

# Weather/Climate Update



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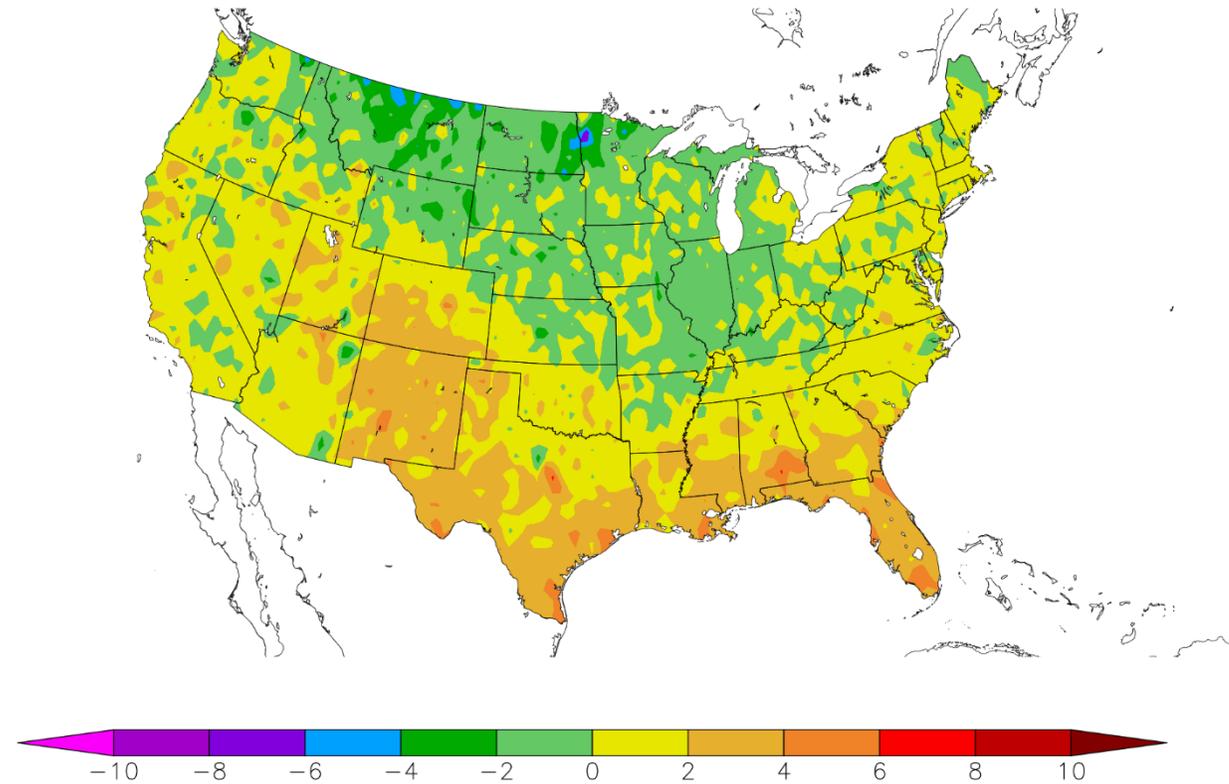
Great Lakes Climate and Lake Levels Update and Outlook Webinar

22 June 2020



# Near Normal Spring Temperatures

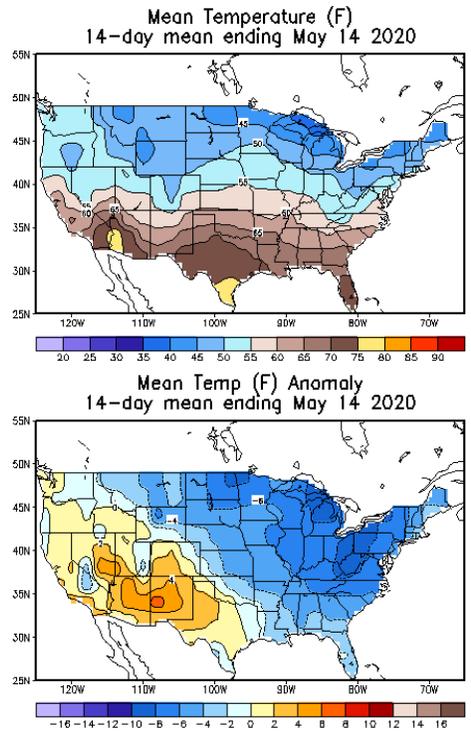
Departure from Normal Temperature (F)  
3/1/2020 – 5/31/2020



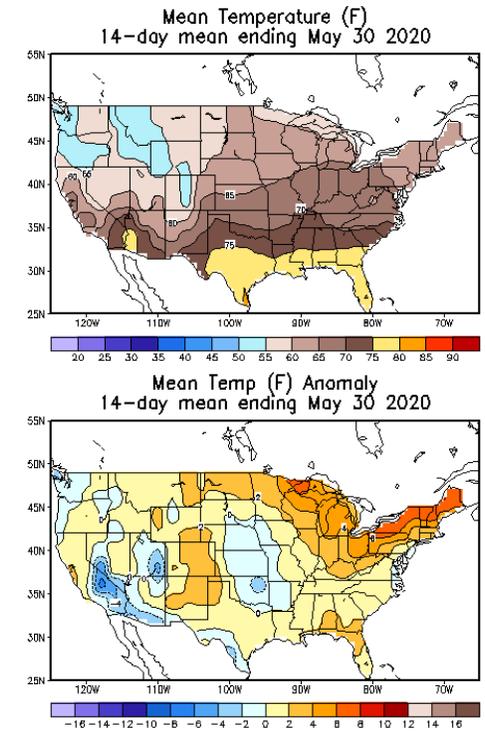
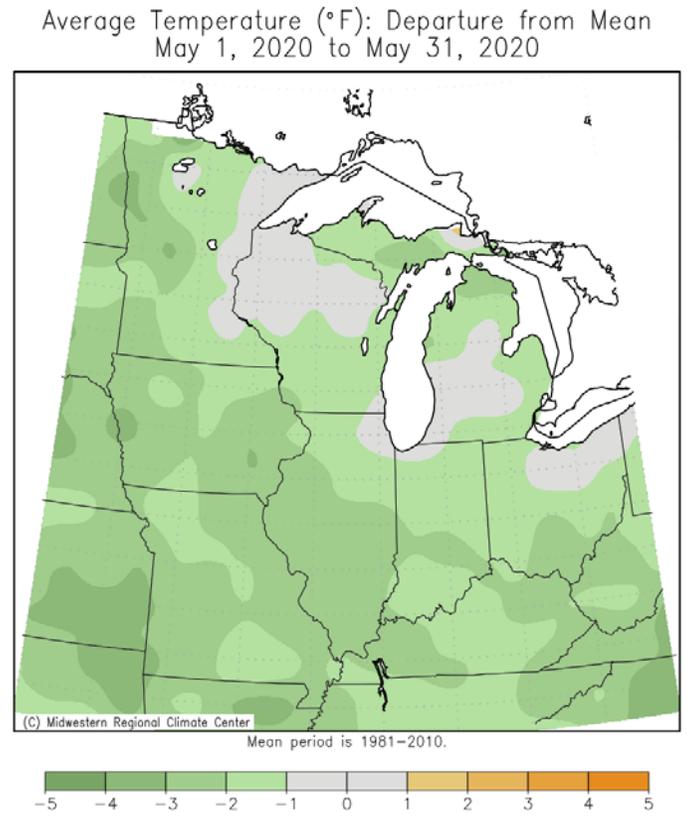
Generated 6/20/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

