



TROPICAL UPDATE

10 AM EDT

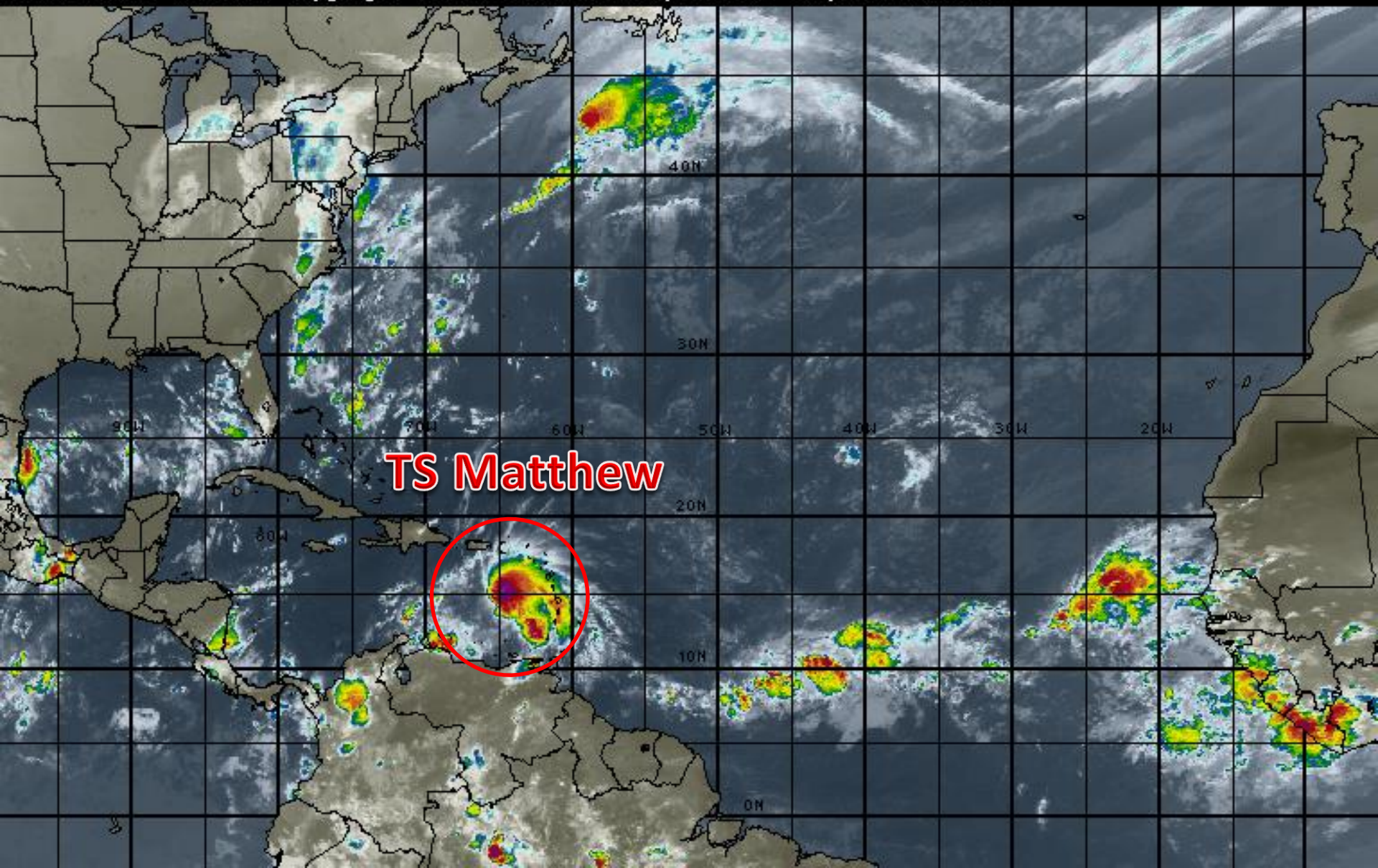
Thursday, September 29, 2016

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





Two-Day Graphical Tropical Weather Outlook

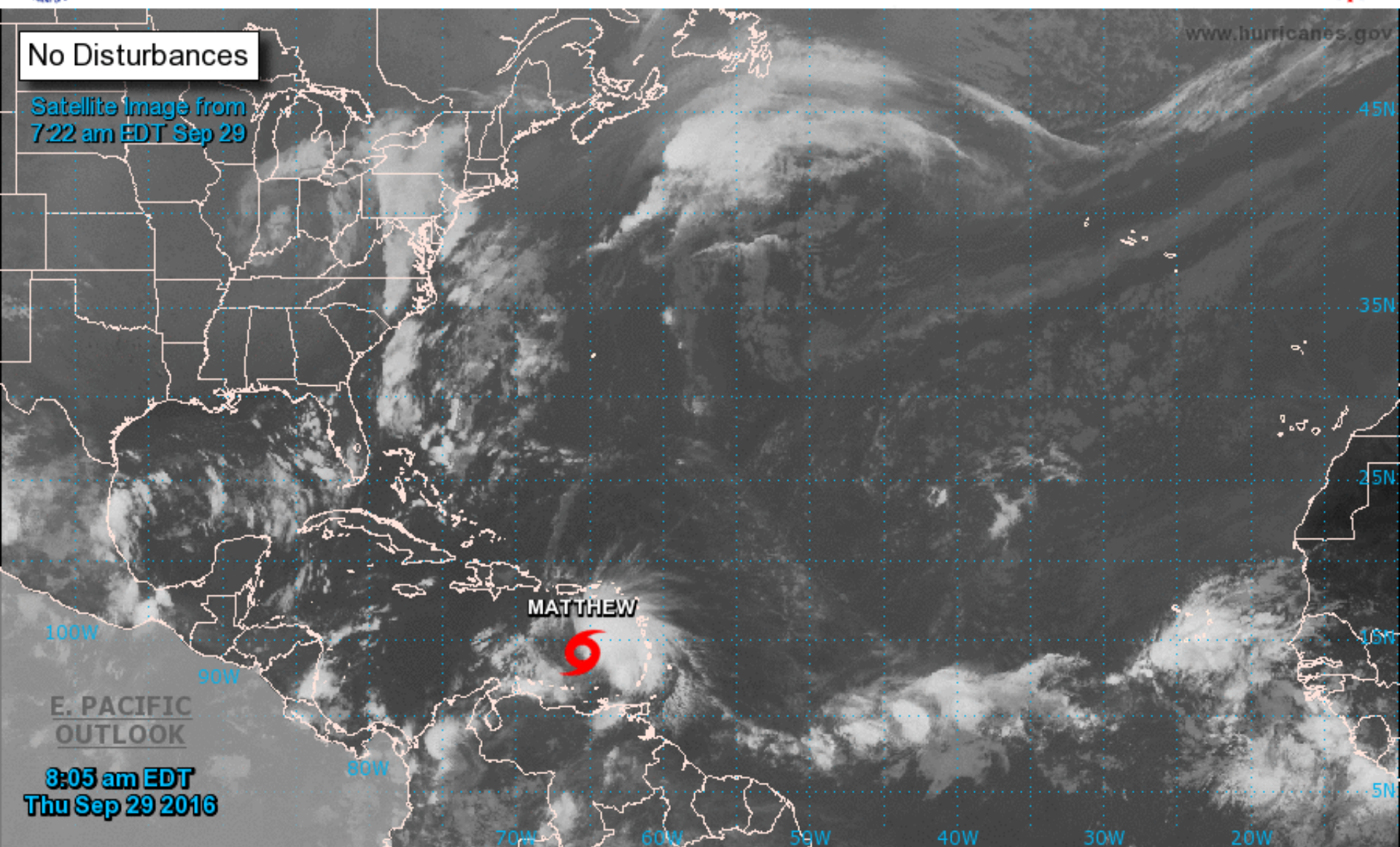
National Hurricane Center Miami, Florida



No Disturbances

Satellite Image from
7:22 am EDT Sep 29

www.hurricanes.gov



8:05 am EDT
Thu Sep 29 2016

Current Disturbances and Two-Day Cyclone Formation Chance: < 40% 40-60% > 60%

Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane

Post-Tropical Cyclone Remnants



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.

8:00 am EDT
Thu Sep 29 2016

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

Tropical Cyclone Formation Potential for the Five-Day Period Ending at 8:00 am EDT Tue Oct 4 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 Storm Matthew

8 AM EDT, Thu Sep 29 2016

Position 14.1°N 65.5°W

Maximum Winds 70 mph

Gusts 75 mph

Movement W at 16 mph

Minimum Pressure 995 mb (29.37 inches)

Blue Marble basemap imagery courtesy NASA

Satellite 1:36 PM UTC
9:36 AM 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.



Tropical Storm Matthew
 Thursday September 29, 2016
 8 AM EDT Intermediate Advisory 4A
 NWS National Hurricane Center

Current Information: ●
 Center Location 14.1 N 65.5 W
 Max Sustained Wind 70 mph
 Movement W at 16 mph

