



TROPICAL UPDATE

5 PM EDT

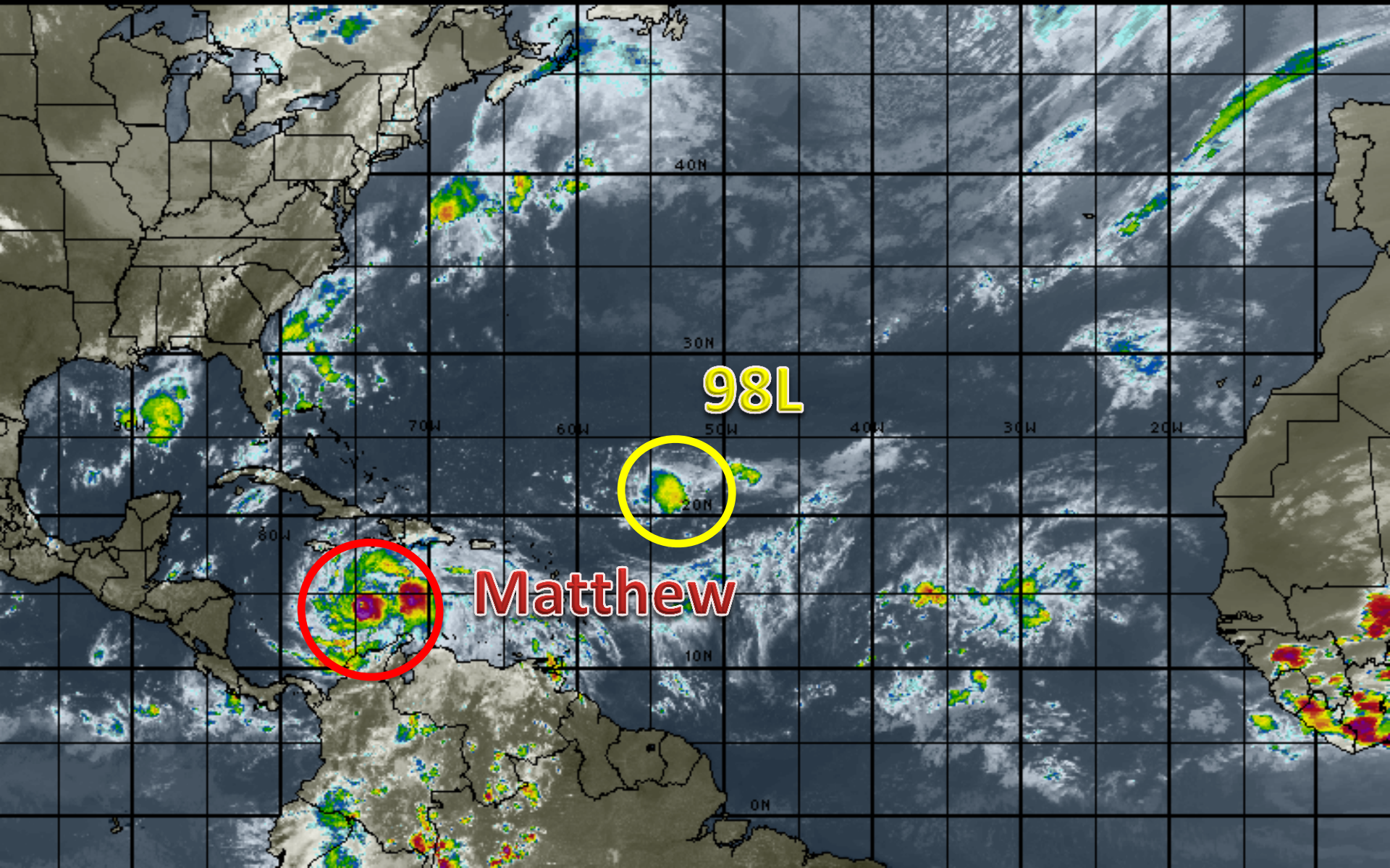
Sunday, October 2, 2016

Hurricane Matthew & Invest 98L (30%)

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

18:00 02-OCT-2016 GMT Copyright © 1998-2016 WSI Corporation <http://www.wsi.com>





Two-Day Graphical Tropical Weather Outlook

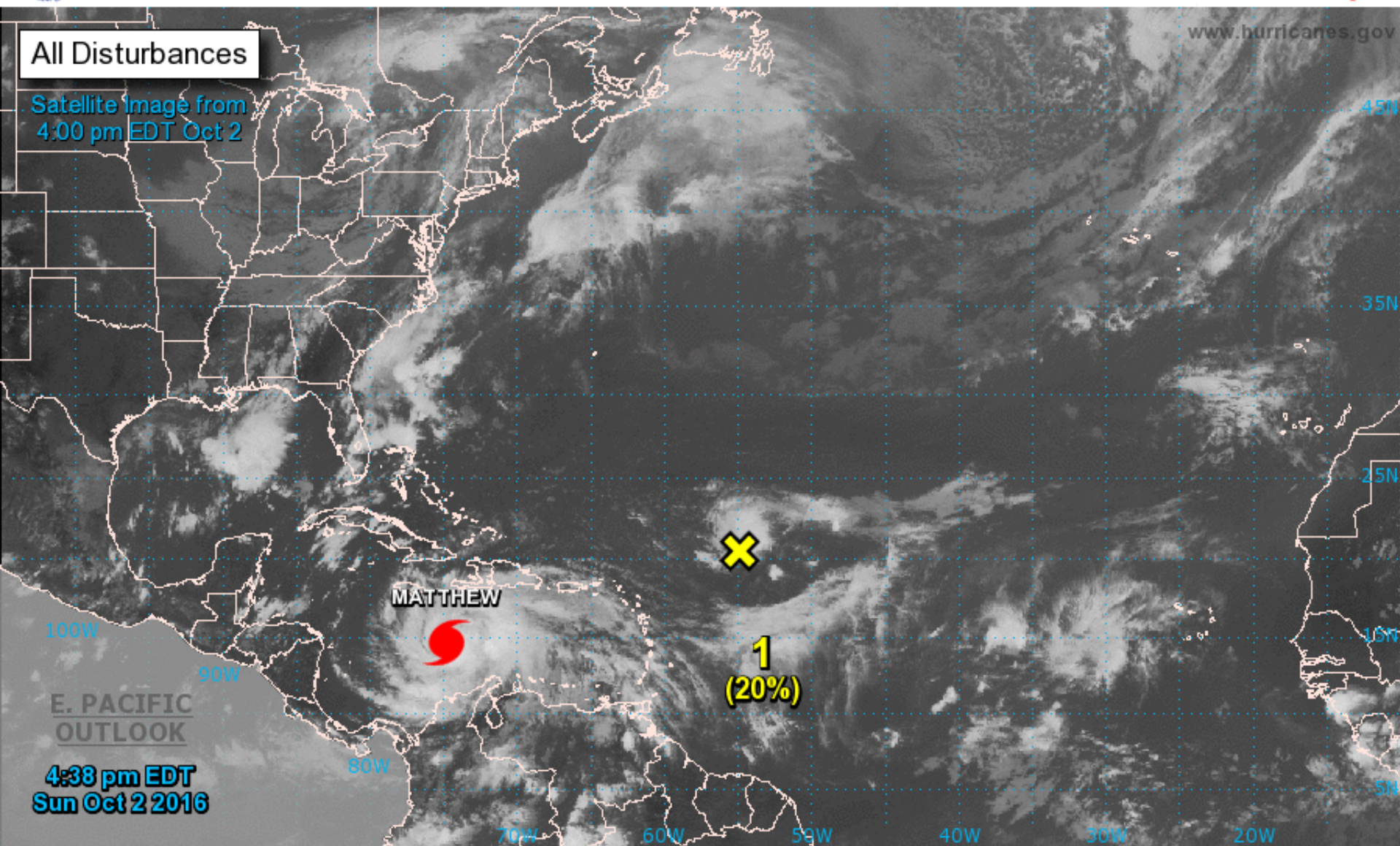
National Hurricane Center Miami, Florida



