

# Global Tropics Hazards And Benefits Outlook

April 19, 2016

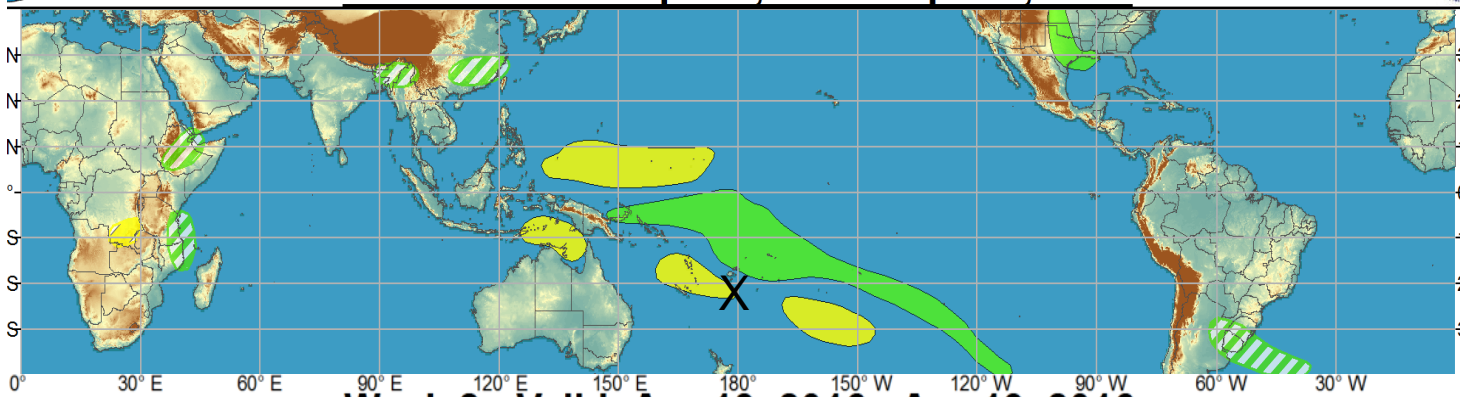
Matthew Rosencrans

## Outline

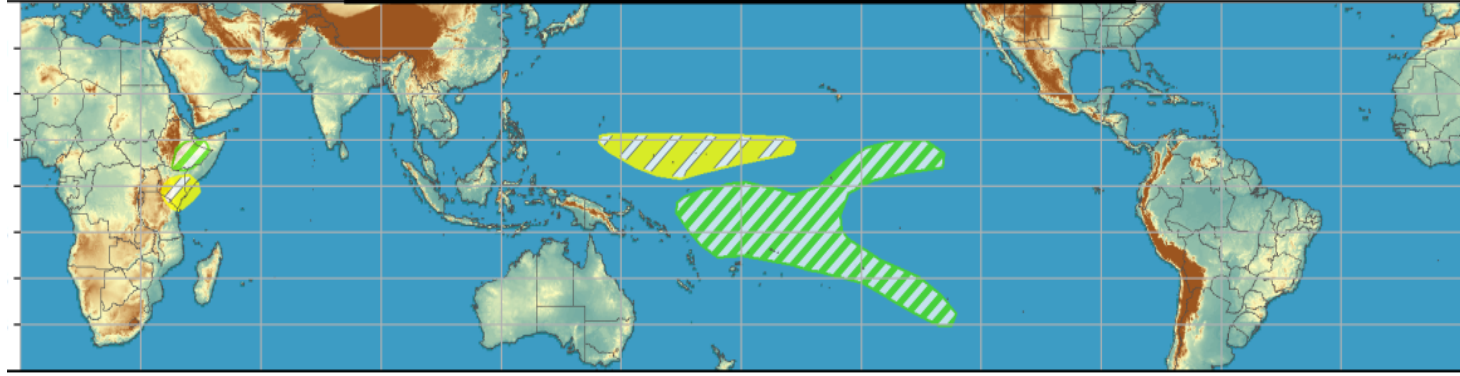
1. Review of Recent Conditions
2. Synopsis of Climate Modes
3. GTH Outlook and Forecast Discussion
4. Connections to U.S. Impacts

