



LANG HURRICANE BASIC INFORMATION FLYER



This flyer will try to explain what actions to take when you receive a hurricane watch or warning alert from the National Weather Service for your local area. It also provides tips on what to do before, during, and after a hurricane. <https://www.ready.gov/hurricane-toolkit>



LANG EM WEB PAGE:

<http://geauxguard.la.gov/resources/emergency-management/>



Hurricane Basics

What

Hurricanes are massive storm systems that form over the water and move toward land. Threats from hurricanes include high winds, heavy rainfall, storm surge, coastal and inland flooding, rip currents, and tornadoes. These large storms are called typhoons in the North Pacific Ocean and cyclones in other parts of the world.

Where

Each year, many parts of the United States experience heavy rains, strong winds, floods, and coastal storm surges from tropical storms and hurricanes. Affected areas include all Atlantic and Gulf of Mexico coastal areas and areas over 100 miles inland, Puerto Rico, the U.S. Virgin Islands, Hawaii, parts of the Southwest, the Pacific Coast, and the U.S. territories in the Pacific. A significant per cent of fatalities occur outside of landfall counties with causes due to inland flooding.

When

The Atlantic hurricane season runs from June 1 to November 30, with the peak occurring between mid-August and late October. The Eastern Pacific hurricane season begins May 15 and ends November 30.

Basic Preparedness Tips

- Know where to go. If you are ordered to evacuate, know the local hurricane evacuation route(s) to take and have a plan for where you can stay. Contact your local emergency management agency for more information.
- Put together a go-bag: disaster supply kit, including a flashlight, batteries, cash, first aid supplies, medications, and copies of your critical information if you need to evacuate
- If you are not in an area that is advised to evacuate and you decide to stay in your home, plan for adequate supplies in case you lose power and water for several days and you are not able to leave due to flooding or blocked roads.
- Make a [family emergency communication plan](#).
- Many communities have text or email alerting systems for emergency notifications. To find out what alerts are available in your area, search the Internet with your town, city, or county name and the word "alerts."

Preparing Your Home

- Hurricane winds can cause trees and branches to fall, so before hurricane season trim or remove damaged trees and limbs to keep you and your property safe.
- Secure loose rain gutters and downspouts and clear any clogged areas or debris to prevent water damage to your property.
- Reduce property damage by retrofitting to secure and reinforce the roof, windows and doors, including the garage doors.
- Purchase a portable generator or install a generator for use during power outages. Remember to keep generators and other alternate power/heat sources outside, at least 20 feet away from windows and doors and protected from moisture; and NEVER try to power the house wiring by plugging a generator into a wall outlet.
- Consider building a [FEMA safe room](#) or ICC 500 storm shelter designed for protection from high-winds and in locations above flooding levels.



Hurricane Watch

Hurricane watch = conditions possible within the next 48 hrs.

Steps to take:

- Review your evacuation route(s) & listen to local officials.
- Review the items in your disaster supply kit; and add items to meet the household needs for children, parents, [individuals with disabilities or other access and functional needs](#)

Hurricane Warning

Hurricane warning = conditions are expected within 36 hrs.

Steps to take:

- Follow evacuation orders from local officials, if given.
- Check-in with family and friends by texting or using social media.
- Follow the hurricane timeline preparedness checklist, depending on when the storm is anticipated to hit and the impact that is projected for your location.

What to do when a hurricane is 6 hours from arriving

- If you're not in an area that is recommended for evacuation, plan to stay at home or where you are and let friends and family know where you are.
- Close storm shutters, and stay away from windows. Flying glass from broken windows could injure you.
- Turn your refrigerator or freezer to the coldest setting and open only when necessary. If you lose power, food will last longer. Keep a thermometer in the refrigerator to be able to check the food temperature when the power is restored.
- Turn on your TV/radio, or check your city/county website every 30 minutes in order to get the latest weather updates and emergency instructions.

What to do when a hurricane is 6-18 hours from arriving

- Turn on your TV/radio, or check your city/county website every 30 minutes in order to get the latest weather updates and emergency instructions.
- Charge your cell phone now so you will have a full battery in case you lose power.

