

Current Watches and Warnings

A **Storm Surge Warning** is in effect from Port Aransas, Texas to Sabine Pass; Galveston Bay, Aransas Bay, San Antonio Bay, and Matagorda Bay

A **Hurricane Watch** is in effect from Port Aransas to San Luis Pass, Texas

A **Tropical Storm Warning** is in effect from the mouth of the Rio Grande to Sabine Pass

A **Storm Surge Watch** is in effect from Baffin Bay to Port Aransas, Texas; Sabine Pass to Rutherford Beach, Louisiana; Corpus Christi Bay

Current Details from the National Hurricane Center (NHC)

COORDINATES: 26.4° north, 96.8° west

LOCATION: 140 miles (225 kilometers) south of Port O'Connor, Texas

MOVEMENT: north at 12 mph (19 kph)

WINDS: 60 mph (95 kph) with gusts to 70 mph (110 kph)

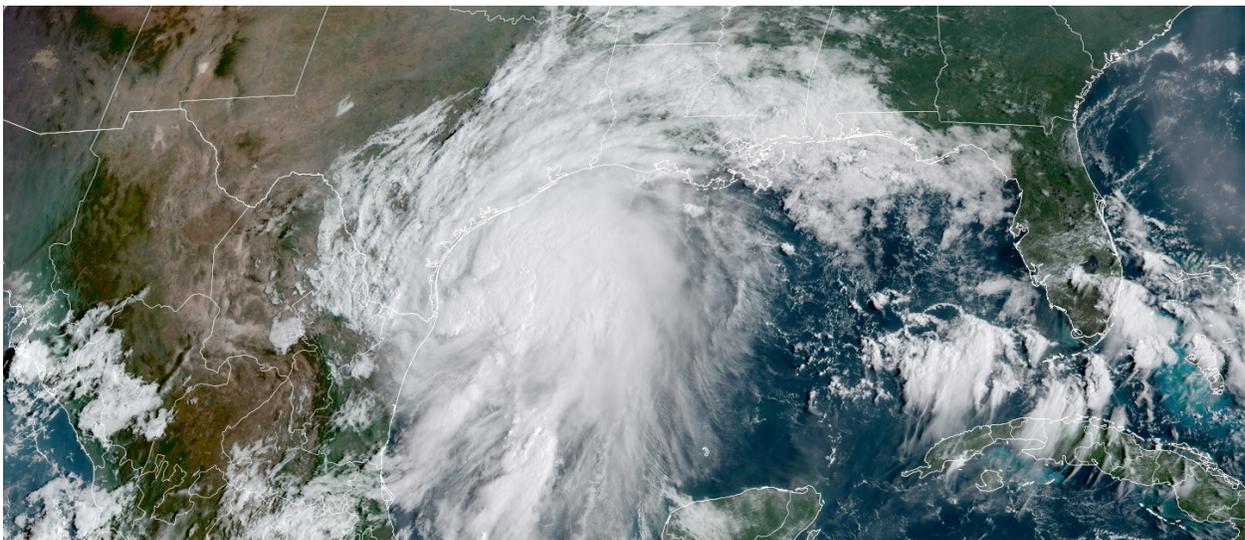
RADIUS OF TROPICAL STORM-FORCE WINDS: 115 miles (185 kilometers)

MINIMUM CENTRAL PRESSURE: 1002 millibars

SAFFIR-SIMPSON SCALE RANKING: Tropical Storm

24-HOUR LANDFALL POTENTIAL: HIGH (Texas; United States)

Latest Satellite Picture



Source: NOAA / NASA / Colorado State University (RAAMB)

Discussion

Tropical Storm Nicholas, located approximately 140 miles (225 kilometers) south of Port O'Connor, Texas, is currently tracking north at 12 mph (19 kph). Doppler radar data from Brownsville and Corpus Christi, Texas, along with reconnaissance aircraft flight-level wind data, indicate that Nicholas' inner-core structure has undergone some radical changes in the last few hours. The earlier near-eyewall pattern dissipated a few hours ago, and has been replaced with what appears to be an ongoing reformation of a new center to the north-northeast of the old center. The aircraft recently found a minimum central pressure of 1000 to 1002 millibars with the dissipating original center, while Doppler radar velocity data show a pronounced mid- to upper-level circulation forming farther north as previously mentioned. The Air Force Reserve Hurricane Hunter aircraft is going to be concentrating its mission in Nicholas' northeastern quadrant to see if reformation of the low-level center is occurring beneath the mid-level circulation noted in radar data. The NHC has maintained the initial wind speed at 60 mph (95 kph).

The initial motion is uncertain towards the north due to the erosion and ongoing reformation of the center. Despite the recent inner-core erosion, the latest NHC model guidance remains in fairly good agreement on Nicholas moving northward through a weakness in the steering ridge of high pressure. The GFS (United States) model has been performing exceptionally well with predicting the recent erosion and more northward reformation of the Nicholas' center. The new NHC track forecast is slightly east of the previous advisory track and lies along the eastern edge of the model consensus.

Although the inner-core convective pattern has been disrupted, recent trends in the radar data suggest that a new center should reform farther northeast into the convective cloud shield. The latest GFS- and ECMWF-based wind shear analyses indicate that moderate westerly wind shear is allegedly affecting Nicholas. However, water vapor satellite imagery suggests that the upper-level wind shear vector is actually from a south-southwesterly direction, which is more along than across the cyclone's forward motion. This actually reduces the magnitude and negative effects of the vertical wind shear. Therefore, strengthening is still expected until landfall as Nicholas continues to move over slightly warmer waters of the Gulf of Mexico. It is possible that Nicholas could become a hurricane just before landfall. Nicholas should rapidly weaken after landfall due to increased frictional effects of land, strong southwesterly wind shear, and entrainment of mid-level dry air, resulting in degeneration into a tropical depression by late Tuesday and a remnant low on Wednesday.

