

# James Brian Elsner

Department of Geography, Florida State University, Tallahassee, FL 32306-2190

jelsner@fsu.edu, phone: (850) 877-4039, fax: (850) 644-5913

<http://myweb.fsu.edu/jelsner>

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## EDUCATION

Ph.D. University of Wisconsin-Milwaukee 1988.

M.S. University of Wisconsin-Milwaukee 1984.

B.S. University of Wisconsin-Milwaukee 1981.

## PROFESSIONAL EXPERIENCE

President, *Climatek Inc.*, 2001–present.

Earl and Sophia Shaw Professor, Department of Geography, FSU, 2008–present.

Professor, Department of Geography, FSU, 2001–2008.

Associate Professor, Department of Geography, FSU, 1998–2001.

Associate Professor, Department of Meteorology, FSU, 1995–1998.

Assistant Professor, Department of Meteorology, FSU, 1990–1995.

Lecturer, University of Wisconsin-Milwaukee, 1989–1990.

Research Scientist, University of Wisconsin-Milwaukee, 1989.

## AWARDS

Holder of the Earl & Sophia Shaw Endowed Chair in Geography, FSU, 2008–present.

Faculty Sabbatical (full salary), 2004, FSU.

Faculty Sabbatical (full salary), 1997, FSU.

Teaching Incentive Program Award, 1996, FSU.

Outstanding Student Teacher Award, 1987, UWM.

## PUBLICATIONS

### Books Written

3. *Hurricane Climatology: A Modern Statistical Guide Using R*, J. B. Elsner and T. H. Jagger, Oxford University Press, 2012, 390pp.
2. *Hurricanes of the North Atlantic: Climate and Society*, J. B. Elsner and A. B. Kara, Oxford University Press, 1999, 496pp.
1. *Singular Spectrum Analysis: A New Tool in Time Series Analysis*, J. B. Elsner and A. A. Tsonis, Plenum, 1996, 164pp.

## Refereed Journal Articles

118. Elsner, J. B., J. C. Trepanier, S. E. Strazzo, and T. H. Jagger, 2012: Sensitivity of limiting hurricane intensity to ocean warmth, *Geophysical Research Letters*, accepted.
117. Murnane, R. J., and J. B. Elsner, 2012: Maximum wind speeds and US hurricane losses, *Geophysical Research Letters*, accepted.
116. Kang, N.-Y., and J. B. Elsner, 2012: Consensus on climate trends in western North Pacific tropical cyclones, *Journal of Climate*, in press.
115. Jagger, T. H., and J. B. Elsner, 2012: Hurricane clusters in the vicinity of Florida, *Journal of Applied Meteorology and Climatology*, in press.
114. Kang, N.-Y., and J. B. Elsner, 2012: An empirical framework for tropical cyclone climatology, *Climate Dynamics*, **39**, 669–680.
113. Hodges, R. E., J. B. Elsner, and T. H. Jagger, 2012: Predictive models for time-to-acceptance: An example using ‘hurricane’ articles in AMS journals, *Bulletin of the American Meteorological Society*, **93**, 879–882.
112. Elsner, J. B., R. E. Hodges, and T. H. Jagger, 2012: Spatial grids for hurricane climate research, *Climate Dynamics*, **39**, 21–36.
111. Elsner, J. B., S. W. Lewers, J. C. Malmstadt, and T. H. Jagger, 2011: Estimating contemporary and future wind-damage losses from hurricanes affecting Eglin Air Force Base, Florida, *Journal of Applied Meteorology and Climatology*, **50**, 1514–1526.
110. Scheitlin, K. N., J. B. Elsner, S. W. Lewers, J. C. Malmstadt, and T. H. Jagger, 2011: Risk assessment of hurricane winds for Eglin Air Force Base in northwestern Florida, USA, *Theoretical and Applied Climatology*, **105**, 287–296.
109. Jagger, T. H., J. B. Elsner, and K. Burch, 2011: Climate and solar signals in property damage losses from hurricanes affecting the United States, *Natural Hazards*, **58**, 541–557, doi:10.1007/s11069-010-9685-4.
108. Convertino, M., J. B. Elsner, R. Muñoz-Carpena, G. A. Kiker, R. A. Fisher, and I. Linkov, 2011: Do tropical cyclones shape shorebird habitat patterns? Biogeoclimatology of Snowy Plovers in Florida, *PLoS ONE*, **6**(1): e15683. doi:10.1371/journal.pone.0015683.
107. Jagger, T. H., and J. B. Elsner, 2010: A consensus model for seasonal hurricane prediction, *Journal of Climate*, **23**, 6090–6099.
106. Malmstadt, J. C., J. B. Elsner, and T. H. Jagger, 2010: Risk of strong hurricane winds to Florida cities, *Journal of Applied Meteorology and Climatology*, **49**, 2121–2132.

