Current Watches and Warnings

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

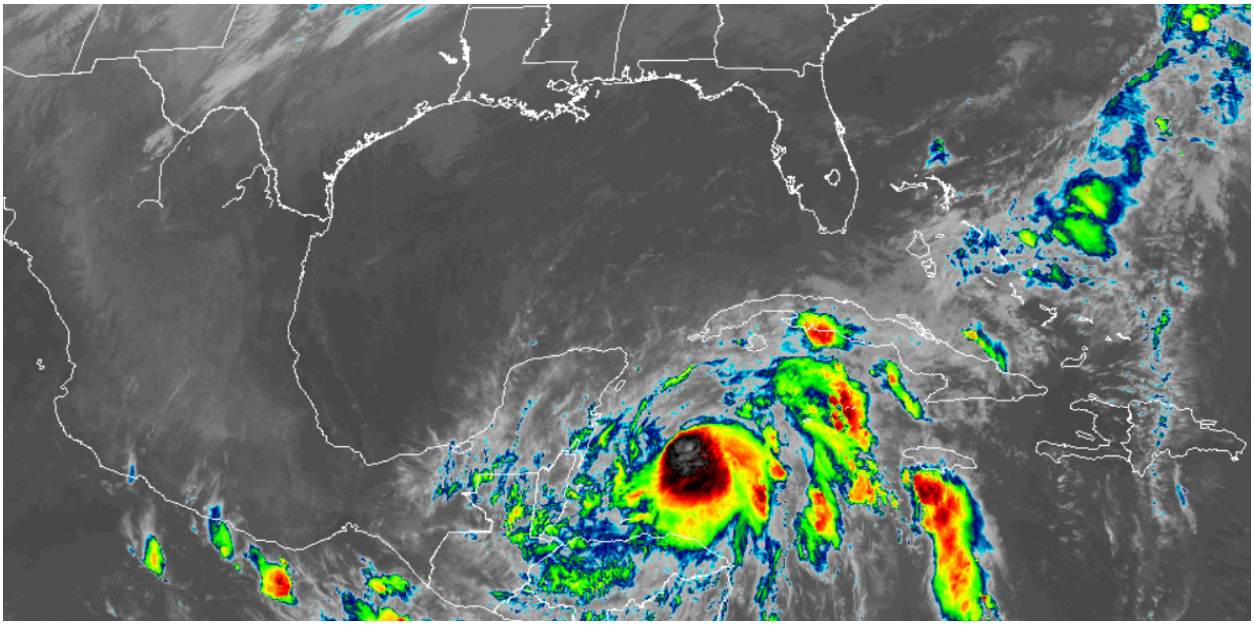
A **Tropical Storm Warning** is in effect for Pinar del Rio (Cuba); south of Tulum to Punta Allen (Mexico); west of Dzilam to Progreso (Mexico)

Current Details from the National Hurricane Center (NHC)

COORDINATES: 19.1° north, 85.3° west
LOCATION: 140 miles (230 kilometers) southeast of Cozumel, Mexico
MOVEMENT: northwest at 10 mph (17 kph)
WINDS: 115 mph (185 kph) with gusts to 85 mph (140 kph)
RADIUS OF TROPICAL STORM-FORCE WINDS: 115 miles (185 kilometers)
MINIMUM CENTRAL PRESSURE: 992 millibars
SAFFIR-SIMPSON SCALE RANKING*: Tropical Storm

FORECAST LANDFALL LOCATION: Mexico (Yucatan Peninsula)
FORECAST LANDFALL TIMEFRAME: late Monday night or early Tuesday morning local time

Latest Satellite Picture



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

Discussion

Tropical Storm Zeta, located approximately 140 miles (230 kilometers) southeast of Cozumel, Mexico, is currently tracking northwest at 10 mph (17 kph). After a period of significant strengthening earlier today, Zeta appears to have steadied in the last few hours. High resolution satellite images indicate that the low-level center of the storm is located near the northwestern edge of the main area of deep convection. The current NHC intensity estimate has been held at 70 mph (110 kph) and is based on an average of the most recent Dvorak satellite estimates. An Air Force Reserve Hurricane Hunter aircraft is scheduled to investigate Zeta in a few hours, and should provide a better estimate of the strength of the storm.

Zeta is moving northwestward, and it is expected that a mid-level ridge of high pressure area centered just east of Florida should steer the tropical cyclone on a continued northwestward heading for the next day before taking the center over the northern part of the Yucatan Peninsula. In roughly 48 hours, Zeta is expected to turn northward over the Gulf of Mexico along the western side of the high. After that time, a trough moving into the southern Plains should induce a turn toward the north-northeast and take the center inland over the southern United States (Louisiana). The system should then move fairly quickly northeastward across the eastern U.S. and emerge into the Atlantic by Day 4. The official NHC track forecast has been adjusted a bit to the west of the previous one.

The storm appears to be experiencing some north-northwesterly wind shear given the displacement of the low-level center from the convection. However, this shear is expected to abate very soon, and the cyclone is likely to strengthen into a hurricane before reaching the northeastern Yucatan Peninsula. Some weakening should occur while Zeta interacts with land during the next 12 to 24 hours. The atmospheric and oceanic environment should be somewhat conducive while the system moves over the southern Gulf of Mexico, and the official NHC forecast shows some re-strengthening in 24 to 36 hours. Later in the forecast period, when Zeta approaches the northern Gulf Coast, cooler shelf waters and some increase in southwesterly shear could cause some weakening. The official NHC intensity forecast is similar to the previous ones and shows Zeta still near hurricane strength at landfall along the northern Gulf of Mexico coast. Zeta is likely to become an extratropical cyclone when it emerges into the Atlantic, and be absorbed by a frontal system around the end of the forecast period.

