

October 2013 Climate Summary for Southwest Lower Michigan

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Overview

October 2013 was warm and wet, with above normal temperatures (Fig. 2) and precipitation (Fig. 4). Snowfall was mostly limited to the 23rd and 24th. The primary climate stations all received a trace of snowfall (Table 1). Measurable snowfall was mostly limited to Allegan and Van Buren counties with lake-enhanced snow (Fig. 5). In these counties, snowfall was above normal for the month (Fig. 6). Elsewhere, totals were near to below normal.

The average temperatures for the month were 1 to 2 degrees above normal (Fig. 2). Average temperature during October can really be analyzed in two halves. There was a distinct pattern shift at the end of the second week of the month, with most days prior to that point warmer than normal. Most days after the 15th were cooler than normal. Most locations reported their lowest temperature of the month on the mornings of October 24th and 25th. Temperatures on the final two days of the month were warmed by strong southerly winds out ahead of a strong storm system.

The precipitation totals for October 2013 across Southwest Lower Michigan ranged from 3 to 5 inches (Fig. 3). These values were up to 2.5 inches above normal (Fig. 4). Most of the precipitation fell with the first and last storm systems of the month.

There were a few thunderstorm episodes during the month, which resulted in minor tree damage due to strong winds. Pea size hail was also reported with the storms on the 26th. October ended with a flourish, as a strong low pressure system brought heavy rains and widespread wind gusts up to 50 mph to the region.

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Table 1. Reported temperature, precipitation, and snowfall amounts for October 2013 at primary climate stations in Southwest Lower Michigan.

Location		Average Temperature (°F)	Precipitation (inches)	Snowfall (inches)
Grand Rapids	Observed	53.1	5.41	T
	Normal	51.0	3.26	0.5
	Above/Below Normal	+ 2.1	+ 2.15	- 0.5
Lansing	Observed	51.9	3.55	T
	Normal	50.3	2.53	0.4
	Above/Below Normal	+ 1.6	+ 1.02	- 0.4
Muskegon	Observed	53.2	4.47	T
	Normal	50.7	3.11	0.2
	Above/Below Normal	+ 2.5	+ 1.36	- 0.2

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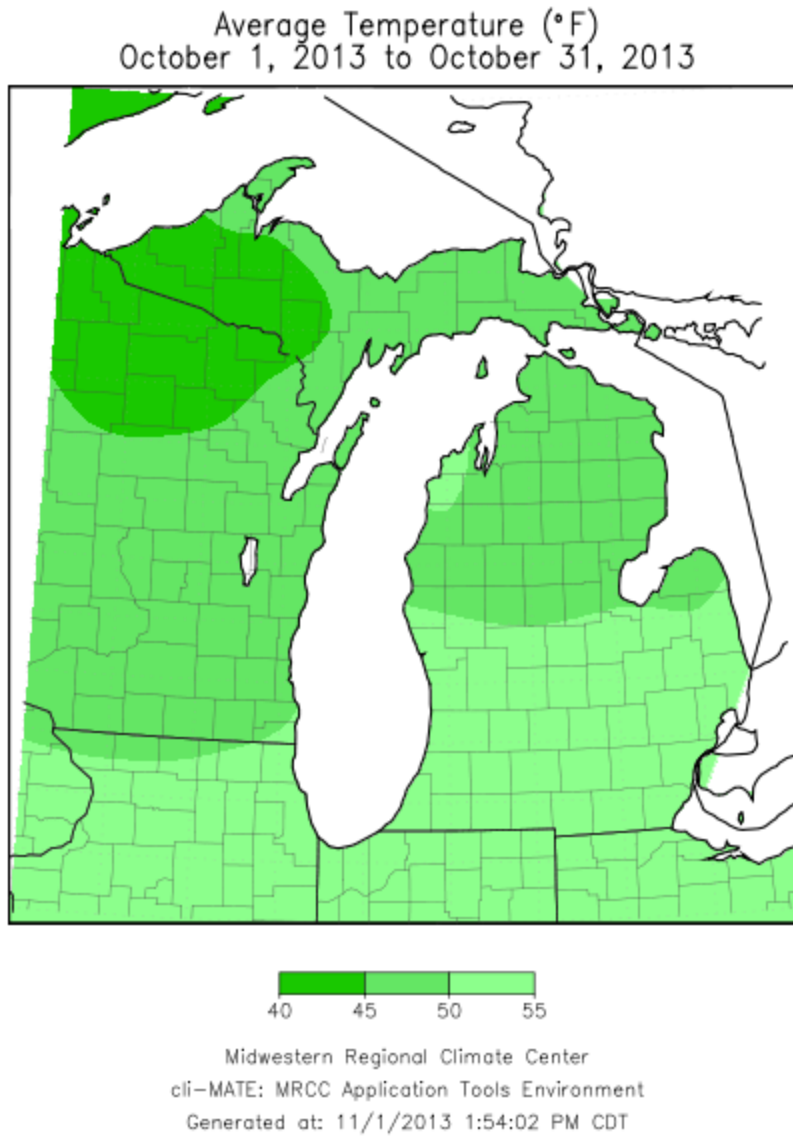


