

Global Tropics Hazards And Benefits Outlook

December 11, 2012

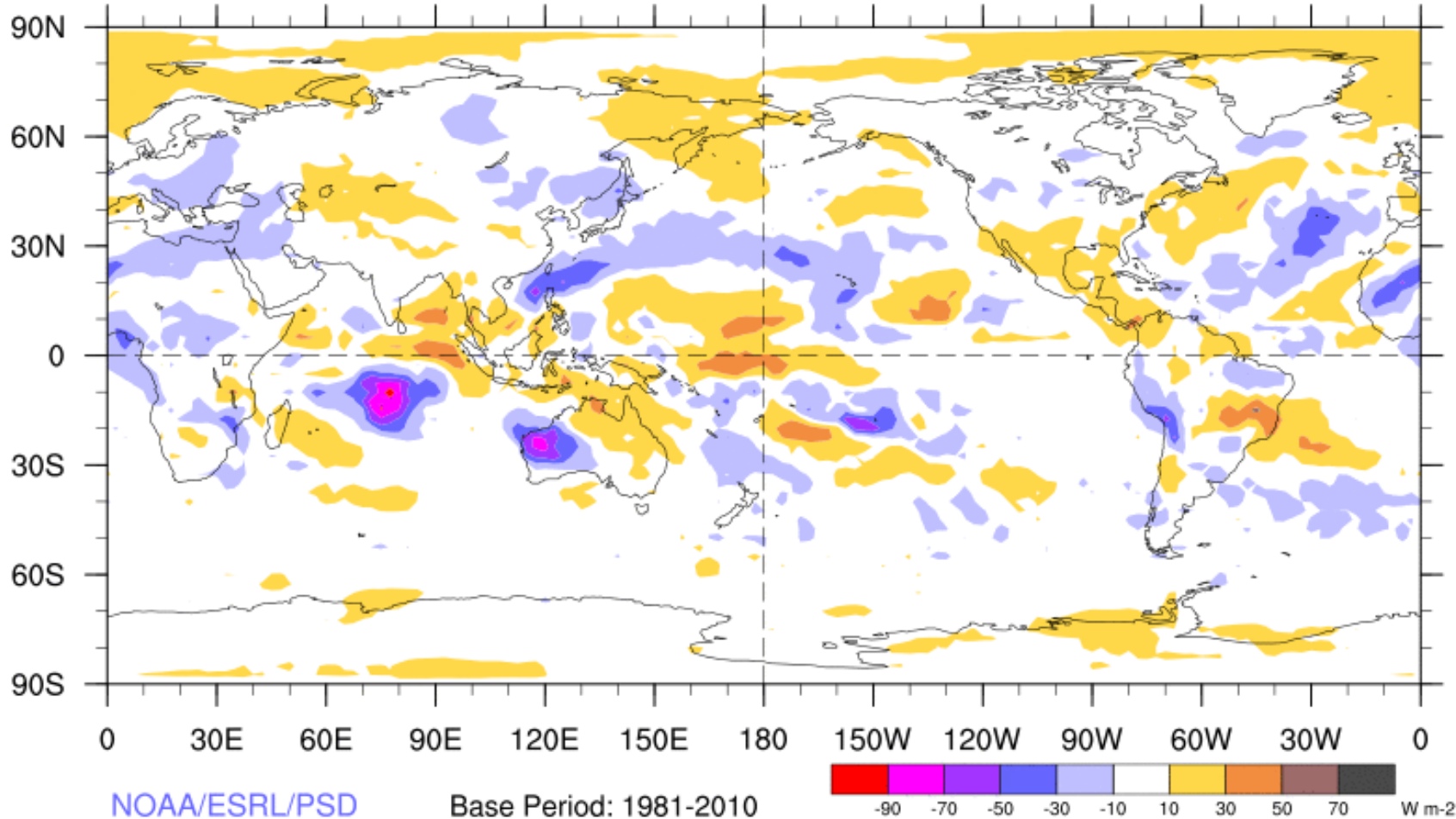
Stephen Baxter

Outline

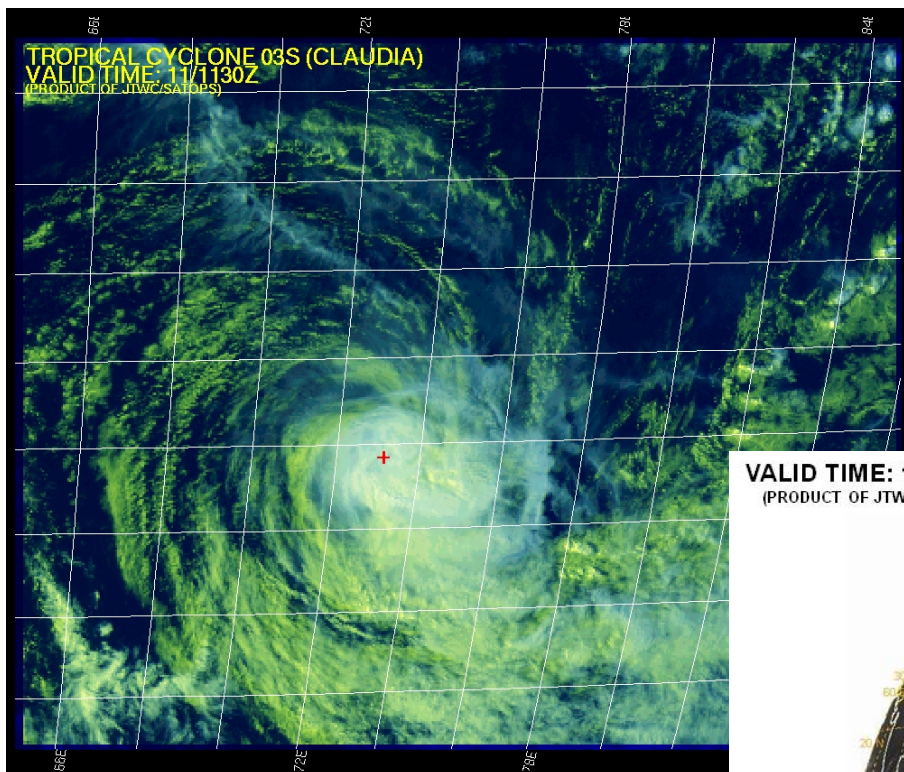
1. Review of Recent Conditions
2. Synopsis of Climate Modes
3. GTH Outlook and Forecast Discussion

