

## **December Climate Narrative Summary**

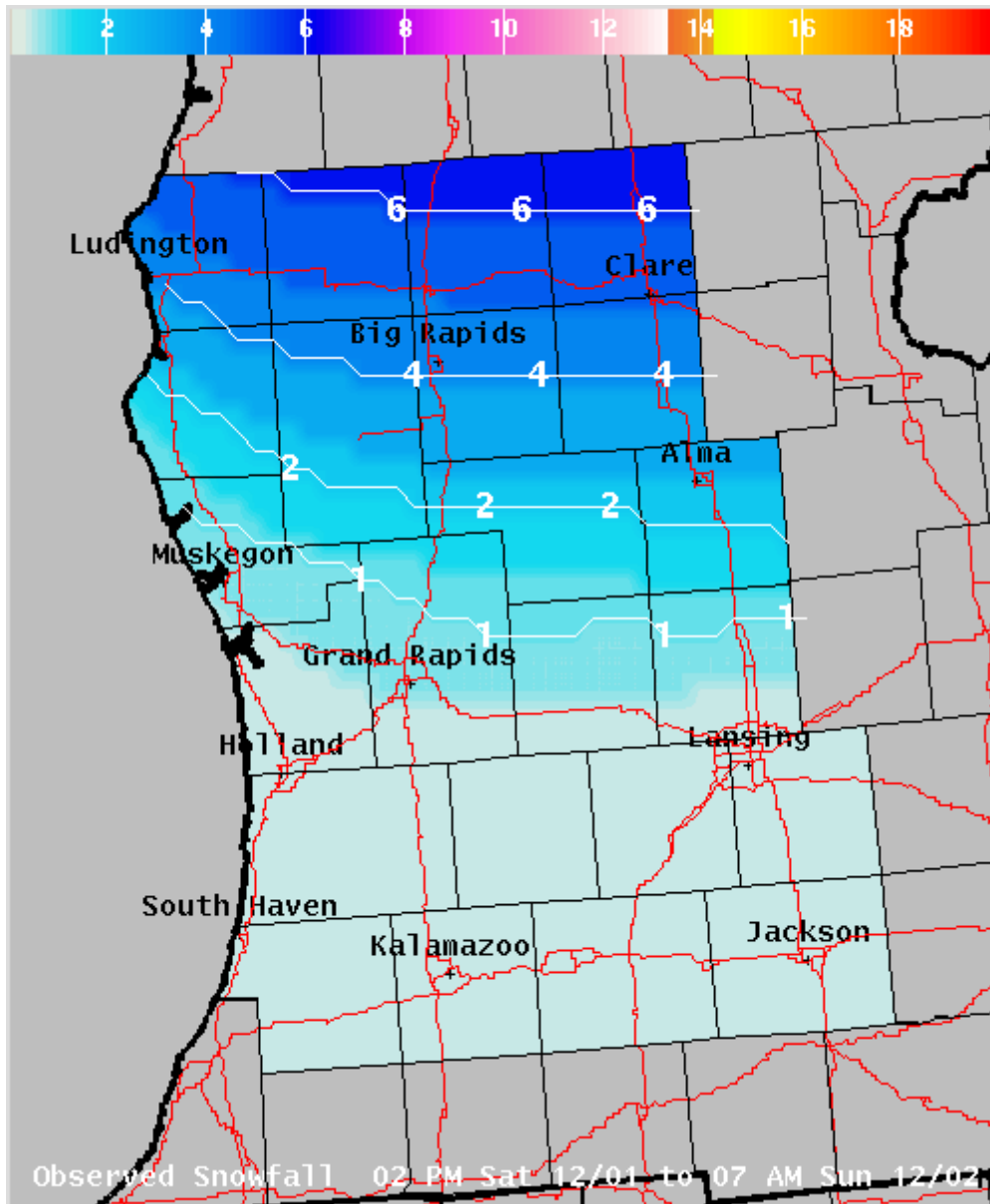
By William Marino and David Beachler

Temperatures for December 2007, across all of southwest Lower Michigan, were on the warm side of near normal. Both total precipitation and for the most part total snowfall were also on the high side of normal.

