

Literaturverzeichnis

- Adrian G., Fiedler F., 1991: Simulation of unstationary wind and temperature fields over complex terrain and comparison with observations; *Beitr. Phys. Atmos.* **64**, 27–48.
- Adrian G., 1994: Zur Dynamik des Windfeldes über orographisch gegliedertem Gelände; *Ber. d. Deutschen Wetterdienstes* **188**, Offenbach, 142 S.
- Banta R. M., Hanson K. R., 1986: Numerical simulation of the development of mountain cumulus clouds; *Proc. WMO/IUGG NWP Symposium, Tokyo*, 767–775.
- Banta R. M., 1990: The role of mountain flows in making clouds; In: Blumen (1990), 229–284.
- Battan L. J., 1976: Vertical air motions and the $\mathcal{Z}$ – $\mathcal{R}$ relation; *J. Appl. Meteor.* **15**, 1120–1121.
- Beheng K. D., Doms G., 1986: A general formulation of collection rates of cloud and raindrops using the kinetic equation and comparison with parameterizations; *Beitr. Phys. Atmos.* **59**, 66–84.
- Beheng K. D., Doms G., 1990: The time evolution of a drop spectrum due to collision/coalescence: A numerical case study on the effects of selfcollection, autoconversion and accretion; *Meteor. Rdsch.* **42**, 52–61.
- Beheng K. D., 1994: A parameterization of warm cloud microphysical conversion processes; *Atmos. Res.* **33**, 193–206.
- Benoit R., 1977: On the integral of the surface layer profile–gradient functions; *J. Appl. Meteor.* **16**, 859–860.
- Bergmann J. C., 1998: A physical interpretation of von Kármán constant based on asymptotic considerations — a new value; *J. Atmos. Sci.* **55**, 3403–3405.
- Berry E. X., 1967: Cloud droplet growth by collection; *J. Atmos. Sci.* **24**, 688–701.
- Blumen W., (Hrsg.), 1990: Atmospheric processes over complex terrain; *Meteor. Monogr.* **23**(45), Amer. Meteor. Soc., Boston, 323 S.
- Bolton D., 1980: The computation of equivalent potential temperature; *Mon. Wea. Rev.* **108**, 1046–1053.
- Bougeault P., 1983: A non-reflective upper boundary condition for limited-height hydrostatic models; *Mon. Wea. Rev.* **111**, 420–429.
- Byun D. W., 1990: On the analytical solutions of flux–profile relationships for the atmospheric surface layer; *J. Appl. Meteor.* **29**, 652–657.
- Carpenter R. L. Jr., Droegemeier K. K., 1998a: Entrainment and detrainment in numerically simulated cumulus congestus clouds. Part I: General results; *J. Atmos. Sci.* **55**, 3417–3432.

- Carpenter R. L. Jr., Droegemeier K. K., 1998b: Entrainment and detrainment in numerically simulated cumulus congestus clouds. Part II: Cloud budgets; J. Atmos. Sci. **55**, 3433–3439.
- Carpenter R. L. Jr., Droegemeier K. K., 1998c: Entrainment and detrainment in numerically simulated cumulus congestus clouds. Part III: Parcel analysis; J. Atmos. Sci. **55**, 3440–3455.
- Clappier A., 1998: A correction method for use in multidimensional time–splitting advection algorithms: application to two- and three–dimensional transport; Mon. Wea. Rev. **126**, 232–242.
- Clark T. L., 1974: A study in cloud phase parameterization using the gamma distribution; J. Atmos. Sci. **31**, 142–155.
- Clark T. L., 1977: A small–scale dynamic model using a terrain–following coordinate transformation; J. Comput. Phys. **24**, 186–215.
- Clark T. L., 1979: Numerical simulations with a three–dimensional cloud model: lateral boundary condition experiments and multicellular severe storm simulations; J. Atmos. Sci. **36**, 2191–2215.
- Clark T. L., 1982: Cloud modeling in three spatial dimensions; In: Knight und Squires (1982), 225–247.
- Cotton W. R., 1972: Numerical simulation of precipitation development in supercooled cumuli. Part I; Mon. Wea. Rev. **100**, 757–763.
