

Global Tropics Hazards And Benefits Outlook

11/7/2017

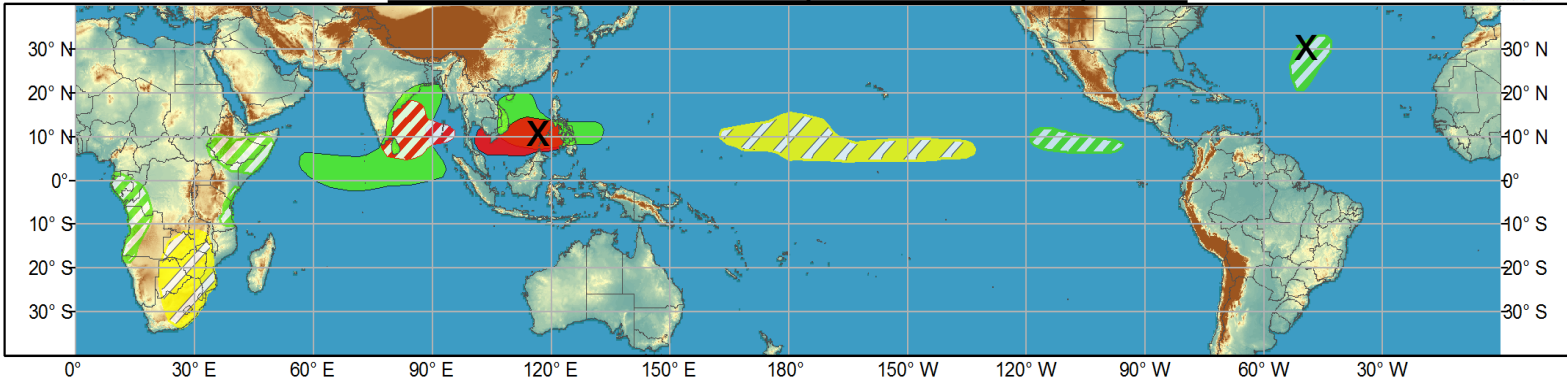
Brad Pugh

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: Nov 01, 2017 - Nov 07, 2017

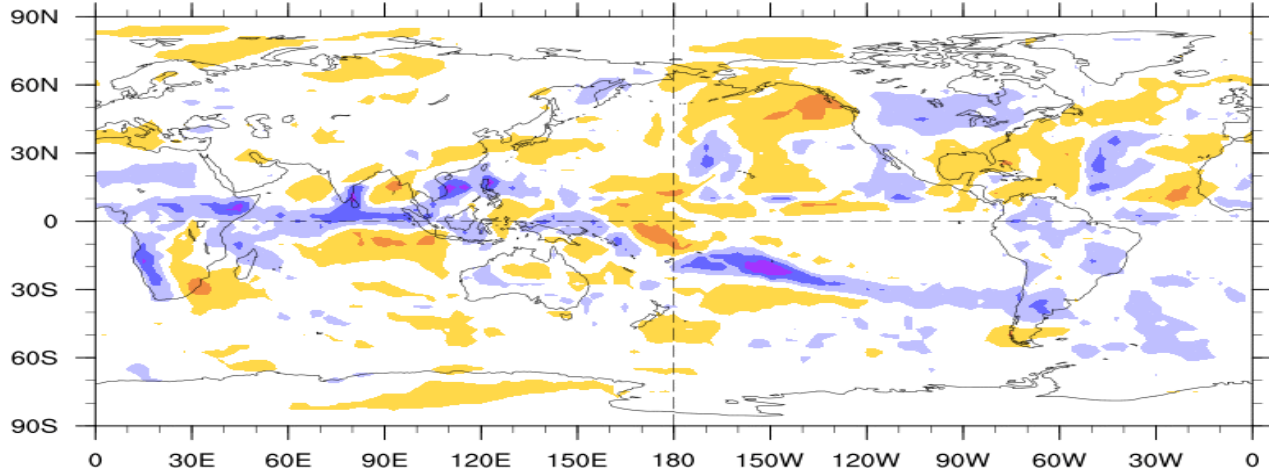


Week 2 - Valid: Nov 01, 2017 - Nov 07, 2017



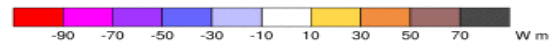
7-Day Average OLR Anomaly

Deadwood: 10/31/2017
2017/10/30 - 2017/11/05



NOAA/ESRL/PSD

Base Period: 1981-2010



Cool shading
More clouds/rain

Warm shading
Less clouds/rain

Synopsis of Climate Modes

ENSO:

- Increasing chance (~55-60%) of La Nina during the Northern Hemisphere fall and winter 2017-18.

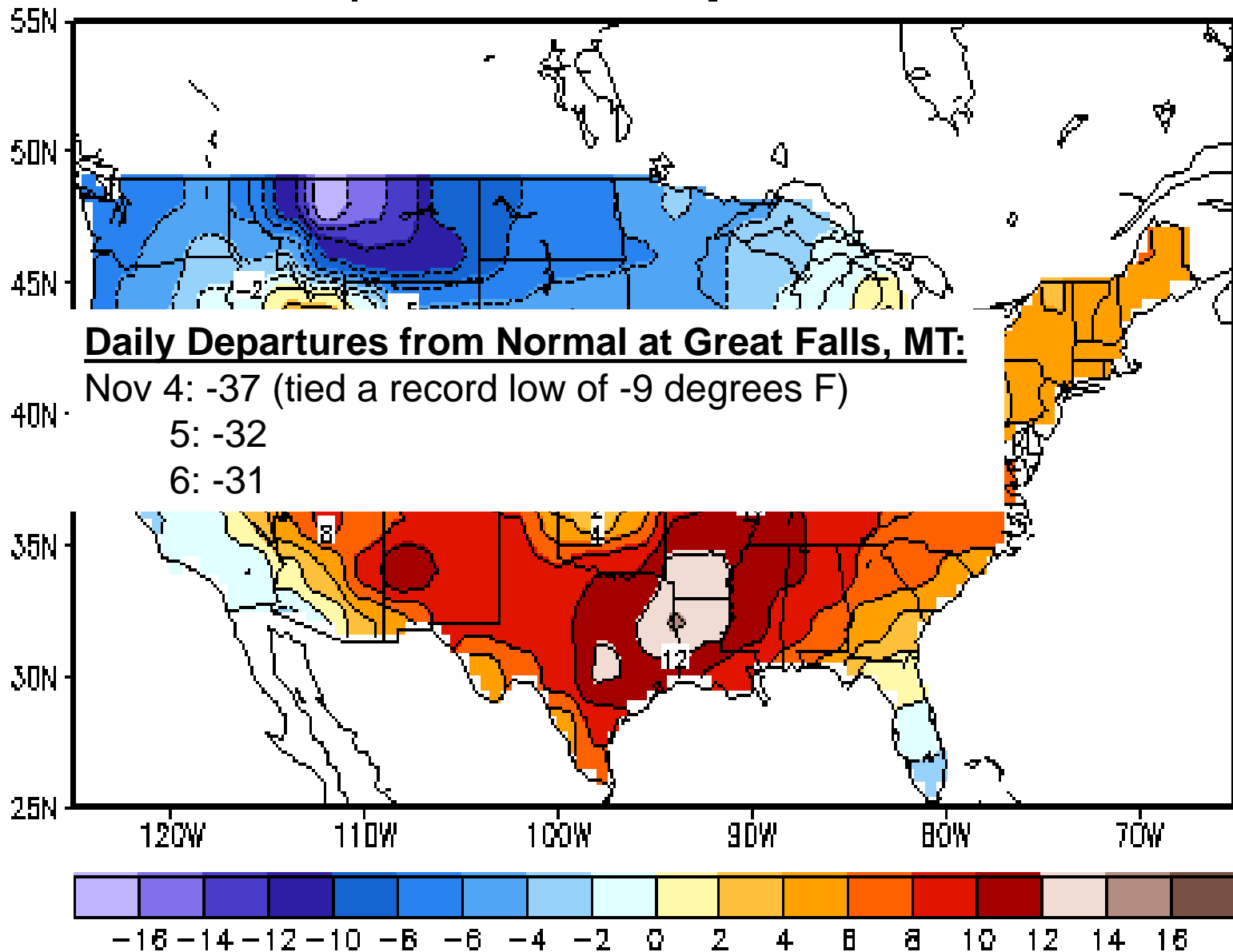
MJO and other subseasonal tropical variability:

- The MJO weakened since late October with a remnant enhance phase entering the Indian Ocean.
- The preferred ECMWF model indicates a continued weakening and the latest GFS/Canadian models are converging on this solution.
- Tropical cyclones and the base state are likely to be the major contributors.