Key Messages from the National Hurricane Center

1. Hurricane conditions and dangerous storm surge are expected in portions of the northern Yucatan Peninsula of Mexico tonight and early Tuesday. Tropical storm conditions could occur over extreme western Cuba beginning later today.

2. Through Tuesday, heavy rainfall is expected from Zeta across the Yucatan Peninsula of Mexico, the Cayman Islands, and central to western Cuba. This rainfall may lead to flash flooding in urban areas. Between Tuesday night and Thursday, heavy rainfall is expected from portions of the central U.S. Gulf Coast into the southern Appalachians, and Mid-Atlantic States near and in advance of Zeta. This rainfall will lead to flash, urban, small stream, and minor river flooding.

3. Zeta is forecast to be at or near hurricane strength when it approaches the northern Gulf Coast on Wednesday, and there is an increasing risk of dangerous storm surge, wind, and rainfall impacts from Louisiana to the Florida Panhandle. Residents in these areas should monitor the progress of Zeta, as Hurricane and Storm Surge watches will likely be issued later today.

Additional Information

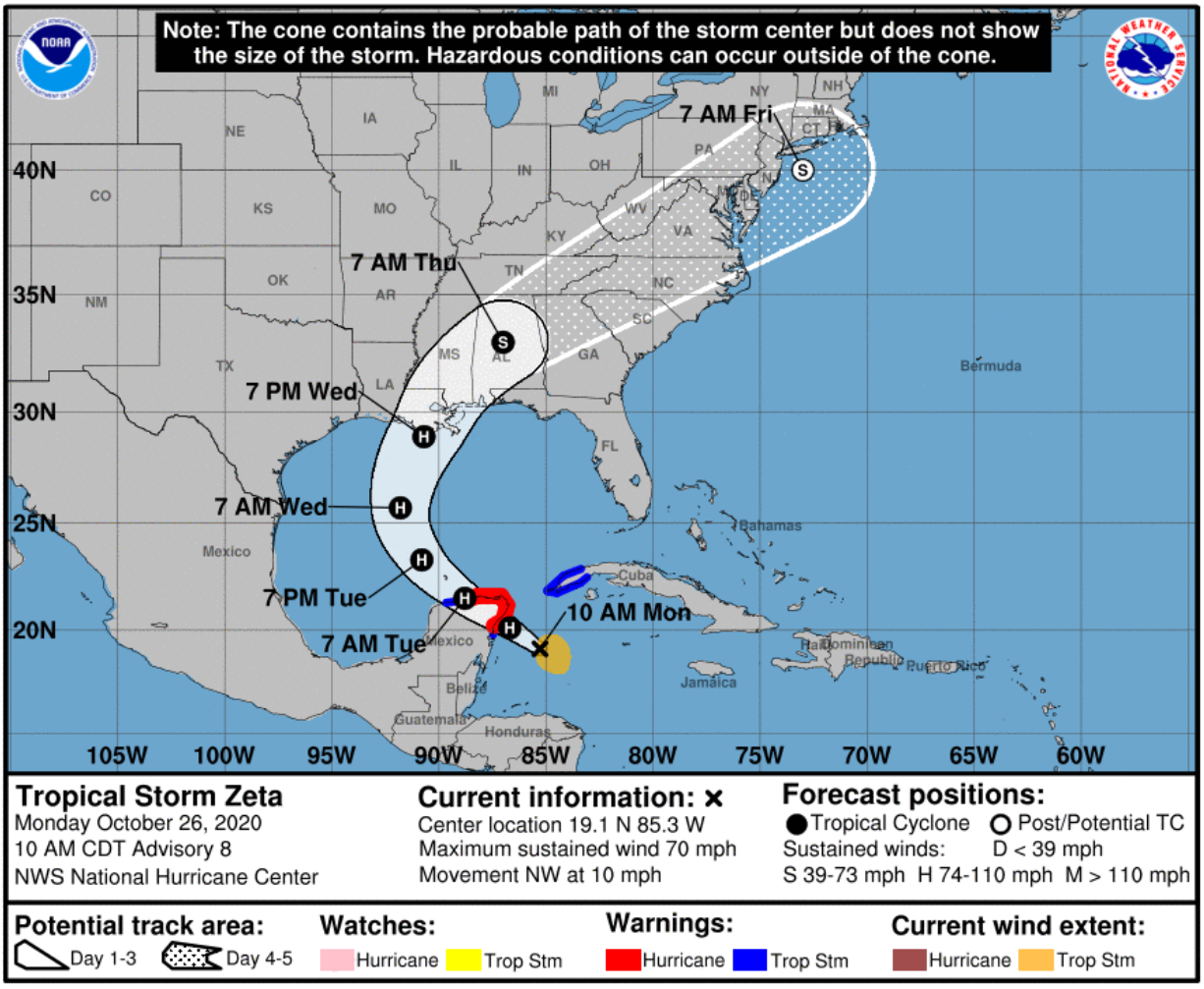
RAINFALL: Rainfall totals of 4 to 8 inches with local amounts of 12 inches are possible through Tuesday along and east-northeast of Zeta's track across the Yucatan Peninsula of Mexico, the Cayman Islands, and central to western Cuba.

