

# **October 2007 Climate Narrative For Southwest Lower Michigan**

By Wayne Hoepner

## **Overview**

October started out in an “Indian Summer” mode with high temperatures in the mid 70s, lows in the lower 50s and near normal precipitation. The temperatures continued to heat up and record high maxima and minima were set from the 5<sup>th</sup> through the 8<sup>th</sup>. For many sections of southwest lower Michigan, the heat wave from the 5<sup>th</sup> through the 8<sup>th</sup> was the warmest on record for October. Across the area, this was the warmest October since 1971. Following are the record highs for Grand Rapids, Lansing and Muskegon for October.

### RECORDS FOR GRAND RAPIDS

6<sup>th</sup>, new record high of 87, previous 86 set in 1900  
    new record high minimum of 68, previous 66 set in 1900  
7<sup>th</sup>, new record high of 87, previous 83 set in 1913  
    new record high minimum of 66, previous 63 set in 1913  
8<sup>th</sup>, new record high of 88, previous 83 set in 1949  
    new record high minimum of 67, previous 63 set in 1949  
This was the 6<sup>th</sup> warmest October on record

### RECORDS FOR LANSING

6<sup>th</sup>, new record high minimum of 66, previous 65 set in 1955  
7<sup>th</sup>, tied previous record high of 86, set in 1879  
    new record high minimum of 64, previous 61 set 1879  
8<sup>th</sup>, new record high of 86, previous 84 set in 1949  
    new record high minimum of 68, previous 65 set 1879  
This was the 8<sup>th</sup> warmest October on record

### RECORDS FOR MUSKEGON

5<sup>th</sup>, new record high of 83, previous 80 set in 2005  
6<sup>th</sup>, tied high minimum record of 68, set in 1900  
7<sup>th</sup>, new record high of 82, previous 80 set in 1949  
    new record high minimum of 67, previous 63 set in 1931  
8<sup>th</sup>, tied record high of 82, set in 1997  
    new record high minimum of 63, previous 62 set in 1914  
This was the 6<sup>th</sup> warmest October on record

A large Canadian high then pushed into the region. Temperatures fell to near to below normal levels with highs in the 50s to lower 60s and lows in the 30s and 40s.

As temperatures returned to above normal, severe weather developed. On the evening of the 18<sup>th</sup>, an EF-2 rated tornado hit the city of Williamston in Ingham County, Michigan. High temperatures reached the upper 70s on the 21<sup>st</sup> with lows in the 50s.

The weather and temperatures then returned to more seasonal levels through the 29<sup>th</sup>, when temperatures moved back above normal.

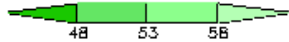
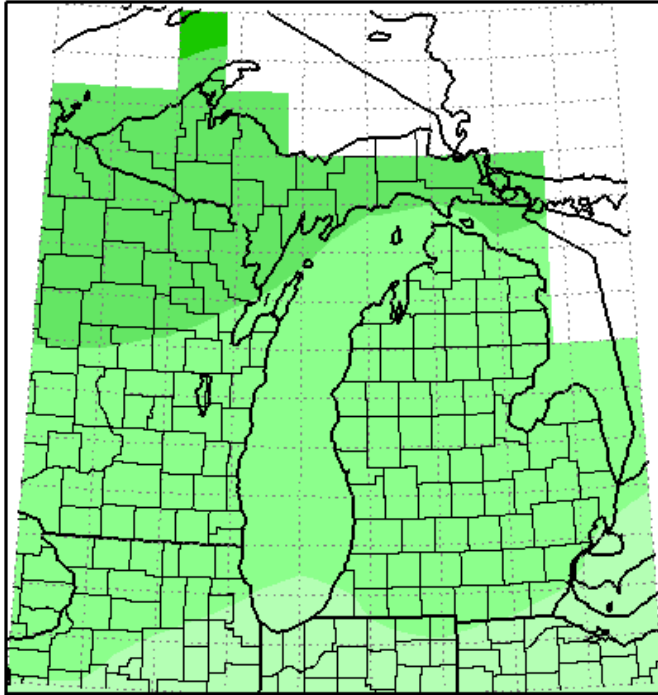
Precipitation for the month of October varied from near normal to above normal. Normals run around 2.5 inches.

