



# Tropical Update



2:30 PM EDT

Friday, October 27, 2023

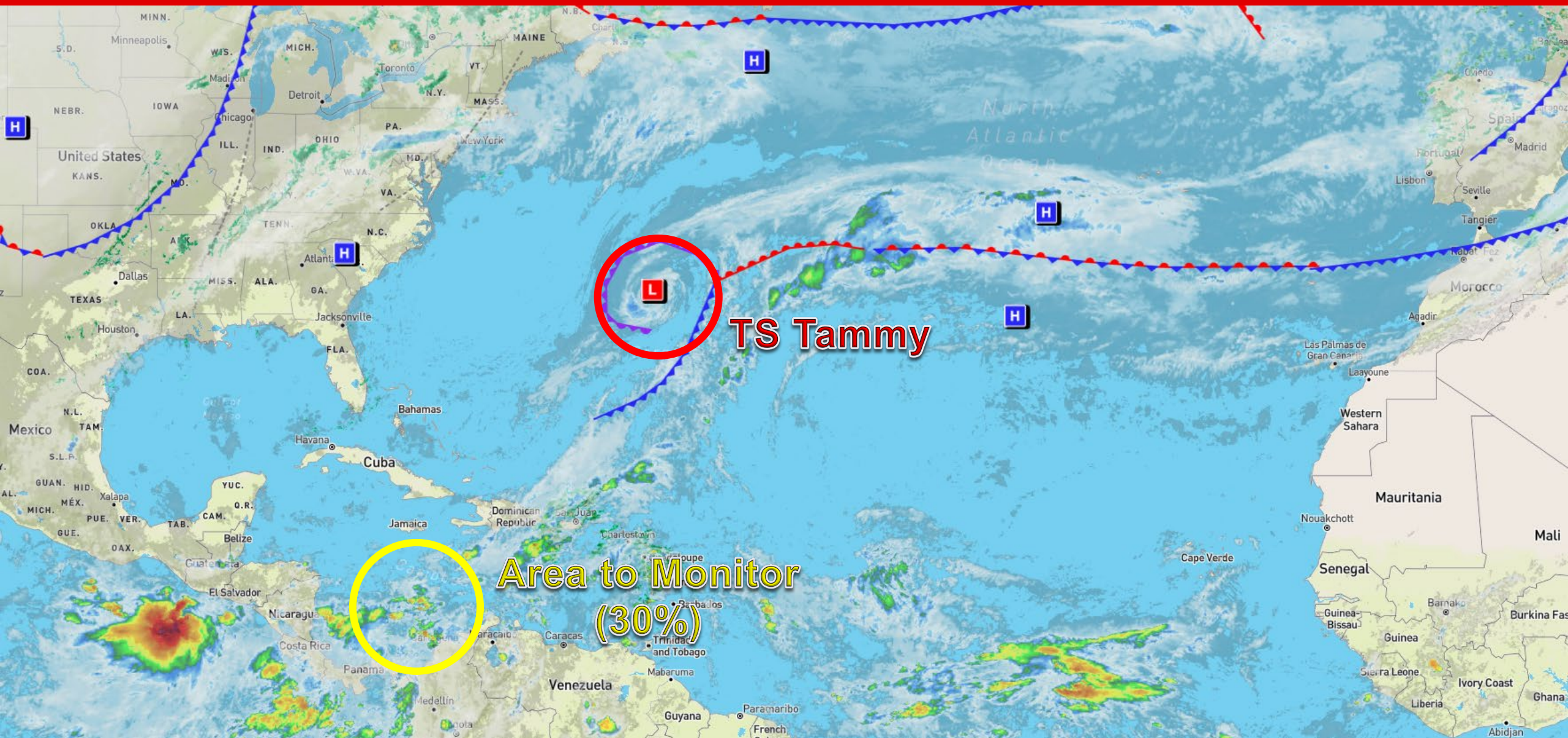
## Tropical Storm Tammy & Western Caribbean Low (30%)

This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an active weather event please contact your County Emergency Management or Public Safety Office, local National Weather Service forecast office, or visit the National Hurricane Center website at [www.hurricanes.gov](http://www.hurricanes.gov).



