

Key List for Bibliography File: SHORTY,WIND,BISTATIC,RADAR  
November 16, 2000

- Annalen38** D. Wetterdienst.  
*Annalen der Meteorologie 38.*  
Deutscher Wetterdienst, herbstschule radarmeteorologie 1998 edition, November 1998.
- Armijo:69** L. Armijo.  
A Theory for the Determination of Wind and Precipitation Velocities with Doppler Radars.  
*J. Atmos. Sci.*, **26**, 570–573, 1969.
- Atlas:68** D. Atlas, K. Naito, and R. E. Carbone.  
Bistatic microwave probing of a refractively perturbed clear atmosphere.  
*J. Atmos. Sci.*, **25**, 257–268, 1968.
- Awaka:82** J. Awaka and T. Oguchi.  
Bistatic radar reflectivities of prupacher-and-pitter form raindrops at 14.3 and 5.33 ghz.  
*J. Radio Res. Lab.*, **29**, 125–150, 1982.
- Aydin:98** K. Aydin, S. H. Park, and T. M. Walsh.  
Bistatic dual-polarization scattering from rain und hail at S- and C-Band frequencies.  
*J. Atmos. Oceanic. Technol.*, **15**, 1110–1121, 1998.
- Bebbington:99** D. H. O. Bebbington, M. Chandra, and R. J. Watson.  
Multiple scattering effects in C-Band Polimetric Radar Observations of intense precipitation.  
In *Proc.29th Radar Meteorology Conf., Montreal*, pages 908–909. Amer. Meteor. Soc., 1999.
- Boccippio:95** D. J. Boccippio.  
A Diagnostic Analysis of the VVP Single-Doppler Retrieval Technique.  
*J. Atmos. Oceanic. Technol.*, **12**, 230–248, 1995.
- Bohne:76** R. A. Bohne and R. C. Srivastava.  
Random Errors in Wind and Precipitation Fall Speed Measurement by a Triple Doppler Radar System.  
In *Proc. 17th Radar Meteorology Conf., Seattle*, pages 7–14. Amer. Meteor. Soc., 1976.
- Browning:68** K. A. Browning and R. Wexler.  
The Determination of Kinematic Properties of a Wind Field Using Doppler Radar.  
*J. Appl. Meteor.*, **7**, 105–113, 1968.
- COST210** C. of the European Communities.  
*COST210-Influence of the atmosphere on interference between radio communications systems at frquencies above 1 GHz.*  
Commission of the European Communities, final report, information technologies and sciences edition, 1991.

- COST75:Anderson** T. Andersson.  
Tests of a method for recovering winds from a single doppler weather radar.  
In *COST 75, Weather Radar Systems*, pages 333–344. Commission of the European Communities, 1994.
- COST75:Archibald** Archibald, E., M. Chandra, P. Meischner, and P. Hardaker.  
Doppler spectrum width as a measure of atmospheric turbulence.  
In *COST 75, Advanced Weather Radar Systems*, pages 612–624. Commission of the European Communities, 1998.
- COST75:Doelling** I. Doelling and P. Meischner.  
Computational sensitivity studies and comparison with experiment for polarimetric radar parameters.  
In *COST 75, Weather Radar Systems*, pages 539–550. Commission of the European Communities, 1994.
- Caillault:99** K. Caillault and Y. Lemaitre.  
Retrieval of Three-Dimensional Wind Fields Corrected for the Time-Induced Advection Problem.  
*J. Atmos. Oceanic. Technol.*, **16**, 708–722, 1999.
- Caya:00** A. Caya.  
Analysis of atmospheric state from bistatic network radar data.  
*xxx*, **xx**, xx, xx.
- Caya:99** A. Caya, I. Zawadzki, F. Fabry, and S. Laroche.  
Assimilation of bistatic radar network data and the near-surface index of refraction.  
In *Proc.29th Radar Meteorology Conf., Montreal*, pages 37–39. Amer. Meteor. Soc., 1999.
- Chong1:00** M. Chong and O. Bousquet.  
On the application of MUSCAT to a ground-based dual-Doppler radar system.  