7-Day Average OLR Anomaly

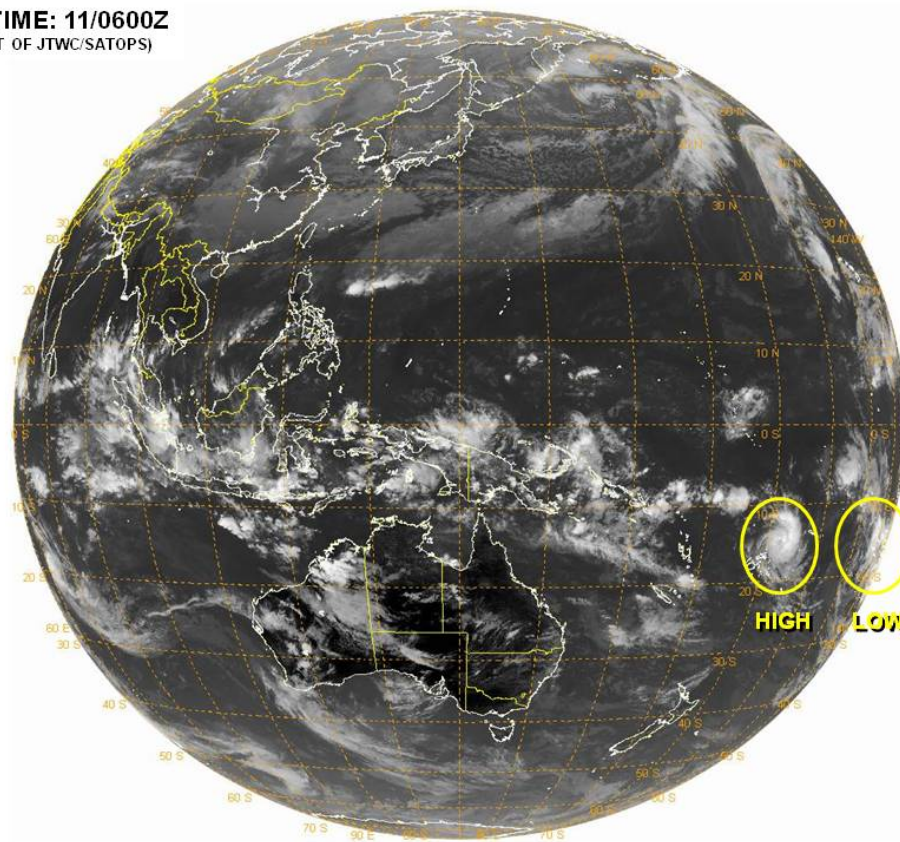
2012/12/03 - 2012/12/09

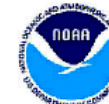


Tropical Cyclone Review

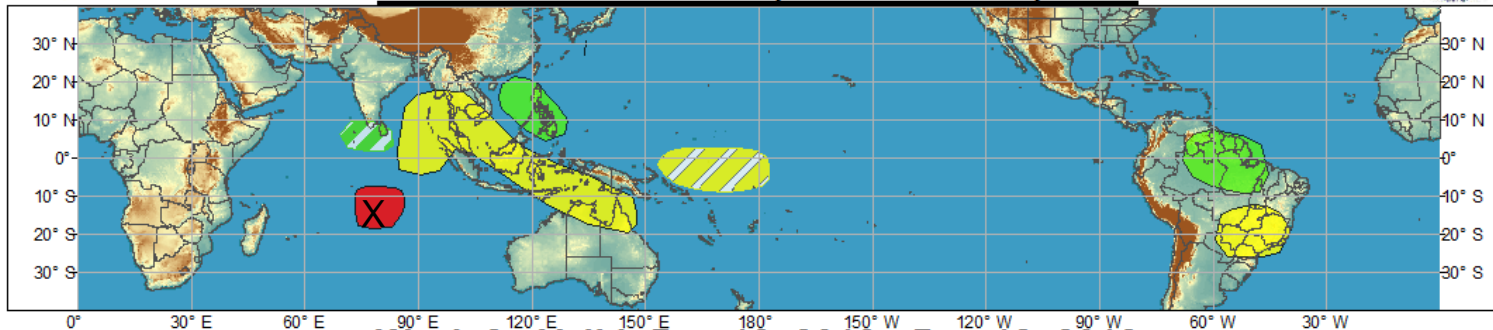


VALID TIME: 11/0600Z
(PRODUCT OF JTWC/SATOPS)





Week 1 - Valid: Dec 05, 2012 - Dec 11, 2012

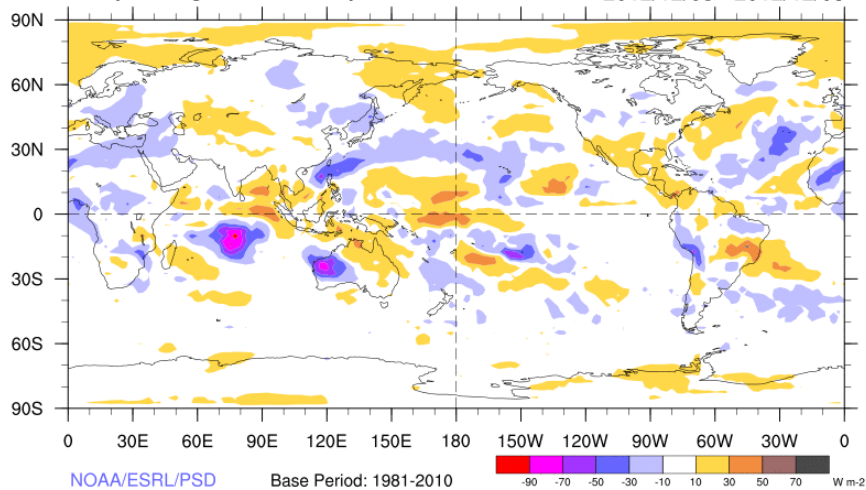


Week 2 - Valid: Dec 05, 2012 - Dec 11, 2012



7-Day Average OLR Anomaly

2012/12/03 - 2012/12/09



Outlook Review

Synopsis of Climate Modes

ENSO:

- ENSO-neutral conditions continue and ENSO-neutral is favored during the Northern Hemisphere winter 2012-13.

MJO and other subseasonal variability:

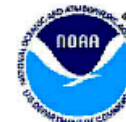
- The MJO has remained weak during the past week, while other sub-seasonal modes have become less coherent as well.
- Dynamical models are in better agreement that the MJO is more likely to emerge in phases 1 or 2 by late in Week-1.
- There is still some westward propagating convection associated with an equatorial Rossby wave.

