

Southeast Michigan Climate Summary

Monthly Temperature, Precipitation, Snowfall, and Severe Weather Summaries

Weather Forecast Office
Detroit, MI



December 2021



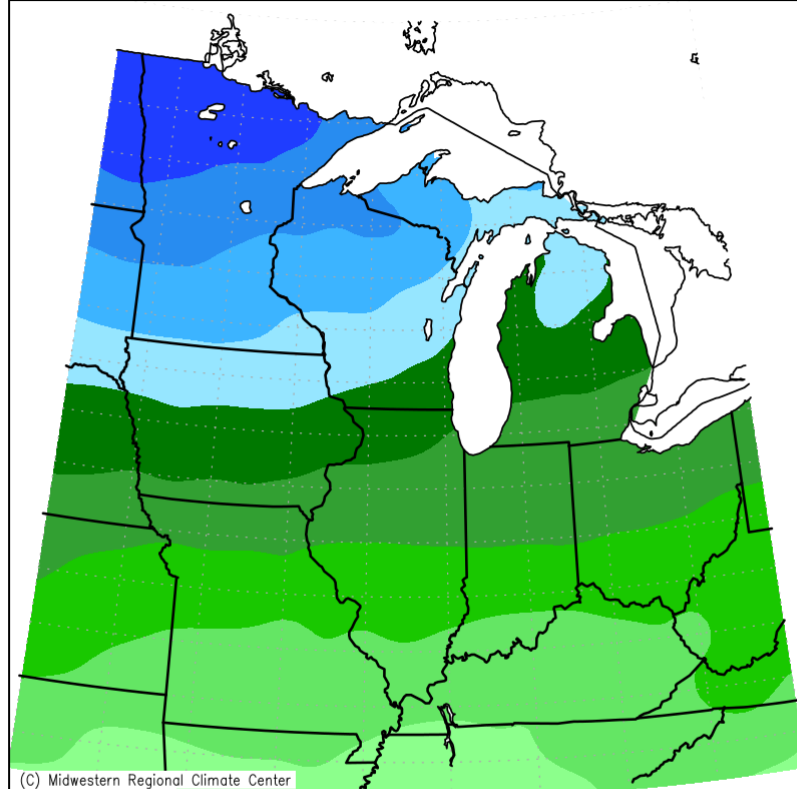
December 2021 – Regional Temperature Summary

Weather Forecast Office
Detroit, MI



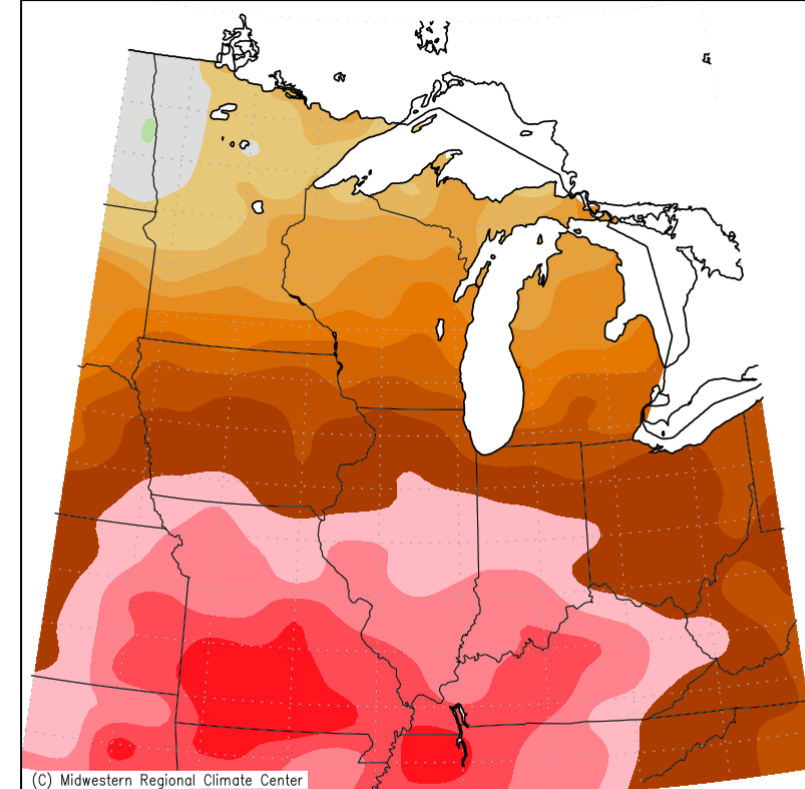
Average Temperature (left) & Departure from Average (right)

Average Temperature (°F)
December 1, 2021 to December 31, 2021




Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
Generated at: 1/5/2022 10:58:28 AM CST

Average Temperature (°F): Departure from Mean
December 1, 2021 to December 31, 2021



