

# Global Tropics Hazards And Benefits Outlook

October 1, 2013

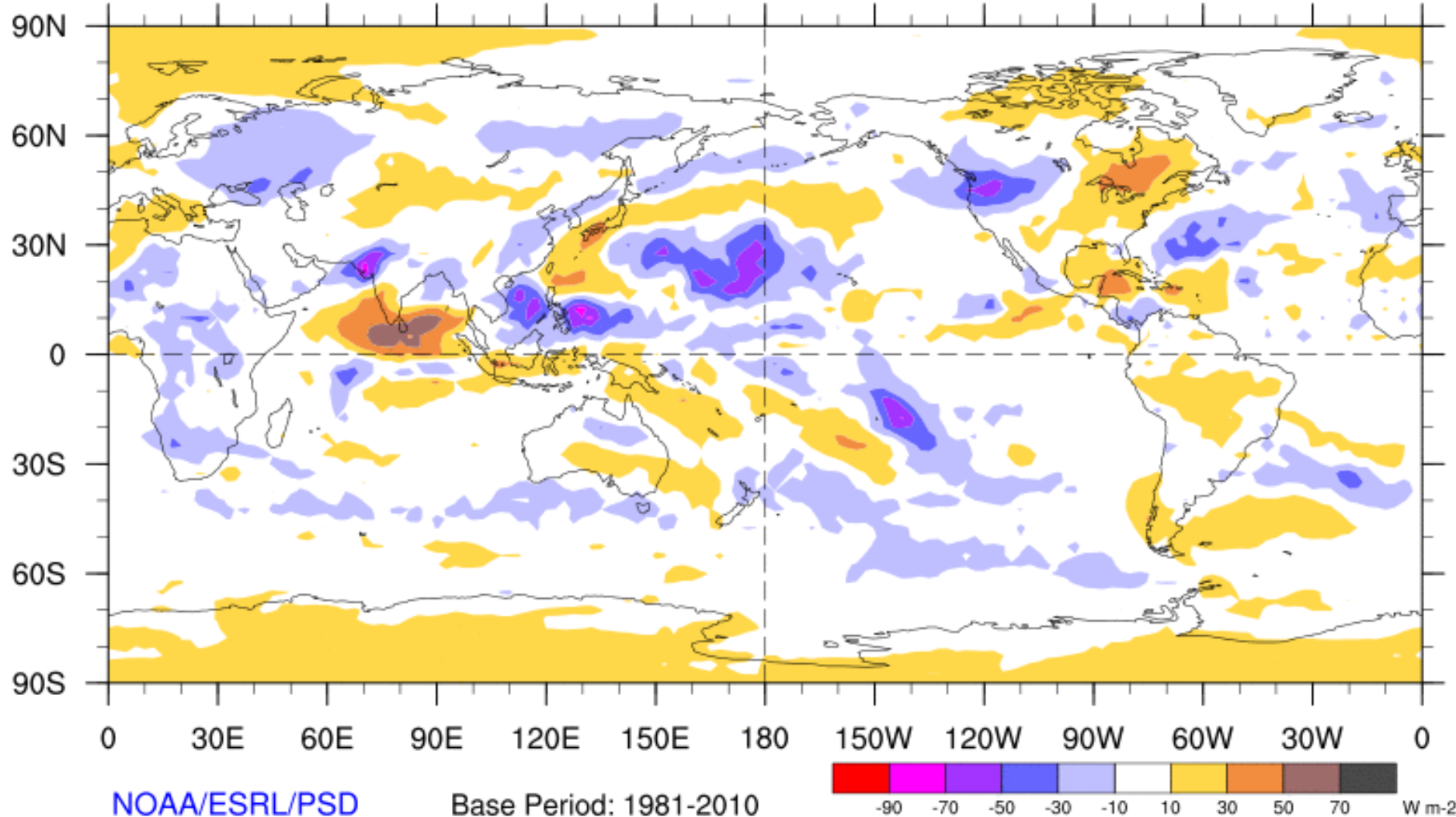
Adam Allgood

## Outline

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

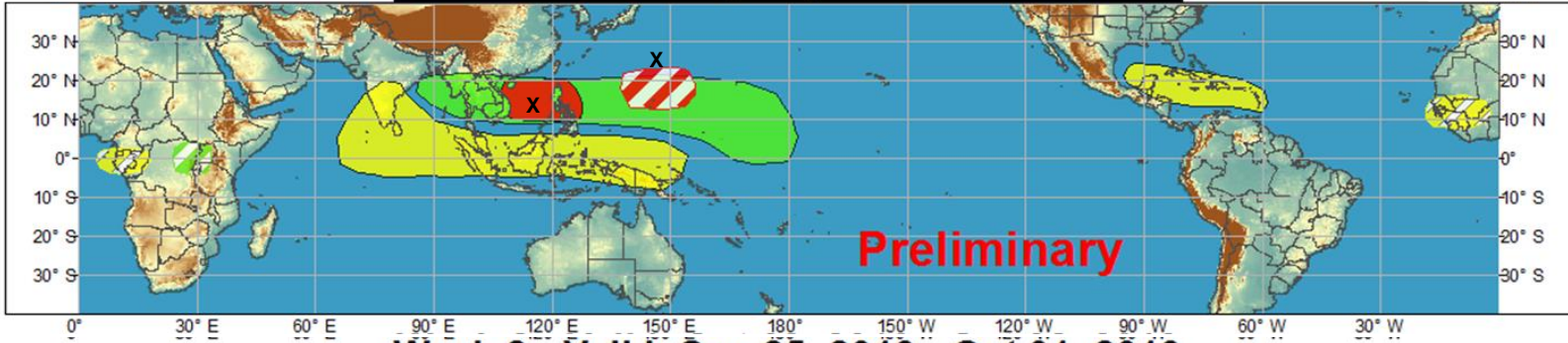
# 7-Day Average OLR Anomaly

2013/09/23 - 2013/09/29

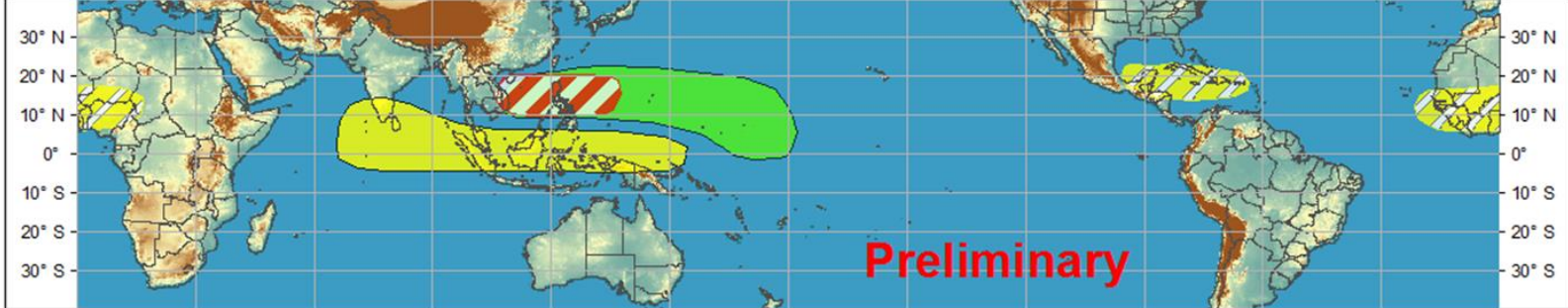


# Outlook Review

**Week 1 - Valid: Sep 25, 2013 - Oct 01, 2013**

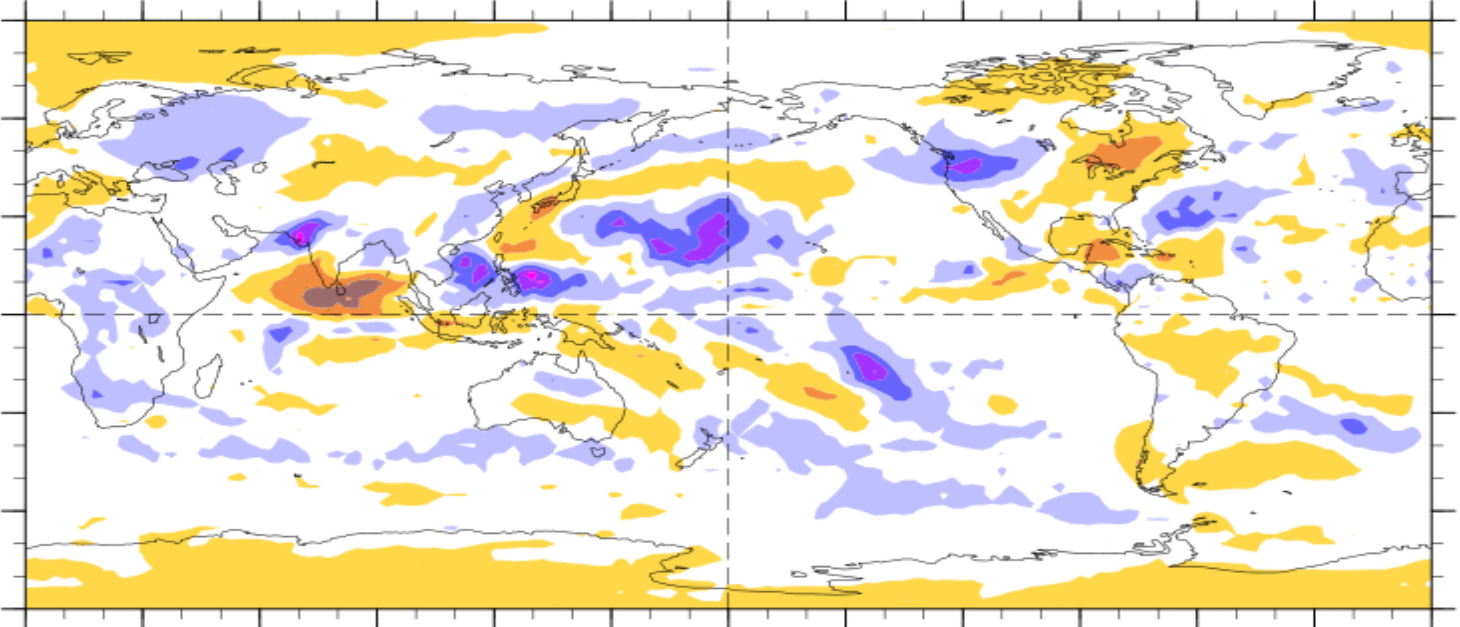


**Week 2 - Valid: Sep 25, 2013 - Oct 01, 2013**



7-Day Average OLR Anomaly

2013/09/23 - 2013/09/29



Cool shading  
More clouds/rain

Warm shading  
Less clouds/rain

# 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, although some observational indicators are less coherent than in previous weeks as other subseasonal variability such as tropical cyclone activity are playing a competing role in the pattern of anomalous tropical convection. The MJO enhanced phase is centered over the Pacific Ocean.

