

March 2014 Climate Summary for Southwest Lower Michigan

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Overview

March 2014 in Southwest Lower Michigan was characterized by well below normal temperatures and record snow depth values during the first two weeks of the month. Precipitation was below normal in March. It was the 4th coldest March on record in Grand Rapids, 5th coldest March in Muskegon, and 10th coldest March in Lansing.

Record snow depth values for March were set at Grand Rapids, Lansing, and Muskegon. The snow depth hit 20 inches in Grand Rapids on March 2nd, breaking the previous March record of 15 inches set in 2007. Grand Rapids set daily snow depth records through March 13th. Also this March, Lansing set a record for the most consecutive days with at least one inch of snow on the ground. That streak reached 106 days on March 24th, breaking the old record of 101 days set in Winter 1962-63. Muskegon also set a record for March snow depth with 24 inches on the 5th, breaking the old record of 22 inches in March 1963.

Temperatures in March were around 10 degrees below normal across Southwest Lower Michigan, which allowed the record snowpack to persist at the tail end of this prolific winter. The first week of March was bitterly cold, with lows at all 3 primary climate stations dipping into the single digits and even negatives. The coldest day was March 3rd when mean temperatures were around 27 degrees below normal. Grand Rapids and Lansing set record low temperatures on the 13th. Temperatures remained below normal through the 26th before moderating.

Precipitation was below normal in March, with the region receiving around a quarter of an inch of precipitation on just a few occasions. The biggest precipitation event was on the 12th, when Lansing received a half inch of precipitation and 6.3 inches of snow, setting a daily snowfall record. Snowfall was near normal near Ludington and Mt. Pleasant and slightly above normal in areas further south.

One of the bigger headlines in March was the flooding potential, which was mostly under control. Several rivers and streams did exceed bankfull, but no significant flooding issues arose. This was attributed to a textbook melt, with intermittent warm periods followed by colder air that served to slow or completely stop the snow melt. Snow depth values in the 18-24 inch range at the beginning of the month were reduced to 0 at the end of the month with not even minor flooding on area rivers.

