

Current Watches and Warnings

A **Tropical Storm Warning** is in effect from the Mouth of the Rio Grande River (U.S.) to San Luis Pass, Texas (TX)

Current Details from the National Hurricane Center (NHC)

COORDINATES: 27.2° north, 93.2° west

LOCATION: 260 miles (420 kilometers) east of Corpus Christi, Texas

MOVEMENT: west-northwest at 9 mph (15 kph)

WINDS: 45 mph (75 kph) with gusts to 60 mph (95 kph)

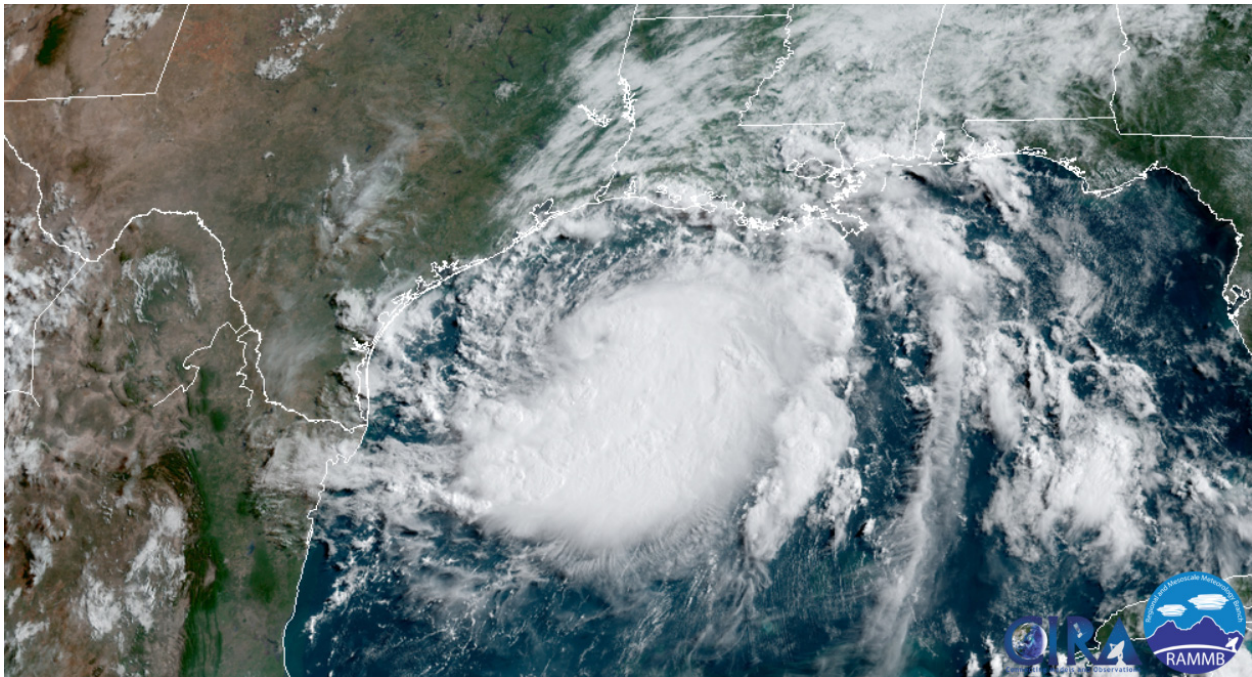
RADIUS OF TROPICAL STORM-FORCE WINDS: 60 miles (95 kilometers)

MINIMUM CENTRAL PRESSURE: 1000 millibars

SAFFIR-SIMPSON SCALE RANKING*: Tropical Storm

24-HOUR LANDFALL POTENTIAL: HIGH (south-central Texas)

Latest Satellite Picture



Source: NOAA

Discussion

Tropical Storm Hanna, located approximately 260 miles (420 kilometers) east of Corpus Christi, Texas, is currently tracking west-northwest at 9 mph (15 kph). Reports from a NOAA reconnaissance aircraft this morning and nearby ship data indicate that Hanna has strengthened a bit. It was additionally found that the storm's center had either moved or reformed further north near the northern edge of the primary thunderstorm cluster. A high-resolution satellite scan suggested that a mid-level eye feature may be forming, but it could also simply be some dry air intrusion from the northwest and west. The NHC has set an initial intensity of 45 mph (75 kph) based on a blend of surface-adjusted wind measurements and ship/buoy data.

