Southeast Michigan Climate Summary

Weather Forecast Office Detroit, MI

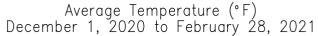
Seasonal Temperature, Precipitation, and Severe Weather Summaries

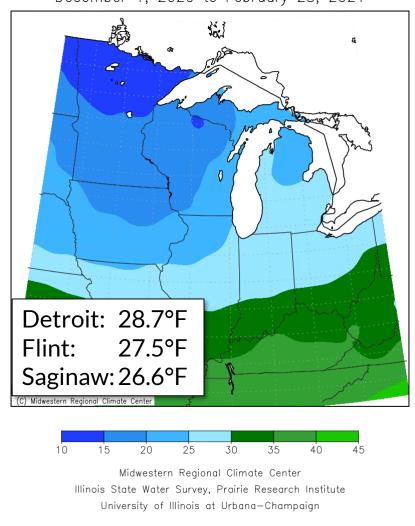


Winter 2020-2021 – Regional Temperature Summary

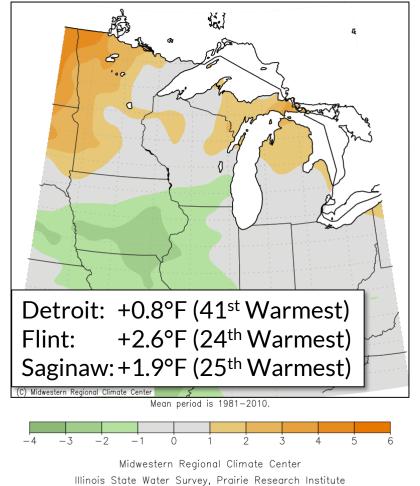


Average Temperature (left) & Departure from Average (right)





Average Temperature (°F): Departure from Mean December 1, 2020 to February 28, 2021



University of Illinois at Urbana-Champaign

Winter - Top 20 Coldest/Warmest on Record



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

| Bank | | Dotroi | t Aroo* | | Flint Bishop** | | | | Soginavy Arac*** | | | |
|------|---------------|-----------|---------|-----------|----------------|-----------|---------|-----------|------------------|-----------|---------|-----------|
| Rank | Detroit Area* | | | | | FIIIILB | isiiop" | | 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 | 30.0 | 1936-1937 |
| 7 | 20.8 | 1919-1920 | 33.0 | 2011-2012 | 19.8 | 1993-1994 | 31.2 | 2011-2012 | 18.2 | 2013-2014 | 29.8 | 2019-2020 |
| 8 | 20.9 | 2013-2014 | 32.9 | 2016-2017 | 19.9 | 1944-1945 | 30.3 | 1932-1933 | 18.2 | 1958-1959 | 29.6 | 1982-1983 |
| 9 | 21.0 | 1935-1936 | 32.6 | 2019-2020 | 20.9 | 1981-1982 | 30.2 | 2016-2017 | 18.7 | 1935-1936 | 29.5 | 1920-1921 |
| 10 | 21.1 | 1892-1893 | 32.5 | 1982-1983 | 21.2 | 1935-1936 | 29.1 | 1952-1953 | 19.0 | 1993-1994 | 29.4 | 2016-2017 |
| 11 | 21.4 | 1904-1905 | 32.5 | 1879-1880 | 21.3 | 1969-1970 | 28.8 | 1936-1937 | 19.2 | 1916-1917 | 29.0 | 1918-1919 |
| 12 | 21.5 | 1978-1979 | 32.3 | 1918-1919 | 21.4 | 1985-1986 | 28.6 | 1948-1949 | 20.0 | 1961-1962 | 28.8 | 1932-1933 |
| 13 | 21.7 | 1880-1881 | 32.2 | 1952-1953 | 21.5 | 1961-1962 | 28.5 | 2012-2013 | 20.1 | 1944-1945 | 28.5 | 2012-2013 |
| 14 | 21.8 | 1911-1912 | 31.6 | 1877-1878 | 21.6 | 2008-2009 | 28.3 | 1930-1931 | 20.2 | 1969-1970 | 28.3 | 1952-1953 |
| 15 | 21.8 | 1878-1879 | 31.3 | 1948-1949 | 21.6 | 1983-1984 | 28.2 | 1991-1992 | 20.3 | 1981-1982 | 28.0 | 1930-1931 |
| 16 | 21.9 | 1981-1982 | 31.2 | 1920-1921 | 21.6 | 1947-1948 | 28.2 | 1949-1950 | 20.7 | 1947-1948 | 27.8 | 1974-1975 |
| 17 | 22.4 | 1969-1970 | 31.1 | 1875-1876 | 22.0 | 2014-2015 | 28.1 | 1974-1975 | 21.2 | 2008-2009 | 27.6 | 1948-1949 |
| 18 | 23.0 | 1958-1959 | 31.0 | 1953-1954 | 22.2 | 2010-2011 | 28.0 | 1953-1954 | 21.3 | 2002-2003 | 27.2 | 1998-1999 |
| 19 | 23.2 | 1876-1877 | 30.8 | 1949-1950 | 22.4 | 1942-1943 | 27.8 | 1998-1999 | 21.4 | 1942-1943 | 27.1 | 1986-1987 |
| 20 | 23.3 | 2014-2015 | 30.7 | 2012-2013 | 22.5 | 2002-2003 | 27.7 | 1986-1987 | 21.6 | 1985-1986 | 27.1 | 1953-1954 |

