

Global Tropics Hazards And Benefits Outlook

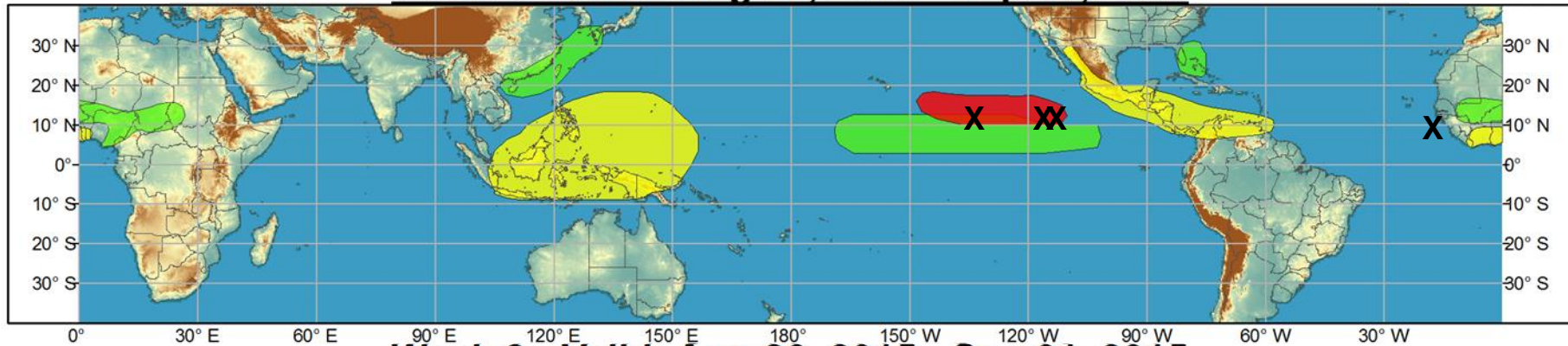
September 1, 2015

Adam Allgood

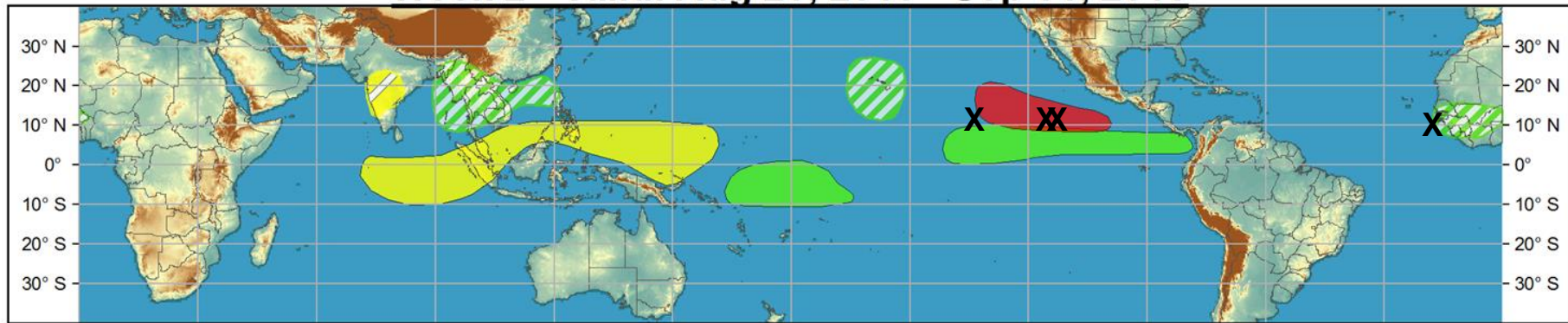
Outline

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: Aug 26, 2015 - Sep 01, 2015

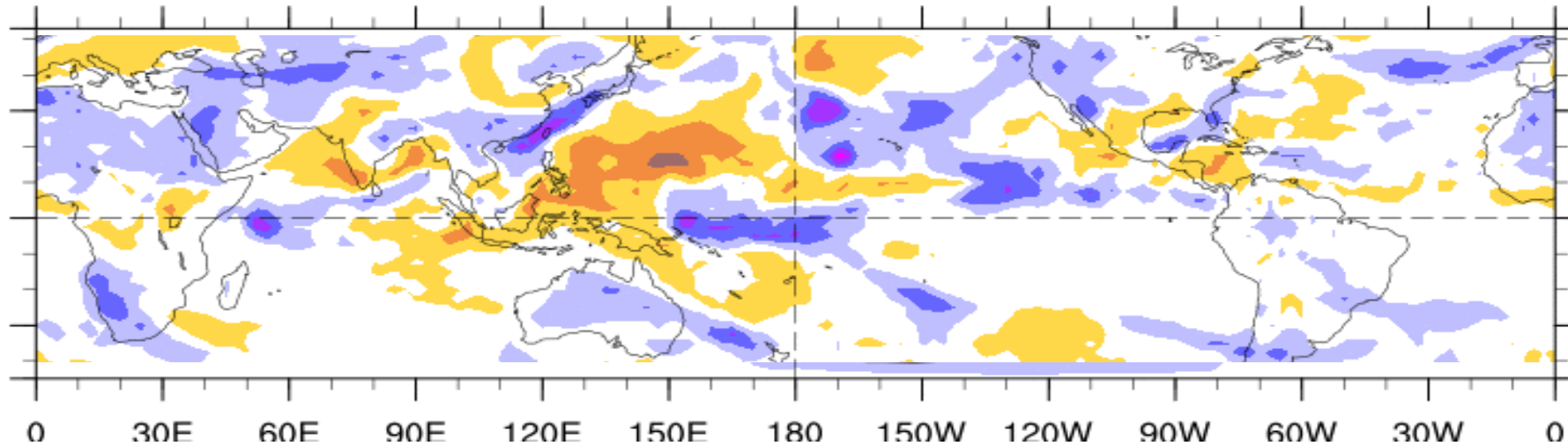


Week 2 - Valid: Aug 26, 2015 - Sep 01, 2015



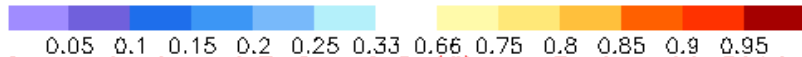
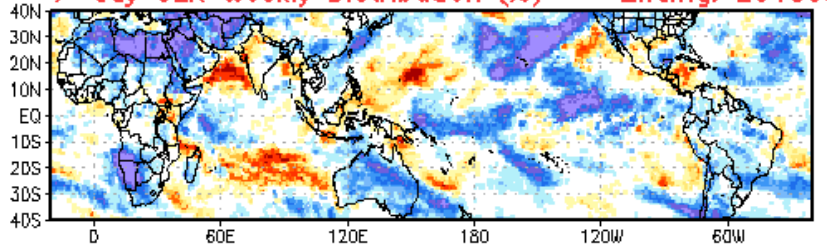
7-Day Average OLR Anomaly

2015/08/24 - 2015/08/30

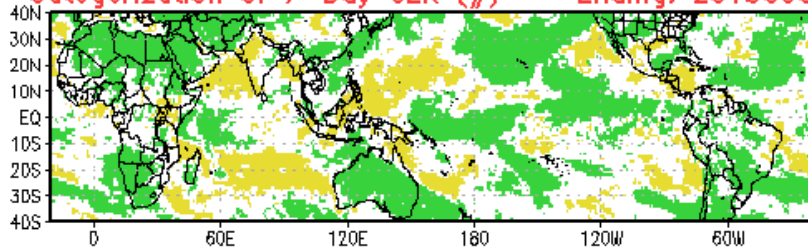


Wet and Dry Shape Verifications

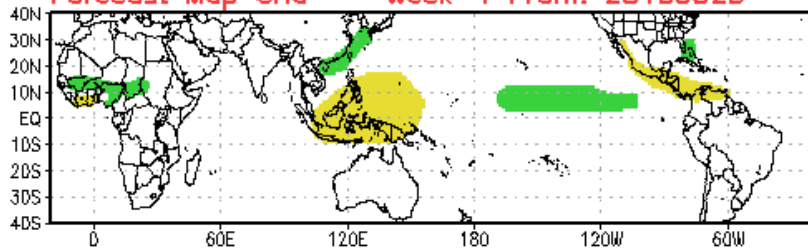
7-day OLR Weekly Distribution (%) -- Ending: 20150901



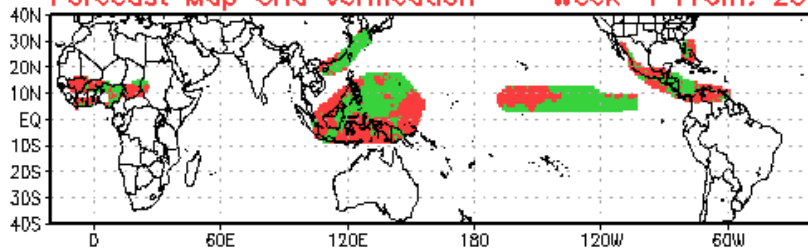
Categorization of 7-Day OLR (#) -- Ending: 20150901



Forecast Map Grid -- Week-1 From: 20150825

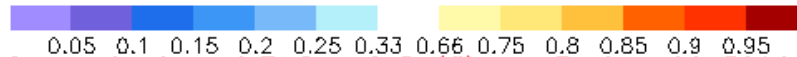
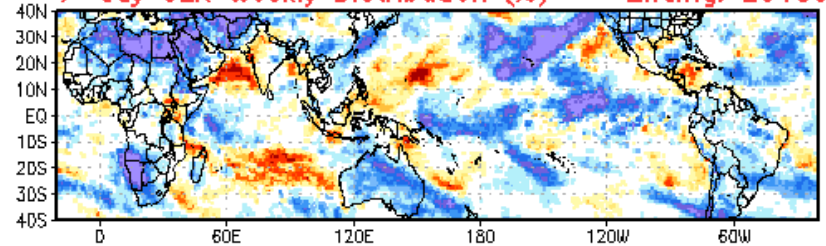


Forecast Map Grid Verification -- Week-1 From: 20150825

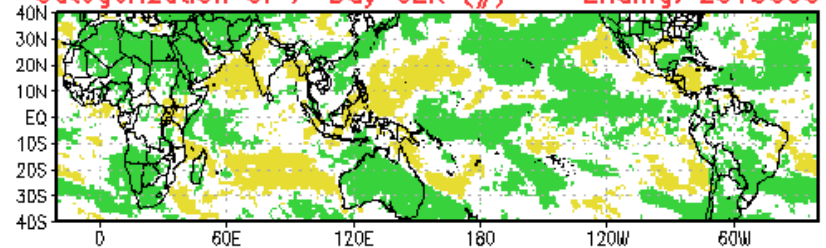


Hit: Green, Miss: Red
Heidke Skill Score: 23.0822

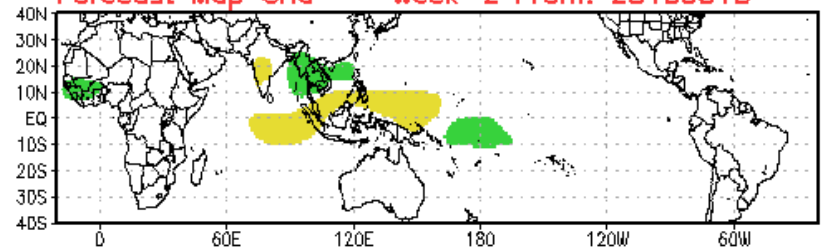
7-day OLR Weekly Distribution (%) -- Ending: 20150901



