



Tropical Update



11:15 AM EDT

Saturday, October 25, 2025

**Melissa Nearing Hurricane Strength Southeast of Jamaica;
Could Become a Major Hurricane as Soon as Tomorrow**

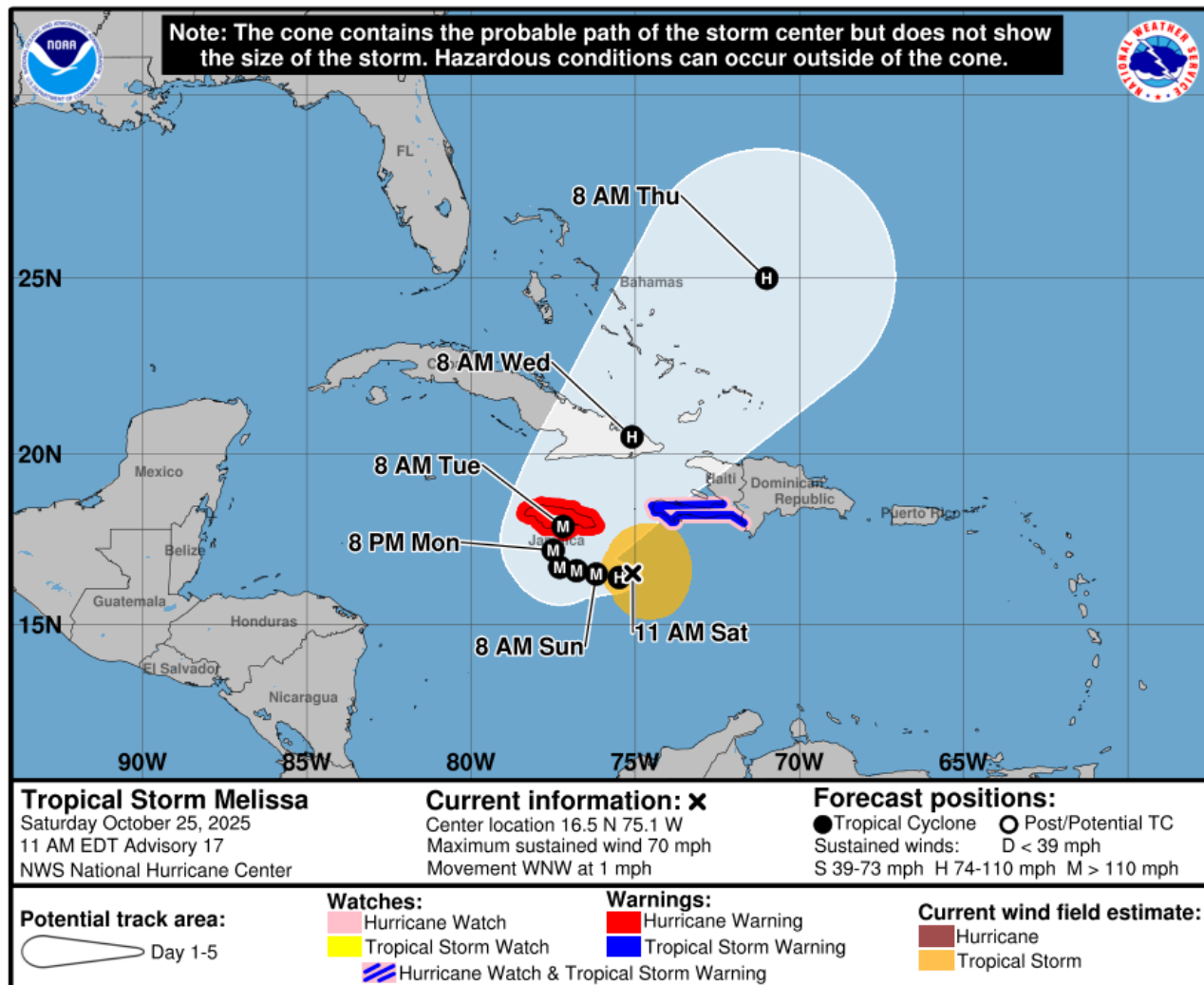
**Mostly Dry Conditions Prevail Across the Sunshine State Ahead of the Next Cold
Front Sunday and Monday**

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.



Tropical Storm Melissa

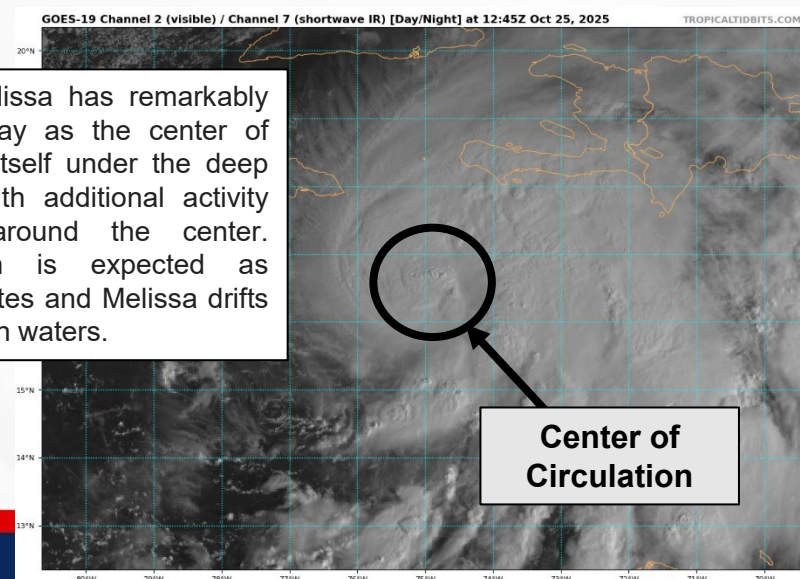
From the National Hurricane Center (NHC)



- **Location:** 155 miles SE of Kingston, Jamaica
- **Maximum Sustained Winds:** 70 mph
- **Current Movement:** WNW at 1 mph
- **FL Watches/Warnings:** None

A slow west-northwestward or westward motion is expected today through Sunday night. A turn to the north and northeast is forecast on Monday and Tuesday. On the forecast track, the center of Melissa is expected to move near or over Jamaica during the weekend and early next week, and it could be near or over eastern Cuba by the middle of next week. Rapid intensification is forecast to occur over the next 24 hours. Melissa is forecast to become a hurricane later today and a major hurricane by Sunday. ***Melissa poses no direct threat to Florida during the next 5 to 7 days, at least; this system will be closely monitored as it drifts over the Caribbean Sea.***

Satellite imagery of Melissa has remarkably improved since yesterday as the center of circulation has worked itself under the deep thunderstorm activity with additional activity beginning to wrap around the center. Continued organization is expected as westerly wind shear abates and Melissa drifts over the very warm ocean waters.





