

# Climatology of the United States

No. 20

1971-2000

Station: KERSHAW 2 SW, SC

COOP ID: 384690

Climate Division: SC 3

NWS Call Sign:

Elevation: 500 Feet

Lat: 34° 31N

Lon: 80° 36W

## 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	53.2	29.7	41.5	80	1949	11	53.1	1974	-4+	1985	22	31.8	1977	730	0	.0	.0	19.6	.6	20.1	.1
Feb	57.6	31.6	44.6	83+	1997	28	51.3	1976	6+	1958	19	36.3	1978	572	0	.0	.0	20.6	.3	15.0	.0
Mar	65.5	38.3	51.9	89	1985	31	58.1	1997	8	1960	6	47.1	1971	410	4	.0	.0	29.0	.1	7.7	.0
Apr	74.1	46.2	60.2	94	2001	11	64.9	1981	19	1964	1	55.3	1983	177	30	.0	.6	29.8	.0	1.5	.0
May	80.7	54.9	67.8	100	1964	29	72.4	1991	30	1989	8	63.5	1989	44	131	.0	2.4	31.0	.0	@	.0
Jun	87.1	63.1	75.1	107	1954	28	80.1	1981	43	1984	1	71.3	1972	1	304	.3	9.3	30.0	.0	.0	.0
Jul	90.7	67.6	79.2	104+	1977	10	83.7	1993	52	1988	2	76.2	1975	0	439	.9	18.8	31.0	.0	.0	.0
Aug	88.9	66.6	77.8	106	1983	22	81.5	1999	51	1965	30	75.0	1981	0	395	.6	12.0	31.0	.0	.0	.0
Sep	83.7	60.8	72.3	103	1954	7	76.5	1980	38	1967	30	67.5	1984	10	226	.0	5.4	30.0	.0	.0	.0
Oct	74.4	48.3	61.4	100	1954	7	68.7	1984	24+	2001	31	53.8	1988	171	58	.0	.2	30.8	.0	1.1	.0
Nov	65.8	39.4	52.6	87	1961	3	61.7	1985	12+	1970	25	46.7	1976	378	7	.0	.0	28.4	.0	8.0	.0
Dec	56.5	32.3	44.4	81+	1998	9	54.7	1971	5+	1983	26	34.3	1989	639	0	.0	.0	21.9	.3	17.5	.0
Ann	73.2	48.2	60.7	107	Jun 1954	28	83.7	Jul 1993	-4+	Jan 1985	22	31.8	Jan 1977	3132	1594	1.8	48.7	333.1	1.3	70.9	.1

+ 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](http://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: KERSHAW 2 SW, SC**

