

# Global Tropics Hazards And Benefits Outlook

April 8, 2013

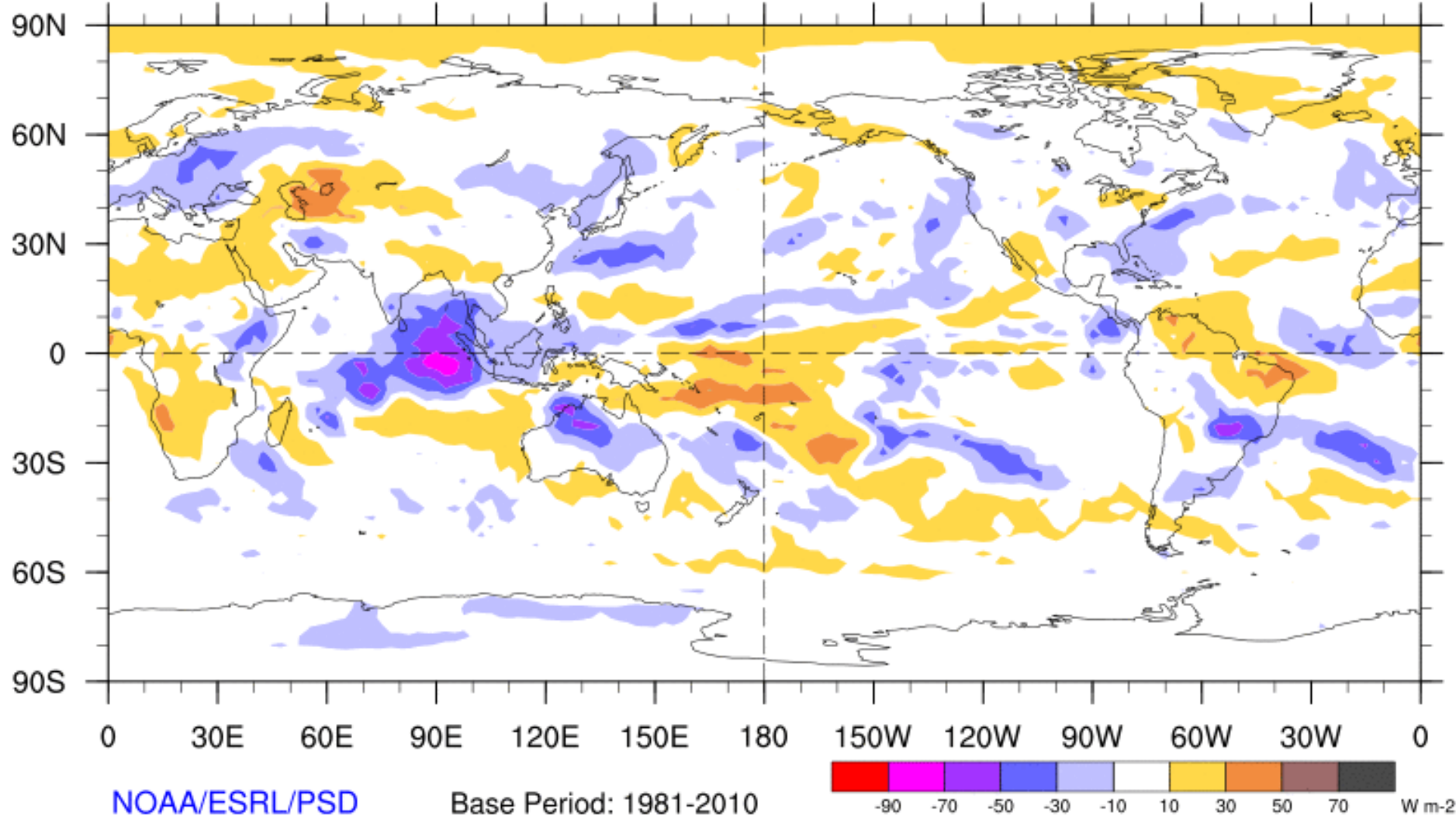
Matthew Rosencrans

## Outline

1. Review of Recent Conditions
2. Synopsis of Climate Modes
3. GTH Outlook and Forecast Discussion

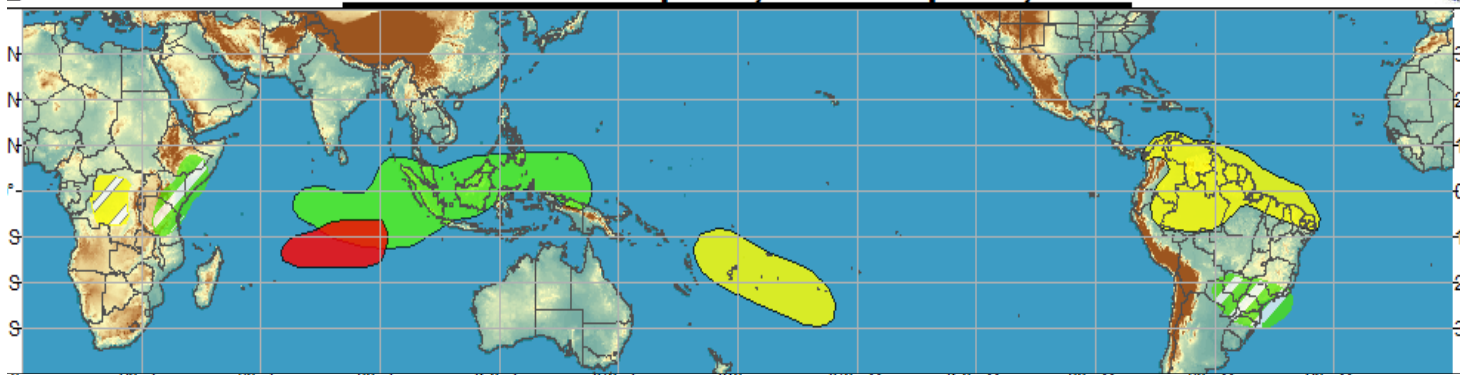
# 7-Day Average OLR Anomaly

2013/04/01 - 2013/04/07

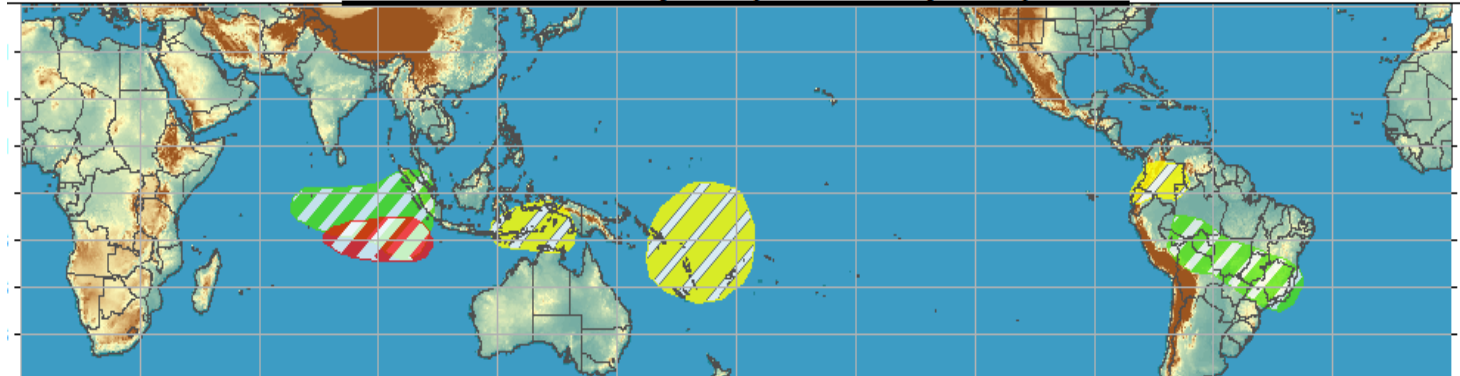


# Outlook Review

**Week 1 - Valid: Apr 03, 2013 - Apr 09, 2013**

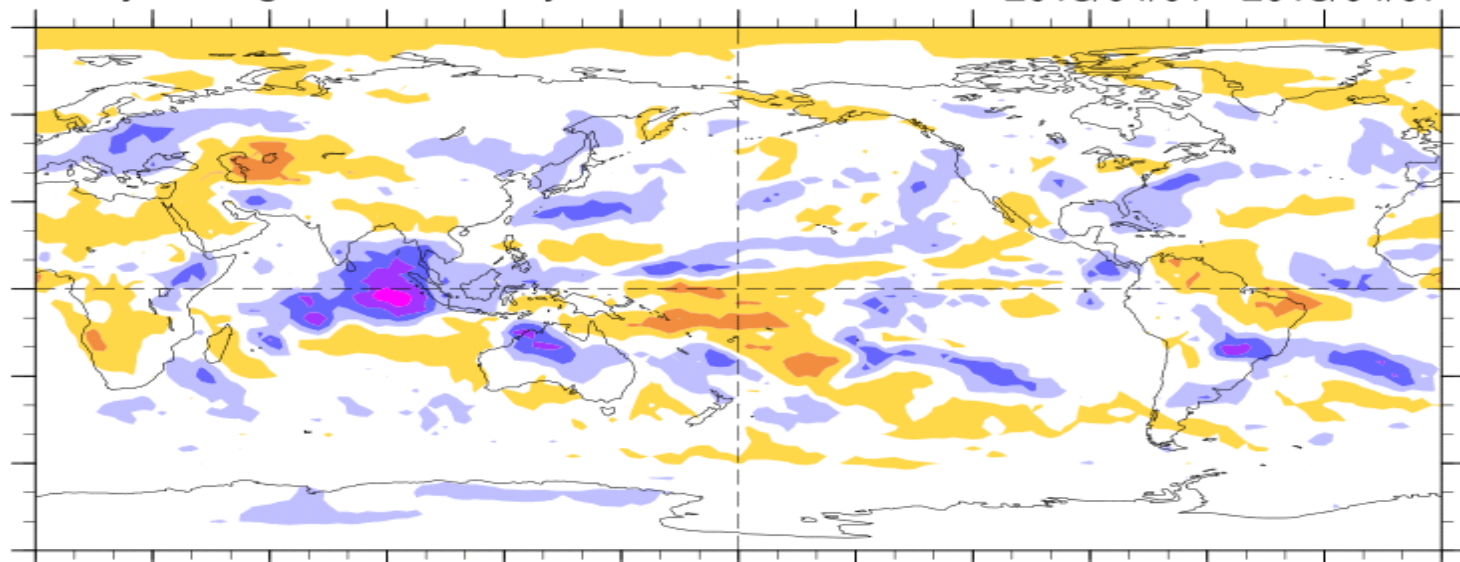


**Week 2 - Valid: Apr 03, 2013 - Apr 09, 2013**



7-Day Average OLR Anomaly

2013/04/01 - 2013/04/07



Cool shading  
More clouds/rain

Warm shading  
Less clouds/rain

# Synopsis of Climate Modes

## ENSO:

- ENSO-neutral conditions are favored to continue through Northern Hemisphere spring 2013

## MJO and other subseasonal tropical variability:

- The MJO remained active over the past week, although some observational indicators are less coherent than in previous weeks as other subseasonal variability are playing a large role in the pattern of anomalous tropical convection. The MJO enhanced phase is centered over the eastern Indian Ocean.

- Dynamical model MJO index forecasts generally support continued eastward propagation. The statistical tools also support continued MJO activity, although those reflect a weaker signal.

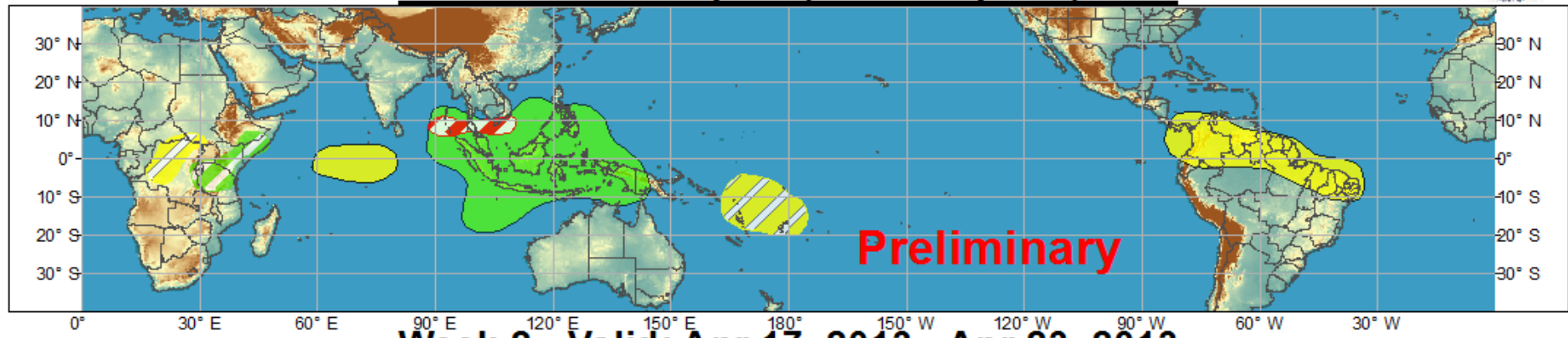
## Extratropics:

- The extended range forecast for the U.S. aligns well with the typical circulation patterns based on the current and forecast phases of the MJO. These include a trend towards above-normal temperatures across the eastern U.S. and a more active across the central U.S.

