

Global Tropics Hazards And Benefits Outlook

April 8, 2013

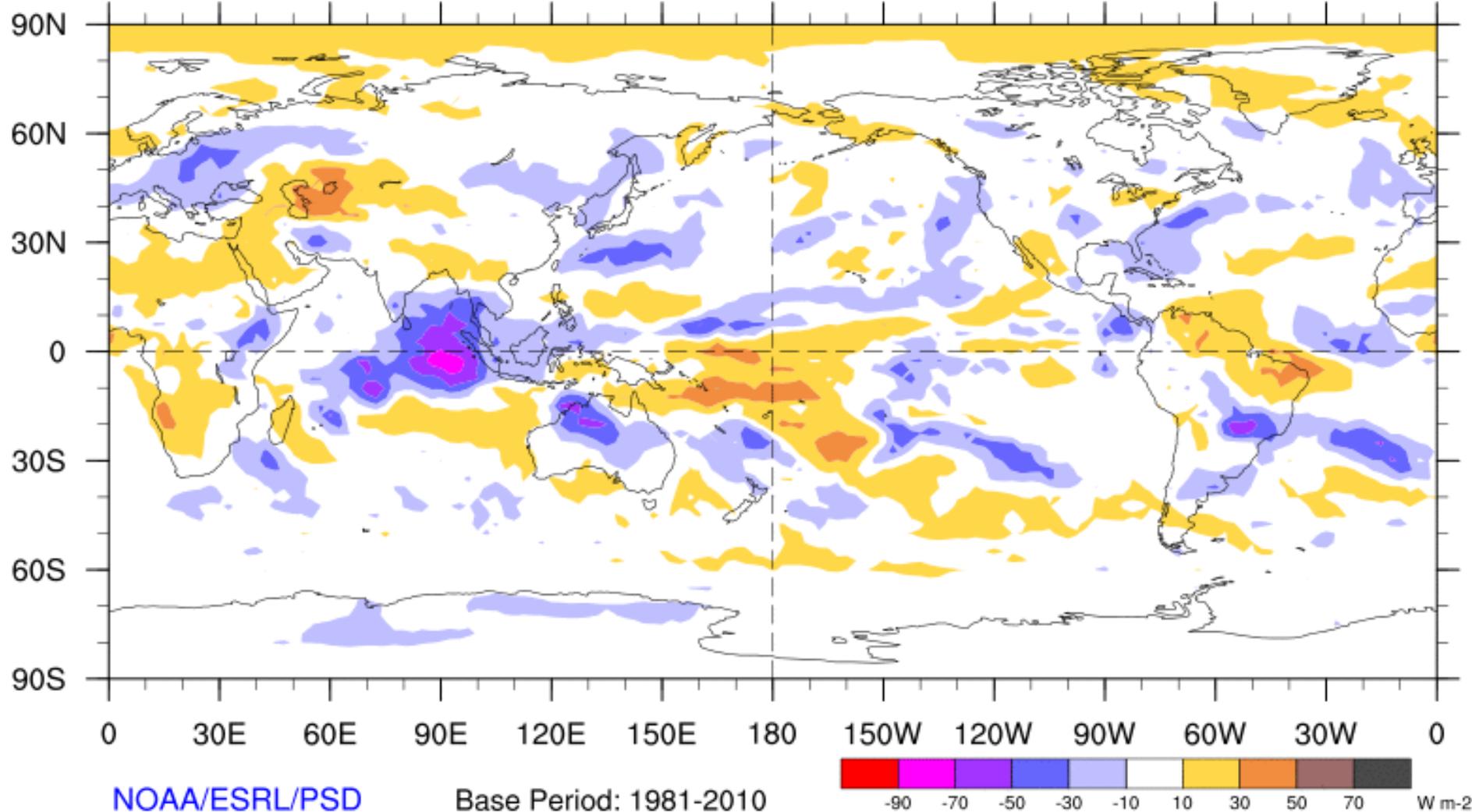
Matthew Rosencrans

Outline

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

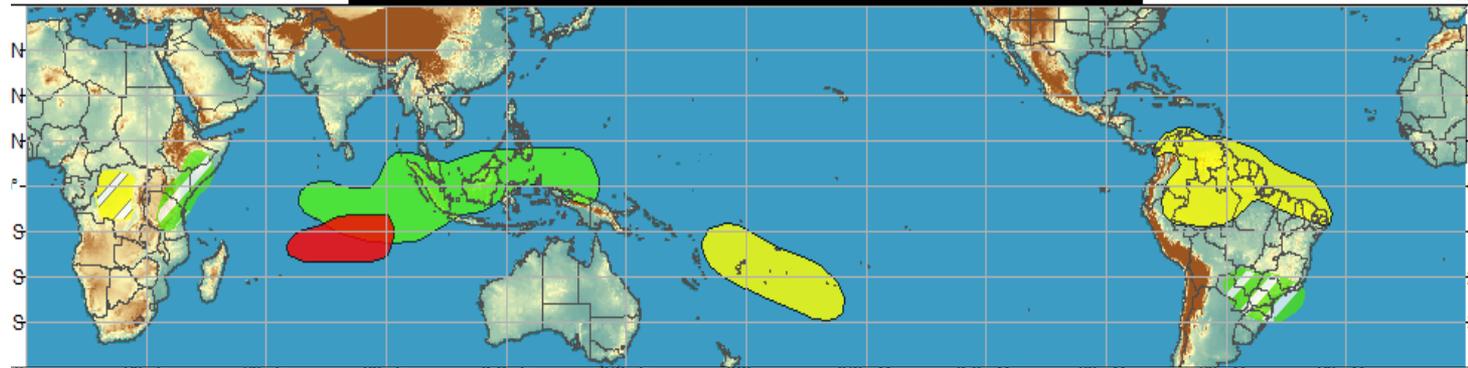
7-Day Average OLR Anomaly

2013/04/01 - 2013/04/07

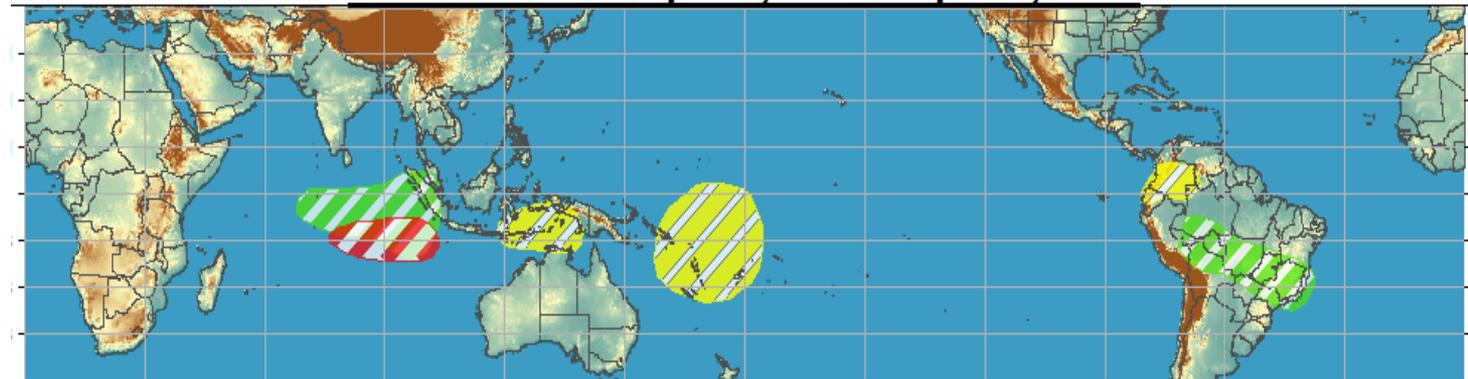


Outlook Review

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

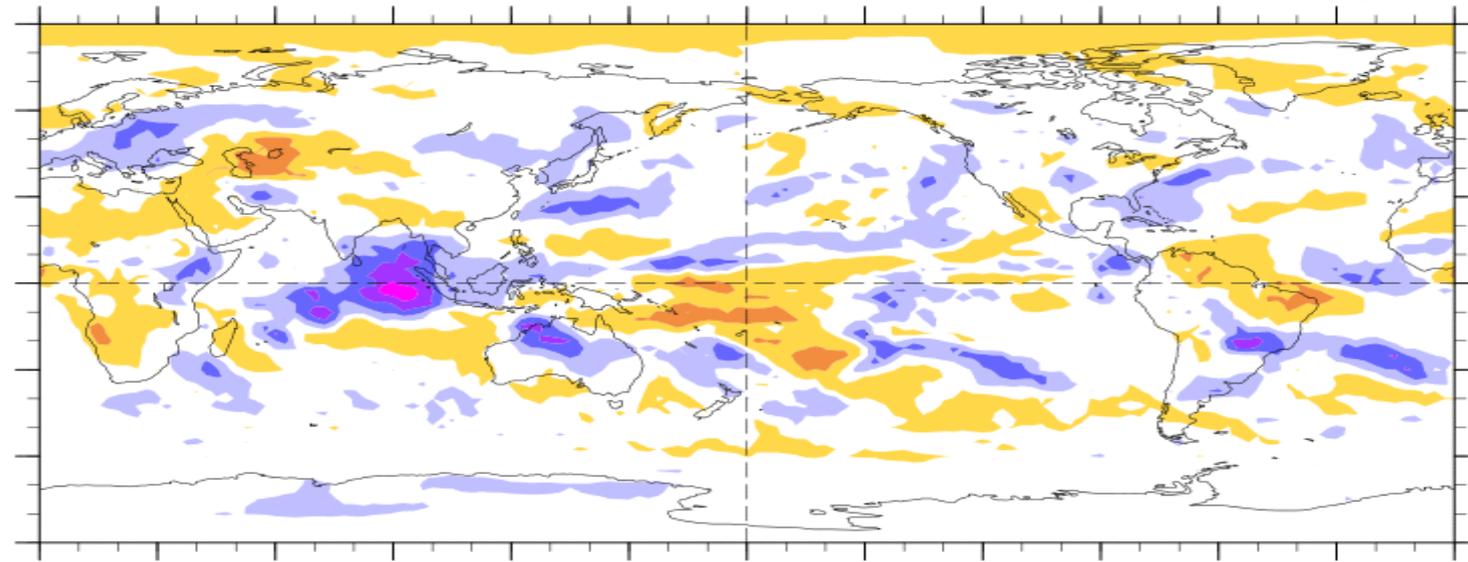


Week 2 - Valid: Apr 03, 2013 - Apr 09, 2013



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.

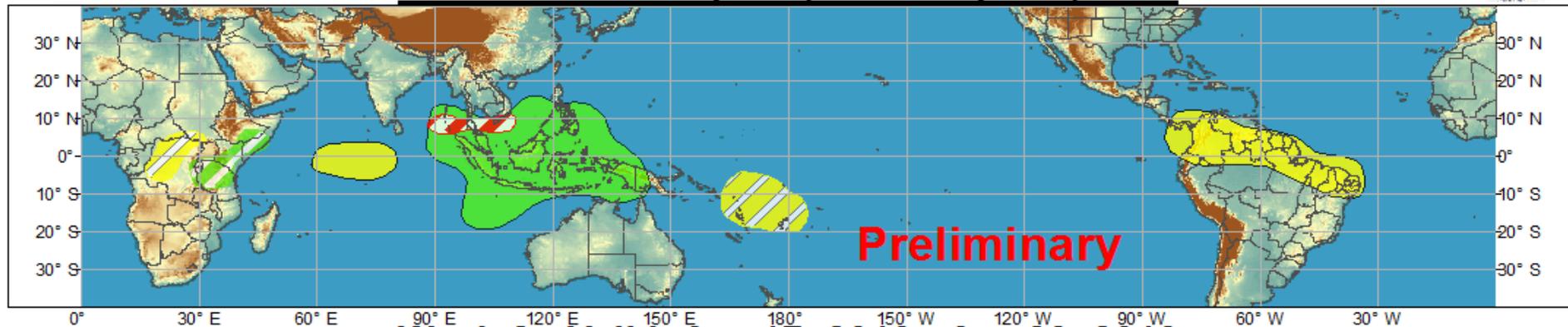
Extratropics:

- 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.

