

Weather/Climate Update



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Great Lakes Climate and Lake Levels Update and Outlook Webinar
2 November 2020

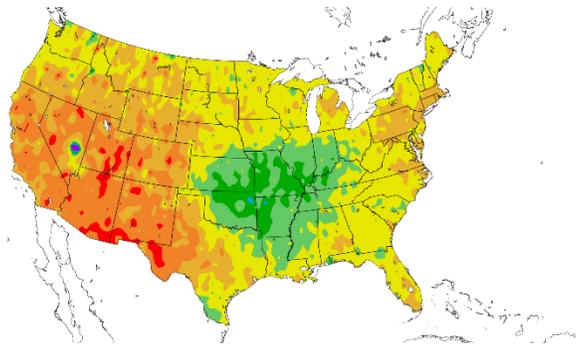


Weather/Climate Review

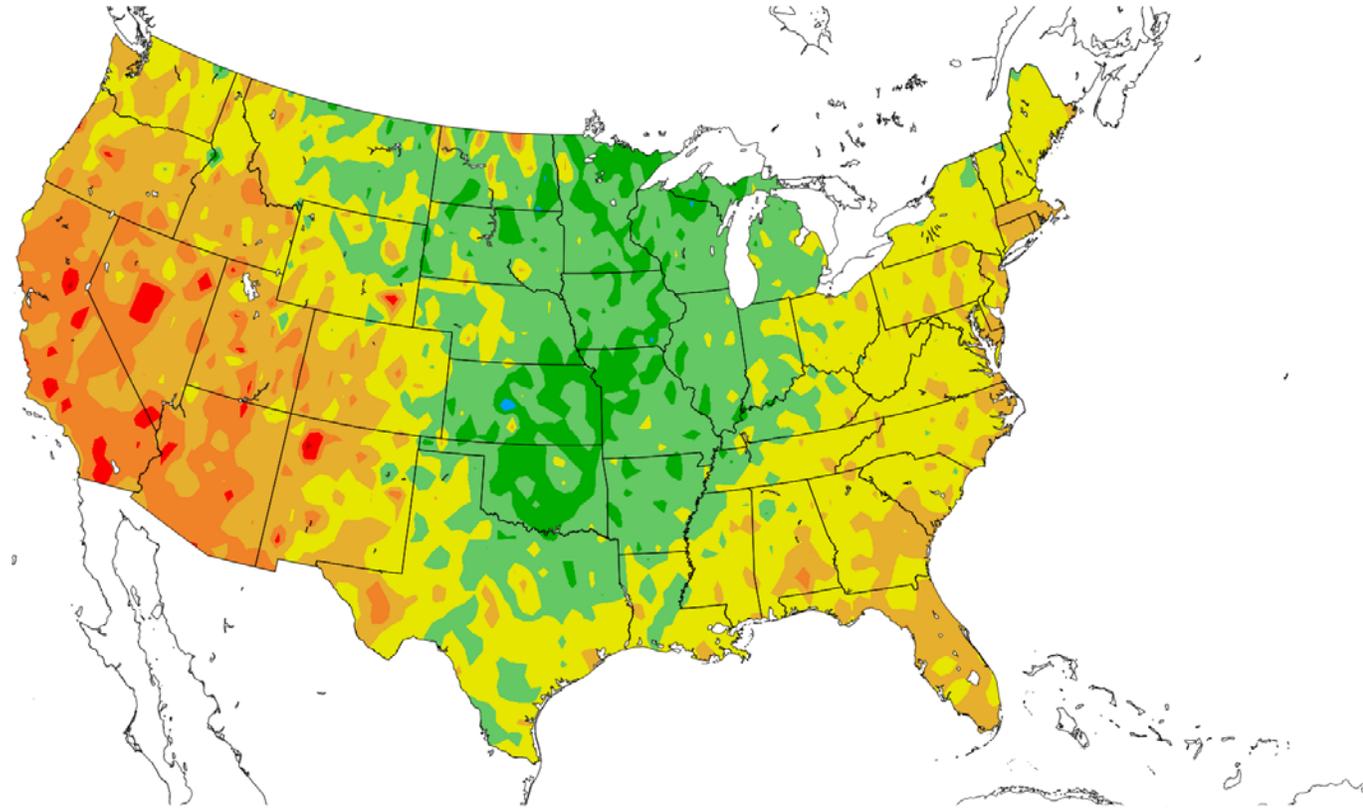
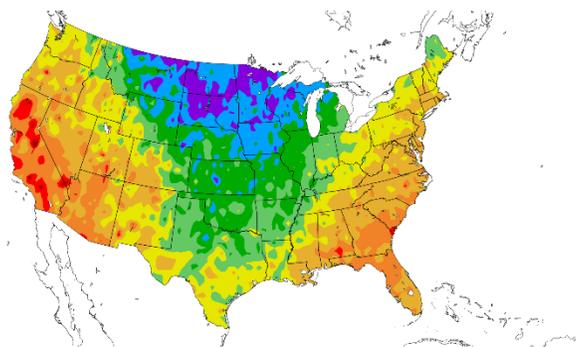
Departure from Normal Temperatures (°F)

August – October, 2020

Departure from Normal Temperature (F)
8/1/2020 – 8/31/2020

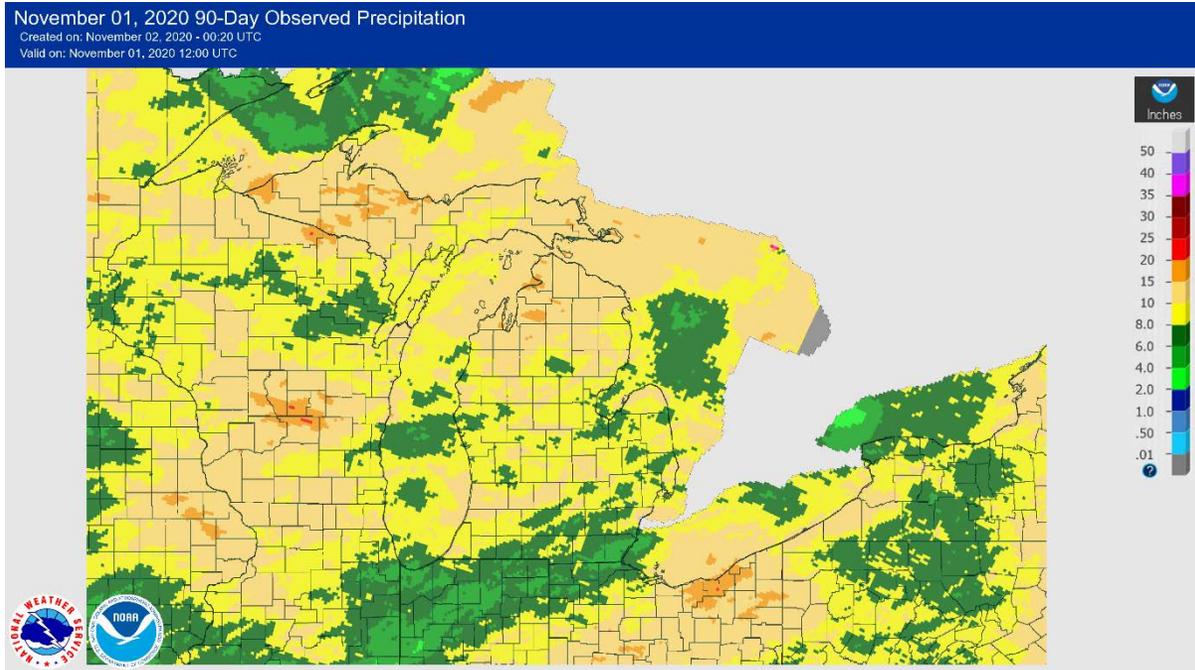
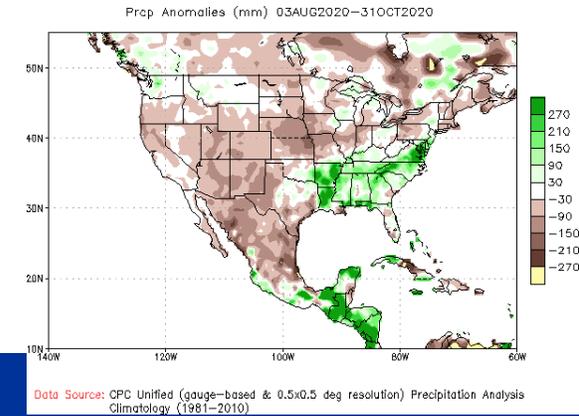