Key Messages from the National Hurricane Center

1. Heavy rainfall will impact portions of the Texas and Louisiana coasts through the middle of the week. Significant rainfall amounts are possible, potentially resulting in areas of life-threatening flash and urban flooding, especially in highly urbanized metropolitan areas. Minor to isolated moderate river flooding is also expected.
2. There is the danger of life-threatening storm surge inundation along the coast of Texas from Port Aransas to Sabine Pass. Residents in these areas should follow any advice given by local officials.
3. Nicholas is forecast to approach the middle Texas coast as a strong tropical storm by this evening and could be near hurricane intensity at landfall. Tropical storm conditions are expected along portions of the middle Texas coast beginning this afternoon, with hurricane conditions possible from Port Aransas to San Luis Pass by late afternoon through tonight.
4. Tropical storm conditions are expected along portions of the coast of south Texas into the afternoon.

Additional Information

RAINFALL: Nicholas is expected to produce storm total rainfall of 8 to 16 inches, with isolated maximum amounts of 20 inches, across portions of the middle and upper Texas coastal areas through the middle of the week. Life-threatening, flash and urban flooding impacts are possible, especially across portions of the upper Texas Gulf Coast near Lake Jackson and Freeport, TX

Across the rest of southeast Texas into southwest Louisiana rainfall of 5 to 10 inches is expected. This rainfall may produce areas of considerable flash and urban flooding, especially in highly urbanized metropolitan areas. Additionally, there is the potential for isolated minor to moderate river flooding.

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:

Port O'Connor to San Luis Pass, TX, including Matagorda Bay: 3-5 feet

San Luis Pass, TX to Rutherford Beach, LA including Galveston Bay: 2-4 feet

Baffin Bay to Port O'Connor, TX: 2-4 feet

Corpus Christi Bay, Aransas Bay and San Antonio Bay: 2-4 feet

Mouth of the Rio Grande to Baffin Bay: 1-3 ft

Rutherford Beach, LA to Intracoastal City, LA: 1-3 feet

Sabine Lake and Calcasieu Lake: 1-3 feet

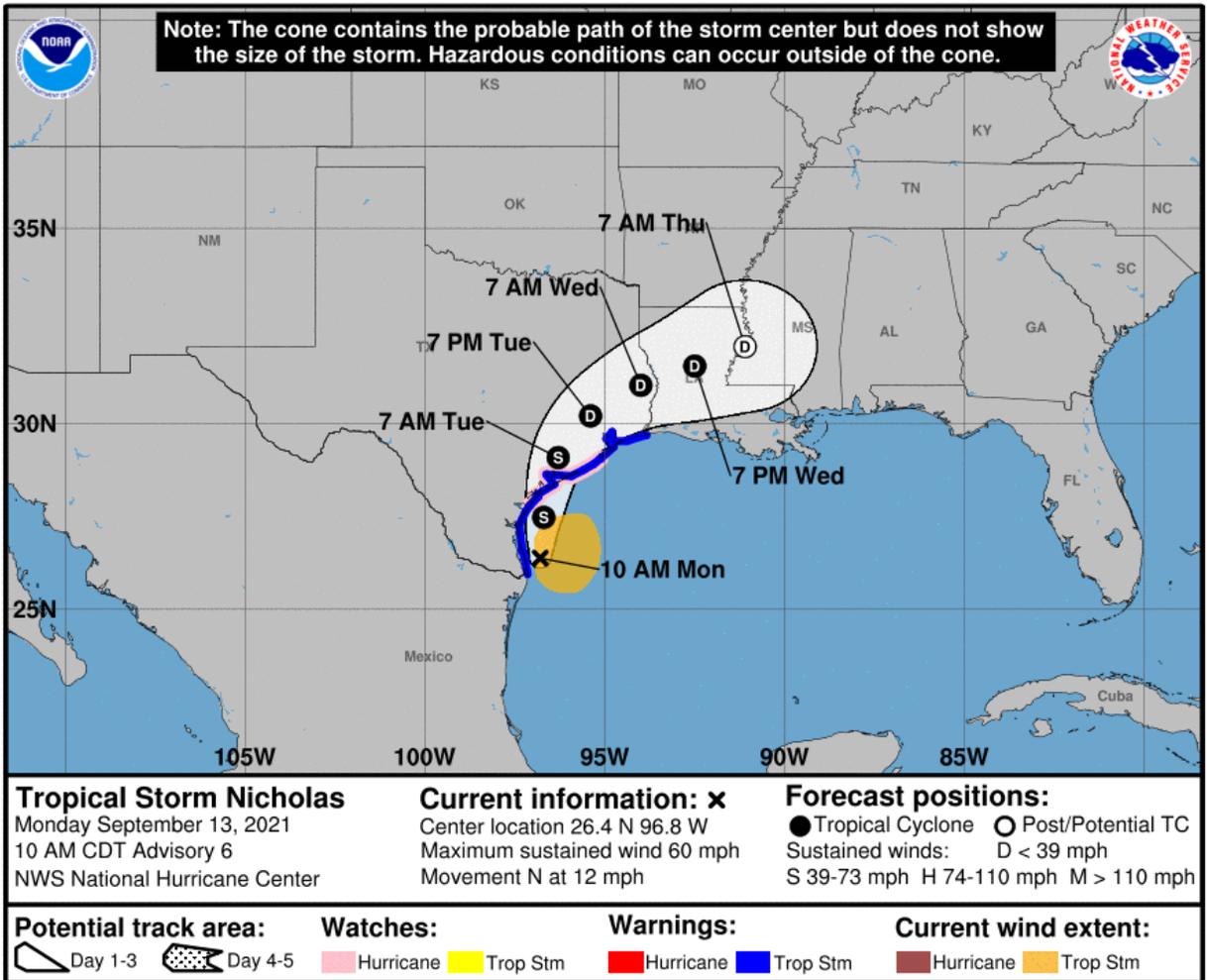
The deepest water will occur along the immediate coast in areas of onshore winds, where the surge will be accompanied by large and dangerous waves. Surge-related flooding depends on the relative timing of the surge and the tidal cycle and can vary greatly over short distances.

