

Global Tropics Hazards And Benefits Outlook

January 29, 2013

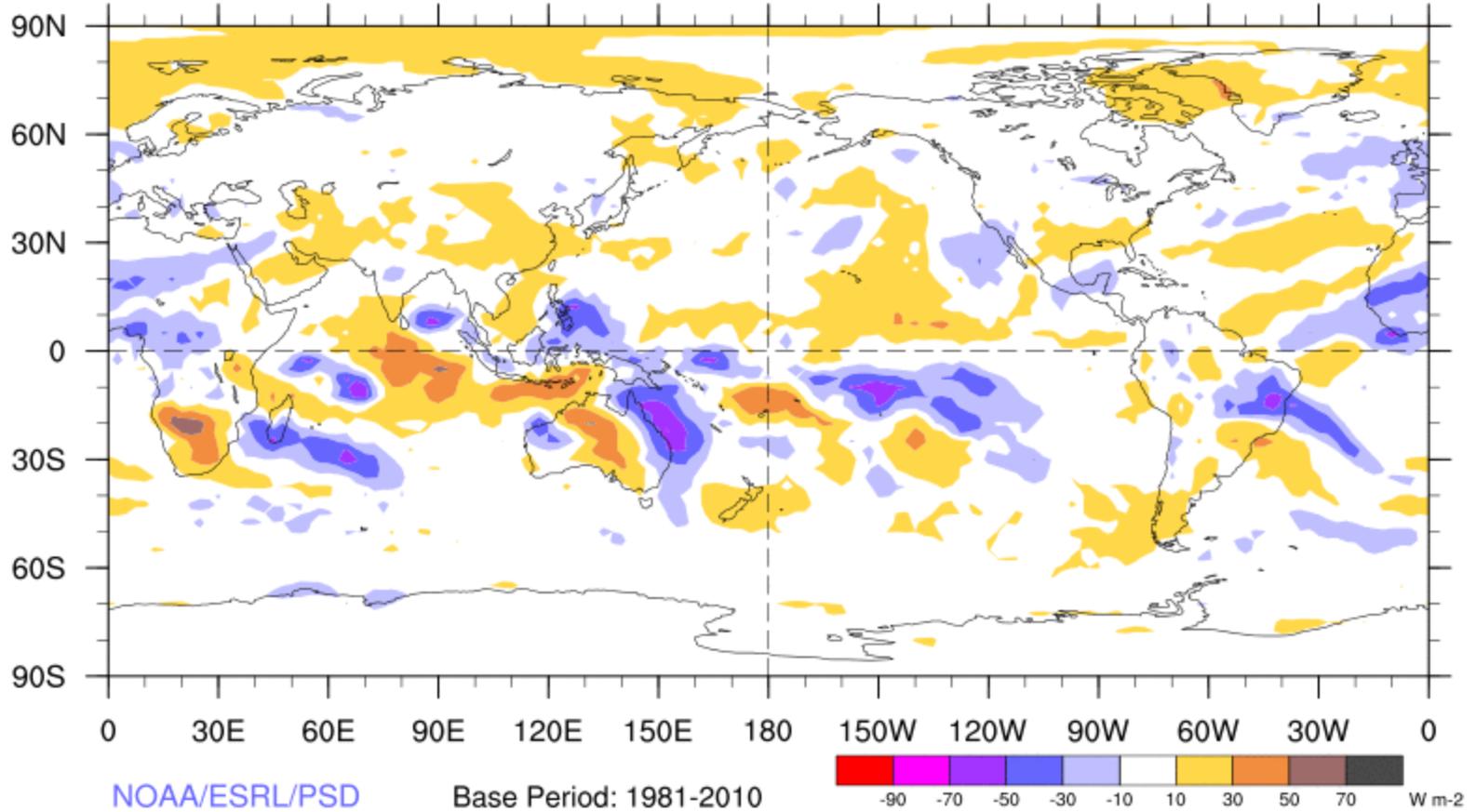
Jon Gottschalck

Outline

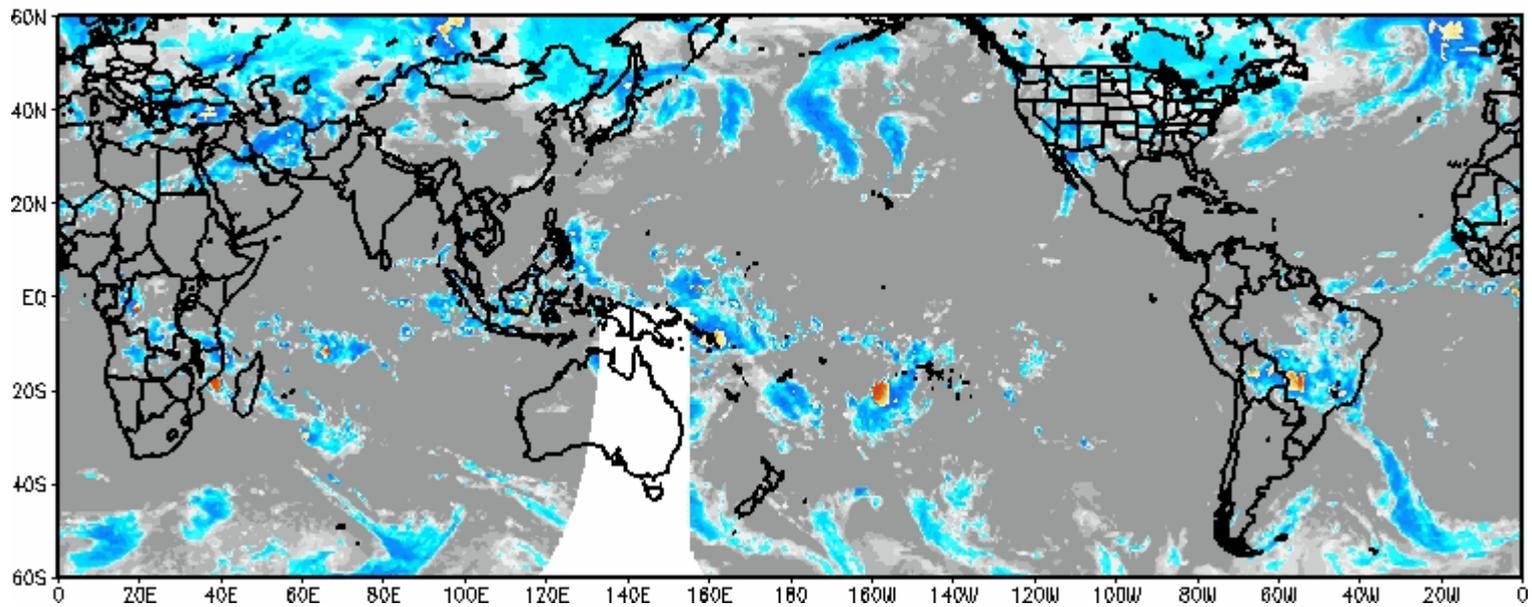
1. Review of Recent Conditions
2. Synopsis of Climate Modes
3. GTH Outlook and Forecast Discussion

7-Day Average OLR Anomaly

2013/01/21 - 2013/01/27



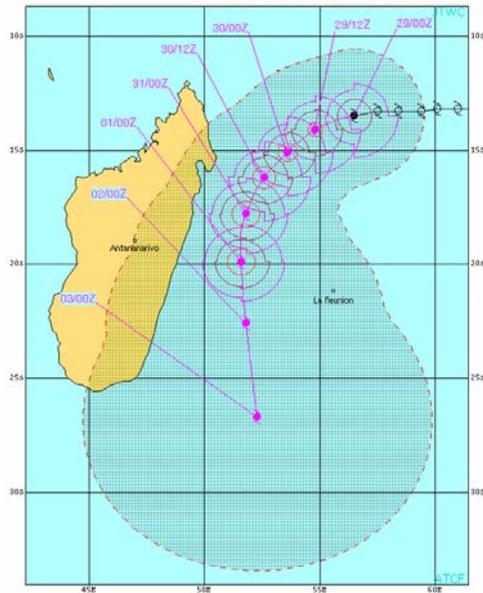
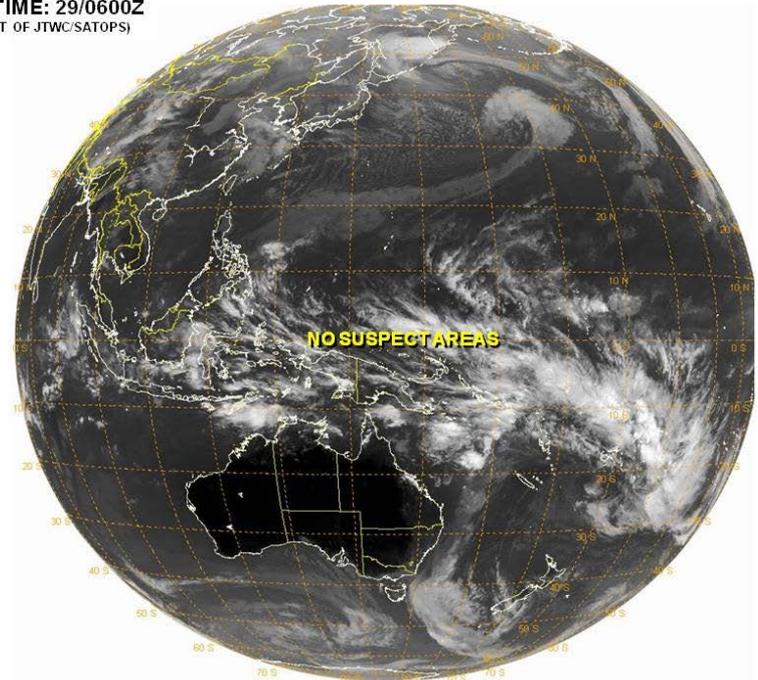
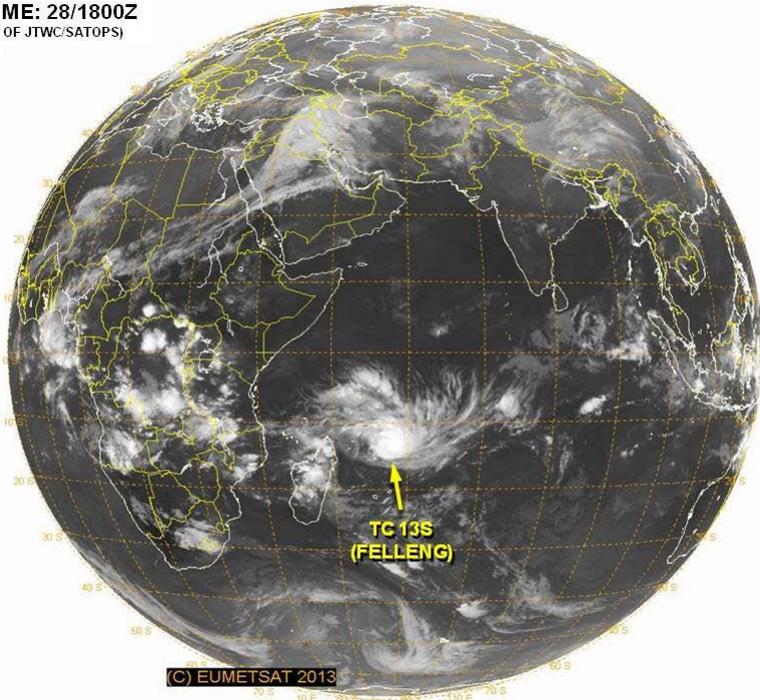
IR Temperatures
0900 UTC 26 JAN 2013



