

# Historical Climatology: Western Upper Michigan



## Michigan Climatic Division 1 Western Upper

**Included counties:** Baraga, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Marquette, Menominee, Ontonagon

## Geography

The Western Upper Peninsula is characterized by rugged terrain with rolling hills and expanses of contiguous forestland. Sugar maple, yellow birch, eastern hemlock, basswood, and white pine, are the most prevalent tree species. The region has a varied landscape of moraines, bogs, lake plains, outwash channels, outwash plains, and bedrock ridges.

## Overview

The Great Lakes have a tremendous effect on most of the peninsula. When compared to areas at the same latitude that are farther from the Lakes Huron and Superior, temperatures are cooler in the late spring and early summer and warmer during the late fall and early winter. In the late winter, as ice coverage on the lakes increases, the area experiences larger temperature variations similar to those at inland locations at the same latitude. The result is winters that are usually long and cold with abundant snowfall. Intense lake-effect snowstorms off Lake Superior are notorious throughout the region. The center ridge of the Keweenaw Peninsula rises 1200 feet above Lake Superior and brings in more snow during the winter months than any other location east of the Mississippi River.

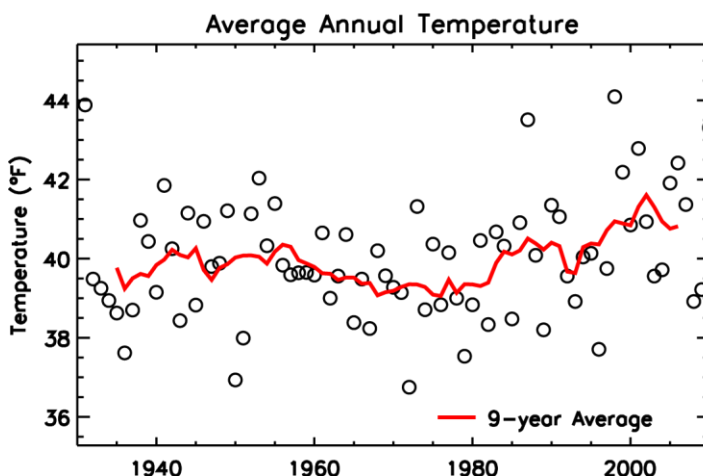
Mean Annual Temperature, 1981-2010	40.6°F	4.8°C
Mean Annual Total Precipitation, 1981-2010	32.0 in	81.3 cm

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

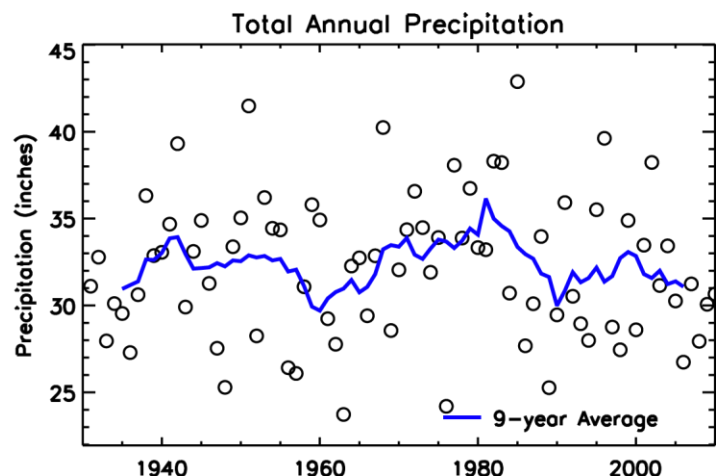
Annual	1.0
Winter, December-February	2.0
Spring, March-May	1.1
Summer, June-August	0.6
Fall, September-November	0.2

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

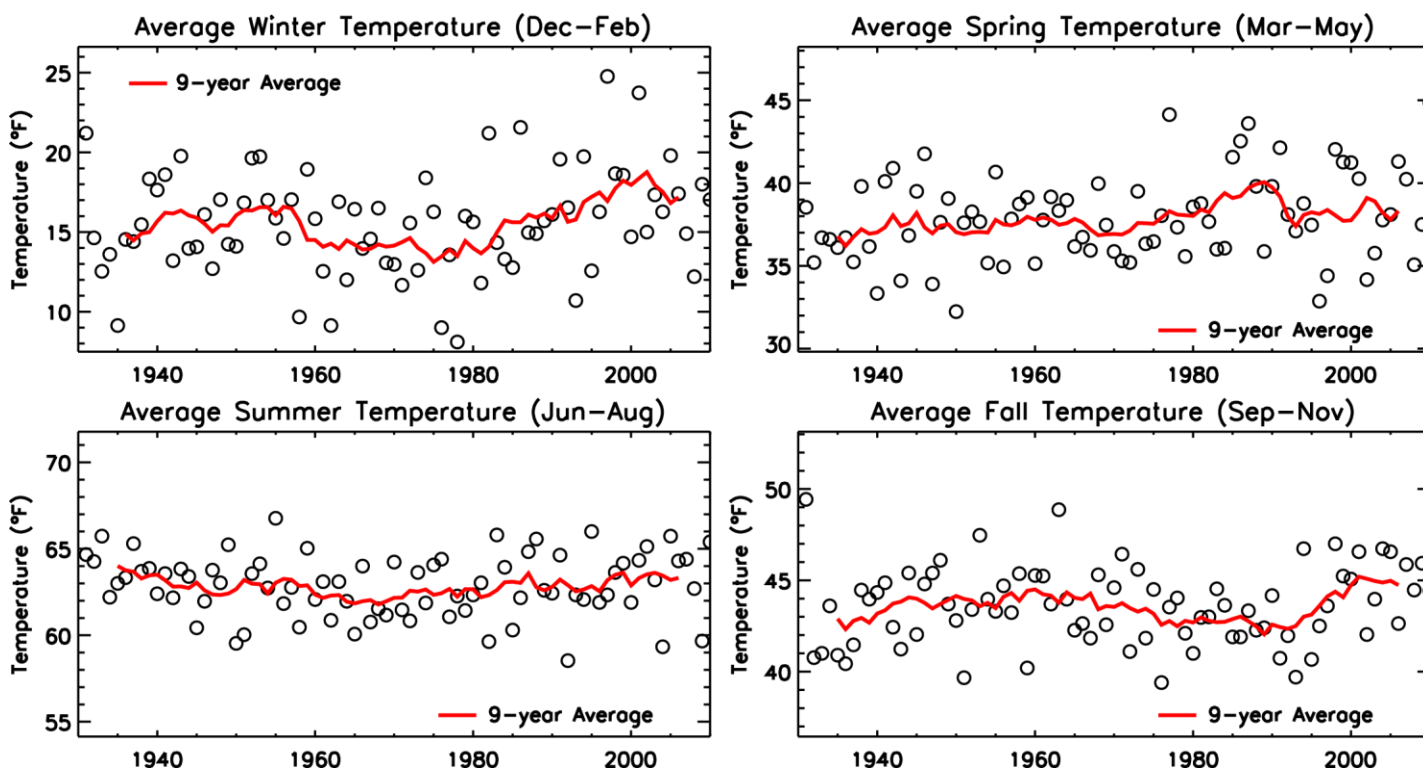
Annual	-1.5
Winter, December-February	7.8
Spring, March-May	-5.6
Summer, June-August	-11.5
Fall, September-November	9.0



