

Global Tropics Hazards And Benefits Outlook

October 9, 2012

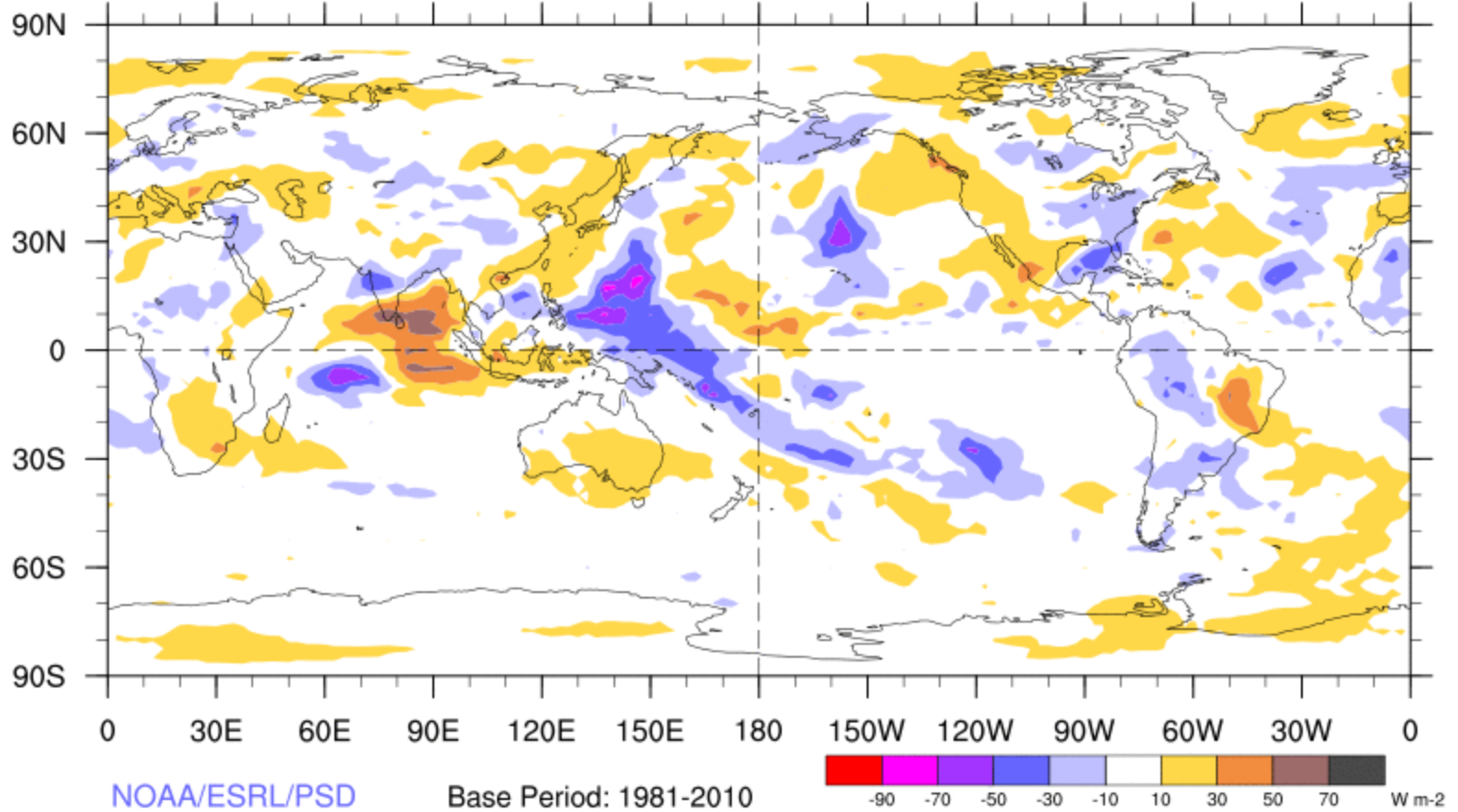
Jon Gottschalck

Outline

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

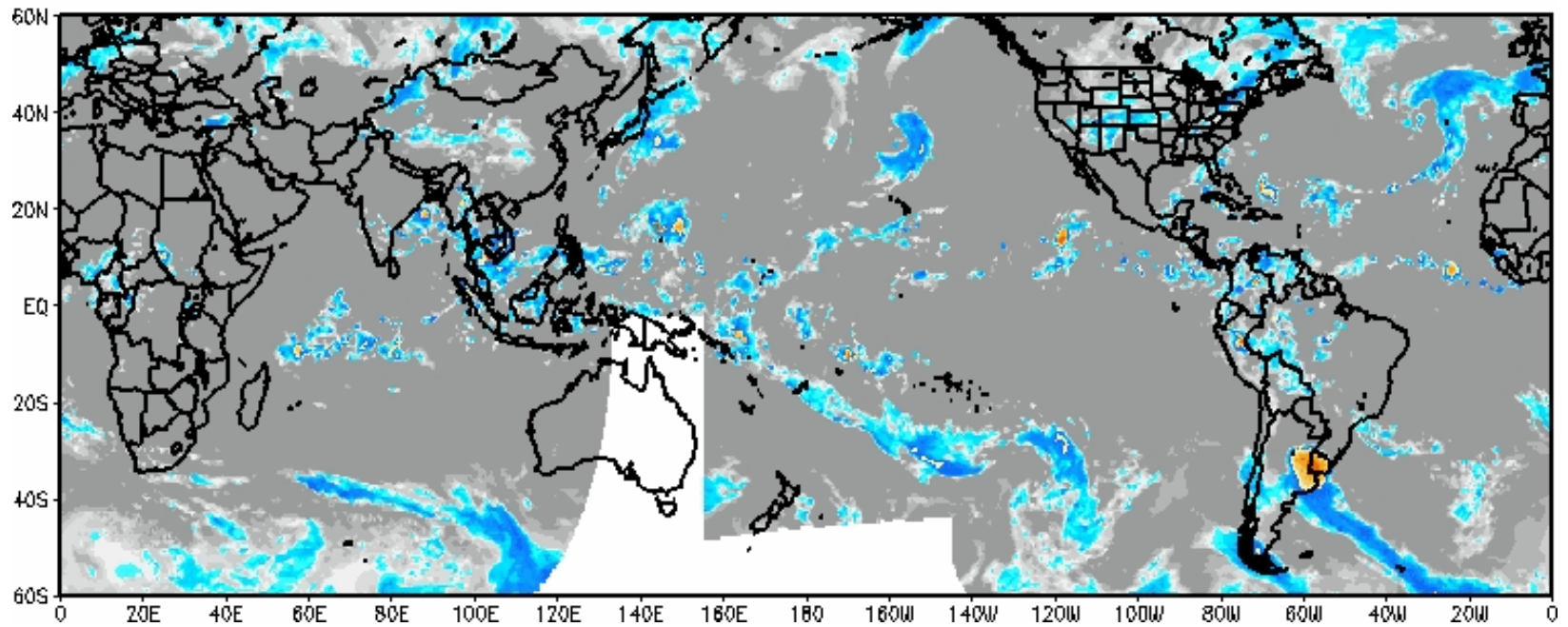
7-Day Average OLR Anomaly

2012/10/01 - 2012/10/07



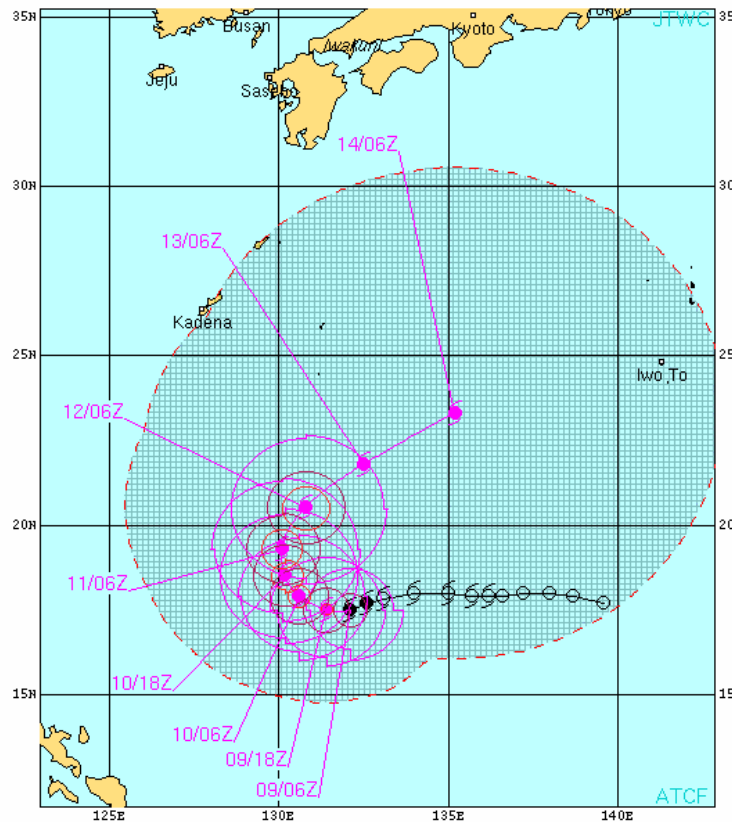
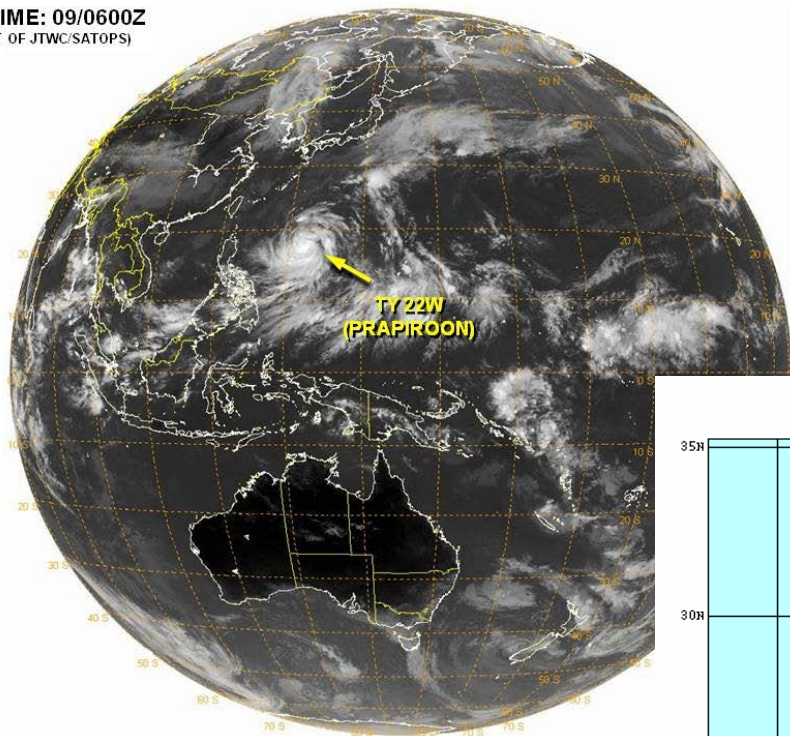
Weekly Satellite Review

IR Temperatures
0900 UTC 06 OCT 2012



Tropical Cyclone Review

VALID TIME: 09/0600Z
(PRODUCT OF JTWC/SATOPS)



TYPHOON 22W (PRAPIROON) WARNING #8
WIPN31 PGTW 090900
090600Z POSIT: NEAR 17.5N 132.1E
MOVING 245 DEGREES TRUE AT 05 KNOTS
MAXIMUM SIGNIFICANT WAVE HEIGHT: 25 FEET
09/06Z, WINDS 065 KTS, GUSTS TO 080 KTS
