

Global Tropics Hazards And Benefits Outlook

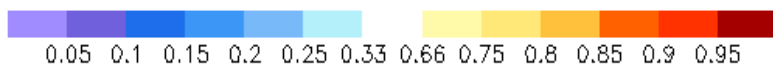
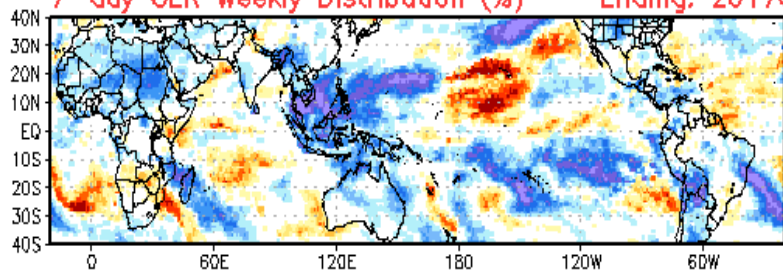
4/11/2017

Brad Pugh

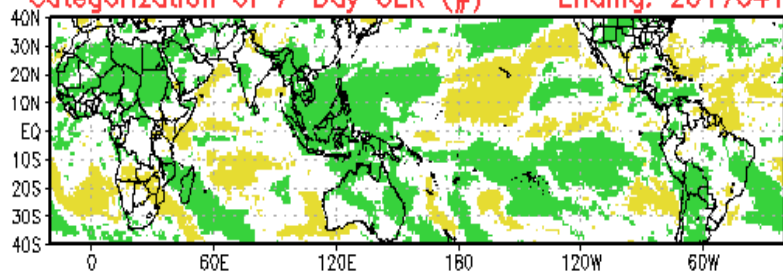
Outline

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

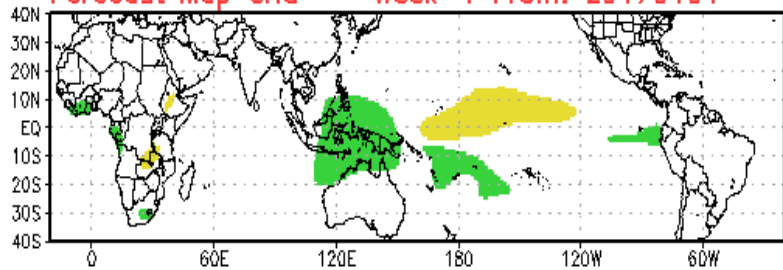
7-day OLR Weekly Distribution (%) -- Ending: 20170411



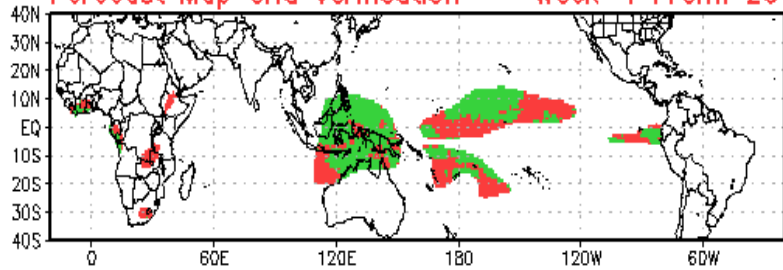
Categorization of 7-Day OLR (#) -- Ending: 20170411



Forecast Map Grid -- Week-1 From: 20170404

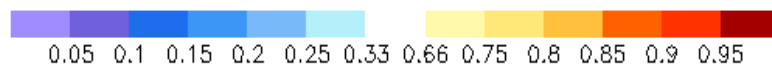
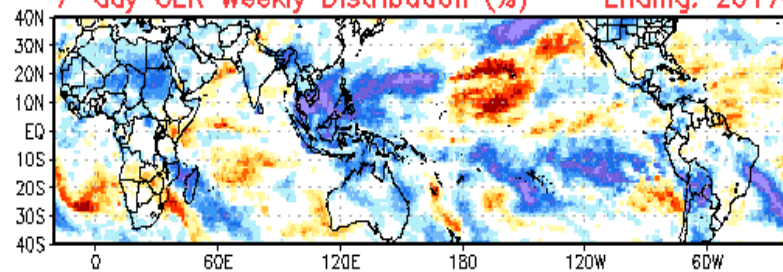


Forecast Map Grid Verification -- Week-1 From: 20170404

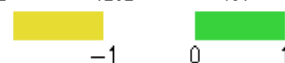
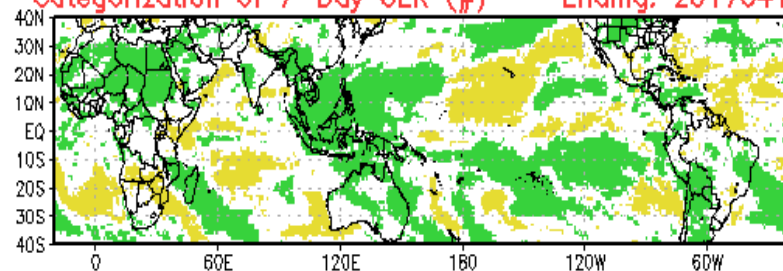


Hit: Green, Miss: Red
Heidke Skill Score: 35.2255

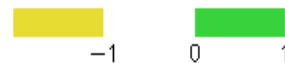
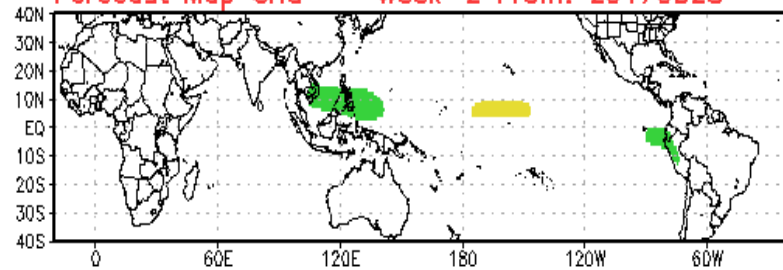
7-day OLR Weekly Distribution (%) -- Ending: 20170411