# Outlook Review

**Week 1 - Valid: Apr 13, 2016 - Apr 19, 2016**

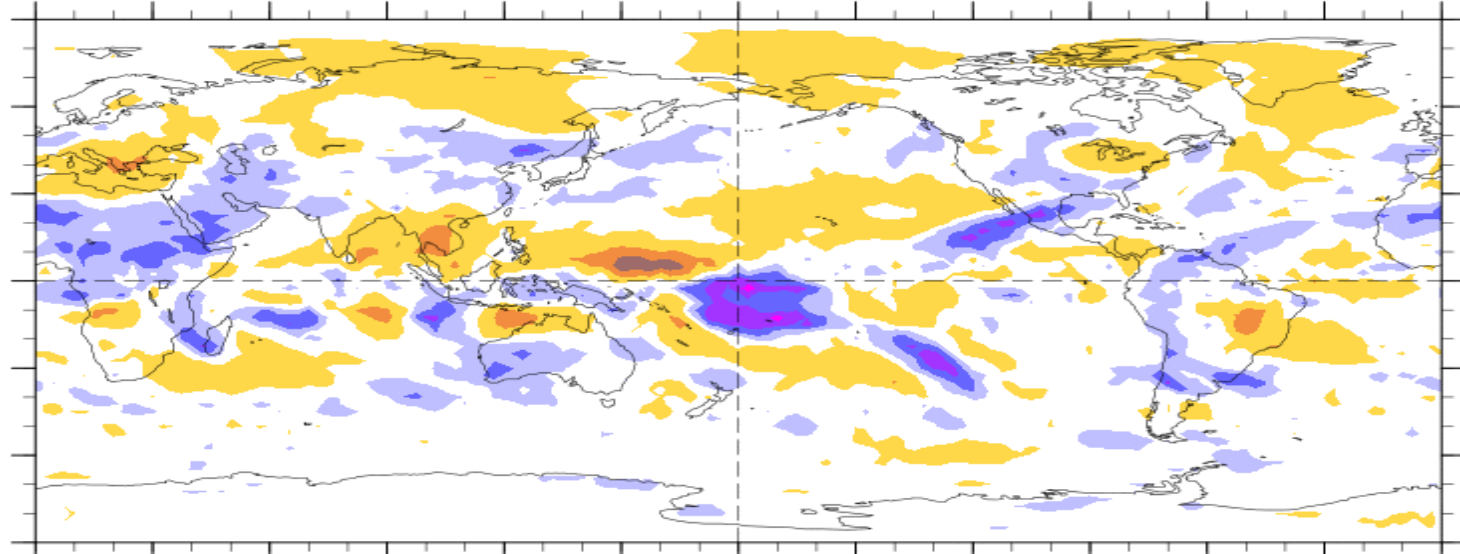


**Week 2 - Valid: Apr 13, 2016 - Apr 19, 2016**



7-Day Average OLR Anomaly

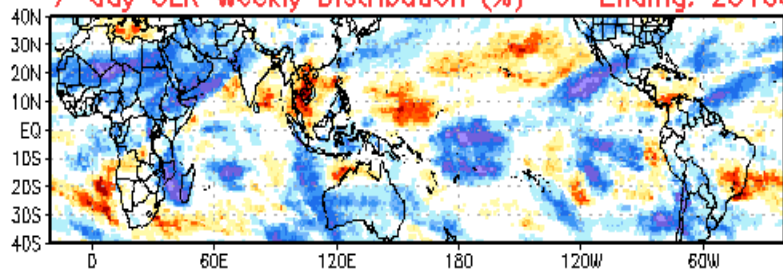
2016/04/11 - 2016/04/17



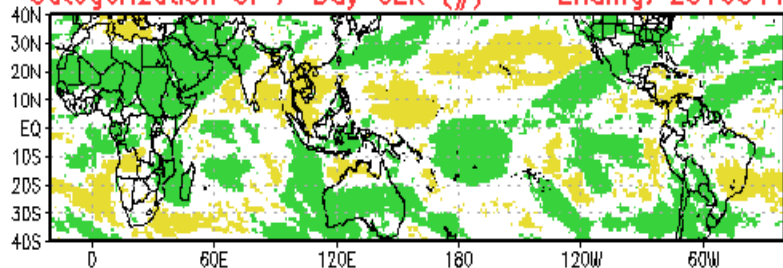
Cool shading  
More clouds/rain

Warm shading  
Less clouds/rain

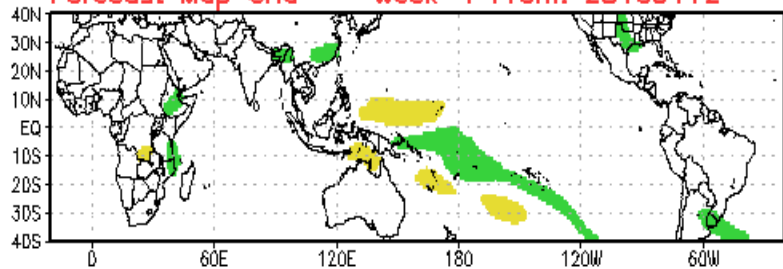
7-day OLR Weekly Distribution (%) -- Ending: 20160419



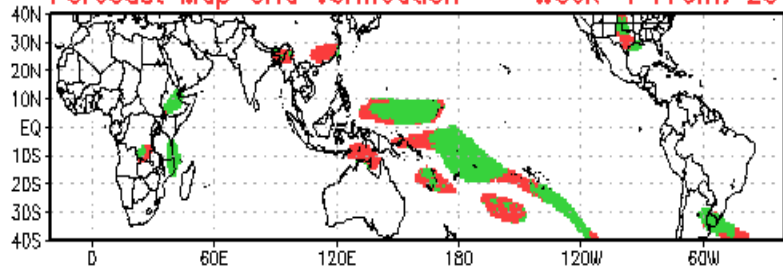
Categorization of 7-Day OLR (#) -- Ending: 20160419



Forecast Map Grid -- Week-1 From: 20160412

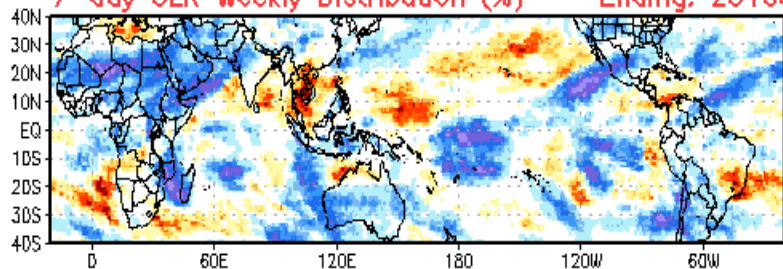


Forecast Map Grid Verification -- Week-1 From: 20160412

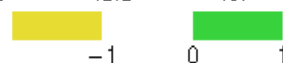
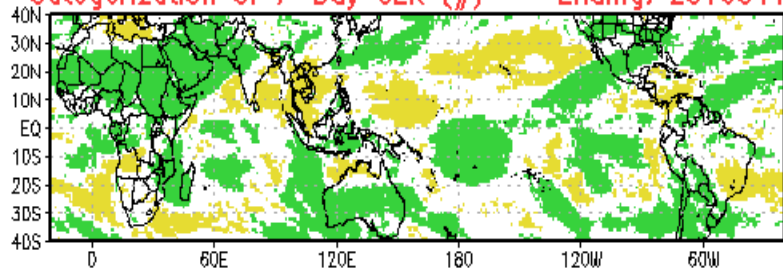


Hit: Green, Miss: Red  
Heidke Skill Score: 41.5108

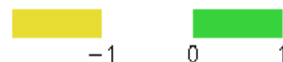
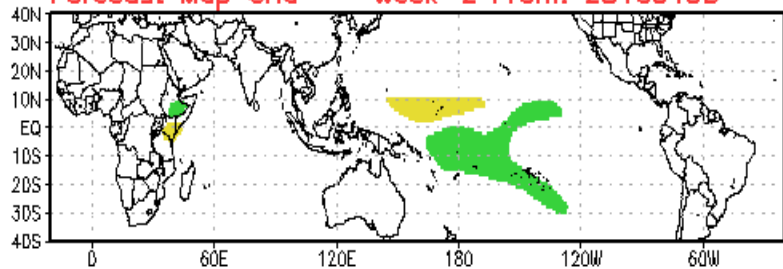
7-day OLR Weekly Distribution (%) -- Ending: 20160419



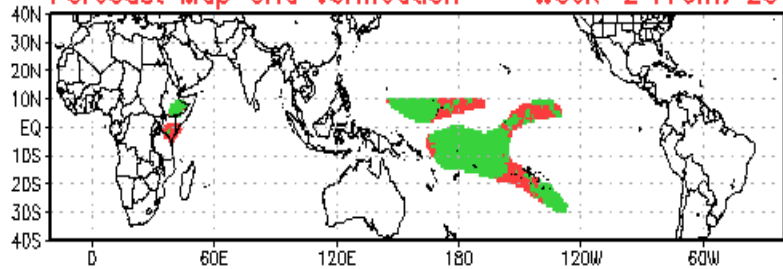
Categorization of 7-Day OLR (#) -- Ending: 20160419



Forecast Map Grid -- Week-2 From: 20160405



Forecast Map Grid Verification -- Week-2 From: 20160405



Hit: Green, Miss: Red  
Heidke Skill Score: 56.3654

# Synopsis of Climate Modes

## ENSO:

- ENSO Alert System Status: [El Niño Advisory/La Niña Watch](#)
- ENSO-neutral is likely during late Northern Hemisphere spring or early summer 2016, with an increasing chance of La Niña during the second half of the year.

## MJO and other subseasonal tropical variability:

- In general, MJO indices are indicating a weak signal
- Most dynamical model MJO index forecasts depict a weak, fairly incoherent signal through Week-2. Therefore, some ENSO influence, along with Kelvin Waves and Equatorial Rossby Waves are likely to play a role.
- Without a strong seasonal or intraseasonal signal, uncertainty is elevated

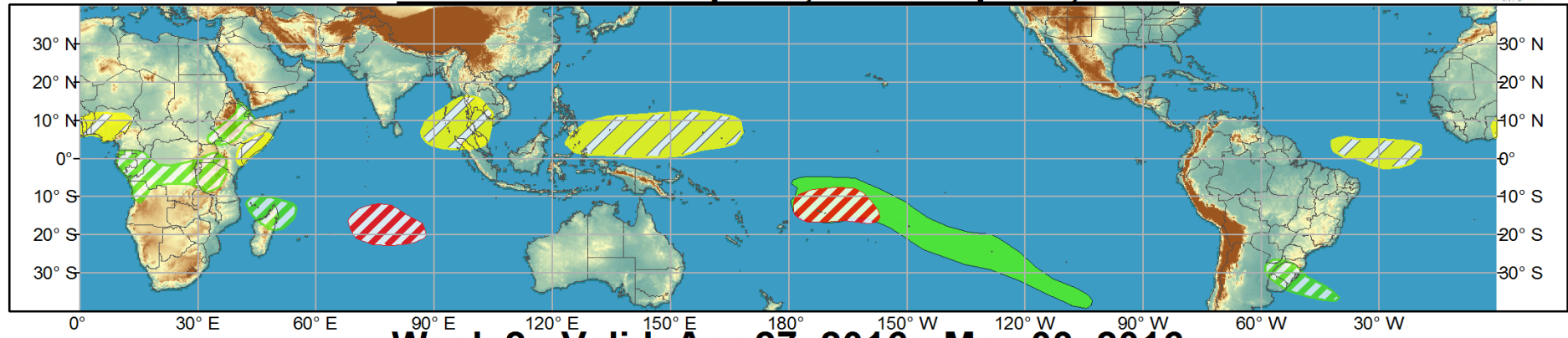
## Extratropics:

- The extended range temperature and precipitation forecasts for the U.S. are not likely to be impacted by the MJO, but more likely impacted by the ongoing El Niño and mid-latitude frontal/cyclonic activity.

