



TROPICAL UPDATE

10 AM EDT

Saturday, October 1, 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

18:00 30-SEP-2016 GMT Copyright © 1998-2016 WSI Corporation <http://www.wsi.com>



Hurricane Matthew

8 AM EDT Sat Oct 01 2016

Position 13.4 N 73.1 W

Maximum Winds 155 mph

Gusts 190 mph

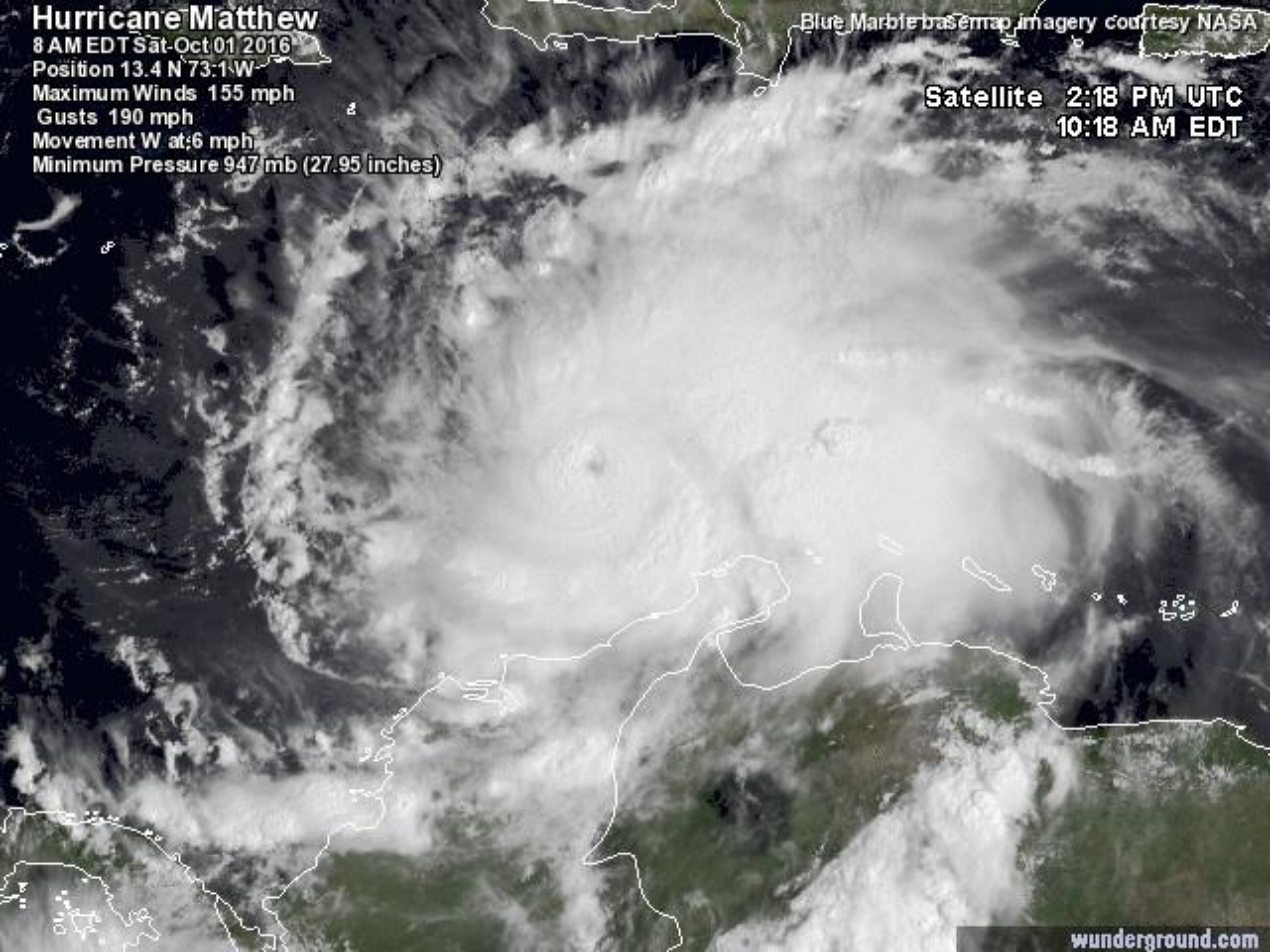
Movement W at 6 mph

Minimum Pressure 947 mb (27.95 inches)

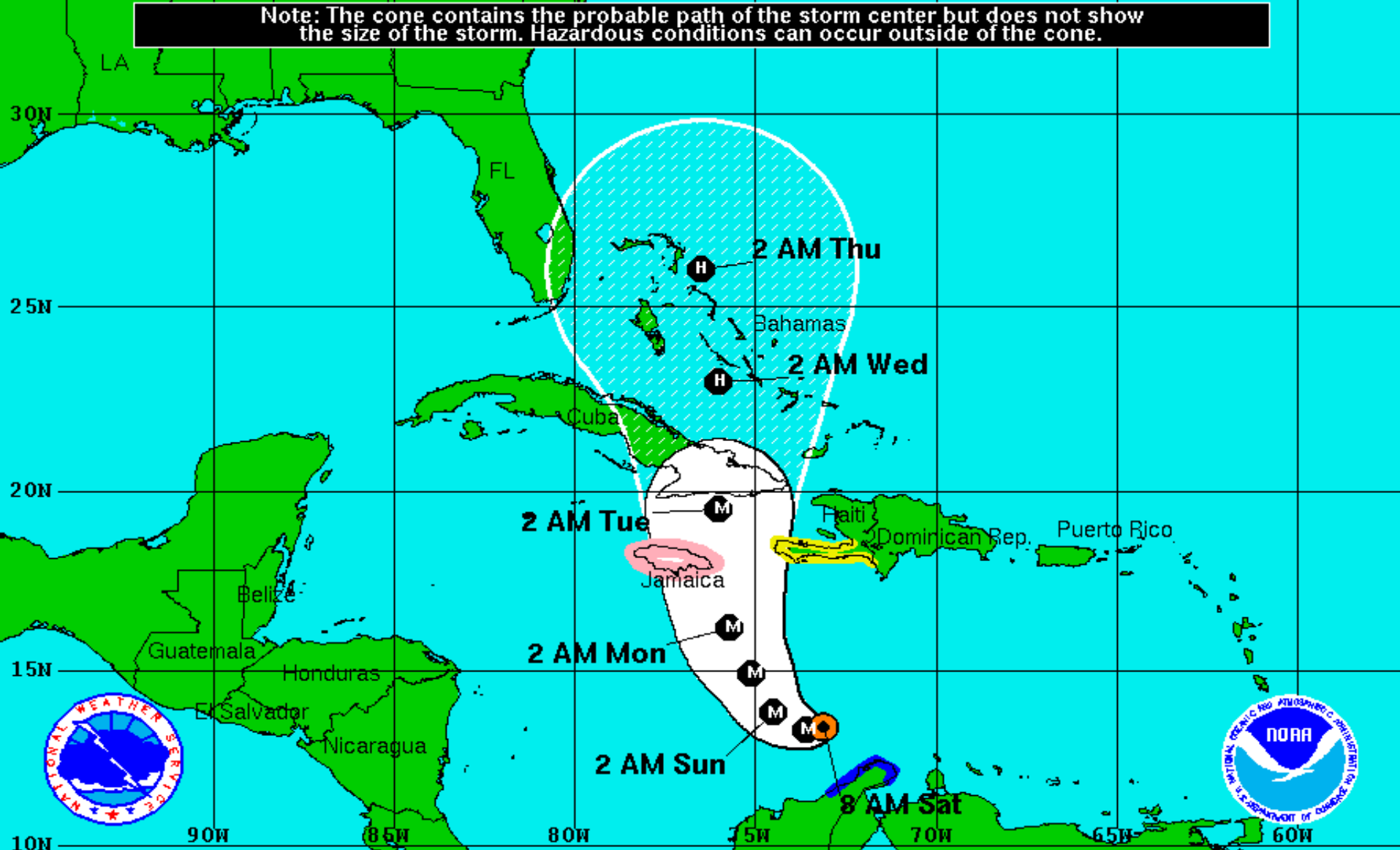
Blue Marble basemap imagery courtesy NASA

Satellite 2:18 PM UTC

10:18 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.