105. Hodges, R. E., and J. B. Elsner, 2010: Evidence linking solar variability with USA hurricanes, *International Journal of Climatology*, **31**, 1897–1907.
104. Jagger, T. H. and J. B. Elsner, 2010: Discussion on: “Public hurricane loss evaluation models: Predicting losses of residential structures in the state of Florida” by S. Hamid et al., *Statistical Methodology*, **7**, 574–576.
103. Elsner, J. B., T. H. Jagger, and R. E. Hodges, 2010: Daily tropical cyclone intensity response to solar ultraviolet radiation, *Geophysical Research Letters*, **37**, L09701, doi: 10.1029/2010GL043091.
102. Scheitlin, K. N., J. B. Elsner, J. C. Malmstadt, R. E. Hodges, and T. H. Jagger, 2010: Towards increased utilization of historical hurricane chronologies, *Journal of Geophysical Research*, **115**, D03108, doi:10/1029/2009JD012424.
101. Kara, A. B., R. W. Helber, T. P. Boyer, and J. B. Elsner, 2009: Mixed layer depth in the Aegean, Marmara, Black and Azov Seas: Part I: General features. *Journal of Marine Systems*, **78**, s169–s180.
100. Elsner, J. B., T. H. Jagger, and E. A. Fogarty, 2009: Visibility network of U.S. hurricanes, *Geophysical Research Letters*, **36**, L16702, doi: 10.1029/2009GL039129.
99. Elsner, J. B., K. Burch, T. H. Jagger, 2009: Catastrophe finance: An emerging discipline, *Eos*, **90**, 281–282.
98. Malmstadt, J., K. Scheitlin, and J. B. Elsner, 2009: Florida hurricanes and damage costs, *Southeastern Geographer*, **49**, 108–131.
97. Jagger, T. H., and J. B. Elsner, 2008: Modeling tropical cyclone intensity with quantile regression, *International Journal of Climatology*, doi:10.1002/joc.1804.
96. Elsner, J. B., and T. H. Jagger, 2008: United States and Caribbean tropical cyclone activity related to the solar cycle, *Geophysical Research Letters*, **35**, L18705, doi:10.1029/2008/GL034431.
95. Elsner, J. B., J. P. Kossin, and T. H. Jagger, 2008: The increasing intensity of the strongest tropical cyclones, *Nature*, **455**, 92–95.
94. Kavlakov, S., J. B. Elsner, and J. A. Perez-Peraza, 2008: A statistical link between tropical cyclone intensification and major geomagnetic disturbances, *Geofisica Internacional*, **47**, 207–213.
93. Elsner, J. B., T. H. Jagger, M. Dickinson, and D. Rowe, 2008: Improving multiseason forecasts of North Atlantic hurricane activity, *Journal of Climate*, **21**, 1209–1219.

92. Elsner, J. B., T. H. Jagger, and K.-b. Liu, 2008: Comparison of hurricane return levels using historical and geological records, *Journal of Applied Meteorology and Climatology*, **47**, 368–374.
91. Elsner, J. B., 2007: Granger causality and Atlantic hurricanes, *Tellus*, **59A**, 476–485.
90. Elsner, J. B., 2007: Climatology: Tempests in time, *Nature*, **447**, 647–648.
89. Fogarty, E., J. B. Elsner, T. H. Jagger, and K.-b. Liu, 2006: Variations in typhoon landfalls over China, *Advances in Atmospheric Sciences*, **23**, 665–677.
88. Elsner, J. B., 2006: Evidence in support of the climate change-Atlantic hurricane hypothesis, *Geophysical Research Letters*, **33**, L16705.
87. Elsner, J. B., R. J. Murnane, and T. H. Jagger, 2006: Forecasting U.S. hurricanes 6 months in advance, *Geophysical Research Letters*, **33**, L10704.
86. Elsner, J. B., A. A. Tsonis, and T. H. Jagger, 2006: High frequency variability in hurricane power dissipation and its relationship to global temperature, *Bulletin of the American Meteorological Society*, **87**, 763–768.
85. Elsner, J. B., T. H. Jagger, and A. A. Tsonis, 2006: Estimated return periods for Hurricane Katrina, *Geophysical Research Letters*, **33**, L08704.
84. Jagger, T. H., and J. B. Elsner, 2006: Climatology models for extreme hurricane winds near the United States, *Journal of Climate*, **19**, 3220–3226.
83. Elsner, J. B., and T. H. Jagger, 2006: Prediction models of U.S. hurricane activity, *Journal of Climate*, **19**, 2935–2952.
82. Elsner, J. B., and T. H. Jagger, 2006: Comparison of hindcasts anticipating the 2004 Florida hurricane season, *Weather and Forecasting*, **21**, 184–194.
81. Tsonis, A. A., J. B. Elsner, A. G. Hunt, and T. H. Jagger, 2005: Unfolding the relation between global temperature and ENSO. *Geophysical Research Letters*, **32**, L09701.
80. Bossak, B. H., and J. B. Elsner, 2004: Plotting early nineteenth century hurricane information. *Eos, Transactions, American Geophysical Union*, **85**.
79. Elsner, J. B., and T. H. Jagger, 2004: A hierarchical Bayesian approach to seasonal hurricane modeling. *Journal of Climate*, **17**, 2813–2827.
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76. Elsner, J. B., and K.-b. Liu 2003: Examining the ENSO-typhoon hypothesis. *Climate Research*, **25**, 43–54.
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74. Elsner, J. B., 2003: Tracking hurricanes. *Bulletin of the American Meteorological Society*, **84**, 353–356.
73. Niu, X.-F., I. W. McKeague, and J. B. Elsner, 2003: Seasonal space-time models for climate systems. *Statistical Inference for Stochastic Processes*, **6**, 111–133.
72. Jagger, T. H., X.-F. Niu, and J. B. Elsner, 2002: A space-time model for seasonal hurricane prediction. *International Journal of Climatology*, **22**, 451–465.
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69. Elsner, J. B., B. H. Bossak, and X.-F. Niu, 2001: Secular changes to the ENSO-U.S. hurricane relationship. *Geophysical Research Letters*, **28**, 4123–4126.
68. Arguez, A., and J. B. Elsner, 2001: Trends in U.S. tropical cyclone mortality during the 20th century. *The Florida Geographer*, **32**, 28–37.
67. Elsner, J. B., 2001: Reply to “Comment on Changes in the rates of North Atlantic major hurricane activity during the 20th century. *Geophysical Research Letters*, **28**, 2873–2874.
66. Jagger, T. H., J. B. Elsner, and X.-F. Niu, 2001: A dynamic probability model of hurricane winds in coastal counties of the United States. *Journal of Applied Meteorology*, **40**, 853–863.
65. Carter, M. M., J. B. Elsner, and S. P. Bennett, 2000: A quantitative precipitation forecast experiment for Puerto Rico. *Journal of Hydrology*, **239**, 162–178.
64. Murnane, R. J., C. Barton, E. Collins, J. Donnelly, J. B. Elsner, K. Emanuel, I. Ginis, S. Howard, C. Landsea, K.b. Liu, D. Malmquist, M. McKay, A. Michaels, N. Nelson, J. O’Brien, D. Scott, and T. Webb III, 2000: Model estimates hurricane wind speed probabilities. *Eos, Transactions of the American Geophysical Union*, **81**, 433, 438.
63. Elsner J. B., K.-b. Liu, and B. Kocher, 2000: Spatial variations in major U.S. hurricane activity: Statistics and a physical mechanism. *Journal of Climate*, **13**, 2293–2305.
62. Elsner J. B., T. H. Jagger and X.-F. Niu, 2000: Changes in the rates of North Atlantic major hurricane activity during the 20th century. *Geophysical Research Letters*, **27**, 1743–1746.