Midwestern Regional Climate Center
Purdue University

December 2021 – SE Michigan Temperature Summary											Weather Forecast Office Detroit, MI		
Warmest, Coldest, and Averages (°F)													
Location	Highest Temp	Lowest Temp	Avg High	Avg Low	Monthly Avg	Location	Highest Temp	Lowest Temp	Avg High	Avg Low	Monthly Avg		
ADRIAN 2 NNE	60	20	44.5	28.3	36.4	GOODRICH	63	16	41.6	26.4	34.0		
ADRIAN LENAWEE CO AP	59	19	43.1	28.5	35.8	GROSSE POINTE FARMS	61	20	42.4	29.9	36.1		
ALGONAC WWTP	60	17	43.3	27.6	35.4	HARBOR BEACH 1 SSE	64	17	39.8	27.6	33.7		
ANN ARBOR MUNICIPAL AP	60	15	42.3	26.8	34.6	LAPEER 2W	62	17	40.8	27.2	34.0		
ANN ARBOR SE	60	17	42.6	27.1	34.9	LAPEER WWTP	63	17	41.7	26.3	34.0		
ANN ARBOR U OF MICH	60	18	42.9	28.3	35.6	LEXINGTON WATER PLANT	63	15	41.5	27.6	34.5		
AUBURN 2NE	61	15	39.9	26.8	33.4	MANCHESTER	61	15	42.4	27.4	34.9		
BAD AXE	62	16	38.6	25.6	32.1	MIDLAND	57	14	36.0	24.5	30.1		
BURTON 4N	63	15	41.5	25.0	33.2	MORENCI	58	16	42.9	26.5	34.7		
CARO WWTP	63	16	40.2	25.6	32.9	OWOSSO WWTP	62	17	41.2	26.5	33.9		
CASS CITY 1 SSW	63	14	39.8	24.8	32.3	PONTIAC INTL AP	61	17	41.4	27.5	34.5		
CHELSEA	61	17	42.4	28.6	35.5	PONTIAC WWTP	61	18	41.9	27.7	34.8		
DEARBORN	62	19	43.4	29.8	36.6	PORT HOPE	63	18	40.0	29.9	35.0		
DEARBORN NO. 2	62	20	45.3	31.5	38.4	PORT HURON	60	21	42.1	31.2	36.7		
DETROIT CITY AP	63	22	45.2	32.1	38.6	RICHMOND 4 NNW	63	16	40.8	26.1	33.4		
DETROIT METRO AIRPORT	61	20	44.1	30.3	37.2	SAGINAW #3	61	19	40.8	27.4	34.1		
DETROIT WILLOW RUN AP	63	21	45.4	31.0	38.2	SAGINAW MBS INTL AP	62	18	39.6	27.2	33.4		
DUNDEE	61	20	44.2	28.9	36.5	SALINE 4SW	61	13	42.9	27.0	35.0		
DURAND WWTP	61	14	41.6	25.1	33.2	TECUMSEH	60	15	43.3	23.3	33.0		
FARMINGTON	61	19	41.7	26.7	34.2	TIPTON 2WNW	60	12	42.4	24.7	33.6		
FILION 5NNW	63	18	41.0	28.9	35.1	VASSAR	63	14	41.1	24.5	32.8		
FLINT 7W	62	17	40.9	25.9	33.4	WHITE LAKE 4E	60	14	41.0	25.5	33.3		
FLINT FCWOS	63	17	41.7	27.0	34.4	WHITMORE LAKE 1NW	60	18	41.6	26.9	34.2		
FRANKENMUTH 1SE	61	16	39.1	25.1	32.1								

December – Top 20 Coldest/Warmest on Record

Weather Forecast Office
Detroit, MI



Top 20 Coldest/Warmest Decembers in Southeast Lower Michigan (°F)

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	34.4	2021	19.5	1919	33.5	2001
8	22.2	1985	37.2	2021	21.3	1985	34.2	2019	20.1	1963	33.4	2021
9	22.4	1958	37.2	1931	21.7	1960	34.1	2001	21.0	1924	33.4	1941
10	22.5	1903	36.3	1918	22.2	1945	33.6	1941	21.3	1944	33.0	2011
11	22.8	1878	35.9	2012	22.4	1950	33.5	2012	21.5	1960	33.0	1965
12	23.0	1909	35.9	1965	22.6	2017	33.4	1984	21.6	1985	32.8	1936
13	23.1	1919	35.8	2001	22.9	1962	33.3	2011	22.0	1980	32.5	2019
14	23.2	1924	35.8	1891	23.0	1995	33.1	2020	22.0	1914	32.3	1994
15	23.3	1910	35.5	2011	23.1	1942	32.8	2014	22.2	1962	32.2	1913
16	23.8	1963	35.5	1941	23.2	1924	32.8	1939	22.4	1926	32.1	2014
17	23.8	1914	35.4	1994	23.9	1937	32.4	1971	22.5	1950	32.0	1998
18	23.9	1886	35.3	1998	24.0	1926	32.3	1998	22.5	1945	32.0	1918
19	24.7	1945	35.1	2019	24.3	2010	32.2	1987	22.5	1942	31.7	2020
20	24.8	1944	34.8	1956	24.3	2005	32.1	2003	22.8	2013	31.5	1959

* 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.

