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: COOKEVILLE, TN **COOP ID: 402009**

Climate Division: TN 2 **NWS Call Sign:** **Elevation: 1,090 Feet** **Lat: 36˚06N** **Lon: 85˚30W**

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	45.7	25.3	35.5	74	1972	25	45.3	1974	-22	1985	21	20.9	1977	914	0	.0	.0	12.4	5.2	22.9	1.1
Feb	50.3	27.3	38.8	80	1996	24	47.0	1990	-13	1996	5	26.7	1978	733	0	.0	.0	15.0	3.2	19.5	.4
Mar	59.6	35.2	47.4	85+	1982	19	53.9	1973	-1	1980	3	40.4	1996	547	0	.0	.0	24.2	.4	14.1	@
Apr	68.7	42.7	55.7	90	1995	11	61.6	1981	20	1975	4	50.7	1997	289	11	.0	@	28.4	.0	4.5	.0
May	76.6	51.9	64.3	93+	1962	19	70.1	1987	29	1963	1	59.6	1997	117	93	.0	.2	31.0	.0	.1	.0
Jun	84.1	60.8	72.5	98	1988	25	76.1	1998	38	1966	1	68.4	1974	7	231	.0	4.4	30.0	.0	.0	.0
Jul	87.7	65.2	76.5	104	1980	17	79.9	1980	46	1988	2	73.2	1976	0	356	.2	10.9	31.0	.0	.0	.0
Aug	87.0	63.3	75.2	101+	1983	21	79.7	1995	46+	1956	22	70.8	1992	2	316	.1	9.0	31.0	.0	.0	.0
Sep	81.3	56.3	68.8	97+	1957	2	74.1	1998	34	1967	30	65.3	1974	37	151	.0	3.7	30.0	.0	.0	.0
Oct	71.1	43.8	57.5	90	1998	1	64.6	1971	22	1957	28	51.1	1987	264	31	.0	@	30.5	.0	4.2	.0
Nov	59.7	35.9	47.8	85	1984	1	55.5	1985	7	1976	30	39.2	1976	518	1	.0	.0	23.7	.1	13.5	.0
Dec	49.7	28.6	39.2	76+	1982	3	48.0	1984	-13+	1962	13	28.8	1989	801	0	.0	.0	16.3	2.8	20.7	.2
Ann	68.5	44.7	56.6	104	Jul 1980	17	79.9	Jul 1980	-22	Jan 1985	21	20.9	Jan 1977	4229	1190	.3	28.2	303.5	11.7	99.5	1.7

\+ 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: 1951-2001

(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: COOKEVILLE, TN **COOP ID: 402009**

Climate Division: TN 2 **NWS Call Sign:** **Elevation: 1,090 Feet** **Lat: 36˚06N** **Lon: 85˚30W**

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	5.33	5.24	3.67	1974	11	11.02	1974	1.03	1986
Feb	4.43	4.31	3.15	1962	27	8.67	1994	1.28	1980
Mar	5.86	5.11	5.28	1975	13	15.75	1975	1.85	1983
Apr	4.52	4.11	2.98	1998	17	8.51	2000	1.51	1976
May	5.66	5.12	5.27	1984	7	13.06	1984	2.13	1988
Jun	4.49	3.68	4.24	1998	11	16.62	1998	.12	1988
Jul	5.07	4.44	4.30	1979	8	10.52	1979	.87	1997
Aug	4.28	4.42	3.57	1964	16	8.35	1982	.67	1999
Sep	4.11	4.13	6.06	1964	29	7.71	1977	.50	1978
Oct	3.47	2.74	3.20	1989	1	7.64	1984	.08	2000
Nov	4.87	4.59	4.80	1973	27	10.20	1973	1.31	1976
Dec	5.73	5.41	4.43	1998	13	14.99	1990	1.68	1985
Ann	57.82	57.60	6.06	Sep 1964	29	16.62	Jun 1998	.08	Oct 2000

Mean Number of Days (3)

Daily Precipitation

Month	>= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	12.2	9.0	4.0	1.3
Feb	10.7	7.9	3.0	1.3
Mar	12.3	9.3	3.9	1.7
Apr	10.8	7.7	3.3	1.2
May	11.3	8.7	3.9	1.6
Jun	10.3	7.5	3.1	1.1
Jul	11.3	8.2	3.3	1.6
Aug	8.8	6.8	3.1	1.1
Sep	8.5	6.1	2.6	1.2
Oct	7.9	5.4	2.4	1.0
Nov	10.4	7.7	3.5	1.0
Dec	11.8	8.4	3.6	1.6
Ann	126.3	92.7	39.7	15.7

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	1.88	2.39	3.11	3.73	4.31	4.91	5.57	6.33	7.31	8.81	10.20
Feb	1.78	2.19	2.77	3.24	3.69	4.15	4.64	5.21	5.93	7.03	8.03
Mar	2.03	2.59	3.39	4.07	4.72	5.39	6.12	6.97	8.05	9.74	11.29
Apr	1.78	2.20	2.79	3.29	3.75	4.23	4.74	5.33	6.08	7.23	8.28
May	2.17	2.70	3.45	4.07	4.67	5.27	5.92	6.68	7.64	9.12	10.47
Jun	.58	.94	1.58	2.20	2.86	3.59	4.44	5.48	6.90	9.21	11.46
Jul	1.93	2.40	3.08	3.64	4.17	4.72	5.31	5.99	6.86	8.20	9.43
Aug	1.47	1.87	2.46	2.96	3.44	3.93	4.47	5.10	5.90	7.14	8.29
Sep	1.21	1.60	2.19	2.70	3.19	3.70	4.26	4.93	5.79	7.14	8.39
Oct	.59	.89	1.40	1.87	2.36	2.89	3.49	4.23	5.21	6.80	8.32
Nov	1.86	2.31	2.96	3.50	4.01	4.53	5.10	5.75	6.58	7.86	9.03
Dec	1.86	2.41	3.21	3.89	4.55	5.23	5.97	6.84	7.96	9.70	11.31
Ann	43.50	46.34	49.93	52.63	55.02	57.32	59.68	62.27	65.40	69.91	73.79

