

Global Tropics Hazards And Benefits Outlook

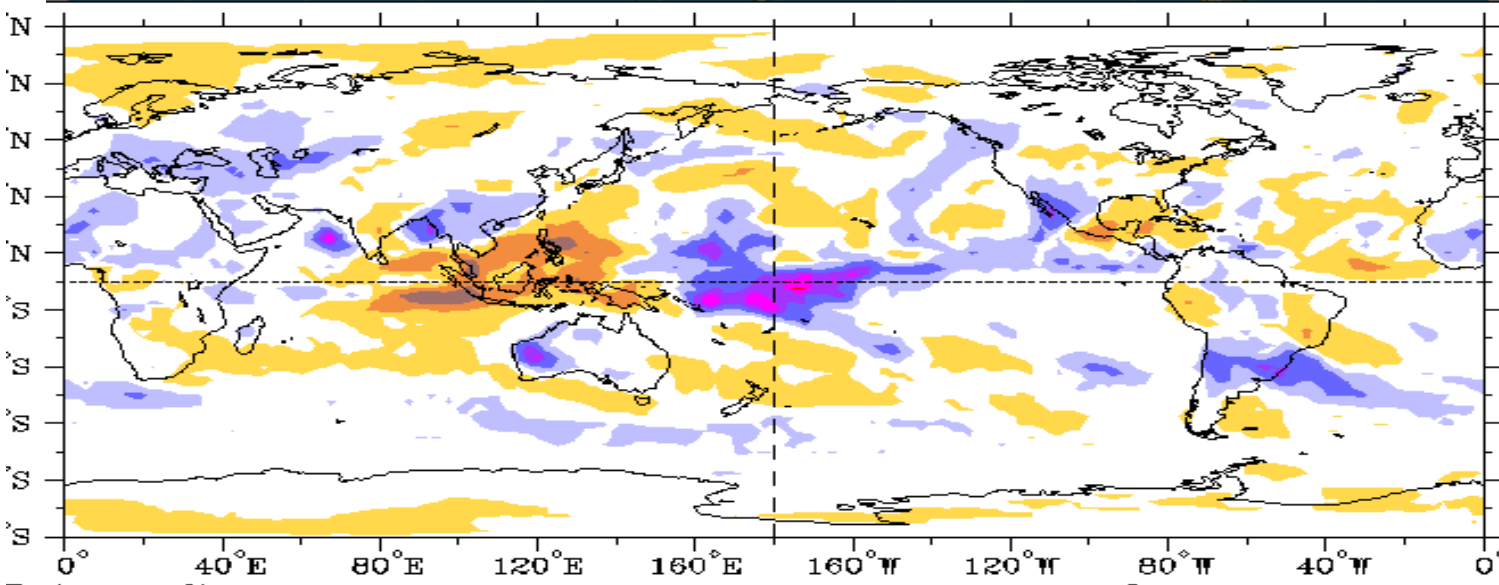
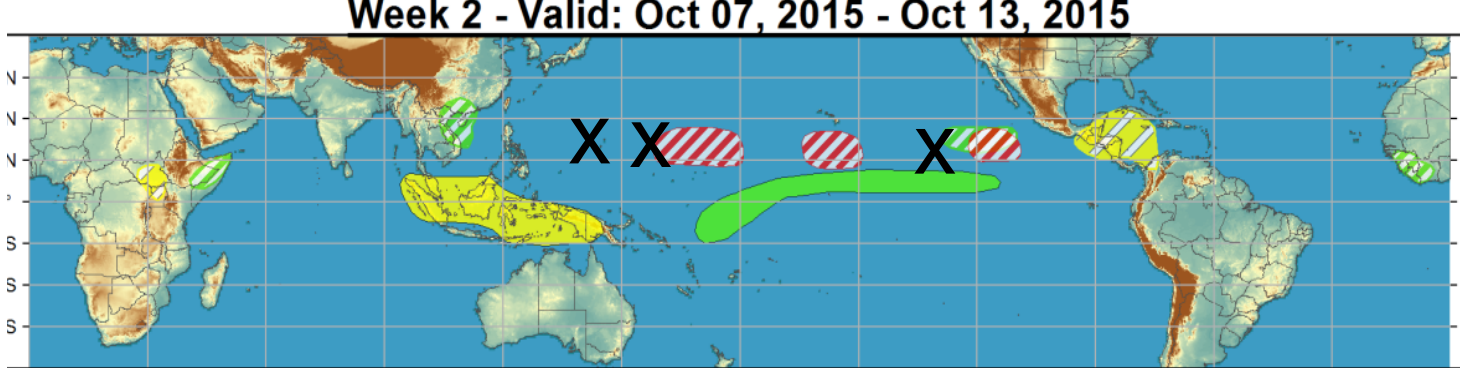
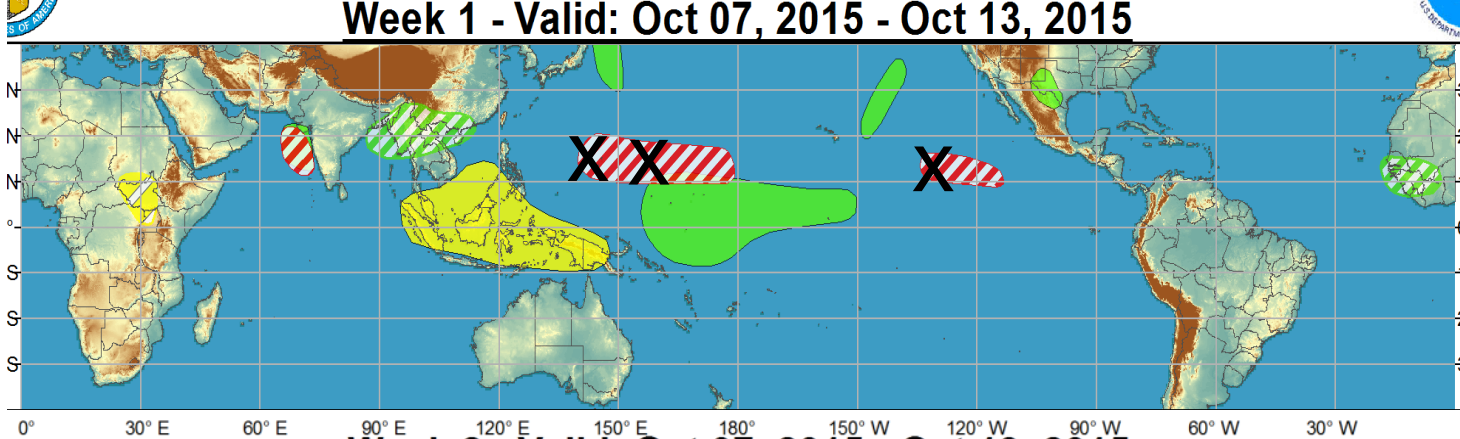
October 13, 2015

Matthew Rosencrans

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



Cool shading
More clouds/rain

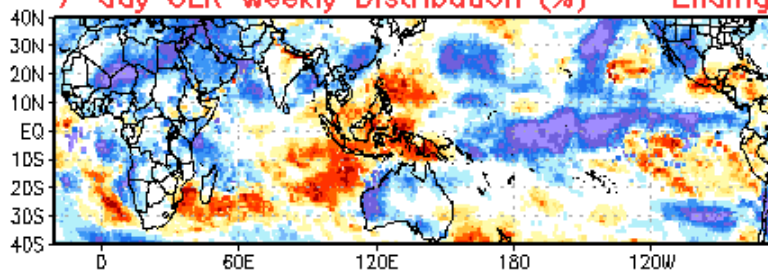
Warm shading
Less clouds/rain

R Anomalies (Base period 1979-2010)

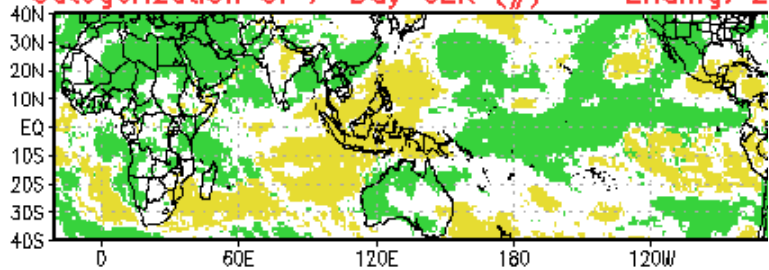
1 of 6-Oct-2015 - 12-Oct-2015



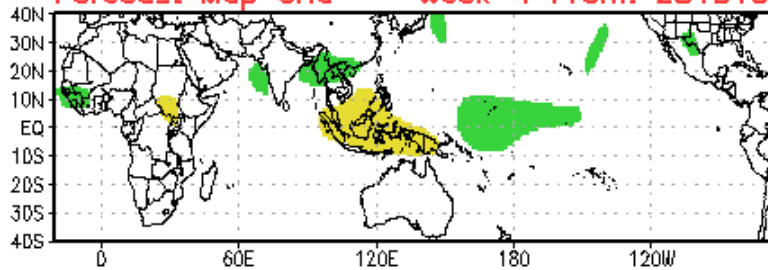
7-day OLR Weekly Distribution (%) -- Ending



