

# **Tropical Update**



# 2:00 PM EDT Monday, June 19, 2023 Tropical Depression Three & Invest 93L (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.hurricanes.gov.



#### Atlantic Basin Satellite Image Chance of development: None Low Medium

High







- Location: 1425 miles E of Southern Windward Islands
- Maximum Sustained Winds: 35 mph
- Current Movement: W at 21 mph
- FL Watches/Warnings: None

Tropical Depression Three is moving toward the west near 21 mph, and this motion is expected to continue for the next several days. On this forecast track, the system should be approaching the Lesser Antilles late this week. Some strengthening is forecast, and the depression is forecast to become a hurricane in a few days.



#### **Tropical Weather Outlook** Disturbance 2 – Invest 93L (LINK)



A tropical wave, located several hundred miles south-southwest of the Cabo Verde Islands, continues to produce a large area of disorganized showers and thunderstorms. Environmental conditions appear favorable for further development of this system, and a tropical depression could form in a couple days while the system moves westward at 10-15 mph across the eastern and central tropical Atlantic.

This system poses no threat to Florida over the next 7-10 days, at least.

\* Formation chance through 48 hours...medium...40 percent.
\* Formation chance through 7 days...medium...50 percent.

### Model Forecasts – Next 5 Days Tropical Depression Three

**Invest 92L Model Track Guidance** 



Computer models are showing decent agreement over the first 1-3 days as Tropical Depression Three generally moves westward across the central tropical Atlantic. Environmental conditions appear conducive for strengthening over the next few days including above normal sea surface temperatures, weak upper-level winds, and a moist atmospheric air mass.

There remains uncertainty regarding the track forecast as the forecast track will likely be heavily dependent upon Tropical Depression Three's intensity. Intensity guidance without the presence of a well-defined center of circulation increases the level of forecast uncertainty. This system is very anomalous for June, which increases the uncertainty.



CIMSS ENV STEERING PRODUCT: 500-850 HPA LAYER (FOR TC MSLP RANGE: 990-999 HPA) 1200 UTC 19JUN23



#### Wind Shear Is the environment favorable for the system?

Color denotes the amount of wind shear and the lines denote how it have changed over the last 24 hours (dotted lines show decreasing shear and solid lines show increasing.



1200 UTC

GOES-EAST 24 HOUR WIND SHEAR TENDENCY PRODUCT

19JUN23 UW-CIMSS



# Dry Air & Saharan Dust Is the environment favorable for the system?

Color denotes concentration of Saharan Dust or dry, stable air.



# Sea Surface Temperatures & Anomalies Is the ocean favorable for the system?

Abnormally warm ocean temperatures for this time of year are warm enough to support development across the Tropical Atlantic. Temperatures near Tropical Depression Three and Invest 93L are running 1 to 2-degrees above normal for this time of year.





### Severe Weather Outlook - Today From the Storm Prediction Center



A cluster of thunderstorms will continue to move across North Florida and along the I-10 corridor through the morning and afternoon hours. The Storm Prediction Center (SPC) is outlooking a Slight Risk (level 2 of 5) for Severe Weather across North Florida and towards the I-4 corridor, with a Marginal Risk (level 1 of 5) extending through Central Florida and the Peninsula. Strong eastern to severe thunderstorms will be capable of producing all modes of severe weather including frequent lightning, damaging wind gusts (45-60 mph), isolated tornadoes, hail (dime to quarter, possibly ping pong size), and heavy downpours. Isolated to scattered showers and thunderstorms are anticipated to re-develop during the peak heating hours of the day with the help of the sea breeze moving inland. Shower and thunderstorm activity looks to slowly dissipate heading into the evening hours and push offshore towards the adjacent waters.

# \*\*\*Only Model Guidance – Time & Position Will Vary\*\*\*



2:00 PM EDT / 1:00 PM CDT 4:00 PM EDT / 3:00 PM CDT 6:00 PM EDT / 5:00 PM CDT 8:00 PM EDT / 7:00 PM CDT 10:00 PM EDT / 9:00 PM CD

Scattered to numerous showers and thunderstorms will continue to push along the I-10 corridor and North Florida through the early to middle to afternoon hours. Strong to severe thunderstorms may re-develop during the peak heating hours of the day with the help of the sea breeze influence. Shower and thunderstorm activity looks to continue into the evening hours before slowly dissipating and pushing over the adjacent waters.



### Flood Watch in Effect & 3-Day Forecast Rainfall

From the National Weather Service & Weather Prediction Center



amounts.