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

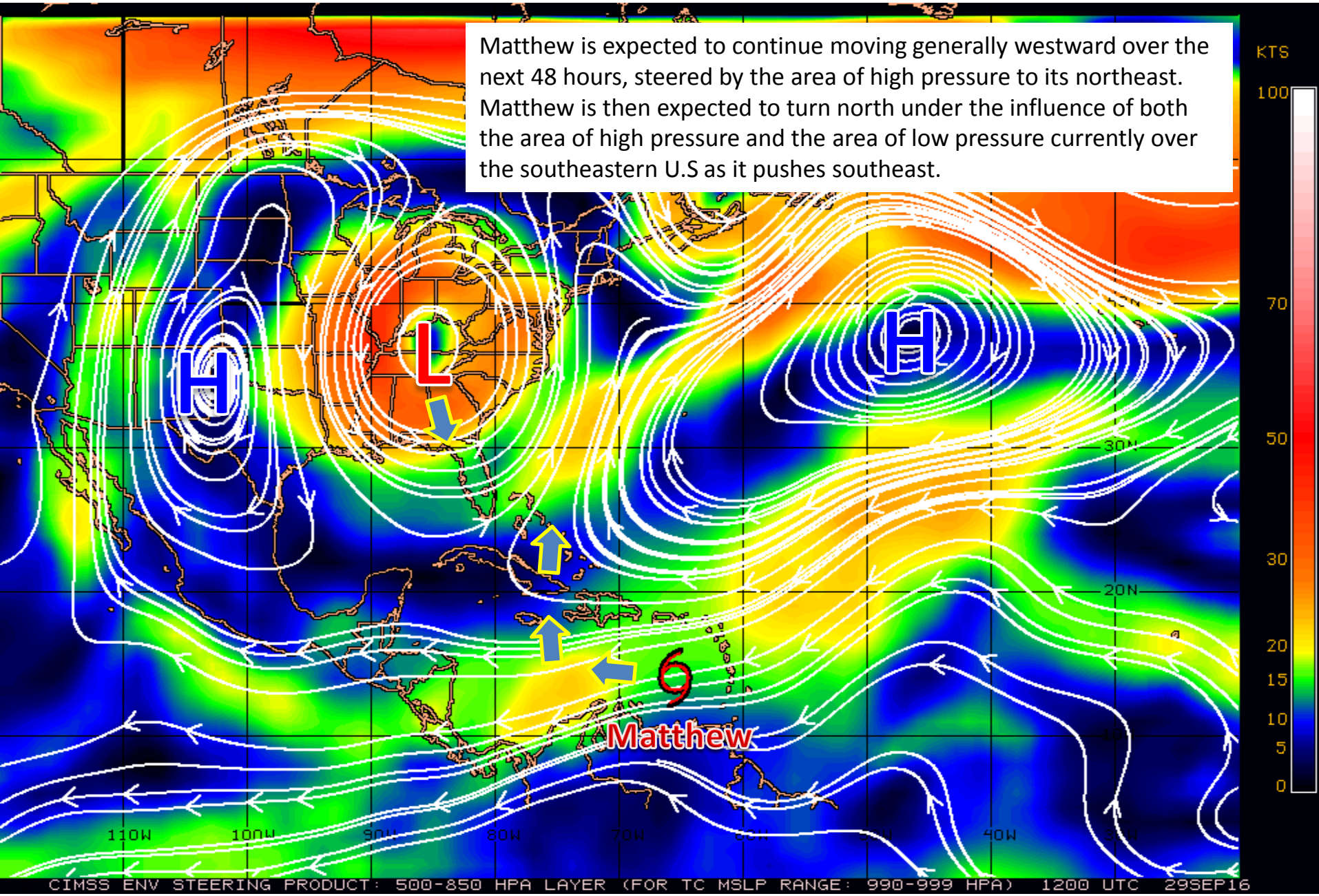
Potential Track Area:
 Day 1-3 Day 4-5

Watches:
 Hurricane Trop.Storm

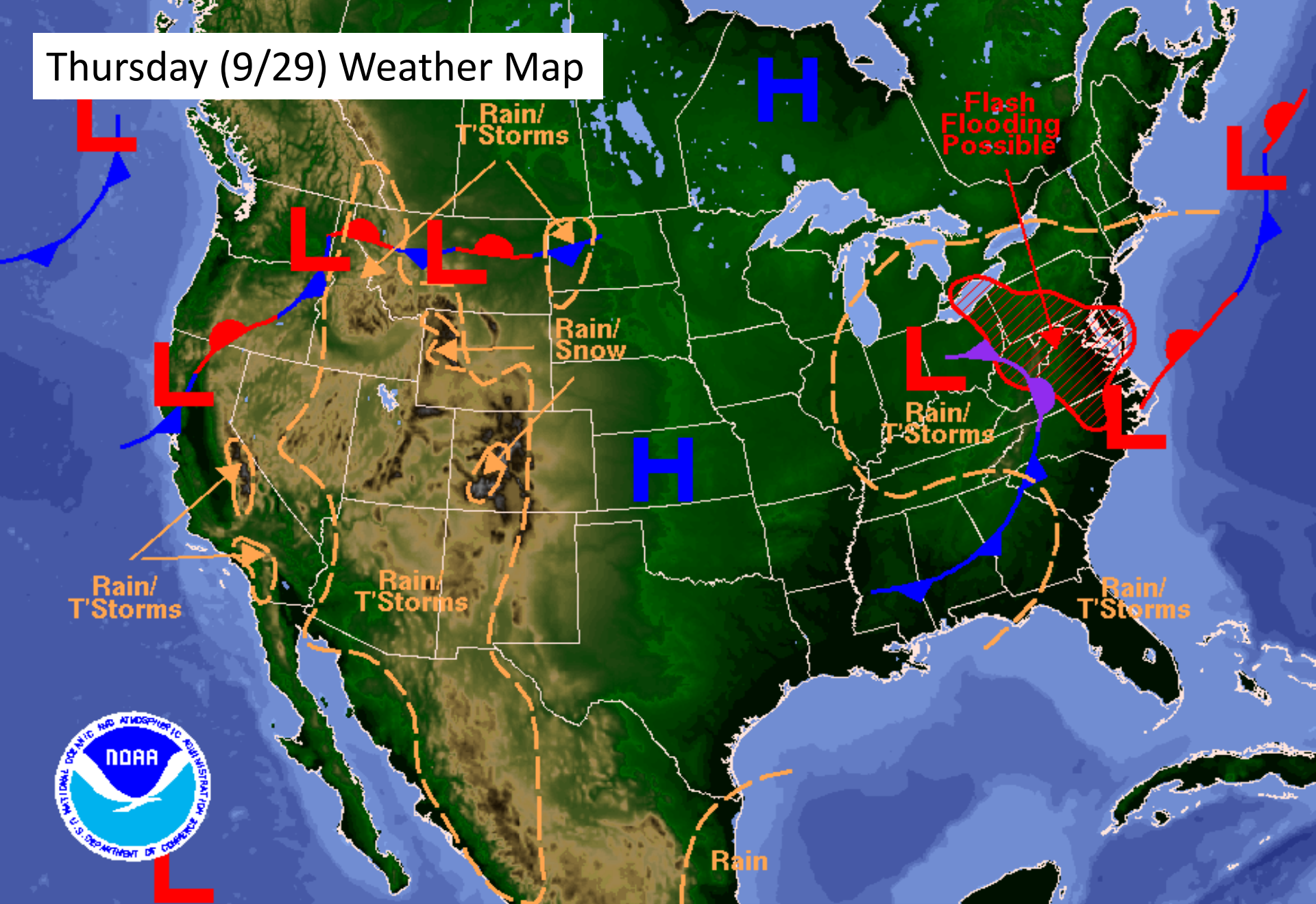
Warnings:
 Hurricane Trop.Storm

Steering Currents

Matthew is expected to continue moving generally westward over the next 48 hours, steered by the area of high pressure to its northeast. Matthew is then expected to turn north under the influence of both the area of high pressure and the area of low pressure currently over the southeastern U.S as it pushes southeast.