Heavy rains will begin to impact the central Gulf Coast Tuesday night, spreading inland across eastern Mississippi, Alabama, northern Georgia during Wednesday, through the southern Appalachians Wednesday night and into the Mid-Atlantic on Thursday. Rainfall totals of 2 to 4 inches with isolated amounts of 6 inches are expected across these areas, resulting in flash, urban, small stream, and minor river flooding.

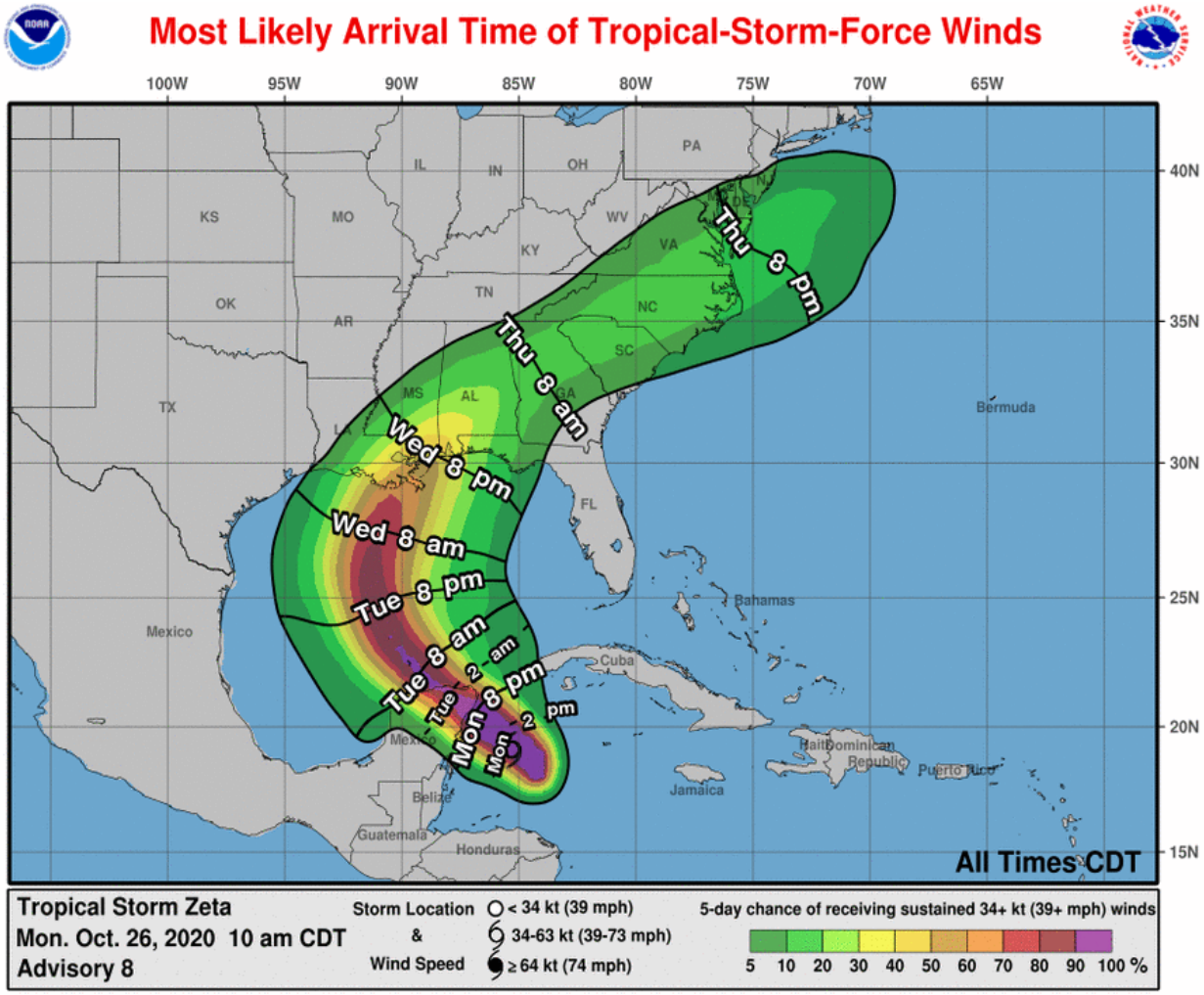
WIND: Hurricane conditions are expected within the Hurricane Warning area in the Yucatan Peninsula by late today. Tropical storm conditions are expected within the Tropical Storm Warning area in Mexico by late today. Tropical storm conditions could occur in the warning area in western Cuba beginning later today.

STORM SURGE: A dangerous storm surge will raise water levels by as much as 2 to 4 feet above normal tide levels along the immediate coast in the Hurricane Warning area near and to the north of where the center makes landfall in the Yucatan Peninsula.

