

Global Tropics Hazards And Benefits Outlook

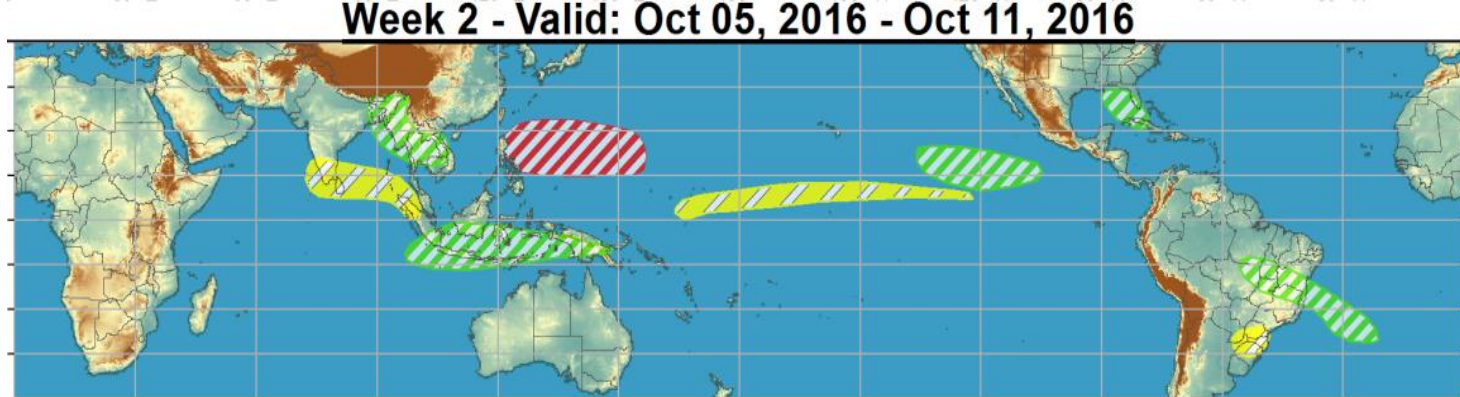
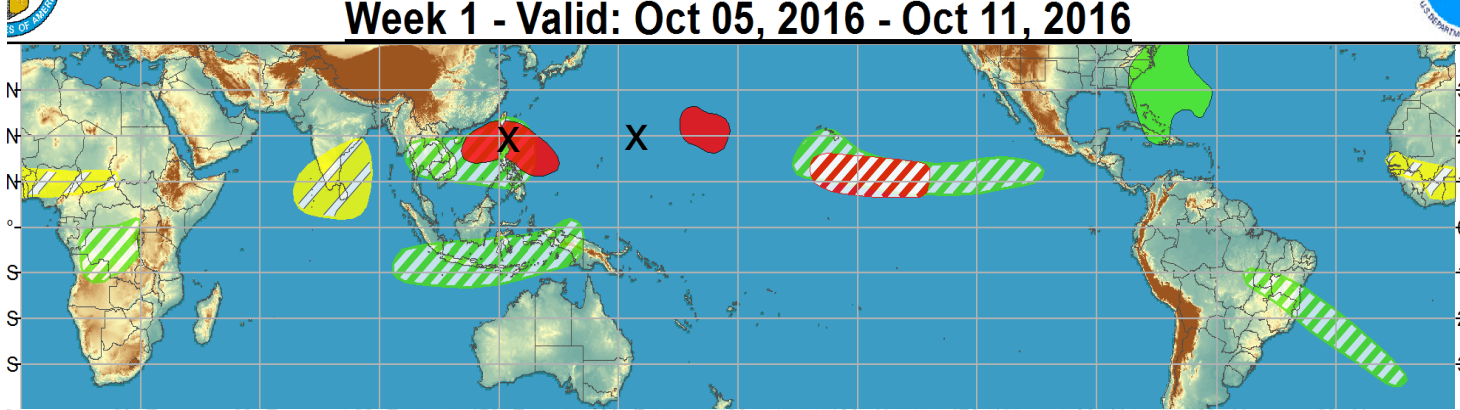
October 11, 2016

Stephen Baxter

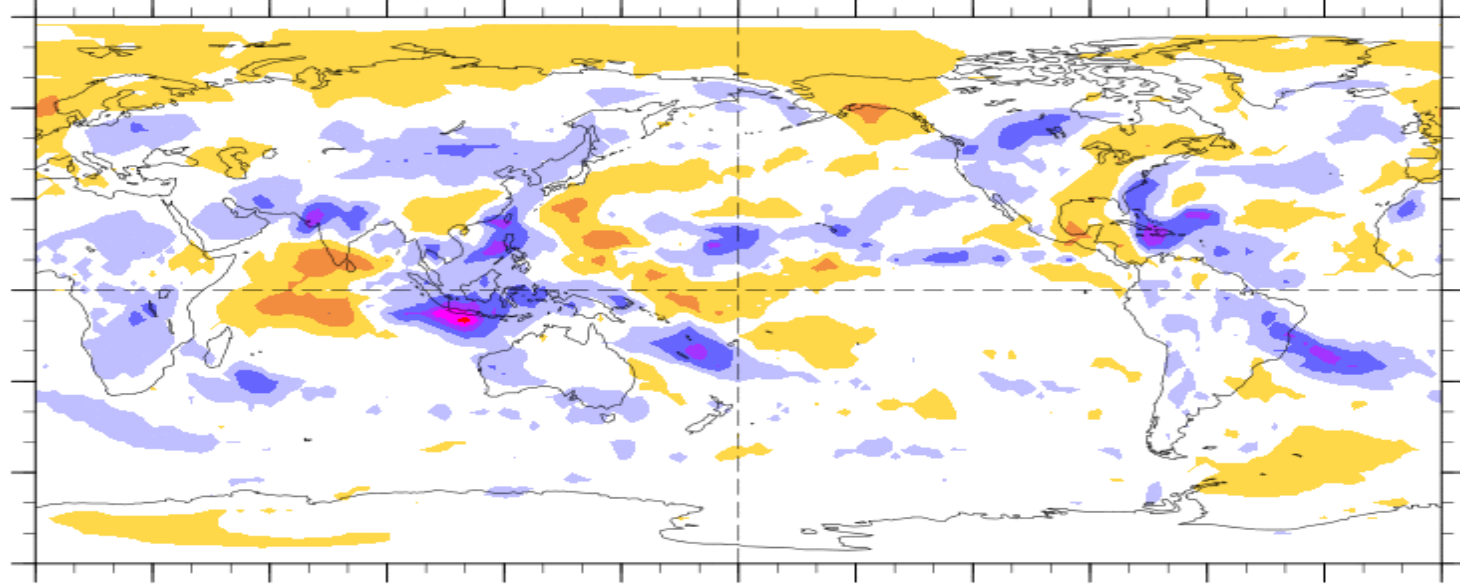
Outline

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

Outlook Review



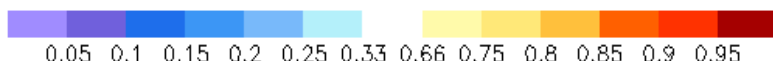
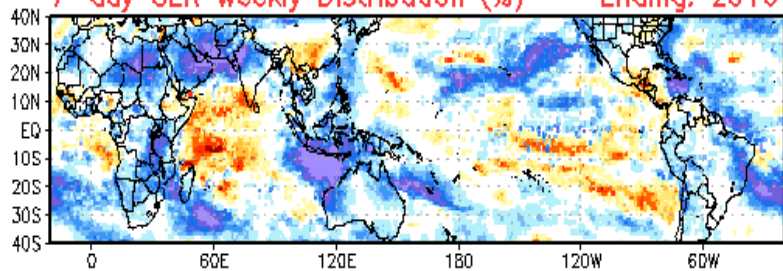
7-Day Average OLR Anomaly 2016/10/03 - 2016/10/09



