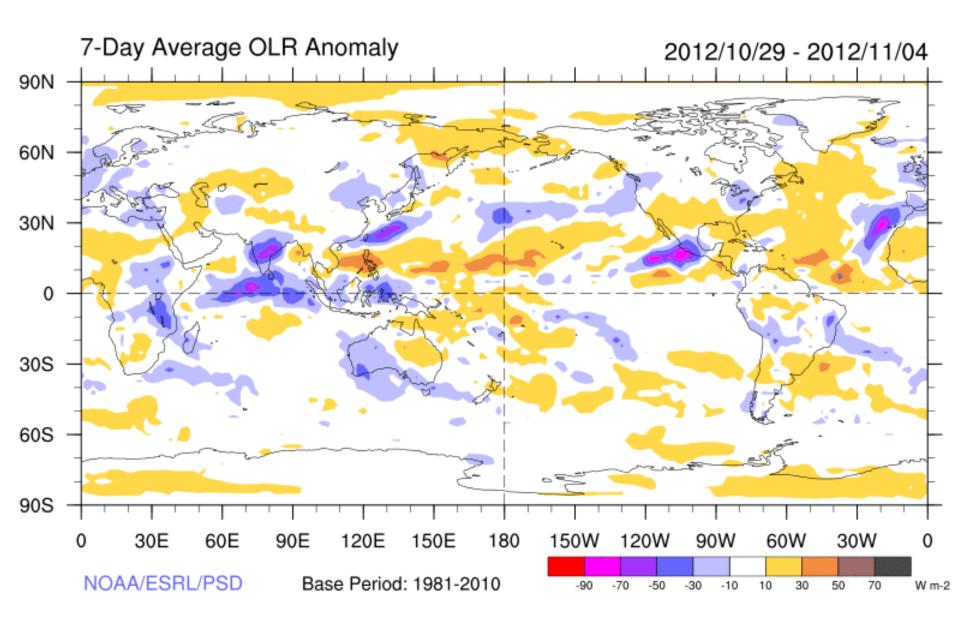
Global Tropics Hazards And Benefits Outlook November 6, 2012