# May Mean Temperatures: Anything But Normal

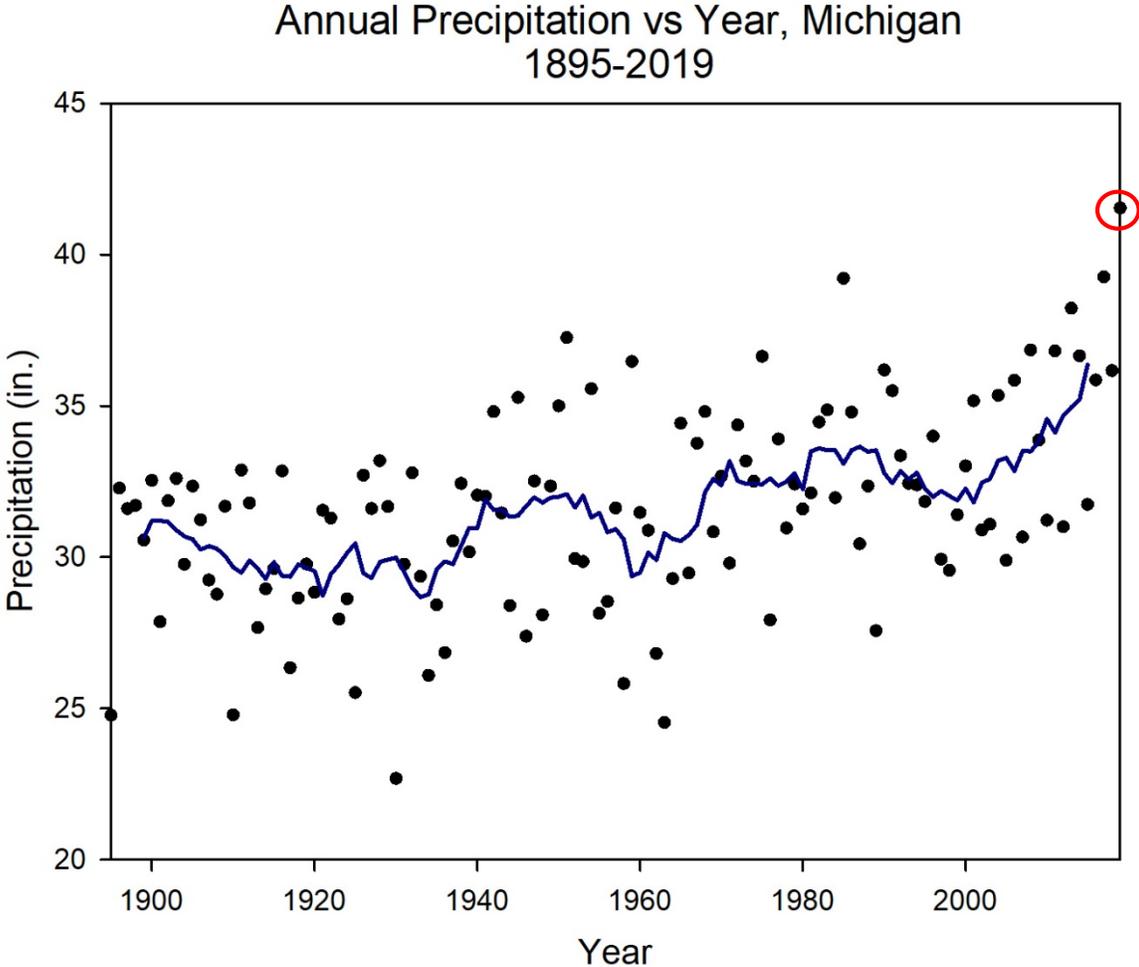


Early Month Temperatures



Late Month Temperatures

# New Annual Precipitation Records in 2019



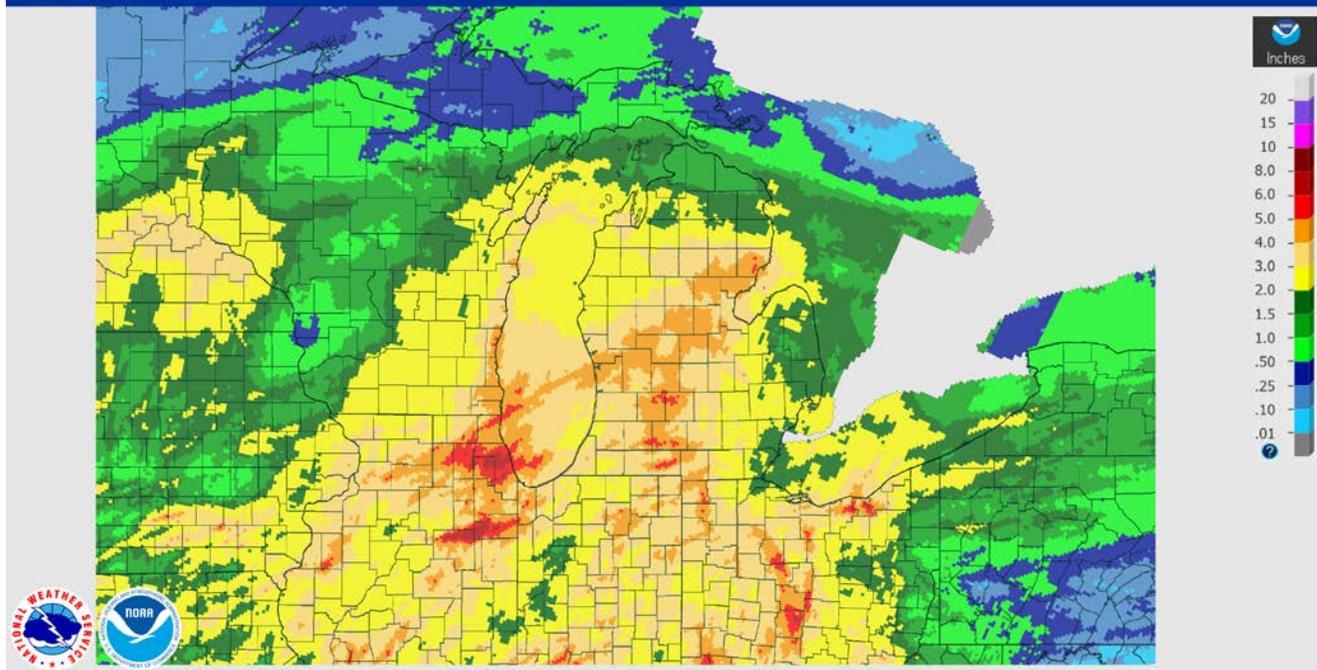
# Atmospheric River Event

## 17-19 May 2020

May 20, 2020 7-Day Observed Precipitation

Created on: May 20, 2020 - 14:39 UTC