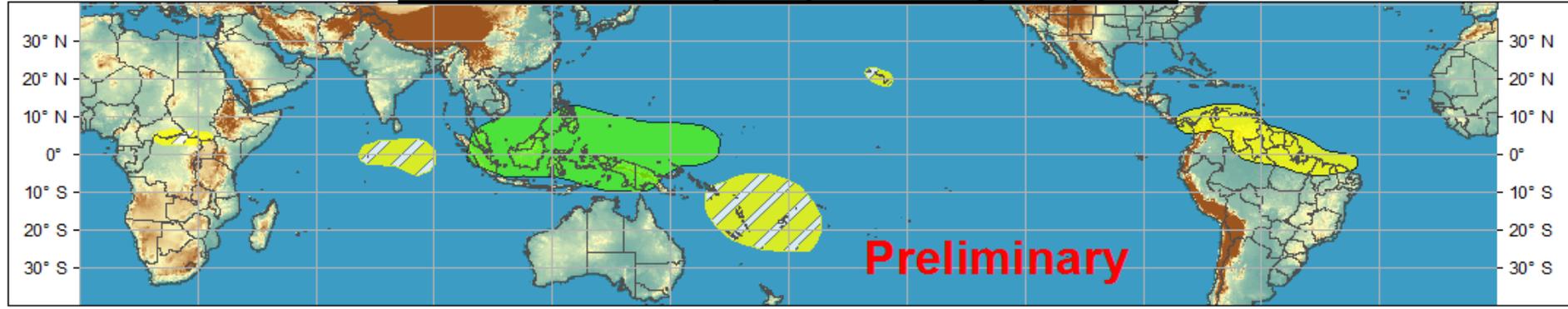


Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

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



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



Produced: 04/09/2013

Forecaster: Rosencrans

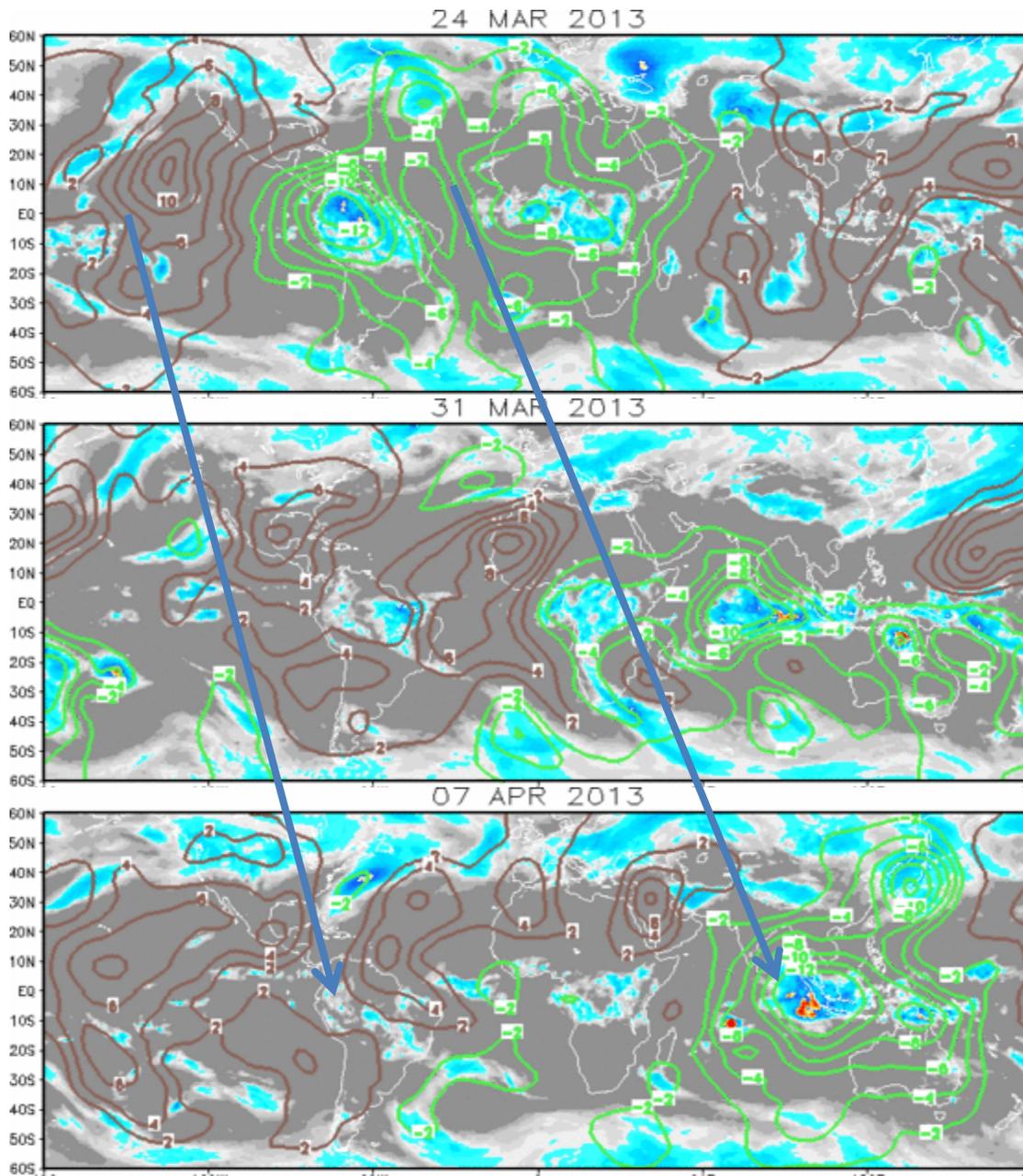
	Confidence		
	High	Moderate	
Tropical Cyclone Formation			Development of a tropical cyclone that eventually reaches tropical storm/cyclone strength.