Detroit Area temperature records date back to November 1874.

^{**} Flint Bishop temperature records date back to January 1921.

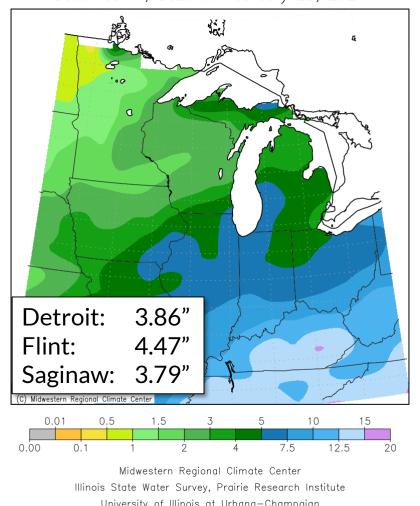
^{***} Saginaw Area temperature records date back to January 1912.

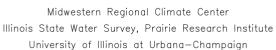
Winter 2020-2021 – Regional Precipitation Summary



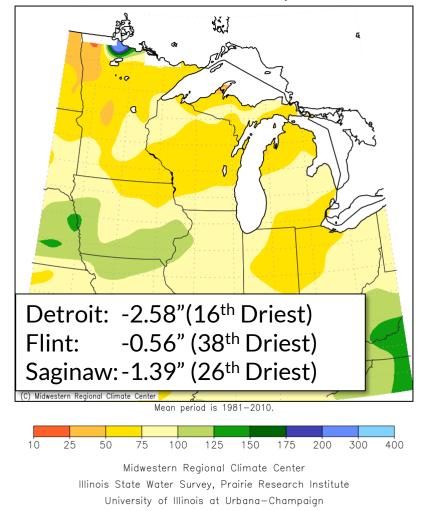
Total Seasonal Precipitation (*left*) & **Percent of Mean** (*right*)