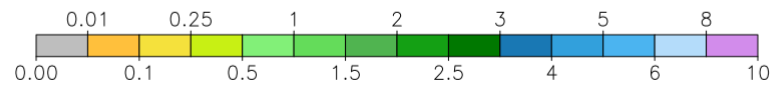
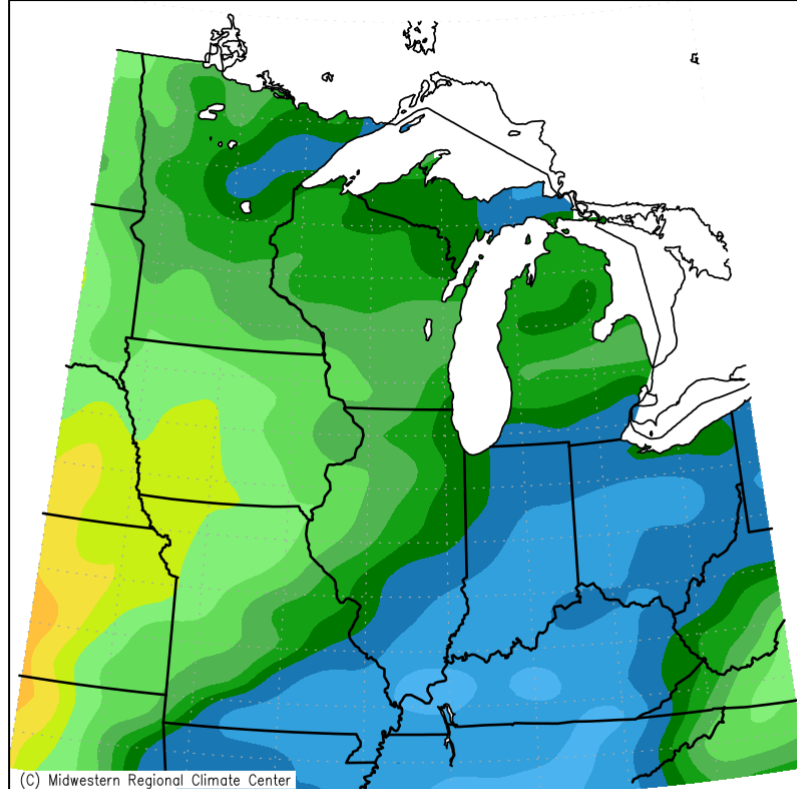
December 2021 – Regional Precipitation Summary

Weather Forecast Office
Detroit, MI



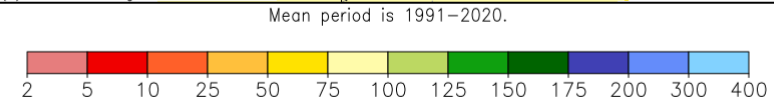
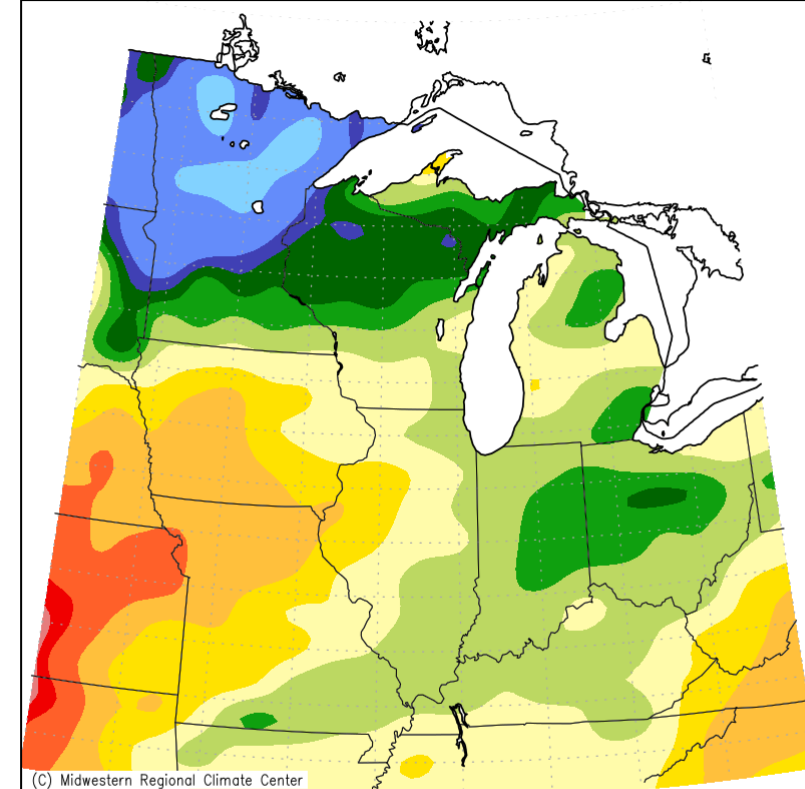
Total Monthly Precipitation (*left*) & Percent of Mean (*right*)