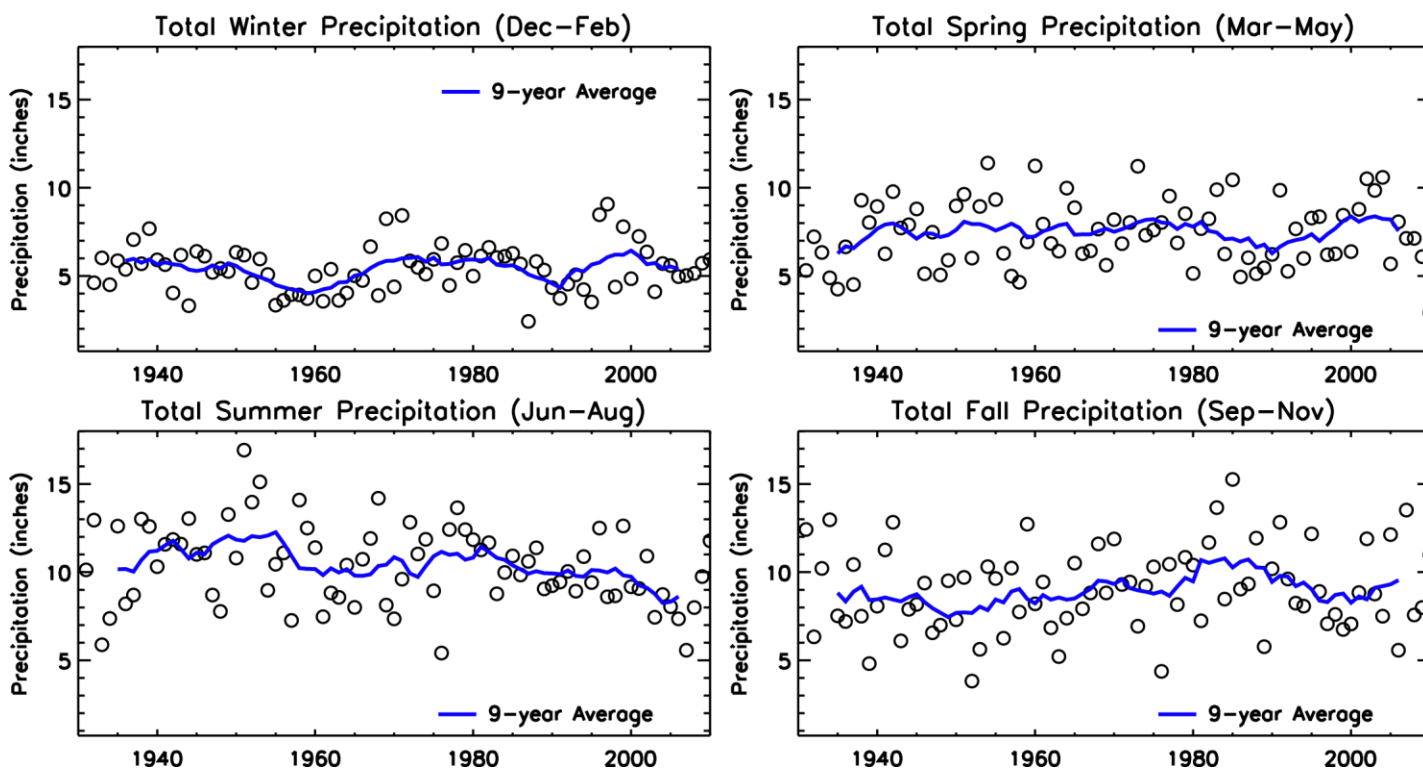
Mean annual temperatures from 1931 to 2011. An open circle represents the average temperature of a single year. The solid line represents the 9-year running mean.



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.