Global Tropics Hazards And Benefits Outlook

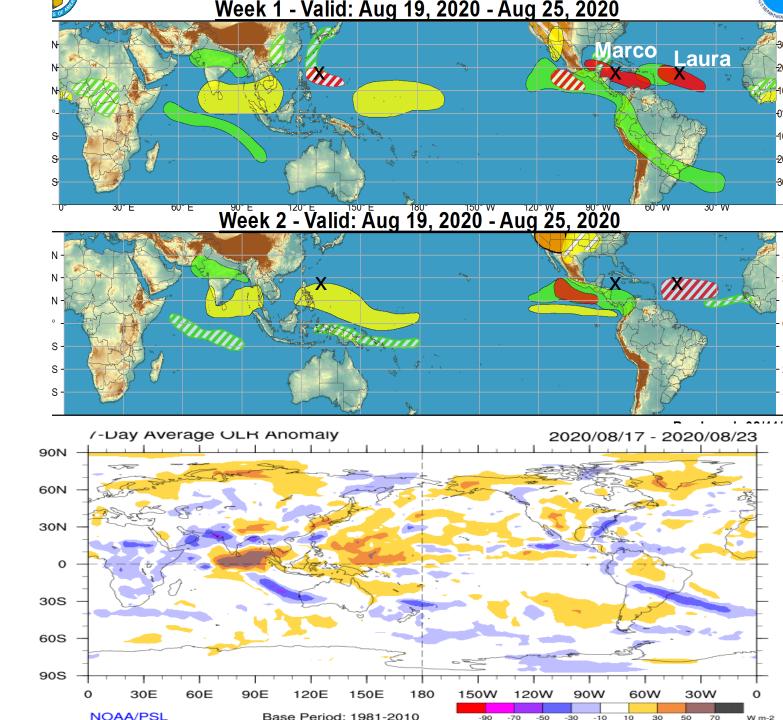
8/25/2020

Brad Pugh

<u>Outline</u>

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

<u>Outlook</u> <u>Review</u>



Cool shading More clouds/rain

Warm shading Less clouds/rain

Synopsis of Climate Modes

ENSO: (August 13, 2020 Update)

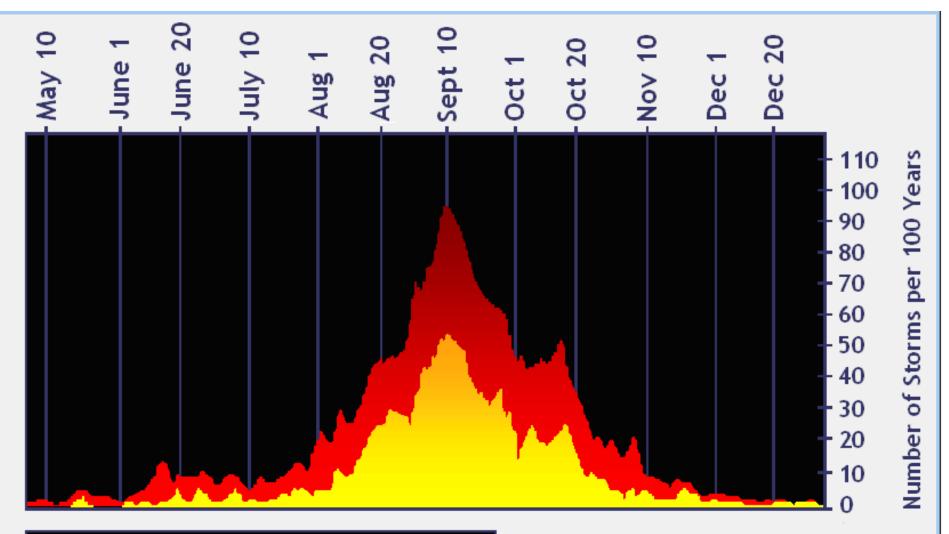
ENSO Alert System Status: <u>La Niña Watch</u>

(next update September 10)

 There is a ~60% chance of La Niña development during Northern Hemisphere fall 2020 and continuing through winter 2020-21 (~55% chance).

