

Hurricanes and tropical storms are regular features in south Florida

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Hurricanes and tropical storms are regular summertime features in south Florida. The name “hurricane” comes from the Caribbean Taino Indian god, Huracan. Hurricanes develop over warm ocean waters from weak disturbances where moist air gets drawn into their low pressure areas. In many south Florida storms, the initial disturbance forms off the west coast of Africa, but storms can also develop from low pressure disturbances originating in the tropical Atlantic or Caribbean. The Coriolis effect causes winds to spiral inward and counterclockwise in the northern hemisphere. Within the low pressure system, rising moist air condenses as it cools, produces rain, and releases heat to the atmosphere, causing the air pressure to decrease further, which pulls more moist air into the system at the surface of the ocean. The storm intensifies

Saffir-Simpson Hurricane Wind Scale	
1	74 – 95 mph
2	96 – 110
3	111 – 130
4	131 – 155
5	155+



NOAA

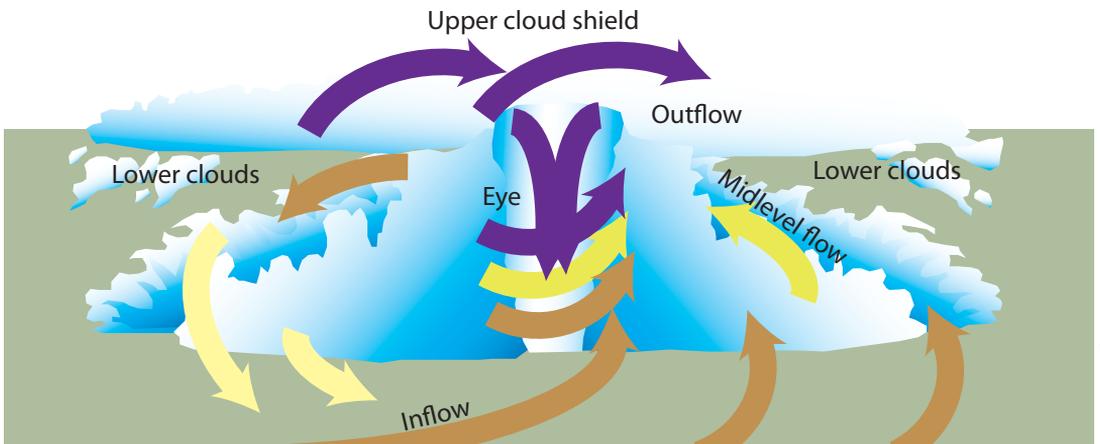
The number of tropical storms that strike Florida varies from year to year but averages about 1.7 storms annually. The chances of hurricane-force winds striking Florida each year varies from 1:100 for Jacksonville to 1:7 for Miami and Key West. The longest period since 1885 without a major hurricane was 9 years, between 1951 – 1959.

as long as these processes continue. As a storm passes over land or cool water, it loses its source of energy and dissipates.

Every storm is different, and it is hard to compare storms. Here are some of the worst to hit south Florida.

1919 Atlantic-Gulf Hurricane

This was the most powerful storm in Key West history. It was the only hurricane known to form in the Atlantic that year. It killed more than 800 people.



N.M. Dorst - NOAA

Hurricane structure and formation.

1926 Great Miami Hurricane

“The blow that broke the population boom” was described at the time as the most destructive hurricane ever to strike the United States. Storm surge of 4.6 meters (15 feet) was reported in Coconut Grove as the eye passed over Miami. Many of the 800 people killed had stepped outdoors during the lull of the passing eye and were swept away when the opposite side of the eyewall passed over the area.

1928 San Felipe-Okeechobee Hurricane

This hurricane came ashore near Palm Beach. When the eye passed over Lake Okeechobee, shifting winds pushed the lake waters against the southern dikes, causing them to fail, and sweeping away homes. Over 1800 Floridians perished.

1935 Florida Keys Labor Day Hurricane

This Category 5 hurricane struck the Middle Florida Keys, destroying the railroad and killing 408 people. Barometric pressure readings from Long Key reflect this to be the most intense hurricane on record in the region.

1960 Hurricane Donna

This Category 4 storm hit the Middle Florida Keys and Fort Myers. Heavy rainfall and storm surges impacted south Florida.

1964 Hurricane Cleo

This Category 2 storm hit Key Biscayne and passed over Miami, Opa-locka, West Hollywood, and Fort Lauderdale. The hurricane caused extensive power outages and water damage that impacted much of the southeast Florida coast.

1965 Hurricane Betsy

The area between Key Largo and Miami was impacted by this Category 3 storm. The storm appeared to be headed to South Carolina; however, it stopped 570 kilometers (350 miles) east of Jacksonville before heading back to south Florida.

1992 Hurricane Andrew

Andrew hit Homestead as a Category 5 storm and caused a 5.2 m (17 ft) storm surge. It is the second costliest storm in the mainland U.S. history.

2004 Hurricane Charley

This storm passed over the Dry Tortugas (177 km [110 mi] per hour winds) and then hit southwest Florida as a Category 4. Most of the damage from Charley was caused by high winds and tornadoes.

2004 Hurricane Frances

This was one of several large hurricanes that hit south Florida in a period of 6 weeks. It was a slow-moving, super-sized storm that covered the entire state of Florida. Upon making landfall near Stuart, the storm produced heavy rainfall and strong winds.

2004 Hurricane Jeanne

This Category 3 storm hit Stuart shortly after Frances. Impacts launched existing piles of storm debris and further weakened buildings, causing additional damage in the area.

2005 Hurricane Katrina

This storm hit the border of Miami-Dade and Broward Counties before moving westward to wreak havoc in Louisiana and Mississippi. Rainfall over southern Florida was estimated between 25.4 – 35.6 cm (10 – 14 in) and flooding and wind damage was extensive. The storm caused \$81 billion in damages in the United States.

2005 Hurricane Wilma

It took 5 hours for this storm to pass over southern Florida, entering at Cape Romano and exiting north of Palm Beach as it changed from a Category 3 to a Category 2 hurricane. The storm caused five deaths in Florida and damages estimated at \$16.8 billion.