

Climatology of the United States

No. 20

1971-2000

Station: USHER TOWER, FL

COOP ID: 089120

Climate Division: FL 2

NWS Call Sign:

Elevation: 33 Feet

Lat: 29°25N

Lon: 82°49W

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	68.6	43.5	56.1	87	1972	13	68.4	1974	9	1985	22	47.2	1977	322	30	.0	.0	30.3	.0	6.3	.0
Feb	71.3	45.5	58.4	87	1962	25	64.5	1990	17	1996	5	50.0	1978	211	26	.0	.0	27.8	.1	4.1	.0
Mar	77.2	50.5	63.9	92	1974	10	69.6	1997	22	1980	3	57.8	1996	106	71	.0	.2	30.9	.0	1.1	.0
Apr	82.2	54.6	68.4	96	1989	30	73.1	1991	28	1962	17	64.2	1987	26	128	.0	1.8	30.0	.0	@	.0
May	88.1	61.5	74.8	102+	1989	28	78.6	1991	42+	2000	1	72.5+	1992	0	304	.1	10.6	31.0	.0	.0	.0
Jun	91.3	67.9	79.6	105	1989	3	83.2	1981	44	1984	1	77.2	1974	0	438	.5	21.0	30.0	.0	.0	.0
Jul	91.9	70.2	81.1	102+	1992	5	83.0+	1998	59	1981	1	79.4	1975	0	499	.1	24.8	31.0	.0	.0	.0
Aug	91.5	70.7	81.1	100+	1989	17	83.4	1980	52	1967	14	79.0	1994	0	498	.1	23.7	31.0	.0	.0	.0
Sep	89.6	68.5	79.1	99	1986	22	80.8+	1986	44	1967	30	76.8	1985	0	421	.0	17.0	30.0	.0	.0	.0
Oct	83.7	59.1	71.4	96+	1986	5	76.5	1985	31+	1968	27	67.0	1987	19	218	.0	2.7	31.0	.0	.1	.0
Nov	76.4	51.3	63.9	92	1986	10	69.6	1985	17	1970	25	56.6	1976	120	86	.0	@	30.0	.0	1.3	.0
Dec	70.1	45.2	57.7	86+	1984	31	65.2	1971	12	1983	25	50.3	1989	264	36	.0	.0	30.4	.0	5.0	.0
Ann	81.8	57.4	69.6	105	Jun 1989	3	83.4	Aug 1980	9	Jan 1985	22	47.2	Jan 1977	1068	2755	.8	101.8	363.4	.1	17.9	.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: 1956-2001

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

078-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: USHER TOWER, FL

COOP ID: 089120

Climate Division: FL 2

NWS Call Sign:

Elevation: 33 Feet

Lat: 29°25N

Lon: 82°49W

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	4.51	4.29	4.26	1988	21	10.59	1979	.25	1974	8.1	6.4	3.0	1.5	.99	1.41	2.07	2.67	3.26	3.90	4.61	5.47	6.60	8.40	10.10
Feb	3.39	2.82	7.00	1970	3	15.20	1998	.72	1994	6.9	4.9	2.3	1.1	.52	.81	1.30	1.77	2.25	2.78	3.39	4.14	5.14	6.76	8.32
Mar	4.73	4.00	5.72	1974	23	12.96	1996	.71	1976	7.7	5.8	3.0	1.6	1.12	1.56	2.25	2.87	3.49	4.14	4.87	5.73	6.87	8.68	10.38
Apr	3.47	2.32	8.41	1982	9	14.61	1982	.46	1987	5.5	3.9	1.6	1.0	.34	.59	1.06	1.54	2.07	2.66	3.36	4.23	5.43	7.42	9.37
May	3.05	2.68	4.20	1967	22	13.14	1976	.05	2000	6.5	4.5	1.9	.9	.31	.54	.96	1.39	1.84	2.36	2.97	3.73	4.76	6.48	8.16
Jun	6.74	6.57	6.36	1995	25	13.11	1974	1.00	1998	12.2	9.2	4.3	2.0	1.94	2.58	3.55	4.38	5.20	6.05	6.99	8.10	9.54	11.79	13.89
Jul	8.55	8.19	5.30	1990	14	16.11	1978	3.38	1972	15.6	11.9	5.4	2.4	4.28	5.00	5.97	6.76	7.48	8.20	8.96	9.83	10.92	12.55	14.01
Aug	9.80	8.82	6.87	1979	13	20.44	1971	3.17	1980	16.8	12.9	6.0	2.9	3.80	4.71	6.00	7.08	8.10	9.14	10.26	11.56	13.22	15.76	18.07
Sep	6.61	5.39	10.45	1964	11	20.12	1988	.86	1972	11.7	8.7	3.8	1.9	1.33	1.93	2.90	3.79	4.68	5.65	6.73	8.04	9.78	12.55	15.18
Oct	2.94	2.52	5.84	1997	27	8.17	1997	.14	1973	5.8	3.7	1.7	.9	.10	.22	.52	.90	1.34	1.89	2.58	3.48	4.78	7.04	9.33
Nov	2.64	2.28	3.52	1986	29	7.52	1972	.00	1978	6.0	4.3	1.6	.8	.27	.58	1.01	1.40	1.79	2.21	2.68	3.26	4.03	5.26	6.44
Dec	3.22	2.55	6.40	1964	27	9.68	1997	.40	1984	6.8	4.8	2.2	.9	.49	.76	1.22	1.67	2.13	2.64	3.22	3.93	4.88	6.43	7.92
Ann	59.65	59.92	10.45	Sep 1964	11	20.44	Aug 1971	.00	Nov 1978	109.6	81.0	36.8	17.9	45.06	47.95	51.62	54.37	56.80	59.14	61.54	64.19	67.37	71.95	75.89