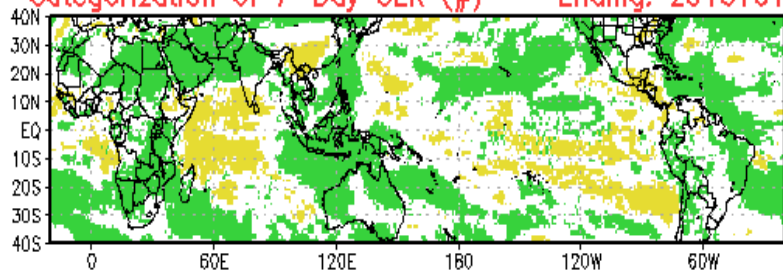
Cool shading
More clouds/rain

Warm shading
Less clouds/rain

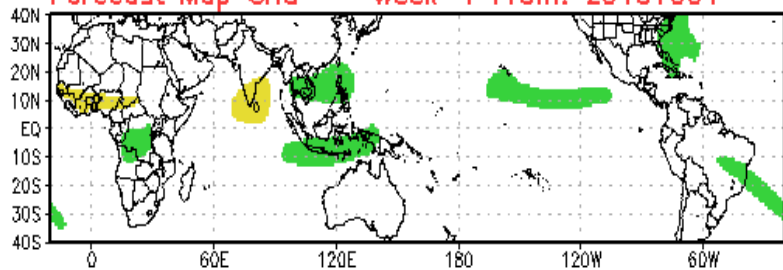
7-day OLR Weekly Distribution (%) -- Ending: 20161011



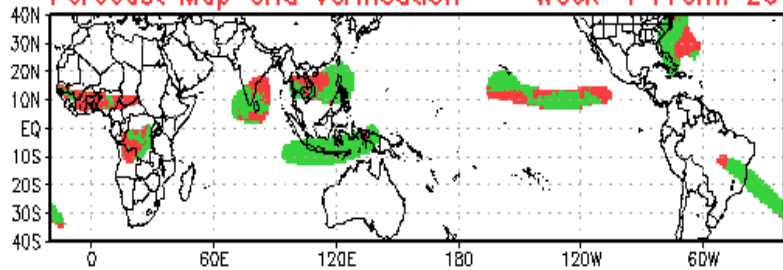
Categorization of 7-Day OLR (#) -- Ending: 20161011



Forecast Map Grid -- Week-1 From: 20161004

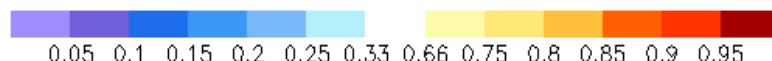
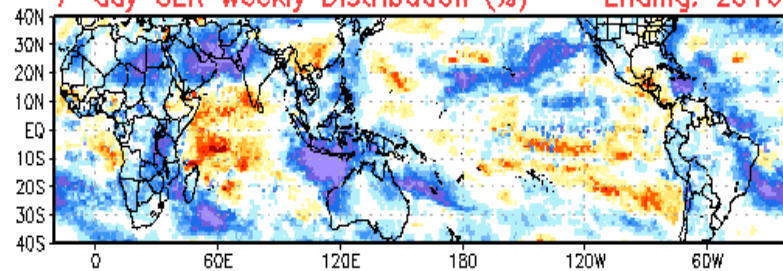


Forecast Map Grid Verification -- Week-1 From: 20161004

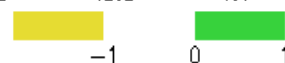
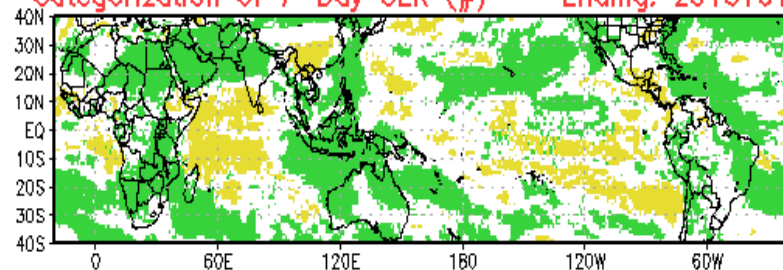


Hit: Green, Miss: Red
Heidke Skill Score: 52.0784

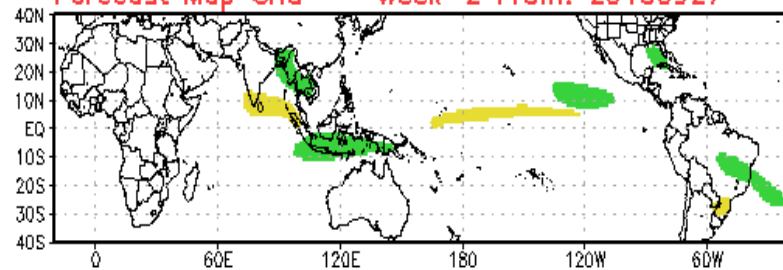
7-day OLR Weekly Distribution (%) -- Ending: 20161011



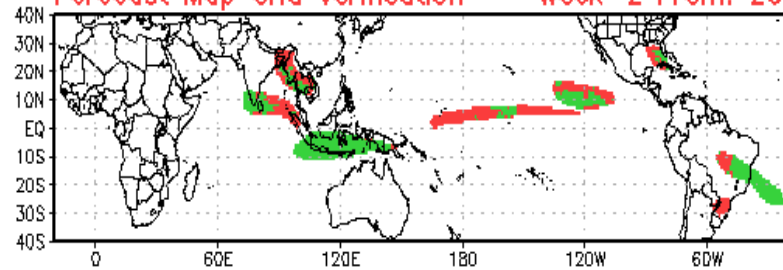
Categorization of 7-Day OLR (#) -- Ending: 20161011



Forecast Map Grid -- Week-2 From: 20160927



Forecast Map Grid Verification -- Week-2 From: 20160927



Hit: Green, Miss: Red
Heidke Skill Score: 32.5516

Synopsis of Climate Modes

ENSO:

- **Not Active**, though conditions are becoming more consistent with developing La Niña conditions.
- The ENSO diagnostic discussion is updated later this week.

MJO and other subseasonal tropical variability:

- Weak intraseasonal signal over the Pacific, destructively interfering with the low-frequency state.
- Dynamical models indicate a weak MJO continuing over the next two weeks.
- Kelvin waves and equatorial Rossby waves are also influencing the pattern.

Extratropics:

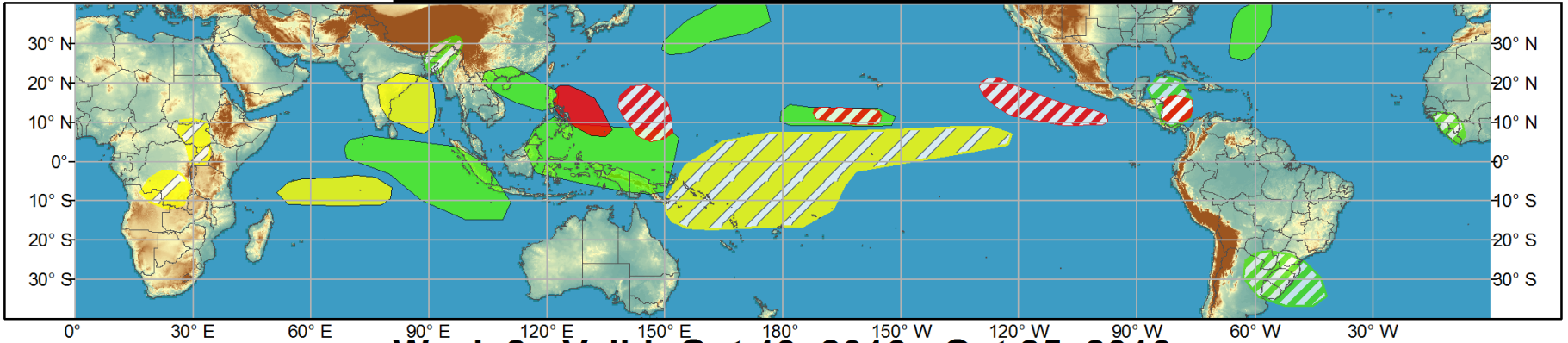
- The extended range temperature and precipitation forecasts for the U.S. are not likely to be impacted by the MJO.