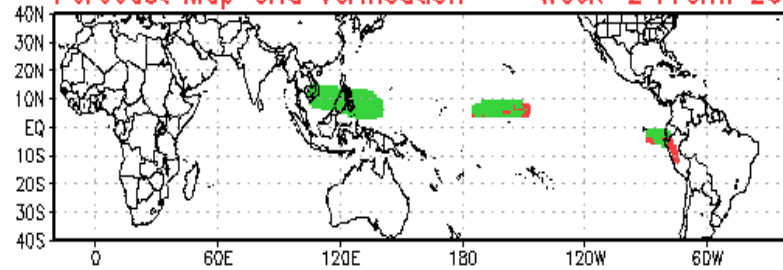
Categorization of 7-Day OLR (#) -- Ending: 20170411



Forecast Map Grid -- Week-2 From: 20170328



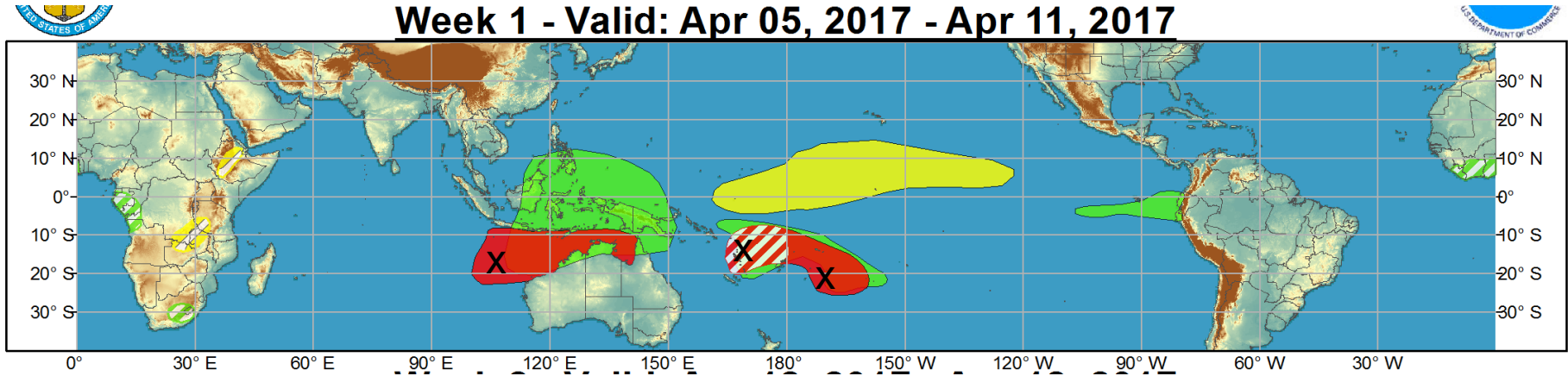
Forecast Map Grid Verification -- Week-2 From: 20170328



Hit: Green, Miss: Red
Heidke Skill Score: 81.1639

Tropical Cyclone Verification

Week 1 - Valid: Apr 05, 2017 - Apr 11, 2017



Tropical Cyclone Ernie

- Apr 6-8: rapidly intensified to max winds of 130 knots over the South Indian Ocean
- Dissipated a few days later

Tropical Cyclone Cook

- Developed on Apr 8 over the southwest Pacific
- Crossed New Caledonia with max sustained winds of 85 knots

Tropical Cyclone 14P

- Short-lived and developed east of the Date Line

Synopsis of Climate Modes

ENSO:

- ENSO-neutral conditions are expected to continue through boreal Spring.
- Increasing chances of El Niño development through boreal Autumn.
- The next ENSO update will be released on 13 Apr 2017.

MJO and other subseasonal tropical variability:

- The MJO remained weak, with slightly more organization in recent days.
- Dynamical models indicate the continuation of a weak signal with fast propagation of the enhanced phase into the Western Hemisphere during the next two weeks.

Extratropics:

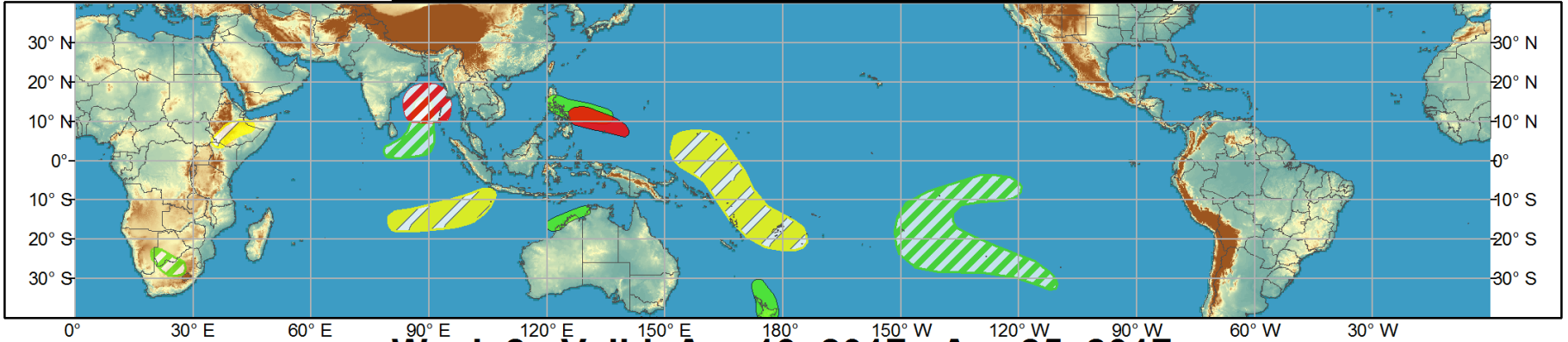
- The extended range temperature and precipitation forecasts for the U.S. are not likely to be influenced by the MJO.
- Model solutions are in good agreement with a trough persisting south of the Aleutians.



