# September 2007 Climate Narrative For Southwest Lower Michigan 

By Nathan Jeruzal

## Overview

September 2007 will be remembered overall as a very warm and dry month for Southwest Lower Michigan. Temperatures overall averaged around 3.5 to 4.5 degrees above normal for the month. Precipitation was around 1.00 inch below normal to as much as 3.00 inches below normal for the month.

The warmer and drier than normal conditions were a result of high pressure holding in control of the weather for a couple of extended periods. Warm and dry weather was found during the first seven days of the month. The very warm weather peaked during this period on the 5th when a few locations reached the 90 degree mark. Plenty of sunshine was found during this time period also.

A cold front moving through brought showers and thunderstorms to the area during the afternoon and evening on the 7 th. Colder air blew in on strong northwest winds from Canada over the region around the 10th and the 11 th. This period of below normal temperatures ended up lasting over the area through the 16 th. Above normal temperatures and plenty of dry weather returned to the area on the 17 th and lasted into the middle portion of the last week of the month. This warm stretch peaked on the 24th when the record for the day was tied at Muskegon and surpassed at Grand Rapids. A couple of locations were able to top 90 degrees on the 24 th.

A cold front then moved through the area late on the 25 th and early on the 26 th. This front brought scattered severe thunderstorms to the southern half of the forecast area with a few reports of wind damage and a couple of reports of large hail. Additional showers and thunderstorms moved into the western portion of the area on the 27 th with a weaker cold front. These storms brought small hail and some gusty sub-severe winds.

## Records by location:

Grand Rapids -
9/24 high $91^{\circ}$. New record max temperature. Old $86^{\circ}$ in 1960.

## Lansing -

None

## Muskegon -

9/24 high $86^{\circ}$. Tied record max temperature. Tied 1941.

| Location |  | Temperature <br> (degrees F) | Precipitation <br> (inches) | Snowfall <br> (inches) |
| ---: | ---: | :---: | :---: | :---: |
| Grand <br> Rapids | Reported | $66.1^{\circ}$ | 1.21 | 0.0 |
|  | Normal | $61.3^{\circ}$ | 4.28 | 0.0 |
|  | Departure | $4.8^{\circ}$ | -3.07 | 0.0 |
| Lansing | Reported | $64.5^{\circ}$ |  |  |
|  | Normal | $60.5^{\circ}$ | 1.86 | 0.0 |
|  | Departure | $4.0^{\circ}$ | -1.62 | 0.0 |
| Muskegon |  |  | 0.0 |  |
|  | Reported | $64.2^{\circ}$ | 2.25 | 0.0 |
|  | Normal | $60.5^{\circ}$ | 3.52 | 0.0 |
|  | Departure | $3.7^{\circ}$ | -1.27 | 0.0 |

Table 1. Temperature, precipitation, and snowfall amounts for September 2007 for Grand Rapids, Lansing, and Muskegon.

## Temperatures

Averoge Temperature in Degrees $F$ September 1, 2007 to September 30, 2007
 Ilinois State Water Survey Champeign, Illnols

Average Temperoture Departure from Mean in Degrees $F$ September 1, 2007 to September 30, 2007


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Champaign, minols

Figure 2b: Average Temperature Departure from mean for September 2007

Average Low Temp Departure from Mean in Degrees $F$ September 1, 2007 to September 30, 2007


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Hlinois State Water Survey
Champaign, Ilinols

Figure 2c: Average Low Temperature Departure for September 2007

Average High Temp Departure from Mean in Degrees $F$ September 1, 2007 to September 30, 2007


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Figure 2d: Average High Temperature Departure for September 2007

## Precipitation

Total Precipitation in Inches
September 1, 2007 to September 30, 2007

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Champign, llinols
Figure 3a: Total Precipitation for September 2007

Total Precipitation Departure from Mean in Inches September 1, 2007 to September 30, 2007

nlinois Stata Water Survey
Champign, llinols
Figure 3b: Total Precipitation Departure from mean for September 2007