Accumulated Precipitation (in)
December 1, 2021 to December 31, 2021




Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
Generated at: 1/5/2022 11:05:16 AM CST

Accumulated Precipitation: Percent of Mean
December 1, 2021 to December 31, 2021



Midwestern Regional Climate Center
Purdue University

December 2021 – SE Michigan Precipitation Summary							Weather Forecast Office Detroit, MI				
Highest daily total, monthly total, and total number of days of measureable precip (in.)											
Location	Highest Daily Total	Monthly Total	# of Days with Precip	Location	Highest Daily Total	Monthly Total	# of Days with Precip	Location	Highest Daily Total	Monthly Total	# of Days with Precip
ADRIAN 2 NNE	0.80	3.57	11	DETROIT CITY AP	0.72	2.53	10	NEW BALTIMORE 0.4 SSE	1.01	2.52	10
ADRIAN LENAWEE CO AP	0.65	2.96	12	DETROIT METRO AIRPORT	0.96	3.47	13	ORTONVILLE 2.3 S	0.76	2.34	11
ALGONAC WWTP	1.10	3.00	9	DETROIT WILLOW RUN AP	0.58	2.07	11	OTTAWA LAKE 1.4 SSW	0.98	2.93	12
ANN ARBOR 4.5 W	1.26	3.11	10	DEXTER 2.2 SE	1.14	3.42	17	OWOSSO WWTP	0.59	2.04	12
ANN ARBOR 7.1 W	1.30	3.14	12	DURAND 6.2 WNW	0.62	1.73	16	PLYMOUTH 5.4 W	1.44	3.66	11
ANN ARBOR MUNICIPAL AP	0.69	2.75	12	FARMINGTON	1.12	3.17	12	PLYMOUTH 6.3 W	1.29	3.48	11
ANN ARBOR SE	1.14	3.33	17	FENTON 2.7 SSE	0.81	2.45	10	PONTIAC INTL AP	0.61	2.37	11
ANN ARBOR U OF MICH	1.32	3.58	16	FENTON 6.2 WSW	0.56	1.81	9	PONTIAC WWTP	0.85	2.79	14
AUBURN 2NE	0.65	1.73	15	FLINT 7W	0.68	1.99	12	PORT HOPE	0.39	1.70	15
BAD AXE	0.55	1.82	17	FLINT FCWOS	0.45	1.81	12	PORT HURON	0.60	2.05	9
BAD AXE 6.3 SSW	0.61	1.79	13	GOODRICH	0.45	1.48	10	PORT HURON 1.6 W	0.73	2.22	12
BAY PORT 3.2 SSW	0.66	1.60	13	GROSSE POINTE FARMS	1.30	4.20	10	RICHMOND 4 NNW	0.81	2.14	11
BURTON 4N	0.60	2.12	12	HARBOR BEACH 1 SSE	0.66	2.12	14	ROSEVILLE	1.08	2.45	10
CANTON 2.7 N	1.23	3.27	13	HIGHLAND 1.3 NE	0.83	2.69	11	ROSEVILLE 1.7 ENE	1.00	2.69	11
CARLETON 2.5 S	0.85	2.89	14	LAPEER 2W	0.61	1.97	13	SAGINAW 6.4 W	0.62	1.60	11
CARO WWTP	0.53	1.84	12	LAPEER WWTP	0.63	1.87	11	SAGINAW 8NW	0.68	1.81	14
CASS CITY 1 SSW	0.55	1.62	12	LIVONIA 2.0 NE	1.16	3.17	11	SAGINAW #3	0.78	2.08	14
CHELSEA	0.94	2.85	12	LIVONIA 2.3 NNW	1.13	3.29	16	SAGINAW MBS INTL AP	0.41	1.69	14
CHELSEA 3.7 NNE	0.94	2.82	12	MANCHESTER	1.29	3.34	13	SALINE 3.8 SSW	0.97	2.88	10
CHESTERFIELD 2.4 E	1.22	2.87	11	MIDLAND	0.80	2.33	11	SALINE 4SW	1.28	3.48	12
DAVISON 3.4 NNW	0.59	1.75	12	MIDLAND 1.5 NNE	0.60	1.87	17	WATERFORD 2.1 NW	0.66	2.01	12
DAVISON 5.2 N	0.44	1.24	10	MIDLAND 2.9 SW	0.59	1.69	14	WHITE LAKE 4E	0.52	2.33	13
DEARBORN	1.20	3.45	16	MILLINGTON 3 SE	0.61	1.39	9	WHITMORE LAKE 1NW	0.94	1.94	9
DEARBORN HGTS 1.8 NW	1.16	3.22	16	MONROE 3.0 S	1.15	3.27	12	WYANDOTTE	1.06	3.17	14
DEARBORN NO. 2	0.87	2.58	13	MORENCI	1.23	3.79	12	YPSILANTI 2.5 SSE	1.18	3.04	12

December – Top 20 Wettest/Driest on Record

Weather Forecast Office
Detroit, MI



Top 20 Wettest/Driest Decembers in Southeast Lower Michigan (in.)

