

Bibliography

- Ahrens, B., Karstens, U., Rockel, B., and Stuhlmann, R. (1998). On the validation of the atmospheric model remo with isccp data and precipitation measurements using simple statistics. *Meteorol. Atmos. Phys.*, 68:127–142.
- Anagnostou, N. E. and Kummerow, C. (1997). Stratiform and convective classification of rainfall using SSM/I 85-Ghz brightness temperature observations. *Journal of Atmospheric and Oceanic Technology*, 14:570–575.
- Appleman, H. S. (1960). A fallacy in the use of skill scores. *Bull. Amer. Meteor.*, 41:64–67.
- Atlas, D. E. (1990). *Radar in Meteorology*. American Meteorological Society, Boston,.
- Baraldi, A. and Parmiggiani, F. (1995). An Investigation of the Textural Characteristics Associated with Gray level cooccurrence matrix statistical parameters. *IEEE Transactions on Geoscience and Remote Sensing*, 33(2):293–304.
- Battan, L. J. (1973). *Radar Observations of the Atmosphere*. The University of Chicago Press, Chicago.
- Betts, A. and Jakob, C. (2002). Study of diurnal cycle of convective precipitation over amazonia using a single column model. *Journal of Geophysical Research*, 107:251–2513.
- Biggerstaff, M. and Listemaa, S. (2000). An improved scheme for convective/stratiform echo classification using radar reflectivity. *Journal of Applied Meteorology*, 39:2129–2150.
- Bremicker, M. (2000). Das Wasserhaushaltsmodell LARSIM Modellgrundlagen und Anwendungsbeispiele,. *Freiburger Schriften zur Hydrologie*, Band 11:120pp.
- Brier, G. W. and Allen, R. A. (1952). Verification of weather forecasts. *Compendium of Meteorology*, Boston, American Meteorological Society, pages 841–848.
- Dai, A. (2001). Global precipitation and thunderstorm frequencies. part II: Diurnal variations. *Journal of Climate*, 14:1112–1128.

- Dai, A., Giorgi, F., and Trenberth, K. (1999). Observed and model-simulated diurnal cycles of precipitation over the contiguous united states. *Journal of Geophysical Research*, 104(D6):6377–6402.
- Donaldson, R. (1970). Vortex Signature Recognition by a Doppler Radar. *Journal of Applied Meteorology*, 9(4):661–670.
- Fujiwara, M. (1965). Raindrop-size distribution from individual storms. *J. Atmos. Sci.*, 22:585–591.
- Gunn, K. and Marshall, J. (1958). The distribution with size of aggregate snow flakes. *Journal of the Atmospheric Sciences*, 15:452–461.
- Hanssen, A. W. and Kuipers, W. (1965). On the relationship between the frequency of rain and various meteorological parameters. *Meded. Verhand.*, 81:2–15.
- Haralick, R., Shanmugam, K., and Dinstein, I. (1973). Textural features for image classification. *IEEE Transactions on Systems, Man, and Cybernetics*, SMC-3(6):610–621.
- Heidke, P. (1926). Berechnung des Erfolges und der Güte der Windstärkevorhersagen im Sturmwarnungsdienst. *Geogr. Ann.*, 8:301–349.
- Hennemuth, B., Rutgersson, A., Bumke, K., Clemens, M., Omstedt, A., Jacob, D., and Smedman, A.-S. (2003). Net precipitation over the Baltic Sea for one year using models and data-based methods. *TELLUS*, 55A:352–367.
- Jacob, D. (2001). A note to the simulation of the annual and inter-annual variability of the water budget over the baltic sea drainage basin. *Meteorol. Atmos. Phy.*, 77:61–73.
- Joss, J. and Waldvogel, A. (1990). *Radar in Meteorology*, chapter Precipitation measurement and hydrology, pages 577–606. American Meteorological Society.
- Land, C., Ponater, M., Sausen, R., and Roeckner, E. (1999). The ECHAM4.L39 (DLR) atmosphere GCM -Technical description and model climatology. Technical report, Cologne, Germany: Deutsches Zentrum für Luft- und Raumfahrt (DLR-Forschungsbericht 1999-31).
- Lehmann, A. (1995). A three-dimensional baroclinic eddy-resolving model of the Baltic Sea. *Tellus A*, 47:1013–1031.
- Lhermitte, R. and Atlas, D. (1963). Doppler fall speed and particle growth in stratiform precipitation. In *Proceedings of the 10th Weather Radar Conference, Boston, USA*, pages 297–302. AMS.

