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: SHOUP, ID **COOP ID: 108395**

Climate Division: ID 4 **NWS Call Sign:** **Elevation: 3,400 Feet** **Lat: 45˚23N** **Lon: 114˚17W**

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	31.2	15.0	23.1	55	1990	10	30.5	1990	-23	1979	1	8.0	1979	1298	0	.0	.0	.1	15.4	30.6	3.7
Feb	39.6	19.5	29.6	61	1995	25	35.5	1991	-21+	1989	4	20.0	1989	993	0	.0	.0	2.7	5.0	27.6	1.3
Mar	52.1	27.8	40.0	77	1966	30	46.8	1992	2	1996	1	32.3	1985	776	0	.0	.0	18.9	.3	25.5	.0
Apr	63.0	33.5	48.3	88	1987	28	53.9	1987	11	1999	10	42.1	1982	503	0	.0	.0	27.4	.0	14.6	.0
May	71.9	39.8	55.9	96+	2001	24	62.8	1992	11	1999	11	51.8	1984	296	12	.0	1.2	30.8	.0	3.2	.0
Jun	80.7	45.9	63.3	102	2000	7	67.7	1986	22	1999	9	59.5	1984	109	59	.2	5.5	30.0	.0	.3	.0
Jul	89.8	51.0	70.4	109	1994	22	76.2	1998	29	1999	5	62.8	1993	34	201	2.2	17.3	31.0	.0	@	.0
Aug	88.7	50.0	69.4	106	1990	6	75.5	1991	28	1992	25	64.3	1989	50	184	2.1	14.4	31.0	.0	.1	.0
Sep	78.1	42.1	60.1	104+	1998	4	66.5	1998	22	1999	27	54.2	1986	204	55	.2	3.8	29.9	.0	2.7	.0
Oct	61.9	33.1	47.5	87	1992	1	52.6	1988	6	1971	29	42.9	1984	543	0	.0	.0	27.9	.1	14.7	.0
Nov	42.1	25.2	33.7	64	1978	4	38.6	1999	-8	1993	26	27.0	1993	939	0	.0	.0	5.4	3.7	25.9	.2
Dec	30.7	16.2	23.5	53	1998	1	31.9	1979	-25+	1990	23	14.9	1983	1289	0	.0	.0	.2	16.8	30.7	2.3
Ann	60.8	33.3	47.1	109	Jul 1994	22	76.2	Jul 1998	-25+	Dec 1990	23	8.0	Jan 1979	7034	511	4.7	42.2	235.3	41.3	175.9	7.5

\+ 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: 1966-2001

(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: SHOUP, ID

COOP ID: 108395

Climate Division: ID 4 **NWS Call Sign:** **Elevation: 3,400 Feet** **Lat: 45˚23N** **Lon: 114˚17W**

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	1.30	1.36	.88	1982	26	2.99	1975	.00	1990
Feb	1.10	.79	2.50	1986	13	8.67	1986	.05	1990
Mar	.88	.75	1.00	1989	7	2.90	1989	.00	1990
Apr	1.18	1.18	1.55	1971	25	3.02	1971	.04	1990
May	1.69	1.71	1.00	1987	26	3.54	1984	.39	1992
Jun	1.64	1.70	1.58	1979	18	4.25	1993	.00	1990
Jul	.99	.94	1.08	1987	10	2.43	1983	.00+	1999
Aug	.91	.77	.82	1976	5	2.65	1976	.08	1991
Sep	.96	.81	1.29	1985	7	3.58	1985	.00+	1993
Oct	.91	.86	1.05	1985	23	2.99	1975	.00	1987
Nov	1.42	1.18	2.50	1986	21	4.26	1991	.10	1993
Dec	1.48	1.49	1.44	1977	2	4.76	1977	.05	1985
Ann	14.46+	13.95+	2.50+	Nov 1986	21	8.67	Feb 1986	.00+	Jul 1999

Mean Number of Days (3)

Month	Daily Precipitation >= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	9.9	4.0	.2	.0
Feb	7.0	3.5	.5	.3
Mar	8.7	3.4	.1	@
Apr	9.7	4.1	.1	.1
May	11.4	5.4	.5	@
Jun	9.9	5.2	.6	.1
Jul	6.7	3.3	.2	@
Aug	6.4	3.0	.3	.0
Sep	6.1	3.1	.2	.1
Oct	6.2	2.7	.2	@
Nov	9.7	4.3	.4	@
Dec	10.8	4.4	.4	.1
Ann	102.5	46.4	3.7	.7

