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Hurricane Preparedness Brief

Jaret Mats
Emergency Manager
USAG-Miami
Directorate of Operations



HURRICANE PREPAREDNESS OBJECTIVES

- **Understanding Destructive Weather Hazards**
- **South Florida – Hazards & Risk Analysis**
- **How to Be Prepared**
- **Resources & Information**
- **Post storm actions and recovery**



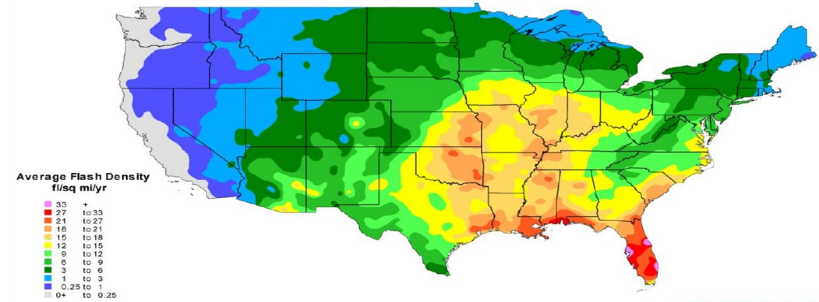


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South Florida Destructive Weather



Vaisala's National Lightning Detection Network® (NLDN®)
Cloud-to-Ground Lightning Incidence in the Continental U.S. (1997 - 2012)



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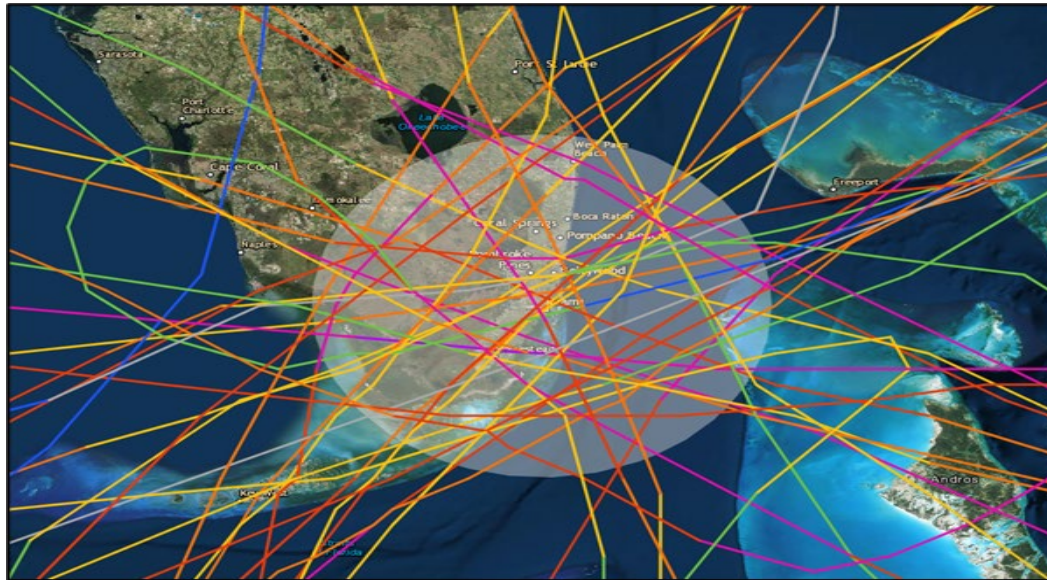
Figure 3: Cloud-to-ground lightning from 1997-2012, courtesy of Vaisala





Understanding the Cone

- Cone predictions are often misinterpreted as impact area vs. storm center (eye) path
- NOAA acknowledges intensity predictions are unreliable
- Rapid changes require constant monitoring
- Wind speed category 'downgrade' does not mean less threat: **Hide from wind; Run from water.**



