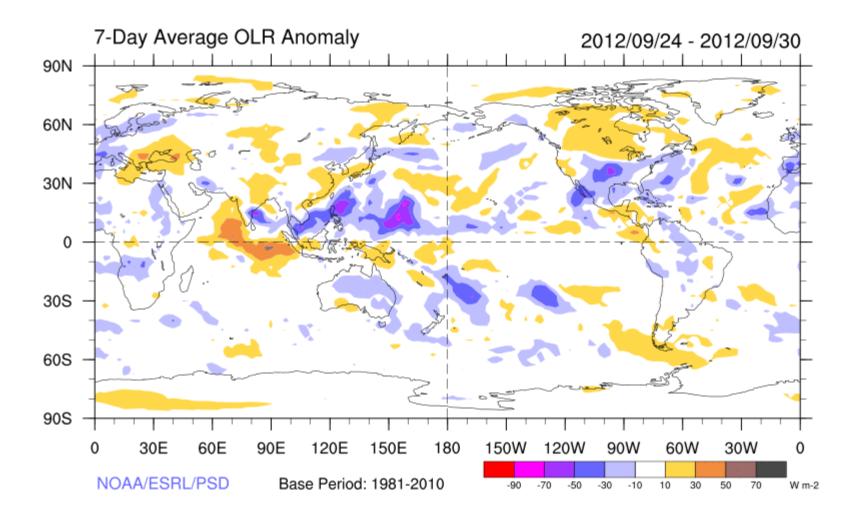
# Global Tropics Hazards And Benefits Outlook October 2, 2012