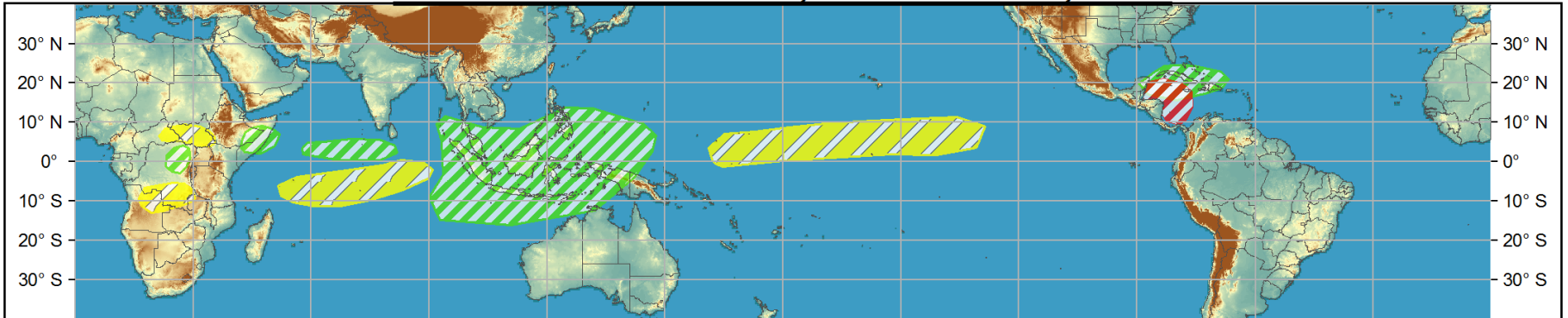
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Oct 12, 2016 - Oct 18, 2016

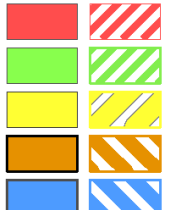


Week 2 - Valid: Oct 19, 2016 - Oct 25, 2016



Confidence
High Moderate

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



- Development of a tropical cyclone (tropical depression - TD, or greater 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: 10/11/2016
Forecaster: Baxter

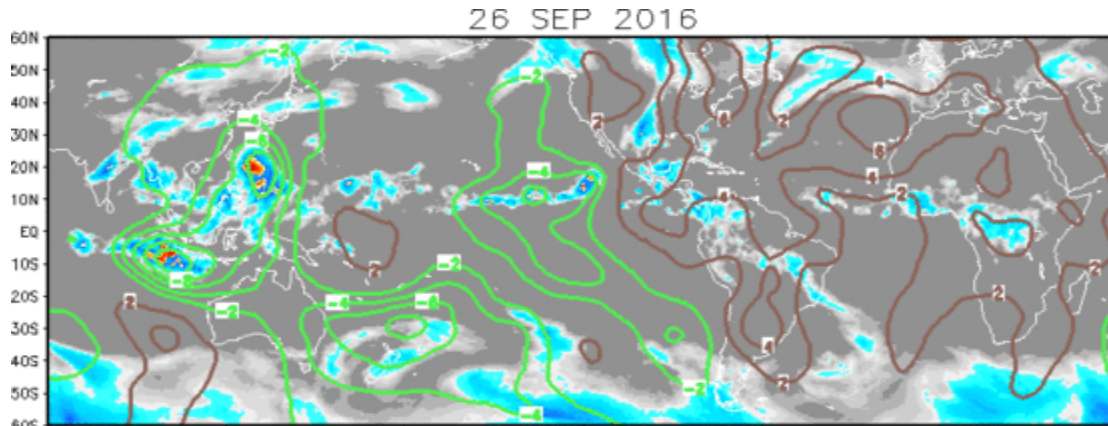
Product is updated once per week, except from 6/1 - 11/30 for the region from 120E to 0, 0 to 40N. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.



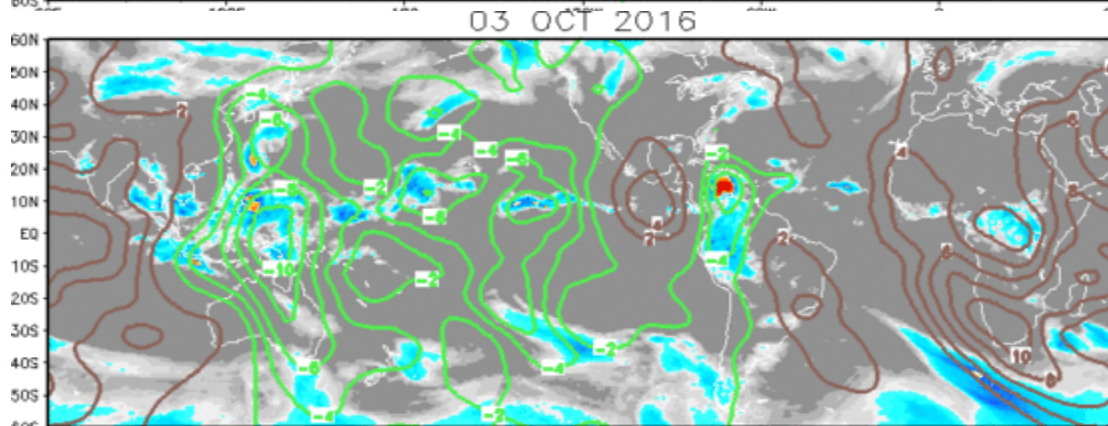
IR Satellite & 200-hpa Velocity Potential Anomalies

