Current Watches and Warnings

A Hurricane Warning is in effect from Tulum to Dzilam, Mexico; Cozumel

A Hurricane Watch is in effect from High Island, Texas (TX) to Grand Isle, Louisiana (LA)

A **Storm Surge Watch** is in effect from High Island, TX to the Alabama/Florida border, including Calcasieu Lake, Vermilion Bay, Lake Pontchartrain, Lake Maurepas, Lake Borgne and Mobile Bay

A Tropical Storm Warning is in effect from Punta Herrero to Tulum, Mexico; Dzilam to Progreso, Mexico

A **Tropical Storm Watch** is in effect from San Luis Pass to west of High Island, TX; east of Grand Isle Louisiana to Bay St. Louis Mississippi, including New Orleans; Lake Pontchartrain and Lake Maurepas

Current Details from the National Hurricane Center (NHC)

COORDINATES: 21.4° north, 88.0° west LOCATION: 65 miles (105 kilometers) west-southwest of Cabo Catoche, Mexico MOVEMENT: northwest at 17 mph (28 kph) WINDS: 105 mph (165 kph) with gusts to 125 mph (205 kph) RADIUS OF TROPICAL STORM-FORCE WINDS: 125 miles (205 kilometers) RADIUS OF HURRICANE-FORCE WINDS: 30 miles (45 kilometers) MINIMUM CENTRAL PRESSURE: 975 millibars SAFFIR-SIMPSON SCALE RANKING*: Category 2

24-HOUR LANDFALL POTENTIAL: NONE

LANDFALL LOCATION: Mexico's Yucatan Peninsula; near Puerto Morelos (just south of Cancun) LANDFALL TIMEFRAME: approximately 5:30 AM local time Wednesday (10:30 UTC) LANDFALL INTENSITY: 110 mph (175 kph) – Category 2

Latest Satellite Picture



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



Discussion

Hurricane Delta, located approximately 65 miles (105 kilometers) west-southwest of Cabo Catoche, Mexico, is currently tracking northwest at 17 mph (28 kph). Satellite and surface observations show that Delta made landfall along the northeastern coast of the Yucatan Peninsula earliest this morning just south of Cancun near Puerto Morelos, Mexico. A WeatherFlow observing site at Puerto Morelos reported near calm winds and a minimum pressure of 972 millibars when the center passed that location. Another WeatherFlow site near Cancun reported peak sustained winds of 84 mph (135 kph), with a gust to 106 mph (170 kph). Hurricane-force winds gusts were also reported at an observing site on Cozumel.

Since landfall, Delta has moved across the northeastern portion of the Yucatan Peninsula and is now about the emerge off the northern coast of the peninsula into the southern Gulf of Mexico. Assuming some weakening has occurred, the NHC has set an initial intensity at 105 mph (165 kph), but this could be a little generous. An Air Force Reserve Hurricane Hunter aircraft is scheduled to investigate Delta early this afternoon.

Once Delta moves over the southern Gulf of Mexico, warm waters and expected low vertical wind shear conditions are expected to allow for re-strengthening during the next 24 to 36 hours. After 48 hours, increasing southwesterly shear and cooler waters over the northern Gulf of Mexico are likely to induce some weakening. The intensity guidance has trended downward this cycle, and the NHC forecast has been adjusted accordingly. However, Delta is still expected to regain major hurricane status and the wind field is likely to grow in size during its approach to the northern Gulf Coast, which will increase the storm surge and wind threats. Regardless of Delta's landfall intensity, life-threatening storm surge and strong winds are likely over a large portion of the northwestern and northern Gulf Coast, which has necessitated the issuance of Storm Surge, Hurricane, and Tropical Storm watches for portions of that area.

Delta is moving northwestward or 305/15 kt. The hurricane should continue moving northwestward around the southwestern periphery of a ridge of high pressure that currently extends over Florida and the northeastern Gulf of Mexico through early Thursday. After that time, a developing mid-level trough over the south-central United States should cause Delta to slow down and turn north-northwestward on Thursday. Delta is forecast to begin accelerating northward or north-northeastward toward the northern Gulf Coast ahead of the trough Thursday night and Friday. There has been little change to the early portion of the track forecast, but there has been a little westward shift in the guidance envelope after 24 hours, and the NHC forecast has been moved in that direction.