What to do when a hurricane is 18-36 hours from arriving

- Bookmark your city or county website for quick access to storm updates and emergency instructions.
- Bring loose, lightweight objects inside that could become projectiles in high winds (e.g., patio furniture, garbage cans); anchor objects that would be unsafe to bring inside (e.g., propane tanks); and trim or remove trees close enough to fall on the building.
- Cover all of your home's windows. Permanent storm shutters offer the best protection for windows. A second option is to board up windows with 5/8" exterior grade or marine plywood, cut to fit and ready to install.



What to do when a hurricane is 36 hours from arriving

- Turn on your TV or radio in order to get the latest weather updates and emergency instructions.
- Build or restock your emergency preparedness kit. Include food and water sufficient for at least three days, medications, a flashlight, batteries, cash, and first aid supplies.
- Plan how to communicate with family members if you lose power. For example, you can call, text, email or use social media. Remember that during disasters, sending text messages is usually reliable and faster than making phone calls because phone lines are often overloaded.
- Review your evacuation plan with your family. You may have to leave quickly so plan ahead.
- Keep your car in good working condition, and keep the gas tank full; stock your vehicle with emergency supplies and a change of clothes.

After a Hurricane

- Listen to local officials for updates and instructions.
- Check-in with family and friends by texting or using social media.
- Return home only when authorities indicate it is safe.
- Watch out for debris and downed power lines.
- Avoid walking or driving through flood waters. Just 6 inches of moving water can knock you down, and one foot of fast-moving water can sweep your vehicle away.
- Avoid flood water as it may be electrically charged from underground or downed power lines and may hide dangerous debris or places where the ground is washed away.
- Photograph the damage to your property in order to assist in filing an insurance claim.
- Do what you can to prevent further damage to your property, (e.g., putting a tarp on a damaged roof), as insurance may not cover additional damage that occurs after the storm.

When there is no hurricane: Make a hurricane plan

- Know your [hurricane risk](#)
- Make an [emergency plan](#)
 - Sign up for alerts and warnings
 - Make a Family Communication plan
 - Plan shelter options
 - Know your evacuation route
- Build or restock your [basic disaster supplies kit](#) including food and water, a flashlight, batteries, chargers, cash, and first aid supplies.
- Consider buying [flood insurance](#)
- Familiarize yourself with local emergency plans. Know where to go and how to get there should you need to get to higher ground.
- Stay tuned to local [wireless emergency alerts](#), TV, or radio for weather updates, emergency instructions, or evacuation orders.



Hurricane Safety Tips and Resources

Important NOAA Weather Radio All Hazards and Emergency Alert System Changes

Hurricanes are among nature's most powerful and destructive phenomena. On average, 12 tropical storms, 6 of which become hurricanes form over the Atlantic Ocean, Caribbean Sea, or Gulf of Mexico during the hurricane season which runs from June 1 to November 30 each year. In the Central Pacific Ocean, an average of 3 tropical storms, 2 of which become hurricanes form or move over the area during the hurricane season, which runs from June 1 to November 30 each year. Guam, the Northern Marianas and Micronesia experience typhoons all year round but the main season is in July through November with a peak from mid-August to mid-September. Over a typical 2-year period, the U.S. coastline is struck by an average of 3 hurricanes, 1 of which is classified as a major hurricane (winds of 111 mph or greater). By knowing what actions to take before the [hurricane season begins, when a hurricane approaches, and when the storm is in your area](#), as well as what to do [after a hurricane leaves your area](#), you can increase your chance of survival. If you, or someone you know, have been a victim of a hurricane, please share your story, including the town and state you were in and the year the event took place.. Please note that NS will then have permission to use your story for educational campaigns. Sharing this information may help save someone's life in the future. [Read stories from survivors and learn how to stay safe.](#)

Hurricane Hazards

While hurricanes pose the greatest threat to life and property, tropical storms and depression also can be devastating. The primary hazards from tropical cyclones (which include tropical depressions, tropical storms, and hurricanes) are storm surge flooding, inland flooding from heavy rains, destructive winds, tornadoes, and high surf and rip currents.