Extratropics:

- The much below-normal temperatures that were observed across the northern Rockies and northern Plains during the first week of November is consistent with the enhanced phase of the MJO over the west Pacific two weeks ago.

Mean Temp (F) Anomaly 5-day mean ending Nov 05 2017

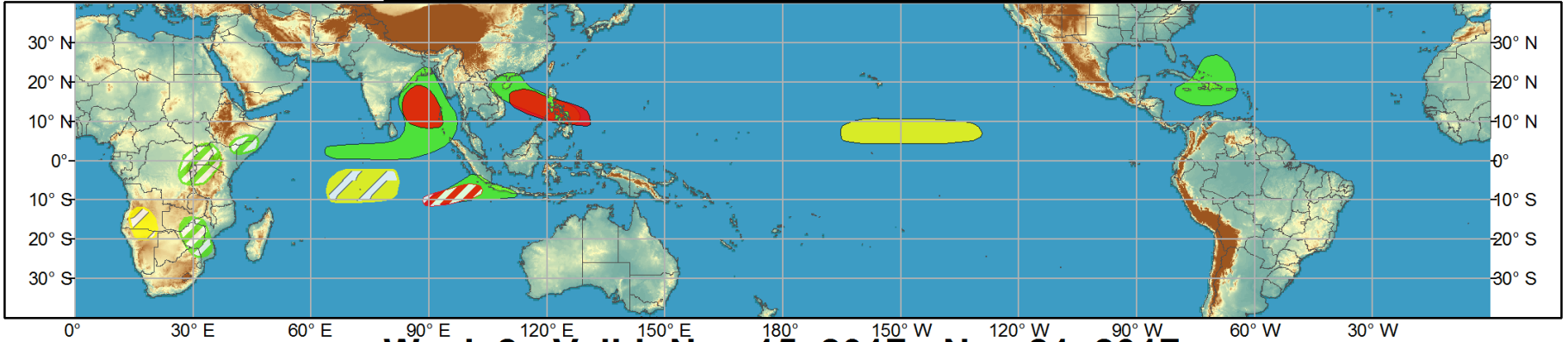




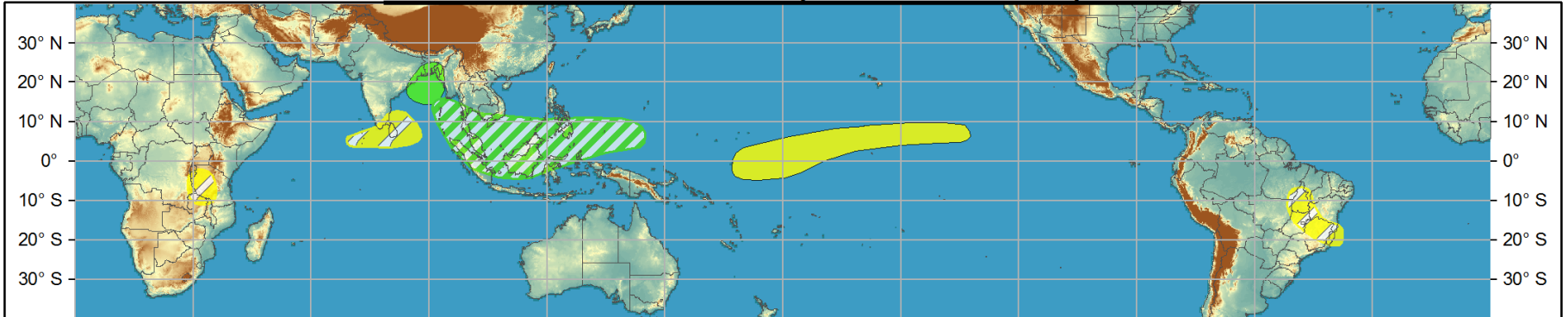
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Nov 08, 2017 - Nov 14, 2017



Week 2 - Valid: Nov 15, 2017 - Nov 21, 2017



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: 11/07/2017
Forecaster: Pugh

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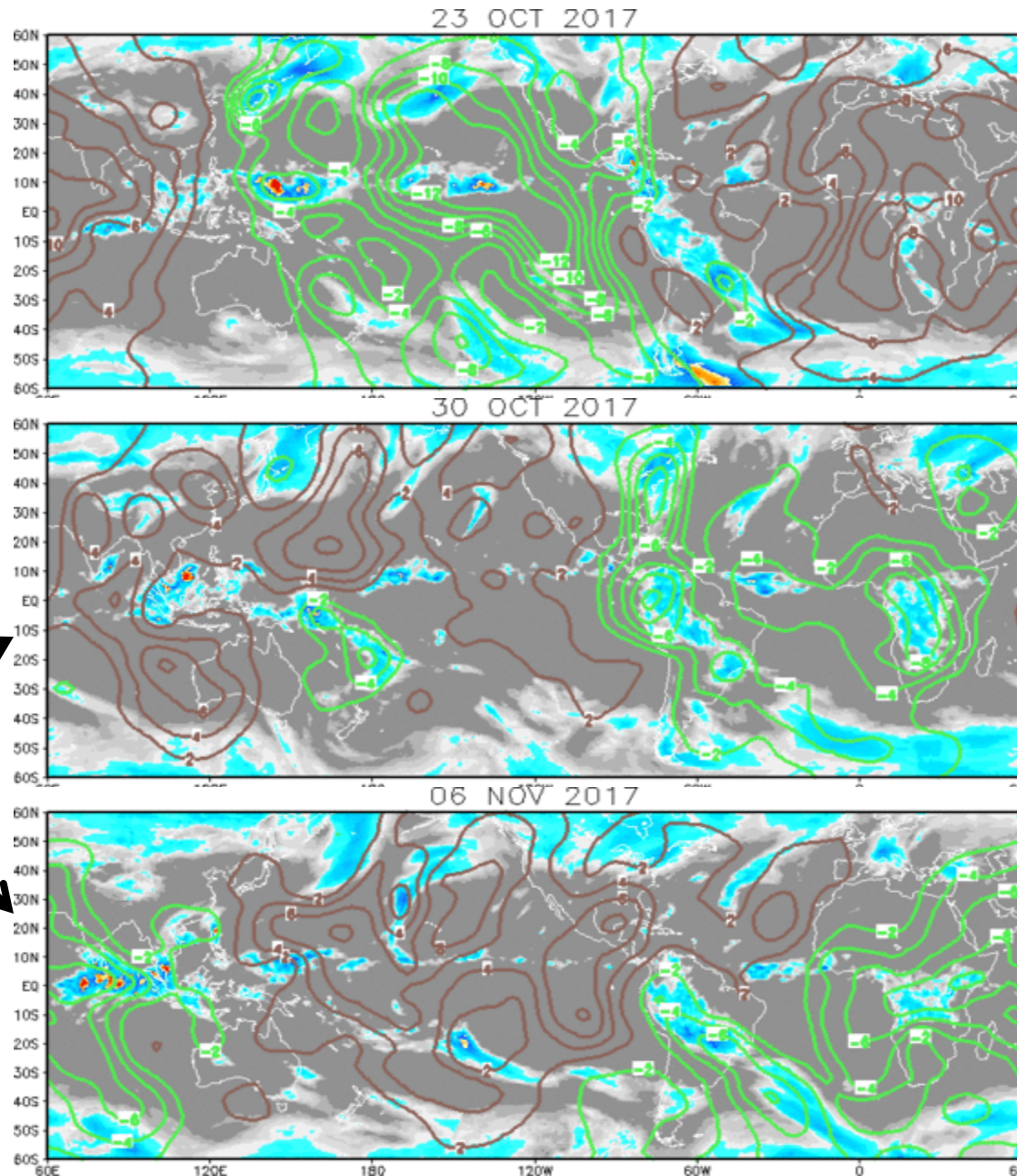
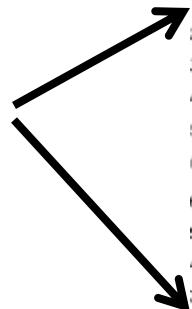
IR Satellite & 200-hpa Velocity Potential Anomalies