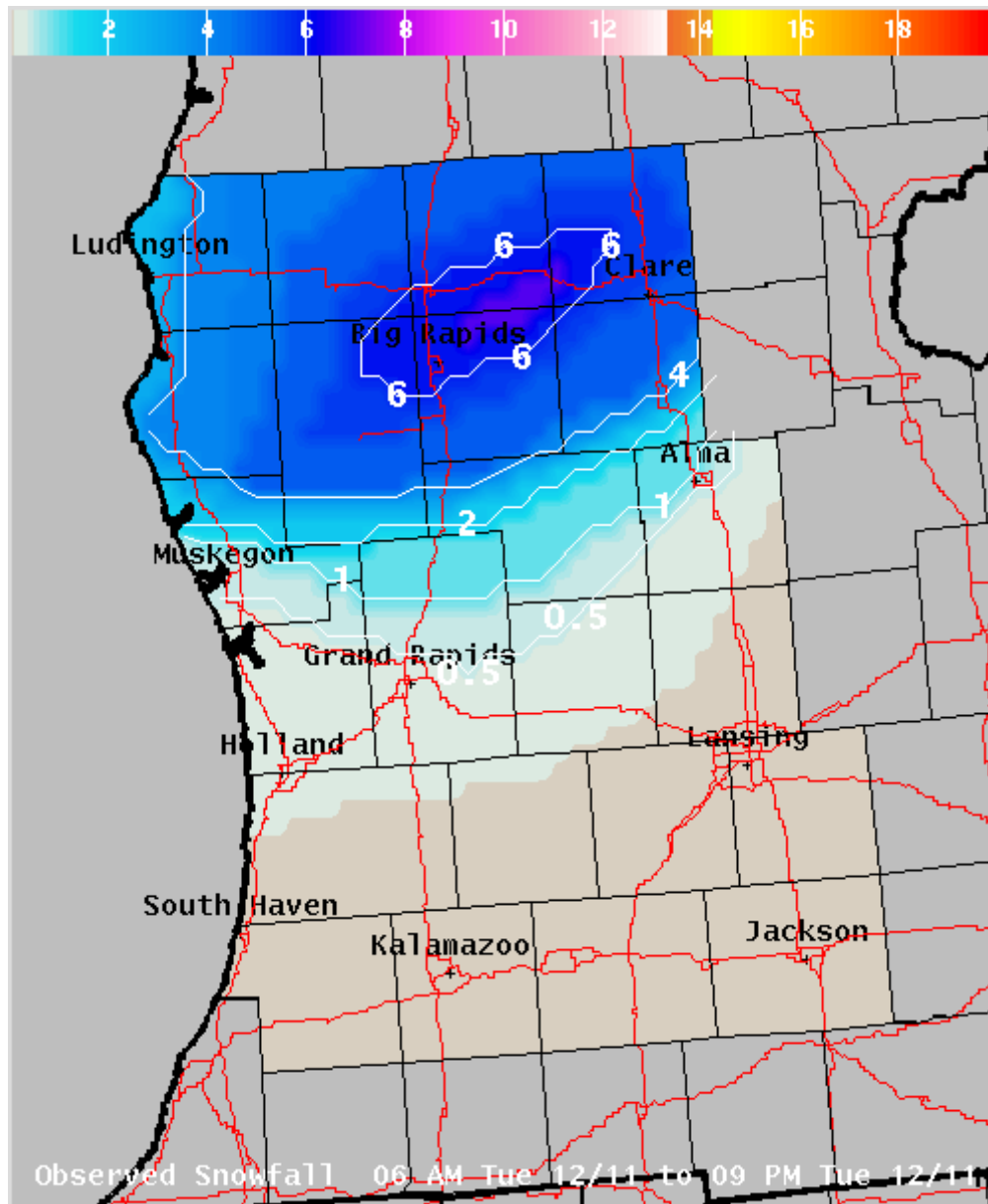
While the total precipitation was only slightly above normal across the area, there were only four days of the month had no precipitation at Grand Rapids. Areas from near and north of Interstate 96 had snow on the ground most of the month. Meanwhile, Big Rapids had at least an inch of snow on the ground the entire month.

Temperatures average slightly warmer than normal. The first half of December was colder than normal. Then around the 19th, it turned warmer than normal and stayed that way the rest of the month.

