

# Global Tropics Hazards And Benefits Outlook

November 5, 2013

Stephen Baxter

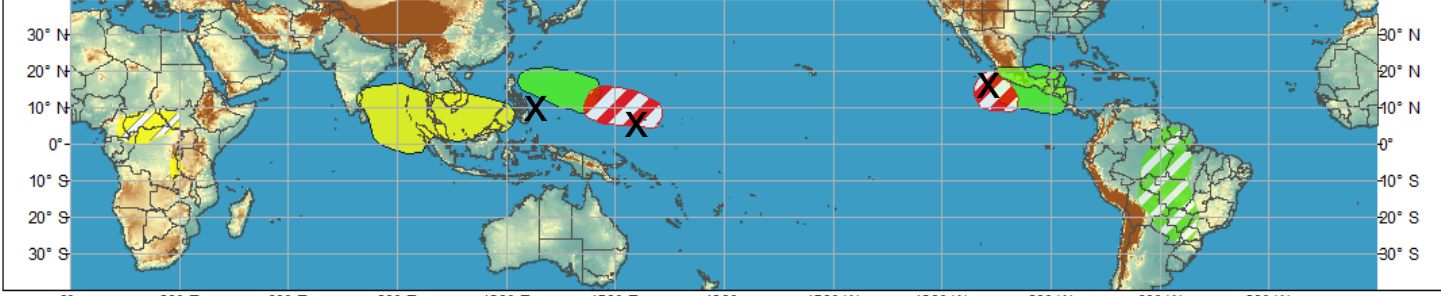
## Outline

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

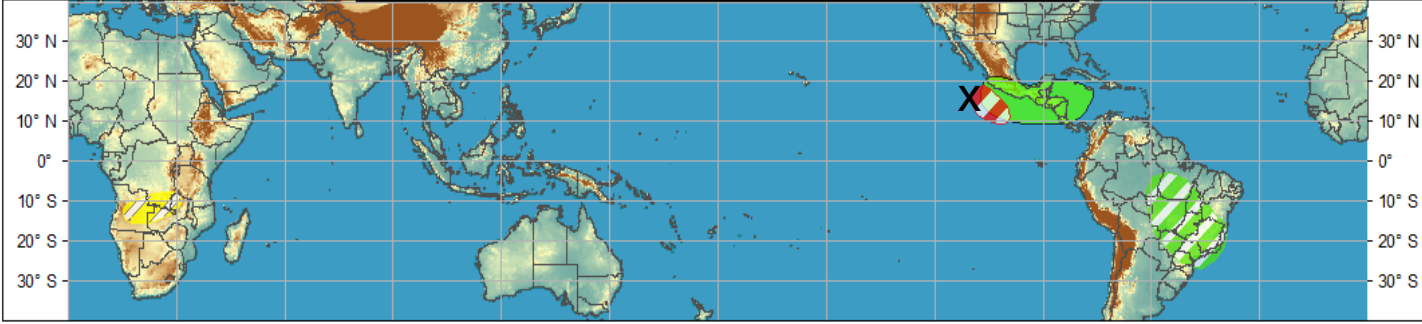
# Outlook Review



**Week 1 - Valid: Oct 30, 2013 - Nov 05, 2013**

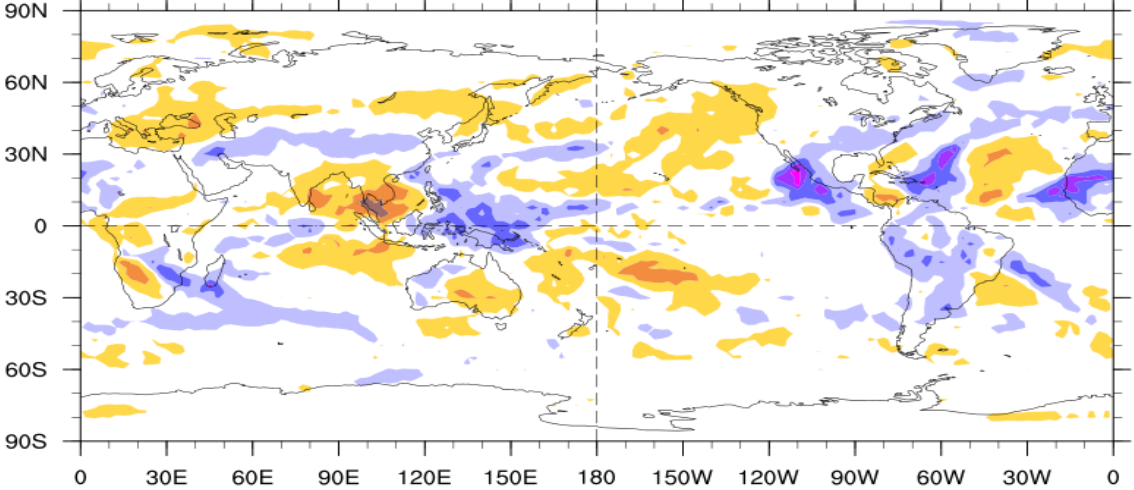


**Week 2 - Valid: Oct 30, 2013 - Nov 05, 2013**



7-Day Average OLR Anomaly

2013/10/28 - 2013/11/03



NOAA/ESRL/PSD

Base Period: 1981-2010



Cool shading  
More clouds/rain

Warm shading  
Less clouds/rain

# Synopsis of Climate Modes

## ENSO:

- ENSO-neutral is expected into the Northern Hemisphere spring 2014.

## MJO and other subseasonal tropical variability:

- The MJO showed signs of reorganizing in the past week with the enhanced phase currently centered over Africa. Other subseasonal and possibly interannual modes continue to play an important role in the pattern of tropical convection.
- Dynamical model MJO index forecasts suggest the propagation of a weak MJO through phases 2 and 3 over the next two weeks. Statistical tools are fairly robust, also suggesting propagation through phases 2 and 3.
- Confidence is fairly low, however, due to some conflicting tools and interference from other modes of variability.