# Atlantic Basin Satellite Image

Chance of development:      None      Low      Medium      High

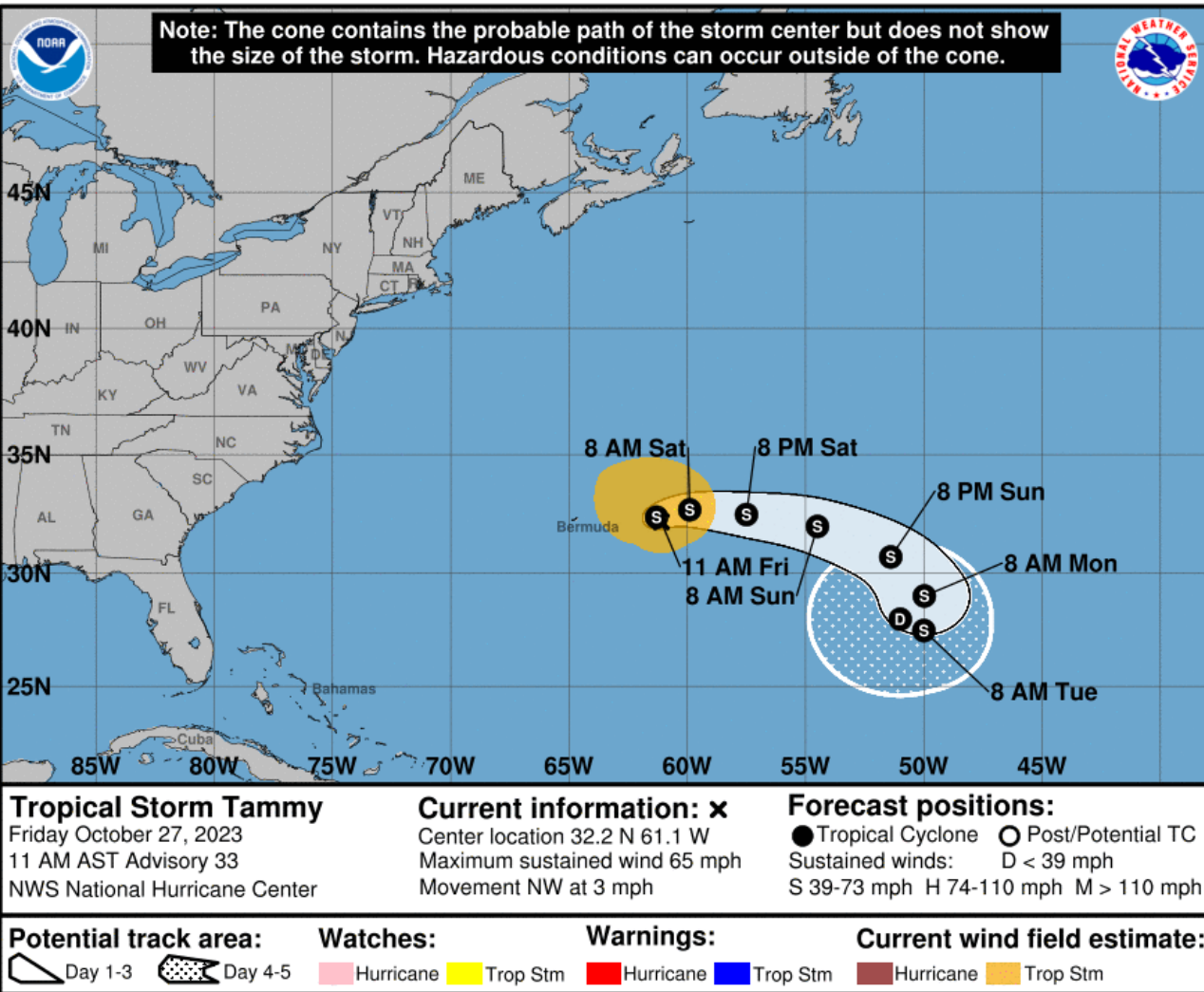






# Forecast Cone

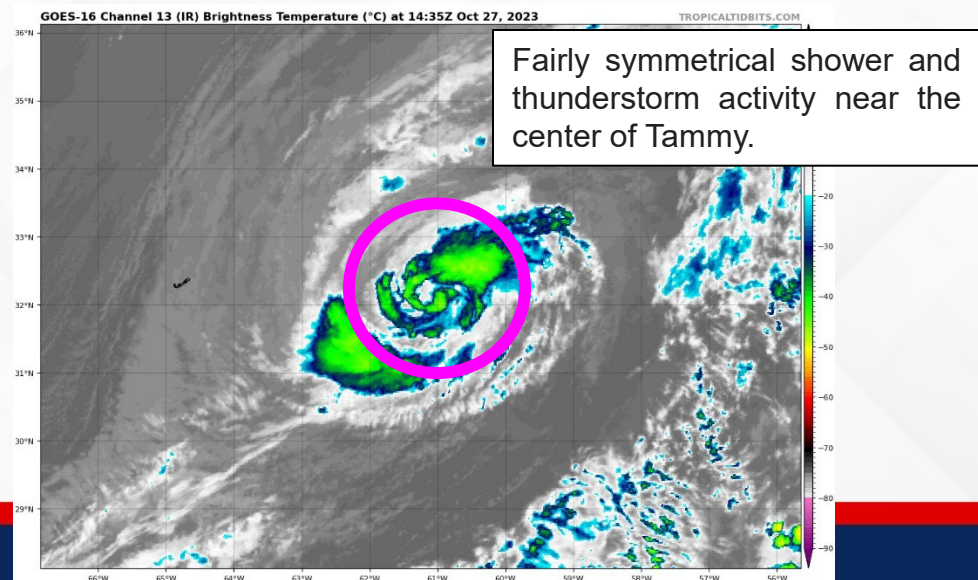
## Tropical Storm Tammy ([LINK](#))



- **Location:** 215 E of Bermuda
- **Maximum Sustained Winds:** 65 mph
- **Current Movement:** NW at 3 mph
- **FL Watches/Warnings:** None

A turn to the north is expected tonight followed by a turn to the east over the next couple of days. On the forecast track, Tammy will begin to move away from Bermuda Saturday morning. Little change in strength is expected during the next day or so.