Tropical Cyclone Review

VALID TIME: 28/1800Z
(PRODUCT OF JTWC/SATOPS)

VALID TIME: 29/0600Z
(PRODUCT OF JTWC/SATOPS)



TROPICAL CYCLONE 13S (FELLENG) WARNING #1
VIETNAM PORT: 2800
CROSSING POINT: 2800 10 55 54.5E
MOVING 260 DEGREES TRUE AT 10 KNOTS
MAXIMUM SIGNIFICANT WAVE HEIGHT: 30 FEET

28/00Z	WINDS 085 KTS	GUSTS TO 080 KTS
28/12Z	WINDS 075 KTS	GUSTS TO 070 KTS
29/00Z	WINDS 085 KTS	GUSTS TO 100 KTS
29/12Z	WINDS 095 KTS	GUSTS TO 110 KTS
30/00Z	WINDS 100 KTS	GUSTS TO 115 KTS
30/12Z	WINDS 105 KTS	GUSTS TO 120 KTS
31/00Z	WINDS 095 KTS	GUSTS TO 110 KTS
31/12Z	WINDS 085 KTS	GUSTS TO 100 KTS

SEA TO	MS	SWL
WAVE_LENGTH	520	81/85C
PT_PERIOD	204	63/68S

BEAKING AND DISTANCE	DIR	DEPT	TAV	OMG	CPDZ
WAVE_LENGTH	324	561	24		
PT_PERIOD	243	331	24		
WAVE_LENGTH	289	343	48		
PT_PERIOD	209	256	48		
WAVE_LENGTH	211	322	72		
PT_PERIOD	279	231	72		

Q LESS THAN 14 KNOTS
Q 14-63 KNOTS
Q MORE THAN 63 KNOTS
WAVE & SURGE CYCLE WAVE PERIODS IN BLACK
FORECAST CYCLONE POSITS IN COLOR

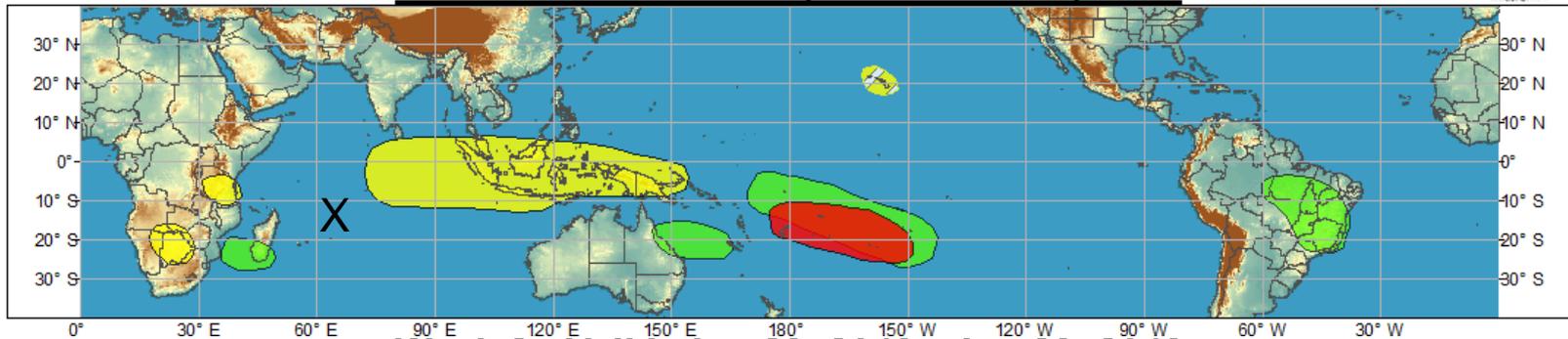




Global Tropical Hazards/Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Jan 23, 2013 - Jan 29, 2013

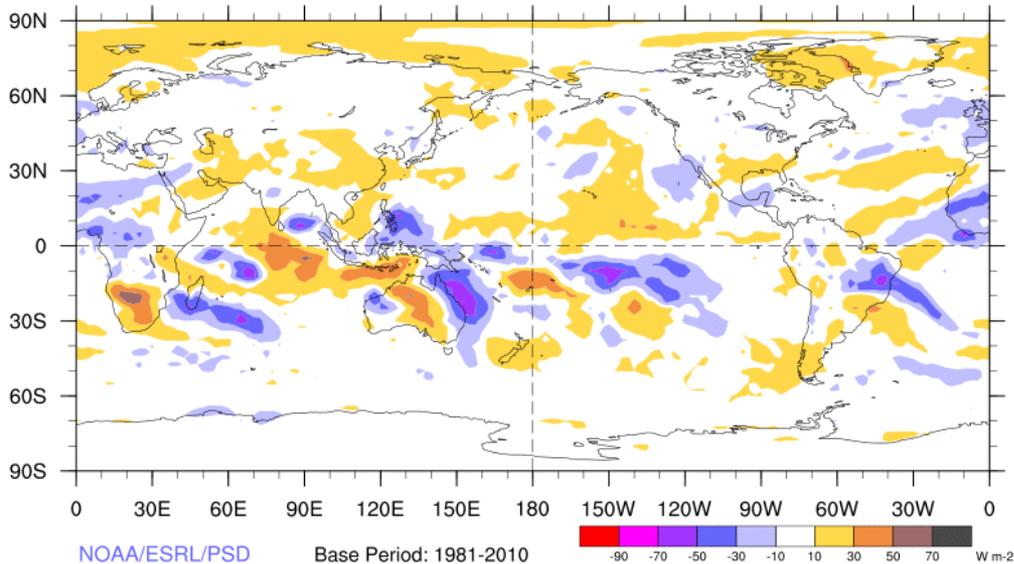


Week 2 - Valid: Jan 23, 2013 - Jan 29, 2013



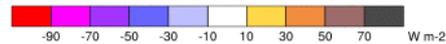
7-Day Average OLR Anomaly

2013/01/21 - 2013/01/27



NOAA/ESRL/PSD

Base Period: 1981-2010



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 over the past week but some observational indicators continued to become less coherent. The enhanced phase is centered across the western Hemisphere.
- Other factors (KWs and TCs) remain active, making MJO signal less clear. Dynamical model MJO index forecasts are in good agreement of renewed eastward propagation.
- Primarily based on dynamical model MJO index forecasts, the MJO is forecast to remain active with the enhanced convective phase shifting to Africa over the next 2 weeks.

Extratropics:

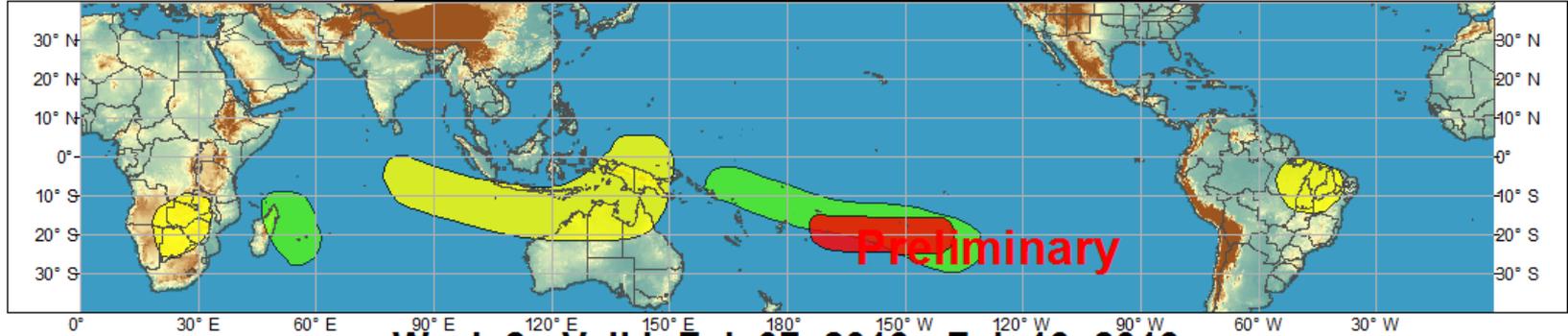
- Uncertainty is increasing considerably for mid-latitude impacts related to tropical forcing
- Large spread and variability in AO forecasts over next two weeks
- Extended range model guidance generally at odds with typical mid-latitude response



Global Tropical Hazards/Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Jan 31, 2013 - Feb 06, 2013



Week 2 - Valid: Feb 07, 2013 - Feb 13, 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: 01/29/2013

