

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: ROYAL PALM RANGER STN, FL

1971-2000

COOP ID: 087760

Climate Division: FL 6

NWS Call Sign:

Elevation: 7 Feet

Lat: 25° 23N

Lon: 80° 36W

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	77.7	56.2	67.0	90+	1997	6	75.5	1974	24	1977	20	57.8	1981	108	155	.0	.1	31.0	.0	.5	.0
Feb	79.0	56.3	67.7	92	1997	23	73.6	1989	29+	1996	17	61.4	1978	58	132	.0	.1	28.2	.0	.1	.0
Mar	82.1	59.2	70.7	100	1997	27	75.5	1997	31	1968	2	66.3	1971	23	197	@	.9	31.0	.0	.0	.0
Apr	84.5	61.9	73.2	95+	1999	12	77.1	1988	37	1950	7	70.9	1971	1	247	.0	2.5	30.0	.0	.0	.0
May	87.2	66.4	76.8	101	1997	22	79.2	1995	49	1963	6	71.8	1992	0	365	.1	8.2	31.0	.0	.0	.0
Jun	89.1	71.7	80.4	99+	1997	20	83.9	1994	50	1984	2	77.4	1971	0	462	.0	15.0	30.0	.0	.0	.0
Jul	90.6	73.0	81.8	102	1996	22	83.9	1987	66+	1981	1	79.8	1974	0	521	.4	20.4	31.0	.0	.0	.0
Aug	91.0	73.3	82.2	100+	1997	14	84.3	1987	66	1950	8	80.7	1992	0	531	.2	20.5	31.0	.0	.0	.0
Sep	89.8	73.4	81.6	101	1996	21	84.1	1987	64	1960	4	80.0	1971	0	498	.1	19.1	30.0	.0	.0	.0
Oct	86.6	69.7	78.2	98	1997	3	80.7+	1995	49+	1961	22	74.5	1976	0	409	.0	6.4	31.0	.0	.0	.0
Nov	82.2	64.2	73.2	95	1996	2	79.4	1986	31+	1956	29	68.9	1976	8	254	.0	.8	30.0	.0	.0	.0
Dec	78.7	58.5	68.6	91	1996	3	74.6	1986	28	1962	14	64.5	1989	40	152	.0	@	31.0	.0	.1	.0
Ann	84.9	65.3	75.1	102	Jul 1996	22	84.3	Aug 1987	24	Jan 1977	20	57.8	Jan 1981	238	3923	.8	94.0	365.2	.0	.7	.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: 1949-2001

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

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Lon: 80°36W

Precipitation (inches)

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	1.83	1.66	3.78	1983	23	9.46	1983	.01	1990	7.1	3.6	1.2	.4	.08	.18	.39	.63	.91	1.25	1.66	2.20	2.96	4.26	5.57
Feb	1.69	1.20	5.62	1981	19	7.69	1983	.01	1989	6.3	2.9	.9	.3	.07	.15	.34	.56	.82	1.14	1.52	2.02	2.74	3.96	5.20
Mar	1.95	1.66	2.53	1992	24	5.09	1986	.13	1974	6.1	3.6	1.3	.5	.22	.37	.65	.92	1.21	1.53	1.91	2.38	3.01	4.06	5.08
Apr	2.94	2.42	9.14	1979	25	10.65	1979	.02	1998	6.6	3.6	1.6	.9	.07	.18	.46	.82	1.26	1.81	2.51	3.45	4.81	7.20	9.63
May	5.48	5.15	9.35	1968	11	12.81	1977	.47	1986	10.1	6.3	3.3	1.8	.96	1.44	2.24	2.99	3.76	4.59	5.53	6.68	8.21	10.68	13.03
Jun	8.58	8.71	9.56	1997	9	22.30	1992	.67	1994	16.4	10.9	5.0	2.4	1.77	2.55	3.81	4.95	6.11	7.35	8.75	10.43	12.65	16.20	19.57
Jul	6.64	6.15	4.53	1985	23	13.20	1988	2.86	1971	16.9	10.5	4.5	1.8	2.81	3.42	4.26	4.95	5.60	6.26	6.96	7.77	8.80	10.36	11.78
Aug	8.82	7.89	7.75	1981	18	20.49	1981	4.34	1979	18.8	12.2	5.1	2.4	4.06	4.83	5.90	6.77	7.58	8.38	9.25	10.24	11.48	13.36	15.06
Sep	8.37	7.57	9.40	1998	16	18.16	1998	3.43	1993	17.8	12.0	4.8	2.3	3.61	4.36	5.42	6.28	7.09	7.90	8.78	9.78	11.05	12.98	14.73
Oct	5.13	4.66	8.45	1999	15	14.13	1999	.46	1984	12.4	7.6	2.7	1.3	1.10	1.57	2.32	3.00	3.69	4.42	5.25	6.24	7.54	9.62	11.59
Nov	2.65	1.77	3.88	1949	14	7.82	1992	.29	2000	8.6	4.6	1.7	.7	.25	.44	.80	1.17	1.57	2.02	2.56	3.23	4.15	5.67	7.17
Dec	1.47	.99	2.99	1979	7	4.07	1986	.04	1987	6.1	2.4	.8	.4	.08	.16	.34	.54	.76	1.03	1.35	1.77	2.35	3.35	4.34
Ann	55.55	56.08	9.56	Jun 1997	9	22.30	Jun 1992	.01+	Jan 1990	133.2	80.2	32.9	15.2	38.83	42.04	46.17	49.31	52.11	54.81	57.61	60.71	64.47	69.94	74.68