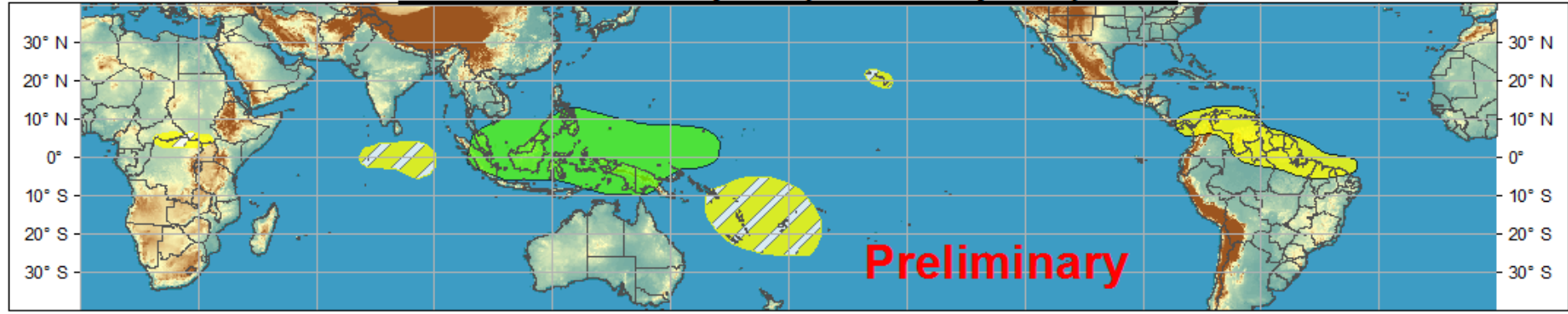


# Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

## Week 1 - Valid: Apr 10, 2013 - Apr 16, 2013



## Week 2 - Valid: Apr 17, 2013 - Apr 23, 2013



Produced: 04/09/2013

Forecaster: Rosencrans

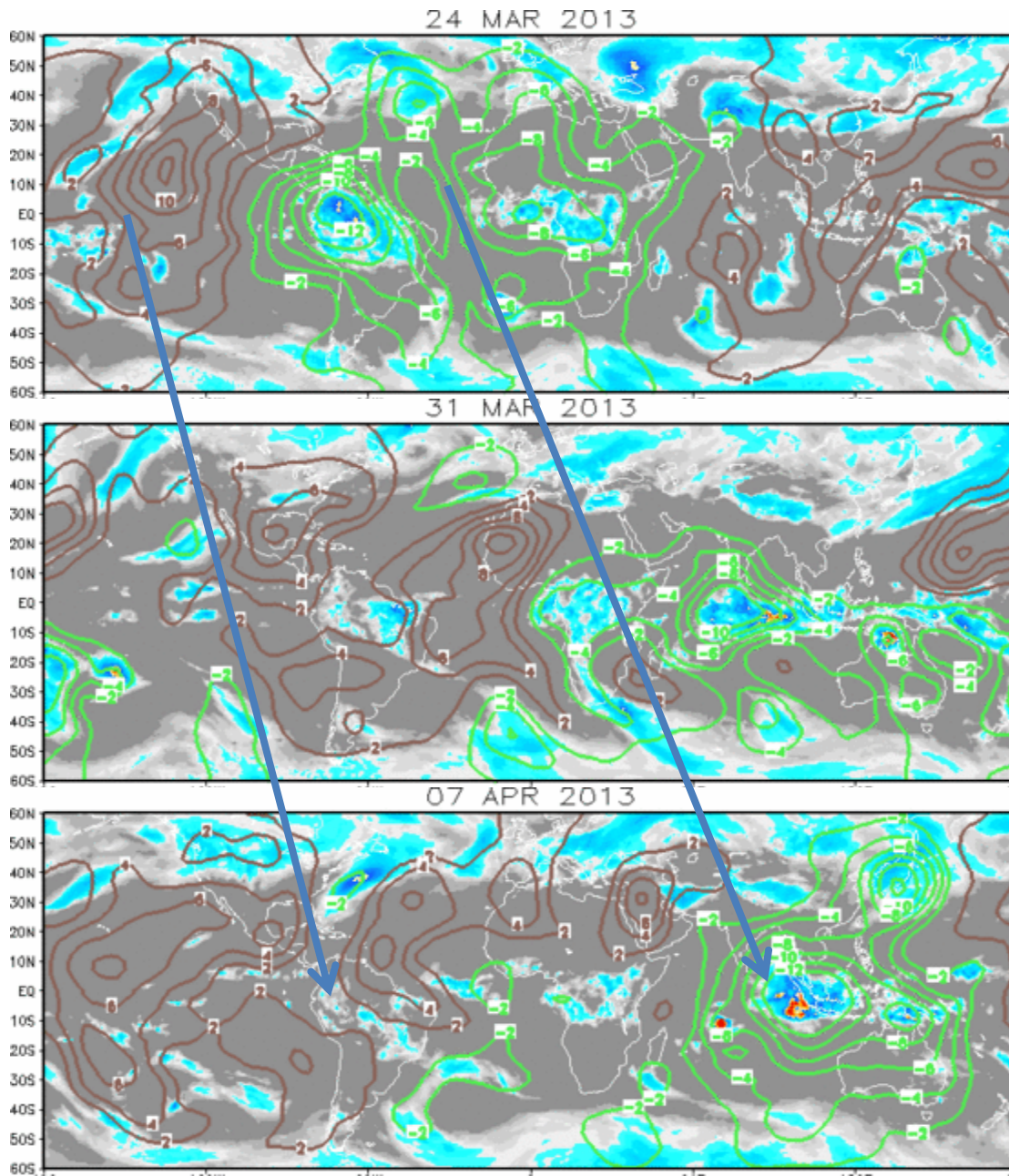
	Confidence		
	High	Moderate	
<b>Tropical Cyclone Formation</b>			Development of a tropical cyclone that eventually reaches tropical storm/cyclone strength.