*J. Atmos. Oceanic. Technol.*, **xx**, xxx, 2000.
- Chong2:00** M. Chong, J. Georgis, O. Bousquet, S. Cosma, V. Gouget, S. Prieur, and F. Roux.  
real-time wind synthesis from doppler radar observations during the mesoscale alpine programme experiment.  
*Bull. Amer. Meteor.*, **xx**, xx, 2000.
- Chong3:00** M. Chong and S. Cosma.  
A formulation of the continuity equation of MUSCAT for either flat or complex terrain.  
*J. Atmos. Oceanic. Technol.*, **xx**, xx, 2000.
- Chong:96** M. Chong and C. Campos.  
Extended Overdetermined Dual-Doppler Formalism in Synthesizing Airborne Doppler Radar Data.  
*J. Atmos. Oceanic. Technol.*, **juni**, 581–597, 1996.
- Cifelli:96** R. Cifelli, S. A. Rutledge, D. J. Boccippio, and T. Matejka.  
Horizontal Divergence and Vertical Velocity Retrievals from Doppler Radar and Wind Profiler Observations.  
*J. Atmos. Oceanic. Technol.*, **13**, 948–966, 1996.

- Clark:80** T. L. Clark, F. I. Harris, and C. G. Mohr.  
Errors in Wind Fields Derived from Multi-Doppler Radars: Random Errors and Temporal Errors Associated with Advection and Evolution.  
*J. Appl. Meteor.*, **19**, 1273–1284, 1980.
- Cohn:95** S. A. Cohn.  
Radar Measurements of Turbulent Eddy Dissipation Rate in the Troposphere: A Comparison of Techniques.  
*J. Appl. Meteor.*, **12**, 85–95, 1995.
- Crane:74** Crane, R. K.  
Bistatic Scatter from Rain.  
*IEEE Trans. Antennas Propag.*, **22**, 312–320, 1974.
- Curtis:00** J. N. Curtis.  
Efficient four-dimensional dealiasing of Doppler radial velocity data.  
<http://eos.atmos.washington.edu:80/curt>.  
1999.
- Dibbern:87** J-Dibbern.  
Dependence of radar parameters on polarization properties of rain for bistatic CW radar.  
*Radio Sci.*, **22**, 769–779, 1987.
- Doviak1:72** J. R. Doviak.  
Comparison of bistatic and monostatic radar detection of clear air atmospheric targets.  
In *Proc. AIAA, 10th Aerospace Science Meeting*, pages 72–175, San Diego, Calif., 1972.
- Doviak2:72** R. Doviak and C. M. Weil.  
Bistatic Radar Detection of the Melting Layer.  
*J. Appl. Meteor.*, **11**, 1012–1016, 1972.
- Doviak:84** J. R. Doviak and D. S. Zrnice.  
*Doppler Radar and Weather Observations*.  
Academic Press, Inc., 1984.
- Dubosclard:99** G. Dubosclard, R. Cordesses, P. Allard, C. Hervier, M. Coltelli, and J. Kornprobst.  
First testing of a volcano doppler radar (voldorad) at mount etna italy.  
*Geophys. Res. Lett.*, **26**, 3389–3392, 1999.
- Easterbrook:75** C. C. Easterbrook.  
Estimating horizontal wind fields by two-dimensional curve fitting of single Doppler radar measurements.  
In *16th Radar Meteorology Conf., Houston, TX*, pages 214–219. AMS, 1975.
- Eccels:68** P. Eccles and R. Rogers.  
Relationship between rainfall rate and other measurable parameters of precipitation, The bistatic radar equation.  
In *13th Conf. on Radar Meteorology*, pages 364–369, Amer. Meteor. Soc., Montreal, Canada, 1968.
- Eilts:90** M. D. Eilts and S. D. Smith.  
Efficient Dealiasing of Doppler Velocities Using Local Environment Constraints.  
*J. Atmos. Oceanic. Technol.*, **7**, 118–126, 1990.

- Elia:00** R. de Elia.  