www.hurricanes.gov

All Disturbances

Satellite Image from
4:00 pm EDT Oct 2



E. PACIFIC
OUTLOOK
4:38 pm EDT
Sun Oct 2 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

Hurricane Matthew

2 PM EDT Sun Oct 02 2016

Position 14.3 N 74.6 W

Maximum Winds 145 mph

Gusts 165 mph

Movement NW at 4 mph

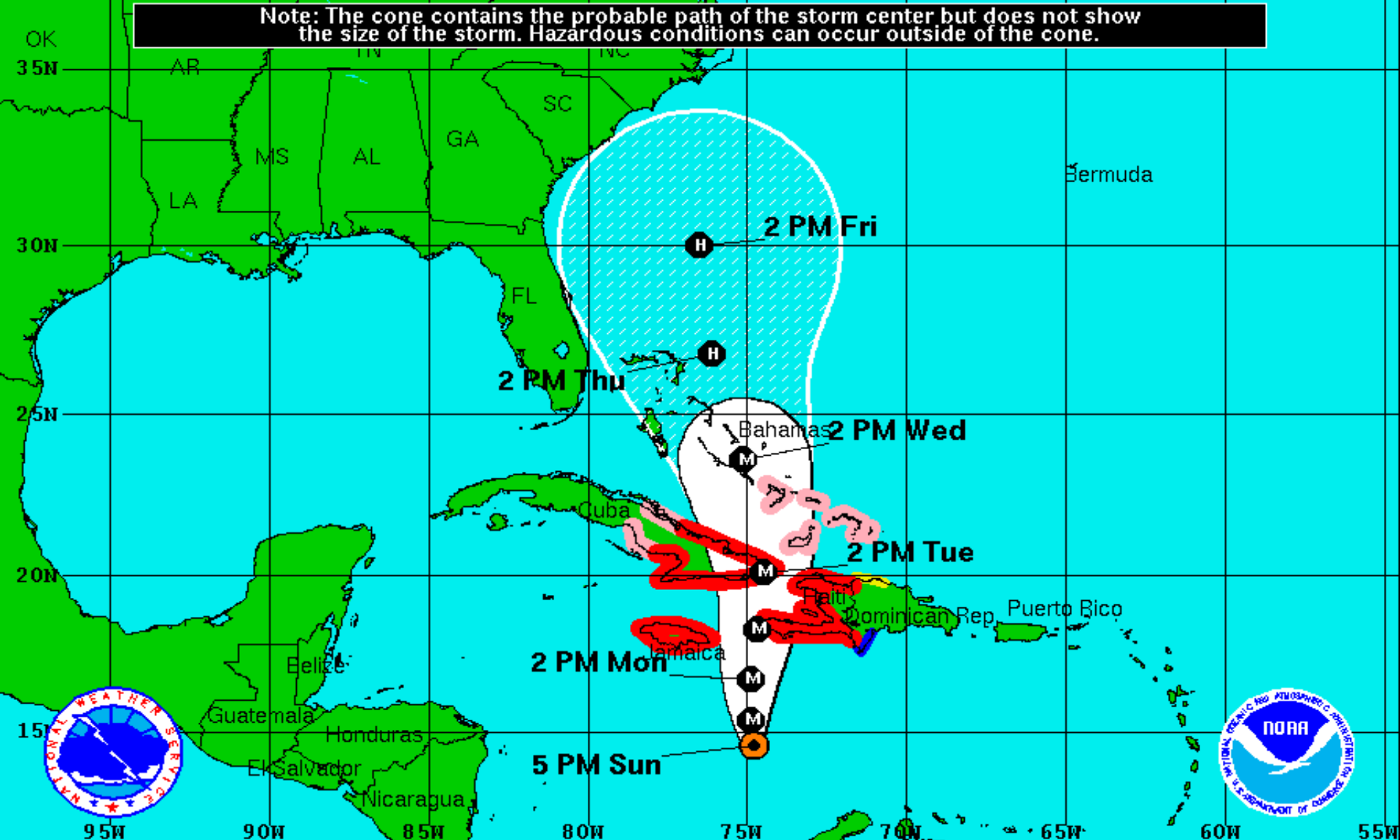
Minimum Pressure 945 mb (27.90 inches)




Blue Marble basemap imagery courtesy NASA







Satellite 8:36 PM UTC
4:36 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.



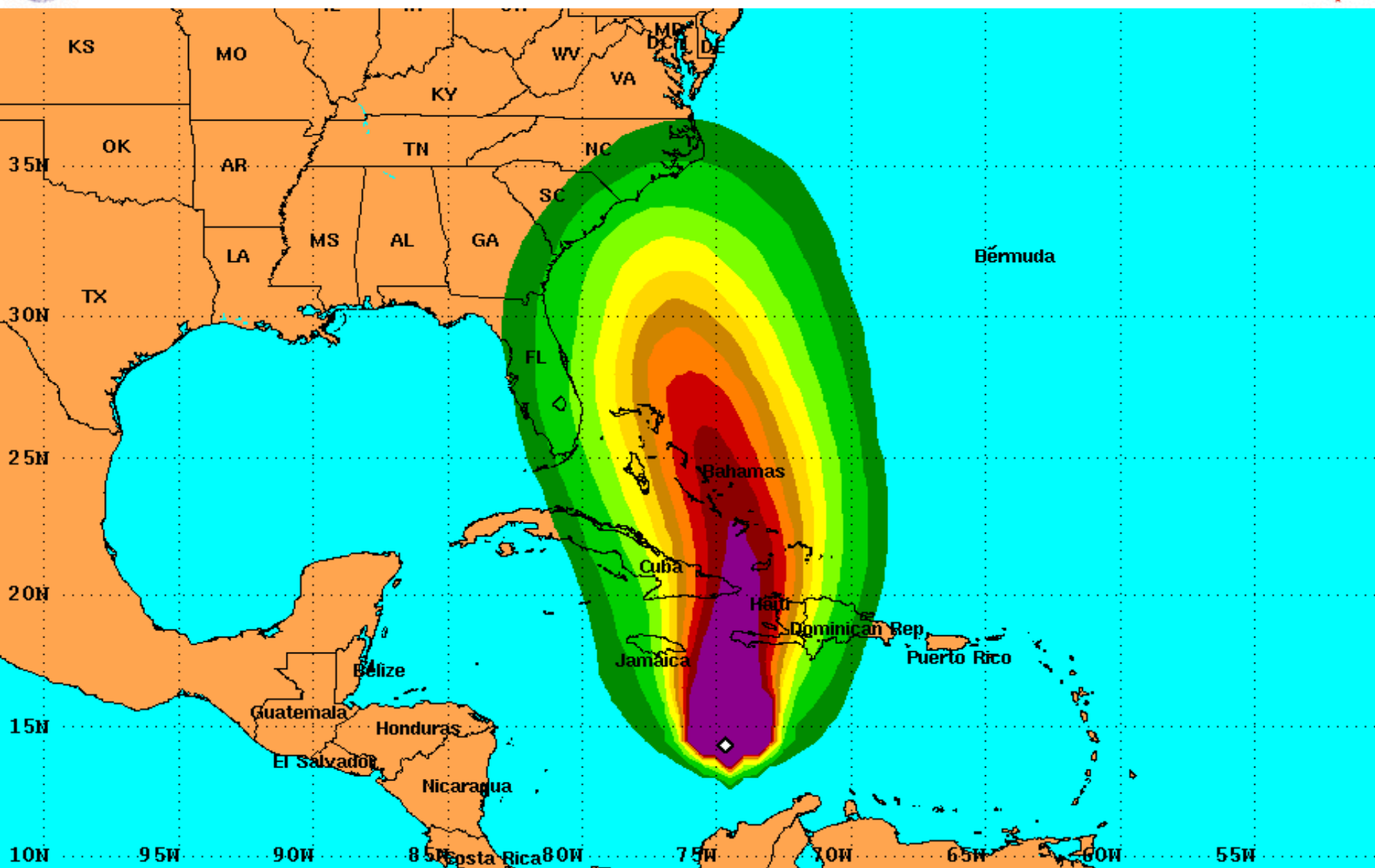
Hurricane Matthew Sunday October 2, 2016 5 PM EDT Advisory 19 NWS National Hurricane Center	Current Information:  Center Location 14.6 N 74.8 W Max Sustained Wind 145 mph Movement NW at 5 mph	Forecast Positions:  Tropical Cyclone  Post-Tropical Sustained Winds: D < 39 mph S 39-73 mph H 74-110 mph M > 110mph
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Potential Track Area:  Day 1-3  Day 4-5	Watches:  Hurricane  Trop.Storm	Warnings:  Hurricane  Trop.Storm
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PRELIMINARY (SINGLE STORM) Tropical Storm Force Wind Speed Probabilities