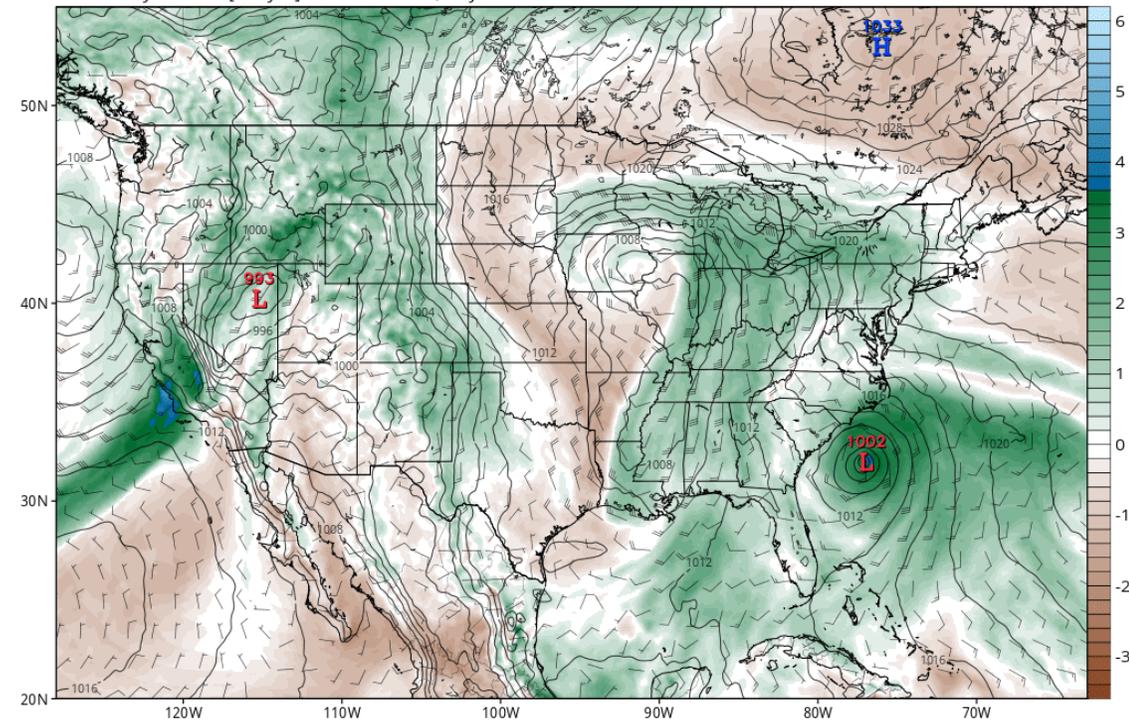
Valid on: May 20, 2020 12:00 UTC



GFS MSLP (mb), Total Precipitable Water Normalized Anomaly, & 850mb Wind (kt)

Init: 00z May 18 2020 [Analysis] valid at 00z Mon, May 18 2020

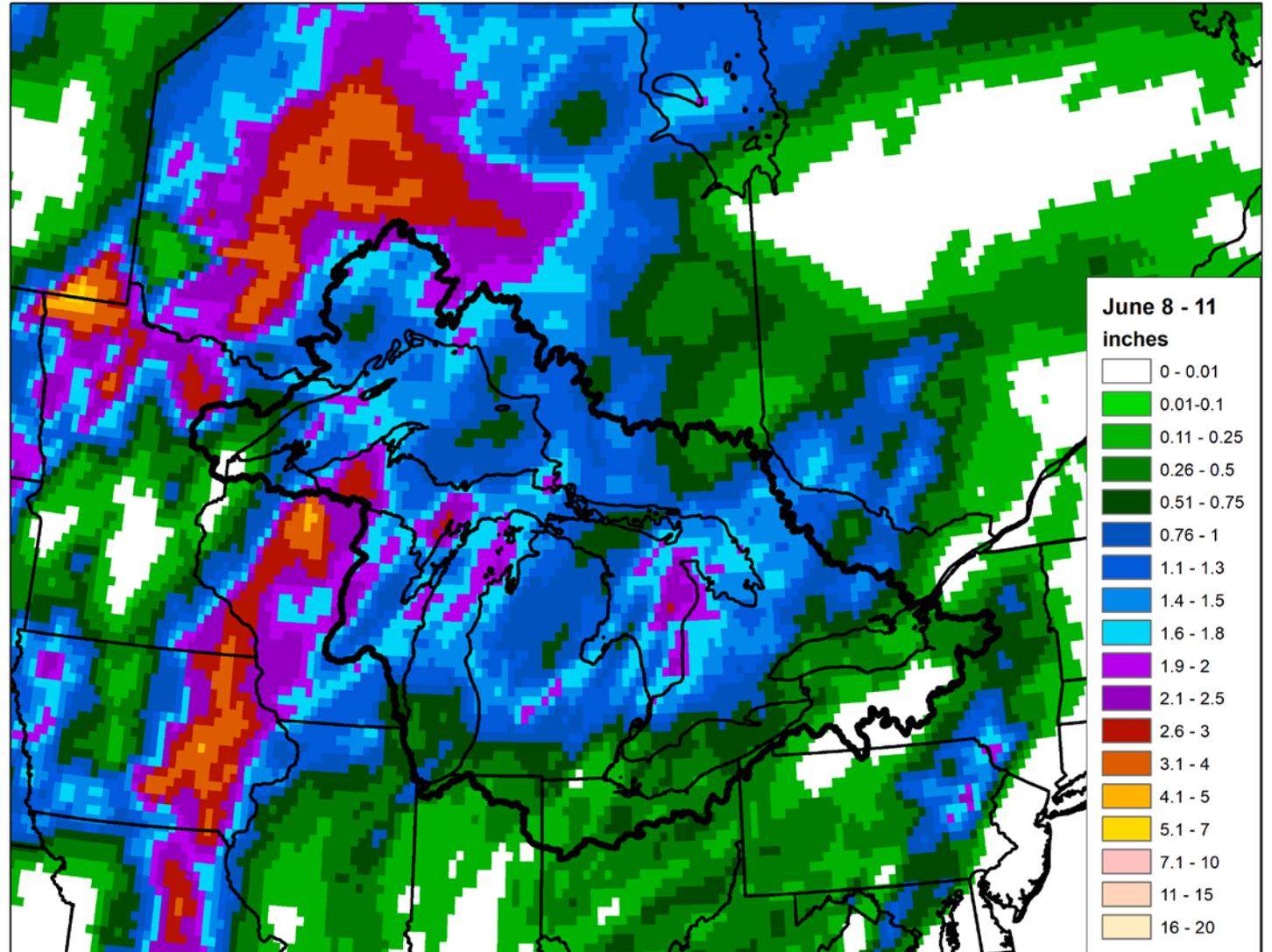
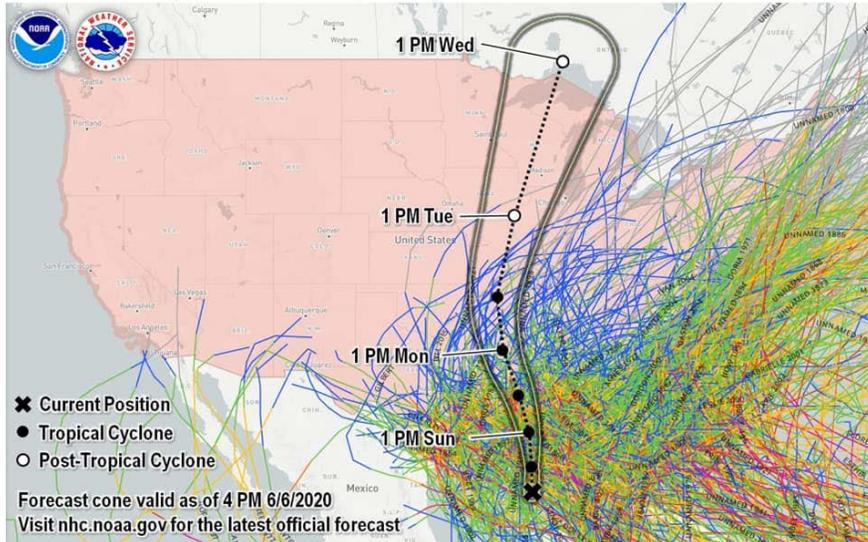
TROPICALTIDBITS.COM



