

Global Tropics Hazards And Benefits Outlook

September 13, 2016

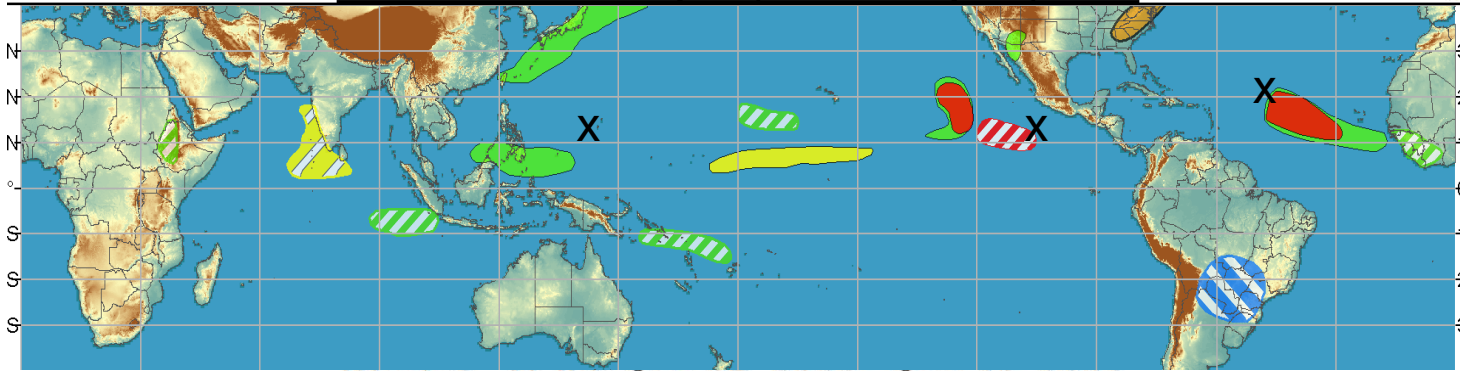
Anthony Artusa

Outline

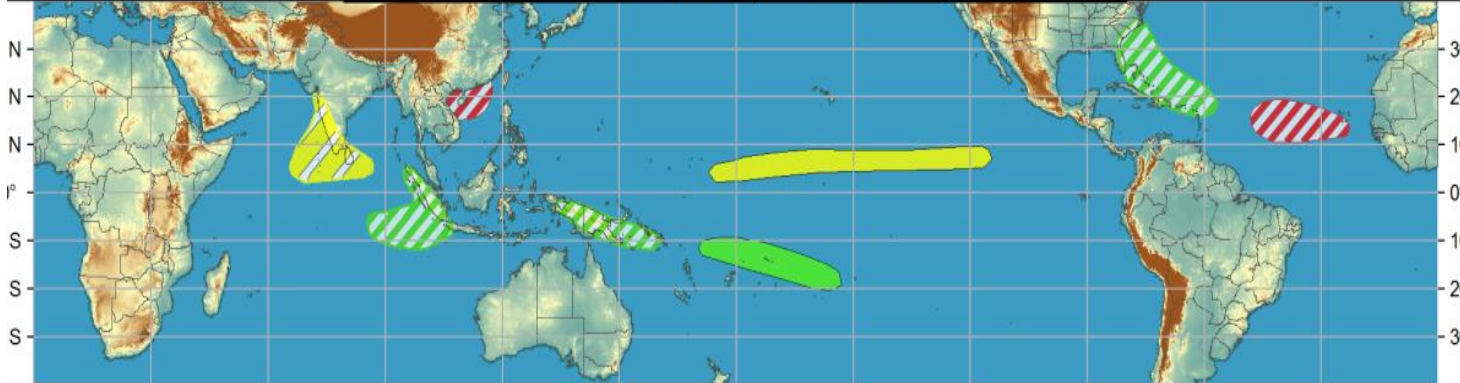
1. Review of Recent Conditions
2. Synopsis of Climate Modes
3. GTH Outlook and Forecast Discussion
4. Connections to U.S. Impacts

Outlook Review

Week 1 - Valid: Sep 07, 2016 - Sep 13, 2016

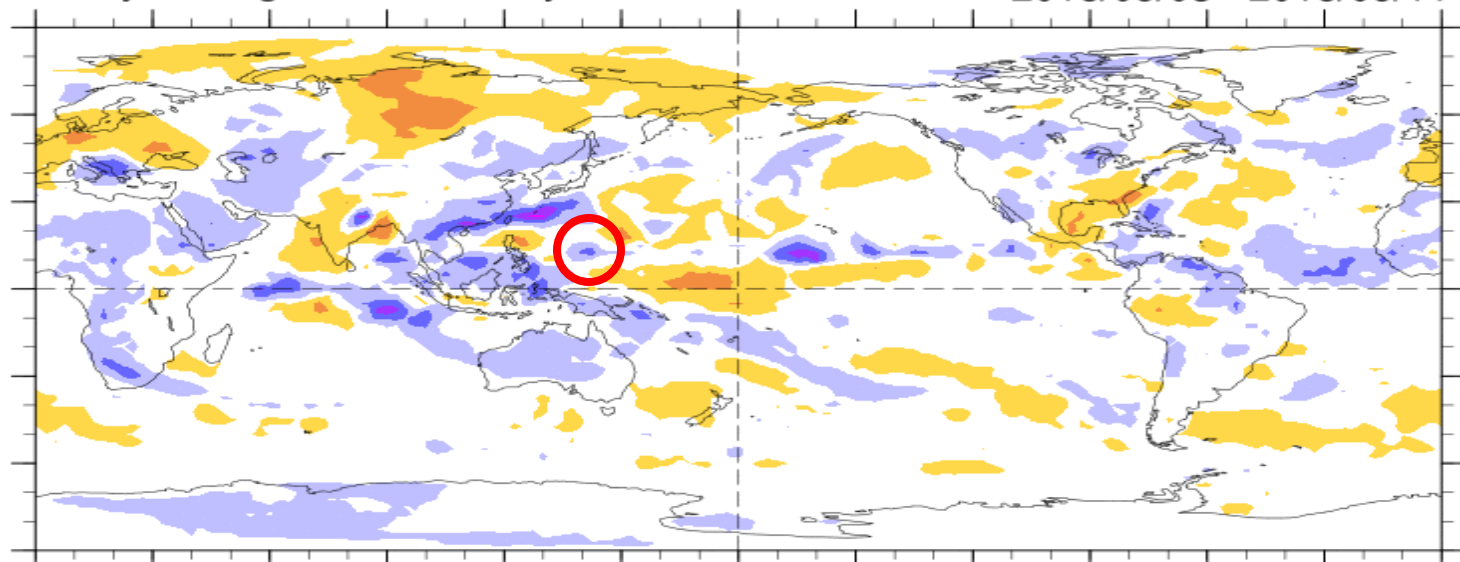


Week 2 - Valid: Sep 07, 2016 - Sep 13, 2016



7-Day Average OLR Anomaly

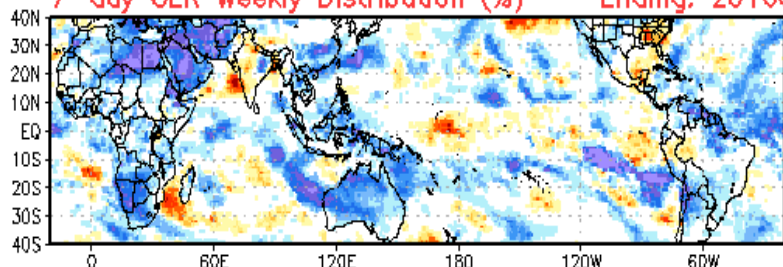
2016/09/05 - 2016/09/11



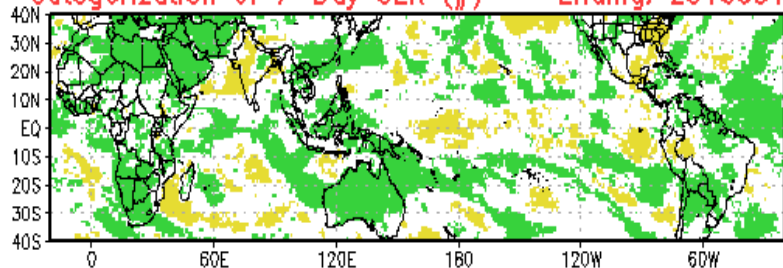
Cool shading
More clouds/rain

Warm shading
Less clouds/rain

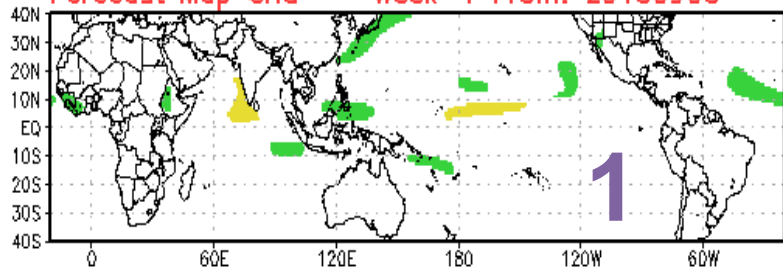
7-day OLR Weekly Distribution (%) -- Ending: 20160913