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59. Elsner J. B., A. B. Kara, and M. A. Owens, 1999: Fluctuations in North Atlantic hurricane frequency. *Journal of Climate*, **12**, 427–437.
58. Tsonis, A. A., P. J. Roebber, and J. B. Elsner, 1999: Long-range correlations in the extratropical atmospheric circulation: Origin and implications. *Journal of Climate*, **12**, 1534–1541.
57. Kara, A. B., and J. B. Elsner, 1998: Characteristics of the atmospheric boundary layer for coastal and inland locations around the Gulf of Mexico, *Atmosfera*, **12**, 1–13.
56. Elsner J. B., X. Niu, and A. A. Tsonis, 1998: Multi-year prediction model of North Atlantic hurricane activity, *Meteorology and Atmospheric Physics*, **68**, 43–51.
55. Kara, A. B., P. H. Ruscher, and J. B. Elsner, 1998: Numerical models of boundary layer processes over and around the Gulf of Mexico during a return-flow event, *Weather and Forecasting*, **13**, 921–933.
54. Bove, M. C., J. B. Elsner, C. W. Landsea, X. Niu, and J. J. O'Brien, 1998: Effect of El Niño on U.S. landfalling hurricanes, revisited, *Bulletin of the American Meteorological Society*, **79**, 2477–2482.
53. Tsonis, A. A., and J. B. Elsner, 1998: Comments on “The southern oscillation as an example of a simple, ordered subsystem of a complex chaotic system”—Reply, *Journal of Climate*, **11**, 2460.
52. Tsonis, A. A., and J. B. Elsner, 1998: Comments on “The southern oscillation as an example of a simple, ordered subsystem of a complex chaotic system,” *Journal of Climate*, **11**, 2453–2454, 2460.
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48. Tsonis, A. A., P. J. Roebber, and J. B. Elsner, 1997: Do climate simulations from sea surface temperature forced models represent actual dynamics? *Nonlinear Processes in Geophysics*, **4**, 93–100.

47. Carter, M. M., and J. B. Elsner, 1997: A statistical method for forecasting rainfall over Puerto Rico, *Weather & Forecasting*, **12**, 515–525.
46. Lehmiller, G. S., T. B. Kimberlain, and J. B. Elsner, 1997: Seasonal prediction models for North Atlantic basin hurricane location, *Monthly Weather Review*, **125**, 1780–1791.
45. Tsonis, A. A., and J. B. Elsner, 1997: Global temperature as a regulator of climate predictability, *Physica D*, **108**, 191–196.
44. Tsonis, A. A., J. B. Elsner, and P. A. Tsonis, 1997: Is DNA a language? *Journal of Theoretical Biology*, **184**, 25–29.
43. Carter, M. M., and J. B. Elsner, 1996: Convective rainfall regions of Puerto Rico, *International Journal of Climatology*, **16**, 1033–1043.
42. Elsner J. B., G. S. Lehmiller, and T. B. Kimberlain, 1996: Objective classification of Atlantic basin hurricanes, *Journal of Climate*, **9**, 2880–2889.
41. Elsner J. B., H. E. Fuelberg, R. L. Deal III, J. A. Orrock, G. S. Lehmiller, and P. H. Ruscher, 1996: Tallahassee, Florida, minimum temperature anomaly: Description and speculations, *Bulletin of the American Meteorological Society*, **77**, 721–728.
40. Tsonis, A. A., and J. B. Elsner, 1996: Mapping the channels of communication between the tropics and midlatitudes, *Physica D*, **92**, 237–244.
39. Tsonis, A. A., P. Kumar, J. B. Elsner, and P. A. Tsonis, 1996: Wavelet analysis of DNA sequences, *Physical Review E*, **53**, 1828–1834.
38. Tsonis, A. A., and J. B. Elsner, 1995: Testing for scaling in natural forms and observables, *Journal of Statistical Physics*, **81**, 869–880.
37. Triantafyllou, J. B. Elsner, A. Lascaratos, C. Koutitas, and A. A. Tsonis, 1995: Structure and properties of the attractor of a marine dynamical system, *Mathematical and Computational Modelling*, **21**, 73–86.
36. Hess, J. C., J. B. Elsner, and N. E. LaSeur, 1995: Improving seasonal hurricane predictions for the Atlantic basin, *Weather & Forecasting*, **10**, 425–432.
35. Elsner, J. B., and C. P. Schmertmann, 1994: Assessing forecast skill through cross validation, *Weather & Forecasting*, **9**, 619–624.
34. Elsner, J. B., and A. A. Tsonis, 1994: Low-frequency oscillation, *Nature*, **372**, 507–508.
33. Tsonis, A. A., G. N. Triantafyllou, J. B. Elsner, J. J. Holdzkom II, and A. D. Kirwan Jr., 1994: An investigation on the ability of nonlinear methods to infer dynamics from observations, *Bulletin of the American Meteorological Society*, **75**, 1623–1633.

