

# Team predicts above-average 2013 Atlantic hurricane season in 30th year of forecasting

April 11 2013

---

(Phys.org) —The Colorado State University team today predicted an above-average 2013 Atlantic basin hurricane season due primarily to anomalous warming of the tropical Atlantic and expected lack of an El Nino event.

CSU is in its 30th year of issuing Atlantic basin seasonal hurricane forecasts.

The team calls for 18 named storms during the [hurricane season](#), which falls between June 1 and Nov. 30. Nine of those are expected to become hurricanes and four of those major hurricanes (Saffir/Simpson category 3-4-5) with sustained winds of 111 mph or greater.

"The tropical Atlantic has anomalously warmed over the past several months, and it appears that the chances of an El Niño event this summer and fall are unlikely," said Phil Klotzbach, who authors the forecast with William Gray of the CSU Tropical Meteorology Project. "Typically, [El Nino](#) is associated with stronger vertical shear across the tropical Atlantic, creating conditions less conducive for [storm formation](#)."

The team's annual predictions are intended to provide a best estimate of activity to be experienced during the upcoming season, not an exact measure.

The forecasts are based on the premise that global oceanic and [atmospheric conditions](#) - such as El Nino, [Atlantic basin sea surface](#)

[temperatures](#) and sea level pressures - that preceded active or inactive hurricane seasons in the past provide meaningful information about similar conditions that will likely occur in the current year.

"All vulnerable [coastal residents](#) should make the same hurricane preparations every year, regardless of how active or inactive the seasonal forecast is," Klotzbach said. "It takes only one landfall event near you to make this an active season."

Five hurricane seasons since 1900 exhibited oceanic and atmospheric characteristics most similar to those observed in February-March 2013: 1915, 1952, 1966, 1996 and 2004. Four out of the five years had above-average [hurricane activity](#).

The team predicts that tropical cyclone activity in 2013 will be about 175 percent of the average season. By comparison, 2012 witnessed tropical cyclone activity that was 131 percent of the average season.

The hurricane forecast team's probabilities for a major hurricane making landfall on U.S. soil in 2013 are:

- Entire U.S. coastline – 72 percent (average for last century is 52 percent)
- U.S. East Coast Including Peninsula Florida – 48 percent (average for last century is 31 percent)
- Gulf Coast from the Florida Panhandle westward to Brownsville – 47 percent (average for last century is 30 percent)
- Caribbean – 61 percent (average for last century is 42 percent)

Probabilities of tropical storm-force, hurricane-force and major hurricane-force winds occurring at specific locations along the U.S. East and Gulf Coasts are listed on the forecast team's Landfall Probability

website at [www.e-transit.org/hurricane](http://www.e-transit.org/hurricane). The site provides U.S. landfall probabilities for all coastal states as well as 11 regions and 205 individual counties along the U.S. coastline from Brownsville, Texas, to Eastport, Maine. Landfall probabilities for regions and counties are adjusted based on the current climate and its projected effects on the upcoming [hurricane](#) season. Probabilities are also available for the Caribbean and Central America. Klotzbach and Gray update the site regularly with assistance from the GeoGraphics Laboratory at Bridgewater State University in Massachusetts.

The team will issue forecast updates on June 3 and August 2.

**More information:** Full forecast: [www.news.colostate.edu/content...ocuments/apr2013.doc](http://www.news.colostate.edu/content...ocuments/apr2013.doc)

CSU RESEARCH TEAM  
EXTENDED RANGE ATLANTIC BASIN HURRICANE FORECAST  
FOR 2013

-Released April 10, 2013-

Tropical Cyclone Parameters Extended Range  
(1981-2010 Climatological Median Forecast for 2013  
in parentheses)

Named Storms (12)\* 18

Named Storm Days (60.1) 95

Hurricanes (6.5) 9

Hurricane Days (21.3) 40

Major Hurricanes (2.0) 4

Major Hurricane Days (3.9) 9

Accumulated Cyclone Energy (92) 165

Net Tropical Cyclone Activity (103%) 175

\* Numbers in ( ) represent medians based on 1981-2010 data.

Provided by Colorado State University

Citation: Team predicts above-average 2013 Atlantic hurricane season in 30th year of forecasting (2013, April 11) retrieved 27 April 2024 from <https://phys.org/news/2013-04-team-above-average-atlantic-hurricane-season.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.