2013 North Atlantic hurricane forecast predicts above-average season

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Scientists at the Florida State University [Center for Ocean-Atmospheric Prediction Studies](#) (COAPS) who developed a unique computer model with a knack for predicting hurricanes with unprecedented accuracy are forecasting a season of above-average activity.

Tim LaRow, associate research scientist at COAPS, and his colleagues released their fifth annual [Atlantic hurricane season](#) forecast today. Hurricane season begins June 1 and runs through Nov. 30.

This year's forecast calls for a 70 percent probability of 12 to 17 named storms with five to 10 of the storms developing into hurricanes. The mean forecast is 15 named storms, eight of them hurricanes, and an average accumulated [cyclone](#) energy (a measure of the strength and duration of storms accumulated during the season) of 135.

"The forecast mean numbers are identical to the observed 1995 to 2010 average named storms and hurricanes and reflect the ongoing period of heightened tropical activity in the North Atlantic," LaRow said.

The COAPS forecast is slightly less than the official [National Oceanic and Atmospheric Administration](#) (NOAA) forecast that predicts a 70 percent probability of 13 to 20 named storms with seven to 11 of those developing into hurricanes this season.

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](#). The forecast numbers are based on 50 individual seasonal atmospheric forecasts using [sea surface temperatures](#) predicted by a recently upgraded NOAA climate model.

The COAPS model is already gaining recognition for its accuracy only four years after its launch. In 2012, the forecast predicted an average of 13 named storms and seven hurricanes, and there ended up being 19 named storms and 10 hurricanes.

"Last year was unusual in that El Niño did not develop as the climate model expected," LaRow said. "El Niño develops when sea surface temperatures in the equatorial Pacific Ocean are warmer than normal, leading to increased wind shear in the Atlantic, which can disrupt developing tropical systems. Last year, El Niño never developed, and it is not predicted to develop this year."

The 2011 forecast predicted an average of 17 named storms and nine hurricanes, and there were actually 19 named storms and seven hurricanes. The 2010 forecast predicted 17 named storms and 10 hurricanes, and there were actually 19 named storms and 12 hurricanes. The 2009 forecast predicted eight named storms and four hurricanes, and there ended up being nine named storms and three hurricanes that year.

Reforecasts 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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