



## Important Messages:

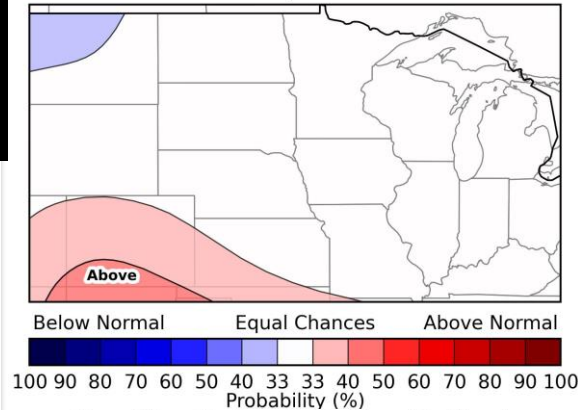
### La Niña, MJO, & AO Expected to Impact March

- ✓ La Niña conditions are favored (66% chance) to transition to ENSO neutral this spring (March-May 2025).
- ✓ If a coherent MJO moves over the Indian Ocean, this would result in a retrograding longwave trough over North America, signaling the return of warmer temperatures over the eastern U.S. in late Feb/early March.
- ✓ The Arctic Oscillation (AO) is forecast to become positive in the last week of February, followed by forecasts of a sharp drop to near neutral to start the month of March, which may lead to a more transient pattern to start the month of March.

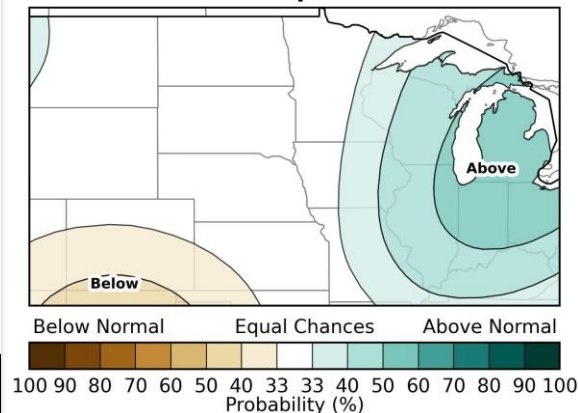
## March 2025 Temperature & Precipitation Outlooks

- **Above-normal temperatures** are favored for southwest Kansas, and much of Colorado.
- **Wetter than normal** conditions are favored from Missouri & Kentucky north into the Great Lakes Region.
- **Drier than normal** conditions are favored in the southern two-thirds of Colorado and southwest Kansas.
- Elsewhere in Central Region, there are equal chances of above-, near-, and below-normal temperatures & precipitation.

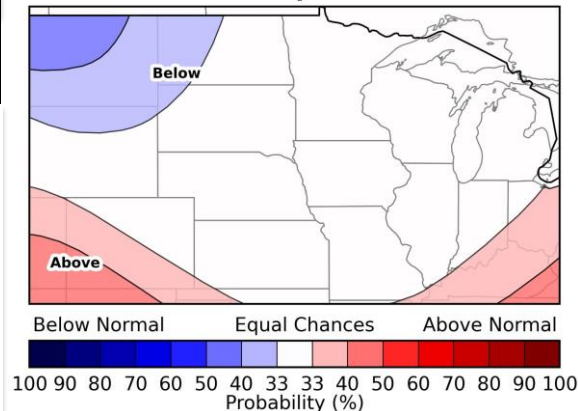
### One Month Temperature Outlook



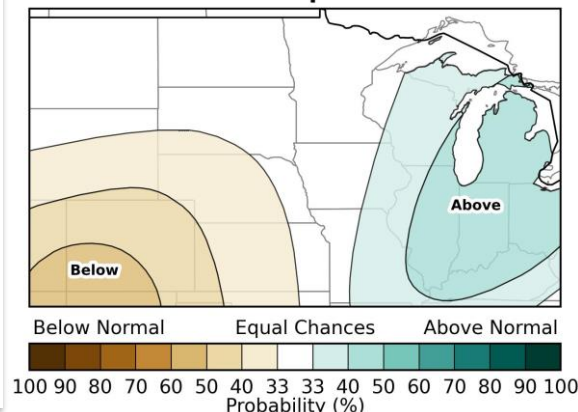
### One Month Precipitation Outlook



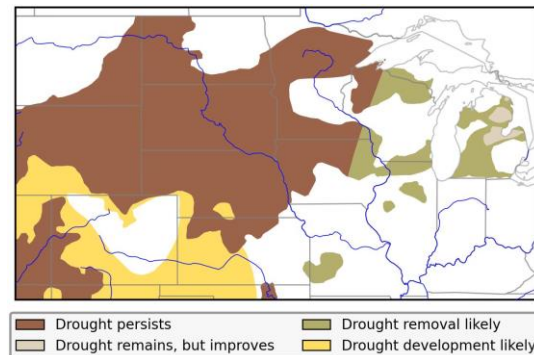
### Three Month Temperature Outlook



### Three Month Precipitation Outlook



## Seasonal Drought Outlook



- **Drought improvement** is expected across the Great Lakes, Upper Mississippi River Valley, and southwest Missouri.
- **Persistent drought** is expected across Minnesota, northern & western Iowa, the Dakotas, Nebraska, northern & eastern Wyoming, western Colorado, and northern Kansas.
- **Drought development** is likely in western Kansas, southwest Wyoming, and parts of Colorado.

