

The Risk Prediction Initiative (RPI) is an academic program at the Bermuda Institute of Ocean Sciences. Since 1994 RPI, has been devoted to connecting natural hazard and climate science with the risk transfer industry. This is achieved via synergistic research funding, data development, collaborative workshops, and educational outreach. More background is available via our website: <http://risk.bios.edu> .

The following is a list of publications by RPI-supported researchers in peer-reviewed academic journals, edited books and scientific bulletins, listed alphabetically for each year.

## 2018

1. Antonescu, B., J.G. Fairman, and D.M. Schultz, 2018: What is the Worst That Could Happen? Reexamining the 24–25 June 1967 Tornado Outbreak over Western Europe. *Wea. Climate Soc.*, 10, 323–340, <https://doi.org/10.1175/WCAS-D-17-0076.1>
2. Caron, L., L. Hermanson, A. Dobbin, J. Imbers, L. Lledó, and G.A. Vecchi, 2018: How Skillful are the Multiannual Forecasts of Atlantic Hurricane Activity?. *Bull. Amer. Meteor. Soc.*, 99, 403–413, <https://doi.org/10.1175/BAMS-D-17-0025.1>
3. Emanuel, K., P. Caroff, S. Delgado, C. Guard, M. Guishard, C. Hennon, J. Knaff, K.R. Knapp, J. Kossin, C. Schreck, C. Velden, and J. Vigh, 2017: Desirability and Feasibility of a Global Reanalysis of Tropical Cyclones. *Bull. Amer. Meteor. Soc.*, (February 2018), <https://doi.org/10.1175/BAMS-D-17-0226.1>
4. Johnston, M. C., Guishard, M. P., Peñate, I. and Currie, I. D. (2018), Flooding threshold rainfall events in Bermuda. *Weather*. doi:10.1002/wea.3096
5. Lavender, S.L., K.J.E. Walsh, L-P. Caron, M. King, S. Monkiewicz, M. Guishard, Q. Zhang, and B. Hunt, 2018: Estimation of the maximum annual number of North Atlantic tropical cyclones using climate models. *Science Advances*, 4, doi: 10.1126/sciadv.aat6509.
6. Walz MA, Befort DJ, Kirchner-Bossi NO, Ulbrich U, Leckebusch GC. Modelling serial clustering and inter-annual variability of European winter windstorms based on large-scale drivers. *Int. J. Climatol.* 2018;1-14.<https://doi.org/10.1002/joc.5481>

## 2017

7. Agard, J.V., Dependence of continental severe convective instability on climatological environmental conditions, Ph.D. Thesis, Department of Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology, September 2017, <https://dspace.mit.edu/handle/1721.1/113799>
8. Antonescu, B., D.M. Schultz, A. Holzer, and P. Groenemeijer, 2017: Tornadoes in Europe: An Underestimated Threat. *Bull. Amer. Meteor. Soc.*, 98, 713–728, <https://doi.org/10.1175/BAMS-D-16-0171.1>
9. Elsner JB, Jagger TH, Fricker T, Statistical Models for Tornado Climatology: Long and Short-Term Views. *PLoS ONE* 11(11), e0166895. doi:10.1371/journal.pone.0166895, Dec. 2016.
10. Groenemeijer, P., T. Púčik, A.M. Holzer, B. Antonescu, K. Riemann-Campe, D.M. Schultz, T. Kühne, B. Feuerstein, H.E. Brooks, C.A. Doswell, H. Koppert, and R. Sausen, 2017: Severe Convective Storms in Europe: Ten Years of Research and Education at the European Severe Storms Laboratory. *Bull. Amer. Meteor. Soc.*, 98, 2641–2651, <https://doi.org/10.1175/BAMS-D-16-0067.1>
11. Janković, V. and D.M. Schultz, 2017: Atmosfear: Communicating the Effects of Climate Change on Extreme Weather. *Wea. Climate Soc.*, 9, 27–37, <https://doi.org/10.1175/WCAS-D-16-0030.1>
12. Kulp, S. & Strauss, B.H., Rapid Escalation of Coastal Flood Exposure in US Municipalities from Sea Level Rise, *Climatic Change* (2017) 142: 477. <https://doi.org/10.1007/s10584-017-1963-7>

## 2016

13. Antonescu, B., D. M. Schultz, F. Lomas, and T. Kühne, 2016: Tornadoes in Europe: Synthesis of the observational datasets. *Mon. Wea. Rev.*, 144, 2445–2480, doi: 10.1175/MWR-D-15-0298.1.
14. Apsley, M. L., K. J. Mulder, and D. M. Schultz, 2015: Reexamining the United Kingdom's greatest tornado outbreak: Forecasting the limited extent of tornadoes along a cold front. *Wea. Forecasting*, 31, 853–875, doi: 10.1175/WAF-D-15-0131.1.
15. Baranes, H.E., Woodruff, J.D., Wallace, D.J. et al. Kanamaru, K., and Cook, T.L., Sedimentological records of the C.E. 1707 Hōei Nankai Trough tsunami in

the Bungo Channel, southwestern Japan, *Nat Hazards* (2016) 84: 1185.  
<https://doi.org/10.1007/s11069-016-2498-3>