Hurricane Matthew

Saturday October 1, 2016

8 AM EDT Intermediate Advisory 13A

NWS National Hurricane Center

Current Information:

Center Location 13.4 N 73.1 W

Max Sustained Wind 155 mph

Movement W at 7 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

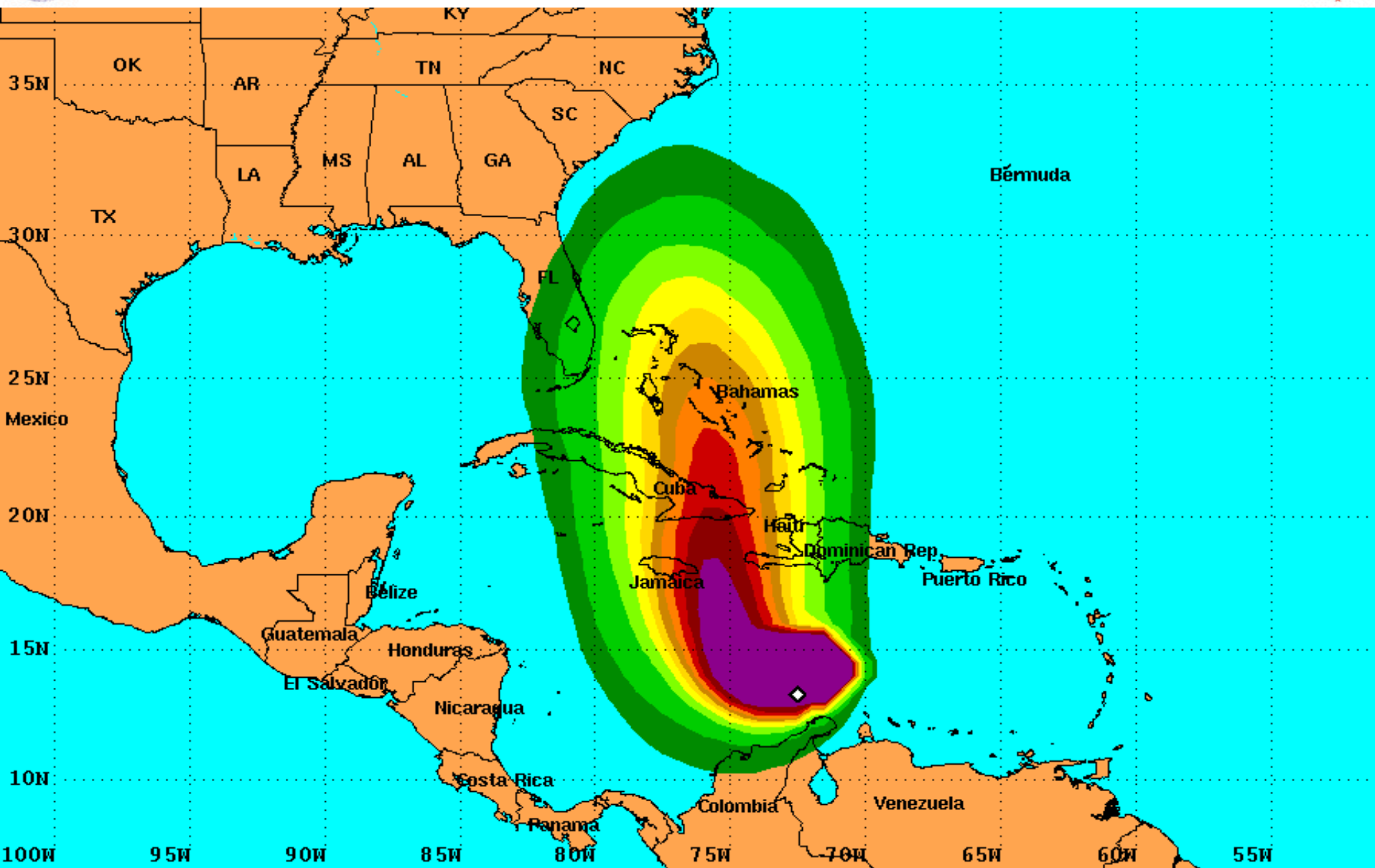
Warnings:

Hurricane Trop.Storm



Tropical Storm Force Wind Speed Probabilities

For the 120 hours (5 days) from 2 AM EDT Sat Oct 1 to 2 AM EDT Thu Oct 6



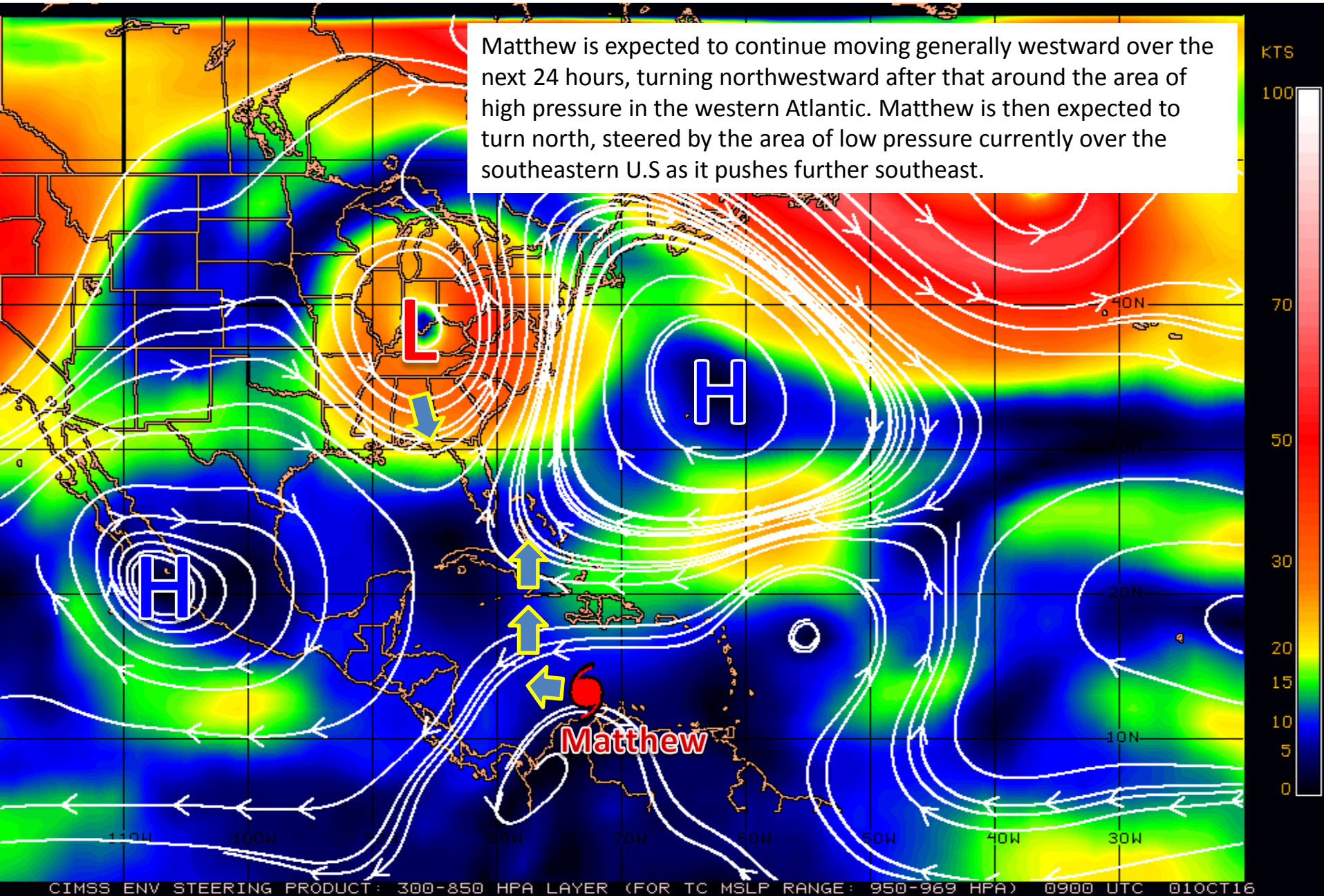
Probability of tropical storm force surface winds (1-minute average ≥ 39 mph) from all tropical cyclones

