HURRICANE IAN

Current Watches and Warnings

A **Hurricane Warning** is in effect for Grand Cayman, Cuban provinces of Isla de Juventud, Pinar del Rio, and Artemisa

A **Tropical Storm Warning** is in effect for the Cuban provinces of La Habana, Mayabeque, and Matanzas, Lower Florida Keys from Seven Mile Bridge westward to Key West, Dry Tortugas

A **Storm Surge Watch** is in effect for the Florida Keys from the Card Sound Bridge westward to Key West, Dry Tortugas, Florida Bay, Anclote River southward to the Card Sound Bridge, Tampa Bay

A **Hurricane Watch** is in effect for Englewood to the Anclote River, including Tampa Bay

A **Tropical Storm Watch** is in effect for, Little Cayman and Cayman Brac, Englewood southward to Flamingo, Florida Keys from Seven Mile Bridge to the Channel 5 Bridge, Lake Okeechobee

Current Details from the National Hurricane Center

COORDINATES: 19.1° north, 82.7° west

LOCATION: 100 miles (160 kilometers) west of Grand Cayman

MOVEMENT: Northwest at 13 mph (20 kph)

WINDS: 80 mph (130 kph) with gusts to 100 mph (160 kph)

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

RADIUS OF HURRICANE-FORCE WINDS: 20 miles (32 kilometers)

MINIMUM CENTRAL PRESSURE: 980 millibars

SAFFIR-SIMPSON SCALE RANKING: Category 1

FORECAST LANDFALL LOCATION: Western Cuba

FORECAST LANDFALL TIMEFRAME: September 27 (morning / local time)

Latest Satellite Imagery

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

Discussion

The satellite presentation of Ian has improved this morning. Deep convection has increased within the inner core during the past several hours, with an expanding central dense overcast noted in recent satellite imagery. The inner core structure continues to take shape in radar data, although the eyewall still has a banded appearance and remains open on the west side. Data from the NOAA and Air Force Hurricane Hunter aircraft indicate that the minimum pressure has gradually fallen to about 980 mb, and the initial intensity is raised slightly to 80 mph (130 kph) for this advisory. The intensity of Ian has increased by 35 mph (55 kph) during the past 18 hours. Further rapid intensification (RI) is expected during the next 24-36 h as Ian crosses the high oceanic heat content of the northwestern Caribbean Sea within a very low vertical wind shear (VWS) environment.

The NHC intensity forecast is like the previous one, and it shows Ian becoming a major hurricane by the time it reaches western Cuba. Ian is forecast to reach its peak intensity in 36 hours over the southeastern Gulf of Mexico. Then, increasing southwesterly shear by 36-48 hours is expected to bring an end to the intensification phase. The combination of strong vertical wind shear and drier mid-level air will induce weakening thereafter, but Ian is expected to remain at or near major hurricane strength as it passes near the west-central coast of Florida on Wednesday and Thursday.

Ian continues to move northwestward at 13 mph (20 kph). A turn toward the north-northwest and north is expected during the next day or so as the hurricane moves around the western extent of a mid-level ridge. Then, an upper-level trough over the eastern U.S. should cause Ian to turn more north-northeastward through Thursday. This track brings the center of Ian close to the west-central coast of Florida during the middle of the week. An even greater concern is the slower forward motion that is forecast during this period, as the upper trough passes north and east of Ian and the steering currents weaken. This would likely prolong the storm surge, wind, and rainfall impacts along the affected portions of the west coast of Florida, although the roughly shore-parallel track still makes it difficult to pinpoint exactly what locations will experience the most severe impacts. The track guidance has come into better agreement during the first 72 hours of the forecast period, and only a minor eastward adjustment was made to the NHC track forecast in line with the multi-model consensus aids.

The aircraft data indicate that the tropical storm force wind radii in the northeastern quadrant were 20-30 n mi larger than previously estimated, and this has been reflected in the latest forecast. Based on these changes, Tropical Storm Watches have been issued for the middle Florida Keys and extended southward along the southwestern coast of Florida.