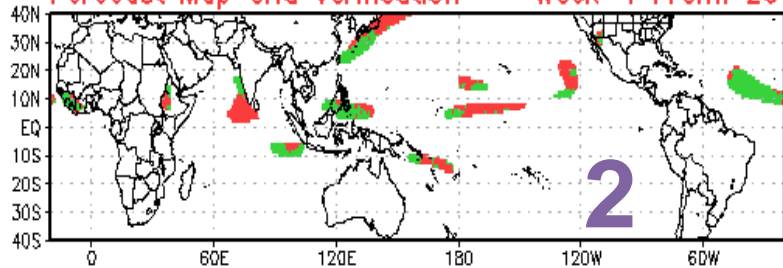
Categorization of 7-Day OLR (#) -- Ending: 20160913



Forecast Map Grid -- Week-1 From: 20160906

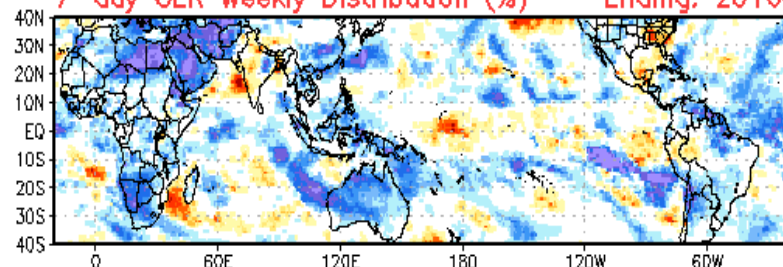


Forecast Map Grid Verification -- Week-1 From: 20160906

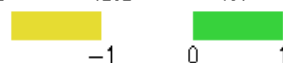
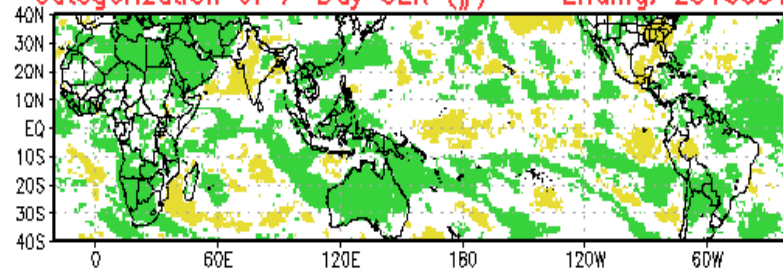


Hit: Green, Miss: Red
Heidke Skill Score: 28.4773

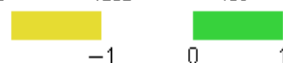
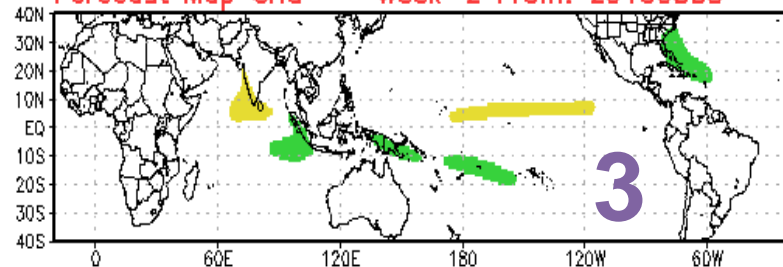
7-day OLR Weekly Distribution (%) -- Ending: 20160913



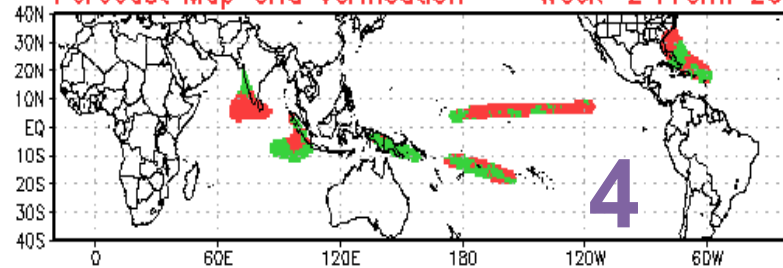
Categorization of 7-Day OLR (#) -- Ending: 20160913



Forecast Map Grid -- Week-2 From: 20160830



Forecast Map Grid Verification -- Week-2 From: 20160830



Hit: Green, Miss: Red
Heidke Skill Score: 21.2463

Synopsis of Climate Modes

ENSO:

- **Not Active**

ENSO-Neutral conditions are slightly favored (55-60%) during the upcoming NH fall and winter 2016-17.

MJO and other subseasonal tropical variability:

- Intraseasonal signal over (north)western Pacific is weak; tied to monsoon trough & TC activity
- Dynamical models indicate weak to moderate amplitude MJO, emerging between the eastern Indian Ocean and the western Pacific.

Extratropics:

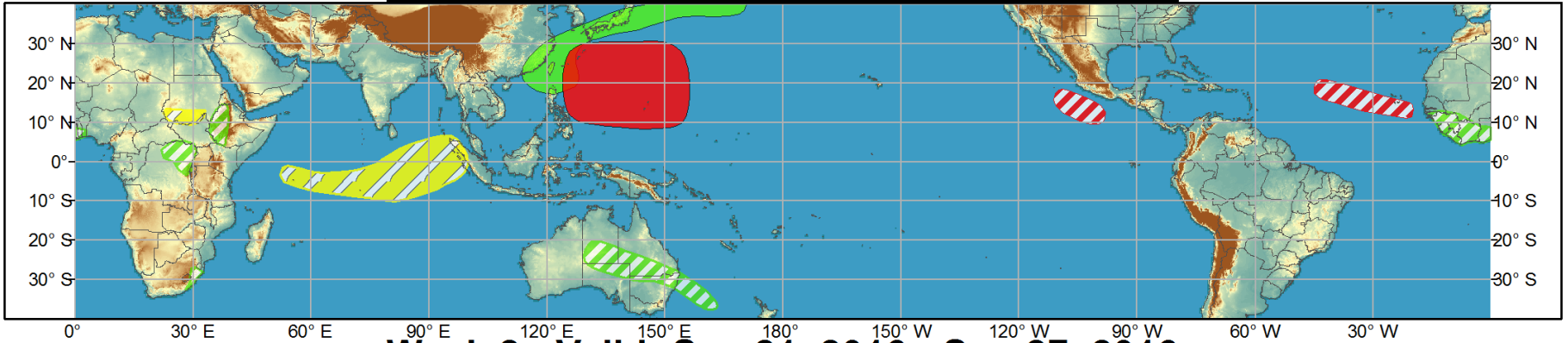
- The extended range temperature and precipitation forecasts for the U.S. are not likely to be impacted by the MJO.



