



Tropical Update



5:00 AM EST

Thursday, November 10, 2022

Tropical Storm Nicole

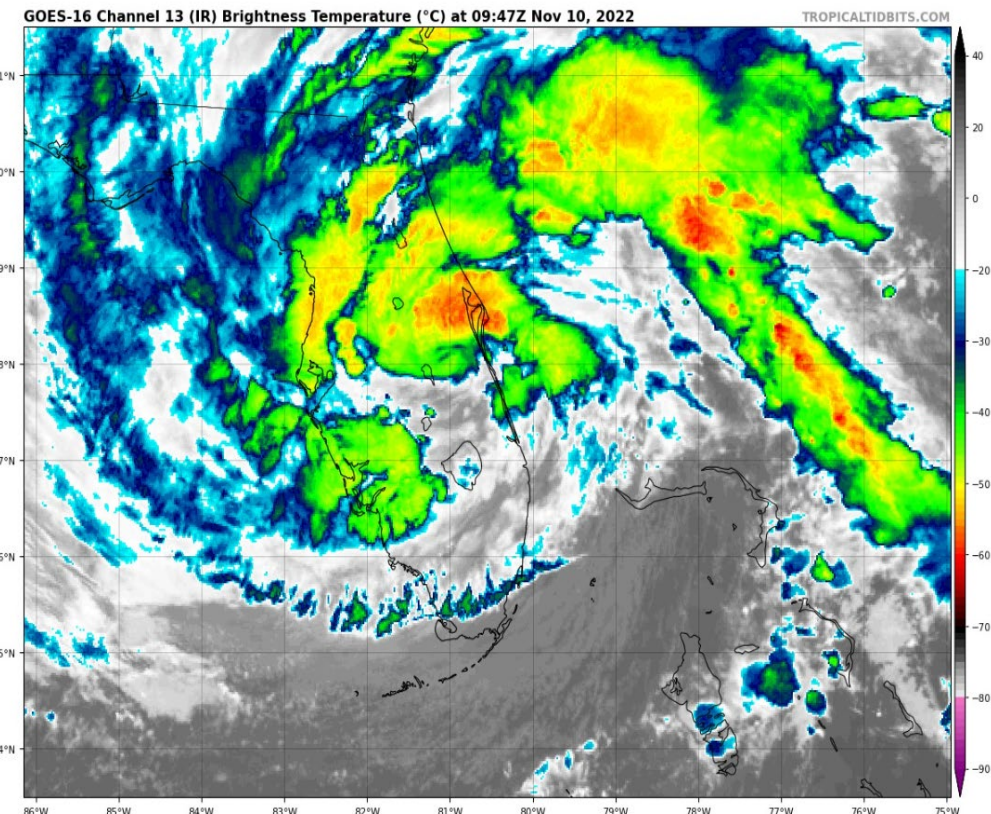
This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an 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 Nicole

5 AM EST Wednesday: Florida Threats & Changes Since Last Packet

	MINIMAL	Low	MODERATE	HIGH	EXTREME
 WINDS					
 STORM SURGE					
 FLASH FLOODING					
 TORNADOES					
	Low	MODERATE	HIGH		
 RIP CURRENTS					

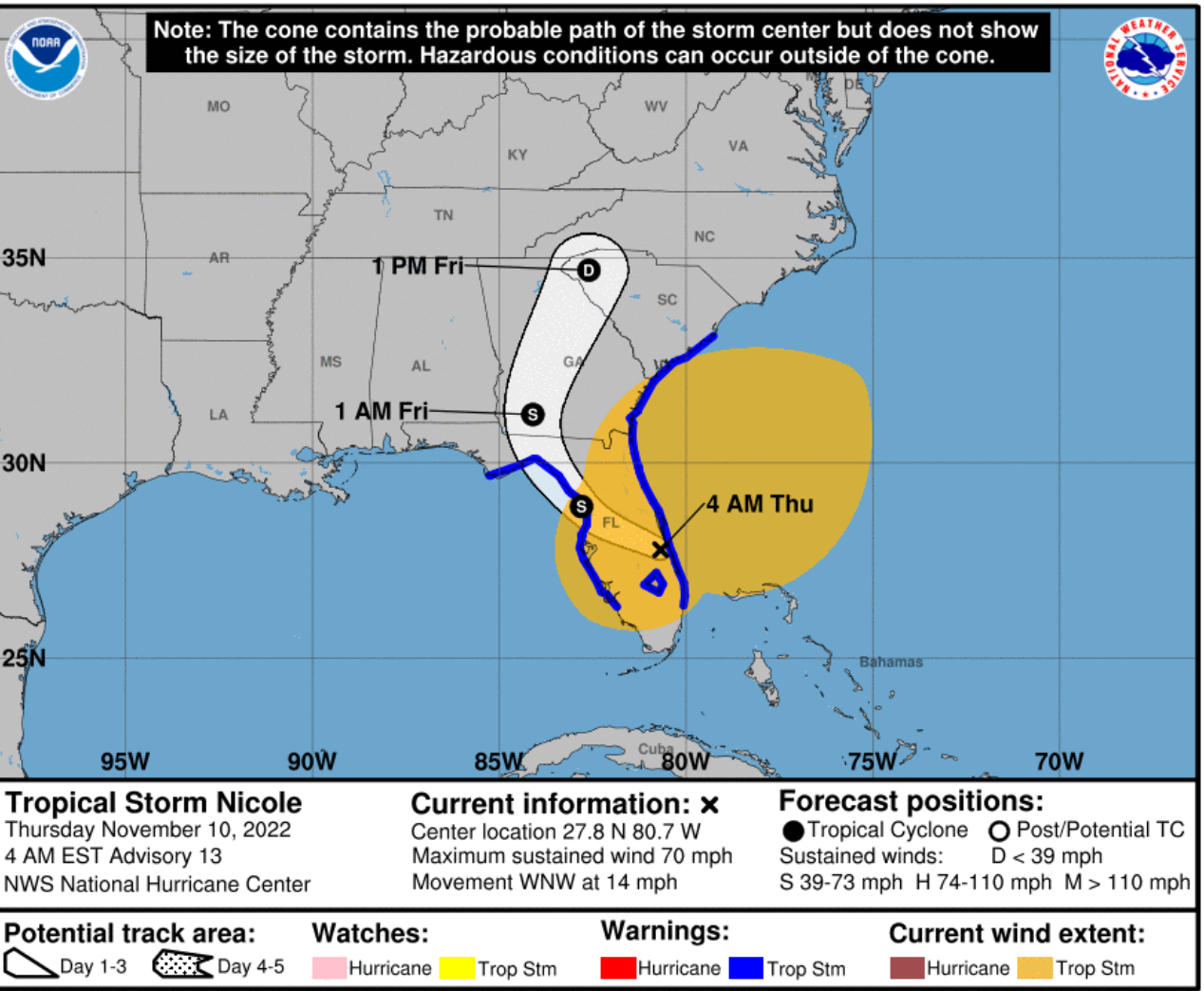


Overview/Recent Changes: Nicole made landfall on North Hutchinson Island, just south of Vero Beach, at 3:00 AM EST as a Category 1 hurricane with maximum sustained winds of 75 mph. With the 4:00 AM EST Advisory, Nicole has weakened to a strong tropical storm, with maximum sustained winds of 70 mph; however, strong winds, dangerous storm surge, and heavy rains continue over a very large area. The Hurricane Warning from Boca Raton to the Flagler/Volusia County line has been changed to a Tropical Storm Warning, and the Tropical Storm Warning south of Boca Raton has been discontinued. The Storm Surge Warning from North Palm Beach to Jupiter Inlet has been discontinued, and the Storm Surge Watch south of North Palm Beach has been discontinued. Coastal flood impacts from Nicole will continue along the East Coast as tropical storm conditions expand westward. There is a risk of dangerous storm surge, significant coastal erosion, damaging winds, and flooding with this system. As Nicole's outer rain bands continue to push over the East Coast of Florida and Northeast Florida today, isolated tornadoes will be possible within the more organized bands of shower and thunderstorm activity across Northeast Florida.