## Extratropics:

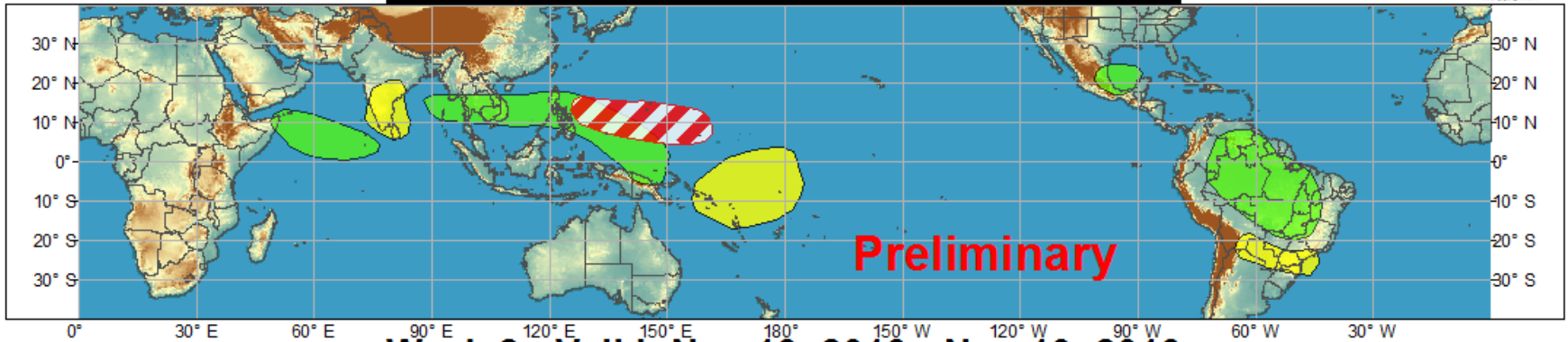
- The extended range forecast for the U.S. is not influenced greatly by the MJO or coherent ENSO modes.
- The AO is currently forecast to be strongly positive over the next ten days.
- The dominant extratropical feature is likely going to be a large block in the North Pacific, likely projecting onto both a negative PNA and a negative WP/NPO pattern.



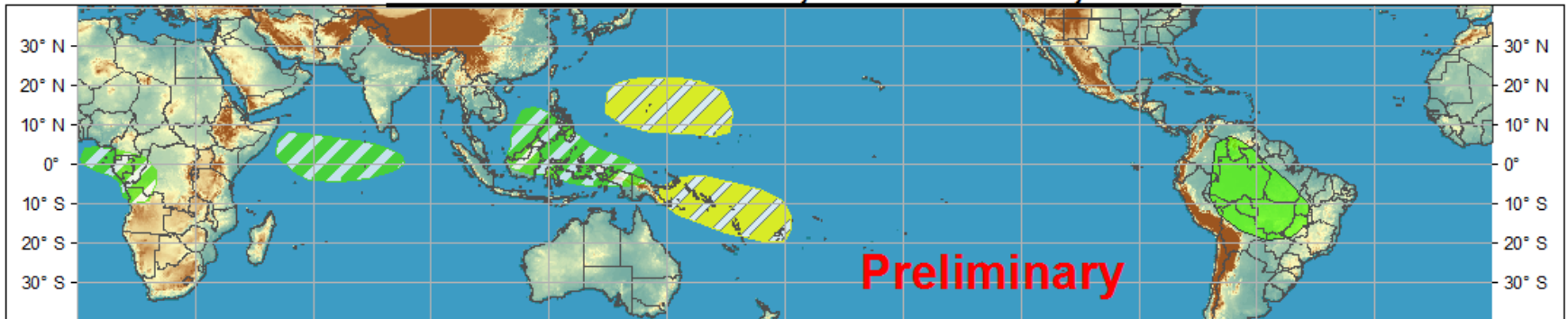
# Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



## Week 1 - Valid: Nov 06, 2013 - Nov 12, 2013



## Week 2 - Valid: Nov 13, 2013 - Nov 19, 2013



Produced: 11/05/2013

Forecaster: Baxter

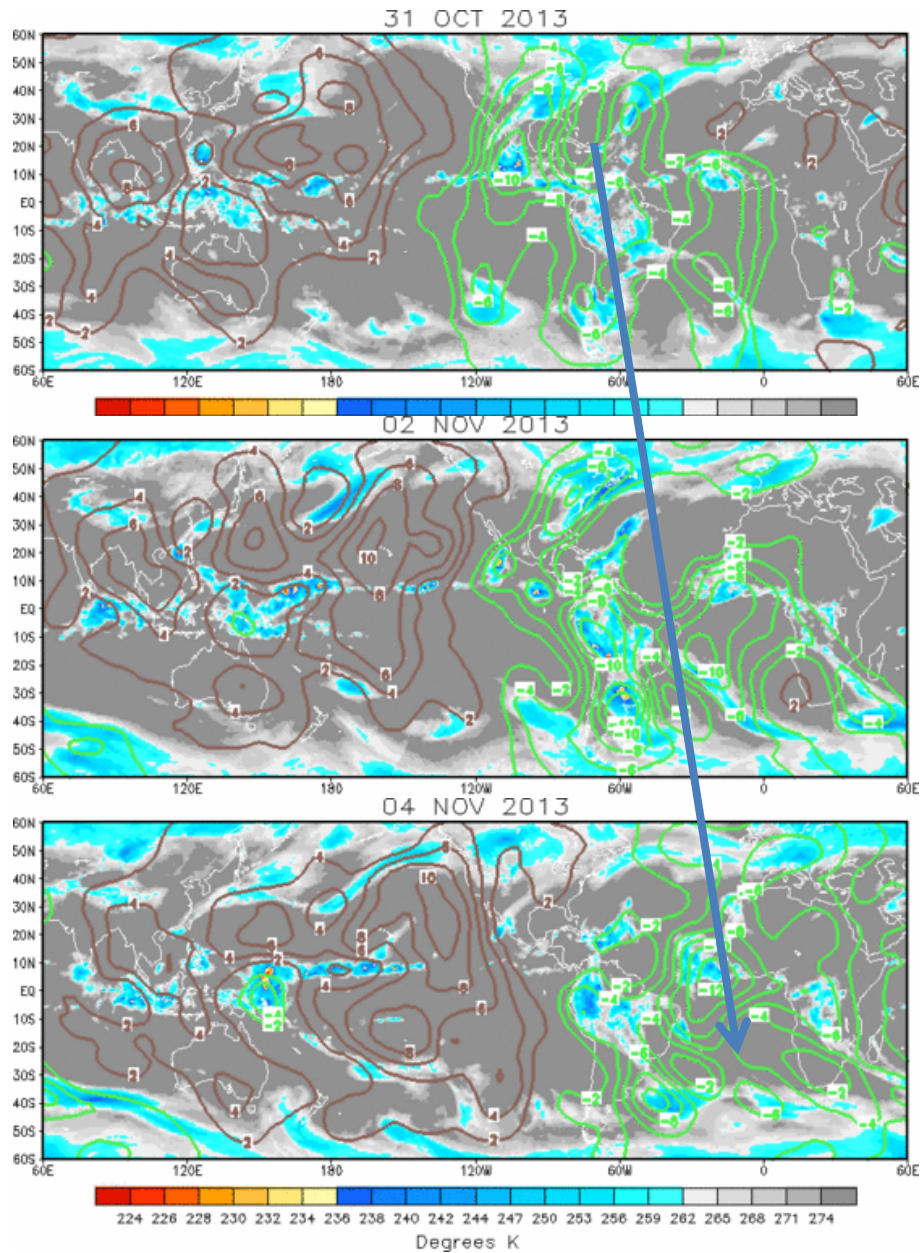
	Confidence		
	High	Moderate	
<b>Tropical Cyclone Formation</b>			Development of a tropical cyclone that eventually reaches tropical storm/cyclone strength.
<b>Above-average rainfall</b>			Weekly total rainfall in the upper third of the historical range.
<b>Below-average rainfall</b>			Weekly total rainfall in the lower third of the historical range.
<b>Above-normal temperatures</b>			7-day mean temperatures in the upper third of the historical range.
<b>Below-normal temperatures</b>			7-day mean temperatures in the lower third of the historical range.