Forecaster: Gottschalck

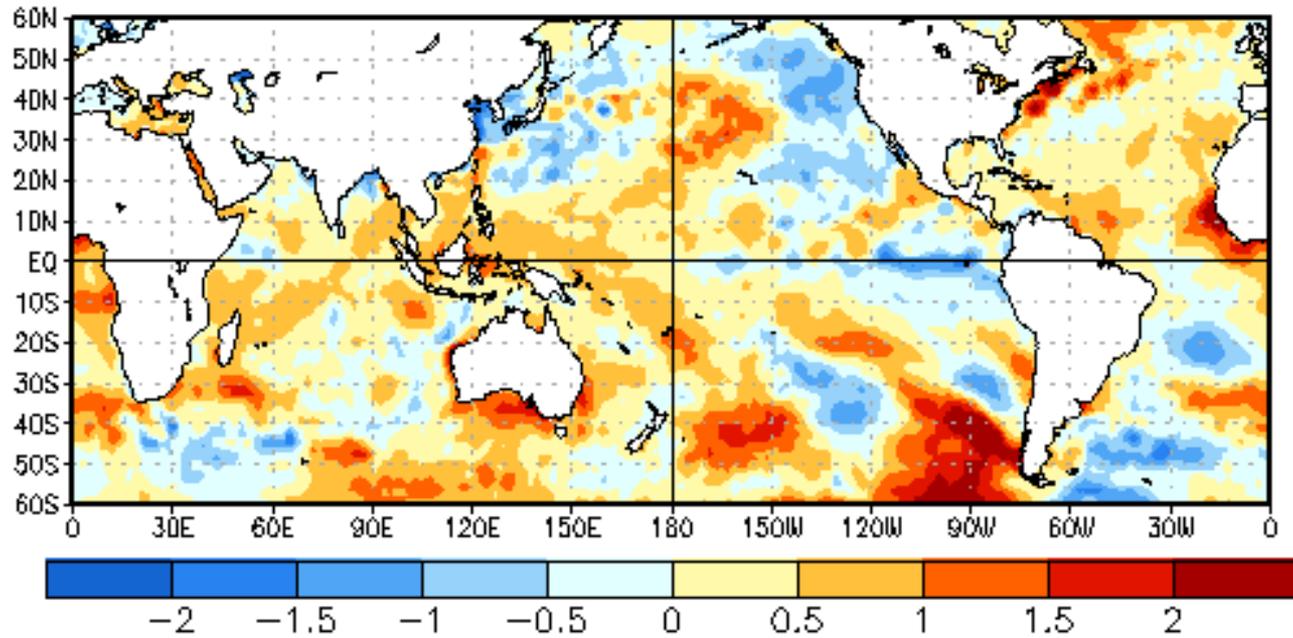
Product is updated once per week. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.



SST Observations

SST Anomalies (°C)

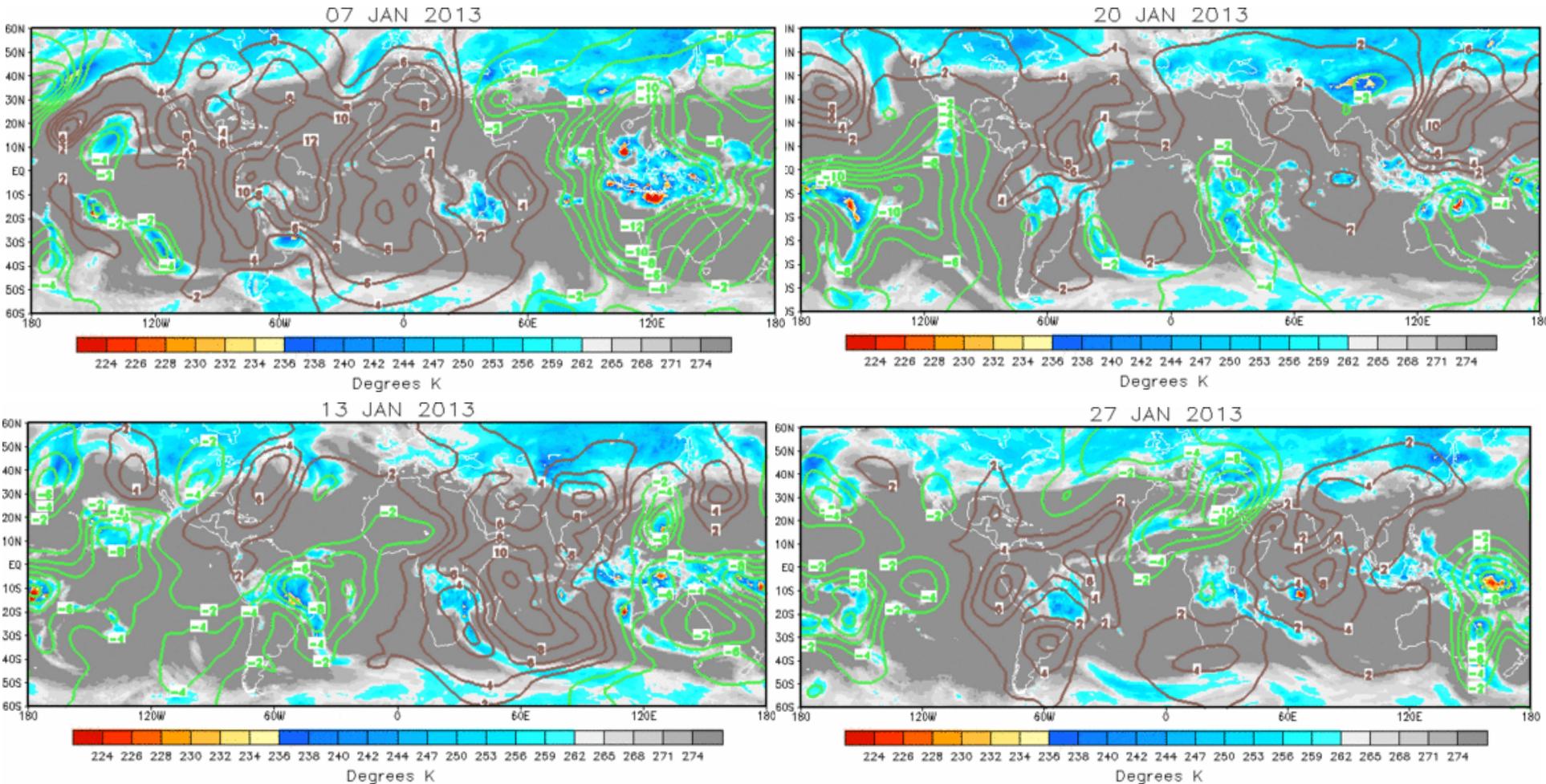
23 JAN 2013



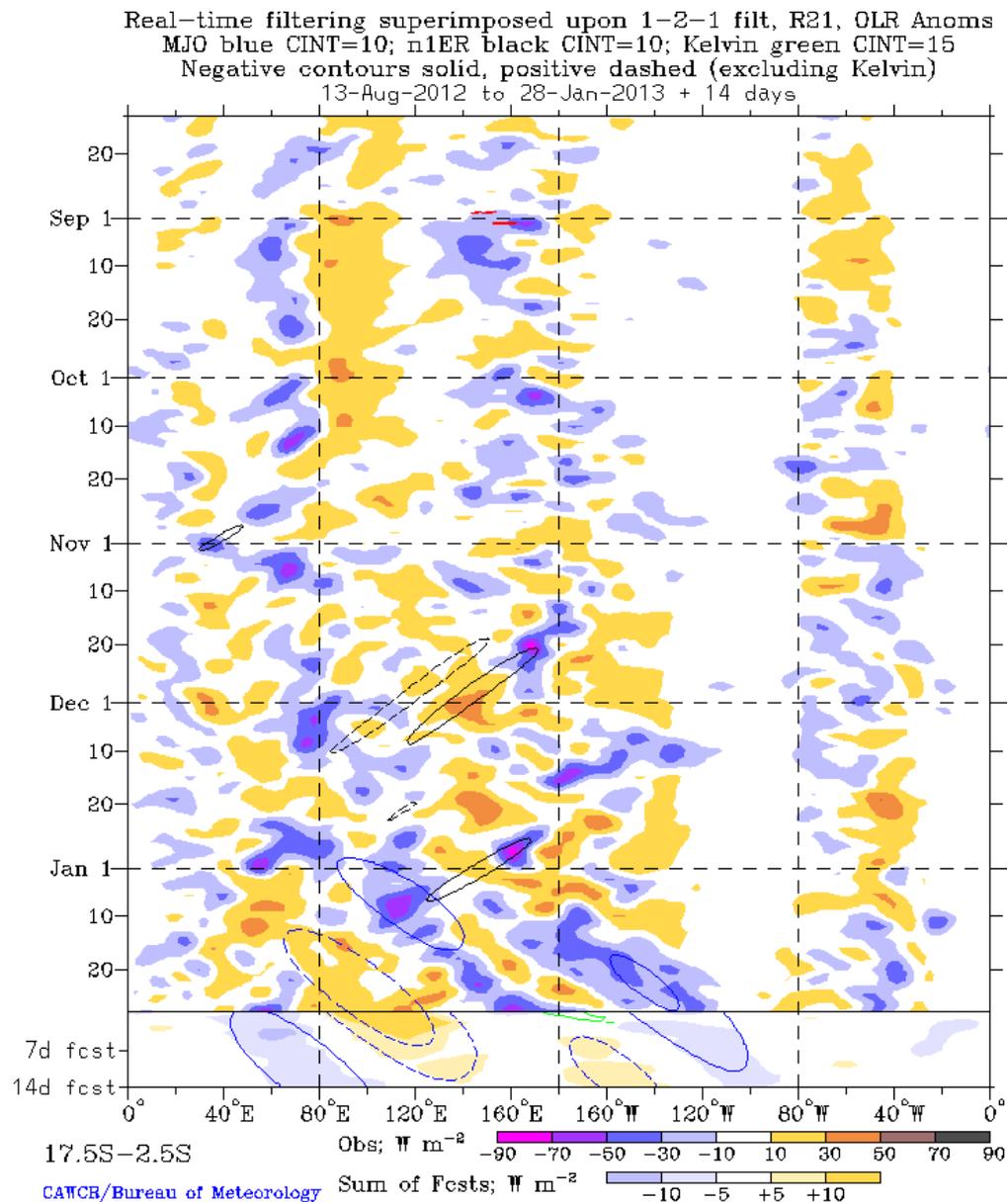
IR Satellite & 200-hpa Velocity Potential Anomalies