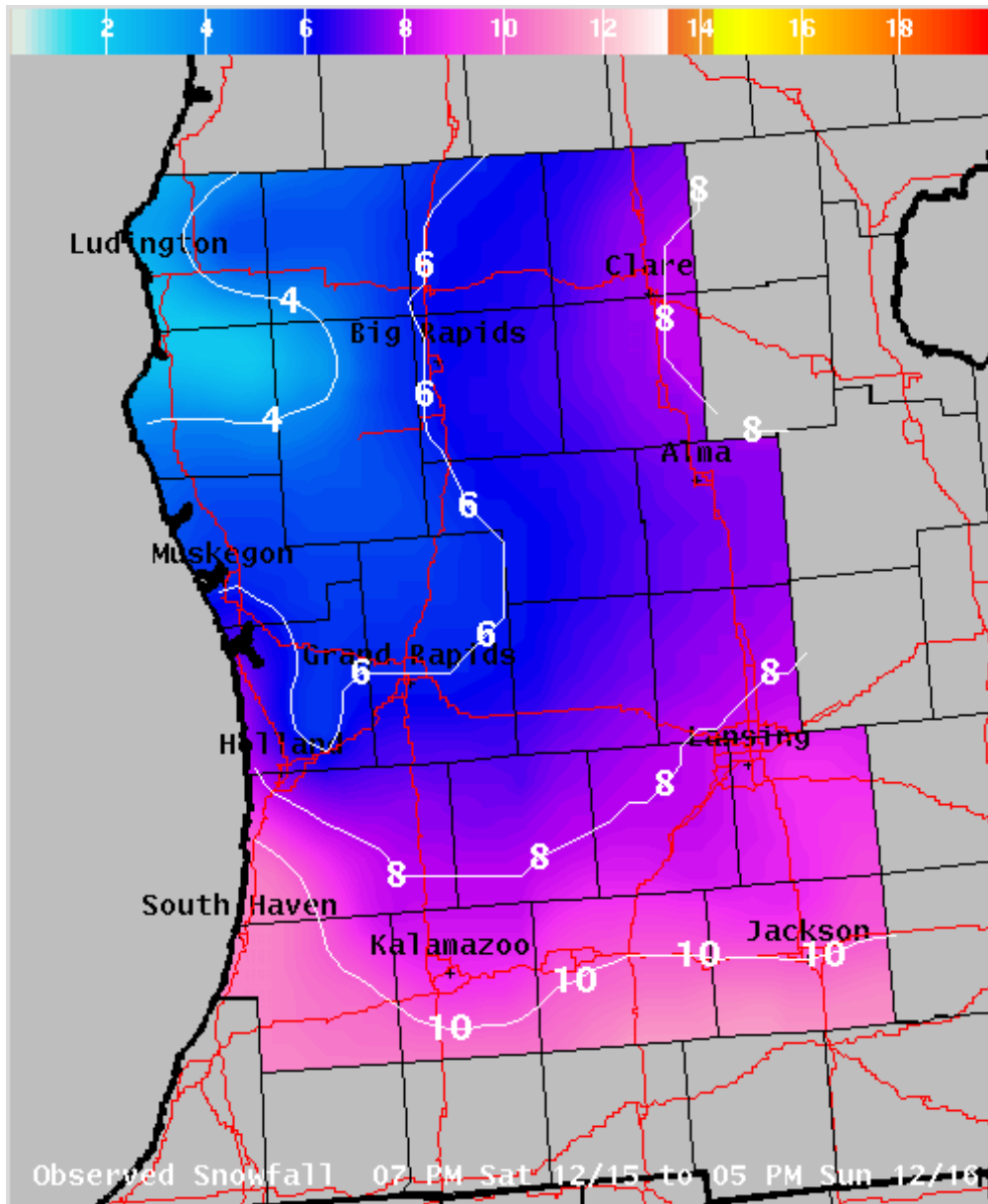
Six storms put down at least 6 inches of snow in parts of southwest Lower Michigan in 12 hours or less. Three of those six events produced most of their snow near and north of Route 10.



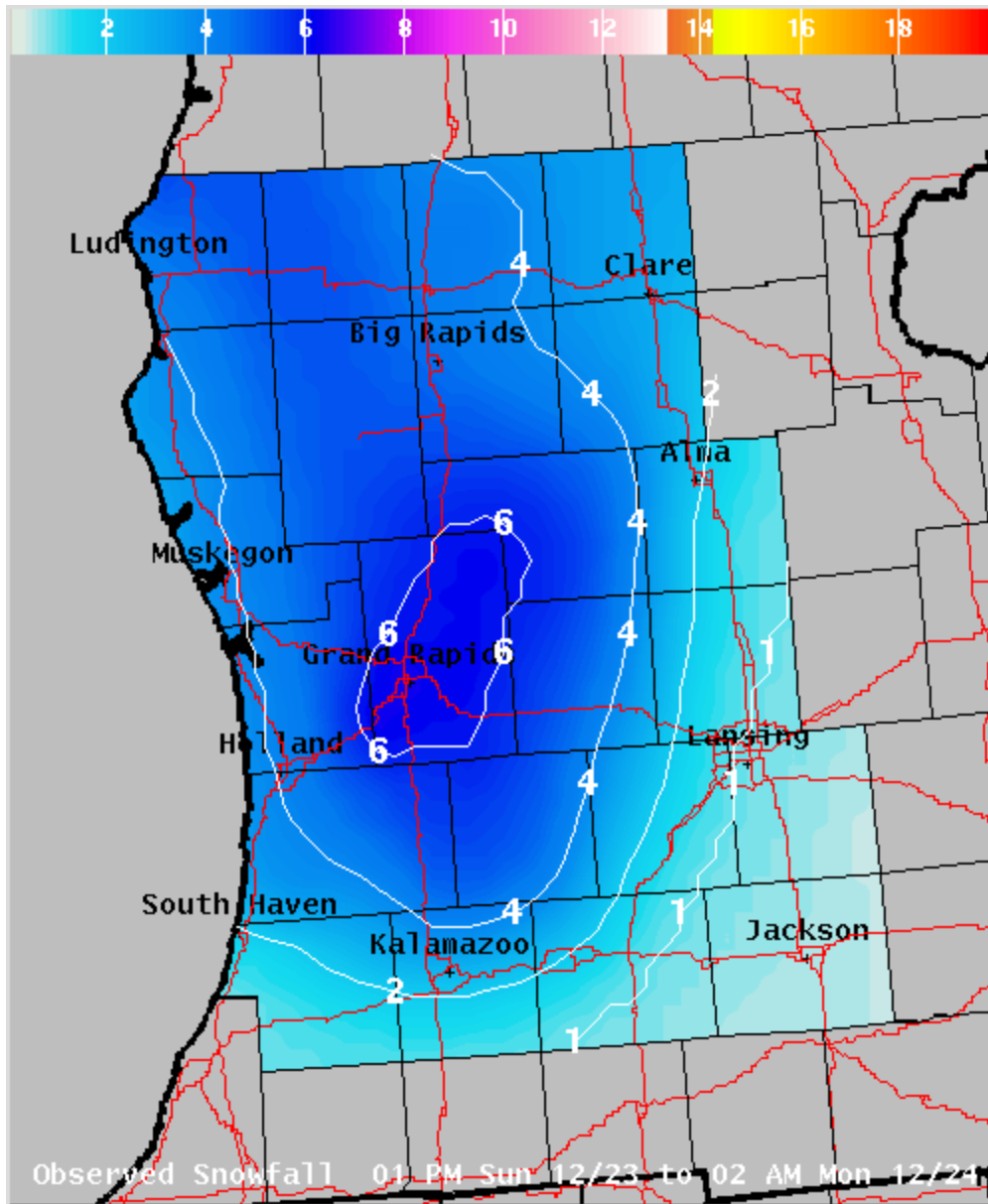
The first event was on December 1st with over 6 inches observed North of Route 10.



