeter, England, September 13-17, 2004.
- PSNT-596 Pielke, R.A., Sr., C. Davey, and T.N. Chase, 2004: Unresolved issues in surface and tropospheric temperature trends. U.S. Climate Change Science Program Workshop on Profiles of Vertical Temperature Trends, Exeter, England, September 13-17, 2004.
- PSNT-597 Steyaert, L., R.A. Pielke Sr., and C. Marshall, 2004: Potential consequences of land cover change on regional weather and climate variability: Reconstructed land cover history and Landsat-derived land cover datasets for atmospheric mesoscale modeling at Colorado State University. EROS Data Center Seminar, October 14, 2004, Sioux Falls, SD.
- PSNT-598 Castro, C.L., R.A. Pielke Sr., and J. Adegoke, 2004: Diagnosing the climatology and interannual variability of North American summer climate with the Regional Atmospheric Modeling System (RAMS). 29th Climate Diagnostics and Prediction Workshop, October 18-22, Madison, WI.
- PSNT-599 Pielke, R.A., Sr., and A. Beltrán-Przekurat, 2004: Effect of landscape change on climate and weather. Long-Term Ecological Research Program, New Mexico State University, October 29, Las Cruces, NM.
- PSNT-600 Castro, C.L., and R.A. Pielke Sr., 2004: Diagnosing the Climatology and Interannual Variability of North American Monsoon with the Regional Atmospheric Modeling System (RAMS): An Update. GEWEX Americas Prediction Project (GAPP) Principal Investigators Meeting, Boulder, Colorado, August 30-31, 2004.
- PSNT-601 Rasool, I., M. Baldi, K. Wolter, T.N. Chase, J. Otterman, R.A. Pielke Sr., and F. Cesarone, 2004: August 2003 heat wave in Western Europe: An analysis and perspective. 4th Annual Meeting of the European Meteorological Society - Part and Partner: 5th Conference on Applied Climatology (ECAC), September 26-30, Nice, France.

- PSNT-602 Adegoke, J., R.A. Pielke Sr., and A.M. Carleton, 2004: Climate impacts of agriculture related land use change in the US. World Meteorological Organization (WMO) Committee on Agricultural Meteorology (CAGM) Expert Team Meeting on the Contribution of Agriculture to the State of Climate, September 27-30, Ottawa, Canada.
- PSNT-603 Beltrán-Przekurat, A.B., C.H. Marshall, and R.A. Pielke Sr., 2004: Impact of a Dynamic Vegetation Parameterization in the Numerical Simulation of a Recent Warm-Season Weather. Preliminary Results. GEWEX Americas Prediction Project (GAPP) Principal Investigators Meeting, August 30-31, 2004, Boulder, Colorado.
- PSNT-604 Pielke, R.A. Sr., C.L. Castro, G. Leoncini, and T.E. Nobis, 2004: Research Theme: Derivation of battlespace parameters. CG/AR Annual Review, November 17-19, 2004, White Sands Missile Range, New Mexico.
- PSNT-605 Pielke, R.A. Sr., 2004: Expanding the concept of human-caused climate. University of Arizona, Tucson, American Meteorological Society Meeting, November 30, Tucson, AZ.
- PSNT-606 Pielke, R.A. Sr., 2004: The role of land-surface processes in local, regional and global weather and climate. NOAA-CIRES Climate Diagnostics Center Seminar, December 15, Boulder, Colorado.
- PSNT-607 Castro, C.L., and R.A. Pielke Sr., 2004: Dynamical downscaling: Assessment of value retained and added using the Regional Atmospheric Modeling System (RAMS). AGU Fall Meeting, December 13-17, San Francisco, California. Eos Trans. AGU, 85(47), Fall Meet. Suppl., Abstract A53A-0871.
- PSNT-608 Strack, G.E. Liston, C.A. Hiemstra, R.A. Pielke Sr., and L. Mahrt, 2004: Snow, shrubs, grasses, and footprint theory: Measuring moisture and energy fluxes in patchy landscapes. AGU Fall Meeting, December 13-17, San Francisco, California. Eos Trans. AGU, 85(47), Fall Meet. Suppl., Abstract C31A-0280.
- PSNT-609 Nair, U.S., D.K. Ray, R.O. Lawton, R.M. Welch, and R.A. Pielke Sr., 2004: The impact of deforestation on orographic cloud formation in a complex tropical environment. Mountains in the Mist: Science for Conserving and Managing TCMF, Hawaii Preparatory Academy, July 27-August 1, Waimea, Hawaii.
- PSNT-610 Matsui, T., H. Masunaga, R.A. Pielke Sr., S.M. Kreidenweis, W.-K. Tao, M. Chin, and Y.J. Kaufman, 2004: Satellite-based assessment of the aerosol effect on global warm cloud properties. AGU Fall Meeting, December 13-17, San Francisco, California, Eos Trans. AGU, 85(47), Fall Meet. Suppl., Abstract A22B-06.
- PSNT-611 Niyogi, D. H. Change, V.K. Saxena, T. Holt, R.A. Pielke, T. Matsui, K. Alapaty, F. Booker, F. Chen, K.J. Davis, B. Holben, T. Meyers, W.C. Oechel, R. Wells, K. Wilson, and Y. Xue, 2004: Direct observations of the aerosols effects on terrestrial carbon and water cycles. AGU Fall Meeting, December 13-17, San Francisco, California, Eos Trans. AGU, 85(47), Fall Meet. Suppl., Abstract A32B-05.
- PSNT-612 Matsui, T., H. Masunaga, R.A. Pielke Sr., S.M. Kreidenweis, W.-K. Tao, M. Chin, Y. Kaufman, 2004: Satellite-based assessment of aerosol forcing on the global warm cloud properties. AEROCENTER Seminar, September 12, 2004, NASA/Goddard Space Flight Center, Greenbelt, MD.
- PSNT-613 Pielke, R.A. Sr., 2004: The regional climate. Panel, Speaker Series on "Water in the Sustainable Landscape: Conservation and Beyond", Sponsored by the Department of Horticulture and Landscape Architecture, CSU Institute for the Built Environment, and the Colorado Water Resources Research Institute. Colorado State University, February 2, Fort Collins, CO.
- PSNT-614 Niyogi, D. H.-I. Change, S. Fall, J. Afieri, R.A. Pielke Sr., T. Matsui, C. Kummerow, and M.B. Coughenour, 2005: Integrated regional climate study with a focus on the land-use land-cover change and associated changes in hydrological cycles in the southeastern United States. NASA Land-Cover and Land-Use Change Science Team Meeting, January

- 11-13, UMUC Inn and Conference Center, College Park, Maryland.
- PSNT-615 Beltran-Przekurat, A., R.A. Pielke, Sr., J.A. Morgan, D. LeCain, and D Smith, 2005: Land-atmosphere interactions in semiarid areas: Examples from Shortgrass Steppe and Jornada LTER sites. 2005 SGS Symposium. Key Issues for Management, Research, and Conservation. Poster Presentation, January 14, 2005.
- PSNT-616 Beltran-Przekurat, A.B., C.H. Marshall, and R.A. Pielke Sr., 2005: Land Use-Land Cover Change In Semi-arid Areas: Jornada Experimental Range Case, LTER Shortgrass Steppe Land Atmosphere Group Meeting, USDA Crops Research Lab, Fort Collins, CO, March 1, 2005.
- PSNT-617 Nair, U.S., D.K. Ray, R.M. Welch, R.A. Pielke Sr., and S.A. Christopher, 2005: Use of MODIS derived albedo in the RAMS. 85th Annual AMS Meeting, 19th Conference on Hydrology, Poster Session, San Diego, CA, January 8-14, 2005.
- PSNT-618 Pielke, R.A. Sr., 2005: Minority report. NRC Review Committee of the Climate Change Science Program Report entitled "Temperature Trends in the Lower Atmosphere: Understanding and Reconciling Differences", Chicago, IL, February 23, 2005.
- PSNT-619 Pielke, R.A. Sr., 2005: Land-use/land-cover change as a major climate forcing: Evidence and consequences for climate research. Cornell University, Ithaca, NY, May 3, 2005.
- PSNT-620 Pielke, R.A. Sr., 2005: Drought update. May 2005 WTF Meeting, Division of Wildlife, Denver, Co, May 12, 2005.
- PSNT-621 Pielke, R.A. Sr., 2005: Land-use/land-cover change as a major climate forcing: Evidence and consequences for climate change research. Oak Ridge National Laboratory, Oak Ridge, TN, June 1, 2005.
- PSNT-622 Pielke, R.A. Sr., 2005: Land-use/land-cover change as a major climate forcing: Evidence and consequences for climate and agricultural research. Summer Ag Institute, Food, Fiber and 14, ARDEC Livestock Facility, Fort Collins, CO, June 13, 2005.
- PSNT-623 Pielke, R.A. Sr., and T.E. Nobis, 2005: Battlefield meteorology including urban areas - Research needs and current capabilities. VTC Seminar with ARL, Cooperative Institute for Research in the Atmosphere, Fort Collins, CO, August 4, 2005.
- PSNT-624 Pielke, R.A. Sr., 2005: Presentation of perspective of science opportunities of GOES-R. GOES-R Science Summit, Arlington, VA, August 17, 2005.
- PSNT-625 Pielke, R.A. Sr., 2005: Drought update. September 2005 WTF Meeting, Division of Wildlife, Denver, Co, September 14, 2005.
- PSNT-626 Pielke, R.A. Sr., 2005: The partnership of weather and air quality. NOAA/EPA Golden Jubilee Symposium on Air Quality Modeling and Its Application, Durham, NC, September 20, 2005.
- PSNT-627 Leoncini, G., and R.A. Pielke Sr., 2005: Nonlinear vs. linear mesoscale dynamics. Battlespace Atmospheric and Cloud Impacts on Military Operations (BACIMO) 2005 Conference, Monterey, CA, October 12-14, 2005.
- PSNT-628 Nair, U.S., R. Ramachandran, Y. Wu, S.A. Christopher, S.G. Graves, R.M. Welch, R.A. Pielke Sr., M. Newchurch, K. Knupp, and N.L. Goddard, 2005: An integrated LES modeling system for Homeland security applications. The Huntsville Simulation Conference, Huntsville, AL, October 25-27, 2005.
- PSNT-629 Matsui, T., H. Masunaga, R.A. Pielke Sr., S.M. Kreidenweis, W.-K. Tao, M. Chin, and Y.J. Kaufman, 2005: Satellite-based assessment of marine low cloud variability associated with Aerosol, atmospheric stability, and the diurnal cycles. American Association for Aerosol Research (AAAR) Meeting, Austin, TX, October 17-21, 2005.
- PSNT-630 Niyogi, D., H.-I. Chang, F. Booker, R.A. Pielke Sr., T. Matsui, L. Gu, V. Saxena, R. Wells, and Y. Xue, 2005: Outstanding issues regarding the role of atmospheric aerosols on terrestrial biosphere and regional climate. American Association for Aerosol Research (AAAR) Meeting, Austin, TX, October 17-21, 2005.

