

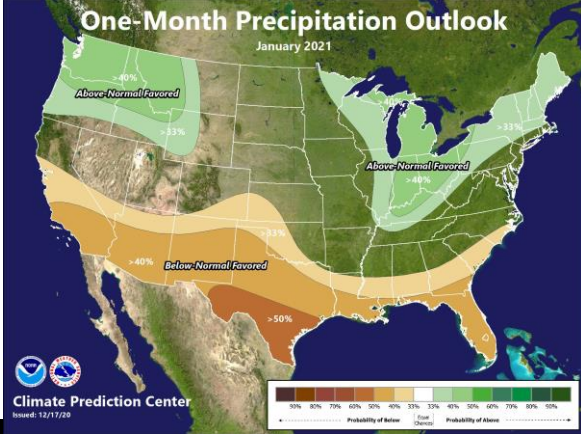
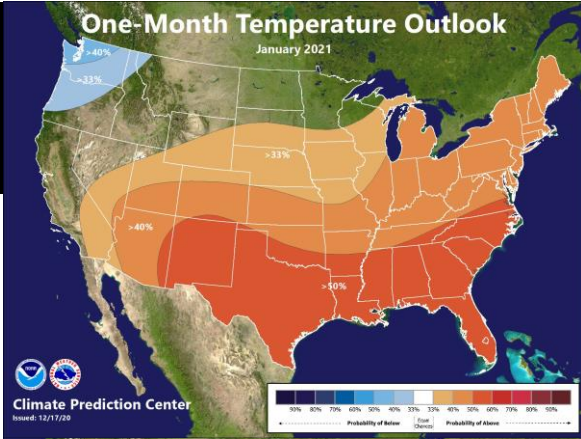


**✓ Important Message:**  
**La Niña Advisory in Effect**

**January 2021 Temperature & Precipitation Outlooks**

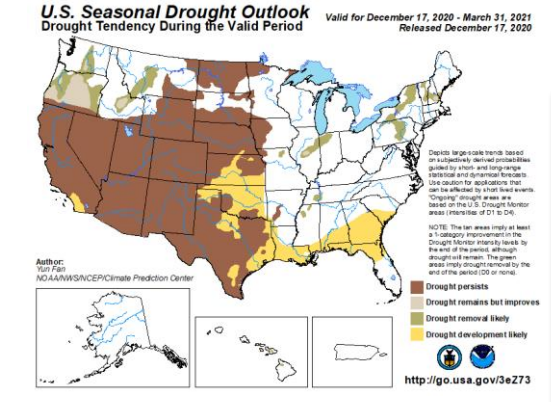
- ✓ There is currently a moderate La Niña in progress. The cold-water anomaly extends well west of the International Dateline. This will significantly weaken the impact the strength of the MJO as convection will have hard time moving east of 60E. This suggests La Niña will be the dominant feature in the CONUS winter weather pattern.
- ✓ La Niña will continue through the winter months but is expected to weaken during the Spring of 2021 (50% chance of ENSO neutral conditions by April-May-June).

- The La Niña signal will be dominant in January's temperature pattern. The below normal snow cover over North America will enhance the warm signal farther north and west than is typical. Most of Central Region is favored to see warmer than normal temperatures. North Dakota and Minnesota have near equal chances of above, near or below normal temperatures.
- Precipitation is favored to be above normal around the Great Lakes Region and drier than normal across western Kansas and eastern Colorado. Equal chances for above, near or below normal elsewhere.

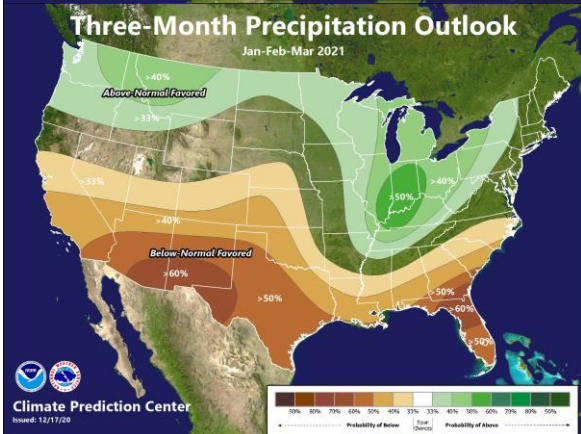
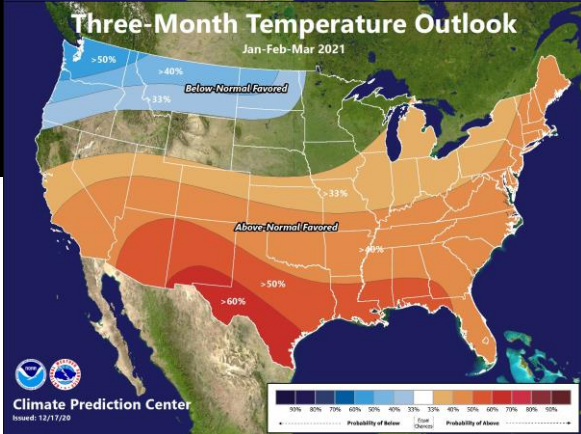


**Seasonal Drought Outlook**

**January through March 2021 Temperature & Precipitation Outlooks**



- As the winter progresses, the cold signal associated with La Niña will increase over the northern Plains. At the same time, warmer than normal conditions will be favored from Michigan through Kansas and Colorado. Near equal chances of above, near or below normal temperatures are expected across areas in-between.
- Typical of many La Niña's, wetter than normal conditions are favored through the Great Lakes Region and into the Ohio Valley. Drier than normal conditions are favored across parts of Kansas, Colorado and Nebraska.

