

Climatology of the United States

No. 20

1971-2000

Station: BARTOW, FL

COOP ID: 080478

Climate Division: FL 4

NWS Call Sign:

Elevation: 125 Feet

Lat: 27° 54N

Lon: 81° 51W

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	73.5	51.5	62.5	88	1945	9	72.7	1974	20	1981	13	54.1	1981	160	68	.0	.0	30.9	.0	1.7	.0
Feb	75.4	52.9	64.2	91	1962	25	71.6	1982	23	1977	17	57.4	1978	105	81	.0	.0	28.1	@	1.1	.0
Mar	80.1	57.1	68.6	93+	1974	30	73.9	1997	23	1980	3	63.3	1996	45	157	.0	.6	31.0	.0	.1	.0
Apr	84.2	60.9	72.6	96+	1999	23	76.1	1975	36	1944	6	68.0	1987	6	233	.0	4.0	30.0	.0	.0	.0
May	89.0	67.1	78.1	101+	1953	27	81.4	1995	47	1945	7	74.9	1992	0	404	.0	14.0	31.0	.0	.0	.0
Jun	91.5	72.1	81.8	103	1977	12	85.9	1998	56+	1984	1	80.1	1972	0	503	.2	22.9	30.0	.0	.0	.0
Jul	92.3	73.4	82.9	102	1932	16	84.7	1981	60	1947	6	81.1	1974	0	553	.1	26.8	31.0	.0	.0	.0
Aug	92.3	73.8	83.1	99+	1991	4	84.7	1980	61	1947	17	81.2	1994	0	560	.0	27.1	31.0	.0	.0	.0
Sep	90.4	72.7	81.6	98+	1944	6	83.2	1974	55	1940	30	79.8	1994	0	496	.0	20.8	30.0	.0	.0	.0
Oct	85.4	66.0	75.7	96+	1955	2	79.1	1985	41+	1957	28	71.1	1987	2	334	.0	4.8	31.0	.0	.0	.0
Nov	79.7	59.6	69.7	93	1973	8	76.2	1986	25	1970	25	65.0	1976	31	169	.0	@	30.0	.0	@	.0
Dec	74.6	53.5	64.1	90	1972	8	70.5	1971	18	1962	13	57.4	1989	115	85	.0	@	30.8	.0	1.0	.0
Ann	84.0	63.4	73.7	103	Jun 1977	12	85.9	Jun 1998	18	Dec 1962	13	54.1	Jan 1981	464	3643	.3	121.0	364.8	@	3.9	.0

+ 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: 1931-2001

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

005-A

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: BARTOW, FL

COOP ID: 080478

Climate Division: FL 4

NWS Call Sign:

Elevation: 125 Feet

Lat: 27°54N

Lon: 81°51W

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	2.51	2.30	3.36	1948	24	6.13	1973	.19	1990	7.2	4.2	1.7	.8	.31	.50	.86	1.21	1.58	1.99	2.47	3.07	3.88	5.20	6.49
Feb	2.82	2.27	4.07	1971	8	9.15	1998	.21	2000	6.7	4.1	1.7	.8	.34	.57	.96	1.36	1.77	2.24	2.78	3.44	4.35	5.83	7.28
Mar	3.11	2.11	4.72	1960	16	10.25	1987	.41	1999	6.5	4.6	2.3	1.0	.35	.59	1.02	1.45	1.92	2.43	3.04	3.80	4.82	6.52	8.17
Apr	2.53	2.09	3.56	1951	19	5.87	1991	.00	2000	5.3	3.5	1.6	.8	.13	.37	.75	1.12	1.52	1.96	2.47	3.11	3.98	5.42	6.81
May	3.81	2.49	4.30	1976	14	13.05	1979	.40	1992	7.3	5.2	2.6	1.3	.48	.79	1.33	1.86	2.42	3.04	3.76	4.65	5.85	7.83	9.75
Jun	6.78	6.95	9.82	1945	24	11.63	1999	.79	1998	13.0	9.1	4.5	2.4	2.53	3.17	4.08	4.84	5.56	6.30	7.10	8.03	9.21	11.03	12.70
Jul	8.56	8.01	4.00	1973	23	14.00	1991	3.19	1972	16.1	11.6	5.4	2.7	3.73	4.50	5.57	6.45	7.26	8.09	8.97	9.99	11.27	13.22	14.98
Aug	6.52	5.74	4.64	1965	10	13.01	1981	2.60	1987	15.6	11.1	4.3	1.8	3.02	3.59	4.38	5.01	5.61	6.20	6.84	7.56	8.47	9.85	11.09
Sep	6.68	5.42	11.50	1933	5	15.96	1998	1.04	1972	12.5	9.2	4.2	2.0	1.89	2.53	3.49	4.32	5.14	5.99	6.93	8.04	9.48	11.74	13.85
Oct	2.71	2.14	5.06	1944	19	6.48	1983	.00	2000	7.5	4.5	1.8	.8	.14	.38	.79	1.19	1.62	2.09	2.65	3.34	4.29	5.85	7.37
Nov	2.18	1.99	4.57	1953	25	7.40	1987	.10	1974	6.6	4.0	1.3	.6	.21	.36	.65	.96	1.29	1.66	2.10	2.66	3.41	4.68	5.92
Dec	2.37	1.79	3.75	1997	13	11.38	1983	.24	1987	6.5	3.9	1.5	.7	.16	.30	.60	.93	1.29	1.71	2.23	2.88	3.78	5.32	6.84
Ann	50.58	49.96	11.50	Sep 1933	5	15.96	Sep 1998	.00+	Oct 2000	110.8	75.0	32.9	15.7	36.73	39.43	42.88	45.49	47.81	50.04	52.34	54.88	57.95	62.39	66.23

