

Hurricane season is here, and FSU scientists predict a near-normal one

June 1 2012

Scientists at the Florida State University Center for Ocean-Atmospheric Prediction Studies (COAPS) have released their fourth annual Atlantic hurricane season forecast, using a unique computer model with a knack for predicting hurricanes with unprecedented accuracy.

Hurricane season begins June 1 and runs through Nov. 30.

This year's [forecast](#) calls for a 70 percent [probability](#) of 10 to 16 named storms and five to nine hurricanes. The mean forecast is for 13 named storms, seven hurricanes, and an average accumulated [cyclone](#) energy — a measure of the strength and duration of storms — of 122. These numbers are based on 51 individual seasonal forecasts conducted since May 25, 2012, using sea surface temperatures predicted by National Oceanic and Atmospheric Administration.

The forecast mean numbers are slightly below the 1995-2010 average of 14 named storms and eight hurricanes, and reflect the possible emergence of El Niño conditions in the tropical Pacific and cooling surface water temperatures in the tropical North Atlantic.

"There is still uncertainty in the magnitude and timing of the emergence of the warming waters in the tropical Pacific along with the cooling of the tropical North Atlantic waters," said lead scientist Timothy LaRow. "These factors combined will to a large extent dictate the level of tropical activity."

LaRow and his colleagues at COAPS use a numerical climate model developed at Florida State to understand seasonal predictability of hurricane activity. The model is one of only a handful of numerical models in the world being used to study seasonal hurricane activity and is different from the statistical methods used by other seasonal hurricane forecasters. FSU is the only university in the United States that issues a seasonal hurricane forecast using a global numerical atmospheric model.

The COAPS forecast is already gaining recognition for its accuracy only three years after its launch. The 2009 forecast predicted eight named storms and four hurricanes, and there ended up being nine named storms and three hurricanes that year. The 2010 forecast predicted 17 named storms and 10 hurricanes, and there were actually 19 named storms and 12 hurricanes. The 2011 forecast predicted an average of 17 named storms and nine hurricanes, and there were actually 19 named storms and seven hurricanes. Re-forecasts conducted using data since 1982 show that the model has a mean absolute error of 1.9 hurricanes and 2.3 named storms.

Provided by Florida State University

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