- Storm surge is the abnormal rise of water generated by a storm's winds. This hazard is historically the leading cause of hurricane related deaths in the United States. Storm surge and large battering waves can result in large loss of life and cause massive destruction along the coast.
- Storm surge can travel several miles inland, especially along bays, rivers, and estuaries.
- Flooding from heavy rains is the second leading cause of fatalities from landfalling tropical cyclones. Widespread torrential rains associated with these storms often cause flooding hundreds of miles inland. This flooding can persist for several days after a storm has dissipated.
- Winds from a hurricane can destroy buildings and manufactured homes. Signs, roofing material, and other items left outside can become flying missiles during hurricanes.
- Tornadoes can accompany landfalling tropical cyclones. These tornadoes typically occur in rain bands well away from the center of the storm.
- Dangerous waves produced by a tropical cyclone's strong winds can pose a significant hazard to coastal residents and mariners. These waves can cause deadly rip currents, significant beach erosion, and damage to structures along the coastline, even when the storm is more than a 1,000 miles offshore.



First Baptist Church in Hackberry, LA



Cameron Parish , LA



Hurricane and Tropical Storm Watches, Warnings, Advisories and Outlooks

Whenever a tropical cyclone (a tropical depression, tropical storm, or hurricane) or a subtropical storm has formed in the Atlantic or eastern North Pacific, the NOAA National Hurricane Center (NHC) issues tropical cyclone advisory products *at least* every 6 hours at 5 am, 11 am, 5 pm, and 11 pm EDT. Similarly, the Central Pacific Hurricane Center (CPHC) issues tropical cyclone advisory products for the central North Pacific *at least* every 6 hours at 5 am, 11 am, 5 pm, and 11 pm HST. When coastal tropical storm or hurricane watches or warnings are in effect, the NHC and CPHC issue Tropical Cyclone Public advisories every 3 hours. You can find these products on www.hurricanes.gov for the Atlantic and eastern North Pacific or www.weather.gov/cphc for the Central Pacific; on TV, radio, and cell phones; and [NOAA Weather Radio](#). Information on NWS tropical cyclone watch, warning, advisory, and outlook products is detailed below. For more details on all NHC products, see the [National Hurricane Center Product User's Guide](#). Storm information and forecasts specific to your local area can be found from you local Weather Forecast Office (WFO) through www.weather.gov.