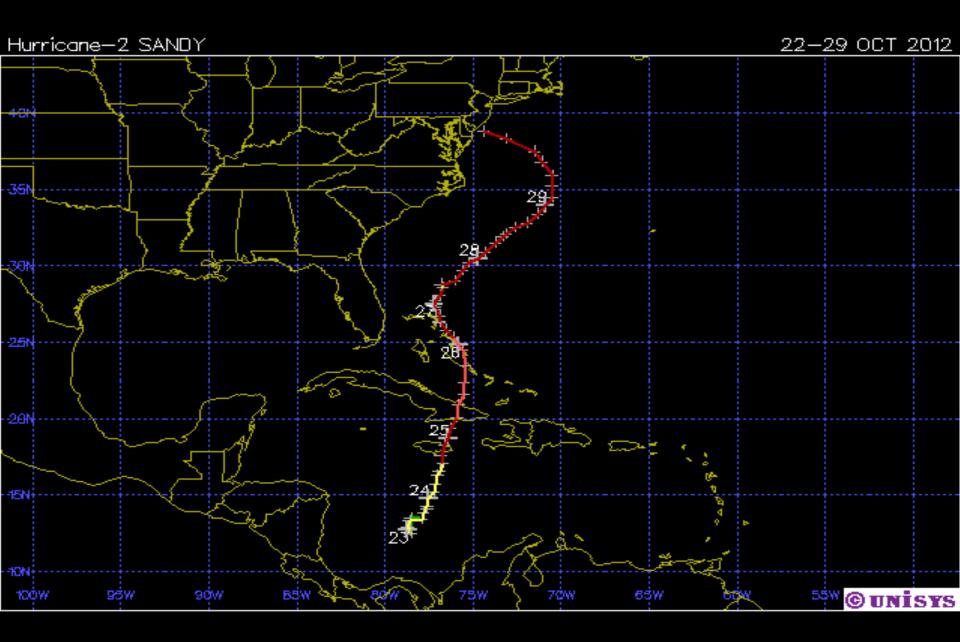
Brad Pugh

<u>Outline</u>

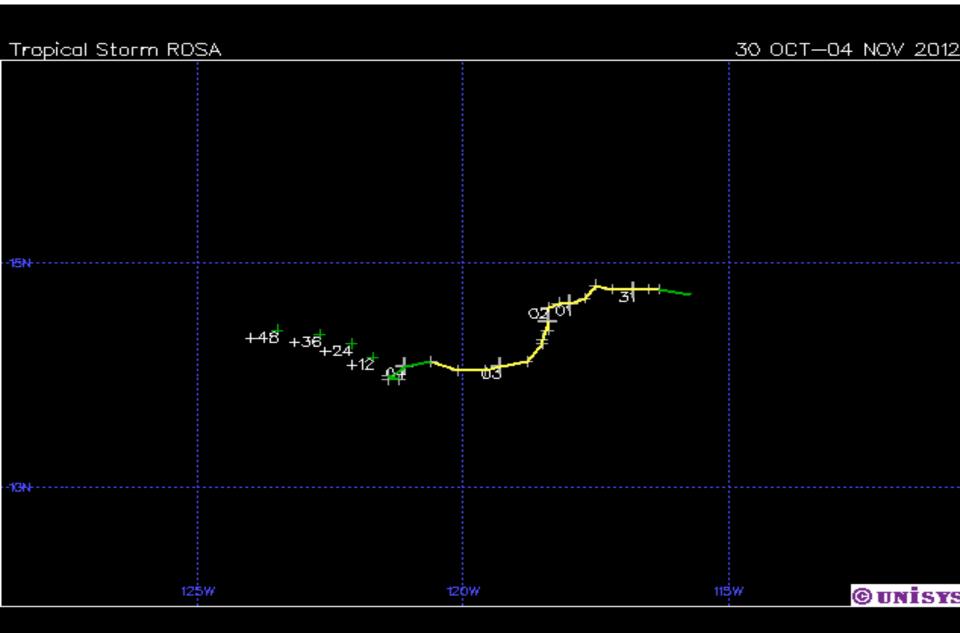
- 1. Review of Recent Conditions
- 2. Synopsis of Climate Modes
- 3. GTH Outlook and Forecast Discussion



