

Global Tropics Hazards And Benefits Outlook

November 4, 2014

Stephen Baxter

Outline

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

Outlook Review



Week 1 - Valid: Oct 29, 2014 - Nov 04, 2014

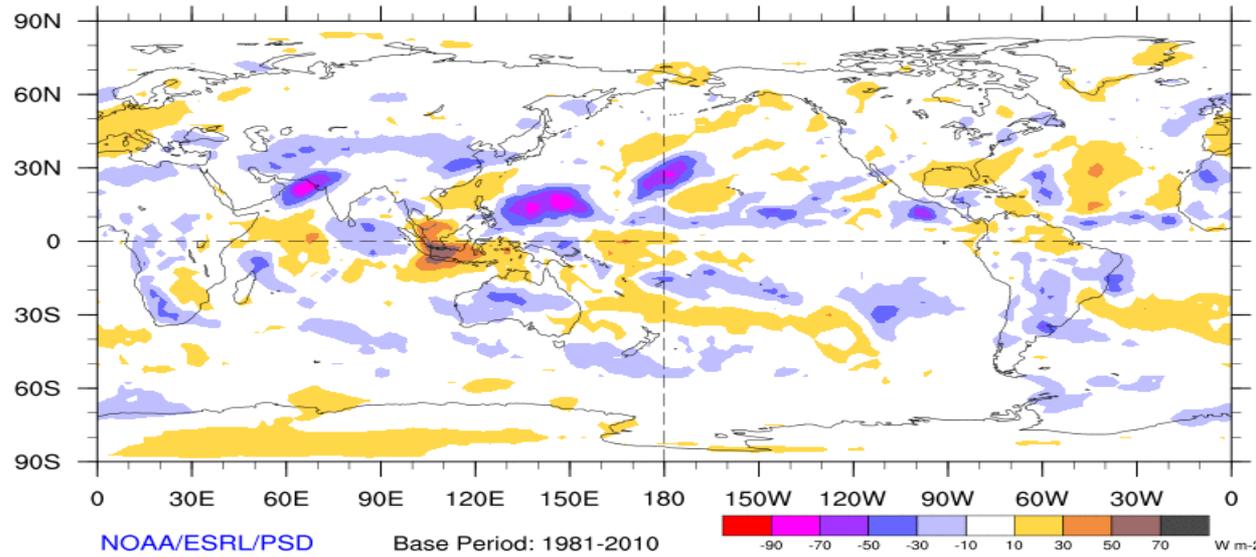


Week 2 - Valid: Oct 29, 2014 - Nov 04, 2014



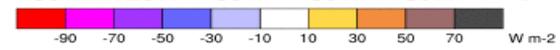
7-Day Average OLR Anomaly

2014/10/27 - 2014/11/02



NOAA/ESRL/PSD

Base Period: 1981-2010



Cool shading
More clouds/rain

Warm shading
Less clouds/rain

Synopsis of Climate Modes

ENSO:

- El Niño is favored to be declared in the next month or so and last into the Northern Hemisphere spring 2015. Consensus among forecast tools is for a weak event.

MJO and other subseasonal tropical variability:

- The MJO remains weak as competing signals interfere with the overall global tropical convective pattern.
- There is better agreement among models this week, though the GFS remains the only robust MJO solution during Week-2. GFS performance has been poor recently, suggesting that the ECMWF and other guidance that indicate little coherent MJO activity are favored. There is some consensus that a weak convective signal could emerge over the Indian Ocean during Week-2.

Extratropics:

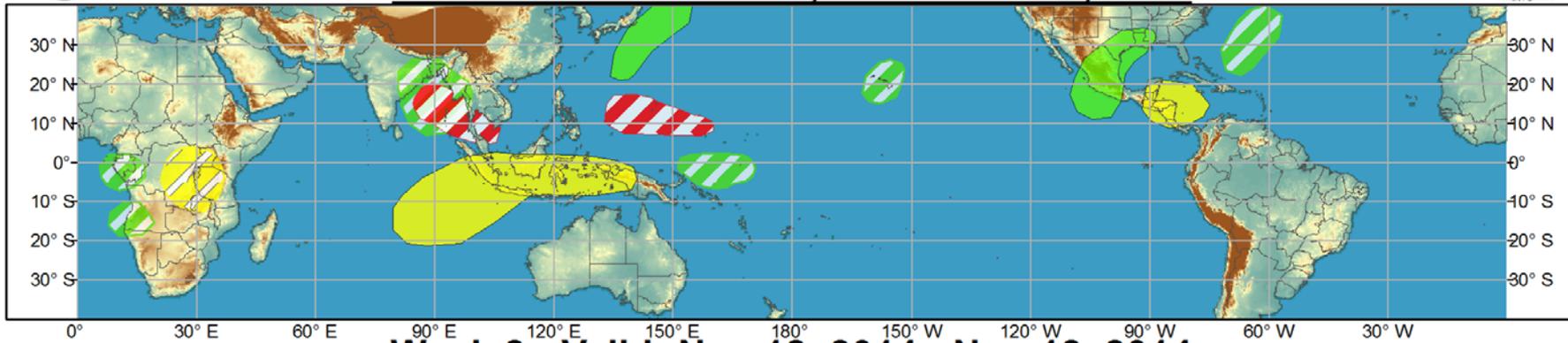
- The dominant feature over the next 10 days is the recurving typhoon over the western Pacific, forecast to contribute to extreme amplification southwest of Alaska, with downstream wave dispersion favoring colder-than-normal and mostly drier-than-average conditions over the CONUS during the 6-14 day period. Beyond that, tropical subseasonal variability gives very little insight into the evolution of the extratropical climate.



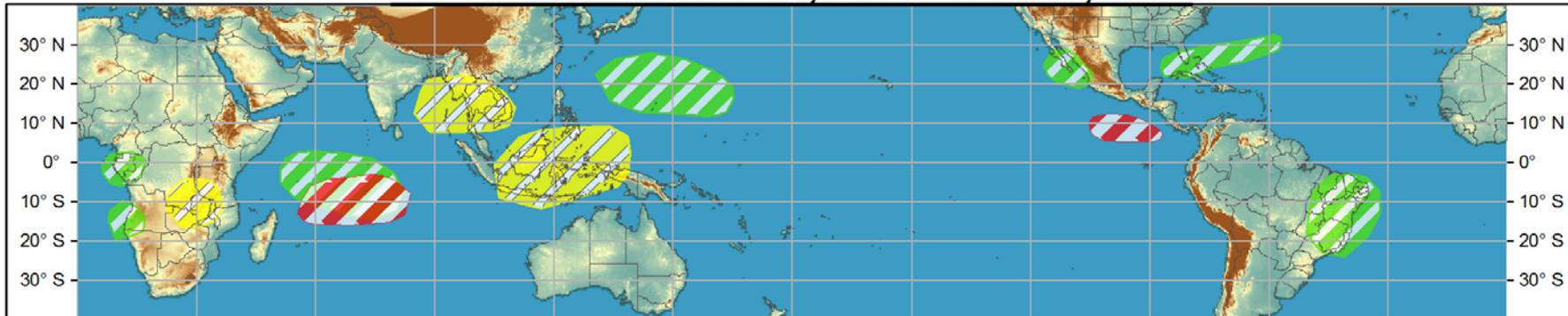
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



