

Global Tropics Hazards And Benefits Outlook

July 16, 2013

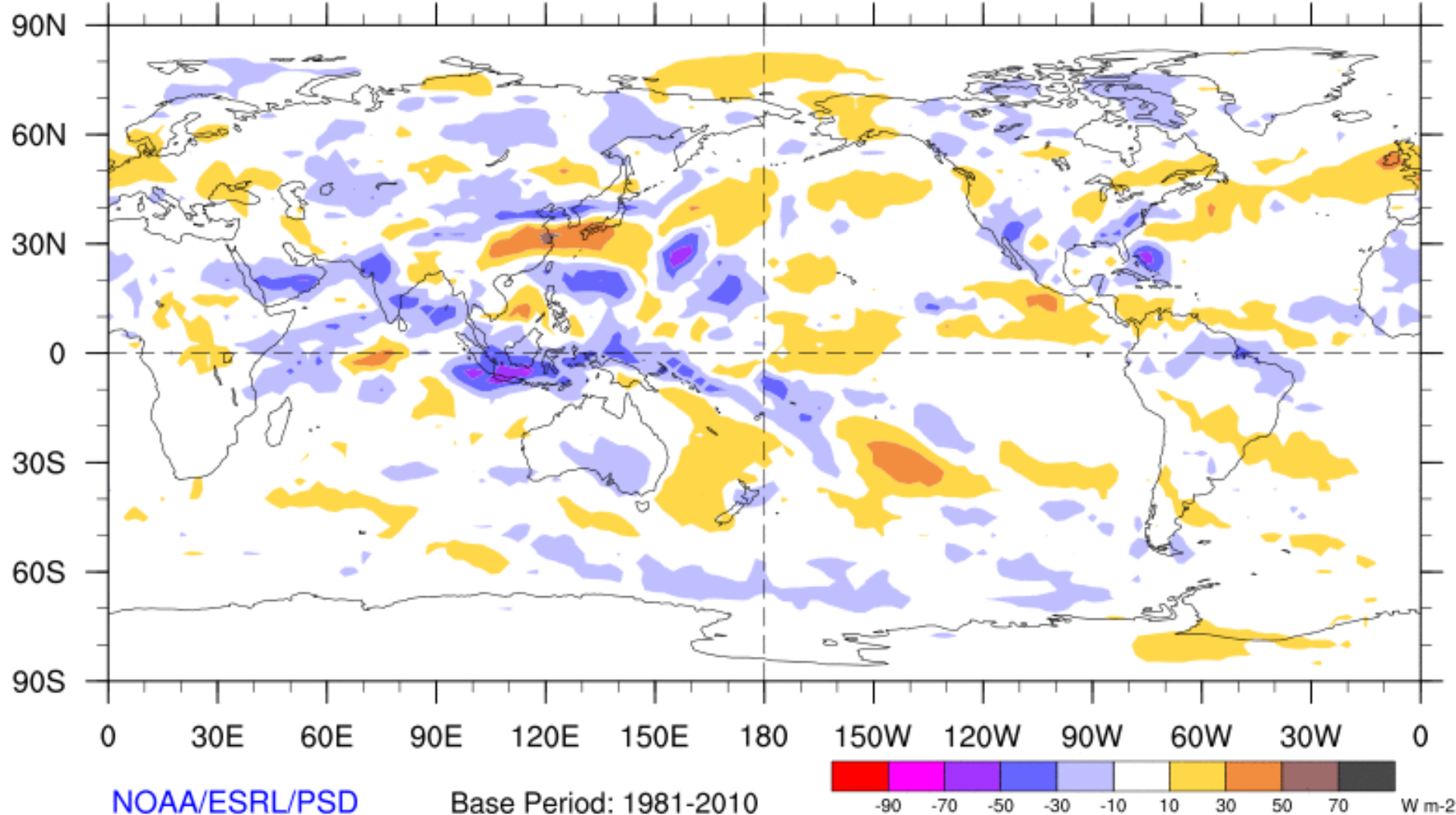
Adam Allgood

Outline

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

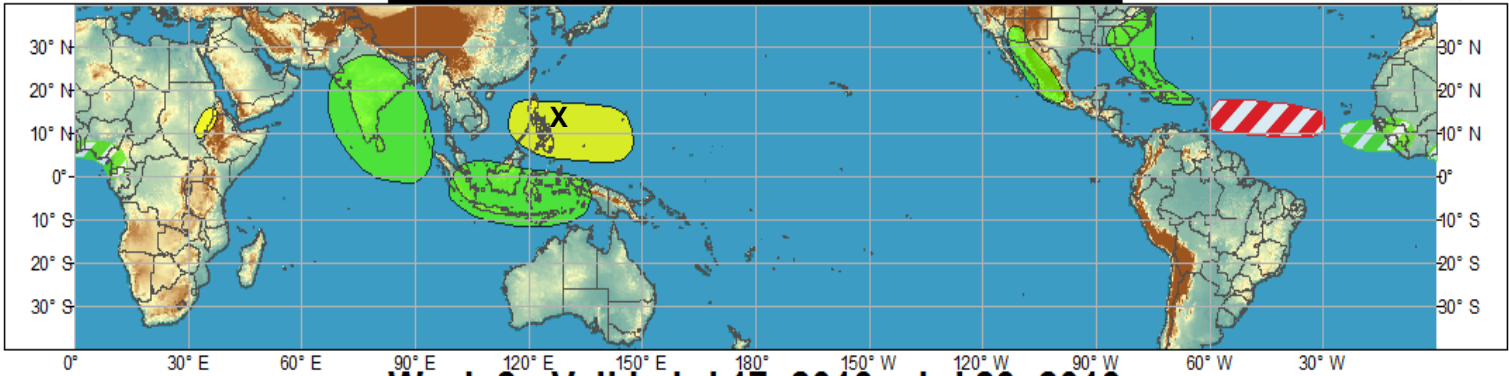
7-Day Average OLR Anomaly

2013/07/08 - 2013/07/14

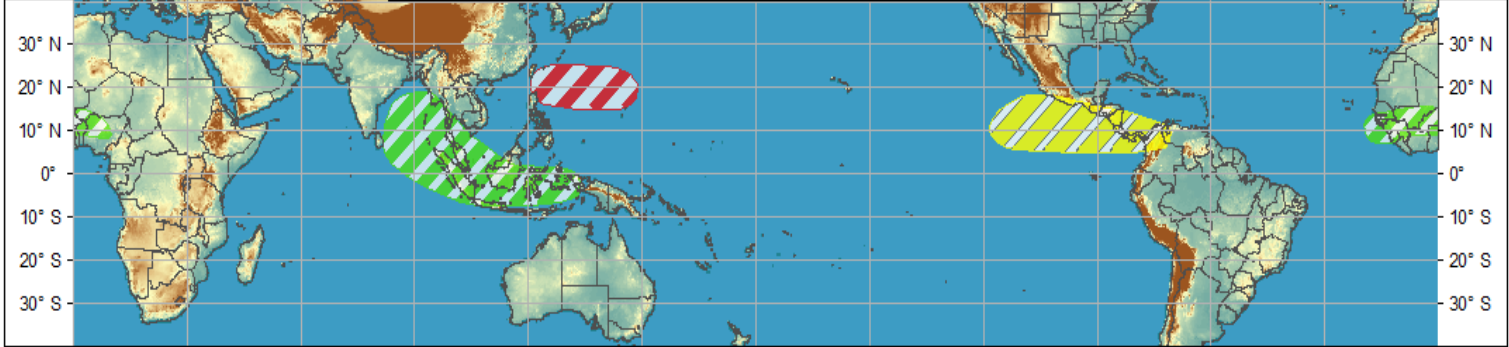


Outlook Review

Week 1 - Valid: Jul 10, 2013 - Jul 16, 2013



Week 2 - Valid: Jul 17, 2013 - Jul 23, 2013

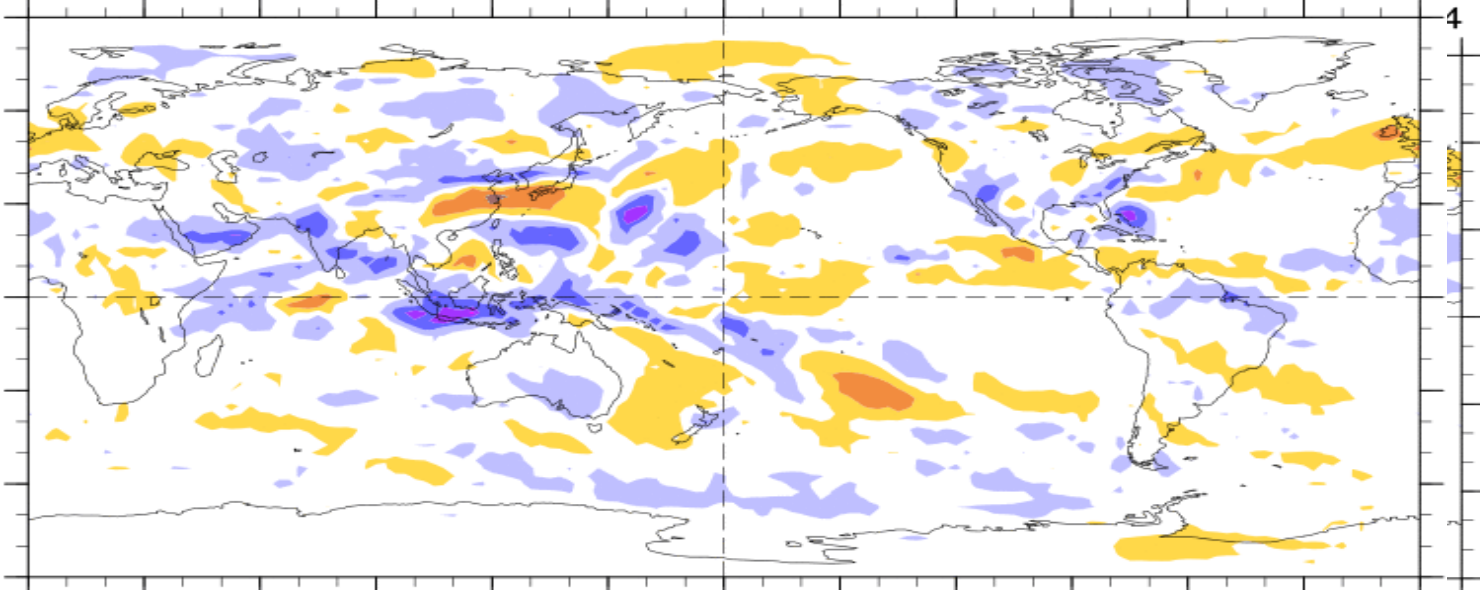


7-Day Average OLR Anomaly

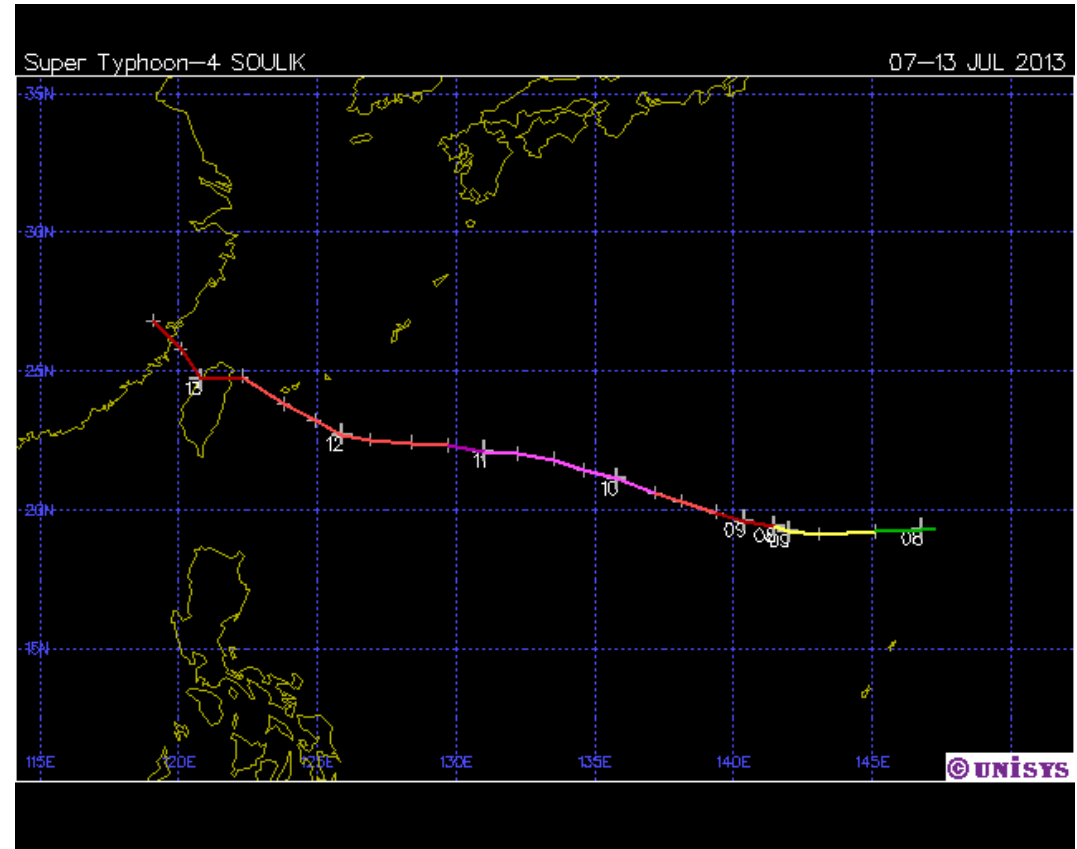
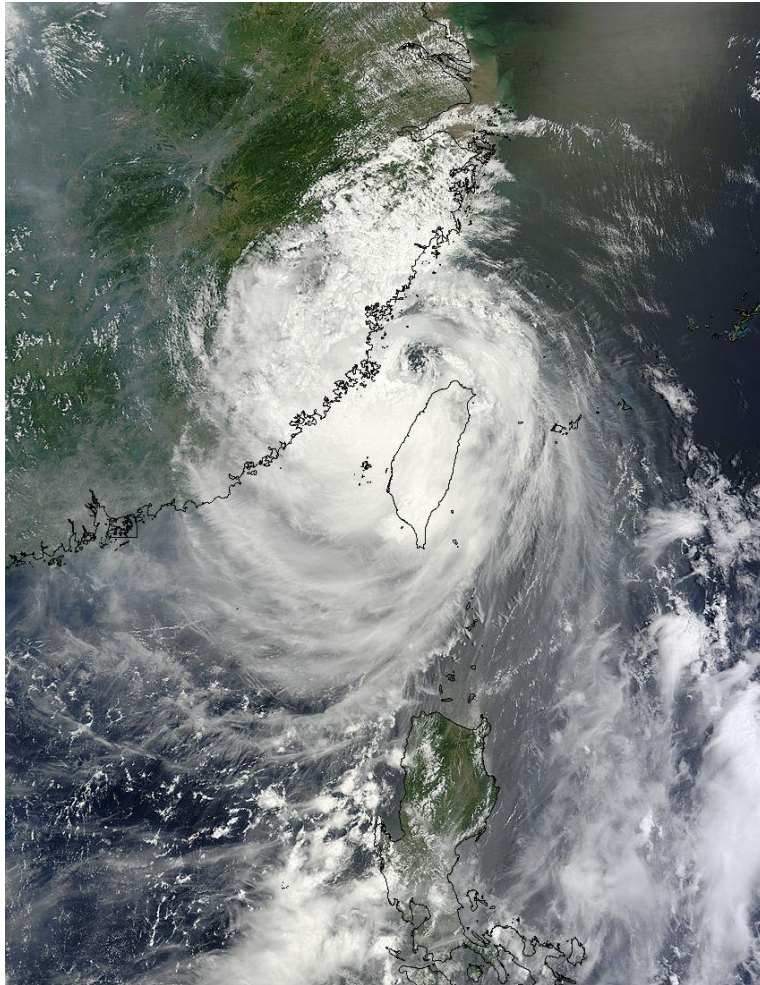
2013/07/08 - 2013/07/14

Cool shading
More clouds/rain

Warm shading
Less clouds/rain



Typhoon Soulik



- First landfall in northern Taiwan – 2 dead, 100+ injured
- Second landfall in Fujian Province – 3 dead, extensive damage in Fujian and Guangdong

Synopsis of Climate Modes

ENSO:

- ENSO-neutral conditions are favored to continue into Northern Hemisphere fall 2013

MJO and other subseasonal tropical variability:

- The MJO remained coherent over the past week, although other modes of intraseasonal variability remain active. The convectively active phase of the MJO propagated over the Indian Ocean during the previous week.
- Dynamical model MJO index forecasts do not supported continued coherence of the MJO signal. Some statistical models and bias-corrected dynamical models favor more eastward propagation of the MJO.

