

Climatology of the United States

No. 20

1971-2000

Station: DRESDEN, TN

COOP ID: 402600

Climate Division: TN 4

NWS Call Sign:

Elevation: 450 Feet Lat: 36° 17N Lon: 88° 42W

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	43.8	25.0	34.4	75	1972	25	43.4	1990	-17+	1963	24	21.3	1977	949	0	.0	.0	10.3	6.0	23.4	.7
Feb	49.8	28.7	39.3	81	1962	13	47.5	1976	-5	1958	17	25.6	1978	722	0	.0	.0	14.3	3.7	18.2	.3
Mar	59.7	37.8	48.8	88	1963	31	55.9	1973	0	1960	5	41.7	1980	508	4	.0	.0	24.7	.4	11.0	.0
Apr	69.7	46.4	58.1	90+	1963	21	64.2	1981	23	1973	11	51.9	1983	232	22	.0	.1	28.9	.0	2.6	.0
May	77.9	55.7	66.8	95+	1962	17	72.6	1987	33	1966	10	61.8	1976	75	131	.0	.9	31.0	.0	.0	.0
Jun	85.9	64.2	75.1	100+	1978	30	78.4	1984	43+	1966	1	70.5	1974	2	302	.1	8.9	30.0	.0	.0	.0
Jul	89.3	68.0	78.7	102	1980	17	82.9	1980	48	1971	31	75.5	1971	0	423	.3	17.3	31.0	.0	.0	.0
Aug	88.4	65.8	77.1	104	1964	5	82.6	1983	47+	1964	13	73.1	1992	1	376	.3	13.6	31.0	.0	.0	.0
Sep	82.5	58.9	70.7	101	1960	7	75.9	1998	35	1967	29	64.6	1974	30	201	.0	5.9	30.0	.0	.0	.0
Oct	71.9	46.5	59.2	92	1963	12	66.8	1971	23	1981	24	53.2	1987	225	44	.0	.1	30.8	.0	2.4	.0
Nov	59.2	37.9	48.6	87	1984	1	55.0	1985	10+	1964	22	38.8	1976	498	3	.0	.0	23.2	.1	10.1	.0
Dec	48.3	29.0	38.7	78	1982	3	48.1	1984	-11	1989	22	27.4	1989	817	0	.0	.0	14.4	3.1	20.3	.2
Ann	68.9	47.0	58.0	104	Aug 1964	5	82.9	Jul 1980	-17+	Jan 1963	24	21.3	Jan 1977	4059	1506	.7	46.8	299.6	13.3	88.0	1.2

+ 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

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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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: DRESDEN, TN

COOP ID: 402600

Climate Division: TN 4

NWS Call Sign:

Elevation: 450 Feet Lat: 36°17N

Lon: 88°42W

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	4.14	3.93	4.20	1999	23	10.10	1999	1.08	1986	9.7	7.0	2.9	1.1	1.12	1.51	2.11	2.64	3.15	3.69	4.29	5.00	5.92	7.36	8.71
Feb	4.35	3.52	4.07	1989	14	11.68	1989	1.46	1978	8.5	6.6	2.9	1.2	1.30	1.71	2.33	2.86	3.38	3.92	4.52	5.22	6.12	7.54	8.85
Mar	5.17	4.55	6.95	1997	2	14.63	1997	2.18	1987	10.9	8.7	3.5	1.4	1.75	2.24	2.96	3.56	4.14	4.74	5.40	6.16	7.14	8.66	10.06
Apr	5.09	4.75	3.92	1974	22	9.71	1998	2.02	1992	10.4	7.8	3.8	1.5	1.99	2.46	3.13	3.69	4.21	4.75	5.33	6.00	6.85	8.16	9.35
May	5.50	5.00	4.60	1983	15	13.52	1983	1.26	1982	10.4	8.0	3.6	1.8	1.93	2.44	3.20	3.83	4.44	5.06	5.74	6.53	7.55	9.11	10.55
Jun	4.94	4.47	4.69	1998	5	11.70	1998	.93	1988	8.5	6.7	3.1	1.4	1.71	2.17	2.85	3.43	3.98	4.54	5.16	5.88	6.80	8.23	9.54
Jul	4.93	4.86	6.73	1975	20	12.00	1972	.87	1991	8.6	6.4	3.1	1.5	1.12	1.57	2.30	2.95	3.59	4.28	5.06	5.98	7.19	9.13	10.95
Aug	3.43	2.62	6.50	1971	22	11.17	1974	.15	1983	6.6	4.9	2.4	.8	.43	.71	1.19	1.67	2.18	2.74	3.39	4.19	5.29	7.08	8.81
Sep	3.82	4.10	3.52	1991	5	10.13	1996	.71	1999	7.7	5.5	2.5	1.3	.98	1.34	1.90	2.39	2.87	3.38	3.94	4.61	5.48	6.86	8.15
Oct	3.28	2.99	3.53	1990	4	7.96	1984	.67	2000	7.3	5.0	2.4	.8	1.04	1.35	1.81	2.21	2.59	2.98	3.42	3.93	4.58	5.60	6.54
Nov	4.94	4.76	4.53	2001	29	9.86	1973	1.15	1998	9.6	7.2	3.3	1.9	1.61	2.08	2.77	3.36	3.92	4.51	5.15	5.90	6.87	8.37	9.76
Dec	5.21	4.29	4.75	1990	18	17.79	1990	.76	1976	9.8	7.0	3.1	1.6	1.19	1.68	2.44	3.12	3.81	4.53	5.35	6.32	7.60	9.63	11.54
Ann	54.80	54.04	6.95	Mar 1997	2	17.79	Dec 1990	.15	Aug 1983	108.0	80.8	36.6	16.3	41.74	44.34	47.63	50.10	52.28	54.37	56.52	58.88	61.72	65.81	69.33