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



Week 2 - Valid: Nov 12, 2014 - Nov 18, 2014



Produced: 11/04/2014

Forecaster: Baxter

Confidence
High Moderate

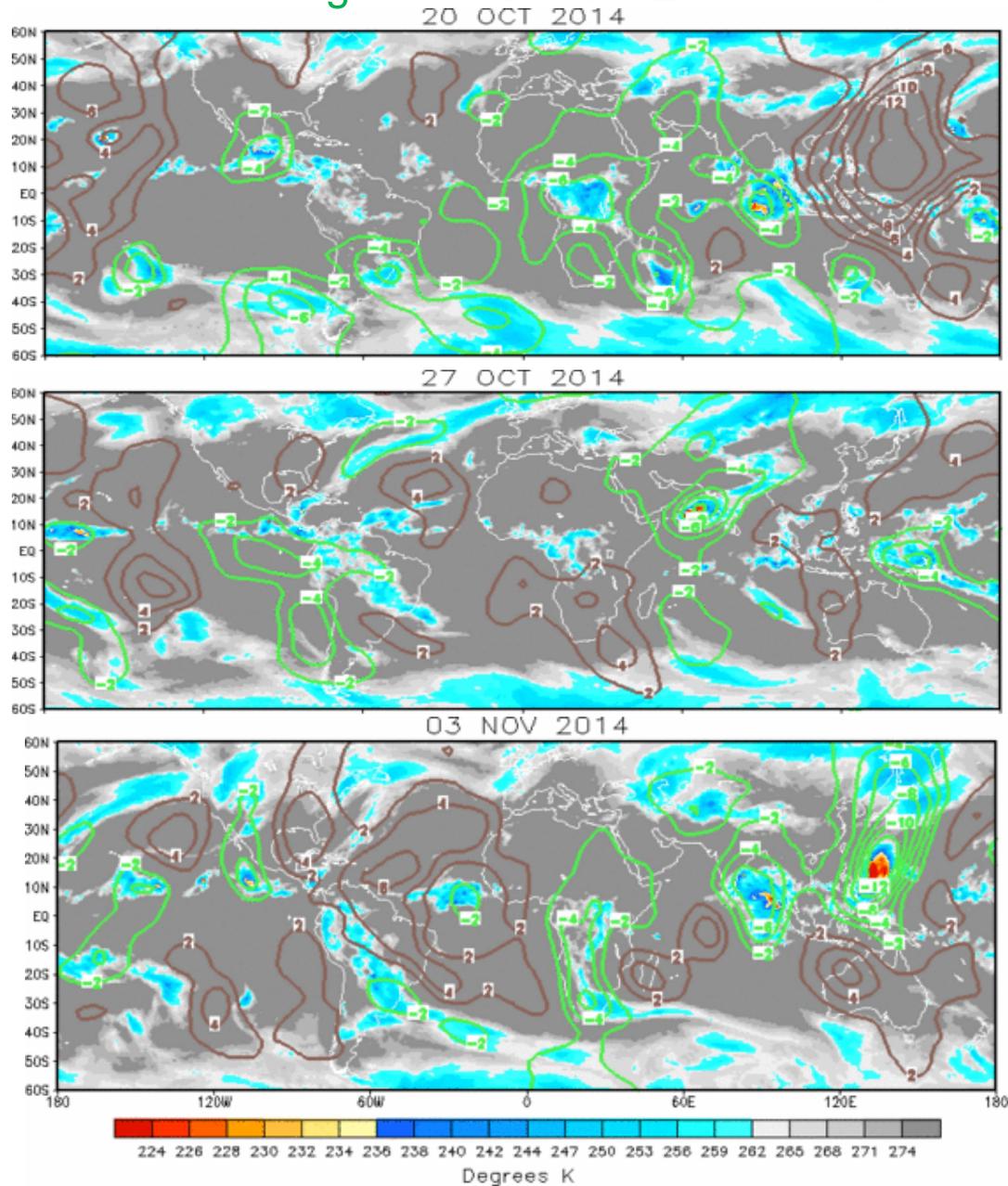
- Tropical Cyclone Formation** Development of a tropical cyclone (tropical depression - TD, or greater strength).
- Above-average rainfall** Weekly total rainfall in the upper third of the historical range.
- Below-average rainfall** Weekly total rainfall in the lower third of the historical range.
- Above-normal temperatures** 7-day mean temperatures in the upper third of the historical range.
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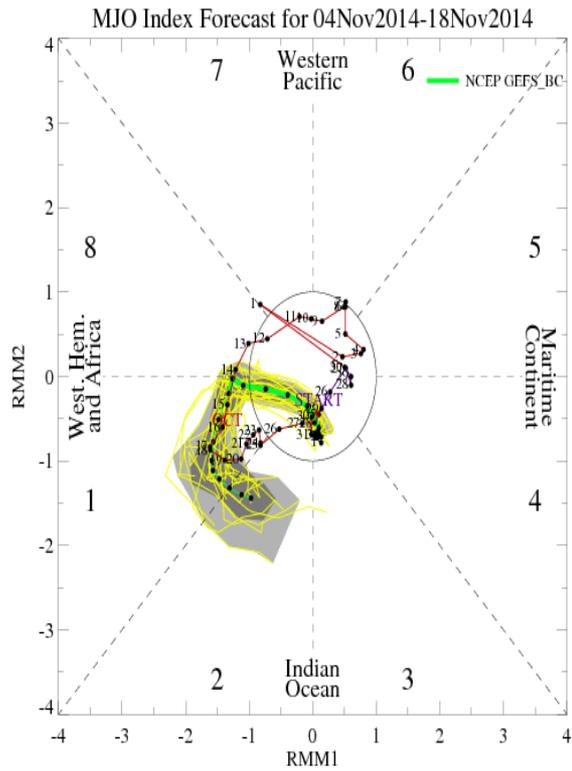


IR Satellite & 200-hpa Velocity Potential Anomalies

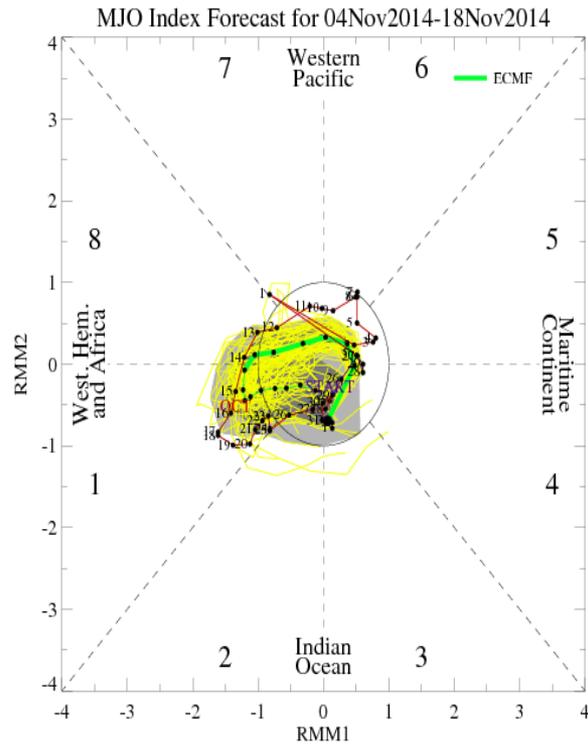
Green: Enhanced Divergence Brown: Enhanced Convergence