Extratropics:

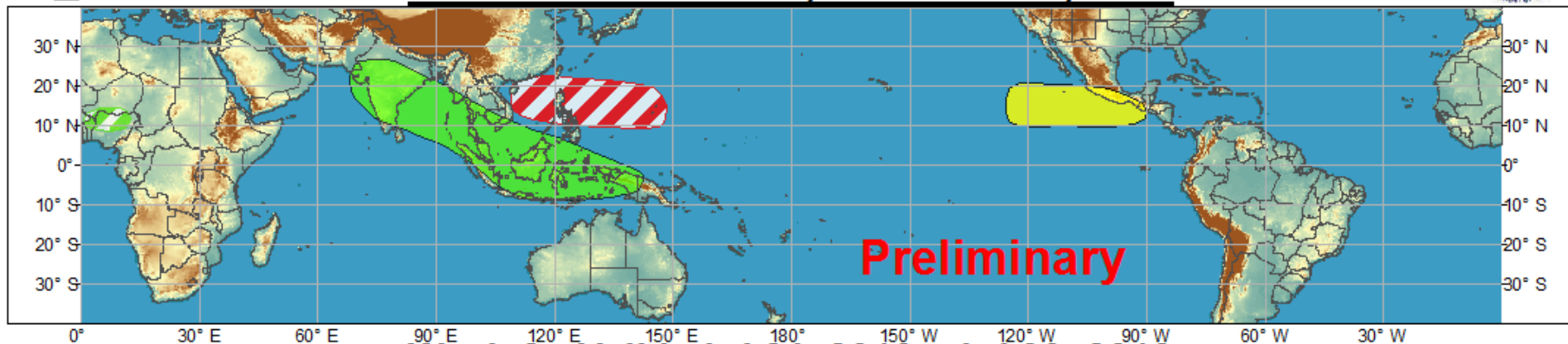
- The extended range forecast for the U.S. favors enhanced chances of above-median rainfall over the eastern CONUS and the Southwest, and tilts the odds towards above-median temperatures over the West and north-central U.S.



Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Jul 17, 2013 - Jul 23, 2013



Week 2 - Valid: Jul 24, 2013 - Jul 30, 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



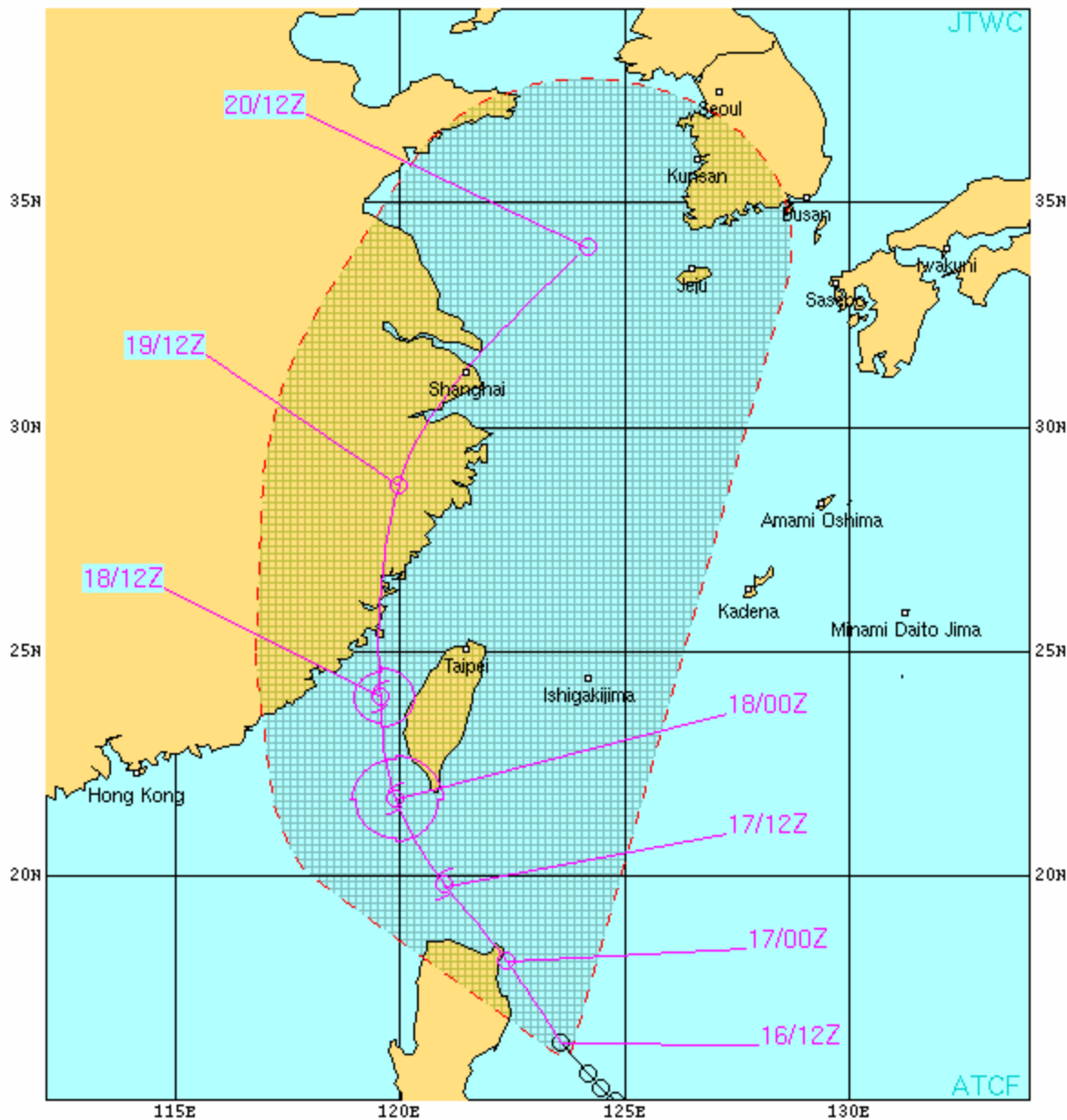
7-day mean temperatures in the lower third of the historical range.

Produced: 07/16/2013

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.





TROPICAL DEPRESSION 08W (EIGHT) WARNING #4
 WTPN31 PGTW 161500
 161200Z POSIT: NEAR 16.3N 123.6E
 MOVING 320 DEGREES TRUE AT 09 KNOTS
 MAXIMUM SIGNIFICANT WAVE HEIGHT: 12 FEET
 16/12Z, WINDS 025 KTS, GUSTS TO 035 KTS
 17/00Z, WINDS 030 KTS, GUSTS TO 040 KTS
 17/12Z, WINDS 035 KTS, GUSTS TO 045 KTS
 18/00Z, WINDS 045 KTS, GUSTS TO 055 KTS
 18/12Z, WINDS 040 KTS, GUSTS TO 050 KTS
 19/12Z, WINDS 030 KTS, GUSTS TO 040 KTS
 20/12Z, WINDS 020 KTS, GUSTS TO 030 KTS

CPA TO:	NM	DTG
SUBIC BAY	215	16/14Z
HONG KONG	305	18/06Z
TAIPEI	105	18/18Z
CAMP HUMPHREYS	226	20/12Z
CAMP RED CLOUD	268	20/12Z
CHINHAE	227	20/12Z
INCHON	240	20/12Z
IWAKUNI	392	20/12Z
KUNSAN_AB	164	20/12Z
OSAN_AB	230	20/12Z
PUSAN	250	20/12Z
SASEBO	280	20/12Z
TAEJU	244	20/12Z
YONGSAN_AIN	250	20/12Z

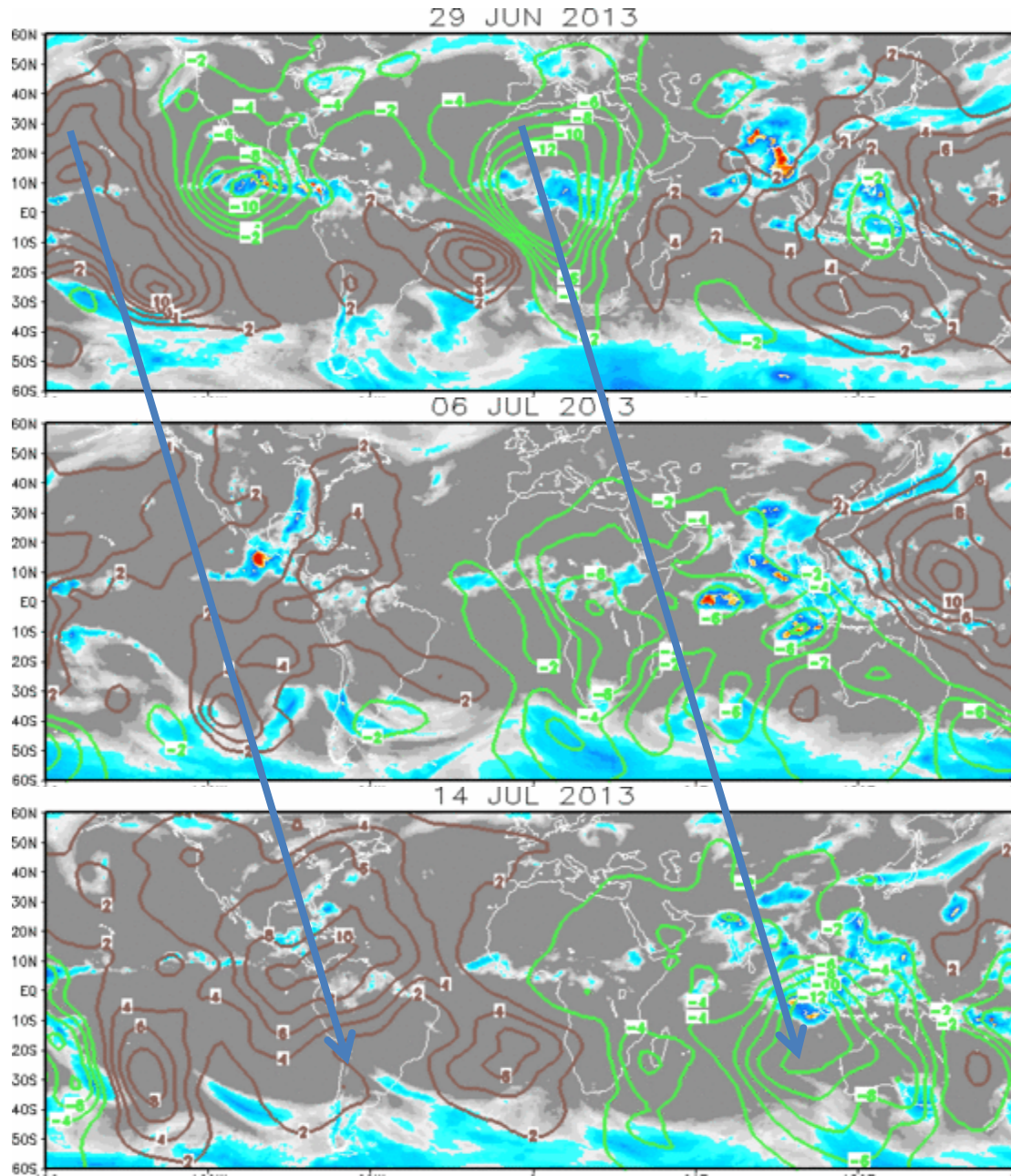
BEARING AND DISTANCE	DIR	DIST (NM)	TAV (HRS)
MANILA	360	312	24
SUBIC BAY	009	303	24
TAIPEI	185	319	24