# From the Weather Prediction Center



Understanding WPC Excessive Rainfall Risk Categories				
No Area/Label	MARGINAL (MRGL)	SLIGHT (SLGT)	MODERATE (MDT)	HIGH (HIGH)
Flash floods are generally not expected.	Isolated flash floods possible	Scattered flash floods possible	Numerous flash floods likely	Widespread flash floods expected
www.wpc.ncep.noaa.gov @NWSWPC	Localized and primarily affecting places that can experience rapid runoff with heavy rainfall.	Mainly localized. Most vulnerable are urban areas, roads, small streams and washes. Isolated significant flash floods possible.	Numerous flash flooding events with significant events possible. Many streams may flood, potentially affecting larger rivers.	Severe, widespread flash flooding. Areas that don't normally experience flash flooding, could. Lives and property in greater danger.
Flash flooding near me? NO Flash Flooding	T = T + 0	$\{(x_i,y_i)\}_{i\in I}$	$C(\sigma_{1}, \eta_{2})$	285 M CA
WEATHER PREDICTION CENTER				

Grounds and soils remain saturated after several days of heavy and intense rainfall across the Panhandle and North Florida. The Weather Prediction Center (WPC) is outlooking a Slight Risk (level 2 of 4) for Flash Flooding across the Panhandle and extending eastward into Nature Coast in anticipation of heavy and intense downpours continuing. A Marginal Risk (level 1 of 4) for Flash Flooding has been extended across Central Florida and along the eastern Peninsula as sea-breeze enhanced showers and thunderstorms will create heavy downpours. Instances of ponding and localized flooding will be possible over recently saturated grounds, as well as urban and low-lying/poor drainage areas.

### **Possible River Flooding** Chance of River Flooding Based on Range of Forecasted Rainfall



Heavy and intense rainfall across the Panhandle and Big Bend have allowed several rivers and creeks to see an increase in water levels. Rises in water levels have been observed across the Apalachicola, Flint, Choctawhatchee, Ochlockonee, and Suwannee Basins are anticipated to rise into Action Stage (bank-full).

A **River Flood Warning** will go into effect later this evening for the <u>Ochlockonee River</u> <u>near Concord</u> as water levels will reach minor flood stage. Water levels are anticipated to crest overnight and slowly fall below flood stage by Tuesday evening. The <u>Aucilla River at Lamont</u> could also see minor flooding as water levels rise through the middle of the week.



#### **Tropical Depression Three:**

- With the 11:00 AM advisory, the National Hurricane Center has ungraded Invest 92L to Tropical Depression Three. The system is located about 1425 miles east of the southern Windward Islands and is moving west at 21 mph. Maximum sustained winds are 35 mph with higher gusts.
- A westward motion is expected to continue for the next several days and should be approaching the Lesser Antilles late this week.
- Some strengthening is forecast, and the depression is forecast to be come a hurricane in a few days as environmental conditions appear conducive.
- There remains forecast uncertainty with Tropical Depression Three later this week as environmental conditions will contribute to its strengthening and its direction. The intensity forecast is more uncertain than normal due to the difference between computer model guidance and the aclimatological nature of this system.
- Tropical Depression Three poses no direct threat to Florida over the next 5-7 days, at least. The next name on the list is Bret (bret).

#### Invest 93L (Eastern Tropical Atlantic Wave):

- A tropical wave, located several hundred miles south-southwest of the Cabo Verde Islands, continues to produce a large area of disorganized showers and thunderstorms.
- Environmental conditions appear favorable for further development of this system, and a tropical depression could form in a couple days while the system moves westward at 10-15 mph across the eastern and central tropical Atlantic. *93L poses no threat to Florida over the next 7-10 days, at least.*

#### Florida Outlook:

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- The active and anomalous weather pattern continues across North Florida as scattered to numerous showers and thunderstorms will continue today.
- The Storm Prediction Center (SPC) is outlooking a Slight Risk (level 2 of 5) for Severe Weather across the Panhandle and Big Bend as strong to severe thunderstorms are anticipated to continue through the afternoon and early evening hours. A Marginal Risk (level 1 of 5) is extended through Central Florida and along the eastern Peninsula.
- All modes of severe weather can be anticipated withing strong to severe thunderstorms across the Panhandle and Big Bend. The primary threats include:
  - Frequent lightning, damaging wind gusts (45-60 mph), isolated tornadoes, hail (dime to quarter size, possibly ping pong size), and heavy downpours.
- The Weather Prediction Center (WPC) is outlooking a Slight Risk (level 2 of 4) for Flash Flooding across the Panhandle and towards Nature Coast, with a Marginal Risk (level 1 of 4) extends across Central Florida and the eastern Peninsula. Heavy and intense downpours can be expected to continue within stronger activity, leading to instances of ponding and localized flooding.
- Additional watches and warnings may be issued as conditions warrant; please ensure you have multiple ways to receive weather alerts!

#### The next briefing package will be issued on Tuesday. For the latest information, please visit the National Hurricane Center website.







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