WIND: Tropical storm conditions are expected within the warning area in southern Texas through the next few hours. These conditions will spread northward within the warning area through tonight, making outside preparations difficult or dangerous. Hurricane conditions are possible in the Hurricane Watch area as early as this afternoon or this evening.

TORNADOES: A couple of tornadoes are possible this afternoon and tonight across the middle and upper Texas coast.

SURF: Swells generated by Nicholas will continue affecting portions of the northwest Gulf Coast through Tuesday. These swells are likely to cause life-threatening surf and rip current conditions.

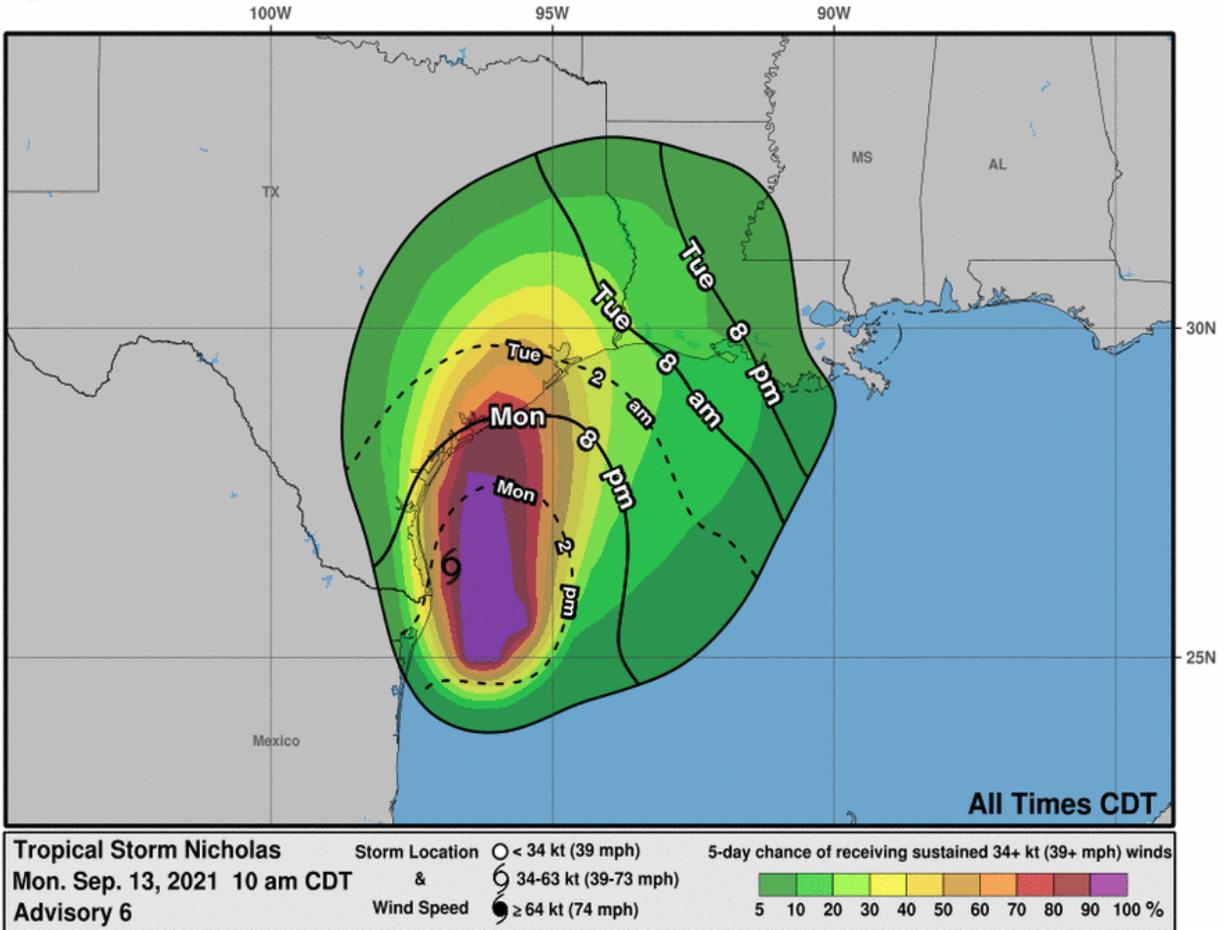
National Hurricane Center (NHC) Forecast



