

Global Tropics Hazards And Benefits Outlook

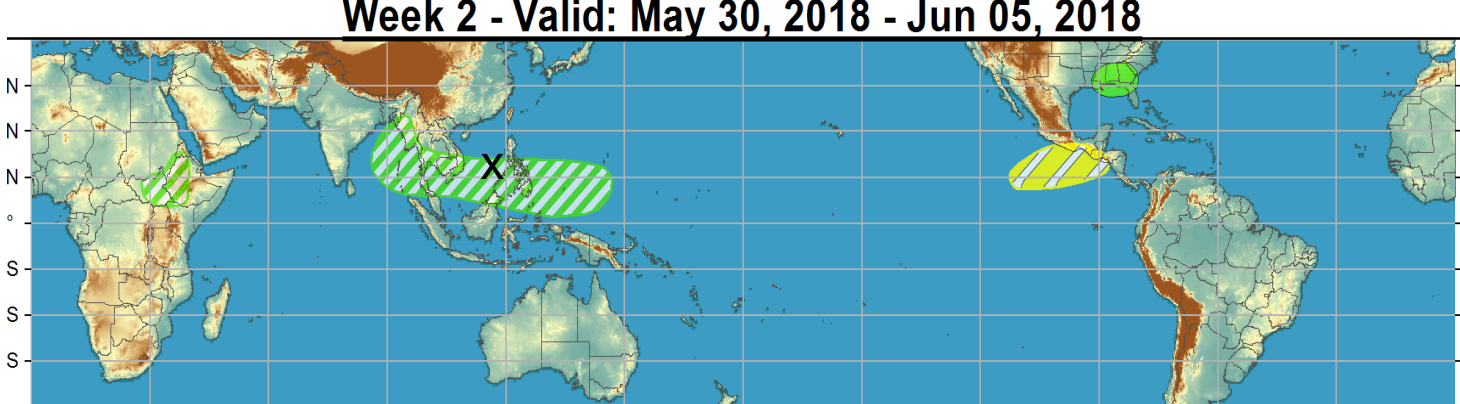
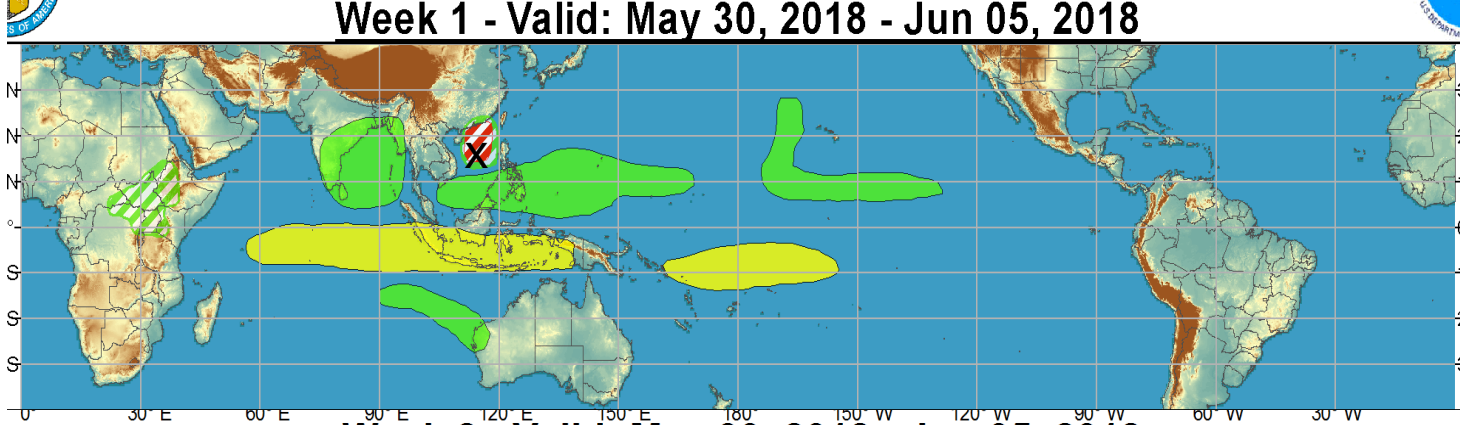
06/05/2018

Stephen Baxter

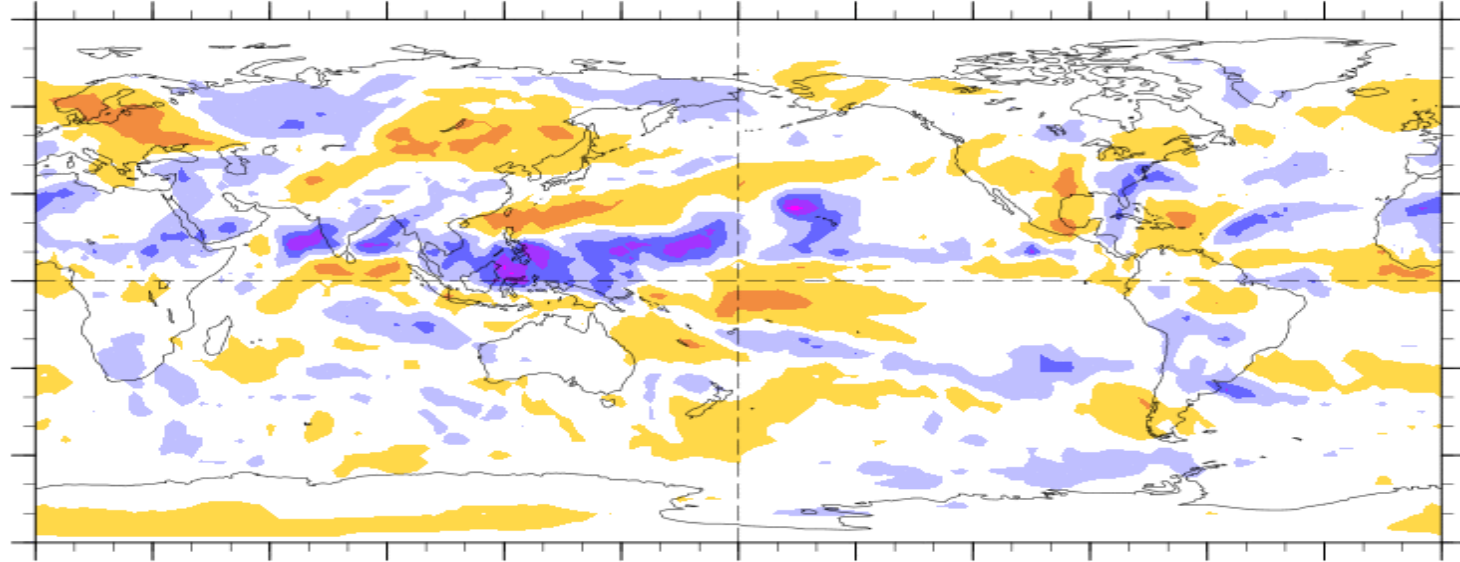
Outline

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

Outlook Review



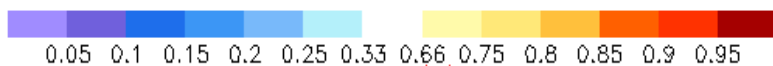
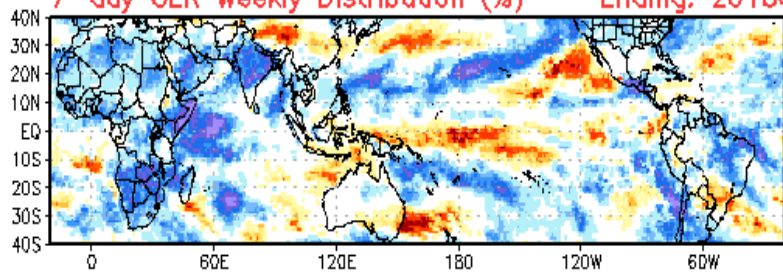
7-Day Average OLR Anomaly 2018/05/28 - 2018/06/03



