Southern Oscillation Index

in Europe

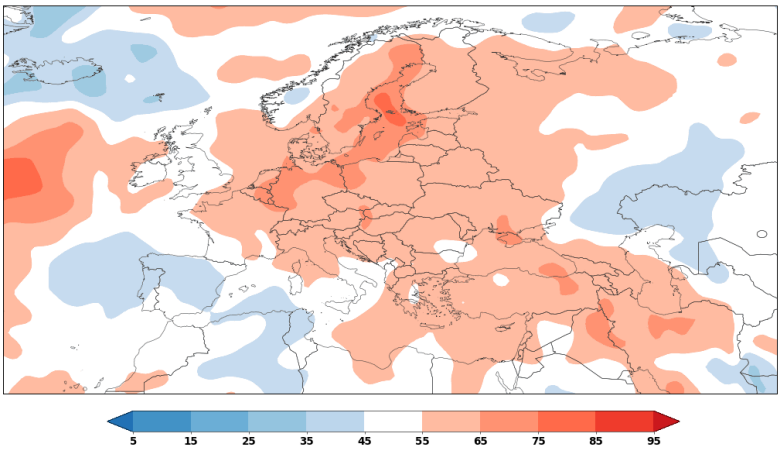
World Climate Service

Positive Phase - Winter

Corresponds to La Niña conditions: below-normal SSTs across the eastern Pacific Ocean

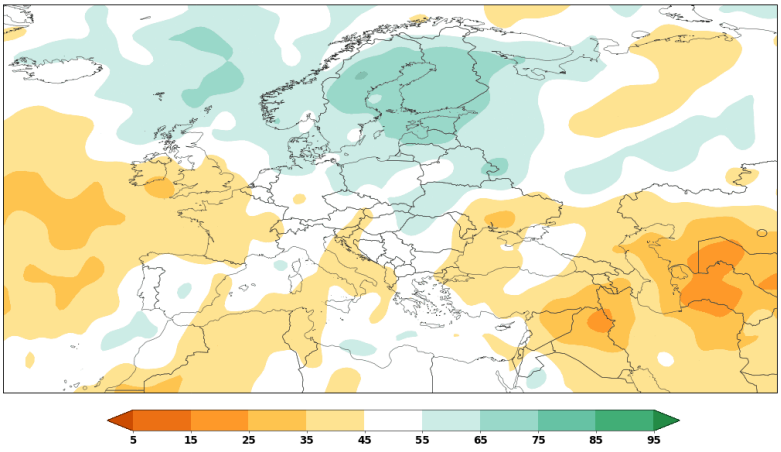
Percent of Years Having Above-Trend DEC-FEB 2m Temperature

1950 1954 1955 1961 1966 1970 1973 1975 1988 1996
1998 1999 2000 2007 2008 2010 2011 2020 2021 2022



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

1950 1954 1955 1961 1966 1970 1973 1975 1988 1996
1998 1999 2000 2007 2008 2010 2011 2020 2021 2022



More Heat Overall

Less Rain in Western Europe

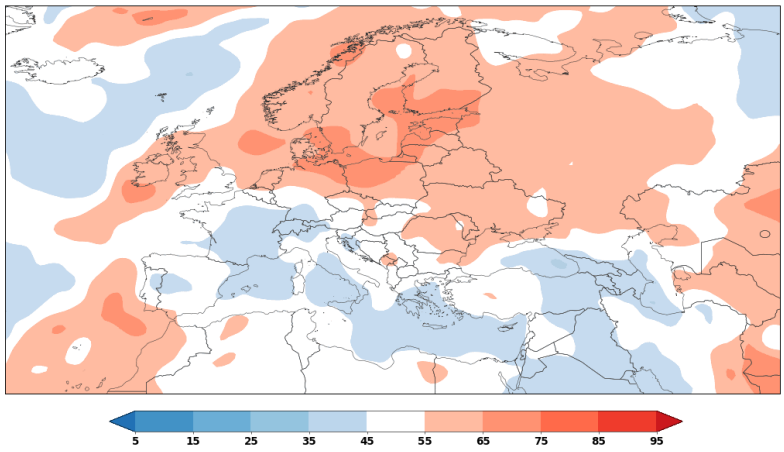
More Rain in Eastern Europe

Negative Phase - Winter

Corresponds to El Niño conditions: above-normal SSTs across the eastern Pacific Ocean

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

1951 1952 1957 1958 1963 1968 1969 1972 1977 1982
1986 1989 1991 1992 1994 1997 2002 2004 2009 2015



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

1951 1952 1957 1958 1963 1968 1969 1972 1977 1982
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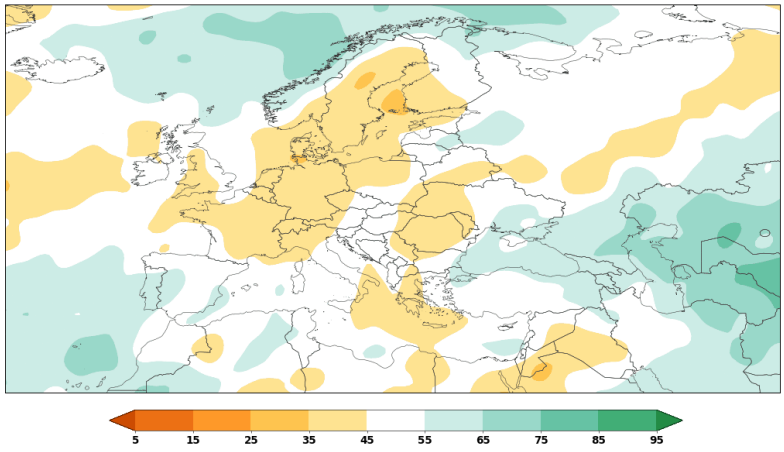

More Heat in Eastern Europe

Less Heat in Central & Southern Europe

Less Rain Overall

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