# **Randall S. Cerveny**

## VITA

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INTERI	NET: cerveny@asu.e	edu	http://geography.asu.edu/cerveny/	
]	ersonal Data: Born - 28 July 1959 Marital Status - Married		Health - Excellent Citizenship - United States	
Educati	<u>on:</u>			
	Doctor of Philosophy University of Nebrasl		August, 1986	
	Master of Arts (Geography) University of Nebraska		May, 1983	
	Bachelor of Science ( University of Nebrasl	Geography) with Distinction	May, 1981	
Professi	ional Involvement:			
2	2006-present United Nations / World Meteorological Organization (WMO) Rapporteur on Extreme Records			
,	2005-present	President's Professor, Arizona State University, R. Aspinall/A. Brazel, Directors		
	1994-present	Contributing Editor, Weatherwise		
ź	2000-2005	Full Professor, Department of Geography Arizona State University, B. O'hUallachain/R. Aspinall, chairs		
	1991-2000	Associate Professor, Department of Geography Arizona State University, Dr. A. Brazel/B. O'hUallachain, chairs		
	1993	Member, Climate Assessment Select Committee, Center for Nuclear Waste Regulatory Analyses Nuclear Regulatory Commission Contract NRC-02-88-005. Project Director: A.R. DeWispelare.		
	1986 - 1991	Assistant Professor, Department of Geography Arizona State University, Dr. P. Gober, chair		
	1985 - 1986Participant in the 1985-6 NSFwith Polar Ice Coring Office		F Antarctic Research Program	

#### Organizations:

Association of American Geographers American Meteorological Society

#### Committee Service:

#### International

-World Meteorological Organization (WMO) Rapporteaur on Extreme Records (2006-present)

#### National

-Secretary/Treasurer, AAG Climate Specialty Group (1988-1989) -AAG local Arrangements Committee (Fall, 1987- Spring 1988) -Consulting Editor, *Weatherwise* (Spring, 1994- present)

#### Community/Local

-Science Advisory Council, Desert Botanical Gardens, Phoenix (1992-present) -President, Central Arizona Chapter of AMS (1989-1992) -Treasurer, ASU chapter of Sigma Xi (1990-1992)

#### University

-ASU CLAS Curriculum Committee Chair (2005-present)

-ASU Distinguished Teaching Academy (2005-present)

-ASU Geography Director of Undergraduate Advising (1997-present)

-ASU Geography Undergraduate Committee (Chair, 1997-present)

-ASU Geography Computer Committee (chair, 1995-2003)

-ASU Geography Personnel Committee (chair, 1993)

-ASU Geography Executive Committee (1993)

-ASU Faculty Meeting Secretary (1993)

-ASU CLAS-ACT member (1992-1993)

-ASU Computer Research Subcommittee (1988-92)

-ASU Geography Graduate Committee, chair (1990-92)

-ASU Geography Graduate Committee (1989-90)

-ASU Geography Masters' Committee (chair), (1987-8)

-ASU Geography Undergraduate Committee (1986-88)

-ASU Geography Executive Committee (1987)

-ASU Climatology Laboratory Advisory Committee (1987-88)

-ASU Geography Search Committees

#### Major Advisor to Completed Graduate Student Programs (chair, only)

<u>Name</u> Diane Douglas David W. Stahle John Shaffer Nancy Selover Leslie Waite Cory Matyas John Shaffer Jonathan Triggs	Date of Graduation December, 1998, Ph.D. August, 1990, Ph.D. May, 1994, M.A. December, 1995, M.A. December, 1999, M.A. August, 2001, M.A. August, 2001, Ph.D. December, 2003 M.A.	Present Position Private Consulting Prof, University of Arkansas Into Ph.D. program Ph.D. student, ASU National Weather Service University of South Florida Scottsdale Community College NASA
P. Grady Dixon	May, 2005 Ph.D.	Mississippi State University
Brian Ochs	May, 2005 M.A.	APS
Valerie Meyer	May, 2004 M.A.	National Weather Service
Russell Vose	May, 2004, Ph.D.	National Climatic Data Center
Nancy Selover	December, 2005, Ph.D.	Arizona State Climatologist
David Brommer	May, 2006, Ph.D.	University of Alabama
Alan Church	May, 2006, M.A.	private GIS company
James Walter	May, 2007, M.A.	Salt River Project (power & water utility)
Colleen Garrity	May, 2007, Ph.D.	SUNY-Geneso
Paul Weser	May, 2007, Ph.D.	Scottsdale Community College

#### Selected Honors, Awards & Accomplishments:

WMO Rapporteur for Climate Extremes (2006-present) President's Professor (2005-present) Fairbury Ambassador (Germanfest, 2001) Arizona State University College of Liberal Arts & Science Excellence In Teaching Award (1998) Article Inclusion in the 50th Anniversary Issue of *Weatherwise* (1997) Arizona State University Nominated Excellence in Advising (1998) Arizona State University Professor of the Month, finalest for ASU Parent's Association Professor Award (1997) President's Award: Service Learning Project (helping low score elementary students using college-course interns) Travelled to every Continent on Earth (1985-1997) British Cartographic Society Medal (1989) The Antarctica Service Medal of the United States of America (1986) The Presidential Fellowship, University of Nebraska (1983-1986) The Maude Hammond Fling Fellowship, University of Nebraska (1981-1983) Leslie Hewes Prize in Geography for Graduate Students (1983) Donald Walter Miller Scholarship (1978) Graduation with Distinction, Nebraska(1977-1981) Honor List every semester in college (1977-1981) Graduated Top Five Percent of Class, Nebraska (1981) Nebraska Wesleyan Trustee's Scholarship (1977) Nebraska Regents' Alternate (1977) Commended, National Merit Test (1977) Fairbury High School Valedictorian (1977)

