

Global Tropics Hazards And Benefits Outlook

August 12, 2013

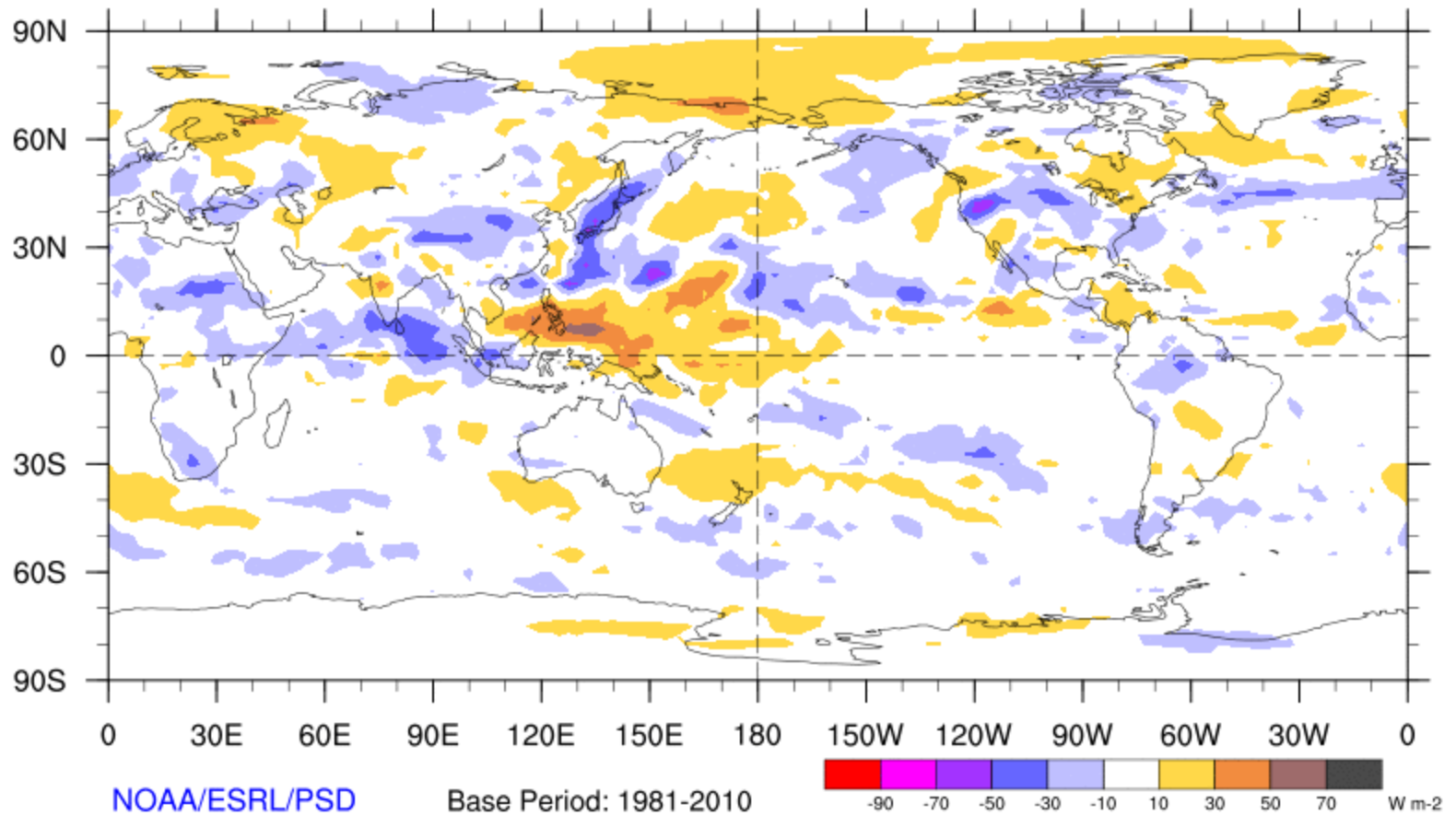
Jon Gottschalck

Outline

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

7-Day Average OLR Anomaly

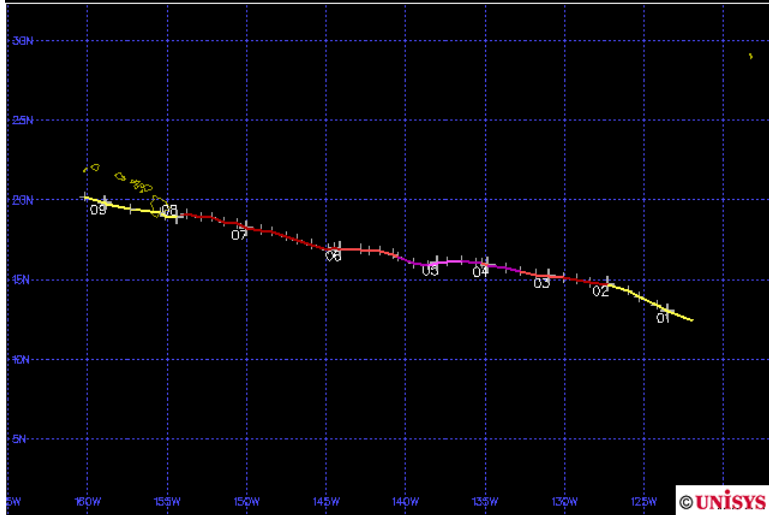
2014/08/04 - 2014/08/10



Pacific Tropical Cyclones

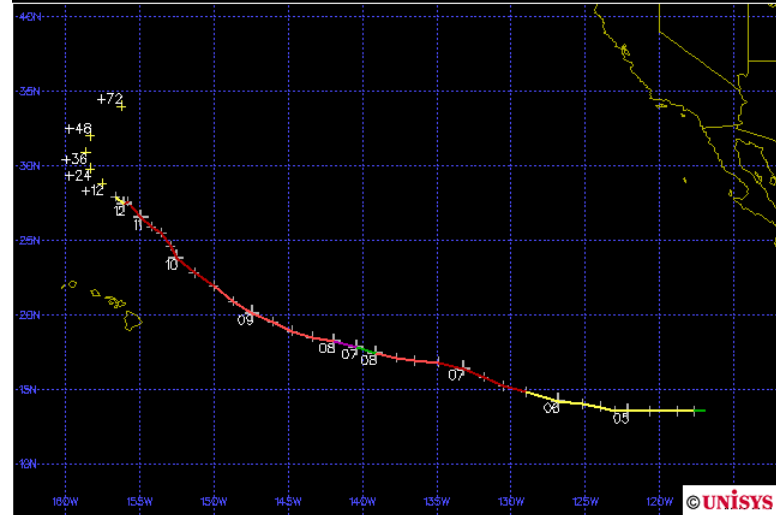
Hurricane-4 ISELLE

31 JUL-09 AUG 2014



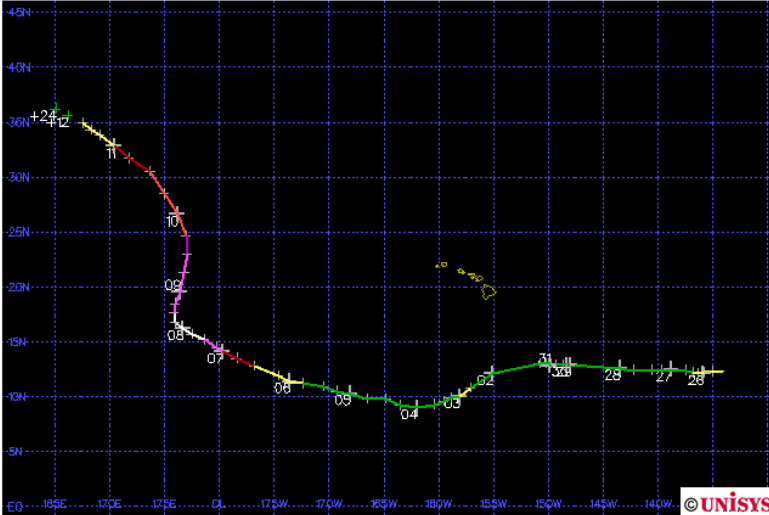
Hurricane-3 JULIO

04-12 AUG 2014



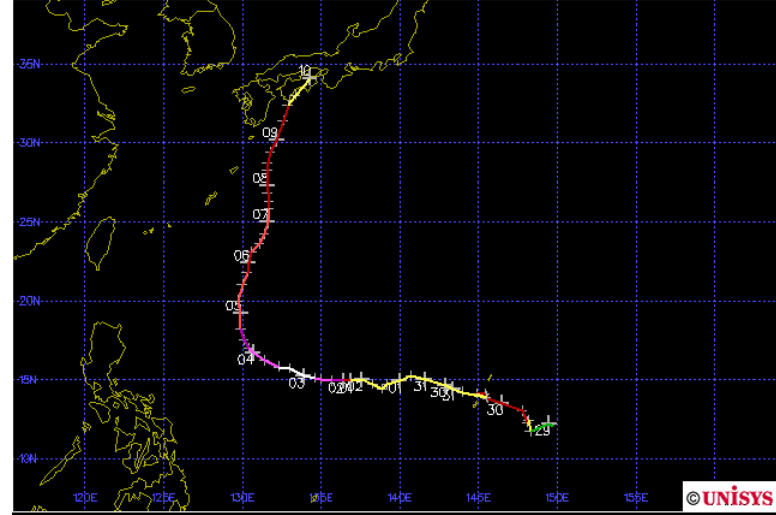
Hurricane-5 GENEVIEVE