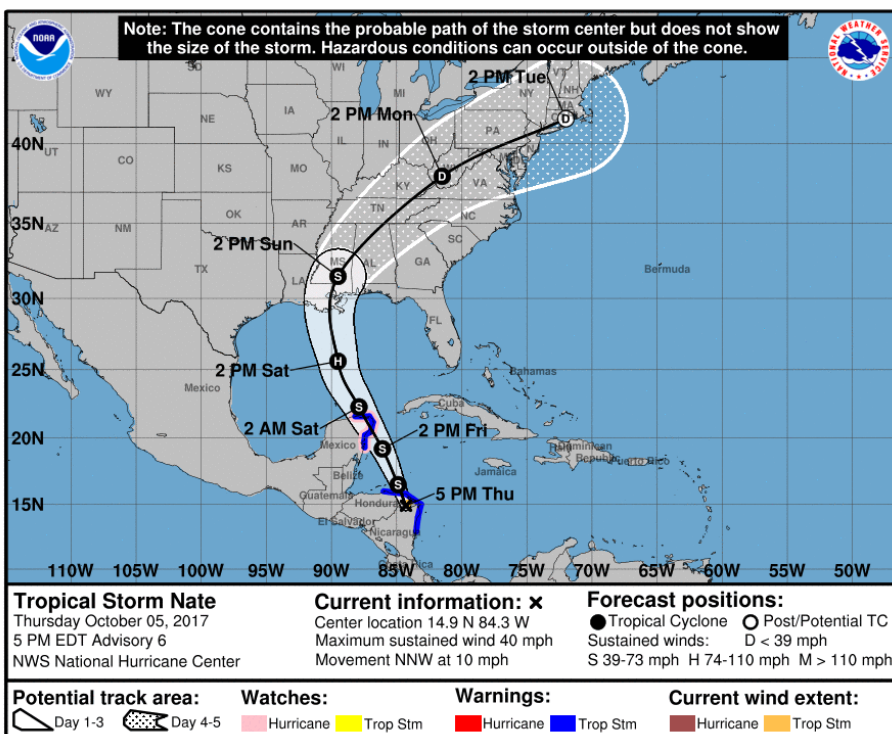
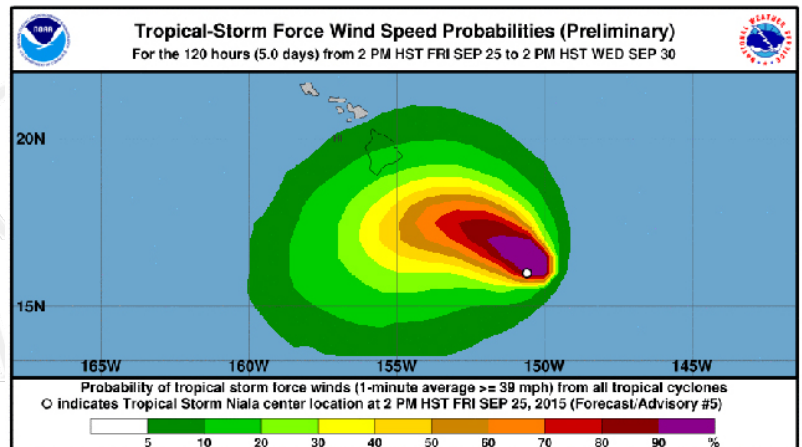
[Warnings](#)

[Watches](#)

[Advisories](#)

[Outlooks](#)

[NWS Local Forecast Office Tropical Products](#)





What to Do Before the Tropical Storm or Hurricane

The best time to prepare for a hurricane is before hurricane season begins on June 1. It is vital to understand your home's vulnerability to storm surge, flooding, and wind. Here is your checklist of things to do BEFORE hurricane seasons begins.

- Know your zone:** Do you live near the Gulf or Atlantic Coasts? Find out if you live in a hurricane evacuation area by contacting your local government/emergency management office or by checking the [evacuation site website](#).
- Put Together an Emergency Kit:** Put together a [basic emergency](#). Check emergency equipment, such as flashlights, generators and storm shutters.
- Write or review your Family Emergency Plan:** Before an emergency happens, sit down with your family or close friends and decide how you will get in contact with each other, where you will go, and what you will do in an emergency. Keep a copy of this plan in your emergency supplies kit or another safe place where you can access it in the event of a disaster. Start at the **Ready.Gov** [emergency plan webpage](#).
- Review Your Insurance Policies:** Review your insurance policies to ensure that you have adequate coverage for your home and personal property.
- Understand NWS forecast products,** especially the meaning of [NWS watches and warnings](#).



Take time now to prepare a hurricane emergency kit. Check below for items to include in your kit.

Don't wait until a warning is issued and the stores are empty or closed.

Prepare an emergency plan and make sure every member of your family knows what to do if they aren't home when an emergency is declared.

Image: NOAA



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5 THINGS TO KNOW ABOUT HURRICANE HAZARD RISKS



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1 Storm surge is water pushed onshore by the tropical system. It causes the most damage of any of the hurricane hazards.
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2 Wind from a hurricane can top 200 mph and cause massive damage to buildings in its path.
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3 Inland flooding caused by heavy rain damages homes and can wash out roadways well away from the coast.
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4 Tornadoes are common as a hurricane moves ashore. They are not typically long-lived, but they can cause plenty of damage.
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5 Rip currents and rough seas are common both before and after a hurricane, making swimming or surfing very dangerous.



For more Hurricane Safety Information, visit weather.gov/hurricanesafety



5 THINGS TO KNOW ABOUT HAVING AN EVACUATION PLAN



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1 Find out if you would need to evacuate. Don't travel hundreds of miles, only far enough away from the evacuation area.
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2 Plan your evacuation route. Have an alternate route.
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3 Leave when ordered to so do. Do not wait.
- 

4 Communicate your plan with someone not in the storm's path.
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5 Plan for your pets. Most local shelters do not permit them.