- PSNT-631 Prokopy, L., D. Niyogi, S. Fall, G. Maricle, N. Niyogi, R.A. Pielke Jr., and R.A. Pielke Sr., 2005: Incorporating societal feedback in assessing water resource vulnerability due to climate variability. African Monsoon Multidisciplinary Analysis (AMMA), 1st International Conference, Dakar, Senegal, November 28-December 4, 2005.
- PSNT-632 Alfieri, J., Z. Ziao, D. Niyogi, R.A. Pielke Sr., F. Chen, and P. LeMone, 2005: Application and validation of a MODIS-based vegetation transpiration model over the southern Great Plains using IHOP 2002 data. AGU Fall Meeting, San Francisco, CA, B11: Changes in Land Use and Water Use and Their Effects on Climate, Including Biogeochemical Cycles, December 5-9, 2005.
- PSNT-633 Hiemstra, C.A., R.A. Pielke, T.L. Sohl, K.L. Sayler, T.R. Loveland, L.T. Steyaert, 2005: The influence of pre-settlement and current High Plains land use and land cover on atmospheric, soils, and vegetation properties. AGU Fall Meeting, San Francisco, CA, B11: Changes in Land Use and Water Use and Their Effects on Climate, Including Biogeochemical Cycles, December 5-9, 2005.
- PSNT-634 Leoncini, G., and R.A. Pielke Sr., 2005: Nonlinear or linear; Hydrostatic or nonhydrostatic mesoscale dynamics? AGU Fall Meeting, San Francisco, CA, B11: Changes in Land Use and Water Use and Their Effects on Climate, Including Biogeochemical Cycles, December 5-9, 2005.
- PSNT-635 Pielke, R.A. Sr., C. Hiemstra, T. Matsui, J. Lin, J. Adegoke, D. Niyogi, and U. Nair, 2005: Is there a human effect on the climate system? AGU Fall Meeting, San Francisco, CA, B11: Changes in Land Use and Water Use and Their Effects on Climate, Including Biogeochemical Cycles, December 5-9, 2005.
- PSNT-636 Ray, D.K., R.M. Welch, U.S. Nair, R.O. Lawton, and R.A. Sr., 2006: Impact of lowland deforestation on southwest Indian tropical wet forests: Cloud cover and rainfall. 86th Annual AMS Meeting, 18th Conference on Climate Variability and Change, Joint Poster Session 1, Land-Atmosphere Interactions, January 28-February 3, Atlanta, GA.
- PSNT-637 Niyogi, D., H.-I. Chang, L. Gu, S. Menon, and R.A. Pielke Sr., 2006: Potential impacts of aerosol-land atmosphere interaction on the Indian Monsoon. 18th Conference on Climate Variability and Change and 20<sup>th</sup> Conference on Hydrology, Joint Session 3, Land-Atmosphere Interactions: Land Data, Land Cover, and Land Use Studies, January 28-February 3, Atlanta, GA.
- PSNT-638 Pielke, R.A. Sr., 2006: Climate Forcings, Feedbacks, and Teleconnections in the Land Surface- Vegetation-Water Components of the Climate System: Consequences and an Alternate Paradigm to Climate Prediction. 1st iLEAPS Science Conference, Boulder, CO, January 24, 2006.
- PSNT-639 Pielke, R.A. Sr., 2006: Climate Change: The Scientific Debate. 108th National Western Mining Conference & Exhibition, Denver, CO, February 8, 2006
- PSNT-640 Pielke, R.A. Sr., 2006: Overlooked and Neglected Issues in Climate Change Studies: The Need for a New Paradigm. The University of Alabama, Huntsville, March 8, 2006.
- PSNT-641 Pielke, R.A. Sr., 2006: Climate System Complexity and Vulnerability Approach: A Broader Perspective on Climate Change. Hydrology Days, Colorado State University, Fort Collins, Colorado, March 22, 2006
- PSNT-642 Pielke, R.A. Sr., 2006: Overlooked and Neglected Issues in Climate Change Studies: The Need for a New Paradigm. Presented at the AWMA-RMSS Meeting, Denver, CO, April 25, 2006.
- PSNT-643 Beltrán-Przekurat, A., R.A. Pielke Sr., J.A. Morgan, D. Le Cain, and D. Smith, 2005: Land-Atmosphere Interactions in Semi-Arid Areas: Examples from Shortgrass Steppe and Jornada LTER Sites. Presented at the 2005 SGS Symposium on Key Issues for Management, Research and Conservation, Ft. Collins, CO, January 14, 2005.

- PSNT-644 Pielke, R.A. Sr., 2006: Consequences of Climate Change and Variability in the Rocky Mountains – The Need for a Vulnerability Assessment Framework. Colorado College State of the Rockies Conference Colorado Springs, Colorado, April 13, 2006.
- PSNT-645 Adegoke, J., S. Vezhapparambu, C.L. Castro, R.A. Pielke Sr., and A.M. Carleton. 2006: Influence of Variations in Low-Level Moisture and Soil Moisture on the Organization of Summer Convective Systems in the US Midwest.. 86th Annual AMS Meeting, 18th Conference on Climate Variability and Change, Atlanta, Georgia, January 28-February 3, 2006.
- PSNT-646 Castro, C.L., R.A. Pielke Sr., and J. Adegoke, 2006: Investigation of the Summer Climate of North America: A Study with a Regional Atmospheric Model (Investigación del Clima del Verano en Norteamérica: Un Estudio con un Modelo Atmosférico). Monsoon Region Climate Applications: a Binational Workshop. Instituto Tecnológico de Sonora (ITSON), Guaymas, Sonora, Mexico, May 8-11, 2006.
- PSNT-647 Pielke, R.A. Sr., 2006: Unresolved Issues with the Assessment of Multi-Decadal Global Land Surface Temperature Trends/Conflict of Interest in the CCSP Report. AASC Annual Meeting, Rapid City, South Dakota, June 21, 2006.
- PSNT-648 Pielke, R.A. Sr., and Roger A. Pielke Jr., 2006: Prediction as a Technology. Presented at Spoleto, Italy, July 15, 2006.
- PSNT-649 Pielke, R.A. Sr., C. Davey, D. Niyogi, K. Hubbard, X. Lin, M. Cai, S. Fall, Y.-K. Lim, H. Li, J. Neilsen-Gammon, K. Gallo, R. Hale, J. Angel, R. Mahmood, and S. Foster, 2006: Unresolved Issues with the Assessment of Multi-Decadal Global Land-Surface Temperature Trends. Presented at The 2nd International Conference on Global Warming and the Next Ice Age,. Santa Fe, New Mexico, July 17-19, 2006.
- PSNT-650 Castro, C.A., A. Beltrán-Przekurat, and R.A. Pielke, Sr., 2006: Statistical Characterization of the Spatiotemporal Variability of Soil Moisture and Vegetation in North America for Regional Climate Model Applications. Presented at The First Climate Prediction Program for the Americas (CPPA) PIs Meeting, Tucson, Arizona, August 14-16, 2006.
- PSNT-651 Beltrán-Przekurat, A., C.H. Marshall, and R.A. Pielke, Sr., 2006: Numerical Simulations of Recent Warm-Season Weather: Impacts of a Dynamic Vegetation Parameterization. Presented at The First Climate Prediction Program for the Americas (CPPA) PIs Meeting, Tucson, Arizona, August 14-16, 2006.
- PSNT-652 Pielke, R.A. Sr., 2006: Regional and Global Climate Forcings. Presented at the Conference on the Earth's Radiative Energy Budget Related to SORCE, San Juan Islands, Washington, September 20-22, 2006.
- PSNT-653 Pielke Sr., R.A., T. Matsui, C. Kummerow, M. B. Coughenour, J.-W. Wang, A. Beltrán-Przekurat, D. Niyogi, S. Fall, H.-I. Chang, and J. Alfieri, 2006: Integrated Regional Climate Study with a Focus on the Land-Use Land- Cover Change and Associated Changes in Hydrological Cycles in the Southeastern United States. NASA Land-Cover and Land-Use Change Science Team Meeting, UMUC Inn and Conference Center, Adelphi, MD, October 10–12, 2006.
- PSNT-654 Matsui, T., A. Beltrán-Przekurat, R.A. Pielke Sr., D. Niyogi, M.B. Coughenour, and J.-W. Wang, 2006: Continental-Scale Calibration of Surface Scale Albedo in the CSU Unified Land Surface Model Using Remote Sensing Data and a Parameter Estimation Model. NASA Land-Cover and Land-Use Change Science Team Meeting, UMUC Inn and Conference Center, Adelphi, MD, October 10–12, 2006.
- PSNT-655 Matsui, T., 2006: Aerosol Effects on Cloud-Precipitation and Land-Surface Processes. CSU Department of Atmospheric Science, Ph.D. Seminar, Fort Collins, CO, November 20, 2006.

