# Global Tropics Hazards And Benefits Outlook 8/16/2022

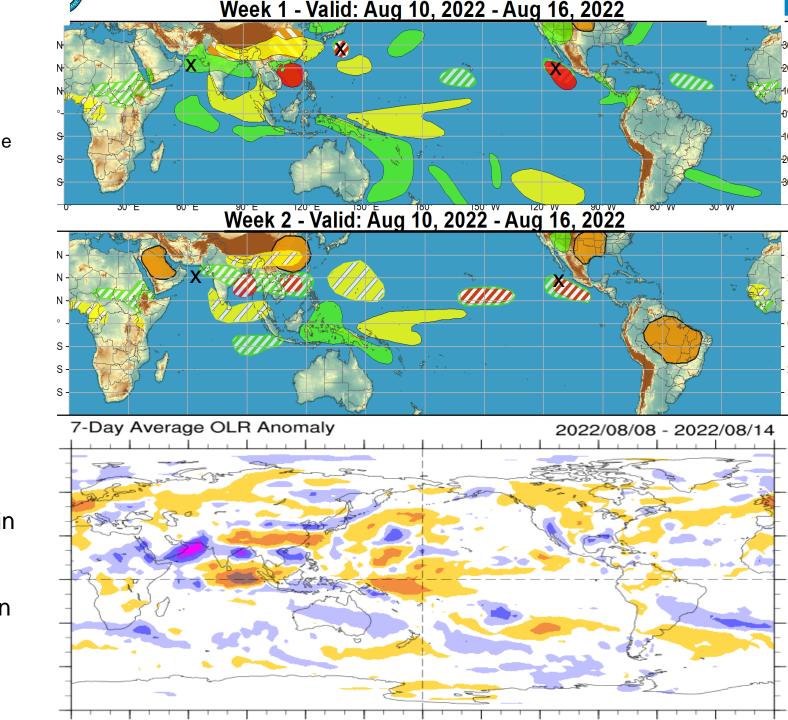
**Brad Pugh** 

## **Outline**

- 1. Review of Recent Conditions
- 2. Synopsis of Climate Modes
- 3. GTH Outlook and Forecast Discussion
- 4. Connections to U.S. Impacts

# Outlook Review

X= Tropical Cyclone



Cool shading More clouds/rain

Warm shading Less clouds/rain

# Synopsis of Climate Modes

ENSO: (August 11, 2022) next update on Thursday, September 8th

- ENSO Alert System Status: <u>La Niña Advisory</u>
- La Niña is favored to continue into the Northern Hemisphere Fall (86% chance), with probabilities decreasing to 60% during Dec-Jan-Feb 2022-23.

## MJO and other subseasonal tropical variability:

- The MJO remains weak and incoherent.
- Dynamical models agree that the MJO strengthens over Africa during week-1 and then propagates eastward across the Indian Ocean during week-2.
- This evolving pattern would increase chances for tropical cyclone (TC) development across the Main Development Region of the Atlantic during late August.
- Unlike previous weeks, TC formation is less likely across the East Pacific during the next two weeks.



#### Global Tropics Hazards and Benefits Outlook - Climate Prediction Center











Confidence
High Moderate

Forecaster: Pugh

**Tropical Cyclone Formation**Development of a tropical cyclone (tropical depression - TD, or greater strength).

7-day mean temperatures in the upper third of the historical range.

Below-normal temperatures 7-day mean temperatures in the lower third of the historical range.

Product is updated once per week, except from 6/1 - 11/30 for the region from 120E to 0, 0 to 40N. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.



**Above-normal temperatures** 













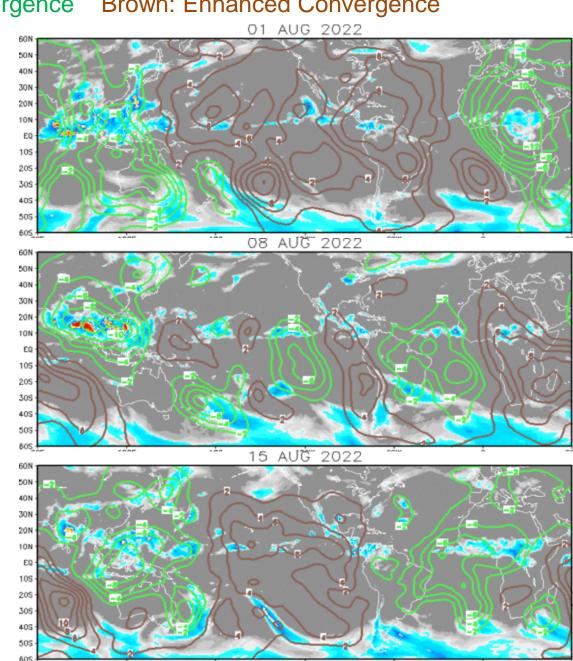
### IR Satellite & 200-hpa Velocity Potential Anomalies