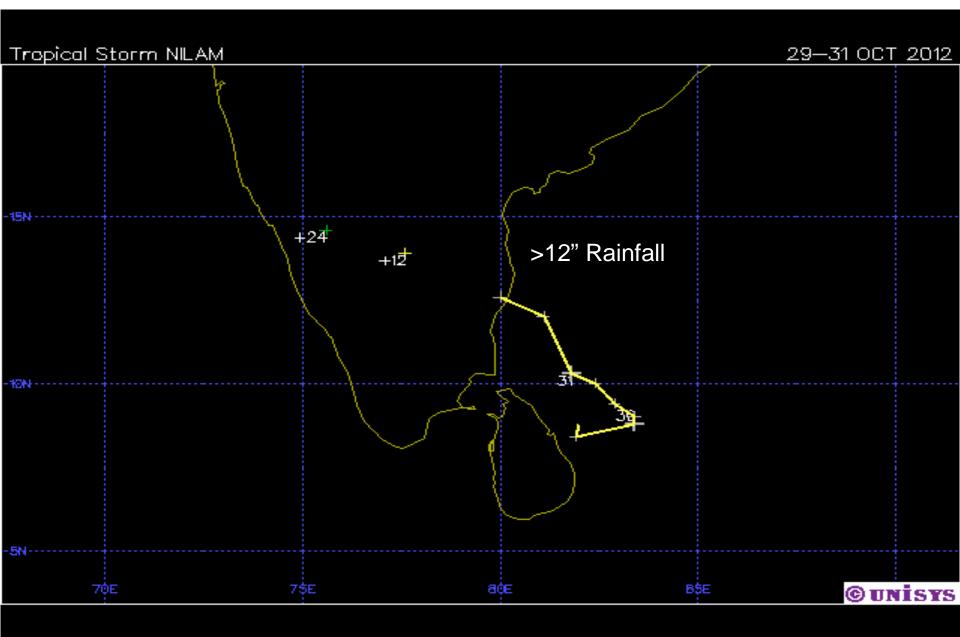
Tropical Cyclone Review

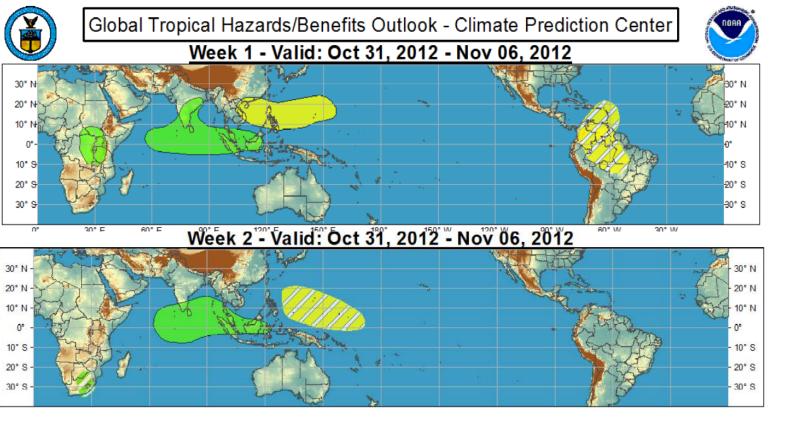


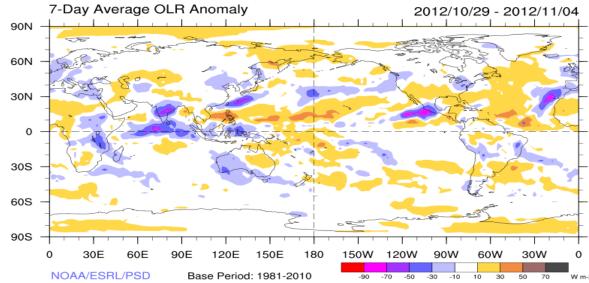
Tropical Cyclone Review



Tropical Cyclone Review



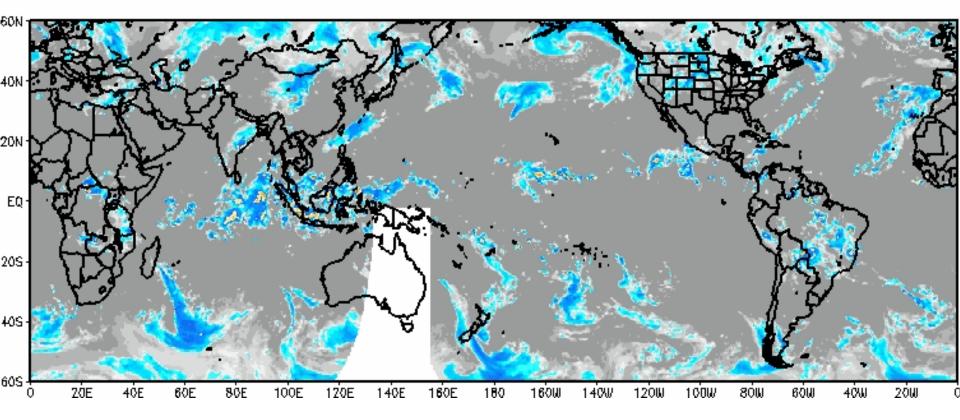




Outlook Review

Weekly Satellite Review

IR Temperatures 0900 UTC 02 NOV 2012



Synopsis of Climate Modes

ENSO:

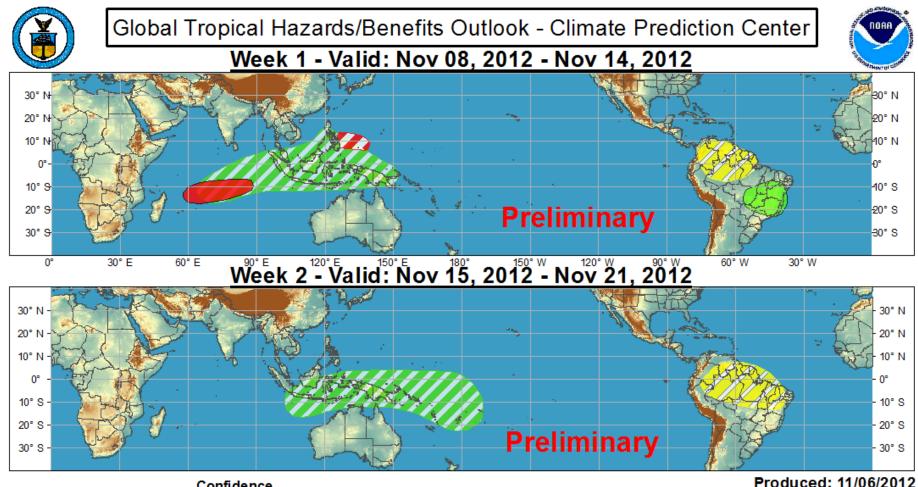
 Borderline ENSO-neutral / weak El Niño conditions are expected to continue into Northern Hemisphere winter 2012-13, possibly strengthening during the next few months.

MJO and other subseasonal variability:

- The MJO remained active (centered across the eastern Indian Ocean).
- There is considerable spread among the dynamical model MJO index forecasts. Some indicate a continued eastward propagating signal.
- The MJO index forecasts are likely struggling with the representation of other subseasonal tropical variability and we favor a continuation of MJO activity.

Extratropics:

• AO index became positive recently and is forecast to remain positive.



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.

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

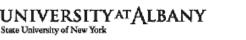
7-day mean temperatures in the upper third of the historical range.

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.