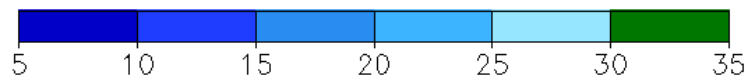
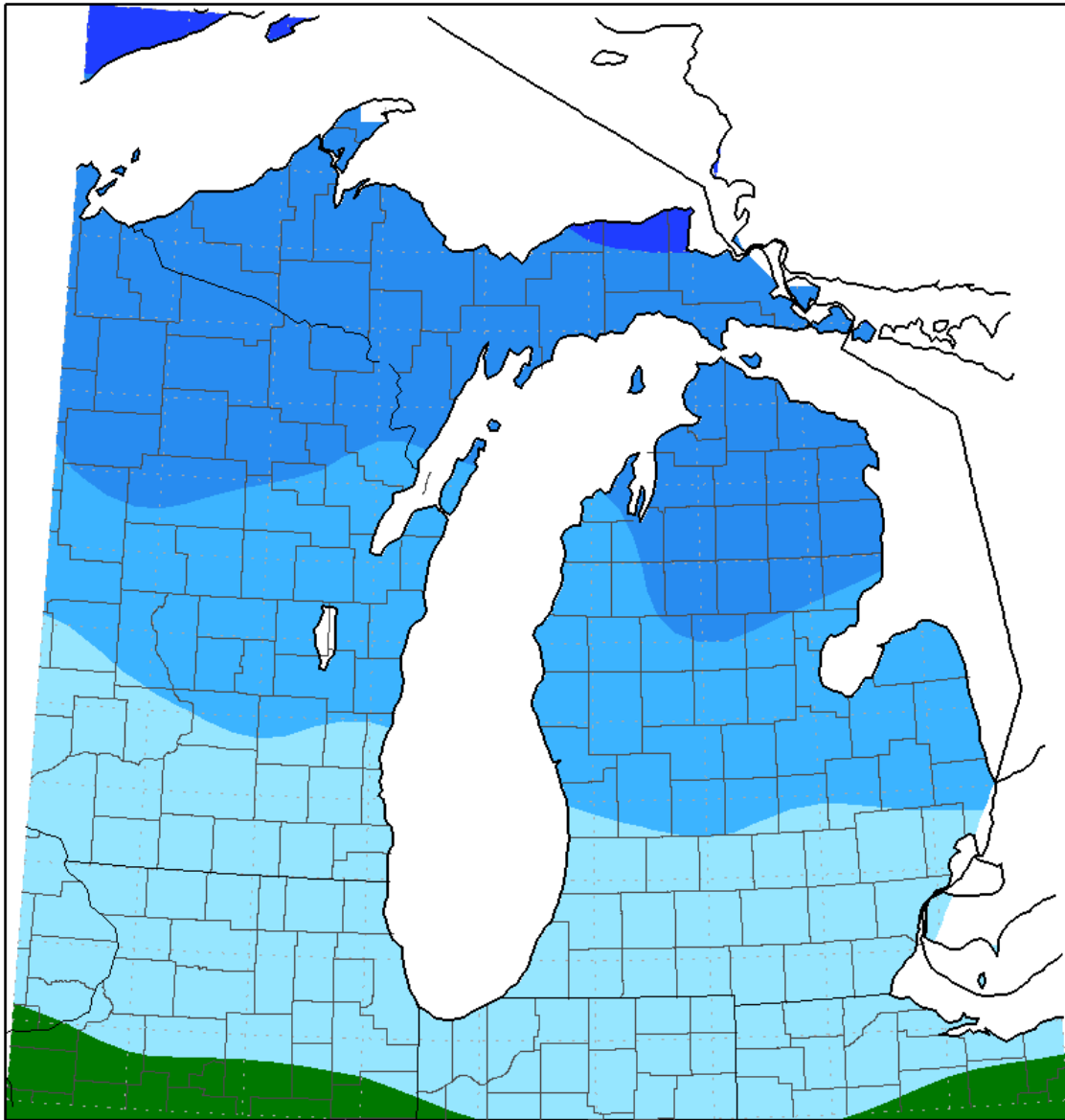
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Table 1. Reported temperature, precipitation, and snowfall amounts for March 2014 at primary climate stations in Southwest Lower Michigan and departures from normal.

Location		Average Temperature (°F)	Precipitation (inches)	Snowfall (inches)
Grand Rapids	Observed	26.6	1.54	6.4
	Departure from Normal	- 9.0	- 0.83	- 1.9
	Normal	35.6	2.37	8.3
Lansing	Observed	25.7	1.69	10.4
	Departure from Normal	- 9.4	- 0.37	+ 3.4
	Normal	35.1	2.06	7.0
Muskegon	Observed	26.5	1.67	7.5
	Departure from Normal	- 8.5	- 0.58	- 1.5
	Normal	35.0	2.25	9.0

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Average Temperature (°F)
March 1, 2014 to March 31, 2014