Green: Enhanced Divergence

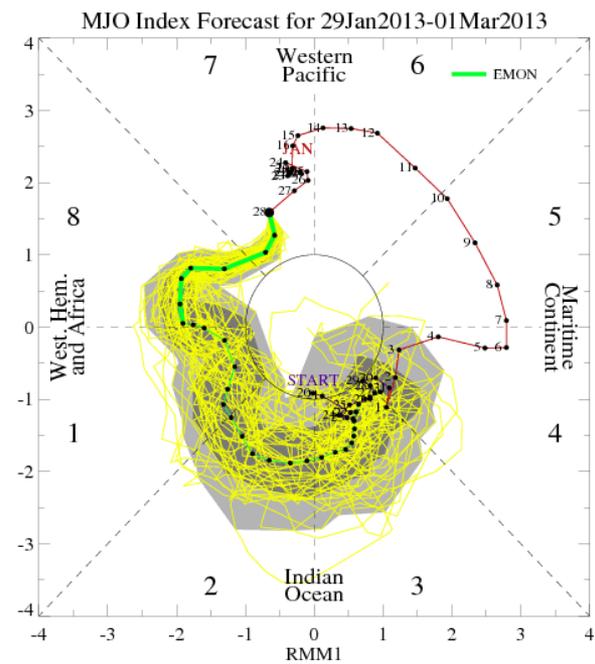
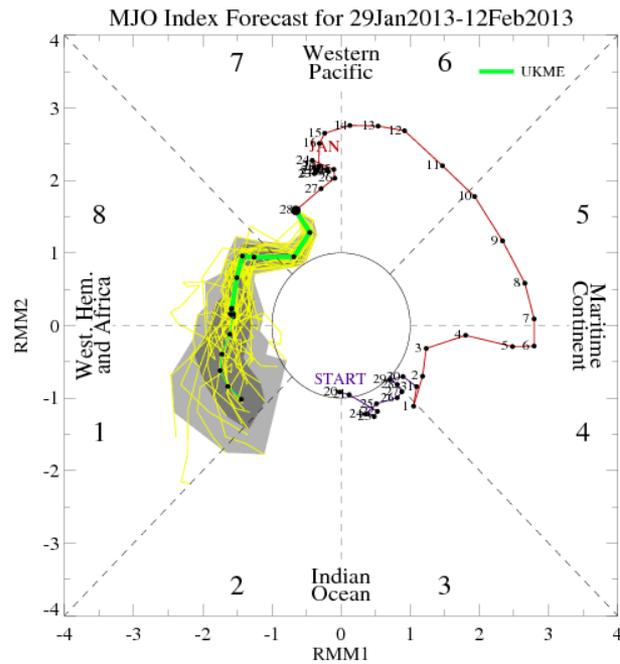
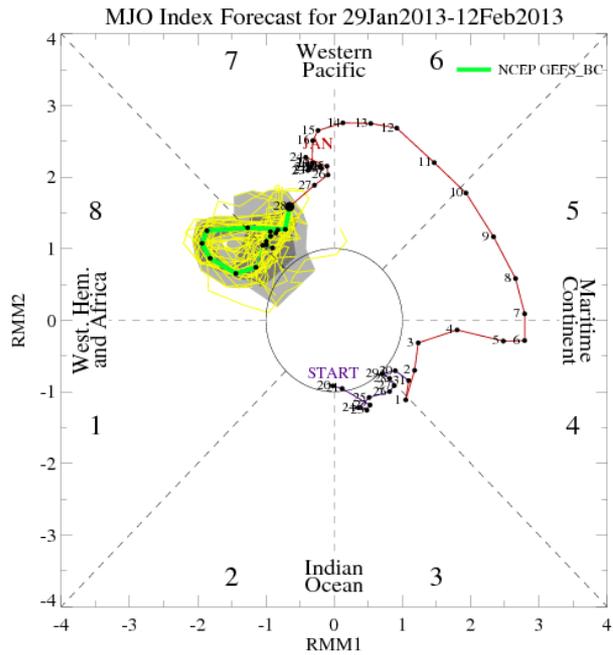
Brown: Enhanced Convergence



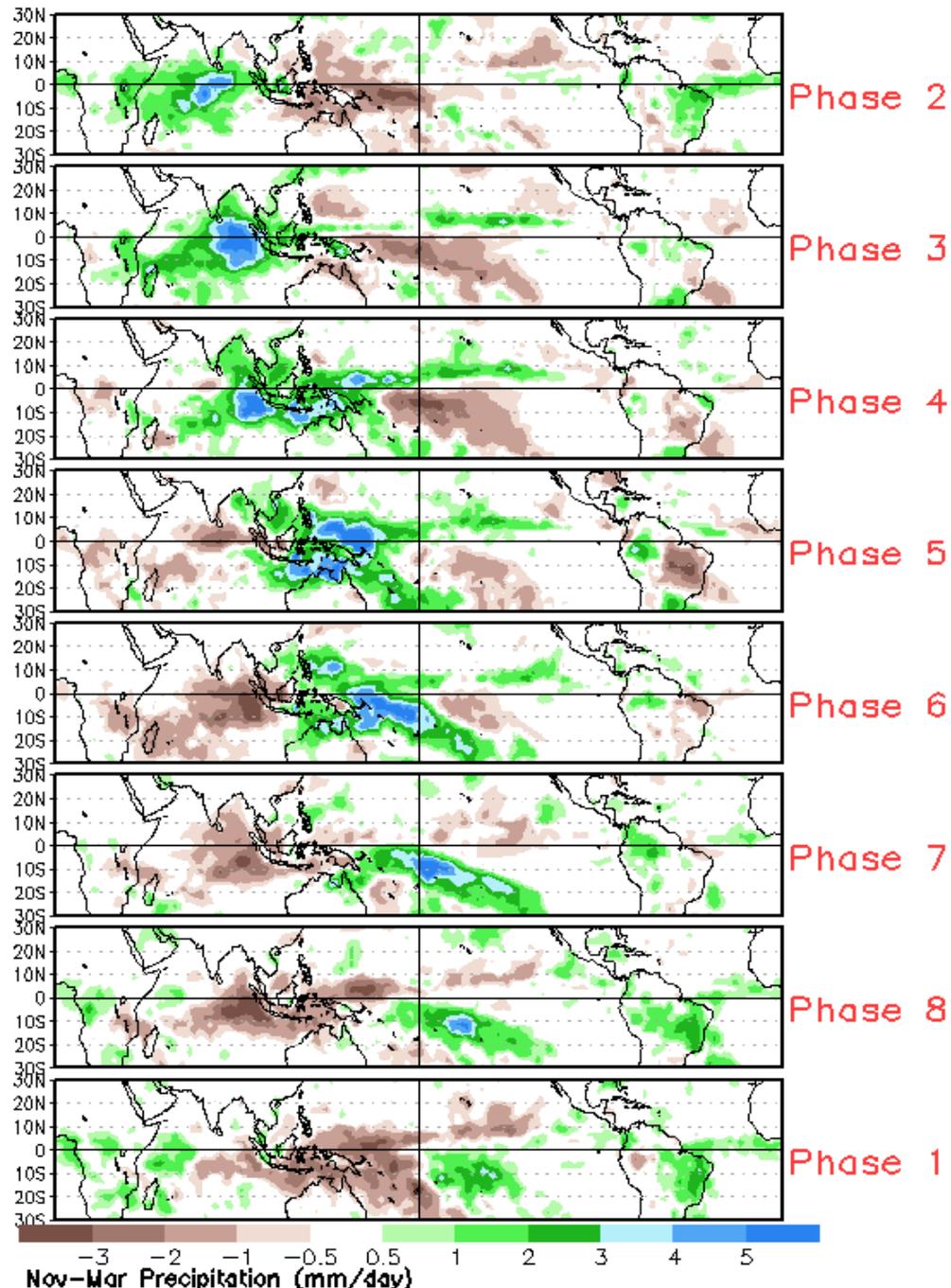
OLR Time-Longitude – Southern Hemisphere



MJO Observation/Forecast

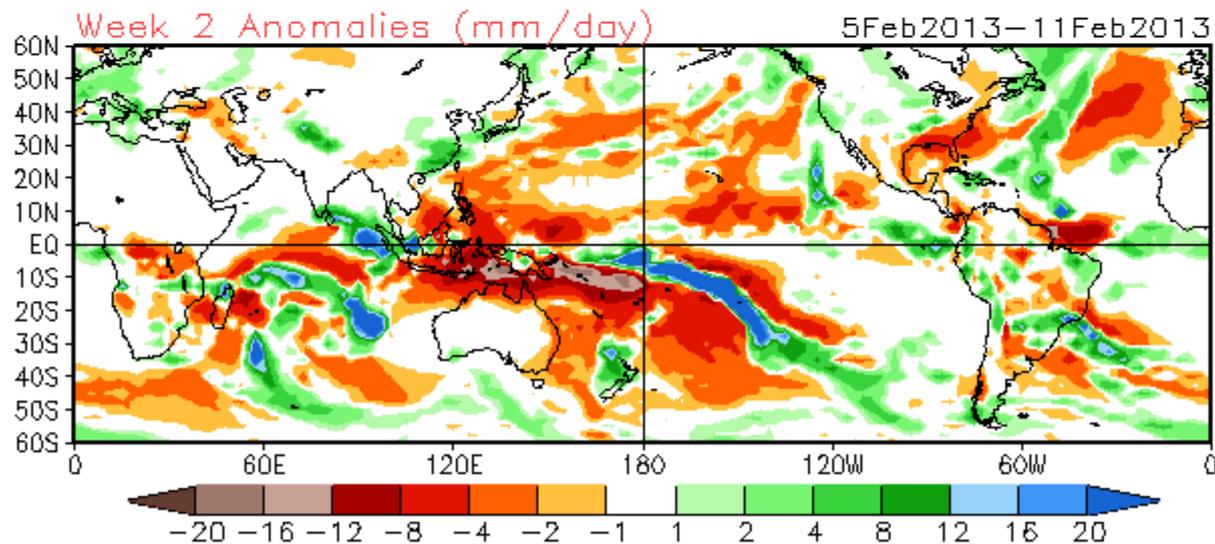
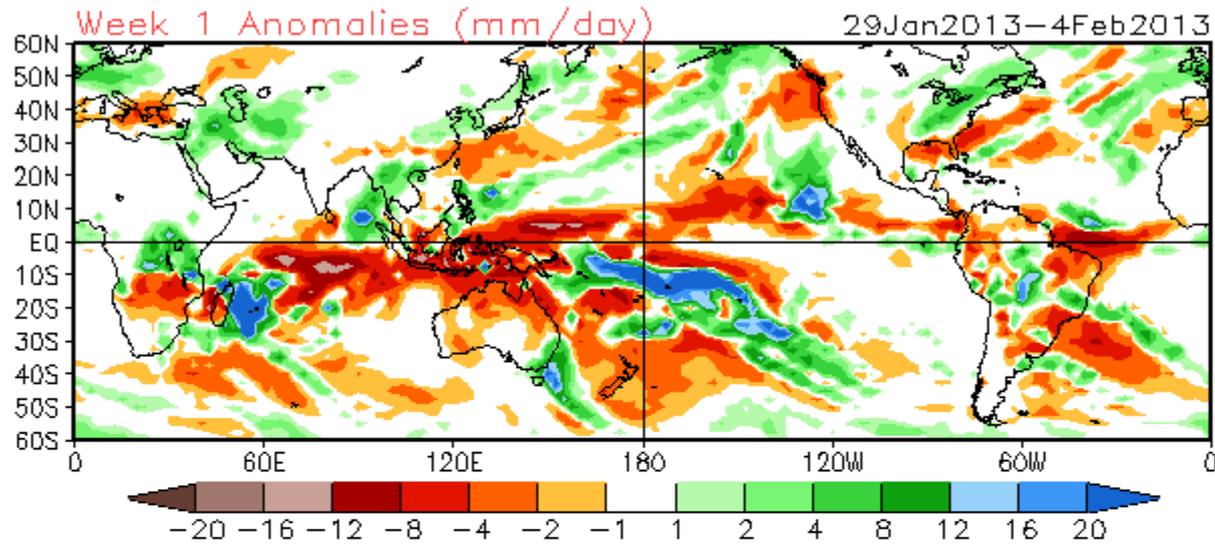