MJO and other subseasonal tropical variability:

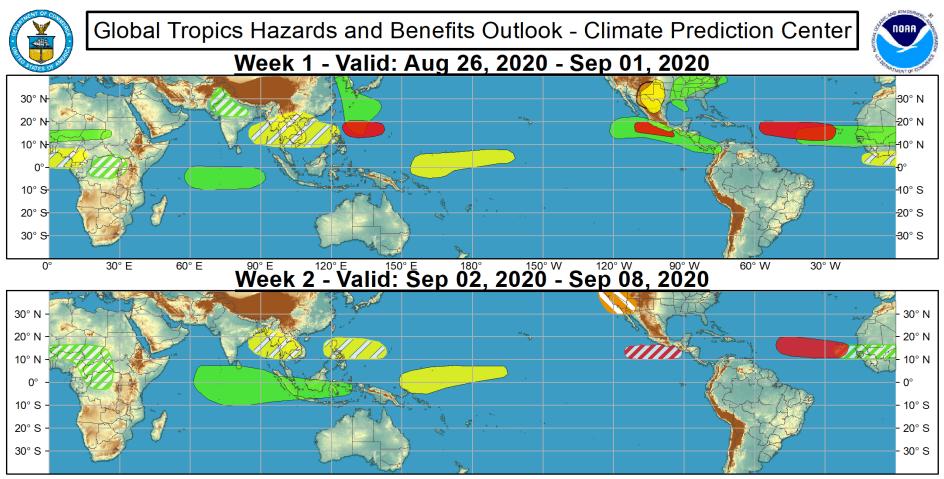
- The MJO continues to propagate eastward with its enhanced phase over Africa.
- Dynamical models are in less agreement but the MJO is expected to shift east to the Indian Ocean during the next week.
- Enhanced waves emerging from Africa, the low-frequency base state, and climatology support an active Atlantic basin through at least early September.



Hurricanes and Tropical Storms

Hurricanes

NOAA



Confidence High Moderate

Tropical Cyclone Formation

Above-average rainfall

Below-average rainfall

Above-normal temperatures

Weekly total rainfall in the lower third of the historical range.

Below-normal temperatures

7-day mean temperatures in the upper third of the historical range.

Weekly total rainfall in the upper third of the historical range.

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

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.











Produced: 08/25/2020 Forecaster: Pugh Development of a tropical cyclone (tropical depression - TD, or greater strength).

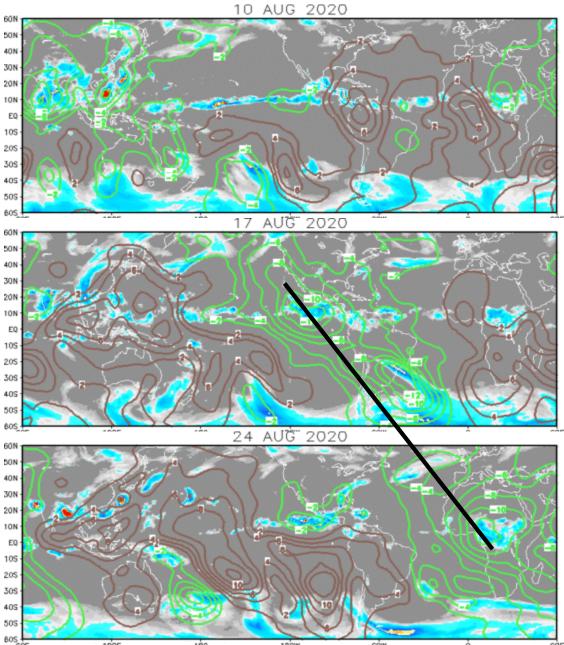
IR Satellite & 200-hpa Velocity Potential Anomalies