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American Legion Scholarship-Citizenship Award (1977)

### Sponsored Projects:

2008	Isentropic Analysis, Randall S. Cerveny, Robert C. Balling, Jr. and Andrew W. Ellis., National Science Foundation, \$100,000
2004	"Development of an Operational Model Series for Forecasting Runoff on the Salt, Tonto, and Verde Watersheds." Andrew W. Ellis, Robert C. Balling, Jr., and Randall S. Cerveny. Salt River Project, \$44,081
2000	"Analysis of Historical Patterns in Hurricane Intensification, Length of the Hurricane Season, and Geographic Position of Hurricanes." Robert C. Balling, Jr. and Randall S. Cerveny. American Petroleum Institute, \$38,166.
1997	AZTC (Arizona Thunderstorm Chasing) Project. Arizona State University/National Weather Service. Funding through local media sources (TV and local weathercasters), \$600.
1996	AZTC (Arizona Thunderstorm Chasing) Project. Arizona State University/National Weather Service. Funding through local media sources (TV and local weathercasters), \$800.
1995	The Influence Of Local Circulation Patterns On Convective Precipitation And Thunderstorm Development: Phoenix AZ. R.S. Cerveny, N.J. Selover, D. Green and T. Craver. NOAA/National Weather Service COMET program. \$4200.
	AZTC (Arizona Thunderstorm Chasing) Project. Arizona State University/National Weather Service. Funding through local media sources (TV and local weathercasters), \$1200.
	CO Forecasting for the Phoenix Metropolitan Area. R.S. Cerveny. Arizona Department of Environmental Quality. \$21,000.
1994	AZTC (Arizona Thunderstorm Chasing) Project. Arizona State University/National Weather Service. Funding through local media sources (TV and local weathercasters), \$600.
1993	AZTC (Arizona Thunderstorm Chasing) Project. Arizona State University/National Weather Service. Funding through local media sources (TV and local weathercasters), \$1300.
1992	Orbitally-Induced Variations in the Diurnal Cycle of Radiation. Randall S. Cerveny. National Science Foundation Geography & Regional Science. \$41,000.
	Research Incentive for Undergraduates: Orbitally-Induced Variations in the Diurnal Cycle of Radiation. Randall S. Cerveny. National Science Foundation. \$5,000.
	AZTC (Arizona Thunderstorm Chasing) Project. Arizona State University/National Weather Service. Funding through local media sources (KTAR radio and local weather easters) \$1800

weathercasters), \$1800.

#### Cerveny Vitae

1991	British Frontal Storms. R.C. Balling, Jr., R. S. Cerveny, S. Idso. British Coal Institute. \$38,000.
1991-1989	AZTC (Arizona Thunderstorm Chasing) Project. Arizona State University/National Weather Service. Funding through local media sources (KTAR radio; KTSP TV; KPNX TV) \$5,500.
1988	Analysis of Weather Normalization Procedures. Salt River Project. Part 2. Robert Balling and Randall Cerveny. \$20,000.
1988	Analysis of Weather Normalization Procedures. Salt River Project. Part 1. Robert Balling and Randall Cerveny. \$5000.
1987-1988	Selected Wind Speed and Temperature Probabilities in Phoenix, Arizona. Robert Balling and Randall S. Cerveny. Salt River Project, \$4,998.
1987	Wind Direction Analysis at St. Johns, Arizona. Salt River Project. Robert Balling and Randall Cerveny. \$7000.

#### **Books**

- 2006 Freaks of the Storm (From Flying Cows to Stealing Thunder, The World's Strangest True Weather Stories), Thunder's Mouth Press (Avalon Publishing Group), New York, January 2006, 371 pp.
- Selected Recent Articles & Professional Publications:
- 2008 (97) Comparison of remote sensing image processing techniques to identify tornado damage areas from Landsat TM data, Soe W. Myint, May Yuan, Randall S. Cerveny and Chandra P. Giri, *Sensors*, *8*, 1128-1156.
- 2007 (96) Characteristics of long-duration precipitation events across the United States, D. Broomer, R.S. Cerveny and R.C. Balling, Jr., *Geophys. Res. Lett.*, Art No. L22712 (Nov, 2007).
  - (95) A new western hemisphere 24-hour rainfall record, R. Cerveny, V.D. Belitskaya, P. Bessemoulin, M. Cortez, C. Landsea, and T.C. Peterson, *WMO Bulletin* 56(3): 212-215.
  - (94) Weather and the Mongols: How the Forces of Nature Helped Shape an Empire. Randy Cerveny. *Weatherwise* Jul/Aug 2007; 60:22-25.
  - (93) Extreme Weather Records: Compilation, Adjudication and Publication R. S. Cerveny, J. Lawrimore, R. Edwards, C. Landsea, *Bulletin of the American Meteorological Society* (Invited Paper). 88 (6): 853-860.
- 2006 (92) Egypt. And Water: Lifeline of a Civilization. Randy Cerveny and Niccole Cerveny. *Weatherwise*.59:20-26.
  - (91) Analysis of Tropical Cyclone Intensification Trends and Variability in the North Atlantic Basin over the Period 1970-2003. Robert C. Balling, Jr. and Randall S. Cerveny. *Meteorology and Atmospheric Physics*, DOI: 10.1007/s00703-006-0196-5.
  - (90) Eye of the Tiger. Randy Cerveny. Orion. 25: 8-9.
- 2005 (89) Heat Mortality Versus Cold Mortality: A Study of Conflicting Databases. P. G. Dixon, D. M. Brommer, B. C. Hedquist, A. J. Kalkstein, G. B. Goodrich, J. C. Walter, C. C. Dickerson IV, S. J. Penny, and R. S. Cerveny, *Bulletin of American Meteorological Society*, 86(7): 937-943.
  - (88) The Meteorological Observations of Charles Darwin aboard the H.M.S. *Beagle*. Randall S. Cerveny. *Bulletin of the American Meteorological Society*, 86(9):1295-1301.
  - (87) Strange Tails of Hail. Randy Cerveny, Charles Knight, Nancy Knight. *Weatherwise* (May, June, 2005), 58:28-33
  - (86) Variations in the Diurnal Character of Tropical Cyclone Wind Speeds. Randall S. Cerveny and Robert C. Balling, Jr. *Geophysical Research Letters* 32 (6): L06706.