*Performance study of a bistatic radar network.*  
PhD thesis, Dep. of atmospheric and oceanic sciences, McGill university, Montreal, 2000.
- Elia:99** R. de Elia and I. Zawadzki.  
Sidelobe contamination in bistatic radars.  
In *Proc.29th Radar Meteorology Conf., Montreal*, pages 218–220. Amer. Meteor. Soc., 1999.
- Fabry:97** F. Fabry, C. Frush, I. Zawadzki, and A. Kilambi.  
On the Extraction of Near-Surface Index of Refraction Using Radar Phase Measurements from Ground Targets.  
*J. Atmos. Oceanic. Technol.*, **14**, 978–987, 1997.
- Farina:83** A. Farina and E. Hanle.  
Position accuracy in netted monostatic and bistatic radar.  
*IEEE Transactions on aerospace and electronic systems*, **AES-19**, 513–520, 1983.
- Friedrich:00** K. Friedrich, M. Hagen, and P. Meischer.  
Vector wind field determination by bistatic multiple-doppler radar.  
*Phys. Chem. Earth (B)*, **25**, 1205–1208, 2000.
- Georffis:99** J.-F. Georffis and P. H. H. F. Roux.  
Observation of precipitating systems over complex orography with meteorological doppler radars : A feasibility study.  
*Meteorology and Atmospheric Physics*, 1999.
- Glaser:86** J. I. Glaser.  
Fifty years of bistatic and multistatic radar.  
In *IEE Proceedings F*, volume **133**, pages 596–603, 1986.
- Grecu:00** M. Grecu and W. F. Krajewski.  
An efficient methodology for detection of anomalous propagation echoes in radar reflectivity data using neutral networks.  
*J. Atmos. Oceanic. Technol.*, **17**, 121–129, 2000.
- Guillemette:99** P. Guillemette and I. Zawadzki.  
Integration of UHF profiler information with bistatic measurements.  
In *Proc.29th Radar Meteorology Conf., Montreal*, pages 142–144. Amer. Meteor. Soc., 1999.
- Hagen:1991** Hagen, M. and S. Stockinger.  
Verfahren zum automatischen entfalten von dopplergeschwindigkeitsmessungen mit einem wetterradar.  
Forschungsbericht, DLR, Inst. fr Physik der Atmosphre, Oberpfaffenhofen, 1991.
- Hanle:86** E. Hanle.  
Survey of bistatic and multistatic radar.  
In *IEE Proceedings F*, volume **133**, pages 587–595, 1986.
- Henja:99** A. Henja and D. B. Michelson.  
Improved polar to cartesian radar data transformation.  
In *Proc.29th Radar Meteorology Conf., Montreal*, pages 252–255. Amer. Meteor. Soc., 1999.

- Hildebrand:94** H. P. Hildebrand, C. A. Walther, C. L. Frush, J. Testud, and F. Baudin.  
The ELDORE/ASTRAIA Airborne Doppler Weather Radar: Goals, Design, and First Field Tests.  
In *Proc. of the IEEE*, volume **82**, pages 1873–1890, 1994.
- Houze:93** Houze, R. A.  
*Cloud Dynamics*.  
Academic Press Inc., 1993.
- Hubbert:97** J. Hubbert and V. N. Bringi.  
The effects of 3-Body scattering on differential reflectivity.  
In *Proc. 28th Radar Meteorology Conf., Austin, Texas*, pages 11–12. Amer. Meteor. Soc., 1997.
- Koscielny:82** A. Koscielny, R. J. Doviak, and R. Rabin.  
Statistical Consideration in the Estimation of Divergence from Single-Doppler Radar and Application to Prestorm Boundary-Layer Observation.  
*J. Appl. Meteor.*, **21**, 197–210, 1982.
- Laroche:94** S. Laroche and I. Zawadzki.  
A variational analysis method for retrieval of three-dimensional wind field from single-Doppler radar data.  
*J. Atmos. Sci.*, **51**, 2664–2682, 1994.
- Laroche:95** S. Laroche and I. Zawadzki.  
Retrievals of horizontal winds from single-Doppler Clear-air data by methods of cross correlation and variational analysis.  
