FLORIDA DIVISION OF EMERGENCY MANAGEMENT

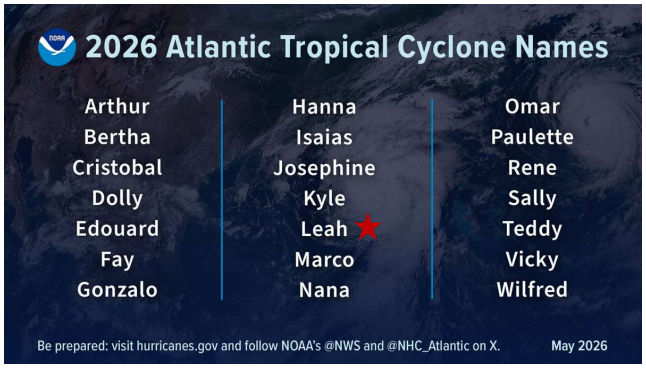
STATE METEOROLOGICAL SUPPORT UNIT

2026 Hurricane Season Outlook & Forecast Products

1

Tropical Cyclone Naming

- Rotating list of names every 6 years
- World Meteorological Organization votes on retirement of names and replacement name
- No more Greek alphabet (effective 2021)
- Alphabetical primary and supplemental list of names



★ New name for 2026, replaces Laura from 2020

2

Pre-Season Forecasts for 2026

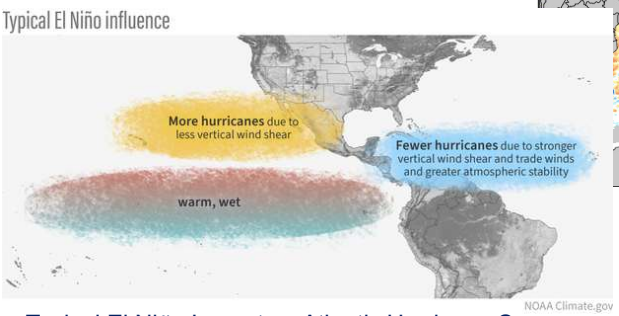
Entity	Total Named Storms	Hurricanes	Major Hurricanes
AVERAGE (1991-2020)	**14.4**	**7.2**	**3.2**
NOAA (5/21/26)	**8-14**	**3-6**	**1-3**
Colorado State University (4/9/26)	13	6	2
The Weather Channel (4/16/26)	12	6	2
University of Arizona (4/7/26)	20	9	4
University of Pennsylvania (4/21/26)	7-13	-	-
North Carolina State University (4/22/26)	12-15	6-9	2-3
United Kingdom Met Office (5/28/26)	9	5	2

3

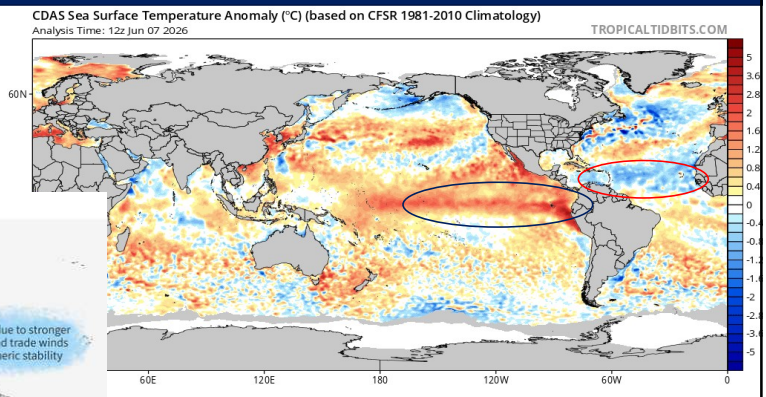
"Normal – Below Average" Season…Why?

Cooler than normal Atlantic sea-surface temperatures, especially in the "Main Development Region"

Strong El Niño developing in the eastern Pacific.



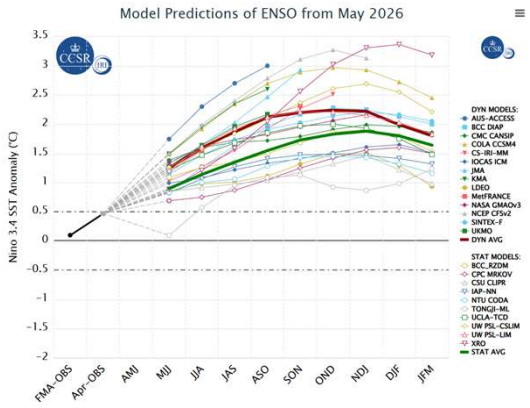
Typical El Niño Impact on Atlantic Hurricane Season



