

# **TROPICAL UPDATE** 1 PM EDT Wednesday, September 28, 2016 Tropical Storm Matthew

This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an active weather event please contact your County Emergency Management or Public Safety Office, local National Weather Service forecast office or visit the National Hurricane Center website at www.nhc.noaa.gov.

# **Atlantic Basin Satellite Image**

12:00 28-SEP-2016 GMT @Copyright WSI Corporation http://www.wsi.com





#### Two-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida





Current Disturbances and Two-Day Cyclone Formation Chance: 🗱 < 40% 🗱 40-60% 🗰 > 60% Tropical or Sub-Tropical Cyclone: O Depression 🥑 Storm 🕑 Hurricane Ø Post-Tropical Cyclone × Remnants Tropical Storm Matthew 11 AM EDT Wed Sep 28 2016 Position 13.4 N 60.7 W Maximum Winds 60 mph Gusts 70 mph Movement W at 20 mph Minimum Pressure 1008 mb (29.76 in ches)

Blue Marble basemap imagery courtesy NASA

Satellite 3:17 PM UTC 11:17 AM EDT

wunderground.com



## **Steering Currents**

 $\checkmark$ 

Matthew is expected to continue moving generally west over the next 72 hours, steered by the area of high pressure to its north. Its track becomes less certain after that time, as how much the area of low pressure currently over the U.S. Midwest strengthens and pushes south will have a significant influence on when Matthew's expected turn to the north occurs and whether it is more northeasterly or northwesterly.

KTS

100

70

50

30

20

15

10

28SEPUG

MSS ENV STEERING PRODUCT: 700-850 HPA LAYER (FOR TC MSLP RANGE: 1000-1010 HPA) 1200 UTC

MI CA

Matthew

### Current Wind Shear (Shaded) and Shear Tendency (Lines)



### Sea Surface Temperatures Near Matthew



#### TS Matthew Model Track Guidance Initialized at 12z Sep 28 2016

Levi Cowan - tropicaltidbits.com



#### TS Matthew Model Intensity Guidance Initialized at 12z Sep 28 2016

Levi Cowan - tropicaltidbits.com



#### Summary:

- At 11am EDT, Invest 97L became Tropical Storm Matthew when a Hurricane Hunter reconnaissance aircraft found a welldefined center of circulation while investigating the system.
- Matthew is located about 35 miles southeast of St. Lucia, or about 1525 miles southeast of Miami, with maximum sustained winds of 60 mph and is moving west at 21 mph.
- There is good agreement on Matthew's generally westward forecast track over the next 72 hours, taking it into the central Caribbean by Saturday morning.
- However, beyond that time, Matthew's forecast track is currently very uncertain. The location and strength of a low pressure system currently over the Midwest will have a major impact on Matthew's eventual track, as will the strength of the high pressure center currently to its north.
- Regardless, the official forecast takes Matthew toward Jamaica and eastern Cuba early next week after a northnorthwesterly turn this weekend.
- It should be noted that there is currently a large discrepancy between the American and European global models on how fast Matthew moves after its forecast northerly turn. The official track forecast beyond 72 hours is a near consensus between the two models.
- Matthew is forecast to become a hurricane by Friday as warm sea surface temperatures, decreasing wind shear, and moist air should produce conditions favorable for intensification as it moves west through the Caribbean.
- Matthew is expected to still be a hurricane as it makes its forecasted turn to the north this weekend, possibly as a category 2 hurricane.
- Elsewhere, a weak area of low pressure off the coast of eastern Mexico is not expected to develop before moving inland later today and tonight.
- It has a 10% (low) chance of development over the next 48 hours and a 10% (low) chance over the next five days.

#### Florida Outlook:

- Expect an increased risk of rip currents along the Florida East Coast beginning early next week.
- It is too early to tell what other impacts, if any, Matthew could have on Florida.

The next briefing packet will be issued Thursday. For more information, visit the NHC website at <u>www.nhc.noaa.gov</u>.



# TROPICAL UPDATE

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## Florida Division of Emergency Management

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