

Southeast Michigan Climate Summary

Seasonal Temperature, Precipitation, and Severe Weather Summaries

Weather Forecast Office
Detroit, MI



Winter 2022-2023

December, January, and February



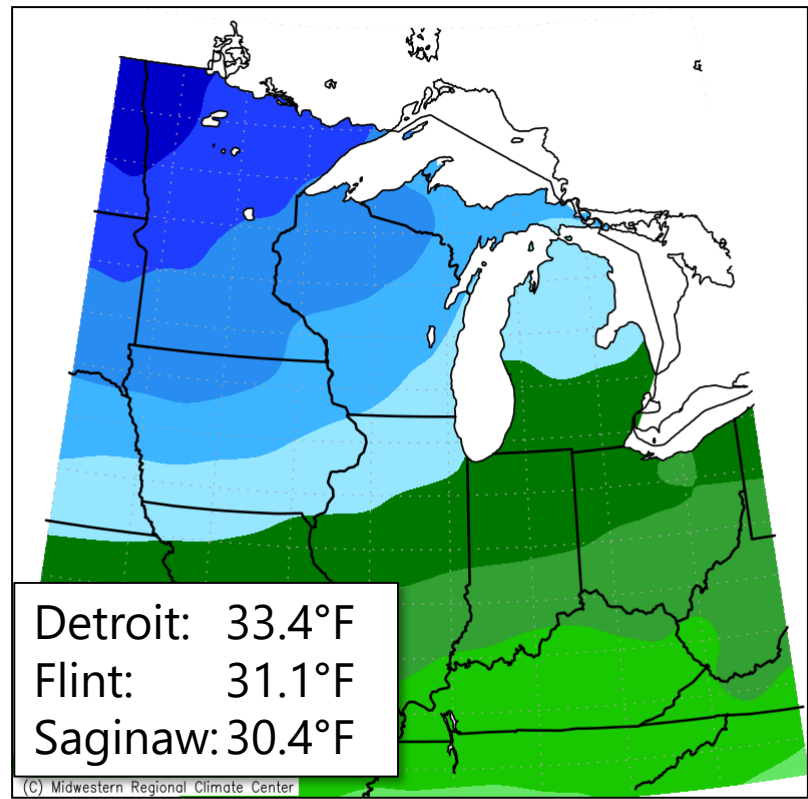
Winter 2022-2023 – Regional Temperature Summary

Weather Forecast Office
Detroit, MI

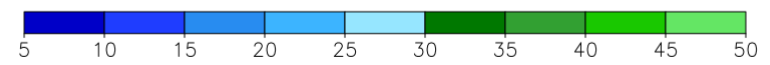


Average Temperature (left) & Departure from Average (right)

Average Temperature (°F)
December 1, 2022 to February 28, 2023

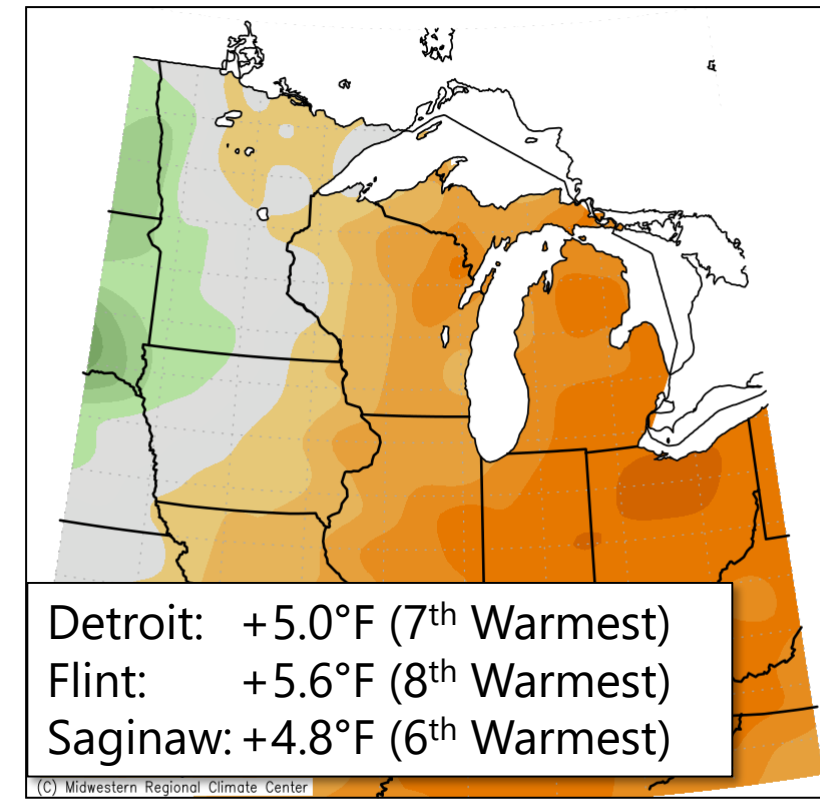


Detroit: 33.4°F
Flint: 31.1°F
Saginaw: 30.4°F



Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
Generated at: 3/1/2023 12:09:38 PM CST

Average Temperature (°F): Departure from Mean
December 1, 2022 to February 28, 2023



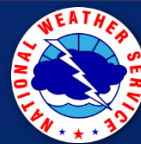
Detroit: +5.0°F (7th Warmest)
Flint: +5.6°F (8th Warmest)
Saginaw: +4.8°F (6th Warmest)



Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
Generated at: 3/1/2023 12:10:24 PM CST