<u>Key Messages from the National Hurricane Center</u>

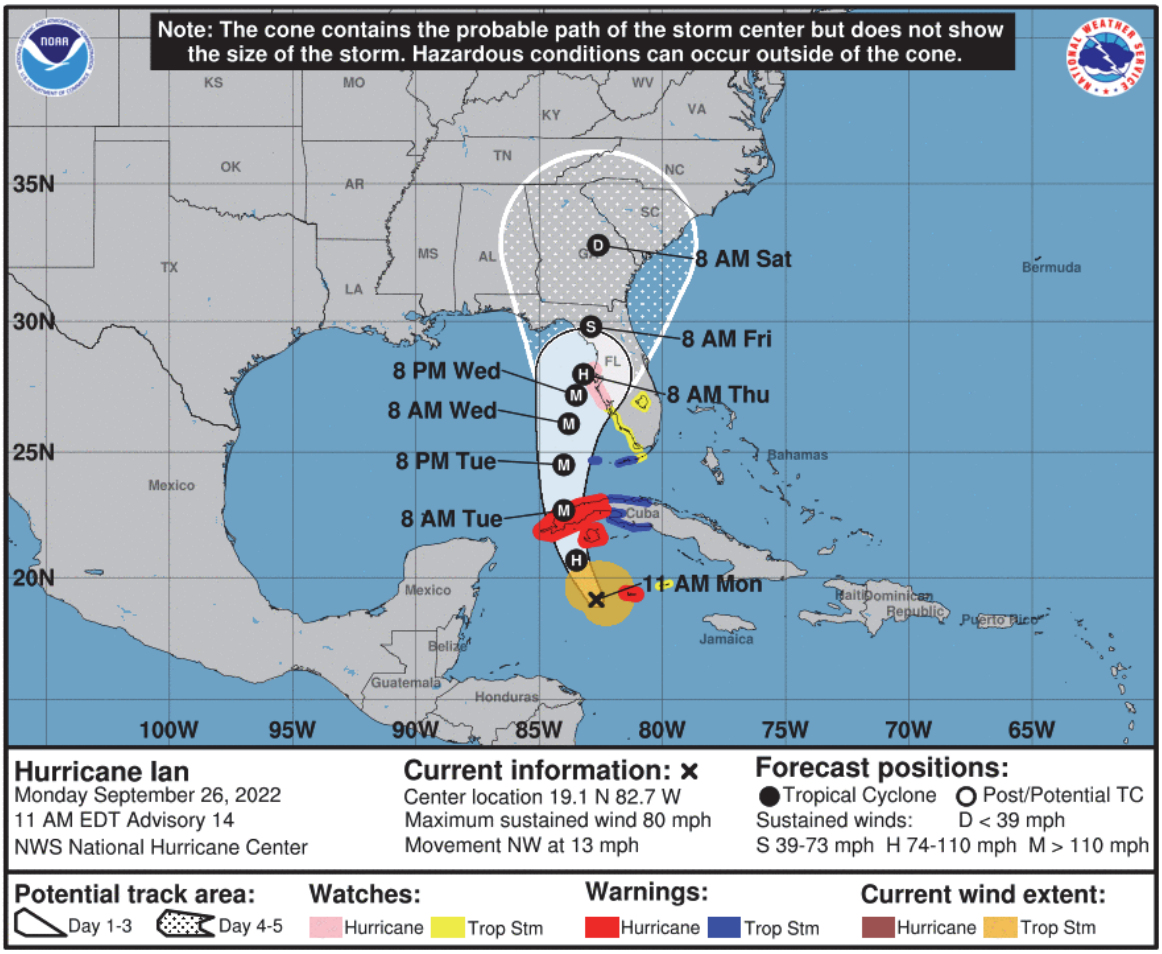
1. Life-threatening storm surge, hurricane-force winds, flash floods and possible mudslides are expected in portions of western Cuba beginning this evening and continuing into Tuesday. Devastating wind damage is possible where the core of Ian moves across western Cuba. Efforts to protect life and property should be rushed to completion.

2. Life-threatening storm surge is possible along much of the Florida west coast, with the highest risk from Fort Myers to the Tampa Bay region. Residents in these areas should listen to advice given by local officials.

