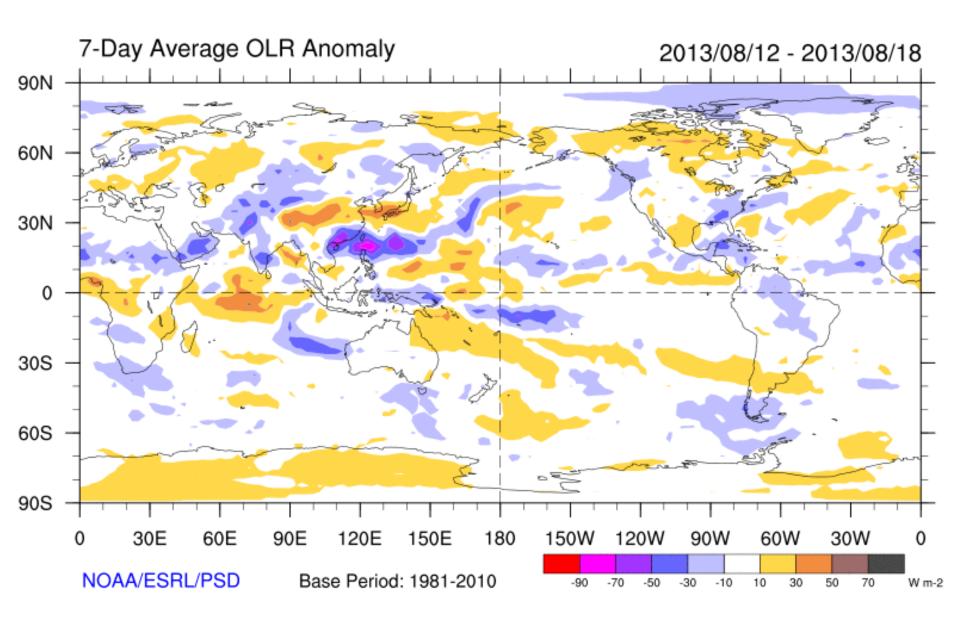
# Global Tropics Hazards And Benefits Outlook <u>August 20, 2013</u>

**Brad Pugh** 

# <u>Outline</u>

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



# Outlook Review

Week 1 - Valid: Aug 14, 2013 - Aug 20, 2013 30° N 20° N 30° S Week 2 - Valid: Aug 14, 2013 - Aug 20, 2013 30° W 20° N 20° N XX 20° S 20° S 30° S -30° S 2013/08/12 - 2013/08/18 7-Day Average OLR Anomaly 90N 60N 30N 0 30S 60S 90S 120E 150E 180 150W NOAA/ESRL/PSD Base Period: 1981-2010

Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Cool shading More clouds/rain

Warm shading Less clouds/rain

# Synopsis of Climate Modes

#### **ENSO:**

• ENSO-neutral conditions are favored to continue through late boreal autumn 2013.

#### MJO and other subseasonal tropical variability:

- The MJO has remained weak over the past 2 to 3 weeks.
- Model MJO index forecasts indicate an organizing MJO signal during Week-1 with an eastward propagation across the western Hemisphere during Week-2.

#### **Tropics**:

- Elevated odds for TC development in the western North Pacific during Week-1, east of the Philippines.
- High chances for TC development in East Pacific with a likely track near the Baja and gulf surge north into the desert Southwest during Week-1.
- •Elevated odds for TC development in East Pacific for Week-2.
- •Increasing odds for TC development across the main development region of Atlantic during Week-2.