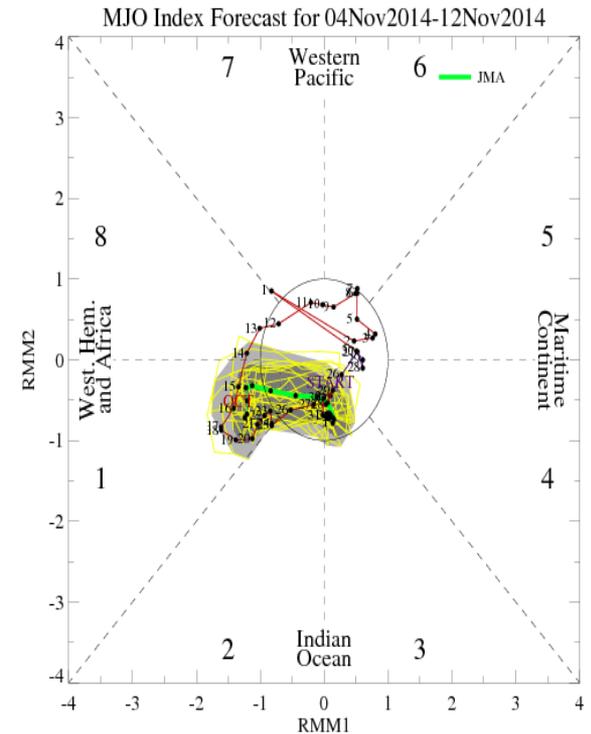
MJO Observation/Forecast



GFS



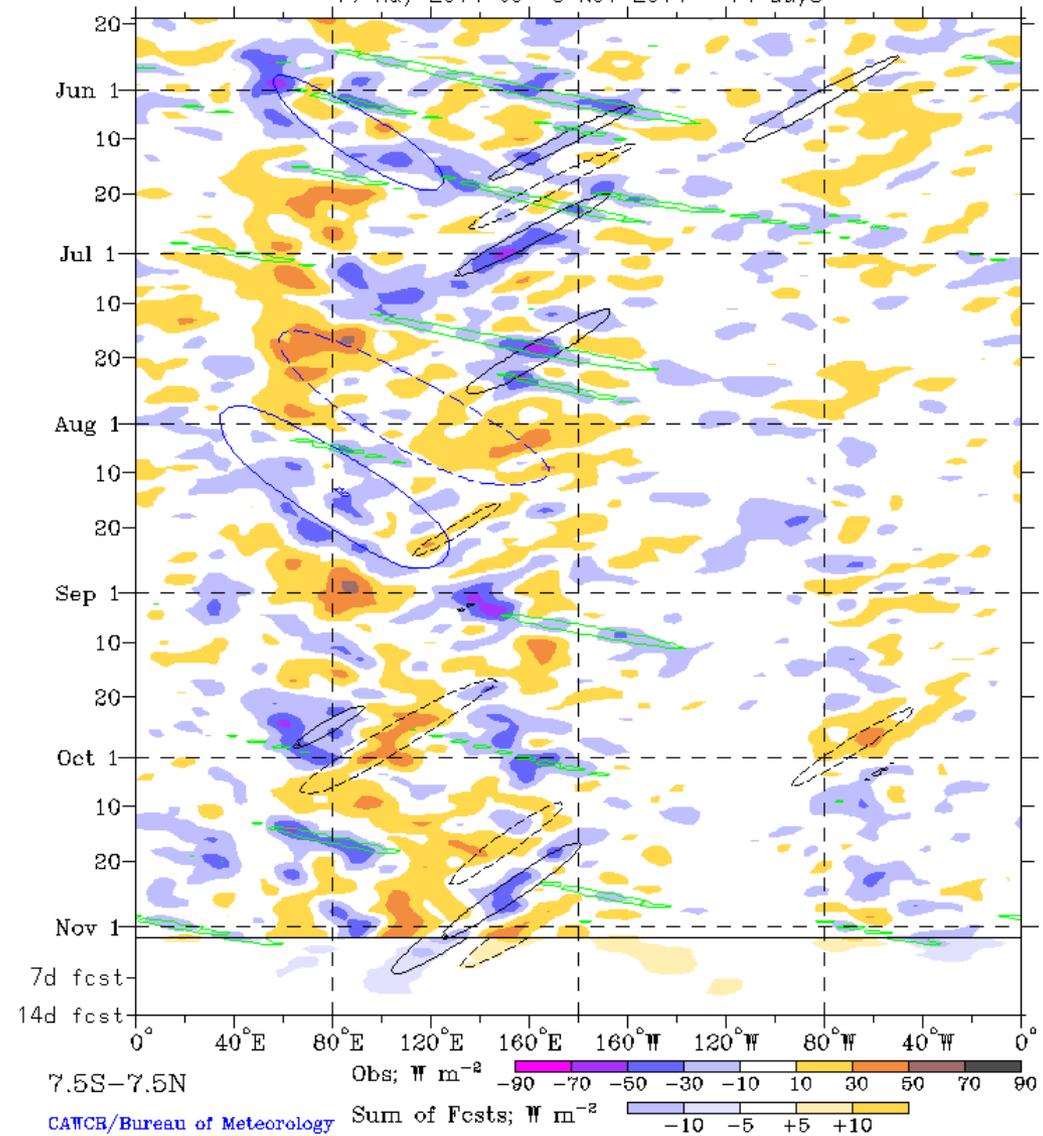
ECMWF



JMA

Better agreement this week.