<b>Above-average rainfall</b>			Weekly total rainfall in the upper third of the historical range.
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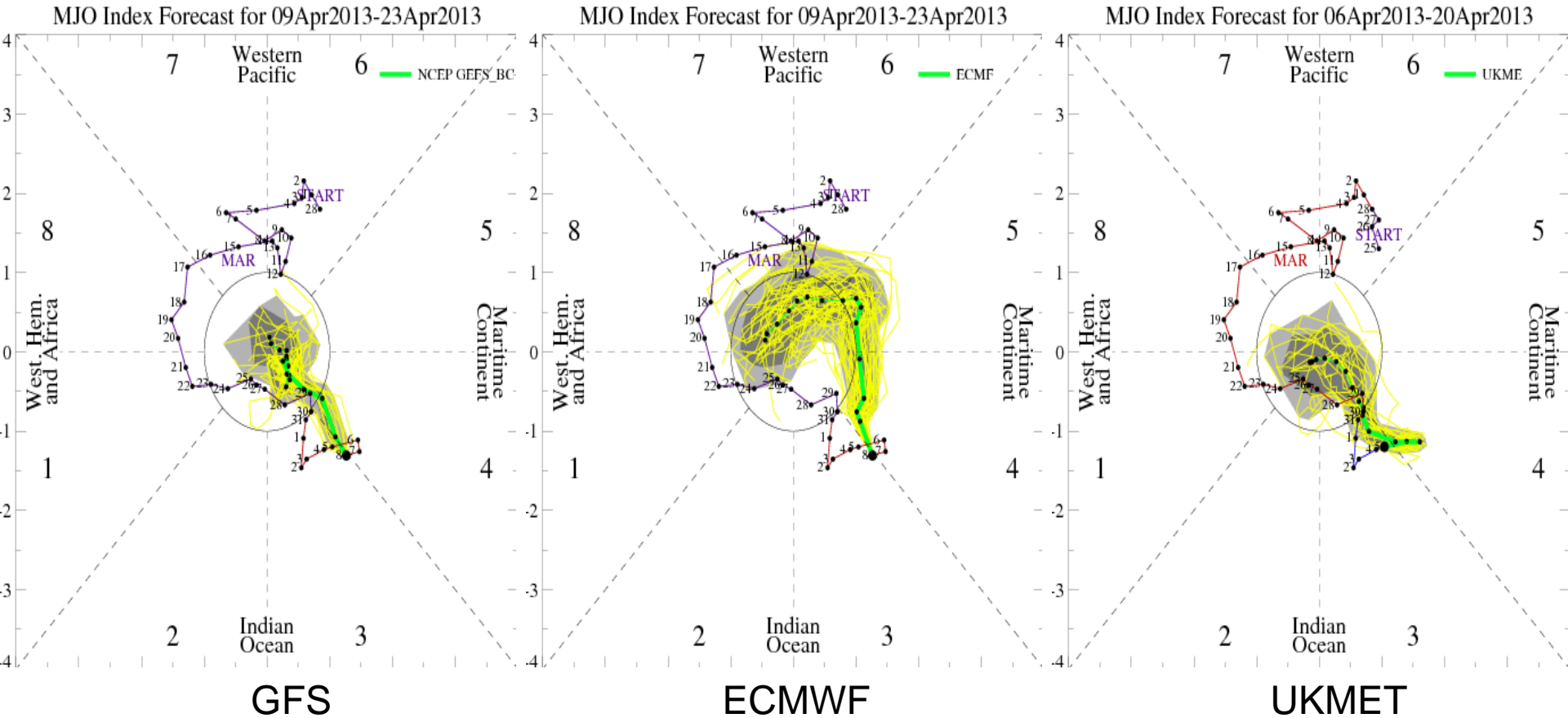


# IR Satellite & 200-hpa Velocity Potential Anomalies

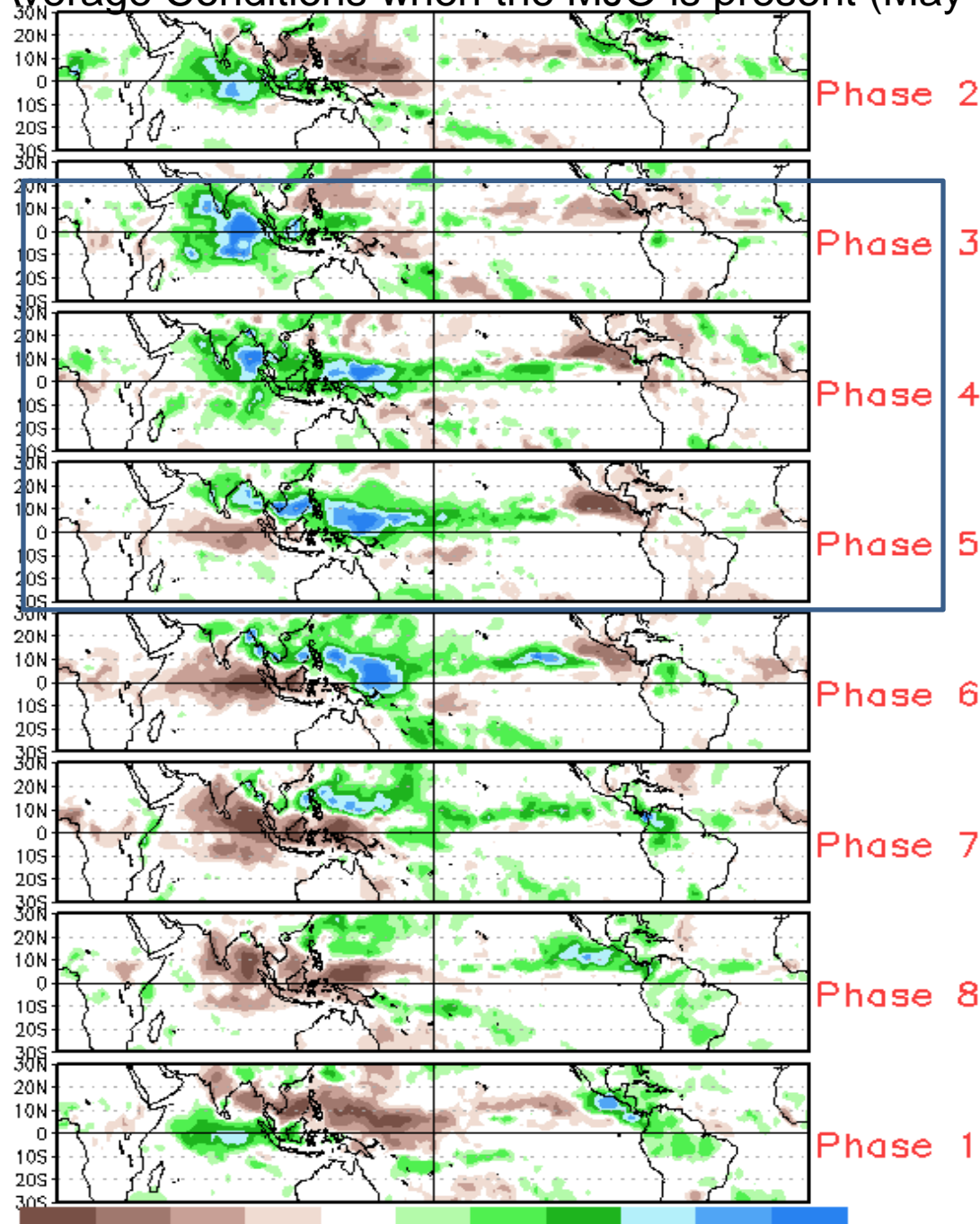
Green: Enhanced Divergence    Brown: Enhanced Convergence