Forecast Cone

Tropical Storm Nicole



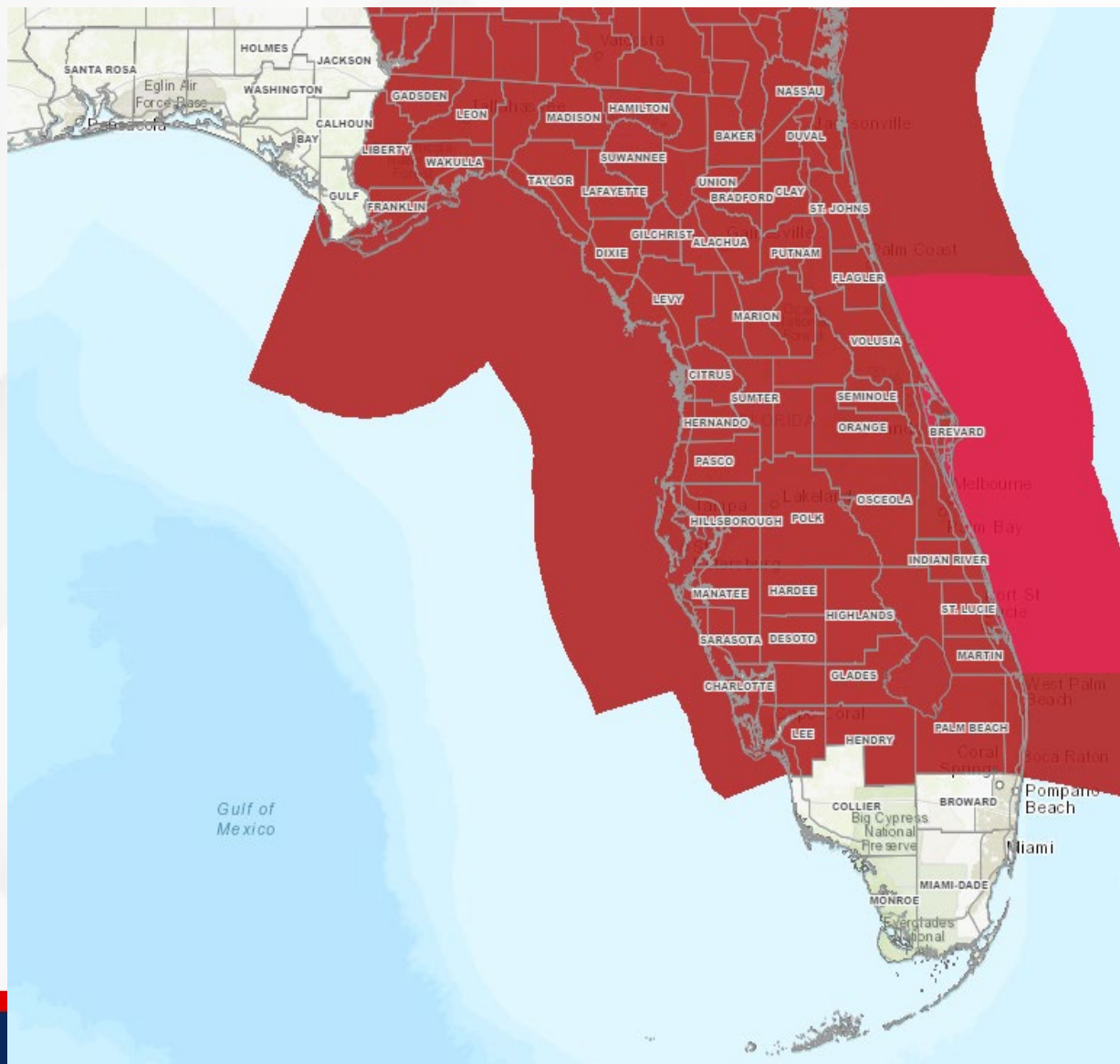
Location: 25 miles northwest of Vero Beach, Florida
Maximum Winds: 70 mph
Movement: WNW at 14 mph

A turn toward the northwest and north-northwest is expected later today and tonight, followed by an acceleration toward the north and northeast on Friday. On the forecast track, the center of Nicole will move across Central Florida this morning, possibly emerge over the far northeastern Gulf of Mexico this afternoon, and then move across the Florida Panhandle and Georgia tonight. While maximum sustained winds have decreased and the system has been downgraded to a tropical storm, **Nicole remains a large tropical storm.** Tropical storm-force winds extend outward up to 450 miles from the center, especially to the north. Additional weakening is forecast while Nicole moves over land during the next day or two, and the storm is likely to become a tropical depression over Georgia tonight or early Friday. Nicole is expected to merge with a frontal boundary over the Mid-Atlantic by Friday night.



Active Tropical Watches/Warnings

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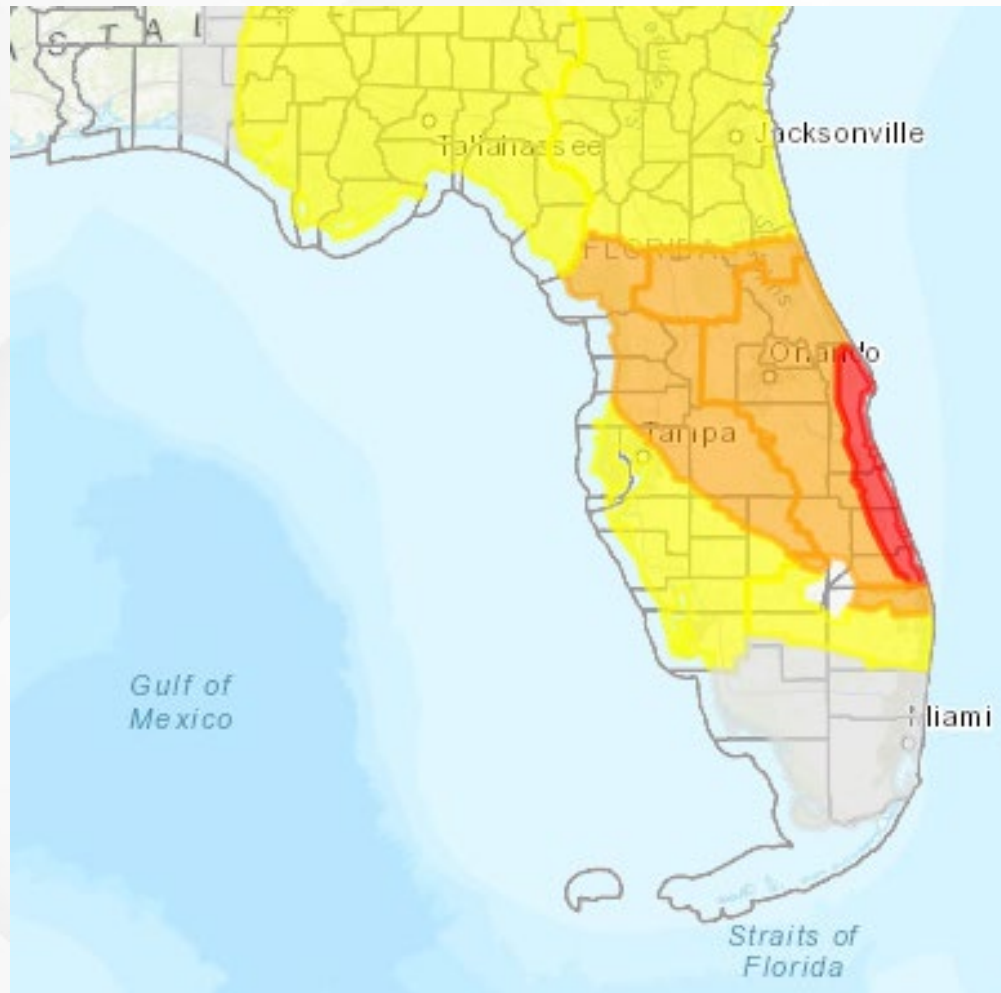
- **Tropical Storm Warning**

- Counties: Gadsden, Liberty, Franklin, Leon, Wakulla, Taylor, Madison, Lafayette, Hamilton, Suwannee, Columbia, Union, Baker, Dixie, Gilchrist, Levy, Alachua, Bradford, Clay, Putnam, Nassau, Duval, St. Johns, Flagler, Marion, Volusia, Brevard, Indian River, St. Lucie, Martin, Lake, Sumter, Citrus, Hernando, Pasco, Polk, Hillsborough, Pinellas, Manatee, Sarasota, Charlotte, Lee, Hendry, Glades, Highlands, Hardee, Desoto, Broward, inland Palm Beach, Okeechobee, Osceola, Orange, and Seminole



Damaging Wind Threat Overview

Tropical Storm Nicole



The greatest damaging wind threat will continue along the Space and Treasure Coasts through the morning, with the overall wind threat expanding northwest toward the Nature Coast and Big Bend through the afternoon hours.