32. Elsner, J. B., and J. C. Honoré, 1994: Ignoring chaos, *Bulletin of the American Meteorological Society*, **75**, 1846–1847.
31. Hess, J. C., and J. B. Elsner, 1994: Extended-range hindcasts of tropical-origin Atlantic hurricane activity, *Geophysical Research Letters*, **21**, 365–368.
30. Hess, J. C., and J. B. Elsner, 1994: Historical developments leading to forecasts of annual Atlantic tropical-cyclone activity, *Bulletin of the American Meteorological Society*, **75**, 1611–1621.
29. Tsonis, A. A., G. Triantafyllou, and J. B. Elsner, 1994: Searching for determinism in observed data: A review of the issues involved, *Nonlinear Processes in Geophysics*, **1**, 12–25.
28. Elsner, J. B., and A. A. Tsonis, 1994: Empirically derived climate predictability over the extratropical Northern Hemisphere, *Nonlinear Processes in Geophysics*, **1**, 41–44.
27. Tsonis, A. A., J. B. Elsner, and P. A. Tsonis, 1993: On the existence of scaling in DNA sequences, *Biochemical and Biophysical Research Communications*, **97**, 1288–1295.
26. Elsner, J. B., and C. P. Schmertmann, 1993: Improving extended-range seasonal predictions of intense Atlantic hurricane activity, *Weather & Forecasting*, **8**, 345–351.
25. Tsonis, A. A., J. B. Elsner, and K. P. Georgakakos, 1993: Estimating the dimensions of weather and climate attractors: Important issues about the procedure and interpretation, *Journal of Atmospheric Sciences*, **50**, 2549–2555.
24. Elsner, J. B., and A. A. Tsonis, 1993: Nonlinear dynamics established in the ENSO, *Geophysical Research Letters*, **20**, 213–216.
23. Elsner, J. B., and A. A. Tsonis, 1993: Complexity and predictability of hourly precipitation, *Journal of Atmospheric Sciences*, **50**, 400–405.
22. Elsner, J. B., 1992: A description of low-frequency atmospheric oscillations over the Northern Hemisphere using singular spectrum analysis, *Geophysical Research Letters*, **19**, 1775–1778.
21. Tsonis, A. A., and J. B. Elsner, 1992: Nonlinear prediction as a way of distinguishing chaos from random fractal sequences, *Nature*, **358**, 217–220.
20. Tsonis, A. A., and J. B. Elsner, 1992: Temperature oscillations, *Nature*, **356**, 751.
19. Elsner, J. B., 1992: Predicting time series using a neural network as a method for distinguishing chaos from noise, *Journal of Physics A*, **25**, 843–850.
18. Elsner, J. B., and A. A. Tsonis, 1992: A note on the spatial structure of the covariability of Northern Hemispheric monthly temperature records in the last 110 years, *Pure and Applied Geophysics*, **137**, 133–146.



