U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

Climatography of the United States No. 20 1971-2000

National Climatic Data Center
Federal Building
151 Patton Avenue
Asheville, North Carolina 28801
www.ncdc.noaa.gov

Station: MEAD 6 S, NE **COOP ID: 255362**

Climate Division: NE 6 **NWS Call Sign:** **Elevation: 1,155 Feet** **Lat: 41˚08N** **Lon: 96˚29W**

Temperature (˚F)

	Mean (1)			Extremes										Degree Days (1) Base Temp 65		Mean Number of Days (3)					
Month	Daily Max	Daily Min	Mean	Highest Daily(2)	Year	Day	Highest Month(1) Mean	Year	Lowest Daily(2)	Year	Day	Lowest Month(1) Mean	Year	Heating	Cooling	Max >= 100	Max >= 90	Max >= 50	Max <= 32	Min <= 32	Min <= 0
Jan	30.8	9.6	20.2	71	1981	25	32.8	1992	-35	1974	12	6.5	1979	1390	0	.0	.0	2.9	15.1	30.6	8.1
Feb	37.1	15.7	26.4	78	1972	29	37.2	1992	-29	1975	9	11.8	1979	1081	0	.0	.0	6.4	10.8	26.4	4.2
Mar	48.9	26.6	37.8	90	1986	31	46.3	1992	-18	1984	10	27.7	1975	845	0	.0	@	15.7	3.5	21.6	.8
Apr	62.1	38.1	50.1	97+	1989	27	59.4	1981	3	1975	3	43.5	1983	453	6	.0	.7	25.1	.3	8.8	.0
May	73.0	49.7	61.4	99	1989	30	68.0	1988	23	1976	3	55.4	1995	180	66	.0	1.2	30.7	.0	1.1	.0
Jun	83.5	59.6	71.6	108	1988	22	78.1	1988	35	1969	3	67.1	1982	21	218	.7	7.5	30.0	.0	.0	.0
Jul	87.4	64.2	75.8	107	1995	13	81.1	1974	39	1971	30	69.8	1992	4	338	1.9	12.6	31.0	.0	.0	.0
Aug	84.7	61.6	73.2	105	1983	16	80.0	1983	38	1988	28	67.0	1992	19	271	.8	9.3	31.0	.0	.0	.0
Sep	77.5	51.9	64.7	107	2000	3	70.5	1998	26+	1984	29	58.8	1993	98	87	.1	4.4	29.9	.0	.8	.0
Oct	65.3	39.3	52.3	94	1975	13	56.2	1971	9	1997	27	46.5	1976	397	2	.0	.3	28.4	.1	7.2	.0
Nov	47.5	26.8	37.2	86	1999	14	45.6	1999	-7+	1986	11	28.8	1991	836	0	.0	.0	13.8	3.3	22.2	.3
Dec	34.4	15.2	24.8	69+	1998	2	31.5	1987	-27	1983	22	6.8	1983	1246	0	.0	.0	4.4	11.6	29.7	4.1
Ann	61.0	38.2	49.6	108	Jun 1988	22	81.1	Jul 1974	-35	Jan 1974	12	6.5	Jan 1979	6570	988	3.5	36.0	249.3	44.7	148.4	17.5

\+ Also occurred on an earlier date(s)

@ Denotes mean number of days greater than 0 but less than .05

Complete documentation available from: www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1968-2001

(3) Derived from 1971-2000 serially complete daily data

Issue Date: February 2004

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

Climatography of the United States No. 20 1971-2000

National Climatic Data Center
Federal Building
151 Patton Avenue
Asheville, North Carolina 28801
www.ncdc.noaa.gov

Station: MEAD 6 S, NE **COOP ID: 255362**

Climate Division: NE 6 **NWS Call Sign:** **Elevation: 1,155 Feet** **Lat: 41°08N** **Lon: 96°29W**

Precipitation (inches)

Precipitation Totals

Month	Means/ Medians(1) Mean	Means/ Medians(1) Median	Extremes Highest Daily(2)	Year	Day	Highest Monthly(1)	Year	Lowest Monthly(1)	Year
Jan	.48	.50	.70	1982	22	1.09	1983	.00+	1987
Feb	.51	.41	.80	1976	16	1.31	1976	.06	1996
Mar	1.85	1.65	1.97	1982	19	5.09	1973	.01	1994
Apr	2.74	2.41	2.38	1986	28	6.54	1978	.34	1990
May	4.19	4.05	3.06	1972	6	8.80	1982	.85	1989
Jun	3.96	3.32	3.20	1991	10	9.94	1991	1.02	1988
Jul	3.31	3.14	5.25	1990	26	9.85	1993	.11	1974
Aug	3.36	2.28	4.05	1998	21	8.68	1987	.53	1973
Sep	2.88	2.59	2.74	1999	5	7.60	1986	.16	1980
Oct	2.15	1.71	4.39	1979	31	5.54	1984	.00+	1999
Nov	1.59	1.50	2.38	1997	30	3.51	1972	.00	1976
Dec	.70	.55	2.55	1984	17	3.48	1984	.00	1979
Ann	27.72	26.72	5.25	Jul 1990	26	9.94	Jun 1991	.00+	Oct 1999