Even with the earlier northwestward jump in the center position, reconnaissance and microwave satellite data indicate that Hanna's motion remains towards the west-northwest. The NHC has not made many notable changes to the official track forecast. The latest NHC model guidance remains in good agreement that a mid-level ridge of high pressure will build to the north and northwest of Hanna during the next couple of days, resulting in the cyclone turning westward by tonight and on Saturday. It should then turn west-southwestward Saturday night and Sunday. The new NHC forecast track continues to show the center making landfall along the south-central coast of Texas within the Tropical Storm Warning area Saturday afternoon or evening.

Hanna's convective cloud shield remains very asymmetrical with the bulk of the convection confined to the southern semicircle. This is despite a broader symmetrical and expanding upper-level outflow pattern currently visible. More recently, some deep convection has developed near the center and the previously mentioned possible mid-level eye feature. Hanna is forecast to remain in relatively low vertical wind shear environment and tracking over very warm ocean waters – a combination that typically favors rapid intensification. However, the presence of nearby dry mid-level air noted has been eroding and preventing convection from developing in the northwest quadrant and near the center. This is the main reason why strengthening has generally been absent in the last few days despite the low wind shear conditions.

The latest model guidance shows the dry air waning in about 24 hours just prior to landfall. Such a development should allow for at least gradual strengthening up until landfall, which should allow for at least gradual. With that said, if an eyewall forms during the next 12 hours, then it is possible that Hanna could be a strong tropical storm – and near minimal hurricane intensity – when it makes landfall. The new NHC intensity forecast is similar to the previous advisory.

Key Messages from the National Hurricane Center

1. Hanna is forecast to strengthen and it is expected to bring tropical-storm-force winds to portions of the Texas coast, where a tropical storm warning is in effect.
2. Hanna is expected to produce heavy rains across portions of southern Texas. These rains could result in flash flooding and isolated minor to moderate river flooding.

Additional Information

WIND: Tropical storm conditions are expected in the warning area by tonight or Saturday morning.

RAINFALL: Hanna is expected to produce 4 to 8 inches of rain with isolated maximum totals of 12 inches through Sunday night in south Texas. This rain may result in life-threatening flash flooding, rapid rises on small streams, and isolated minor to moderate river flooding in south Texas. In upper Texas and

Louisiana coasts, and inland to the Mexican states of Coahuila, Nuevo Leon, and northern Tamaulipas, 3 to 5 inches of rain is expected.