Winter – Top 20 Coldest/Warmest on Record

Weather Forecast Office
Detroit, MI



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

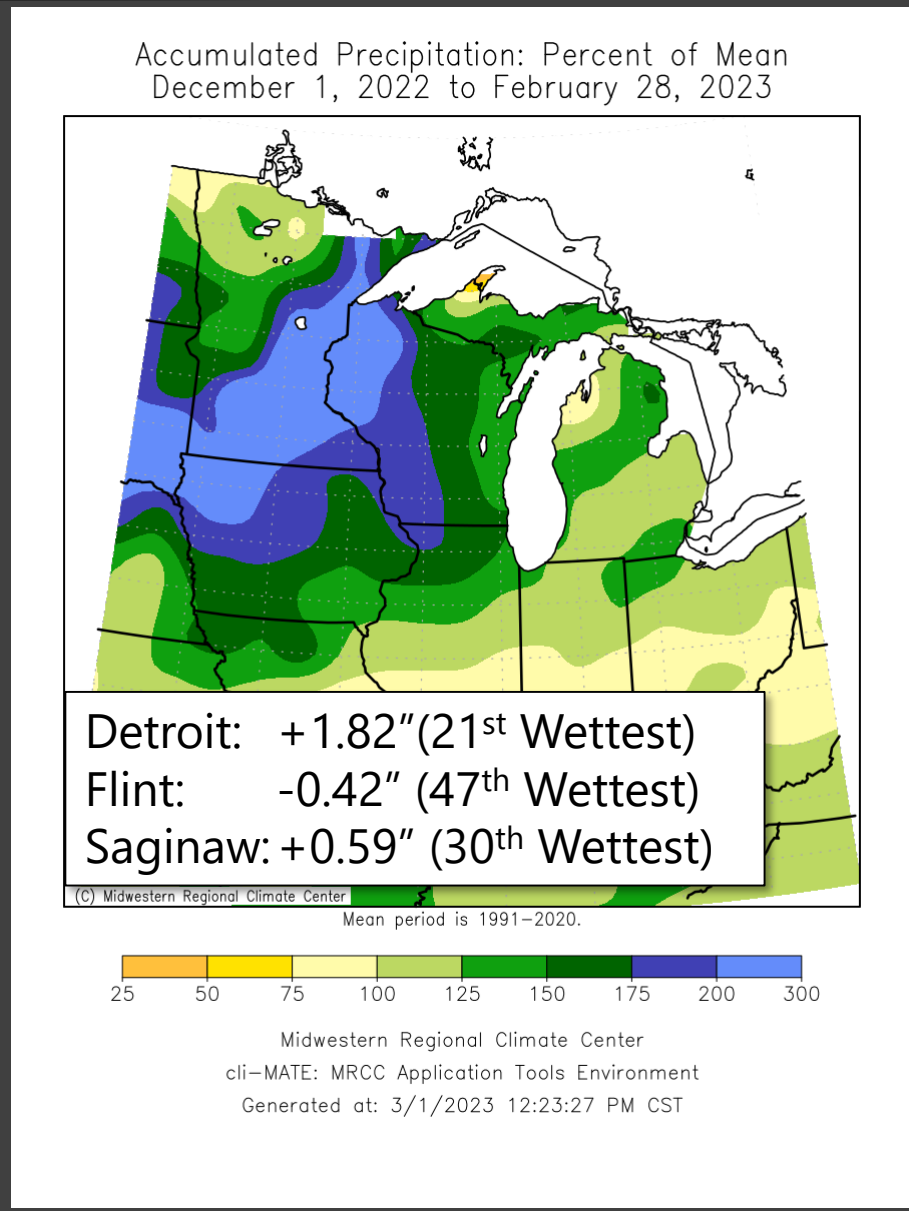
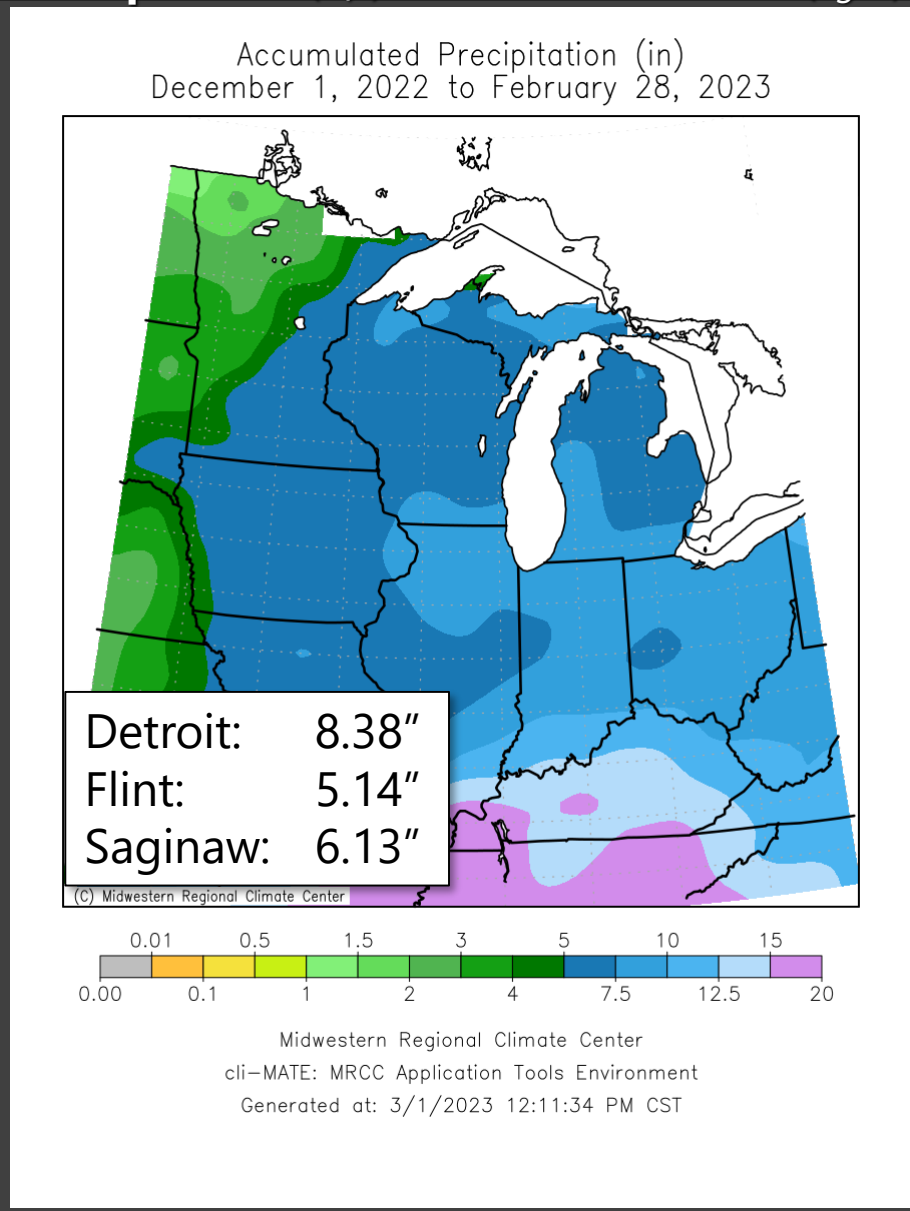
| Rank | Detroit Area* | | | | Flint Bishop** | | | | Saginaw Area*** | | | |
|------|---------------|-----------|---------|-----------|----------------|-----------|---------|-----------|-----------------|-----------|---------|-----------|
| | Coldest | | Warmest | | Coldest | | Warmest | | Coldest | | 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 | 33.4 | 1931-1932 | 15.7 | 1962-1963 | 33.3 | 1931-1932 |
| 2 | 19.3 | 1874-1875 | 35.7 | 1931-1932 | 17.0 | 1962-1963 | 33.0 | 2015-2016 | 16.5 | 1917-1918 | 31.7 | 2015-2016 |
| 3 | 19.7 | 1976-1977 | 35.2 | 1889-1890 | 17.8 | 1958-1959 | 32.2 | 1982-1983 | 16.6 | 1919-1920 | 30.9 | 1997-1998 |
| 4 | 19.7 | 1917-1918 | 33.8 | 2001-2002 | 18.6 | 1978-1979 | 31.7 | 2001-2002 | 17.5 | 1978-1979 | 30.6 | 2011-2012 |
| 5 | 20.4 | 1962-1963 | 33.8 | 1997-1998 | 19.0 | 2013-2014 | 31.5 | 2019-2020 | 18.0 | 1977-1978 | 30.5 | 2001-2002 |
| 6 | 20.6 | 1977-1978 | 33.5 | 2015-2016 | 19.3 | 1977-1978 | 31.3 | 1997-1998 | 18.2 | 1976-1977 | 30.4 | 2022-2023 |
| 7 | 20.8 | 1919-1920 | 33.4 | 2022-2023 | 19.8 | 1993-1994 | 31.2 | 2011-2012 | 18.2 | 2013-2014 | 30.0 | 1936-1937 |
| 8 | 20.9 | 2013-2014 | 33.0 | 2011-2012 | 19.9 | 1944-1945 | 31.1 | 2022-2023 | 18.2 | 1958-1959 | 29.8 | 2019-2020 |
| 9 | 21.0 | 1935-1936 | 32.9 | 2016-2017 | 20.9 | 1981-1982 | 30.3 | 1932-1933 | 18.7 | 1935-1936 | 29.6 | 1982-1983 |
| 10 | 21.1 | 1892-1893 | 32.6 | 2019-2020 | 21.2 | 1935-1936 | 30.2 | 2016-2017 | 19.0 | 1993-1994 | 29.5 | 1920-1921 |
| 11 | 21.4 | 1904-1905 | 32.5 | 1982-1983 | 21.3 | 1969-1970 | 29.1 | 1952-1953 | 19.2 | 1916-1917 | 29.4 | 2016-2017 |
| 12 | 21.5 | 1978-1979 | 32.5 | 1879-1880 | 21.4 | 1985-1986 | 28.8 | 1936-1937 | 20.0 | 1961-1962 | 29.0 | 1918-1919 |
| 13 | 21.7 | 1880-1881 | 32.3 | 1918-1919 | 21.5 | 1961-1962 | 28.6 | 1948-1949 | 20.1 | 1944-1945 | 28.8 | 1932-1933 |
| 14 | 21.8 | 1911-1912 | 32.2 | 1952-1953 | 21.6 | 2008-2009 | 28.5 | 2012-2013 | 20.2 | 1969-1970 | 28.5 | 2012-2013 |
| 15 | 21.8 | 1878-1879 | 31.6 | 1877-1878 | 21.6 | 1983-1984 | 28.3 | 1930-1931 | 20.3 | 1981-1982 | 28.3 | 1952-1953 |
| 16 | 21.9 | 1981-1982 | 31.3 | 1948-1949 | 21.6 | 1947-1948 | 28.2 | 1991-1992 | 20.7 | 1947-1948 | 28.0 | 1930-1931 |
| 17 | 22.4 | 1969-1970 | 31.2 | 1920-1921 | 22.0 | 2014-2015 | 28.2 | 1949-1950 | 21.2 | 2008-2009 | 27.8 | 1974-1975 |
| 18 | 23.0 | 1958-1959 | 31.1 | 1875-1876 | 22.2 | 2010-2011 | 28.1 | 1974-1975 | 21.3 | 2002-2003 | 27.6 | 1948-1949 |
| 19 | 23.2 | 1876-1877 | 31.0 | 1953-1954 | 22.4 | 1942-1943 | 28.0 | 1953-1954 | 21.4 | 1942-1943 | 27.2 | 1998-1999 |
| 20 | 23.3 | 2014-2015 | 30.8 | 1949-1950 | 22.5 | 2002-2003 | 27.8 | 1998-1999 | 21.6 | 1985-1986 | 27.1 | 1986-1987 |