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16. Tsonis, A. A., and J. B. Elsner, 1991: Fractal properties of rain in the time domain and Taylor’s hypothesis, *Meteorology and Hydrology*, **2**, 98–103.
15. Elsner, J. B., and A. A. Tsonis, 1991: Do bidecadal oscillations exist in the global temperature record? *Nature*, **353**, 551–553.
14. Tsonis, A. A., J. B. Elsner, and P. A. Tsonis, 1991: Periodicity in DNA coding sequences: Implications in gene evolution, *Journal of Theoretical Biology*, **151**, 323–331.
13. Elsner J. B., and A. A. Tsonis, 1991: Comparisons of observed Northern Hemisphere surface air temperature records, *Geophysical Research Letters*, **18**, 1229–1232.
12. Tsonis, A. A., and J. B. Elsner, 1991: Multiple fractal dimensions in snow, *Atmospheric Research*, **26**, 1–5.
11. Tsonis, A. A., and J. B. Elsner, 1990: Multiple attractors, fractal basins and longterm climate dynamics, *Atmospheric Physics*, **63**, 171–176.
10. Tsonis, A. A., and J. B. Elsner, 1990: Comments on “Dimension analysis of climatic data,” *Journal of Climate*, **3**, 1502–1505.
9. Elsner, J. B., W. H. Drag, and J. K. Last, 1989: Synoptic weather patterns associated with the Milwaukee, Wisconsin flash flood of 6 August 1986, *Weather & Forecasting*, **4**, 537–554.
8. Elsner, J. B., J. R. Mecikalski, and A. A. Tsonis, 1989: A shore-parallel cloud band over Lake Michigan, *Monthly Weather Review*, **117**, 2822–2823.
7. Tsonis, A. A., and J. B. Elsner, 1989: Testing the global warming hypothesis, *Geophysical Research Letters*, **16**, 795–797.
6. Tsonis, A. A., and J. B. Elsner, 1989: Chaos, strange attractors and the weather, *Bulletin of the American Meteorological Society*, **70**, 16–23.
5. Tsonis, A. A., J. B. Elsner, and P. A. Tsonis, 1989: On the dynamics of a forced reaction-diffusion model for biological pattern formation, *Proceedings of the National Academy of Sciences, USA*, **86**, 4938–4942.
4. Tsonis, A. A., and J. B. Elsner, 1988: The weather attractor over very short-time scales, *Nature*, **333**, 545–547.
3. Tsonis, A. A., and J. B. Elsner, 1987: Fractal characterization and simulation of lightning, *Atmospheric Physics*, **60**, 187–192.

2. Sikdar, D. N., and J. B. Elsner, 1987: Large-scale circulation departures related to wet episodes in Northeast Brazil, *Quarterly Journal of the Royal Meteorological Society*, **113**, 567–580.
1. Sikdar, D. N., and J. B. Elsner, 1987: Intra-seasonal variability of rainfall and atmospheric energetics over Northeast Brazil during the rainy season of 1979, *Tellus A*, **39**, 49–60.

### **Books Edited**

- Elsner, J. B., R. E. Hodges, J. C. Malmstadt, and K. N. Scheitlin, 2010: *Hurricanes and Climate Change, vol 2*, Springer, 255 pp.
- Elsner, J. B. and T. H. Jagger, 2009: *Hurricanes and Climate Change*, Springer, 419 pp.
- Tsonis, A. A. and J. B. Elsner, 2008: *Nonlinear Dynamics in Geosciences*, Springer, 604 pp.

### **Book Chapters**

- Scheitlin, K. N., and J. B. Elsner, 2010: “A track-relative climatology of Eglin Air Force Base hurricanes in a variable climate,” in *Hurricanes and Climate Change, vol 2*, J. Elsner et al., Eds., Springer, 217–230.
- Malmstadt, J. C., and J. B. Elsner, 2010: “Frequency and intensity of hurricanes within Florida’s threat zone,” in *Hurricanes and Climate Change, vol 2*, J. Elsner et al., Eds., Springer, 191–204.
- Elsner, J. B., and T. H. Jagger, 2010: “On the increasing intensity of the strongest Atlantic hurricanes,” in *Hurricanes and Climate Change, vol 2*, J. Elsner et al., Eds., Springer, 175–190.
- Hodges, R. E., and J. B. Elsner, 2010: “A statistical analysis of the frequency of United States and eastern North Pacific hurricanes related to solar activity,” in *Hurricanes and Climate Change, vol 2*, J. Elsner et al., Eds., Springer, 121–136.
- Jagger, T. H., and J. B. Elsner, 2010: “Environmental signals in property damage losses from hurricanes,” in *Hurricanes and Climate Change, vol 2*, J. Elsner et al., Eds., Springer, 101–120.
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- Fogarty, E. A., J. B. Elsner, T. H. Jagger, and A. A. Tsonis, 2009: “Network analysis of U.S. hurricanes,” in *Hurricanes and Climate Change*, J. Elsner and T. Jagger, Eds., Springer, 153–168.

- Jagger, T. H., J. B. Elsner, and M. A. Saunders, 2008: “Forecasting U.S. insured hurricane losses,” in *Climate Extremes and Society*, R. Murnane and H. Diaz, Eds., Cambridge University Press, Chapter 10, 189–208.
- Elsner, J. B., and B. H. Bossak, 2004: “Hurricane landfall probability and climate”, in *Hurricanes and Typhoons: Past, Present, and Future*, R. Murnane and K.-b. Liu, Eds., Columbia University Press.
- Tsonis, A. A., and J. B. Elsner, 1992: “What do data analyzes tell us about the variability of global temperature?” Chapter 3, Section I, in *A Global Warming Forum: Scientific, Economic, and Legal Overview*, R. A. Geyer, Ed., CRC Press.
- Elsner, J. B., 1991: “Predicting time series using a neural network as a method of distinguishing chaos from noise.”, in *Artificial Neural Networks: Proceedings of the 1991 International Conference on Artificial Neural Networks (ICANN-91)*, T. Kohonen, K. Mäkisara, O. Simula, & J. Kangas, Eds., North Holland.

