

# Chief Pilot's Working Group



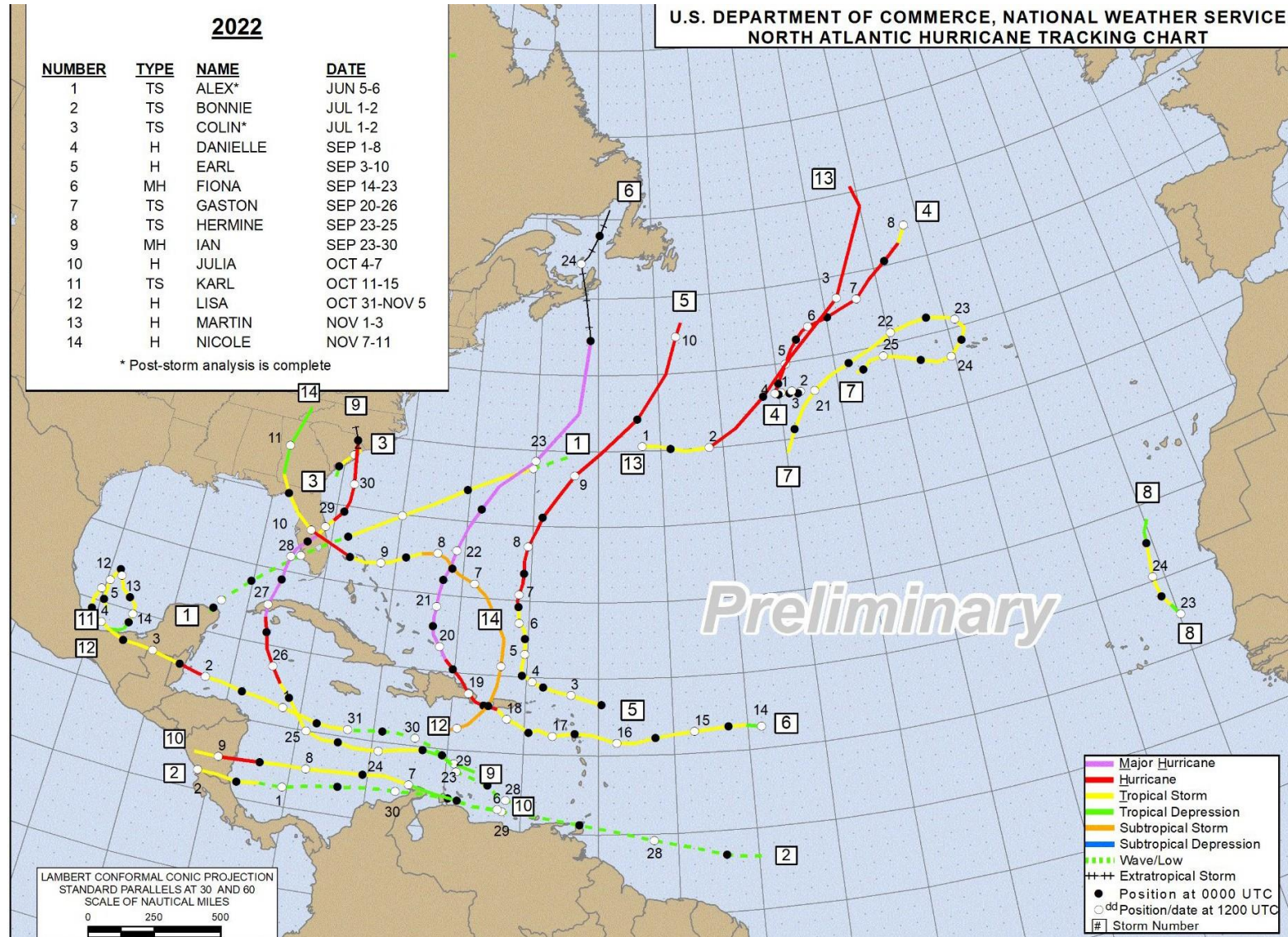
## •Weather Box Expansion

- February/April 2023- Safety Risk Management Panel Convened
- Purpose was to to identify and mitigate any potential risks
- Results
  - FAA/NWS support the idea of an expansion of weather box applicable sizes
  - Development of a feedback mechanism
  - Approximately a year long accuracy assessment
  - Recommendations to modify AC 90-80

