CLIMATOLOGICAL SUMMARY

CLIMATOGRAPHY OF THE U. S. NO. 20 - 32

MINOT, NORTH DAKOTA

Latitude 48° 16′ N Longitude 101° 17′ W

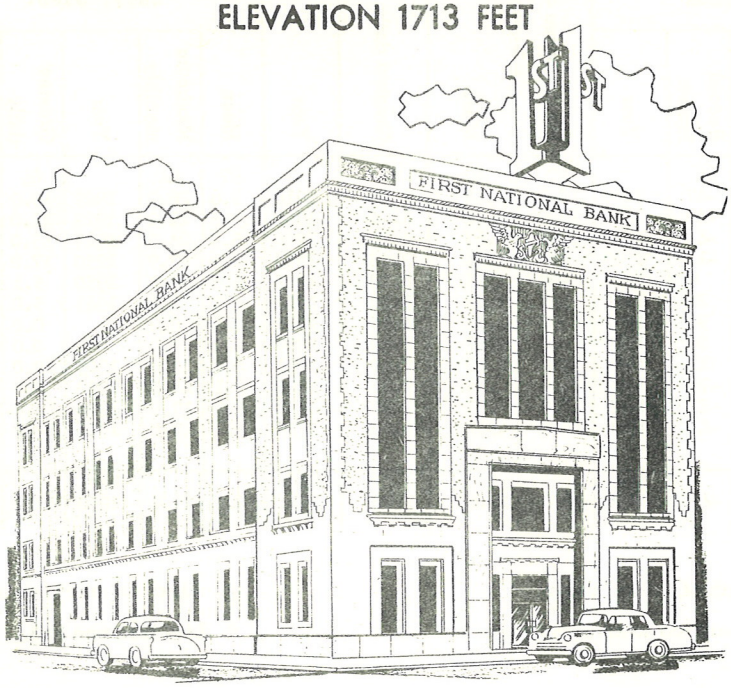
ELEVATION 1713 FEET

Data Compiled

From Official

U. S. Weather

Bureau Records



Prepared by

Weather Bureau

State Climatologist

For North Dakota

In Cooperation

with

First

National Bank

Minot,

North Dakota

Let the First National Skyline Weather Guide be Your Guide to Friendly Banking Service

Climate of Minot. North Dakota

Minot is located in east central Ward County in northwestern North Dakota some 60 miles west of the geographical center of North America. The Souris River flows southeastward out of Canada, enters north central Ward County, and continues southeastward through Minot. The Des Lacs River flows southward out of Canada, enters extreme northwestern Ward County, and enters the Souris River a few miles northwest of Minot. The Des Lacs River in combination with the Souris River forms a natural boundary between different topographic features of the county. To the northeast lies level to gently rolling farm and grassland. To the southwest lies more typical range land which is generally more rolling and at a higher elevation. A range of hills extends from the west central part of the county southeastward to the south central and southeastern part. Highest elevations are more than 2100 feet above mean sea level. Ward County is a diversified dry land farming area. Principal cash crops include wheat, barley, and flax. There is an extensive cattle raising and dairy industry.

These topographic features exert only a minor influence on the weather patterns; therefore, the climate of Minot can be regarded as quite typical of the entire county.

Basically the climate of Minot is classified as continental in character. This is enhanced by the presence of the Rocky Mountains far to the west which effectively limits the modifying influence of maritime air masses from the Pacific Ocean. On the other hand there are no obstacles to air movement from the north or from the south. Consequently summers tend to be quite warm with occasional hot spells but with very few days that can be described as humid. Winters tend to be cold although there is a great deal of variation from day to day, month to month, and even year to year. Cold arctic outbreaks can be expected several times every winter, but there are compensating periods of mild weather which can be very pleasant indeed.

The average temperature during the summer is about 66 degrees. July is the warmest month and will normally have 7 days when the temperature reaches or exceeds 90 degrees. There is a total of 18 days each year when the temperature reaches 90 degrees or higher. The highest ever recorded was 109 on June 20, 1910, and also on July 11, 1936. The average temperature during the winter months of December, January, and February is about 11 degrees. The temperature will drop to zero or below on about 55 days each year. The lowest ever recorded was 49 below on February 15, 1936. However, we can expect the temperature to climb to above 32 degrees on 24 days during the winter months.

The average annual precipitation at Minot is 15.62 inches. Of this amount nearly 50 per cent falls during May, June, and July, and more than 75 per cent falls during the crop season April through September. This distribution permits a vigorous agriculture to flourish in most years. Total annual precipitation has ranged from 7.13 inches in 1934 to 24.90 inches in 1941. Precipitation of .10 inch or more can be expected on the average to occur on 39 days each year, and 1.00 inch or more can be expected on 2 or 3 days each year. Summertime precipitation is usually in the form of thunderstorms which can be expected on about 30 days each year. June is normally the wettest month of the year. The greatest amount ever recorded in any single month was 10.63 inches in June 1944. The likelihood of receiving 1.00 inch or more in a 7 day period is greatest the latter part of June when the chance is about once in 3 years. The probability of a dry 7 day period, trace or less, is greatest, apparently, in late October and early November when the chance is nearly once in 2 years. Rainfall intensities of about 1.00 inch in one hour, 1.50 inches in 6 hours, and 1.90 inches in 24 hours can be expected once in 2 years. About 32 inches of snow falls on the average each year. The seasonal snowfall has ranged from 100 inches in the winter of 1949-1950 to less than 7 inches in the winter of 1930-1931. Nearly 28 inches of snow fell in April 1950 for the greatest monthly amount, and 17 inches fell in a single day on April 24, 1950. Measurable snowfall can be expected about once in 2 years in October, 2 years in 3 in April, and 1 year in 8 in May. The ground is usually covered with snow from early in December to the middle of March.