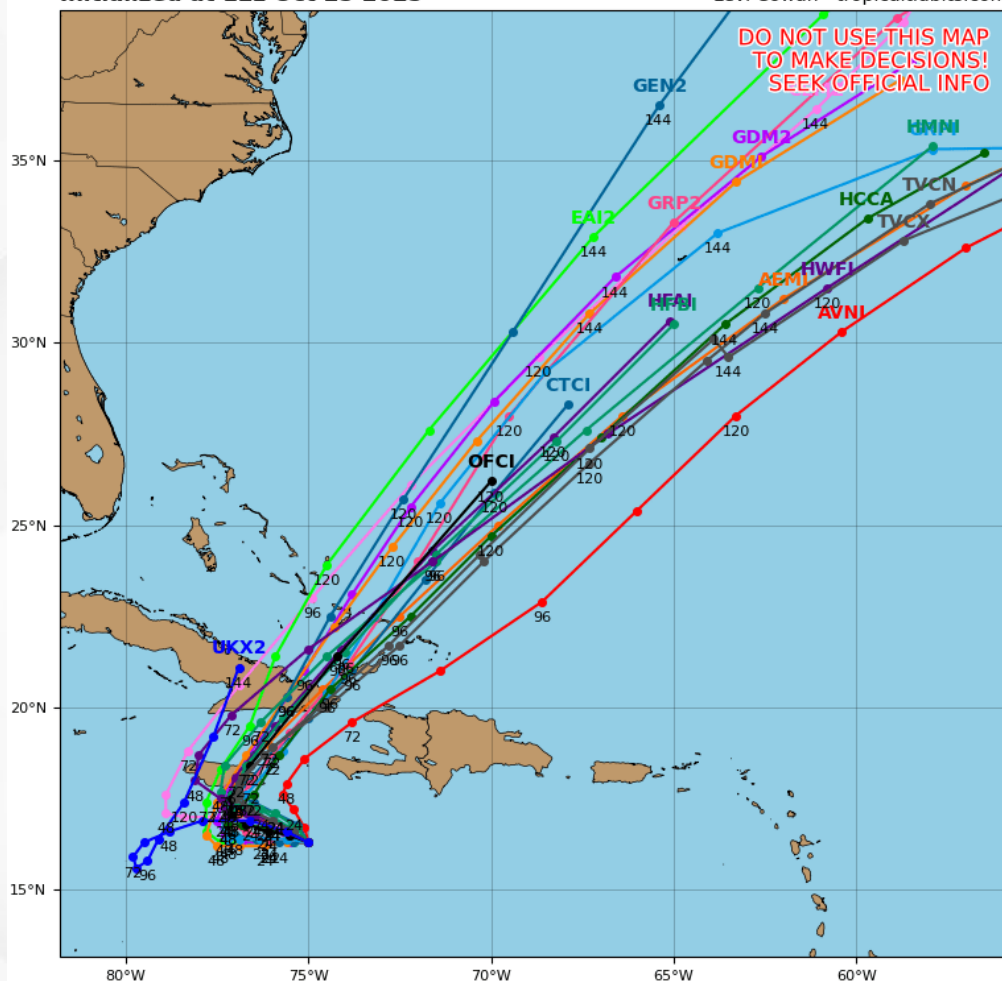
Computer Model Ensembles

Tropical Storm Melissa

Tropical Storm MELISSA Model Track Guidance

Initialized at 12z Oct 25 2025

Levi Cowan - tropicaltidbits.com



Two competing high-pressure systems to the southwest and northeast of Melissa will continue to promote a rather slow and erratic motion over the Caribbean Sea today. Computer forecast models are in good agreement with this before the neighboring high pressure to the north steers Melissa slowly westward through the weekend just south of Jamaica.

Model guidance has come into much better agreement this morning that Melissa will eventually be pulled north and northeastward Days 3 through 5 as a strengthening upper-level disturbance over the eastern U.S. imparts some influence on the larger steering currents surrounding Melissa. The consensus for this turn north has trended quicker, with computer forecast models generally tracking the center of Melissa across central and eastern Jamaica (compared to western Jamaica yesterday). *However, there remains uncertainty in this final solution and the trends in timing of when and how quickly Melissa turns north and then northeast will continue to be closely monitored.* The near-term intensification of Melissa will influence its track this weekend and early next week.

The eventual track beyond Day 4 and 5 for Melissa will be dependent on its near-term organization, as well as the eventual location and timing of the deep upper-level disturbance and frontal system over the Eastern U.S. However, computer forecast models are in agreement that westerly steering flow will keep Melissa well off the coast of the United States tracking Melissa northeastward across eastern Cuba and into the southern Bahamas by the middle part of next week.

