

# Global Tropics Hazards And Benefits Outlook

March 5, 2013

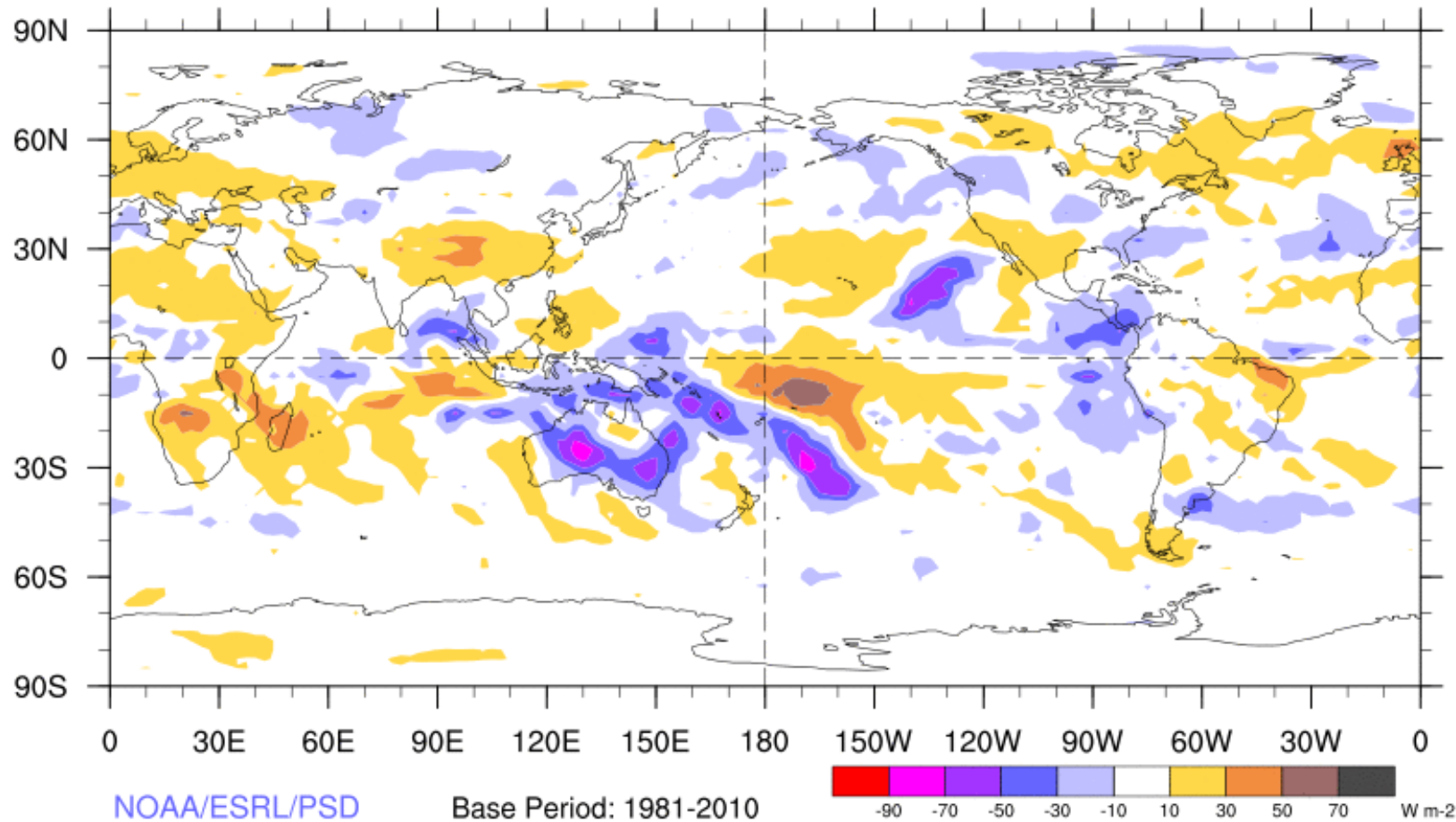
Steve Baxter

## Outline

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

# 7-Day Average OLR Anomaly

2013/02/25 - 2013/03/03

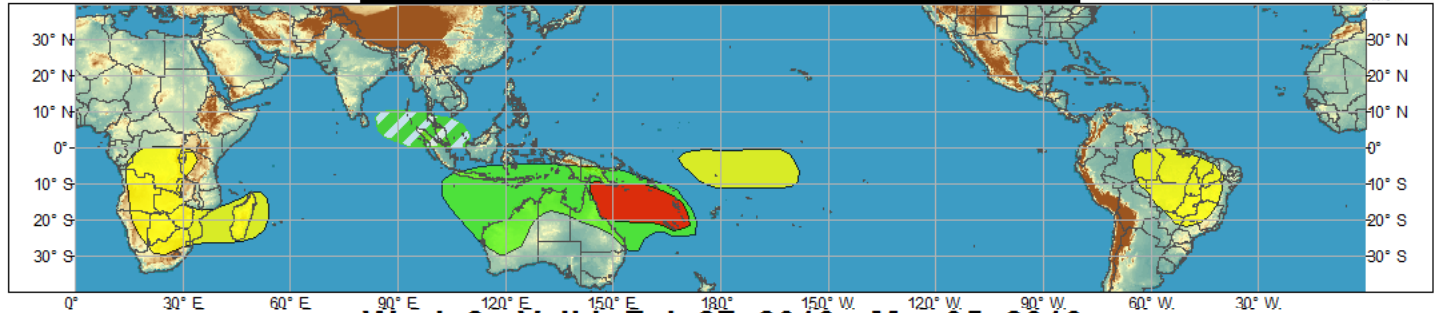




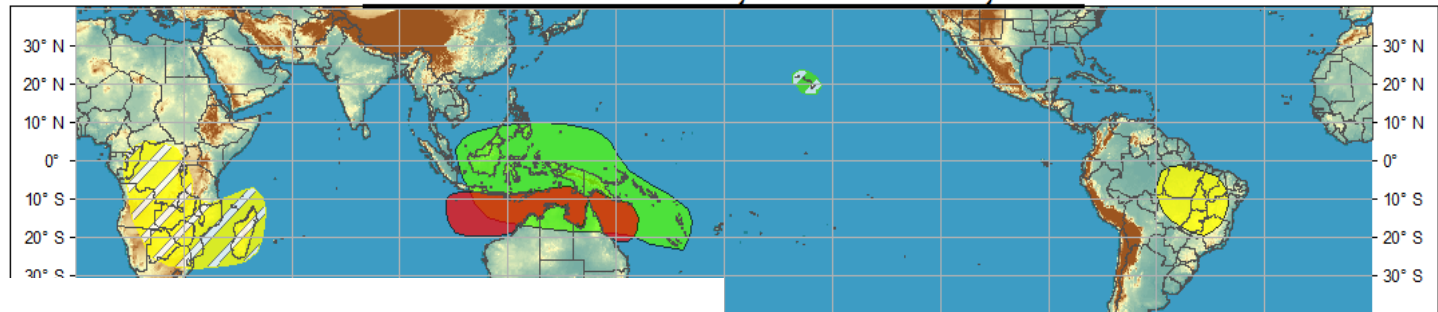
# Global Tropical Hazards/Benefits Outlook - Climate Prediction Center