<https://www.weather.gov/srh/tropical?office=mfl>

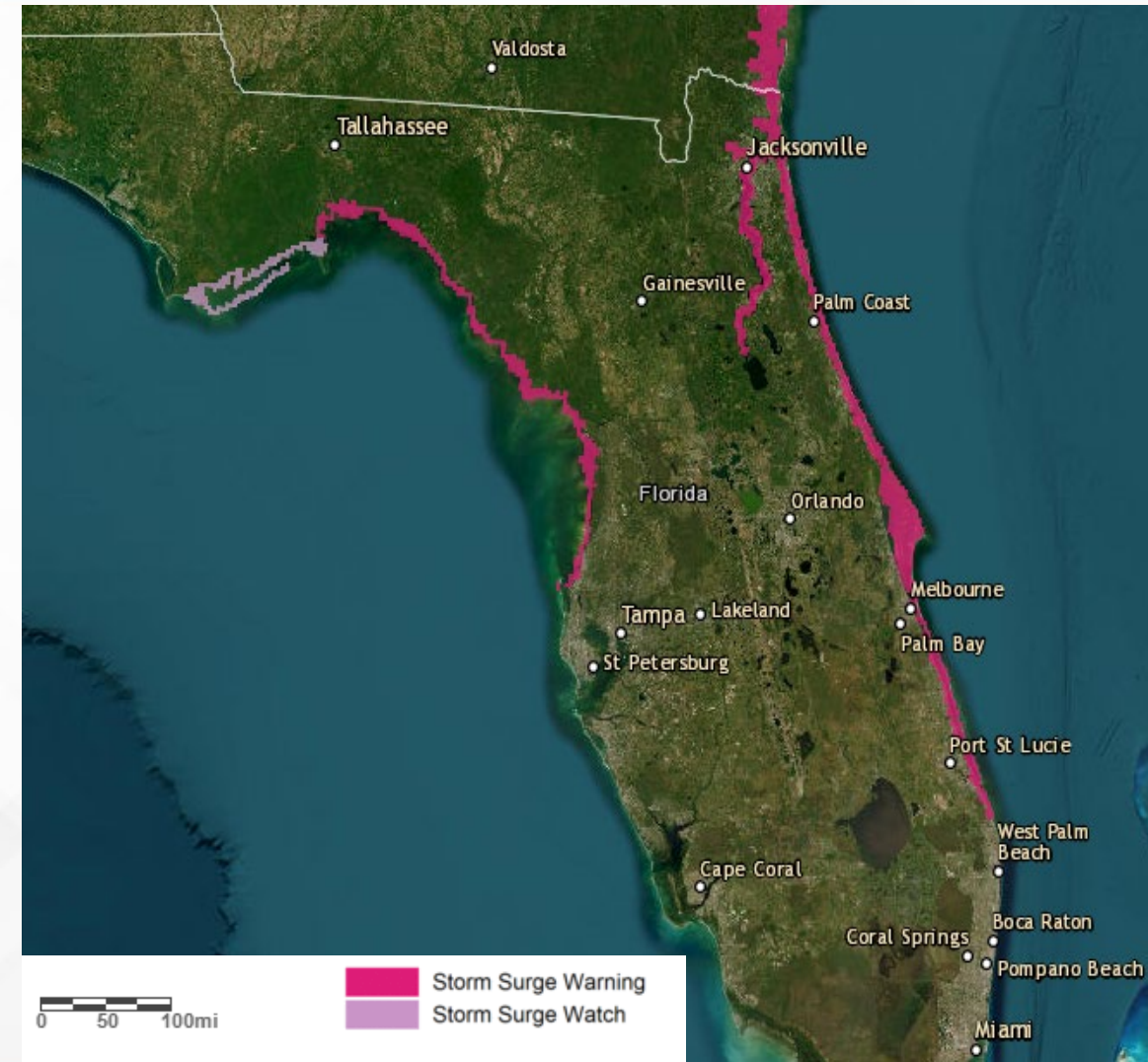
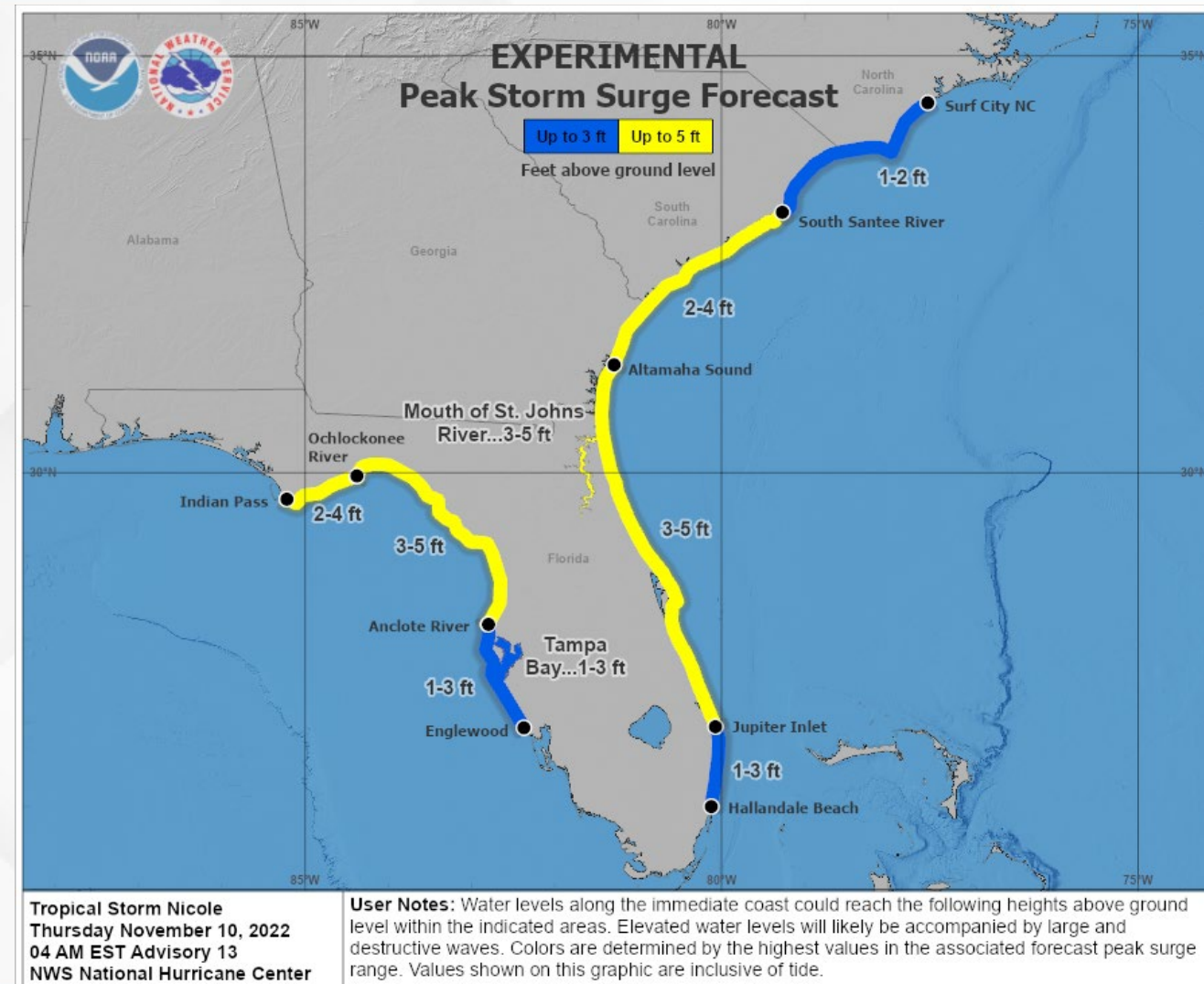
Click on “Threats and Impacts” Tab

Wind Threat
Potential for wind greater than 110 mph
Potential for wind 74 to 110 mph
Potential for wind 58 to 73 mph
Potential for wind 39 to 57 mph
Wind less than 39 mph



