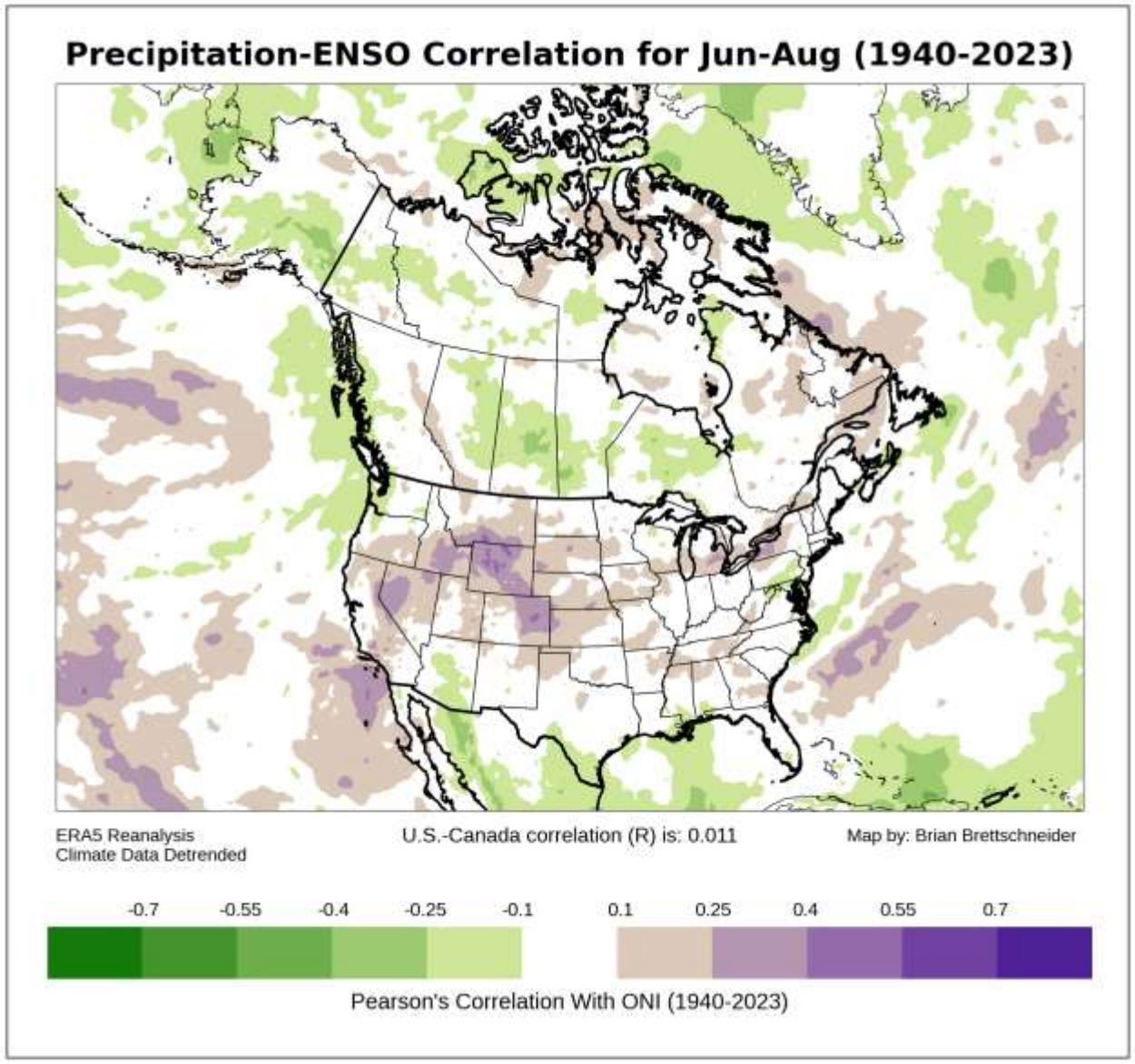
ENSO Correlation

Note: This computed a Pearson's-R value for each grid cell against the monthly (or combined multiple months) Nino 3.4 value computed from ERSST v5. A Best Practice is to not run this for periods greater than 3 months; e.g., do not do a Jan-Dec correlation. By default, no time series strip is generated. The map colors and categories are automatically chosen and are the same for all variables. If a specific correlation has not been run before, it can take 6-10 minutes to run.