◇ indicates HURRICANE MATTHEW center location at 2 AM EDT Sat Oct 1 2016 (Forecast/Advisory #13)

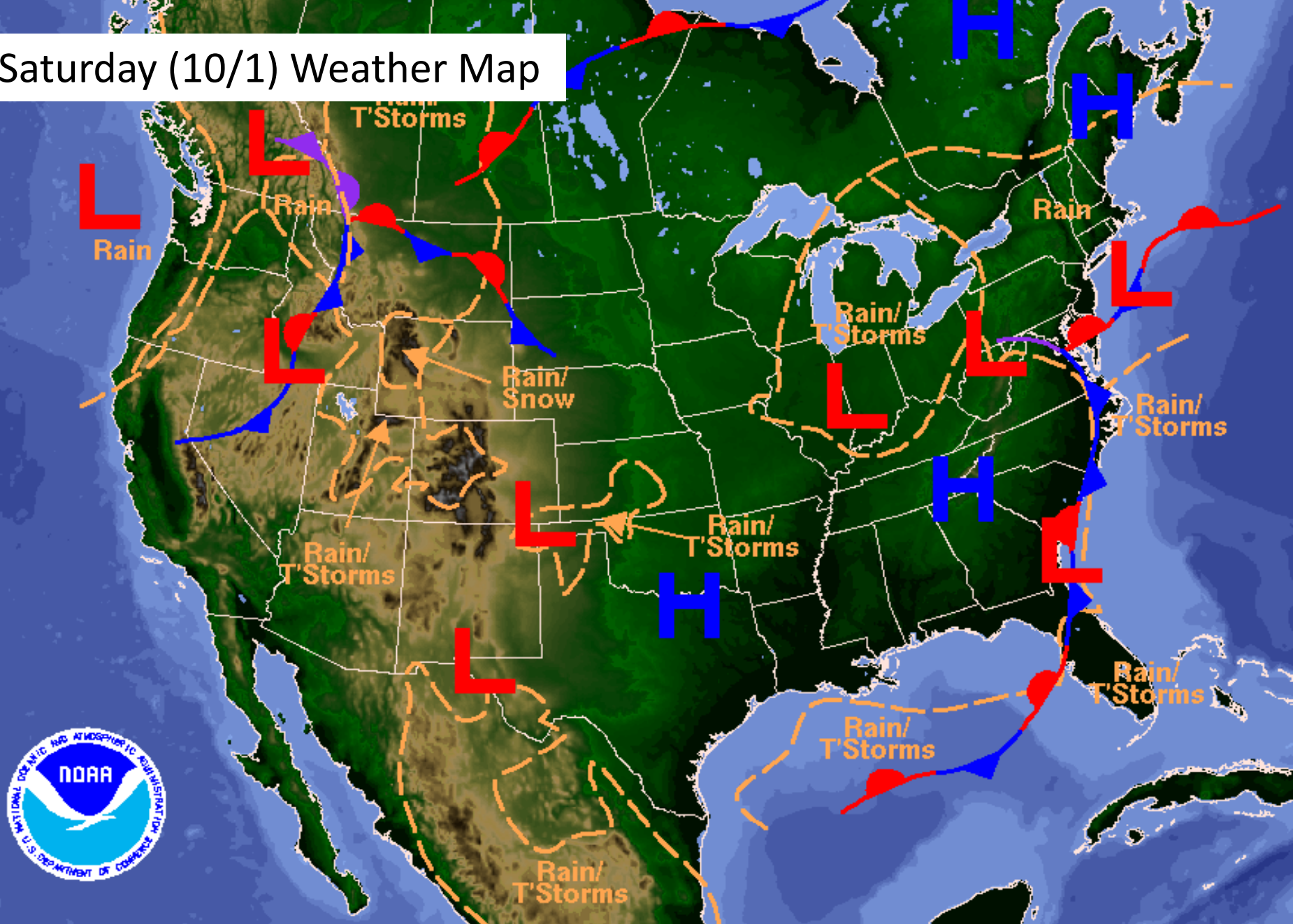


Steering Currents

Matthew is expected to continue moving generally westward over the next 24 hours, turning northwestward after that around the area of high pressure in the western Atlantic. Matthew is then expected to turn north, steered by the area of low pressure currently over the southeastern U.S as it pushes further southeast.