Figure 1. Average temperature (°F) for October 2013.

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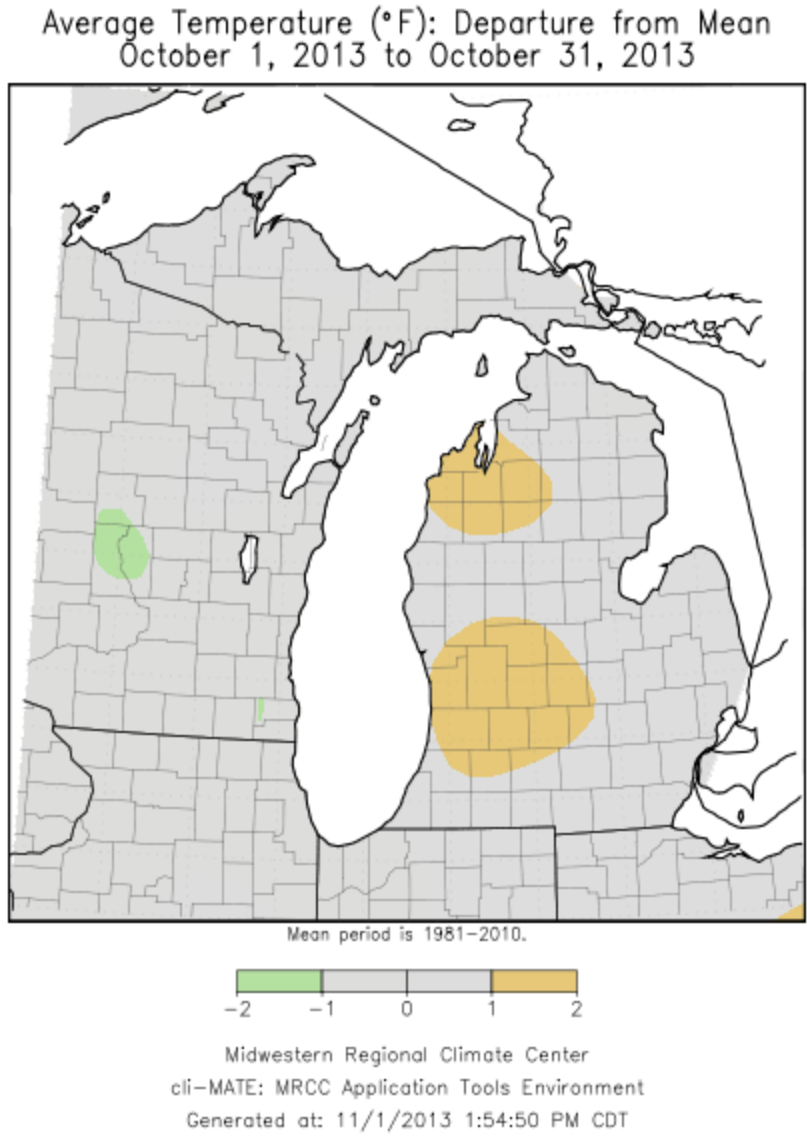


Figure 2. Average temperature departure (°F) for October 2013.