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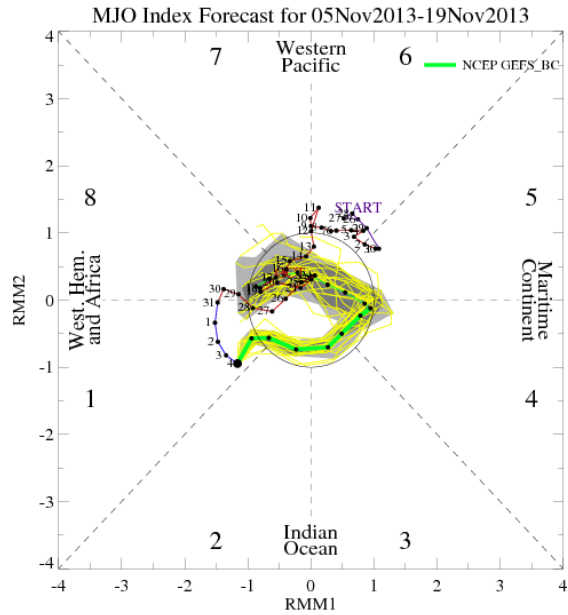


# IR Satellite & 200-hpa Velocity Potential Anomalies

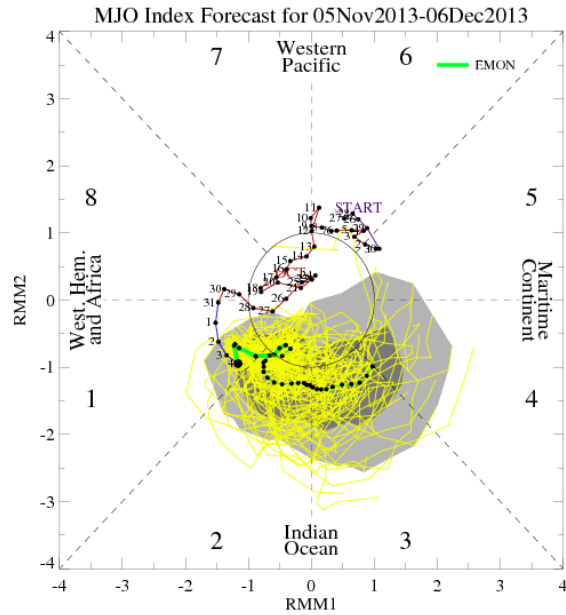
Green: Enhanced Divergence    Brown: Enhanced Convergence