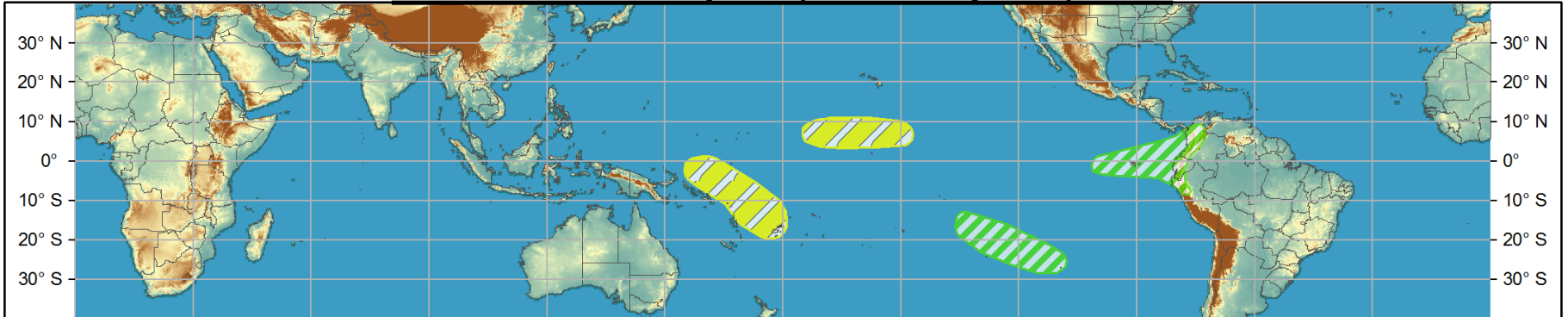
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Apr 12, 2017 - Apr 18, 2017



Week 2 - Valid: Apr 19, 2017 - Apr 25, 2017



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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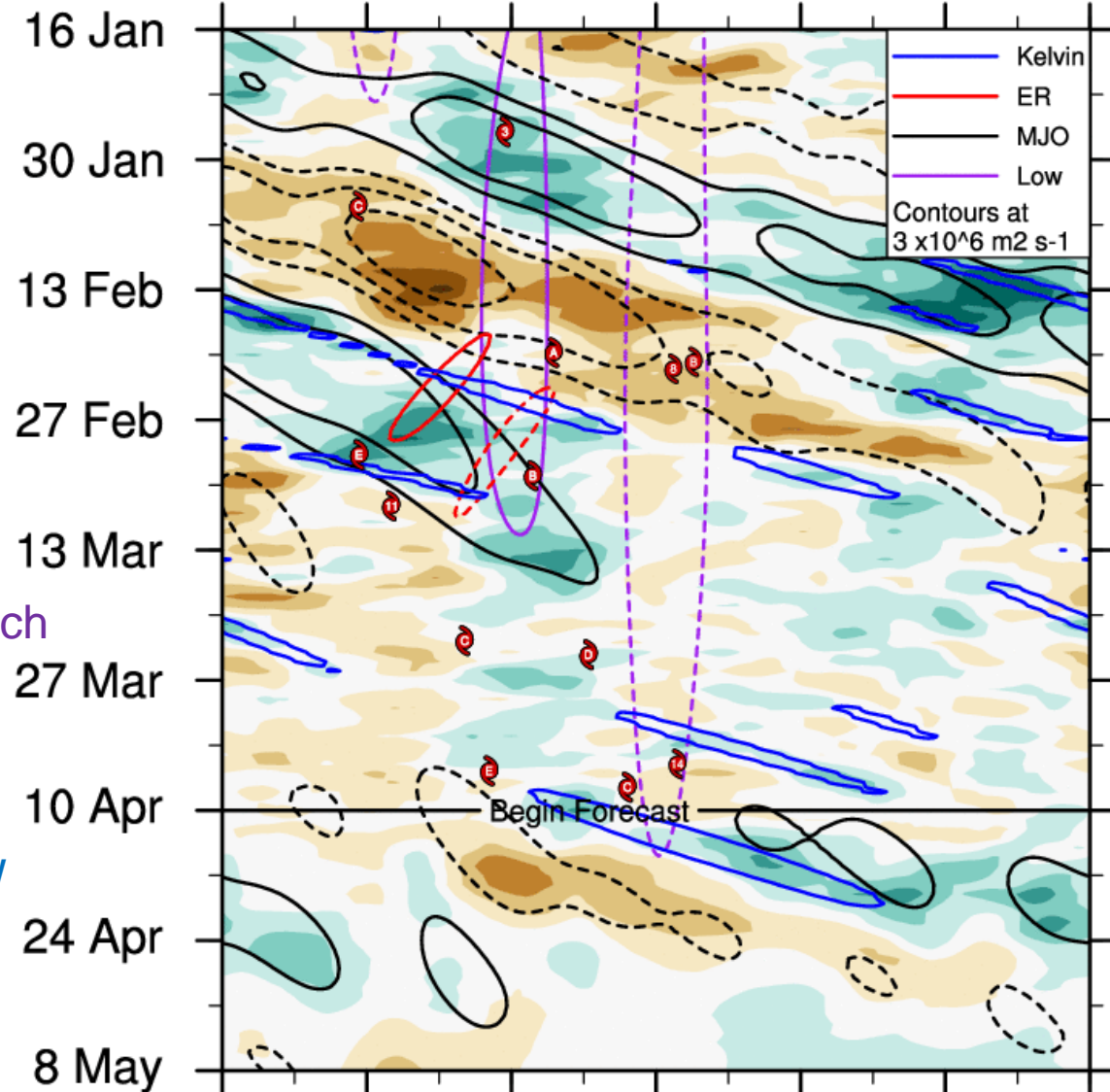
Produced: 04/11/2017
Forecaster: Pugh

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.



