



Southeast Michigan Climate Summary

Monthly Temperature, Precipitation, Snowfall, and Severe Weather Summaries

Michigan, Average Temperature, September
1901-2000
Avg. 58.5°F

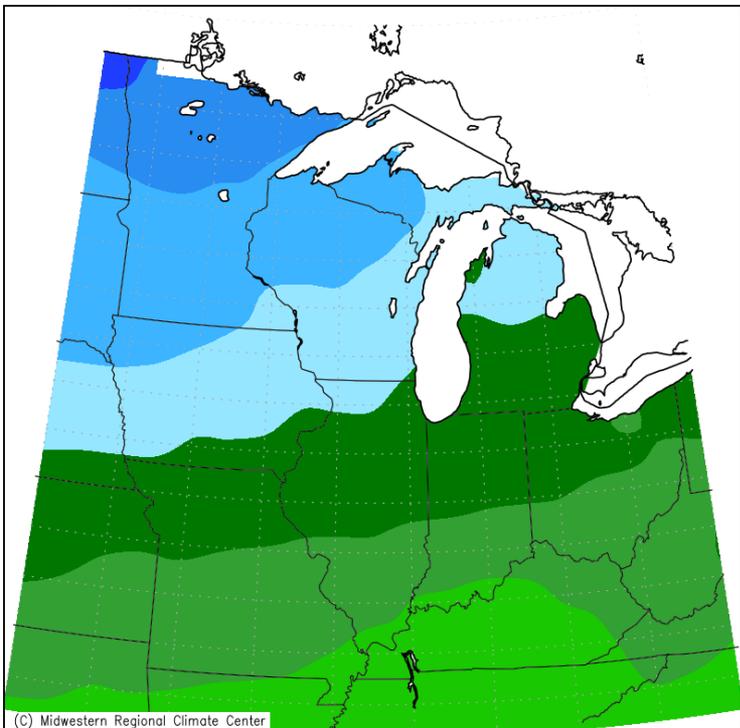




December 2018 – Regional Temperature Summary

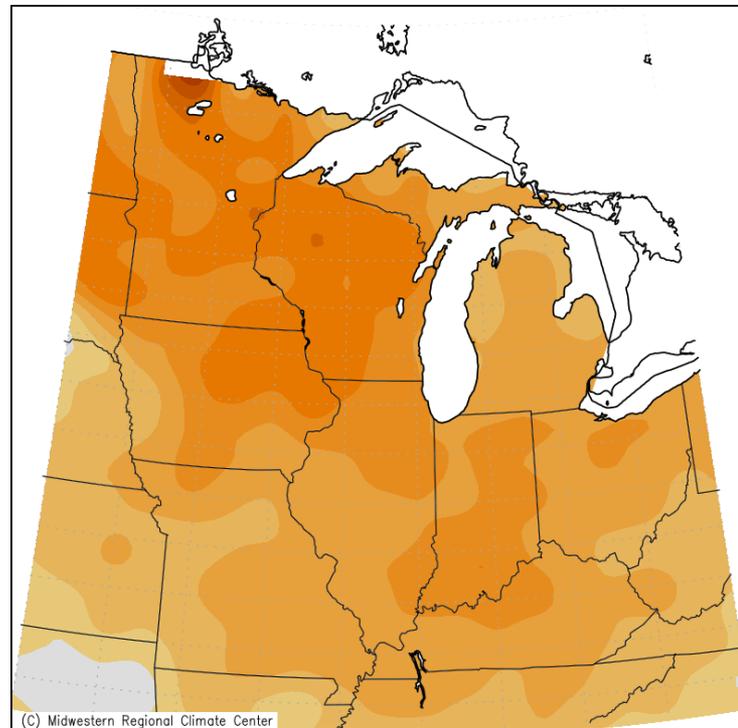
Average Temperature (left) & Departure from Average (right)

Average Temperature (°F)
December 1, 2018 to December 31, 2018



Midwestern Regional Climate Center
Illinois State Water Survey, Prairie Research Institute
University of Illinois at Urbana-Champaign