#### Global Tropics Hazards and Benefits Outlook - Climate Prediction Center







Week 2 - Valid: Aug 28, 2013 - Sep 03, 2013



Produced: 08/20/2013 Confidence High Moderate

Forecaster: Pugh

**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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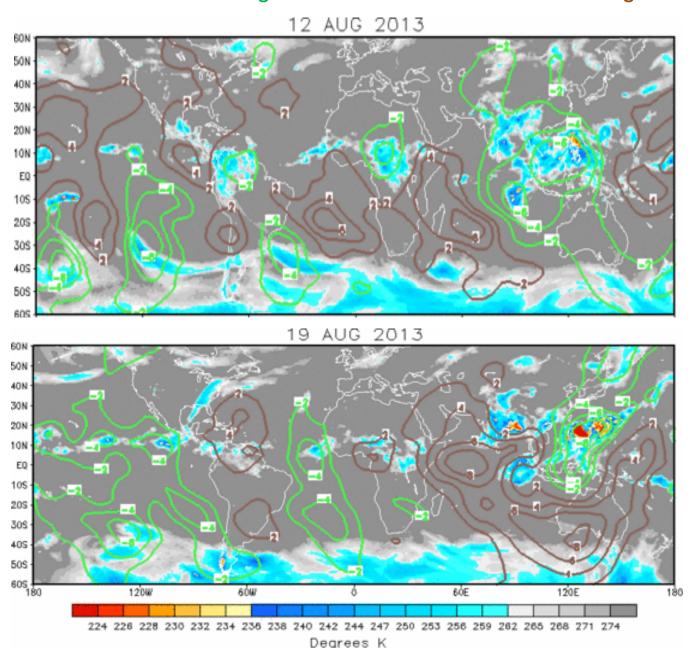




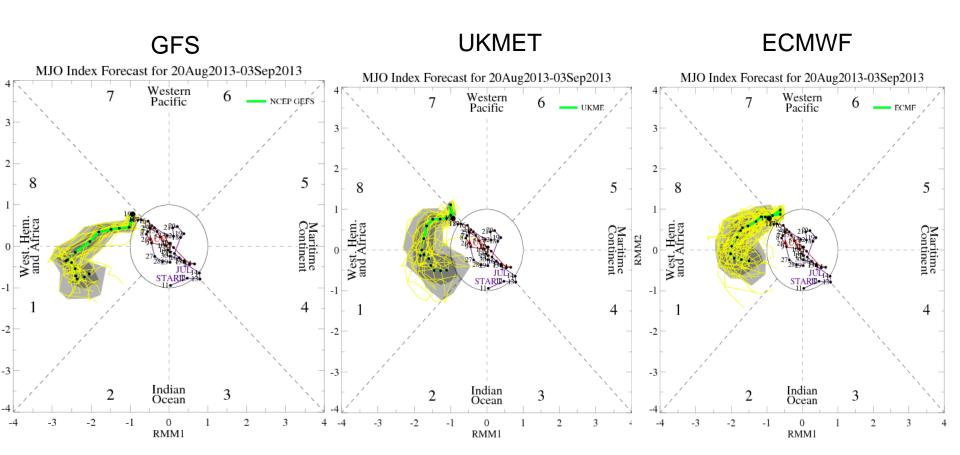


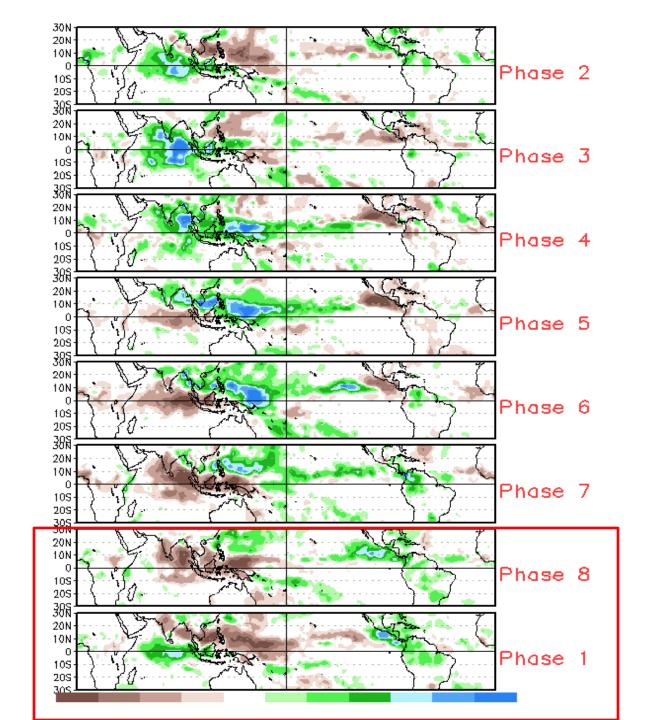
## IR Satellite & 200-hpa Velocity Potential Anomalies