National Hurricane Center (NHC) Forecast

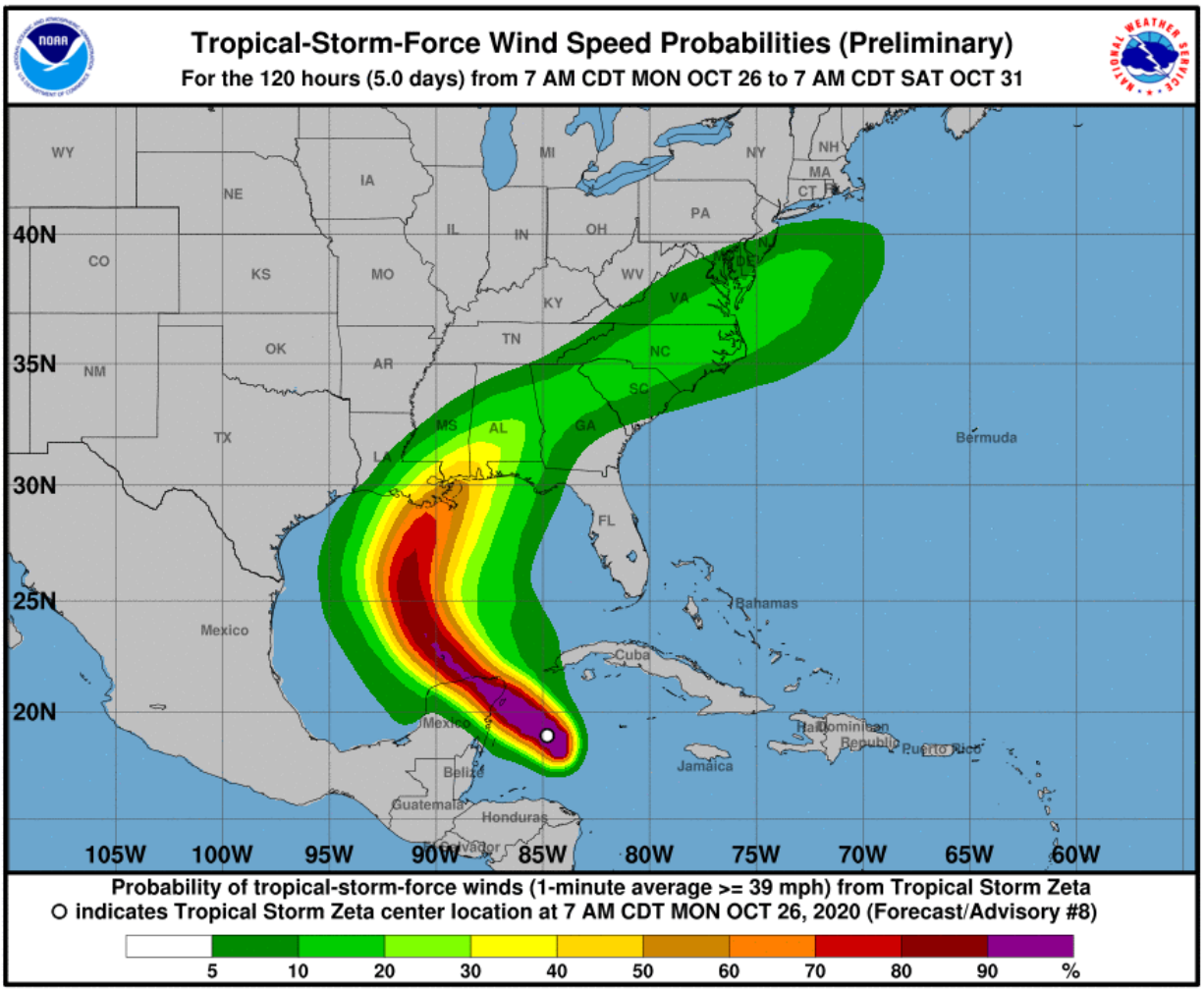


Most Likely Arrival Time of Tropical Storm-Force Winds

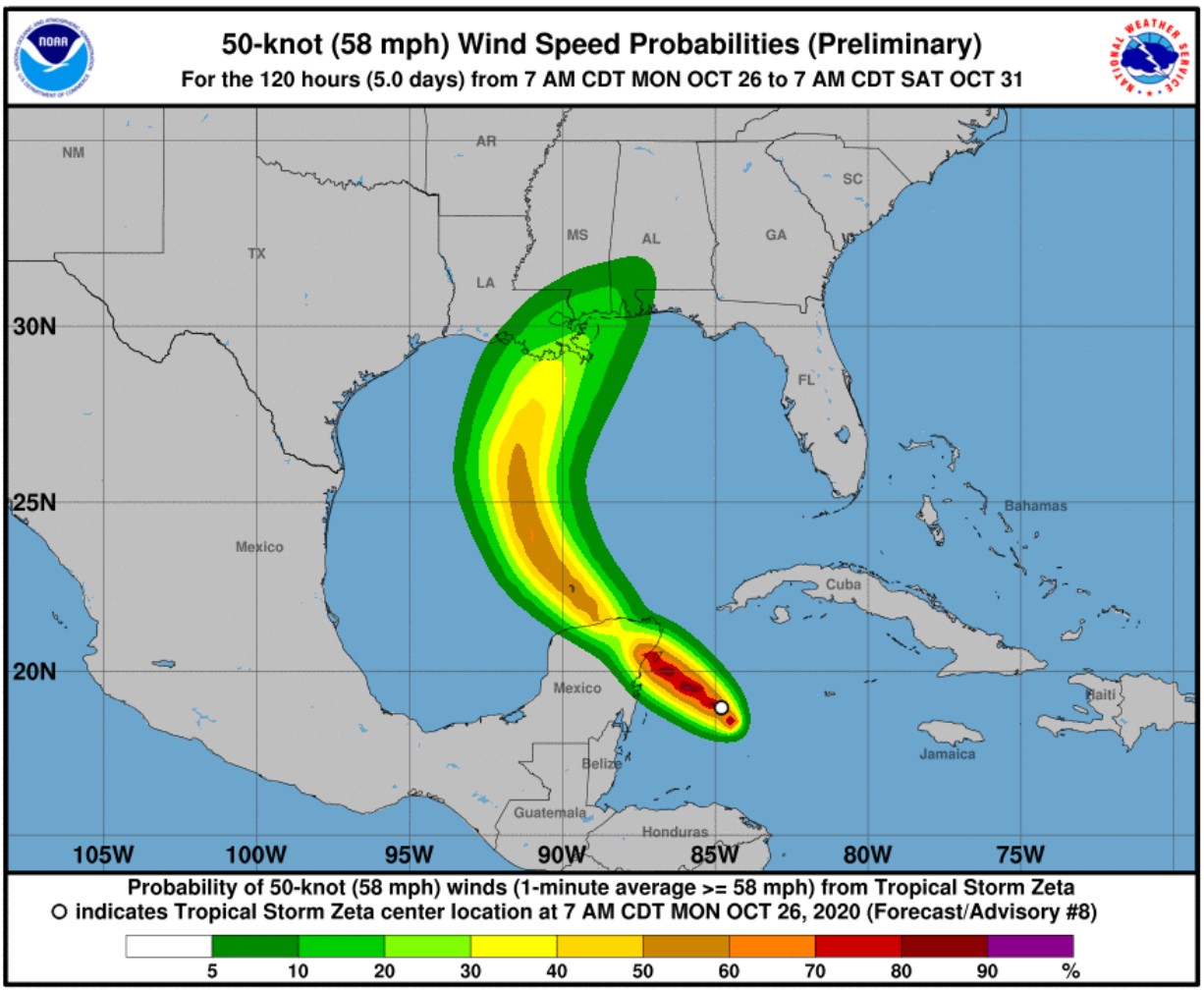