09/18Z, WINDS 075 KTS, GUSTS TO 090 KTS
10/06Z, WINDS 085 KTS, GUSTS TO 105 KTS
10/18Z, WINDS 090 KTS, GUSTS TO 110 KTS
11/06Z, WINDS 100 KTS, GUSTS TO 125 KTS
12/06Z, WINDS 095 KTS, GUSTS TO 115 KTS
13/06Z, WINDS 090 KTS, GUSTS TO 110 KTS
14/06Z, WINDS 080 KTS, GUSTS TO 100 KTS

CPA TO:	NM	DTG
KADENA_AB	379	13/00Z
IWO_JIMA	346	14/06Z

BEARING AND DISTANCE	DIR	DIST (NM)	TAV (HRS)
KADENA_AB	155	396	72

○ LESS THAN 34 KNOTS
◊ 34-63 KNOTS
⊗ MORE THAN 63 KNOTS
FAST 6 HOURLY CYCLONE POSITS IN BLACK
FORECAST CYCLONE POSITS IN COLOR

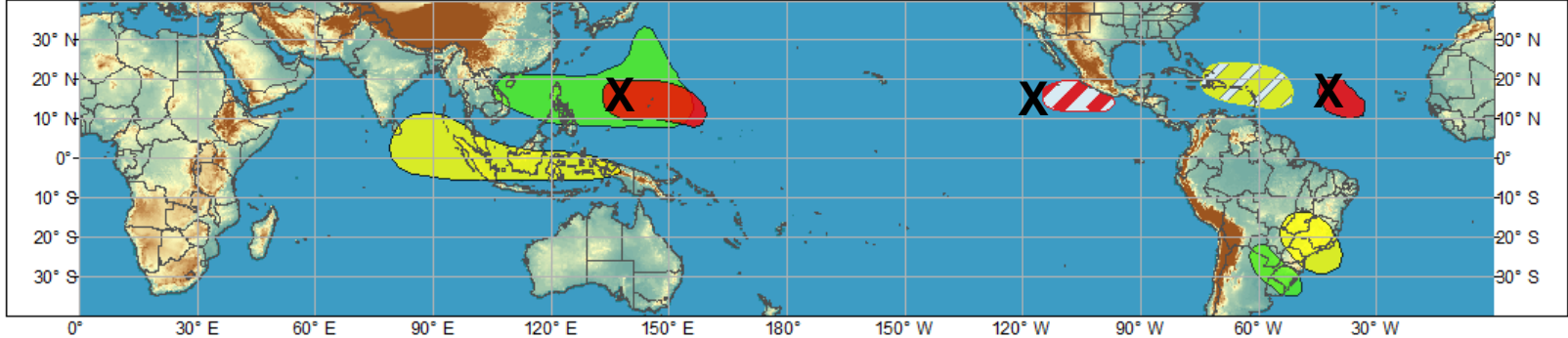




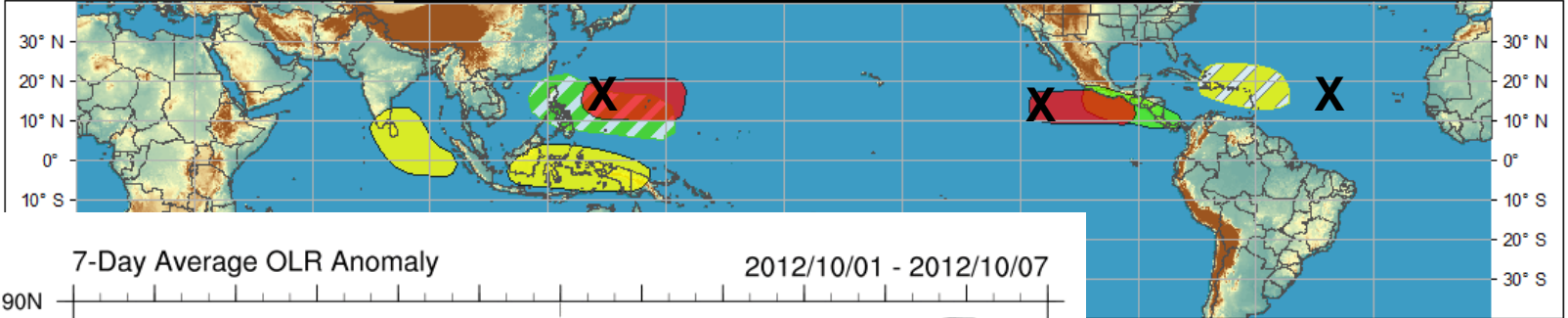
Global Tropical Hazards/Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Oct 03, 2012 - Oct 09, 2012