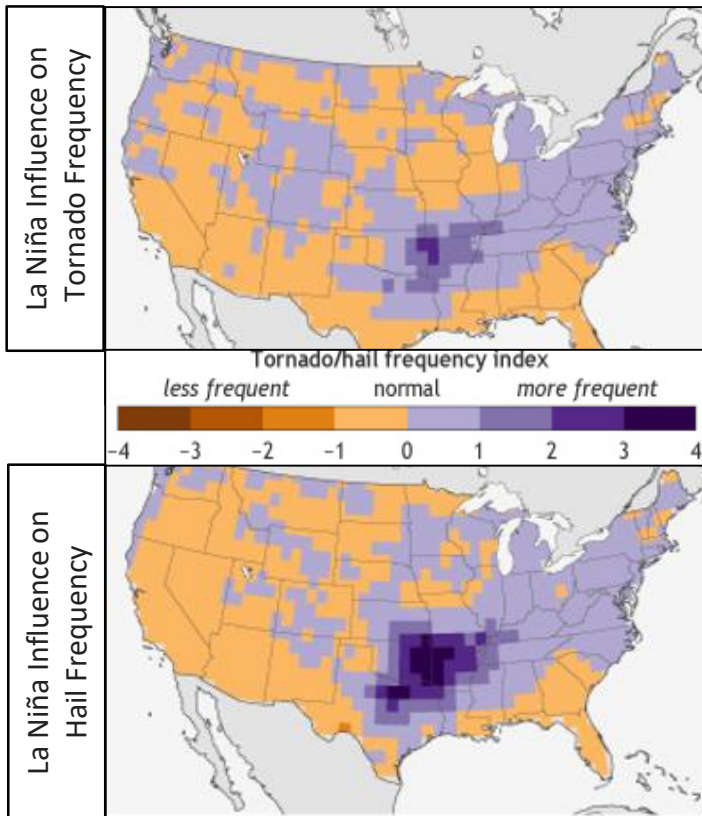
## Mar-Apr-May 2025 Temperature & Precipitation Outlooks

- **Above-normal temperatures** are favored in southern & western Colorado; far southwest Kansas & Wyoming; southeast Missouri, Kentucky, and southern Indiana.
- **Below-normal temperatures** are favored in northern Wyoming, and western Dakotas.
- **Wetter than normal** conditions are favored from Missouri & Kentucky north into the Great Lakes Region.
- **Drier than normal** conditions are favored in Colorado; much of Nebraska and Kansas, southern 2/3rds of Wyoming, and southwest South Dakota.





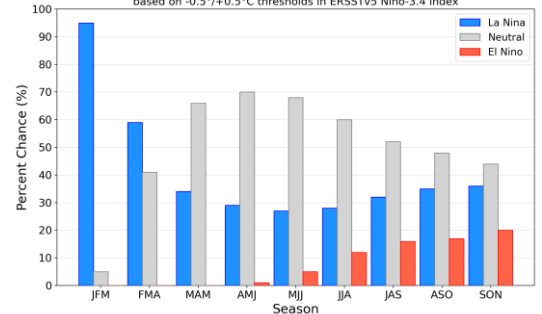
## ENSO Status: La Niña Advisory



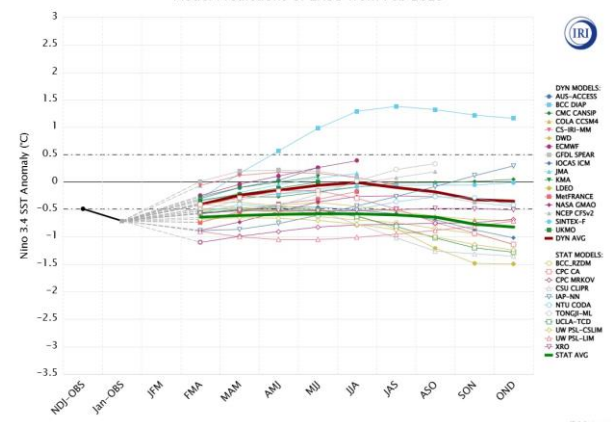
Large hail and tornado events are more common in the central and southern United States during the spring months (March-May) if La Niña conditions are present. Allen, J.T., Tippett, M.K., Sobel, A.H. (2015). Influence of the El Niño/Southern Oscillation on tornado and hail frequency in the United States. *Nature Geoscience* 8, 278–283.

## IRI/CPC Probabilistic ENSO Forecast/Plumes

Official NOAA CPC ENSO Probabilities (issued February 2025)  
based on  $-0.5^{\circ}/+0.5^{\circ}\text{C}$  thresholds in ERSSTv5 Niño-3.4 index



Model Predictions of ENSO from Feb 2025



- La Niña conditions are favored (66% chance) to transition to ENSO-neutral during meteorological spring (March-May 2025).
- A weak La Niña is less likely to result in conventional spring impacts, though predictable signals can still influence the forecast guidance and outlooks ([CPC's seasonal outlooks](#)).

## Useful Links/Info:

News from [Climate.gov](#)  
[Latest ENSO Blog](#) from Climate.gov  
[Sea Surface Temperatures](#) from the Climate Prediction Center  
[Latest ENSO Discussion](#) from the Climate Prediction Center  
[Drought Information](#) from the US Drought Monitor  
[Interactive GIS Mapping](#) from NCEI (Anomalies/Rankings)  
[Local Climate Analysis Tool](#) (LCAT) – Account registration required

## Other Teleconnection Info

- One area to watch in March will be the Northern Plains. Typically a positive Arctic Oscillation (+AO) results in warmer-than-normal temperatures across the Lower 48 (particularly over the eastern half of the CONUS), with negative heights over Canada. Some tools (MLR) and models bring in neutral or cooler temperatures over northern parts of the CONUS, while others, such as the Week 3-4 ECMWF are warmer than normal, thus, equal chances is favored for temperatures.