# MJO Observation/Forecast



# Average Conditions when the MJO is present (May-Sep)

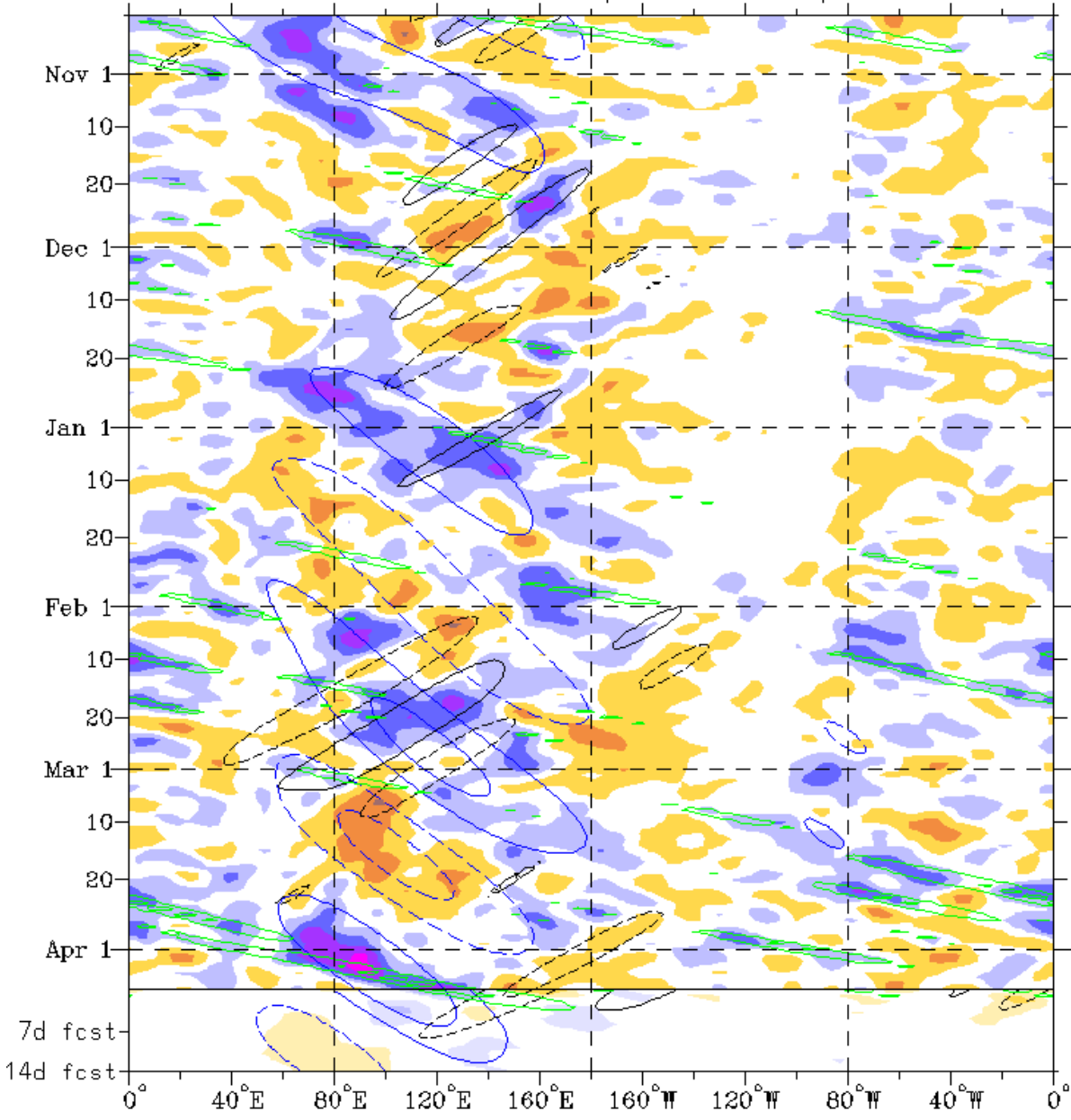


CAVEAT:  
Connection of  
downstream  
precipitation  
patterns to MJO  
phase is not as  
robust during  
spring.

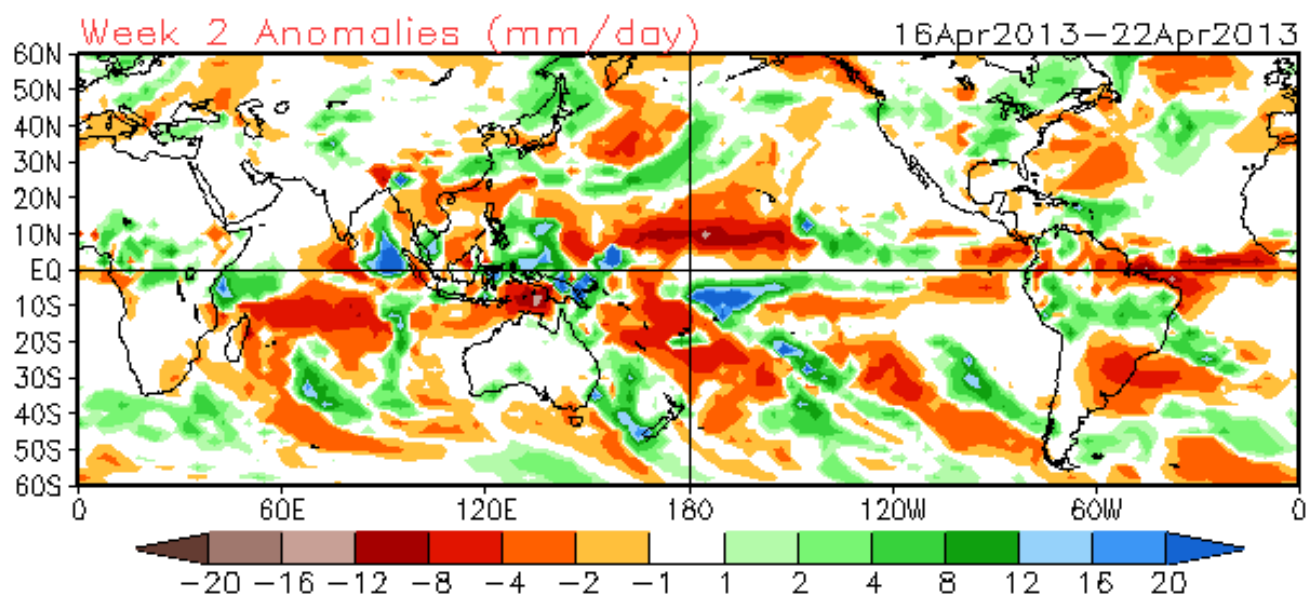
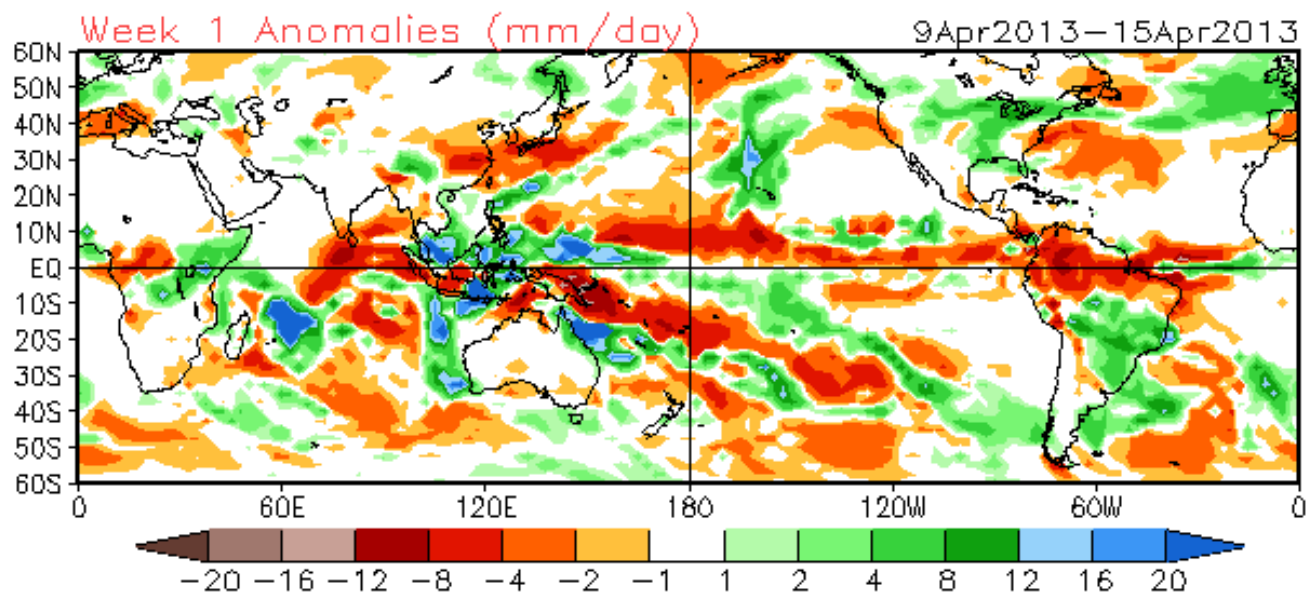