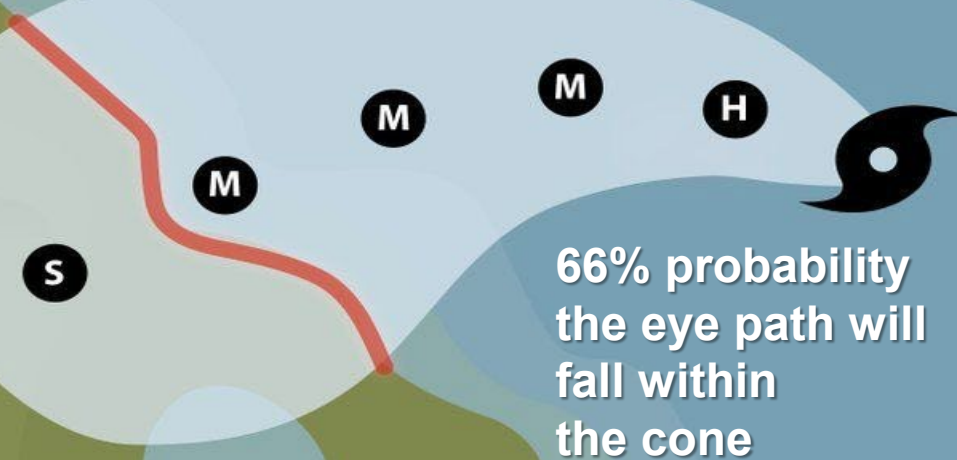
Tracks of hurricane centers within 65 miles of Miami since 1865





Understanding the Cone

The Forecast "Cone"



- D** Tropical Depression (less than 39 MPH)
- S** Tropical Storm (between 39 MPH and 73 MPH)
- H** Hurricane (between 74 MPH and 110 MPH)
- M** Major Hurricane (greater than 110 MPH)

What it tells you.

The probable forecast track of the **center of the storm** up to 5 days out from its current position.

About **two-thirds of the time**, the center of the storm will remain in the cone.

What it *doesn't* tell you.

The size of the storm.

The impacts both within the cone and outside the cone. **Impacts often occur well outside of the cone.**

hurricanes.gov





HURRICANE PREPAREDNESS

Hurricane Preparedness

Determine Your Risk



Storm surge



Strong winds



Tornadoes



Flooding & rainfall



Rip currents

[weather.gov](https://www.weather.gov)



NOAA



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Storm Surge vs Flood Zones

Flood zone: Mapped by FEMA for use in the National Flood Insurance Program. Each flood zone designation tells homeowners exactly what the risk is for flooding at their property over a period of years, regardless of the cause. By law, all homes in high-risk zones carrying a mortgage must be covered by flood insurance.

The **Flood Zones** and the **Storm Surge Planning Zones** are determined by different methods and have different purposes. **Residents must check both zones.**

Flood Zone Map

Storm Surge Map (SLOSH)

Storm Surge Planning Zones:

Based on hurricane storm surge determined by the National Hurricane Center using ground elevation and the area's vulnerability to water from lakes/oceans being pushed over land by a hurricane. The storm surge planning zones are marked from A through E.