Average Temperature (°F): Departure from Mean
December 1, 2018 to December 31, 2018



Midwestern Regional Climate Center
Illinois State Water Survey, Prairie Research Institute
University of Illinois at Urbana-Champaign





December 2018 – SE Michigan Temp Summary

Average Temperature (left column) & **Departure from Average** (right column)

Location	Temperature	Departure
ADRIAN 2 NNE	33.1	5.3
ADRIAN LENAWEE COUNTY AP	32.5	4.0
ALGONAC WWTP	33.0	3.0
ANN ARBOR MUNICIPAL AP	31.7	3.6
ANN ARBOR SE	32.0	4.0
ANN ARBOR U OF MICH	32.0	3.0
AUBURN 2NE	31.1	4.4
BAD AXE	30.2	3.1
BURTON 4N	31.3	3.3
CARLETON 2W	34.5	5.5
CARO WWTP	30.4	3.3
CASS CITY 1 SSW	29.2	3.2
CHELSEA	31.8	3.8
CORUNNA 2 NE	34.5	2.7
DEARBORN	34.0	4.0
DEARBORN NO. 2	34.4	4.5
DETROIT CITY AP	33.8	3.4
DETROIT METROPOLITAN AP	34.5	4.3
DETROIT WILLOW RUN AP	34.8	6.6
DUNDEE	33.0	4.1
DURAND WWTP	30.0	3.0
FARMINGTON	31.7	3.9
FILION 5NNW	32.5	6.5
FLINT 7 W	30.8	3.4
FLINT BISHOP INTL AP	31.3	3.9
FRANKENMUTH 1SE	31.5	3.8
GOODRICH	31.3	3.8
GROSSE POINTE FARMS	34.0	5.2
HARBOR BEACH 1 SSE	30.7	3.6
LAPEER 2W	32.1	4.2

Location	Temperature	Departure
LAPEER WWTP	31.5	4.1
LEXINGTON WATER PLANT	31.4	3.6
LINDEN WWTP	30.6	3.4
MANCHESTER	32.1	4.2
MIDLAND	30.9	3.3
MILAN WWTP	33.1	4.7
MILFORD GM PROVING GROUND	30.6	3.8
MONROE	32.7	2.8
MORENCI	31.5	3.4
NEWPORT 4SSE	37.5	11.5
OWOSSO WWTP	31.5	3.9
PONTIAC OAKLAND COUNTY INTL AP	31.7	3.8
PONTIAC WWTP	32.3	4.8
PORT AUSTIN WWTP	31.4	3.7
PORT HOPE	31.9	3.1
PORT HURON	33.7	4.6
RICHMOND 4 NNW	31.7	4.4
SAGINAW #3	30.2	2.7
SAGINAW MBS INTL AP	31.4	4.1
SALINE	32.3	4.4
SALINE 4SW	32.5	4.7
TECUMSEH	31.6	3.2
TIPTON 2WNW	31.2	3.1
VASSAR	30.5	3.3
WHITMORE LAKE 1NW	31.3	3.9
YALE 1 NNW	29.6	3.2