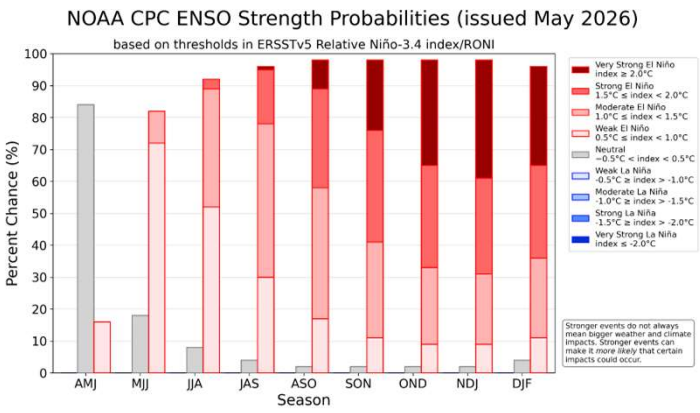
CSU Analog Seasons – **2006, 2009, 2015, 2023**
2 Below-average *(2009, 2015)*, 1 near-normal *(2006)*, 1 above-average *(2023)*

4

El Niño Forecasts



International Research Institute For Climate and Society



NOAA Climate Prediction Center

El Niño is **highly likely** to strengthen in the coming months

5

Misconceptions about the "Below-Average" Season

A seasonal forecast that predicts lower-than-normal activity does NOT mean that we should put our guard down.

The 1992 Atlantic Hurricane Season was a significantly below average season.

- Only **7** named storms formed, with 4 hurricanes and only 1 major hurricane

The one major hurricane?

- **Hurricane Andrew**

"It only takes one"

6

Seasonal Outlooks

Regardless of the numbers…tropical cyclones in the Atlantic Basin will always pose risks & preparedness is a must

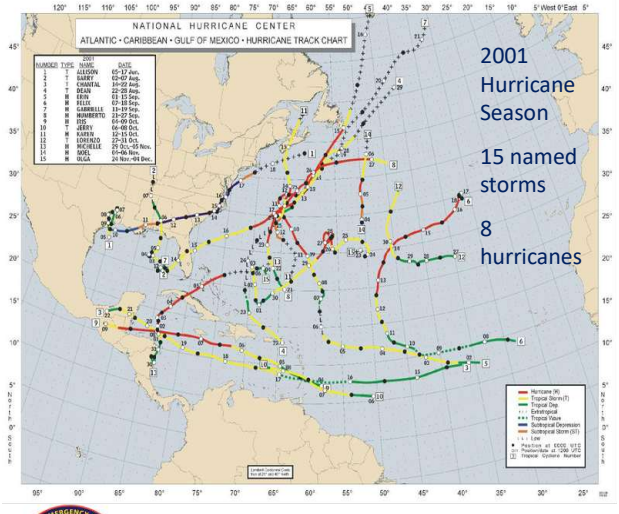
Seasonal forecast models look at similar years to make seasonal predictions

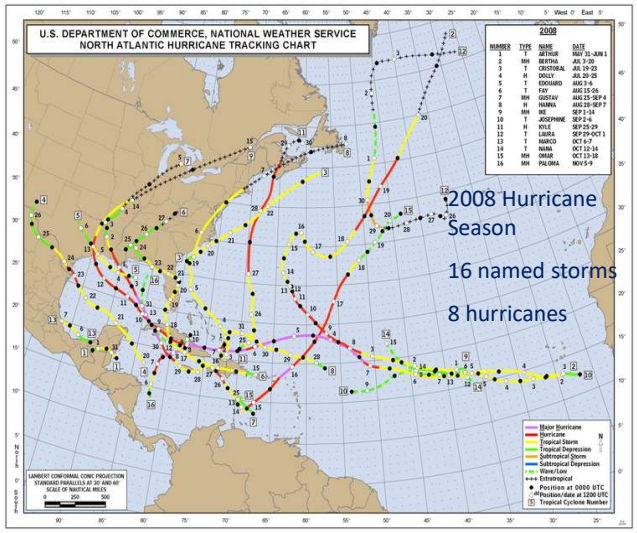
Their greatest usage is to gauge how *many* storms may form, not how many may make direct *impacts.*

Note the differences between 2001 and 2008 AND 2010 and 2020…

7

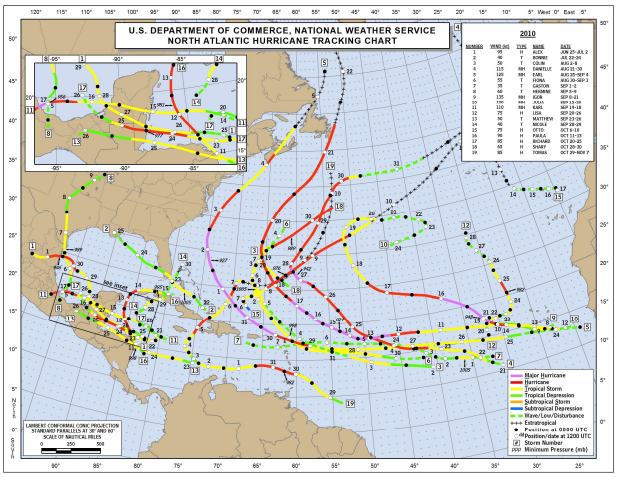
Similar Number of Storms…Different Results