## •IFR diversions

- Additional sources of weather in critical areas
- Hurricane season outlook and planning tools

# Quiet Year for Louisiana and SE Texas



# Colorado State 2023 Forecast

## Atlantic Basin Tropical Activity

| Forecast Parameter | Forecast | 1991 - 2020 Average |
|--------------------|----------|---------------------|
| Named Storms       | 13       | 14.4                |
| Hurricanes         | 6        | 7.2                 |
| Major Hurricanes   | 2        | 3.2                 |

Below Average

# The Weather Channel 2023 Forecast

## Atlantic Basin Tropical Activity

| Forecast Parameter      | Forecast  | 1991 - 2020 Average |
|-------------------------|-----------|---------------------|
| <b>Named Storms</b>     | <b>15</b> | <b>14.4</b>         |
| <b>Hurricanes</b>       | <b>7</b>  | <b>7.2</b>          |
| <b>Major Hurricanes</b> | <b>3</b>  | <b>3.2</b>          |

Average

# University of Arizona 2023 Forecast

## Atlantic Basin Tropical Activity

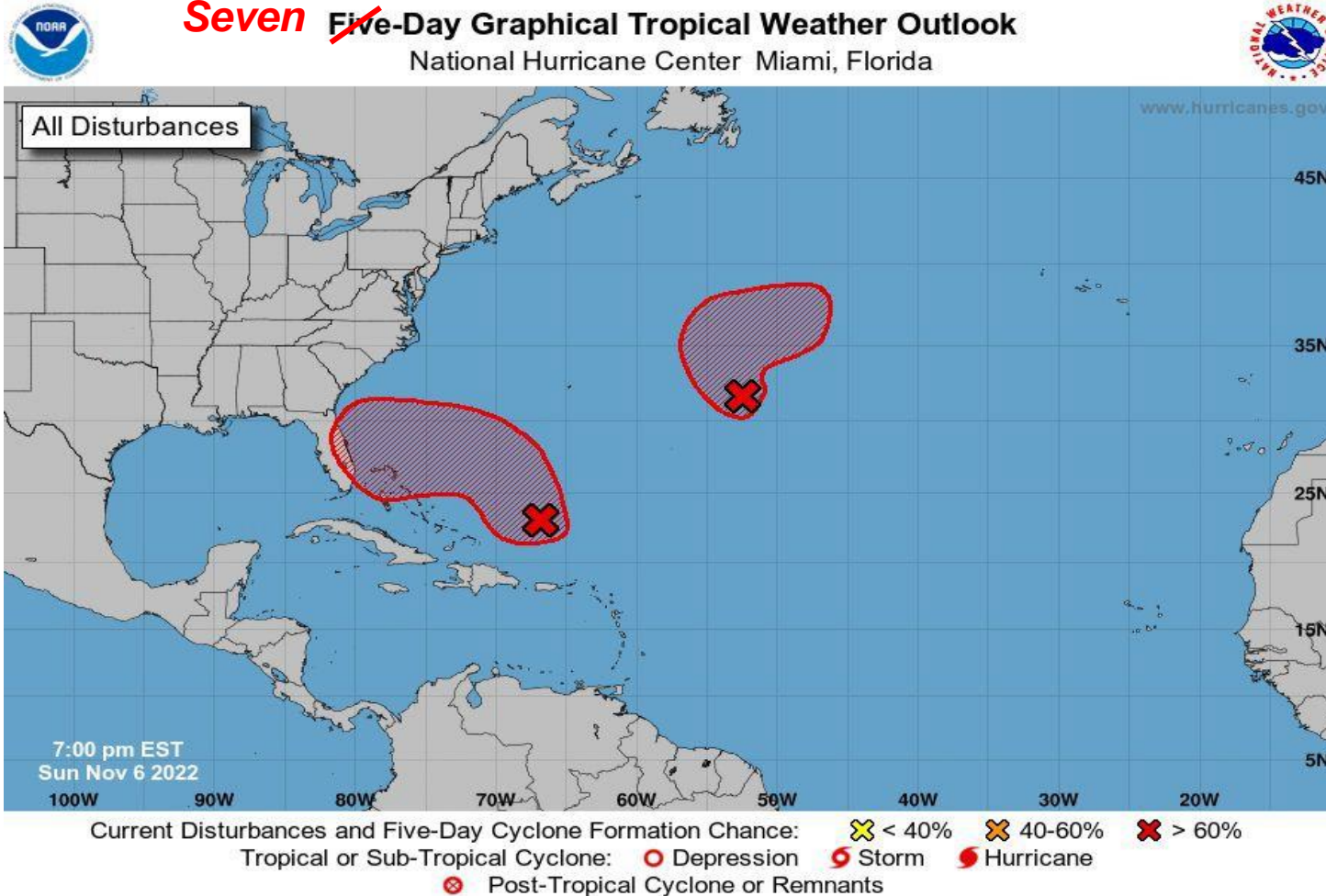
| Forecast Parameter | Forecast | 1991 - 2020 Average |
|--------------------|----------|---------------------|
| Named Storms       | 19       | 14.4                |
| Hurricanes         | 9        | 7.2                 |
| Major Hurricanes   | 5        | 3.2                 |