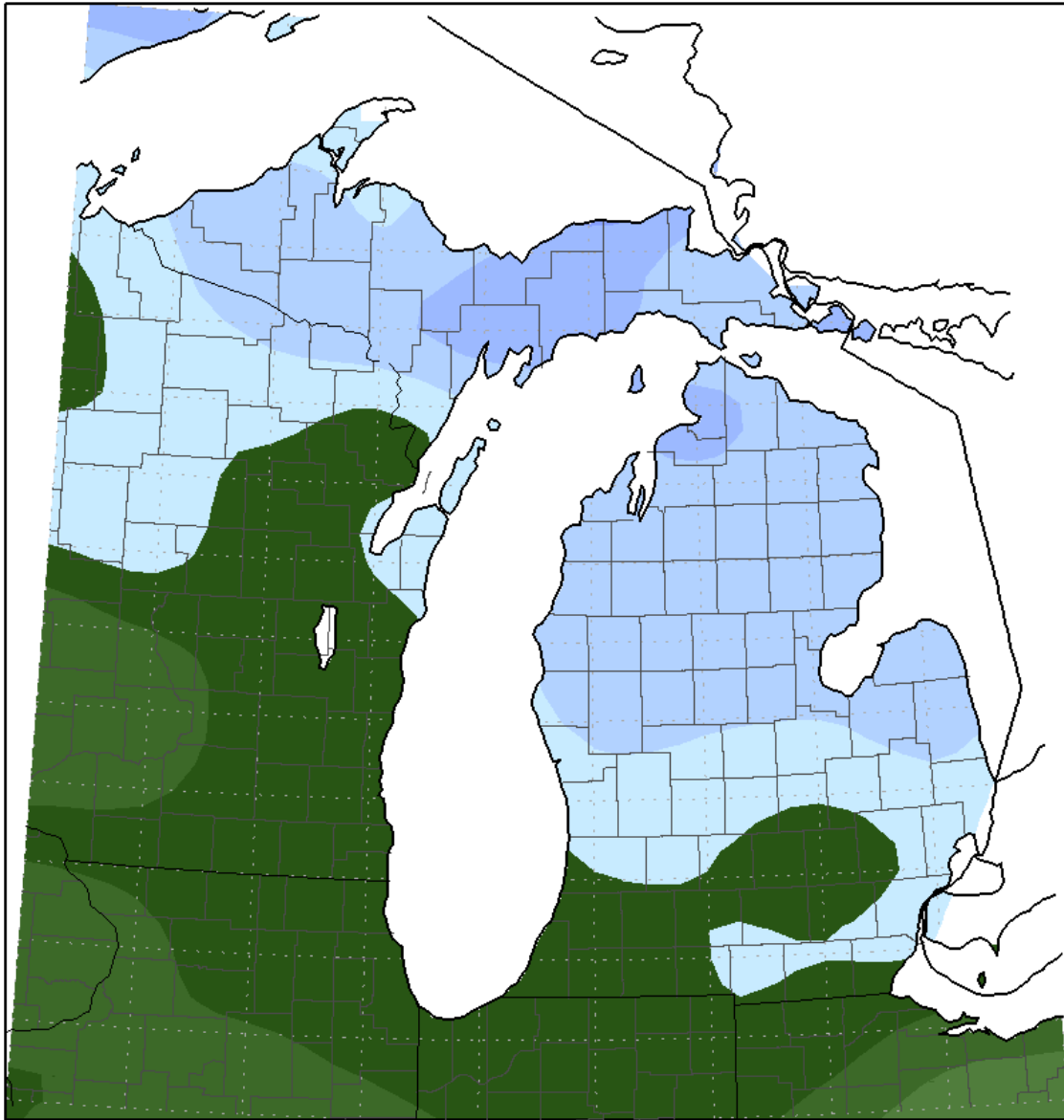


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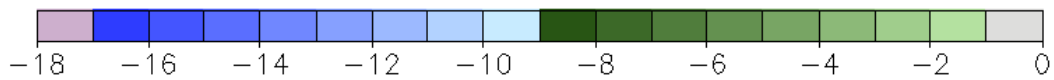
Figure 1. Average temperature (°F) for March 2014.

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Average Temperature (°F): Departure from Mean
March 1, 2014 to March 31, 2014



Mean period is 1981–2010.