* Detroit Area temperature records date back to November 1874.

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

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

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



Winter – Top 20 Wettest/Driest on Record

Weather Forecast Office
Detroit, MI



Top 20 Wettest/Driest Winters 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 | 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 |

* 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.

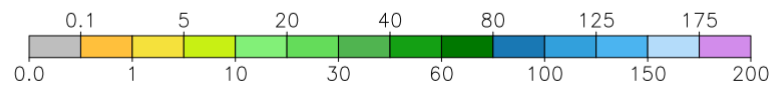
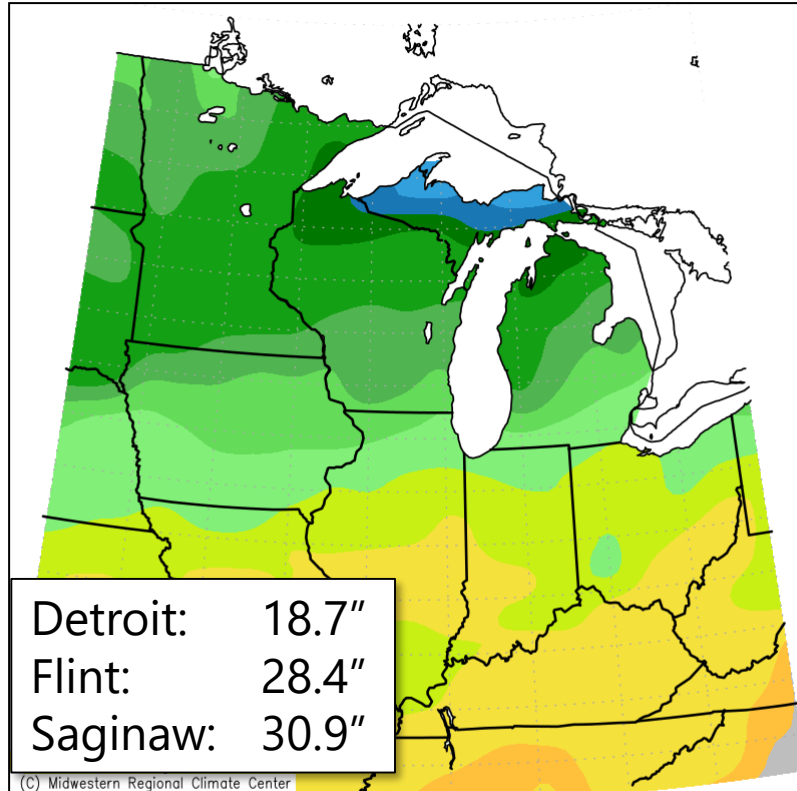
Winter 2022-2023 – Regional Snowfall Summary

Weather Forecast Office
Detroit, MI



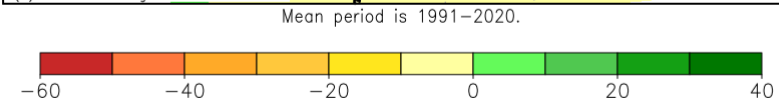
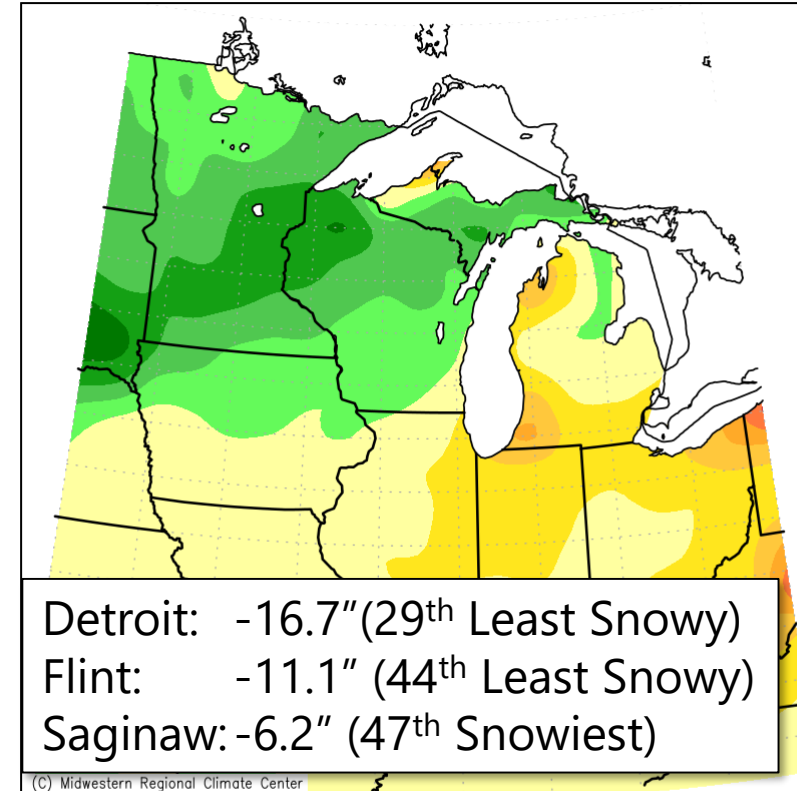
Total Seasonal Snowfall (left) & Percent of Mean (right)

Accumulated Snowfall (in)
December 1, 2022 to February 28, 2023



Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
Generated at: 3/1/2023 12:25:41 PM CST

Accumulated Snowfall (in): Departure from Mean
December 1, 2022 to February 28, 2023



Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
Generated at: 3/1/2023 12:25:59 PM CST