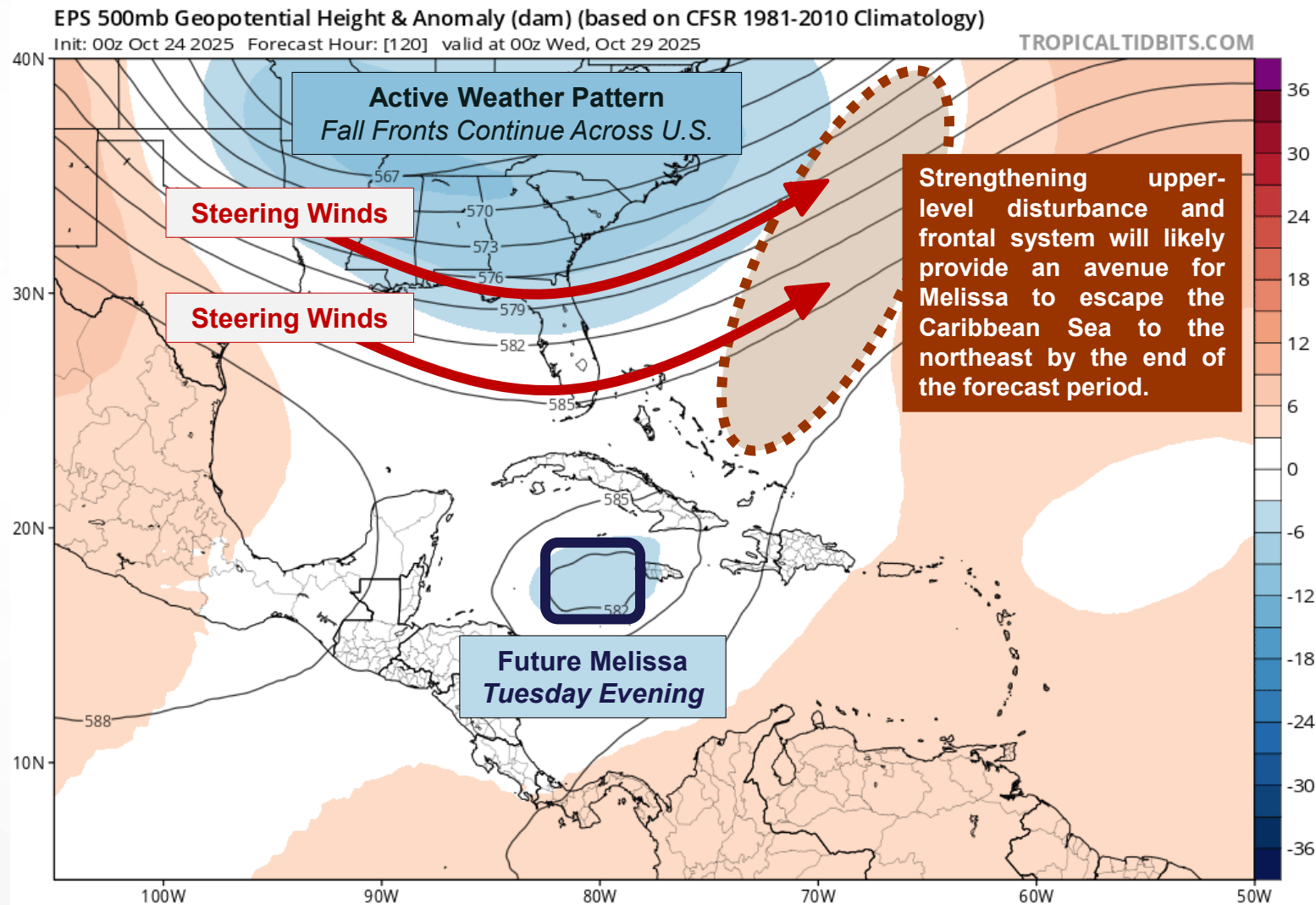


Monitoring the Steering Currents

*** **COMPUTER MODEL DISCUSSION ONLY; NOT A FORECAST** ***

This Weekend: Melissa will continue to drift over the Caribbean Sea, courtesy of collapsed steering winds and competing areas of high-pressure systems. Melissa will be more influenced by the high-pressure system to its north later today and Sunday, which will begin a gradual westward motion.

Early to Middle Next Week: We monitor an upper-level disturbance and frontal system deepening over the eastern U.S. early to middle next week. Steering winds out of the west to southwest will provide (*stronger*) Melissa a lift northeastward out of the Caribbean Sea toward southeastern Cuba, the southeastern Bahamas, and Turks and Caicos mid to late next week.



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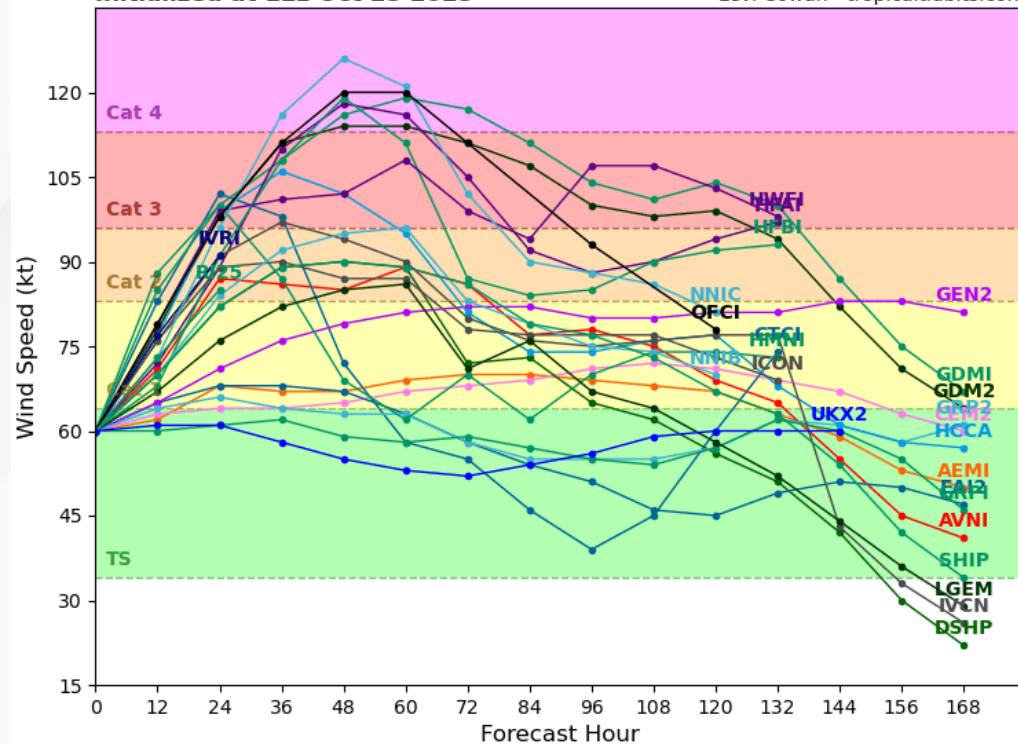
Computer Model Ensembles