Green: Enhanced Divergence Brown: Enha

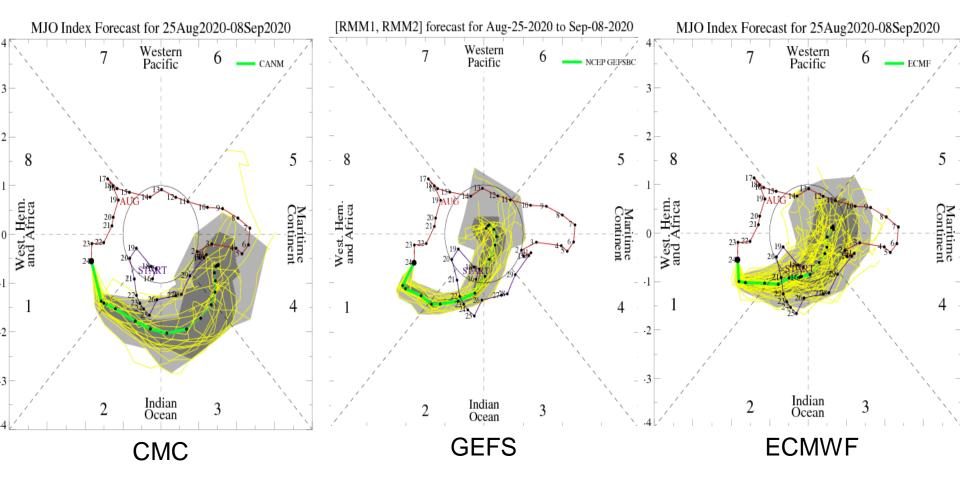
Brown: Enhanced Convergence

Coherent Wave-1 spatial pattern

Enhanced phase shifted east from the Americas to Africa

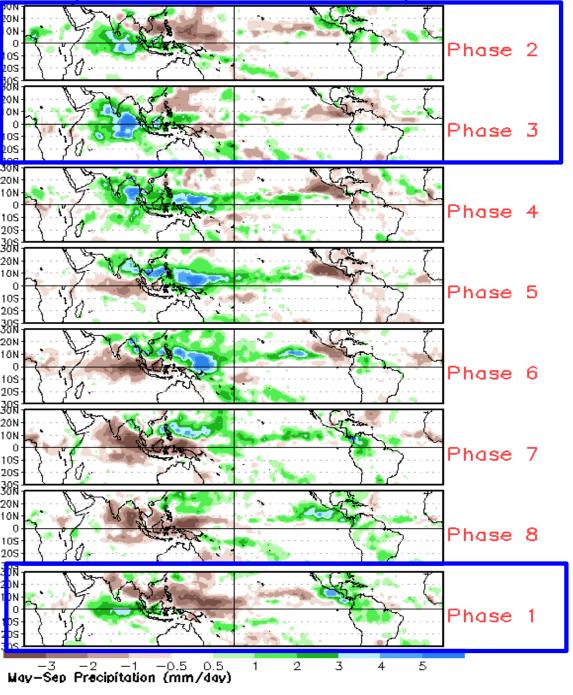


MJO Observation/Forecast

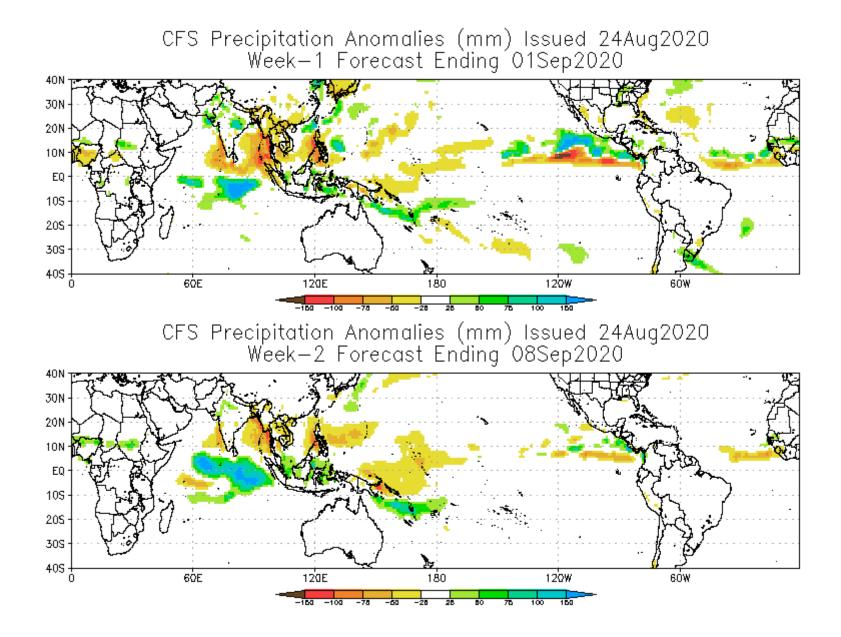


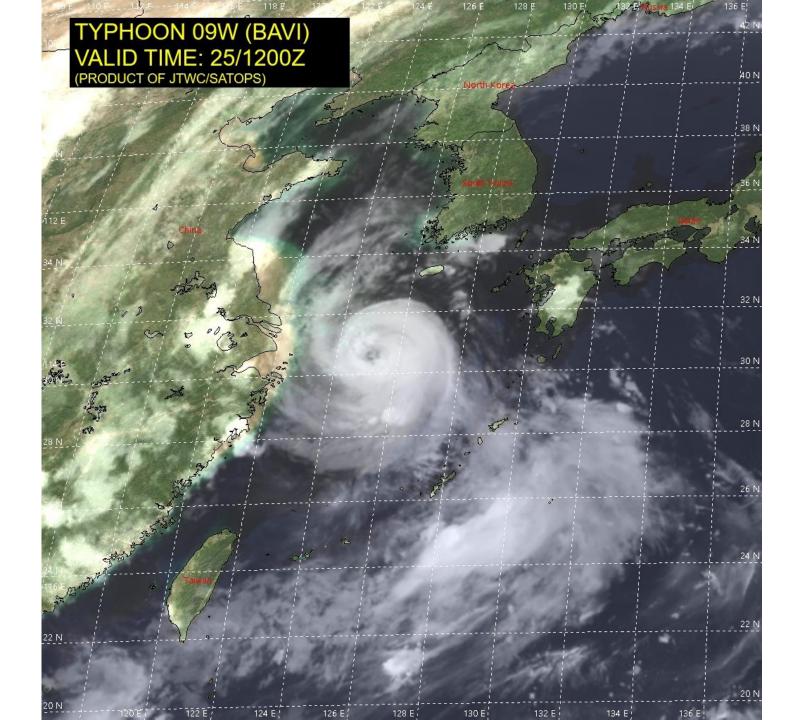