Green: Enhanced Divergence Brown: Enhanced Convergence

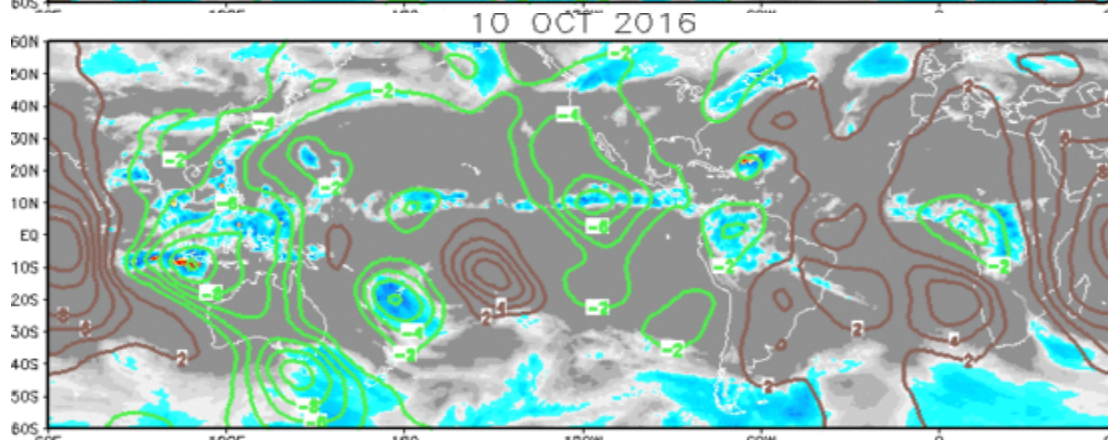
Nearly a wave-1 pattern



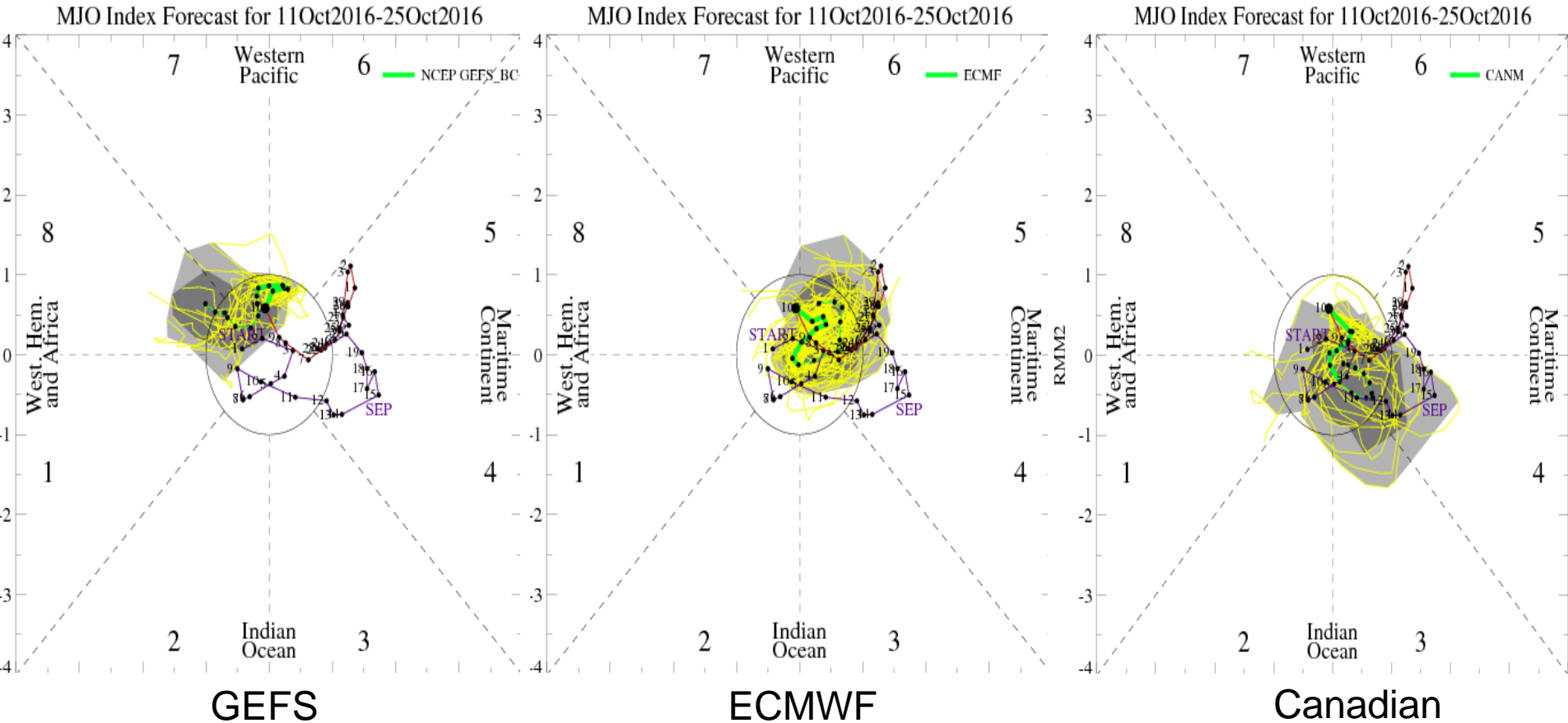
Wave-1 pattern persists with enhanced convection over Maritime Continent and West Pacific



Pattern becomes less coherent due to destructive interference with low-frequency state.

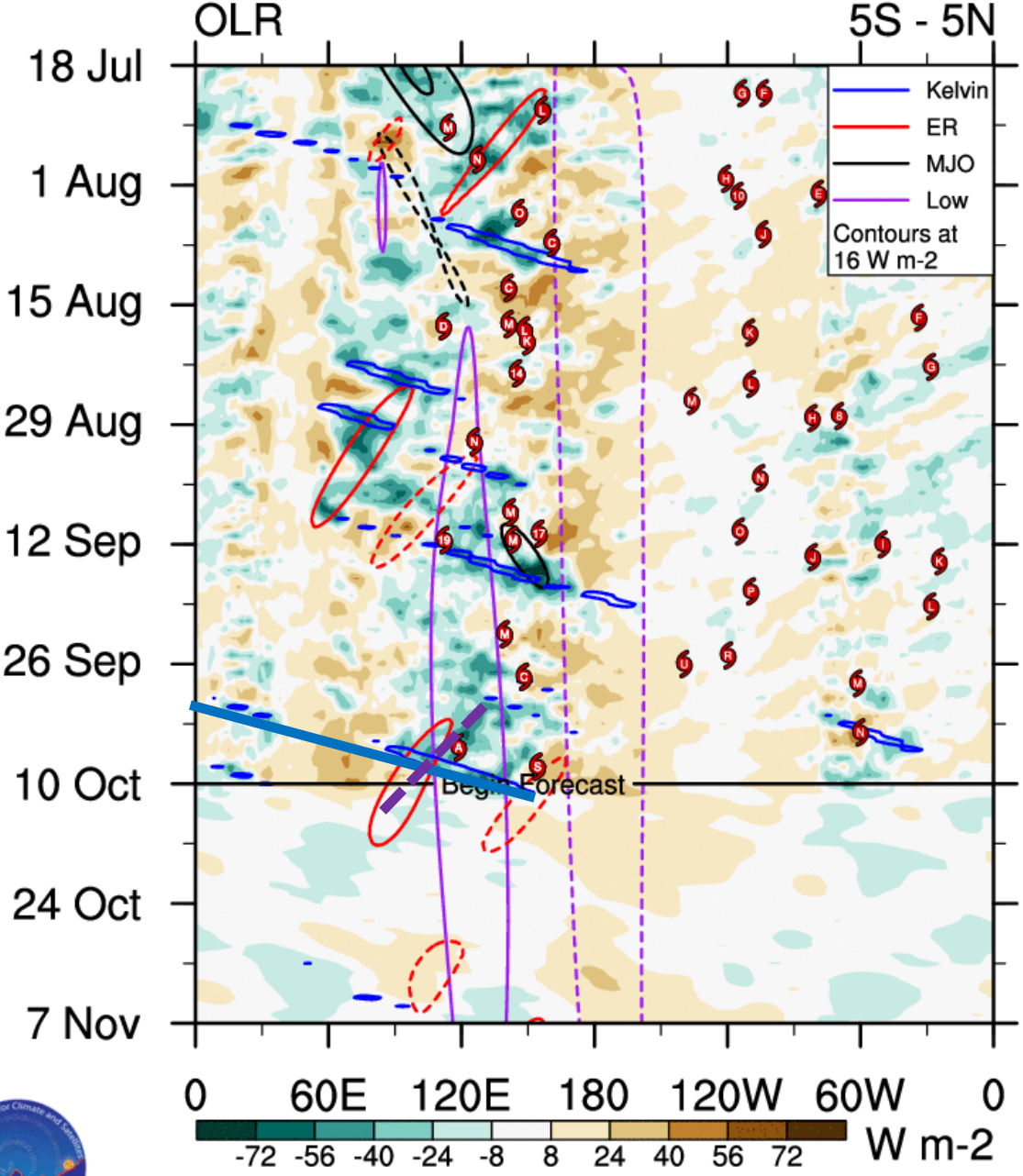


MJO Observation/Forecast

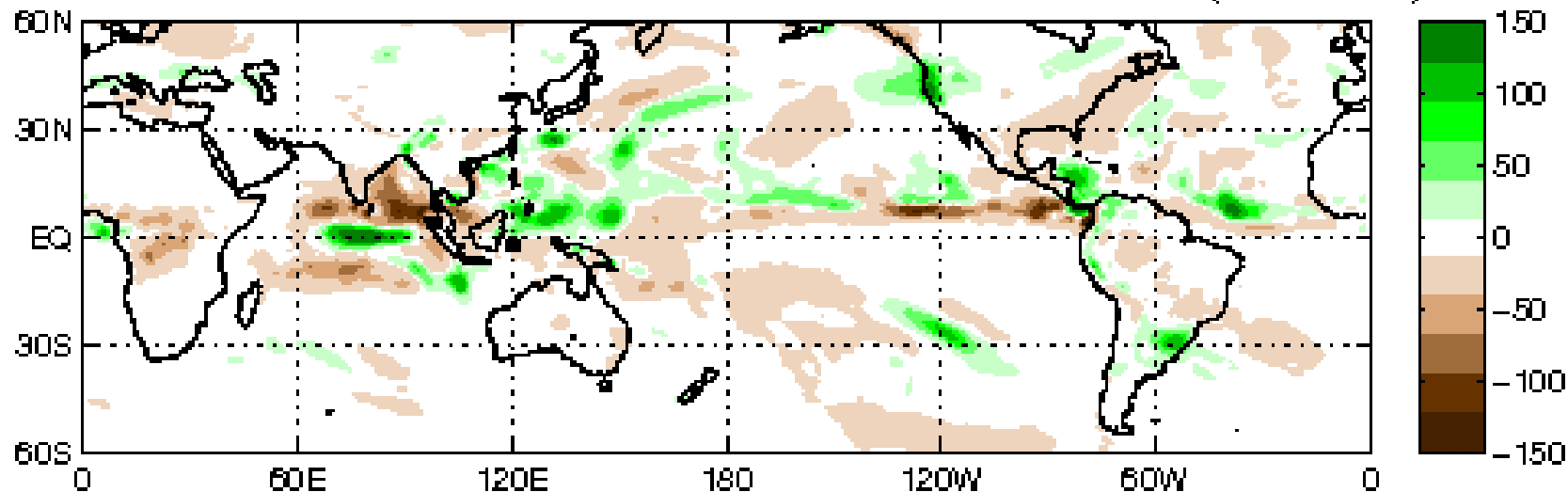


Models indicate little in the way of coherent MJO activity as monitored by the RMM index.