### Book Reviews

- *Hurricanes of the Gulf of Mexico*, by Barry D. Keim and Robert A. Muller, Louisiana State University Press: 2009, *The Professional Geographer*, **62**, 559–560 (2010).
- *In the eye of the storm, Storm World: Hurricanes, Politics, and the Battle Over Global Warming*, by Chris Mooney, Harcourt: July 2007, *Nature*, **448**, 648 (2007).
- *Analysis of Time Series Structure: SSA and Related Techniques*, by N. Golyandina, V. Nekrutkin, & A. Zhigljavsky, *Journal of the American Statistical Association*, **97**, 1207–1208 (2002).
- *Chaos and Determinism: Turbulence as a Paradigm for Complex Systems Converging Toward Final States*, by A. Favre, H. Guitton, J. Guitton, A. Lichnerowicz, & E. Wolff, translated by B. E. Schwarzbach, *Bulletin of the American Meteorological Society*, **76**, 1824–1825 (1995).
- *The Essence of Chaos*, by E. N. Lorenz, *Bulletin of the American Meteorological Society*, **75**, 862–864 (1994).
- *Non-Linear Variability in Geophysics: Scaling and Fractals*, Eds. S. Lovejoy & D. Schertzer, *Bulletin of the American Meteorological Society*, **73**, 645–646 (1992).
- *From Cardinals to Chaos: Reflections on the Life and Legacy of S. Ulam*, edited by N. G. Cooper, *Bulletin of the American Meteorological Society*, **72**, 1554–1556 (1991).

### Meeting Summaries

- Elsner, J. B., 2008: International Summit on Hurricanes and Climate Change, *Bulletin of the American Meteorological Society*, **89**, 677–679.

- Elsner, J. B., V. K. Gupta, S. Lovejoy, V. Lucarini, A. B. Murray, A. S. Sharma, S. Tebbens, A. A. Tsonis, and D. Vassiliadis, 2007: 20 Years of Nonlinear Dynamics in Geosciences, *EOS Transactions*, **88**, 29–30.

### Forecasts

- Elsner J. B., 1998: Verification of our forecasts for the 1998 North Atlantic hurricane season and predictions for the 1999 season, *Experimental Long-Lead Forecast Bulletin*, **7/4**.
- Elsner J. B., T. B. Kimberlain, and G. S. Lehmiller, 1998: Early August forecasts of Atlantic hurricane activity for the balance of the 1998 season, using Poisson, logistic, and OLS models, *Experimental Long-Lead Forecast Bulletin*, **7/3**.
- Elsner J. B., and T. B. Kimberlain, 1997: Verification of our forecasts for the 1997 North Atlantic hurricane season and predictions for the 1998 season, *Experimental Long-Lead Forecast Bulletin*, **6/4**.
- Elsner J. B., T. B. Kimberlain, and G. S. Lehmiller, 1997: Early August forecasts of Atlantic hurricane activity for the balance of the 1997 season, using Poisson, logistic, and OLS models, *Experimental Long-Lead Forecast Bulletin*, **6/3**.
- Elsner J. B., G. S. Lehmiller, and T. B. Kimberlain, 1996: Forecasts of Atlantic tropical storm activity for 1997, *Experimental Long-Lead Forecast Bulletin*, **5/4**.
- Elsner J. B., G. S. Lehmiller, and T. B. Kimberlain, 1996: Early August Atlantic hurricane activity forecasts for the balance of the 1996 season, *Experimental Long-Lead Forecast Bulletin*, **5/3**.
- Elsner J. B., 1996: A probabilistic model of the number of intense Atlantic hurricanes for 1996, *Experimental Long-Lead Forecast Bulletin*, **5/1**.
- Elsner J. B. and C. P. Schmertmann, 1995: Multiple least-squares regression and Poisson model forecasts of Atlantic tropical storm activity for 1996, *Experimental Long-Lead Forecast Bulletin*, **4/4**.
- Elsner J. B., T. B. Kimberlain, and C. P. Schmertmann, 1994: Poisson model forecasts of Atlantic tropical storm activity for 1995, *Experimental Long-Lead Forecast Bulletin*, **3/4**.
- Elsner J. B., C. P. Schmertmann, and J. C. Hess, 1993: Long-lead forecasts of annual Atlantic hurricane activity for 1994 and a verification of the 1993 forecast, *Experimental Long-Lead Forecast Bulletin*, **2/4**.
- Elsner J. B. and C. P. Schmertmann, 1993: A long-lead seasonal forecast of intense Atlantic hurricane activity for 1993, *Experimental Long-Lead Forecast Bulletin*, **2/1**.

### Grants

- Risk Prediction Initiative, \$51,750, July 2010–June 2011.
- Department of Defense, SERDP, \$1,020,000, April 2009–March 2012.
- National Science Foundation, \$143,008, January 2008–December 2009.
- Florida Department of Health \$23,725, January 2005–June 2005.
- National Science Foundation, \$460,046, January 2005–December 2007.
- U.S. Southern Command, \$499,702, October 2003 – September 2004.
- Florida Department of Transportation, \$125,000, September 2002 – October 2003.
- National Science Foundation, \$132,191, August 2002 – July 2005.
- Florida Department of Transportation, \$124,326, September 2001 – October 2002.
- FSU Cornerstone Program, Program Enhancement Grant, \$90,000, July 2001 – June 2003.
- National Science Foundation, \$206,163, November 2000 – October 2003.
- FSU Committee on Faculty Research Support, \$8,000, May 2000 – August 2000.
- Risk Prediction Initiative, \$72,000, June 1999 – May 2001.
- CITM (NOAA) \$34,000, October 1998 – September 1999.
- COMET (NCAR) \$57,688, January 1998 – December 1999.
- Risk Prediction Initiative, \$50,000, November 1997 – May 1999.
- National Science Foundation, \$156,000, May 1997 – April 2000.
- Risk Prediction Initiative, \$35,000, June 1996 – May 1997.
- FSU Council on Research and Creativity, \$6,000, November 1995 – October 1996.
- National Science Foundation, \$110,000, February 1995 – September 1997.
- National Science Foundation, \$99,000, December 1993 – November 1996.
- CITM (NOAA) \$17,000/yr, October 1993 – September 1997.
- FSU Committee on Faculty Research Support, \$8,000, May 1993 – August 1993.
- NOAA (OGP) \$45,000, September 1991 – August 1992.
- FSU Council on Research and Creativity, \$10,500, November 1990 – October 1991.

