

GC Briefing

October 10, 2018

Weather Sentinel Hurricane Michael

Hurricane Michael has strengthened into a category-4 hurricane on the Saffir-Simpson Scale, with further intensification possible before landfall according to the National Hurricane Center (NHC). The center of Michael is forecast to make landfall in the Florida Panhandle near Panama City Beach, Florida later today.

Status at 8 AM EDT (12 UTC) Today (NHC)

Maximum Sustained Winds: 145 mph
Approximate Location: About 90 miles southwest of Panama City, Florida
Motion: North at 13 mph
Minimum Central Pressure: 933 mb
Extent of Hurricane-Force Winds from the Center: 45 miles
Extent of Tropical-Storm-Force Winds from the Center: 185 miles
Status: Category-4 Hurricane

Discussion

- Hurricane Michael now sits about 90 miles southwest of Panama City, Florida moving to the north at 13 mph according to the National Hurricane Center (NHC). The NHC best forecast indicates that Michael will begin to turn to the north-northeast within the next 12 hours due to the steering effects of a low pressure trough over the central U.S. and a high pressure ridge over the western Atlantic. This guidance indicates that landfall should occur close to the 12 hour forecast point to the east of Panama City, Florida. The turn to the north-northeast will correspond with a significant increase in forward speed as the storm crosses the Southeastern U.S. following landfall. The current NHC forecast track indicates Michael will reemerge over the Atlantic as a Tropical Storm on late Thursday or Friday near Norfolk, Virginia.
- Concerning intensity, Michael has strengthened to a category-4 hurricane on the Saffir-Simpson Scale with maximum sustained winds of 145 mph and higher gusts. Michael's strengthening has been aided by warm sea surface temperatures, increased storm ventilation, and light to moderate wind shear conditions. Potential additional strengthening may occur until interaction with land disrupts Michael's structure as the storm approaches the coast.
- Hurricane, tropical storm and storm surge watches and warnings have been issued by the NHC for areas under potential or imminent threat along the northeastern Gulf Coast and southeast U.S. coast. Specifics can be found at www.nhc.noaa.gov. Watches, warnings and advisories have also been issued for inland areas under threat by local National Weather Service Forecast Offices, available at www.weather.gov.
- This is a large storm, and conditions extend well away from the center of circulation. Hazards of concern include:
 - Storm surge to render property, vehicle and infrastructure damage due to seawater inundation, water velocity and wave battering with waterborne debris. Inundation heights above ground may reach as high as 9-13 feet for some areas according to the NHC. Impacts will be most severe near the immediate coast and adjacent waterways, however seawater inundation will extend well inland from the immediate coast and adjacent waterways to also affect broad, low-lying areas of the Florida Panhandle