- 2004 (85) The Grand Canyon Spectre. Niccole and Randy Cerveny. *Weatherwise*. (July/August 2004), 57(3):57-58
  - (84) Free-Air CO2 Enrichment Effects on the Energy Balance and Evapotranspiration of Sorghum. J.M. Triggs, B.A. Kimble, P.J. Pinter, Jr., G.W. Wall, M.M. Conley, T.J. Brooks, R.L. LaMorte, N.R. Adam, M.J.Ottman, A.D. Matthias, S.W. Leavitt, R.S. Cerveny, *Agricultural and Forest Meteorology*, *124: 63-79*.
  - (83) Long-Term (250,000 B.P. to 50,000 A.P.) Variations in Ultraviolet and Visible Radiation (0.175 μm - 0.690 μm). John A. Shaffer and Randall S. Cerveny. *Earth and Planetary Science*, 41 (2): 111-120.
  - (82) The Oddities of Lightning, Randy Cerveny. *Weatherwise*, 57(2): 64-68.
- 2003 (81) Analysis of the duration, seasonal timing, and location of North Atlantic tropical cyclones: 1950-2002. R.C. Balling, Jr. and R.S. Cerveny, *Geophysical Research Letters*, 30 (24): N.10.1029/2003GL018404.
  - (80) Vertical dimensions of seasonal trends in the diurnal temperature range across the United States. R.C. Balling, Jr. and R.S. Cerveny, *Geophysical Research Letters*, 30(17):N.10.1029/2003GL017776.
  - (79) What's in a Name? Randy Cerveny, *Weatherwise* 56(5): 46-47
  - (78) Cosmic ray flux impact on clouds? An analysis of radiosonde, cloud cover, and surface temperature records from the United States. R.C. Balling, Jr. and R.S. Cerveny, *Theoretical and Applied Climatology*, 75:225-231.
  - (77) Local and Regional Discriminators of Mesoscale Convective Vortex Development in Arizona. David M. Brommer, Robert C. Balling, Jr., and Randall S. Cerveny. *Monthly Weather Review*, **131**, pp. 1939-1943.
  - (76) Analysis of radiosonde-based lapse rates and the difference between near-surface and satellite-based lower-tropospheric air temperatures over the central United States. Robert C. Balling and Randall S. Cerveny. *Geophysical Research Letters*, 30(7):N.1029-2002GL016693.
  - (75) Compilation and Discussion of Trends in Severe Storms in the United States: Popular Perception v. Climate Reality. Robert C. Balling, Jr. and Randall S. Cerveny. *Natural Hazards*, **29**(2):103-112.
- 2002 (74) The Ten Strangest Oddities of the Tornado. Randall S. Cerveny and Shaeffer. *Weatherwise* **55**(4):20-27
  - (73) A weekly cycle in atmospheric carbon dioxide. R.S. Cerveny and K.J. Coakley, *Geophysical Research Letters* **29**, 10.1029.
- 2001 (72) Does the Urban CO2 Dome of Phoenix, Arizona Contribute to Its Heat Island? R.C. Balling, Jr., R.S. Cerveny and C. Idso, *Geophysical Research Letters*, 28 (24), 4599-4602