Green: Enhanced Divergence

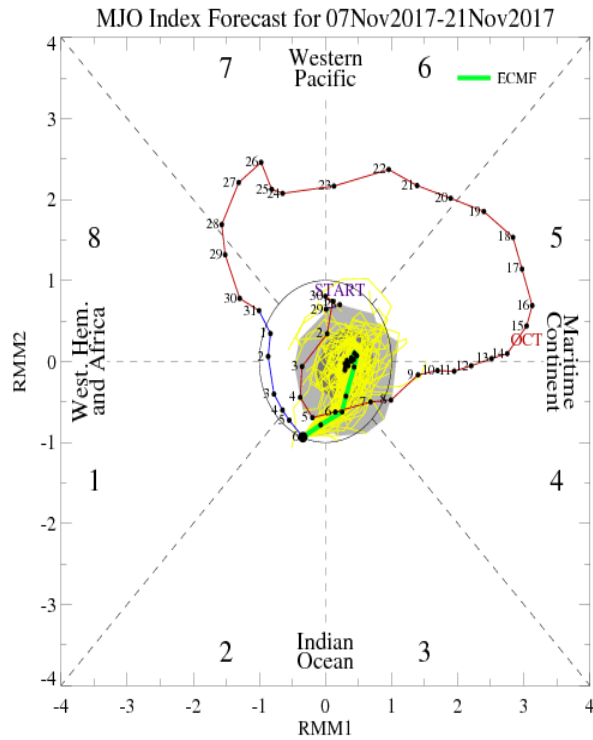
Brown: Enhanced Convergence

Wave-1 with a moderate/strong MJO projection.

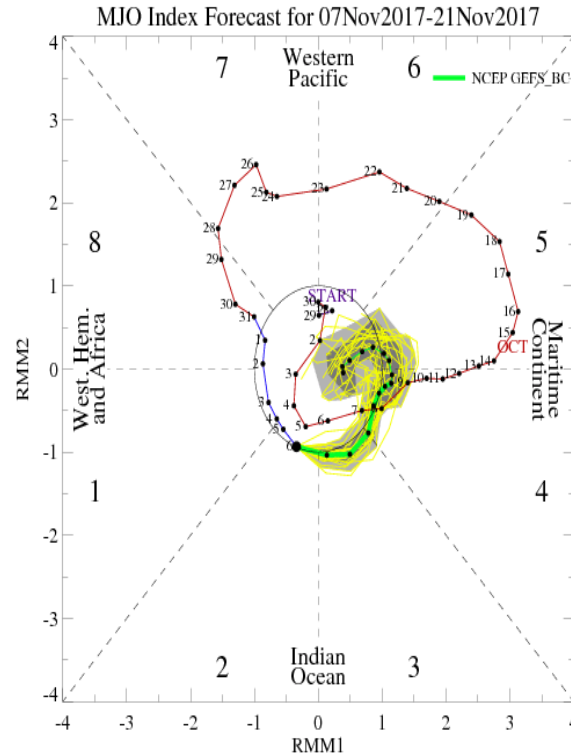
Wave-1 but anomalies are smaller and more regional.



