

Global Tropics Hazards And Benefits Outlook

November 11, 2014

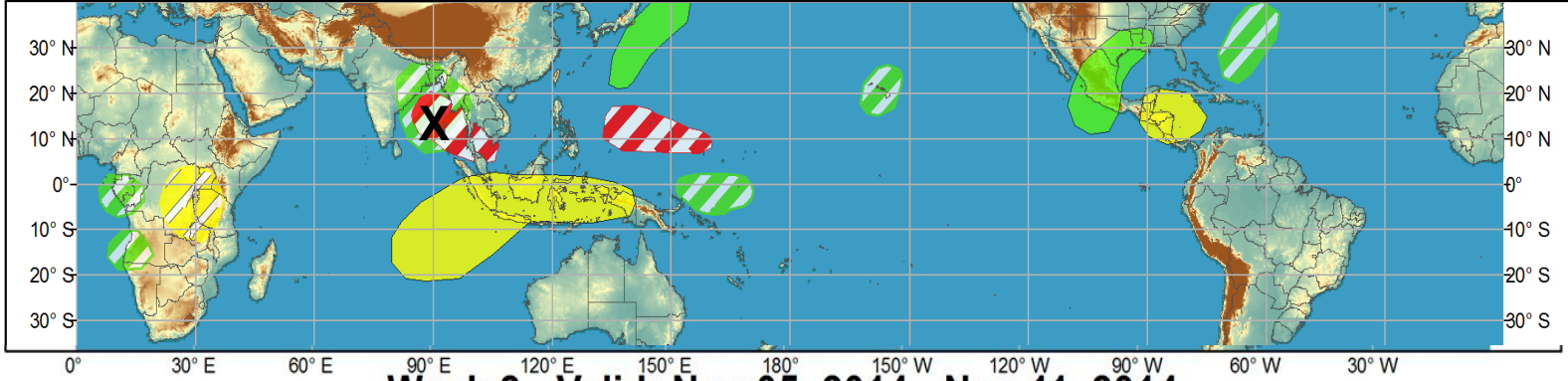
Adam Allgood

Outline

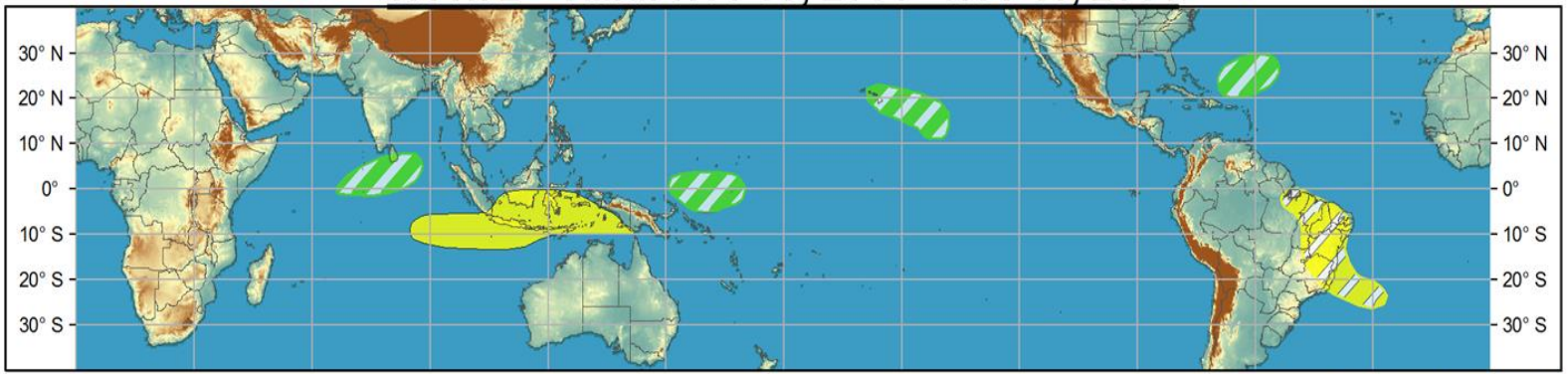
1. Review of Recent Conditions
2. Synopsis of Climate Modes
3. GTH Outlook and Forecast Discussion
4. Connections to U.S. Impacts



Week 1 - Valid: Nov 05, 2014 - Nov 11, 2014

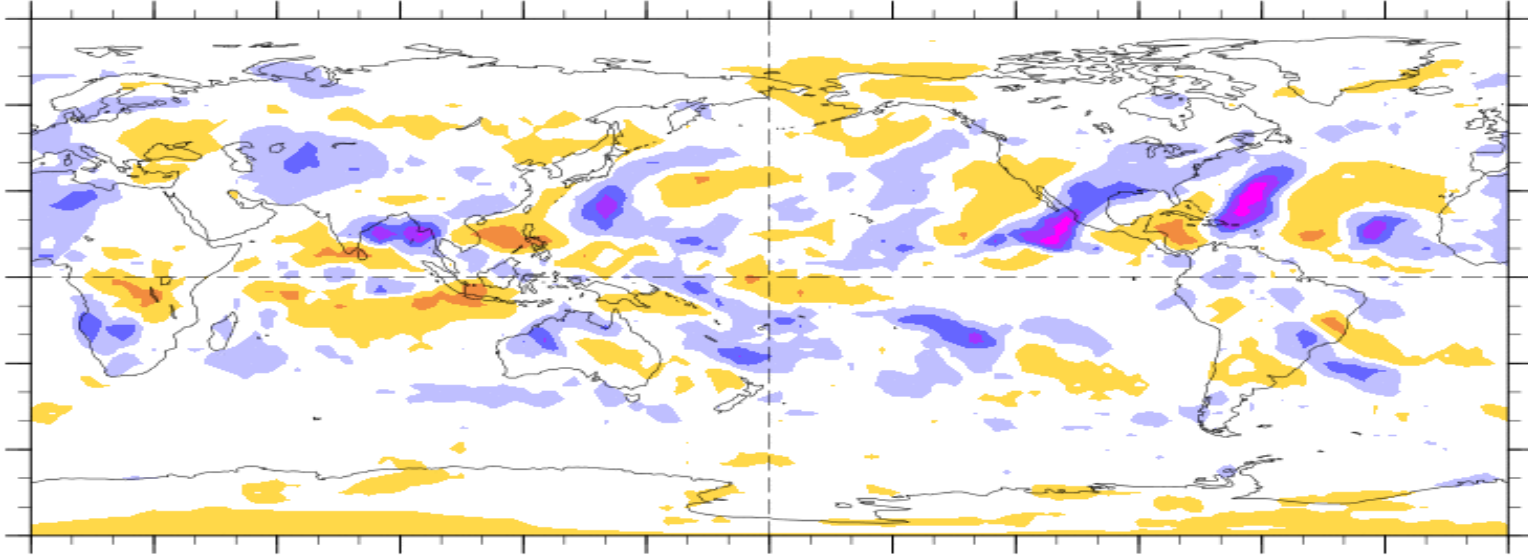


Week 2 - Valid: Nov 05, 2014 - Nov 11, 2014



7-Day Average $\hat{\sigma}$ LR Anomaly

**Produced: 10/28/2014
2014/11/03 - 2014/11/09**



Outlook Review

Cool shading
More clouds/rain

Warm shading
Less clouds/rain

Synopsis of Climate Modes

ENSO:

- There is a 58% chance of El Niño during the Northern Hemisphere winter, which is favored to last into the Northern Hemisphere spring 2015.

MJO and other subseasonal tropical variability:

- The amplitude of the RMM and CPC (velocity potential) indices increased during the past week, although eastward propagation of the signal has not been established at this time.
- Dynamical model MJO index forecasts generally support continued eastward propagation, although forecasted convective anomalies are weak over the Indian Ocean. Due to interference from the SST driven base state, it is unclear whether the signal will evolve into a more robust, long lived MJO event.
- Other modes, including westward moving features and extratropical interactions continue to influence the pattern.

Extratropics:

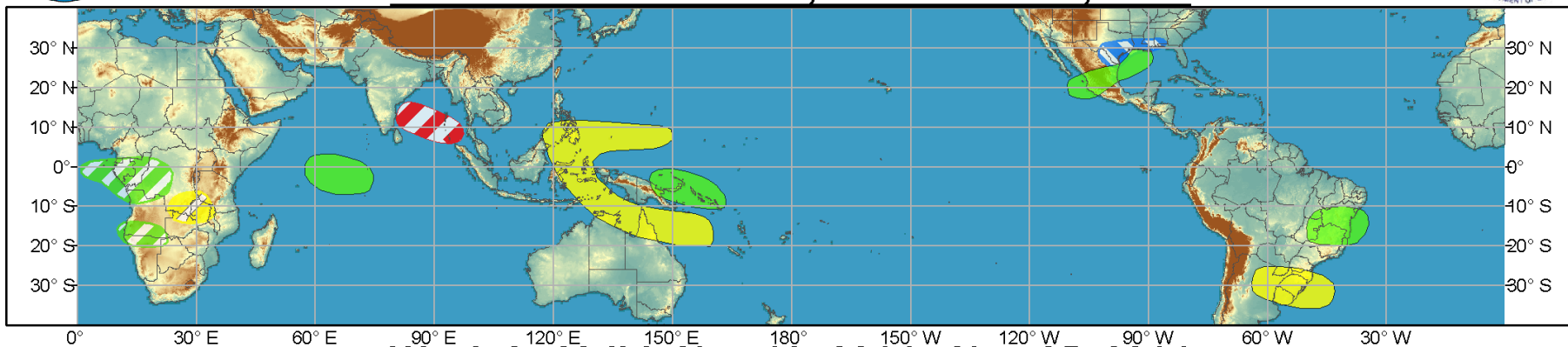
- There is high uncertainty regarding the potential for MJO evolution. A more robust Indian Ocean event, however, would potentially contribute to a warming trend across the eastern and central CONUS during late November or early December.



