

RICHARD W. KATZ

CONTACT INFORMATION

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EMPLOYMENT

1/14 – *Senior Scientist Emeritus*, CISL, NCAR, Boulder, CO
10/09 – 12/13 *Senior Scientist*, IMAGE, NCAR, Boulder, CO
7/94 – 9/09 *Senior Scientist*, ISSE (formerly ESIG), NCAR, Boulder, CO
7/03 – 10/03 *Guest Professor*, University of Innsbruck, Austria
5/03 – 6/03 *Invited Professor*, Swiss Federal Institute of Technology, Lausanne
1/97 – 4/97 *Visiting Scientist*, NIWA, Wellington, New Zealand
7/84 – 6/94 *Scientist III*, ESIG, NCAR, Boulder, CO
10/89 – 8/90 *Visiting Research Scientist*, Dept. of Land, Air and Water Resources and
Division of Statistics, Univ. of California, Davis, CA
7/83 – 6/84 *Scientist II*, ESIG, NCAR, Boulder, CO
10/79 – 6/83 *Research Associate and Assistant Professor (Research)*, Dept. of Atmospheric
Sciences and Dept. of Statistics, Oregon State Univ., Corvallis, OR
9/80 – 7/82 *Research Statistician*, Corvallis Environmental Research Laboratory, EPA,
Corvallis, OR
8/76 – 9/79 *Scientist I*, ESIG, NCAR, Boulder, CO
9/75 – 8/76 *Postdoctoral Fellow*, Advanced Study Program, NCAR, Boulder, CO
9/74 – 9/75 *Statistician*, Center for Climatic and Environmental Assessment, NOAA,
Columbia, MO

EDUCATION

9/70 – 8/74 Pennsylvania State Univ., University Park, PA (*PhD Statistics*)
Thesis: “A stochastic process defined on a Markov chain: Properties and an
application to meteorology” (*Advisor*: Frank A. Haight)
9/66 – 6/70 Univ. of Virginia, Charlottesville, VA (*BA Mathematics, High Distinction*)

SOCIETIES

American Geophysical Union (*Retired*) Institute of Mathematical Statistics (*Retired*)
American Meteorological Society (*Fellow*) Phi Beta Kappa (*Honorary*)
American Statistical Association (*Retired*)

AWARDS

2010	International Meetings on Statistical Climatology Achievement Award
2007	UCAR Special Recognition Award
2001	Fellow, American Meteorological Society
1987, 88, 92, 97	Nominee, NCAR Outstanding Publications Award
1979	NASA (Johnson Space Center) Group Achievement Award
1975	NOAA Environmental Data Service Special Achievement Award

EDITORIAL/REVIEW SERVICE

2009 – 2015	Editorial Board, <i>Advances in Water Resources</i>
1997 – 2014	Editorial Board, <i>Extremes</i> (Co-Editor: Special issue on “Statistics of Extremes in Weather and Climate,” V. 13, No. 2, June 2010)
1985 – 2014	Editorial Board, <i>Climatic Change</i> (Associate Deputy Editor, 2011 – 2014)
2011 – 2013	Contributing Editor, <i>Climate Research</i>
2004 – 2009	Associate Editor, <i>Water Resources Research</i>
2001, 2002, 2005	Member, NSF Proposal Review Panel on Biocomplexity in the Environment: Dynamics of Coupled Natural and Human Systems
2000	Member, NSF/EPA Proposal Review Panel on Environmental Statistics
1977 – 1997	Editorial Collaborator and Contributing Editor, <i>Current Index to Statistics</i>
1985 – 1987	Editor, <i>Network Newsletter</i>