*J. Atmos. Oceanic. Technol.*, **12**, 721–738, 1995.
- Lazarus:99** S. Lazarus, A. Shapiro, and K. Droegemeier.  
An analysis of the Gal-Chen Single-Doppler Velocity Retrieval.  
*J. Atmos. Oceanic. Technol.*, **16**, 5–18, 1999.
- Lhermitte:61** M. R. Lhermitte and D. Atlas.  
Precipitation motion by pulse Doppler.  
In *Proc. 9th Weather Radar Conf., Boston*, pages 498–503. Amer. Meteor. Soc., 1961.
- Lhermitte:68** M. R. Lhermitte.  
New developments in Doppler radar methods.  
In *Proc. 13th Radar Meteorology Conf.*, pages 14–17, Amer. Meteor. Soc., Montreal, Canada, 1968.
- Lhermitte:76** R. Lhermitte and M. Gilet.  
Acquisition and Processing of Tri-Doppler Radar Data.  
In *Proc. 17th Radar Meteorology Conf., Seattle*, pages 1–6. Amer. Meteor. Soc., 1976.
- Liou:99** C.-Y. Liou.  
Single Radar Recovery of Cross-Beam Wind Components Using a Modified Moving Frame of Reference Technique.  
*J. Atmos. Oceanic. Technol.*, **16**, 1003–1016, 1999.
- Mewes:99** J. J. Mewes and A. Shapiro.  
Dual-doppler analysis using the anelastic vertical vorticity equation.  
In *Proc. 29th Radar Meteorology Conf., Montreal*, pages 33–36. Amer. Meteor. Soc., 1999.

- Mohr:81** C. G. Mohr, L. J. Miller, and R. L. Vaughan.  
An interactive software package for the rectification of radar data to three-dimensional cartesian coordinates.  
In *Preprints 20th Conf. on Radar Meteorology, Boston*, pages 690–695. Amer. Meteor. Soc., 1981.
- Montmerle:00** T. Montmerle, A. Caya, and I. Zawadzki.  
Simulation of a mid-latitude storm initialized with bistatic Doppler radar data.  
*Mon. Wea. Rev.*, **xx**, xx, 2000.
- Nathanson:90** E. F. Nathanson, J. P. Reilly, and M. N. Cohen.  
*Radar Design Principles*.  
McGraw-Hill, Inc., sec. edition, 1990.
- Navon:87** M. I. Navon and D. M. Legler.  
Conjugate-Gradient Methods for Large-Scale Minimization in Meteorology.  
*Mon. Wea. Rev.*, **115**, 1479–1502, 1987.
- Olsen:78** L. R. Olsen and U. H. W. Lammers.  
Bistatic radar measurements of ice-cloud reflectivities in the upper-troposphere.  
*Electron. Lett.*, **14**, 219–221, 1978.
- Orr:99** W. B. Orr and R. A. Kropfli.  
A method for estimating particle fall velocities from vertically pointing Doppler radar.  
*J. Atmos. Oceanic. Technol.*, **16**, 29–37, 1999.
- Pamment:98** A. J. Pamment and B. J. Conway.  
Objective Identification of Echoes Due to Anomalous Propagation in Weather Radar Data.  
*J. Atmos. Oceanic. Technol.*, **15**, 98–113, 1998.
- Persson:87** G. O. P. Persson and T. Andersson.  
A real-time system for automatic single-Doppler wind field analysis.  
In E. Publication, editor, *Proc. Symp. Mesoscale Analysis & Forecasting, Vancouver, Canada*, volume **SP-282**, pages 61–66, 1987.
- Powell:77** D. J. M. Powell.  
Restart procedures for the conjugate-gradient method.  
*Math. Prog.*, **11**, 42–49, 1977.
- Protat1:99** P. Protat and P. Eccles.  
Kinematic and dynamic study of a shallow supercell hailstorm sampled by the McGill bistatic multiple-Doppler radar network.  
*xxx*, **xxx**, 00–00, 1999.
- Protat2:99** A. Protat and I. Zawadzki.  