Based upon a summary of wind data from December 1948 to June 1960, the prevailing wind direction is northwest in all months being most pronounced during the winter season. In the summer winds from a southerly direction blow nearly as often. April is the windiest month with an average wind speed of nearly 14 miles per hour. The average speed throughout the year is a little over 12 miles per hour. The strongest winds are usually from the northwest. The highest observed wind speed, from hourly observations, during this period was 55 miles per hour.

Sunshine and humidity data are not available for the Minot area, but records at Devils Lake and Williston should be a close approximation to those prevailing in the Minot area.

Possible sunshine during the year averages a little over 60 per cent ranging from about 75 per cent in July to 45 to 50 per cent in November and December. The average sky cover during the year is six tenths. About 230 days each year would be classified clear or partly cloudy. Relative humidity averages nearly 80 per cent the year around during early morning hours. In summer the relative humidity will fall to less than 50 per cent during most afternoons, while in the winter it will average about 70 per cent during the afternoon.

Alfred A. Skrede
State Climatologist
U. S. Weather Bureau
Bismarck, North Dakota

MEANS AND EXTREMES FOR PERIOD

Month	Temperature (°F) Means: Daily maximum	Daily minimum	Monthly	Extremes: Record highest	Year	Record lowest	Year	** Mean degree days	Precipitation Totals (Inches): Mean	Greatest daily	Year	Snow, Sleet: Mean	Maximum monthly	Year	Greatest daily	Year	Mean number of days: Precip. .10 inch or more	Temperatures: Max. 90° and above	Max. 32° and below	Min. 32° and below	Min. 0° and below	Month
(a)	57	57	57	64		64		57	57	64		57	64.		64		57	57	57	57	57	
J	17.5	-3.6	7.0	59	1906	-47	1916	1800	.48	1.00	1916	5.6	26.2	1949	10.0	1916	2	0	25	31	19	J
F	21.7	0.8	11.3	66	1958	-49	1936	1500	.44	1.20	1922	4.8	21.2	1922	12.0	1922	2	0	21	28	14	F
M	34.4	13.2	23.8	80	1910	-40	1897	1280	.63	1.07	1950	5.7	21.5	1943	15.0	1920	2	0	13	30	6	M
A	53.1	28.3	40.7	98	1915	-11	1899	730	1.24	2.40	1903	3.1	27.9	1950	17.0	1950	3	*	2	20	*	A
M	66.1	39.8	53.0	105	1934	9	1909	400	2.15	3.00	1903	0.5	18.3	1950	5.1	1950	5	1	*	7	0	M
J	75.0	49.9	62.5	109	1910	24	1915	140	3.25	3.70	1914	0.1	5.0	1943	5.0	1943	7	2	0	1	0	J
J	82.5	54.9	68.7	109	1936	30	1922	50	2.13	3.15	1935	0.0	0.0		0.0		5	7	0	*	0	J
A	80.8	51.7	66.3	107	1949	26	1915	60	1.87	2.40	1899	0.0	0.0		0.0		4	6	0	*	0	A
S	69.9	42.0	56.0	104	1915	11	1927	280	1.40	3.40	1903	0.2	10.0	1903	10.0	1903	3	2	0	4	0	S
O	57.2	31.7	44.5	93	1897	-16	1919	640	.86	1.26	1924	2.1	24.2	1932	9.0	1932	2	*	1	16	*	O
N	37.2	17.1	27.2	75	1904#	-27	1905	1130	.70	2.20	1922	5.0	19.0	1906	12.0	1919#	2	0	11	28	3	N
D	23.9	3.8	13.9	66	1939	-44	1916	1580	.47	1.20	1918	5.1	17.0	1916	12.0	1918	2	0	20	31	13	D
Year	51.6	27.5	39.5	109	July 1936#	-49	Feb. 1936	9590	15.62	3.70	June 1914	32.2	27.9	April 1950	17.0	April 1950	39	18	93	196	55	Year

(a) Average length of record, years.

T Trace, an amount too small to measure.

** Base 65°F

Also on earlier dates, months, or years.

* Less than one half.