**Week 1 - Valid: Feb 27, 2013 - Mar 05, 2013**

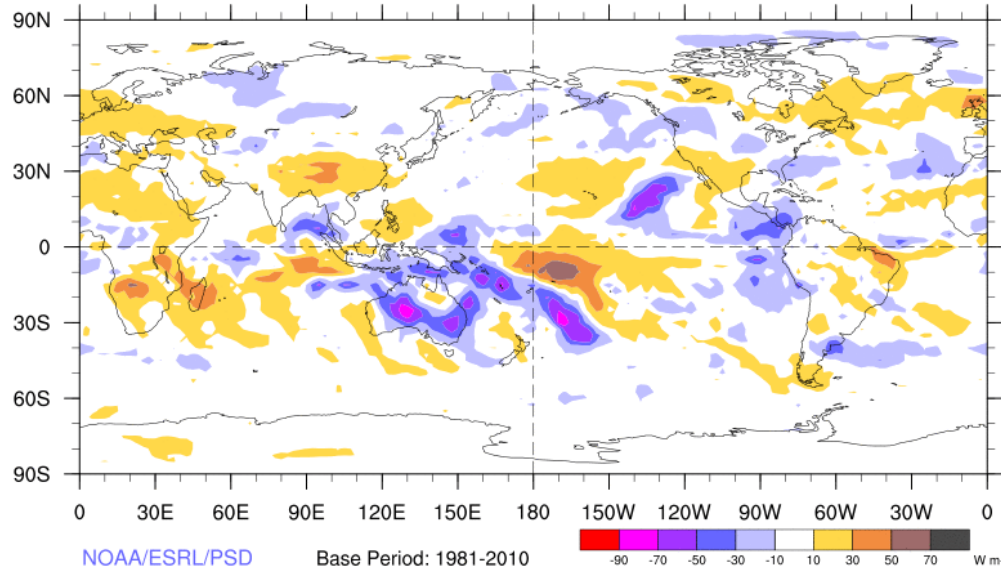


**Week 2 - Valid: Feb 27, 2013 - Mar 05, 2013**



7-Day Average OLR Anomaly

2013/02/25 - 2013/03/03



NOAA/ESRL/PSD

Base Period: 1981-2010

-90 -70 -50 -30 -10 10 30 50 70 W m-2

Outlook  
Review

# 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 with the enhanced phase entering the western Pacific during the past week. There is a temporary pause in phase 6 currently due to other subseasonal tropical modes.
- There is some spread in the dynamical model MJO index forecasts but the consensus is for a slowly propagating signal moving eastward into phase 7 during the period. Westward moving equatorial Rossby waves are expected to be important over the next two weeks as well.
- Statistical forecasts generally support slow eastward movement and a gradual decrease in amplitude.

## Extratropics:

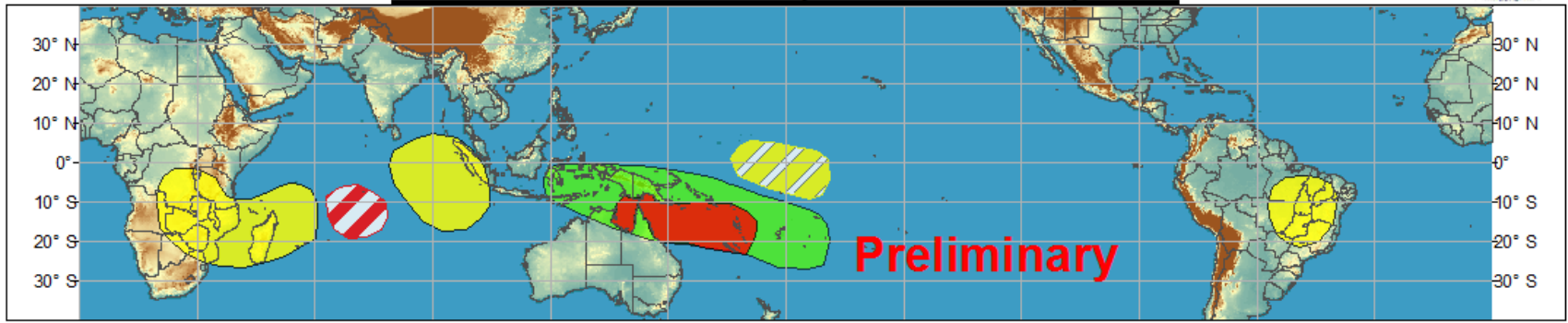
- High latitude blocking (-AO / -NAO) playing a large role across the central and eastern U.S. despite MJO forcing
- Circulation across the Pacific has been more consistent with the MJO
- The current forecast evolution of the MJO supports an extratropical response in phase with the negative AO



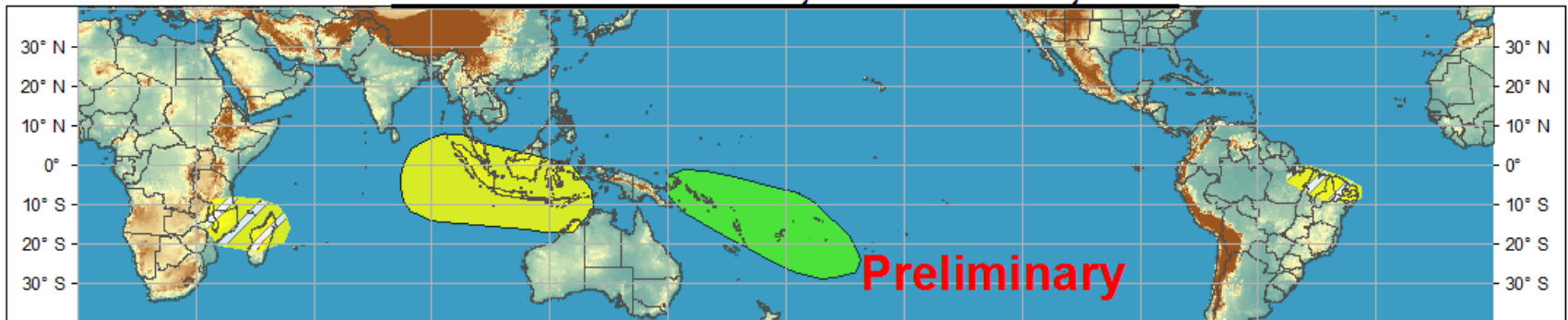
# Global Tropical Hazards/Benefits Outlook - Climate Prediction Center