For more Hurricane Safety Information, visit weather.gov/hurricanesafety

5 THINGS TO KNOW ABOUT STRENGTHENING YOUR HOME



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1 Keep trees around your home trimmed well before a storm to prevent damage from broken branches.
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2 Have the proper materials in advance to board up your windows to protect them from flying debris.
- 

3 Bring loose outdoor items such as patio furniture inside. They can blow around and cause damage to homes.
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4 Secure all doors on your property. Remember that the garage door is usually the most vulnerable.
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5 Move your car inside a garage or to another secure location.



For more Hurricane Safety Information, visit weather.gov/hurricanesafety



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5 THINGS TO KNOW ABOUT UPDATING YOUR INSURANCE



1 Check your insurance policies well ahead of the storm to see what is covered.



2 Make sure you have flood insurance. Flooding is the leading cause of damage from tropical systems.



3 Visit floodsmart.gov to learn about your flood risk and flood insurance options for your area.



4 Prepare your home and vehicles according to your specific insurance policies to ensure damages are covered.



5 Know where your insurance documents and contact information are located. Take them with you if you evacuate.



For more Hurricane Safety Information, visit weather.gov/hurricanesafety

5 THINGS TO KNOW ABOUT GETTING YOUR HURRICANE SUPPLIES



1 Food/Water - Get supplies well in advance, enough for each person for at least one week.

2 Medicine/First-aid - Ensure you have 30 days worth of medication and supplies. Pharmacies may be closed.

3 Communications - Have extra batteries for radios and a hand crank charger for your phone.

4 Gas - Fill up your car or a gas can beforehand. If the power goes out, you will be unable to pump gas.

5 Money - Have cash on hand. With no electricity, ATMs and credit cards will not work.



For more Hurricane Safety Information, visit weather.gov/hurricanesafety

5 THINGS TO KNOW ABOUT WHERE TO GET HURRICANE INFO



1 Television - Tune in to your trusted local news source.

2 Phone - Access mobile.weather.gov on your mobile phone and get Wireless Emergency Alerts.

3 Radio - Receive forecast information and news on your NOAA Weather Radio.

4 Social Media - Stay in touch with friends and family and receive updates from your trusted sources of information.

5 Computer - Access information from weather.gov, ready.gov and flash.org



For more Hurricane Safety Information, visit weather.gov/hurricanesafety



Actions to Take When a Tropical Storm or Hurricane Threatens

When a hurricane threatens your community, be prepared to evacuate if you live in a storm surge risk area. Allow enough time to pack and inform friends and family if you need to leave your home.

•**Secure your home:** Cover all of your home's windows. Permanent storm shutters offer the best protection for windows. A second option is to board up windows with 5/8 inch exterior grade or marine plywood, built to fit, and ready to install. Buy supplies before the hurricane season rather than waiting for the pre-storm rush.

•**Stayed tuned in:** Check the websites of your local [National Weather Service office](#) and [local government/emergency management office](#). Find out what type of emergencies could occur and how you should respond. Listen to NOAA Weather Radio or other radio or TV stations for the latest storm news.

•**Follow instructions issued by local officials. Leave immediately if ordered!**

•**If NOT ordered to evacuate:**

- Take refuge in a small interior room, closet, or hallway on the lowest level during the storm. Put as many walls between you and the outside as you can.
- Stay away from windows, skylights, and glass doors.
- If the eye of the storm passes over your area, there will be a short period of calm, but at the other side of the eye, the wind speed rapidly increases to hurricane force winds coming from the opposite direction.