- Dynamical model MJO index forecasts are mixed, with some supporting continued eastward propagation. The statistical tools also support continued MJO activity, although those reflect a weaker signal.

## Extratropics:

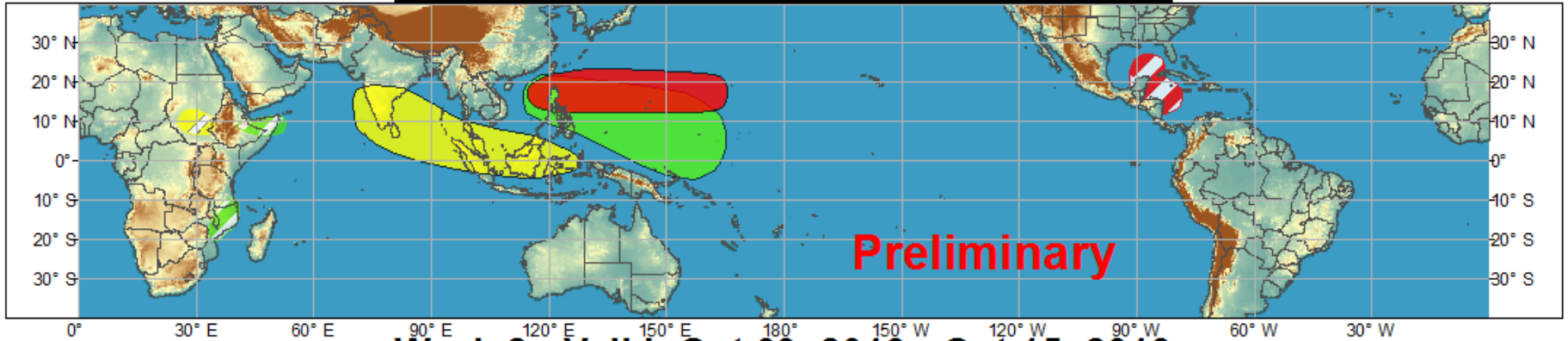
- The extended range forecast for the U.S. is out of phase with the typical circulation patterns based on the current and forecast phases of the MJO. Heavy rainfall associated with tropical activity is possible along the Gulf Coast during Week-1, and above normal temperatures are more likely during the Week-2 period.



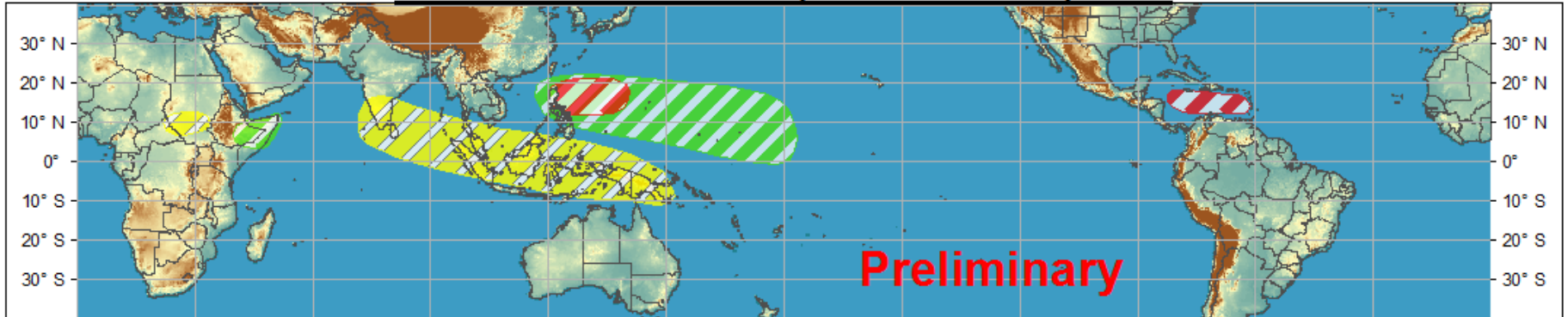
# Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



## Week 1 - Valid: Oct 02, 2013 - Oct 08, 2013



## Week 2 - Valid: Oct 09, 2013 - Oct 15, 2013



**Confidence**  
High Moderate

- Tropical Cyclone Formation**
- Above-average rainfall**
- Below-average rainfall**
- Above-normal temperatures**
- Below-normal temperatures**



- Development of a tropical cyclone that eventually reaches tropical storm/cyclone strength.
- Weekly total rainfall in the upper third of the historical range.
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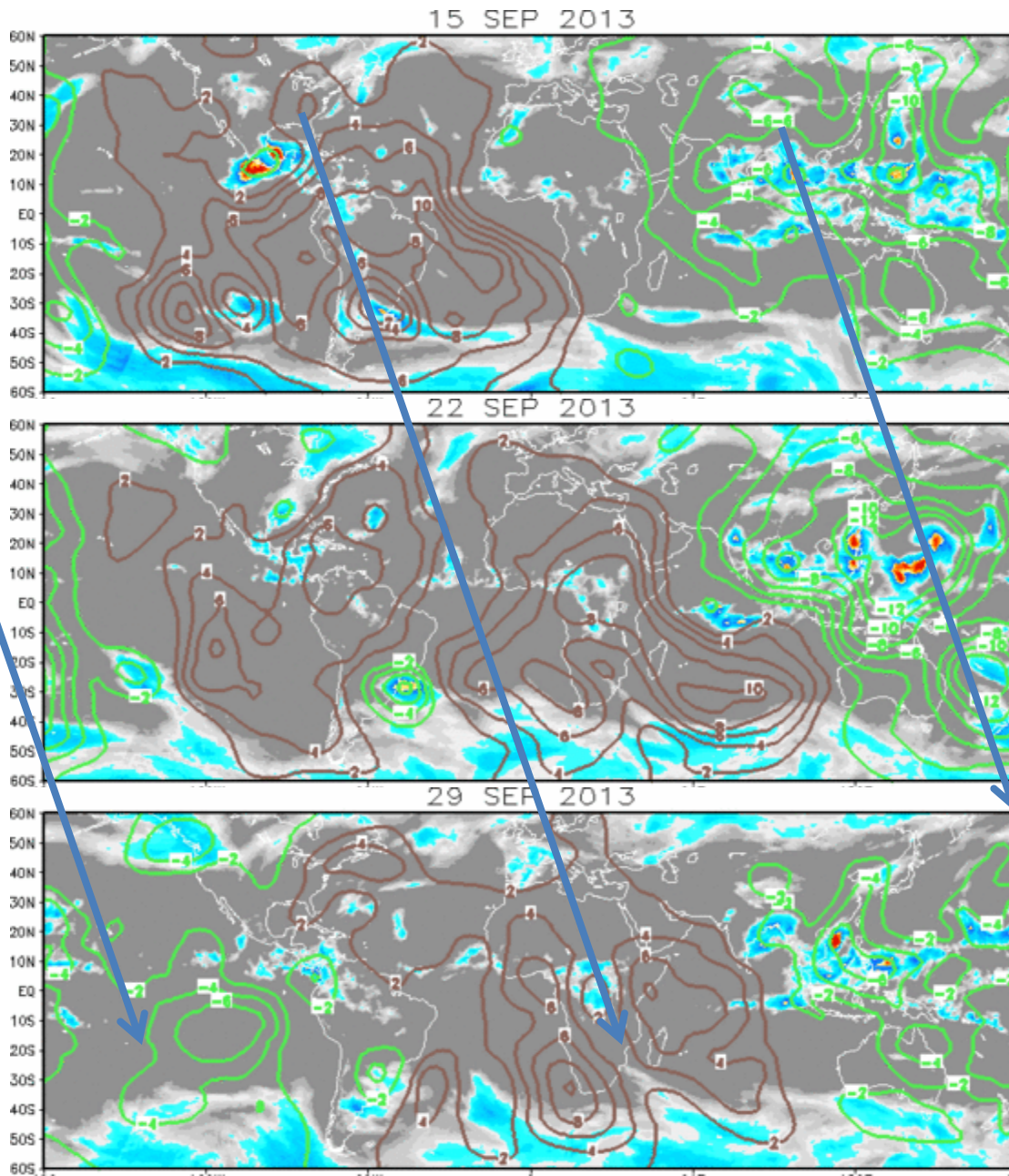
Produced: 10/01/2013  
Forecaster: Allgood

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.