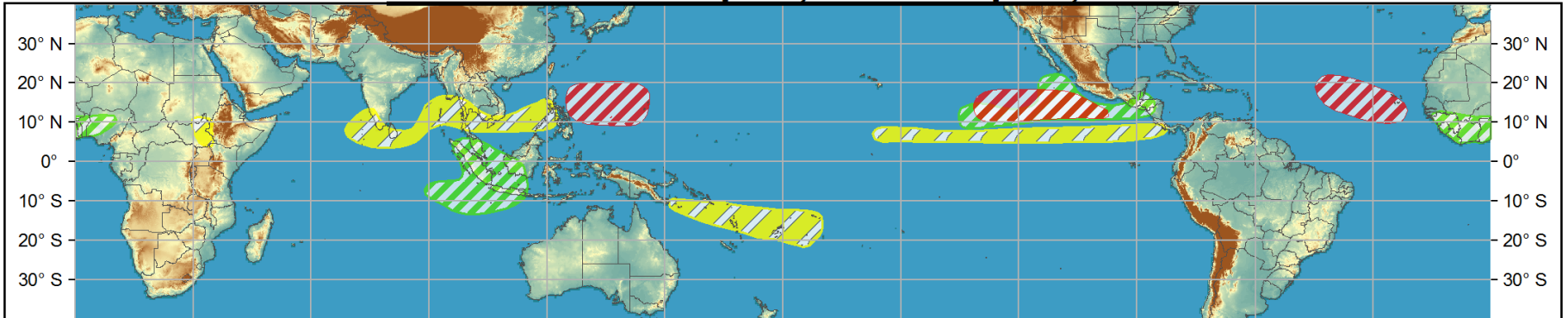
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Sep 14, 2016 - Sep 20, 2016



Week 2 - Valid: Sep 21, 2016 - Sep 27, 2016



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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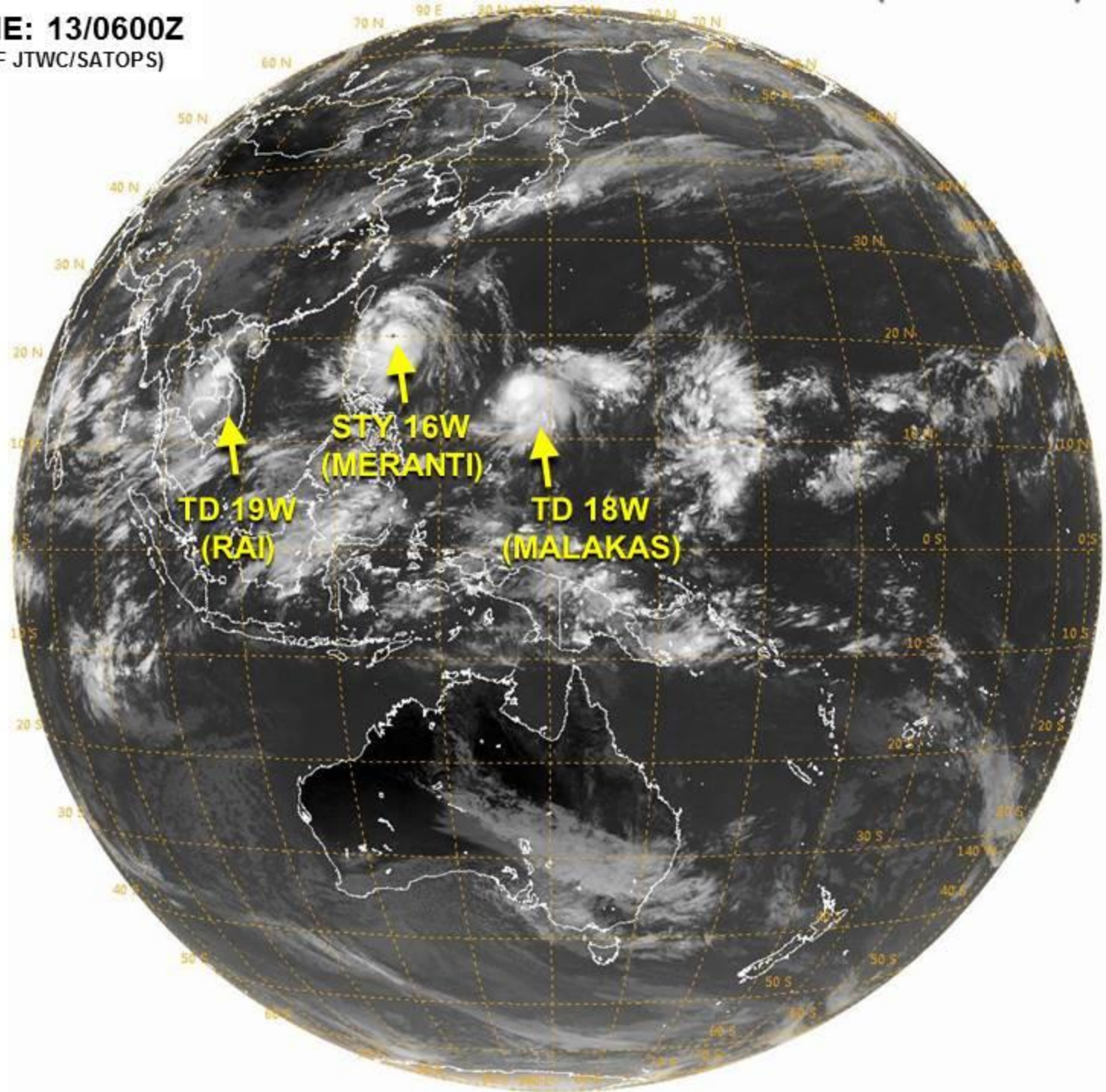
Produced: 09/13/2016

Forecaster: Artusa

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.

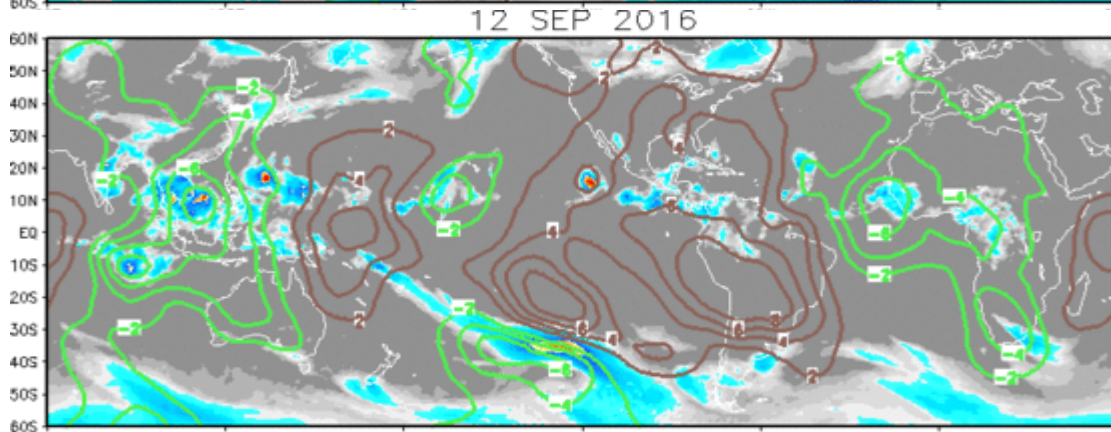
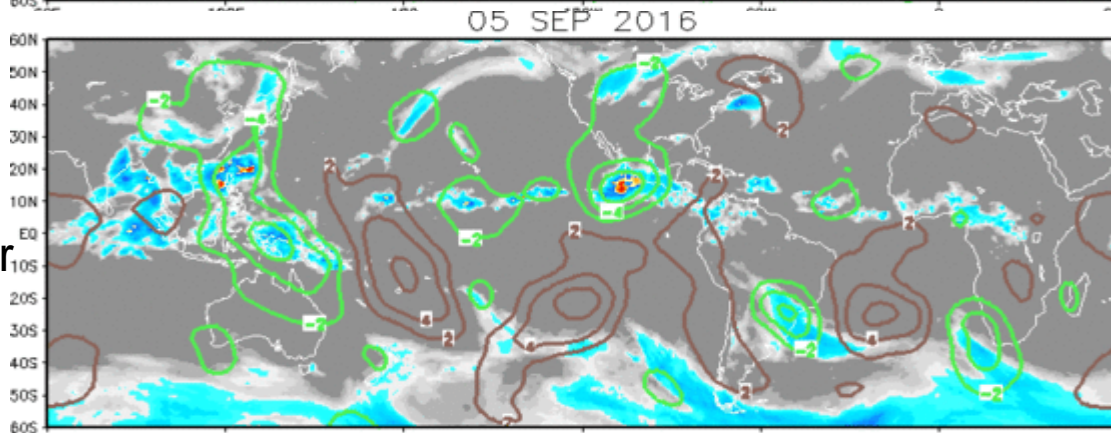
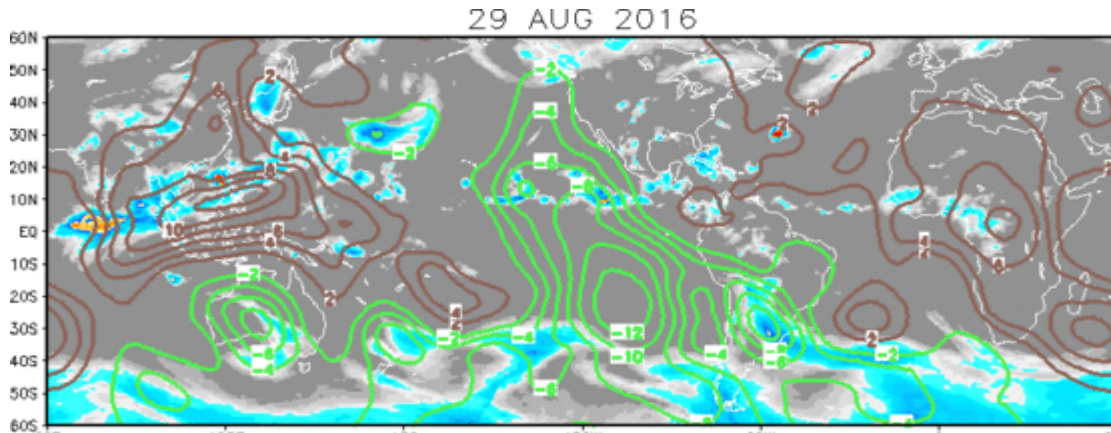