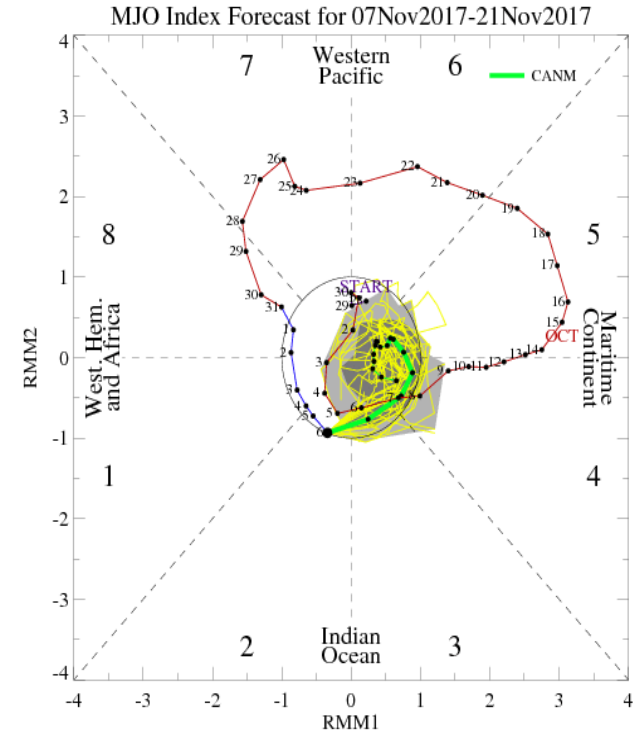
MJO Observation/Forecast



ECMWF



GEFS

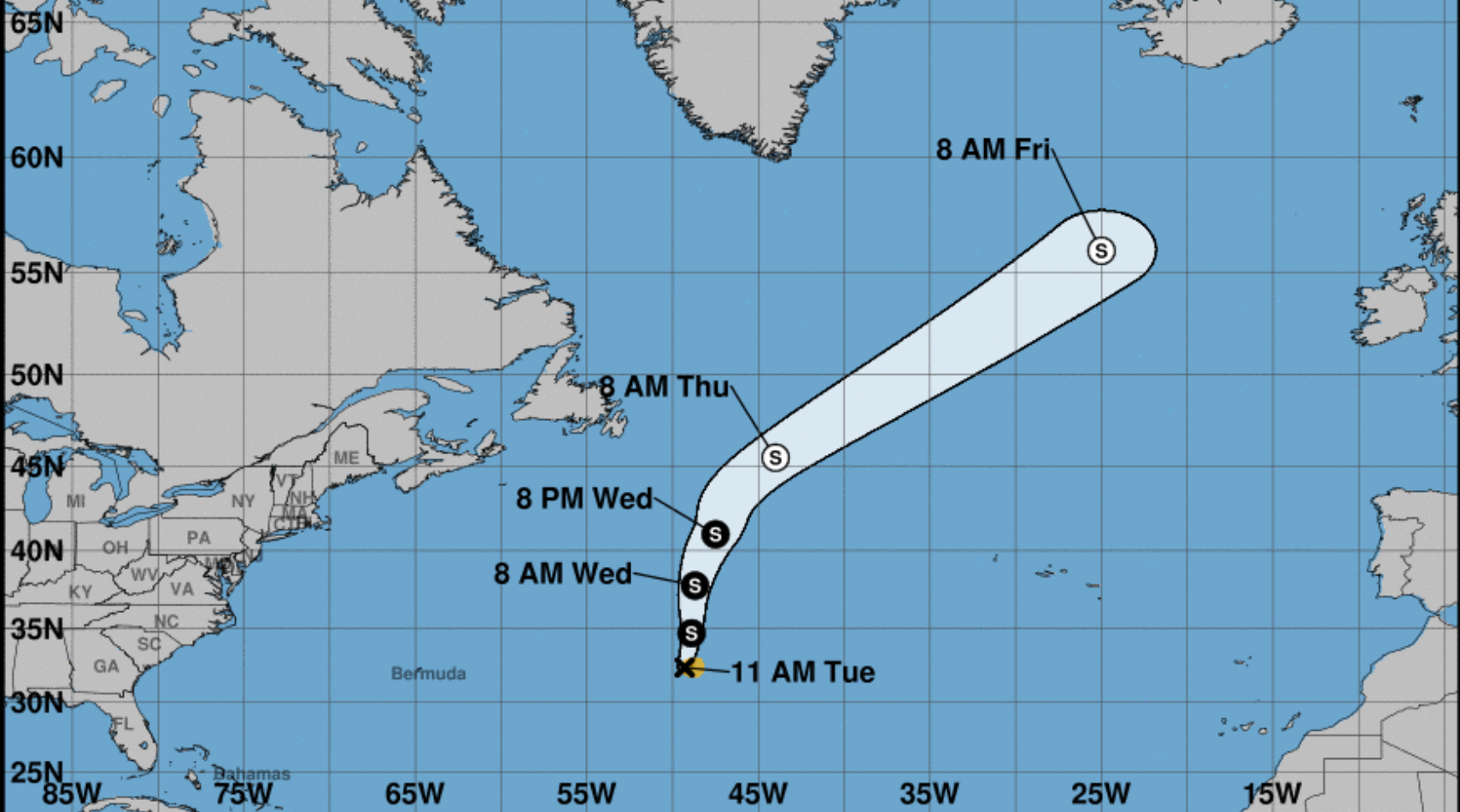


Canadian

The GEFS and Canadian models have trended towards the ECMWF solution with a continued decay of the MJO signal during Week-1.



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.



Tropical Storm Rina
 Tuesday November 07, 2017
 11 AM AST Advisory 6
 NWS National Hurricane Center

Current information: x
 Center location 32.4 N 49.3 W
 Maximum sustained wind 40 mph