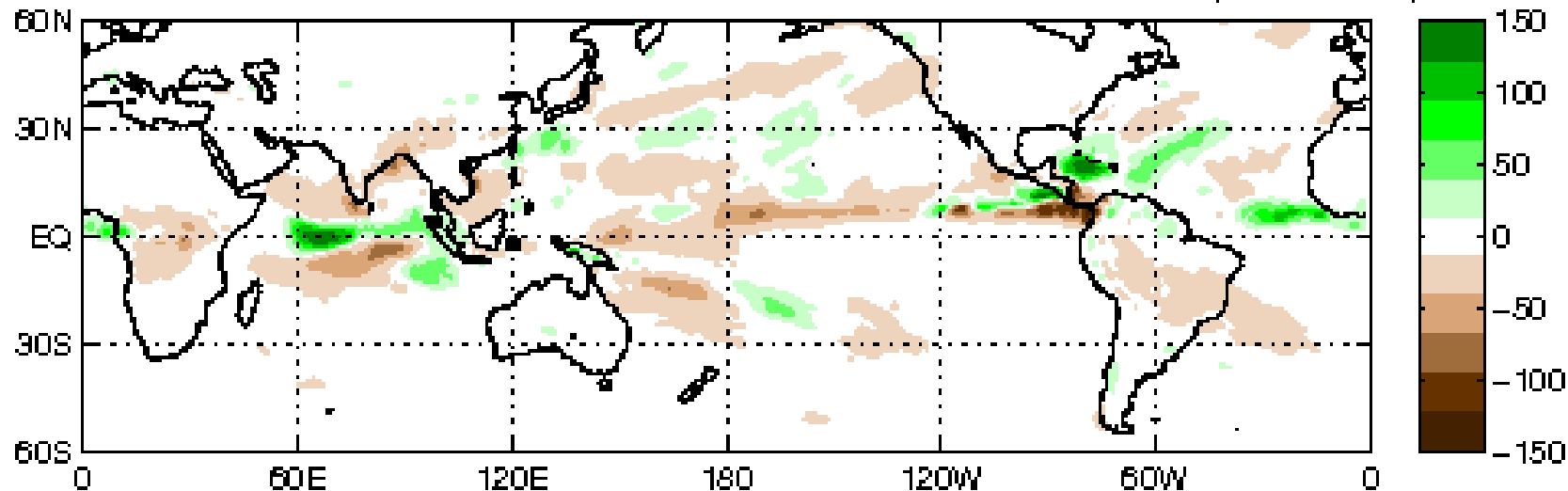
Complicated pattern with **Low Frequency pattern** and **Kelvin waves** as the major influences, along with equatorial **Rossby waves**.



CFS: Anom. PREC Week: 1: 12-Oct-2016 to 18-Oct-2016 (mm/week)



CFS: Anom. PREC Week: 2: 19-Oct-2016 to 25-Oct-2016 (mm/week)





Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



Graphical Tropical Weather Outlooks

Graphical Tropical Weather Outlook

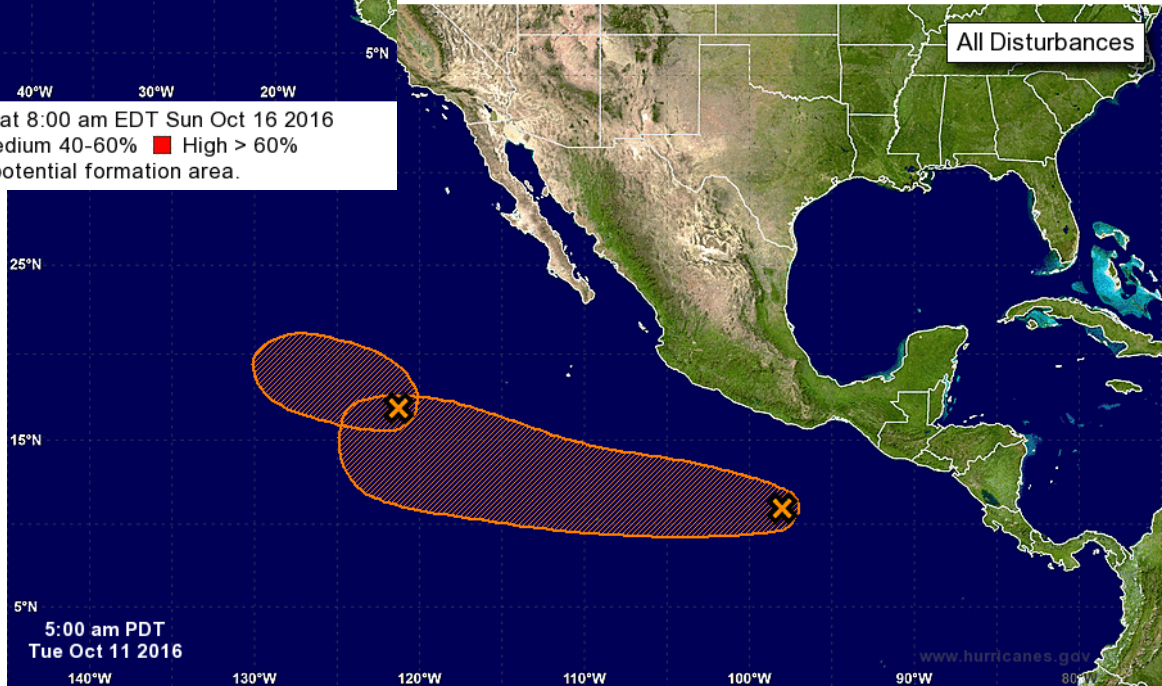
National Hurricane Center Miami, Florida



Tropical Cyclone Formation Potential for the Five-Day Period Ending at 8:00 am EDT Sun Oct 16 2016

Chance of Cyclone Formation in Five Days: ■ Low < 40% ■ Medium 40-60% ■ High > 60%

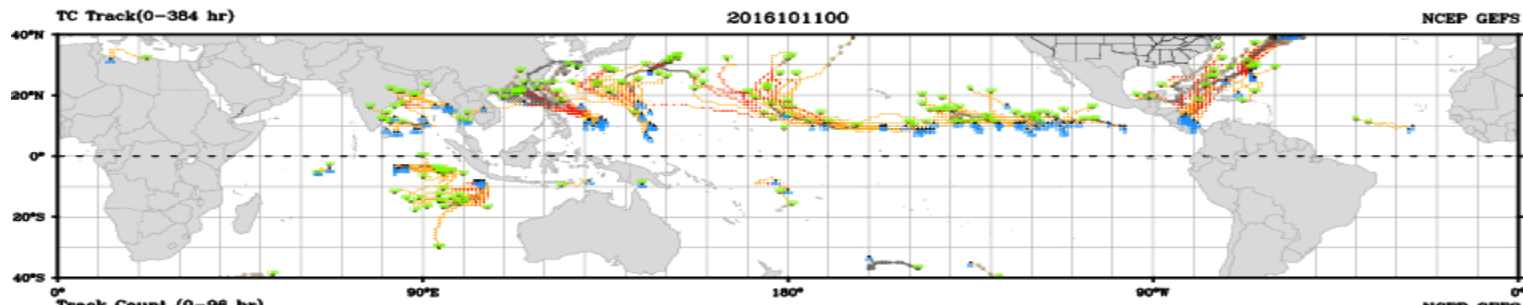
X indicates current disturbance location; shading indicates potential formation area.