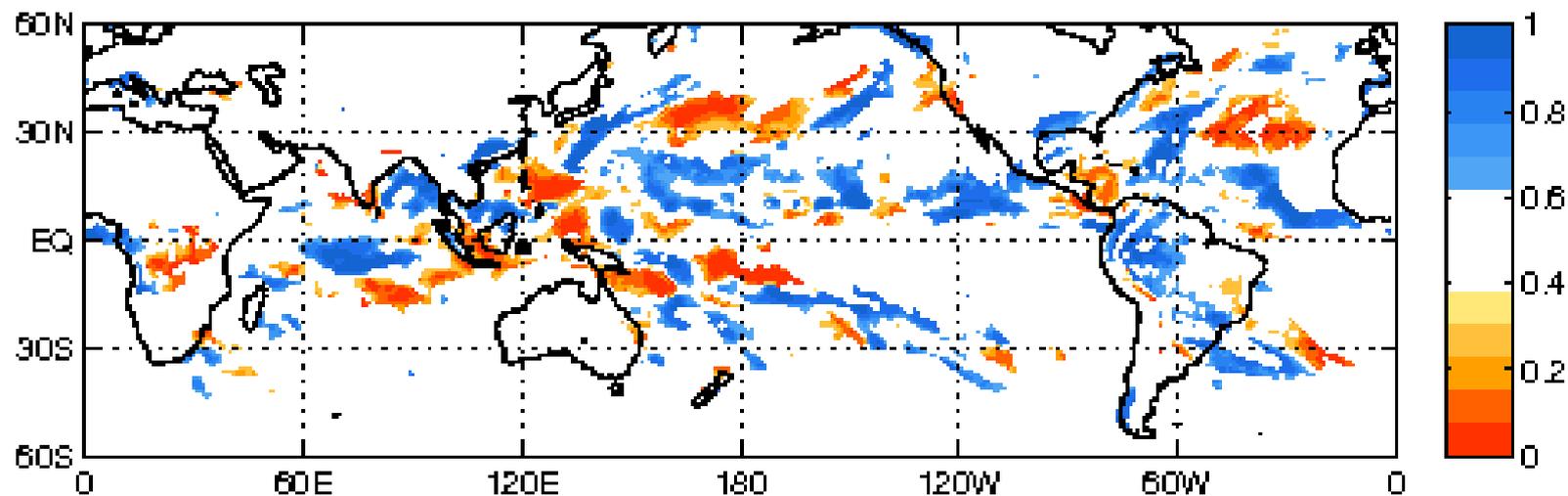
Real-time filtering superimposed upon 1-2-1 filt, R21, OLR Anoms
 MJO blue CINT=10; n1ER black CINT=10; Kelvin green CINT=15
 Negative contours solid, positive dashed (excluding Kelvin)
 19-May-2014 to 3-Nov-2014 + 14 days



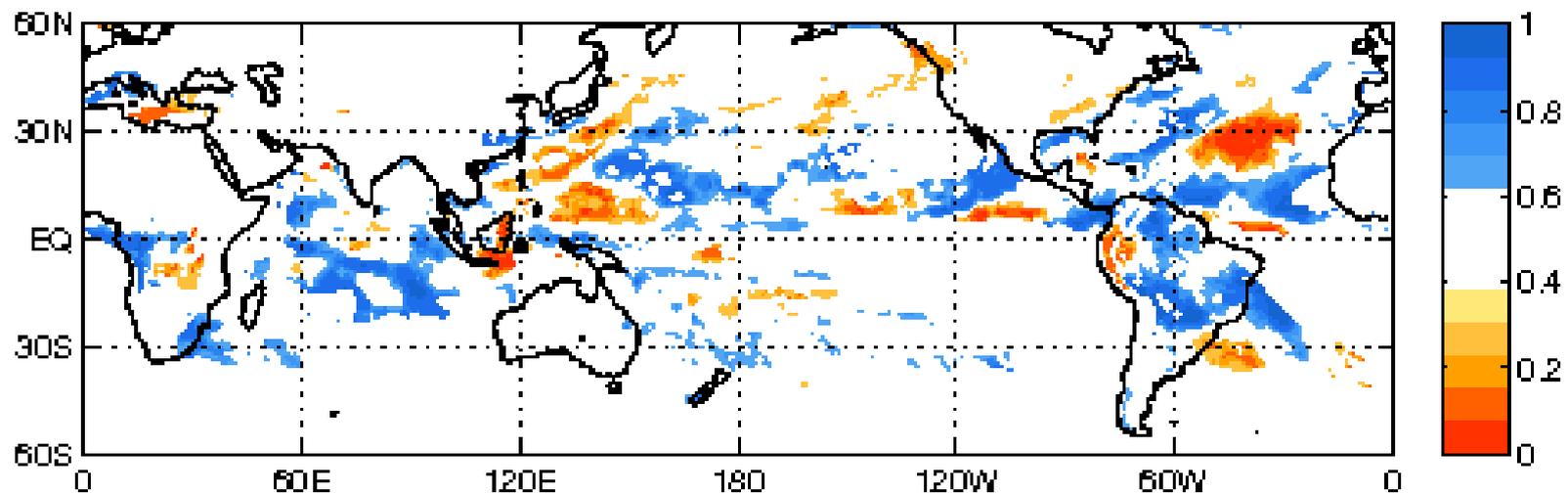
There is some eastward-moving Kelvin wave activity, competing with persistent drying near 100-120E. Westward-moving waves are also evident.

Note persisted enhanced convection over the East Pac.

CFS Prob. Fcst PREC Week: 1: 04-Nov-2014 to 10-Nov-2014



CFS Prob. Fcst PREC Week: 2: 11-Nov-2014 to 17-Nov-2014





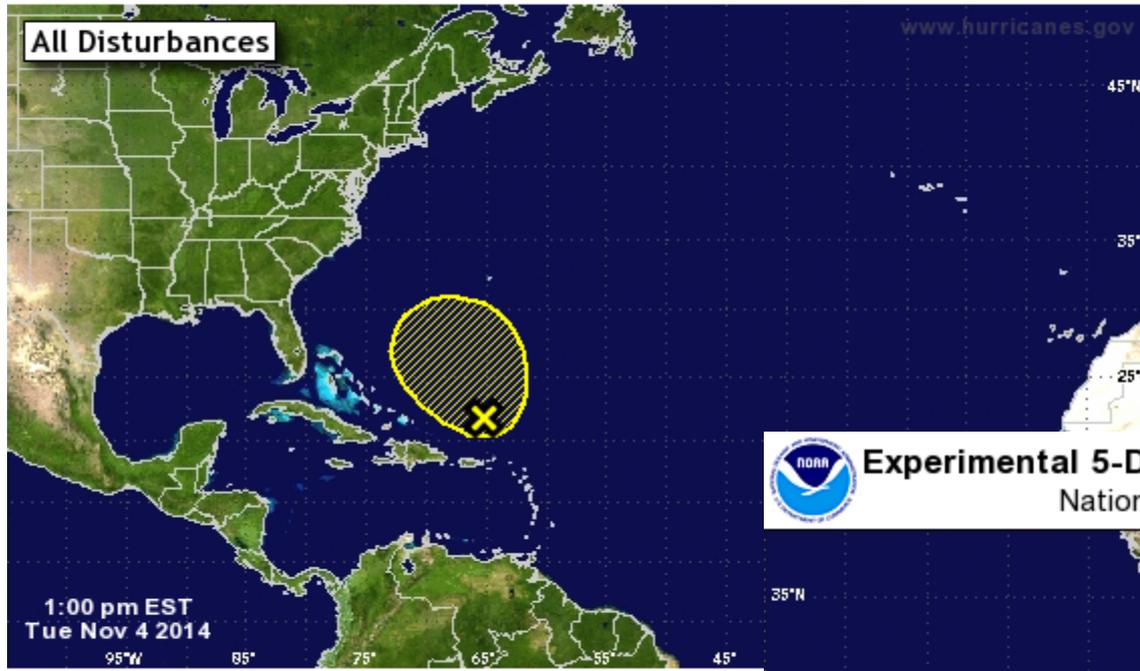
Experimental 5-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