- Cotton W. R., Anthes R. A., 1989: *Storm and Cloud Dynamics*; Int. Geophys. Ser. Vol. **44**, Acad. Press, San Diego, 880 S.
- Courant R., Friedrichs K., Lewy H., 1928: On the partial difference equations of mathematical physics; Math. Ann. **100**, 32–74; Nachdruck 1967: IBM J. **11**, 215–234.
- Das P., 1979: A non–archimedian approach to the equations of convection dynamics; J. Atmos. Sci. **36**, 2183–2190.
- Deardorff J. W., Willis G. E., 1967: Investigation of turbulent thermal convection between horizontal plates; J. Fluid Mech. **28**, 675–704.
- Diem M., 1948: Messungen der Größe von Wolkenelementen II; Meteor. Rdsch. **1**, 261–273.
- Diem M., Strantz R., 1971: Typen der Regentropfenspektren II; Meteor. Rdsch. **24**, 23–26.
- Diem M., 1973: Zur Struktur der Wolken III; Meteor. Rdsch. **26**, 157–179.
- Dölling I. G., Joss J., Riedl J., 1998: Systematic variations of $\mathcal{Z}$ – $\mathcal{R}$ –relationships from drop size distributions measured in northern Germany during seven years; Atmos. Res. **47–48**, 635–649.
- Dörnbrack A., Schumann U., 1993: Numerical simulation of turbulent convective flow over wavy terrain; Boundary Layer Meteor. **65**, 323–355.
- Doms G., Herbert F., 1985: Fluid- und Mikrodynamik in numerischen Modellen konvektiver Wolken; Ber. Inst. Meteor. Geophys. **62**, Univ. Frankfurt, 378 S.
- Dorwarth G. U., 1979: Die Parametrisierung der Niederschlagsbildung in mesoskaligen Modellen; Diplomarbeit, Meteor. Inst., Univ. Karlsruhe, 194 S.
- Dorwarth G. U., 1985: Numerische Berechnung des Druckwiderstandes typischer Geländeformen; Diss., Univ. Karlsruhe, 166 S.
- Dotzek N., 1993: Direkte numerische Simulation turbulenter Naturkonvektion in 2D und 3D; Diplomarbeit, Inst. Meteor. Klimaforsch., Univ. Karlsruhe, 212 S.

- Dotzek N., Fiedler F., 1995: Rayleigh–Bénard convection in shear flow; Proc. Geophys. Astrophys. Convection Conf. GAC'95, NCAR, Boulder, 45.
- Dotzek N., Emeis S., 1996: Dokumentation der Neuerungen an den Grenzschicht–Unterprogrammen BDLYK, GERVAN und USTS3D im Modell KAMM3D; Interner Ber. Inst. Meteor. Klimaforsch., Univ. Karlsruhe, 51 S.
- Dotzek N., Hannesen R., Beheng K. D., Peterson R. E., 1998: Tornadoes in Germany, Austria, and Switzerland; Proc. 19th Conf. on Severe Local Storms, Minneapolis, 93–96.
- Dotzek N., Hannesen R., 1998: Analyse eines Tornados im Oberrheingraben; Ann. Meteor. **37**, 47–48.
- Dotzek N., 1998: Numerische Modellierung topographisch induzierter hochreichender konvektiver Wolken; Ann. Meteor. **37**, 465–466.
- Durran D. R., Klemp J. B., 1982: The effect of moisture on the Brunt–Väisälä frequency; J. Atmos. Sci. **39**, 2152–2158.
- Durran D. R., 1989: Improving the anelastic approximation; J. Atmos. Sci. **46**, 1453–1461.
- Durran D. R., 1990: Reply to: Fiedler (1990); J. Atmos. Sci. **47**, 1819–1820.
- Durran D. R., Yang M.–J., Slinn D. N., Brown R. G., 1993: Toward more accurate wave–permeable boundary conditions; Mon. Wea. Rev. **121**, 604–620.
- Emanuel K. A., 1994: *Atmospheric Convection*; Univ. Press, Oxford, 580 S.