Accumulated Precipitation (in) December 1, 2020 to February 28, 2021





Accumulated Precipitation: Percent of Mean December 1, 2020 to February 28, 2021





Winter - Top 20 Wettest/Driest on Record



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 | 10.31 | 1929-1930 | 2.87 | 1960-1961 | 8.67 | 1953-1954 | 1.94 | 2002-2003 | 8.49 | 1937-1938 | 2.08 | 1976-1977 |
| 4 | 9.55 | 1974-1975 | 3.23 | 1876-1877 | 8.27 | 1931-1932 | 2.19 | 1976-1977 | 8.48 | 1959-1960 | 2.19 | 2002-2003 |
| 5 | 9.49 | 1931-1932 | 3.30 | 1969-1970 | 8.09 | 1937-1938 | 2.20 | 1933-1934 | 8.41 | 1964-1965 | 2.22 | 1963-1964 |
| 6 | 9.36 | 1984-1985 | 3.39 | 1874-1875 | 8.04 | 2012-2013 | 2.40 | 1944-1945 | 8.11 | 1965-1966 | 2.42 | 1944-1945 |
| 7 | 9.33 | 2004-2005 | 3.41 | 1976-1977 | 7.96 | 2000-2001 | 2.42 | 1960-1961 | 7.87 | 2004-2005 | 2.45 | 1922-1923 |
| 8 | 9.22 | 2007-2008 | 3.43 | 1888-1889 | 7.83 | 1975-1976 | 2.43 | 1939-1940 | 7.81 | 1972-1973 | 2.52 | 1933-1934 |
| 9 | 9.14 | 1973-1974 | 3.45 | 1943-1944 | 7.55 | 1973-1974 | 2.60 | 1921-1922 | 7.61 | 1997-1998 | 2.66 | 1969-1970 |
| 10 | 8.97 | 1967-1968 | 3.50 | 1933-1934 | 7.51 | 2004-2005 | 2.78 | 1963-1964 | 7.57 | 2008-2009 | 2.66 | 1911-1912 |
| 11 | 8.92 | 2012-2013 | 3.58 | 1900-1901 | 7.51 | 1929-1930 | 2.93 | 1983-1984 | 7.53 | 1973-1974 | 2.81 | 1960-1961 |
| 12 | 8.82 | 1996-1997 | 3.67 | 1919-1920 | 7.46 | 1948-1949 | 2.93 | 1957-1958 | 7.39 | 1984-1985 | 2.84 | 1939-1940 |
| 13 | 8.78 | 1938-1939 | 3.68 | 1944-1945 | 7.27 | 2007-2008 | 3.10 | 1988-1989 | 7.24 | 2007-2008 | 2.96 | 1943-1944 |
| 14 | 8.47 | 2005-2006 | 3.72 | 1939-1940 | 7.26 | 2017-2018 | 3.22 | 1943-1944 | 7.19 | 1950-1951 | 3.15 | 1983-1984 |
| 15 | 8.42 | 1964-1965 | 3.72 | 1896-1897 | 7.25 | 1974-1975 | 3.29 | 1986-1987 | 7.14 | 2012-2013 | 3.17 | 1993-1994 |
| 16 | 8.32 | 1951-1952 | 3.86 | 2020-2021 | 7.19 | 2005-2006 | 3.35 | 1993-1994 | 7.09 | 1971-1972 | 3.18 | 1994-1995 |
| 17 | 8.25 | 1906-1907 | 4.02 | 1988-1989 | 7.14 | 2016-2017 | 3.40 | 1922-1923 | 7.07 | 1938-1939 | 3.22 | 1979-1980 |
| 18 | 8.21 | 1959-1960 | 4.05 | 1979-1980 | 6.81 | 1946-1947 | 3.47 | 1981-1982 | 7.02 | 2015-2016 | 3.25 | 1988-1989 |
| 19 | 8.16 | 2013-2014 | 4.15 | 1963-1964 | 6.80 | 1951-1952 | 3.61 | 2009-2010 | 7.02 | 1967-1968 | 3.26 | 1986-1987 |
| 20 | 8.15 | 1908-1909 | 4.18 | 1930-1931 | 6.68 | 1971-1972 | 3.67 | 1926-1927 | 6.99 | 1927-1928 | 3.29 | 1930-1931 |
| * D / | | • •, ,• | | 1 1 4 1 | | 1 10 | _ , | | | | | |

^{*} Detroit Area precipitation records date back to November 1874.

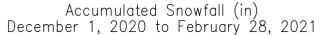
^{**} Flint Bishop precipitation records date back to January 1921.

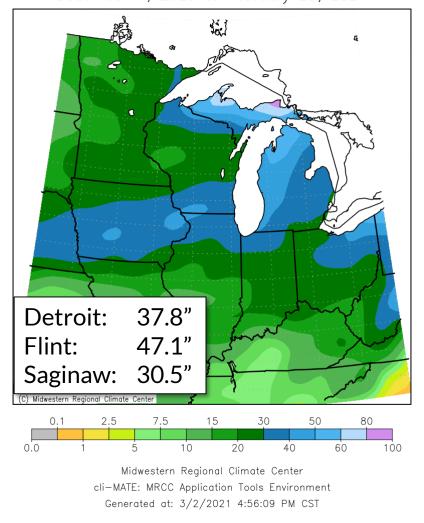
^{***} Saginaw Area precipitation records date back to January 1912.

