



SUBTROPICAL STORM NICOLE

Current Watches and Warnings

Hurricane Warning:

- The Abacos, Berry Islands, Bimini, and Grand Bahama Island in the northwestern Bahamas
- Boca Raton to Flagler/Volusia County Line, Florida

Tropical Storm Warning:

- Andros Island, New Providence, and Eleuthera in the Northwestern Bahamas
- Hallandale Beach Florida to Altamaha Sound Georgia
- Lake Okeechobee

Storm Surge Warning:

- North Palm Beach Florida to Altamaha Sound Georgia
- Mouth of the St. Johns River to Georgetown Florida

Hurricane Watch:

- Hallandale Beach to the Volusia/Brevard County Line Florida
- Lake Okeechobee
- Flagler/Volusia County Line to Ponte Vedra Beach

Storm Surge Watch:

- South of North Palm Beach to Hallandale Beach Florida
- Altamaha Sound Georgia to Savannah River Georgia
- Anclote River Florida to Suwannee River Florida

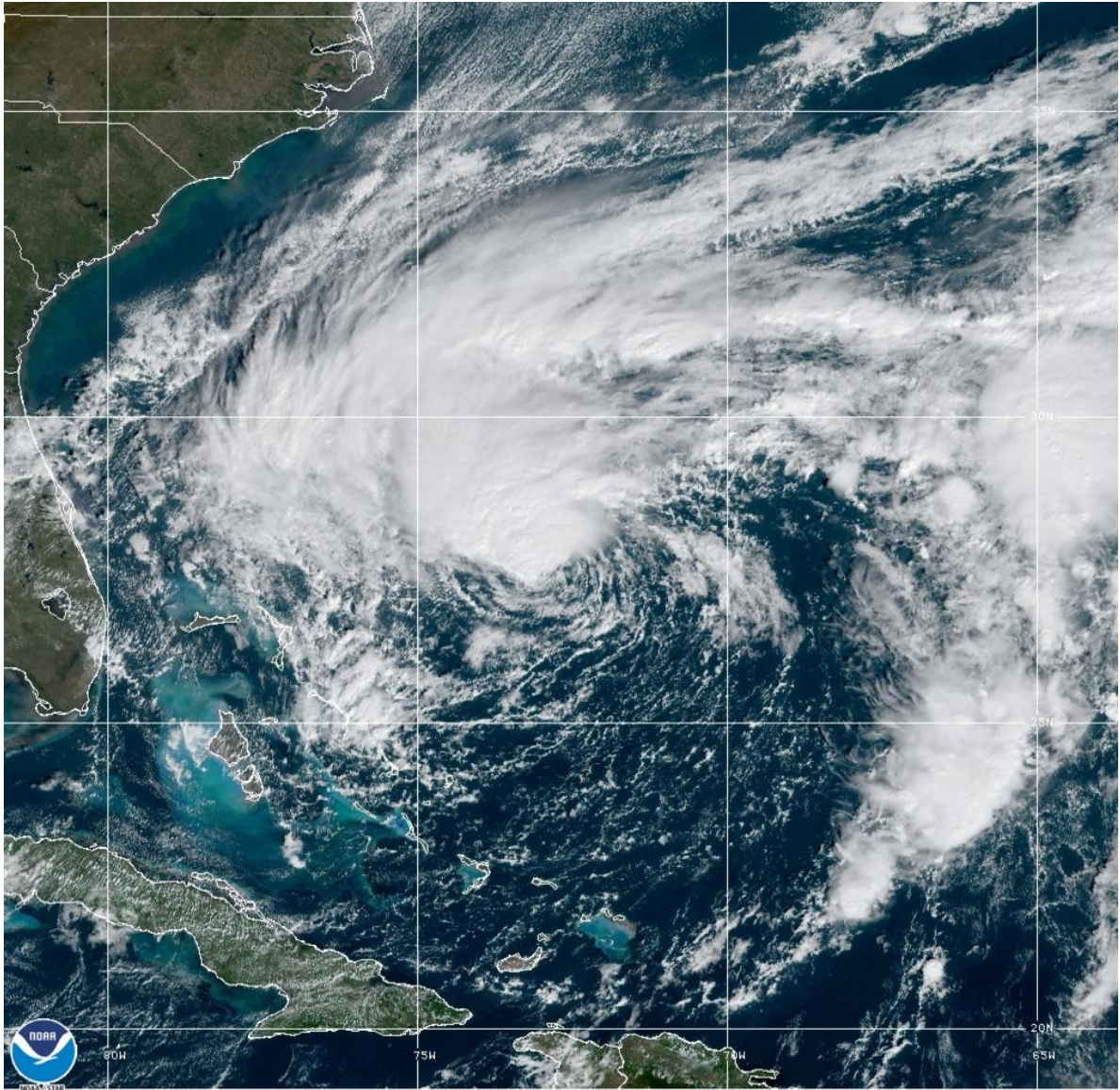
Tropical Storm Watch:

- South of Hallandale Beach to north of Ocean Reef Florida
- North of Bonita Beach to the Ochlockonee River Florida

Current Details from the National Hurricane Center

COORDINATES	27.8N 72.7W
LOCATION	350 miles (560 km) NE of the Northwestern Bahamas
WINDS	50 mph (85 kph)
RADIUS OF TROPICAL STORM-FORCE WINDS	380 miles (610 kph)
MOVEMENT	West at 9 mph (15 kph)
MINIMUM CENTRAL PRESSURE	994 mbar
SAFFIR-SIMPSON SCALE RANKING	Tropical Storm

Latest Satellite Imagery



08 Nov 2022 15:00Z NOAA/NESDIS/STAR GOES-East GEOCOLOR

Source: NOAA / NASA

Discussion

Deep convection has developed and persisted near the center of Nicole this morning and while there are still some characteristics of a subtropical cyclone, the smaller radius of maximum winds and improving inner-core convection suggest it has made the transition to a tropical cyclone. A NOAA reconnaissance aircraft has reported that the pressure has fallen to around 992 mb, and has found 700-mb flight-level winds of 54 kt and believable SFMR winds of 40-42 kt. Based on those data, the initial intensity was raised to 45 kt at 1200 UTC, and is kept there for this advisory.

The anticipated westward turn appears to have occurred, and the initial motion estimate is 280/8 kt. A strong deep-layer ridge over the southeastern United States is expected to steer the storm westward to west-southwestward during the next 24 to 36 hours. This motion will bring the center of Nicole near the northwest Bahamas on Wednesday. After that time, the ridge is forecast to shift eastward allowing Nicole to turn west-northwestward to northwestward, as it approaches the east coast of Florida. By 72 hours, Nicole is forecast to recurve over the southeastern United States ahead of a mid-latitude trough. Although there is good agreement on this overall scenario, there is some increased spread in the track guidance on exactly when Nicole makes the west-northwestward turn near the east coast of Florida. The typically reliable GFS and ECMWF models are along the southern side of the guidance envelope, while the regional hurricane models (HWRF and HMON) are on the northern side. Since the storm is likely near the apex of its most northern point, it is worth noting the the model trackers are noticeable north of the raw model fields. In fact, the GFS tracker is about 45-50 n mi north of its raw fields.

The NHC track is very close to the previous forecast, which is along the southern side of dynamical model trackers and is closest to the GFS ensemble mean. Until the guidance stabilizes, it is prudent not to make any significant changes.

Nicole will be traversing relatively warm SSTs of 27-28 degrees Celsius and upper-level conditions that are expected to allow for steady strengthening during the approach to the northwestern Bahamas and the east coast of Florida. The NHC forecast calls for Nicole to become a hurricane when it is near the northwest Bahamas and remain a hurricane when it reaches Florida. The NHC intensity forecast is close to the various intensity consensus aids. Weakening is expected after Nicole moves inland over Florida and while it accelerates northeastward over the southeastern United States. Although the system could still produce tropical-storm-force winds over the adjacent offshore waters. Nicole should be extratropical by late Friday, and most of the global models show the circulation dissipating between days 4 and 5.

Key Messages from the National Hurricane Center

1. Hurricane conditions and a dangerous storm surge are expected in portions of the northwestern Bahamas on Wednesday, where a Hurricane Warning is in effect.
2. Hurricane conditions are expected across portions of the coast of southeast and east-central Florida beginning late Wednesday or Wednesday night, where a Hurricane Warning has been issued. Tropical storm conditions are expected in the Tropical Storm Warning areas in Florida and Georgia beginning early Wednesday.

3. A dangerous storm surge is expected along much of the east coast of Florida and portions of coastal Georgia where a Storm Surge Warning is in effect. The storm surge will be accompanied by large and damaging waves. Residents in the warning area should listen to advice given by local officials.

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

5. Nicole will produce heavy rainfall Wednesday and Thursday across the Florida Peninsula. Flash and urban flooding will be likely with possible river rises on the St. Johns River. Flash, urban and small stream flooding will be possible in Southeast Georgia and portions of South Carolina Thursday into Thursday night.

Additional Information

WIND: Hurricane conditions are expected in the northwestern Bahamas within the hurricane warning area on Wednesday, with tropical storm conditions beginning across all of the northwestern Bahamas by tonight. Hurricane conditions are expected within the hurricane warning area along the east coast of Florida Wednesday night with tropical storm conditions expected by tonight or early Wednesday within the tropical storm and hurricane warning areas. Hurricane conditions are possible within the hurricane watch area on Wednesday night and Thursday. Tropical storm conditions are possible within the watch area along the west coast of Florida by Wednesday night.

STORM SURGE: The combination of a dangerous storm surge and the tide will cause normally dry areas near the coast to be flooded by rising waters moving inland from the shoreline. The water could reach the following heights above ground somewhere in the indicated areas if the peak surge occurs at the time of high tide.

