

Climatology of the United States

No. 20

1971-2000

Station: DUNN 4 NW, NC

COOP ID: 312500

Climate Division: NC 6

NWS Call Sign:

Elevation: 200 Feet

Lat: 35°19N

Lon: 78°41W

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	50.8	28.6	39.7	80	1970	29	50.0	1974	-4	1985	21	27.6	1977	784	0	.0	.0	17.9	1.1	19.8	@
Feb	54.9	30.7	42.8	83	1975	23	50.4	1990	4+	1996	6	34.4	1978	622	0	.0	.0	19.8	.6	15.3	.0
Mar	63.2	38.4	50.8	89	1985	29	56.2	1997	10	1980	2	45.8	1996	440	0	.0	.0	28.2	@	8.1	.0
Apr	72.0	45.8	58.9	93+	1981	29	62.9	1981	25	1985	10	54.9	1983	198	14	.0	.5	29.8	.0	1.3	.0
May	78.8	55.4	67.1	97+	1996	20	71.7	1991	33	1963	2	63.0	1992	48	113	.0	2.5	31.0	.0	.0	.0
Jun	85.4	63.7	74.6	100	1981	16	78.6	1981	43+	1976	6	70.5	1976	4	290	@	9.2	30.0	.0	.0	.0
Jul	88.9	68.3	78.6	102+	1986	19	81.9	1986	52+	1983	5	75.2	1976	0	422	.4	15.9	31.0	.0	.0	.0
Aug	87.1	66.8	77.0	108	1983	22	80.9	1999	47+	1976	31	72.1	1976	0	370	.3	11.2	31.0	.0	.0	.0
Sep	81.7	60.3	71.0	100	1980	3	74.8	1998	37+	1983	25	65.9	1976	13	193	@	4.0	30.0	.0	.0	.0
Oct	72.4	47.1	59.8	94+	1986	5	66.5	1984	21	1976	29	52.9	1987	208	45	.0	.2	31.0	.0	1.2	.0
Nov	63.2	37.8	50.5	86+	1974	3	57.9	1985	12	1970	25	40.7	1976	440	4	.0	.0	27.8	.0	9.3	.0
Dec	54.0	31.2	42.6	80+	1998	9	49.7	1971	1	1989	25	34.1	1989	696	0	.0	.0	21.4	.5	17.1	.0
Ann	71.0	47.8	59.5	108	Aug 1983	22	81.9	Jul 1986	-4	Jan 1985	21	27.6	Jan 1977	3453	1451	.7	43.5	328.9	2.2	72.1	@

+ 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

Issue Date: February 2004

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1962-2001

(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: DUNN 4 NW, NC

COOP ID: 312500

Climate Division: NC 6

NWS Call Sign:

Elevation: 200 Feet Lat: 35°19N

Lon: 78°41W

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	4.13	3.97	2.36	1977	10	8.44	1998	.83	1981	10.5	7.3	3.0	.8	1.39	1.78	2.35	2.84	3.30	3.78	4.31	4.92	5.71	6.93	8.05
Feb	3.65	3.54	2.95	1995	16	7.66	1983	.93	1991	8.7	6.4	2.6	.9	1.09	1.43	1.95	2.40	2.84	3.29	3.79	4.38	5.14	6.34	7.44
Mar	4.57	4.70	4.50	1998	9	8.12	1998	1.27	1981	10.0	7.2	3.2	1.2	1.60	2.03	2.66	3.19	3.69	4.21	4.78	5.44	6.28	7.58	8.78
Apr	3.24	3.05	3.03	1987	15	7.24	1998	.20	1976	7.2	5.5	2.0	.9	.63	.92	1.40	1.84	2.28	2.76	3.30	3.95	4.81	6.20	7.51
May	3.86	3.41	2.42	1981	28	7.63	1976	.67	1999	9.7	6.5	2.7	1.0	.93	1.29	1.85	2.35	2.85	3.38	3.97	4.67	5.60	7.06	8.43
Jun	4.44	3.53	5.85	1992	27	13.84	1995	.85	1993	9.4	6.2	2.6	1.3	.98	1.39	2.04	2.63	3.21	3.84	4.54	5.39	6.50	8.26	9.93
Jul	5.64	5.04	5.10	1970	11	12.07	1993	1.41	1998	11.3	8.3	3.4	1.6	1.34	1.87	2.69	3.43	4.16	4.93	5.80	6.83	8.18	10.33	12.34
Aug	4.81	4.79	2.85	2001	12	11.15	1981	.86	1983	10.4	7.8	3.3	1.3	1.33	1.79	2.48	3.09	3.68	4.30	4.99	5.80	6.85	8.50	10.04
Sep	4.50	3.69	7.40	1999	16	17.61	1999	.30	1990	7.7	6.0	2.8	1.3	.54	.90	1.53	2.16	2.82	3.56	4.43	5.50	6.95	9.33	11.65
Oct	3.19	3.04	6.06	1964	4	7.72	1995	.00	2000	5.8	4.0	1.9	1.0	.36	.75	1.28	1.74	2.21	2.70	3.26	3.94	4.83	6.26	7.62
Nov	3.05	2.88	4.52	1963	6	7.24	1972	.23	1973	7.4	5.2	2.2	.9	.75	1.03	1.48	1.88	2.27	2.68	3.14	3.69	4.42	5.56	6.63
Dec	3.50	3.16	5.00	1972	23	10.22	1972	.51	1985	9.8	6.3	2.5	.8	.78	1.11	1.62	2.08	2.54	3.03	3.59	4.25	5.11	6.50	7.80
Ann	48.58	47.84	7.40	Sep 1999	16	17.61	Sep 1999	.00	Oct 2000	107.9	76.7	32.2	13.0	36.44	38.84	41.89	44.18	46.21	48.16	50.16	52.37	55.03	58.87	62.16