# Tropical Storm Cristobal Remnants

8-11 June 2020

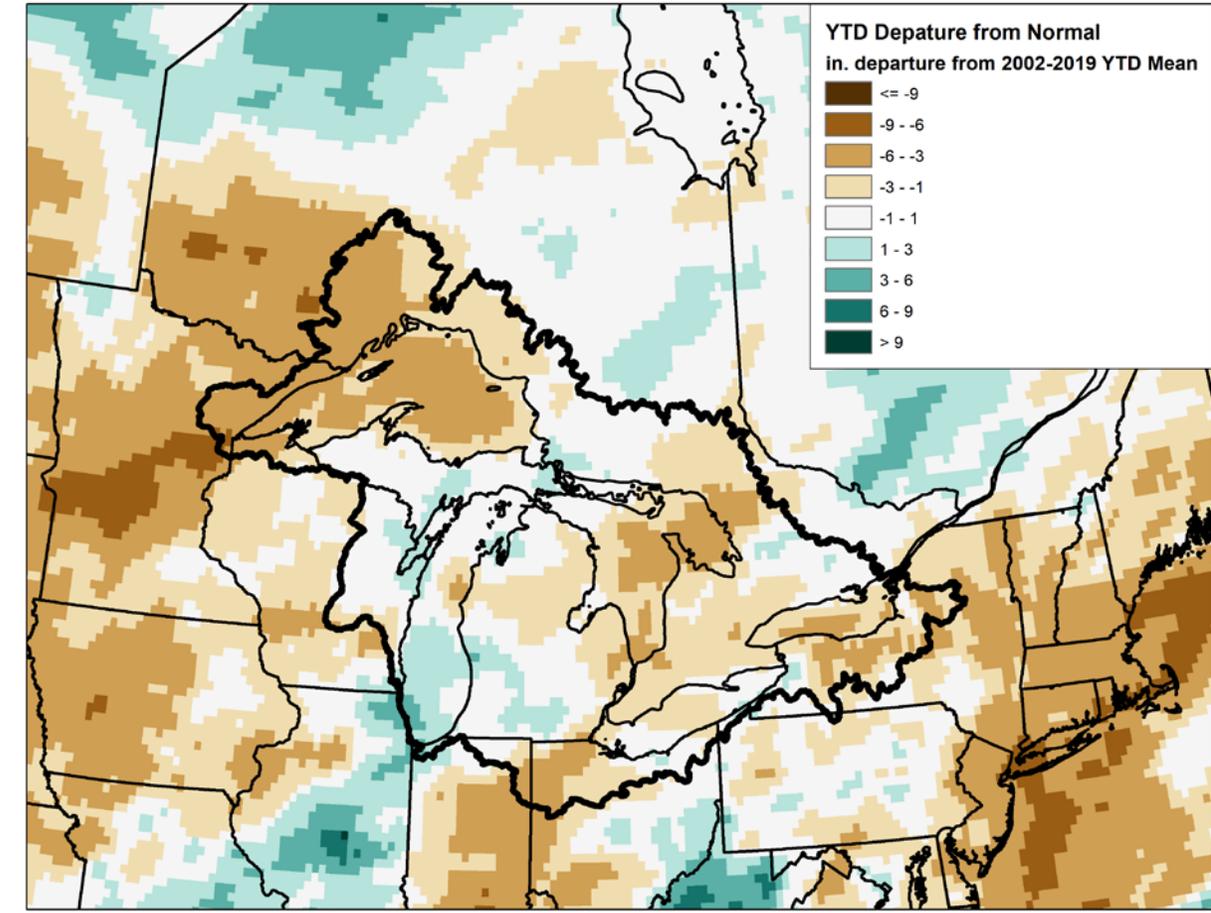
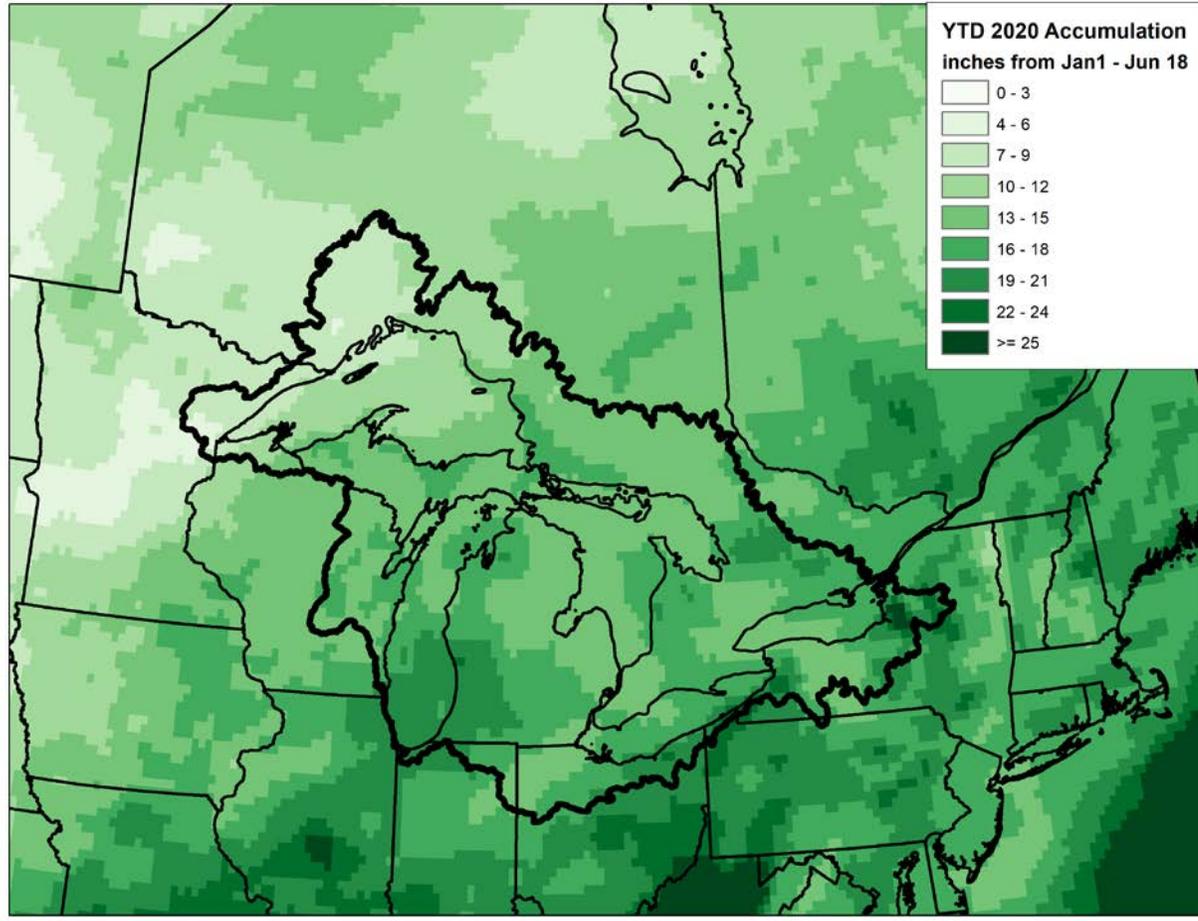
Remnants of Cristobal Could Track Further West Across Wisconsin Than Any Other Post-Tropical System on Record Since Mid-1800s