- Engquist, B., Osher S., 1981: One–sided difference approximations for nonlinear conservation laws; Math. Comput. **36**, 321–351.
- Fiedler B. H., 1990: Comments on: Durran (1989); J. Atmos. Sci. **47**, 1817–1818.
- Fiedler F., 1983: Einige Charakteristika der Strömung im Oberrheingraben; In: Fiedler und Höschele (1983), 113–123.
- Fiedler F., Höschele K., (Hrsg.), 1983: Prof. M. Diem zum 70. Geburtstag; Wiss. Ber. Inst. Meteor. Klimaforsch. **4**, Univ. Karlsruhe, 163 S.
- Fiedler F., 1993: Development of meteorological computer models; Interdiscipl. Sci. Rev. **18**, 192–198.
- Finke U., 1995: Wechselwirkung zwischen hochreichender Konvektion und kurzperiodischen Schwerewellen; DLR Inst. Phys. Atmos., Forsch. Ber. **95–35**, 106 S.
- Flassak T., 1990: Ein nicht–hydrostatisches mesoskaliges Modell zur Beschreibung der Dynamik der planetaren Grenzschicht; Fortschr.–Ber. VDI, Reihe 15, Nr. **74**, VDI–Verlag, Düsseldorf, 204 S.
- Förstner J., 1998: Entwicklung der Grundversion eines kompressiblen mesoskaligen atmosphärischen Modells für Parallelrechner; Diplomarbeit, Inst. Meteor. Klimaforsch., Univ. Karlsruhe, 67 S.
- Foote G. B., du Toit P. S., 1969: Terminal velocity of raindrops aloft; J. Appl. Meteor. **8**, 249–253.
- Fortak H., 1982: *Meteorologie*; D. Reimer, Berlin, 298 S.
- Fox–Rabinovitz M. S., 1996: Computational dispersion properties of 3D staggered grids for a nonhydrostatic anelastic system; Mon. Wea. Rev. **124**, 498–510.
- Fujita, T. T., 1981: Tornadoes and downbursts in the context of generalized planetary scales; J. Atmos. Sci. **38**, 1511–1534.

- Fujita, T. T., 1989: The Teton–Yellowstone tornado of 21 July 1987; *Mon. Wea. Rev.* **117**, 1913–1940.
- Goering H., (Hrsg.), 1958: *Sammelband zur statistischen Theorie der Turbulenz*; Akademie–Verlag, Berlin, 228 S.
- Gresho P. M., Sani R. L., 1987: On pressure boundary conditions for the incompressible Navier–Stokes equations; *Int. J. Numer. Meth. Fluids* **7**, 1111–1145.
- Gysi H., 1995: Niederschlagsmessung mit Radar in orographisch gegliedertem Gelände; Diss., Univ. Karlsruhe, 188 S.
- Gysi H., 1998: Orographic influence on the distribution of accumulated rainfall with different wind directions; *Atmos. Res.* **47–48**, 615–633.
- Haase G., 1998: Simulation von Radarmessungen mit Daten des Lokalmodells; Diplomarbeit, Meteor. Inst., Univ. Bonn, 84 S.
- Haase–Straub S. P., Heimann D., Hauf T., Smith R. K., (Hrsg.), 1994: The squall line of 21 July 1992 in Switzerland and southern Germany — a documentation; *Forsch. Ber. DLR* **94–18**, Inst. Phys. Atmos., Oberpfaffenhofen, 226 S.
- Hannesen R., Dotzek N., Gysi H., Beheng K. D., 1998: Case study of a tornado in the Upper Rhine valley; *Meteor. Z., N. F.* **7**, 163–170.
- Hannesen R., 1998: Analyse konvektiver Niederschlagssysteme mit einem C–Band Dopplerradar in orographisch gegliedertem Gelände; Diss., Univ. Karlsruhe, 119 S.
- Hauf T., 1980: Schallfilterung im konvektiven Scale; Diss., Univ. Mainz, 213 S.
- Hinzpeter H., 1985: Konvektive Bewölkung über See — Rollen und offenen Zellen; Vandenhoeck & Ruprecht, Göttingen, 26 S.
