



Weeks 2-3 Global Tropics Hazards Outlook

8/1/2023

Brad Pugh

NWS / NCEP / Climate Prediction Center

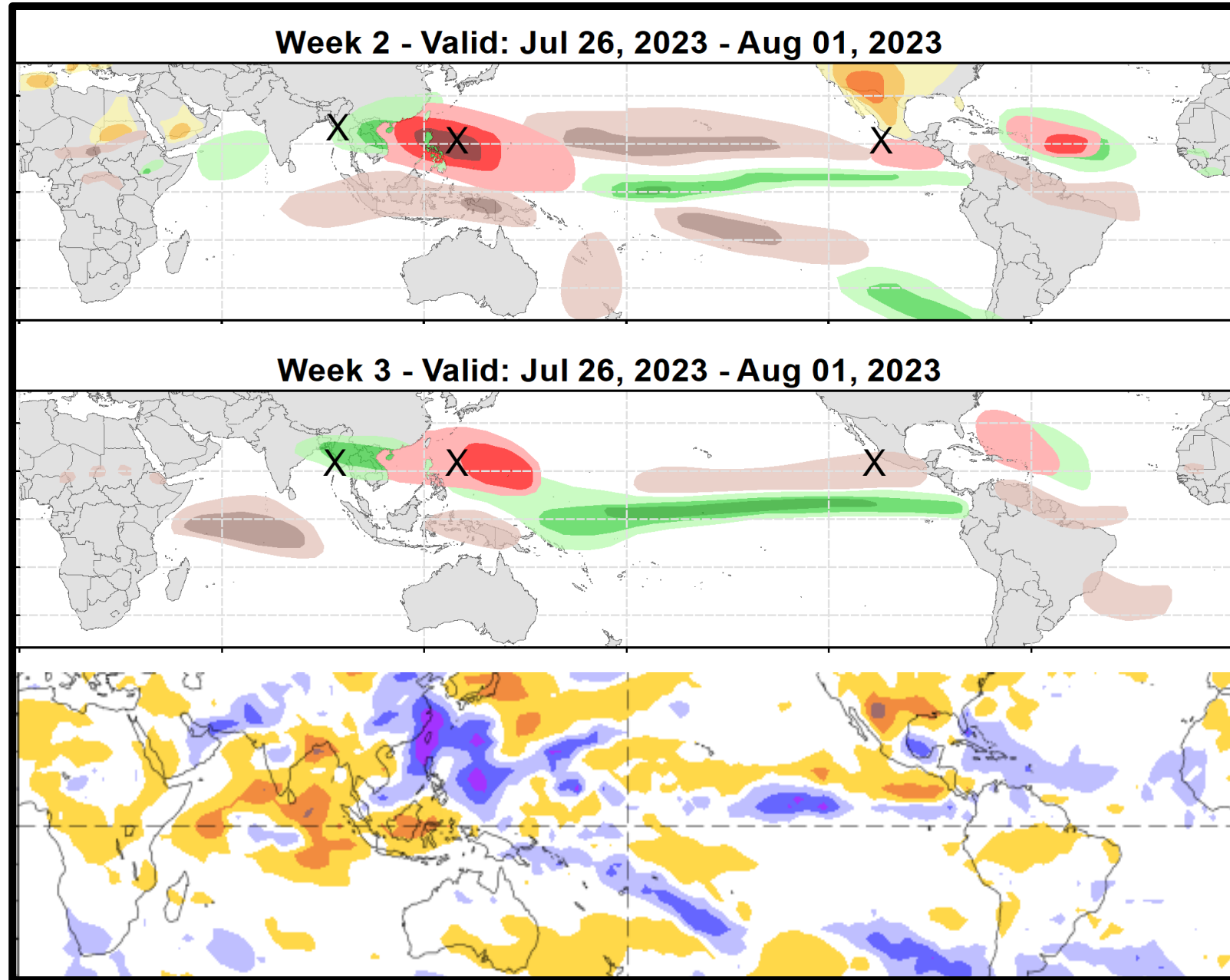
Outlook Review: TC development & anomalous precipitation during the past week

Typhoon Doksuri made landfall in Fujian province in eastern China on July 28.

July 28: Typhoon Khanun formed in the West Pacific

August 1: Tropical Storm Dora developed in the East Pacific

August 1: TC in the northeast Bay of Bengal



Synopsis of Climate Modes:

ENSO: (July 13, 2023 Update) *next update on Thursday, Aug 10th*

- ENSO Alert System Status: [El Niño Advisory](#)
- There is a greater than 90% chance that El Niño will continue through the Northern Hemisphere winter.

MJO and other subseasonal tropical variability:

- MJO has weakened although there is a remnant signal observed in a couple of diagnostic tools.
- Dynamical model forecasts either maintain a weak MJO or exhibit large spread among the ensemble members.
- Given the large uncertainty on the MJO evolution, forecast confidence is tempered for weeks 2 and 3.

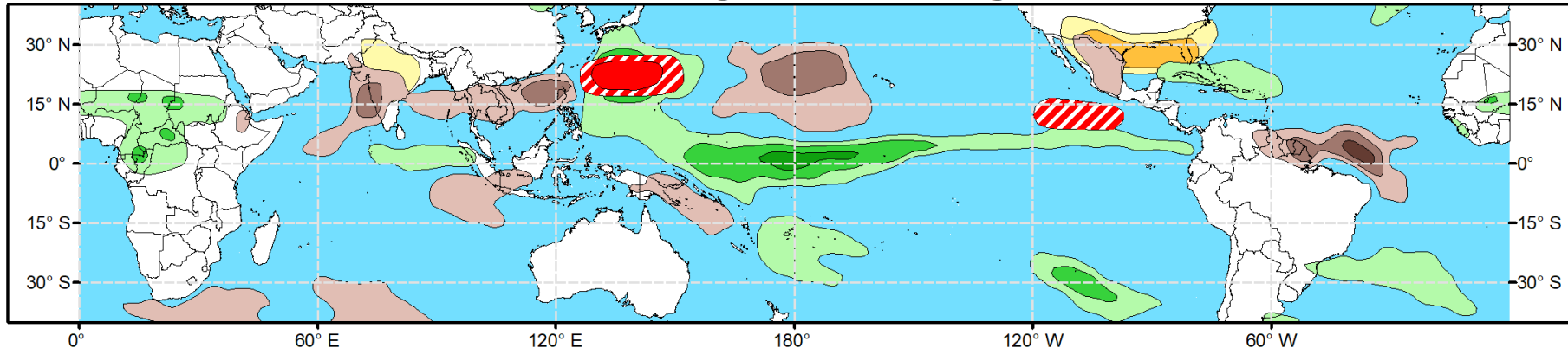


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Climate Prediction Center

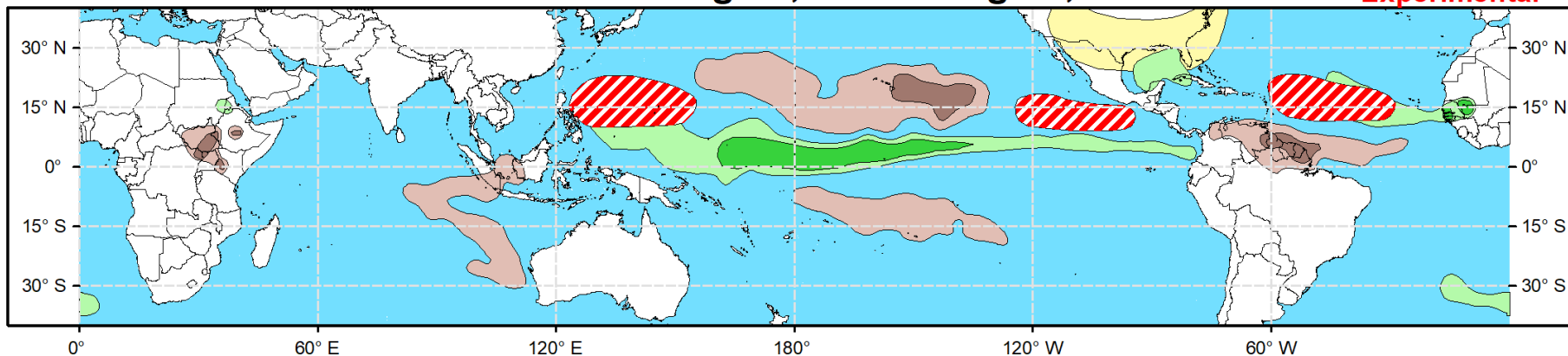


Week 2 - Valid: Aug 09, 2023 - Aug 15, 2023



Week 3 - Valid: Aug 16, 2023 - Aug 22, 2023

**** Experimental ****



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Formation Probability**



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Rainfall Probability**



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*Weekly total rainfall in the
Upper third of the historical range*