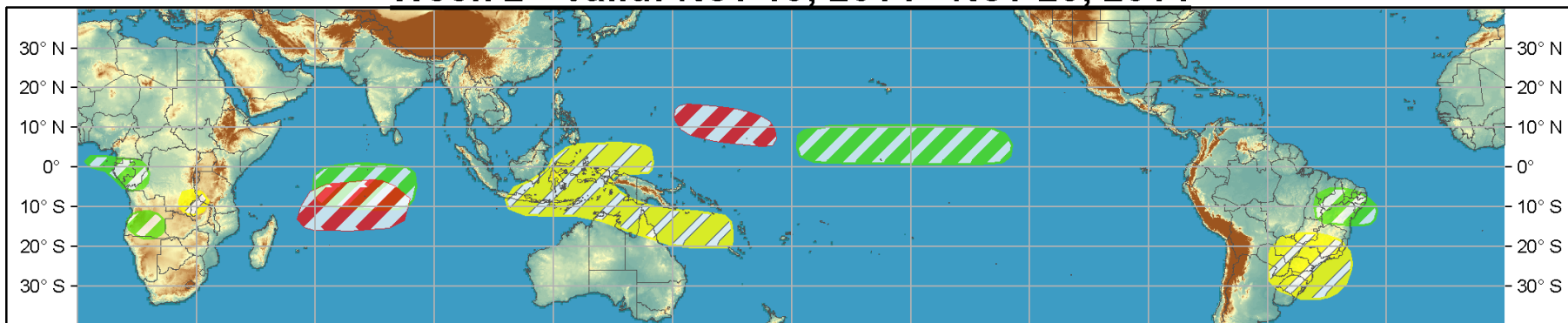
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Nov 12, 2014 - Nov 18, 2014



Week 2 - Valid: Nov 19, 2014 - Nov 25, 2014



Confidence

High Moderate

- Tropical Cyclone Formation** Development of a tropical cyclone (tropical depression - TD, or greater 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: 11/11/2014

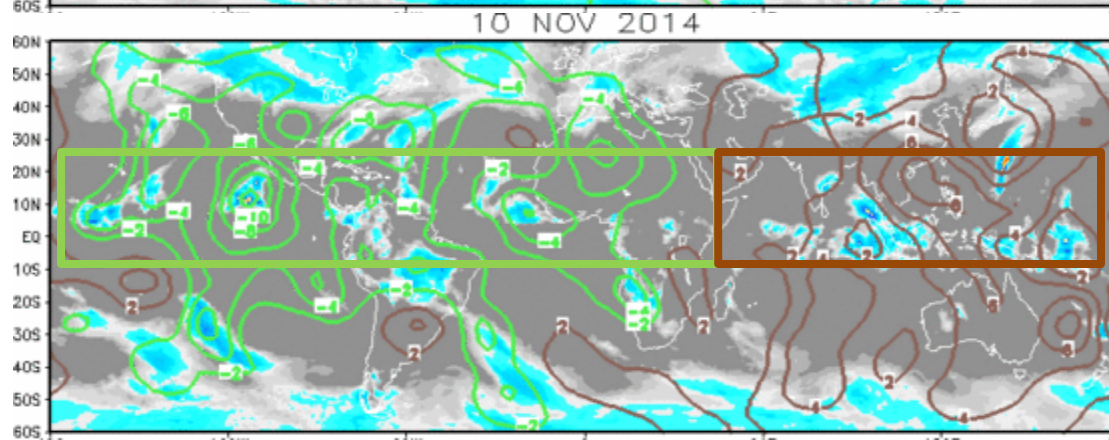
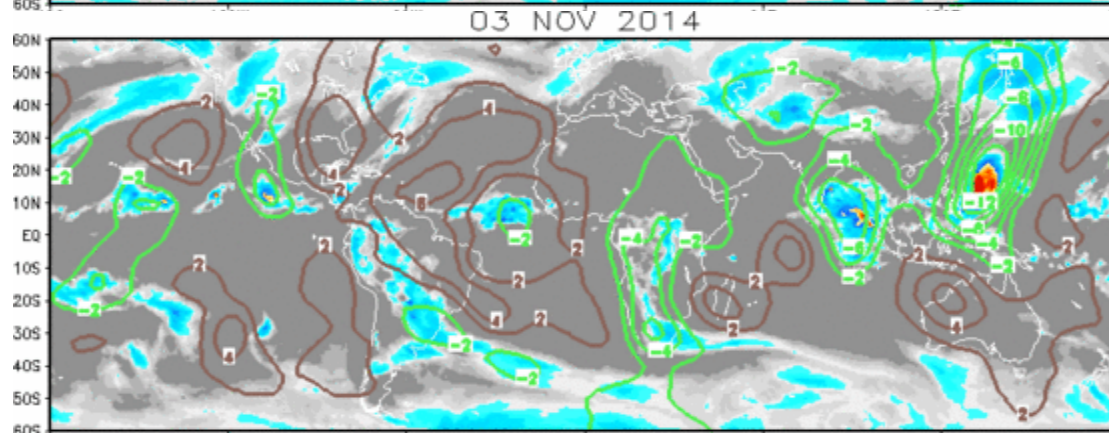
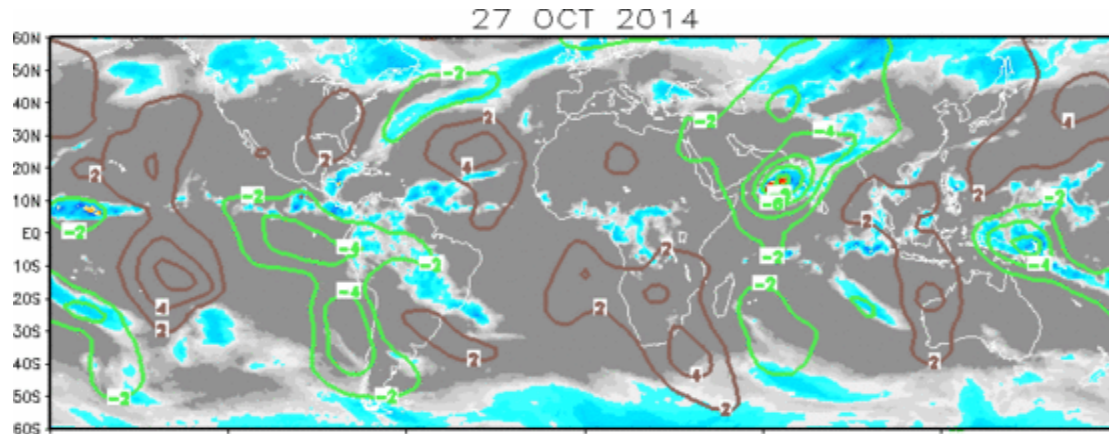
Forecaster: Allgood

Product is updated once per week, except from 6/1 - 11/30 for the region from 120E to 0, 0 to 40N. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.



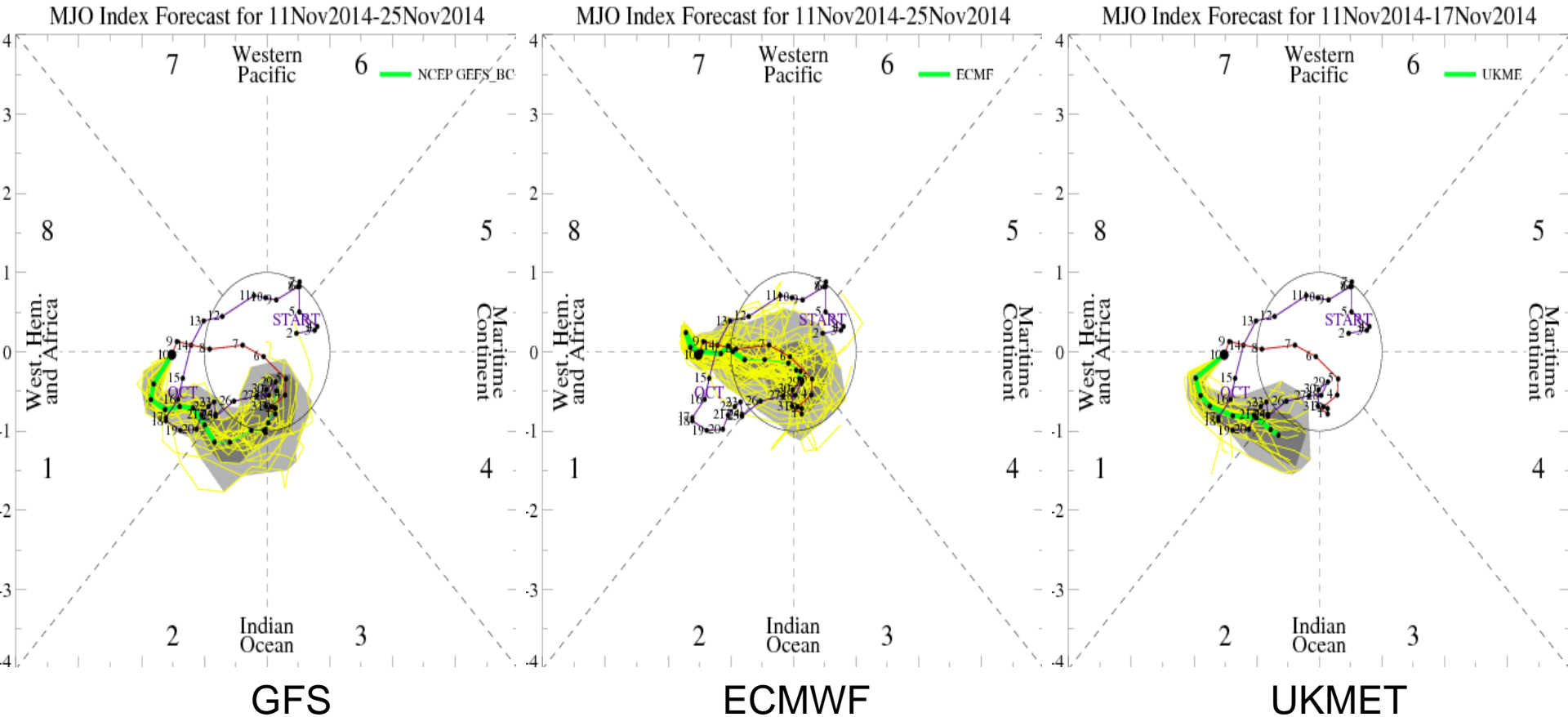
IR Satellite & 200-hpa Velocity Potential Anomalies

Green: Enhanced Divergence Brown: Enhanced Convergence



Wave-1 structure, but a lack of coherent eastward propagation (yet).