Most Likely Arrival Time of Tropical Storm-Force Winds

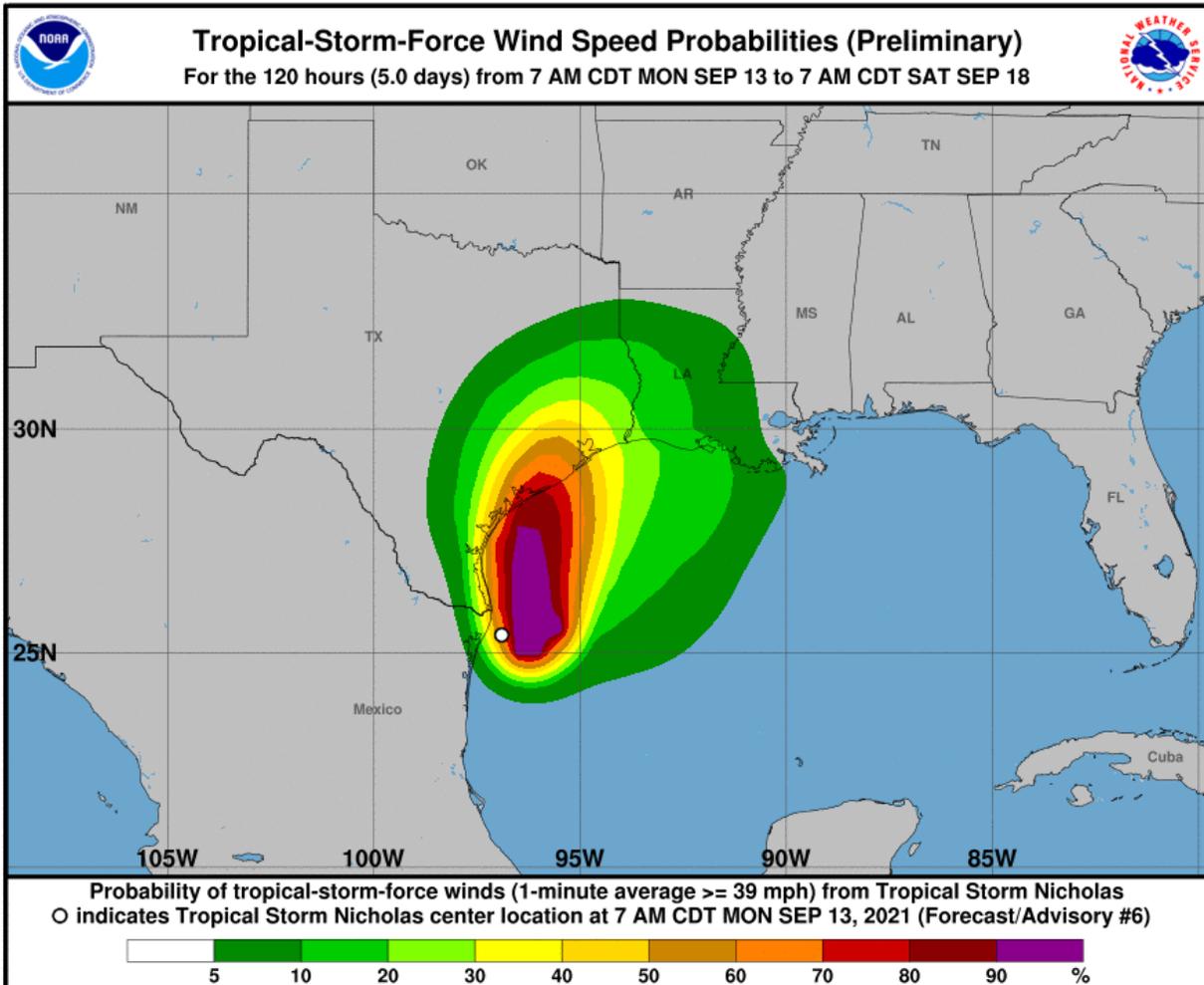


Most Likely Arrival Time of Tropical-Storm-Force Winds

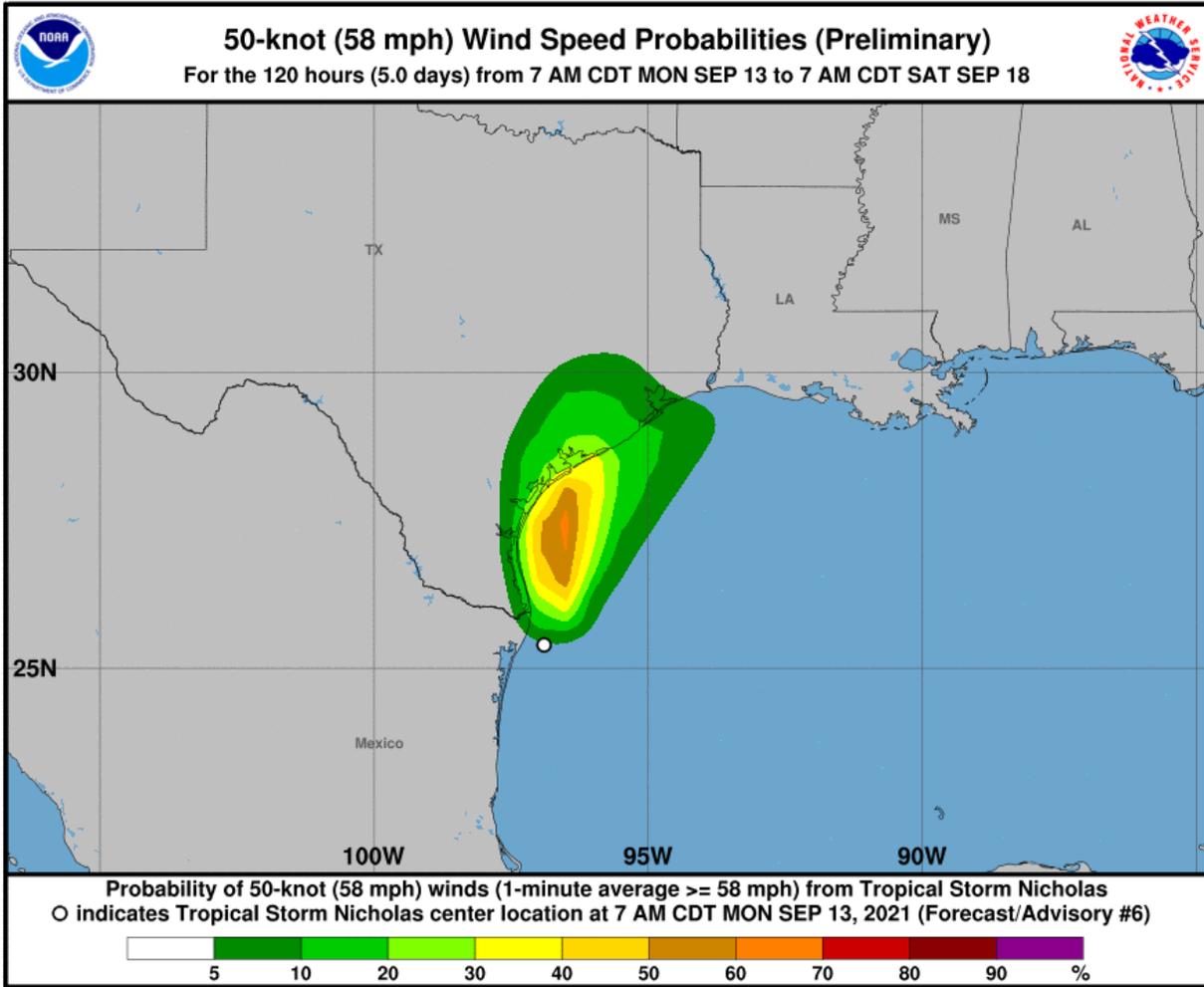