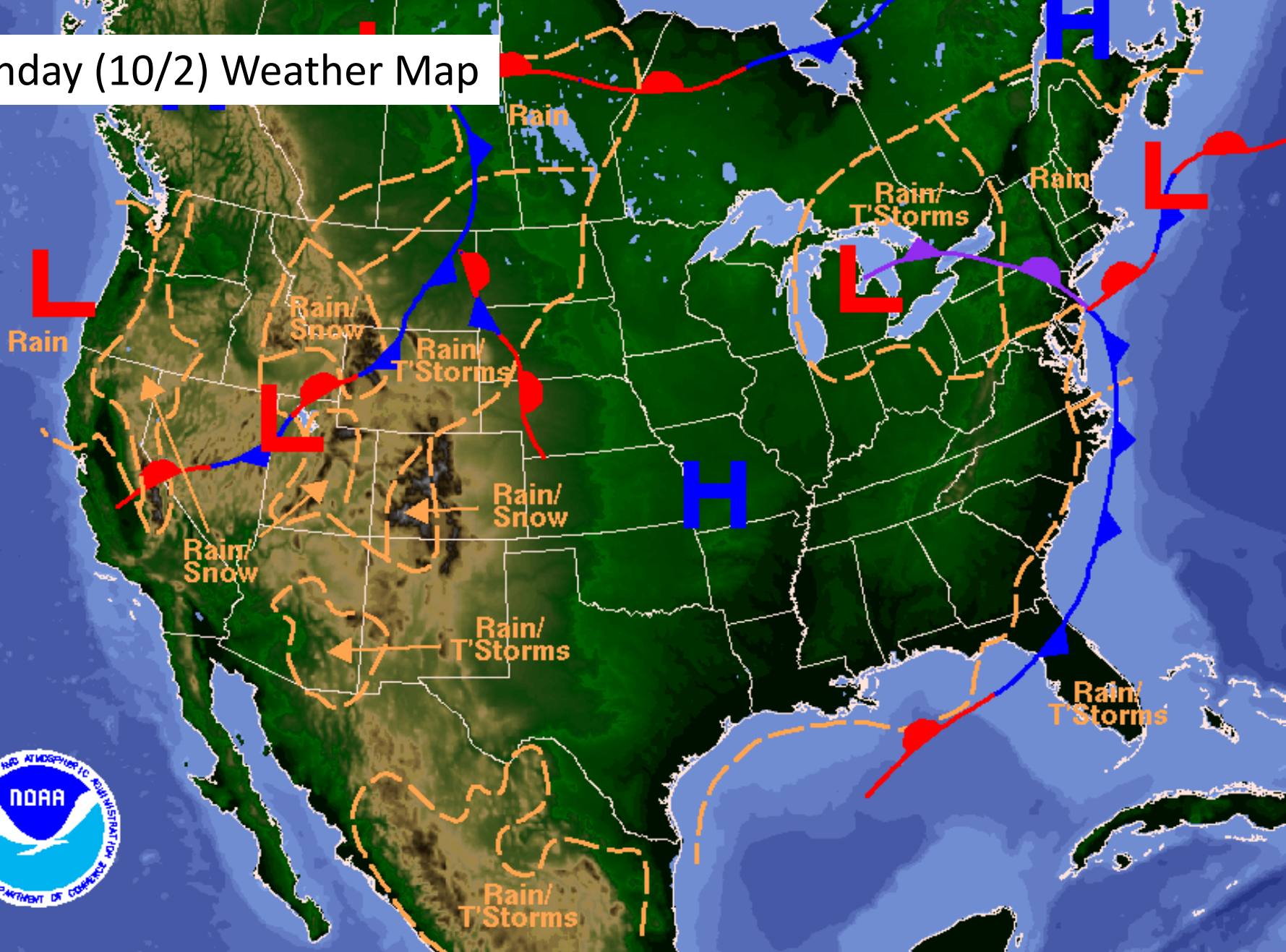


Saturday (10/1) Weather Map



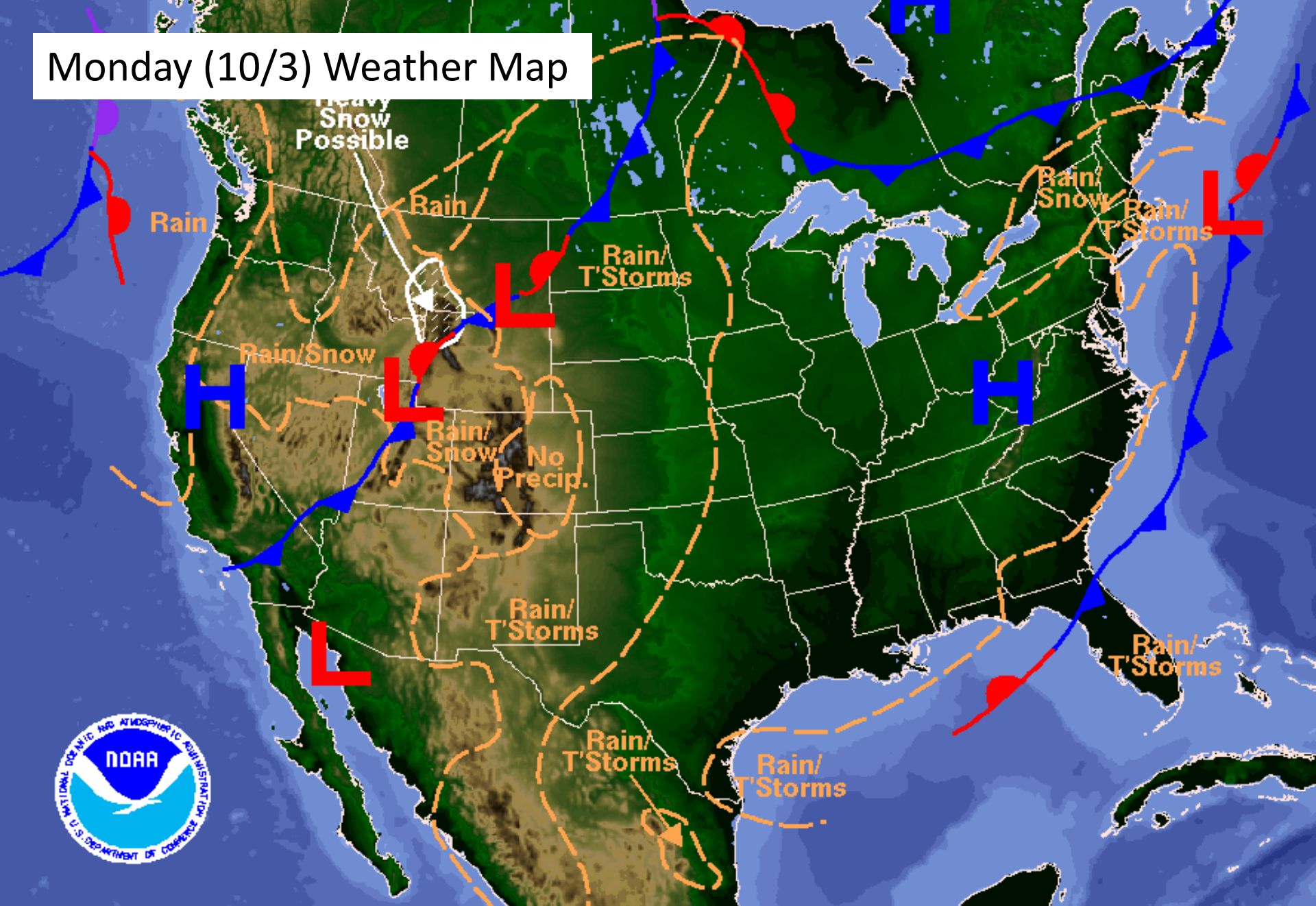
Weather Forecast for Sat, Oct 01, 2016, issued 5:05 AM EDT
DOC/NOAA/NWS/NCEP/Weather Prediction Center
Prepared by Kong based on WPC, SPC and NHC forecasts