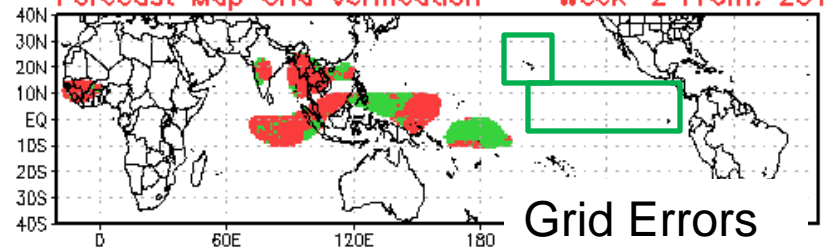
Categorization of 7-Day OLR (#) -- Ending: 20150901



Forecast Map Grid -- Week-2 From: 20150818



Forecast Map Grid Verification -- Week-2 From: 20150818



Grid Errors

Hit: Green, Miss: Red
Heidke Skill Score: 5.2858

Synopsis of Climate Modes

ENSO:

- Current: [El Niño Advisory](#)
- Outlook: There is a greater than 90% chance that El Niño will continue through Northern Hemisphere winter 2015-16, and around an 80% chance it will last into early spring 2016.

MJO and other subseasonal tropical variability:

- The MJO remains weak, and is forecast to remain weak.
- Some observational fields indicate an eastward moving signal over the Pacific related to the basins that have been favored for tropical cyclone development.

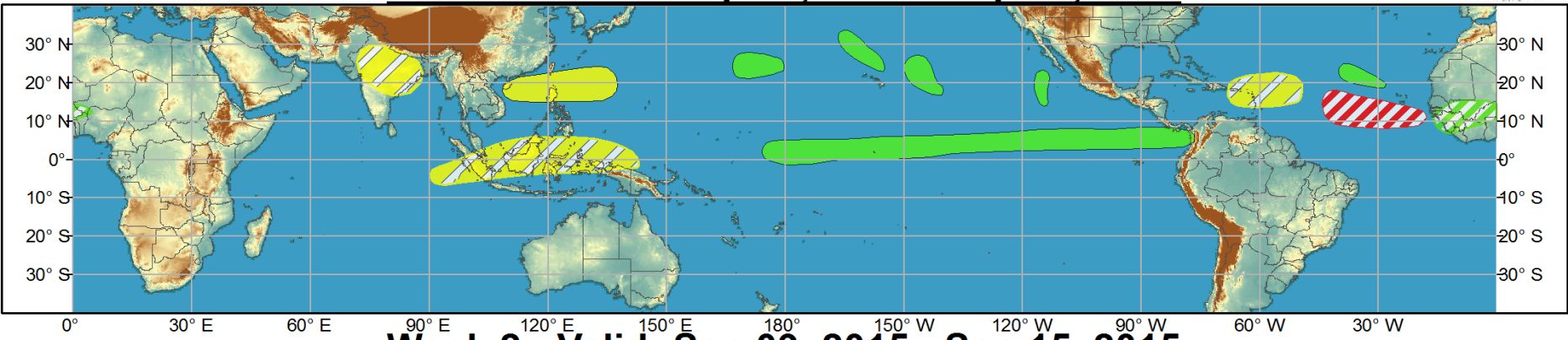
Extratropics:

- No MJO impacts on the extratropics are anticipated
- Multiple potential recurving tropical cyclones may have a significant impact on downstream mid-latitude pattern changes and amplification.

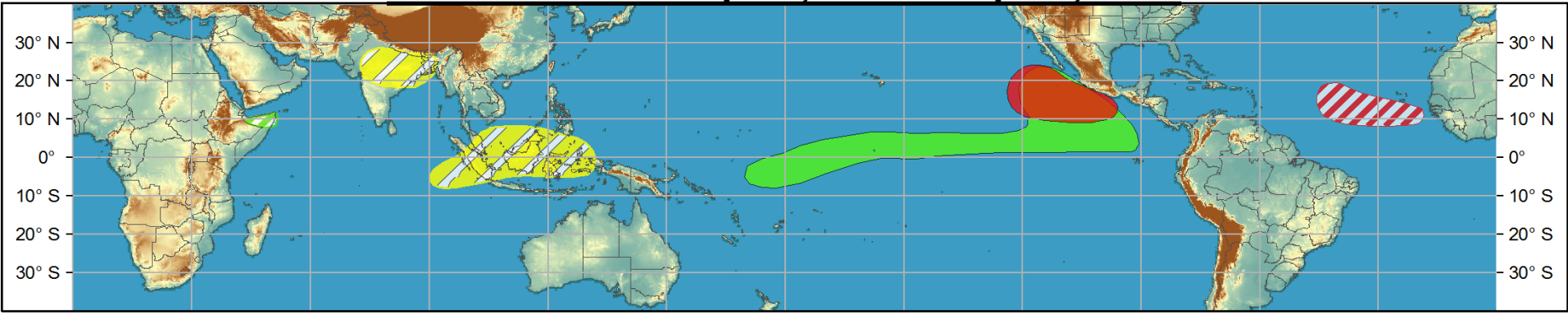


Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Sep 02, 2015 - Sep 08, 2015



Week 2 - Valid: Sep 09, 2015 - Sep 15, 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: 09/01/2015
Forecaster: Allgood

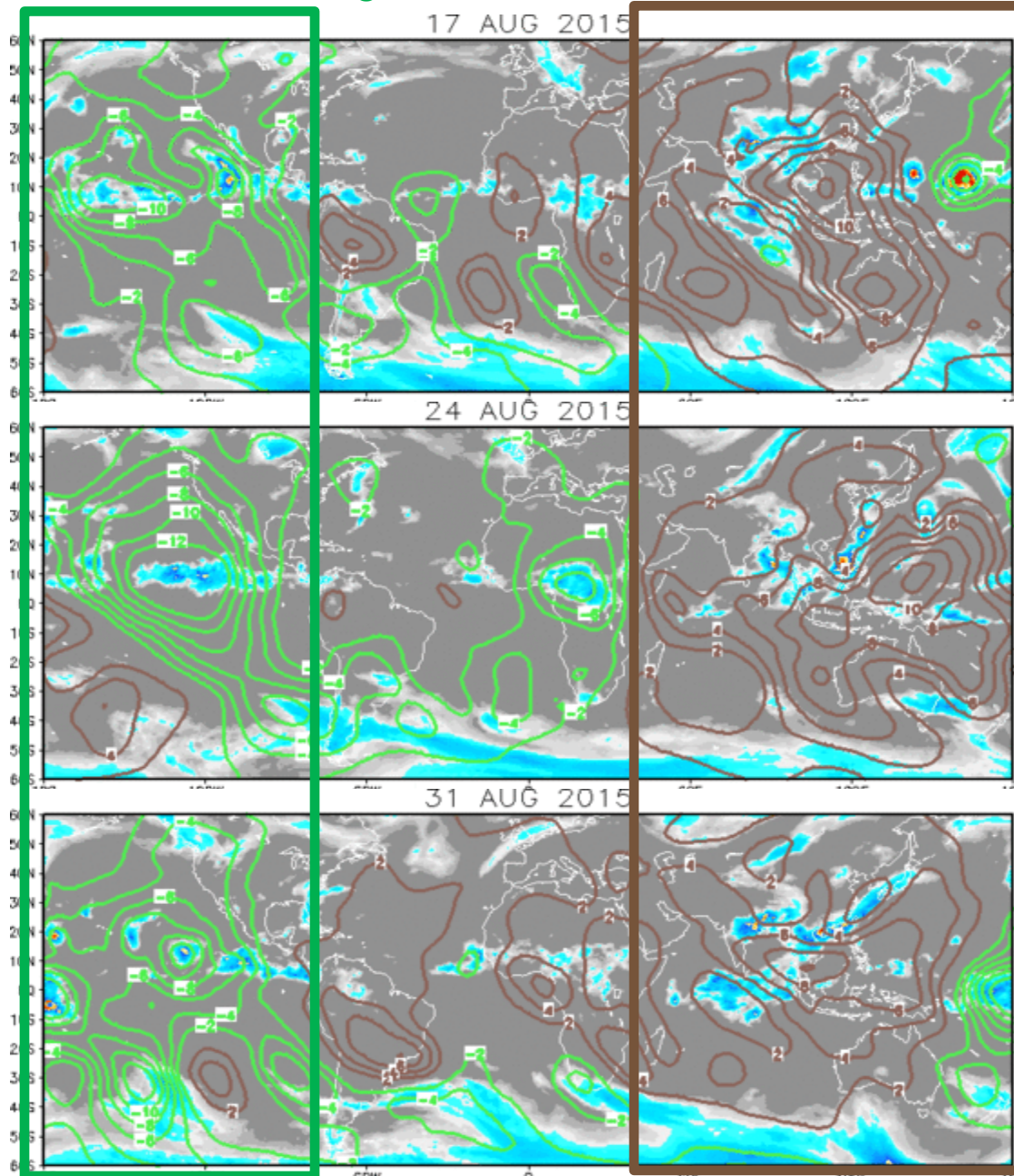
Product is updated once per week, except from 6/1 - 11/30 for the region from 120E to 0, 0 to 40N. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.