**COOP ID: 384690**

**Climate Division: SC 3**

**NWS Call Sign:**

**Elevation: 500 Feet Lat: 34°31N**

**Lon: 80°36W**

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	4.75	4.46	2.96	1998	7	9.64	1998	.69	1981	9.2	6.6	3.3	1.2	1.66	2.11	2.76	3.31	3.83	4.37	4.96	5.65	6.52	7.88	9.13
Feb	3.76	3.52	2.79	1984	14	6.49	1998	.93	1978	8.0	5.7	2.7	1.1	1.26	1.61	2.13	2.58	3.00	3.44	3.92	4.48	5.20	6.31	7.34
Mar	4.59	4.35	3.97	1983	18	12.00	1980	.60	1985	8.8	7.0	3.3	1.2	1.39	1.83	2.48	3.04	3.58	4.15	4.77	5.50	6.44	7.91	9.28
Apr	3.32	3.25	2.94	1979	26	7.62	1979	.19	1976	7.2	5.2	2.3	1.0	.53	.82	1.30	1.76	2.23	2.75	3.34	4.06	5.02	6.58	8.08
May	3.53	3.24	3.14	1989	2	6.63	1989	.60	2000	8.5	5.8	2.5	.8	1.25	1.58	2.06	2.47	2.86	3.26	3.69	4.20	4.84	5.84	6.76
Jun	4.11	3.94	3.95	1958	27	7.17	1995	.54	1986	9.6	7.0	2.8	1.1	1.47	1.85	2.41	2.88	3.33	3.79	4.30	4.88	5.63	6.78	7.84
Jul	5.05	3.67	5.95	1997	24	12.98	1975	1.17	1977	10.9	7.6	3.0	1.1	1.19	1.66	2.40	3.06	3.72	4.41	5.19	6.12	7.34	9.27	11.08
Aug	4.35	4.46	4.00	1952	31	8.45	1971	.89	1973	10.0	7.5	2.6	1.1	1.28	1.70	2.32	2.85	3.38	3.92	4.52	5.23	6.14	7.57	8.90
Sep	4.22	3.69	10.14	1998	4	11.68	1998	.30	1984	7.6	5.8	2.5	1.2	.80	1.17	1.79	2.36	2.94	3.57	4.28	5.14	6.28	8.11	9.85
Oct	3.56	2.95	9.85	1990	11	16.20	1990	.00	2000	5.9	4.7	2.0	1.0	.33	.73	1.32	1.84	2.37	2.95	3.61	4.40	5.47	7.19	8.83
Nov	3.44	3.14	5.70	1957	18	9.00	1985	.39	1999	7.3	5.4	2.5	1.0	1.01	1.34	1.83	2.25	2.67	3.10	3.57	4.13	4.85	5.98	7.04
Dec	3.29	3.22	2.00	1963	24	6.75	1983	.27	1988	8.5	6.2	2.3	.7	.94	1.25	1.72	2.13	2.53	2.95	3.41	3.95	4.66	5.76	6.79
Ann	47.97	47.00	10.14	Sep 1998	4	16.20	Oct 1990	.00	Oct 2000	101.5	74.5	31.8	12.5	36.20	38.53	41.49	43.71	45.68	47.57	49.51	51.64	54.21	57.92	61.10

+ 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:  
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Station: KERSHAW 2 SW, SC

COOP ID: 384690

Climate Division: SC 3

NWS Call Sign:

Elevation: 500 Feet

Lat: 34°31N

Lon: 80°36W

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	.0	0	0	5.0	1988	6	5.0	1988	0	0	0	0	0	.2	.2	.2	.1	.0	.0	.0	.0	.0
Feb	.2	.0	#	0	1.1	1984	6	1.1	1984	1	1982	27	#+	1982	.2	.2	.0	.0	.0	.1	.0	.0	.0
Mar	.7	.0	#	0	4.2	1983	25	4.2	1983	4	1983	25	#+	1998	.2	.2	.2	.0	.0	.1	.1	.0	.0
Apr	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.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	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nov	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Dec	.0	.0	#	0	.0	0	0	.0	0	#	1989	19	#	1989	.0	.0	.0	.0	.0	.0	.0	.0	.0
Ann	1.5	.0	N/A	N/A	5.0	Jan 1988	6	5.0	Jan 1988	4	Mar 1983	25	#+	Mar 1998	.6	.6	.4	.1	.0	.2	.1	.0	.0

+ 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:

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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	4/28	4/22	4/18	4/14	4/10	4/07	4/03	3/30	3/23
32	4/22	4/14	4/09	4/04	3/31	3/26	3/22	3/16	3/09
28	4/09	4/01	3/27	3/22	3/18	3/14	3/09	3/04	2/24
24	3/15	3/09	3/04	2/28	2/24	2/20	2/16	2/10	1/31
20	3/09	3/01	2/24	2/19	2/14	2/09	2/04	1/28	1/15
16	2/28	2/18	2/11	2/05	1/29	1/22	1/12	0/00	0/00
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	10/10	10/15	10/18	10/21	10/24	10/26	10/29	11/02	11/06
32	10/16	10/23	10/28	11/01	11/05	11/09	11/13	11/18	11/25
28	10/27	11/02	11/07	11/11	11/14	11/18	11/22	11/27	12/03
24	11/16	11/23	11/27	12/01	12/05	12/09	12/13	12/19	12/29
20	11/29	12/06	12/11	12/16	12/21	12/25	12/30	1/06	1/18
16	12/04	12/17	12/26	1/04	1/13	1/23	2/05	0/00	0/00
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	221	213	206	201	196	191	185	179	170
32	251	240	232	225	218	212	205	197	186
28	269	259	252	246	241	235	229	222	213
24	>365	300	293	287	283	278	273	268	261
20	>365	329	320	313	307	301	295	288	279
16	>365	>365	>365	>365	350	332	321	312	300