CHI200 with CFS forecasts

5S - 5N

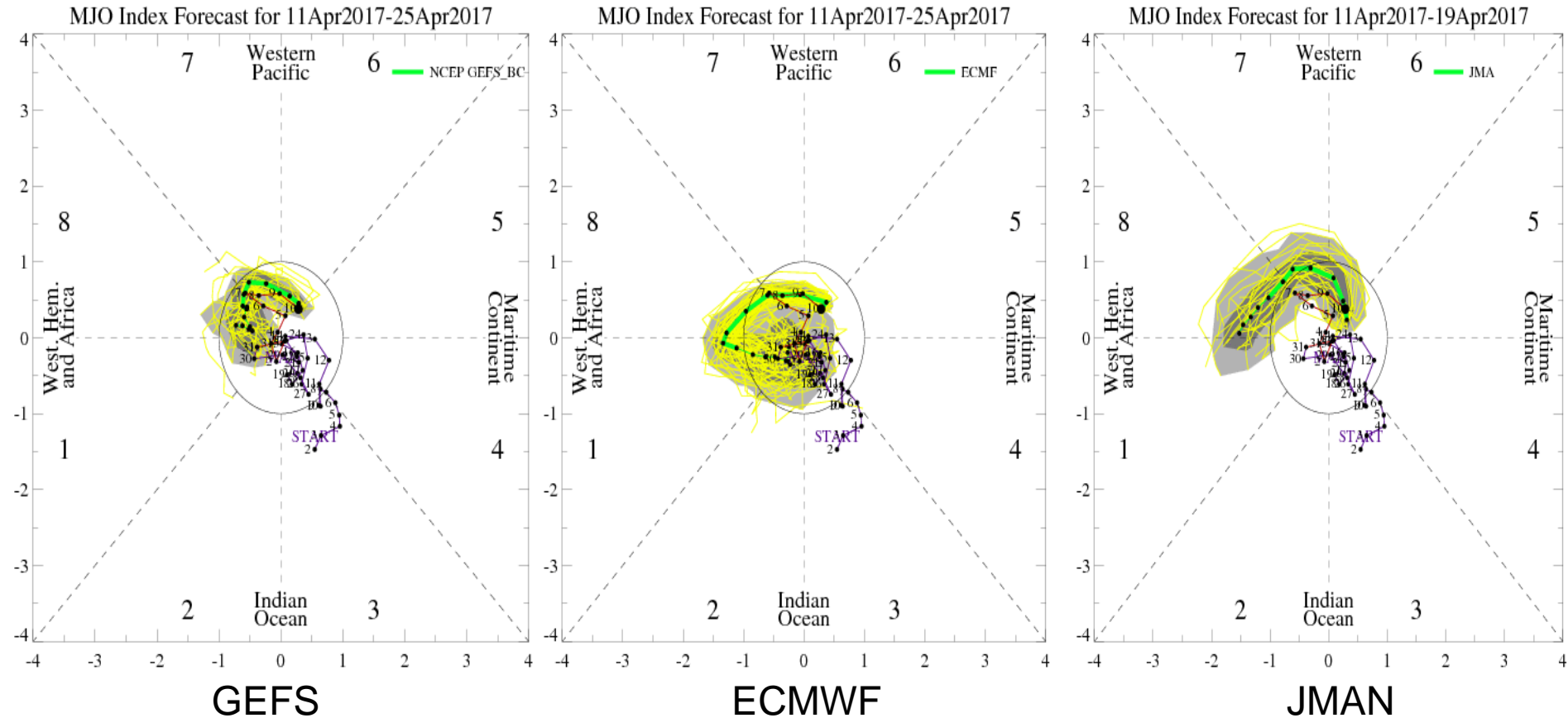


Low frequency state dominates since mid-March

Forecast of MJO and KW



MJO Observation/Forecast



Wheeler-Hendon based analyses of model forecasts indicate eastward propagation of a weak signal.

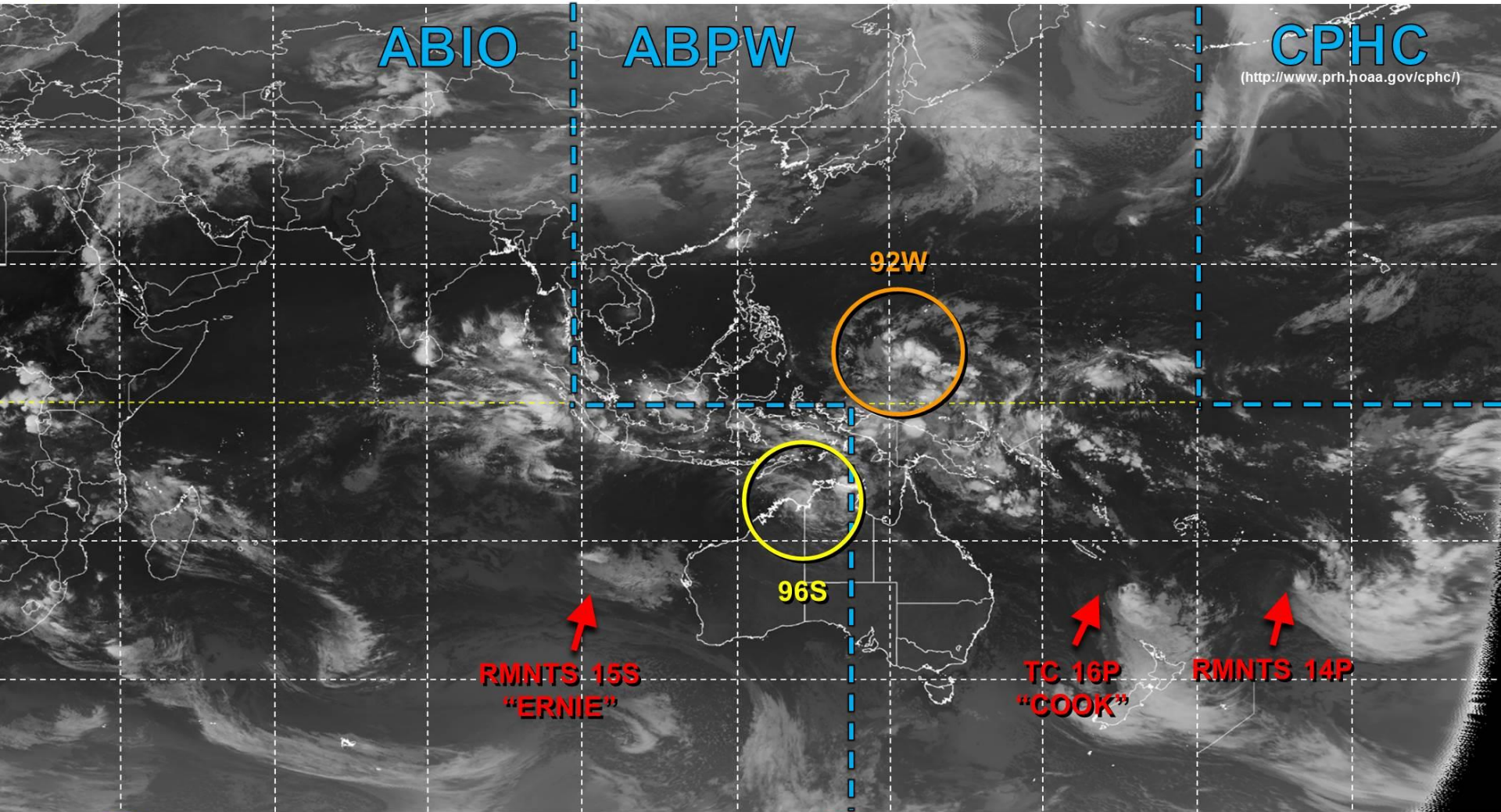


Tropical Cyclone Development Potential



IMAGE TIME: 11/1700Z

(PRODUCT OF JTWC/SATOPS)