Above-average rainfall			Weekly total rainfall in the upper third of the historical range.
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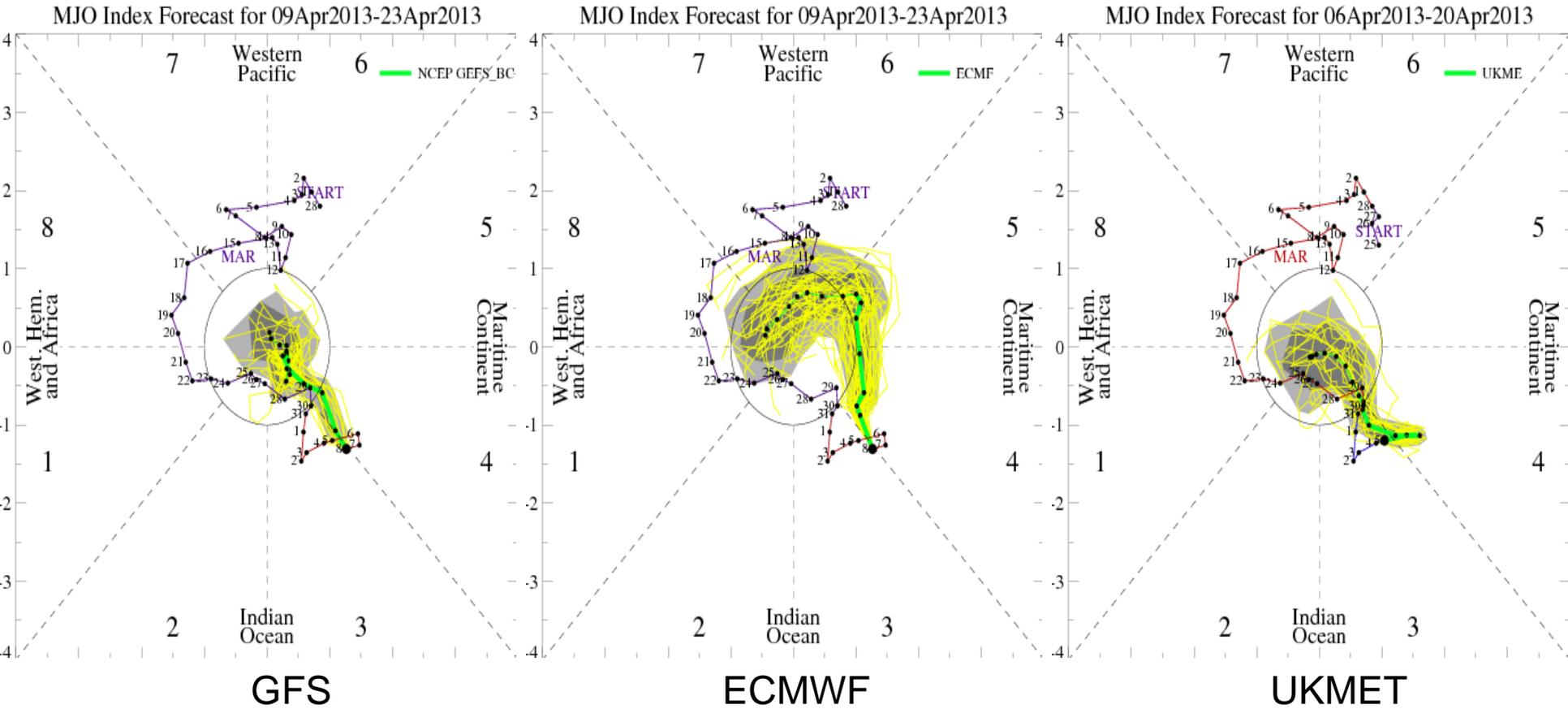


IR Satellite & 200-hpa Velocity Potential Anomalies

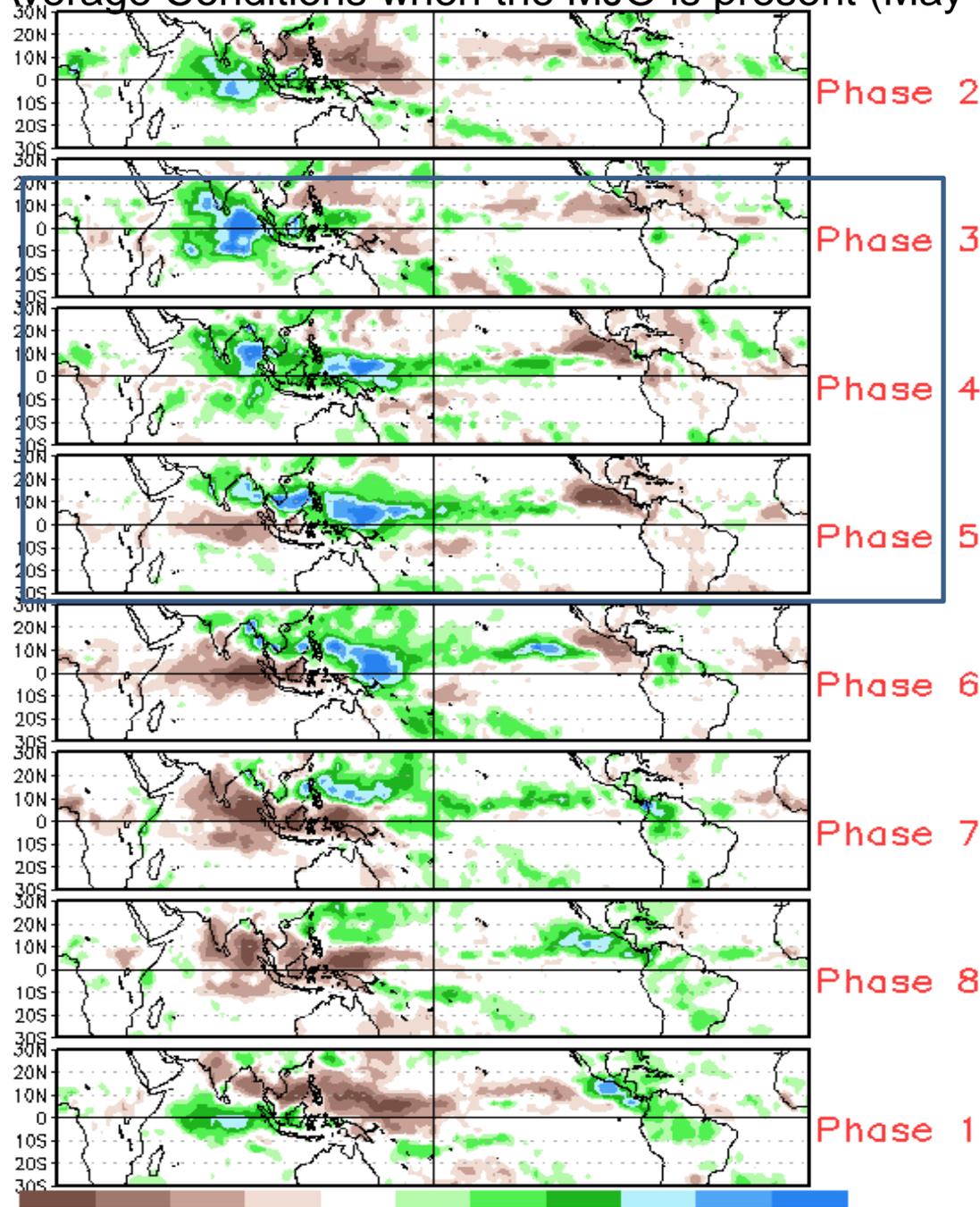
Green: Enhanced Divergence Brown: Enhanced Convergence