Average Conditions when the MJO is present (Nov-Mar)

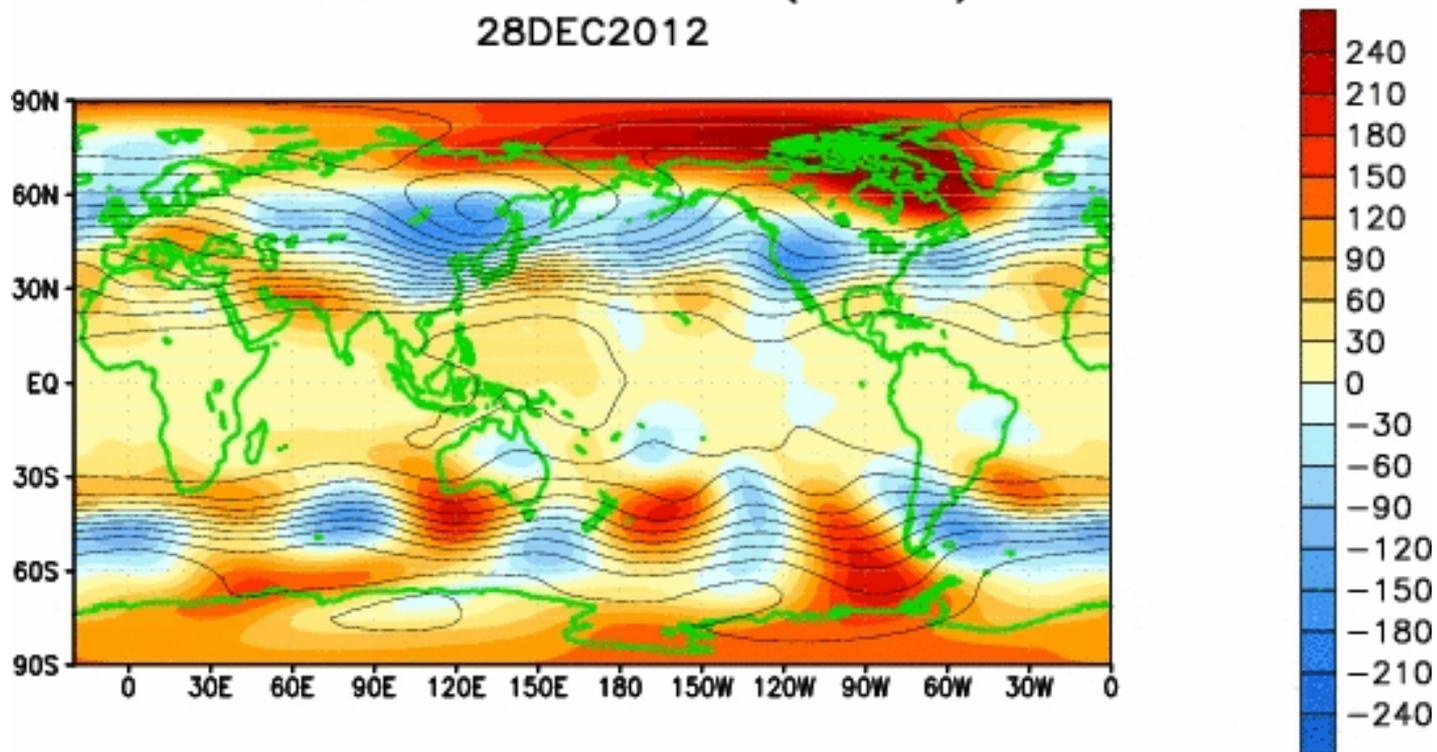


CFSv2 Weeks 1 & 2 Precipitation

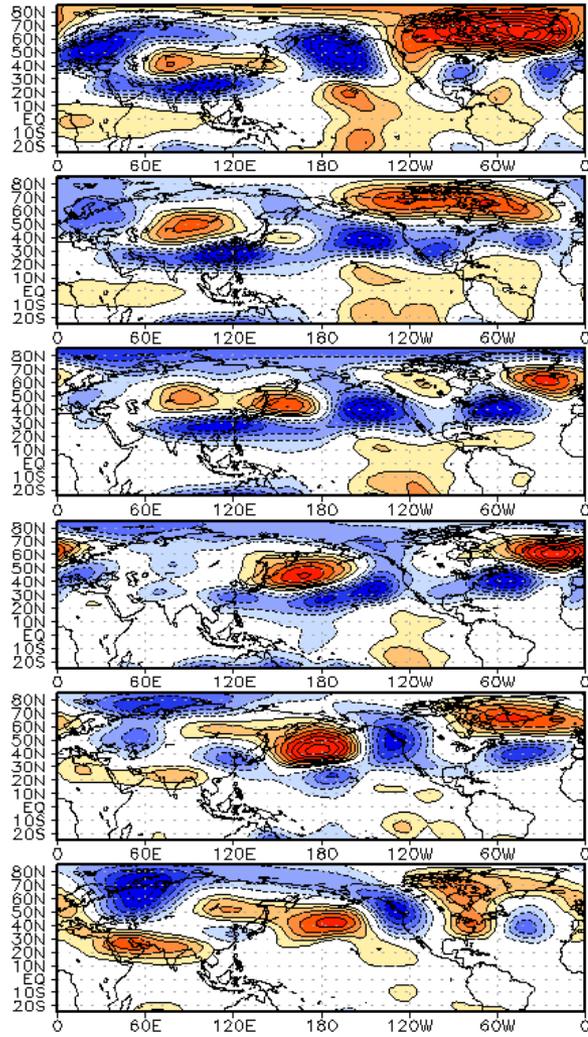
16 Member Ensemble Mean Forecast from 28Jan2013



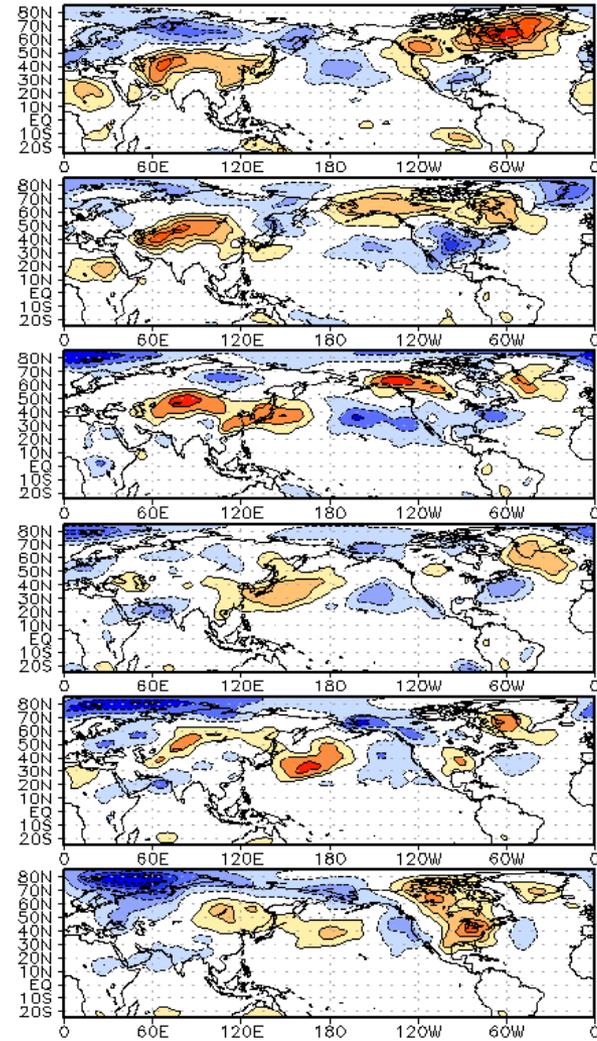
CDAS 200-hPa HT Anoms (11d rm)
28DEC2012



WHMJ0 Phase 8 z200 Lagged Composite (djf)