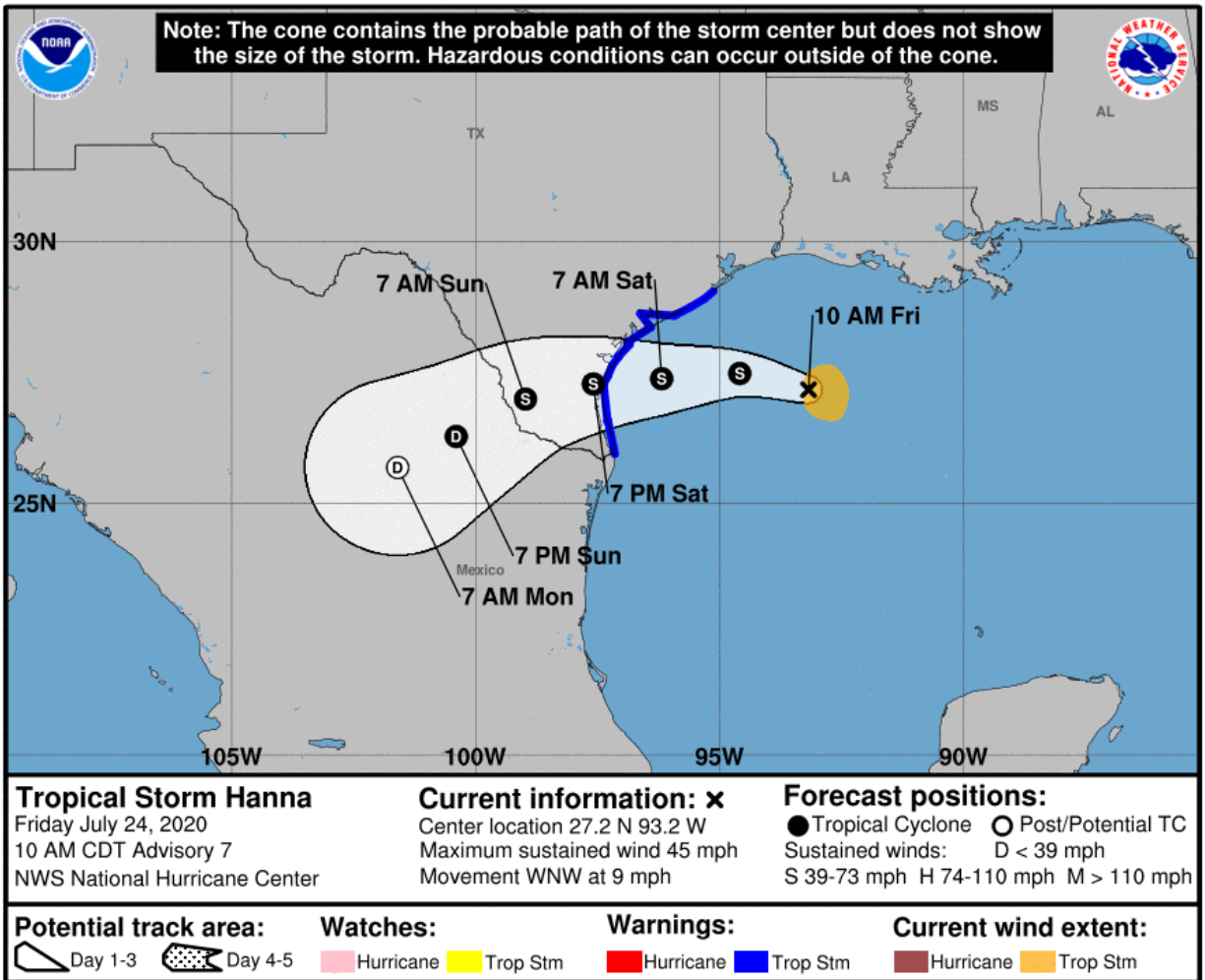
STORM SURGE: The combination of storm surge and the tide will cause normally dry areas near the coast to be flooded by rising waters moving inland from the shoreline. The water could reach the following heights above ground somewhere in the indicated areas if the peak surge occurs at the time of high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

Mouth of the Rio Grande to High Island including Corpus Christi Bay, Matagorda Bay, and Galveston Bay: 1-3 feet

The deepest water will occur along the immediate coast near and to the right of the landfall location. Surge-related flooding depends on the relative timing of the surge and the tidal cycle, and can vary greatly over short distances.

SURF: Swells generated by Hanna are expected to increase and affect much of the Texas and Louisiana coasts during the next few days. These swells are likely to cause life-threatening surf and rip current conditions.