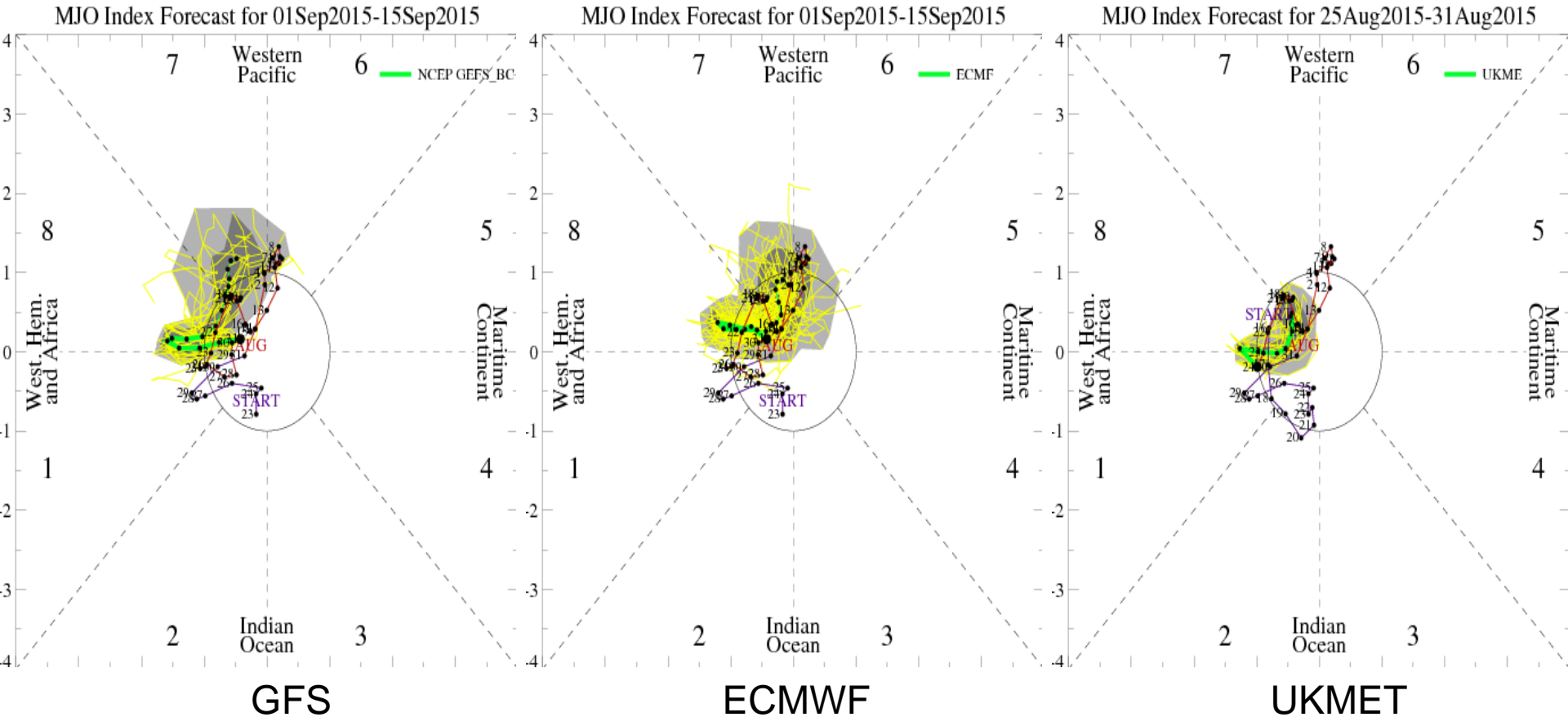
IR Satellite & 200-hpa Velocity Potential Anomalies

Green: Enhanced Divergence Brown: Enhanced Convergence

El Niño pattern
is locked into
place



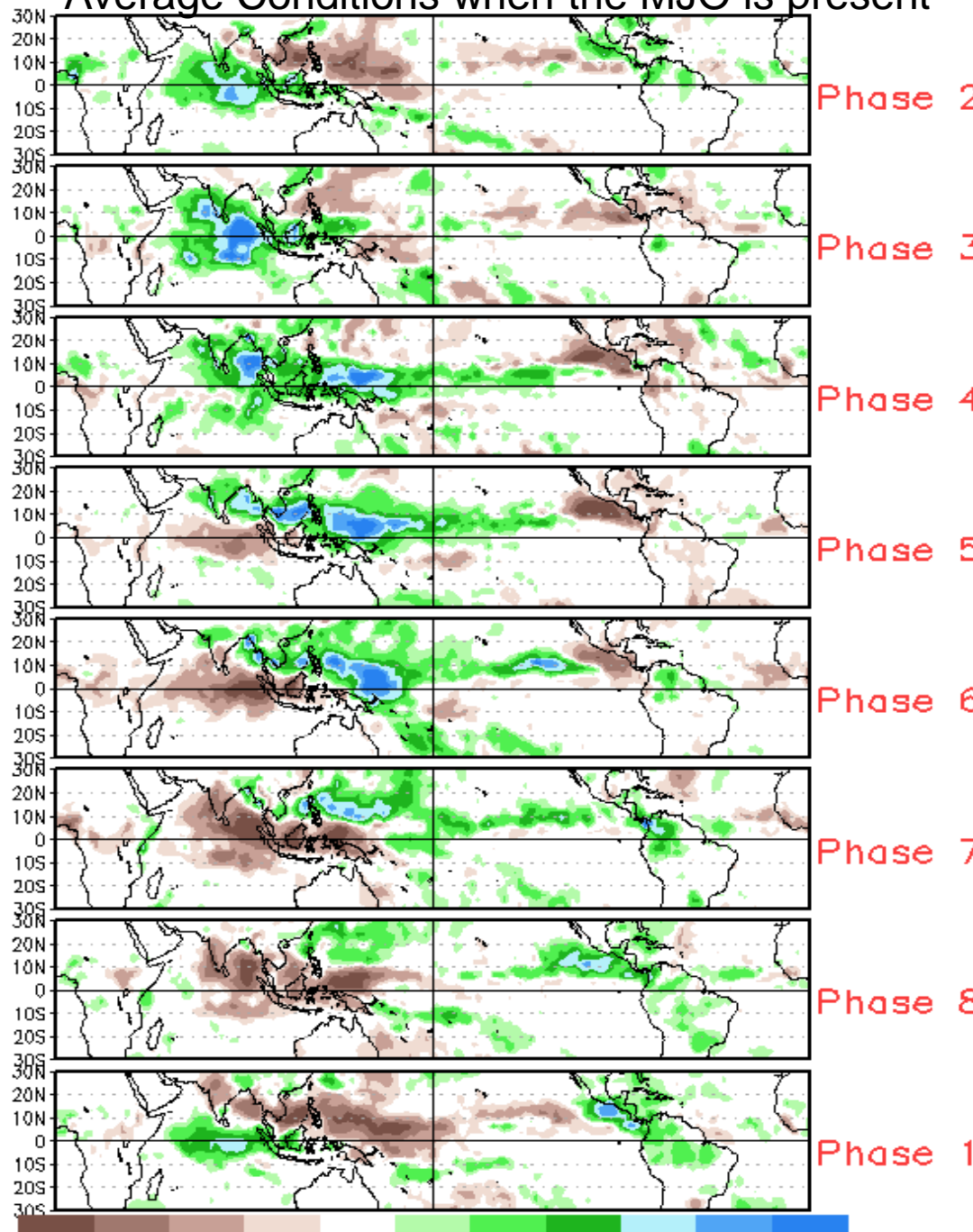
MJO Observation/Forecast



No MJO activity apparent in these RMM MJO Index forecasts.

Signal over Western Hemisphere may be related to TC activity.

Average Conditions when the MJO is present



Phase 2

Phase 3

Phase 4

Phase 5

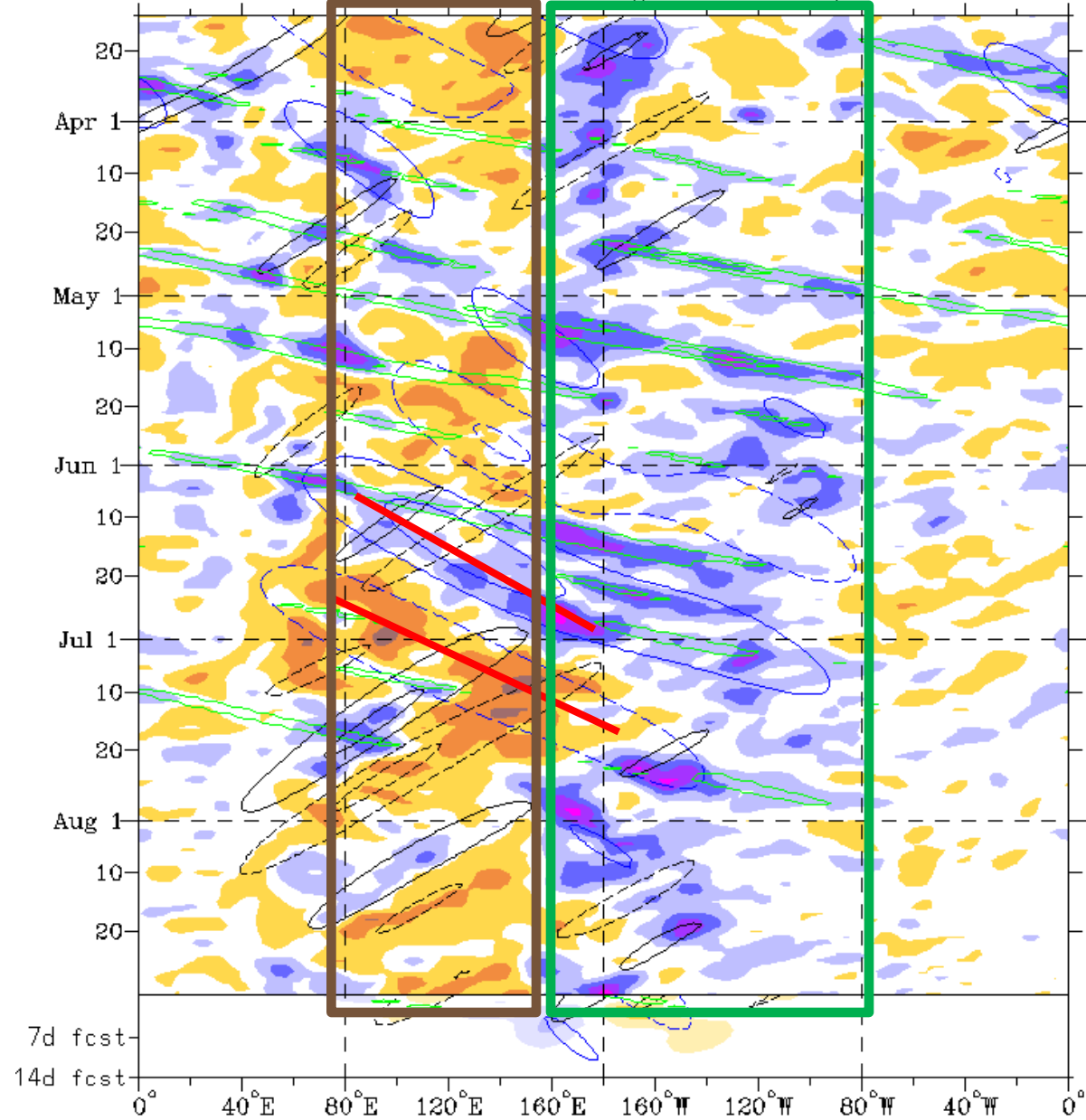
Phase 6

Phase 7

Phase 8

Phase 1

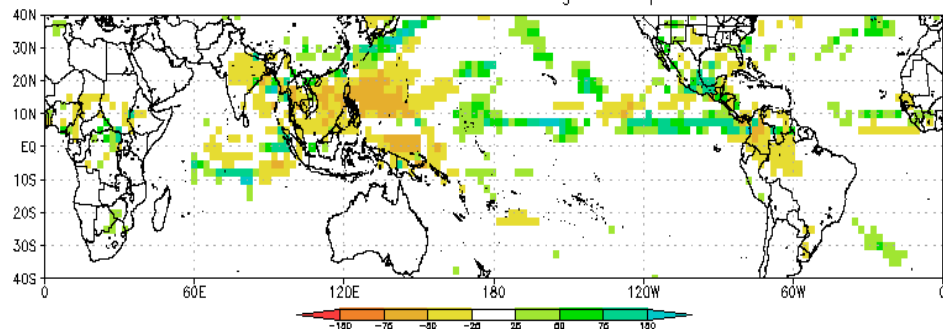
CAVEAT: These panels are representative of robust MJO events.