Green: Enhanced Divergence Brown: Enhanced Convergence

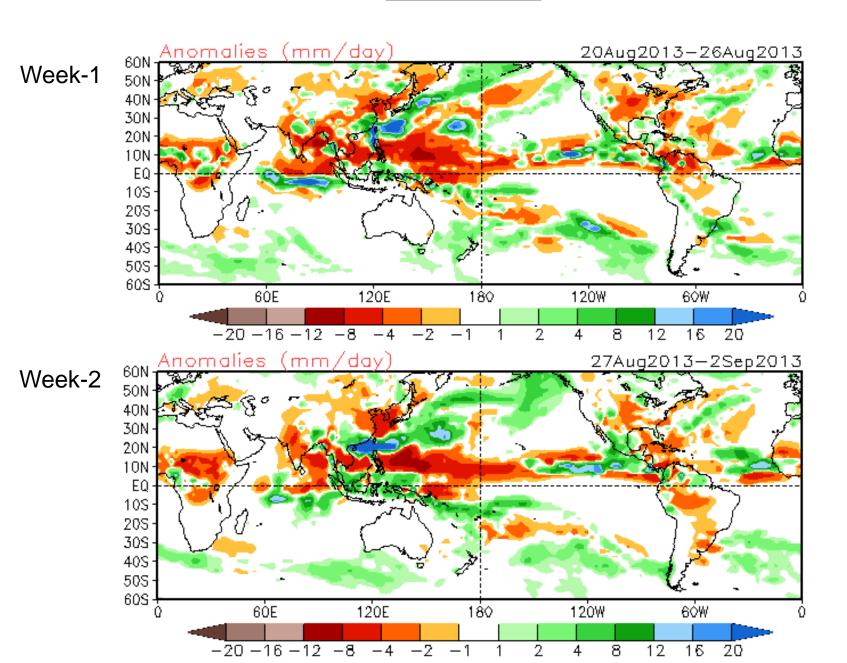


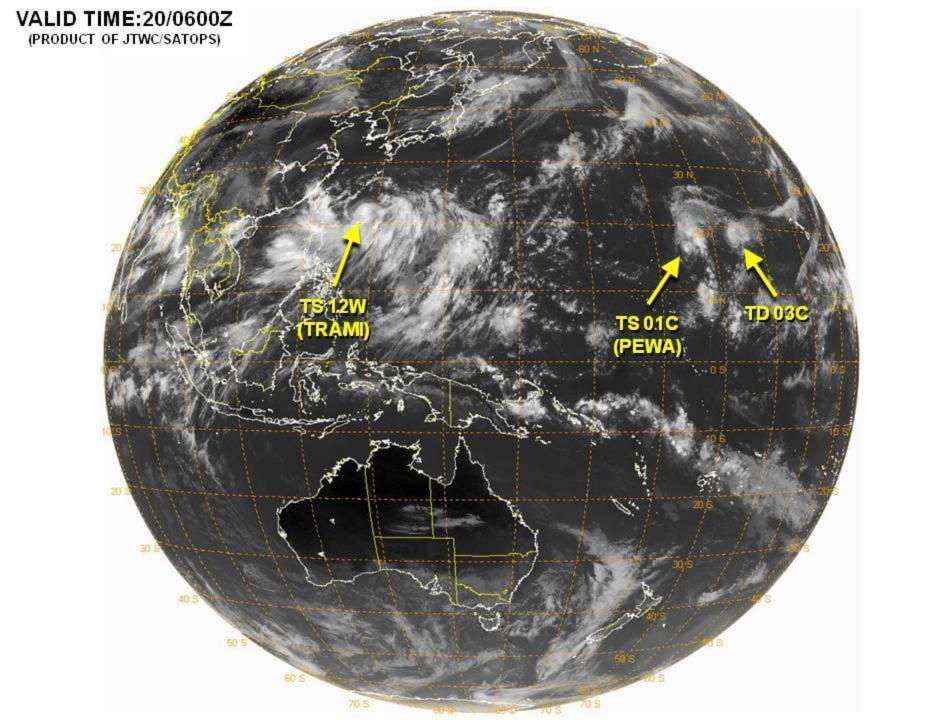
# MJO Observation/Forecast



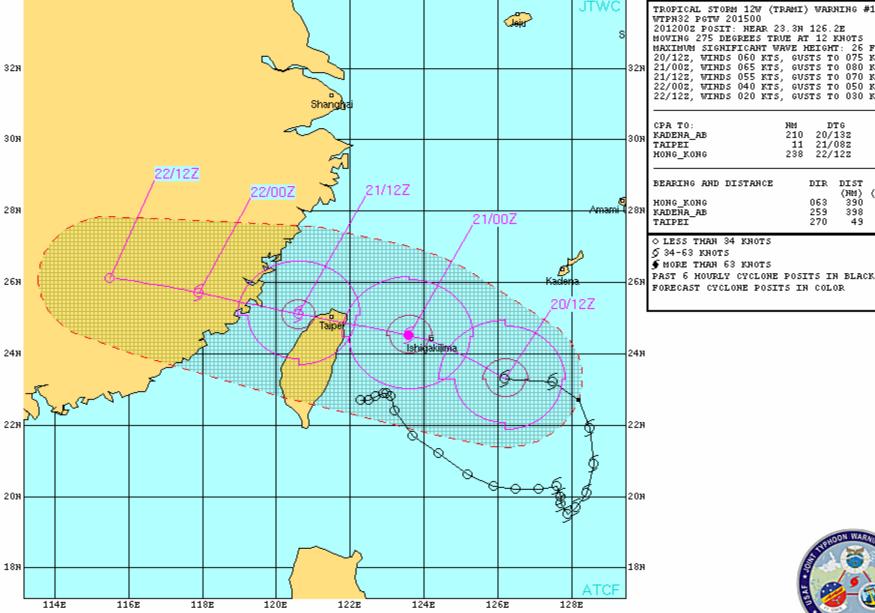


### **GFS Forecast**





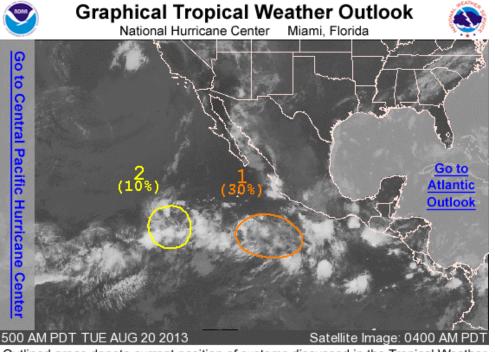
### Joint Typhoon Warning Center



TROPICAL STORM 12W (TRAMI) WARNING #15 201200Z POSIT: NEAR 23.3N 126.2E MOVING 275 DEGREES TRUE AT 12 KNOTS MAXIMUM SIGNIFICANT WAVE HEIGHT: 26 FEET 20/12z, WINDS 060 KTS, GUSTS TO 075 KTS 21/002, WINDS 065 KTS, GUSTS TO 080 KTS 21/122, WINDS 055 KTS, GUSTS TO 070 KTS 22/002, WINDS 040 KTS, GUSTS TO 050 KTS 22/12Z, WINDS 020 KTS, GUSTS TO 030 KTS DTG 20/13z 21/08z 238 22/122 DIR DIST TAU (MM) (HRS) `39Ó 24 063 398 24 259 270 49 24