Key Messages from the National Hurricane Center

1. Life-threatening storm surge and dangerous winds will continue within portions of the northern Yucatan Peninsula of Mexico into early afternoon. Heavy rainfall, which could lead to significant flash flooding, will affect the northern Yucatan Peninsula through early Thursday.

2. Delta is expected to grow in size as it approaches the northern Gulf Coast, where there is an increasing likelihood of life-threatening storm surge and dangerous hurricane-force winds beginning Friday, particularly for portions of the Louisiana coast. Storm Surge and Hurricane Watches are in effect, and residents in these areas should follow advice given by local officials.

3. Flash, urban, small stream, and minor river flooding is likely Friday through Saturday from portions of the central Gulf Coast northward into portions of the Lower to Middle Mississippi Valley. As Delta moves farther inland, additional heavy rainfall is expected in the Ohio Valley and Mid Atlantic this weekend.

Additional Information

STORM SURGE: A life-threatening storm surge will raise water levels in areas of onshore winds by as much as 6 to 9 feet above normal tide levels along the northern coast of the Yucatan Peninsula from Cabo Catoche to Progreso, and 5 to 7 feet above normal tide levels along the eastern coast of the Yucatan Peninsula from Tulum to Cabo Catoche. Near the coast, the surge will be accompanied by large and destructive waves.

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:

Pecan Island, LA to Port Fourchon, LA, including Vermilion Bay: 7-11 feet Cameron, LA to Pecan Island, LA: 4-7 feet Port Fourchon, LA to Ocean Springs, MS, including Lake Borgne: 4-6 feet Lake Pontchartrain and Lake Maurepas: 3-5 feet Ocean Springs, MS to AL/FL border, including Mobile Bay: 2-4 feet High Island, TX to Cameron, LA, including Calcasieu Lake: 2-4 feet Sabine Lake: 1-3 feet Port O'Connor, TX to High Island, TX, including Galveston Bay: 1-3 feet

The deepest water will occur along the immediate coast near and to the east of the landfall location, 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: Hurricane and tropical storm conditions will continue within the warning area in the Yucatan peninsula during the next few hours. Tropical storm conditions are possible within the watch areas along the Gulf coast by late Thursday night or early Friday with hurricane conditions possible within the Hurricane Watch area by Friday morning.

RAINFALL: Through early Thursday, Delta is expected to produce 4 to 6 inches of rain, with isolated maximum totals of 10 inches, across portions of the northern Yucatan Peninsula. This rainfall may result in areas of significant flash flooding.

Friday through Saturday, Delta is expected to produce 4 to 8 inches of rain, with isolated maximum totals of 12 inches across portions of the central Gulf Coast north into portions of the Lower to Middle Mississippi Valley. These rainfall amounts will lead to flash, urban, small stream, and minor river flooding. As Delta moves farther inland, 1 to 3 inches of rain, with locally higher amounts, is expected in the Ohio Valley and Mid Atlantic this weekend.

SURF: Swells generated by Delta will affect land areas around the northwestern Caribbean Sea today. Swell will begin to affect portions of the northern and western Gulf coast on Thursday. 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

National Hurricane Center: Wind Speed Probabilities

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



Wind Probabilities (≥60 mph (95 kph))









NHC: Storm Surge Inundation Graphic



Weather Prediction Center: Rainfall 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: Thursday morning after 10:00 AM Central Time (15:00 UTC).

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			Severe Tropical Storm	Cat. 2 Tropical Cyclone	Cat. 2 Tropical Cyclone	Severe Tropical Storm	Severe Cyclonic Storm
55	65	100							
60	70	110							
65	75	120	Cat. 1 Hurricane	Typhoon	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. 2 Hurricane						
90	105	170				Cat. 4 Severe Tropical Cyclone	Cat. 4 Severe Tropical Cyclone	Intense Tropical Cyclone	
95	110	175							
100	115	185	Cat. 3 Major Hurricane						
105	120	195							
110	125	205				Cat. 5 Severe Tropical Cyclone	Cat. 5 Severe Tropical Cyclone		
115	130	210							
120	140	220	Cat. 4 Major Hurricane					Very Intense Tropical Cyclone	Super Cyclonic Storm
125	145	230							
130	150	240		Super Typhoon					
135	155	250							
140	160	260	Cat. 5 Major Hurricane						
>140	>160	>260							

*Tropical Cyclone Intensity Classifications for Global Basins

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