- Högström U., 1988: Non–dimensional wind and temperature profiles in the atmospheric surface layer: a re–evaluation; *Boundary Layer Meteor.* **42**, 55–78.
- Högström U., 1996: Review of some basic characteristics of the atmospheric surface layer; *Boundary Layer Meteor.* **78**, 215–246.
- Höllner H., 1986: Parameterization of cloud–microphysical processes in a three–dimensional convective mesoscale model; *Forsch. Ber. DFVLR* **86–02**, Inst. Phys. Atmos., Oberpfaffenhofen, 148 S.
- Holtslag A. A. M., 1984: Estimates of diabatic wind speed profiles from near–surface weather observations; *Boundary Layer Meteor.* **29**, 225–250.
- Houze R. A., 1993: *Cloud Dynamics*; Int. Geophys. Ser. Vol. **53**, Acad. Press, San Diego, 570 S.
- Houze R. A., 1997: Stratiform precipitation in regions of convection: a meteorological paradox?; *Bull. Amer. Meteor. Soc.* **78**, 2179–2196.
- Hugelmann C.–P., 1988: Differenzenverfahren zur Behandlung der Advektion; *Wiss. Ber. Inst. Meteor. Klimaforsch.* **8**, Univ. Karlsruhe, 74 S.
- Hugelmann C.–P., Kleiser T., 1992: Zur Behandlung von offenen Rändern; KfK Bericht 4980, Karlsruhe, 94 S.
- Huggel A., Schmid W., Waldvogel A., 1996: Raindrop size distributions and the radar bright band; *J. Appl. Meteor.* **35**, 1688–1701.

- Huntingford C., Blyth E. M., Wood N., Hewer F. E., Grant A., 1998: The effect of orography on evaporation; *Boundary Layer Meteor.* **86**, 487–504.
- Janenko N. N., 1969: Die Zwischenschrittmethode zur Lösung mehrdimensionaler Probleme der mathematischen Physik; *Lecture Notes in Math.* **91**, Springer, Berlin, 194 S.
- Kessler E. III, 1969: On the distribution and continuity of water substance in atmospheric circulation; *Meteor. Monogr.* **10**(32), Amer. Meteor. Soc., Boston, 84 S.
- Klemp J. B., Wilhelmson R. B., 1978: The simulation of three-dimensional convective storm dynamics; *J. Atmos. Sci.* **35**, 1070–1096.
- Klemp J. B., Durran D. R., 1983: An upper boundary condition permitting internal gravity wave radiation in numerical mesoscale models; *Mon. Wea. Rev.* **111**, 430–444.
- Klemp J. B., 1987: Dynamics of tornadic thunderstorms; *Annu. Rev. Fluid Mech.* **19**, 369–402.
- Kley D., Smit H. G. J., Vömel H., Grassl H., Ramanathan V., Crutzen P. J., Williams S., Meywerk J., Oltmans S. J., 1997: Tropospheric water-vapour and ozone cross-sections in a zonal plane over the central equatorial Pacific Ocean; *Quart. J. Roy. Meteor. Soc.* **123**, 2009–2040.
- Knight C. A., Squires P., (Hrsg.), 1982: *Hailstorms of the Central High Plains, Vol. 1: The National Hail Research Experiment*; Colorado Associated Univ. Press, Boulder, 282 S.
- Kogan Y. L., 1991: The simulation of a convective cloud in a 3-D model with explicit microphysics. Part I: Model description and sensitivity experiments; *J. Atmos. Sci.* **48**, 1160–1189.
- Krettenauer K., Schumann U., 1992: Numerical simulation of turbulent convection over wavy terrain; *J. Fluid Mech.* **237**, 261–299.
- Kropfli R. A., 1979: PHOENIX multiple-Doppler radar operations; project PHOENIX rep. **1**, NOAA/NCAR Boulder Atmos. Observatory, 33–56.
- Kuo Y.-H., Bresch J. F., Cheng M.-D., Kain J., Parsons D. B., Tao W.-K., Zhang D.-L., 1997: Summary of a mini workshop on cumulus parameterization for mesoscale models; *Bull. Amer. Meteor. Soc.* **78**, 475–491.