ABIO

ABPW

CPHC

(<http://www.prh.hoaa.gov/cphc/>)

92W

96S

RMNTS 15S
"ERNIE"

TC 16P
"COOK"

RMNTS 14P

LOW

TC formation unlikely within 24 hours

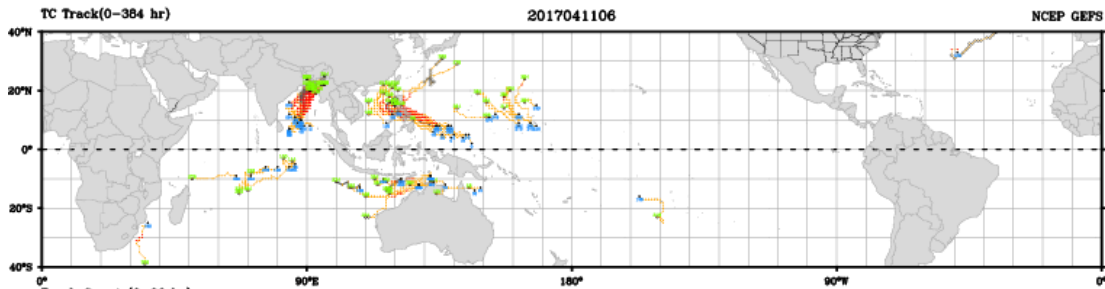
MEDIUM

TC development likely, but expected to occur beyond 24 hours

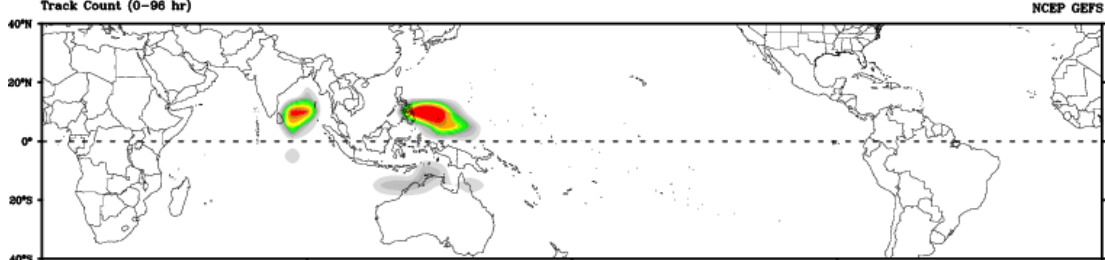
HIGH

TC development likely within 24 hours (Reference TCFA)

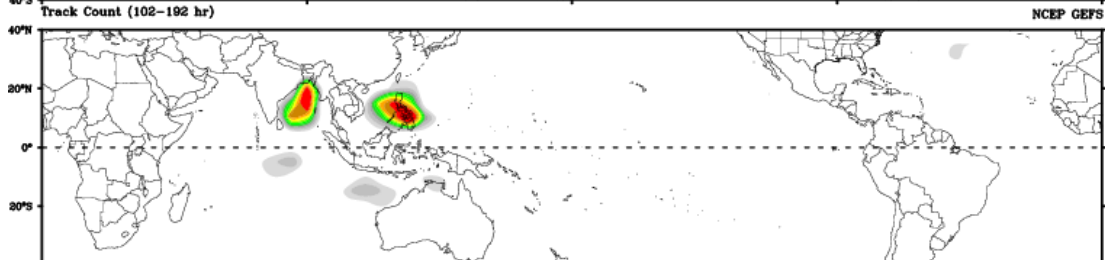
 Tropical Cyclone (Reference Warning)



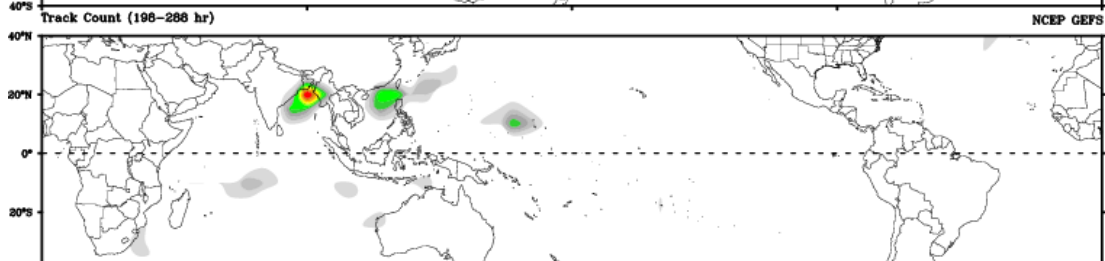
Days 1-4



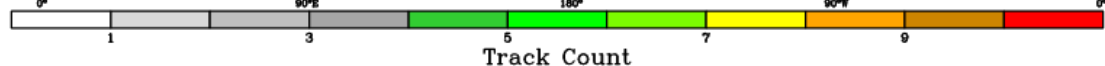
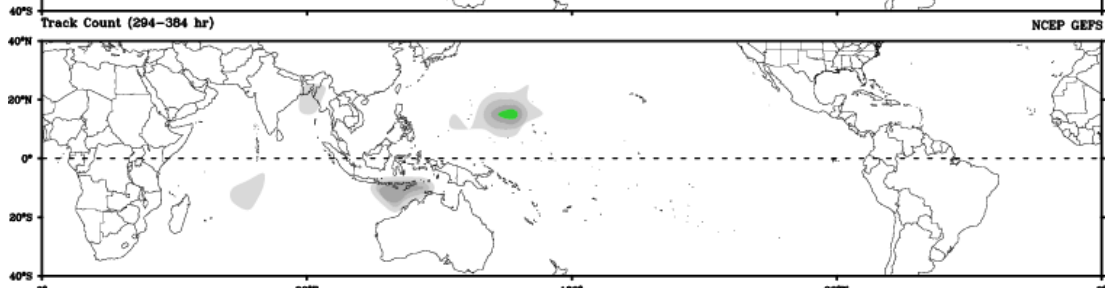
Day 5-8