All Disturbances

www.hurricanes.gov



1:00 pm EST
Tue Nov 4 2014

Tropical Cyclone Formation Potential for the 5-Day Period Ending
 Chance of Cyclone Formation in 5 Days: ■ Low < 30% ■ Med
 X indicates current disturbance location; shading indicates



Experimental 5-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



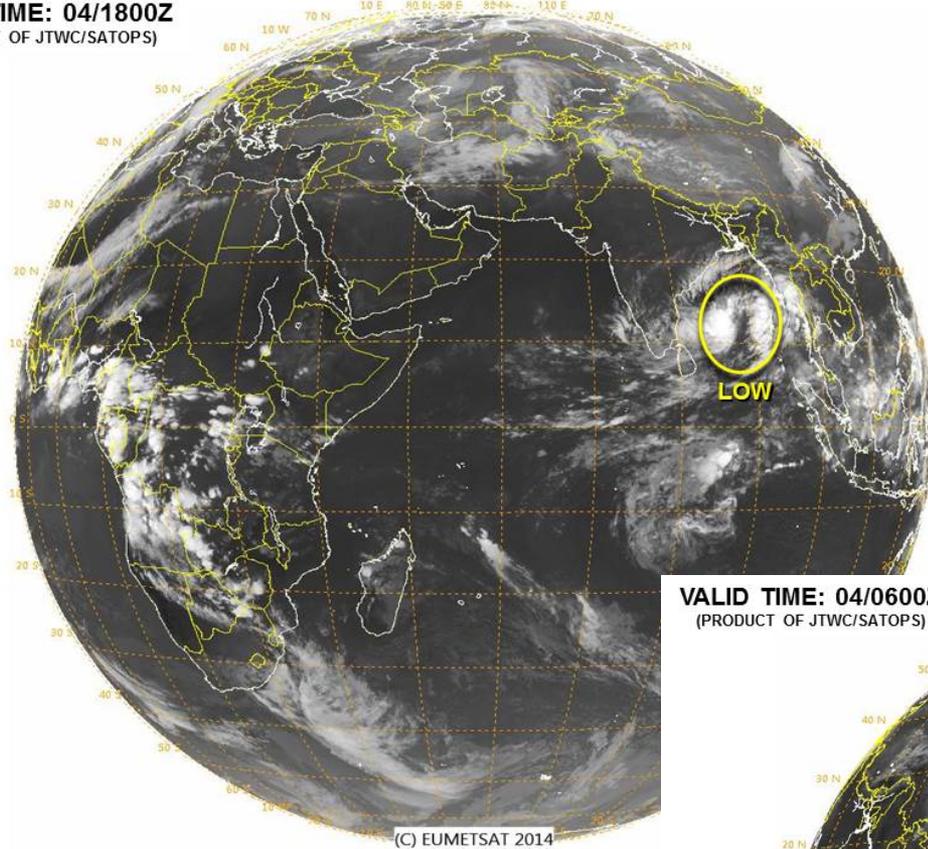
All Disturbances



10:00 am PST
Tue Nov 4 2014

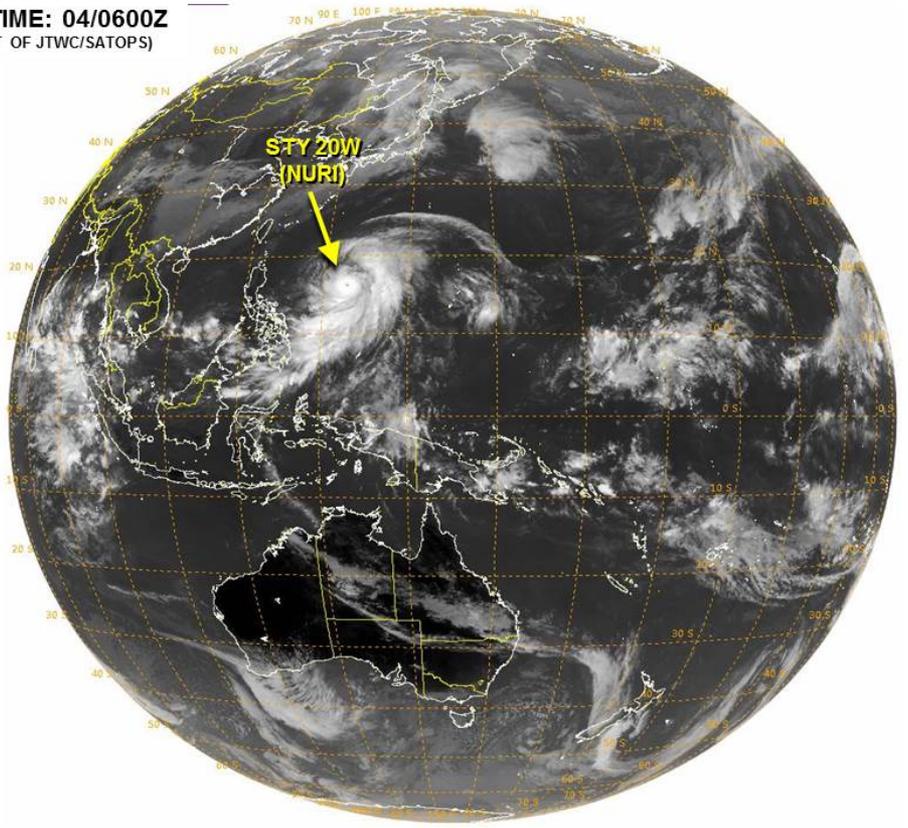
Tropical Cyclone Formation Potential for the 5-Day Period Ending 10:00 am PST Sun Nov 9 2014
 Chance of Cyclone Formation in 5 Days: ■ Low < 30% ■ Medium 30-50% ■ High > 50%
 X indicates current disturbance location; shading indicates potential formation area.

