

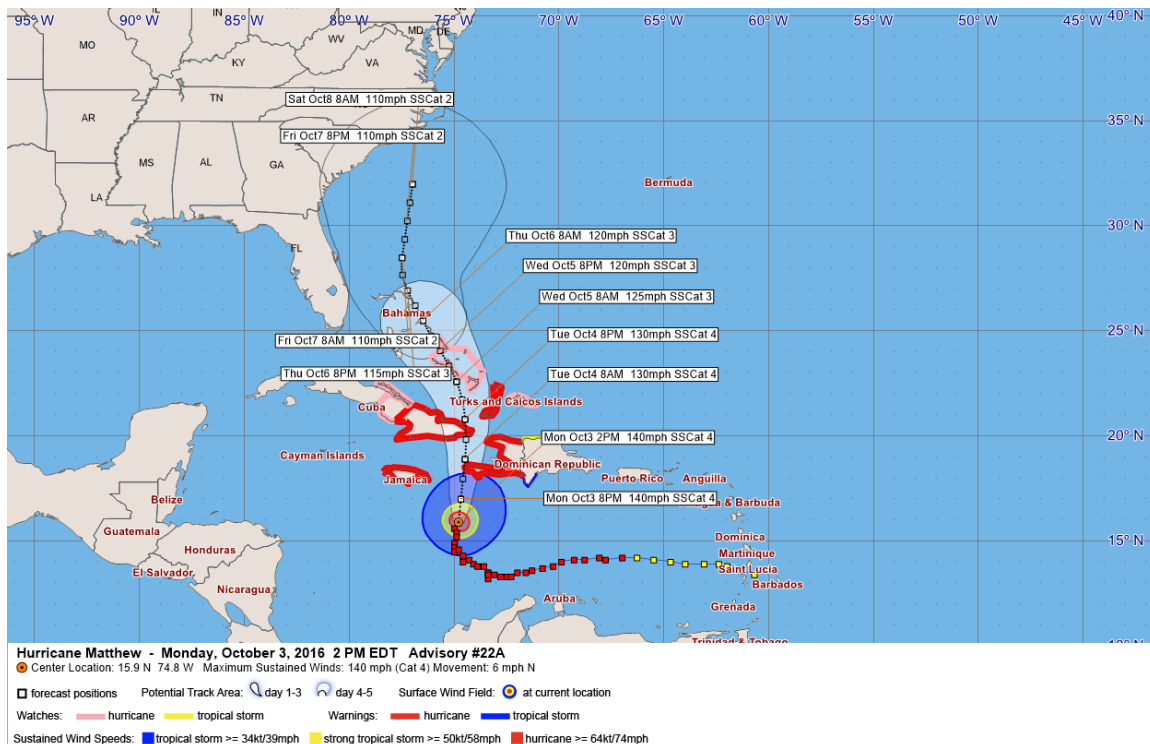
Storm Summary for Hurricane Matthew

Monday, October 3, 2016 at 2 PM EDT

(Output from Hurrevac, based on National Hurricane Center Forecast Advisory #22A)

Matthew is currently a Category 4 major hurricane on the Saffir-Simpson Hurricane Wind Scale, with maximum sustained winds of 140 mph (120 kts), moving north at 6 mph. The estimated minimum central pressure is 940 mb. Hurricane-force winds extend outward up to 35 miles (55 km) from the storm center. Tropical storm-force winds extend outward up to 185 miles (295 km) from the storm center.

Certain coastal locations are under Hurricane Warning, Hurricane Watch, Tropical Storm Warning, and Tropical Storm Watch. The geographic extents of these watches and warnings are detailed in the advisory text at the end of this report.



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WTNT34 KNHC 031750

BULLETIN
HURRICANE MATTHEW INTERMEDIATE ADVISORY NUMBER 22A
NWS NATIONAL HURRICANE CENTER MIAMI FL AL142016
200 PM EDT MON OCT 03 2016

...DANGEROUS HURRICANE MATTHEW MOVING NORTHWARD...
...LIFE-THREATENING RAIN...WIND...AND STORM SURGE EXPECTED IN
PORTIONS OF HAITI...