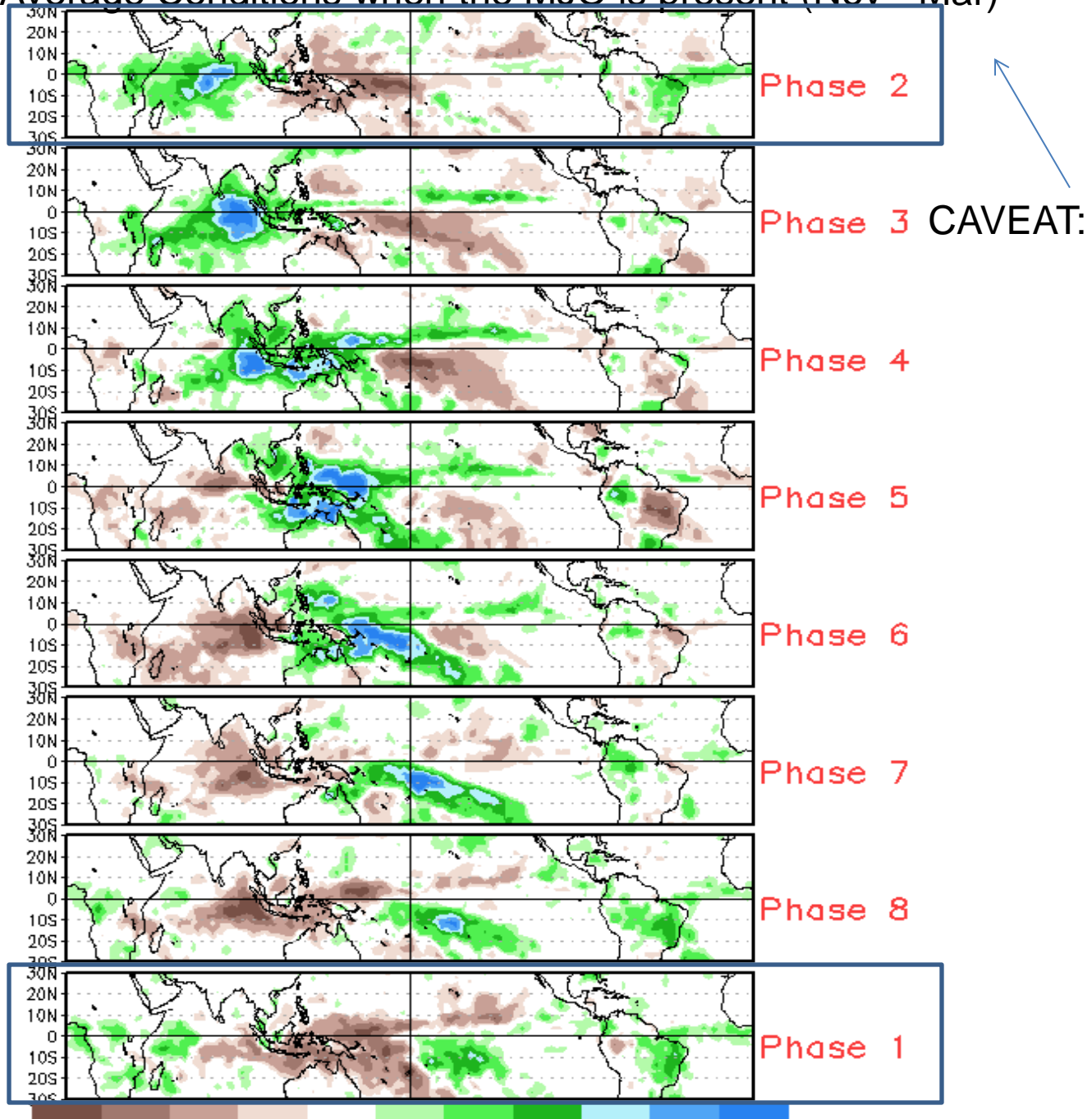
MJO Observation/Forecast



Several models (GFS, UKMET, Canadian, Japanese) depict an evolving MJO event.

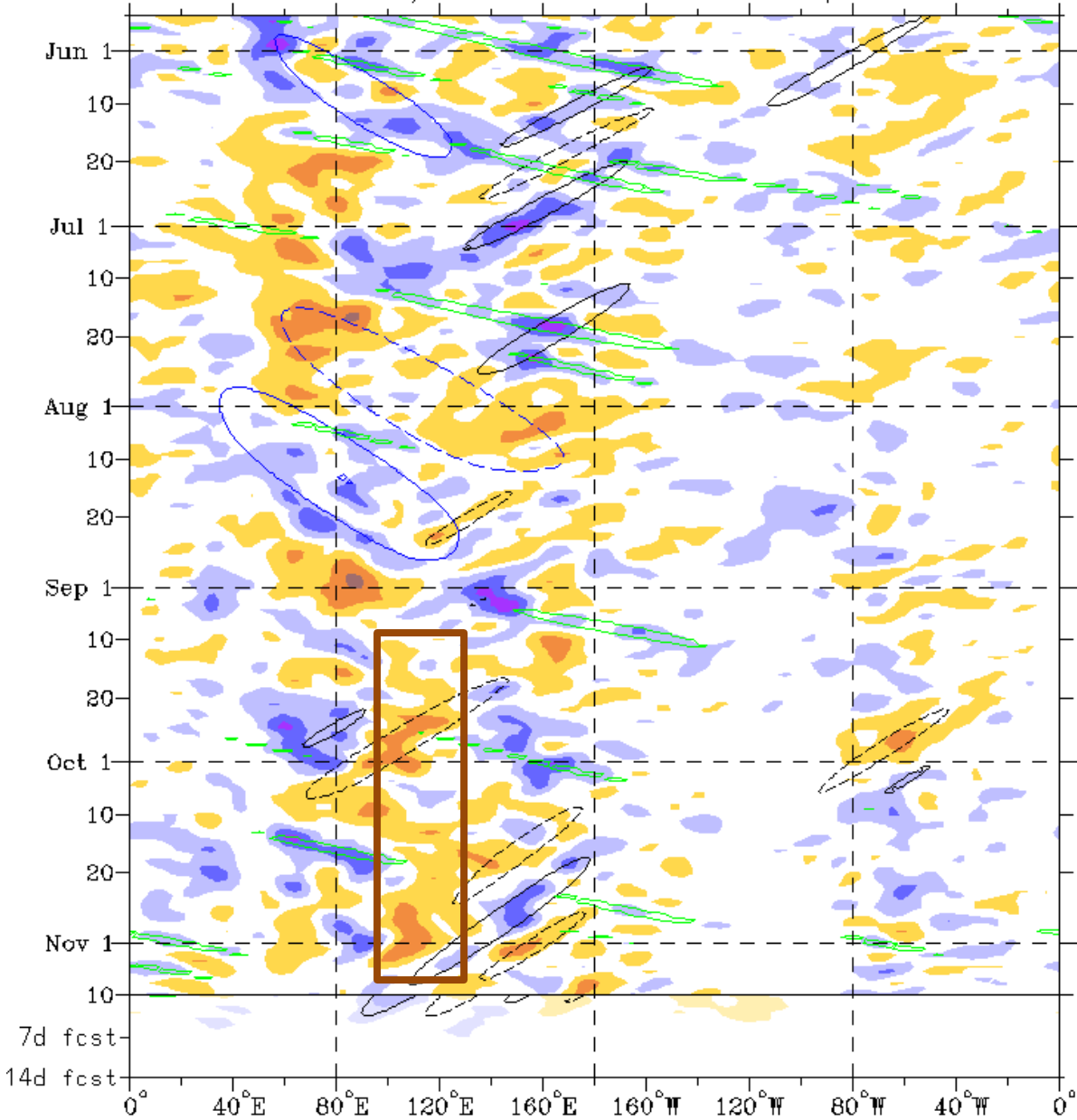
The bias corrected ECMWF is an outlier, quickly weakening the signal by the end of Week-1.