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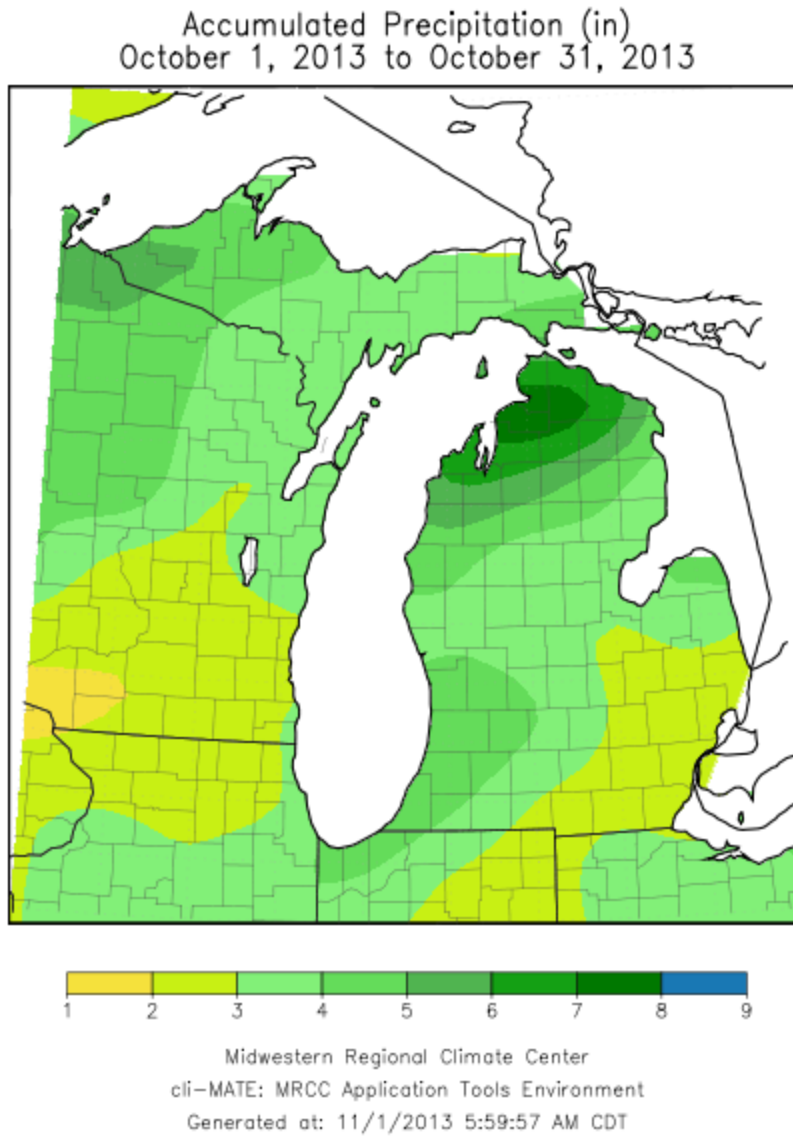
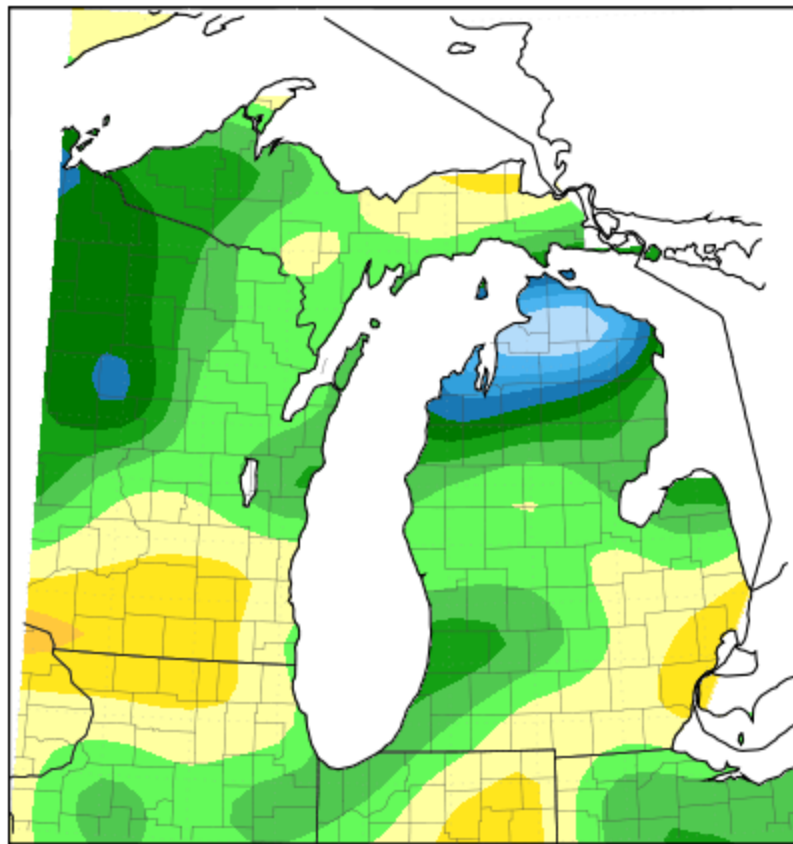


