

Global Tropics Hazards And Benefits Outlook

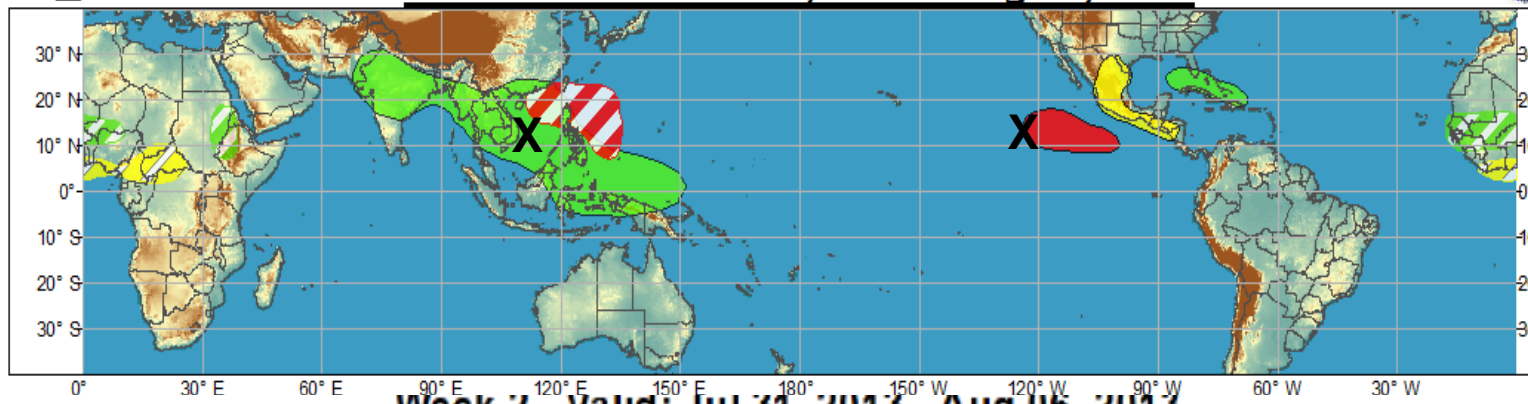
August 6, 2013

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

Week 1 - Valid: Jul 31, 2013 - Aug 06, 2013

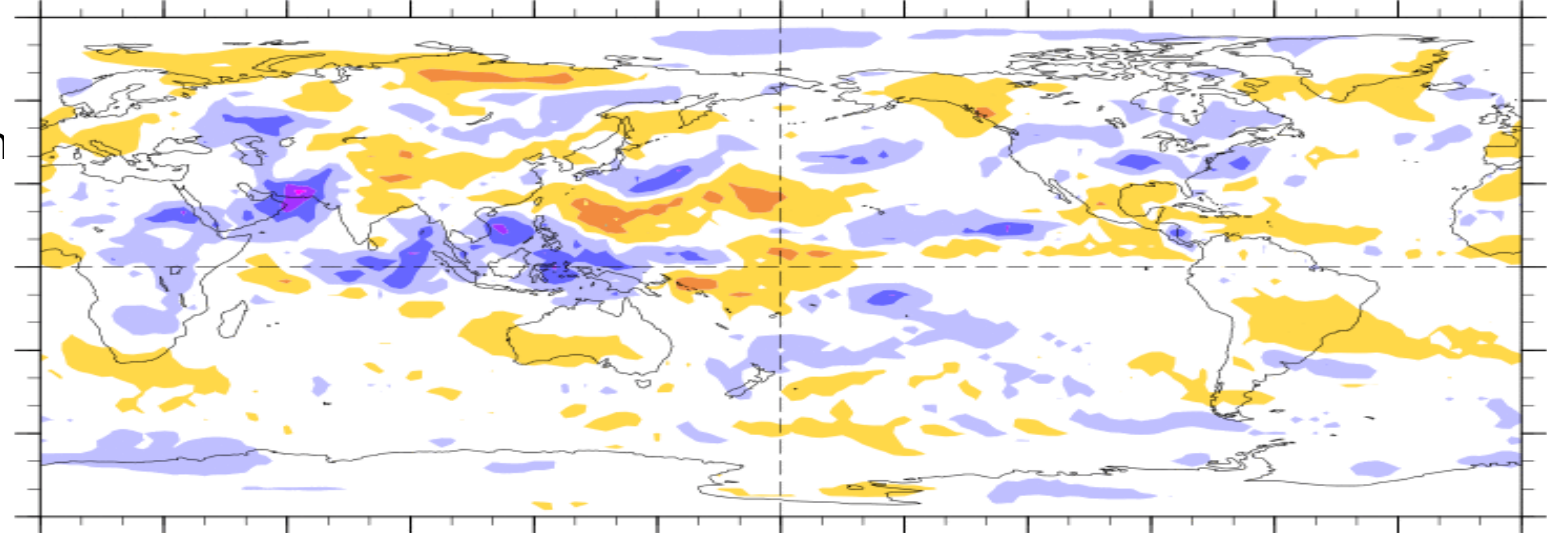


Week 2 - Valid: Jul 31, 2013 - Aug 06, 2013



7-Day Average OLR Anomaly

2013/07/29 - 2013/08/04



Outlook Review

Cool shading
More clouds/rain

Warm shading
Less clouds/rain

Synopsis of Climate Modes

ENSO:

- ENSO-neutral conditions are favored to continue through Northern Hemisphere fall 2013

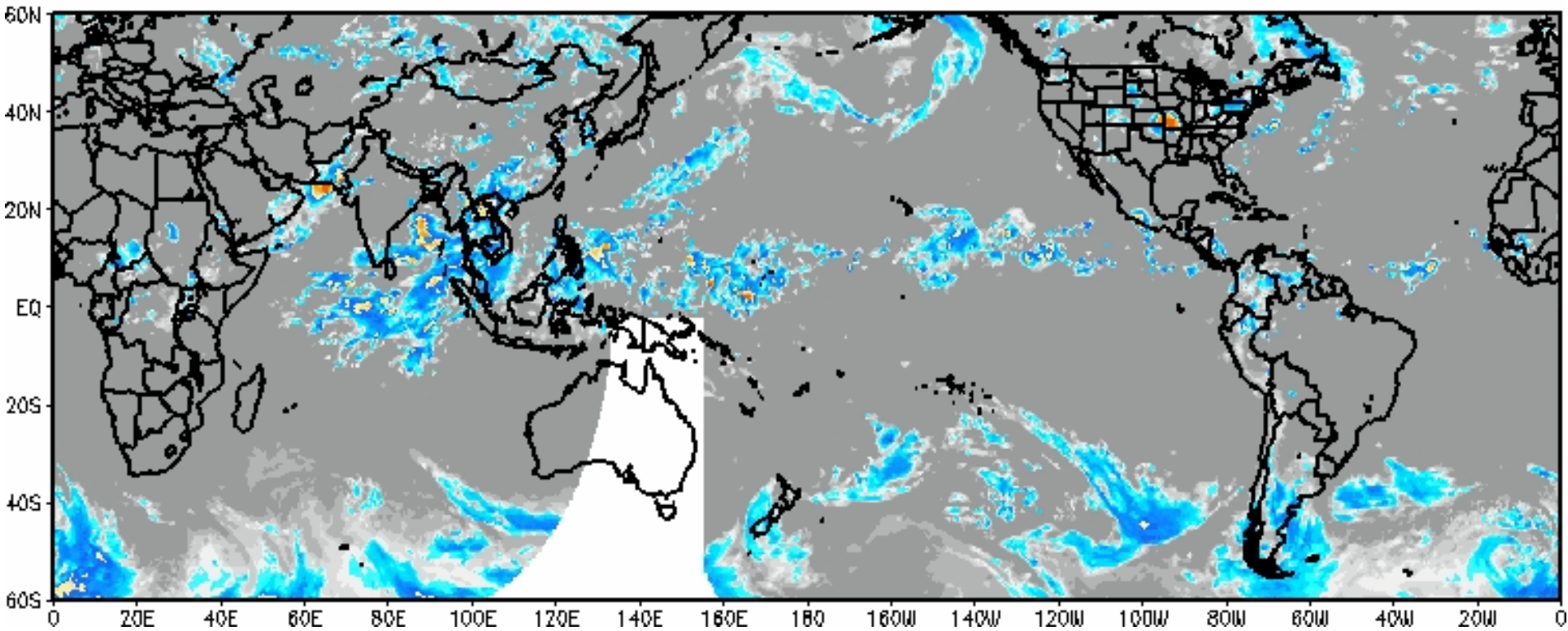
MJO and other subseasonal tropical variability:

- The MJO remained weak for the second consecutive week. Other modes of variability are evident in the observations, and play a role in the current outlook.
- Most dynamical and statistical model MJO index forecasts indicate little to no amplitude in the MJO during the next 2 weeks.
- Enhanced tropical cyclone formation probabilities are forecast to continue over the western and eastern Pacific for the upcoming two weeks. Late in week-2, TC formation may become more favorable across the main development region (MDR) of the tropical Atlantic.

Extratropics:

- The MJO is not likely to have a major impact on the circulation over the CONUS.

