### Historical Climatology: Central Lower Michigan







Michigan Climatic Division 6 Central Lower

Included counties: Clare, Gladwin, Gratiot, Isabella, Mecosta, Midland, Montcalm, Osceola

#### Geography

The Central Lower Climatic Division of Michigan is characterized by gently rolling farmland with patches of mixed forests. Of note, the Chippewa River, with headwaters in Mecosta County, flows northeastward through the town of Mt. Pleasant towards Saginaw Bay. The surrounding terrain is gently rolling farmland. Occasional oil wells add contrast to the landscape. Field crops include corn, hay, wheat, and dry beans with some livestock raised in this area.

#### **Overview**

As a result of the prevailing westerly winds, Mt. Pleasant does experience some lake effect. This is minimal, however, and essentially limited to increased cloudiness during the late fall and early winter. The continental type of climate of Mt. Pleasant is characterized by larger temperature ranges than in areas at the same latitude near the Great Lakes which have moderated temperatures. Diminished wind speeds or winds which do not traverse large unfrozen lakes often produce clearing skies and the colder temperatures expected at continental locations. 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.

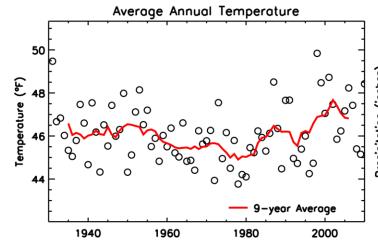
Mean Annual Temperature, 1981-2010	46.5°F	8.1°C
Mean Annual Total Precipitation, 1981-2010	33.7 in	85.6 cm

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

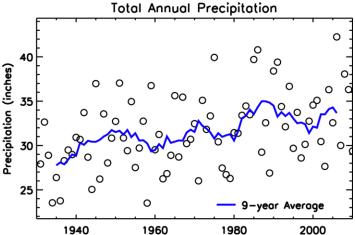
Annual	0.9
Winter, December-February	1.9
Spring, March-May	1.0
Summer, June-August	0.4
Fall, September-November	0.1

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

Annual	9.0
Winter, December-February	8.9
Spring, March-May	9.6
Summer, June-August	1.3
Fall, September-November	18.2

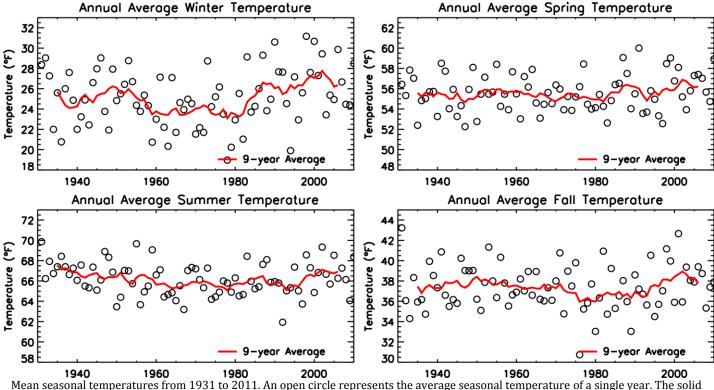


Mean annual temperatures from 1931 to 2011. An open circle represents the average temperature of a single year. The solid line represents the 9-year running mean.

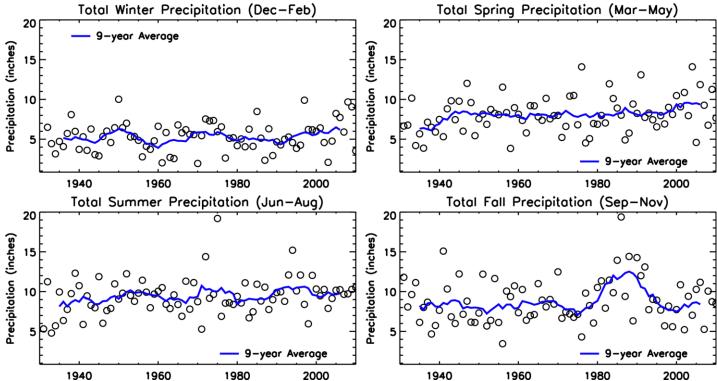


Annual precipitation totals from 1931 to 2011. An open circle represents the total precipitation for a single year. The solid line represents the 9-year running mean.





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.