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

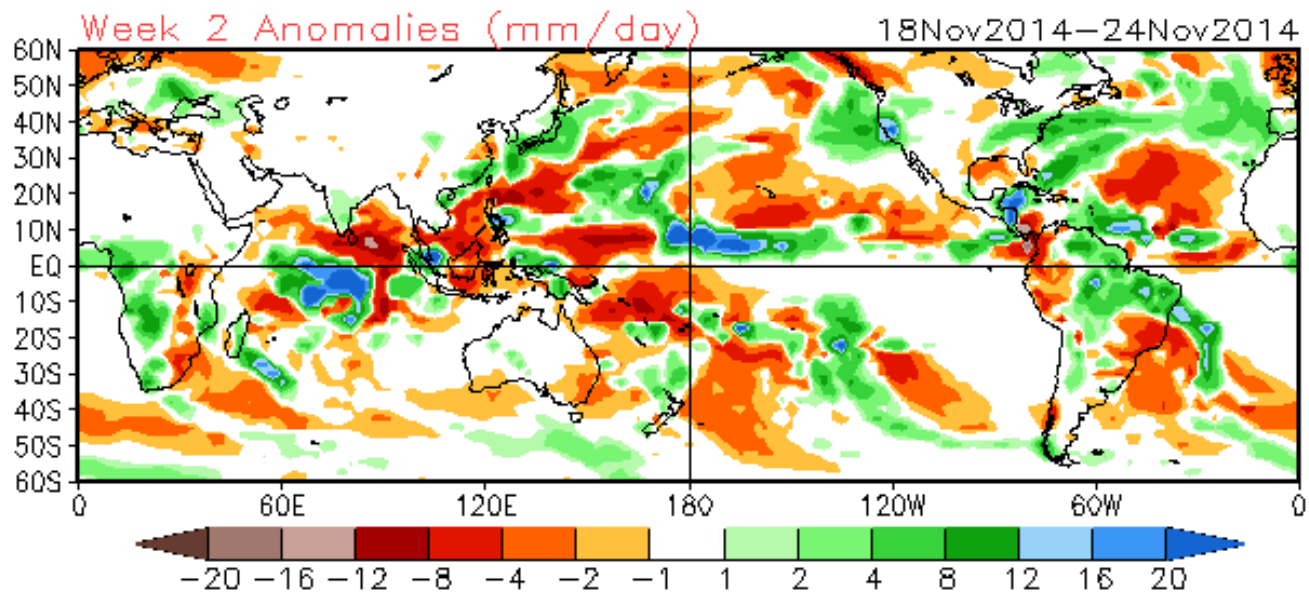
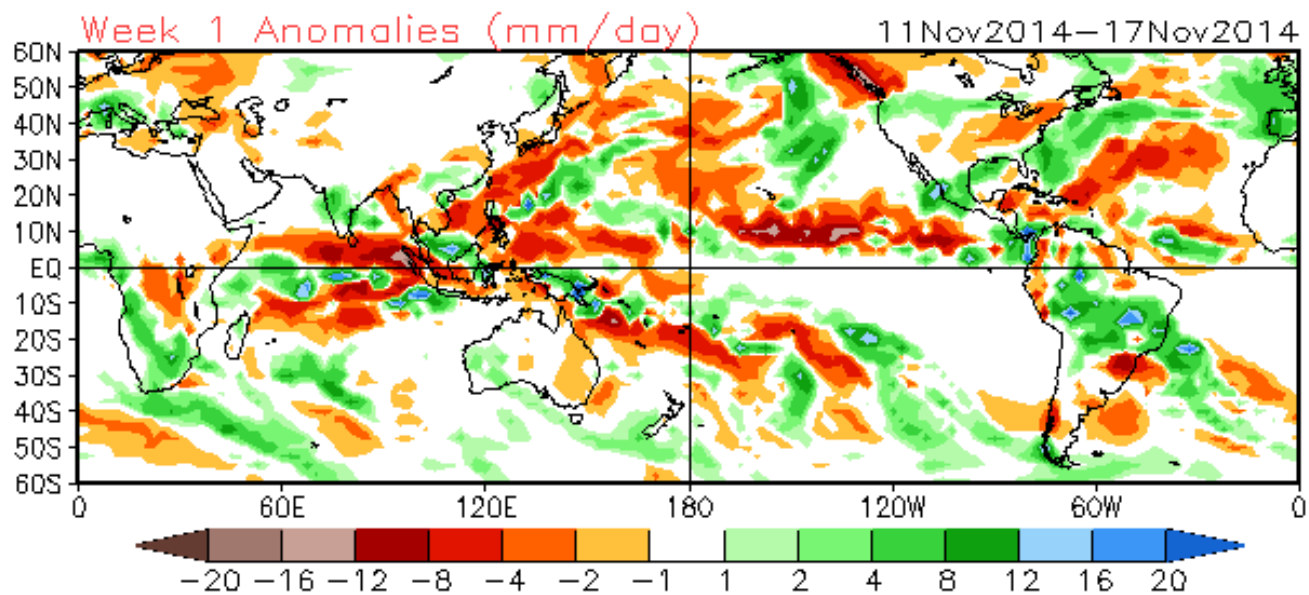


Persistent suppression has been observed over the Maritime Continent since mid-September (brown box)

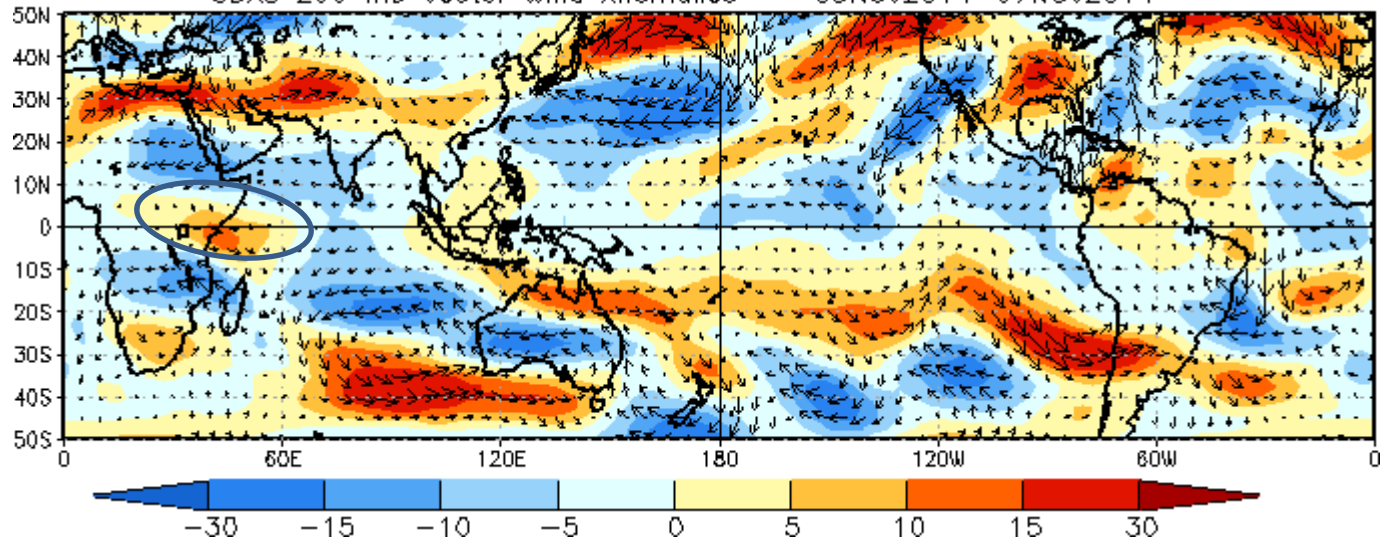
Kelvin Wave activity has generated enhanced convection east and west of the M.C., but there has been no long-lived MJO-like subseasonal signal.



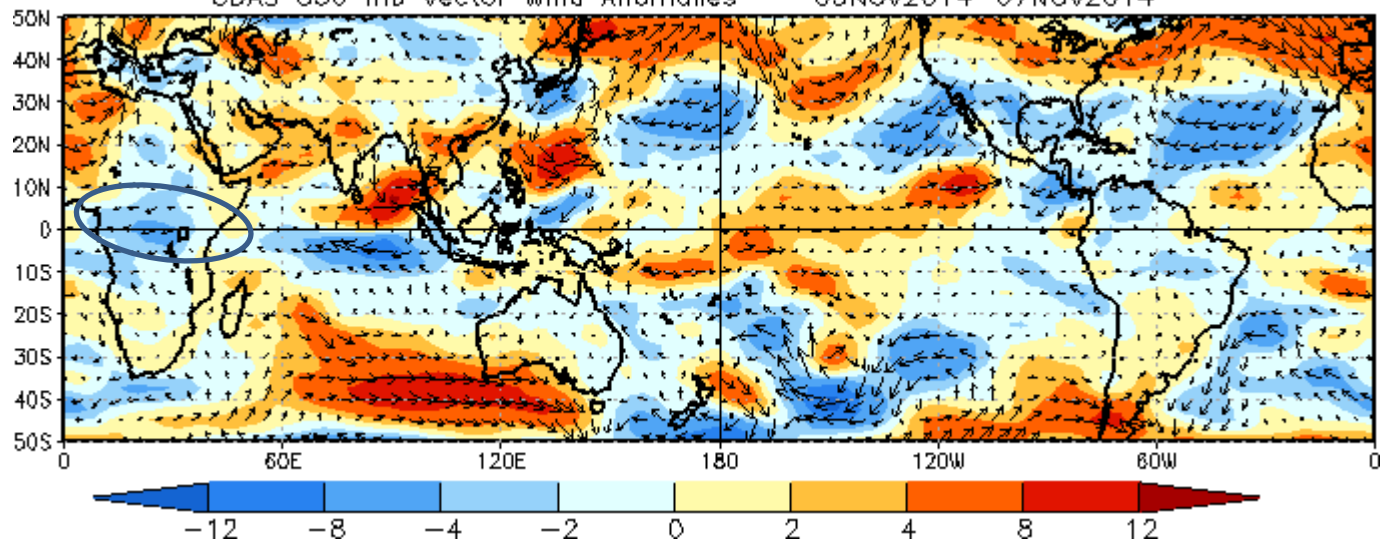
Westward moving features evident west of the Date Line.