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	.12	.26	.48	.67	.86	1.07	1.31	1.61	2.00	2.63	3.23
Feb	.04	.10	.22	.36	.53	.73	.99	1.31	1.78	2.58	3.39
Mar	.10	.21	.35	.48	.61	.75	.90	1.09	1.34	1.73	2.11
Apr	.21	.31	.48	.64	.81	.99	1.19	1.44	1.77	2.30	2.81
May	.45	.61	.86	1.07	1.28	1.50	1.75	2.03	2.41	3.00	3.56
Jun	.28	.50	.78	1.01	1.23	1.46	1.71	2.01	2.40	3.02	3.60
Jul	.00	.08	.24	.39	.56	.74	.96	1.22	1.59	2.20	2.80
Aug	.08	.14	.26	.38	.52	.68	.87	1.11	1.43	1.98	2.52
Sep	.00	.00	.13	.27	.43	.62	.86	1.17	1.59	2.33	3.06
Oct	.09	.20	.35	.48	.61	.76	.92	1.12	1.38	1.81	2.21
Nov	.21	.33	.53	.73	.93	1.16	1.42	1.73	2.16	2.85	3.52
Dec	.13	.23	.42	.63	.85	1.11	1.42	1.80	2.33	3.22	4.09
Ann	8.59	9.65	11.04	12.13	13.11	14.08	15.09	16.23	17.63	19.70	21.52

+ 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: 1966-2001
(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: SHOUP, ID **COOP ID: 108395**

Climate Division: ID 4 **NWS Call Sign:** **Elevation: 3,400 Feet** **Lat: 45°23N** **Lon: 114°17W**

Snow (inches)

Snow Totals

Means/Medians (1)

Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median
Jan	13.5	11.5	10	12
Feb	4.8	4.5	7	4
Mar	1.3	.0	2	#
Apr	.2	.0	#	0
May	.0	.0	#	0
Jun	.0	.0	0	0
Jul	.0	.0	0	0
Aug	.0	.0	0	0
Sep	.0	.0	0	0
Oct	.1	.0	#	0
Nov	5.4	4.6	#	#
Dec	18.4	21.3	5	4
Ann	43.7	41.9	N/A	N/A

Extremes (2)

Month	Highest Daily Snow Fall	Year	Day	Highest Monthly Snow Fall	Year	Highest Daily Snow Depth	Year	Day	Highest Monthly Mean Snow Depth	Year
Jan	10.0	1983	5	28.0+	1976	32	1982	28	21	1982
Feb	9.0	1986	22	12.0	1972	32	1982	14	25	1982
Mar	7.0	1972	2	8.0	1972	23	1972	2	10	1976
Apr	3.0	1971	25	3.0	1971	#+	2000	6	#+	2000
May	.0	0	0	.0	0	#	1996	3	#	1996
Jun	.0	0	0	.0	0	0	0	0	0	0
Jul	.0	0	0	.0	0	0	0	0	0	0
Aug	.0	0	0	.0	0	0	0	0	0	0
Sep	.0	0	0	.0	0	0	0	0	0	0
Oct	1.0	1971	31	1.0	1971	#+	1999	15	#+	1999
Nov	8.0	1975	30	19.0	1975	13	1975	30	2	1983
Dec	7.0	1971	5	27.0	1971	20	1983	31	14	1978
Ann	10.0	Jan 1983	5	28.0+	Jan 1976	32+	Feb 1982	14	25	Feb 1982

Mean Number of Days (1)

Snow Fall >= Thresholds

Month	0.1	1.0	3.0	5.0	10.0
Jan	5.9	3.4	.9	.4	.1
Feb	1.8	1.4	.2	.1	.0
Mar	.7	.4	.1	.1	.0
Apr	.1	@	@	.0	.0
May	.0	.0	.0	.0	.0
Jun	.0	.0	.0	.0	.0
Jul	.0	.0	.0	.0	.0
Aug	.0	.0	.0	.0	.0
Sep	.0	.0	.0	.0	.0
Oct	@	@	.0	.0	.0
Nov	1.7	1.0	.4	.1	.0
Dec	4.7	3.4	1.4	.4	.0
Ann	14.9	9.6	3.0	1.1	.1