Tropical Storm Melissa

Tropical Storm MELISSA Model Intensity Guidance

Initialized at 12z Oct 25 2025

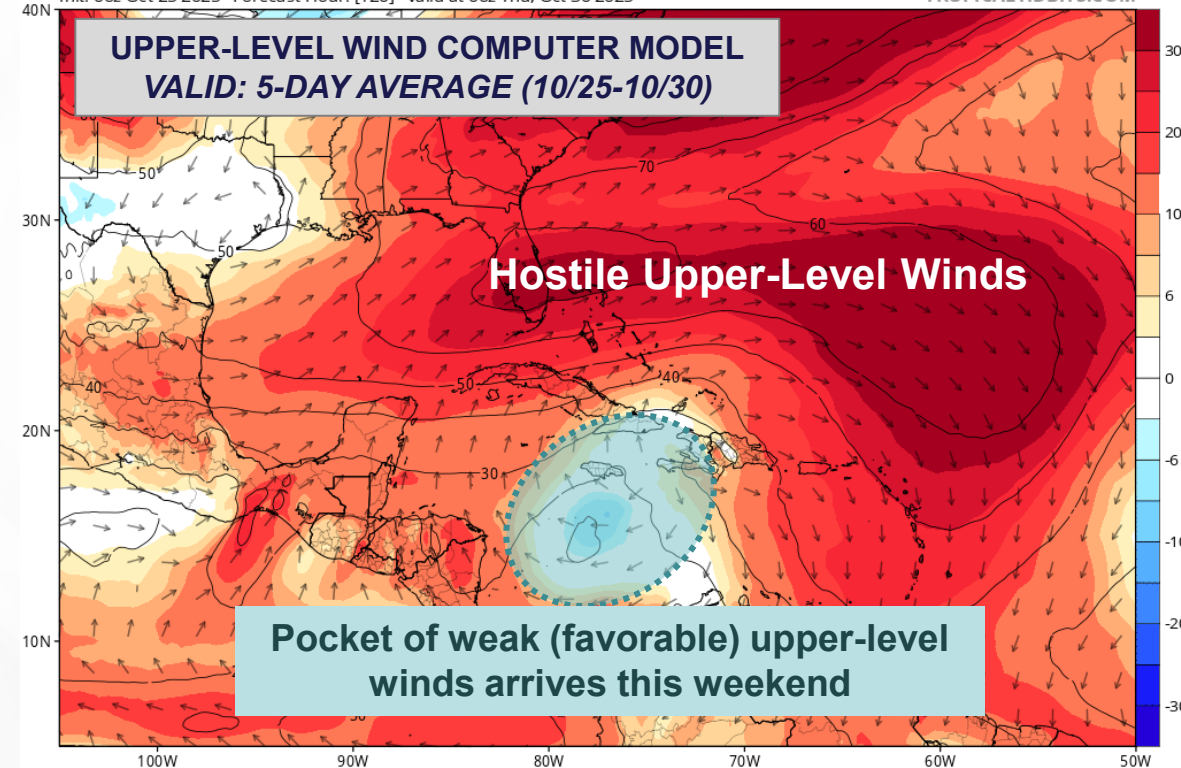
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EPS Mean 850-200 hPa Bulk Shear (kt, contour) & Anomaly (kt, shaded/vector) from 06z25Oct to 06z30Oct (Days 1-5)

