

# Historical Climatology: Southwest Lower Michigan



## Michigan Climatic Division 8 Southwest Lower Michigan

**Included counties:** *Ottawa, Kent,  
Allegan, Berrien, Van Buren, Cass*

### Geography

The Southwest Lower Climatic Division is in the heart of the "Lake Michigan Snow Belt". The terrain is level to gently rolling, and roughly 20 percent wooded. Fruit orchards, various types of berries and vegetables are grown in the South Haven area.

### Overview

Prevailing westerly winds, in combination with Lake Michigan to the west, produce a strong lake effect that increases cloudiness and snowfall during the fall and winter, and moderates the temperature throughout most of the year. This moderation of the climate is partially responsible for the diversified agriculture carried on in western Michigan. Northeasterly to southeasterly winds may produce clearing skies with the associated colder temperatures more common to areas further removed from the lake influence. Because the day-to-day weather is controlled by the movement of pressure systems across the nation, this area seldom experiences prolonged periods of hot, humid weather in the summer or extreme cold during the winter.

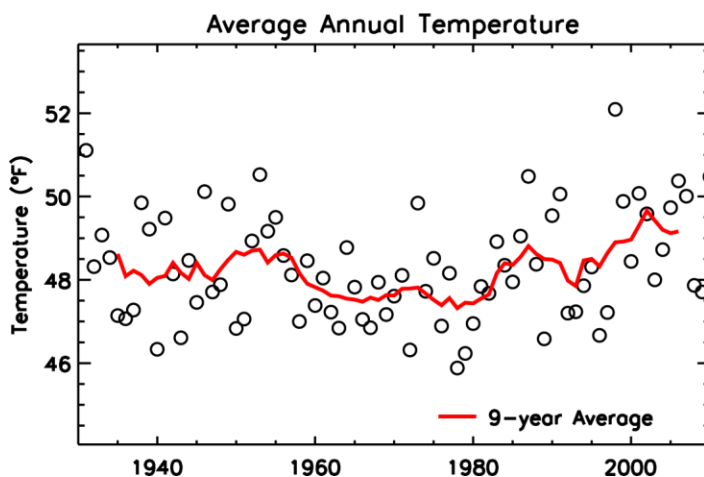
Mean Annual Temperature, 1981-2010	48.7°F	9.3°C
Mean Annual Total Precipitation, 1981-2010	38.0 in	96.5 cm

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

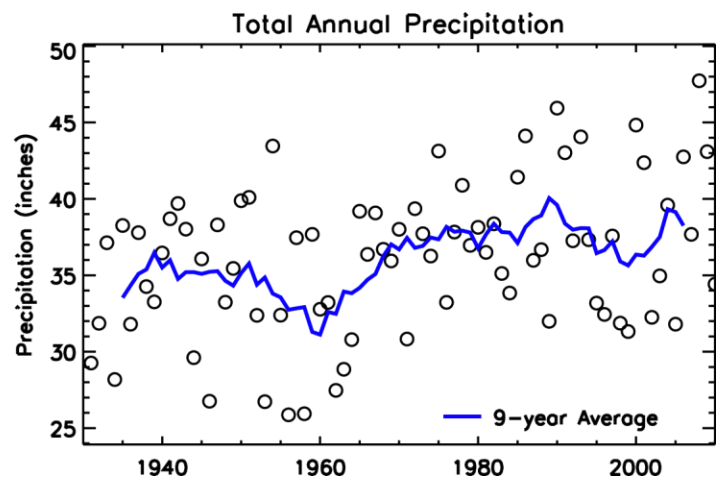
Annual	0.9
Winter, December-February	1.9
Spring, March-May	1.1
Summer, June-August	0.6
Fall, September-November	0.2

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

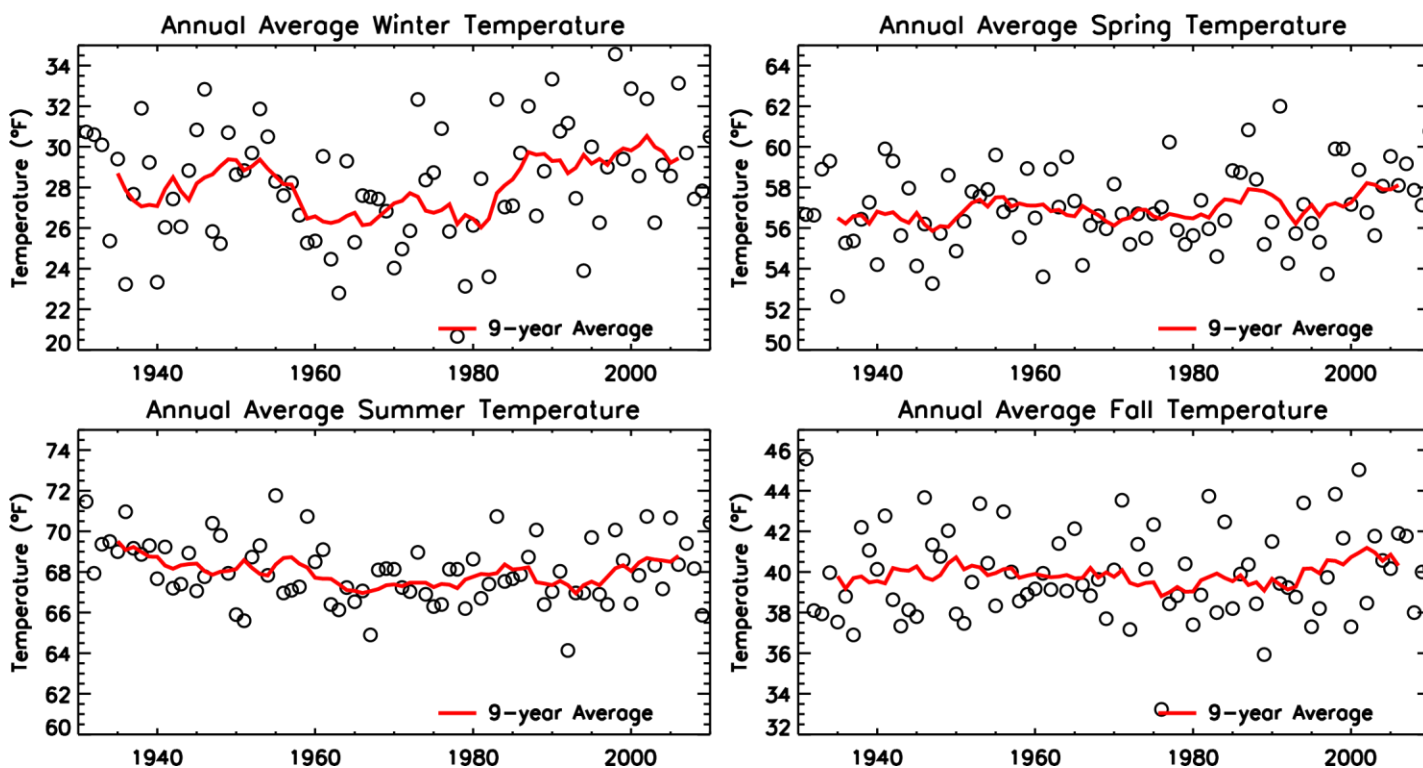
Annual	8.0
Winter, December-February	7.5
Spring, March-May	3.6
Summer, June-August	4.8
Fall, September-November	17.1