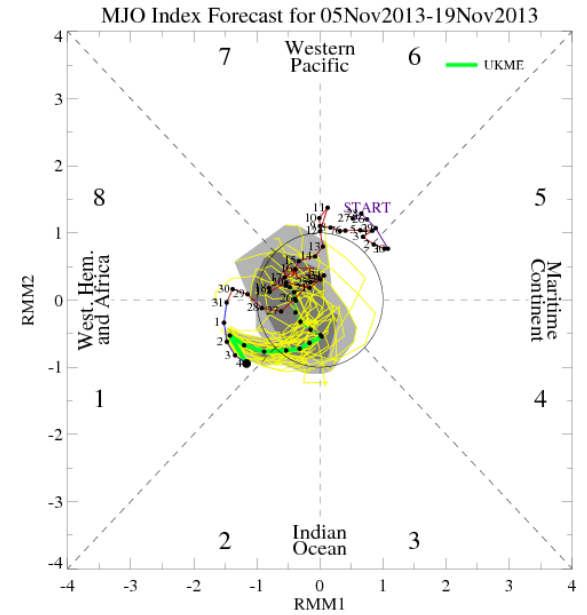
# MJO Observation/Forecast



GFS

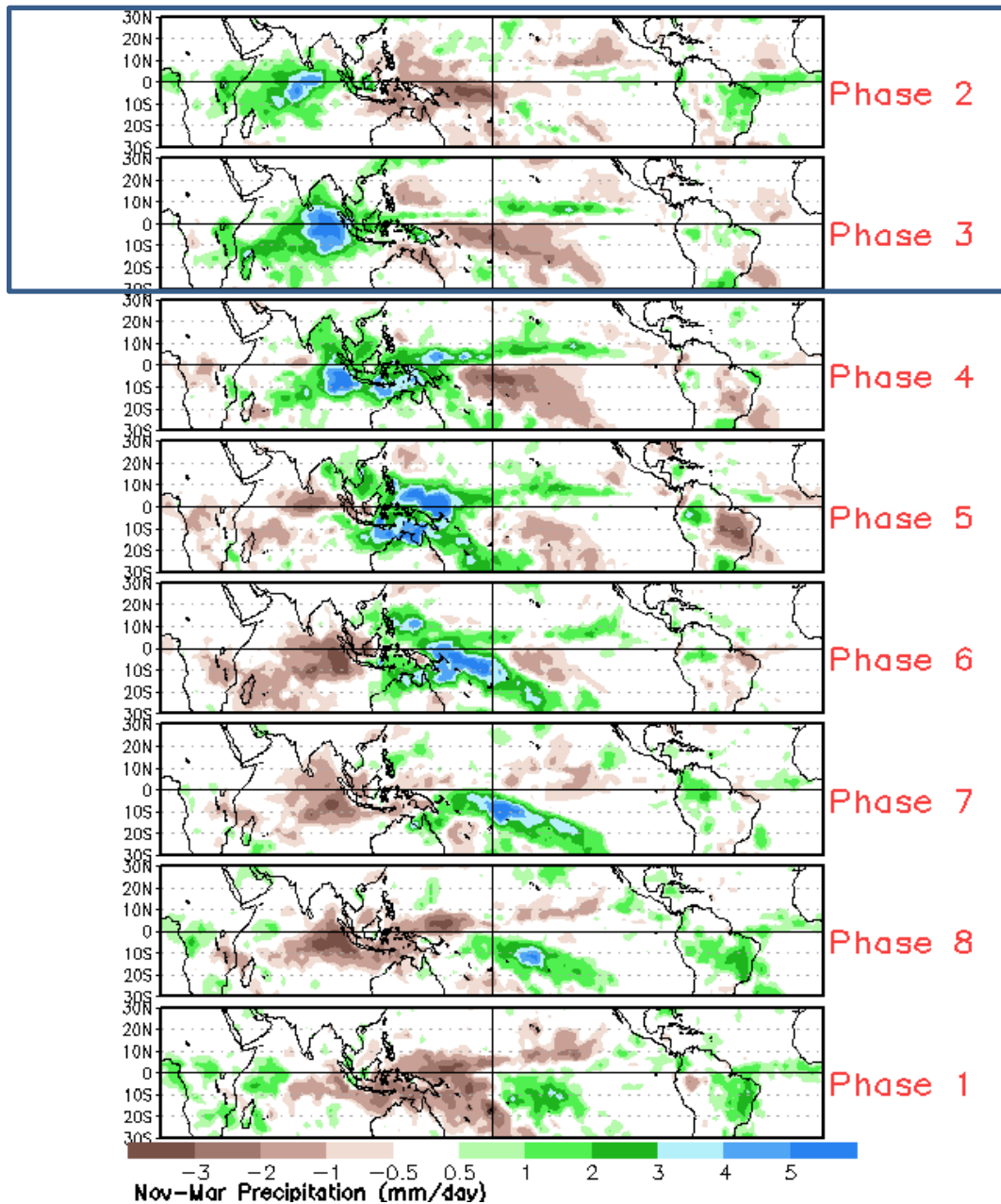


ECMWF

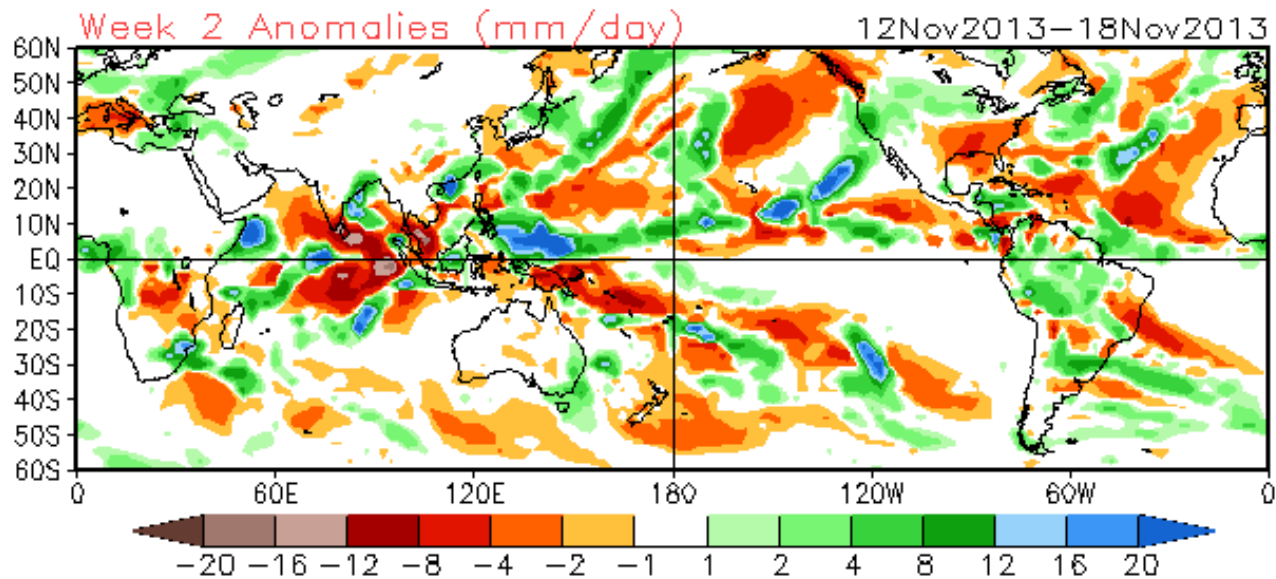
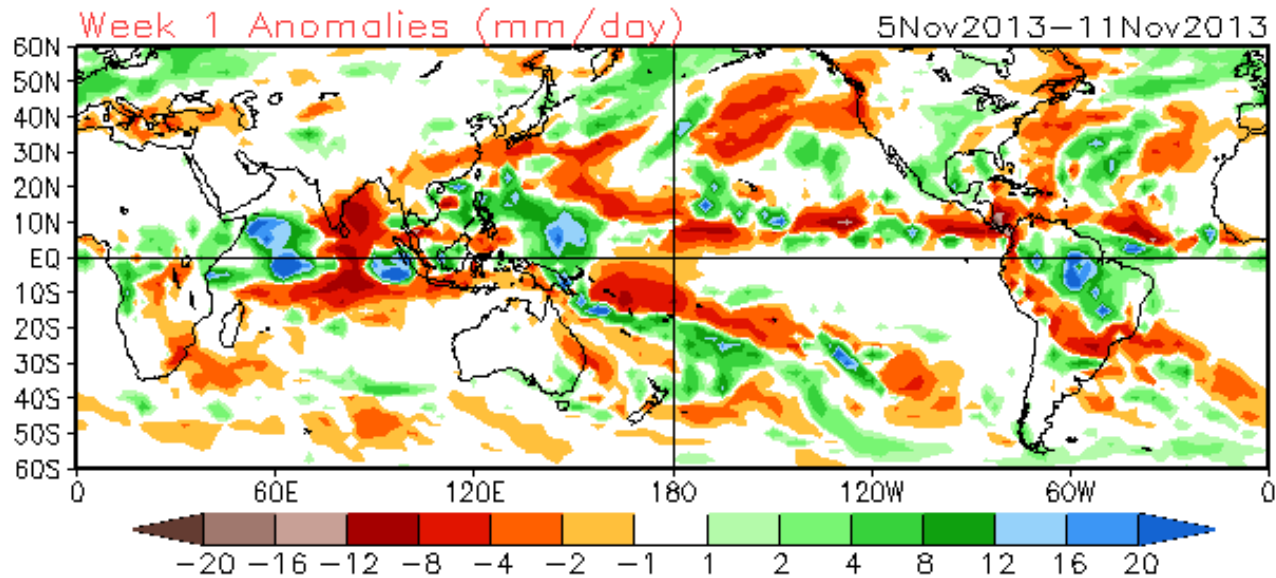


