

# Historical Climatology: Northwestern Wisconsin



## Wisconsin Climatic Division 1 Northwest

**Included counties:** Douglas, Bayfield,  
Burnett, Washburn, Sawyer, Polk,  
Barron, Rusk

## Geography

Wisconsin Climate Division 1 is bordered by Lake Superior to the north and Minnesota to the west. It includes Apostle Islands National Lakeshore and the city of Superior. The terrain is covered by a mix of forests and agriculture.

## Overview

The northern sections of Wisconsin Climatic Division 1 include the western reach of the Lake Superior "snowbelt" which extends northeastward along the center ridge of Michigan's Keweenaw Peninsula. This ridge has a strong influence on the development of the heavy snow squalls observed during the winter months. The lake effect also increases cloudiness during the fall and winter and modifies temperatures, keeping them cooler during the late spring and early summer, and warmer during the late fall and early winter. Farther inland, this division experiences a largely continental climate, driven by the movement of high and low pressure systems across the continent. As a result, day-to-day temperature variations are larger in the southern sections farther away from Lake Superior.

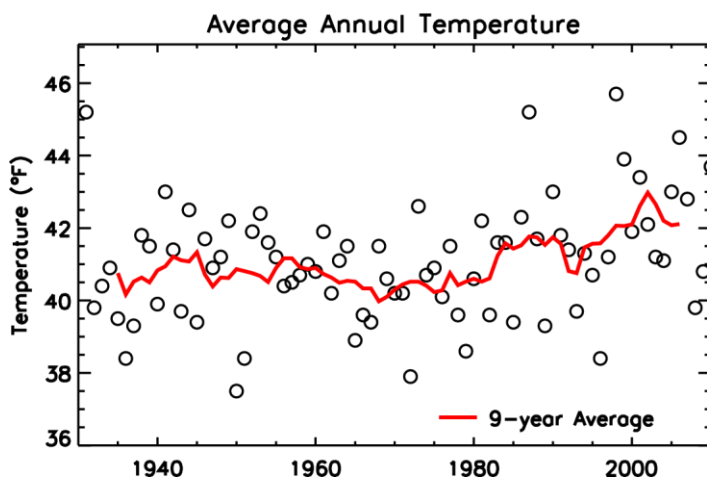
|  |         |         |
|--|---------|---------|
| Mean Annual Temperature, 1981-2010         | 41.8°F  | 5.5°C   |
| Mean Annual Total Precipitation, 1981-2010 | 31.9 in | 81.0 cm |

## Changes in Mean Temperature (°F) from 1951-1980 to 1981-2010

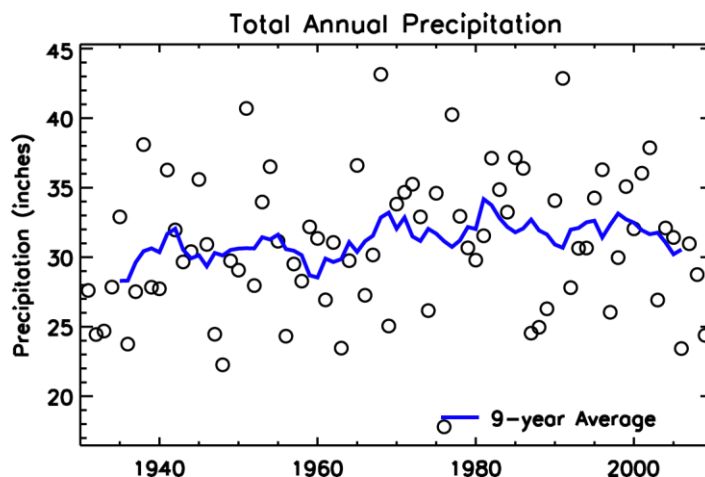
|                           |     |
|---------------------------|-----|
| Annual                    | 1.3 |
| Winter, December-February | 2.9 |
| Spring, March-May         | 1.6 |
| Summer, June-August       | 0.4 |
| Fall, September-November  | 0.2 |