Above Average



# Tropical Weather Outlook is now 7 Days

## 7 Day Tropical Weather Outlook



The 5-day Tropical Weather Outlook (TWO) and Graphical Tropical Weather Outlook (GTWO) will be extended to 7 days beginning May 15, 2023.

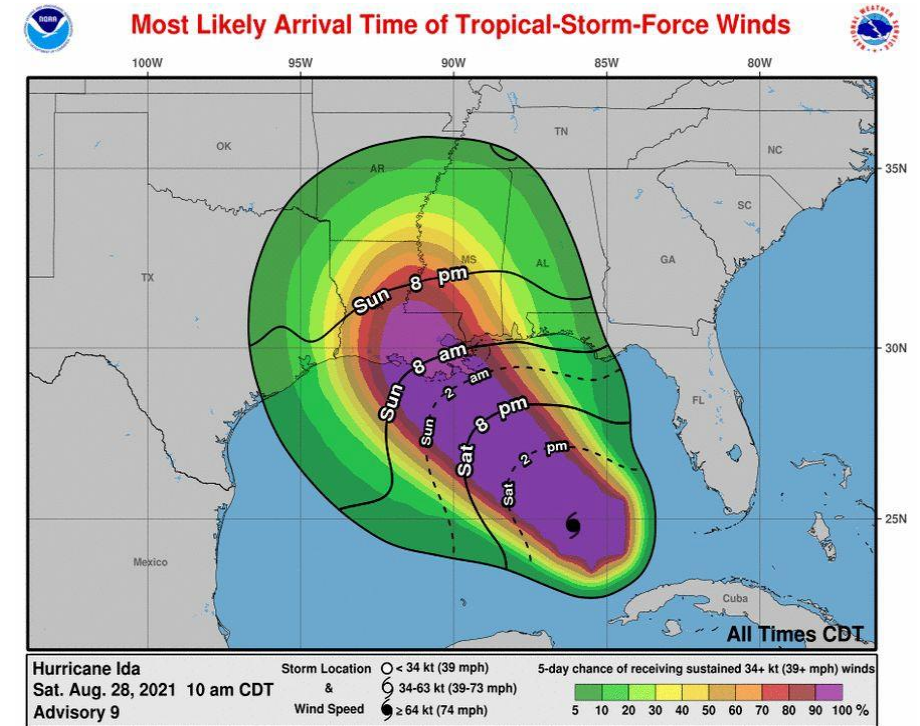
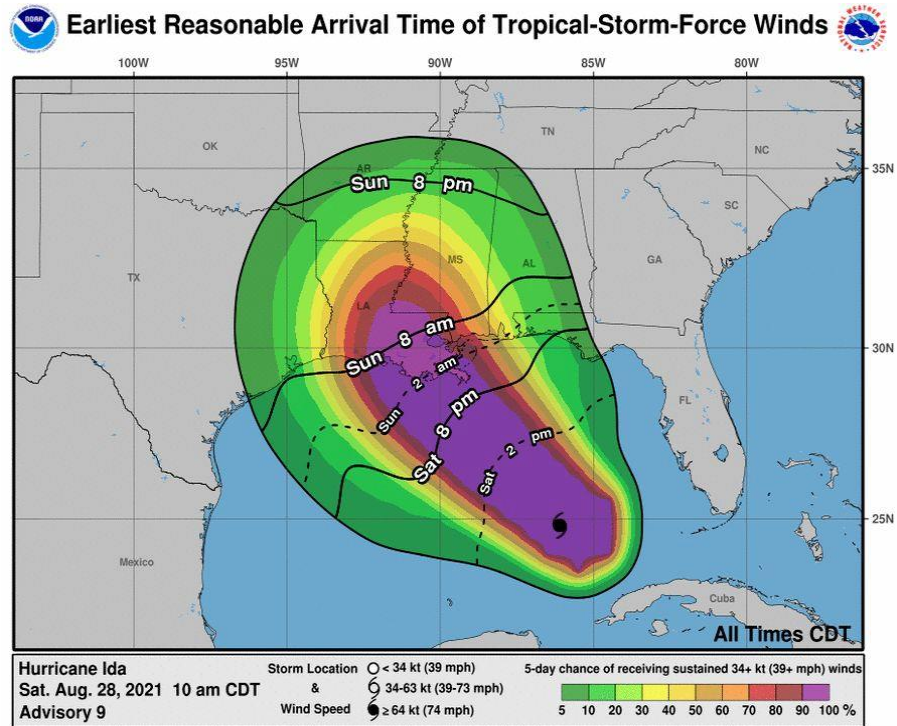
This product will now show the chance for tropical cyclone formation over the next 7 days.