*Tammy poses no direct threat to Florida.*



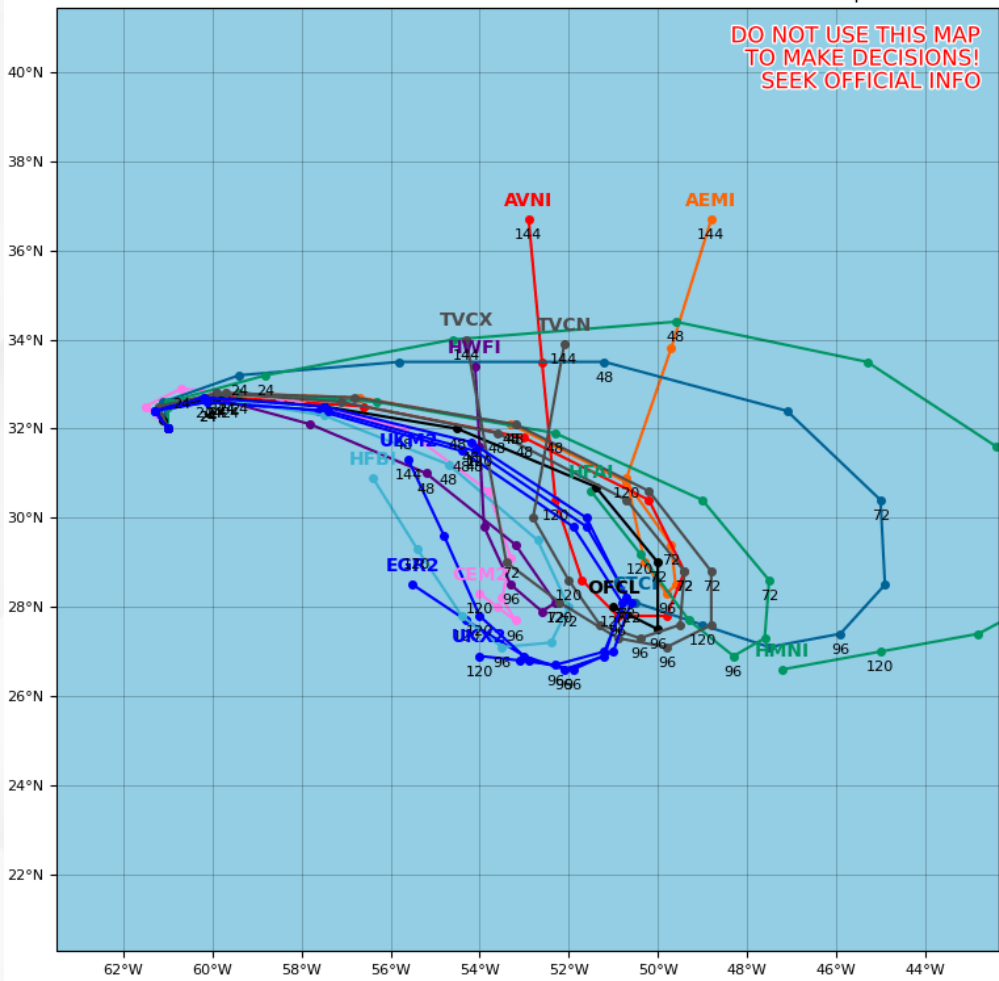


# Model Forecasts – Next 5 Days

## Tropical Storm Tammy

### Tropical Storm TAMMY Model Track Guidance

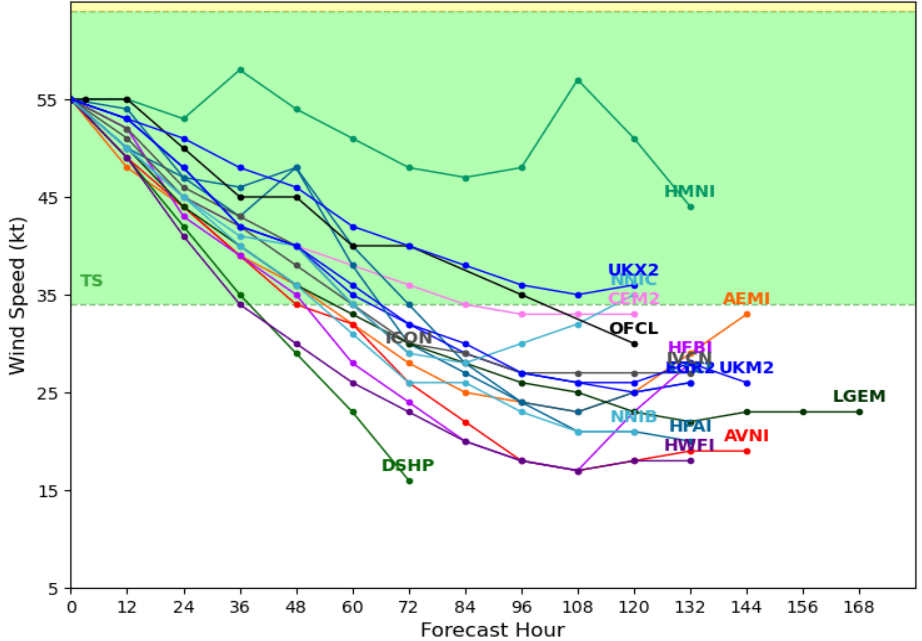
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Over the next few days, atmospheric and oceanic conditions will likely result in gradual weakening. Computer models are in decent agreement that Tammy will weaken into a depression within the next 5 days; however, given the environment, this may occur sooner. Computer models are in good agreement that Tammy should turn eastward in the next 12-24 hours, followed by a southeast to south turn over the open eastern Atlantic in the next 3-5 days.

### Tropical Storm TAMMY Model Intensity Guidance

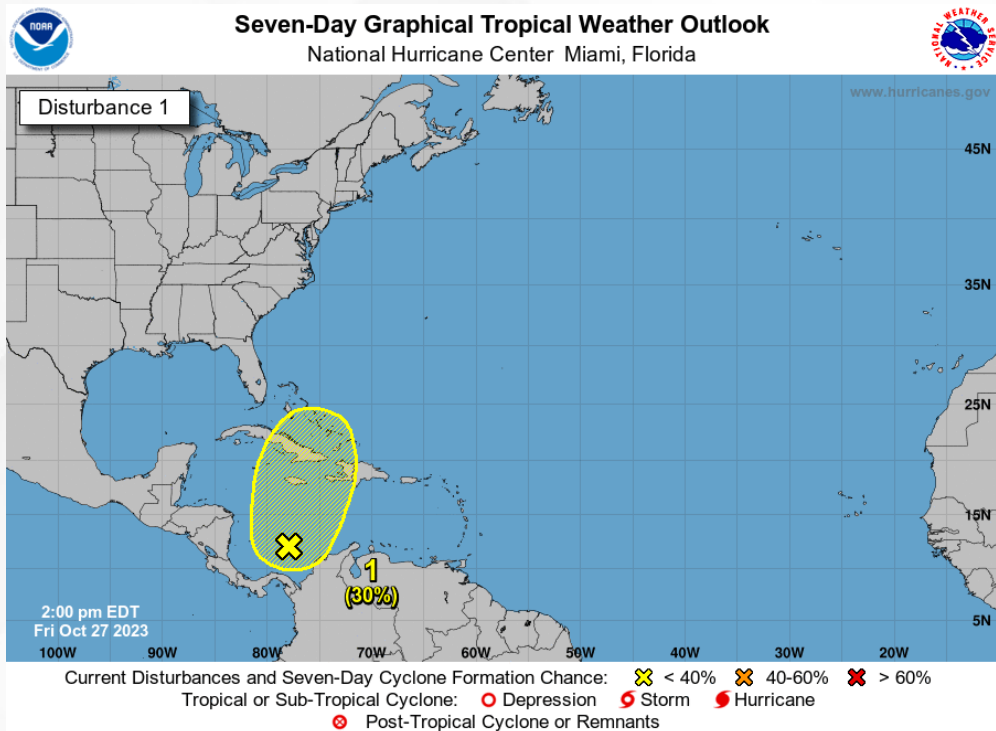
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# Tropical Weather Outlook

Disturbance 1 – Western Caribbean Low ([LINK](#))



 10%

48 Hour Formation

 30%

7 Day Formation

A broad area of low pressure has formed over the southwestern Caribbean Sea. Environmental conditions could support some slow development of this system during the next several days while it moves generally westward.

*This broad area of low pressure poses no direct threat to Florida over the next 5 days, but its development will continue to be monitored through the weekend.*

\* Formation chance through 48 hours...**low...10%.**

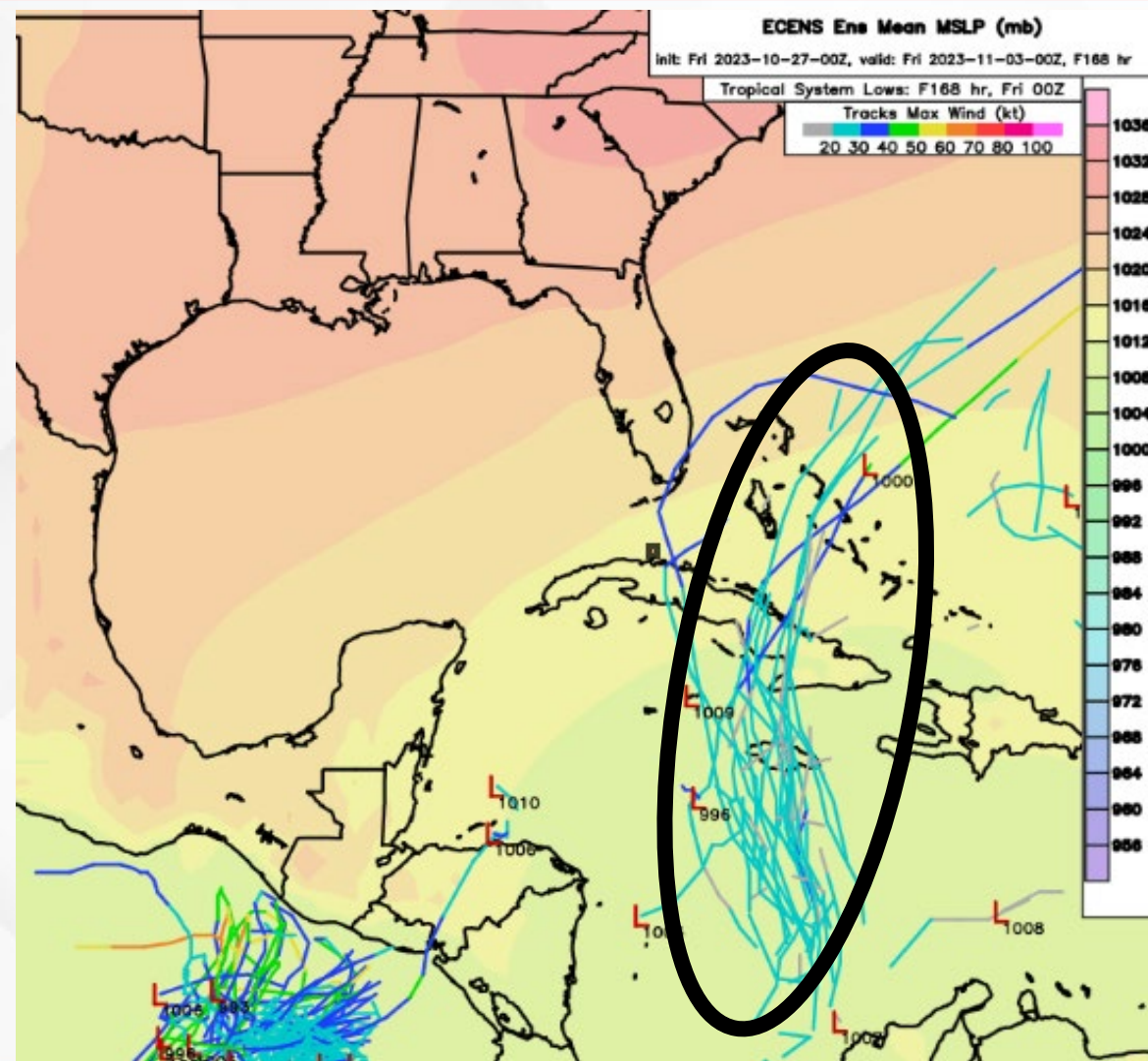
\* Formation chance through 7 days...**low...30%.**