- North Palm Beach to Altamaha Sound including the St. Johns River to the Fuller Warren Bridge...3 to 5 ft
- Altamaha Sound to the Savannah River...2 to 4 ft
- St. Johns River south of the Fuller Warren Bridge to Georgetown...2 to 4 ft
- Hallandale Beach to North Palm Beach...2 to 4 ft
- Anclote River to the Suwannee River...2 to 4 ft
- Middle of Long Boat Key to Anclote River including Tampa Bay...1 to 3 ft
- North of Ocean Reef to Hallandale Beach including Biscayne Bay...1 to 2 ft

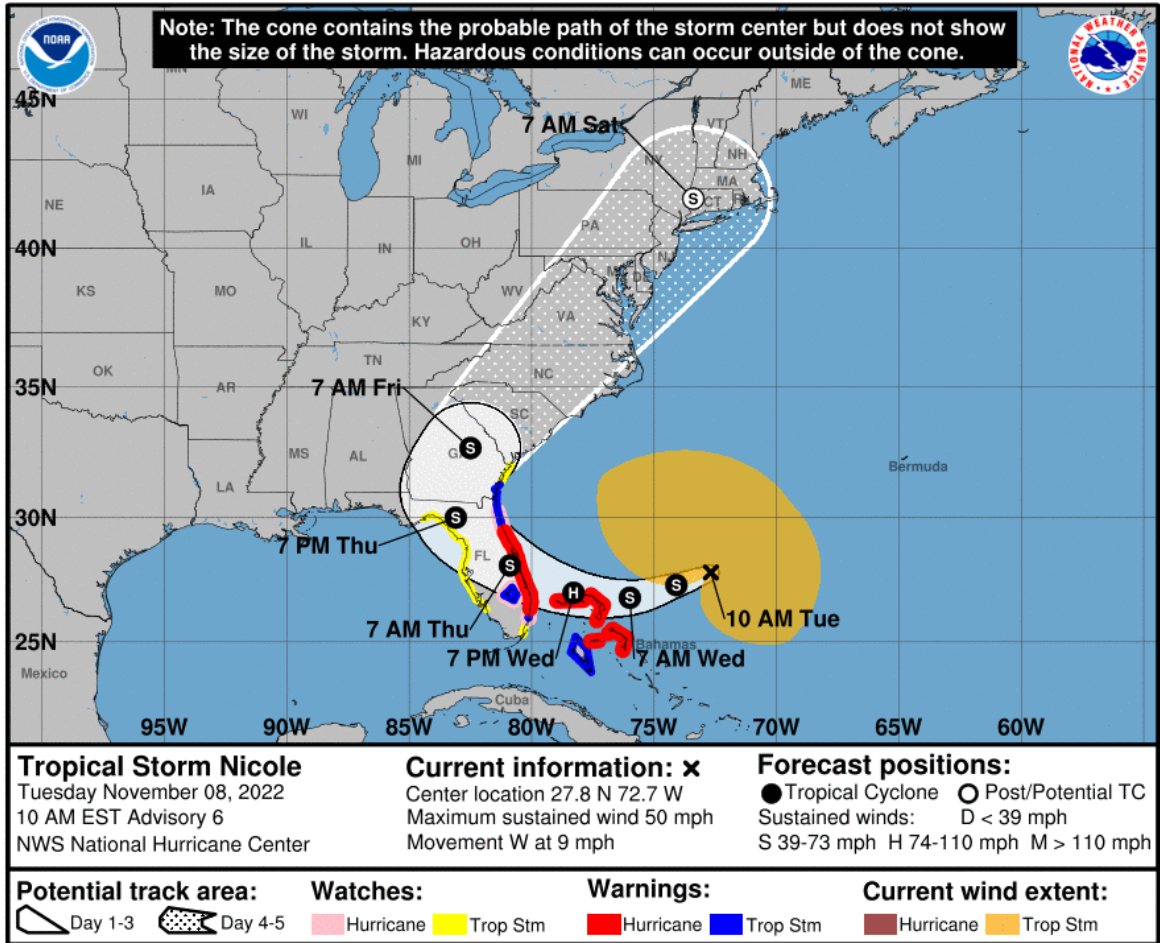
Storm surge could raise water levels by as much as 4 to 6 feet above normal tide levels along the immediate coast of the northwestern Bahamas in areas of onshore winds.

The deepest water will occur along the immediate coast near and to the north of the landfall location, where the surge will be accompanied by large and destructive waves. Surge-related flooding depends on the relative timing of the surge and the tidal cycle, and can vary greatly over short distances. For information specific to your area, please see products issued by your local National Weather Service forecast office.