UKMET

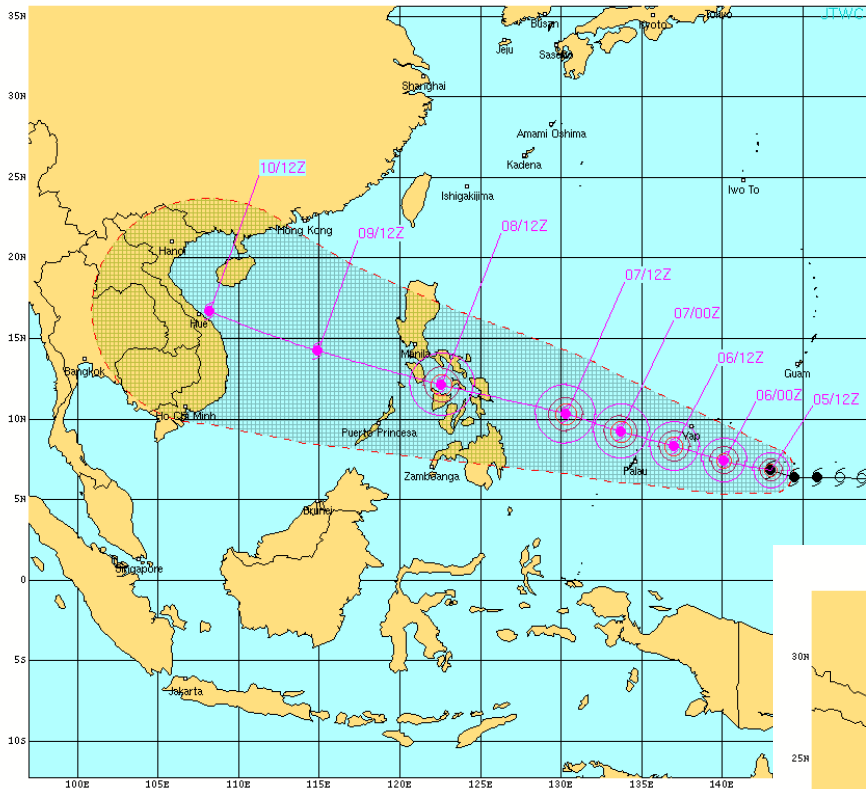
# Average Conditions when the MJO is present (Nov-Mar)



CFSv2 Weeks 1 & 2 Precipitation  
16 Member Ensemble Mean Forecast from 04Nov2013







**TYPHOON 31W (MAYFAN) WARNING #10**  
 WPPH88 PGTW 051500  
 051200Z POSIT: NEAR 6.8N 143.0E  
 MOVING 285 DEGREES TRUE AT 15 KNOTS  
 MAXIMUM SIGNIFICANT WAVE HEIGHT: 30 FEET

05/12Z, WINDS 090 KTS, GUSTS TO 110 KTS  
 06/00Z, WINDS 105 KTS, GUSTS TO 130 KTS  
 06/12Z, WINDS 115 KTS, GUSTS TO 140 KTS  
 07/00Z, WINDS 125 KTS, GUSTS TO 150 KTS  
 07/12Z, WINDS 130 KTS, GUSTS TO 160 KTS  
 08/12Z, WINDS 120 KTS, GUSTS TO 145 KTS  
 09/12Z, WINDS 110 KTS, GUSTS TO 135 KTS  
 10/12Z, WINDS 095 KTS, GUSTS TO 115 KTS

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**CPA TO:**

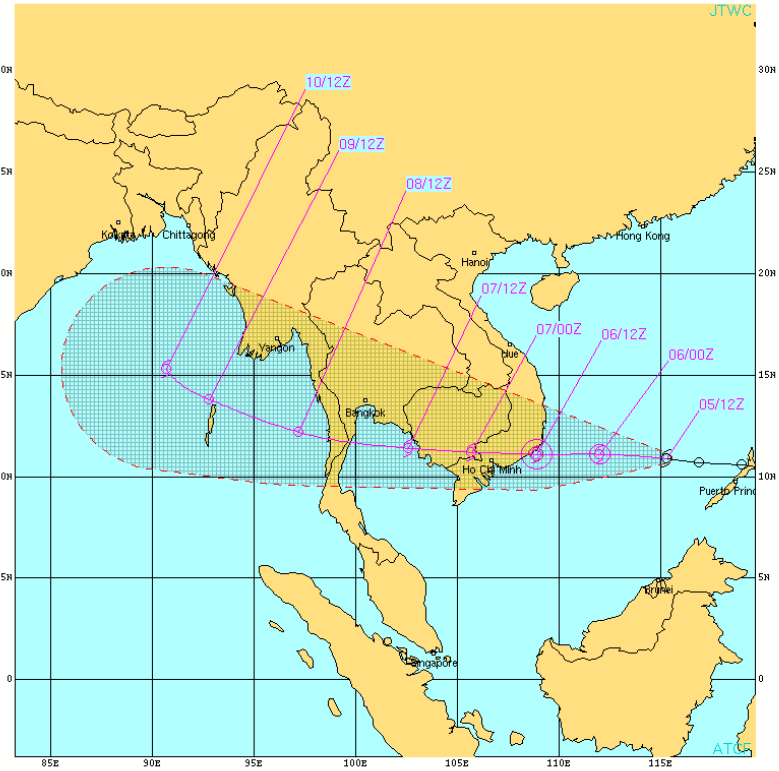
STATION	NM	DTG
SOROL	51	06/00Z
FALIS	145	06/01Z
ULITHI	136	06/05Z
VAP	87	06/09Z
NGULU	3	06/10Z
ANGAUR	124	06/20Z
KAVANAGEL	47	06/20Z
KOROR	98	06/20Z
SONSOROL	249	07/01Z
TOBI	399	07/02Z
ZAMBONGA	309	08/10Z
MANILA	121	08/19Z
PUEERTO_PRINCESA	197	08/21Z
SUBIC_BAY	121	08/21Z
HO_CHI MINH_CITY	359	10/08Z
DA_NANG	36	10/11Z
HANOI	289	10/12Z