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Lower third of the historical range*

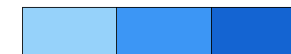
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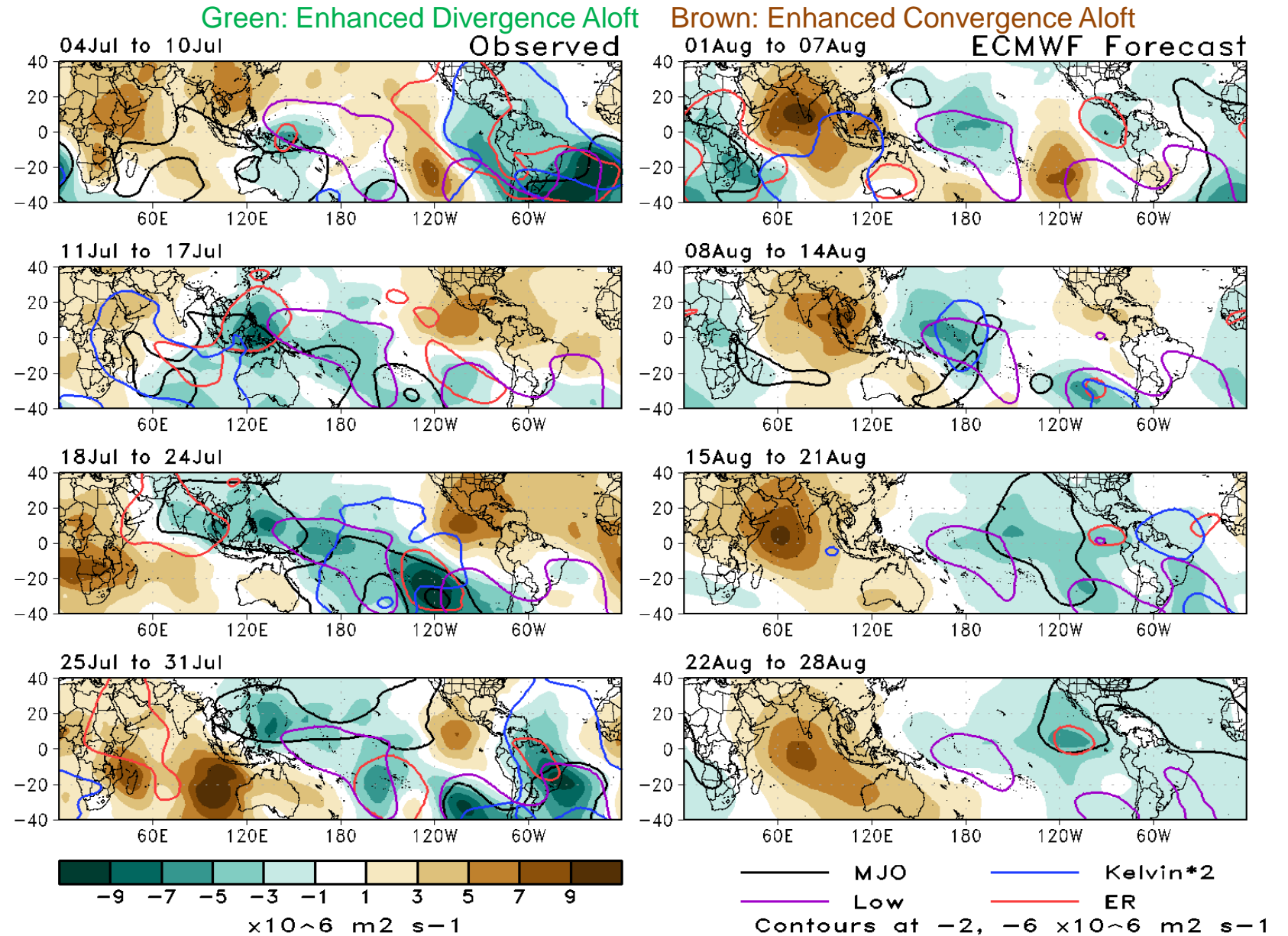
Issued: 08/01/2023

Forecaster: Pugh

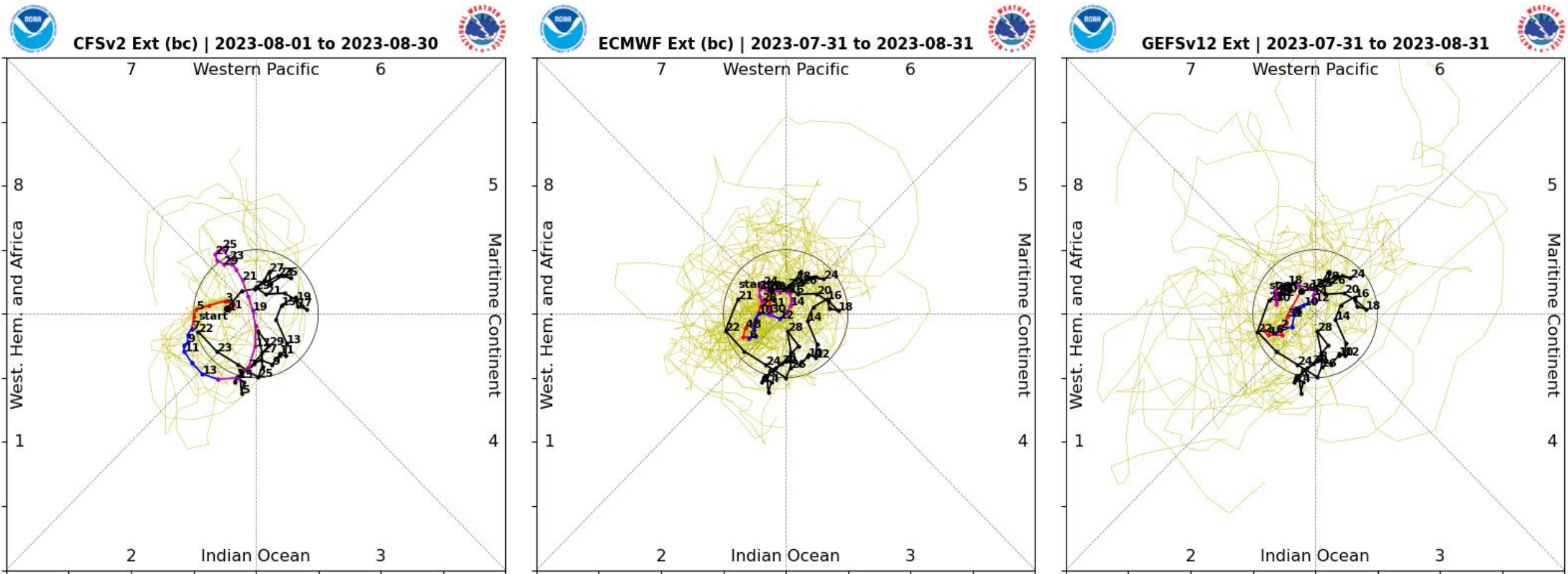
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200-hPa Velocity Potential Anomaly Maps:

- Wave-1 structure during mid July became less coherent.
- El Nino (denoted by the purple contour) is expected to have the greatest influence.



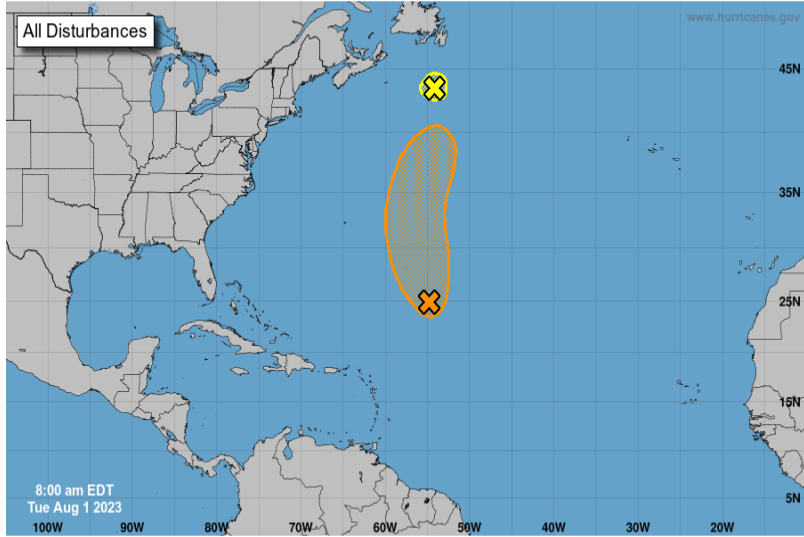
RMM Index Observations & Forecasts:




- The CFS ensemble mean is most bullish with an increasing amplitude as the MJO propagates eastward to the Indian Ocean by mid-August.
- However, ensemble spread is large among the ECMWF and GFS.