VALID TIME: 13/0600Z
(PRODUCT OF JTWC/SATOPS)



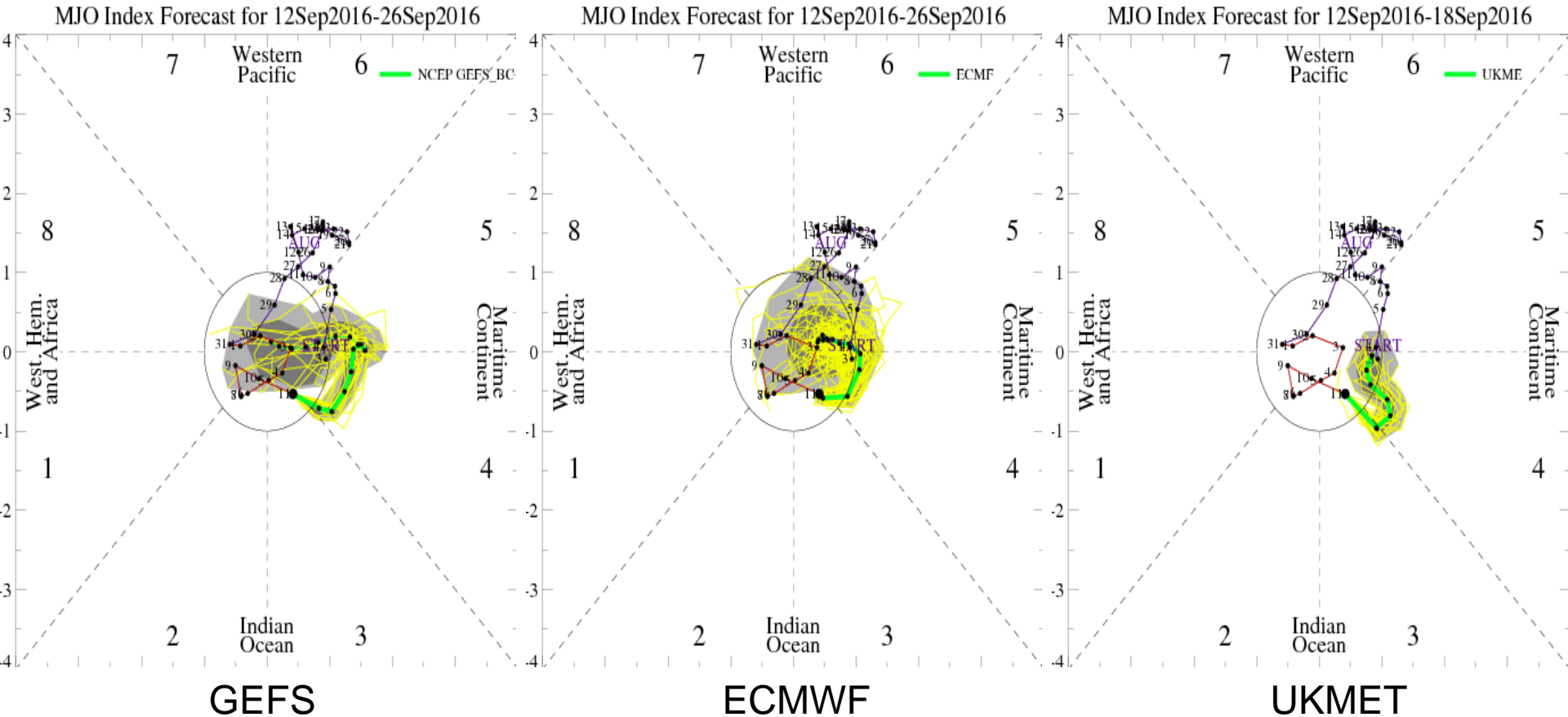
IR Satellite & 200-hpa Velocity Potential Anomalies

Green: Enhanced Divergence Brown: Enhanced Convergence



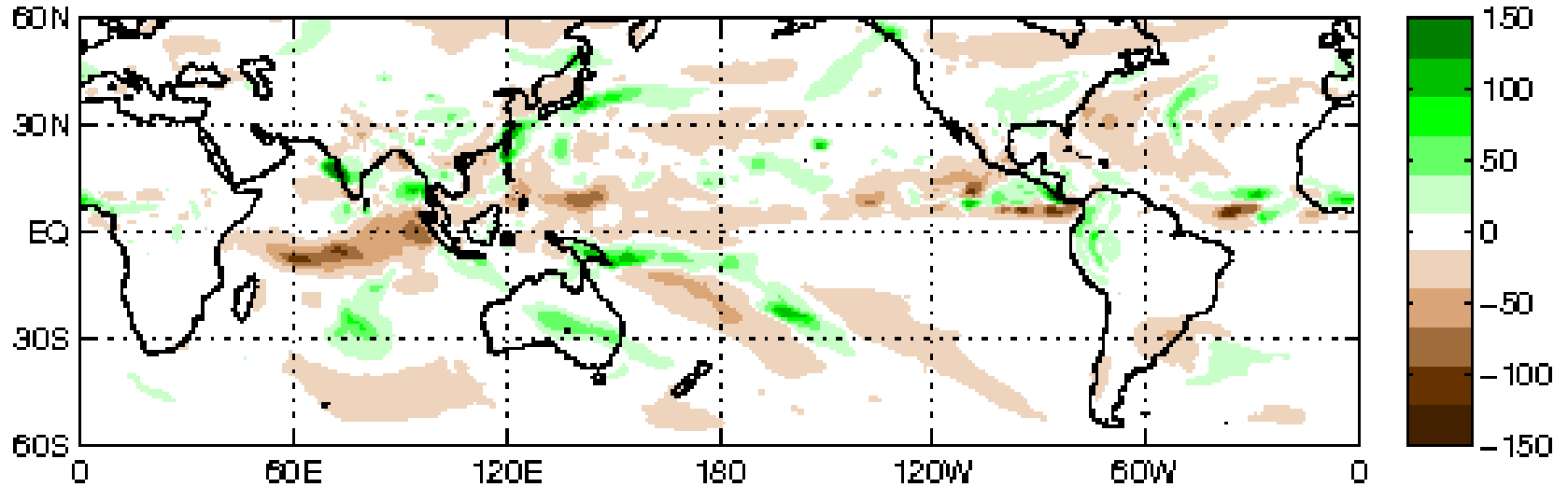
Breakdown of the signal into higher wavenumber modes.