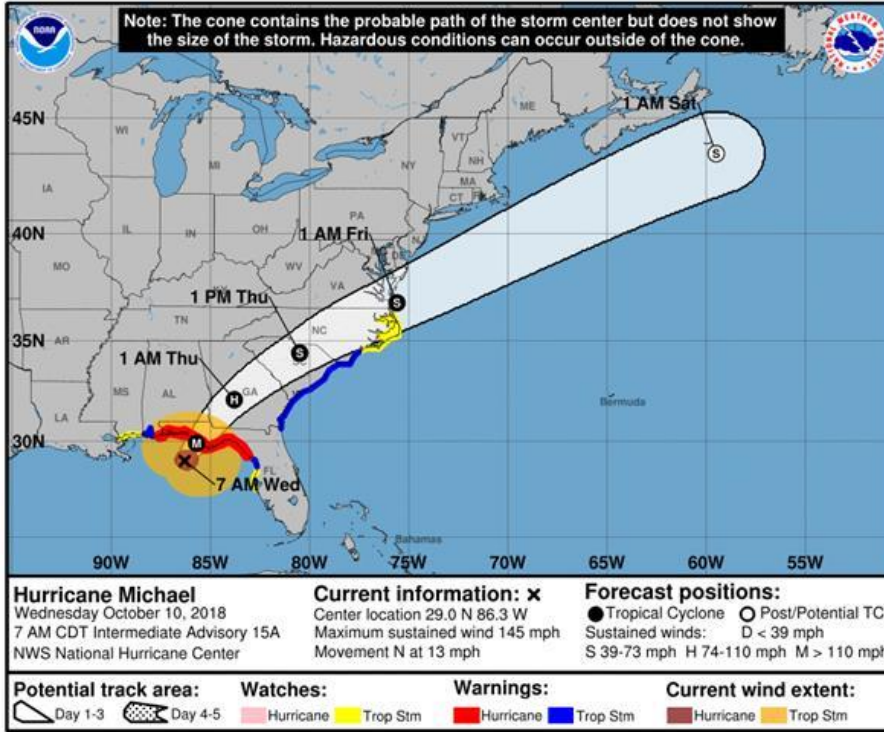
- and Big Bend Region.
- Severe to complete wind damage can be expected to property and infrastructure along and adjacent to the core of the storm. Damaging winds will render variable property and vehicle damage over a large area, along with downed trees and powerlines and power outages. Hurricane conditions will extend well inland to affect areas of the Florida Panhandle, southeastern Alabama and southwestern Georgia where more substantial wind damage can be expected for these areas to both property and infrastructure. Wind impacts will be most severe for areas closer and to the right of the storm track and closer to coastal areas.
 - Heavy rainfall will also bring the threat of flooding and flash-flooding for areas in the Florida Panhandle, Big Bend, and southeast Alabama, with amounts of 4-8 inches and local amounts to 12 inches expected by the NHC. The flood threat will be compounded where storm water management systems are impeded by storm surge.
 - Tornadoes will be possible across parts of the Florida Panhandle and the northern Florida Peninsula through this afternoon with tornado risk spreading into parts of central and southern Georgia and southern South Carolina this afternoon and tonight.
- where a storm surge warning is in effect. The worst of the storm surge is expected between Tyndall Air Force Base and Keaton Beach where 9 to 13 feet of inundation is possible.
2. Michael is likely to produce potentially catastrophic wind damage where the core of the hurricane moves on shore in the Florida Panhandle. Dangerous hurricane-force winds will also extend well inland across portions of the Florida Panhandle, southern Georgia, and southeast Alabama as Michael moves inland.
 3. Heavy rainfall from Michael could produce life-threatening flash flooding from the Florida Panhandle and Big Bend region into portions of Georgia, the Carolinas and southeast Virginia.
 4. Tropical storm conditions will likely affect portions of the southeast U.S. coast from northeast Florida through Virginia, and tropical storm watches and warning are in effect for these areas.

Further Sentinel updates will be issued as materially new guidance comes available. Statements from the National Hurricane Center can be found at www.nhc.noaa.gov. Local National Weather Service watches, warnings and advisories can be found at www.weather.gov (type in the location or zip code, or click on the map).

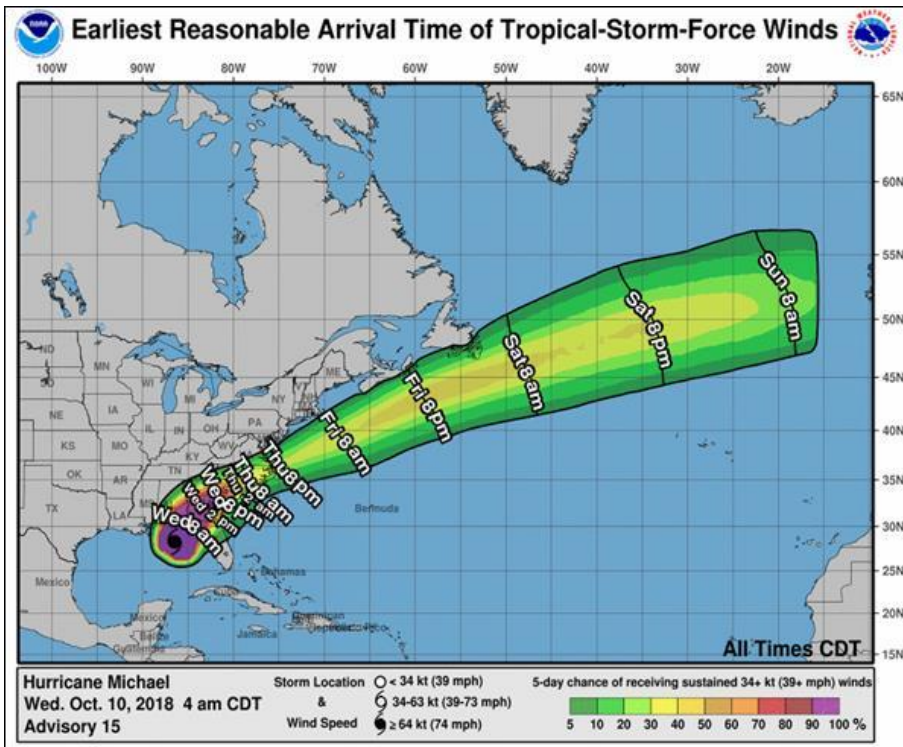
Local watches and warnings from official meteorological agencies, and statements from local emergency management agencies supersede this update, and should be closely heeded concerning matters of personal safety.