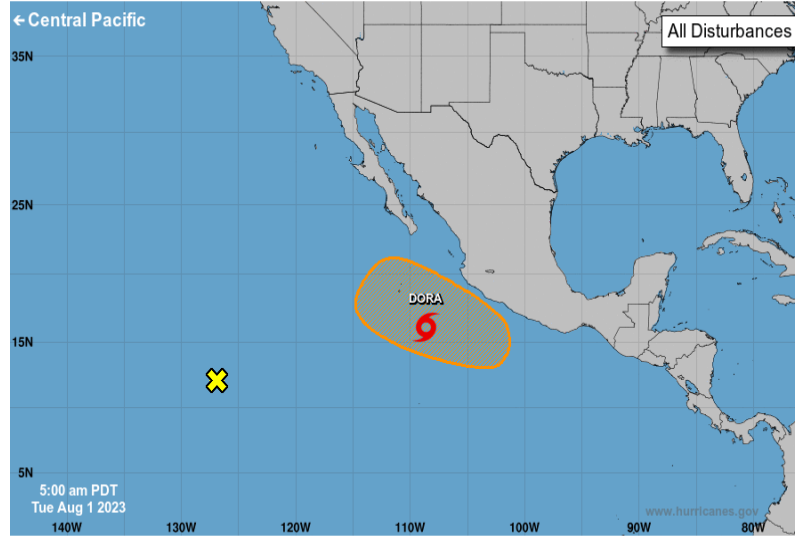
Tropical Cyclone Monitoring/Forecast: NHC


Seven-Day Graphical Tropical Weather Outlook
 National Hurricane Center Miami, Florida




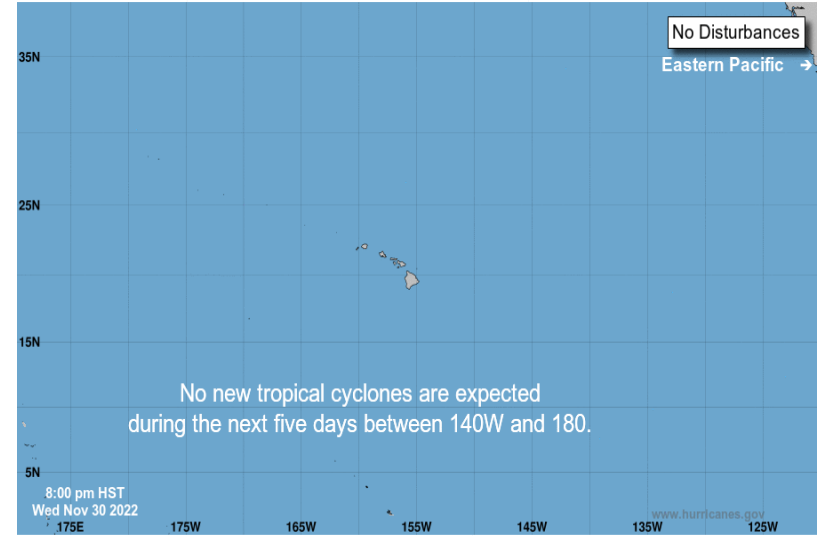
Current Disturbances and Seven-Day Cyclone Formation Chance:  < 40%  40-60%  > 60%
 Tropical or Sub-Tropical Cyclone:  Depression  Storm  Hurricane
 Post-Tropical Cyclone or Remnants






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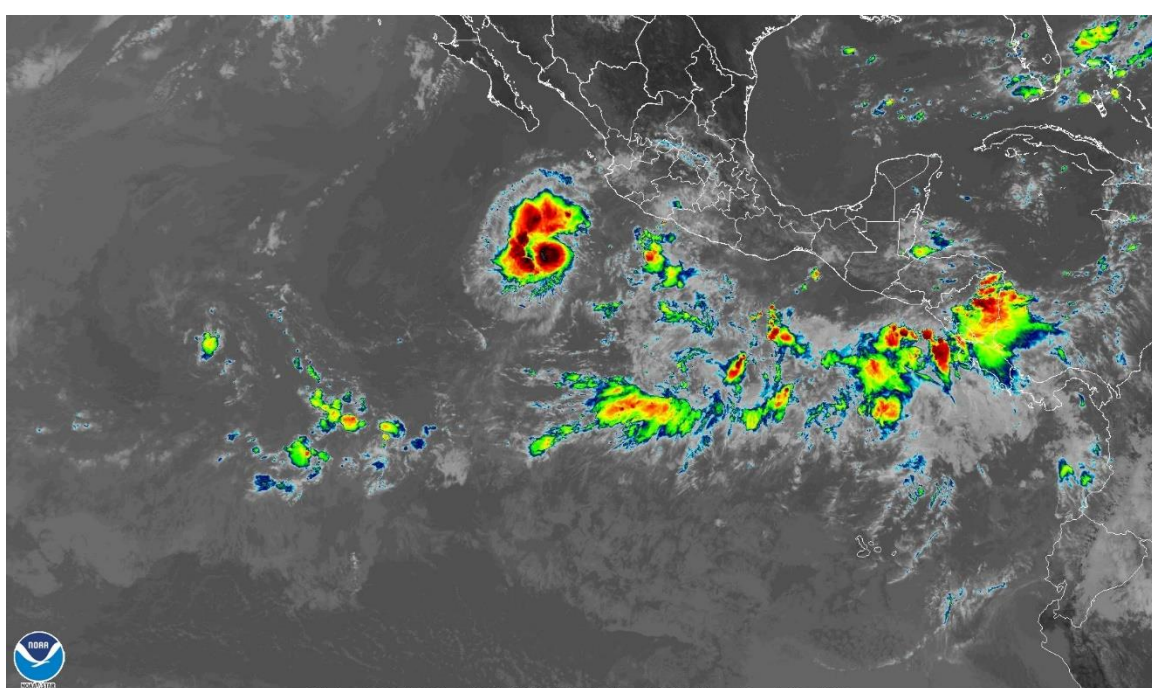


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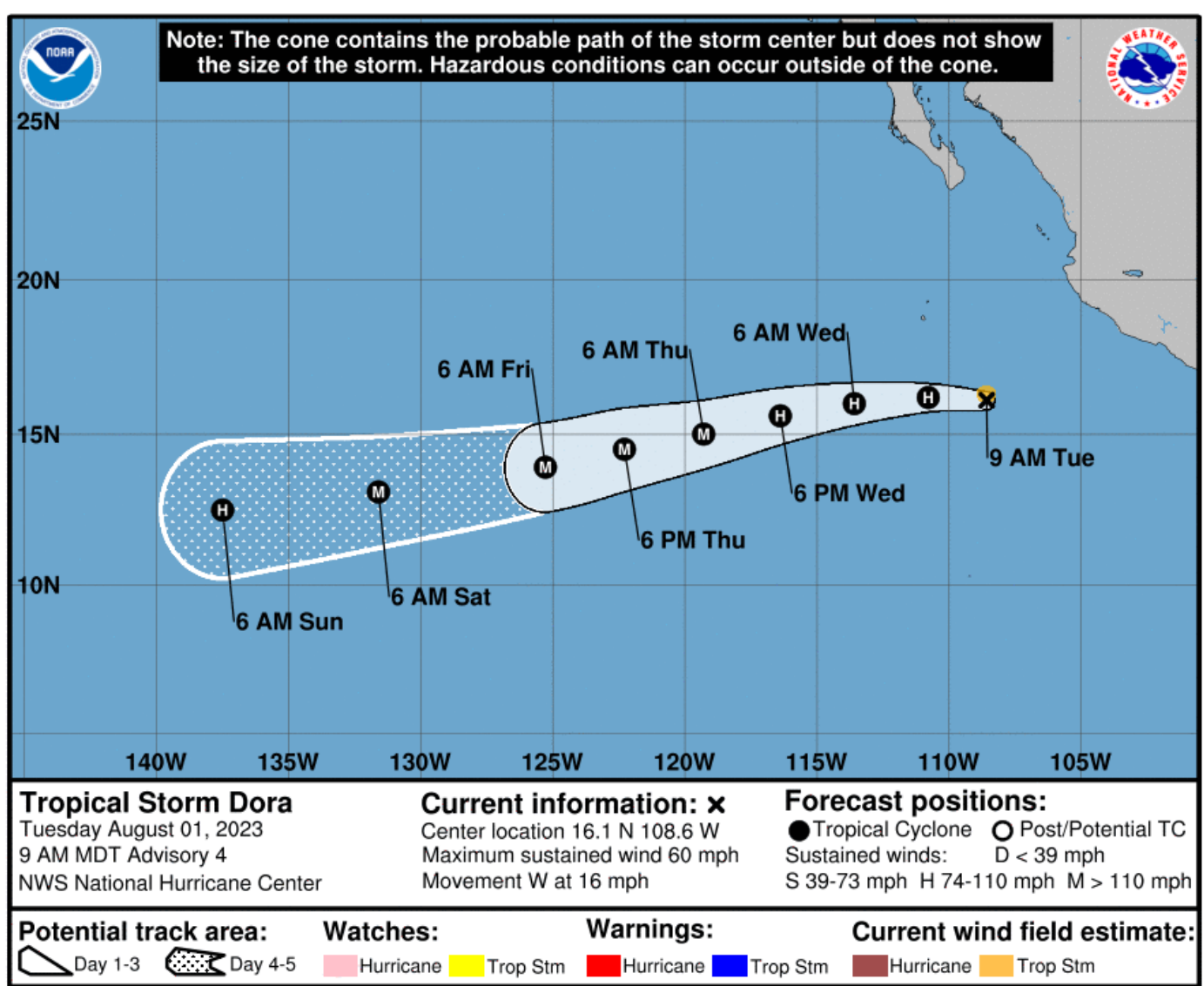

