



TROPICAL UPDATE

5 PM EDT

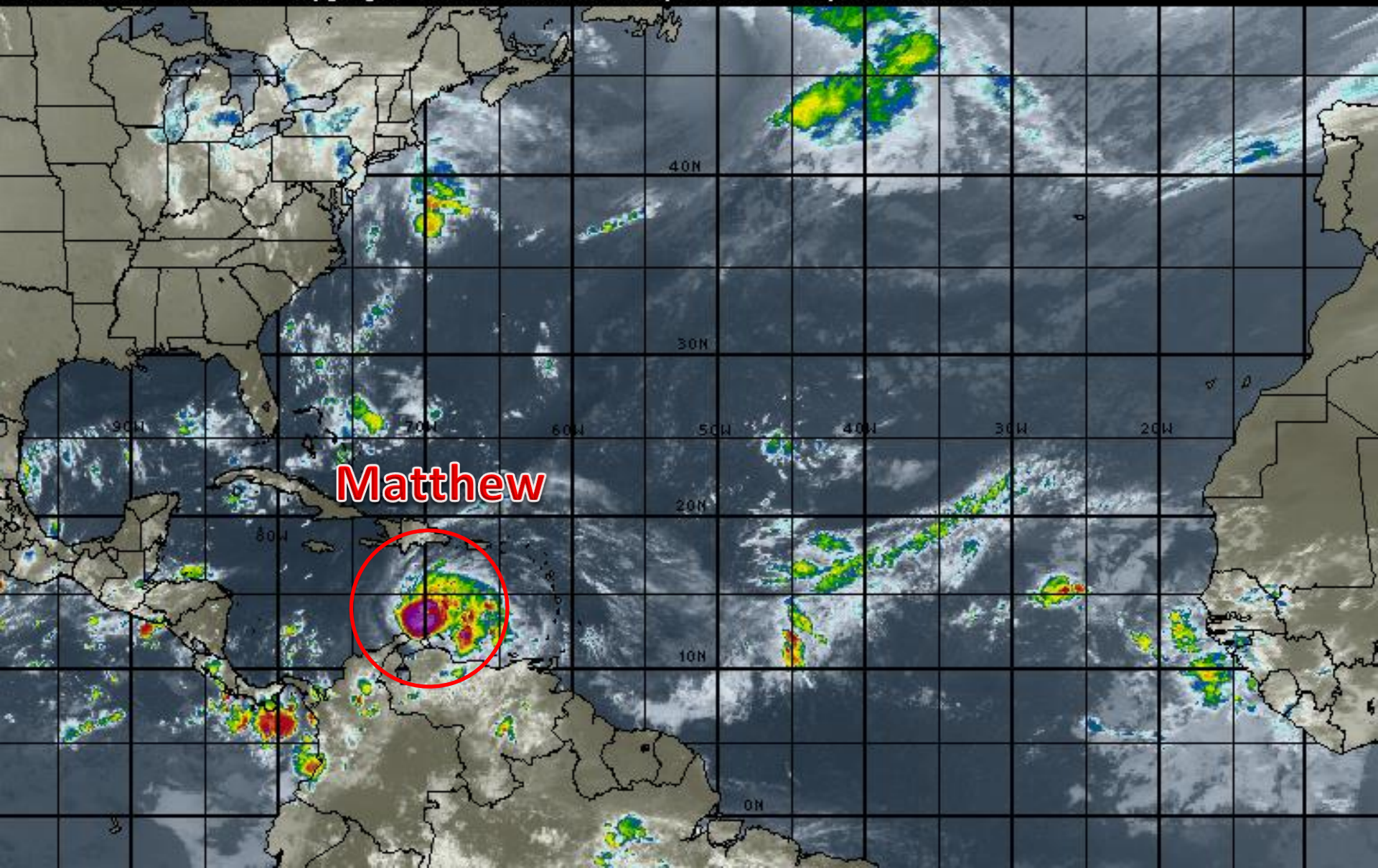
Friday, September 30, 2016

Hurricane 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

09:00 30-SEP-2016 GMT Copyright © 1998-2016 WSI Corporation <http://www.wsi.com>



Hurricane Matthew

2 PM EDT Fri Sep 30 2016

Position: 13.6 N 71.3 W

Maximum Winds 120 mph

Gusts 140 mph

Movement WSW at 11 mph

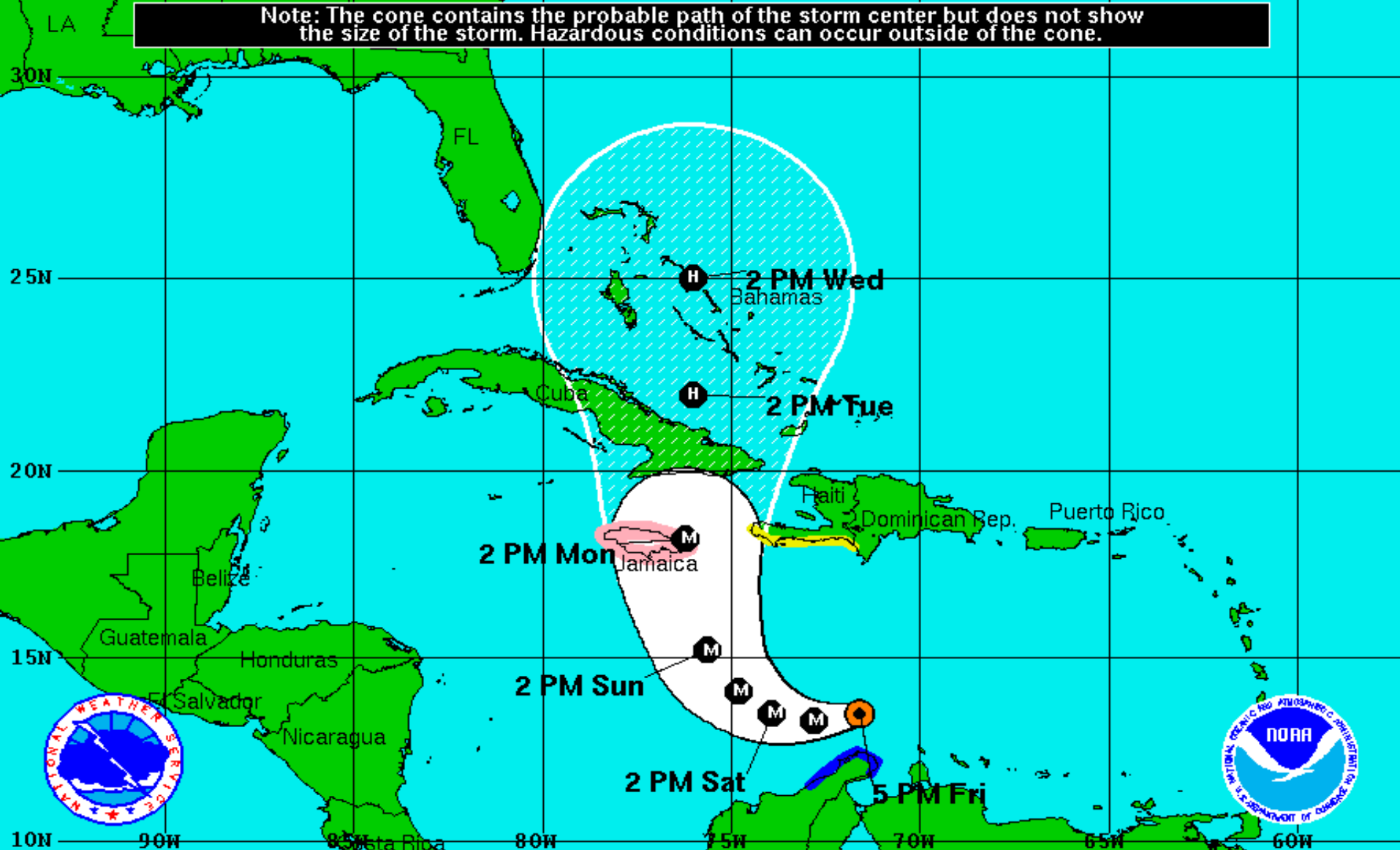
Minimum Pressure 960 mb (28.34 inches)