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	2.96	2019	0.92	1941
19	3.65	2006	1.23	1890	2.68	1942	1.11	1961	2.93	1929	0.94	1915
20	3.59	1968	1.23	1880	2.64	1978	1.12	1945	2.90	1990	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.

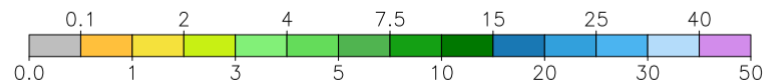
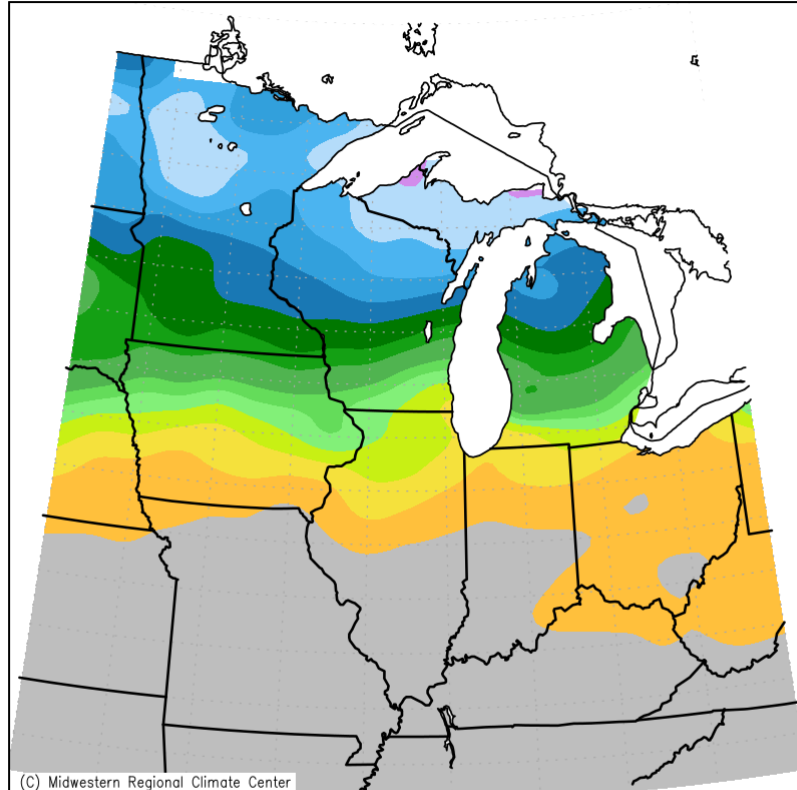
December 2021 – Regional Snowfall Summary

Weather Forecast Office
Detroit, MI



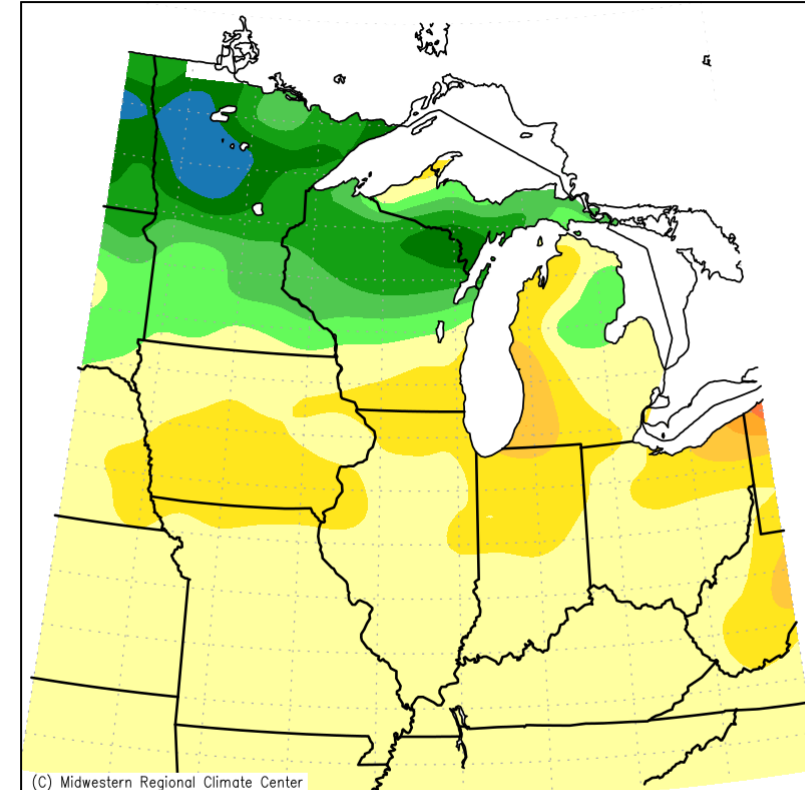
Total Monthly Snowfall (*left*) & Departure from Normal (*right*)