Departure from Normal Temperature (F)
10/1/2020 – 10/31/2020

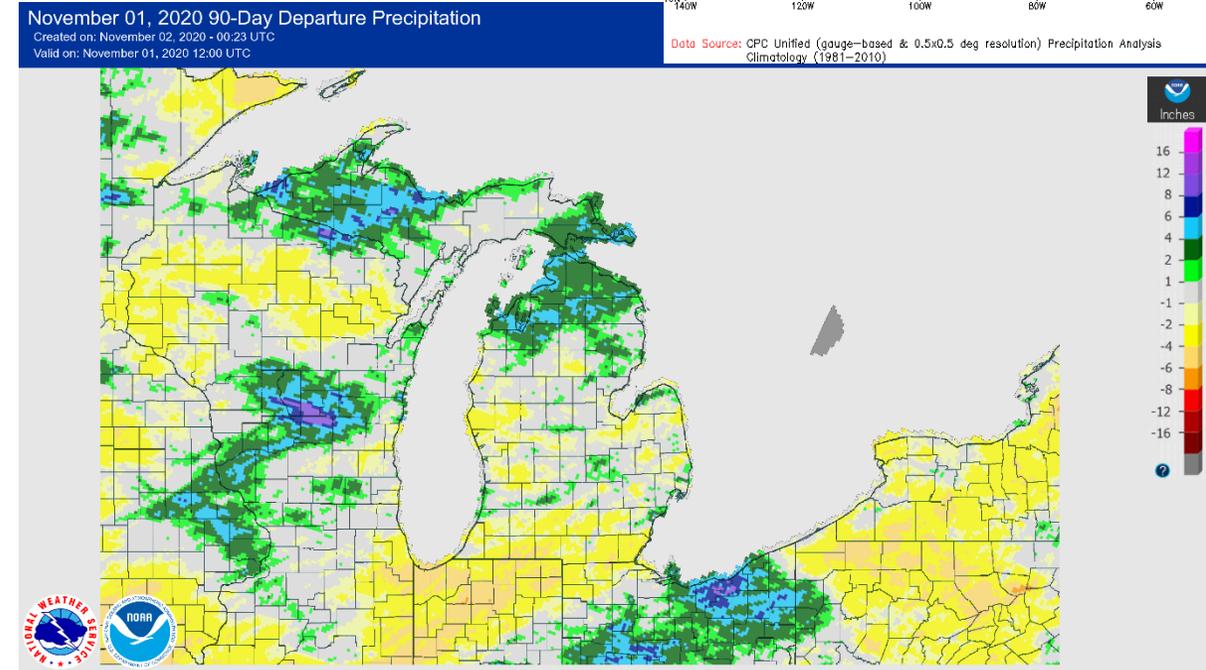


90-Day Precipitation Totals

3 August – 31 October 2020



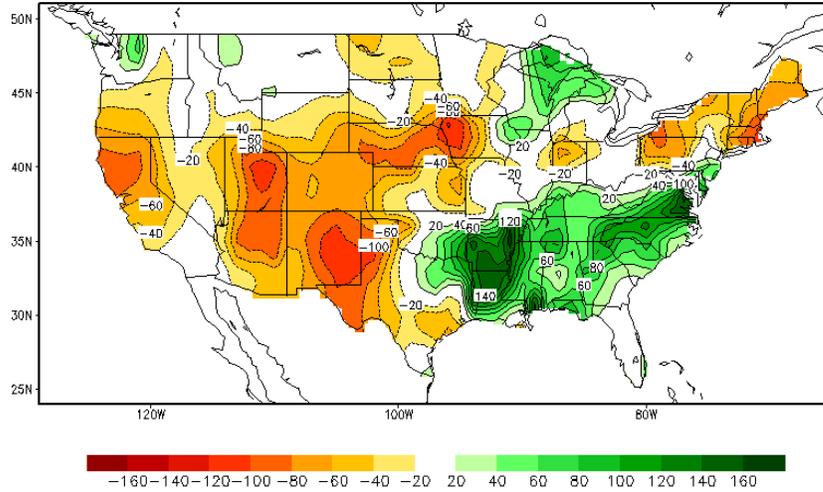
Total Precipitation



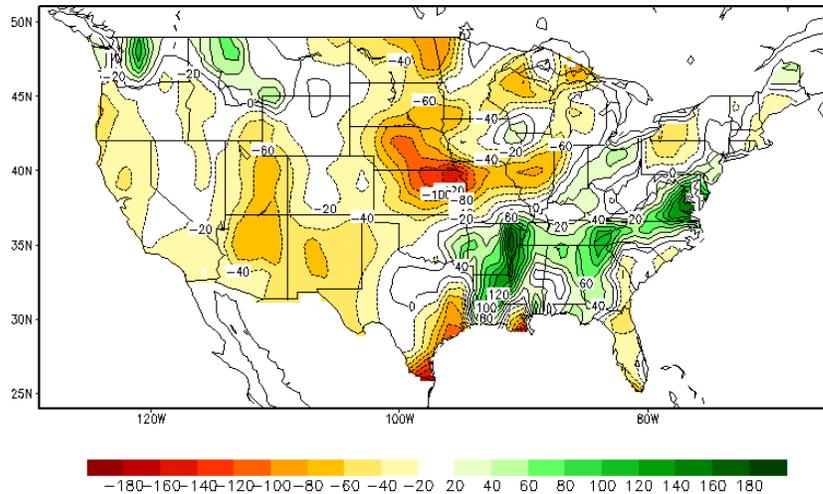
Precipitation Departure from Normal

Soil Moisture and Streamflow Conditions

Calculated Soil Moisture Anomaly (mm)