A variational method for real-time retrieval of three-dimensional wind field from multiple-doppler bistatic radar network data.  
*J. Atmos. Oceanic. Technol.*, **16**, 432–449, 1999.
- Protat:00** A. Protat and I. Zawadzki.  
Optimization of dynamic retrievals from a multiple-doppler radar network.  
*J. Atmos. Oceanic. Technol.*, **17**, 753–760, 2000.

- Qiu:92** J.-C. Qiu and Q. Xu.  
A Simple Adjoint Method of Wind Analysis for Single-Doppler Data.  
*J. Atmos. Oceanic. Technol.*, **9**, 588–598, 1992.
- Quoetone:99** L. Quoetone and D. Sirmans.  
The occurrence and impact of bistatic coupling in the WSR-88D Network.  
In *Proc.29th Radar Meteorology Conf., Montreal*, pages 242–245. Amer. Meteor. Soc., 1999.
- Ray:78** S. P.Ray, K. K. Wagner, K. W. Johnson, J. J. Stephens, W. C. Bumgarner, and E. A. Mueller.  
Triple-Doppler Observation of a Convective Storm.  
*J. Appl. Meteor.*, **17**, 1201–1212, 1978.
- Ray:80** S. P. Ray, C. L. Ziegler, W. Bumgarner, and R. J. Serafin.  
Single- and Multiple-Doppler Radar Observations of Tornadic Storms.  
*Mon. Wea. Rev.*, **108**, 1607–1625, 1980.
- Riley:99** R. J. Riley.  
Radar returns from insects: implications for meteorological radars.  
In *Proc.29th Radar Meteorology Conf., Montreal*, pages 390–393. Amer. Meteor. Soc., 1999.
- Rinehart:81** R. E. Rinehart and J. D. Tuttle.  
A technique for determining antenna beam patterns using a ground target.  
In *Preprints, 20th Conf. on Radar Meteorology, Boston*, pages 672–675. Amer. Meteor. Soc., 1981.
- Rinehart:99** E. R. Rinehart.  
*Radar for meteorologists*.  
Rinehart Publications, University of North Dakota, 1999.
- Rogers:63** R. R. Rogers.  
Radar measurement of velocities of meteorological scatterers.  
*J. Atmos. Sci.*, **20**, 170–174, 1963.
- Rogers:71** P. Rogers and P. Eccles.  
The bistatic radar equation for randomly distributed targets.  
In *Proc. of the IEEE*, volume **59**, pages 1019–1021, 1971.
- Roux:96** F. Roux and F. D. Marks Jr.  
Extended Velocity Track Display (EVTD): An Improved Processing method for Doppler Radar Observation of Tropical Cyclone.  
*J. Atmos. Oceanic. Technol.*, **13**, 875–899, 1996.
- Rubin:00** W. L. Rubin.  
Radar-acoustic detection of aircraft wake vortices.  
*J. Atmos. Oceanic. Technol.*, **17**, 1058–1065, 2000.
- Satoh:99** S. Satoh and J. Wurman.  
Accuracy of composite wind fields derived from a bistatic multiple-doppler radar network.  
In *Proc. 29th Radar Meteorology Conf., Montreal*, pages 221–224. Amer. Meteor. Soc., 1999.

- Schmid:98** W. Schmid, M. Wueest, and S. Mecklenburg.  
Retrieval of wind fields from single-Doppler data: error analysis and implications for operational applications.  
In *COST 75, Advanced Weather Radar Systems*, pages 602–611. Commission of the European Communities, 1998.
- Schonwiese:85** D. C. Schonwiese.  
*Praktische Statistik fr Meteorologen und Geowissenschaftler*.  
Gebrder Borntraeger, Berlin, Stuttgart, 1985.
- Shapiro:99** A. Shapiro and J. J. Mewes.  
New Formulations of Dual-Doppler Wind Analysis.  
*J. Atmos. Oceanic. Technol.*, **16**, 782–792, 1999.
- Shupyatsky:74** A. B. Shupyatsky.  
Echo depolarization as measured with bistatic radar.  