Jon Gottschalck

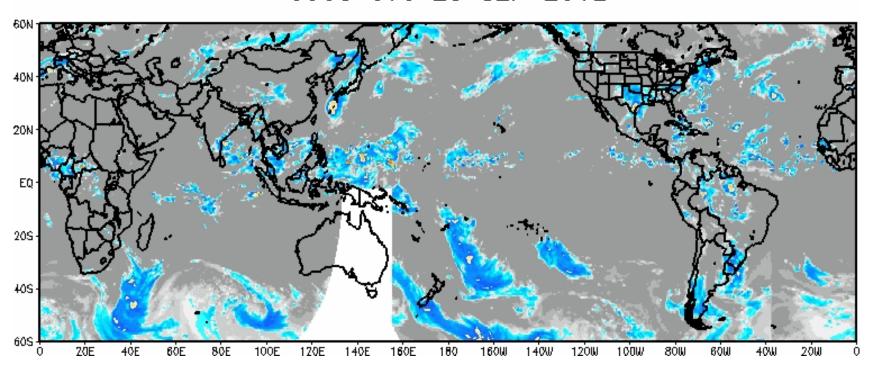
#### **Outline**

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

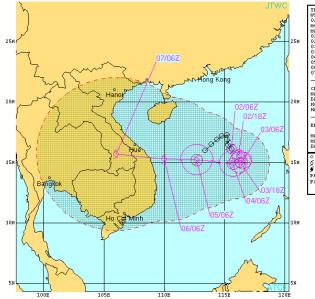


## Weekly Satellite Review

IR Temperatures 0900 UTC 29 SEP 2012



## **Tropical Cyclone Review**



TROPICAL STORM 21W (GAEMI) WARNING #4 WTPN31 PGTW 020900 0206002 POSIT: NEAR 16.1N 115.6E	
0206002 POSTT: NEAR 16 1N 115 6E	
MOVING 135 DEGREES TRUE AT 04 KNOTS	
MAXIMUM SIGNIFICANT WAVE HEIGHT: 15 FEET	
02/062, WINDS 040 KTS, GUSTS TO 050 KTS	
02/18Z, WINDS 045 KTS, GUSTS TO 055 KTS	
03/062, WINDS 050 KTS, GUSTS TO 065 KTS	
03/182, WINDS 055 KTS, GUSTS TO 070 KTS	
04/062, WINDS 060 KTS, GUSTS TO 075 KTS	
05/062, WINDS 060 KTS, GUSTS TO 075 KTS	
06/062, WINDS 050 KTS, GUSTS TO 065 KTS	
07/062, WINDS 040 KTS, GUSTS TO 050 KTS	
,, ,	
CPA TO: NM DTG	
MANILA 257 03/072	
DA_HANG 33 06/182 HO_CHI_MINH_CITY 287 06/232	
HO CHI MINH CITY 287 06/232	
HANOI 318 07/062	
100101	
BEARING AND DISTANCE DIR DIST TAU	
(HM) (HRS	
MANILA 279 258 24	/
MANILA 274 308 48	
DA_MANG 100 259 72	