OCT, 2020

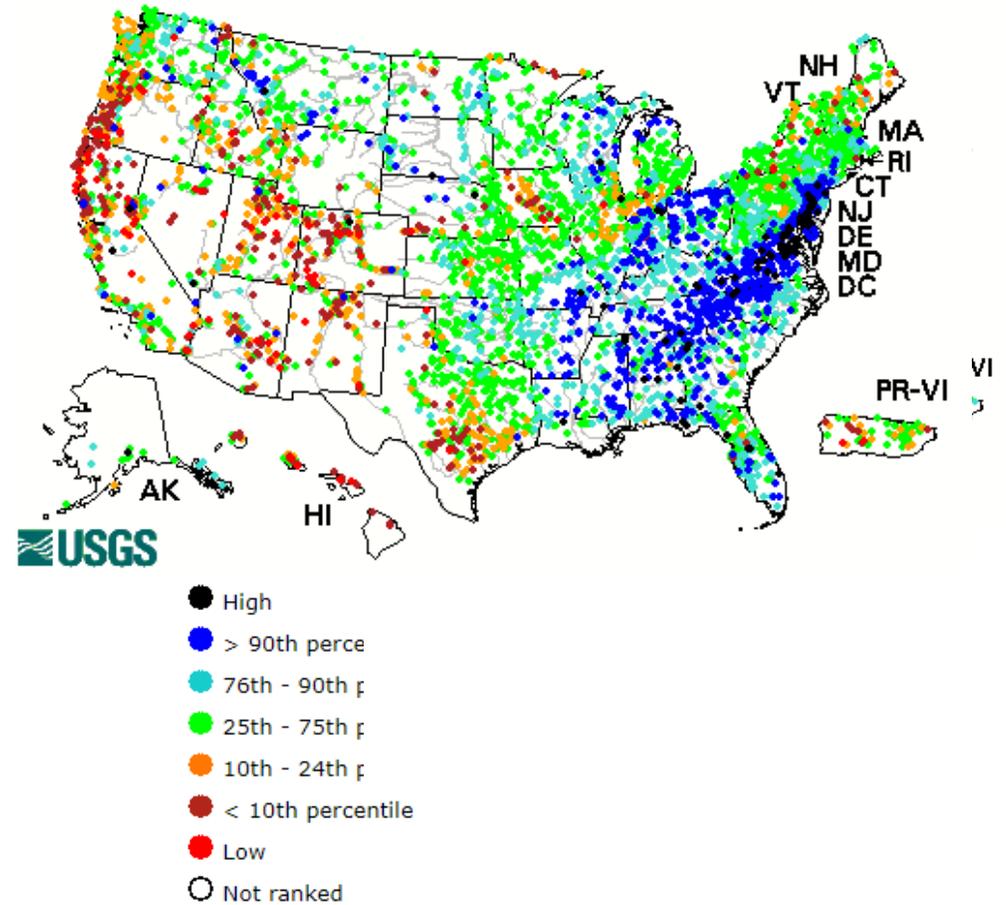


Calculated Soil Moisture Anomaly Change
OCT 31, 2020 from JUL.31



Daily Streamflow Conditions

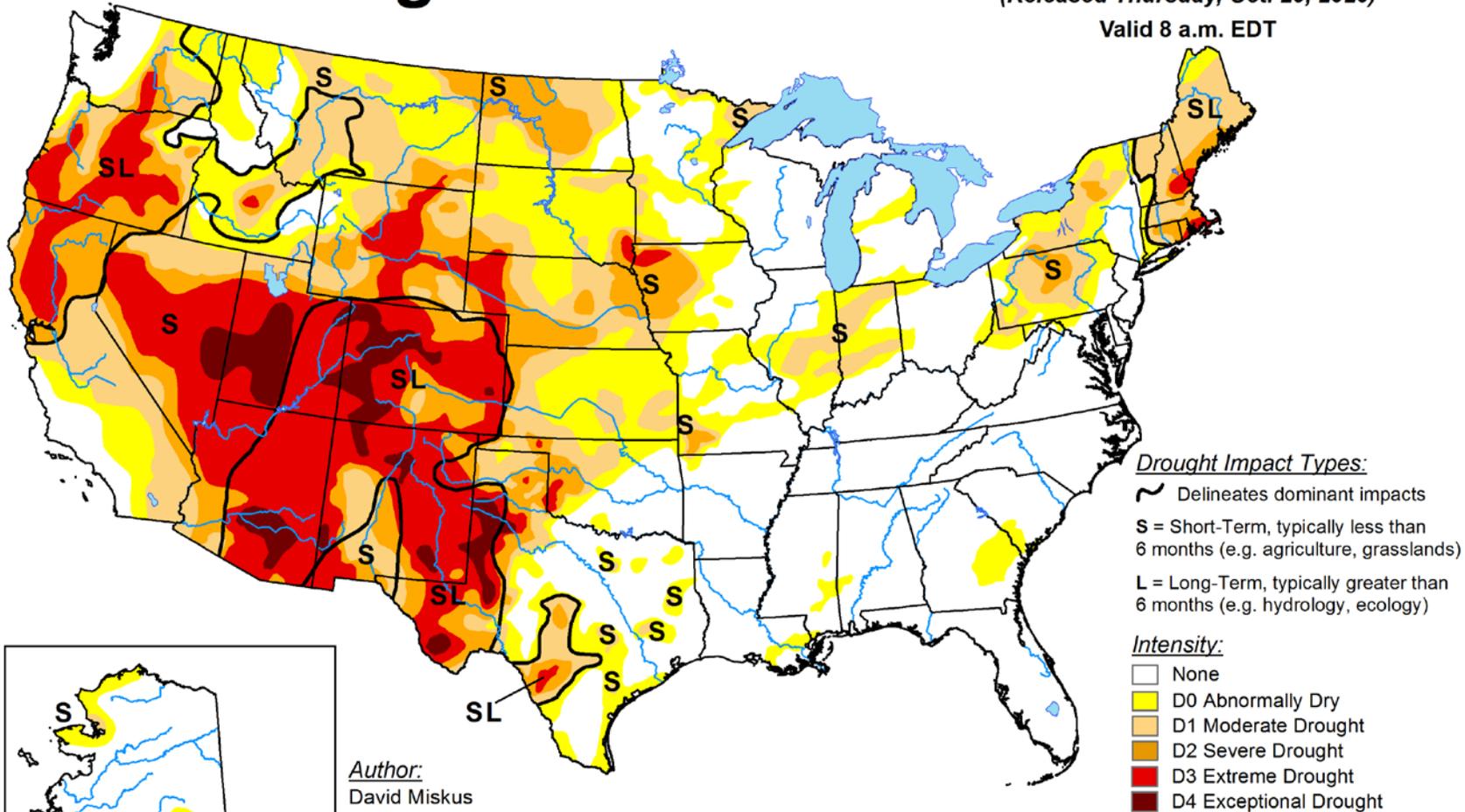
Sunday, November 01, 2020 19:30ET



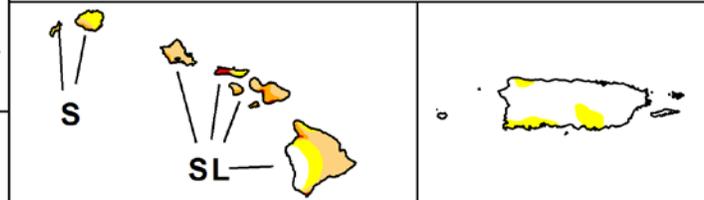
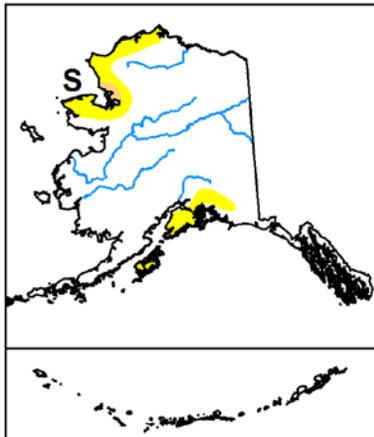
<https://waterdata.usgs.gov/nwis/rt>