## Change in Mean Total Precipitation (%) from 1951-1980 to 1981-2010

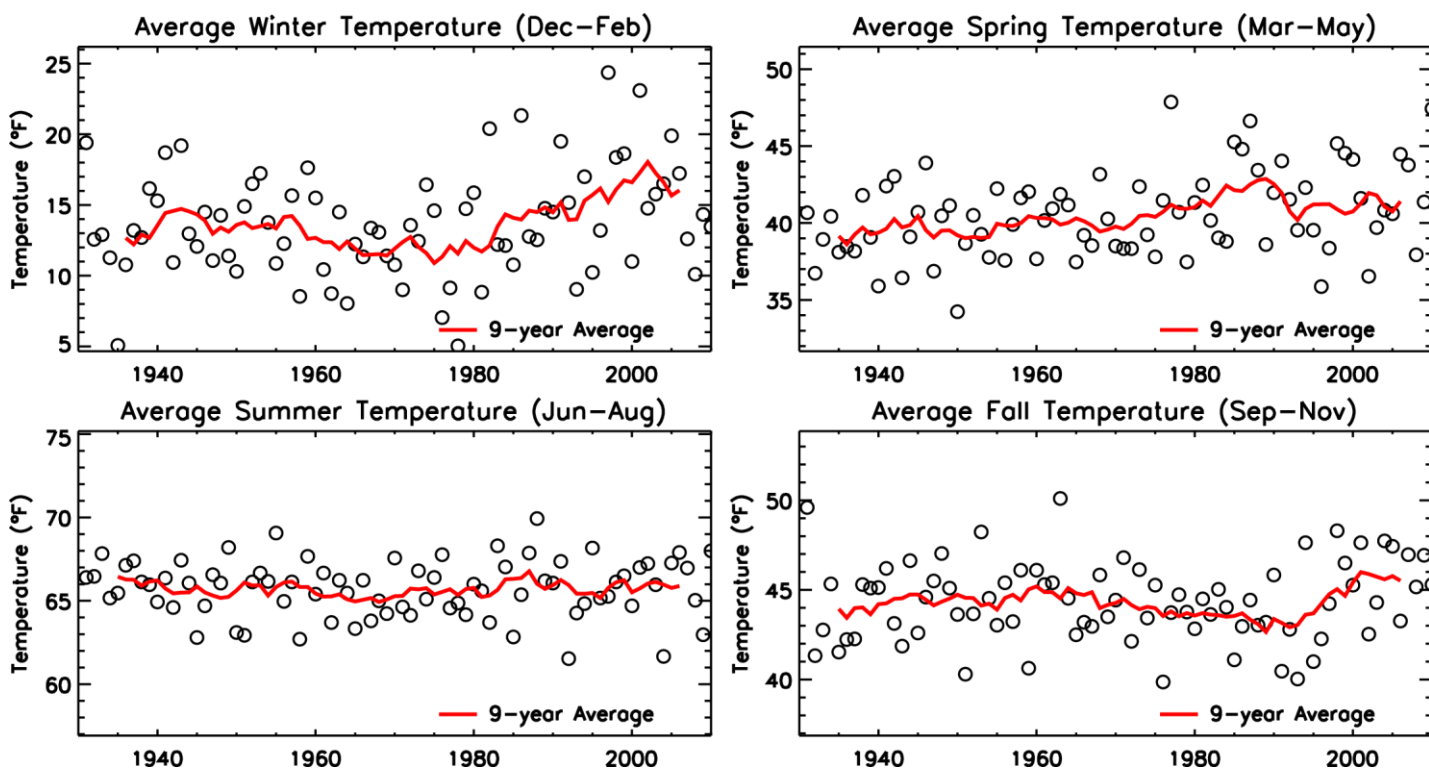
|                           |      |
|---------------------------|------|
| Annual                    | 2.0  |
| Winter, December-February | 0.5  |
| Spring, March-May         | -1.4 |
| Summer, June-August       | -7.1 |
| Fall, September-November  | 20.9 |