Blue Marble basemap imagery courtesy NASA

Satellite 7:57 PM UTC
3:57 PM EDT



Note: The cone contains the probable path of the storm center but does not show the size of the storm. Hazardous conditions can occur outside of the cone.



Hurricane Matthew
 Friday September 30, 2016
 5 PM EDT Advisory 11
 NWS National Hurricane Center

Current Information: ●
 Center Location 13.5 N 71.6 W
 Max Sustained Wind 140 mph
 Movement WSW at 9 mph

Forecast Positions:
 ● Tropical Cyclone ○ Post-Tropical
 Sustained Winds: D < 39 mph
 S 39-73 mph H 74-110 mph M > 110mph

Potential Track Area:
 Day 1-3 Day 4-5

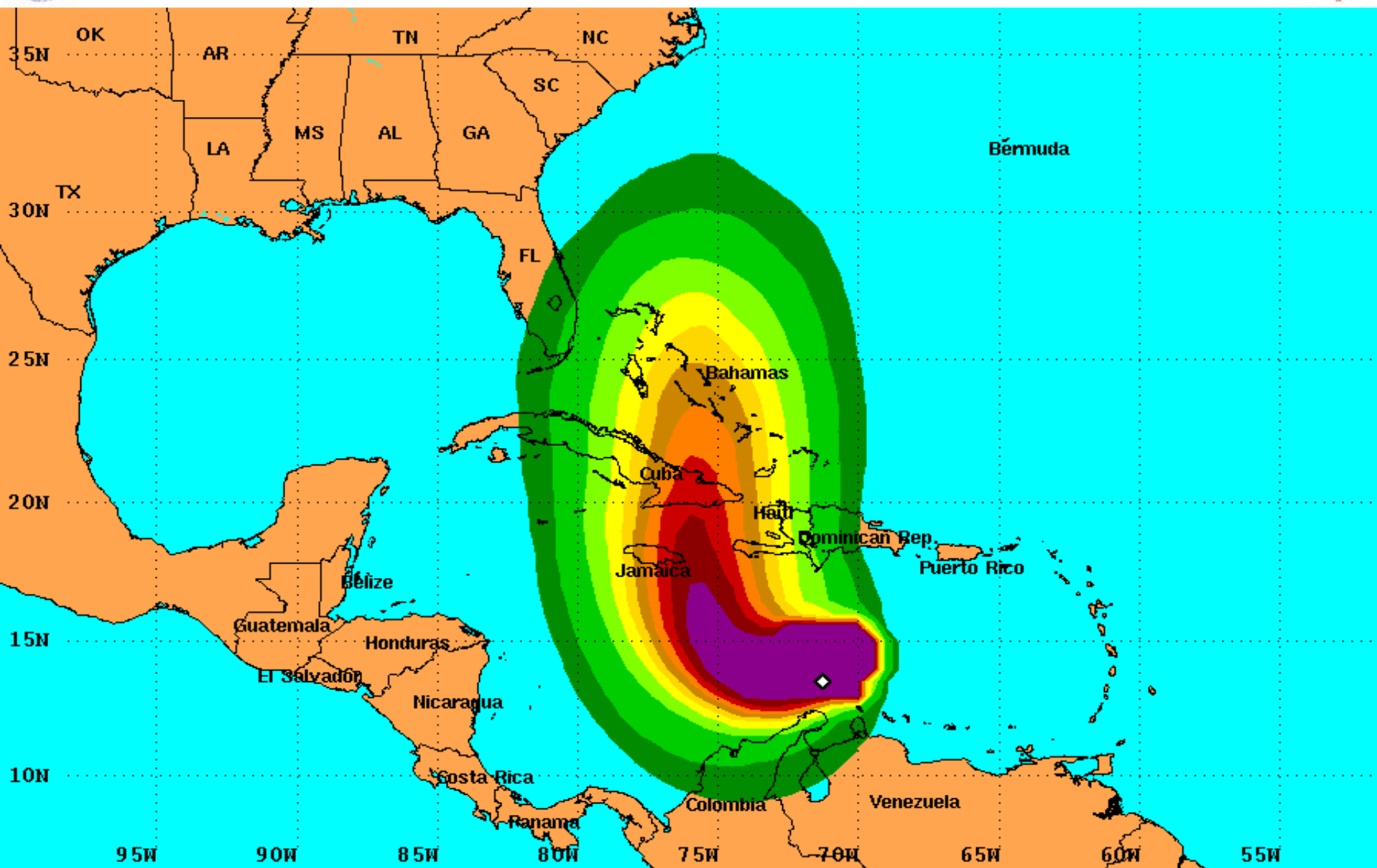
Watches:
 Hurricane Trop.Storm

Warnings:
 Hurricane Trop.Storm



Tropical Storm Force Wind Speed Probabilities

For the 120 hours (5 days) from 2 PM EDT Fri Sep 30 to 2 PM EDT Wed Oct 5



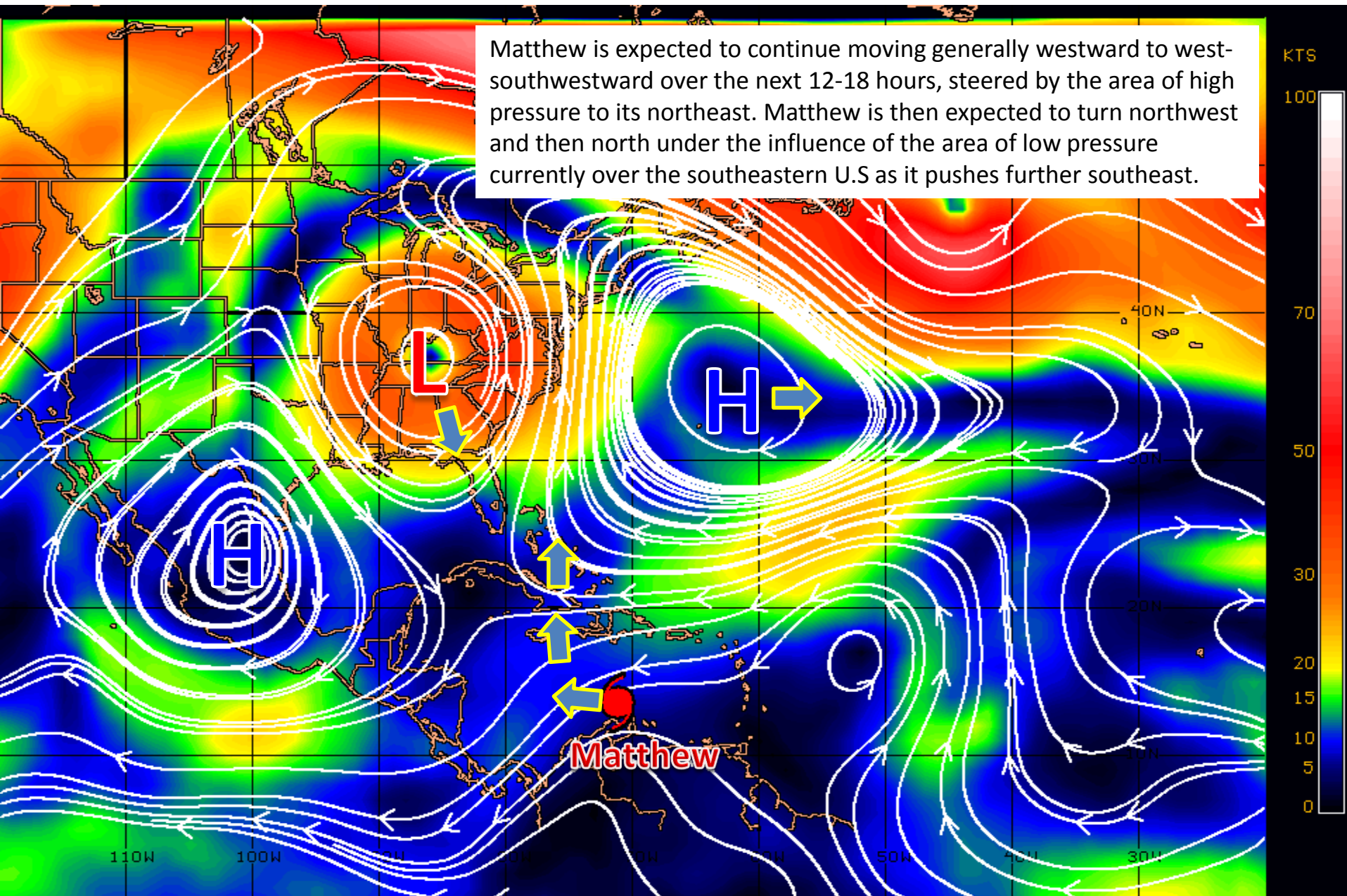
Probability of tropical storm force surface winds (1-minute average ≥ 39 mph) from all tropical cyclones

◊ indicates HURRICANE MATTHEW center location at 2 PM EDT Fri Sep 30 2016 (Forecast/Advisory #11)