+ 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: 1931-2001

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

Complete documentation available from:
www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

Climatography of the United States

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Station: BARTOW, FL

COOP ID: 080478

Climate Division: FL 4

NWS Call Sign:

Elevation: 125 Feet

Lat: 27° 54N

Lon: 81° 51W

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	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Feb	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Mar	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.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	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Ann	.0	.0	N/A	N/A	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.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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Climate Division: FL 4

NWS Call Sign:

Elevation: 125 Feet

Lat: 27° 54N

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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	3/13	3/02	2/23	2/17	2/10	2/04	1/29	1/20	1/08
32	2/25	2/15	2/08	2/02	1/26	1/20	1/11	12/27	0/00
28	2/06	1/24	1/12	12/28	0/00	0/00	0/00	0/00	0/00
24	1/28	1/06	0/00	0/00	0/00	0/00	0/00	0/00	0/00
20	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00
16	0/00	0/00	0/00	0/00	0/00	0/00	0/00	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	11/19	12/01	12/10	12/17	12/24	12/31	1/08	1/18	2/01
32	12/09	12/20	12/28	1/05	1/12	1/19	1/29	2/15	0/00
28	12/22	1/06	1/19	2/08	0/00	0/00	0/00	0/00	0/00
24	1/05	1/29	0/00	0/00	0/00	0/00	0/00	0/00	0/00
20	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00
16	0/00	0/00	0/00	0/00	0/00	0/00	0/00	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	>365	342	324	314	307	299	292	284	273
32	>365	>365	>365	>365	351	335	324	312	299
28	>365	>365	>365	>365	>365	>365	>365	>365	330
24	>365	>365	>365	>365	>365	>365	>365	>365	>365
20	>365	>365	>365	>365	>365	>365	>365	>365	>365
16	>365	>365	>365	>365	>365	>365	>365	>365	>365

* 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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Climate Division: FL 4 NWS Call Sign: Elevation: 125 Feet Lat: 27° 54N Lon: 81° 51W

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	160	105	45	6	0	0	0	0	0	2	31	115	464
60	104	43	12	0	0	0	0	0	0	0	7	47	213
57	66	22	5	0	0	0	0	0	0	0	2	24	119
55	47	14	2	0	0	0	0	0	0	0	0	15	78
50	19	3	0	0	0	0	0	0	0	0	0	3	25
32	0	0	0	0	0	0	0	0	0	0	0	0	0

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	945	900	1135	1217	1427	1493	1576	1583	1486	1355	1128	993	15238
55	279	269	423	527	714	803	863	870	796	642	438	295	6919
57	236	222	364	467	652	743	801	808	736	580	380	242	6231
60	181	159	279	377	559	653	708	715	646	487	295	172	5231
65	68	81	157	233	404	503	553	560	496	334	169	85	3643
70	47	28	72	111	250	353	398	405	346	190	79	29	2308

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	691	688	882	969	1172	1250	1321	1332	1239	1100	880	738	691	1379	2261	3230	4402	5652	6973	8305	9544	10644	11524	12262
45	538	545	727	819	1017	1100	1166	1177	1089	945	730	585	538	1083	1810	2629	3646	4746	5912	7089	8178	9123	9853	10438
50	392	407	572	669	862	950	1011	1022	939	790	581	437	392	799	1371	2040	2902	3852	4863	5885	6824	7614	8195	8632
55	258	274	420	519	707	800	856	867	789	635	433	298	258	532	952	1471	2178	2978	3834	4701	5490	6125	6558	6856
60	148	164	276	370	552	650	701	712	639	480	291	177	148	312	588	958	1510	2160	2861	3573	4212	4692	4983	5160
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	440	447	588	659	809	864	916	922	871	776	592	472	440	887	1475	2134	2943	3807	4723	5645	6516	7292	7884	8356

(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