IR Temperatures 0900 UTC 03 AUG 2013

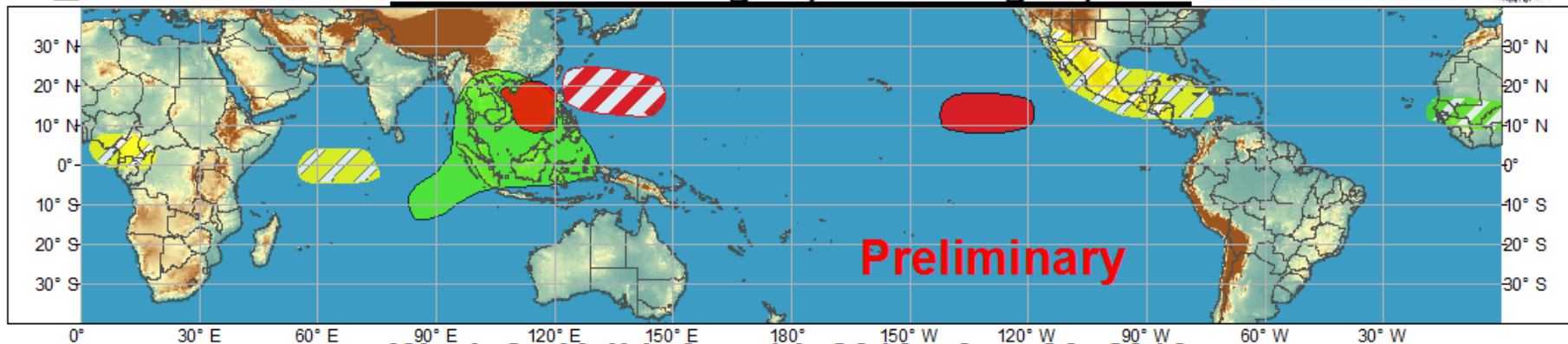




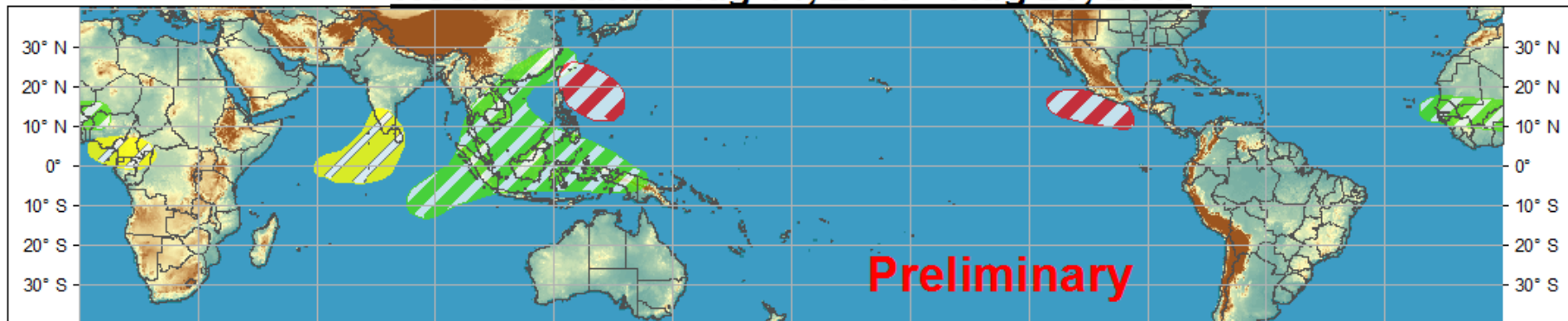
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Aug 07, 2013 - Aug 13, 2013



Week 2 - Valid: Aug 14, 2013 - Aug 20, 2013



Confidence
High Moderate

- Tropical Cyclone Formation**
- Above-average rainfall**
- Below-average rainfall**
- Above-normal temperatures**
- Below-normal temperatures**



- Development of a tropical cyclone that eventually reaches tropical storm/cyclone strength.
- Weekly total rainfall in the upper third of the historical range.
- 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.

Produced: 08/06/2013

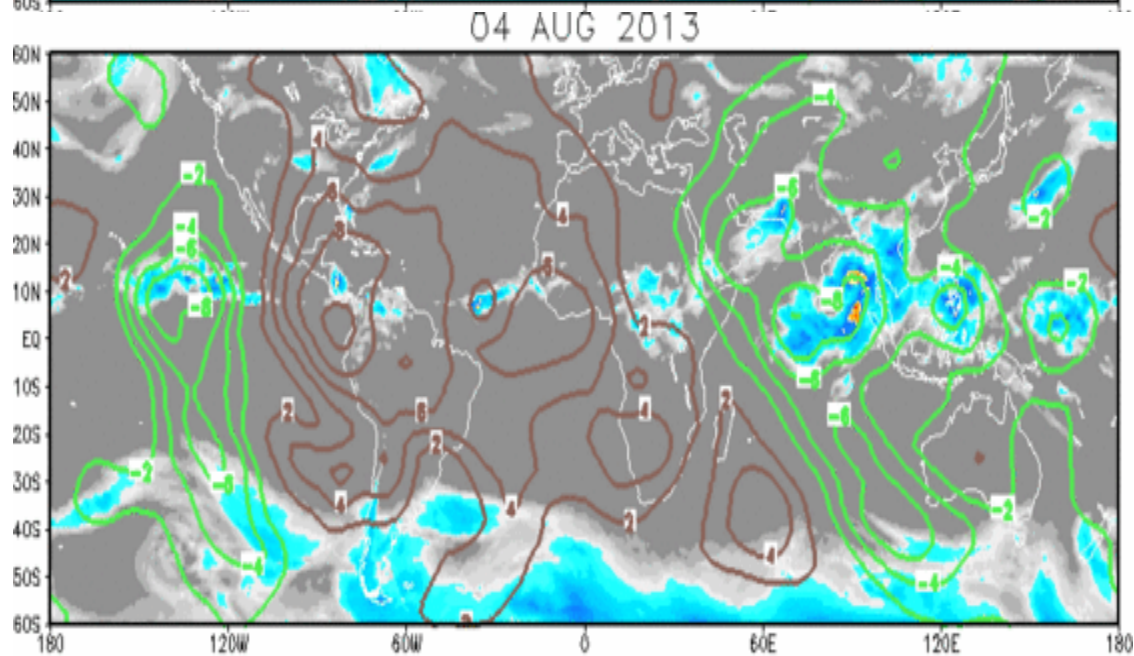
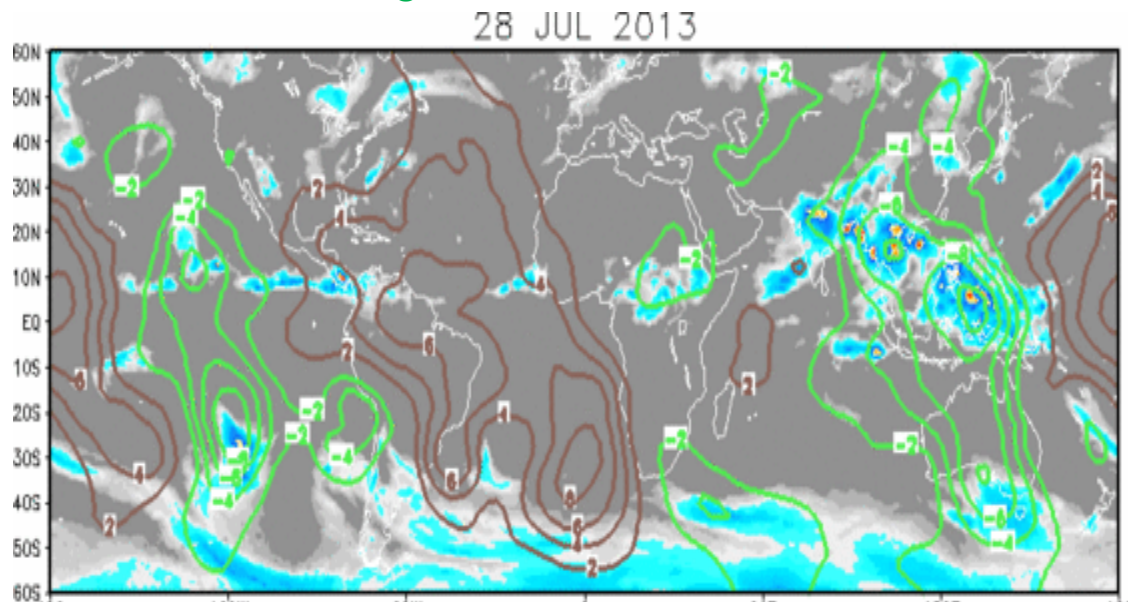
Forecaster: Pugh

Product is updated once per week. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.