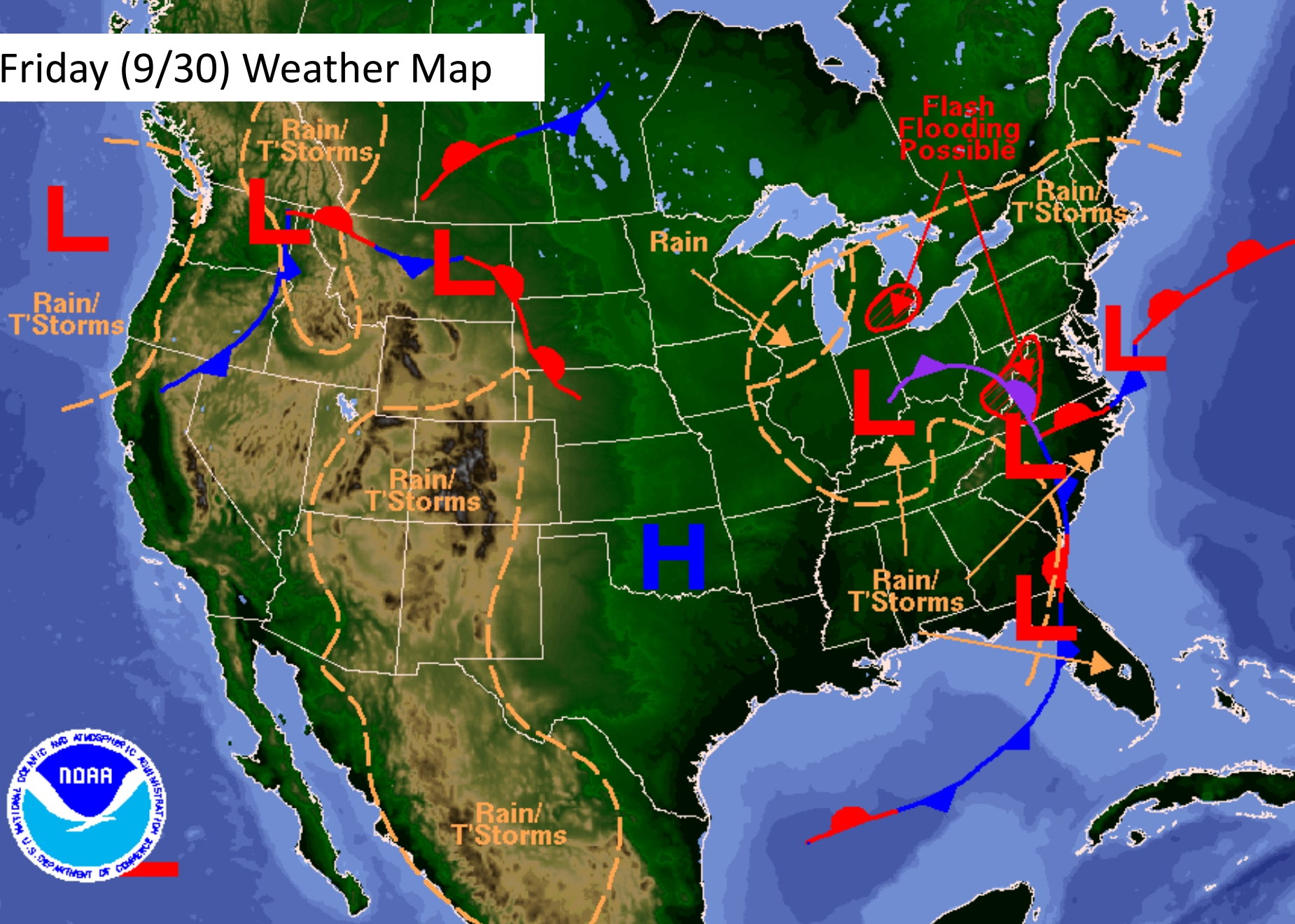


Steering Currents

Matthew is expected to continue moving generally westward to west-southwestward over the next 12-18 hours, steered by the area of high pressure to its northeast. Matthew is then expected to turn northwest and then north under the influence of the area of low pressure currently over the southeastern U.S as it pushes further southeast.