+ 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: 1962-2001

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

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Station: DUNN 4 NW, NC

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Climate Division: NC 6

NWS Call Sign:

Elevation: 200 Feet

Lat: 35° 19N

Lon: 78° 41W

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	1.1	.0	#	0	7.0	1988	7	7.0	1988	7	1973	8	1	1973	.4	.3	.3	.1	.0	.1	.1	.0	.0
Feb	2.0	.0	#	0	5.5	1979	19	12.3	1979	7	1989	25	#+	1989	.8	.6	.4	.1	.0	.1	.1	@	.0
Mar	.9	.0	#	0	4.0	1980	2	8.0	1980	8	1980	3	#	1980	.2	.2	.2	.0	.0	.1	.1	@	.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	.5	.0	#	0	6.0	1989	24	6.0	1989	#	1973	17	#	1973	.1	.1	.1	.1	.0	.0	.0	.0	.0
Ann	4.5	.0	N/A	N/A	7.0	Jan 1988	7	12.3	Feb 1979	8	Mar 1980	3	1	Jan 1973	1.5	1.2	1.0	.3	.0	.3	.3	@	.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

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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	5/02	4/26	4/22	4/18	4/15	4/11	4/08	4/03	3/28
32	4/18	4/13	4/09	4/06	4/03	3/31	3/27	3/24	3/18
28	4/05	3/30	3/26	3/22	3/19	3/15	3/12	3/07	3/01
24	3/23	3/16	3/10	3/06	3/02	2/25	2/21	2/15	2/08
20	3/11	3/01	2/22	2/16	2/10	2/05	1/29	1/22	1/10
16	2/23	2/14	2/07	2/01	1/26	1/20	1/13	1/02	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	10/05	10/10	10/14	10/17	10/20	10/23	10/26	10/30	11/04
32	10/13	10/19	10/23	10/27	10/30	11/03	11/06	11/11	11/17
28	10/25	11/01	11/05	11/09	11/13	11/16	11/20	11/25	12/01
24	11/02	11/12	11/19	11/25	12/01	12/06	12/13	12/20	12/29
20	11/21	11/30	12/07	12/14	12/19	12/25	12/31	1/08	1/20
16	12/08	12/18	12/26	1/02	1/08	1/15	1/23	2/05	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	211	203	197	192	187	183	178	172	164
32	233	225	219	215	210	205	200	195	187
28	265	256	249	244	238	233	227	221	212
24	306	295	287	280	273	267	260	252	241
20	>365	340	326	316	308	300	292	283	271
16	>365	>365	>365	>365	346	333	323	312	298

* 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	784	622	440	198	48	4	0	0	13	208	440	696	3453
60	639	483	293	92	10	0	0	0	2	115	303	547	2484
57	553	406	213	49	3	0	0	0	1	75	230	459	1989
55	497	354	166	29	1	0	0	0	0	54	188	402	1691
50	367	236	78	5	0	0	0	0	0	19	102	274	1081
32	69	19	0	0	0	0	0	0	0	0	1	27	116

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	309	321	583	806	1088	1276	1445	1393	1169	859	555	354	10158
55	23	12	36	145	376	586	732	680	479	200	52	17	3338
57	17	8	21	105	316	526	670	618	420	159	35	11	2906
60	11	1	8	58	230	436	577	525	331	107	18	6	2308
65	0	0	0	14	113	290	422	370	193	45	4	0	1451
70	0	0	0	1	39	160	268	220	82	14	0	0	784

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	132	199	393	616	874	1064	1215	1171	959	647	371	192	132	331	724	1340	2214	3278	4493	5664	6623	7270	7641	7833
45	67	114	261	466	719	914	1060	1016	809	493	247	107	67	181	442	908	1627	2541	3601	4617	5426	5919	6166	6273
50	32	58	158	325	564	764	905	861	659	343	143	53	32	90	248	573	1137	1901	2806	3667	4326	4669	4812	4865
55	9	24	81	202	413	614	750	706	509	213	72	23	9	33	114	316	729	1343	2093	2799	3308	3521	3593	3616
60	0	5	36	108	270	464	595	551	362	108	31	7	0	5	41	149	419	883	1478	2029	2391	2499	2530	2537
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	91	136	254	396	572	727	837	814	648	414	245	128	91	227	481	877	1449	2176	3013	3827	4475	4889	5134	5262

(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