25 JUL-11 AUG 2014



Super Typhoon-5 HALDNG

28 JUL-10 AUG 2014



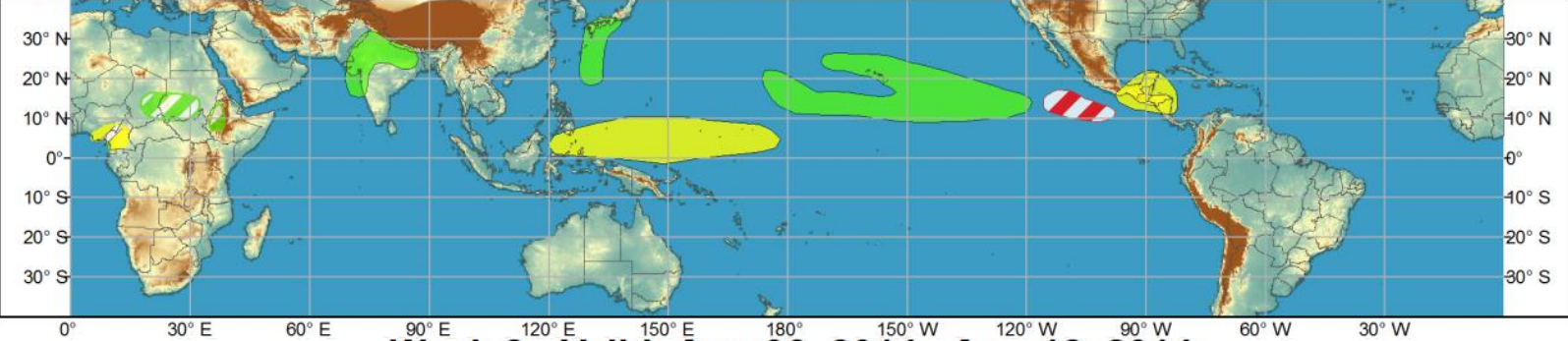
Outlook Review



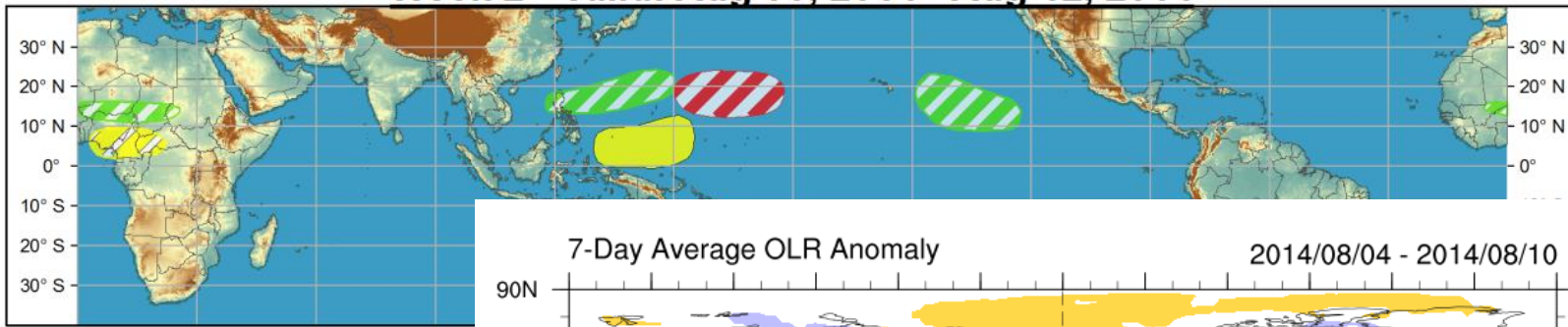
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Aug 06, 2014 - Aug 12, 2014

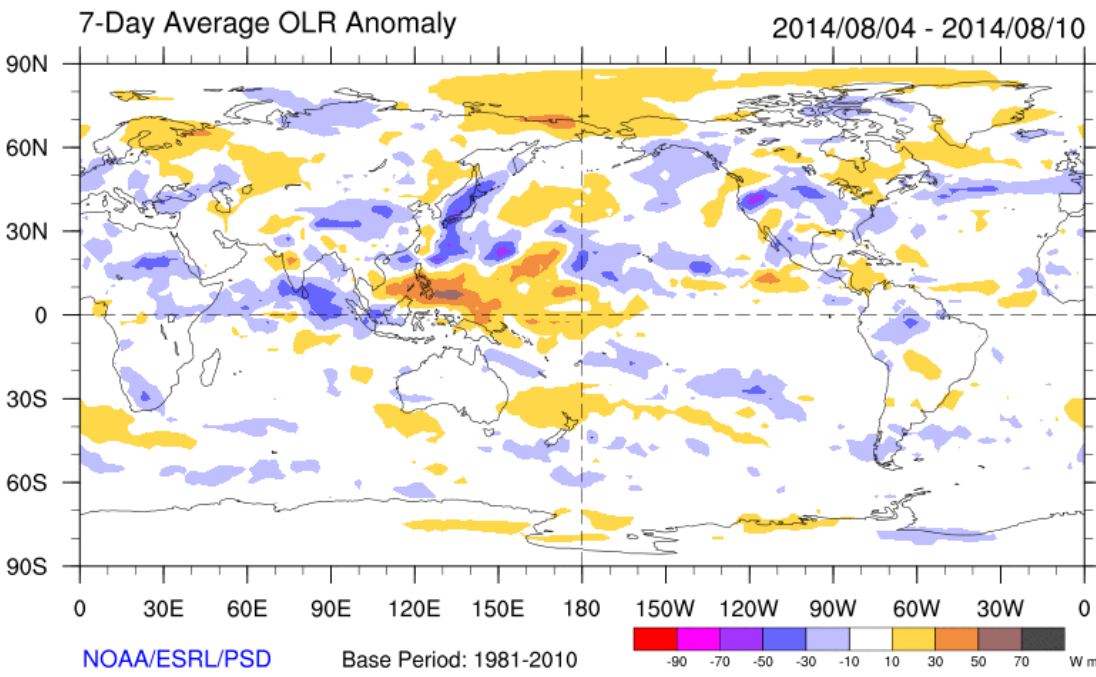


Week 2 - Valid: Aug 06, 2014 - Aug 12, 2014



Cool shading
More clouds/rain

Warm shading
Less clouds/rain



Synopsis of Climate Modes

ENSO:

- El Nino Watch remains in effect with probabilities near 65% during the Oct-Nov-Dec through Dec-Jan-Feb seasons.