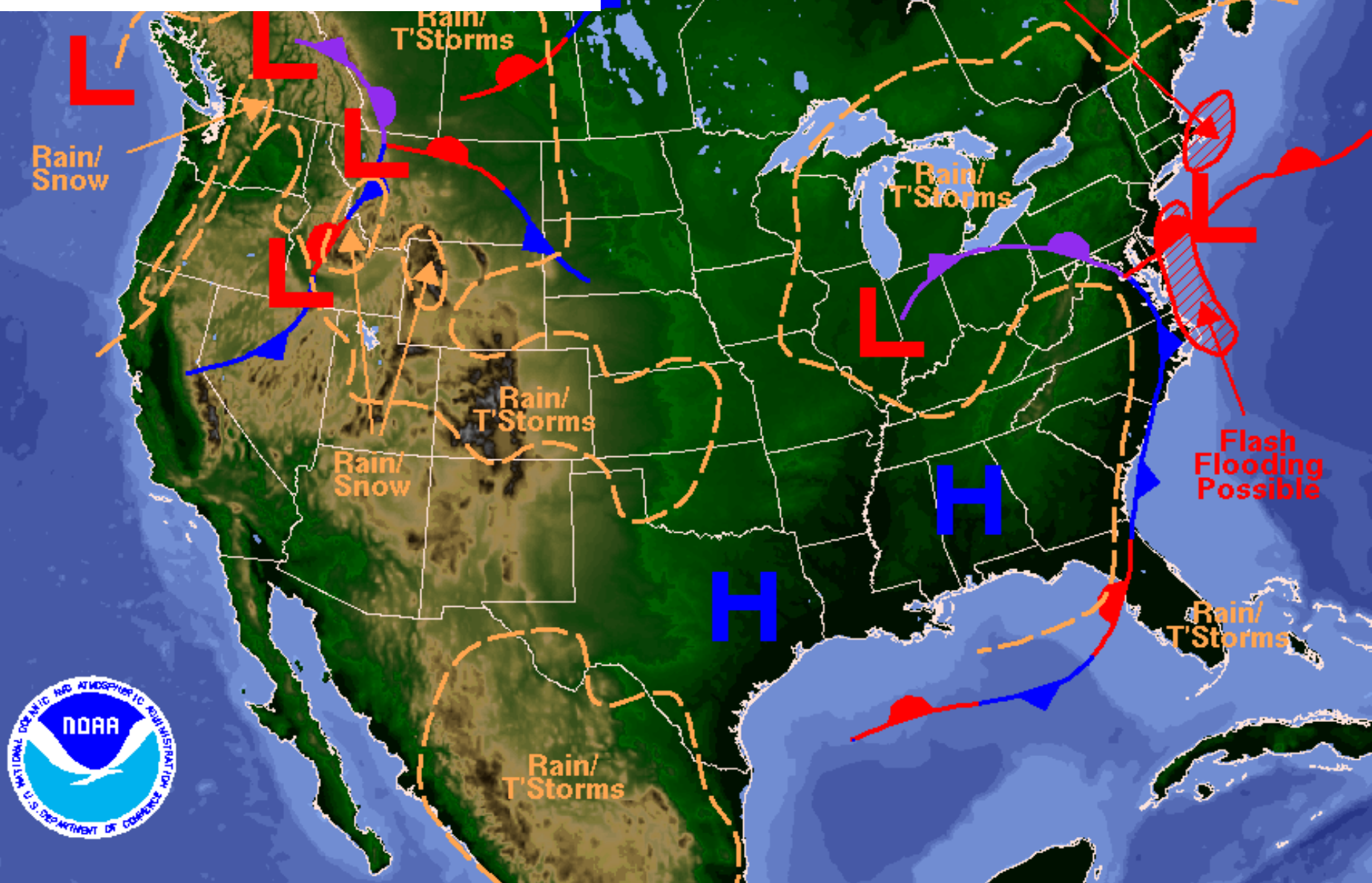


Friday (9/30) Weather Map



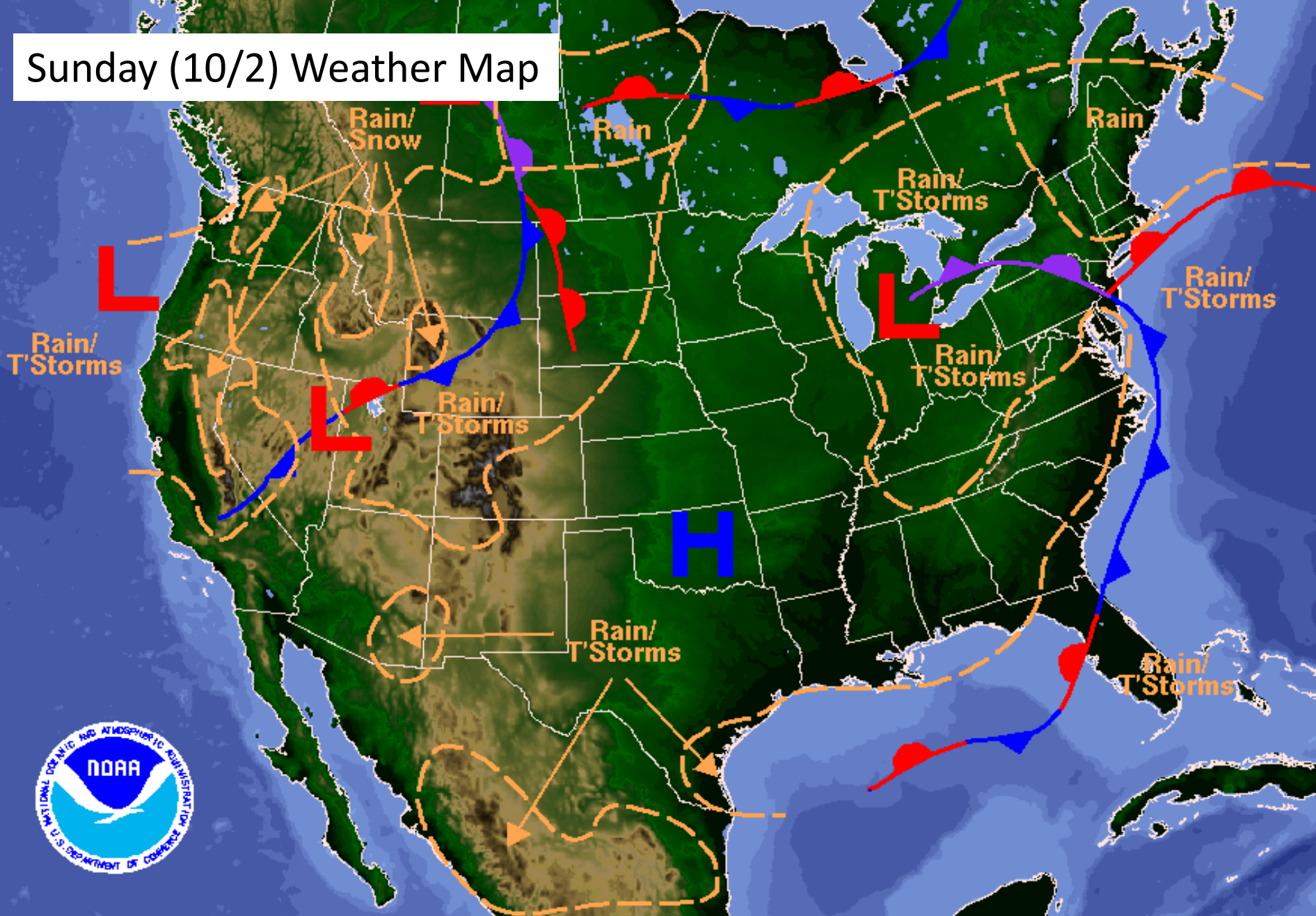
Weather Forecast for Fri, Sep 30, 2016, issued 4:49 AM EDT
DOC/NOAA/NWS/NCEP/Weather Prediction Center
Prepared by McCreynolds based on WPC, SPC and NHC forecasts