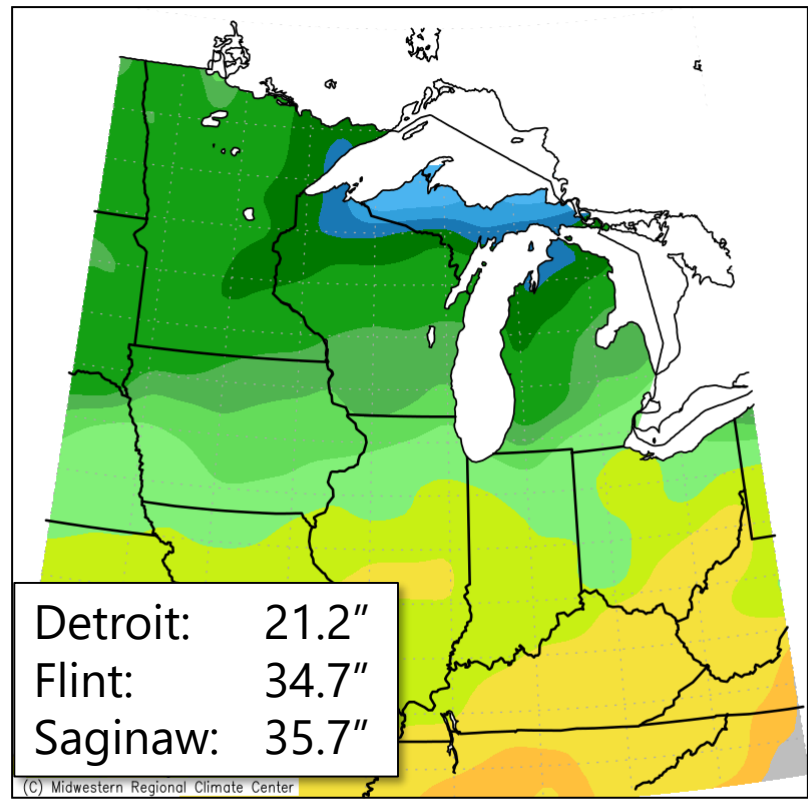
Season-to-Date 2022-2023 – Regional Snowfall Summary

Weather Forecast Office
Detroit, MI



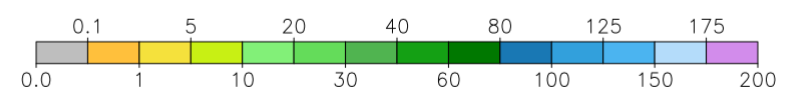
Total Seasonal Snowfall (left) & Percent of Mean (right)

Accumulated Snowfall (in)
October 1, 2022 to February 28, 2023



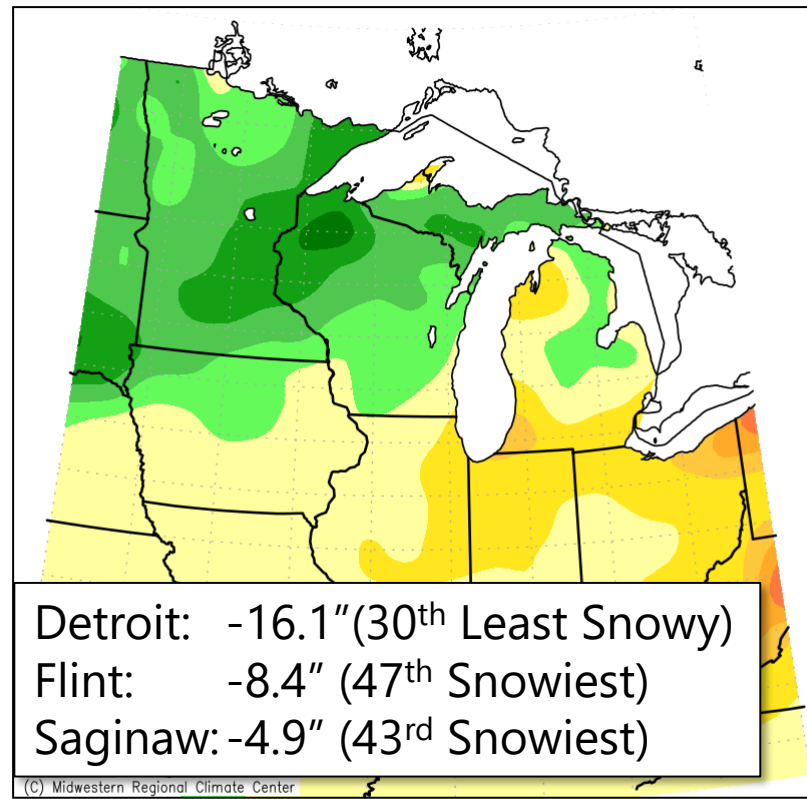
Detroit: 21.2"
Flint: 34.7"
Saginaw: 35.7"

(C) Midwestern Regional Climate Center



Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
Generated at: 3/1/2023 12:31:41 PM CST

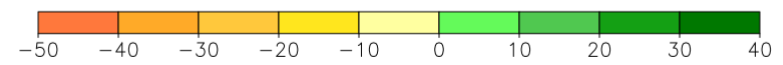
Accumulated Snowfall (in): Departure from Mean
October 1, 2022 to February 28, 2023



Detroit: -16.1" (30th Least Snowy)
Flint: -8.4" (47th Snowiest)
Saginaw: -4.9" (43rd Snowiest)

(C) Midwestern Regional Climate Center

Mean period is 1991-2020.



Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
Generated at: 3/1/2023 12:32:10 PM CST