MJO and other subseasonal tropical variability:

- The MJO remained weak in general and this is indicated by objective MJO indices. There is some evidence, however, of an intraseasonal signal, primarily noted as an envelope of suppressed convection that has slowly shifted eastward to the western Pacific from the Indian Ocean.
- A strong westward moving equatorial Rossby wave is evident across the western Pacific.
- Looking ahead, the fact remains that robust, canonical and longer-lived MJO activity has been difficult to initiate and maintain in recent months and this is likely to continue. Both statistical and dynamical model forecast tools indicate little prospects for more strong MJO activity to emerge in the coming few weeks.

Extratropics:

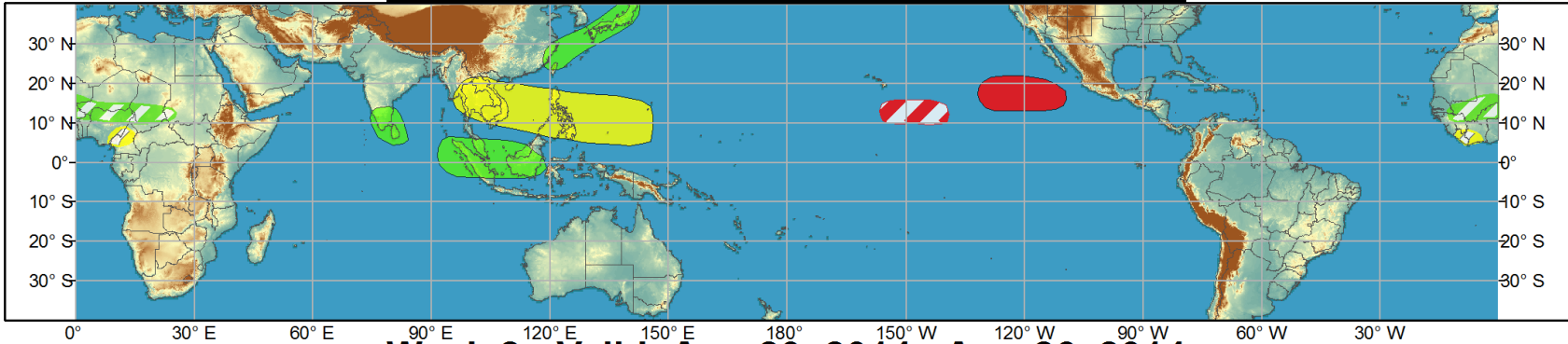
- Convective pattern favors little subseasonal predictability originating from Tropics at the current time. Latest model guidance indicates sub-par monsoon precipitation for the Southwest beginning later this week into next week.



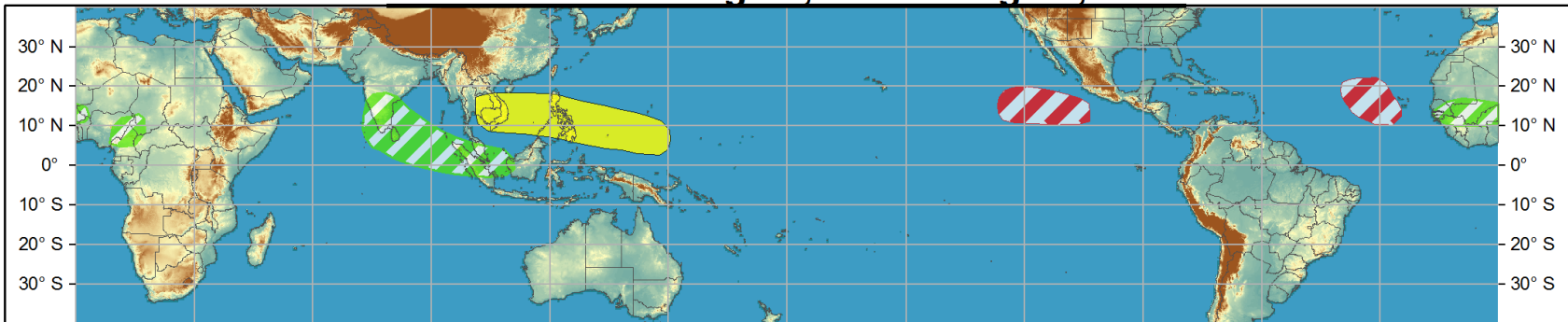
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Aug 13, 2014 - Aug 19, 2014



Week 2 - Valid: Aug 20, 2014 - Aug 26, 2014



Confidence
High Moderate

- Tropical Cyclone Formation** Development of a tropical cyclone (tropical depression - TD, or greater 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.
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Produced: 08/12/2014

Forecaster: Gottschalck

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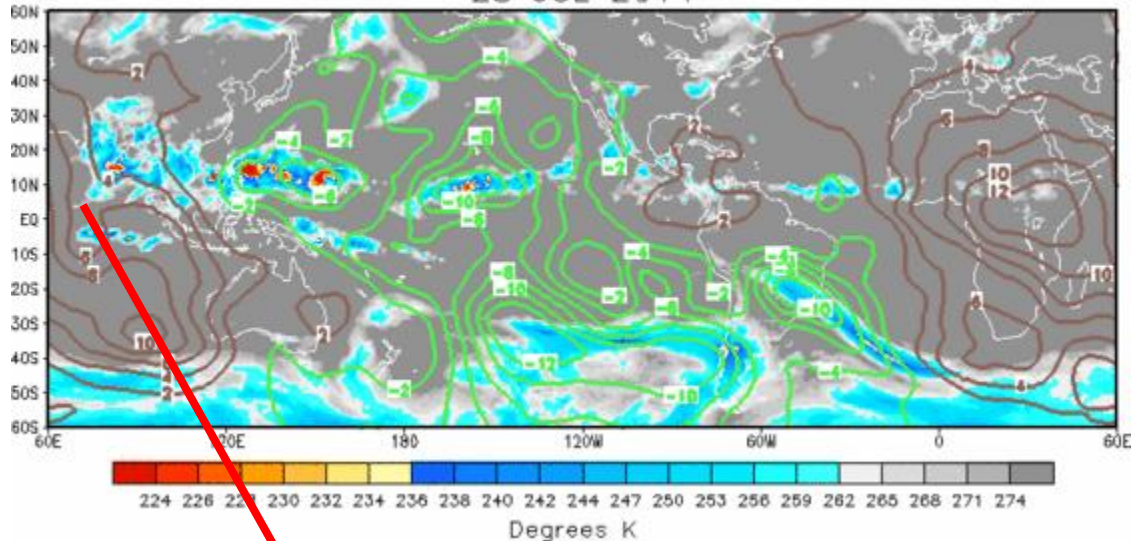