- (71) Between the Stars. Randy Cerveny, D.A. Periconi, R.C. Balling, Jr, and S.L. Baliunas, *Weatherwise*, 54(5), 28-33
- 2000 (70) The Moon and El Niño. Randall S. Cerveny and John A. Shaffer. *Geophysical Research Letters*, 28 (1): 25-28 JAN 1 2001.
  - (69) The Climate Riddle of the Lost Squadron. Randy Cerveny and Robert C. Balling, Jr. Weatherwise, 53 (6)
  - (68) The Rescue of the Lost Squadron Crewmen. Randy Cerveny *Weatherwise*, 53 (6)
  - (67) Climatological Relationships between Tropical Cyclones and Rainfall. Randall S. Cerveny and Lynn E. Newman. *Monthly Weather Review*, 128: (9) 3329-3336.
  - (66) Lights, Camera, Weather. Randy Cerveny, *Scientific American (special issue)*, 11:98-103.
  - (65) It's Raining Eels: A compendium of Weird Weather. Randy Cerveny, *Scientific American (special issue)*, 11: 54-55.
- Large asymmetrical temperature trends at Mount Wilson, California. Balling, R.C., Jr.,
  D.A. Periconi, R.S. Cerveny, and S.L. Baliunas, *Geophysical Research Letters*, 26, 2753-2756.
  - (63) Lunar influence on diurnal temperature range, R.S. Cerveny and R.C. Balling, Jr., *Geophysical Research Letters*, 26:1605-9.
  - (62) *Climate at the Bottom of the Grand Canyon.* D. Stantski-Martin, M. Marcus, A. Brazel, N.J. Selover and R.S. Cerveny. *Forum, 45: 1-8.*
- 1998 (61) Identification of Anthropogenic Weekly Cycles in Northwest Atlantic Pollution, Precipitation and Tropical Cyclones. R.S. Cerveny and R.C. Balling, Jr. *Nature*, 394: 561-562.
  - (60) Long-term Equilibrium Tides. R.S. Cerveny and J.A. Shaffer. *Journal of Geophysical Research-Oceans* 103:18801-18804.
  - (59) The Day the Dinosaurs Died, R.S. Cerveny. *Weatherwise*, 51:13-16.
  - (58) Ethics, Values and Geographic Research (Forum Response), J.R. Harman, J.A. Harrington, Jr. and R.S. Cerveny *Annals of the Association of American Geographers*, 88: 308-315.
  - (57) Ethics in Geographic Research—The example of Global Warming. J. Harman, J. Harrington, and R.S. Cerveny. *Annals of the Association of American Geographers*, 88: 277-290.

- 1997 (56) Polar Temperature Sensitivity to Climatic Forcing? J. A. Shaffer, R.S. Cerveny and R.C. Balling, Jr., *Geophysical Research Letters*, **24**:29-32.
  - (55) A new approach to paleoclimatic research using Linear Programming. M. Kuby, R.S. Cerveny and R.A. Dorn. *Paleogeography, Paleoclimatology, Paleoecology*, **129**: 251-267.
- 1996 (54) Small-Scale / Local Winds, R.S. Cerveny, *Encyclopedia of Climate and Weather*, S. Schneider, ed., New York: Oxford University Press, 693-697.
  - (53) Radiation windows as indicators of an astronomical influence on the Devil's Hole chronology. J.A. Shaffer, R.S. Cerveny and R.A. Dorn. *Geology*, **24**:1017-1020.
  - (52) Making Weather in the Movies. R.S. Cerveny. *Weatherwise*, **49**: 35-40.
  - (51) Visualization of Milankovitch Climate-Change Theory. H.J. Wolters, J.A. Shaffer, R.S. Cerveny and R.E. Barnhill. *Journal of Geoscience Education*, **44**: 7-12.
- 1995 (50) The Influence of Lunar Phase on Daily Global Temperatures. R.C. Balling, Jr. and R.S. Cerveny. *Science*, **267**: 1481-1482.
  - (49) Lunar Phase Influence on Global Temperatures. J.C.Dyre, C.V. Voorhies; R.C. Balling, Jr. and R.S. Cerveny. *Science*, **269**: 1284-1285.
  - (48) Milankovitch radiation cycles. R.S. Cerveny, J.A. Shaffer, N.J. Selover. In *McGraw-Hill Yearbook of Science and Technology 1995* (New York: McGraw-Hill), pp. 275-278.
- 1994 (47) Elements of Espionage. R.S. Cerveny and M.G. Marcus. *Weatherwise*. **47**: 14-21.
  - (46) Power of the Gods. R.S. Cerveny . *Weatherwise*. **47** (2): 10-23.
  - (45) The Impact of Rainfall Frequency on Coca (Etythrozylum coca) Production in the Chapare Region of Bolivia. M.S. McGlade, R. Henkel, R.S. Cerveny, *Yearbook*, Conference of Latin Americanist Geographers, **20**: 97-105.
- 1993 (44) Meteorological Assessment of Homer's *Odyssey*. Randall S. Cerveny. *Bulletin of the American Meteorological Society*. **74**:1025-1034.
  - (43) Localized Climate Responses During the 11 July 1991 Eclipse: Phoenix AZ. A.J. Brazel, R.S. Cerveny, B.L. Trapido. *Climatic Change*. **23**:155-168.
- 1992 (42) Impact of the Southern Oscillation on the North American Southwest Monsoon. J.A. Harrington, R.S. Cerveny and R.C. Balling. *Physical Geography*. **13**: 318-330.
  - (41) Climate and Cocaine. M.S. McGlade, R.S. Cerveny and R. Henkel. *Nature*, **361**: 25.
  - (40) The Hottest Game in Town. R.S. Cerveny, S. Calderon, M. Hubble. *Weatherwise*, **45**, 26-28.