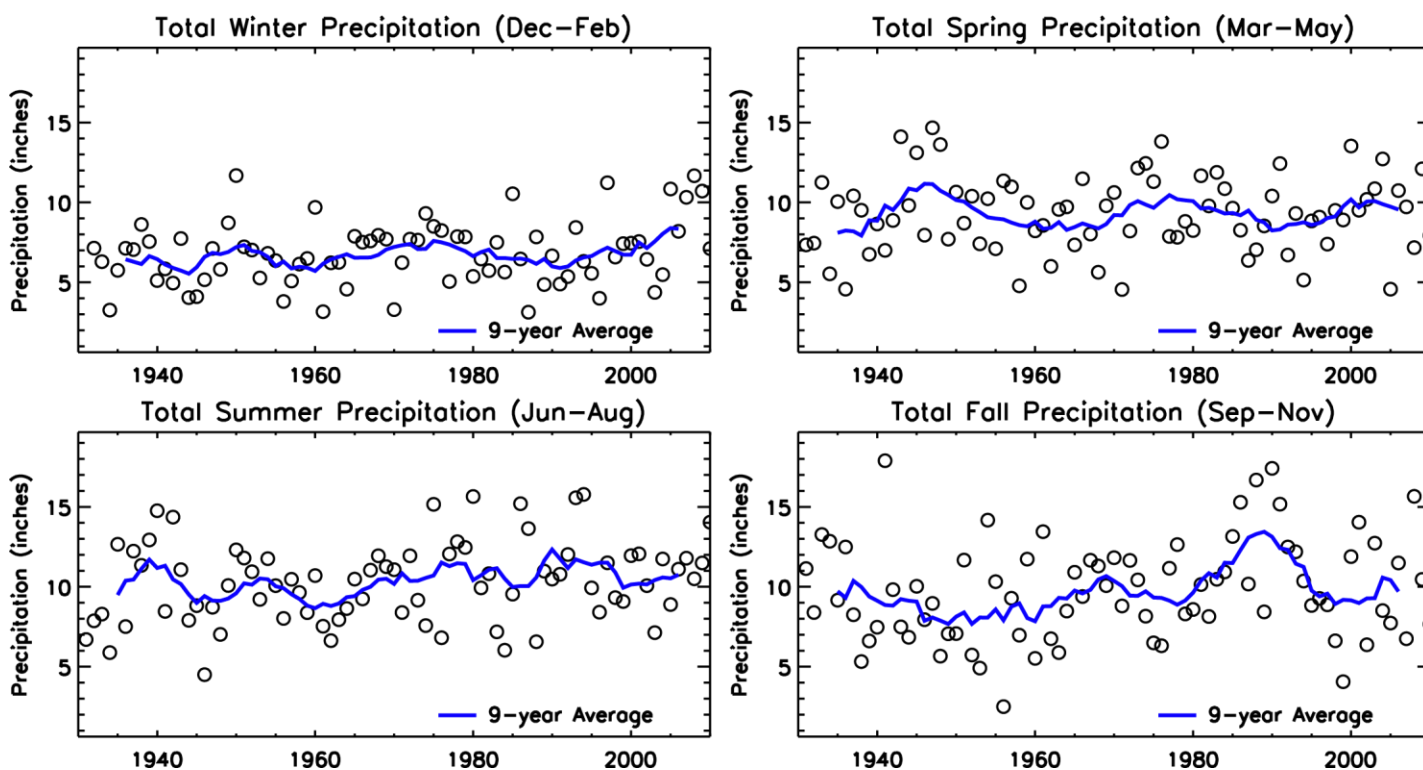
Mean annual temperatures from 1931 to 2011. An open circle represents the average temperature of a single year. The solid line represents the 9-year running mean.



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.