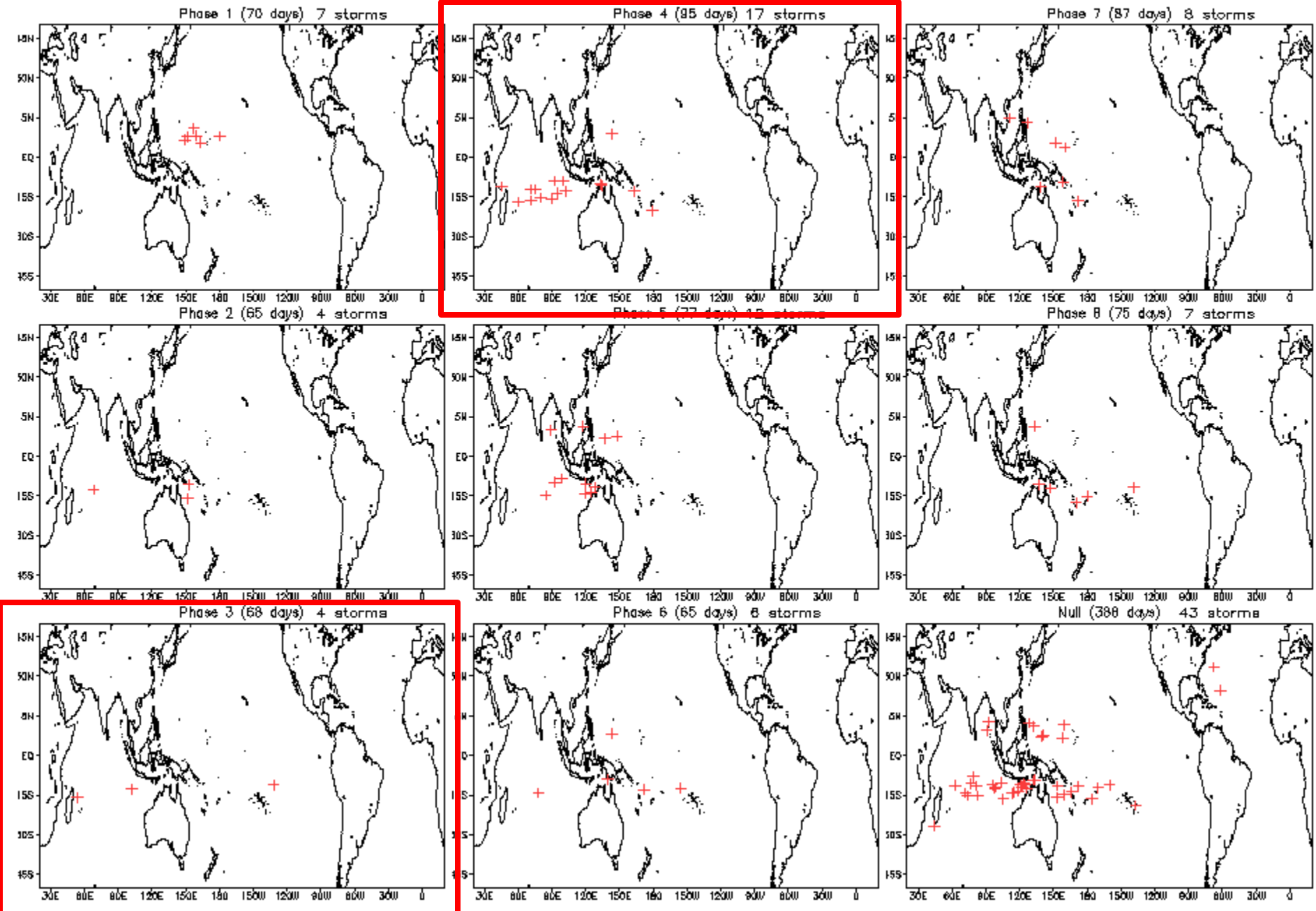
Atmospheric Kelvin waves and active phase of the MJO forecast to impact Indian Ocean and Maritime Continent.

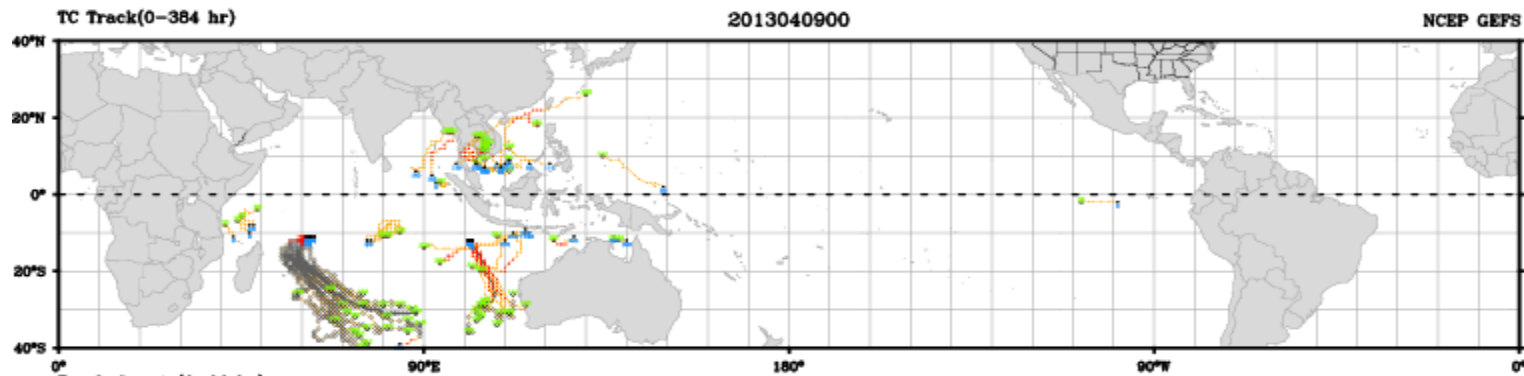


Indications of other modes of variability, including mid-latitude influence near the Date Line.