CONFERENCES/WORKSHOPS ORGANIZED

6 – 24 June 2011	Organizer, NCAR Advanced Study Program Colloquium on Statistical Assessment of Extreme Weather Phenomena under Climate Change, Boulder
20 – 24 Jan 2008	Program Chair, AMS 19th Conference on Probability and Statistics in Atmospheric Sciences, New Orleans, LA
3 – 5 Jan 2007	Co-Organizer, Workshop on Frameworks for Integration of Atmospheric-Oceanic Science with Operational Decision-Making, Monterey, CA
29 Jan – 2 Feb 2006	Program Co-Chair, AMS 18th Conference on PSAS, Atlanta, GA
11 – 15 Jan 2004	Program Co-Chair, AMS 17th Conference on PSAS, Seattle, WA
18 – 24 July 1998	Co-Organizer, NCAR Colloquium on Statistics for Understanding the Atmosphere and Ocean, Boulder, CO
6 – 19 July 1994	Co-Organizer, NCAR Colloquium on Application of Statistics to Modeling the Earth's Climate System, Boulder, CO
16 – 18 Nov 1983	Program Chair, AMS 9th Conference on PSAS, Hot Springs, AR

OTHER COMMUNITY SERVICE

2012 – 2014	Member, Working Group on Extremes, US Climate Variability and Predictability Research Program (CLIVAR)
2011 – 2013	Member, Working Group on Science of Climate Change, US National Climate Assessment Development and Advisory Committee
2011 – 2013	Member, American Statistical Association Advisory Committee on Climate Change Policy (Chair, 2013)
2006 – 2012	Member, External Engineering and Science Advisory Board, Center for Collaborative Adaptive Sensing of the Atmosphere (CASA)
2001 – 2012	AMS Committee on Probability and Statistics (Member, 2001–2006; Chair, 2006–2009; Ex Officio Member, 2009–2012)
2007 – 2008	Chair, Drafting Team, AMS Information Statement on probability forecasts
2005 – 2007	Contributing Author, Chapter 11, WG I, IPCC 4th Assessment Report
2002 – 2004	Secretary, The International Environmetrics Society (TIES)
1999 – 2002	Regional Representative (North America), Board of Directors, TIES
1999 – 2000	Contributing Author, Chapters 10 & 13, WG I, IPCC 3rd Assessment Report
1994 – 1995	Contributing Author, Chapter 3, WG I, IPCC 2nd Assessment Report
1989 – 1990	Contributing Author, Chapter 8, WG I, IPCC 1st Assessment Report
1981 – 1984	AMS Committee on Probability and Statistics (Member 1981–82, Chair 1982–83, Ex Officio Member 1984)
1978 – 1979	Secretary, Colorado-Wyoming Chapter, American Statistical Association
1977 – 1979	Adjunct Professor, Dept. of Economics, Univ. of Colorado, Boulder, CO

SERVICE TO NCAR

2009 – 2011	Member, NCAR Appointments Review Group (also 1998–2002)
2007 – 2013	Member, IMAGE Council
1995 – 2013	Member, NCAR Book Selection Committee
2000 – 2006	Member, Executive Committee, NCAR Scientists Assembly (Chair, 2005–06)
2005	Co-Chair, Proposal Review Committee, NCAR Directors Opportunity Fund
1993 – 1995	Member, NCAR Director's Office Divisional Equity Committee

TEACHING/EDUCATIONAL SERVICE

3/16	Introduction to univariate extreme value theory in climate sciences, Course on Beyond P-Values: The Statistics of Extremes, NCAR, Boulder, CO
2/14	Extreme value analysis, AMS Short Course on Statistical Analysis of Weather and Climate Extremes, Atlanta, GA
2/12	Extreme value analysis for geophysical applications, Vancouver, BC
10/09	Statistics of extremes in climate change, Short Course, Univ. Buenos Aires, Argentina
1/09	Tutorial on Extremes Toolkit, AMS Short Course on Statistics of Extreme Events, Phoenix, AZ