- (39) On the Development of a Real-Time Interactive Storm Observation Program in Phoenix, AZ. R.S. Cerveny, S. Calderon, N. Hoffmann, M. Franjevic. *Bulletin of the American Meteorological Society*, **73**: 773-778.
- (38) The Weather Luck of Christopher Columbus. Randall S. Cerveny and J.S. Hobgood. *Weatherwise* **45**: 34-26
- (37) The Impact of Snow Cover on Diurnal Temperature Range. Randall S. Cerveny and R.C. Balling, Jr. *Journal of Geophysical Letters*, **19**: 797-800.
- (36) Reply (to K. Emmanuel). S.B. Idso, R.C. Balling, Jr., R.S. Cerveny. *Meteorology and Atmospheric Physics*, **47**: 85-86.
- (35) Meteorological Implications of the First Voyage of Christopher Columbus. R.S. Cerveny and J.S. Hobgood. *Bulletin of the American Meteorological Society*, **73**: 173-179.
- 1991 (34) Greenhouse Warming May Moderate British Storminess. R.C. Balling, Jr., R.S. Cerveny, T.A. Miller, S.B. Idso. *Meteorology and Atmospheric Physics*, **46**: 181-184.
  - (33) Orbital Signals in the Diurnal Cycle of Radiation. R.S. Cerveny. *Journal of Geophysical Research Atmospheres.* **96**: 17209-17215.
  - (32) Competitive Learning Experiences: The Role of Weather Forecasting Contests in Geography Programs. J. Harrington, R.S. Cerveny and J.S. Hobgood. *Journal of Geography*, **90**: 27-31.
  - (31) Tree-Ring Reconstructed Sunshine Duration over the Central USA. D.W. Stahle, M.K. Cleaveland and R.S. Cerveny. *International Journal of Climatology*. **11**: 285-295.
- 1990 (30) Carbon Dioxide and Hurricanes: Implications of Northern Hemispheric Warming for Atlantic/Caribbean Storms. S.B. Idso, R.C. Balling, Jr., R.S. Cerveny. *Meteorological and Atmospheric Physics.*, **42**: 259-263.
  - (29) Tall Tale Weather. R.S. Cerveny, J. Schumacher, and C.K. Cerveny. *Weatherwise*. **43**: 248-252.
  - (28) Inhomogeneities in the Long-Term United States' Sunshine Record. R.S. Cerveny and R.C. Balling, Jr. *Journal of Climate*, **3** : 1045-1048.
  - (27) Thermal Patterns of Pacific South America Associated with El Nino/ Southern Oscillation. Kevin Walsh and Randall S. Cerveny. *Int. Journal of Climatology*. 10: 451-457.
- 1989 (26) Shadowing of Nonpolluted Locations by Urban Pollution. Randall S. Cerveny. *Annals of the Association of American Geographers*. **70**: 242-256.
  - (25) Weather of the Pharaohs. Randall S. Cerveny. *Weatherwise*. **42** (6), 307-314.

- (24) Wind Field Analysis Using Unit-Vector Density Mapping. Randall S. Cerveny and Stephen J. Lavin. *Theoretical and Applied Climatology* **39**: 218-230.
- (23) Sherlock Holmes and the Weather. Randall S. Cerveny and Sandra Brazel. *Weatherwise.* **42**: 80-84.
- 1988 (22) Ice-Age Hurricanes and Tropical Storms. Jay S. Hobgood and Randall S. Cerveny. *Nature* **333**: 243-245.
  - (21) Application of Temporal Statistics in Snow Climatological Studies. John A. Harrington and Randall S. Cerveny. *Physical Geography*. **9**: 337-353.
  - (20) Escaper's Weather: Military Applications. Randall S. Cerveny and Brent R. Skeeter. *Department of Defense Survival, Evasion, Resistance and Escape (SERE) Bulletin.* **1**:1-8 (classified).
  - (19) Reply (to Dr. Cherry). Robert C. Balling and Randall S. Cerveny. *Journal of Applied Meteorology* 27: 881.
  - (18) Escaper and Environment. Randall S. Cerveny and Brent R. Skeeter. *Journal of Meteorology* 13: 265-276.
- 1987 (17) Winds and Wind Systems. R.C. Balling, R.S. Cerveny and K.F. Dewey. *The Encyclopedia of Climatology* (J.E. Oliver and R.W. Fairbridge, eds.), New York: Van Nostrand Reinhold Publishing, 933-941.
  - (16) Atmospheric Nomenclature. Randall S. Cerveny. The *Encyclopedia of Climatology* (J.E. Oliver and R.W. Fairbridge, eds.), New York: Van Nostrand Reinhold Publishing, 140-141.
  - (15) A Preliminary Investigations of a Relationship between South American Snow Cover and the Southern Oscillation. R.S. Cerveny, B.R. Skeeter and K.F. Dewey. *Monthly Weather Review* **115**: 620-623.
  - (14) The Relationship between Summer Season Rainfall Events and Lake-Surface Area. D.C. Rundquist, M.P. Lawson, L.P. Queen and R.S. Cerveny. *Water Resources Bulletin* 23: 493-508.
  - (13) Long-Term Associations between Wind Speeds and the Urban Heat Island of Phoenix, Arizona. Robert C. Balling and R.S. Cerveny. *Journal of Climate and Applied Meteorology* **26**: 712-716.
  - (12) A Climatology of Mean Monthly Snowfall for the Conterminous United States: Temporal and Spatial Patterns. J.A. Harrington, R.S. Cerveny and K.F. Dewey. *Journal of Climate and Applied Meteorology* **26**: 897-912.
  - (11) Escapers' Weather. Randall S. Cerveny and Brent R. Skeeter. *Weatherwise* **40**: 248-253.