Winter 2022-2023 – Daily Temperature Graph

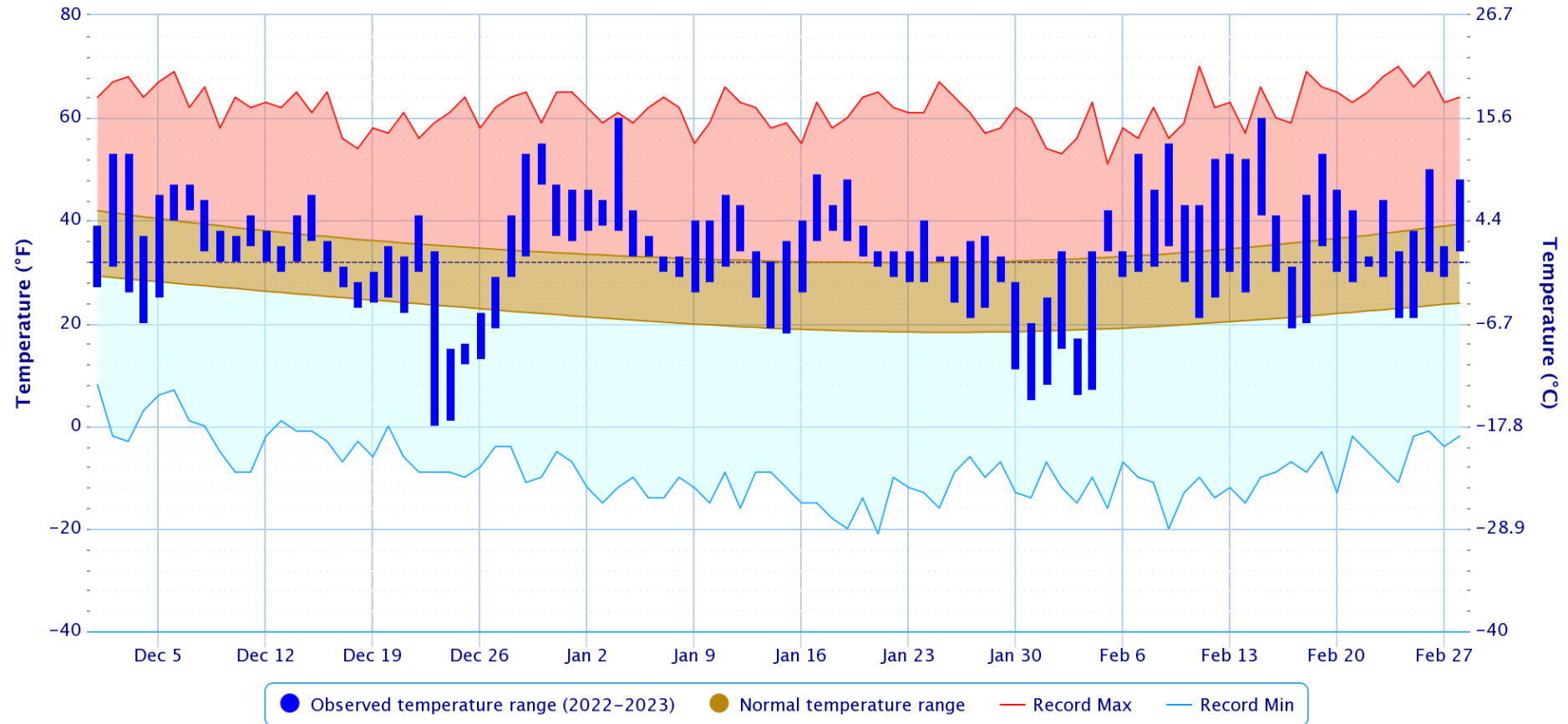
Weather Forecast Office
Detroit, MI



DETROIT

Daily Temperature Data – Detroit Area, MI (ThreadEx)

Period of Record – 1874-01-01 to 2023-02-28. Normals period: 1991-2020. Click and drag to zoom chart.



Powered by ACIS

Temperature Stats:

Days at or below 0°F: 1
Highest max: 60°F (Jan 4 & Feb 15)
Lowest min: 0°F (Dec 23)
Lowest max: 15°F (Dec 24)
Highest min: 47°F (Dec 30)

Winter 2022-2023 – Daily Precip/Snow Graphs

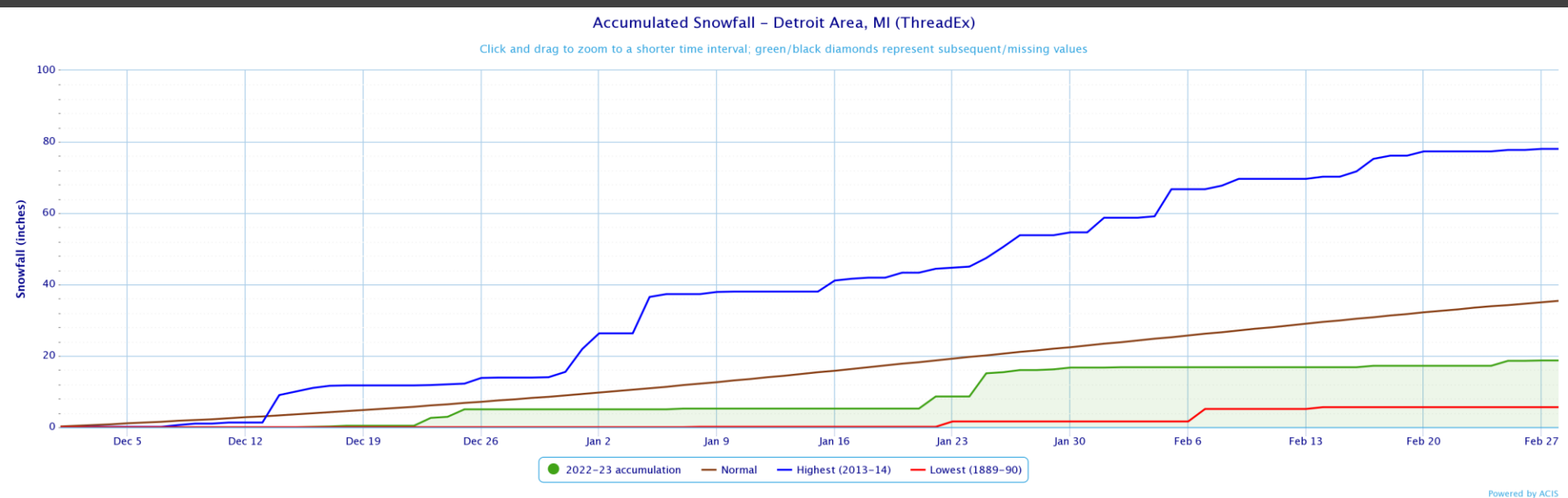
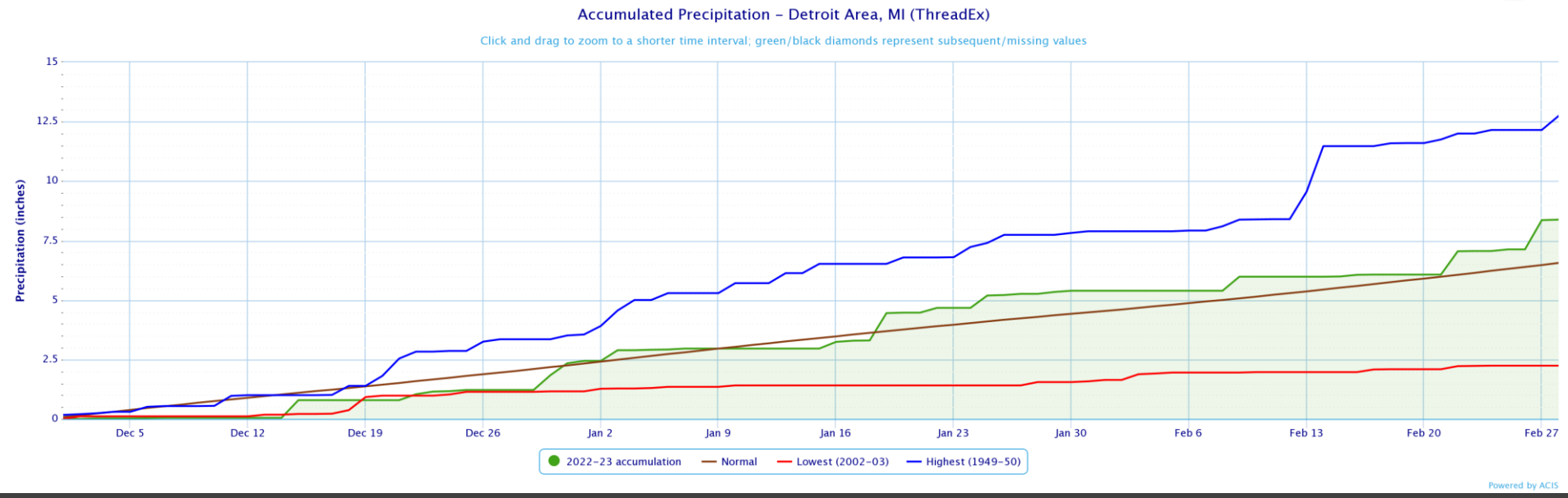
DETROIT

Precipitation Stats:

Days with 1" or more: 2
Days with 0.01" or more: 35
Highest daily precip: 1.23"
(Feb 27)

Snowfall Stats:

Days with 6" or more: 1
Days with 3" or more: 2
Days with 0.1" or more: 17
Highest daily snowfall: 6.5"
(Jan 25)