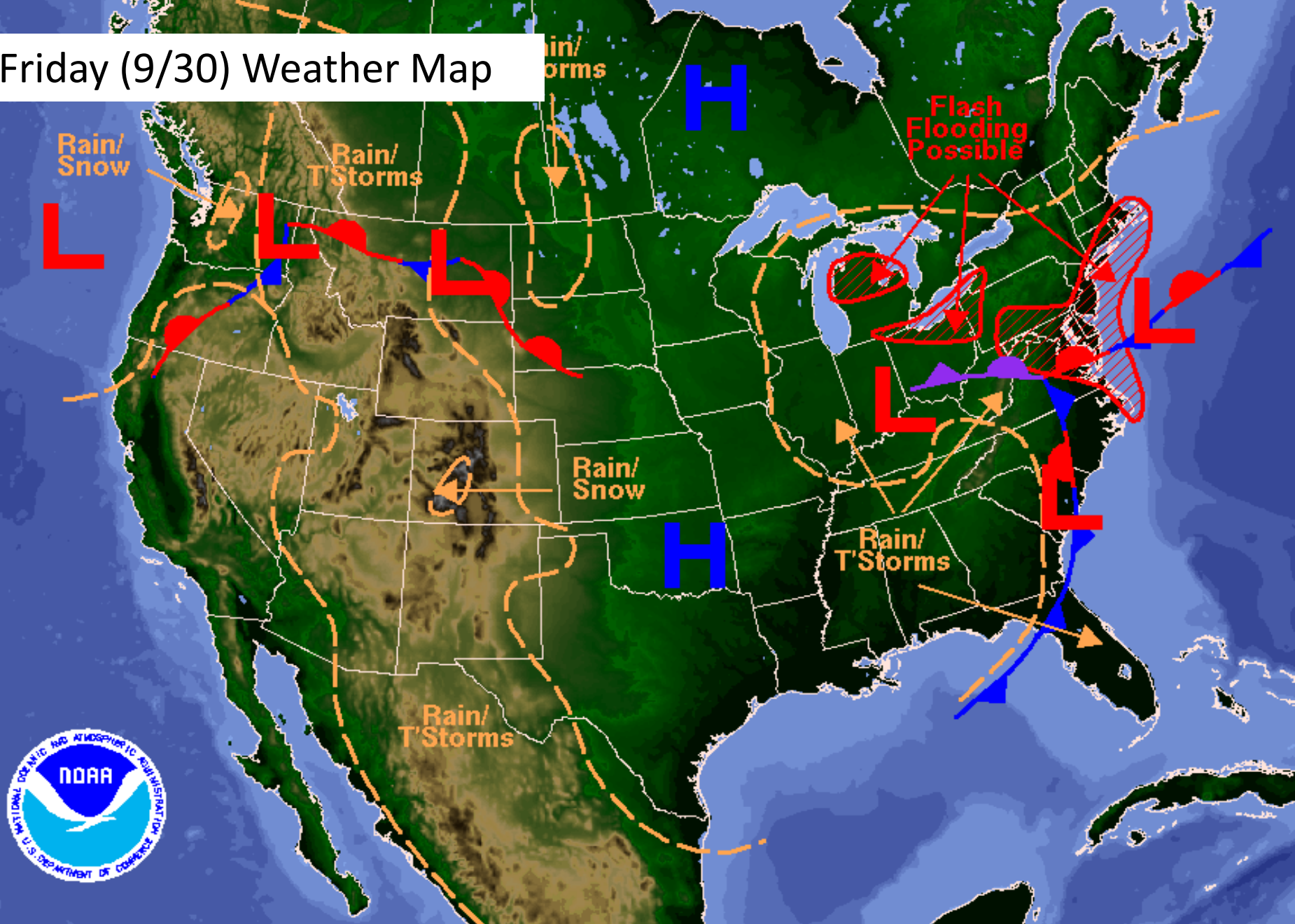


Thursday (9/29) Weather Map



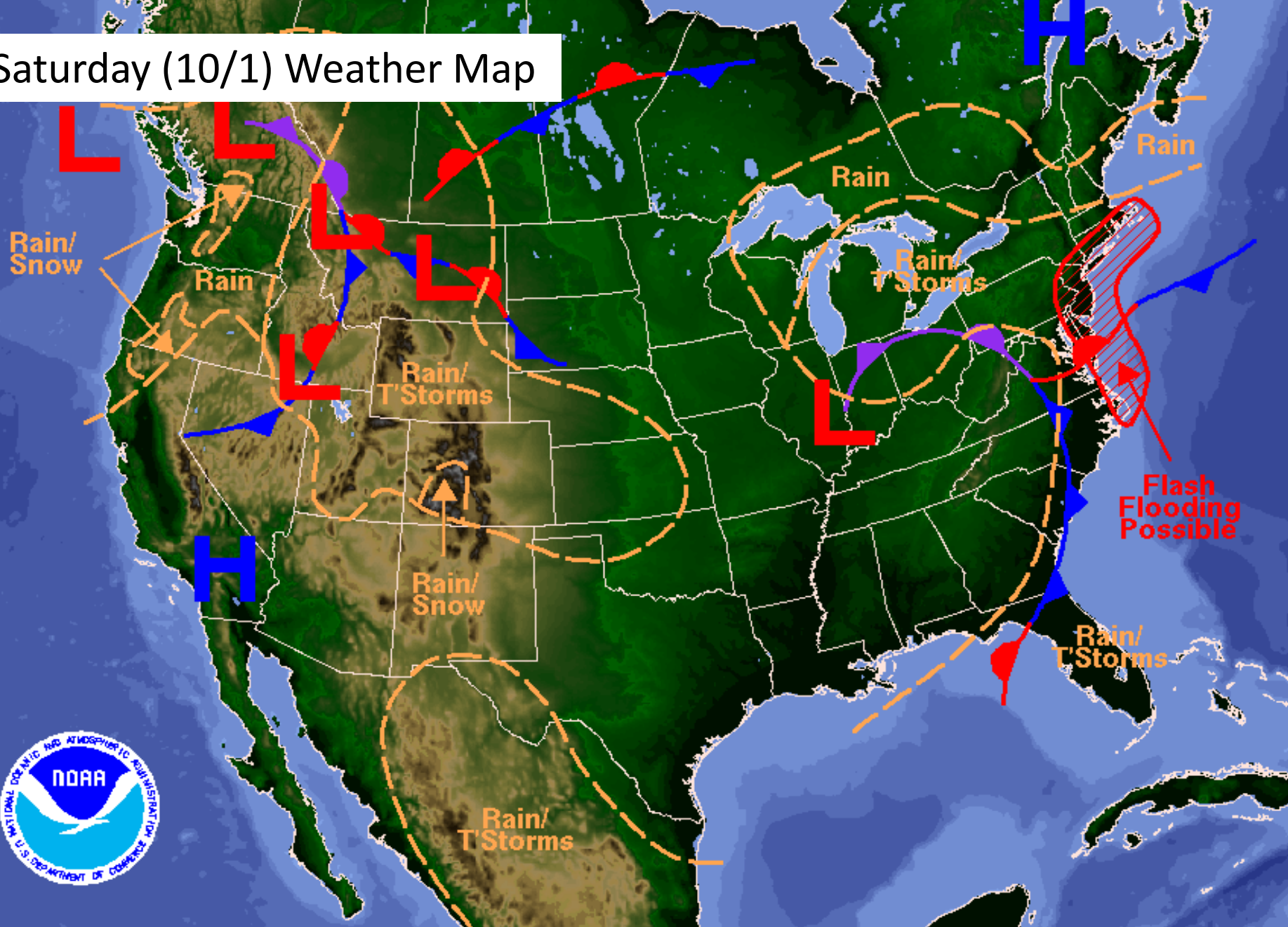
Weather Forecast for Thu, Sep 29, 2016, issued 4:47 AM EDT
DOC/NOAA/NWS/NCEP/Weather Prediction Center
Prepared by McCreynolds based on WPC, SPC and NHC forecasts

Friday (9/30) Weather Map



Weather Forecast for Fri, Sep 30, 2016, issued 4:51 AM EDT Thu, Sep 29, 2016
DOC/NOAA/NWS/NCEP/Weather Prediction Center
Prepared by McCreynolds based on WPC, SPC and NHC forecasts