16. Camp, J. and Caron, L.-P., (2016) Analysis of Atlantic hurricane landfall forecasts in coupled GCMs on seasonal and multi-annual timescales. Chapter 9 in *Hurricanes and Climate Change*. 3rd edition. Springer.
17. Hart, R., D. Chavas, and M. Guishard, 2016: The Arbitrary Definition of the Current Atlantic Major Hurricane Landfall Drought. *Bull. Amer. Meteor. Soc.*, 97, 713–722, doi: 10.1175/BAMS-D-15-00185.1.
18. Knapp, K., J. Matthews, J. Kossin, and C. Hennon, 2016: Identification of Tropical Cyclone Storm Types Using Crowdsourcing. *Mon. Wea. Rev.*, 144, 3783–3798, doi: 10.1175/MWR-D-16-0022.1.
19. Strazzo, S. E., J. B. Elsner, T. E. LaRow, H. Murakami, M. Wehner, and M. Zhao (2016), The influence of model resolution on the simulated sensitivity of North Atlantic tropical cyclone maximum intensity to sea surface temperature, *J. Adv. Model. Earth Syst.*, 8, 1037–1054, doi:10.1002/2016MS000635.
20. Vigh, J. L., N. M. Dorst, C. L. Williams, E. W. Uhlhorn, B. W. Klotz, J. Martinez, H. E. Willoughby, F. D. Marks, Jr., D. R. Chavas, 2016: FLIGHT+: The Extended Flight Level Dataset for Tropical Cyclones (Version 1.1). Tropical Cyclone Data Project, National Center for Atmospheric Research, Research Applications Laboratory, Boulder, Colorado.

## 2015

21. Caron, L.-P., L. Hermanson and F.J. Doblas-Reyes (2015). Multi-annual forecasts of Atlantic U.S. tropical cyclone wind damage potential. *Geophysical Research Letters*, doi:10.1002/2015GL063303.
22. Chavas, D.R., and J. Vigh, 2014: QSCAT-R: The QuikSCAT Tropical Cyclone Radial Structure Dataset. NCAR Technical Note NCAR/TN-513+STR, 25 pp, DOI: 10.5065/D6J67DZ4.
23. Hennon, C.C., K.R. Knapp, C.J. Schreck, S.E. Stevens, J.P. Kossin, P.W. Thorne, P.A. Hennon, M.C. Kruk, J. Rennie, J. Gadéa, M. Striegl, and I. Carley, 2015: Cyclone Center: Can Citizen Scientists Improve Tropical Cyclone Intensity Records?. *Bull. Amer. Meteor. Soc.*, 96, 591–607, <https://doi.org/10.1175/BAMS-D-13-00152.1>
24. Vigh, J., 2015: VDM+: The Enhanced Vortex Message Dataset: Structure, Intensity, and Environmental Parameters from Atlantic Tropical Cyclones. NCAR

Technical Note NCAR/TN-517+STR, 72 pp, doi:10.5065/D6PR7T26.

25. Woodruff J.D., Kanamaru K., Kundu S. and Cook T.L. Depositional evidence for the Kamikaze typhoons and links to changes in typhoon climatology. *Geology* December 4, 2014, doi: 10.1130/G36209.1

## 2014

26. Caron, L.-P., M. Boudreault and C.L. Bruyere (2014). Changes in large-scale controls of Atlantic tropical cyclone activity with the phases of the Atlantic Multidecadal Oscillation, *Climate Dynamics*, June 2014.
27. Elsner, J. and Guishard, MP, Meeting Summary: First International Summit on Tornadoes and Climate Change, *Eos, Transactions, American Geophysical Union*, Volume 95, Issue 45, page 412, 11 November 2014.
28. Elsner, J.B. and H.M. Widen, 2014: Predicting Spring Tornado Activity in the Central Great Plains by 1 March. *Mon. Wea. Rev.*, 142, 259–267, <https://doi.org/10.1175/MWR-D-13-00014.1>
29. Hodges, R.E., Jagger, T., Elsner, J. The sun-hurricane connection: Diagnosing the solar impacts on hurricane frequency over the North Atlantic basin using a space-time model, *Natural Hazards*, March 2014.
30. Landsea, C.W., A. Hagen, W. Bredemeyer, C. Carrasco, D.A. Glenn, A. Santiago, D. Strahan-Sakoskie, and M. Dickinson, 2014: A Reanalysis of the 1931–43 Atlantic Hurricane Database. *J. Climate*, 27, 6093–6118, <https://doi.org/10.1175/JCLI-D-13-00503.1>
31. Smith, L. A., Du, H. , Suckling, E. B. and Niehörster, F. (2015), Probabilistic skill in ensemble seasonal forecasts. *Q.J.R. Meteorol. Soc.*, 141: 1085-1100. doi:10.1002/qj.2403
32. Steen-Larsen, H. C., Sveinbjörnsdóttir, A. E., Peters, A. J., Masson-Delmotte, V., Guishard, M.P., Hsiao, G., Jouzel, J., Noone, D., Warren, J. K., and White, J. W. C.: Climatic controls on water vapor deuterium excess in the marine boundary layer of the North Atlantic based on 500 days of in situ, continuous measurements, *Atmos. Chem. Phys.*, 14, 7741-7756, doi:10.5194/acp-14-7741-2014, 2014.
33. Walsh, KJE., Camargo, S., Vecchi, GA, Daloz, AS, Elsner, J, Emanuel, K, Horn, M, Lim, YK, Roberts, M, Patricola, C, Scoccimarro E, Sobel, AH, Strazzo, S, Villarini, G, Wehner, M, Zhao, M, Kossin, JP, LaRow, T, Oouchi, K, Schubert, S, Wang, H, Bacmeister, J, Chang, P, Chauvin, F, Jablonowski, C, Kumar, A,

