# Southeast Michigan Climate Summary

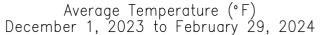
Weather Forecast Office Detroit, MI

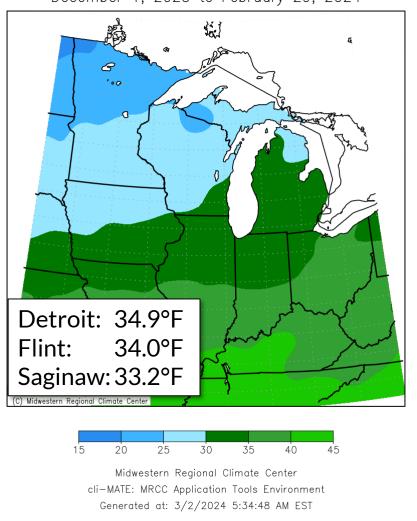
Seasonal Temperature, Precipitation, and Severe Weather Summaries



## Winter 2023-2024 – Regional Temperature Summary

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





Detroit: +6.5°F (4<sup>th</sup> Warmest)

Average Temperature (°F): Departure from Mean December 1, 2023 to February 29, 2024

Midwestern Regional Climate Center cli-MATE: MRCC Application Tools Environment Generated at: 3/2/2024 5:35:13 AM EST

Mean period is 1991-2020

Flint:  $+8.5^{\circ}F$  (1<sup>st</sup> Warmest)

Saginaw: +7.7°F (1st Warmest)

### Winter - Top 20 Coldest/Warmest on Record



#### Top 20 Coldest/Warmest Winters 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	18.8	1903-1904	36.9	1881-1882	16.7	1976-1977	34.0	2023-2024	15.7	1962-1963	33.2	1931-1932
2	19.3	1874-1875	35.7	1931-1932	17.0	1962-1963	33.4	1931-1932	16.5	1917-1918	33.2	2023-2024
3	19.7	1976-1977	35.2	1889-1890	17.8	1958-1959	33.0	2015-2016	16.6	1919-1920	31.7	2015-2016
4	19.7	1917-1918	34.9	2023-2024	18.6	1978-1979	32.2	1982-1983	17.5	1978-1979	30.9	1997-1998
5	20.4	1962-1963	33.8	2001-2002	19.0	2013-2014	31.7	2001-2002	18.0	1977-1978	30.6	2011-2012
6	20.6	1977-1978	33.8	1997-1998	19.3	1977-1978	31.5	2019-2020	18.2	1976-1977	30.5	2001-2002
7	20.8	1919-1920	33.5	2015-2016	19.8	1993-1994	31.3	1997-1998	18.2	2013-2014	30.4	2022-2023
8	20.9	2013-2014	33.4	2022-2023	19.9	1944-1945	31.2	2011-2012	18.2	1958-1959	30.0	1936-1937
9	21.0	1935-1936	33.0	2011-2012	20.9	1981-1982	31.1	2022-2023	18.7	1935-1936	29.8	2019-2020
10	21.1	1892-1893	32.9	2016-2017	21.2	1935-1936	30.3	1932-1933	19.0	1993-1994	29.6	1982-1983
11	21.4	1904-1905	32.6	2019-2020	21.3	1969-1970	30.2	2016-2017	19.2	1916-1917	29.5	1920-1921
12	21.5	1978-1979	32.5	1982-1983	21.4	1985-1986	29.1	1952-1953	20.0	1961-1962	29.4	2016-2017
13	21.7	1880-1881	32.5	1879-1880	21.5	1961-1962	28.8	1936-1937	20.1	1944-1945	29.0	1918-1919
14	21.8	1911-1912	32.3	1918-1919	21.6	2008-2009	28.6	1948-1949	20.2	1969-1970	28.8	1932-1933
15	21.8	1878-1879	32.2	1952-1953	21.6	1983-1984	28.5	2012-2013	20.3	1981-1982	28.5	2012-2013
16	21.9	1981-1982	31.6	1877-1878	21.6	1947-1948	28.3	1930-1931	20.7	1947-1948	28.3	1952-1953
17	22.4	1969-1970	31.3	1948-1949	22.0	2014-2015	28.2	1991-1992	21.2	2008-2009	28.0	1930-1931
18	23.0	1958-1959	31.2	1920-1921	22.2	2010-2011	28.2	1949-1950	21.3	2002-2003	27.8	1974-1975
19	23.2	1876-1877	31.1	1875-1876	22.4	1942-1943	28.1	1974-1975	21.4	1942-1943	27.6	1948-1949
20	23.3	2014-2015	31.0	1953-1954	22.5	2002-2003	28.0	1953-1954	21.6	1985-1986	27.2	1998-1999
† Detroit Anna Anna materia na sanda data bash ta Nasamban 1974												

<sup>\*</sup> Detroit Area temperature records date back to November 1874.