National Hurricane Center: Wind Speed Probabilities

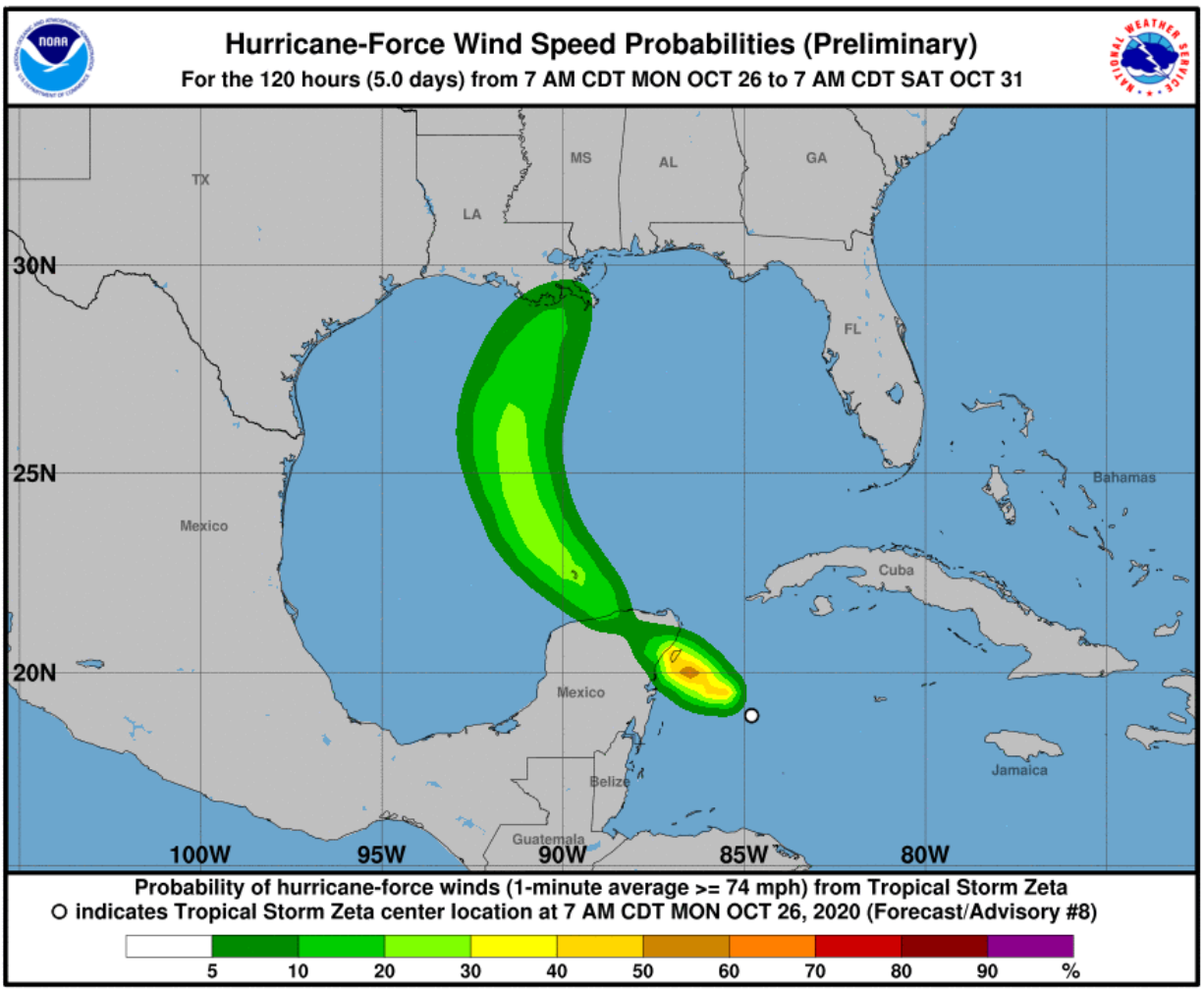
Tropical Storm-Force Wind Probabilities (≥40 mph (65 kph))



