

## IN CASE YOU MISSED IT

## Weather Underground Blog: "Florida's Lucky, Record-Setting Hurricane Drought Will End, Perhaps This Season"

In a blog posted today on the website *Weather Underground*, weather.com Senior Meteorologist Jonathan Erdman discusses a number of factors that may lead to the end of Florida's hurricane drought. It has been more than 10 years since a hurricane made landfall in Florida despite 66 hurricanes having moved through the Atlantic. This is especially significant given Florida's 1,260 miles of coastline. During this time, Florida has had some close calls and landfalls were avoided due to other mitigating meteorological conditions. Erdman also warns that without a recent landfall and with new residents moving into the state, Floridians may have become complacent. With the possibility of a hurricane reaching Florida's shores this season, Erdman encourages residents to plan and prepare.

<u>Click here</u> to view the multimedia blog presentation with video and graphics or read the full post below.

## Florida's Lucky, Record-Setting Hurricane Drought Will End, Perhaps This Season

Jon Erdman

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It's been over a decade since Florida experienced a hurricane landfall, an improbable record that won't likely last much longer, and may be snapped this season.

Since Category 3 Hurricane Wilma roared ashore in South Florida on Oct. 24, 2005, the Sunshine State has gone over 10 years without a single hurricane landfall.

That amounts to 66 straight Atlantic hurricanes - starting with Hurricane Beta in late October 2005 through Hurricane Alex in January 2016 - that haven't come ashore in Florida.

Colorado State University tropical meteorologist Dr. Phil Klotzbach said this non-Florida hurricane landfall streak exactly doubled the previous record from the late 1970s to mid-1980s.

This is remarkable given the state has 1,260 miles of coastline, the longest of any state along the Gulf of Mexico or the Atlantic Ocean.

According to the National Hurricane Center, 40 percent of the landfalling U.S. hurricanes from 1851 to 2010 have impacted the Florida coast. That's a total of 114 hurricanes in about 160 years.

Breaking down the number of Florida's hurricane strikes by decade, the 2010s are even more of an oddity.

Both the 1970s and 1980s featured relatively few strikes.

However, that was also during the nadir of the Atlantic Multidecadal Oscillation, a cycle of North Atlantic sea-surface temperatures, during which numbers of named storms and particularly stronger hurricanes can lessen during the cooler phase that was in place then.

The AMO's warmer phase beginning in 1995 has been found to correlate to a higher number of tropical storms becoming strong hurricanes.

But the number of named storms and hurricanes are poorly correlated to landfalls, and the percentage of hurricanes impacting the U.S. since 2006 is a record low for any 10-year period, according to Klotzbach.

Despite that, there have been some recent hurricane close calls for the Sunshine State.

In each of these cases, however, the upper-atmospheric steering currents have pushed those hurricanes either well east or west of Florida.

In other cases, particularly in recent seasons, some combination of dry air, wind shear (the change in wind speed and/or direction with height) or land interaction in the Caribbean has weakened or completely dissipated any tropical cyclones threatening Florida.

- Chantal (2013)
- Danny (2015)
- Erika (2015)

Florida has been extraordinarily lucky to have at least one of these factors either weakening or steering away hurricanes consistently since late 2005.

There have also been eight tropical storm landfalls in the Sunshine State from 2006-2015. In 2012, Tropical Storm Beryl and Tropical Storm Debby triggered significant flooding in northern Florida. Debby also spawned 18 tornadoes. Several years earlier in 2008, Tropical Storm Fay moved very slowly across Florida and also caused significant flooding in parts of the state.

And it was just 12 years ago that Florida was struck by four hurricanes in a span of 45 days during the 2004 hurricane season.

Such long gaps in hurricane activity like the one we are seeing can lead to complacency among residents.

Klotzbach noted that Florida has gained over 2 million new residents since Hurricane Wilma in 2005.

As of 2012, only 36 percent of Florida residents were native born, and Florida was adding about 1,000 new residents a day as of December 2015.

It's safe to assume a large percentage of those new residents, and perhaps some younger residents in parts of the state, have never been through a hurricane before.

Despite this long run of fortune, Florida will be hit by a hurricane again, possibly this season.

If you live where hurricanes and tropical storms threaten, you should be prepared every hurricane season, regardless of how long it's been since the last one, and what the pre-season hurricane season outlooks say.

After all, it only takes one storm to turn any hurricane season into a disaster.

Jonathan Erdman is a senior meteorologist at weather.com and has been an incurable weather geek since a tornado narrowly missed his childhood home in Wisconsin at age 7.