Saturday (10/1) Weather Map



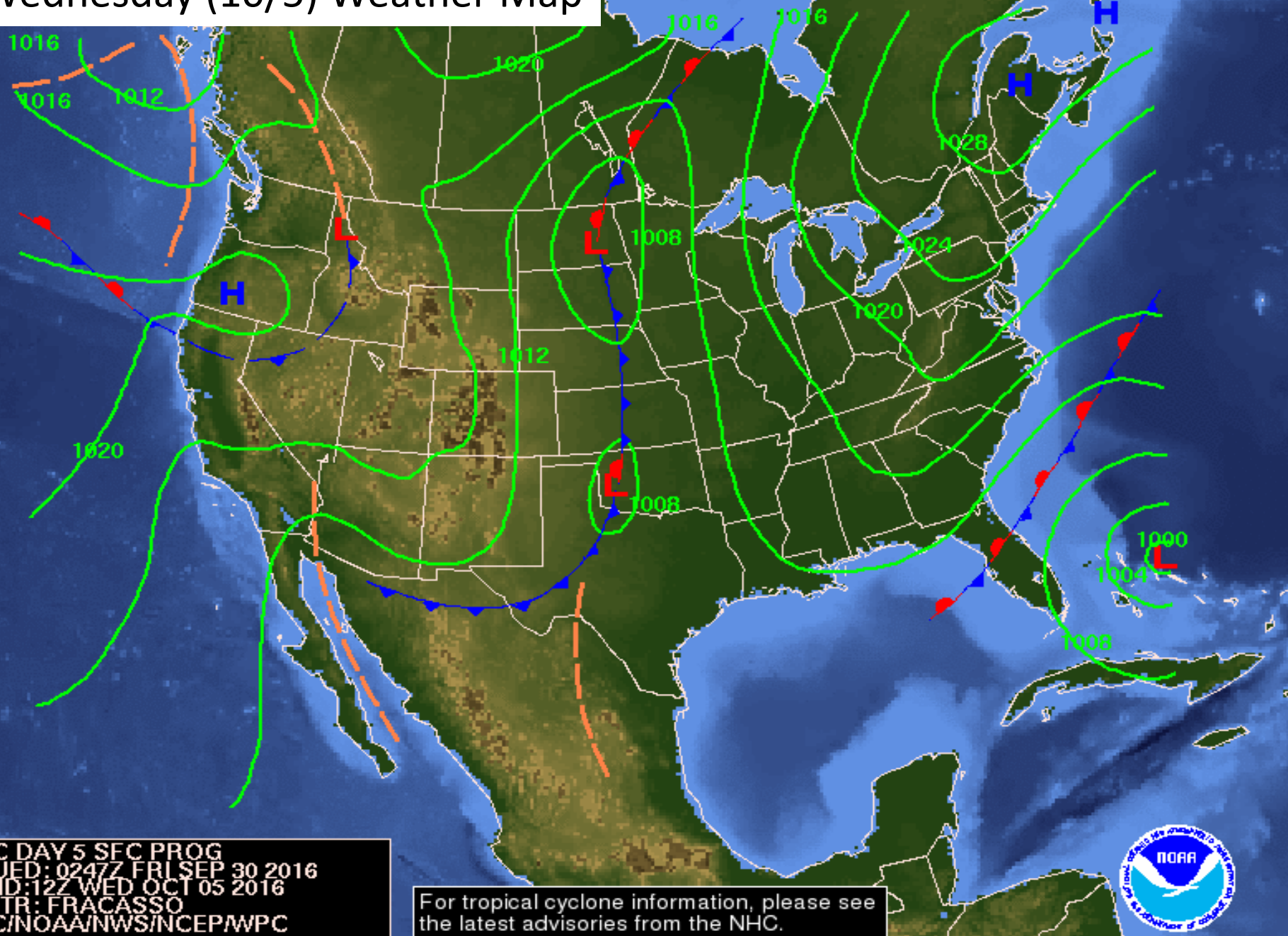
Weather Forecast for Sat, Oct 01, 2016, issued 4:52 AM EDT Fri, Sep 30, 2016
DOC/NOAA/NWS/NCEP/Weather Prediction Center
Prepared by McCreynolds based on WPC, SPC and NHC forecasts