After a Hurricane

- Continue listening to a [NOAA Weather Radio](#) or the local news for the latest updates.
- If you evacuated, return home *only* when officials say it is safe.
- Once home, drive only if necessary and avoid flooded roads and washed-out bridges. If you must go out, watch for fallen objects in the road, downed electrical wires, and weakened walls, bridges, roads, and sidewalks that might collapse.
- Walk carefully around the outside of your home to check for loose power lines, gas leaks, and structural damage.
- Stay out of any building if you smell gas, if floodwaters remain around the building, or if the building or home was damaged by fire, or if the authorities have not declared it safe.
- Carbon monoxide poisoning is one of the leading causes of death after storms in areas dealing with power outages. Never use a portable generator inside your home or garage. [Review generator safety.](#)
- Use battery-powered flashlights. Do NOT use candles. Turn on your flashlight before entering a vacated building. The battery could produce a spark that could ignite leaking gas, if present.



Shareables

[2017 Hurricane Preparedness Week Social Media Toolkit](#) (link)

[National Hurricane Center](#) (link)

[National Weather Service Hurricane Safety](#) (link)

[When the Waves Swell – Hurricane Animated](#) (Video)

[How to Prepare for a Hurricane](#) (PDF)

[Hurricane Playbook](#) (PDF)

[Prepare Your Organization for a Hurricane Playbook](#) (PDF)

[Communication Tools](#) (PDF)

[Hurricane Creative Materials](#) (PDF)

[National Creative Resources](#) (PDF)

HURRICANE

is a wind. It got its name from the evil American Indian god Hurakan



Hurricanes form above warm ocean waters between 5 and 20 degrees of northern and southern latitudes

An essential condition for a hurricane is a huge mass of warm water

whose temperature must be above 26.50 °C

heat depth: 50 m

The ocean water, which is warmer than air, begins to evaporate.

The masses of heated vapor rise upwards forming a low-pressure area – a cyclone

The ambient air begins to move

At a certain height the heated vapor reaches dew point and gets condensed

The heat energy released as a result warms up the air, which climbs up to feed the newly formed cyclone

The rotatory component of wind speed twists the wind (anti-clockwise in the Northern Hemisphere and clockwise in the Southern)

The rotation draws increasing masses of air from outside into the vortex

The cyclone assumes the silhouette of a giant funnel, its narrowest part facing down

Wind speed in spiral eddies reaches 240 to 320 km/h

The main source of hurricane energy is the heat released when water vapor condenses in a rising air current. This explains why hurricanes quickly peter out when they hit dry land

A swathe affected by a hurricane can reach 400 to 600 km

SAFFIR-SIMPSON HURRICANE SCALE

In the early 1970s, Herbert Saffir, a civil engineer, and Robert Simpson, director of the U.S. National Hurricane Center, worked out a scale to assess hurricane force on the basis of the storm wave and wind speed

Category	Name/ Wind speed	Wave height
1	Minimal ~ 120-150 km/h	1-2 m
2	Moderate ≈ 150-180 km/h	2-2.5 m
3	Extensive ≈ 180-210 km/h	2.5-4 m
4	Extreme ≈ 210-250 km/h	4-5.5 m
5	Catastrophic more than 250 km/h	more than 5.5 m