Init: 06z Oct 25 2025 Forecast Hour: [120] valid at 06z Thu, Oct 30 2025

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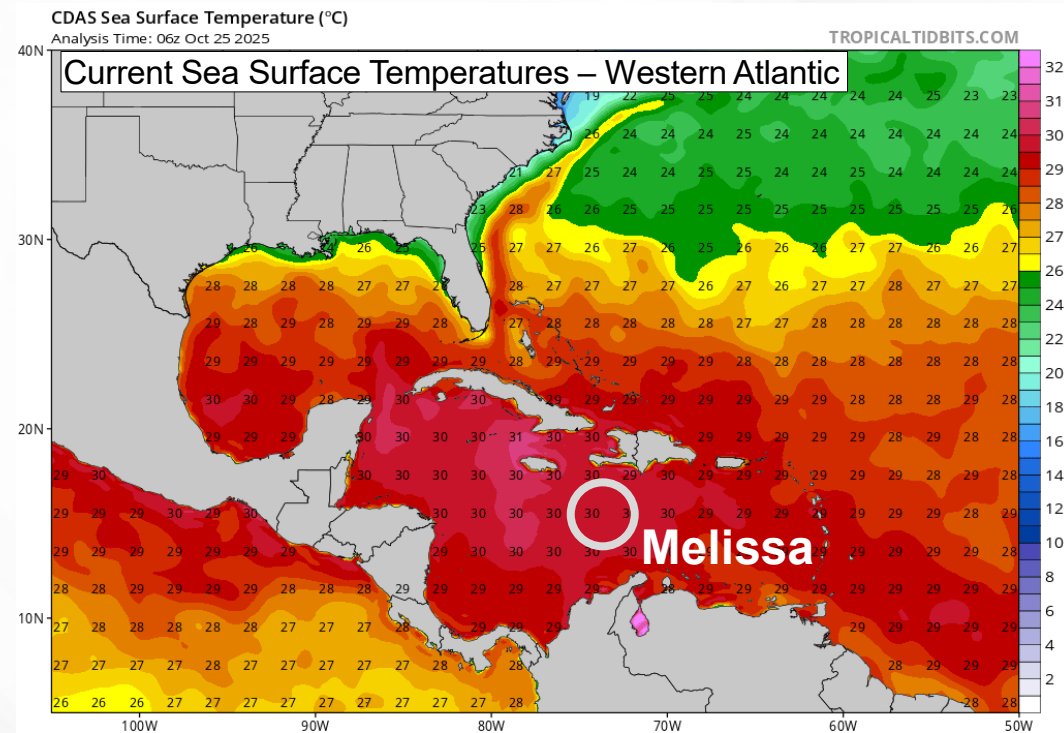
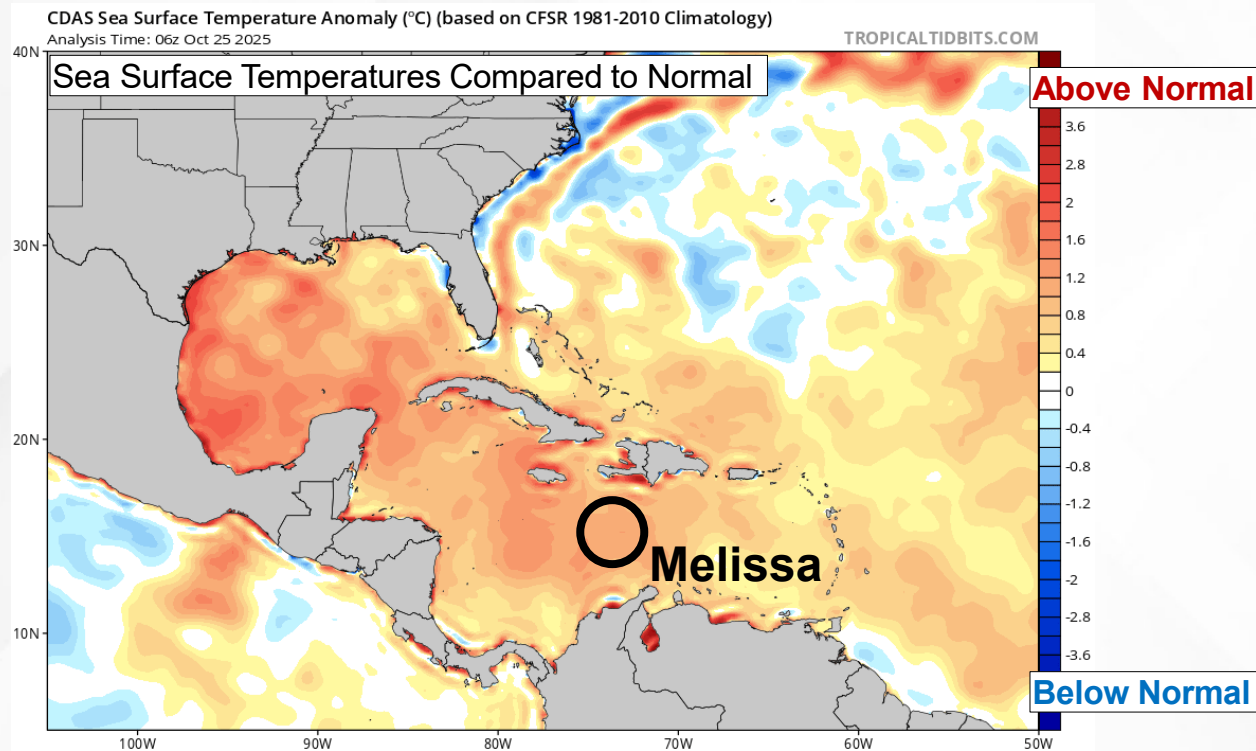


The upper-level winds and wind shear have certainly relaxed since yesterday, as evidence from Melissa's improved structure and organization this morning. As such, the center of circulation is much more vertically organized this morning (lower, middle, and upper-levels of the atmosphere) and it is only a matter of time until Melissa potentially rapidly intensifies later today or tonight. Computer forecast models are in general good agreement that Melissa will significantly intensify in the next 24 to 48 hours, potentially becoming a dangerous major hurricane south of Jamaica. There remains some uncertainty surrounding just how much land interaction Melissa may face once near and over Jamaica, which could limit the extent of strengthening in the near-term and also beyond once Melissa crosses over Jamaica. At this time, computer forecast models agree that Melissa will remain a hurricane as it crosses through eastern Cuba and the Southwest Bahamas during the early to middle part of next week.



Ocean Water Temperatures

Environmental Conditions Favorable for Development?