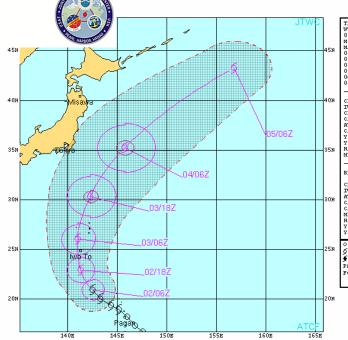
O LESS THAN 34 KNOTS

§ 34-63 KNOTS

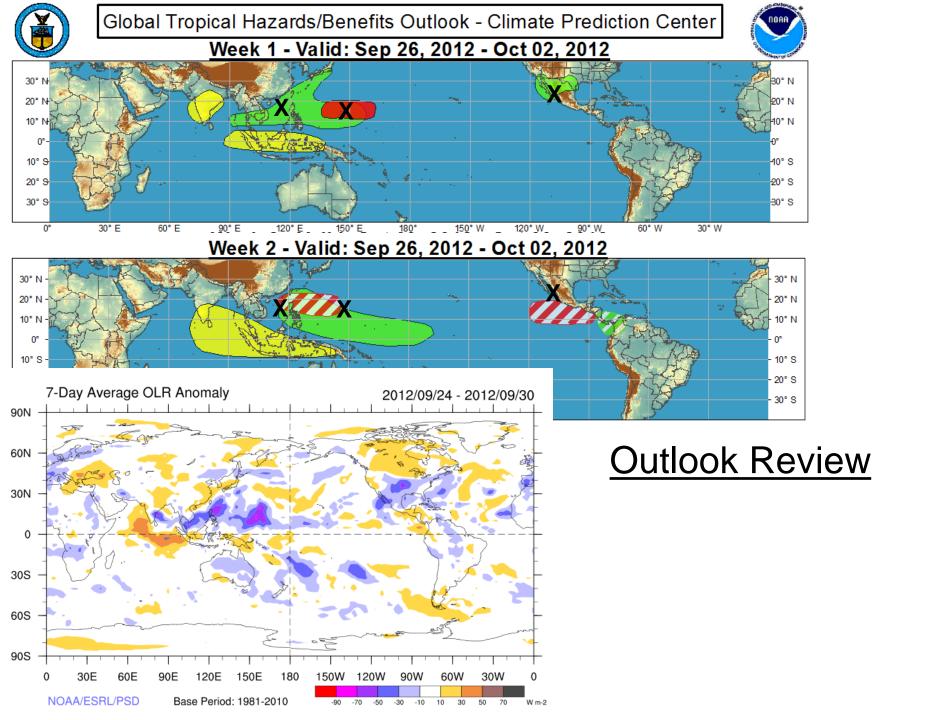
§ MORE THAN 63 KNOTS

PAST 6 HOURLY CYCLONE POSITS IN BLACK

FORECAST CYCLONE POSITS IN COLOR



TROPICAL STORM 20W (MALIKSI) WARNING #8 WTPH32 FOTT 020900 0205002 FOSIT: HERR 20.9N 142.5E MOVING 320 DEGREES TRUE AT 12 KNOTS MAXIMUM SIGNIFICARIT WAVE HEIGHT: 18 FEET 02/162, WINDS 045 KTS, GUSTS TO 055 KTS 02/162, WINDS 045 KTS, GUSTS TO 055 KTS 03/162, WINDS 050 KTS, GUSTS TO 055 KTS 03/162, WINDS 055 KTS, GUSTS TO 075 KTS 03/162, WINDS 056 KTS, GUSTS TO 075 KTS 05/062, WINDS 045 KTS, GUSTS TO 075 KTS	
CPA TO: NM DT6 INW0_JIMPA 18 03/02z CHCPI_JIMPA 55 03/10z CAMMP_FUJI 313 04/00z ATSUGI 269 04/01z CAMMP_ZAMMA 269 04/01z CAMMP_ZAMMA 269 04/01z YOKOTURA 251 04/01z YOKOTURA 251 04/01z MIRATTA_AIPPOPT 233 04/02z MISAWA 365 04/10z	
CHICHI JIMA   DISTANCE   DIR DIST TAU (NM) (MRS)	
OLESS THAN 34 KNOTS Ø 34-63 KNOTS Ø MORE THAN 63 KNOTS PAST 6 HOURLY CYCLONE POSITS IN BLACK FORECAST CYCLONE POSITS IN COLOR	•



# Synopsis of Climate Modes

#### **ENSO**:

• ENSO-neutral conditions continue. The new ENSO Diagnostic discussion will be released next Thursday 10/4.

#### MJO and other subseasonal variability:

- The MJO remained weak with any enhanced phase remaining over the western Pacific and at this time the MJO is forecast to remain weak over the period.