- 11/08 Statistics of extremes in climate change, Short Course, Michigan State Univ.
 6/07 Uncertainty, optimal use, and economic value of weather forecasts, COMET course on Mesoscale Analysis and Prediction, UCAR, Boulder, CO
 5/07 Statistics of extremes in climate change, CSIRO Short Course, Melbourne, Australia
 1/05 Application of probabilistic forecasts: Decision making with forecast uncertainty, AMS Short Course on Probabilistic Forecasting, San Diego, CA
 7/04 Tutorial on Extremes Toolkit, NCAR Summer Colloquium on Climate and Health
 1/04 Introduction to significance testing, AMS Short Course on Significance Testing, Model Evaluation, and Alternatives, Seattle, WA
 10/03 Statistical methods for weather and climate forecasting and decision making, Univ. Innsbruck, Austria
 5/03 Stochastic modeling of environmental time series, Swiss Federal Institute of Technology
 1/02 Economic value of climate forecasts, AMS Short Course on Verification of Climate Forecasts, Orlando, FL
 1990 Applied statistics, Univ. of California, Davis
 7/86 WMO Training Workshop on Modern Statistical Methods for Climate Data Applications, Nairobi, Kenya
 1979 – 83 Principles of statistics, regression analysis, statistical meteorology, Oregon St. Univ.

PH.D. COMMITTEES

- 2006 Marta Nogaj, Université Paris-Sud XI, France (*rapporteur & member*)
 2005 Daniel Cooley, Dept. Applied Mathematics, Univ. Colorado (*member*)
 1996 John Sansom, Inst. Stat. & Op. Res., Victoria Univ., Wellington, NZ (*external examiner*)
 1979 John Snyder, Dept. Economics, Univ. Colorado (*member*)

INTERNS/STUDENT VISITORS

- 2012 H el ene Benveniste,  cole des Mines, Paris, France
 2010 Anne Sabourin, Laboratoire des Sciences du Climat et l'Environnement, Paris, France
 2009 Ulf Cormann, University of Siegen, Germany
 2008 Jana Sillmann, Max Planck Institute for Meteorology, Hamburg, Germany
 2007 – 8 Marcus Walter, Dept. Meteorology, Pennsylvania State Univ. (*SOARS*)
 2007 – 8 John Henry, Dept. Statistics, Oregon State Univ.
 2006 Bret Harper, Energy & Resources Group, Univ. California, Berkeley (*SOARS*)
 2004 Matt Coleman, Dept. Meteorology, Pennsylvania State Univ. (*SOARS*)
 1998 Shelly Knight, Dept. Geography, Univ. of Colorado
 1995 Leslea Davison, Dept. Statistics, Rice Univ.

WEB SITES

Economic Value of Weather and Climate Forecasts: www.isse.ucar.edu/staff/katz/esig.html

Statistics of Weather and Climate Extremes: www.isse.ucar.edu/extremevalues/extreme.html

