Why did Florida escape hurricanes for 9 years?

By Ken Kaye, Sun Sentinel

A combination of strong wind shear, dry air and Saharan dust over tropical regions allowed Florida to escape a hurricane strike for a record ninth season, experts say.

In addition, a dome of high pressure over the western Atlantic called the Bermuda High was on the weak side, allowing several of the season's six hurricanes to turn north before reaching the U.S. coastline.

"Overall, the environment was not conducive for storm formation this year," said Colorado State University climatologist Phil Klotzbach.

Florida, pummeled by 65 hurricanes since 1900, has not been hit since Wilma in October 2005. Since then, no specific weather pattern has protected Florida. Rather, various combinations of atmospheric conditions were at play. They include:

- **2013**: A rather anemic year with only two hurricanes, thanks largely to dry and sinking air.
- **2012**: Dry air, Saharan dust and the Bermuda High kept storms at bay, although Hurricane Sandy drew close enough to cause severe coastal flooding.
- **2011**: During a busy season, the Bermuda High directed many systems north, and wind shear and dry air subdued others.
- **2010**: Although 12 hurricanes formed, the Bermuda High directed many storms to the north.
- **2009**: El Niño, the large-scale pattern that shreds storms, allowed only three hurricanes to form.
- **2008**: Various steering currents kept systems clear of the state, although there were several close calls, including Hurricane Ike, which was predicted to hit South Florida but slid to the south.
- **2007**: Wind shear stunted several storms, and the Bermuda High directed others to the north and south, including Category 5 Hurricanes Dean and Felix.
- **2006**: El Niño and Saharan air outbursts kept the number of hurricanes to five.
Since 2005, 61 hurricanes have bypassed Florida, the last being this year's Hurricane Gonzalo, said Jim Lushine, a retired forecaster and tropical expert.

"That's the third-longest streak of missed hurricane strikes in the past 100 years," he said.

Because the state on average is struck by a hurricane once every five years, it's "astounding that Florida has gone so long without a hit," said Dan Kottlowski, lead hurricane forecaster for AccuWeather.com.

In addition, the season presented some mysteries.

For example, the Atlantic basin is supposedly entrenched in a period where hurricanes form frequently and more intensely, yet this year's overall tropical energy was about two-thirds normal, Klotzbach said.

El Niño, initially predicted to emerge by the heart of the season, was a no-show. Yet the wind shear over the Atlantic basin was remarkably strong and eerily similar to El Niño conditions.

One possible explanation: Some studies show wind shear has increased as a result of a warming planet, Kottlowski said.

He theorizes some form of an El Niño did arise, even though the Eastern Pacific never met the technical requirements of warming to — and remaining at — about 75 degrees for three months.