CDAS 200 mb Vector Wind Anomalies -- 03NOV2014-07NOV2014

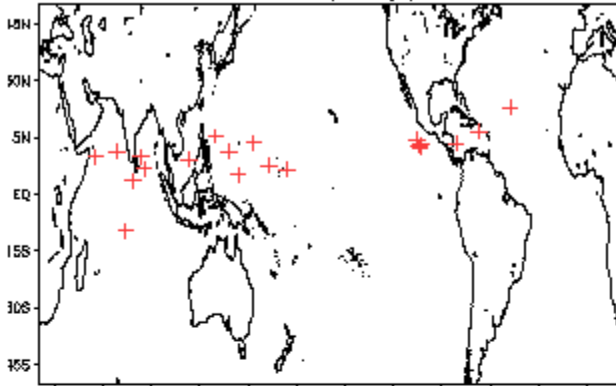


CDAS 850 mb Vector Wind Anomalies -- 03NOV2014-07NOV2014

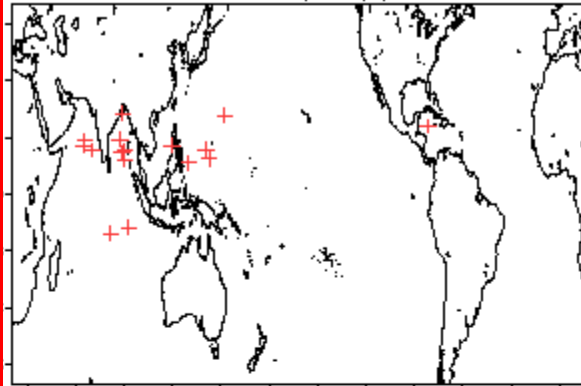


November Tropical Storm Formation by MJO phase

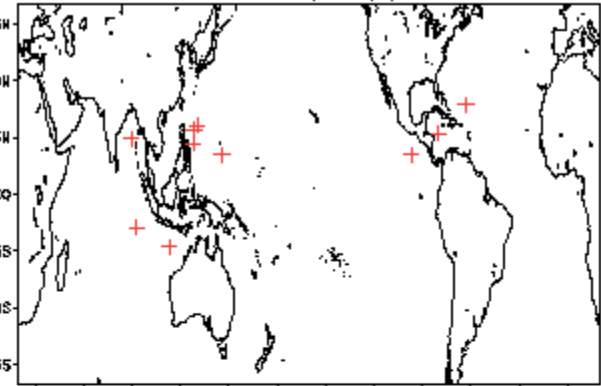
Phase 1 (65 days) 21 storms



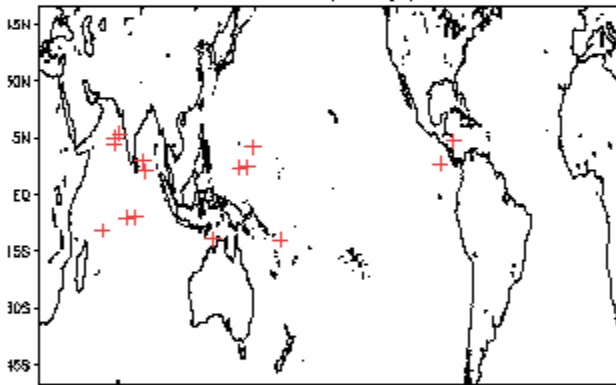
Phase 4 (77 days) 17 storms



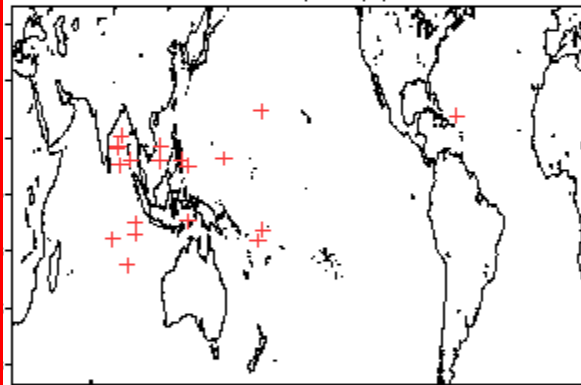
Phase 7 (68 days) 11 storms



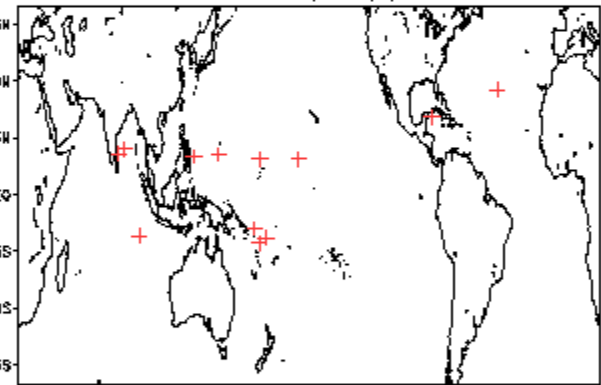
Phase 2 (88 days) 16 storms



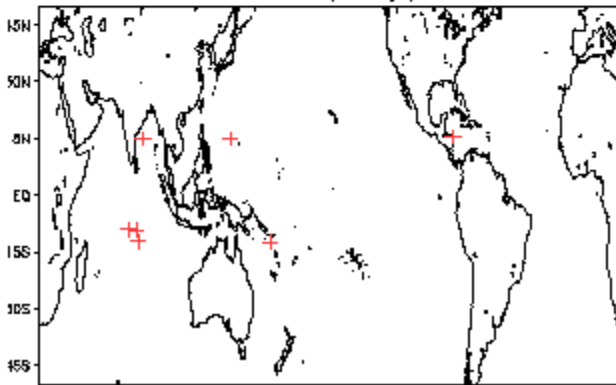
Phase 5 (72 days) 20 storms