GRANTS

- 10/11 – 9/16 Network on statistical methods in atmospheric and oceanic sciences, *NSF/DMS* [Collaborator; Node Director 10/11 – 12/13]
- 5/11 – 4/15 Assessing high-impact weather response to climate variability and change utilizing extreme value theory, *NSF/EaSM* [Collaborator]
- 5/11 – 4/15 Integration of decadal climate predictions, ecological models and human decision-making models to support climate-resilient agriculture in the Argentine Pampas, *NSF/EaSM* [Co-PI]
- 9/07 – 8/12 Interactions between changing climate and technological innovations in agricultural decision-making: Implications for land use and sustainability of production systems, *NSF/CNH* [Co-PI]
- 6/05 – 9/06 Multivariate dependence in climate extremes, *ORNL* [Co-PI]
- 9/04 – 2/10 Understanding and modeling the scope of adaptive management in agroecosystems in the Pampas in response to interannual and decadal climate variability and other risk factors, *NSF/BE-CNH* [Co-PI]
- 7/04 – 6/08 A statistics program at NCAR, *NSF/DMS* [Co-PI]
- 7/99 – 6/04 Geophysical Statistics Program at the National Center for Atmospheric Research, *NSF/DMS* [PI]
- 1/97 – 12/01 Sensitivity analysis of the effect of changes in mean and variability of climate on crop production and regional economics in the southeastern U.S.: An integration of stochastic, climate, crop and economic modeling, *EPA* [Co-I]
- 1/97 – 12/99 Analysis of the effect of changing climate variability on crop production in the Southeast: An integration of stochastic modeling, regional climate modeling, crop modeling and remote sensing techniques, *NASA* [Co-I]
- 7/93 – 7/99 Collaboration between statistical and atmospheric sciences on modeling the climate system, *NSF/DMS* [PI]
- 9/95 – 9/98 Vegetation response to mesoscale climate variability in the mountainous West, *NSF/SBES* [Co-Investigator]
- 1/92 – 12/93 Precipitation variability and extreme events: Implications for climate models and climate change, *NOAA/OGP* [PI]
- 4/89 – 4/92 Methods for analyzing extreme events with application to scenario development for climate impact assessment, *EPA* [PI]
- 10/87 – 4/91 Studies of the optimal use and economic value of weather and climate information, *NSF/ATM* [Co-PI]
- 10/86 – 9/89 Identifying and coping with extreme meteorological events, *NSF (U.S.- Eastern Europe Cooperative Science Program)* [Co-PI]
- 4/85 – 9/87 Use of static and dynamic decision-making models to describe quality/value relationships for weather and climate information, *NSF/ATM* [Co-PI]
- 9/82 – 12/86 Case studies of the economic value of monthly and seasonal climate forecasts, *NOAA* [Co-PI]

- 10/82 – 7/85 Use of decision-making models to describe quality/value relationships for weather and climate information, *NSF/ATM* [Co-PI]
- 7/80 – 12/82 Dynamic decision-making models for assessing the value of weather and climate information, *NSF/ATM* [Co-Principal Investigator]

ARTICLES IN JOURNALS

- Tye, M.R., R.W. Katz, and B. Rajagopalan, 2017: Climate change or climate regimes? Examining multi-annual variations in precipitation extremes over the Argentine Pampas. *Climate Dynamics* (submitted).
- Barlow, M. et al. (14 others including R.W. Katz), 2017: North American extreme precipitation events and related large scale meteorological patterns: a review of statistical methods, dynamics, modeling, and trends. *Climate Dynamics* (to be resubmitted).
- Gilleland, E., R.W. Katz, and P. Naveau, 2017: Quantifying the risk of extreme events under climate change. *Chance*, **30.4**, 30–36.
- Gilleland, E., and R.W. Katz, 2016: extRemes 2.0: An extreme value analysis package in R. *Journal of Statistical Software*, **72**, doi: 10.18637/jss.v072.i08.
- Grotjahn, R. et al. (12 others including R.W. Katz), 2016: North American extreme temperature events and related large scale meteorological patterns: a review of statistical methods, dynamics, modeling, and trends. *Climate Dynamics*, **46**, 1151–1184.
- Verdin, A., B. Rajagopalan, W. Kleiber, and R.W. Katz, 2015: Coupled stochastic weather generation using spatial and generalized linear models. *Stochastic Environmental Research and Risk Assessment*, **29**, 347–356.
- Cheng, L., A. AghaKouchak, E. Gilleland, and R.W. Katz, 2014: Non-stationary extreme value analysis in a changing climate. *Climatic Change*, **127**, 353–369.
- Tye, M.R., D.B. Stephenson, G. Holland, and R.W. Katz, 2014: A Weibull approach for improving climate model projections of tropical cyclone maximum wind-speed distributions. *Journal of Climate*, **27**, 6119–6133.
- Vose, R.S. et al. (25 others including R.W. Katz), 2014: Monitoring and understanding changes in extremes: Extratropical storms, winds, and waves. *Bulletin of the American Meteorological Society*, **95**, 377–386.
- Rootzén, H., and R.W. Katz, 2013: Design Life Level: Quantifying risk in a changing climate. *Water Resources Research*, **49**, 5964–5972.
- Peterson, T.C. et al. (27 others including R.W. Katz), 2013: Monitoring and understanding changes in heat waves, cold waves, floods and droughts in the United States: State of knowledge. *Bulletin of the American Meteorological Society*, **94**, 821–834.
- Smith, A.B., and R.W. Katz, 2013: US billion-dollar weather and climate disasters: data sources, trends, accuracy, and biases. *Natural Hazards*, **67**, 387–410.
- Kunkel, K.E. et al. (24 others including R.W. Katz), 2013: Monitoring and understanding trends in extreme storms: State of knowledge. *Bulletin of the American Meteorological Society*, **94**, 499–514.
- Kleiber, W., R.W. Katz, and B. Rajagopalan, 2013: Daily minimum and maximum temperature simulation over complex terrain. *Annals of Applied Statistics*, **7**, 588–612.