+ 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

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Station: DRESDEN, TN

COOP ID: 402600

Climate Division: TN 4

NWS Call Sign:

Elevation: 450 Feet

Lat: 36° 17N

Lon: 88° 42W

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	3.5	1.0	#	0	6.0	1977	10	16.0	1977	10	1977	10	3	1978	1.8	1.0	.4	.1	.0	3.3	1.7	.7	.1
Feb	3.3	2.3	#	0	8.0	1979	7	12.8	1978	8+	1985	1	2	1979	1.2	.8	.3	.2	.0	1.9	.6	.1	.0
Mar	.4	.0	#	0	2.5	1980	1	3.0	1971	3	1980	1	#+	1980	.3	.2	.0	.0	.0	.3	@	.0	.0
Apr	.0	.0	#	0	.5	1971	6	.5	1971	#	1971	6	#	1971	@	.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	.2	.0	#	0	2.0	1976	15	3.0	1976	1	1976	12	#+	1976	.1	.1	.0	.0	.0	@	.0	.0	.0
Dec	.1	.0	#	0	1.0	1974	1	1.0	1974	1	1984	6	#+	1990	.2	.1	.0	.0	.0	@	.0	.0	.0
Ann	7.5	3.3	N/A	N/A	8.0	Feb 1979	7	16.0	Jan 1977	10	Jan 1977	10	3	Jan 1978	3.6	2.2	.7	.3	.0	5.5	2.3	.8	.1

+ 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/normal/usnormals.html

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NWS Call Sign:

Elevation: 450 Feet

Lat: 36° 17N

Lon: 88° 42W

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	5/05	4/30	4/26	4/23	4/20	4/17	4/14	4/10	4/05
32	4/19	4/15	4/12	4/10	4/08	4/06	4/04	4/01	3/28
28	4/14	4/09	4/05	4/02	3/30	3/27	3/24	3/21	3/16
24	3/31	3/26	3/22	3/19	3/16	3/13	3/10	3/07	3/02
20	3/18	3/10	3/04	2/27	2/23	2/18	2/14	2/08	1/31
16	3/09	3/01	2/24	2/19	2/14	2/10	2/05	1/30	1/22
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	9/30	10/04	10/08	10/10	10/13	10/15	10/18	10/21	10/25
32	10/08	10/13	10/17	10/20	10/23	10/26	10/29	11/02	11/08
28	10/25	10/30	11/03	11/06	11/08	11/11	11/14	11/18	11/22
24	10/31	11/06	11/11	11/15	11/19	11/23	11/27	12/02	12/09
20	11/09	11/16	11/22	11/26	11/30	12/04	12/09	12/14	12/21
16	11/16	11/28	12/06	12/13	12/19	12/25	1/01	1/09	1/21
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	196	189	184	179	175	171	167	162	155
32	215	209	205	201	197	194	190	186	180
28	241	235	230	226	222	219	215	210	204
24	274	265	258	253	247	242	237	230	221
20	310	300	292	286	280	273	267	259	249
16	347	328	318	310	303	297	289	281	270

* 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	949	722	508	232	75	2	0	1	30	225	498	817	4059
60	794	585	366	127	27	0	0	0	8	128	360	665	3060
57	709	507	288	80	13	0	0	0	3	85	284	579	2548
55	650	455	242	56	7	0	0	0	1	62	238	521	2232
50	507	334	146	17	1	0	0	0	0	23	144	386	1558
32	138	58	6	0	0	0	0	0	0	0	5	72	279

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	212	261	525	780	1079	1290	1446	1398	1160	842	500	278	9771
55	11	14	48	146	373	600	733	685	472	191	44	15	3332
57	8	10	32	110	316	540	671	623	413	152	29	10	2914
60	0	4	17	67	238	450	578	530	328	102	16	3	2333
65	0	0	4	22	131	302	423	376	201	44	3	0	1506
70	0	0	0	5	57	165	269	230	102	14	0	0	842

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	71	142	317	552	837	1060	1208	1158	929	605	295	119	71	213	530	1082	1919	2979	4187	5345	6274	6879	7174	7293
45	38	74	208	410	682	910	1053	1003	779	454	191	64	38	112	320	730	1412	2322	3375	4378	5157	5611	5802	5866
50	13	34	124	278	528	760	898	848	629	311	112	29	13	47	171	449	977	1737	2635	3483	4112	4423	4535	4564
55	3	14	62	174	382	610	743	693	481	195	58	9	3	17	79	253	635	1245	1988	2681	3162	3357	3415	3424
60	0	1	30	90	239	460	588	538	339	102	22	0	0	1	31	121	360	820	1408	1946	2285	2387	2409	2409
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	46	89	197	346	542	724	835	795	617	387	177	72	46	135	332	678	1220	1944	2779	3574	4191	4578	4755	4827

(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.

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| <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 |
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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