## Week 1 - Valid: Mar 07, 2013 - Mar 13, 2013



## Week 2 - Valid: Mar 14, 2013 - Mar 20, 2013



**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.

**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.

Produced: 03/05/2013

Forecaster: Baxter

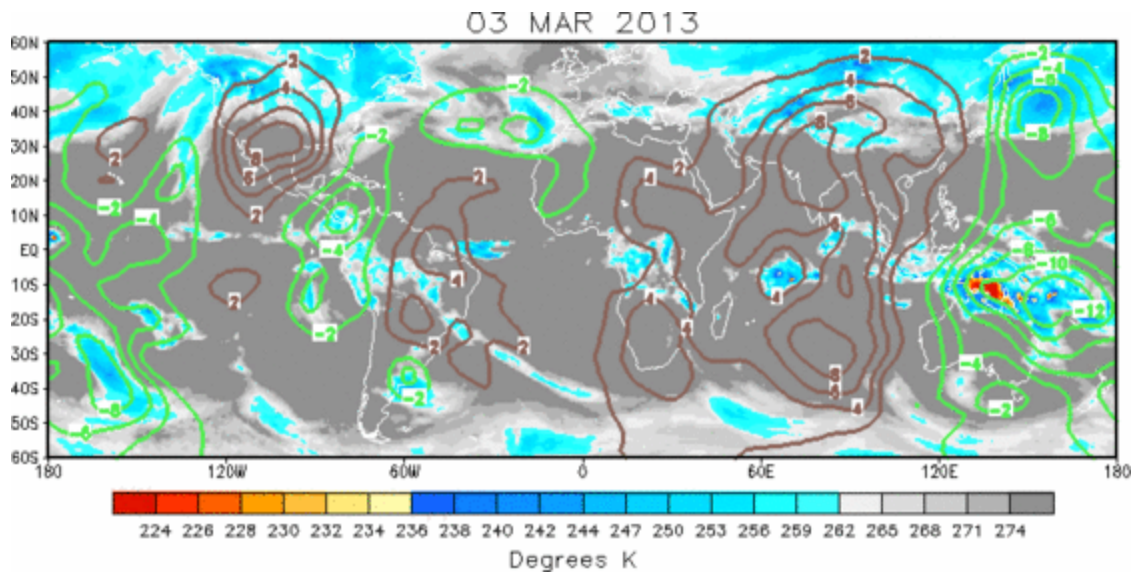
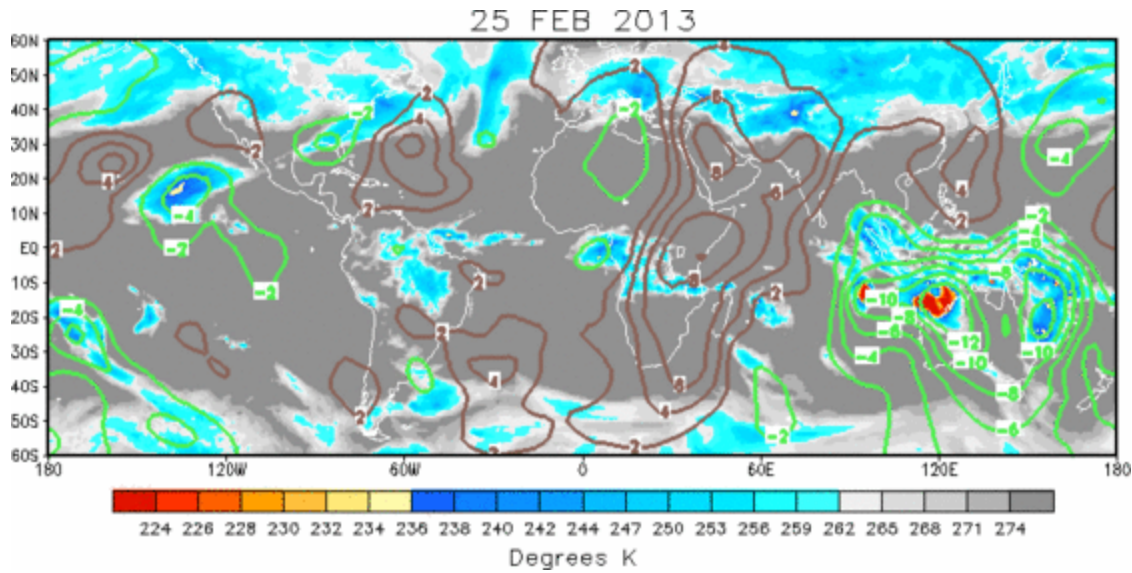
Product is updated once per week. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.



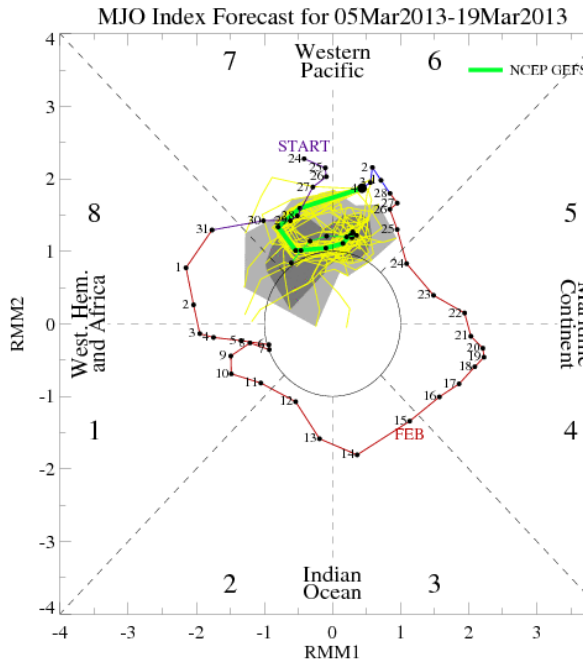
# IR Satellite & 200-hpa Velocity Potential Anomalies