Extratropics:

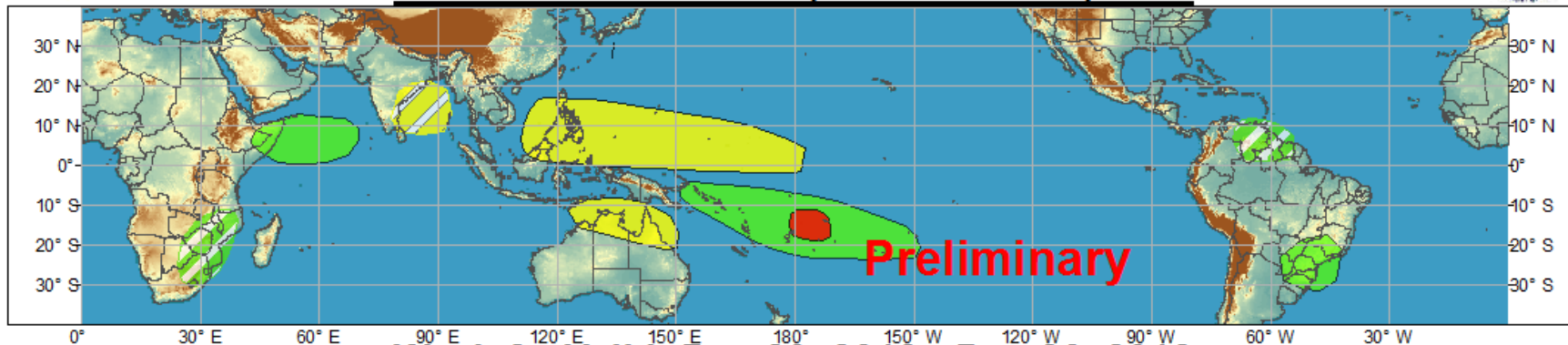
- AO/NAO forecast to be negative to neutral over the next two weeks. Additionally, a negative PNA pattern is expected, but not canonical. Tropical forcing of the mid-latitudes remains unclear at this time, but there is some potential interaction on the horizon with reinvigorated MJO.



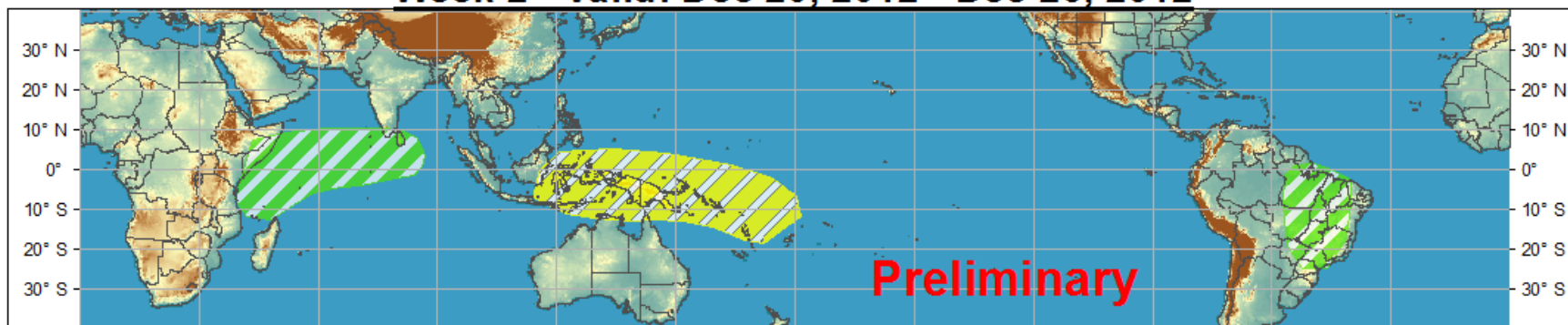
Global Tropical Hazards/Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Dec 13, 2012 - Dec 19, 2012



Week 2 - Valid: Dec 20, 2012 - Dec 26, 2012



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: 12/11/2012

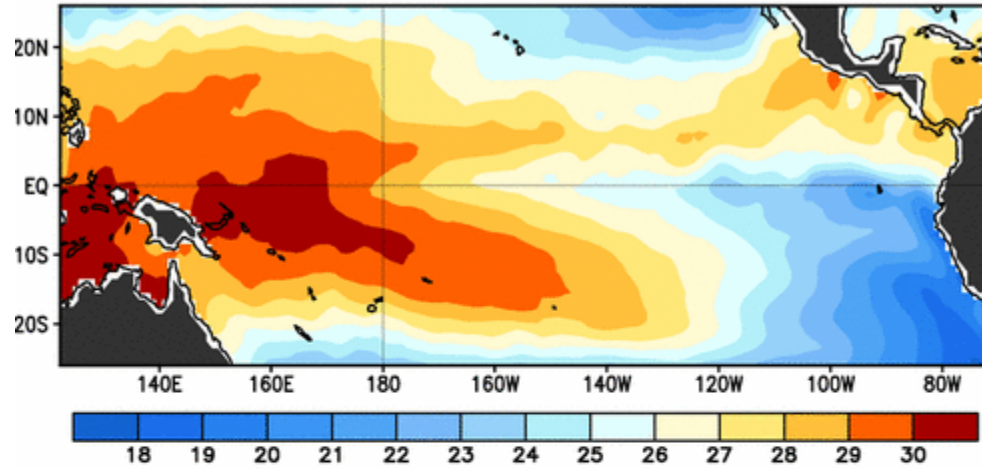
Forecaster: Baxter

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.

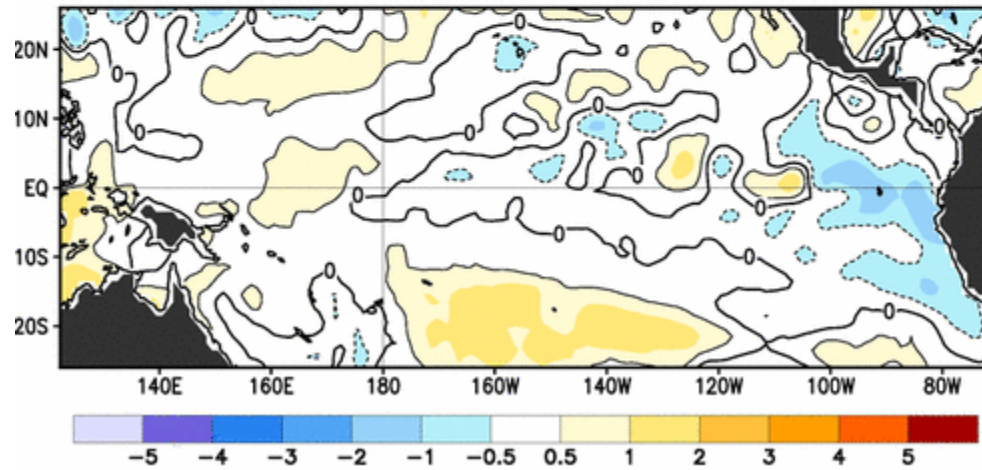


SST Observations

Observed Sea Surface Temperature (°C)



Observed Sea Surface Temperature Anomalies (°C)