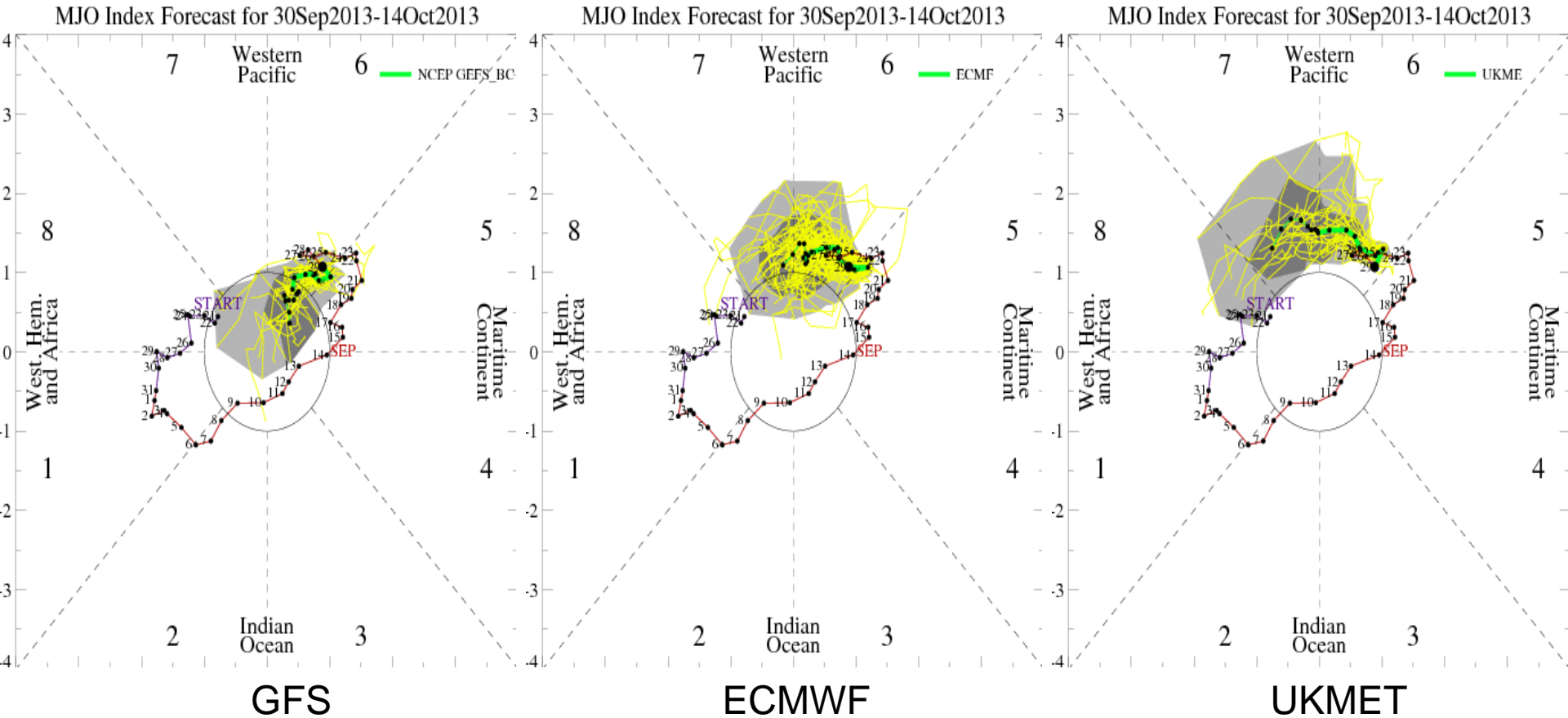


# IR Satellite & 200-hpa Velocity Potential Anomalies

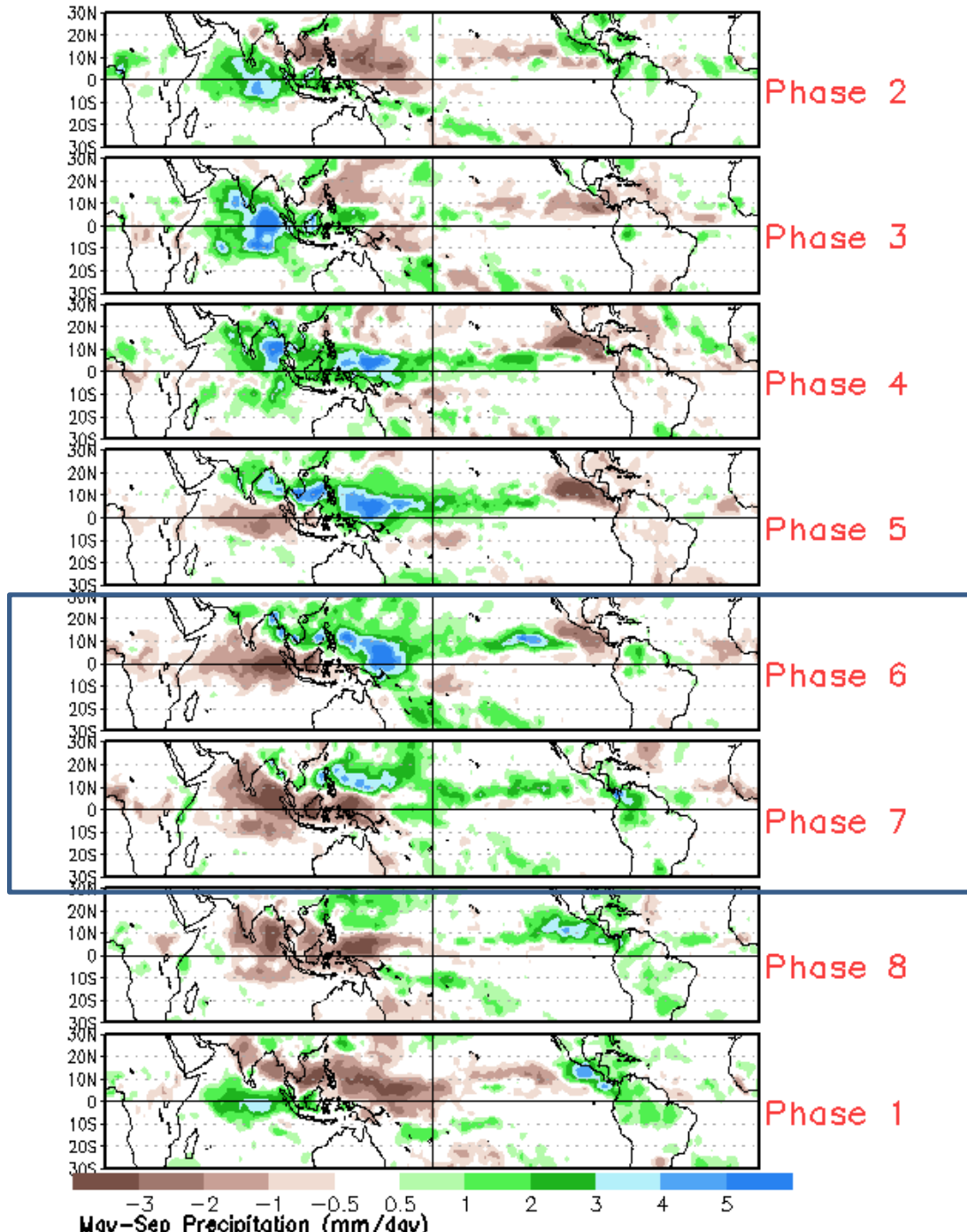
Green: Enhanced Divergence    Brown: Enhanced Convergence



# MJO Observation/Forecast

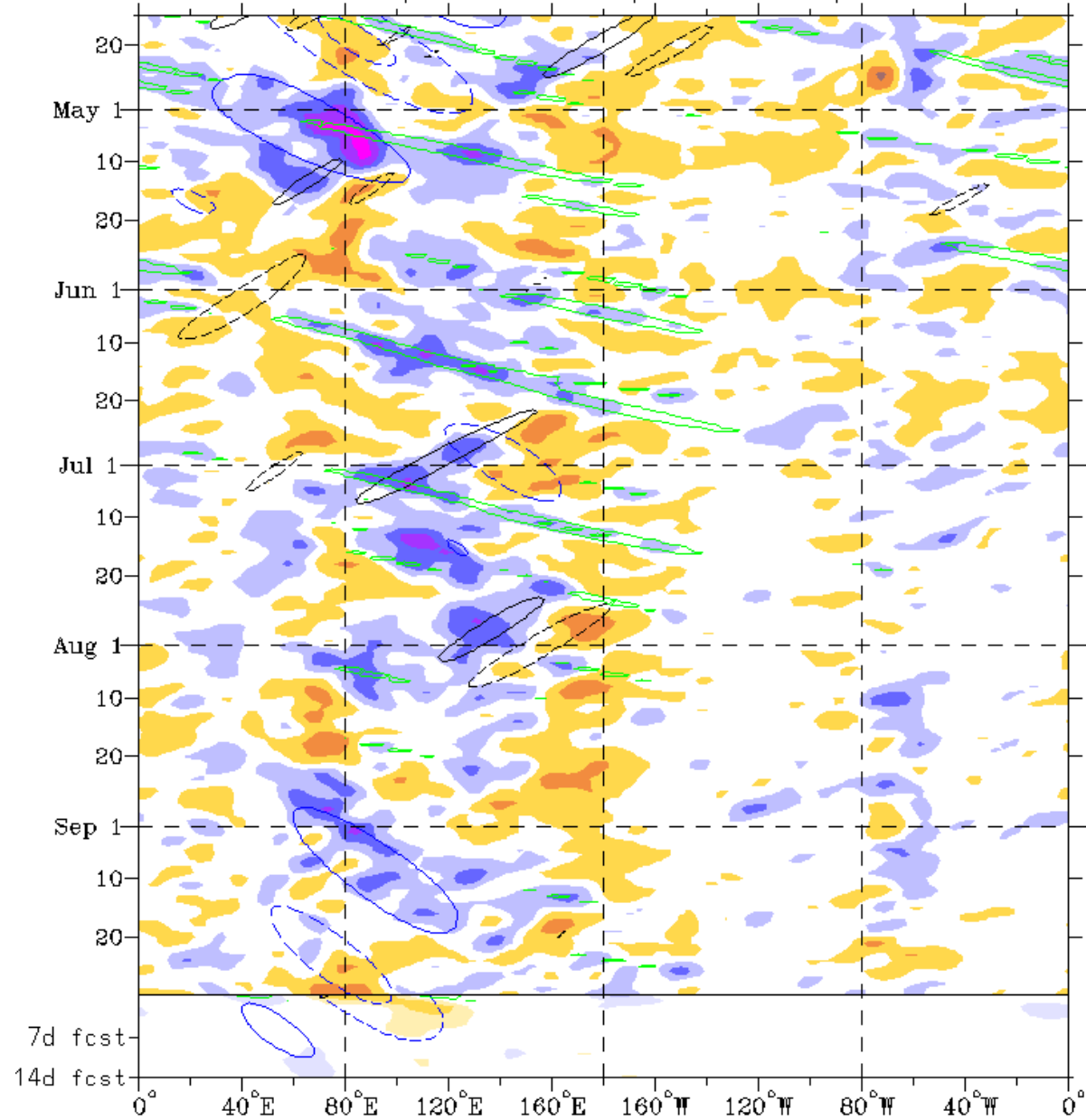


# Average Conditions when the MJO is present (May-Sep)



CAVEAT:



