

# TROPICAL UPDATE

## 9 AM EDT

## Friday, August 18, 2017

## Tropical Storm Harvey, Invest 92L (70%) & East Atlantic Tropical Wave (40%)

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**





### **Five-Day Graphical Tropical Weather Outlook**

National Hurricane Center Miami, Florida





## **Steering Currents**

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3 areas of high pressure will steer the tropical systems for the next 3-5 days, but gaps in between these areas often allow for curvature northward. High pressure in the Gulf of Mexico and western Atlantic is forecast to remain in place through Wednesday, with the eastern Azores High expected to weaken and allow the far eastern atlantic tropical wave to move northwest.

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CIMSS ENV STEERING PRODUCT: 500-850 HPA LAYER (FOR TO MSLP RANGE: 990-999 HPA) 0900 UTC 18AUG17

Harvey

### Current Wind Shear (shaded) and Shear Tendency (lines)

Current While shear will be the largest hurdle for all 3 systems. Shear is light at the moment near T.S. Harvey Shear and the Atlantic Tropical Wave (ATW), but wind shear is increasing near 92L. Wind shear is expected to ктз increase for Harvey as it moves through the Caribbean, remain moderate to strong near 92L and near 100 Florida, and shear currently near 92L will eventually influence the ATW.



0900

18AUG17

UW-CIMSS



#### Areas of dry air ahead of 92L and the eastern Atlantic tropical wave may also impede development.



## **Tropical Storm Harvey Satellite**





### Earliest Reasonable Arrival Time of Tropical-Storm-Force Winds





### Tropical Storm HARVEY Model Track Guidance Initialized at 12z Aug 18 2017

#### Levi Cowan - tropicaltidbits.com



### **Tropical Storm HARVEY Model Intensity Guidance**

Initialized at 12z Aug 18 2017

Levi Cowan - tropicaltidbits.com



# 92L (Area 1) Satellite

Thunderstorm activity has increased near Invest Area 92L, but it continues to have a more broad center of circulation. However, it would take only a slight increase in organization for a tropical depression to form later today or tonight.

### Invest 92L Model Track Guidance

Initialized at 12z Aug 18 2017

#### Levi Cowan - tropicaltidbits.com



Invest 92L Model Intensity Guidance

Initialized at 12z Aug 18 2017



Computer models keep this system weak (ranging from a tropical wave to weak tropical storm) since atmospheric conditions are predicted to be unfavorable as the system nears the western Atlantic. Note: The TCLP, OCD5 and SHIP are statistical/historical models that <u>do not</u> take into account the forecast the state of the atmosphere. Also note the CMC2 is stronger due to a predicted stall/turn to the north before arriving in the Bahamas.

## Forecast Cumulative Rainfall – Next 7 Days



## Atlantic Tropical Wave (Area 2) Satellite

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This tropical wave appears to be beginning to acquire a broad area of circulation.

EUMETSAT METEOSAT-9 RAINBOW IR CH. 4 - AUG 18 17 12:00 UTC

# Summary

- At 5pm EDT Thursday, Hurricane Gert degenerated into a post-tropical low in the North Atlantic and advisories on the system were discontinued.
- At 5pm EDT Thursday, Potential Tropical Cyclone #9 (formerly invest 91L) was upgraded to Tropical Storm Harvey.
- At 8am EDT Friday, Tropical Storm Harvey was approaching the Leeward Islands, which is 1,560 miles southeast of Miami, Florida, and moving quickly west at 18mph.
- Maximum sustained winds are near 40 mph, and additional strengthening is expected to occur as it travels through the Caribbean Sea over the next 5 days. There is a chance that it could become a hurricane before landfall, but the current forecast is for a strong tropical storm due to increasing wind shear.
- Further east, an area of low pressure (Invest 92L) in the central Atlantic about 750 miles northeast of the Leeward Islands (2,050 miles southeast of Miami), has become more organized since yesterday.
- While this system could form into a tropical depression today or tonight, environmental conditions are becoming less favorable for development.
- As a result, the National Hurricane Center is predicting a 70% (high) chance of it becoming a depression within the next 48 hours.
- An Air Force Reserve Hurricane Hunter reconnaissance aircraft is scheduled to investigate this system Saturday afternoon, if necessary.
- The next name on the 2017 Atlantic name list is Irma.

- Computer models are in fairly good agreement, bringing 92L north of Puerto Rico this weekend and approaching the Bahamas and South Florida next Monday and Tuesday, but as a weak system (ranging from tropical wave to weak tropical storm).
- A tropical wave off the west coast of Africa continues to produce a large area of disorganized showers and thunderstorms.
- Conditions will be favorable for development, and there is a 40% (medium) chance of it becoming a depression or storm within the next 5 days.
- The full suite of computer models have not been run on this system yet, but global models suggest development into a system is possible next week.

### Florida Outlook:

- Tropical Storm Harvey does not pose a threat to Florida within the next 5 days. If the system were to emerge into the southwestern Gulf of Mexico next week, it could increase the rip current risk to portions of the Gulf Coast.
- Computer models suggest 92L could approach southern Florida in 4-5 days, but as a weak system.
- However, Floridians should still monitor the progress of the system for any changes in intensity.
- The most likely impact at this time would be the threat for locally heavy rain to South Florida next Monday-Wednesday.
- It is too early to speculate on any additional impacts to Florida from 92L.
- The eastern Atlantic tropical wave does not pose a threat to Florida.

Another briefing packet will be issued this afternoon. For more information on these systems visit the NHC website at <u>www.nhc.noaa.gov</u>



# TROPICAL UPDATE

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