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



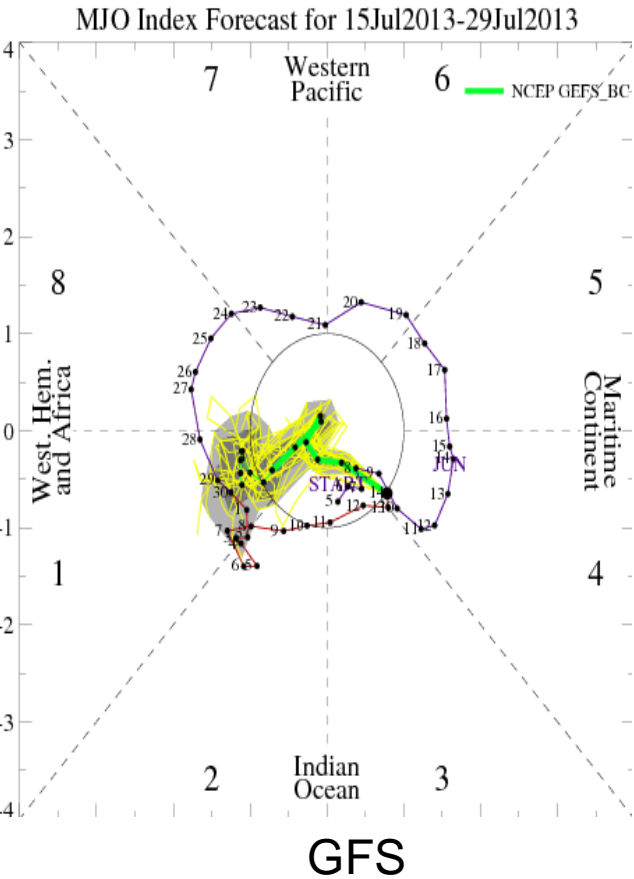
IR Satellite & 200-hpa Velocity Potential Anomalies

Green: Enhanced Divergence Brown: Enhanced Convergence

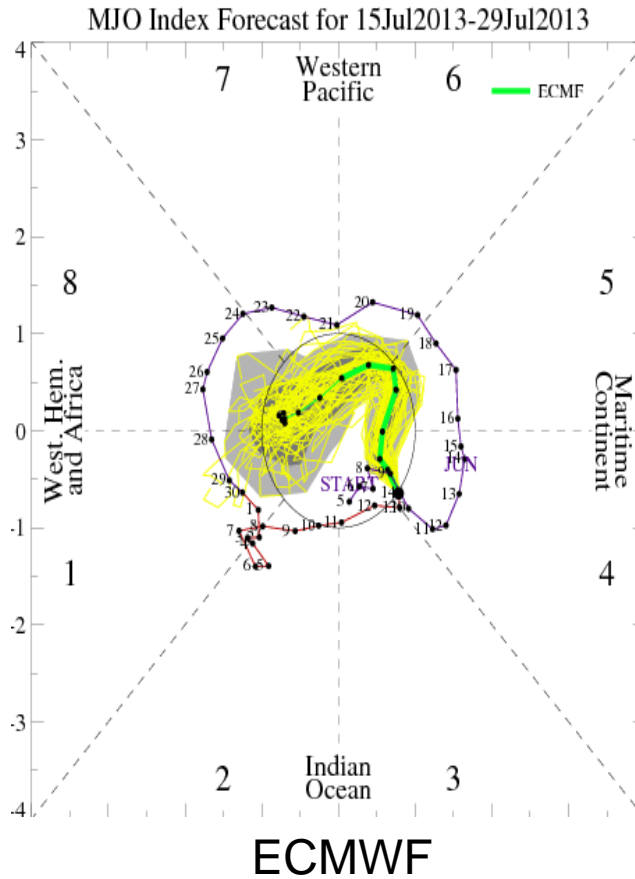


During the previous two weeks, areas of enhanced divergence and convergence associated with the MJO propagated eastward