- (10) Unit-Vector Density Mapping. Stephen J. Lavin and Randall S. Cerveny. *Cartographic Journal* **24**: 131-141.
- 1986 (9) Identification and Analysis of Climatic Fields through Dot-Density Shading. Stephen J. Lavin and Randall S. Cerveny. *Journal of Atmospheric and Oceanic Technology* 3: 552-558.
- 1985 (8) CONSTABLE as a Global Climate Model for Classroom Use. R.S. Cerveny, R.C. Balling and J.A. Schumacher. *Journal of Geography* **84**: 165-168.
  - (7) Seasonal Temperature Forecasts as Products of Antecedent Linear and Spatial Temperature Arrays. Merlin P. Lawson and Randall S. Cerveny. *Journal of Climate and Applied Meteorology* **24**: 848-859.
  - (6) Energy Balance Modeling: An Alternative Dynamic Parameterization. Randall S. Cerveny and Robert C. Balling. *Journal of Climatology* **5**: 423-431.
- 1984 (5) CONSTABLE: A Simple One-Dimensional Climate Model for Climatologists in Geography. Randall S. Cerveny and Robert C. Balling. *Professional Geographer* 36: 188-196.
  - (4) Analysis of Time and Space Variations in Long-Term Monthly Averaged Wind Speeds in the United States. Robert C. Balling and Randall S. Cerveny. *Wind Engineering* 8: 1-8.
  - Numerical Experiments with the Global Energy Balance Model CONSTABLE. Randall
    S. Cerveny and Robert C. Balling. *Proceedings* of the 15<sup>th</sup> Annual Pittsburgh Conference on Modeling and Simulation. 15: Part 1, 321-326.
  - (2) Impacts of Nuclear War: Results from a Simple Energy Balance Climate Model. J.A. Schumacher, R.C. Balling and R.S. Cerveny. *Physical Geography* **5**: 199-205.
- Spatial and Temporal Variations in Long-Term Normal Percent Possible Solar Radiation Levels in the United States. Robert C. Balling and Randall S. Cerveny. *Journal of Climate and Applied Meteorology* 22: 1726-1732.

#### Professional Reports, Book Chapters & Reviews

2007 El Niño/Southern Oscillation and Other Climatic Teleconnections, Randall S. Cerveny in *Climatic Change and Variations: A Primer for Teachers* (William Dando, editor), National Council for Geographic Education.

Weather Extremes Records, Randall S. Cerveny in *Climatic Change and Variations: A Primer for Teachers* (William Dando, editor), National Council for Geographic Education.

Lightning Curiosities, Randy Cerveny in Weather, Andrew McMeel Publishing.

2006	The QBO and Tropical Climate, Randall S. Cerveny, in The Global Climate System:
	Patterns, Processes and Teleconnections (ed. H.A. Bridgman and J.E. Oliver, Cambridge
	University Press, Cambridge, pp. 67-74

Review of *Twilight of the Mammoths: Ice Age Extinctions and the Rewilding of America* by Paul S. Martin for AZ/NV Academy of Sciences

2005 Lightning Curiosities by Randy Cerveny. In *Weather Guide Calendar with Phenomenal Weather Events*, Accord Publishing Ltd.

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- 2004 *Review of Bolt of Fate-Benjamin Franklin and His Electric Kite Hoax.* Randy Cerveny; *Weatherwise*; Jan/Feb 2004; Vol. 57 (1): 48
- 2003 Review of Weather Rage, Ross Reynolds by Randy Cerveny, Weatherwise 56(5); 52

*Review of Floods, Droughts, and Climate Change,* Michael Collier and Robert H. Webb by Randy Cerveny, Weatherwise

2002 *Review of El Niño in History*, Cesar Caviedes by Randy Cerveny, Weatherwise **55**(4):46-47

*Review of The Coldest March: Scott's Fatal Antarctic Expedition*, Susan Solomon, by Randall S. Cerveny, *Bulletin of the American Meteorological Society*83:601-603

- 2000 *Review of El Niño 1997-1998 (The Climate Event of the Century)*, Stanley Changnon (editor) by Randy Cerveny, *Weatherwise*
- 1999 Potential Future Climates. R.S. Cerveny and R.C. Balling, Jr. For Climate & Civilization section of the Encyclopedia of Human Ecology (Idso and Brazel, editors).

1998	Present Climates of South America. R.S. Cerveny. In <i>Climates of the Southern Continents Present, Past and Future.</i> (eds. J.E. Hobbs, J.A. Lindesay, and H.A. Bridgman), (John Wiley & Sons, Chichester), p. 107-135.
1997	The Western San Juan Mountains: Their Geology, Ecology, and Human History, Blair (ed.) by Randall S. Cerveny, for American Scientist
1995	CO Prediction for the Phoenix Metropolitan Area. Arizona Department of Environmental Quality.
1993	Expert Elicitation of Future Climate in the Yucca Mountain Vicinity. Iterative Performance Assessment Phase 2.5. Nuclear Regulatory Commission Contract NRC-02-88-005. Center for Nuclear Waste Regulatory Analyses. August.
1988	Analysis of Weather Normalization Procedures. Salt River Project. Part 1. Robert Balling and Randall Cerveny. Final Report for SRP project.
1987	Wind Direction Analysis at St. Johns, Arizona. R.C. Balling and R.S. Cerveny. Final Report for SRP project.
1985	Variability in the Surface Area of Sandhills Lakes and its Relationship to Precipitation and Groundwater Levels. M.P. Lawson, D.C. Rundquist, R.C. Balling, R.S. Cerveny and L.P. Queen. Occasional Paper #7, Department of Geography, University of Nebraska. 46 pages.
	Chemical Content of Precipitation over East-Central Nebraska: 1979-1982. Shashi B. Verma and R.S. Cerveny. Progress Report 85-3. Center for Agricultural Meteorology and Climatology, 29 pages.
1983	A Reference Manual for the Global Climate Model CONSTABLE. Randall Cerveny and Robert Balling. Occasional Paper #6, Department of Geography, University of Nebraska. 105 pages. (2 printings.)
Paper Present	ations
2007 3 <sup>rd</sup> An	nual <u>NEBRASKA AG CLASSIC (NAC)</u> , December 12 – 13 (Keynote Speaker)