December – Top 20 Coldest/Warmest

Top 20 Coldest/Warmest Decembers in Southeast Lower Michigan

Rank	Detroit Area*				Flint Bishop**				Saginaw Area***			
	Coldest		Warmest		Coldest		Warmest		Coldest		Warmest	
	Temp	Year	Temp	Year	Temp	Year	Temp	Year	Temp	Year	Temp	Year
1	17.8	1876	41.1	2015	16.1	1989	41.0	2015	16.2	1989	39.1	2015
2	18.0	1989	40.6	1881	16.6	2000	37.2	1982	17.2	2000	35.3	1923
3	19.2	2000	39.3	1889	17.4	1976	36.8	1923	18.8	1983	34.5	1982
4	20.8	1983	38.1	1877	17.8	1958	35.4	2006	18.9	1976	34.4	2006
5	21.5	1976	37.7	1923	20.1	1983	35.4	1965	19.0	1958	34.2	1931
6	21.8	1917	37.4	2006	20.5	1944	34.7	1931	19.1	1917	34.1	2012
7	21.9	1880	37.3	1982	20.8	1963	34.1	2001	19.5	1919	33.5	2001
8	22.2	1985	37.2	1931	21.3	1985	33.6	1941	20.1	1963	33.4	1941
9	22.4	1958	36.3	1918	21.7	1960	33.5	2012	21.0	1924	33.0	2011
10	22.5	1903	35.9	2012	22.2	1945	33.4	1984	21.3	1944	33.0	1965
11	22.8	1878	35.9	1965	22.4	1950	33.3	2011	21.5	1960	32.8	1936
12	23.0	1909	35.8	2001	22.6	2017	32.8	2014	21.6	1985	32.3	1994
13	23.1	1919	35.8	1891	22.9	1962	32.8	1939	22.0	1980	32.2	1913
14	23.2	1924	35.5	2011	23.0	1995	32.4	1971	22.0	1914	32.1	2014
15	23.3	1910	35.5	1941	23.1	1942	32.3	1998	22.2	1962	32.0	1998
16	23.8	1963	35.4	1994	23.2	1924	32.2	1987	22.4	1926	32.0	1918
17	23.8	1914	35.3	1998	23.9	1937	32.1	2003	22.5	1950	31.5	1959
18	23.9	1886	34.8	1956	24.0	1926	32.1	1979	22.5	1945	31.4	2018
19	24.7	1945	34.6	1959	24.3	2010	32.0	1994	22.5	1942	31.4	1952
20	24.8	1944	34.5	2018	24.3	2005	31.7	1959	22.8	2013	31.4	1987

* Detroit Area temperature records date back to January 1874.