Sunday (10/2) Weather Map



Weather Forecast for Sun, Oct 02, 2016, issued 4:55 AM EDT Fri, Sep 30, 2016
DOC/NOAA/NWS/NCEP/Weather Prediction Center
Prepared by McCreynolds based on WPC, SPC and NHC forecasts

Wednesday (10/5) Weather Map



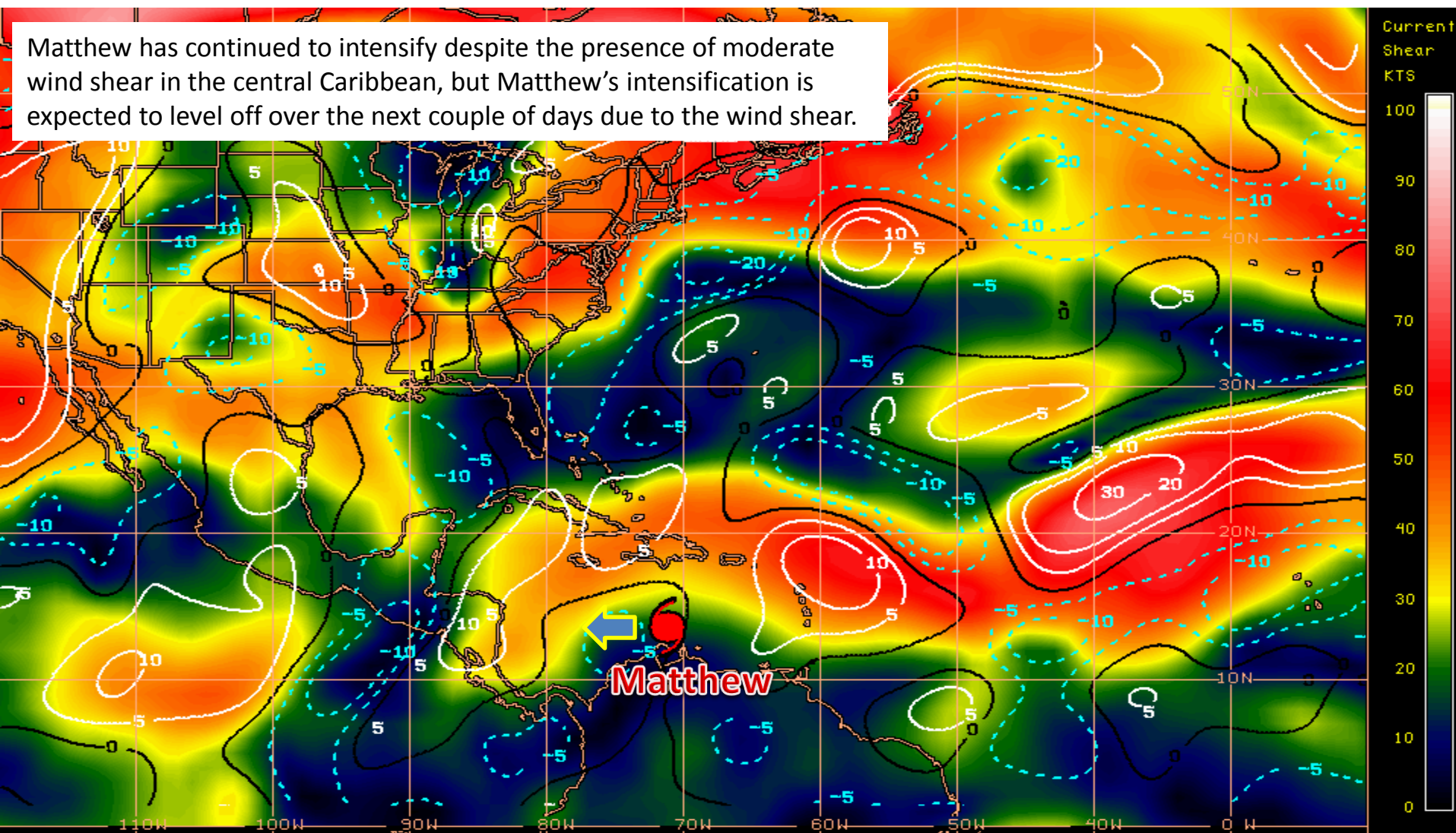
WPC DAY 5 SEC PROG
ISSUED: 0247Z FRI SEP 30 2016
VALID: 12Z WED OCT 05 2016
FCSTR: FRACASSO
DOC/NOAA/NWS/NCEP/WPC

For tropical cyclone information, please see
the latest advisories from the NHC.