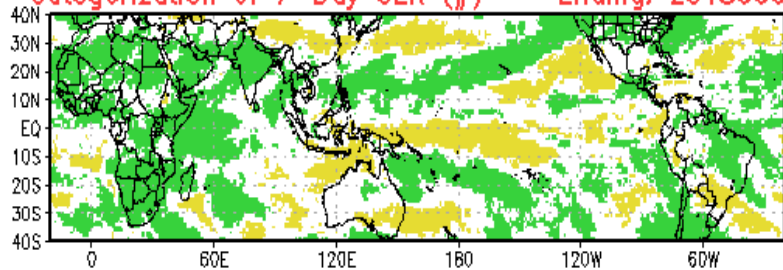
Cool shading
More clouds/rain

Warm shading
Less clouds/rain

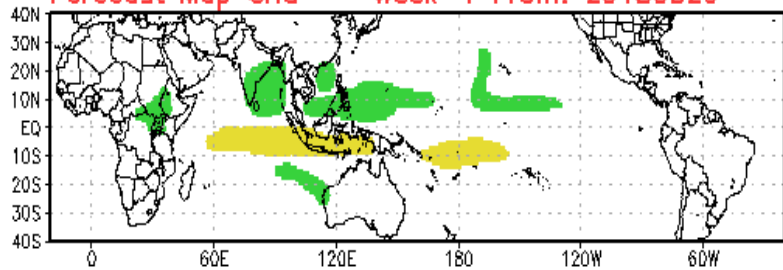
7-day OLR Weekly Distribution (%) -- Ending: 20180605



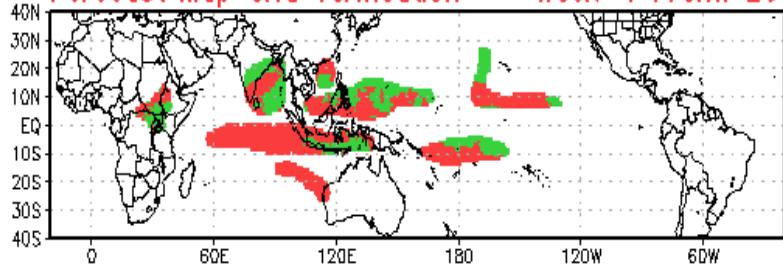
Categorization of 7-Day OLR (#) -- Ending: 20180605



Forecast Map Grid -- Week-1 From: 20180529

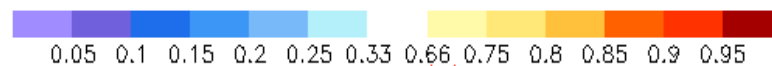
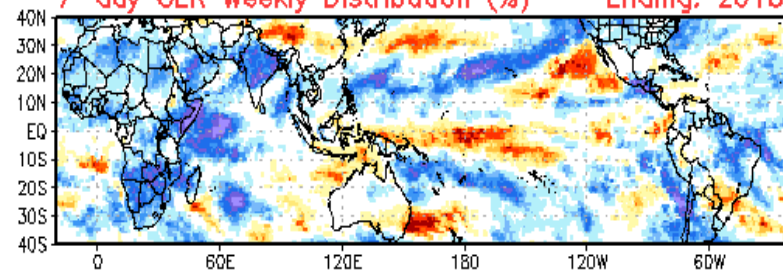


Forecast Map Grid Verification -- Week-1 From: 20180529

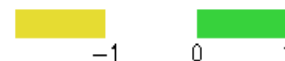
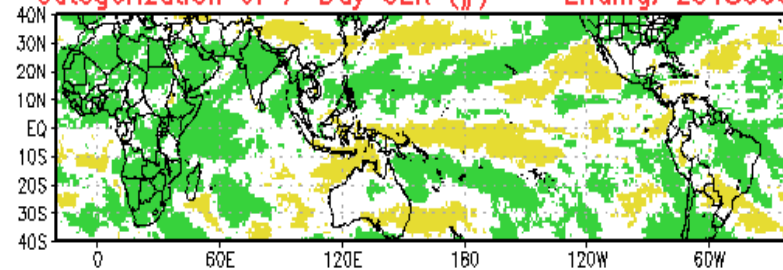


Hit: Green, Miss: Red
Heidke Skill Score: 3.6711

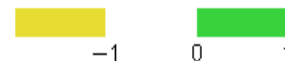
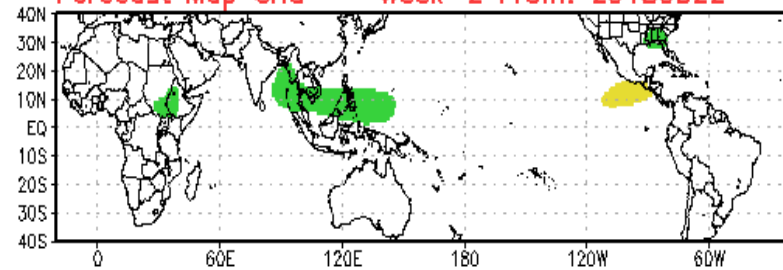
7-day OLR Weekly Distribution (%) -- Ending: 20180605



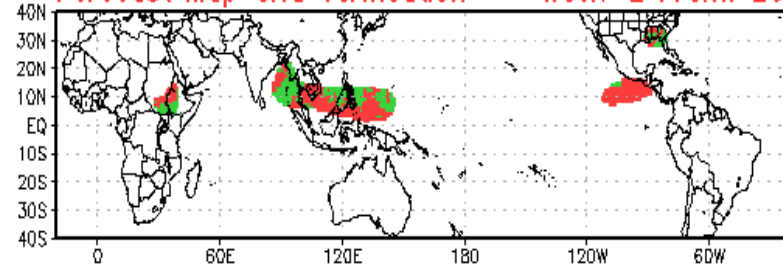
Categorization of 7-Day OLR (#) -- Ending: 20180605



Forecast Map Grid -- Week-2 From: 20180522



Forecast Map Grid Verification -- Week-2 From: 20180522



Hit: Green, Miss: Red
Heidke Skill Score: 8.8711

Synopsis of Climate Modes

ENSO:

- ENSO-neutral is favored for summer 2018, with increasing odds of El Niño in fall and early winter.

MJO and other subseasonal tropical variability:

- The MJO remained active, propagating across the Maritime Continent. MJO-related convection has shifted northeastward across Southeast Asia, which is typical for this time of year.
- Dynamical models indicate a rapid weakening of the signal. Some remnant MJO activity appears likely, but interference from equatorial Rossby waves and forecast tropical cyclone activity is expected to create

Extratropics:

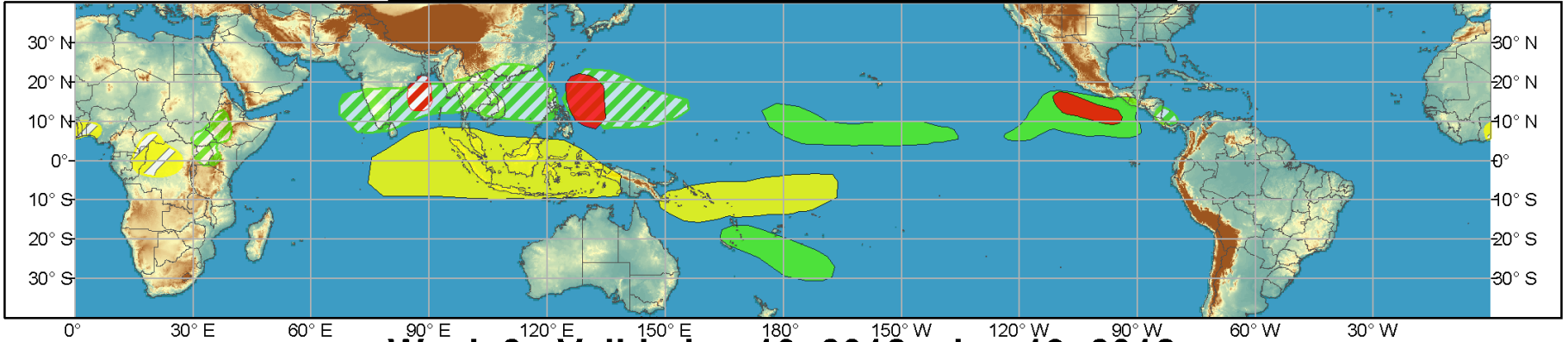
- A forecast intensification of upper-level low pressure near the Aleutians and modest downstream wave propagation seems broadly consistent with forecast TC recurvature and the extratropical response to associated enhanced convection over the northwestern tropical Pacific.