- Kim, Y., R.W. Katz, B. Rajagopalan, G.P. Podestá, and E.M. Furrer, 2012: Reducing overdispersion in stochastic weather generators using a generalized linear modeling approach. *Climate Research*, **53**, 13–24.
- Kleiber, W., R.W. Katz, and B. Rajagopalan, 2012: Daily spatiotemporal precipitation simulation using latent and transformed Gaussian processes. *Water Resources Research*, **48**, W01523, doi: 10.1029/2011WR011105.
- Sillmann, J., M. Croci-Maspoli, M. Kallache, and R.W. Katz, 2011: Extreme cold winter temperatures in Europe under the influence of North Atlantic atmospheric blocking. *Journal of Climate*, **24**, 5899–5913.
- Gilleland, E., and R.W. Katz, 2011: A new software to analyze how extremes change over time. *Eos*, **92**, 13–14.
- Towler, E., B. Rajagopalan, E. Gilleland, R.S. Summers, D. Yates, and R.W. Katz, 2010: Modeling hydrologic and water quality extremes in a changing climate: a statistical approach based on extreme value theory. *Water Resources Research*, **46**, W11504, doi: 10.1029/2009WR008876.
- Furrer, E.M., R.W. Katz, M.D. Walter, and R. Furrer, 2010: Statistical modeling of hot spells and heat waves. *Climate Research*, **43**, 191–205.
- Katz, R.W., 2010: Statistics of extremes in climate change. *Climatic Change*, **100**, 71–76.
- Podestá, G., F. Bert, B. Rajagopalan, S. Apipattanavis, C. Laciana, E. Weber, W. Easterling, R. Katz, D. Letson, and A. Menendez, 2009: Decadal climate variability in the Argentine Pampas: regional impacts of plausible climate scenarios on agricultural systems. *Climate Research*, **40**, 199–210.
- Letson, D., C.E. Laciana, F.E. Bert, E.U. Weber, R.W. Katz, X.I. Gonzalez, and G.P. Podestá, 2009: Value of perfect ENSO phase predictions for agriculture: evaluating the impact of land tenure and decision objectives. *Climatic Change*, **97**, 145–170.
- Furrer, E.M., and R.W. Katz, 2008: Improving the simulation of extreme precipitation events by stochastic weather generators. *Water Resources Research*, **44**, W12439, doi: 10.1029/2008WR007316.
- Zheng, X., and R.W. Katz, 2008: Simulation of spatial dependence in daily rainfall using multisite generators. *Water Resources Research*, **44**, W09403, doi: 10.1029/2007WR006399.
- Zheng, X., and R.W. Katz, 2008: Mixture model of generalized chain-dependent processes and its application to simulation of interannual variability of daily rainfall. *Journal of Hydrology*, **349**, 191–199.
- Apipattanavis, S., G. Podestá, B. Rajagopalan, and R.W. Katz, 2007: A semiparametric multivariate and multisite weather generator. *Water Resources Research*, **43**, W11401, doi: 10.1029/2006WR005714.
- Harper, B.R., R.W. Katz, and R.C. Harriss, 2007: Statistical methods for quantifying the effect of the El Niño–Southern Oscillation on wind power in the northern Great Plains of the United States. *Wind Engineering*, **31**, 123–137.
- Furrer, E.M., and R.W. Katz, 2007: Generalized linear modeling approach to stochastic weather generators. *Climate Research*, **34**, 129–144.
- Katz, R.W., and M. Ehrendorfer, 2006: Bayesian approach to decision making using ensemble weather forecasts. *Weather and Forecasting*, **21**, 220–231.
- Katz, R.W., G.S. Brush, and M.B. Parlange, 2005: Statistics of extremes: Modeling ecological disturbances. *Ecology*, **86**, 1124–1134.