Murakami H, Ose, T, Reed, KA, Saravanan, R, Yamada, Y, Zarzycki, CM, Vidale, PL, Jonas, JA, Henderson, N, Hurricanes and climate: the U.S. CLIVAR working group on hurricanes, Bulletin of the American Meteorological Society, Sept 2014.

34. Ward, P.J., Jongman, B., Kummu, M., Dettinger, M.D., Sperna Weiland, F.C., Winsemius, H.C., Strong influence of El Niño Southern Oscillation on flood risk around the globe, Proceedings of the National Academy of Sciences, September 2014

### 2013

35. Cipullo, M. High-resolution Modeling Studies of the Changing Risks of Damage from Extratropical Cyclones, North Carolina State University, Master of Science Thesis, Marine, Earth & Atmos Sciences, 2013.
36. Elsner J. B. and Jagger T. H., Hurricane Climatology: A Modern Statistical Guide Using R, Oxford University Press, 2013, 380pp.
37. Elsner, James B., Sarah E. Strazzo, Thomas H. Jagger, Timothy LaRow, Ming Zhao, 2013: Sensitivity of Limiting Hurricane Intensity to SST in the Atlantic from Observations and GCMs. J. Climate, 26, 5949–5957.
38. Niehörster, F. (editor), Aichinger, M., Murnane, R., Ranger, N. and Surminski, S., Warming of the Oceans and Implications for the (Re)Insurance Industry, Geneva Association, June 2013.
39. Strazzo, Sarah, James B. Elsner, Timothy LaRow, Daniel J. Halperin, Ming Zhao, 2013: Observed versus GCM-Generated Local Tropical Cyclone Frequency: Comparisons Using a Spatial Lattice. J. Climate, 26, 8257–8268.
40. Strazzo, Sarah, James B. Elsner, Jill C. Trepanier, Kerry A. Emanuel, Frequency, intensity, and sensitivity to sea surface temperature of North Atlantic tropical cyclones in best-track and simulated data, Journal of Advances in Modeling Earth Systems, Volume 5, Issue 3, pages 500–509, 3rd Quarter 2013.
41. Taylor, C., Murnane, R., Graf, W., and Lee, Y. (2013). Epistemic Uncertainty, Rival Models, and Closure. Nat. Hazards Rev., 14(1), 42–51.
42. Truchelut, Ryan E., Robert E. Hart, Briana Luthman, 2013: Global Identification of Previously Undetected Pre-Satellite-Era Tropical Cyclone Candidates in NOAA/CIRES Twentieth-Century Reanalysis Data. J. Appl. Meteor. Climatol., 52, 2243–2259.
43. Woodruff, Jonathan D., Jennifer L. Irish, Suzana J. Camargo, Coastal flooding

by tropical cyclones and sea-level rise, *Nature* 504, 44–52, December 2013.

## 2012

44. Evan, A. T. (2012) Atlantic hurricane activity following two major volcanic eruptions, *J. Geophys. Res.*, 117, D06101, doi:10.1029/2011JD016716.
45. Murnane, R. J. and J. B. Elsner, Maximum wind speeds and US hurricane losses, *Geophysical Research Letters*, 39, L16707, doi: 10.1029/2012GL052740, 2012.
46. Jagger, T. H. and J. B. Elsner, Hurricane clusters in the vicinity of Florida, *Journal of Applied Meteorology and Climatology*, 51, 869–877, doi: 10.1175/JAMC-D-11-0107.1, 2012.
47. Ranger, N. and F. Niehörster, Deep uncertainty in long-term hurricane risk: Scenario generation and implications for future climate experiments, *Global Environmental Change*, 703–712, doi: 10.1016/j.gloenvcha.2012.03.009, 2012.