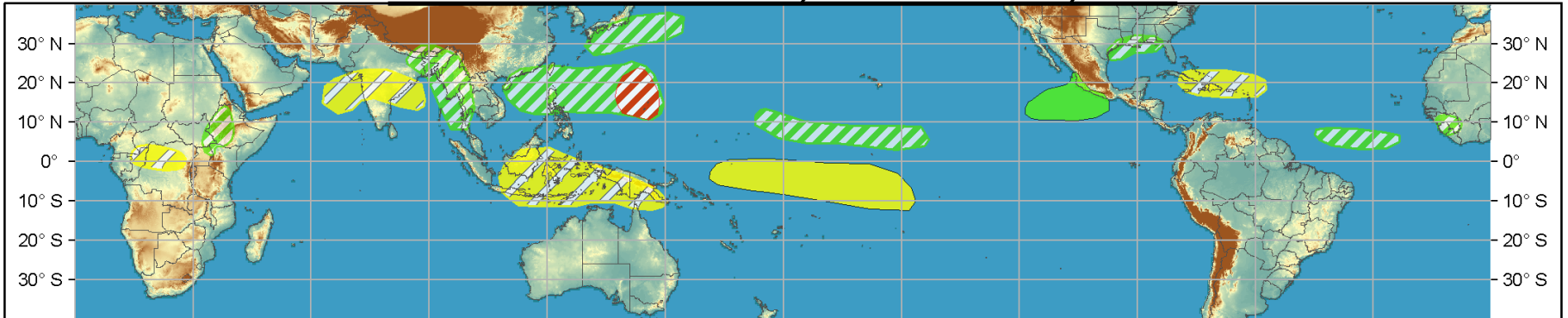
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Jun 06, 2018 - Jun 12, 2018

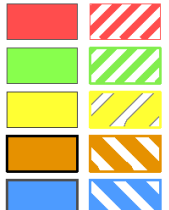


Week 2 - Valid: Jun 13, 2018 - Jun 19, 2018



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: 06/05/2018

Forecaster: Finan/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

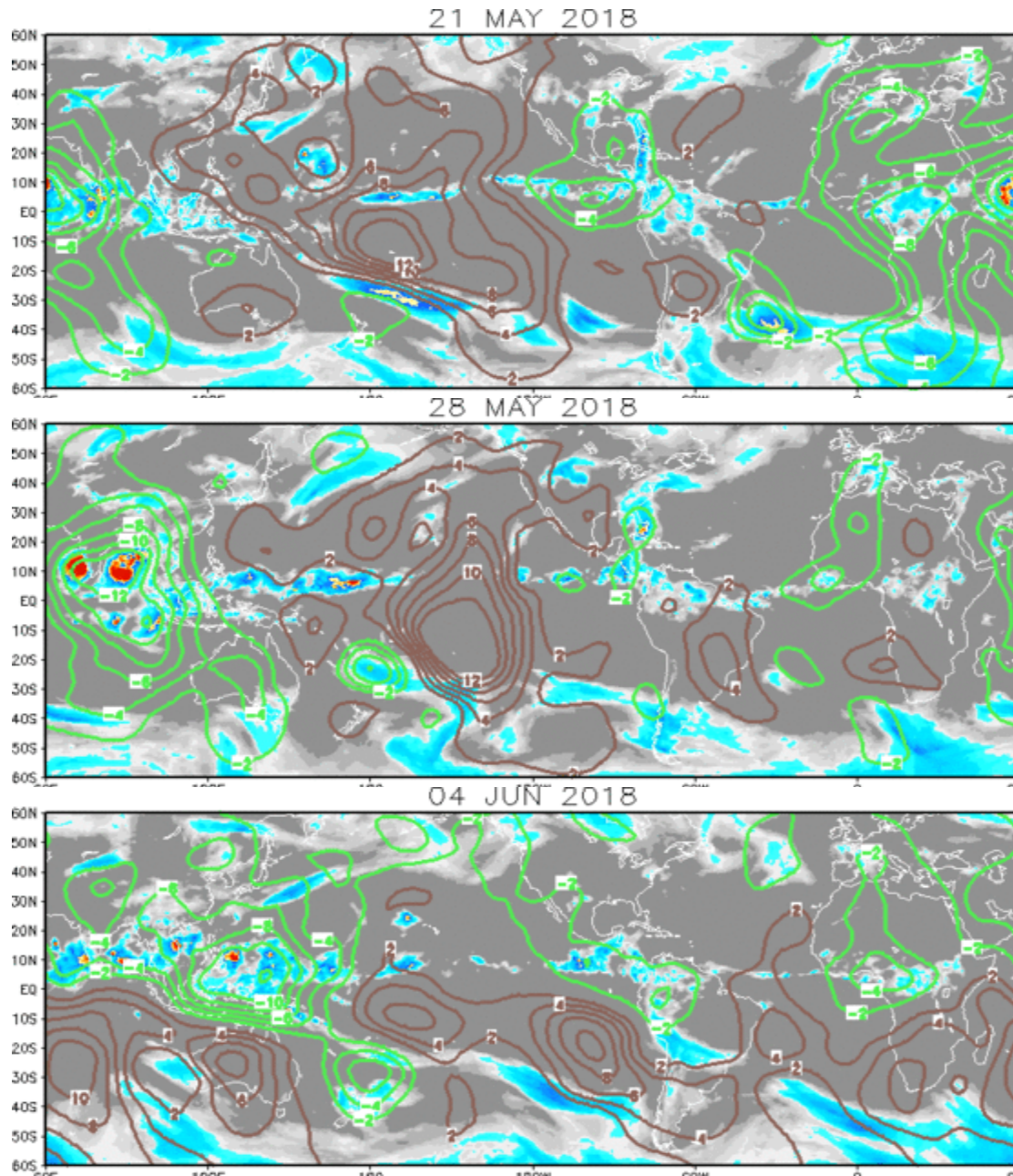
Green: Enhanced Divergence

Brown: Enhanced Convergence

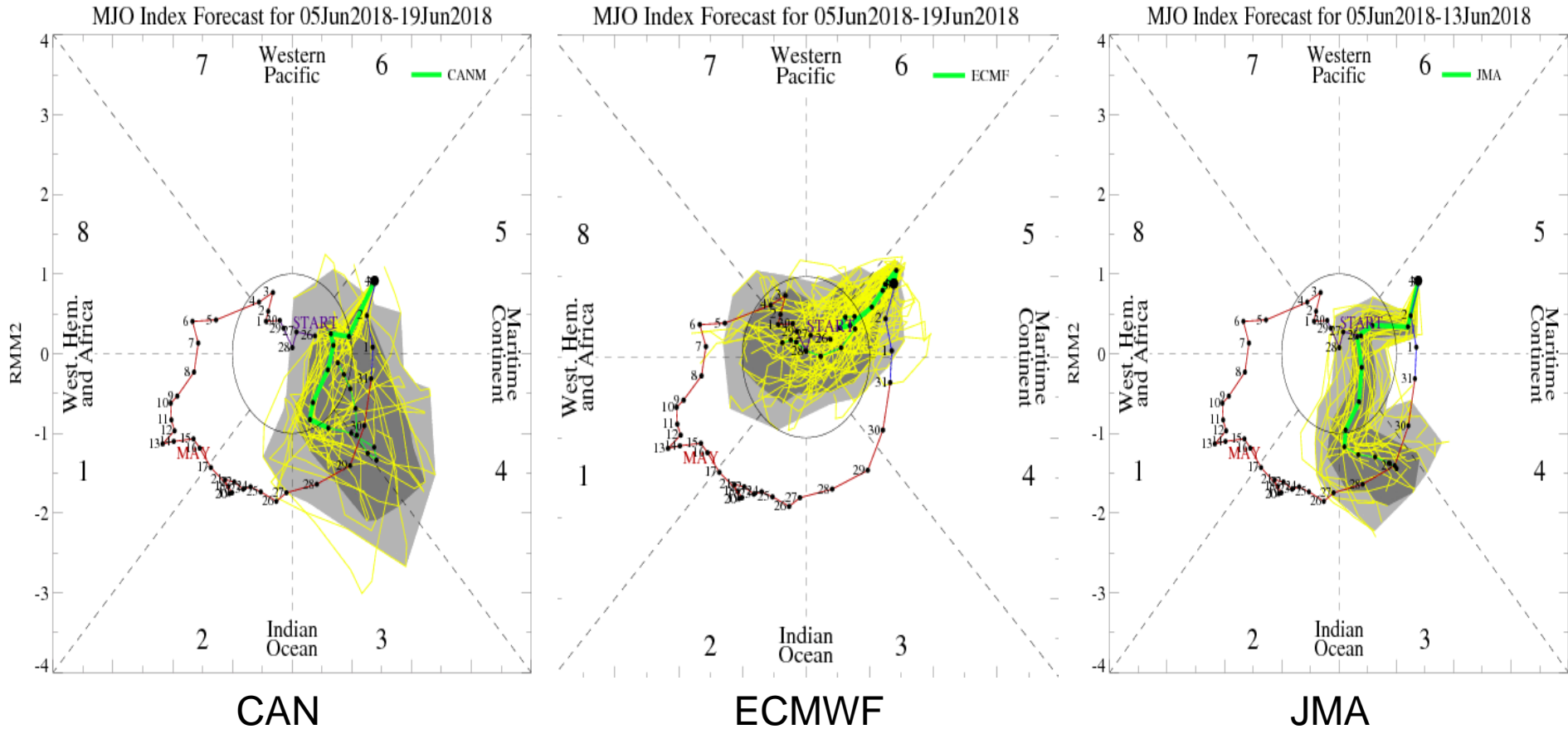
Generally a wave-1 pattern with the enhanced phase over Africa and the western Indian Ocean.