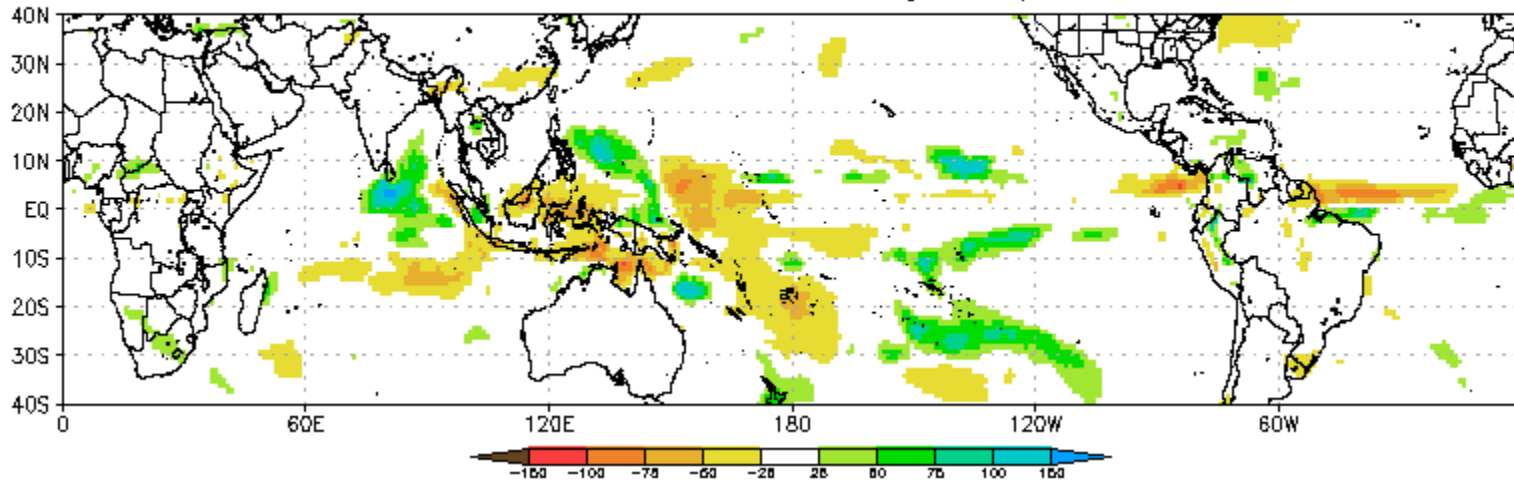
Day 9-12



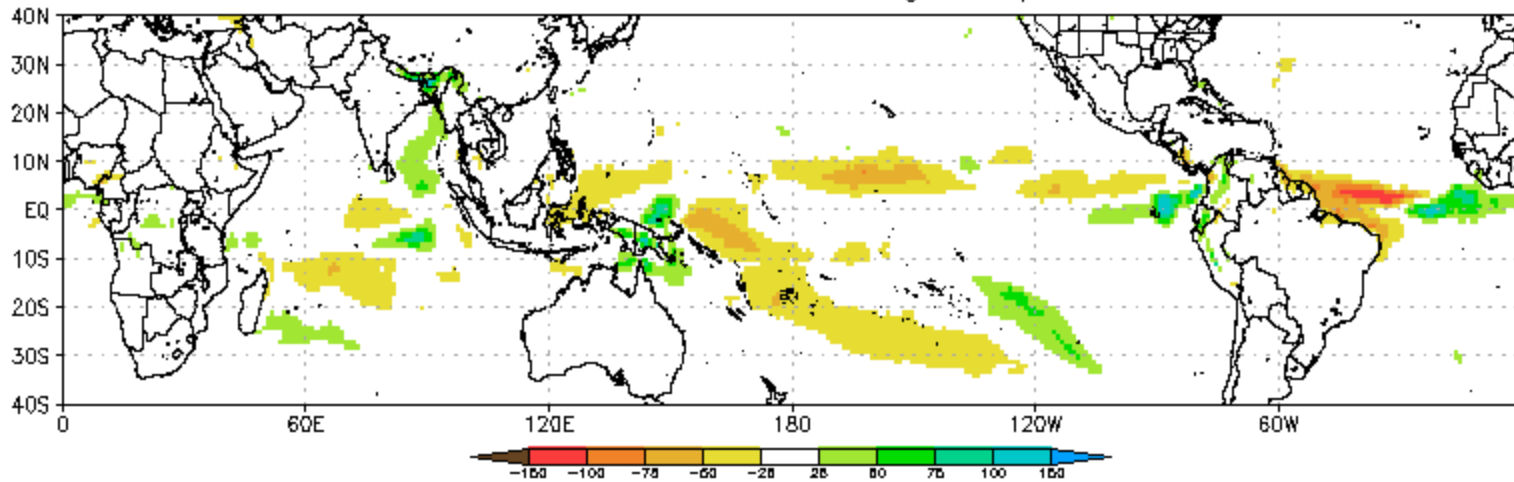
Day 13-15



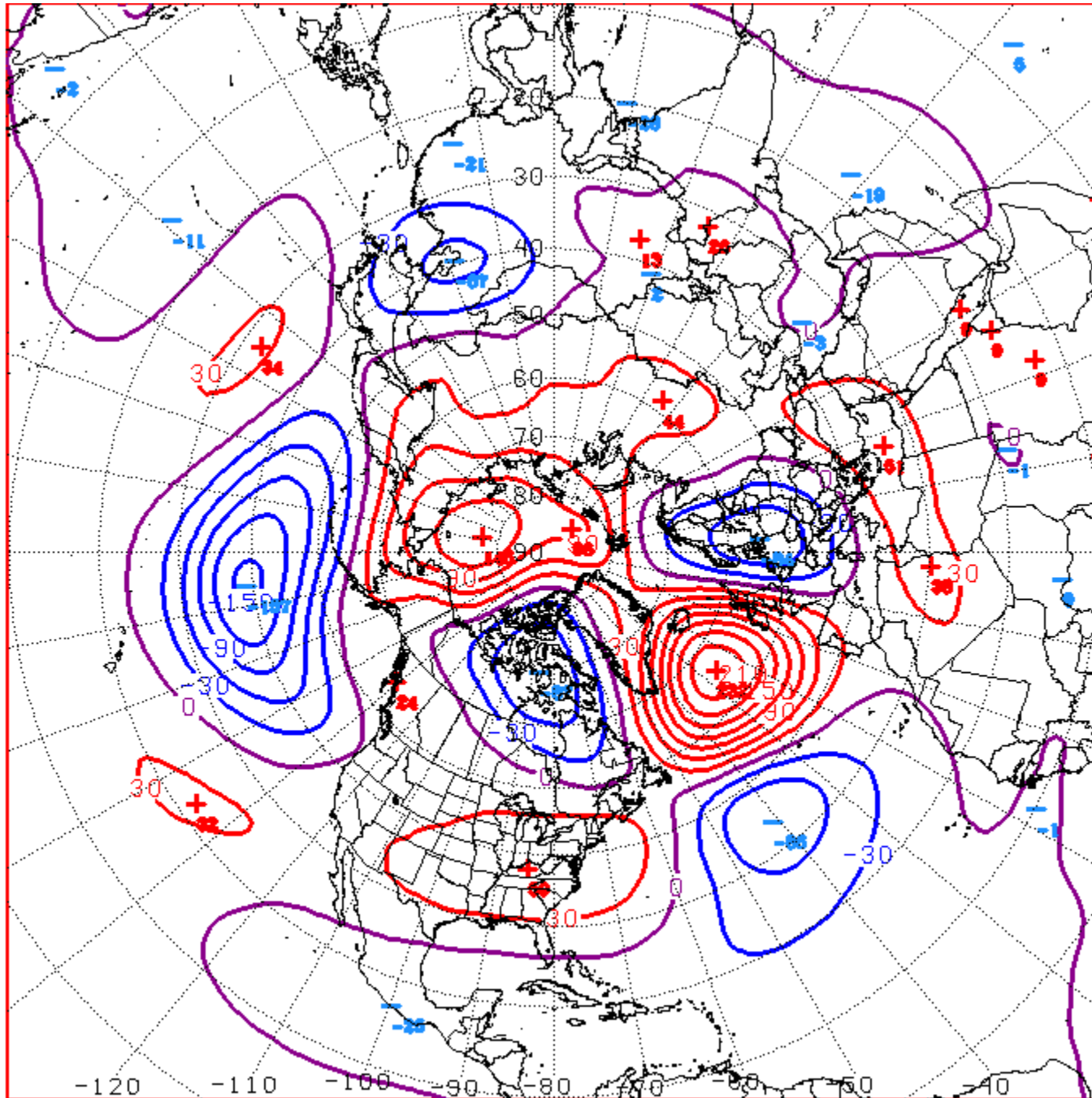
CFS Precipitation Anomalies (mm) Issued 10Apr2017
Week-1 Forecast Ending 18Apr2017



CFS Precipitation Anomalies (mm) Issued 10Apr2017
Week-2 Forecast Ending 25Apr2017

