



TROPICAL UPDATE

5 AM EDT

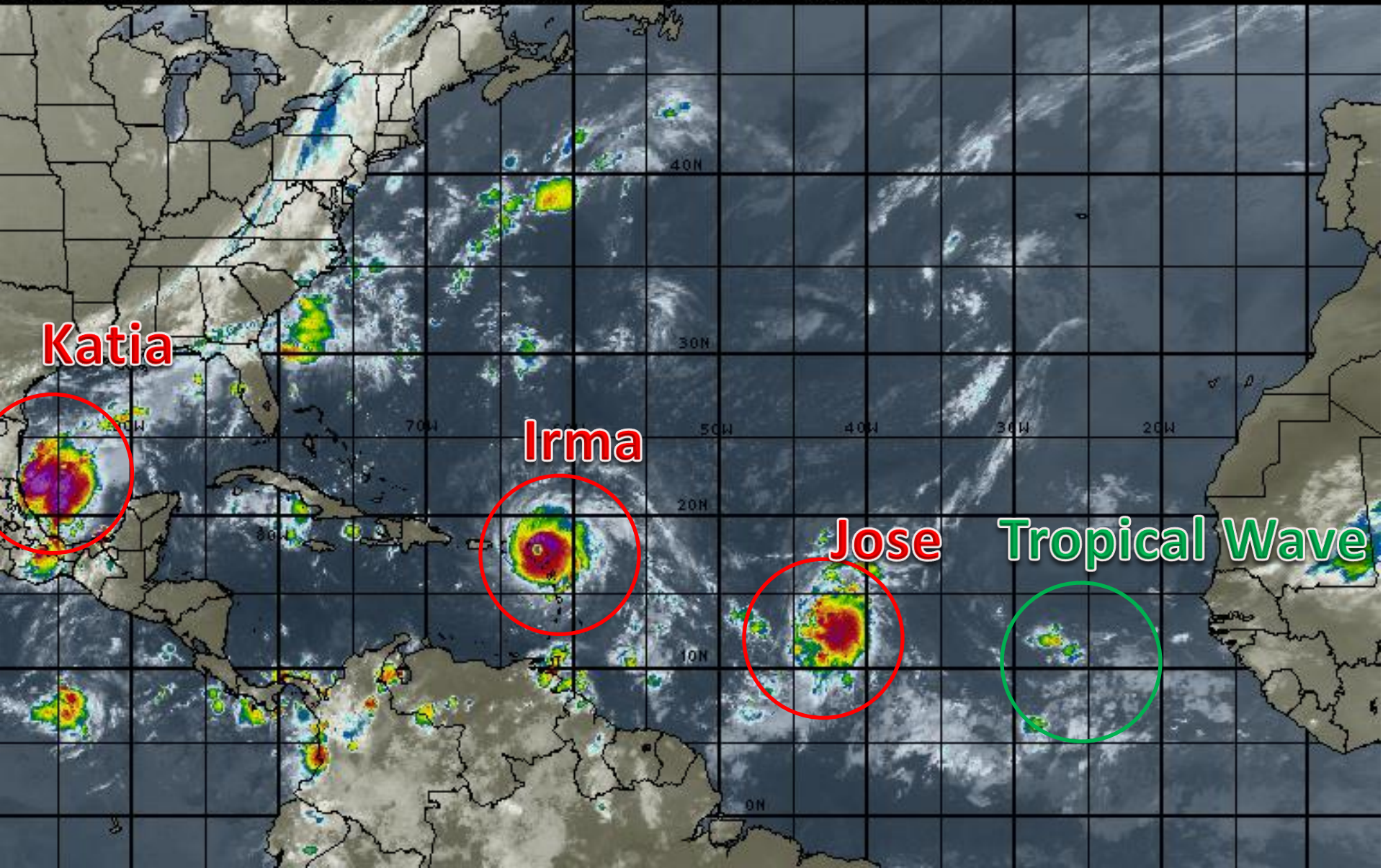
Wednesday, September 6, 2017

**Hurricane Irma, Tropical Storm Jose, and
Tropical Storm Katia**

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 06-SEP-2017 GMT Copyright © 1998-2016 MSI Corporation <http://www.wsi.com>



Hurricane Irma

5 AM EDT Wed Sep 06 2017

Position 17.9 N 62.6 W

Maximum Winds 185 mph

Gusts 225 mph

Movement WNW at 16 mph

Minimum Pressure 914 mb (26.98 inches)

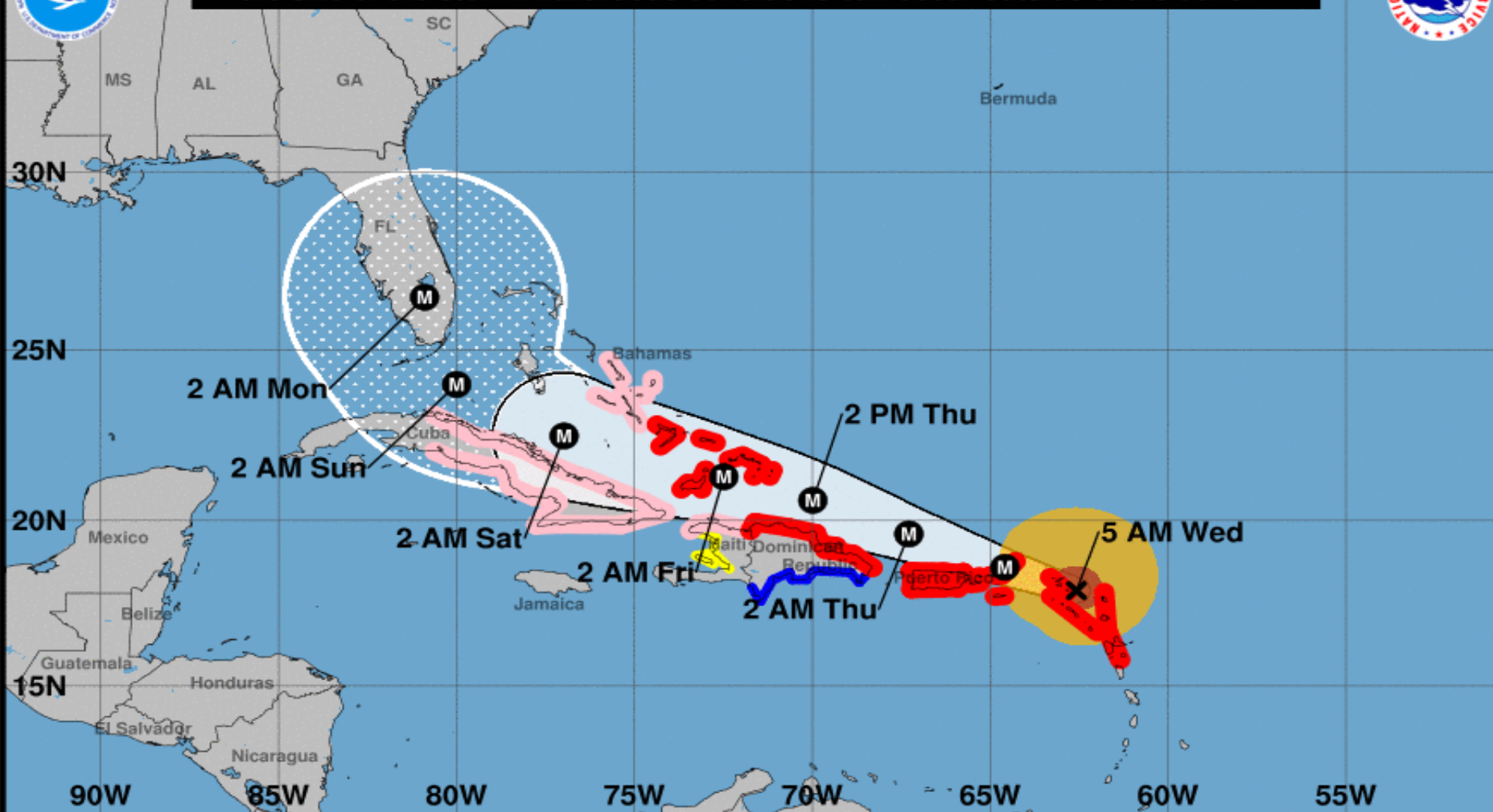
Blue Marble basemap imagery courtesy NASA

Satellite 9:47 AM UTC
5:47 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 Irma

Wednesday September 06, 2017

5 AM AST Advisory 29

NWS National Hurricane Center

Current information: x

Center location 17.9 N 62.6 W

Maximum sustained wind 185 mph

Movement WNW at 16 mph

Forecast positions:

● Tropical Cyclone ○ Post/Potential TC

Sustained winds: D < 39 mph

S 39-73 mph H 74-110 mph M > 110 mph

Potential track area:

Day 1-3 Day 4-5

Watches:

Hurricane Trop Stm

Warnings:

Hurricane Trop Stm

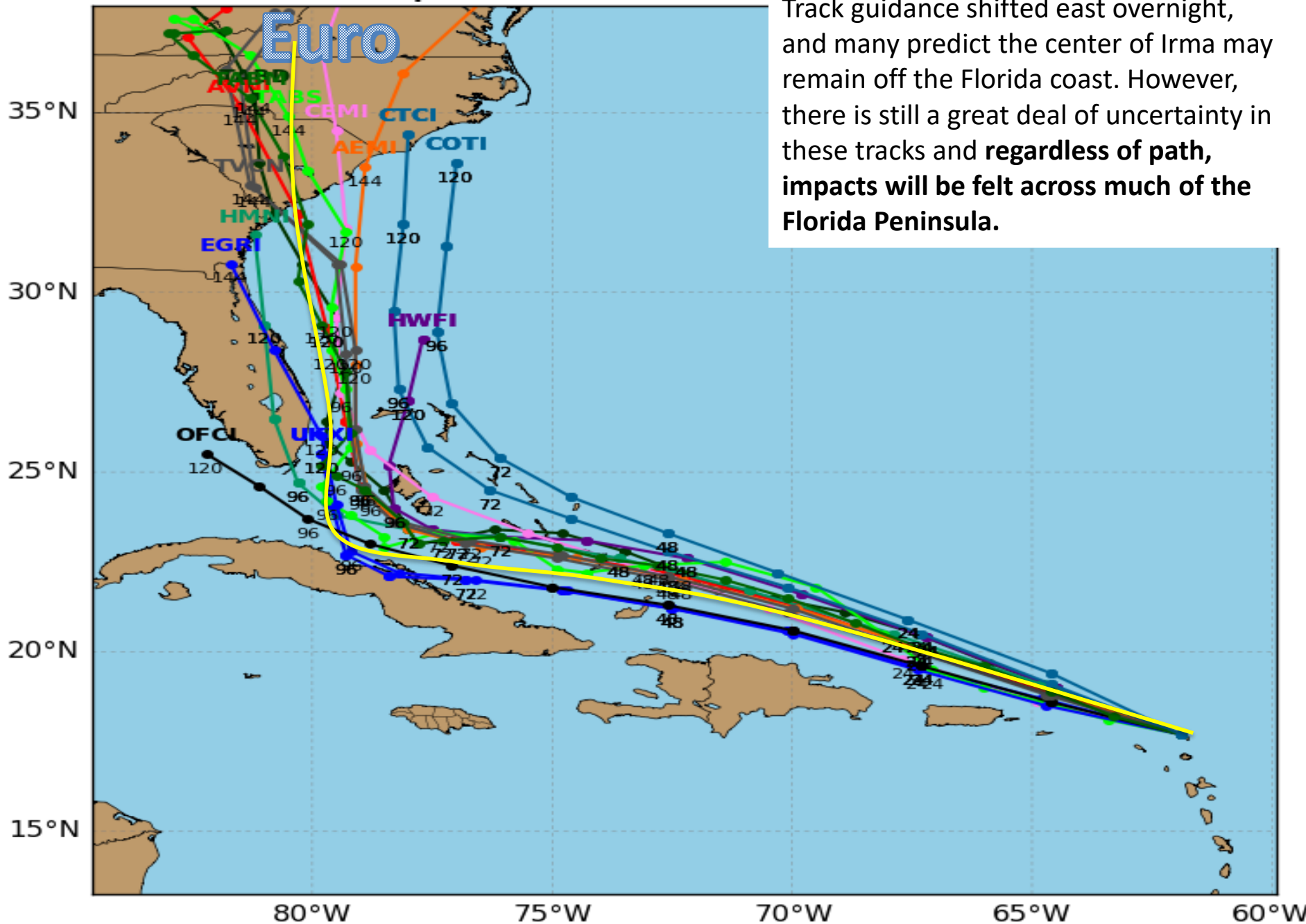
Current wind extent:

Hurricane Trop Stm

Hurricane IRMA Model Track Guidance

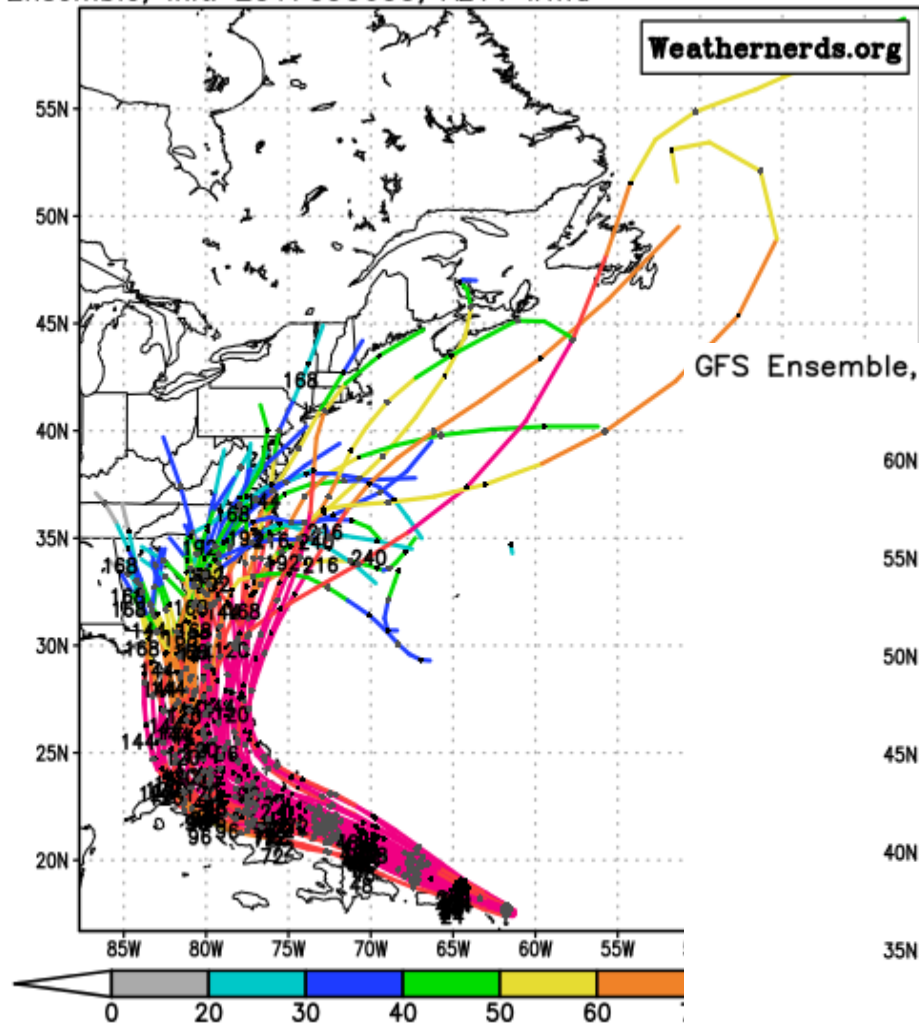
Initialized at 06z Sep 06 2017

Track guidance shifted east overnight, and many predict the center of Irma may remain off the Florida coast. However, there is still a great deal of uncertainty in these tracks and **regardless of path, impacts will be felt across much of the Florida Peninsula.**



ECMWF Ensemble, init: 2017090600, AL11 Irma

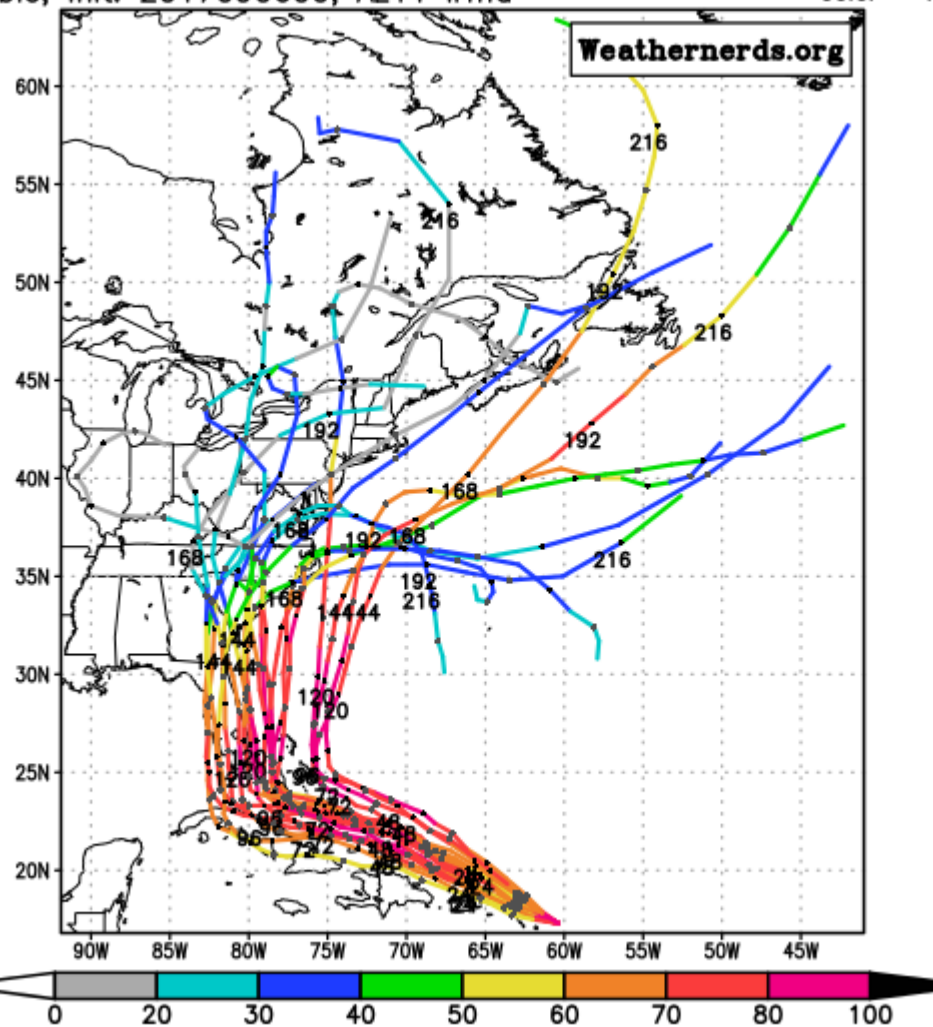
color = max wind (kt)



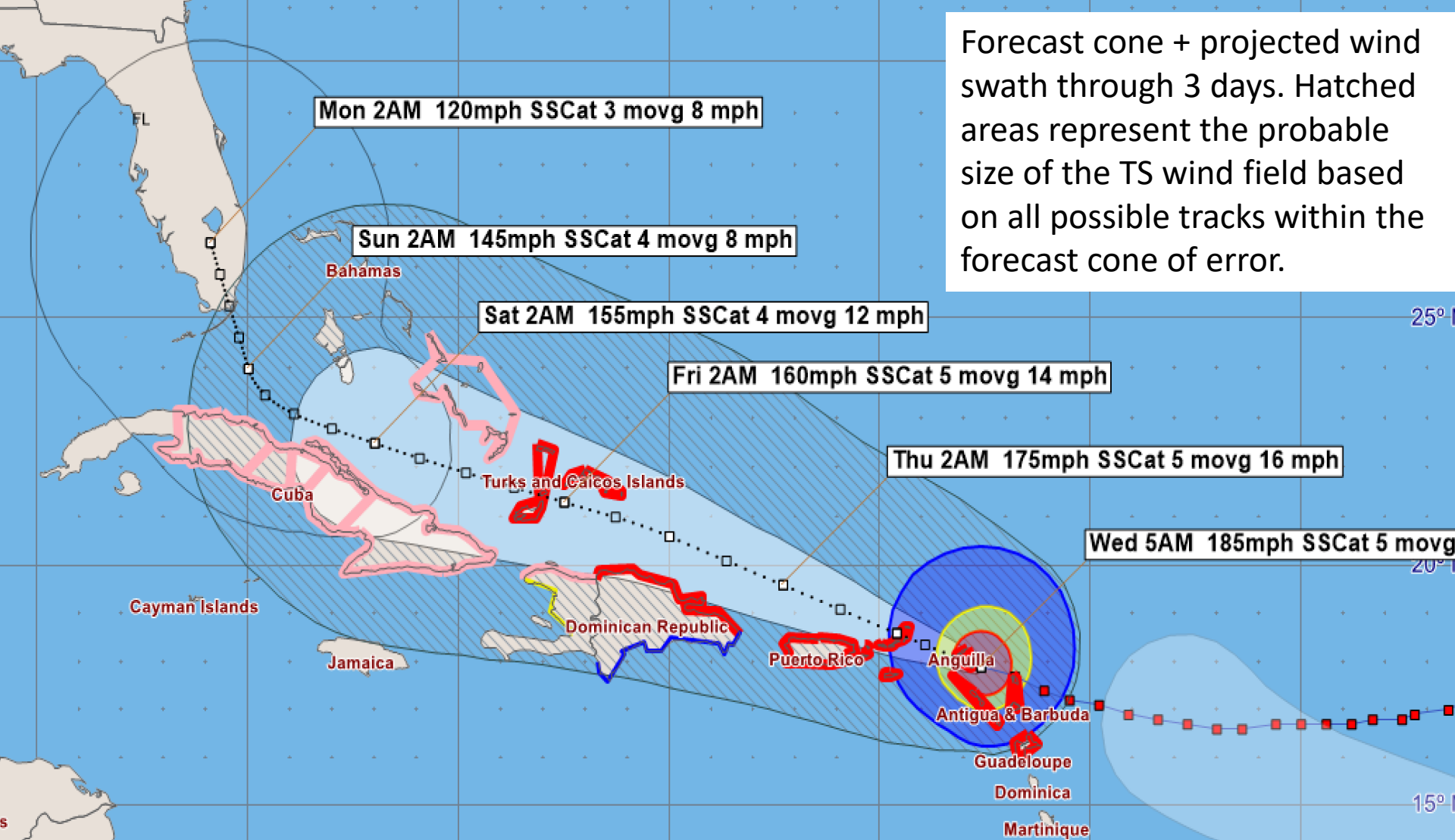
Still can't rule out a West coast impact, but the majority of solutions is for the Peninsula or East Coast

GFS Ensemble, init: 2017090600, AL11 Irma

color = n



Forecast cone + projected wind swath through 3 days. Hatched areas represent the probable size of the TS wind field based on all possible tracks within the forecast cone of error.