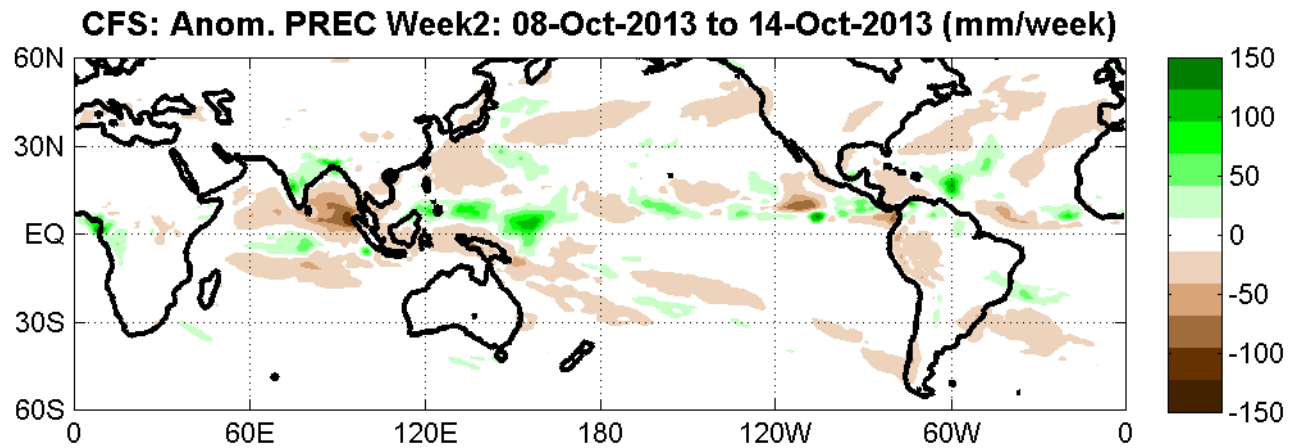
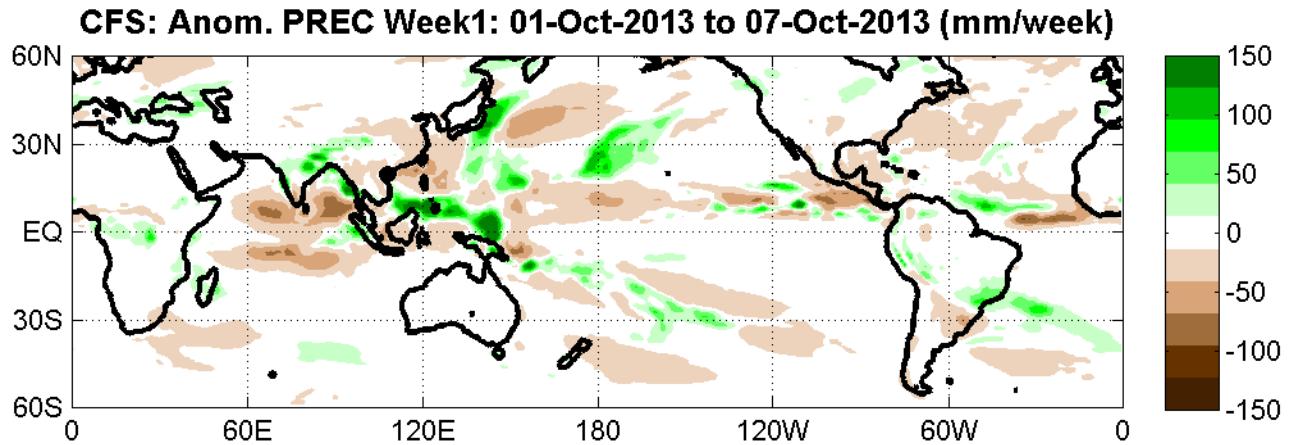


Active phase of the MJO  
forecast to impact Indian Ocean  
and Maritime Continent.

Atmospheric Kelvin waves to  
impact Americas

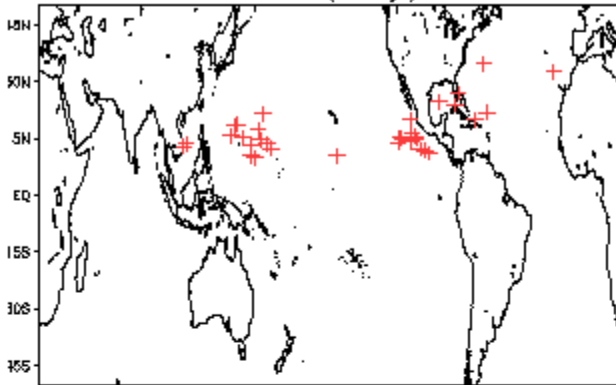
Indications of other modes of  
variability, including mid-latitude  
influence near the Date Line.