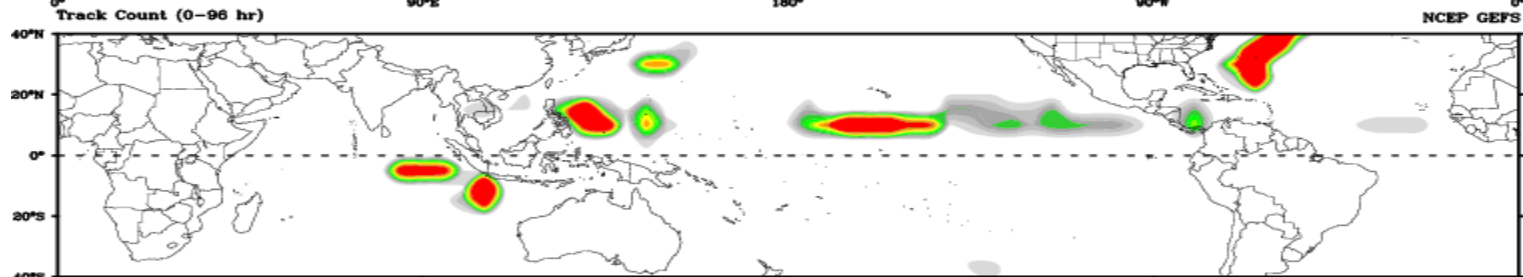
Tropical Cyclone Formation Potential for the Five-Day Period Ending at 5:00 am PDT Sun Oct 16 2016

Chance of Cyclone Formation in Five Days: ■ Low < 40% ■ Medium 40-60% ■ High > 60%

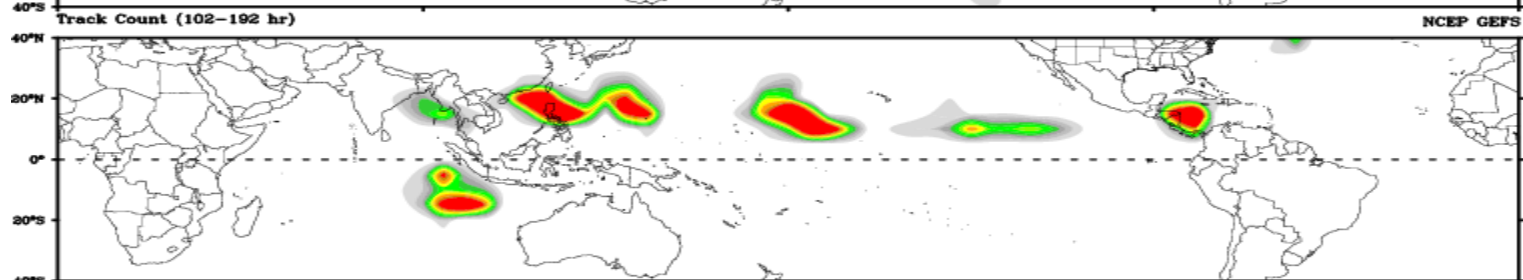
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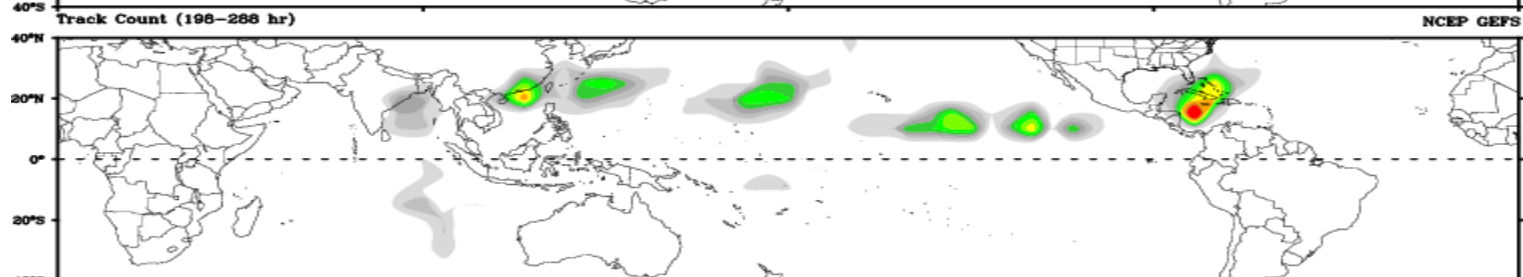
Days 1-4



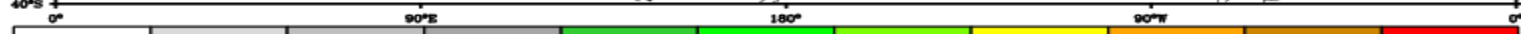
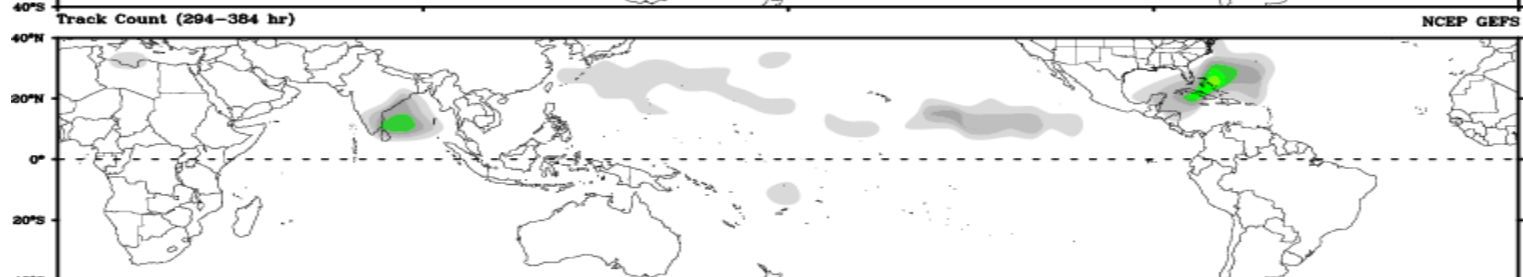
Day 5-8