- Atmospheric Kelvin wave activity may elevate the chances for tropical cyclogenesis across the eastern Pacific during parts of the period but confidence is somewhat low.

#### **Extratropics:**

 Recurving western Pacific tropical cyclones still a factor for the PNA sector but there is much better agreement in mid-latitude model guidance this week.



#### Global Tropical Hazards/Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Oct 04, 2012 - Oct 10, 2012



Week 2 - Valid: Oct 11, 2012 - Oct 17, 2012



Confidence High Moderate Produced: 10/02/2012

Forecaster: Gottschalck

**Tropical Cyclone Formation** Above-average rainfall Development of a tropical cyclone that eventually reaches tropical storm/cyclone strength.

Weekly total rainfall in the upper third of the historical range. Weekly total rainfall in the lower third of the historical range.

Below-average rainfall Above-normal temperatures Below-normal temperatures

7-day mean temperatures in the upper third of the historical range.

7-day mean temperatures in the lower third of the historical range.

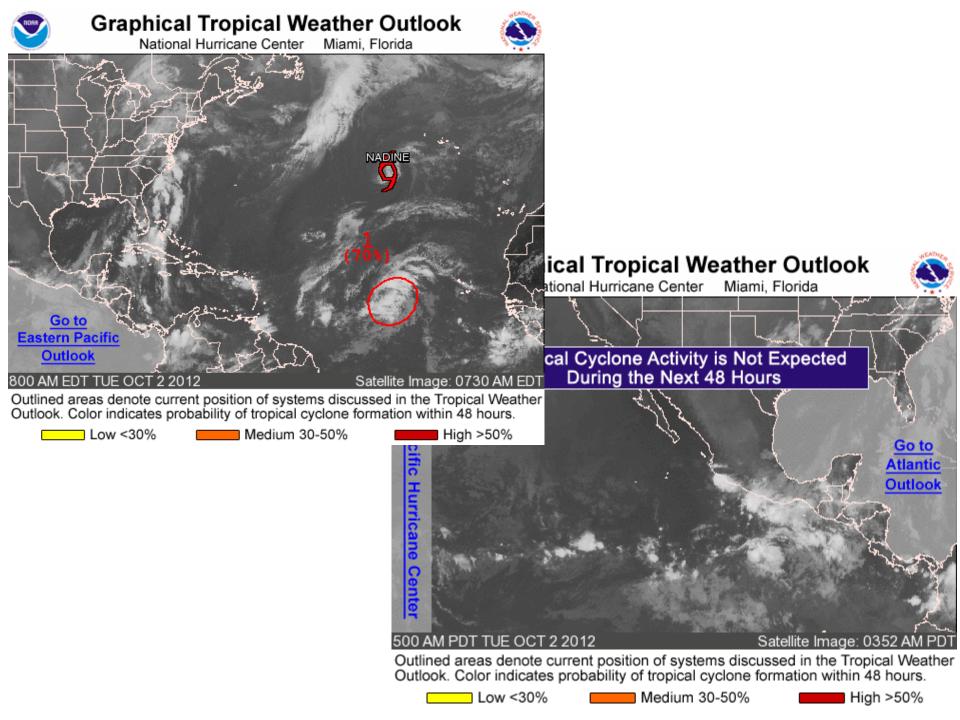
Product is updated once per week. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.