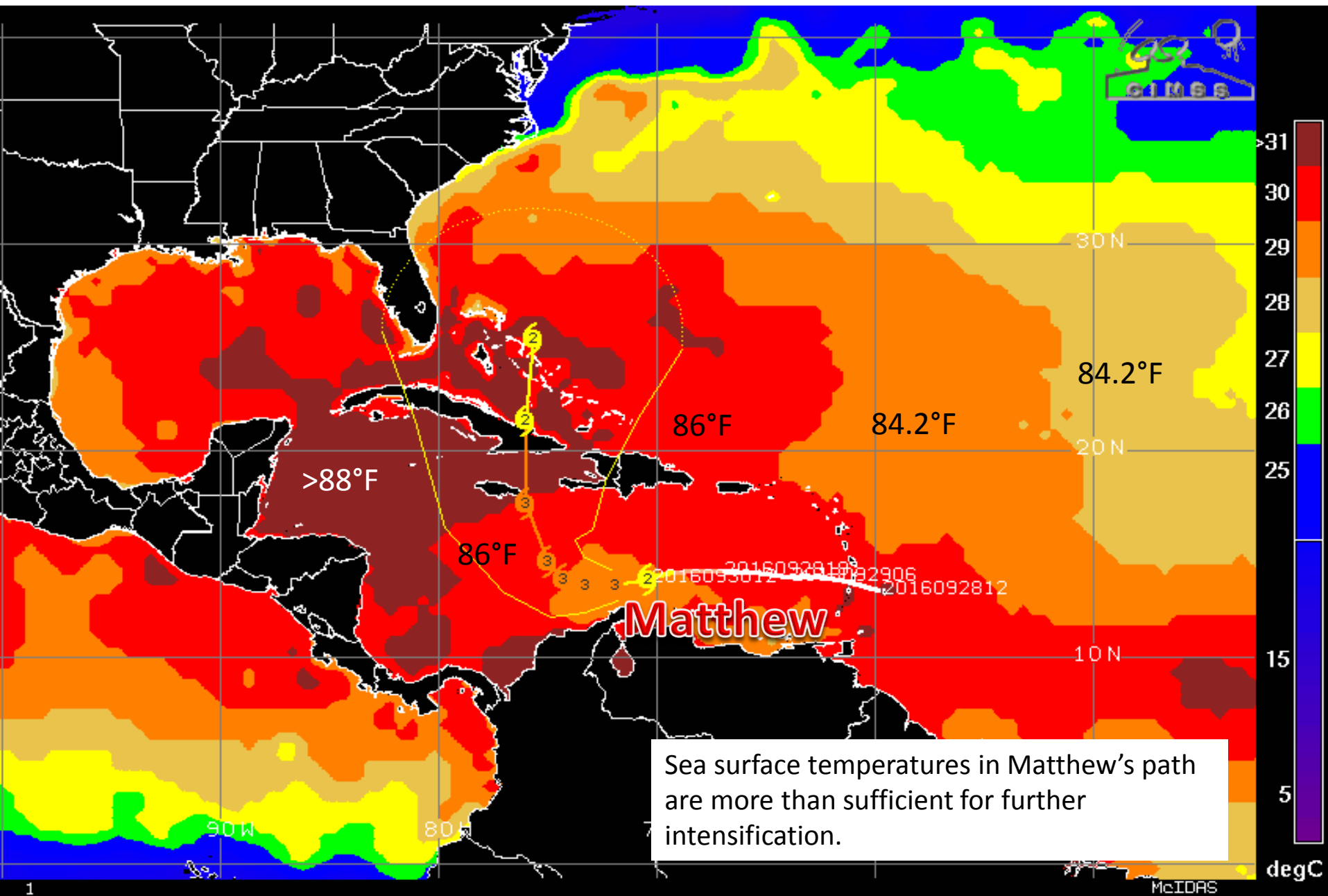
Current Wind Shear (Shaded) and Shear Tendency (Lines)

Matthew has continued to intensify despite the presence of moderate wind shear in the central Caribbean, but Matthew's intensification is expected to level off over the next couple of days due to the wind shear.