U.S. Drought Monitor

October 27, 2020
(Released Thursday, Oct. 29, 2020)
Valid 8 a.m. EDT



Author:
David Miskus
NOAA/NWS/NCEP/CPC



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>



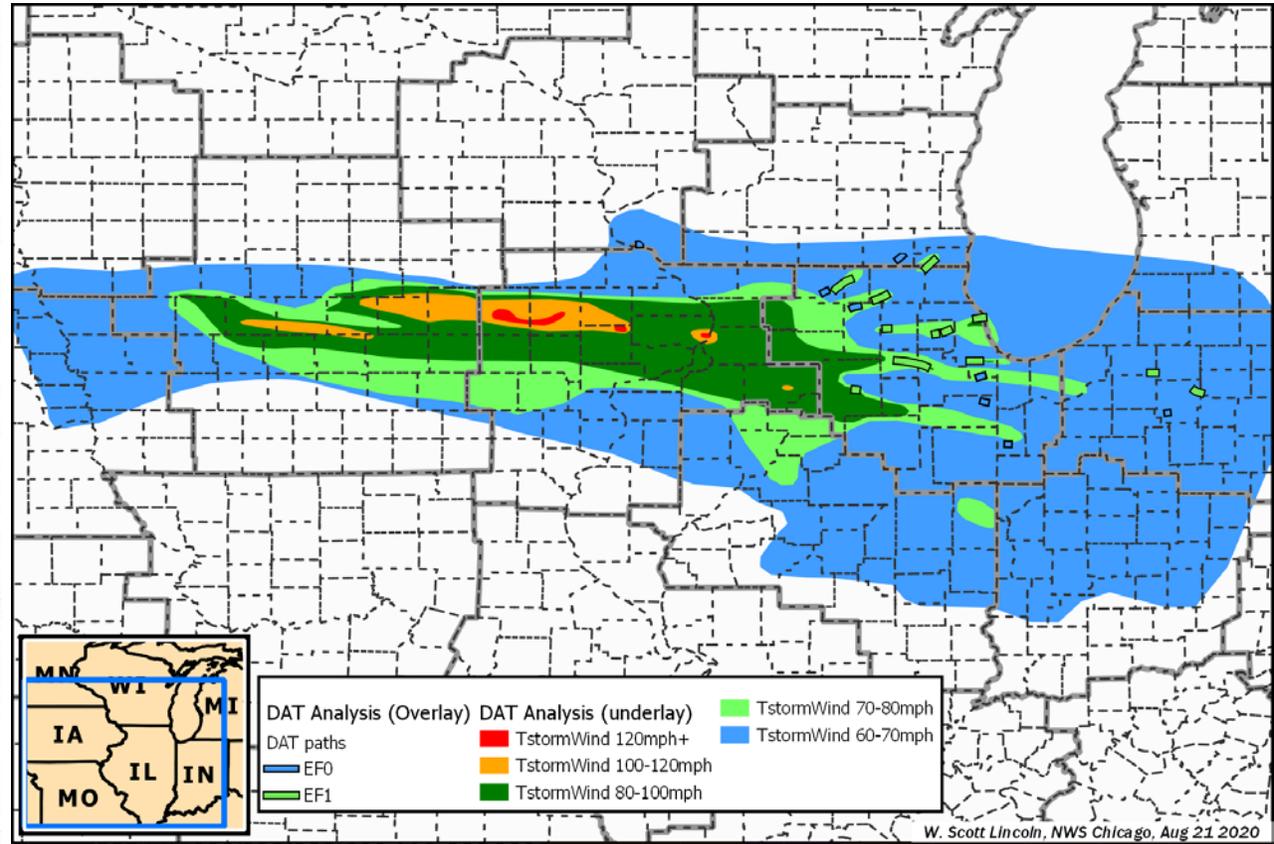
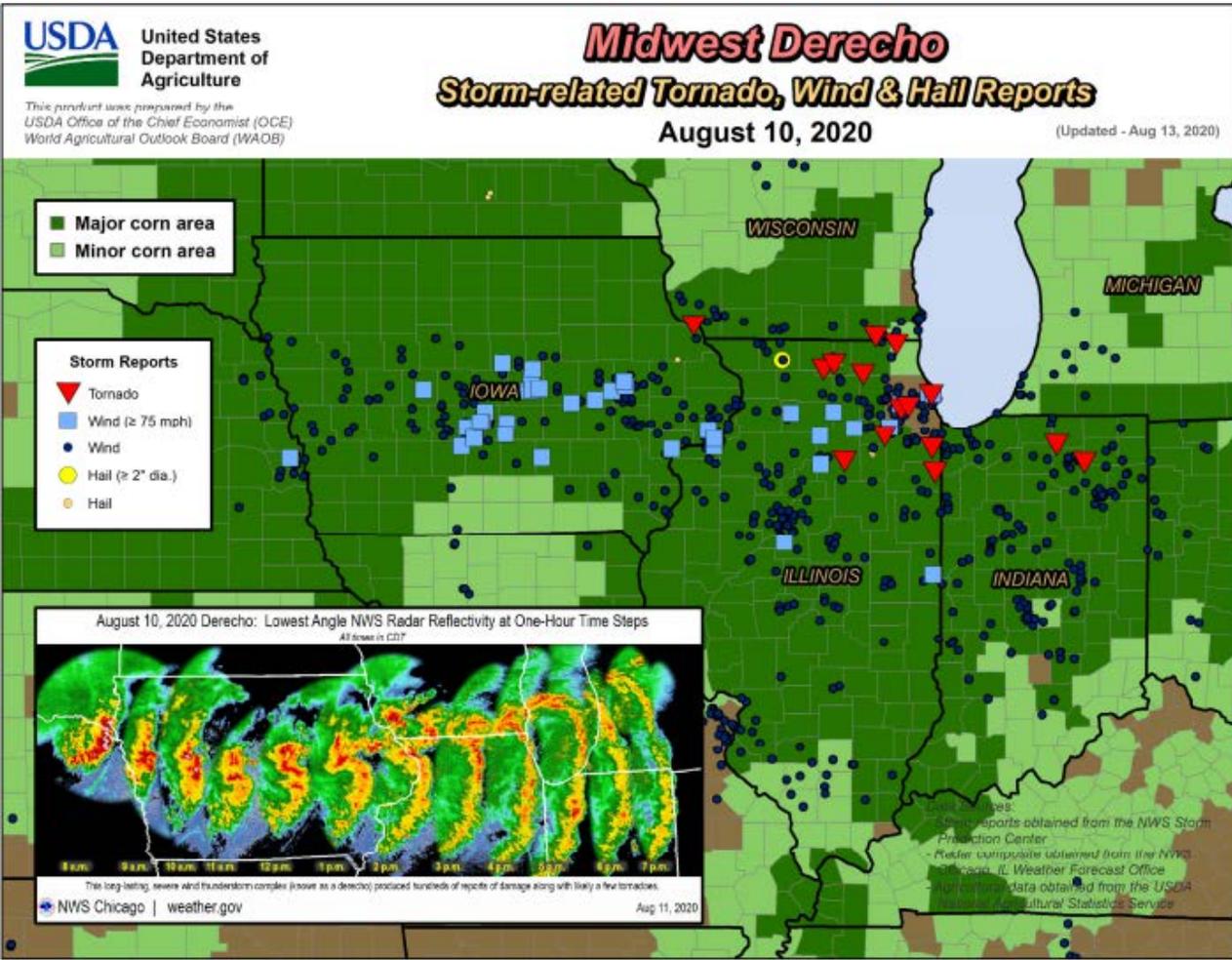
droughtmonitor.unl.edu

AUG 10 2020 Derecho Event

- A line of severe thunderstorms with winds from 70-140 mph moved W-E across the Midwest on August 10, 2020.
- High winds with the storms lasted more than 30 minutes at many locations resulting in severe and widespread property damage.
- The storms led to a meteotsunami across lakeshore sections of SW Lower Michigan with a brief 1.5' rise in lake levels.
- Economic damage estimated at \$7.5B (as of 16 OCT), likely the most costly severe thunderstorm-related weather disaster in U.S. history.