MJO Observation/Forecast

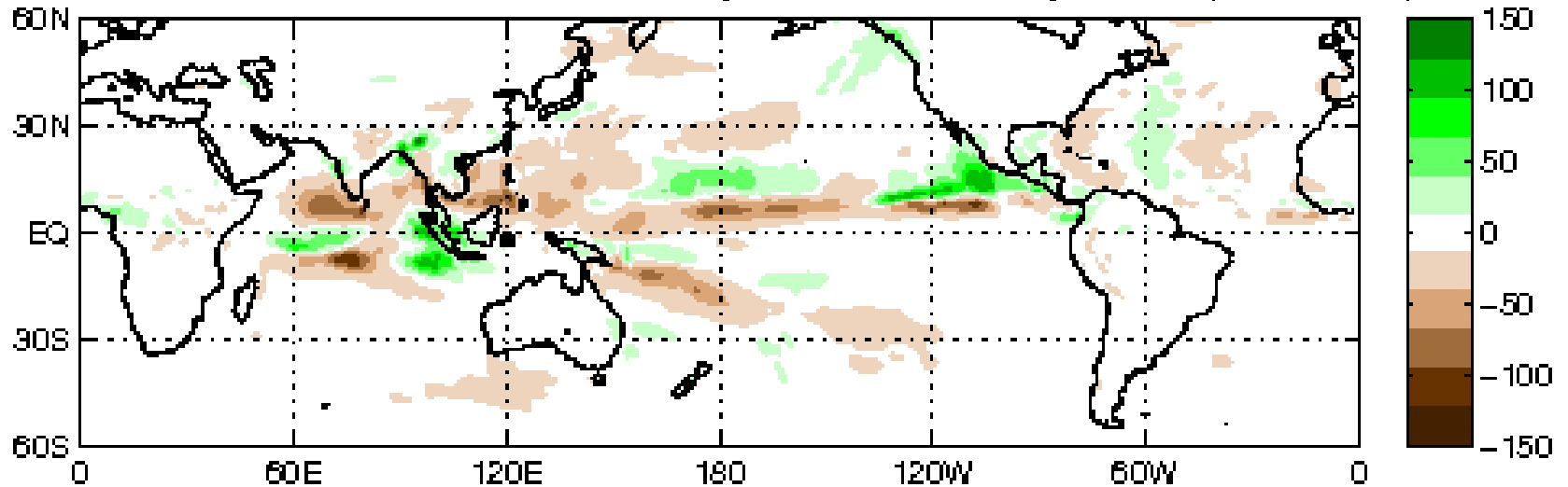


Wheeler-Hendon based analyses of model forecasts indicate a somewhat stronger signal emerging over the region between the eastern Indian Ocean and the western Pacific.

CFS: Anom. PREC Week: 1: 14-Sep-2016 to 20-Sep-2016 (mm/week)



CFS: Anom. PREC Week: 2: 21-Sep-2016 to 27-Sep-2016 (mm/week)



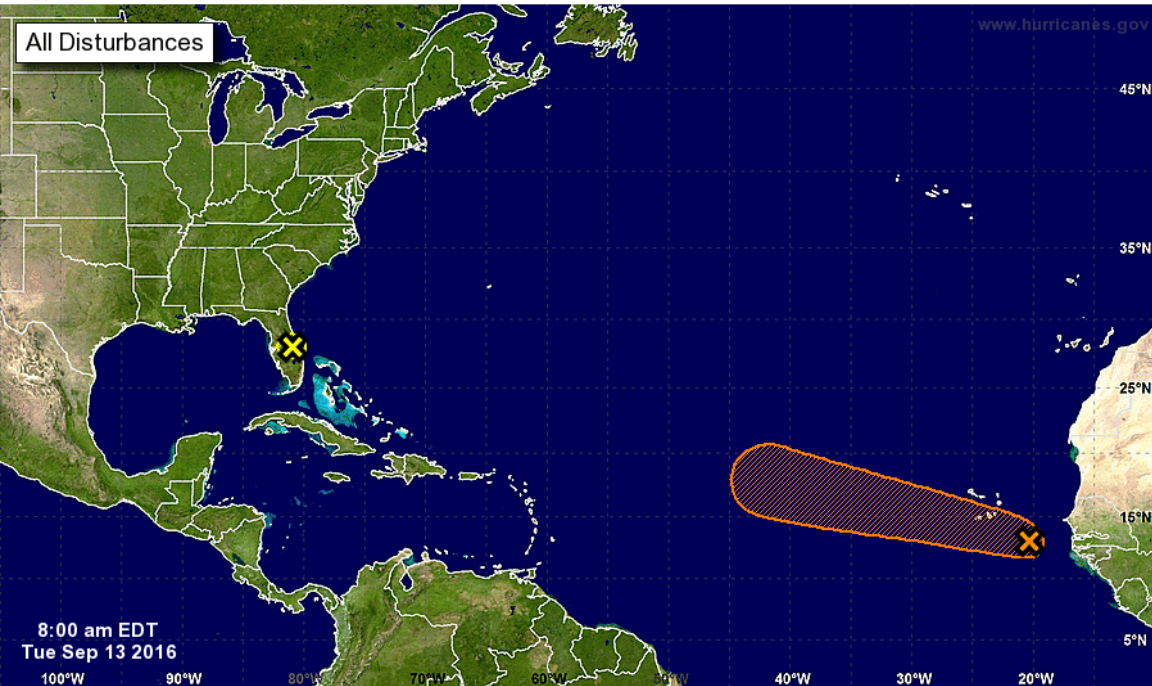


Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



Graphical Tropical Weather Outlook

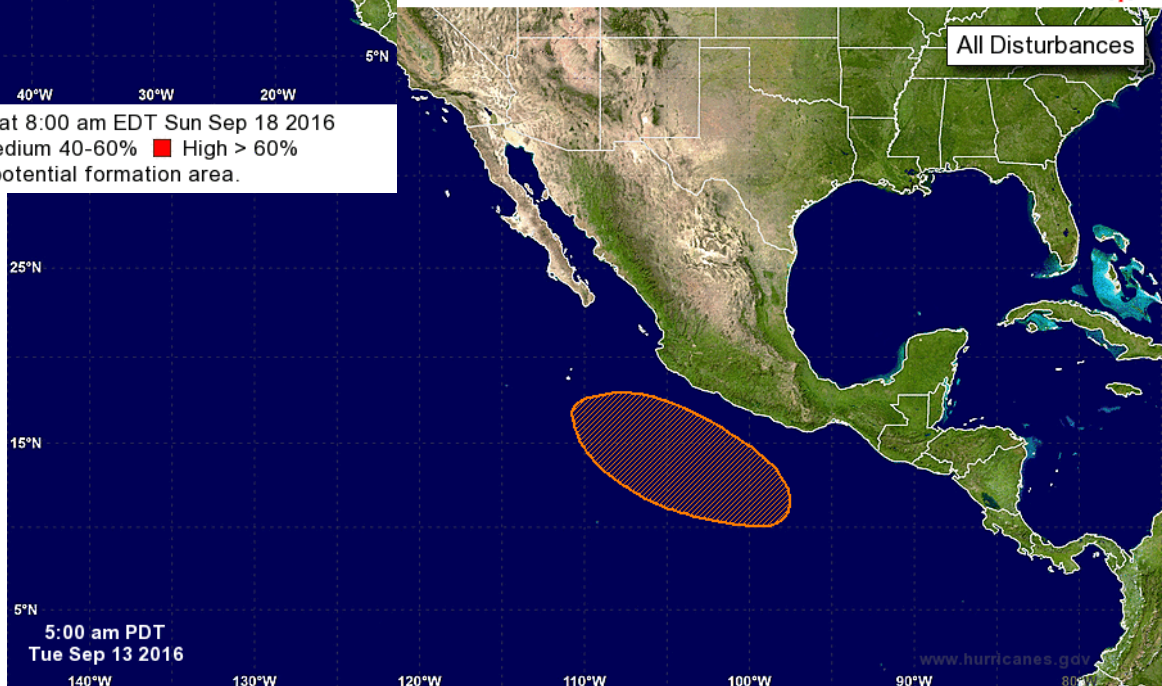


8:00 am EDT
Tue Sep 13 2016

Tropical Cyclone Formation Potential for the Five-Day Period Ending at 8:00 am EDT Sun Sep 18 2016
 Chance of Cyclone Formation in Five Days: ■ Low < 40% ■ Medium 40-60% ■ High > 60%
 X indicates current disturbance location; shading indicates potential formation area.