- PSNT-656 Pielke Sr., R.A., 2007: Why We Need a New Direction in Climate Change Science. Presented at the Department of Geological Sciences, University of Texas, Austin, January 23, 2007.
- PSNT-657 Pielke Sr., R.A., C. Davey, D. Niyogi, K. Hubbard, X. Lin, M. Cai, S. Fall, Y.-K. Lim, H. Li, J. Neilsen- Gammon, K. Gallo, R. Hale, J. Angel, R. Mahmood, and S. Foster, 2007: What is Missing In Climate Change Assessments and Why: Unresolved Issues With the Assessment of Multi-Decadal Global Land-Surface Temperature Trends. GEO 302C Climate Change Lecture, Presented at the University of Texas, Austin, January 24, 2007.
- PSNT-657 Pielke Sr., R.A., 2007: Prediction as a Technology. Presented at the University of Texas, Austin, January 25, 2007.
- PSNT-658 Pielke Sr., R.A., 2007: Overlooked Science Issues in Climate Change. Presented at the University of Delaware Colloquium, February 26, 2007.
- PSNT-659 Pielke Sr., R.A., 2007: Land Use and Climate Interactions [i.e., the role of land use within the climate system]. Presented at the NASA Land-Cover and Land-Use Change Science Team Meeting, UMUC Inn and Conference Center, East, Adelphi, MD, April 4 - 6, 2007.
- PSNT-660 Pielke Sr., R.A., T. Nobis, G. Leoncini, and D. Stokowski, 2007: Battlefield Scale Meteorology. Presented at the DoD Center for Geosciences/ Atmospheric Research Annual Review at Colorado State University, Fort Collins, Colorado, April 17-19, 2007.
- PSNT-661 Stokowski, D.M., R.A. Pielke Sr., G. Leoncini, 2007: Replacement of Parameterized Physics with Look-up-tables (LUTs). Presented at the DoD Center for Geosciences/Atmospheric Research Annual Review at Colorado State University, Fort Collins, Colorado, April 17-19, 2007.
- PSNT-662 Nobis, T., 2007: Presented at the DoD Center for Geosciences/ Atmospheric Research Annual Review at Colorado State University, Fort Collins, Colorado, April 17-19, 2007.
- PSNT-663 Pielke Sr., R.A., 2007: The Human Impact on the Weather and Climate. Presented at the 2007 Tripartite Symposium entitled "Realities and Challenges of Global Warming/Global Dimming", Pittsburgh, Pennsylvania, April 24, 2007.
- PSNT-664 Pielke Sr., R.A. 2007: The Human Impact on Weather and Climate. Bonn, Germany, June 5, 2007.
- PSNT-665 Pielke Sr., R.A. 2007: The Role of Landscape Processes within the Climate System. Presented at the International Symposium on "Landform - structure, evolution, process control", University of Bonn, Germany, June 7-10, 2007.
- PSNT-666 Pielke Sr., R.A. 2007: The Human Impact on Weather and Climate, Presented at the GKSS Research Center, Geesthacht, Germany, June 11, 2007.
- PSNT-667 Castro, C.L., A.B. Beltran-Przekurat, and R.A. Pielke Sr., 2007: Spatiotemporal Variability and Covariability of Temperature, Precipitation, Soil Moisture, and Vegetation in North America for Regional Climate Model Applications. Presented at the American Geophysical Union Joint Assembly, Acapulco, Mexico, 22-25 May 2007.
- PSNT-668 Pielke Sr., R.A., 2007: The Role of Landscape Processes within the Climate System. Session Keynote Address National Center for Atmospheric Research (NCAR) Junior Faculty Forum on Coupling Terrestrial and Atmospheric Water Dynamics to Improve Predictability in a Changing Environment, Center Green Facility, Boulder, CO, July 9, 2007.
- PSNT-669 Baldi, M., G. Dalu, and R.A. Pielke Sr., 2007: Vertical Velocities and Available Potential Energy Generated by Landscape Variability, Presented at the EGU General Assembly 2007, Vienna, Austria, 14-20 April 2007.
- PSNT-670 Pielke Sr., R.A., 2007: Human Impacts on Climate: A Broader View than Reported in the IPCC. Presented at the Maryland Department of the Environment Air and Radiation Management Administration, Baltimore, MD, July 13, 2007.



- PSNT-671 Pielke Sr., R.A., 2007: Human Impacts on Climate: A Broader View than Reported in the 2007 IPCC Report. Presented at the Ecosystems Engineering Seminar, Arizona State University, Tempe, AZ, August 22, 2007 (same talk presented at the University of Arizona; see PSNT-672).
- PSNT-672 Pielke Sr., R.A., 2007: Human Impacts on Climate: A Broader View than Reported in the 2007 IPCC Report. Presented at the Department of Atmospheric Sciences, The University of Arizona, August 23, 2007 (same talk presented at Arizona State University; see PSNT-671).
- PSNT-673 Pielke Sr., R.A., 2007: Global Warming and Climate Change - Have You Been Presented The Full Story? 2007 Collegiate Peaks Forum Series Lecture, Buena Vista, Colorado, August 31, 2007.
- PSNT-674 Pielke Sr., R.A., 2007: Land-Use Change and Microclimate Exposure Effects on Near-Surface Air Temperature Assessments: Unresolved Issues. Presented at the NSF Workshop on Detecting the Atmospheric Response to the Changing Face of the Earth: A Focus on Human-Caused Regional Climate Forcings, Land-Cover/Land-Use Change, and Data Monitoring. Boulder, CO, August 27-29, 2007.
- PSNT-675 Pielke Sr., R.A., 2007: Role of Land in Understanding and Responding to Climate. Presented at the International Conference on Climate Changes Spatial Planning (CcSP), World Forum Convention Center, The Hague, The Netherlands, September 12-13, 2007.
- PSNT-676 Lin, X., R.A. Pielke, and K.G. Hubbard, 2007: Temporal and Spatial Variations of Moist Enthalpy in the U.S. High Plains Region. Eos Trans. AGU, 88(52), Fall Meet. Suppl., Abstract GC21A-0151, AGU Fall Meeting, San Francisco, CA, 10-14 December 2007.
- PSNT-677 Pielke Sr., R.A., 2007: Climate Metrics: A Reality Check. Presentation to NSF Staff, Washington, DC, December 5, 2007.
- PSNT-678 Pielke Sr., R.A., 2008: A Reality Check On Global Warming. Four States Irrigation Council 55th Annual Meeting "Irrigation Transitions to the Future". Fort Collins, CO, January 9, 2008.
- PSNT-679 Pielke Sr., R.A., 2008: Human Impacts on Weather and Climate - Recent Research Results Require That We Adopt A Broader Assessment. Department of Atmospheric and Oceanic Sciences Seminar, University of Colorado, Boulder, CO, February, 29, 2008.
- PSNT-680 Pielke Sr., R.A., 2008: Current Practices in Quantitative Assessment of the Earth System - Weather and Climate. Workshop on Graduate Education Initiative Inverse Modeling and Data Assimilation Technology, Boulder, CO, April 8, 2008.
- PSNT-681 Pielke Sr., R.A., 2008: A Proposed New Metric for Quantifying the Climatic Effects of Human-Caused Alterations to the Global and Regional Water Cycles. CU Hydrology And Water Resources Seminar, Boulder, CO, April 23, 2008.
- PSNT-682 Pielke Sr., R.A., 2008: The Diverse Role Of Humans Within the Climate System - A Need to Broaden the Perspective Presented to Policymakers. CUAHSI Biennial Colloquium on Hydrologic Science and Engineering, July 14-16, 2008, Boulder, Colorado.
- PSNT-682 Pielke Sr., R.A., 2008: Human Impacts on Weather and Climate - Recent Research Results Require That We Adopt A Broader Assessment. AAWE Keynote Lecture, August 23, 2008, Vail, CO.
- PSNT-683 Pielke Sr., R.A., 2008: A Realty Check on Global Warming. Air & Waste Management Association, August 6, 2008, Denver, CO.
- PSNT-684 Pielke Sr., R.A., 2008: Human Impacts on Weather and Climate - Recent Research Results Require That We Adopt A Broader Assessment. Marshall Climate Science Meeting, Washington, DC, September 14-16, 2008.
- PSNT-685 Beltran-Przekurat, A., and R.A. Pielke Sr., 2008: GEMRAMS Training. South Florida Water Management District, September 23-25, 2008.

- PSNT-686 Pielke Sr., R.A., 2008: The Need To Assess Spatial Variations In Climate Forcings - Suggestions For Future Research. Presented at the National Research Council Planning Meeting: Solar Influences on Recently Observed Climate Change, Washington, DC, December 8, 2008.
- PSNT-687 Pielke Sr., R.A., 2009: Global/Regional/Local-Scale Climate Change - A Reality Check. 25th Minerals Management Information Transfer Meeting, New Orleans, LA, January 6-8, 2009.
- PSNT-688 Pielke Sr., R.A., 2009: An Overview On the Complexity of the Climate System and the Role of Humans Within It. NCAR, Boulder, CO, January 23, 2009.
- PSNT-689 Pielke Sr., R.A., 2009: An Overview On the Complexity of the Climate System and the Role of Humans Within It. ATOC4800/5000 "Policy Implications of Climate Controversies/Critical Issues in Climate and the Environment", University of Colorado, Boulder, February 5, 2009.
- PSNT-690 Dairaku, K., S. Emori, T. Nozawa, S. Iizuka, W. Sasaki, R.A. Pielke Sr, and A. Beltran, 2009: Impacts of Global Warming on Hydrological Cycles in the Asian Monsoon Region and Introduction of Multi-Model Ensembles and Downscaling for Regional Risk Assessment. ATOC Seminar, University of Colorado, Boulder, February 13, 2009.
- PSNT-691 Castro, C.L., R.A. Pielke Sr., B. Rockel, H. von Storch, G. Leoncini, 2009: Dynamical Downscaling: Assessment of Model System Dependent Retained and Added Variability for Two Different Regional Climate Models. 21st Century Challenges in Regional-scale Climate Modeling Workshop, Lund, Sweden, 4 - 8 May 2009.
- PSNT-692 Pielke Sr., R.A., 2009: Considering the Human Influence on Climate. George C. Marshall Institute, Washington, DC, May 14, 2009.
- PSNT-693 Pielke Sr., R.A., 2009: A Bottom Up, Resource-Based Perspective To Deal With Climate Variability and Change. CUAHSI Hydrologic Synthesis Summer Institute City College of New York, New York, NY, July 14, 2009.