# CFS v2 Forecast of Precipitation Anomalies For Weeks 1 and 2

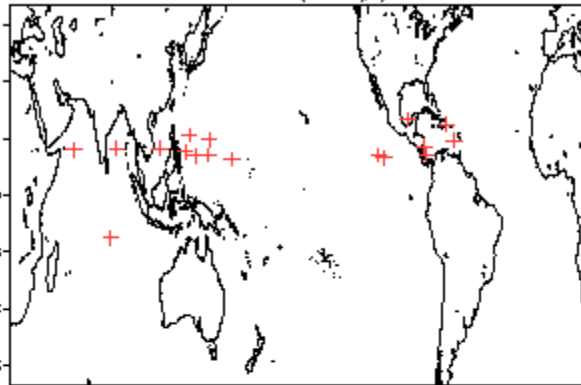


# October Tropical Storm Formation by MJO phase

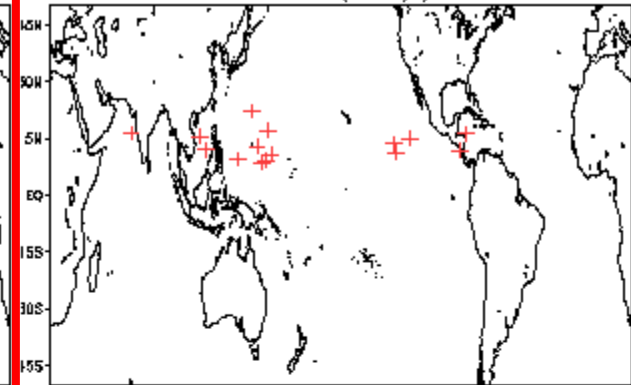
Phase 1 (94 days) 34 storms



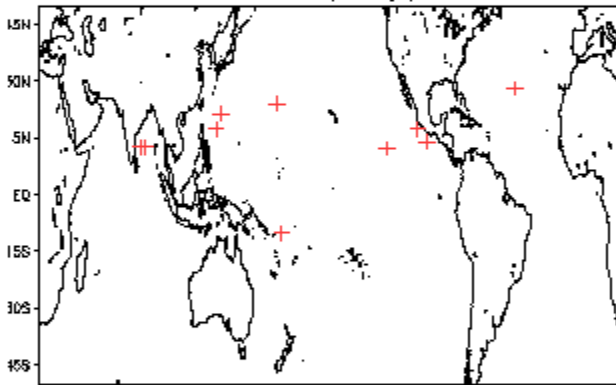
Phase 4 (85 days) 18 storms



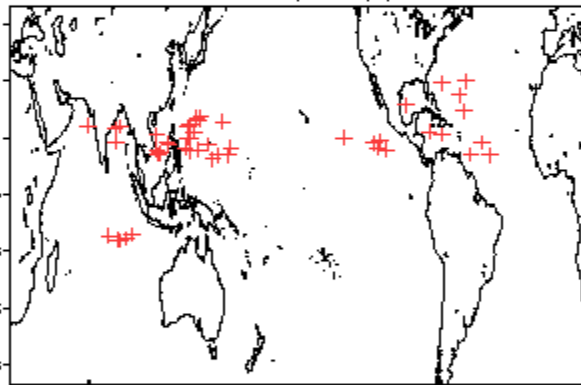
Phase 7 (48 days) 16 storms



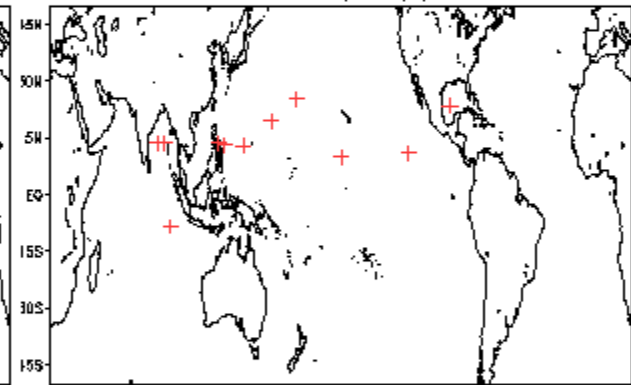
Phase 2 (75 days) 11 storms



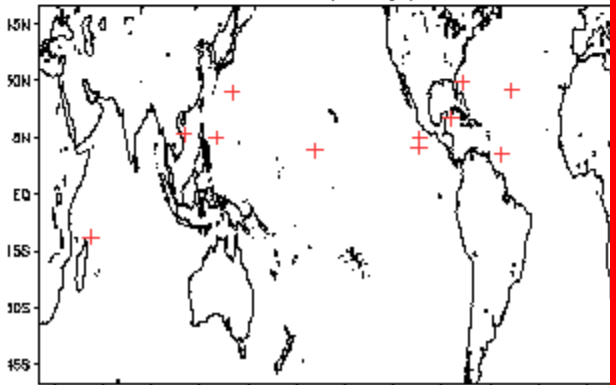
Phase 5 (133 days) 48 storms



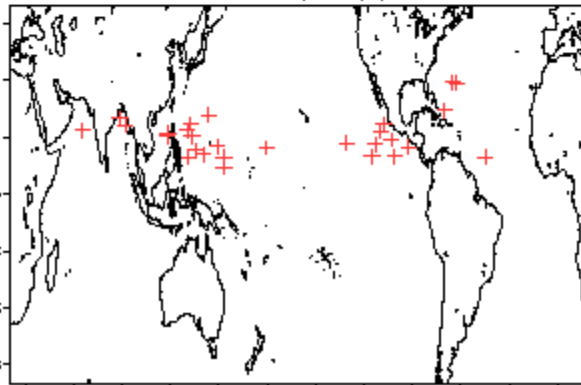
Phase 8 (66 days) 12 storms



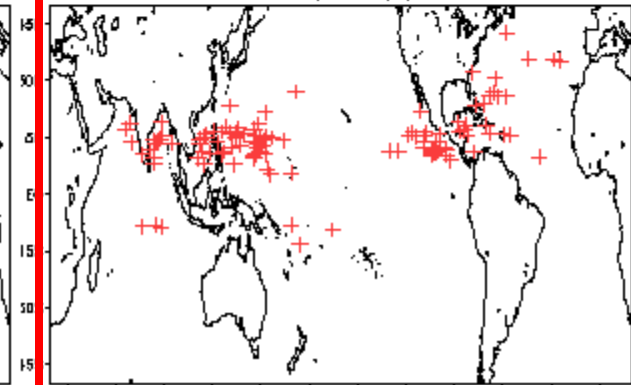
Phase 3 (41 days) 12 storms



Phase 6 (78 days) 30 storms



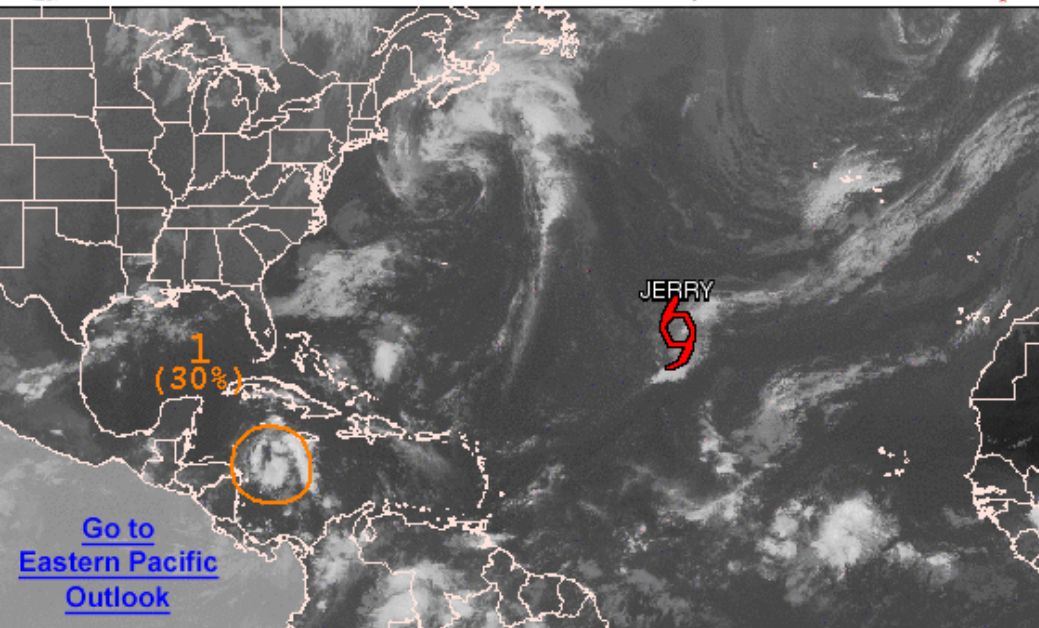
Null (422 days) 119 storms





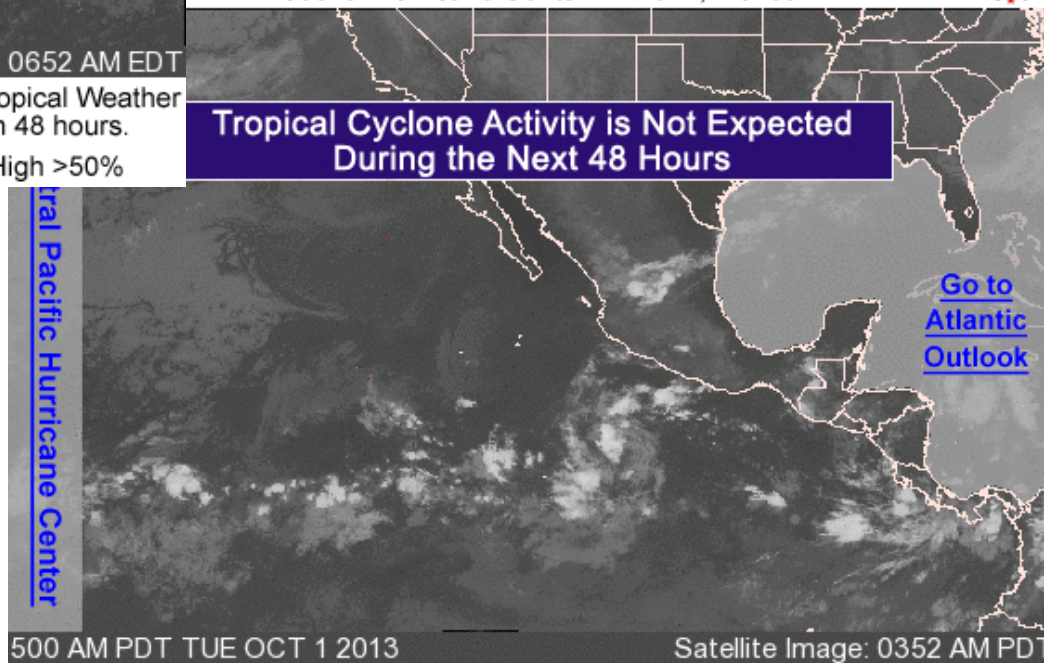
# Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida

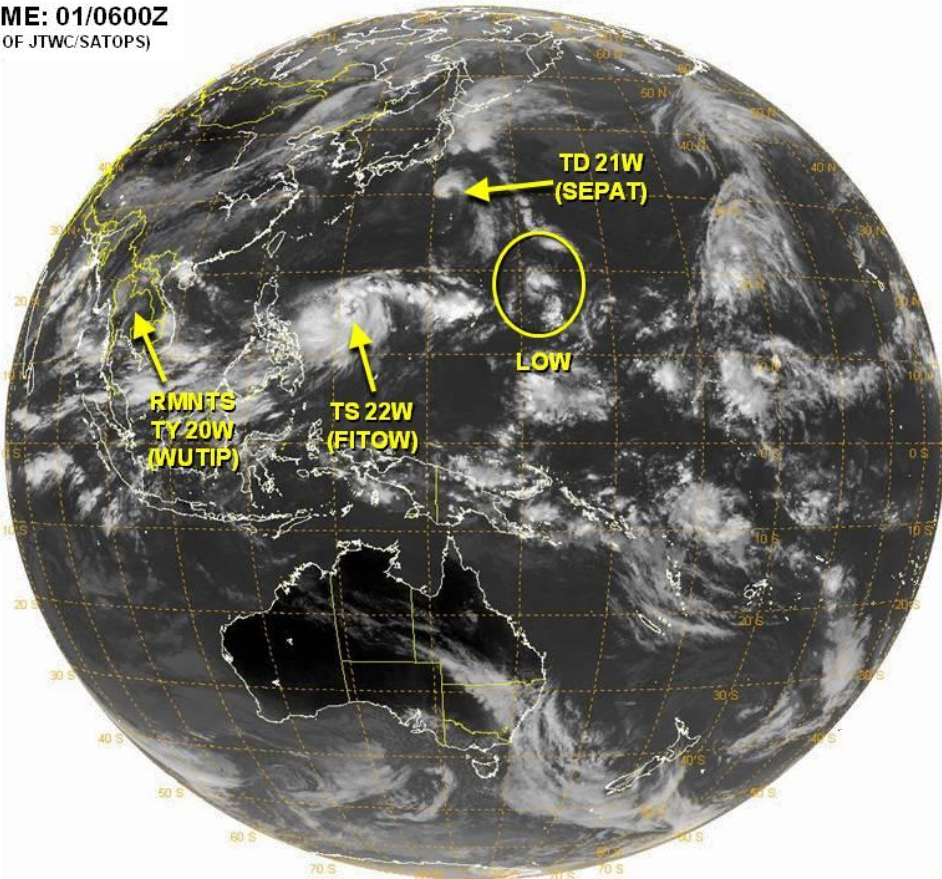


# Graphical Tropical Weather Outlook

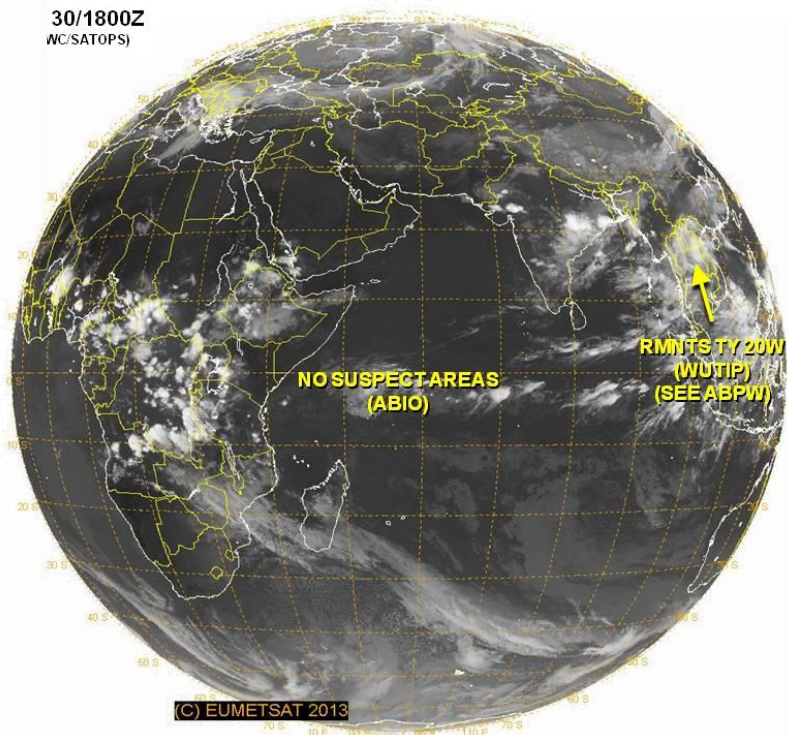
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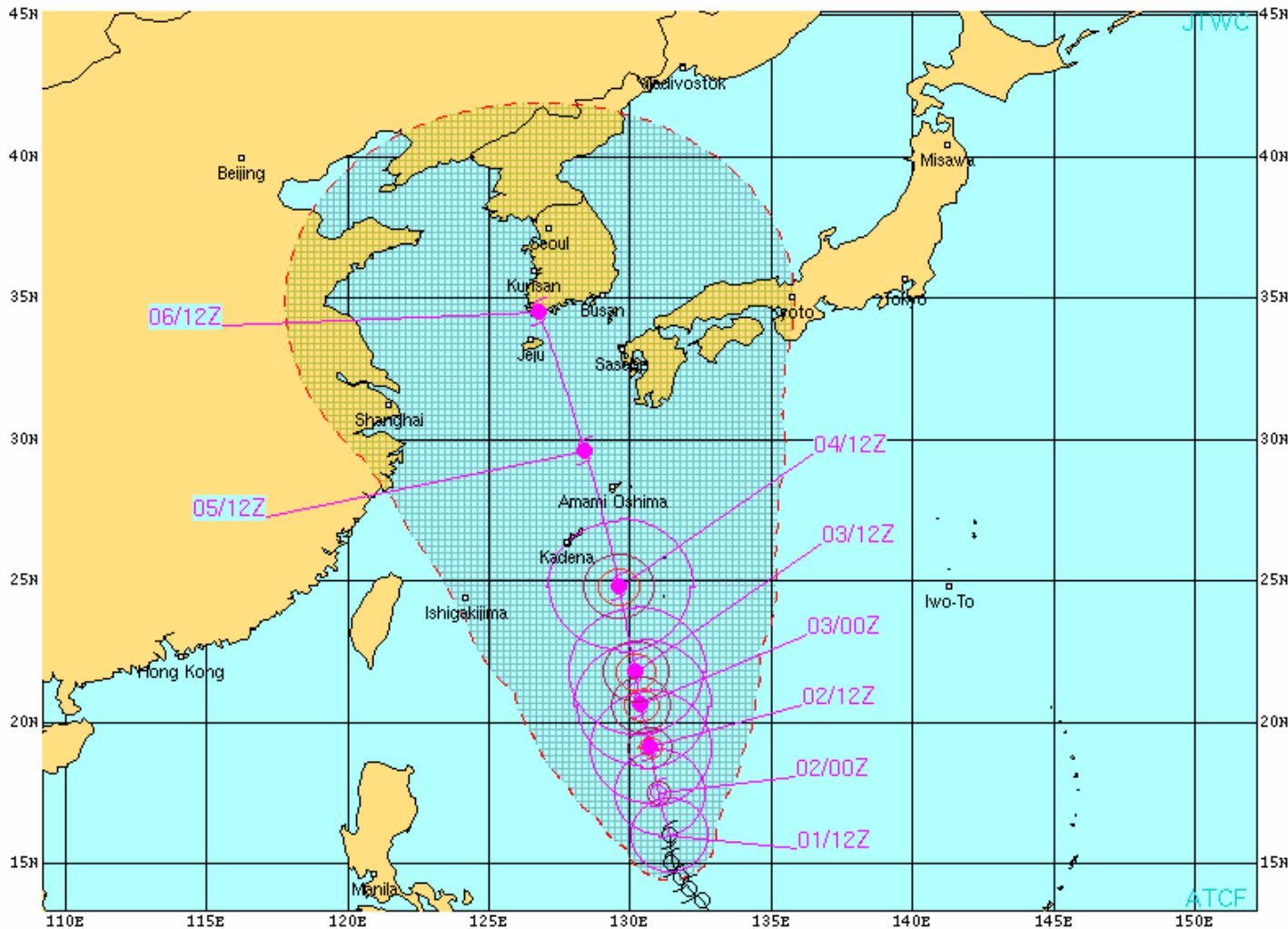