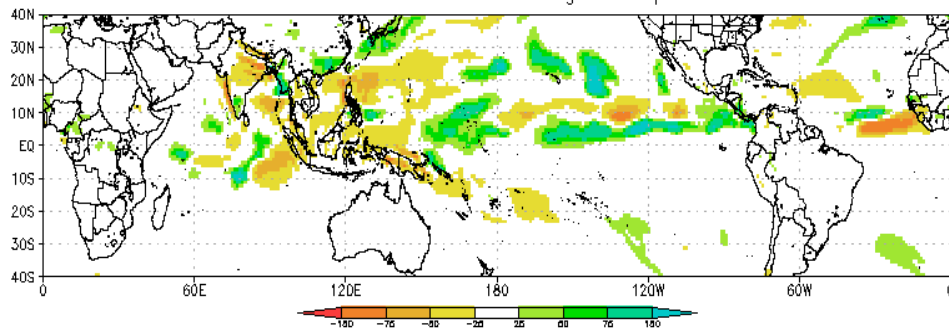
El Niño conditions are dominating the OLR pattern.

Westward moving features are TCs

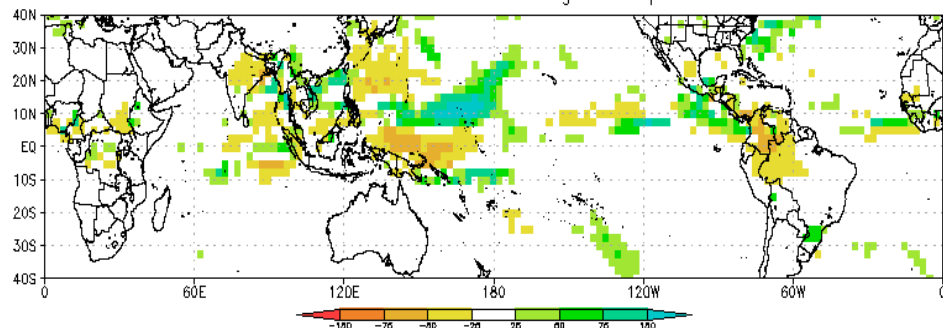
GFS Precip Anomalies (mm) Issued 01Sep2015
Week-1 Forecast Ending 08Sep2015



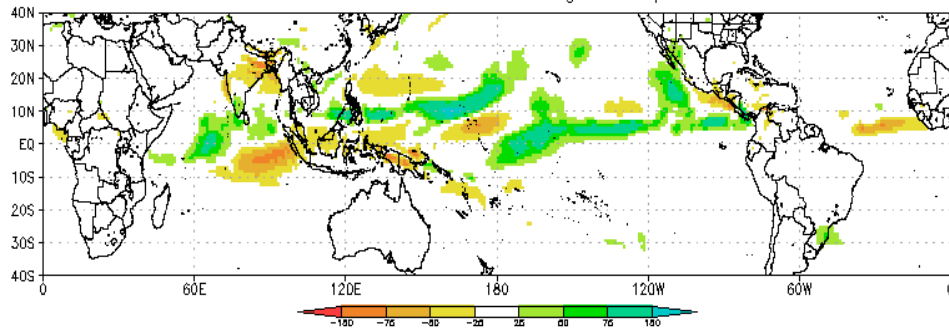
CFSv2 Precip Anomalies (mm) Issued 31Aug2015
Week-1 Forecast Ending 08Sep2015

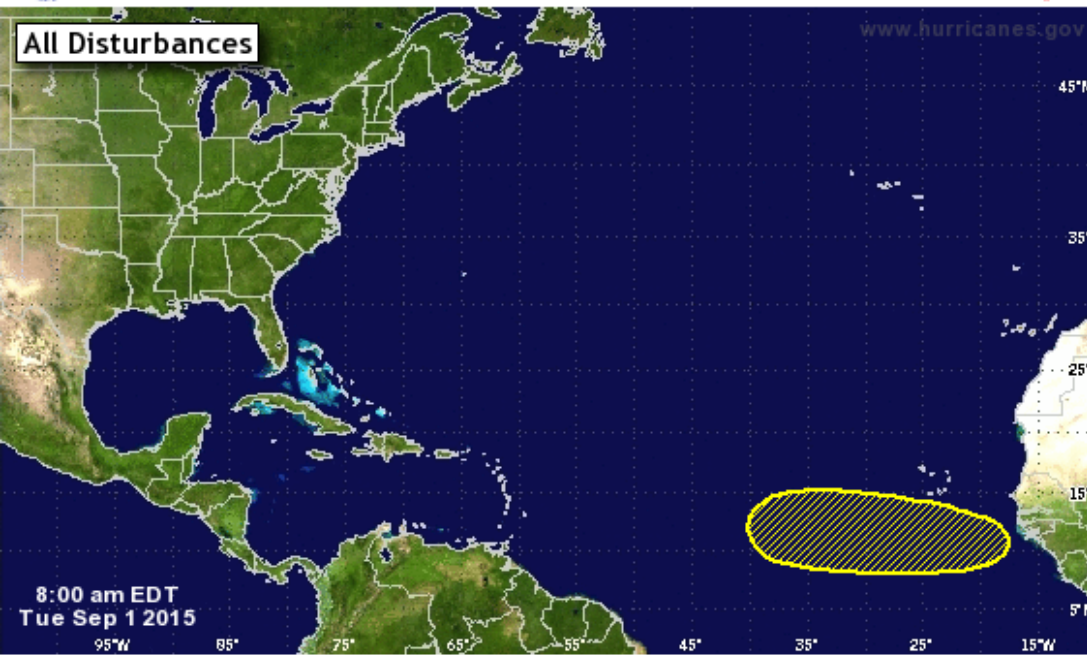


GFS Precip Anomalies (mm) Issued 01Sep2015
Week-2 Forecast Ending 15Sep2015



CFSv2 Precip Anomalies (mm) Issued 31Aug2015
Week-2 Forecast Ending 15Sep2015





8:00 am EDT
Tue Sep 1 2015

Tropical Cyclone Formation Potential for the 5-Day Period Ending 8:00 am EDT Sun Sep 6 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.

Day Graphical Tropical Weather Outlook
National Hurricane Center Miami, Florida



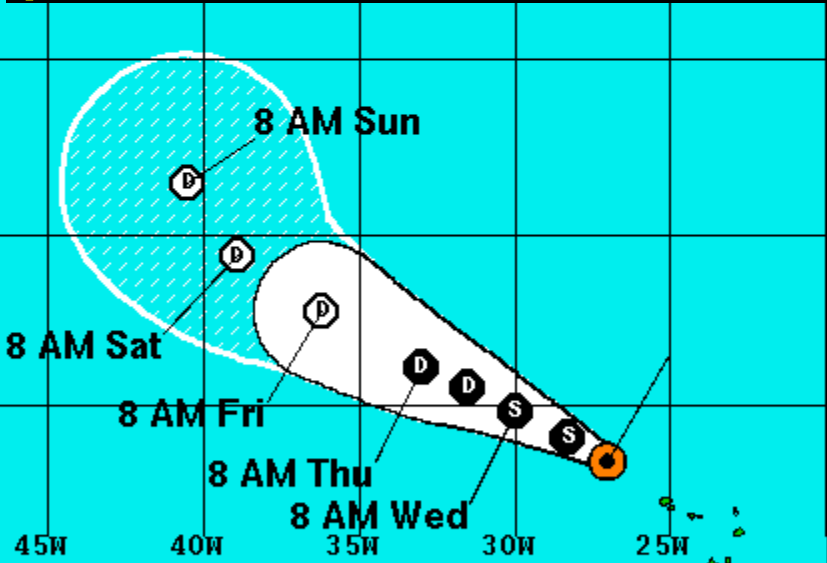
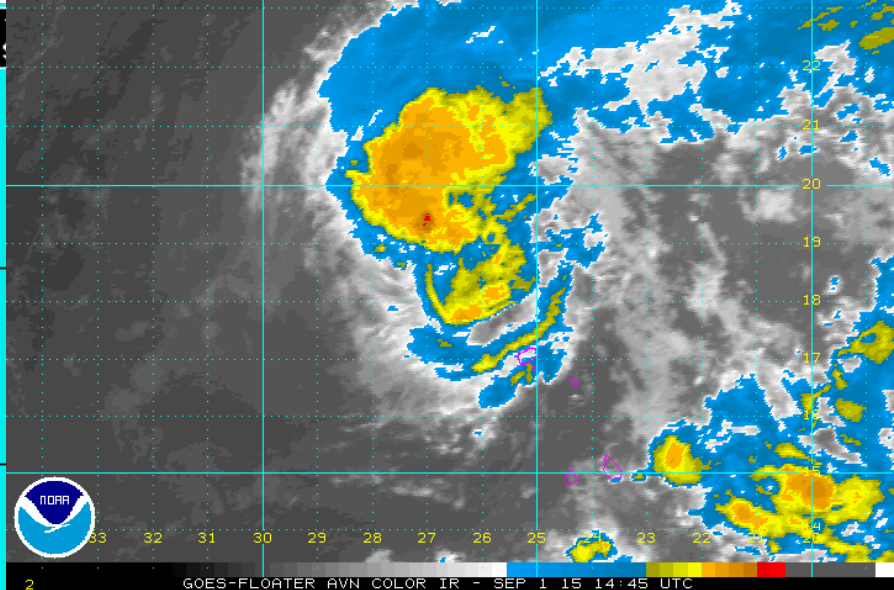
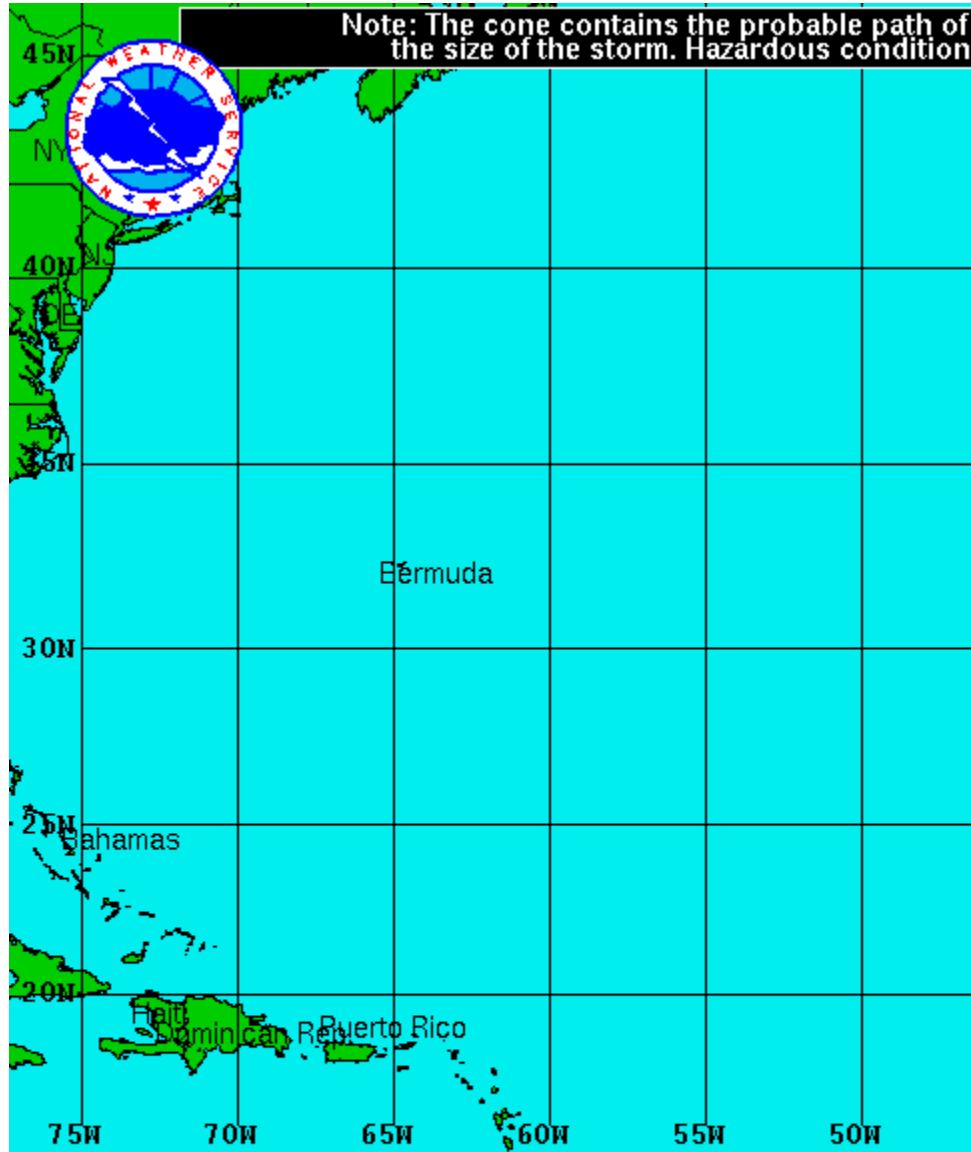
No Disturbances