- Lee B. D., Wilhelmson R. B., 1997a: The numerical simulation of non-supercell tornadogenesis. Part I: Initiation and evolution of pretornadic mesocyclone circulations along a dry outflow boundary; *J. Atmos. Sci.* **54**, 32–60.
- Lee B. D., Wilhelmson R. B., 1997b: The numerical simulation of non-supercell tornadogenesis. Part II: Evolution of a family of tornadoes along a weak outflow boundary; *J. Atmos. Sci.* **54**, 2387–2415.
- Lemon L. R., Doswell C. A. III, 1979: Severe thunderstorm evolution and mesocyclone structure as related to tornadogenesis; *Mon. Wea. Rev.* **107**, 1184–1197.
- Lenz C.-J., 1996: Energieumsetzungen an der Erdoberfläche in gegliedertem Gelände; Diss., Univ. Karlsruhe, 246 S.
- Lilly D. K., Klemp J. B., 1979: The effects of terrain shape on nonlinear hydrostatic mountain waves; *J. Fluid Mech.* **95**, 241–261.
- Lin Y.-L., Farley R. D., Orville H. D., 1983: Bulk parameterization of the snow field in a cloud model; *J. Climat. Appl. Meteor.* **23**, 1065–1092.

- Linder W., Schmid W., 1996: A tornadic thunderstorm in Switzerland exhibiting a radar-detectable low-level vortex; Proc. 12th Int. Conf. on Clouds and Precip., Zürich, 577–580.
- Liu C., Moncrieff M. W., 1997: Dynamical influence of microphysics in tropical squall lines: a numerical study; Mon. Wea. Rev. **125**, 2193–2210.
- Locatelli J. D., Hobbs P. V., 1974: Fall speeds and masses of solid precipitation particles; J. Geophys. Res. **79**, 2185–2197.
- Löffler-Mang M., Joss J., 1999: An optical disdrometer for measuring size and velocity of hydrometeors; Erscheint bei J. Atmos. Oceanic Technol.
- Ludlam F. H., 1980: *Clouds and Storms. The behavior and Effect of Water in the Atmosphere*; Pennsylvania State Univ. Press, Univ. Park, 405 S.
- Lüpkes C., 1991: *Untersuchungen zur Parametrisierung von Koagulationsprozessen niederschlagsbildender Tropfen*; Dr. Kovač, Hamburg, 156 S.
- Lynn B. H., Tao W.-K., Wetzel P. J., 1998: A study of landscape-generated deep moist convection; Mon. Wea. Rev. **126**, 928–942.
- Marshall J. S., Palmer W. M. K., 1948: The distribution of raindrops with size; J. Meteor. **5**, 165–166.
- Medawar P. B., 1979: *Ratschläge für einen jungen Wissenschaftler*; Piper, München, 199 S.
- Miller M. J., Thorpe A. J., 1981: Radiation conditions for the lateral boundaries of limited-area numerical models; Quart. J. Roy. Meteor. Soc. **107**, 615–628.
- Möller F., 1973: *Einführung in die Meteorologie*, Bd. I; B. I. Wissenschaftsverlag, Mannheim, 222 S.
- Mölders N., Kramm G., Laube M., Raabe A., 1997: On the influence of bulk-parameterization schemes of cloud microphysics on the predicted water-cycle-relevant quantities — a case study; Meteor. Z., N. F. **6**, 21–32.
- Moeng C.-H., Rotunno R., 1990: Vertical-velocity skewness in the buoyancy-driven boundary layer; J. Atmos. Sci. **47**, 1149–1162.
- Morris R. M., 1986: The Spanish plume — testing the forecaster's nerve; Meteor. Mag. **115**, 349–357.
- Munz C.-D., 1990: Theorie und Numerik nichtlinearer hyperbolischer Differentialgleichungen, I. Die skalare Erhaltungsgleichung; KfK Bericht 4805, Karlsruhe, 179 S.
- Murray F. W., 1967: On the computation of saturation vapor pressure; J. Appl. Meteor. **6**, 203–204.