IR Satellite & 200-hpa Velocity Potential Anomalies

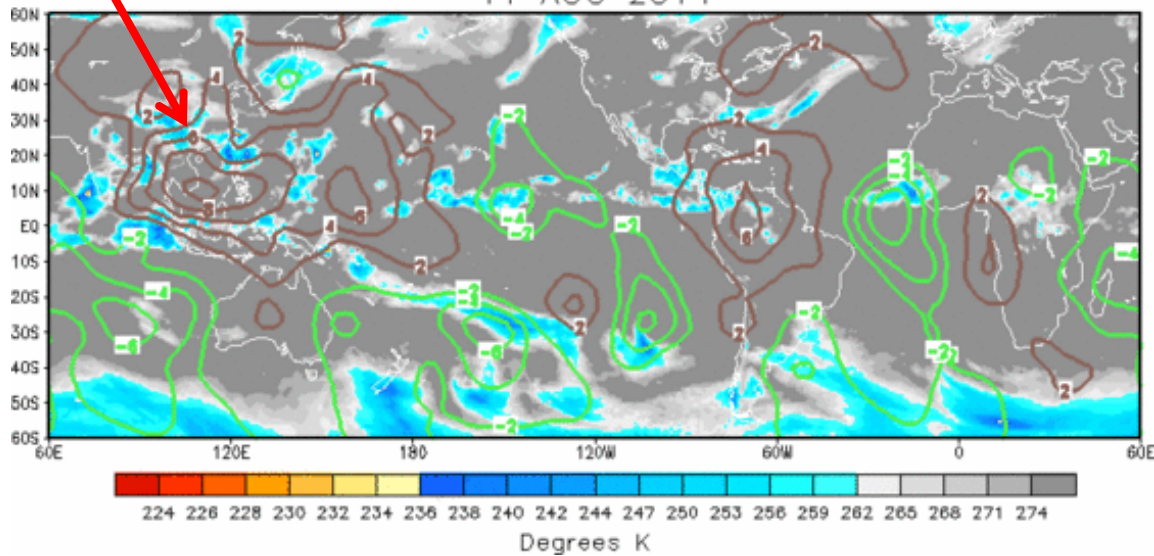
Green: Enhanced Divergence

Brown: Enhanced Convergence

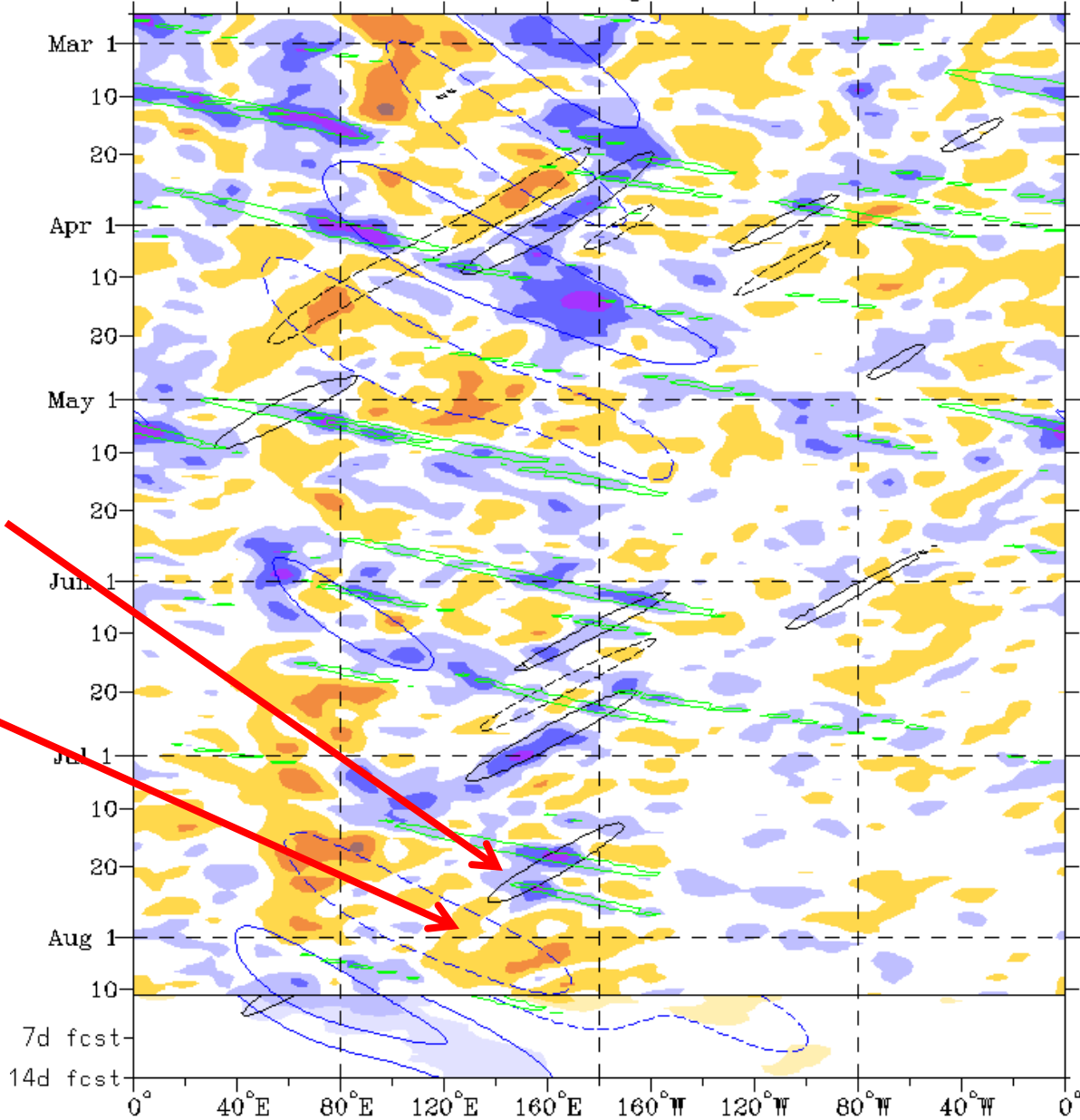
28 JUL 2014



11 AUG 2014



Real-time filtering superimposed upon 1-2-1 filt, R21, OLR Anoms
 MJO blue CINT=10; n1ER black CINT=10; Kelvin green CINT=15
 Negative contours solid, positive dashed (excluding Kelvin)
 24-Feb-2014 to 11-Aug-2014 + 14 days



Equatorial Rossby Wave activity

Weak MJO activity

Interference of modes across
 Indo Pacific warm pool will
 prediction quite difficult