MONTHLY AND SEASONAL SNOWFALL

	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1905-1906	0	0.4	13.5	0	7.6	1.0	1.5	T	0.5	0	24.5
1906-1907	0	0	19.0	8.7	14.2	1.8	5.8	1.1	0.8	0	51.4
1907-1908	0	0	0.5	3.5	0.3	4.6	7.4	7.2	T	0	23.5
1908-1909	0	3.0	9.6	0.9	3.1	2.7	5.0	2.5	0.3	0	27.1
1909-1910	0	1.0	2.2	8.8	0.5	5.3	T	0.1	0	0	17.9
1910-1911	0	0	8.0	4.8	5.3	11.4	2.4	3.0	0	0	34.9
1911-1912	0	0.5	4.0	2.5	5.5	0.5	6.0	2.7	0	0	21.7
1912-1913	0		0.5	2.2	5.0	0.2	5.6	0.5	0	0	•
1913-1914	2.5	1.0	0.4	T	3.5	3.1	8.0	2.0	0	0	20.5
1914-1915	0	0	3.5	2.6	2.5	2.0	T	0	1.0	0	11.6
1915-1916	0	T	2.5	7.0	24.0	6.5	13.5	3.0	0	0	56.5
1916-1917	0	2.0	2.0	17.0	3.0	7.0	T	0.5	0	0	31.5
1917-1918	0	12.5	3.5	9.5	4.2	1.8	0.5	3.0	0	0	35.0
1918-1919	0	0.2	12.2	15.0	2.2	8.0	16.2	2.0	0	0	55.8
1919-1920	T	14.5	12.5	8.0	6.0	2.5	15.0	0	0	0	58.5
1920-1921	0	0	1.0	2.0	3.0	5.0	9.0	7.0	0	0	27.0
1921-1922	0	0	7.2	0.8	2.2	21.2	6.0	4.0	0	0	41.4
1922-1923	0	3.0	2.0	13.0	1.5	4.0	4.0	6.5	0	0	34.0
1923-1924	0	1.0	1.0	3.5	3.0	4.0	0	8.5	2.5	0	23.5
1924-1925	0	0	0.2	7.3	0	2.0	7.0	0	0	0	16.5
1925-1926	0	4.0	T	1.5	2.7	1.7	0	3.0	0	0	12.9
1926-1927	0	T	6.0	6.0	4.0	2.0	4.0	0	0	0	22.0
1927-1928	0	0	8.0	2.5	1.0	0	4.0	5.0	0	0	20.5
1928-1929			T	1.5	1.0	3.5	5.8	1.0	0	0	
1929-1930	0	5.9	3.9	7.4	0.8	9.1	0.2	0	0	0	27.3
1930-1931	0	0	0.6	0.2	0.5	0.7	4.7	0	0	0	6.7
1931-1932	0	T	1.9	0.3	5.4	2.5	4.9	0.3		0	
1932-1933	0	24.2	0.6	0	8.7	1.8	3.5	7.0	0	0	45.8
1933-1934	0	2.5	8.0	9.5	2.0	0.8		0	0	0	
1934-1935	3.0	0	0.1	4.1	8.7	3.0	2.5	1.0		T	

	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1935-1936	0	0.5	13.0	5.9	4.0	9.0	5.0	T	0	0	37.4
1936-1937	0	0.5	2.0	2.5	1.8	1.0	1.0	4.0	0	0	12.8
1937-1938	0	0	2.6	6.2	5.4	4.9	0.5	T	0	0	19.6
1938-1939	0	0	10.2	6.3	9.0	12.3	11.5	1.2	0	0	50.5
1939-1940	0.3	2.4	0	1.0	3.4	11.0	5.3	3.9	T	0	27.3
1940-1941	0	0	15.3	3.7	5.2	3.8	6.6	2.8	T	0	37.4
1941-1942	0	0.8	11.2	6.5	1.3	5.2	14.2	0.5	0	0	39.7
1942-1943	4.0	T	3.3	7.3	5.7	2.9	21.5	T	T	5.0	49.7
1943-1944	0	1.0	3.8	0.7	5.8	4.8	5.1	0.7	T	0	21.9
1944-1945	T	0	5.0	0.8	3.0	2.0	5.5	5.8	T	0	22.1
1945-1946	0.2	T	7.3	9.7	10.1	8.9	0.5	T	0.4	0	37.1
1946-1947	T	12.7	5.5	4.2	2.2	2.3	3.2	10.6	T	0	40.7
1947-1948	T	0.6	7.1	4.0	2.2	13.7	6.6	11.5	0	0	45.7
1948-1949	0	T	5.8	14.7	26.2	8.8	8.9	0	0	0	64.4
1949-1950	0	2.3	1.0	14.3	14.6	5.0	16.6	27.9	18.3	0	100.0
1950-1951	T	1.0	5.2	7.6	14.4	9.6	8.6	5.2	T	0	51.6
1951-1952	0.6	1.3	3.5	5.9	14.2	2.0	2.4	T	0	0	29.9
1952-1953	0	0.1	0.7	2.4	8.2	2.3	11.3	16.4	3.0	0	44.4
1953-1954	0	T	3.9	7.3	8.6	1.1	9.5	3.5	0.9	0	34.8
1954-1955	T	T	1.1	1.6	5.5	3.8	7.3	1.4	0	0	20.7
1955-1956	0	1.6	9.7	4.1	4.4	1.8	13.2	0.3	T	0	35.1
1956-1957	T	0	4.0	4.0	4.2	2.6	0.9	0.4	0	0	16.1
1957-1958	T	2.6	2.7	1.8	2.9	11.6	1.1	T	0	0	22.7
1958-1959	T	T	14.9	1.9	2.5	6.4	1.0	1.0	T	0	27.7
1959-1960	T	10.1	15.9	1.2	10.5	0.5	3.3	4.6	0.2	0	46.3
1960-1961	0	T	5.3	4.7	0.4	11.8	0.6	4.0	T	0	26.8
1961-1962	T	T	T	6.5	10.2	5.8	6.6	0.2	0	0	29.3