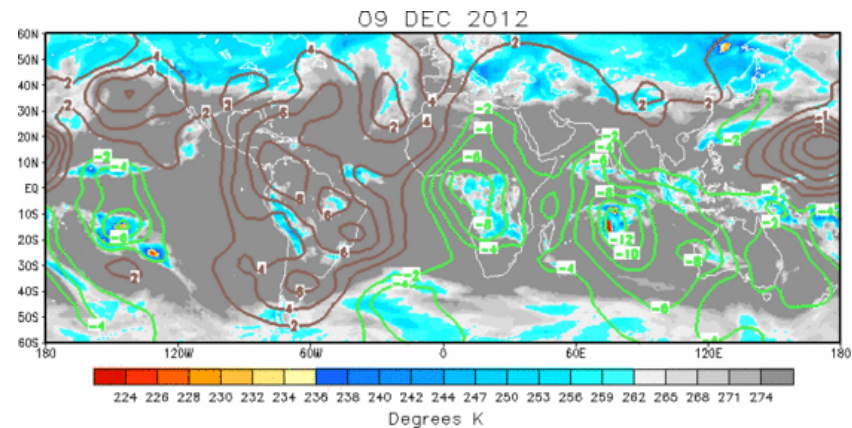
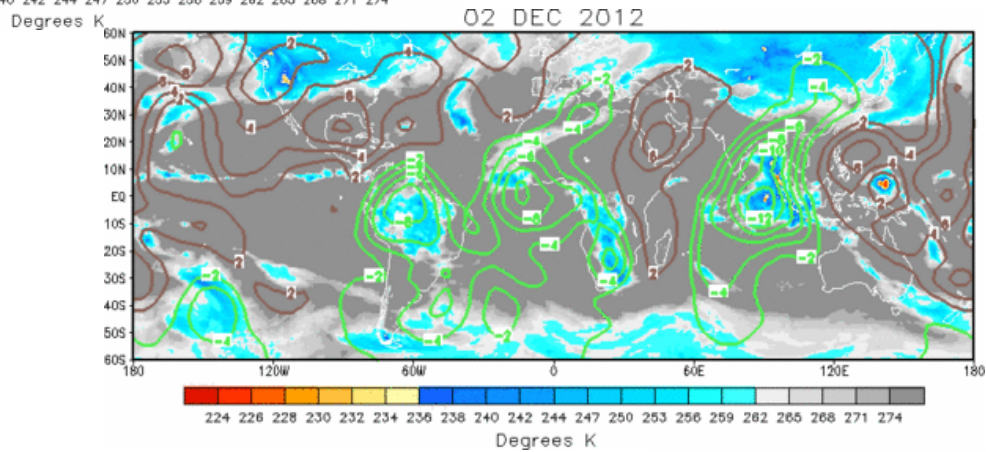
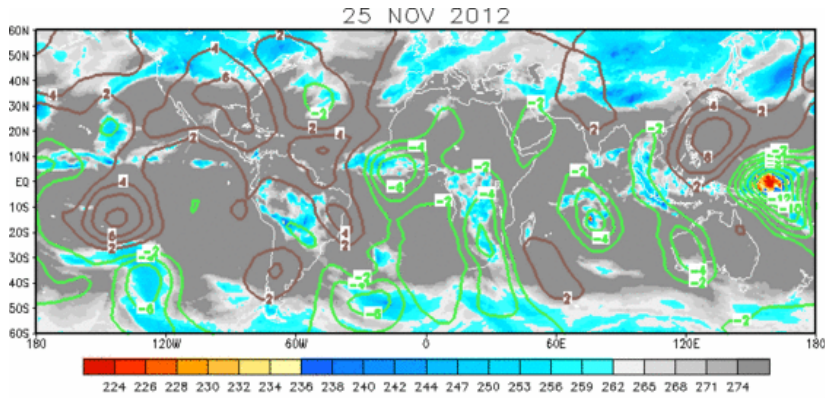


7-day Average Centered on 05 December 2012

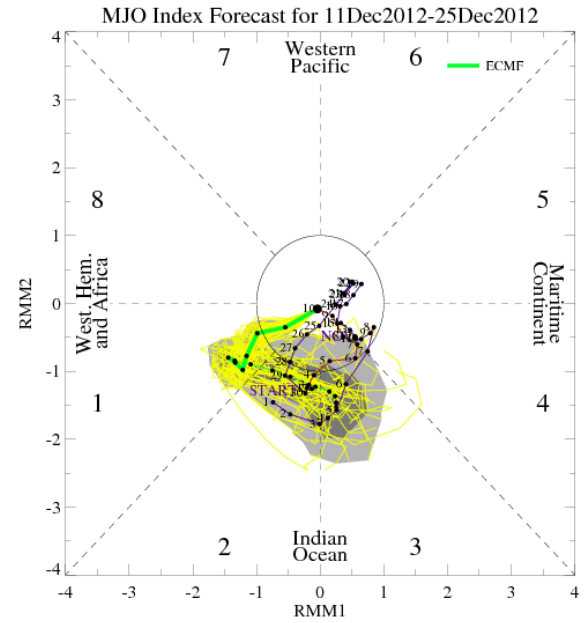
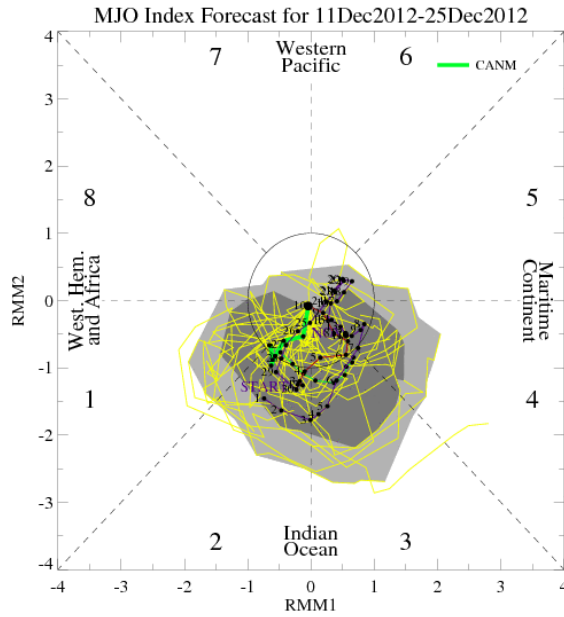
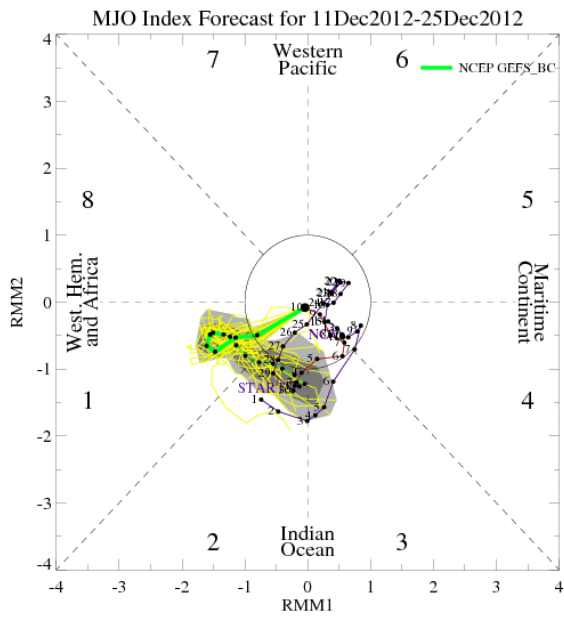
IR Satellite & 200-hpa Velocity Potential Anomalies