BEAUFORT WIND SCALE

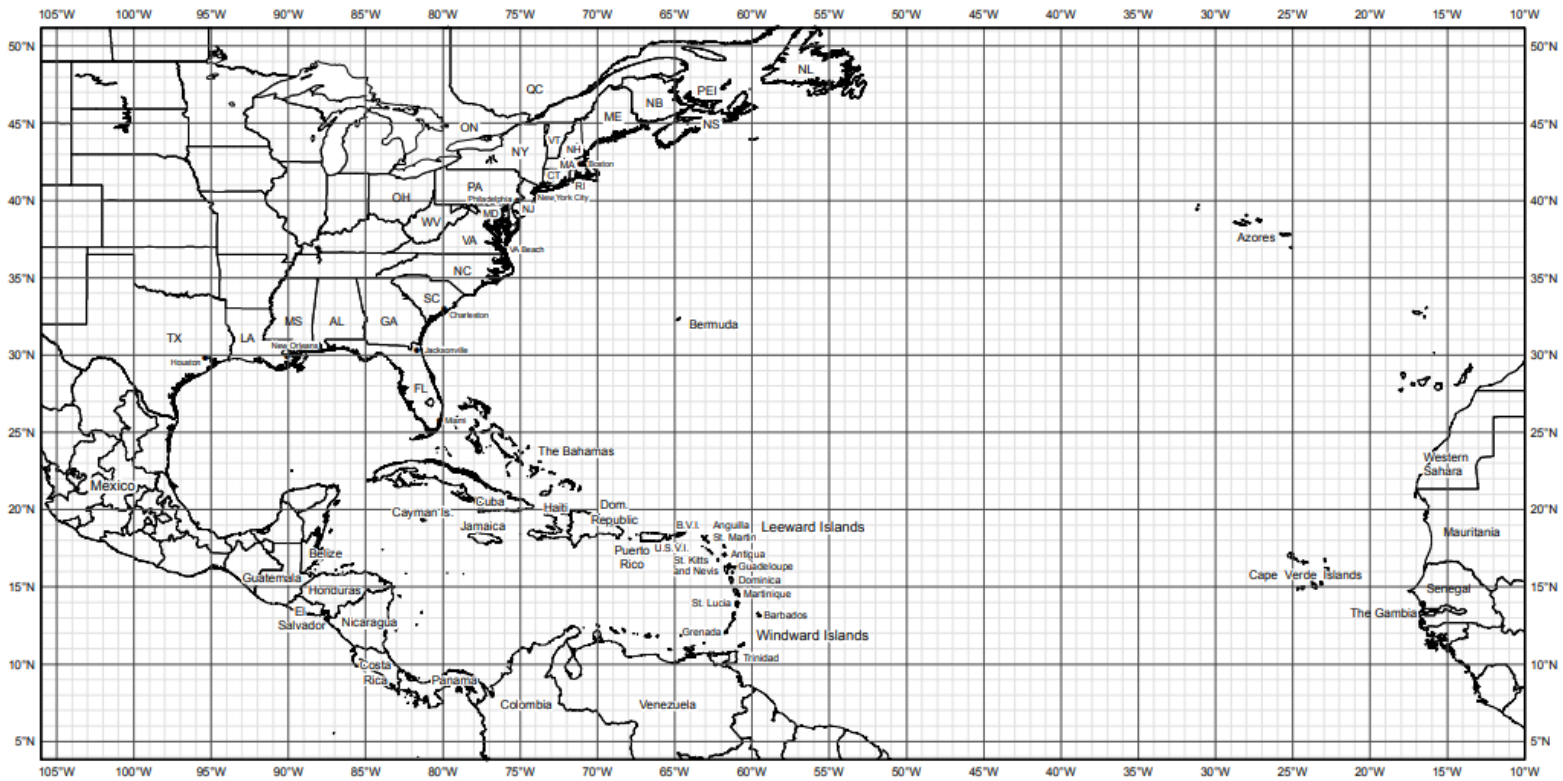
In 1806, British Admiral Francis Beaufort proposed the following wind scale:

0	1	2	3	4	5	6	7	8	9	10	11	12
calm	light air	light breeze	gentle breeze	moderate breeze	fresh breeze	strong breeze	moderate gale	fresh gale	strong gale	whole gale	storm	hurricane
0-0.2 m/s less than 1 km/h	0.3-1.5 m/s 1-5 km/h	1.6-3.3 m/s 6-11 km/h	3.4-5.4 m/s 12-19 km/h	5.5-7.9 m/s 20-28 km/h	8.0-10.7 m/s 29-38 km/h	10.8-13.8 m/s 39-49 km/h	13.9-17.1 m/s 50-61 km/h	17.2-20.7 m/s 62-74 km/h	20.8-24.4 m/s 75-88 km/h	24.5-28.4 m/s 89-102 km/h	28.5-32.6 m/s 103-117 km/h	more than 32.6 m/s more than 117 km/h



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HURRICANE TRACKING MAP



2018 Atlantic Storm Names

Alberto

Beryl

Chris

Debby

Ernesto

Florence

Gordon

Helene

Isaac

Joyce

Kirk

Leslie

Michael

Nadine

Oscar

Patty

Rafael

Sara

Tony

Valerie

William