# Model Forecasts – Next 7 Days

## Western Caribbean Sea



Computer model guidance suggests the broad area of low pressure will gradually advance northward over the Caribbean Sea during the next 5 days. As the area of low pressure becomes more organized over the Caribbean waters late Sunday into Monday, the system looks to migrate northward to Jamaica and Cuba prior to interacting with a frontal system midweek. Consensus across the computer models keep this system generally weak and disorganized (*as indicated by the cooler colors*), especially given its potential interaction with terrain and increasingly harsh atmospheric conditions later in the forecast period.

Forecast details will become clearer later this weekend once the broad circulation develops additional shower and thunderstorm activity.



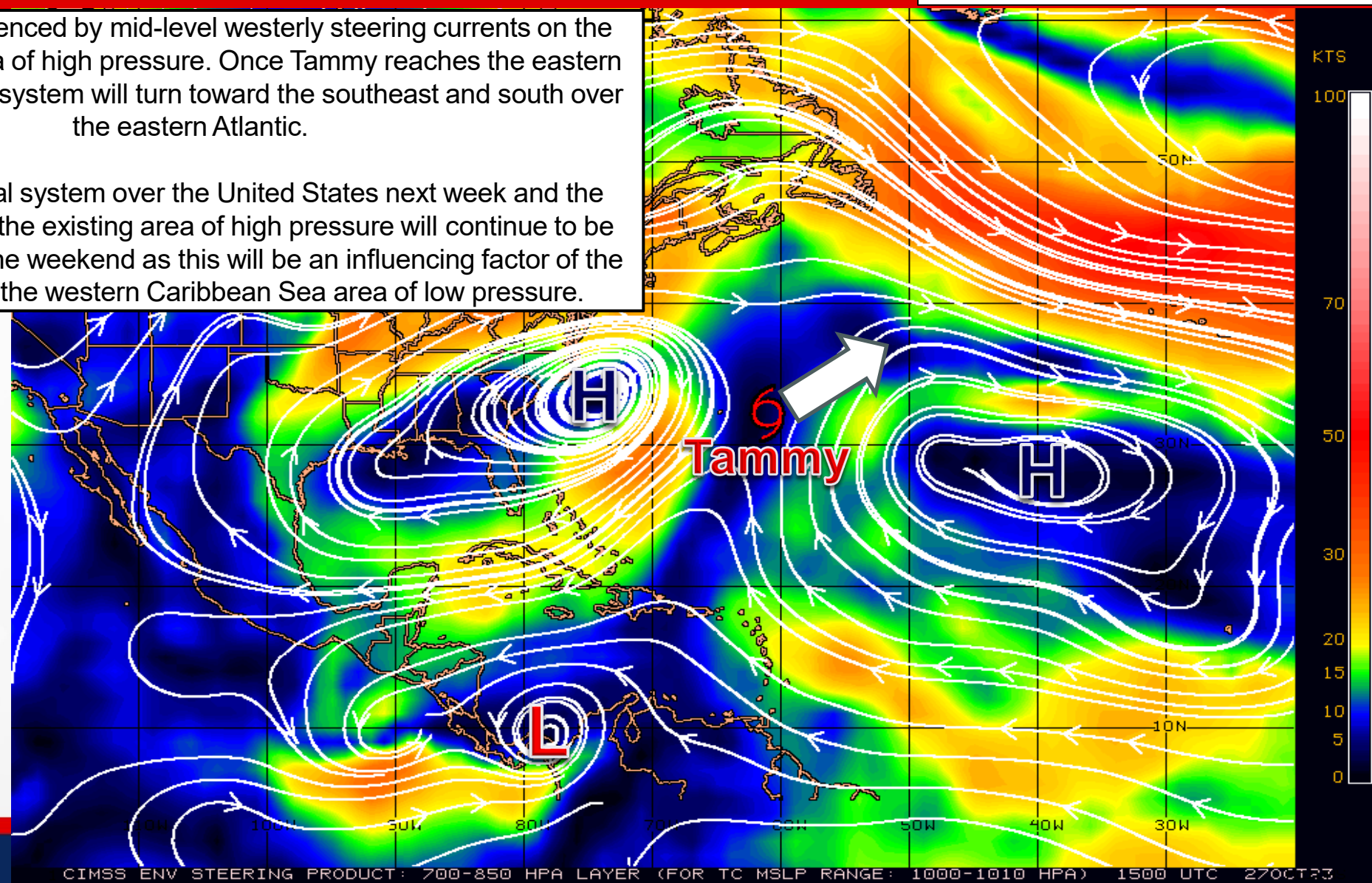
# Steering Currents

## What is Moving the System?

Color denotes the movement speed through the atmosphere and thin white lines denote direction. Tightly clustered white lines represent faster movement as well.

Tammy will be influenced by mid-level westerly steering currents on the north side of an area of high pressure. Once Tammy reaches the eastern side of the high, the system will turn toward the southeast and south over the eastern Atlantic.

A developing frontal system over the United States next week and the eastward retreat of the existing area of high pressure will continue to be monitored through the weekend as this will be an influencing factor of the eventual track of the western Caribbean Sea area of low pressure.