For the 120 hours (5 days) from 2 PM EDT Sun Oct 2 to 2 PM EDT Fri Oct 7



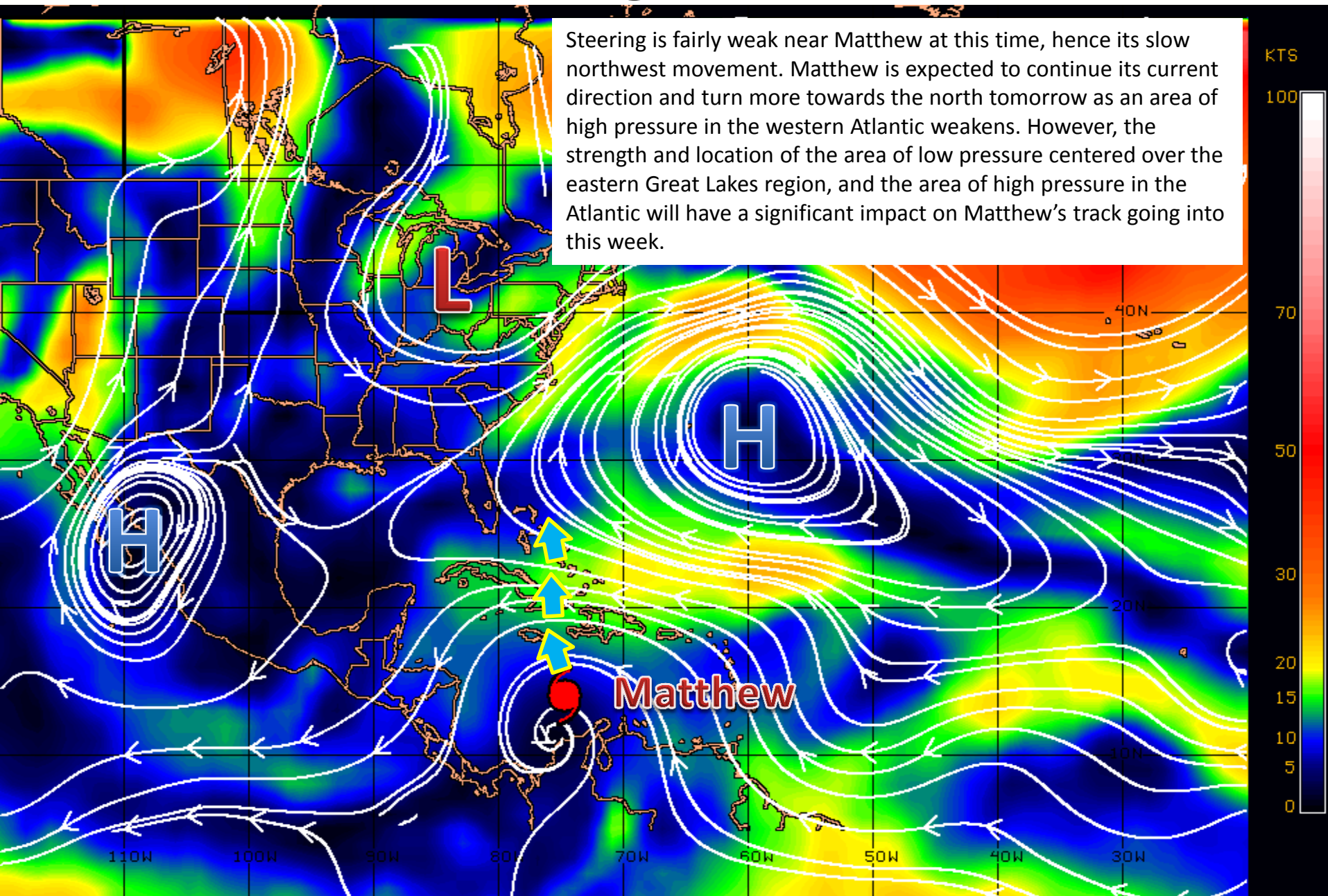
Probability of sustained tropical storm force surface winds (1-minute average of 39 mph or greater)

◊ indicates HURRICANE MATTHEW center location at 2 PM EDT Sun Oct 2 2016 (Forecast/Advisory #19)

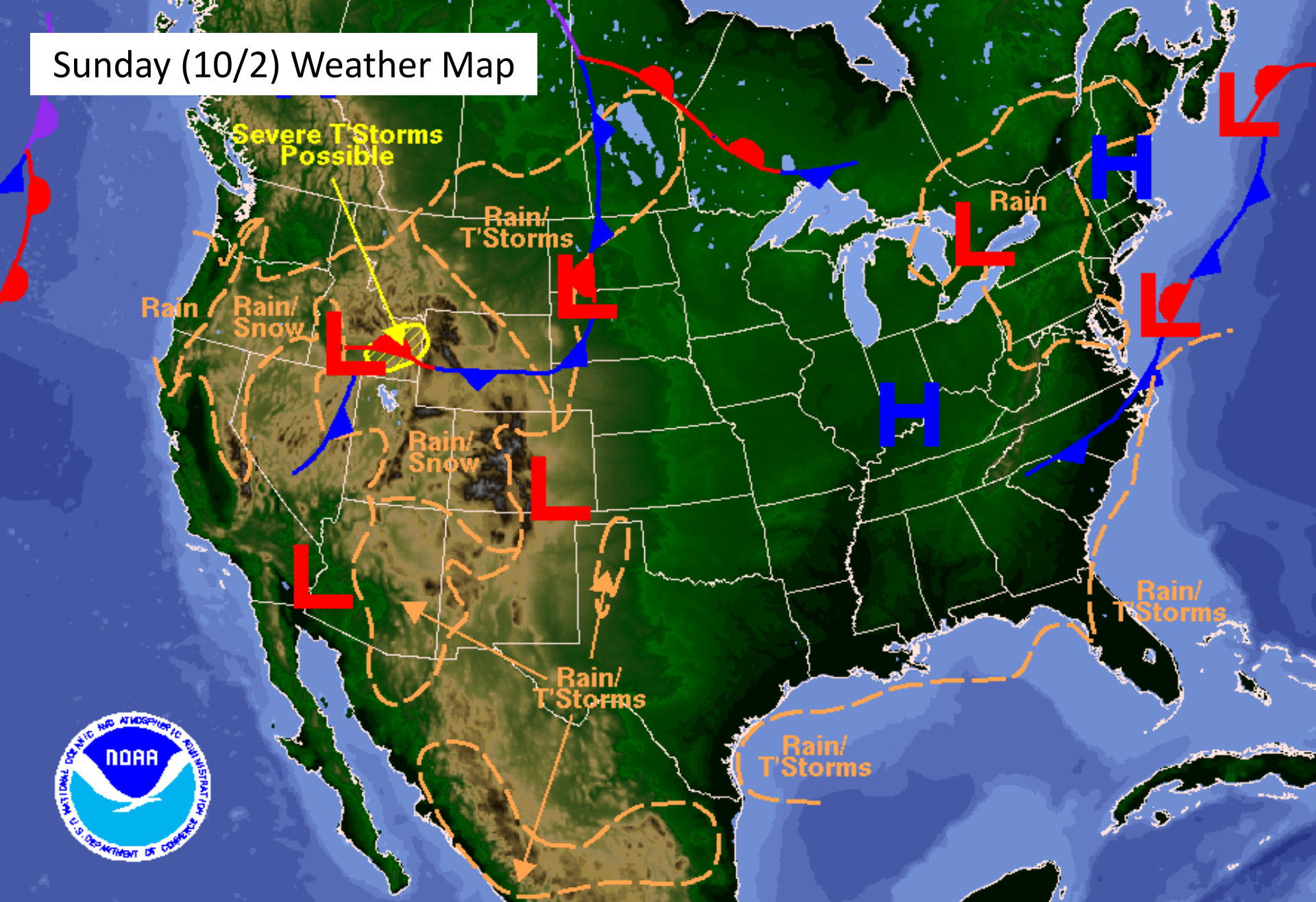


Steering Currents

Steering is fairly weak near Matthew at this time, hence its slow northwest movement. Matthew is expected to continue its current direction and turn more towards the north tomorrow as an area of high pressure in the western Atlantic weakens. However, the strength and location of the area of low pressure centered over the eastern Great Lakes region, and the area of high pressure in the Atlantic will have a significant impact on Matthew's track going into this week.