\* 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](http://www.ncdc.noaa.gov/oa/climate/normal/usnormals.html)

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**Climate Division: SC 3      NWS Call Sign:      Elevation: 500 Feet    Lat: 34°31N    Lon: 80°36W**

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	730	572	410	177	44	1	0	0	10	171	378	639	3132
60	582	432	270	85	10	0	0	0	2	88	247	496	2212
57	495	354	197	47	3	0	0	0	0	53	181	412	1742
55	439	303	155	30	1	0	0	0	0	35	143	359	1465
50	310	188	74	7	0	0	0	0	0	11	70	243	903
32	39	7	0	0	0	0	0	0	0	0	0	23	69

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	332	360	616	843	1109	1293	1462	1418	1206	909	619	407	10574
55	19	11	59	183	398	603	749	705	516	232	72	30	3577
57	13	7	38	141	338	543	687	643	457	187	49	21	3124
60	8	1	18	88	252	453	594	550	368	129	26	12	2499
65	0	0	4	30	131	304	439	395	226	58	7	0	1594
70	0	0	0	6	50	168	285	242	108	19	0	0	878

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	142	203	403	623	879	1068	1218	1176	975	669	395	198	142	345	748	1371	2250	3318	4536	5712	6687	7356	7751	7949
45	70	113	266	475	724	918	1063	1021	825	515	261	109	70	183	449	924	1648	2566	3629	4650	5475	5990	6251	6360
50	32	58	152	334	570	768	908	866	675	366	155	53	32	90	242	576	1146	1914	2822	3688	4363	4729	4884	4937
55	8	18	75	208	416	618	753	711	525	227	83	29	8	26	101	309	725	1343	2096	2807	3332	3559	3642	3671
60	0	4	34	109	270	468	598	556	382	122	33	4	0	4	38	147	417	885	1483	2039	2421	2543	2576	2580
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	102	153	265	403	575	730	838	815	658	427	256	135	102	255	520	923	1498	2228	3066	3881	4539	4966	5222	5357

(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](http://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](http://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"><li>a. Temperature/ Precipitation Tables<ol style="list-style-type: none"><li>1. 1971-2000 Monthly Normals</li><li>2. Cooperative Summary of the Day</li><li>3. National Weather Service station records</li><li>4. 1971-2000 serially complete daily data</li></ol></li><li>b. Degree Day Table<ol style="list-style-type: none"><li>1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals</li><li>2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data</li></ol></li></ol> | <ol style="list-style-type: none"><li>c. Snow Tables<ol style="list-style-type: none"><li>1. Snow Climatology</li><li>2. Cooperative Summary of the Day</li></ol></li><li>d. Freeze Data Table<br/>1971-2000 serially complete daily data</li></ol> |
|---|---|

## References

U.S. Climate Normals 1971-2000, [www.ncdc.noaa.gov/normal.html](http://www.ncdc.noaa.gov/normal.html)  
U.S. Climate Normals 1971-2000-Products Clim20, [www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html)  
Snow Climatology Project Description, [www.ncdc.noaa.gov/oa/climate/monitoring/snowclim/mainpage.html](http://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](http://www1.ncdc.noaa.gov/pub/data/special/serialcomplete_jam_0900.pdf)