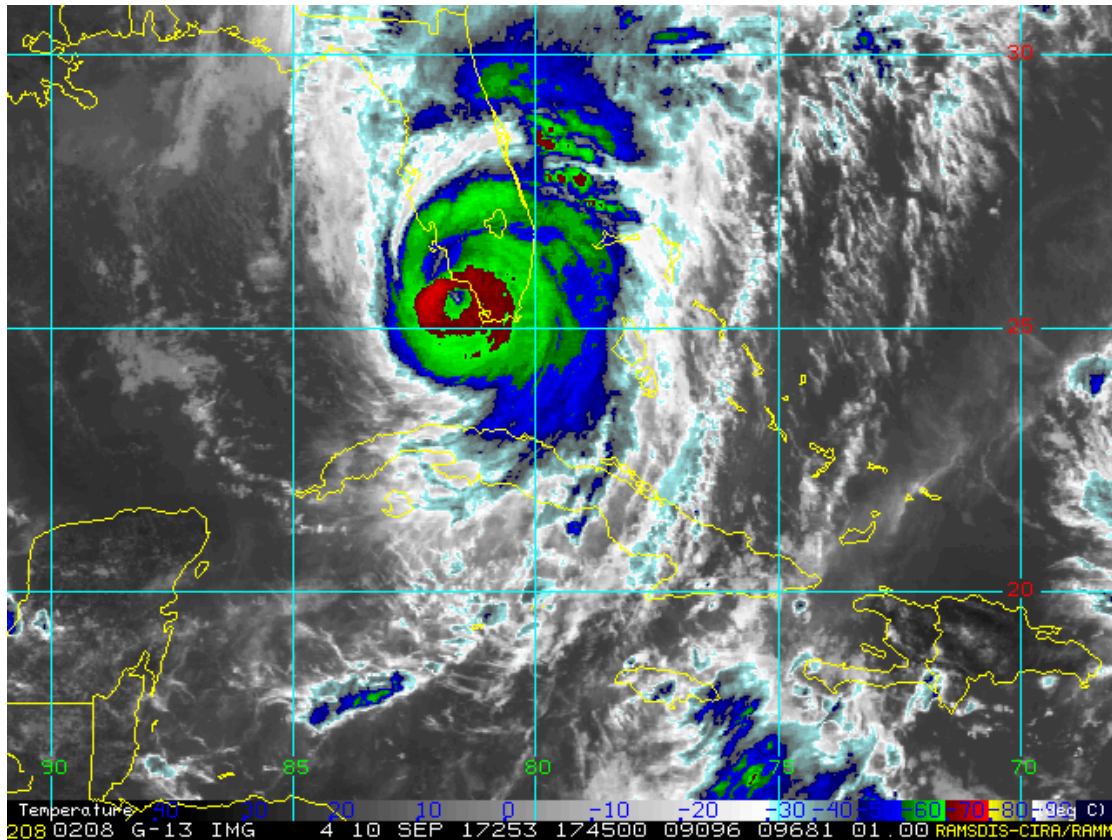




MIAMI-SOUTH FLORIDA
National Weather Service
Forecast Office
<http://www.weather.gov/miami>



Hurricane Irma Makes Landfall in SW Florida on September 10th, 2017

2019 Florida Severe Weather Awareness Week

Thursday, January 17th is Hurricane and Flooding Awareness Day

Unlike our neighbors in the Florida panhandle, South Florida was fortunate to escape major impacts from tropical systems in 2018. The only tropical system to have any kind of impact in South Florida in 2018 was Tropical Storm Gordon which formed just south of Homestead on Labor Day. Gordon was a reminder that tropical storms and hurricanes don't always give us several days of advanced notice, and that sometimes tropical systems can rapidly develop nearby or right over South Florida.

The relatively uneventful 2018 hurricane season for South Florida followed the 2017 season which will be remembered for Hurricane Irma, the first major hurricane to strike South Florida since Wilma in 2005. Despite the lack of impacts this past year, we can and should apply lessons learned from recent hurricane impacts to ensure that individuals, families, and communities remain well informed and prepared for hurricanes.



Damage to dock at Tin City in Naples caused by storm surge from Hurricane Irma (NWS Storm Survey picture)



Marooned boat in Coconut Grove after Hurricane Irma (NWS Storm Survey picture)

The active hurricane season of 2017 and its impacts felt across all of South Florida served as a reminder that we live in one of the most vulnerable and hurricane-prone places in the country. On average, the center of a hurricane will pass within 50 miles of any point in South Florida every 6 to 8 years. This means that while hurricane strikes are typically not a yearly occurrence, statistics indicate that South Florida will at least be significantly threatened a few times a decade, and impacted directly by a hurricane at least once a decade. Indirect hurricane impacts, as well as tropical storms passing over South Florida, occur with a much higher frequency; at least every 2 or 3 years on average.

Therefore, we can't afford to become complacent. Be prepared **every year** for the possibility of a tropical storm or hurricane impacting our region.