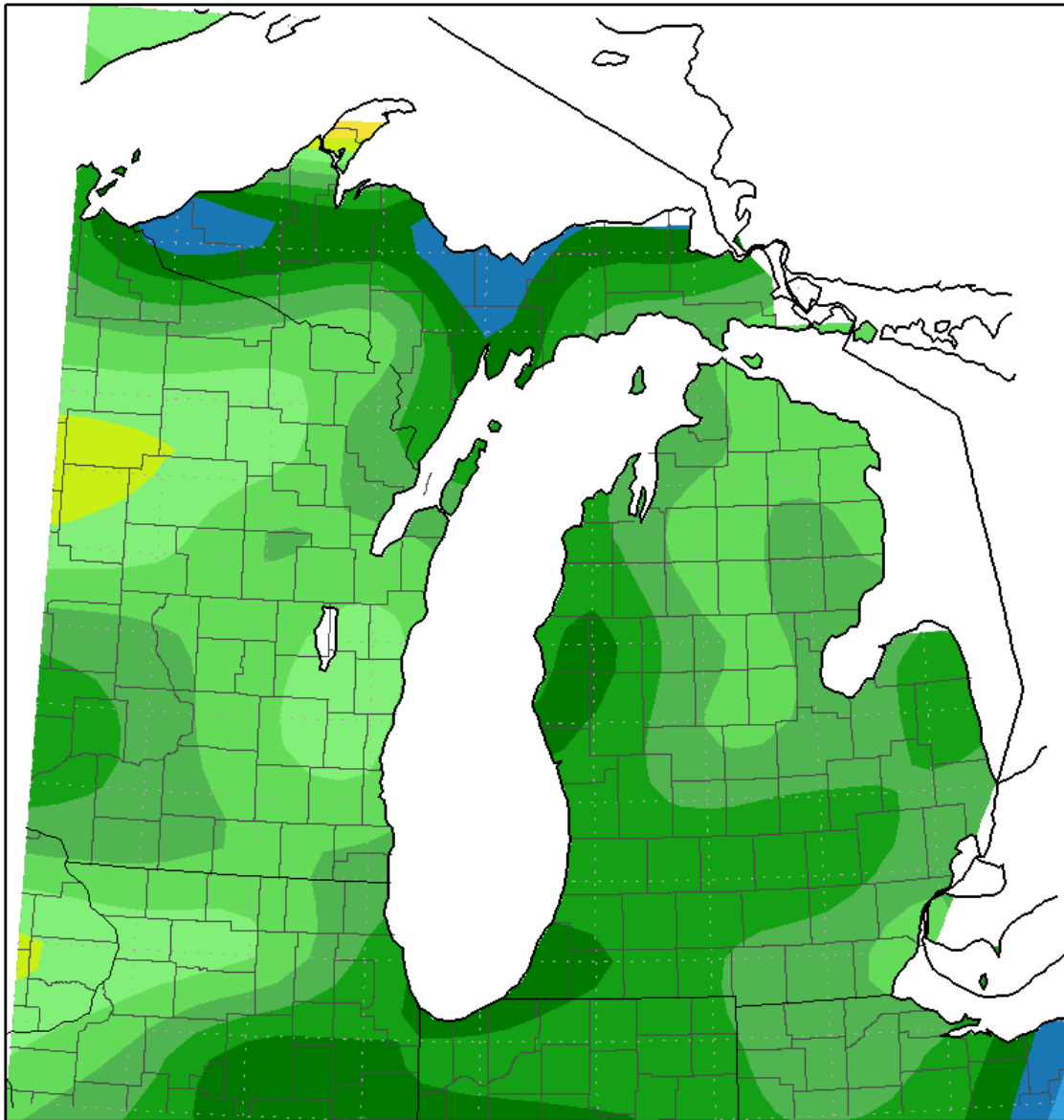


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Figure 2. Average temperature departure from normal (°F) for March 2014.

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Accumulated Precipitation (in)
March 1, 2014 to March 31, 2014