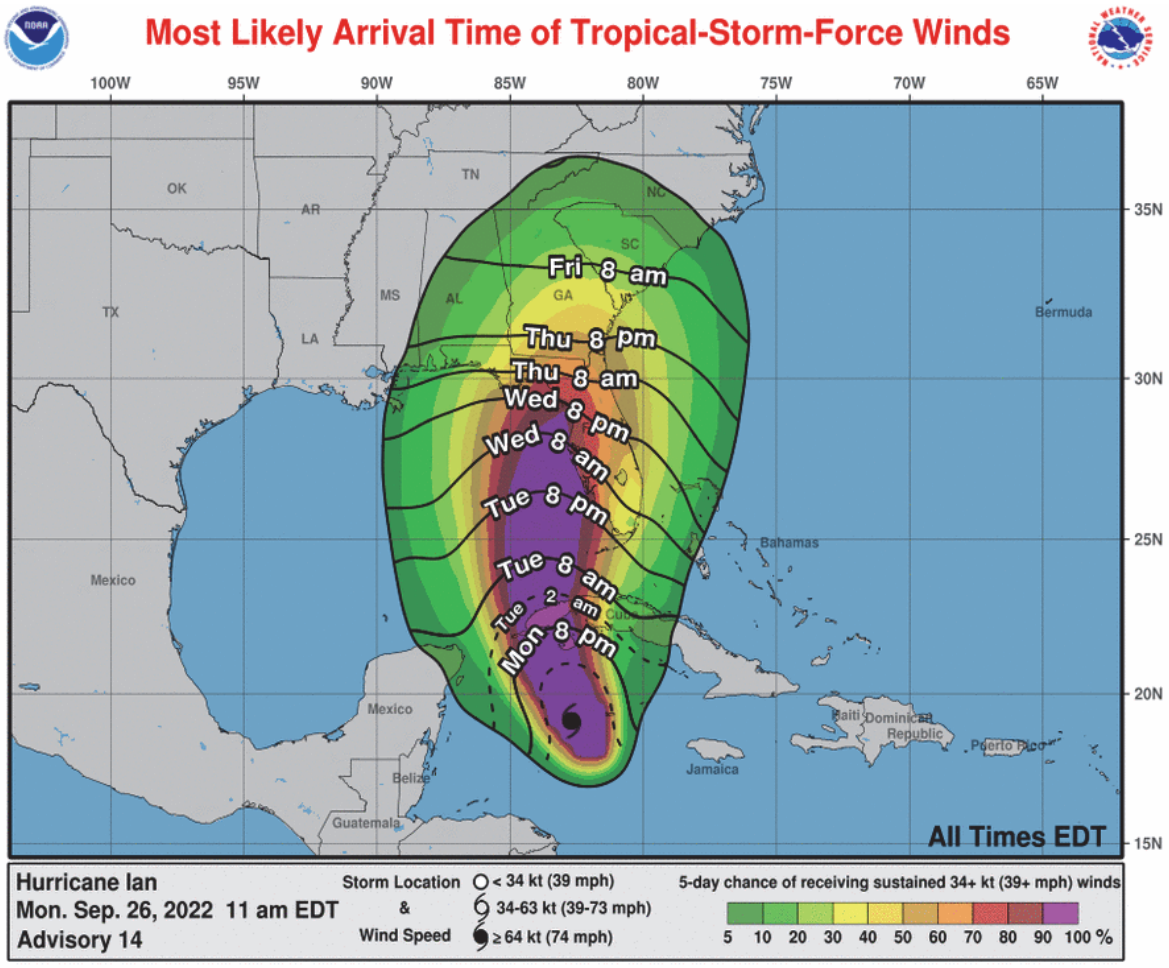
3. Hurricane-force winds are possible in the hurricane watch area in west-central Florida beginning Wednesday morning with tropical storm conditions possible by late Tuesday. Residents in this area should ensure that they have their hurricane plan in place.

4. Heavy rainfall will increase across the Florida Keys and south Florida Tuesday, spreading to central and northern Florida Wednesday and Thursday, potentially causing flash, urban and small stream flooding. Significant prolonged river flooding is likely across central Florida.