No new tropical cyclones are expected during the next five days.

11:00 am PDT
Tue Sep 1 2015

Tropical Cyclone Formation Potential for the 5-Day Period Ending 11:00 am PDT Sun Sep 6 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.

Note: The cone contains the probable path of the size of the storm. Hazardous conditions:



Tropical Storm Fred
 Tuesday September 1, 2015
 11 AM EDT Advisory 11
 NWS National Hurricane Center

Current Information: ●
 Center Location 18.3 N 27.0 W
 Max Sustained Wind 50 mph
 Movement WNW at 10 mph

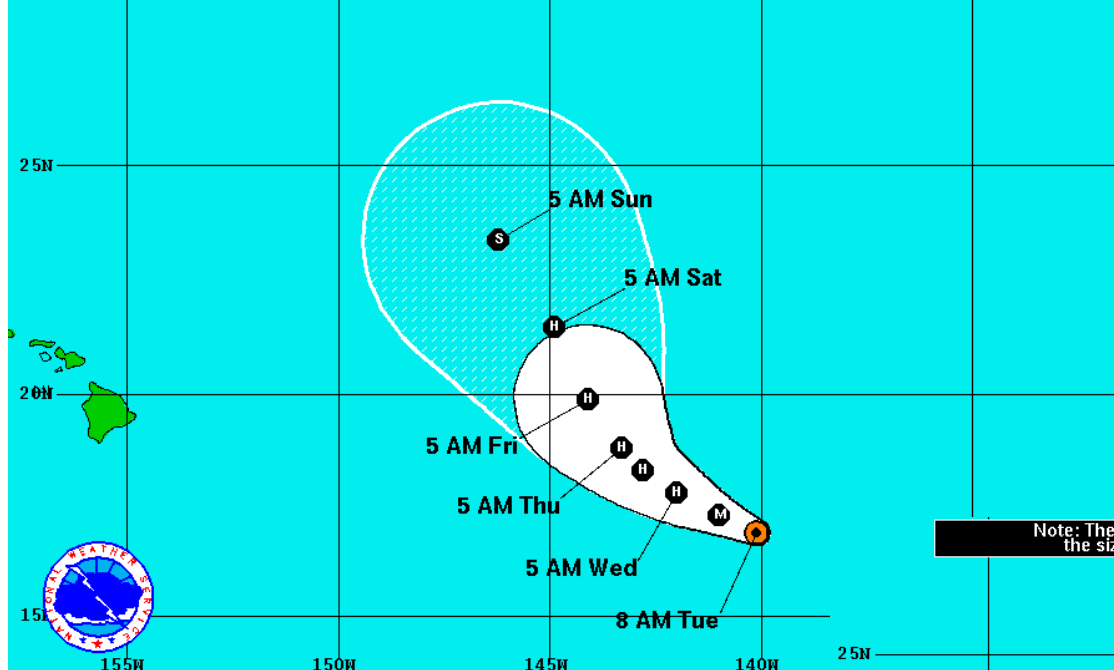
Forecast Positions:
 ● Tropical Cyclone ○ Post-Tropical
 Sustained Winds: D < 39 mph
 S 39-73 mph H 74-110 mph M > 110mph

Potential Track Area:
 [White Cone] Day 1-3 [Hatched Cone] Day 4-5

Watches:
 [Pink Box] Hurricane [Yellow Box] Trop.Storm

Warnings:
 [Red Box] Hurricane [Blue Box] Trop.Storm

Note: The cone contains the probable path of the storm center but does not show the size of the storm. Hazardous conditions can occur outside of the cone.



Hurricane Jimena
 Tuesday September 1, 2015
 8 AM PDT Advisory 24
 NWS National Hurricane Center

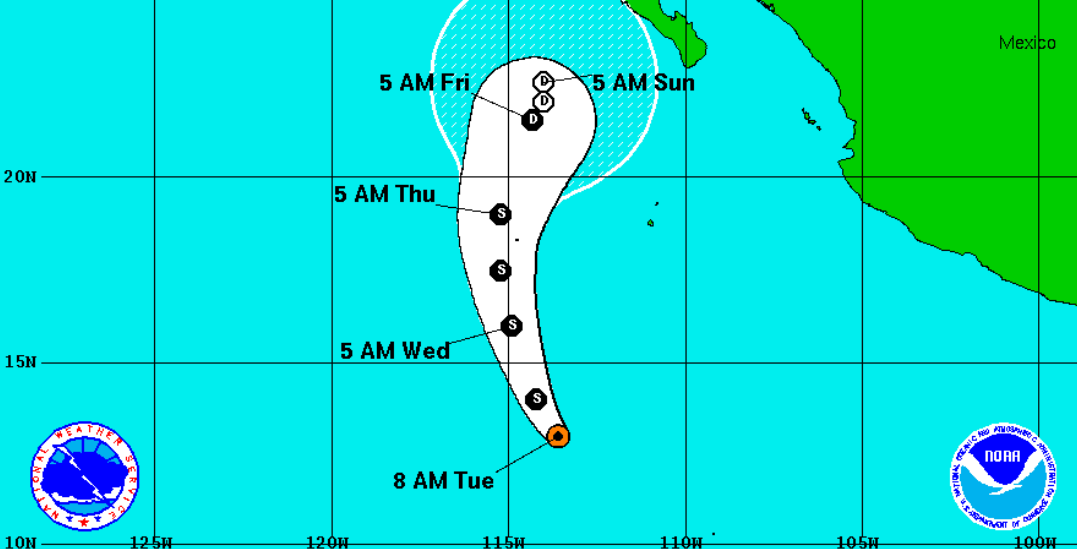
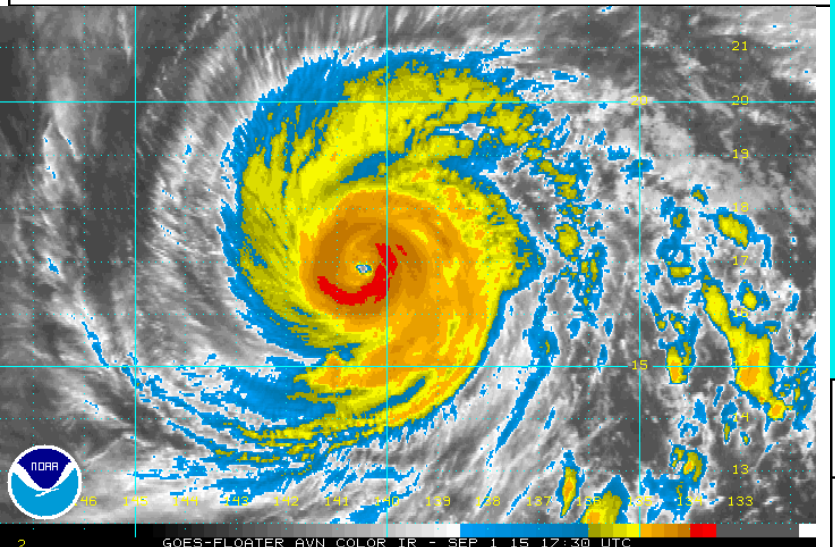
Current Information: ●
 Center Location 16.9 N 140.1 W
 Max Sustained Wind 120 mph
 Movement WNW at 10 mph

Forecast: ● Tropical Storm
 Sustained Winds: S 39-73 mph

Potential Track Area:
 Day 1-3 Day 4-5

Watches:
 Hurricane Trop. Storm

Warnings:
 Hurricane



Tropical Depression Fourteen-E
 Tuesday September 1, 2015
 8 AM PDT Advisory 4
 NWS National Hurricane Center

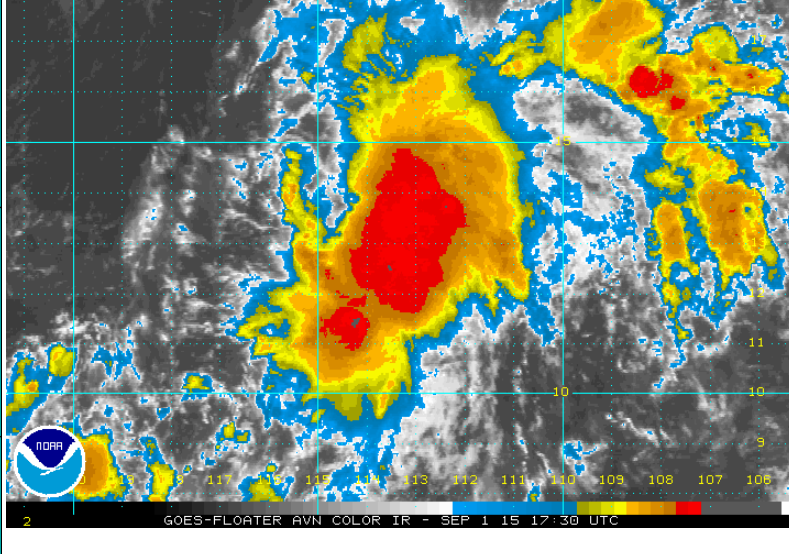
Current Information: ●
 Center Location 13.0 N 113.6 W
 Max Sustained Wind 35 mph
 Movement NNW at 8 mph