Figure 3. Total precipitation (in inches) for October 2013.

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Accumulated Precipitation (in): Departure from Mean
October 1, 2013 to October 31, 2013



Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
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Figure 4. Accumulated precipitation departure (in inches) for October 2013.

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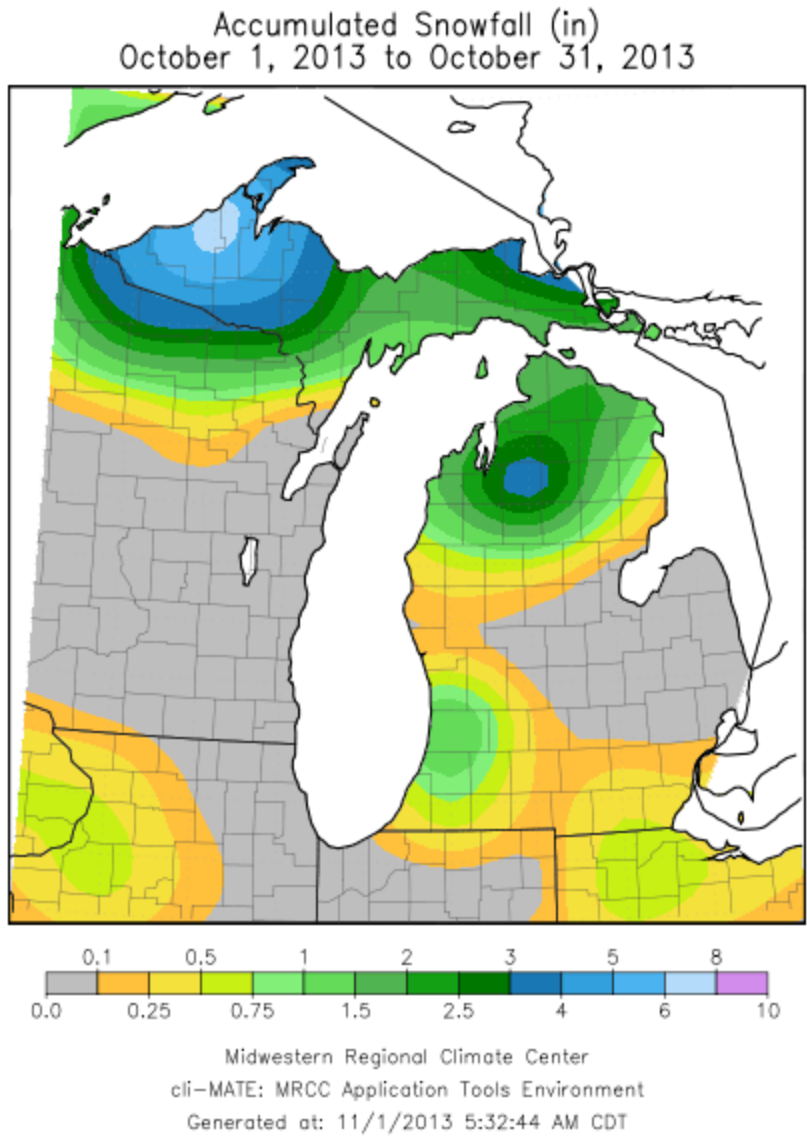


