

U.S. DEPARTMENT OF COMMERCE, WEATHER BUREAU  
IN COOPERATION WITH THE WISCONSIN CROP REPORTING SERVICE  
CLIMATOGRAPHY OF THE UNITED STATES NO. 20-47

LATITUDE 44°02'N  
LONGITUDE 88°09'W  
ELEV. (GROUND) 856 Feet

CLIMATOLOGICAL SUMMARY

STATION:  
CHILTON, WISCONSIN

MEANS AND EXTREMES FOR PERIOD --1945-1959

Month	Temperature (°F)										** Mean degree days	Precipitation Totals (Inches)						Mean number of days					Month			
	Means					Extremes						Mean	Greatest daily	Year	Snow, Sleet			Precip. 10 inch or more	Temperatures							
	Daily maximum	Daily minimum	Monthly	Record highest	Year	Record lowest	Year	Mean	Maximum monthly	Year					Greatest daily	Year	90° and above		32° and below	32° and below	0° and below					
																						Max.		Min.		
(a)	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Jan.	27.2	9.0	18.1	57	1947	-33	1951	1150	1.13	0.96	1950	8.6	18.9	1959	6.2	1949	3	0	20	31	9	Jan.				
Feb.	30.1	11.2	20.7	54	1957	-25	1951	1240	1.26	1.53	1953	9.2	22.6	1959	9.5	1959	4	0	16	28	7	Feb.				
Mar.	40.2	21.8	31.0	78	1945	-9	1950+	1050	1.80	0.95	1959	9.5	25.5	1959	16.0	1959	5	0	7	27	1	Mar.				
Apr.	56.8	34.6	45.7	83	1958+	15	1950	580	2.86	1.50	1951	1.5	9.0	1957	6.0	1947	6	0	*	13	0	Apr.				
May	68.6	43.0	55.8	91	1959+	24	1947	310	2.81	3.42	1959	11	0.5	1947	0.5	1947	7	*	0	3	0	May.				
June	78.2	53.5	65.9	98	1953	31	1949	90	3.77	3.38	1957	0	0		0		8	2	0	*	0	0	June			
July	82.4	58.5	70.5	100	1948	42	1948+	30	3.54	3.14	1952	0	0		0		6	4	0	0	0	0	July			
Aug.	82.0	57.9	70.0	100	1947	39	1951+	30	3.28	3.59	1953	0	0		0		6	5	0	0	0	0	Aug.			
Sept.	73.7	49.6	61.7	96	1959	24	1949	150	2.86	1.78	1950	0	0		0		6	2	0	1	0	0	Sept.			
Oct.	63.1	40.4	51.8	87	1947	15	1952	110	2.06	3.40	1954	0.3	2.0	1959+	2.0	1959+	4	0	0	6	0	0	0	Oct.		
Nov.	43.7	27.4	35.6	78	1944	-9	1950	890	2.32	1.65	1952	5.9	16.1	1947	9.0	1947	5	0	6	21	1	0	0	Nov.		
Dec.	30.7	15.1	22.9	60	1948	-14	1951	1310	1.55	2.11	1955	8.8	21.7	1950	7.0	1959	4	0	16	29	5	0	0	Dec.		
Year	56.4	35.2	45.8	100	1948+	-33	Jan. 1951	7930	29.24	3.50	Aug. 1958	43.8	26.5	March 1959	10.0	March 1959	64	13	67	195	23	Year				

(a) Average length of record, years.

+ Also on earlier dates, months, or years.

T Trace, an amount too small to measure.

\* Less than one half.

\*\* Base 65°F.--H. C. S. Thom, Monthly Weather Review, January 1954

CLIMATE OF CHILTON, WISCONSIN

Chilton, county seat of Calumet County, is located on a branch of the Manitowoc River in east-central Wisconsin. The terrain of the area is rolling with scattered woodlots. Originally, the area was covered with a mixed forest of sugar maple, basswood, and oak. The soils vary from brown or black prairie loams to reddish or grayish brown clays.

The station is located in a low spot near the river. On nights of strong radiational cooling, lower temperatures will be experienced than at higher elevations. Otherwise, this summary approximates conditions in the area.

Chilton has a continental climate. Winters are relatively cold and snowy while summers are warm and fully developed. Springs and falls are sometimes short and are often a composite of both winter and summer. Weather changes in winter and spring can be expected every few days. The area is in the zone of frequent mid-latitude cyclonic storms that move from west to east across the country.