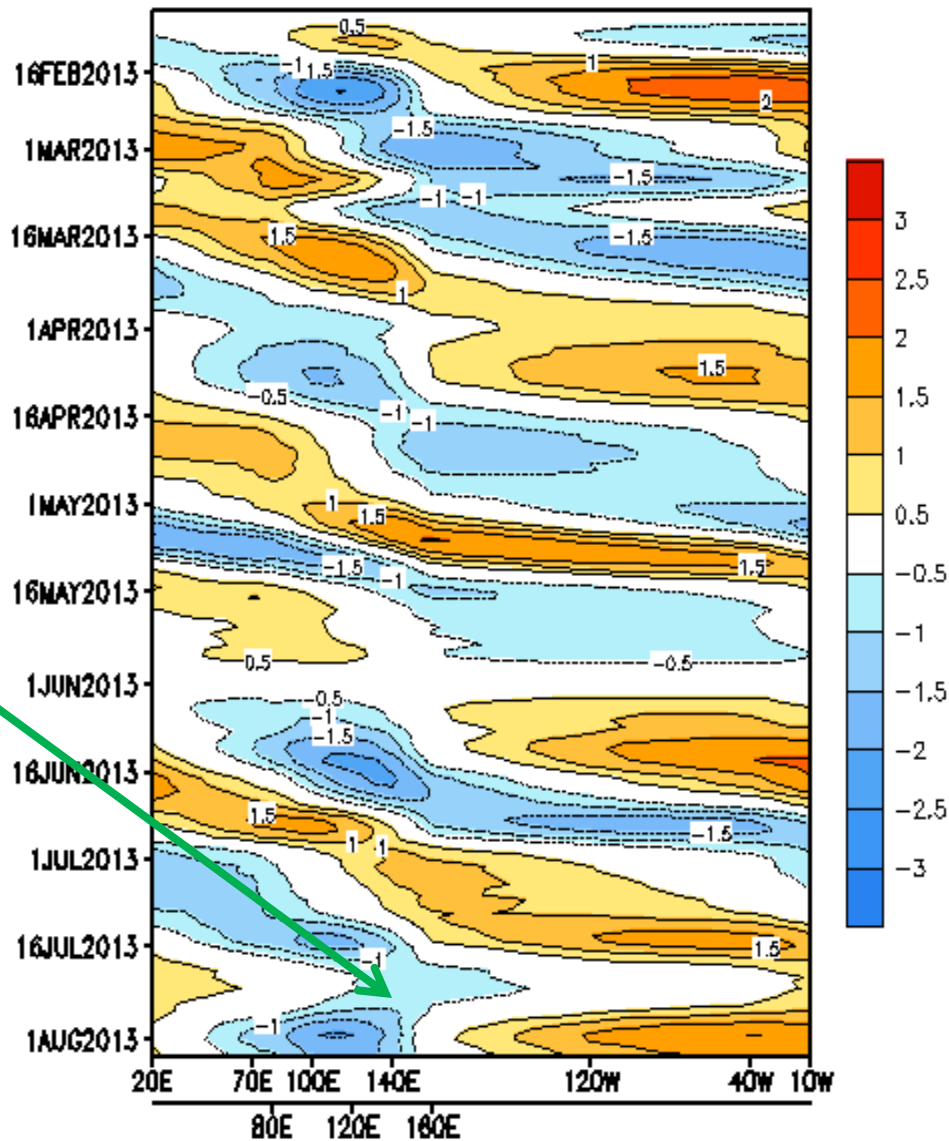


IR Satellite & 200-hpa Velocity Potential Anomalies

Green: Enhanced Divergence Brown: Enhanced Convergence



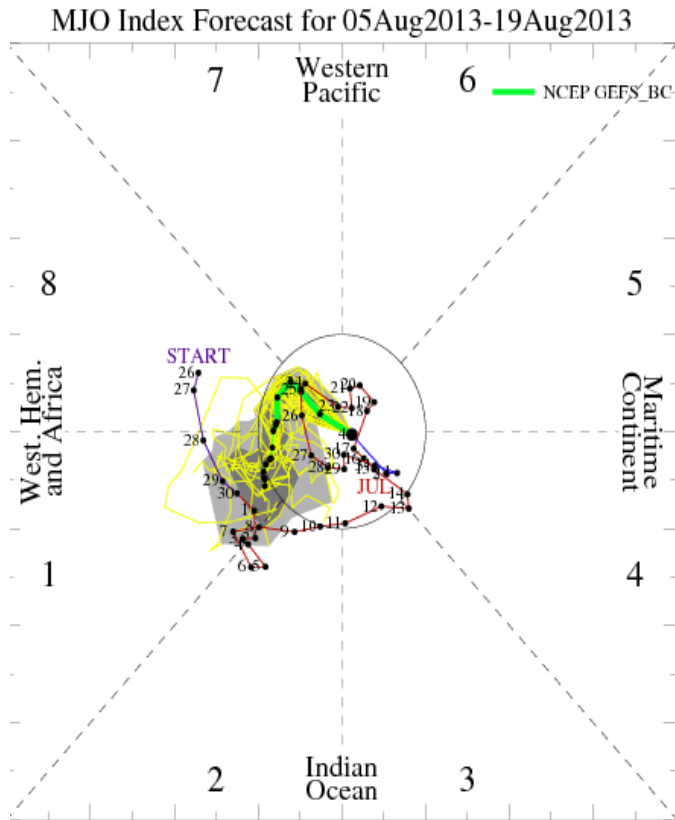
5 -day Running Mean



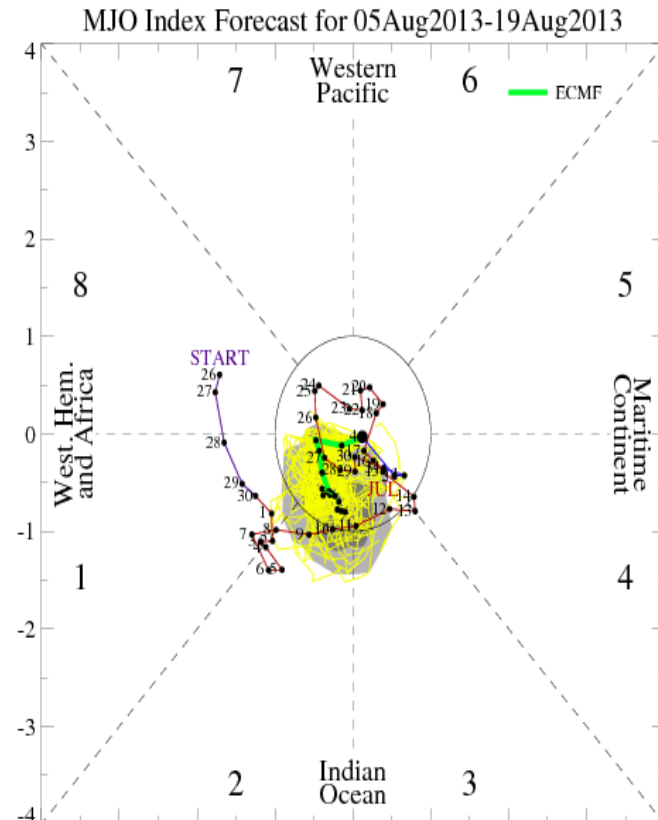
The breakdown of the MJO signal is apparent on the CPC MJO index during late July