- Katz, R.W., M.B. Parlange, and C. Tebaldi, 2003: Stochastic modeling of the effects of large-scale circulation on daily weather in the southeastern U.S. *Climatic Change*, **60**, 189–216.
- Katz, R.W., M.B. Parlange, and P. Naveau, 2002: Statistics of extremes in hydrology. *Advances in Water Resources*, **25**, 1287–1304.
- Katz, R.W., 2002: Stochastic modeling of hurricane damage. *Journal of Applied Meteorology*, **41**, 754–762.
- Katz, R.W., 2002: Sir Gilbert Walker and a connection between El Niño and statistics. *Statistical Science*, **17**, 97–112.
- Katz, R.W., 2002: Techniques for estimating uncertainty in climate change scenarios and impact studies. *Climate Research*, **20**, 167–185.
- Sontakke, N.A., D.J. Shea, R.A. Madden, and R.W. Katz, 2001: Potential for long-range regional precipitation prediction over India. *Mausam*, **52**, 47–56.
- Parlange, M.B., and R.W. Katz, 2000: An extended version of the Richardson model for simulating daily weather variables. *Journal of Applied Meteorology*, **39**, 610–622.
- Katz, R.W., 1999: Extreme value theory for precipitation: Sensitivity analysis for climate change. *Advances in Water Resources*, **23**, 133–139.
- Katz, R.W., and X. Zheng, 1999: Mixture model for overdispersion of precipitation. *Journal of Climate*, **12**, 2528–2537.
- Katz, R.W., 1999: Moments of power transformed time series. *Environmetrics*, **10**, 301–307.
- Madden, R.A., D.J. Shea, R.W. Katz, and J.W. Kidson, 1999: The potential long-range predictability of precipitation over New Zealand. *International Journal of Climatology*, **19**, 405–421.
- Kiely, G., J.D. Albertson, M.B. Parlange, and R.W. Katz, 1998: Conditioning stochastic properties of daily precipitation on indices of atmospheric circulation. *Meteorological Applications*, **5**, 75–87.
- Katz, R.W., and M.B. Parlange, 1998: Overdispersion phenomenon in stochastic modeling of precipitation. *Journal of Climate*, **11**, 591–601.
- Katz, R.W., and M.B. Parlange, 1996: Mixtures of stochastic processes: Application to statistical downscaling. *Climate Research*, **7**, 185–193.
- Katz, R.W., 1996: Use of conditional stochastic models to generate climate change scenarios. *Climatic Change*, **32**, 237–255.
- Tarleton, L.F., and R.W. Katz, 1995: Statistical explanation for trends in extreme summer temperatures at Phoenix, Arizona. *Journal of Climate*, **8**, 1704–1708.
- Katz, R.W., and M.B. Parlange, 1995: Generalizations of chain-dependent processes: Application to hourly precipitation. *Water Resources Research*, **31**, 1331–1341.
- Chu, P.-S., R.W. Katz, and P. Ding, 1995: Modelling and forecasting seasonal precipitation in Florida: A vector time-domain approach. *International Journal of Climatology*, **15**, 53–64.
- Brown, B.G., and R.W. Katz, 1995: Regional analysis of temperature extremes: Spatial analog for climate change? *Journal of Climate*, **8**, 108–119.
- Katz, R.W., and B.G. Brown, 1994: Sensitivity of extreme events to climate change: The case of autocorrelated time series. *Environmetrics*, **5**, 451–462.
- Katz, R.W., and J. Garrido, 1994: Sensitivity analysis of extreme precipitation events. *International Journal of Climatology*, **14**, 985–999.
- Downton, M.W., and R.W. Katz, 1993: A test for inhomogeneous variance in time-averaged temperature data. *Journal of Climate*, **6**, 2448–2464.
- Katz, R.W., 1993: Towards a statistical paradigm for climate change. *Climate Research*, **2**, 167–175.