Mean Number of Days (3)

Daily Precipitation

Month	>= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	3.6	1.6	.1	.0
Feb	3.9	1.5	.2	.0
Mar	6.7	3.7	1.0	.3
Apr	8.3	5.9	1.9	.5
May	11.1	7.6	2.7	1.0
Jun	8.9	6.2	2.6	1.1
Jul	8.1	5.6	2.2	.9
Aug	8.1	5.2	2.0	.9
Sep	6.8	4.6	1.8	.9
Oct	5.7	3.8	1.2	.6
Nov	5.3	3.1	1.0	.3
Dec	4.5	1.8	.4	@
Ann	81.0	50.6	17.1	6.5

Precipitation Probabilities (1)

Probability that the monthly/annual precipitation will be equal to or less than the indicated amount

Monthly/Annual Precipitation vs Probability Levels
These values were determined from the incomplete gamma distribution

Month	.05	.10	.20	.30	.40	.50	.60	.70	.80	.90	.95
Jan	.00	.06	.15	.23	.31	.39	.49	.60	.76	1.01	1.25
Feb	.06	.10	.17	.24	.32	.40	.50	.62	.79	1.06	1.33
Mar	.10	.20	.42	.67	.95	1.29	1.70	2.23	2.97	4.23	5.50
Apr	.67	.93	1.33	1.68	2.03	2.41	2.82	3.32	3.96	4.99	5.95
May	1.24	1.64	2.24	2.75	3.26	3.78	4.36	5.04	5.91	7.29	8.56
Jun	.90	1.27	1.85	2.37	2.89	3.44	4.06	4.80	5.78	7.32	8.79
Jul	.58	.88	1.36	1.81	2.27	2.77	3.34	4.04	4.96	6.44	7.86
Aug	.48	.76	1.24	1.71	2.19	2.73	3.35	4.11	5.13	6.79	8.39
Sep	.53	.79	1.21	1.60	2.00	2.43	2.92	3.51	4.29	5.55	6.76
Oct	.00	.24	.62	.97	1.32	1.70	2.15	2.68	3.41	4.60	5.75
Nov	.09	.25	.49	.73	.97	1.25	1.56	1.96	2.49	3.36	4.21
Dec	.04	.10	.21	.31	.42	.54	.68	.86	1.10	1.50	1.89
Ann	17.73	19.59	22.00	23.87	25.54	27.18	28.88	30.78	33.10	36.51	39.50

\+ Also occurred on an earlier date(s)
\# Denotes amounts of a trace
@ Denotes mean number of days greater than 0 but less than .05
****** Statistics not computed because less than six years out of thirty had measurable precipitation

(1) From the 1971-2000 Monthly Normals
(2) Derived from station's available digital record: 1968-2001
(3) Derived from 1971-2000 serially complete daily data

Complete documentation available from:
www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Services

Climatography of the United States No. 20 1971-2000

National Climatic Data Center
Federal Building
151 Patton Avenue
Asheville, North Carolina 28801
www.ncdc.noaa.gov

Station: MEAD 6 S, NE **COOP ID: 255362**

Climate Division: NE 6 **NWS Call Sign:** **Elevation: 1,155 Feet** **Lat: 41°08N** **Lon: 96°29W**

Snow (inches)

Snow Totals

Means/Medians (1)

Extremes (2)

Mean Number of Days (1)