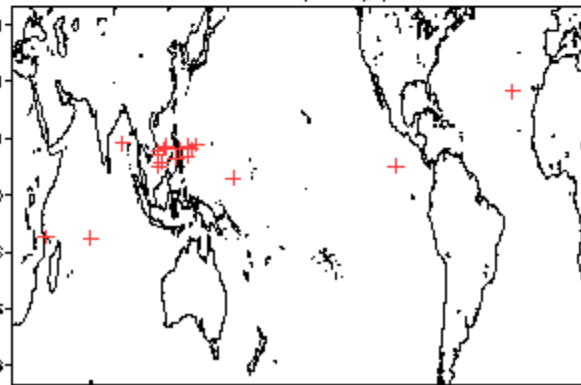
Phase 8 (60 days) 14 storms



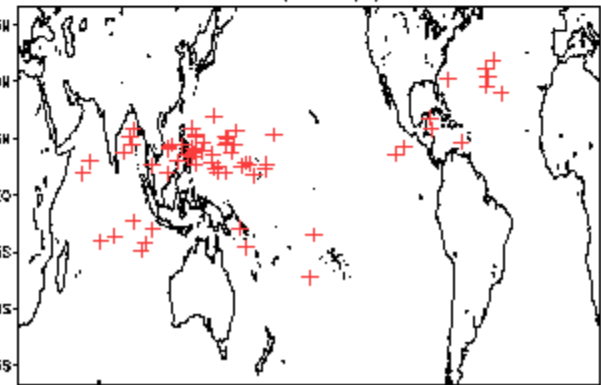
Phase 3 (89 days) 8 storms



Phase 6 (91 days) 19 storms



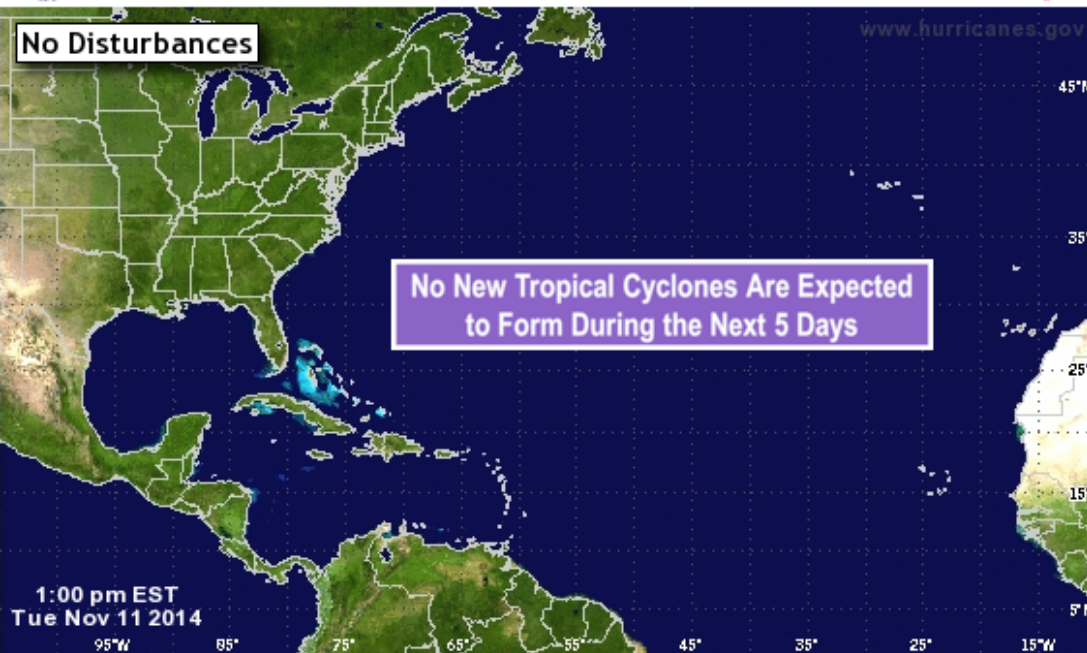
Null (380 days) 65 storms





Experimental 5-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida

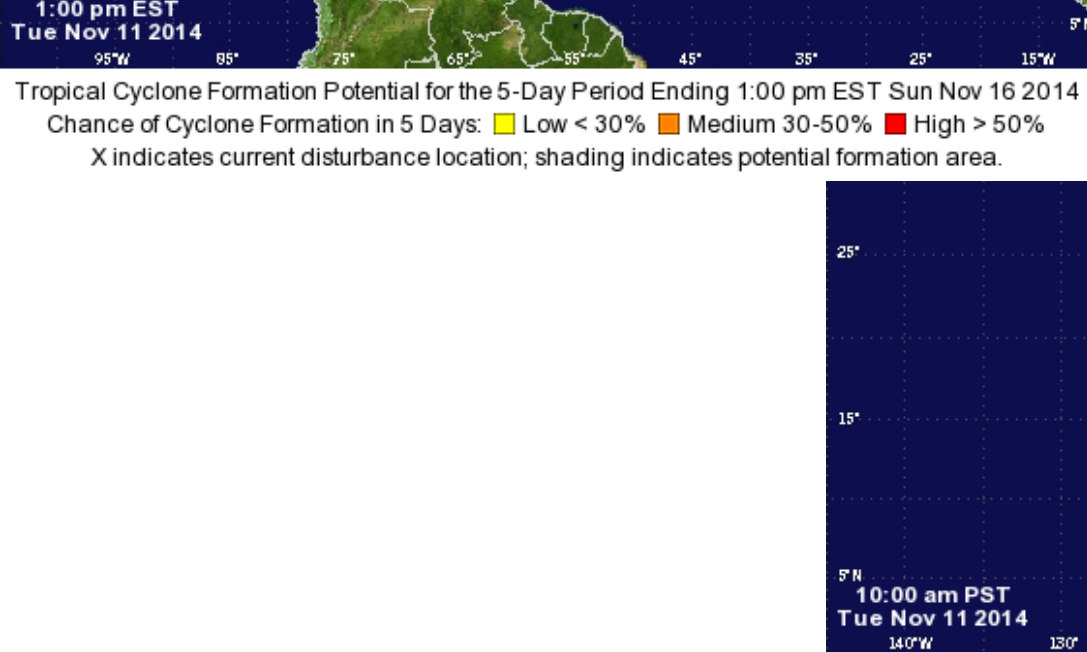


1:00 pm EST
Tue Nov 11 2014

No New Tropical Cyclones Are Expected to Form During the Next 5 Days

Experimental 5-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



All Disturbances

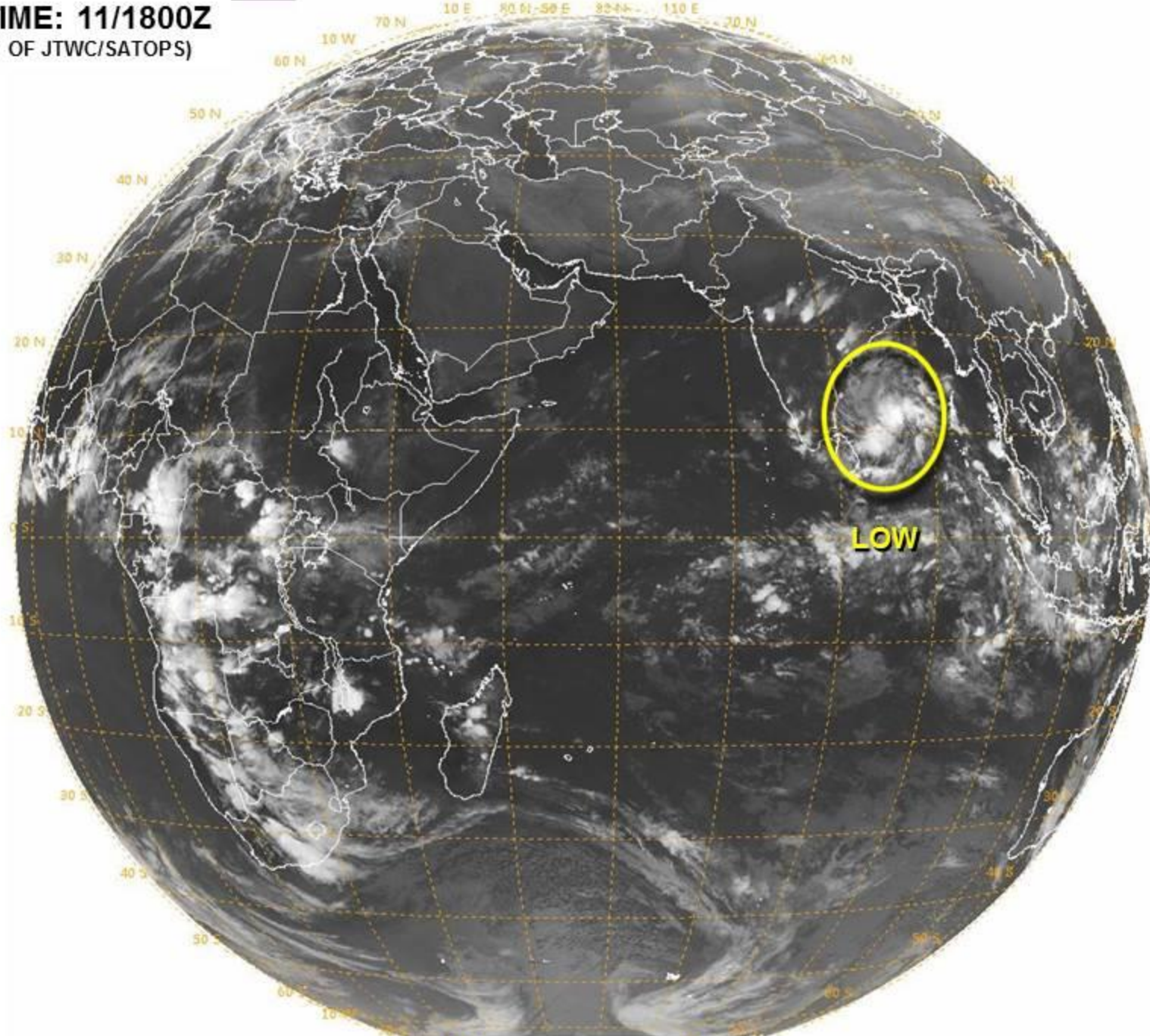
10:00 am PST