** Flint Bishop temperature records date back to January 1921.

*** Saginaw Area temperature records date back to January 1912.

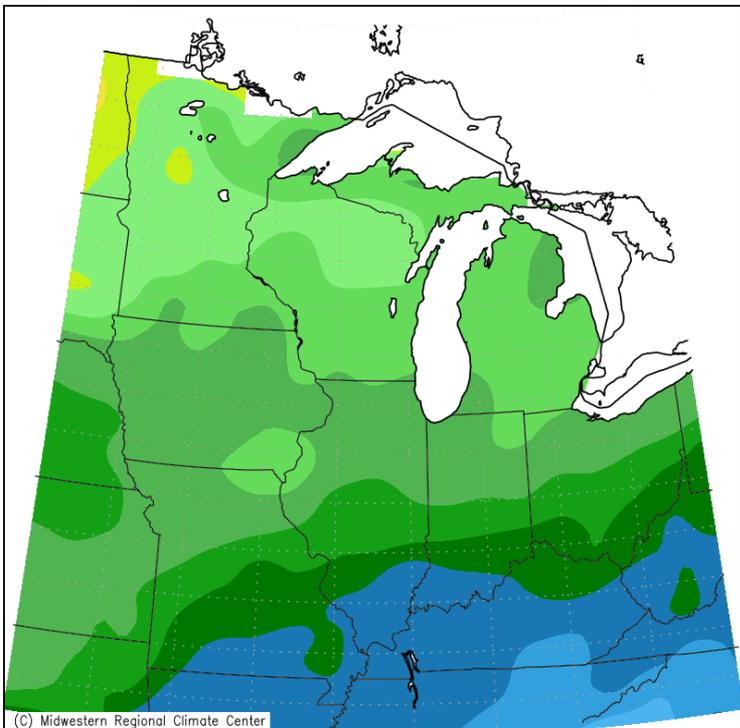




December 2018 – Regional Precipitation Summary

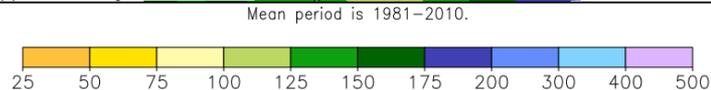
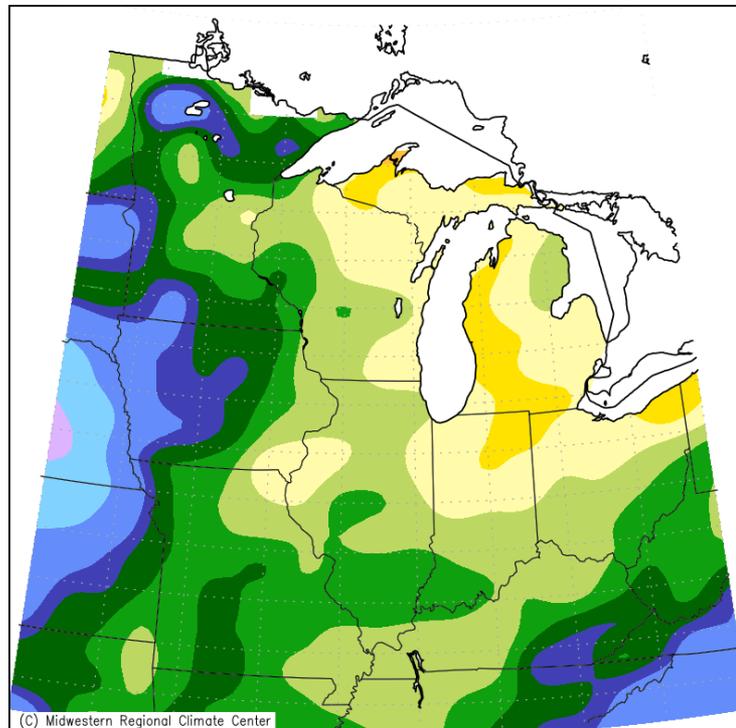
Total Monthly Precipitation (left) & Percent of Mean (right)

Accumulated Precipitation (in)
December 1, 2018 to December 31, 2018



Midwestern Regional Climate Center
Illinois State Water Survey, Prairie Research Institute
University of Illinois at Urbana-Champaign

Accumulated Precipitation: Percent of Mean
December 1, 2018 to December 31, 2018



Midwestern Regional Climate Center
Illinois State Water Survey, Prairie Research Institute
University of Illinois at Urbana-Champaign





December 2018 – SE Michigan Precipitation Summary

Average Precipitation (*left column*) & **Departure from Average** (*right column*)

Location	Precipitation	Departure	Location	Precipitation	Departure
ADRIAN 2 NNE	2.06	-0.05	MANCHESTER	1.26	-0.92
ADRIAN LENAWEE COUNTY AP	2.30	0.23	MIDLAND	2.20	0.43
ALGONAC WWTP	2.16	-0.31	MILAN WWTP	1.76	-0.12
ANN ARBOR MUNICIPAL AP	1.45	-0.59	MILFORD GM PROVING GROUND	2.22	0.14
ANN ARBOR SE	1.66	-1.09	NEWPORT 4SSE	0.56	0.25
ANN ARBOR U OF MICH	2.39	-0.50	MORENCI	1.52	-1.20
BAD AXE	2.38	0.42	OWOSSO WWTP	1.77	-0.20
CARO WWTP	1.82	-0.35	PONTIAC OAKLAND COUNTY INTL AP	2.14	0.31
CASS CITY 1 SSW	1.80	-0.16	PONTIAC WWTP	1.81	-0.31
CHELSEA	1.49	-0.53	PORT AUSTIN WWTP	2.14	0.51
CHESANING	1.63	-0.20	PORT HOPE	3.06	1.18
DEARBORN	1.89	-0.68	PORT HURON	2.67	0.55
DEARBORN NO. 2	2.15	-0.30	RICHMOND 4 NNW	1.77	-0.64
DETROIT CITY AP	1.91	-0.06	SAGINAW #3	1.54	-0.34
DETROIT METROPOLITAN AP	2.66	0.20	SAGINAW MBS INTL AP	1.98	0.12
DETROIT WILLOW RUN AP	2.12	0.25	SALINE	1.38	-0.22
DUNDEE	1.66	-0.90	SALINE 4SW	1.57	-0.62
DURAND WWTP	1.39	-0.56	TECUMSEH	1.22	-1.15
FARMINGTON	1.67	-0.44	TIPTON 2WNW	1.32	-0.87
FILION 5NNW	1.92	0.05	VASSAR	1.23	-0.70
FLINT 7 W	1.67	-0.32	WHITMORE LAKE 1NW	1.68	-0.30
FLINT BISHOP INTL AP	2.11	0.19	WYANDOTTE	1.65	-0.96
GOODRICH	1.40	-0.77	YALE 1 NNW	1.72	-0.08
GROSSE POINTE FARMS	1.66	-0.82			
HARBOR BEACH 1 SSE	1.77	-0.69			
CORUNNA 2 NE	0.60	0.32			
LAPEER 2W	1.50	-0.48			
LAPEER WWTP	1.56	-0.17			
LEXINGTON WATER PLANT	1.53	-0.58			
LINDEN WWTP	1.59	-0.44			