Winter 2022-2023 – Daily Temperature Graph

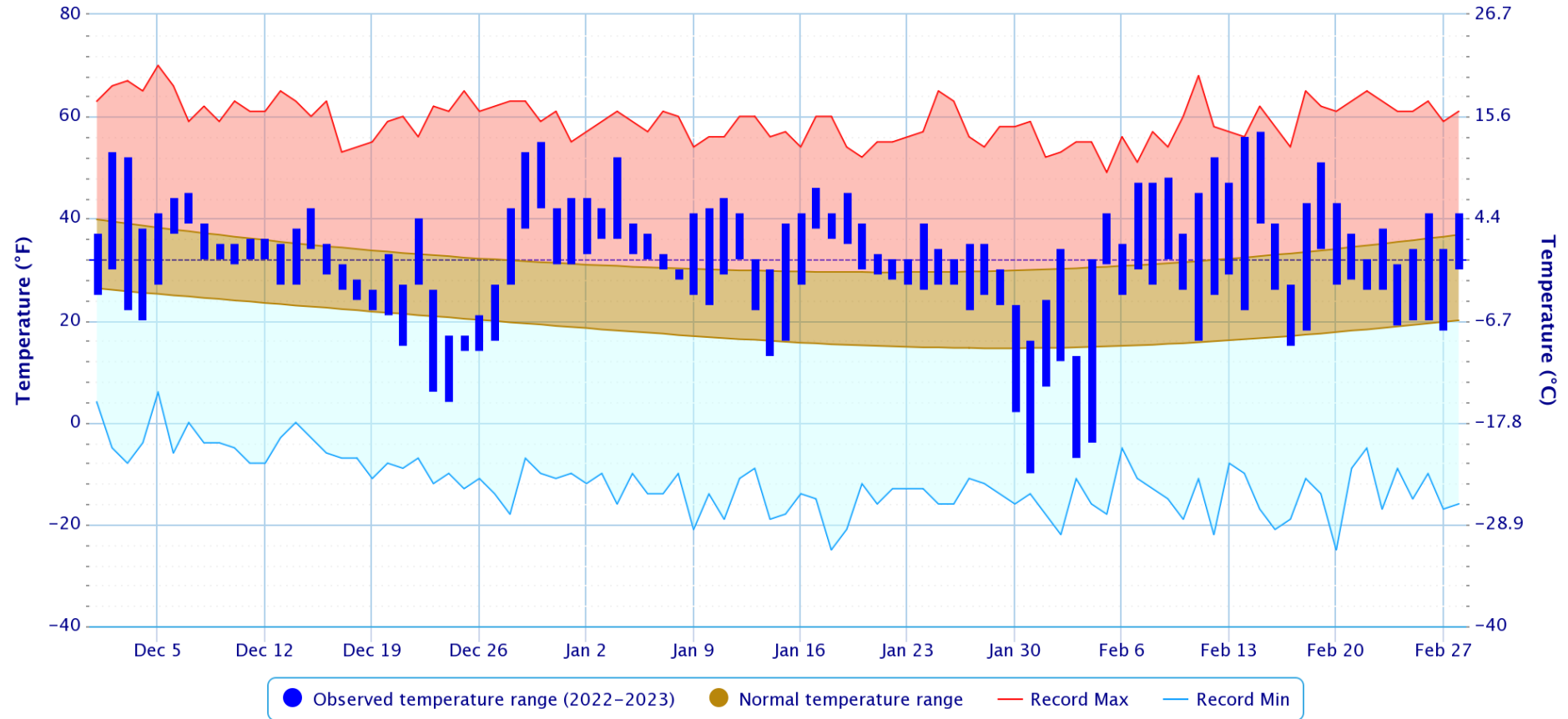
Weather Forecast Office
Detroit, MI



FLINT

Daily Temperature Data – Flint Area, MI (ThreadEx)

Period of Record – 1921-01-01 to 2023-02-28. Normals period: 1991-2020. Click and drag to zoom chart.



Powered by ACIS

Temperature Stats:

Days at or below 0°F: 3
Highest max: 57°F (Feb 15)
Lowest min: -10°F (Jan 31)
Lowest max: 13°F (Feb 3)
Highest min: 42°F (Dec 30)

Winter 2022-2023 – Daily Precip/Snow Graphs

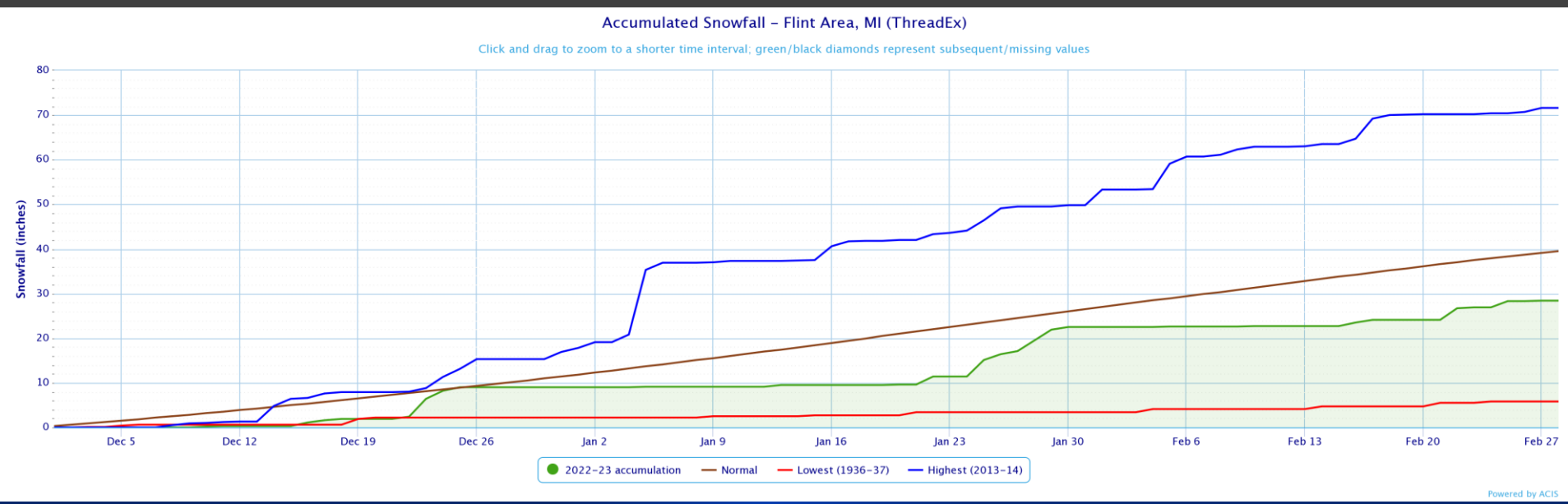
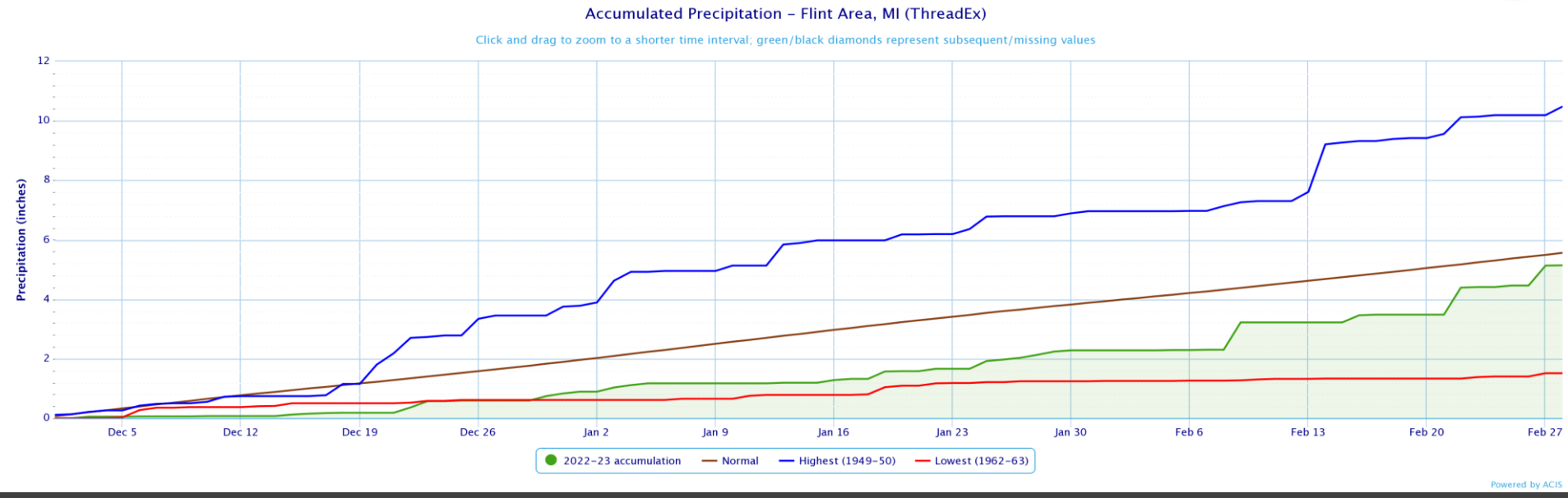
FLINT