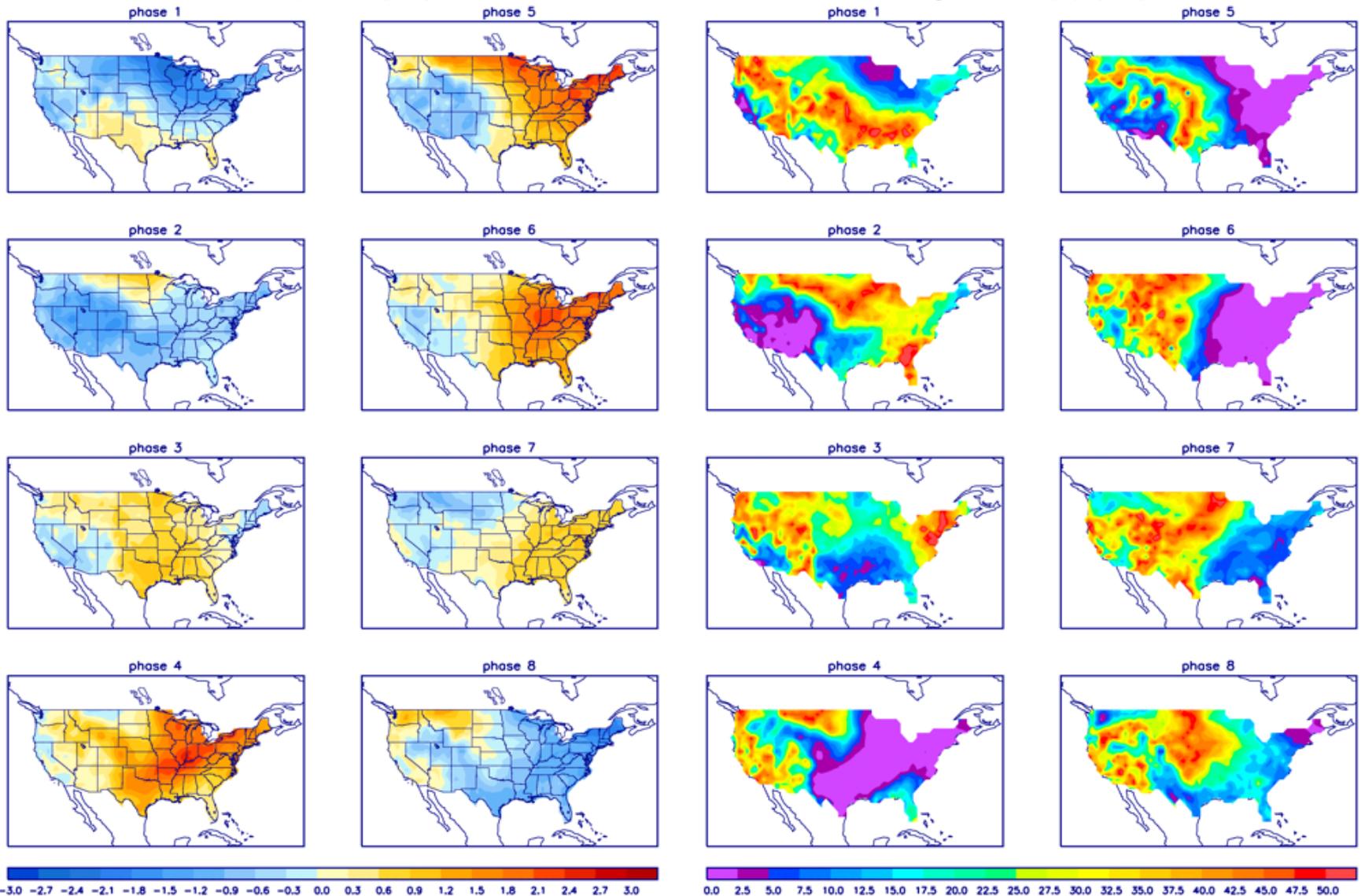


WHMJ0 Phase 8 t850 Lagged Composite (djf)

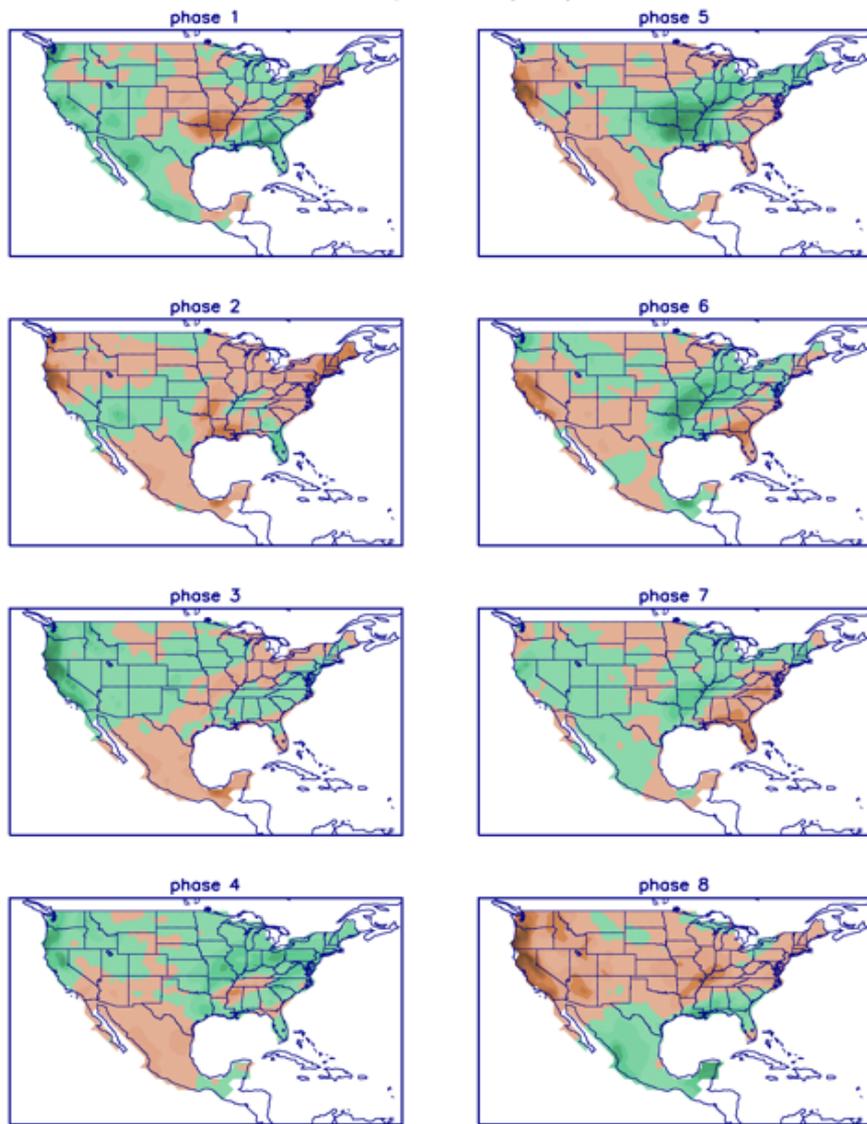


T composites (DJF)

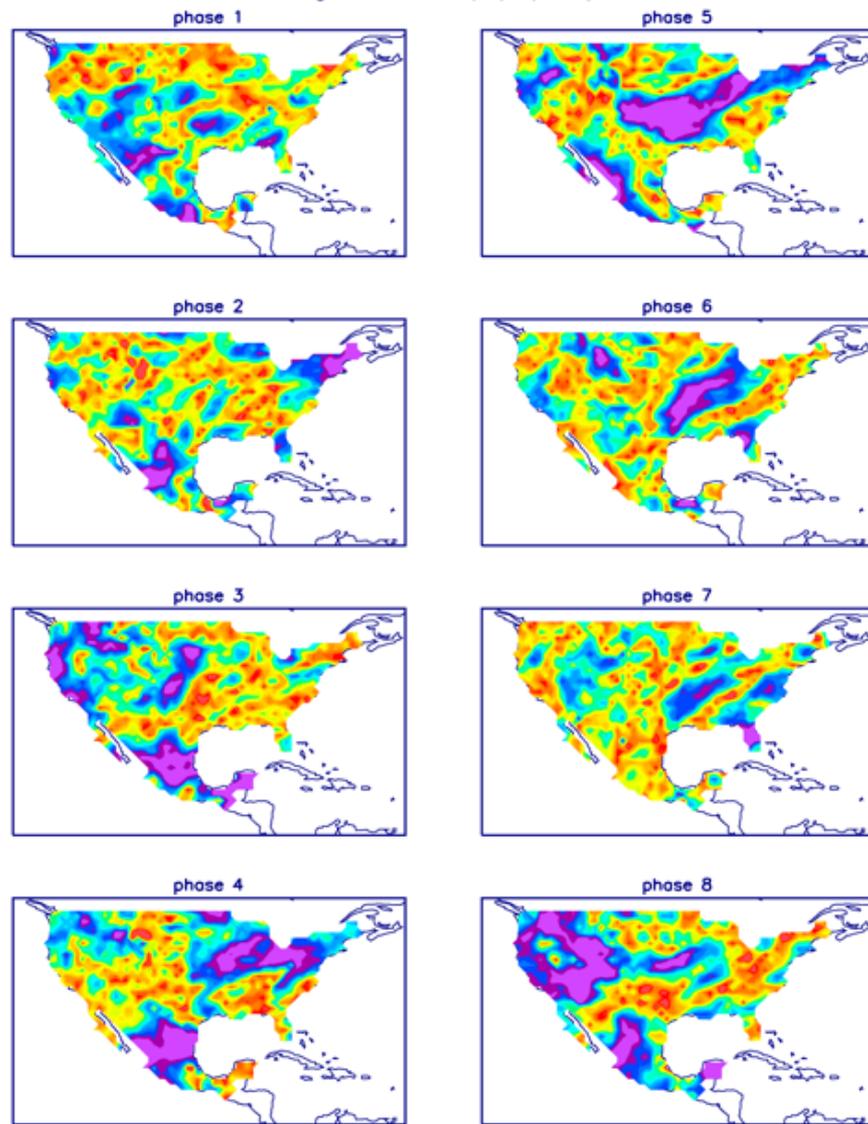
Significance (%) (DJF)