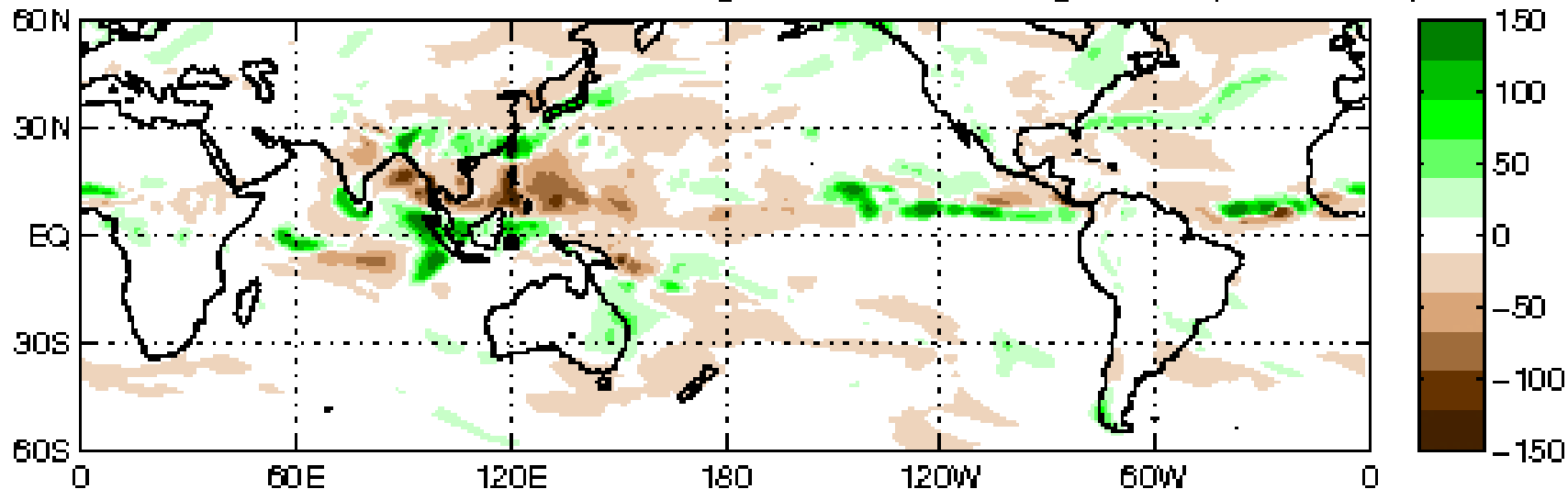
7.5S-7.5N

Obs; $W m^{-2}$ -90 -70 -50 -30 -10 10 30 50 70 90

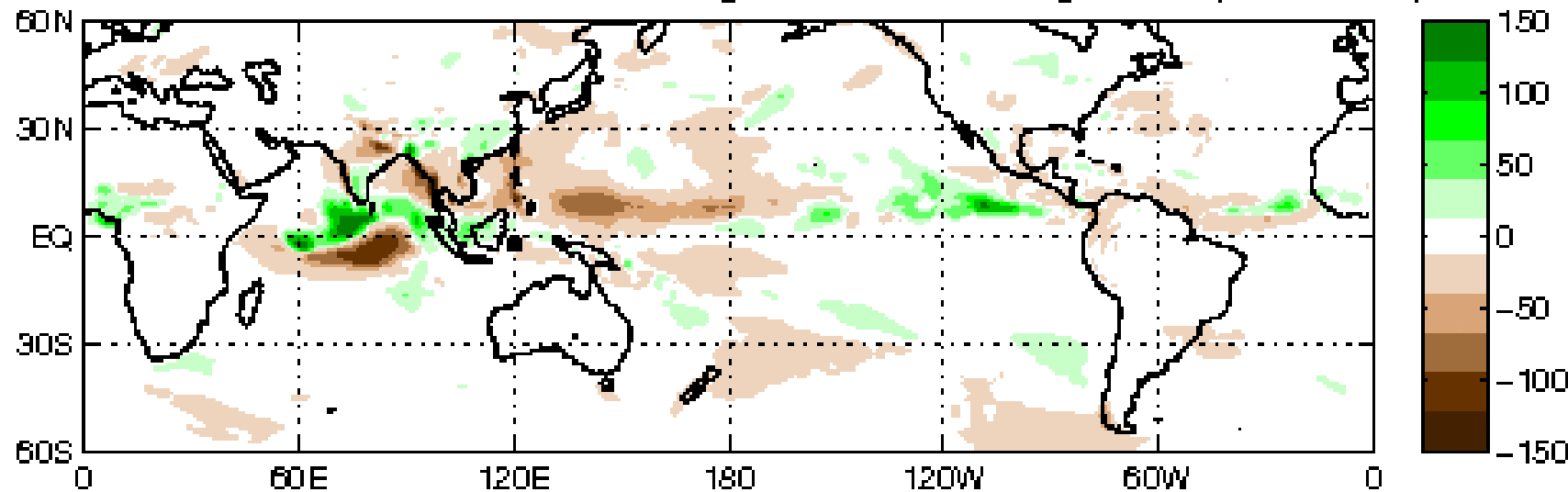
CAWCB/Bureau of Meteorology

Sum of Fcsts; $W m^{-2}$ -10 -5 +5 +10

CFS: Anom. PREC Week1: 12-Aug-2014 to 18-Aug-2014 (mm/week)



CFS: Anom. PREC Week2: 19-Aug-2014 to 25-Aug-2014 (mm/week)





2-Day Graphical Tropical Weather Outlook

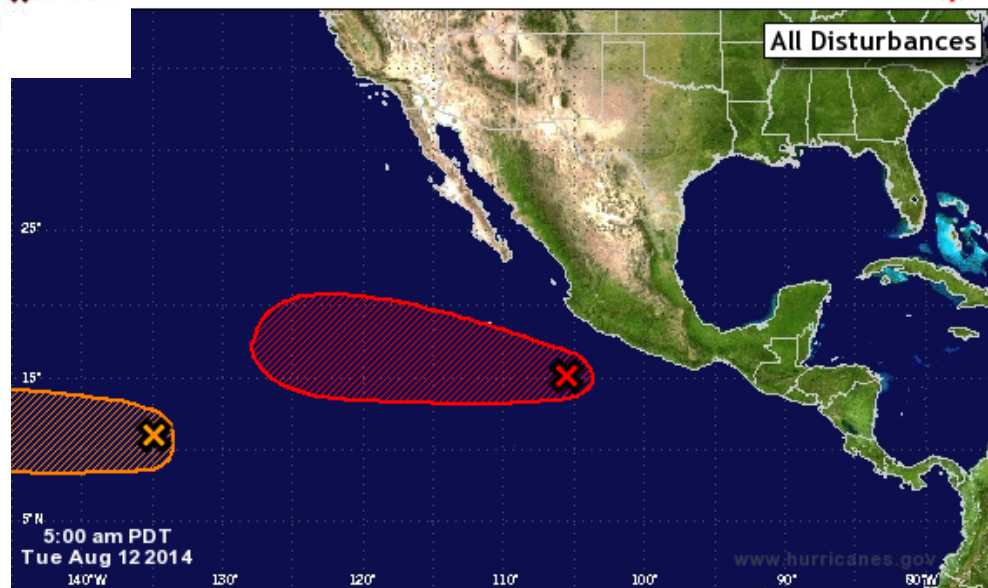
National Hurricane Center Miami, Florida



Current Disturbances and 2-Day Cyclone Formation Chance: < 30% 30-50% > 50%
 Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane
 Post-Tropical Cyclone Remnants