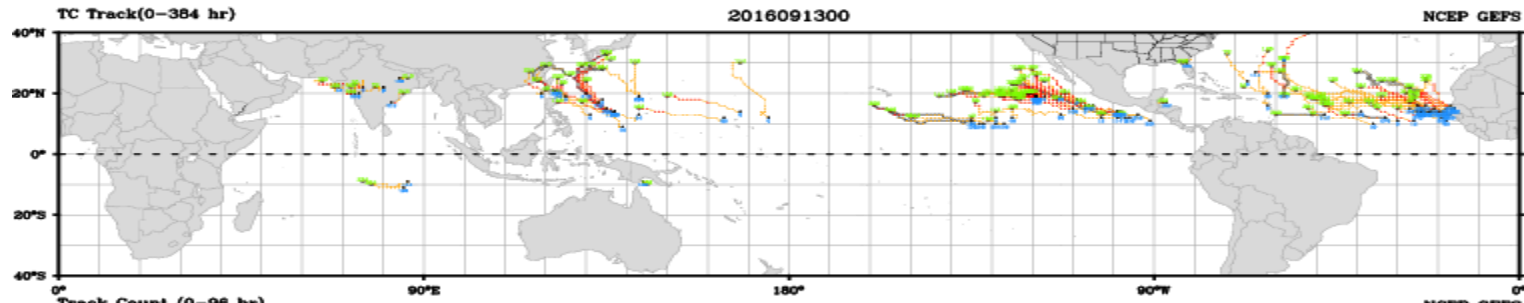
Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida

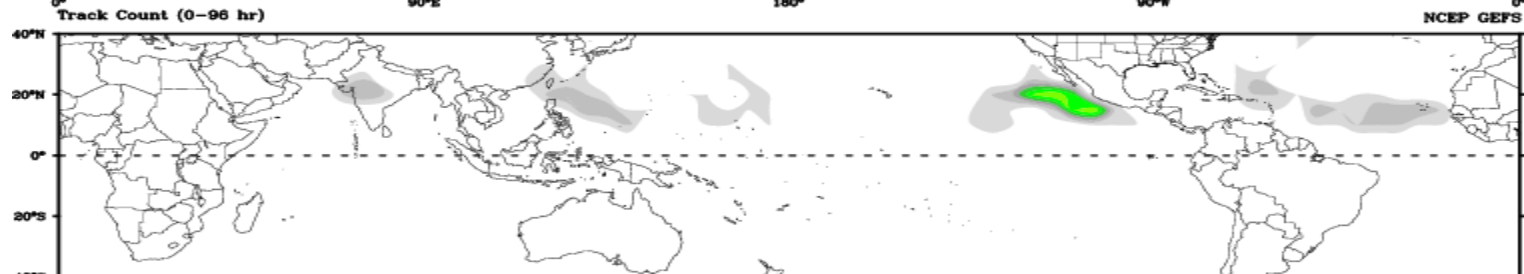


5:00 am PDT
Tue Sep 13 2016

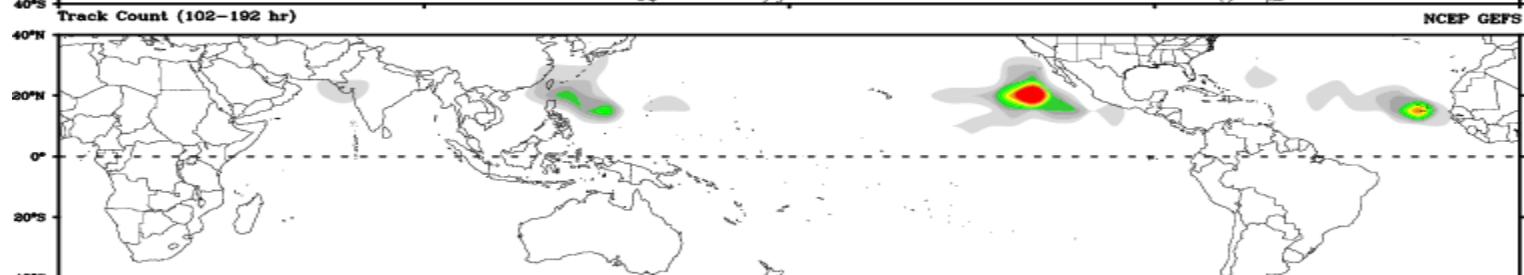
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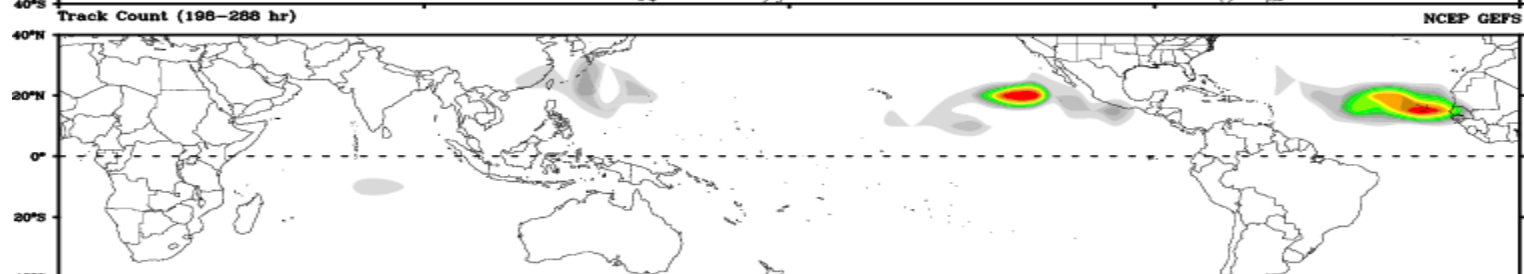
Days 1-4



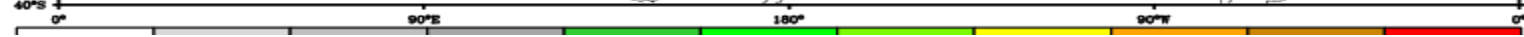
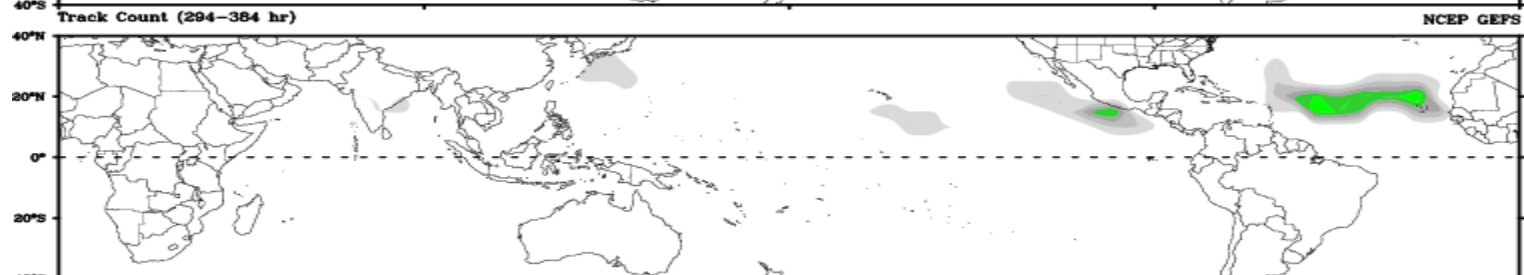
Day 5-8