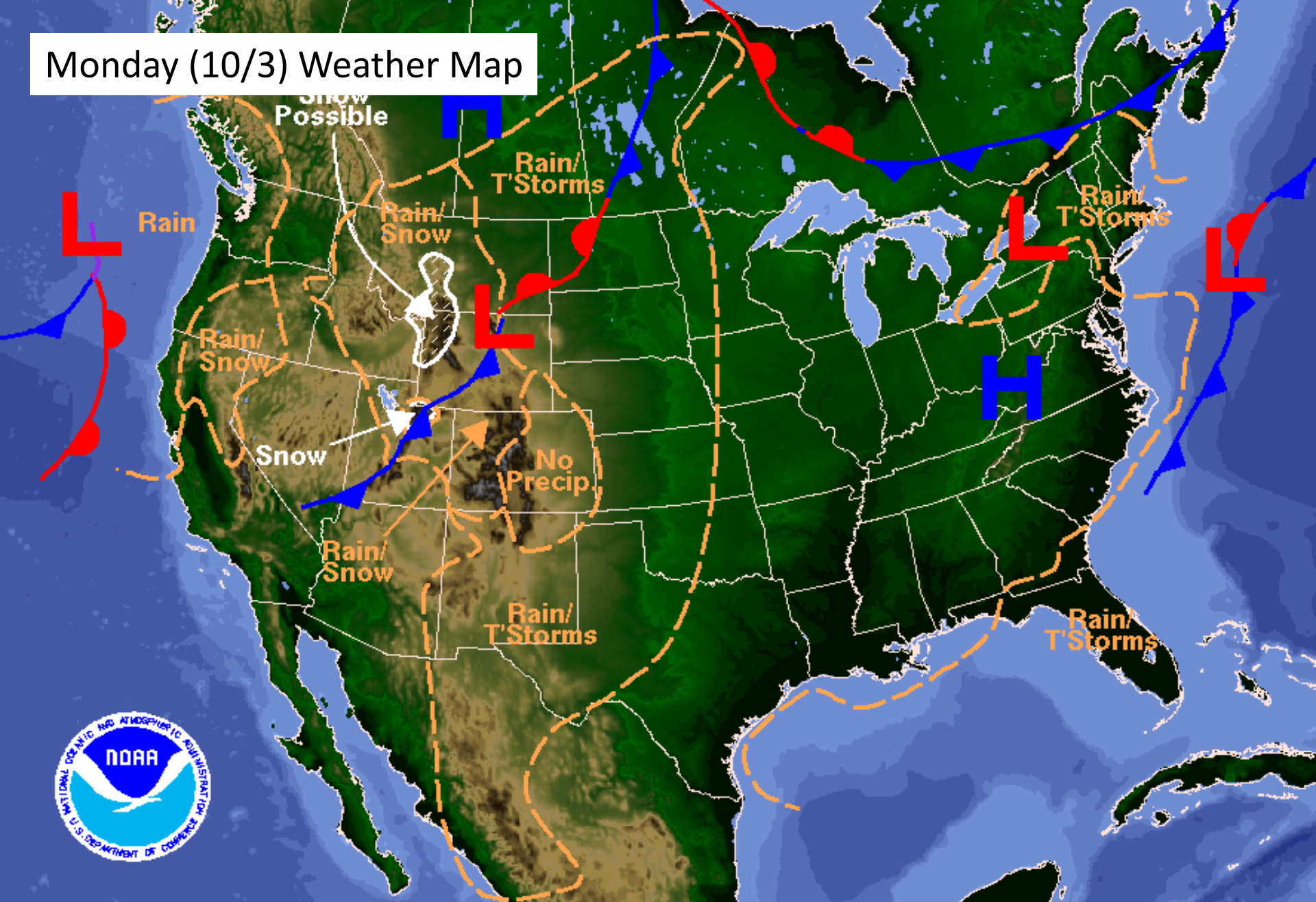


Sunday (10/2) Weather Map



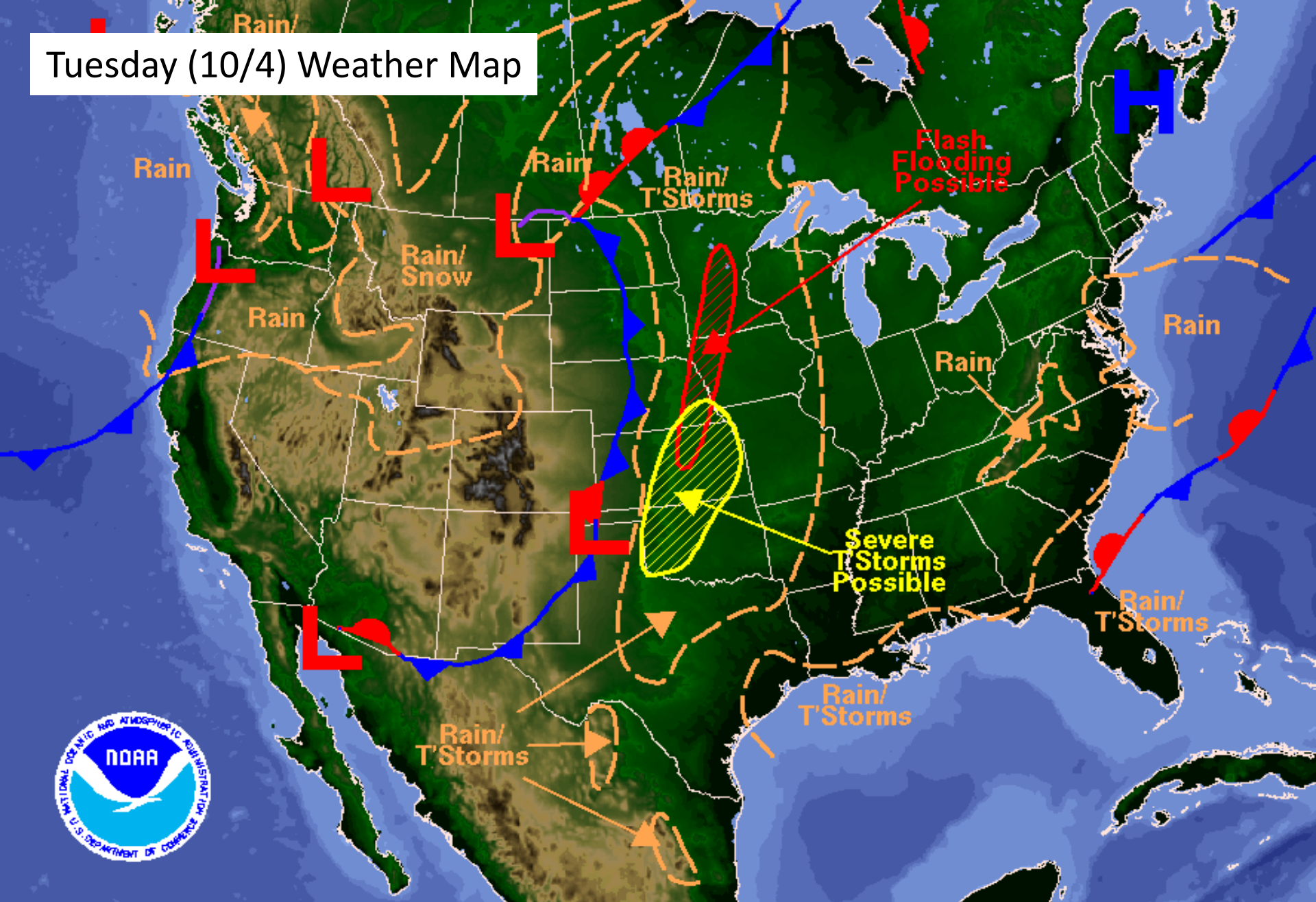
Weather Forecast for Sun, Oct 02, 2016, issued 4:41 PM EDT
DOC/NOAA/NWS/NCEP/Weather Prediction Center
Prepared by Fanning based on WPC, SPC and NHC forecasts

Monday (10/3) Weather Map



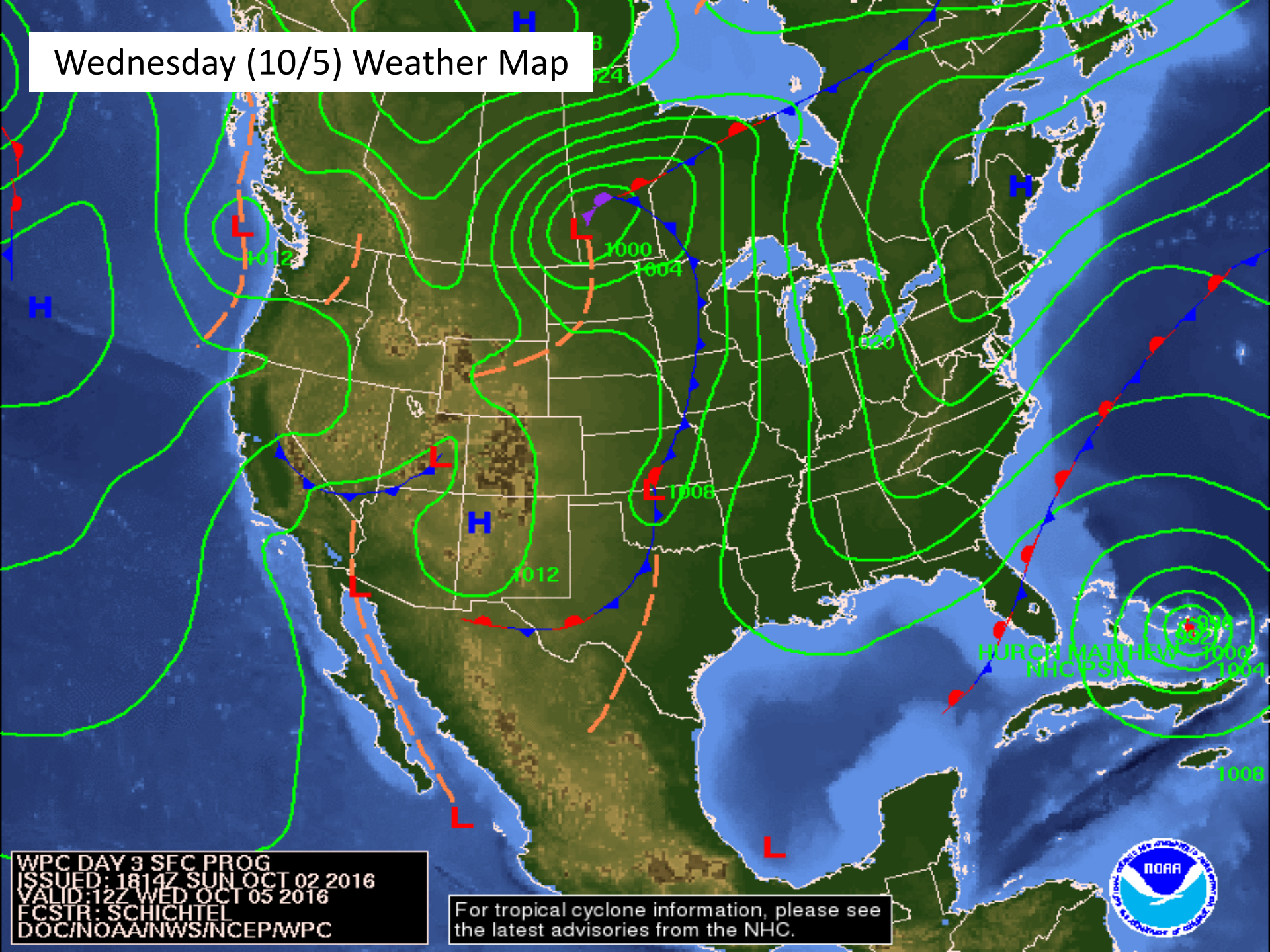
Weather Forecast for Mon, Oct 03, 2016, issued 4:51 AM EDT Sun, Oct 02, 2016
DOC/NOAA/NWS/NCEP/Weather Prediction Center
Prepared by Kong based on WPC, SPC and NHC forecasts