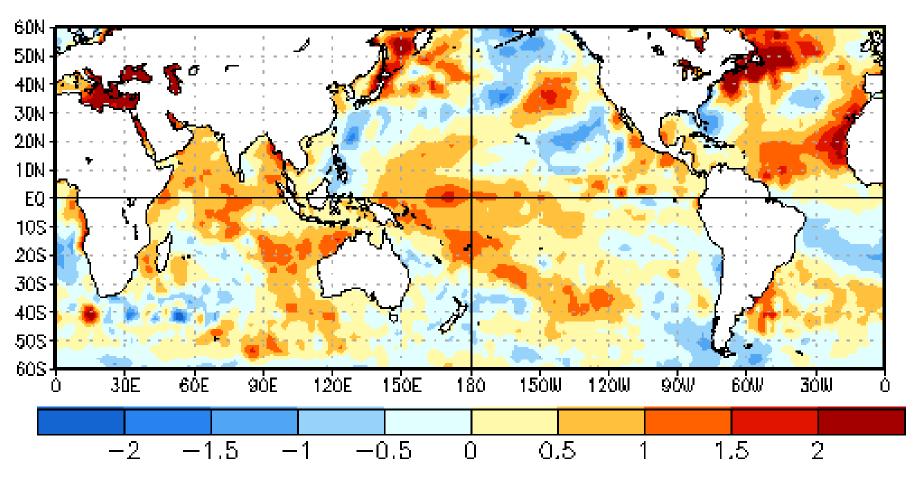




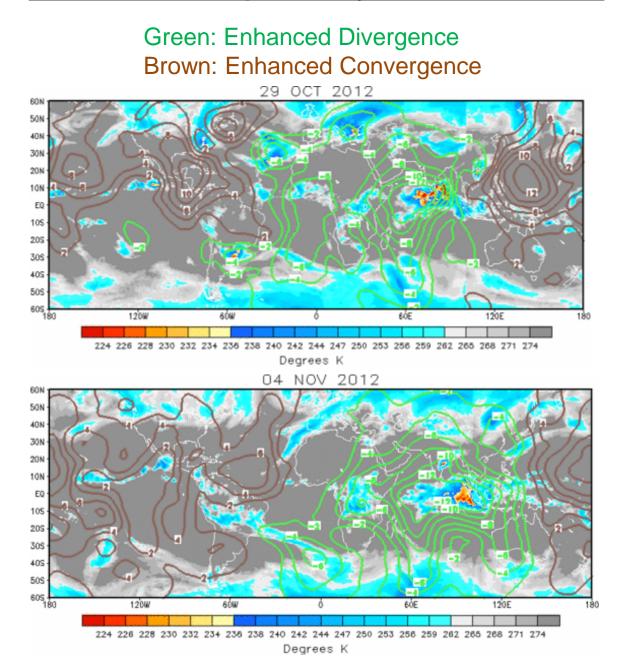
Forecaster: Pugh

SST Observations

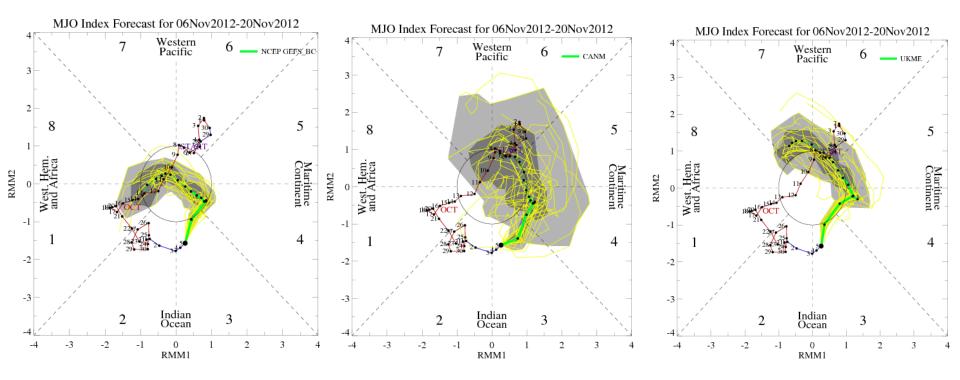
31 OCT 2012



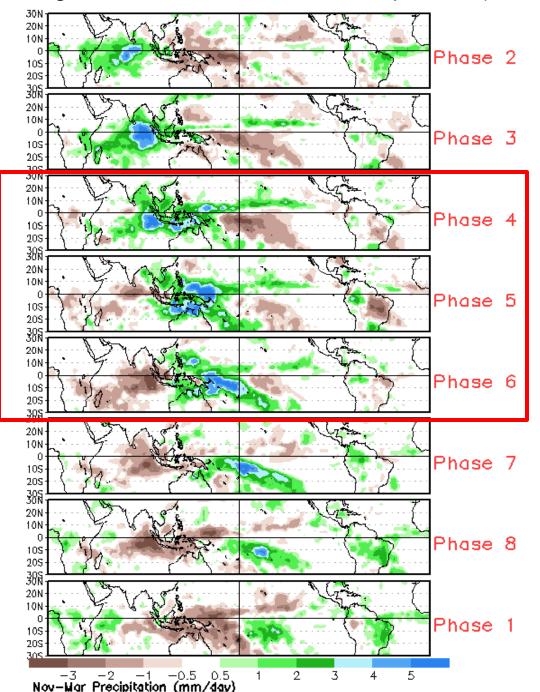
IR Satellite & 200-hpa Velocity Potential Anomalies

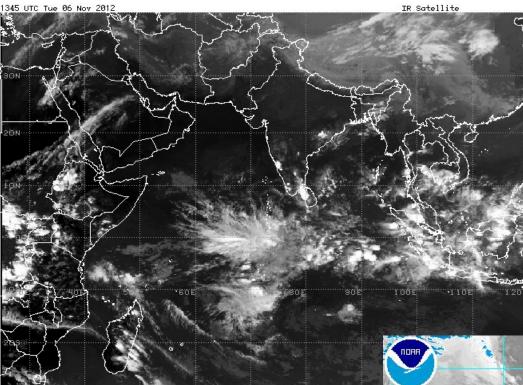


MJO Observation/Forecast

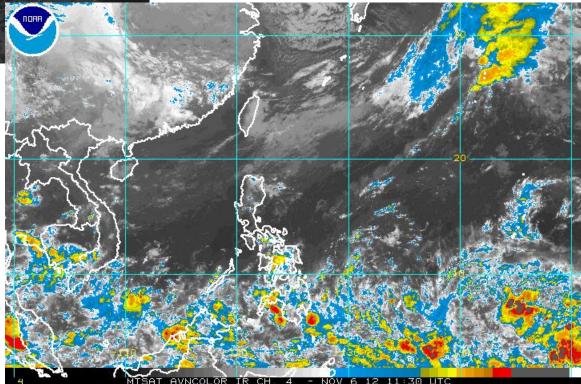


Average Conditions when the MJO is present (Nov-Mar)