**VALID TIME: 01/0600Z**  
(PRODUCT OF JTWC/SATOPS)



**30/1800Z**  
NC/SATOPS)



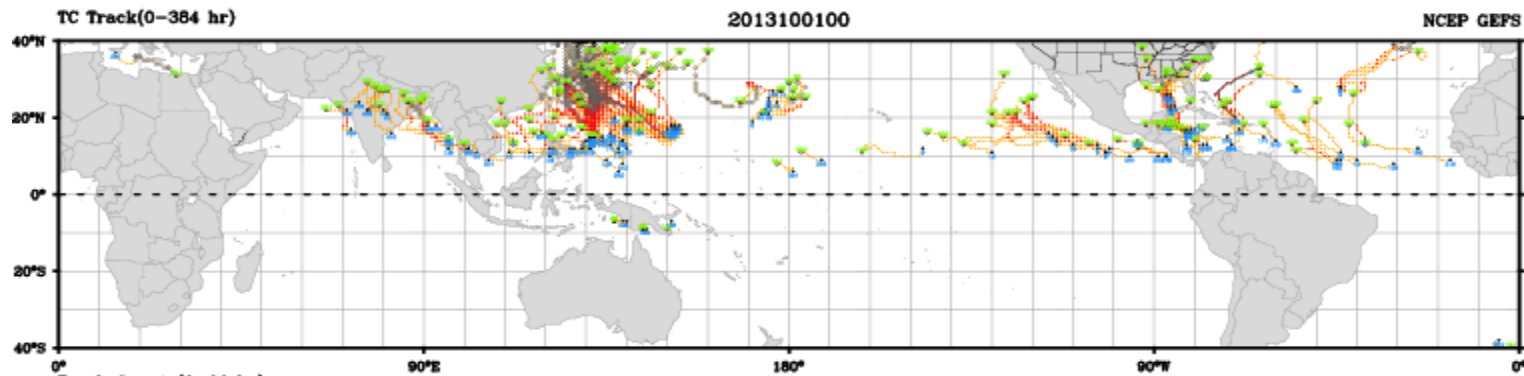


**TROPICAL STORM 22W (FITOW) WARNING #6**  
 WIPN33 PGTW 011500  
 011200Z POSIT: NEAR 16.0N 131.4E  
 MOVING 355 DEGREES TRUE AT 10 KNOTS  
 MAXIMUM SIGNIFICANT WAVE HEIGHT: 17 FEET  
 01/12Z, WINDS 050 KTS, GUSTS TO 065 KTS  
 02/00Z, WINDS 055 KTS, GUSTS TO 070 KTS  
 02/12Z, WINDS 070 KTS, GUSTS TO 085 KTS  
 03/00Z, WINDS 085 KTS, GUSTS TO 105 KTS  
 03/12Z, WINDS 095 KTS, GUSTS TO 115 KTS  
 04/12Z, WINDS 100 KTS, GUSTS TO 125 KTS  
 05/12Z, WINDS 090 KTS, GUSTS TO 110 KTS  
 06/12Z, WINDS 070 KTS, GUSTS TO 085 KTS

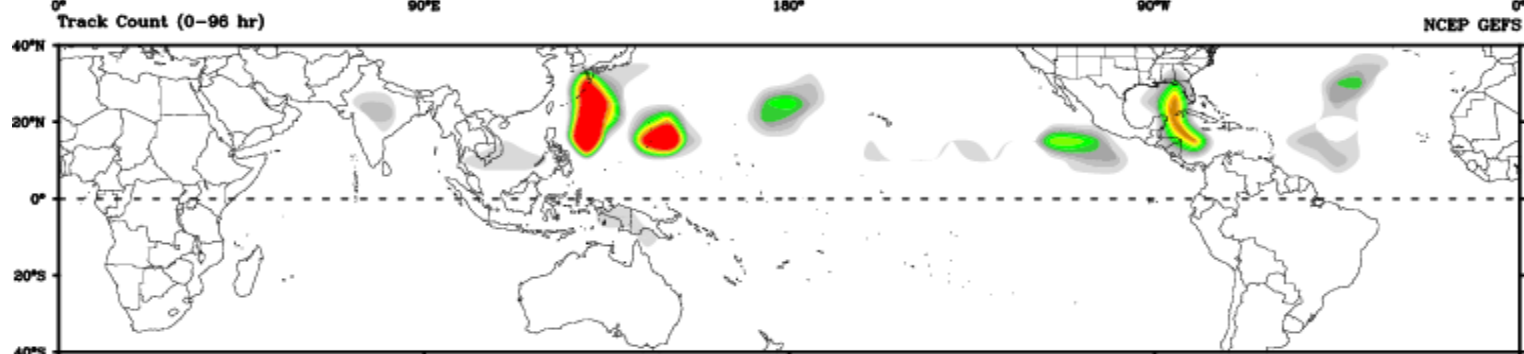
CPA TO:	NM	DTG
KADENA_AB	73	04/22Z
SASEBO	116	06/03Z
IWAKUNI	250	06/06Z
CAMP HUMPHREYS	150	06/12Z
CAMP RED_CLOUD	198	06/12Z
CHINHAE	95	06/12Z
INCHON	180	06/12Z
KUNSAN_AB	84	06/12Z
OSAN_AB	156	06/12Z
PUSAN	118	06/12Z
TAEJU	121	06/12Z
YONGSAN_AIN	180	06/12Z