## 2011

48. Evan, Amato T., Suzana J. Camargo, 2011: A Climatology of Arabian Sea Cyclonic Storms. *J. Climate*, 24, 140–158. doi: <http://dx.doi.org/10.1175/2010JCLI3611.1>
49. Evan, A. T., G. R. Foltz, D. Zhang and D. J. Vimont (2011) Influence of African dust on ocean-atmosphere variability in the tropical Atlantic, *Nature Geoscience*, 4, 762–765, doi:10.1038/ngeo1276.
50. Evan, A. T., J. P. Kossin, C. E. Chung and V. Ramanathan (2011) Strengthening of Arabian Sea tropical cyclones and the South Asian atmospheric brown cloud, *Nature*, 479, 94–97, doi:10.1038/nature10552.
51. Hart, R. E. (2011), An inverse relationship between aggregate northern hemisphere tropical cyclone activity and subsequent winter climate, *Geophys. Res. Lett.*, 38, L01705, doi:10.1029/2010GL045612.
52. Hodges, R. E. and Elsner, J. B. (2011), Evidence linking solar variability with US hurricanes. *Int. J. Climatol.*, 31: 1897–1907. doi:10.1002/joc.2196
53. Jagger, T.H, Elsner, J.B. & Burch, R.K., 2011. Climate and solar signals in property damage losses from hurricanes affecting the United States. *Natural Hazards*. July 2011, Volume 58, Issue 1, pp 541-557



54. Truchelut, R. E., and R. E. Hart (2011), Quantifying the possible existence of undocumented Atlantic warm-core cyclones in NOAA/CIRES 20th Century Reanalysis data, *Geophys. Res. Lett.*, 38, L08811, doi:10.1029/2011GL046756.
55. Murnane, R. J., C. E. Taylor, T. Jagger, Z. Hu, Robust simulation for sensitivity analysis of catastrophe risk losses, in *Applications of Statistics and Probability in Civil Engineering*, M. H. Faber, J. Köhler, and K. Nishijima, eds., CRC Press, New York, pp. 875-877, 2011.

### 2010

56. Boldt, K.V., Lane, P, Woodruff, J.D., and Donnelly, J.P., 2010, Calibrating a sedimentary record of overwash from Southeastern New England using modeled historic hurricane surges. *Marine Geology*, v. 275: 127-139
57. Evan, Amato T., Sujoy Mukhopadhyay, 2010: African Dust over the Northern Tropical Atlantic: 1955–2008. *J. Appl. Meteor. Climatol.*, 49, 2213–2229. doi.org/10.1175/2010JAMC2485.1
58. Elsner, J. B., T. H. Jagger, and R. E. Hodges (2010), Daily tropical cyclone intensity response to solar ultraviolet radiation, *Geophys. Res. Lett.*, 37, L09701, doi:10.1029/2010GL043091.
59. Kossin, J.P., S.J. Camargo, and M. Sitkowski, 2010: Climate Modulation of North Atlantic Hurricane Tracks. *J. Climate*, 23, 3057–3076, <https://doi.org/10.1175/2010JCLI3497.1>
60. Malmstadt, J.C., J.B. Elsner, and T.H. Jagger, 2010: Risk of Strong Hurricane Winds to Florida Cities. *J. Appl. Meteor. Climatol.*, 49, 2121–2132, <https://doi.org/10.1175/2010JAMC2420.1>
61. Scheitlin, K. N., J. B. Elsner, J. C. Malmstadt, R. E. Hodges, and T. H. Jagger (2010), Toward increased utilization of historical hurricane chronologies, *J. Geophys. Res.*, 115, D03108, doi:10.1029/2009JD012424.

### 2009

62. Elsner, J. B., T. H. Jagger and E. A. Fogarty. 2009. Visibility Network of United States Hurricanes. *Geophysical Research Letters*, VOL. 36, L16702, doi:10.1029/2009GL039129. August 2009.
63. Elsner, J. B., R. K. Burch, and T. H. Jagger (2009), Catastrophe Finance: An Emerging Discipline, *Eos Trans. AGU*, 90(33), 281–282, doi:10.1029/2009EO330001.

64. Evan, A. T., D. J. Vimont, R. Bennartz, J. P. Kossin and A. K. Heidinger (2009) The role of aerosols in the evolution of tropical North Atlantic Ocean temperature, *Science*, Vol. 324. no. 5928, pp. 778 - 781, doi:10.1126/science.1167404.
65. Guishard, Mark P., Jenni L. Evans, Robert E. Hart, 2009: Atlantic Subtropical Storms. Part II: Climatology. *J. Climate*, 22, 3574–3594. doi: <http://dx.doi.org/10.1175/2008JCLI2346.1>
66. Mann, ME, Woodruff JD, Donnelly JP, and Zhang Z., Atlantic hurricanes and climate over the past 1,500 years, *Nature*. 2009 Aug 13 ;460(7257): 880-3. doi: 10.1038/nature08219.