National Hurricane Center: Wind Speed Probabilities

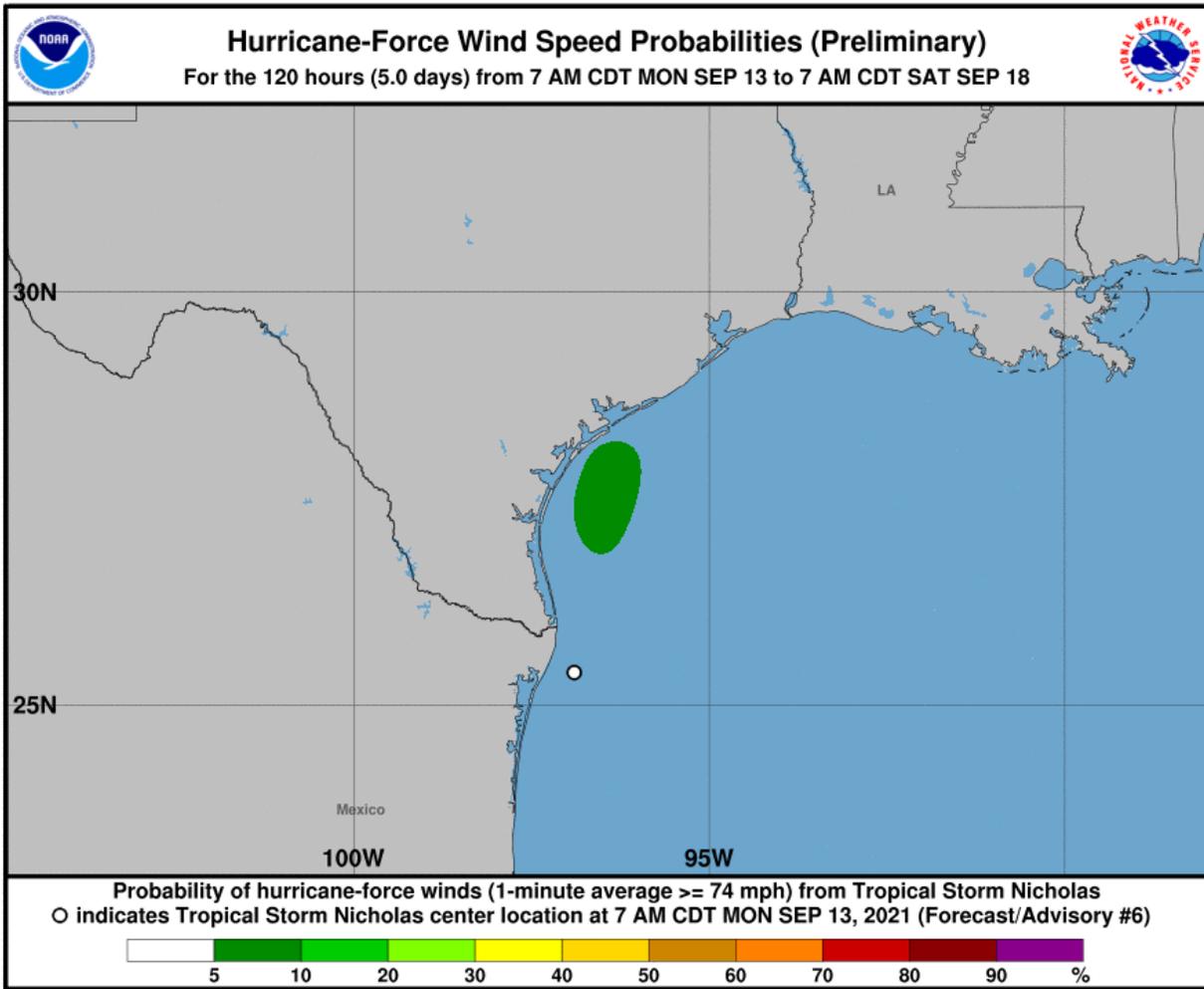
Tropical Storm-Force Wind Probabilities (≥ 40 mph (65 kph))