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**BEARING AND DISTANCE**

STATION	DIR (DEG)	DIST (NM)	TAU (KTS)
ANGAUR	063	187	24
ZAMBONGA	285	370	24
FALIS	247	245	24
KAVANAGEL	085	197	24
KOROR	063	165	24
NGULU	270	30	24
SONSOROL	058	388	24
SOROL	272	20	24
ULITHI	238	181	24
VAP	222	97	24

○ LESS THAN 34 KNOTS  
 ◐ 34-63 KNOTS  
 ● MORE THAN 63 KNOTS



**TROPICAL STORM 30W (THIRTY) WARNING #10**  
 WPPH82 PGTW 051500  
 051200Z POSIT: NEAR 10.3N 115.3E  
 MOVING 275 DEGREES TRUE AT 15 KNOTS  
 MAXIMUM SIGNIFICANT WAVE HEIGHT: 15 FEET

05/12Z, WINDS 035 KTS, GUSTS TO 045 KTS  
 06/00Z, WINDS 045 KTS, GUSTS TO 055 KTS  
 06/12Z, WINDS 055 KTS, GUSTS TO 070 KTS  
 07/00Z, WINDS 045 KTS, GUSTS TO 055 KTS  
 07/12Z, WINDS 035 KTS, GUSTS TO 045 KTS  
 08/12Z, WINDS 030 KTS, GUSTS TO 040 KTS  
 08/12Z, WINDS 030 KTS, GUSTS TO 040 KTS  
 10/12Z, WINDS 035 KTS, GUSTS TO 045 KTS

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**CPA TO:**

STATION	NM	DTG
DA_NANG	238	06/15Z
HO_CHI MINH_CITY	21	06/20Z

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**BEARING AND DISTANCE**

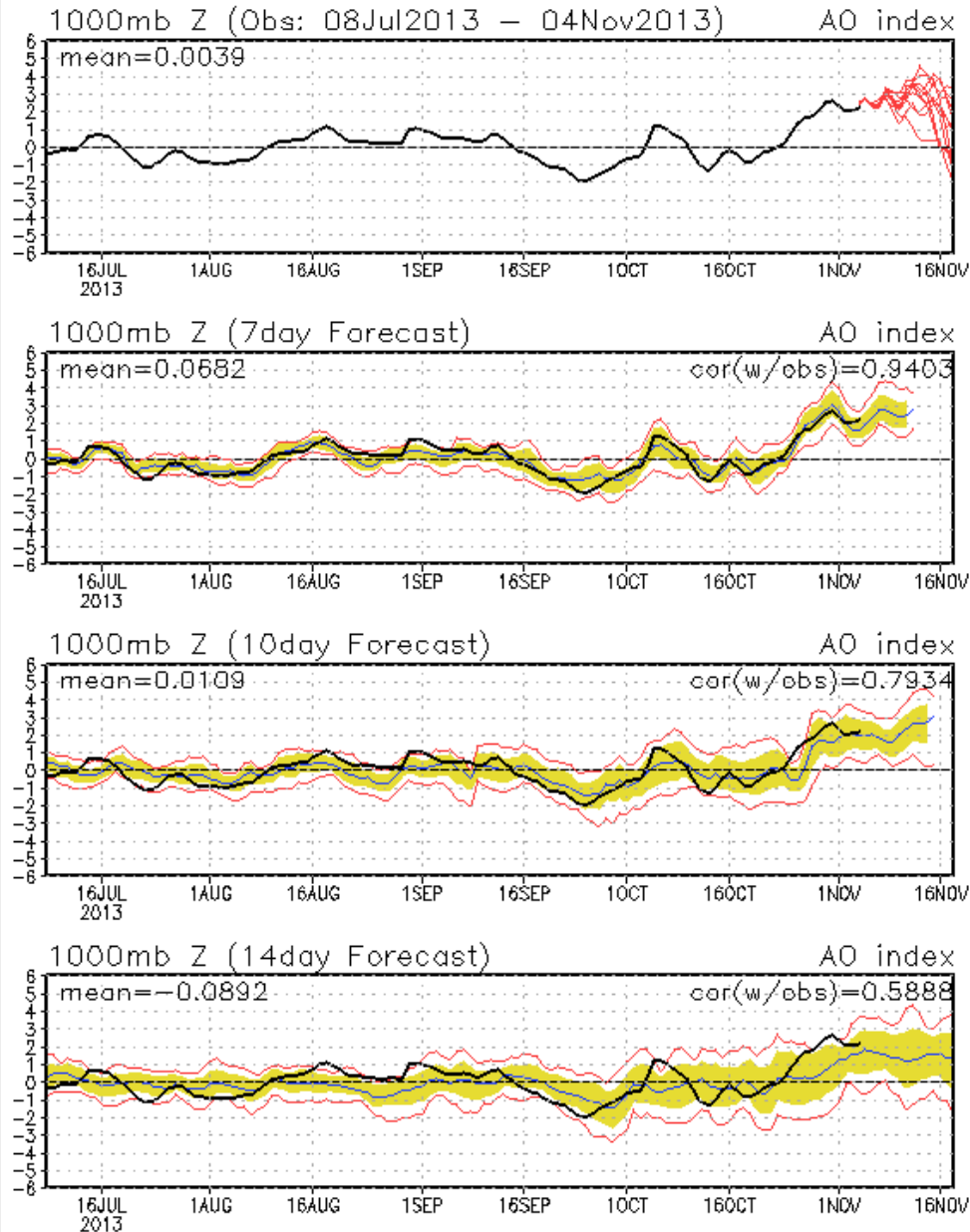
STATION	DIR (DEG)	DIST (NM)	TAU (KTS)
DA_NANG	173	236	24
HO_CHI MINH_CITY	082	131	24