2003: Future Climates of the Southwest. Drought Symposium, East Campus, April, 2003 (East Campus) (invited)

2002	Weekly Cycles in Atmospheric Carbon Dioxide. R.S. Cerveny. Association of American Geographers Annual Meeting, March, 2002
2001	Strange Weather. R.S. Cerveny, Arizona State University, Eva Coor's Community Enrichment Program Violent Earth Lecture Series
2000	Being Multin Milankovitch. R.S. Cerveny, Department of Geology, September, 2000

2000	Weekly Cycles in Regional Pollution, Temperature, Precipitation and Tropical cyclone Activity, International Scientific Meeting on Detection and Modelling of Recent Climate Change and Its effects on a Regional Scale, Terragona (Spain), 29-31 May, 2000
1998	Modification of Atlantic Rainfall and Hurricanes by Urban Pollution. R.S. Cerveny and R.C. Balling, Jr National Meeting of the Associaton of American Meteorologists, in Phoenix, AZ in January, 1998.
1997	Inadvertent Modification of Atlantic Rainfall and Hurricanes by Urban Pollution. R.S. Cerveny and R.C. Balling, Jr. 92th National Meeting of the Associations of American Geographers in Ft. Worth in April, 1997.
	Polar Sensitivity to Lunar Phase? J.A. Shaffer, R.S. Cerveny and R.A. Dorn. 92th National Meeting of the Associations of American Geographers in Ft. Worth in April, 1997.
1996	Extreme Ocean Tides: Part 1, the Recent Past. R.S. Cerveny and J.A. Shaffer. 91th National Meeting of the Associations of American Geographers in Charlotte in April, 1996.
	Extreme Ocean Tides: Part 2, the Geologic Past. J.A. Shaffer and R.S. Cerveny. 91th National Meeting of the Associations of American Geographers in Charlotte in April, 1996.
1995	Lunar Influence on Global Temperatures. R.S. Cerveny and R.C. Balling, Jr. 90th National Meeting of the Associations of American Geographers in Atlanta in March, 1995.
1994	Visualization of Quaternary Climate Change. R.S. Cerveny J.A. Shaffer, H. Wolters, R.E. Barnhill. 89th National Meeting of the Association of American Geographers in San Francisco in April, 1994.
	A New Approach to Paleoclimatology: Curve Fitting Using Linear Programming. M. Kuby, R. Cerveny and R. Dorn. 89th National Meeting of the Association of American Geographers in San Francisco in April, 1994.
1993	Future Climate Scenarios for Yucca Mountain Nevada. R.S. Cerveny. Center for Nuclear Waste Regulatory Analyses, San Antonio TX in June, 1993.
	Climatic Implications of Radiative Dispersion. R.S. Cerveny and J.A. Shaffer. 88th National Meeting of the Associations of American Geographers in Atlanta in April, 1993.
	A Digitized Archive of South American Snow Cover. Natalie A. Williams, Randall S. Cerveny and Kenneth F. Dewey. 88th National Meeting of the Associations of American Geographers in Atlanta in April, 1993.
	Climate and Cocaine. M. McGlade, R.S. Cerveny and R. Henkel. 88th National Meeting of the Associations of American Geographers in Atlanta in April, 1993.

1992	Long-term Variations in Ultraviolet Radiation. R.S. Cerveny. Mintz Memorial
	Symposium on Climatic Change. Jerusalem, Israel. December, 1992.

The Weather Luck of Christopher Columbus. R.S. Cerveny. Arizona State University. November, 1992

The Weather Luck of Christopher Columbus. R.S. Cerveny. Columbus. Lecture Series. Salisbury State University, October, 1992.

The Hour-Glass of the Ice Ages. R.S. Cerveny. Geosciences Lecture Series. Salisbury State University, October 1992.

On the Development of a Real-Time Interactive Storm Observation Program in Phoenix, AZ. R.S. Cerveny, S. Calderon, N. Hoffmann, M. Franjevic. 4th Arizona Severe Weather Symposium in Scottsdale AZ in June, 1992

The Climatic 'Normalcy" of the Weather of 1492. R.S. Cerveny. 87th National Meeting of the Association of American Geographers in San Diego in April, 1992.

Climatological Aspects of the First Voyage of Christopher Columbus. J.S. Hobgood and R.S. Cerveny. 87th National Meeting of the Association of American Geographers in San Diego in April, 1992.

- 1991 Carbon Dioxide and Hurricanes. R.S. Cerveny, R.C. Balling, Jr., and S.B. Idso. 86th National Meeting of the Association of American Geographers in Miami in April, 1991.
- 1990 Trends in Upper Air Circulation: Implications to the Greenhouse Effect. R.S. Cerveny. 85th National Meeting of the Association of American Geographers in Toronto in March, 1989.

Simulation of Greenhouse Hurricanes. R.S. Cerveny. Global Change Conference, Phoenix Arizona. October, 1990.