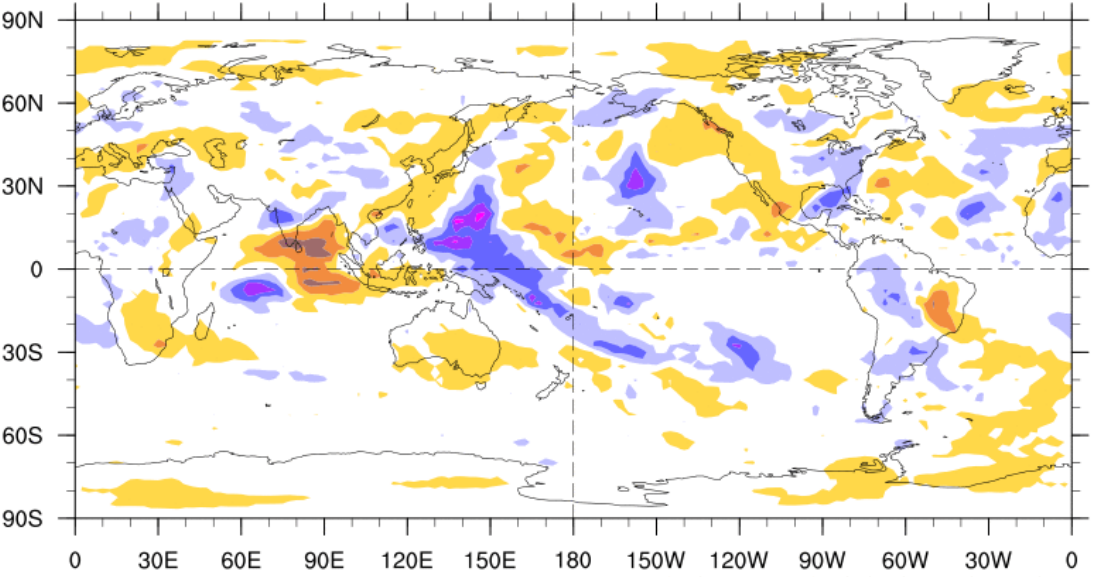


Week 2 - Valid: Oct 03, 2012 - Oct 09, 2012



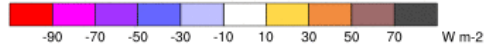
7-Day Average OLR Anomaly

2012/10/01 - 2012/10/07



NOAA/ESRL/PSD

Base Period: 1981-2010



Outlook Review

Synopsis of Climate Modes

ENSO:

- Borderline ENSO-neutral / weak El Niño conditions are expected to continue into Northern Hemisphere winter 2012-13, possibly strengthening during the next few months.

MJO and other subseasonal variability:

- The MJO remained weak.
- Some potential for a stronger signal to develop in the western hemisphere in Week-2
- Model skill of MJO index forecasts has been very marginal recently
- Most likely a combination of other tropical subseasonal variability (atmospheric Kelvin and ER wave activity)

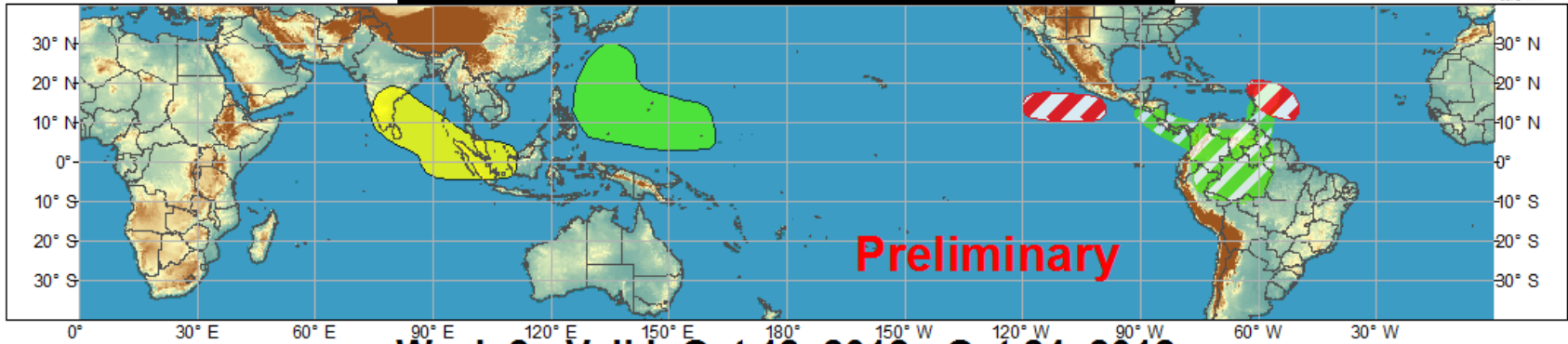
Extratropics:

- Some extended range model guidance favors moisture from the Tropics entering SW/SP once again

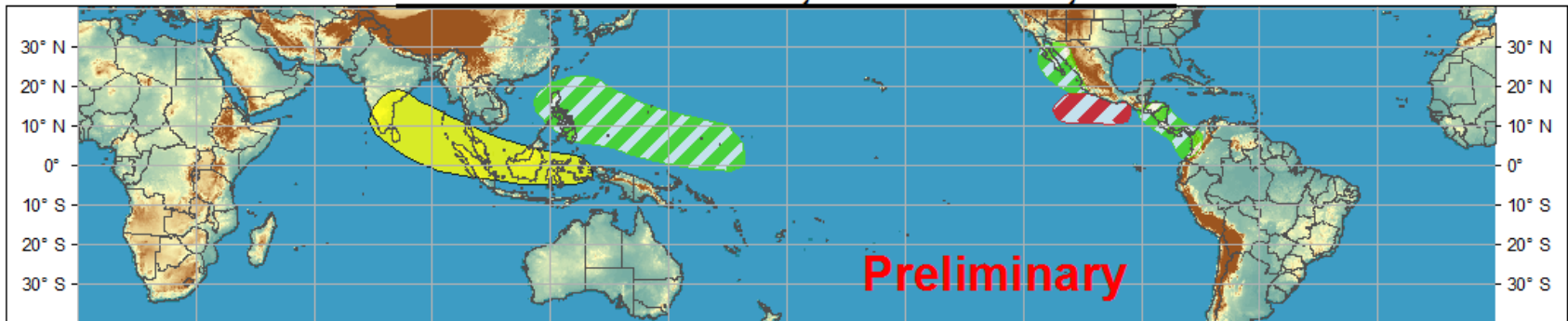


Global Tropical Hazards/Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Oct 11, 2012 - Oct 17, 2012



Week 2 - Valid: Oct 18, 2012 - Oct 24, 2012



Confidence

High Moderate

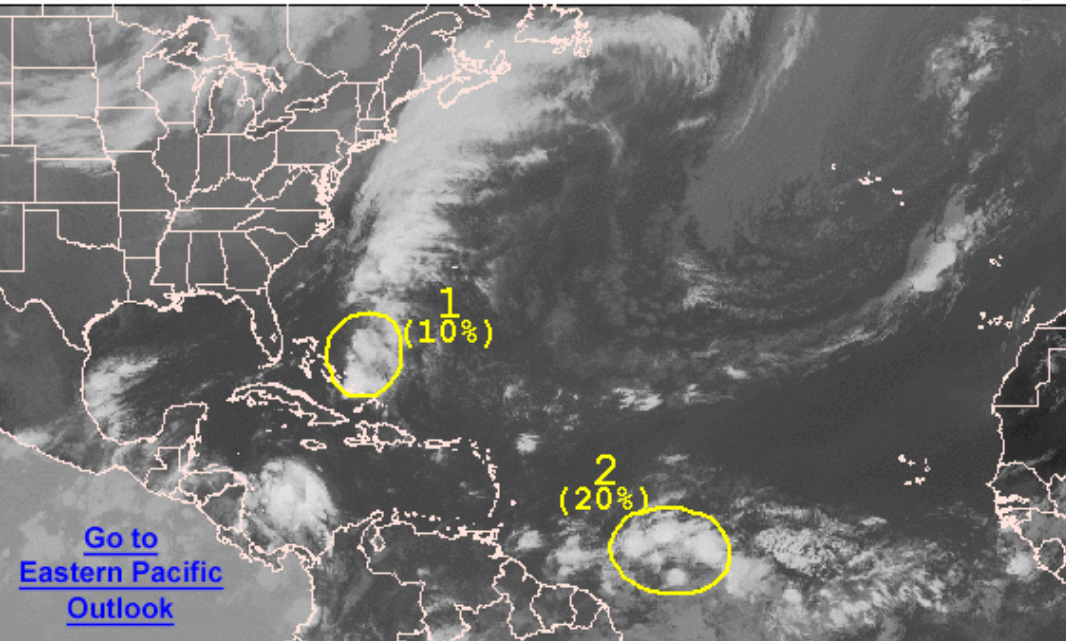
- Tropical Cyclone Formation** Development of a tropical cyclone that eventually reaches tropical storm/cyclone strength.
- Above-average rainfall** Weekly total rainfall in the upper third of the historical range.
- Below-average rainfall** Weekly total rainfall in the lower third of the historical range.
- Above-normal temperatures** 7-day mean temperatures in the upper third of the historical range.
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Produced: 10/09/2012

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.