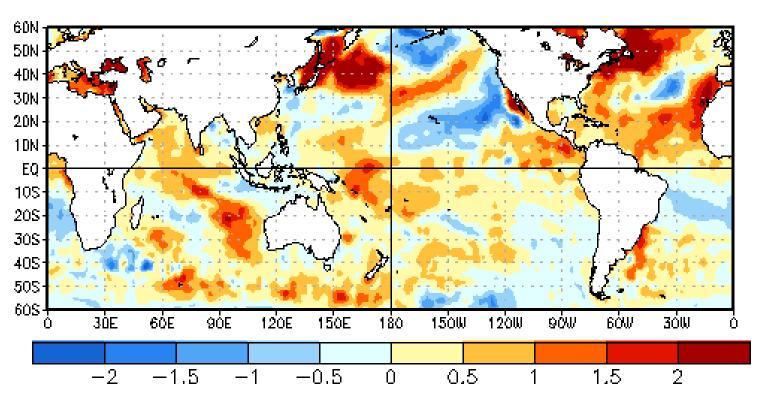






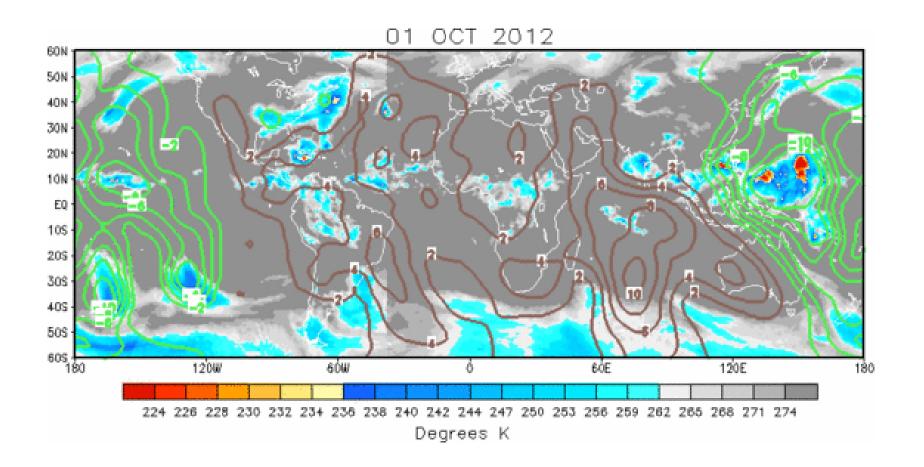
## **SST Observations**

26 SEP 2012

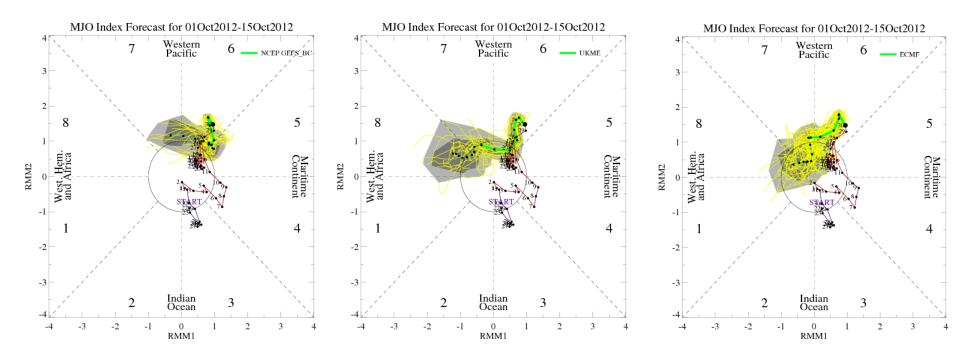


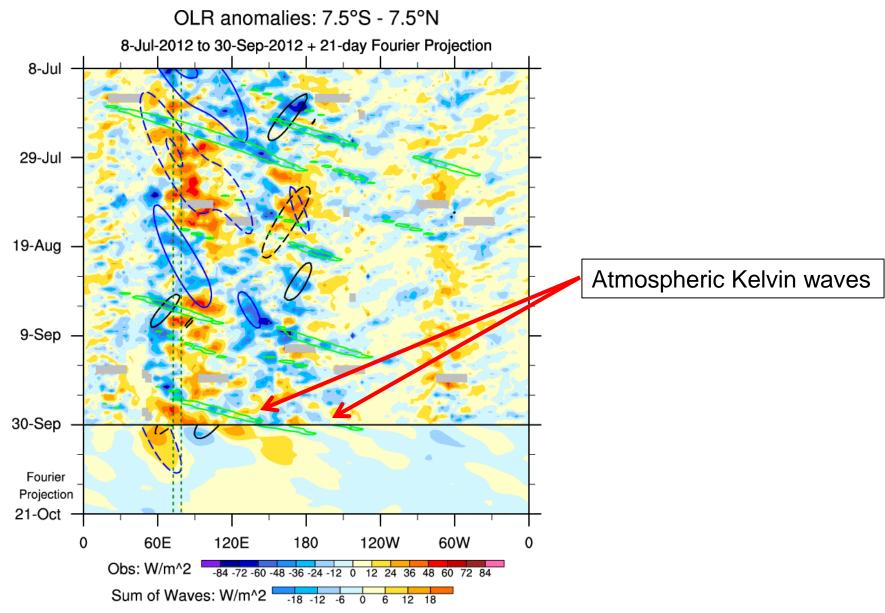
#### IR Satellite & 200-hpa Velocity Potential Anomalies

Green: Enhanced Divergence Brown: Enhanced Convergence

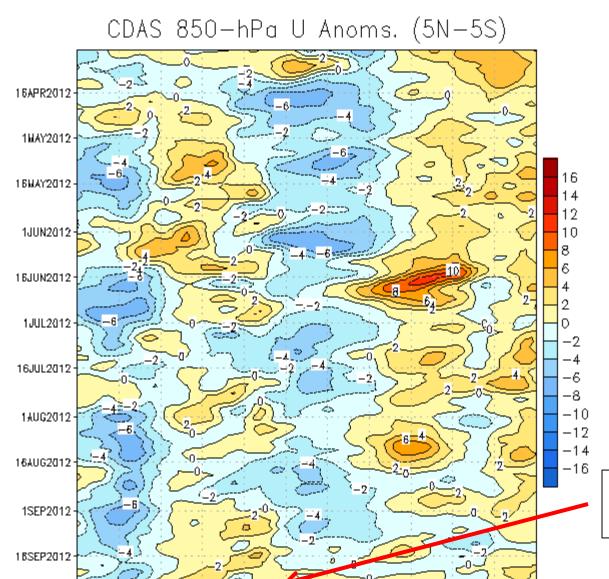


## MJO Observation/Forecast





MJO (blue, CINT=12); ER (black, CINT=12); Kelvin (green, CINT=12)



Westerly wind burst, some help for El Nino?