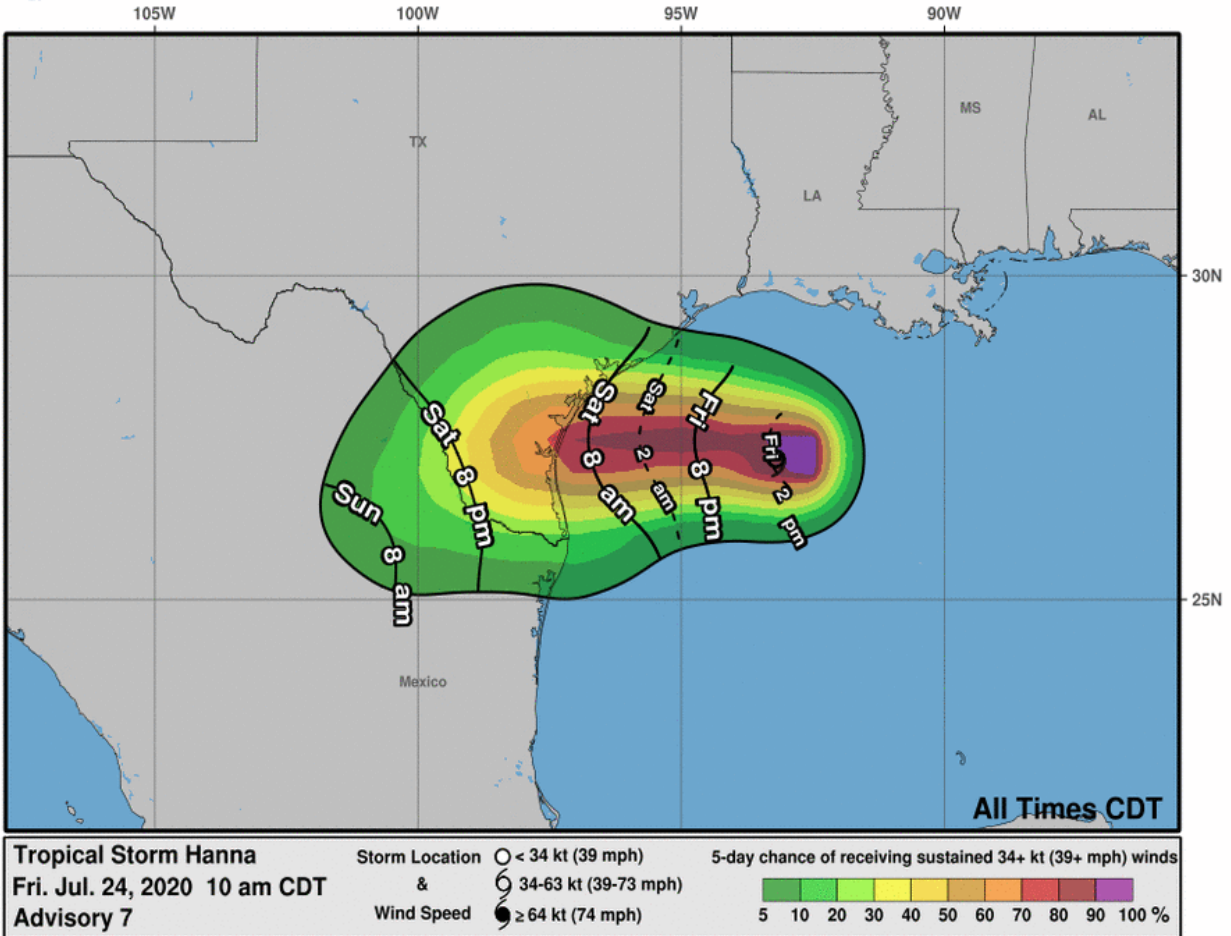
National Hurricane Center (NHC) Forecast