MJO Observation/Forecast



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



Phase 2

Phase 3

Phase 4

Phase 5

Phase 6

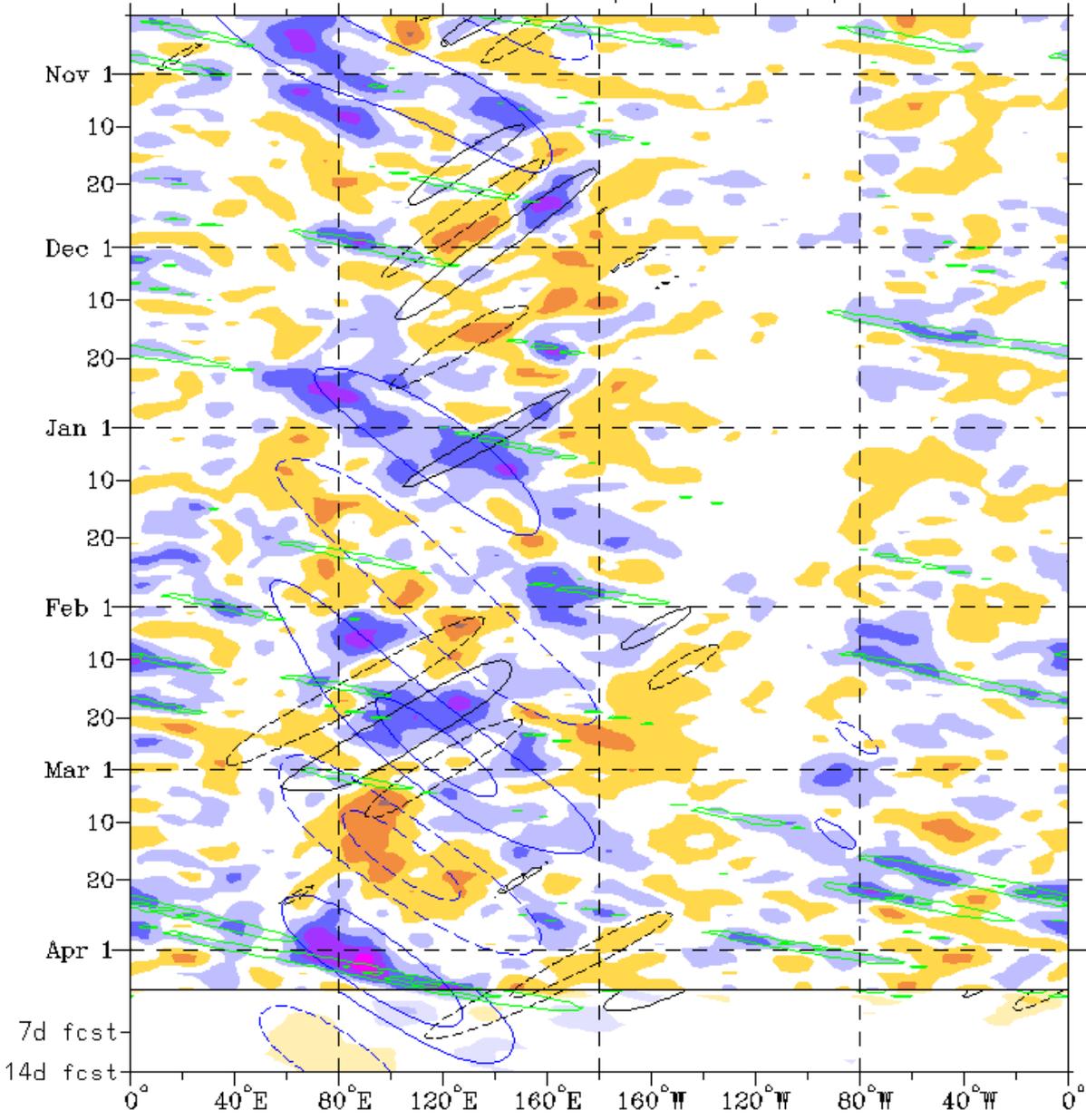
Phase 7

Phase 8

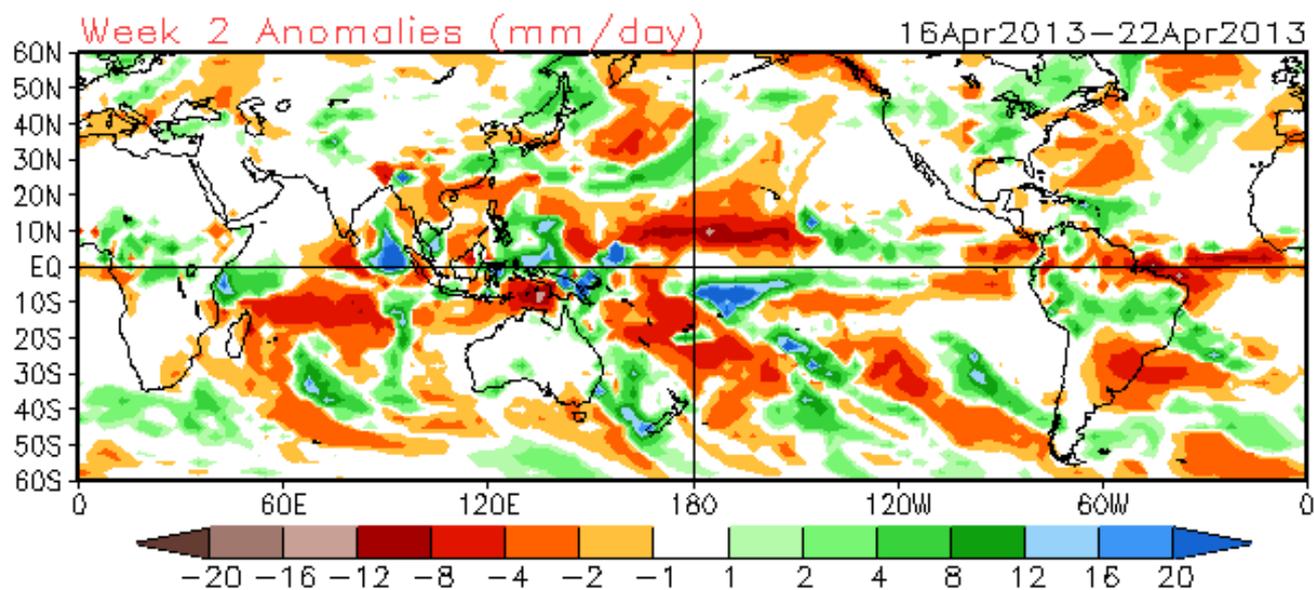
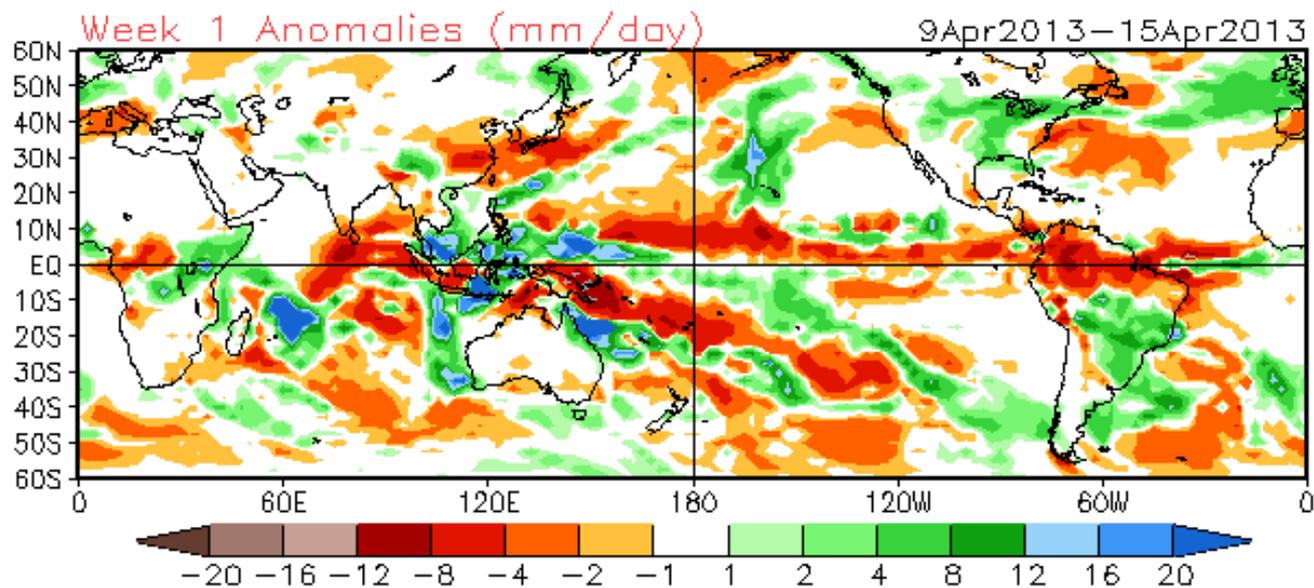
Phase 1