Forecast Positions: ● Tropical Cyclone ○ Post-Tropical
 Sustained Winds: D < 39 mph
 S 39-73 mph H 74-110 mph M > 110mph

Potential Track Area:
 Day 1-3 Day 4-5

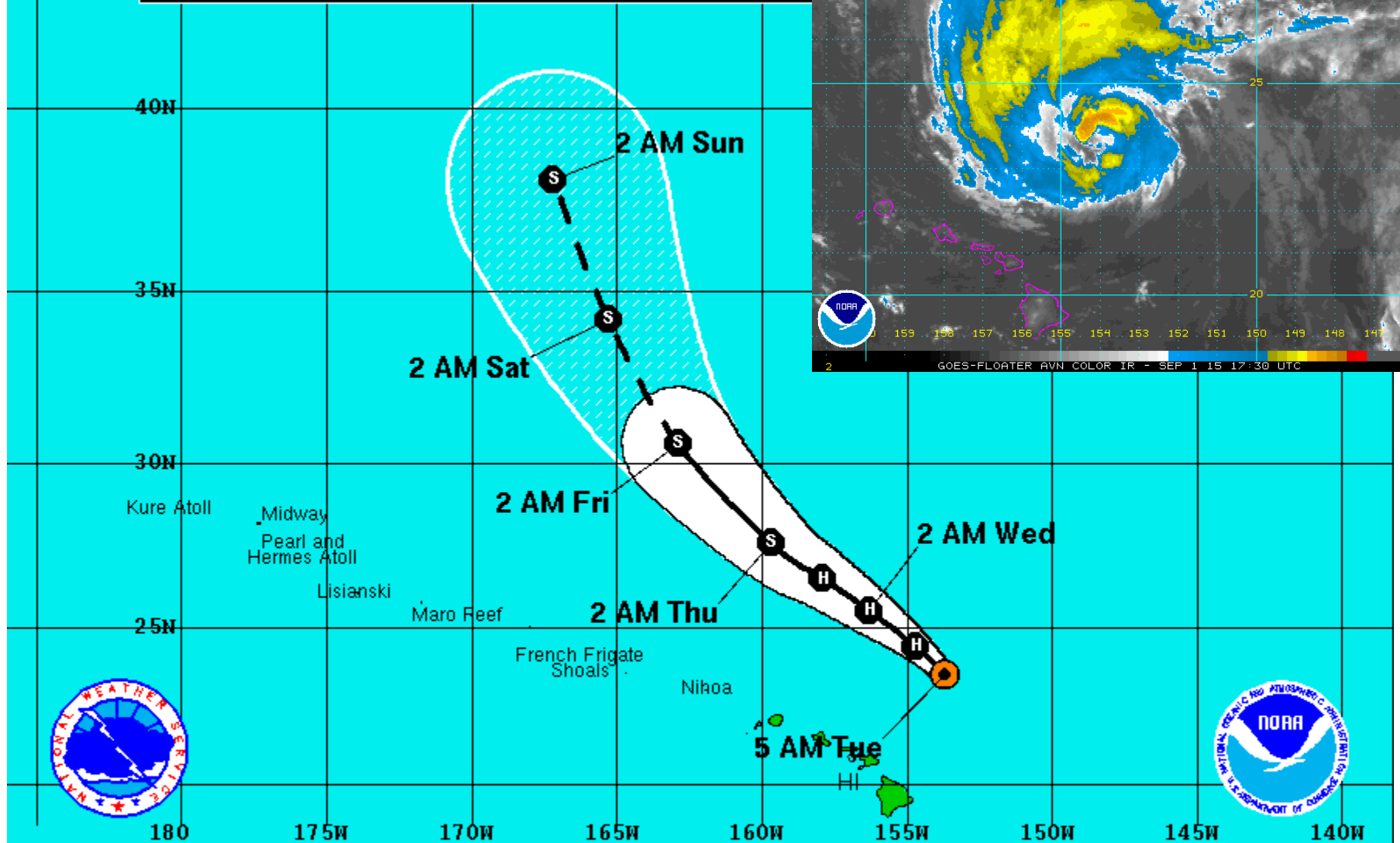
Watches:
 Hurricane Trop. Storm

Warnings:
 Hurricane Trop. Storm






Note: The cone contains the probable path of the storm center but does not show the size of the storm. Hazardous conditions can occur outside of the cone.

Note: The cone contains the probable path of the storm. Hazardous conditions can



Hurricane Ignacio
 Tuesday September 1, 2015
 5 AM HST Advisory 31
 NWS Central Pacific Hurricane Center

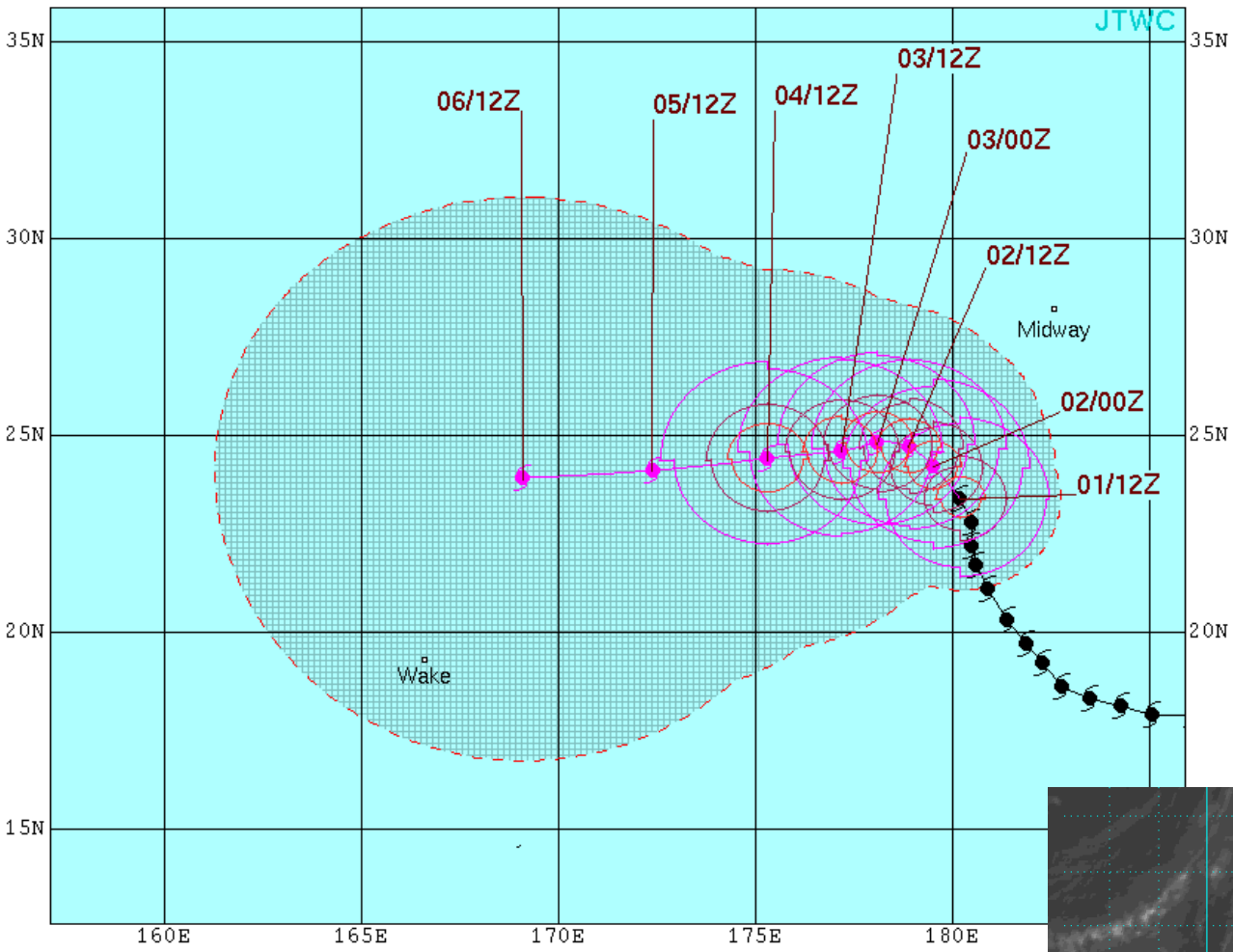
Current Information: 
 Center Location 23.5 N 153.7 W
 Max Sustained Wind 80 mph
 Movement NW at 10 mph

Forecast Positions:
 Tropical Cyclone  Post-Tropical
 Sustained Winds: D < 39 mph
 S 39-73 mph H 74-110 mph M > 110mph

Potential Track Area:
 Day 1-3  Day 4-5

Watches:
 Hurricane  Trop.Storm

Warnings:
 Hurricane  Trop.Storm



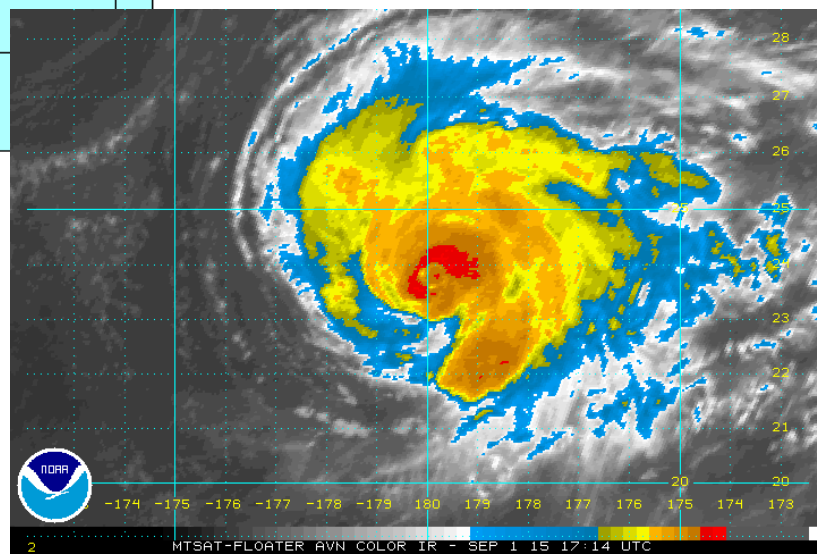
TYPHOON 03C (KILO) WARNING #48
 WTPN31 PGTW 011500
 011200Z POSIT: NEAR 23.4N 179.8W
 MOVING 335 DEGREES TRUE AT 07 KNOTS
 MAXIMUM SIGNIFICANT WAVE HEIGHT: 40 FEET