Green: Enhanced Divergence

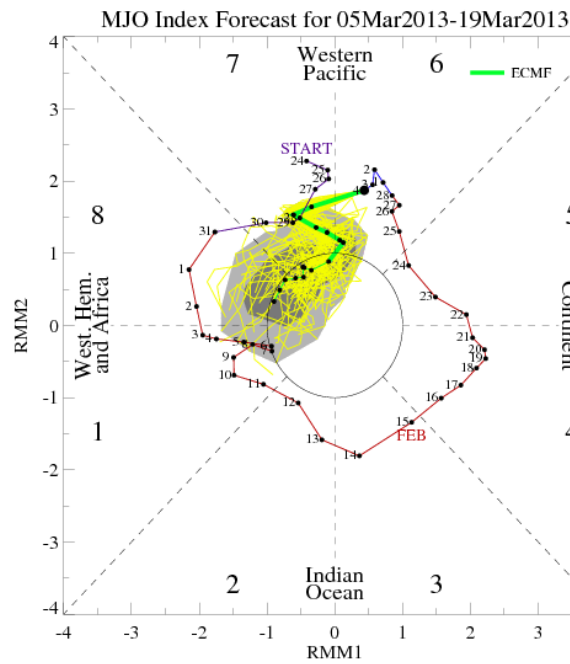
Brown: Enhanced Convergence



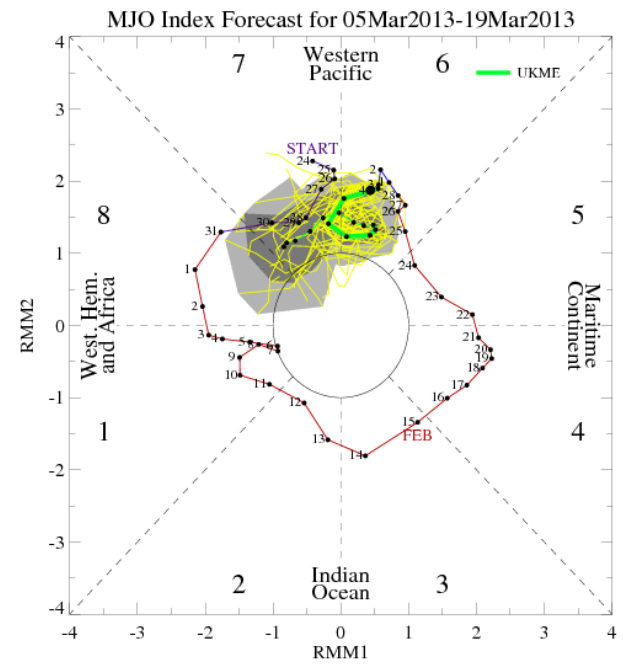