Tuesday (10/4) Weather Map



Weather Forecast for Tue, Oct 04, 2016, issued 4:59 AM EDT Sun, Oct 02, 2016
DOC/NOAA/NWS/NCEP/Weather Prediction Center
Prepared by Kong based on WPC, SPC and NHC forecasts

Wednesday (10/5) Weather Map

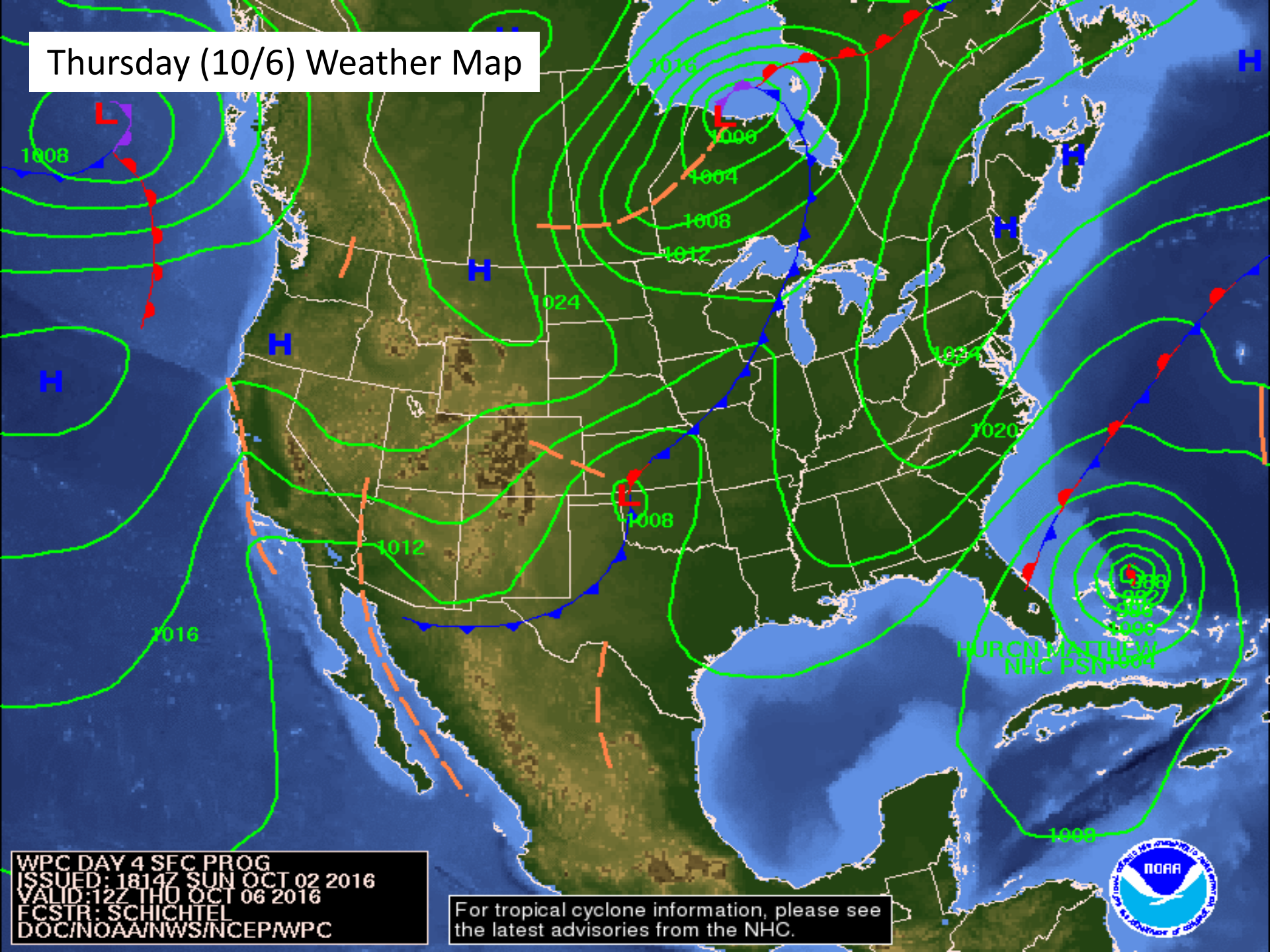


WPC DAY 3 SEC PROG
ISSUED: 1814Z SUN OCT 02 2016
VALID: 12Z WED OCT 05 2016
FCSTR: SCHICTEL
DOC/NOAA/NWS/NCEP/WPC

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



Thursday (10/6) Weather Map

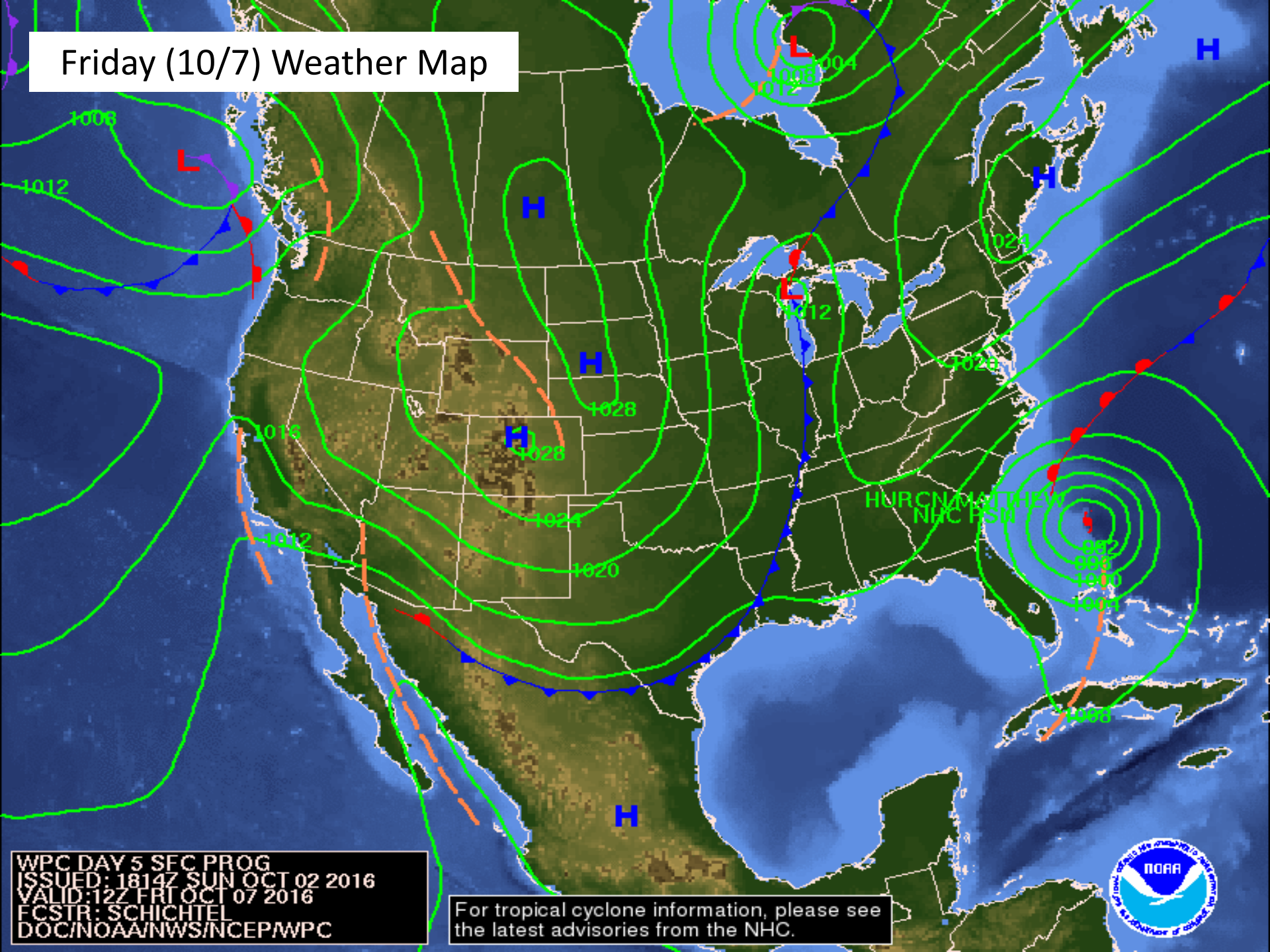