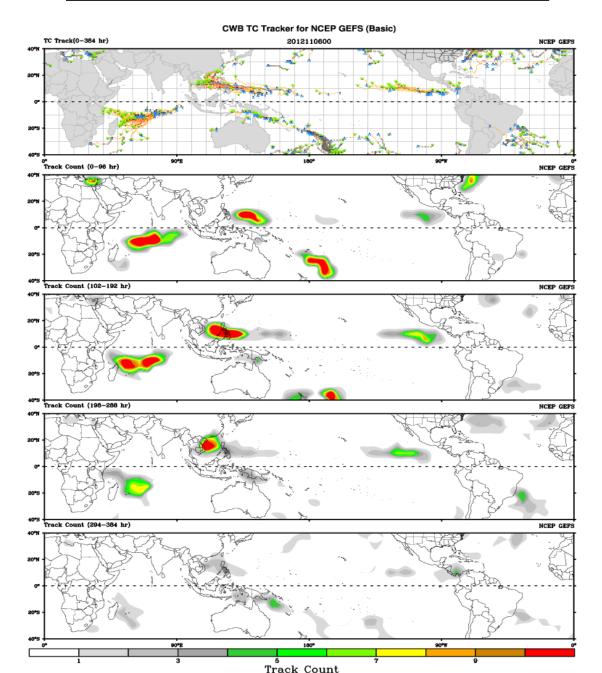




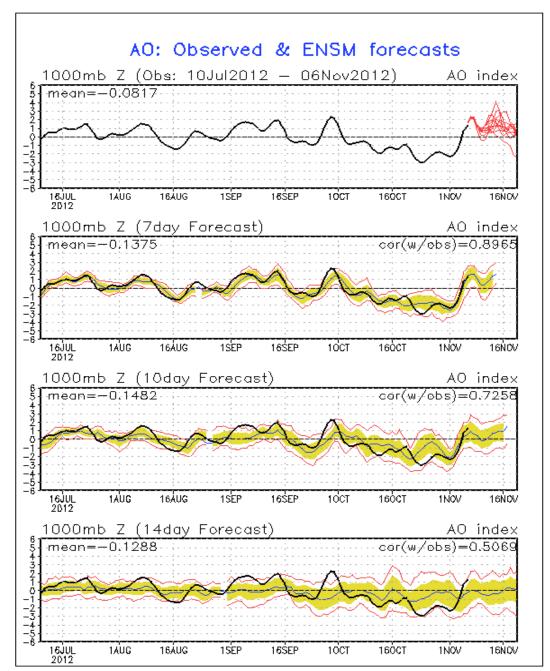
Initial Conditions & TC Development



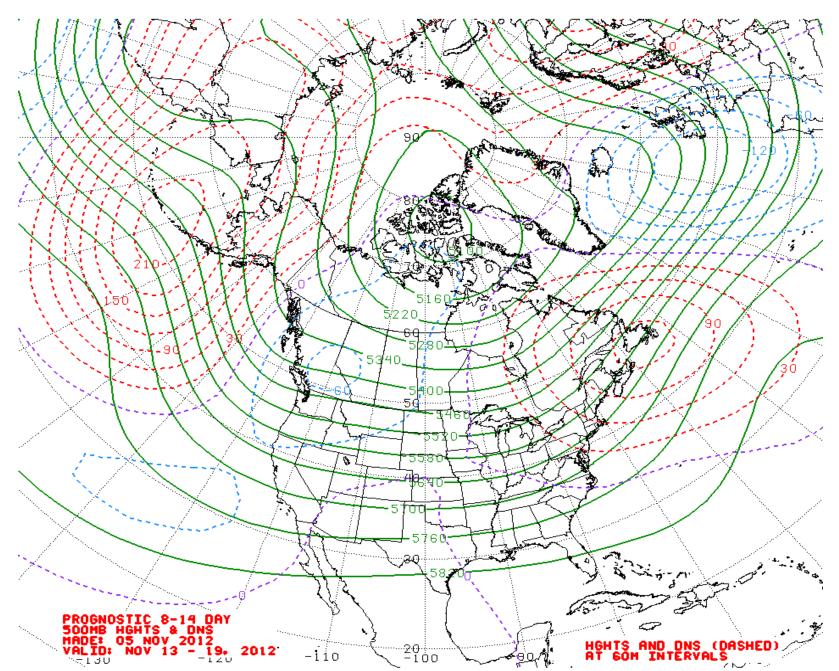
Ensemble GFS TC Guidance



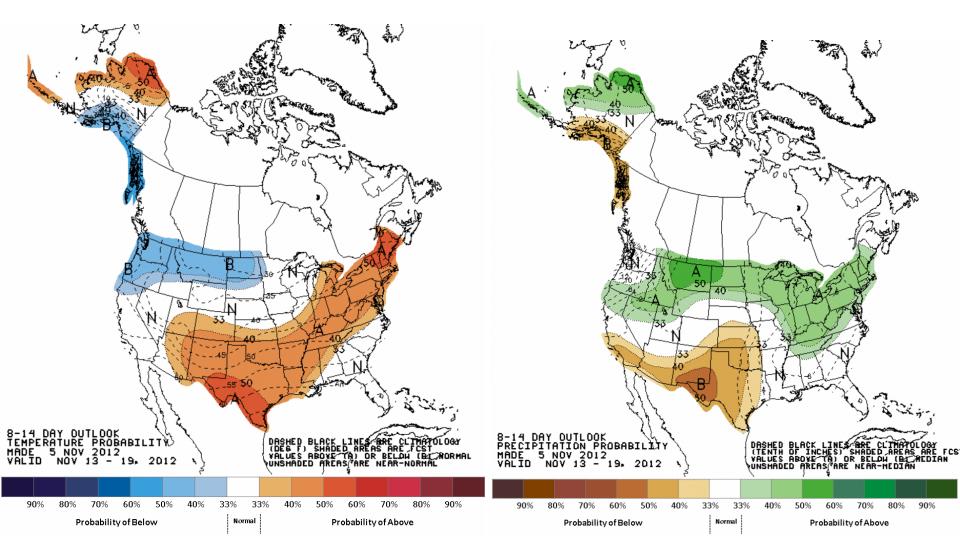
Recent AO Observations and GEFS Forecast

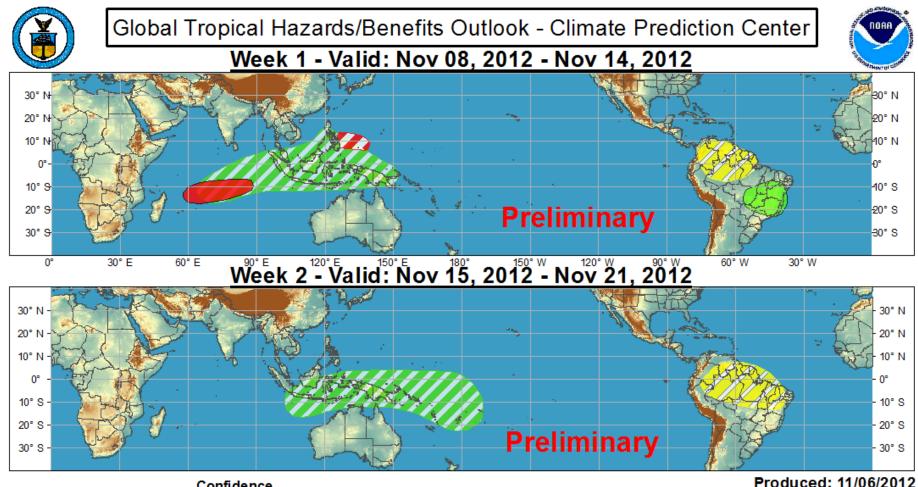


Week 2 500-hPa Manual Chart



Week 2 -- Temperature and Precipitation





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.

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

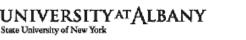
7-day mean temperatures in the upper third of the historical range.

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Forecaster: Pugh