01/12Z,	WINDS 100 KTS,	GUSTS TO 125 KTS
02/00Z,	WINDS 100 KTS,	GUSTS TO 125 KTS
02/12Z,	WINDS 100 KTS,	GUSTS TO 125 KTS
03/00Z,	WINDS 105 KTS,	GUSTS TO 130 KTS
03/12Z,	WINDS 115 KTS,	GUSTS TO 140 KTS
04/12Z,	WINDS 125 KTS,	GUSTS TO 150 KTS
05/12Z,	WINDS 125 KTS,	GUSTS TO 150 KTS
06/12Z,	WINDS 125 KTS,	GUSTS TO 150 KTS

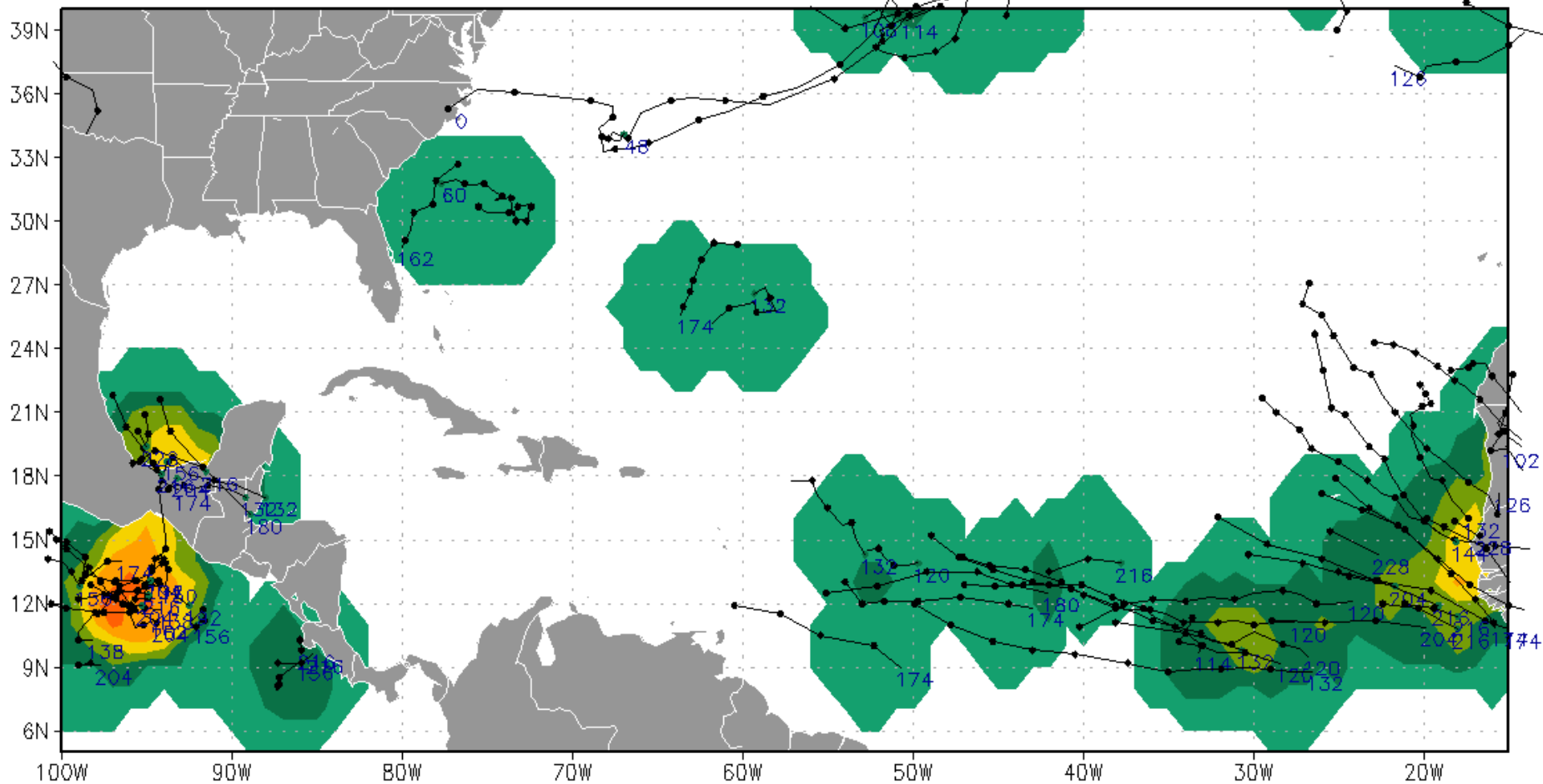
CPA TO:	NM	DTG
MIDWAY_ISLAND	292	02/09Z
WAKE	309	06/12Z

BEARING AND DISTANCE	DIR	DIST	TAU
		(NM)	(HRS)
MIDWAY_ISLAND	223	293	24

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

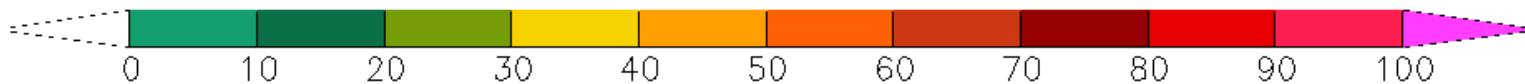


NCEP Ensemble-based Probability (%) of TC genesis for forecasts during the 120–240h period from initial time = 2015090100

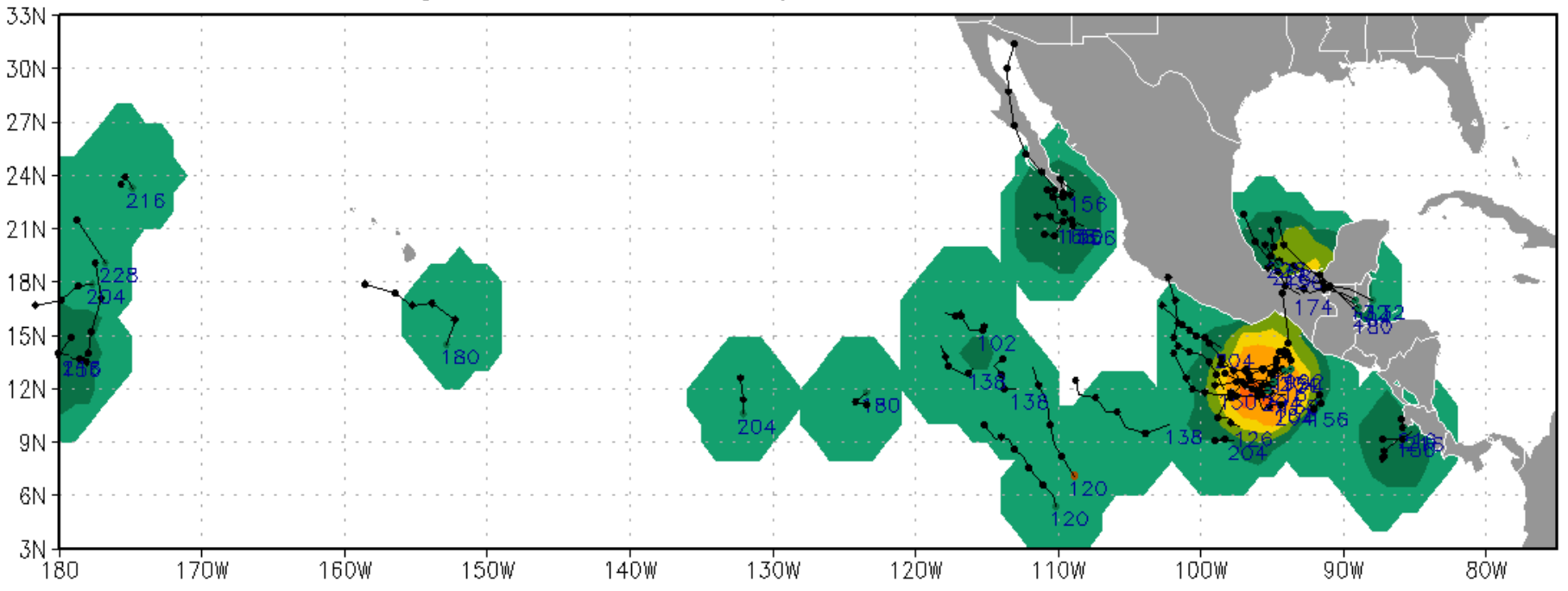


● = position at 00 or 12 UTC

Forecast hour shown at beginning of each track
is first lead time the storm was detected in model



NCEP Ensemble-based Probability (%) of TC genesis for forecasts during the 120–240h period from initial time = 2015090100