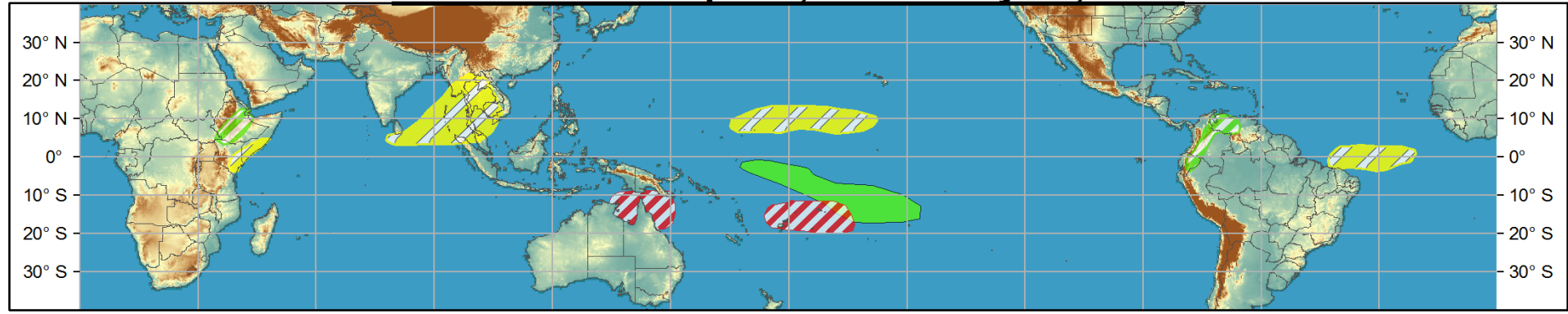


# Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

## Week 1 - Valid: Apr 20, 2016 - Apr 26, 2016



## Week 2 - Valid: Apr 27, 2016 - May 03, 2016



Produced: 04/19/2016

Forecaster: Rosencrans

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.
		Below-normal temperatures 7-day mean temperatures in the lower third of the historical range.

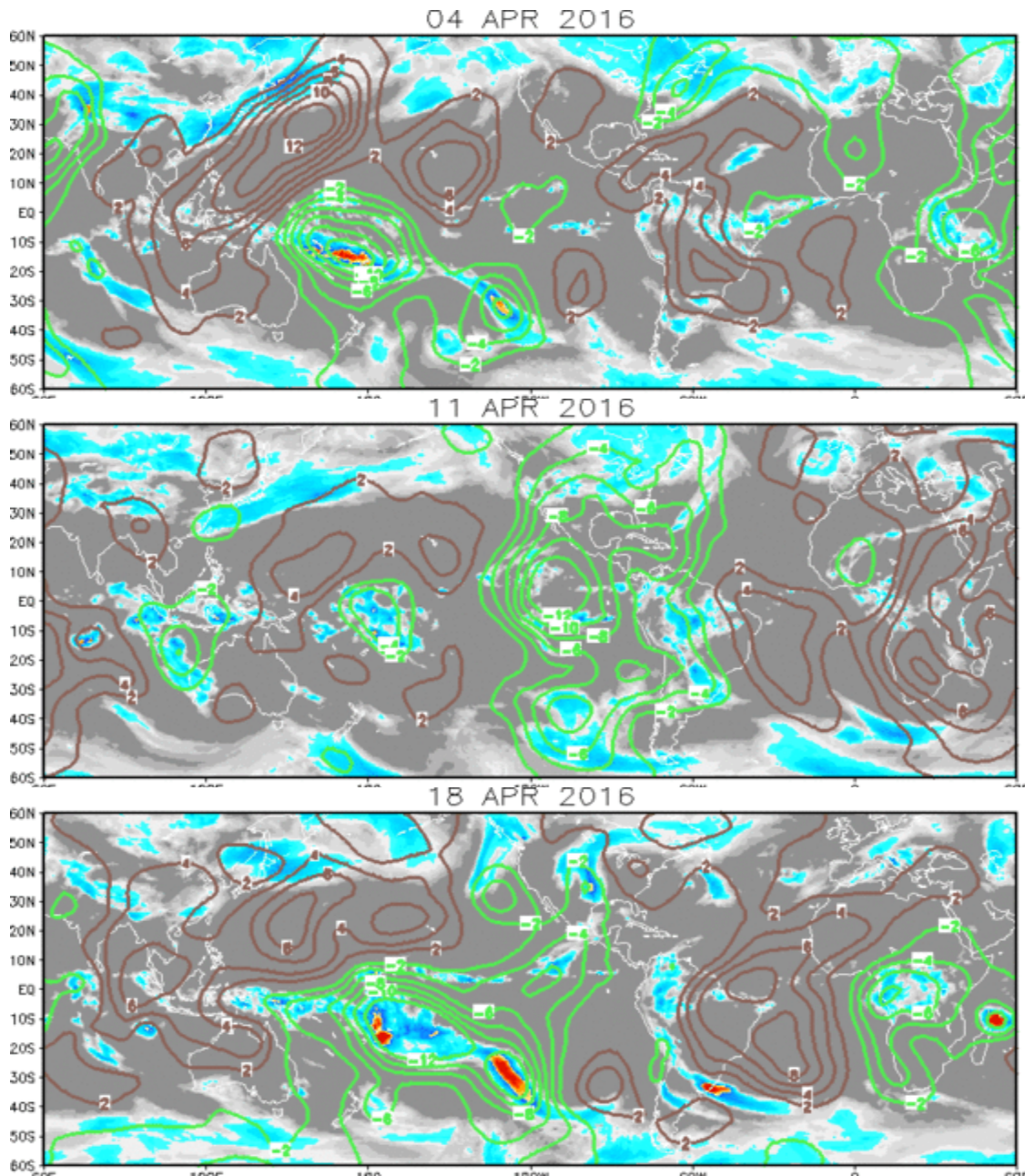
Product is updated once per week, except from 6/1 - 11/30 for the region from 120E to 0, 0 to 40N. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.