Although there are differences in amplitude, all models depict eastward propagation Given the well-defined MJO currently, the Canadian ensemble mean is favored

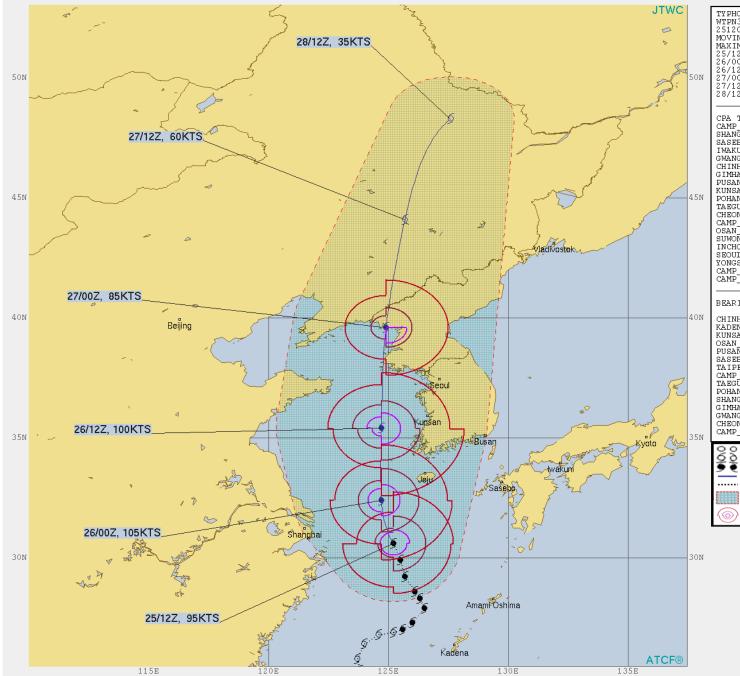
Average Conditions when the MJO is present



CAVEAT: These panels are representative of robust MJO events.