Hurricane Irma - Wednesday, September 6, 2017 5 AM EDT Advisory #29

Center Location: 17.9 N 62.6 W Maximum Sustained Winds: 185 mph (Cat 5) Movement: 16 mph W

□ forecast positions Potential Track Area: ☞ day 1-3 ☞ day 4-5 Surface Wind Field: ☉ at current location

Watches: ■ hurricane ■ tropical storm

Warnings: ■ hurricane ■ tropical storm

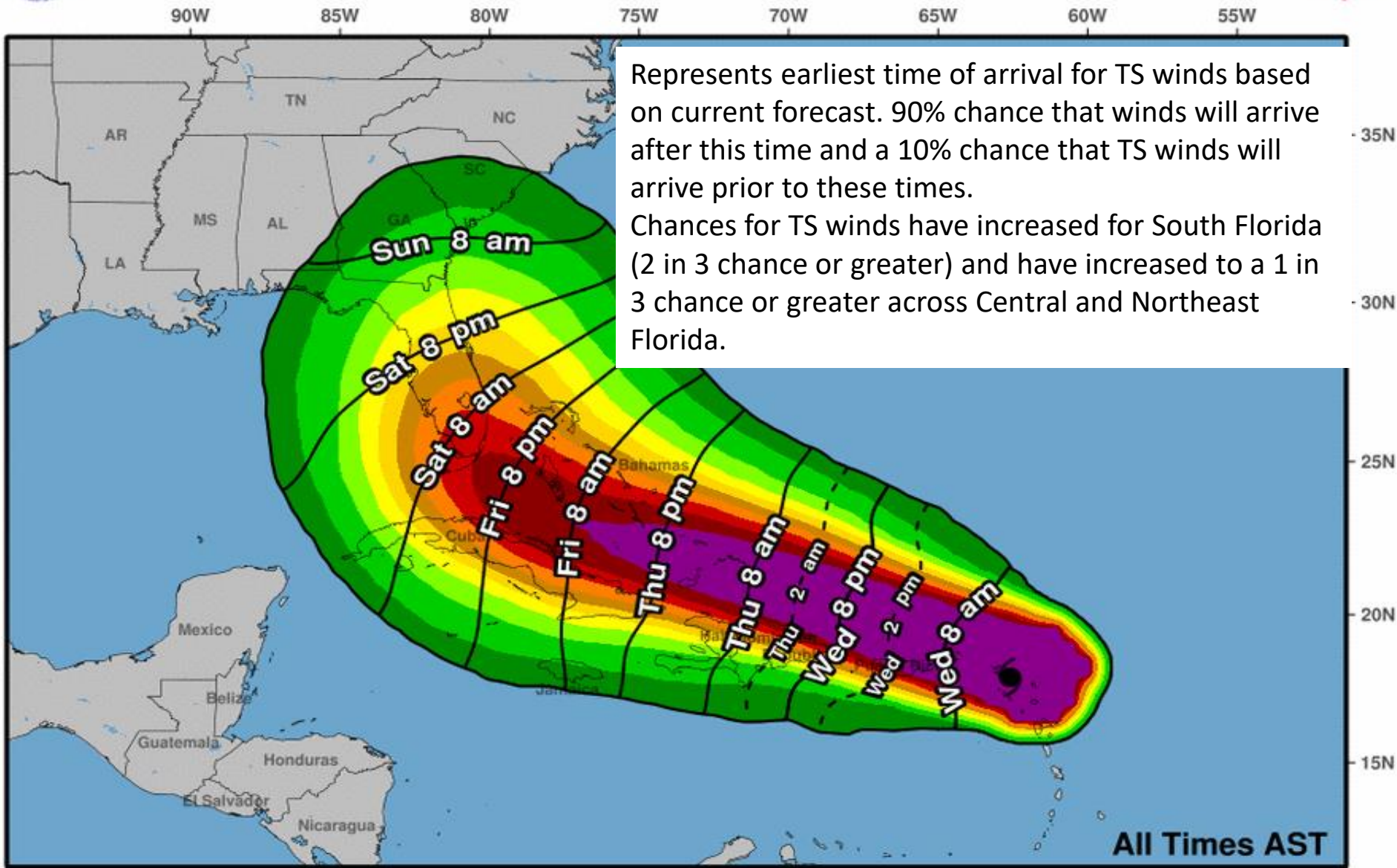
Sustained Wind Speeds: ■ tropical storm $\geq 34\text{kt}/39\text{mph}$ ■ strong tropical storm $\geq 50\text{kt}/58\text{mph}$ ■ hurricane $\geq 64\text{kt}/74\text{mph}$

No current surge probabilities data

■ 1 to 3 feet ■ Greater than 3 feet ■ Greater than 6 feet ■ Greater than 9 feet



Earliest Reasonable Arrival Time of Tropical-Storm-Force Winds



Represents earliest time of arrival for TS winds based on current forecast. 90% chance that winds will arrive after this time and a 10% chance that TS winds will arrive prior to these times.

Chances for TS winds have increased for South Florida (2 in 3 chance or greater) and have increased to a 1 in 3 chance or greater across Central and Northeast Florida.

Hurricane Irma
Wed. Sep. 6, 2017 5 am AST
Advisory 29

Storm Location & Wind Speed (knots)

○ <34 ◐ 34-63 ● ≥64

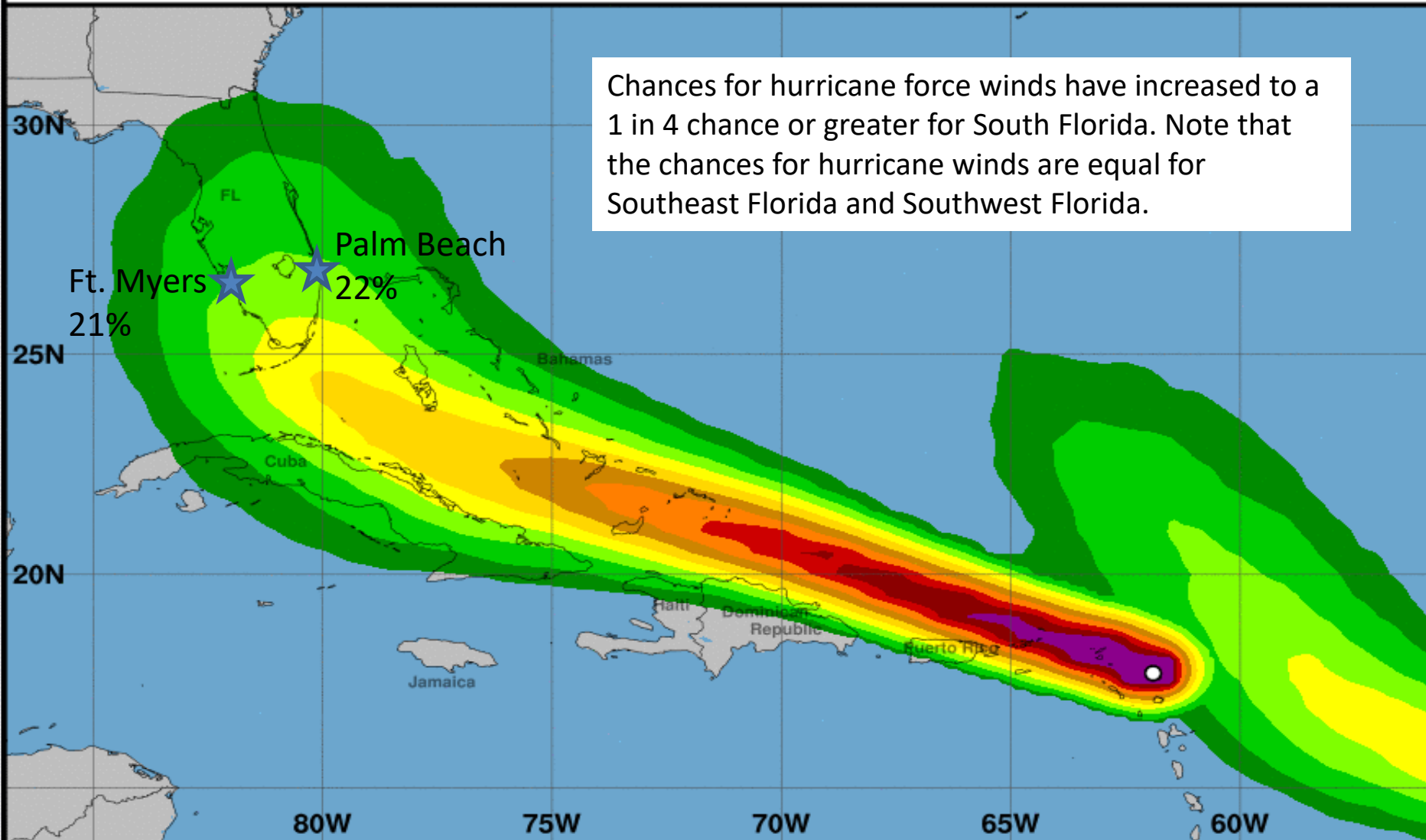
Five-day chance of receiving sustained 34+ knot (39+ mph) winds

5	10	20	30	40	50	60	70	80	90	100 %
---	----	----	----	----	----	----	----	----	----	-------