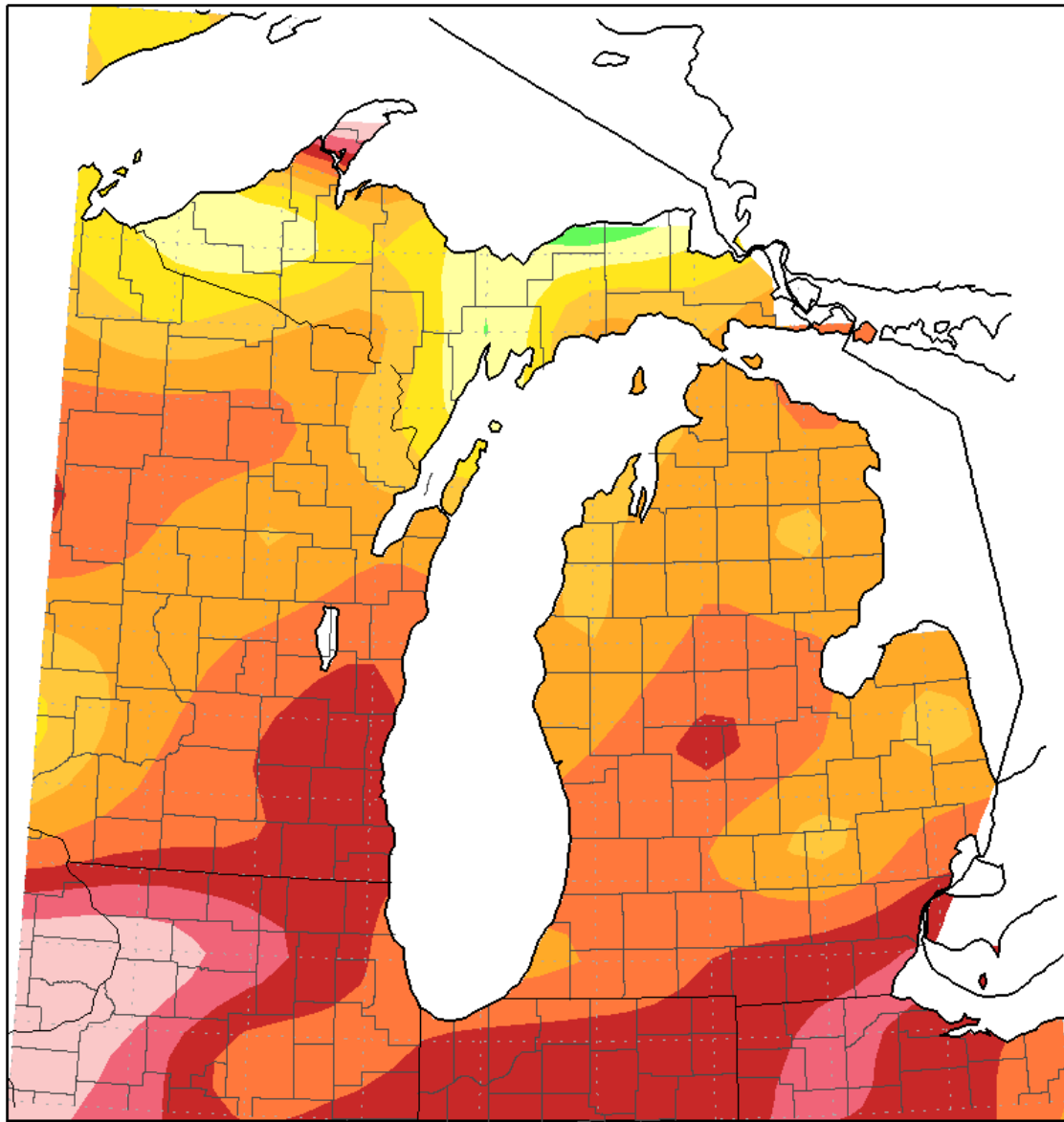


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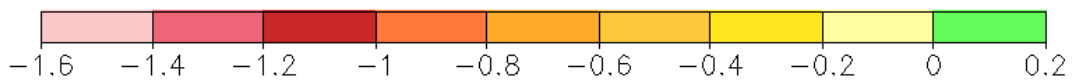
Figure 3. Total precipitation (in inches) for March 2014.

March 2014 Climate Summary for Southwest Lower Michigan

Accumulated Precipitation (in): Departure from Mean
March 1, 2014 to March 31, 2014



Mean period is 1981–2010.