December – Top 20 Wettest/Driest

Top 20 Wettest/Driest Decembers in Southeast Lower Michigan

Rank	Detroit Area*				Flint Bishop**				Saginaw Area***			
	Wettest		Driest		Wettest		Driest		Wettest		Driest	
	Total	Year	Total	Year	Total	Year	Total	Year	Total	Year	Total	Year
1	5.19	1967	0.42	1900	4.66	1971	0.44	1969	5.33	1972	0.33	1939
2	4.83	1878	0.43	1943	4.03	1975	0.44	1943	4.83	1971	0.35	1958
3	4.79	1929	0.44	1960	4.01	1972	0.49	1960	4.67	1965	0.40	1960
4	4.73	1895	0.59	1958	3.76	1984	0.51	1993	4.19	1949	0.42	1943
5	4.62	1907	0.60	1874	3.75	1949	0.58	1958	3.85	1982	0.49	1919
6	4.62	1879	0.78	1993	3.57	1931	0.61	1962	3.77	2008	0.55	1993
7	4.60	1987	0.79	1976	3.41	2000	0.77	1997	3.77	1959	0.62	1969
8	4.60	1957	0.85	1995	3.33	1940	0.77	1939	3.71	1920	0.62	1930
9	4.53	1966	0.88	1917	3.24	1951	0.79	1963	3.43	1980	0.67	1976
10	4.37	1990	0.93	1896	3.03	1929	0.80	1955	3.36	1967	0.69	1981
11	4.17	1881	0.97	1919	2.95	1980	0.92	1976	3.34	1984	0.69	1913
12	4.07	2008	0.99	1913	2.90	1927	1.00	1989	3.31	1927	0.78	1997
13	4.00	1974	1.02	1962	2.81	2006	1.02	1941	3.24	1968	0.80	1922
14	3.93	1965	1.02	1939	2.79	2008	1.03	1926	3.22	1996	0.80	1912
15	3.79	1971	1.10	1930	2.79	1967	1.08	2002	3.10	2015	0.83	1934
16	3.78	1983	1.16	2002	2.78	1973	1.09	1921	2.99	1962	0.86	1989
17	3.77	1906	1.16	1998	2.75	1982	1.10	1930	2.97	2006	0.90	1917
18	3.66	1901	1.16	1888	2.70	1946	1.10	1922	2.93	1929	0.92	1941
19	3.65	2006	1.23	1890	2.68	1942	1.11	1961	2.90	1990	0.94	1915
20	3.59	1968	1.23	1880	2.64	1978	1.12	1945	2.85	1936	0.97	1935

* Detroit Area precipitation records date back to November 1874.