Sunday (10/2) Weather Map



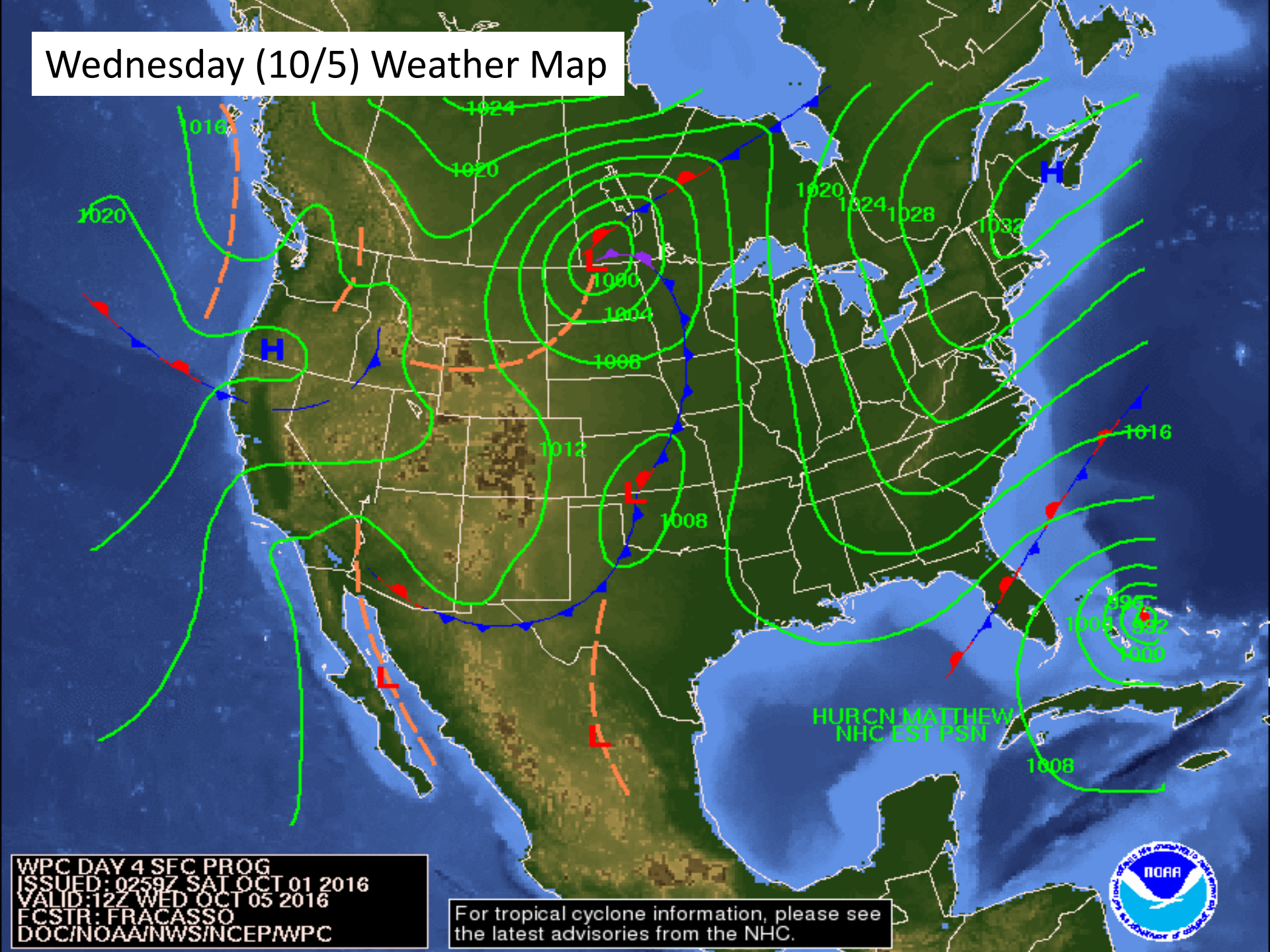
Weather Forecast for Sun, Oct 02, 2016, issued 5:09 AM EDT Sat, Oct 01, 2016
DOC/NOAA/NWS/NCEP/Weather Prediction Center
Prepared by Kong based on WPC, SPC and NHC forecasts

Monday (10/3) Weather Map



Weather Forecast for Mon, Oct 03, 2016, issued 5:21 AM EDT Sat, Oct 01, 2016
DOC/NOAA/NWS/NCEP/Weather Prediction Center
Prepared by Kong based on WPC, SPC and NHC forecasts