## THESES OF WHICH I WAS A MAJOR ADVISOR

### M.S. Students

- Artz, R., 1982, M.S. Thesis: Comparison of methods of air parcel trajectory analysis for defining source-receptor relationships. University of Virginia.
- Blanchard, D.O., 1983, M.S. Thesis: Variability of the convective field pattern in south Florida and its relationship to the synoptic flow. Department of Atmospheric Science, Colorado State University.
- Chase, Thomas N., 1995: M.S. Thesis: The sensitivity of a general circulation model to large scale vegetation changes. Department of Atmospheric Science, Colorado State University, 57 pp.
- Ciolek, John T. Jr., 2005, M.S. Thesis: Assessment of atmospheric plume prediction, modeling and vulnerability capabilities with respect to terrorist events. Department of Atmospheric Science, Colorado State University, 180 pp.
- Coskun, Mustafa, 1992, M.S. Plan B, Department of Atmospheric Science, Colorado State University, No thesis required.
- Cramer, Captain James, 1988, M.S. Thesis: Observational evaluation of snow cover effects on the generation and modification of mesoscale circulations. Department of Atmospheric Science, Colorado State University, 144 pp.
- Darby, Lisa S., 2001, M.S. Thesis: The sea breeze at Monterey Bay: Comparisons between lidar measurements and two-dimensional numerical simulations. Department of Atmospheric Science, Colorado State University, 106 pp.
- Eastman, Joseph L., 1993, M.S. Thesis: A numerical study and tracer evaluation of transport and diffusion in a lake breeze. Department of Atmospheric Science, Colorado State University, 112 pp.
- Greene, Ethan M., 1999, M.S. Thesis: Simulation of alpine snow distributions in the northern Colorado Rocky Mountains using a numerical snow-transport model. Department of Atmospheric Science, Colorado State University, 79 pp.
- Hanamean, James R. Jr., 2001, M.S. Thesis: Vegetation impacts on maximum and minimum temperatures in northeast Colorado. Department of Atmospheric Sciences, Colorado State University, 67 pp.
- Knowles, Captain John B., 1993, M.S. Thesis: The influence of forest fire induced albedo differences on the generation of mesoscale circulations. Department of Atmospheric Science, Colorado State University, 86 pp.
- Lindsey, C.G., 1980, M.S. Thesis: Analysis of coastal wind energy regimes. University of Virginia.
- Martin, Charles L., 1981, M.S. Thesis: Numerical accuracy in a mesoscale meteorological model. University of Virginia.
- McCoy, Mary, 1988, M.S. Thesis: Application of a local-scale dry model to operational short-range forecasting. Department of Atmospheric Science, Colorado State University, 125 pp.
- McQueen, Jeffrey T., 1985, M.S. Thesis: A numerical and climatological investigation of deep convective cloudiness patterns in south Florida. Atmospheric Science Department, Colorado State University.
- Mehring, P., 1981, M.S. Thesis: Atmospheric variables and morning roosting of chimney swifts (*Chaetura pelagica*). University of Virginia.
- Mizzi, A.P., 1981, M.S. Thesis: A numerical investigation of the mesoscale atmospheric circulation in the Oregon coastal zone with a coupled atmosphere-ocean model. University of Virginia.

- Papineau, John M., 1992, M.S. Thesis: A performance evaluation of the NGM and RAMS models for the 29-30 March 1991 Front Range storm. Department of Atmospheric Science, Colorado State University, 73 pp.
- Poulos, Gregory S., 1992, M.S. Thesis: The potential effect of Los Angeles Basin Pollution on Grand Canyon air quality. Department of Atmospheric Science, Colorado State University, 154 pp.
- Rodriguez, Humberto, 1992, M.S. Thesis: Influence of mesoscale variations in land surface albedo on large-scale averaged heat fluxes. Department of Atmospheric Science, Colorado State University, 70 pp.
- Shaw, Brent L., 1995, M.S. Thesis: The effect of soil moisture and vegetation heterogeneity on a Great Plains dryline: A numerical study. Department of Atmospheric Science, Colorado State University, 93 pp.
- Stocker, Roger, 1996, M.S. Thesis: Numerical examination of long-range dispersion using RAMS with a climatological analysis for the MOHAVE field study. Department of Atmospheric Science, Colorado State University, 119 pp.
- Strack, John E., 2001, M.S. Thesis: Sensitivity of model-generated daytime surface heat fluxes over snow to land-cover changes. Department of Atmospheric Sciences, Colorado State University, 74 pp.
- Tunick, Arnold D., 1984, M.S. Thesis: A first-order closure model of the atmospheric boundary layer; Comparison with observations and theory. Department of Atmospheric Science, Colorado State University.
- Xian, Zejin, 1991, M.S. Thesis: A 2-D model study of the influence of the surface on mesoscale convection during the Indian monsoon. Department of Atmospheric Science, Colorado State University, 110 pp +appendix.
- Yu, Chang-Han, 1985, M.S. Thesis: Mesoscale air quality under stagnant synoptic cold season conditions in the Lake Powell area. Atmospheric Science Department, Colorado State University, 125 pp.

#### **Ph.D. Students**

- Arritt, Raymond W., 1985, Ph.D. Dissertation: Numerical studies of thermally and mechanically forced circulations over complex terrain. Department of Atmospheric Science, Colorado State University, 193 pp.
- Beltran, Adriana Beatriz, 2005, Ph.D. Dissertation: Using a coupled atmospheric-biospheric modeling system (GEMRAMS) to model the effects of land-use/land-cover changes on the near-surface atmosphere. Department of Atmospheric Science, Colorado State University, 186 pp.
- Castro, Christopher Lawrence, 2005, Ph.D. Dissertation: Investigation of the summer climate of North America: A regional atmospheric modeling study. Department of Atmospheric Science, Colorado State University, 210 pp.
- Chase, Thomas N., 1999: Ph.D. Dissertation: The role of historical land-cover changes as a mechanism for global and regional climate change. Graduate Degree Program in Ecology, Colorado State University, 117 pp.
- Copeland, Jeffrey H., 1995, Ph.D. Dissertation: Impact of soil moisture and vegetation distribution on July 1989 climate using a regional climate model. Department of Atmospheric Science, Colorado State University, 124 pp.
- Cram, Jennifer M., 1990, Ph.D. Dissertation: Numerical simulation and analysis of the propagation of a prefrontal squall line. Department of Atmospheric Science, Colorado State University, 332 pp.

- Davey, Christopher A., 2005, Ph.D. Dissertation: Alternative metrics for measuring heating trends, with possible connections between the surface and troposphere. Graduate Degree Program in Ecology, Colorado State University, 267 pp.
- Eastman, Joseph L., 1999, Ph.D. Dissertation: Analysis of the effects of CO<sub>2</sub> and landscape change using a coupled plant and meteorological model. Graduate Degree Program in Ecology, Colorado State University, 148 pp.
- Finley, Catherine, 1997, Ph.D. Dissertation: Numerical simulation of intense multi-scale vortices generated by supercell thunderstorms. Department of Atmospheric Science, Colorado State University, 297 pp.
- Hadfield, Mark Gregory, 1988, Ph.D. Dissertation: The response of the atmospheric convective boundary layer to surface inhomogeneities. Department of Atmospheric Science, Colorado State University, 398 pp.
- Lee, Tsengdar J., 1992, Ph.D. Dissertation: The impact of vegetation on the atmospheric boundary layer and convective storms. Department of Atmospheric Science, Colorado State University, 137 pp.
- Leoncini, Giovanni, 2008, Ph.D. Dissertation: Improving numerical weather prediction: Error growth at the convective scale and speed. Department of Atmospheric Science, Colorado State University, 109 pp.
- Lu, Lixin, 1999, Ph.D. Dissertation: Implementation of a two-way interactive atmospheric and ecological model and its application to the central United States. Department of Atmospheric Science, Colorado State University, 134 pp.
- Marshall, Curtis H., 2004, Ph.D. Dissertation: Simulated impacts of anthropogenic land-cover change on the mesoscale climate of the Florida peninsula. Department of Atmospheric Science, Colorado State University, 127 pp.
- Matsui, Toshihisa, 2006, Ph.D. Dissertation: Aerosol effects on cloud-precipitation and land-surface processes. Department of Atmospheric Science, Colorado State University, 262 pp.
- McCumber, Michael, 1980, Ph.D. Dissertation: A numerical simulation of the influence of heat and moisture fluxes upon mesoscale circulations. University of Virginia, 255 pp.
- McNider, Richard T., 1981, Ph.D. Dissertation: Investigation of the impact of topographic circulations on the transport and dispersion of air pollutants. University of Virginia.
- Moran, Michael D., 1992, Ph.D. Dissertation: Numerical modelling of mesoscale atmospheric dispersion. Department of Atmospheric Science, Colorado State University, 758 pp.
- Nair, Udaysankar S., 2002, Ph.D. Dissertation: Climatic impact of lowland deforestation on tropical montane cloud forests in Costa Rica. Department of Atmospheric Sciences, Colorado State University, 140 pp.
- Papineau, John M., 1998, Ph.D. Dissertation: Orographic precipitation: A mesoscale modeling perspective. Department of Atmospheric Science, Colorado State University, 131 pp.
- Poulos, Gregory S., 1996, Ph.D. Dissertation: The interaction of katabatic winds and mountain waves. Department of Atmospheric Science, Colorado State University, 300 pp.
- Snook, John, 1993, Ph.D. Dissertation: An investigation of Colorado Front Range winter storms using a nonhydrostatic mesoscale numerical model designed for operational use. Department of Atmospheric Science, Colorado State University, 373 pp.
- Song, Jenn-Luen, 1986, Ph.D. Dissertation: A numerical investigation of Florida's sea breeze-cumulonimbus interactions. Department of Atmospheric Science, Colorado State University, 187 pp.
- Strack, John E., 2006, Ph.D. Dissertation: Arctic tundra shrub invasion and soot deposition: consequences for spring snowmelt and near-surface air temperatures. Department of Atmospheric Sciences, Colorado State University, 127 pp.

- Vidale, Pier Luigi, 1998, Ph.D. Dissertation: Contributions of land surface forced mesoscale circulations to the total heat, moisture and momentum budgets over BOREAS. Department of Atmospheric Science, Colorado State University.
- Wesley, Douglas A., 1991, Ph.D. Dissertation: An investigation of the effects of topography on Colorado Front Range winter storms. Department of Atmospheric Science, Colorado State University, 197 pp.
- Zeng, Xubin, 1992, Ph.D. Dissertation: Chaos theory and its application in the atmosphere. Department of Atmospheric Science, Colorado State University, 177 pp. + appendix.