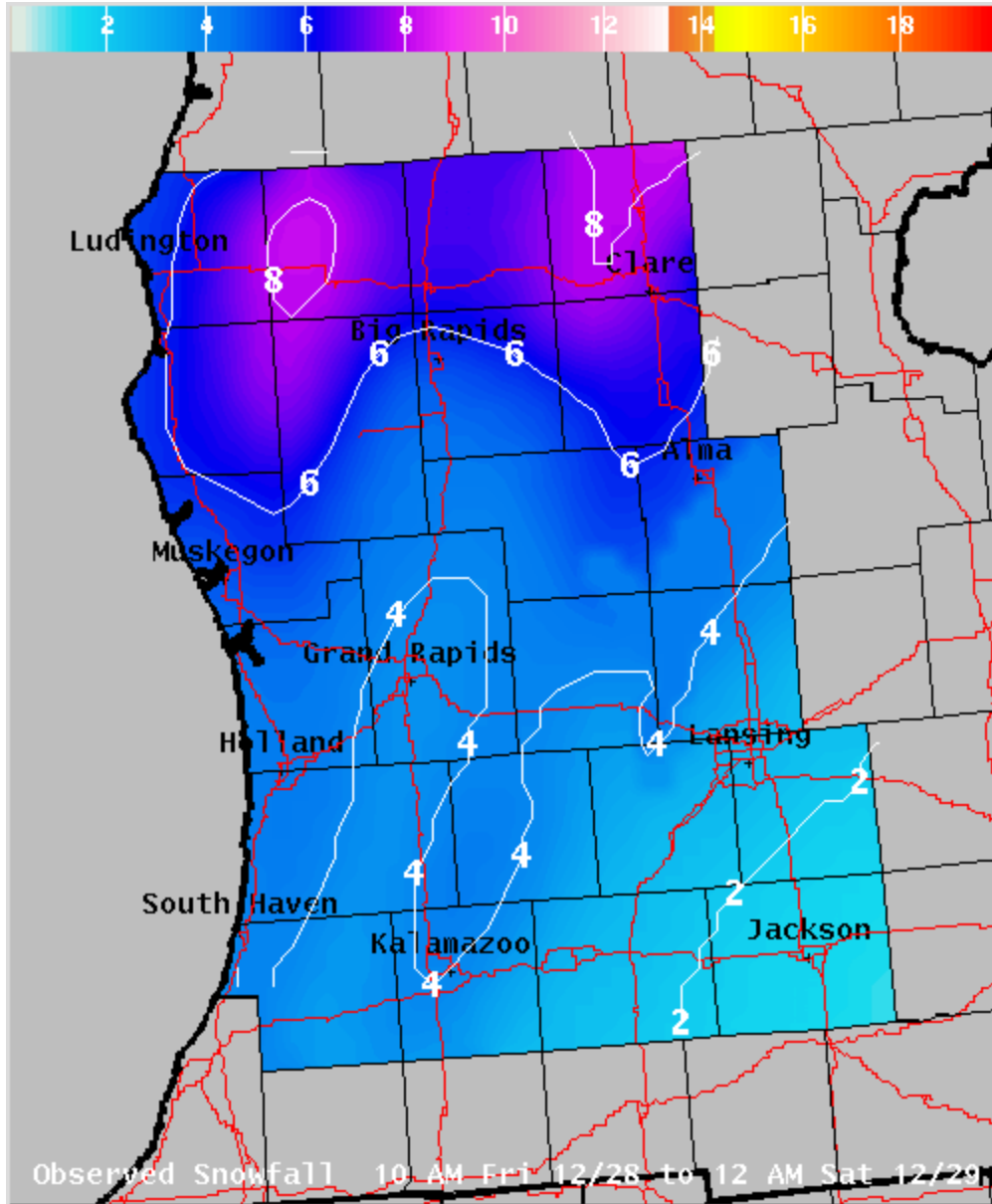
The second storm with more than 6 inches of snowfall was on the 11th. That storm produced 6 to 8 inches near Route 10, mostly east of Route 131.