Wednesday (10/5) Weather Map

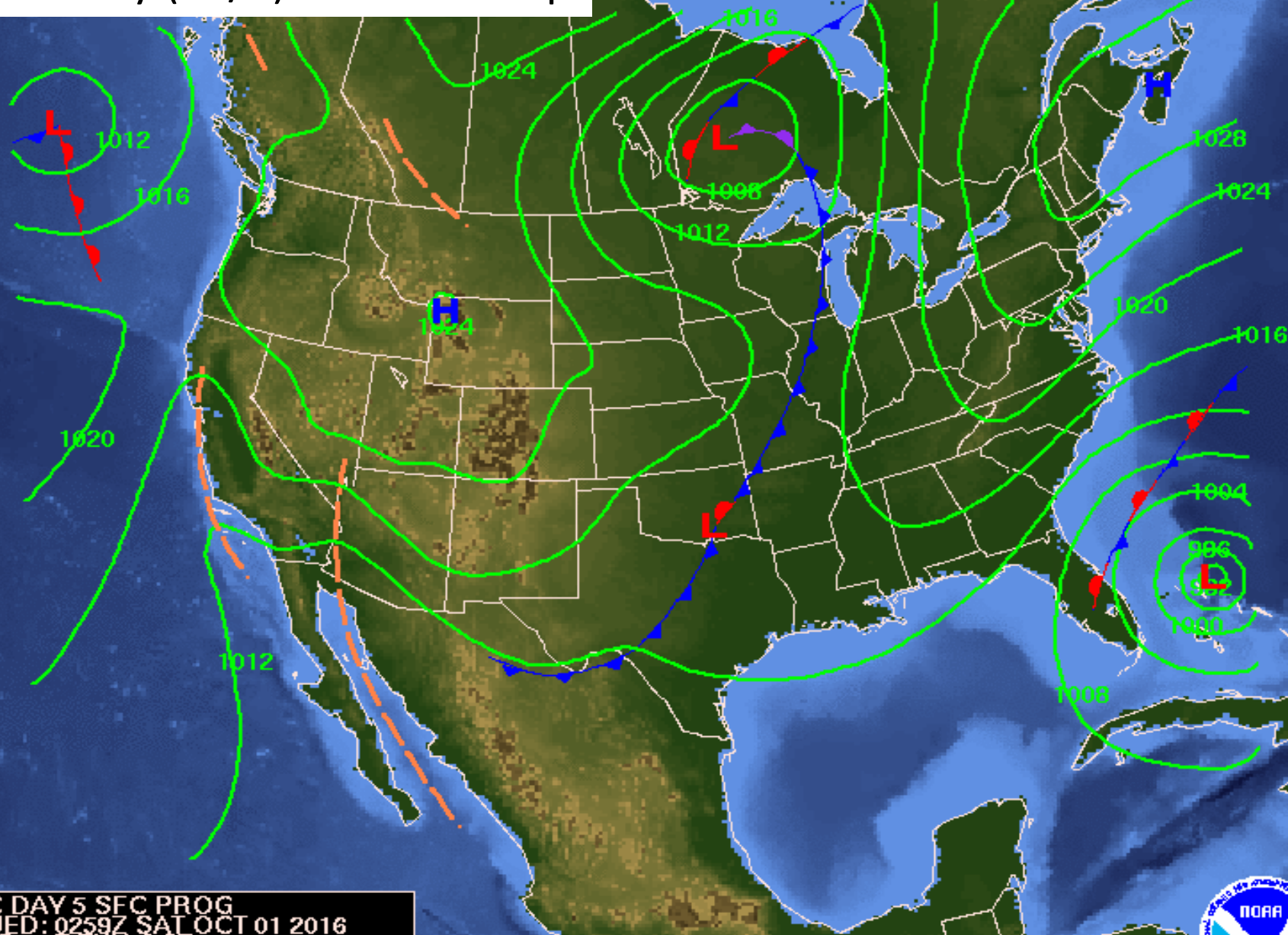


WPC DAY 4 SEC PROG
ISSUED: 0259Z SAT OCT 01 2016
VALID: 12Z WED OCT 05 2016
FCSTR: FRACASSO
DOC/NOAA/NWS/NCEP/WPC

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



Thursday (10/6) Weather Map



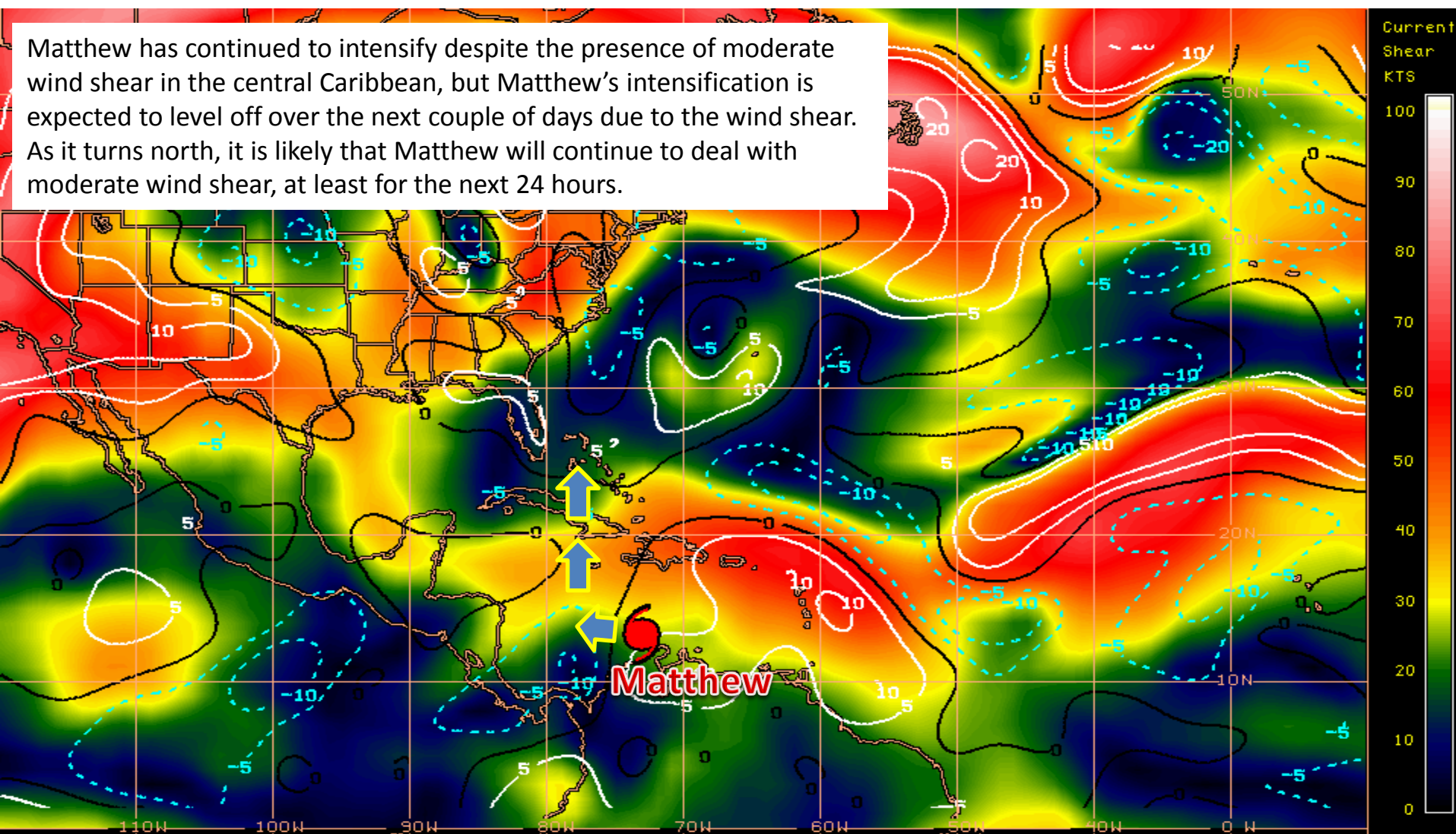
WPC DAY 5 SEC PROG
ISSUED: 0259Z SAT OCT 01 2016
VALID: 12Z THU OCT 06 2016
FCSTR: FRACASSO
DOC/NOAA/NWS/NCEP/WPC

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



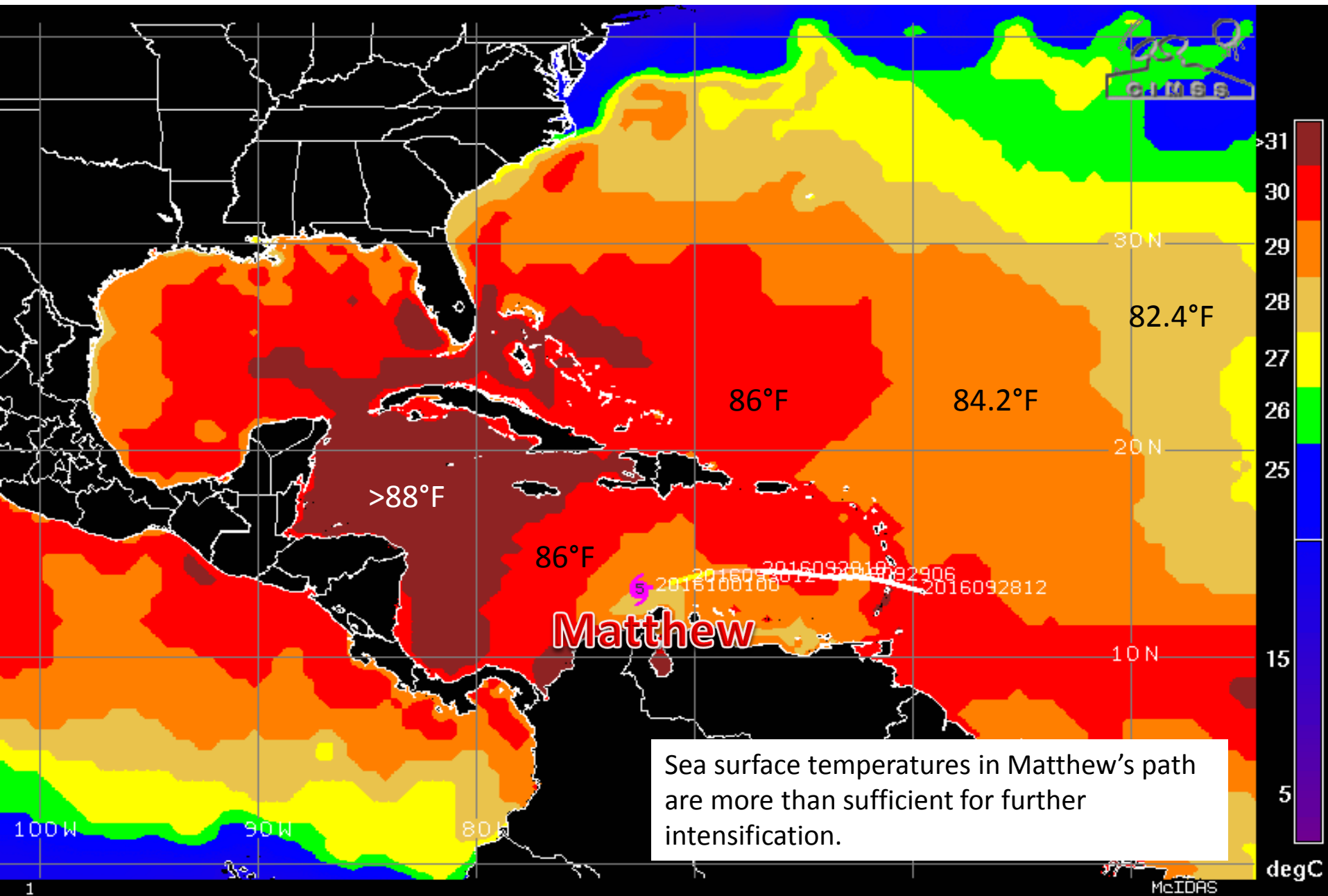
Current Wind Shear (Shaded) and Shear Tendency (Lines)

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. As it turns north, it is likely that Matthew will continue to deal with moderate wind shear, at least for the next 24 hours.