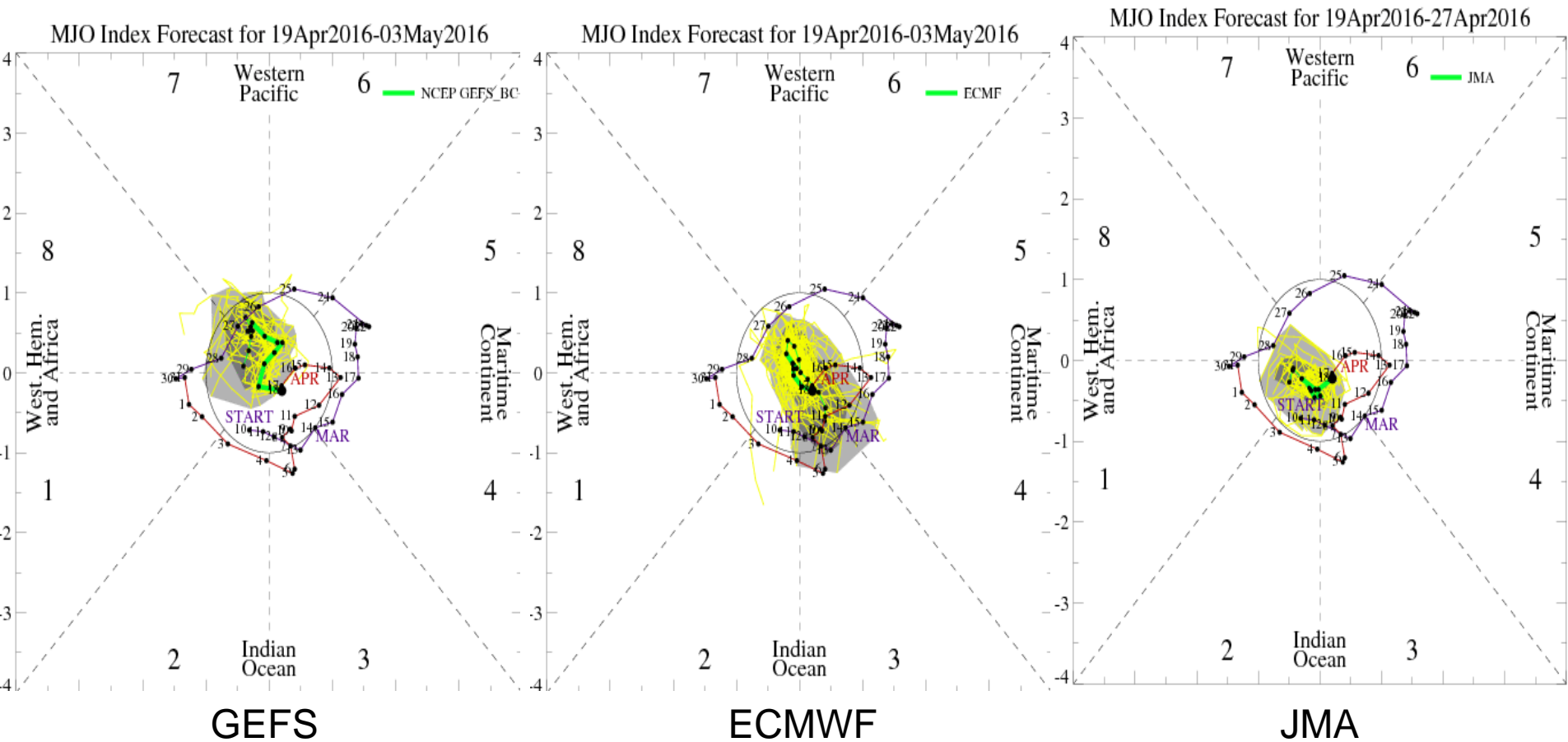


# IR Satellite & 200-hpa Velocity Potential Anomalies

Green: Enhanced Divergence    Brown: Enhanced Convergence

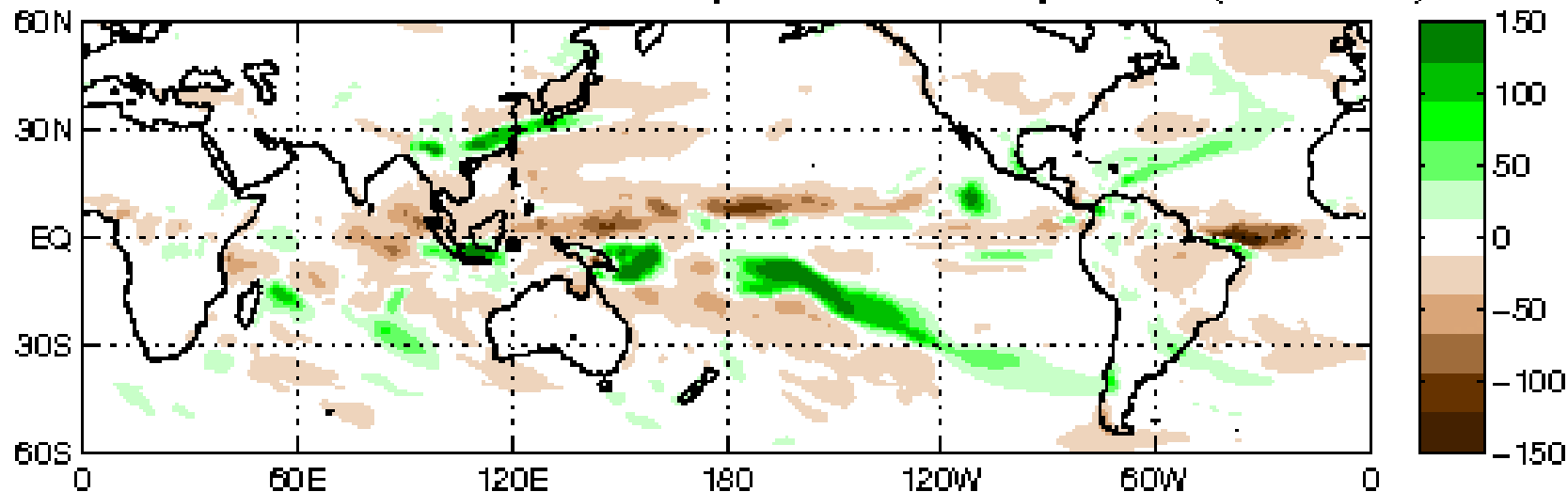


# MJO Observation/Forecast

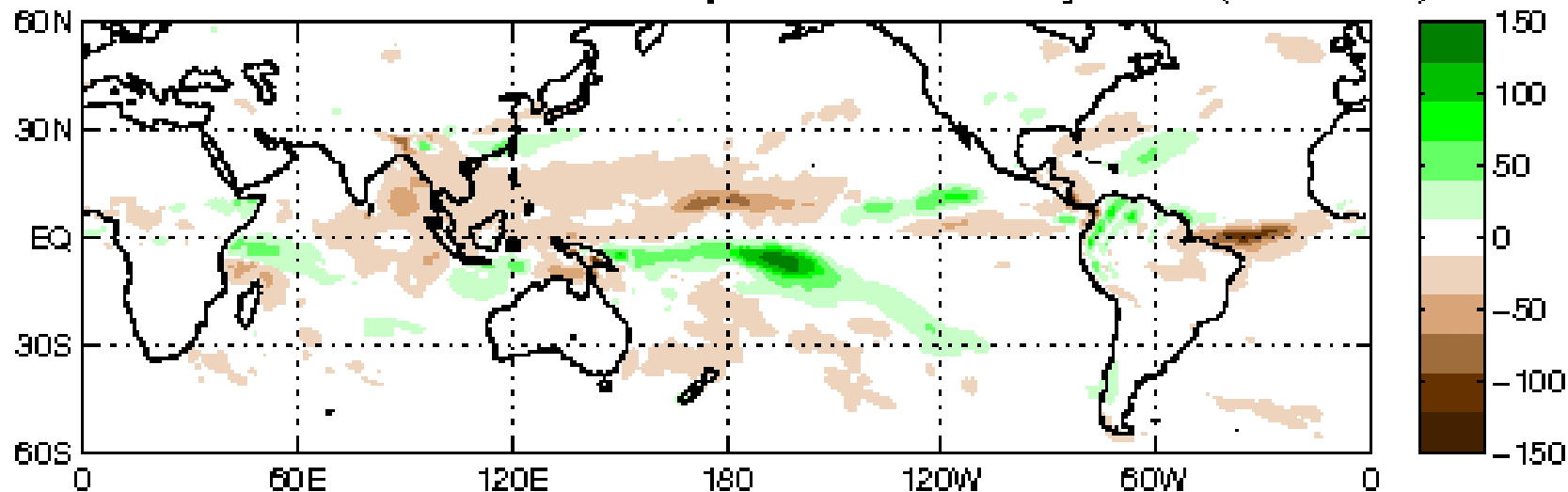


Wheeler-Hendon based analyses of model forecasts indicate a weak signal for the next 2 weeks.