RAINFALL: Nicole is expected to produce the following rainfall amounts through Friday: Northwest Bahamas into the eastern, central and northern portions of the Florida Peninsula: 3 to 5 inches with local maxima of 7 inches Southeast Georgia into portions of South Carolina: 1 to 4 inches. Flash and urban flooding will be likely, along with possible renewed river rises on the St. Johns River, across the Florida Peninsula on Wednesday and Thursday. Heavy rainfall from this system will spread north farther up the Eastern Seaboard late Thursday into Friday.

SURF: Large swells generated by Nicole will affect the northwestern Bahamas, the east coast of Florida, and much of the southeastern United States coast during the next several days. These swells are likely to cause life-threatening surf and rip current conditions. Please consult products from your local weather office.

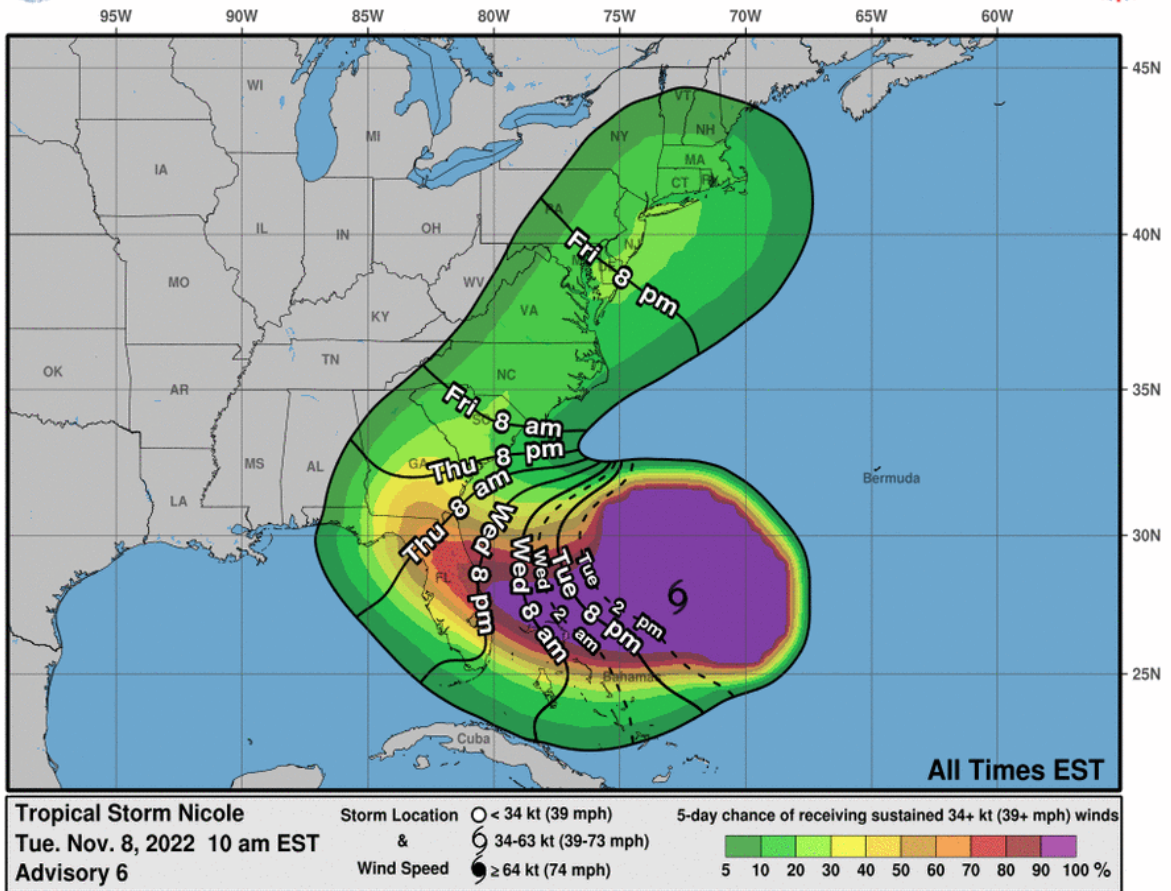
National Hurricane Center Forecast



Most Likely Arrival Time of Tropical Storm-Force Winds



Most Likely Arrival Time of Tropical-Storm-Force Winds

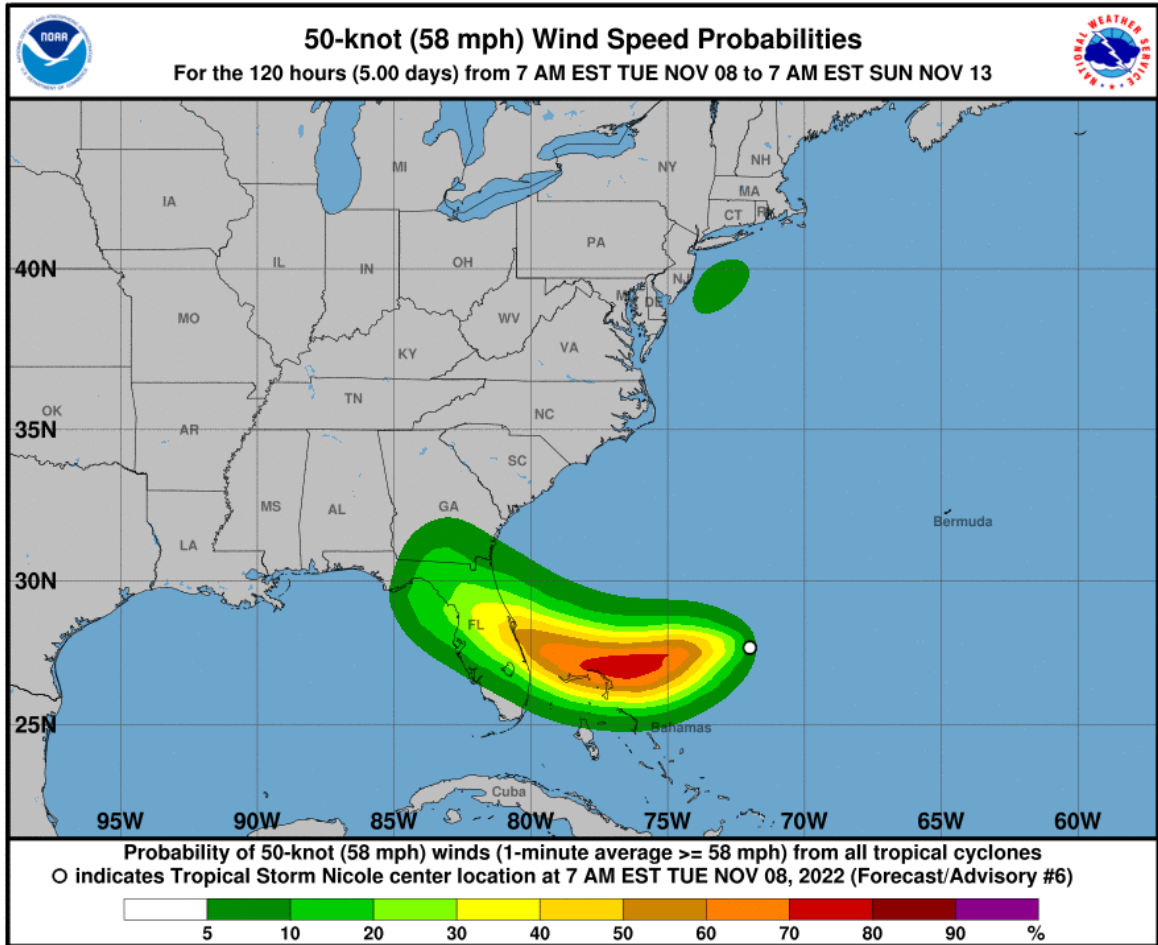


National Hurricane Center: Wind Speed Probabilities

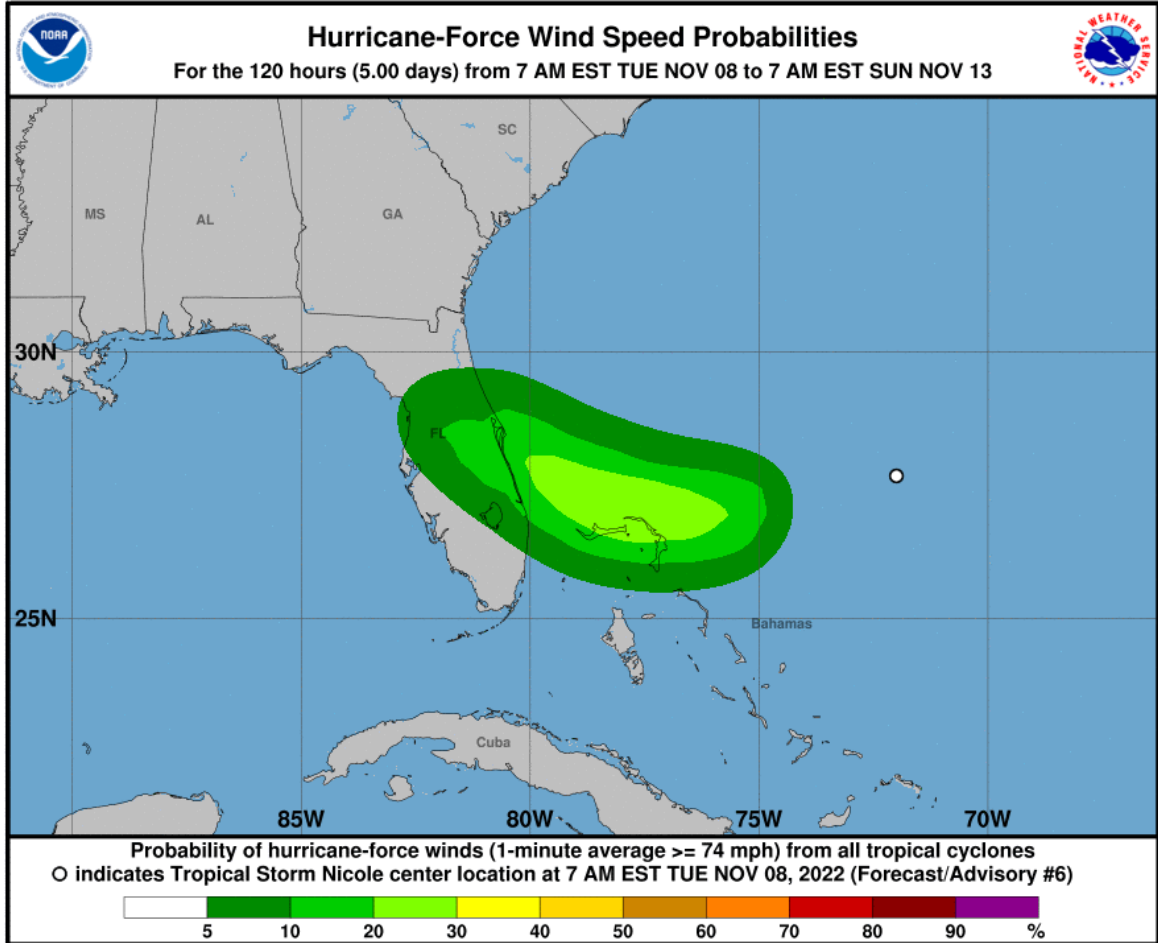
Tropical Storm-Force Wind Probabilities (≥ 40 mph (65 kph))