Day 9-12

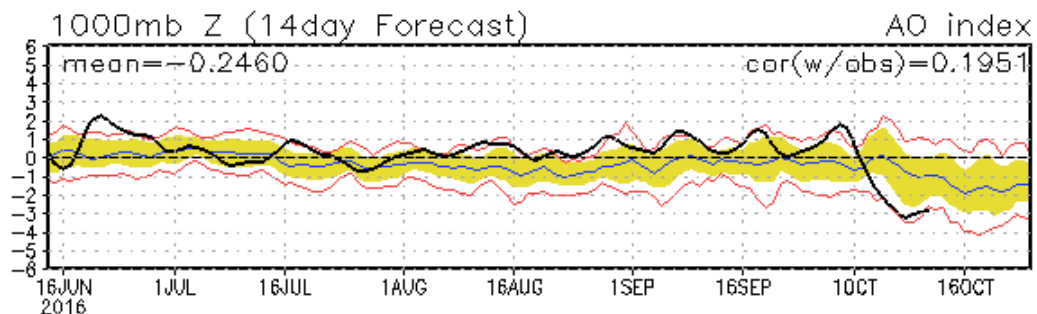
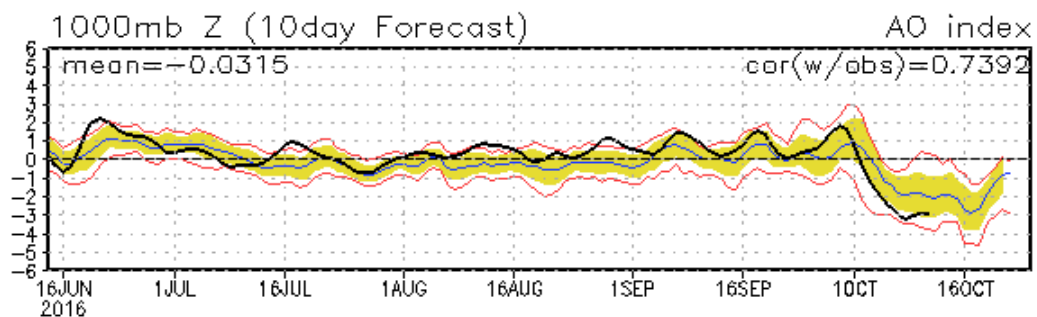
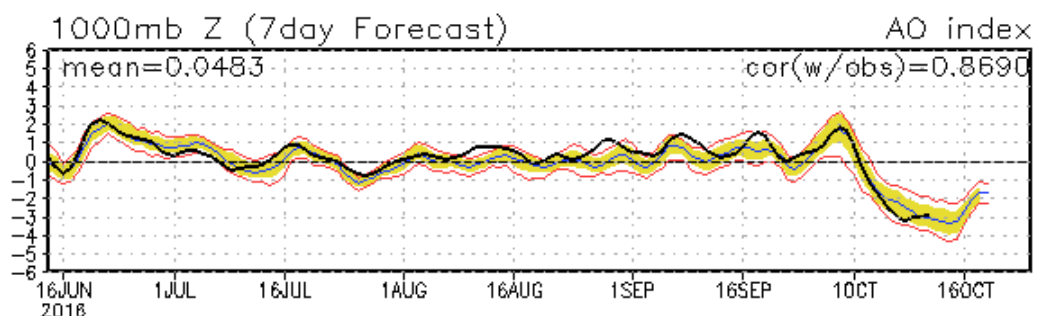
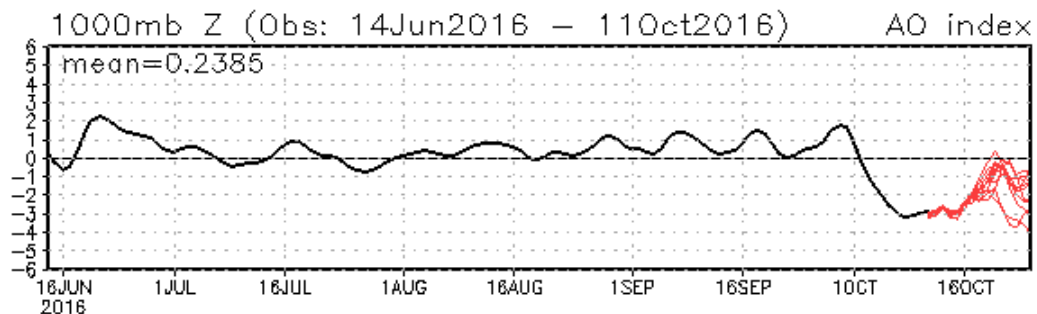