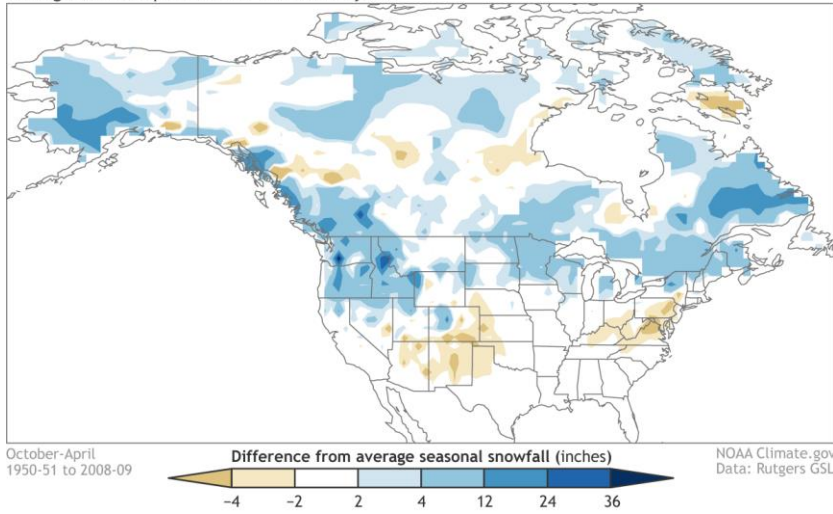


The possibility of below normal precipitation is expected to expand drought conditions into Kansas, and allow the current drought to continue over Nebraska, Colorado, Wyoming and parts of the Dakotas. Improvement is expected over Illinois and northern Indiana, where above normal precipitation is favored.

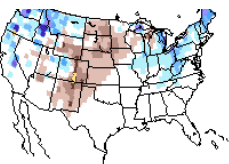


## ENSO Status: La Niña Advisory

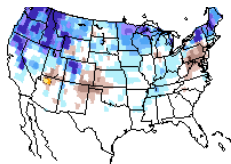
Average snowfall patterns for all La Niña years



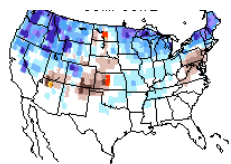
DJF La Niña  
Snow Anomalies



JFM La Niña  
Snow Anomalies



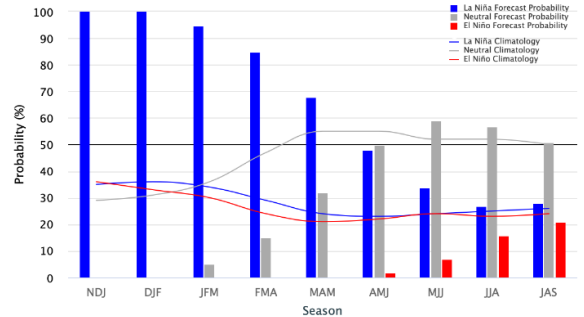
FMA La Niña  
Snow Anomalies



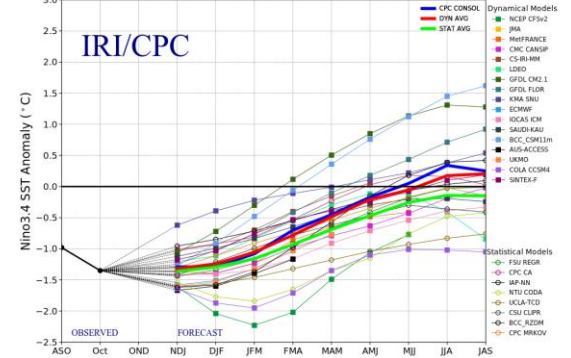
Typically, during a La Niña, snowfall tends to be greater later in the season than during the beginning of the season (see plots above).

## IRI/CPC Probabilistic ENSO Forecast/Plumes

Early-December 2020 CPC/IRI Official 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 Nov 2020



- The Consolidated and Multi Model Ensembles show the 95% chance of the current moderate La Niña continuing into mid winter.
- There is a 50% chance of ENSO-neutral conditions developing by mid spring. ENSO-neutral conditions are likely by summer 2021.

## Other Teleconnection Effects

- Higher frequency forcing factors such as the MJO are not expected to be a major factor in January. Presently, La Niña conditions are currently hindering the progression of the MJO.
- Presently, there are no signs of sudden stratospheric warming (to impact the forecast) either.

## Useful Links/Info:

- News from [Climate.gov](https://www.climate.gov)
- [Latest ENSO Blog](https://www.climate.gov) from Climate.gov
- [Sea Surface Temperatures](https://www.climate.gov) from the Climate Prediction Center
- [Latest ENSO Discussion](https://www.climate.gov) from the Climate Prediction Center
- [Drought Information](https://www.drought.gov) from the US Drought Monitor
- [Interactive GIS Mapping](https://www.ncei.noaa.gov) from NCEI (Anomalies/Rankings)
- [Local Climate Analysis Tool](https://www.lcat.noaa.gov) (LCAT) – Account registration required
- [NWS Forecast Maps](https://www.westernregion.noaa.gov) from Western Region