*J. Rech. Atmos.*, **8**, 201–204, 1974.
- Skolnik:90** M. Skolnik.  
*Radar Handbook*.  
McGraw-Hill, Inc., zweite edition, 1990.
- Smythe:83** R. G. Smythe and D. S. Zrnić.  
Correlation Analysis of Doppler Radar Data and retrieval of the Horizontal Wind.  
*J. Climat. Appl. Meteor.*, **22**, 297–311, 1983.
- Sun:97** J. Sun and N. A. Crook.  
Dynamical and Microphysical Retrieval from Doppler Radar Observations Using Cloud Model and Its Adjoint. Part I: Model Development and Simulated Data Experiments.  
*J. Atmos. Sci.*, **54**, 1642–1661, 1997.
- Sun:98** J. Sun and N. A. Crook.  
Dynamical and Microphysical Retrieval from Doppler Radar Observations Using Cloud Model and Its Adjoint. Part II: Retrieval Experiment of an Observed Florida Convective Storm.  
*J. Atmos. Sci.*, **55**, 835–852, 1998.
- Tabary:00** P. Tabary and G. Scialom.  
Real-time retrieval of the wind from aliased velocities measured by Doppler radars.  
*J. Atmos. Oceanic. Technol.*, **xx**, xx, 2000.
- Tian:96** L. Tian and R. C. Srivastava.  
Measurement of Attenuation at C Band in a Convective Storm by a Dual-Radar-Method.  
*J. Atmos. Oceanic. Technol.*, **14**, 184–196, 1996.
- Trapp:00** R. J. Trapp and C. A. D. III.  
Radar data objective analysis.  
*J. Atmos. Oceanic. Technol.*, **17**, 105–120, 2000.
- Tuttle:90** D. J. Tuttle and G. B. Foote.  
Determination of the boundary layer airflow from a single Doppler radar.  
*J. Atmos. Oceanic. Technol.*, **7**, 218–232, 1990.



- Wilson:88** W. J. Wilson and D. Reum.  
The Flare Echo: Reflectivity and Velocity Signature.  
*J. Atmos. Oceanic. Technol.*, **5**, 197–205, 1988.
- Wueest:99** M. Wueest.  
The effect of smoothing algorithmus on the retrieval of wind fields from simulated bistatic radar network data.  
*xxx, xxx*, (xxx), xxx, xxx.
- Wurman1:94** J. Wurman.  
Vector winds from a single-transmitter bistatic dual-doppler radar network.  
*Bull. Amer. Meteor.*, **75**, (6), 983–994, 1994.
- Wurman2:94** J. Wurman.  
Directly measured vector winds from an inexpensive bistatic multiple-Doppler radar network.  
In *COST75-Weather radar Systems*, number 99, pages 99–99. Commission of European Communities, 1994.
- Wurman:91** J. Wurman.  
Forcing mechanisms of thunderstorm downdrafts.  
In *25th Int. Conf. on Radar Meteorology*, Preprints, pages J63–66, Amer. Meteor. Soc., Paris, 1991.
- Wurman:93** J. Wurman, S. Heckman, and D. Boccippio.  
A Bistatic Multiple-Doppler Radar Network.  
*J. Appl. Meteor.*, **32**, 1802–1814, 1993.
- Wurman:95** J. Wurman, M. Randall, C. L. Frush, E. Loew, and C. L. Holloway.  
Design of a bistatic dual-Doppler radar for retrieving vector winds using one transmitter and a remote low-gain passiv receiver.  
In *Proc. of the IEE - Special issue on Remote Sensing Instruments for Environmental Research*, volume **82**, pages 1861–1872, 1995.
- West:99** A. M. West, W. Schmid, and I. Zawadzki.  
Improving single-doppler wind retrievals with secondary wind field data.  
In *Proc.29th Radar Meteorology Conf., Montreal*, pages 138–141. Amer. Meteor. Soc., 1999.
- Zawadzki:73** I. Zawadzki.  
Statistical Properties of Precipitation Patterns.  
*JAM*, **12**, 459–472, 1973.