Green: Enhanced Divergence

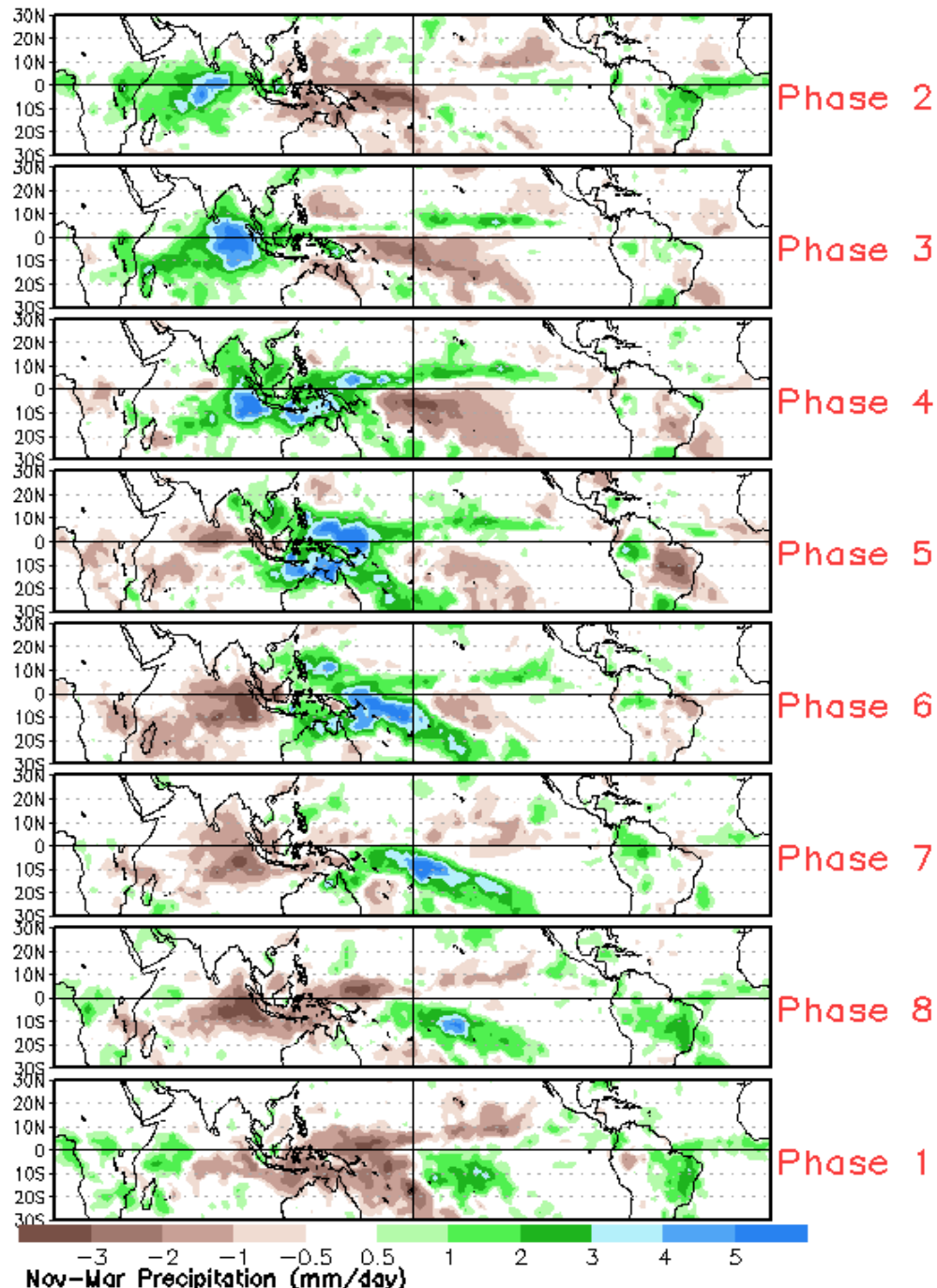
Brown: Enhanced Convergence



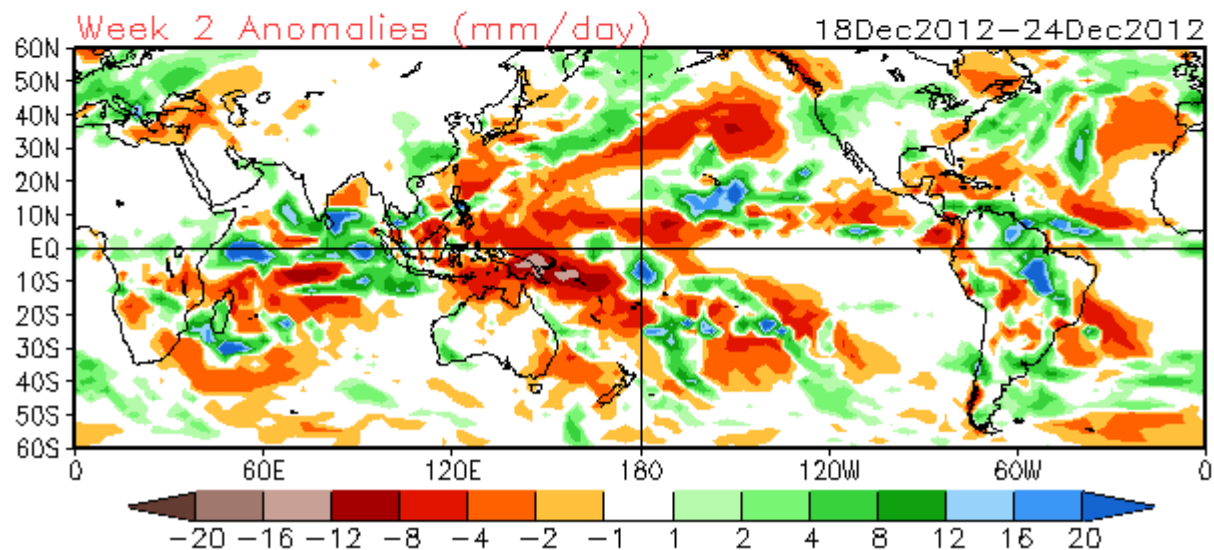
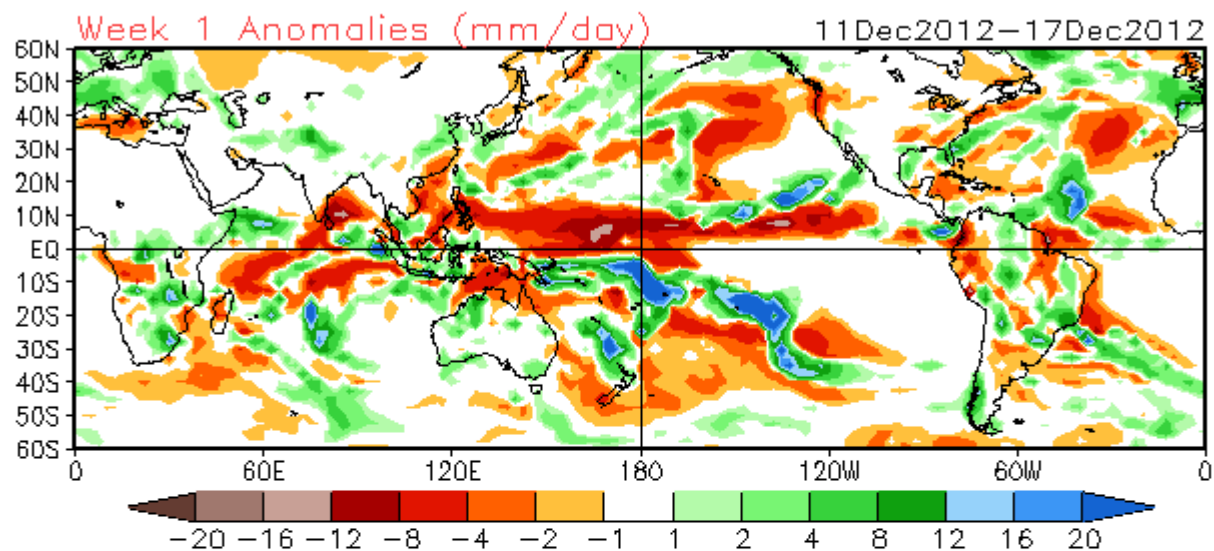
MJO Observation/Forecast