## **WORKSHOPS ATTENDED**

- American Meteorological Society Workshop in Micrometeorology, Boston, Massachusetts, August 14-18, 1972.
- Invited participant to the Bureau of Reclamation Skywater Workshop on July 22-25, 1974.
- Invited participant to the AFOS (Automatic Forecast Office Station), National Weather Service Workshop in Silver Spring, Maryland, October 4, 1974.
- Invited participant in a short workshop entitled Modeling the Urban Boundary Layer, May 5, 1975, Las Vegas, Nevada. Presented a short talk discussing K-theory.
- Invited attendee at the International Symposium on the Boundary Layer, November 3-4, 1975, Madison, Wisconsin.
- Invited participant at a workshop held November 5-7, 1975 in Boulder, Colorado, to produce a boundary layer research plan for Project SESAME.
- Invited participant at the Ecology-Meteorology Workshop at Douglas Lake Biological Station, Michigan, from August 16-20, 1976. Session was entitled Biological Wind Prospecting.
- Invited participant to the ERDA Workshop on Models in Wind Energy Utilization, November 9-11, 1976, Battelle, Seattle, Washington. Presented an informal paper outlining application of mesoscale model to wind power studies.
- Invited participant to a Workshop sponsored by Carl Kreitzberg of Drexel entitled Workshop on Local Weather Forecast Techniques, 1980 and Beyond, March 10-11, 1977, Philadelphia, Pennsylvania.
- Invited participant to the Numerical Modeling Workshop sponsored by the Aerosol Group at NCAR, June 23-24, 1977, Boulder, Colorado. Presented an informal paper outlining our current work.
- Invited participant to an AMS Workshop on Future National Atmospheric Research Efforts, sponsored by the National Science Foundation, August 17-18, 1977, Boston, Massachusetts. Invited in the capacity as chairman of the AMS Committee on Weather Forecasting and Analysis.
- Invited participant to the Workshop on Solar-Terrestrial Studies on the Space Shuttle, Guntersville, Alabama, October 11-13, 1977.
- Invited participant to the AMS Workshop on Mesoscale Interactions with Cloud Processes, October 24-25, 1977, NCAR, Boulder, Colorado. One of two lead discussants on theoretical aspects of orographic situations.
- Invited participant to the NOAA Environmental Research Lab Workshop on Mesoscale Modeling, October 26-27, 1977, at ERL, Boulder, Colorado.
- Invited participant to the Prototype Regional Observing and Forecasting Service (PROFS) Workshop, sponsored by the Environmental Research Labs of NOAA, Estes Park, Colorado, March 12-17, 1978.
- Invited participant to the Southern Newspaper Publishers Association Foundation Seminar entitled Weather as News held May 7-10, 1978, College Station, Texas (see PSNT-22).
- Invited to serve as Chairman of the Session on Orographic Cloud and Precipitation at the AMS Cloud Physics and Atmospheric Electricity Conference held July 31-August 4, 1978, Issaquah, Washington.
- Invited participant and moderator of one afternoon of the Environmental Research Lab of NOAA's sponsored Workshop on the Planetary Boundary Layer held August 14-18, 1978, Boulder, Colorado.
- Invited participant to the NOAA Workshop on Weather Modification. Presented a paper entitled Non-Seeding Approaches to the Modification of Summertime Cumulus, May 16-18, 1979, Pingree Park, Colorado (see PSNT- 29).
- Invited participant to Mesoscale Planning Conference, Norman, Oklahoma, March 26-27, 1979.

Invited participant to a Symposium entitled Symposium on Intermediate Range Atmospheric Transport Processes and Technology Assessment, October 1-3, 1980, Gatlinburg, Tennessee. Sponsored by the U.S. Department of Energy, NOAA and the Oak Ridge National Laboratory.

Invited participant to a Workshop entitled Transport and Removal of Atmospheric Particles, Bologna, Italy, December 15-17, 1980.

Invited participant to a Workshop entitled Representativeness of Meteorological Observations, Boulder, Colorado, June 29-July 1, 1981.

Invited participant to a UCAR Workshop on the National STORM Program, Norman, Oklahoma, June 3-4, 1982.

Invited speaker to an EPA Jamboree, Southern Pines, North Carolina, July 27- 28, 1982. Presented a talk with R.T. McNider entitled Investigation of the Transport and Diffusion of Pollutants in complex Terrain Using a Numerical Model. Presented the same talk on July 27 at the Meteorology Section of EPA in Research Triangle Park, North Carolina.

Attended UCAR Annual Member's Meeting as a substitute for Judd Harper, UCAR Member Representative, Oct. 8-9, 1985, Boulder, Colorado.

Organizer of the CIRA Workshop on Acid Deposition in Colorado, Colorado State University, August 13-15, 1986 in Pingree Park, Colorado.

U.S. Organizer of the International Conference on Energy Transformations and Interactions with Small and Mesoscale Atmospheric Processes, March 2-6, 1987, Lausanne, Switzerland.

Invited Attendee to the European Panel of the U.S. Army Research Office, May 12-15, 1987, Risø National Laboratory, Roskilde, Denmark.

Invited to serve as Chairman of the Session of the Seminar/Workshop on Wind Engineering: The Past to the Future, June 4-5, 1987, Colorado State University, Fort Collins, Colorado.

Member of the panel 'Challenge of Using Mesoscale Data in Mesoscale Numerical Models', IAMAP at the IUGG XIX General Assembly Meeting, Vancouver, British Columbia, Canada, August 17-19, 1987.

Invited to serve as Organizer of the Formal Panel Discussion entitled Mesoscale Forecasting Today and Tomorrow--Problems and Opportunities, as part of the IUGG Symposium on Mesoscale Analysis and Forecasting, Incorporating Nowcasting, August 17-19, 1987, Vancouver, British Columbia, Canada.

Invited to serve as Chairman of the Session on Thermally or Topographically Forced Flow I, of the 3rd AMS Conference on Mesoscale Processes, August 21-26, 1987, Vancouver, British Columbia, Canada.

Co-Organizer of the Workshop on Monitoring Climate for the Effects of Increasing Greenhouse Gas Concentrations, CIRA, Pingree Park, Colorado, August 26-28, 1987.

Attended the Short Course on the Use of Numerical Weather Prediction Guidance and Weather Satellite Imagery by the Broadcast Industry of the American Meteorological Society, June 25, 1987, Reno, Nevada.

Invited participant to the League of Women Voters of the Pikes Peak Region Workshop Designing With the Wind.....Can Open Space Corridors Improve Air Quality in Urban Areas. October 2, 1987, Colorado Springs, Colorado.

Invited panel member to the workshop "A Brown Cloud Forum, Session III: Understanding the Causes" sponsored by the University of Denver in cooperation with U.S. Senator William Armstrong. February 8, 1988, University of Denver Campus, Denver, Colorado.

Scientific Advisory Member for the 2nd International Conference on Atmospheric Sciences and Applications to Air Quality. October 3-7, 1988, Science Council of Japan, Minato-ku, Roppongi 7-22-34, Tokyo 106, Japan.

Co-Organizer of the ARO Workshop on Large Eddy Simulations, November 2-4, 1988, Breckenridge, Colorado.

Attended the CRAY XM/P Upgrade Committee Workshop, NCAR, June, 1989.



Attended the Precipitation Measurement and Modeling Workshop, Pingree Park, Colorado, August 23-25, 1989.

Organizer and co-chairman of the session on Meteorological and Climatological Factors Influencing Visibility at the AWMA/EPA International Specialty Conference entitled Visibility and Fine Particles, Estes Park, October 1989.

Co-Organizer of the RAMS Workshop, Fort Collins, Colorado, October 10-11, 1989.

Invited panel member to the Mesomet Advisory Panel Conference, Traben-Trarbach, FRG, April 23-27, 1990.

Convener of the Symposium on Meteorological Aspects of Mesoscale and Long-Range Pollution Transport, Reading, England, August 1, 1990.

Invited attendee to the Complete Modeling System Workshop, Atlanta, Georgia, November 7-8, 1990.

Invited attendee to the Workshop on the Army Regional Aerosol Transport Simulation (ARATS), Camberley, England, October 29-October 30, 1990.

Attendee, Mesomet Advisory Panel Conference, U.S. Army Atmospheric Sciences Laboratory, White Sands Missile Range, New Mexico, December 3-7, 1990.

Attendee, Project MOHAVE Planning Workshop, Denver, Colorado, April 29-May 2, 1991.

Invited panel member to the Colorado Center for Environmental Management Workshop on Hazardous Waste and Environmental Restoration, University of Denver, May 22, 1991.

Invited attendee and organizer of the 4-Dimensional Data Assimilation and Predictability on the Mesoscale Workshop, Fort Collins, Colorado, May 21-23, 1991.

Invited attendee to the Workshop on Requirements for Global Scale Terrestrial Biospheric Data Sets for IGBP Core Projects, Hotel Expo, Toulouse, France, June 17-19, 1991.

Panelist, "Climate Change: What Effect on Land?", August 7, 1991.

Co-Convener of Session M5: The Parameterization of Complex Terrain Effects in Regional and Large-Scale Models. IAMAP, August 13, 1991.

Chairperson of Session 4B: Planetary Boundary Layer and Surface Parameterization at the AMS 9th Conference on Numerical Weather Prediction, Denver, Colorado, October 14-18, 1991.

Co-Organizer of the Workshop on Global Climate Change and Regional Responses, Pingree Park, Colorado, October 21-24, 1991.

Content facilitator, Regional Haze Workshop, Scottsdale, Arizona, December 10-12, 1991.

Attended the SERON Science Team Meeting, Research Triangle Park, North Carolina, February 27-28, 1992.

Participant, TERRA Climate Scenario Workshop, Boulder, Colorado, March 3, 1992.

Gave a Colloquium in the Colorado School of Mines Physics Department, April 21, 1992, Golden, Colorado.

Attended the Project MOHAVE Data Analysis (Including Modeling) Meeting, Fort Collins, Colorado, May 27-28, 1992.

Chaired session on Subgrid Scale Parameterization at the Mesoscale Modeling Workshop Incorporating Project Wind Data, El Paso, Texas, June 16-18, 1992.

Attended the PILPS Planning Meeting, Columbia, Maryland, June 24-26, 1992.

Attended the ISLSCP Americans Workshop, Remote Sensing of the Land Surface for Studies of Global Change, Coiwlumbia, Maryland, June 23-26, 1992

Attended the Aspen Global Change Institute Summer Session on Freshwater, Land and Biologic Interactions, Aspen, Colorado, July 19-August 1, 1992.

Member, Steering Committee for the Second International Conference/Workshop on Integrating GIS and Environmental Modeling, September 26-29, 1992, Breckenridge, Colorado.

Member, Scientific Review Committee for the EPA Habitat Sensitivity Program, January 27-29, 1993.

Member, Meteorology Subcommittee of the Grand Canyon Visibility Transport Commission Technical Committee, 1992-1995.

Attended the Integrated Regional Models: Analysis of Interactions between Humans and their Environment Workshop sponsored by the Institute of Ecosystem Studies, Box AB, Millbrook, NY 12545.

Chairperson, Coupled Mesoscale Modeling Colloquium and Workshop, NASA, Calverton, Maryland, February 22-25, 1993.

Attended the BOREAS Winnipeg Workshop, May 26-28, 1993.