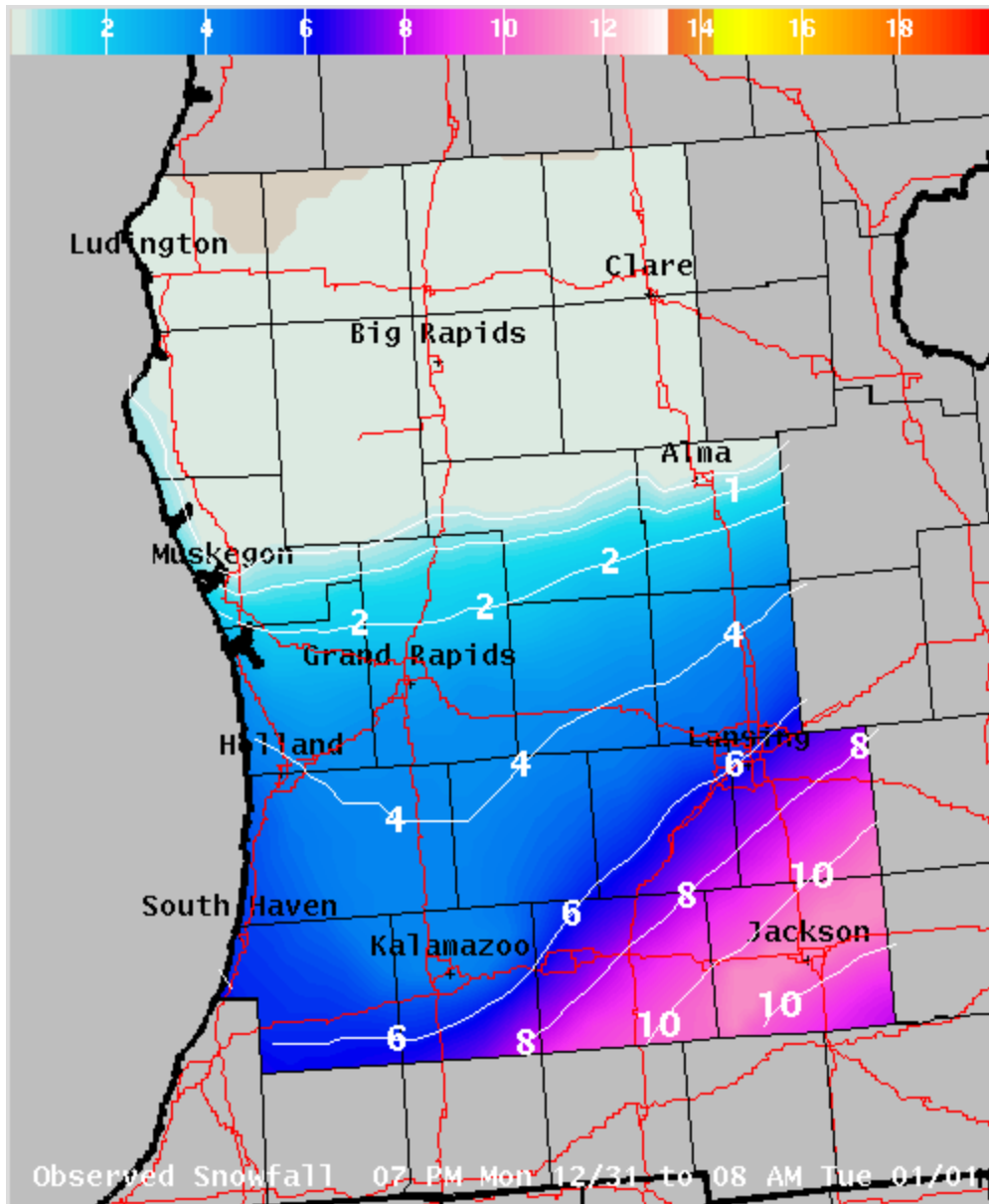
The third big snow storm of the month started around 7 PM on the 15th and ended by 5 PM on the 16th. While the center of that storm passed south of Lower Michigan, all but the northwest sections of the Grand Rapid County Warning Area had over 6 inches from that one. Areas south of Interstate 94 had between 10 inches and a foot of snow from that event.



Event number four was a lake enhanced snow event the day before Christmas. It resulted in 6 to 7 inches of snow over most of Kent County.



The fifth storm of the month started on the 28th at 10 AM and ended by midnight on the 28th. It resulted in 6 to 8 inches of wet snow across areas near and north of Route 10.