AUG 10 Derecho Event



Winter Makes an Early Appearance

National Snowfall Analysis: accumulation from 2020-09-30 to 2020-11-01

Issued 2020-11-01 23:59:46 UTC

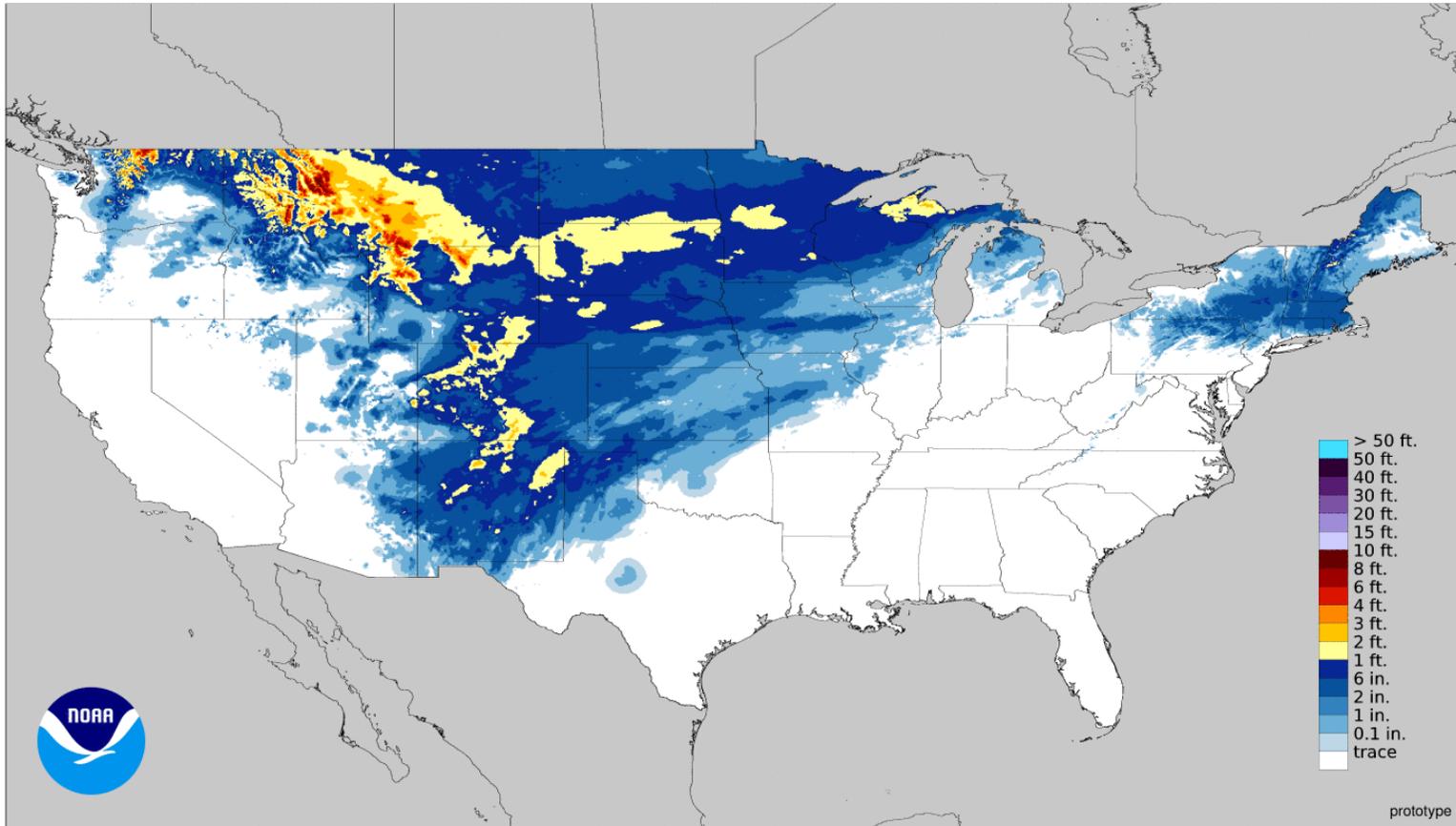


Photo: Minnesota State Patrol



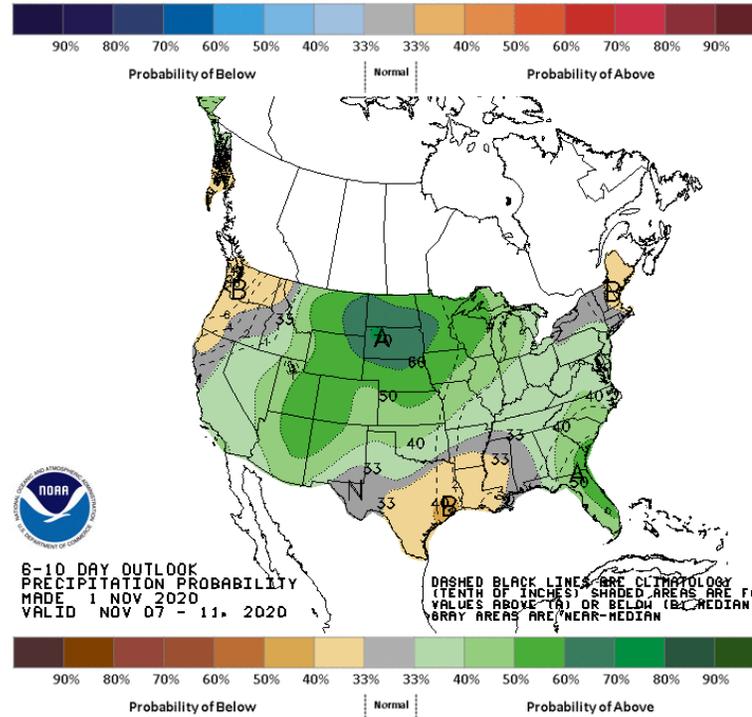
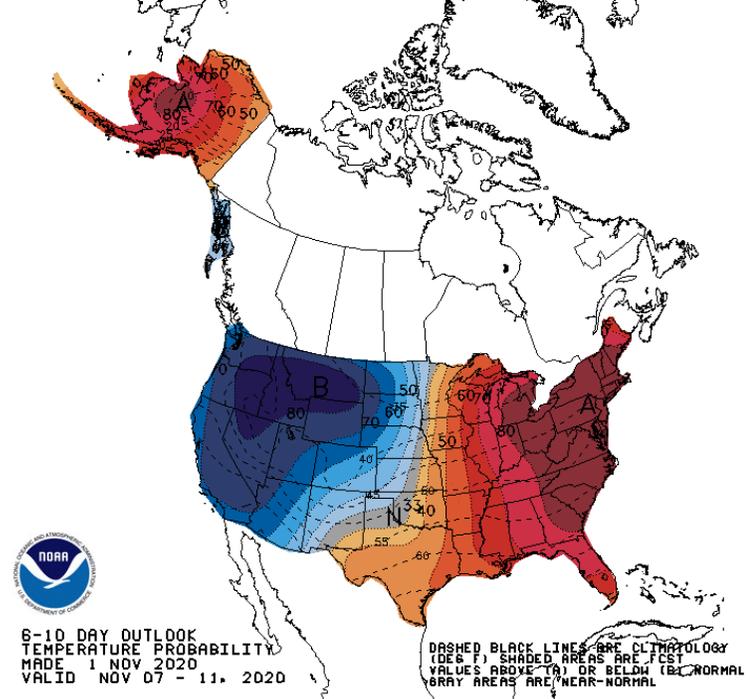
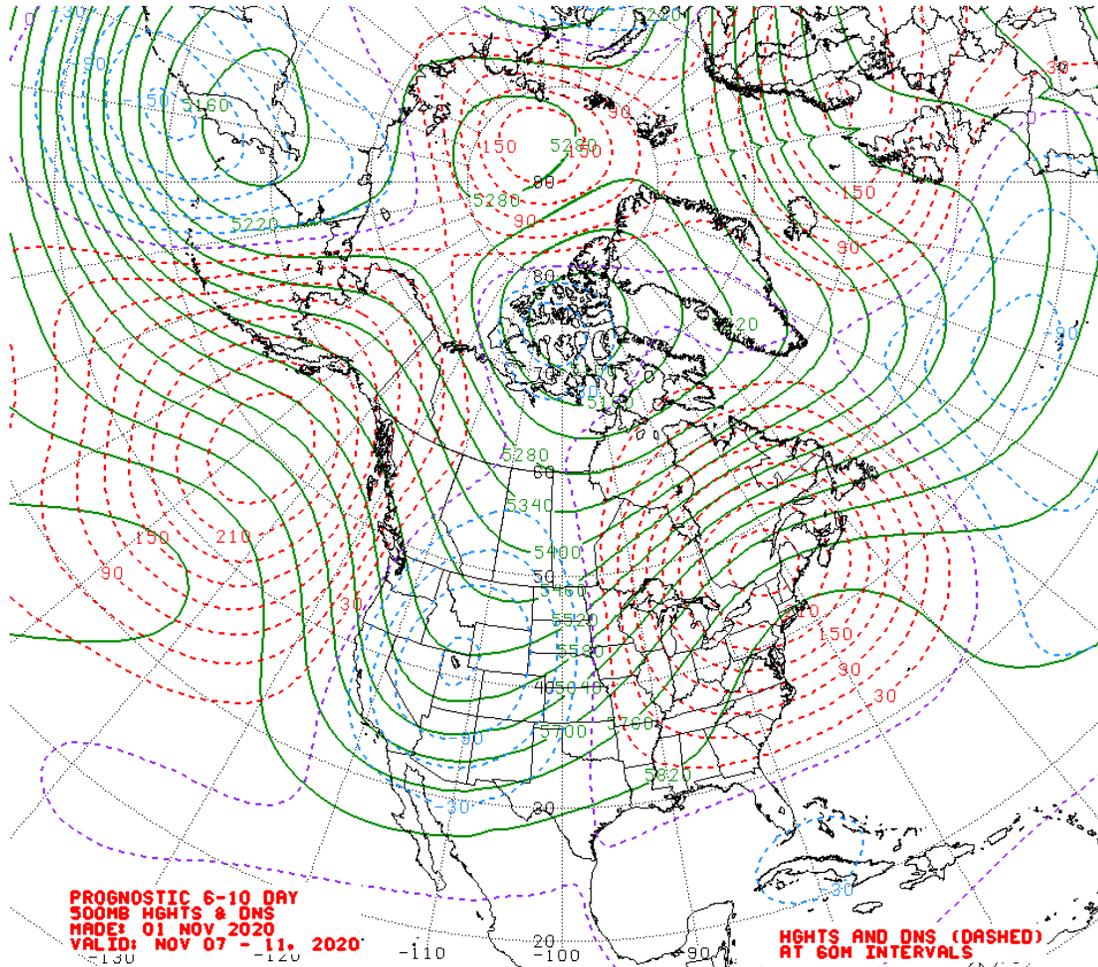
Photo: Jerry Holt/Star Tribune via AP