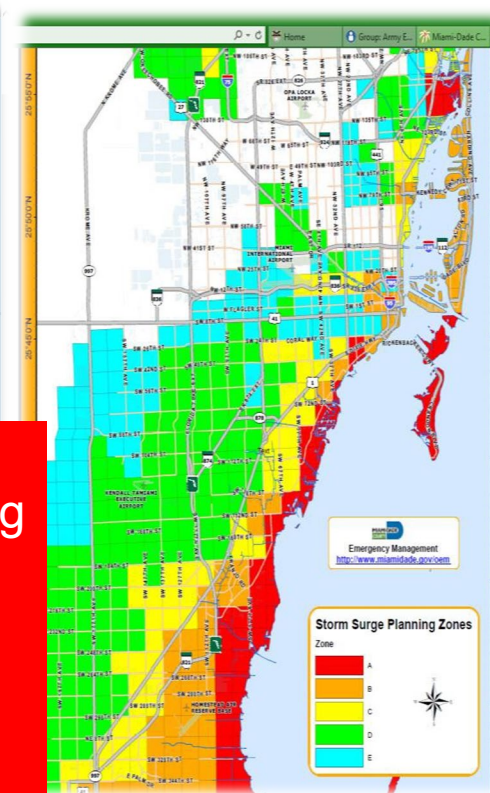
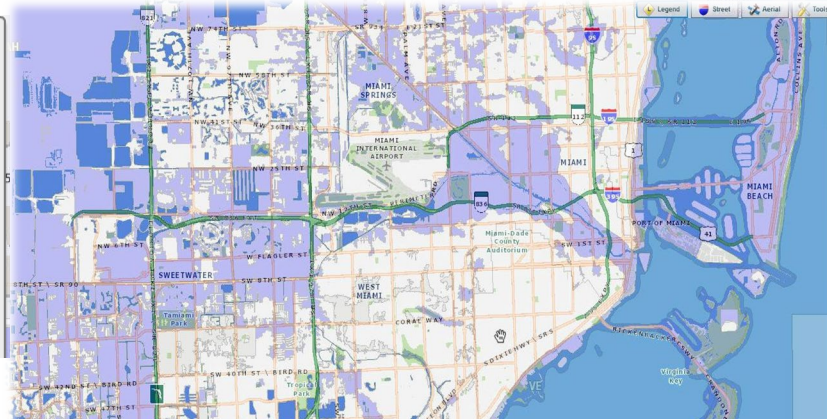
Legend

Transparency

Visible

- A, AE, AH
- VE
- OPEN WATER
- 0.2 PCT ANNUAL CHANCE FLOOD HAZARD
- D, X

[Click here for flood designation descriptions](#)



You CAN be impacted by hurricane tidal surge flooding WITHOUT being in a 100 year flood plain!

You CAN be in a flood zone without being in a Storm Surge Planning Zone.

Evacuation zones are normally based on Storm Surge zones but check with your county!





Know Your Zone

- **Know your Storm Surge/Evacuation Zone**

- Miami Dade Storm Surge Interactive map (also on Ready MDC app):

<http://mdc.maps.arcgis.com/apps/webappviewer/index.html?id=4919c85a439f40c68d7b3c81c3f44b58>

- Broward Storm Surge/Evacuation:

<http://www.broward.org/Hurricane/Pages/EvacuationRoutes.aspx>

- Palm Beach County Surge/Evacuation (also on PBC Dart app):

<https://www.discover.pbc.gov/org/publicsafety/dem/Publications/Evacuation%20-Zones.pdf>





HURRICANE PREPAREDNESS

Hurricane Preparedness

Get an Insurance Checkup



Check with
your agent



Know your
policy



Consider
flood insurance



Keep
documents
with you

[weather.gov](https://www.weather.gov)





HURRICANE PREPAREDNESS

Hurricane Preparedness

Complete a Written Plan



Have a contact list



Keep critical documents together for quick access



Have at least one contact outside of the impact area



Share your plan

weather.gov





HURRICANE PREPAREDNESS

Hurricane Preparedness

Develop an Evacuation Plan



Find out if you live in an evacuation zone



Plan several routes



Have a go bag for supplies



Plan for your pets



Follow evacuation orders if given

[weather.gov](https://www.weather.gov)





HURRICANE PREPAREDNESS

Hurricane Preparedness

Strengthen Your Home



Cover windows



Trim trees



Secure loose outdoor items



Secure all doors



Move vehicle to a safe location

[weather.gov](https://www.weather.gov)





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HURRICANE PREPAREDNESS

Hurricane Preparedness

Assemble Disaster Supplies



Food & water



Medicine & prescriptions



Keep gas tank full



Cash on hand



Radio, batteries, phone chargers

[weather.gov](https://www.weather.gov)





Basic Hurricane Kit Essentials

- **Water:** one gallon per person, per day (3-day supply for evacuation, 2-week supply for home).
- **Food:** non-perishable, easy-to-prepare items (3-day supply for evacuation, 2-week supply for home).
- **Medications:** (7-day supply) and medical items.
- Flashlights or Solar Powered Light Source
- Radio, battery-powered or hand-crank (NOAA Weather Radio if possible).
- Extra batteries.
- First aid kit.
- Multi-purpose tool, like Leatherman or Swiss Army knife.