Most Likely Arrival Time of Tropical Storm-Force Winds



Most Likely Arrival Time of Tropical-Storm-Force Winds

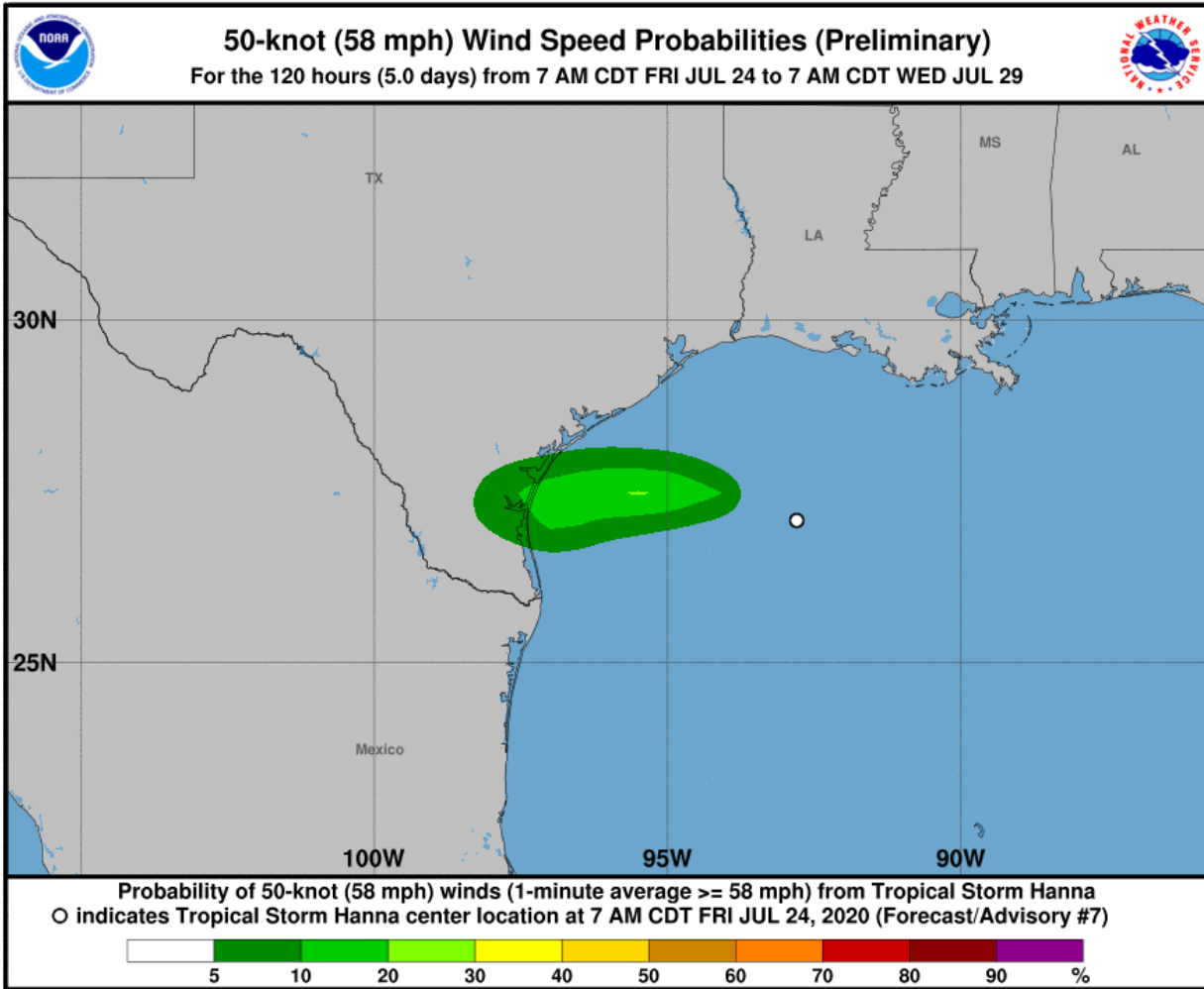


National Hurricane Center: Wind Speed Probabilities

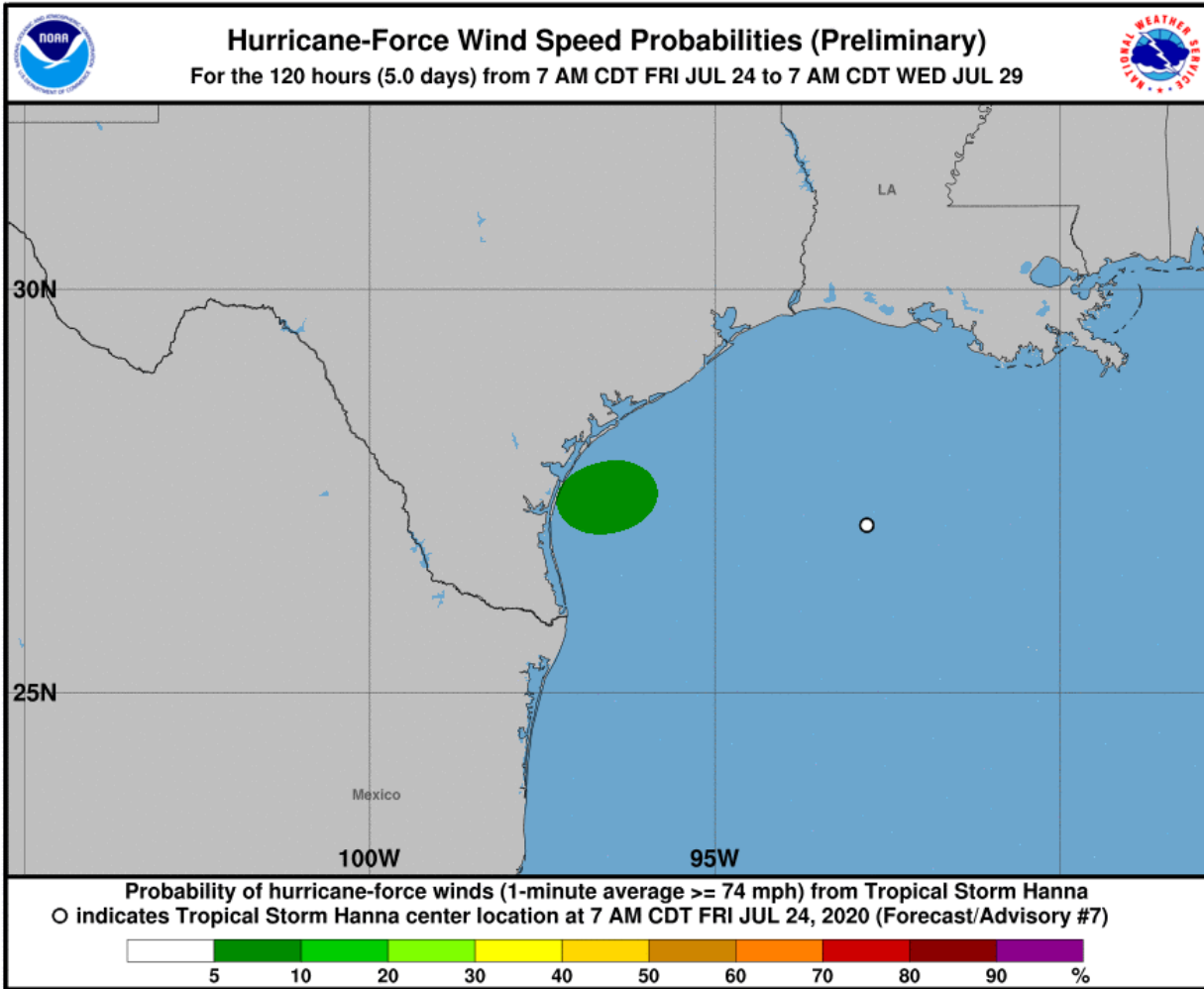
Tropical Storm-Force Wind Probabilities (≥ 40 mph (65 kph))