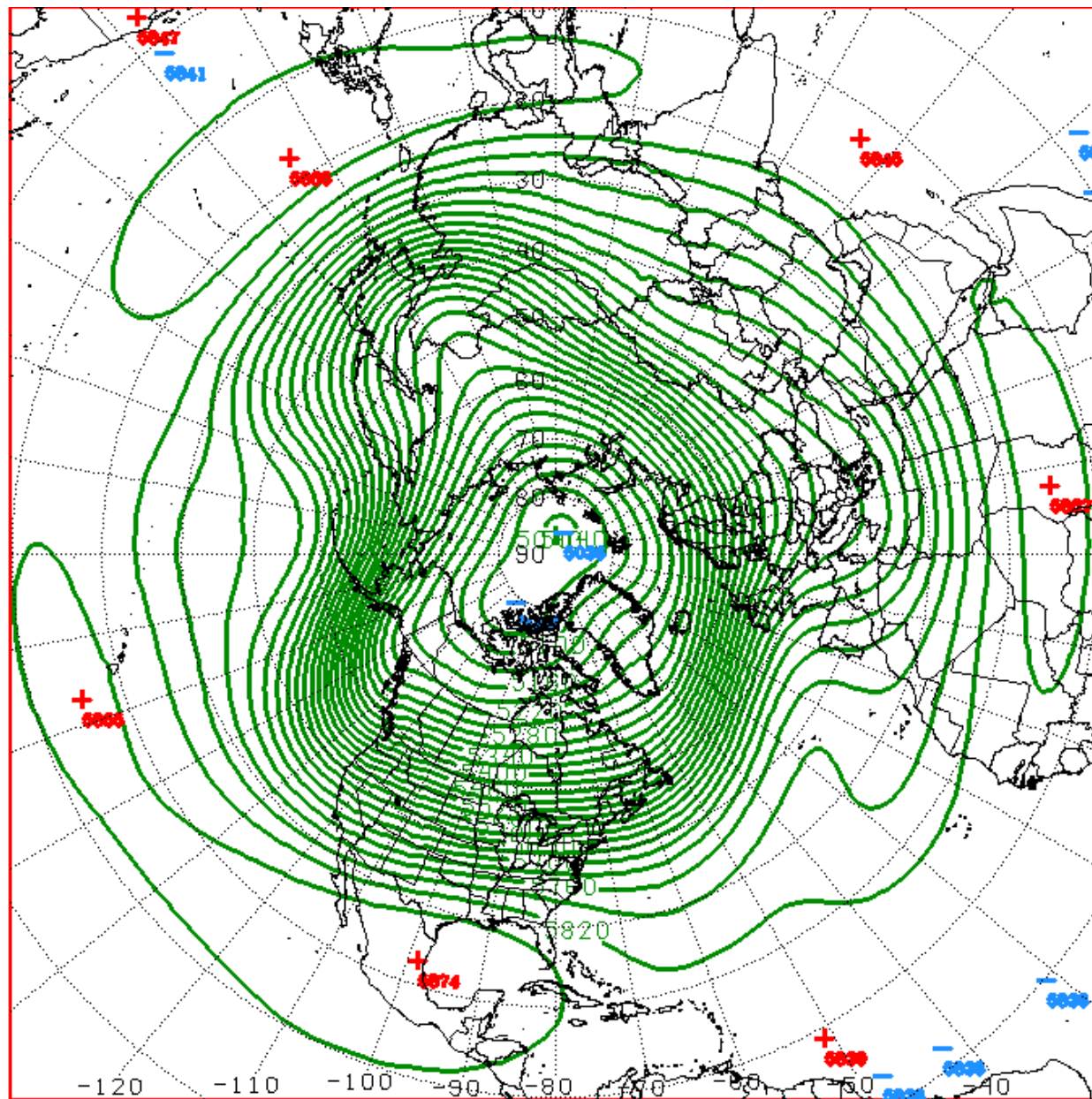
○ LESS THAN 34 KNOTS  
 ◐ 34-63 KNOTS  
 ● MORE THAN 63 KNOTS  
 PAST 6 HOURLY CYCLONE POSITS IN BLACK  
 FORECAST CYCLONE POSITS IN COLOR



# Connections to U.S. Impacts

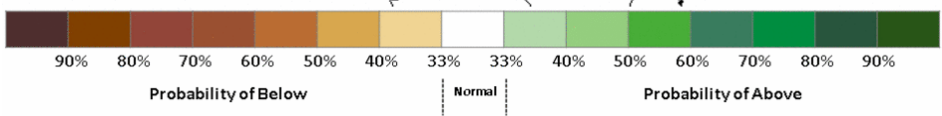
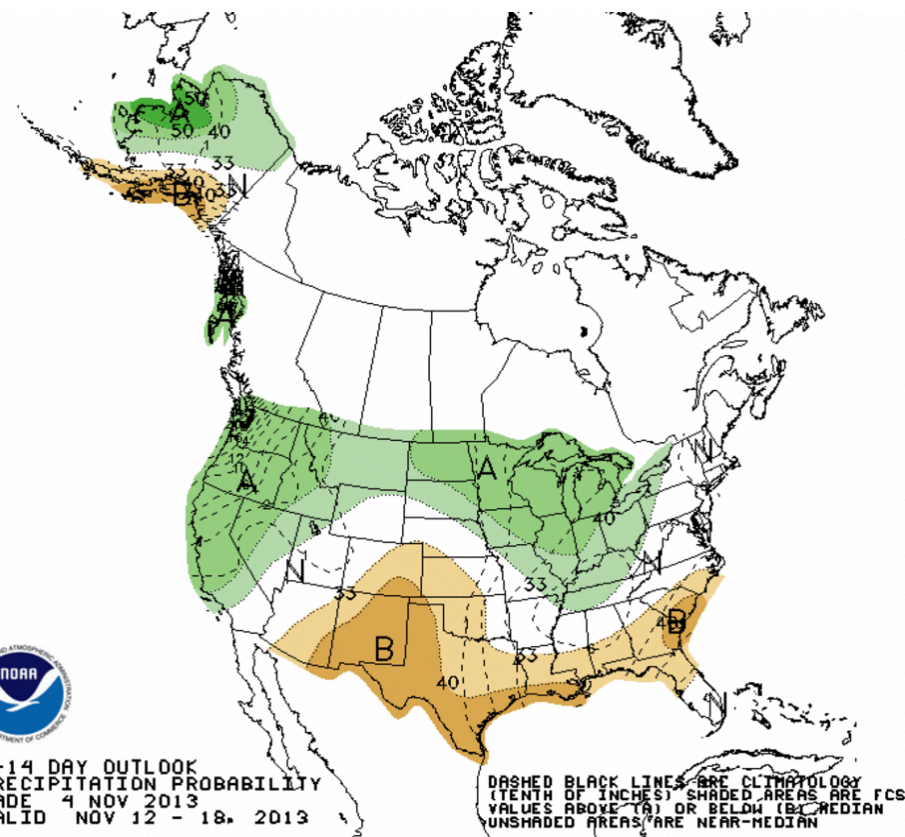
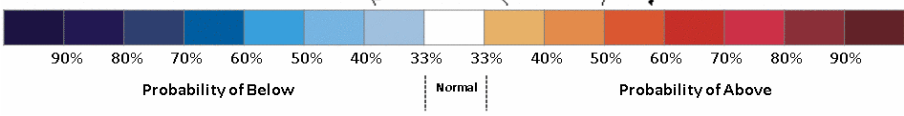
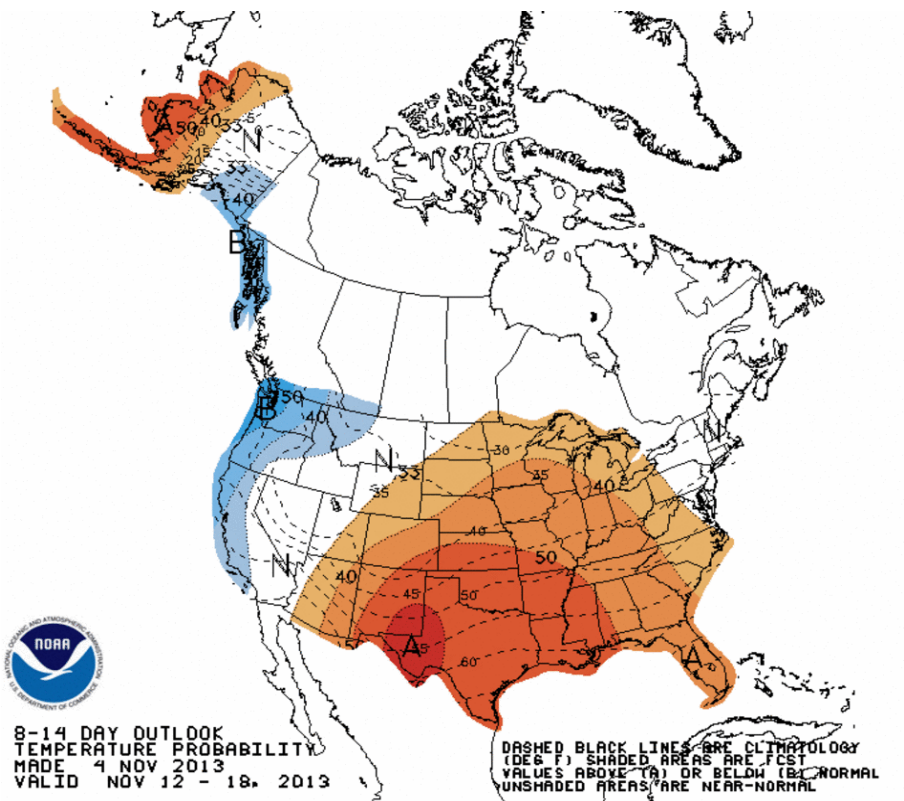
## AO: Observed & ENSM forecasts