## 2008

67. Elsner, J.B., Meeting Summary: Hurricanes and Climate Change. *Bulletin of the American Meteorological Society*, May 2008, Vol. 89, No. 5
68. Elsner, J.B., T.H. Jagger, M. Dickinson, and D. Rowe, 2008: Improving Multiseason Forecasts of North Atlantic Hurricane Activity. *J. Climate*, 21, 1209–1219, <https://doi.org/10.1175/2007JCLI1731.1>
69. Evans, C. and Robert E. Hart, 2008: Analysis of the Wind Field Evolution Associated with the Extratropical Transition of Bonnie (1998). *Mon. Wea. Rev.*, 136, 2047–2065. doi: <http://dx.doi.org/10.1175/2007MWR2051.1>
70. Hart, R., R. Maue, and M. Watson, 2008: Papers of Note: How long does the climate "remember" a tropical cyclone? *Bulletin of the Amer. Meteor. Soc.*, May 2008, 596-598.
71. James B. Elsner, Kossin, J.P. and Jagger, T.H. 2008. The increasing intensity of the strongest tropical cyclones *Nature*, Vol 455|4 September 2008| doi:10.1038/nature07234
72. Kossin, J. P. (2008), Is the North Atlantic hurricane season getting longer? *Geophys. Res. Lett.*, 35, L23705, doi:10.1029/2008GL036012
73. Woodruff, J. D., J. P. Donnelly, K. Emanuel, and P. Lane (2008), Assessing sedimentary records of paleohurricane activity using modeled hurricane climatology, *Geochem. Geophys. Geosyst.*, 9, Q09V10, doi:10.1029/2008GC002043.
74. Jonathan D. Woodruff, Donnelly, J.P., Mohrig, D. and Geyer, W.R. 2008. Reconstructing relative flooding intensities responsible for hurricane induced



deposits from Laguna Playa Grande, Vieques, Puerto Rico. *Geology*, May 2008; v. 36; no. 5; p. 391–394; doi: 10.1130/G24731A.1.

## 2007

75. García-Herrera, R., P. Ribera, E. Hernández, and L. Gimeno (2007), Northwest Pacific typhoons documented by the Philippine Jesuits, 1566–1900, *J. Geophys. Res.*, 112, D06108, doi:10.1029/2006JD007370.
76. Guishard, M. P., E. A. Nelson, J. L. Evans, R. E. Hart, and D. G. O’Connell. 2007. Bermuda subtropical storms. *Meteorology and Atmospheric Physics*. Volume 97, Issue 1-4, pp 239-253.
77. Kossin, James P., John A. Knaff, Howard I. Berger, Derrick C. Herndon, Thomas A. Cram, Christopher S. Velden, Richard J. Murnane, Jeffrey D. Hawkins, 2007: Estimating Hurricane Wind Structure in the Absence of Aircraft Reconnaissance. *Wea. Forecasting*, 22, 89–101. doi: <http://dx.doi.org/10.1175/WAF985.1>
78. Kossin, J. P., K. R. Knapp, D. J. Vimont, R. J. Murnane, and B. A. Harper (2007), A globally consistent reanalysis of hurricane variability and trends, *Geophys. Res. Lett.*, 34, L04815, doi:10.1029/2006GL028836.
79. Kossin, J.P. and D.J. Vimont, 2007: A More General Framework for Understanding Atlantic Hurricane Variability and Trends. *Bull. Amer. Meteor. Soc.*, 88, 1767–1782, <https://doi.org/10.1175/BAMS-88-11-1767>
80. Liu, Kam-biu 2007. Uncovering Prehistoric Hurricane Activity. *American Scientist*, 95 (March-April), 126-133
81. Maue, R. N., and R. E. Hart (2007), Comment on “Low frequency variability in globally integrated tropical cyclone power dissipation” by Ryan Srivier and Matthew Huber, *Geophys. Res. Lett.*, 34, L11703, doi:10.1029/2006GL028283.
82. Scileppi, E., and J. P. Donnelly (2007), Sedimentary evidence of hurricane strikes in western Long Island, New York, *Geochem. Geophys. Geosyst.*, 8, Q06011, doi:10.1029/2006GC001463

## 2006

83. Demuth, J.L., M. DeMaria, and J.A. Knaff, 2006: Improvement of advanced microwave sounding unit tropical cyclone intensity and size estimation algorithms. *J. Appl. Meteor.*, 45, 1573-1581.
84. Elsner, J.B. and T.H. Jagger, 2006: Comparison of Hindcasts Anticipating the

- 2004 Florida Hurricane Season. *Wea. Forecasting*, 21, 182–192, <https://doi.org/10.1175/WAF916.1>
85. Elsner, J.B. and T.H. Jagger, 2006: Prediction Models for Annual U.S. Hurricane Counts. *J. Climate*, 19, 2935–2952, <https://doi.org/10.1175/JCLI3729.1>
86. Elsner, J., T.H. Jagger and A. A. Tsonis. 2006. Estimated return periods for Hurricane Katrina. *Geophysical Research Letters*, v33, L08704, doi:10.1029/2005GL025452
87. Elsner, J., R. Murnane and T.H. Jagger. 2006. Forecasting U.S. hurricanes 6 months in advance, *Geophysical Research Letters*, VOL. 33, L10704, doi:10.1029/2006GL025693, 2006
88. Elsner, J.B., A.A. Tsonis, and T.H. Jagger, 2006: High-Frequency Variability in Hurricane Power Dissipation and Its Relationship to Global Temperature. *Bull. Amer. Meteor. Soc.*, 87, 763–768, <https://doi.org/10.1175/BAMS-87-6-763>.
89. Jagger, T.H. and J.B. Elsner, 2006: Climatology Models for Extreme Hurricane Winds near the United States. *J. Climate*, 19, 3220–3236, <https://doi.org/10.1175/JCLI3913.1>.
90. Mailier, P.J., D.B. Stephenson, C.A. Ferro, and K.I. Hodges, 2006: Serial Clustering of Extratropical Cyclones. *Mon. Wea. Rev.*, 134, 2224–2240, <https://doi.org/10.1175/MWR3160.1>
91. Mueller, K.J., M. DeMaria, J. Knaff, J.P. Kossin, and T.H. Vonder Haar, 2006: Objective Estimation of Tropical Cyclone Wind Structure from Infrared Satellite Data. *Wea. Forecasting*, 21, 990–1005, <https://doi.org/10.1175/WAF955.1>
92. Murnane R.J., Catastrophe Risk Models for Wildfires in the Wildland–Urban Interface: What Insurers Need. *Natural Hazards Review (ASCE)*, 2006, 7:4(150), doi: 10.1061/(ASCE)1527-6988(2006)7:4(150).