Surge Watches and Warnings

In Effect Until Further Notice

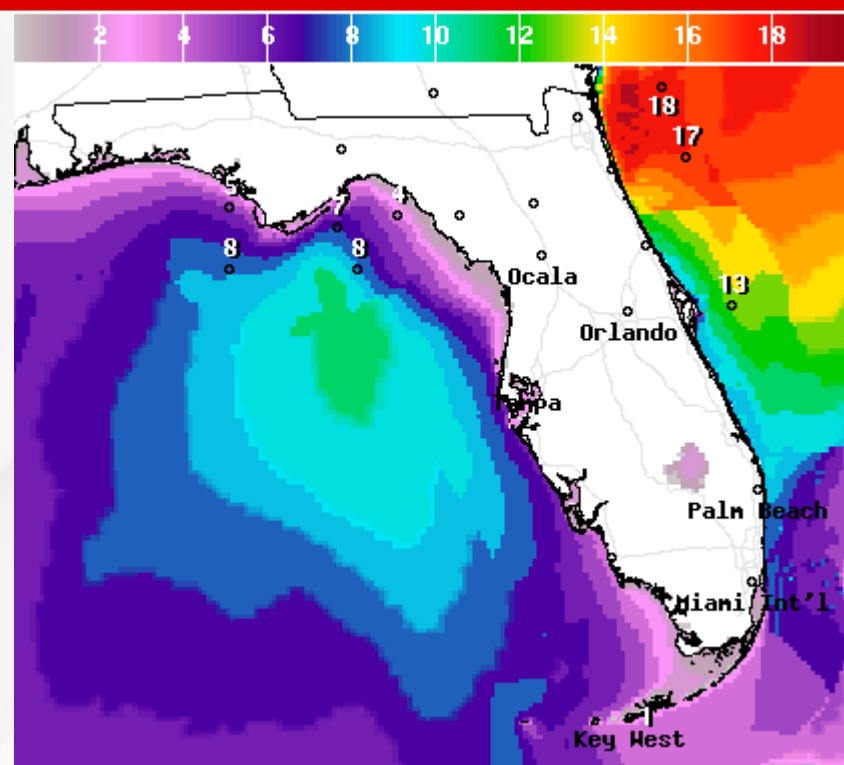


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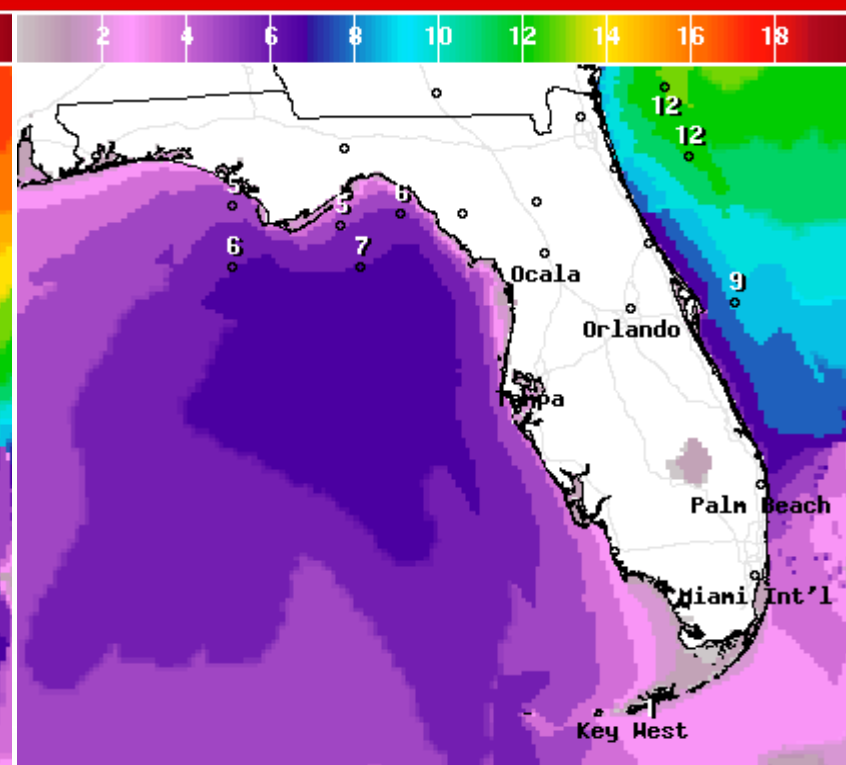


Wave Heights & Ocean Swells

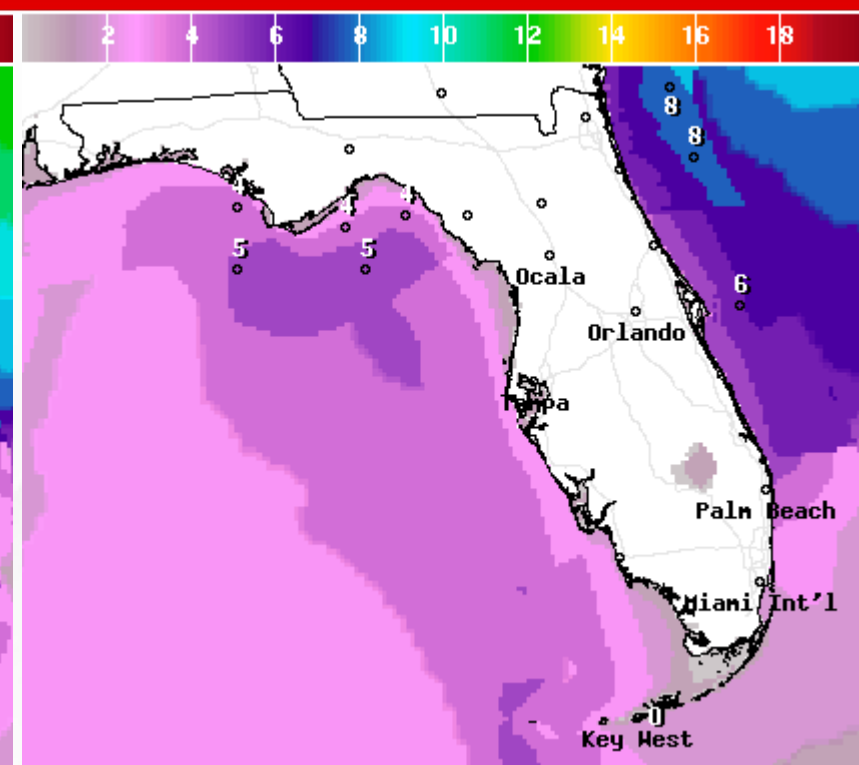
Thursday, Thursday Night, & Friday



Thursday



Thursday Night



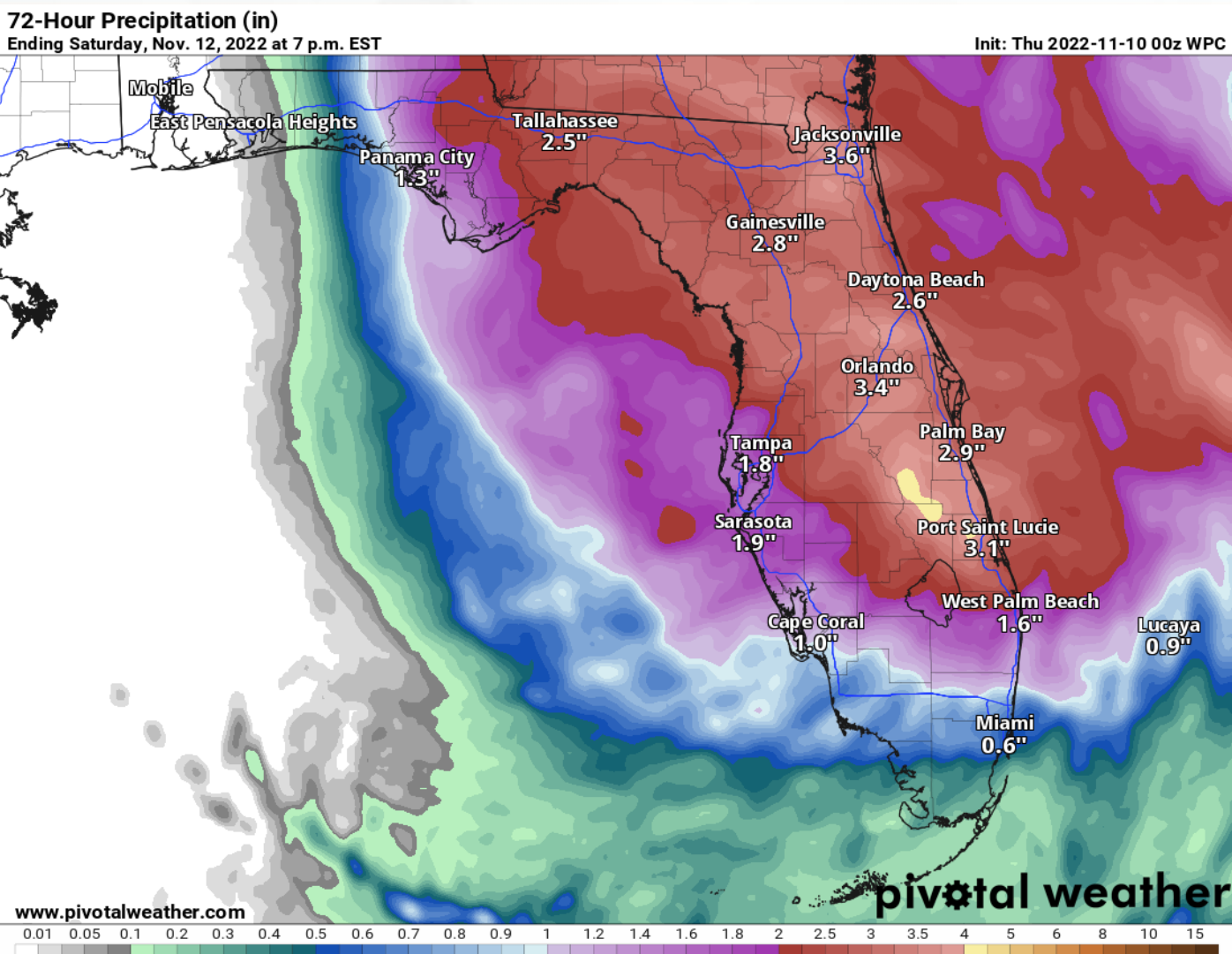
Friday

Lingering high surf of 8-16' can be expected to continue along portions of the East Coast today, which may result in continued moderate to severe coastal erosion at times of high tide. Wave heights will also increase along portions of the Florida Gulf Coast today, leading to minor to potentially moderate erosion during high tide. Wave heights should begin to subside on Friday.



3-Day Forecast Rainfall

From the Weather Prediction Center



Widespread additional rainfall totals of 3-5" are possible along portions of the East Coast and Peninsula through the next 48-72 hours. Rainfall totals of 2-4" are expected across the remainder of the Peninsula.

Isolated higher totals of 6-8" cannot be ruled out over portions of the Peninsula.