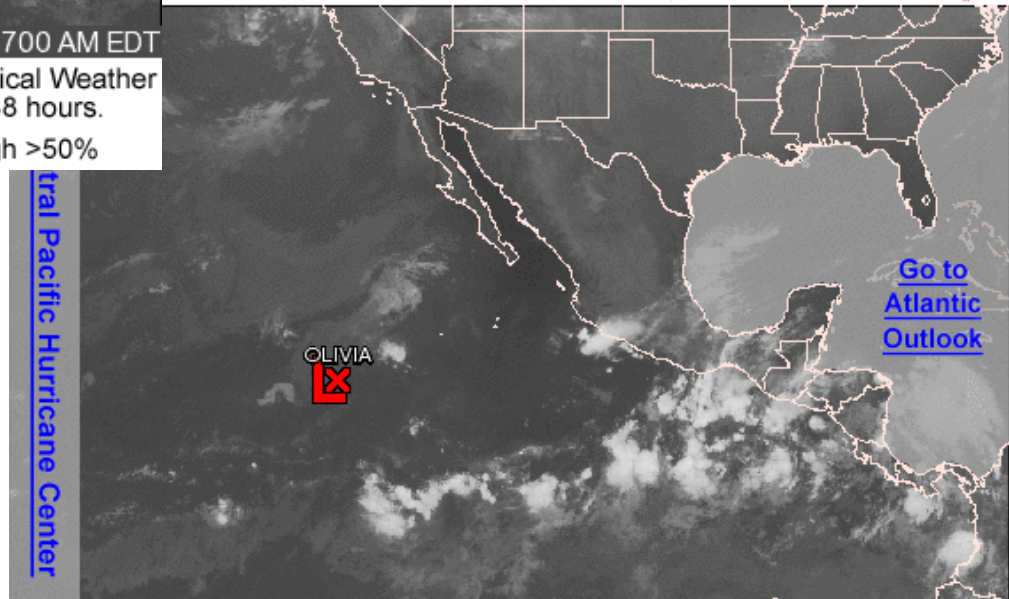




800 AM EDT TUE OCT 9 2012 Satellite Image: 0700 AM EDT

Outlined areas denote current position of systems discussed in the Tropical Weather Outlook. Color indicates probability of tropical cyclone formation within 48 hours.

Low <30% Medium 30-50% High >50%



500 AM PDT TUE OCT 9 2012 Satellite Image: 0400 AM PDT

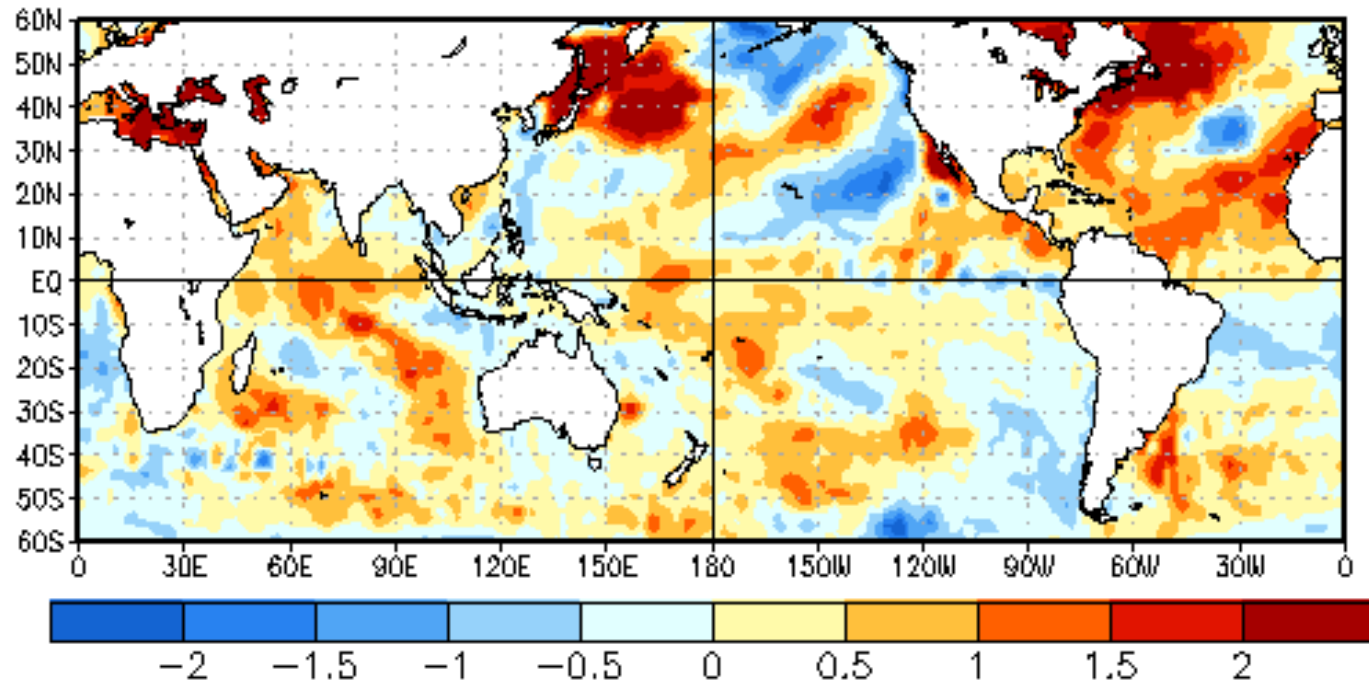
Outlined areas denote current position of systems discussed in the Tropical Weather Outlook. Color indicates probability of tropical cyclone formation within 48 hours.

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Central Pacific Hurricane Center