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

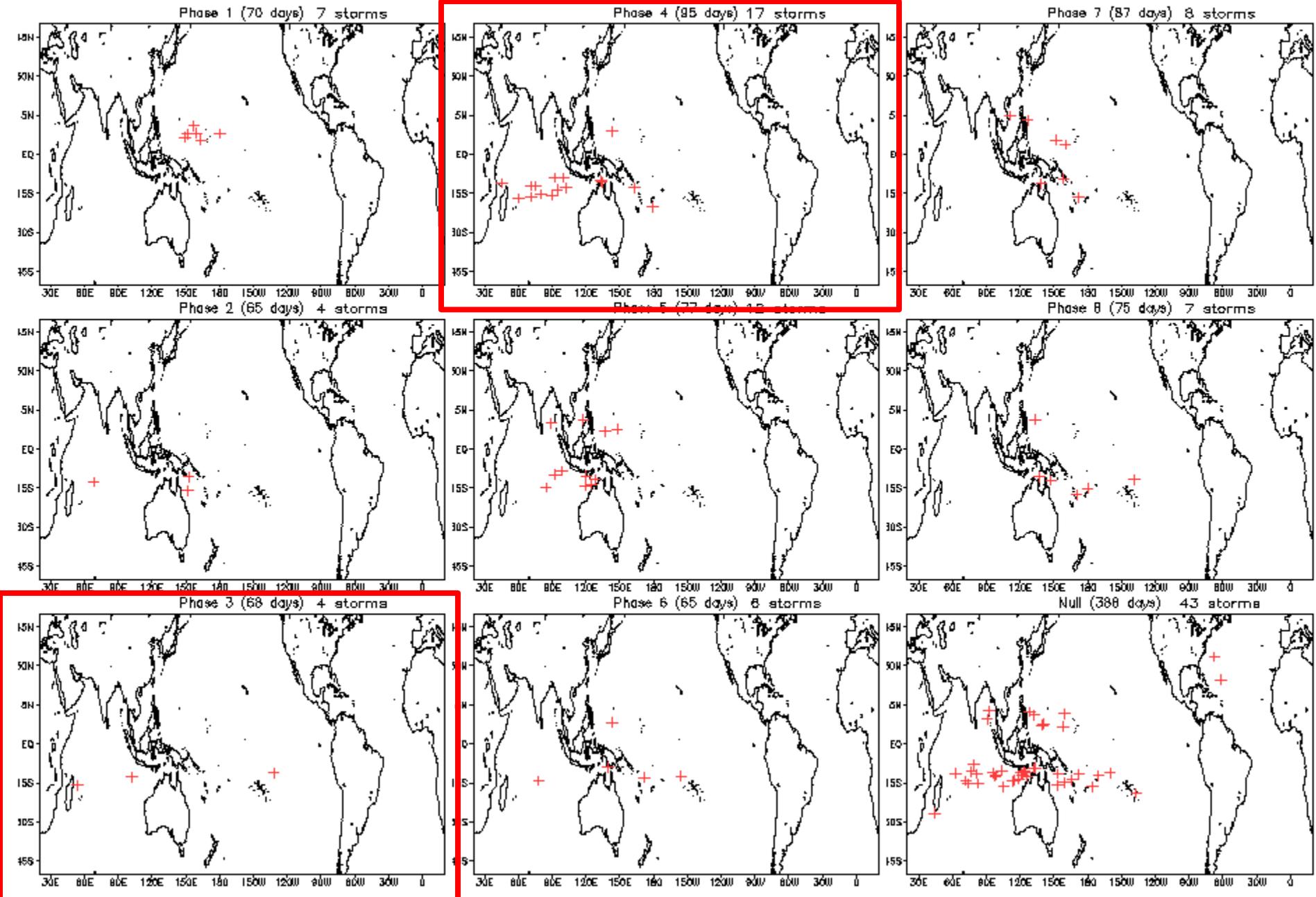
Atmospheric Kelvin waves and active phase of the MJO forecast to impact Indian Ocean and Maritime Continent.



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



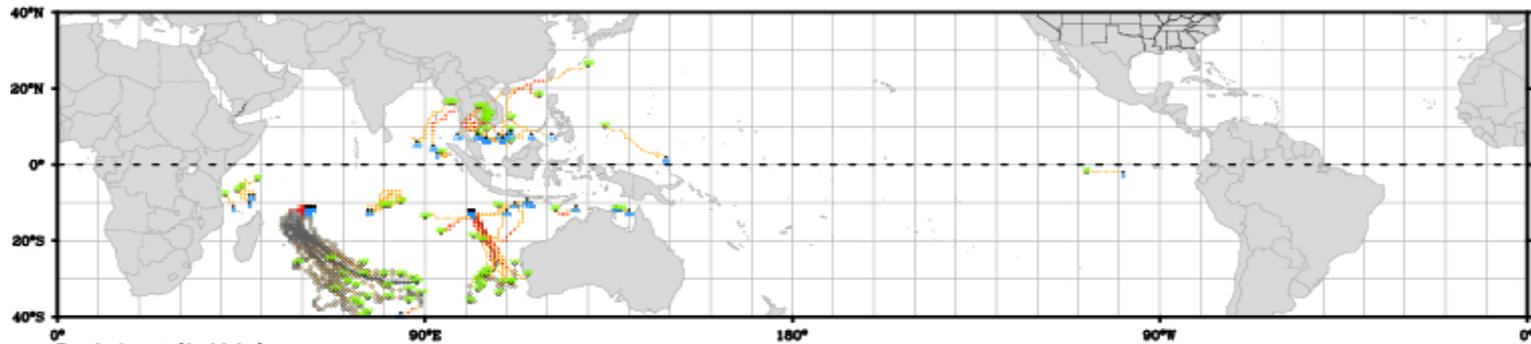
April Tropical Storm Formation by MJO phase



TC Track(0-384 hr)

2013040900

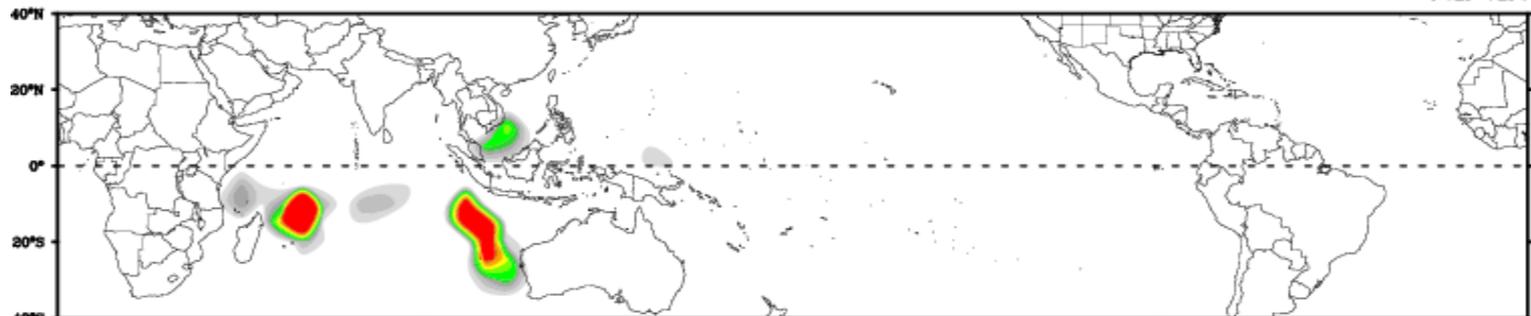
NCEP GEFS



Days 1-4

Track Count (0-96 hr)