## 2005

93. Donnelly, J. P. 2005. Evidence of Past Intense Tropical Cyclones from Backbarrier Salt Pond Sediments: A Case Study from Isla de Culebrita, Puerto Rico, USA. *J. Coastal Research*. SI(42). 201-210.
94. Lu, H.Y. and Liu, K.B., 2005. Phytolith indicators of coastal environmental changes and hurricane overwash deposition, *The Holocene* 15 (7): 965-972.
95. Ribera P., R. García-Herrera, L. Gimeno, E. Hernández. 2005. Typhoons in the

Philippine Islands, 1901–1934. *Climate Research*. 29: 85-90.

## 2004

96. Cai, M. and E. Kalnay. 2004. Response to the comments by Vose et al. and Trenberth. *Nature*. 427: 214-214, doi:10.1038/427214a.
97. Donnelly, J. P. , J. Butler, S. Roll, M. Wengren and T. Webb III. 2004. A backbarrier overwash record of intense storms from Brigantine, New Jersey. *Marine Geology* 210: 107– 121.
98. Landsea, C. W., C. Anderson, N. Charles, G. Clark, J. Dunion, J. Partagas, P. Hungerford, C. Neumann, and M. Zimmer. 2004. The Atlantic hurricane database re-analysis project: Documentation for the 1851-1910 alterations and additions to the HURDAT database. In: *Hurricanes and Typhoons: Past, Present and Future*. R.J. Murnane and K.-B. Liu, (Eds), Columbia University Press.
99. Liu, K. B. 2004. Paleotempestology: Principles, methods, and examples from Gulf coast lake-sediments. In: *Hurricanes and Typhoons: Past, Present, and Future*. R.J. Murnane and K.-B. Liu, K.B. (Eds.), Columbia University Press, New York.
100. Louie, K. S. and Liu, K. B., 2004. Ancient records of typhoons in Chinese historical documents. In: *Hurricanes and Typhoons: Past, Present and Future*. R.J. Murnane and K.-B. Liu, (Eds), Columbia University Press
101. Liu, K. B., 2004. Paleotempestology: Geographic solutions to hurricane hazard assessment and risk prediction. In: *WorldMinds: Geographical Perspectives on 100 Problems*. D. Janelle, B. Warf, and K. Hansen (Eds), Kluwer Academic Publishers, Dordrecht, pp. 443-448.
102. Murnane, Richard J., 2004: Climate Research and Reinsurance. *Bull. Amer. Meteor. Soc.*, 85, 697–707. doi: <http://dx.doi.org/10.1175/BAMS-85-5-697>.
103. Murnane, R. J. 2004. The importance of best-track data for understanding the past, present, and future of hurricanes and typhoons. In: *Hurricanes and Typhoons: Past, Present, and Future*. R.J. Murnane and K.-B. Liu, (Eds), Columbia University Press.
104. Murnane, R. and K. B. Liu. (Eds.), 2004. *Hurricanes and Typhoons: Past, Present, and Future*. Columbia University Press, New York.

