



# Des Moines Climate



## 1878-2018

Compiled by: Craig Cogil – Updated 12/13/2018

### Temperature

Highest Daily Maximum:	110	July 25, 1936 and August 4, 1918
Lowest Daily Maximum:	-14	January 12, 1912
Highest Daily Minimum:	83	July 21, 1934, August 8, 1930 and July 26, 1930
Lowest Daily Minimum:	-30	January 5, 1884
Highest Daily Average:	95	July 15, 1936 and July 21, 1934
Lowest Daily Average:	-21.5	January 12, 1912
Highest Monthly Average:	85.8	July 1936
Lowest Monthly Average:	6.1	January 1912
Highest Winter Average:	32.3	1881/1882
Lowest Winter Average:	14.5	1884/1885 and 1935/1936
Highest Spring Average:	60.1	2012
Lowest Spring Average:	44.7	1960
Highest Summer Average:	79.3	1934
Lowest Summer Average:	68.4	1915
Highest Autumn Average:	58.7	1931
Lowest Autumn Average:	46.9	1880
Highest Yearly:	56.1	2012
Lowest Yearly:	46.7	1883

Most Consecutive Days of Max at 100 degrees or Higher:	15	July 3 – 17, 1936
Most Consecutive Days of Max at 90 degrees or Higher:	25	June 25 – July 19, 1936
Most Consecutive Days of Max at 32 degrees or Lower:	47	January 8 – February 23, 1978
Most Consecutive Days of Max at 0 degrees or Lower:	4	January 31 - Feb 3, 1996*
Most Consecutive Days of Min at 70 degrees or Higher:	22	July 15 – August 5, 2011
Most Consecutive Days of Min at 33 degrees or Higher:	212	March 30 – October 27, 2010
Most Consecutive Days of Min at 32 degrees or Lower:	114	Nov. 12, 1903 – March 5, 1904
Most Consecutive Days of Min at 0 degrees or Lower:	17	January 12 – 28, 1963*
Earliest Initial Occurrence of 70 degrees or Higher:	February 12, 1990	
Latest Initial Occurrence of 70 degrees or Higher:	April 30, 1944	
Earliest Final Occurrence of 70 degrees or Higher:	October 3, 1925	
Latest Final Occurrence of 70 degrees or Higher:	November 29, 1998	
Earliest Initial Occurrence of 90 degrees of Higher:	March 29, 1986	
Latest Initial Occurrence of 90 degrees or Higher:	July 20, 1945	
Earliest Final Occurrence of 90 degrees or Higher:	June 25, 1950	
Latest Final Occurrence of 90 degrees or Higher:	October 12, 1975*	

## Temperature Normals 1981-2010

Yearly Average:	50.8
Winter Average:	25.3
Spring Average:	51.1
Summer Average:	74.2
Autumn Average:	52.6

## Precipitation

Wettest Day:	6.18"	August 27, 1975
Wettest Month:	15.79"	June 1881
Driest Month:	0.01"	December 2002
Wettest Winter:	7.87"	1959/1960
Driest Winter:	0.98"	1976/1977
Wettest Spring:	19.32"	1991
Driest Spring:	2.87"	1988
Wettest Summer:	29.67"	1993
Driest Summer:	2.58"	1886
Wettest Autumn:	18.73"	1914
Driest Autumn:	1.56"	1950
Wettest Year:	56.81"	1881
Driest Year:	17.07"	1956
Highest 7-day total:	12.02"	September 10 – 16, 1914
Highest 30-day total:	17.09"	May 25 – June 23, 1947
Highest 90-day total:	29.44"	June 28 – September 25, 1993
Consecutive Days of No Measured Rain:	45	October 2, 1952 – November 15, 1952
Consecutive Days of a Trace or more:	21	April 6 – 26, 1992 and Oct. 18 – Nov. 7, 1885
Consecutive Days of 0.01 or more:	12	May 25 - June 5, 1903
Consecutive Days of 0.10 or more:	8	October 19 – 26, 1908
Consecutive Days of 0.50 or more:	4	August 8 - 11, 2010*
Consecutive Days of 1.00 or more:	4	August 13 – 16, 1900

## Precipitation Normals 1981-2010

Yearly Average:	36.02"
Winter Average:	3.70"
Spring Average:	10.90"
Summer Average:	13.54"
Autumn Average:	7.88"