Five-Day Graphical Tropical Weather Outlook
 Central Pacific Hurricane Center Honolulu, Hawaii



Current Disturbances and Five-Day Cyclone Formation Chance:  < 40%  40-60%  > 60%
 Tropical or Sub-Tropical Cyclone:  Depression  Storm  Hurricane
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01 Aug 2023 16:30Z - NOAA/NESDIS/STAR - GOES-East - Band 13 - EEP

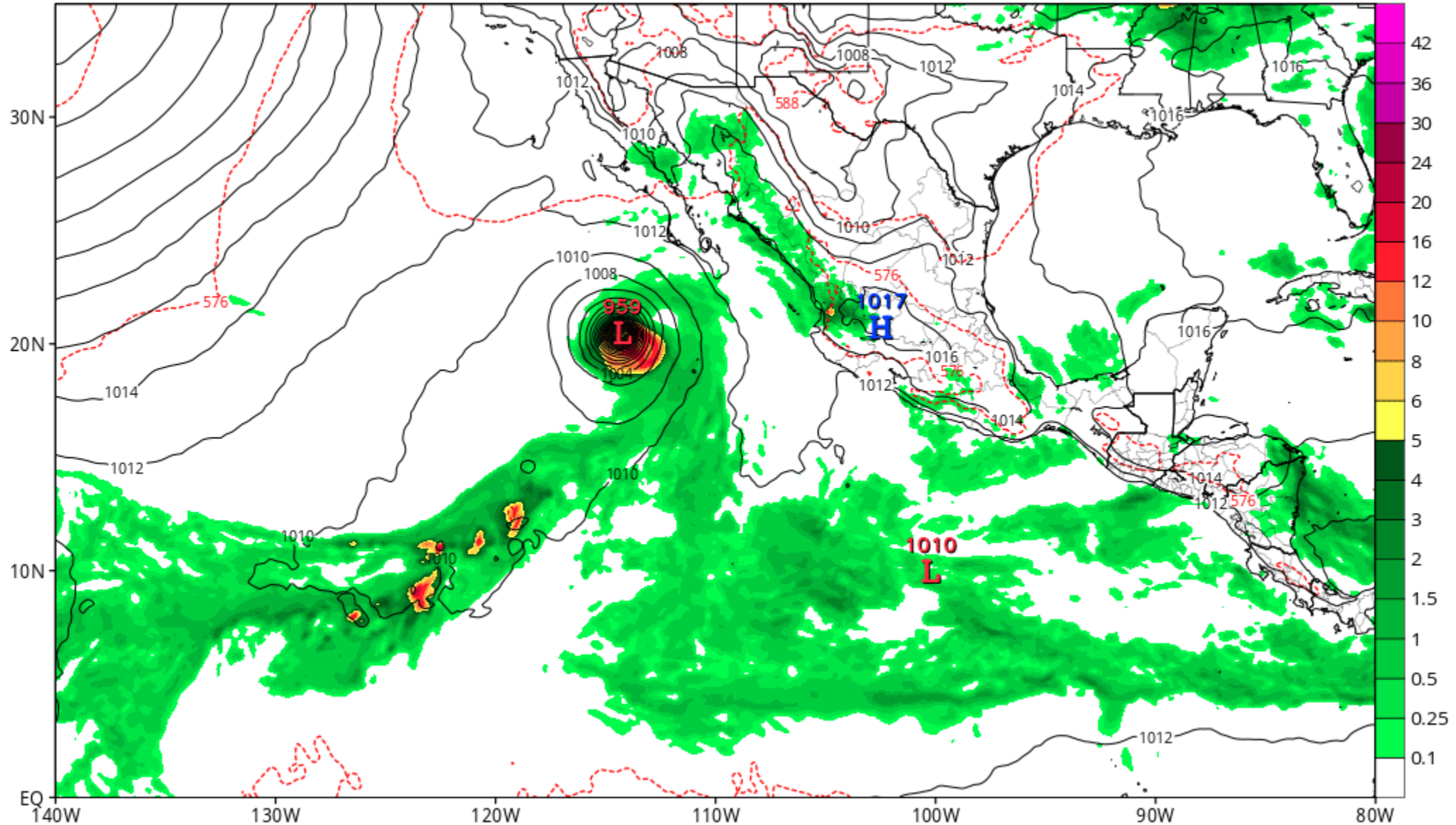


Next potential TC in the East Pacific...

GFS 6-hour Averaged Precip Rate (mm/hr), MSLP (hPa) & 1000-500mb Thickness (dam)