SUMMARY OF 200 PM EDT...1800 UTC...INFORMATION

LOCATION...15.9N 74.8W
ABOUT 250 MI...400 KM SW OF PORT AU PRINCE HAITI
ABOUT 195 MI...315 KM SE OF KINGSTON JAMAICA
MAXIMUM SUSTAINED WINDS...140 MPH...220 KM/H
PRESENT MOVEMENT...N OR 5 DEGREES AT 6 MPH...9 KM/H
MINIMUM CENTRAL PRESSURE...940 MB...27.76 INCHES

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY:

None.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Hurricane Warning is in effect for...

- * Jamaica
- * Haiti
- * Cuban provinces of Guantanamo, Santiago de Cuba, Holguin, Granma, and Las Tunas
- * Southeastern Bahamas, including the Inaguas, Mayaguana, Acklins, Crooked Island, Long Cay, and Ragged Island

A Hurricane Watch is in effect for...

- * Cuban province of Camaguey
- * Turks and Caicos Islands
- * Central Bahamas, including Long Island, Exuma, Rum Cay, San Salvador, and Cat Island

A Tropical Storm Warning is in effect for...

- * Dominican Republic from Barahona westward to the border with Haiti

A Tropical Storm Watch is in effect for...

- * Dominican Republic from Puerto Plata westward to the border with Haiti

Interests elsewhere in Hispaniola, the Bahamas, and in the Florida Peninsula and the Florida Keys should monitor the progress of Matthew.

For storm information specific to your area, please monitor products issued by your national meteorological service.

DISCUSSION AND 48-HOUR OUTLOOK

At 200 PM EDT (1800 UTC), the eye of Hurricane Matthew was located near latitude 15.9 North, longitude 74.8 West. Matthew is moving toward the north near 6 mph (9 km/h), and this general motion is forecast to continue through Wednesday with an increase in forward speed expected tonight. On the forecast track, the center of Matthew will approach southwestern Haiti tonight, move near eastern Cuba late Tuesday, and move near or over portions of the southeastern and central Bahamas Tuesday night and Wednesday.

Data from an Air Force Reserve Hurricane Hunter aircraft indicate that maximum sustained winds are near 140 mph (220 km/h) with higher gusts. Matthew is a dangerous category 4 hurricane on the Saffir-Simpson Hurricane Wind Scale. Some fluctuations in intensity are possible during the next couple of days, but Matthew is expected to remain a powerful hurricane through Wednesday.

Hurricane-force winds extend outward up to 35 miles (55 km) from the center and tropical-storm-force winds extend outward up to 185 miles (295 km).

The latest minimum central pressure based on data from the aircraft is 940 mb (27.76 inches).

HAZARDS AFFECTING LAND

WIND: Hurricane conditions are expected to first reach Haiti tonight, eastern Cuba Tuesday, and the southeastern Bahamas late Tuesday. Tropical storm conditions are expected to first reach Haiti this afternoon, eastern Cuba tonight, and the southeastern Bahamas early Tuesday, making outside preparations difficult or dangerous. Preparations to protect life and property should be rushed to completion.

Tropical storm conditions are expected in Jamaica and along the southern coast of the Dominican Republic within the warning area beginning today.

Hurricane conditions are possible in the hurricane watch areas by Tuesday night with tropical storm conditions possible on Tuesday. Tropical storm conditions are also possible in the tropical storm watch area in the Dominican Republic by late today.

RAINFALL: Matthew is expected to produce total rainfall amounts in the following areas:

Southern Haiti and southwestern Dominican Republic...15 to 25 inches, isolated 40 inches
Eastern Cuba and northwestern Haiti...8 to 12 inches, isolated 20 inches
Eastern Jamaica...5 to 10 inches, isolated 15 to 20 inches
Southeastern Bahamas...8 to 12 inches, isolated 15 inches
Turks and Caicos Islands...2 to 5 inches, isolated 8 inches
Northeastern Haiti and the Dominican Republic...1 to 3 inches, isolated 5 inches
Western Jamaica...1 to 2 inches

Life-threatening flash floods and mudslides are likely from this

rainfall in southern and northwestern Haiti, the southwestern Dominican Republic, and eastern Cuba.