WTPN31 PGTW 251500 251200Z POSIT: NEAR MOVING 340 DEGREES ' MAXIMUM SIGNIFICANT 25/12Z, WINDS 095 K' 26/00Z, WINDS 105 K' 26/00Z, WINDS 100 K' 27/10Z, WINDS 060 K'	
CPA TO: CAMP_KENGUN SHANGHAI SASEBO IWAKUNI GWANGJU_AB CHINHAE_AB PUSAN KUNSAN_AB POHANG- TAEGU CHEONGJU_AB CAMP_HUMPHREYS OSAN_AB INCHON SBOUL_AB YONGSÄN_AIN CAMP_RED_CLOUD CAMP_CASEY	NM DTG 311 25/172 175 25/212 253 26/04Z 374 26/09Z 104 26/11Z 196 26/12Z 206 26/12Z 216 26/12Z 92 26/14Z 193 26/14Z 193 26/14Z 108 26/17Z 108 26/17Z 108 26/17Z 108 26/17Z 108 26/18Z 112 26/18Z 107 26/18Z 106 26/19Z 111 26/20Z
BEARING AND DISTANC CHINHAE KADENA_AB CGAN_AB OGAN_AB PUSAÑ SASEBO TAIPEI CAMP_HUMPHREYS TAEGU POHANG SHANGHAI GIMHAE_AB GWANGJU_AB CHEONGJU_AB CHEONGJU_AB	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
 LESS THAN 34 KNOTS 34-63 KNOTS MORE THAN 63 KNOTS FORECAST CYCLONE TRACK PAST CYCLONE TRACK DENOTES 34 KNOT WIND DANGER AREA/USN SHIP AVOIDANCE AREA FORECAST 34/50/64 KNOT WIND RADII (WINDS VALID OVER OPEN OCEAN ONLY) 	

GFS 6-hour Averaged Precip Rate (mm/hr), MSLP (hPa) & 1000-500mb Thickness (dam) Init: 12z Aug 25 2020 Forecast Hour: [96] valid at 12z Sat, Aug 29 2020 TROPICAL TIDBITS.COM 42 C1020= 60N >1016 36 30 24 20 16 12 40 N 10 8 6 5 3 20N May recurve over the North Pacific. 1.5 maintaining a high-amplitude pattern downstream over North America 0.5 0.2 0.1 EO