Key Messages From The NHC

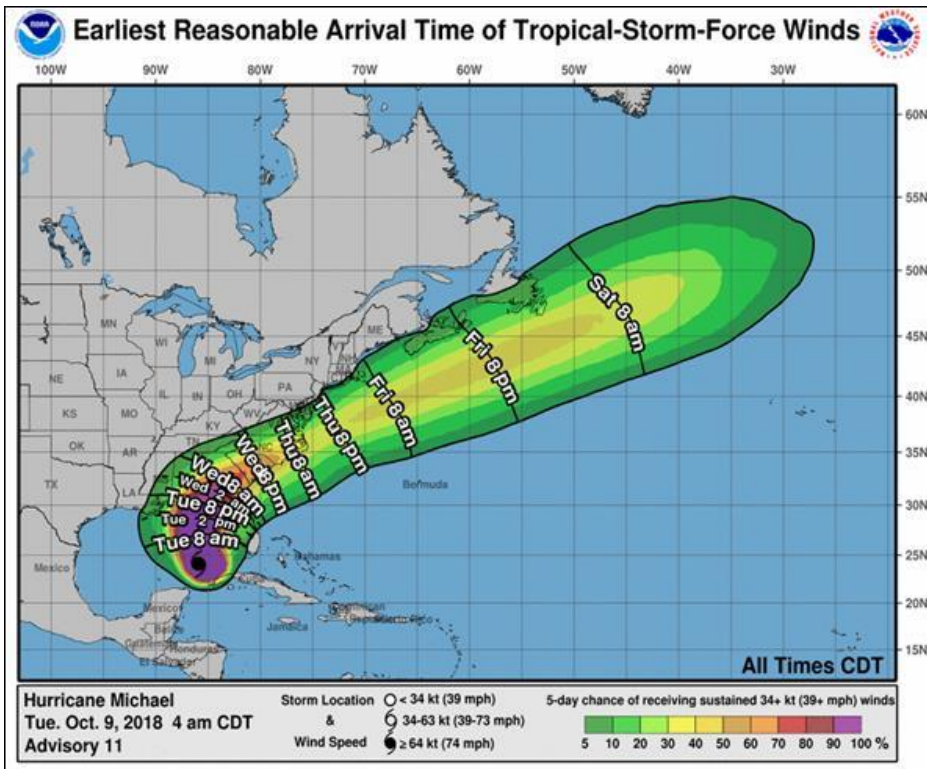
1. Life-threatening storm surge is likely along portions of the coasts of the Florida Panhandle, Big Bend, and Nature Coast,