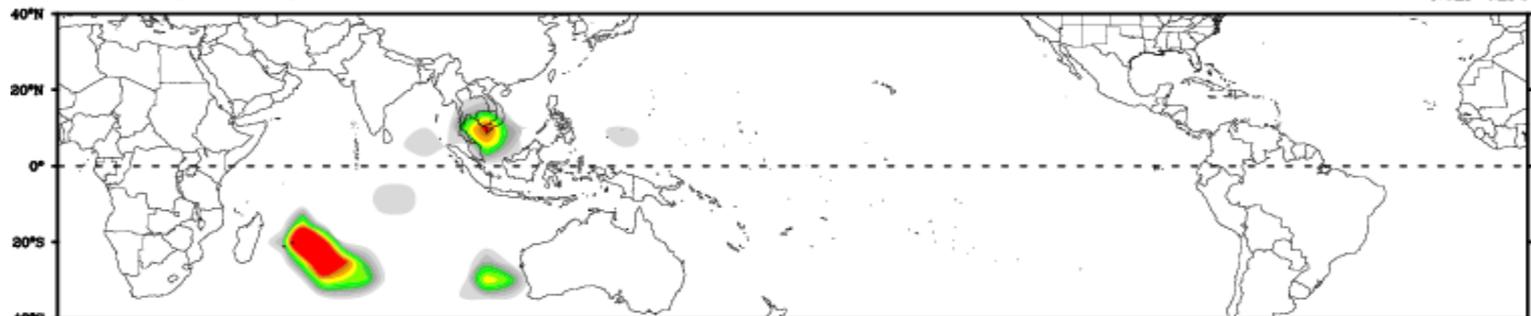
NCEP GEFS



Day 5-8

Track Count (102-192 hr)