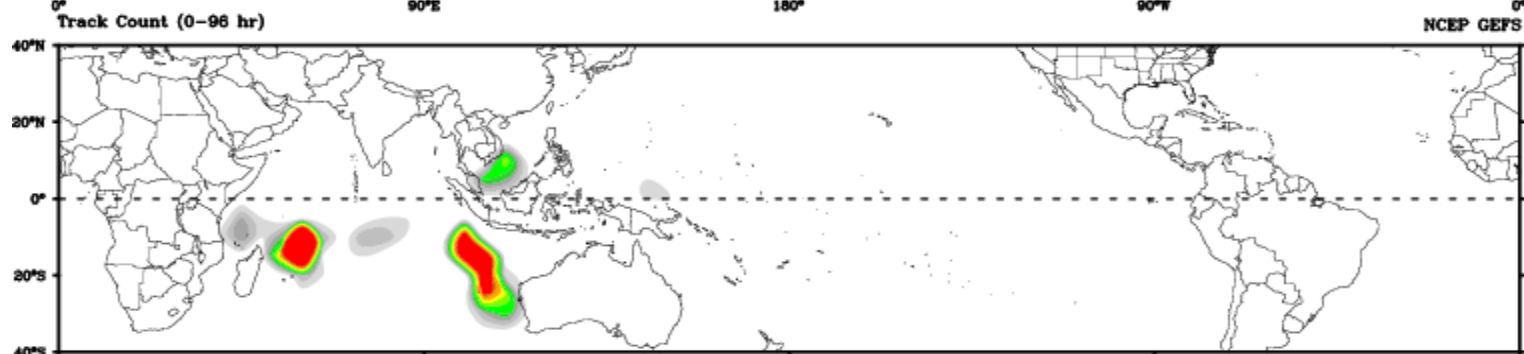


# April Tropical Storm Formation by MJO phase

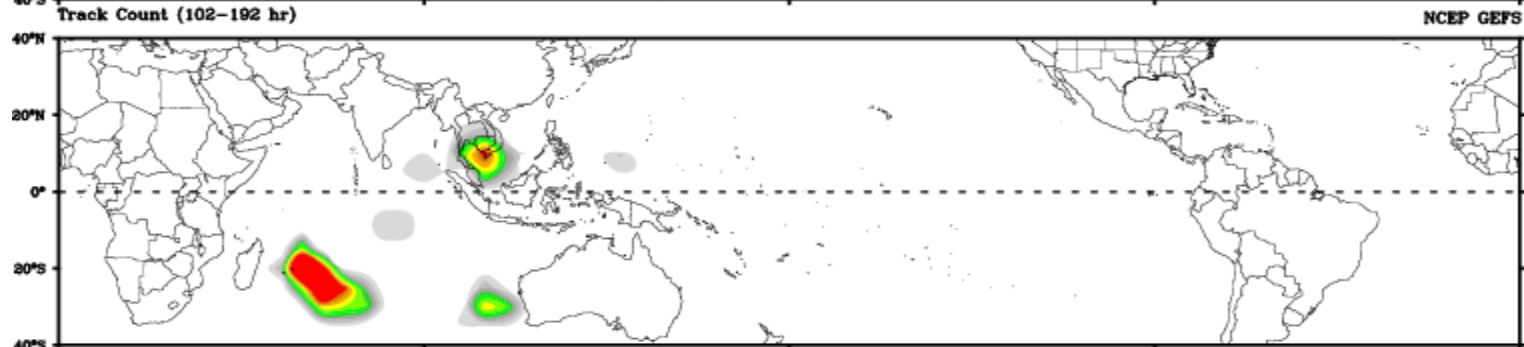




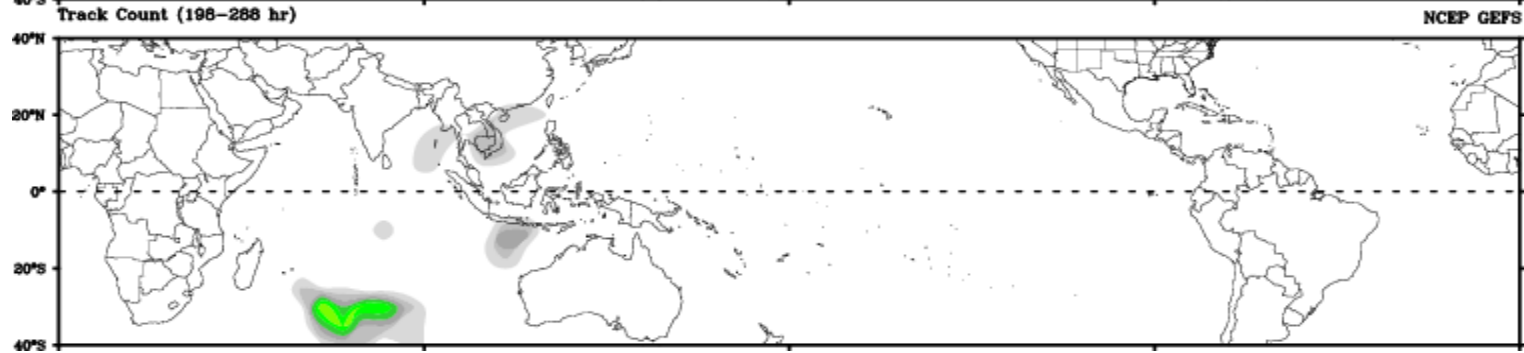
Days 1-4



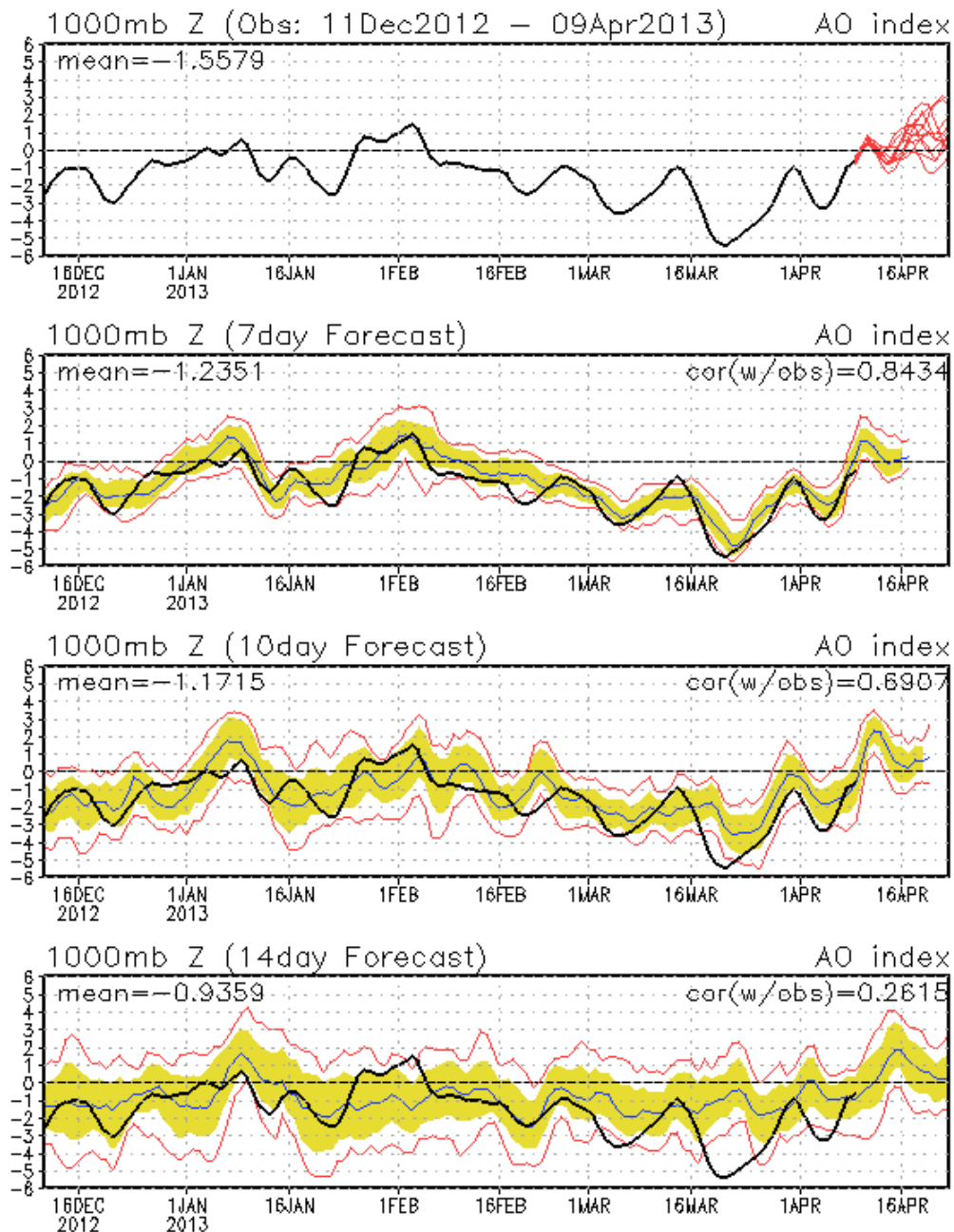
Day 5-8