- Katz, R.W., and M.B. Parlange, 1993: Effects of an index of atmospheric circulation on stochastic properties of precipitation. *Water Resources Research*, **29**, 2335–2344.
- Katz, R.W., 1993: Dynamic cost–loss ratio decision-making model with an autocorrelated climate variable. *Journal of Climate*, **6**, 151–160.
- Katz, R.W., 1992: Role of statistics in the validation of general circulation models. *Climate Research*, **2**, 35–45.
- Katz, R.W., and B.G. Brown, 1992: Extreme events in a changing climate: Variability is more important than averages. *Climatic Change*, **21**, 289–302 (Reprinted in D.I. Stern, F. Jotzo, and L. Dobes (eds.), 2014: *Climate Change and the World Economy*, Edward Elgar Publishing, Northampton, MA).
- Katz, R.W., and B.G. Brown, 1991: The problem of multiplicity in research on teleconnections. *International Journal of Climatology*, **11**, 505–513.
- Katz, R.W., and A.H. Murphy, 1990: Quality/value relationships for imperfect weather forecasts in a prototype multistage decision-making model. *Journal of Forecasting*, **9**, 75–86 [with correspondence, **11**, 86–88 (1992)].
- Faragó, T., I. Dobi, R.W. Katz, and I. Matyasovszky, 1989: Meteorological application of extreme value theory: Problems of finite, dependent and non-homogeneous samples. *Időjárás*, **93**, 261–275.
- Katz, R.W., 1989: Statistics and decision making for extreme meteorological events. *Időjárás*, **93**, 23–35.
- Chu, P.-S., and R.W. Katz, 1989: Spectral estimation from time series models with relevance to the Southern Oscillation. *Journal of Climate*, **2**, 86–90.
- Katz, R.W., 1988: Statistical procedures for making inferences about climate variability. *Journal of Climate*, **1**, 1057–1064.
- Katz, R.W., 1988: Use of cross correlations in the search for teleconnections. *Journal of Climatology*, **8**, 241–253.
- Katz, R.W., B.G. Brown, and A.H. Murphy, 1987: Decision-analytic assessment of the economic value of weather forecasts: The fallowing/planting problem. *Journal of Forecasting*, **6**, 77–89.
- Katz, R.W., and A.H. Murphy, 1987: Quality/value relationship for imperfect information in the umbrella problem. *American Statistician*, **41**, 187–189.
- Chu, P.-S., and R.W. Katz, 1987: Measures of predictability with applications to the Southern Oscillation. *Monthly Weather Review*, **115**, 1542–1549.
- Brown, B.G., R.W. Katz, and A.H. Murphy, 1986: On the economic value of seasonal-precipitation forecasts: The fallowing/planting problem. *Bulletin of the American Meteorological Society*, **67**, 833–841.
- Katz, R.W., and M.H. Glantz, 1986: Anatomy of a rainfall index. *Monthly Weather Review*, **114**, 764–771.
- Glantz, M.H., and R.W. Katz, 1985: Drought as a constraint to development in Sub-Saharan Africa. *Ambio*, **XIV**, 334–339.
- Chu, P.-S., and R.W. Katz, 1985: Modeling and forecasting the Southern Oscillation: A time-domain approach. *Monthly Weather Review*, **113**, 1876–1888.
- Murphy, A.H., R.W. Katz, R.L. Winkler, and W.-R. Hsu, 1985: Repetitive decision making and the value of forecasts in the cost–loss ratio situation: A dynamic model. *Monthly Weather Review*, **113**, 801–813.