Snow Fall >= Thresholds

Snow Depth >= Thresholds

Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median	Highest Daily Snow Fall	Year	Day	Highest Monthly Snow Fall	Year	Highest Daily Snow Depth	Year	Day	Highest Monthly Mean Snow Depth	Year	0.1	1.0	3.0	5.0	10.0	1	3	5	10
Jan	3.7	2.5	2	1	5.0	1991	25	12.0	1991	11	1974	14	6	1975	2.6	1.6	.4	@	.0	9.5	5.4	2.5	.0
Feb	3.4	3.0	2	1	4.0	1975	4	9.0	1999	10	1979	19	8	1979	2.4	1.5	.4	.0	.0	9.9	4.8	1.4	.2
Mar	2.6	1.7	1	#	8.0	1998	8	14.2	1998	12	1998	13	3	1998	1.7	1.0	.2	.1	.0	3.8	1.5	.6	.2
Apr	.9	.0	#	#	6.0	1985	1	6.0+	1992	6	1992	21	#+	1998	.5	.2	.1	.1	.0	.7	.2	.1	.0
May	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Jun	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Jul	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Aug	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Sep	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Oct	.5	.0	#	0	8.0	1997	26	8.0	1997	8	1997	26	1	1997	.2	.2	@	@	.0	.2	.1	.1	.0
Nov	2.6	1.1	#	#	7.5	1981	30	8.5	1981	8	1983	30	1	1993	1.3	.9	.3	.1	.0	2.4	.9	.2	.0
Dec	4.1	4.0	1	1	6.0	1974	15	8.6	1994	11+	2000	26	9	1983	2.7	1.5	.4	.2	.0	6.7	2.8	.9	.0
Ann	17.8	12.3	N/A	N/A	8.0+	Mar 1998	8	14.2	Mar 1998	12	Mar 1998	13	9	Dec 1983	11.4	6.9	1.8	.5	.0	33.2	15.7	5.8	.4

+ Also occurred on an earlier date(s) #Denotes trace amounts

@ Denotes mean number of days greater than 0 but less than .05

-9/-9.9 represents missing values
Annual statistics for Mean/Median snow depths are not appropriate

(1) Derived from Snow Climatology and 1971-2000 daily data

(2) Derived from 1971-2000 daily data

Complete documentation available from:
www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

Climatography of the United States No. 20 1971-2000

National Climatic Data Center
Federal Building
151 Patton Avenue
Asheville, North Carolina 28801
www.ncdc.noaa.gov

Station: MEAD 6 S, NE **COOP ID: 255362**

Climate Division: NE 6 **NWS Call Sign:** **Elevation: 1,155 Feet** **Lat: 41˚08N** **Lon: 96˚29W**

Freeze Data

Spring Freeze Dates (Month/Day)

Temp (F)	Probability of later date in spring (thru Jul 31) than indicated(*)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	5/19	5/14	5/10	5/07	5/04	5/01	4/28	4/25	4/20
32	5/13	5/08	5/05	5/02	4/30	4/27	4/24	4/21	4/16
28	5/04	4/28	4/24	4/20	4/17	4/13	4/10	4/05	3/31
24	4/19	4/15	4/11	4/09	4/06	4/04	4/01	3/29	3/24
20	4/10	4/04	3/31	3/27	3/24	3/21	3/17	3/13	3/07
16	4/04	3/28	3/24	3/20	3/16	3/13	3/09	3/04	2/26

Fall Freeze Dates (Month/Day)

Temp (F)	Probability of earlier date in fall (beginning Aug 1) than indicated(*)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	9/15	9/18	9/21	9/24	9/26	9/28	9/30	10/03	10/07
32	9/19	9/24	9/28	10/02	10/05	10/08	10/11	10/15	10/20
28	9/28	10/03	10/06	10/09	10/12	10/15	10/18	10/22	10/27
24	10/15	10/20	10/23	10/26	10/28	10/31	11/02	11/06	11/10
20	10/15	10/22	10/27	10/31	11/04	11/07	11/12	11/16	11/23
16	10/27	11/03	11/07	11/11	11/15	11/18	11/22	11/27	12/03

Freeze Free Period

Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	163	156	152	148	144	140	136	131	124
32	178	171	166	162	158	153	149	144	137
28	200	192	187	182	178	174	169	164	156
24	224	217	212	208	204	200	196	191	184
20	252	242	235	229	224	218	212	205	195
16	268	260	253	248	243	238	232	226	217

***** Probability of observing a temperature as cold, or colder, later in the spring or earlier in the fall than the indicated date.

0/00 Indicates that the probability of occurrence of threshold temperature is less than the indicated probability.

Derived from 1971-2000 serially complete daily data

Complete documentation available from:
www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

Climatography of the United States No. 20 1971-2000

National Climatic Data Center
Federal Building
151 Patton Avenue
Asheville, North Carolina 28801
www.ncdc.noaa.gov

Station: MEAD 6 S, NE **COOP ID: 255362**

Climate Division: NE 6 **NWS Call Sign:** **Elevation: 1,155 Feet** **Lat: 41˚08N** **Lon: 96˚29W**

Degree Days to Selected Base Temperatures (˚F)

Heating Degree Days (1)

Base Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	1390	1081	845	453	180	21	4	19	98	397	836	1246	6570
60	1235	941	691	319	96	4	0	4	36	254	686	1091	5357
57	1142	861	605	247	61	1	0	1	16	181	597	998	4710
55	1080	810	547	205	42	0	0	0	9	138	540	936	4307
50	932	679	409	117	14	0	0	0	1	62	403	789	3406
32	446	287	86	3	0	0	0	0	0	0	79	324	1225