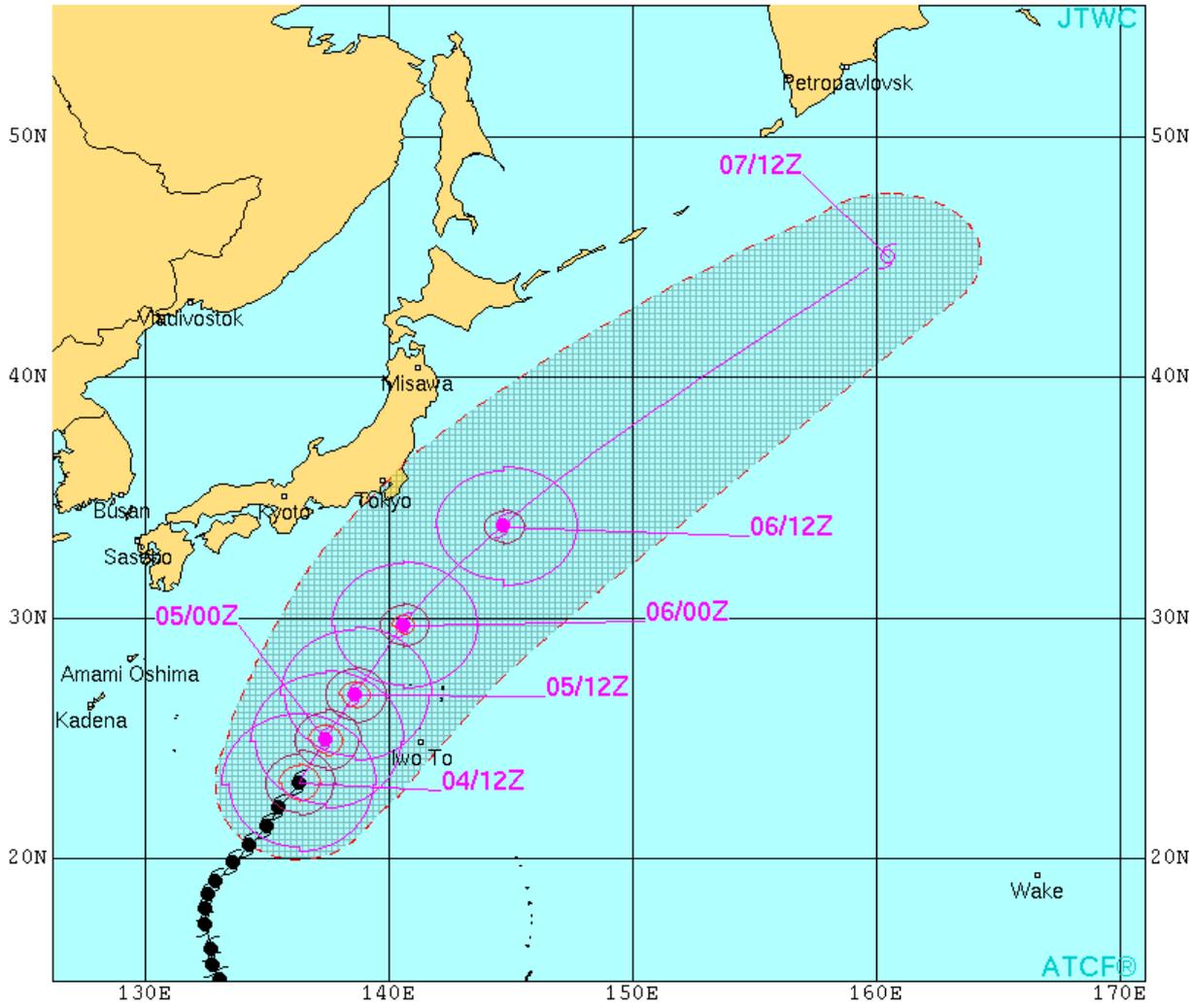
VALID TIME: 04/1800Z
(PRODUCT OF JTWC/SATOPS)



(C) EUMETSAT 2014

VALID TIME: 04/0600Z
(PRODUCT OF JTWC/SATOPS)





TYPHOON 20W (NURI) WARNING #19
 WTPN31 PGTW 041500
 041200Z POSIT: NEAR 23.1N 136.3E
 MOVING 035 DEGREES TRUE AT 12 KNOTS
 MAXIMUM SIGNIFICANT WAVE HEIGHT: 45 FEET
 04/12Z, WINDS 120 KTS, GUSTS TO 145 KTS
 05/00Z, WINDS 105 KTS, GUSTS TO 130 KTS
 05/12Z, WINDS 090 KTS, GUSTS TO 110 KTS
 06/00Z, WINDS 075 KTS, GUSTS TO 090 KTS
 06/12Z, WINDS 065 KTS, GUSTS TO 080 KTS
 07/12Z, WINDS 045 KTS, GUSTS TO 055 KTS

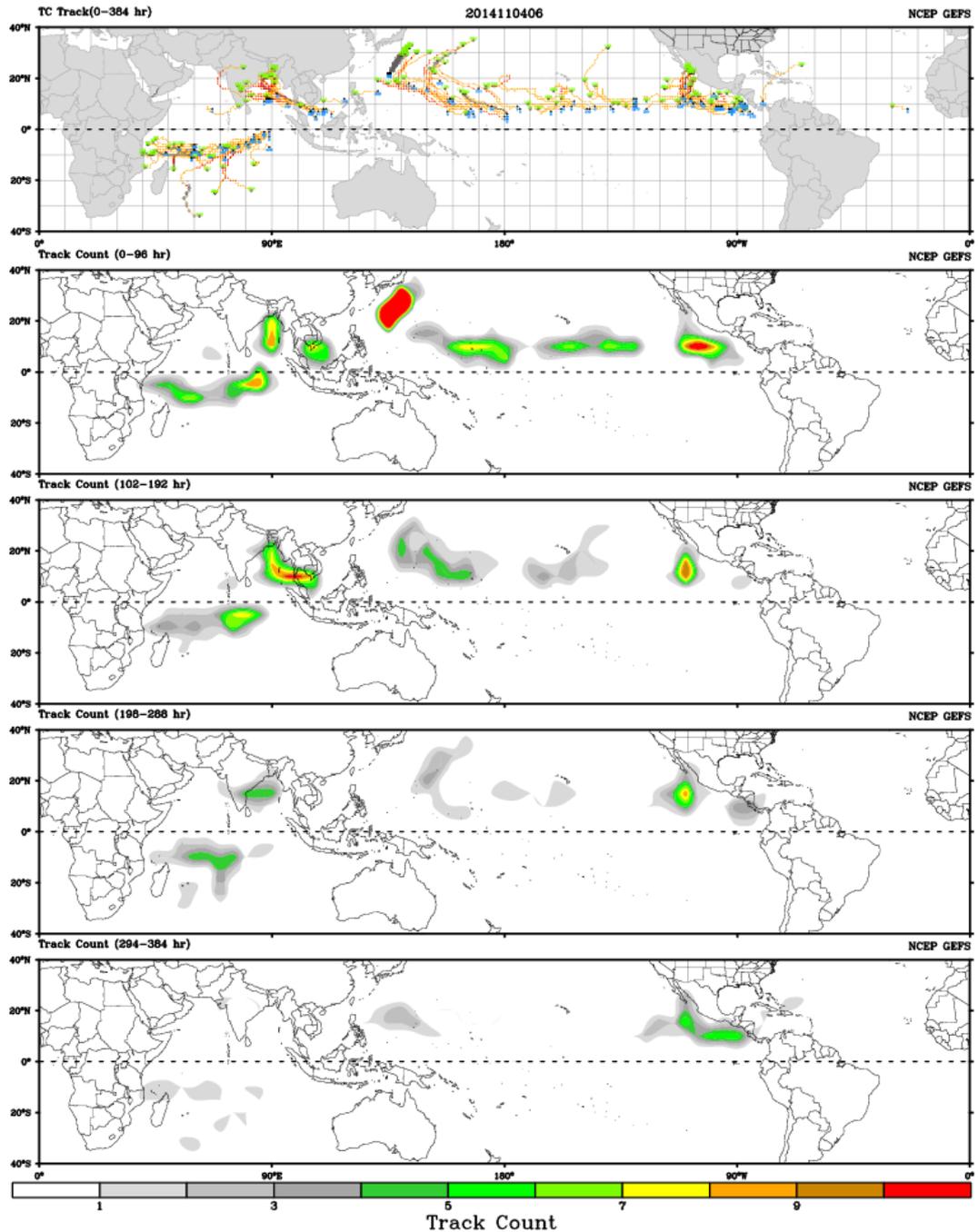
CPA TO:	NM	DTG
IWO_TO	186	05/09Z
CHICHI_JIMA	154	05/20Z
CAMP_FUJI	295	06/07Z
ATSUGI	262	06/09Z
CAMP_ZAMA	262	06/09Z
YOKOSUKA	243	06/09Z
YOKOTA_AB	270	06/09Z
NARITA_AIRPORT	233	06/10Z
MISAWA	399	06/17Z