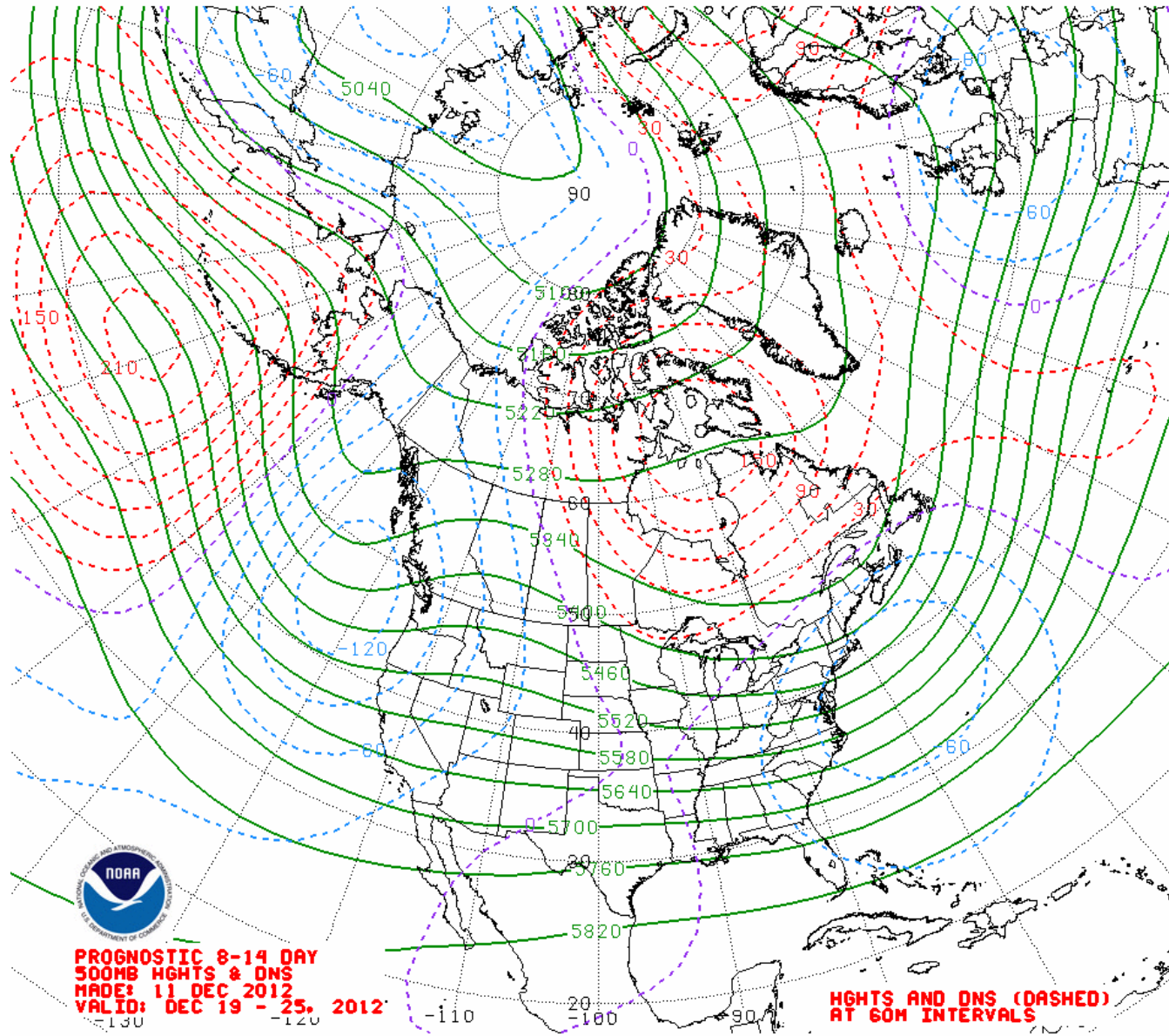
Average Conditions when the MJO is present (Nov-Mar)