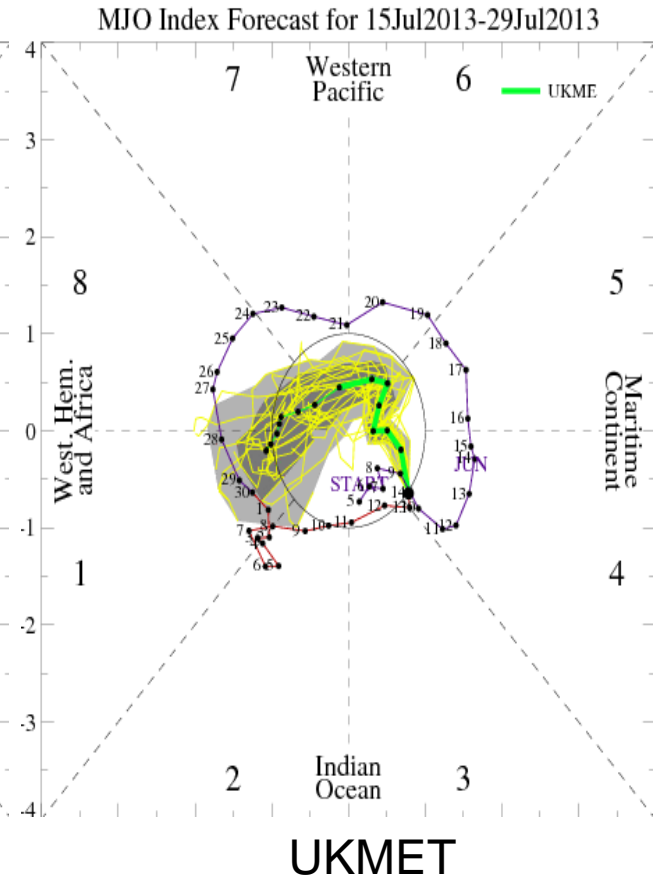
MJO Observation/Forecast



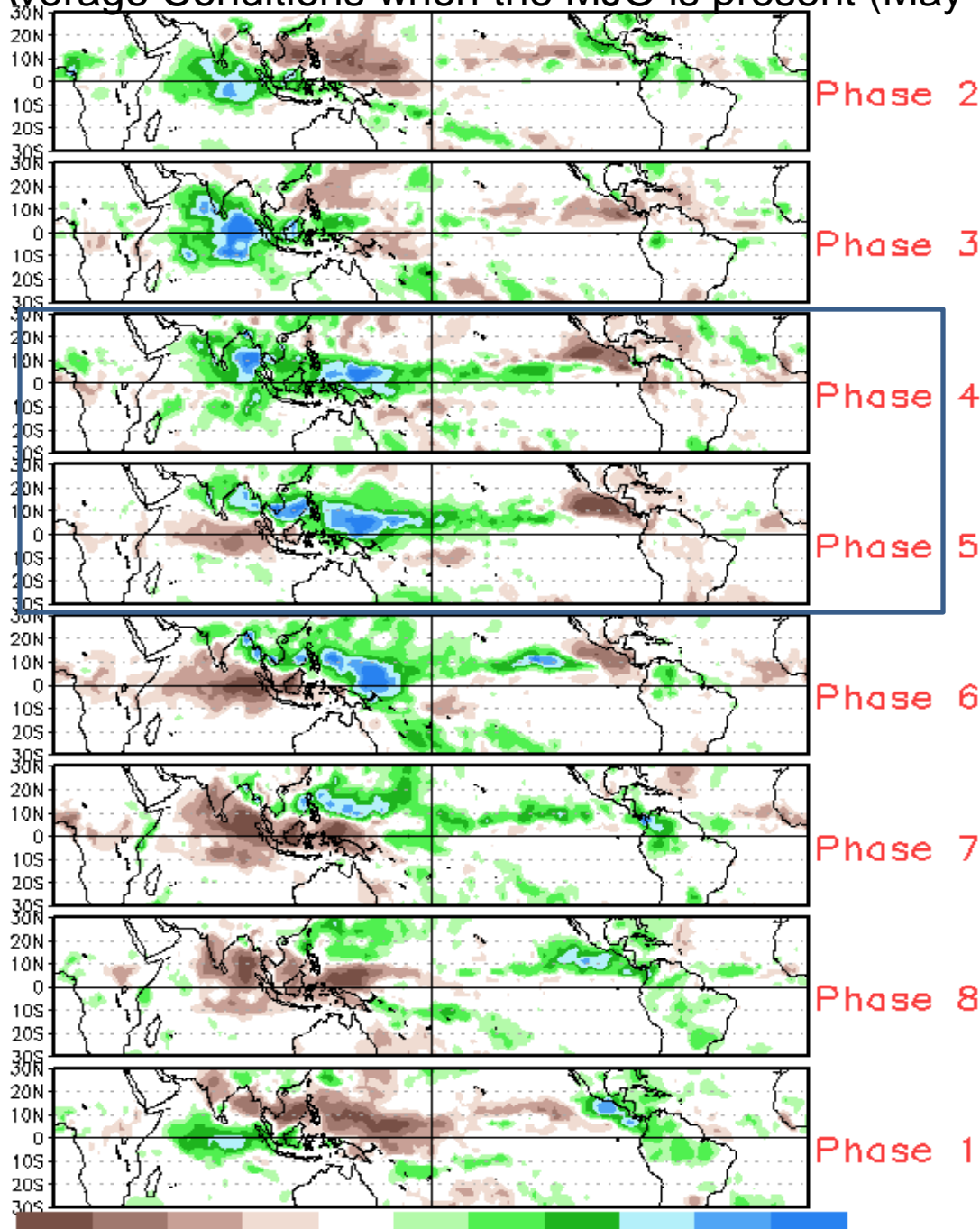
No coherent MJO during the upcoming two weeks



Less coherence, but still hints at eastward propagation



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

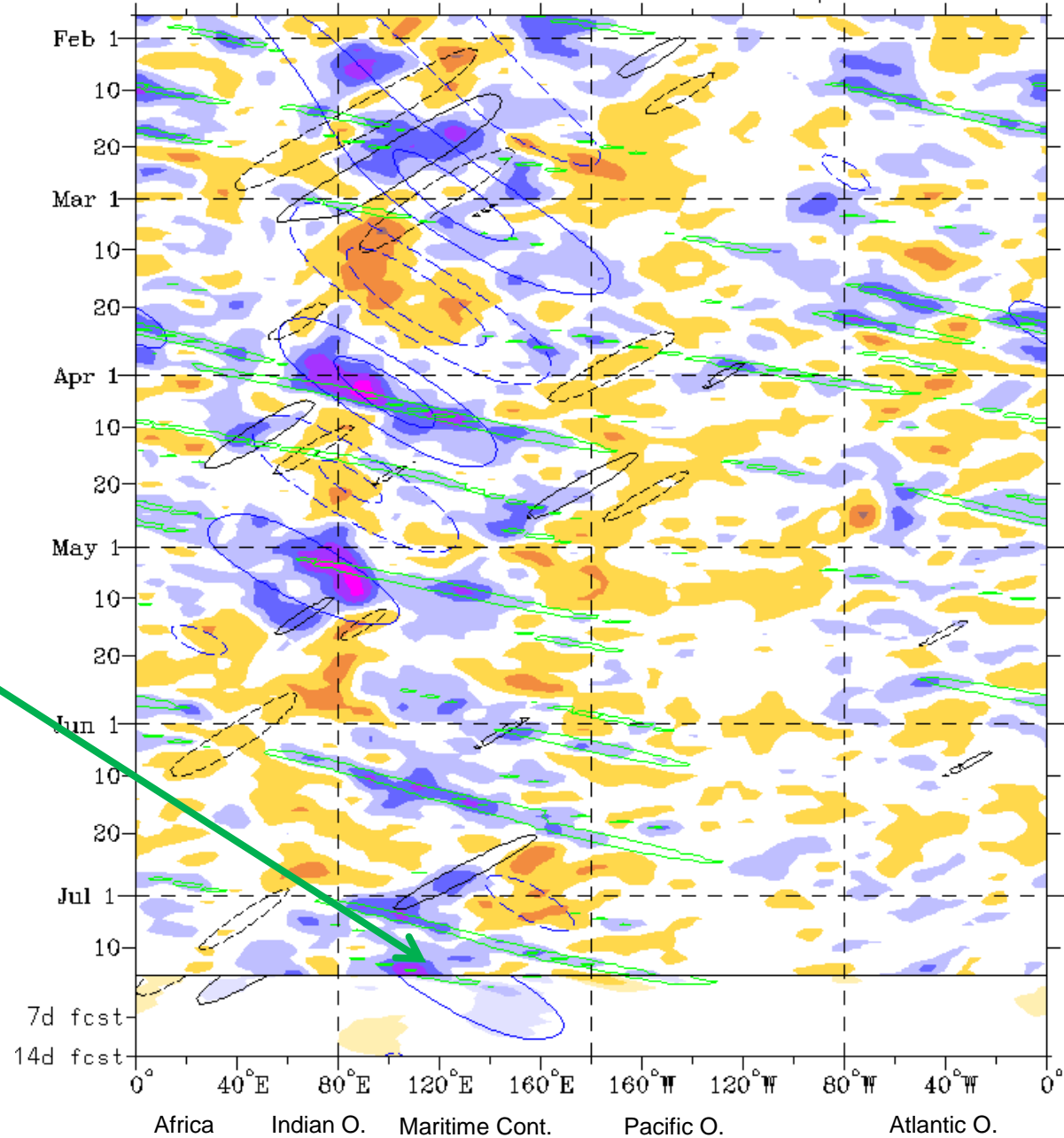


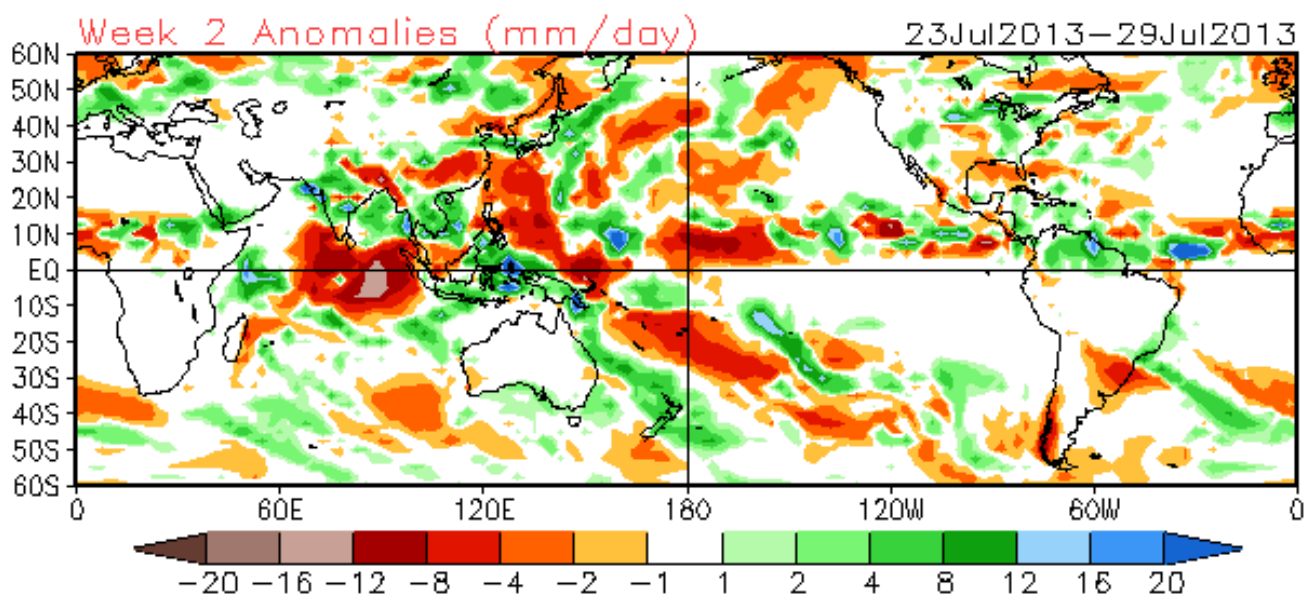
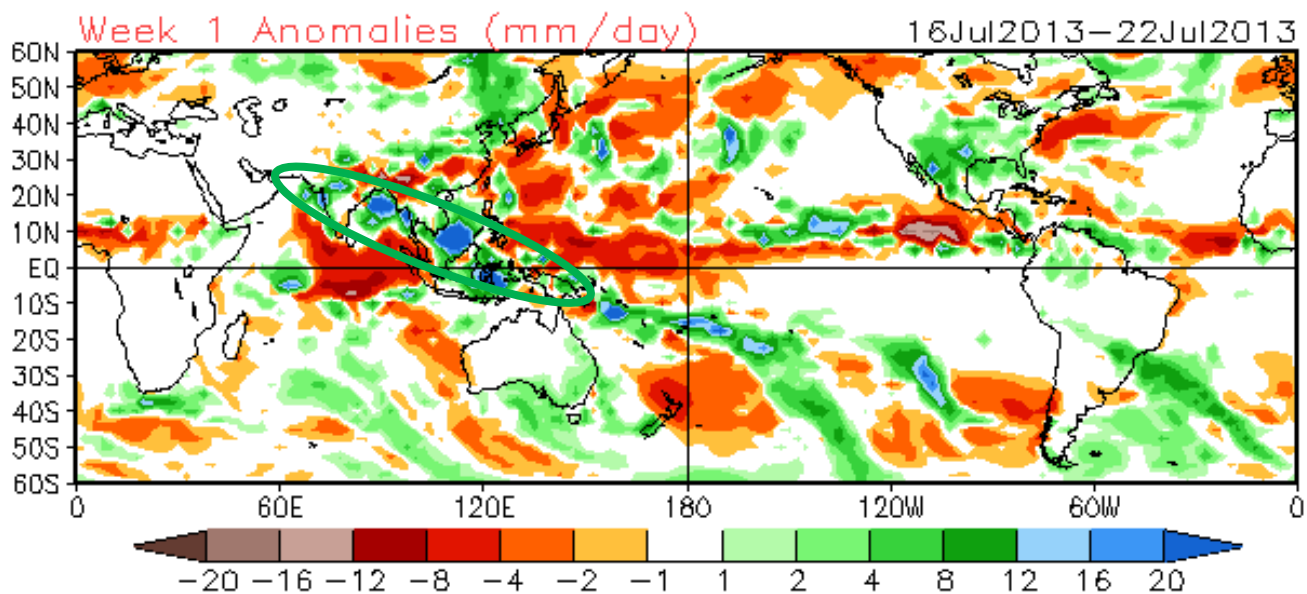
An MJO signal in phase 4 – enhanced convection over the eastern Indian Ocean and Maritime Continent.