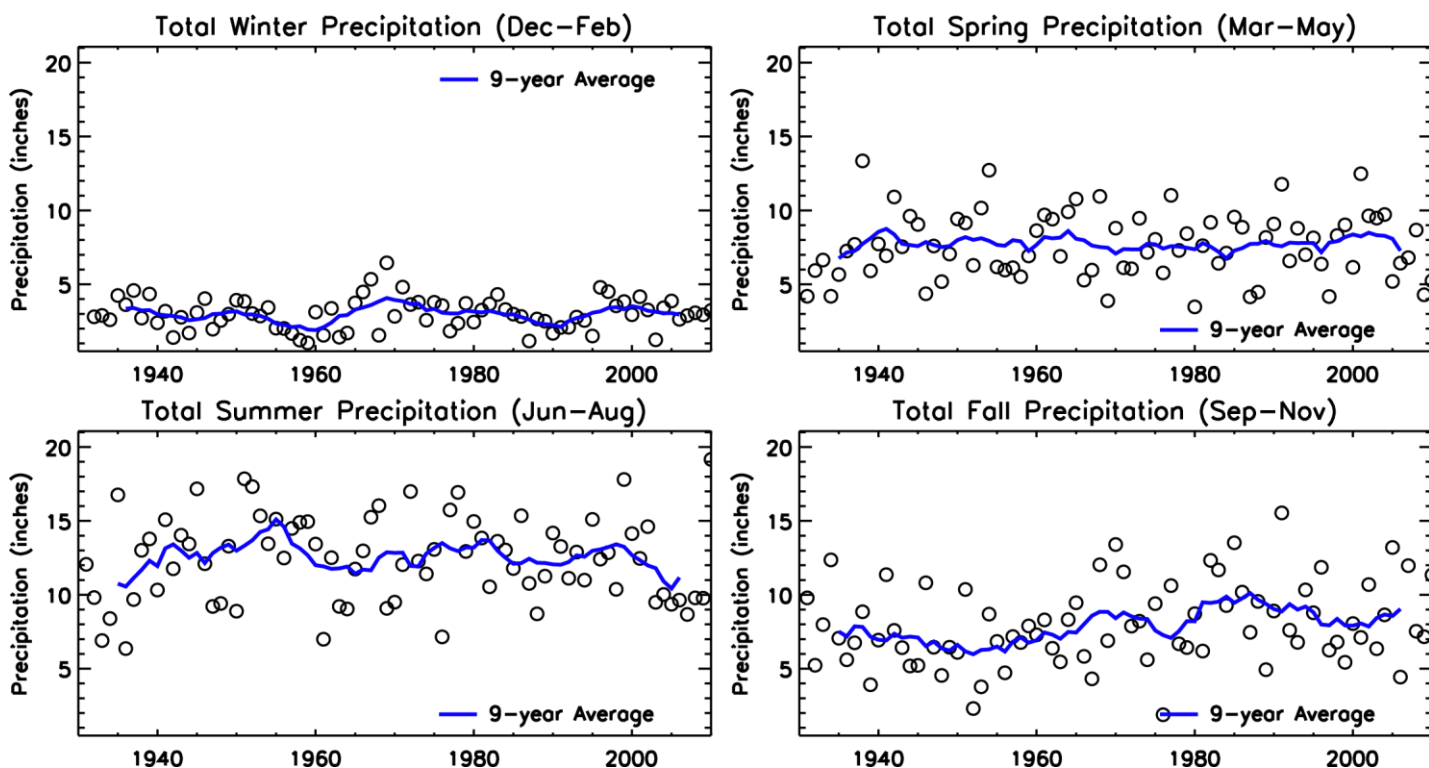
Mean annual temperatures from 1931 to 2011. An open circle represents the average temperature of a single year. The solid line represents the 9-year running mean.



Annual precipitation totals from 1931 to 2011. An open circle represents the total precipitation for a single year. The solid line represents the 9-year running mean.



Mean seasonal temperatures from 1931 to 2011. An open circle represents the average seasonal temperature of a single year. The solid line is the 9-year running mean. Winter values include data from the December of the previous year.



Total seasonal precipitation from 1931 to 2011. An open circle represents the total seasonal precipitation for a single year. The solid line represents the 9-year running mean of the total seasonal precipitation. Winter values include data from the December of the previous year.