High-amplitude wave-1 propagated eastward with the enhanced (suppressed) phase over the Indian Ocean (Pacific).

Wave-1 pattern began to break down with zonally oriented VP anomalies. Enhanced convection has been centered recently over Southeast Asia.

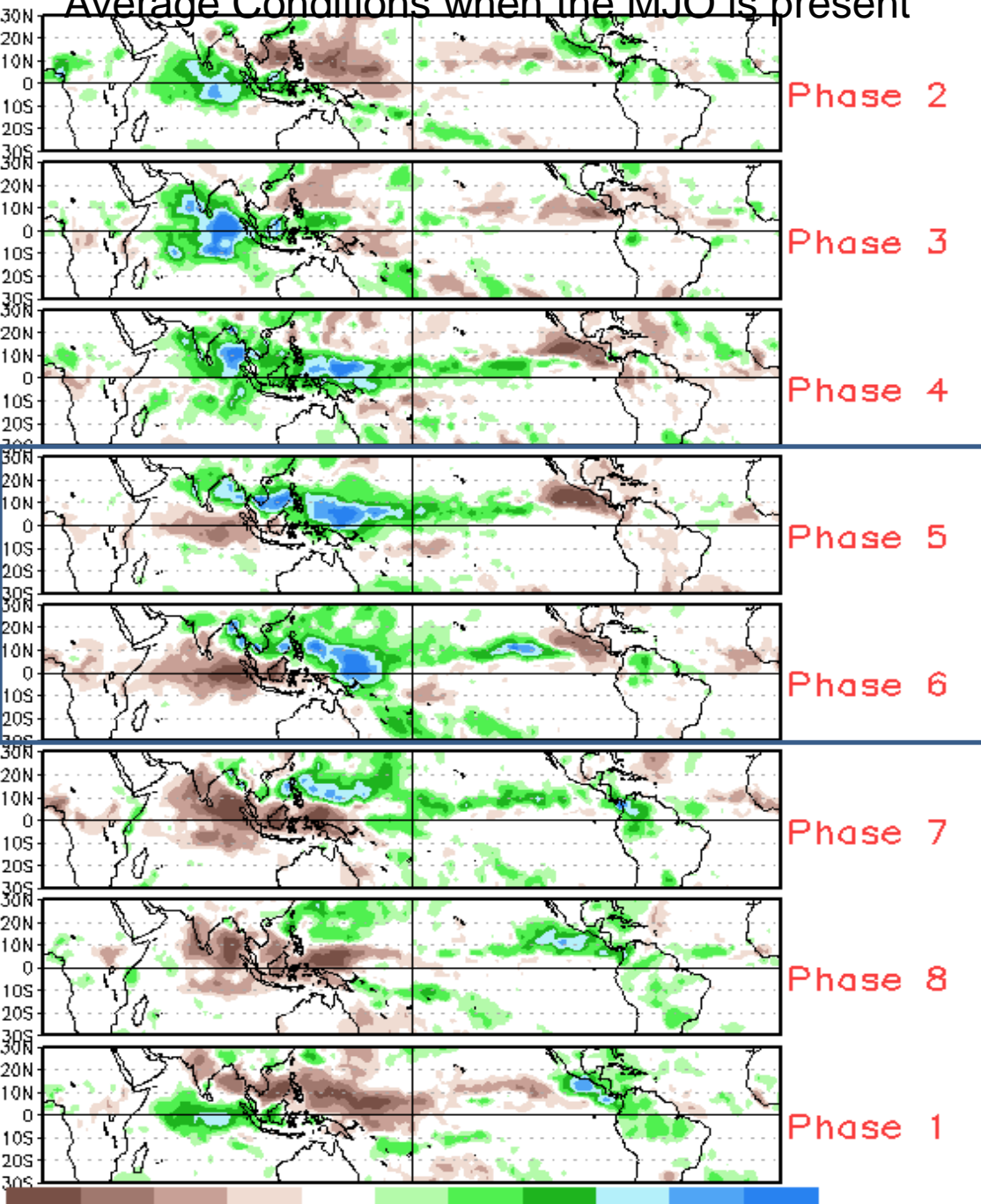


MJO Observation/Forecast



All models forecast the imminent weakening of the MJO as monitored by the RMM index.

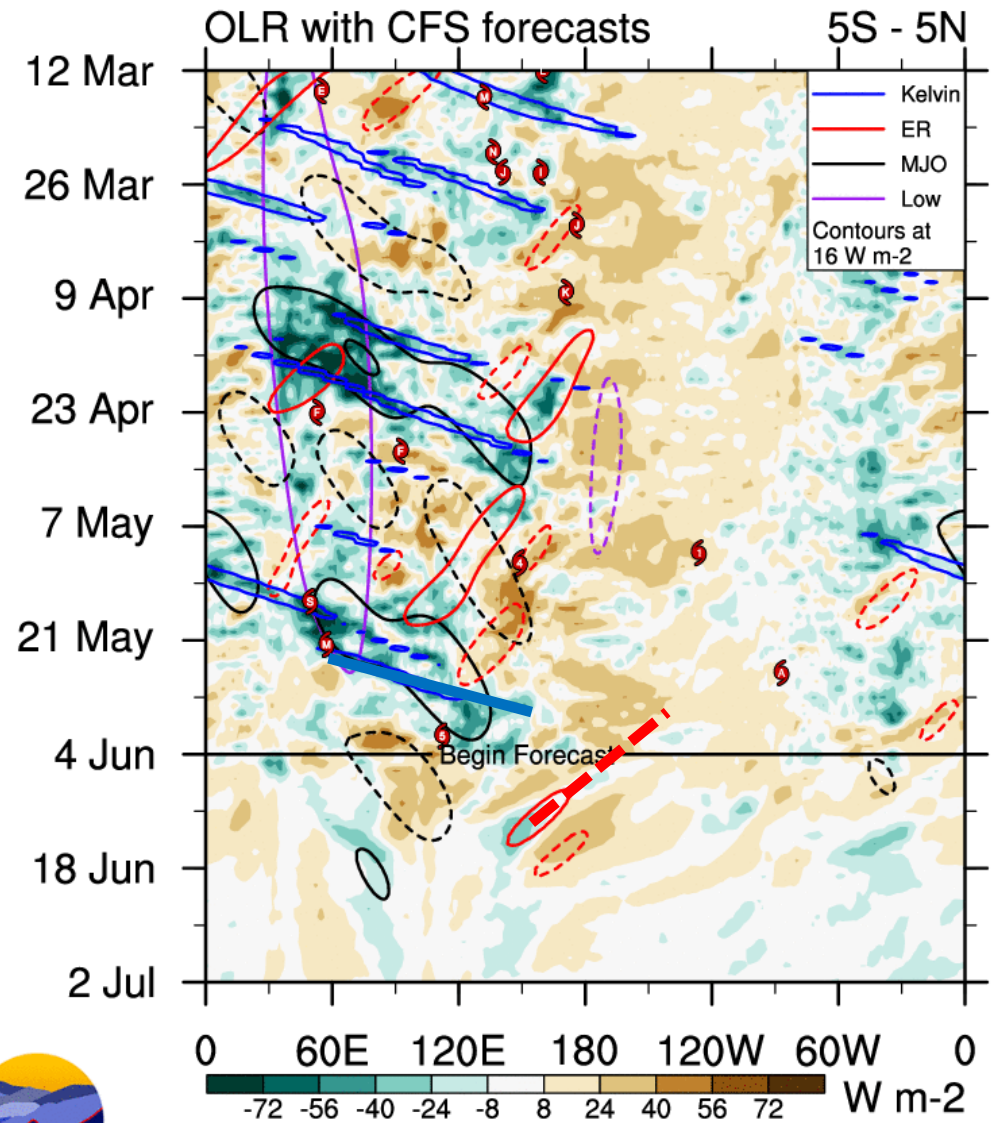
Average Conditions when the MJO is present