Green: Enhanced Divergence Brown: Enhanced Convergence

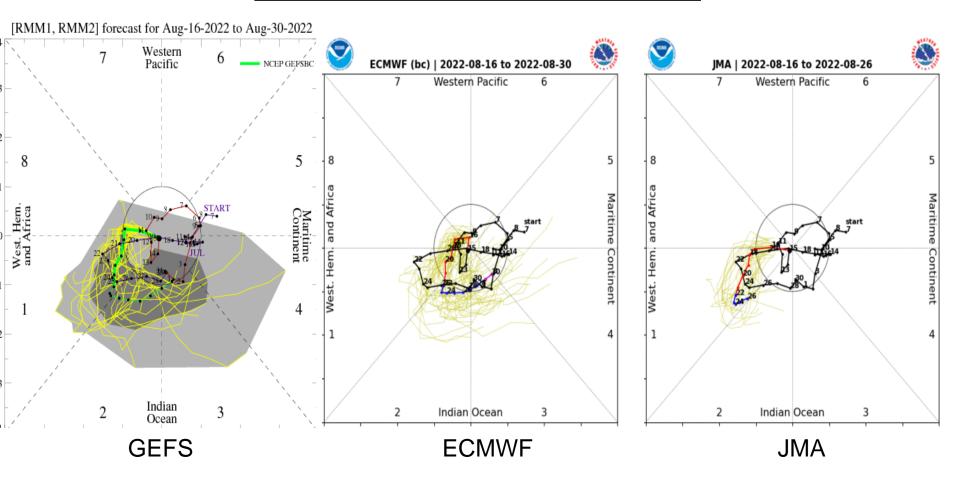
Envelopes of enhanced and suppressed conditions continued to shift eastward by early August.

Pattern has become much less defined with increasing anomalous divergence aloft over the Pacific and Atlantic.
Enhanced convection remains entrenched over the IO

La Nina continues to dominate over the Pacific and Maritime Continent. A Kelvin Wave has recently led to upper-level divergence across Africa.



## MJO Observation/Forecast



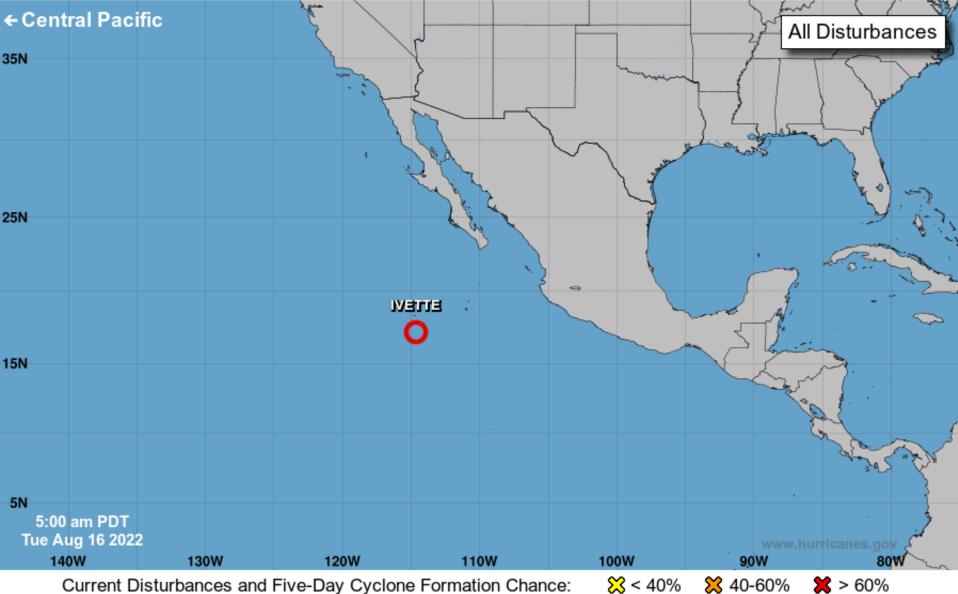
Good model agreement for an increase in amplitude and eastward propagation across Africa and the Indian Ocean.



## Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida





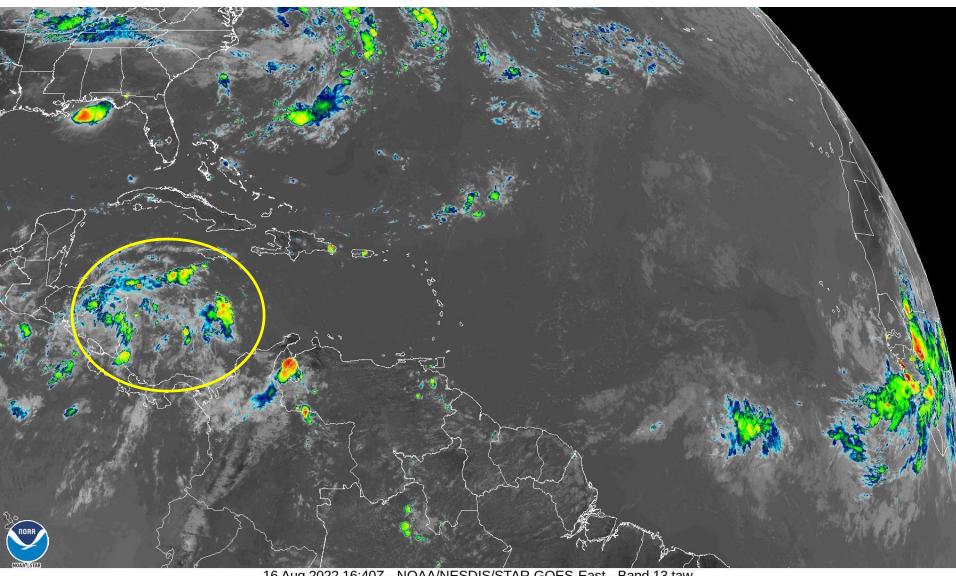
Post-Tropical Cyclone or Remnants

O Depression

Storm

Hurricane

Tropical or Sub-Tropical Cyclone:



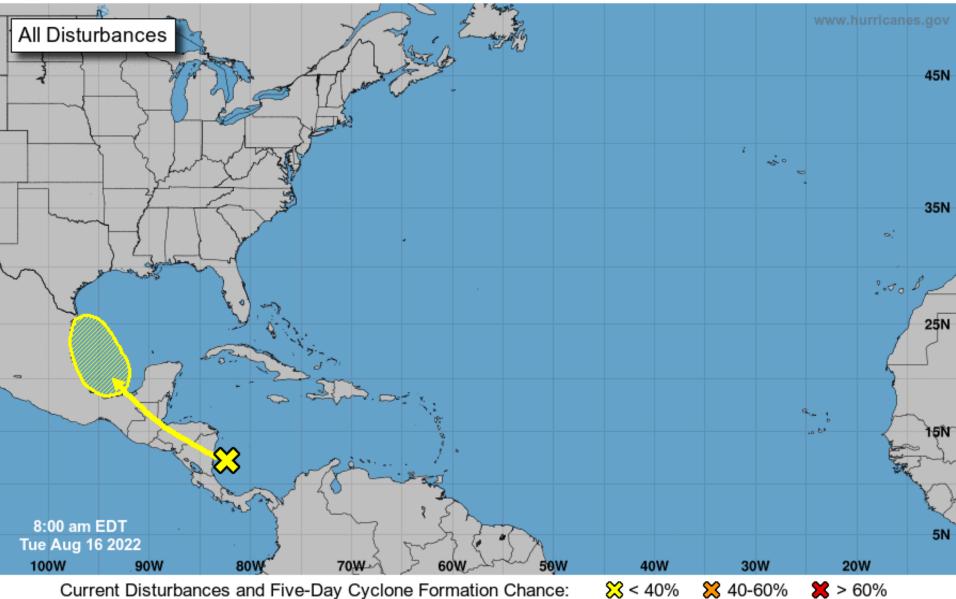
16 Aug 2022 16:40Z - NOAA/NESDIS/STAR GOES-East - Band 13 taw



## Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida





O Depression

Post-Tropical Cyclone or Remnants

Tropical or Sub-Tropical Cyclone:

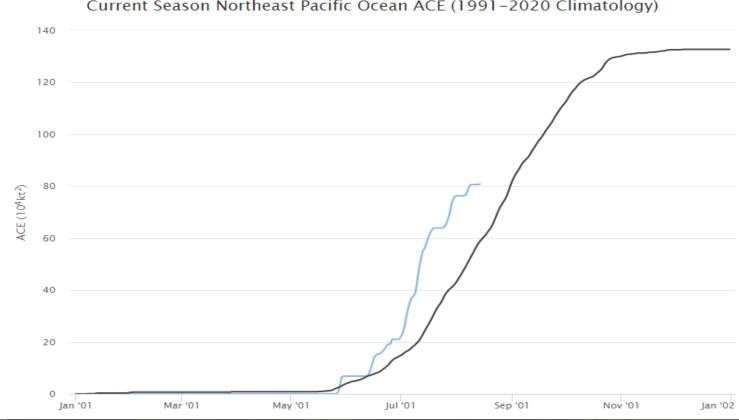
Storm

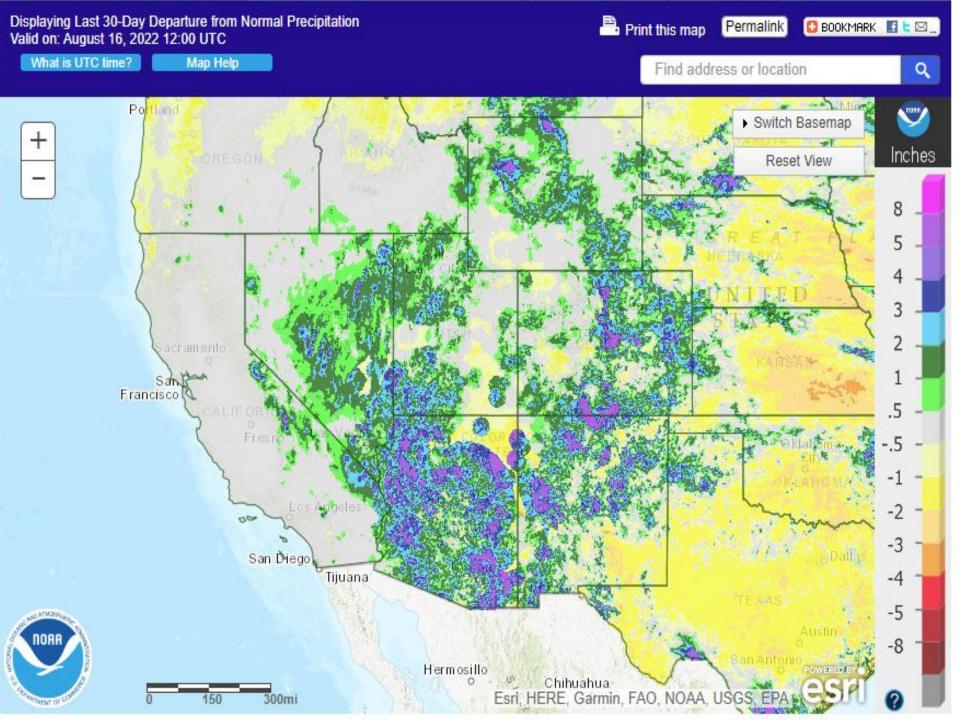
Hurricane

Year	Storm#	Name	Dates TC Active	Max Wind (kts)	MSLP (mb)	Named Storm Days	<u>Hurricane</u> <u>Days</u>	<u>Major Hurricane</u> <u>Days</u>	Accumulated Cyclone Energy
2022	1	<u>AGATHA</u>	5/28-5/31	95	964	3.25	2.00	0.00	6.8
2022	2	BLAS	6/14-6/20	75	980	6.00	2.75	0.00	8.4
2022	3	CELIA	6/17-6/28	55	993	7.25	0.00	0.00	5.9
2022	4	BONNIE	7/1-7/9	100	964	8.00	4.75	0.50	16.5
2022	5	DARBY	7/9-7/17	120	954	7.50	4.50	1.75	19.0
2022	6	ESTELLE	7/16-7/21	75	984	5.50	2.25	0.00	7.6
2022	7	FRANK	7/26-8/2	80	975	7.25	2.25	0.00	9.4
2022	8	GEORGETTE	7/27-7/31	50	997	4.00	0.00	0.00	3.0
2022	9	HOWARD	8/7-8/10	75	983	3.25	1.25	0.00	4.4
2022	10	<u>IVETTE</u>	8/15-8/15	35	1005	0.25	0.00	0.00	0.1