 Movement N at 15 mph

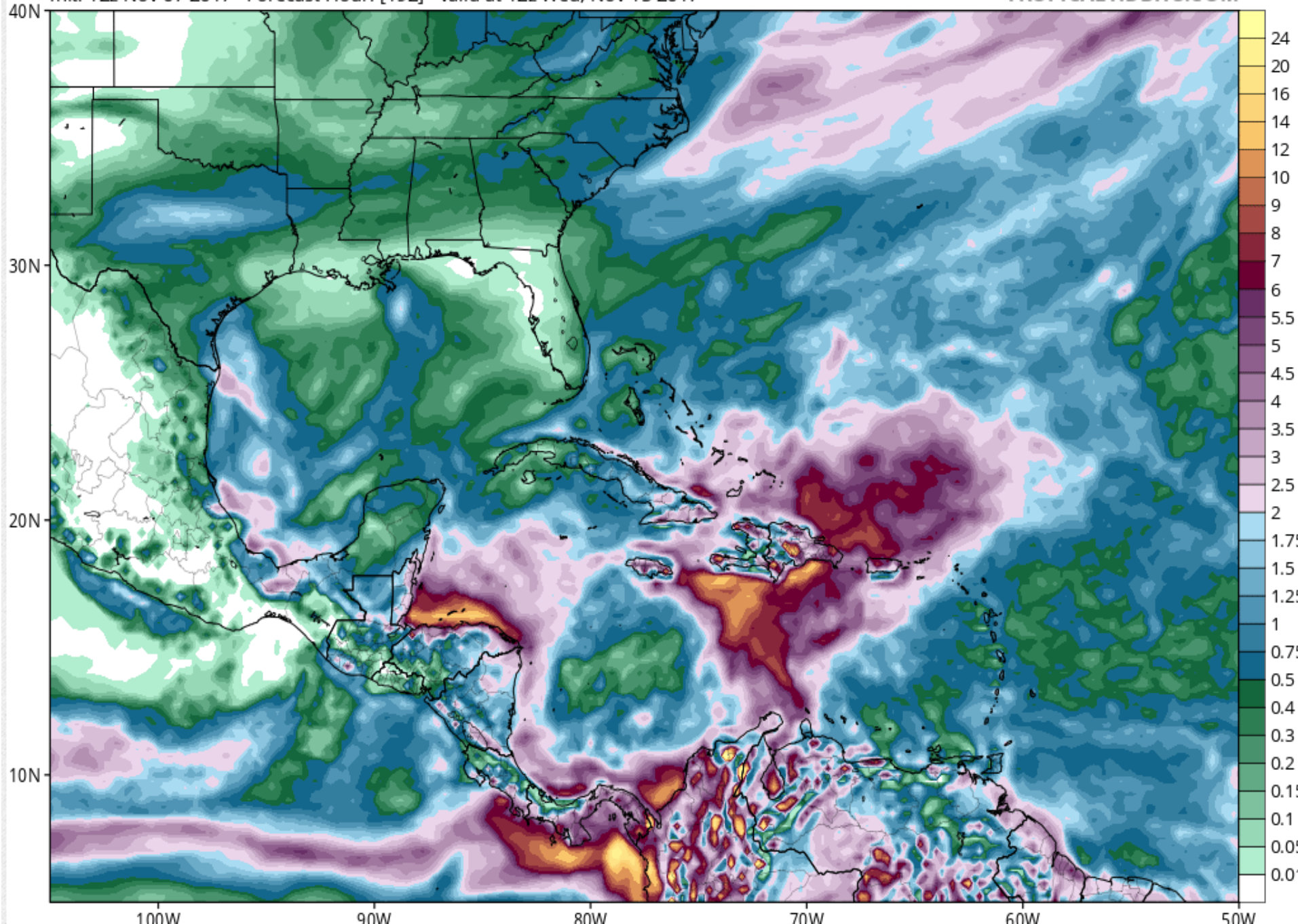
Forecast positions:
 ● Tropical Cyclone ○ Post/Potential TC
 Sustained winds: D < 39 mph
 S 39-73 mph H 74-110 mph M > 110 mph

Potential track area:	Watches:	Warnings:	Current wind extent:
Day 1-3 Day 4-5	Hurricane Trop Stm	Hurricane Trop Stm	Hurricane Trop Stm

GFS Total Accumulated Precipitation (inches) from 12z07Nov2017 to 12z15Nov2017

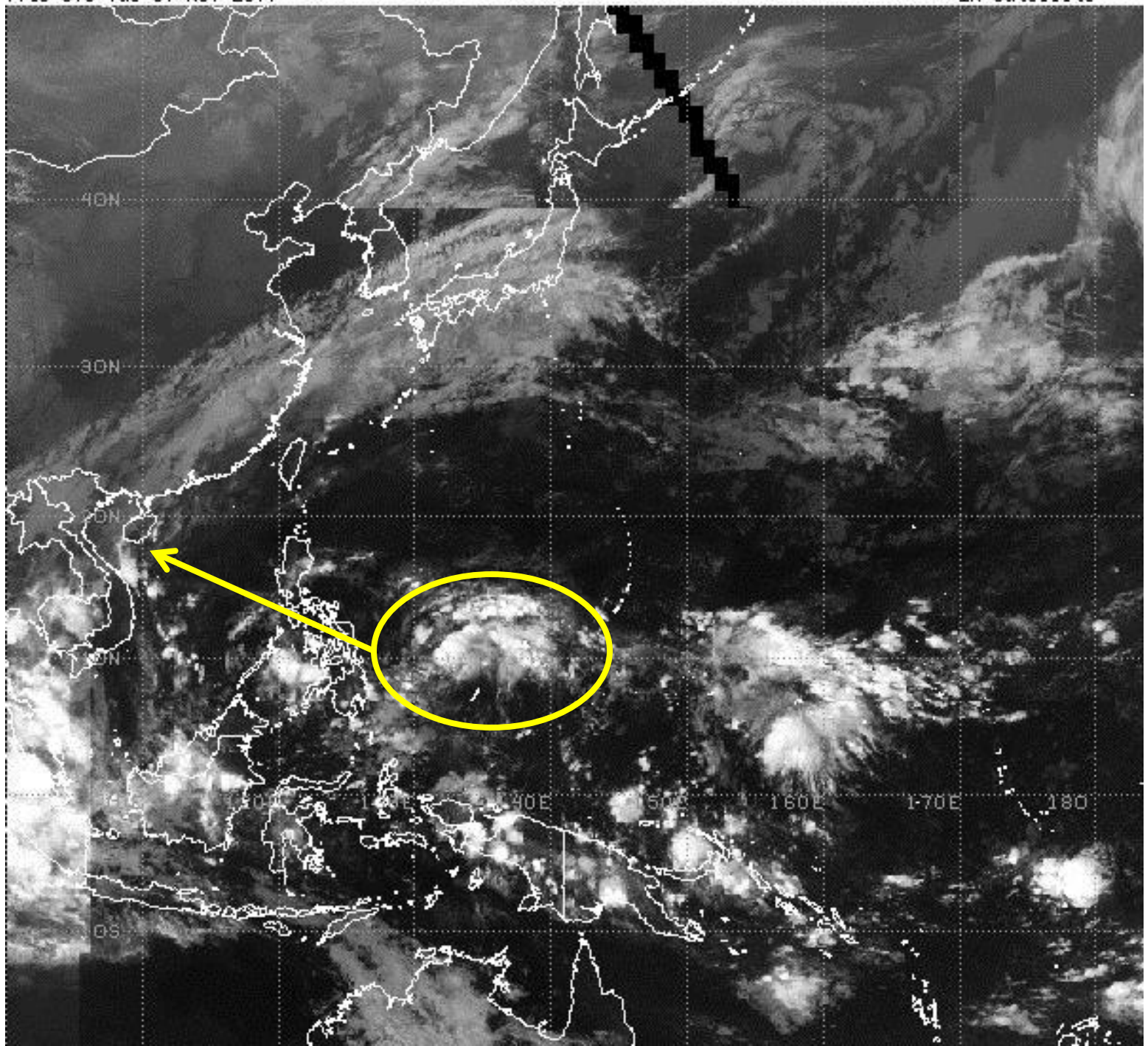
Init: 12z Nov 07 2017 Forecast Hour: [192] valid at 12z Wed, Nov 15 2017

