Arctic Oscillation

in the US

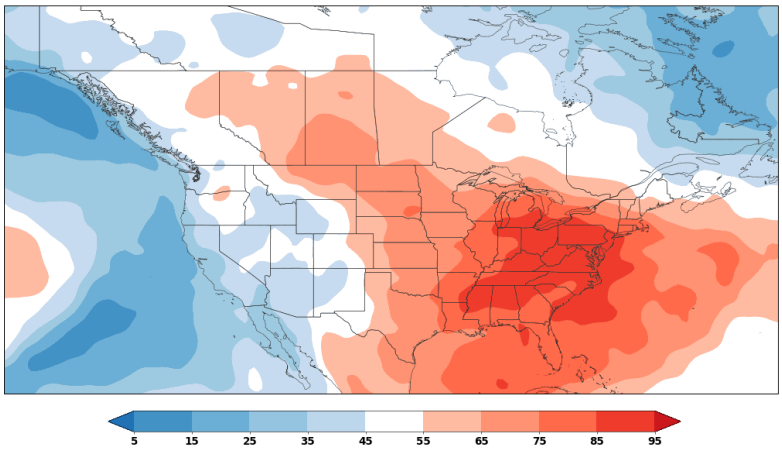
World Climate Service

Positive Phase - Winter

Below-normal surface pressure within the Arctic Circle

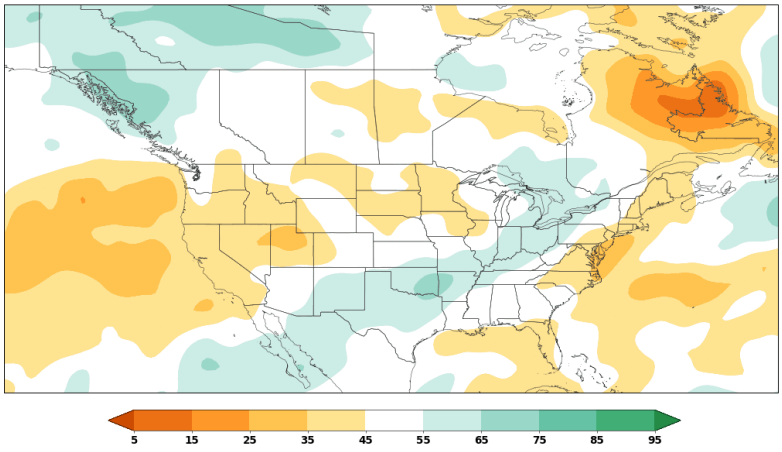
Percent of Years Having Above-Trend DEC-FEB 2m Temperature

1971 1972 1974 1975 1988 1989 1990 1991 1992 1994
1998 1999 2001 2006 2007 2011 2014 2016 2019 2021



Percent of Years Having Above-Normal DEC-FEB Precipitation (ERA5 Reanalysis)

1971 1972 1974 1975 1988 1989 1990 1991 1992 1994
1998 1999 2001 2006 2007 2011 2014 2016 2019 2021



Less Heat in the West

More Heat in the East

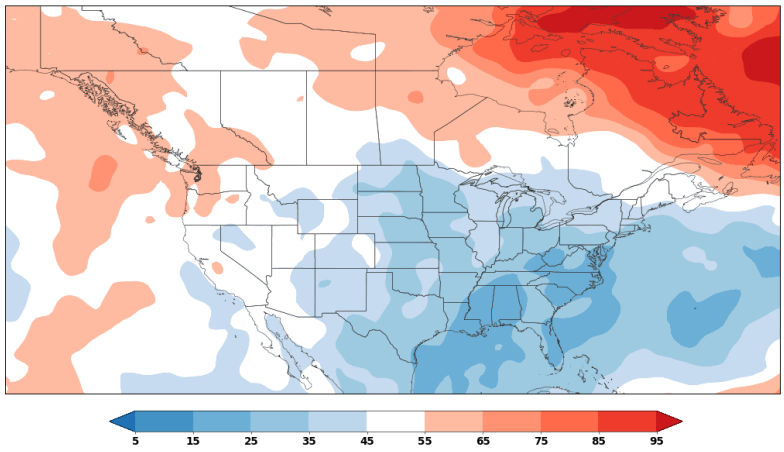
Less Rain on the West & East Coasts

Negative Phase - Winter

Above-normal surface pressure within the Arctic Circle

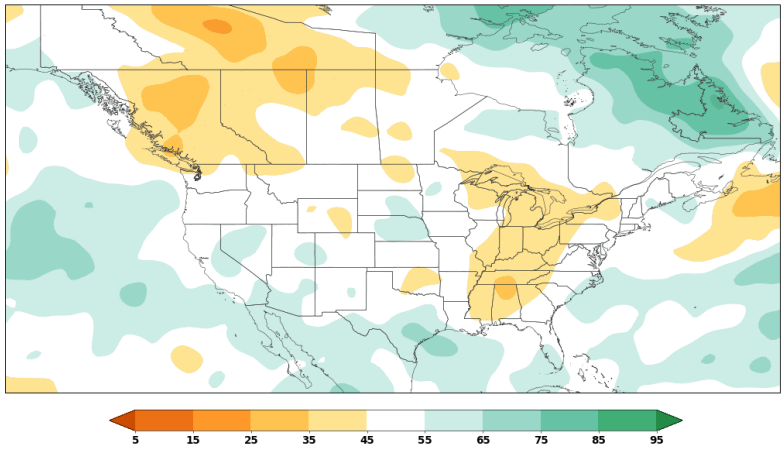
Percent of Years Having Above-Trend DEC-FEB 2m Temperature

1952 1955 1957 1959 1962 1964 1965 1967 1968 1969
1976 1977 1978 1984 1985 2000 2003 2009 2012 2020



Percent of Years Having Above-Normal DEC-FEB Precipitation (ERA5 Reanalysis)

1952 1955 1957 1959 1962 1964 1965 1967 1968 1969
1976 1977 1978 1984 1985 2000 2003 2009 2012 2020



Less Heat Overall

Less Rain in the Midwest

More Rain in the Southwest

The AO is only one factor in a complex system that influences the US climate. Long-range forecasts provided in the WCS Monthly Reports are the best guide to the season ahead.