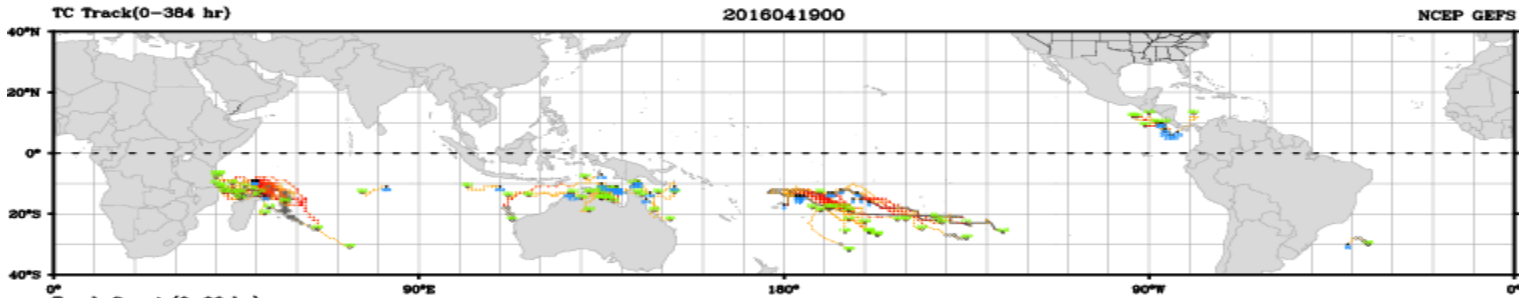
**CFS: Anom. PREC Week: 1: 20-Apr-2016 to 26-Apr-2016 (mm/week)**



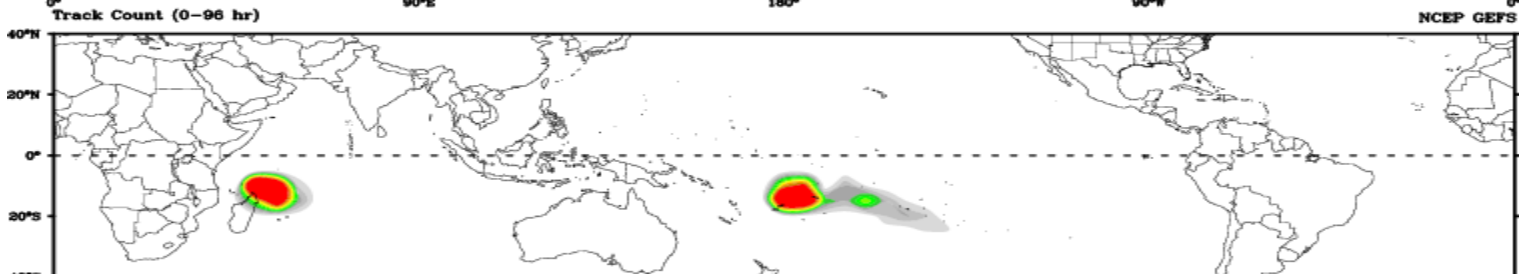
**CFS: Anom. PREC Week: 2: 27-Apr-2016 to 03-May-2016 (mm/week)**