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1906	11.7	10.8	16.1	47.0	49.5	61.7	67.2	66.0	61.7	46.1	24.7	8.0	39.2
1907	-6.9	11.0	22.9	31.4	44.2	62.2	66.0	62.9	50.4	43.4	30.4	20.2	36.5
1908	16.3	14.8	19.6	43.5	49.7	60.7	68.6	61.6	59.8	41.6	32.4	15.8	40.4
1909	2.9	12.3	24.2	32.8	52.2	62.4	67.0	69.0	60.4	42.5	28.0	5.3	38.3
1910	11.0	6.4	42.6	49.2	52.4	68.6	70.0	63.2	55.4	48.0	23.2	12.6	41.9
1911	-2.4	8.2	30.6	42.2	54.8	66.3	65.2	62.0	54.0	43.8	19.7	17.6	38.5
1912	-2.8	13.6	15.4	43.8	54.7	62.8	64.4	62.4	50.2	45.0	31.9	21.5	38.6
1913	4.1	8.6	16.9	45.6	51.8	65.8	65.6	68.4	56.3	39.8	35.2	24.4	40.3
1914	15.2	1.6	26.8	40.8	55.6	61.2	72.4	63.9	58.5	48.7	34.7	6.0	40.5
1915	4.8	16.0	23.5	48.6	52.2	56.7	59.6	62.8	52.8	45.7	26.4	15.0	38.7
1916	-10.0	6.6	19.2	39.3	52.1	59.3	73.2	67.6	56.9	39.9	29.4	1.0	36.2
1917	2.0	-0.8	22.2	34.8	50.0	59.0	70.2	64.0	54.8	31.5	35.6	-1.4	35.2
1918	-1.6	9.4	32.8	38.5	48.0	60.6	62.0	62.4	51.3	42.4	28.4	18.5	37.7
1919	19.0	4.7	14.6	40.7	55.0	66.5	69.3	66.0	56.3	30.4	12.6	5.6	36.7
1920	-0.6	10.8	18.4	29.3	51.7	59.7	67.4	67.7	56.5	46.1	25.2	12.2	37.0
1921	13.0	17.6	22.6	38.6	51.7	65.0	69.6	63.2	53.2	45.3	18.6	14.4	39.4
1922	5.0	-2.0	23.5	39.0	53.4	61.4	62.6	66.1	55.6	41.8	28.8	4.8	36.7
1923	6.0	1.6	14.4	34.8	51.8	64.6	67.8	59.1	56.4	46.2	36.8	22.1	38.5
1924	3.4	22.2	26.4	38.8	46.7	57.6	66.7	62.2	55.8	50.6	27.8	6.2	38.7
1925	11.0	16.3	26.0	47.4	55.2	62.0	66.6	66.5	56.8	36.9	28.2	13.3	40.5
1926	19.0	24.0	27.4	43.5	59.2	61.6	71.8	65.0	52.3	43.0	23.0	9.7	41.6
1927	11.0	13.4	31.1	42.8	47.0	62.8	66.2	63.4	56.4	46.6	17.0	-3.1	37.9
1928	13.8	19.3	27.7	35.2	59.0	57.9	67.9	62.8	53.4	43.1	31.8	20.8	41.1
1929	-3.1	4.1	31.6	39.8	47.8	59.9	69.1	66.9	51.1	46.2	26.0	10.3	37.5
1930	-2.3	20.4	25.6	46.4	49.6	62.5	71.4	69.2	54.5	40.0	29.2	22.8	40.8
1931	23.8	30.6	26.5	44.0	52.6	67.6	69.9	66.6	58.8	47.4	30.6	22.8	45.1
1932	9.6	14.0	19.4	43.8	55.2	66.8	69.0	65.8	54.9	37.0	25.3	14.4	39.6
1933	12.2	9.0	29.4	38.4	54.5	68.8	70.0	69.0	59.2	41.2	29.1	8.0	40.7