Hurricane-Force Wind Speed Probabilities

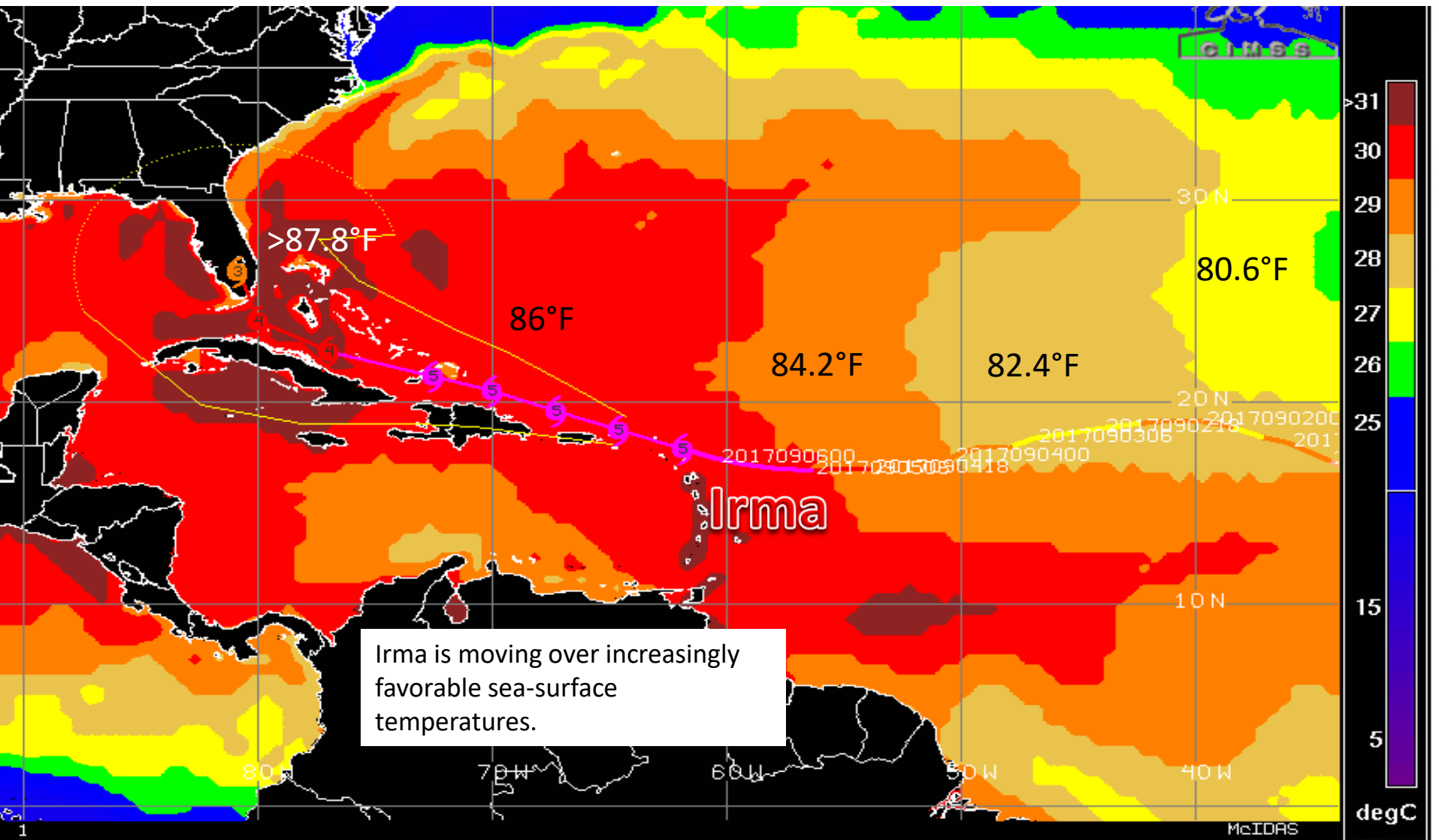
For the 120 hours (5.00 days) from 2 AM AST WED SEP 06 to 2 AM AST MON SEP 11



Probability of hurricane-force winds (1-minute average ≥ 74 mph) from all tropical cyclones
O indicates Hurricane Irma center location at 2 AM AST WED SEP 06, 2017 (Forecast/Advisory #29)

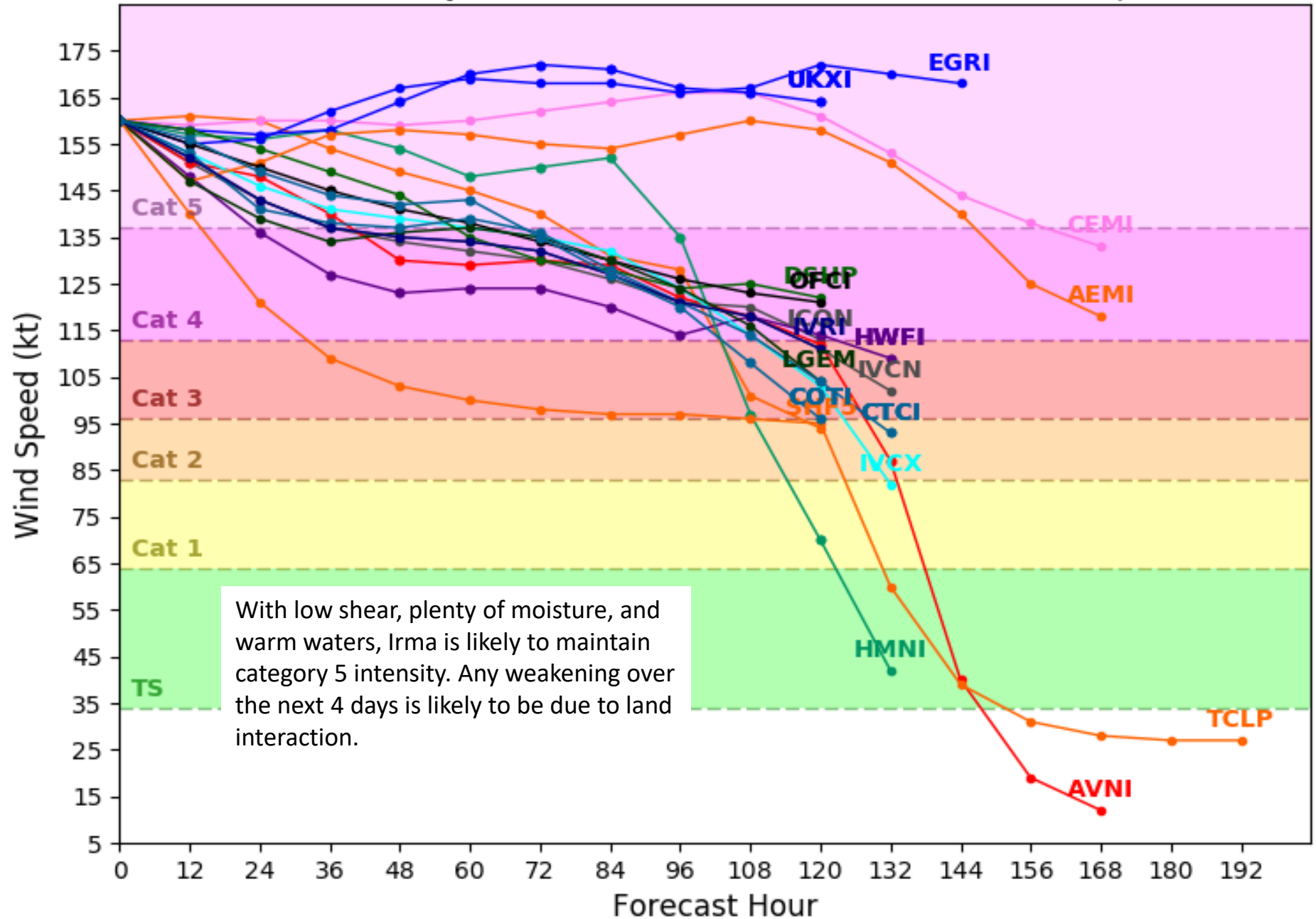


Sea Surface Temperatures Near Irma



- | | |
|------------|--------------------------------|
| Low/NoV | I - Invest Area |
| Tropical | L - Tropical Depression |
| Tropical | 6 - Tropical Storm |
| Category 1 | 5 - Hurricane/Typhoon |
| Category 2 | (w/ category) |
| Category 3 | |
| Category 4 | |
| Category 5 | |

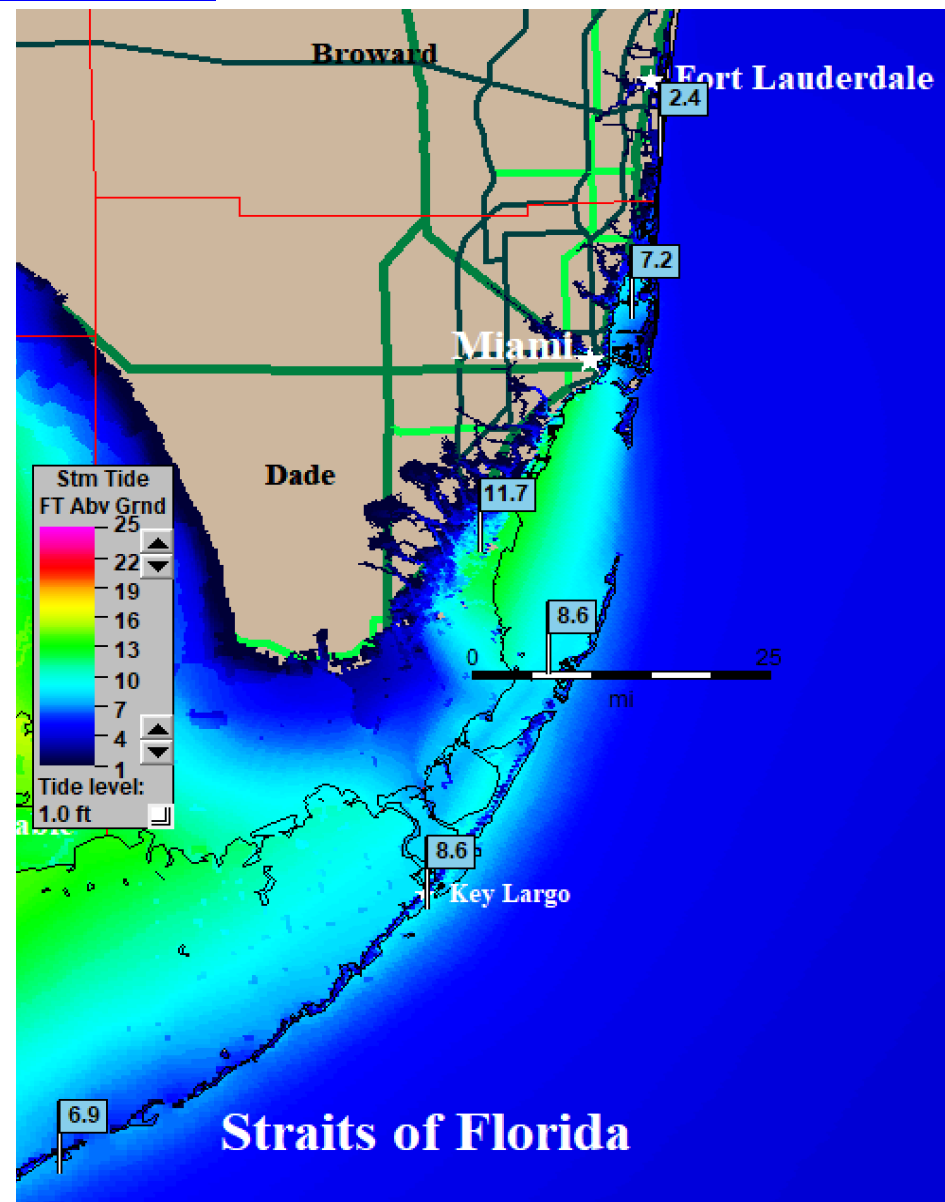
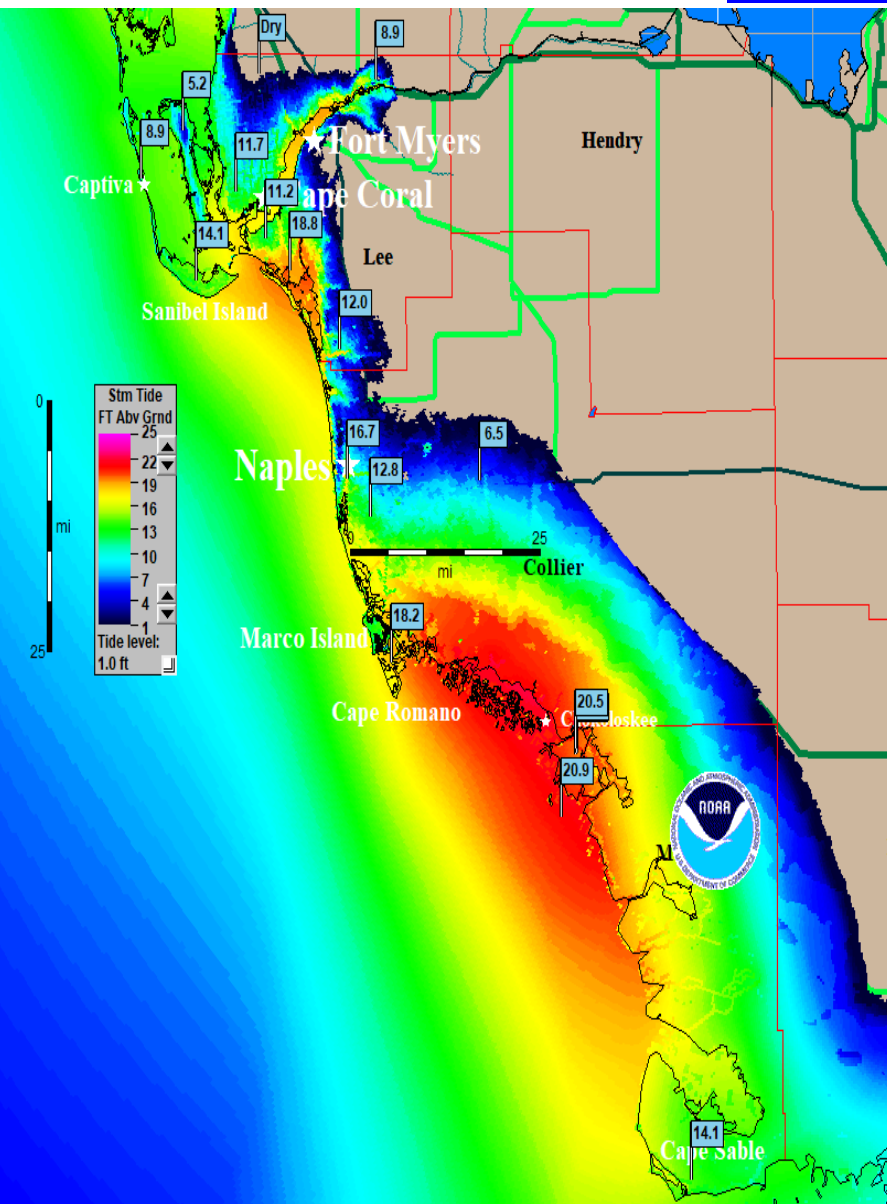
Levi Cowan - tropicaltidbits.com