Accumulated Snowfall (in)
December 1, 2021 to December 31, 2021



Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
Generated at: 1/5/2022 2:27:39 PM CST

Accumulated Snowfall (in): Departure from Mean
December 1, 2021 to December 31, 2021



Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
Generated at: 1/5/2022 2:28:13 PM CST

December 2021 – SE Michigan Snowfall Summary

Weather Forecast Office
Detroit, MI



Highest daily total, monthly total, and total number of days of measureable snow (in.)

Location	Highest Daily Total	Monthly Total	# of Days with Snow	Location	Highest Daily Total	Monthly Total	# of Days with Snow	Location	Highest Daily Total	Monthly Total	# of Days with Snow
ADRIAN 2 NNE	2.2	2.5	3	FARMINGTON	1.2	2.2	3	OIL CITY 2S	1.9	6.4	7
ALGONAC WWTP	1.0	1.0	1	FENTON 6.2 WSW	2.8	7.8	5	OTTAWA LAKE 1.4 SSW	2.0	2.0	1
ANN ARBOR 7.1 W	1.8	2.7	4	FILION 5NNW	2.2	5.7	7	OWOSSO WWTP	3.0	8.8	6
ANN ARBOR SE	2.1	5.1	7	FLINT 7W	3.1	9.6	7	PLEASANT RIDGE 0.5 WNW	0.8	0.8	1
ANN ARBOR U OF MICH	1.9	5.1	10	FLINT FCWOS	3.1	9.6	6	PONTIAC WWTP	2.0	4.4	4
AUBURN 2NE	2.2	8.5	9	FRANKENMUTH 1SE	2.7	6.9	6	PORT HURON	1.5	3.0	3
BAD AXE	2.1	6.0	11	GOODRICH	1.5	5.2	6	PORT HURON 1.6 W	2.3	6.8	6
BAD AXE 6.3 SSW	1.7	5.9	7	GROSSE POINTE FARMS	0.5	0.5	1	RICHMOND 4 NNW	2.4	7.5	6
BAY PORT 3.2 SSW	2.5	6.6	7	HARBOR BEACH 1 SSE	3.0	6.4	8	ROSEVILLE	1.1	1.8	3
BURTON 4N	3.2	9.3	6	HIGHLAND 1.3 NE	2.5	7.4	6	SAGINAW 6.4 W	2.0	8.0	7
CANTON 2.7 N	1.7	2.9	3	LAPEER 2W	2.5	8.8	9	SAGINAW 8NW	1.9	8.2	7
CARO WWTP	2.0	6.5	7	LAPEER WWTP	3.0	7.0	5	SAGINAW #3	2.8	7.4	7
CASS CITY 1 SSW	1.5	5.0	7	LEXINGTON WWTP	1.0	4.4	6	SAGINAW MBS INTL AP	1.9	9.4	9
CHELSEA	1.0	2.6	4	LINDEN WWTP	2.0	5.0	4	SALINE 3.8 SSW	1.5	2.5	3
CHELSEA 3.7 NNE	2.1	4.0	6	LIVONIA 2.3 NNW	1.6	3.2	4	SALINE 4SW	1.0	2.5	3
CHESANING	2.0	4.5	4	MANCHESTER	0.8	1.6	3	SHELBY 0.4 SSE	1.2	4.3	5
DAVISON 5.2 N	2.3	6.9	6	MIDLAND	2.0	7.9	6	VASSAR	2.4	6.4	5
DEARBORN	0.3	0.4	2	MIDLAND 1.5 NNE	1.8	6.2	10	WATERFORD 2.1 NW	2.0	6.5	5
DETROIT METRO AIRPORT	1.9	3.3	6	MILLINGTON 3 SE	2.5	6.9	6	WHITE LAKE 4E	3.1	8.4	6
DURAND 6.2 WNW	2.3	8.0	6	MORENCI	1.9	2.1	2	WYANDOTTE	2.0	3.3	5
DURAND WWTP	2.5	8.5	5	NEW BALTIMORE 0.4 SSE	1.5	3.9	6				

December – Top 20 Snowiest/Least Snowy on Record

Weather Forecast Office
Detroit, MI



Top 20 Snowiest/Snowless Decembers in Southeast Lower Michigan (in.)

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	1948
10	19.9	1983	1.4	1888	20.0	1983	2.6	1928	19.5	1978	2.8	2006
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	1979
15	16.6	1977	2.0	1918	17.1	2007	3.7	1948	18.0	1937	3.4	1961
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.