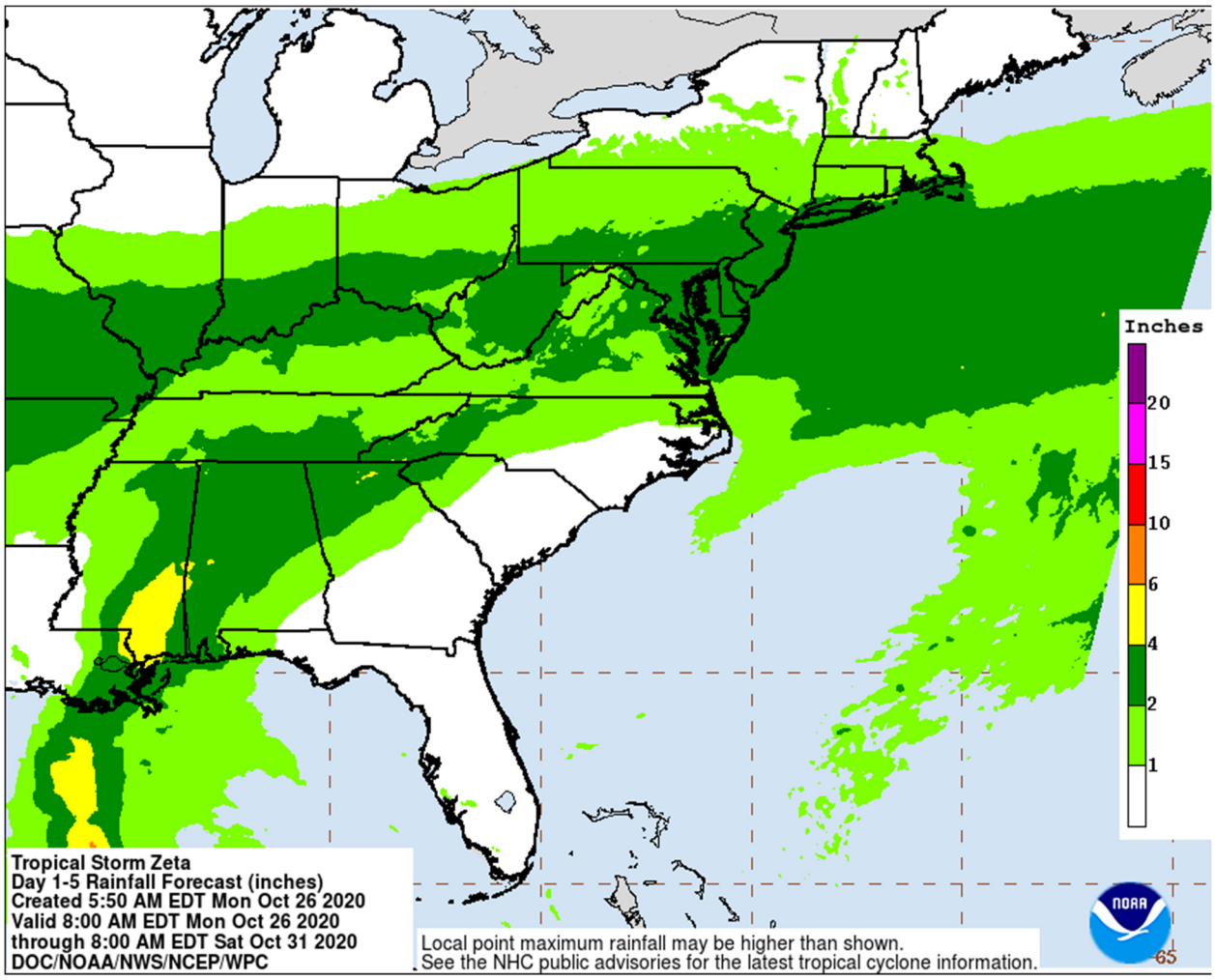
Wind Probabilities (≥60 mph (95 kph))



