National Weather Service
Central Region Climate Outlook

Mar 2024 – May 2024

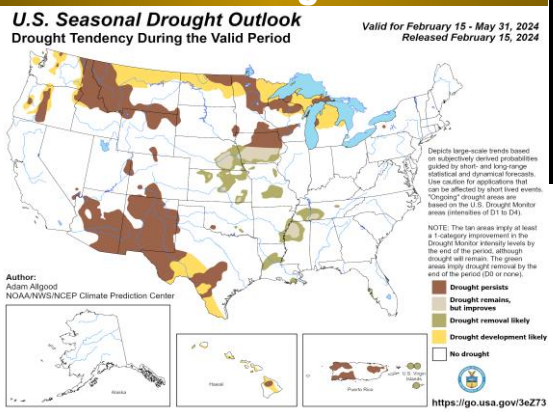
Thursday, February 15, 2024 8:11 PM

Important Messages:

El Niño Continues to Weaken

- ✓ El Niño conditions continue, but a transition to an ENSO-neutral state likely by May.
- ✓ Temperature and precipitation outlooks for March are largely influenced by El Niño and model output, while leaning towards long term trends thereafter into the spring season.
- ✓ There are increasing chances of a La Niña developing by late Summer into the Fall.

Seasonal Drought Outlook



- Drought improvement or removal is favored across portions of Kansas, Missouri, Nebraska, and southern Iowa.
- Ongoing drought is expected to persist across the Upper Midwest with drought development likely across portions of North Dakota eastward into Upper Michigan.

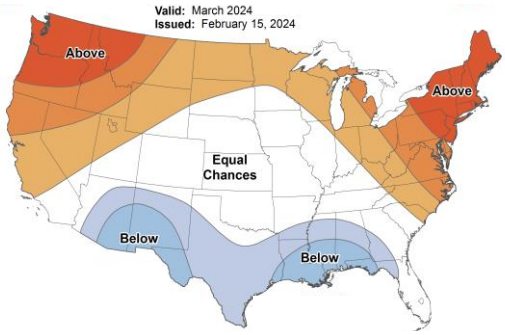
March 2024 Temperature & Precipitation Outlooks

- Above normal temps favored from the Northern Plains to Great Lakes. Equal chances for near-above or below normal temps elsewhere across Central Region with varying signals suggesting lower than average confidence.
- Statistical and dynamical models show a wetter signal across WY/CO/KS/NE/SD. Drier than normal across the northern half of Michigan. Equal chances across the rest of Central Region.

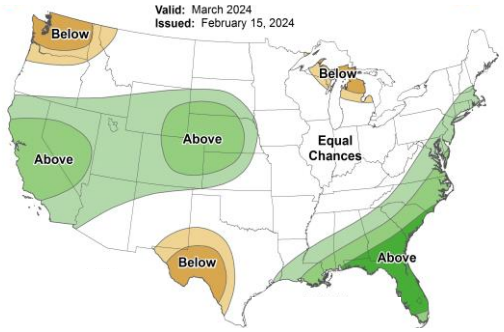
Mar-Apr-May 2024 Temperature & Precipitation Outlooks

- The overall pattern continues to rely on El Niño along with model output for March, then switching to long-term trends beyond that as the ENSO phase transitions to neutral.
- Above normal temperatures are favored from the Northern Rockies eastward across Upper Midwest/Great Lakes and southeast into Ohio Valley.
- Lean towards wetter signal from Kansas/Nebraska eastward into the mid-Mississippi and Ohio Valley's.