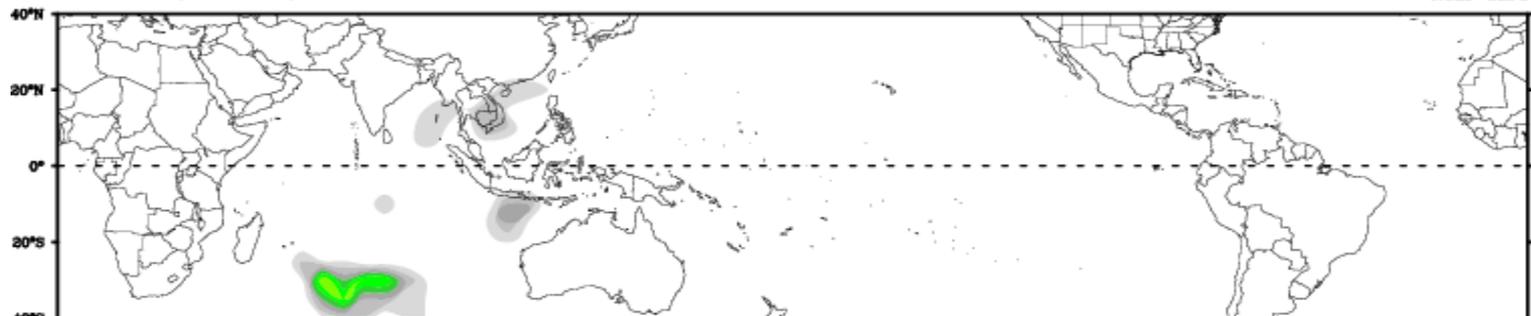
NCEP GEFS



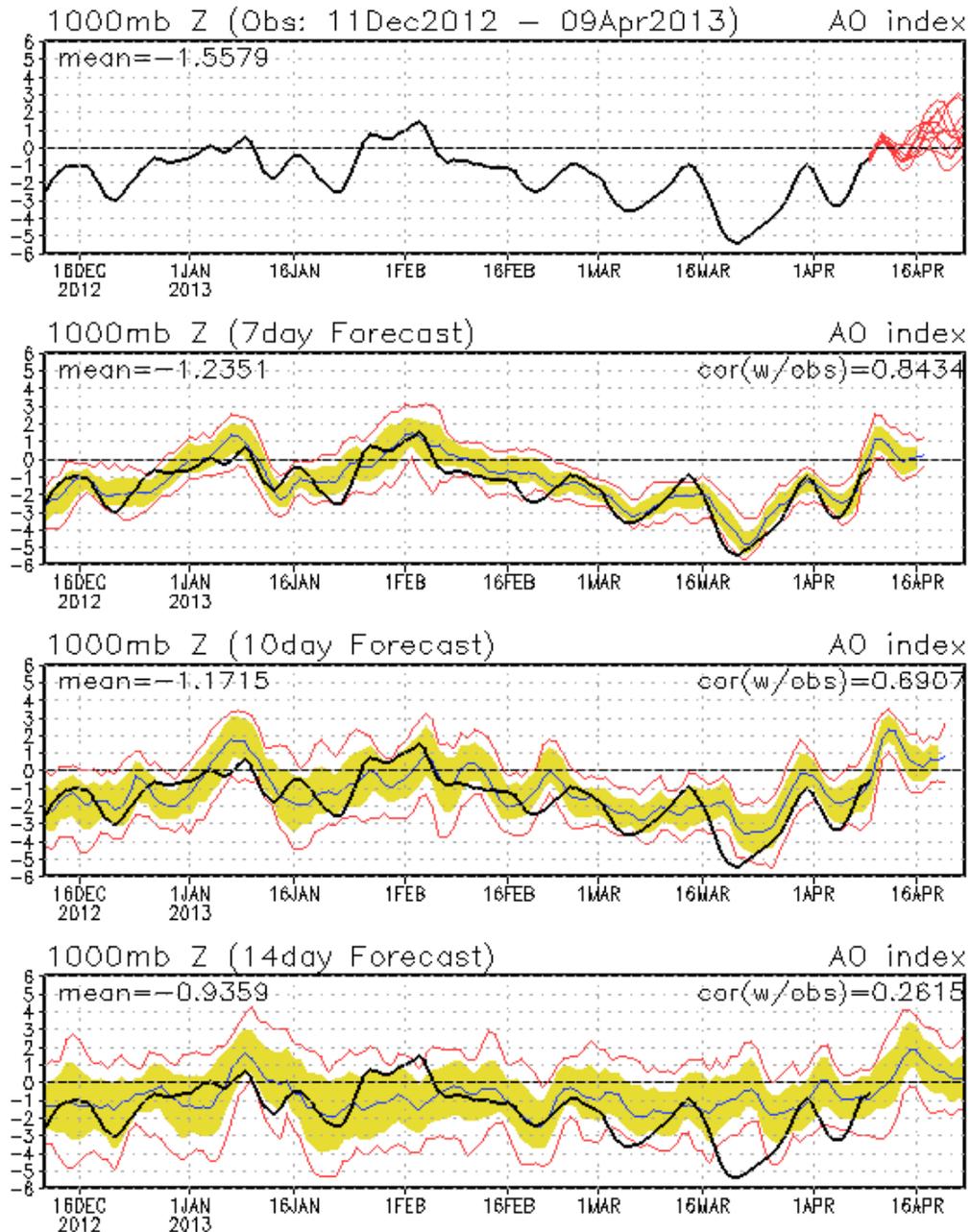
Day 9-12

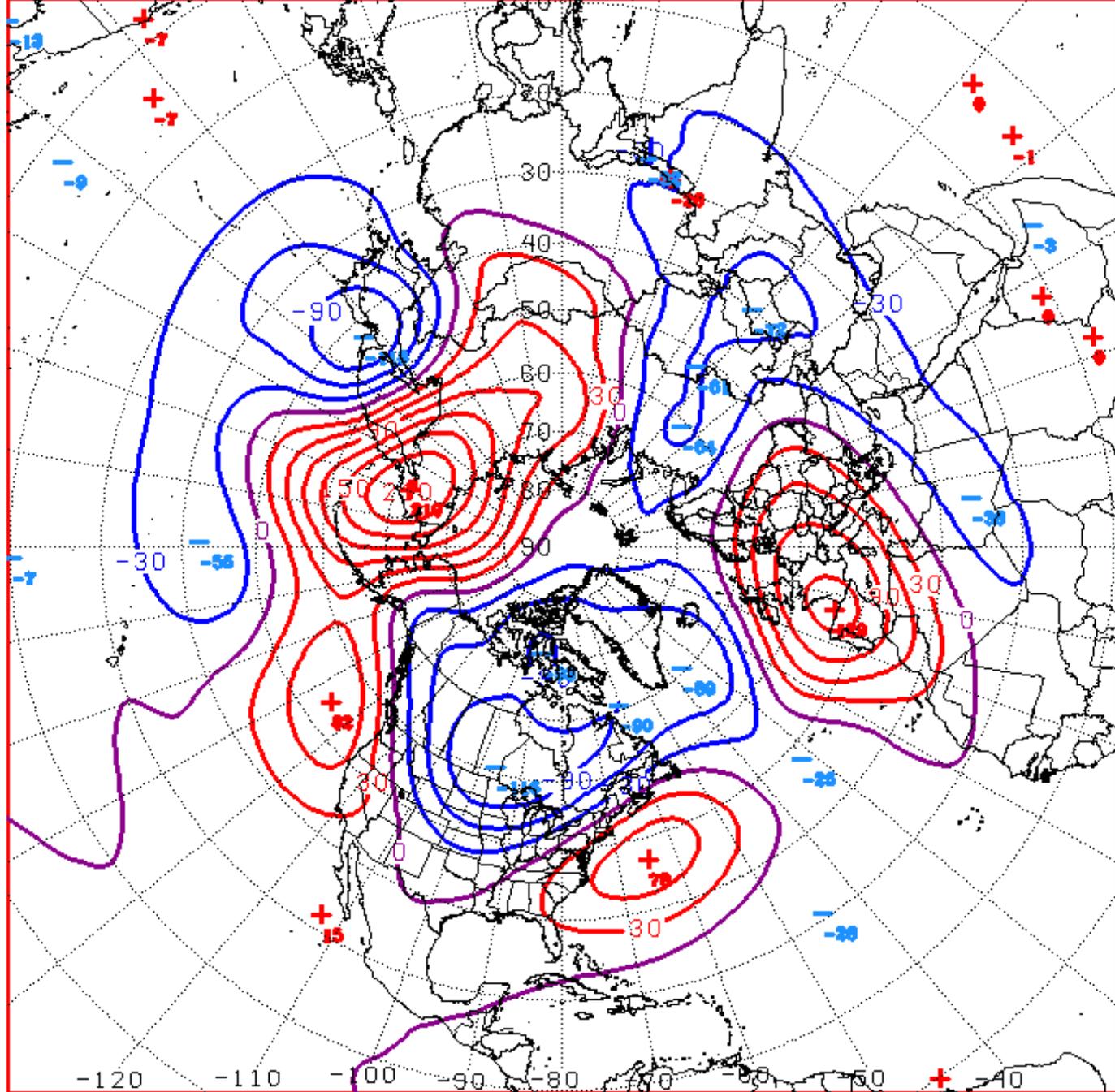
Track Count (198-288 hr)

