Southern Oscillation Index

in South America

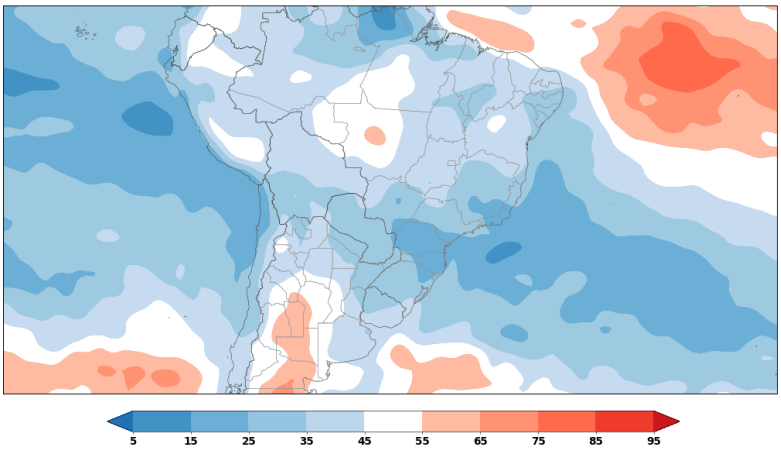
World Climate Service

Positive Phase - Winter

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

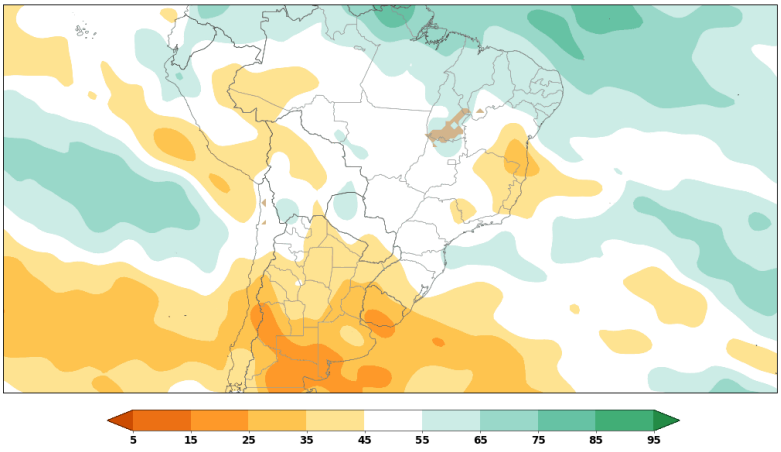
Percent of Years Having Above-Trend JUN-AUG 2m Temperature

1950 1955 1956 1964 1968 1971 1973 1974 1975 1979
1981 1988 1996 1998 2008 2010 2011 2013 2021 2022



Percent of Years Having Above-Normal JUN-AUG Precipitation (ERA5 Reanalysis)

1950 1955 1956 1964 1968 1971 1973 1974 1975 1979
1981 1988 1996 1998 2008 2010 2011 2013 2021 2022



Less Heat Overall

More Rain in Northern South America

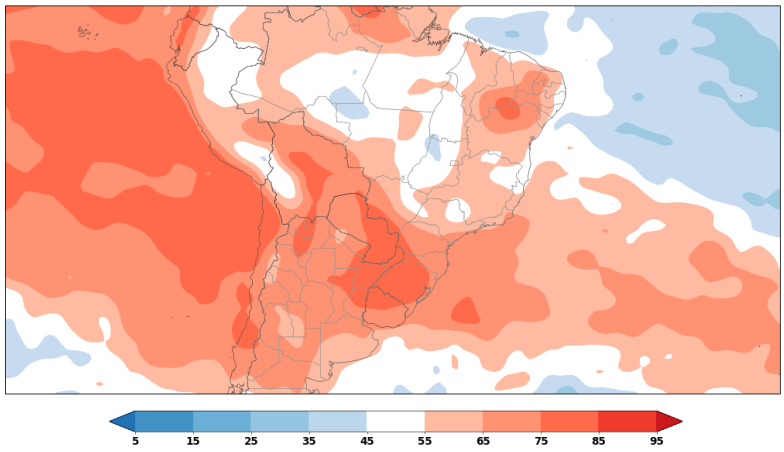
Less Rain in Southern South America

Negative Phase - Winter

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

Percent of Years Having Above-Trend JUN-AUG 2m Temperature

1951 1953 1963 1965 1972 1976 1977 1982 1987 1992
1993 1994 1997 2002 2004 2006 2012 2015 2019 2023



Percent of Years Having Above-Normal JUN-AUG Precipitation (ERA5 Reanalysis)

1951 1953 1963 1965 1972 1976 1977 1982 1987 1992
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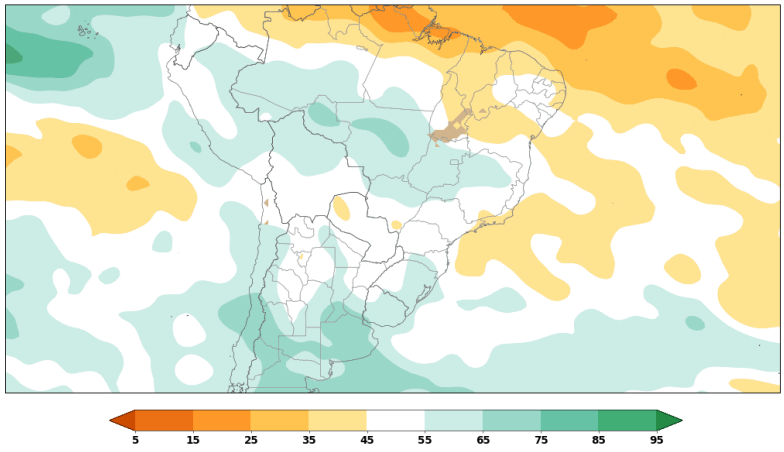

More Heat Overall

Less Rain in Northern South America

More Rain in Southern South America

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