Fast Moving Storm

Fast Moving Storm

Typical Moving Storm

Slow Moving Storm





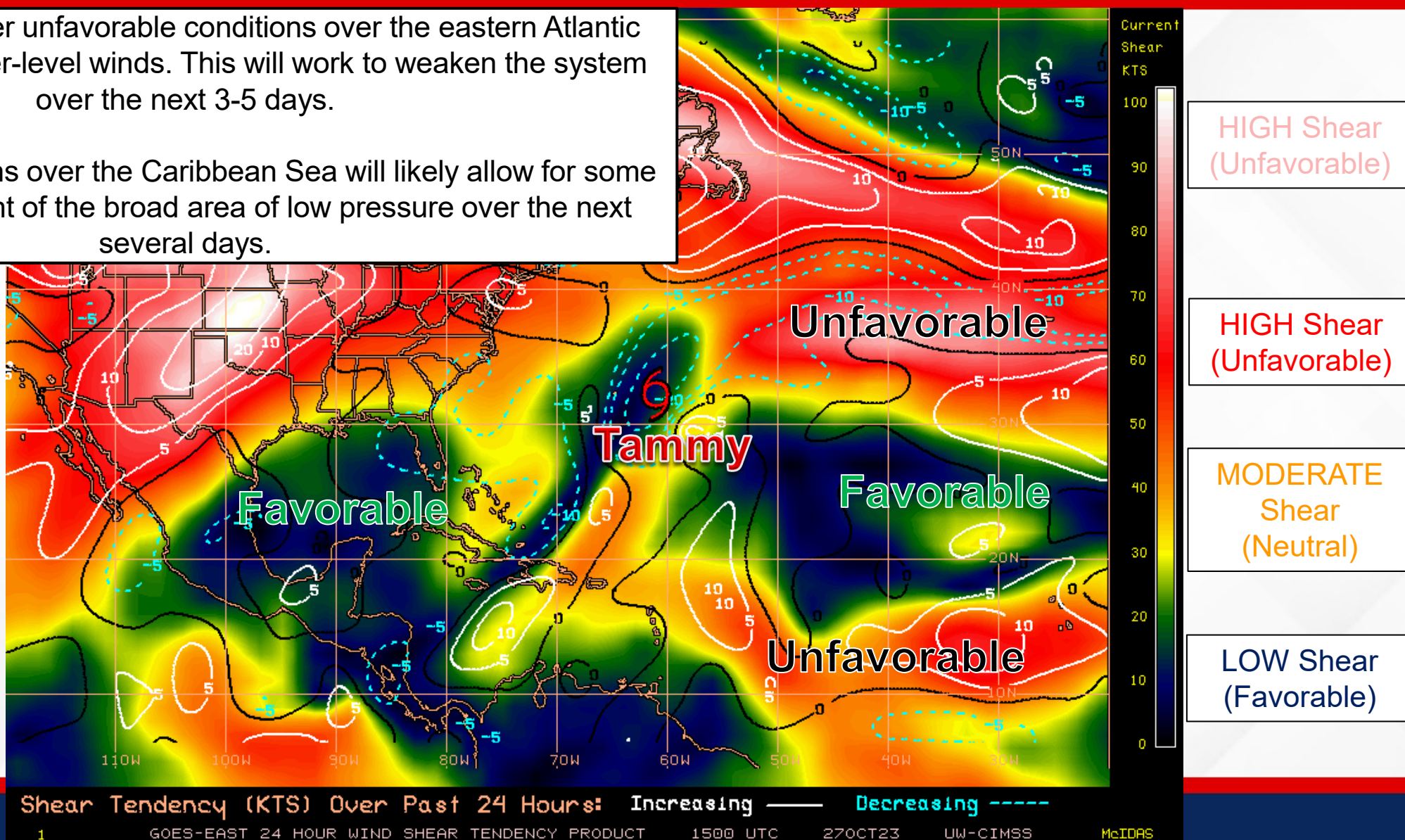
# Wind Shear

Is the environment favorable for the system?

Color denotes the amount of wind shear and the lines denote how it have changed over the last 24 hours (dotted lines show decreasing shear and solid lines show increasing).

Tammy will encounter unfavorable conditions over the eastern Atlantic featuring strong upper-level winds. This will work to weaken the system over the next 3-5 days.

Atmospheric conditions over the Caribbean Sea will likely allow for some gradual development of the broad area of low pressure over the next several days.







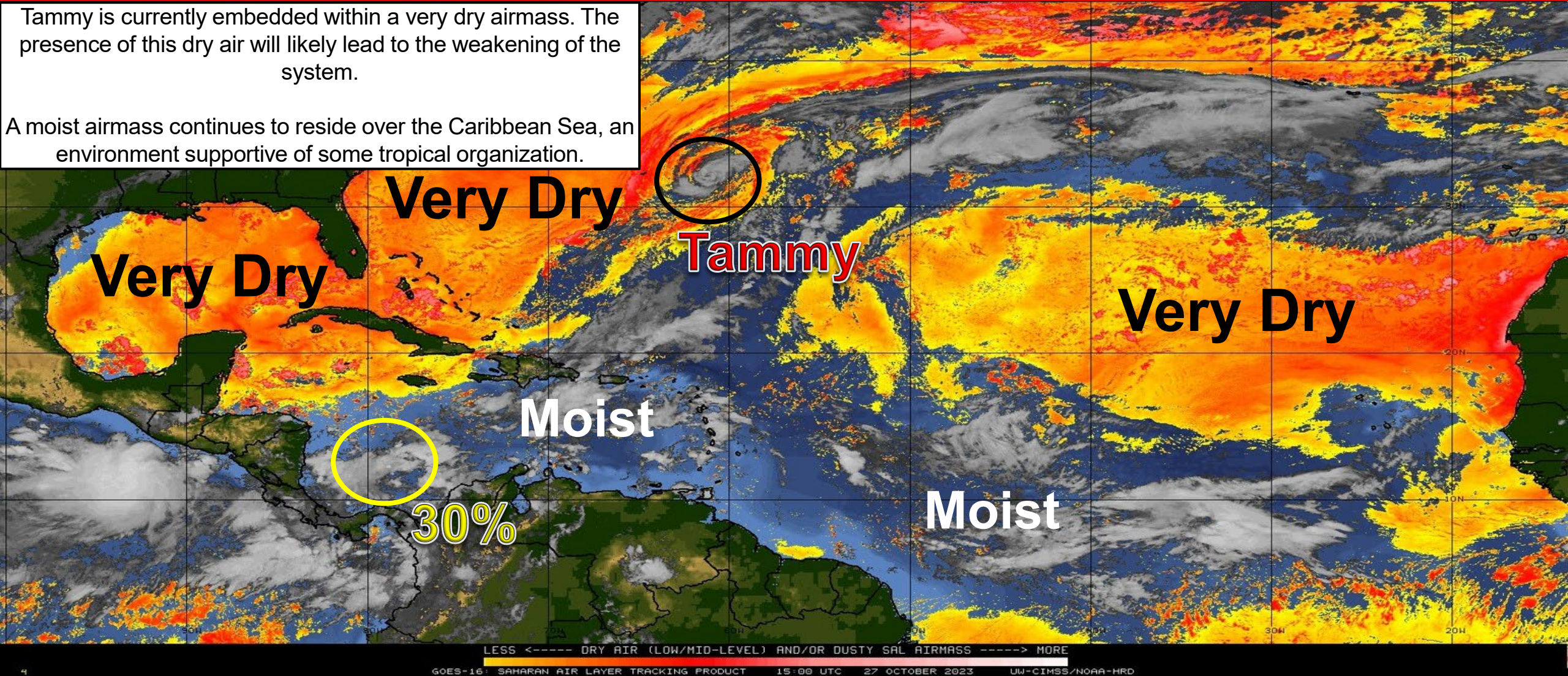
# Dry Air & Saharan Dust

Is the environment favorable for the system?

Color denotes concentration of Saharan Dust or dry, stable air.

Tammy is currently embedded within a very dry airmass. The presence of this dry air will likely lead to the weakening of the system.

A moist airmass continues to reside over the Caribbean Sea, an environment supportive of some tropical organization.