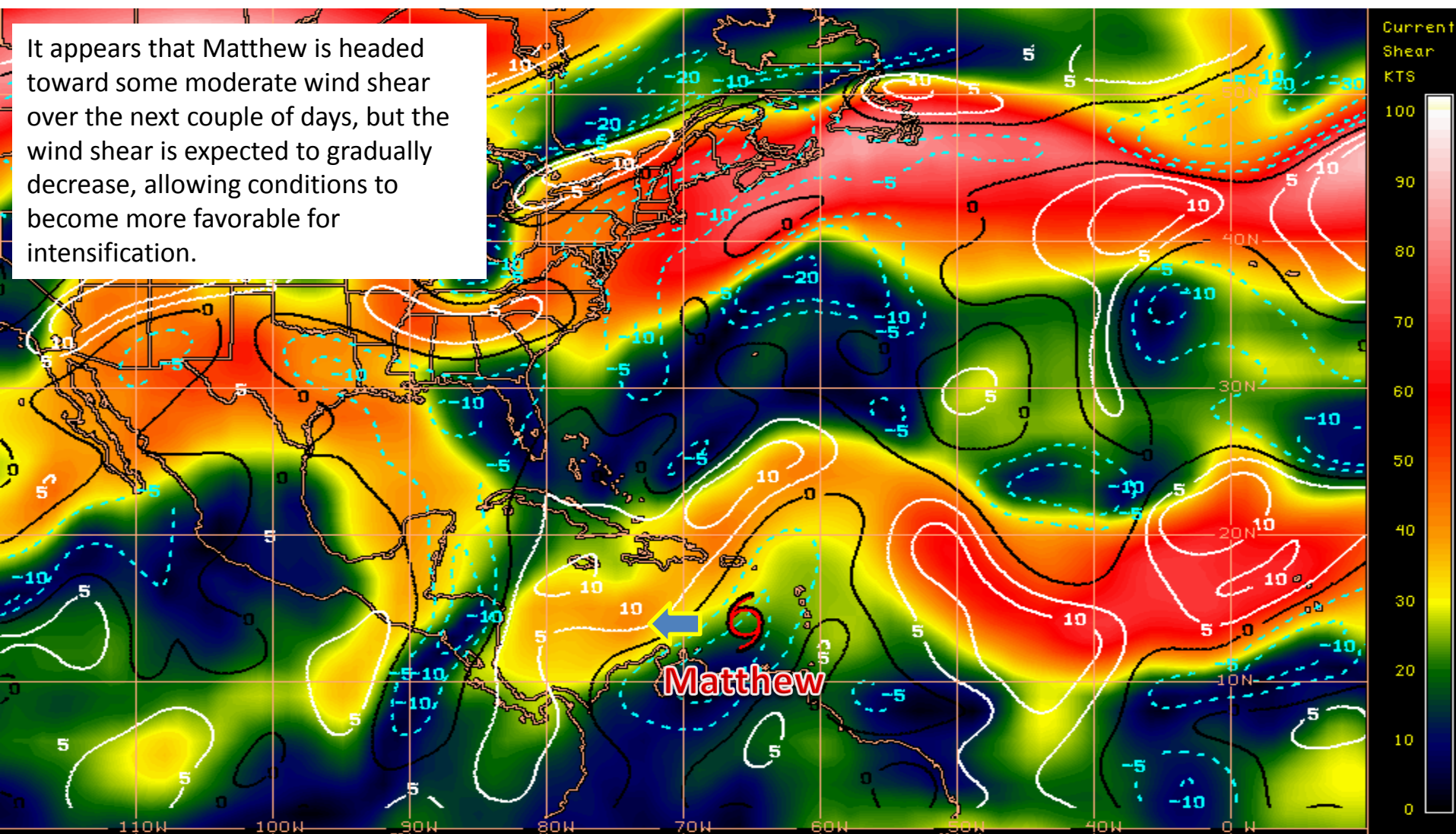
Saturday (10/1) Weather Map



Weather Forecast for Sat, Oct 01, 2016, issued 4:54 AM EDT Thu, Sep 29, 2016
DOC/NOAA/NWS/NCEP/Weather Prediction Center
Prepared by McCreynolds based on WPC, SPC and NHC forecasts