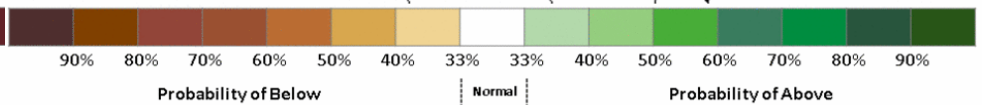
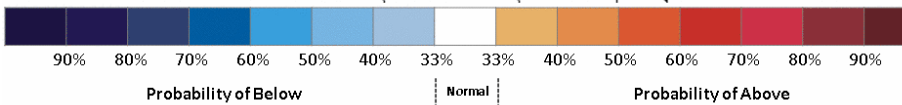
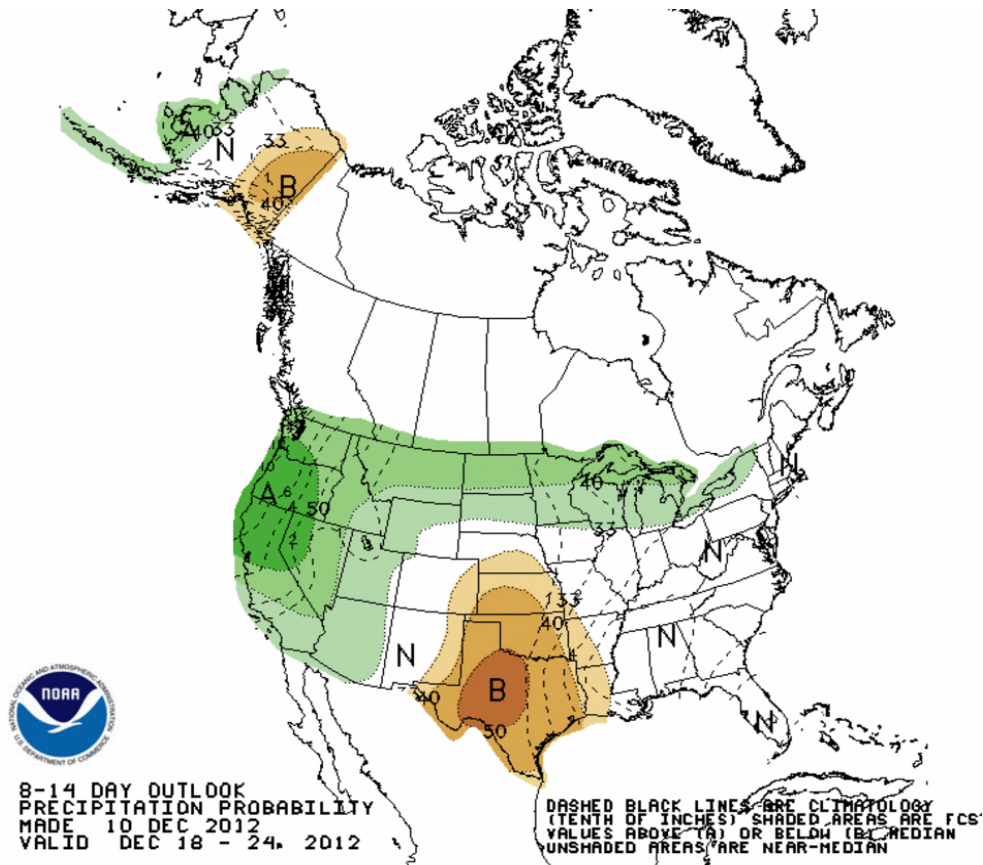
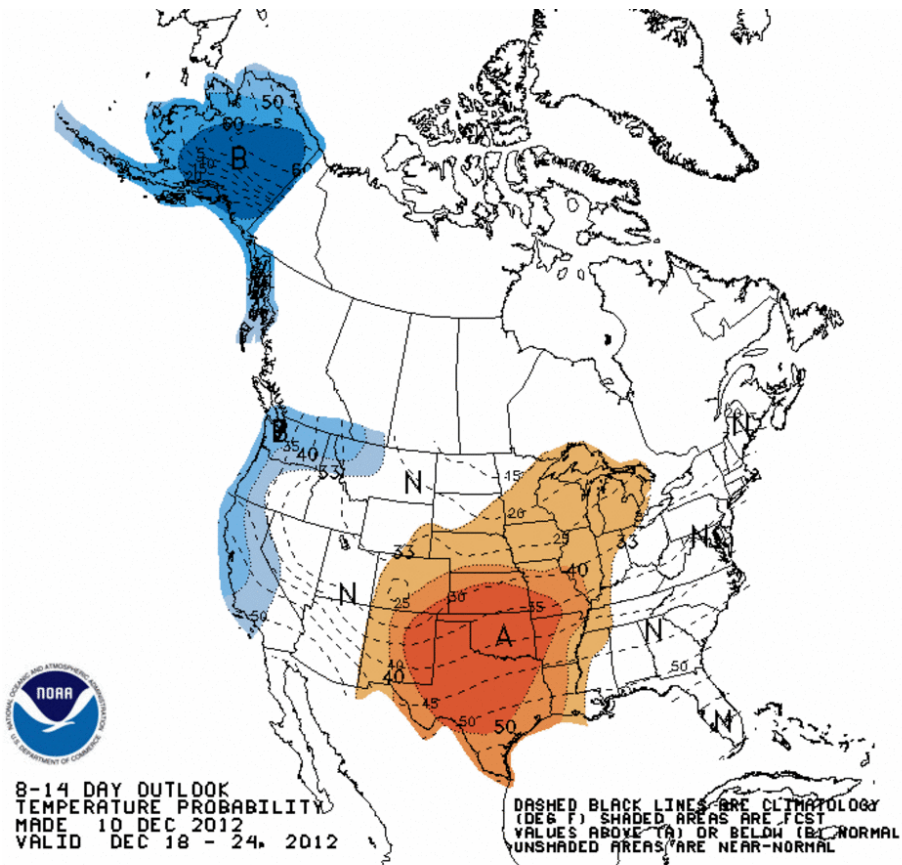
CFSv2 Weeks 1 & 2 Precipitation
16 Member Ensemble Mean Forecast from 10Dec2012