WPC DAY 4 SEC PROG
ISSUED: 1814Z SUN OCT 02 2016
VALID: 12Z THU OCT 06 2016
FCSTR: SCHICTEL
DOC/NOAA/NWS/NCEP/WPC

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



Friday (10/7) Weather Map

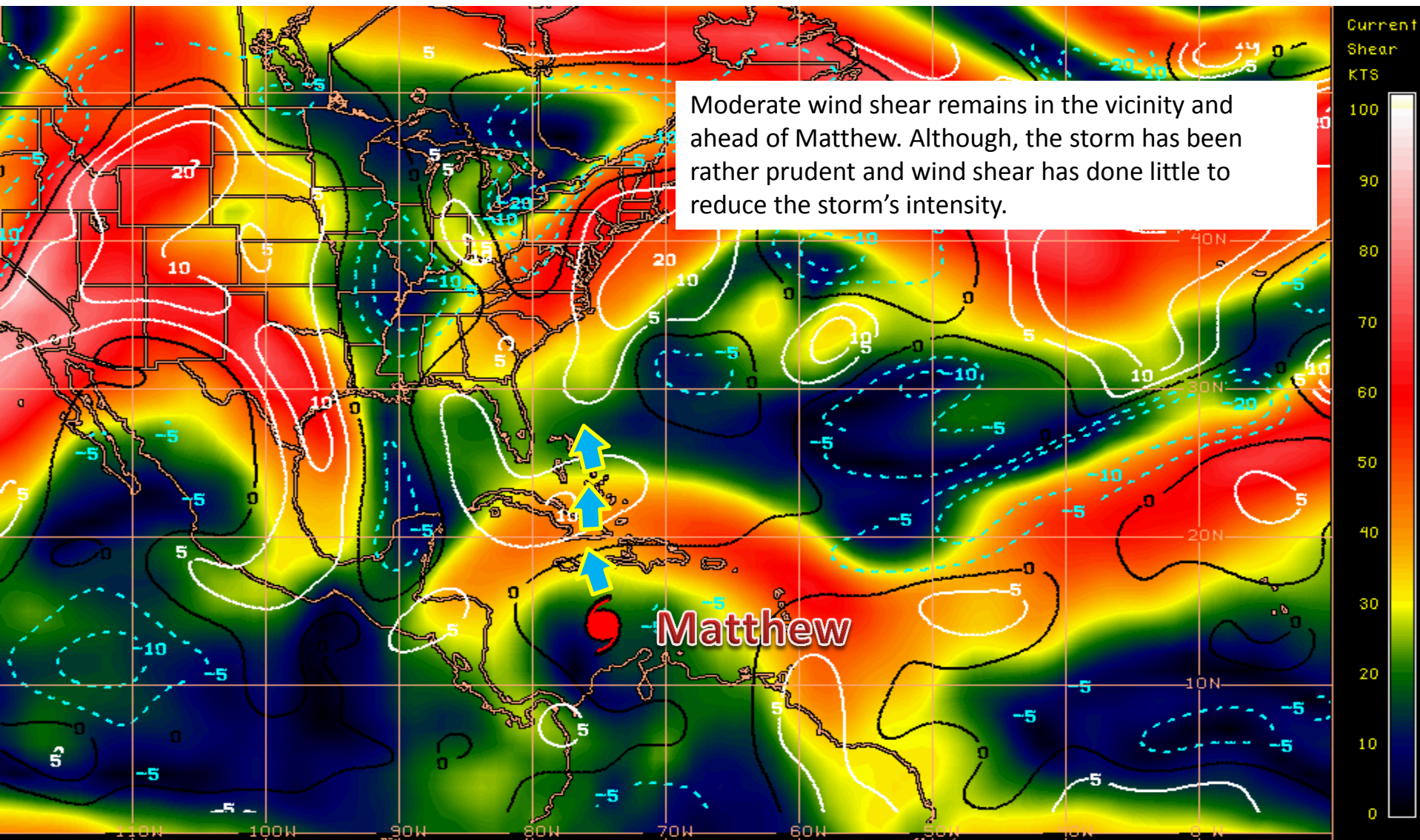


WPC DAY 5 SEC PROG
ISSUED: 1814Z SUN OCT 02 2016
VALID: 12Z FRI OCT 07 2016
FCSTR: SCHICTEL
DOC/NOAA/NWS/NCEP/WPC

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

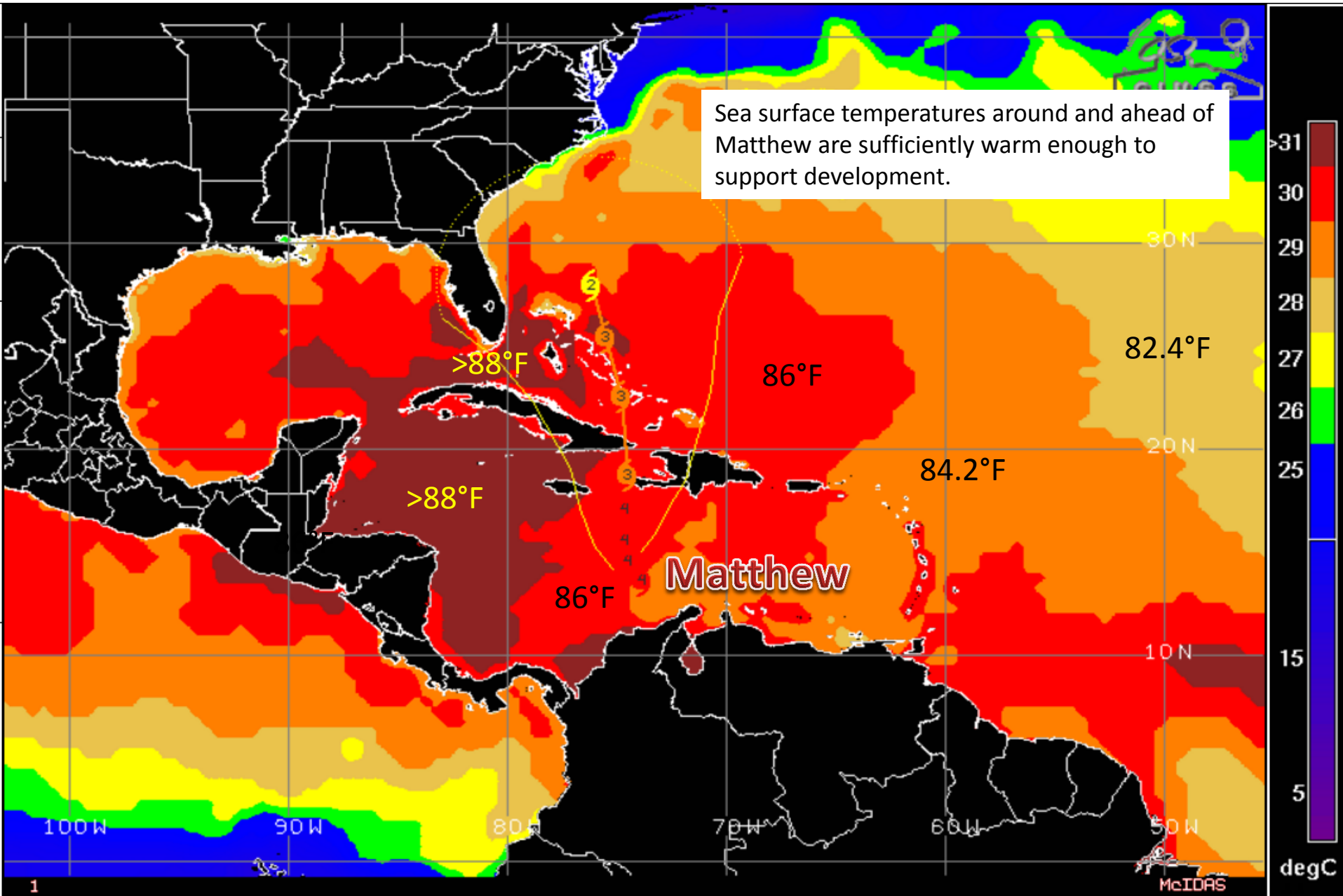


Current Wind Shear (shaded) and Shear Tendency (contours)