Member, Science Advisory Committee (SAC) for the Center for Geosciences, July 1, 1993 -- June 30, 1994.

Chairperson of Session 12: Land-surface processes and climate at the Joint Scientific Assembly of the International Association of Meteorology and Atmospheric Physics and the International Association of Hydrological Sciences, July 15, 1993, Yokohama, Japan.

Attended BOREAS Modeling Workshop, Missoula, Montana, February 7-9, 1994.

Attended the Grand Canyon Visibility Transport Commission Meteorological Model Reconciliation and Clear Air Corridor Meteorological Characterization Workshop, August 30-31, 1994, Flagstaff, Arizona.

Organizing Committee, Second International Symposium on Computational Wind Engineering, August 4-8, 1996, Colorado State University, Fort Collins, Colorado.

Provided input to the Colorado Legislative Council on the Air Quality State Implementation Plan, January 17, 1995.

Member of the Climate Variability Panel (Issues and Future Implications) at the US Dept. of Commerce and NOAA Workshop on Atlantic Hurricane Variability on Decadal Time Scales: Nature, Causes, and Socio-Economic Impacts. February 9-10, 1995, Coral Gables, Florida.

Attended the Climate Modeling and Analysis Program Science Advisory Council Meeting, December 7-8, 1995, Boulder, CO. Attended the Workshop on the DOE Initiative Concerning Vertical Transport Phenomena in the Southwest USA, 28-30 August 1996, NCAR, Boulder, Colorado.

Provided advice on pages 70-73 in "Everyday Science Explained", National Geographic Society, 1996 by Curt Suplee.

Chair of the session entitled "Assessment of land-surface heterogeneity in hydrological modelling -- General issues", 5th Scientific Assembly of the International Association of Hydrological Sciences (IAHS), Rabat, Morocco, 23 April-3 May 1997.

Member, IGBP BAHC 9th Scientific Steering Committee, Shonan Village, Japan, May 6 & 13, 1999.

Coordinator for Session BAHC-1 combined with LUCC2 and GCTE2 - Landscape disturbance, land cover change, and land atmosphere feedback, Shonan Village, Japan, May 12, 1999.

Attended the American Association of State Climatologists (AASC) Annual Meeting, Charleston, South Carolina, July 25-28, 1999.

Attended the SGS Site Review, July 11-13, 1999, Fort Collins, CO.

Member, CSU LTER Executive Committee (1997-present)

Member, Committee for "The Symposium on Observing and Understanding the Variability of Water in Weather and Climate" to be held at the American Meteorological Society's 2003 Annual Meeting in Long Beach, California.

Attended the NRC/CRC Workshop on "Climate Change Feedbacks: Characterizing and Reducing Uncertainty", August 13-16, 2001, Boulder, CO.

Member, Committee on Carbon Monoxide Episodes in Meteorological and Topographical Problem Areas, National Research Council, Irvine, California, 2001-2003.

Attended the NCDC-RCC Synchronization Meeting, August 20th, Asheville, NC, 2002.

Chairperson, Joint Session 8: Role of Vegetation and Land Use/Land Cover in the Water Cycle (Joint with the Symposium on Observing and Understanding the Variability of Water in Weather and Climate and the 17th Conference on Hydrology), February, 2002.

Member of the National Research Council's (NRC) Committee on Radiative Forcing Effects on Climate, 07/2003-12/31/2004.

Chair of the AGU Hydrology Days 2003 Session entitled "The Dynamics of Drought", April 1, 2003, Fort Collins, Colorado.

Co-Chaired the Forum on Modeling the Atmospheric Boundary Layer Sponsored by the Army Research Laboratory and the DoD Center for Geosciences/Atmospheric Research with Dr. Jon Mercurio and Dr. Tomislava Vukicevic, May 19-23, 2003, Fort Collins, CO.

Member of the Roger Revelle Medal Committee of the American Geophysical Union for the term July 1, 2004 - June 30, 2006.

Co-Organizer of the NSF Sponsored Workshop **Detecting the Atmospheric Response to the Changing Face of the Earth: A Focus on Human-Caused Regional Climate Forcings, Land-Cover/Land-Use Change, and Data Monitoring**, August 27-29, 2007 Boulder, CO. See: <http://cires.colorado.edu/science/groups/pielke/links/Detect/>

Chair, AGU Earth Interactions Editor Search Committee (2008).

Member, ESD Advisory Committee Member, Oak Ridge National Lab, Oak Ridge, TN (2007-present)

#### **CURRENT OR PAST MEMBERSHIP IN PROFESSIONAL AND SCIENTIFIC SOCIETIES**

Professional Member of the American Meteorological Society (currently)

Member of the Air Pollution Control Association (currently)

Gamma Theta Upsilon: National Professional Geography Fraternity - Beta Delta Chapter

Phi Kappa Phi: Academic Honor Society

Society of the Sigma Xi: Member, honorary organization devoted to the encouragement of research in pure and applied science

Chi Epsilon Pi: Honorary Meteorology Society

Regular Member of the Virginia Academy of Science

Member of the Canadian Meteorological Society

Nature Conservancy

American Wilderness Alliance

Adjunct Professor, Texas Tech University, 9/1/89 -- 8/31/94

#### **EDITORIAL SERVICE**

Associate Editor, *Journal of the Atmospheric Sciences*, for a three year term effective May 1979.

Chief Editor, *Monthly Weather Review* (January 1981 - December 1986).

Editor, *Theoretical and Applied Climatology* (formerly *Archives for Meteorology, Geophysics and Bioclimatology*), Series B. 1985 - January 1992.

Editor for the subfield Atmospheric Science for the *Earth Science Reviews*, 1986 - 1996.

Editor, *Meteorology and Atmospheric Physics* (formerly *Archives for Meteorology, Geophysics and Bioclimatology*), Series A, 1985 - 1991.

Editor, *Environmental Software* (1987 - 1994).

Editor, CIRA Newsletter, Volumes 1, 2 and 3, (1986-1988).

Consulting Editor, Mesoscale Meteorology, Encyclopedia of Climate and Weather (November 1990 - present).

Editorial Board, ENVIRONews, Fiatlux Publications, (January 1994 - present).

Editor-in-Chief, U.S. National Report to the International Union of Geodesy and Geophysics  
1991-1994.

Board of the Oxford Press Encyclopedia of Climate and Weather (1995-1996).

Co-Chief Editor, *Journal of Atmospheric Science*, (January 1996 - present).

Robert Ward, Roger Pielke, and Pepe Salas, Issue Editors, Universities Council on Water  
Resources, Water Resources Update, entitled "Is Global Climate Change Research  
Relevant to Day-to-Day Water Resources Management?" Issue No. 124, May 2003.

Editor, Water Resources Research, 2006-present

Editor, Scientific Online Letters on the Atmosphere (SOLA), 2006- 2008

## **PUBLIC SERVICE**

Brownsville PTA President (1977 - 1978).

Invited speaker on one-hour radio talk show - WJMA, Orange, Virginia, 1979, 1980 and 1981 (Topic - The Weather).

Emergency Medical Technician - Ambulance (EMT - March 1980).

Member of the Cunningham Island Preserve Management Committee of the Nature Conservancy (October 1980 - January 1982).

Appointed to the Colorado Air Quality Control Commission by Governor Richard Lamm, March 1983 for a four year term, renewed March 1987. Secretary, October 1987-December 1988; Vice-Chairman, December 1988-1989.

Soccer coach, Fort Collins Soccer, Spring 1983.

Distinguished Meteorological Observer for PROFS, July 1983.

Served on a panel to comment on the acid rain problem, sponsored by the Fort Collins League of Women Voters and the Audubon Society, November 10, 1983.

Served on a panel sponsored by COPIRG (Colorado Public Interest Research Group) on April 10, 1985 to discuss air quality problems in Fort Collins, Colorado.

Gave a presentation on Air Quality Research in Atmospheric Science at CSU at the CSU Industrial Relations Day, CSU, March 1, 1985 and March 7, 1986.

Participated in the Fort Collins Chamber of Commerce Partners Program, September 1986 - January 1987.

Gave a presentation on the ARO Grant to CSU to the Fort Collins Exchange Club, November 13, 1986, Fort Collins, Colorado.

Gave a presentation to the League of Women Voters/Sierra Club on Air Quality Problems in Fort Collins, January 14, 1987, Fort Collins, Colorado.

Directed student (Nicole Waage) as part of the Fort Collins Chamber of Conference Partnership program, Fall, 1986.

Gave lecture to journalism students at CSU on February 7, 1989 on air quality in Colorado, and experiences with the Air Quality Control Commission.

Provided evaluation of WNET/PBS script on the Everglades; first shown on March 26, 1989.

Participated in a talk show from 8:30 a.m. to 11:00 a.m. on KCOL 1430 AM radio in Fort Collins with Dr. Bob Woodmansee on the topic 'Possible Greenhouse Gas Climate Changes'.

Member of the State Auditor's Air Pollution Study Committee, September 1990 -- November 1991.

Gave lecture to Professor Bill Parton's class on 'Landscape Effects on Climate and Weather', April 23, 1991.

Member, Fort Collins Task Force on Hazardous Waste Disposal, 1991 -- present.

Reviewed content areas for the American Geological Institute, Earth Science Content Guidelines Grades K-12.

Gave lecture to Dennis Ojima's class in Natural Resources on April 30, 1992.

Gave a presentation on tornadoes to the 2nd Grade classes at Johnson Elementary School, Fort Collins, CO, May 19, 1993 and February 27, 1997.

Appeared on KOA 850 A.M. on June 15, 1993 on Mike Roseberg radio talk show.

Lectured to Professor Bill Parton's class NR676 entitled "Ecological Modelling" on May 2, 1995 and April 16, 1996.

Gave lecture at NREL, November 18, 1998 on "Landscape Effects on Regional and Global Weather and Climate".

Gave lecture to Indy Burke's NR660 class, April 10, 1998 on "Biogeochemical Cycling".

Gave lecture to Bill Parton's NREL April 29, 1999 class entitled "Vegetation Dynamics".

Gave invited lecture on surface and boundary layer physics for the 7-11 June 1999 COMET Faculty Course on Numerical Models, Boulder, Colorado.

Reviewed teacher edition chapters for the Holt, Rinehart, and Winston Science 2001 Program, 1998-1999.

Presented a talk to the CSU Chapter of the Society of Physics Students entitled "Limits to Climate Prediction - Influence of Nonlinear Feedbacks" on April 17, 1998.