Data updated through 06 Aug 2013

MJO Observation/Forecast



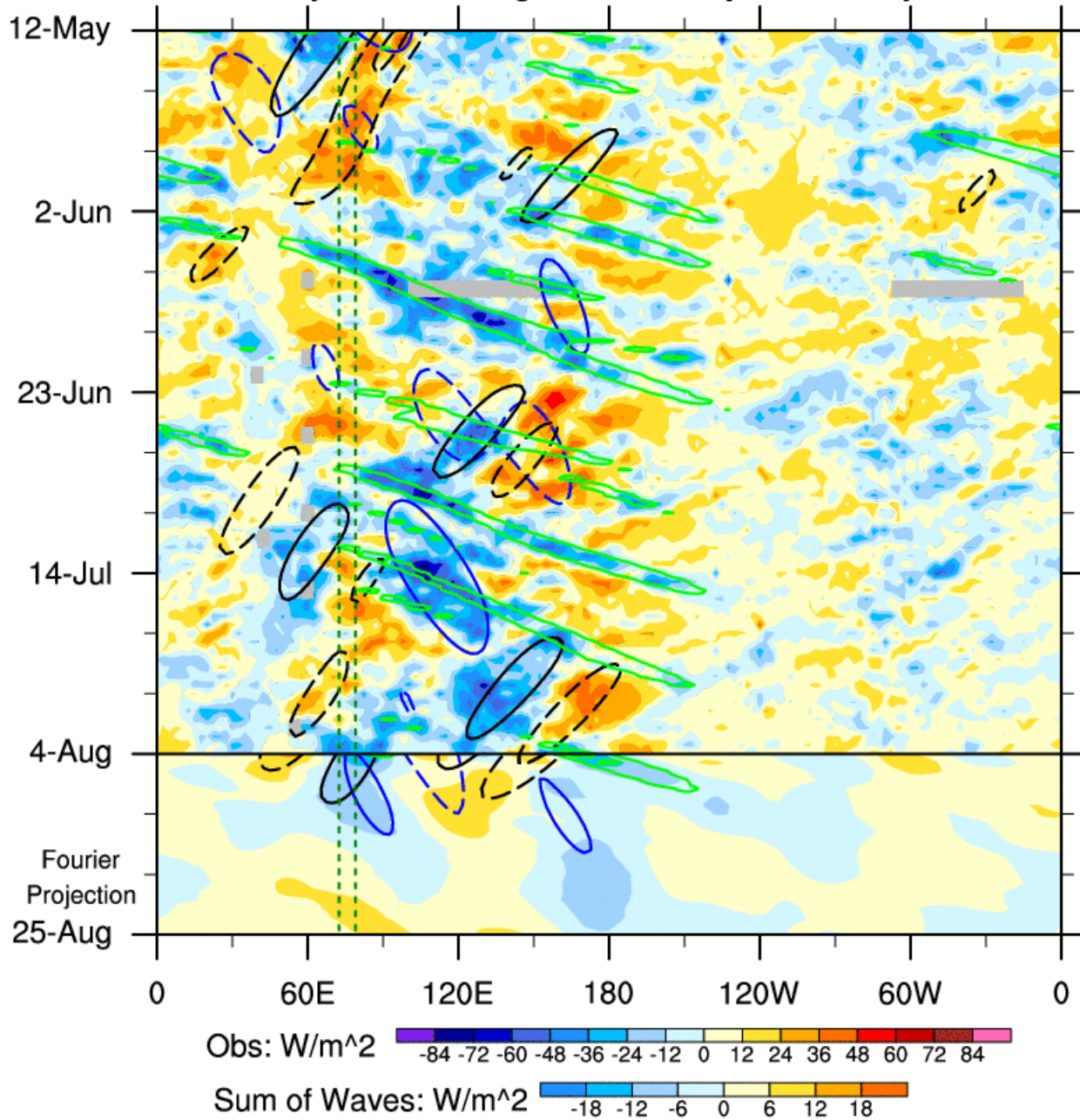
GFS



ECMWF

OLR anomalies: 7.5°S - 7.5°N

12-May-2013 to 4-Aug-2013 + 21-day Fourier Projection

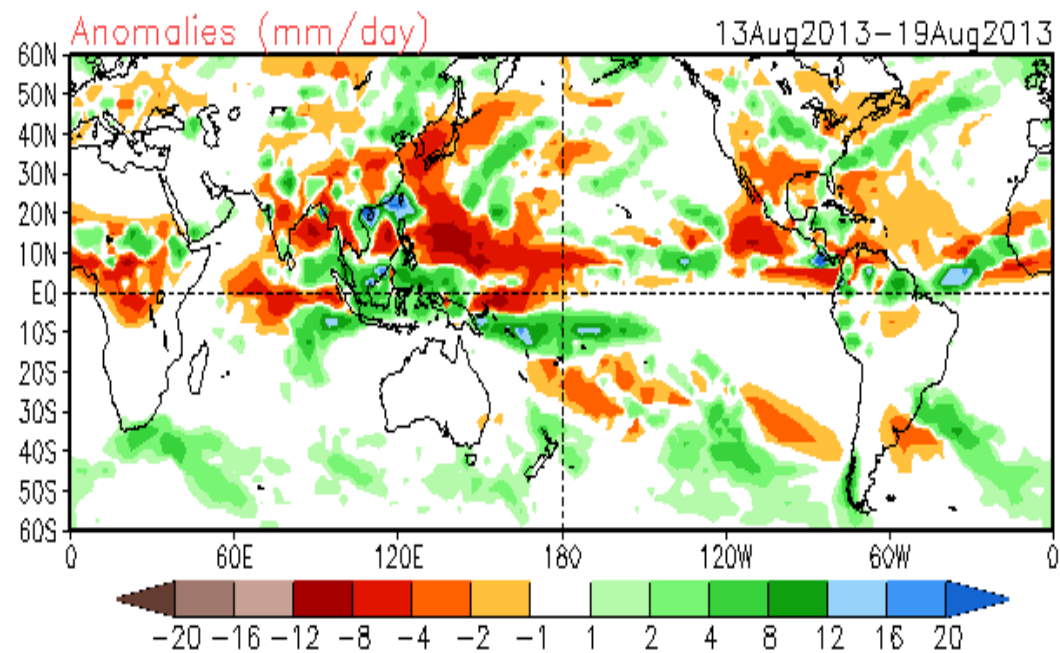
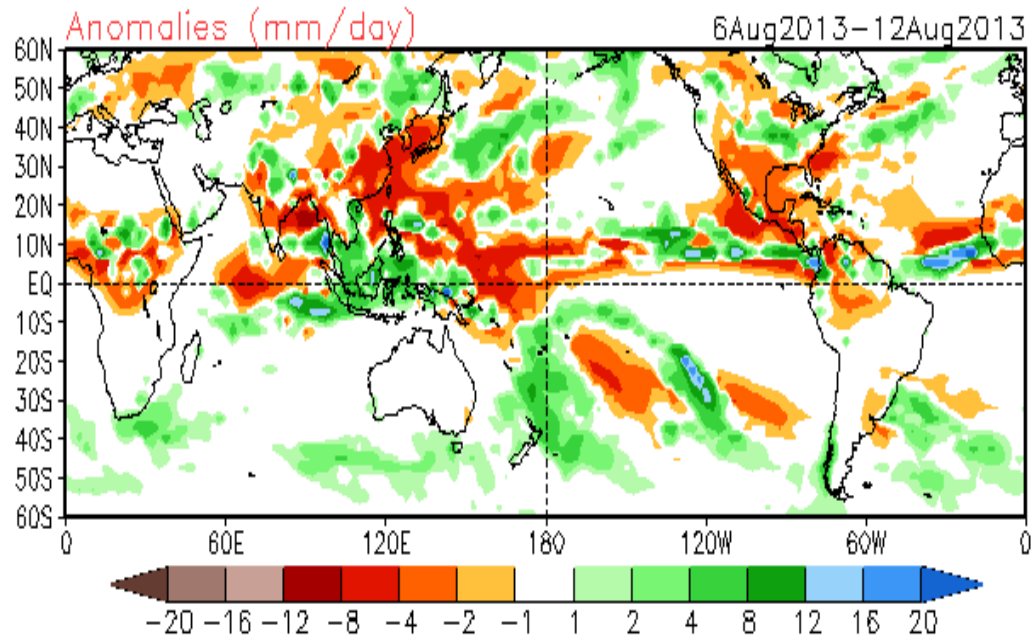


MJO (blue, CINT=12); ER (black, CINT=12); Kelvin (green, CINT=12)

MJO not likely to have any major effects during the next two weeks.

Atmospheric Kelvin wave to affect east Pacific (green line).




GFS Forecast

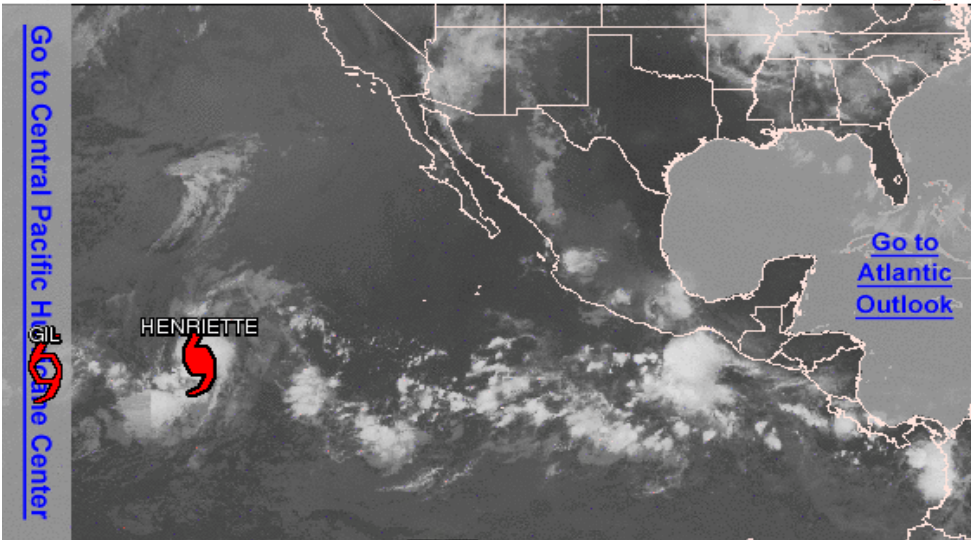




800 AM EDT TUE AUG 6 2013 Satellite Image: 0652 AM EDT




Outlined areas denote current position of systems discussed in the Tropical Weather Outlook. Color indicates probability of tropical cyclone formation within 48 hours.