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

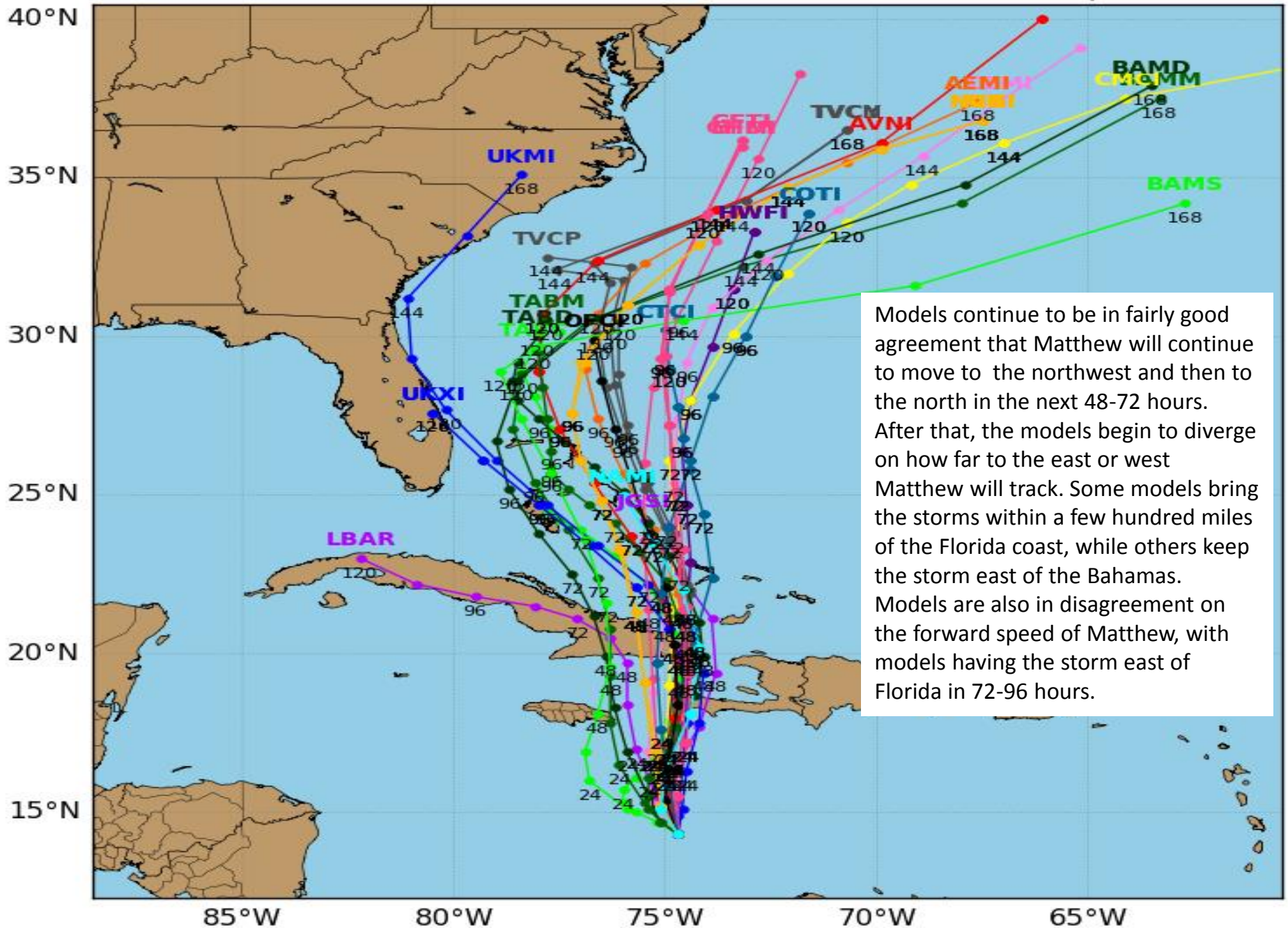
Sea Surface Temperatures Near Matthew



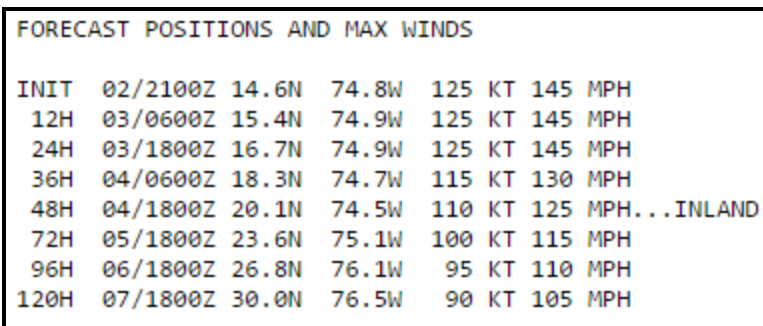
Hurricane MATTHEW Model Track Guidance

Initialized at 18z Oct 02 2016

Levi Cowan - tropicaltidbits.com



Levi Cowan - tropicaltidbits.com



Intensity forecasts for Matthew have been extremely difficult, and they continue to show little agreement. Matthew remains a Category 4 hurricane and will likely see fluctuations in its intensity as all powerful hurricanes do. Matthew will also weaken once it begins interacting with landmasses of Eastern Cuba and Hispaniola in 36-48 hours. Due to the high terrain, Matthew is expected to weaken to a Category 2 storm, before regaining its major hurricane strength once it reaches the warm waters over the Bahamas by midweek.

The latest intensity forecast from the National Hurricane Center will likely prove a better indicator of Matthew's future strength than the guidance models.



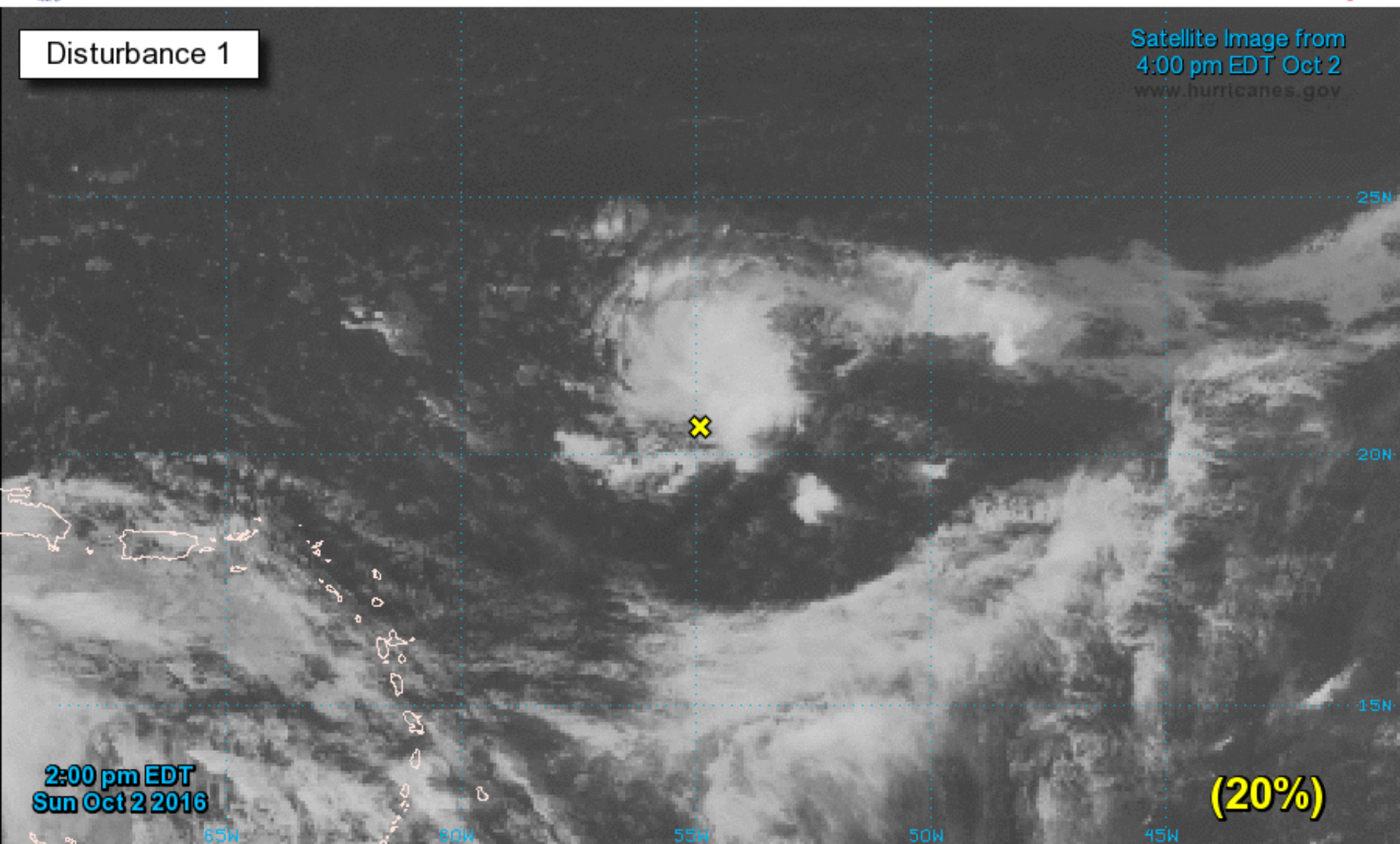
Two-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



Disturbance 1

Satellite Image from
4:00 pm EDT Oct 2
www.hurricanes.gov



2:00 pm EDT
Sun Oct 2 2016

(20%)

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

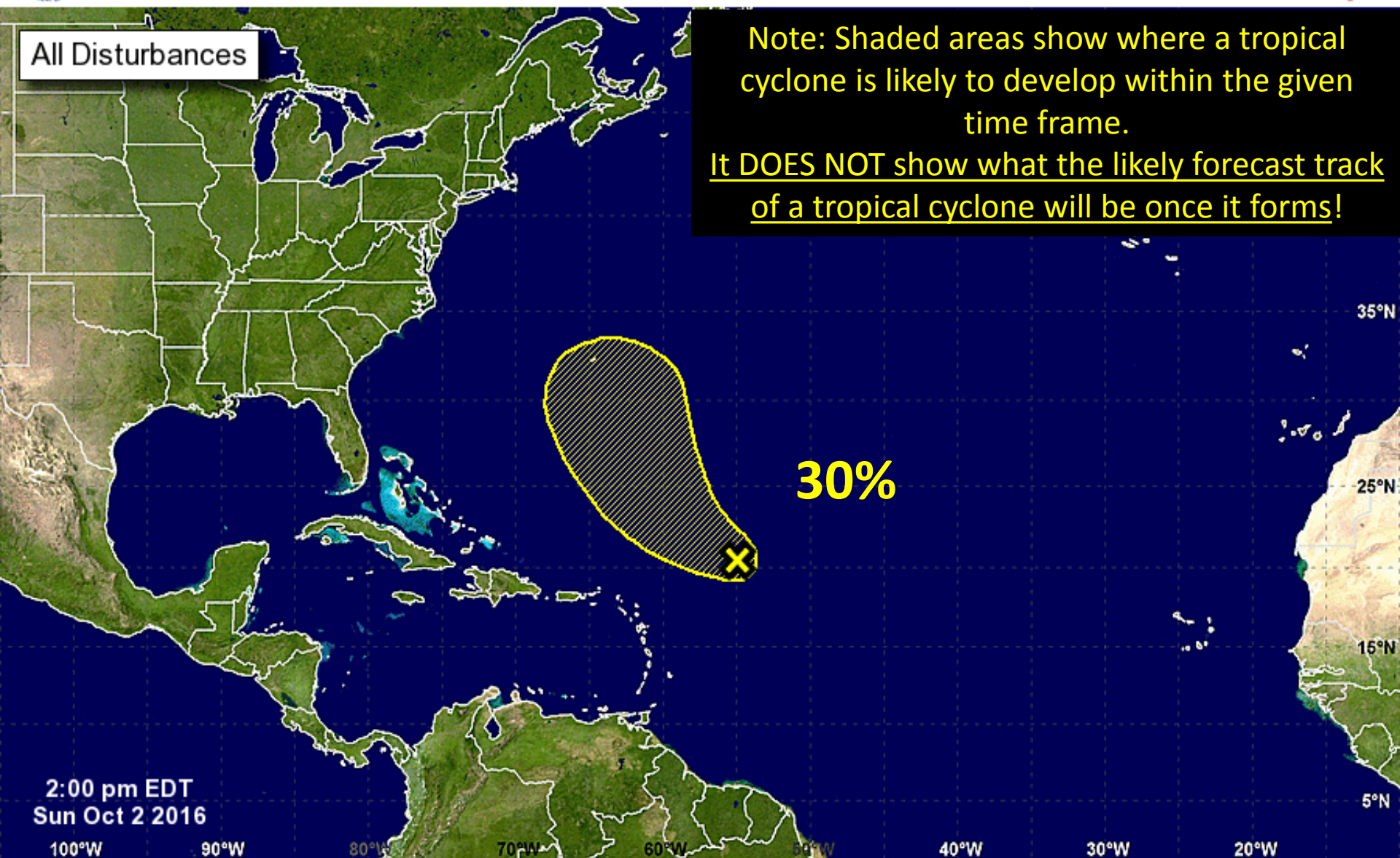
National Hurricane Center Miami, Florida