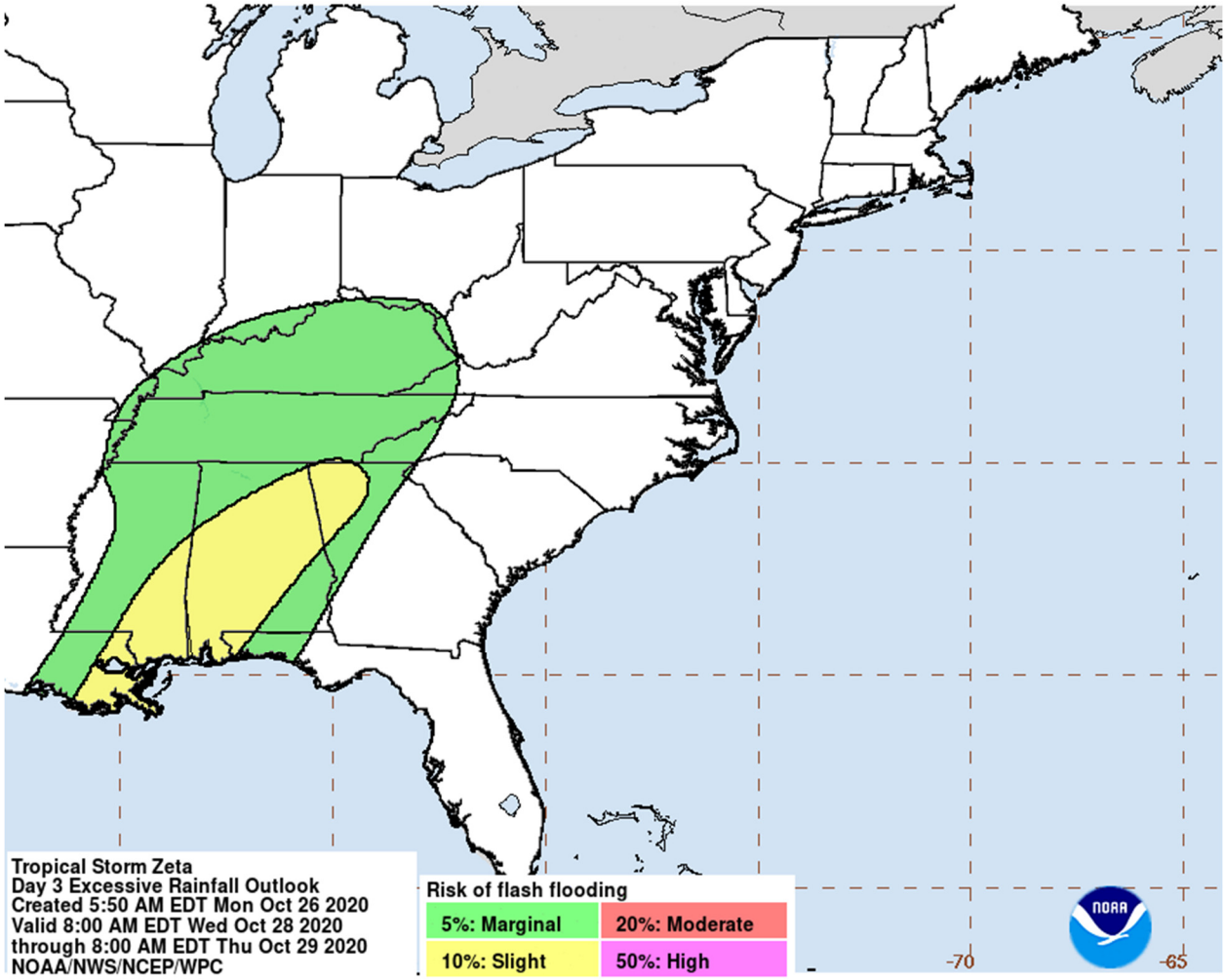
Hurricane-Force Wind Probabilities (≥75 mph (120 kph))



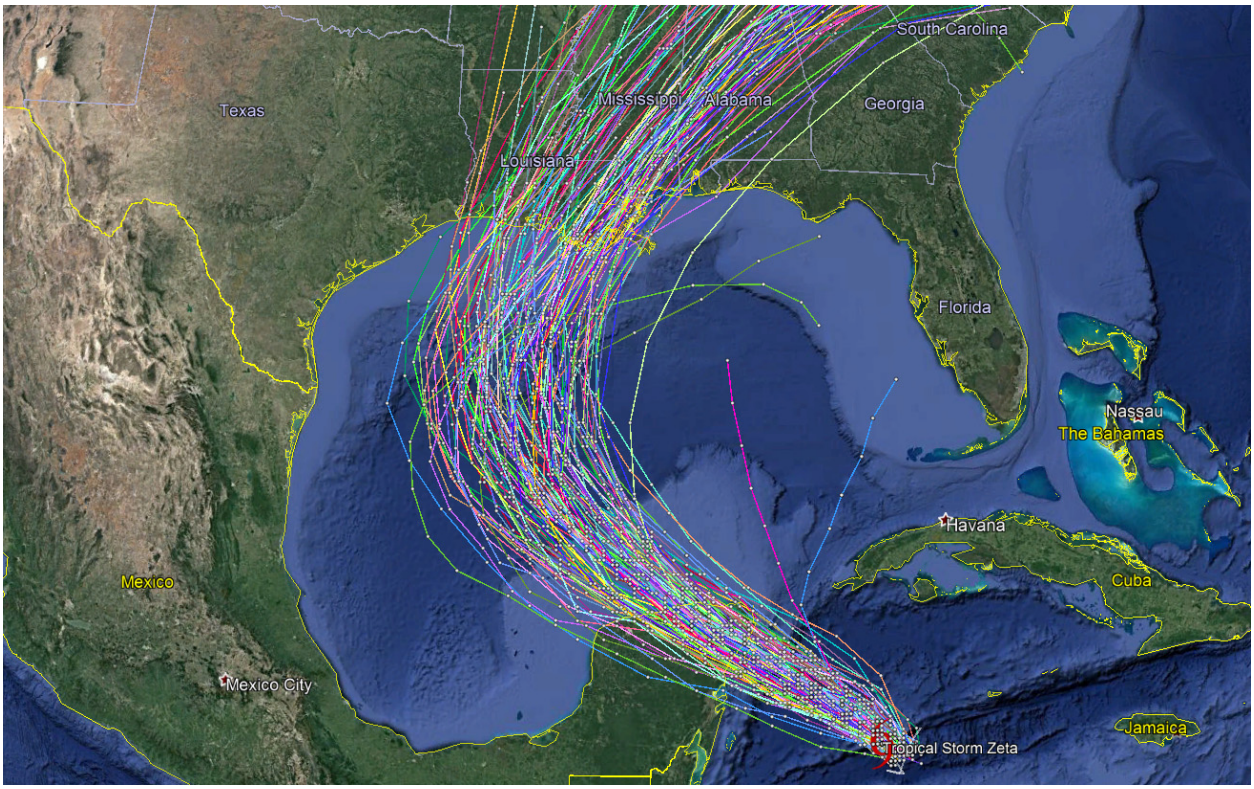
Weather Prediction Center: Rainfall Potential