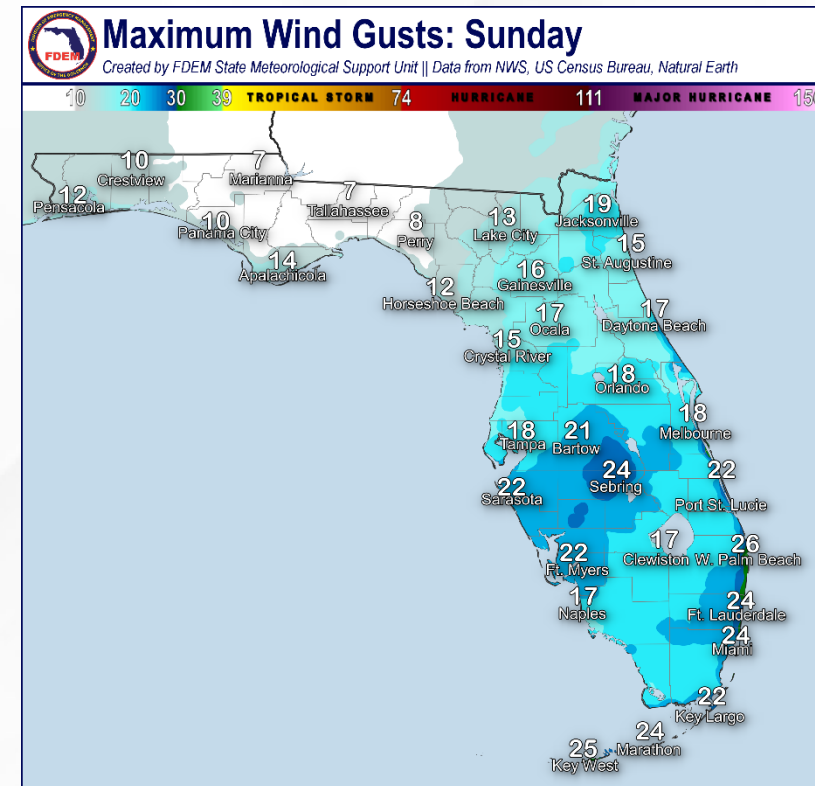
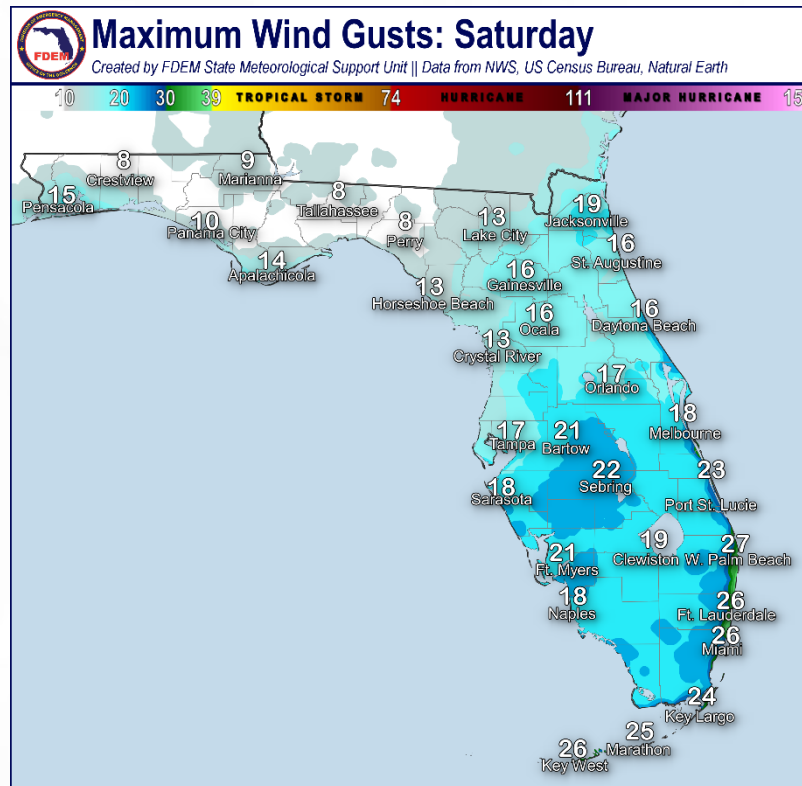
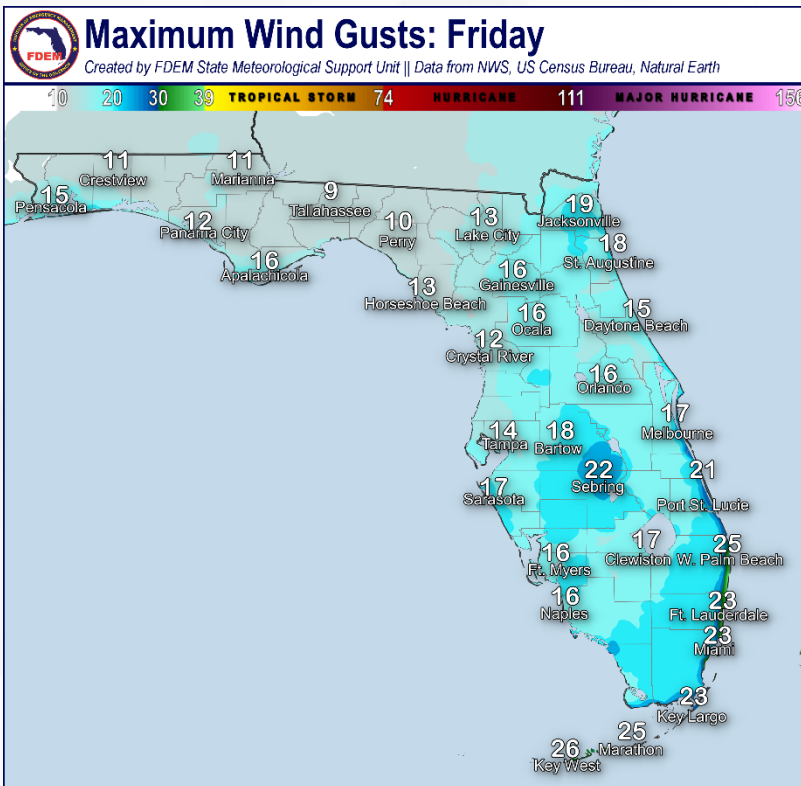