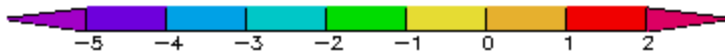
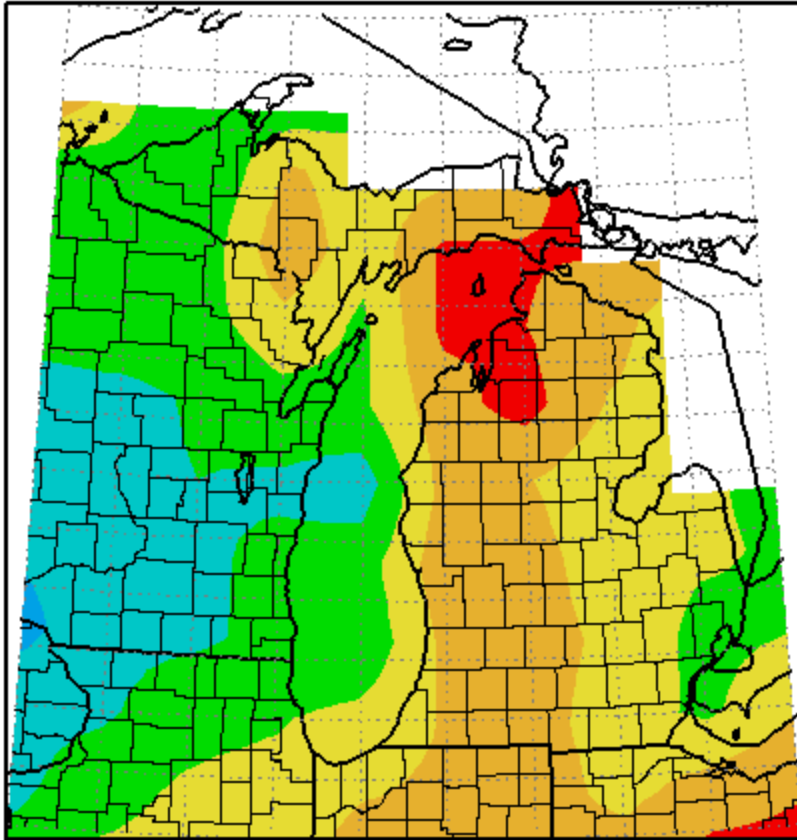
The sixth event occurred on New Year's Eve, and ended on New Year's Day 2008. This storm consisted of heavy wet snow with a narrow band of very heavy snow falling from near Marshall northeast to Lansing and points east. In that area, 10 to 12 inches of snow fell. Most of the rest of the area south of a line Lansing to Kalamazoo, snowfall amounts were 6 inches or more.

<b>Location</b>		<b>Temperature (degrees F)</b>	<b>Precipitation (inches)</b>	<b>Snowfall (inches)</b>
<b>Grand Rapids</b>	<i>Reported</i>	29.2°	3.03	25.0
	<i>Normal</i>	27.6°	2.70	18.8
	<i>Departure</i>	+1.6°	+0.33	+6.2
<b>Lansing</b>	<i>Reported</i>	27.2°	2.43	16.7
	<i>Normal</i>	26.9°	2.17	13.2
	<i>Departure</i>	+0.3°	+0.26	+3.5
<b>Muskegon</b>	<i>Reported</i>	29.7°	2.79	21.7
	<i>Normal</i>	28.6°	2.64	29.3
	<i>Departure</i>	+1.1°	+0.15	-7.6

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

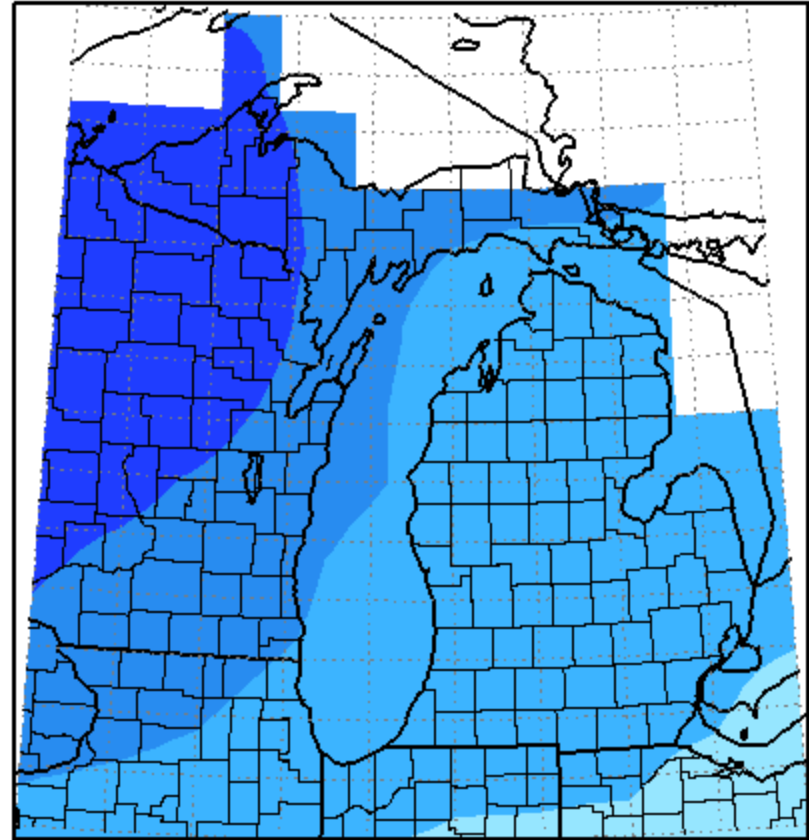


Average Temperature Departure from Mean in Degrees F  
December 1, 2007 to December 31, 2007