- Nance L. B., Durran D. R., 1994: A comparison of the accuracy of three anelastic systems and the pseudo-incompressible system; J. Atmos. Sci. **51**, 3549–3565.
- Nestle R., 1969: Der Tornado vom 10. 7. 1968 im Raum Pforzheim; Meteor. Rdsch. **22**, 1–3.
- Nickerson E. C., Smiley V. E., 1975: Surface layer and energy budget parameterizations for mesoscale models; J. Appl. Meteor. **14**, 297–300.
- Nickerson E. C., Richard E., Rosset R., Smith D. R., 1986: The numerical simulation of clouds, rain, and airflow over the Vosges and Black Forest mountains: a meso- β model with parameterized microphysics; Mon. Wea. Rev. **114**, 398–414.
- Nuss W. A., 1986: Observations of a mountain tornado; Mon. Wea. Rev. **114**, 233–237.

- Ogura Y., Takahashi T., 1971: Numerical simulation of the life cycle of a thunderstorm cell; Mon. Wea. Rev. **99**, 895–911.
- Orlanski I., 1975: A rational subdivision of scales for atmospheric processes; Bull. Amer. Meteor. Soc. **56**, 527–530.
- Orlanski I., 1976: A simple boundary condition for unbounded hyperbolic flow; J. Comput. Phys. **21**, 251–269.
- Paulson C. A., 1970: The mathematical representation of wind speed and temperature profiles in the atmospheric surface layer; J. Appl. Meteor. **9**, 857–861.
- Peyret R., Taylor T. D., 1983: *Computational Methods for Fluid Flow*; Springer, Berlin, 358 S.
- Pielke R. A., Pearce R. P., (Hrsg.), 1994: Mesoscale modeling of the atmosphere; Meteor. Monogr. **25**(47), Amer. Meteor. Soc., Boston, 167 S.
- Press W. H., Flannery B. P., Teukolsky S. A., Vetterling W. T., 1992: *Numerical Recipes, The Art of Scientific Computing*, 2nd ed.; Univ. Press, Cambridge, 963 S.
- Pruppacher H. R., Klett J. D., 1997: *Microphysics of Clouds and Precipitation*, 2nd ed.; Kluwer Acad. Publ., Dordrecht, 954 S.
- Randall D. A., Wielicki B. A., 1997: Measurements, models, and hypotheses in the atmospheric sciences; Bull. Amer. Meteor. Soc. **78**, 399–406.
- Reichmann H., 1982: *Streckensegelflug*; Motorbuch Verlag, Stuttgart, 223 S.
- Rockel B., Raschke E., 1994: Inclusion of radiation in mesoscale models; In: Pielke und Pearce (1994), 39–45.
- Roedel W., 1992: *Physik unserer Umwelt: die Atmosphäre*; Springer, Berlin, 457 S.
- Rogers R. R., Baumgardner D., Ethier S. A., Carter D. A., Ecklund W. L., 1993: Comparison of raindrop size distributions measured by radar wind profiler and by airplane; J. Appl. Meteor. **32**, 694–699.
- Schaaf C. B., Wurman J., Banta R. M., 1988: Thunderstorm-producing terrain features; Bull. Amer. Meteor. Soc. **69**, 272–277.
- Schädler G., 1990: Numerische Simulationen zur Wechselwirkung zwischen Landoberflächen und atmosphärischer Grenzschicht; Wiss. Ber. Inst. Meteor. Klimaforsch. **13**, Univ. Karlsruhe, 217 S.
- Segal M., Arritt R. W., Shen J., Anderson C., Leuthold M., 1997: On the clearing of cumulus clouds downwind from lakes; Mon. Wea. Rev. **125**, 639–646.
- Segal M., Leuthold M., Arritt R. W., Anderson C., Shen J., 1997: Small lake daytime breezes: some observational and conceptual evaluations; Bull. Amer. Meteor. Soc. **78**, 1135–1147.
- Sekhon R. S., Srivastava R. C., 1970: Snow size spectra and radar reflectivity; J. Atmos. Sci. **27**, 299–307.