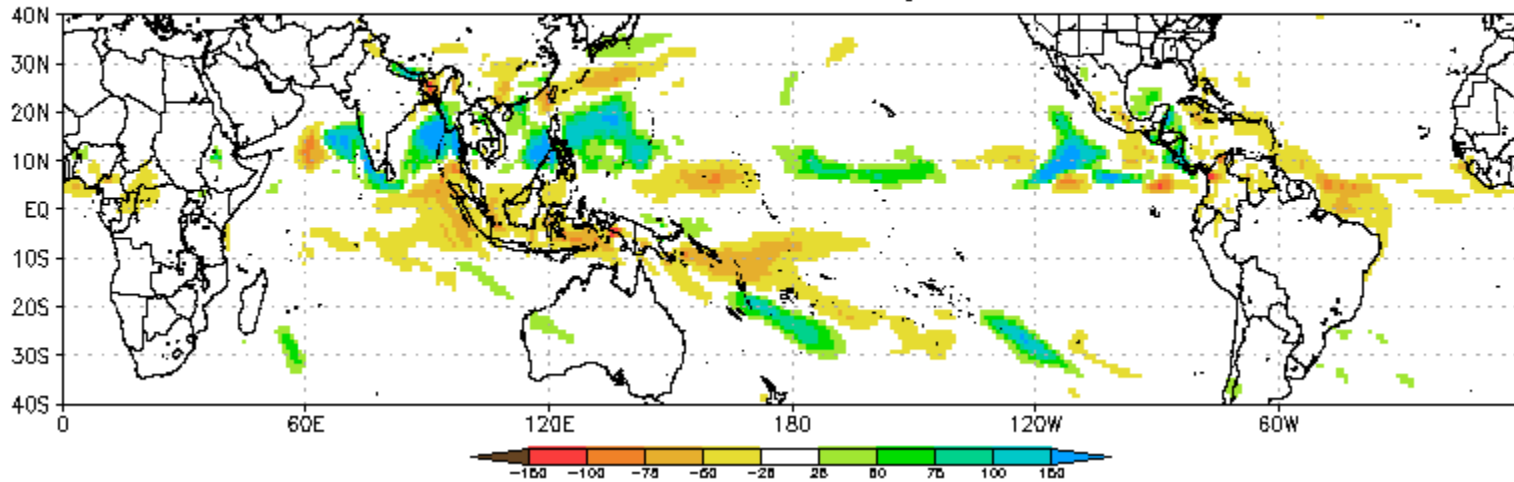
CAVEAT: These panels are representative of robust MJO events.

MJO, Rossby wave and **Kelvin wave** having an influence

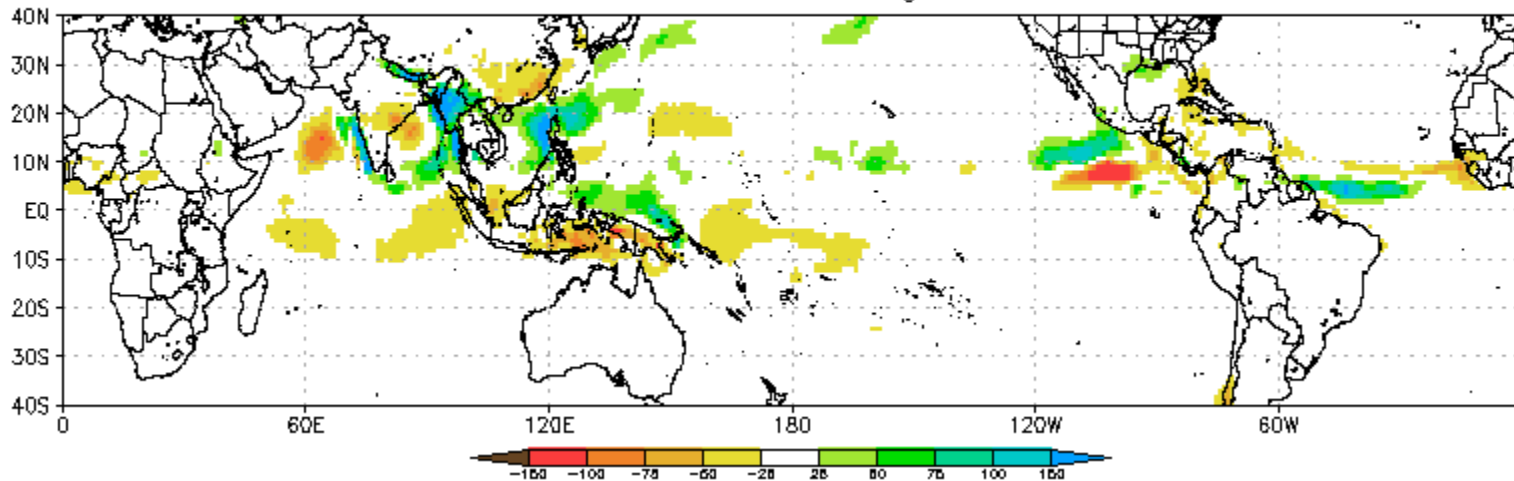
Low-frequency pattern less of an influence



CFS Precipitation Anomalies (mm) Issued 04Jun2018
Week-1 Forecast Ending 12Jun2018



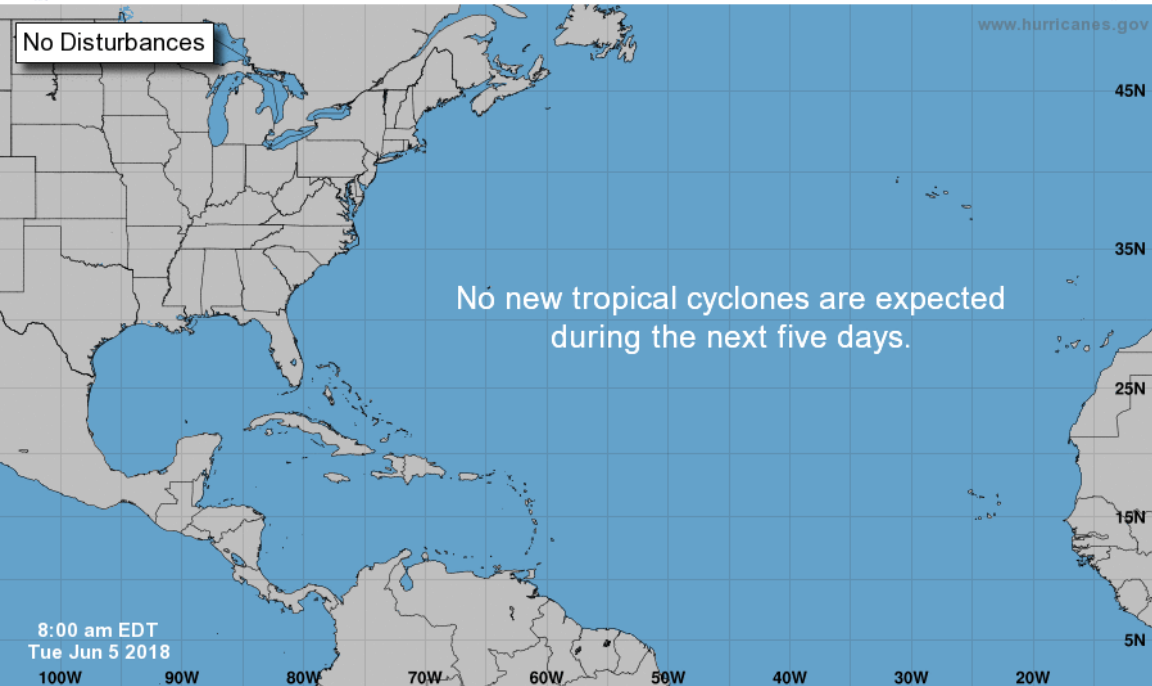
CFS Precipitation Anomalies (mm) Issued 04Jun2018
Week-2 Forecast Ending 19Jun2018





Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



8:00 am EDT
Tue Jun 5 2018

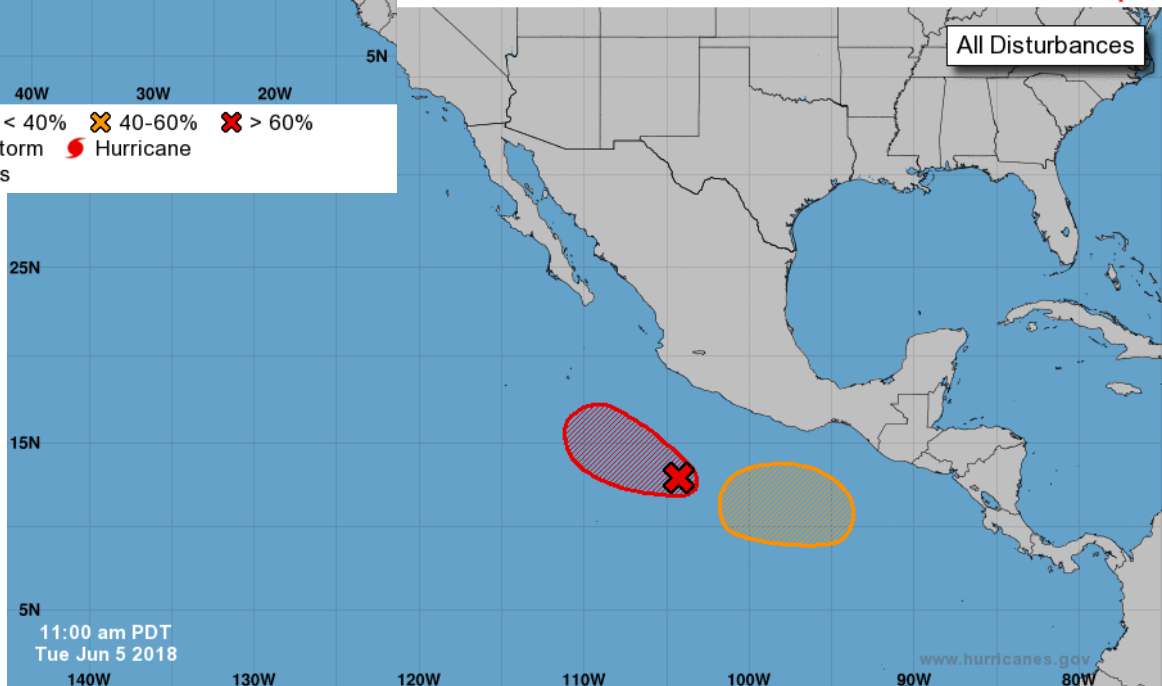
Current Disturbances and Five-Day Cyclone Formation Chance: < 40% 40-60% > 60%

Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane

Post-Tropical Cyclone or Remnants

Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida

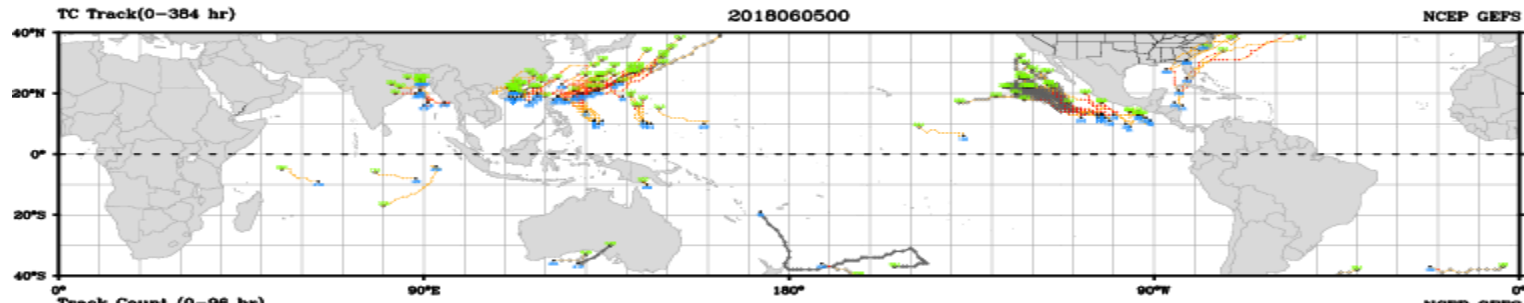


11:00 am PDT
Tue Jun 5 2018

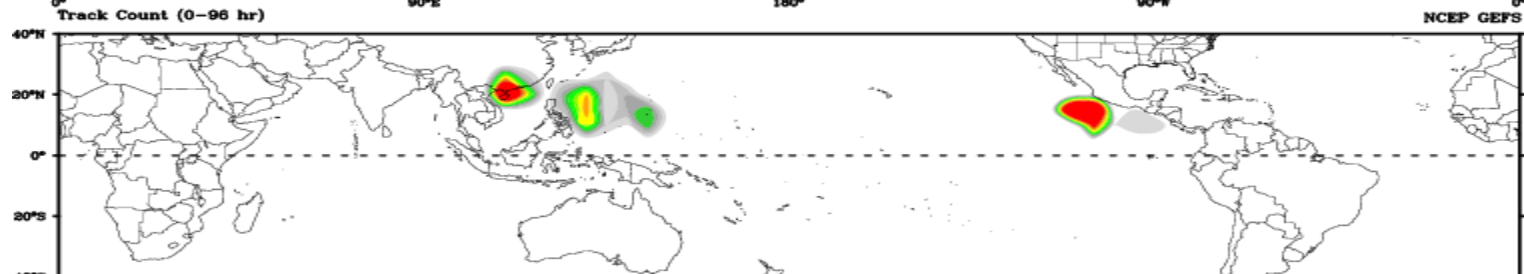
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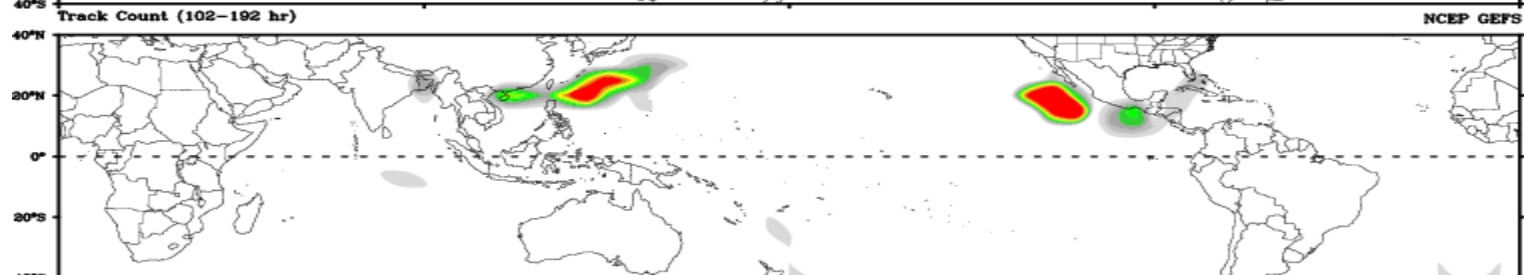
Post-Tropical Cyclone or Remnants