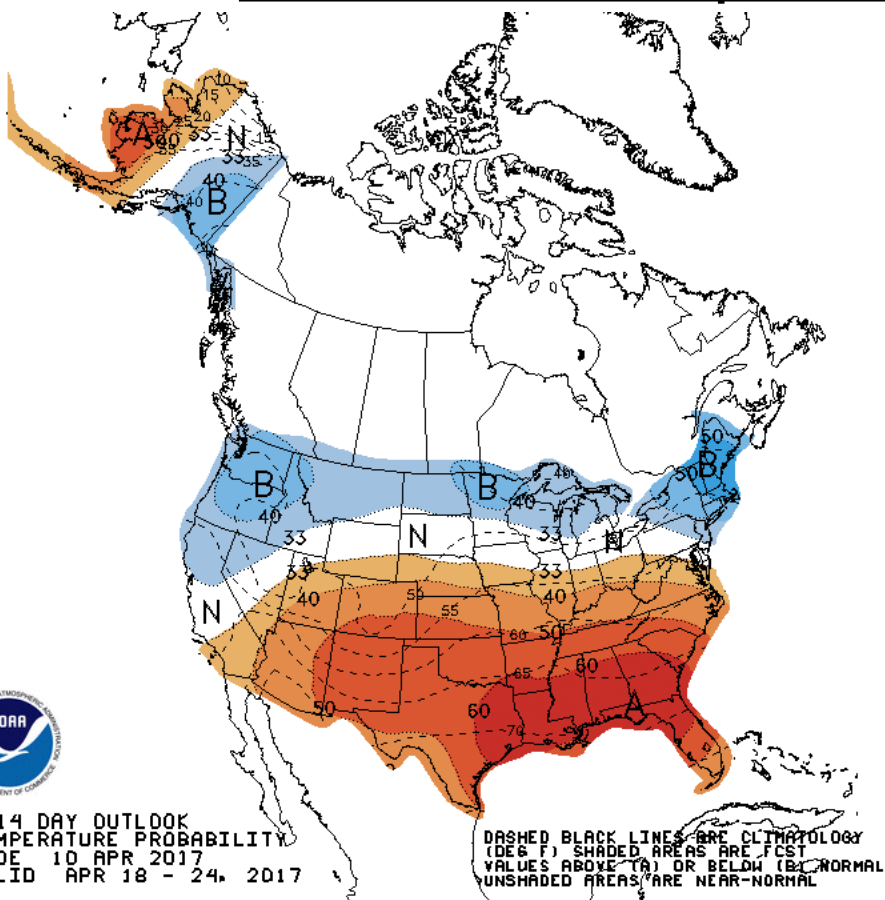


Connections to U.S. Impacts

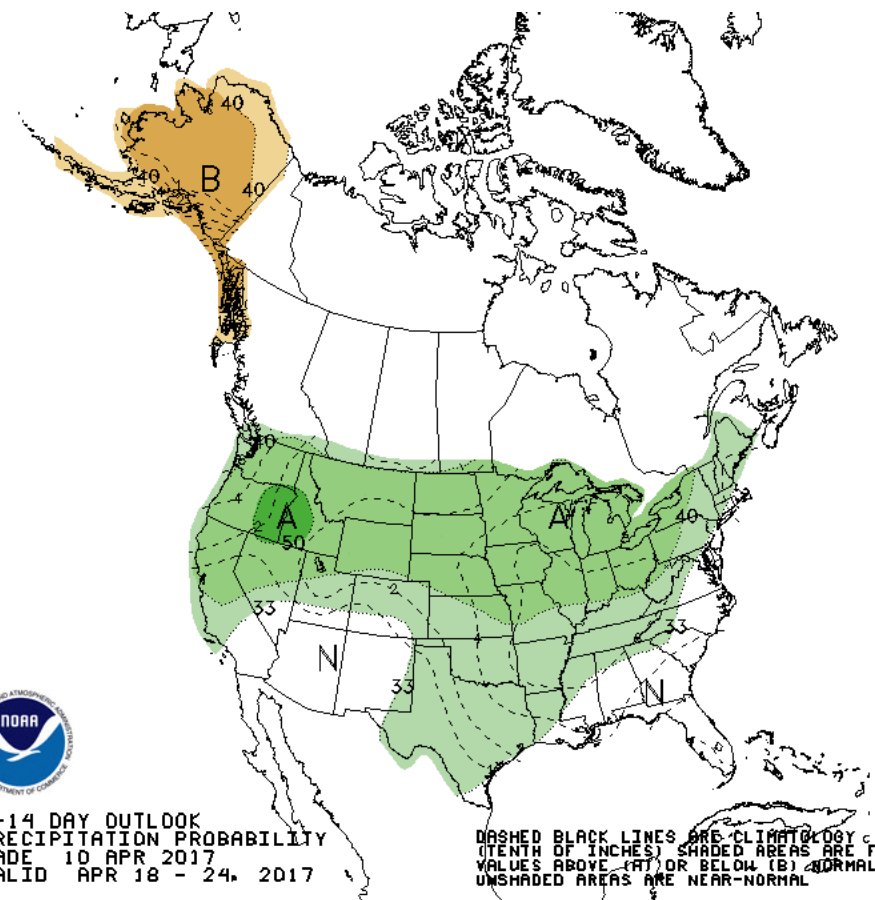
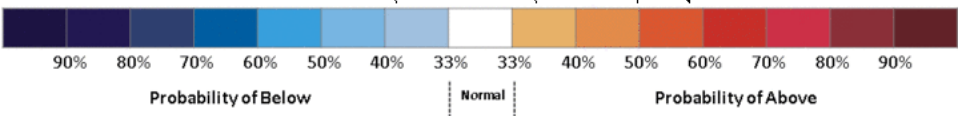


D+11 500 MB ANOMALIES FROM 00Z ENSM
CPC MAP MADE APR 11 2017 0640 UTC CNTD APR 22 2017

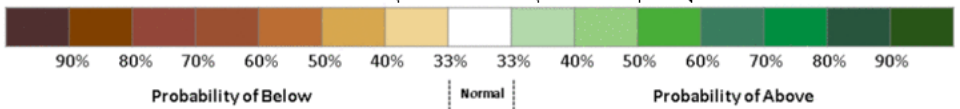
Week 2 – Temperature and Precipitation