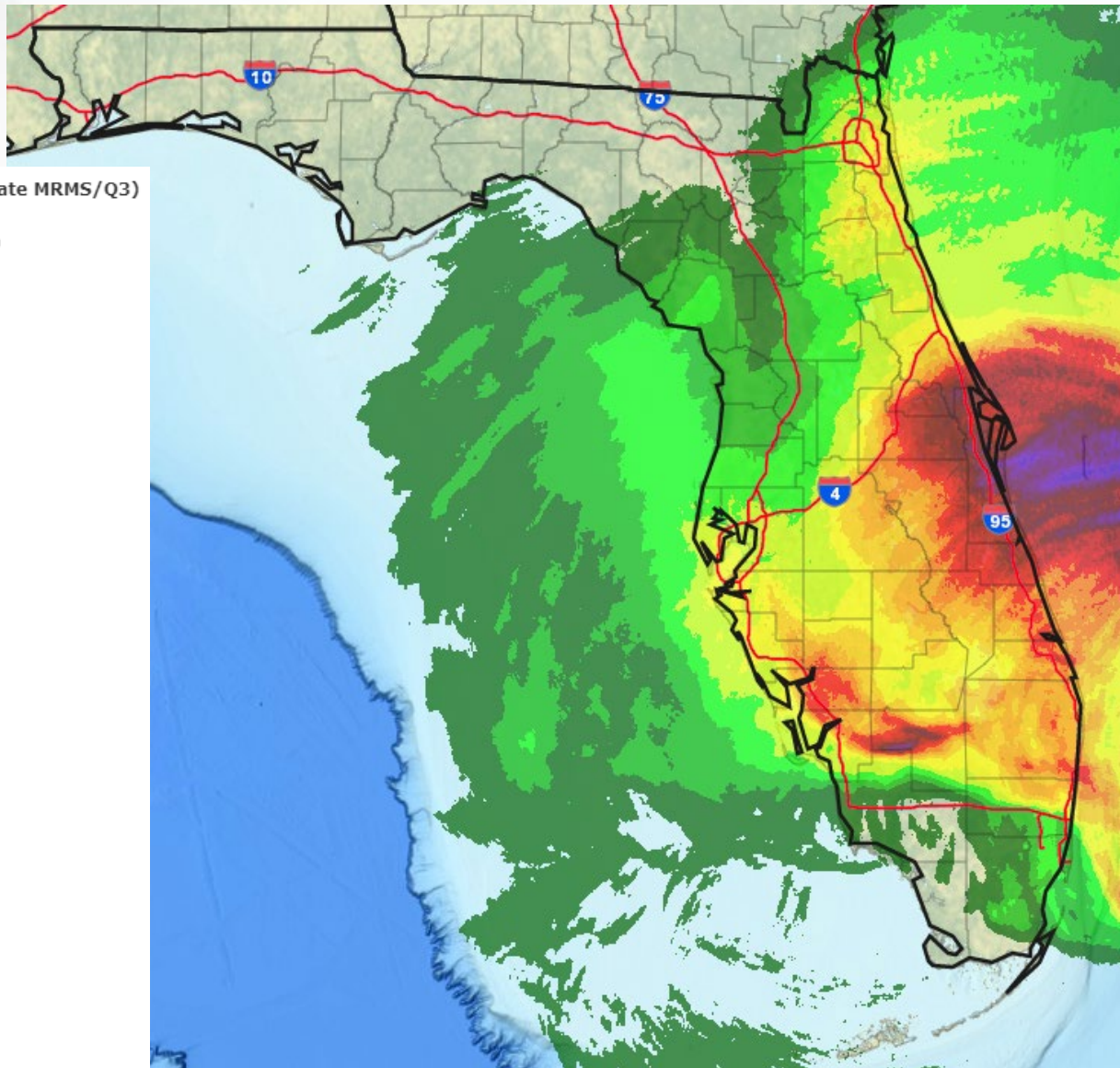
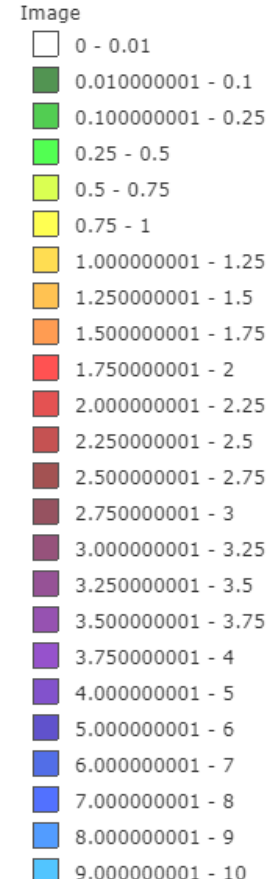


Estimated Observed Rainfall

Past 12 Hours

Radar Estimated Rainfall - Hourly (Frequent Update MRMS/Q3)

12-Hr Quantitative Precipitation Accumulation (inches)



- Widespread rainfall totals of 1-1.5" have been observed over along the East Coast and across the Peninsula over the past 12 hours.
- Higher rainfall totals of 2-3" have been observed over portions of the Peninsula, mainly south of the I-4 corridor.
- The greatest rainfall totals of 2-4" have been observed near and along the I-95 corridor in East-Central Florida.