# MJO Observation/Forecast



GFS

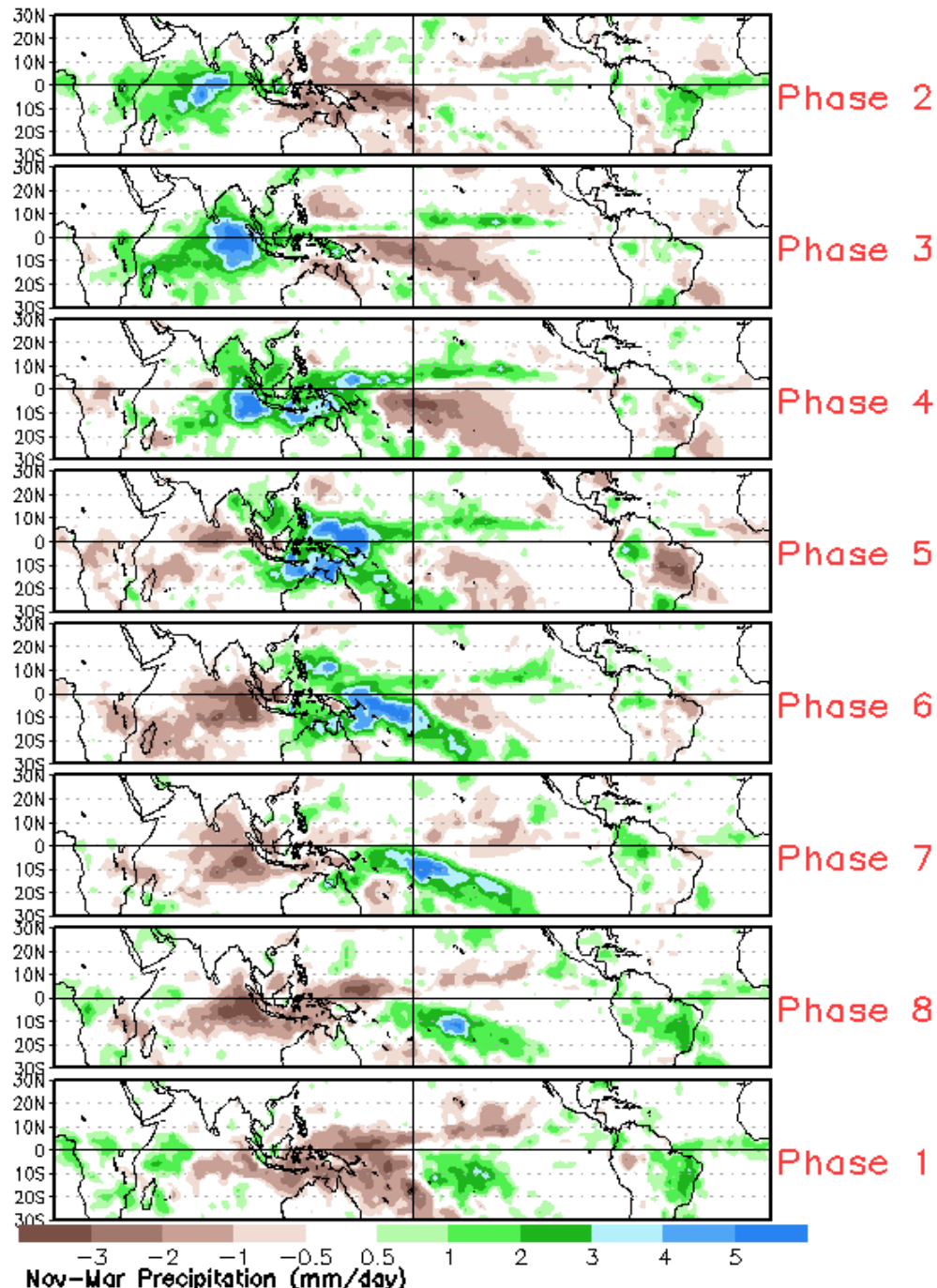


ECMWF



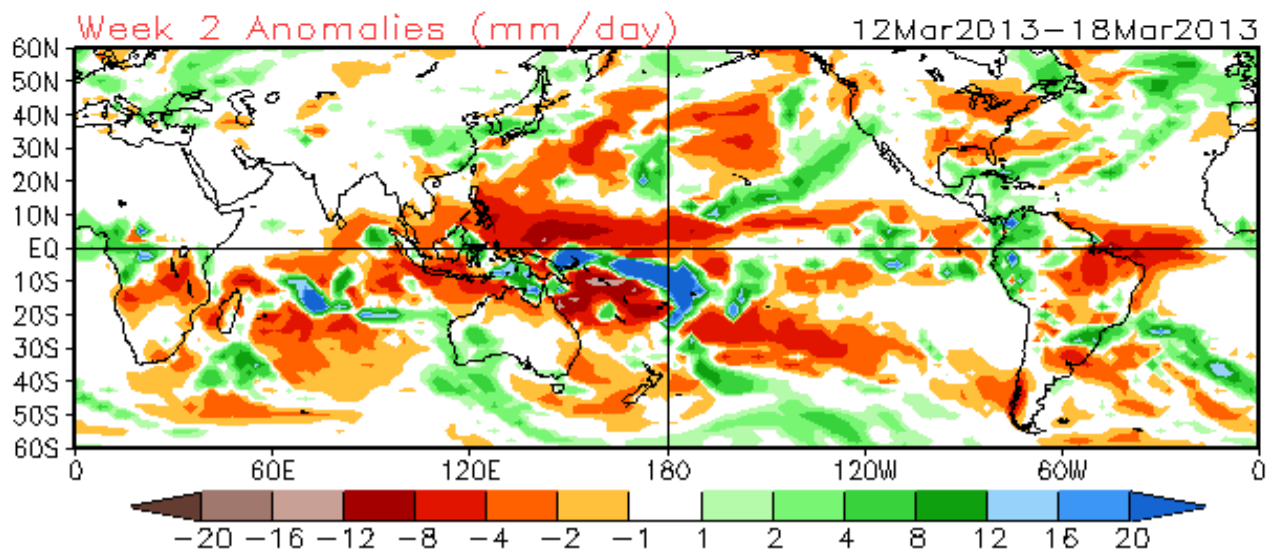
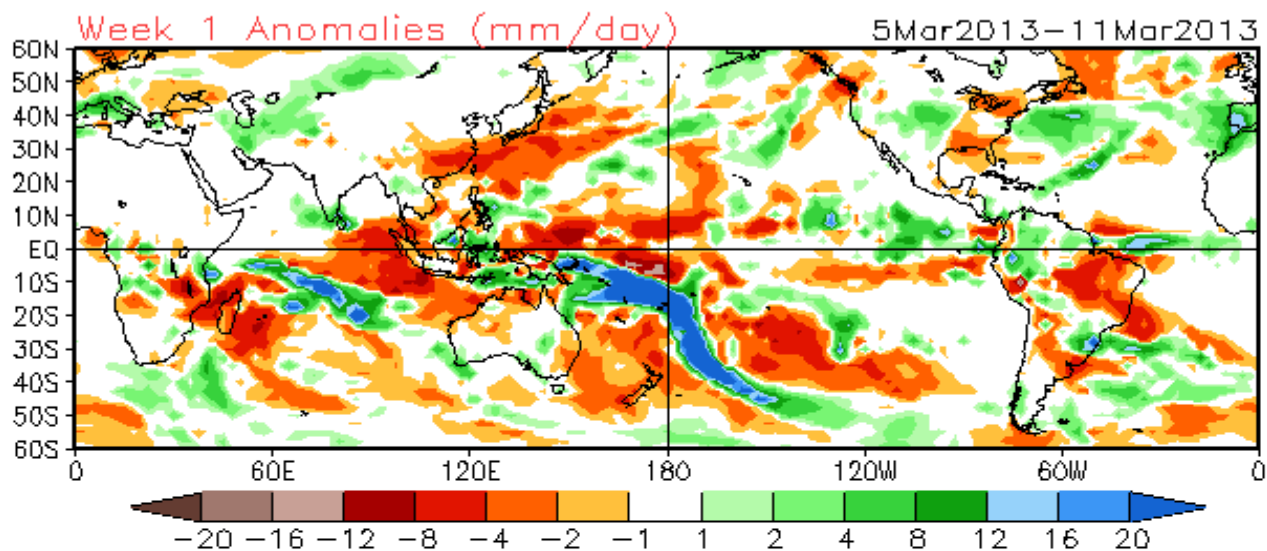
UKMET