SST Observations

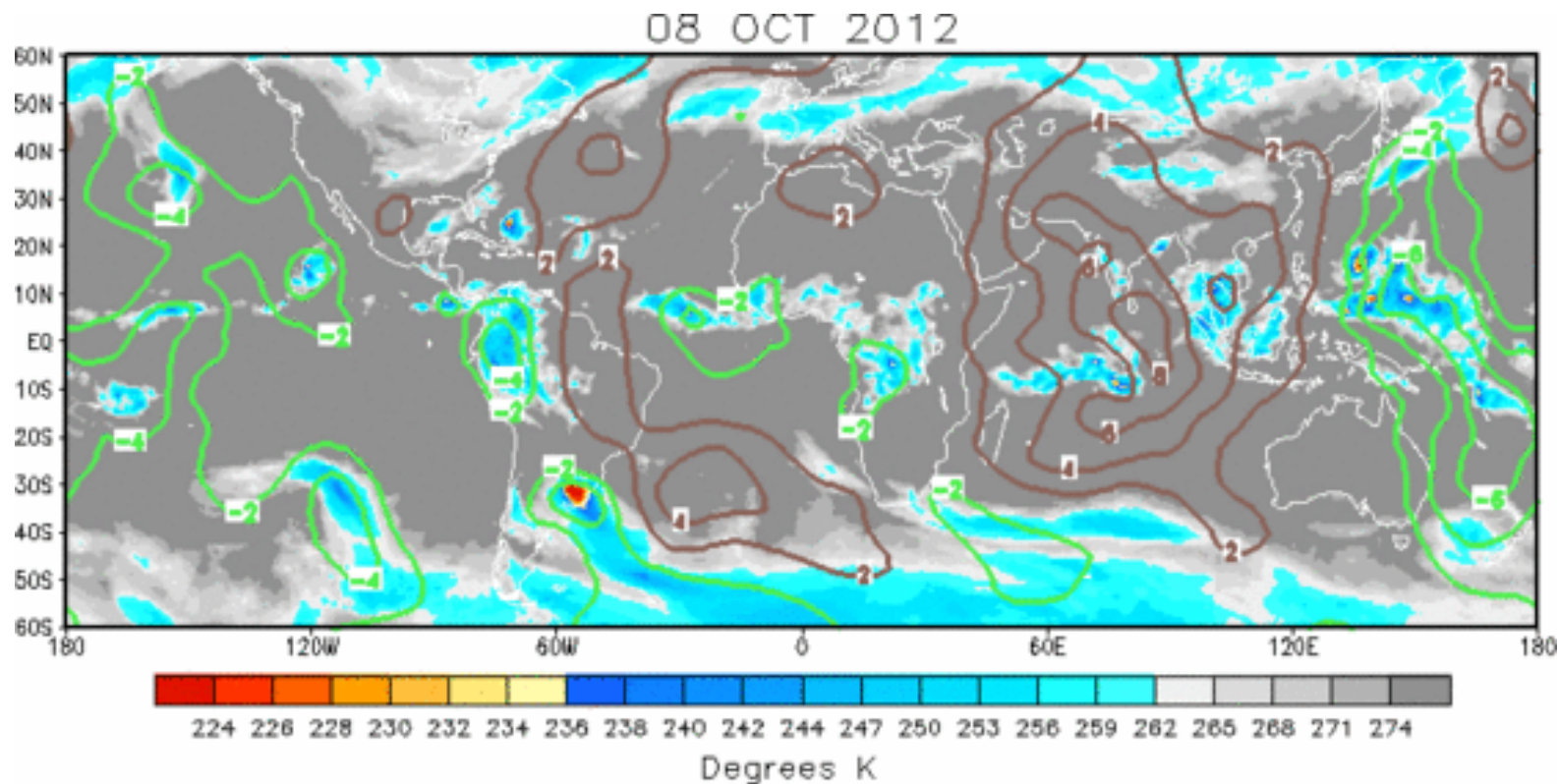
03 OCT 2012



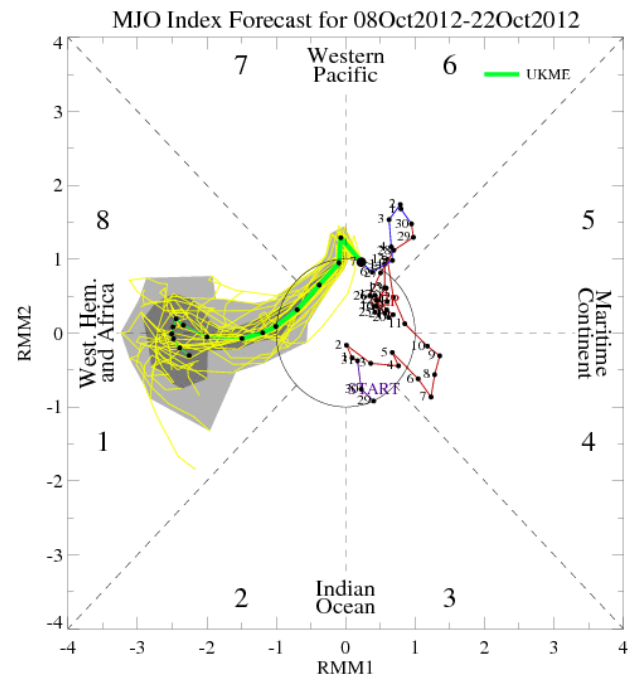
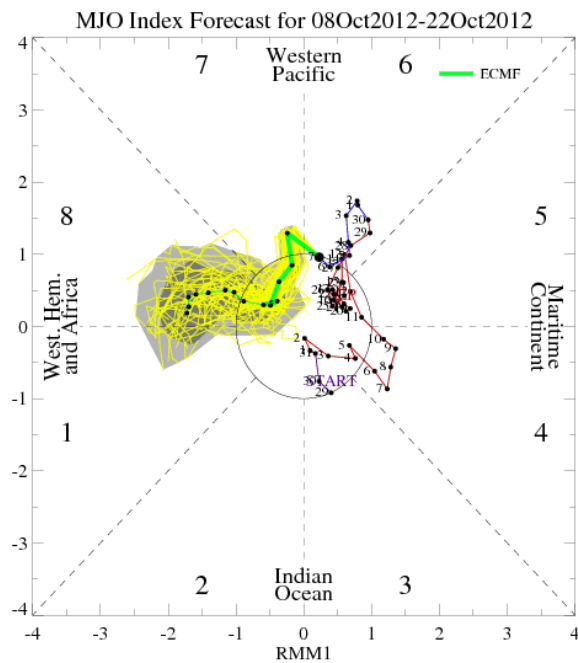
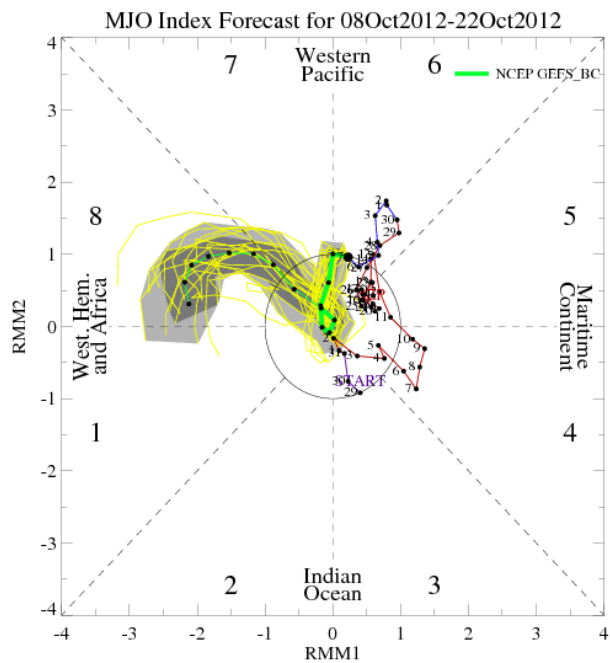
IR Satellite & 200-hpa Velocity Potential Anomalies