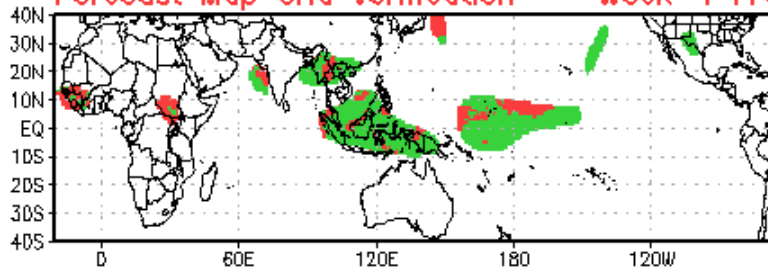
Categorization of 7-Day OLR (#) -- Ending: 2



Forecast Map Grid -- Week-1 From: 201510

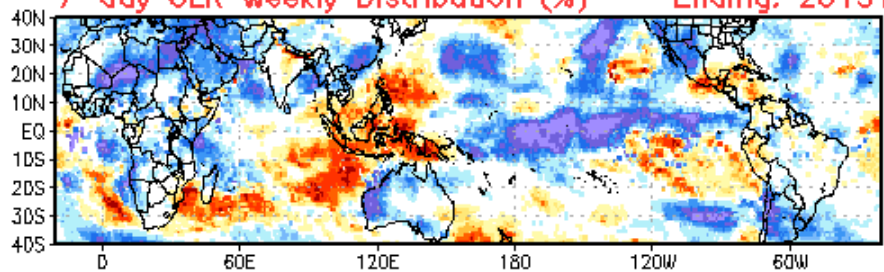


Forecast Map Grid Verification -- Week-1 From: 201510

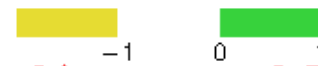
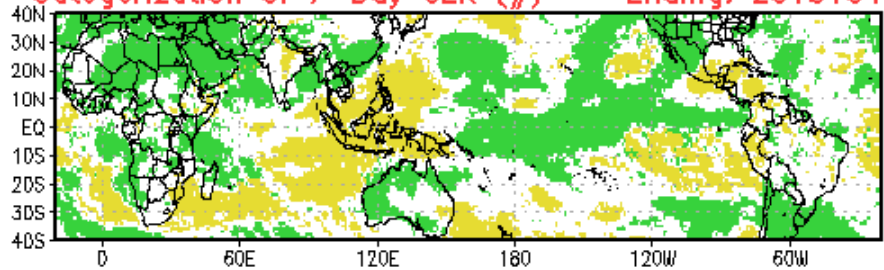


Hit: Green, Miss: Red
Heidke Skill Score: 60.9977

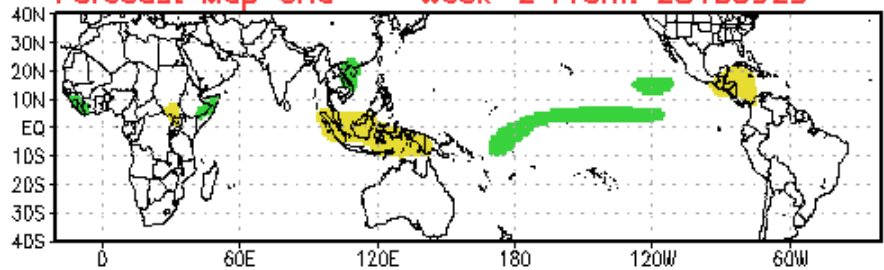
7-day OLR Weekly Distribution (%) -- Ending: 20151013



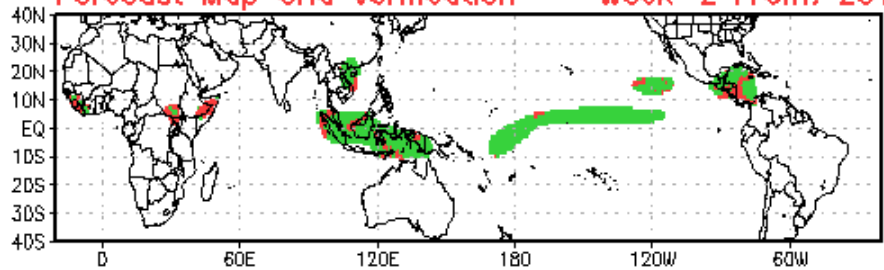
Categorization of 7-Day OLR (#) -- Ending: 20151013



Forecast Map Grid -- Week-2 From: 20150929



Forecast Map Grid Verification -- Week-2 From: 20150929



Hit: Green, Miss: Red
Heidke Skill Score: 71.0988

Synopsis of Climate Modes

ENSO:

- Current: [El Niño Advisory](#)
- Outlook: There is an approximately 95% chance that El Niño will continue through Northern Hemisphere winter 2015-16, gradually weakening through spring 2016.

MJO and other subseasonal tropical variability:

- The MJO is weak and not likely to impact tropical variability during the next week. During Week-2, there is a slight chance the MJO may strengthen.
- Most dynamical model MJO index forecasts depict little to no MJO signal during Week-1. During Week-2, some models indicate a strengthening signal anywhere from Africa to the Eastern Indian Ocean, although the root cause of that is still uncertain.

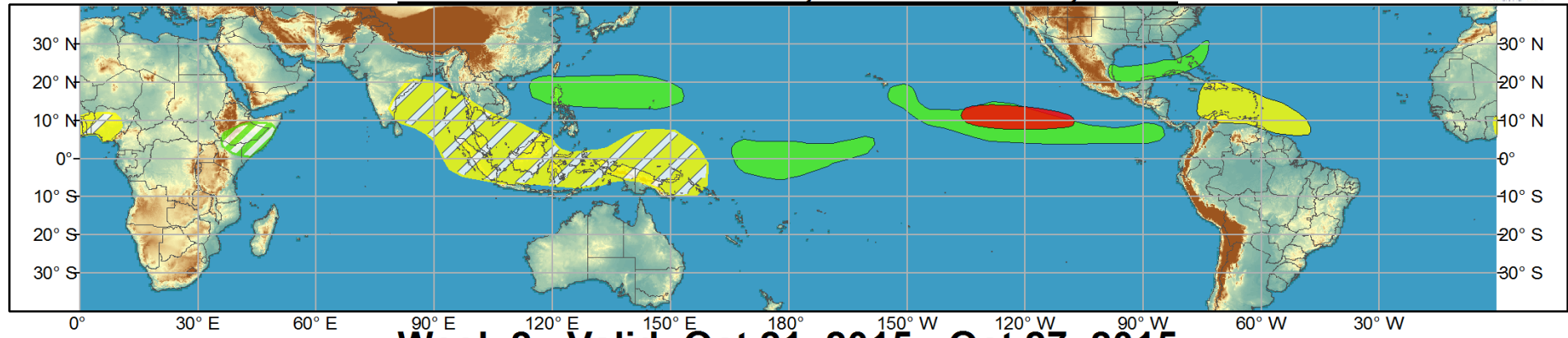
Extratropics:

- The extended range temperature and precipitation forecasts for the U.S. are not likely to be impacted by the MJO, but more likely impacted by the ongoing El Niño and tropical cyclone activity.