<https://www.nohrsc.noaa.gov/snowfall>

Monthly/Seasonal Outlooks

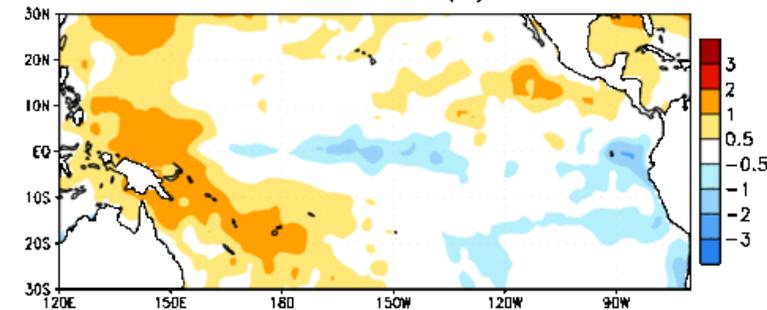
NOAA CPC 6-10 Day Outlook

NOV 7th-11th, 2020



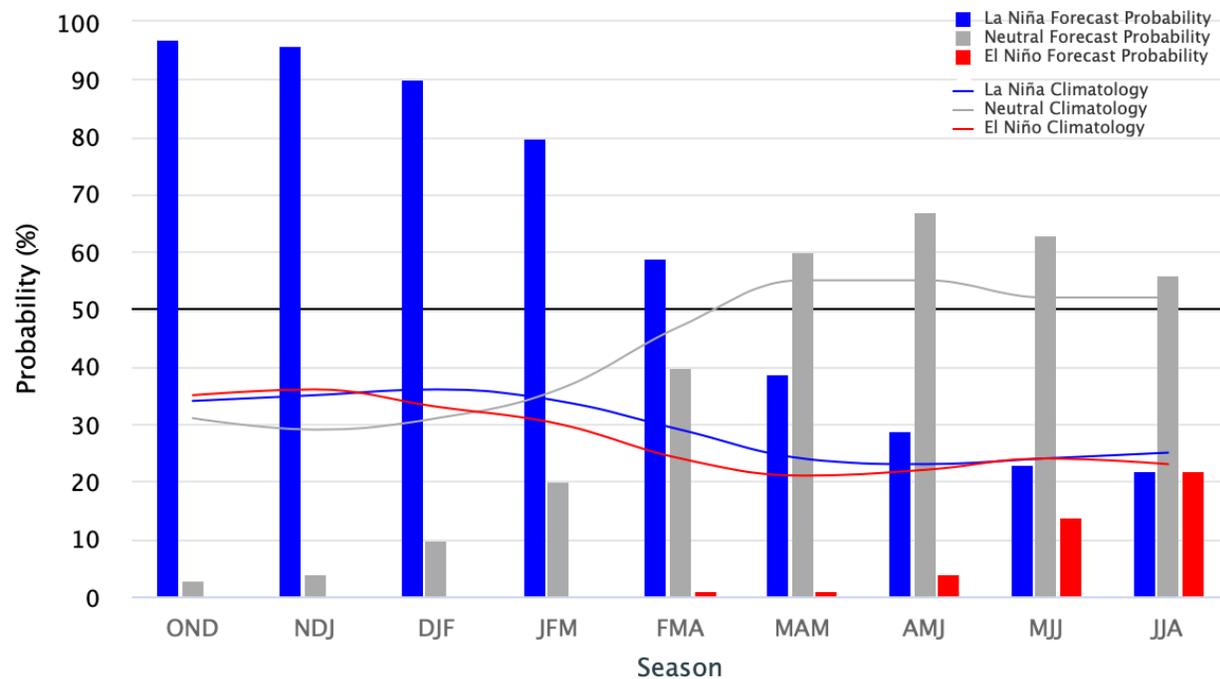
ENSO Forecast

Week centered on 12 AUG 2020
SST Anomalies (°C)