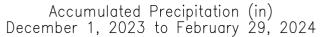
<sup>\*\*</sup> Flint Bishop temperature records date back to January 1921.

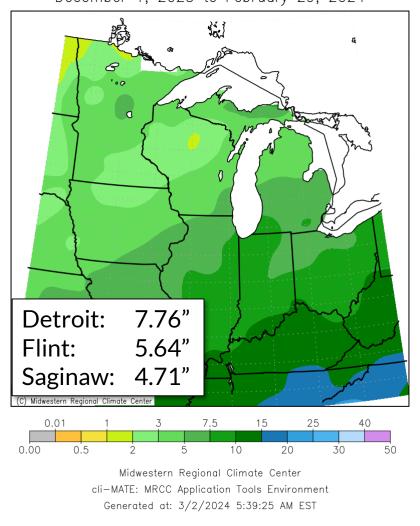
<sup>\*\*\*</sup> Saginaw Area temperature records date back to January 1912.

## Winter 2023-2024 – Regional Precipitation Summary

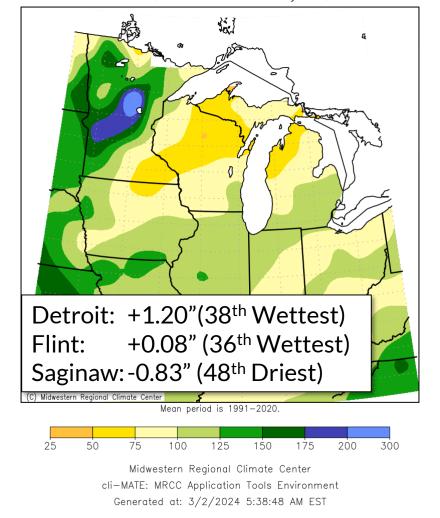


**Total Seasonal Precipitation** (*left*) & **Percent of Mean** (*right*)





Accumulated Precipitation: Percent of Mean December 1, 2023 to February 29, 2024



# Winter - Top 20 Wettest/Driest on Record



Top 20 Wettest/Dries	Winters in Southeast l	Lower Michigan (in.)
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Rank		Detroit	Are	a*	Flint Bishop**				Saginaw Area***			
	Wettest		Driest		Wettest		Driest		Wettest		Driest	
	Total	Year	Total	Year	Total	Year	Total	Year	Total	Year	Total	Year
1	12.74	1949-1950	2.24	2002-2003	10.48	1949-1950	1.51	1962-1963	11.95	1996-1997	1.86	1941-1942
2	12.41	1907-1908	2.36	1962-1963	8.83	1984-1985	1.78	1969-1970	11.24	1949-1950	1.95	1919-1920
3	10.79	1875-1876	2.87	1960-1961	8.67	1953-1954	1.94	2002-2003	8.49	1937-1938	2.08	1976-1977
4	10.31	1929-1930	3.23	1876-1877	8.27	1931-1932	2.19	1976-1977	8.48	1959-1960	2.19	2002-2003
5	10.03	1880-1881	3.30	1969-1970	8.09	1937-1938	2.20	1933-1934	8.41	1964-1965	2.22	1963-1964
6	9.55	1974-1975	3.39	1874-1875	8.04	2012-2013	2.40	1944-1945	8.11	1965-1966	2.42	1944-1945
7	9.49	1931-1932	3.41	1976-1977	7.96	2000-2001	2.42	1960-1961	7.87	2004-2005	2.45	1922-1923
8	9.36	1984-1985	3.43	1888-1889	7.83	1975-1976	2.43	1939-1940	7.81	1972-1973	2.52	1933-1934
9	9.33	2004-2005	3.45	1943-1944	7.55	1973-1974	2.60	1921-1922	7.61	1997-1998	2.66	1969-1970
10	9.22	2007-2008	3.50	1933-1934	7.51	2004-2005	2.78	1963-1964	7.57	2008-2009	2.66	1911-1912
11	9.14	1973-1974	3.58	1900-1901	7.51	1929-1930	2.93	1983-1984	7.53	1973-1974	2.81	1960-1961
12	8.97	1967-1968	3.67	1919-1920	7.46	1948-1949	2.93	1957-1958	7.39	1984-1985	2.84	1939-1940
13	8.94	1879-1880	3.68	1944-1945	7.27	2007-2008	3.10	1988-1989	7.24	2007-2008	2.96	1943-1944
14	8.92	2012-2013	3.72	1939-1940	7.26	2017-2018	3.22	1943-1944	7.19	1950-1951	3.15	1983-1984
15	8.82	1996-1997	3.72	1896-1897	7.25	1974-1975	3.29	1986-1987	7.14	2012-2013	3.17	1993-1994
16	8.78	1938-1939	3.86	2020-2021	7.19	2005-2006	3.35	1993-1994	7.09	1971-1972	3.18	1994-1995
17	8.58	1878-1879	4.02	1988-1989	7.14	2016-2017	3.40	1922-1923	7.07	1938-1939	3.22	1979-1980
18	8.54	1897-1898	4.05	1979-1980	6.81	1946-1947	3.47	1981-1982	7.02	2015-2016	3.25	1988-1989
19	8.47	2005-2006	4.15	1963-1964	6.80	1951-1952	3.61	2009-2010	7.02	1967-1968	3.26	1986-1987
20	8.42	1964-1965	4.18	1930-1931	6.68	1971-1972	3.67	1926-1927	6.99	1927-1928	3.29	1930-1931
* Detweit Aven precipitation records data healt to Nevember 1974												