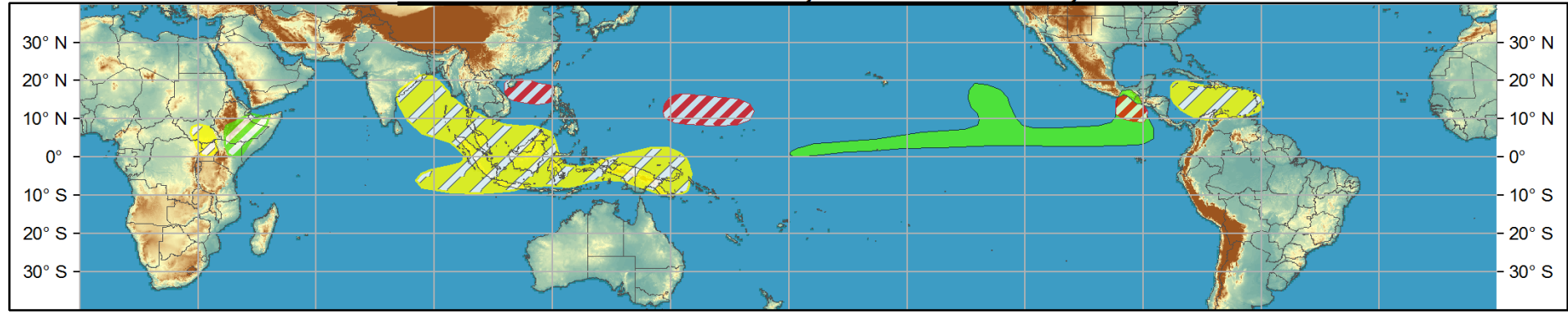


Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Oct 14, 2015 - Oct 20, 2015



Week 2 - Valid: Oct 21, 2015 - Oct 27, 2015



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

Produced: 10/13/2015

Forecaster: Rosencrans

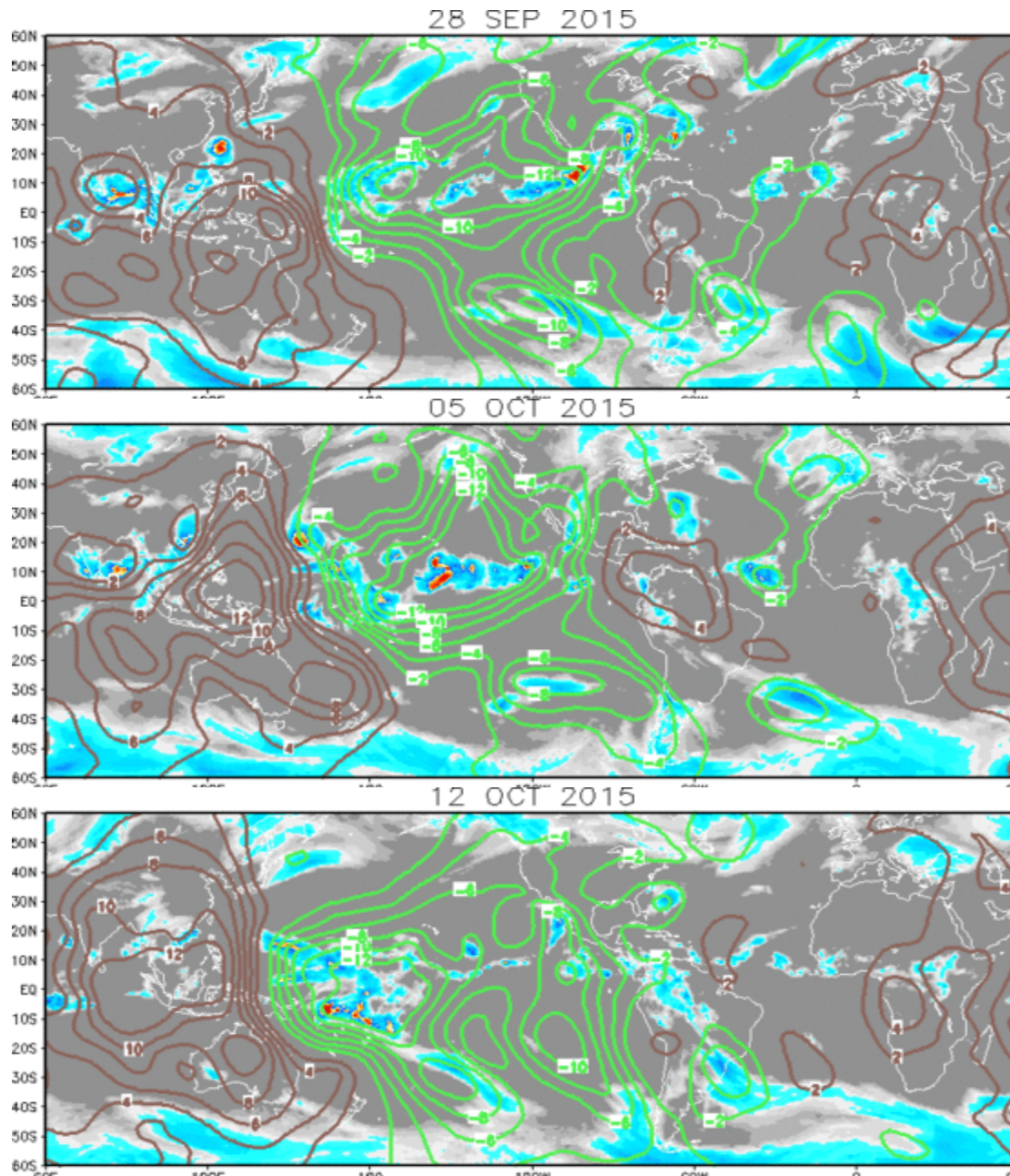
Product is updated once per week, except from 6/1 - 11/30 for the region from 120E to 0, 0 to 40N. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.



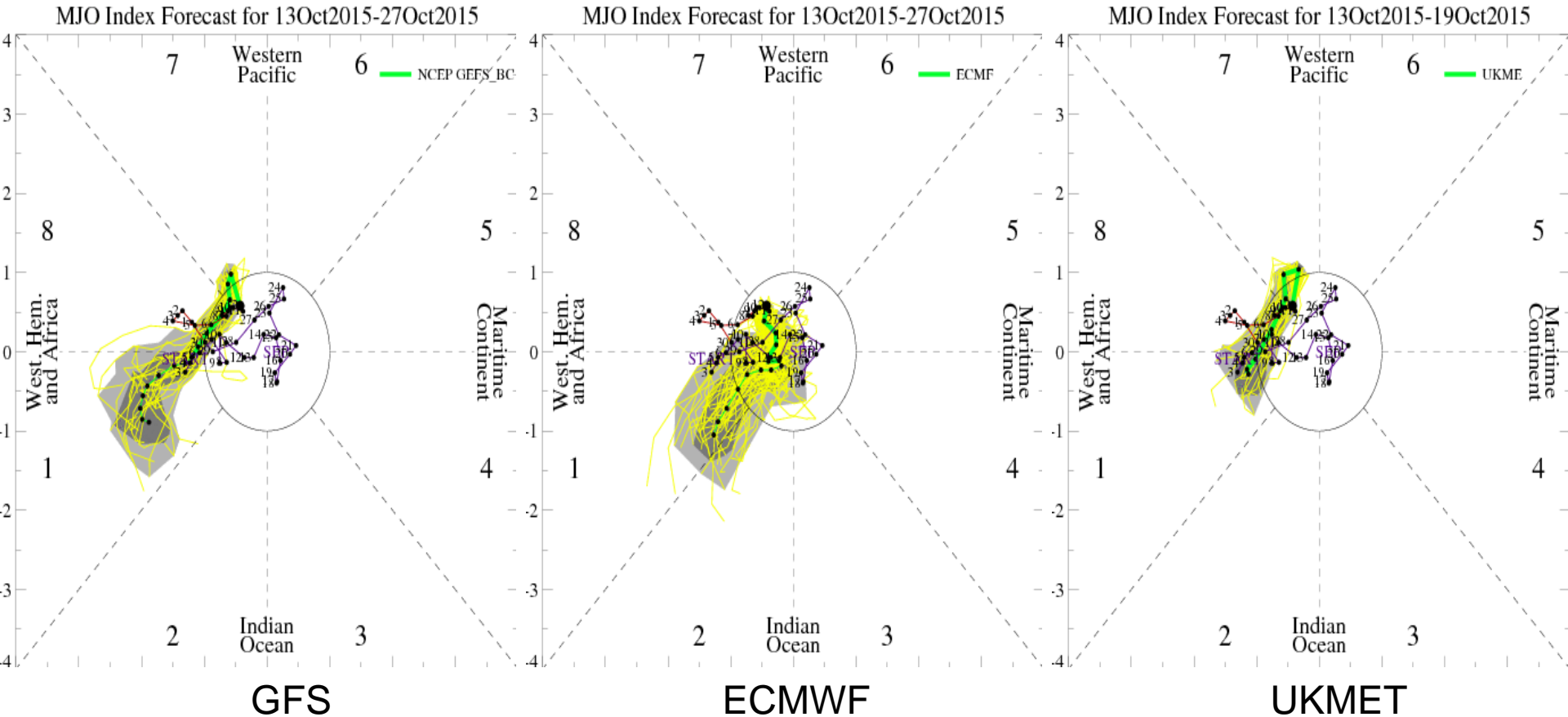
IR Satellite & 200-hpa Velocity Potential Anomalies

Green: Enhanced Divergence Brown: Enhanced Convergence

Base state and
some transient
features evident.