# Forecast Wind Gusts

## Friday – Sunday



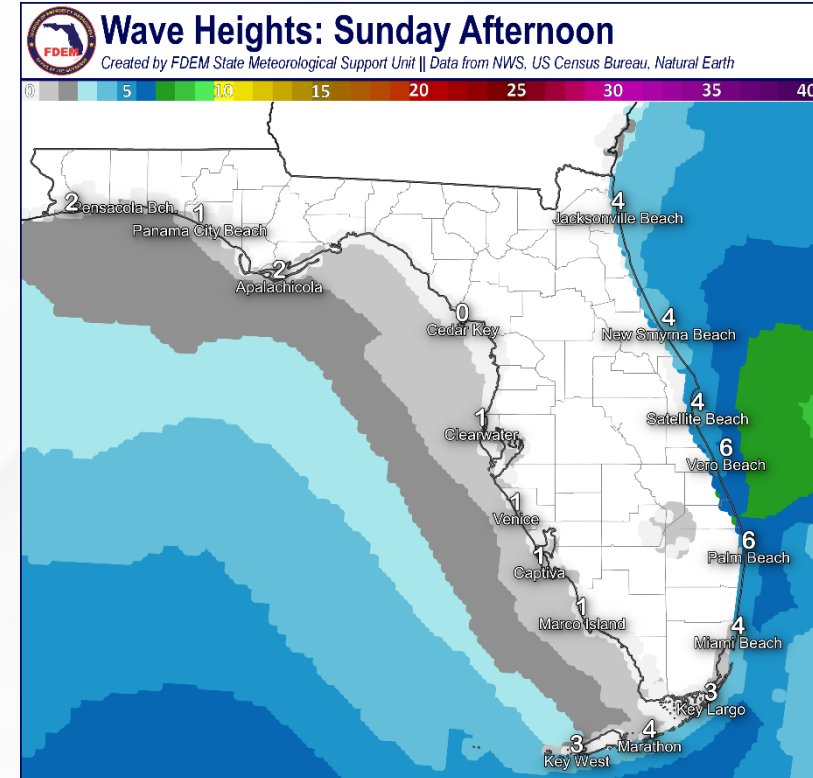
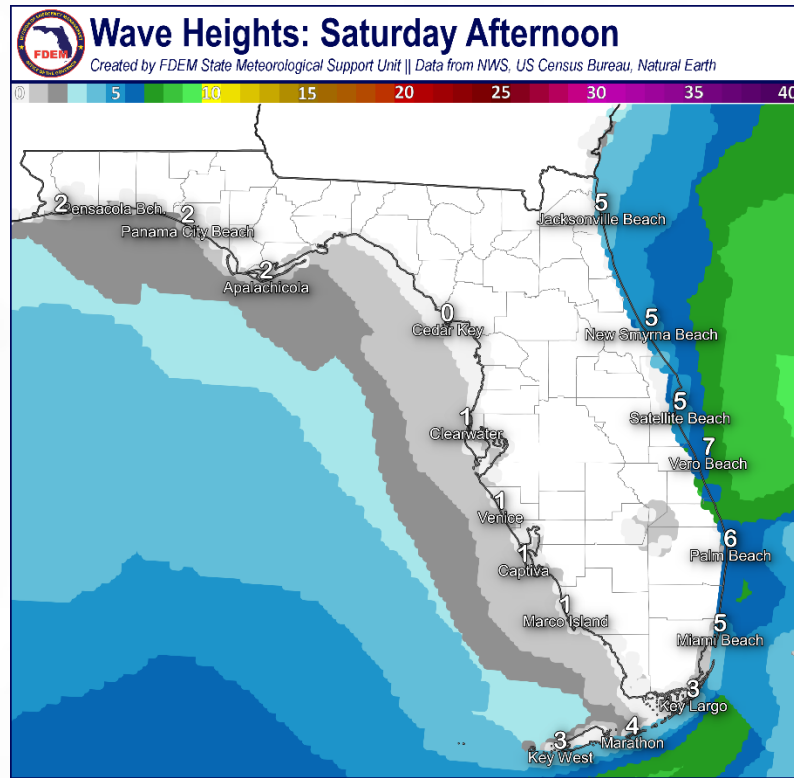
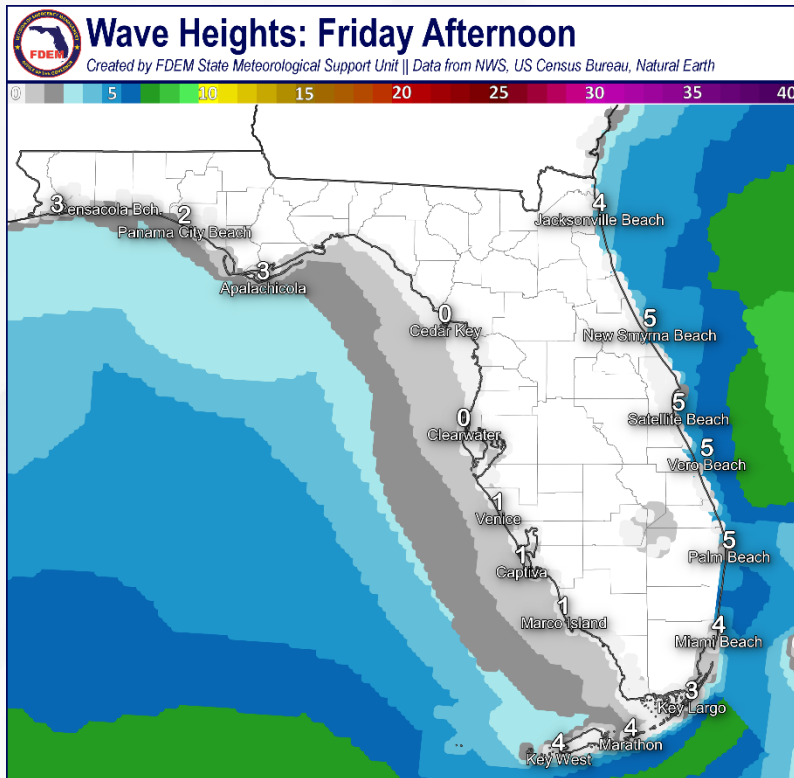
Breezy conditions will persist through the Florida Peninsula this weekend, with wind gusts reaching 15-25 mph at times. Locally higher wind gusts of 25-30 mph cannot be ruled out along portions of the Treasure Coast, coastal Southeast Florida, and along the Florida Keys. Persist onshore flow will maintain elevated wave heights along several Atlantic beaches.





# Forecast Wave Heights

## Friday – Sunday



Breezy onshore flow will maintain elevated wave heights along several Florida East Coast beaches through the weekend. **Wave heights** of 5-7' can be expected along portions of the East-Central and Southeast Florida coastlines, with breakers in the surf zone reaching 3-5' elsewhere along the Atlantic Coast. Rough surf and windy conditions will result in a **high risk of rip currents** along the East Coast through the weekend.