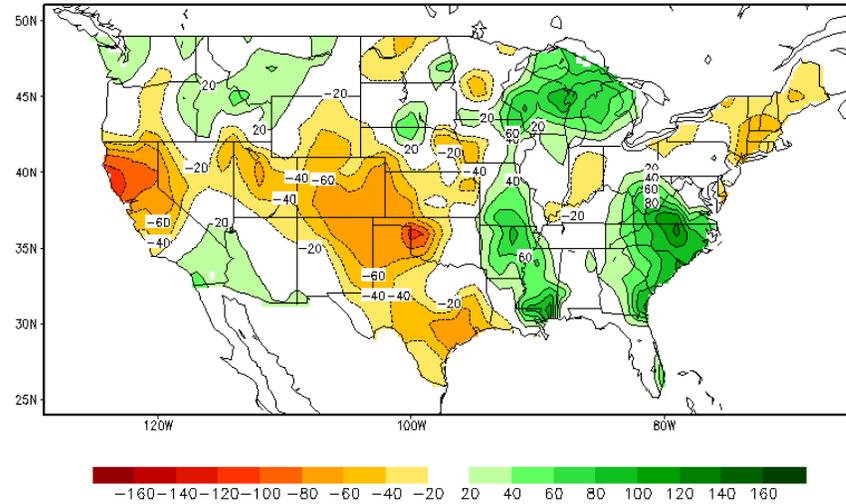
# Trending Drier Across most of the Great Lakes Basin

## Total Precipitation, 1 JAN – 18 JUN 2020

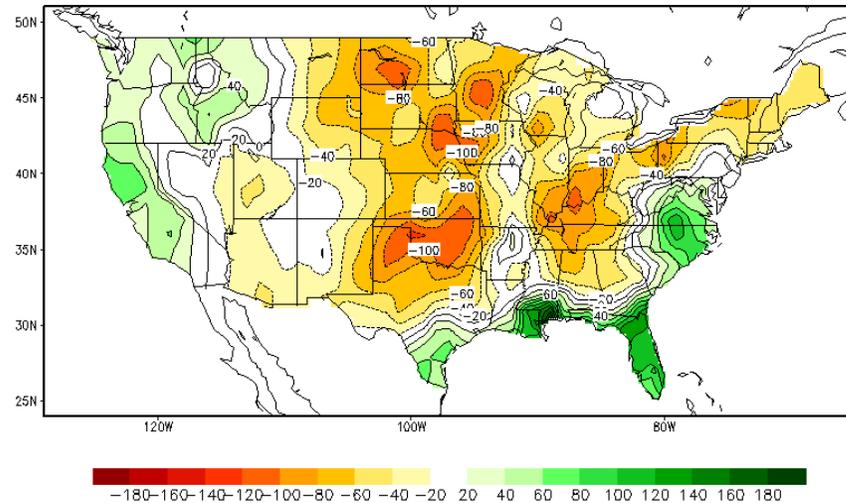


# Soil Moisture and Streamflow Conditions

Calculated Soil Moisture Anomaly (mm)  
JUN 20, 2020

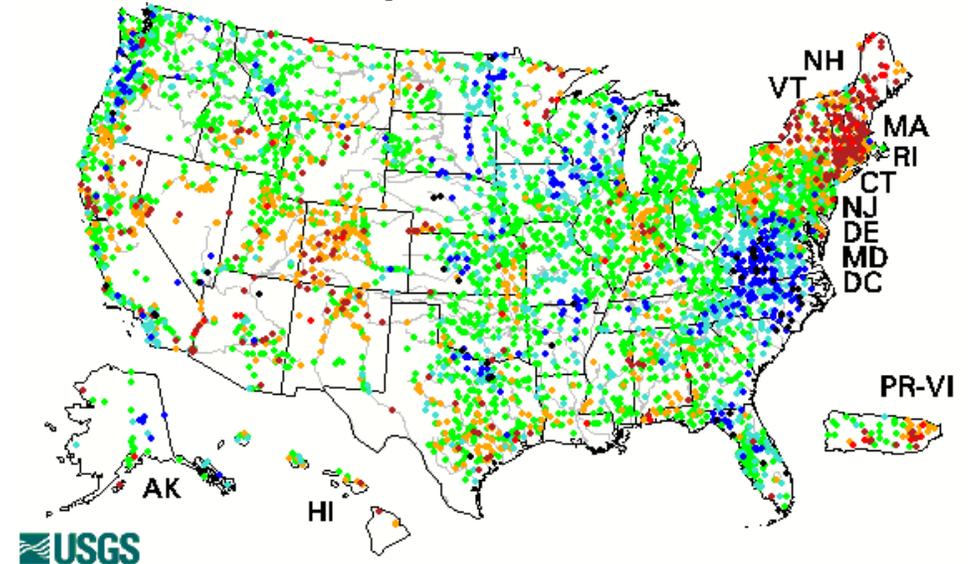


Calculated Soil Moisture Anomaly Change  
JUN 20, 2020 from MAR.31



## Daily Streamflow Conditions

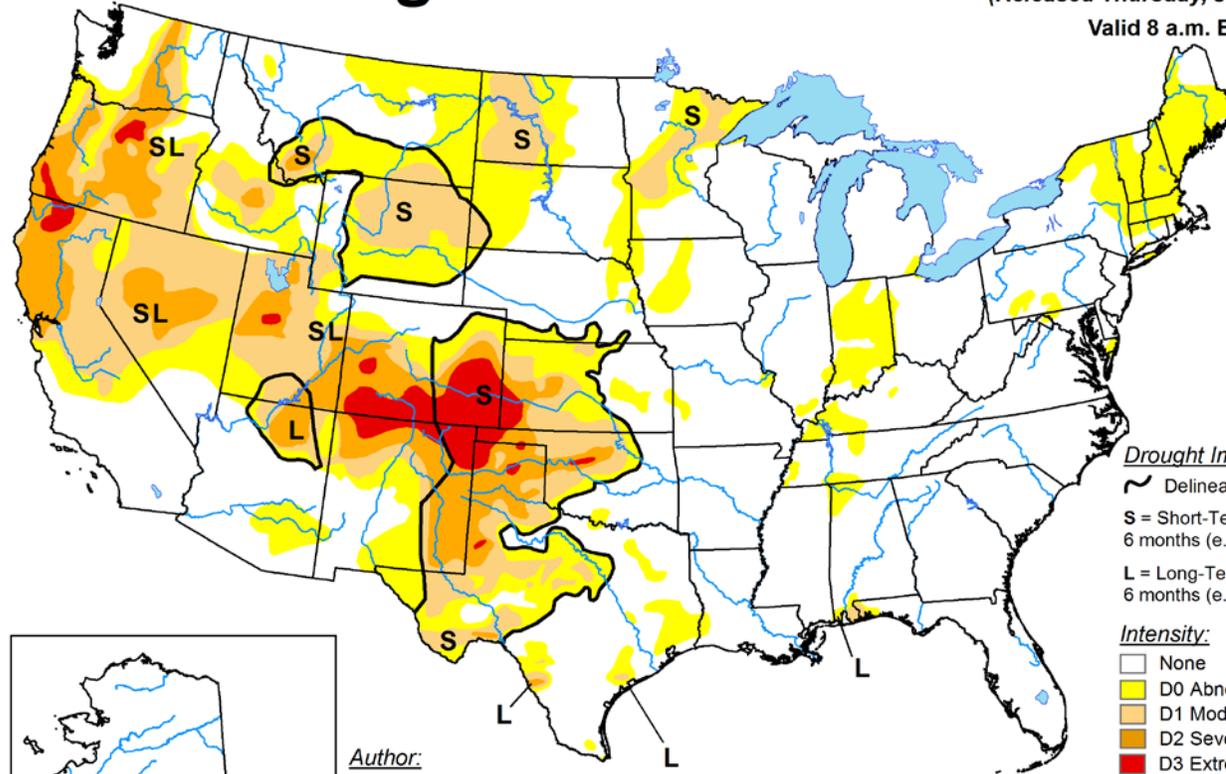
Monday, June 22, 2020 08:30ET



<https://waterdata.usgs.gov/nwis/rt>

# U.S. Drought Monitor

June 16, 2020  
 (Released Thursday, Jun. 18, 2020)  
 Valid 8 a.m. EDT

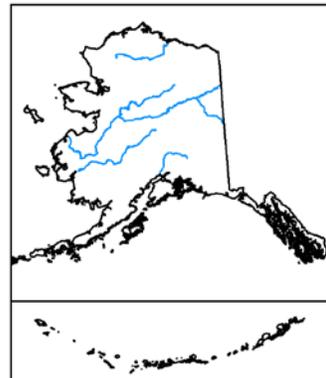


**Drought Impact Types:**

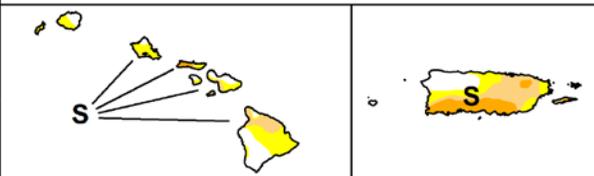
- ~ Delineates dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