+ 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: 1956-2001

(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

No. 20 1971-2000

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151 Patton Avenue
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Station: USHER TOWER, FL

COOP ID: 089120

Climate Division: FL 2

NWS Call Sign:

Elevation: 33 Feet

Lat: 29°25N

Lon: 82°49W

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	#	1989	23	#	1989	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	N/A	N/A	#	Feb 1989	23	#	Feb 1989	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 2

NWS Call Sign:

Elevation: 33 Feet

Lat: 29°25N

Lon: 82°49W

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	4/07	3/31	3/26	3/21	3/17	3/13	3/08	3/03	2/24
32	3/31	3/21	3/13	3/07	3/01	2/23	2/17	2/09	1/30
28	3/07	2/27	2/21	2/16	2/11	2/05	1/31	1/23	1/10
24	2/20	2/11	2/05	1/30	1/24	1/16	1/06	0/00	0/00
20	2/03	1/20	1/07	0/00	0/00	0/00	0/00	0/00	0/00
16	1/04	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	10/23	10/30	11/05	11/10	11/14	11/19	11/24	11/30	12/07
32	10/30	11/08	11/14	11/19	11/24	11/30	12/05	12/11	12/20
28	11/20	12/01	12/09	12/15	12/22	12/28	1/05	1/14	1/31
24	12/07	12/19	12/28	1/05	1/13	1/23	2/06	0/00	0/00
20	12/26	1/10	1/24	0/00	0/00	0/00	0/00	0/00	0/00
16	1/10	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	275	263	255	248	242	235	228	220	209
32	306	291	281	272	265	257	249	240	227
28	>365	358	335	322	312	302	293	282	267
24	>365	>365	>365	>365	>365	344	329	318	305
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 2 NWS Call Sign: Elevation: 33 Feet Lat: 29° 25N Lon: 82° 49W

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	322	211	106	26	0	0	0	0	0	19	120	264	1068
60	228	119	39	4	0	0	0	0	0	4	54	163	611
57	178	77	18	1	0	0	0	0	0	1	29	115	419
55	147	54	10	0	0	0	0	0	0	0	18	87	316
50	80	19	1	0	0	0	0	0	0	0	4	36	140
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	746	739	987	1093	1327	1428	1522	1521	1411	1222	956	795	13747
55	180	150	284	403	614	738	809	808	721	509	284	169	5669
57	148	116	230	343	552	678	747	746	661	448	234	135	5038
60	106	74	158	257	459	588	654	653	571	358	170	90	4138
65	30	26	71	128	304	438	499	498	421	218	86	36	2755
70	24	8	20	43	156	288	344	343	271	106	32	13	1648

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	510	538	747	857	1083	1196	1281	1286	1177	981	723	558	510	1048	1795	2652	3735	4931	6212	7498	8675	9656	10379	10937
45	366	399	592	707	928	1046	1126	1131	1027	826	573	409	366	765	1357	2064	2992	4038	5164	6295	7322	8148	8721	9130
50	239	272	437	557	773	896	971	976	877	671	425	278	239	511	948	1505	2278	3174	4145	5121	5998	6669	7094	7372
55	141	162	299	408	618	746	816	821	727	519	294	168	141	303	602	1010	1628	2374	3190	4011	4738	5257	5551	5719
60	69	79	172	265	464	596	661	666	577	366	175	89	69	148	320	585	1049	1645	2306	2972	3549	3915	4090	4179
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	330	346	489	573	735	816	877	887	820	669	480	362	330	676	1165	1738	2473	3289	4166	5053	5873	6542	7022	7384

(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/normal/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