Green: Enhanced Divergence

Brown: Enhanced Convergence

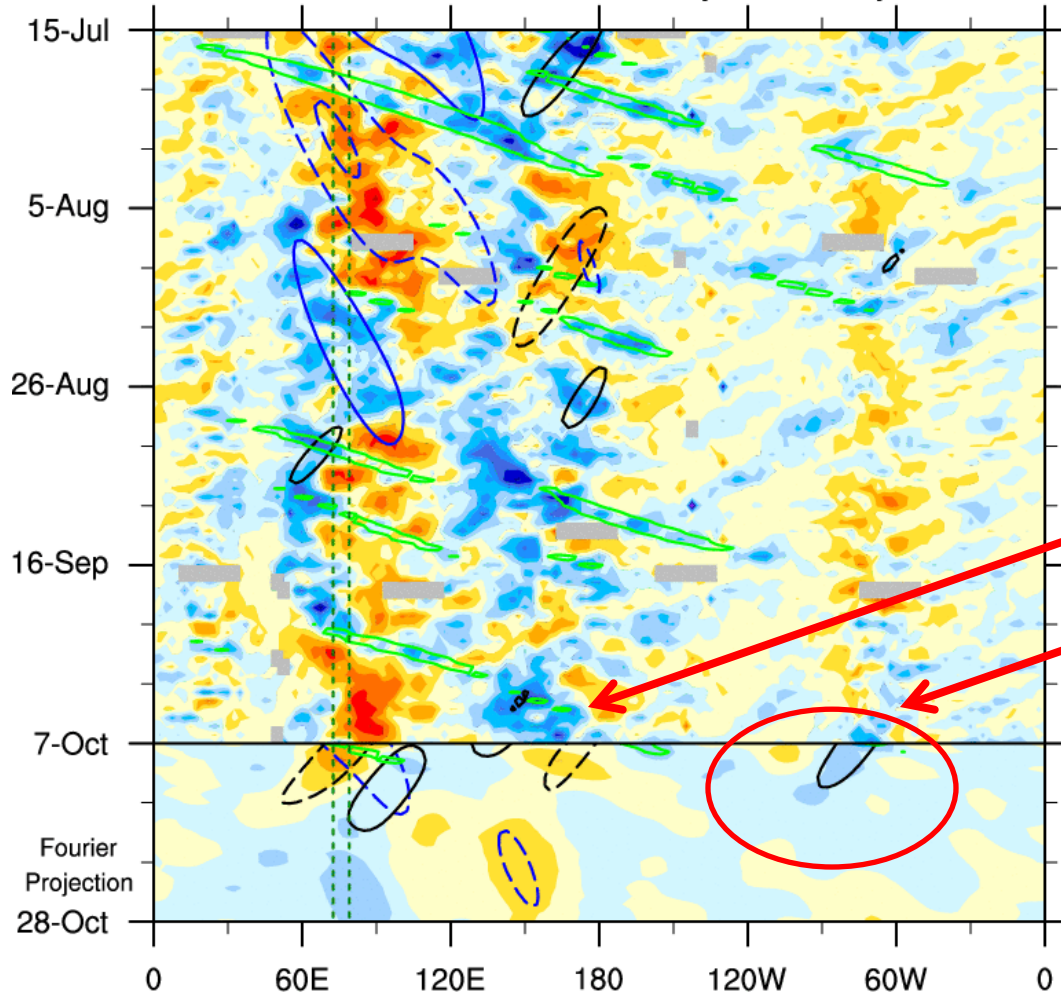


MJO Observation/Forecast



OLR anomalies: 7.5°S - 7.5°N

15-Jul-2012 to 7-Oct-2012 + 21-day Fourier Projection



Atmospheric Kelvin wave
Equatorial Rossby wave

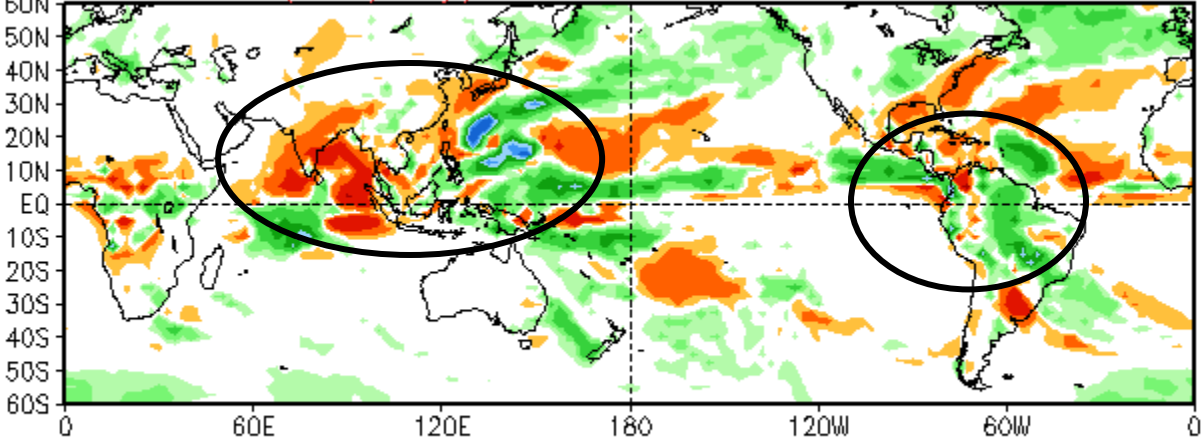
Obs: W/m^2 -84 -72 -60 -48 -36 -24 -12 0 12 24 36 48 60 72 84

Sum of Waves: W/m^2 -18 -12 -6 0 6 12 18

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

Anomalies (mm/day)

100Oct2012-160Oct2012



GFS - Week-1

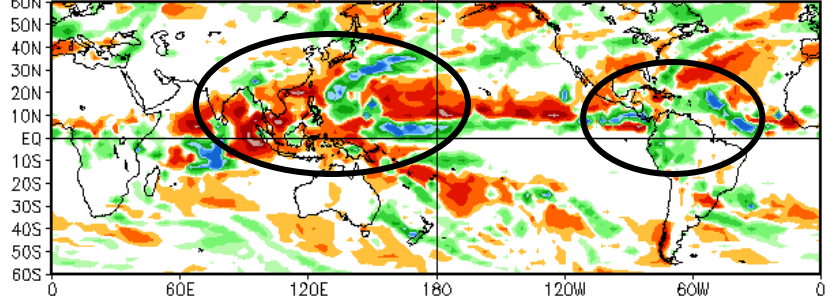
CFSv2 Weeks 1 & 2 Precipitation

16 Member Ensemble Mean Forecast from 08Oct2012

CFS - Week-1 and Week-2

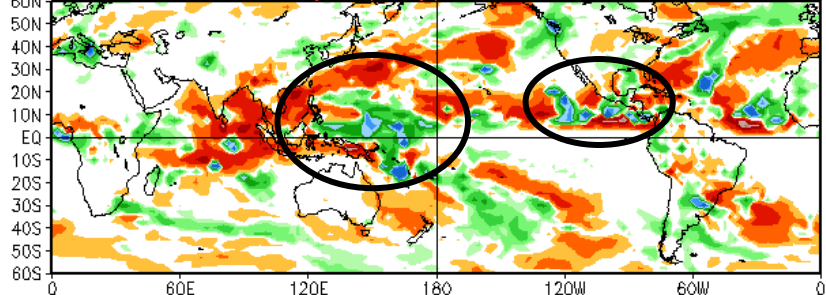
Week 1 Anomalies (mm/day)

90Oct2012-150Oct2012



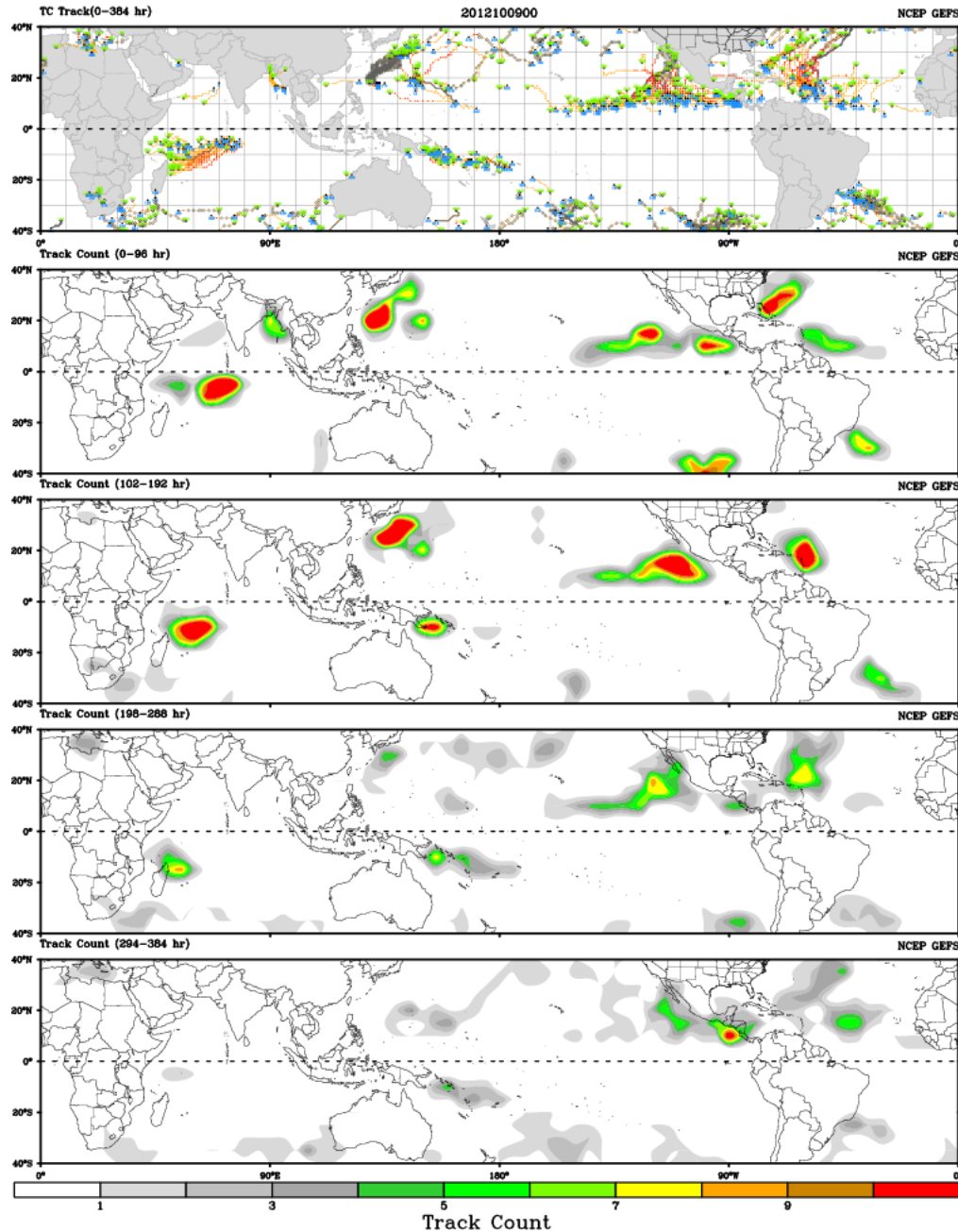
Week 2 Anomalies (mm/day)