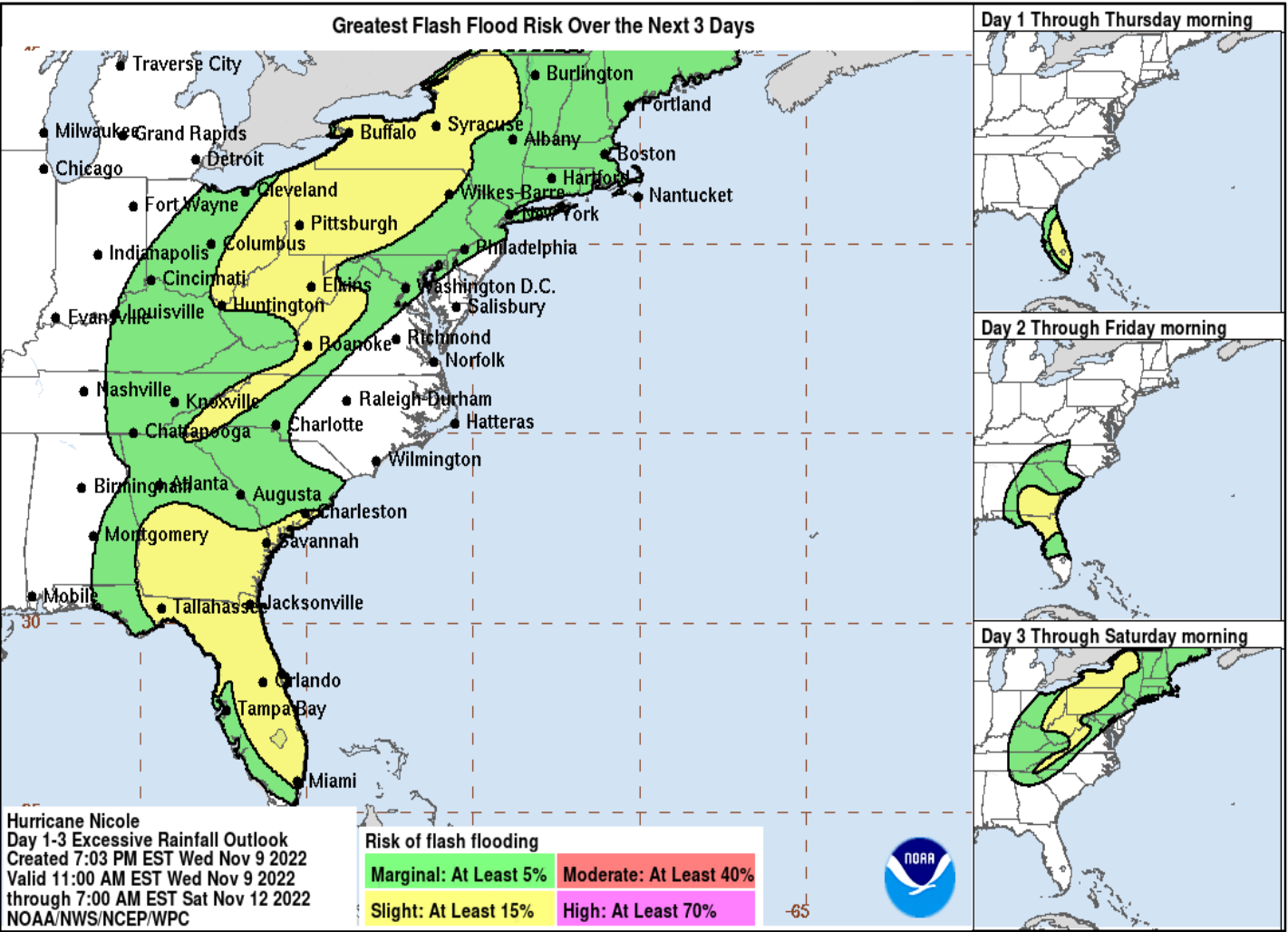
Flash Flood Outlooks

From the Weather Prediction Center

Understanding WPC Excessive Rainfall Risk Categories

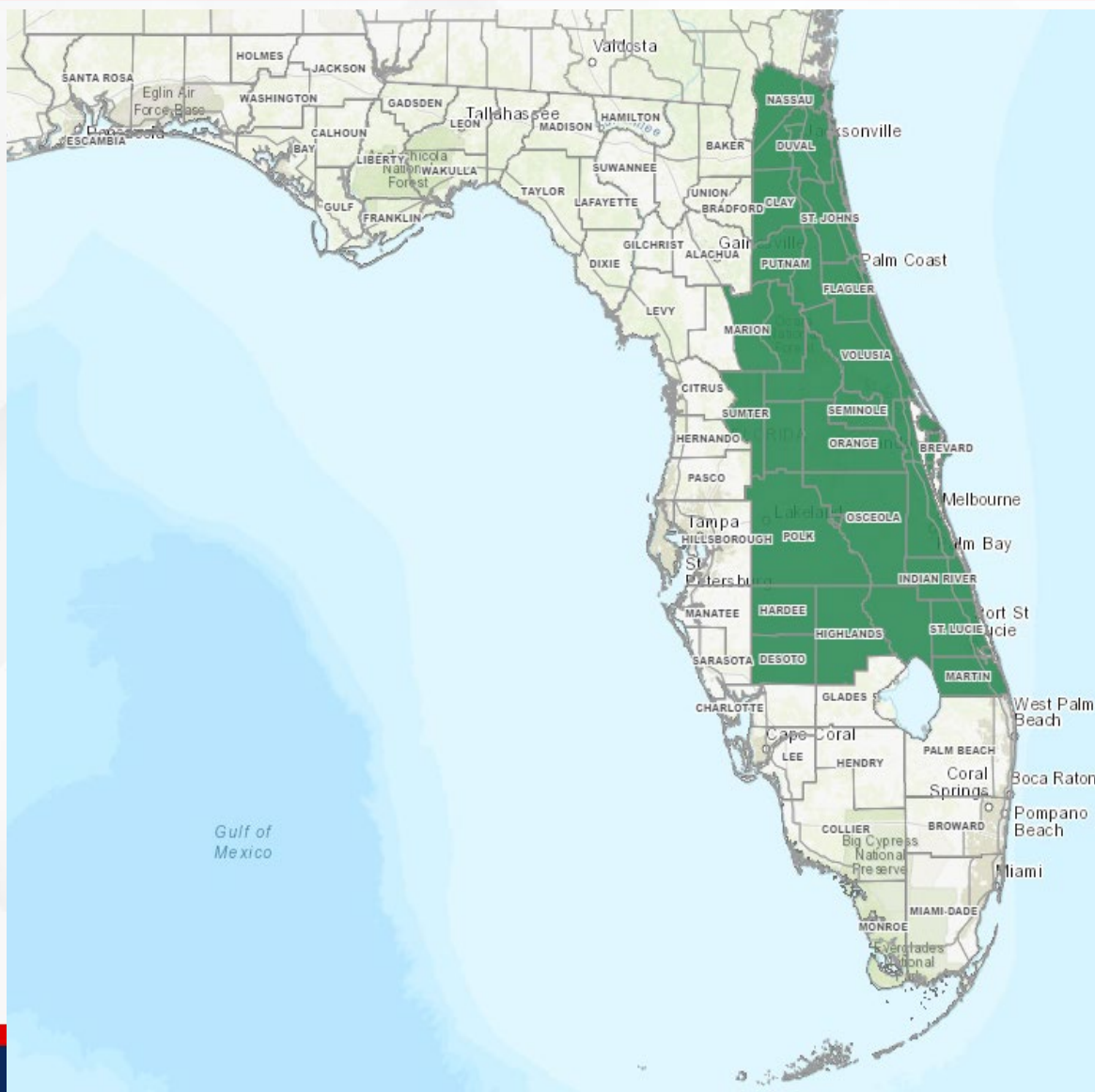
No Area/Label	MARGINAL (MRGL)	SLIGHT (SLGT)	MODERATE (MDT)	HIGH (HIGH)
Flash floods are generally not expected.	Isolated flash floods possible	Scattered flash floods possible	Numerous flash floods likely	Widespread flash floods expected
	Localized and primarily affecting places that can experience rapid runoff with heavy rainfall.	Mainly localized. Most vulnerable are urban areas, roads, small streams and washes. Isolated significant flash floods possible.	Numerous flash flooding events with significant events possible. Many streams may flood, potentially affecting larger rivers.	Severe, widespread flash flooding. Areas that don't normally experience flash flooding, could. Lives and property in greater danger.
@NWSWPC				
Flash flooding near me?	Flash Flooding	Flash Flooding	Flash Flooding	Flash Flooding
	NO Flash Flooding			
WEATHER PREDICTION CENTER				

Forecast rain amounts could lead to a slight chance of flash flooding (level 2 of 4) across the eastern Panhandle, the Big Bend, and Northeast Florida today. Additional rainfall over portions of the East Coast may lead to a quicker onset of flooding as some locations received heavy rainfall totals over the past 12 hours.