Data updated through 29 SEP 2012

140E

160E

160W

180

140W

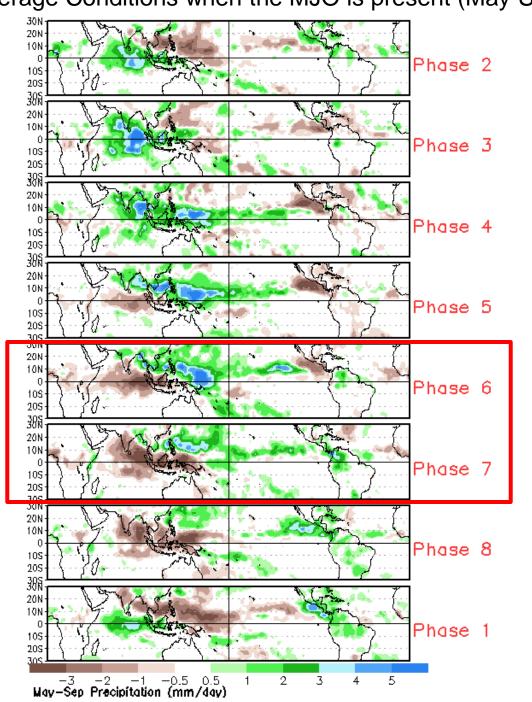
120W

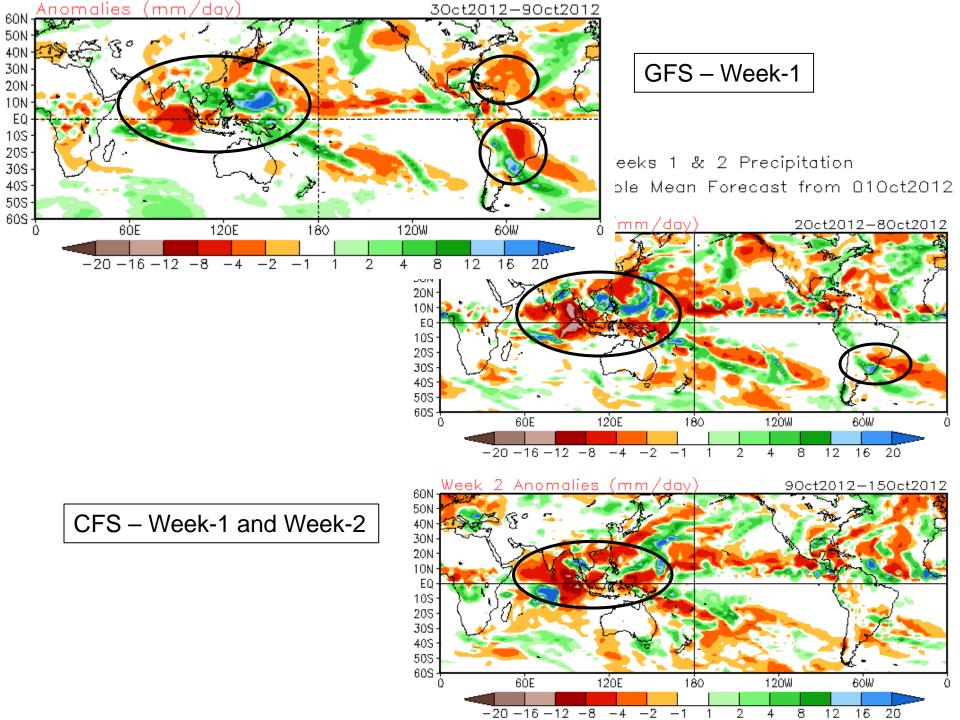
100W

120E

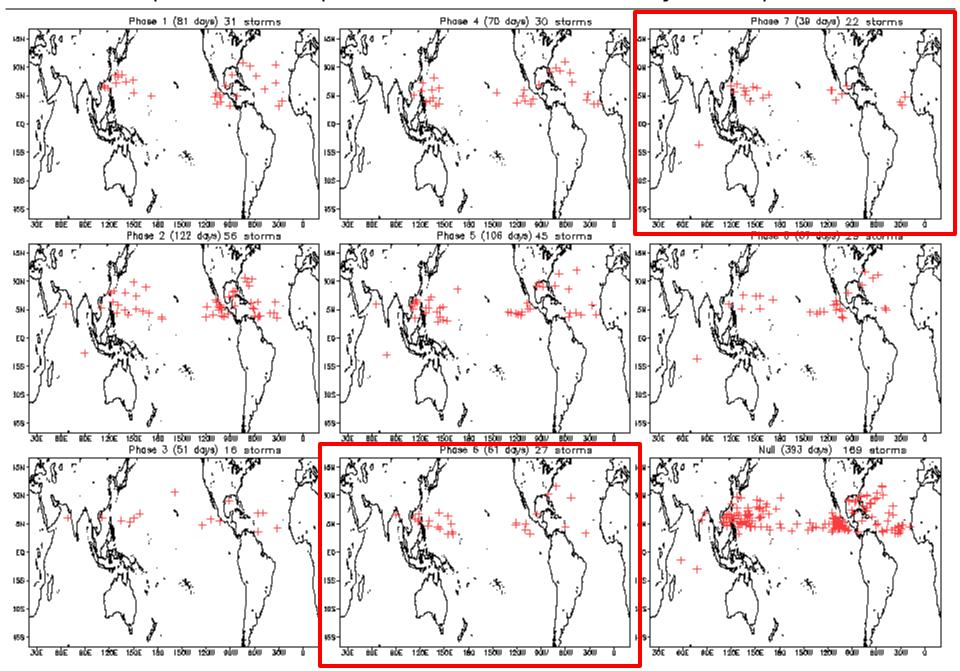
100E

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

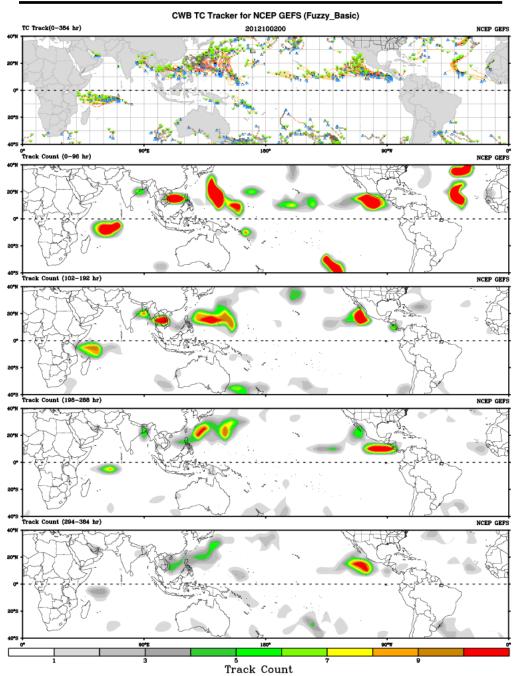




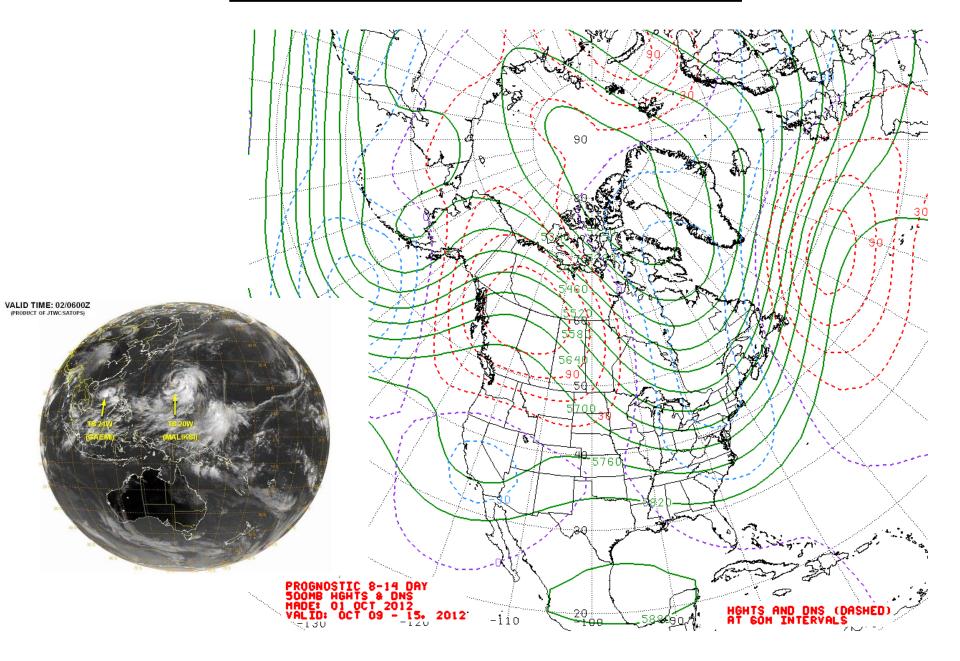