By phase 5 – note drying over the equatorial Indian Ocean

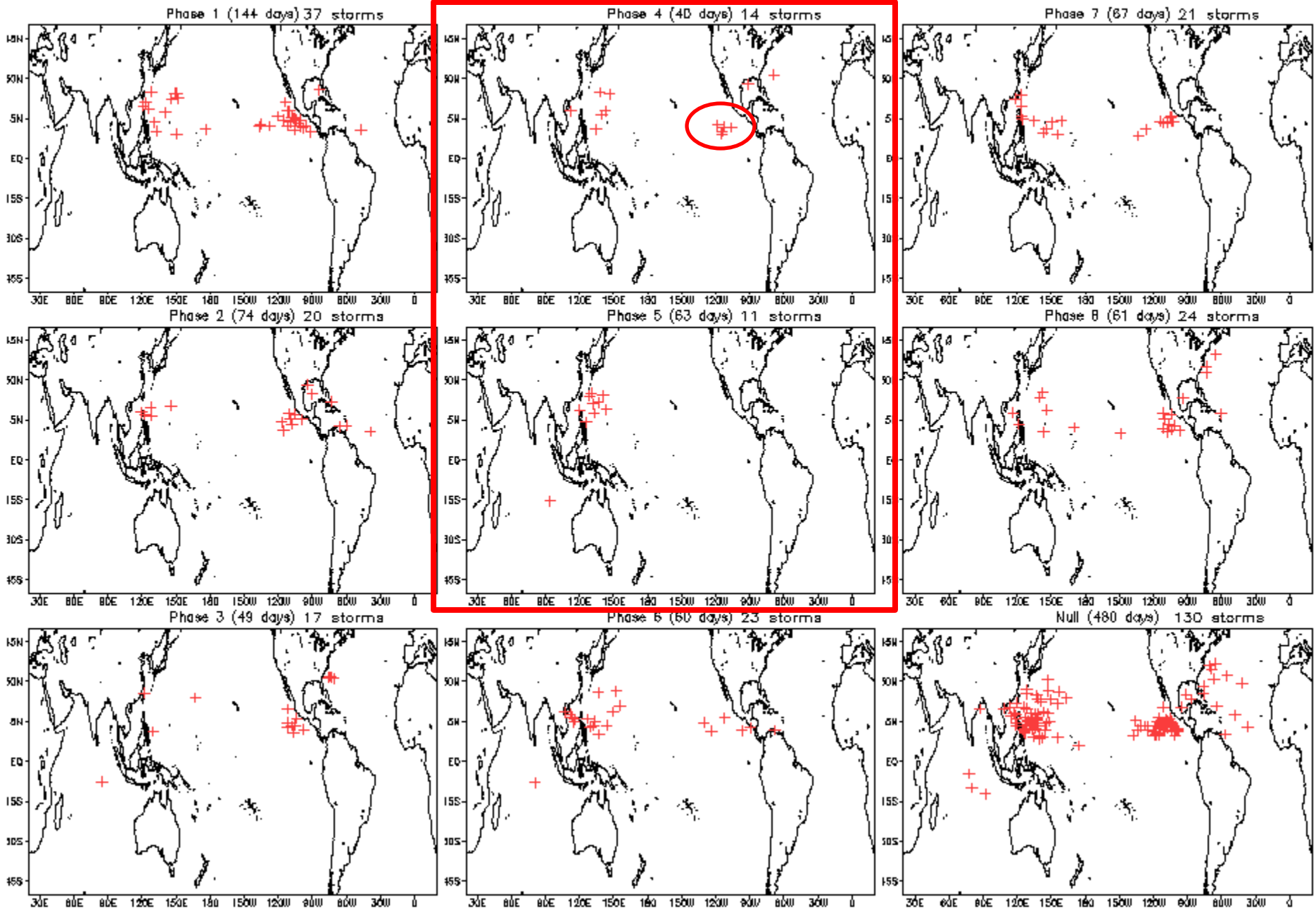
Active phase of the MJO propagating from the Indian Ocean over the Maritime Continent

Indications of other modes of variability, including an equatorial Rossby Wave over the eastern Indian Ocean.