BEARING AND DISTANCE	DIR	DIST (NM)	TAU (HRS)
CHICHI_JIMA	265	193	24
IWO_TO	310	189	24

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



CWB TC Tracker for NCEP GEFS (Fuzzy_AllCriteria)



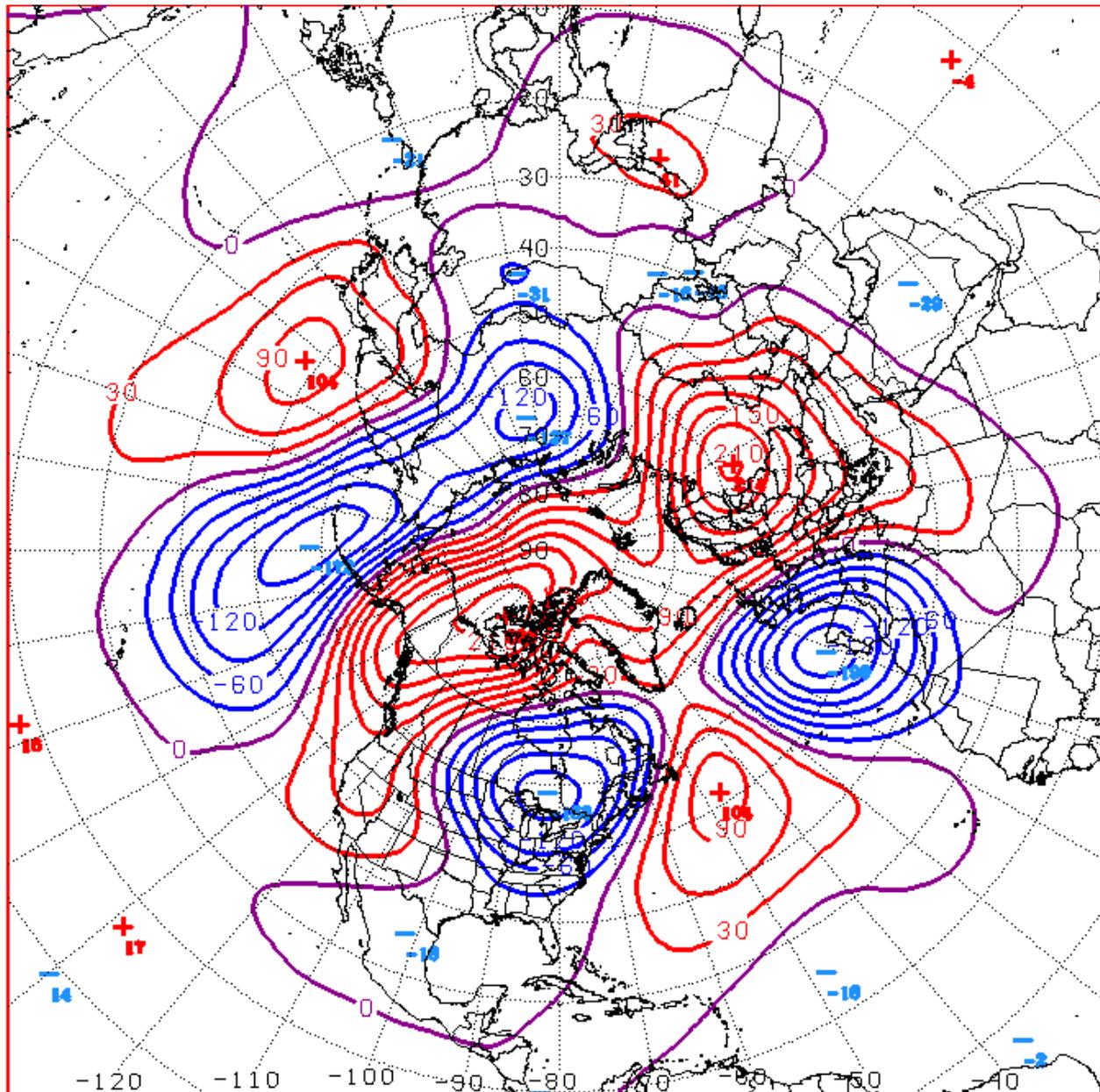
Days 1-4

Day 5-8

Day 9-12

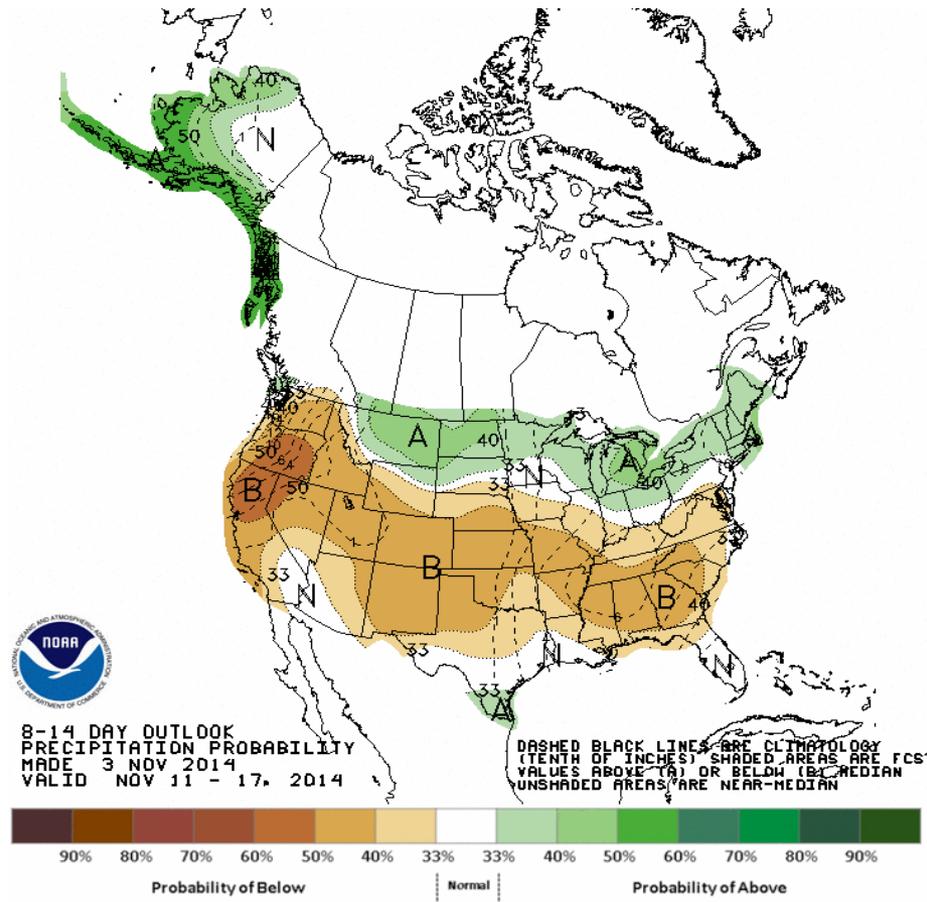
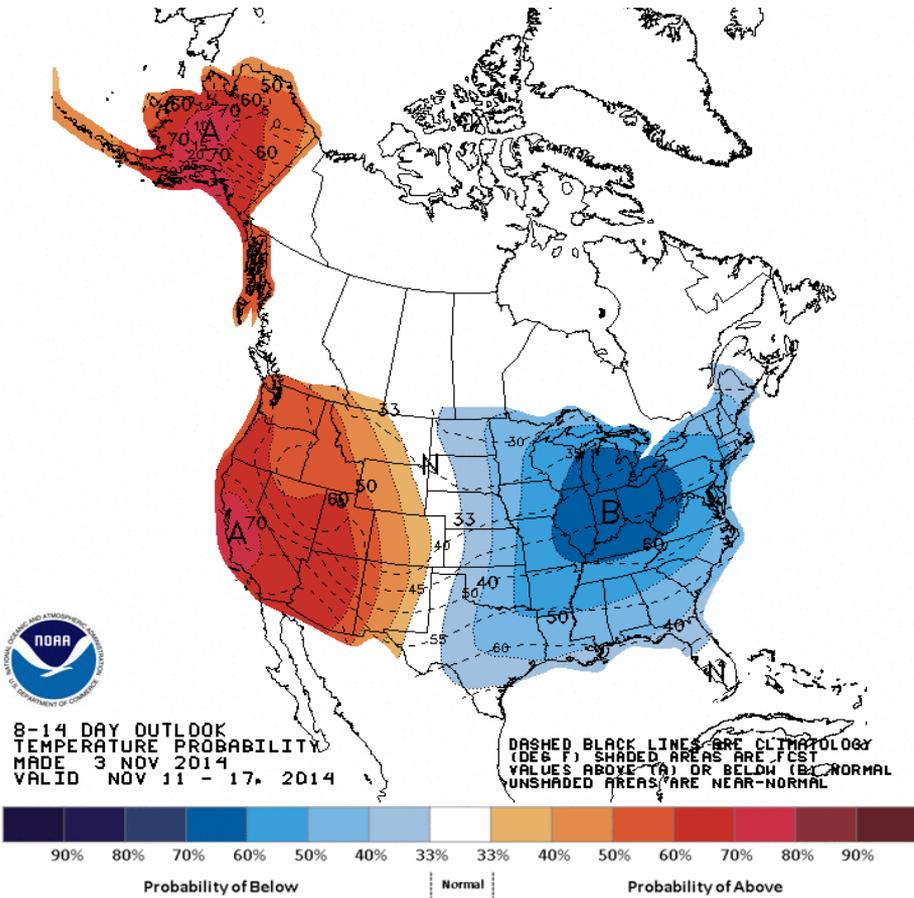