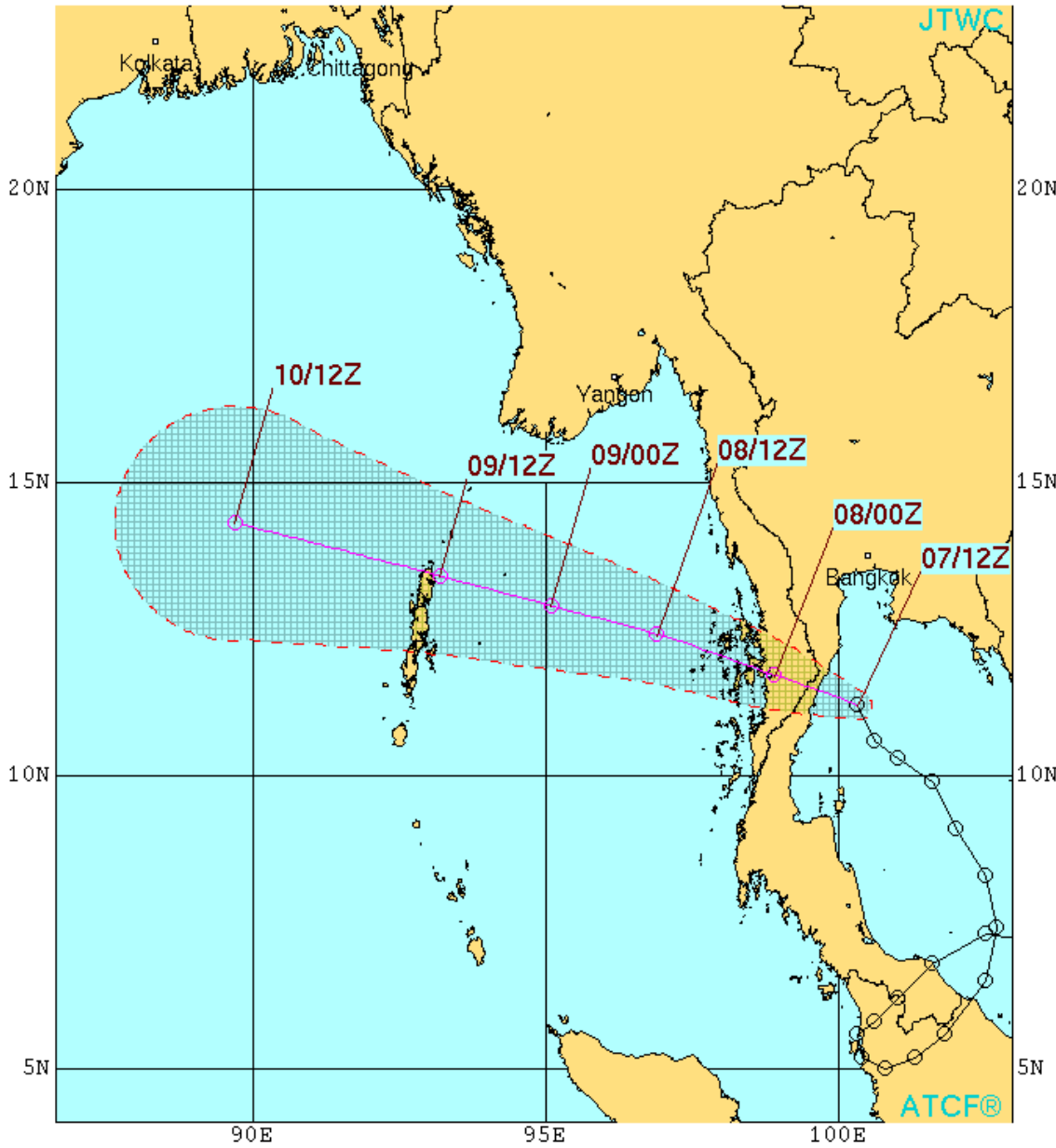
TROPICALTIDBITS.COM



1745 UTC Tue 07 Nov 2017

IR Satellite





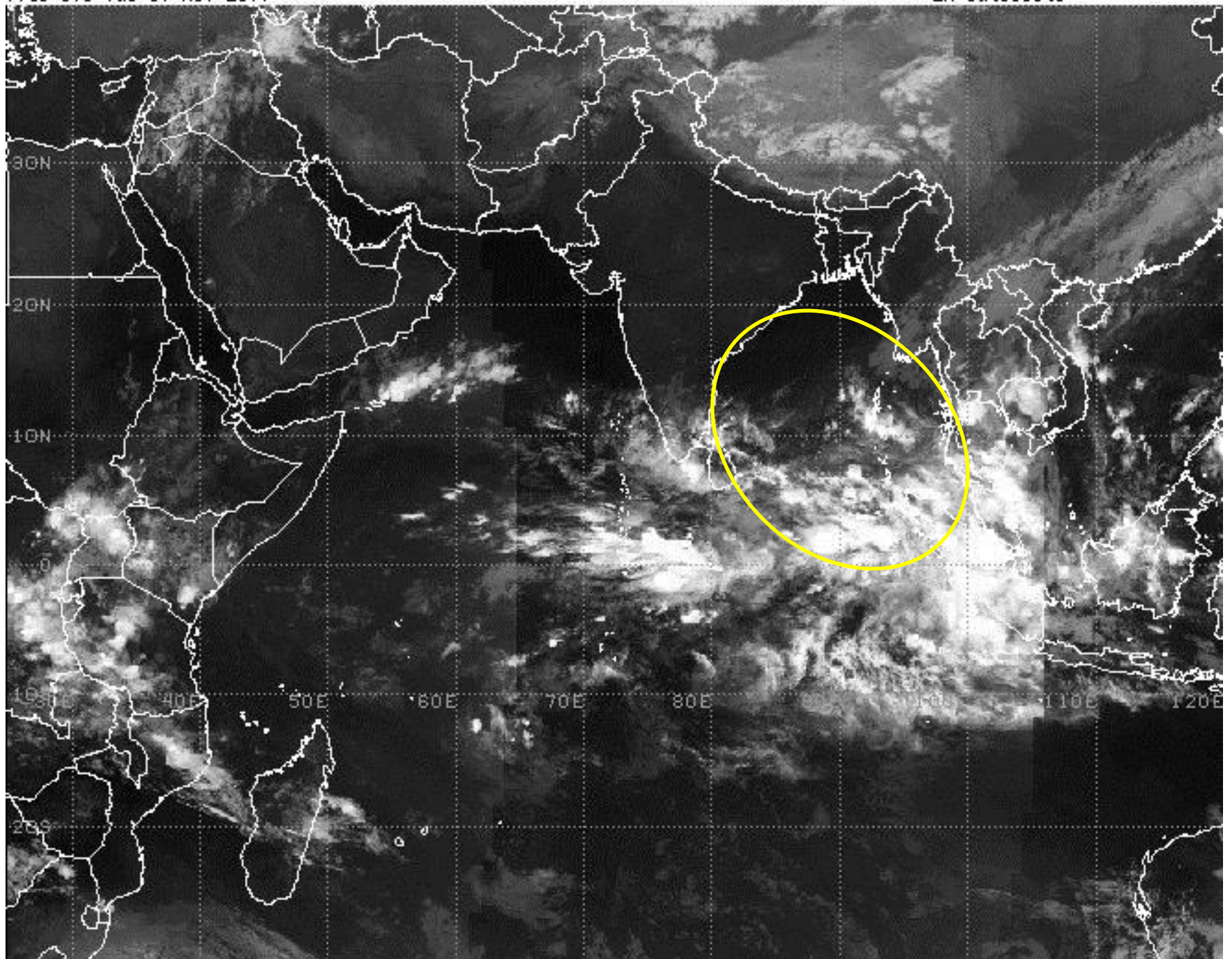
TROPICAL DEPRESSION 29W (TWENTYNINE) WARNING #6
 WTPN31 PGTW 071500
 071200Z POSIT: NEAR 11.2N 100.3E
 MOVING 335 DEGREES TRUE AT 07 KNOTS
 MAXIMUM SIGNIFICANT WAVE HEIGHT: 6 FEET
 07/12Z, WINDS 025 KTS, GUSTS TO 035 KTS
 08/00Z, WINDS 020 KTS, GUSTS TO 030 KTS
 08/12Z, WINDS 025 KTS, GUSTS TO 035 KTS
 09/00Z, WINDS 030 KTS, GUSTS TO 040 KTS
 09/12Z, WINDS 025 KTS, GUSTS TO 035 KTS
 10/12Z, WINDS 020 KTS, GUSTS TO 030 KTS

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



1745 UTC Tue 07 Nov 2017

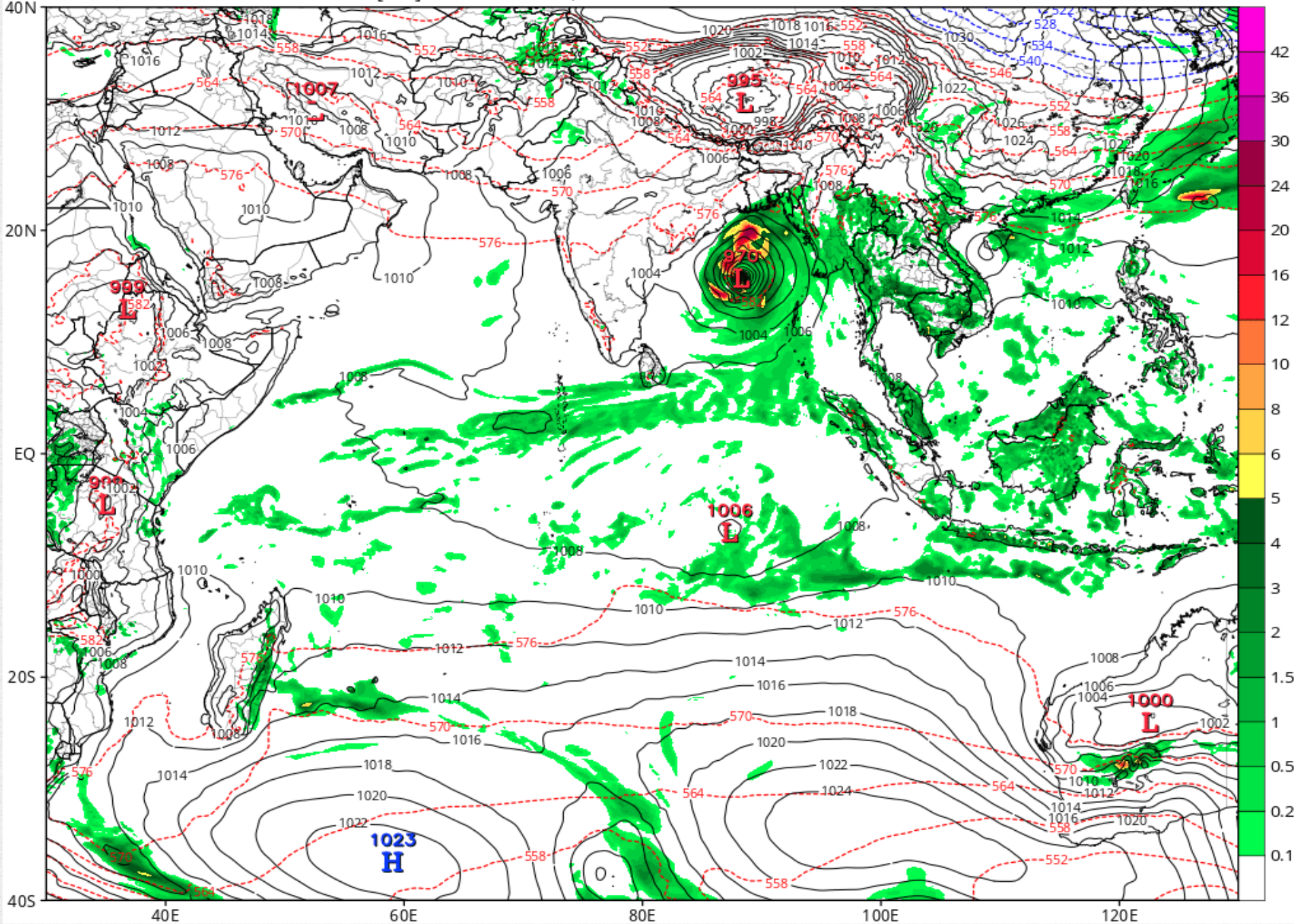
IR Satellite



GFS 6-hour Averaged Precip Rate (mm/hr), MSLP (hPa) & 1000-500mb Thickness (dam)