100F

120E

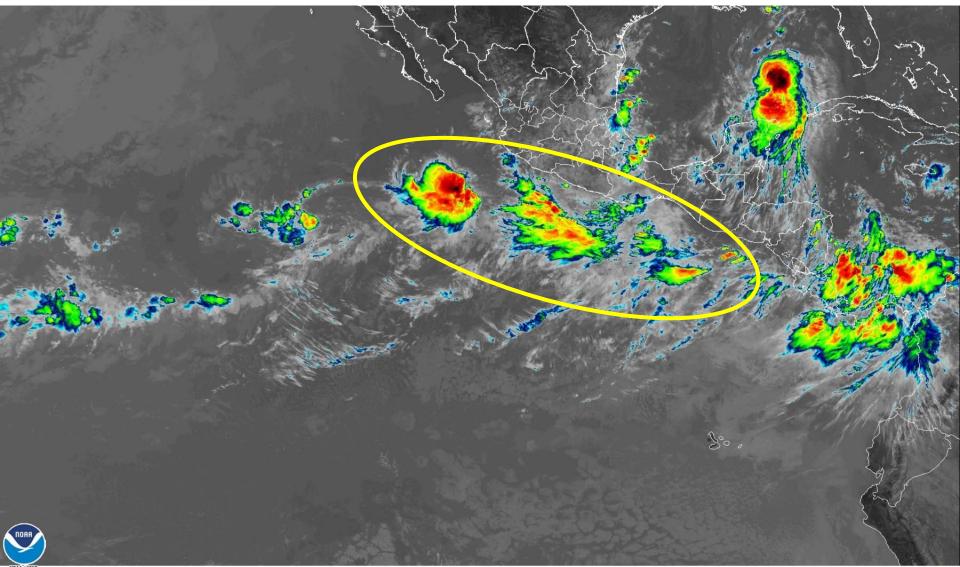
140E

6 B. B. S. S.

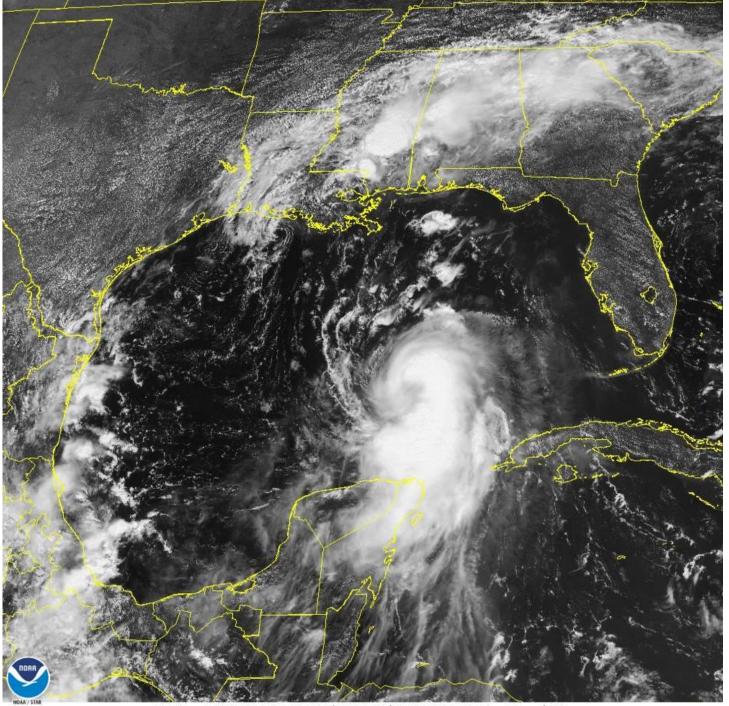
160F

180

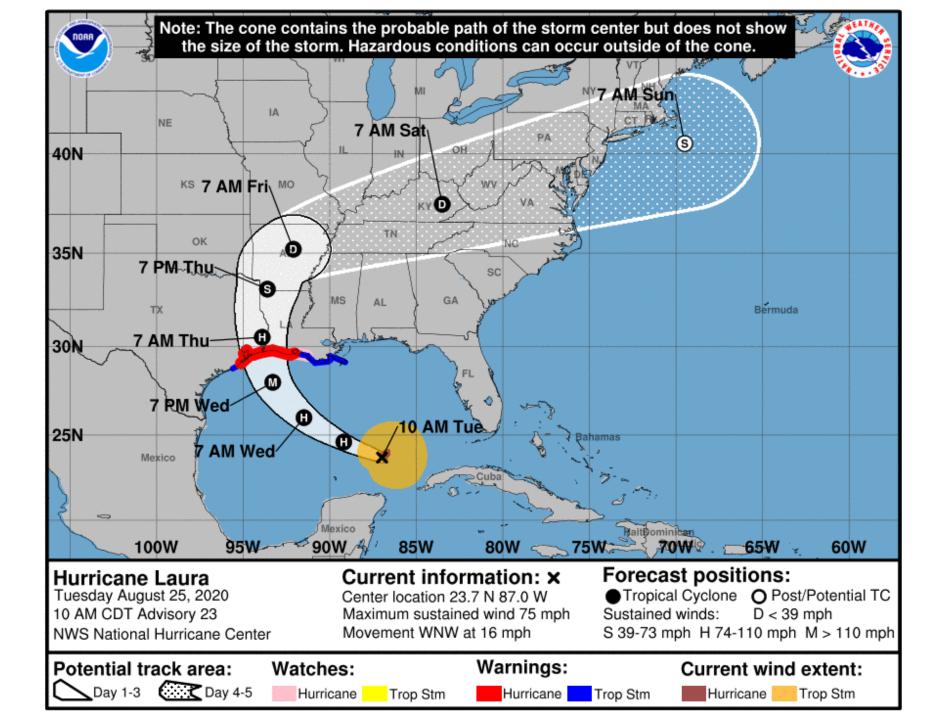
160W