** Flint Bishop precipitation records date back to January 1921.

*** Saginaw Area precipitation records date back to January 1912.



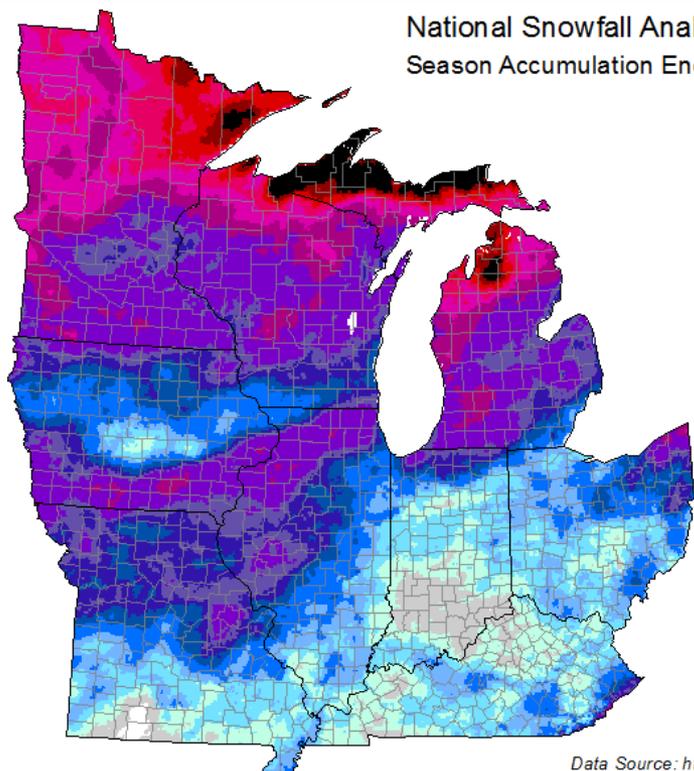


Cold Season 2018-2019 Snowfall Summary

Total Seasonal Snowfall (left) & Percent of Mean (right)

National Snowfall Analysis: Estimated (inches)
Season Accumulation Ending at 12 UTC on 1/3/2019

NOHRSC Prototype data

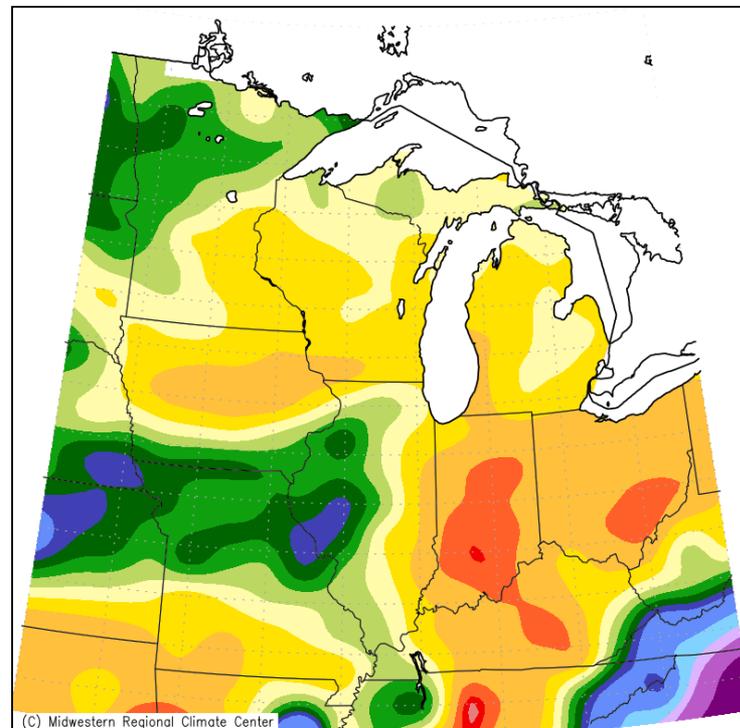


- > 48
- 42 to 48
- 36 to 42
- 30 to 36
- 24 to 30
- 18 to 24
- 12 to 18
- 10 to 12
- 8.0 to 10
- 6.0 to 8.0
- 4.0 to 6.0
- 3.0 to 4.0
- 2.0 to 3.0
- 1.0 to 2.0
- 0.1 to 1.0
- < 0.1



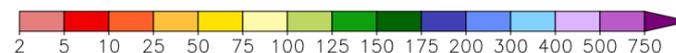
Data Source: http://www.nohrsc.noaa.gov/snowfall_v2

Accumulated Snowfall: Percent of Mean
July 1, 2018 to January 2, 2019



(C) Midwest Regional Climate Center

Mean period is 1981-2010.