Cooling Degree Days (1)

Base Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	79	129	264	546	910	1187	1357	1276	980	629	233	101	7691
55	0	8	12	58	239	497	644	563	298	54	4	0	2377
57	0	4	8	41	195	438	582	501	246	34	1	0	2050
60	0	0	1	22	138	351	489	412	176	14	0	0	1603
65	0	0	0	6	66	218	338	271	87	2	0	0	988
70	0	0	0	1	24	113	199	156	34	0	0	0	527

Growing Degree Units (2)

Base	Growing Degree Units (Monthly)												Growing Degree Units (Accumulated Monthly)											
	Jan	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
40	2	32	125	348	676	963	1117	1043	753	409	95	8	2	34	159	507	1183	2146	3263	4306	5059	5468	5563	5571
45	0	9	67	231	521	813	962	888	605	282	48	2	0	9	76	307	828	1641	2603	3491	4096	4378	4426	4428
50	0	1	35	137	374	663	807	733	461	169	15	0	0	1	36	173	547	1210	2017	2750	3211	3380	3395	3395
55	0	0	9	73	243	514	652	578	323	87	3	0	0	0	9	82	325	839	1491	2069	2392	2479	2482	2482
60	0	0	3	34	138	367	497	423	207	34	0	0	0	0	3	37	175	542	1039	1462	1669	1703	1703	1703
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	8	30	96	222	419	630	749	690	485	271	78	14	8	38	134	356	775	1405	2154	2844	3329	3600	3678	3692

(1) Derived from the 1971-2000 Monthly Normals
(2) Derived from 1971-2000 serially complete daily data
Note: For corn, temperatures below 50 are set to 50, and temperatures above 86 are set to 86

Complete documentation available from:
www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

Notes

a. The monthly means are simple arithmetic averages computed by summing the monthly values for the period 1971-2000 and dividing by thirty. Prior to averaging, the data are adjusted if necessary to compensate for data quality issues, station moves or changes in station reporting practices. Missing months are replaced by estimates based on neighboring stations.

b. The median is defined as the middle value in an ordered set of values. The median is being provided for the snow and precipitation elements because the mean can be a misleading value for precipitation normals.

c. Only observed validated values were used to select the extreme daily values.

d. Extreme monthly temperature/precipitation means were selected from the monthly normals data.
Monthly snow extremes were calculated from daily values quality controlled to be consistent with the Snow Climatology.

e. Degree Days were derived using the same techniques as the 1971-2000 normals.
Compete documentation for the 1971-2000 Normals is available on the internet from:
www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

f. Mean "number of days statistics" for temperature and precipitation were calculated from a serially complete daily data set .
Documentation of the serially complete data set is available from the link below:

g. Snowfall and snow depth statistics were derived from the Snow Climatology.
Documentation for the Snow Climatology project is available from the link under references.

Data Sources for Tables

Several different data sources were used to create the Clim20 climate summaries. In some cases the daily extremes appear inconsistent with the monthly extremes and or the mean number of days statistics. For example, a high daily extreme value may not be reflected in the highest monthly value or the mean number of days threshold that is less than and equal to the extreme value. Some of these difference are caused by different periods of record. Daily extremes are derived from the station's entire period of record while the serial data and normals data were are for the 1971-2000 period. Therefore extremes observed before 1971 would not be included in the 1971-2000 normals or the 1971-2000 serial daily data set. Inconsistencies can also occur when monthly values are adjusted to reflect the current observing conditions or were replaced during the 1971-2000 Monthly Normals processing and are not reconciled with the Summary of the Day data.

a. Temperature/ Precipitation Tables
   1. 1971-2000 Monthly Normals
   2. Cooperative Summary of the Day
   3. National Weather Service station records
   4. 1971-2000 serially complete daily data

b. Degree Day Table
   1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals
   2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data

c. Snow Tables
   1. Snow Climatology
   2. Cooperative Summary of the Day

d. Freeze Data Table
   1971-2000 serially complete daily data

References

U.S. Climate Normals 1971-2000, www.ncdc.noaa.gov/normals.html
U.S. Climate Normals 1971-2000-Products Clim20, www.ncdc.noaa.gov/oa/climate/normals/usnormalsprods.html
Snow Climatology Project Description, www.ncdc.noaa.gov/oa/climate/monitoring/snowclim/mainpage.html
Eischeid, J. K., P. Pasteris, H. F. Diaz, M. Plantico, and N. Lott, 2000: Creating a serially complete, national daily time series of temperature and precipitation for the Western United States. J. Appl. Meteorol., 39, 1580-1591,
www1.ncdc.noaa.gov/pub/data/special/ serialcomplete_jam_0900.pdf