National Hurricane Center Forecast

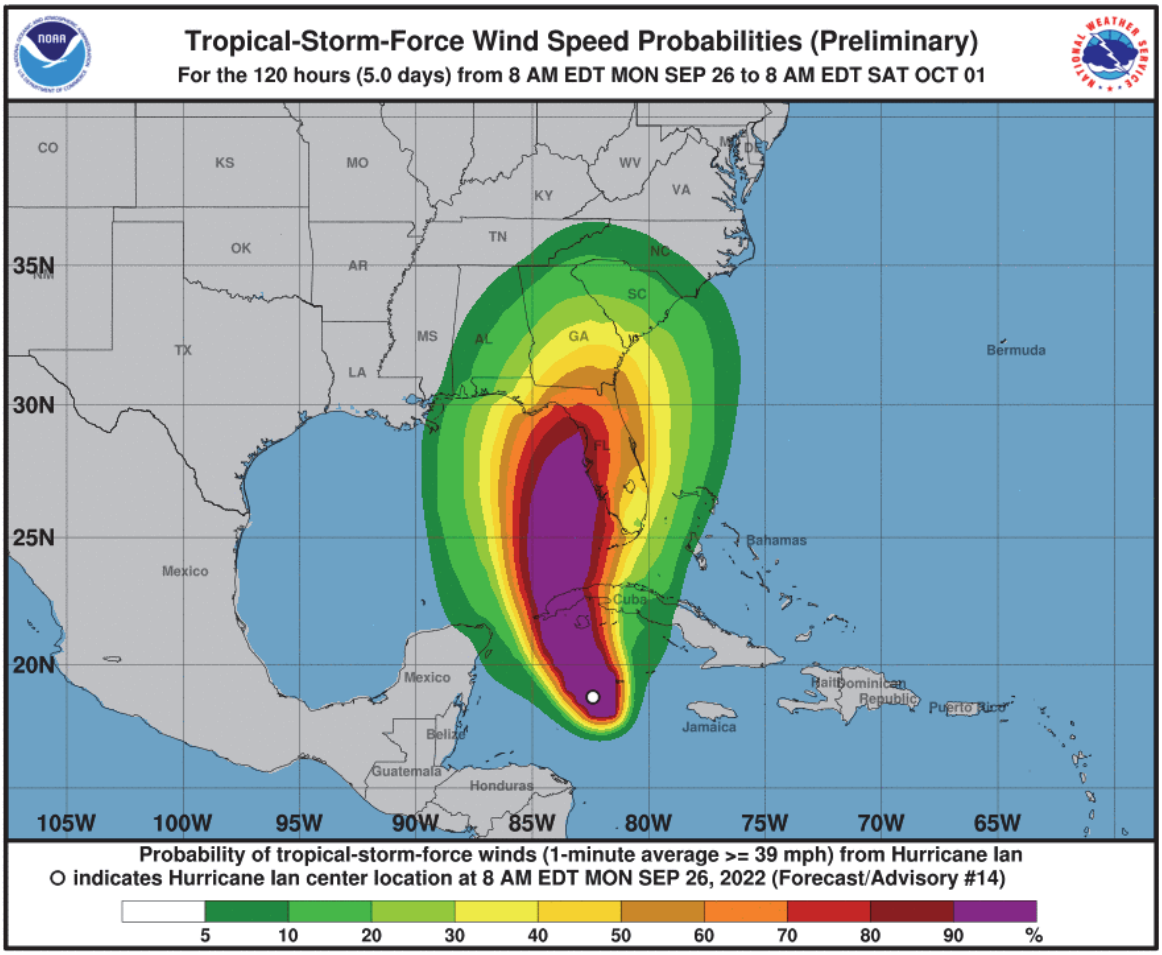


Most Likely Arrival Time of Tropical Storm-Force Winds

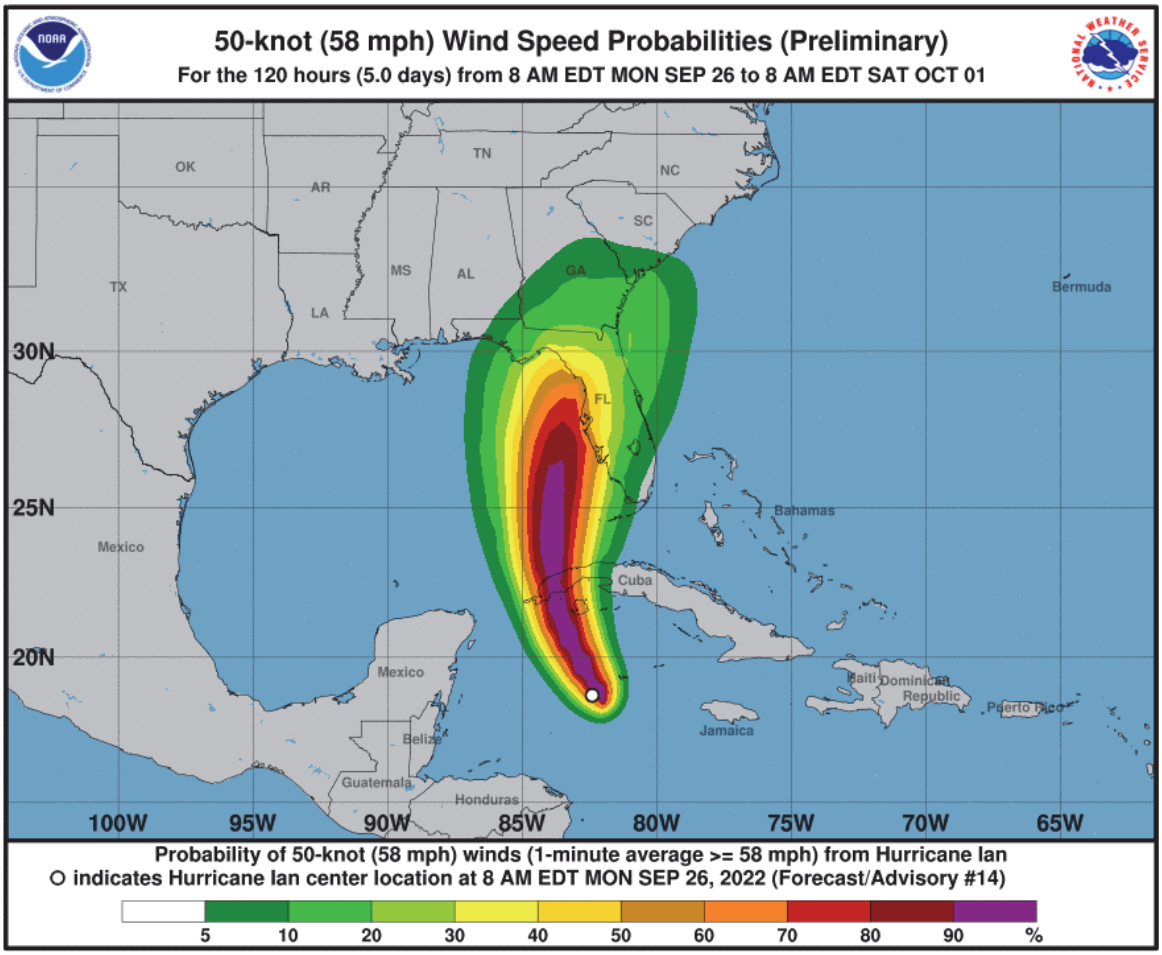