July Tropical Storm Formation by MJO phase





Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



800 AM EDT TUE JUL 16 2013

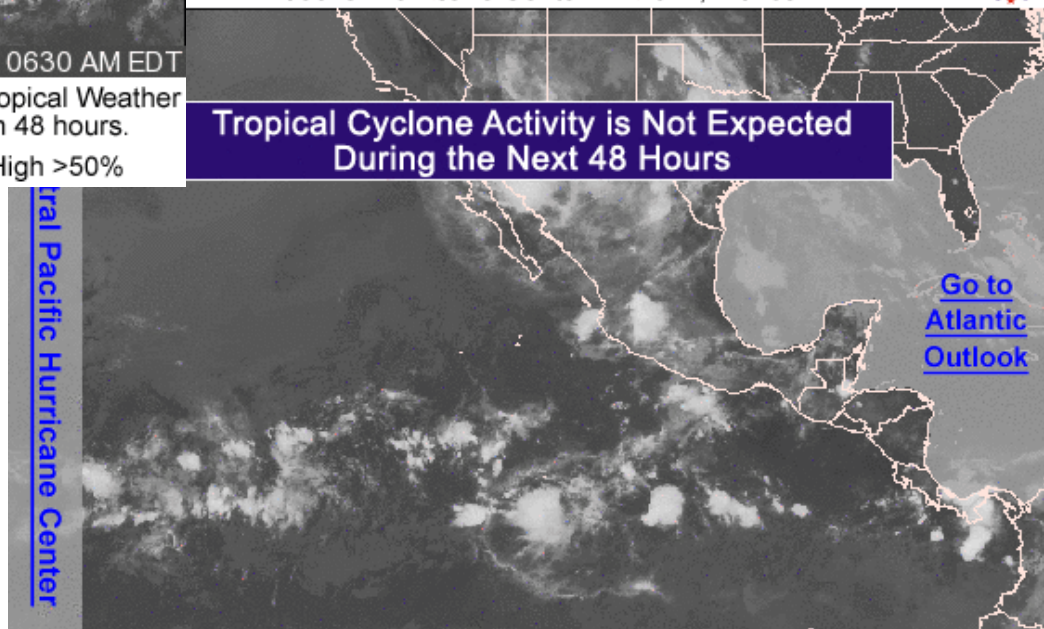
Satellite Image: 0630 AM EDT

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%

Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida

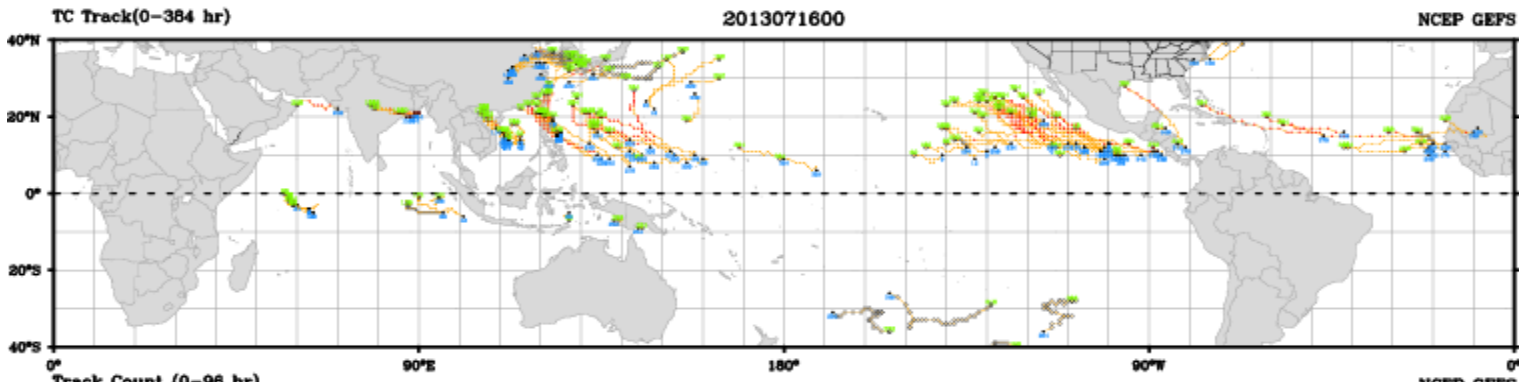


500 AM PDT TUE JUL 16 2013

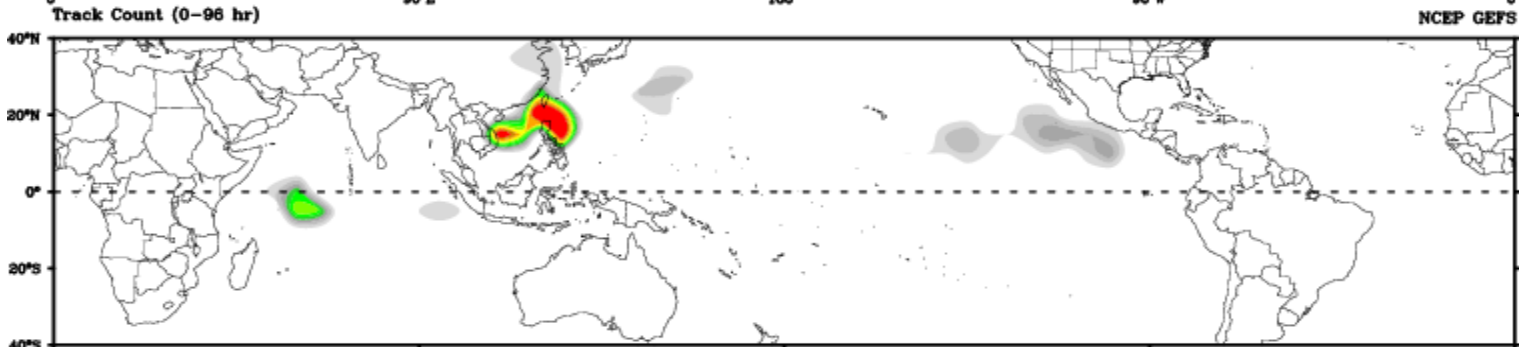
Satellite Image: 0330 AM PDT

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

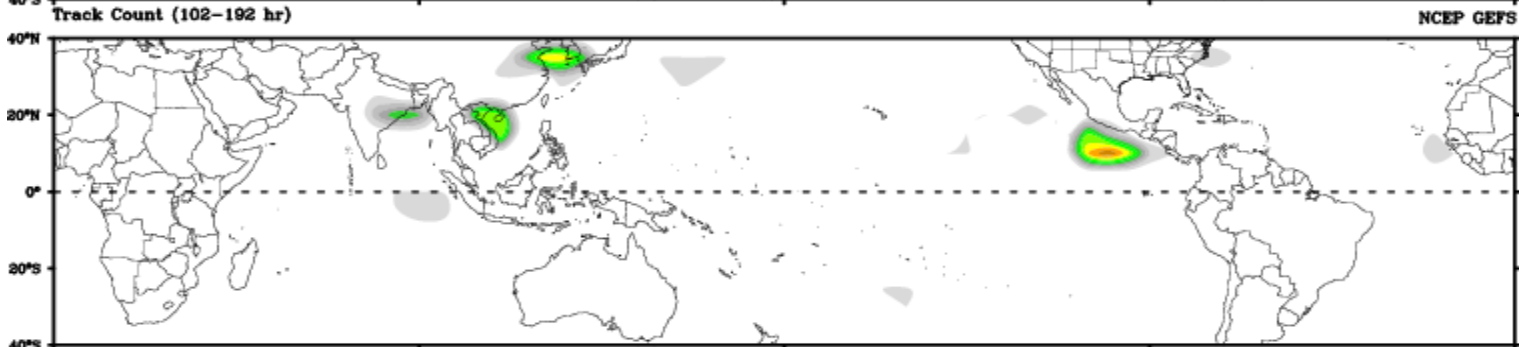
Low <30%
 Medium 30-50%
 High >50%



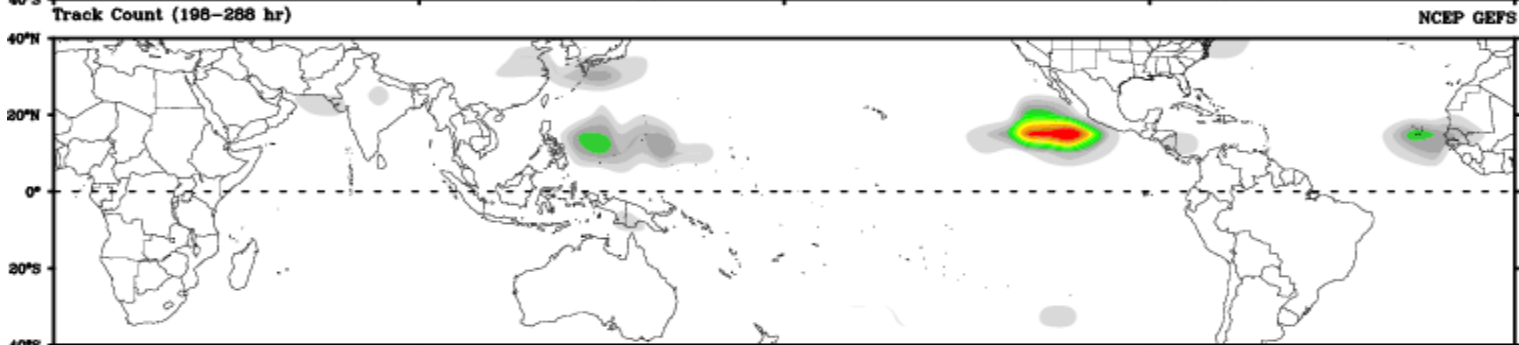
Days 1-4



Day 5-8



Day 9-12



Connections to U.S. Impacts

US Composites based on MJO Phase

phase 4

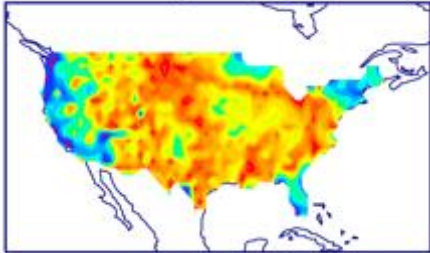


phase 5

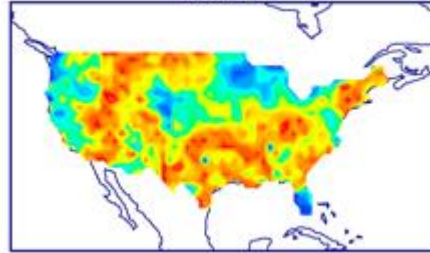


Indicates a shift toward warmer conditions across the north central CONUS. The signal is weak.

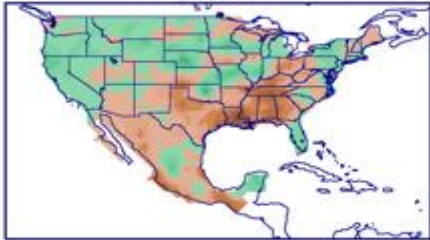
phase 4



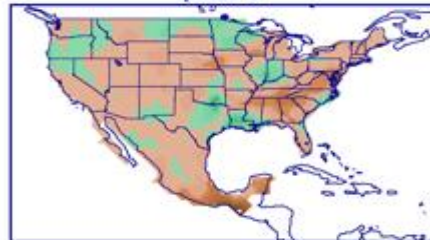
phase 5



phase 4

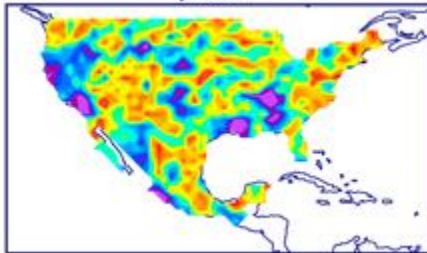


phase 5

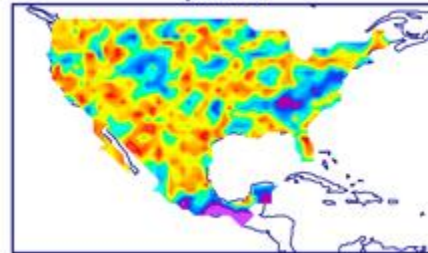


Indicates drier conditions over the Southeast.