FORECAST CYCLONE POSITS IN COLOR





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**



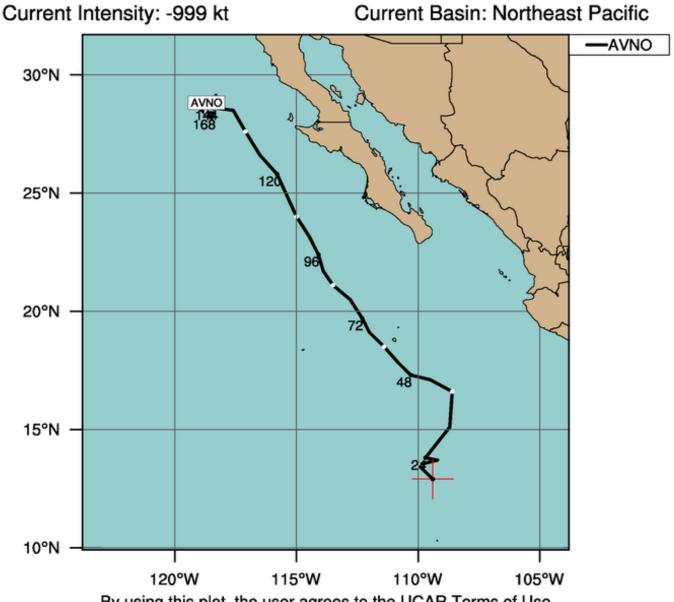




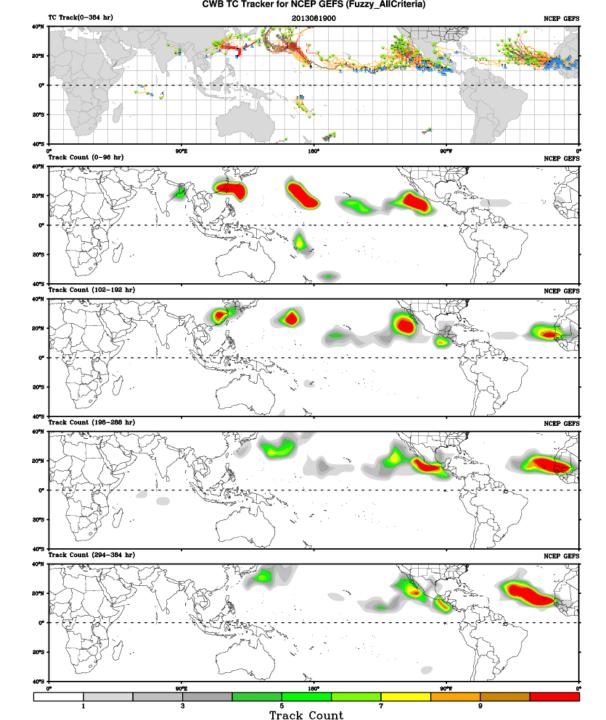
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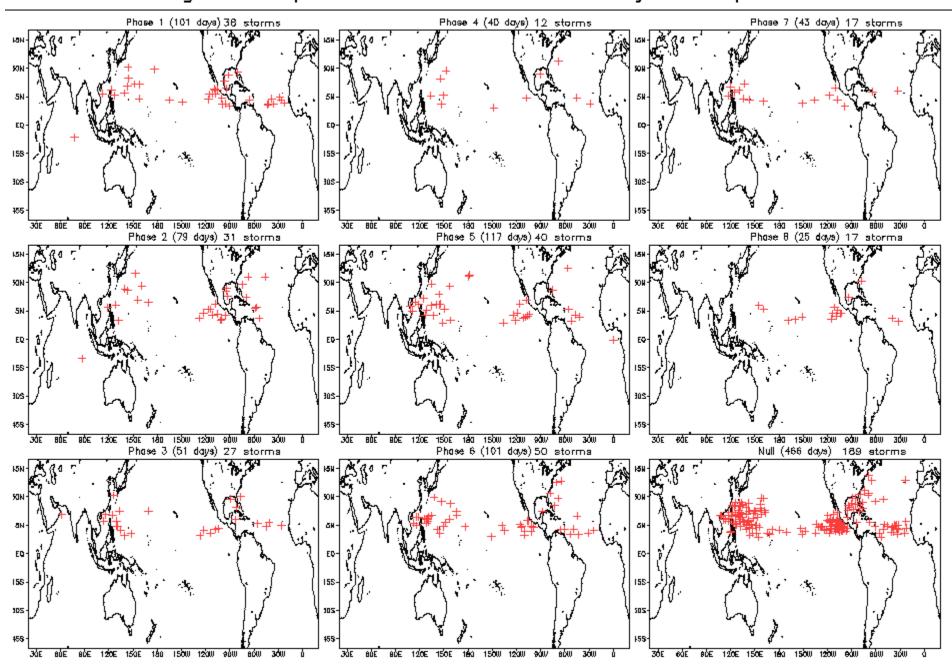
## NCEP GFS Ensemble track guidance initialized at 0600 UTC, 20 August 2013