<sup>\*</sup> Detroit Area precipitation records date back to November 1874.

<sup>\*\*</sup> Flint Bishop precipitation records date back to January 1921.

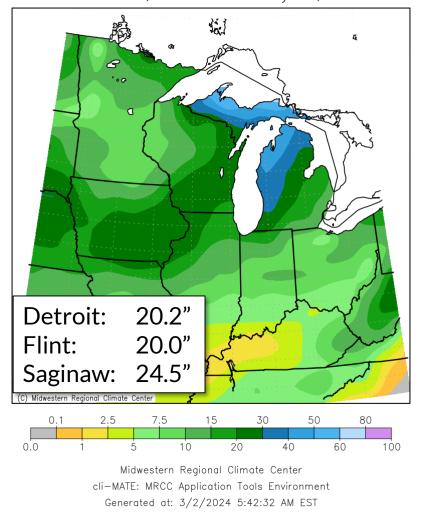
<sup>\*\*\*</sup> Saginaw Area precipitation records date back to January 1912.

# Winter 2023-2024 – Regional Snowfall Summary

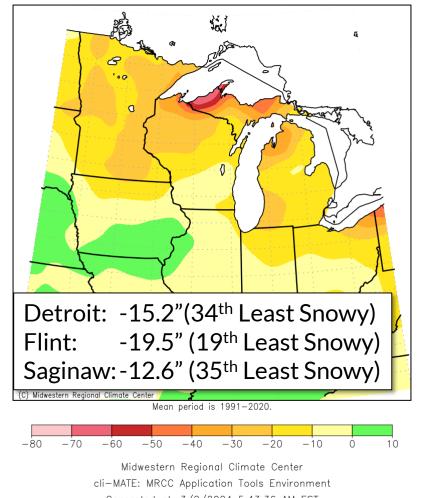


Total Seasonal Snowfall (left) & Percent of Mean (right)





Accumulated Snowfall (in): Departure from Mean December 1, 2023 to February 29, 2024



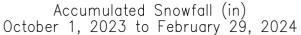
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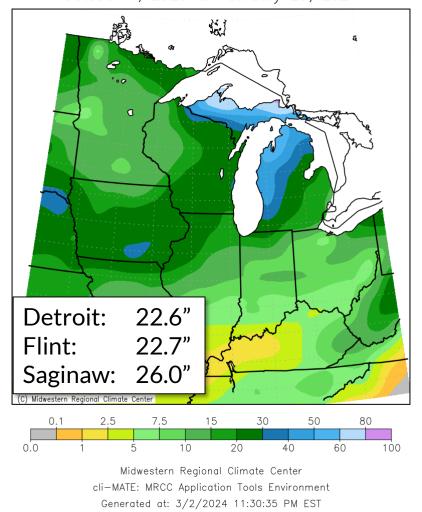