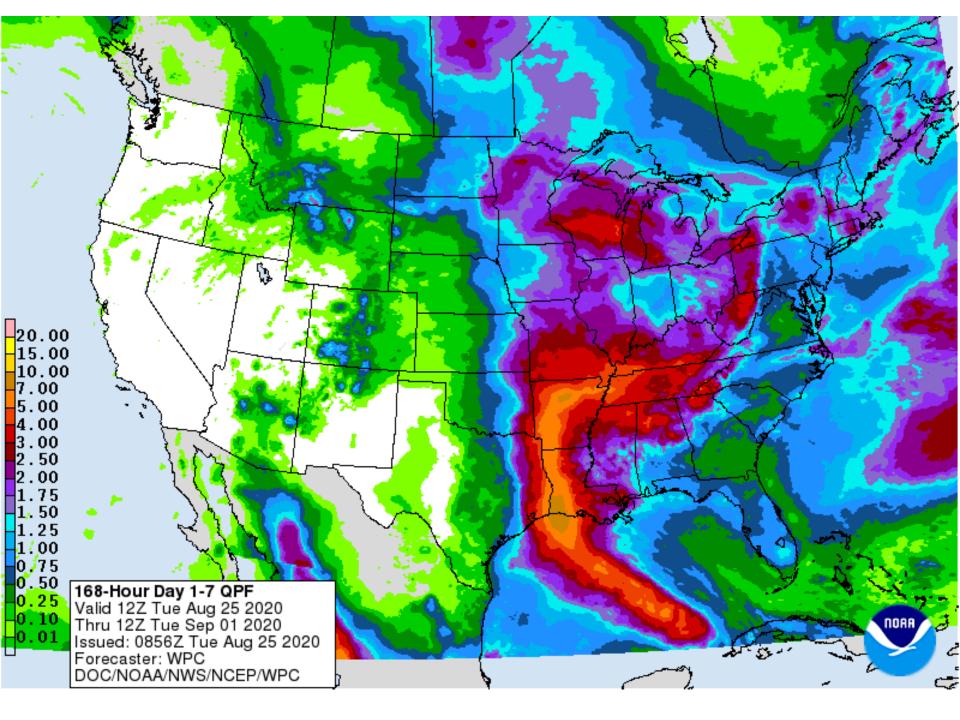


25 Aug 2020 17:20Z NOAA/NESDIS/STAR GOES-East Band 13

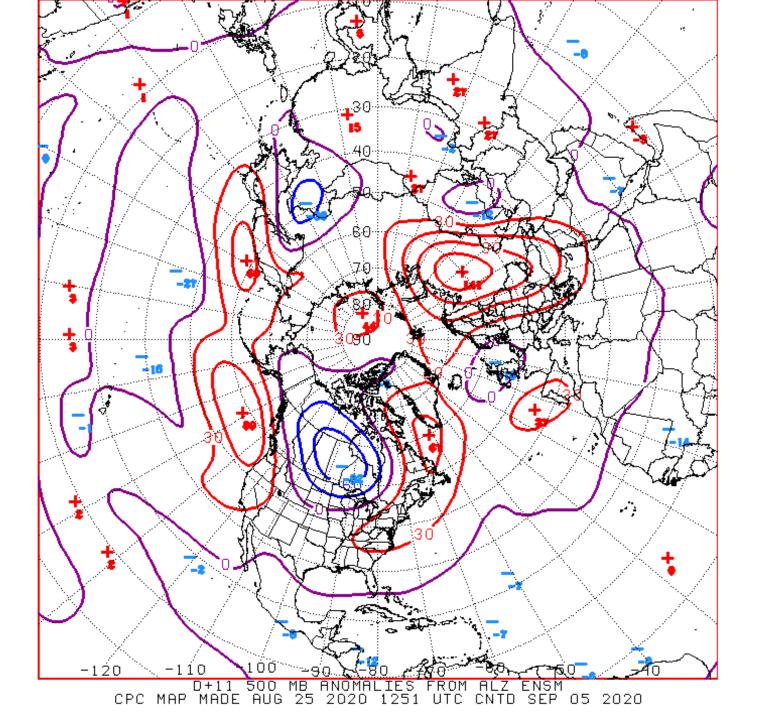


25 Aug 2020 17:31Z NOAA/NESDIS/STAR GOES-East Band 02