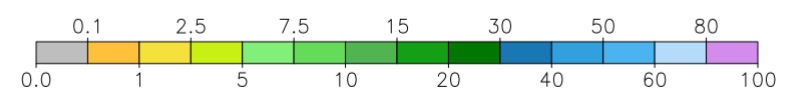
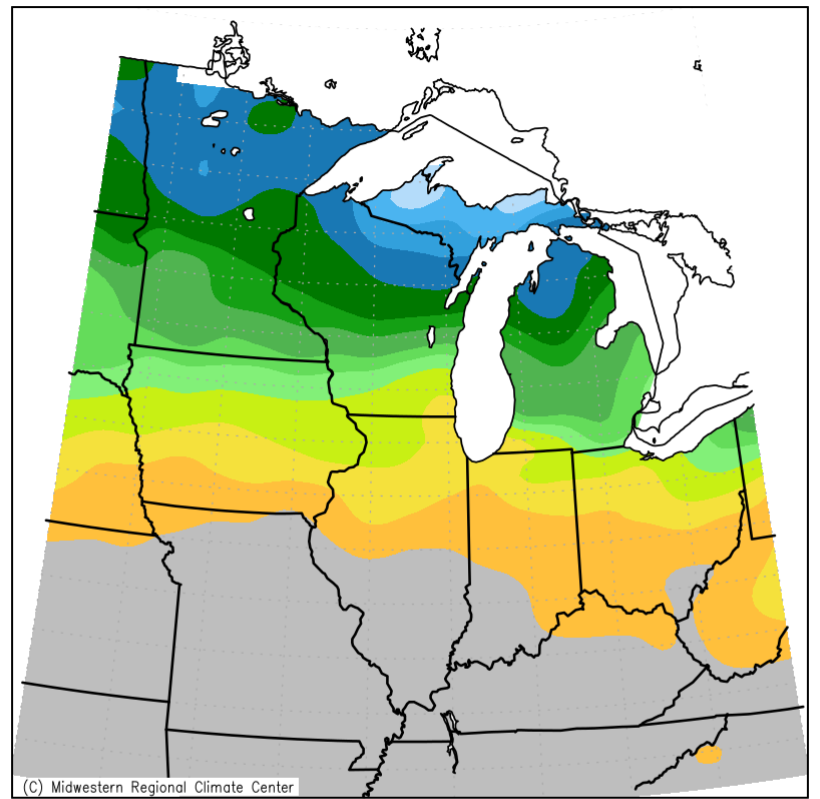
** Flint Bishop snowfall records date back to January 1921.

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

Note: this table does not account for trace (T) events

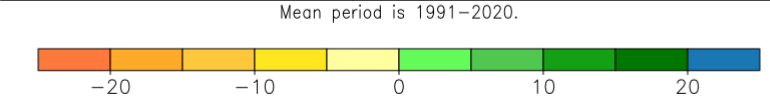
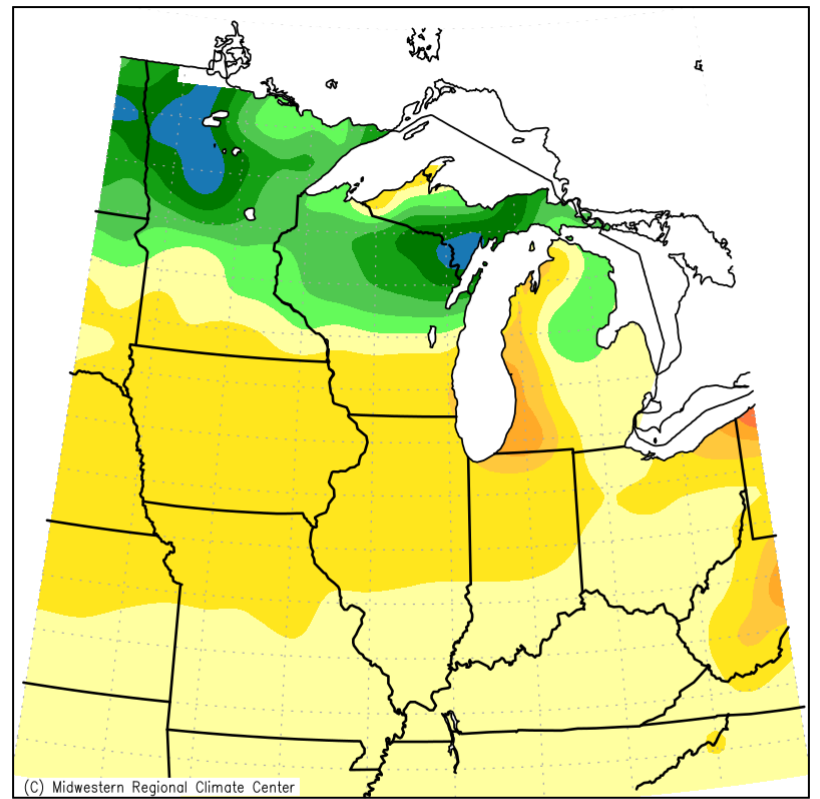
Total Snowfall (left) & Departure from Normal (right)