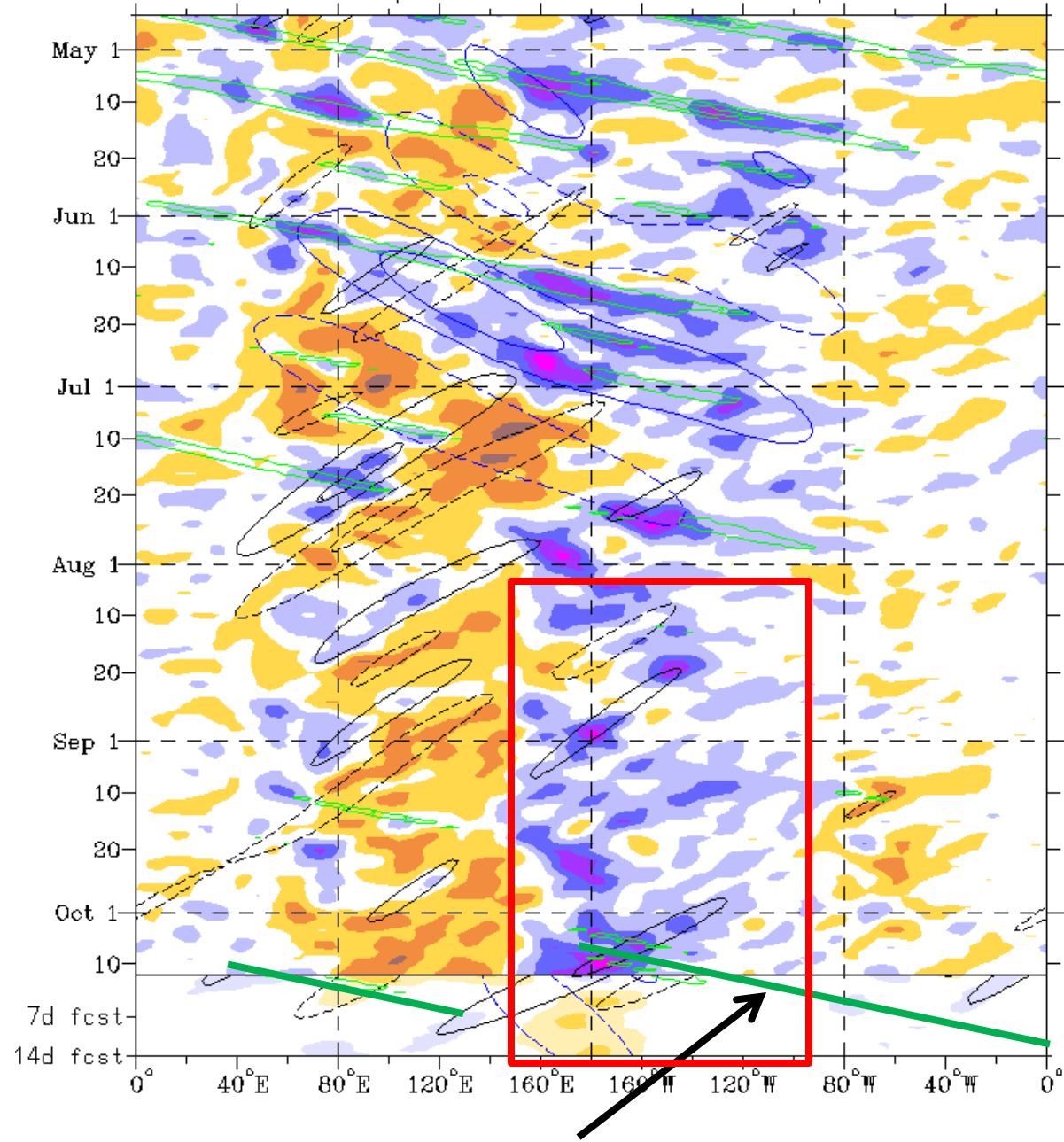


MJO Observation/Forecast



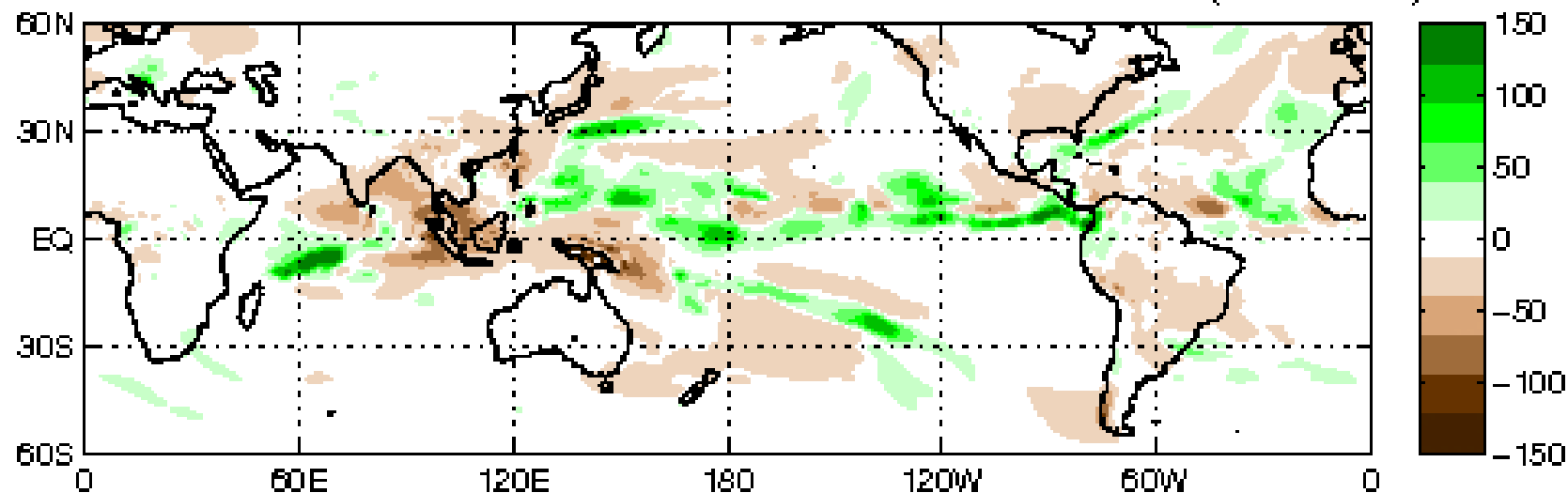
Wheeler-Hendon based analyses of model forecasts indicate little/no signal during Week-1, with a stronger signal over Africa during Week-2.

Low frequency likely to dominate pattern more than MJO.

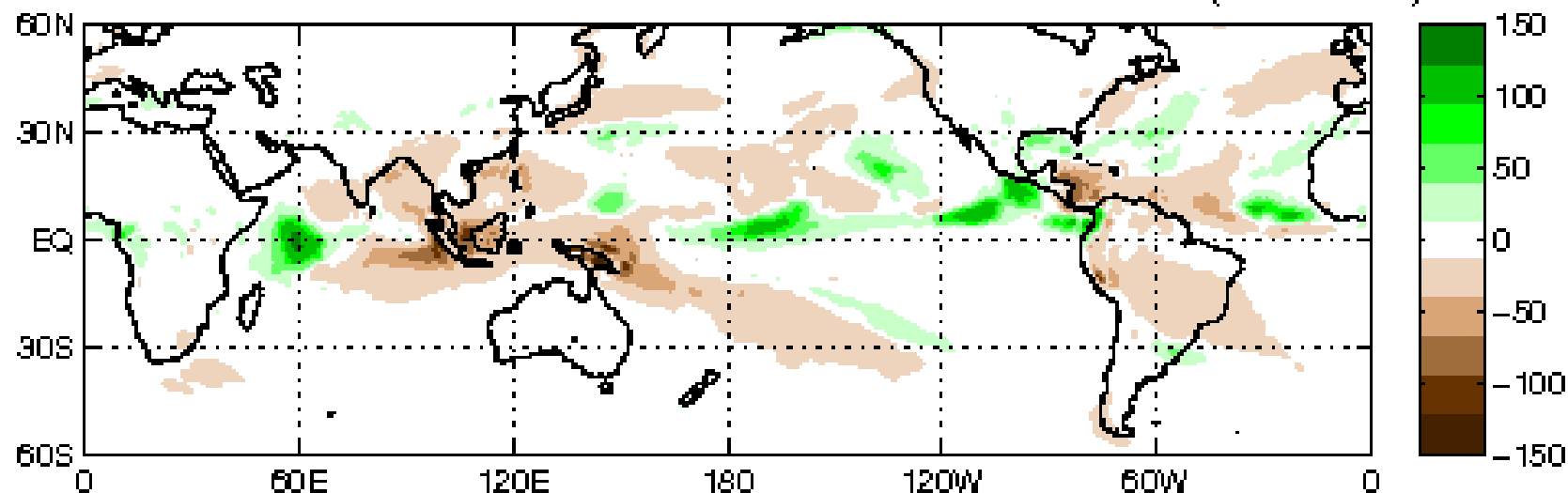


Kelvin Wave likely impacting East Pacific.

CFS: Anom. PREC Week: 1: 14-Oct-2015 to 20-Oct-2015 (mm/week)



CFS: Anom. PREC Week: 2: 21-Oct-2015 to 27-Oct-2015 (mm/week)