Figure 5. Total snowfall (in inches) for October 2013.

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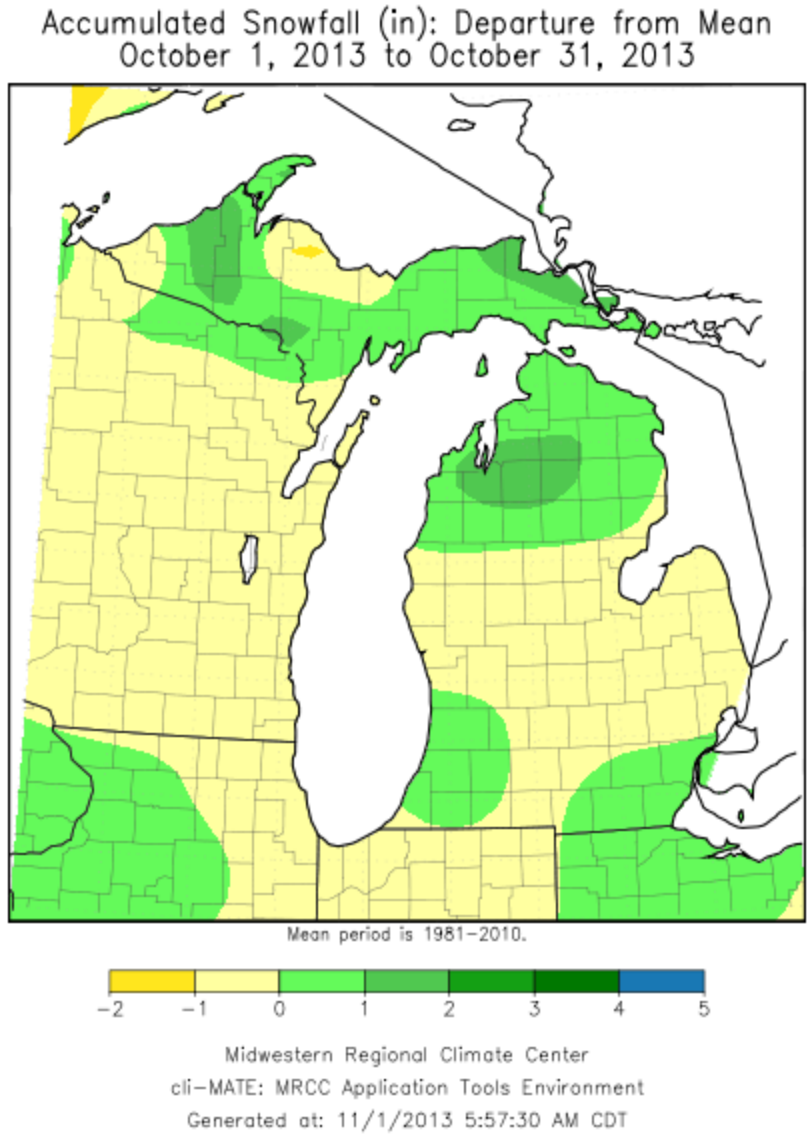


Figure 6. Accumulated snowfall departure from mean (in inches) for October 2013.