National Hurricane Center: Wind Speed Probabilities

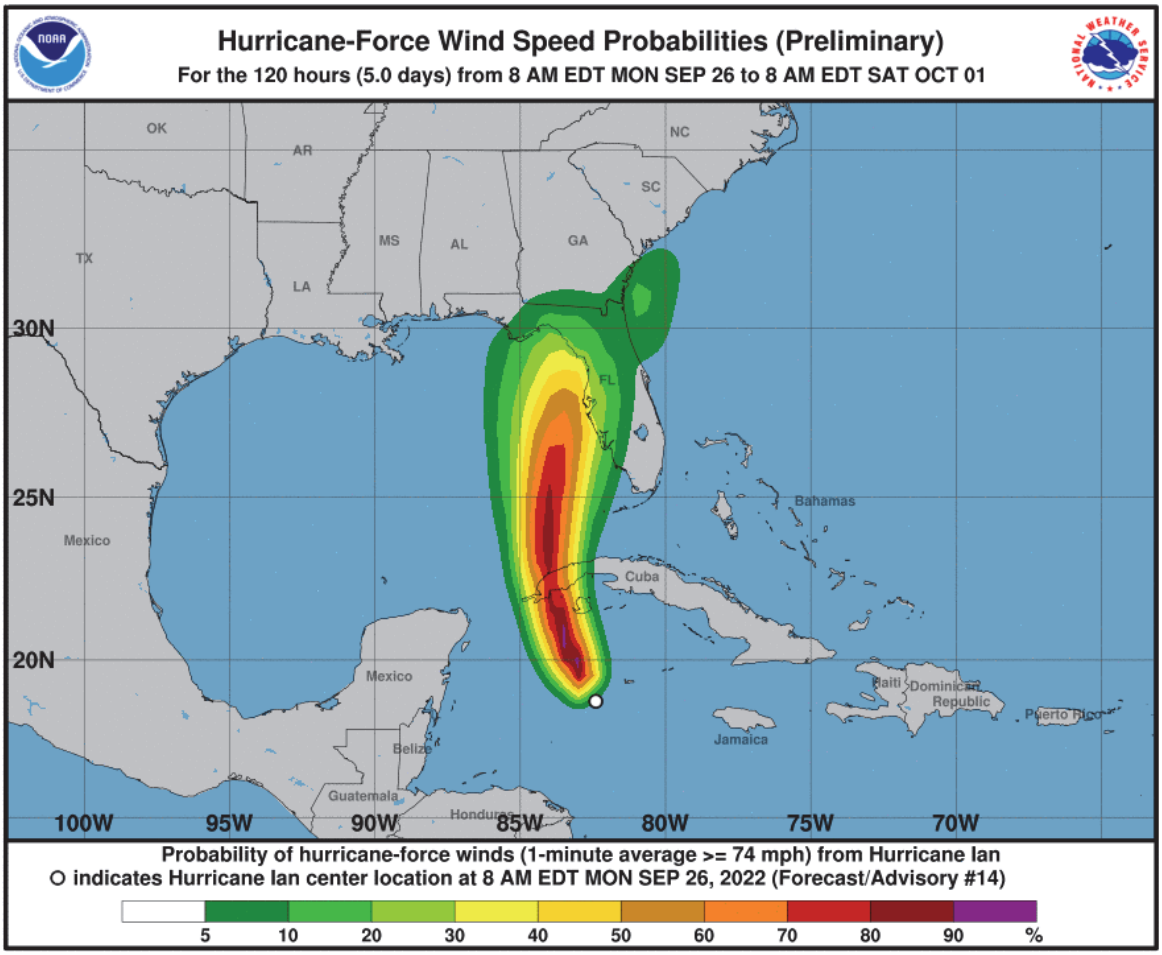
Tropical Storm-Force Wind Probabilities (≥40 mph (65 kph))