IT'S NOT JUST ABOUT THE WIND

As the storms of 2017 made clear, tropical cyclones are multi-hazard weather systems. While the wind speed is what determines the classification of a tropical cyclone, other hazards such as storm surge, flooding and tornadoes can cause significant impacts including loss of life, regardless of the storm's category. Hurricane Irma's storm tide reached close to 10 feet in the Everglades City/Chokoloskee area of Southwest Florida, and as high as 6 feet as far away as Coconut Grove south of Downtown Miami. Hurricane Irma and Tropical Storm Philippe in 2017 spawned a combined eight tornadoes across South Florida, and flooding from heavy rain occurred with all of the 2017 storms, as well as in the Homestead area from Tropical Storm Gordon on Labor Day 2018.

Remember: It doesn't take a major hurricane to produce significant impacts. Tropical storms directly impacting South Florida have been known to produce severe flooding, damaging winds and tornadoes. Take every tropical cyclone seriously, whether it's a tropical storm or a major hurricane. Also, pay close attention to the Tropical Weather Outlook issued 4 times a day during hurricane season to stay abreast of weather systems which have the potential of forming into tropical storms, especially those close to Florida such as Tropical Storm Gordon last year.

Important: Historically, it is the water that has caused most of the deaths in hurricanes. About 90 percent of all hurricane-related deaths nationwide occur from drowning from either the storm surge or freshwater flooding. Fortunately, no deaths were directly attributed to the storm surge from Hurricane Irma, but a slightly different track could have resulted in much higher storm surge and life-threatening flooding.

Residents of coastal and surge-prone areas are urged to heed advice from local officials and evacuate whenever storm surge flooding is expected. Become familiar with your county's storm surge evacuation zones and know whether you live in one or not. **Visit your county's emergency management web site for more information on evacuation zones.**

HURRICANE SAFETY TIPS: regardless of the short or long term hurricane outlook, South Floridians need to be prepared every year. It only takes one big storm to affect our area long-lasting impacts to be felt. Now is the time to begin preparing for the 2019 hurricane season. Develop a plan and have it in place before a storm threatens. Know if you live in a hurricane evacuation zone. Gather supplies such as bottled water, canned foods and batteries. Remember to buy enough provisions to last a minimum of three to five days in the event of a tropical system affecting our area. Buy and install hurricane shutters. A minimum of preparation can save lives and property.

People are also urged to be extremely cautious during the storm's aftermath. Typically, more people die after the passage of a storm than during the storm itself. Most of the deaths associated with Hurricane Irma occurred after the storm's passage from a combination of factors including carbon monoxide poisoning, injuries while removing debris and storm shutters, lack of proper air conditioning, and vehicle accidents. Extreme care must be used when using generators, and make sure to run them in an outdoor location, not inside the house.

For a comprehensive list of hurricane preparedness information, visit [ready.gov](https://www.ready.gov) and [Ready South Florida](#).

Flooding

South Florida's occasional torrential rains and flat terrain can lead to major flooding. While tropical weather systems produce most of the significant and widespread rain events, flooding also occurs from non-tropical weather systems. Major flooding events occur at least two or three times a year, and in some years even more. In May 2018, nearly two weeks of almost daily heavy rainfall led to localized flooding of several urban South Florida neighborhoods, and a weather disturbance over the Gulf of Mexico in June 2017 caused three to four days of intense rains of up to 20 inches and severe flooding from coastal Collier County to Broward and Palm Beach counties. On otherwise typical summer days, local thunderstorms frequently produce enough rainfall to flood streets and cause hazardous driving conditions.



Typical South Florida Urban/Street Flooding

Another type of flooding, tidal flooding due to astronomical high tide (a.k.a. King Tides), typically affects vulnerable areas along the Intracoastal Waterway during high tide cycles in September, October, and November, leading to flooding of streets, parks, and marinas.

PREPARE FOR FLOODING: The flat south Florida terrain lends itself to ponding of water in poorly drained or low lying areas during heavy rain events, rather than the flash flooding that occurs in other parts of the country. While this type of flooding is normally not as deadly or destructive, it can still lead to significant impacts as water can enter homes and other structures, as well as make driving extremely hazardous due to flooded roadways which can sometimes obscure canals. If water is covering a roadway, do not assume that you can drive through it. **Turn around, don't drown.**

All South Floridians need to be aware of their particular neighborhood's vulnerability to flooding. Fortunately, people can also plan well in advance for floods. The best advice is to have flood insurance, a separate policy from your homeowners insurance. Know if you live in an area which floods frequently from heavy rains.

Good flood safety information can be found at the [NWS Flood Safety web site](#).

Monitor NOAA Weather Radio before, during and after a tropical cyclone or flood event to stay abreast of the latest information. You can also visit the National Weather Service

Miami Forecast Office web site at [weather.gov/southflorida](https://www.weather.gov/southflorida) where a description of potential storm impacts and latest hurricane and flood watches and warnings will be available, as well as the National Hurricane Center's five-day tropical cyclone track and intensity forecast.