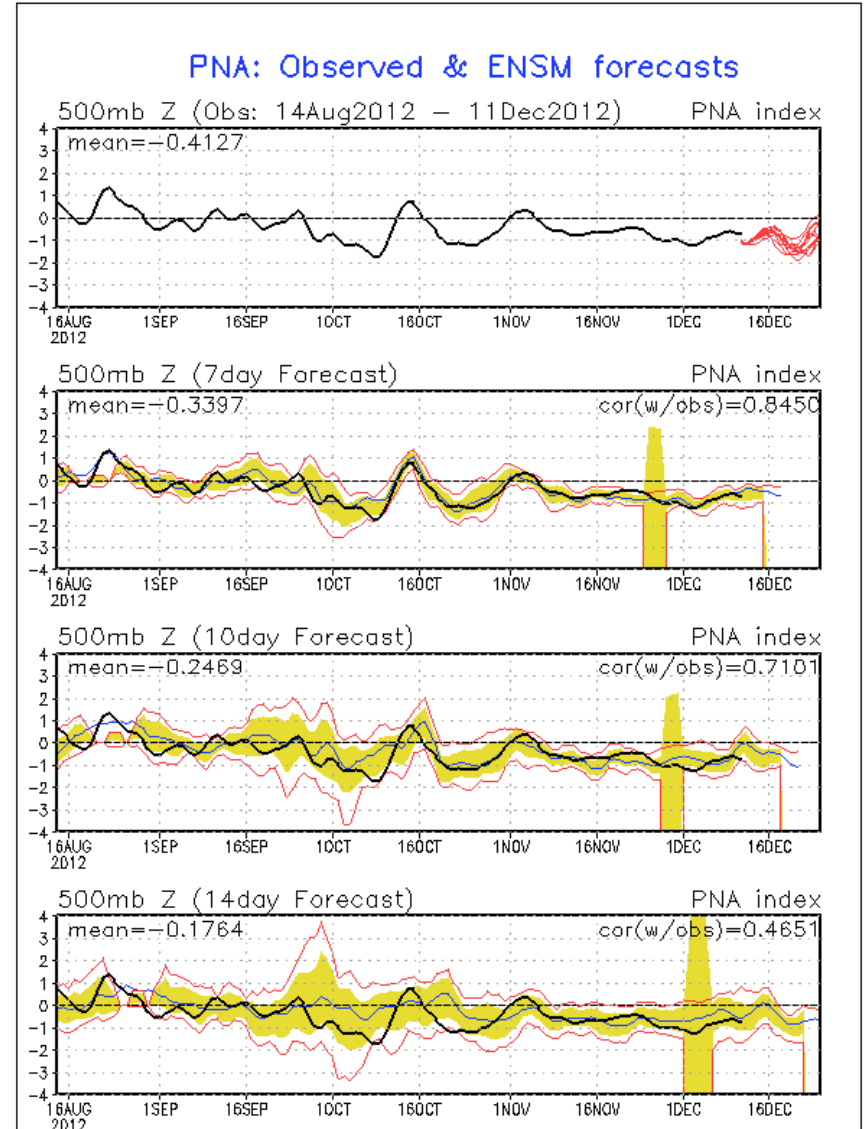
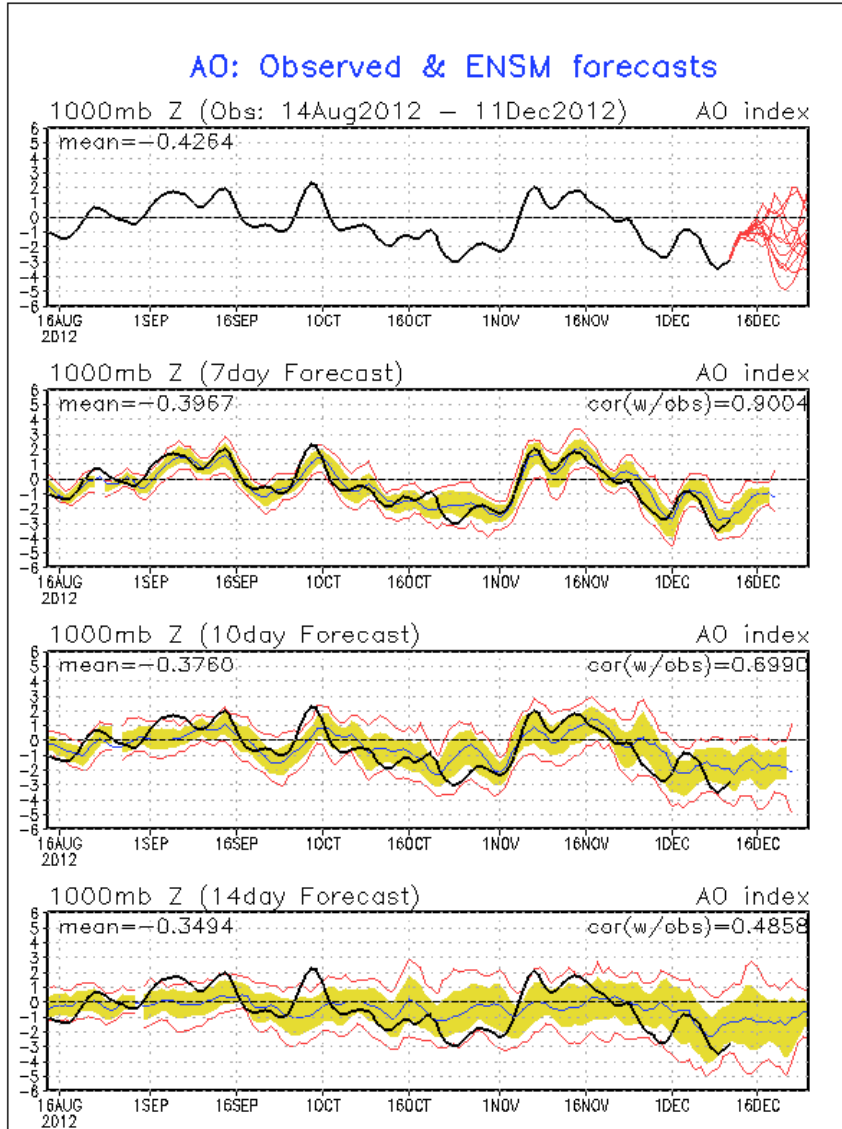
Week 2 500-hPa Manual Chart



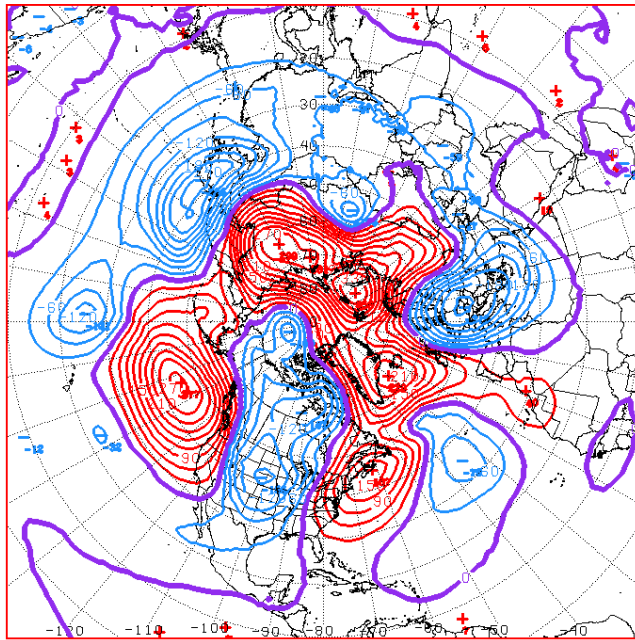
Week 2 -- Temperature and Precipitation



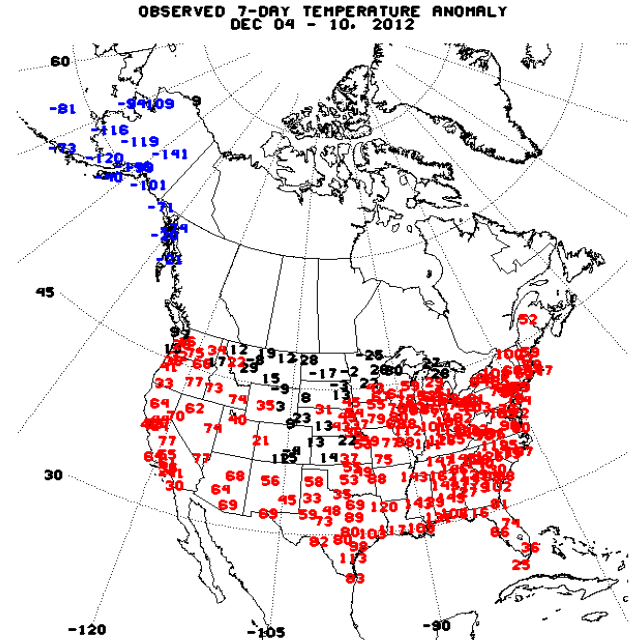
Recent AO and PNA Observations and GEFS Forecast



Last Week's Observations and PNA/AO Composite



0-4 OBSVD 500HS 70 MEAN OBSVD DNS
CPC MAP MADE 12 11 2012 CNTD 2012/12/07



(1981-2010 CLIMATE) UNITS ARE 10TH F DEG
MAP CREATED 2012 DEC 11

DJF Pentad $AO < -0.5$, $PNA < -0.5$ $N=25$