Gave a lecture on Vegetation Dynamics to Bill Parton's class, April 29, 1999.

Appeared on Peter Boyle's Channel 12 talk show entitled "Inside Colorado"; the topic was "Global Warming" on July 5, 2000.

Invited Speaker at the Colorado Diversified Trust Annual Meeting, October 18, 2000, Fort Collins, Colorado.

Gave a lecture to Scott Denning's AT 606 Class on October 16, 2000 on "The Role of Human Land Use and Land-Use Change on Climate".

Appeared on KTKT990 AM Radio in Tucson, Arizona on March 15, 2001; the topic was "Global Warming".

Presented a seminar at the NREL Fall 2002 Seminar Series on "Future Directions of Global Ecosystem Science", Colorado State University, October 4, 2002 entitled "Atmosphere-land surface interactions in semi-arid regions."

## **HONORS AND FELLOWSHIPS RECEIVED**

National Science Foundation Traineeship (September 1968-January 1971).

Summer Computing Facility Fellowship (at the National Center for Atmospheric Research, Summer 1970)

Special Achievement Award - NOAA (at the Experimental Meteorology Lab) - For numerical modeling of the mesoscale dry sea breeze circulation over South Florida, January 1 through June 1, 1973.

HF-1 Work referenced in July/August 1975 issue of National Science Foundation Mosaic, 6, # 4, 17-18 (Based on interview by William Cowlis).

Work referenced in July 21, 1973, Vol. 104, No.3, p. 34 of Science News in article titled Predicting Sea Breeze Patterns.

Listed in 13th Edition of American Men and Women in Science.

NOAA Distinguished Authorship Award for 1974 paper entitled A Three- Dimensional Model of the Sea Breezes over South Florida, Monthly Weather Review, 102, 115-134.

Interviewed concerning work published in Weatherwise, 28, 156-160 entitled Ice Fall from a Clear Sky in Fort Pierce, Florida, by News Tribune, Fort Pierce, Florida, December 1973 and by Daily News Record, Harrisonburg, Virginia, March 1976. The March interview carried over the Associated Press.

Received 1977 American Meteorological Society's Leroy Meisinger Award for Fundamental Contributions to Mesoscale Meteorology through Numerical Modeling of the Sea Breeze and Interactions among the Mountains, Oceans, Boundary Layer, and the Free Atmosphere.

HF-2 Guest Editor (with Lance F. Bosart) of the December 1976 issue of Monthly Weather Review. Wrote Forward at beginning of issue with Dr. Bosart.

Presented the Special Achievement Citation by Towson State University and the Alumni, September 1977.

Certified Consulting Meteorologist (CCM), granted 1977.

Elected Fellow of the American Meteorological Society, October 1982.

Listed in the 20th Edition of Who's Who in the West, August 1985.

Received the 1984 Abell New Faculty Research and Graduate Program Award.

Listed in the 1987 Edition of Who's Who of Emerging Leaders in America.  
 Received the 1987/1988 Abell Research Faculty Award.  
 Listed in the 1991 Edition of American Men and Women in Science.  
 Listed in the 1992-1993 Edition of Who's Who in American Education.  
 Listed in the 1992 Edition of Who's Who Environmental Registry.  
 Appointed CIRA Fellow, October 1, 1983 - December 31, 2005.  
 Awarded the CSURF 1993 Researcher of the Year Award.  
 Designated a Pennsylvania State Centennial Fellow in 1996.  
 Listed in the 1996-97 Edition of Who's Who in Science and Engineering.  
 Ph.D. Student Lixin Lu was awarded one of 12 Outstanding Student Paper Awards out of 310 student presentations on behalf of the Hydrology Section at the Fall 1998 AGU Meeting.  
 NOAA Distinguished Authorship Award with Conrad Ziegler and John Lee for 1997 paper entitled Convective initiation at the dryline: A modeling study. *Mon. Wea. Rev.*, **125**, 1001-1026.  
 Alumni Award for the College of Earth and Mineral Sciences along with Bill Cotton at the Pennsylvania State University, 1999.  
 Received the Engineering Dean's Council Award in April 2000.  
 Listed in EMPIRE (Empowering Executives & Professionals) Who's Who Executive and Professional Registry, February 2003.  
 Named a Fellow of the American Geophysical Union, May 19, 2004 in Montreal, Quebec, Canada, for his fundamental contribution in hydroclimatatology and his lasting impact on the philosophy of the discipline. Only 1/10th of 1 percent of the AGU membership are named fellows in any given year, and only 2 percent of the total Union's membership are fellows.

## **PREPARED REVIEWS FOR THE FOLLOWING JOURNALS, BOOKS AND AGENCIES**

U.S. Army  
 Bulletin of the American Meteorological Society  
 CRC Press  
 Cambridge University Press, Elsevier Science  
 Dynamics of Atmospheres and Oceans, Elsevier Science  
 Energy Research and Development Administration  
 Geophysical Research Letters  
 Review of Geophysics and Space Physics  
 Environmental Protection Agency  
 Journal of Applied Meteorology  
 Journal of the Atmospheric Science  
 Monthly Weather Review  
 National Center for Atmospheric Research  
 National Science Foundation  
 Quarterly Journal of the Royal Meteorological Society  
 Random House, Inc.  
 U.S. Department of Energy  
 Lawrence Livermore Laboratory  
 John Wiley and Sons, Inc.  
 Archives for Meteorology, Geophysics and Bioclimatology, Series A  
 Geological Survey

Journal of Geophysical Research  
Tellus  
Journal of Computational Physics  
Climatological Bulletin (Canada)  
Colorado Office of State Auditor  
National Research Council, Commission of Engineering and Technical Systems  
Climate Change  
National Academy of Sciences, Marine Board  
Division of International Programs, National Science Foundation  
National Environment Research Council, United Kingdom  
Prentice Hall, Inc.  
Australian Research Committee  
Reviews of Geophysics  
Science  
Journal of the Meteorological Society of Japan  
Army Research Office  
New Jersey Agricultural Experiment Station  
National Center for Supercomputing Applications  
Journal of Geophysical Research - Atmosphere  
Air Force Office of Scientific Research (AFOSR) Atmospheric Sciences Review Panel  
Monograph on Climate Systems Modeling, K. Trenberth (Editor)

#### **CONSULTANT WORK**

Vandeventer, Black, Meredith and Martin (Law Firm)  
McGuire, Woods and Battle (Law Firm)  
Lockheed Electronics Company  
Valley Environmental Council (citizen's group)  
ERT  
Oak Ridge National Laboratory  
Simpson Weather Associates  
Brookhaven National Laboratory  
Lawrence Livermore Laboratory  
Stanford Research Institute (SRI)  
Western Oil and Gas Association  
Decision Focus, Inc.  
Arthur D. Little, Inc.  
Los Alamos National Laboratory  
Wisconsin Division of Natural Resources  
Natural Environment Research Council, United Kingdom  
Lockheed-Martin  
SAIC  
University of Alabama at Huntsville  
Oak Ridge National Laboratory  
AATA International, Inc.  
EROS Data Center  
South Florida Water District



## COMMITTEES SERVED ON

### University and Department Committees

- Member of the University of Virginia's College of Arts and Sciences Task Force on Telecommunications (January through April 1975).
- Member of the University of Virginia's Department of Environmental Sciences Library Committee (1974-1975).
- Member of the University of Virginia's Department of Environmental Sciences Undergraduate Review Committee.
- Organizer of the University of Virginia's Department of Environmental Sciences Seminar (1976-1977).
- Member of the University of Virginia's Department of Environmental Sciences Graduate Academic Review Committee (1978-1981).
- Member of the University of Virginia's Dean's Committee for Undergraduate Advising (1978-1981).
- University of Virginia's Faculty Honor Advisor for Environmental Sciences (Fall 1979-1981).
- Member of the Colorado State University Department Seminar Committee, 1983-1984.
- Member of the Colorado State University College of Engineering Computing Committee, Fall 1984-August 1988.
- Chairman, September 1986-August 1988, September 1992-August 1994.
- Member of the Colorado State University College of Engineering Faculty Awards Selection Committee, January 1985.
- Chairman of the Colorado State University Department of Atmospheric Science Computing Committee, January 1985-August 1988.
- Faculty Representative, Engineering Dean's Council Advisory Board, Colorado State University (1987/1988 academic year).
- Member, Special Advisory Committee, Department of Atmospheric Science, Colorado State University, 1987/88.
- Member, Faculty Search Committee, Department of Atmospheric Science, Colorado State University, 1987/88.
- Member, Advanced Technical Computing Coordinating Committee of Colorado State University, appointed by J. Harper, Research Vice-President, March 1988-1989.
- Chairman, College of Engineering Awards Committee, 1990 Faculty Awards Banquet, May, 1990.
- Member's Representative to the 9-10 October Annual Meeting of UCAR Members, Boulder, Colorado, 1990.
- Served on the CSU University Committee for allocation of NCAR YM/P computer resources 1990-1991.
- Served on the Research Associate Screening and Promotion Committee for the Department of Atmospheric Science at Colorado State University, 1991-1994, 1999-2004, Chairman-1995.
- College Vision Faculty Focal Group, 1993.
- Atmospheric Science Library Representative, Colorado State University, 1992-1993.
- Member, University Grievance Committee, 1998-2002.
- Chair, University Grievance Committee, May 27, 1998.
- Appointed Advising Faculty Member in the Graduate Degree Program in Ecology, 1996-present.
- Member, CSU Faculty Council Executive Committee Program in Ecology (1996 - 2003).
- Faculty Representative to the College Professional Development Committee, 1997-1998 academic year.
- Member, Department Code Revision Committee, 1995-1998.
- Member, College Code Revision Committee, 1997-1998.

Member, NSF sponsored, Long-Term Ecological Research (LTER) Executive Committee, 1998-1999.

Member, Local Organizing Committee of the 2nd International Symposium on Computational Wind Engineering (CWE-96), CSU, August 1996.

Session Chairman, Workshop on Land-surface Modeling and Application for Mesoscale Models, NCAR, Boulder, CO, June 24-25, 1999.

Member, GDPE Executive Committee, 1999-2005.

Faculty Council Representative, July 1, 2000 - June 30, 2003.

Member, Dean's Council Award Committee, 2001.

Executive Committee of Faculty Council, July 1, 2001- June 30, 2002.

Member, College Code Committee, January 2002-2003.

Member, Committee to Award the Endowed Borland Professorships in Civil Engineering, Colorado State University, 2002.