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

Sea Surface Temperatures Near Matthew

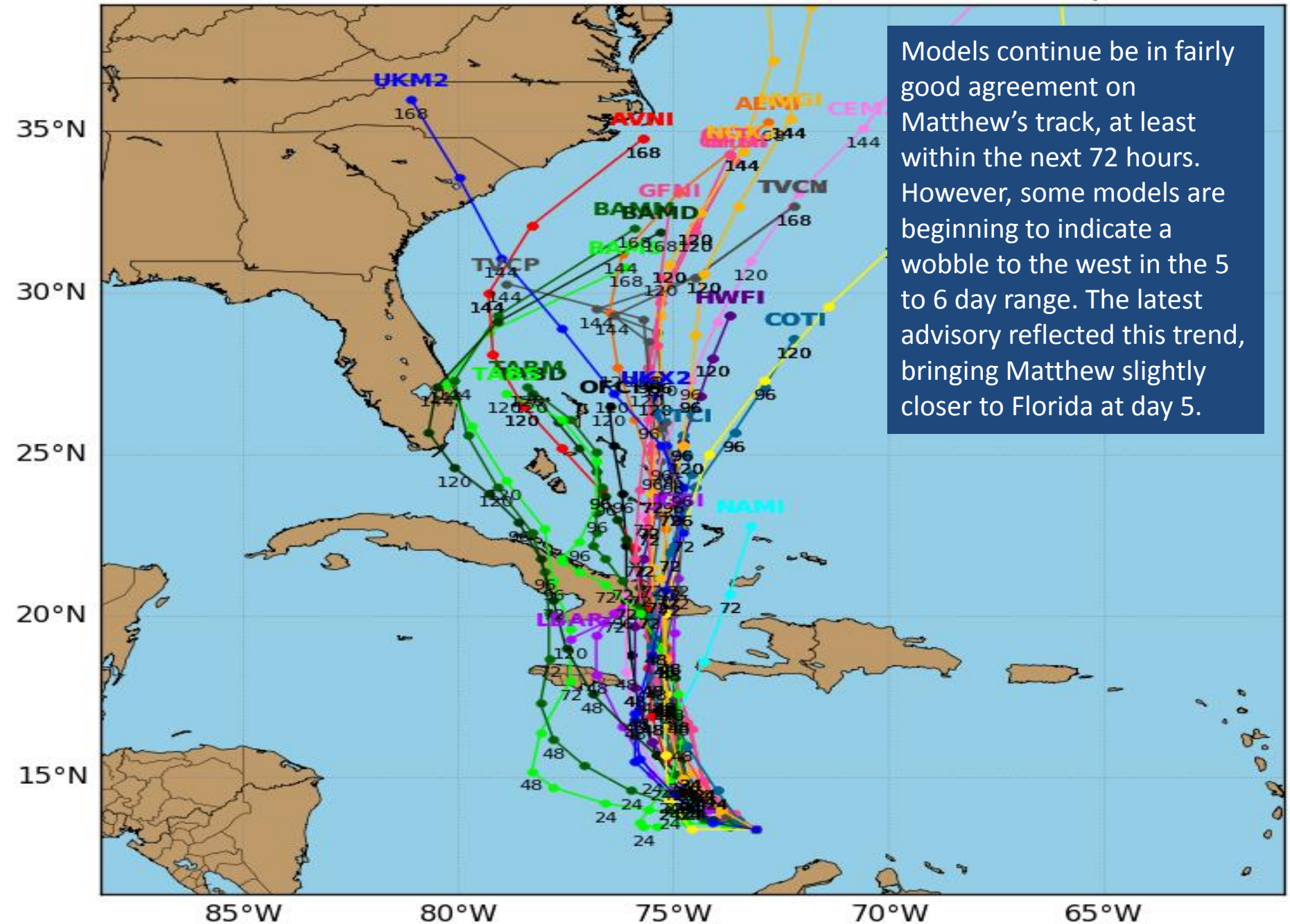


Hurricane MATTHEW Model Track Guidance

Initialized at 12z Oct 01 2016

Levi Cowan - tropicaltidbits.com

Models continue to be in fairly good agreement on Matthew's track, at least within the next 72 hours. However, some models are beginning to indicate a wobble to the west in the 5 to 6 day range. The latest advisory reflected this trend, bringing Matthew slightly closer to Florida at day 5.



Initialized at 12z Oct 01 2016

Intensity forecasts for Matthew so far have been difficult, and they continue to show little agreement. After Matthew's rapid intensification to Category 5, it is back to a Category 4 storm and most models indicate a leveling off with fluctuations in strength through 48 hours due to continued interaction with wind shear. Beyond that, the models spread even more, from Category 1 to Category 5. Land interaction and whether wind shear decreases or not will be huge factors in Matthew's future intensity.

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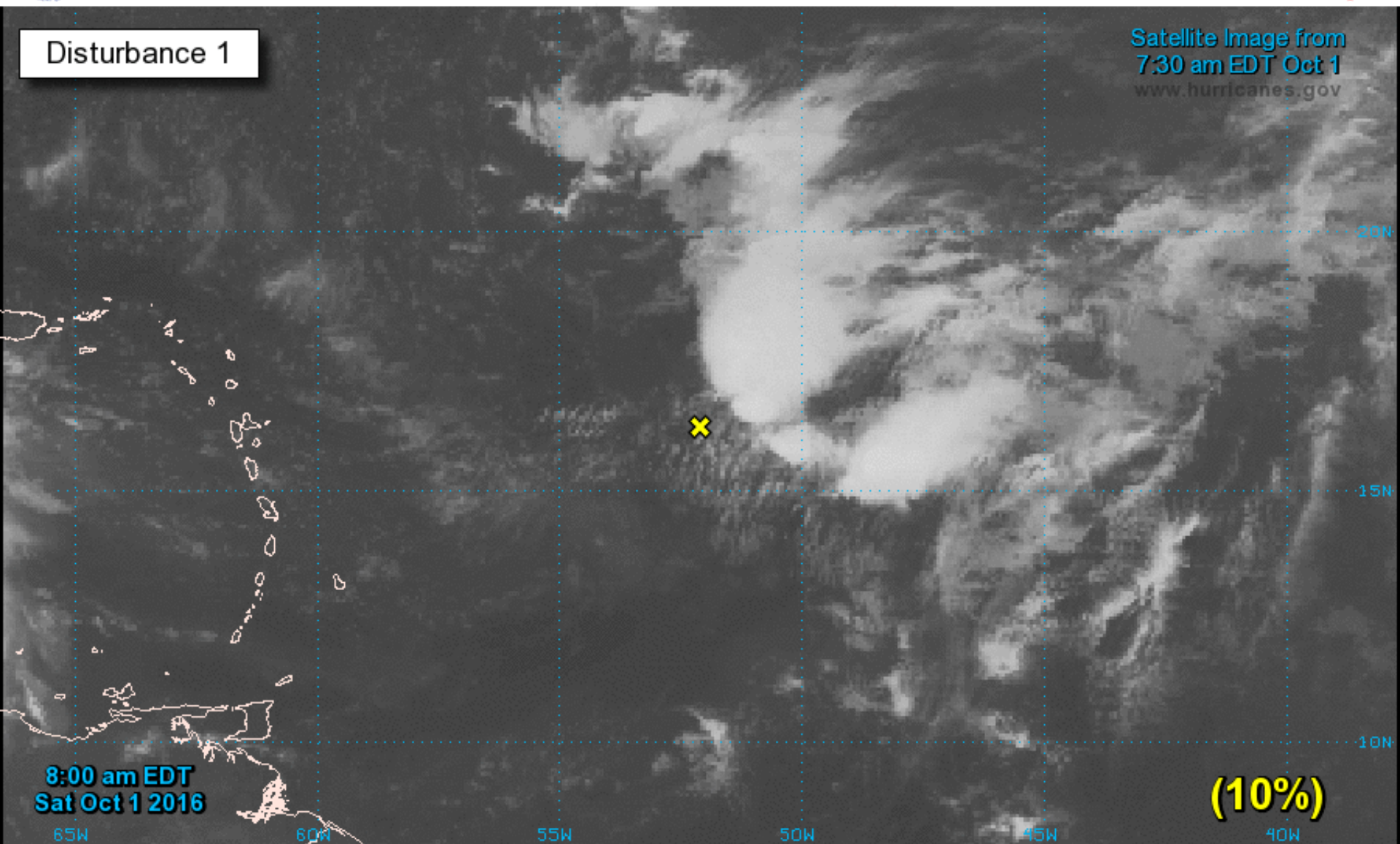
Two-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