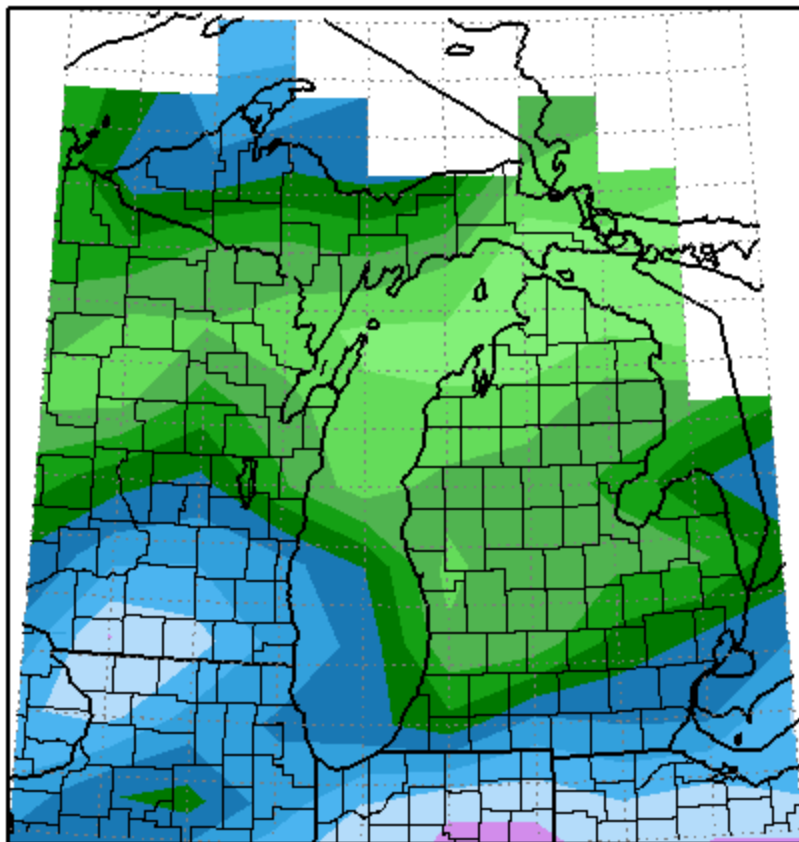
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Illinois State Water Survey  
Champaign, Illinois

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

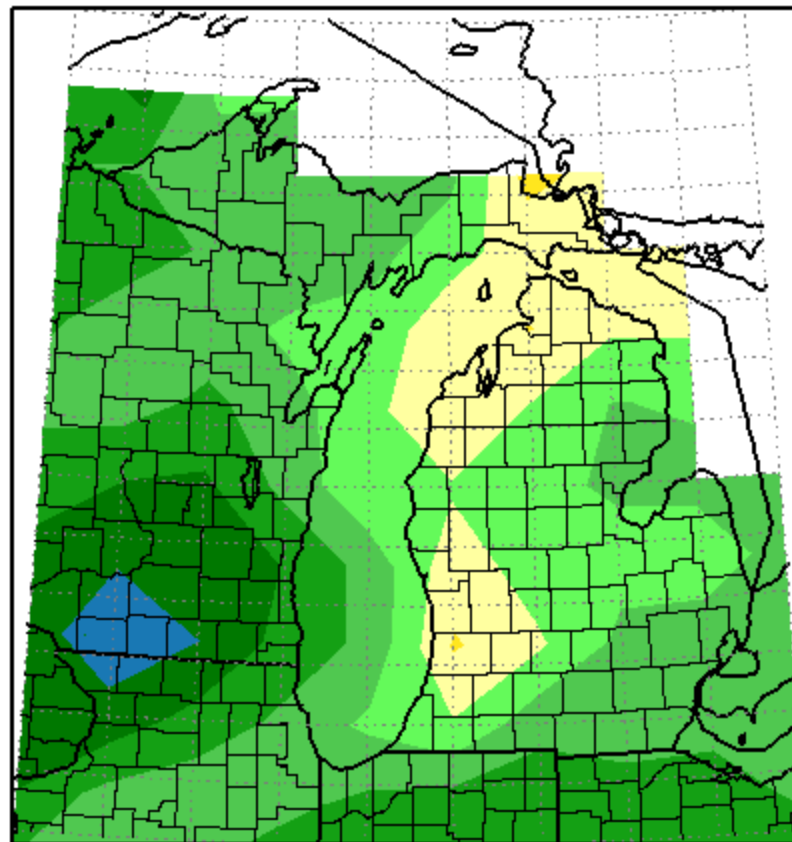


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Total Precipitation in Inches  
December 1, 2007 to December 31, 2007