### **Other Committees**

Member of the American Meteorological Society's Committee on Weather Forecasting and Analysis (1975).

Chairman of the American Meteorological Society's Committee on Weather Forecasting (1976-1977).

Guest Editor (with Lance Bosart) for the December 1976 issue of Monthly Weather Review.

Invited to serve on the NASA Supporting Research and Technology Ad Hoc Advisory Subcommittee in order to review unsolicited proposals and returned peer reviews at Goddard Space Flight Facility, Maryland, August 21-23, 1978.

Member of the AMS Awards Committee (1980).

Member of the Virginia Division of Forestry, Herbicide Study Committee (1981).

Chairman of the AMS Ad Hoc Committee on the Feasibility of a Compendium of Forecasting (report submitted to AMS, January 1981).

Invited member - Scientific Panel Evaluation Committee (SPEC) of the Mesoscale Research Section of the National Center for Atmospheric Research (NCAR), January 29-30, 1981.

Invited member - Review Panel of the Atmospheric Sciences Program which the Department of Energy is supporting at NOAA's Air Resources Laboratory, June 16, 1981.

EPA Environmental and Physics Panel - Air (May 1982-1985). Invited panel member whose task is to meet periodically in order to evaluate proposals to the EPA.

Invited panel member to a meeting entitled EPA Research Plan for Acid Precipitation and Atmospheric Processes. Crystal City, Virginia, May 24- 25, 1982.

Invited member - AMS/EPA steering committee for the Specialty Conference on Modeling Non-Homogeneous, Non-Stationary Urban Boundary Layers, held October 1983 in Baltimore, Maryland (June 1982-October 1983).

Invited reviewer of Chapter 4 (Transport Processes) and invited facilitator of Chapter 8 (Deposition Models) in Volume 1 of the EPA document entitled Acidic Deposition Phenomena and its Effects - A Critical Assessment Document, in Raleigh, North Carolina, November 1-2, 1982.

Member of the AMS Publication Commission, 1981-1986.

Invited member of the EPA Review panel on the EPA Complex Terrain and Urban Particulate Modeling Programs, January 11-13, 1983.

Invited member of the AMS Ad Hoc Committee of the AMS Publication Commission to develop a policy for bringing research reviews to AMS journals (1983- 1984).

Member of the CRAY X-MP 4800 Front-End Procurement Committee, NCAR, January 1985-1986.

Member of the Laser Printer Selection Committee, NCAR, January-February, 1986.

Member, Technical Topic Team for SCENES Intensive Studies, June 1986 - 1987.

Member of the Advisory Committee of Envirosoft 88, September 27-29, 1988, Porto Carras, Greece.

Member of the Blue Ribbon Diesel Task Force, Governor Romer's Office, October, 1987-April 1988.

Member of NOAA/ERL Program Office Wind Profiler Assessment Committee, June 1987-April 1988.

Member of the R\*SCAN Corporation and Scientific and Technical Advisory Committee (STAC), November 1, 1987- October 31, 1990.

Member of the Peer Review Committee for the 1987/1988 Metro Denver Brown Cloud Study, Fall 1987.

Member, Scientific Advisory Committee, South Central Coast of California Air Monitoring Program, 1984 - 1987.

Scientific Advisory Committee for the Conference entitled ENVIROSOFT 86, November 19-21, 1986, Newport Beach, California.

NASA Science Advisory Committee for Phase I of LASE (Lidar Atmospheric Sounding Experiment), July 1985 -December 1989.

Member, AMS Committee on Mesoscale Processes for a three year term, January 31, 1986-January 31, 1989.

Member, ICDM Working Group C - Mesoscale Dynamics Working Group, February 1986-1987, Secretary for Working Group 6 on Mesoscale Dynamics, May 1986-1987. Member since February 1986.

Member, NCAR ATD Field Observing Facility (FOF) Advisory Panel, April 1986 - October 1989. Vice-Chairman of the NCAR FOF Panel, October 1987-April 1988; Chairman, October 1988-April 1989.

Member, National Acid Precipitation (NAPAP) Task Group III (Transport) Advisory Committee, April 1986.

Member, Air Quality Subcommittee of the Fort Collins Area Chamber of Commerce February 1988-August 1988.

Member of the U.S. Army European Advisory Panel on Meteorological Research (1989 - 1993). Reviewed 3 research applications for the National Board of Employment, Education and Training, Australian Research Council, Research Grants Committee.

Member, Colorado Environment 2000 Project, Air Work Group, November 1988-Fall 1989.

Chairman, NCAR ATD Director Search, July-September, 1989.

Member, Air Expertise Committee, Governor's Rocky Flats Scientific Panel on Monitoring Systems, July, 1989-1994.

Chairman, Visibility Subcommittee of the Colorado Air Quality Commission (August 1987 - June 1989).

Chairman, NCAR FOF Panel, Fall, 1988.

Elected a member of the American Geophysical Union, April, 1989.

Served on the Technical Program Committee for the AWMA/EPA International Specialty Conference entitled Visibility and Fine Particles, Estes Park, October 1989.

Member, Grasslands and Grassland Science in Northern China Committee on Scholarly Communication with the People's Republic of China (CSCPRC), National Academy of Science, American Council of Learned Societies and Social Sciences Research Council, Washington, DC, May 1990-September 1991.

Member, International Scientific Advisory Committee for Envirosoft 90, 3rd International Conference on Development and Application of Computer Techniques to Environmental Studies, Montreal, Canada, September 11-13, 1990.

Member, Winter Icing and Storms Project (WISP) Science Steering Committee, Winter 1988/89 and Winter 1990/91-1993.

Member, National Research Council, Board of Atmospheric Sciences and Climate, Panel on Coastal Meteorology, December 1990-September 1991.

Member, Meteorological Subcommittee, Denver Brown Cloud Study II, December, 1990 - 1991.

Member, Ad Hoc Steering Committee for International Satellite Land Surface Climatology Project (ISLSCP), March 1991 - 1992.

Appointed Member, Air Quality and Visibility Advisory Panel for CIRA (1991-1994).

Member of the Scientific Advisory Committee Review of ASCOT and Aircraft Operations Programs, Pacific Northwest Laboratory, October 8-9, 1991.

Chaired Session 2 at the International Conference on Mountain Environments in Changing Climates, Davos, Switzerland, October 12, 1992.

Member-at-Large of the AMS Publications Commission for a 3-year term beginning January 1993.

Member, TERRA Science Committee, 1992-1995.

Member, Committee on the Coastal Ocean, March 25, 1993 { December 31, 1995.

Served on the NSF Review Panel for Small Business Innovation Research (SBIR) proposals. Boulder, Colorado, September 13-14, 1993.

Member, International Commission for Dynamical Meteorology, 1995 - 1996.

Member, NCAR Scientific Computing Division Advisory Panel (1995 - 1996).

Member, Second and Third Prospectus Development Team of the U.S. Weather Research Program to NOAA and NSF, 1995.

Member, AGI Upper Elementary Earth Science Sourcebook Advisory Steering Committee (1996 - 1998).

Member, IGBP BAHC Scientific Steering Committee, February 1998.

Member, Joint Project Working Group between IHP-V and IGBP-BAHC, 1999-2003.

Member, Science Steering Committee for the Land-Atmosphere-Ice Interactions (LAI) studies of ARCSS, 1998-2001.

Reviewed Tornado Alley: Monster Storms of the Great Plains by H.B. Bluestein for Nature, Volume 398, 304.

Member, NSF Hydrology Committee to develop new mission statement for this component of the NSF (WEB: Water, Energy, Biosphere), 2000-2001.

Served as the “Weather Guy” for AOL (August 1996-December 1999) to answer weather questions for children on the Kids Only Channel.

Serving as Advisor to the Encyclopedia Britannica in their updating of the atmospheric science material in their new edition (December 1999-2003).

Member, Encyclopedia of Atmospheric Sciences Editorial Advisory Board (November 2000 - November 2001).

Member, AMS Committee on Meteorology and Oceanography of the Coastal Zone, January 31, 1997-January 30, 2000.

Member, Center for Advanced Studies (CAS) External Advisory Panel, University of New Mexico, Albuquerque (January 2001 for a 3-year term).

Chair of the Plenary Session on Writing, Publication, and Discussion of Reports at the IGBP Global Change Meeting on Nonlinear Responses to Global Environmental Change: Critical Thresholds and Feedbacks, IGBP Nonlinear Initiative, May 27-29, 2001, Duke University, Durham, NC.

Member, Planning Group, Planning Process for a Future Land Project in IGBP II and IHDP, January 21-23, 2002, Fort Collins, CO.

Member, Mesoscale Wind Modeling Peer Review Board, Mars Exploration Rover Project, March 8, 2002, Jet Propulsion Laboratory, Pasadena, CA.

Long-Term Hydrologic Observational (LTHO) Planning Committee (February 2002-present).

President-Elect, American Association of State Climatologists (2001-8/2002).

President, American Association of State Climatologists (2002 - 2003).  
Member, AGU Hydrology Days 2002 Committee, April 1-4, Colorado State University, Fort Collins, CO.  
Member, Editorial Advisory Board of the Encyclopedia of Atmospheric Sciences, 2002.  
Reviewed a report entitled "Air Emissions from Animal Feeding Operations" for the National Academies Research Council Board on Agriculture and Natural Resources and the Board on Environmental Studies and Toxicology, Washington, DC, October, 2002.  
Provided testimony at the Hearing before the Subcommittee on Oversight and Investigations of the Committee on Energy and Commerce, House of Representatives, One Hundred Seventh Congress, Second Session, July 25, 2002. Available at <http://www.access.gpo.gov/congress/house>  
Member, Peer Review Panel for Research Proposals for the South-Central Regional Center of National Institute for Global Environmental Change (NIGEC), Tulane University, New Orleans, LA, Summer 2003.  
Member, UCAR Membership Committee, appointed October 2003-2005.  
Member, NASULGC Board on Oceans and Atmosphere Executive Committee (BOAEX), 2003-2005.  
Served as External Reviewer for the Master's thesis of Chris Douglas Smith, University of the West Indies, Cave Hill, Barbados, West Indies, July 1, 2007.  
Served as External Reviewer for the Ph.D. dissertation of Mr. Ashoke Basistha, Indian Institute of Technology, Roorkee, India, July 2008. Dissertation Entitled "CLIMATE CHANGE STUDIES: A SPATIO-TEMPORAL ANALYSIS FOR PART OF INDIA."