Init: 12z Aug 01 2023 Forecast Hour: [144] valid at 12z Mon, Aug 07 2023

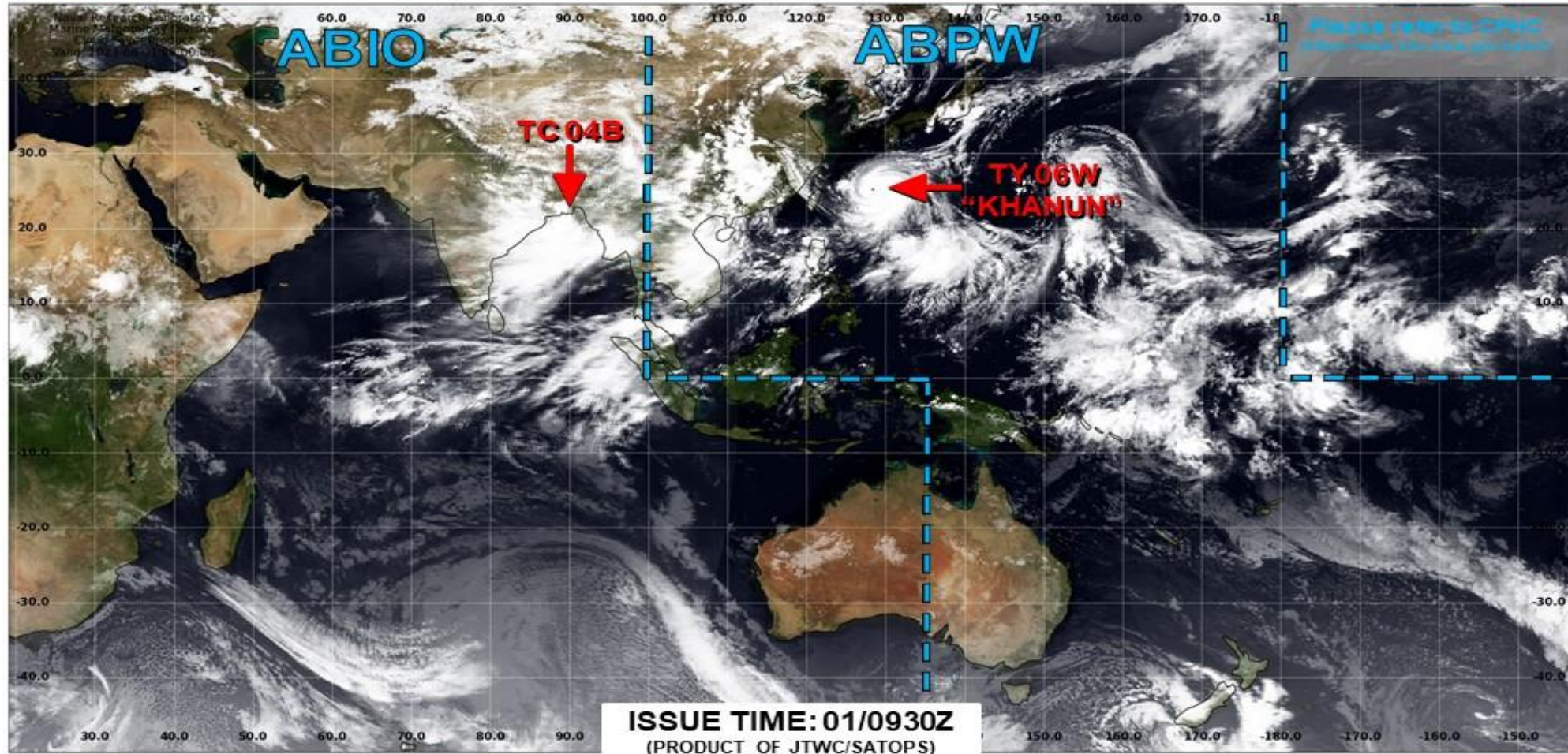
TROPICALTIDBITS.COM



Tropical Cyclone Monitoring/Forecast: JTWC



JOINT TYPHOON WARNING CENTER



TC development unlikely within 24 hours



TC development likely, but expected to occur beyond 24 hours

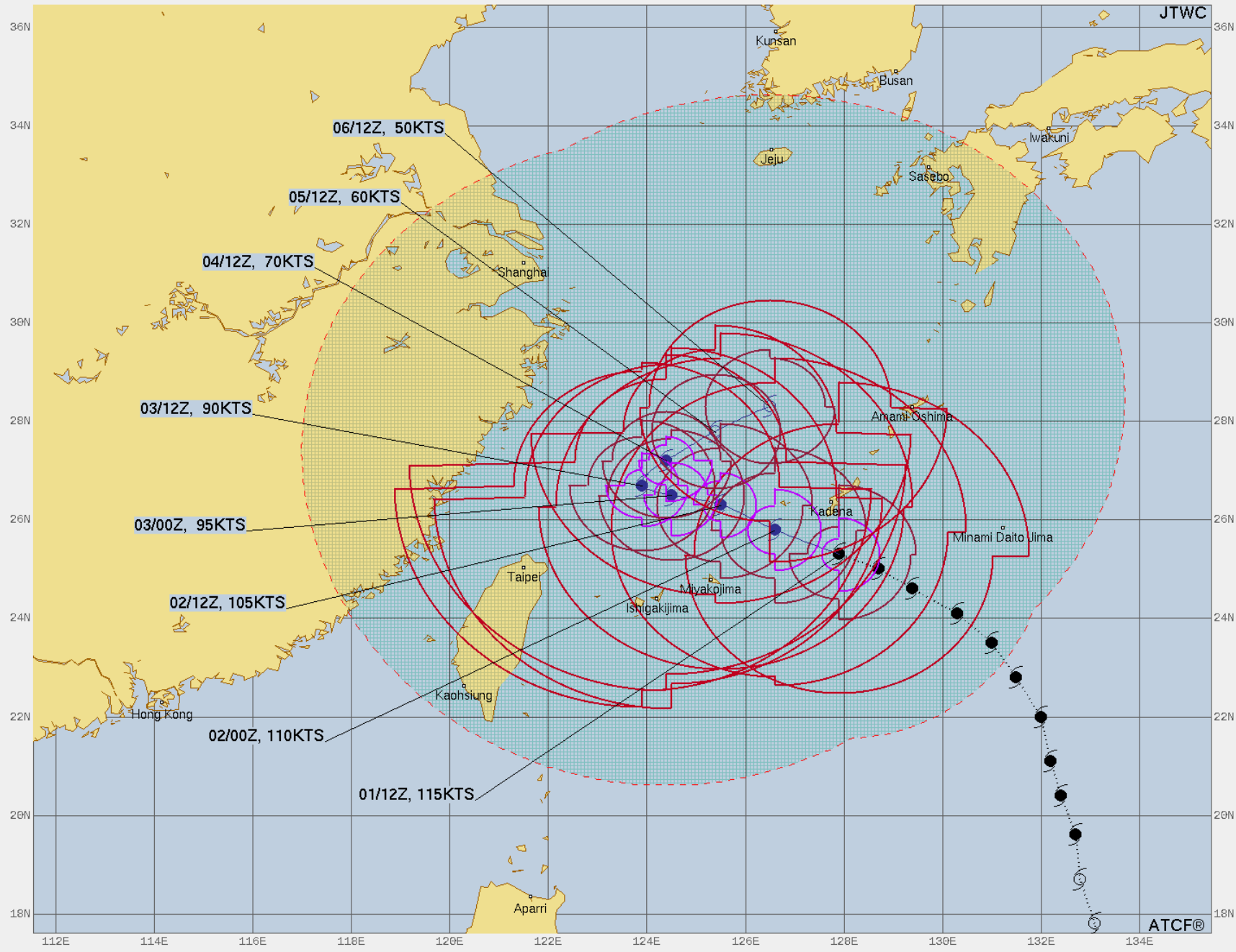


TC development likely within 24 hours (Reference TCFA)



Monitoring for potential transition to TC. Invest label color denotes tropical transition probability





TYPHOON 06W (KHANUN) WARNING #22
 WTPN32 PGTW 011500
 011200Z POSIT: NEAR 25.3N 127.9E
 MOVING 295 DEGREES TRUE AT 08 KNOTS
 MAXIMUM SIGNIFICANT WAVE HEIGHT: 47 FEET
 01/12Z, WINDS 115 KTS, GUSTS TO 140 KTS
 02/00Z, WINDS 110 KTS, GUSTS TO 135 KTS
 02/12Z, WINDS 105 KTS, GUSTS TO 130 KTS
 03/00Z, WINDS 095 KTS, GUSTS TO 115 KTS
 03/12Z, WINDS 090 KTS, GUSTS TO 110 KTS
 04/12Z, WINDS 070 KTS, GUSTS TO 085 KTS
 05/12Z, WINDS 060 KTS, GUSTS TO 075 KTS
 06/12Z, WINDS 050 KTS, GUSTS TO 065 KTS