 Low <30%  Medium 30-50%  High >50%

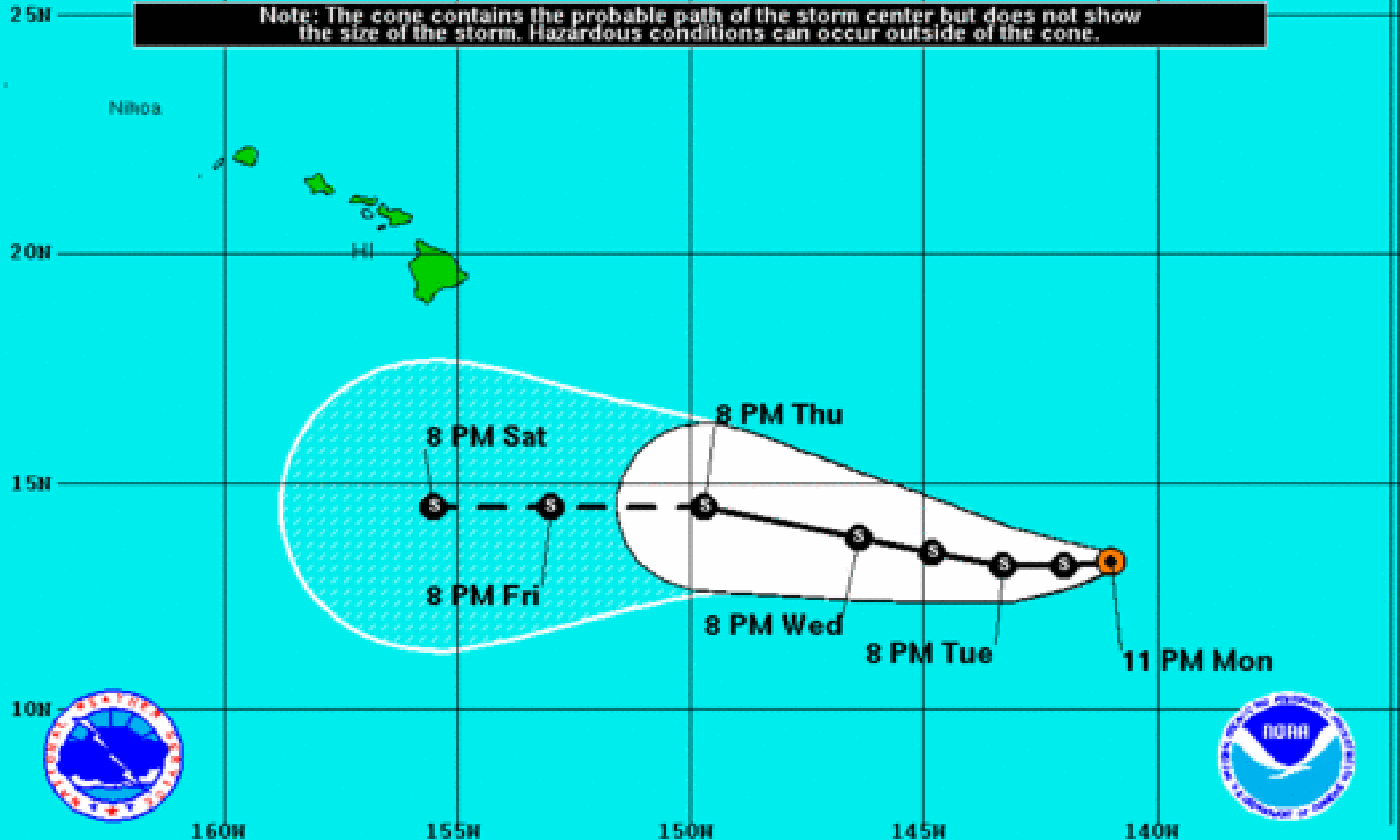


500 AM PDT TUE AUG 6 2013 Satellite Image: 0622 AM PDT

Outlined areas denote current position of systems discussed in the Tropical Weather Outlook. Color indicates probability of tropical cyclone formation within 48 hours.

 Low <30%  Medium 30-50%  High >50%

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.



Tropical Storm Gil
 Monday August 5, 2013
 11 PM HST Advisory 28
 NWS Central Pacific Hurricane Center

Current Information: ●
 Center Location 13.3 N 141.0 W
 Max Sustained Wind 40 mph
 Movement W at 9 mph

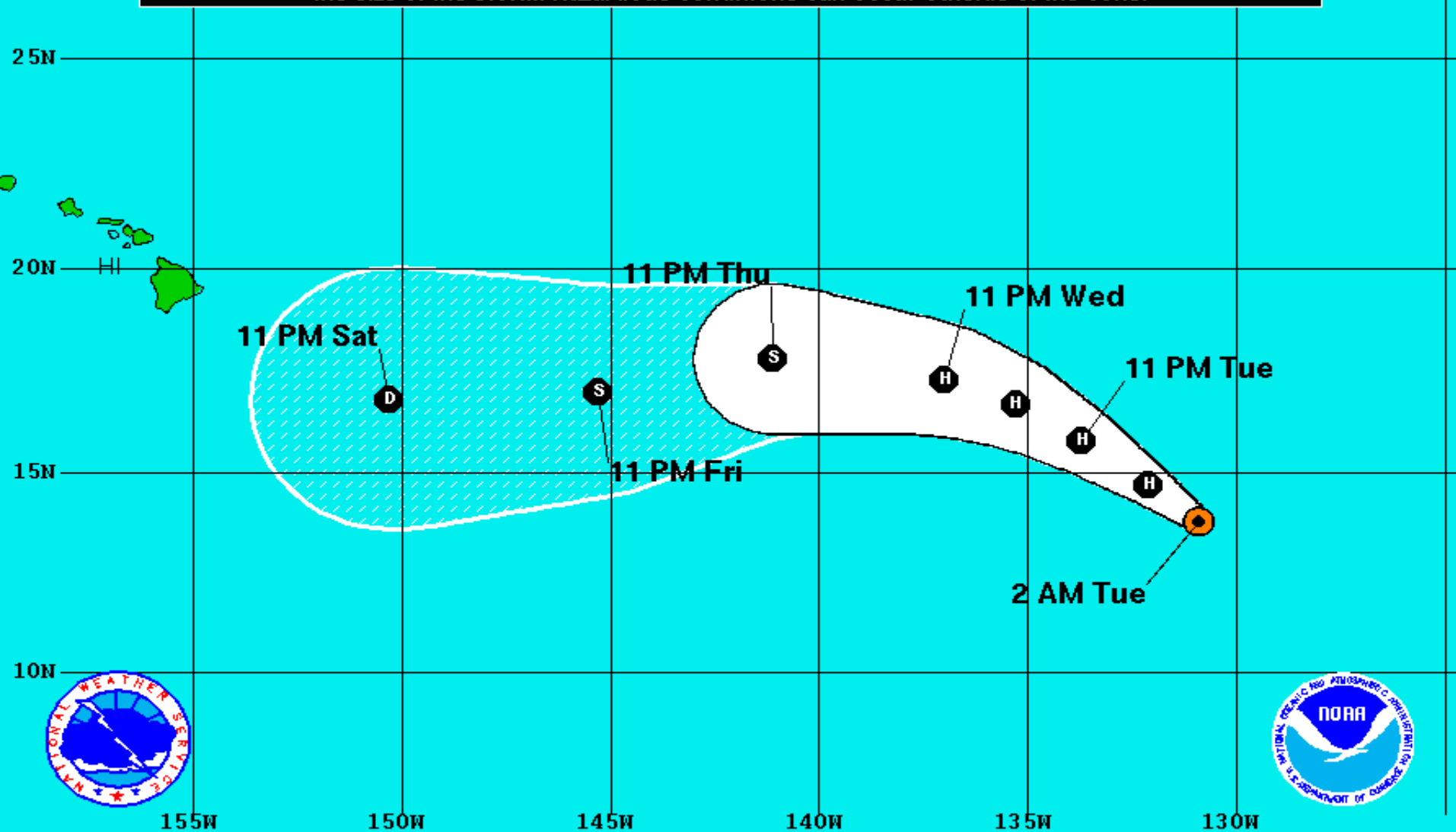
Forecast Positions:
 ● Tropical Cyclone ○ Post-Tropical
 Sustained Winds: D < 39 mph
 S 39-73 mph H 74-110 mph M > 110mph

Potential Track Area:
 Day 1-3 Day 4-5


Watches:
 Hurricane Trop.Storm



Warnings:
 Hurricane Trop.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 Henriette
 Tuesday August 6, 2013
 2 AM PDT Advisory 12
 NWS National Hurricane Center

Current Information: 
 Center Location 13.8 N 130.9 W
 Max Sustained Wind 75 mph
 Movement WNW at 10 mph

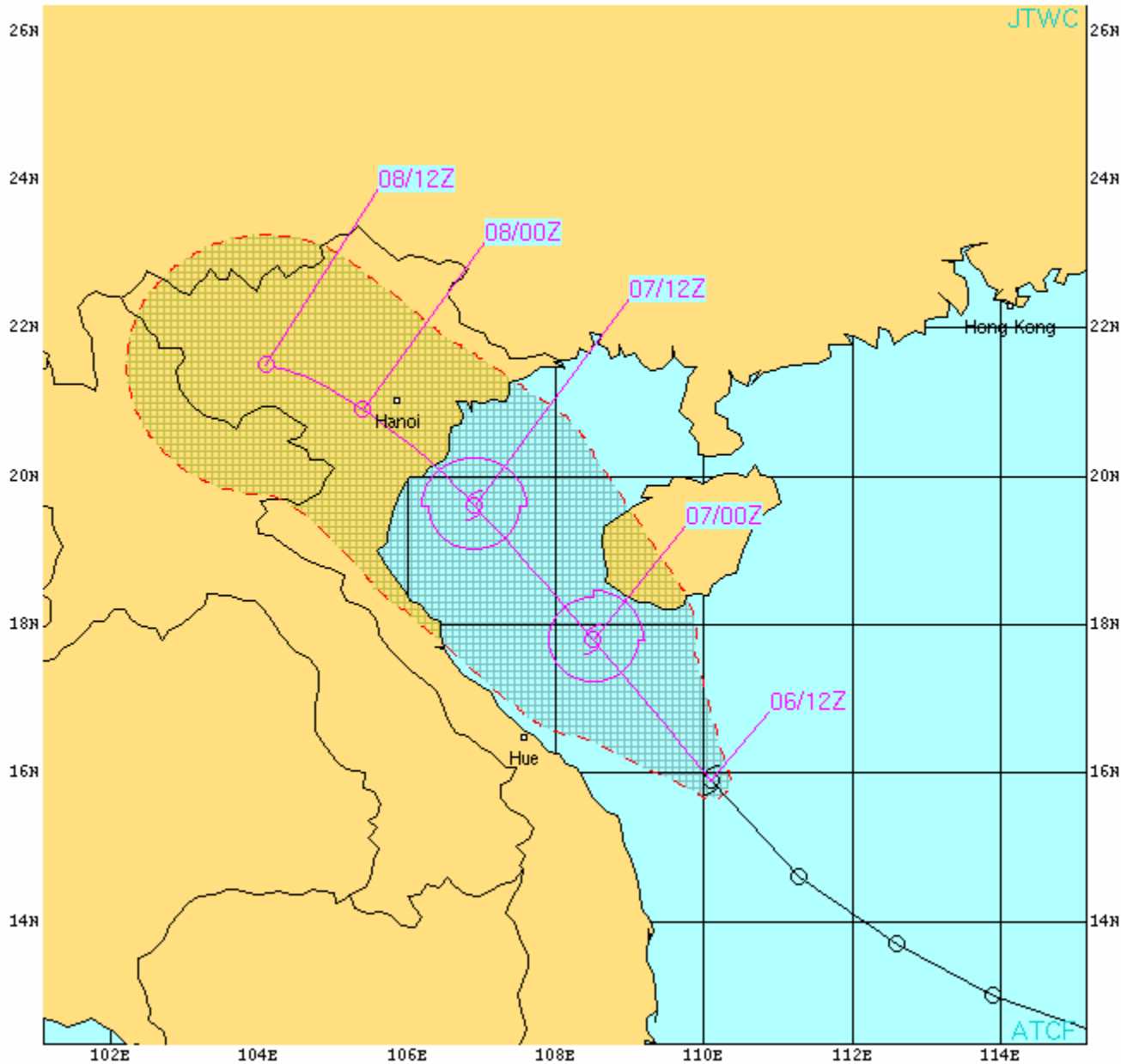
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Potential Track Area:
 Day 1-3  Day 4-5