Precipitation Stats:

Days with 1" or more: 0
Days with 0.01" or more: 38
Highest daily precip: 0.92"
(Feb 9)

Snowfall Stats:

Days with 6" or more: 0
Days with 3" or more: 2
Days with 0.1" or more: 27
Highest daily snowfall: 4.0"
(Dec 23)



Winter 2022-2023 – Daily Temperature Graph

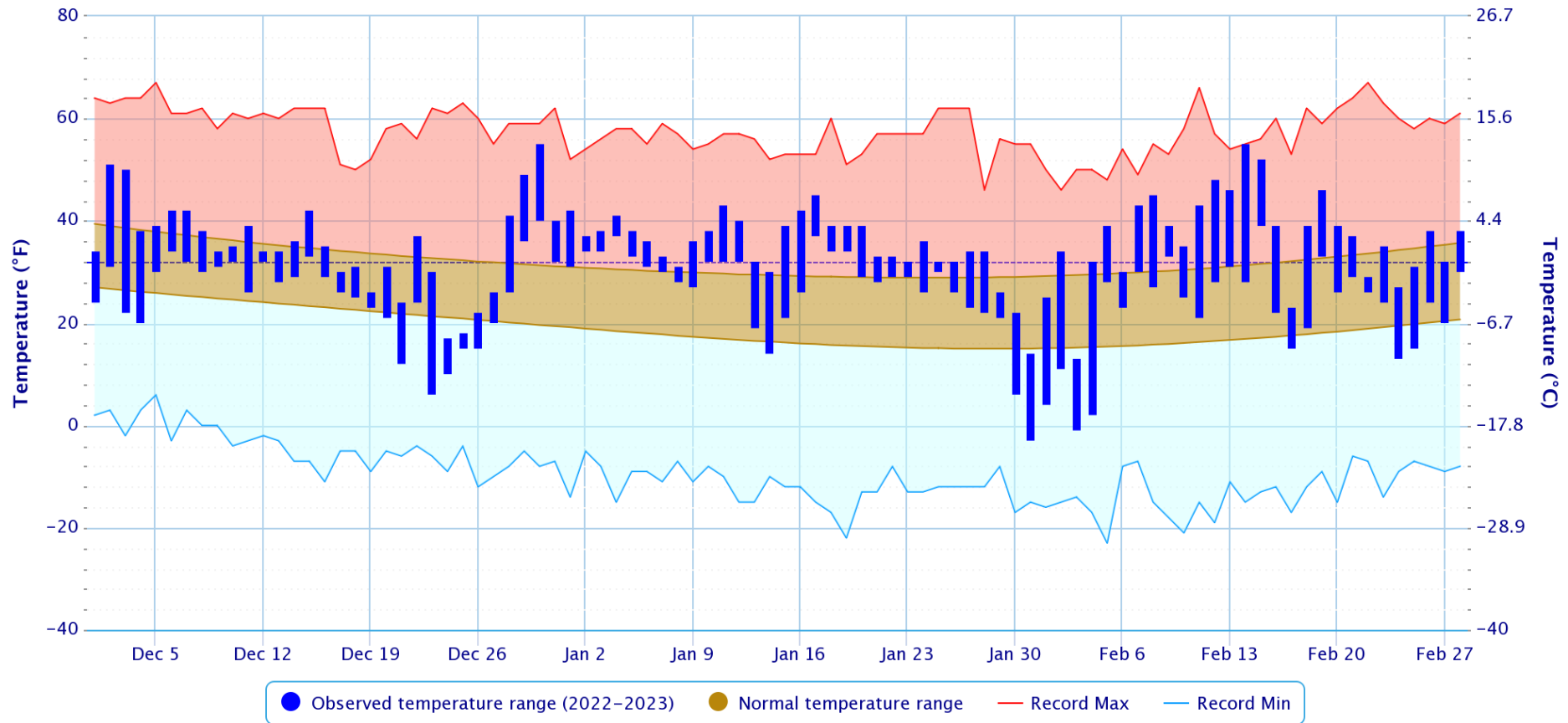
Weather Forecast Office
Detroit, MI



SAGINAW

Daily Temperature Data – Saginaw Area, MI (ThreadEx)

Period of Record – 1912-01-01 to 2023-02-28. Normals period: 1991-2020. Click and drag to zoom chart.



Powered by ACIS

Temperature Stats:

Days at or below 0°F: 2
Highest max: 55°F (Dec 30 & Feb 14)
Lowest min: -3°F (Jan 31)
Lowest max: 13°F (Feb 3)
Highest min: 40°F (Dec 30)