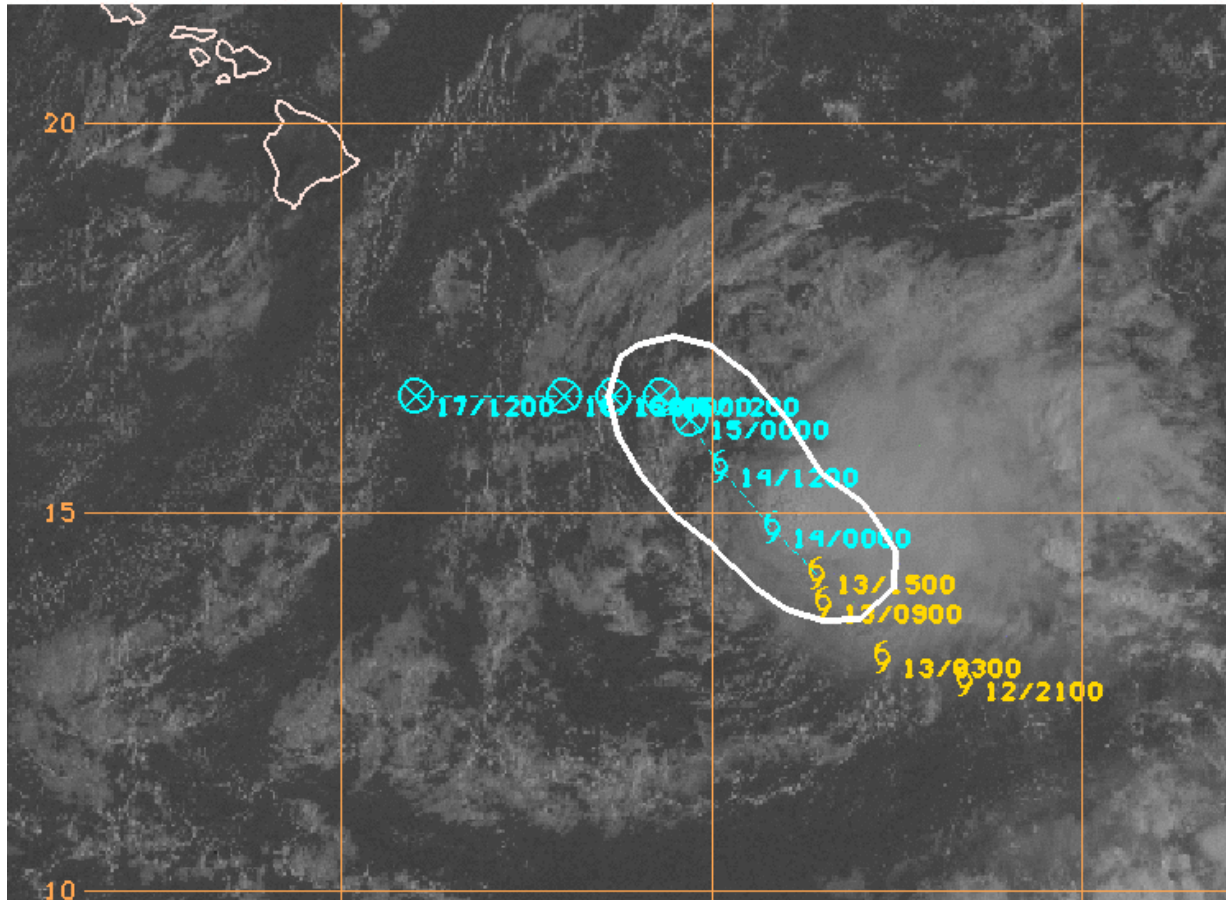




Tropical Storm Nora



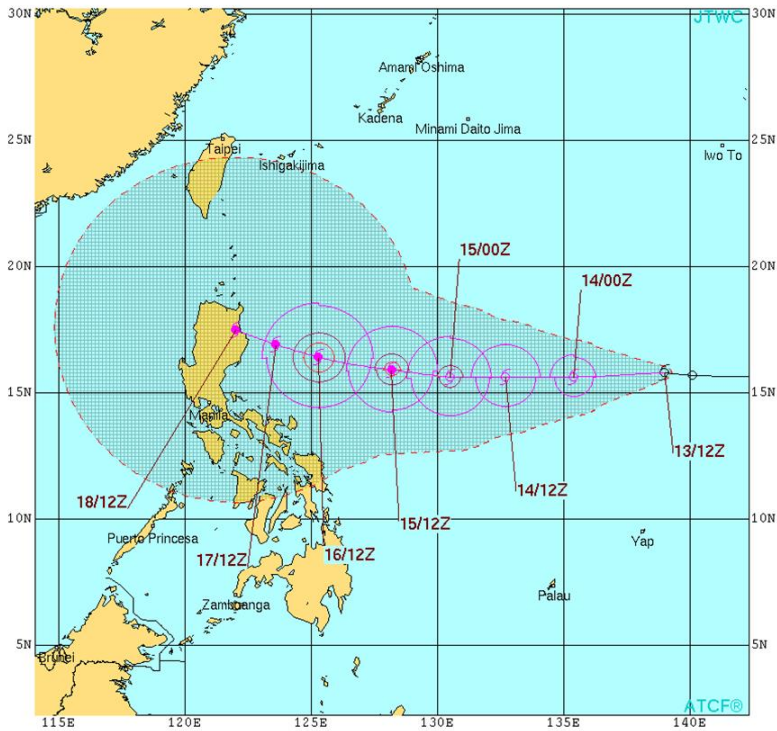
Satellite Image with Forecast Track and
25%+ probability of sustained winds of 34 kt or higher
Central Pacific Hurricane Center Honolulu, Hawaii



Past Positions: ⊗ Tropical Depression ⚡ Tropical Storm 🌀 Hurricane

Forecast Track: ⊗ Tropical Depression ⚡ Tropical Storm 🌀 Hurricane

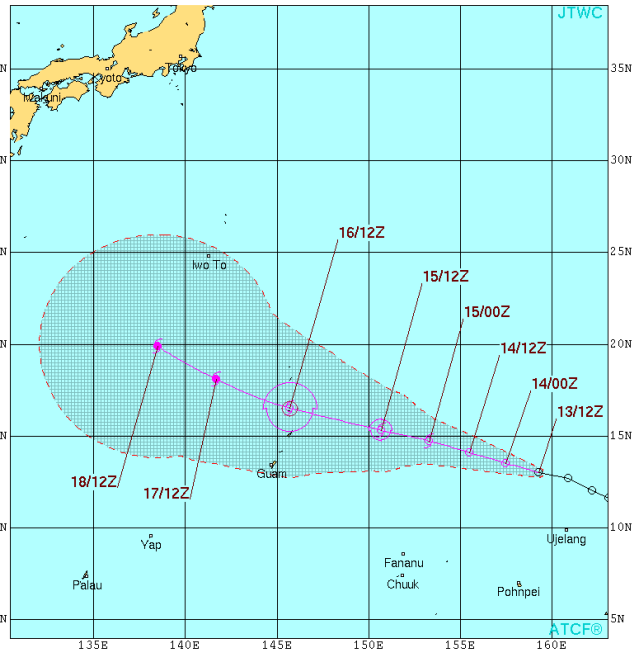
Track from Advisory #017 Issued at 1500 UTC TUE OCT 13 2015
Satellite Image taken at 1730 UTC 10/13/15



TROPICAL STORM 24W (KOPPU) WARNING #3
 WTPN31 PGTW 131500
 131200Z POSIT: NEAR 15.8N 139.0E
 MOVING 275 DEGREES TRUE AT 11 KNOTS
 MAXIMUM SIGNIFICANT WAVE HEIGHT: 10 FEET
 13/12Z, WINDS 035 KTS, GUSTS TO 045 KTS
 14/00Z, WINDS 040 KTS, GUSTS TO 050 KTS
 14/12Z, WINDS 050 KTS, GUSTS TO 065 KTS
 15/00Z, WINDS 060 KTS, GUSTS TO 075 KTS
 15/12Z, WINDS 070 KTS, GUSTS TO 085 KTS
 16/12Z, WINDS 090 KTS, GUSTS TO 110 KTS
 17/12Z, WINDS 120 KTS, GUSTS TO 145 KTS
 18/12Z, WINDS 110 KTS, GUSTS TO 135 KTS

CPA TO:	NM	DTG
YAP	378	13/16Z
MANILA	183	18/08Z
CLARK AB	160	18/12Z
SUBIC_BAY	192	18/12Z

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



TROPICAL DEPRESSION 25W (TWENTYFIVE) WARNING #2
 WTPN32 PGTW 131500
 131200Z POSIT: NEAR 13.0N 159.3E
 MOVING 280 DEGREES TRUE AT 16 KNOTS
 MAXIMUM SIGNIFICANT WAVE HEIGHT: 8 FEET
 13/12Z, WINDS 025 KTS, GUSTS TO 035 KTS
 14/00Z, WINDS 030 KTS, GUSTS TO 040 KTS
 14/12Z, WINDS 030 KTS, GUSTS TO 040 KTS
 15/00Z, WINDS 035 KTS, GUSTS TO 045 KTS
 15/12Z, WINDS 040 KTS, GUSTS TO 050 KTS
 16/12Z, WINDS 055 KTS, GUSTS TO 070 KTS
 17/12Z, WINDS 065 KTS, GUSTS TO 080 KTS
 18/12Z, WINDS 075 KTS, GUSTS TO 090 KTS

CPA TO:	NM	DTG
PARIN	364	13/14Z
OROLUK	373	14/03Z
SALPAN	73	16/10Z
TINIAN	88	16/10Z
ANDERSEN_AFB	180	16/11Z
HAGATNA	199	16/11Z
ROTA	146	16/11Z
ANATAHAN	6	16/12Z
NAVSTA GUAM	197	16/12Z
WFO GUAM	187	16/12Z
ALAMAGAN	65	16/13Z
PMGAN	93	16/14Z
AGRIHAN	130	16/16Z
IWO_TO	333	18/12Z