- Shiino J.-I., 1983: Evolution of Raindrops in an axisymmetric cumulus model. Part I: Comparison of the parameterized with non-parameterized microphysics; J. Meteor. Soc. Japan **61**, 629–655.
- Shih T. M., Tan C. H., Hwang B. C., 1989: Effects of grid staggering on numerical schemes; Int. J. Numer. Meth. Fluids **9**, 193–212.
- Smith P. L., Myers C. G., Orville H. D., 1975: Radar reflectivity factor calculations in numerical cloud models using bulk parameterizations of precipitation; J. Appl. Meteor. **14**, 1156–1165.

- Smith P. L., 1984: Equivalent radar reflectivity factors for snow and ice particles; J. Climat. Appl. Meteor. **23**, 1258–1260.
- Starr D. O’C., Cox S. K., 1985: Cirrus clouds. Part I: A cirrus cloud model; J. Atmos. Sci. **42**, 2663–2681.
- Stephens G. L., 1984: The parameterization of radiation for numerical weather prediction and climate models; Mon. Wea. Rev. **112**, 826–867.
- Stowasser M., 1996: Vergleich von vier anelastisch approximierten Systemen; Studienarbeit, Inst. Meteor. Klimaforsch., Univ. Karlsruhe, 44 S.
- Sui C. H., Li X., Lau K.–M., Adamec D., 1997: Multiscale air–sea interactions during TOGA–COARE; Mon. Wea. Rev. **125**, 448–461.
- Tao W.–K., Simpson J., Mc Cumber M., 1989: An ice–water saturation adjustment; Mon. Wea. Rev. **117**, 231–235.
- Tartaglione N., Buzzi A., Fantini M., 1996: Supercell simulations with simple ice parameterization; Meteor. Atmos. Phys. **58**, 139–149.
- Tetens O., 1930: Über einige meteorologische Begriffe; Z. Geophys. **6**, 297–309.
- Ulbrich C. W., 1983: Natural variations in the analytical form of the raindrop size distribution; J. Climat. Appl. Meteor. **22**, 1764–1775.
- Ulbrich C. W., 1994: Corrections to empirical relations derived from rainfall disdrometer data for effects due to drop size distribution truncation; Atmos. Res. **34**, 207–215.
- van Ulden A. P., Holtslag A. A. M., 1985: Estimation of atmospheric boundary layer parameters for diffusion applications; J. Climat. Appl. Meteor. **24**, 1196–1207.
- Waldvogel A., 1974: The N_0 –jump of raindrop spectra; J. Atmos. Sci. **31**, 1067–1078.
- Warner T. T., Peterson R. A., Treadon R. E., 1997: A tutorial on lateral boundary conditions as a basic and potentially serious limitation to regional numerical weather prediction; Bull. Amer. Meteor. Soc. **78**, 2599–2617.
- Weckwerth T. M., Wilson J. W., Wakimoto R. M., Crook N. A., 1997: Horizontal convective rolls: Determining the environmental conditions supporting their existence and characteristics; Mon. Wea. Rev. **125**, 505–525.
- Wegener A., 1917: *Wind- und Wasserhosen in Europa*; Vieweg, Braunschweig, 301 S.
- Weisman, M. L., Klemp J. B., 1984: The structure and classification of numerically simulated convective storms in directionally varying wind shears; Mon. Wea. Rev. **112**, 2479–2498.
- Weisman M. L., Skamarock W. C., Klemp J. B., 1997: The resolution dependence of explicitly modeled convective systems; Mon. Wea. Rev. **125**, 527–548.
- Welch R. M., Ravichandran M. G., Cox S. K., 1986: Prediction of quasi–periodic oscillations in radiation fogs. Part I: Comparison of simple similarity approaches; J. Atmos. Sci. **43**, 633–651.
- Wippermann F., 1984: Air flow over and in broad valleys: channeling and counter–current; Beitr. Phys. Atmos. **57**, 92–105.
- Xue M., Droegemeier K. K., Wong V., Shapiro A., Brewster K., 1995: ARPS Version 4.0 User’s guide; Center for Analysis and Prediction of Storms, Univ. Oklahoma, Norman, 381 S.