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

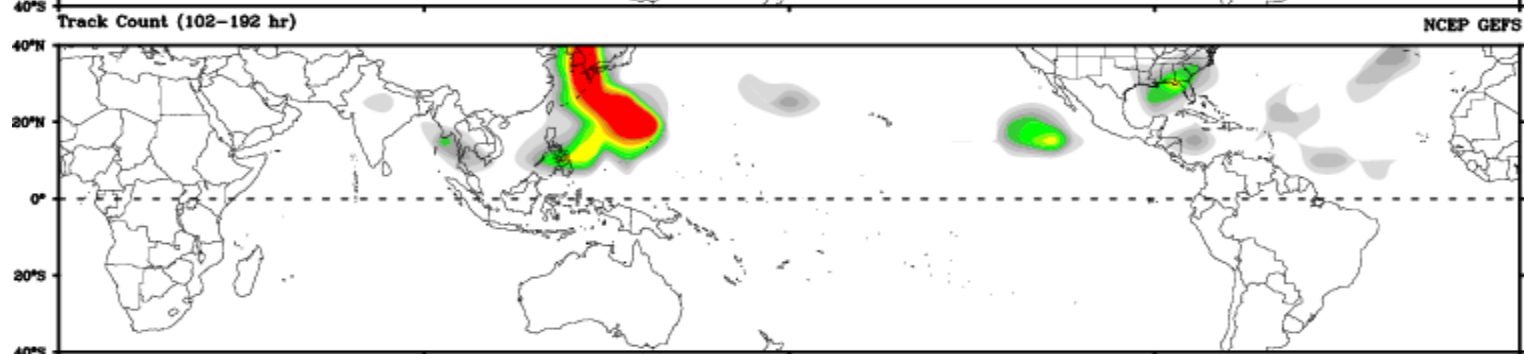




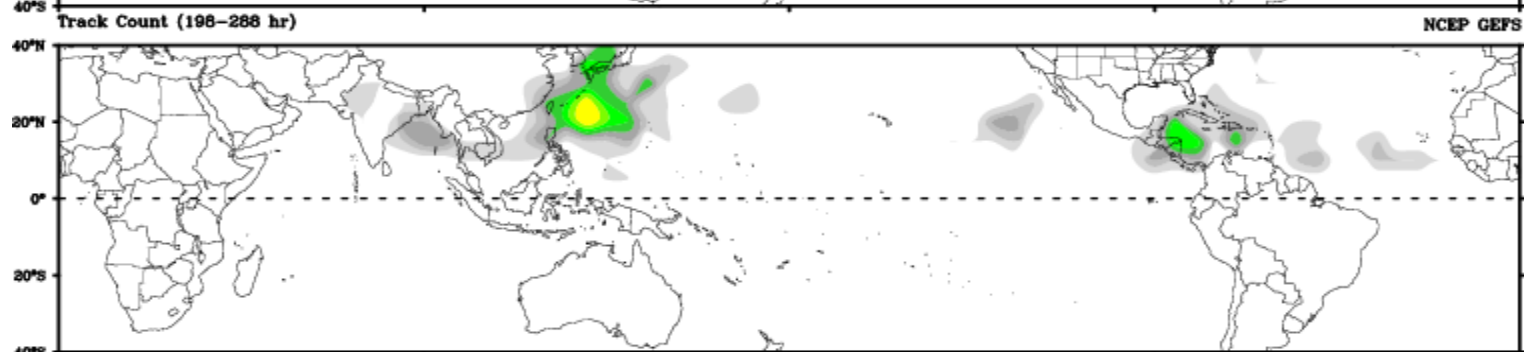
Days 1-4



Day 5-8



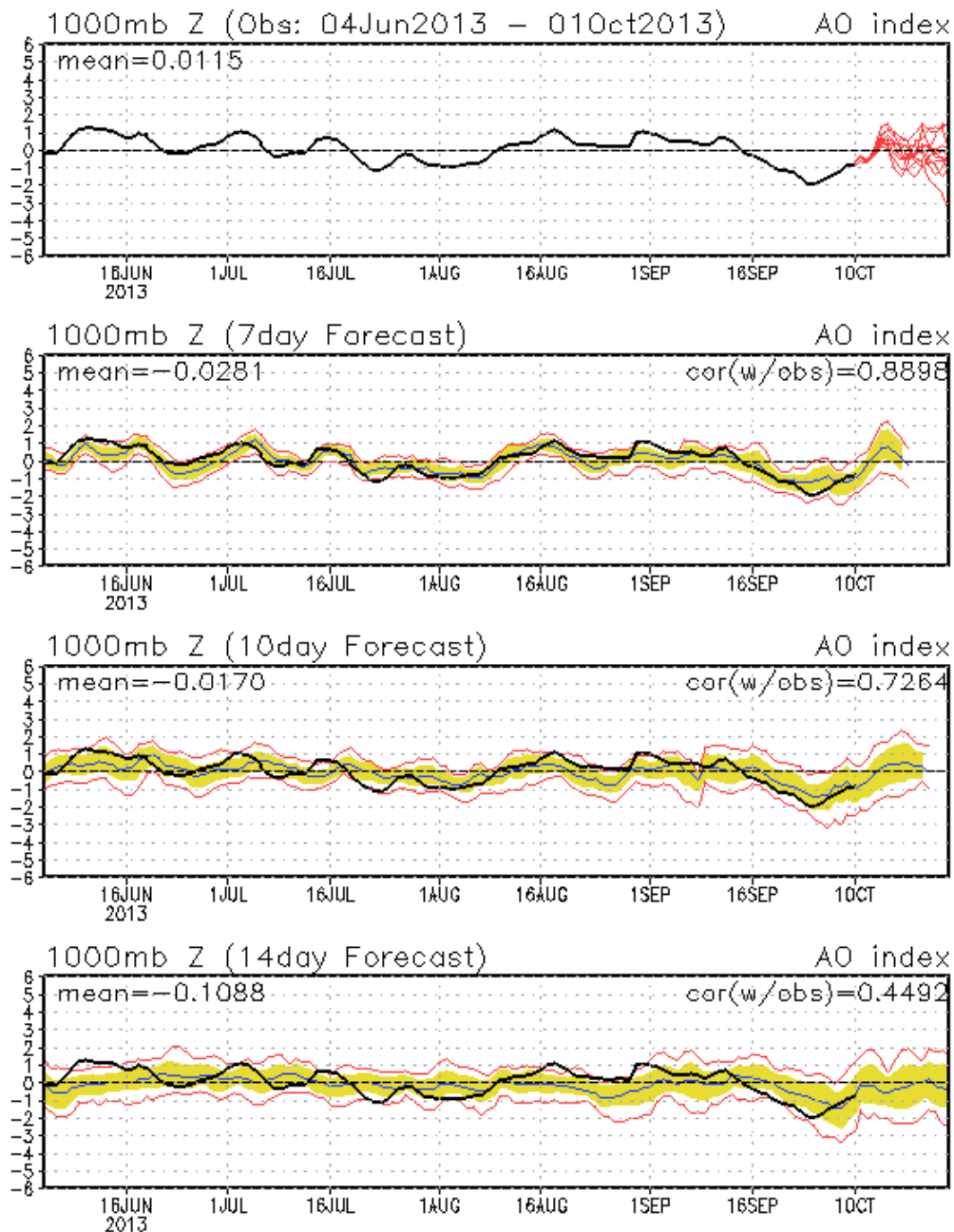
Day 9-12



# Connections to U.S. Impacts



## AO: Observed & ENSM forecasts

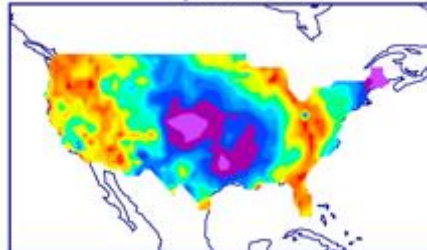


# US Composites based on MJO Phase

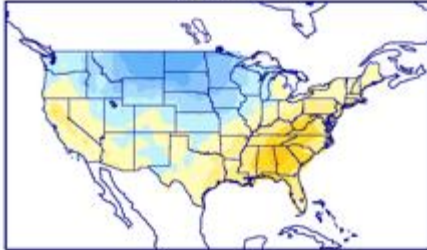
phase 6



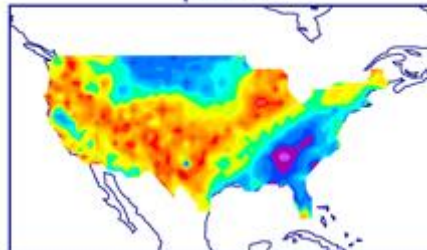
phase 6



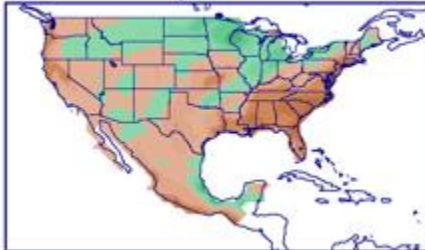
phase 7



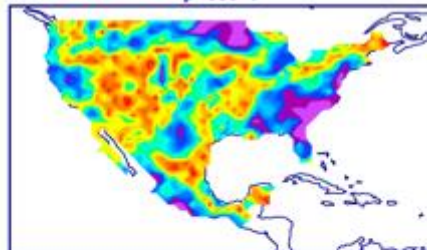