BEARING AND DISTANCE	DIR	DIST	TAU
OROLUK	003	384	24

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





Five-Day Graphical Tropical Weather Outlooks

National Hurricane Center Miami, Florida

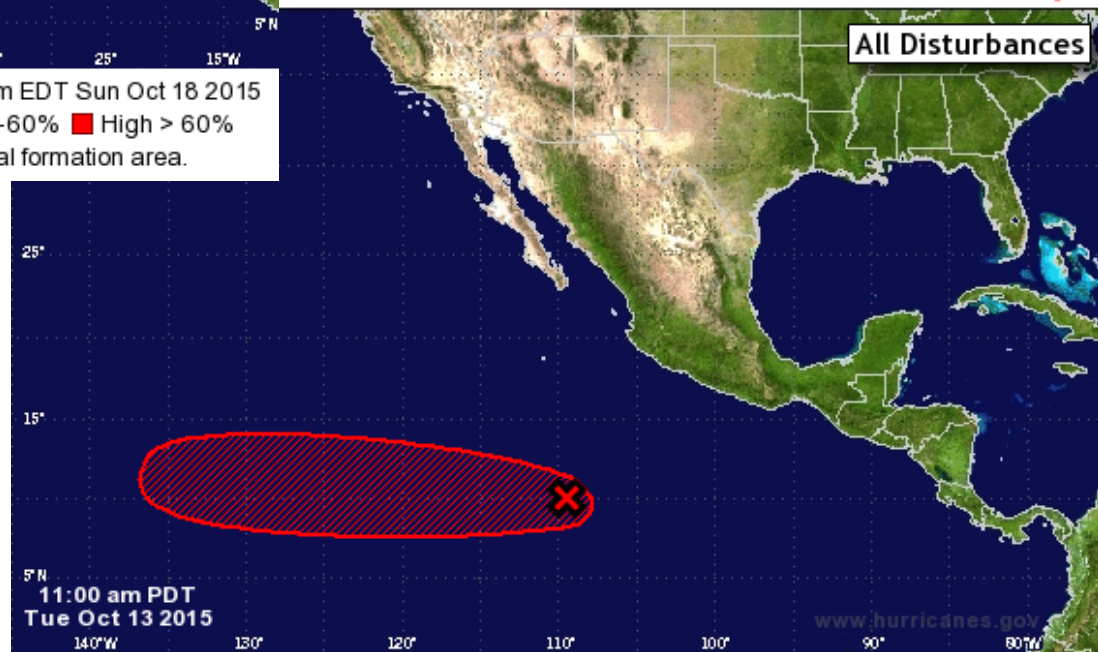


Five-Day Graphical Tropical Weather Outlook

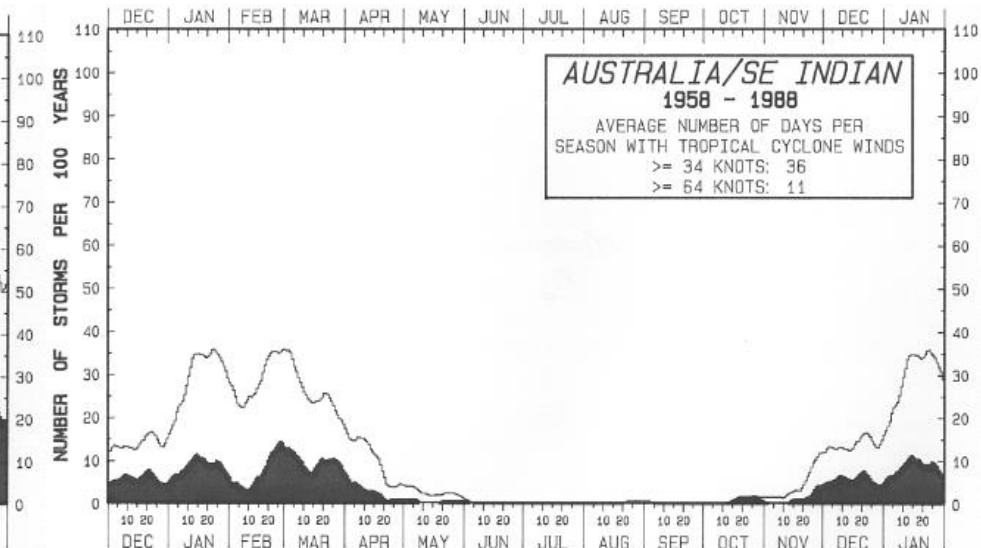
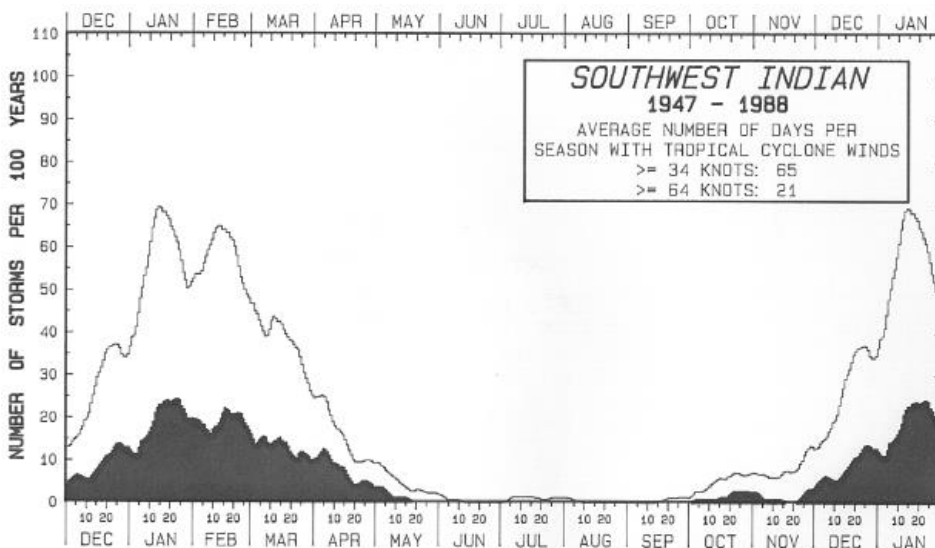
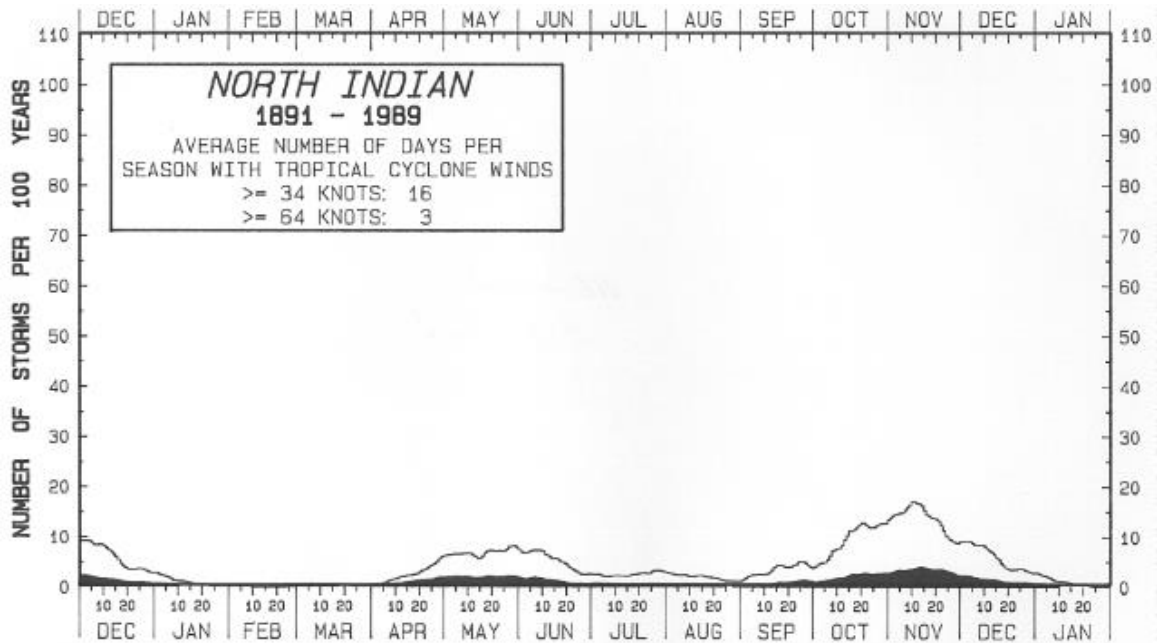
National Hurricane Center Miami, Florida

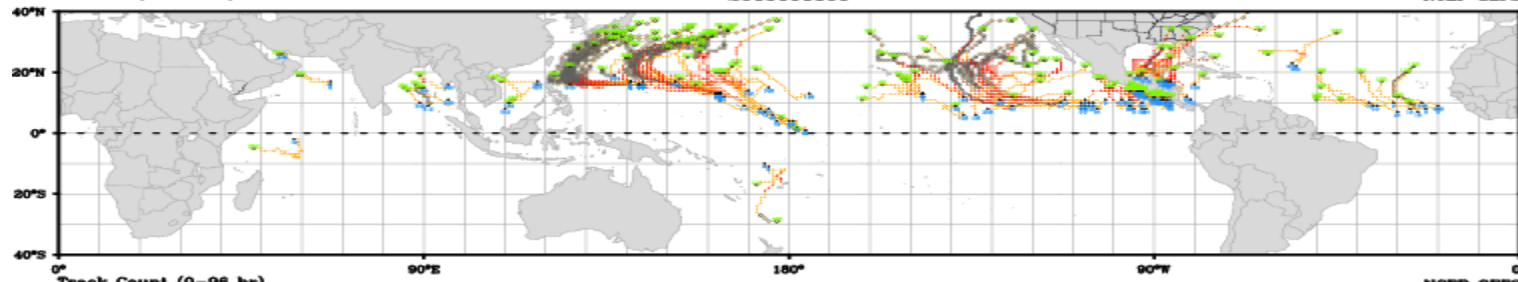


Tropical Cyclone Formation Potential for the 5-Day Period Ending 2:00 pm EDT Sun Oct 18 2015
 Chance of Cyclone Formation in 5 Days: ■ Low < 40% ■ Medium 40-60% ■ High > 60%
 X indicates current disturbance location; shading indicates potential formation area.