**Intensity:**

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought



Author:  
 Richard Tinker  
 CPC/NOAA/NWS/NCEP



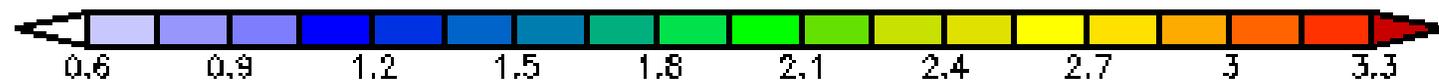
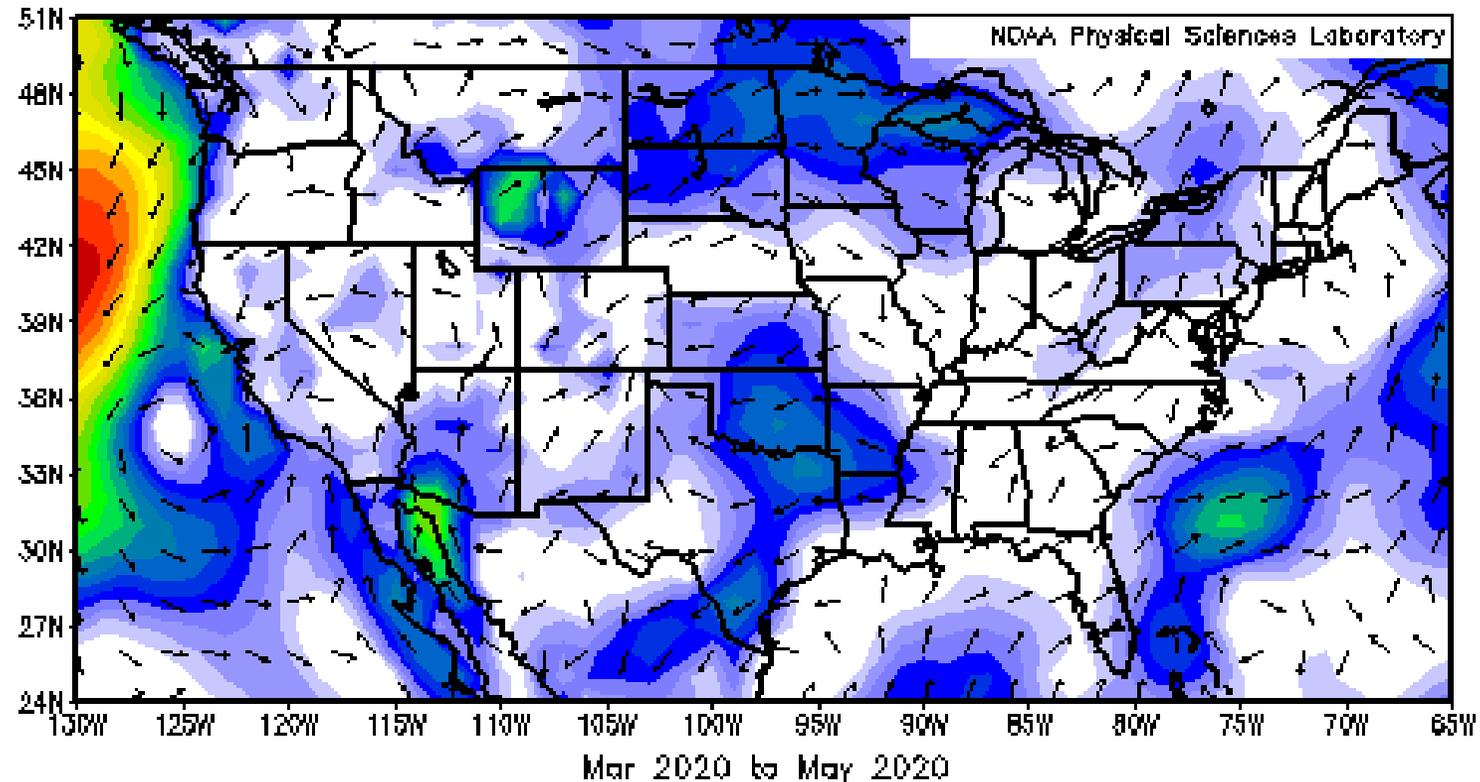
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

# A Windier Than Normal Spring

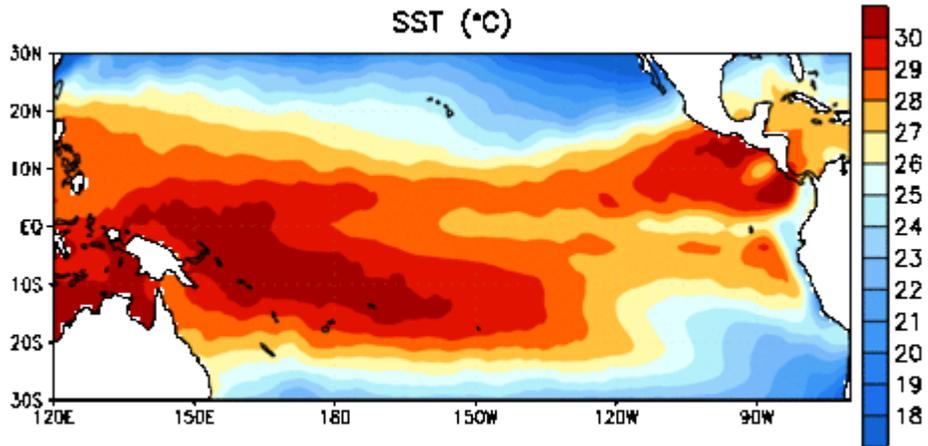
NCEP North American Regional Reanalysis  
Vector Wind (m/s) Composite Anomaly 1981–2010 climo



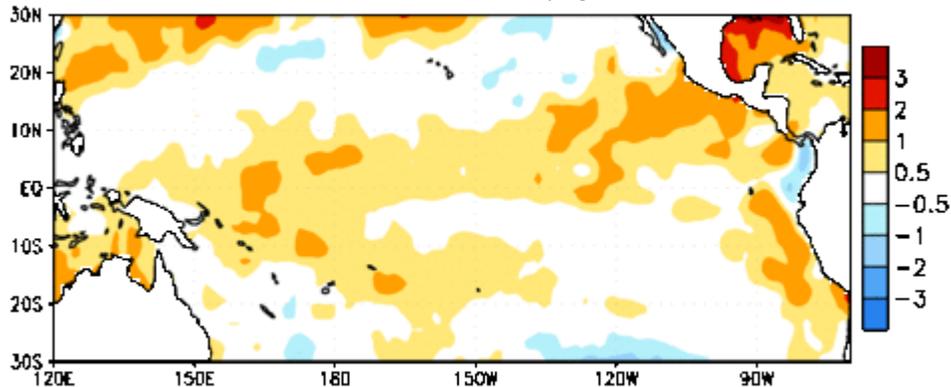
# Monthly/Seasonal Outlooks

# ENSO Outlook

Week centered on 01 APR 2020  
SST (°C)