Day 9-12

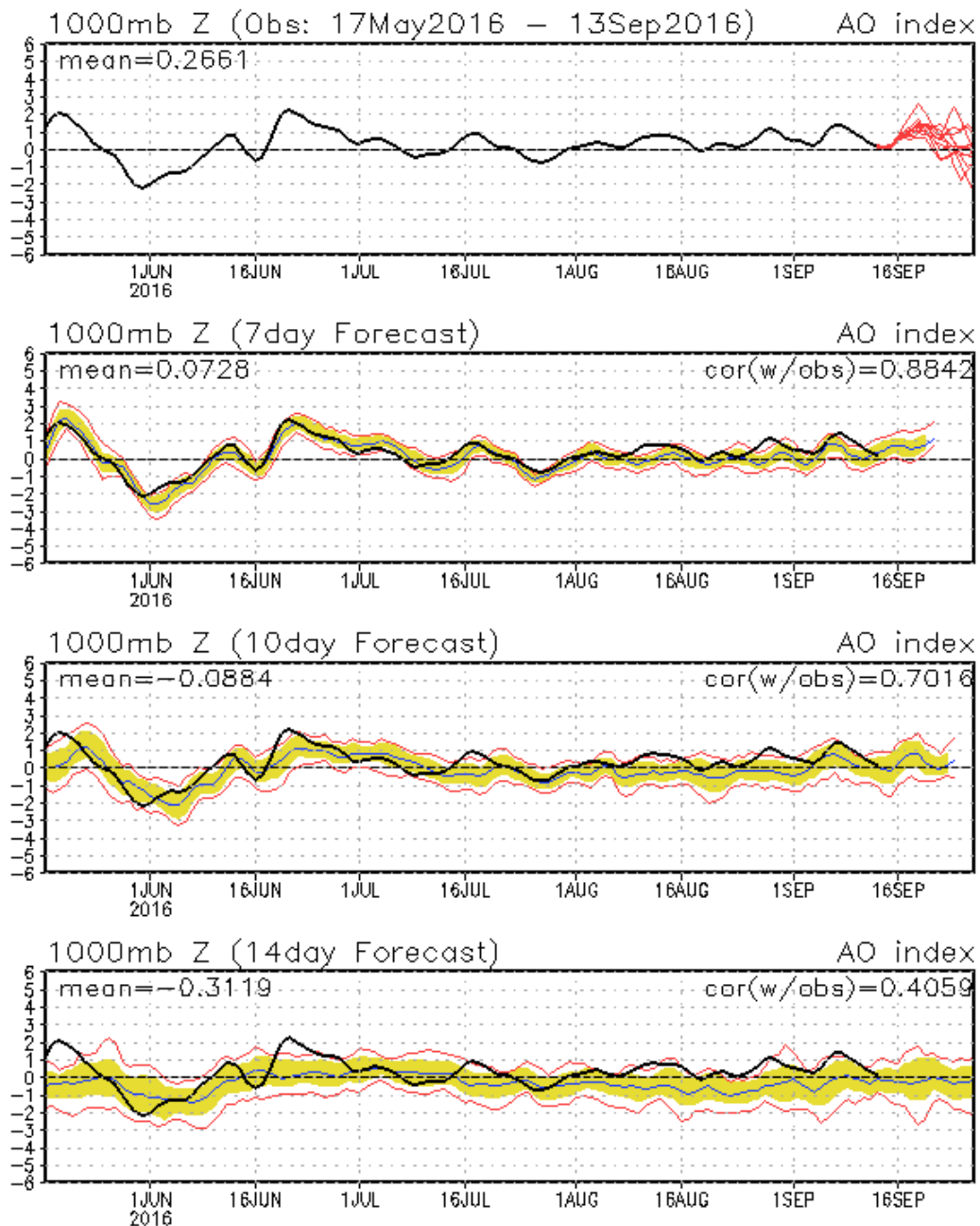


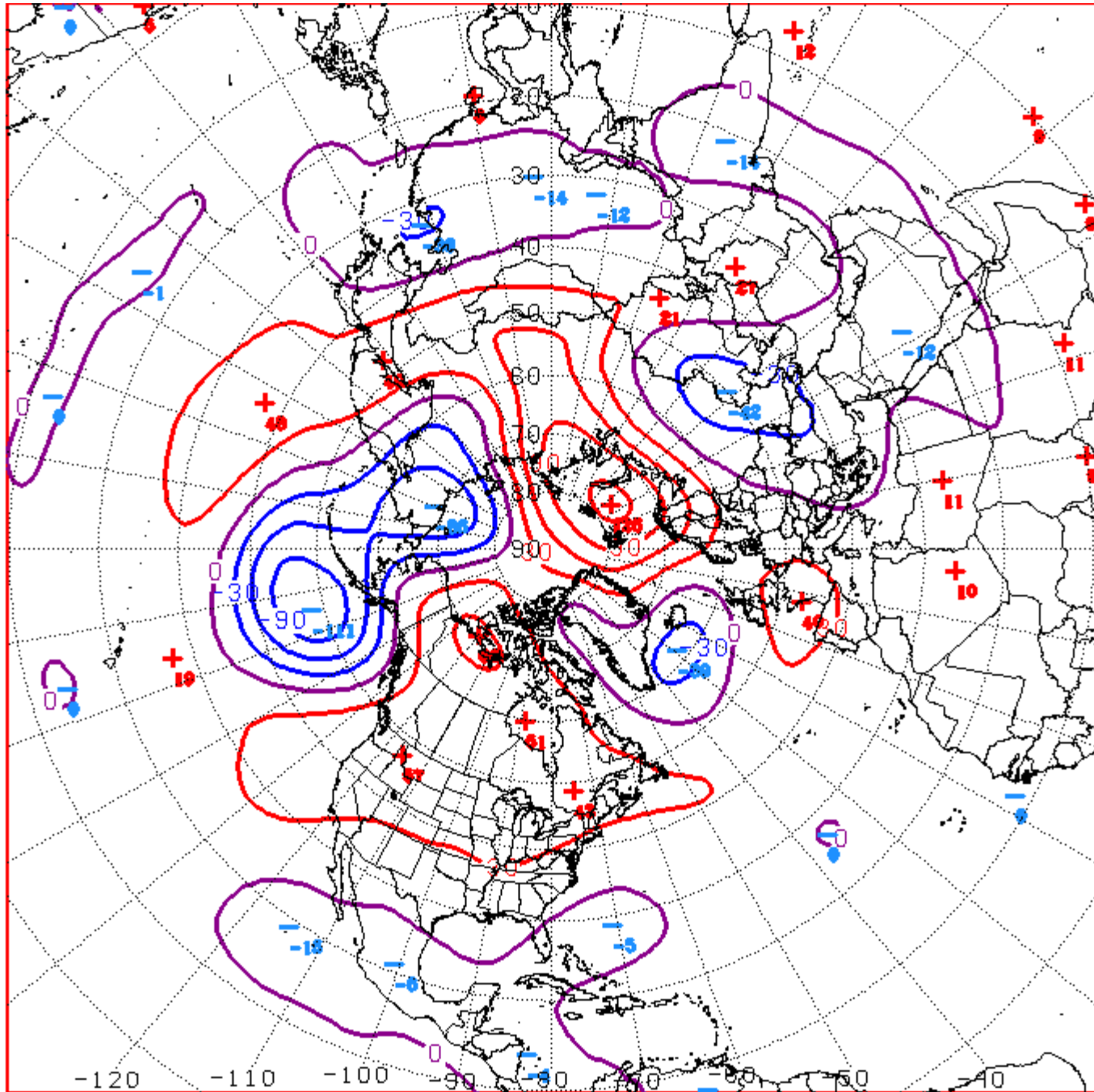
Day 13-15



Connections to U.S. Impacts

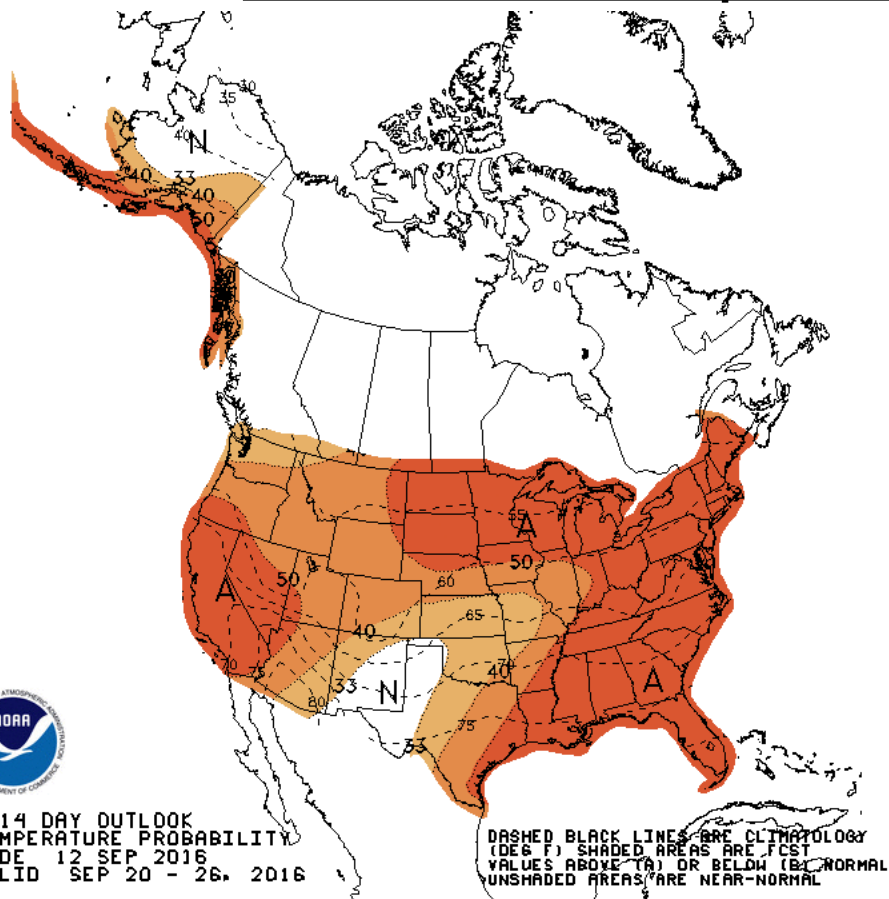
AO: Observed & ENSM forecasts





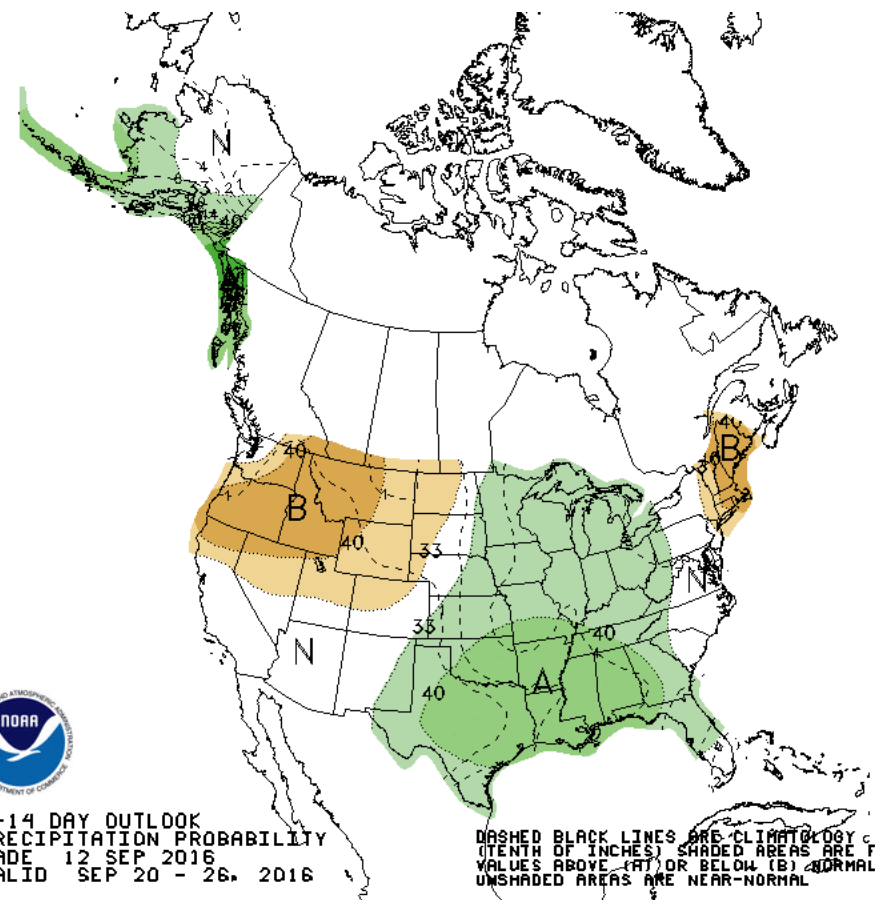
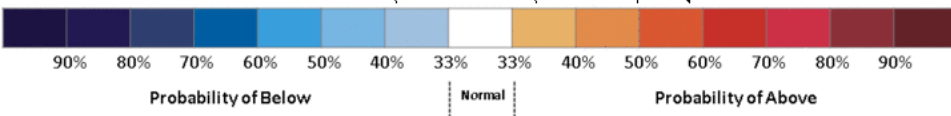
D+11 500 MB ANOMALIES FROM ALZ ENSM
CPC MAP MADE SEP 13 2016 1334 UTC CNTD SEP 24 2016

Week 2 – Temperature and Precipitation



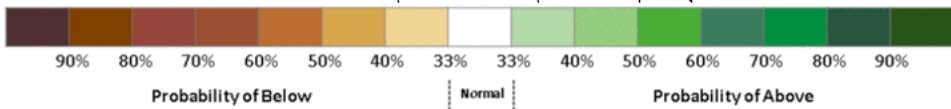
8-14 DAY OUTLOOK
TEMPERATURE PROBABILITY
MADE 12 SEP 2016