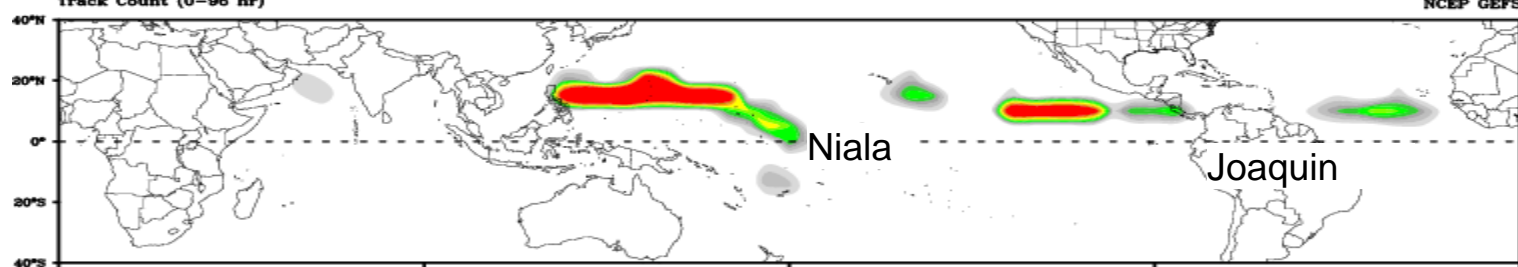


Tropical Cyclone Formation Potential for the 5-Day Period Ending 11:00 am PDT Sun Oct 18 2015
 Chance of Cyclone Formation in 5 Days: ■ Low < 40% ■ Medium 40-60% ■ High > 60%
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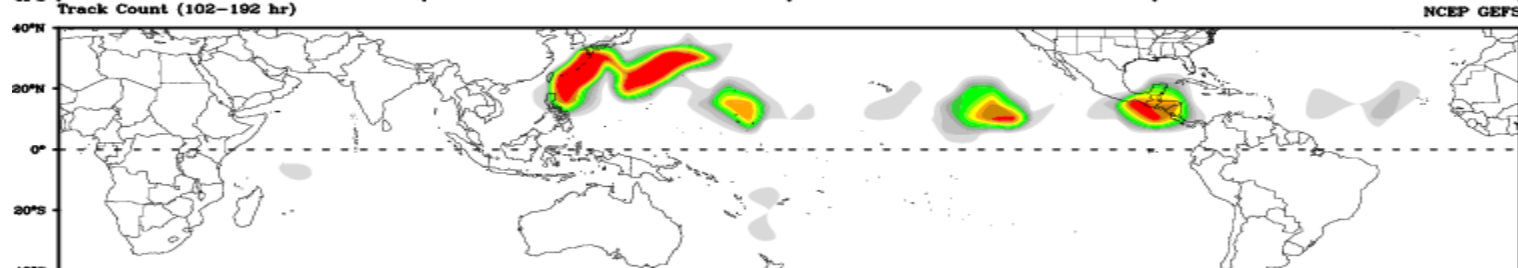