## 2003

105. Dunion, J. P., C. W. Landsea, S. H. Houston, and M. D. Powell. 2003. A Reanalysis of the Surface Winds for Hurricane Donna of 1960. *Monthly Weather Review*. 131: 1992-2011
106. Elsner, J. B. 2003. Tracking Hurricanes. *Bulletin of the American Meteorological Society*. 84: 353-356.
107. Elsner, J. B., and K. B. Liu. 2003. Examining the ENSO-Typhoon Hypothesis. *Climate Research*. 25: 43-54.
108. Kalnay, E. and M. Cai. 2003. Impact of urbanization and land use on climate change. *Nature*. 423: 528-531
109. Liu, K. B. 2003. Documentary records of typhoon landfalls in China during the past 1,000 years: Historical climatology and societal implications. In: *Encounter Between Meteorology and History of Science*. T. Tsukahara and T. Mikami (Eds.), Kobe University, Kobe, Japan (in Japanese, with English abstract), pp. 43-57.
110. Liu, K. S. and J. C. L. Chan. 2003. Climatological characteristics and seasonal forecasting of tropical cyclones making landfall along the South China coast. *Monthly Weather Review*. 131: 1650-1662.
111. Liu, K. B., H. Y. Lu, and C. M. Shen. 2003. Assessing the vulnerability of the Alabama Gulf coast to intense hurricane strikes and forest fires in the light of long-term climatic changes. In: *Integrated Assessment of the Climate Change Impacts on the Gulf Coast Region*, Z.H. Ning, R.E. Turner, T. Doyle and K. Abdollahi (Eds), Gulf Coast Regional Climate Change Council, Baton Rouge, pp. 223-230.
112. Louie, K.S. and K. B. Liu. 2003. Earliest historical records of typhoons in China. *Journal of Historical Geography*. 29: 299-316.
113. Lu, H. Y. and K. B. Liu. 2003. Phytoliths of common grasses in the coastal environments of southeastern USA. *Estuarine, Coastal and Shelf Science*. 58: 587-600.
114. Lu, H. Y. and K. B. Liu. 2003. Morphological variations of lobate phytoliths from grasses in China and the south-eastern United States. *Diversity and Distributions*. 9: 73-87.
115. Scott, D. B., E. S. Collins, P. T. Gayes, and E. Wright. 2003. Records of prehistoric hurricanes on the South Carolina coast based on micropaleontological and sedimentological evidence, with comparison to other Atlantic Coast records.

Geological Society of America Bulletin. 115: 1027-1039.

## 2002

116. DeGaetano, A. T., and R. J. Allen. 2002. A homogenized historical temperature extreme dataset for the United States. *Journal of Technology*. 19: 1267-1284.
117. Jagger, T. H., X. Niu, and J. B. Elsner. 2002. A space-time model for seasonal hurricane prediction. *International Journal of Climatology*. 22: 451-465.
118. Liu, K. B. and M. L. Fearn. 2002. Lake sediment evidence of coastal geologic evolution and hurricane history from Western Lake, Florida. Reply to Otvos. *Quaternary Research*. 57: 429-431.
119. Murnane, R. J., M. Crowe, A. Eustis, S. Howard, J. Koepsell, R. Leffler, and R. Livezey. 2002. The weather-risk management industry's climate forecast and data needs: a workshop report. *Bulletin of the American Meteorological Society*. 83: 1193-1198.

## 2001

120. Allen, R. J., and A. T. DeGaetano. 2001. Estimating missing daily temperature extremes using an optimized regression approach. *International Journal of Climatology*. 21: 1305-1319.
121. Arguez, A. and J. B. Elsner. 2001. Trends in US Tropical Cyclone Mortality During the Past Century. *The Florida Geographer*. 32: 28-37.
122. Donnelly, J. P., S. Smith Bryant, J. Butler, J. Dowling, L. Fan, N. Hausmann, P. Newby, B. Shuman, J. Stern, K. Westover, and T. Webb III. 2001. 700 yr sedimentary record of intense hurricane landfalls in southern New England. *Geological Society of America Bulletin*. 113: 714-727.
123. Donnelly, J. P., S. Roll, M. Wengren, J. Butler, R. Lederer, and T. Webb III. 2001. Sedimentary evidence of intense hurricane strikes from New Jersey. *Geology*. 29: 615-618.
124. 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.
125. Elsner, J. B. and B. H. Bossak. 2001. Bayesian analysis of U.S. hurricane climate. *Journal of Climate*. 14: 4341-4350.

126. Elsner, J. B., B. H. Bossak, and X. F. Niu. 2001. Secular changes to the ENSO-US hurricane relationship. *Geophysical Research Letters*. 28: 4123-4126.
127. Jagger, T. H., J. B. Elsner, and X. Niu. 2001. A dynamic probability model of hurricane winds in coastal counties of the United States. *Journal of Applied Meteorology*. 40: 853-863.
128. Liu, K. B., C. Shen, and K. S. Louie. 2001. A 1000-year history of typhoon landfalls in Guangdong, southern China, reconstructed from Chinese historical documentary records. *Annals of the Association of American Geographers*. 91: 453-464.
129. Weng, H. 2001. A combined dynamic and kinematic view of amplitude vacillation in baroclinic flows. In: *Dynamics of Atmospheric and Oceanic Circulations and Climate*. Institute of Atmospheric Physics, Chinese Academy of Sciences (Eds), China Meteorological Press, pp.229-251.

## 2000

130. Allen, R. J. and A. T. DeGaetano. 2000. A method to adjust long-term temperature extreme series for non-climatic inhomogeneities. *Journal of Climate*. 13: 3680-3695.
131. Bender, M. A., and I. Ginis. 2000. Real case simulations of hurricane-ocean interaction using a high resolution coupled model: Effect on hurricane intensity. *Monthly Weather Review*. 128: 917-946.
132. 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.
133. 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.
134. Elsner, J. B., and B. Kocher. 2000. Global tropical cyclone activity: a link to the North Atlantic Oscillation. *Geophysical Research Letters*. 27: 129-132.
135. Landsea, C. W. 2000. El Niño-Southern Oscillation and the seasonal predictability of tropical cyclones. In: *El Niño and the Southern Oscillation : Multiscale Variability and Global and Regional Impacts*. H. F. Diaz and V. Markgraf (Eds). pp.149-181
136. Landsea, C. W. 2000. Climate variability of tropical cyclones: Past, Present and