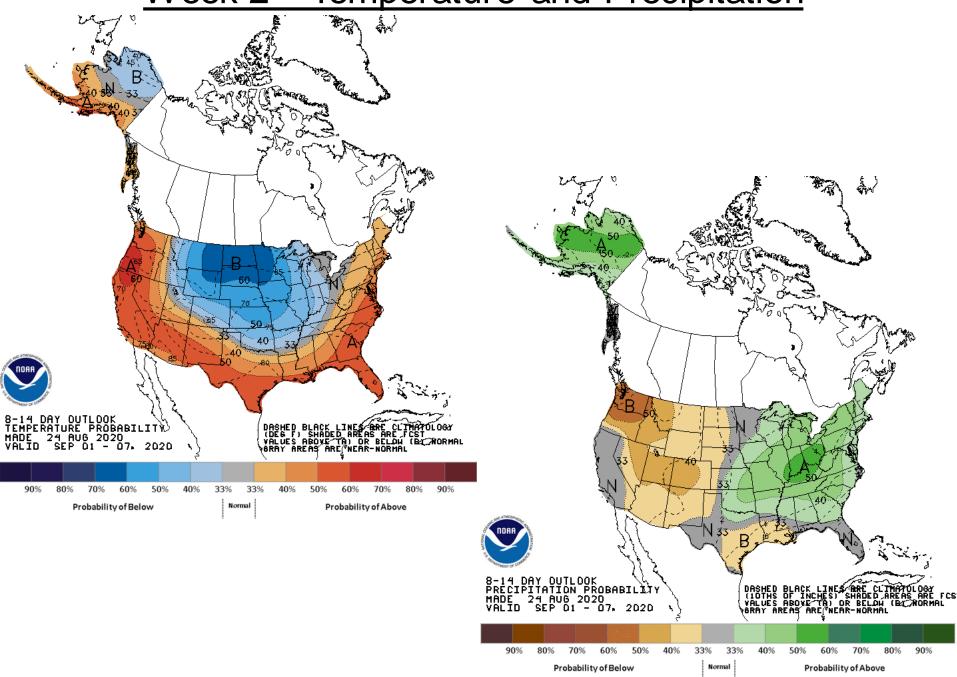


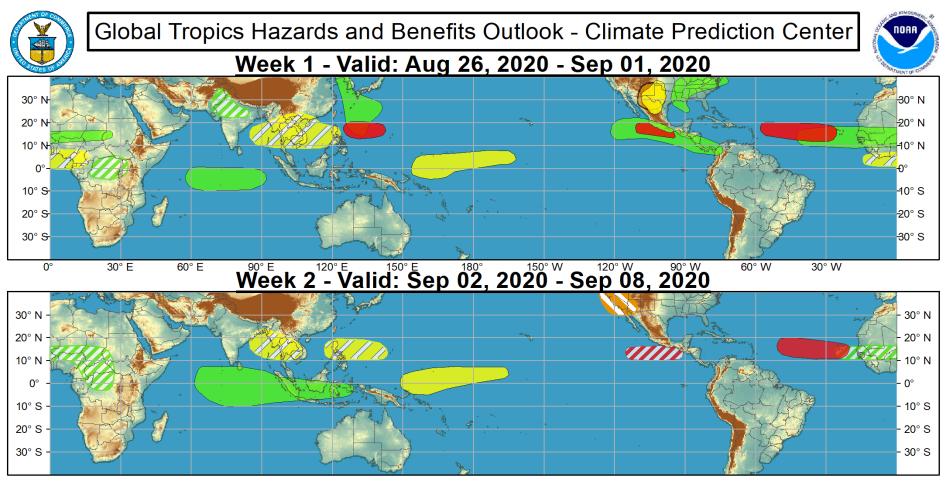


Connections to U.S. Impacts









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