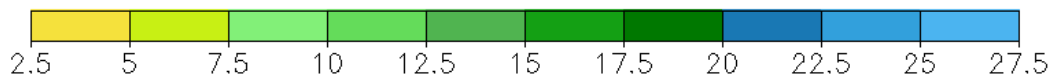
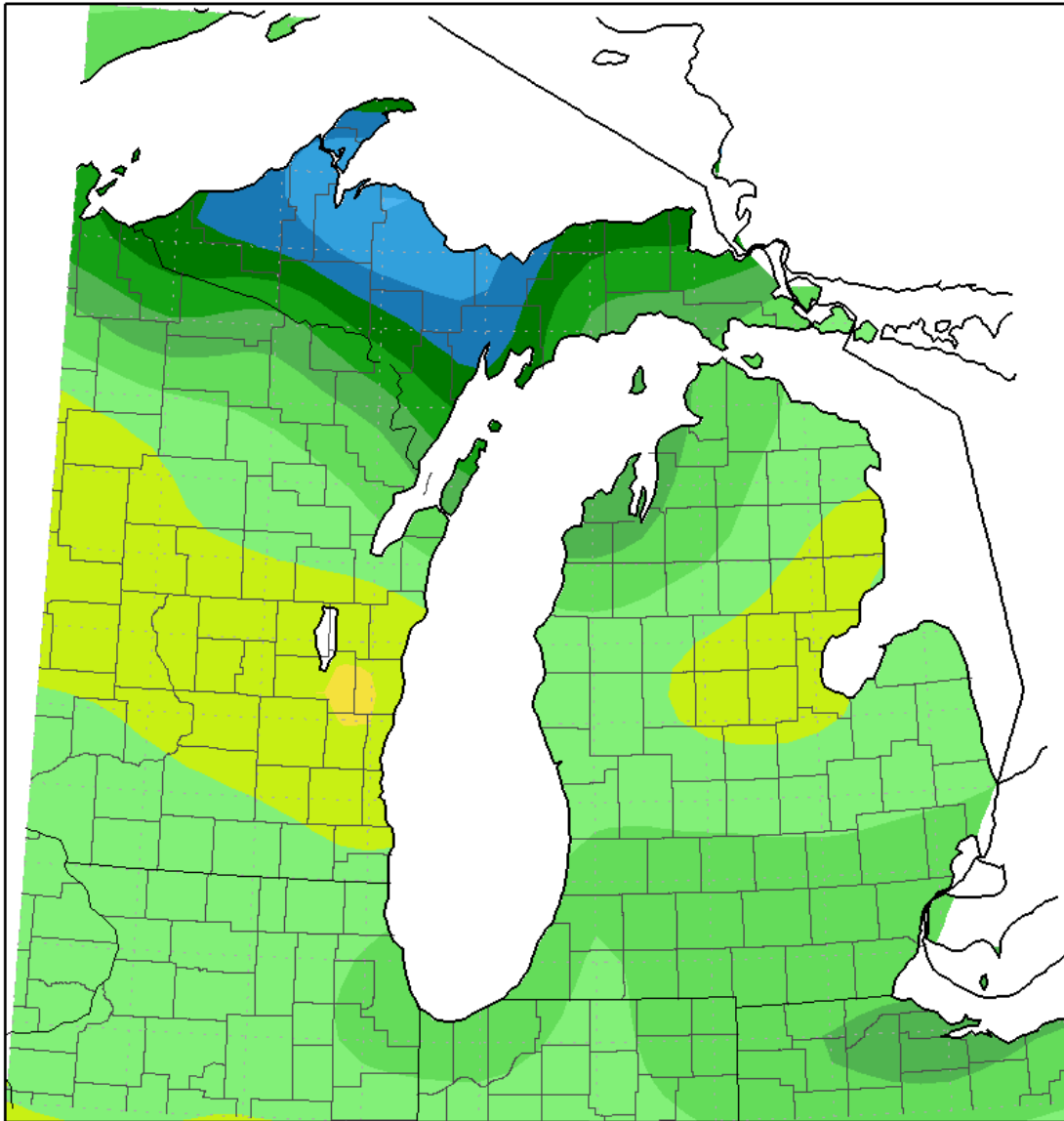


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Figure 4. Average precipitation departure from normal (in inches) for March 2014.