Flood Watches in Effect

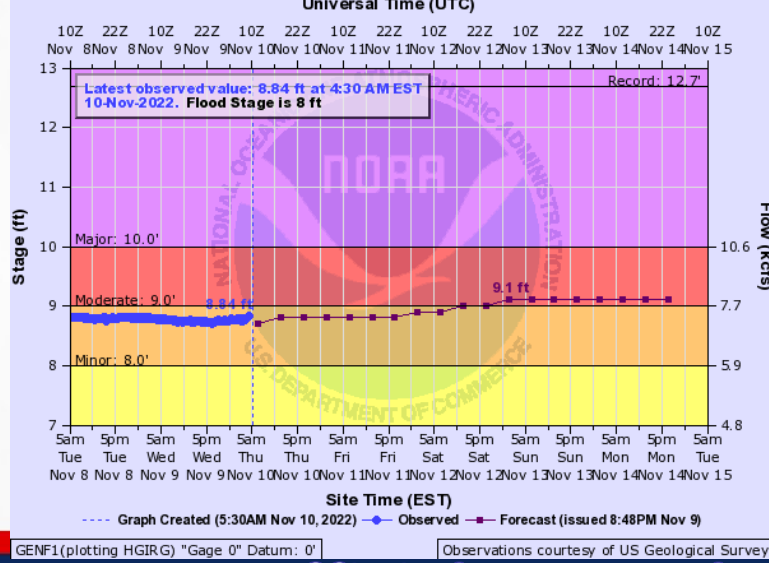
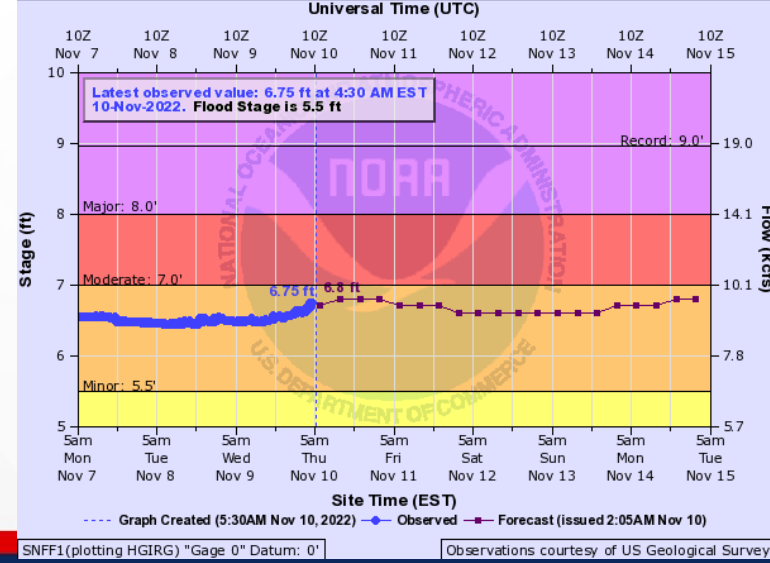
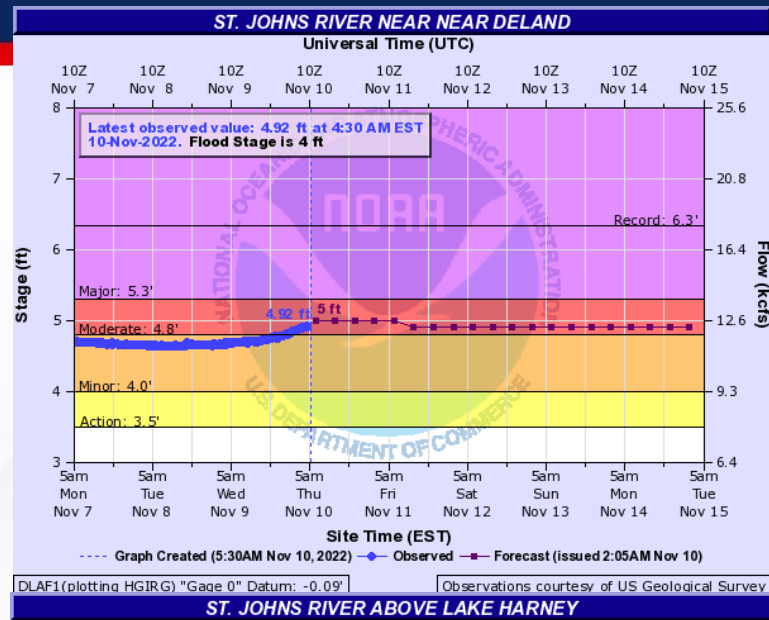
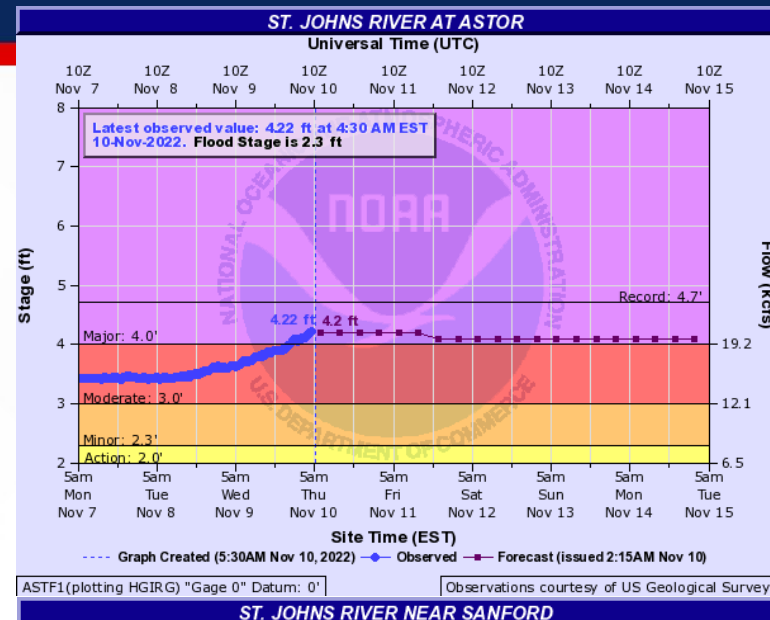
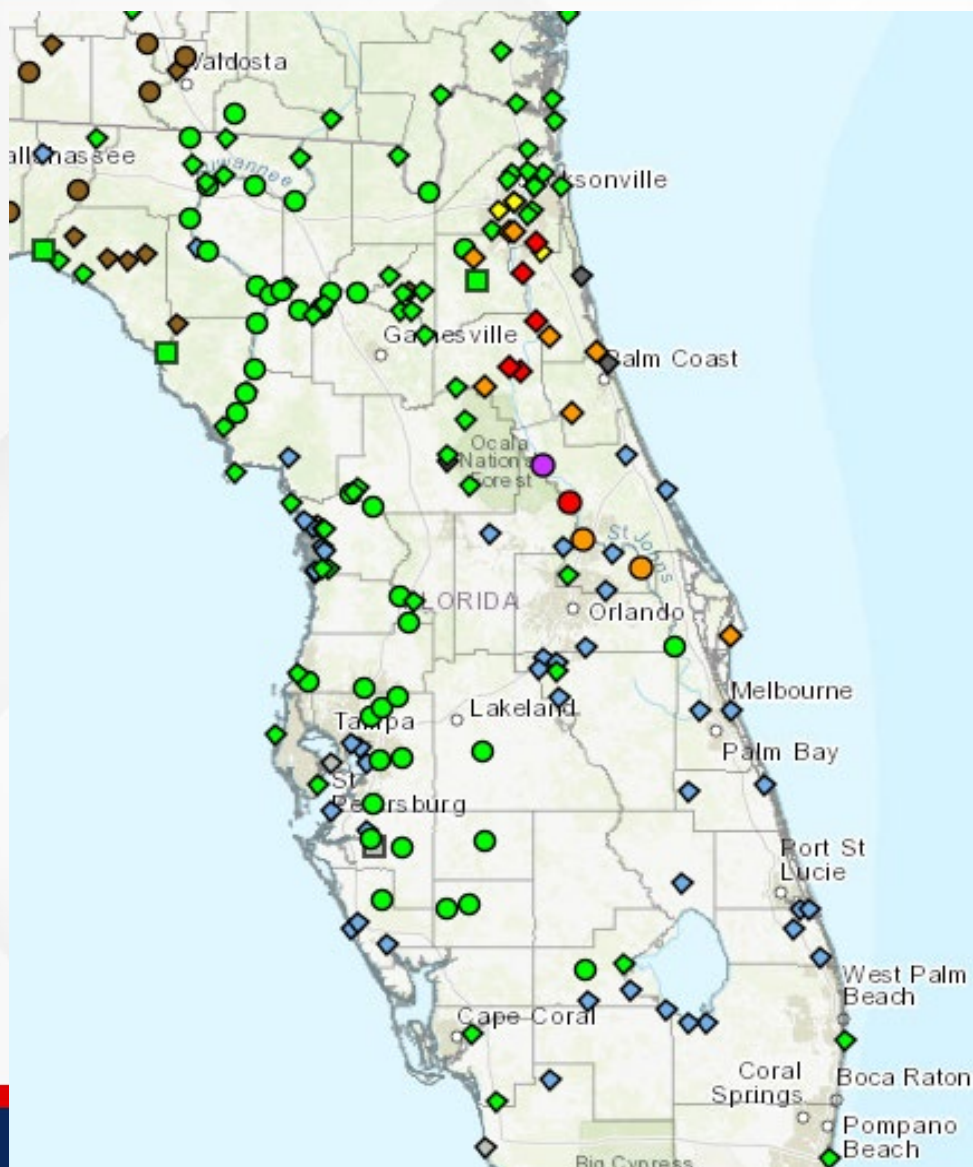


- **Flood Watch** in effect through this afternoon
 - Counties: Nassau, Duval, Clay, St. Johns, Flagler, Putnam, eastern Marion, Sumter, Volusia, Brevard, Orange, Seminole, Lake, Osceola, Indian River, Polk, Hardee, Desoto, Highlands, Okeechobee, St. Lucie, Martin



Current River Status & Forecast Hydrographs

As of Thursday Morning

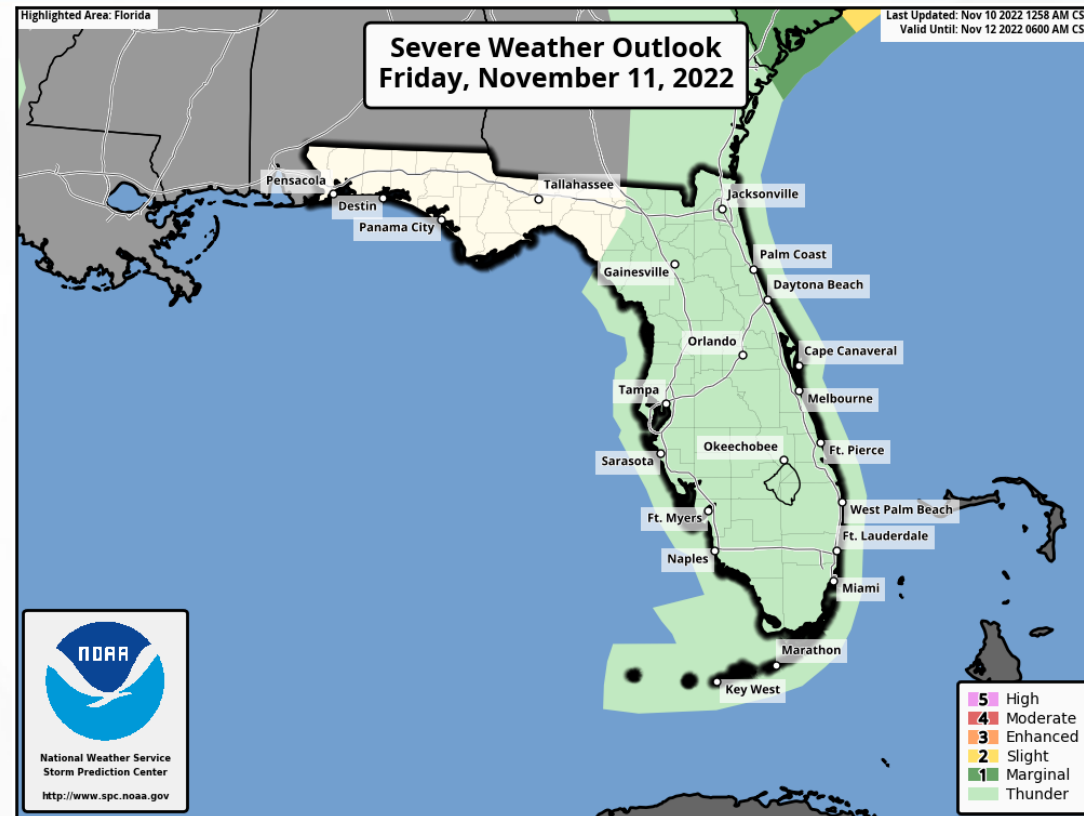
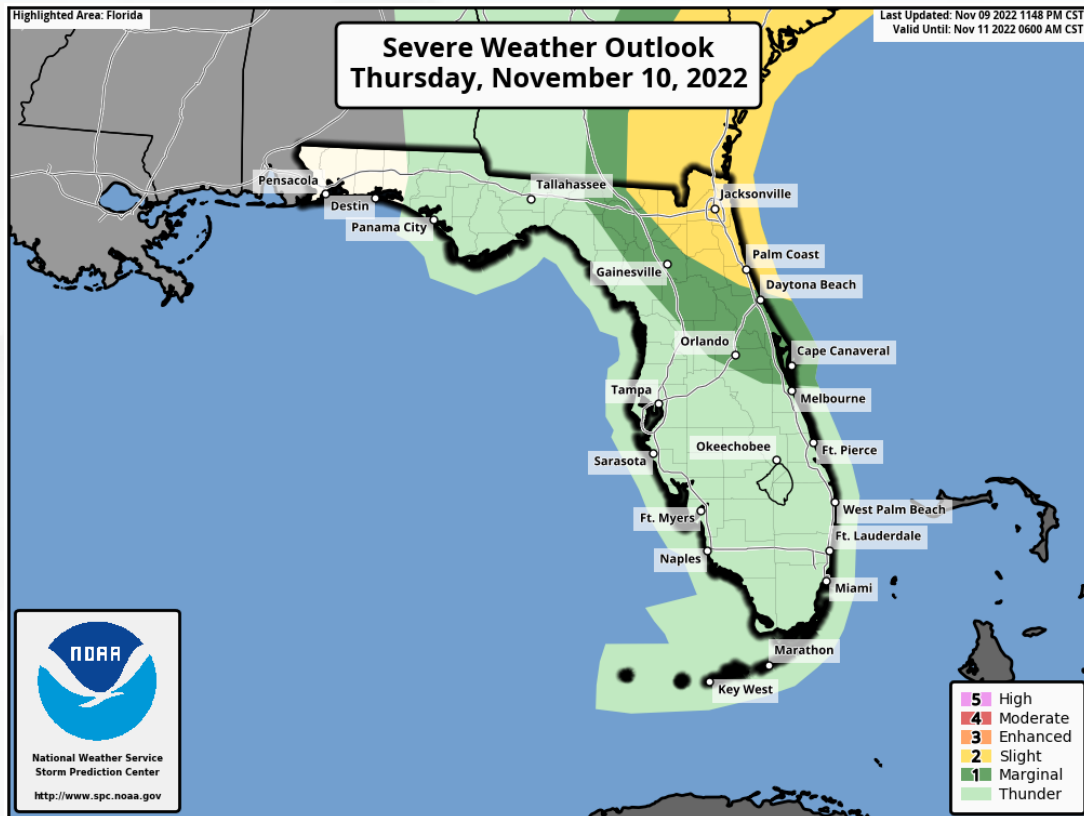