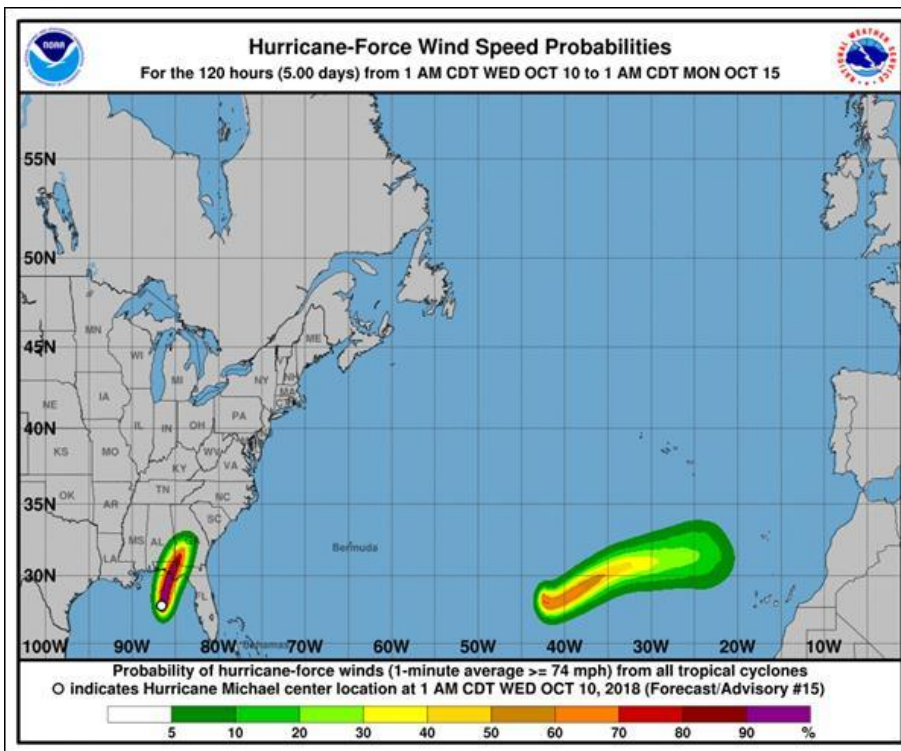
NHC Position and Best Forecast
 SOURCE: NOAA/NHC



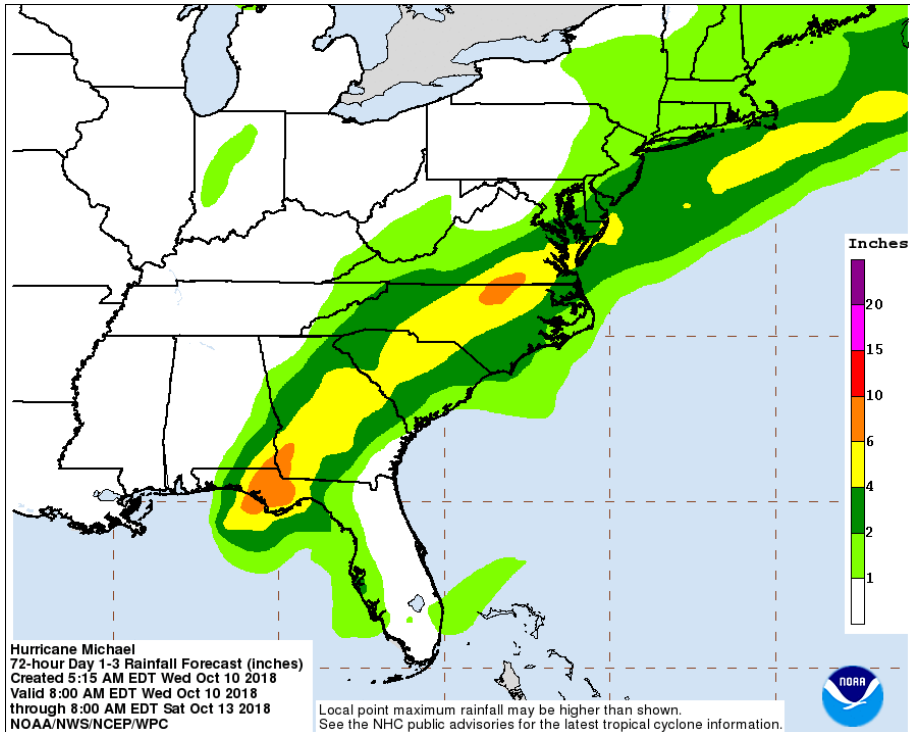
Storm Surge Watches and Warnings
 SOURCE: NOAA/NHC



**Earliest Reasonable Arrival Time of Tropical-Storm-Force Winds (Contours)
Probability of Tropical-Storm-Force Winds (Shaded)**
SOURCE: NOAA/NHC



Probability of Hurricane Force Winds
SOURCE: NOAA/NHC



Forecast Rainfall Amounts
3-Days Ending 8AM EDT (12 UTC) October 13
 SOURCE: NOAA/NHC

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