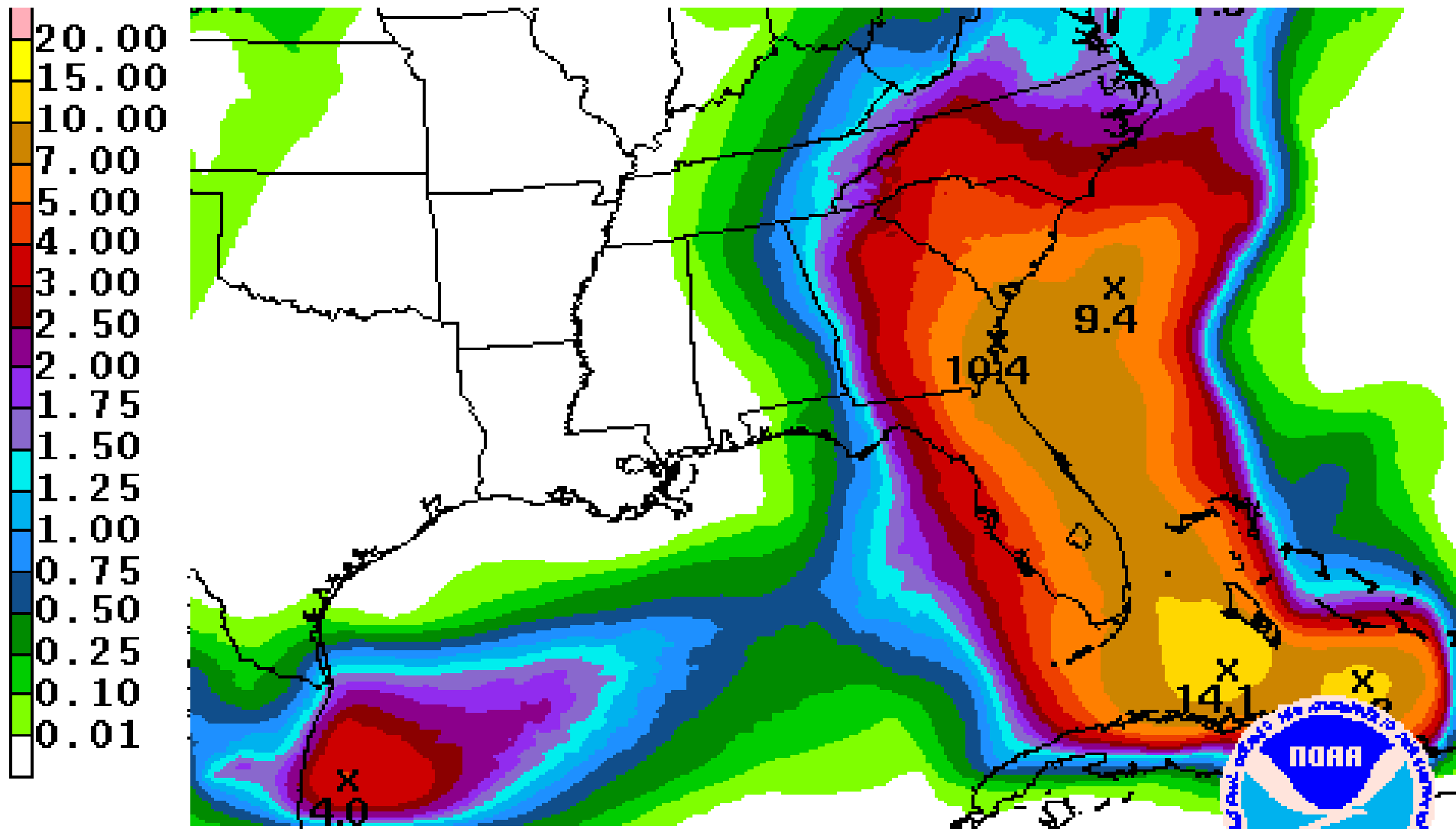
SLOSH maximum storm surge estimates

Cat 4 moving N @10mph. Zoomable map

<http://noaa.maps.arcgis.com/apps/MapSeries/index.html?appid=d9ed7904dbec441a9c4dd7b277935fad&entry=1>



7 Day Cumulative Rainfall Forecast (does not account for higher totals)



Tropical Storm Jose

5 AM EDT Wed Sep 06 2017

Position 12.5 N 42.8 W

Maximum Winds 55 mph

Gusts 70 mph

Movement W at 12 mph

Minimum Pressure 1 002 mb (29.58 inches)

Blue Marble basemap imagery courtesy NASA

Satellite 9:47 AM UTC
5:47 AM EDT

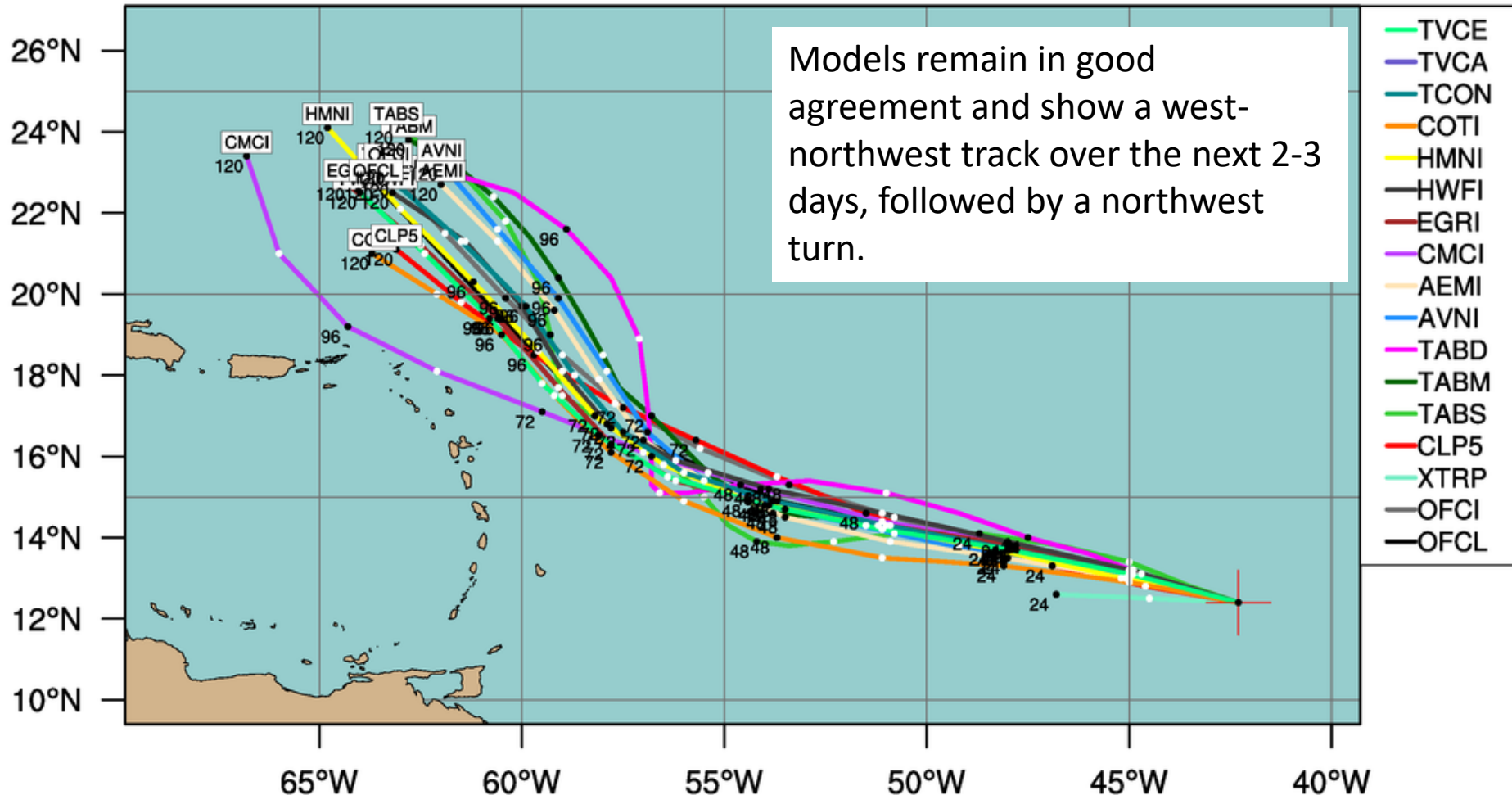


TROPICAL STORM JOSE (AL12)