- Marquard, A. (1963). An algorithm for least-squares estimation of nonlinear parameters. *Journal of Applied Mathematics*, 11:413–441.
- Marshall, J. S. and Palmer, W. M. (1948). The distribution of raindrop size. *Journal of Meteorology*, 5:165–166.
- Michelson, D., Andersson, T., Collier, C., Koistinen, J., Overgaard, S., Riedl, J., and Zhukov, V. (1999). The international radar network for the baltic sea experiment. In *Preprints 29th AMS International Conference on Radar Meteorology*, pages 317–320. AMS.
- Michelson, D., Andersson, T., Koistinen, J., Collier, C., Riedl, J., Szturc, J., Gjertsen, U., Nielsen, A., and Overgaard, S. (2000). Baltex radar data centre products and their methodologies. Technical Report RMK 90, SMHI, SE-60176 Norrköping, Sweden.
- Michelson, D. and Koistinen, J. (2000). Gauge-radar network adjustment for the baltic sea experiment. *Phy. Chem. Earth (B)*, 25(10-12):915–920.
- Morcrette, J.-J. (1991). Evaluation of model-generated cloudiness: Satellite-observed and model-generated diurnal variability of brightness temperature. *Monthly Weather Review*, 119:1205–1224.
- Nesbitt, W. N. and Zipser, E. J. (2003). The Diurnal Cycle of Rainfall and Convective Intensity according to Three Years of TRMM Measurements. *Journal of Climate*, 16:1456–1475.
- Ohmstedt, A., Gustafsson, B., Rodhe, J., and Walin, G. (2000). Use of baltic sea modelling to investigate the water cycle and the heat balance in gcm and regional climate models. *Climate Research*, 15:95–108.
- Pankiewicz, G. S. (1997). Neural network classification of convective air masses for a flood forecasting system. *International Journal of Remote Sensing*, 18:887–898.
- Randall, D., Harshvardhan, and Dazlich, D. (1991). Diurnal variability of the hydrological cycle in a general circulation model. *Journal of Atmospheric Sciences*, 48:40–62.
- Richter, K.-G. and Ebel, M. (2003). Analysis of the water cycle of the baltic area under present and future conditions. In *German Climate Research Program (2001-2006), DEK-LIM Status Seminar 2003, Bad Münstereifel, 6th-8th October 2003*, 205-206.
- Rosenfeld, D., Wolff, D., and Atlas, D. (1993). General probability-matched relations between radar reflectivity and rain rate. *Journal of Applied Meteorology*, 32:50–72.

- Rudolf, B. and Schneider, U. (2004). Calculation of gridded precipitation data for the global land-surface using in-situ gauge observations. In *Proceedings IPWG-2, Monterey*.
- Rumelhart, D. and McClelland, J. (1986). *Parallel Distributed Processing*. MIT press.
- Sauvageot, H. (1992). *Radar Meteorology*. Artech House. 366pp.
- Sauvageot, H. (1994). Rainfall measurement by radar: A review. *Atmos. Res*, 35:27–54.
- Schowengerdt, R. (1997). *Remote sensing, models and methods for image processing*. Academic press.
- Sekhorn, R. and Srivastava, R. (1970). Snow size spectra and radar reflectivity. *J. Atmos. Sci.*, 27:299–307.
- Shepherd, G., Cluckie, I., Collier, C., Yu, S., and James (1988). The identification of rainfall type from weather radar data. *Meteorological Magazine*, 117:180–186.
- Skomorowski, P., Clemens, M., Bumke, K., Rudolf, B., and Rubel, F. (2003). Observed precipitation climatology for the Baltic. *Geophysical Research Abstracts*, 5:10133.
- Steiner, M., Houze, R., and Yuter, S. (1995). Climatological characterizations of three-dimensional storm structure from operational radar and rain gauge data. *Journal of Applied Meteorology*, 34:1978–2007.
- Stephens, G. (1994). *Remote Sensing of the Lower Atmosphere*. Oxford University Press.
- Sumner, G. (1988). *Precipitation Process and Analysis*. John Wiley & Sons Ltd.
- Tetzlaff, G. and Hagemann, N. (1986). Bemerkungen zum Niederschlag in Hannover. *Meteorologische Rundschau*, 39:1–12.
- Tian, B., Shaikh, M., Azimi-Sadjadi, M., Vonder Haar, T., and Reinke, D. (1999). A study of cloud classification with neural networks using spectral and textural features. *IEEE Transactions on Neural Networks*, 10:138–151.
- Tiedke, M. (1989). A comprehensive mass flux scheme for cumulus parameterization in large-scale models. *Monthly Weather Review*, 117:1779–1800.
- Trenberth, K. E., Dai, A., Rasmussen, R., and Pearson, D. (2003). The changing character of precipitation. *Bull. Amer. Meteor. Soc.*, 84:1205–1217.
- Uddstrom, M. J. and Gray, W. (1995). Satellite cloud classification and rain-rate estimation using multispectral radiances and measures of spatial texture. *Journal of Applied Meteorology*, 35:839–858.

Woodcok, F. (1976). The Evaluation of Yes/No Forecasts for Scientific and Administrative Purposes. *Monthly Weather Review*, 104:1209–1214.

Zhang, G., Vivekanandan, J., and Brandes, E. (2001). A method for estimating rain rate and drop size distribution from polarimetric radar measurements. *IEEE Transactions on Geoscience and Remote Sensing*, 39(Issue 4):830–841.

