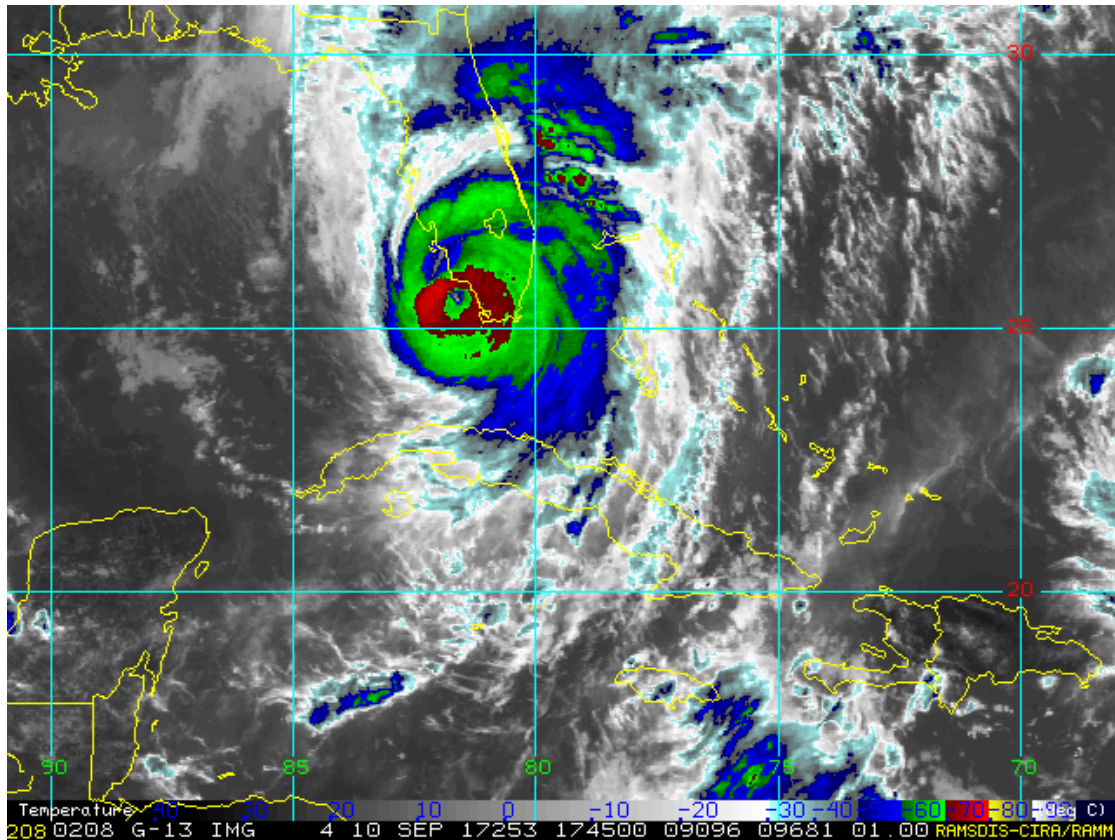




MIAMI-SOUTH FLORIDA National Weather Service Forecast Office <http://www.weather.gov/miami>



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

2018 Florida Severe Weather Awareness Week

Thursday, January 25th is Hurricane and Flooding Awareness Day

The 2017 hurricane season will undoubtedly be remembered for Hurricane Irma, the first major hurricane to strike Florida since Wilma in 2005. Irma's primary impacts were felt in the Florida Keys and Collier County, where major hurricane force winds and damaging storm surge caused long-lasting impacts. Irma's large size meant that hurricane force winds, storm surge, tornadoes and rainfall flooding occurred across all of South Florida from the Gulf coast to the Atlantic, illustrating that hurricane impacts are far-reaching and extend well beyond the landfall point of the center or eye.



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



Marooned boat in Coconut Grove (NWS Storm Survey picture)

While Irma was by far the biggest tropical cyclone impact in South Florida, 2017 also brought impacts from two other tropical storms, Tropical Storm Emily on July 31st and Tropical Storm Philippe on October 28th. Emily caused strong wind gusts and flooding rain to Collier County and Philippe spawned three tornadoes in SE Florida.

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 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. Hurricane Irma's storm tide reached close to 10 feet in the Everglades City/Chokoloskee area of SW Florida, and as high as 6 feet as far away as Coconut Grove south of Downtown Miami. Irma and Philippe spawned a combined eight tornadoes across South Florida, and flooding from heavy rain occurred with all of the 2017 storms.

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.

Important: Historically, it is the water that causes 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 Irma, but a slightly different track could have resulted in much higher storm surge and a higher threat of 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 2018 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. A disturbance over the Gulf of Mexico meandered near Florida for almost a week and 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, leading to the closure of Big Cypress National Preserve and many local roadways. A low pressure trough associated with Tropical Storm Emily triggered an afternoon of severe flooding in Miami Beach and Downtown Miami on August 1st where at least a dozen structures sustained water damage.

Another type of flooding, tidal flooding due to astronomical high tide (a.k.a. King Tides), impacted coastal areas in early October with street flooding, particularly in vulnerable areas along the Intracoastal Waterway in southeast Florida.



Typical South Florida Urban/Street Flooding

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 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.