The number of days in a year with 90 degrees or higher has varied from 30 in 1955 to 1 in 1951. The number of days with 0 degrees or lower has varied from 34 in 1959 to 10 in the years 1952 and 1953.

Precipitation during the 5-month period May through September has averaged about 55 percent of the annual normal. The likelihood of 1 inch or more of rain falling in a 7-day period during the summer is greatest the first half of June when the chance is 3 in 10 years. The likelihood of a 7-day dry period, trace or less, during the summer is greatest the last part of August when the chance is 2 in 10 years. Intensities of about 1.20 inches in 1 hour, 1.90 inches in 6 hours, and 2.60 inches in 24 hours can be expected about once in two years. The greatest amount of precipitation to fall in 24 hours was the 3.50 inches that fell August 30, 1958.

Snowfall has varied from 98 inches in 1959 to 21 inches for the years 1948 and 1958. The average date of the first 1 inch or greater snowfall is November 21. The chance of this fall by October 21 is 1 in 10 years and by December 22 is 9 in 10 years. Blizzards have occurred on an average of one-half day a year and glaze has formed on an average of 4 days a year.

Thunderstorms have averaged occurrences on 30 days a year with individual years ranging from 46 to 20 days. Hail has fallen on an average of 2 days a year with extreme years of 5 and 0 days. Since 1916, 3 tornadoes have been confirmed in Calumet County.

Wind, sunshine, and relative humidity records are not available but the following wind and humidity data from Appleton and sunshine data from Green Bay should approximate conditions at Chilton.

The prevailing annual winds have averaged northwest 19 per cent, west 12 per cent, and southwest 23 per cent of the time. Prevailing winds in July have averaged northwest 16 per cent, west 9 per cent, and southwest 29 per cent of the time. Prevailing winds in January have averaged northwest 24 per cent, west 17 per cent, and southwest 22 per cent of the time. Average annual wind speeds have averaged 12 miles per hour. April and November have been the windiest months with averages of 13 miles per hour. August has been least windy with an average of 10 miles per hour. Extreme winds usually blow from the southwest, south, or west.

Winter maximum relative humidity has averaged in the low 80's with minimum averages in the mid-70's; comparative summer averages are the mid-80's and low 60's.

Sunshine has averaged about 40 per cent for November and December, 45 per cent for January, 60 per cent or more for May through September, and from 50 to 60 per cent for the remaining months.

The average date of the last 32-degree freeze in the spring is May 17, and the first in the fall is October 2. The growing season, defined as the number of days between the last 32-degree freeze in the spring and the first in the fall, averages 138 days. The following table gives the likelihood of critical temperatures occurring:

AFTER DATE IN SPRING

Temperature	20%	40%	60%	80%
32° or below	May 27	May 20	May 14	May 7
28° or below	May 11	May 4	Apr. 28	Apr. 21
24° or below	Apr. 26	Apr. 18	Apr. 12	Apr. 5
20° or below	Apr. 9	Apr. 2	Mar. 26	Mar. 18
16° or below	Mar. 31	Mar. 23	Mar. 17	Mar. 9

BEFORE DATE IN FALL

32° or below	Sept. 22	Sept. 29	Oct. 5	Oct. 12
28° or below	Sept. 30	Oct. 8	Oct. 14	Oct. 22
24° or below	Oct. 14	Oct. 21	Oct. 28	Nov. 5
20° or below	Oct. 28	Nov. 5	Nov. 11	Nov. 19
16° or below	Nov. 5	Nov. 13	Nov. 19	Nov. 27