### Season-to-Date 2023-2024 – Regional Snowfall Summary

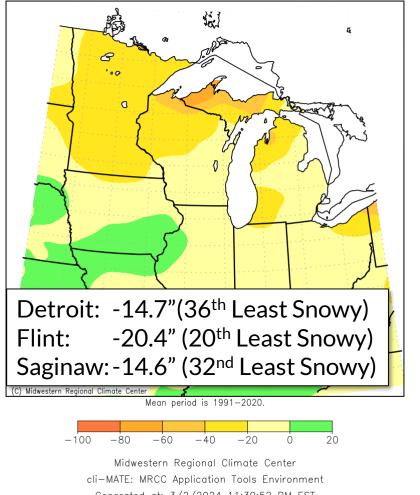


**Total Seasonal Snowfall (left) & Percent of Mean (right)** 





Accumulated Snowfall (in): Departure from Mean October 1, 2023 to February 29, 2024



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# Winter 2023-2024 - Daily Temperature Graph



### **DETROIT**

#### **Temperature Stats:**

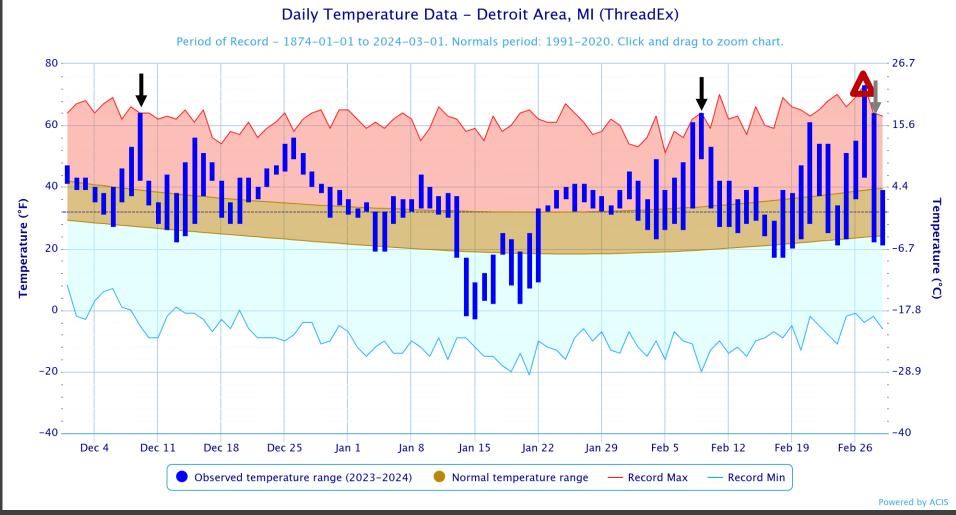
Days at or below 0°F: 2

**Highest max:** 73°F (Feb 27)

Lowest min: -3°F (Jan 15)

Lowest max: 9°F (Jan 15)

Highest min: 49°F (Dec 26)



RECORDS

**February All Time Max Temp:** 73°F on Feb 27

Daily Max Temp: 64°F on Dec 9, 64°F on Feb 9 Daily Max Temp (tied): 64°F on Feb 28