Shear Tendency (KTS) Over Past 24 Hours: Increasing — Decreasing ----

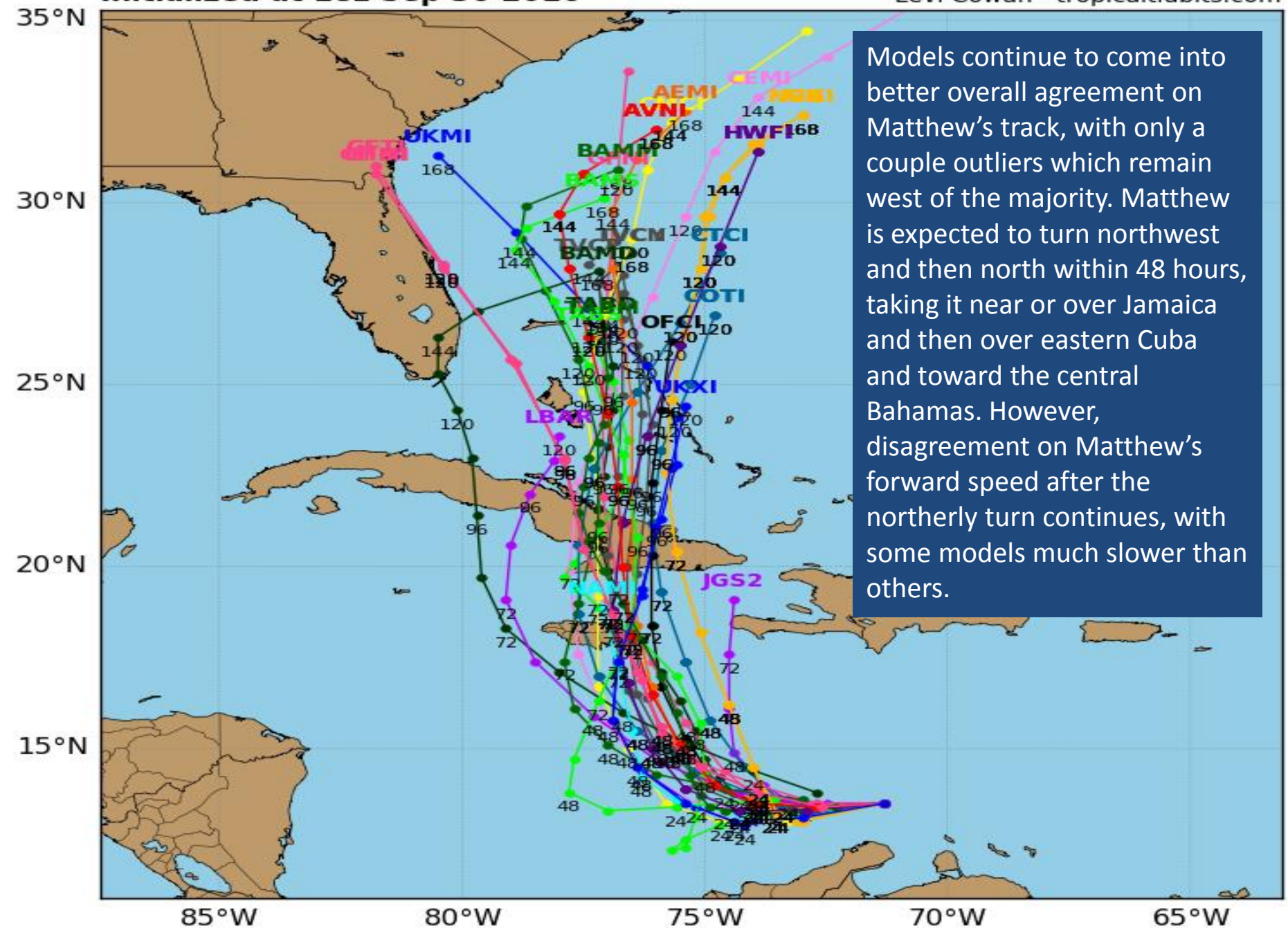
Sea Surface Temperatures Near Matthew



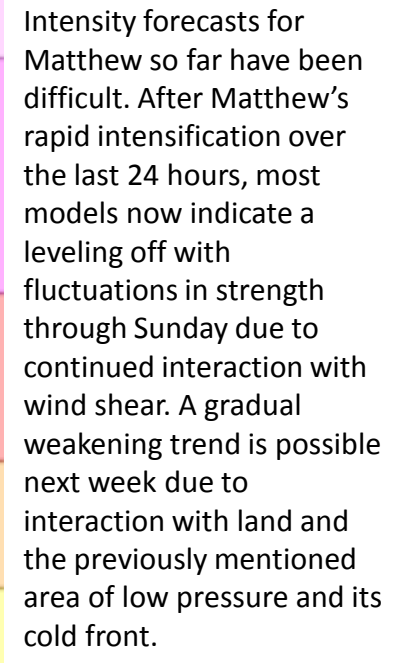
Hurricane MATTHEW Model Track Guidance

Initialized at 18z Sep 30 2016

Levi Cowan - tropicaltidbits.com



Levi Cowan - tropicaltidbits.com





Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



www.hurricanes.gov

No Disturbances

No new tropical cyclones are expected during the next five days.

2:00 pm EDT
Fri Sep 30 2016

100°W 90°W 80°W 70°W 60°W 50°W 40°W 30°W 20°W

45°N

35°N

25°N

15°N

5°N

Tropical Cyclone Formation Potential for the Five-Day Period Ending at 2:00 pm EDT Wed Oct 5 2016

Chance of Cyclone Formation in Five Days: ■ Low < 40% ■ Medium 40-60% ■ High > 60%

X indicates current disturbance location; shading indicates potential formation area.

Tropical Summary:

- At 5pm EDT, Hurricane Matthew was located about 465 miles southeast of Kingston, Jamaica, or approximately 1,000 miles south-southeast of Miami, Florida.
- Maximum sustained winds are 140 mph with higher gusts, making Matthew a Category 4 hurricane on the Saffir-Simpson scale.
- Matthew is moving to the west-southwest at 9 mph, a decrease in speed from the previous advisory. A turn to the west is expected tonight, and a westward motion is expected to continue through Saturday along with a further decrease in forward speed. Matthew is then expected to turn west-northwest by Saturday night and then turn toward the northwest on Sunday.
- Forecast models continue to come into better agreement on Matthew's forecast track, but are still in some disagreement on its future intensity.
- Moderate wind shear in Matthew's path has had little effect on the storm, as Matthew has rapidly intensified from a minimal Category 1 hurricane at 2pm EDT yesterday to a Category 4 storm in the latest advisory.
- Most guidance models indicate a leveling off with some fluctuation in strength over the next 48 hours, and this is reflected in the official forecast. However, intensity forecasts for Matthew have been difficult, and there is low confidence in the current forecast.
- Matthew is currently being steered west by a strong area of high pressure in the central Atlantic, but a strong area of low pressure is moving into the southeast U.S. and bringing a cold front into Florida.
- As the area of low pressure moves southeast and the area of high pressure shifts slightly to the east, Matthew is expected to turn northwest and then north late this weekend toward Jamaica and eastern Cuba and continue north toward the central Bahamas toward the early to middle part of next week.
- However, there is still some uncertainty as to when Matthew makes the northward turn. A weaker and/or faster moving storm could make it to Jamaica before turning north across central Cuba, while a stronger and/or slower-moving storm may turn earlier toward the Windward Passage between Cuba and Haiti.
- The average NHC track errors at days 4 and 5 are on the order of 180 and 240 miles, respectively, so it is important not to focus on the "black skinny line" of the forecast track since the range of possibilities remains between central Cuba and Haiti.

Florida Outlook:

- At this time, it is too early to say exactly what, if any, impacts Matthew will have on Florida.
- Florida remains outside of the 5-day average error cone. However, South Florida and parts of east Central Florida now have a 5%-10% chance, and Southeast Florida has a 10%-20% chance, of seeing tropical storm force winds sometime over the next five days.
- Any possible impacts are 5-7 days away, but Matthew is a very large storm and it has the potential to generate occasionally gusty winds and rough seas along the East Coast of Florida, with minor coastal flooding and erosion. Any additional impacts are dependent on the future track of the storm.

Another briefing packet will be issued Saturday. For more information, please visit the NHC website at www.nhc.noaa.gov.



TROPICAL UPDATE

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State Meteorological Support Unit
Florida Division of Emergency Management

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