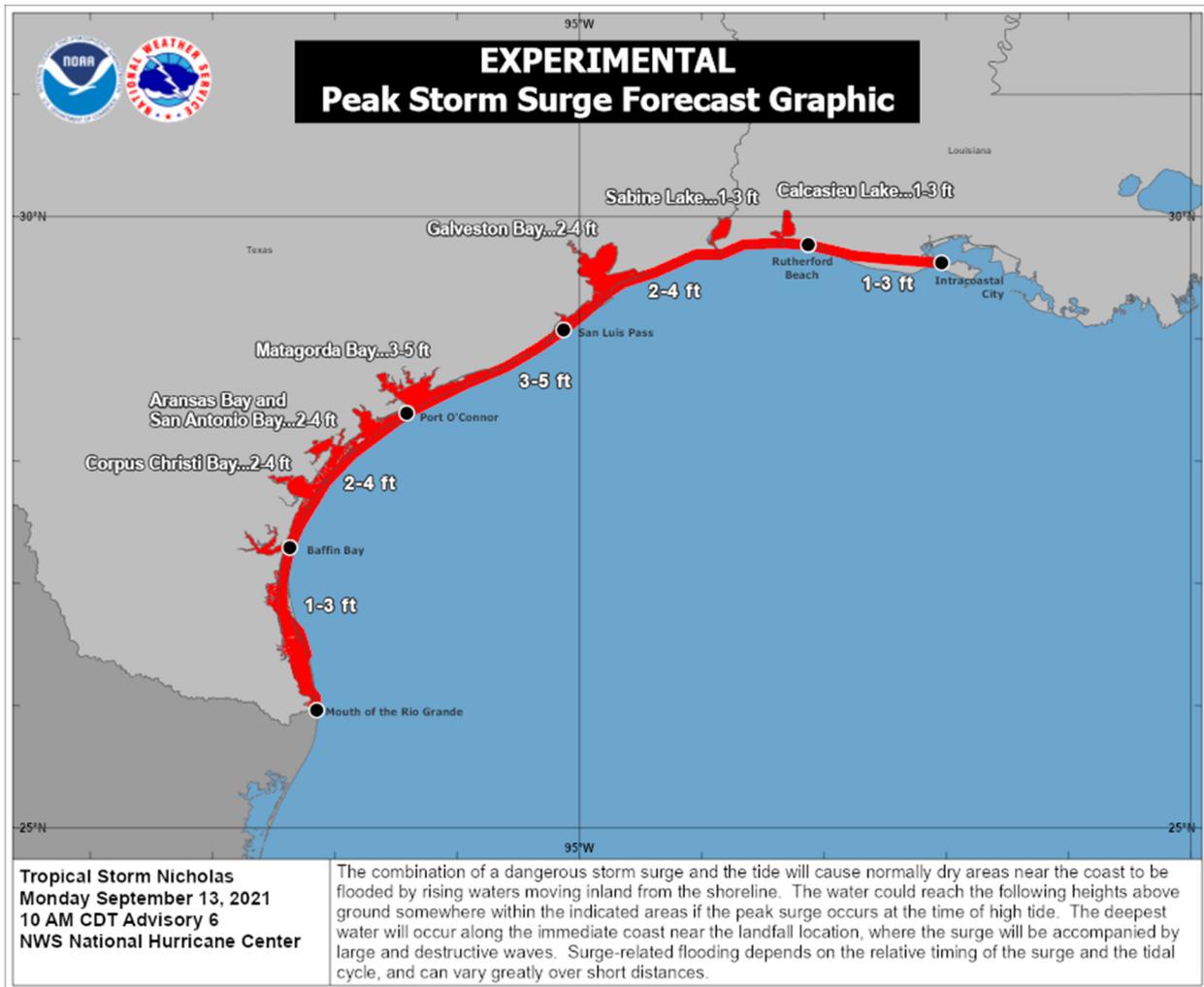
Wind Probabilities (≥ 60 mph (95 kph))