Winter 2020-2021 – Regional Snowfall Summary

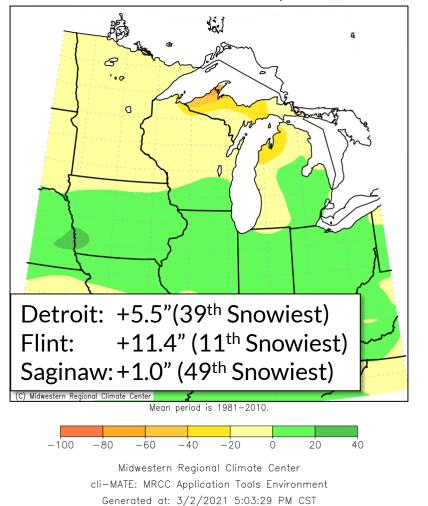


Total Seasonal Snowfall (left) & Percent of Mean (right)





Accumulated Snowfall (in): Departure from Mean December 1, 2020 to February 28, 2021

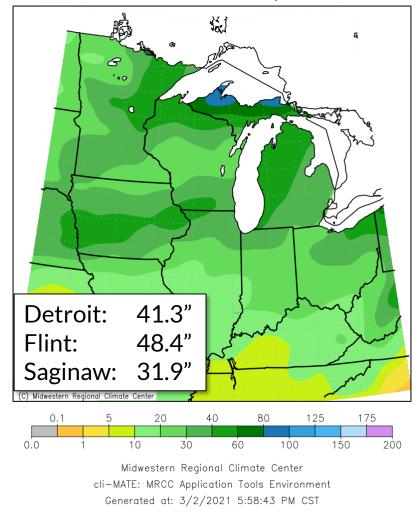


Season-to-Date 2020-2021 – Regional Snowfall Summary

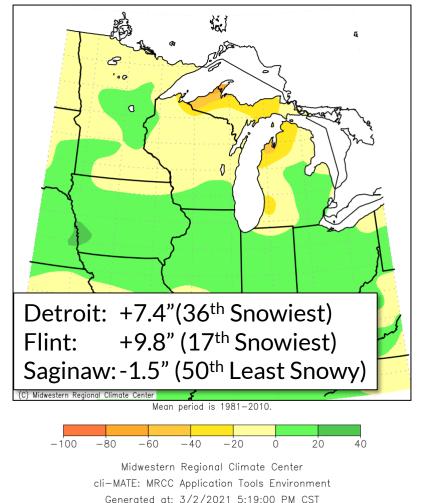


Total Seasonal Snowfall (left) & Percent of Mean (right)

Accumulated Snowfall (in) October 1, 2020 to February 28, 2021



Accumulated Snowfall (in): Departure from Mean October 1, 2020 to February 28, 2021