Experimental 5-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida

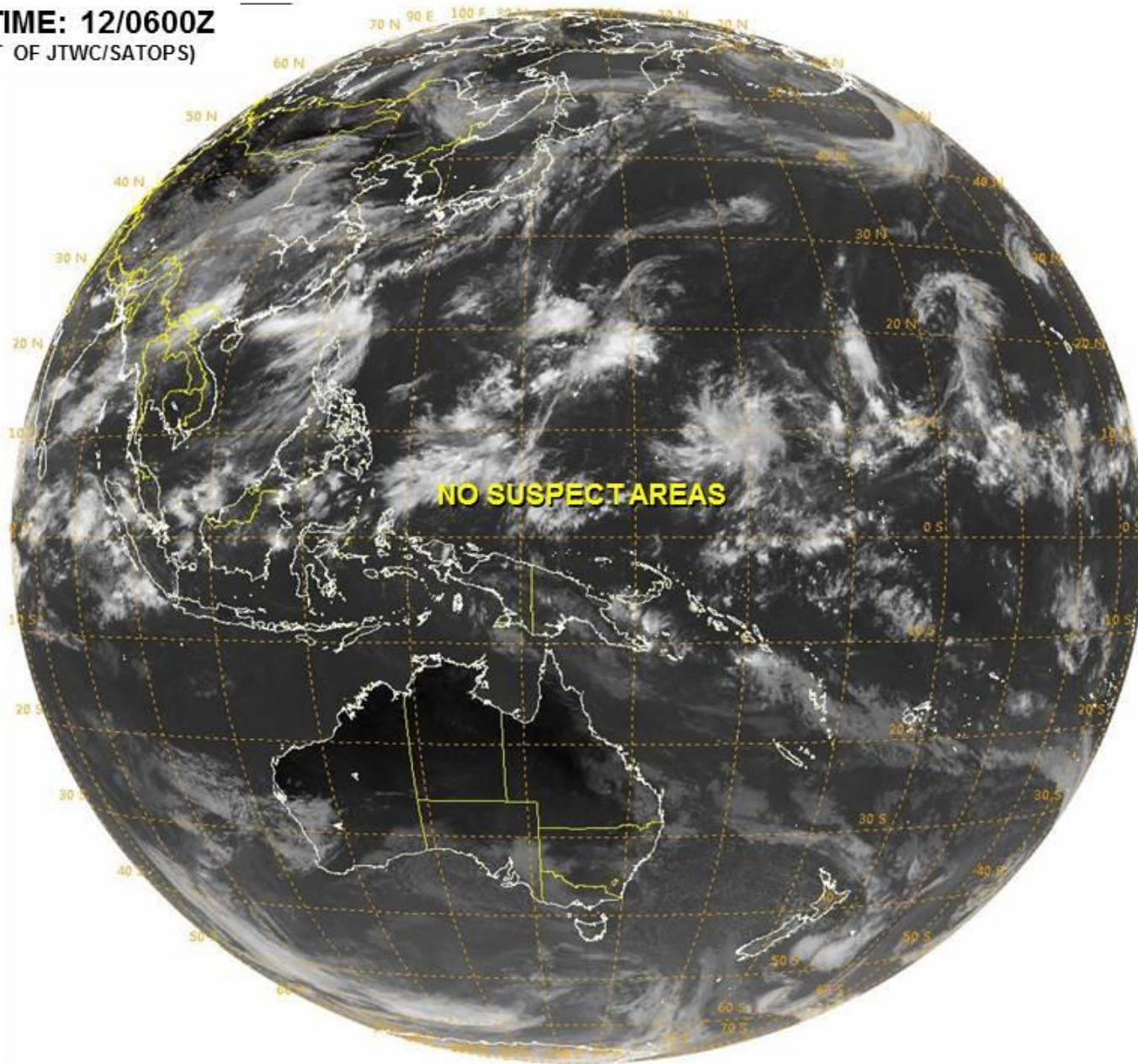


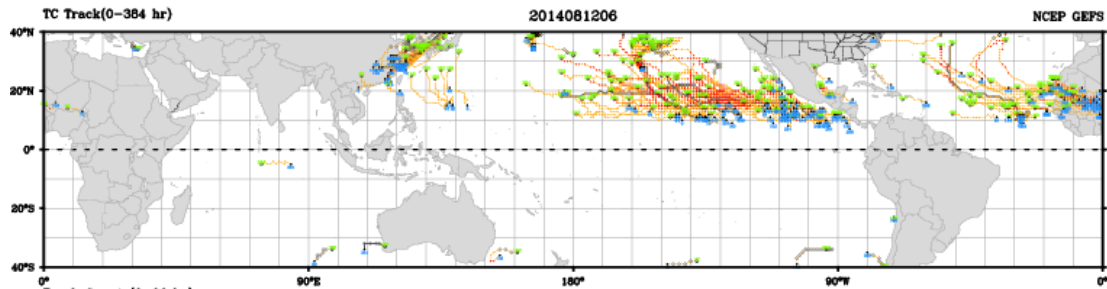
Tropical Cyclone Formation Potential for the 5-Day Period Ending 5:00 am PDT Sun Aug 17 2014

Chance of Cyclone Formation in 5 Days: Low < 30% Medium 30-50% High > 50%

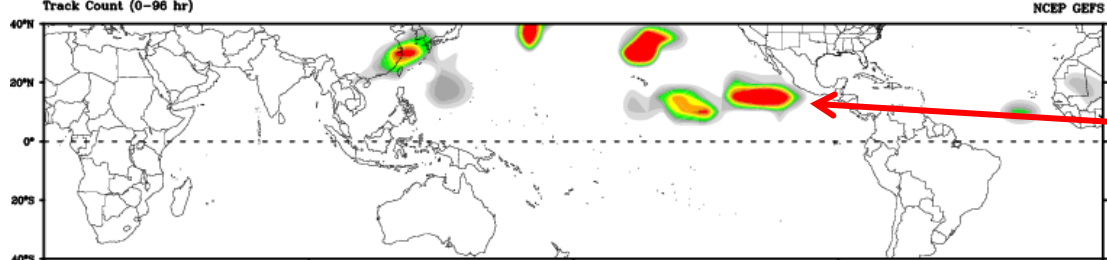
X indicates current disturbance location; shading indicates potential formation area.

VALID TIME: 12/0600Z
(PRODUCT OF JTWC/SATOPS)



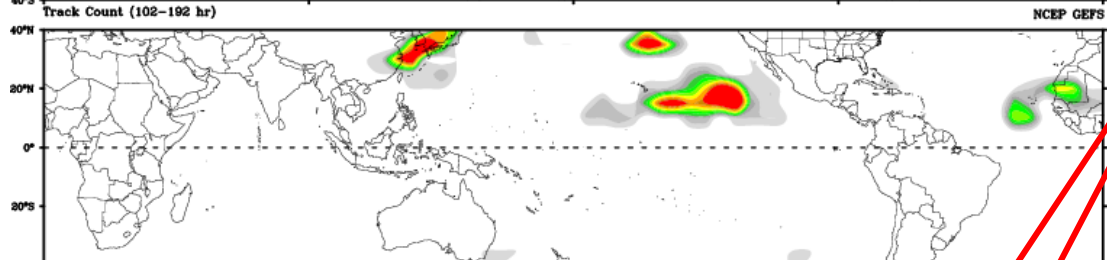


Days 1-4

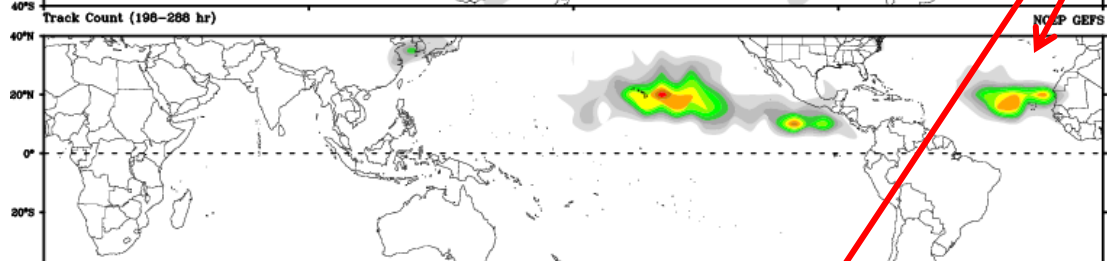


Areas to watch over period

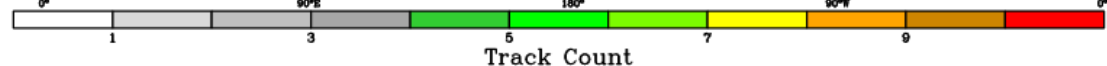
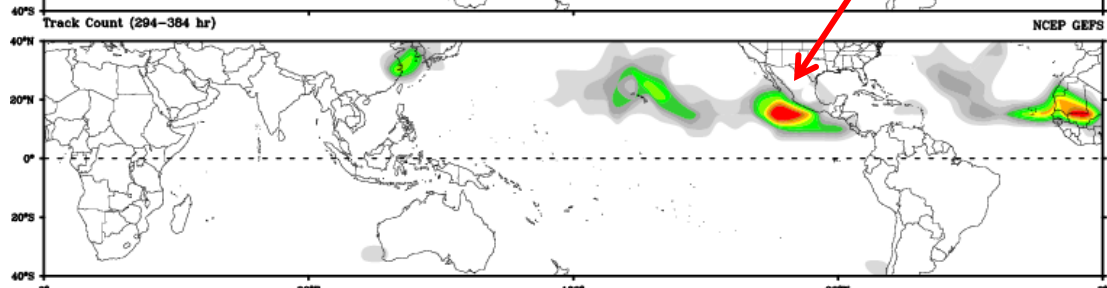
Day 5-8