Disturbance 1

Satellite Image from
7:30 am EDT Oct 1
www.hurricanes.gov



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

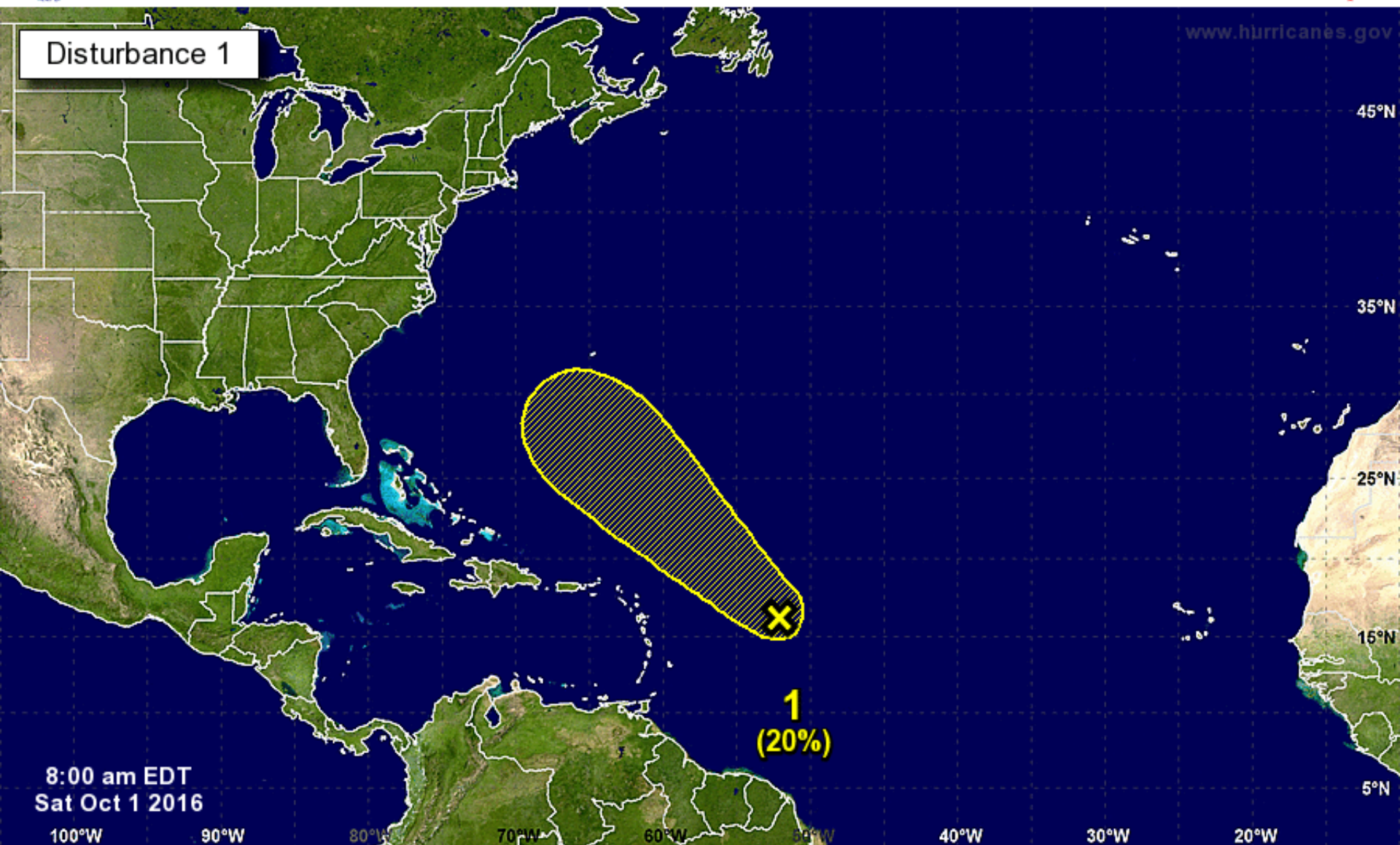
Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane

Post-Tropical Cyclone Remnants



Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



Tropical Cyclone Formation Potential for the Five-Day Period Ending at 8:00 am EDT Thu Oct 6 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 8am EDT, Hurricane Matthew was located about 400 miles southeast of Kingston, Jamaica, or approximately 970 miles south-southeast of Miami, Florida.
- Matthew reached Category 5 status overnight, but maximum sustained winds are currently 155 mph with higher gusts, making Matthew a Category 4 hurricane on the Saffir-Simpson scale.
- It is moving to the west at 7 mph. A turn to the west-northwest is expected later today, and a turn to the north-northwest is expected on Sunday.
- Forecast models are in fairly good agreement on Matthew's forecast track, but remain in disagreement on its future intensity.
- Most intensity guidance models indicate some weakening or some fluctuation in strength over the next 48 hours. However, intensity forecasts for Matthew have proven difficult, and the intensity forecast beyond 48-72 hours is complex due to land interaction and how much wind shear Matthew will encounter.
- The official forecast calls for Matthew to mostly maintain its strength over the next 24 hours, followed by some weakening at 36 hours and then a leveling off again through 72 hours.
- As for its track, 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 slowly moving into the southeast U.S. with a stationary front draped from North Carolina to the eastern Gulf of Mexico this morning.
- The current forecast calls for the area of low pressure to push further southeast and the area of high pressure to weaken, causing Matthew to gradually turn northwest and then north-northwest late this weekend and early next week toward Jamaica and eastern Cuba, continuing north toward the central Bahamas toward the middle 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 moving across central Cuba, while a stronger and/or slower-moving storm may turn earlier toward the Windward Passage between Cuba and Haiti.
- Also, 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.
- Elsewhere, a broad area of low pressure in the central tropical Atlantic is producing winds near tropical storm force this morning along with disorganized showers and storms.
- Environmental conditions are not favorable for development, and it has a 10% (low) chance of development over the next 48 hours and a 20% (low) chance over the next five days as it moves northwest over the next few days toward Bermuda.
- This disturbance is not a threat to Florida.

Florida Outlook:

- At this time, it is still too early to say exactly what, if any, impacts Matthew will have on Florida.
- Parts of the southeastern Florida Peninsula are now within the 5-day average error cone. Also, parts of South Florida now have a 10% to 20% chance of seeing tropical storm force winds sometime within the next five days.
- Any possible impacts remain 4-6 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, with minor coastal flooding and erosion. Any additional impacts are dependent on the future track of the storm, which remains uncertain at this time.

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



TROPICAL UPDATE

Created by:

William Watson, Assistant State Meteorologist
william.watson@em.myflorida.com

State Meteorological Support Unit

Florida Division of Emergency Management

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