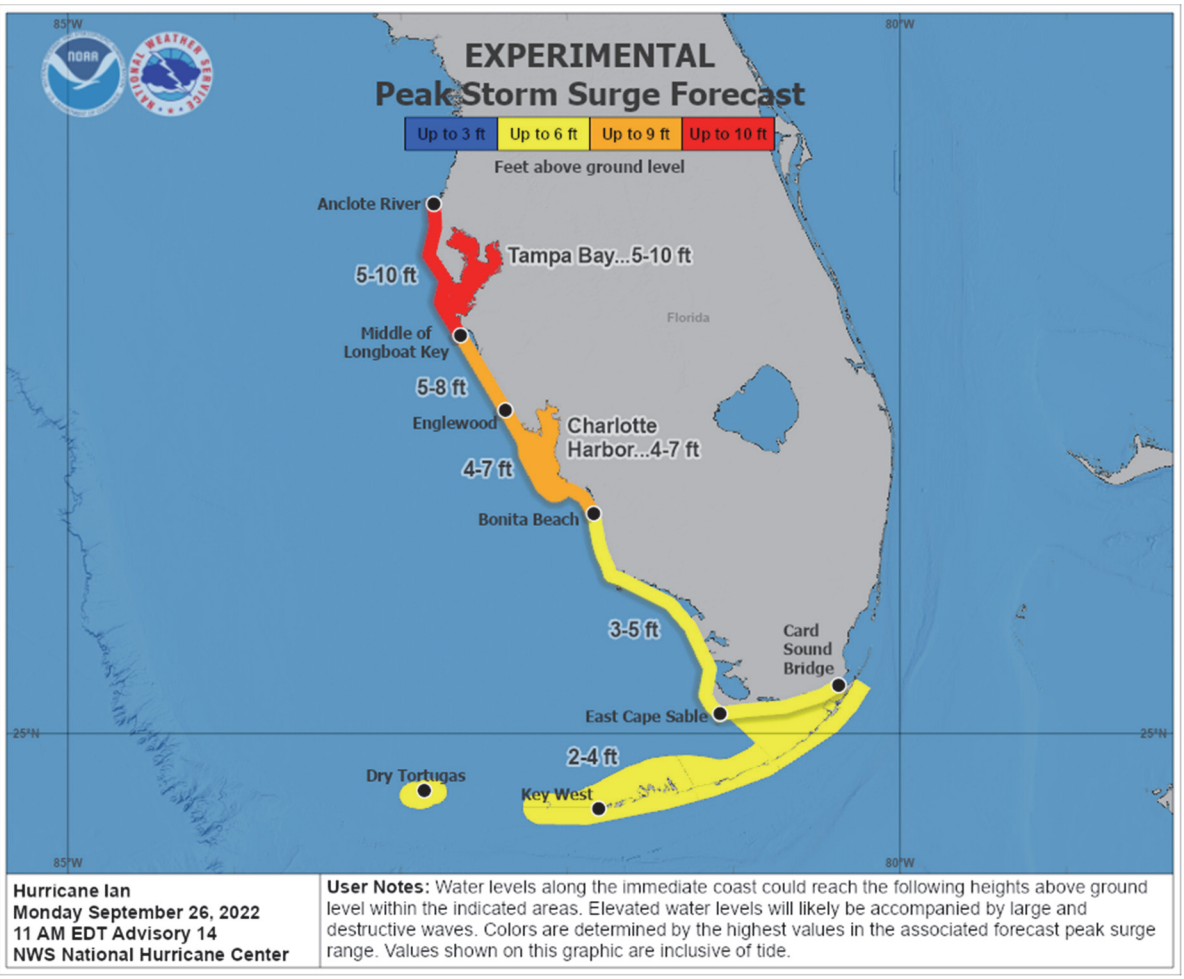
Wind Probabilities (≥60 mph (95 kph))



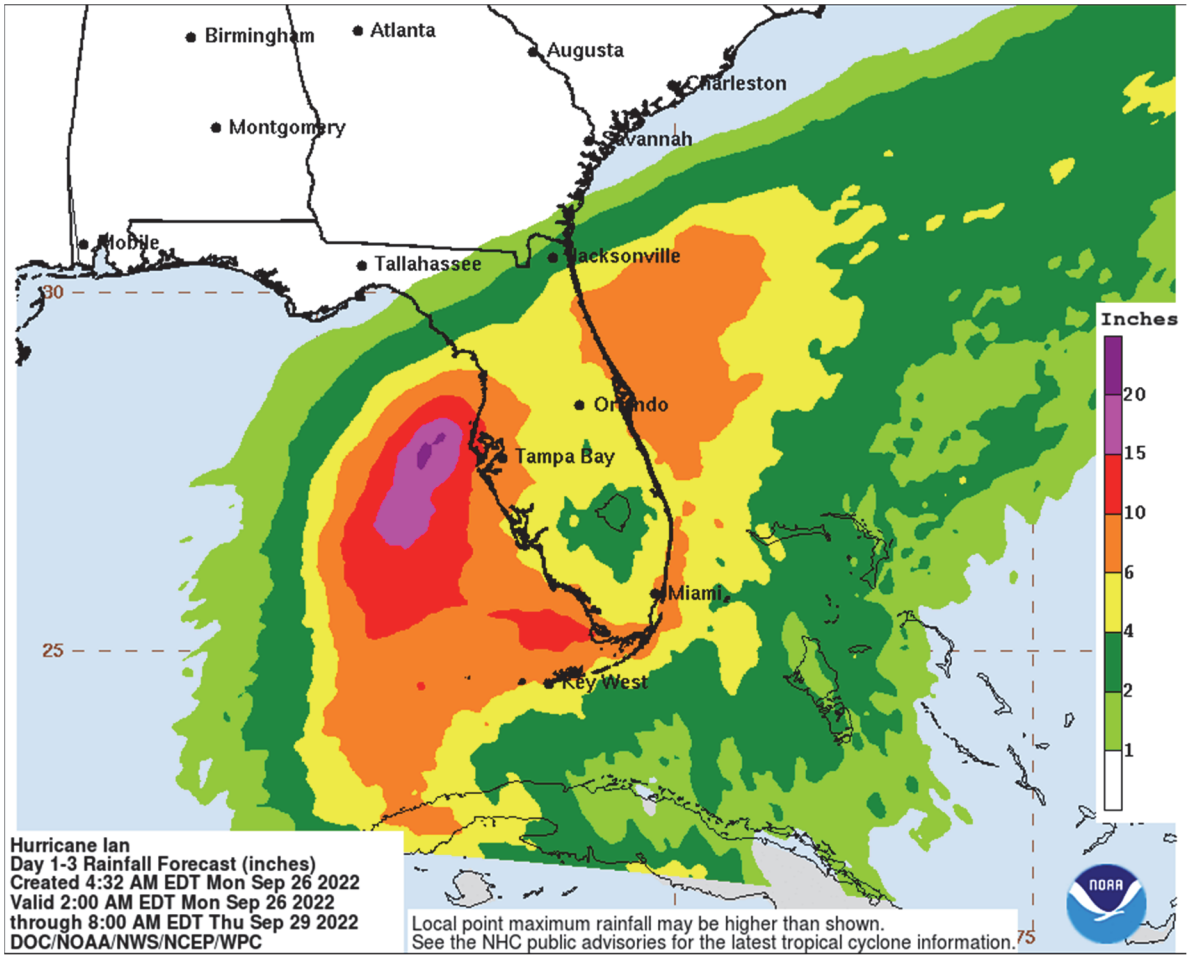
Hurricane-Force Wind Probabilities (≥75 mph (120 kph))