Day 9-12

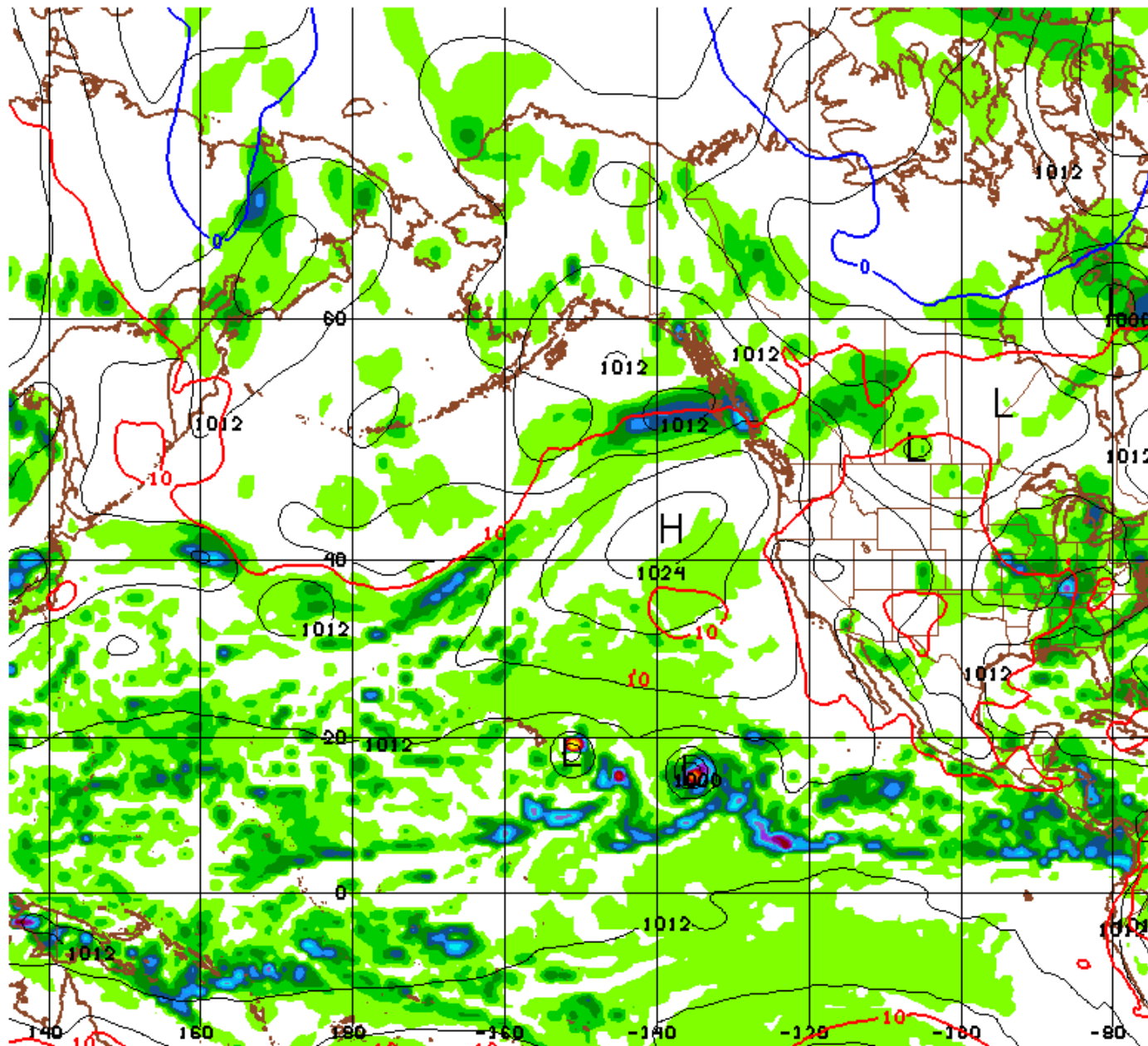
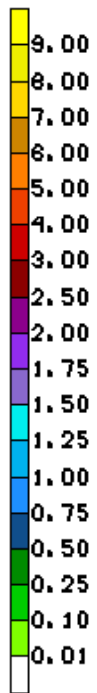