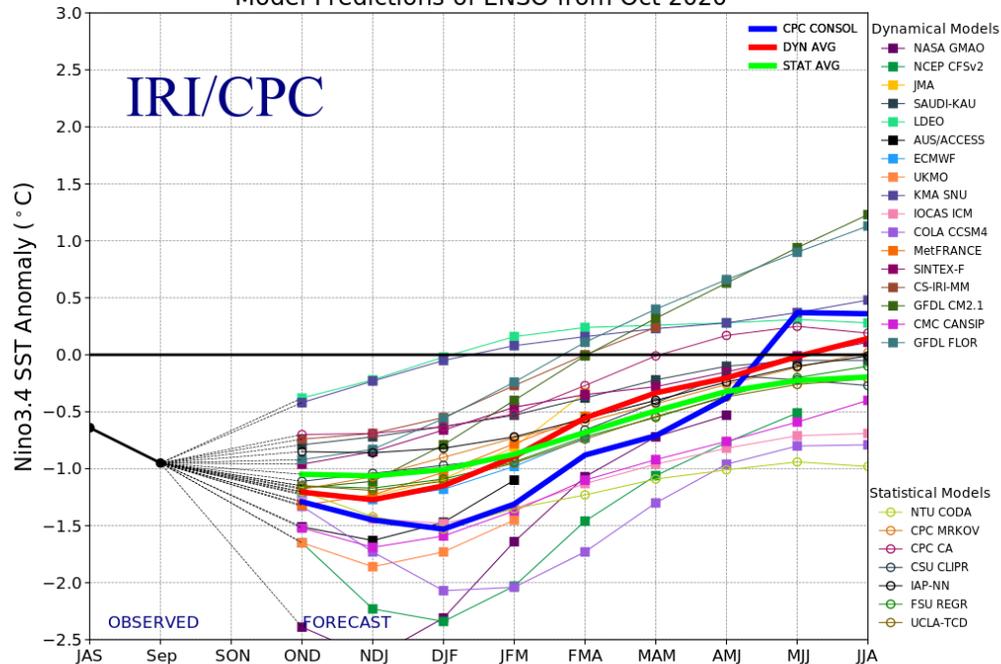


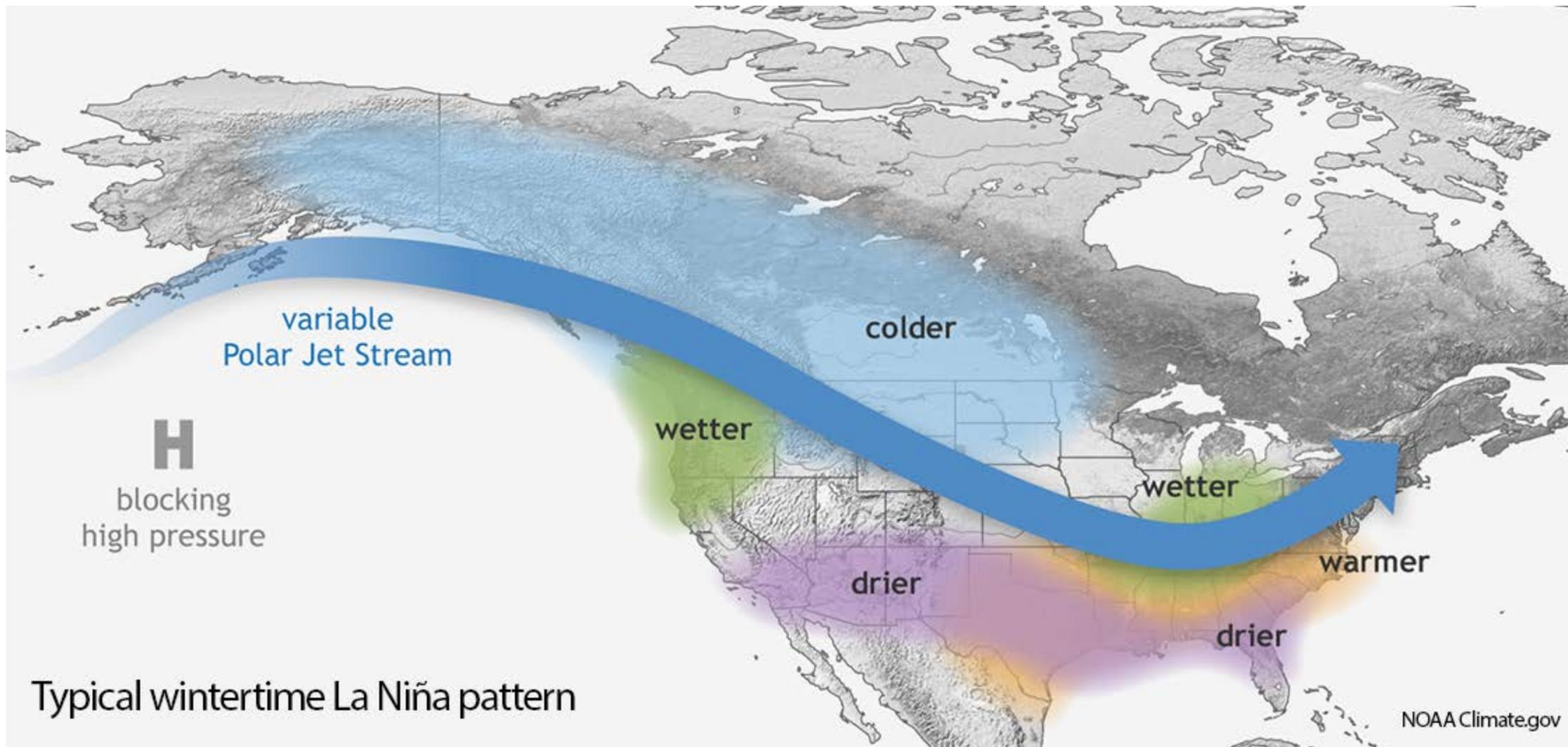
Mid-October 2020 IRI/CPC Model-Based Probabilistic ENSO Forecasts