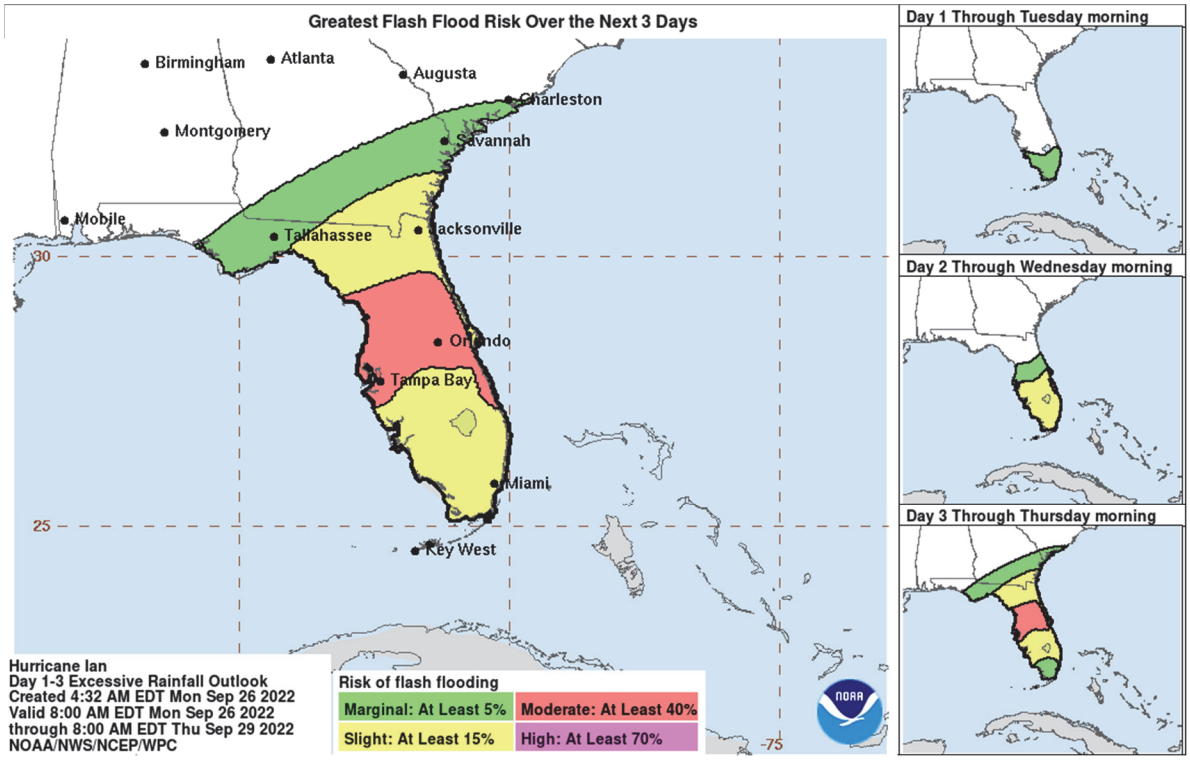
National Hurricane Center: Storm Surge Inundation Graphic