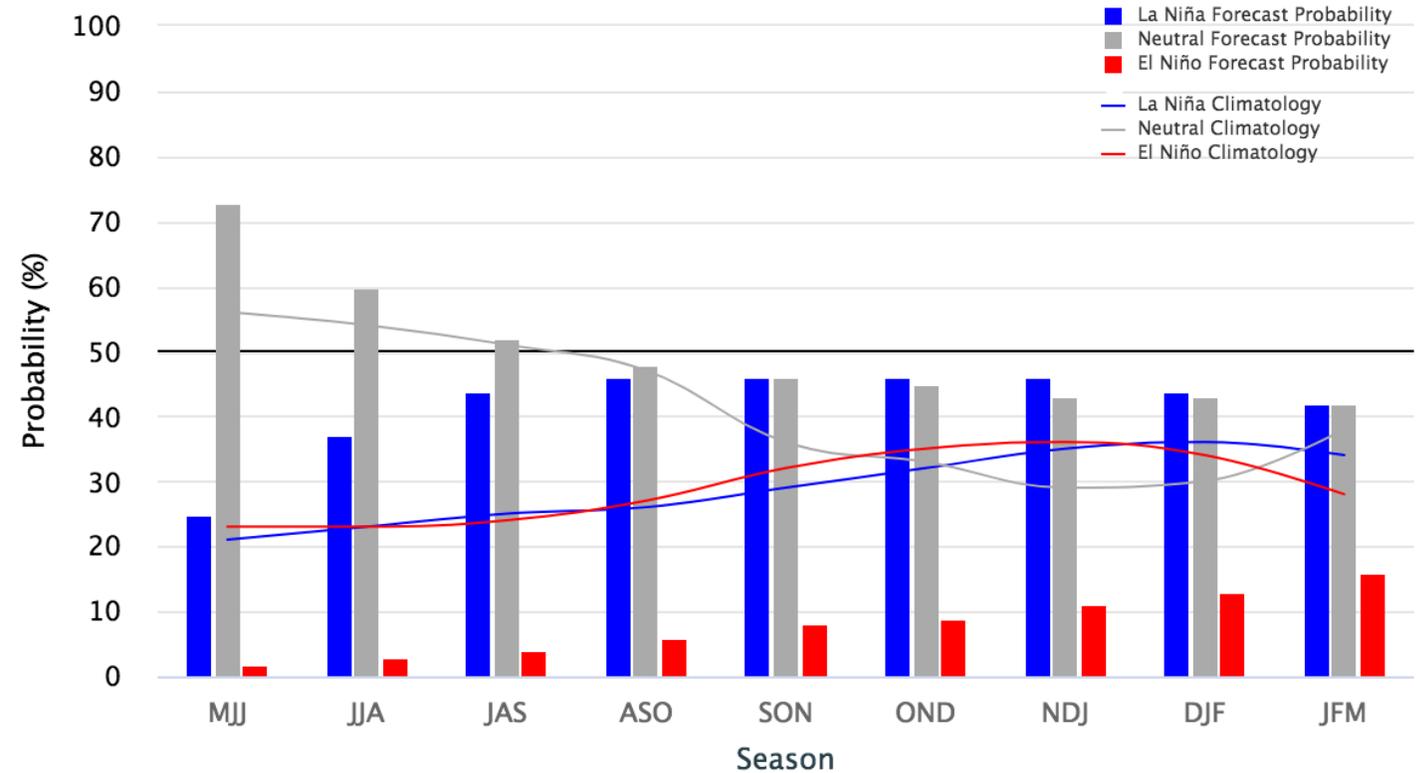


Week centered on 01 APR 2020  
SST Anomalies (°C)



## Early-June 2020 CPC/IRI Official Probabilistic ENSO Forecasts

ENSO state based on NINO3.4 SST Anomaly  
Neutral ENSO:  $-0.5\text{ }^{\circ}\text{C}$  to  $0.5\text{ }^{\circ}\text{C}$

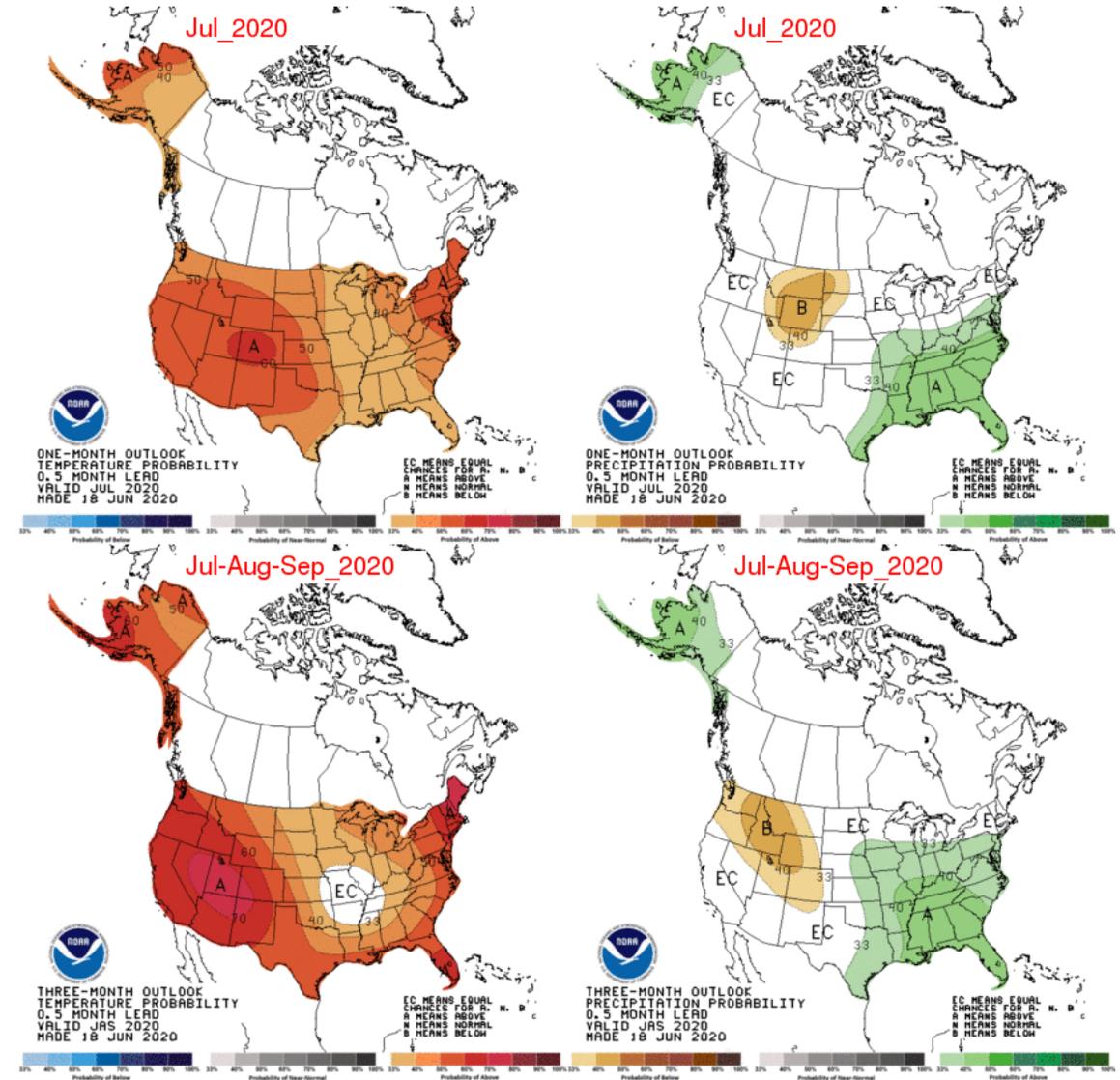


[https://www.cpc.ncep.noaa.gov/products/analysis\\_monitoring/enso\\_update/stanim.shtml](https://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_update/stanim.shtml)  
[https://iri.columbia.edu/our-expertise/climate/forecasts/enso/current/?enso\\_tab=enso-cpc\\_plume](https://iri.columbia.edu/our-expertise/climate/forecasts/enso/current/?enso_tab=enso-cpc_plume)