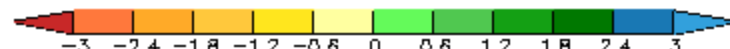
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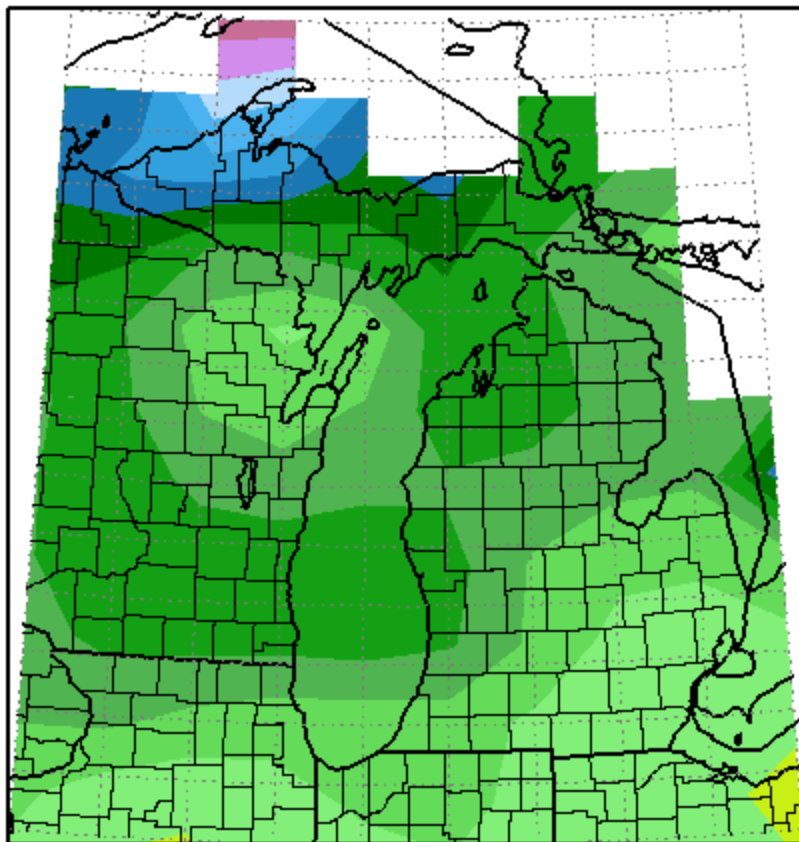


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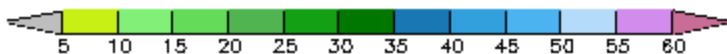
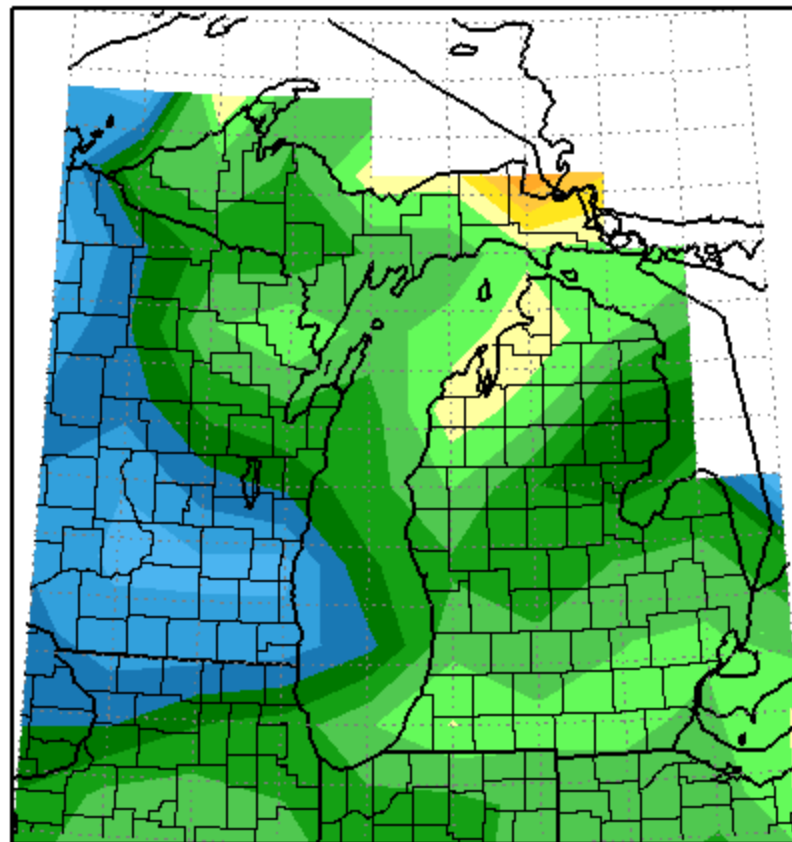
Illinois State Water Survey

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Total Snowfall in Inches  
December 1, 2007 to December 31, 2007



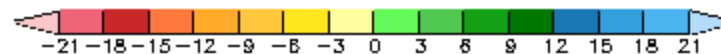
Total Snowfall Departure from Mean in Inches  
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