Tue Nov 11 2014

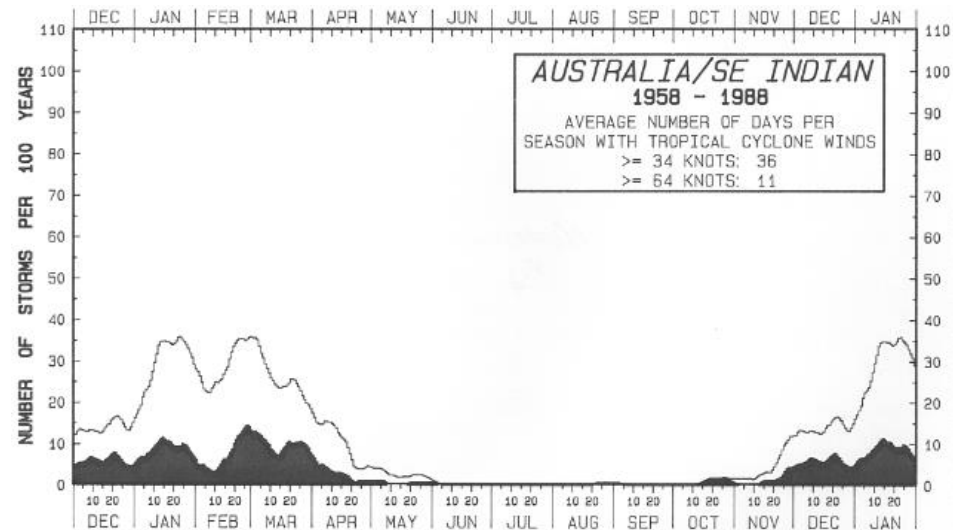
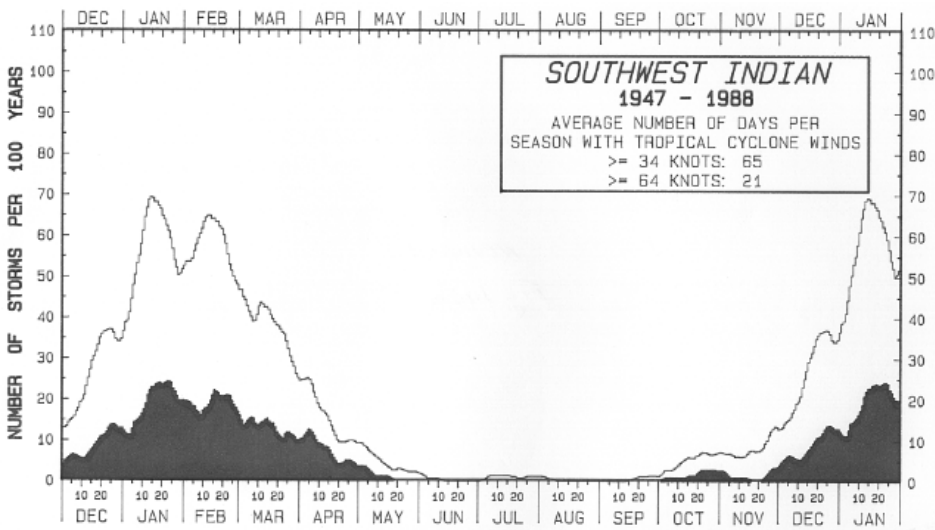
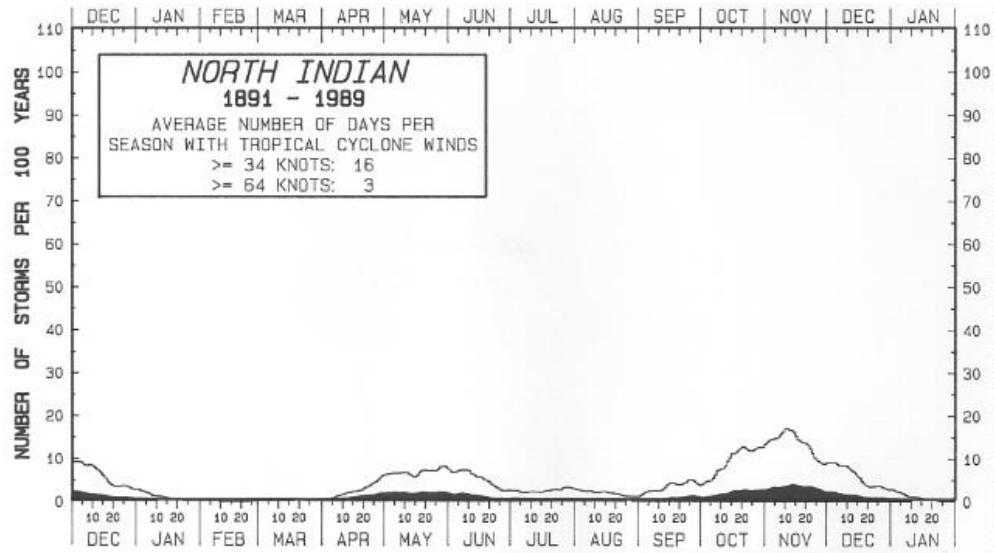
Tropical Cyclone Formation Potential for the 5-Day Period Ending 10:00 am PST Sun Nov 16 2014

Chance of Cyclone Formation in 5 Days: ■ Low < 30% ■ Medium 30-50% ■ High > 50%

X indicates current disturbance location; shading indicates potential formation area.

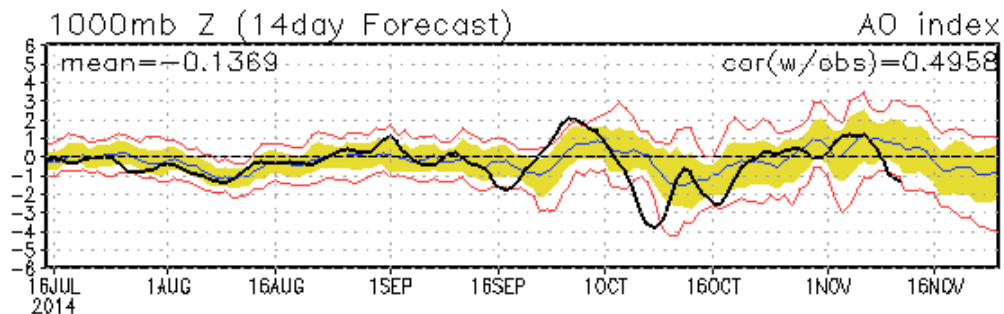
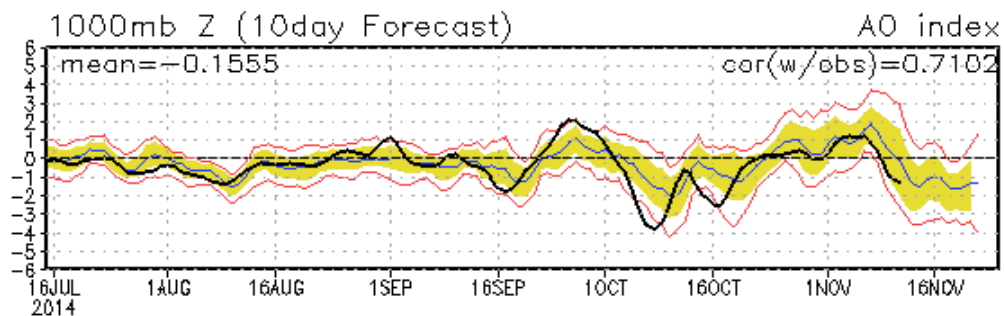
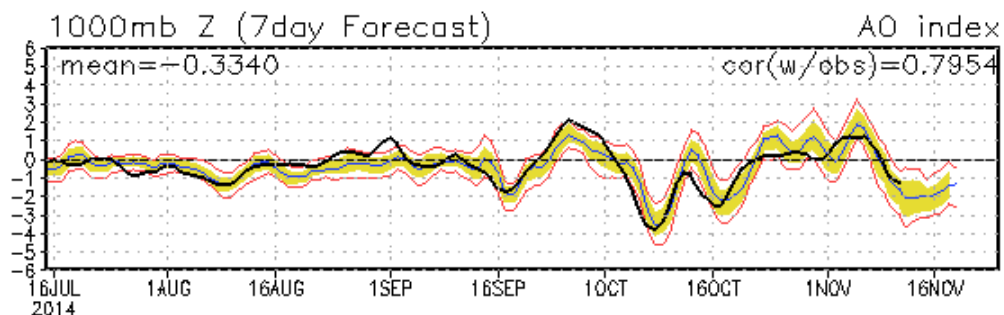
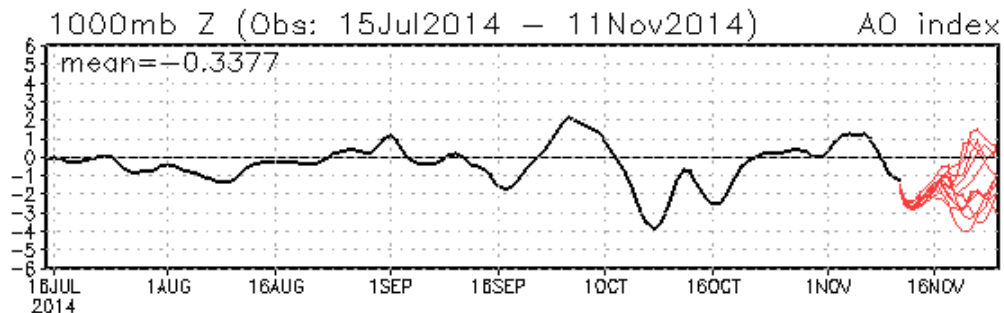
VALID TIME: 11/1800Z
(PRODUCT OF JTWC/SATOPS)