8

Analog Years…Different Results

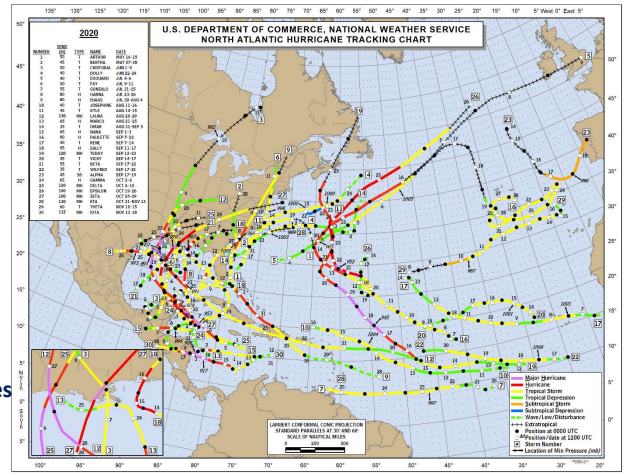


2010 Hurricane Season

19 named storms, 12 hurricanes, 5 Major Hurricanes

2020 Hurricane Season

30 named storms, 14 hurricanes, 7 Major Hurricanes



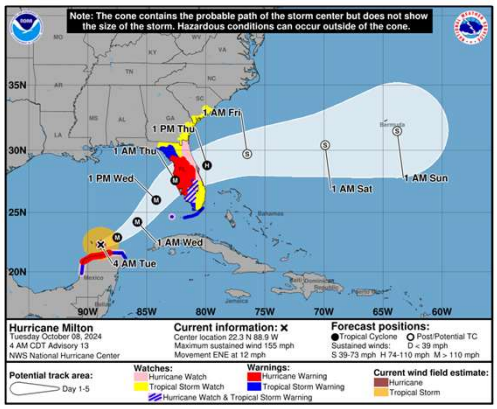
9

Changes to NHC Products and New Forecasting Tools Available in 2026

10

Changes to the NHC Cone of Uncertainty

Past Cone (pre. 2026)

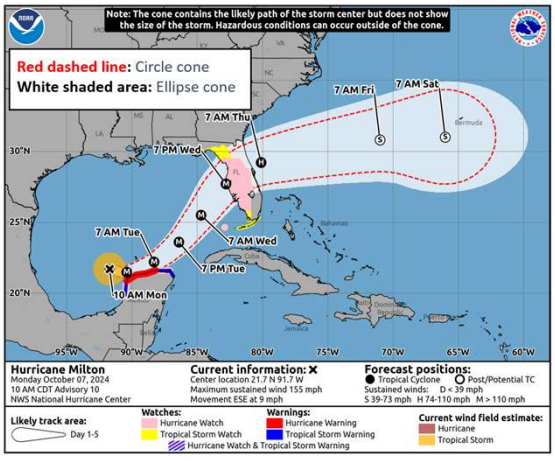


2026 Cone

- **Inland watches and warnings now shown on cone of uncertainty map.**
- **Helps communicate inland hazards a tropical cyclone poses.**

11

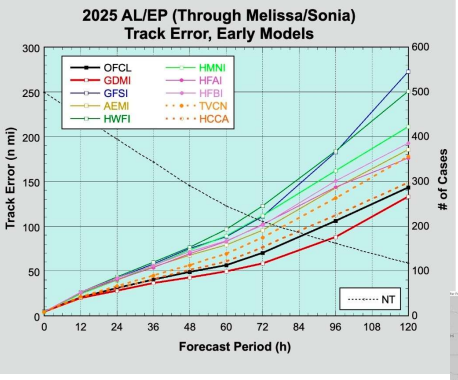
Experimental Cone



- Current NHC cone is produced by drawing circles around each forecast point and connecting them.
  - Circle area is determined by average NHC absolute track error at that forecast hour such that a tropical cyclone should end up within the cone 2/3 of the time.
- Experimental cone draws ellipses instead of circle about each forecast point.
  - Ellipses are drawn based on both average NHC directional and speed errors such that a tropical cyclone should end up within the cone 9/10 of the time.
- Experimental cone will be made available **in addition** to the main cone of uncertainty.

12

AI Weather Models



reinforcing trough helping to kick it farther out to sea. The latest NHC track forecast is a little west in the first 24-60 h, but falls back near the previous forecast track thereafter. The track is roughly a blend of the reliable HFIP Corrected Consensus Approach (HCCA) and Google Deep Mind ensemble mean (GDMI).

Now that Melissa is intensifying again, it seems more clear that the earlier pause in intensification was a temporary oscillation, and the hurricane now appears poised to intensify more in the short-term. The latest NHC intensity forecast shows a little more intensification in 12 h, but continues to show a peak intensity of 140 kt, which is supported by HAFS-B which shows landfall of Melissa as a catastrophic Category 5 hurricane. The Google DeepMind ensemble members also continue to indicate this peak, with now 48/50 members reaching this lofty intensity. However, inner-core processes like