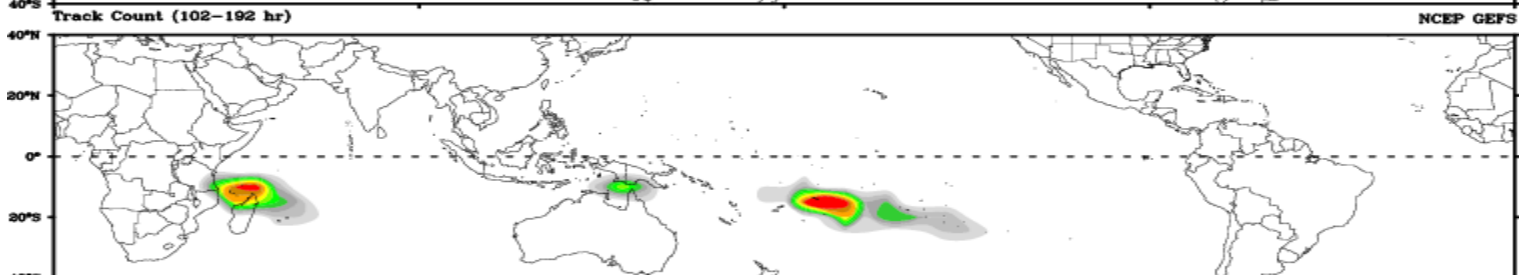




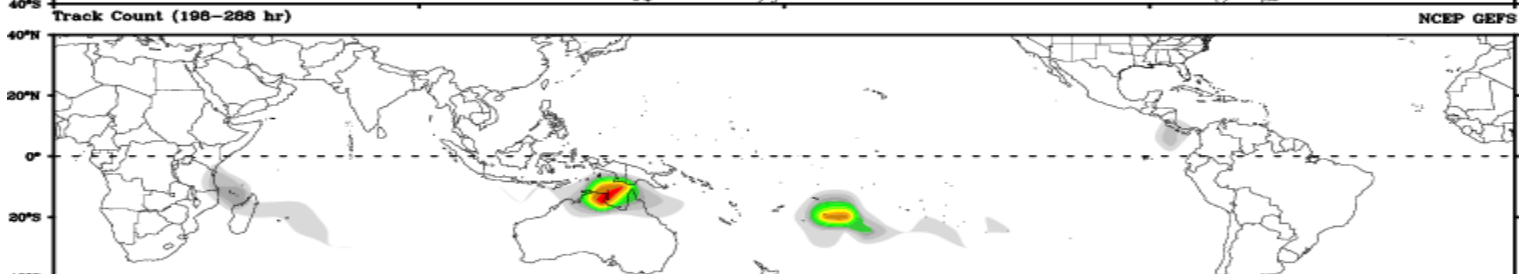
Day 1-4



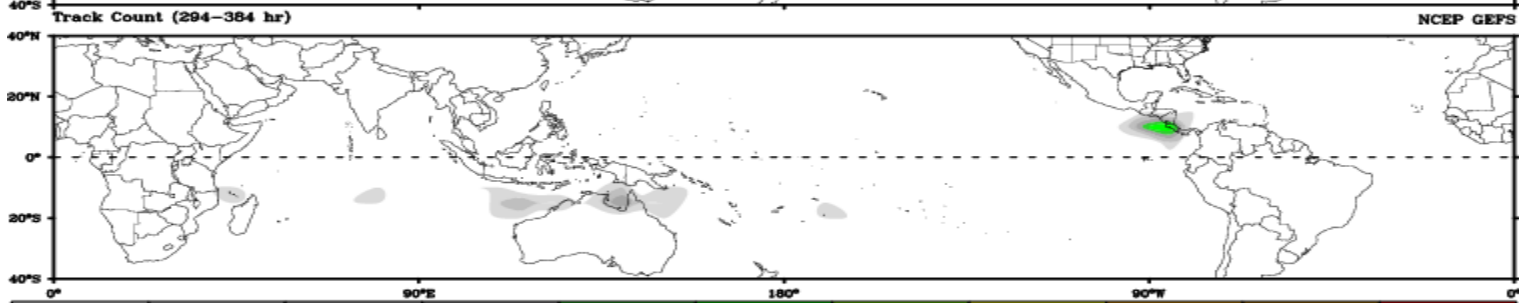
Day 5-8



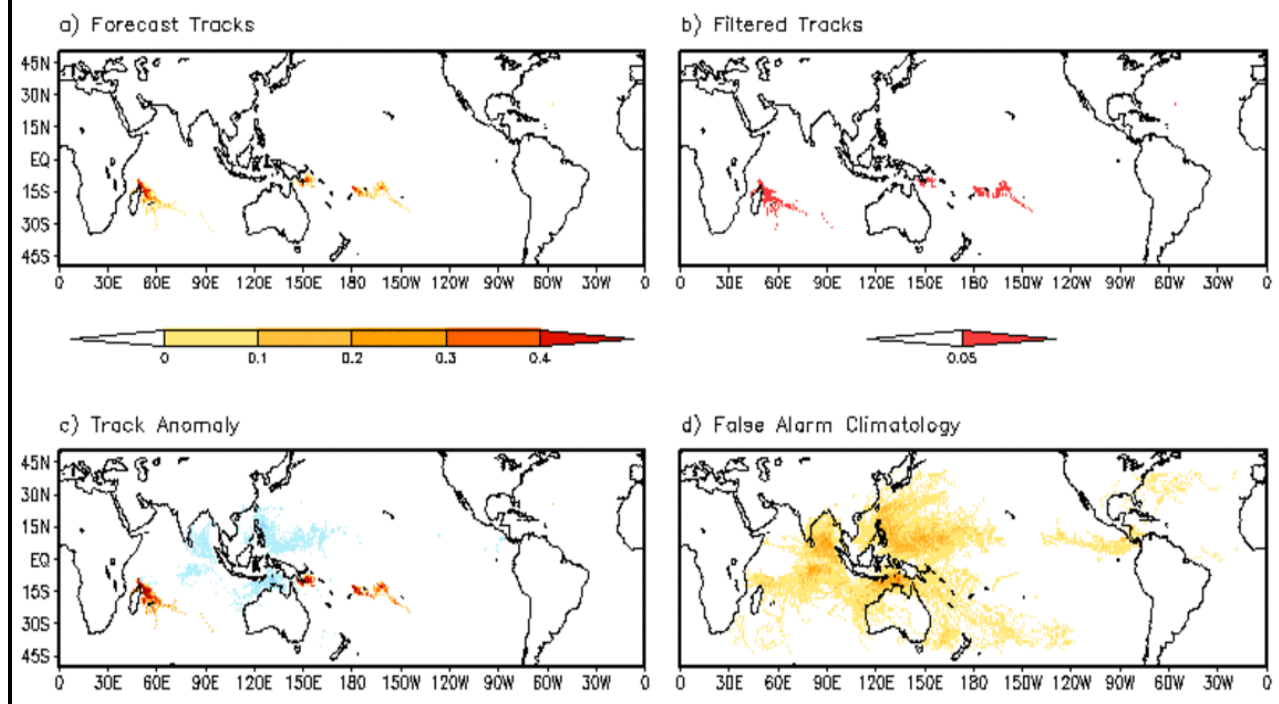
Day 9-12



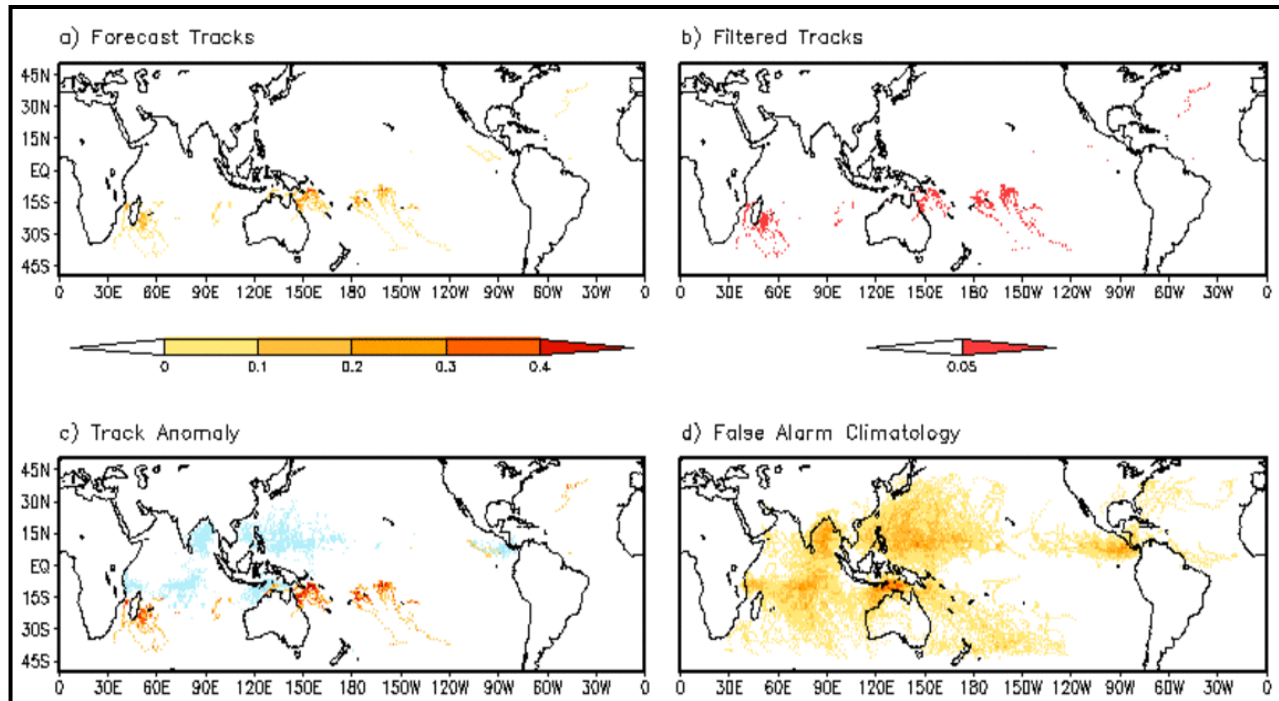
Day 13-15



Week 1  
19 Apr – 25 Apr