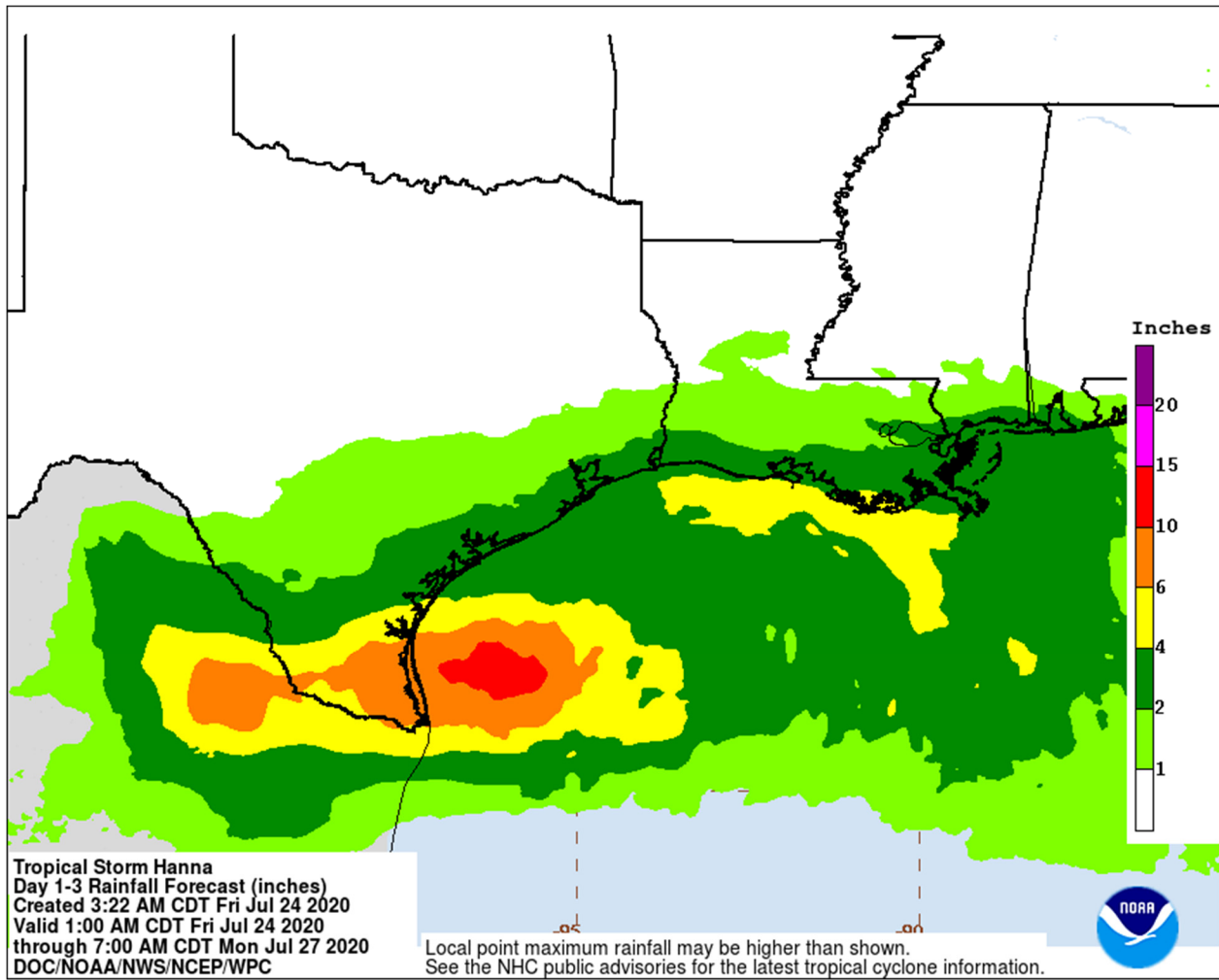
Wind Probabilities (≥ 60 mph (95 kph))