1934	16.8	21.7	28.3	44.2	62.6	62.2	70.6	66.2	50.6	50.2	33.8	12.6	43.3
1935	2.8	23.6	25.9	37.4	49.3	59.4	72.4	63.7	55.6	45.2	15.4	12.6	38.6
1936	-7.7	-15.4	24.3	32.0	59.0	64.2	79.0	67.4	57.2	42.8	28.4	16.3	37.3
1937	-7.6	9.8	27.8	41.2	56.9	66.3	71.4	71.8	58.5	44.3	26.0	13.5	40.0
1938	11.0	7.8	34.8	42.6	52.4	64.5	70.5	69.4	63.6	51.3	24.2	19.0	42.6
1939	14.0	-1.0	22.8	43.4	61.6	59.5	74.3	68.6	59.5	42.0	36.8	29.0	42.5
1940	5.9	16.2	25.2	38.6	56.4	62.4	70.9	68.5	63.6	50.0	20.6	19.5	41.5
1941	10.5	11.1	24.6	43.7	57.1	63.6	69.6	67.0	53.6	44.4	29.6	21.8	41.4
1942	19.4	14.1	29.4	44.8	49.4	59.2	66.2	64.8	53.8	46.0	26.0	9.2	40.2
1943	-2.6	14.4	16.1	43.9	49.6	58.8	69.8	66.4	55.2	49.0	28.6	22.2	39.3
1944	21.3	8.6	12.8	41.0	58.0	60.4	67.8	65.0	56.5	50.4	24.8	14.6	40.1
1945	11.6	14.7	32.0	35.8	47.1	57.4	67.5	66.7	52.6	45.9	19.2	4.8	37.9
1946	11.4	9.0	33.3	48.4	50.4	63.1	70.8	64.8	56.8	39.5	24.6	12.6	40.4
1947	15.7	7.2	21.0	39.6	49.8	59.4	70.6	70.2	54.4	51.2	22.1	14.4	39.6
1948	11.4	6.2	15.4	36.8	55.1	62.5	69.2	68.3	63.4	46.7	28.4	9.5	39.4
1949	1.1	1.2	20.3	48.0	56.2	62.6	68.6	71.3	56.6	42.9	37.9	6.3	39.4
1950	-13.4	7.7	18.5	31.5	48.7	61.1	65.5	63.2	57.5	46.8	20.2	9.3	34.7
1951	3.0	10.5	9.9	37.8	56.4	58.9	68.4	62.1	52.6	40.8	21.4	5.6	35.6
1952	3.5	17.7	18.0	50.7	54.6	63.0	66.8	66.7	59.7	43.6	30.5	20.2	41.3
1953	14.3	18.4	24.9	34.8	51.2	62.1	67.9	69.4	57.2	51.2	35.8	20.6	42.3
1954	-2.8	30.4	21.6	37.3	49.0	59.8	68.8	65.6	53.5	44.0	36.0	25.2	40.7
1955	10.6	6.7	17.3	46.5	55.3	61.6	70.4	70.0	54.8	46.8	12.9	4.0	38.1
1956	4.4	9.7	21.3	35.1	53.0	67.6	66.0	66.1	53.8	47.2	28.8	17.9	39.2
1957	2.0	12.6	26.3	39.8	55.2	61.0	74.0	65.8	54.8	42.9	28.4	22.2	40.4
1958	17.5	9.8	24.1	43.4	57.2	59.3	64.8	68.5	56.8	46.3	26.0	11.9	40.5
1959	2.2	7.3	32.5	40.8	50.5	65.2	70.7	68.6	52.5	36.7	19.8	24.5	39.3
1960	7.8	12.0	18.3	40.4	54.8	60.7	71.9	68.6	59.5	47.3	27.7	16.4	40.5
1961	15.9	19.8	31.5	36.8	52.5	70.9	69.7	75.1	52.2	46.7	28.5	7.0	42.2
1962	8.7	6.2	21.7	43.6	51.6	65.0	65.9	69.4	56.6	49.9	36.2	19.9	41.2

