Multi-Season Forecasts of North Atlantic Hurricane Activity: 2005–2010

JAMES B. ELSNER

Department of Geography, Florida State University

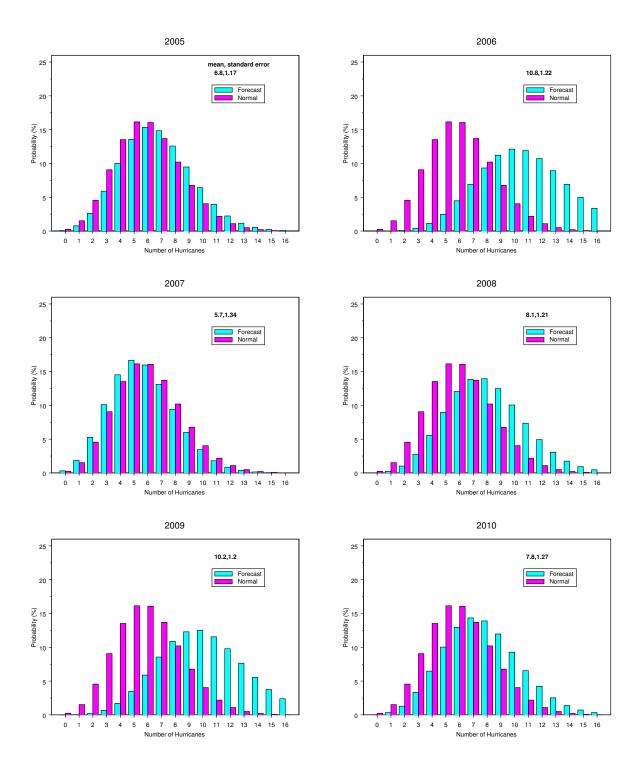
Tallahassee, FL 32306

email: jelsner@garnet.fsu.edu

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Singular spectrum analysis (SSA) applied to annual North Atlantic hurricane counts produces a set of filtered time records that capture the important temporal variations in hurricane activity. Details of the analysis are given in Elsner et al. (1999). Multivariate Poisson regression of annual counts on the filtered records provides a forecast probability distribution for the next season. Reapplying the procedure on the observed record plus the forecast value provides a forecast for the next season and beyond. Here we make forecasts for six consecutive seasons beginning with the 2005 season.

Number of Hurricanes



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Reference

• Elsner, J. B., A. B. Kara, and M. A. Owens, 1999: Fluctuations in North Atlantic hurricanes. *J. Climate*, **12**, 427–437.