# Average Conditions when the MJO is present (Nov-Mar)

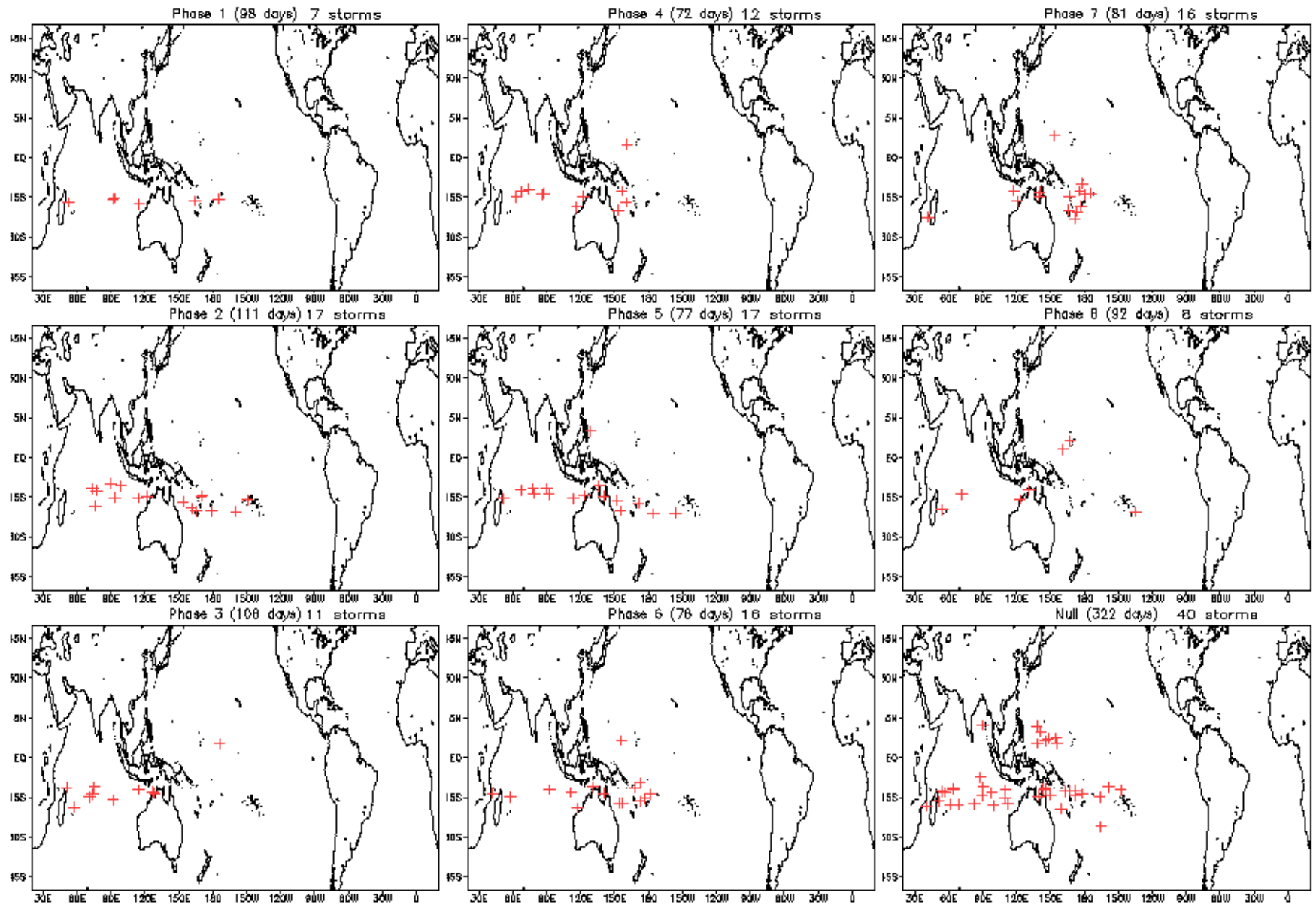




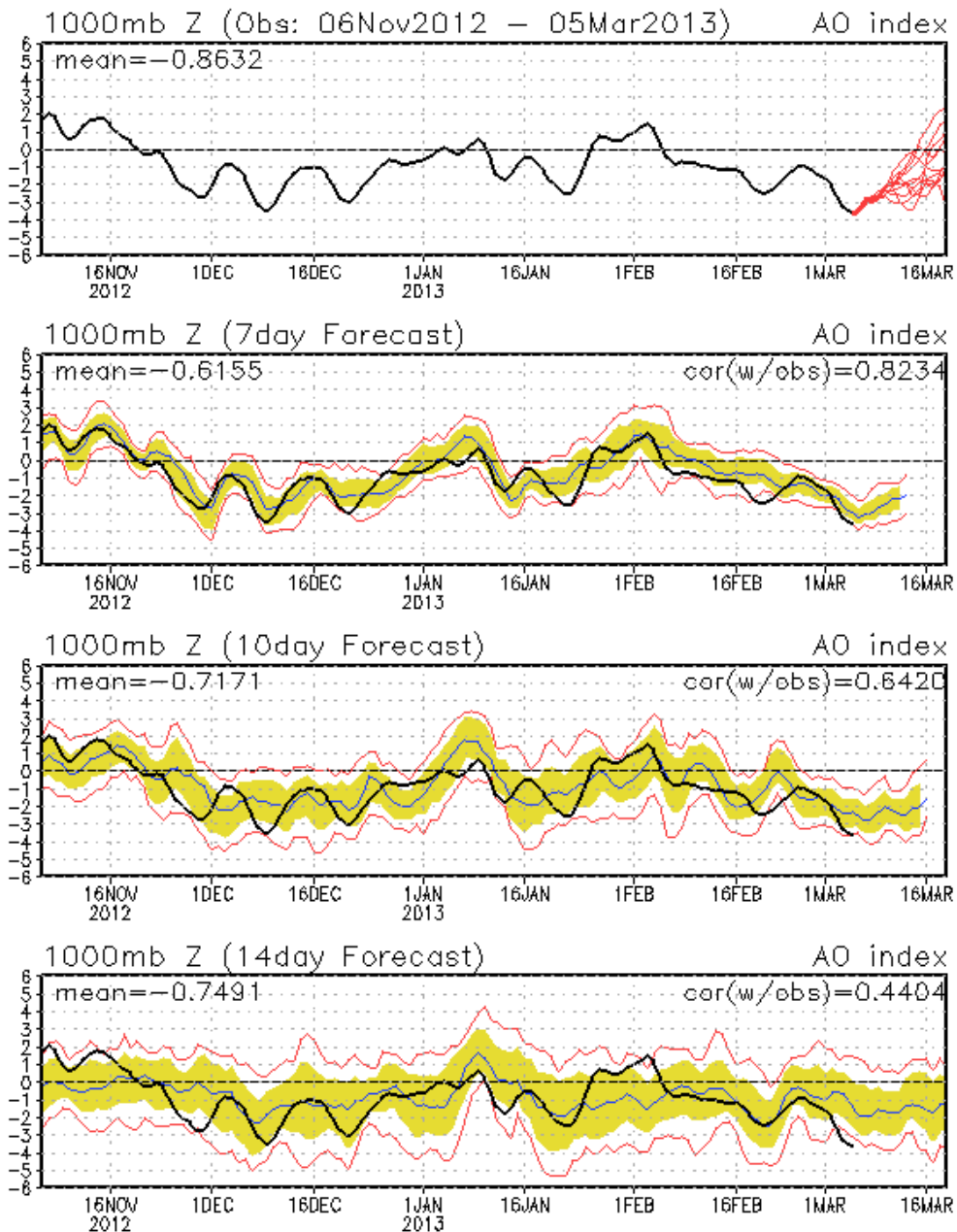
CFSv2 Weeks 1 & 2 Precipitation  
16 Member Ensemble Mean Forecast from 04Mar2013