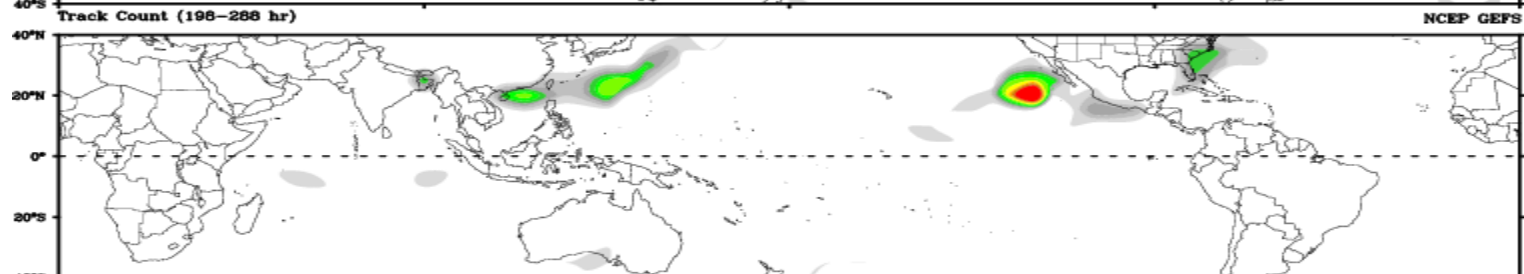
Days 1-4



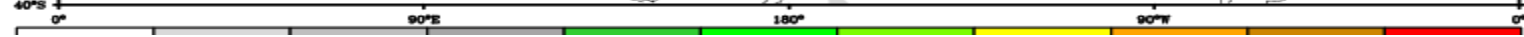
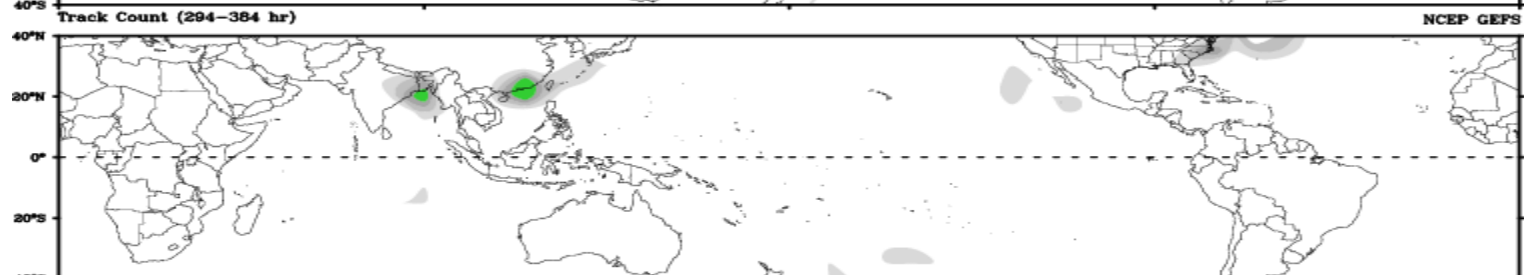
Day 5-8