Snow Depth >= Thresholds

Month	1	3	5	10
Jan	-9.9	-9.9	-9.9	-9.9
Feb	17.8	14.7	12.0	8.0
Mar	2.8	2.2	2.0	1.5
Apr	.0	.0	.0	.0
May	.0	.0	.0	.0
Jun	.0	.0	.0	.0
Jul	.0	.0	.0	.0
Aug	.0	.0	.0	.0
Sep	.0	.0	.0	.0
Oct	.0	.0	.0	.0
Nov	2.8	1.6	.7	.1
Dec	19.1	13.3	11.4	4.7
Ann	-9.9	-9.9	-9.9	-9.9

+ 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: SHOUP, ID **COOP ID: 108395**

Climate Division: ID 4 **NWS Call Sign:** **Elevation: 3,400 Feet** **Lat: 45˚23N** **Lon: 114˚17W**

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	6/27	6/20	6/15	6/10	6/06	6/02	5/28	5/23	5/16
32	6/05	5/30	5/25	5/21	5/17	5/13	5/09	5/04	4/27
28	5/17	5/10	5/06	5/01	4/28	4/24	4/20	4/15	4/08
24	5/03	4/24	4/17	4/11	4/06	3/31	3/25	3/19	3/09
20	4/04	3/27	3/21	3/16	3/11	3/07	3/02	2/24	2/16
16	3/27	3/18	3/12	3/07	3/02	2/25	2/20	2/14	2/05

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	8/27	9/02	9/06	9/10	9/14	9/17	9/21	9/25	10/01
32	9/09	9/15	9/19	9/22	9/25	9/28	10/02	10/06	10/11
28	9/16	9/23	9/28	10/02	10/06	10/10	10/14	10/19	10/25
24	10/01	10/08	10/12	10/16	10/20	10/24	10/28	11/01	11/08
20	10/21	10/27	10/31	11/03	11/06	11/09	11/12	11/16	11/21
16	10/30	11/05	11/09	11/13	11/16	11/19	11/23	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	132	120	112	105	99	92	85	77	66
32	157	148	141	136	131	125	120	113	104
28	193	182	174	167	161	154	147	140	129
24	234	221	212	204	197	189	182	172	160
20	269	259	251	245	239	233	226	219	208
16	287	277	270	264	258	253	247	240	230

***** 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: SHOUP, ID **COOP ID: 108395**

Climate Division: ID 4 **NWS Call Sign:** **Elevation: 3,400 Feet** **Lat: 45˚23N** **Lon: 114˚17W**

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	1298	993	776	503	296	109	34	50	204	543	939	1289	7034
60	1143	853	621	358	173	40	9	16	113	390	789	1134	5639
57	1050	769	528	275	117	18	2	7	72	301	699	1041	4879
55	988	713	466	225	86	9	0	3	51	246	639	979	4405
50	833	573	320	121	31	1	0	0	17	124	489	824	3333
32	316	161	21	0	0	0	0	0	0	0	82	310	890

Base — Cooling Degree Days (1)

Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	41	91	268	488	739	940	1190	1157	842	481	133	44	6414
55	0	0	1	22	112	259	477	448	203	13	0	0	1535
57	0	0	0	13	81	208	417	389	164	7	0	0	1279
60	0	0	0	5	44	140	331	306	115	2	0	0	943
65	0	0	0	0	12	59	201	184	55	0	0	0	511
70	0	0	0	0	1	17	106	96	21	0	0	0	241

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	2	70	246	491	698	942	894	596	251	16	0	0	2	72	318	809	1507	2449	3343	3939	4190	4206	4206
45	0	0	16	131	337	548	787	739	447	130	2	0	0	0	16	147	484	1032	1819	2558	3005	3135	3137	3137
50	0	0	2	55	204	399	632	584	304	49	0	0	0	0	2	57	261	660	1292	1876	2180	2229	2229	2229
55	0	0	0	17	96	258	477	430	178	14	0	0	0	0	0	17	113	371	848	1278	1456	1470	1470	1470
60	0	0	0	0	36	136	324	285	85	0	0	0	0	0	0	0	36	172	496	781	866	866	866	866
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	0	7	71	198	334	449	575	553	413	199	9	0	0	7	78	276	610	1059	1634	2187	2600	2799	2808	2808

(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