Early-cycle track guidance initialized at 0600 UTC, 06 September 2017

Current Intensity: 45 kt

Current Basin: North Atlantic

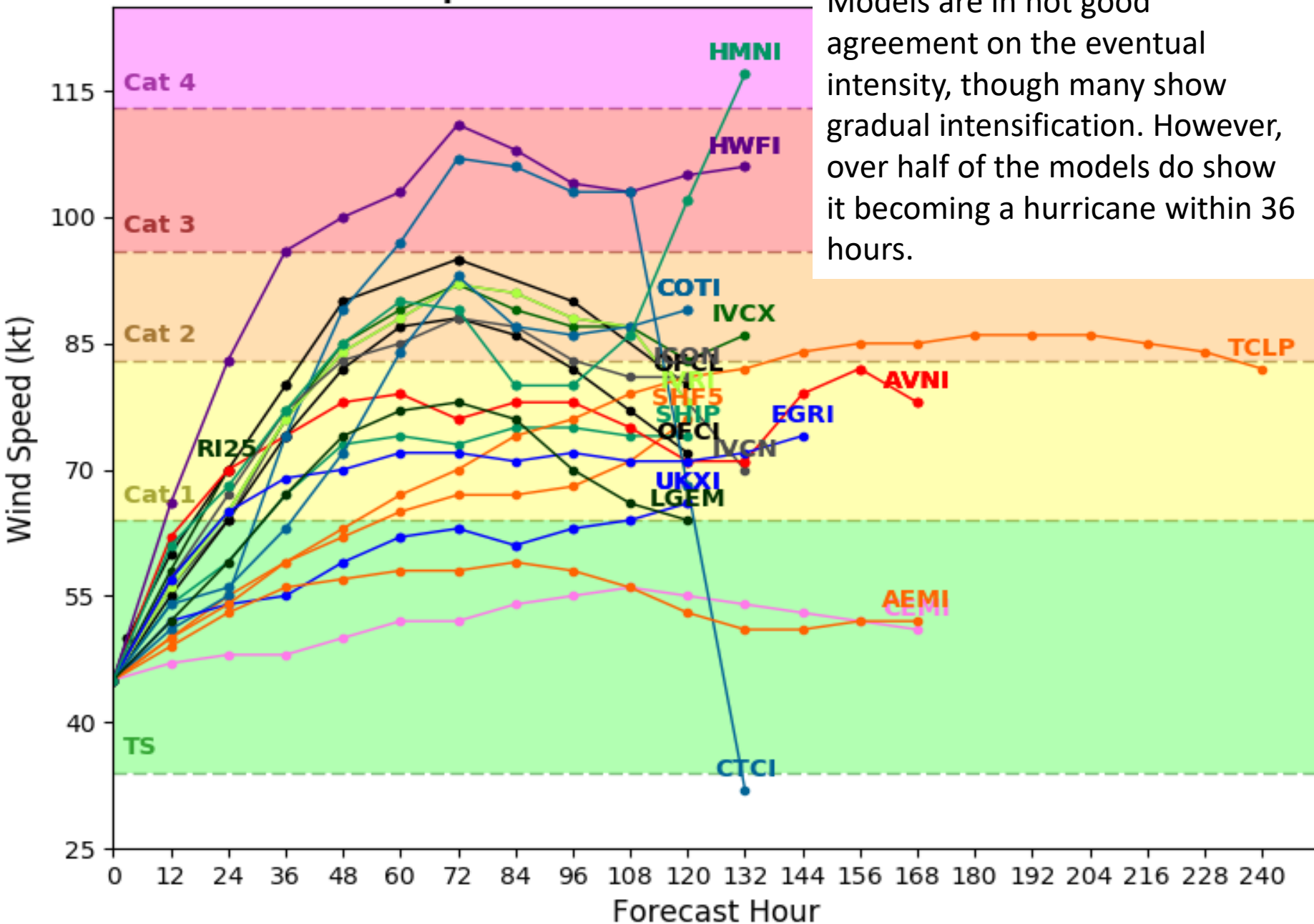


By using this plot, the user agrees to the UCAR Terms of Use which can be accessed at: <http://www2.ucar.edu/terms-of-use>

Plot generated at 0921 UTC 06 September 2017

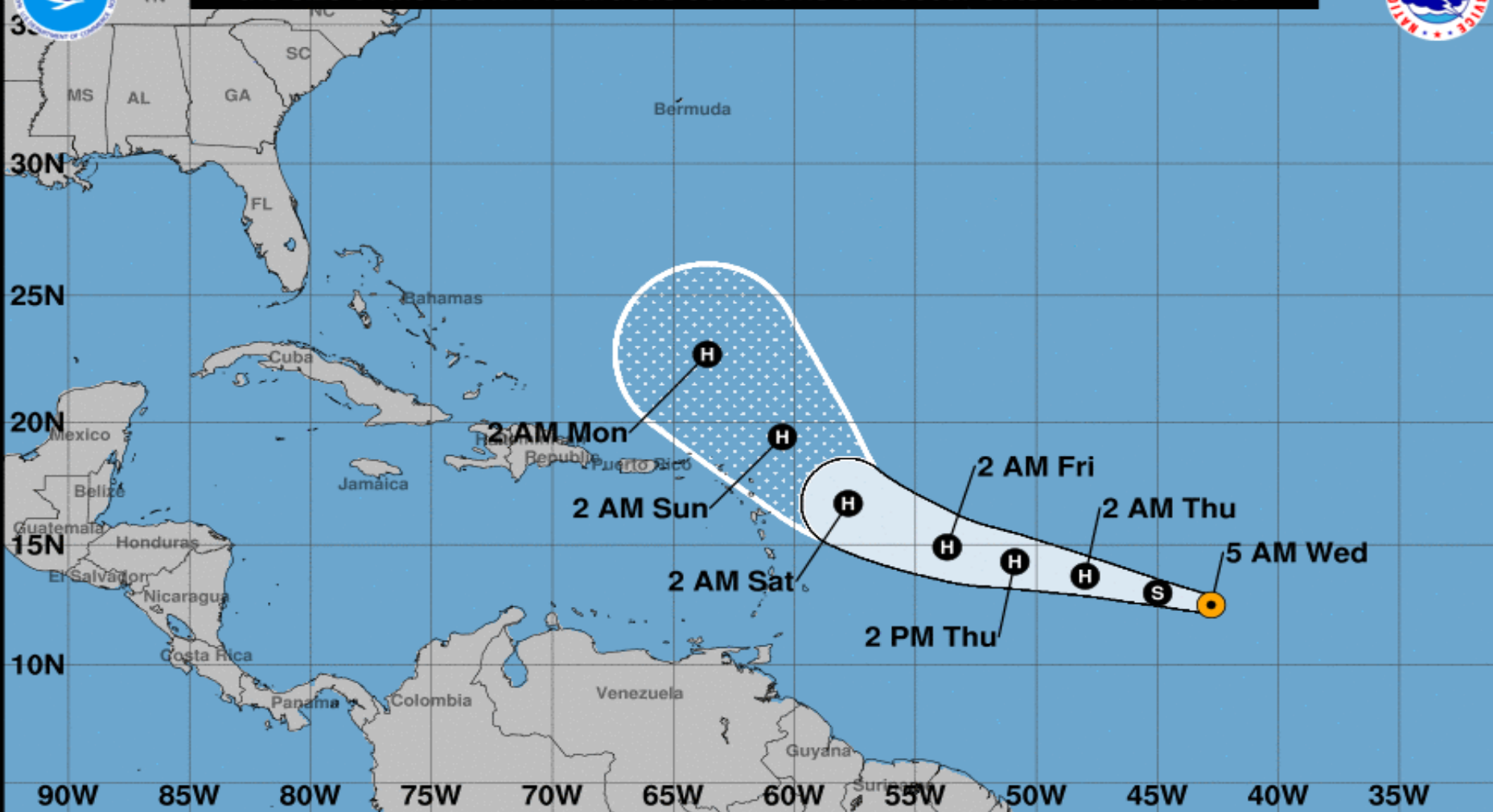
Initialized at 06z Sep 06 2017

Models are in not good agreement on the eventual intensity, though many show gradual intensification. However, over half of the models do show it becoming a hurricane within 36 hours.





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 Jose

Wednesday September 06, 2017

5 AM AST Advisory 4

NWS National Hurricane Center

Current information:



Center location 12.5 N 42.8 W

Maximum sustained wind 60 mph

Movement W at 13 mph

Forecast positions:

● Tropical Cyclone ○ Post/Potential TC

Sustained winds: D < 39 mph

S 39-73 mph H 74-110 mph M > 110 mph

Potential track area:



Day 1-3



Day 4-5

Watches:



Hurricane



Trop Storm

Warnings:



Hurricane



Trop Storm

Tropical Storm Katia

5 AM EDT Wed Sep 06 2017

Position 22.1 N 96.3 W

Maximum Winds 40 mph

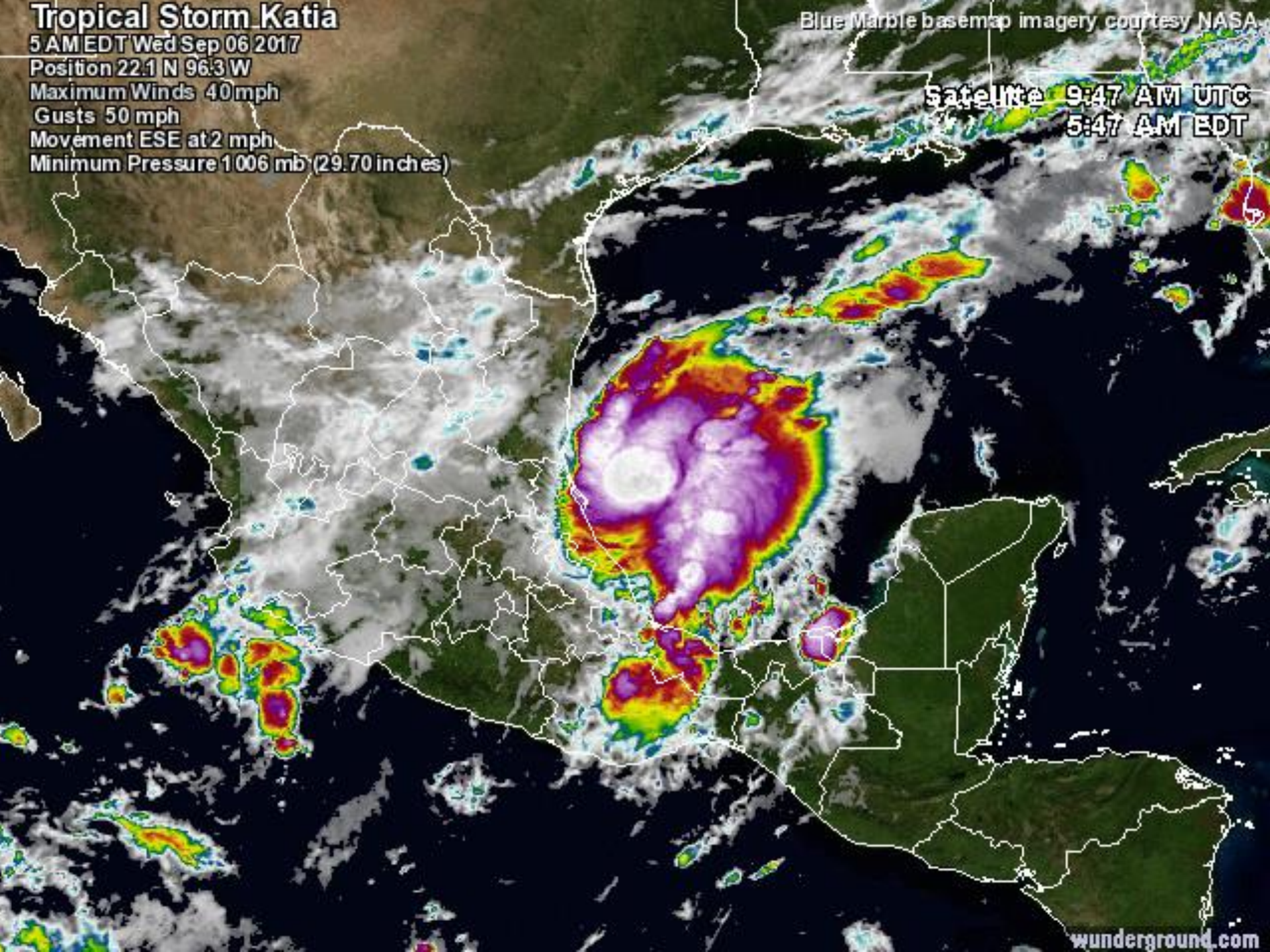
Gusts 50 mph

Movement ESE at 2 mph

Minimum Pressure 1006 mb (29.70 inches)

Blue Marble basemap imagery courtesy NASA

Satellite 9:47 AM UTC
5:47 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 Katia

Wednesday September 06, 2017

4 AM CDT Advisory 3

NWS National Hurricane Center

Current information:

Center location 22.1 N 96.3 W
Maximum sustained wind 40 mph
Movement ESE at 2 mph

Forecast positions:

● Tropical Cyclone ○ Post/Potential TC
Sustained winds: D < 39 mph
S 39-73 mph H 74-110 mph M > 110 mph

Potential track area:

Day 1-3 Day 4-5

Watches:

Hurricane Trop Storm

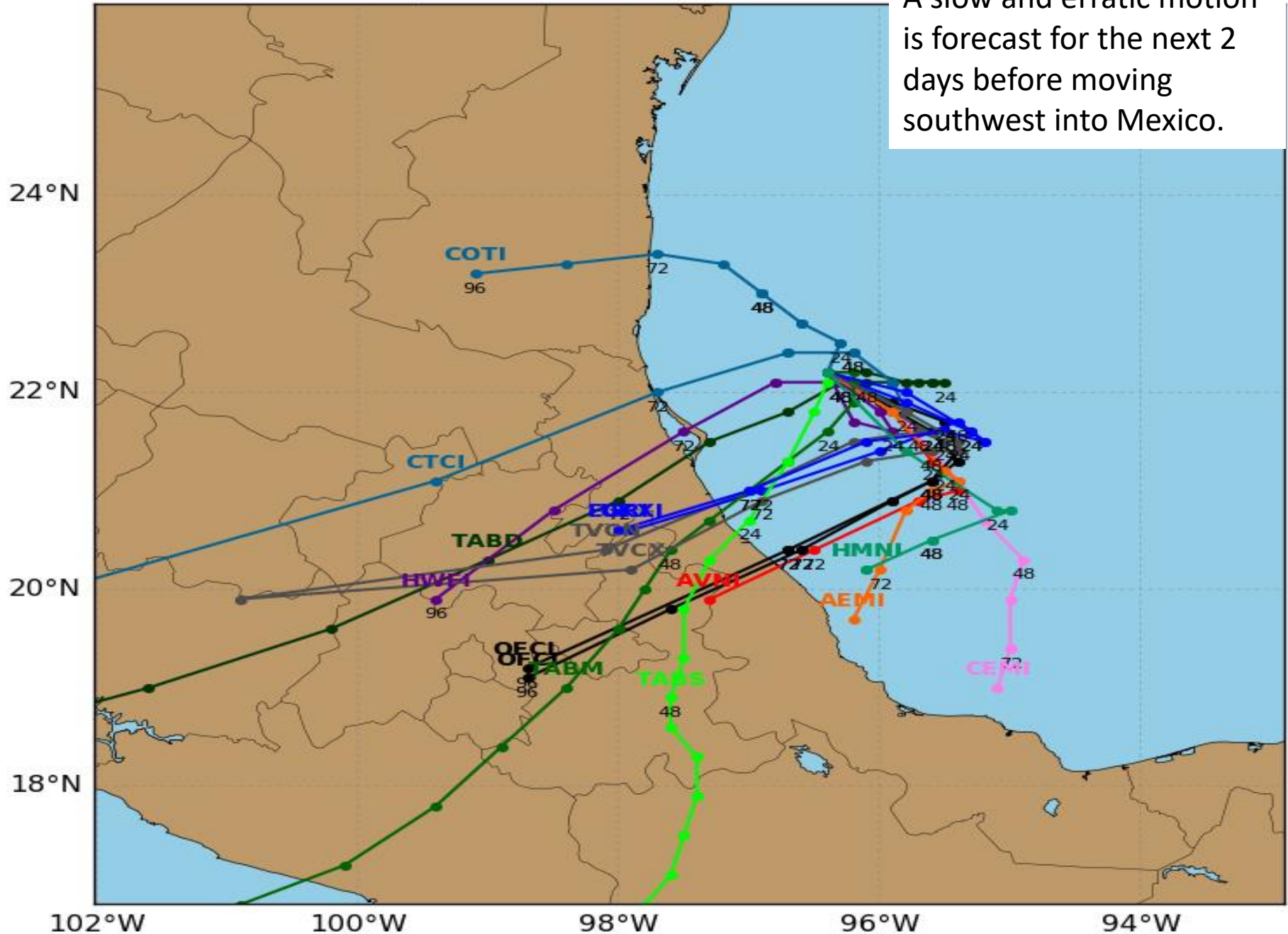
Warnings:

Hurricane Trop Storm

Tropical Storm KATIA Model Track Guidance

Initialized at 06z Sep 06 2017

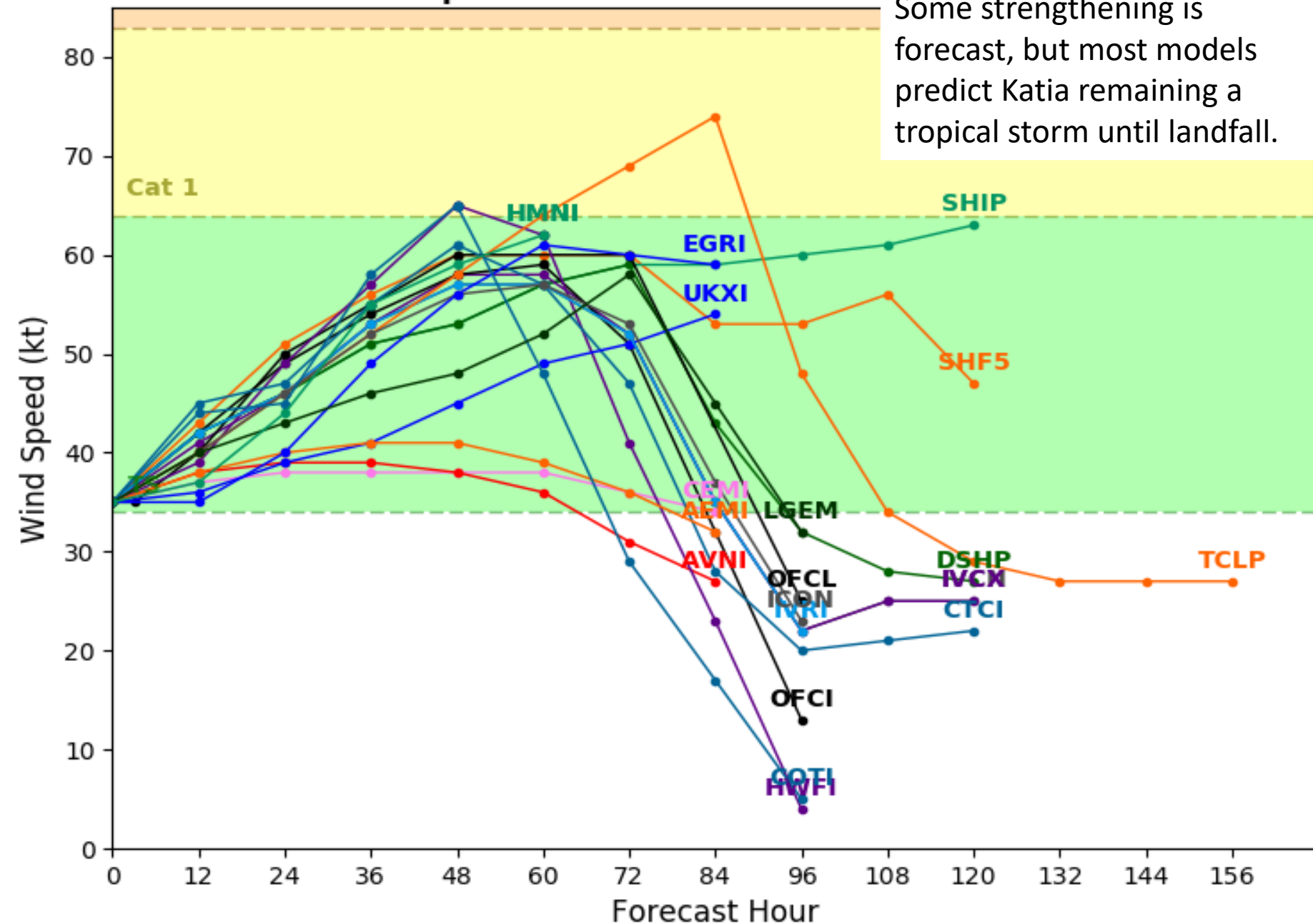
A slow and erratic motion is forecast for the next 2 days before moving southwest into Mexico.



