

# TROPICAL UPDATE

### 5 PM EDT

#### Monday, September 4, 2017

### Major Hurricane Irma, Invest 94L (80%), and SW Gulf Tropical Wave (50%)

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 04-SEP-2017 GMT Copyright © 1998-2016 WSI Corporation http://www.wsi.com



### Irma Infrared Satellite Imagery

Irma is completing an eye wall replacement cycle, which is why the eye has clouded up some. However, it is likely to clear out again soon as winds have increased.



## **Steering Currents**

KTS

100

50

30

20

The high pressure between the Bahamas and Bermuda will keep pushing Irma westward, or just south of due west, tonight. Irma will then move along the western periphery of the high pressure into the Bahamas by the end of this week. The tropical wave in the southwest Gulf of Mexico will be slow to move over the next couple of days, but will drift northwest. The tropical wave in the open Atlantic will continue west or northwest.

110W

CIMSS ENV STEERING PRODUCT: 400-850 HPA LAYER (FOR TC MSLP RANGE: 970-989 HPA) 1500 UTC 04SEP17

Irma

#### Hurricane IRMA Model Track Guidance

Initialized at 12z Sep 04 2017

Levi Cowan - tropicaltidbits.com







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





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



#### Hurricane IRMA Model Intensity Guidance

Initialized at 18z Sep 04 2017

Levi Cowan - tropicaltidbits.com





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

National Hurricane Center Miami, Florida





### Satellite Image of Invest 94L



## Satellite Image of SW Gulf Tropical Wave

2017-09-04-1900 UTC

The tropical wave located in the SW Gulf of Mexico/Bay of Campeche remains disorganized, but thunderstorms activity has increased. Slow development of this system remains possible through mid-week.

### Summary

- At 5pm EDT, Hurricane Irma was located about 490 miles east of the Leeward Islands, or about 1,750 miles eastsoutheast of Miami, and was moving west at 13 mph.
- Maximum sustained winds are near 130 mph, making Irma a category 4 storm on the Saffir-Simpson scale. It is expected to maintain strength or gradually strengthen over the next couple days due to low wind shear and favorable sea-surface temperatures.
- Irma is expected to continue west tonight and then west-northwest tomorrow. Irma will move into the Turks and Caicos and eastern Bahamas on Friday. This weekend, Irma is expected to turn northward as it interacts with a trough across the eastern United States.
- Exactly when the turn northward occurs is still being debated by the models. A later turn would mean more impacts to Florida. However, it could also mean Irma interacts with the mountainous terrain of Cuba and Hispaniola.
- Hurricane hunter aircraft will continue to investigate the system regularly through the week.
- A tropical wave southeast of Irma by some 1,000 miles in the tropical Atlantic Ocean, now being referred to as Invest Area 94L, is producing showers and thunderstorms this afternoon.
- Conditions are expected to be favorable for development, and it could become a tropical depression in the next couple of days as it continues moving west or northwest over the tropical Atlantic.
- The NHC has given this disturbance a 40% (medium) chance of development over the next 48 hours and an 80% (high) chance of development over the next five days.
- A tropical wave in the southwestern Gulf of Mexico is producing disorganized showers and thunderstorms. Moderate amounts of wind shear are limiting development, but the system has become more organized today and may develop by mid-week.
- The NHC has given this disturbance a 40% (medium) chance of development over the next 48 hours and a 50% (medium) chance of development over the next five days.
- The next names on the list are Jose and Katia.

## Florida Outlook

- The tropical wave in the southwestern Gulf of Mexico does not pose a direct threat to Florida.
- The tropical wave in the open, tropical Atlantic, now being referred to as Invest Area 94L, does not pose a threat to Florida during the 7-10 days. This system is likely to remain out to sea but will be monitored.
- Irma does not pose a direct threat to Florida through Friday.
- Wave heights will begin to increase along the East Coast of Florida Thursday and into the weekend. The rip current risk will also begin to rise. These impacts are a definite, even if Irma remains a couple hundred miles off the coast.
- It is too early to speculate on other impacts from Irma (rainfall amounts, winds, storm surge, etc.). These details will begin to come into line likely within the next 48 hours. How close Irma gets to Florida before the turn north remains the key part of this forecast that still needs to be nailed down. Small shifts can make a big difference in wind and surge impacts.
- No part of Florida is currently in the National Hurricane Center's 5-day cone for Hurricane Irma. If the current forecast does not change, parts of South Florida may begin to enter the day 5 portion of the cone late tonight or tomorrow.

Another briefing packet will be issued on Tuesday morning. For more information, visit the NHC website at <u>www.hurricanes.gov</u>.



# TROPICAL UPDATE

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### Florida Division of Emergency Management

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