8-14 DAY OUTLOOK
TEMPERATURE PROBABILITY
MADE 10 APR 2017
VALID APR 18 - 24, 2017



8-14 DAY OUTLOOK
PRECIPITATION PROBABILITY
MADE 10 APR 2017
VALID APR 18 - 24, 2017

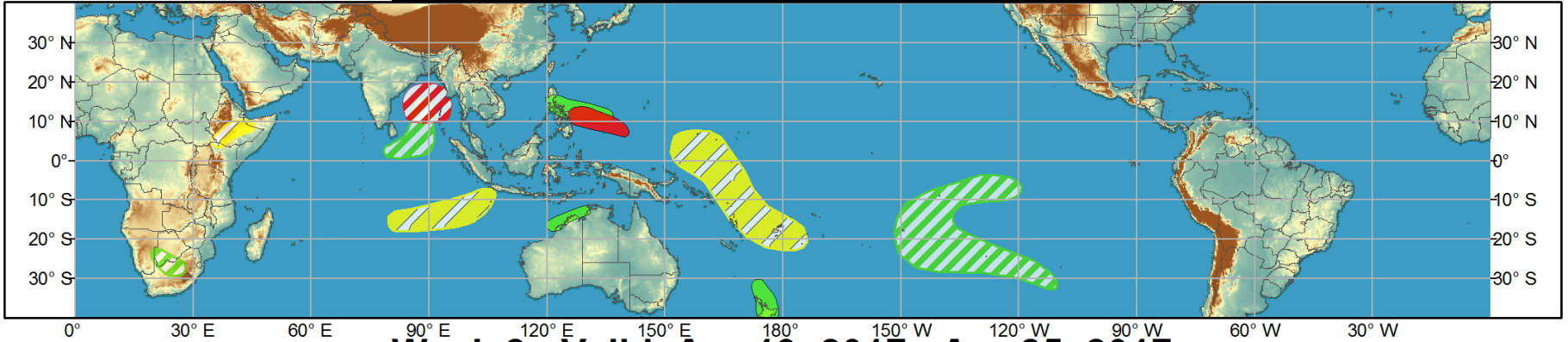




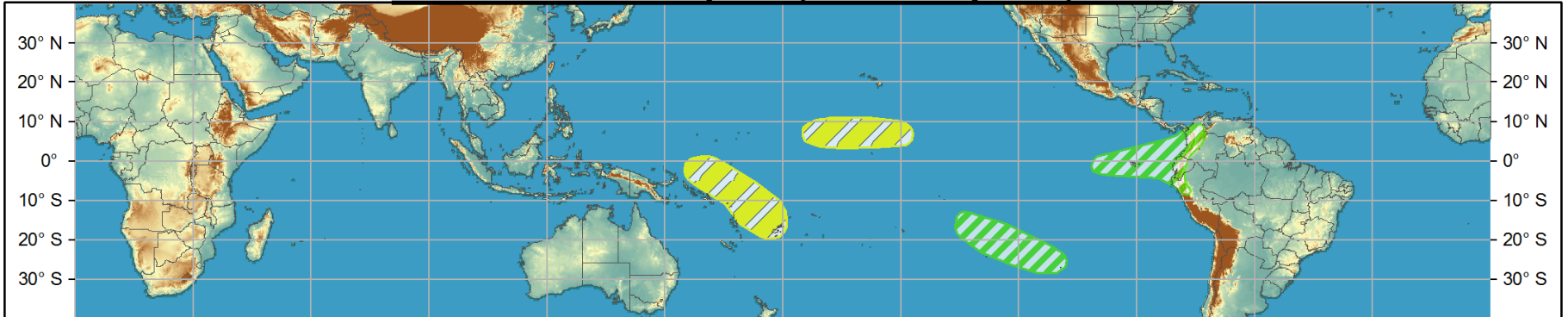
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