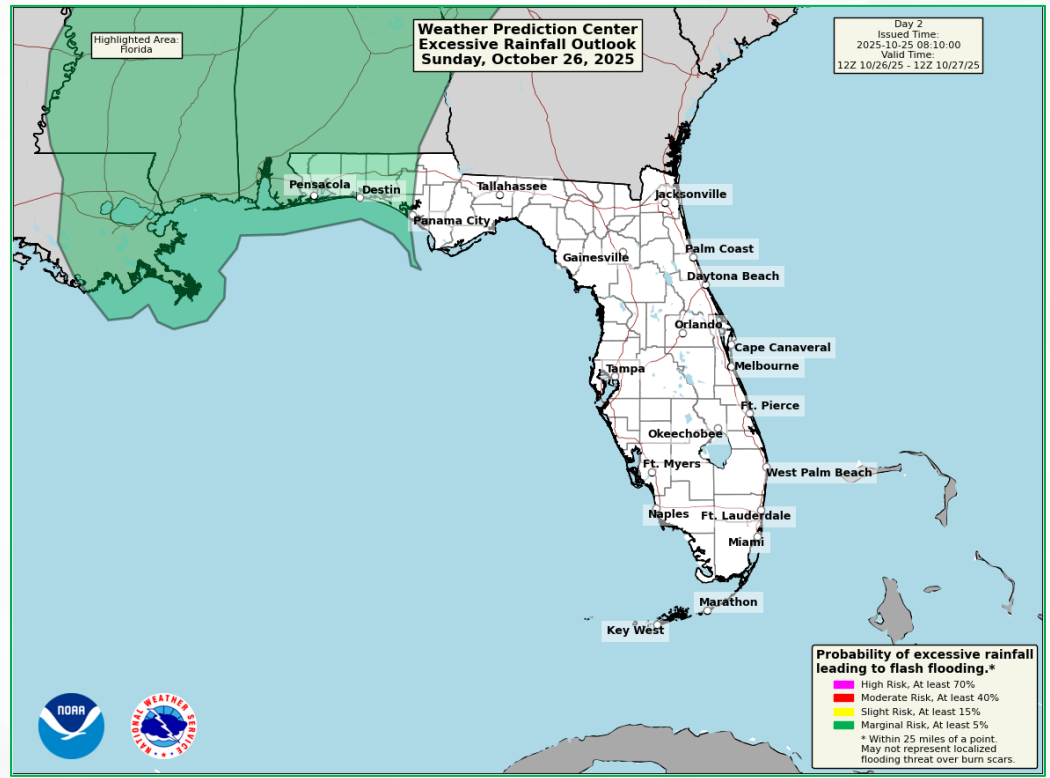
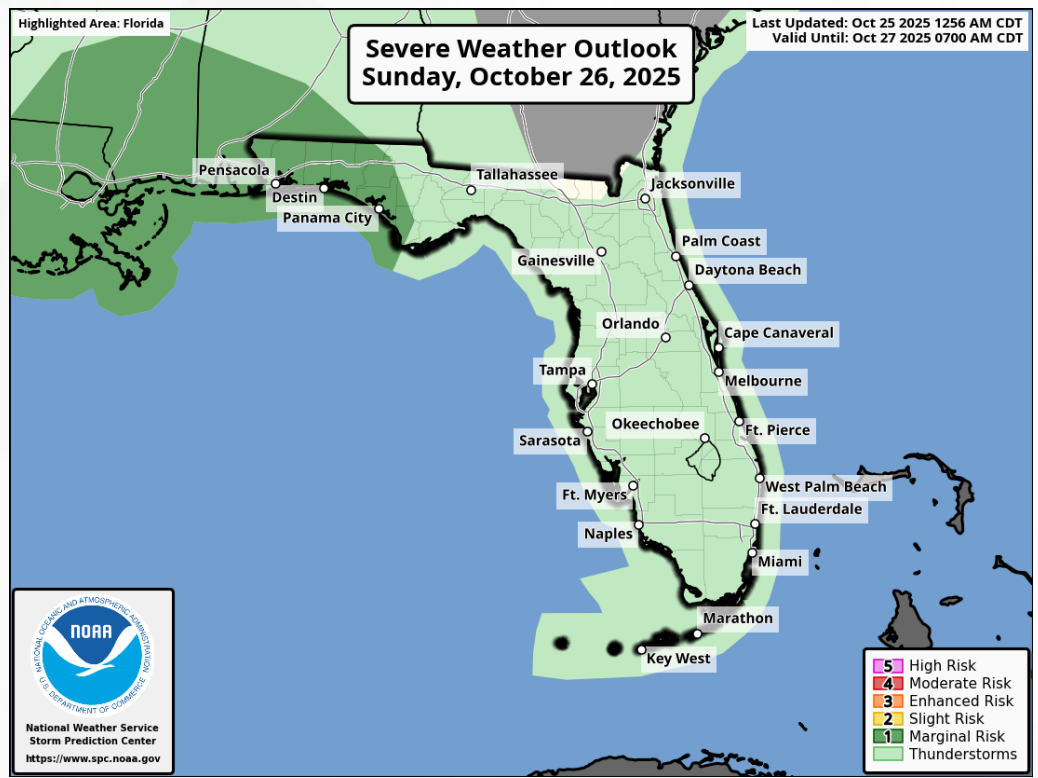


Melissa will traverse the exceptionally warm waters of the Caribbean Sea, where sea surface temperatures (ranging in the mid to upper 80s) are the highest across the Atlantic basin. These temperatures are approximately 1 to 2-degrees above average for this time of year and will significantly influence the system's eventual intensity, depending on how long Melissa remains over the Caribbean waters during the next 3 to 5 days. With easing upper-level winds today and no signs of dry air in the surrounding environment, warm waters (*and at an impressive depth below the surface*) would provide ample fuel for significant to event rapid intensification later today and through this weekend.



Next Cold Front Approaches Florida Panhandle This Weekend

From the Storm Prediction Center (SPC) & Weather Prediction Center (WPC)