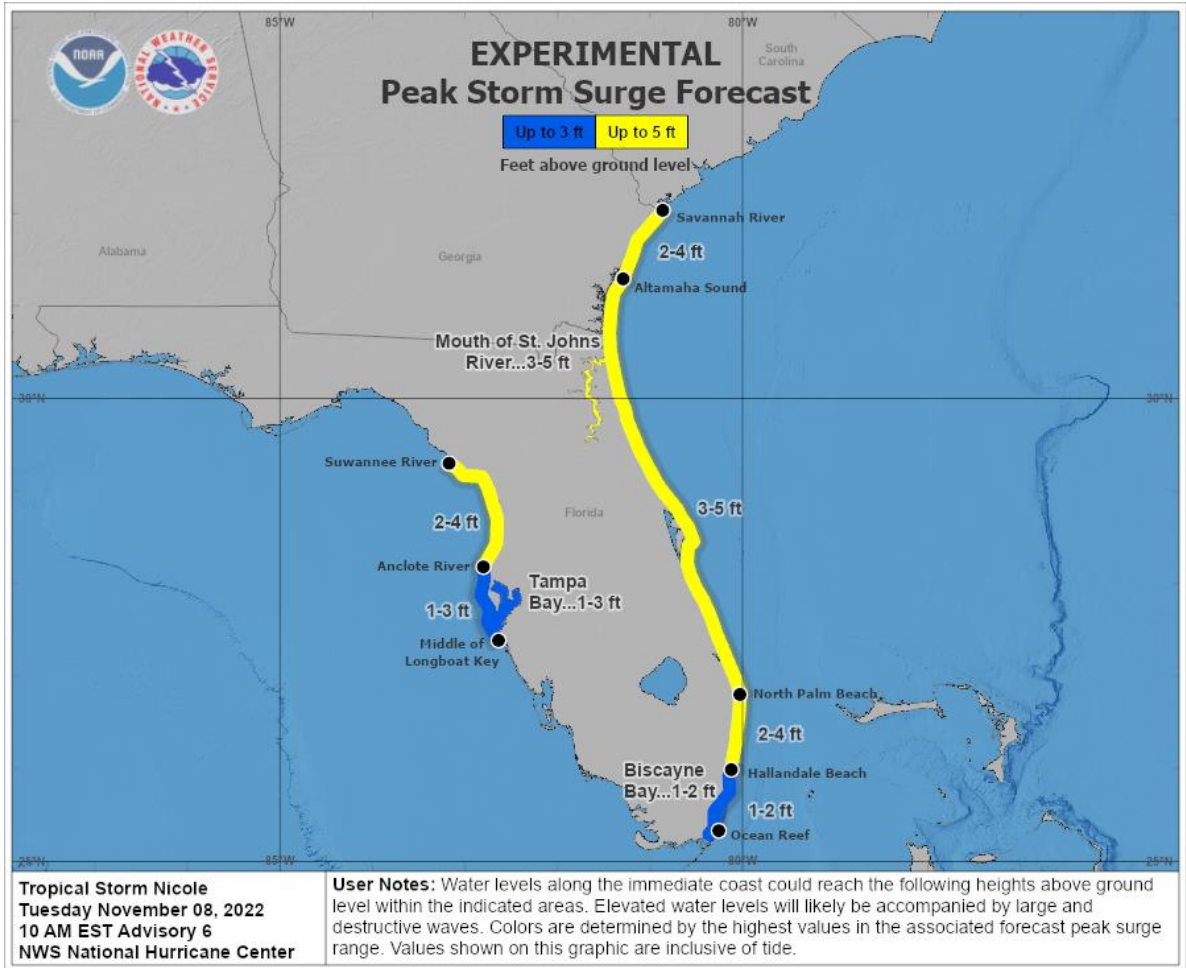
Wind Probabilities (≥ 60 mph (95 kph))