- Future. In: STORMS. R. Pielke, Jr. and R. Pielke, Sr., (Eds). Routledge, New York, Vol. 1, pp. 220-241
137. Liu, K. B. and M. L. Fearn. 2000. Reconstruction of prehistoric landfall frequencies of catastrophic hurricanes in northwestern Florida from lake sediment records. *Quaternary Research*. 54: 238-245.
138. Liu, K. B. and M. L. Fearn. 2000. Holocene history of catastrophic hurricane landfalls along the Gulf of Mexico coast reconstructed from coastal lake and marsh sediments. In: *Current Stresses and Potential Vulnerabilities: Implications of Global Change for the Gulf Coast Region of the United States*. Z.H. Ning and K.K. Abdollahi (Eds.), Gulf Coast Regional Climate Change Council, Franklin Press, Baton Rouge, pp. 38-47.
139. Malmquist, D. L. and A. F. Michaels. 2000. Severe storms and the insurance industry. In: STORMS. R. Pielke, Jr. and R. Pielke, Sr., (Eds). Routledge Press. Vol. 1, pp. 54-69.
140. Murnane, R. J., C. Barton, E. Collins, J. Donnelly, J. 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.
141. Shen W., I. Ginis, and R. E. Tuleya. 2000. A sensitivity study of the thermodynamic environment on GFDL model hurricane intensity: implication for global warming. *Journal of Climate*. 13: 109-121.
142. Tang, L., C. Shen, K. B. Liu, and J. T. Overpeck. 2000. Changes in South Asian monsoon: new high-resolution paleoclimatic records from Tibet, China. *Chinese Science Bulletin*. 45 (1): 87-90.
143. Travis, J. 2000. Hunting prehistoric hurricanes: storm-tossed sand offers a record of ancient cyclones. *Science News*. 157: 333-335.

## 1999

144. Collins, E. S., D. B. Scott, and P. T. Gayes. 1999. Hurricane records on the South Carolina Coast: can they be detected in the sediment record? *Quaternary International*. 56: 15-26.
145. Druyan, L. M., P. Lonergan, and T. Eichler. 1999. A GCM investigation of global warming impacts relevant to tropical cyclone genesis. *International Journal of Climatology*. 19: 607-617.

146. Elsner, J. B. and A. B. Kara. 1999. Hurricanes of the North Atlantic: Climate and Society. Oxford University Press, Inc., NY, NY. 488 pp.
147. Elsner, J. B., A. B. Kara, and M. A. Owens. 1999. Fluctuations in North Atlantic hurricane frequency. *Journal of Climate*. 12: 427-437.
148. Malmquist, D. and R. Murnane. 1999. The Risk Prediction Initiative: A working example of a public-private partnership. In: *Natural Disaster Management*, T. Ingleton (Ed.), Leicester, England, IDNDR (International Decade for Natural Disaster Reduction) Secretariat of the United Nations, p. 271-275.
149. Pielke, Jr., R. A. and C. W. Landsea. 1999. La Niña, El Niño, and Atlantic hurricane damages in the United States. *Bulletin of the American Meteorological Society*. 80: 2027-2034.

### 1998

150. Bove, M. C., J. B. Elsner, C. W. Landsea, X. Niu, and J. B. O'Brien. 1998. Effect of El Niño on U.S. landfalling hurricanes, revisited. *Bulletin of the American Meteorological Society*. 79: 2477-2482.
151. Chan, J. C. L., J. E. Shi, and C. M. Lam. 1998. Seasonal forecasting of tropical cyclone activity over the western North Pacific and the South China Sea. *Weather and Forecasting*. 13: 997-1004.
152. Chang, P., L. Ji, H. Li, C. Penland, and L. Matrosova. 1998. Prediction of tropical Atlantic sea surface temperature. *Geophysical Research Letters*. 25: 1193-1196.
153. Elsner, J. B., X. F. Niu, and A. A. Tonis. 1998. Multi-year prediction model of North Atlantic hurricane activity. *Meteorology and Atmospheric Physics*. 68: 43-51.
154. Kimberlain, T. B. and J. B. Elsner. 1998. The 1995-96 North Atlantic hurricane seasons: a return of the tropical-only hurricane. *Journal of Climate*. 11: 2062-2069.
155. Malmquist, D. L. 1998. ENSO, tropical cyclones, and the insurance industry. *ENSO Signal*. 9: 4-6.
156. Penland, C. and L. Matrosova. 1998. Prediction of tropical Atlantic sea surface temperatures using linear inverse modeling. *Journal of Climate*. 11: 483-496.

157. Pielke, Jr., R. A. and C. W. Landsea. 1998. Normalized hurricane damages in the United States: 1925-1995. *Weather and Forecasting*. 13: 621-631.

**1997**

158. 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.

159. *Michaels, A., D. Malmquist, A. Knap, and A. Close*. 1997. Climate science and insurance risk. *Nature*. 389: 225-227.