\+ 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: 1951-2001
(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: COOKEVILLE, TN **COOP ID: 402009**

Climate Division: TN 2 **NWS Call Sign:** **Elevation: 1,090 Feet** **Lat: 36°06N** **Lon: 85°30W**

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	3.3	1.5	#	#	7.0	1996	8	12.1	1996	7	1996	8	2	1978	1.9	1.1	.4	.1	.0	3.7	1.4	.3	.0
Feb	2.5	1.0	#	#	7.5	1979	7	15.8	1979	10	1979	10	2	1979	1.6	1.1	.4	.1	.0	2.0	.8	.3	.1
Mar	.9	.0	#	#	3.5	1980	2	6.5	1996	8	1993	13	1	1993	.7	.4	.1	.0	.0	.3	.1	.0	.0
Apr	.1	.0	#	0	1.0	1971	7	1.0+	1983	1+	1983	18	#+	1983	.1	.1	.0	.0	.0	.1	.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	.3	.0	#	0	2.5	1976	12	3.5	1976	#+	1976	30	#+	1976	.2	.1	.0	.0	.0	.0	.0	.0	.0
Dec	.8	.0	#	#	3.5	1982	12	5.5	1997	4	1982	12	#+	2000	.7	.3	@	.0	.0	.4	.1	.0	.0
Ann	7.9	2.5	N/A	N/A	7.5	Feb 1979	7	15.8	Feb 1979	10	Feb 1979	10	2+	Feb 1979	5.2	3.1	.9	.2	.0	6.5	2.4	.6	.1

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

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

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

(2) Derived from 1971-2000 daily data

-9/-9.9 represents missing values

Annual statistics for Mean/Median snow depths are not appropriate

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: COOKEVILLE, TN **COOP ID: 402009**

Climate Division: TN 2 **NWS Call Sign:** **Elevation: 1,090 Feet** **Lat: 36˚06N** **Lon: 85˚30W**

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	5/09	5/06	5/02	4/29	4/26	4/21	4/15
32	4/30	4/25	4/21	4/18	4/16	4/13	4/10	4/06	4/02
28	4/19	4/14	4/10	4/07	4/04	4/01	3/29	3/26	3/21
24	4/10	4/03	3/29	3/25	3/21	3/17	3/12	3/07	3/01
20	3/25	3/17	3/11	3/06	3/01	2/24	2/19	2/13	2/04
16	3/15	3/06	2/27	2/21	2/16	2/10	2/04	1/28	1/19

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	9/29	10/03	10/06	10/08	10/10	10/13	10/15	10/18	10/22
32	10/05	10/10	10/14	10/17	10/20	10/23	10/27	10/31	11/05
28	10/18	10/23	10/27	10/30	11/02	11/05	11/08	11/11	11/16
24	11/01	11/06	11/09	11/12	11/15	11/18	11/21	11/24	11/29
20	11/08	11/14	11/18	11/22	11/25	11/28	12/02	12/06	12/12
16	11/22	12/01	12/07	12/12	12/17	12/22	12/27	1/02	1/11

Freeze Free Period

Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	180	173	168	164	160	156	152	147	141
32	205	199	195	191	187	184	180	175	169
28	231	224	219	215	211	207	203	198	191
24	261	254	248	243	239	234	229	224	216
20	298	288	281	274	269	263	256	249	239
16	332	320	313	307	301	296	290	283	273

***** 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: COOKEVILLE, TN **COOP ID: 402009**

Climate Division: TN 2 **NWS Call Sign:** **Elevation: 1,090 Feet** **Lat: 36˚06N** **Lon: 85˚30W**

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	914	733	547	289	117	7	0	2	37	264	518	801	4229
60	767	593	402	168	51	1	0	0	9	157	375	646	3169
57	679	515	319	112	27	0	0	0	4	107	295	562	2620
55	621	462	268	81	17	0	0	0	2	80	246	504	2281
50	484	336	163	28	4	0	0	0	0	32	144	368	1559
32	136	51	6	0	0	0	0	0	0	0	3	62	258

Cooling Degree Days (1)

Base Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	245	242	482	712	999	1214	1379	1338	1103	790	476	285	9265
55	17	9	31	103	303	524	666	625	415	157	29	13	2892
57	13	6	20	73	251	464	604	563	357	122	18	9	2500
60	8	0	10	40	183	375	511	470	273	79	8	1	1958
65	0	0	0	11	93	231	356	316	151	31	1	0	1190
70	0	0	0	2	36	110	204	175	63	9	0	0	599

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	90	129	279	487	758	978	1136	1094	869	553	278	130	90	219	498	985	1743	2721	3857	4951	5820	6373	6651	6781
45	41	65	174	348	603	828	981	939	719	401	175	68	41	106	280	628	1231	2059	3040	3979	4698	5099	5274	5342
50	19	27	98	230	451	678	826	784	569	264	99	33	19	46	144	374	825	1503	2329	3113	3682	3946	4045	4078
55	5	5	46	129	307	528	671	629	422	155	52	10	5	10	56	185	492	1020	1691	2320	2742	2897	2949	2959
60	0	0	14	64	180	378	516	474	282	72	17	0	0	0	14	78	258	636	1152	1626	1908	1980	1997	1997
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	59	91	190	311	488	662	781	748	574	361	180	84	59	150	340	651	1139	1801	2582	3330	3904	4265	4445	4529

(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