# Winter 2023-2024 - Daily Precip/Snow Graphs



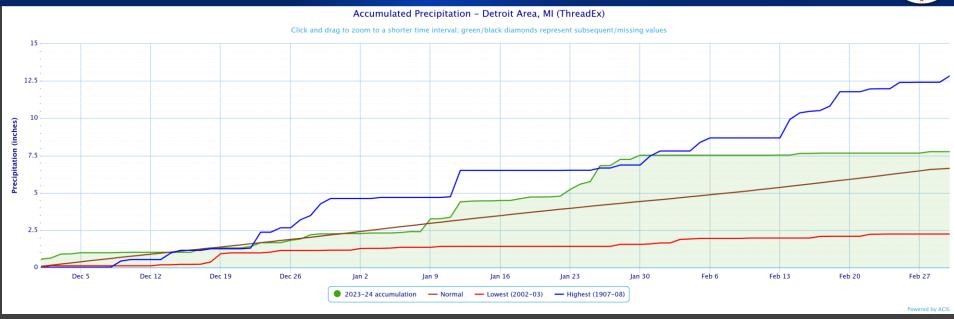
### **DETROIT**

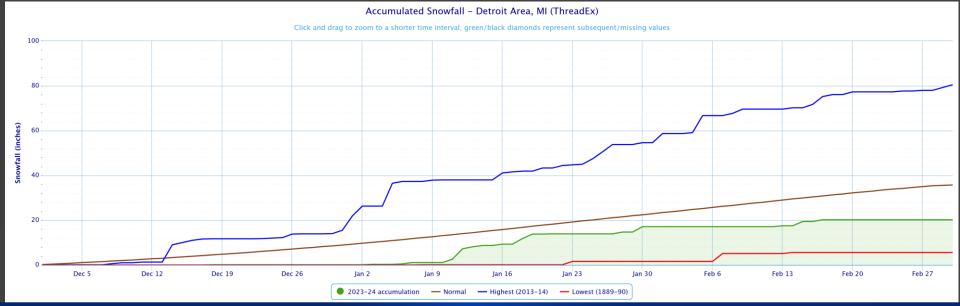
#### **Precipitation Stats:**

Days with 1" or more: 2 Days with 0.01" or more: 41 Highest daily precip: 1.07" (Jan 26)

#### **Snowfall Stats:**

Days with 6" or more: 0 Days with 3" or more: 1 Days with 0.1" or more: 17 Highest daily snowfall: 4.6" (Jan 12)





# Winter 2023-2024 - Daily Temperature Graph



### **FLINT**

#### **Temperature Stats:**

Days at or below 0°F: 3

**Highest max:** 74°F (Feb 27)

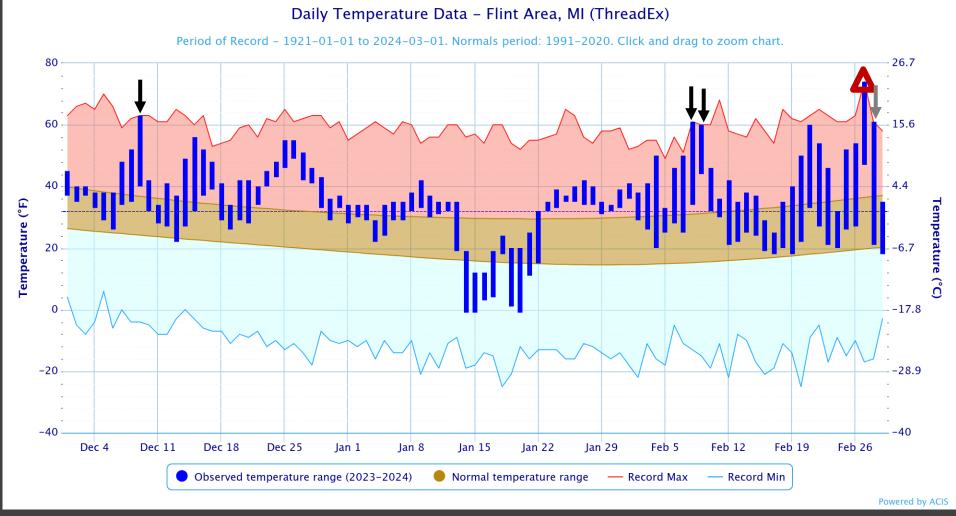
**Lowest min:** -1°F (Jan 14, 15,

& 20)

Lowest max: 12°F (Jan 15 &

16)

Highest min: 49°F (Dec 26)