Accumulated Snowfall (in)
October 1, 2021 to December 31, 2021



Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
Generated at: 1/5/2022 2:29:10 PM CST

Accumulated Snowfall (in): Departure from Mean
October 1, 2021 to December 31, 2021



Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
Generated at: 1/5/2022 2:30:16 PM CST



Follow links for web summaries

December 11 High Wind
weather.gov/dtx/High-Wind-December-11-2021



NOWData Observed Weather Climate Prediction and Variability Local Data/Records Climate Resources

NOWData - NOAA Online Weather Data

1. Location » 2. Product » 3. Options » 4. View »

View map

- ✓ Detroit Area
- Flint Area
- Saginaw Area
- Adrian 2 Nne, MI
- Ann Arbor Univ O, MI
- Bad Axe, MI
- Caro Wwtp, MI
- Chelsea, MI
- Detroit City Ap, MI
- Detroit Metropol, MI

Product

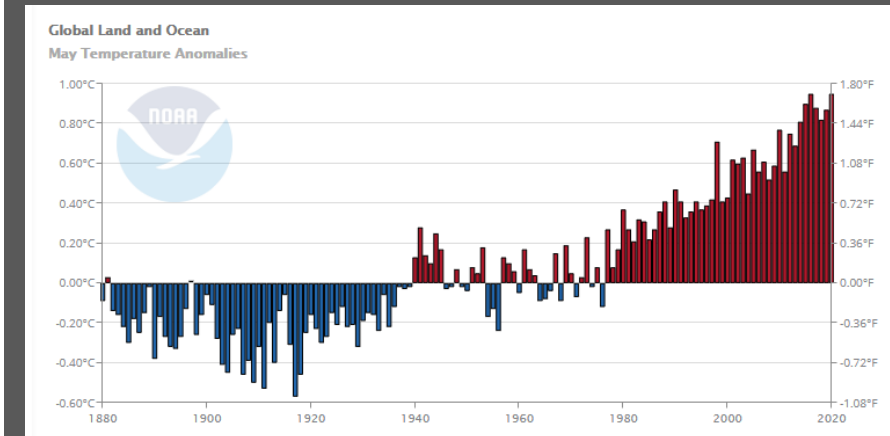
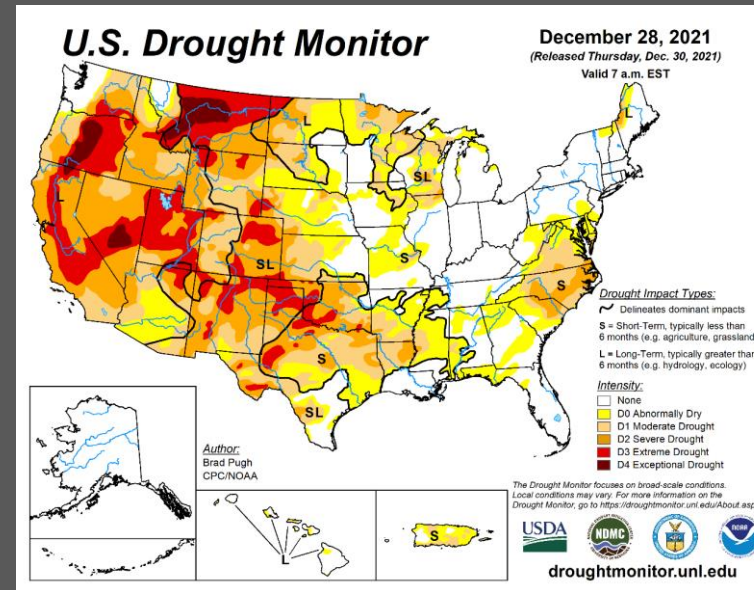
- ✓ Daily data for a month
- Daily almanac
- Monthly summarized data
- Calendar day summaries
- Daily/monthly normals
- Climatology for a day
- First/last dates
- Temperature graphs
- Accumulation graphs

Date: 2021-08 **Go**

Product Description:
DAILY DATA FOR A MONTH - daily maximum, minimum and average temperature (degrees F), average temperature departure from normal (degrees F), heating and cooling degree days (base 65), precipitation, snowfall and snow depth (inches) for all days of the selected month. Basic monthly summary statistics are also provided.

Powered by **CACIS**
10/22 Regional Climate Centers

The Applied Climate Information System (ACIS) is a joint project of the Regional Climate Centers, the National Centers for Environmental Information (NCEI) and the National Weather Service. Official data and data for additional locations are available from the Regional Climate Centers and NCEI.



SE Michigan Climate Products

weather.gov/wrh/climate?wfo=dtx

U.S. Drought Monitor

drought.gov/drought/data-maps-tools/current-conditions

NOAA NCEI Climate at a Glance

ncdc.noaa.gov/cag/

Thank you to our COOP and CoCoRaHS volunteer weather observers!