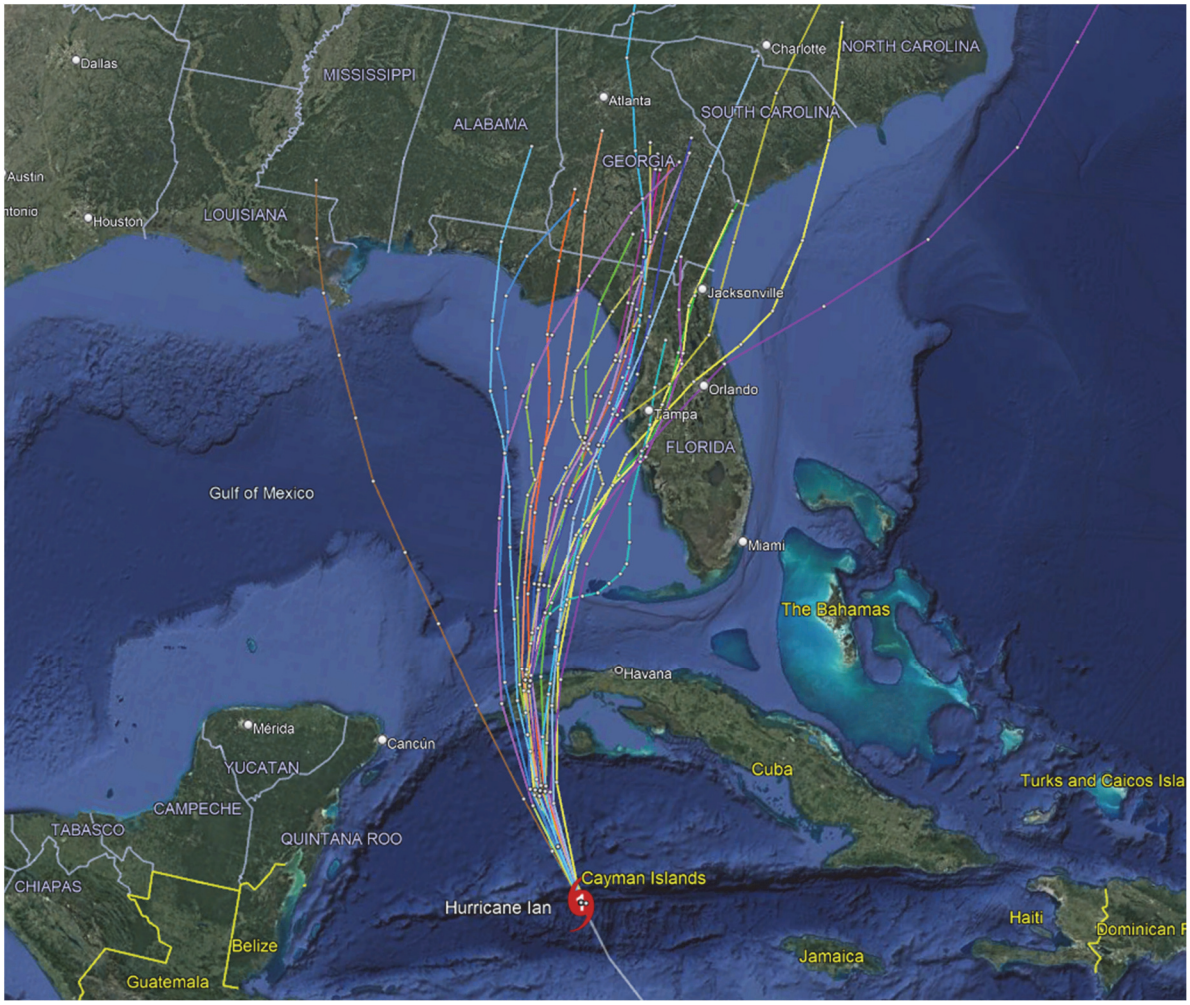
Weather Prediction Center: Rainfall Potential



Weather Prediction Center: Flash Flood Potential



Current 'Spaghetti' Model Output Data



Source: NOAA

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: Monday, September 26 after 21:00 UTC

Appendix: 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">KT</th><th rowspan="2">MPH</th><th rowspan="2">KPH</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="6">Tropical Storm</td><td rowspan="6">Tropical Storm</td><td rowspan="3">Tropical Storm</td><td rowspan="3">Cat. 1 Tropical Cyclone</td><td rowspan="3">Cat. 1 Tropical Cyclone</td><td rowspan="3">Moderate Tropical Storm</td><td rowspan="3">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></tr>
<tr><td>50</td><td>60</td><td>95</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>55</td><td>65</td><td>100</td></tr>
<tr><td>60</td><td>70</td><td>110</td></tr>
<tr><td>65</td><td>75</td><td>120</td><td rowspan="4">Cat. 1 Hurricane</td><td rowspan="11">Typhoon</td><td rowspan="11">Typhoon</td><td rowspan="4">Cat. 3 Severe Tropical Cyclone</td><td rowspan="4">Cat. 3 Severe Tropical Cyclone</td><td rowspan="4">Tropical Cyclone</td><td rowspan="11">Very Severe Cyclonic Storm</td></tr>
<tr><td>70</td><td>80</td><td>130</td></tr>
<tr><td>75</td><td>85</td><td>140</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="3">Cat. 4 Severe Tropical Cyclone</td><td rowspan="3">Cat. 4 Severe Tropical Cyclone</td><td rowspan="3">Intense 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="3">Cat. 3 Major Hurricane</td></tr>
<tr><td>105</td><td>120</td><td>195</td><td rowspan="5">Cat. 5 Severe Tropical Cyclone</td><td rowspan="5">Cat. 5 Severe Tropical Cyclone</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="4">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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About Aon

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