RECORDS

**February All Time Max Temp:** 74°F on Feb 27

**Daily Max Temp:** 

63°F on Dec 9, 61°F on Feb 8, 60°F on Feb 9

Daily Max Temp (tied): 61°F on Feb 28

# Winter 2023-2024 - Daily Precip/Snow Graphs



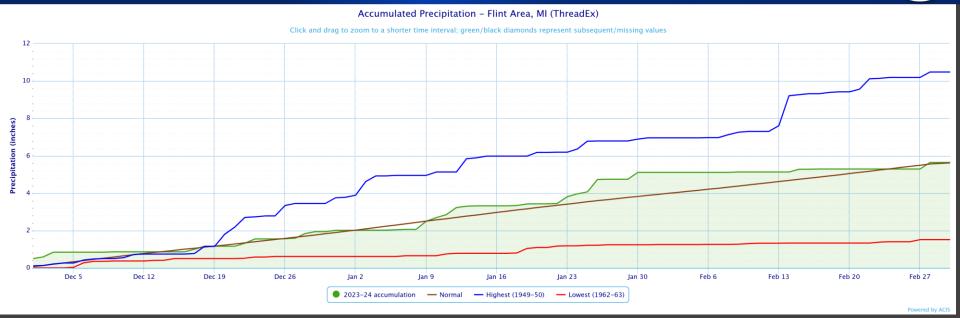
### **FLINT**

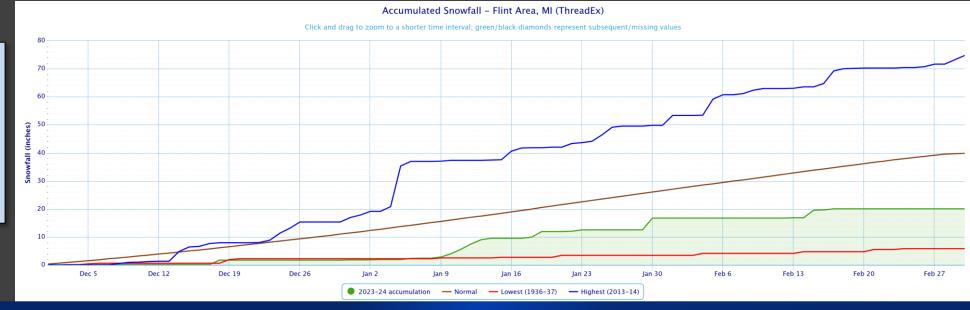
#### **Precipitation Stats:**

Days with 1" or more: 0 Days with 0.01" or more: 36 Highest daily precip: 0.66" (Jan 26)

#### **Snowfall Stats:**

Days with 6" or more: 0 Days with 3" or more: 1 Days with 0.1" or more: 21 Highest daily snowfall: 4.2" (Jan 30)







## Winter 2023-2024 - Daily Temperature Graph



#### **SAGINAW**

#### **Temperature Stats:**

Days at or below 0°F: 3

**Highest max:** 74°F (Feb 27)

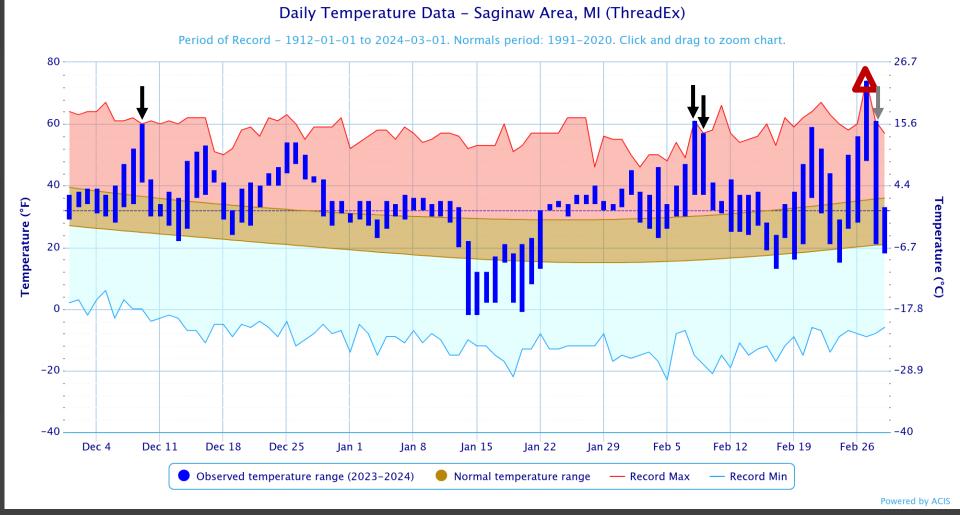
Lowest min: -2°F (Jan 14 &

15)

Lowest max: 12°F (Jan 15 &

16)

Highest min: 48°F (Feb 27)