VALID SEP 20 - 26, 2016

DASHED BLACK LINES ARE CLIMATOLOGY (DEG F). SHADED AREAS ARE FCST VALUES ABOVE (A) OR BELOW (B) NORMAL. UNSHADED AREAS ARE NEAR-NORMAL.



8-14 DAY OUTLOOK
PRECIPITATION PROBABILITY
MADE 12 SEP 2016
VALID SEP 20 - 26, 2016

DASHED BLACK LINES ARE CLIMATOLOGY (TENTH OF INCHES). SHADED AREAS ARE FCST VALUES ABOVE (A) OR BELOW (B) NORMAL. UNSHADED AREAS ARE NEAR-NORMAL.

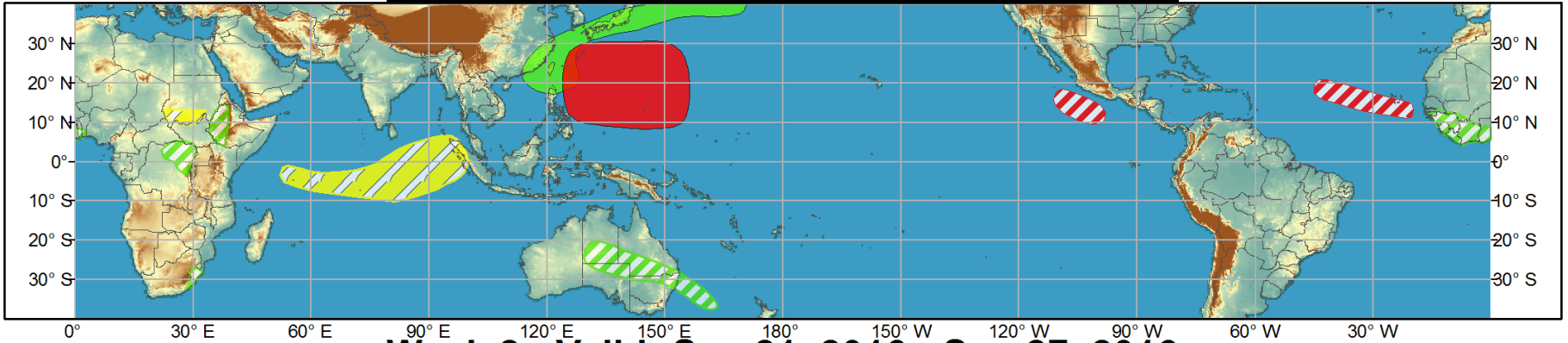




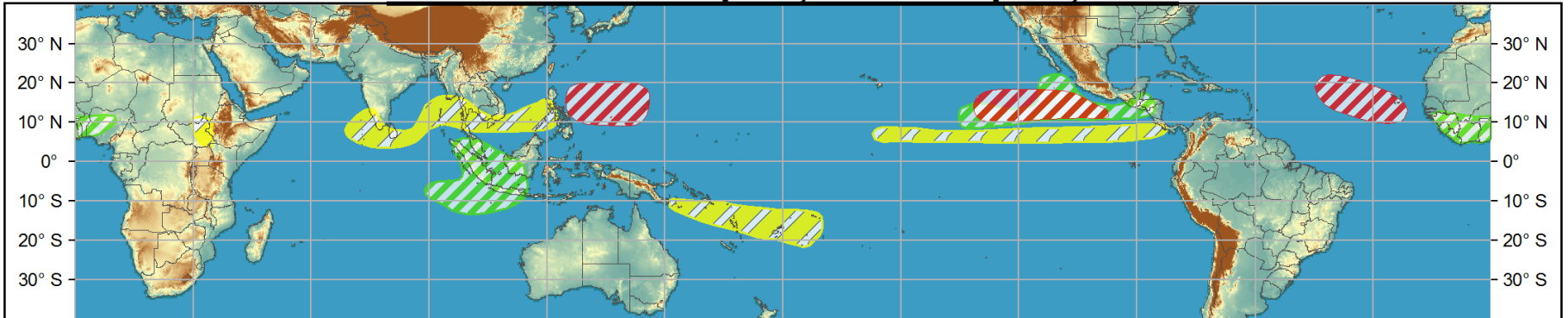
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