Watches:
 Hurricane  Trop.Storm

Warnings:
 Hurricane  Trop.Storm

Joint Typhoon Warning Center



TROPICAL STORM 10W (MANGKHUT) WARNING #4
 WTPN31 PGTW 061500
 061200Z POSIT: NEAR 15.9N 110.1E
 MOVING 320 DEGREES TRUE AT 17 KNOTS
 MAXIMUM SIGNIFICANT WAVE HEIGHT: 14 FEET
 06/12Z, WINDS 035 KTS, GUSTS TO 045 KTS
 07/00Z, WINDS 040 KTS, GUSTS TO 050 KTS
 07/12Z, WINDS 040 KTS, GUSTS TO 050 KTS
 08/00Z, WINDS 030 KTS, GUSTS TO 040 KTS
 08/12Z, WINDS 020 KTS, GUSTS TO 030 KTS

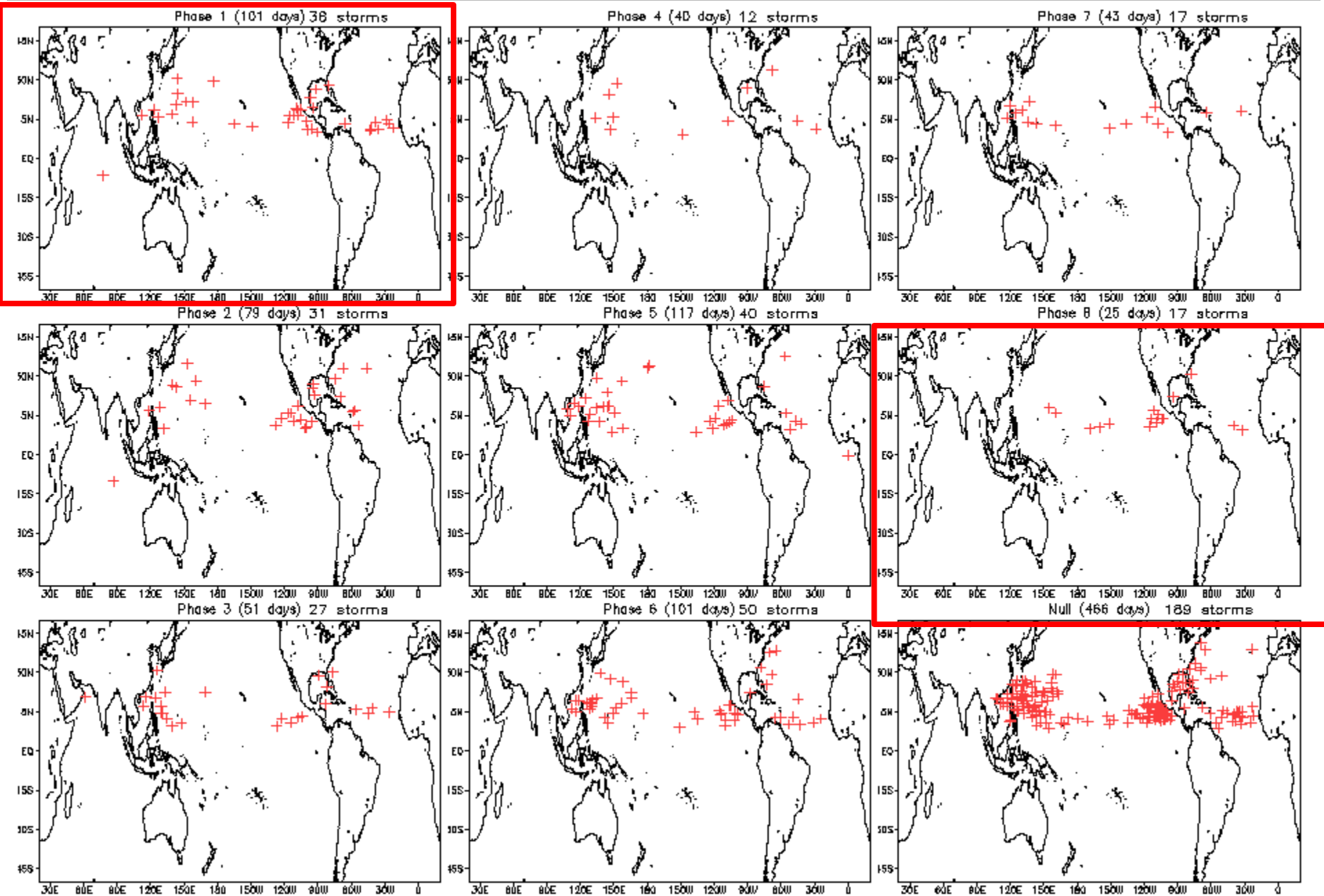
CPA TO:	NM	DTG
DA_NANG	77	06/18Z
HANOI	22	07/22Z

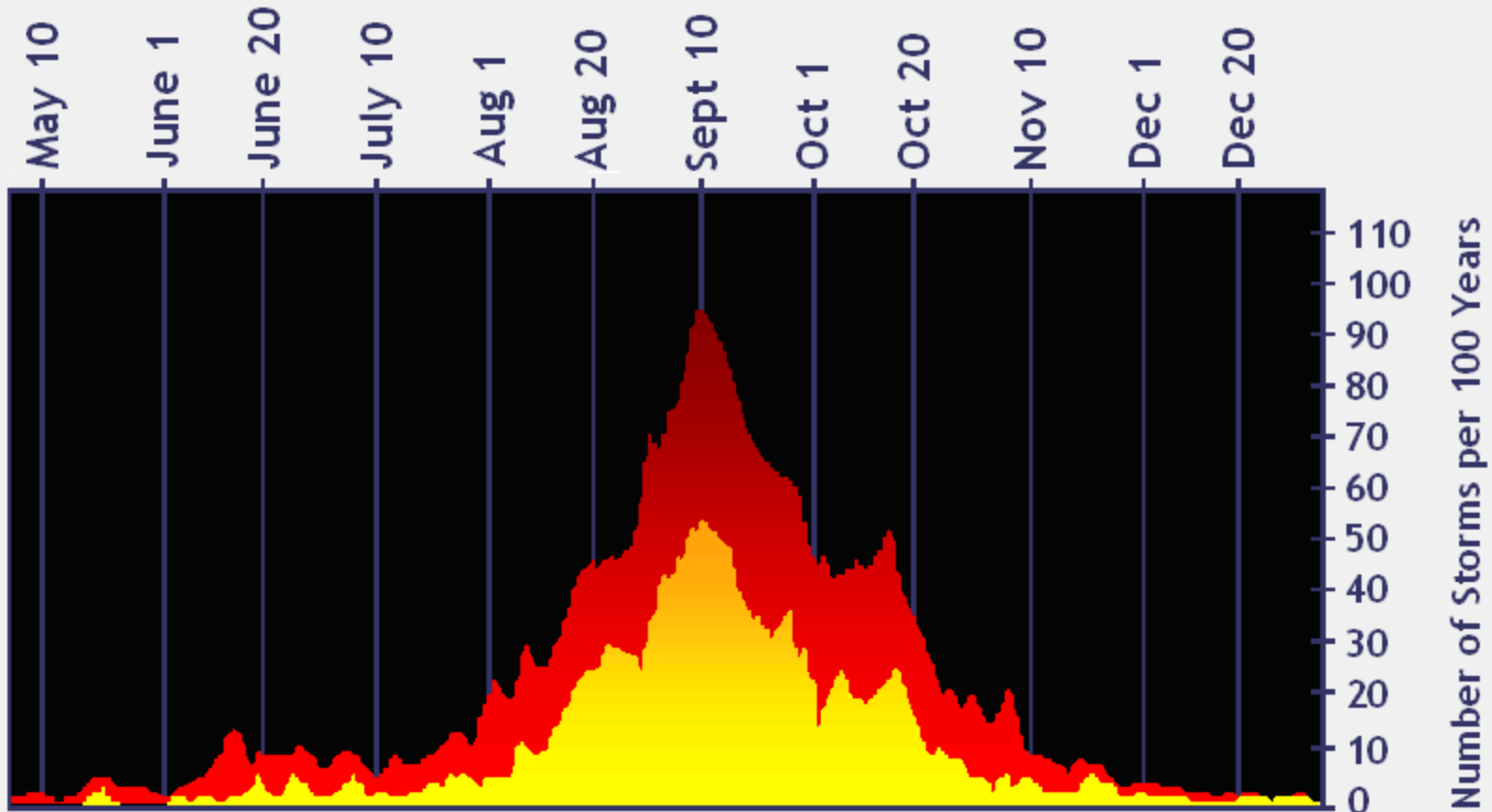
BEARING AND DISTANCE	DIR	DIST (NM)	TAV (HRS)
DA_NANG	340	230	24
HANOI	146	101	24

