

Team continues to predict above-average 2013 Atlantic hurricane season

August 5 2013

The Colorado State University team today continued to predict an above-average 2013 Atlantic basin hurricane season, although the forecast numbers have been reduced slightly due to some anomalous cooling in the eastern tropical and subtropical Atlantic.

The team calls for 18 named storms during the [hurricane season](#), between June 1 and Nov. 30. Eight of those are expected to become hurricanes and three of those are expected to become major hurricanes (Saffir/Simpson category 3-4-5) with sustained winds of 111 mph or greater. This is a slight reduction from the early April and early June forecasts when the team called for 18 named storms, nine hurricanes and four major hurricanes. So far, four named storms have formed in the Atlantic basin, but none have intensified into hurricanes.

"While the tropical Atlantic remains warmer than normal, it has cooled somewhat in the eastern portion of the basin. However, it appears that the chances of an El Niño event this summer and fall are unlikely," said Phil Klotzbach, of the CSU Tropical Meteorology Project. "Typically, El Niño is associated with stronger vertical shear across the tropical Atlantic, creating conditions less conducive for [storm formation](#)."

CSU is in its 30th year of issuing Atlantic basin seasonal hurricane forecasts. 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 Niño, 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. The team does not give credence to the hypothesis that rises in CO₂ may have a significant impact on this year's [hurricane activity](#).

"All vulnerable coastal residents should make the same hurricane preparations every year, regardless of how active or inactive the seasonal forecast is," said Bill Gray, founder of the Tropical Meteorology Project and co-author of the forecast. "It takes only one landfall event near you to make this an active season."

The Atlantic basin has been in an active period for hurricane activity since 1995, due to an active phase of the Atlantic Multi-Decadal Oscillation, which fluctuates on a 25- to 35-year timescale. Other than the very active landfalling years of 2004 and 2005, the U.S. has not experienced as many landfalling major hurricanes as would be expected given this active cycle. There has never been a period in the historical record dating back to 1851 where seven years have passed without a landfalling major hurricane. These fortunate conditions should not be expected to continue.

Four hurricane seasons since 1950 exhibited oceanic and atmospheric characteristics most similar to those observed in June-July 2013 and expected during this year's hurricane season: 1952, 1996, 2007, and 2008. The activity over these four years was above average..

The team predicts that tropical cyclone activity in 2013 will be about 150 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 during the remainder of the 2013 hurricane season are:

- Entire U.S. coastline – 64 percent (average for last century is 52 percent)
- U.S. East Coast including Peninsula Florida – 40 percent (average for last century is 31 percent)
- Gulf Coast from the Florida Panhandle westward to Brownsville – 40 percent (average for last century is 30 percent)
- Caribbean – 53 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. 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 two-week forecasts every other Friday for the remainder of the active part of the hurricane season (Aug. 16 and 30, Sept. 13 and 27, Oct. 11 and 25). An October-November forecast for the Caribbean basin will be issued on Tuesday, Oct. 1. An end-of-season verification will be issued in late November.

More information: [August 2013 Forecast of Atlantic Seasonal Hurricane Activity and Landfall Strike \(pdf format\)](#)

Provided by Colorado State University

Citation: Team continues to predict above-average 2013 Atlantic hurricane season (2013, August 5) retrieved 1 May 2024 from
<https://phys.org/news/2013-08-team-above-average-atlantic-hurricane-season.html>

<p>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.</p>
--