U.S. and Canada Jun-Aug Precipitation ENSO Correlation

Shared of green are inverse correlations and purples are positive correlations
In this example, Jun-Aug La Nina (negative SSTs) are negatively correlated in Alaska. This means negative SSTs mean positive precipitation (above normal)



Select Map Area (1-10): 2

1 = Global (time: 0:30 to 1:20)
2 = U.S./Canada (time: 0:30 to 1:40)
3 = Contiguous U.S. (time: 0:30 to 1:50)
4 = Alaska (time: 0:30 to 1:30) ☐ Indigenous names
5 = Alaska and NW Canada (time: 0:30 to 1:15)
6 = Polar (time: 0:30 to 1:30) (60 to 90) North ☑
7 = Europe (time: 0:30 to 1:20)
8 = Pacific Northwest (time: 0:30 to 1:35)
9 = U.S. Pacific Islands (time: 0:30 to 1:25)
10 = Country, State, Province, or Box (all Plate Carree)
Global
Countries (e.g., Country New Zealand)
States (e.g., State New York)
Canada provinces/territories (e.g., Canada Manitoba)
Box, N. Lat, S. Lat, W. Lon, E. Lon (Example: Box,45,25,-120,-50)

Select Map Type (1-9): 7

1 = Ranks (since 1940)
2 = Departure From Normal (not clouds/wind)
3 = Below, Near, Above Normal (slower)
4 = Target Year Values (not wind)
5 = Normal Values (not wind)
6 = 50 or 75-Year trend (8-10 mins for new run)
7 = 50-Year ENSO Season Correlation (6-10 mins for new run)
8 = SPI (precip auto selected; 8-mins for new run)
9 = Composite ENSO or List of Years (6-mins for new run)

Ranks / trend start year 1940

Note: For periods that wrap around New Year, the start year should by the year at the start of the period. For 1974-75 to 2023-24, (50 years), enter 1974 here (end year should be most current year).

Choose Map Theme (1-8) 2

Available themes: 1 = t2m, 2 = precip, 3 = snow, 4 = sst , 5 = dewpt, 6 = clouds, 7 = wind, 8 = seaice

Map Elements (Check top row for most N. American maps)
Lower 48 States ☑ U.S. Counties ☐ Canada Provinces ☑
Major Rivers ☐ U.S. Interstates ☐ Gridlines ☐
NWS WFOs ☐ NPS Units ☐ Climate Divs ☐
Major World Cities ☐ World Roads (adds 1:00) ☐

Last month to start evaluation (e.g., 2 for Feb): 8

Number of months (up to 12) to evaluate (e.g., 3 for Dec-Feb): 3

Year of last month for assessment: 2023

Note 1: Do not select a date in the future!
Note 2: Make sure that your period is not 1939-40. There is no 1939 data.
Note 3: Even when generating normals, make sure not to pick a date in the future.

Values or Departure strip (1=Values, 2=Departure): 1
Show Values or Departure strip (1=Yes, 2=No): 2

Begin Climo 1991 **End** Climo 2020

Central Longitude (Arctic Only) 0
(Used for Map Type options 2 and 3 above)

ENSO Section Only ONI Min -5.0 ONI Max 5.0 [Use to select from a range of average ONI val; or enter list of years manually below.]

OR List of years
Map Subtitle (used when a list of years is entered) 20 chars or less
Above/Below (1=Above/2=Below): 1 100.0 From Climo. Use Detrended Climatology (ONI or list of years) ☑

[Note 1: Only Used if Map Type is 9. Takes 6 mins for new query. Min of 4+ years and separated by commas has priority. For DJF use end year.]
[Note 2: For the count of years above the trendline, units are % avg for snow and precip and clouds. Specify units below for temp, dew pt, and wind.

Units -> Metric or Imperial (1 = Metric, 2 = Imperial): 1

Temp/Wind Departure/Temp Trend Interval 1.0 (Makes 11 categories of Map Interval size.)

Dark Mode : ☐

Raw data obtained from Copernicus ECMWF Server. Analysis may not be accurate. **Use at your own risk!**

Generate (to reset form, select map area 0 and press button)