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Severe Weather Outlooks

From the Storm Prediction Center



Outer rain bands from Nicole may produce isolated tornadoes across portions of Northeast and East-Central Florida this morning into afternoon. The greatest risk resides east of I-75 and north of the I-4 corridor in Northeast Florida.

Understanding Severe Thunderstorm Risk Categories

THUNDERSTORMS (no label)	1 - MARGINAL (MRGL)	2 - SLIGHT (SLGT)	3 - ENHANCED (ENH)	4 - MODERATE (MDT)	5 - HIGH (HIGH)
No severe* thunderstorms expected	Isolated severe thunderstorms possible	Scattered severe storms possible	Numerous severe storms possible	Widespread severe storms likely	Widespread severe storms expected
Lightning/flooding threats exist with all thunderstorms	Limited in duration and/or coverage and/or intensity	Short-lived and/or not widespread, isolated intense storms possible	More persistent and/or widespread, a few intense	Long-lived, widespread and intense	Long-lived, very widespread and particularly intense

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Key Messages

From the National Hurricane Center



Key Messages for Tropical Storm Nicole

Advisory 13: 4:00 AM EST Thu Nov 10, 2022

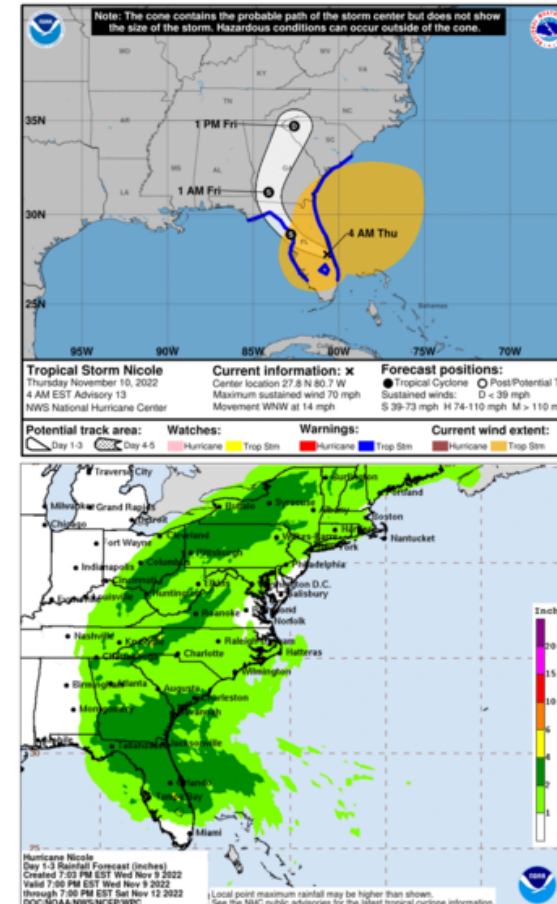


1. Tropical storm conditions will continue along the east coast of Florida, Georgia, and South Carolina within the warning areas today. Tropical storm conditions will spread northward along the west coast of Florida to the coast of the Florida Panhandle through tonight.

2. A dangerous storm surge is expected along portions of the east-central and northeastern coast of Florida, portions of coastal Georgia, and the Florida Big Bend along the Gulf coast. The storm surge will be accompanied by large and damaging waves along the Atlantic coast. Residents in the warning area should listen to advice given by local officials.

3. Do not focus on the exact track of Nicole since it is a large storm with hazards extending well to the north of the center, outside of the forecast cone. These hazards will continue to affect much of the Florida peninsula and portions of the southeast United States.

4. Nicole will produce heavy rainfall today across the Florida Peninsula. Flash and urban flooding will be possible across portions of the Florida Peninsula along with renewed river flooding on the St. Johns River. Isolated flash, urban, and small stream flooding will also be possible on Friday in the Southeast through the central Appalachians, including the Blue Ridge Mountains, and extending northward through eastern Ohio, west central Pennsylvania, into western New York by Friday night into Saturday.



For more information go to hurricanes.gov

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Summary

Tropical Storm Nicole:

- Nicole made landfall on North Hutchinson Island, just south of Vero Beach, at 3:00 AM EST as a Category 1 hurricane with maximum sustained winds near 75 mph.
- At 4:00 AM EST Thursday, Nicole has been downgraded to a tropical storm with maximum sustained winds of 70 mph; however, **Nicole remains a large tropical storm** as tropical storm-force winds extend outward up to 450 miles from the center (especially to the north).
- A turn toward the northwest and north-northwest is expected later today and tonight, followed by an acceleration toward the north and northeast on Friday.
- On the forecast track, the center of Nicole will move across Central Florida this morning, possibly emerge over the far northeastern Gulf of Mexico this afternoon, and then move across the Florida Panhandle and Georgia tonight.
- Additional weakening is forecast while Nicole moves over land during the next day or two, and the storm is likely to become a tropical depression over Georgia tonight or early Friday. Nicole is expected to merge with a frontal boundary over the Mid-Atlantic by Friday night.

Florida Outlook:

- Nicole will continue to produce significant coastal flooding, strong winds, storm surge, heavy rain along portions of the East Coast today.
- Due to the large wind field of Nicole, strong wind gusts will continue across the entire Florida Peninsula and Florida Big Bend.
- A Tropical Storm Warning remains in effect for much of the Florida Peninsula, Big Bend, and Northeast Florida.
- Tropical storm conditions are occurring across the Peninsula and will spread northwestward to the Big Bend and eastern Panhandle through the day.
- Elevated tides, ocean swells, and strong winds will push water upstream through the St. Johns, leading to coastal flooding along the river. The St. Johns River at Astor has returned into major flood stage this morning, with additional forecast points expected to rise into moderate flood stage this weekend.
- Lingering high surf of 8-16' can be expected to continue along portions of the East Coast today, which may result in continued moderate to severe coastal erosion at times of high tide.
- A Storm Surge Warning remains in effect for Jupiter Inlet northward, along the St. Johns River to Georgetown, and the Anclote River to the Ochlockonee River.
- Storm Surge Watches remain in effect from the Ochlockonee River westward to Indian Pass.
- Rainfall amounts of 3-4" have been observed along East-Central Florida over the past 12 hours. Additional rain amounts of 2-5" are possible across much of the Florida Peninsula and into North Florida over the next 72 hours, leading to a slight risk of flash flooding and rises on local rivers.
- Additional rainfall over portions of the East Coast may lead to a quicker onset of flooding as some locations received heavy rainfall totals over the past 12 hours.
- A Flood Watch remains in effect for 22 Florida counties.
- Isolated tornadoes are possible in the outer bands of Nicole across portions of Northeast Florida today.

The next briefing packet will be issued 11:00 AM Thursday. 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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