

Climatography of the United States

No. 20

1971-2000

Station: LAKE GEORGE 8 SW, CO

COOP ID: 054742

Climate Division: CO 4

NWS Call Sign:

Elevation: 8,520 Feet Lat: 38° 54N

Lon: 105° 28W

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	31.4	-1.8	14.8	61	1997	3	22.4	1999	-50	1962	10	3.5	1984	1558	0	.0	.0	1.0	14.5	31.0	17.4
Feb	35.5	1.8	18.7	60	1986	26	27.7	1976	-42	1989	7	5.9	1973	1298	0	.0	.0	2.3	9.7	28.3	12.1
Mar	42.2	13.9	28.1	68	1997	21	34.1	1999	-30	1965	3	20.1	1973	1146	0	.0	.0	7.8	5.3	30.8	3.5
Apr	49.4	22.0	35.7	73	1992	30	42.0	1981	-14+	1973	4	27.3	1973	879	0	.0	.0	16.9	2.0	28.3	.6
May	59.3	31.9	45.6	81	2000	31	49.8	1996	10	1982	6	41.2	1983	601	0	.0	.0	26.4	.1	16.1	.0
Jun	70.4	39.8	55.1	87+	1998	30	59.4	1994	24	1975	11	51.4	1983	299	2	.0	.0	29.8	.0	2.4	.0
Jul	75.4	45.7	60.6	88	1989	5	62.9	2000	32+	1992	16	57.7	1973	143	5	.0	.0	31.0	.0	@	.0
Aug	73.1	44.7	58.9	87	2000	10	62.3	2000	30+	1992	26	55.9	1974	193	4	.0	.0	31.0	.0	.1	.0
Sep	66.7	36.5	51.6	83	1978	6	56.0	1998	8	1965	21	48.4	1974	402	0	.0	.0	29.0	.0	7.0	.0
Oct	56.8	25.7	41.3	79	1980	1	44.9	1988	-2	1979	31	35.5	1984	736	0	.0	.0	24.8	1.1	27.5	.1
Nov	41.7	13.7	27.7	65+	1999	1	34.7	1999	-33	1972	28	15.0	1972	1119	0	.0	.0	8.3	6.2	29.9	2.7
Dec	32.5	1.6	17.1	58+	1998	2	29.2	1980	-40	1978	8	2.6	1986	1487	0	.0	.0	1.4	14.2	31.0	13.2
Ann	52.9	23.0	37.9	88	Jul 1989	5	62.9	Jul 2000	-50	Jan 1962	10	2.6	Dec 1986	9861	11	.0	.0	209.7	53.1	232.4	49.6

+ 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: 1948-2001

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

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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: LAKE GEORGE 8 SW, CO

COOP ID: 054742

Climate Division: CO 4

NWS Call Sign:

Elevation: 8,520 Feet Lat: 38°54N

Lon: 105°28W

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	.32	.23	.44	1974	18	.92	1979	.05+	1997	3.8	1.2	.0	.0	.04	.06	.10	.15	.20	.25	.32	.39	.50	.68	.85
Feb	.29	.24	.80	1984	26	1.19	1987	.02	1994	3.4	1.0	@	.0	.02	.04	.08	.12	.16	.21	.27	.35	.46	.65	.83
Mar	.81	.70	1.13	1990	6	2.33	1990	.04	1989	6.3	2.6	.2	@	.11	.18	.29	.40	.52	.65	.80	.99	1.24	1.64	2.04
Apr	.95	.73	1.31	1980	24	2.86	1980	.10	1981	6.3	3.2	.3	@	.14	.22	.36	.49	.62	.77	.95	1.16	1.44	1.91	2.36
May	1.40	1.21	1.45	1994	10	3.12	1994	.11	1998	8.1	3.5	.7	.2	.20	.32	.52	.71	.92	1.14	1.40	1.71	2.14	2.83	3.49
Jun	1.32	1.18	1.58	1975	10	2.79	1988	.11	1990	8.2	4.3	.4	.1	.28	.40	.59	.77	.95	1.13	1.35	1.60	1.94	2.48	2.99
Jul	2.29	2.24	1.43+	1998	11	4.65	1975	.24	1994	12.3	6.1	1.1	.2	.55	.77	1.10	1.40	1.69	2.00	2.35	2.77	3.31	4.17	4.98
Aug	2.50	2.25	1.72	1984	18	7.26	1984	.44	1973	13.7	7.0	1.3	.2	.69	.93	1.29	1.60	1.91	2.23	2.59	3.01	3.56	4.42	5.23
Sep	1.08	.97	1.27	1963	8	3.38	1976	.06	1987	7.1	3.3	.6	@	.15	.24	.39	.54	.70	.87	1.07	1.32	1.65	2.19	2.72
Oct	.74	.72	1.09	1969	4	3.02	1984	.05	1983	4.5	2.1	.3	.0	.09	.15	.26	.36	.47	.59	.73	.91	1.14	1.53	1.91
Nov	.49	.36	.85	1986	1	1.64	1986	.01	1989	4.4	1.7	.2	.0	.02	.04	.10	.16	.24	.33	.44	.58	.79	1.14	1.49
Dec	.39	.29	.49	1978	6	1.08	1988	.04	1994	4.0	1.3	.0	.0	.04	.07	.13	.18	.24	.30	.38	.47	.60	.81	1.01
Ann	12.58	12.64	1.72	Aug 1984	18	7.26	Aug 1984	.01	Nov 1989	82.1	37.3	5.1	.7	7.89	8.75	9.88	10.75	11.54	12.31	13.11	14.00	15.10	16.71	18.12