# NOAA CPC

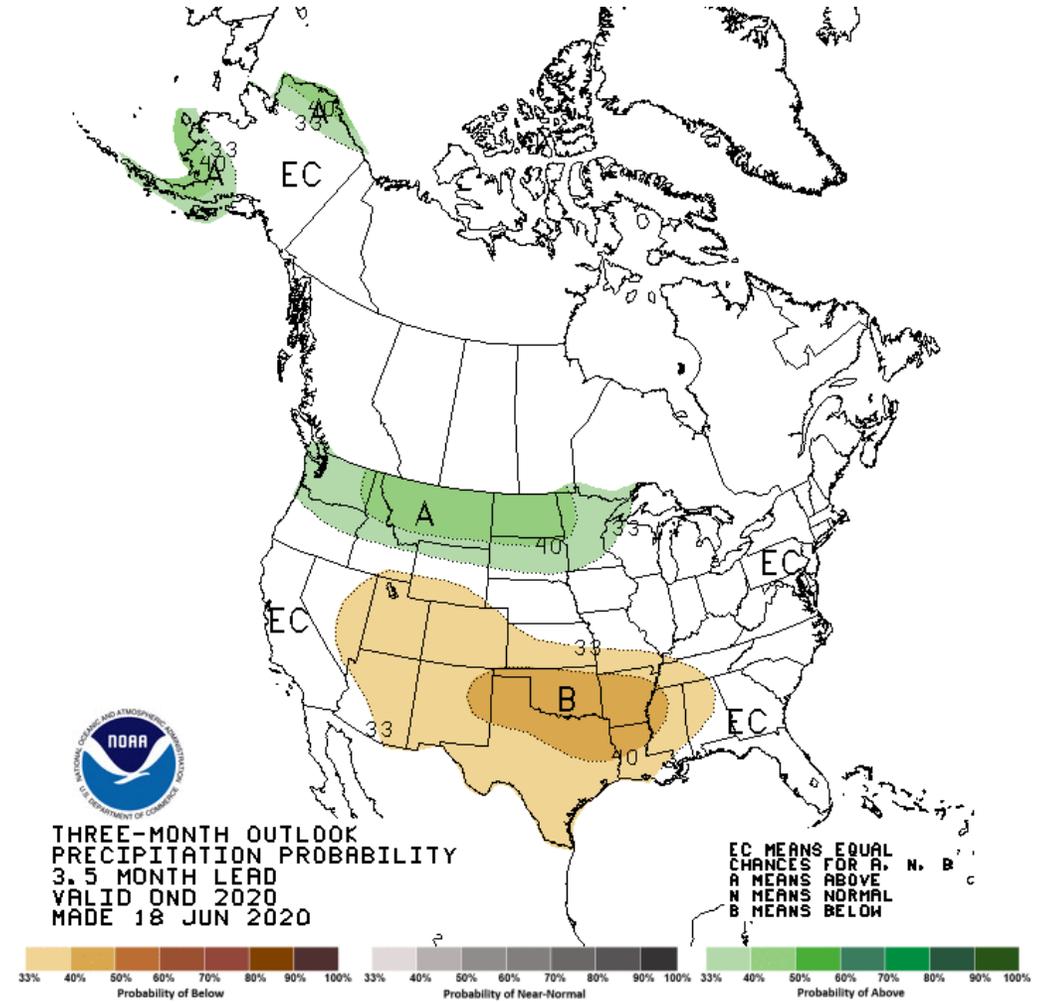
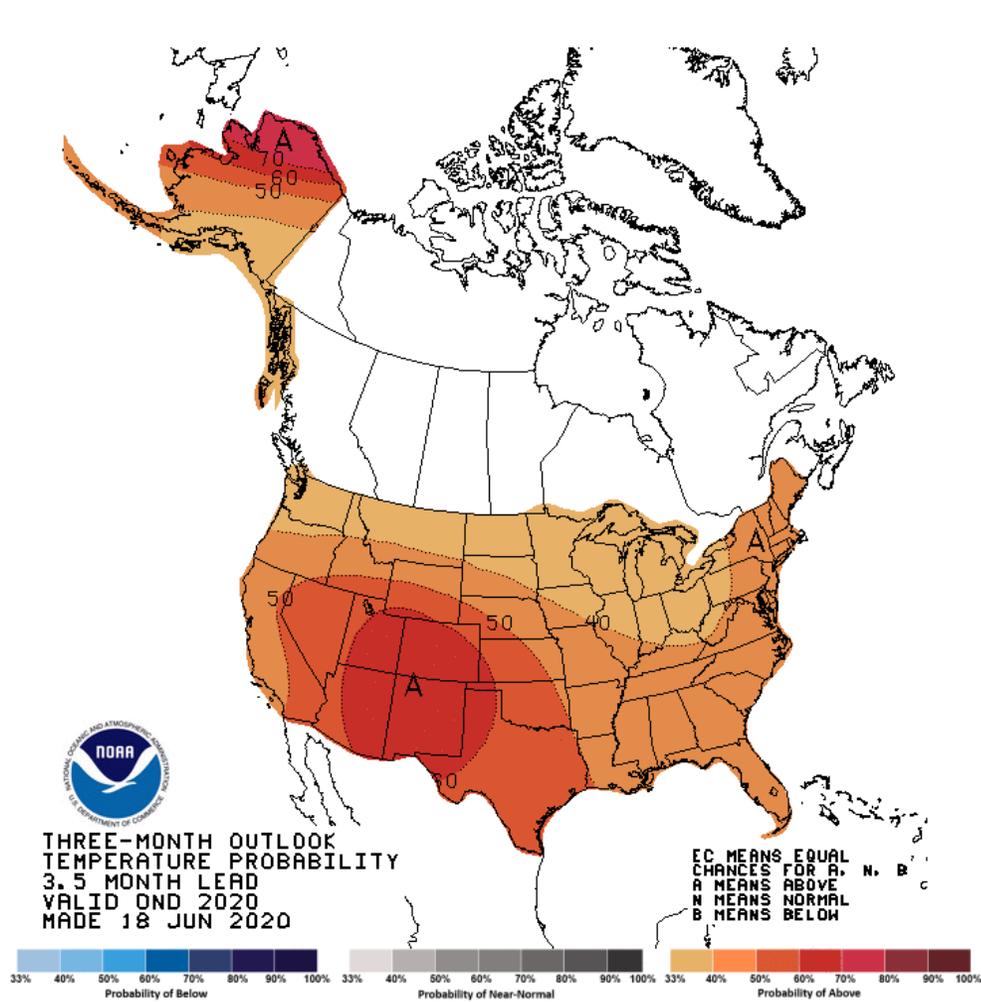
## 1 and 3-Month Outlooks

July - September, 2020



# NOAA CPC Seasonal Outlook

October - December 2020



Thank You!