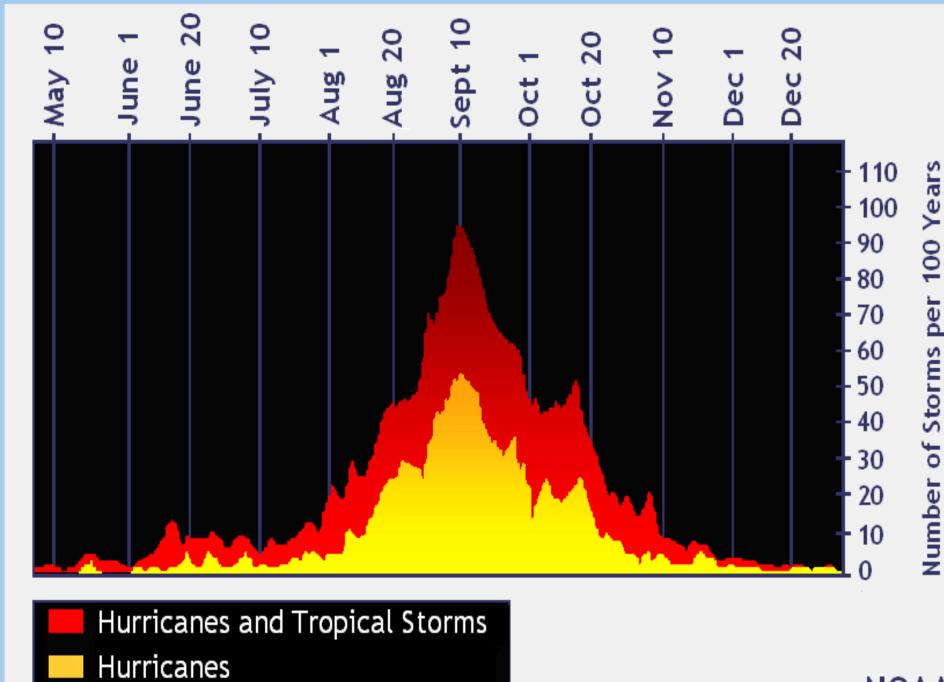




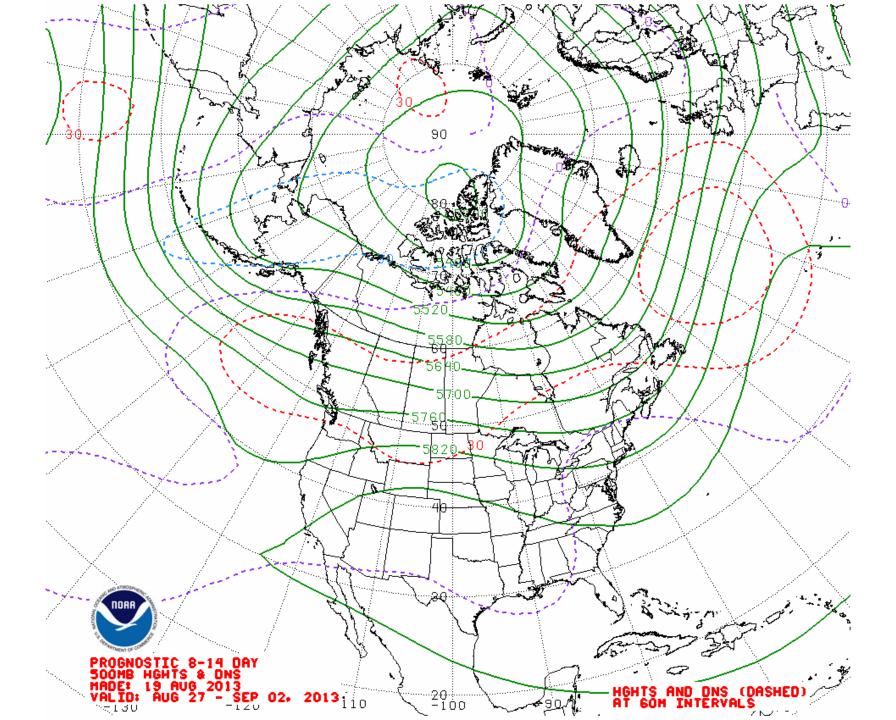


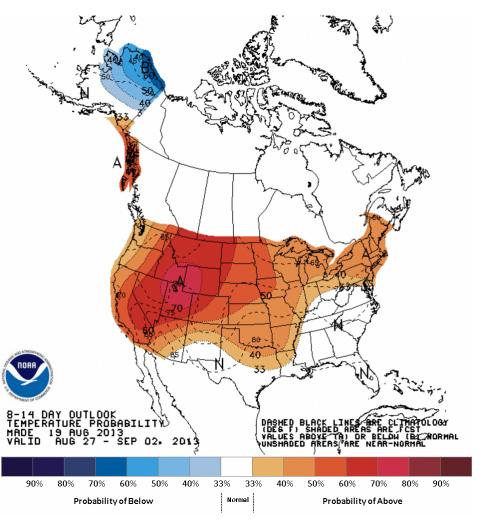
## August Tropical Storm Formation by MJO phase