#### September Tropical Storm Formation by MJO phase



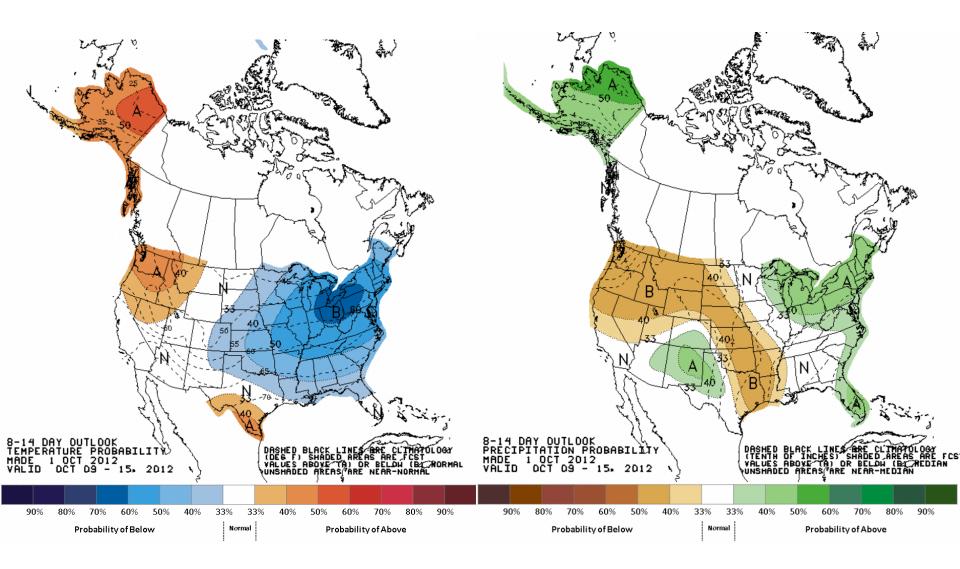
## **Ensemble GFS TC Guidance**



## Week 2 500-hPa Manual Chart



#### Week 2 -- Temperature and Precipitation





#### Global Tropical Hazards/Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Oct 04, 2012 - Oct 10, 2012



Week 2 - Valid: Oct 11, 2012 - Oct 17, 2012





Produced: 10/02/2012

Forecaster: Gottschalck Development of a tropical cyclone that eventually reaches tropical storm/cyclone strength.

Tropical Cyclone Formation

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

Below-normal temperatures

7-day mean temperatures in the upper third of the historical range.

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