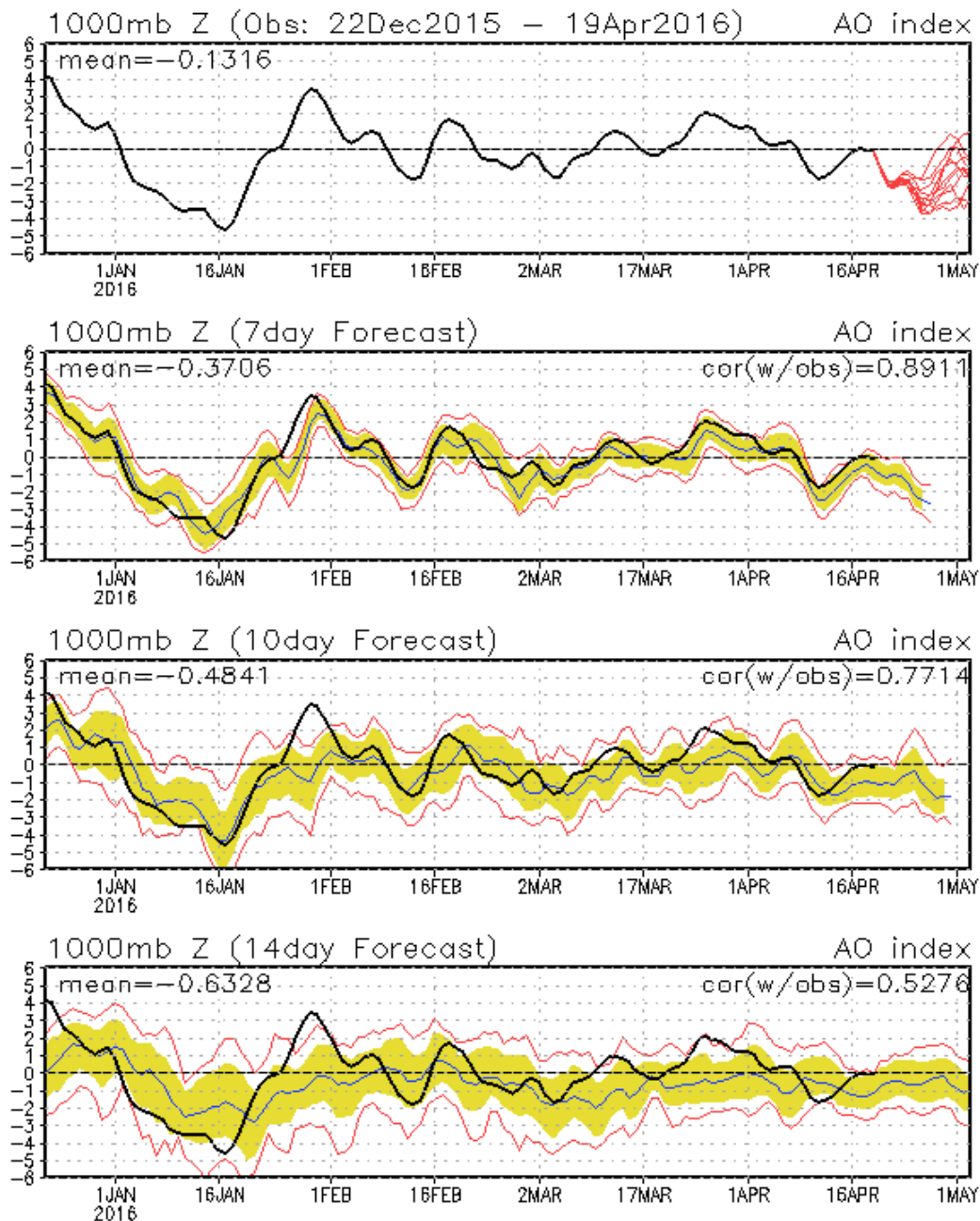


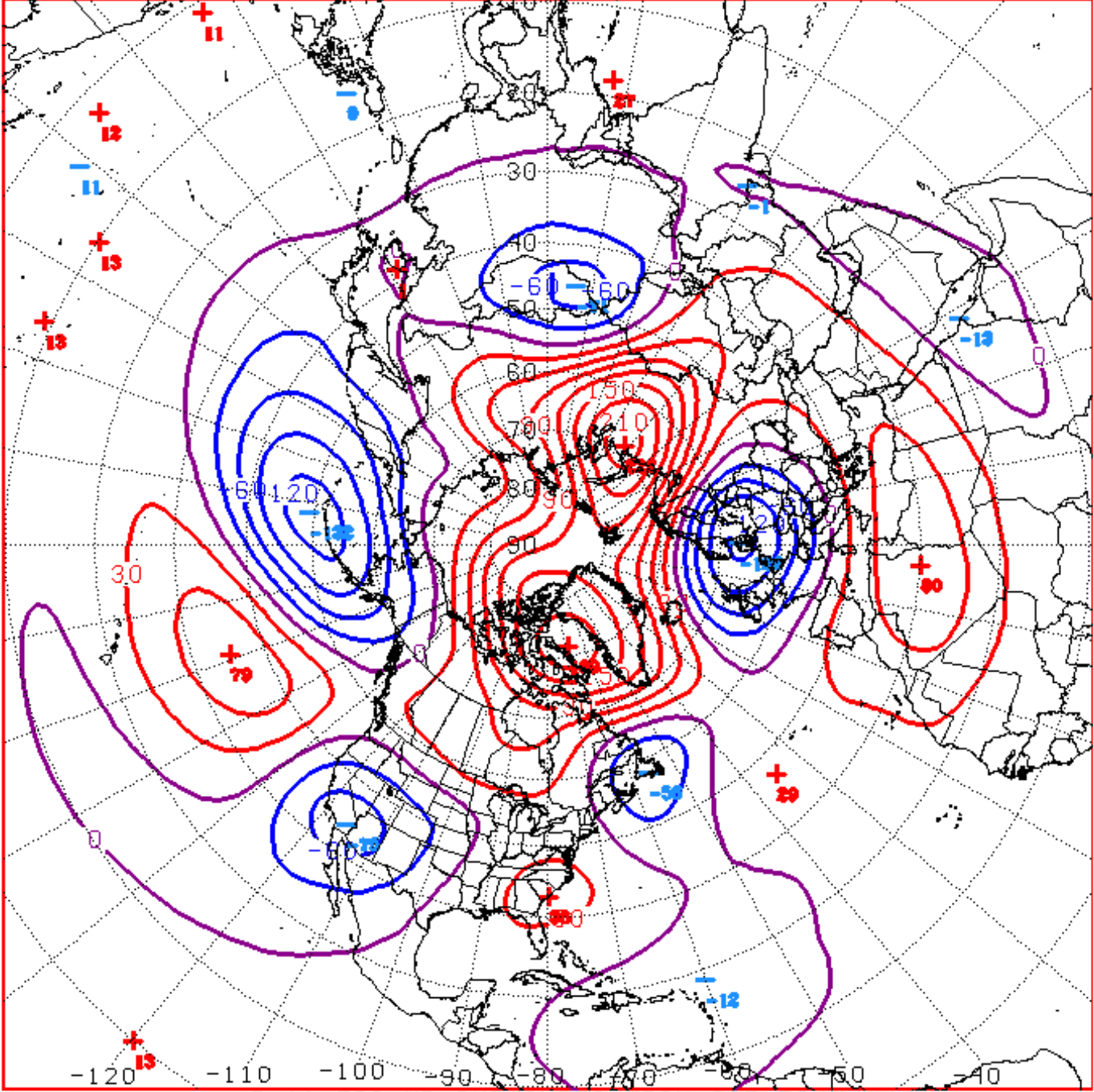
Week 2  
26 Apr – 2 May



# Connections to U.S. Impacts

## AO: Observed & ENSM forecasts

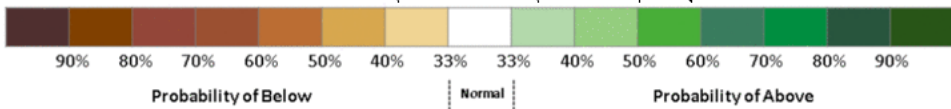
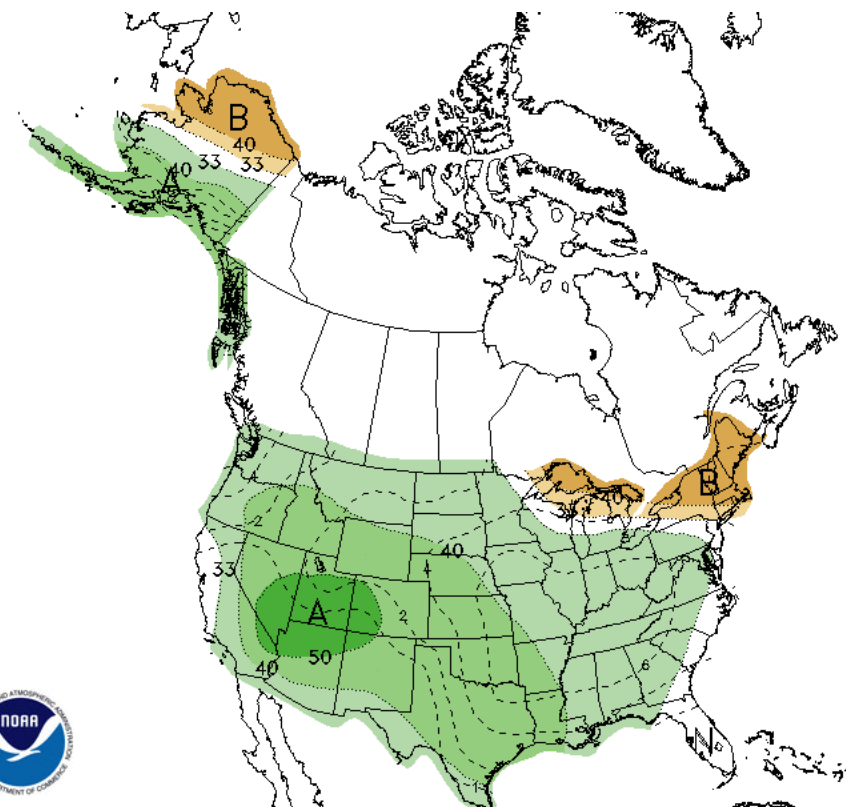
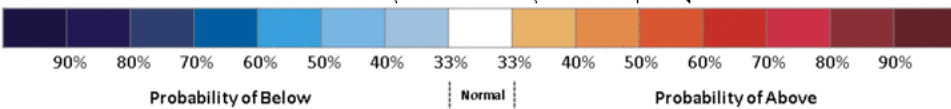