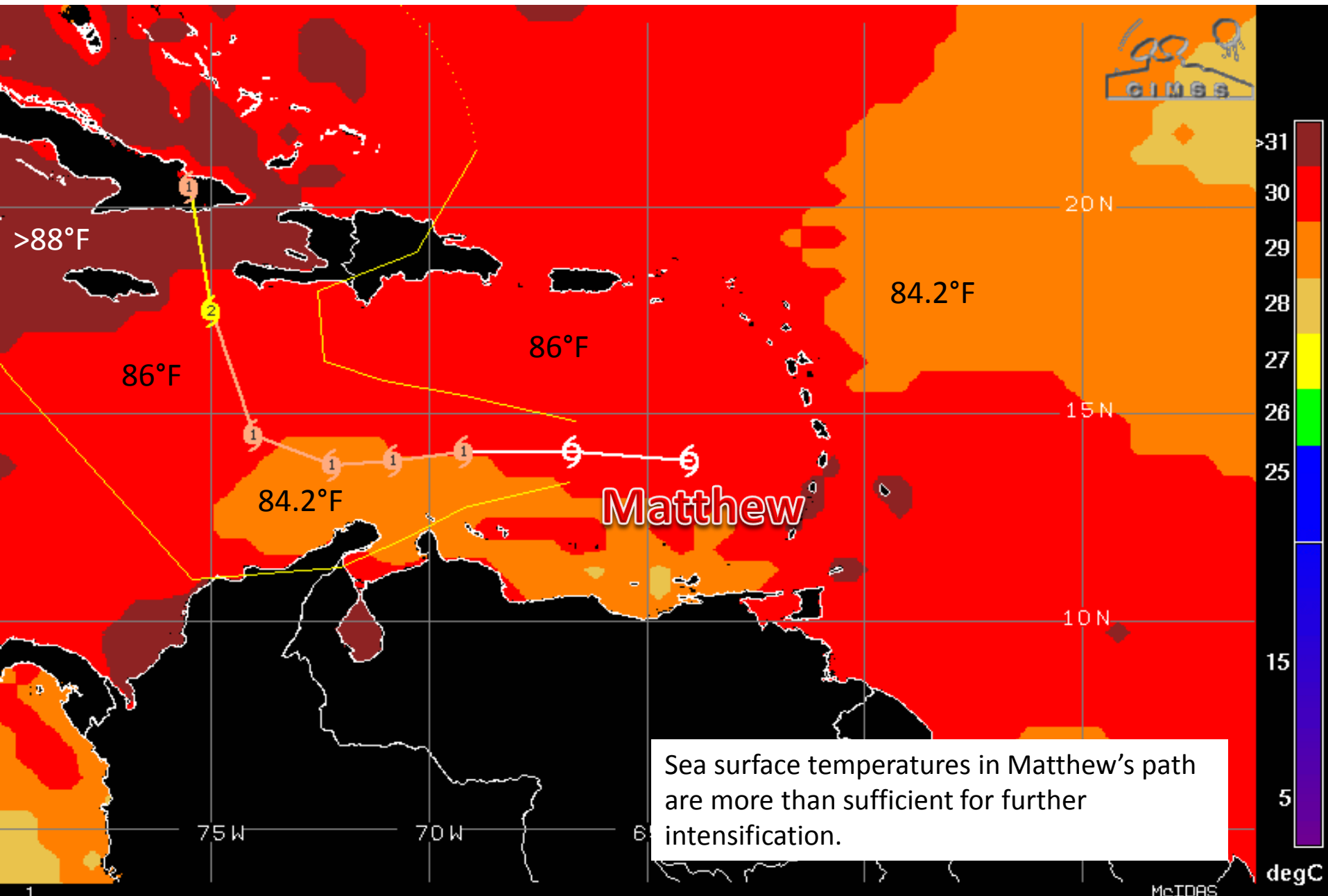
Current Wind Shear (Shaded) and Shear Tendency (Lines)

It appears that Matthew is headed toward some moderate wind shear over the next couple of days, but the wind shear is expected to gradually decrease, allowing conditions to become more favorable for intensification.