160Oct2012-220Oct2012

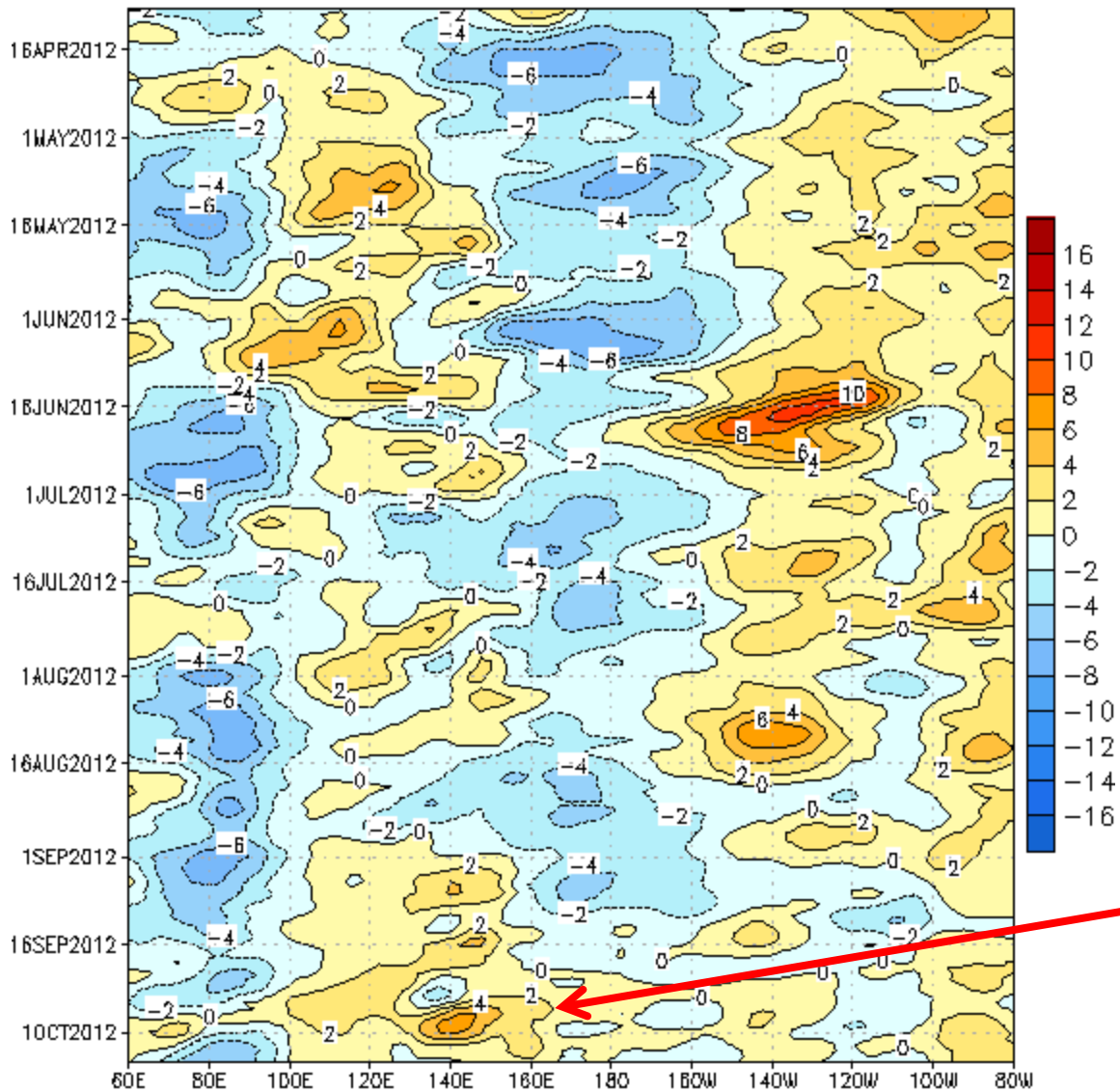


Ensemble GFS TC Guidance

CWB TC Tracker for NCEP GEFS (Fuzzy_Basic)



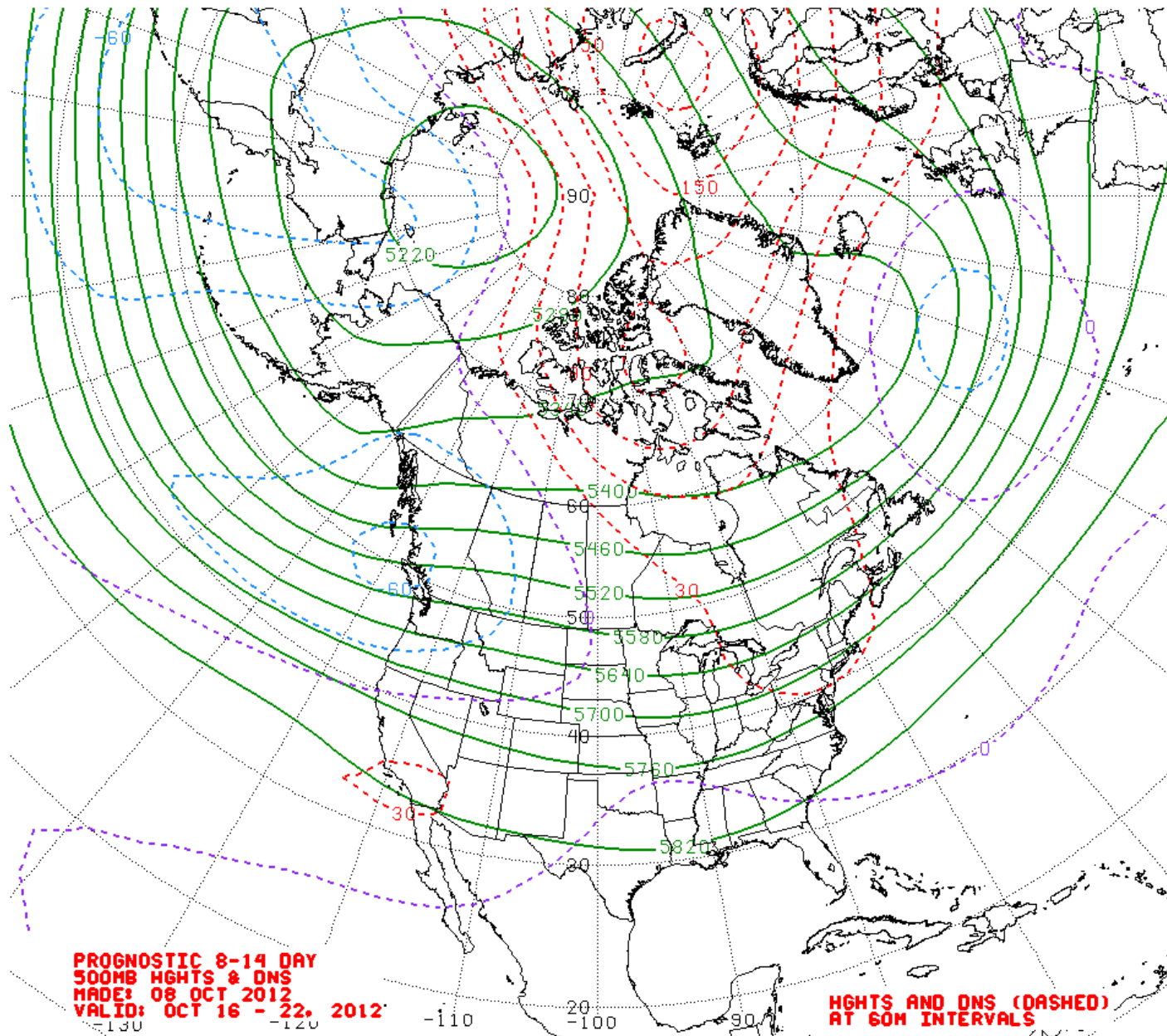
CDAS 850-hPa U Anoms. (5N-5S)