D+11 500 MB HEIGHTS FROM 00Z ECMM  
 CPC MAP MADE NOV 05 2013 1107 UTC CNTD NOV 16 2013

# Week 2 – Temperature and Precipitation

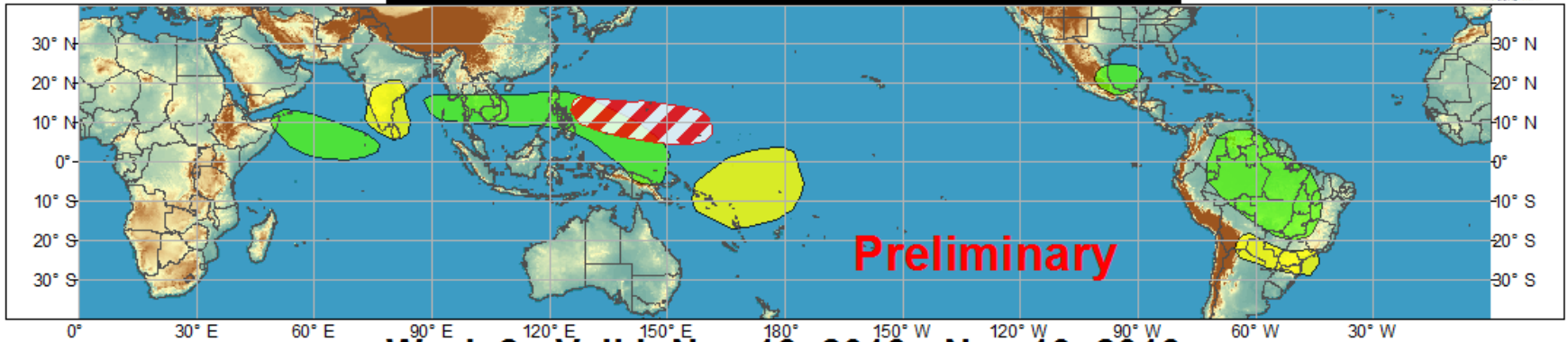




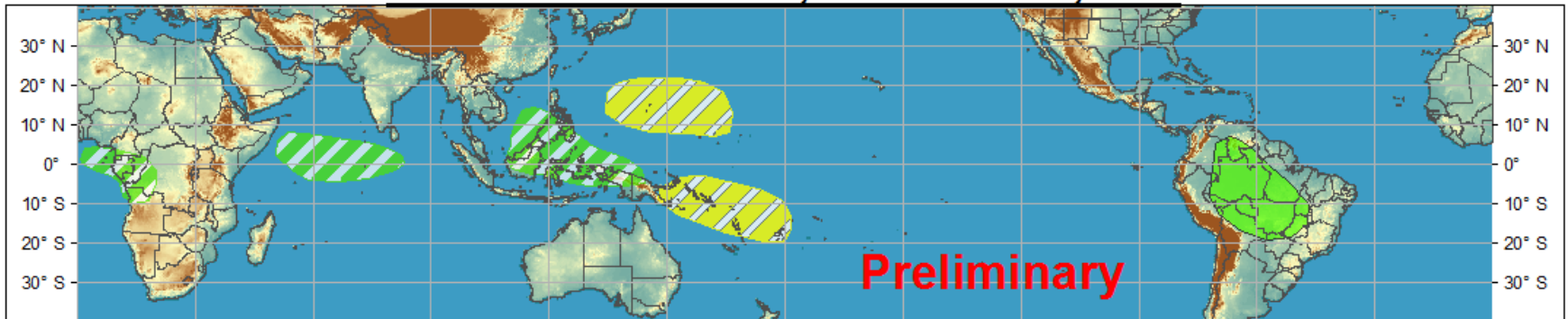
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