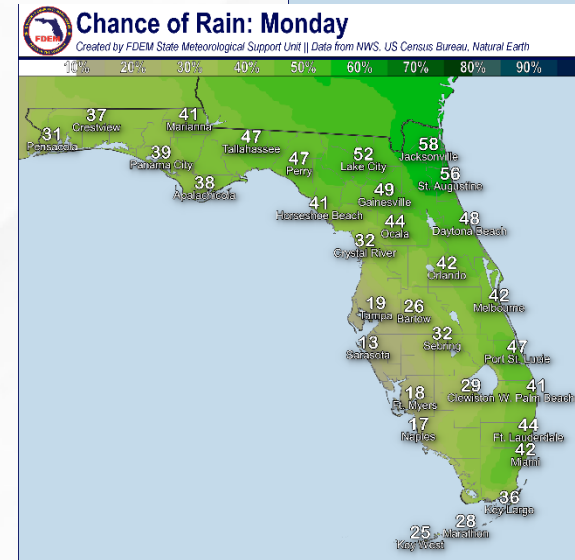
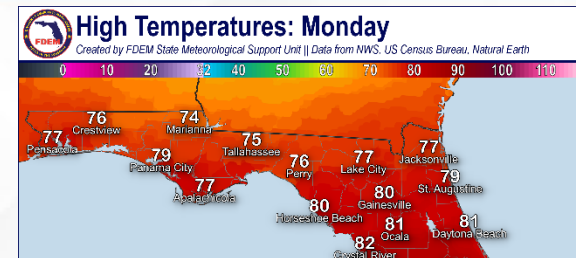
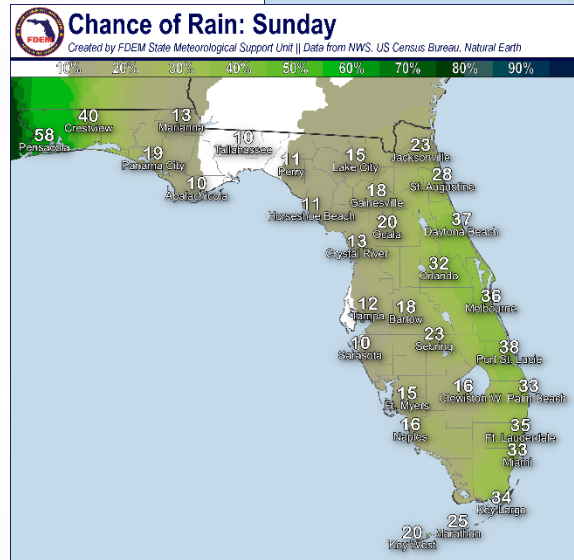
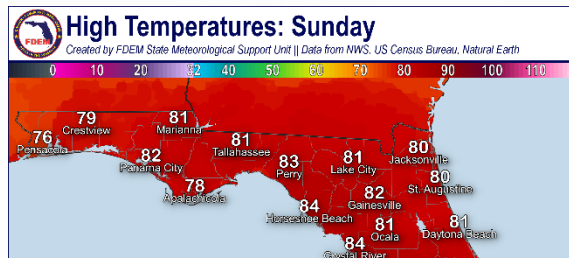
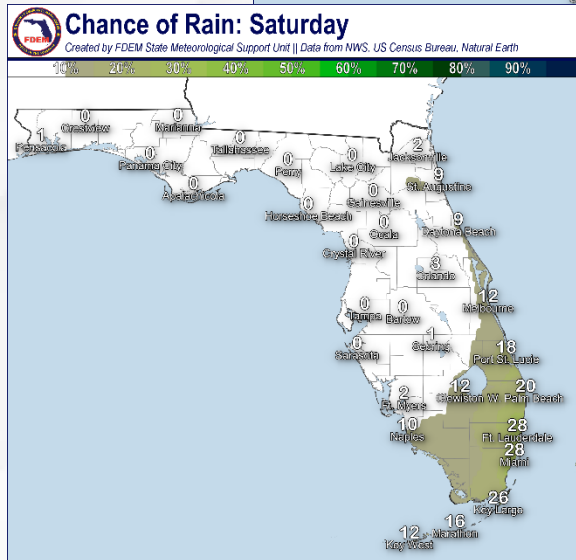
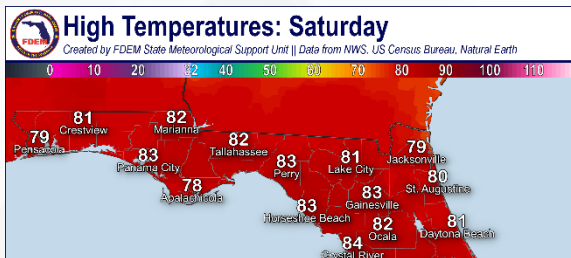


Another frontal system will approach the western Florida Panhandle later this weekend, bringing widely scattered showers and embedded thunderstorms along and ahead of the cold front (30-55% chance of rain). The Storm Prediction Center (SPC) has introduced a **Marginal Risk (level 1 of 5) for Severe Weather** as any more organized thunderstorm activity may produce isolated gusty winds and occasional lightning. While the best ingredients for severe weather with this cold front remain focused over the Southern Plains and Lower Mississippi Valley, a few **strong to locally severe thunderstorms** may redevelop over the adjacent Gulf waters late Sunday into early Monday. There is a **Marginal Risk (level 1 of 4) for Flash Flooding** along the Florida Panhandle, west of the US-231 corridor as locally heavy downpours will be possible; however, rainfall would be a welcomed change to the drought-ridden Florida Panhandle.



High Temperatures & Chances of Rain – Next 3 Days

From the National Weather Service (NWS)



Temperatures will top out this weekend on Saturday across North Florida whereas heat will continue to build across West-Central and Southwest Florida through Monday. Afternoon high temperatures will reach the lower 80s across North Florida on Saturday and Sunday as sunshine prevails, before cloudy and rainy conditions bring cooler highs in the middle 70s on Monday. Highs will top out in the middle to upper 80s, with some localized lower 90s, throughout the southern Florida Peninsula through Monday. **Heat index values** may reach the middle 90s across West-Central and South Florida on Sunday and Monday. Chances of rain will increase each day with breezy onshore winds bringing isolated showers to the East Coast on Sunday (25-40% chance of rain). The next frontal system will bring scattered showers and embedded thunderstorms to North Florida Sunday night, spreading across the rest of the Peninsula on Monday (35-55% chance of rain).