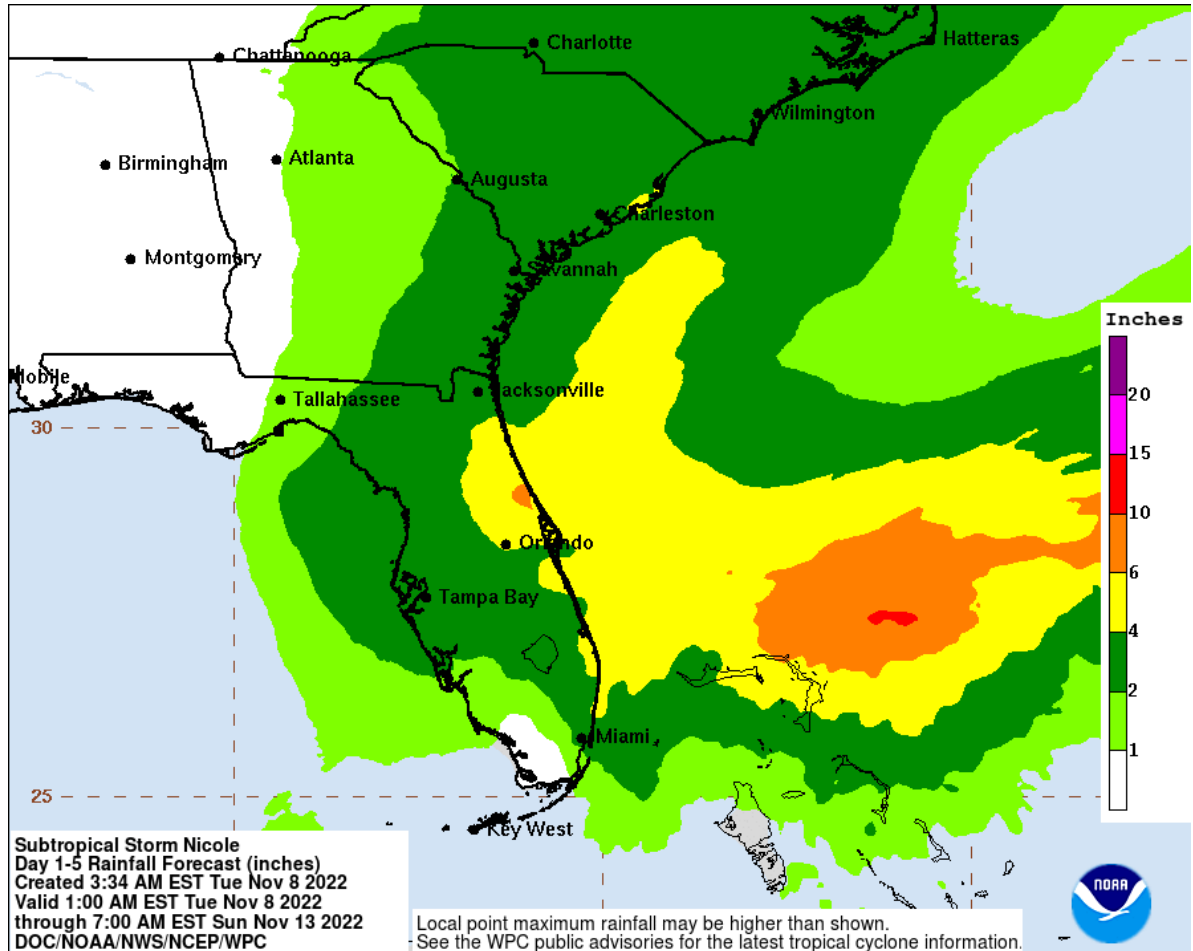
Hurricane-Force Wind Probabilities (≥ 75 mph (120 kph))