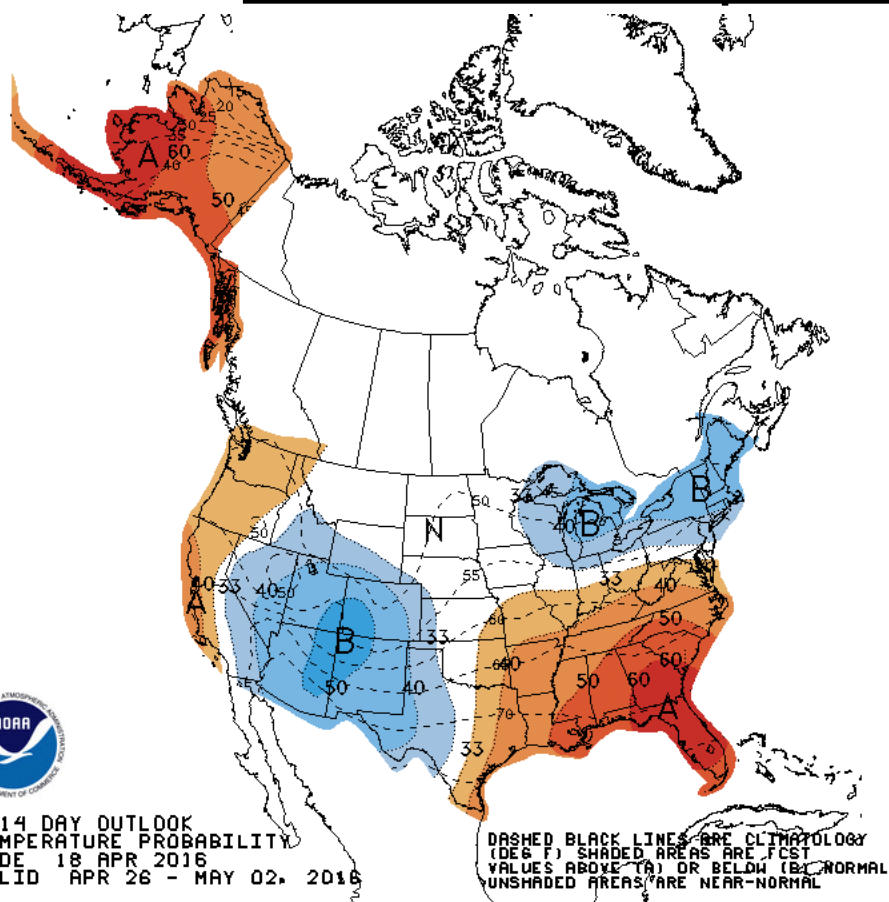




D+11 500 MB ANOMALIES FROM 00Z ECMM  
CPC MAP MADE APR 19 2016 1004 UTC CNTD APR 30 2016



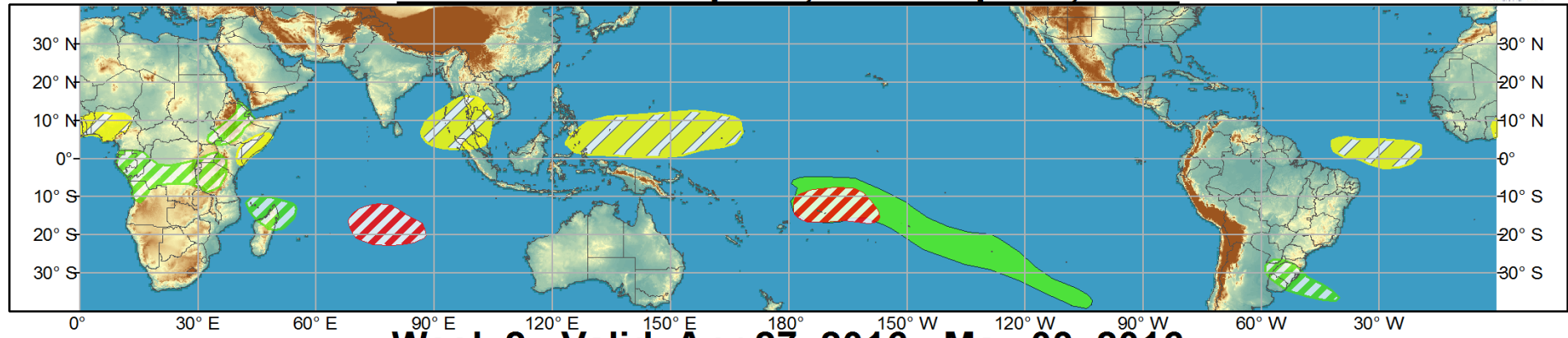
# Week 2 – Temperature and Precipitation



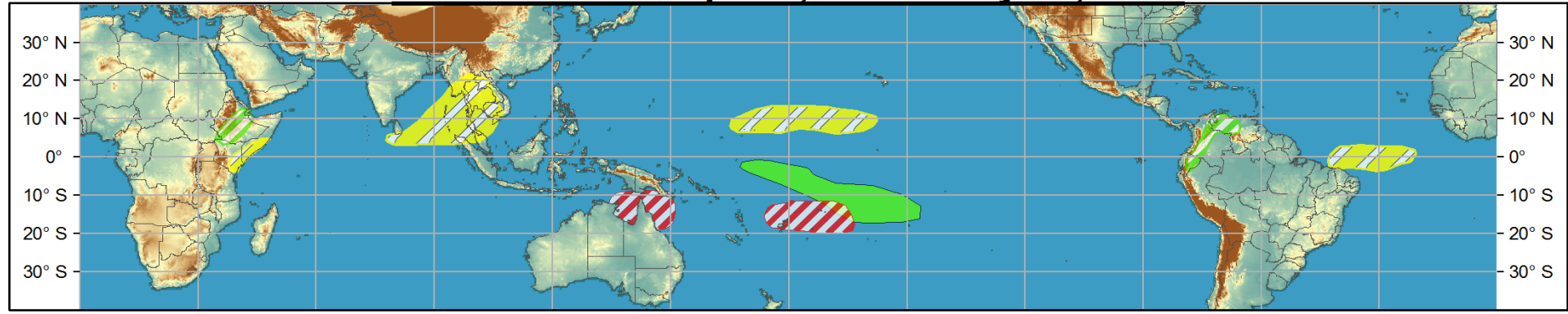


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