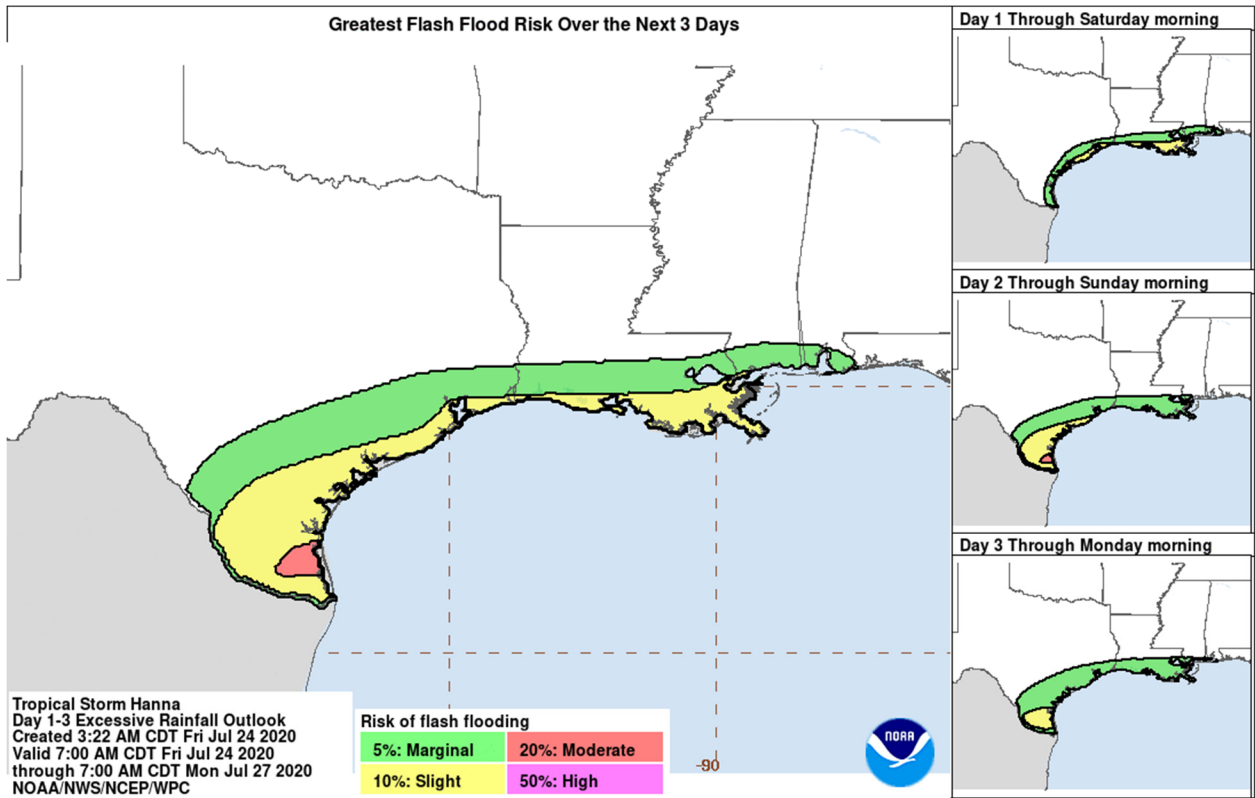
Hurricane-Force Wind Probabilities (≥ 75 mph (120 kph))



