

Climatography of the United States No. 20

National Climatic Data Center
Federal Building
151 Patton Avenue
Asheville, North Carolina 28801
www.ncdc.noaa.gov

Station: DOVER 1 W, TN

1971-2000

COOP ID: 402589

Climate Division: TN 3

NWS Call Sign:

Elevation: 475 Feet

Lat: 36°29N

Lon: 87°52W

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	43.9	24.4	34.2	76	1950	25	42.9	1990	-24	1963	24	19.4	1977	958	0	.0	.0	10.4	6.0	23.6	1.2
Feb	49.7	27.6	38.7	83	1962	13	46.2	1990	-21	1951	2	24.0	1978	738	0	.0	.0	14.3	3.6	18.9	.4
Mar	60.0	36.8	48.4	92	1929	24	56.1	1973	-3	1960	5	41.6	1980	520	5	.0	.0	24.3	.3	11.7	@
Apr	69.8	45.3	57.6	91+	1951	30	64.2	1981	22+	1950	14	51.9	1983	243	20	.0	.1	28.8	.0	3.0	.0
May	77.2	54.1	65.7	95	1953	29	71.1	1987	30+	1963	2	60.2	1976	93	112	.0	.4	30.9	.0	.1	.0
Jun	84.6	62.9	73.8	105	1952	28	76.8	1971	38	1966	1	69.0	1974	5	266	.1	5.9	30.0	.0	.0	.0
Jul	88.5	67.0	77.8	108+	1930	12	81.8	1986	47	1968	5	74.8	1971	0	395	.4	14.6	31.0	.0	.0	.0
Aug	87.6	64.9	76.3	107	1930	8	81.3	1983	46+	1986	29	71.8	1992	2	350	.4	11.7	31.0	.0	.0	.0
Sep	81.5	57.4	69.5	102	1954	5	75.8	1998	29+	1983	22	64.3	1974	41	175	.1	4.3	30.0	.0	.1	.0
Oct	70.9	44.7	57.8	93	1953	1	66.2	1971	19	1952	29	51.3	1976	262	38	.0	@	30.5	.0	3.6	.0
Nov	58.8	37.1	48.0	84+	1950	1	54.7	1985	-7	1950	25	37.9	1976	514	2	.0	.0	22.9	.2	11.2	.0
Dec	48.3	28.3	38.3	79	1951	31	47.9	1984	-13	1989	22	26.8	1989	827	0	.0	.0	14.7	3.3	19.9	.3
Ann	68.4	45.9	57.2	108+	Jul 1930	12	81.8	Jul 1986	-24	Jan 1963	24	19.4	Jan 1977	4203	1363	1.0	37.0	298.8	13.4	92.1	1.9

+ 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: 1928-2001

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

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Lon: 87°52W

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	4.28	4.35	4.11	1979	7	10.00	1999	.70	1986	9.2	7.0	2.8	1.0	1.04	1.44	2.07	2.62	3.17	3.75	4.40	5.18	6.19	7.80	9.30
Feb	4.49	3.91	4.24	1956	17	11.51	1989	2.04+	1993	8.8	6.8	3.0	1.3	1.68	2.10	2.70	3.20	3.68	4.17	4.70	5.31	6.10	7.31	8.41
Mar	5.40	4.67	5.68	1997	2	14.97	1975	2.15	1987	10.6	8.3	3.6	1.7	1.79	2.30	3.05	3.69	4.30	4.94	5.63	6.44	7.48	9.10	10.59
Apr	4.55	3.92	6.28	1968	4	12.49	1979	1.53	1988	10.1	7.7	3.4	1.2	1.54	1.97	2.60	3.13	3.64	4.17	4.75	5.42	6.28	7.62	8.85
May	4.89	4.74	4.28	1983	19	13.76	1983	1.97	1988	10.2	7.7	3.6	1.3	1.91	2.36	3.01	3.54	4.05	4.57	5.12	5.77	6.59	7.85	9.00
Jun	4.37	4.35	5.44	1998	5	10.81	1998	.33	1988	9.1	6.8	3.0	1.1	1.18	1.60	2.23	2.78	3.32	3.89	4.52	5.27	6.24	7.76	9.19
Jul	4.40	4.06	3.56	1984	16	8.76	1984	.90	2000	8.8	6.6	3.0	1.3	1.50	1.91	2.52	3.04	3.53	4.04	4.59	5.24	6.07	7.35	8.53
Aug	3.66	3.00	7.60	1982	31	10.65	1982	.00	1999	7.7	5.4	2.4	1.2	.36	.79	1.40	1.93	2.47	3.06	3.72	4.53	5.59	7.32	8.96
Sep	3.88	3.60	5.15	1979	14	8.81	1982	.55	1998	8.2	5.8	2.6	1.2	.88	1.24	1.81	2.32	2.83	3.37	3.98	4.71	5.67	7.20	8.63
Oct	3.51	3.24	3.60	2001	14	7.19	1984	.39	2000	7.3	5.3	2.7	1.0	.96	1.29	1.79	2.24	2.67	3.12	3.63	4.22	5.00	6.22	7.35
Nov	4.89	4.58	4.02	2001	29	10.50	1979	1.44	1998	9.3	7.2	3.5	1.5	1.49	1.95	2.65	3.24	3.82	4.42	5.08	5.86	6.86	8.43	9.88
Dec	5.08	4.35	4.90	1990	22	14.10	1990	.76	1976	9.0	6.9	3.3	1.5	1.25	1.73	2.47	3.13	3.78	4.46	5.23	6.14	7.33	9.22	10.98
Ann	53.40	52.29	7.60	Aug 1982	31	14.97	Mar 1975	.00	Aug 1999	108.3	81.5	36.9	15.3	39.32	42.08	45.60	48.26	50.61	52.88	55.21	57.78	60.89	65.38	69.25