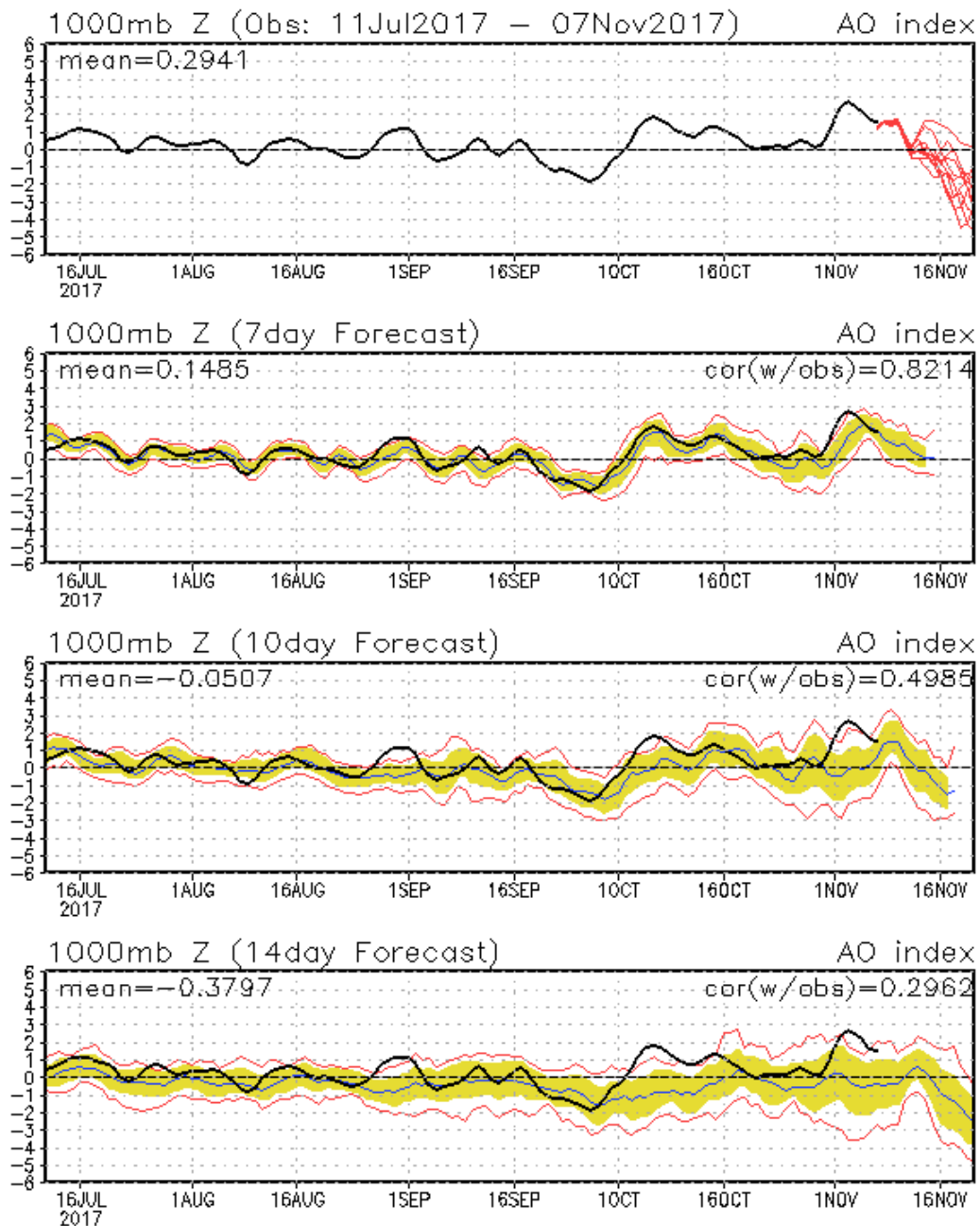
Init: 12z Nov 07 2017 Forecast Hour: [168] valid at 12z Tue, Nov 14 2017

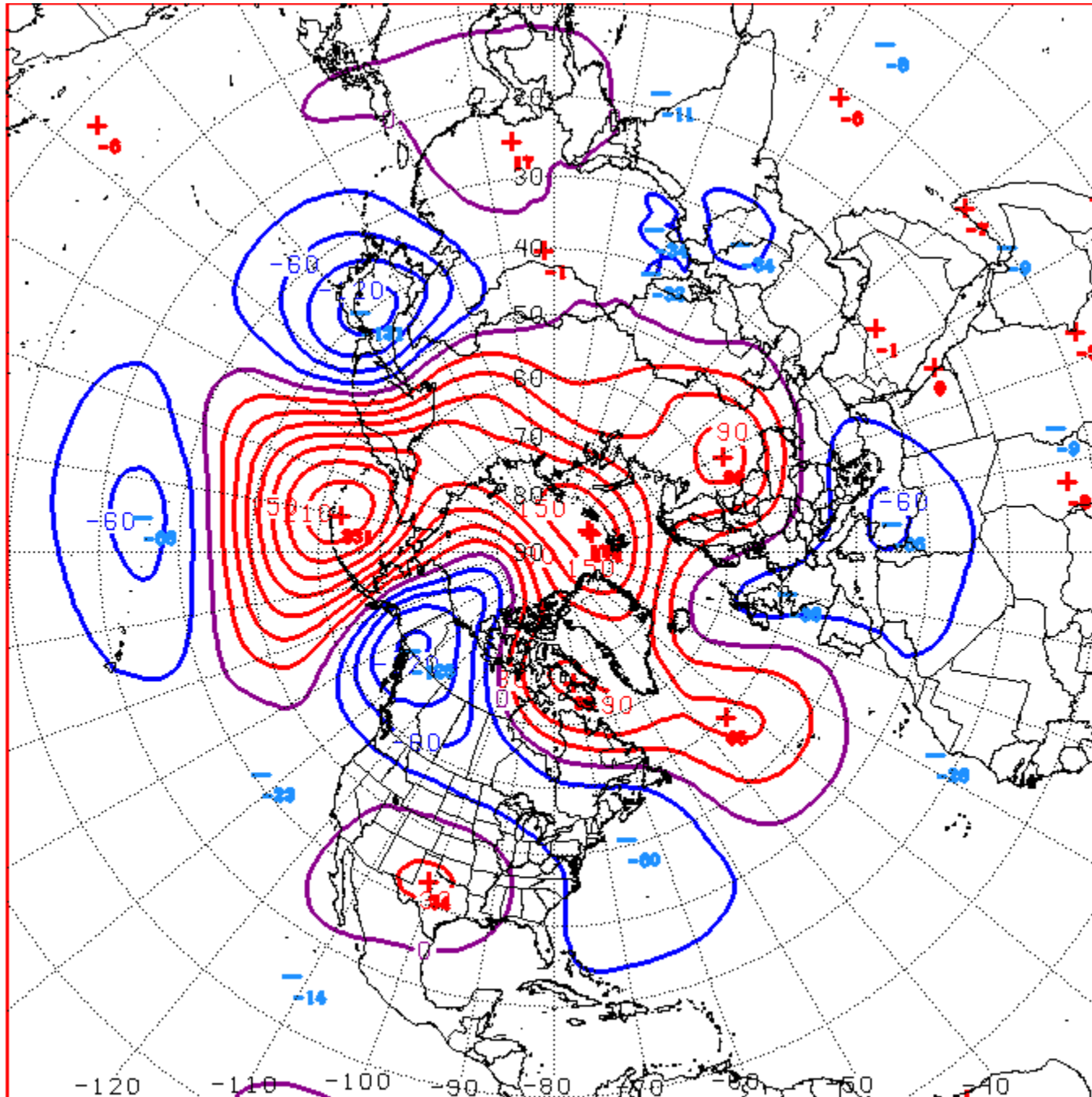
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Connections to U.S. Impacts