<b>Location</b>		<b>Temperature (degrees F)</b>	<b>Precipitation (inches)</b>	<b>Snowfall (inches)</b>
<b>Grand Rapids</b>	<i>Reported</i>	58.1°	3.13	0.0
	<i>Normal</i>	49.9°	2.80	0.6
	<i>Departure</i>	8.2°	0.33	-0.6
<b>Lansing</b>	<i>Reported</i>	56.4°	3.36	0.0
	<i>Normal</i>	49.2°	2.29	0.4
	<i>Departure</i>	7.2°	1.07	-0.4
<b>Muskegon</b>	<i>Reported</i>	57.0°	2.42	0.0
	<i>Normal</i>	49.7°	2.80	0.6
	<i>Departure</i>	7.3°	-0.38	-0.6

**Table 1:** Temperature, precipitation, and snowfall amounts for October 2007 for Grand Rapids, Lansing and Muskegon.

## Temperatures

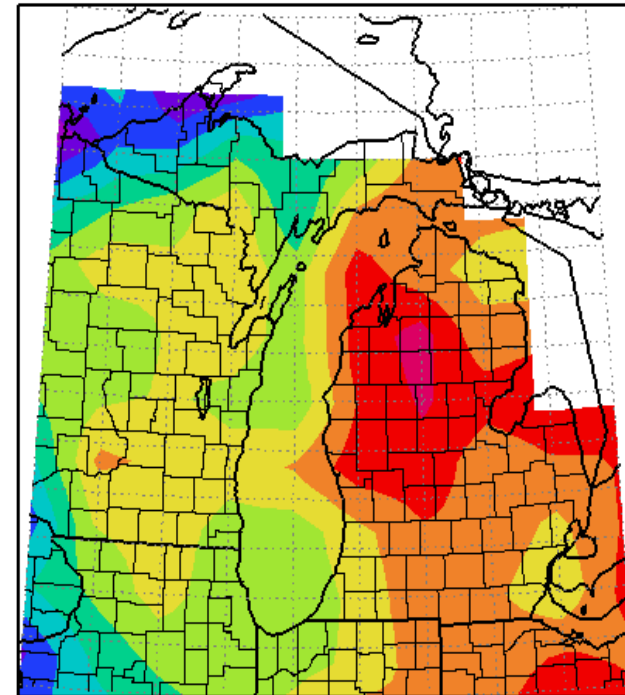
Average Temperature in Degrees F  
October 1, 2007 to October 31, 2007



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Champaign, Illinois

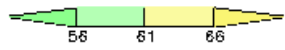
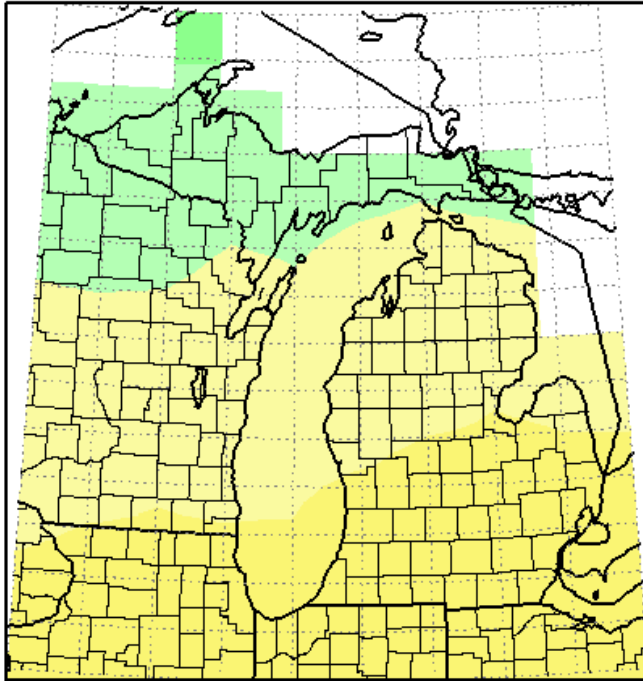
## Departures