Day 13-16

Connections to U.S. Impacts



D+8 500 MB ANOMALIES FROM 00Z ECMM
 CPC MAP MADE NOV 04 2014 1028 UTC CNTD NOV 12 2014

Week 2 – Temperature and Precipitation

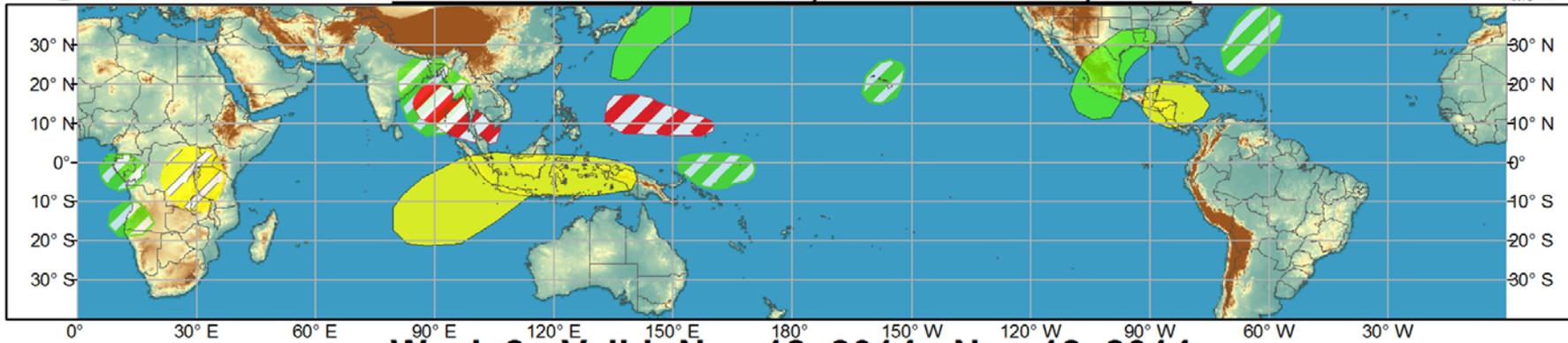




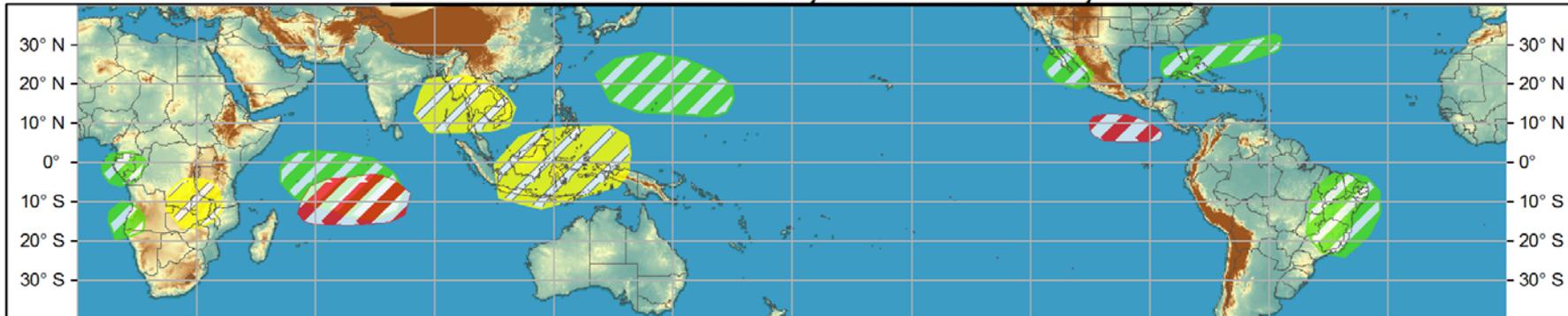
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