All Disturbances

Note: Shaded areas show where a tropical cyclone is likely to develop within the given time frame.

It DOES NOT show what the likely forecast track of a tropical cyclone will be once it forms!



Tropical Cyclone Formation Potential for the Five-Day Period Ending at 2:00 pm EDT Fri Oct 7 2016

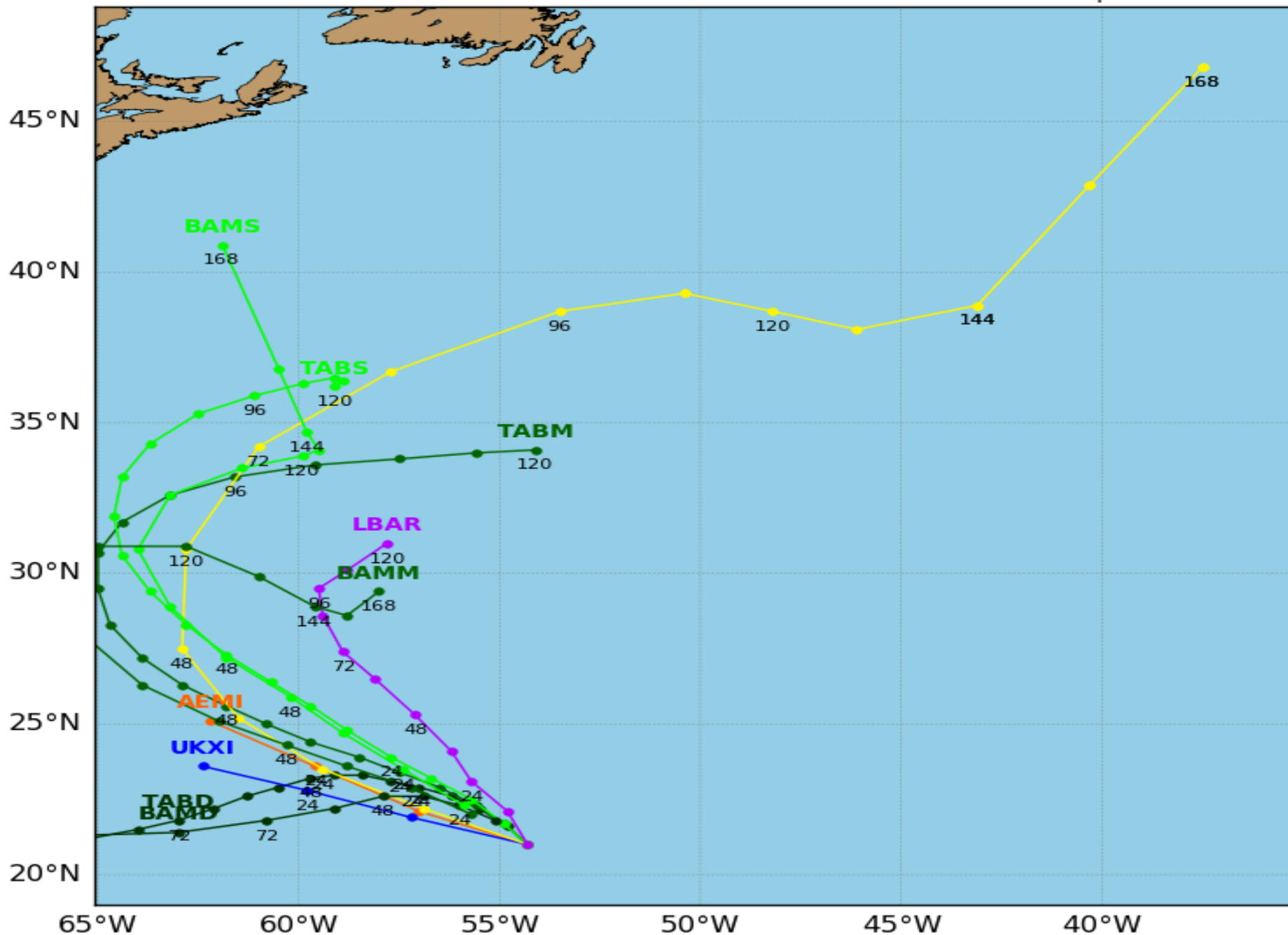
Chance of Cyclone Formation in Five Days: Low < 40% Medium 40-60% High > 60%

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

Invest 98L Model Track Guidance

Initialized at 18z Oct 02 2016

Levi Cowan - tropicaltidbits.com



Tropical Summary:

- At 5pm EDT, Hurricane Matthew was located 270 miles south southeast of Kingston, Jamaica, or approximately 855 miles southeast of Miami, Florida.
- Maximum sustained winds are currently 145 mph with higher gusts, making Matthew a Category 4 hurricane on the Saffir-Simpson scale. Tropical storm force winds extend out to 140 miles from the circulation in the northwest quadrant.
- Matthew is moving toward the northwest near 5 mph. A turn toward the north is expected tonight.
- On the forecast track, the center of Matthew will approach southwestern Haiti and Jamaica on Monday.
- Forecast models are in fairly good agreement on Matthew's forecast through the next 48-72 hours, but then begin to diverge towards 96-120 hours.
- Matthew is currently being steered around an area of high pressure in the Central Atlantic, while a weak area of low pressure continues to slowly push eastward in the Gulf of Mexico.
- The current forecast calls for the area of high pressure to weaken and shift east, causing Matthew to gradually turn to the north by tonight and tomorrow as it heads towards Cuba and Hispaniola.
- By Thursday, the high pressure in the Atlantic, to the northeast of Matthew, is expected to slightly intensify, which would induce a turn toward the left at some point in 3-5 days (Wednesday-Friday timeframe). The timing and magnitude of this turn is still uncertain. At that point, Matthew will be located over southeastern and central Bahamas.
- Any change in forecast strength and location of the area of high pressure and area of low pressure could affect Matthew's track significantly in days 4-5 and beyond. Confidence in the track forecast beyond 72 hours remains low.
- The average NHC track errors at days 4 and 5 are on the order of 175 miles and 230 miles, respectively, so it is important not to focus on the line in the middle of the forecast track.
- Intensity forecasting for Matthew has been extremely difficult, and I would not put too much emphasis on model intensity guidance at this time.
- The official forecast from the National Hurricane Center calls for Matthew to retain its major hurricane status as it moves towards Eastern Cuba and Hispaniola over the next two days.
- Gradual weakening is expected once Matthew begins interacting with land on Tuesday, and then gradual strengthening is possible once the system emerges into the Atlantic and heads towards the Bahamas on Wednesday.
- Elsewhere, Invest 98L is a broad low pressure system located about 600 miles east-northeast of the Leeward Islands and continues to produce an area of showers and thunderstorms. Any development of this system should be slow to occur due to strong upper-level winds. The system poses no threat to Florida.
- The system has a 20% (low) chance of development over the next 48 hours, and a 30% (low) chance of development through the next five days.

Florida Outlook:

- At this time, it is still too early to say exactly what, if any, impacts Matthew will have on Florida.
- Part of the southeastern Florida Peninsula remains within the 5-day average error cone.
- Also, parts of South Florida and the Treasure Coast an approximately 20% chance of seeing tropical storm force winds sometime within the next five days.
- Any possible impacts remain 3-6 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, along with minor coastal flooding, beach erosion, and dangerous rip currents.
- Any additional impacts are dependent on the future track of the storm, which remains uncertain at this time.

Another briefing packet will be issued on Monday morning. 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