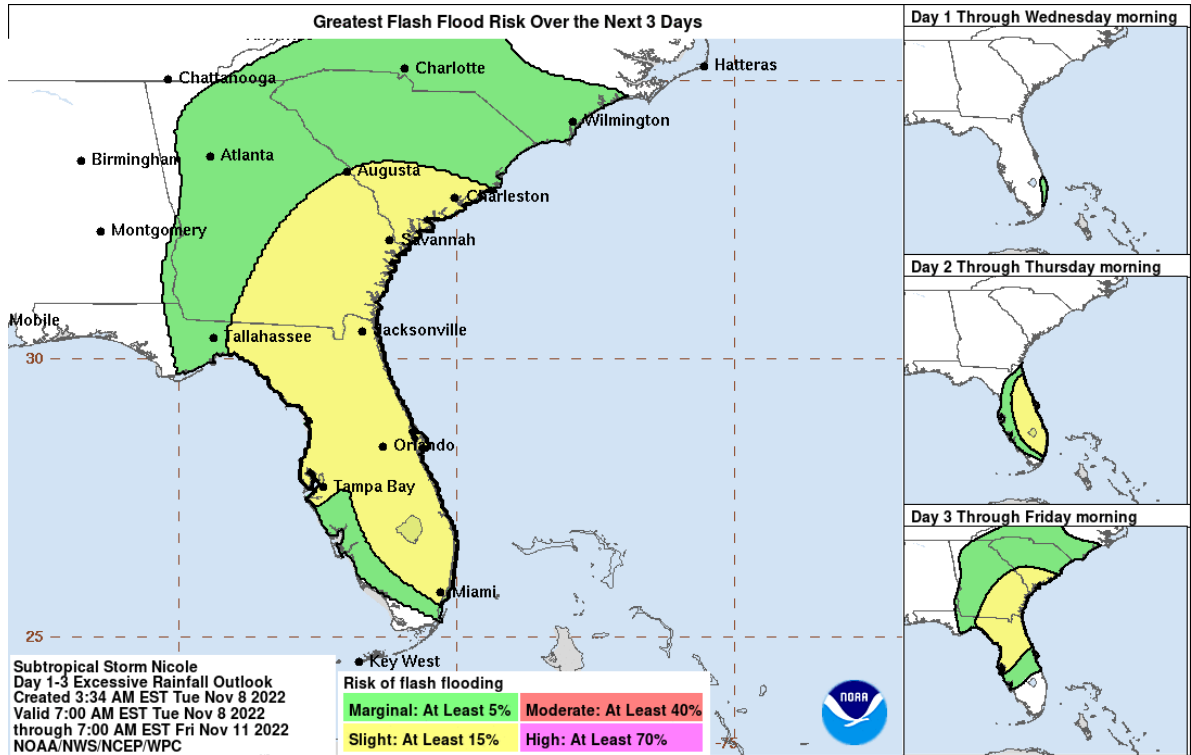
National Hurricane Center: Storm Surge Inundation Graphic



Weather Prediction Center: Rainfall Potential



Weather Prediction Center: Flash Flood Potential





NEXT CAT ALERT: Next Cat Alert for Nicole will be issued for the 4PM EST advisory.

Appendix: Tropical Cyclone Intensity Classifications for Global Basins

WIND SPEED			BASINS AND MONITORING BUREAU							
KT	MPH	KPH	NE Pacific, Atlantic	NW Pacific	NW Pacific	SW Pacific	Australia	SW Indian	North Indian	
			National Hurricane Center (NHC)	Joint Typhoon Warning Center (JTWC)	Japan Meteorological Agency (JMA)	Fiji Meteorological Service (FMS)	Bureau of Meteorology (BOM)	Meteo-France (MF)	India Meteorological Department (IMD)	
30	35	55	Tropical Depression	Tropical Depression	Tropical Depression	Tropical Depression	Tropical Low	Tropical Depression	Deep Depression	
35	40	65	Tropical Storm	Tropical Storm	Tropical Storm	Cat. 1 Tropical Cyclone	Cat. 1 Tropical Cyclone	Moderate Tropical Storm	Cyclonic Storm	
40	45	75								
45	50	85								
50	60	95								
55	65	100								
60	70	110								
65	75	120	Cat. 1 Hurricane	Typhoon	Cat. 3 Severe Tropical Cyclone	Cat. 3 Severe Tropical Cyclone	Tropical Cyclone	Very Severe Cyclonic Storm		
70	80	130								
75	85	140								
80	90	150								
85	100	160			Cat. 4 Severe Tropical Cyclone	Cat. 4 Severe Tropical Cyclone	Intense Tropical Cyclone			
90	105	170								
95	110	175								
100	115	185			Cat. 3 Major Hurricane	Typhoon	Cat. 4 Severe Tropical Cyclone		Cat. 4 Severe Tropical Cyclone	Intense Tropical Cyclone
105	120	195								
110	125	205								
115	130	210								
120	140	220	Cat. 4 Major Hurricane	Super Typhoon	Cat. 5 Severe Tropical Cyclone	Cat. 5 Severe Tropical Cyclone	Very Intense Tropical Cyclone	Super Cyclonic Storm		
125	145	230								
130	150	240								
135	155	250	Cat. 5 Major Hurricane	Super Typhoon	Cat. 5 Severe Tropical Cyclone	Cat. 5 Severe Tropical Cyclone	Very Intense Tropical Cyclone	Super Cyclonic Storm		
140	160	260								
>140	>160	>260								

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