## **Reports**

- Jagger, T. H., L. Harduar-Morano, J. B. Elsner, C. Duclos, G. Kearney, and D. Johnson 2005: A procedure for disease mapping: Bayesian models and GIS, *CDC Newsletter*, September.
- Gordon, R. T., A. Boissonnade, and J. B. Elsner, 2000: A track classification of North Atlantic tropical cyclones. Report to Risk Management Solutions of Menlo Park, CA. 28pp.
- Elsner J. B., and A. B. Kara, 1997: Hurricane return periods along the Gulf Coast and Florida, NOAA Tech. Memo., NWS SR-192.
- Elsner J. B., 1996: A probabilistic model of the number of intense Atlantic basin hurricanes for the 1996 season. NOAA Tech. Attach., NWS SR/SSD96-12.
- Drag, W. H., J. B. Elsner, and J. K. Last, 1987: Pattern recognition and the Milwaukee flash flood of August 6, 1986, NOAA Tech. Attach., NWS CR87-15.
- Elsner, J. B., P. J. Elsner, and J. K. Last, 1986: Milwaukee's bulletin board system, *American Weather Observer*, **3**, 10.

#### **CONFERENCE ORGANIZER/SESSION CONVENER**

- 3rd International Summit on Hurricanes and Climate Change, Rhodes, 27 June–2 July 2011, Organizer.
- 2nd International Summit on Hurricanes and Climate Change, Corfu, 31 May–5 June 2009, Organizer.
- 1st International Summit on Hurricanes and Climate Change, Crete, 24 May–1 June 2007, Organizer with R.J. Murnane
- 20 Years of Nonlinear Dynamics in Geosciences, Rhodes, 9–13 June 2006, Organizer with A.A. Tsonis.
- American Association of Geographers, Philadelphia, 17 March 2004.
- European Geophysical Society XXI General Assembly, The Hague, Netherlands, 6–10 May 1996, Quantifying Predictability, with M.K. Davey, M. Allen, and T. Opsteegh.

#### **INVITED LECTURES**

- Modern Methods in Hurricane Climatology, Zurich/London, March, 2011.
- Space and Solar Weather, Boulder, April, 2011.
- Spatial Models for Hurricane Climate, University of Minnesota, Minneapolis, August, 2011.
- Workshop on Modern Statistics for Climate Research, Oslo, February, 2010

- Catastrophe Risk Summit, Man Investments and Nephila Capital, Bermuda, April 2010
- Florida Catastrophic Risk Management Center, Tallahassee, May, 2009
- Risk Prediction Initiative Workshop, Bermuda, October, 2009
- Workshop on Assessment and mitigation of emerging risk, Paris, December, 2009
- Risk Prediction Initiative, Bermuda, October, 2008.
- Tokio Millennium, Atlanta, April 2007.
- Tokio Millennium, Bermuda, May 2006.
- CCC Information Services, Miami, April 2006.
- National Hurricane Conference (debate moderator), Orlando, April 2006.
- General Reinsurance, Annual Meeting, Coral Gables, March 2006.
- Reinsurance Association of America, Tampa, February 2006.
- Hurricane Science Review, Webinar, XL Reinsurance, November 2005.
- Summer Political Methodology Meeting, Florida State University, July 2005.
- GE Insurance Solutions, Webinar, Kansas City, MO, February, 2005.
- Florida Public Interest Environmental Conference, Gainesville, FL, February, 2005.
- EQECAT 2004 Catastrophe Management Summit, Orlando, February, 2004.
- National Hurricane Conference, New Orleans, April, 2003.
- U.S. Southern Command, Barbados, January, 2003.
- Risk Prediction Initiative, Bermuda, June, 2002.
- Casualty Actuarial Society, Miami Beach, FL, May, 2001.
- Historical and paleo hurricane records, Columbia, SC, March, 2001.
- Enron, Houston, TX, February, 2001.
- AAAS meeting, Washington, DC, February, 2000.
- SUS hurricane meeting, Miami, FL, November, 1999.
- Re-insurance industry meeting, Hamilton, Bermuda, May, 1999.
- Caribbean Meteorological Institute, Barbados, April, 1999.