New URL:

<https://www.nhc.noaa.gov/gtwo.php?basin=atl&fdays=7>

National Weather Service  
Lake Charles, LA

# Time of Arrival Graphics



- Provides probabilistic time of arrival of 34 KT/39 MPH winds
- Earliest reasonable is based on 10% threshold- 90% chance that the storm will arrive AFTER the time on the graphic.
- Most likely is based on 50% threshold

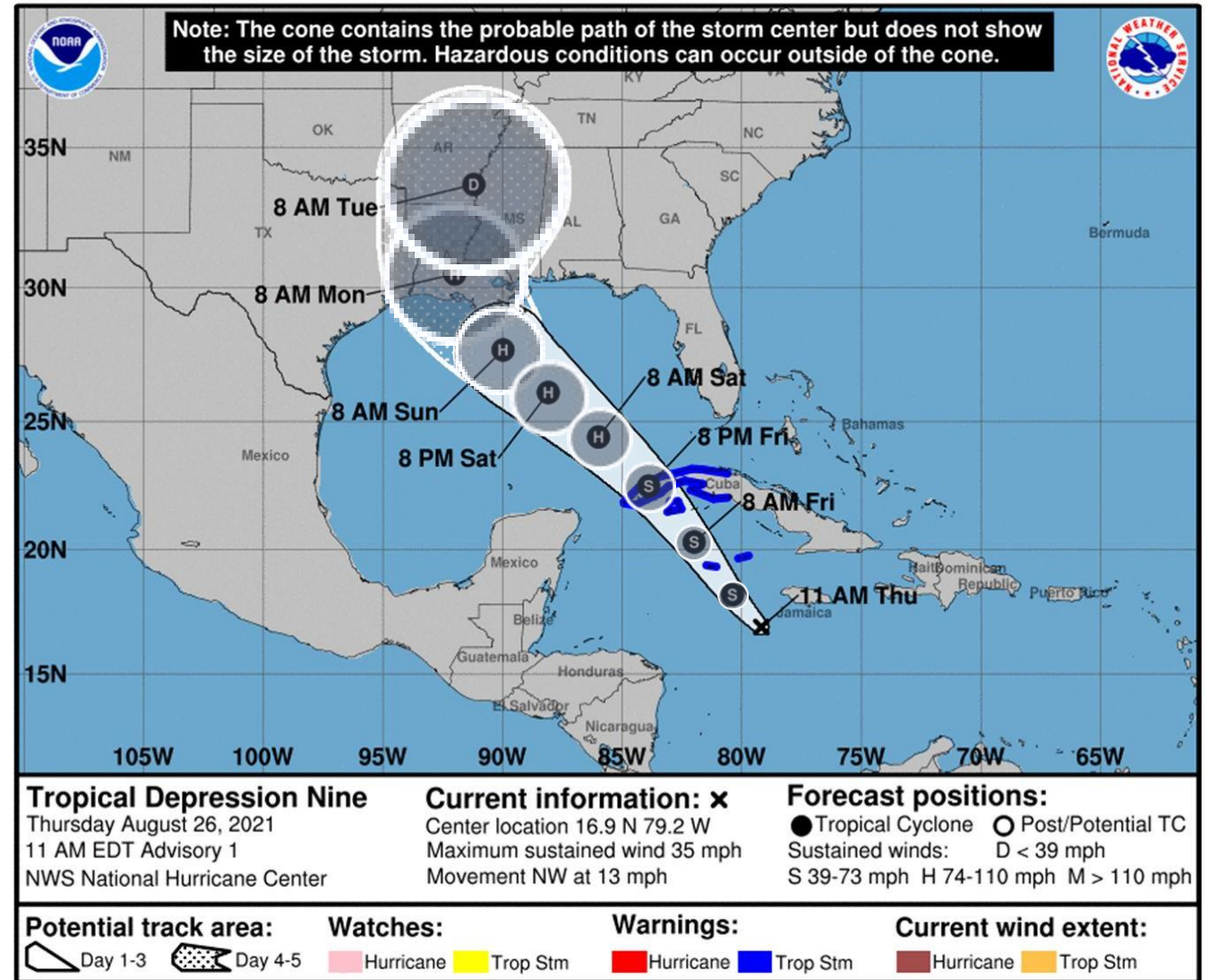
# How the Cone is Made

Made from circles based on 67th percentile of NHC error over last 5 years.

Circles are “drawn” around each forecast point (12, 24, 36 h, etc.) based on the 67th percentile of the NHC track forecast error over the past 5 years at that forecast lead time

A cone is drawn based on those circles

The cone size does not change through the season and does not change for each storm.