- Brown, B.G., R.W. Katz, and A.H. Murphy, 1985: Exploratory analysis of precipitation events with implications for stochastic modeling. *Journal of Climate and Applied Meteorology*, **24**, 57–67.
- Mearns, L.O., R.W. Katz, and S.H. Schneider, 1984: Extreme high-temperature events: Changes in their probabilities with changes in mean temperature. *Journal of Climate and Applied Meteorology*, **23**, 1601–1613 [with correspondence, **24**, 1280 (1985)].
- Adams, R.M., T.D. Crocker, and R.W. Katz, 1984: Assessing the adequacy of natural science information: A Bayesian approach. *The Review of Economics and Statistics*, **LXVI**, 568–575.
- Brown, B.G., R.W. Katz, and A.H. Murphy, 1984: Time series models to simulate and forecast wind speed and wind power. *Journal of Climate and Applied Meteorology*, **23**, 1184–1195.
- Stewart, T.R., R.W. Katz, and A.H. Murphy, 1984: Value of weather information: A descriptive study of the fruit-frost problem. *Bulletin of the American Meteorological Society*, **65**, 126–137.
- Katz, R.W., 1983: Statistical procedures for making inferences about precipitation changes simulated by an atmospheric general circulation model. *Journal of the Atmospheric Sciences*, **40**, 2193–2201.
- Winkler, R.L., A.H. Murphy, and R.W. Katz, 1983: The value of climate information: A decision-analytic approach. *Journal of Climatology*, **3**, 187–197.
- Katz, R.W., 1982: Statistical evaluation of climate experiments with general circulation models: A parametric time series modeling approach. *Journal of the Atmospheric Sciences*, **39**, 1446–1455.
- Katz, R.W., A.H. Murphy, and R.L. Winkler, 1982: Assessing the value of frost forecasts to orchardists: A dynamic decision-making approach. *Journal of Applied Meteorology*, **21**, 518–531.
- Katz, R.W., 1981: On some criteria for estimating the order of a Markov chain. *Technometrics*, **23**, 243–249.
- Katz, R.W., and R.R. Garcia, 1981: Statistical relationships between hailfall and damage to wheat. *Agricultural Meteorology*, **24**, 29–43.
- Katz, R.W., and R.H. Skaggs, 1981: On the use of autoregressive-moving average processes to model meteorological time series. *Monthly Weather Review*, **109**, 479–484.
- Katz, R.W., 1979: Parsimony in modeling daily precipitation. *Water Resources Research*, **15**, 1628–1630.
- Katz, R.W., 1979: Sensitivity analysis of statistical crop-weather models. *Agricultural Meteorology*, **20**, 291–300.
- Katz, R.W., and M.H. Glantz, 1979: Weather modification for food production: Panacea or placebo? *Journal of Soil and Water Conservation*, **34**, 132–134.
- Katz, R.W., 1978: Persistence of subtropical African droughts. *Monthly Weather Review*, **106**, 1017–1021.
- Katz, R.W., 1977: An application of chain-dependent processes to meteorology. *Journal of Applied Probability*, **14**, 598–603.
- Katz, R.W., 1977: Precipitation as a chain-dependent process. *Journal of Applied Meteorology*, **16**, 671–676.
- Glantz, M.H., and R.W. Katz, 1977: When is a drought a drought? *Nature*, **267**, 192–193 [with correspondence, **271**, 7 (1978)].
- Katz, R.W., 1977: Assessing the impact of climatic change on food production. *Climatic Change*, **1**, 85–96.
- Katz, R.W., 1974: Computing probabilities associated with the Markov chain model for precipitation. *Journal of Applied Meteorology*, **13**, 953–954.

COMMENTS/EDITORIALS

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