

Climatology of the United States No. 20

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

Station: GORDON 6 N, NE

1971-2000

COOP ID: 253355

Climate Division: NE 3

NWS Call Sign:

Elevation: 3,700 Feet Lat: 42° 54N

Lon: 102° 12W

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	32.3	8.7	20.5	67	1989	31	31.1	1990	-40	1915	23	3.9	1979	1380	0	.0	.0	3.6	12.9	30.5	7.6
Feb	38.3	13.9	26.1	75	1972	29	36.6	1999	-40	1936	6	13.9	1978	1090	0	.0	.0	7.2	8.8	26.9	4.3
Mar	46.8	21.0	33.9	86	1910	22	40.7	1986	-31	1960	3	25.7	1975	965	0	.0	.0	14.3	4.9	27.1	1.7
Apr	57.3	29.9	43.6	92	1910	28	50.0	1981	-15	1936	3	36.3	1983	642	0	.0	.1	21.7	1.2	16.9	@
May	68.5	41.2	54.9	98+	1934	30	60.4	1994	12+	1954	3	48.4	1995	327	12	.0	.4	28.9	.0	3.7	.0
Jun	79.7	50.5	65.1	106	1989	20	74.3	1988	23	1919	3	59.7	1982	97	101	.3	5.2	29.8	.0	.1	.0
Jul	86.9	56.6	71.8	110	1939	11	76.2	1974	31	1915	4	65.1	1992	17	226	1.8	13.2	31.0	.0	.0	.0
Aug	85.6	54.7	70.2	106	1936	24	74.8+	2000	27	1910	25	65.2	1974	37	197	.6	12.3	31.0	.0	.0	.0
Sep	75.2	43.9	59.6	105	1931	9	67.7	1998	1	1926	25	53.8	1993	215	51	.1	4.0	29.0	.1	2.8	.0
Oct	61.7	32.6	47.2	95	1910	10	49.8+	2000	-11	1925	28	43.4	1984	553	0	.0	.1	25.4	.5	13.2	@
Nov	44.2	19.7	32.0	81	1999	9	44.7	1999	-25	1916	13	20.0	1985	992	0	.0	.0	11.1	6.4	26.9	1.2
Dec	35.2	11.2	23.2	72	1939	9	33.4	1999	-40	1983	21	1.8	1983	1296	0	.0	.0	5.6	11.1	30.4	5.2
Ann	59.3	32.0	45.7	110	Jul 1939	11	76.2	Jul 1974	-40+	Dec 1983	21	1.8	Dec 1983	7611	587	2.8	35.3	238.6	45.9	178.5	20.0

+ 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/normal/usnormals.html

Issue Date: February 2004

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1898-2001

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

045-A

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: GORDON 6 N, NE

COOP ID: 253355

Climate Division: NE 3

NWS Call Sign:

Elevation: 3,700 Feet Lat: 42° 54N

Lon: 102° 12W

Precipitation (inches)																								
	Precipitation Totals									Mean Number of Days (3)				Precipitation Probabilities (1) Probability that the monthly/annual precipitation will be equal to or less than the indicated amount										
	Means/ Medians(1)		Extremes							Daily Precipitation				Monthly/Annual Precipitation vs Probability Levels These values were determined from the incomplete gamma distribution										
Month	Mean	Med-ian	Highest Daily(2)	Year	Day	Highest Monthly(1)	Year	Lowest Monthly(1)	Year	>= 0.01	>= 0.10	>= 0.50	>= 1.00	.05	.10	.20	.30	.40	.50	.60	.70	.80	.90	.95
Jan	.40	.34	1.28	1944	27	1.02	1988	.00	1989	4.5	1.3	.1	.0	.04	.08	.15	.20	.26	.33	.40	.49	.62	.81	1.00
Feb	.46	.41	1.15	1930	24	1.41	1993	.00	1996	3.8	1.3	.1	.0	.01	.05	.11	.18	.25	.33	.43	.56	.74	1.04	1.34
Mar	.97	.68	2.29	2000	8	3.14	2000	.19	1991	5.6	2.8	.4	.1	.14	.22	.36	.49	.63	.79	.96	1.18	1.48	1.95	2.41
Apr	1.98	2.22	3.45	1911	30	4.14	1972	.16	1982	8.6	4.8	1.1	.3	.33	.50	.79	1.07	1.34	1.65	2.00	2.42	2.98	3.89	4.77
May	3.05	2.98	3.20	1901	4	5.56	1982	.42	1992	10.2	6.6	1.8	.4	1.12	1.40	1.81	2.16	2.49	2.82	3.19	3.61	4.15	4.98	5.75
Jun	3.10	2.94	2.75	1963	15	6.52	1995	.68	1974	9.0	5.8	2.0	.5	.81	1.10	1.55	1.95	2.34	2.75	3.21	3.75	4.45	5.56	6.60
Jul	3.08	2.89	3.82	1938	31	8.08	1984	.73	1971	8.1	5.5	1.9	.8	.89	1.18	1.62	2.00	2.38	2.76	3.19	3.70	4.35	5.38	6.33
Aug	1.46	1.55	2.60	1909	9	2.47	1974	.37	1976	6.3	4.0	.8	.2	.45	.59	.80	.97	1.14	1.32	1.51	1.74	2.04	2.50	2.92
Sep	1.54	1.16	2.20	1946	18	4.64	1989	.22	1980	6.2	3.7	.9	.3	.24	.38	.60	.81	1.03	1.27	1.54	1.88	2.33	3.05	3.75
Oct	1.29	.97	2.50	1982	19	4.72	1998	.23	1974	4.4	2.8	.7	.1	.12	.21	.38	.56	.76	.98	1.24	1.58	2.03	2.80	3.54
Nov	.61	.49	1.70	1922	4	1.23	1992	.12+	1989	4.6	1.8	.2	.0	.11	.17	.26	.34	.42	.51	.62	.74	.91	1.18	1.43
Dec	.43	.40	2.00	1910	4	1.71	1987	.00	1991	4.0	1.3	.1	.0	.03	.08	.15	.21	.28	.35	.43	.54	.67	.90	1.12
Ann	18.37	18.96	3.82	Jul 1938	31	8.08	Jul 1984	.00+	Feb 1996	75.3	41.7	10.1	2.7	11.98	13.17	14.73	15.92	16.99	18.04	19.13	20.34	21.81	23.98	25.87

+ 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: 1898-2001

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

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

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: GORDON 6 N, NE

COOP ID: 253355

Climate Division: NE 3

NWS Call Sign:

Elevation: 3,700 Feet

Lat: 42° 54N

Lon: 102° 12W

Snow (inches)																							
Snow Totals															Mean Number of Days (1)								
Means/Medians (1)					Extremes (2)										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	6.2	6.2	2	2	8.0	1992	8	11.5	2000	14	1988	4	9	1988	3.3	2.4	.4	.2	.0	14.3	8.5	4.4	.8
Feb	5.3	5.0	2	1	7.0	1997	3	11.0	2000	15	1993	22	9	1993	2.7	2.0	.7	.2	.0	8.6	5.5	2.0	.0
Mar	7.3	5.8	1	1	13.5	1975	27	23.0	1990	13	1998	11	5	1998	3.2	2.5	.8	.4	.1	5.7	3.1	1.8	.4
Apr	5.1	3.0	#	#	8.0	1972	14	17.0	1995	11	1997	12	2	1997	2.2	1.9	.9	.4	.0	3.0	1.5	1.0	.1
May	.1	.0	#	0	.5	1983	12	.5+	1984	1	1984	7	#+	1995	.1	.0	.0	.0	.0	.1	.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	.2	.0	#	0	2.0	1984	25	2.0+	1995	1+	1995	20	#+	1995	.2	.1	.0	.0	.0	@	.0	.0	.0
Oct	2.4	.0	#	0	9.0	1973	12	10.0	1973	9	1973	12	1+	1997	.6	.6	.3	.1	.0	.9	.4	.1	.0
Nov	5.9	4.0	1	1	8.0	1995	1	21.9	1983	10	1983	28	4	1972	2.4	2.0	.5	.3	.0	6.7	3.5	1.6	.1
Dec	5.9	4.5	2	2	6.5	1983	19	16.5	1987	15+	1987	31	8	1983	3.0	2.5	.7	.3	.0	13.3	6.7	5.2	1.1
Ann	38.4	28.5	N/A	N/A	13.5	Mar 1975	27	23.0	Mar 1990	15+	Feb 1993	22	9+	Feb 1993	17.7	14.0	4.3	1.9	.1	52.6	29.2	16.1	2.5

+ 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

**Climatography
of the United States
No. 20
1971-2000**

Station: GORDON 6 N, NE

COOP ID: 253355

Climate Division: NE 3

NWS Call Sign:

Elevation: 3,700 Feet

Lat: 42° 54N

Lon: 102° 12W

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	6/14	6/08	6/03	5/30	5/27	5/23	5/19	5/15	5/09
32	6/01	5/26	5/22	5/19	5/15	5/12	5/09	5/05	4/29
28	5/15	5/11	5/08	5/05	5/02	4/30	4/27	4/24	4/20
24	5/06	5/02	4/29	4/26	4/23	4/20	4/17	4/14	4/09
20	4/25	4/20	4/16	4/13	4/10	4/07	4/03	3/31	3/25
16	4/16	4/10	4/05	4/01	3/29	3/25	3/22	3/17	3/11
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	9/01	9/06	9/09	9/12	9/15	9/18	9/21	9/25	9/30
32	9/10	9/14	9/18	9/21	9/24	9/26	9/29	10/03	10/08
28	9/18	9/24	9/28	10/02	10/05	10/08	10/12	10/16	10/22
24	9/26	10/02	10/07	10/11	10/14	10/18	10/22	10/26	11/02
20	10/02	10/09	10/14	10/18	10/22	10/25	10/30	11/03	11/10
16	10/16	10/21	10/25	10/28	11/01	11/04	11/07	11/11	11/17
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	134	126	120	115	111	106	101	95	87
32	158	148	142	136	131	125	119	113	103
28	178	170	164	159	155	150	146	140	132
24	199	190	184	179	174	169	163	157	148
20	223	213	206	200	194	189	183	176	166
16	238	231	225	220	216	212	207	201	194

* 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/normal/usnormals.html

**Climatography
of the United States**
No. 20
1971-2000

Station: GORDON 6 N, NE

COOP ID: 253355

Climate Division: NE 3 NWS Call Sign: Elevation: 3,700 Feet Lat: 42° 54N Lon: 102° 12W

Degree Days to Selected Base Temperatures (°F)													
Base	Heating Degree Days (1)												
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	1380	1090	965	642	327	97	17	37	215	553	992	1296	7611
60	1225	950	810	493	202	39	2	11	121	400	842	1141	6236
57	1132	866	717	407	140	20	0	5	78	310	752	1048	5475
55	1070	810	655	352	106	11	0	2	56	253	692	986	4993
50	918	682	505	227	45	2	0	0	19	132	555	837	3922
32	427	276	102	10	0	0	0	0	0	2	167	362	1346

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	71	111	160	359	708	993	1233	1182	826	472	165	90	6370
55	0	0	0	11	101	315	520	472	192	10	0	0	1621
57	0	0	0	6	73	263	458	412	155	5	0	0	1372
60	0	0	0	2	42	193	367	325	107	1	0	0	1037
65	0	0	0	0	12	101	226	197	51	0	0	0	587
70	0	0	0	0	2	41	116	100	19	0	0	0	278

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	25	68	214	485	772	1003	967	625	288	60	10	2	27	95	309	794	1566	2569	3536	4161	4449	4509	4519
45	0	3	31	125	341	623	848	812	481	175	23	1	0	3	34	159	500	1123	1971	2783	3264	3439	3462	3463
50	0	1	8	63	217	475	693	657	352	90	4	0	0	1	9	72	289	764	1457	2114	2466	2556	2560	2560
55	0	0	0	28	118	332	538	504	233	35	0	0	0	0	0	28	146	478	1016	1520	1753	1788	1788	1788
60	0	0	0	5	53	206	385	353	134	8	0	0	0	0	0	5	58	264	649	1002	1136	1144	1144	1144
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	4	29	77	164	312	486	634	614	405	217	58	16	4	33	110	274	586	1072	1706	2320	2725	2942	3000	3016

(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.
Complete documentation for the 1971-2000 Normals is available on the internet from:
www.ncdc.noaa.gov/oa/climate/normal/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 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.

- | | |
|---|---|
| <ol style="list-style-type: none">a. Temperature/ Precipitation Tables<ol style="list-style-type: none">1. 1971-2000 Monthly Normals2. Cooperative Summary of the Day3. National Weather Service station records4. 1971-2000 serially complete daily datab. Degree Day Table<ol style="list-style-type: none">1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data | <ol style="list-style-type: none">c. Snow Tables<ol style="list-style-type: none">1. Snow Climatology2. Cooperative Summary of the Dayd. Freeze Data Table
1971-2000 serially complete daily data |
|---|---|

References

U.S. Climate Normals 1971-2000, www.ncdc.noaa.gov/normal.html
U.S. Climate Normals 1971-2000-Products Clim20, www.ncdc.noaa.gov/oa/climate/normal/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