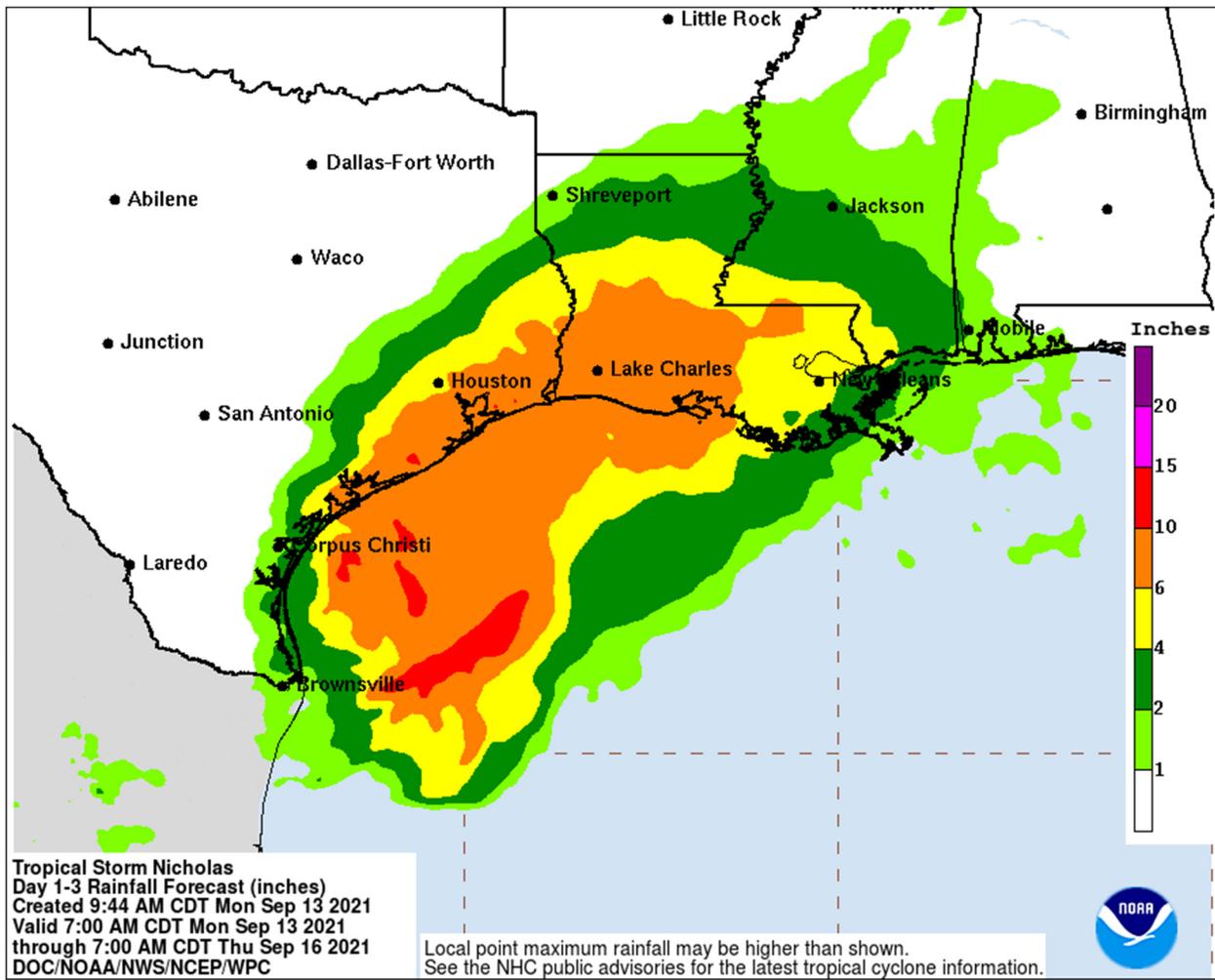
Hurricane-Force Wind Probabilities (≥ 75 mph (120 kph))