+ 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: 1928-2001

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

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Station: DOVER 1 W, TN

COOP ID: 402589

Climate Division: TN 3

NWS Call Sign:

Elevation: 475 Feet

Lat: 36°29N

Lon: 87°52W

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	3.2	1.8	#	#	6.5	1982	13	12.8	1978	13	1978	26	3	1977	1.7	1.0	.4	.2	.0	2.7	1.4	.3	.0
Feb	3.8	2.0	#	#	8.0	1979	7	15.8	1978	11	1985	2	5	1979	1.4	1.2	.5	.2	.0	1.5	.8	.3	.0
Mar	.5	.0	#	0	5.5	1987	31	5.5	1987	6	1987	31	#+	1999	.2	.1	.1	@	.0	.2	.1	@	.0
Apr	#	.0	#	0	#	1992	1	#+	1992	#	2000	9	#	2000	.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	#	1993	31	#	1993	#	1993	31	#	1993	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nov	.2	.0	#	0	1.5	1976	12	3.0	1976	2	1996	10	#	1996	.2	.1	.0	.0	.0	@	.0	.0	.0
Dec	.3	.0	#	0	2.0	1984	6	2.5	1983	2+	2000	18	#+	2000	.2	.2	.0	.0	.0	.3	.0	.0	.0
Ann	8.0	3.8	N/A	N/A	8.0	Feb 1979	7	15.8	Feb 1978	13	Jan 1978	26	5	Feb 1979	3.7	2.6	1.0	.4	.0	4.7	2.3	.6	.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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Climate Division: TN 3

NWS Call Sign:

Elevation: 475 Feet

Lat: 36°29N

Lon: 87°52W

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	5/09	5/03	4/29	4/25	4/22	4/18	4/14	4/10	4/04
32	4/30	4/24	4/20	4/17	4/13	4/10	4/06	4/02	3/27
28	4/15	4/11	4/08	4/05	4/03	3/31	3/28	3/25	3/21
24	4/04	3/28	3/23	3/19	3/15	3/11	3/07	3/02	2/23
20	3/21	3/14	3/09	3/05	3/01	2/25	2/21	2/16	2/09
16	3/13	3/05	2/27	2/22	2/18	2/13	2/08	2/03	1/26
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	10/04	10/07	10/10	10/12	10/15	10/18	10/21	10/25
32	10/02	10/08	10/11	10/15	10/18	10/21	10/24	10/28	11/03
28	10/17	10/24	10/28	11/01	11/04	11/08	11/12	11/16	11/23
24	10/31	11/06	11/10	11/14	11/17	11/21	11/25	11/29	12/05
20	11/08	11/15	11/21	11/25	11/29	12/03	12/08	12/13	12/20
16	11/18	11/27	12/03	12/09	12/14	12/19	12/24	12/31	1/08
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	188	182	178	173	169	164	158	151
32	212	204	197	192	187	182	177	170	162
28	238	230	224	220	215	211	206	201	193
24	274	265	258	252	246	241	235	228	219
20	302	292	285	278	273	267	261	253	243
16	331	318	310	303	297	290	284	276	266

* 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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COOP ID: 402589

Climate Division: TN 3 NWS Call Sign: Elevation: 475 Feet Lat: 36° 29N Lon: 87° 52W

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	958	738	520	243	93	5	0	2	41	262	514	827	4203
60	803	601	379	136	36	0	0	0	12	158	374	676	3175
57	721	524	301	88	18	0	0	0	5	110	296	590	2653
55	662	472	255	62	10	0	0	0	3	83	249	533	2329
50	521	350	159	20	2	0	0	0	0	35	151	397	1635
32	157	67	8	0	0	0	0	0	0	0	5	82	319

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	222	254	517	767	1042	1252	1418	1371	1125	799	484	278	9529
55	14	14	50	139	339	562	705	658	437	169	37	16	3140
57	11	10	34	104	284	502	643	596	379	134	25	11	2733
60	0	4	19	63	210	412	550	503	297	89	13	4	2164
65	0	0	5	20	112	266	395	350	175	38	2	0	1363
70	0	0	0	4	46	138	241	207	85	12	0	0	733

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	73	134	313	538	805	1020	1180	1130	894	561	286	120	73	207	520	1058	1863	2883	4063	5193	6087	6648	6934	7054
45	38	74	204	399	650	870	1025	975	744	413	185	63	38	112	316	715	1365	2235	3260	4235	4979	5392	5577	5640
50	15	34	118	270	495	720	870	820	594	279	110	32	15	49	167	437	932	1652	2522	3342	3936	4215	4325	4357
55	1	10	65	165	348	570	715	665	448	168	57	11	1	11	76	241	589	1159	1874	2539	2987	3155	3212	3223
60	0	1	28	84	213	420	560	510	308	86	20	1	0	1	29	113	326	746	1306	1816	2124	2210	2230	2231
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	47	89	198	338	520	699	812	776	593	366	176	72	47	136	334	672	1192	1891	2703	3479	4072	4438	4614	4686

(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