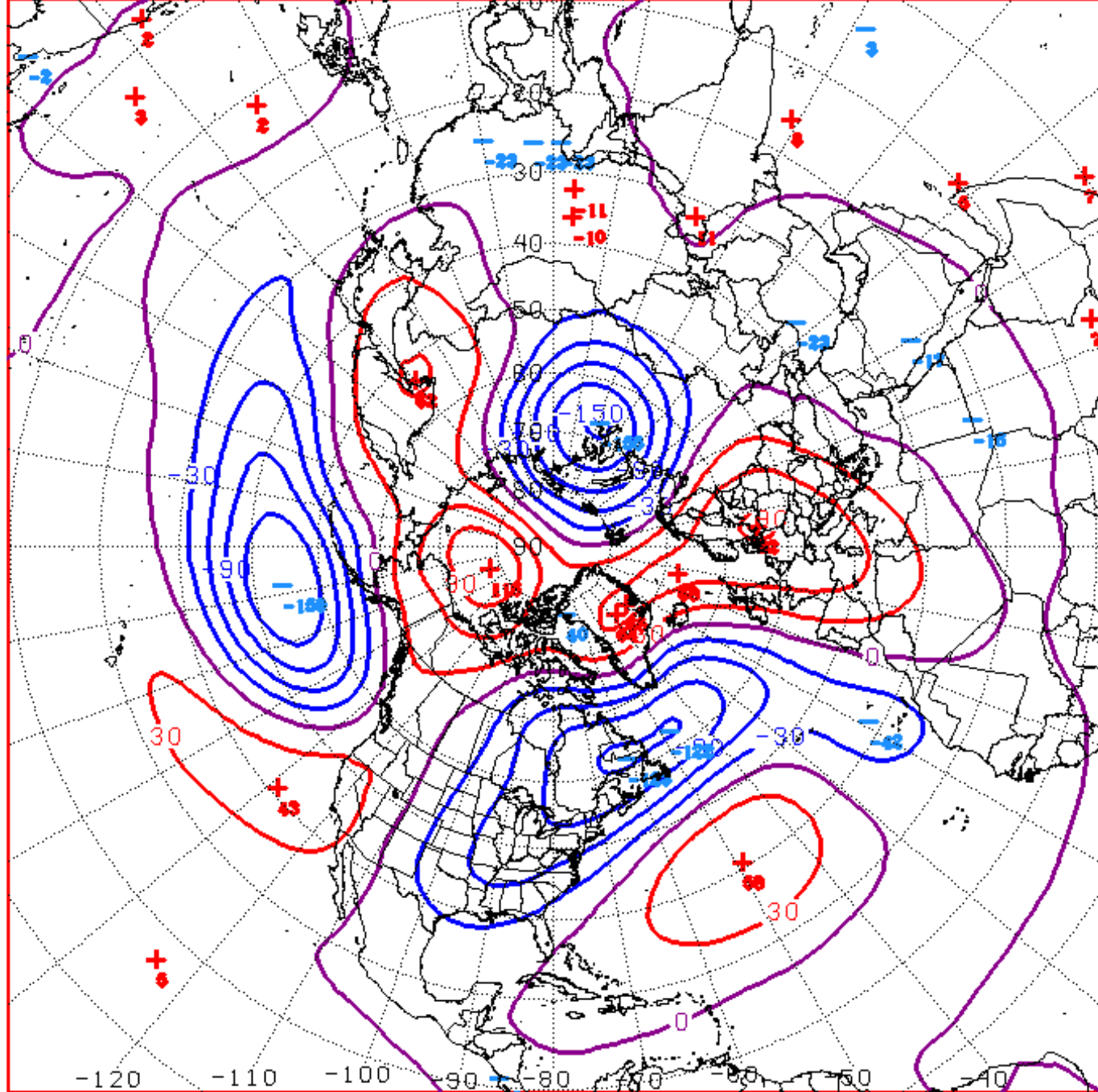




Connections to U.S. Impacts

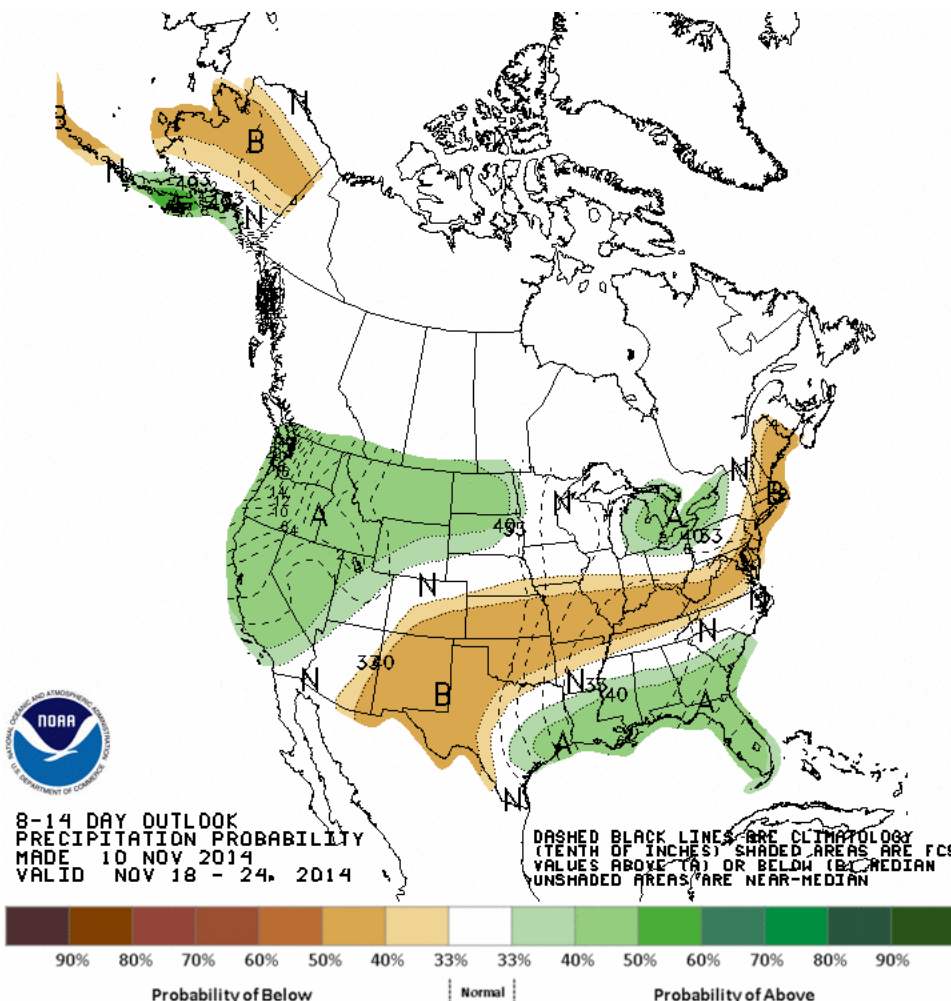
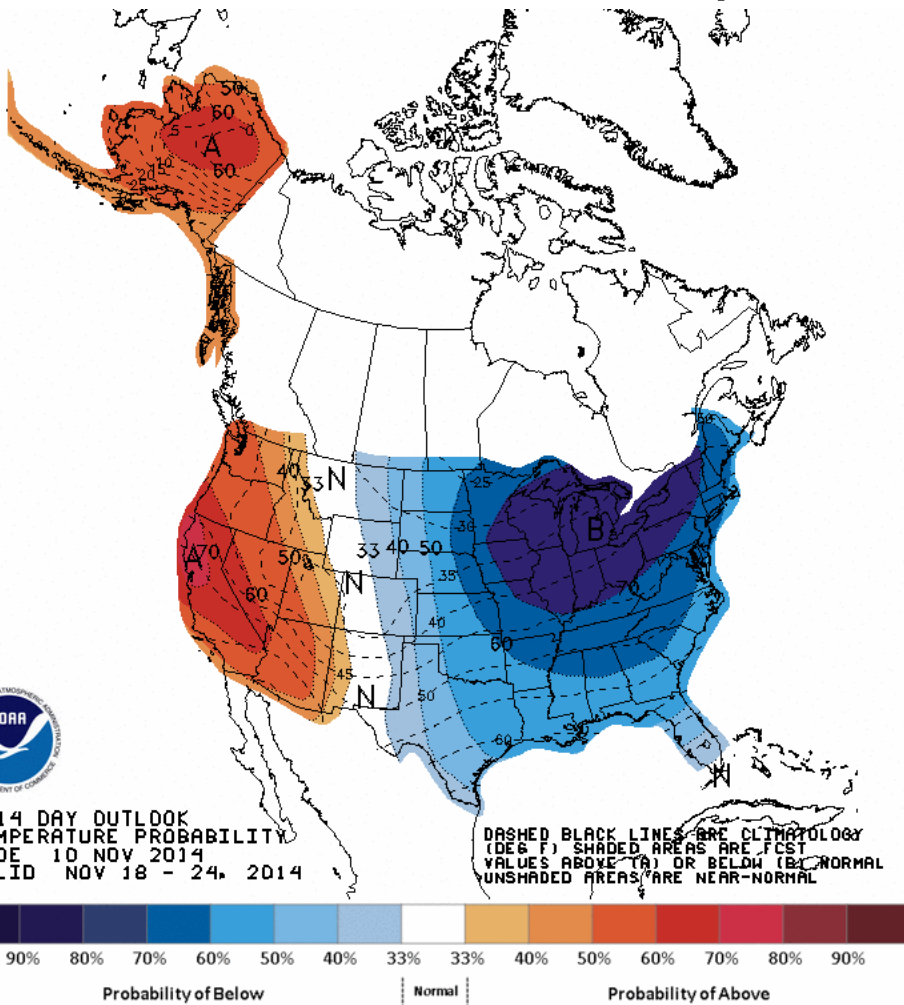
AO: Observed & ENSM forecasts





D+11 500 MB ANOMALIES FROM 00Z ECMF
 CPC MAP MADE NOV 11 2014 1027 UTC CNTD NOV 22 2014

Week 2 – Temperature and Precipitation

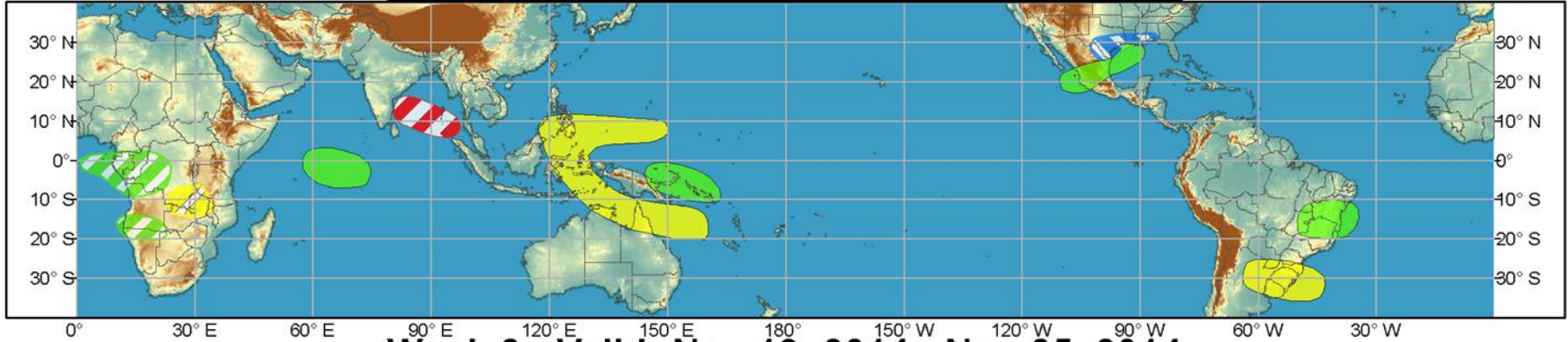




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