## Snowfall

Snowiest Day:	19.8"	January 1, 1942
Snowiest Month:	37.0"	January 1886
Snowiest Season:	72.0"	1911-1912
Least Snow in a Season:	8.3"	1965-1966
Snowiest Calendar Year:	78.2"	1886
Least Snow Calendar Year:	2.3"	1889
Highest 7-day total:	26.2"	December 26, 1941 – January 1, 1942
Highest 30-day total:	40.2"	February 21 – March 21, 1912
Highest 90-day total:	65.0"	December 23, 1911 – March 21, 1912
Most Snow on Ground:	22"	February 11, 1905 and January 1, 1942
Consecutive Days of No Measured Snow:	277	February 23 – November 26, 1889
Consecutive Days of a Trace or more:	18	January 10 – 27, 2011
Consecutive Days of 1.0" or more:	5	December 5 – 9, 1919
Consecutive Days with 1" Snowdepth:	94	from December 7, 2009 to March 10, 2010
Earliest Initial Occurrence of Trace:		September 24, 1985
Earliest Initial Occurrence of 0.1":		October 10, 1932 and 2009

Earliest Initial Occurrence of 1”:	October 10, 2009
Latest Initial Occurrence of Trace:	December 2, 1939
Latest Initial Occurrence of 0.1”:	December 26, 1939
Latest Initial Occurrence of 1”:	February 2, 1989
Earliest Final Occurrence of Trace:	March 7, 2012
Earliest Final Occurrence of 0.1”:	February 10, 1981
Earliest Final Occurrence of 1”:	January 12, 1966
Latest Final Occurrence of Trace:	May 28, 1947
Latest Final Occurrence of 0.1”:	May 15, 1907
Latest Final Occurrence of 1”:	May 3, 1907 and 2013

## Snowfall Normals (1981-2010)

Season Average (July-June):	35.3”
January Average:	8.5”
February Average:	7.9”
March Average:	5.2”
April Average:	1.8”
May to September Average:	0.0”
October Average:	0.4”
November Average:	2.5”
December Average:	9.0”

## Frost/Freeze

Earliest Initial Occurrence of 36 degrees:	September 13, 1902
Latest Initial Occurrence of 36 degrees:	November 7, 1947
Earliest Final Occurrence of 36 degrees:	April 6, 1977
Latest Final Occurrence of 36 degrees:	May 31, 1889
Earliest Initial Occurrence of 32 degrees:	September 22, 1995*
Latest Initial Occurrence of 32 degrees:	November 11, 1882
Earliest Final Occurrence of 32 degrees:	March 28, 1925
Latest Final Occurrence of 32 degrees:	May 29, 1947
Earliest Initial Occurrence of 28 degrees:	September 28, 1942
Latest Initial Occurrence of 28 degrees:	November 26, 2009
Earliest Final Occurrence of 28 degrees:	March 9, 2012
Latest Final Occurrence of 28 degrees:	May 7, 1931*

\*- Indicates the event is tied with a previous day(s), month(s) or year(s).

### Brief Metadata:

The observation history of Des Moines basically involves downtown sites and the airport. The first downtown location was at the northeast corner of 6<sup>th</sup> Avenue and Walnut Street from August 10, 1878 to December 31, 1886. From January 1, 1887 to March 31, 1889 the location of observations was a block east from the original site at the southwest corner of 5<sup>th</sup> Avenue and Walnut Street. The next location was a block and a half south at the northeast corner of 5<sup>th</sup> Avenue and Court from April 1, 1889 to September 30, 1929. The final downtown location was on the southeast corner of East 1<sup>st</sup> Street and Walnut from October 1, 1929 to January 2, 1974.

Observation at the airport began on February 1, 1928 with the observation equipment placed at various locations on the airfield. The exact location of the observations from February 1, 1928 to January 31, 1938 is not clear other than they were taken near the airfield. From February 1, 1938 to October 15, 1950 observation were made at the Municipal Hanger at the airfield. The observation

site then moved to the current terminal building on October 16, 1950 until November 30, 1995. On December 1, 1995, the DSM ASOS was commissioned with observation moving to near centerfield on the airfield. Upon commissioning of ASOS, snowfall observations moved to the Des Moines Waterworks until December 31, 1996. From January 1, 1997 to November 30, 2004, snow observation were done at the NWS office in Johnston then returned to the Des Moines Airport on December 1, 2004.

The Des Moines climate record is a compilation of observation data from the downtown locations from August 10, 1878 to August 31, 1939. The airport observations were used from September 1, 1939 to present.

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