Generated at: 3/2/2021 5:19:00 PM CST



Winter 2020-2021 - Daily Temp/Precip Graphs



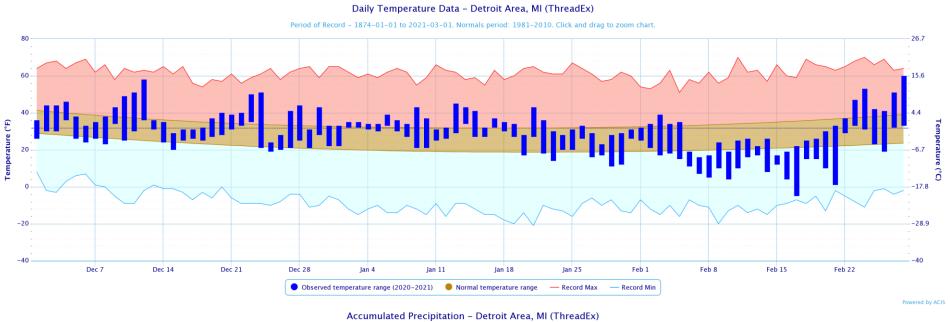
DETROIT

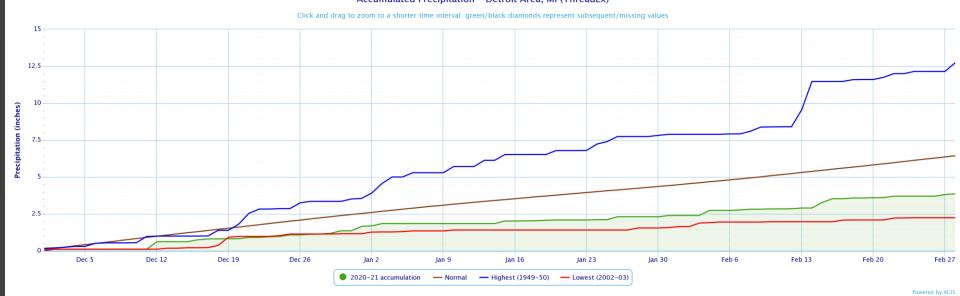
Temperature Stats:

Days at or below 0°F: 1 **Highest max:** 60°F (Feb 28) Lowest min: -5°F (Feb 17) Lowest max: 16°F (Feb 2) Highest min: 36°F (Dec 4 & Dec 12)

Precipitation Stats:

Days with 1" or more: 0 Days with 0.01" or more: 39 Highest 24 hr precip: 0.51" (Dec 12)





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Winter 2020-2021 - Daily Temp/Precip Graphs



FLINT

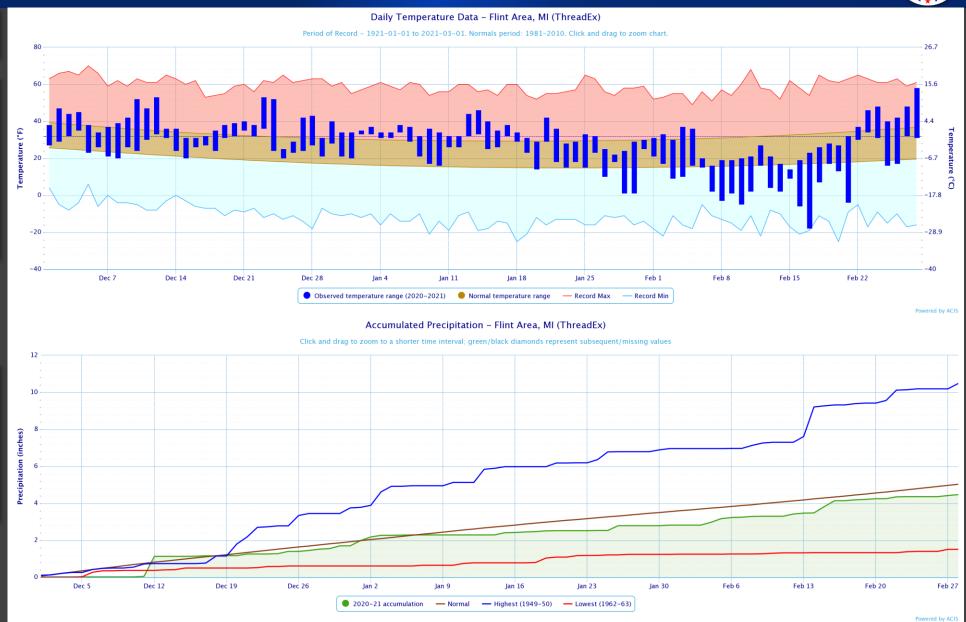
Temperature Stats:

Days at or below 0°F: 5
Highest max: 58°F (Feb 28)
Lowest min: -18°F (Feb 17)
Lowest max: 14°F (Feb 15)
Highest min: 36°F (Dec 23)

Precipitation Stats:

Days with 1" or more: 1
Days with 0.01" or more: 45
Highest 24 hr precip: 1.08"

(Dec 12)