RECORDS

February All Time Max Temp: 74°F on Feb 27

Daily Max Temp:
60°F on Dec 9, 61°F on Feb 8, 57°F on Feb 9

Daily Max Temp (tied): 61°F on Feb 28

# Winter 2023-2024 - Daily Precip/Snow Graphs



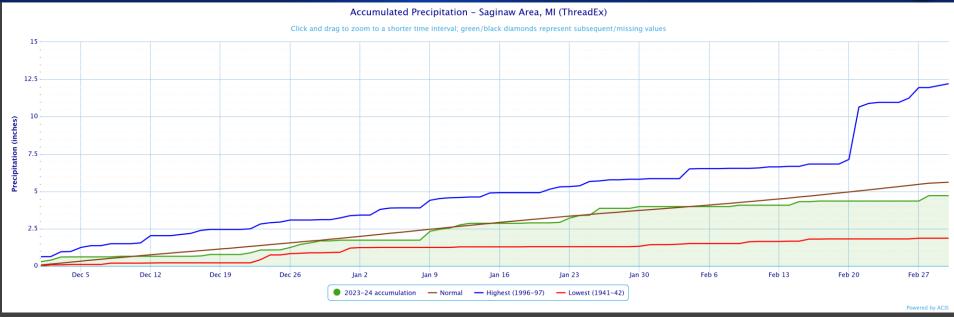
### **SAGINAW**

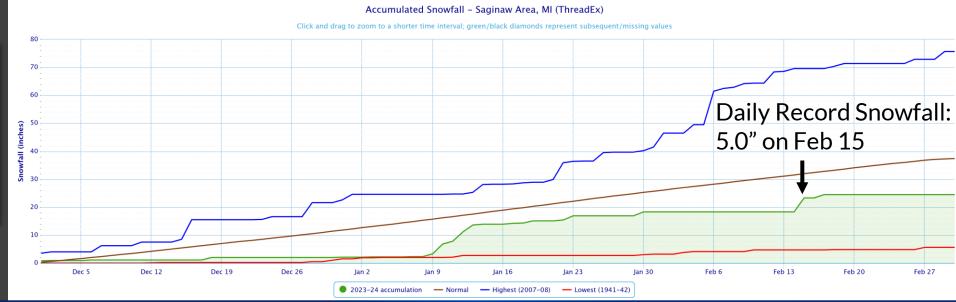
#### **Precipitation Stats:**

Days with 1" or more: 0 Days with 0.01" or more: 31 Highest daily precip: 0.59" (Jan 9)

#### **Snowfall Stats:**

Days with 6" or more: 0 Days with 3" or more: 3 Days with 0.1" or more: 21 Highest daily snowfall: 5.0" (Feb 15)







## Winter 2023-2024 - Significant Weather Events

Weather Forecast Office Detroit, MI

Follow links for web summaries

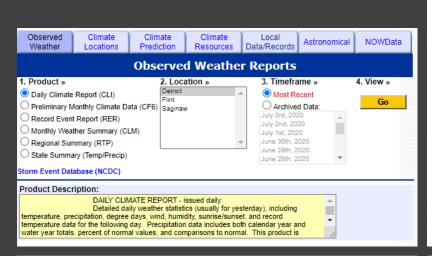
**January 12-13 Winter Storm** 

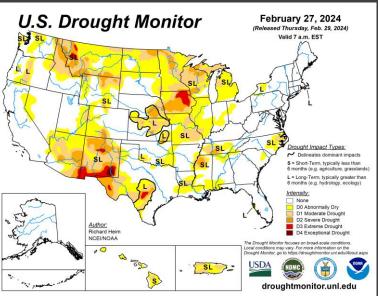
weather.gov/dtx/2024-01-12-Winter-Storm

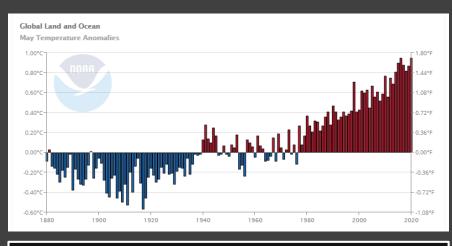
February 28 Grand Blanc Tornado Public Information Statement

### **Additional Climate Resources**









#### **SE Michigan Climate Products**

weather.gov/climate/index.php?wfo=dtx

#### **U.S. Drought Monitor**

<u>drought.gov/drought/data-maps-tools/current-conditions</u>

#### **NOAA NCEI Climate at a Glance**

ncdc.noaa.gov/cag/

Thank you to our COOP and CoCoRaHS volunteer weather observers!