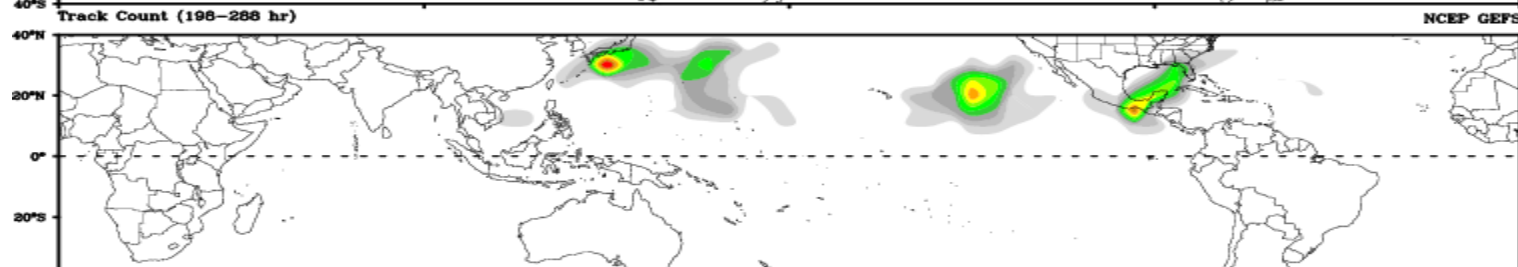
Days 1-4



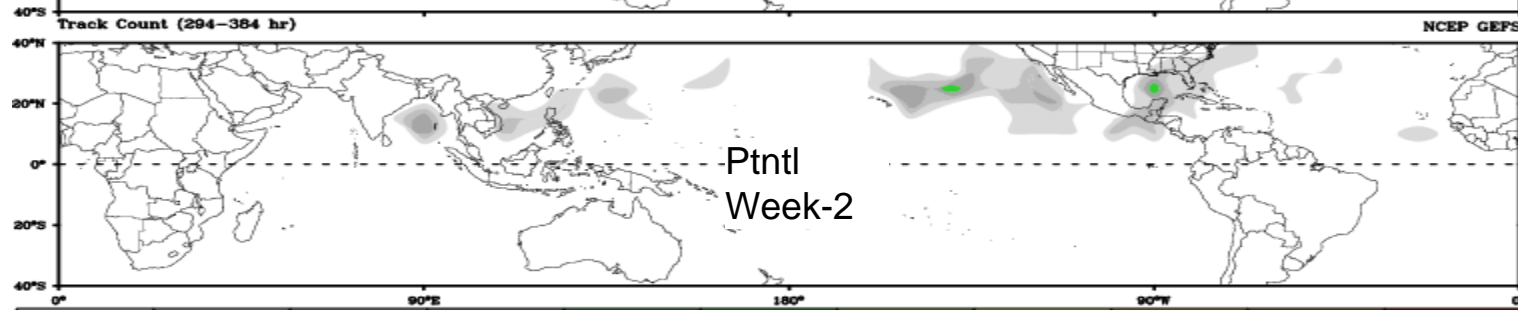
Day 5-8



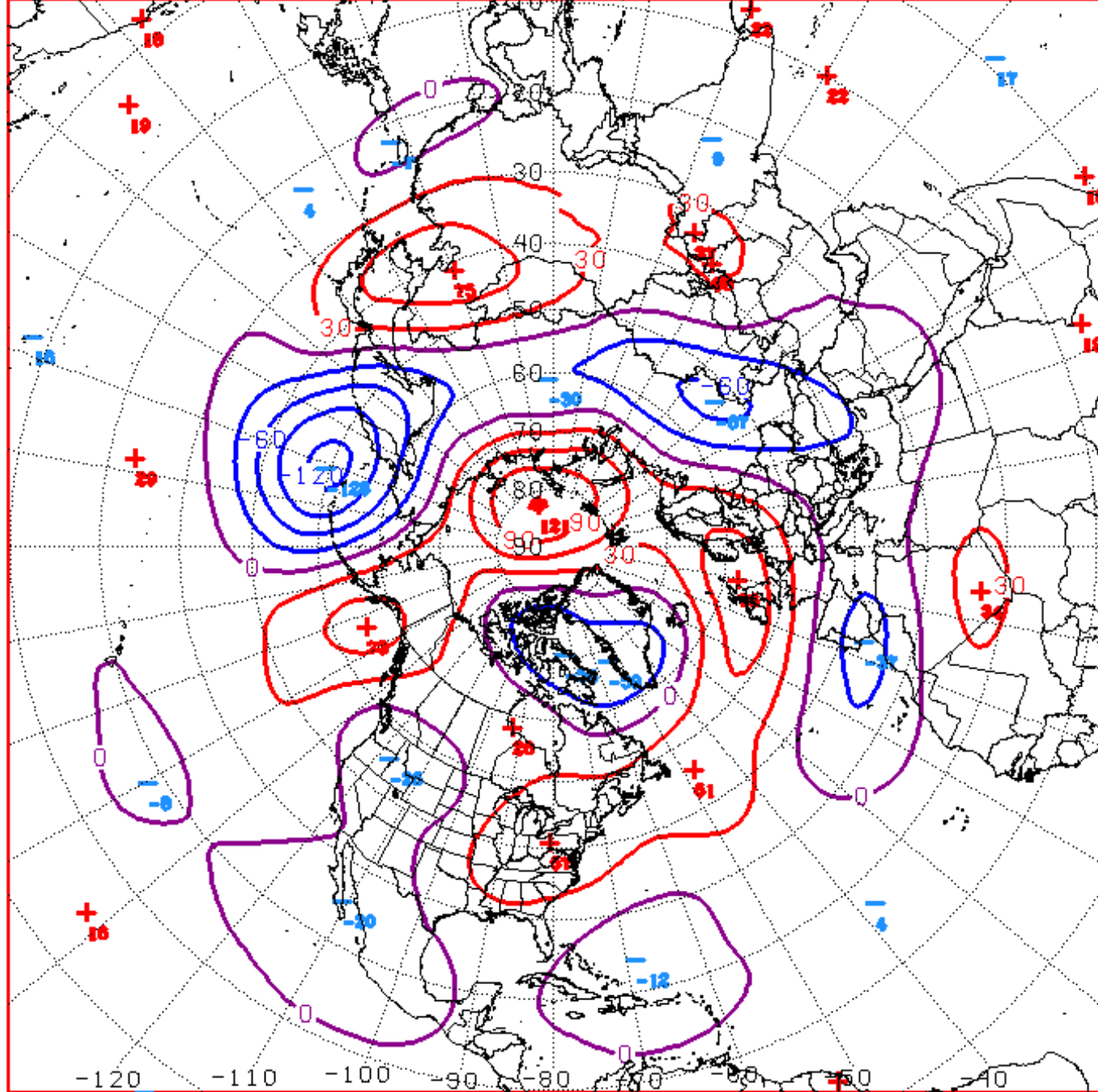
Day 9-12



Day 13-15

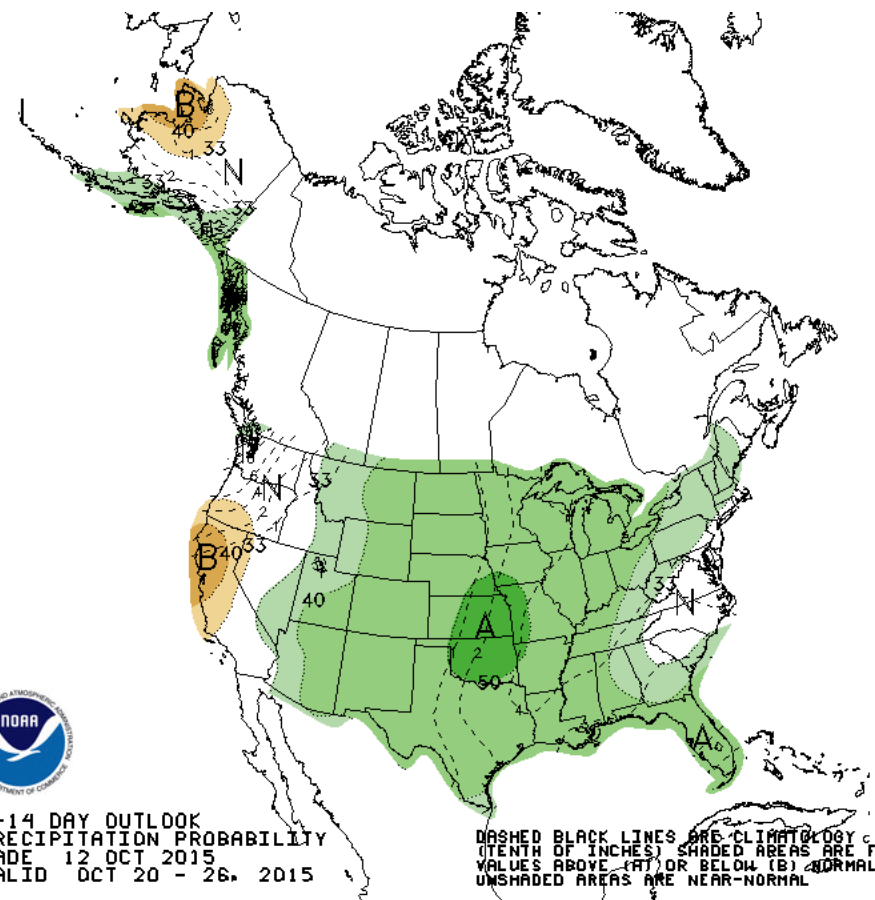
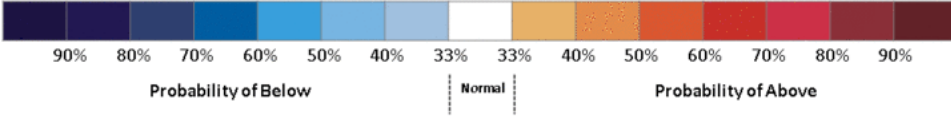
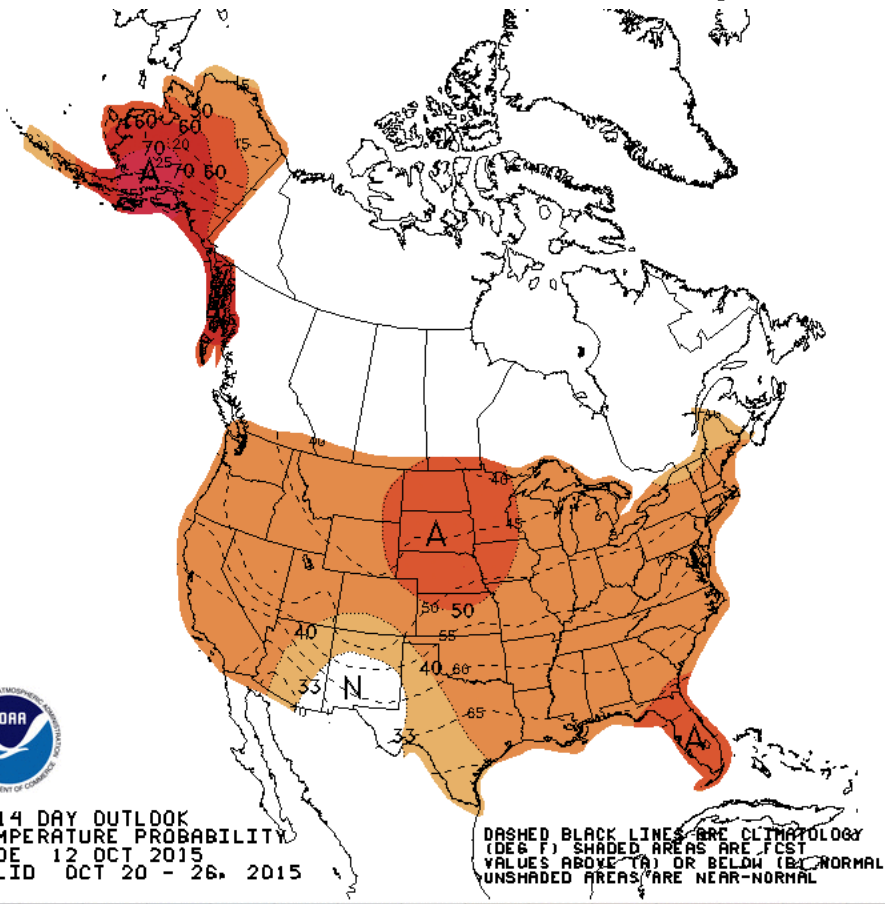


Connections to U.S. Impacts



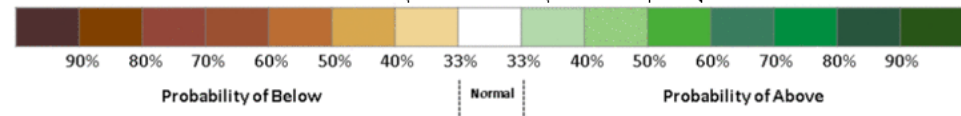
D+11 500 MB ANOMALIES FROM 00Z ECMM
CPC MAP MADE OCT 13 2015 1004 UTC CNTD OCT 24 2015

Week 2 – Temperature and Precipitation



8-14 DAY OUTLOOK
PRECIPITATION PROBABILITY
MADE 12 OCT 2015
VALID OCT 20 - 26, 2015

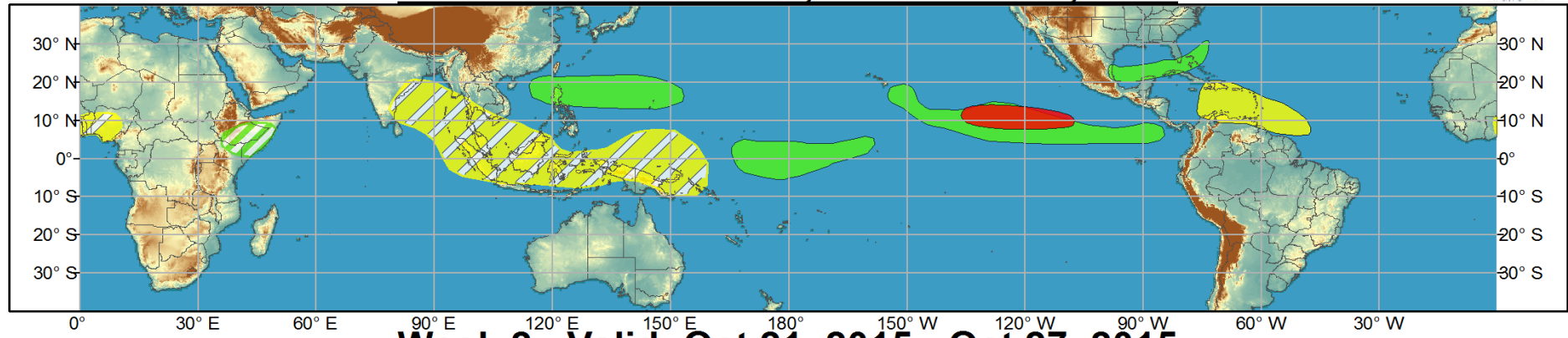
DASHED BLACK LINES ARE CLIMATE LOGY (TENTH OF INCHES) SHADED AREAS ARE FCST VALUES ABOVE (A) OR BELOW (B) NORMAL UNSHADED AREAS ARE NEAR-NORMAL



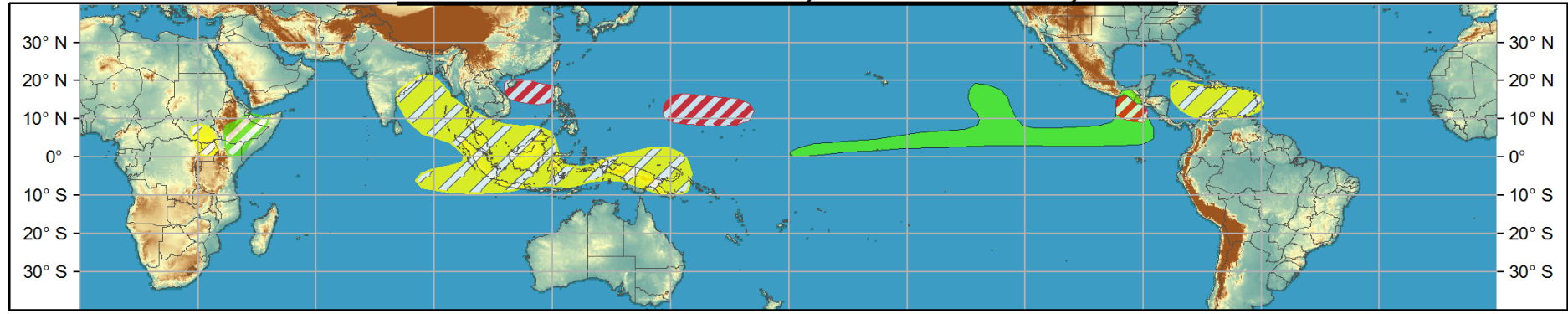


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