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CHILTON, WISCONSIN

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1944									62.3	50.2	40.8	19.0	
1945	14.0	20.0	41.8	46.4	51.6	61.0	68.4	70.2	61.2	47.8	35.2	17.4	44.6
1946	20.5	18.9	40.9	47.6	53.2	64.0	68.0	67.3	60.8	51.6	38.0	25.7	46.5
1947	22.9	16.8	29.2	43.0	50.8	62.5	69.6	76.2	63.9	59.8	30.4	22.6	45.6
1948	14.4	19.4	31.0	50.3	55.4	66.2	71.9	71.2	66.0	50.5	42.1	24.7	46.9
1949	21.5	20.6	31.4	45.7	58.1	69.9	73.3	71.1	58.5	34.2	26.0	25.5	47.1
1950	19.7	19.7	26.3	37.8	55.4	67.0	67.6	63.7	59.9	54.2	31.4	15.3	43.2
1951	14.5	19.8	27.4	43.2	60.0	62.7	69.8	66.1	58.7	50.7	27.9	20.8	47.5
1952	19.7	25.3	28.1	48.9	56.3	68.3	73.1	68.2	62.7	45.3	38.3	26.8	46.7
1953	23.3	22.1	32.5	42.2	56.7	67.9	71.4	70.9	62.6	55.6	41.1	27.1	47.8
1954	18.7	29.9	29.9	48.0	51.2	68.0	69.7	67.3	62.3	49.9	38.6	24.3	46.5
1955	17.9	20.6	29.5	51.9	59.8	65.8	75.7	74.4	61.2	52.9	31.5	18.6	46.8
1956	20.1	21.2	26.3	42.6	55.2	68.5	67.6	69.0	58.5	55.1	25.6	25.6	45.6
1957	12.6	25.0	32.2	46.5	54.9	66.3	71.5	69.2	60.2	48.1	35.6	27.0	45.7
1958	20.4	15.7	32.3	46.2	56.8	62.3	69.4	70.3	61.8	53.1	27.9	15.9	45.2
1959	11.0	15.2	26.5	45.4	62.1	67.6	69.9	74.3	63.8	46.6	27.8	30.2	45.0

STATION HISTORY

A climatological station was established in Chilton on January 1, 1894. The station was moved a number of times before its closing October 31, 1910. The instruments were exposed in the yards of the observers.

A rain recording gauge was installed at the Calumet County Highway Garage November 18, 1939. The gauge was moved to the Water Pumping Station November 14, 1940, and to the Sewage Disposal Plant November 18, 1941. Maximum and minimum thermometers were installed August 31, 1944.

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1944						4.08	2.73	2.97	3.50	0.42	3.55	0.94	
1945	0.40	1.50	0.81	3.73	3.15	5.61	1.99	2.03	4.65	1.15	4.69	1.45	31.16
1946	2.21	1.01	1.69	0.77	2.96	4.30	1.15	3.88	2.03	1.52	2.39	2.22	26.13
1947	1.21	0.42	1.74	4.10	4.62	4.97	2.79	4.81	4.43	1.23	2.63	0.96	33.91
1948	0.31	1.51	1.70	2.47	2.27	2.60	5.40	1.91	2.21	1.82	4.35	1.50	28.05
1949	2.16	0.86	2.48	1.71	0.93	2.29	4.15	1.63	1.82	1.72	0.97	1.09	22.01
1950	2.49	1.28	1.89	3.00	1.19	2.52	6.76	3.22	3.06	0.71	1.16	2.12	29.40
1951	1.21	1.39	3.39	4.85	0.84	2.22	4.20	3.06	3.30	5.33	1.63	1.73	33.15
1952	2.28	0.82	2.62	1.89	2.90	2.36	6.61	2.88	0.70	0.27	3.13	2.31	28.77
1953	0.81	3.58	2.01	3.72	1.39	4.12	1.08	3.07	1.44	0.31	0.34	1.50	23.37
1954	0.34	1.08	1.34	4.17	1.57	5.83	2.63	2.02	5.65	5.30	1.10	1.00	32.03
1955	0.56	1.48	1.02	2.62	3.60	3.59	4.18	1.15	1.90	3.14	0.81	1.09	25.14
1956	0.36	0.67	2.62	2.03	4.69	4.20	5.37	5.62	2.01	0.45	2.60	1.10	31.72
1957	0.25	0.60	0.85	2.24	4.64	6.63	3.55	1.89	1.71	1.40	3.51	1.78	29.05
1958	0.57	0.18	0.66	2.79	1.31	2.67	2.30	6.75	3.36	3.50	1.94	0.22	28.25
1959	1.74	2.53	2.18	2.82	6.15	2.33	1.79	5.39	3.91	4.76	2.32	3.75	39.67

STATION HISTORY (Continued)

Observers at the Chilton station have been:

- John G. Mageler.....January 1, 1894 to January 31, 1896
- Louis Plutz.....February 1, 1896 to March 31, 1896
- T. A. Theyer.....March 1, 1896 to June 30, 1899
- Charles Lovett.....July 1, 1899 to August 31, 1899
- G. M. Morrissey.....September 1, 1899 to June 30, 1901
- Milton Jones.....July 1, 1901 to August 31, 1902
- D. V. Jones.....September 1, 1902 to October 31, 1910
- Ernest J. Willette.....November 18, 1939 to November 13, 1940
- Adelbert H. Roll.....November 14, 1940 to present