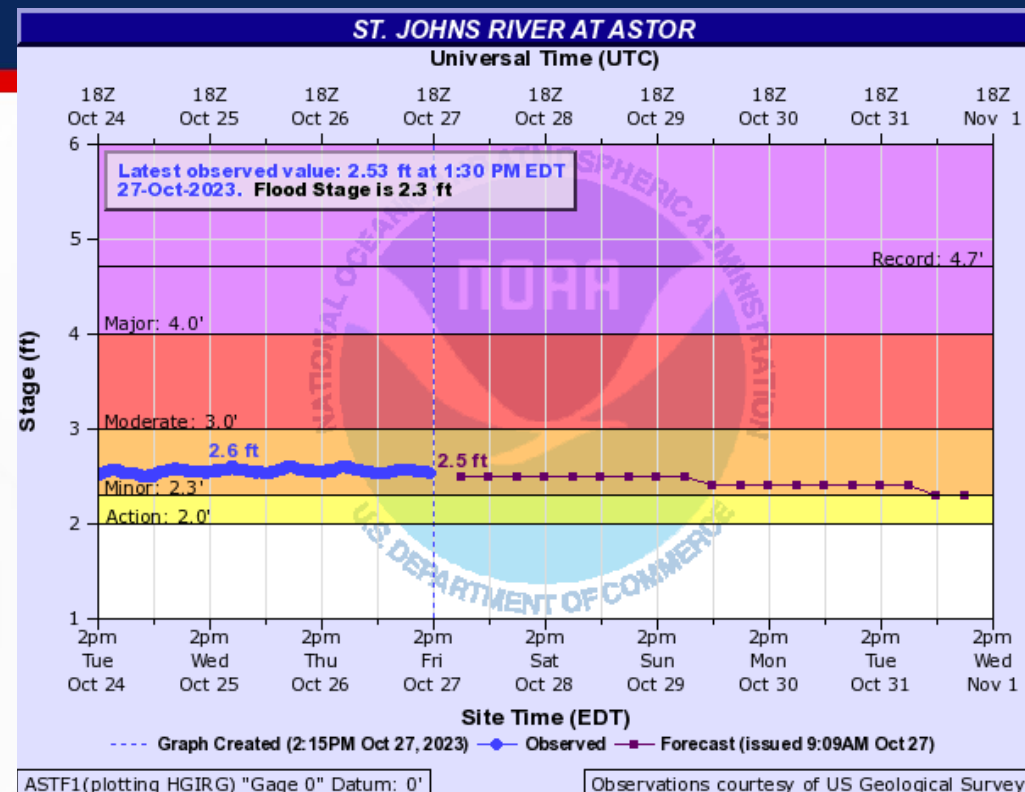
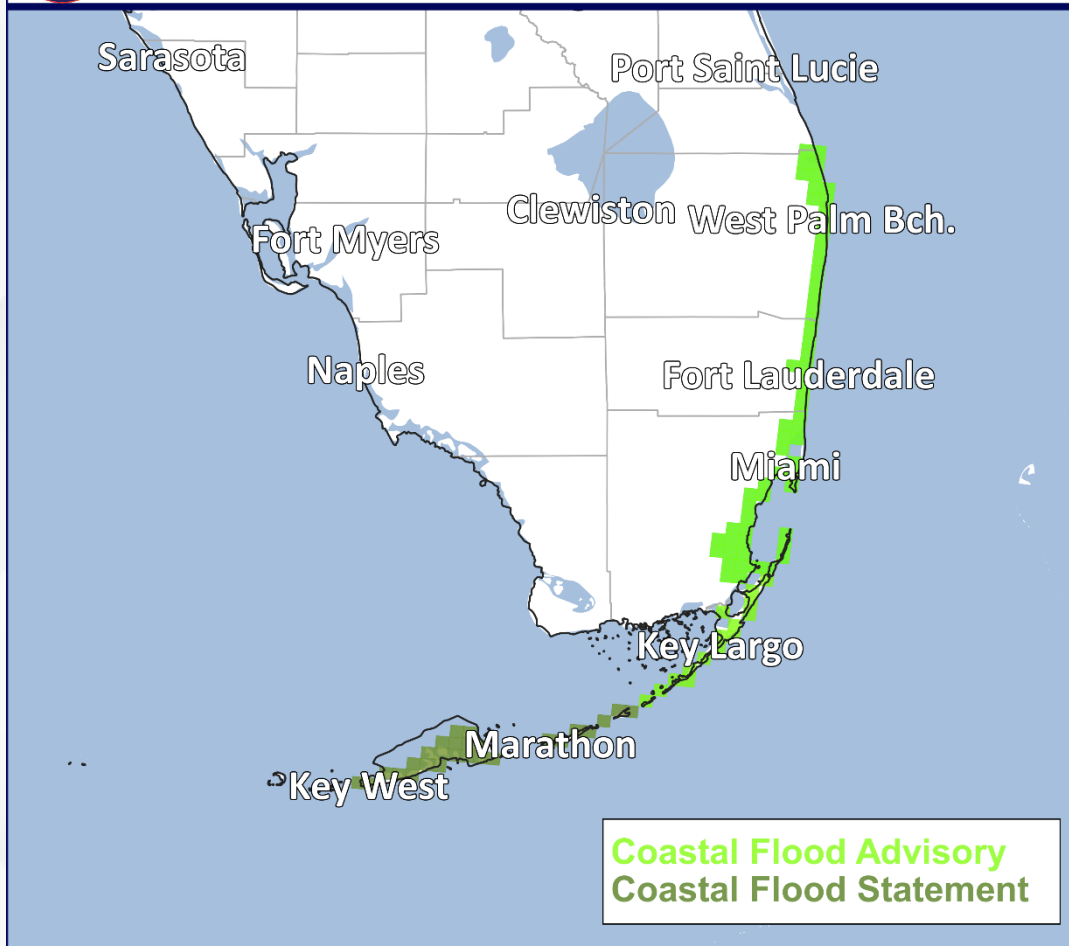
# Flooding – Coastal & Riverine

## From the National Weather Service



### Coastal Flooding: Friday

Created by FDEM State Meteorological Support Unit || Data from NWS, US Census Bureau, Natural Earth



Elevated tides of 1.5-2' above normally dry ground will develop further along the East Coast with the upcoming full moon this weekend. The combination of elevated tides, persistent onshore flow, and elevated wave heights will likely lead to **minor coastal flooding** along the East Coast near or at times of high tide. **Minor to moderate coastal flooding** will be possible along portions of the Southeast Florida Coast, with additional Coastal Flood Advisories or Statements likely to extend northward this weekend.

Persistent onshore flow and elevated tides may lead to backed up water levels along tidal portions of the St. Johns River basin later this weekend. **Minor coastal flooding** for the Northeast Florida Coast and areas along the St. Johns River may be possible near or during times of high tide. Water levels at Astor remain in **minor flood stage**, and are forecast to remain steady through midweek.





# Summary

## **Tropical Storm Tammy:**

- As of 11:00 AM EDT, Tammy has regenerated into a tropical storm located 215 miles east of Bermuda, and was moving northwestward at 3 mph.
- A turn toward the north is expected tonight followed by a turn to the east over the next couple of days.
- On the forecast track, Tammy will begin to move away from Bermuda Saturday morning.
- Maximum sustained winds are near 65 mph, and little change in strength is expected during the next day or so. *Tammy poses no direct threat to Florida.*

## **Western Caribbean Sea Low (30%):**

- A broad area of low pressure has formed over the southwestern Caribbean Sea.
- Environmental conditions could support some slow development of this system during the next several days while it moves generally northward.
- The National Hurricane Center is outlooking a 10% (low) chance of development over the next 48 hours, and a 30% (low) chance of development over the next 7 days.
- *This broad area of low pressure poses no direct threat to Florida over the next 5 days, but its development will continue to be monitored through the weekend.*

## **Florida Outlook:**

- Elevated astronomical tides are anticipated to extend along the East Coast with the upcoming full moon this weekend. Minor to moderate coastal and tidal flooding will be possible near or during times of high tide continuing through weekend; Coastal Flood Advisories and Statements remain in effect for Southeast Florida and the Florida Keys, and may extend northward along additional Atlantic Coast beaches.
- The St. Johns River basin may experience minor coastal flooding along tidal portions of the river due to persistent onshore flow and elevated tides near or during times of high tide through the weekend. The St. Johns River at Astor remains within minor flood stage as water levels continue to slowly decline through the week.
- Breezy conditions will maintain elevated surf heights and an increased risk of rip currents along many Atlantic beaches.
- The next name on the list is Vince.

The next briefing package will be issued on Saturday. For the latest information, please visit the [National Hurricane Center website](#).



# Tropical Update



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**State Meteorological Support Unit**

**Florida Division of Emergency Management**

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