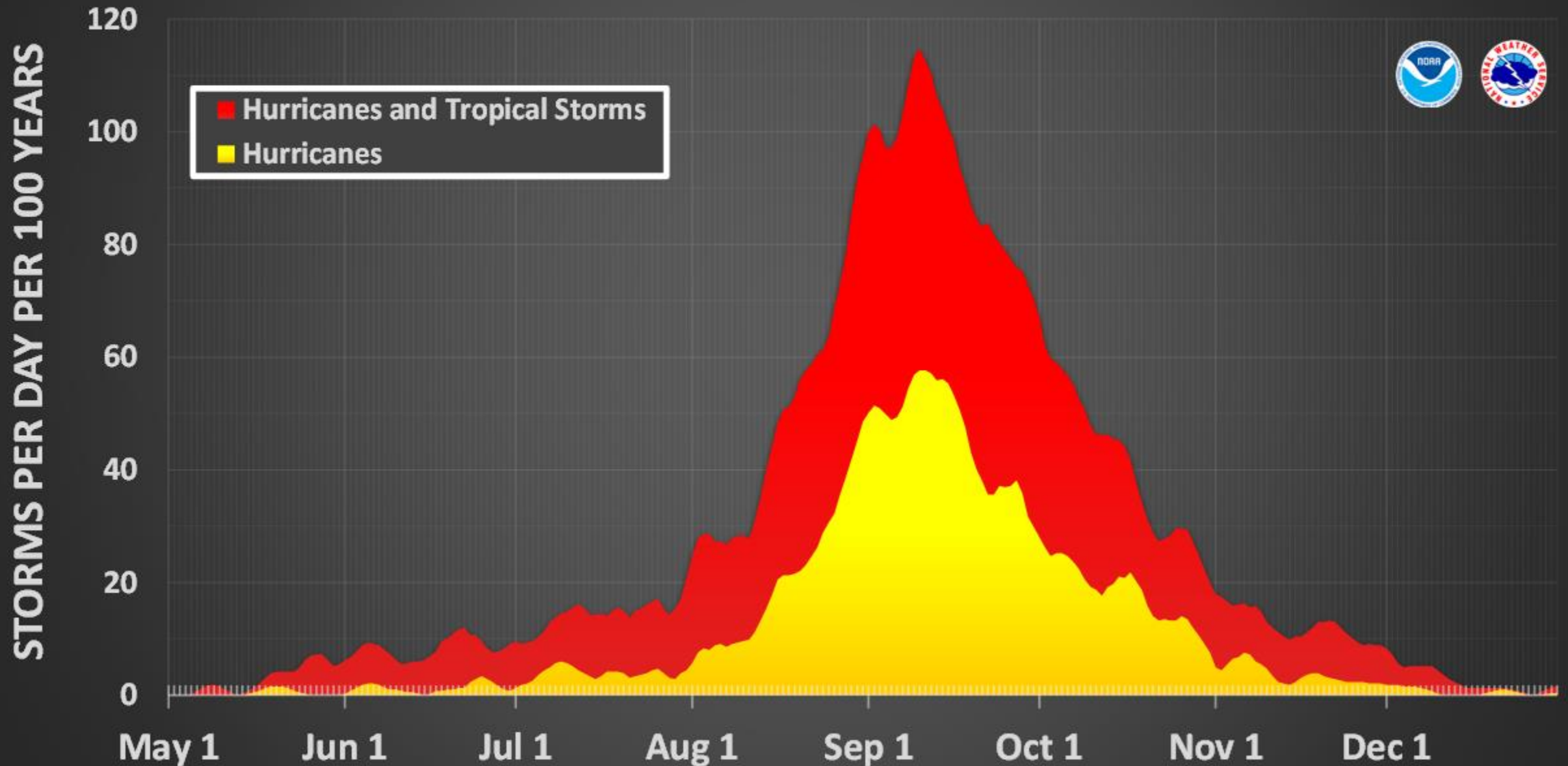
CPA TO:	NM	DTG
WHITE_BEACH	56	08/01/16Z
KADENA_AB	60	08/01/17Z
KAHSTIUNG	314	08/03/11Z
TAIPEI	161	08/03/12Z
SHANGHAI	283	08/04/20Z
CAMP_KENGUN	353	08/06/12Z
KANOYA	295	08/06/12Z
MOKPO	390	08/06/12Z
SASEBO	337	08/06/12Z
YEOSU	395	08/06/12Z

BEARING AND DISTANCE	DIR	DIST (NM)	TAU (HRS)
KADENA_AB	175	66	0
TAIPEI	087	348	0
OKIDAITO_JIMA	286	186	0
MINAMIDAITO_JIMA	261	181	0
KANOYA	204	399	0
WHITE_BEACH	180	60	0

- LESS THAN 34 KNOTS
- 34-63 KNOTS
- MORE THAN 63 KNOTS
- FORECAST CYCLONE TRACK
- PAST CYCLONE TRACK
- DENOTES 34 KNOT WIND DANGER AREA/USN SHIP AVOIDANCE AREA
- FORECAST 34/50/64 KNOT WIND RADII (WINDS VALID OVER OPEN OCEAN ONLY)