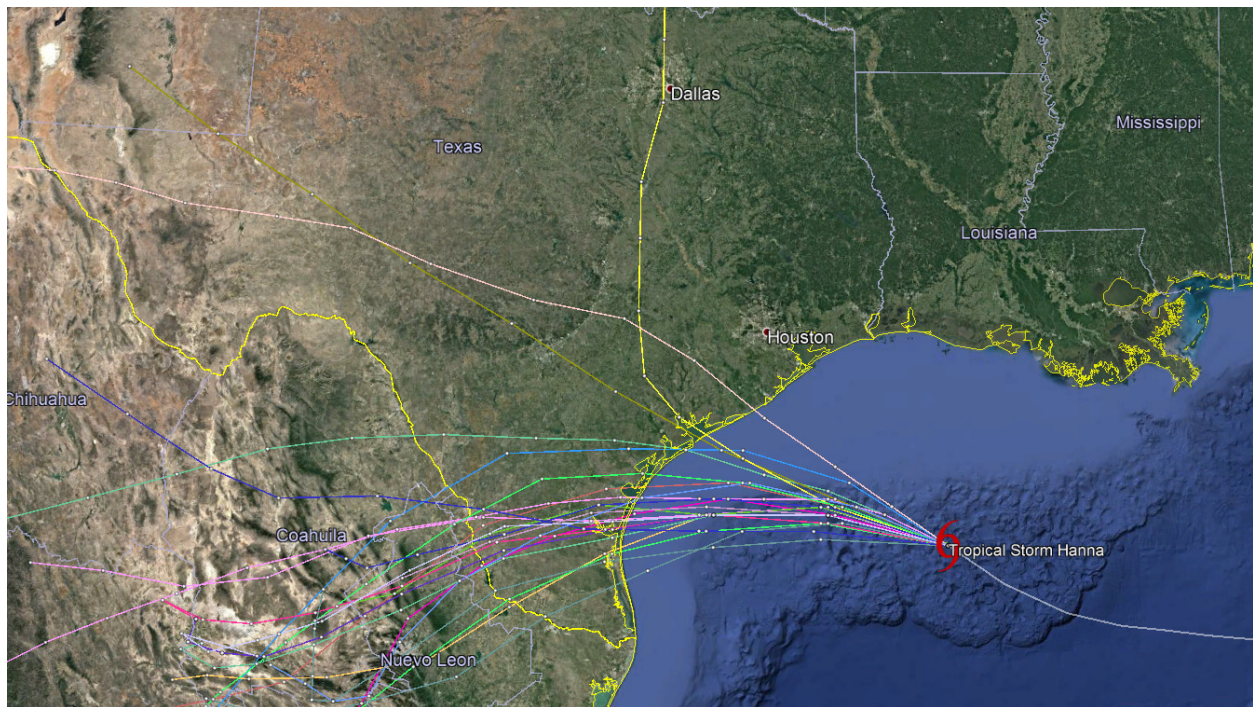
Weather Prediction Center: Rainfall Potential



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: Saturday morning after 10:00 AM Central Time (15:00 UTC)

*Tropical Cyclone Intensity Classifications for Global Basins

WIND SPEED			BASINS AND MONITORING BUREAU						
KTS ¹	MPH ¹	KPH ¹	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	Typhoon	Cat. 4 Severe Tropical Cyclone	Cat. 4 Severe Tropical Cyclone	Intense Tropical Cyclone	Very Severe Cyclonic Storm
90	105	170							
95	110	175	Cat. 3 Major Hurricane	Typhoon	Typhoon	Cat. 4 Severe Tropical Cyclone	Cat. 4 Severe Tropical Cyclone	Intense Tropical Cyclone	Very Severe Cyclonic Storm
100	115	185							
105	120	195							
110	125	205	Cat. 4 Major Hurricane	Super Typhoon	Super Typhoon	Cat. 5 Severe Tropical Cyclone	Cat. 5 Severe Tropical Cyclone	Very Intense Tropical Cyclone	Super Cyclonic Storm
115	130	210							
120	140	220							
125	145	230							
130	150	240	Cat. 5 Major Hurricane	Super Typhoon	Super Typhoon	Cat. 5 Severe Tropical Cyclone	Cat. 5 Severe Tropical Cyclone	Very Intense Tropical Cyclone	Super Cyclonic Storm
135	155	250							
140	160	260							
>140	>160	>260	Cat. 5 Major Hurricane	Super Typhoon	Super Typhoon	Cat. 5 Severe Tropical Cyclone	Cat. 5 Severe Tropical Cyclone	Very Intense Tropical Cyclone	Super Cyclonic Storm

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