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1906	.76	.10	.15	1.03	5.28	5.06	1.20	1.59	.53	1.03	3.13	.87	20.73
1907	1.42	.18	.62	.60	.16	2.13	3.10	1.42	1.01	.62	.05	.36	11.67
1908	.03	.46	.74	1.56	2.57	2.67	2.33	3.54	1.19	1.65	.96	.09	17.79
1909	.31	.27	.51	.42	2.38	3.20	1.47	.55	.49	1.03	.22	.88	11.73
1910	.05	.53	1.27	1.77	1.13	.48	2.28	.51	.55	.67	.87	.48	10.59
1911	.53	1.14	.26	.30	2.09	3.63	1.21	4.87	2.28	1.14	.46	.25	18.16
1912	.55	.05	.60	2.47	4.67	1.62	3.29	1.56	2.13	2.10	.05	.24	19.33
1913	.50	.02	.56	.94	1.62	1.14	2.00	3.76	1.58	1.05	.19	T	13.36
1914	.35	.31	.80	2.01	2.43	9.94	1.32	2.44	.48	.30	.40	.26	21.04
1915	.25	.20	.35	.66	2.94	4.31	1.68	1.32	2.45	.29	.87	.70	16.02
1916	2.40	.67	1.35	1.61	.75	3.29	.62	2.70	.87	1.13	.45	1.70	17.54
1917	.30	.70	T	1.87	.06	.97	2.62	1.14	1.24	1.46	.35	.95	11.66
1918	.43	.18	.14	2.25	1.61	.98	3.11	2.42	.25	.44	2.62	1.50	15.93
1919	.22	.80	1.62	1.56	3.11	2.02	.43	.69	3.18	1.83	1.25	.80	17.51
1920	.60	.25	1.60	.77	.95	3.81	1.20	2.17	1.25	.48	.18	.50	13.76
1921	.30	.50	1.80	1.85	1.49	2.69	2.49	.77	4.36	.51	.74	.17	17.67
1922	.23	2.12	.60	.55	2.46	3.60	2.79	1.75	1.12	.36	3.33	1.33	20.24
1923	.15	.40	.40	1.66	1.39	3.01	2.33	1.18	1.50	1.52	.55	.35	14.44
1924	.30	.45	.05	1.45	.87	4.78	1.69	1.66	1.21	2.20	.02	.38	15.06
1925	.00	.20	.70	.76	.57	3.56	1.00	.77	2.23	.72	.17	.20	10.88
1926	.28	.25	.00	.74	2.05	2.06	.45	2.73	2.89	.77	.60	.60	13.42
1927	.40	.20	.75	1.67	5.90	2.37	4.08	3.34	.12	1.45	.80	.25	21.33
1928	.10	.00	.40	.52	1.58						T	.10	
1929	.10	.14	.29	.23	3.19	1.16	.46	.17	1.31	1.78	.26	.57	9.66
1930	.05	.67	.01	.45	2.48	4.07	.30	1.00	1.17	.86	.05	.02	11.13
1931	.06	.05	.40	.00	1.26	1.65	1.79	3.31	2.78	.29	.95	.02	12.56
1932	.37	.17	.34	2.40	3.45	4.78	3.63	1.34	.40	2.24	.05	.03	19.20
1933	.46	.12	.24	2.56	4.13	1.43	2.16	.63	.54	.79	.79	.92	14.77
1934	.21	.10	.42	.16	.24	2.45	1.09	.41	1.32	.07	.25	.41	7.13
1935	.87	.30	.37	.80	2.84	1.99	7.20	1.21	.30	.05	1.31	.59	17.83
1936	.33	.69	.33	.06	1.23	1.70	.42	.78	1.83	.04	.20	.22	7.83
1937	.18	.10	.04	2.16	1.40	3.94	1.31	1.01	2.31	1.54	.34	.51	14.84
1938	.49	.51	.45	1.09	2.42	2.49	2.88	1.37	.15	1.18	1.67	.52	15.22
1939	.39	.52	.58	.82	1.65	3.23	1.71	3.06	.61	.46	.09	.08	13.20
1940	.14	.79	.51	1.63	3.66	2.75	3.26	1.95	.45	.47	.76	.21	16.58
1941	.44	.28	.54	1.92	3.76	5.59	1.87	2.48	5.74	1.09	.78	.41	24.90
1942	.20	.30	1.69	1.50	1.27	2.09	3.83	1.31	.79	.11	.21	.56	13.86
1943	.33	.25	1.71	2.33	2.70	4.74	4.04	3.48	.31	.31	.43	.07	20.70
1944	.63	.38	.42	.87	1.62	10.63	1.30	3.66	1.33	T	1.81	.04	22.69
1945	.29	.17	1.03	.75	1.79	2.23	3.11	1.16	.94	.56	.78	.96	13.77
1946	.83	.87	.50	.69	.20	1.39	2.24	1.77	.47	2.00	.36	.32	11.64
1947	.15	.20	.18	1.69	1.93	6.45	1.29	3.14	.59	.89	.70	.30	17.51
1948	.18	1.05	.50	3.03	1.23	2.12	5.84	2.29	.01	1.01	1.45	.82	19.53
1949	1.50	.84	.82	.52	4.63	2.33	2.37	.14	.40	.77	.10	.97	15.39
1950	1.07	.29	1.94	3.36	2.90	4.13	2.19	1.56	1.03	.24	.49	.61	19.81
1951	1.15	.94	.69	1.27	.87	4.30	.81	4.09	.99	.99	.25	.58	16.93
1952	1.41	.20	.24	T	.60	3.59	2.28	3.64	.78	.09	.27	.24	13.34
1953	.86	.29	1.72	3.27	6.02	7.12	.63	.83	.50	.96	.47	.70	23.37
1954	.81	.13	.93	1.52	1.64	6.50	.85	2.62	5.72	.27	.11	.18	21.28
1955	.56	.36	.61	1.11	2.36	1.24	1.21	1.27	1.67	.38	.81	.41	11.99
1956	.45	.18	1.01	.24	1.53	2.80	4.00	1.79	.57	.51	.80	.50	14.38
1957	.39	.20	.11	1.00	1.52	3.56	1.69	3.68	1.04	1.53	.34	.18	15.24
1958	.18	1.27	.11	.64	.59	2.29	3.48	.26	.84	.74	1.72	.23	12.35
1959	.25	.63	.29	.40	1.02	3.32	1.60	1.43	5.02	2.17	1.96	.12	18.21
1960	.89	.09	.48	1.23	2.49	1.78	1.00	3.34	.13	T	.58	.47	12.48
1961	.04	1.34	.24	1.81	1.53	.15	1.66	.25	2.98	T	T	.55	10.55
1962	.84	.58	.83	.22	4.28	4.64	3.16	1.64	.28	.93	.29	.42	18.11