Atlantic Hurricane and Tropical Storm Activity

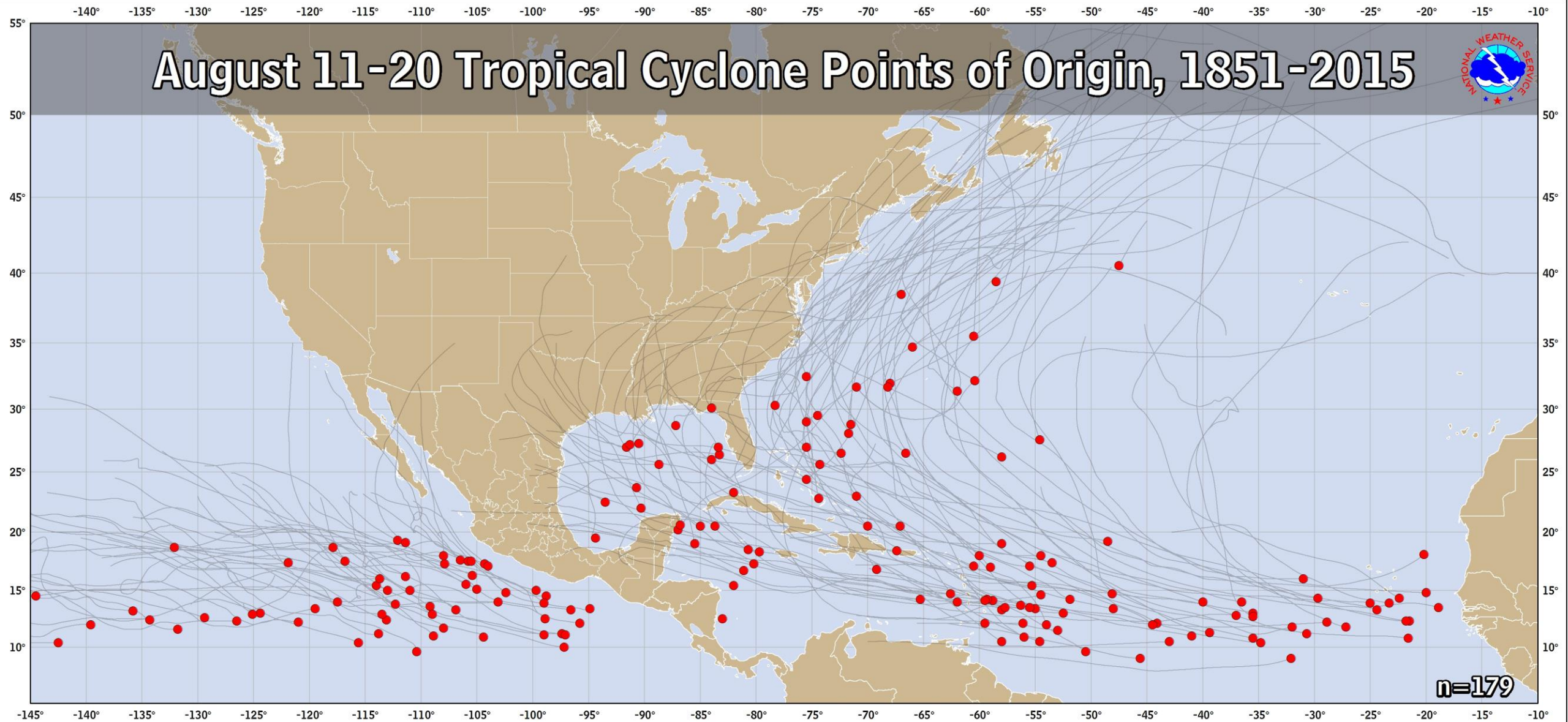
Based on Data from 1944 to 2020



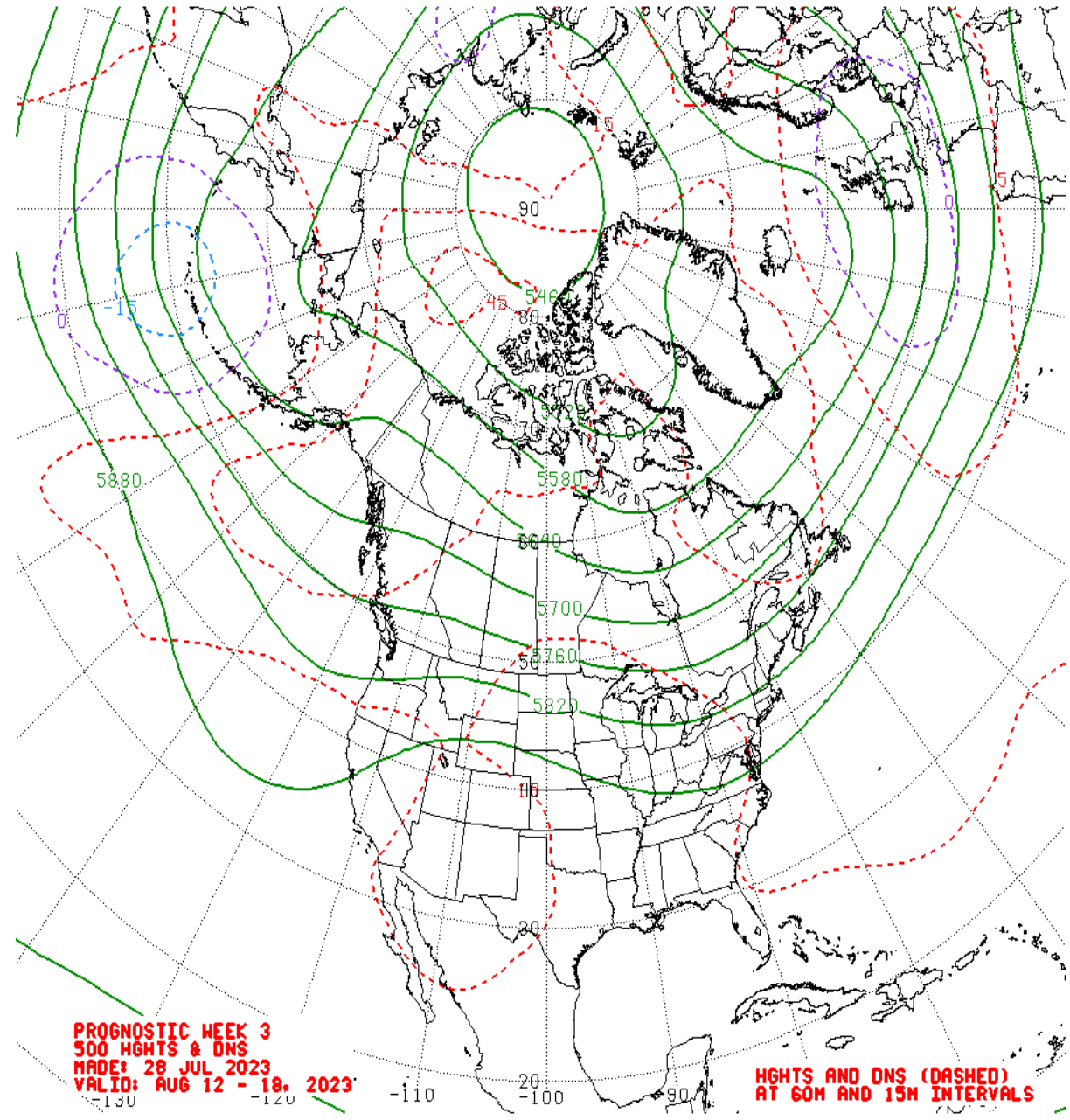
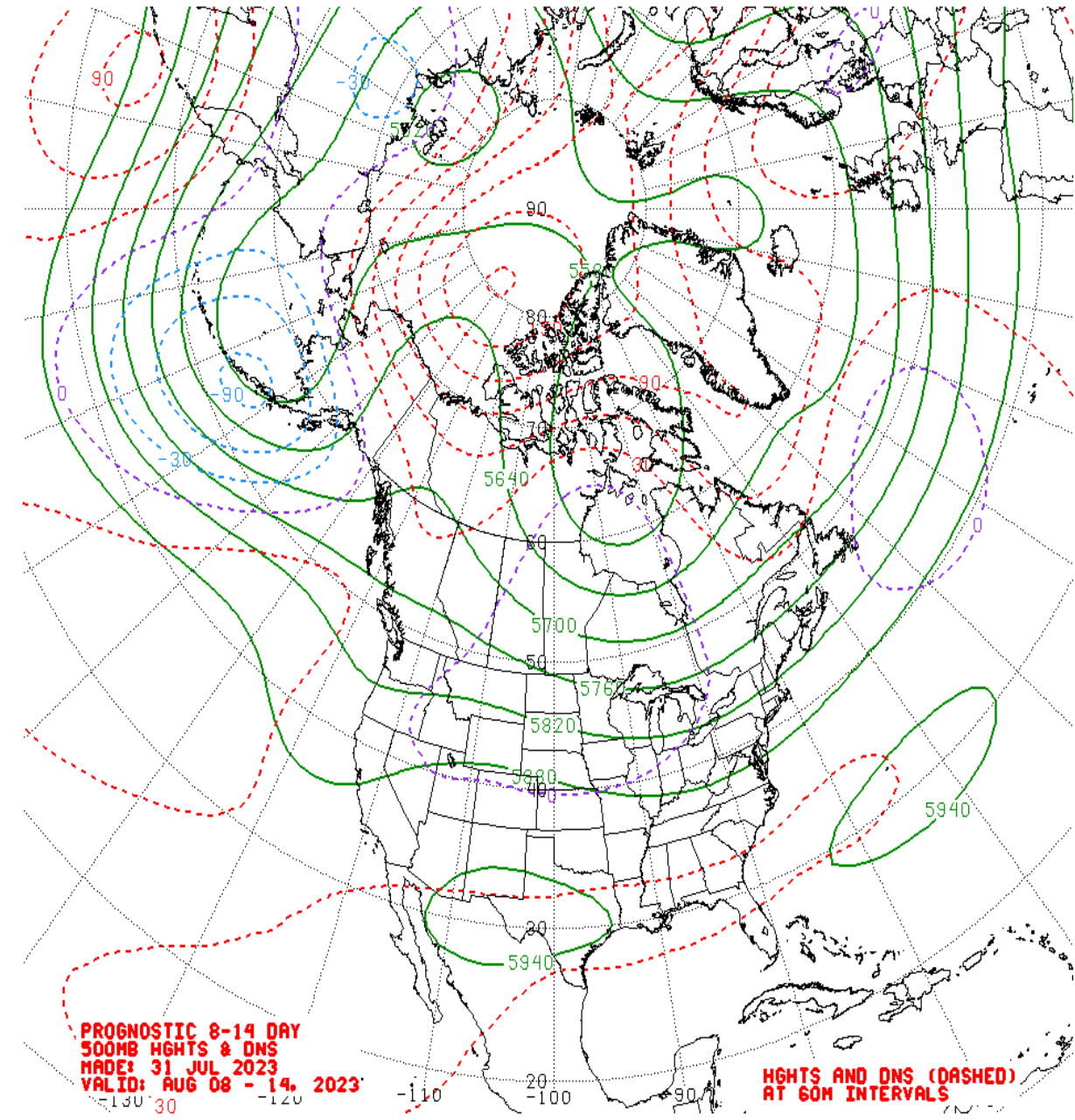
August 11-20 Tropical Cyclone Points of Origin, 1851-2015