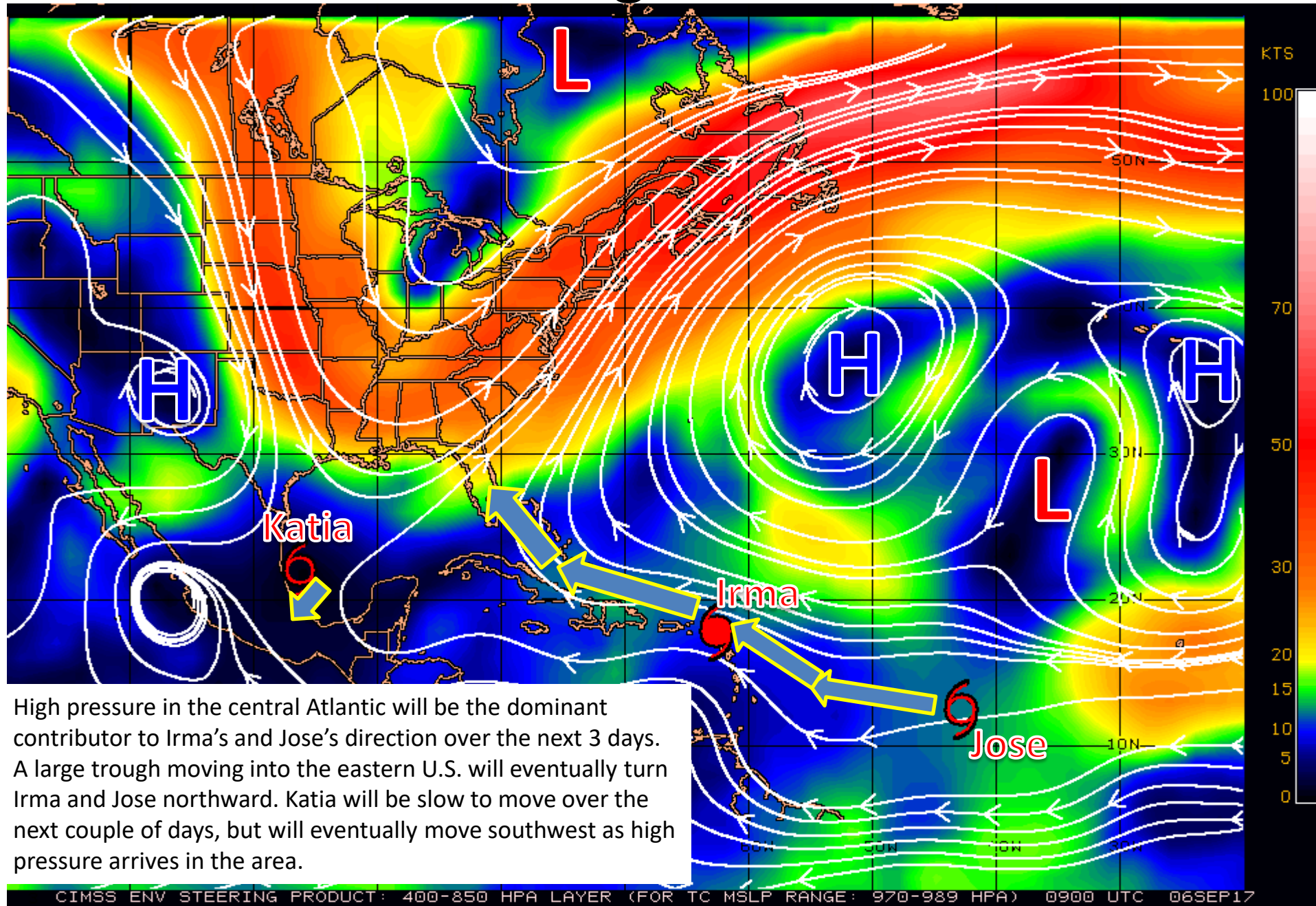
Tropical Storm KATIA Model Intensity Guidance

Initialized at 06z Sep 06 2017

Some strengthening is forecast, but most models predict Katia remaining a tropical storm until landfall.

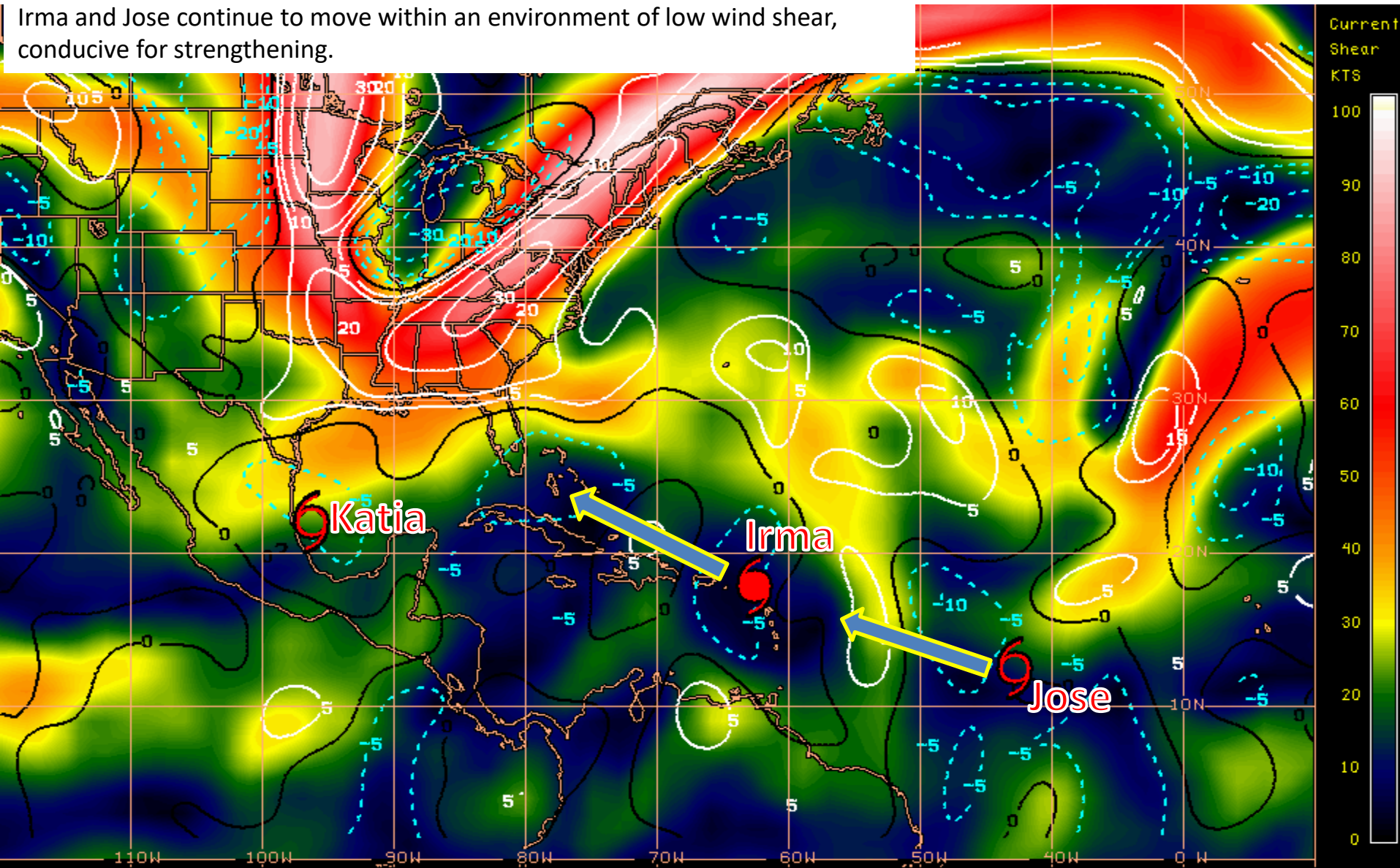


Steering Currents



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

Irma and Jose continue to move within an environment of low wind shear, conducive for strengthening.



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

Summary

- At 5am EDT Wednesday, Hurricane Irma was located about 35 miles east-southeast of St. Martin in the northern Leeward Islands, or about 1,250 miles east-southeast of Miami.
- Maximum sustained winds remain near 185 mph with higher gusts, keeping Irma a category 5 storm on the Saffir-Simpson Hurricane Wind scale.
- Some fluctuations in intensity are likely during the next day or two, but Irma is forecast to remain a powerful hurricane due to low wind shear and favorable sea-surface temperatures.
- Irma is now moving toward the west-northwest near 16 mph, and this general motion is expected to continue for the next couple of days.
- On the forecast track, the extremely dangerous core of Irma will move over portions of the northern Leeward Islands this morning, near or over portions of the northern Virgin Islands later today, and pass near or just north of Puerto Rico this afternoon or tonight.
- The core of Irma is forecast to move between Hispaniola/Cuba and the Bahamas Thursday-Saturday, approaching South Florida and the Florida Keys by Sunday.
- Long-range models are predicting a northward turn to occur in about 4 days, but exactly when the turn occurs is still uncertain.
- At 5am EDT Wednesday, Tropical Storm Jose was located 1,255 miles east of the Windward Islands, which is about 2,600 miles southeast of Miami, Florida.
- Maximum sustained winds have increased to near 60mph, and Jose is likely to become a hurricane by tonight.
- Jose is expected to move west-northwest, approaching the northern Leeward Islands this weekend before turning northwest.
- Beyond 4 days, the track for Jose is also uncertain as some models predict the Jose could stall in the western Atlantic.
- Tropical Depression #13 was upgraded to Tropical Storm Katia at 5am EDT Wednesday.
- Katia is located in the southwestern Gulf of Mexico about 275 miles south-southeast of the U.S./Mexico border, or about 940 miles west-southwest of Key West, Florida.
- A slow southeast movement in the western Gulf of Mexico is expected over the next 2 days, eventually moving southwest and into eastern Mexico over the weekend.
- Maximum sustained winds are near 40mph. Some strengthening is expected during the next 48 hours, but Katia is likely to remain a tropical storm until landfall.

Florida Outlook

- Although computer models have shifted east, much of the Florida Peninsula lies within the NHC 5 day cone of error and could feel impacts from this system regardless of the eventual path.
- No watches or warnings are currently in effect, but could be issued as early as tonight for portions of South Florida.
- The chances for tropical storm and hurricane winds continue to increase for the Florida Peninsula.
- There is currently a 1 in 4 chance of hurricane force winds south of Lake Okeechobee within the next 5 days.
- It is important to note that the chances of hurricane force winds are nearly equal for both Southeast Florida and Southwest Florida.
- Wind impacts to South Florida from Irma could occur as early as Saturday morning, with the most likely timeframe for tropical storm force winds arriving Saturday evening.
- Although specifics on storm surge are not yet available, a storm of this size and intensity would have the ability to produce dangerous storm surge heights across portions of South Florida and the Florida Keys.
- In addition, rainfall amounts could reach as high as 8-15", but specifics on the location of high rainfall totals is still uncertain.
- Tropical Storm Jose does not pose a threat to Florida within the next 5-7 days, but should be monitored.
- Tropical Storm Katia does not pose a threat to Florida.

Another briefing packet will be issued Wednesday afternoon. For more information, visit the NHC website at www.hurricanes.gov.



TROPICAL UPDATE

Created by:

Amy Godsey, Chief State Meteorologist

amy.godsey@em.myflorida.com

State Meteorological Support Unit

Florida Division of Emergency Management

Users wishing to subscribe (approval pending) to this distribution list, register at
https://public.govdelivery.com/accounts/FLDEM/subscriber/new?topic_id=SERT_Met_Tropics.

Other reports available for subscription are available at

<https://public.govdelivery.com/accounts/FLDEM/subscriber/new?preferences=true>