Average Temperature Departure from Mean in Degrees F  
October 1, 2007 to October 31, 2007



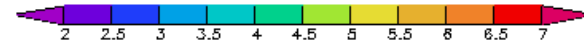
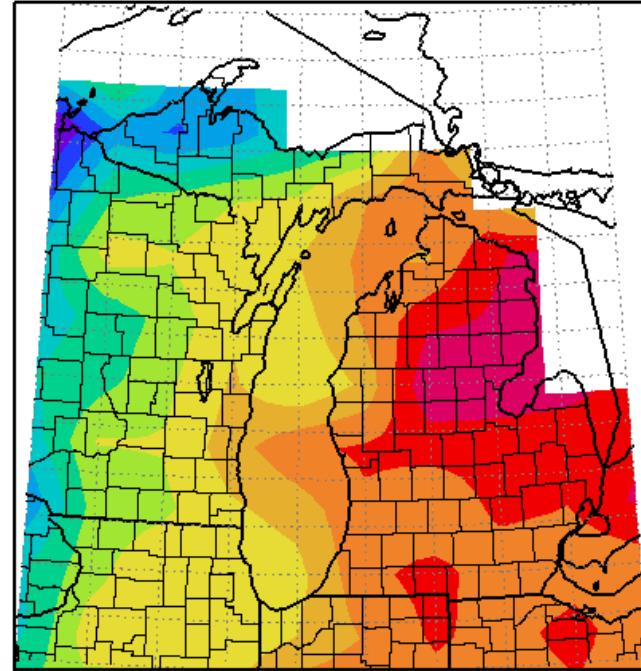
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Average High Temperature in Degrees F  
October 1, 2007 to October 31, 2007



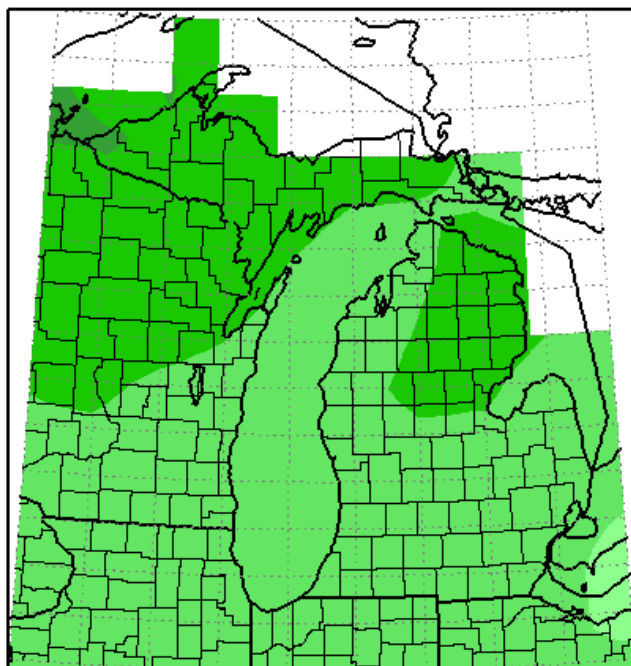
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Average High Temp Departure from Mean in Degrees F  
October 1, 2007 to October 31, 2007



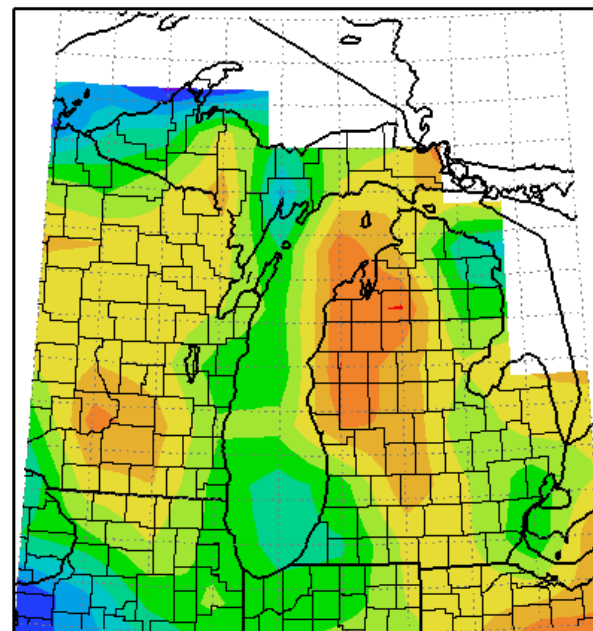
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Average Low Temperature in Degrees F  
October 1, 2007 to October 31, 2007