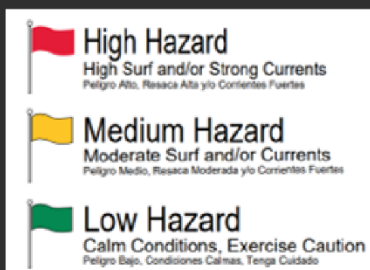
Dangerous Beach & Marine Conditions

From the National Weather Service (NWS)



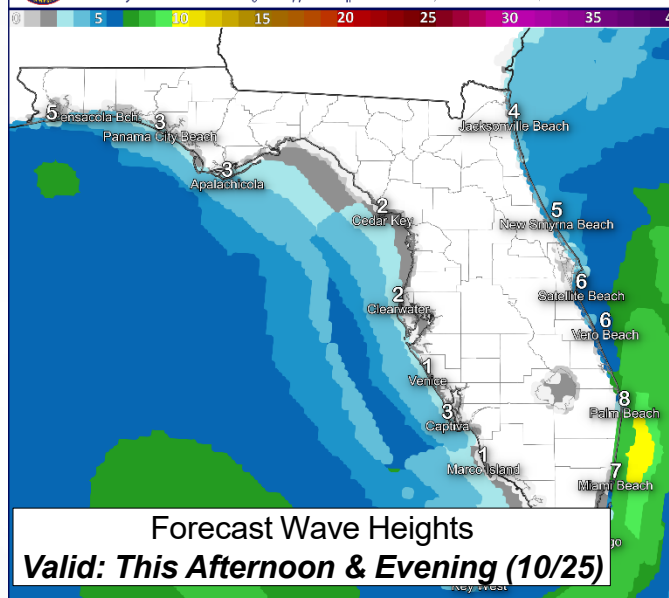
Rip Current Risk: Saturday

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



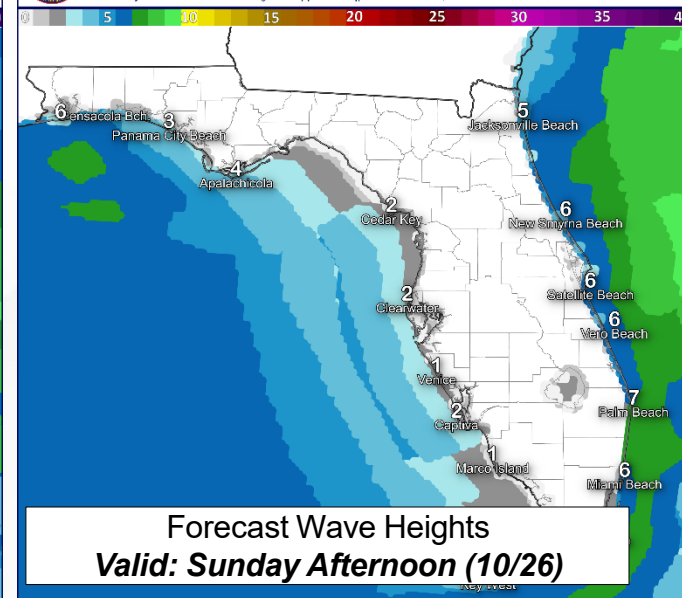
Wave Heights: Saturday Afternoon

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



Wave Heights: Sunday Afternoon

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



- Breezy winds channeled between high pressure across the Southeast U.S. and Tropical Storm Melissa in the Caribbean will continue to build an ocean swell off the Florida East Coast this weekend.
- High Surf Advisories** are in effect through late Sunday across the Space, Treasure, and Gold Coasts for **elevated surf of 6-8'**, with a few waves in the surf zone **upwards of 10'** across Southeast Florida beaches.
- A **high risk for rip currents** can be expected for all East Coast beaches, as well as Panhandle beaches, this weekend as breezy onshore winds and elevated surf bring dangerous swimming conditions.



Summary

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Tropical Storm Melissa:

- As of 11:00 AM EDT, Tropical Storm Melissa is located about 155 miles southeast of Kingston, Jamaica, and is drifting west-northwestward at 1 mph.
- A slow west-northwestward or westward motion is expected today through Sunday night. A turn to the north and northeast is forecast on Monday and Tuesday. On the forecast track, the center of Melissa is expected to move near or over Jamaica during the weekend and early next week.
- Maximum sustained winds are near 70 mph with higher gusts.
- Rapid intensification is forecast to occur over the next 24 hours. Melissa is forecast to become a hurricane later today and a major hurricane by Sunday.
- ***Melissa poses no direct threat to Florida during the next 5-7 days; however, this system continues to be closely monitored as it meanders over the Caribbean Sea.***

Florida Outlook:

- Temperatures will top out this weekend on Saturday across North Florida whereas heat will continue to build across West-Central and Southwest Florida through Monday.
 - Afternoon high temperatures will reach the lower 80s across North Florida on Saturday and Sunday as sunshine prevails, before cloudy and rainy conditions bring cooler highs in the middle 70s on Monday.
 - Highs will top out in the middle to upper 80s, with some localized lower 90s, throughout the southern Florida Peninsula through Monday. Heat index values may reach the middle 90s across West-Central and South Florida on Sunday and Monday.
- Chances of rain will increase each day along the Florida East Coast with breezy onshore winds and enough low-level moisture bringing isolated showers on Sunday (25-35% chance of rain) and widely scattered showers and embedded thunderstorms on Monday (45-55% chance of rain).
- The next frontal system will bring widely scattered showers and embedded thunderstorms to the western Panhandle late in the afternoon on Sunday, spreading across the rest of the Panhandle and North Florida Sunday night and Monday (35-55% chance of rain).
- The Storm Prediction Center (SPC) has introduced a Marginal Risk (level 1 of 5) for Severe Weather Sunday evening and night over the far western Florida Panhandle as any more organized thunderstorm activity may produce isolated gusty winds and occasional lightning.
 - While the best ingredients for severe weather with this cold front remain focused over the Southern Plains and Lower Mississippi Valley, a few strong to locally severe thunderstorms may redevelop over the adjacent Gulf waters late Sunday into early Monday.
- There is a Marginal Risk (level 1 of 4) for Flash Flooding along the Florida Panhandle, west of the US-231 corridor as locally heavy downpours will be possible; however, rainfall would be a welcomed change to the drought-ridden Florida Panhandle.
- A high risk for rip currents is expected for all East Coast and Panhandle beaches this weekend as ocean swells build across the Gulf and off the Florida East Coast.
- High Surf Advisories are in effect for much of the East Coast through late on Sunday for surf of 6-8', with a few waves upwards of 10' in the surf zone possible across Southeast Florida beaches.
- The next name on the list is **Nestor** (NES-tor).

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



Tropical Update

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Florida Division of Emergency Management

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