NCEP GEFS

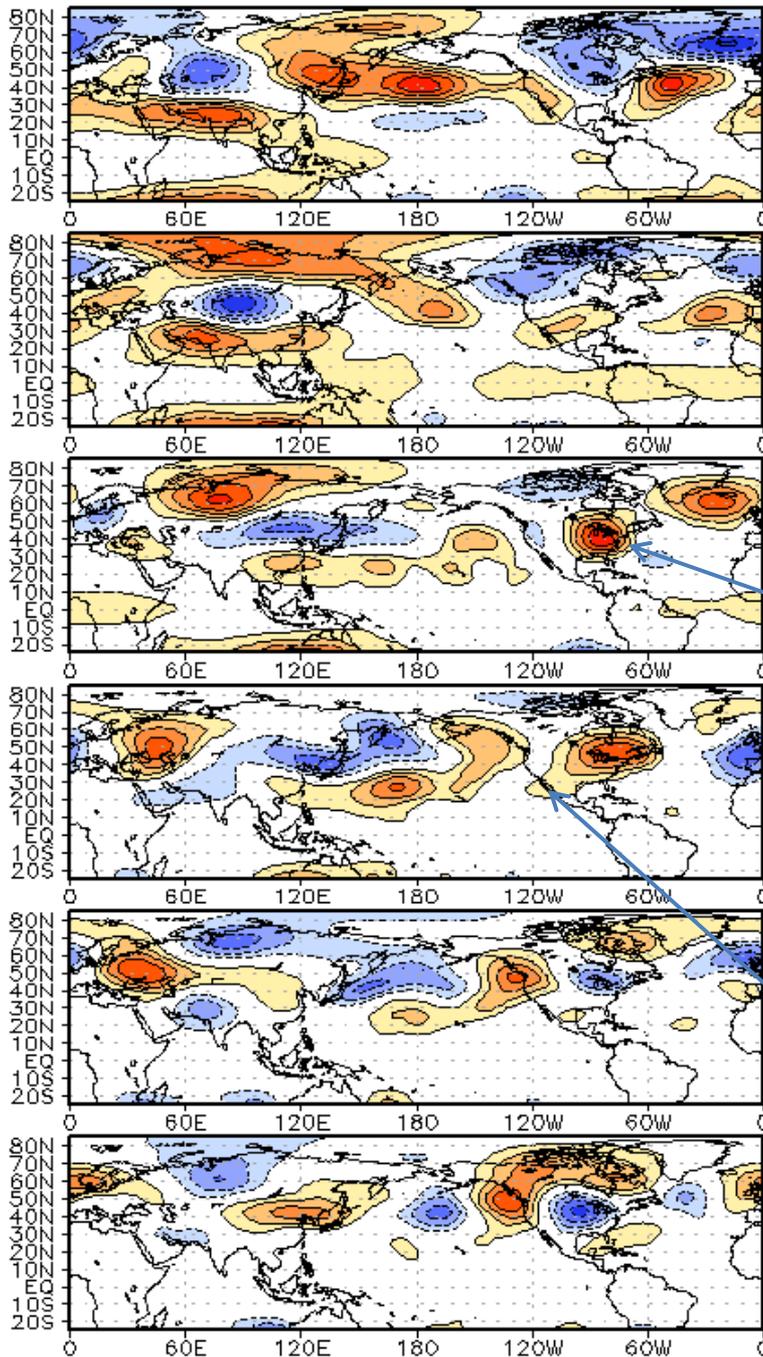


AO: Observed & ENSM forecasts





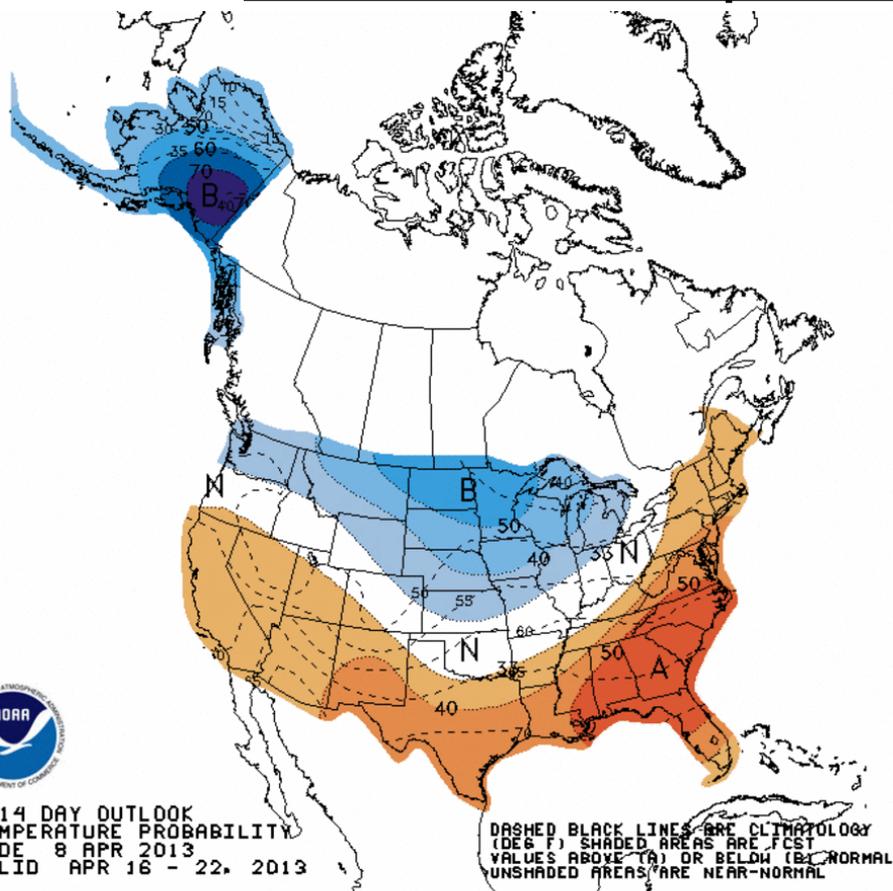
D+11 500 MB ANOMALIES FROM 00Z ECMM
CPC MAP MADE APR 09 2013 1037 UTC CNTD APR 20 2013



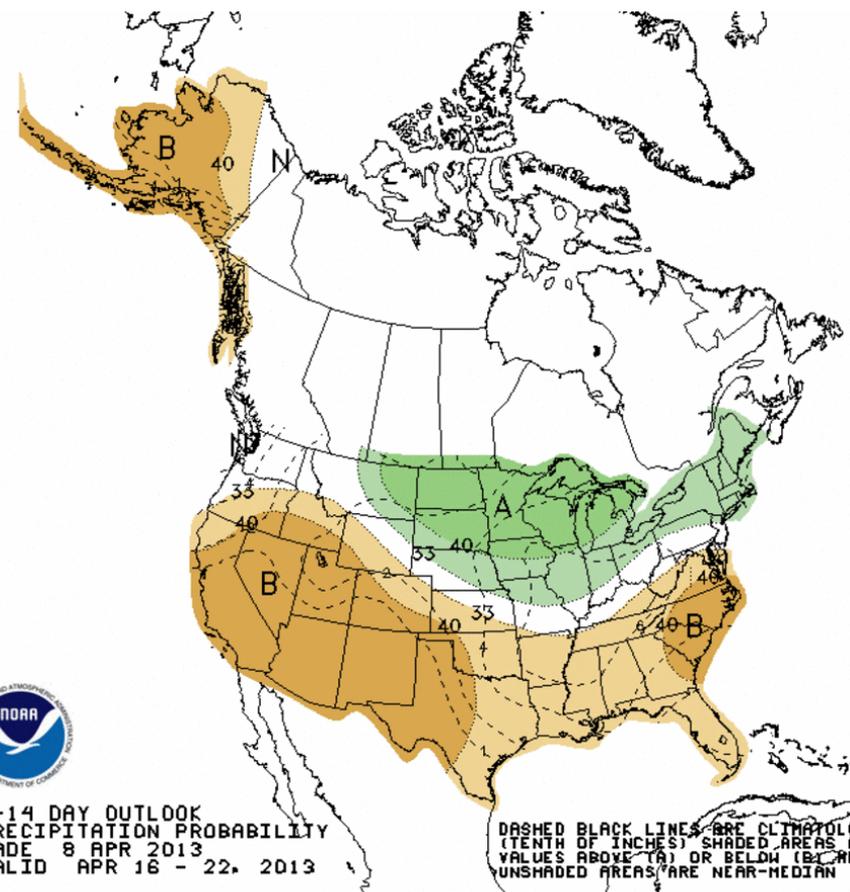
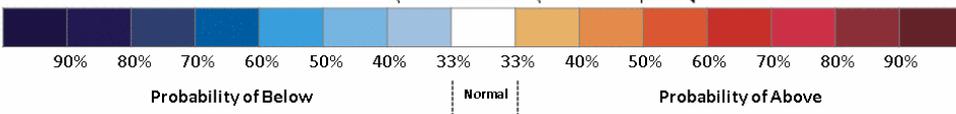
Indicates a shift toward warmer conditions across the eastern half of the CONUS. 5-15 days out. Slightly offset from current dynamical model outputs.

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

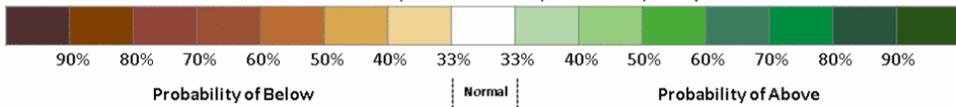
Week 2 – Temperature and Precipitation



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



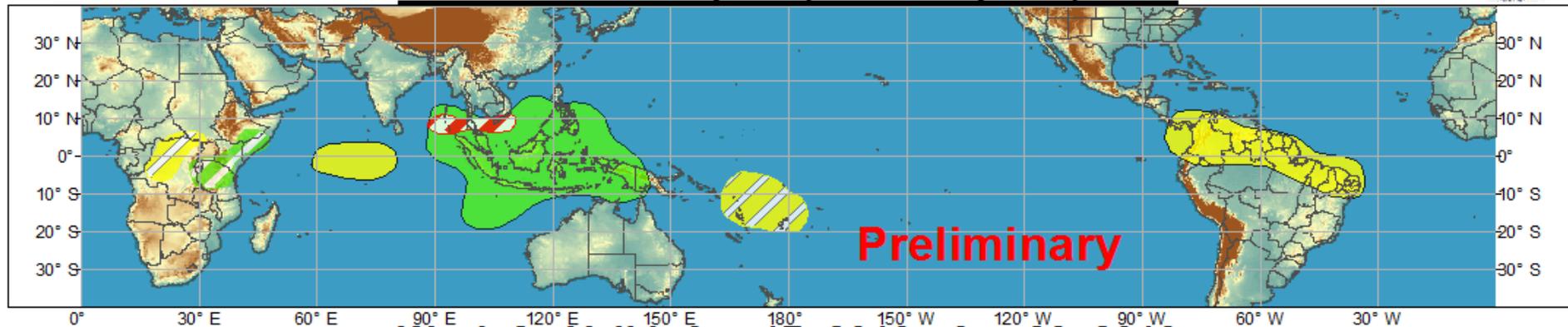
8-14 DAY OUTLOOK
PRECIPITATION PROBABILITY
MADE 8 APR 2013
VALID APR 16 - 22, 2013



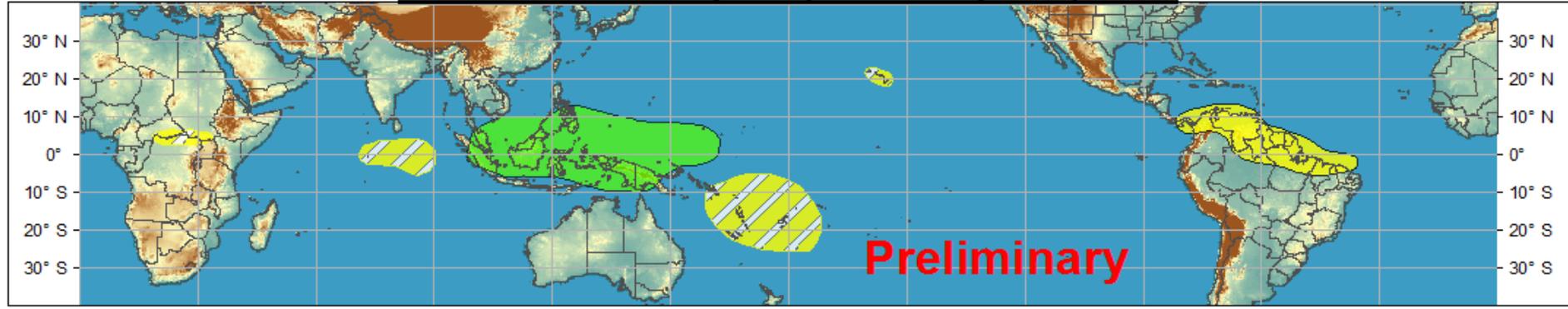


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