- 1989 Ice-Age Tropical Cyclones: The South Pacific Ocean. R.S. Cerveny and J.S. Hobgood. 3rd Southern Hemispheric Meteorology and Oceanography Conference. November, Buenos Aires, Argentina.
- 1988 Arroyo Cutting and Flood Event in the American Southwest. S.G. Wells, R.C. Balling and R.S. Cerveny. Geologic Society of America Meeting.

Ice-Age Hurricanes and Tropical Storms. J.S. Hobgood, J.N. Rayner and R.S. Cerveny. 1<sup>st</sup> Ohio State University Symposium on Supercomputing.

Density Mapping. Randall S. Cerveny. Department of Earth Sciences, New Mexico State University.

1988 Pollution Shadowing. Randall S. Cerveny. Department of Chemistry, Arizona State University.

	Escaper's Weather. B.R. Skeeter and R.S. Cerveny. 84th National Meeting of the Association of American Geographers at Phoenix in March, 1988.
1988	Ice-Age Hurricanes and Tropical Storms. J.S. Hobgood, R.S. Cerveny and J.N. Rayner. 84th National Meeting of the Association of American Geographers at Phoenix in March, 1988.
	Use of the Balance Equation in Energy Balance Modeling. Randall S. Cerveny. Department of Geography, University of Nebraska.
1987	South American Snow Cover and the Southern Oscillation. R.S. Cerveny, B.R. Skeeter and K.F. Dewey. 83rd National Meeting of the Association of American Geographers at Portland, Oregon in April, 1987.
	A Climatology of Mean Monthly Snowfall for the Conterminous United States: Temporal and Spatial Patterns. J.A. Harrington, R.S. Cerveny and K.F. Dewey. 83rd National Meeting of the Association of American Geographers at Portland, Oregon in April, 1987.
	Application of Temporal Statistics in Snow Climatological Studies. J.A. Harrington and R.S. Cerveny. 83rd National Meeting of the Association of American Geographers at Portland, Oregon in April, 1987.
	Unit-Vector Density Mapping. S.J. Lavin and R.S. Cerveny. 83rd National Meeting of the Association of American Geographers at Portland, Oregon in April, 1987.
1986	Mass-momentum Conservation in Energy Balance Models. Presented at a special session on new climate models at the 82nd National Meeting of the Association of American Geographers at St. Paul, Minnesota in May, 1986.
1985	Seasonal Forecasts from Multivariate Examination of Antecedent Temperature Arrays. Merlin P. Lawson and Randall S. Cerveny. 4 <sup>th</sup> Conference on Applied Climatology, American Meteorological Society.
	Conservation Principles in Energy Balance Models. Randall S. Cerveny. Institute of Polar Studies. Ohio State University.
	CONSTABLE as a Classroom Climate Model. Randall Cerveny and Robert Balling. Presented at a special session on classroom use of models at the 81st National Meeting of the Association of American Geographers at Detroit, Michigan in April, 1985.
1984	Numerical Experiments with the Global Energy Balance Model CONSTABLE. Randall S. Cerveny and Robert C. Balling. 15 <sup>th</sup> Conference on Modeling and Simulation. Pittsburgh, Pennsylvania.
1984	Energy Balance Climate Modeling: Sensitivity Tests. Randall Cerveny. Presented at a special session on climate modeling at the 80th National Meeting of the Association of American Geographers at Washington, D.C. in April, 1984.

1983 A Dynamic Parameterization of a Surface Wind Field into a Sellers Type Global Climate Model. Randall Cerveny. Presented at the 79th National Meeting of the Association of American Geographers at Denver, Colorado in April, 1983.

#### Additional Professional Activities

Consulting editor, Weatherwise

Reviewer for: Science Nature Bulletin of the American Meteorological Society Geophysical Research Letters Journal of Geophysical Research Monthly Weather Review Theoretical and Applied Climatology Professional Geographer Annals of the AAG Geographical Review Journal of Geography National Science Foundation (NSF)

> Djuric's Weather Analysis Chelius-Frentz: A Basic Meteorology Exercise Manual

Public Service:

Developer, AZTC (Arizona Thunderstorm Chasing) Project			
(Arizona State University/National Weather Service/			
KTAR Radio/Salt River Proj	KTAR Radio/Salt River Project/KTSP TV)		
Interviewed by: KPHX TV, TTVK T	Interviewed by: KPHX TV, TTVK TV, KPHO TV, KTSP TV, KFYI Radio		
CNN	Associated Press (AP)		
Nature	Nature Australia		
Arizona <i>Republic</i>	Tucson Citizen		
Scottsdale Progress	Mesa/Tempe Tribune		
Omaha World Herald	BBC Radio London		
MSNBC Television	ABC News Radio & TV		
CBS Radio	Voice of America		
US News & World Report	Miami Herald		
NY Times	Fox National TV		
NBC Today Program	Newsweek		
Discovery Magazine	Science		
WOR New York Radio	ABC Good Morning America		
Canadian Broadcasting Corp	. Radio New Zealand		
National TV Japan	Atlanta Constitution		
Sports Illustrated Magazine	United Press International (UPI)		
<b>CBS</b> Evening News	New Scientist		
Weather Channel	Coast-to-Coast AM		

Speaker at numerous civic clubs, nursing homes at elementary schools

Research Interests:

Climate History Physical Climatology Synoptic Climatology

Atmospheric Teleconnections

Climatic Modeling Dynamic Climatology Climatic Change

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