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

*Tropical Cyclone Intensity Classifications for Global Basins

<table>
<tr><th colspan="3">WIND SPEED</th><th colspan="7">BASINS AND MONITORING BUREAU</th></tr>
<tr><th rowspan="2">KTS[1]</th><th rowspan="2">MPH[1]</th><th rowspan="2">KPH[1]</th><th>NE Pacific, Atlantic</th><th>NW Pacific</th><th>NW Pacific</th><th>SW Pacific</th><th>Australia</th><th>SW Indian</th><th>North Indian</th></tr>
<tr><th>National Hurricane Center (NHC)</th><th>Joint Typhoon Warning Center (JTWC)</th><th>Japan Meteorological Agency (JMA)</th><th>Fiji Meteorological Service (FMS)</th><th>Bureau Of Meteorology (BOM)</th><th>Meteo-France (MF)</th><th>India Meteorological Department (IMD)</th></tr>
<tr><td>30</td><td>35</td><td>55</td><td>Tropical Depression</td><td>Tropical Depression</td><td>Tropical Depression</td><td>Tropical Depression</td><td>Tropical Low</td><td>Tropical Depression</td><td>Deep Depression</td></tr>
<tr><td>35</td><td>40</td><td>65</td><td rowspan="5">Tropical Storm</td><td rowspan="5">Tropical Storm</td><td rowspan="2">Tropical Storm</td><td rowspan="2">Cat. 1 Tropical Cyclone</td><td rowspan="2">Cat. 1 Tropical Cyclone</td><td rowspan="2">Moderate Tropical Storm</td><td rowspan="2">Cyclonic Storm</td></tr>
<tr><td>40</td><td>45</td><td>75</td></tr>
<tr><td>45</td><td>50</td><td>85</td><td rowspan="3">Severe Tropical Storm</td><td rowspan="3">Cat. 2 Tropical Cyclone</td><td rowspan="3">Cat. 2 Tropical Cyclone</td><td rowspan="3">Severe Tropical Storm</td><td rowspan="3">Severe Cyclonic Storm</td></tr>
<tr><td>50</td><td>60</td><td>95</td></tr>
<tr><td>55</td><td>65</td><td>100</td></tr>
<tr><td>60</td><td>70</td><td>110</td><td rowspan="3">Cat. 1 Hurricane</td><td rowspan="13">Typhoon</td><td rowspan="13">Typhoon</td><td rowspan="3">Cat. 3 Severe Tropical Cyclone</td><td rowspan="3">Cat. 3 Severe Tropical Cyclone</td><td rowspan="3">Tropical Cyclone</td><td rowspan="9">Very Severe Cyclonic Storm</td></tr>
<tr><td>65</td><td>75</td><td>120</td></tr>
<tr><td>70</td><td>80</td><td>130</td></tr>
<tr><td>75</td><td>85</td><td>140</td><td rowspan="3">Cat. 4 Severe Tropical Cyclone</td><td rowspan="3">Cat. 4 Severe Tropical Cyclone</td><td rowspan="6">Intense Tropical Cyclone</td></tr>
<tr><td>80</td><td>90</td><td>150</td></tr>
<tr><td>85</td><td>100</td><td>160</td><td rowspan="3">Cat. 2 Hurricane</td></tr>
<tr><td>90</td><td>105</td><td>170</td><td rowspan="7">Cat. 5 Severe Tropical Cyclone</td><td rowspan="7">Cat. 5 Severe Tropical Cyclone</td></tr>
<tr><td>95</td><td>110</td><td>175</td></tr>
<tr><td>100</td><td>115</td><td>185</td><td rowspan="4">Cat. 3 Major Hurricane</td></tr>
<tr><td>105</td><td>120</td><td>195</td></tr>
<tr><td>110</td><td>125</td><td>205</td></tr>
<tr><td>115</td><td>130</td><td>210</td></tr>
<tr><td>120</td><td>140</td><td>220</td><td rowspan="4">Cat. 4 Major Hurricane</td><td rowspan="5">Very Intense Tropical Cyclone</td><td rowspan="5">Super Cyclonic Storm</td></tr>
<tr><td>125</td><td>145</td><td>230</td></tr>
<tr><td>130</td><td>150</td><td>240</td><td rowspan="3">Super Typhoon</td></tr>
<tr><td>135</td><td>155</td><td>250</td></tr>
<tr><td>140</td><td>160</td><td>260</td><td rowspan="2">Cat. 5 Major Hurricane</td></tr>
<tr><td>>140</td><td>>160</td><td>>260</td></tr>
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