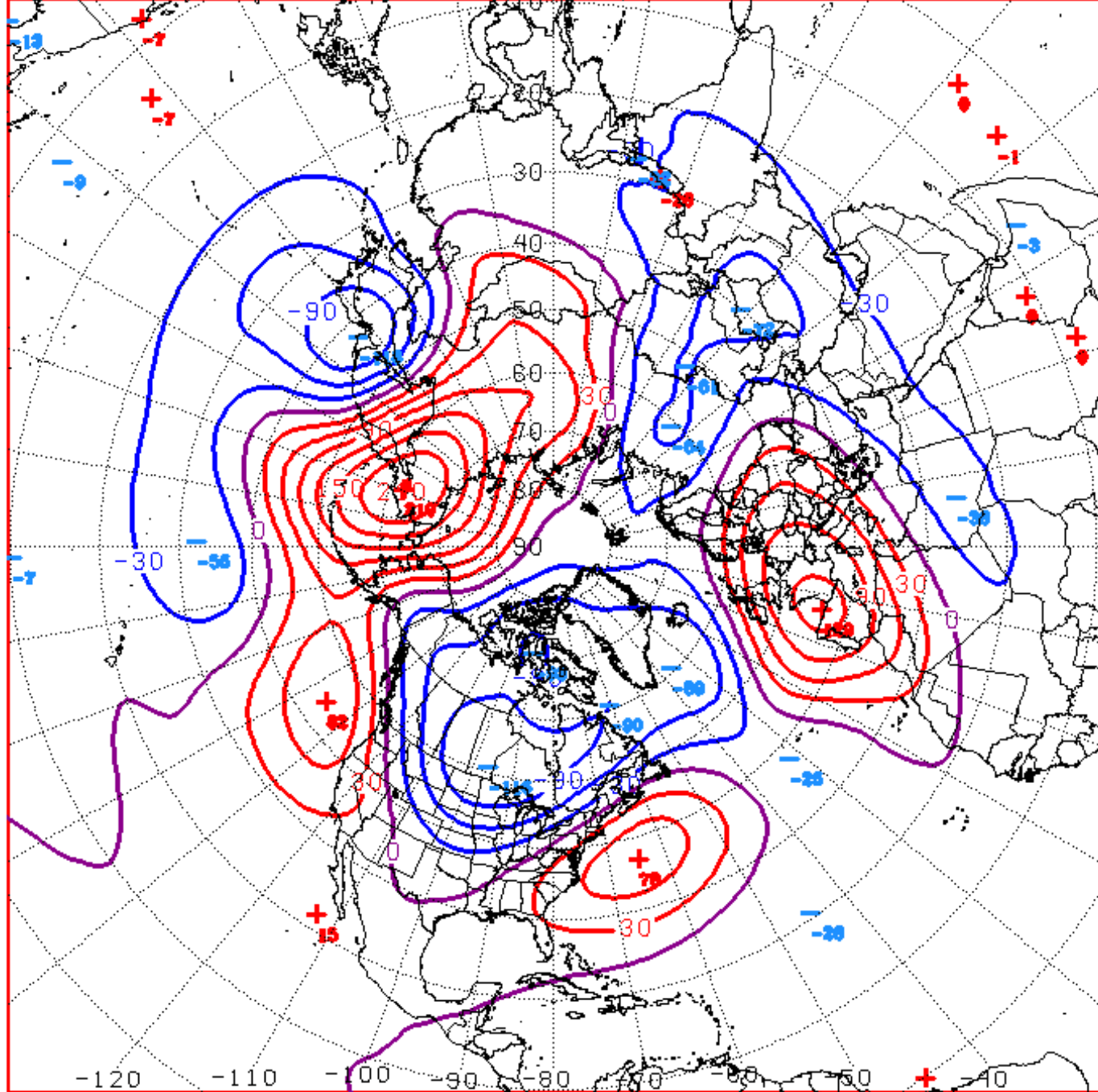


Day 9-12

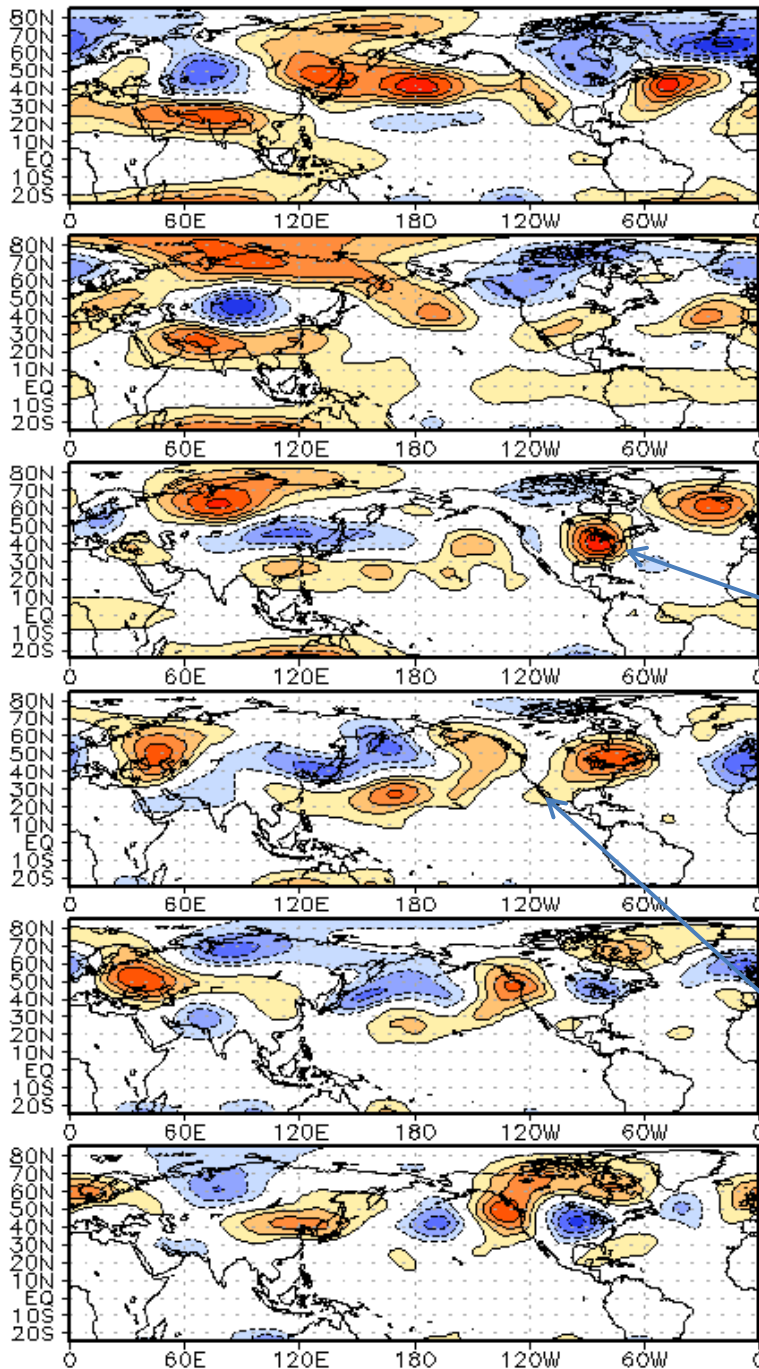


## AO: Observed & ENSM forecasts





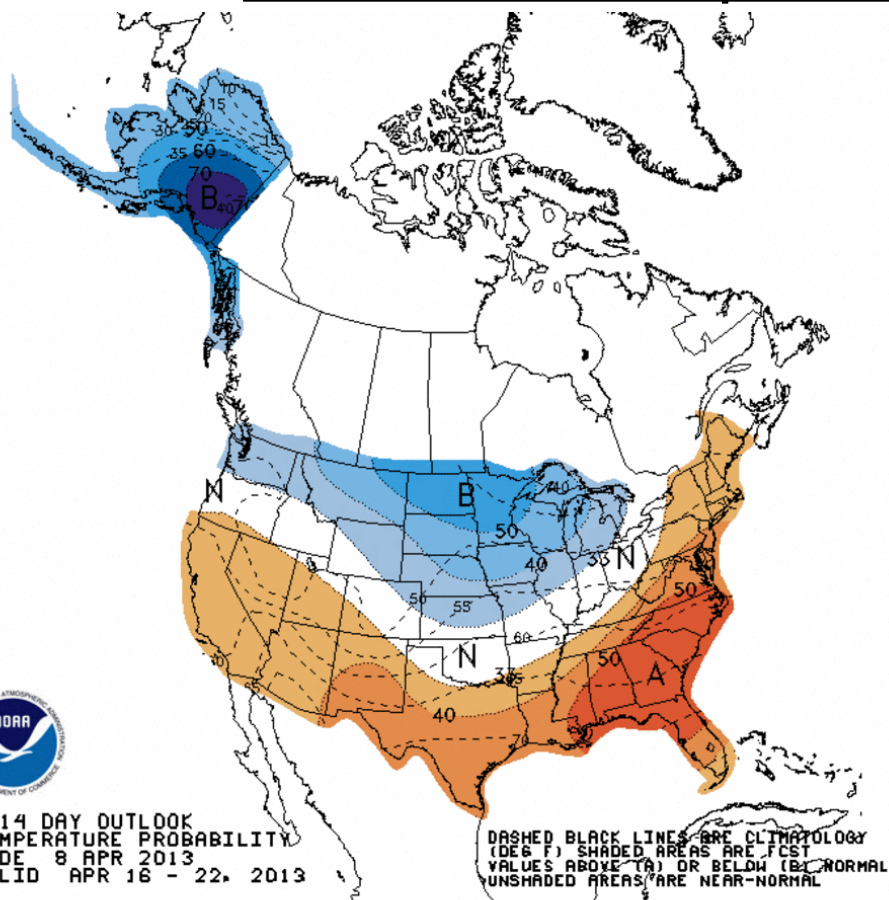
D+11 500 MB ANOMALIES FROM 00Z ECMM  
CPC MAP MADE APR 09 2013 1037 UTC CNTD APR 20 2013