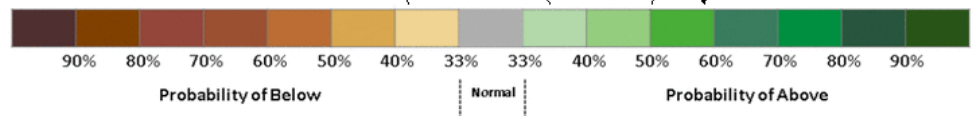
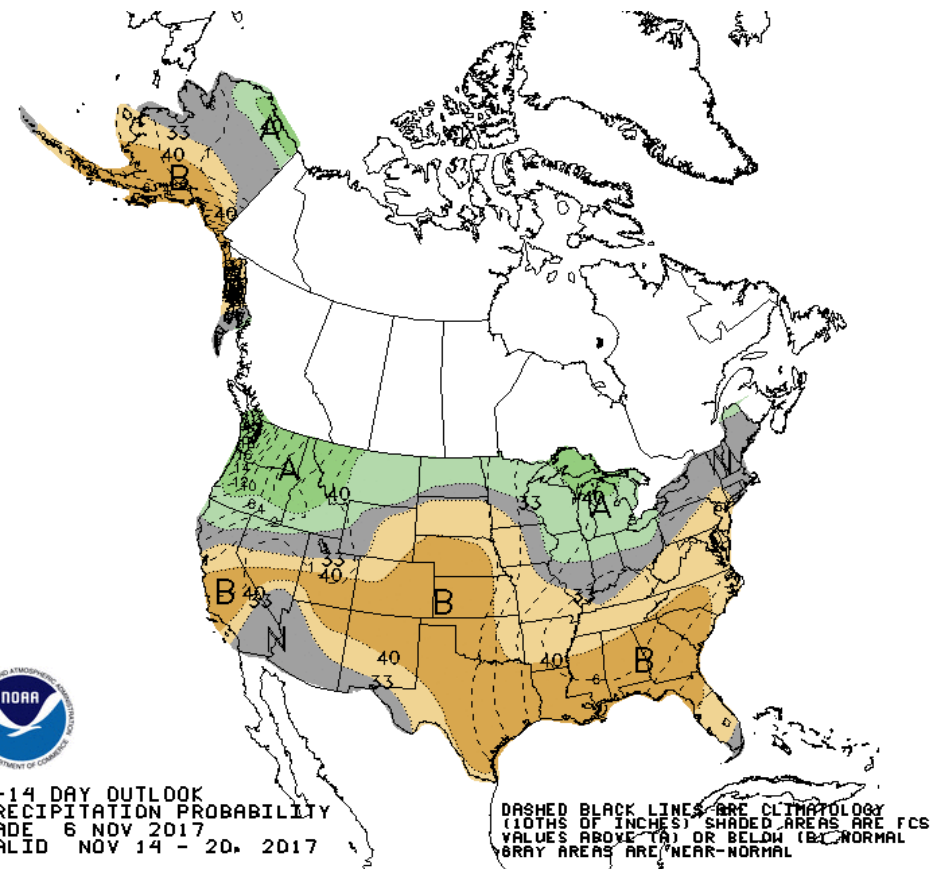
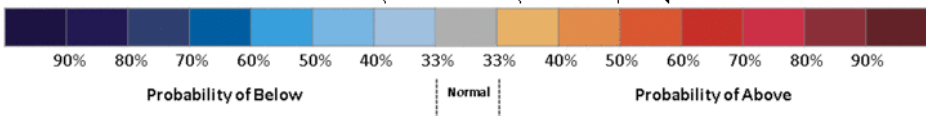
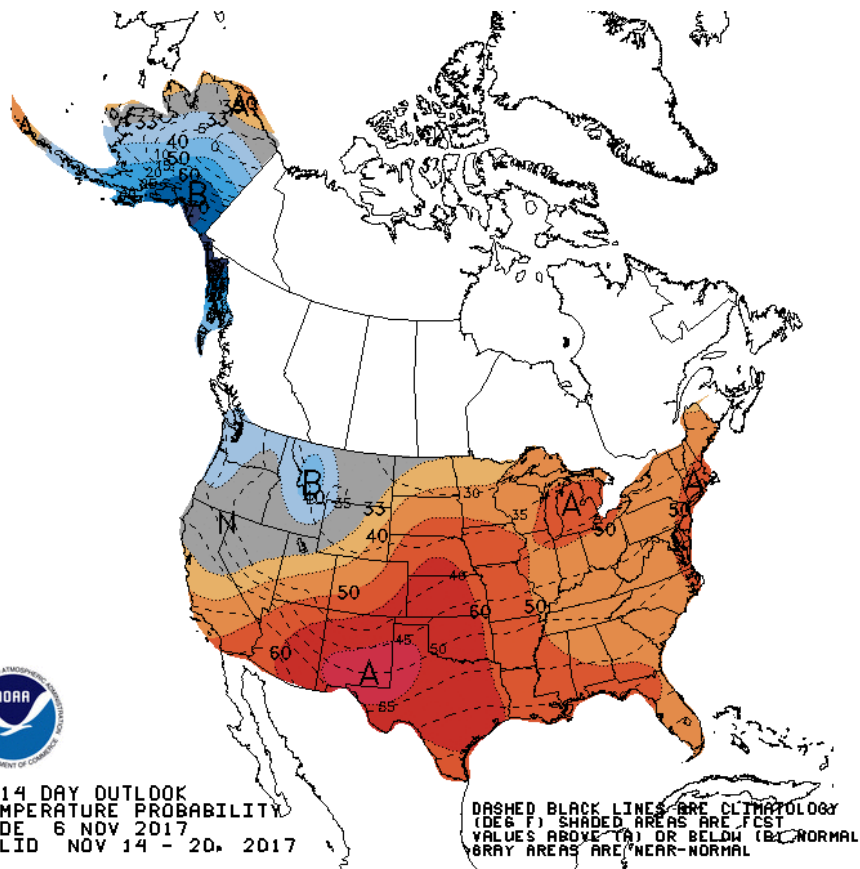
AO: Observed & ENSM forecasts





D+11 500 MB ANOMALIES FROM 00Z ENSM
CPC MAP MADE NOV 07 2017 0607 UTC CNTD NOV 18 2017

Week 2 – Temperature and Precipitation

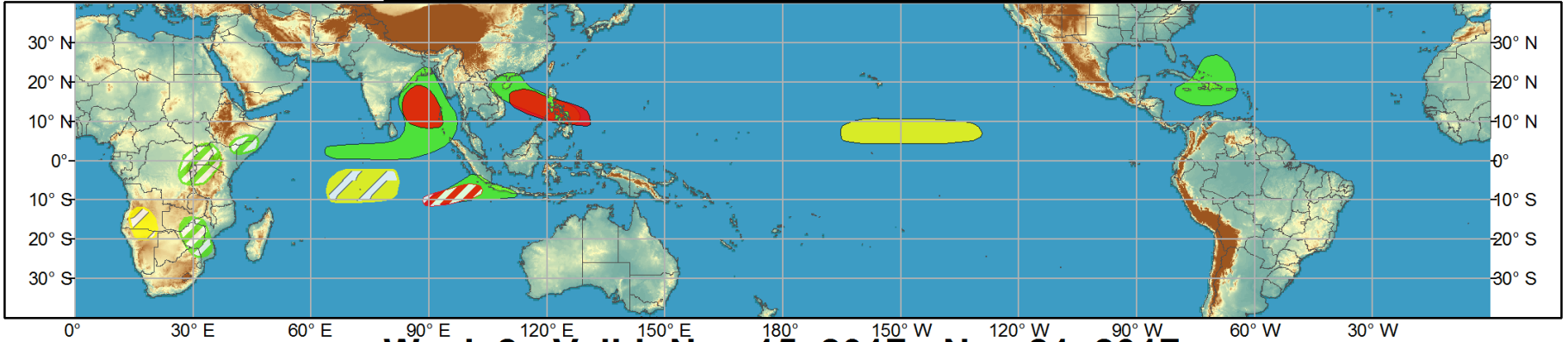




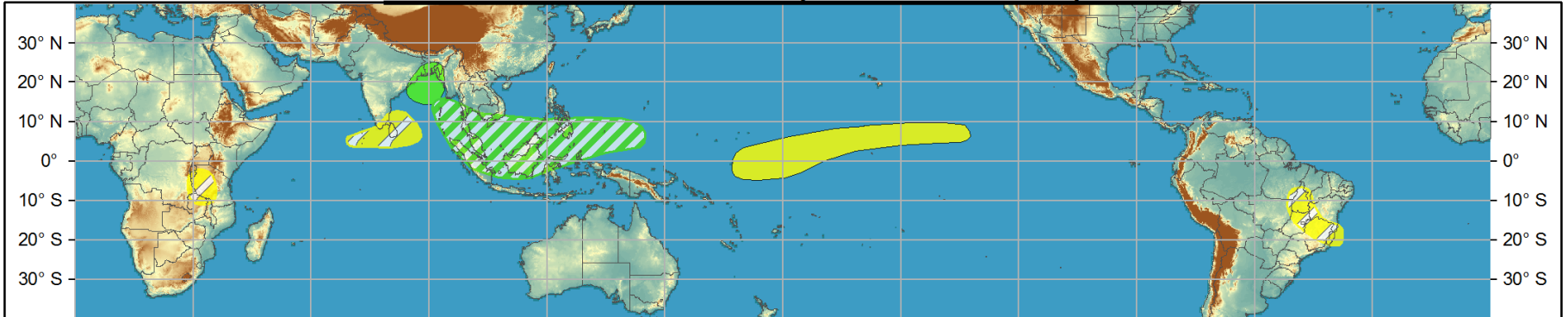
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