Winter 2020-2021 - Daily Temp/Precip Graphs



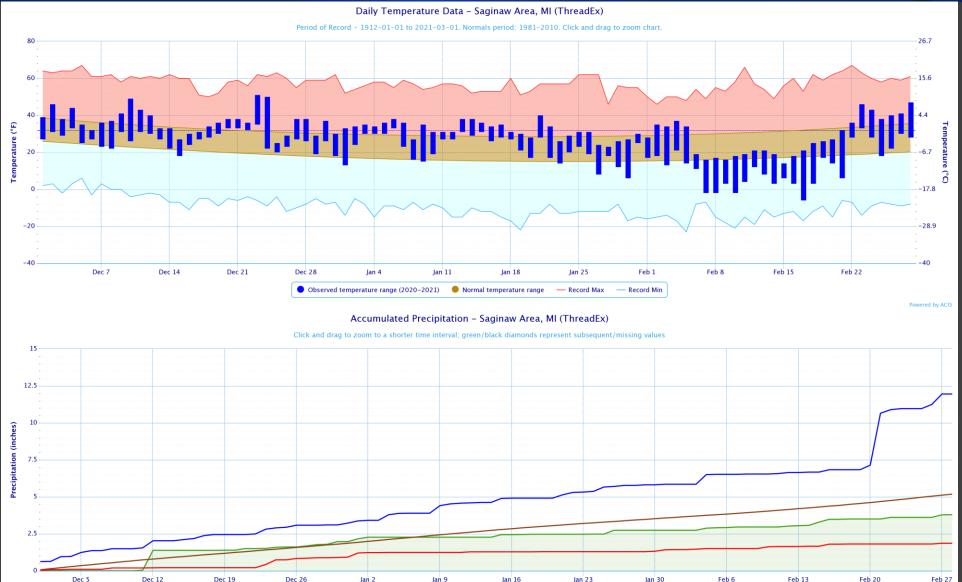
SAGINAW

Temperature Stats:

Days at or below 0°F: 4
Highest max: 51°F (Dec 23)
Lowest min: -6°F (Feb 17)
Lowest max: 14°F (Feb 15)
Highest min: 35°F (Dec 23)

Precipitation Stats:

Days with 1" or more: 1 Days with 0.01" or more: 31 Highest 24 hr precip: 1.34" (Dec 12)



NWSDetroit

Winter 2020-2021 - Significant Weather Events

Follow links for web summaries

January 26 Snowfall

weather.gov/dtx/winterweatheradvisory-01-26-2021

February 4-5 Snowfall

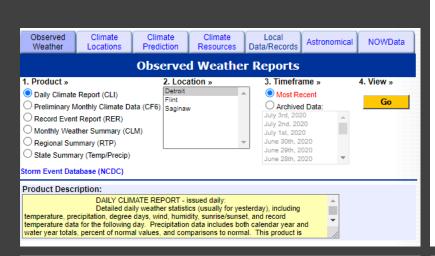
weather.gov/dtx/WinterWeatherAdvisory-02-04-05-2021

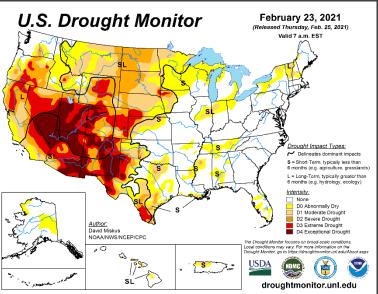
President's Day Winter Storm

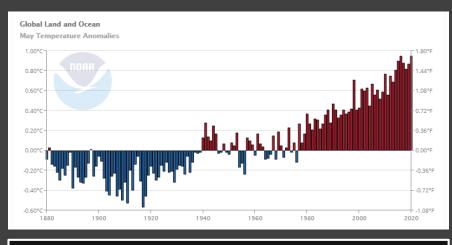
weather.gov/dtx/210215winterstorm

Additional Climate Resources









SE Michigan Climate Products

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

U.S. Drought Monitor

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

NOAA NCEI Climate at a Glance

ncdc.noaa.gov/cag/

Thank you to our COOP and CoCoRaHS volunteer weather observers!