Day 13-15

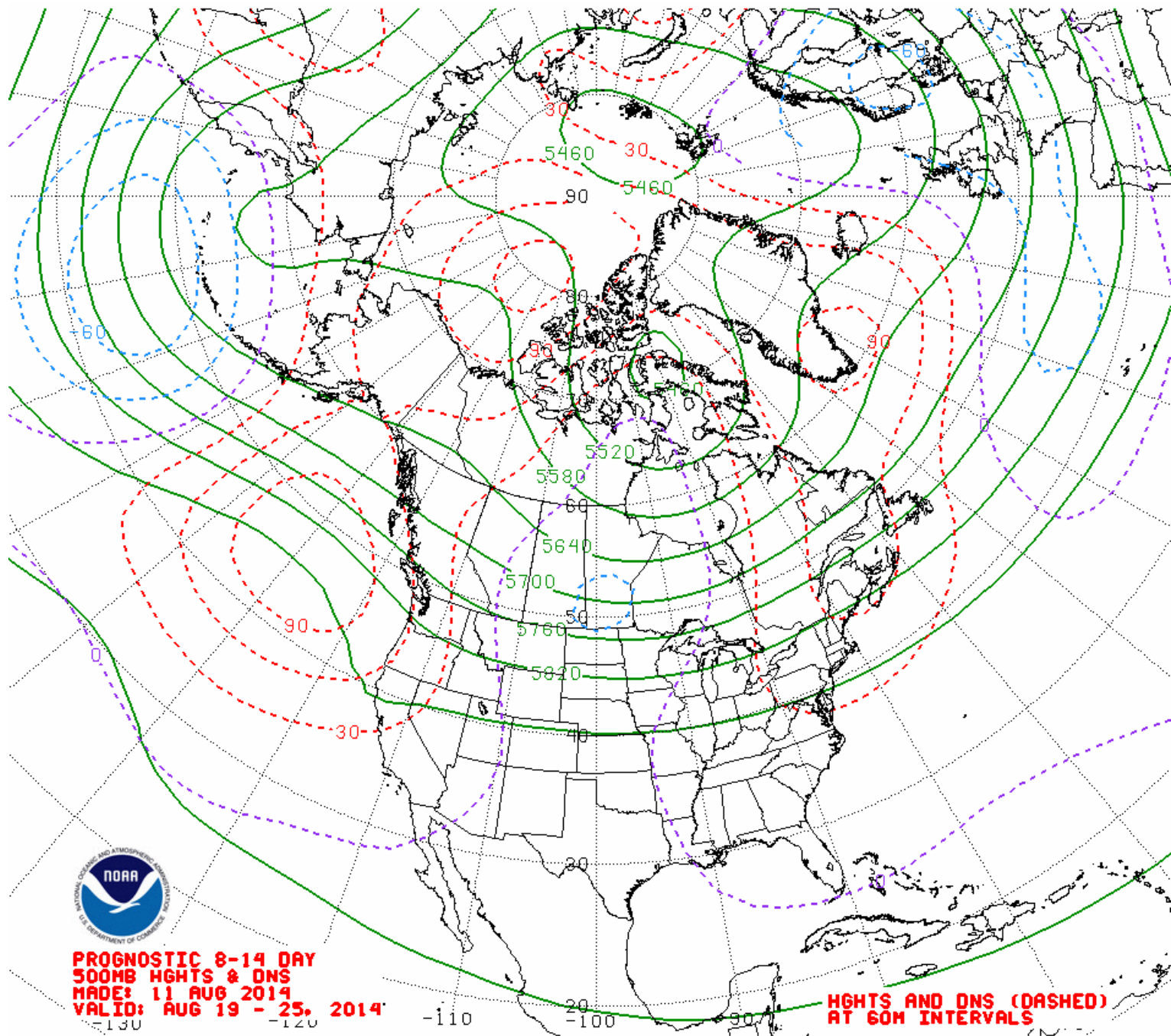




08/12/14 06UTC 180HR FCST VALID TUE 08/19/14 18UTC NCEP/NWS/NOAA



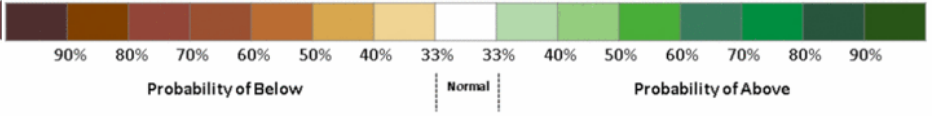
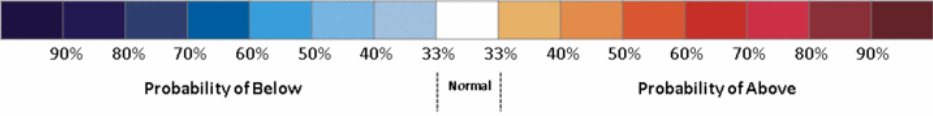
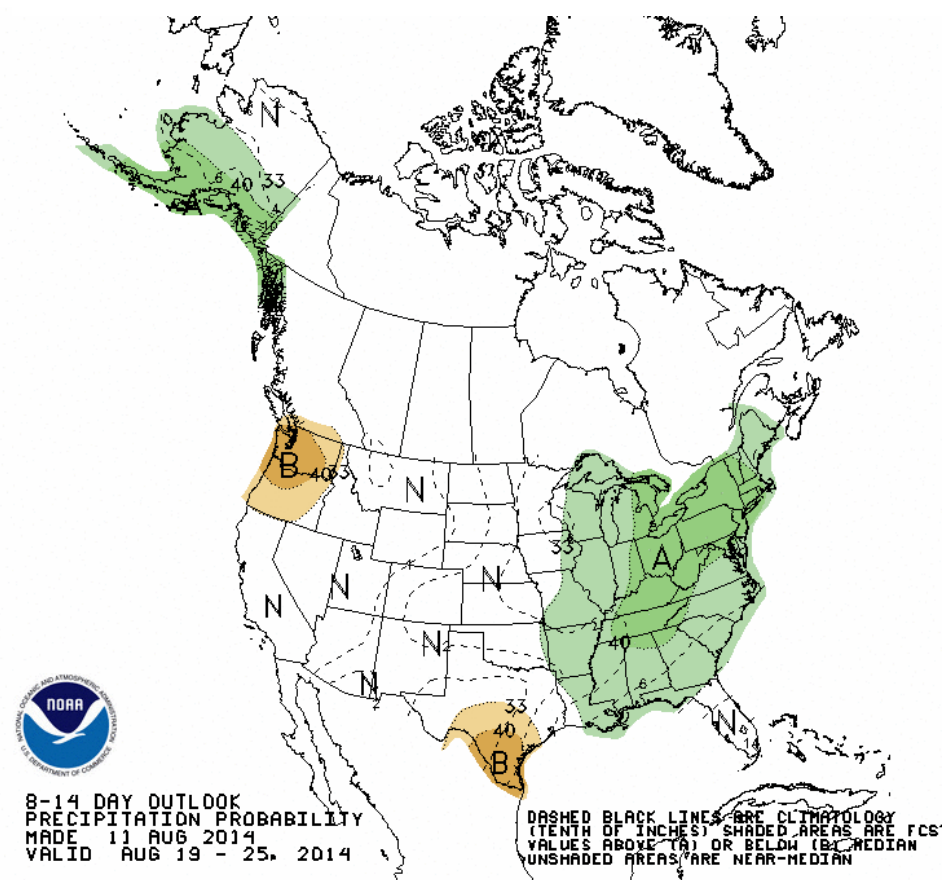
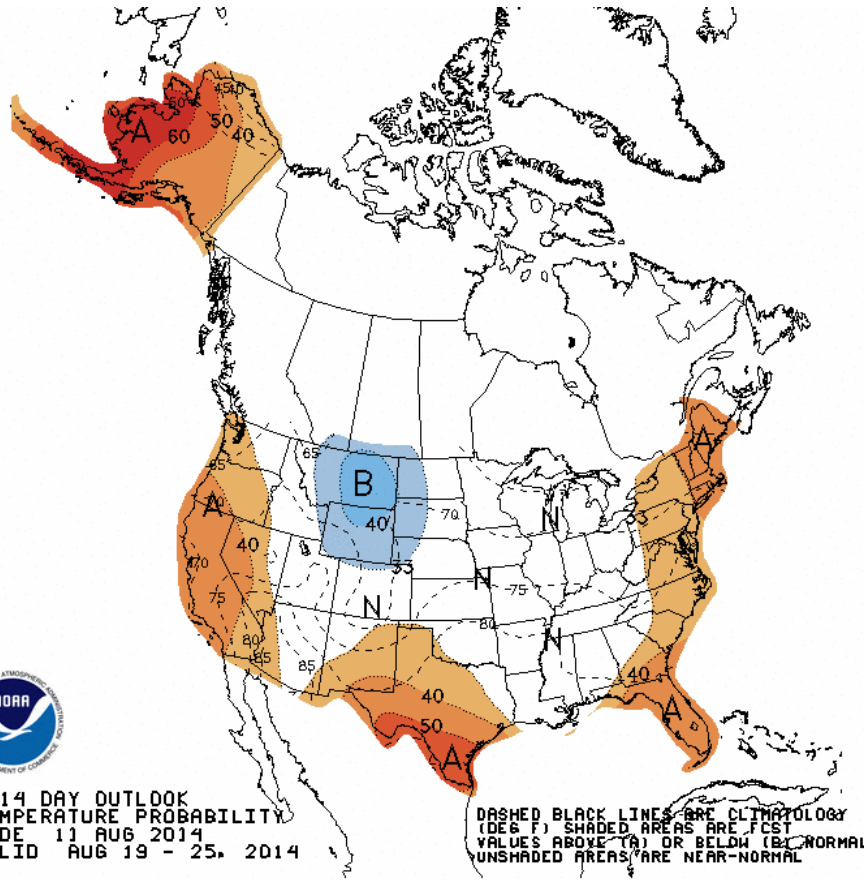
140819/1800V180 GFS MSLP 12HR PRCP(IN) 850MB TEMP(C)



PROGNOSTIC 8-14 DAY
500MB HGHTS & ΩS
MADE: 11 AUG 2014
VALID: AUG 19 - 25, 2014

HGHTS AND ΩS (DASHED)
AT 60M INTERVALS

Week 2 – Temperature and Precipitation

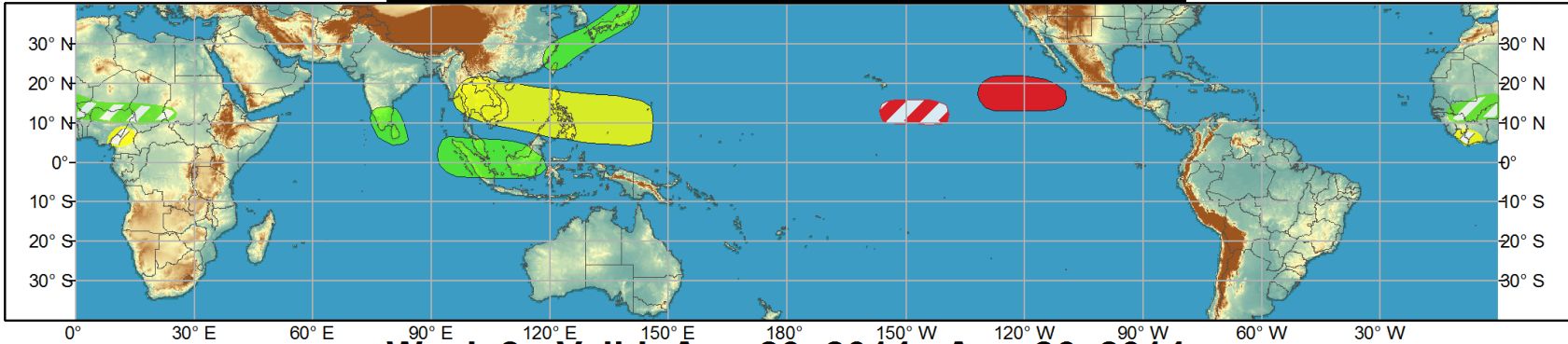




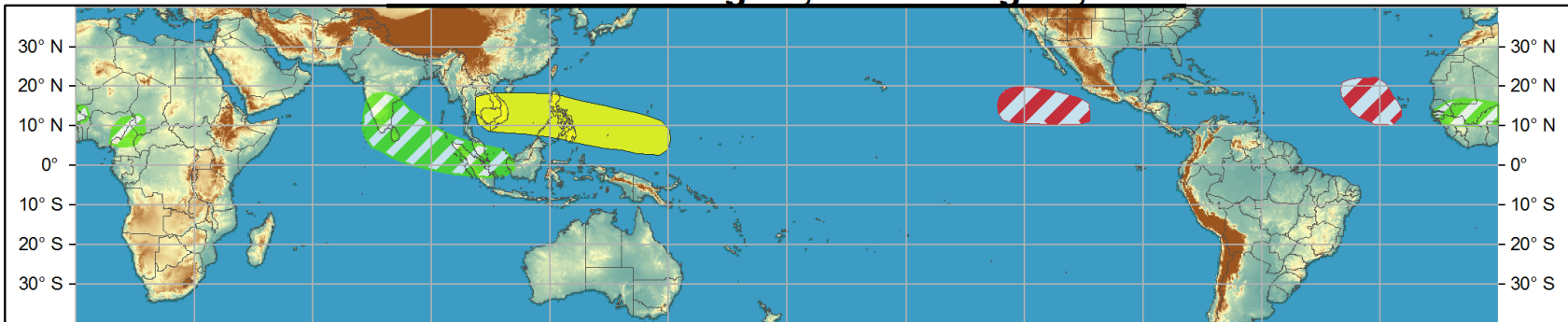
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