Build a Kit/s

- **Prepare for worst case scenario**
 - **Fail to plan=plan to fail.**
- **Build kit/s and review/replenish/cycle supplies (72 hours minimum)**
 - Know the difference between Emergency Kit and Disaster Kit
 - Emergency kit should have 72 hours of supplies
 - Disaster kit for longer periods of no electricity or water lasting 14-30 days, even minor hurricanes may result in week(s) of power loss/boil water orders
 - Talk the plan and kit over with your family – get input!
 - Use checklists – particularly for the last-minute changes to planning.
- **Exercise the plan – find gaps and instill confidence**
 - For example, Pre-Hurricane season: test your kit for a day! 3 meals from kit; no lights or plug-in electricity for 1 night (spare batteries, power bank, card games)
 - Does your spouse/family have access to everything to be ready without you if you are TDY or deployed?
- **Inform your relatives and supervisor of your plan and/or evacuation**





HURRICANE PREPAREDNESS

Hurricane Preparedness

Help Your Neighbor



Help your
neighbors
prepare



Help your
neighbors
evacuate



Check-in after
the storm passes

[weather.gov](https://www.weather.gov)



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HURRICANE PREPAREDNESS (Post Storm)

• After the Storm

- Monitor the news before, during and after the storm for information on curfews, shelters, relief centers, contaminated water order
- Contact relatives/supervisor with your status (consider texting)
- Minimize calls and driving to allow emergency calls, first responders and utility repair personnel to get through
- Conduct a damage assessment and take photos of damage if possible
- Keep all receipts
- No generators indoors (or near air vents, windows)
- Avoid injury – limited emergency response capability (e.g., removing debris/cutting down trees/flooded areas)

• Post Storm Potential Conditions and Hazards

- Do not trust what you cannot see! (debris blocked & flooded streets)
- Drive with caution due to missing traffic lights/stop signs
- Shortage of food, water, fuel and supplies
- Prepare for prolonged loss of utilities and public services; downed power lines
- Boil water orders due to contamination





HURRICANE PREPAREDNESS

Hurricane

Resources

Be Prepared

NOAA



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Local Resources

- **Miami Dade Emergency Management**
 - <http://www.miamidade.gov/oem>
- **Broward Emergency Management**
 - <http://www.broward.org/Hurricane>
- **Monroe County Emergency Management**
 - <https://www.monroecounty-fl.gov>
- **Emergency Management Resources:**
 - www.readysouthflorida.org (FL counties)
 - www.floridadisaster.org (FL state)
 - <https://www.ready.gov> (Federal)
- **SC Hurricane Hotline: 305-437-3919**





Additional Resources

- **Weather**

- <https://www.nhc.noaa.gov/>
- Consider apps like “My Radar”, “Max Tracker” (local 10 news)
- Local News and Weather (Battery operated radio in kit!)

- **County Resources**

- Miami Dade Emergency Management
<http://www.miamidade.gov/oem> (App: ReadyMDC, plus alert signup available)
- Broward Emergency Management
<http://www.broward.org/hurricane> (Alert signup available)
- Monroe County Emergency Management
<https://www.monroecounty-fl.gov>
- Palm Beach Public Safety (App: PBCDart; plus alert signup available)
<http://discover.pbcgov.org/publicsafety/dem/pages/default.aspx>





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Discussions & Questions?

Mr. Jaret Mats, USAG-Miami Emergency Manager