+ 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: 1948-2001

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

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

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COOP ID: 054742

Climate Division: CO 4

NWS Call Sign:

Elevation: 8,520 Feet

Lat: 38° 54N

Lon: 105° 28W

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	5.8	3.8	3	3	8.0	2000	27	18.0	2000	16	1987	22	9	1987	3.0	2.4	.7	.1	.0	19.4	14.1	9.4	1.4
Feb	5.2	4.5	3	2	8.0	1985	23	19.0	1987	20	1987	28	8	1987	2.9	1.9	.5	.2	.0	14.7	9.9	4.6	.6
Mar	13.5	13.0	2	2	14.5	1985	29	37.3	1985	32	1985	30	9	1987	4.9	4.2	1.5	.7	.1	12.2	7.0	3.3	.6
Apr	12.9	10.8	1	1	11.0	1984	21	37.5	1973	20	1973	12	10	1973	4.1	3.7	1.7	.9	.1	6.9	3.4	1.9	.7
May	2.9	1.3	#	#	12.0	1983	2	20.0	1983	12	1983	2	1	1990	1.3	1.2	.4	.2	@	.9	.3	.2	@
Jun	.3	.0	#	0	7.0	1975	10	7.0	1975	3	1975	10	#+	1996	@	@	@	@	.0	.1	@	.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	1.1	.0	#	0	6.0	1985	29	8.0	1971	5	1985	29	#+	2000	.4	.4	.1	.1	.0	.3	.1	.1	.0
Oct	5.3	4.5	#	#	12.0	1971	29	22.5	1984	14	1997	27	3	1984	2.0	1.5	.7	.3	.1	2.7	1.6	.9	.1
Nov	7.8	5.0	1	1	11.2	1985	1	23.0	1972	15	1972	28	8	1972	3.0	2.5	.8	.3	.1	8.6	4.6	2.8	.4
Dec	8.1	7.6	3	2	8.0	1982	24	17.0	1988	18	1972	12	13	1972	3.3	2.5	.9	.3	.0	17.1	9.7	6.6	1.7
Ann	62.9	50.5	N/A	N/A	14.5	Mar 1985	29	37.5	Apr 1973	32	Mar 1985	30	13	Dec 1972	24.9	20.3	7.3	3.1	.4	82.9	50.7	29.8	5.5

+ 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

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Elevation: 8,520 Feet

Lat: 38° 54N

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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	7/12	7/05	7/01	6/27	6/23	6/19	6/16	6/11	6/05
32	6/27	6/21	6/16	6/13	6/09	6/06	6/02	5/29	5/23
28	6/10	6/04	5/31	5/27	5/23	5/20	5/16	5/12	5/06
24	5/24	5/19	5/15	5/12	5/09	5/06	5/03	4/29	4/24
20	5/13	5/08	5/05	5/01	4/28	4/25	4/22	4/18	4/13
16	5/03	4/28	4/25	4/22	4/19	4/16	4/13	4/09	4/04
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	8/18	8/23	8/28	8/31	9/03	9/07	9/10	9/14	9/20
32	9/03	9/07	9/10	9/13	9/15	9/17	9/20	9/23	9/27
28	9/12	9/16	9/19	9/22	9/24	9/27	9/29	10/03	10/07
24	9/18	9/23	9/27	9/30	10/03	10/06	10/09	10/13	10/18
20	9/26	10/01	10/05	10/08	10/11	10/14	10/17	10/21	10/26
16	10/04	10/10	10/14	10/18	10/21	10/25	10/28	11/01	11/07
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	101	91	83	77	71	66	59	52	42
32	121	112	107	102	97	92	87	81	73
28	147	139	133	128	123	118	113	107	99
24	169	161	156	151	147	142	138	132	125
20	189	180	175	170	165	160	155	149	141
16	205	198	193	189	185	181	177	172	165

* 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:

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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	1558	1298	1146	879	601	299	143	193	402	736	1119	1487	9861
60	1403	1158	991	729	446	165	37	73	256	581	969	1332	8140
57	1310	1074	898	639	355	102	9	31	177	488	879	1239	7201
55	1248	1018	836	579	296	69	3	15	130	426	819	1177	6616
50	1093	878	681	433	168	19	0	1	46	275	669	1022	5285
32	552	406	195	62	2	0	0	0	0	9	209	492	1927

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	17	32	72	173	424	693	885	834	588	296	81	28	4123
55	0	0	0	0	5	72	174	136	28	0	0	0	415
57	0	0	0	0	2	45	119	90	14	0	0	0	270
60	0	0	0	0	0	18	54	39	4	0	0	0	115
65	0	0	0	0	0	2	5	4	0	0	0	0	11
70	0	0	0	0	0	0	0	0	0	0	0	0	0

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	0	0	3	49	214	463	649	598	369	123	6	0	0	0	3	52	266	729	1378	1976	2345	2468	2474	2474
45	0	0	0	10	103	318	494	443	230	38	0	0	0	0	0	10	113	431	925	1368	1598	1636	1636	1636
50	0	0	0	0	26	181	339	289	107	3	0	0	0	0	0	0	26	207	546	835	942	945	945	945
55	0	0	0	0	2	74	189	141	29	0	0	0	0	0	0	0	2	76	265	406	435	435	435	435
60	0	0	0	0	0	12	60	33	2	0	0	0	0	0	0	0	0	12	72	105	107	107	107	107
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	0	1	19	67	175	321	409	373	268	146	26	0	0	1	20	87	262	583	992	1365	1633	1779	1805	1805

(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