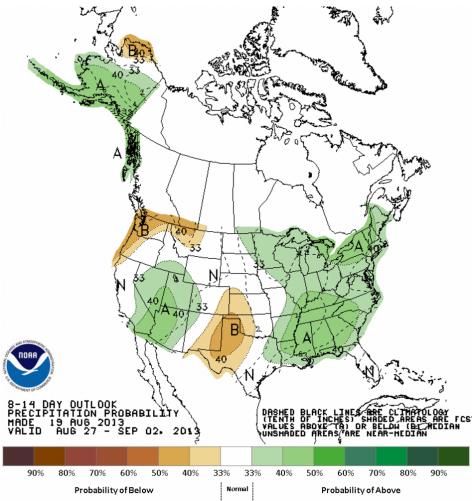




NOAA





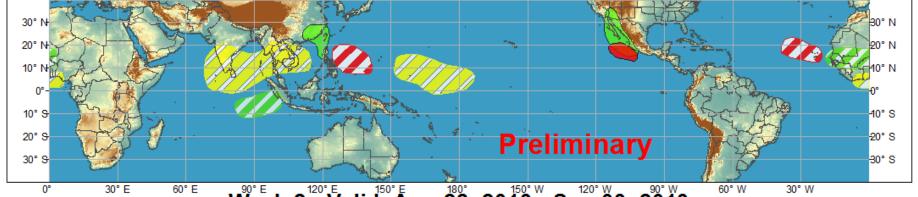




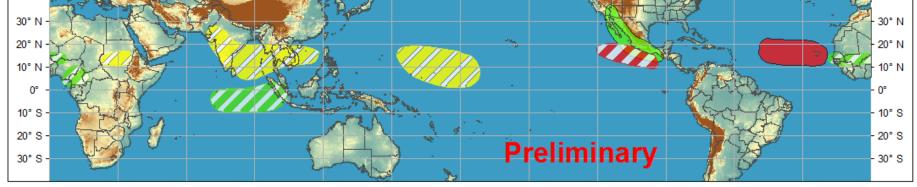
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