- National Hurricane Conference, Orlando, FL, April, 1999.
- Global Hydrology and Climate Center, Huntsville, AL, March, 1999.
- National Hurricane Conference, Norfolk, VA, April, 1998.
- Aon Reinsurance Meeting, Chicago, IL, June, 1997.
- Re-insurance industry meeting, Hamilton, Bermuda, December, 1996.
- Seminar on Catastrophe Issues, Keynote Address, Casualty Actuarial Society, St. Petersburg, April, 1996.
- Bermuda Biological Station for Research, Bermuda, September, 1995.
- NWSFO, Anchorage, June, 1993.
- European Geophysical Society XVIII General Assembly, Wiesbaden, May, 1993.
- Clark-Atlanta University, Atlanta, October, 1991.
- Bulgarian Institute of Nuclear Physics, Sofia, June, 1991.
- Bulgarian Academy of Sciences, Sofia, June, 1991.
- AMS-West Central Illinois Chapter, Peoria, March 1990.
- University of Dayton, Dayton, March, 1990.
- Milwaukee Area Technical College, Milwaukee, April, 1988.

## FORMAL COURSES TAUGHT

- **Graduate level:** Synoptic Meteorology Lecture/Laboratory (U/G), Mesometeorology Laboratory, Computational Methods in Atmospheric Science, Statistical Weather and Climate Prediction, Data Analysis and Statistics in Meteorology, Atmospheric Thermodynamics, Hurricanes and Society, Quantitative Geography, Advanced Quantitative Methods, Seminars: Bayesian Thought, Complexity Theory, Open Source Software for Geographers.
- **Undergraduate level:** Survey of Meteorology, Tornadoic Storms, General Meteorology, Introduction to Dynamic Meteorology, Current Weather Discussion, Physical Geography, Chasing Storms.
- **Students graduated:** Vincint Tino, MS (Meteorology), Jason Hess, MS (Meteorology), Todd Kimberlain, MS (Meteorology), Matt Carter, MS, PhD (Meteorology), Kwan Kong, MS (Meteorology), David Whitehead, MS (Meteorology), Weitan Pan, MS, (Engineering), Bethany Kocher, MS (Meteorology), Marc Cooper, MS (Geography), Ethan Gibney, MS (Geography), Brian Bossak, PhD (Geography), Emily Fogarty, MS (Geography), Jeff



Dickey, PhD (Geography), Todd Albert, PhD (Geography), Jill Malmstadt, MS (Geography), Emily Fogarty, PhD (Geography), Robert Hodges, MS (Geography), Kelsey Scheitlin, PhD (Geography).

- **Course list by semester (since Fall 1996):**

Semester	Course	Title
Fall 2011/Spring 2012		Sabbatical
Spring 2011	GEO 5934	Advanced Quantitative Geography
Spring 2011	GEO 5934	Seminar: Bayesian Methods and Models
Fall 2010	GEO 5165	Quantitative Geography
Fall 2010	GEO 4930	Chasing Storms
Spring 2010	GEO 5934	Advanced Quantitative Geography
Spring 2010	GEO 5934	Spatial Data Analysis with R
Fall 2009	GEO 5165	Quantitative Geography
Fall 2009	GEO 5934	Hurricane Climatology
Spring 2009	GEO 5934	Advanced Quantitative Geography
Fall 2008	GEO 5934	Seminar: R for Graphics
Fall 2008	GEO 5165	Quantitative Geography
Spring 2008	GEO 5934	Advanced Quantitative Methods
Fall 2007	GEO 5165	Quantitative Geography
Fall 2007	GEO 5934	Seminar: Open Source Software for Geographers
Spring 2007	GEO 5934	Seminar: Open Source Software for Geographers
Spring 2007	GEO 5934	Advanced Quantitative Methods
Fall 2006	GEO 5934	Seminar: Bayesian Thought
Fall 2006	GEO 5165	Quantitative Geography
Spring 2006	GEO 5934	Advanced Quantitative Methods
Fall 2005	GEO 5934	Seminar: Bayesian Models
Fall 2005	GEO 5165	Quantitative Geography
Spring 2005	GEO 5934	Seminar: Complexity Theory
Spring 2005	GEO 5934	Advanced Quantitative Methods
Fall 2004	GEO 5934	Seminar: Bayesian Analysis
Fall 2004	GEO 5165	Quantitative Geography
Spring 2004	Sabbatical	
Fall 2003	GEO 5934	Advanced Quantitative Methods
Spring 2003	GEO 5165	Quantitative Geography
Spring 2003	GEO 4930	Hurricane Climate
Fall 2002	GEO 5934	Advanced Quantitative Methods
Spring 2002	GEO 5165	Quantitative Geography
Fall 2001	GEO 5934	Advanced Quantitative Methods
Spring 2001	GEO 5165	Quantitative Geography
Fall 2000	GEO 3200c	Physical Geography

Fall 2000	GEO 5934	Advanced Quantitative Methods
Spring 2000	GEO 4930	Florida's Weather & Climate
Spring 2000	GEO 5165	Quantitative Geography
Fall 1999	GEO 3200c	Physical Geography
Fall 1999	GEO 4930	Hurricanes & Society
Spring 1999	MET 5550	Statistical Weather Prediction
Fall 1999	MET 2700	General Meteorology
Fall 1999	MET 3520	Current Weather Discussion
Spring 1998	MET 5550	Statistical Weather Prediction
Fall 1998	MET 2700	General Meteorology
Fall 1998	MET 3520	Current Weather Discussion
Spring 1997	Sabbatical	
Fall 1997	MET 4420	Atmospheric Physics I
Fall 1997	MET 3520	Current Weather Discussion
Spring 1996	MET 4159	Data Analysis
Fall 1996	MET 1010	Introduction to the Atmosphere
Fall 1996	MET 2700	General Meteorology