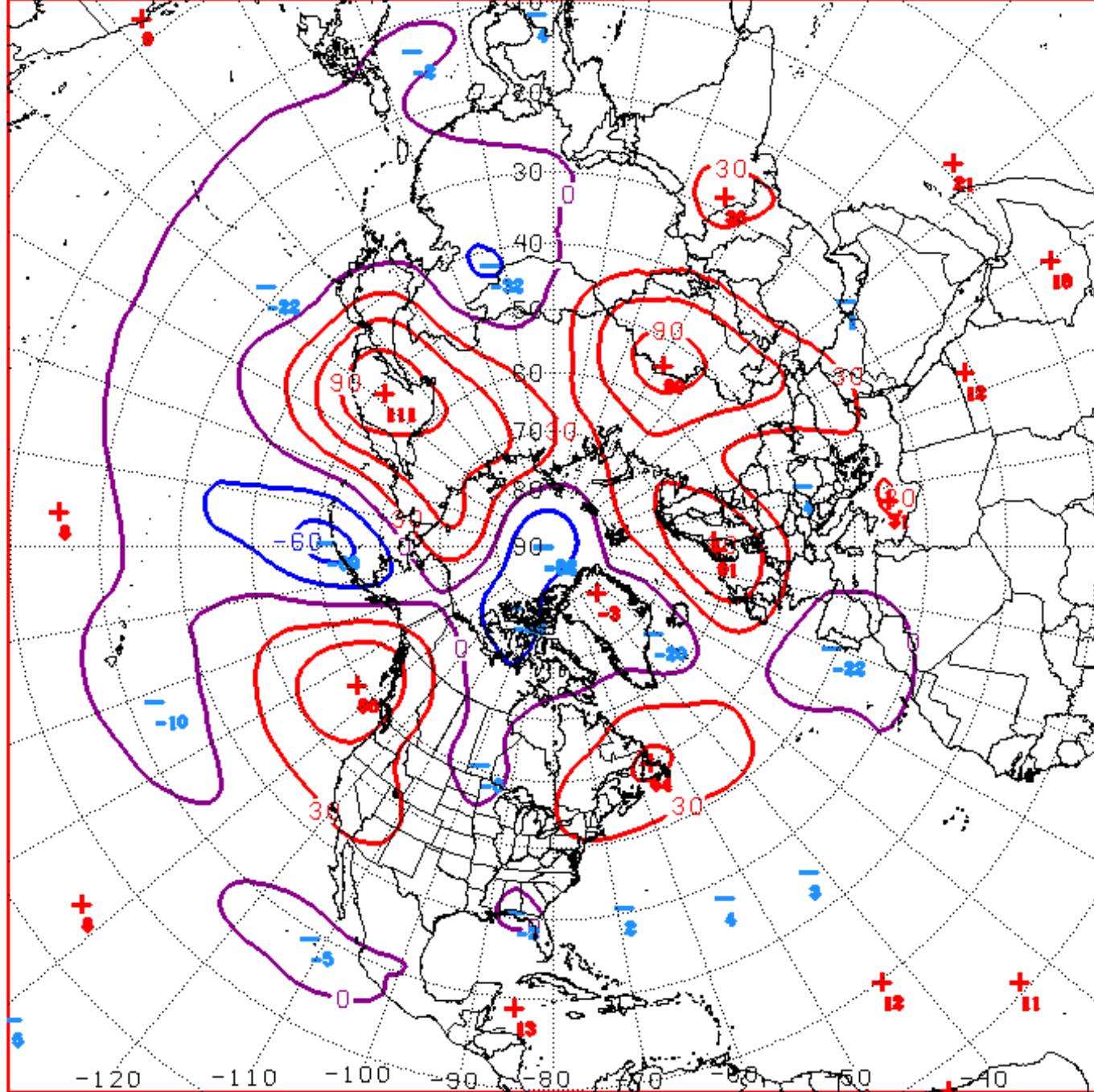


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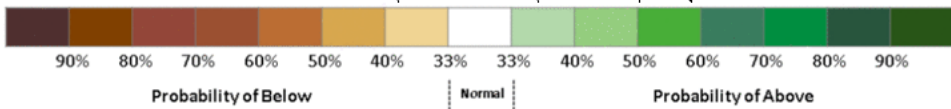
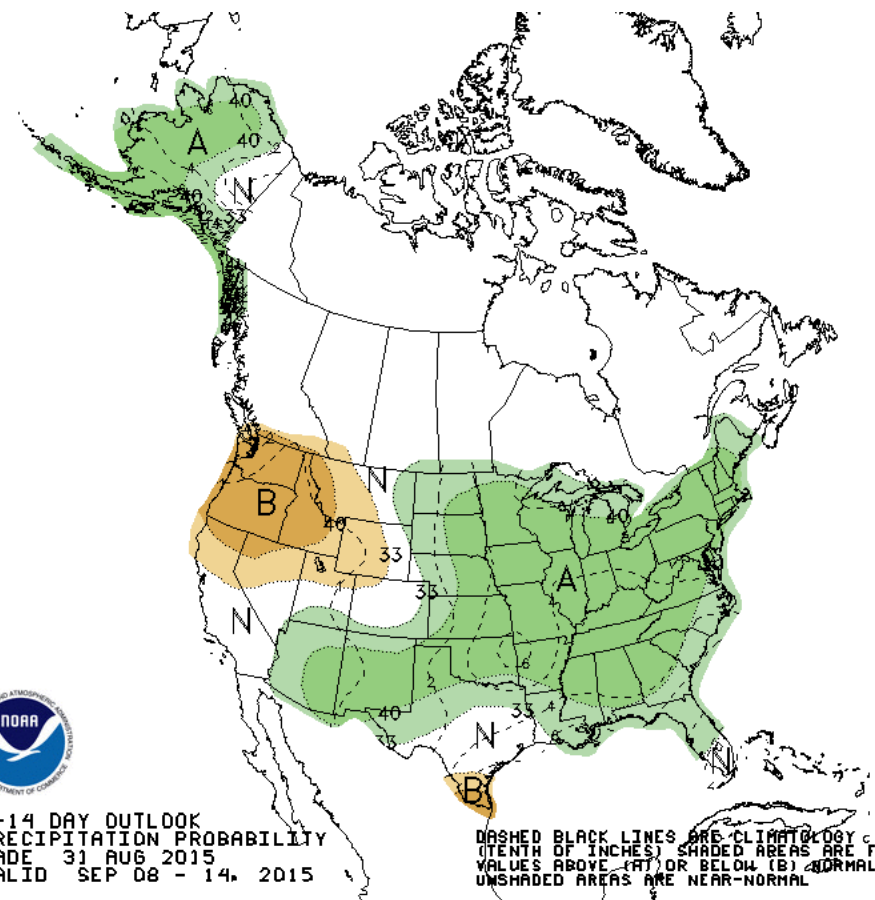
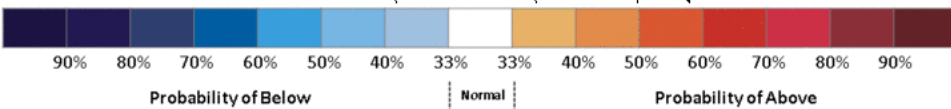
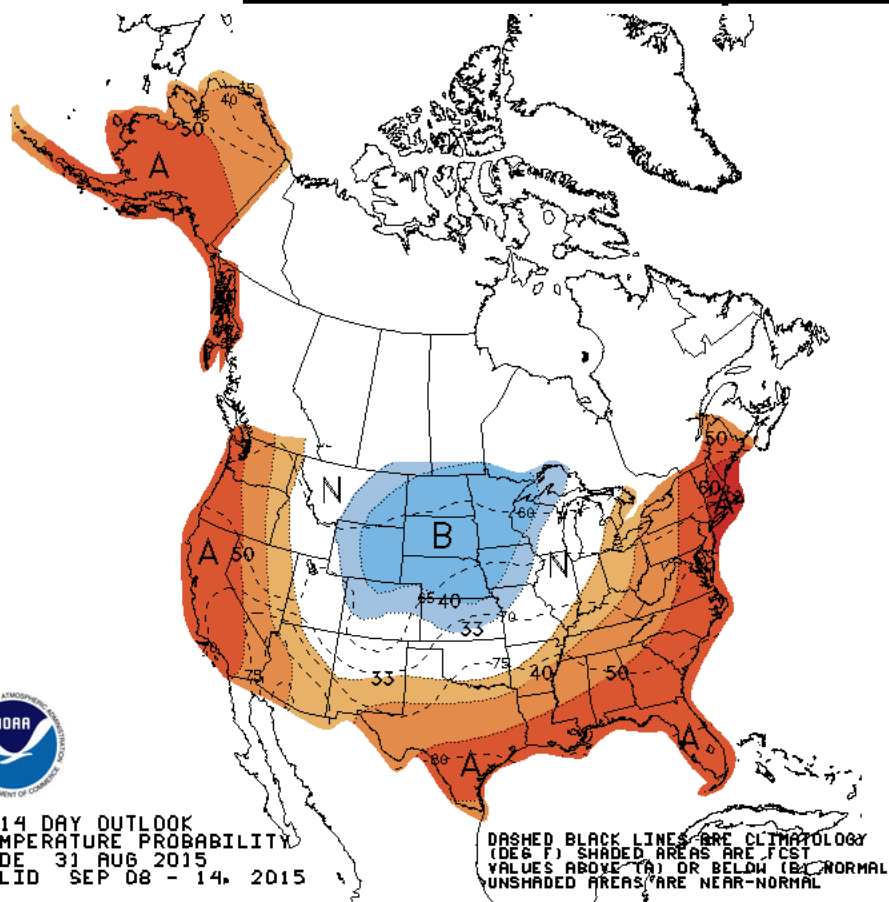


Connections to U.S. Impacts



D+11 500 MB ANOMALIES FROM 00Z ECMM
 CPC MAP MADE SEP 01 2015 0957 UTC CNTD SEP 12 2015

Week 2 – Temperature and Precipitation

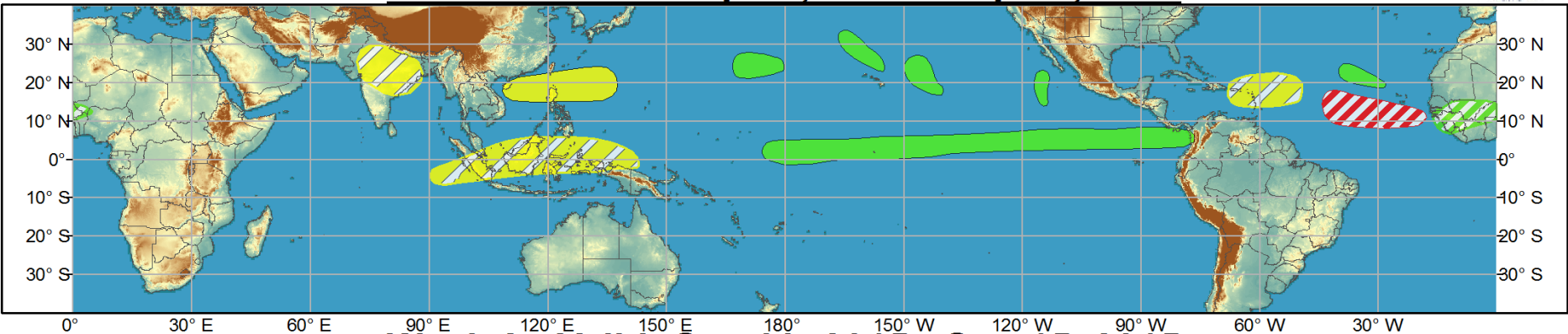




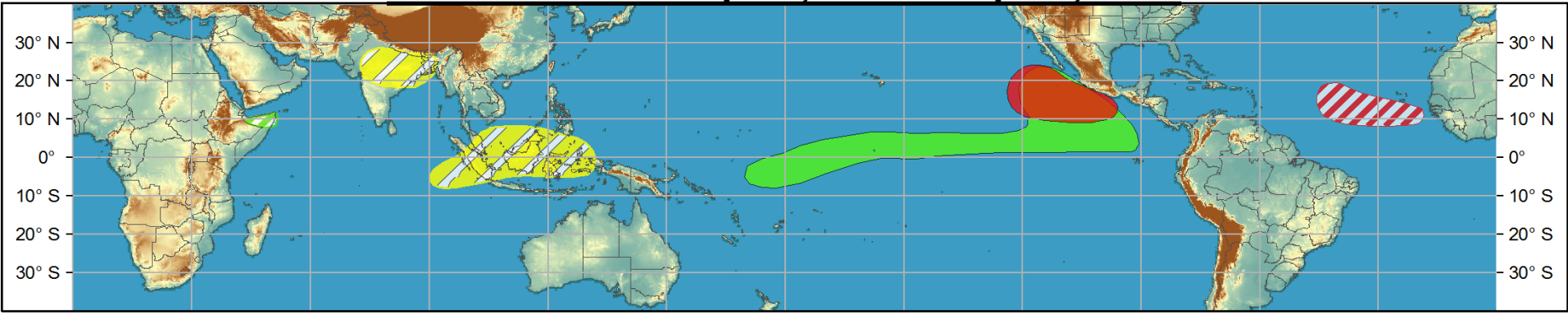
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- Above-normal temperatures**
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