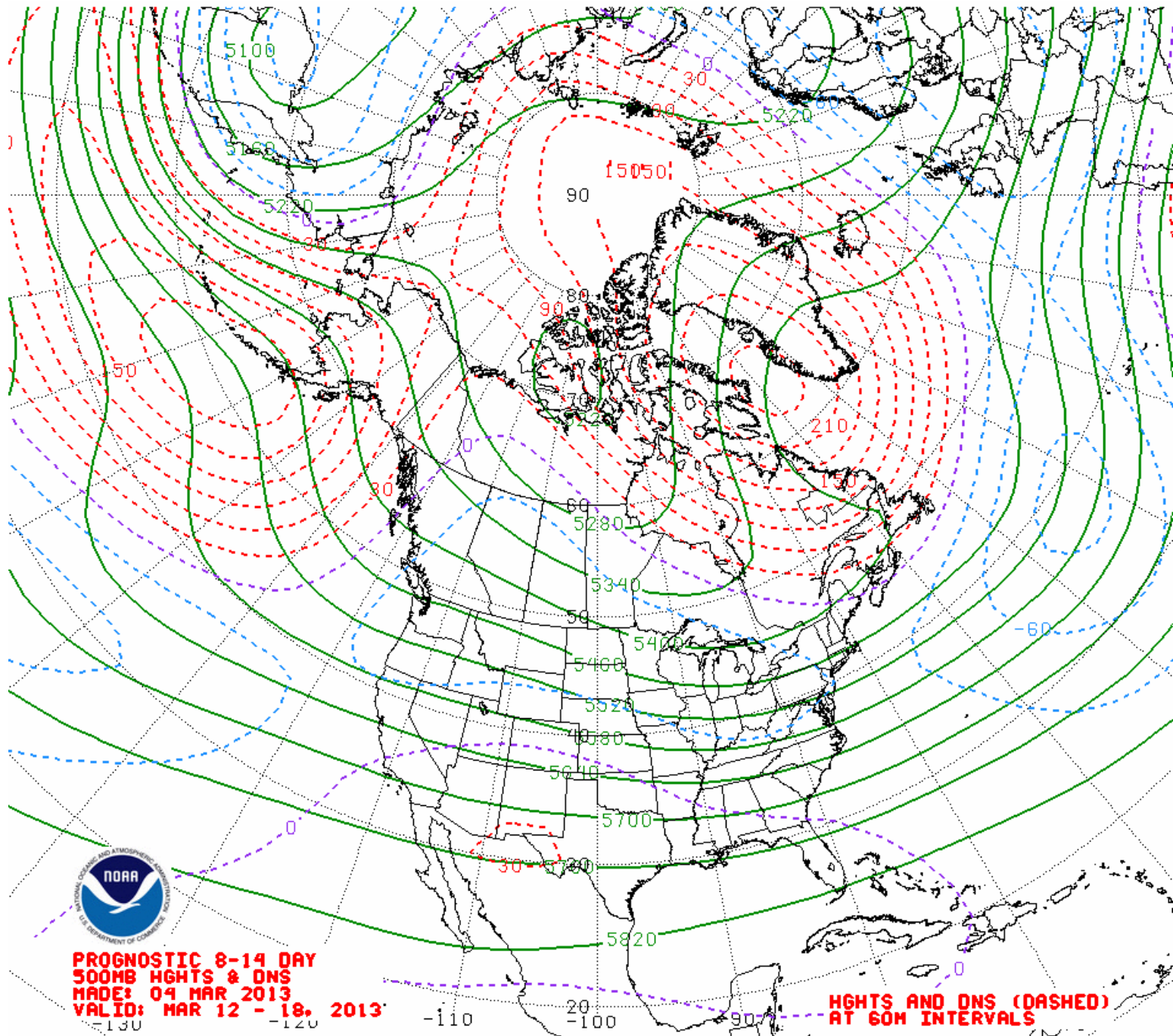


# March Tropical Storm Formation by MJO phase

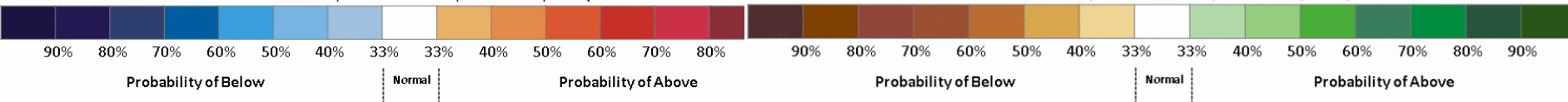
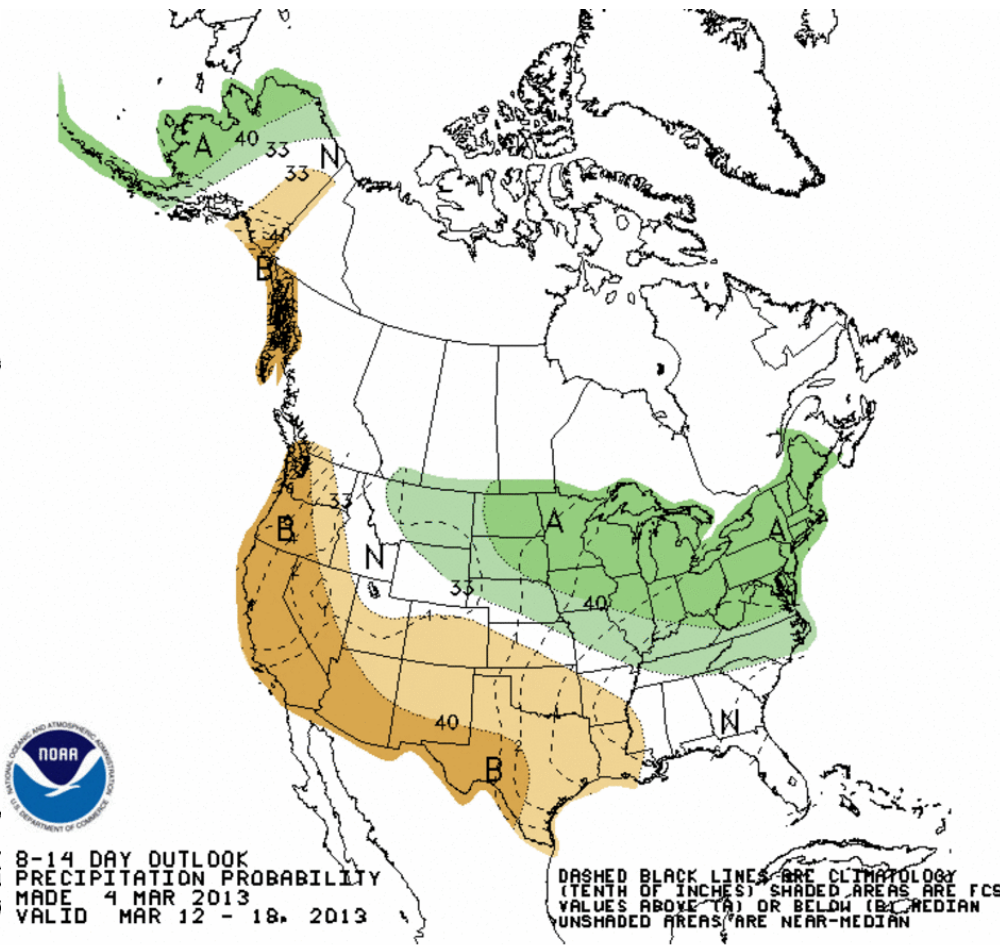
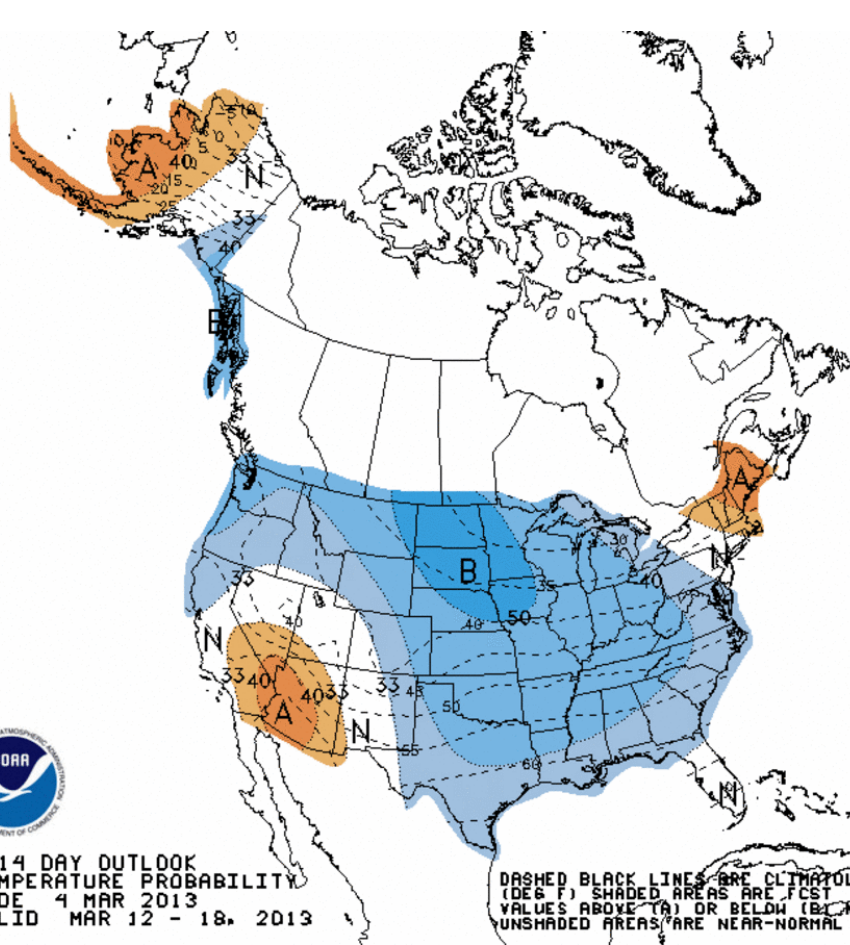