○ LESS THAN 34 KNOTS
 ⊗ 34-63 KNOTS
 ⊛ MORE THAN 63 KNOTS
 PAST 6 HOURLY CYCLONE POSITS IN BLACK
 FORECAST CYCLONE POSITS IN COLOR



August Tropical Storm Formation by MJO phase

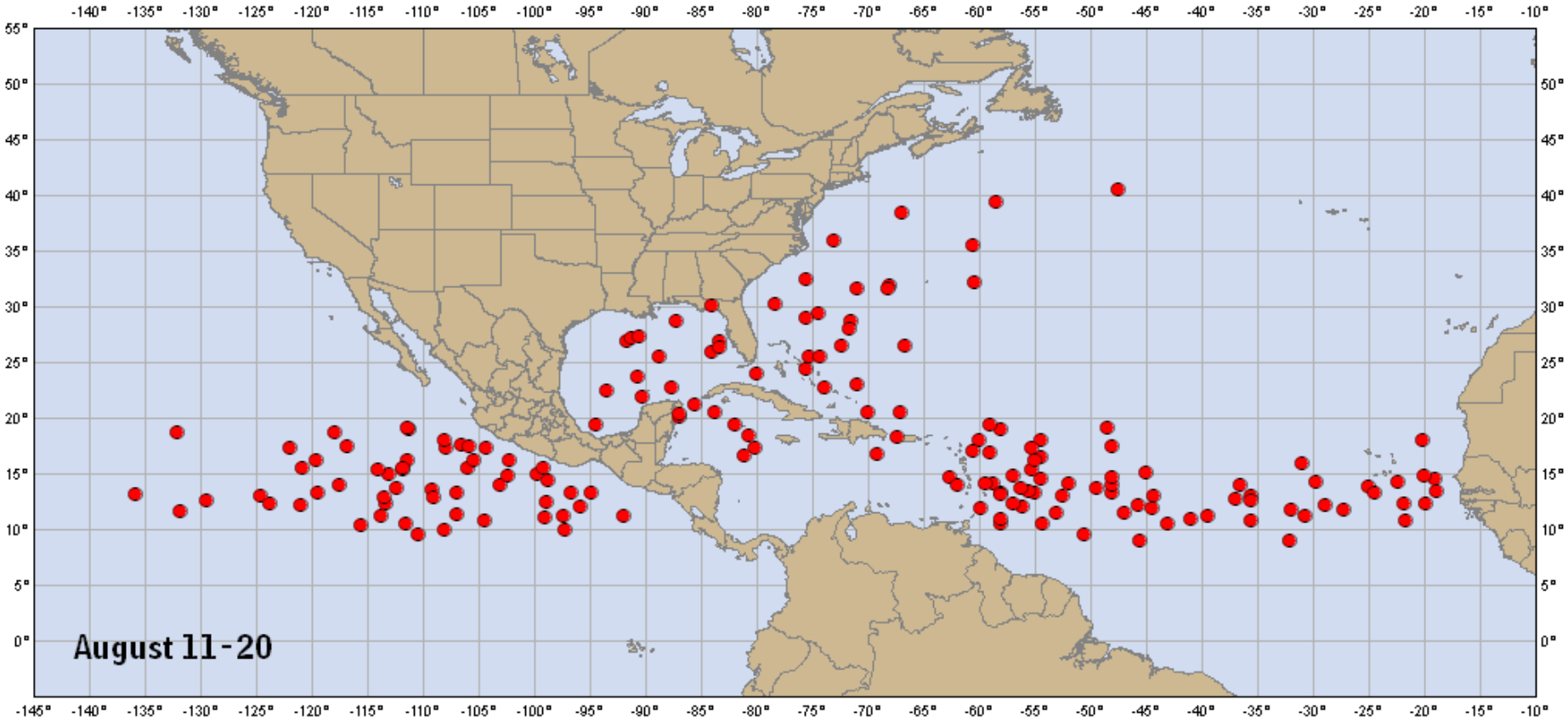


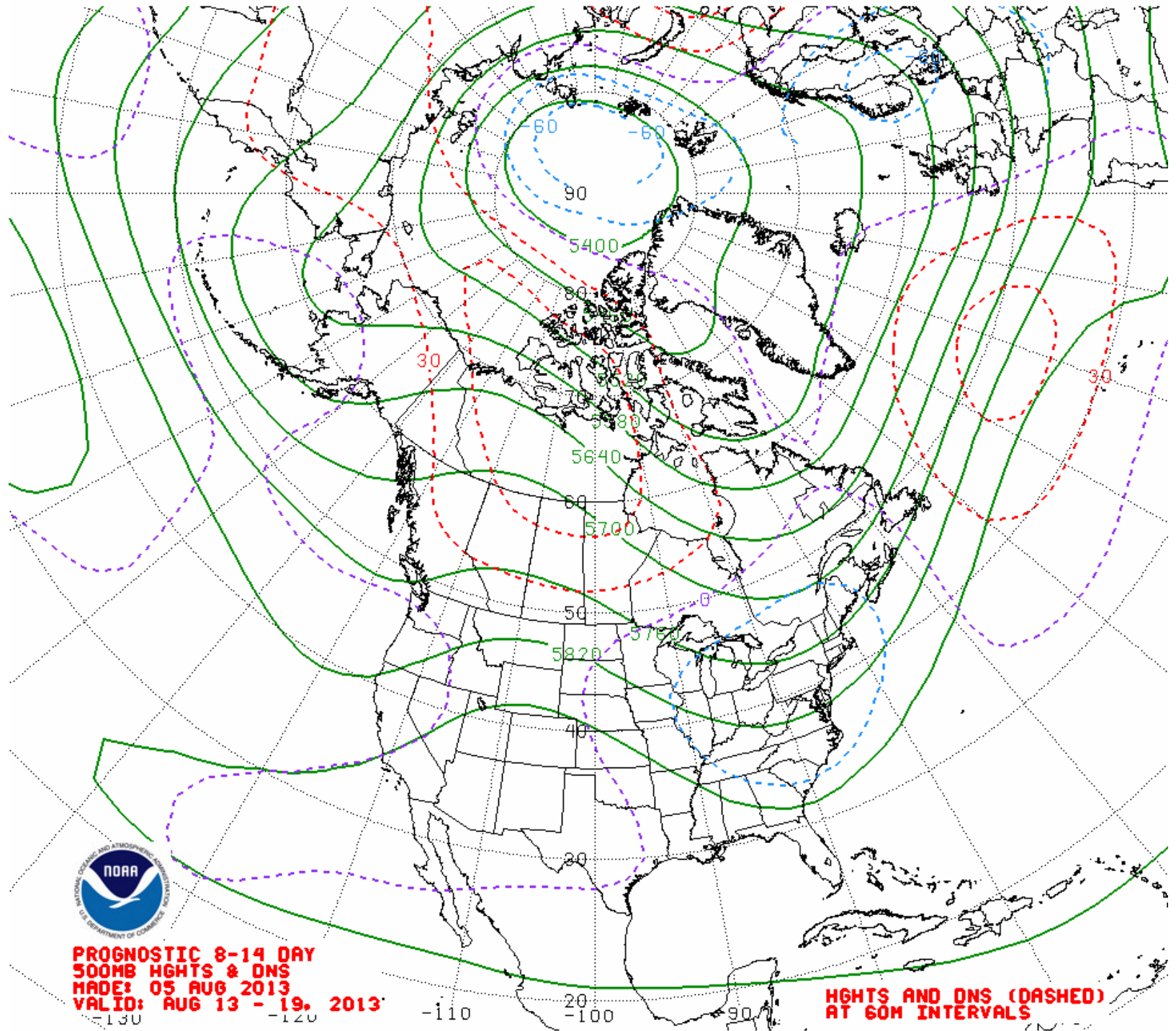


■ Hurricanes and Tropical Storms
■ Hurricanes

NOAA

Origin of Tropical Cyclones

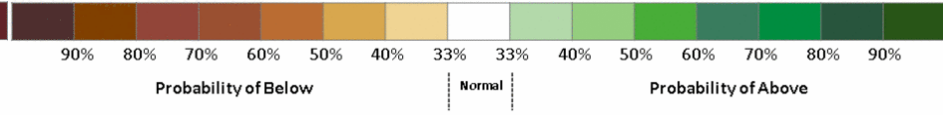
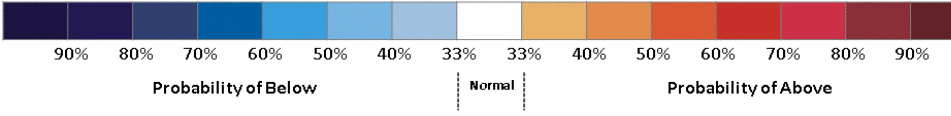
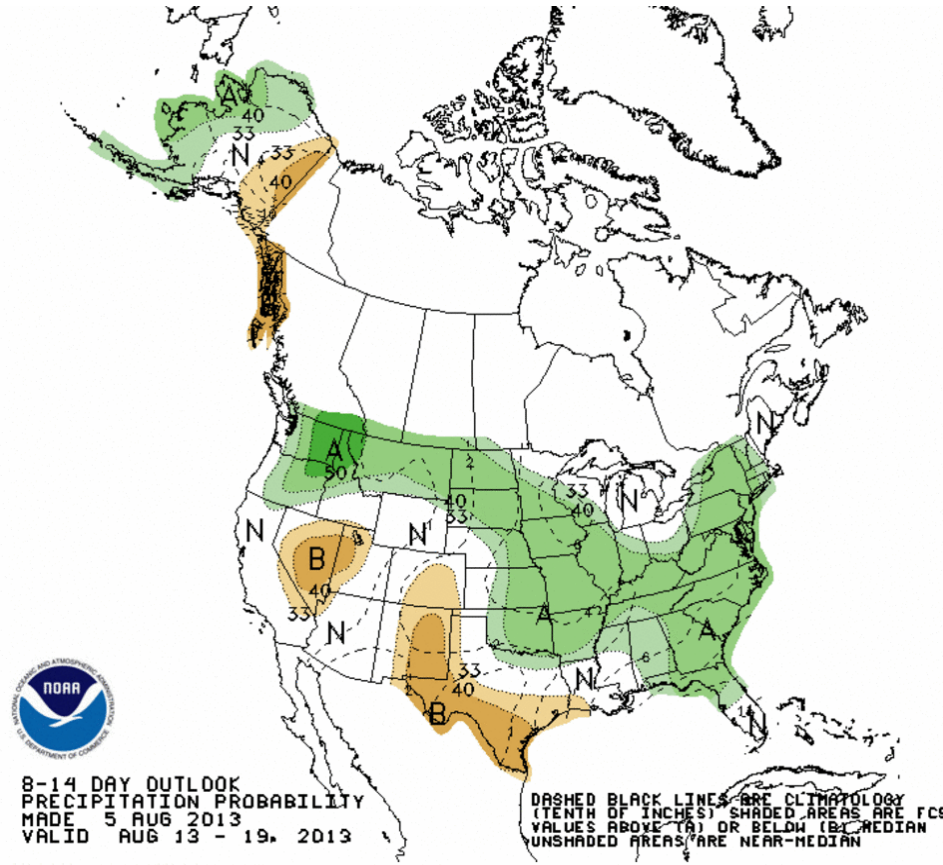
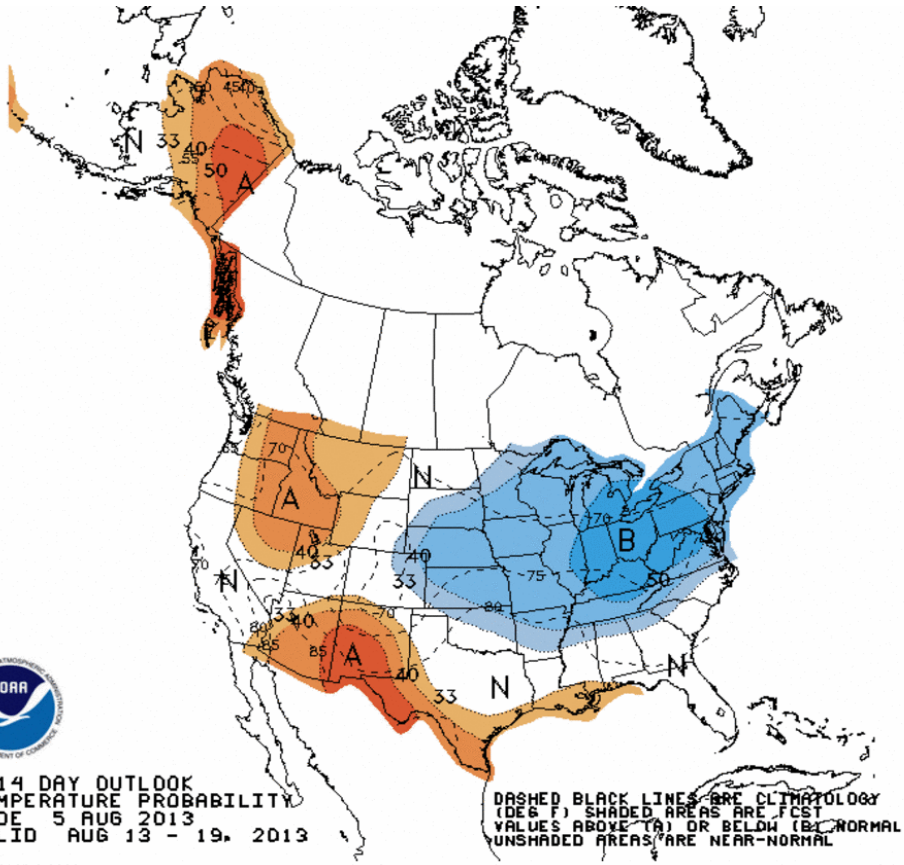




PROGNOSTIC 8-14 DAY
500MB HGHTS & DNS
MADE: 05 AUG 2013
VALID: AUG 13 - 19, 2013