phase 7



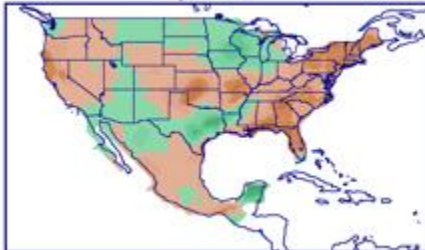
phase 6



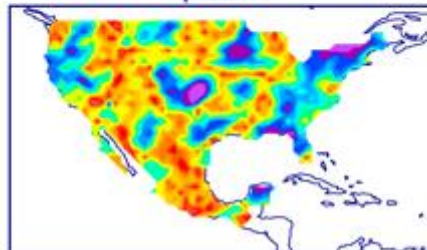
phase 6

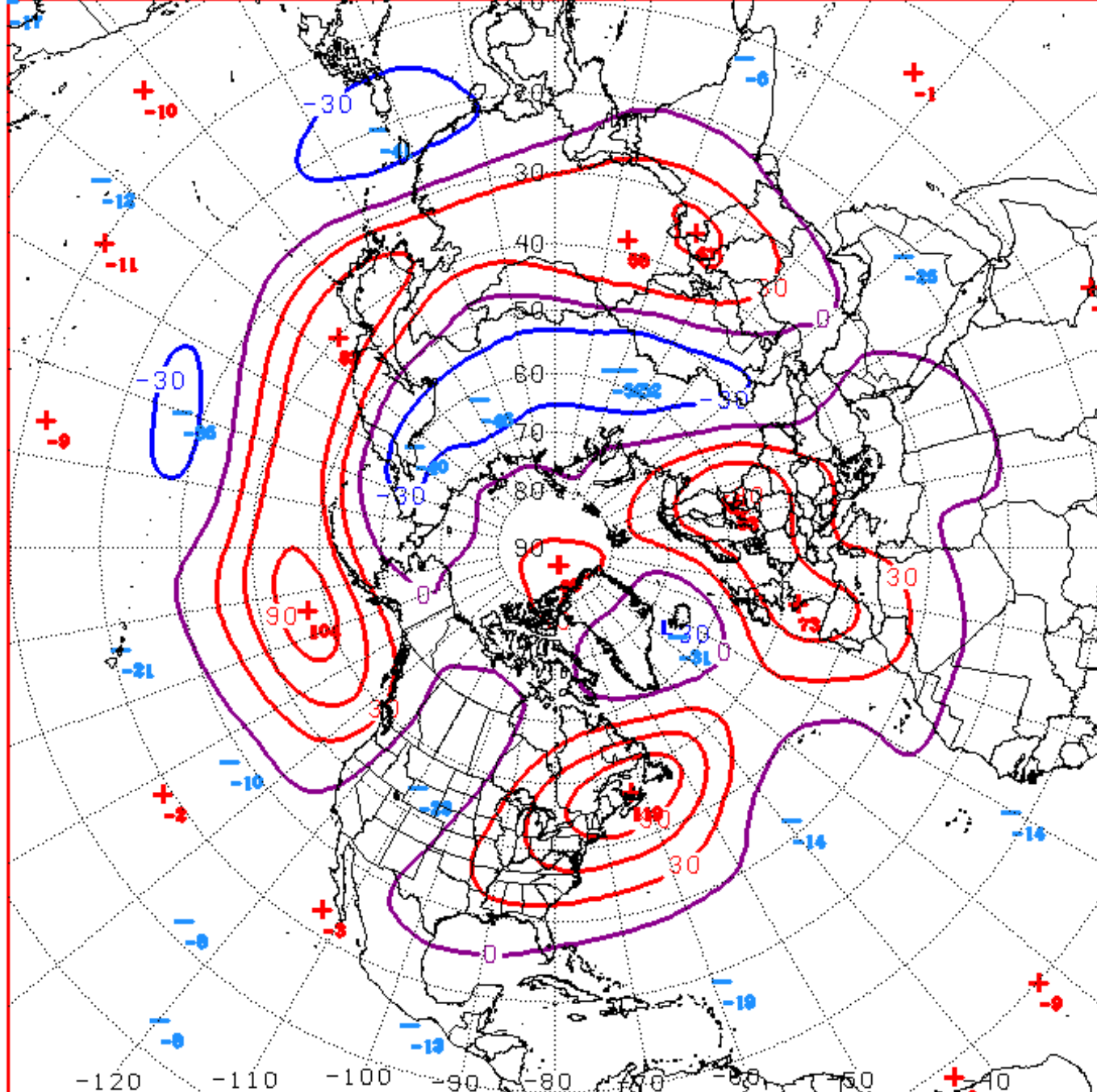


phase 7



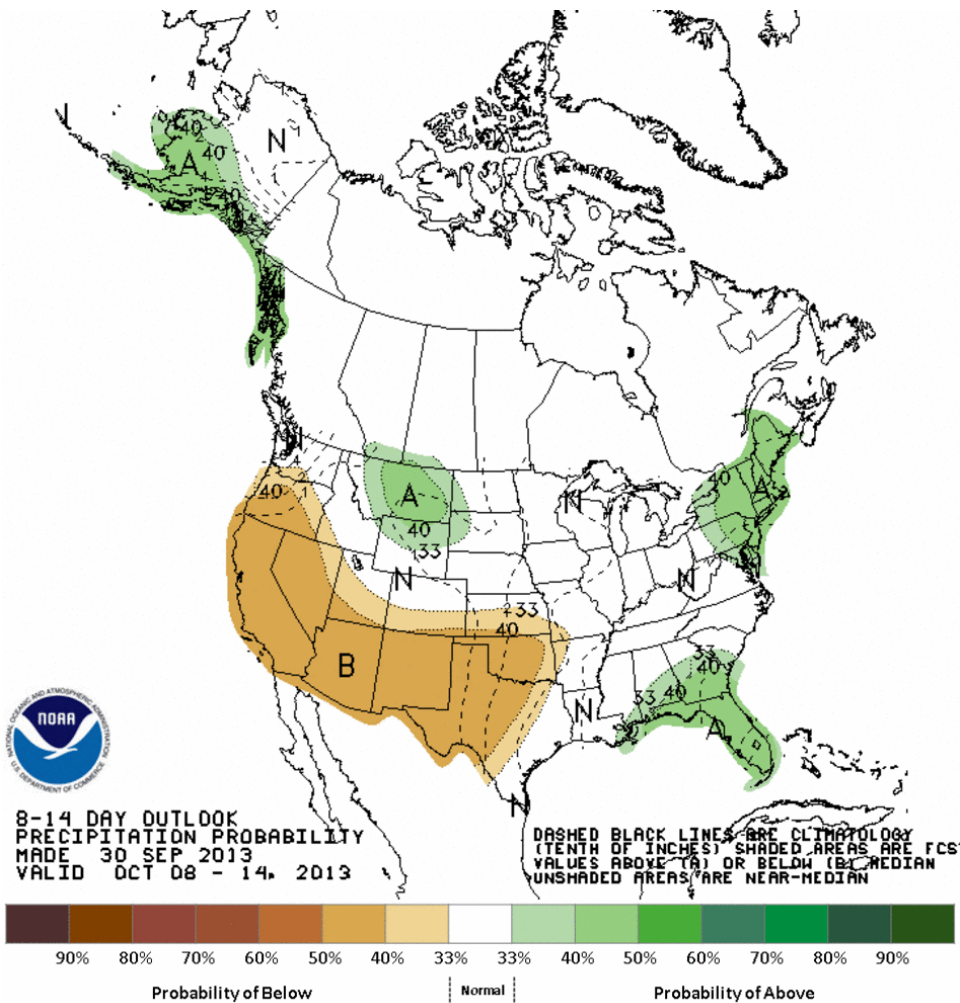
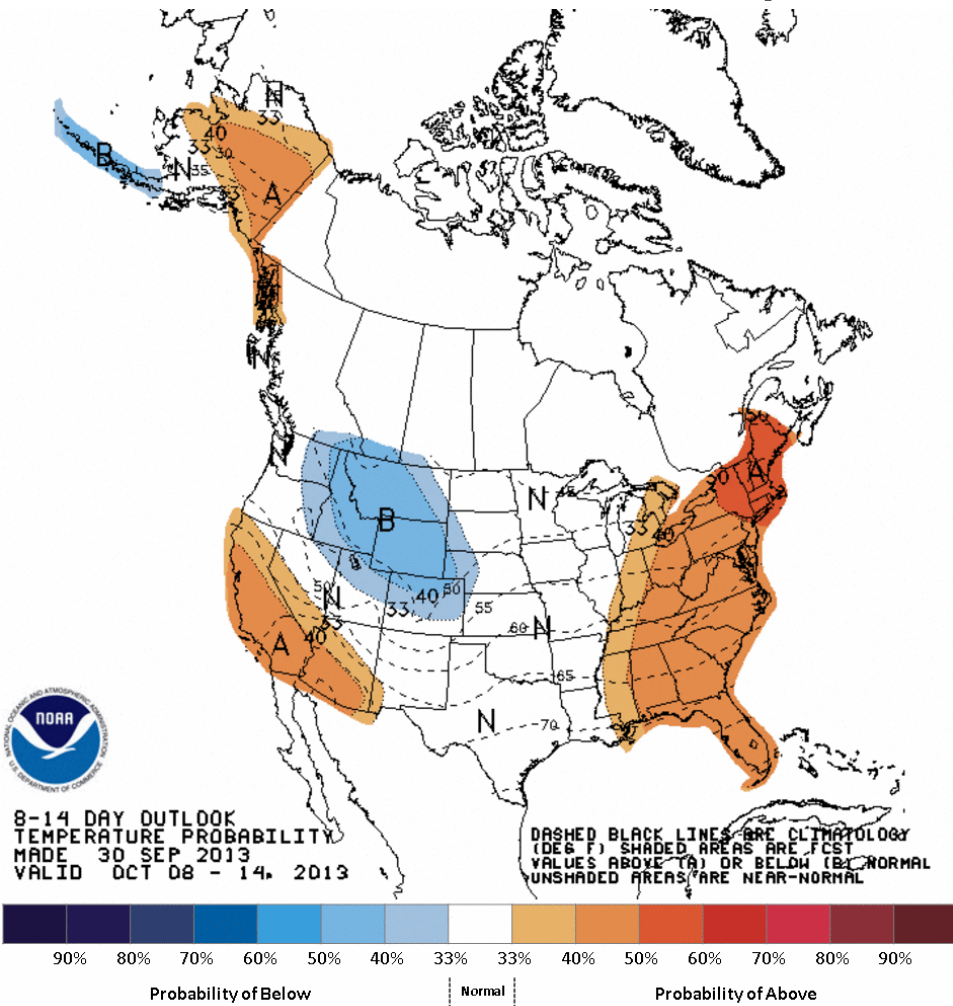
phase 7





D+11 500 MB ANOMALIES FROM 00Z ECMM  
CPC MAP MADE OCT 01 2013 1101 UTC CNTD OCT 12 2013

# Week 2 – Temperature and Precipitation

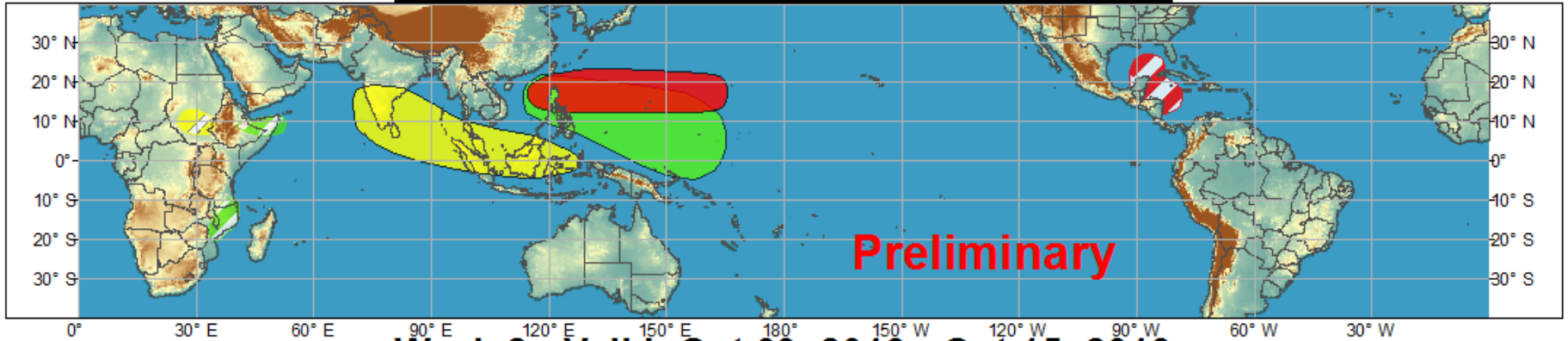




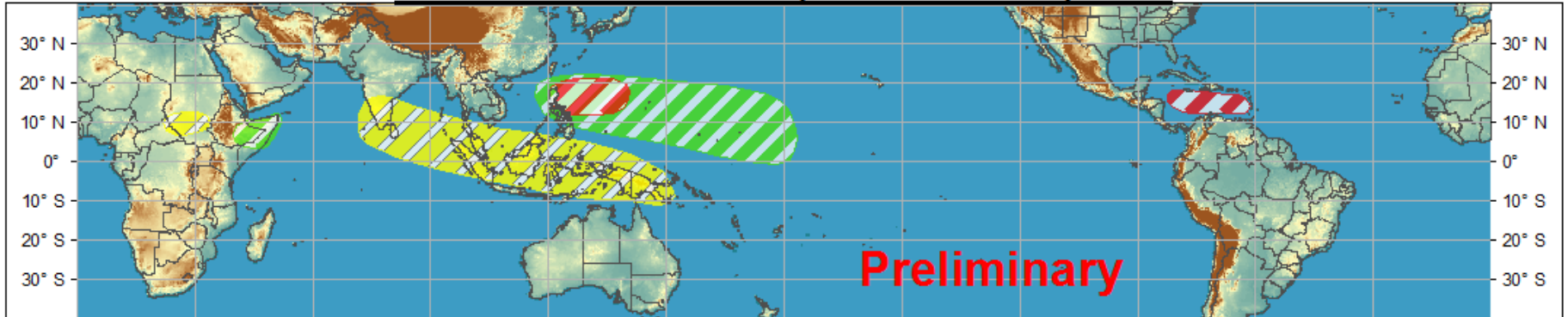
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