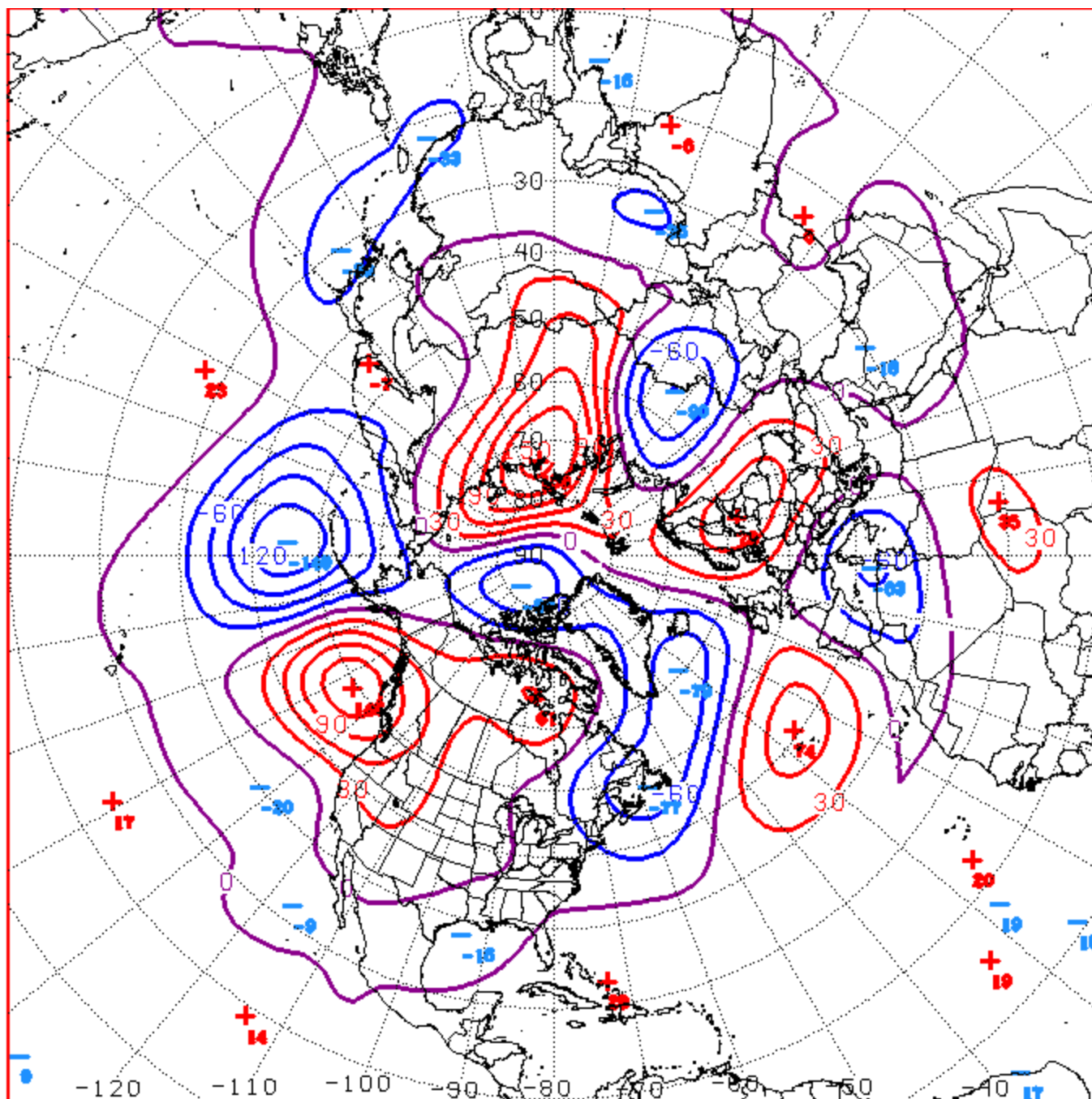
Day 9-12



Day 13-15

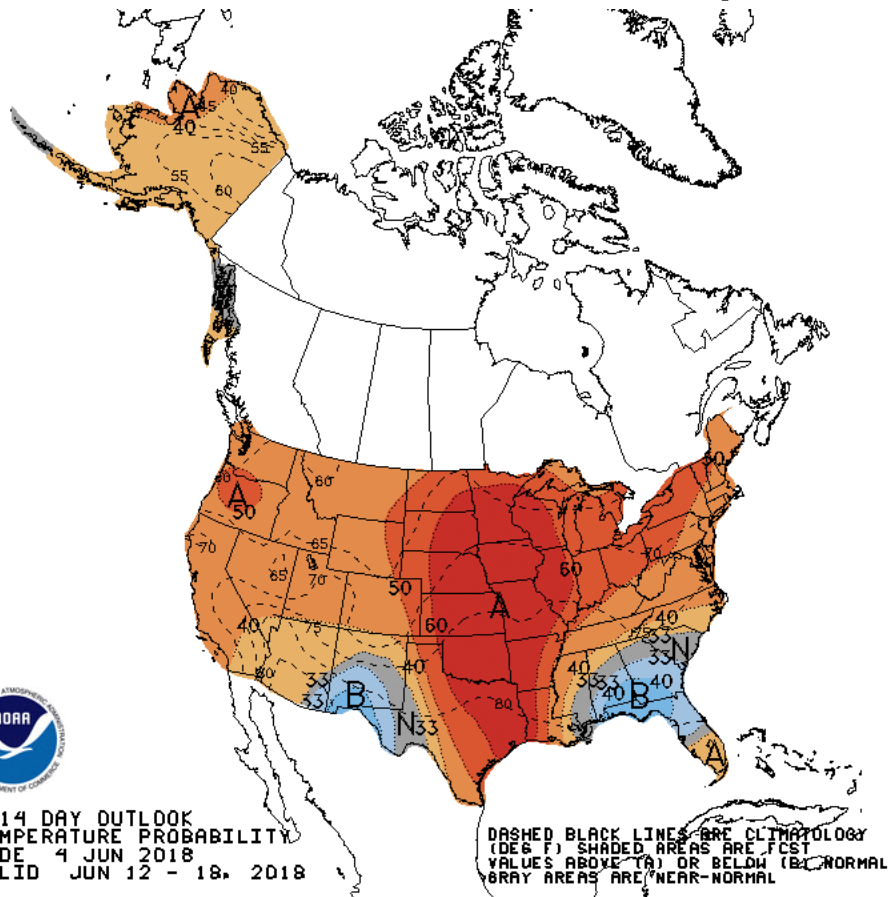


Connections to U.S. Impacts



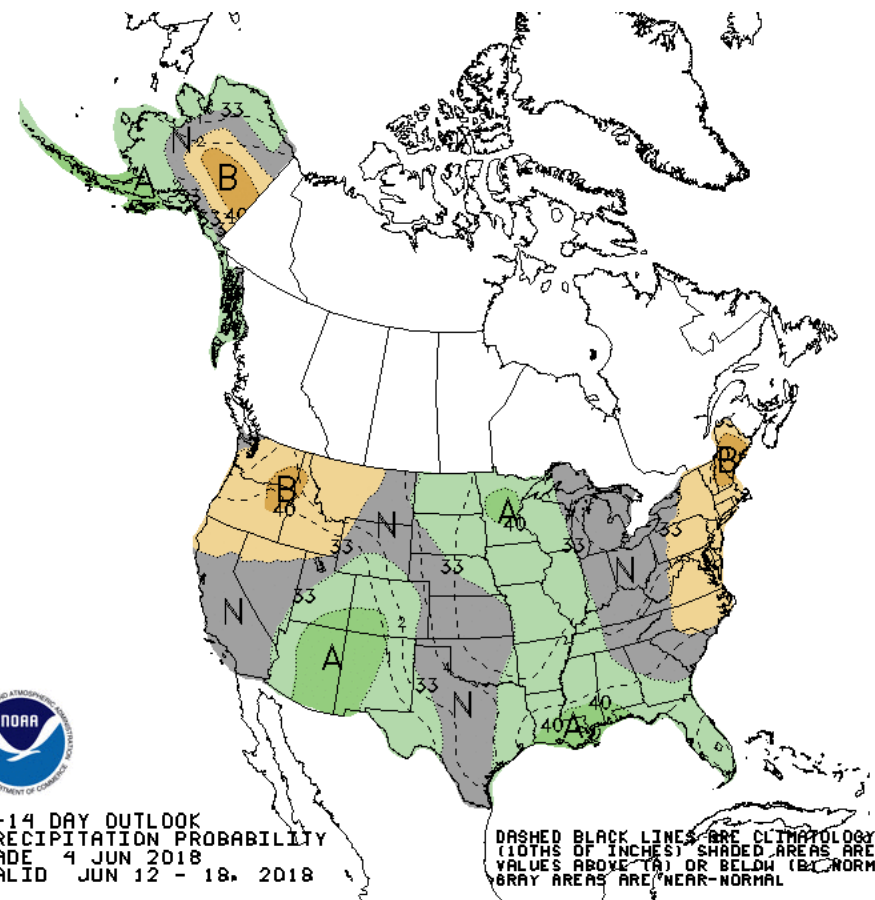
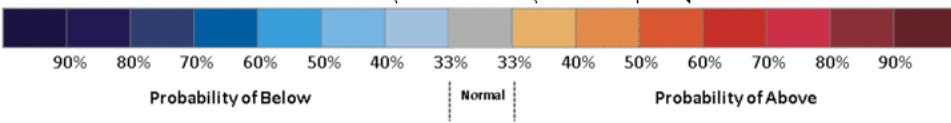
D+11 500 MB ANOMALIES FROM 06Z ENSM
 CPC MAP MADE JUN 05 2018 1225 UTC CNTD JUN 16 2018

Week 2 – Temperature and Precipitation



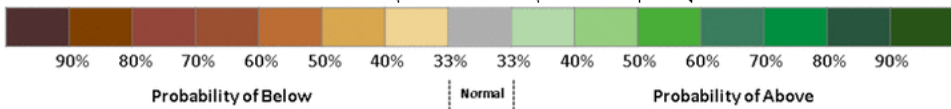
8-14 DAY OUTLOOK
TEMPERATURE PROBABILITY
MADE 4 JUN 2018
VALID JUN 12 - 18, 2018

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



8-14 DAY OUTLOOK
PRECIPITATION PROBABILITY
MADE 4 JUN 2018
VALID JUN 12 - 18, 2018

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

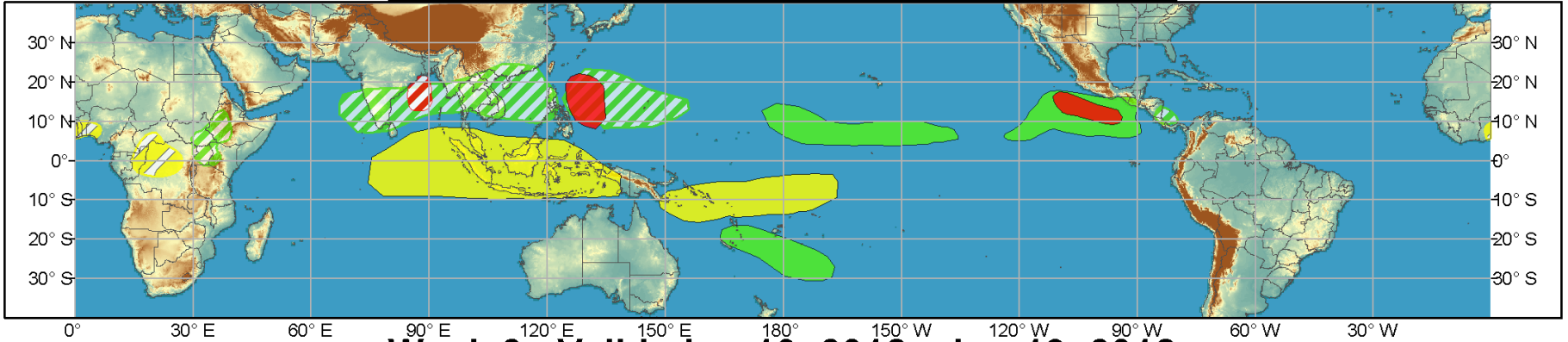




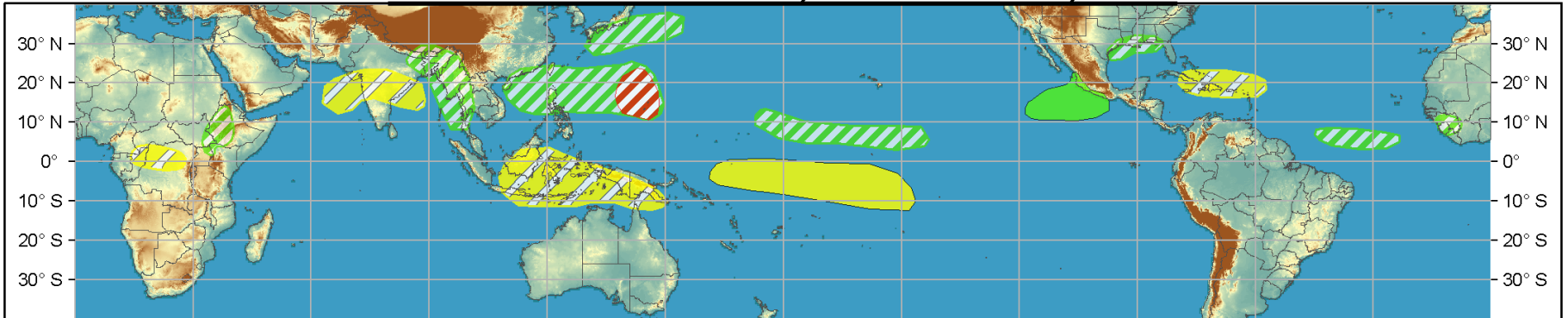
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