HGHTS AND DNS (DASHED)
AT 60M INTERVALS

Week 2 – Temperature and Precipitation

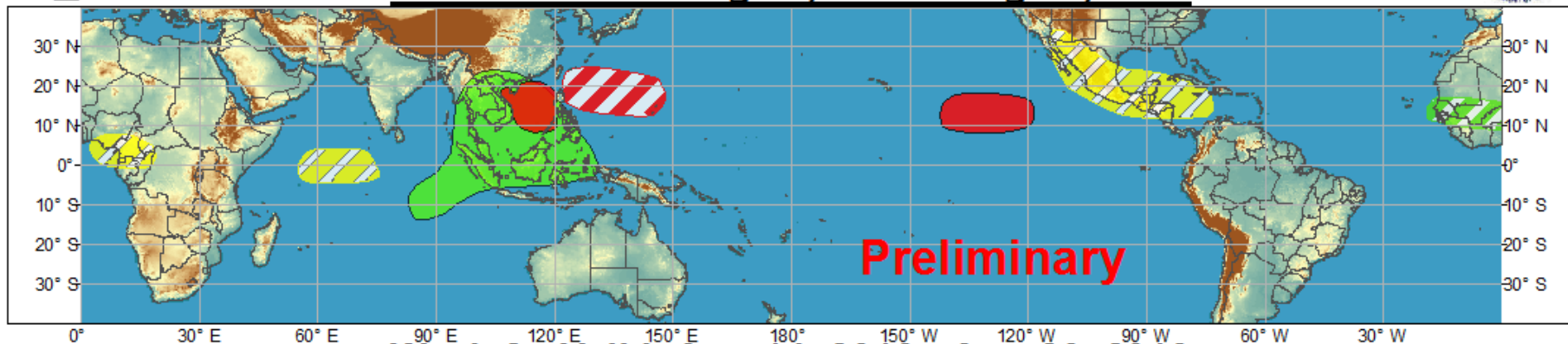




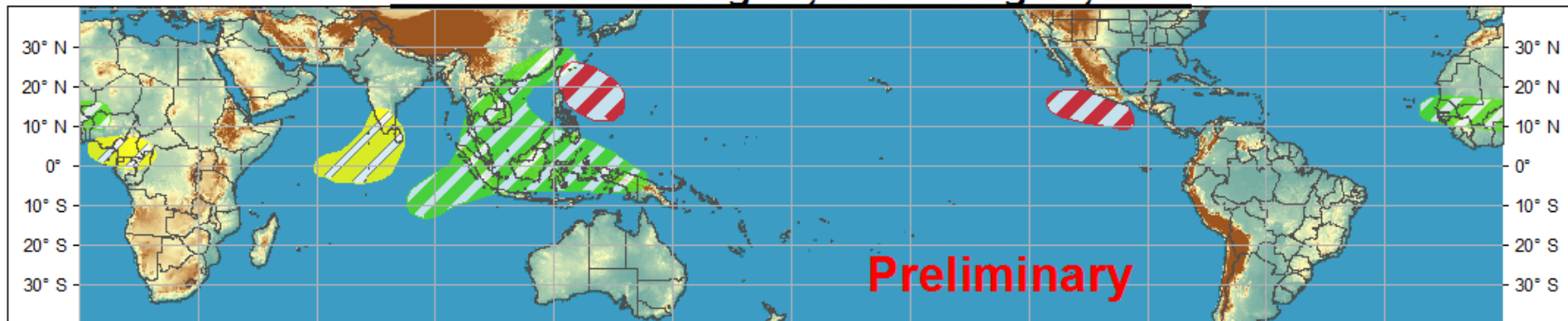
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Development of a tropical cyclone that eventually reaches tropical storm/cyclone strength.

Above-average rainfall



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

Below-average rainfall



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

Above-normal temperatures



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.

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