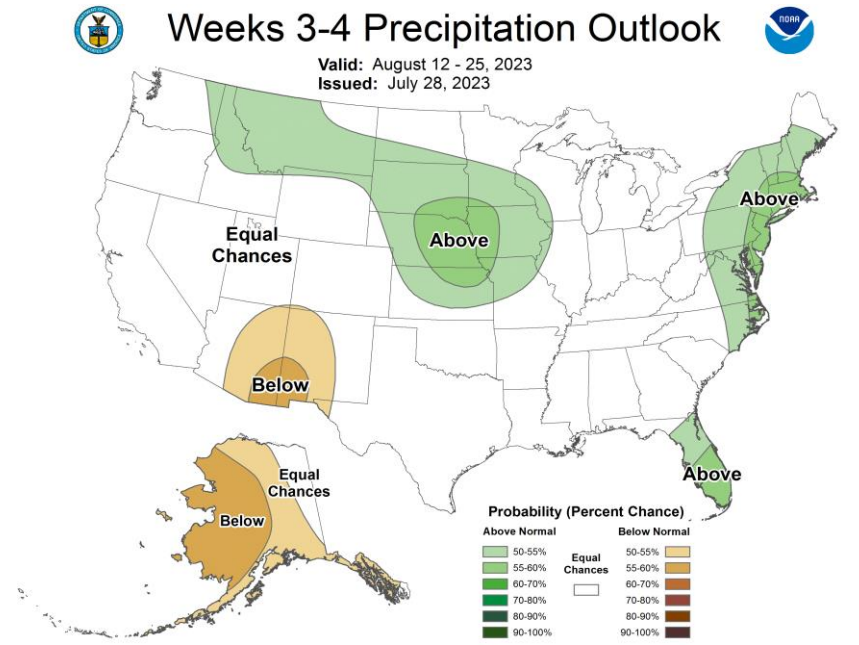
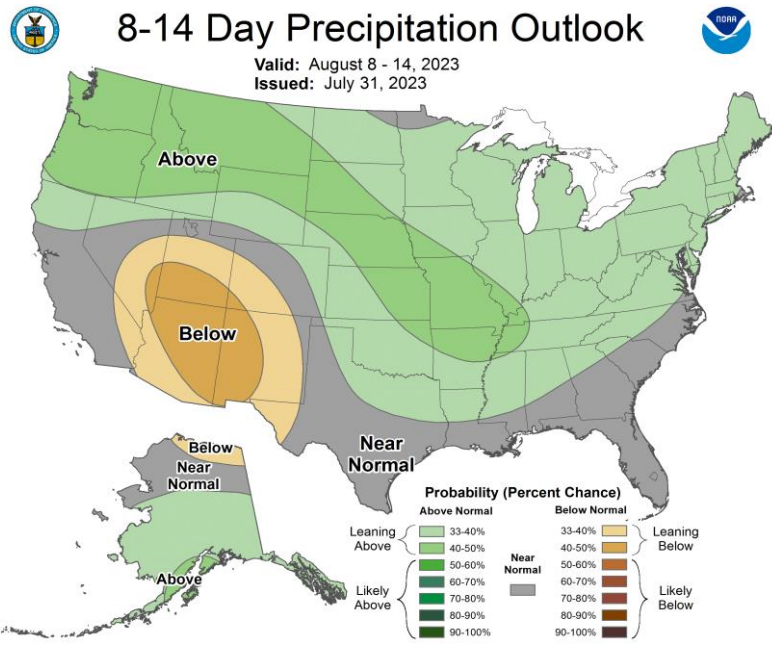
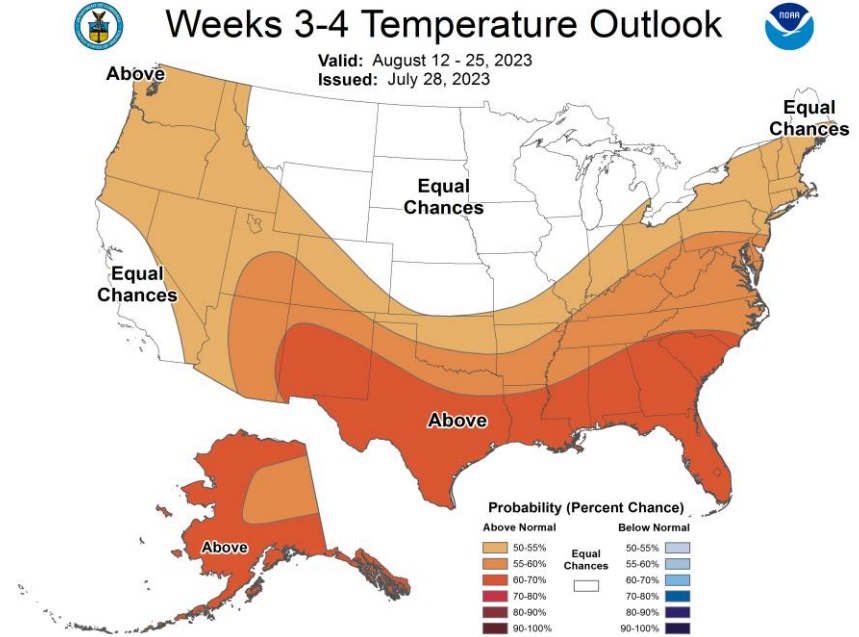
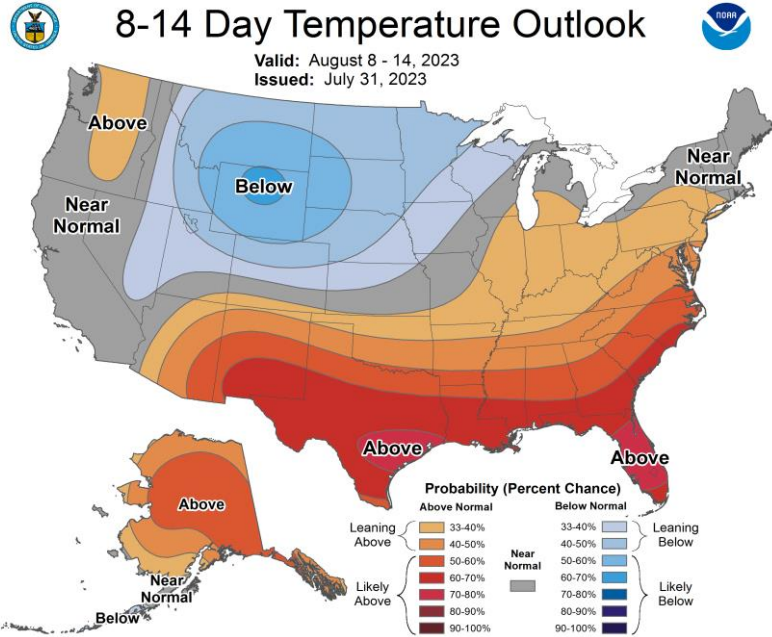
n=179



Mean 500-hPa Height Anomaly Forecasts:



Official Temperature & Precipitation Forecasts:



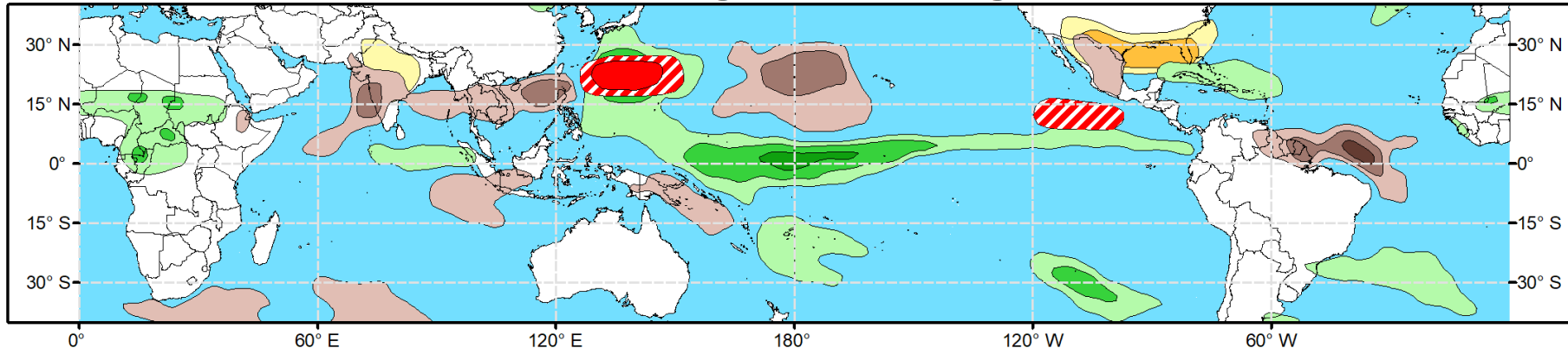


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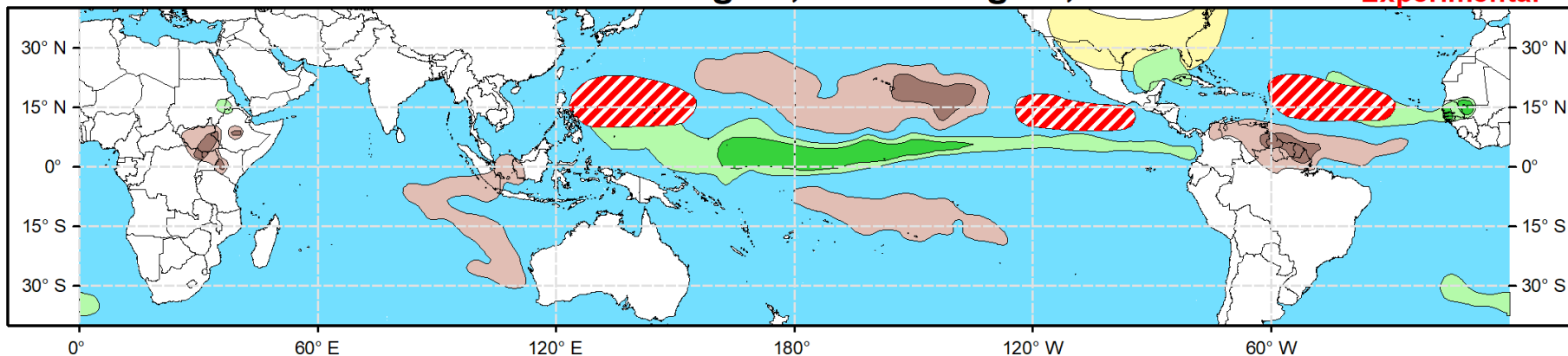


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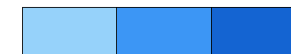
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