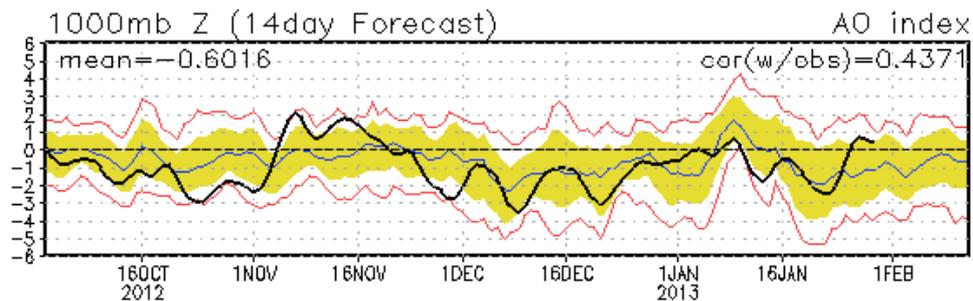
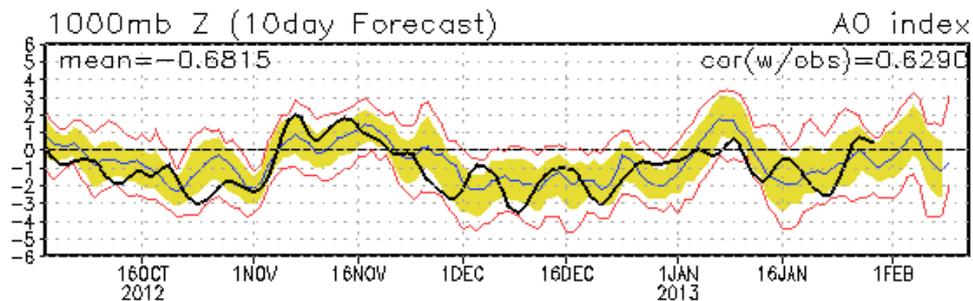
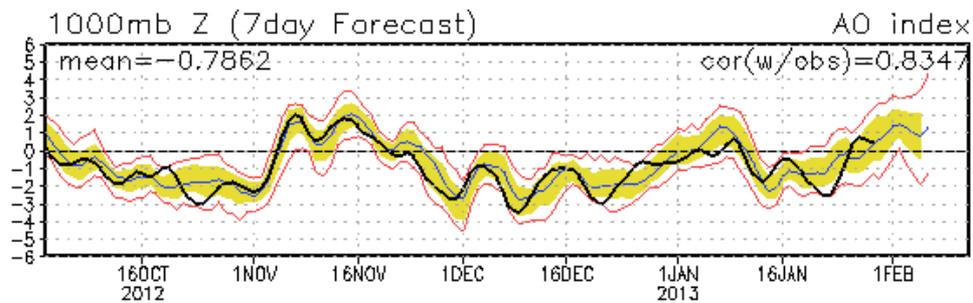
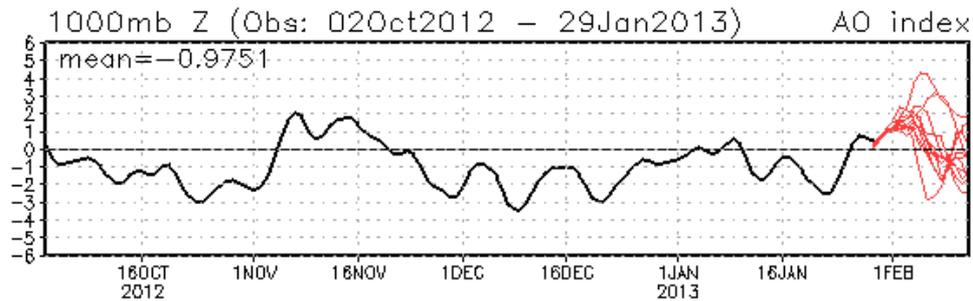
P composites (DJF)



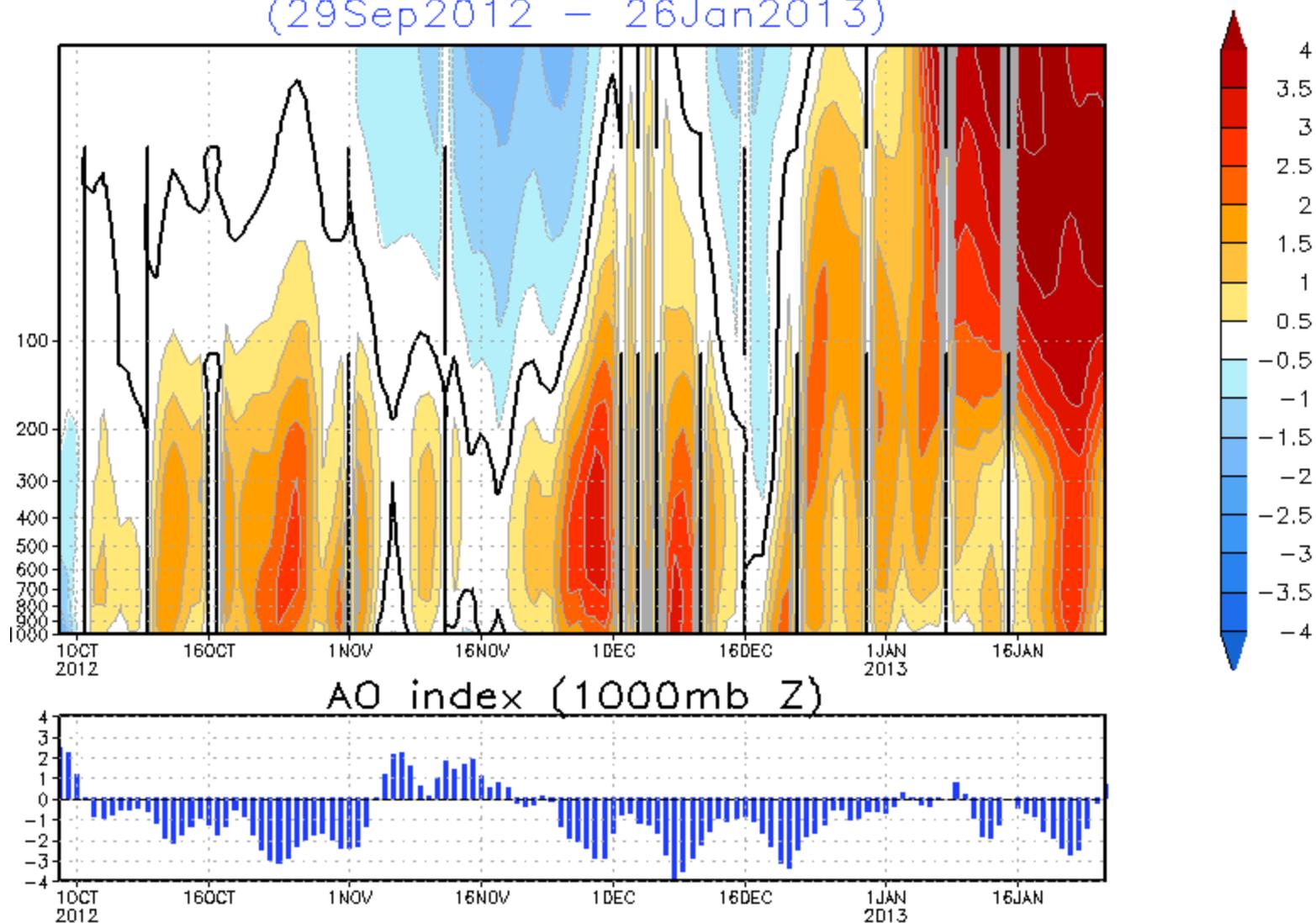
Significance (%) (DJF)