40 45 50  
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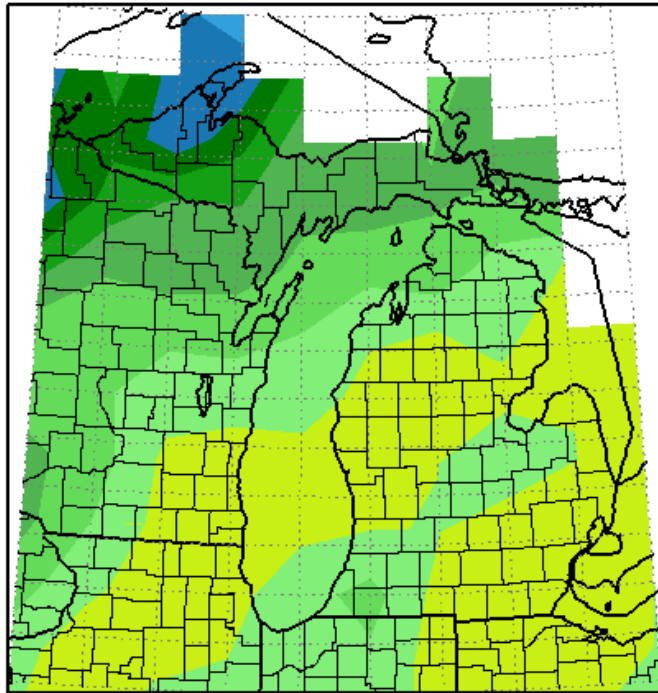
Average Low Temp Departure from Mean in Degrees F  
October 1, 2007 to October 31, 2007



3.5 4 4.5 5 5.5 6 6.5 7 7.5 8 8.5 9  
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## Precipitation

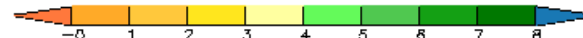
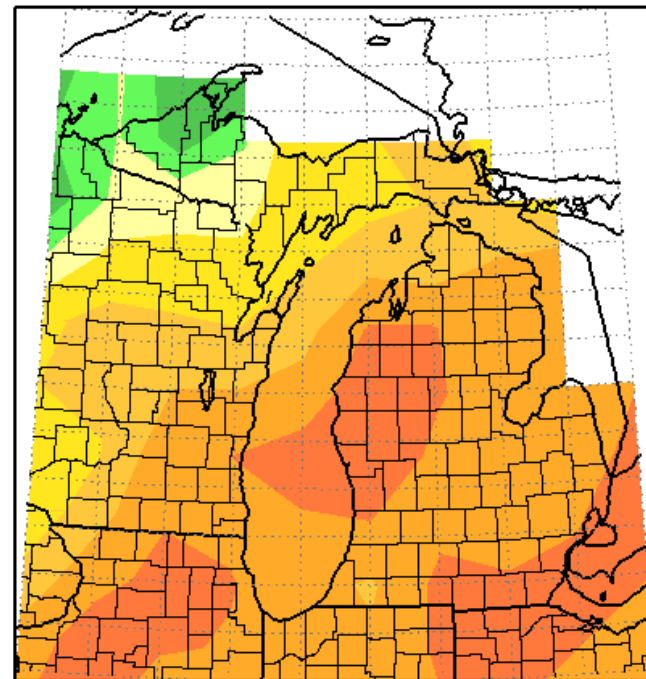
Total Precipitation in Inches  
October 1, 2007 to October 31, 2007



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## Departure

Total Precipitation Departure from Mean in Inches  
October 1, 2007 to October 31, 2007



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