PROBABILITY OF FREEZE OCCURRENCE IN SPRING

Dates on which chance of last occurrence of indicated temperature (or lower) decreases to

Temp (°F)	90%	75%	50%	25%	10%
32	May 7	May 14	May 21	May 28	Jun. 4
28	Apr. 26	May 3	May 10	May 17	May 24
24	Apr. 13	Apr. 21	Apr. 29	May 7	May 15
20	Apr. 4	Apr. 12	Apr. 20	Apr. 29	May 6
16	Mar. 23	Mar. 31	Apr. 9	Apr. 18	Apr. 26

PROBABILITY OF FREEZE OCCURRENCE IN FALL

Dates on which chance of first occurrence of indicated temperature (or lower) increases to

Temp (°F)	10%	25%	50%	75%	90%
32	Sep. 3	Sep. 9	Sep. 15	Sep. 21	Sep. 27
28	Sep. 15	Sep. 21	Sep. 28	Oct. 5	Oct. 11
24	Sep. 20	Sep. 28	Oct. 6	Oct. 14	Oct. 22
20	Oct. 1	Oct. 9	Oct. 18	Oct. 27	Nov. 4
16	Oct. 10	Oct. 18	Oct. 27	Nov. 5	Nov. 13

Monthly Maximum Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1906	59	54	60	86	95	83	93	101	101	89	62	40	101
1907	23	44	54	62	79	88	91	94	81	83	56	57	94
1908	49	45	51	85	79	90	95	91	100	78	68	43	100
1909	46	50	48	62	85	93	91	98	90	86	65	40	98
1910	43	42	80	91	84	109	104	95	92	89	64	40	109
1911	35	35	68	87	88	96	97	89	82	82	53	55	97
1912	40	42	55	76	84	98	93	90	85	82	54	48	98
1913	39	51	54	85	93	96	96	98	94	84	66	61	98
1914	56	42	76	80	95	89	99	98	92	89	69	42	99
1915	46	40	63	98	90	89	87	96	104	74	65	43	104
1916	32	45	49	76	93	84	98	96	98	76	70	53	98
1917	41	43	53	65	91	96	105	96	96	77	71	44	105
1918	42	48	70	70	92	102	97	87	85	77	59	53	102
1919	48	47	48	76	99	99	103	98	88	80	45	44	103
1920	37	38	57	56	85	91	99	101	94	90	58	43	101
1921	42	53	58	75	86	103	101	103	89	82	64	47	103
1922	38	37	48	79	85	95	96	99	95	83	52	44	99
1923	45	40	50	82	89	93	98	95	97	75	64	53	98
1924	45	59	50	70	81	83	92	98	92	79	60	48	98
1925	48	52	63	80	93	93	103	97	95	58	61	58	103
1926	48	51	70	89	98	96	104	98	85	70	68	43	104
1927	42	43	61	72	78	88	95	95	95	84	53	37	95
1928	49	56	70	84	100						63	46	
1929	34	38	73	70	86	91	104	102	98	82	58	45	104
1930	34	55	56	79	89	85	104	98	88	69	66	46	104
1931	54	58	52	83	92	105	108	95	100	81	70	47	108
1932	47	63	54	79	94	88	101	92	91	82	50	48	101
1933	46	45	63	76	93	103	102	99	96	76	59	50	103
1934	41	49	59	85	105	89	104	104	89	87	68	42	105
1935	40	58	64	73	74	90	95	99	91	82	40	39	99
1936	30	26	48	68	93	102	109	104	95	84	65	47	109
1937	27	44	63	70	94	98	105	104	92	81	62	40	105
1938	38	49	64	78	86	93	96	97	98	87	50	48	98
1939	42	43	73	89	94	90	103	100	96	72	69	66	103
1940	44	48	56	69	93	92	97	97	101	80	49	46	101
1941	45	42	61	79	95	93	94	105	89	78	61	59	105
1942	56	51	62	84	83	82	90	100	94	86	62	43	100
1943	45	42	54	77	85	84	92	89	87	85	53	51	92
1944	54	33	39	68	93	85	94	92	79	77	58	43	94
1945	41	44	68	69	82	94	93	98	97	84	55	42	98
1946	37	40	78	82	85	87	101	98	94	83	58	41	101
1947	44	41	47	86	82	80	96	103	88	82	56	41	103
1948	39	42	46	75	98	93	98	97	98	79	48	47	98
1949	45	43	42	87	91	94	99	107	90	84	70	56	107
1950	13	39	48	66	83	91	94	89	93	80	64	42	94
1951	37	37	44	79	88	88	100	86	81	77	53	46	100
1952	41	41	48	92	90	90	93	99	90	73	65	43	99
1953	45	41	55	73	83	90	91	93	89	92	69	47	93
1954	39	49	50	75	82	91	98	96	82	78	68	51	98
1955	35	39	64	78	89	89	97	98	93	85	57	41	98
1956	40	40	50	69	89	99	92	89	88	81	48	51	99
1957	32	43	62	81	80	84	100	100	86	87	51	47	100
1958	48	66	57	82	89	92	95	104	94	85	65	42	104
1959	41	35	63	82	85	99	99	99	93	71	55	43	99
1960	42	41	62	68	87	87	103	96	98	83	62	46	103
1961	48	54	65	71	89	97	94	100	83	84	70	51	100
1962	43	42	60	87	77	89	88	97	88	75	60	54	97

Monthly Minimum Temperature (°F)