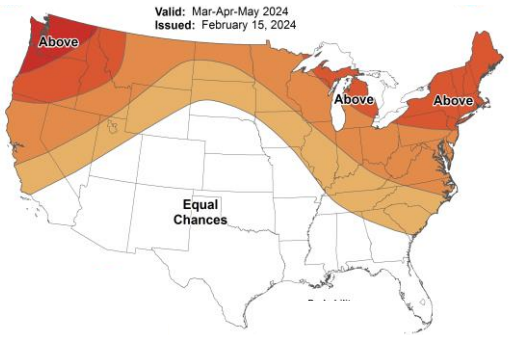
One Month Temperature Outlook



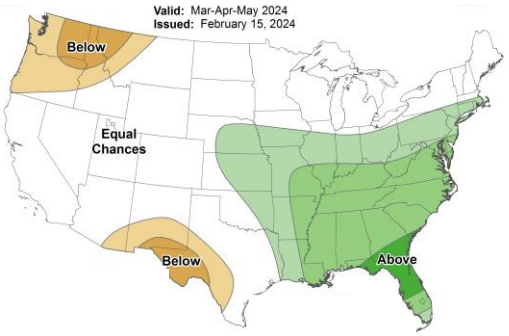
One Month Precipitation Outlook



Three Month Temperature Outlook



Three Month Precipitation Outlook



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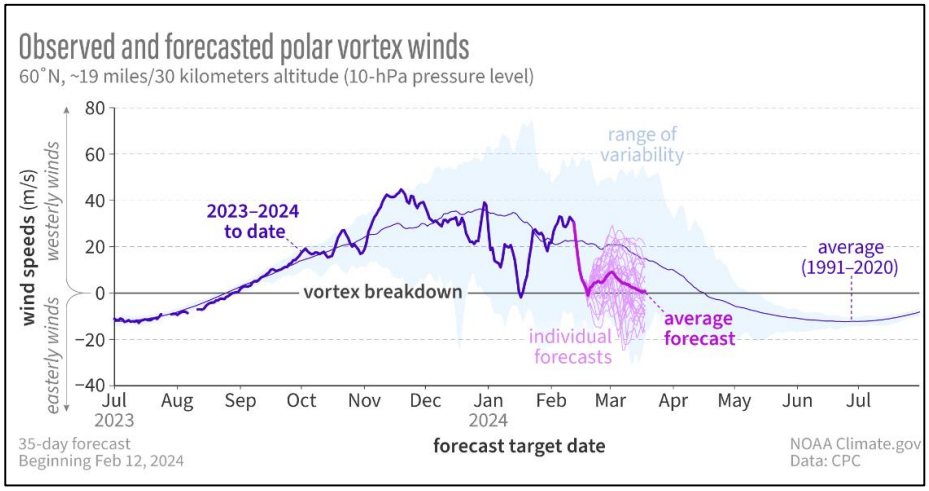
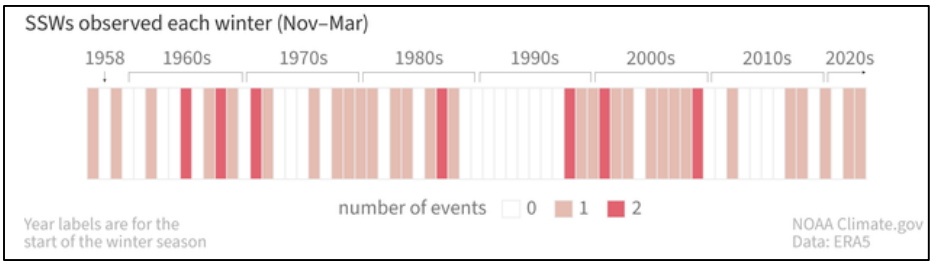
ENSO Status: El Niño Advisory / La Niña Watch



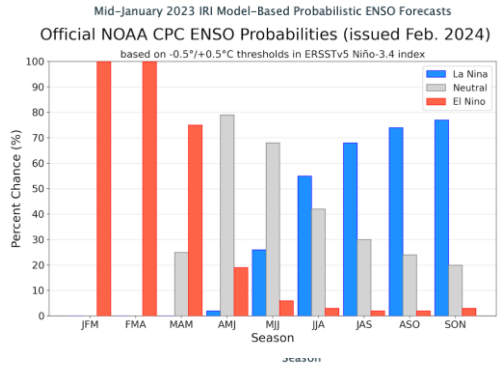
- Another Sudden Stratospheric Warming (SSW) event is possible before the end of February. This may lead to a weakened polar vortex as we head into March, which could yield the potential for a late season Arctic outbreak over the Eastern and Central U.S.
- It's rather rare to witness 2 SSW events in the same winter, having only occurred 7 times since 1950, with the most recent back in 2009.

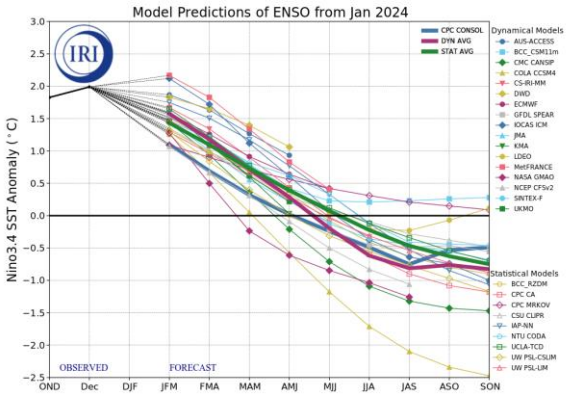


Useful Links/Info:

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
NWS Forecast Maps from Western Region

IRI/CPC Probabilistic ENSO Forecast/Plumes





- While SST's remain above normal, the upper ocean heat content has cooled considerably in the past 2 months to near normal. El Niño is likely to transition to Neutral conditions by May. Models are in rather good agreement for La Niña development by later Summer or Fall. Some model output suggests the possibility of a moderate or stronger event.

Other Teleconnection Effects

- The Madden Julian Oscillation (MJO) may transition into phase 2 and then 3 heading into March. Lagged composites would favor ridging and warmer temperatures across a large part of the Central and Eastern U.S. for mid to late March. However, this is only one piece of the puzzle, with destructive interference possible from other teleconnections such as possibility of a SSW event which may lead to –AO development.

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