ENSO state based on NINO3.4 SST Anomaly
Neutral ENSO: -0.5 °C to 0.5 °C



Model Predictions of ENSO from Oct 2020

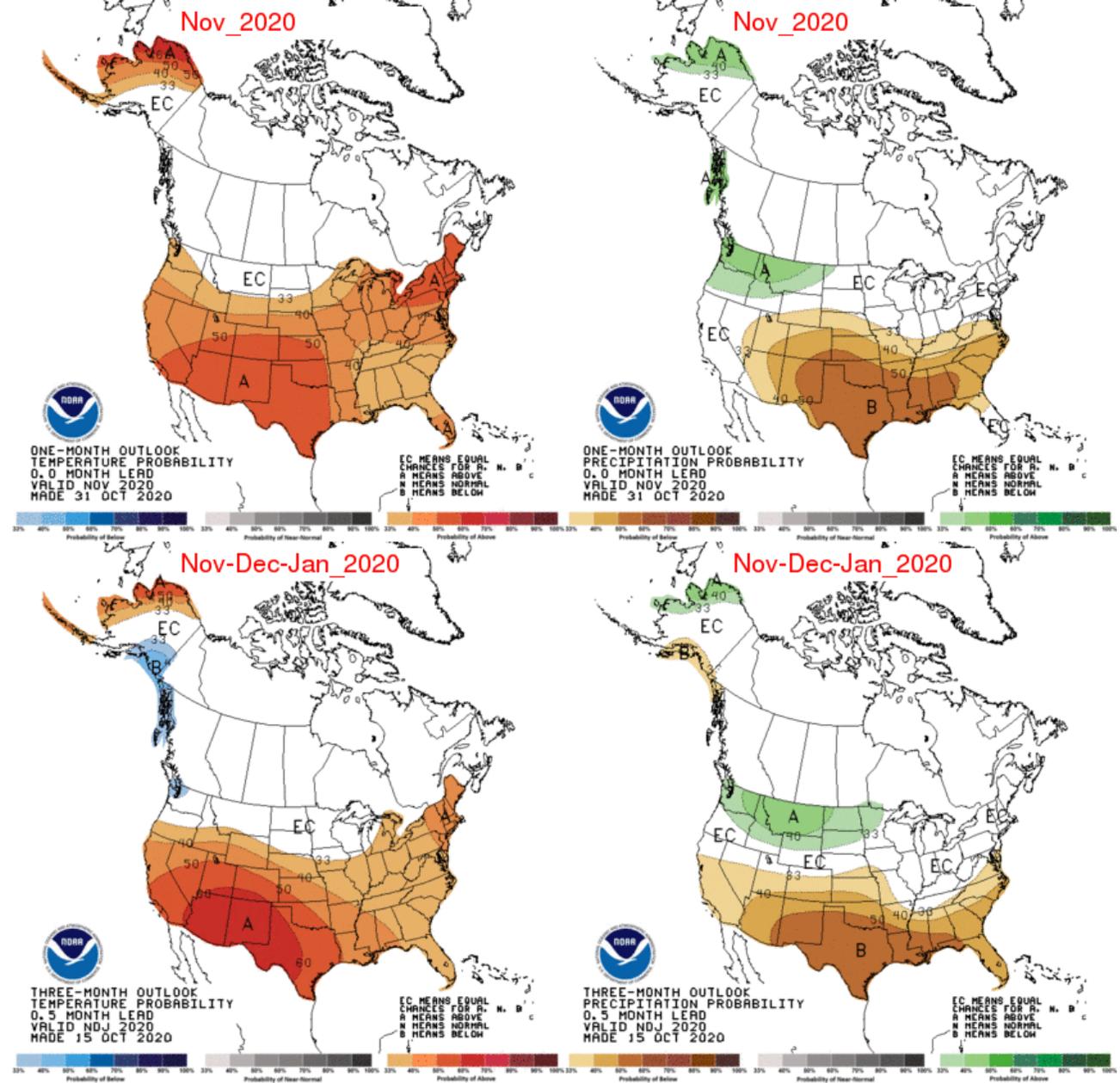




NOAA CPC

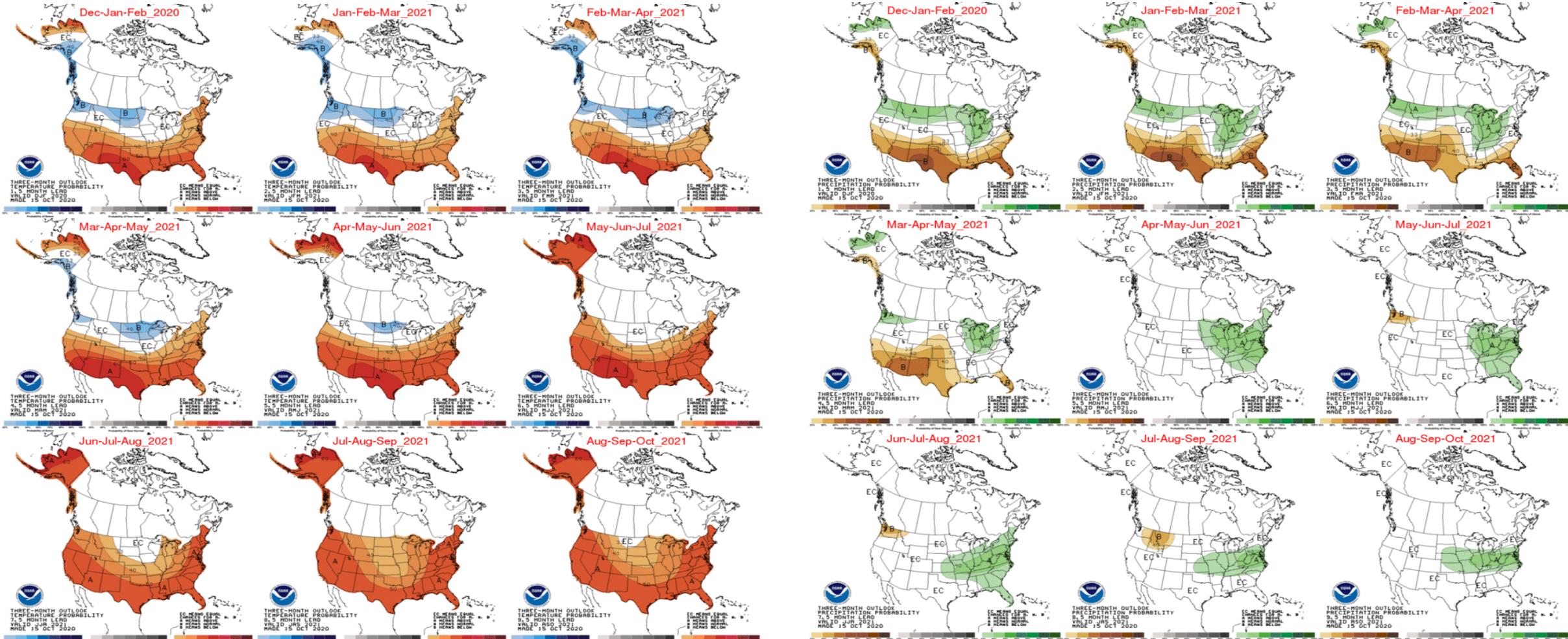
1- and 3-Month Outlooks

November 2020 – January 2021



https://www.cpc.ncep.noaa.gov/products/predictions/multi_season/13_seasonal_outlooks/color/page2.gif

NOAA CPC 3-Month Outlooks

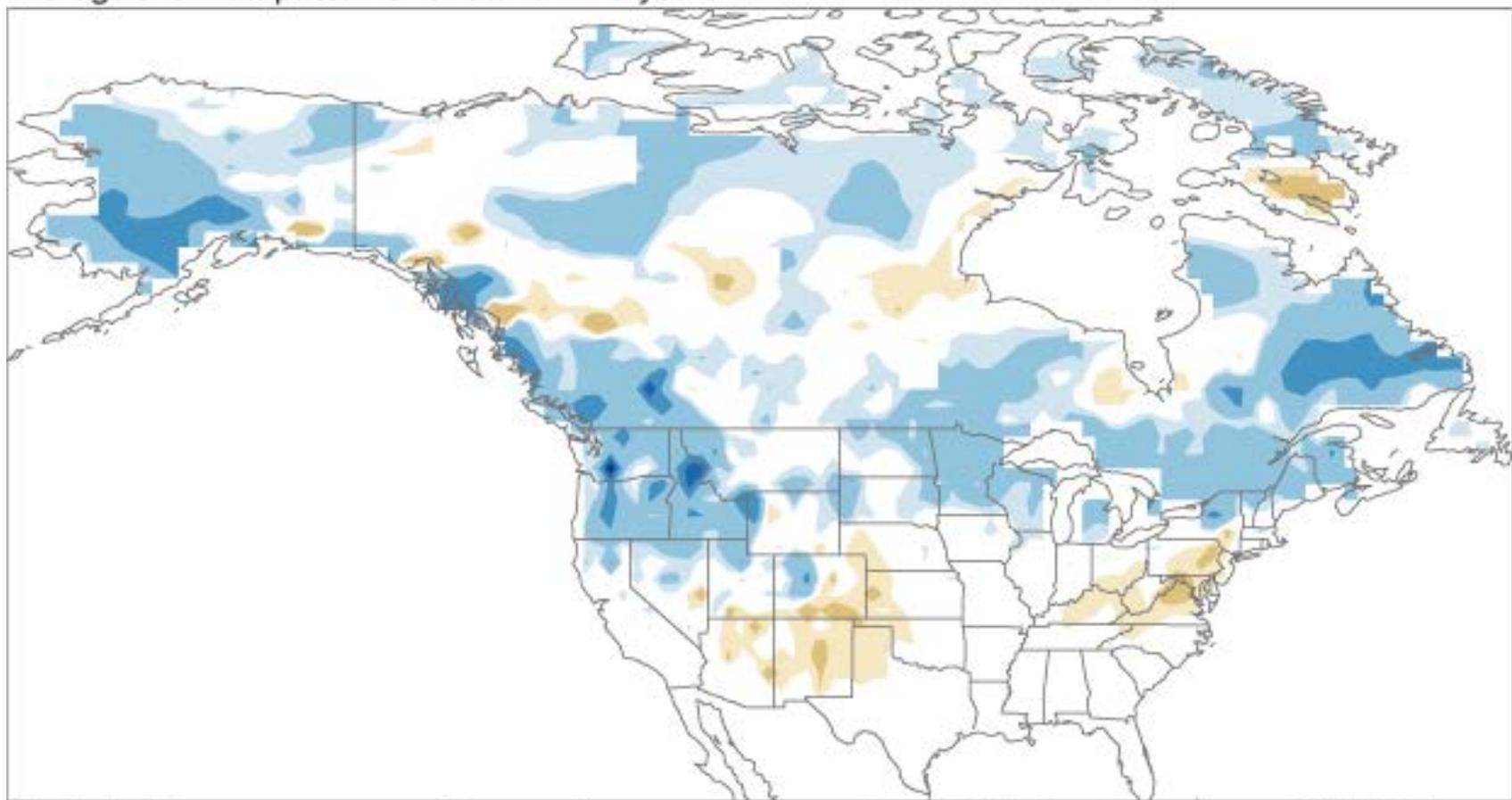


Mean Temperature

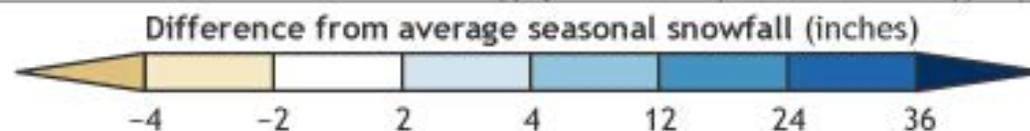
Precipitation

La Nina and Seasonal Snowfall Totals

Average snowfall patterns for all La Niña years



October-April
1950-51 to 2008-09



NOAA Climate.gov
Data: Rutgers GSL



Thank You!

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Monthly Difference from Long-Term Average Precipitation (mm), (gray = preliminary)