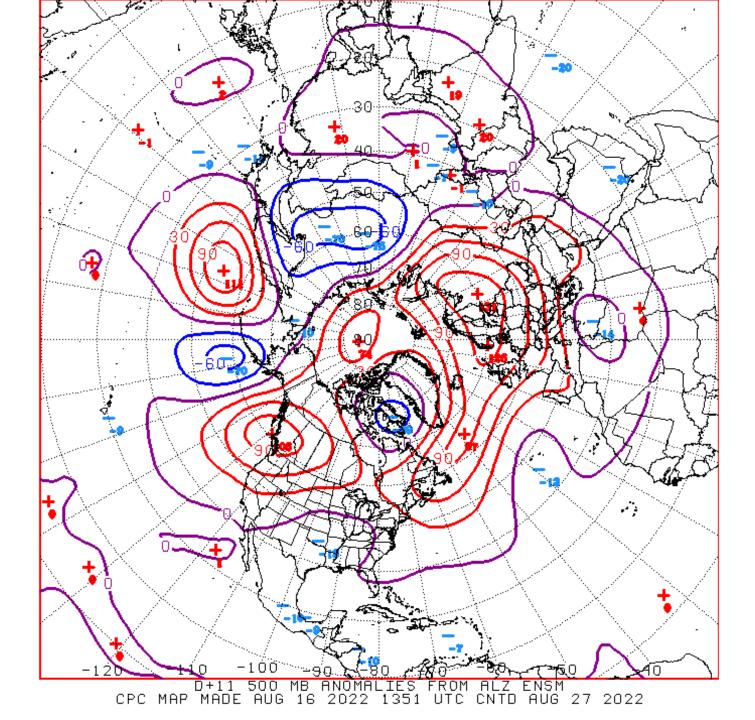
All columns that are underlined are sortable.

#### Current Season Northeast Pacific Ocean ACE (1991-2020 Climatology)

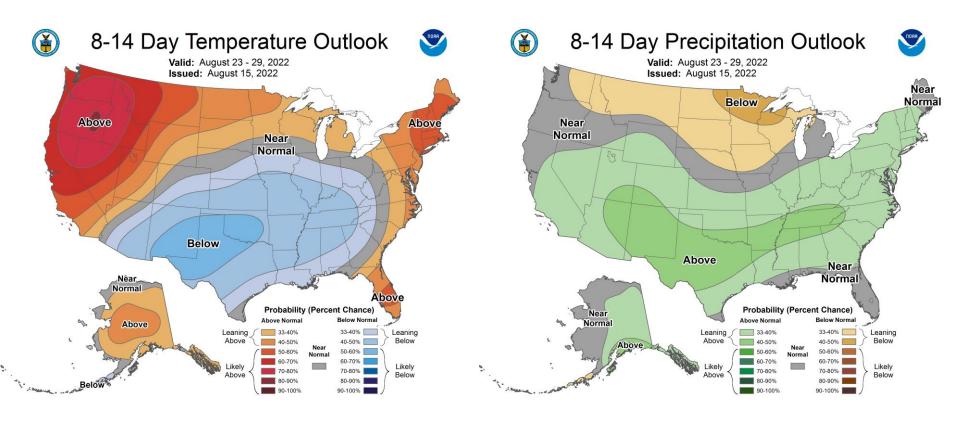




## Connections to U.S. Impacts



## Week 2 - Temperature and Precipitation





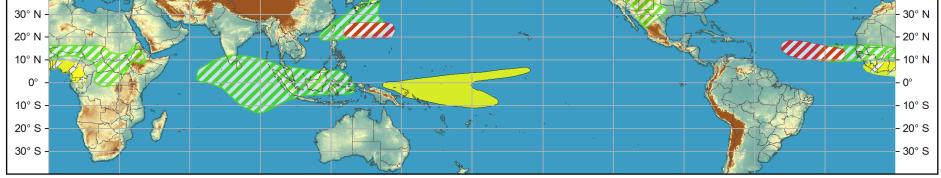
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Confidence
High Moderate

Produced: 08/16/2022

Forecaster: Pugh

Tropical Cyclone Formation Development of a tropical cyclone (tropical depression - TD, or greater strength).

Weekly total rainfall in the lower third of the historical range.

7-day mean temperatures in the upper third of the historical range.

7-day mean temperatures in the lower third of the historical range.

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Below-average rainfall

**Above-normal temperatures** 

**Below-normal temperatures** 