Midwestern Regional Climate Center
Illinois State Water Survey, Prairie Research Institute
University of Illinois at Urbana-Champaign





December 2018 – SE Michigan Snowfall Summary

Average Snowfall (left column) & **Departure from Average** (right column)

Location	Snowfall	Departure
ADRIAN 2 NNE	0.1	-4.9
ANN ARBOR U OF MICH	2.9	-10.5
BAD AXE	4.0	-4.7
CARO WWTP	2.1	-0.1
CASS CITY 1 SSW	2.2	-7.2
CHELSEA	T	-7.8
DEARBORN	0.5	-3.7
DETROIT METROPOLITAN AP	0.5	-9.1
FLINT 7 W	3.9	-3.8
FLINT BISHOP INTL AP	3.8	-8.0
GROSSE POINTE FARMS	1.0	-5.6
LAPEER WWTP	2.4	-4.9
MORENCI	0.1	-7.3
OWOSSO WWTP	2.1	-8.0
PONTIAC WWTP	2.2	-5.3
PORT HURON	T	-9.0
SAGINAW #3	1.0	-9.6
SAGINAW MBS INTL AP	1.8	-7.2
YALE 1 NNW	1.7	-6.8



December – Top 20 Snowiest/Snowless

Top 20 Snowiest/Snowless Decembers in Southeast Lower Michigan

Rank	Detroit Area*				Flint Bishop**				Saginaw Area***			
	Snowiest		Snowless		Snowiest		Snowless		Snowiest		Snowless	
	Total	Year	Total	Year	Total	Year	Total	Year	Total	Year	Total	Year
1	34.9	1974	0.0	1889	35.3	2000	0.1	1943	40.2	2000	0.0	1943
2	27.4	1929	0.1	2014	29.1	2008	0.6	2014	39.1	2008	0.9	2014
3	25.1	2000	0.4	1894	27.7	1929	1.1	1939	26.7	1929	1.0	1993
4	24.0	1951	0.5	2018	24.9	1951	1.4	1921	24.0	1951	1.0	1939
5	22.5	2017	0.9	1943	23.3	2017	2.2	1955	22.6	2007	1.5	1941
6	22.5	1895	1.2	1998	22.2	2005	2.2	1936	21.9	1972	1.8	2018
7	21.4	2008	1.3	2015	21.3	1974	2.4	1967	20.1	1989	2.4	1912
8	20.8	1886	1.3	1931	21.1	1975	2.5	2015	19.9	1947	2.7	1923
9	20.1	1910	1.4	1982	20.2	2016	2.5	1979	19.7	1968	2.8	2006
10	19.9	1983	1.4	1888	20.0	1983	2.6	1928	19.5	1978	2.8	1948
11	19.8	2005	1.6	1965	19.9	1970	3.2	1931	19.3	1954	2.8	1928
12	19.8	1975	1.6	1936	18.3	1973	3.4	1998	18.9	2013	2.9	1958
13	17.3	1981	1.9	1993	18.3	1972	3.5	1993	18.5	2005	3.0	1960
14	16.8	2016	2.0	1939	17.6	1976	3.6	1982	18.1	1980	3.4	1961
15	16.6	1977	2.0	1918	17.1	2007	3.7	1948	18.0	1937	3.4	1979
16	16.6	1893	2.0	1900	16.9	2013	3.8	2018	17.7	1996	3.4	1922
17	16.4	1973	2.3	1979	16.7	1991	4.0	1941	16.7	2004	3.6	1969
18	16.1	1884	2.4	2006	13.8	1980	4.3	2006	16.6	2016	3.6	1950
19	16.0	1898	2.6	1971	13.7	2004	4.4	2011	16.3	1962	4.2	2015
20	15.5	2013	2.6	1928	13.2	1985	4.4	1924	14.2	1995	4.3	1921

* Detroit Area snowfall records date back to January 1880.

** Flint Bishop snowfall records date back to January 1921.

*** Saginaw Area snowfall records date back to January 1912.