Indicates a shift toward warmer conditions across the eastern half of the CONUS. 5-15 days out. Slightly offset from current dynamical model outputs.

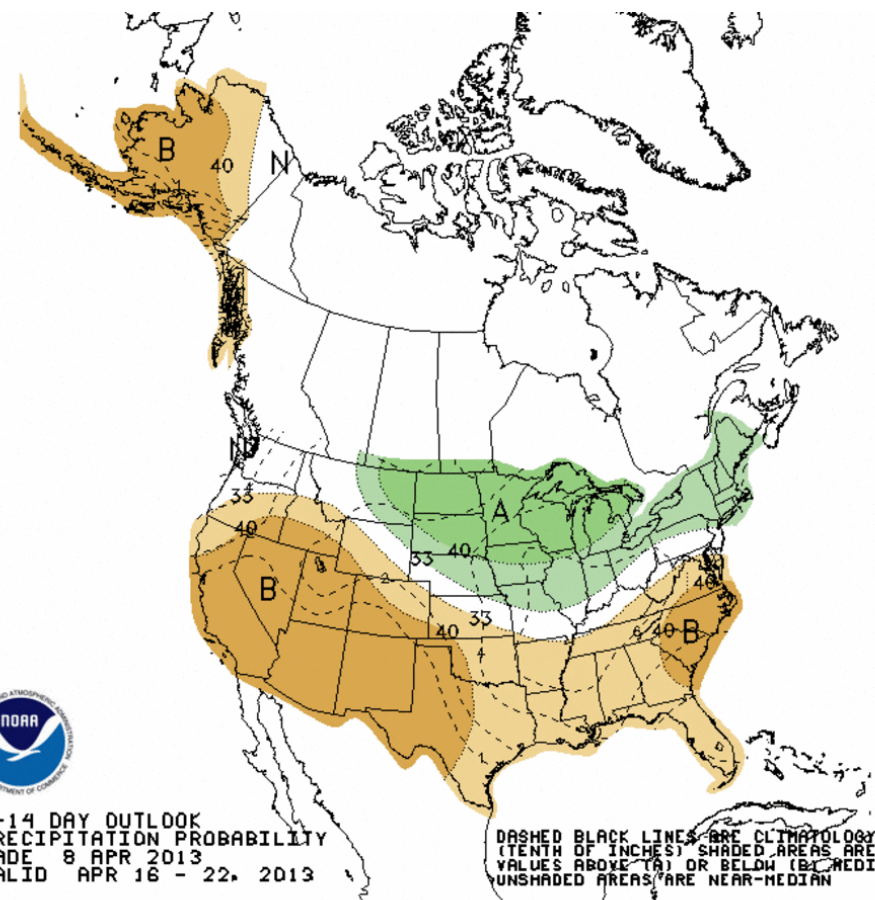
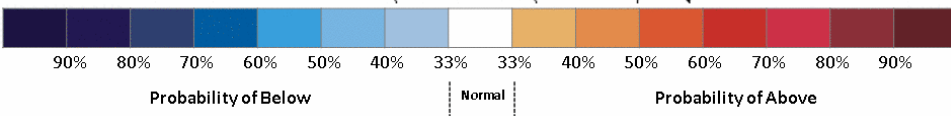
Would also support some moisture return over the central portions of the country, although a bit later and north (minimal southern stream energy)

# Week 2 – Temperature and Precipitation



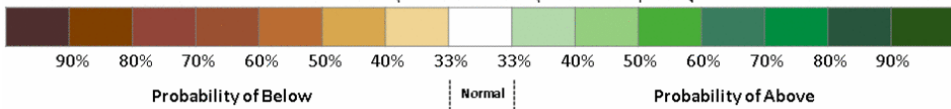
8-14 DAY OUTLOOK  
TEMPERATURE PROBABILITY  
MADE 8 APR 2013  
VALID APR 16 - 22, 2013

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 8 APR 2013  
VALID APR 16 - 22, 2013

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

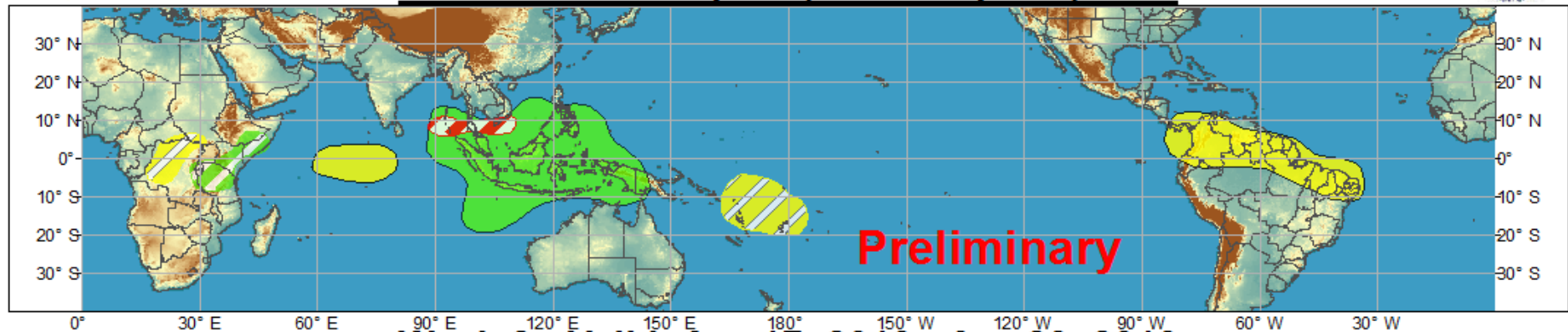




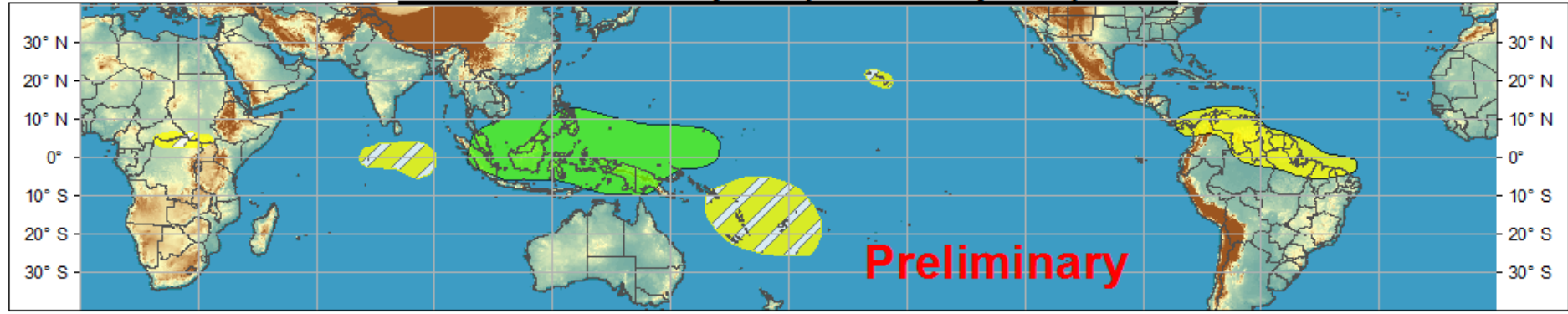


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