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

Sea Surface Temperatures Near Matthew

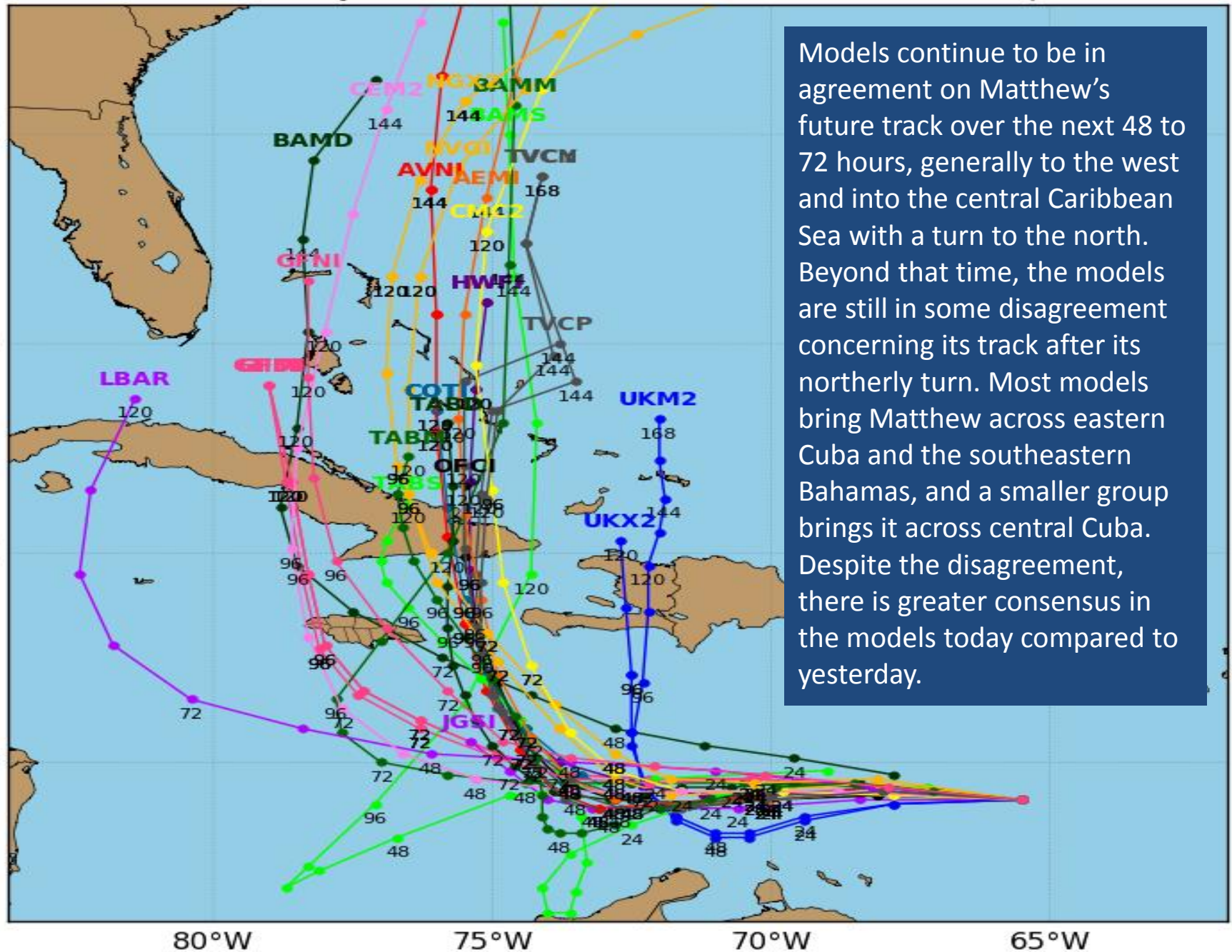


Tropical Storm MATTHEW Model Track Guidance

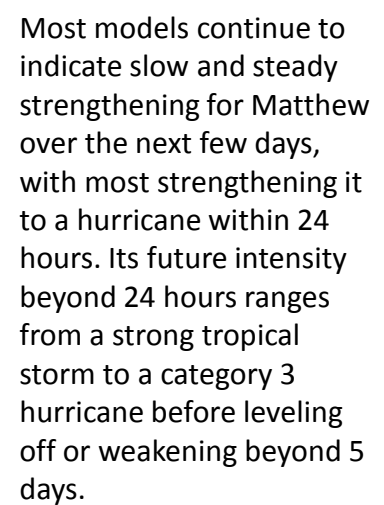
Initialized at 12z Sep 29 2016

Levi Cowan - tropicaltidbits.com

Models continue to be in agreement on Matthew's future track over the next 48 to 72 hours, generally to the west and into the central Caribbean Sea with a turn to the north. Beyond that time, the models are still in some disagreement concerning its track after its northerly turn. Most models bring Matthew across eastern Cuba and the southeastern Bahamas, and a smaller group brings it across central Cuba. Despite the disagreement, there is greater consensus in the models today compared to yesterday.



Levi Cowan - tropicaltidbits.com



Tropical Summary:

- At 8am EDT Thursday, Tropical Storm Matthew was located 300 miles south of San Juan, Puerto Rico, or approximately 1,260 miles southeast of Miami, Florida.
- Maximum sustained winds have increased to 70mph with higher gusts. Additional strengthening is expected, and Matthew could become a hurricane later today. Continued strengthening is expected throughout the weekend and the official forecast takes Matthew to Category 2 status by Monday.
- T.S. Matthew is moving quickly west at 16mph. A continued west motion with some decrease in forward speed is expected through Friday before turning to the northwest or north-northwest sometime on Saturday.
- Forecast models have come into better agreement on the forecast track, but are still in disagreement on the future intensity of Matthew.
- Some models keep Matthew a minimal hurricane or strong tropical storm while others predict that Matthew could become a major hurricane within 4-5 days.
- Matthew is currently being steered west by a strong area of high pressure in the north-central Atlantic, but a strong area of low pressure is currently moving into the southeast U.S. with a cold front moving into Florida.
- This weather system, as it moves southeast and Matthew continues west away from high pressure, will cause Matthew to turn northward over the weekend towards the Windward Passage between Cuba and Haiti and towards the central Bahamas early next week.
- However, there is still some uncertainty as to exactly when Matthew makes the northward turn. A weaker and/or faster moving storm could make it to Jamaica before turning north across Cuba while a stronger and slower-moving storm may turn earlier. Since Matthew is already near hurricane strength and moving slower than yesterday, there is slightly more confidence in an earlier northward turn.
- 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 is between central Cuba and Hispaniola.

Florida Outlook:

- At this time it is too early to say exactly what, if any, impacts Tropical Storm Matthew will have on Florida.
- Florida, at this time, is outside the 5 day average error cone and the chances of receiving tropical storm force winds within 5 days is less than 5%.
- Any impacts, if they occur, are 6-9 days away, but Matthew is a very large storm and has the potential to generate occasionally gusty winds and rough seas along the East Coast of Florida, with minor coastal flooding and erosion. Additional impacts are dependent on the future track of the storm.

Another briefing packet will be issued on Thursday afternoon. For more information on this system, 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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