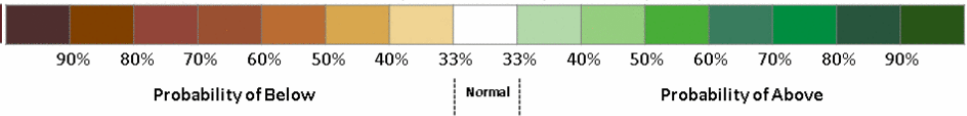
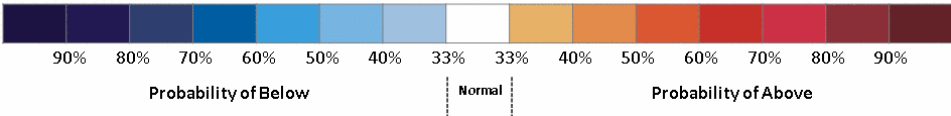
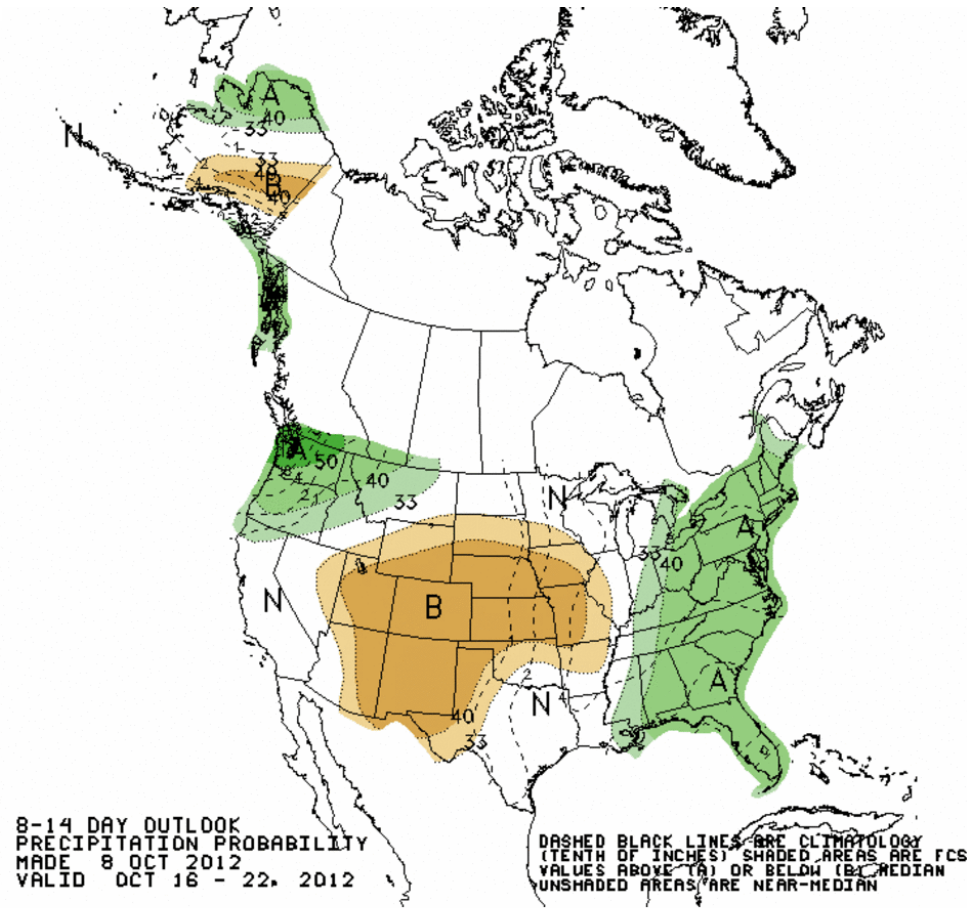
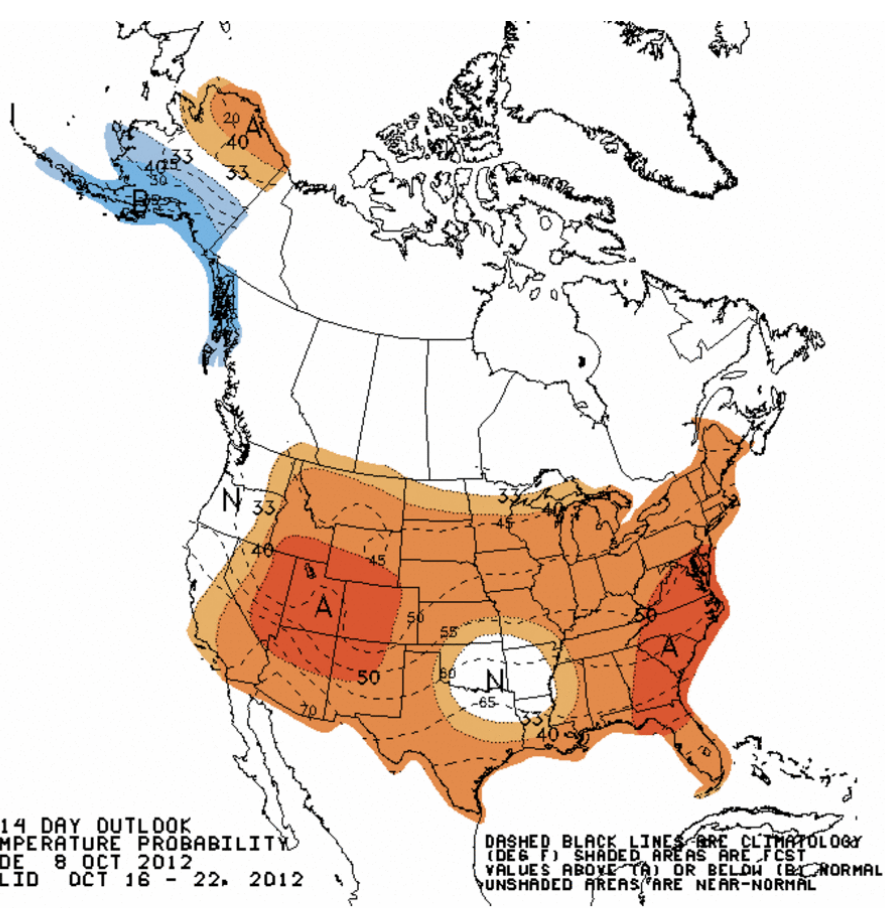
Westerly wind burst,
some help for El Nino?

Data updated through 06 OCT 2012

Week 2 500-hPa Manual Chart



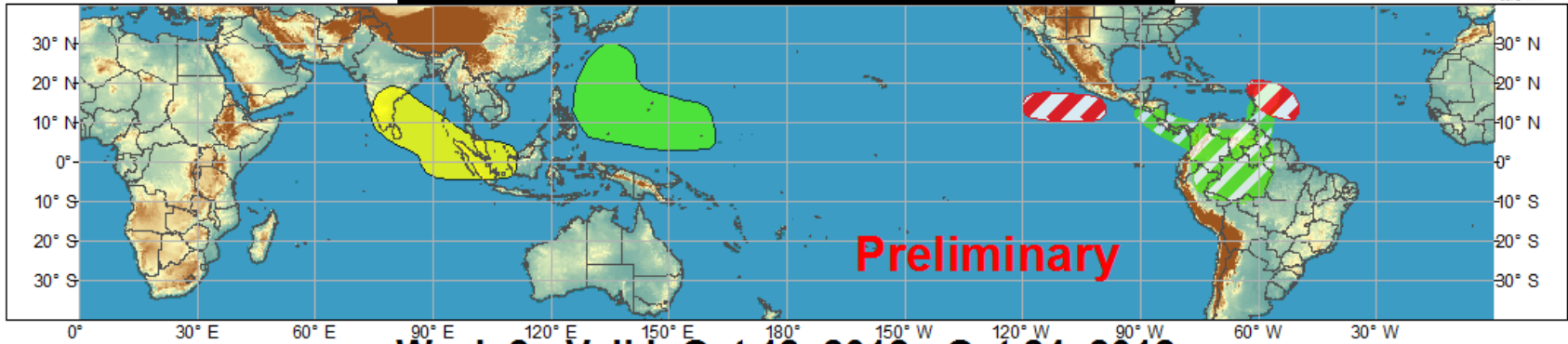
Week 2 -- Temperature and Precipitation



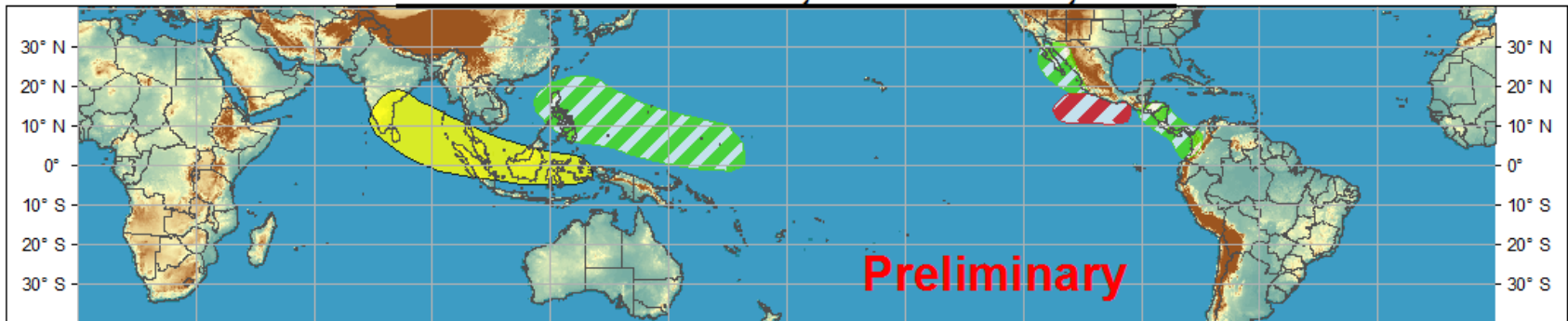


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