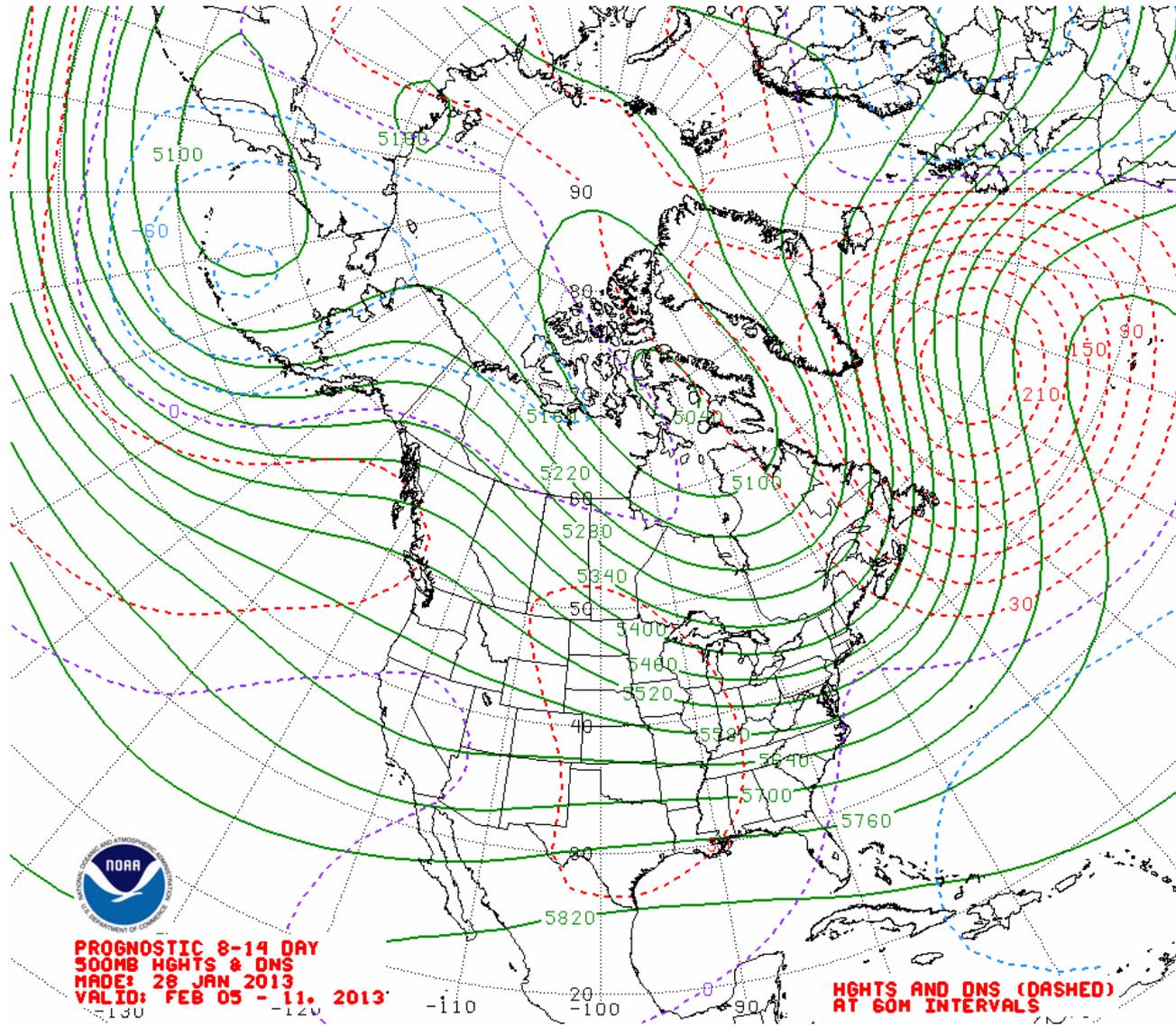
AO: Observed & ENSM forecasts



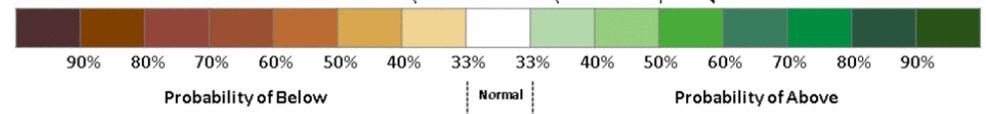
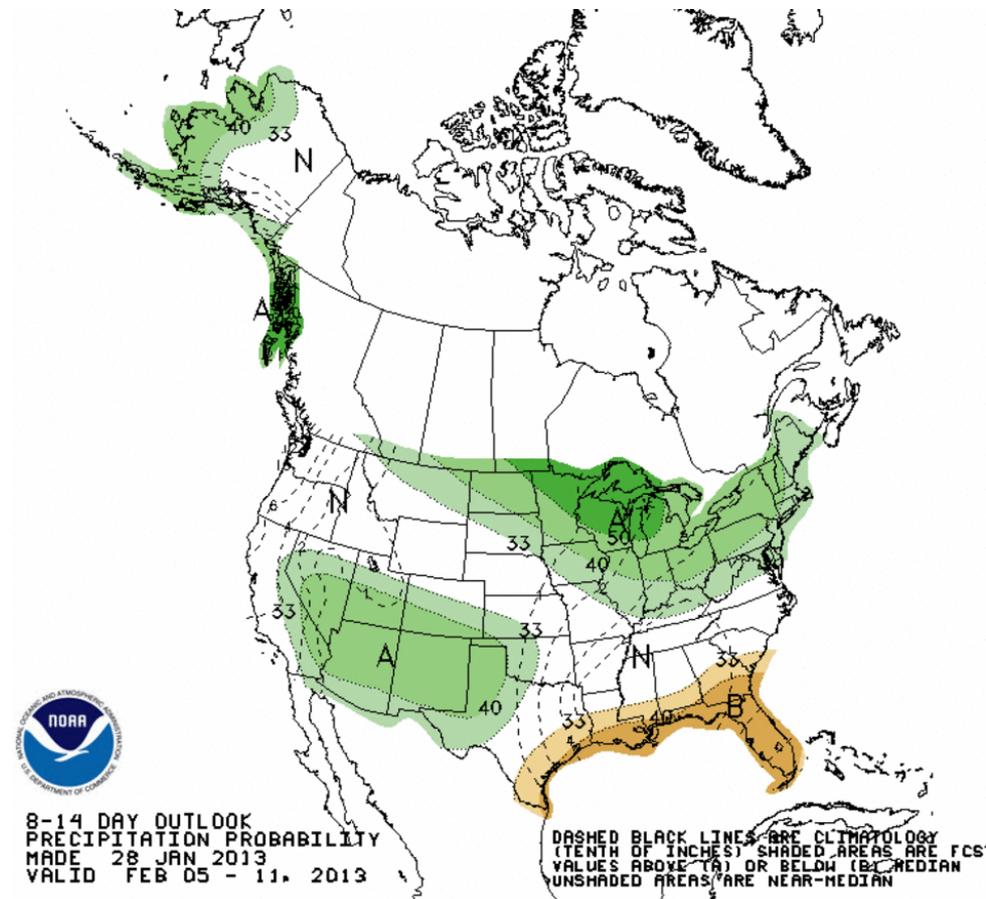
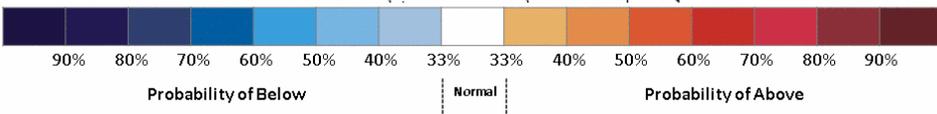
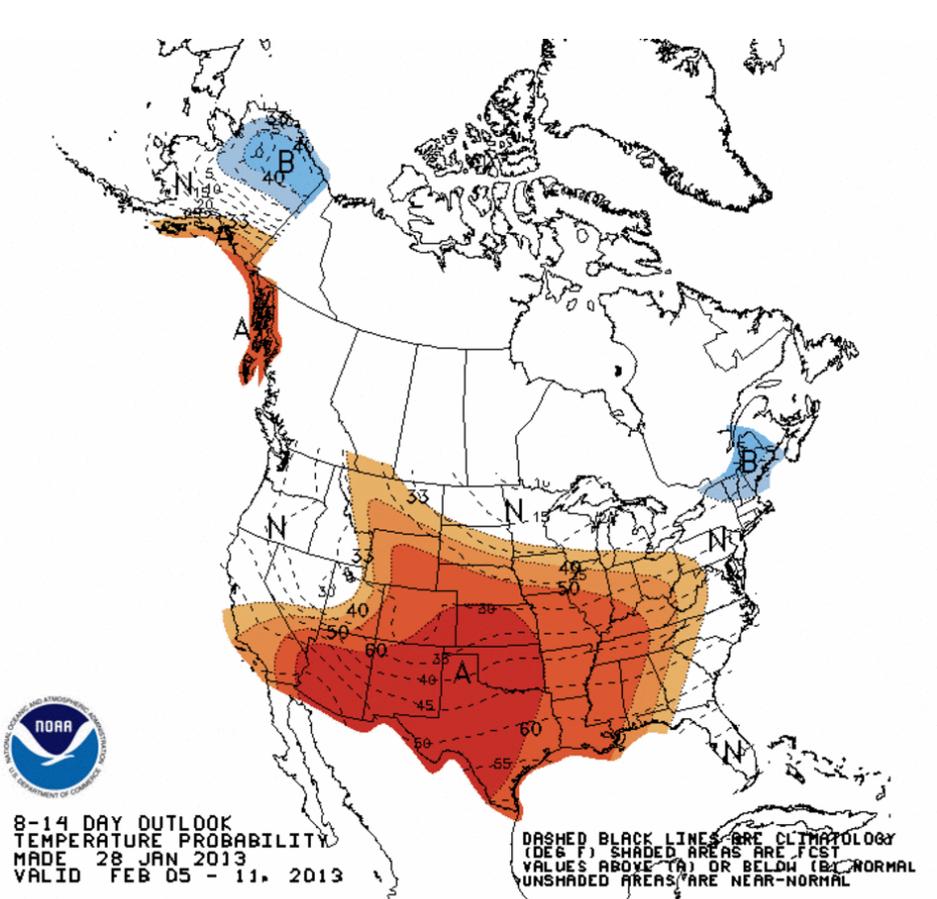
Normalized GPH anomaly (65°N–90°N) (29Sep2012 – 26Jan2013)



Week 2 500-hPa Manual Chart

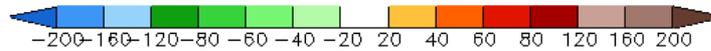
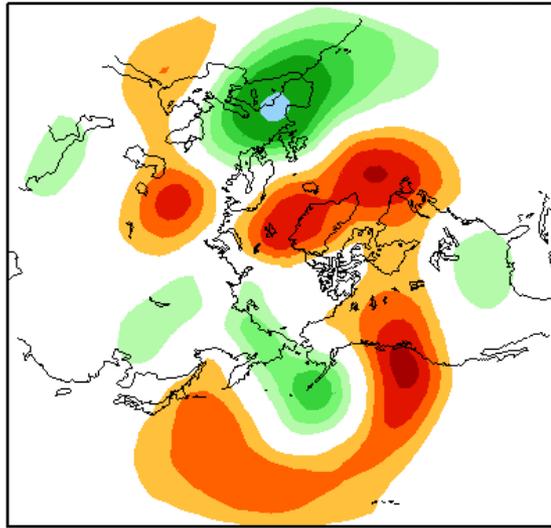


Week 2 – Temperature and Precipitation

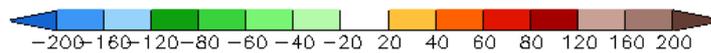
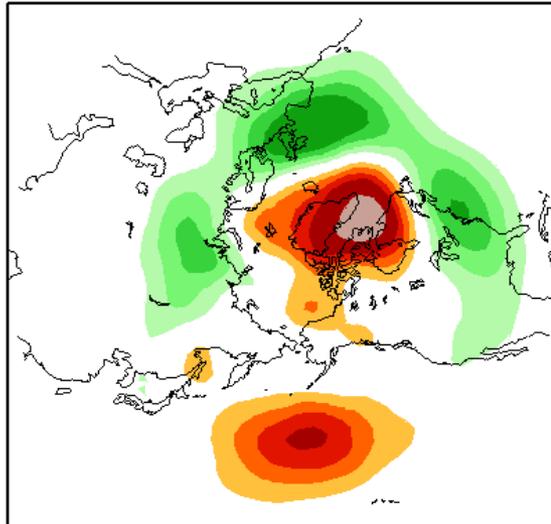


CFSv2 Weeks 3 & 4 500 hPa Z Anomalies (m)
16 Member Ensemble Mean Forecast from 28Jan2013

Week 3 12Feb2013–18Feb2013



Week 4 19Feb2013–25Feb2013

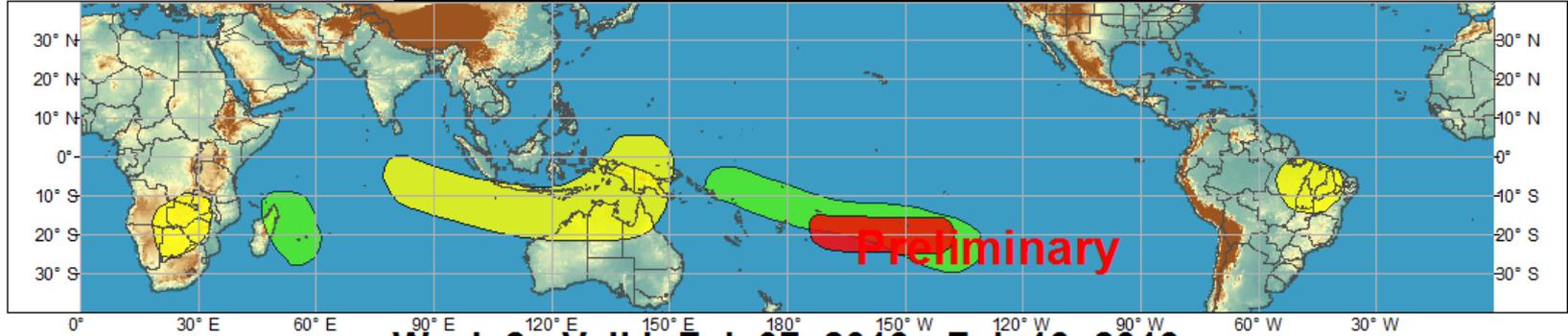




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