Winter 2022-2023 – Daily Precip/Snow Graphs

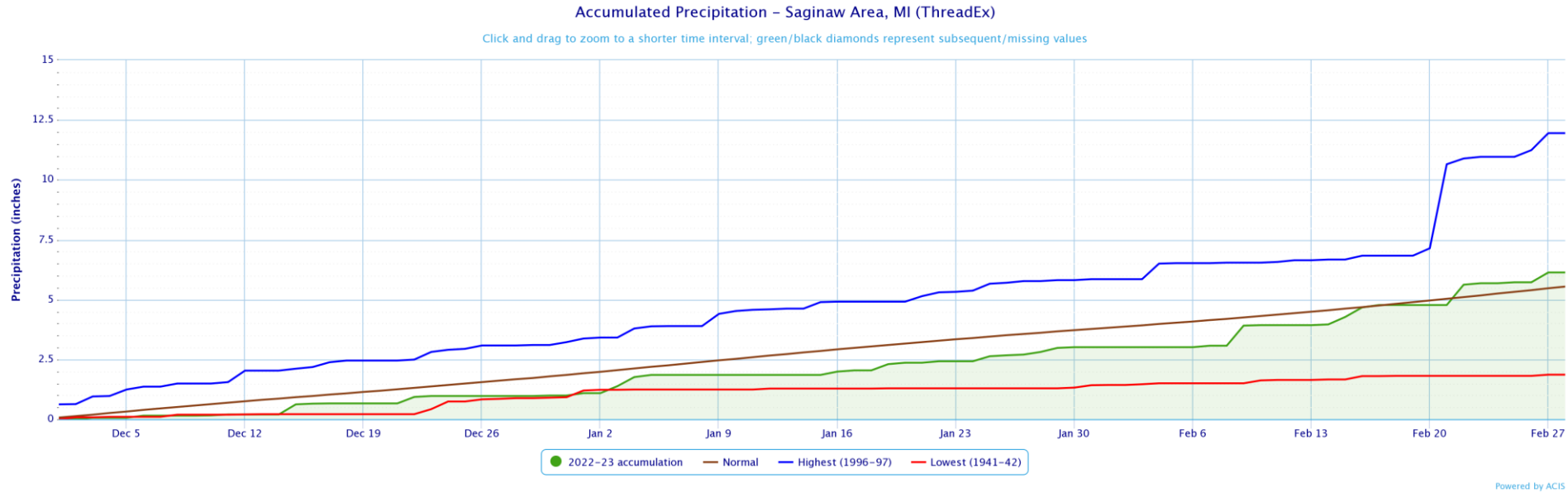
Weather Forecast Office
Detroit, MI



SAGINAW

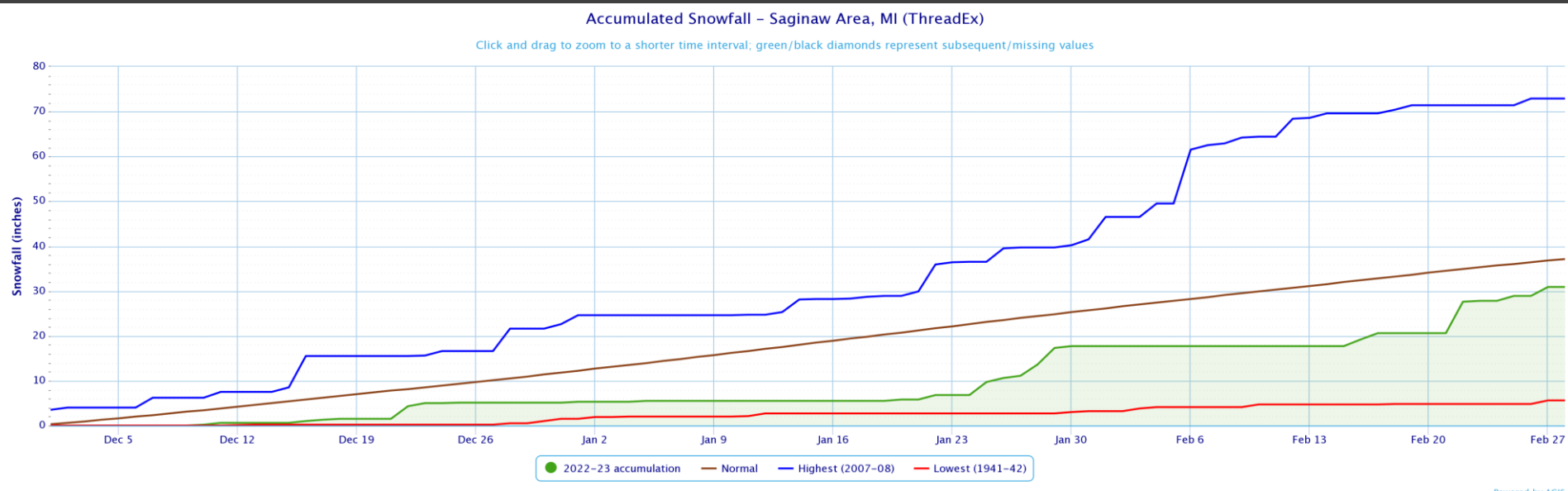
Precipitation Stats:

Days with 1" or more: 0
Days with 0.01" or more: 36
Highest daily precip: 0.85"
(Feb 22)



Snowfall Stats:

Days with 6" or more: 1
Days with 3" or more: 2
Days with 0.1" or more: 24
Highest daily snowfall: 7.0"
(Feb 22)



Winter 2022-2023 - Significant Weather Events

Weather Forecast Office
Detroit, MI



Follow links for web summaries

December 22-25 Winter Storm

weather.gov/dtx/December-22-25-2022-Winter-Storm

January 25 Winter Storm

weather.gov/dtx/2023-01-25-SoutheastMichigan-Snowstorm

January 28-29 Winter Storm

weather.gov/dtx/2023-01-28-29-Winter-Storm

February 22 Winter Storm

weather.gov/dtx/2023-02-22-Winter-Storm

February 27 Winter Storm

weather.gov/dtx/2023-02-27-Winter-Storm



Observed Weather | Climate Locations | Climate Prediction | Climate Resources | Local Data/Records | Astronomical | NOWData

Observed Weather Reports

1. Product »
 Daily Climate Report (CLI)
 Preliminary Monthly Climate Data (CF6)
 Record Event Report (RER)
 Monthly Weather Summary (CLM)
 Regional Summary (RTP)
 State Summary (Temp/Precip)

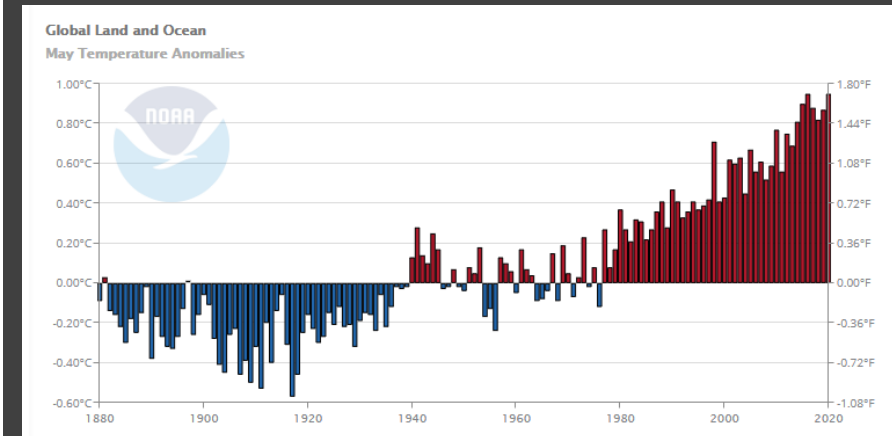
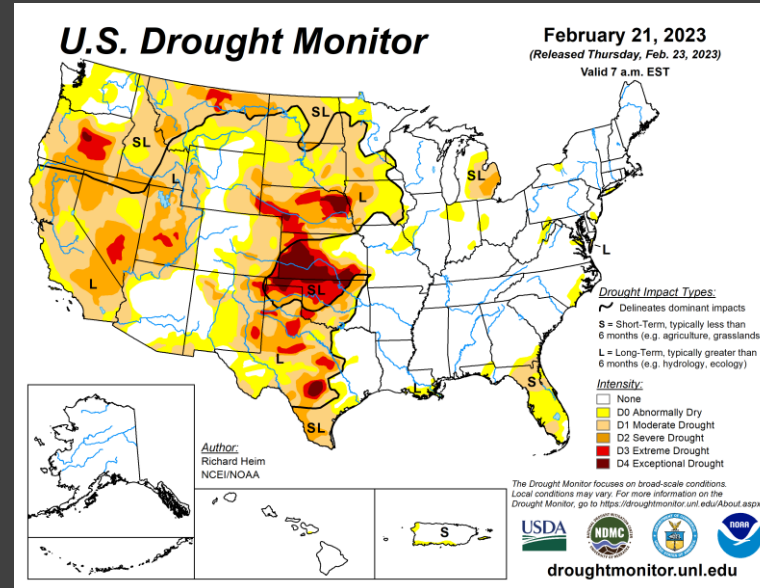
2. Location »
Detroit
Flint
Saginaw

3. Timeframe »
 Most Recent
 Archived Data:
July 3rd, 2020
July 2nd, 2020
July 1st, 2020
June 30th, 2020
June 29th, 2020
June 28th, 2020

4. View »
Go

[Storm Event Database \(NCDC\)](#)

Product Description:
DAILY CLIMATE REPORT - issued daily:
Detailed daily weather statistics (usually for yesterday), including temperature, precipitation, degree days, wind, humidity, sunrise/sunset, and record temperature data for the following day. Precipitation data includes both calendar year and water year totals, percent of normal values, and comparisons to normal. This product is



SE Michigan Climate Products

weather.gov/climate/index.php?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!