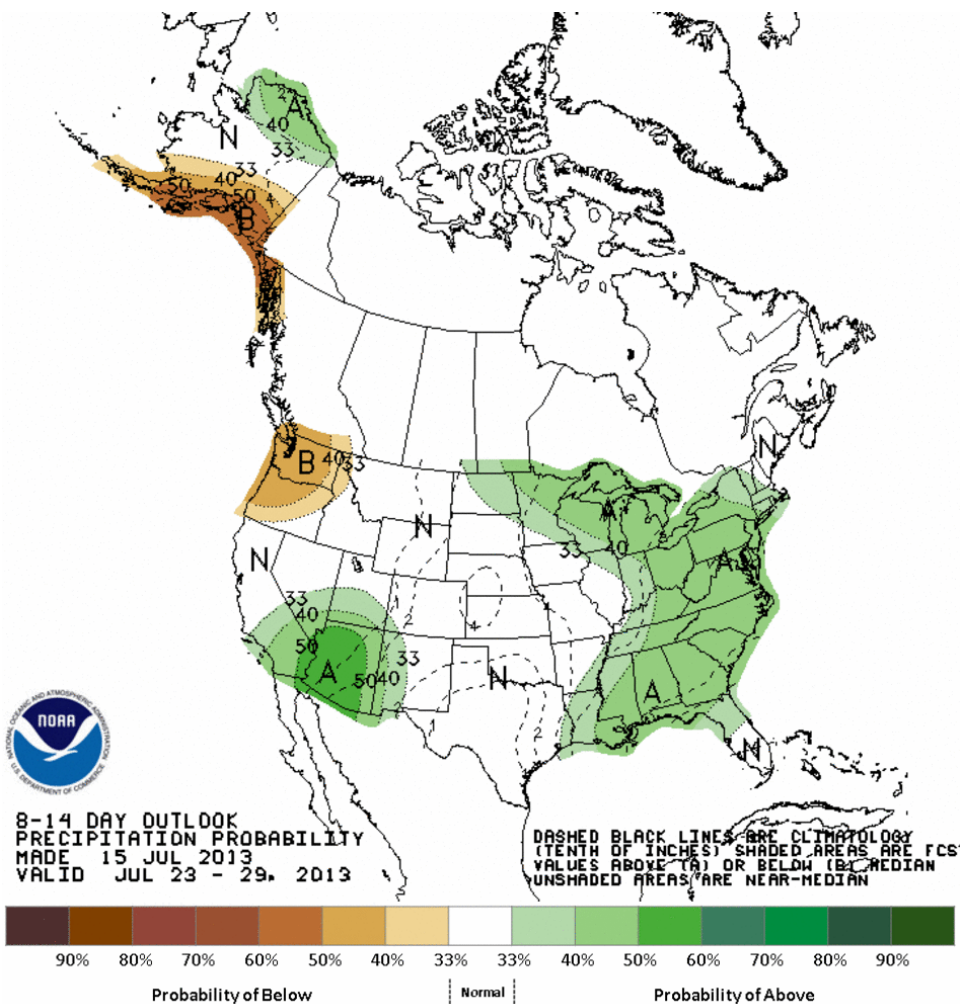
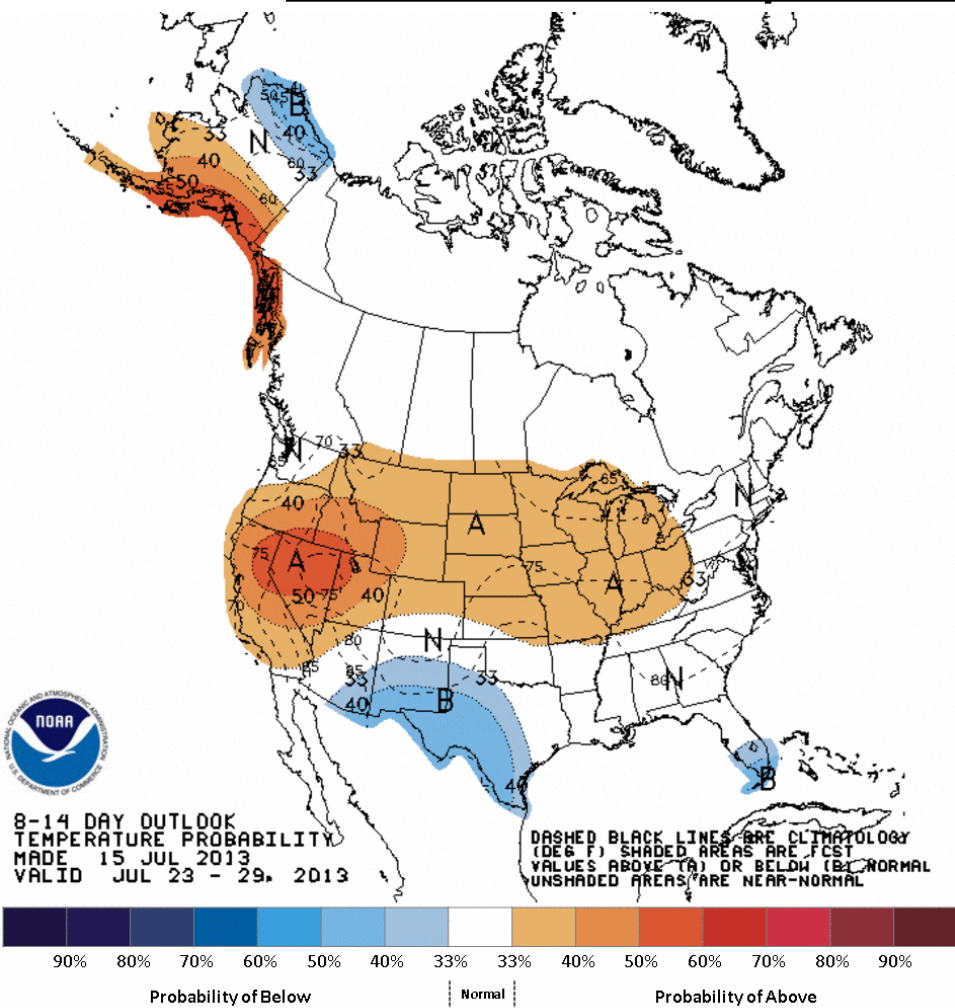
phase 4



phase 5



Week 2 – Temperature and Precipitation

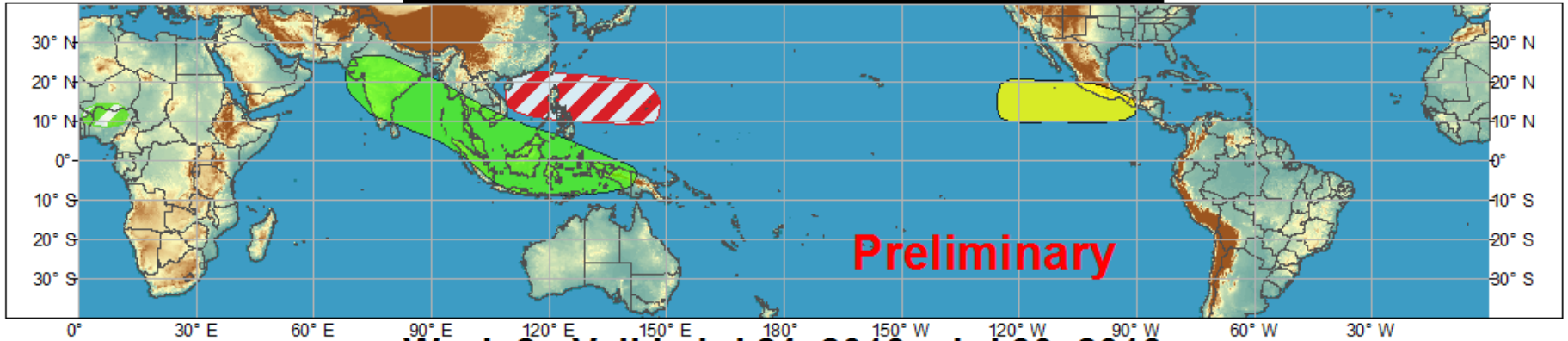




Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Jul 17, 2013 - Jul 23, 2013



Week 2 - Valid: Jul 24, 2013 - Jul 30, 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: 07/16/2013

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.