**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 Laura**  
Tuesday August 25, 2020  
10 AM CDT Advisory 23  
NWS National Hurricane Center

**Current information: x**  
Center location 23.7 N 87.0 W  
Maximum sustained wind 75 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

- 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.
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Hurricane Trop Stm

# NWS Products to Monitor

## 7 Days Out

- Tropical Weather Outlook

New



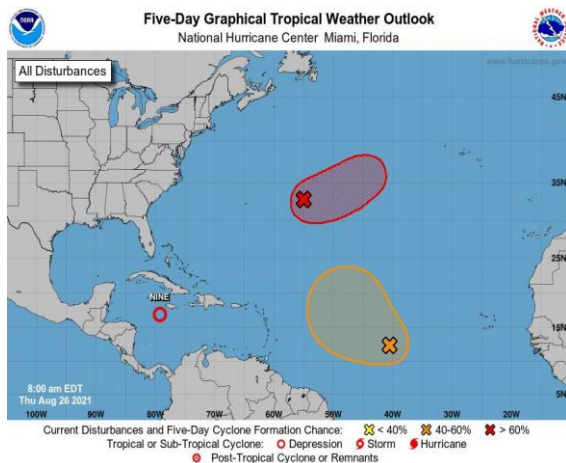
## 60 Hours Out

- PSurge (for select, well-behaved storms)



## 5 Days Out

- NHC Advisory Packages (cone, wind speed probabilities, TOA)



## 48 Hours Out

- Watch/Warning Products
- Hurricane Threats and Impacts Graphics
- PSurge/Inundation Forecasts

**National Weather Service  
Lake Charles, LA**