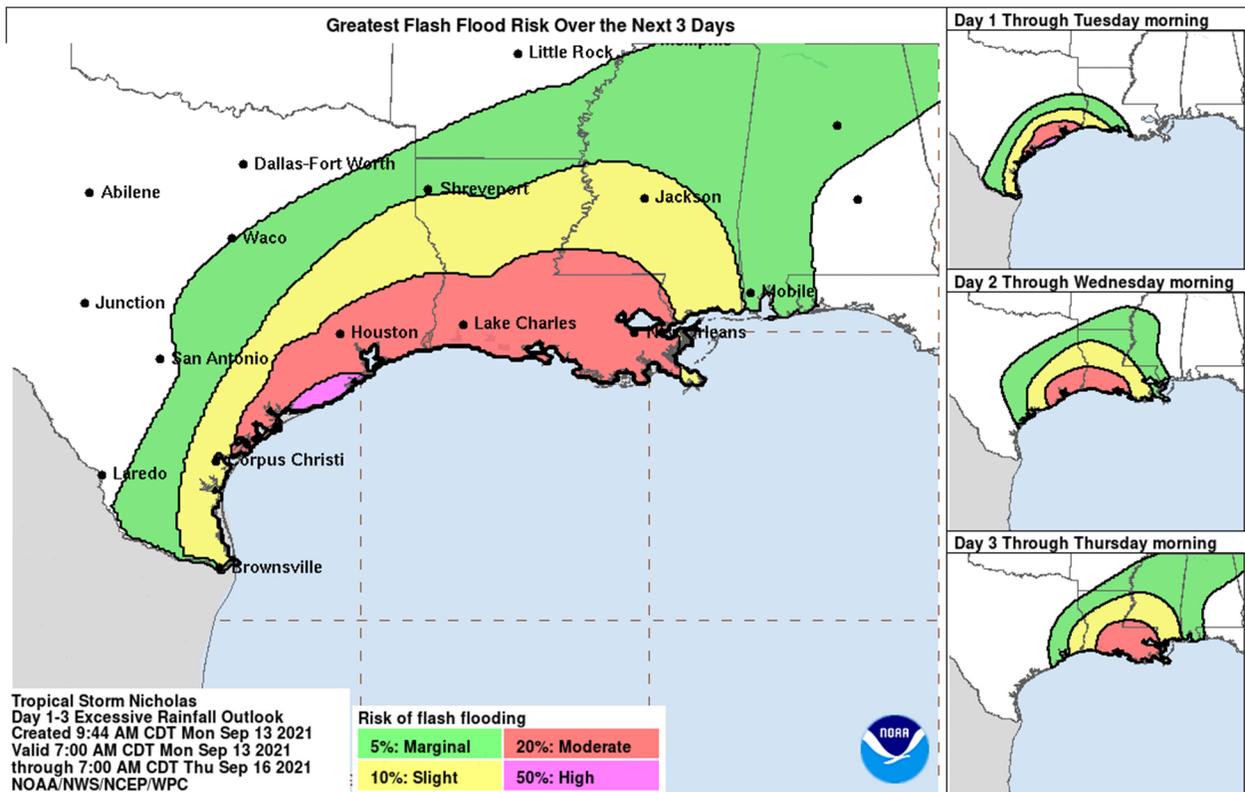
NHC: Storm Surge Inundation Graphic



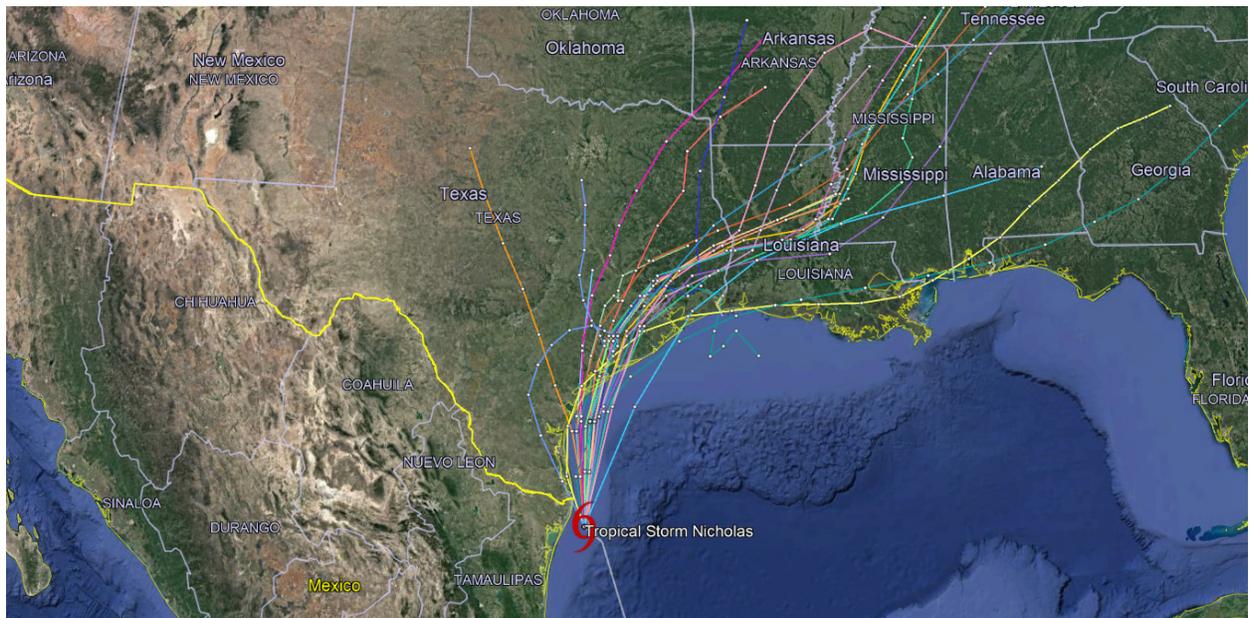
Weather Prediction Center: Rainfall Potential



Weather Prediction Center: Flash Flood Potential



Current 'Spaghetti' Model Output Data



Source: NHC

Additional Information and Update Schedule

Wind intensity forecasts and forecast track information can be found via the National Hurricane Center at www.nhc.noaa.gov

NEXT CAT ALERT: Tuesday morning after 10:00 AM Central Time (15:00 UTC).

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	Cat. 1 Hurricane	Typhoon	Typhoon	Cat. 3 Severe Tropical Cyclone	Cat. 3 Severe Tropical Cyclone	Tropical Cyclone	Very Severe Cyclonic Storm
65	75	120							
70	80	130							
75	85	140							
80	90	150							
85	100	160	Cat. 2 Hurricane		Typhoon	Cat. 4 Severe Tropical Cyclone	Cat. 4 Severe Tropical Cyclone	Intense Tropical Cyclone	
90	105	170							
95	110	175	Cat. 3 Major Hurricane		Typhoon	Cat. 5 Severe Tropical Cyclone	Cat. 5 Severe Tropical Cyclone	Very Intense Tropical Cyclone	
100	115	185							
105	120	195							
110	125	205	Cat. 4 Major Hurricane	Super Typhoon	Cat. 5 Severe Tropical Cyclone	Cat. 5 Severe Tropical Cyclone	Very Intense Tropical Cyclone		
115	130	210							
120	140	220							
125	145	230							
130	150	240	Cat. 5 Major Hurricane	Super Typhoon	Cat. 5 Severe Tropical Cyclone	Cat. 5 Severe Tropical Cyclone	Very Intense Tropical Cyclone		
135	155	250							
140	160	260							
>140	>160	>260	Super Typhoon	Super Typhoon	Super Typhoon	Super Typhoon	Super Typhoon	Super Typhoon	Super Cyclonic Storm

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