Year	Jan.	Feb	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1906	-30	-29	-10	14	25	39	40	43	27	13	-11	-32	-32
1907	-32	-25	-10	10	10	33	45	33	19	9	0	-17	-25
1908	-31	-15	-17	-2	20	35	42	34	26	13	-3	-23	-23
1909	-35	-21	-2	7	9	41	41	32	34	10	-10	-27	-35
1910	-29	-27	11	18	28	30	45	34	26	16	-6	-21	-29
1911	-33	-22	-6	14	13	36	37	33	31	15	-11	-28	-33
1912	-41	-26	-19	18	26	35	34	40	22	22	11	-12	-41
1913	-33	-33	-16	18	25	35	46	43	26	8	6	-14	-33
1914	-29	-35	-11	10	23	35	41	31	29	16	1	-41	-41
1915	-40	-9	-15	5	20	27	33	26	25	16	0	-12	-40
1916	-27	-32	-22	17	25	34	41	40	15	14	-4	-44	-47
1917	-25	-43	-26	11	22	26	34	29	24	3	9	-38	-43
1918	-33	-33	-2	10	14	29	37	36	17	6	-1	-41	-41
1919	-40	-34	-35	13	21	27	30	33	20	-16	-26	-32	-40
1920	-42	-31	-24	-3	24	28	41	32	22	15	-8	-30	-42
1921	-20	-30	-17	5	18	35	41	31	28	17	-25	-32	-32
1922	-26	-33	-19	-1	26	35	30	38	23	11	-2	-32	-46
1923	-25	-35	-31	1	18	34	36	33	20	9	3	-22	-35
1924	-30	-15	1	18	20	30	43	41	23	23	-12	-34	-34
1925	-33	-22	-21	21	18	40	40	40	26	13	-9	-24	-24
1926	-15	-5	-1	5	23	29	43	41	20	11	-3	-22	-22
1927	-31	-10	3	14	20	36	37	36	11	23	-19	-29	-31
1928	-30	-9	-3	1	26						7	-15	-30
1929	-34	-36	1	14	13	30	42	35	26	23	-10	-26	-36
1930	-32	-15	-5	17	24	40	41	45	17	10	-6	-10	-32
1931	-13	-6	-9	11	15	39	44	43	30	22	-1	-13	-13
1932	-30	-23	-21	17	29	42	41	39	29	0	-12	-19	-30
1933	-17	-36	-7	11	26	40	42	38	29	12	-1	-29	-36
1934	-16	-20	-7	21	28	40	35	29	22	16	8	-32	-32
1935	-35	-12	-17	8	31	31	50	31	26	7	-16	-24	-35
1936	-32	-49	-11	-9	26	35	46	43	27	10	-16	-20	-49
1937	-36	-24	1	11	24	39	44	45	30	11	-15	-18	-36
1938	-30	-22	2	8	27	37	45	41	28	20	-12	-32	-32
1939	-23	-28	-17	5	29	35	49	39	18	-2	4	-13	-38
1940	-25	-18	-4	10	22	37	45	42	29	20	-22	-25	-25
1941	-23	-23	-9	18	30	33	38	42	22	10	-8	-15	-23
1942	-30	-21	0	15	23	28	40	39	12	3	-3	-19	-30
1943	-33	-20	-18	19	25	32	52	40	32	19	9	-14	-33
1944	-20	-28	-15	6	22	38	43	42	29	26	-9	-14	-28
1945	-21	-15	-20	18	20	35	43	46	22	14	-7	-26	-26
1946	-18	-27	3	22	23	33	47	39	27	19	-10	-28	-28
1947	-23	-27	-10	11	20	35	44	43	24	28	-6	-16	-27
1948	-23	-21	-29	4	27	37	48	43	34	14		-19	-29
1949	-32	-24	-9	22	29	41	44	39	29	19	6	-23	-32
1950	-33	-16	-15	11	26	34	43	37	31	24	-13	-23	-33
1951	-34	-22	-21	20	31	36	39	44	26	8	-11	-28	-34
1952	-25	-9	-19	15	29	41	45	41	32	13	-2	0	-25
1953	-23	-13	-19	8	26	37	49	46	28	23	9	-11	-23
1954	-34	-9	-13	-4	21	39	43	45	30	17	3	-11	-34
1955	-18	-25	-22	25	27	37	40	45	25	19	-15	-25	-25
1956	-22	-19	-14	14	29	42	47	36	29	22	-1	-20	-22
1957	-29	-17	1	4	33	40	51	41	23	6	1	-17	-29
1958	-16	-26	-4	13	20	37	42	36	29	22	-15	-21	-26
1959	-25	-23	14	15	25	37	48	44	22	15	-14	5	-25
1960	-21	-11	-15	17	25	37	45	44	32	6	-14	-15	-21
1961	-28	-18	11	11	23	42	46	48	28	18	2	-25	-28
1962	-30	-31	-29	16	24	35	45	40	34	21	15	-16	-31

STATION HISTORY

The systematic collection of climatological data was begun in January 1897 with the appointment of Mr. J. W. Rode as cooperative observer. In subsequent years there were numerous observers all taking observations in the city. Instrumental equipment consisted of maximum and minimum thermometers in a standard instrument shelter and an 8-inch rain gage. On Oct. 26, 1942, the cooperative station was closed and observations transferred to the airport where the Civil Aeronautics Administration (now the Federal Aviation Agency) maintained an airways weather reporting station. This summary is based on data obtained from these locations using the more complete data from about 1906.

Another cooperative station was established at the Agricultural Experiment Station on April 1, 1946, and continued to the present time. Temperature records at this station were combined with earlier records to produce the Freeze Probability table.

Observers at Minot have been:

J. W. Rode..... Jan. 1, 1897 to Oct. 30, 1897
R. H. Gollay..... Jan. 1, 1898 to Feb. 28, 1899
J. L. Arnold..... Mar. 1, 1899 to Aug. 31, 1900
Louis A. Larson..... Jan. 1, 1902 to Nov. 30, 1904
John J. Bates..... June 1, 1905 to June 30, 1911
Louise Bates..... July 1, 1911 to Nov. 30, 1911
Bessie L. Faris..... Apr. 1, 1914 to Jan. 31, 1915
W. I. Faris..... Feb. 1, 1915 to May 31, 1928
Julia B. Rue..... Oct. 22, 1928 to May 31, 1933
Mark M. Chatfield, Jr.... June 1, 1933 to June 31, 1933
Mark M. Chatfield, Sr.... Aug. 1, 1933 to June 30, 1938
Kenneth A. Chatfield..... July 1, 1938 to Oct. 25, 1942
F A A..... Oct 26, 1942 to the present