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Accumulated Snowfall (in)
March 1, 2014 to March 31, 2014

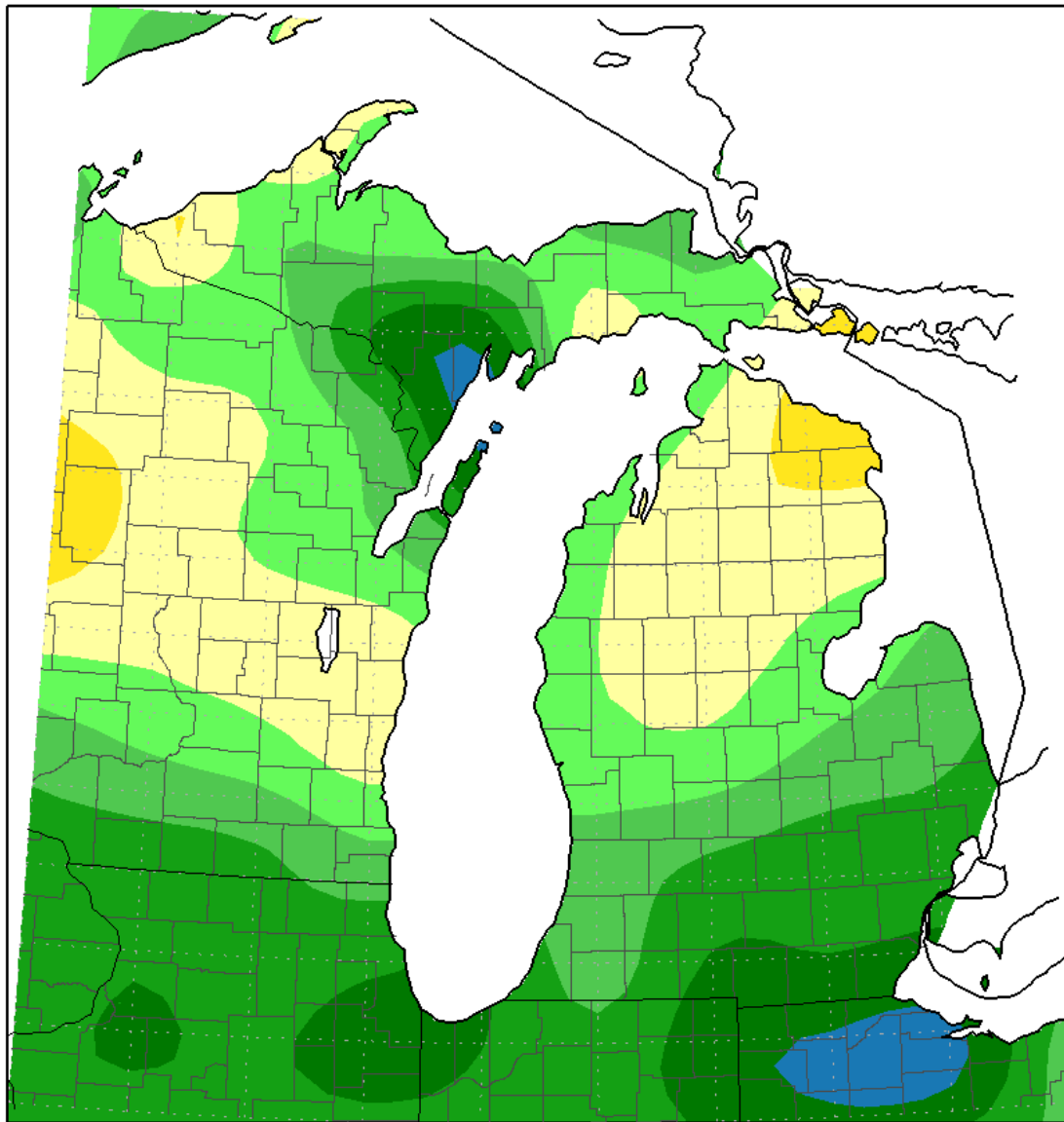


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Figure 5. Total snowfall (in inches) for March 2014.

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Accumulated Snowfall (in): Departure from Mean
March 1, 2014 to March 31, 2014



Mean period is 1981-2010.



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Figure 6. Total snowfall departure from normal (in inches) for March 2014.