STORM SURGE: The combination of a dangerous storm surge and large and destructive waves could raise water levels by as much as the following amounts above normal tide levels...

Southern Coast of Cuba east of Cabo Cruz...7 to 11 feet
South Coast of Haiti...7 to 10 feet
Northern Coast of Cuba east of Camaguey...4 to 6 feet
Jamaica...2 to 4 feet
Gulf of Gonave in Haiti...3 to 5 feet
Southern coast of the Dominican Republic...1 to 3 feet
Central and southeastern Bahamas...10 to 15 feet

Surge-related flooding depends on the relative timing of the surge and the tidal cycle, and can vary greatly over short distances. Large waves generated by Matthew will cause water rises to occur well in advance of and well away from the track of the center.

SURF: Swells generated by Matthew will continue to affect portions of the coasts of Hispaniola, Jamaica, Aruba, Colombia, eastern Cuba, and the Caribbean coastline of Central America during the next few days. Swells from Matthew will begin affecting portions of the Bahamas on Tuesday. These swells are likely to cause life-threatening surf and rip current conditions. Please consult products from your local weather office.

NEXT ADVISORY

Next complete advisory at 500 PM EDT.

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Forecaster Brennan

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WTNT44 KNHC 031457

HURRICANE MATTHEW DISCUSSION NUMBER 22
NWS NATIONAL HURRICANE CENTER MIAMI FL AL142016
1100 AM EDT MON OCT 03 2016

The latest Air Force Reserve Hurricane Hunter mission into Matthew found peak flight-level winds of 124 kt at 10,000 feet and a peak SFMR wind of 122 kt in the northeastern eyewall around 12Z. Based on these data, the initial intensity is set to 120 kt for this advisory. The aircraft reported an eyewall with a diameter of 14 n mi that is open to the southwest and the latest central pressure based on dropsonde data is 941 mb. Little overall change in intensity is expected during the next couple of days, with the exception of some weakening due to possible land interaction with Haiti and eastern Cuba. However, there could be fluctuations in intensity due to eyewall cycles that are difficult to predict. While Matthew is expected to be a little weaker once it moves into the Bahamas as the shear increases somewhat and the ocean heat content decreases a little, it is expected to remain a dangerous hurricane through the next 5 days.

Matthew is moving due north at around 5 kt, and the hurricane should

continue moving generally northward for the next 36 to 48 hours around the western periphery of the Atlantic subtropical ridge. During this time, the track guidance is in generally good agreement and the NHC forecast has been nudged a little to the east toward the consensus aids and the center of the guidance envelope. After that time, the track forecast becomes more complicated, with the models continuing to show a lack of consistency in the evolution of the ridge rebuilding north of Matthew in 3 to 5 days, leading to a large amount of along and cross track spread at these times. The ECMWF and UKMET are along the left side of the guidance at days 4 and 5, with the other models farther east. The new NHC track is a bit left of the previous one and lies near the latest GFS/ECMWF blend, and a little left of the latest multi-model consensus.

While all of the deterministic track models currently keep Matthew east of Florida, there is still enough uncertainty in the global ensembles that direct impacts in Florida cannot be ruled out. In addition, it is still too soon to determine whether, or how Matthew could affect the remainder of the U.S. east coast.

FORECAST POSITIONS AND MAX WINDS

INIT	03/1500Z	15.6N	75.0W	120 KT	140 MPH
12H	04/0000Z	17.0N	74.7W	120 KT	140 MPH
24H	04/1200Z	18.9N	74.5W	115 KT	130 MPH
36H	05/0000Z	20.8N	74.5W	115 KT	130 MPH
48H	05/1200Z	22.6N	74.9W	110 KT	125 MPH
72H	06/1200Z	25.5N	76.5W	105 KT	120 MPH
96H	07/1200Z	28.5N	77.5W	95 KT	110 MPH
120H	08/1200Z	32.0N	77.0W	95 KT	110 MPH

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Forecaster Brennan