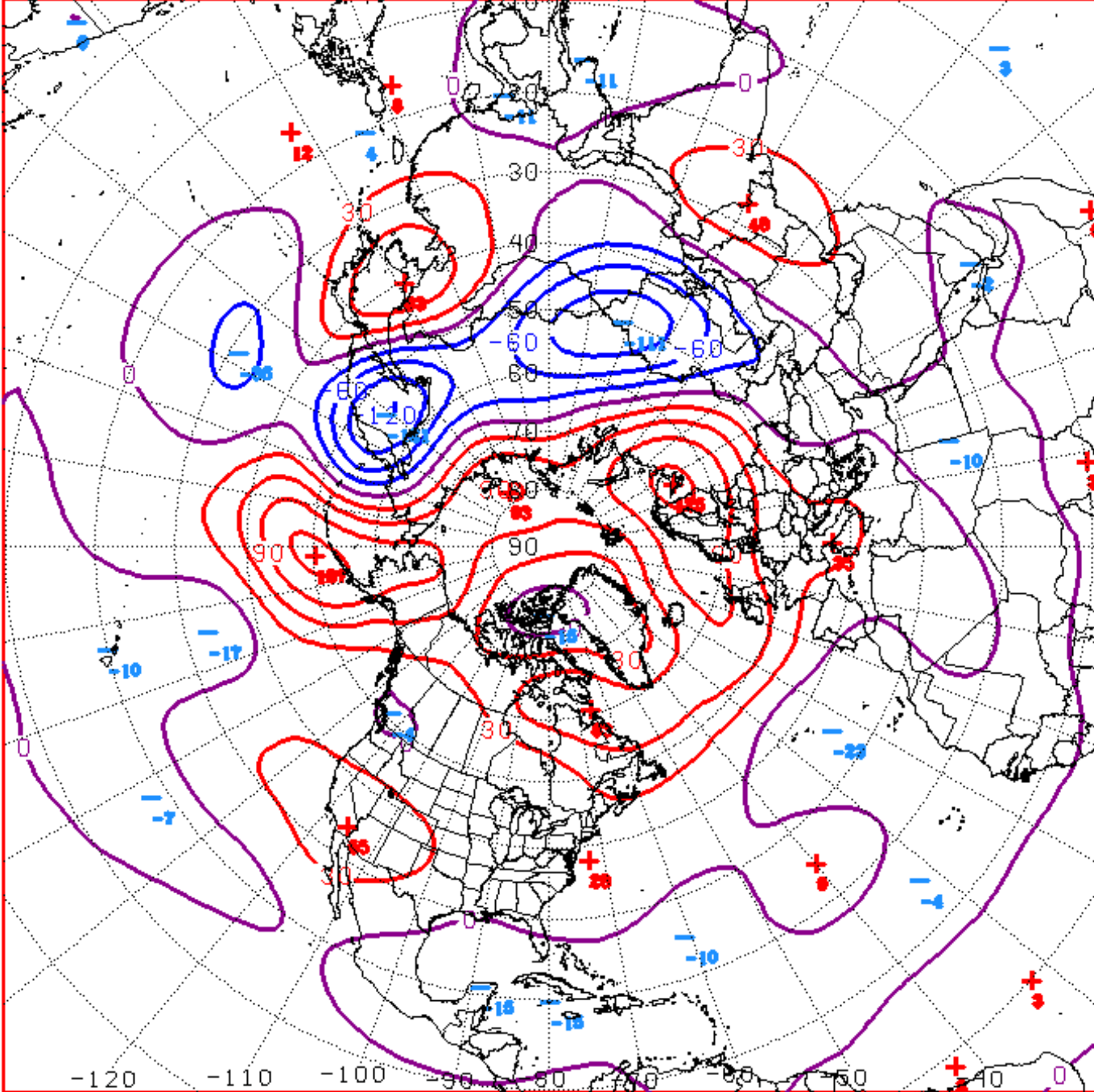
Day 13-15



Connections to U.S. Impacts

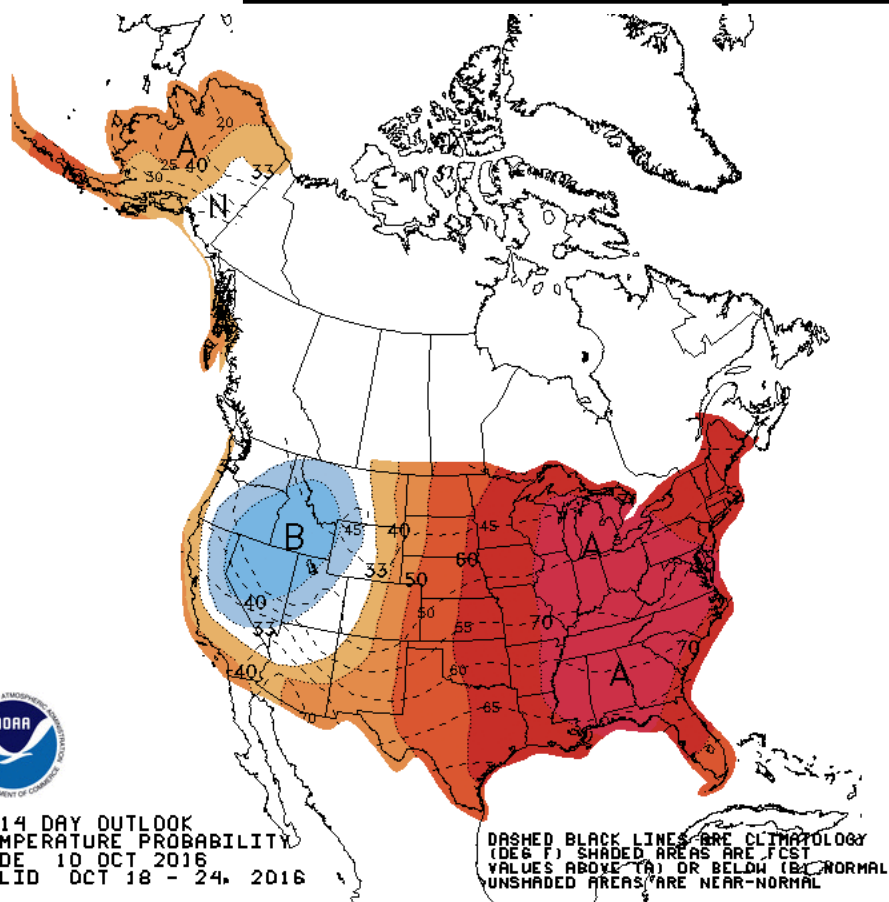
AO: Observed & ENSM forecasts





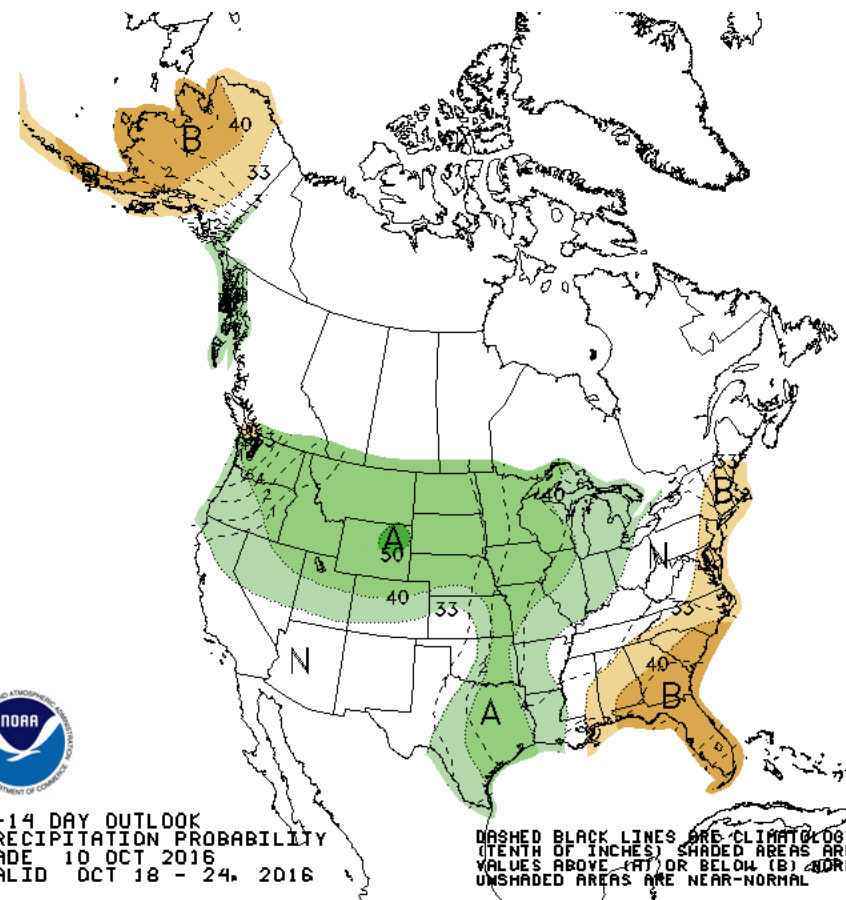
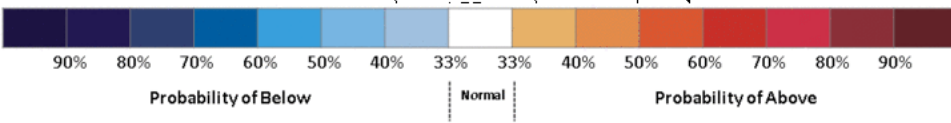
D+11 500 MB ANOMALIES FROM 00Z ECMM
CPC MAP MADE OCT 11 2016 1035 UTC CNTD OCT 22 2016

Week 2 – Temperature and Precipitation



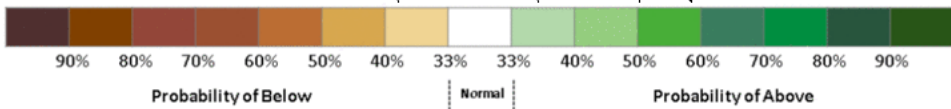
8-14 DAY OUTLOOK
TEMPERATURE PROBABILITY
MADE 10 OCT 2016
VALID OCT 18 - 24, 2016

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 10 OCT 2016
VALID OCT 18 - 24, 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.

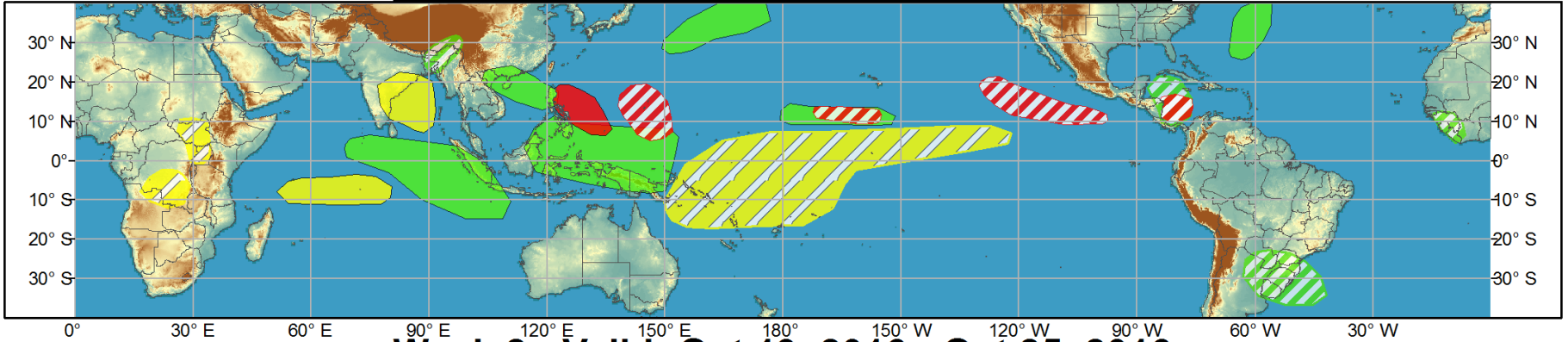




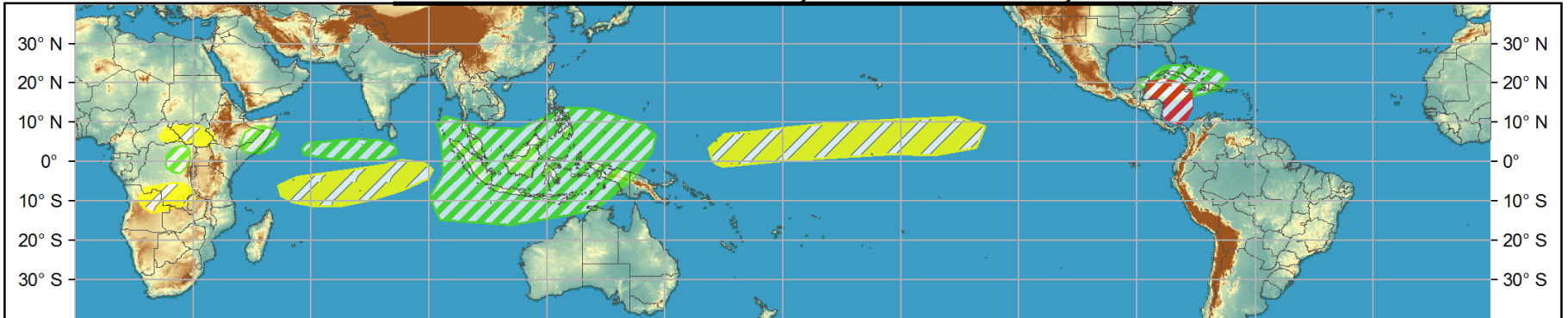
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