## AO: Observed & ENSM forecasts

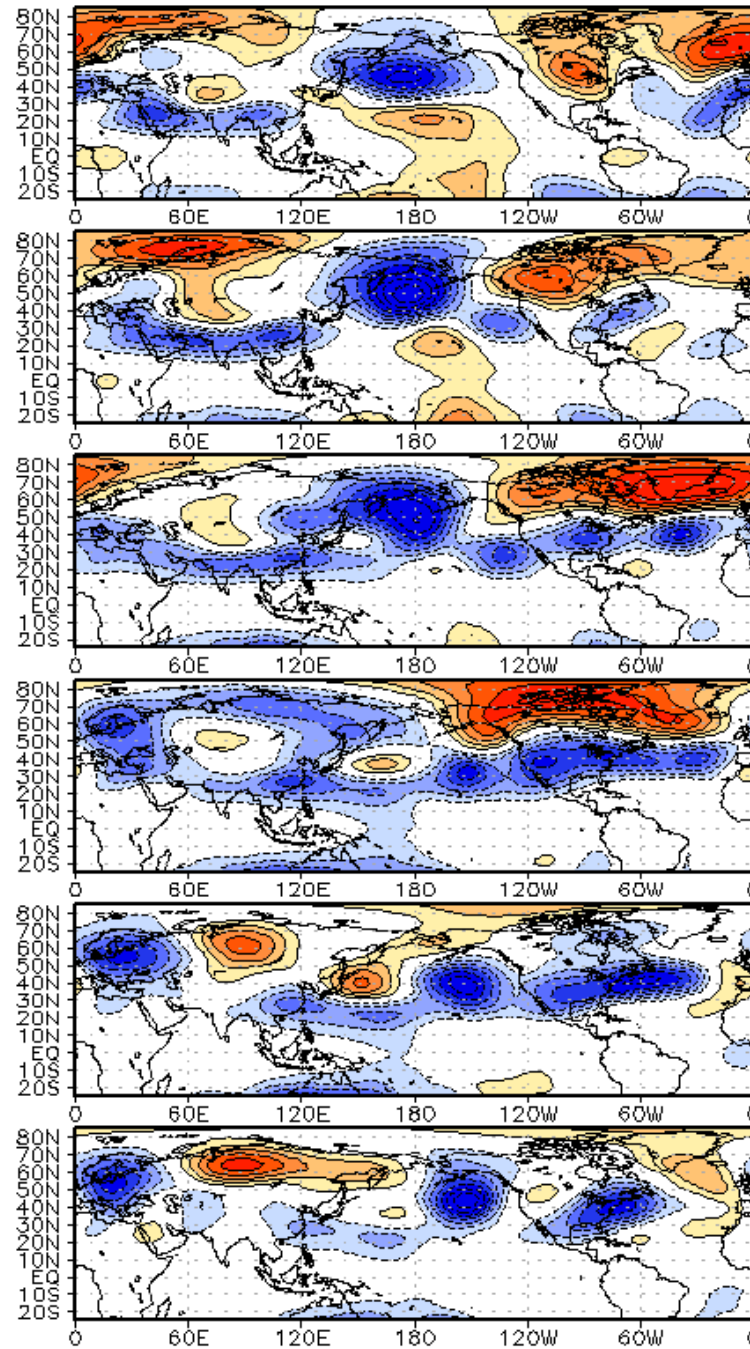




# Week 2 – Temperature and Precipitation



WHMJO Phase 7 z200 Lagged Composite (fma)

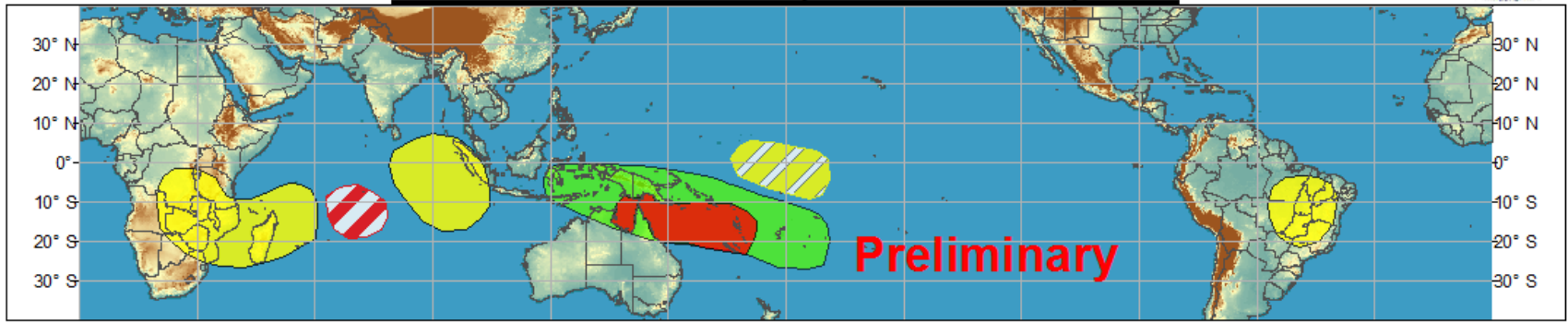




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