+ 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: 1949-2001

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

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Climate Division: FL 6

NWS Call Sign:

Elevation: 7 Feet

Lat: 25°23N

Lon: 80°36W

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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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	2/07	1/25	1/12	0/00	0/00	0/00	0/00	0/00	0/00
32	1/31	1/19	1/03	0/00	0/00	0/00	0/00	0/00	0/00
28	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00
24	0/00	0/00	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	12/26	1/07	1/19	0/00	0/00	0/00	0/00	0/00	0/00
32	1/09	1/20	2/05	0/00	0/00	0/00	0/00	0/00	0/00
28	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00
24	0/00	0/00	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	>365	>365	>365	>365	>365	>365	>365	338
32	>365	>365	>365	>365	>365	>365	>365	>365	>365
28	>365	>365	>365	>365	>365	>365	>365	>365	>365
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 6 NWS Call Sign: Elevation: 7 Feet Lat: 25° 23N Lon: 80° 36W

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	108	58	23	1	0	0	0	0	0	0	8	40	238
60	50	19	5	0	0	0	0	0	0	0	0	11	85
57	29	9	1	0	0	0	0	0	0	0	0	4	43
55	20	4	0	0	0	0	0	0	0	0	0	2	26
50	7	0	0	0	0	0	0	0	0	0	0	0	7
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	1083	998	1197	1236	1388	1452	1544	1554	1488	1432	1236	1135	15743
55	390	358	484	546	675	762	831	841	798	719	546	423	7373
57	337	307	423	486	613	702	769	779	738	657	486	363	6660
60	265	232	334	396	520	612	676	686	648	564	396	277	5606
65	155	132	197	247	365	462	521	531	498	409	254	152	3923
70	93	61	95	109	213	312	366	376	348	256	134	66	2429

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	856	823	951	998	1171	1221	1307	1313	1268	1197	1021	897	856	1679	2630	3628	4799	6020	7327	8640	9908	11105	12126	13023
45	702	678	796	848	1016	1071	1152	1158	1118	1042	871	742	702	1380	2176	3024	4040	5111	6263	7421	8539	9581	10452	11194
50	547	534	641	698	861	921	997	1003	968	887	721	588	547	1081	1722	2420	3281	4202	5199	6202	7170	8057	8778	9366
55	397	389	486	548	706	771	842	848	818	732	571	436	397	786	1272	1820	2526	3297	4139	4987	5805	6537	7108	7544
60	256	261	333	398	551	621	687	693	668	577	421	287	256	517	850	1248	1799	2420	3107	3800	4468	5045	5466	5753
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	573	548	641	689	823	867	929	931	900	861	716	598	573	1121	1762	2451	3274	4141	5070	6001	6901	7762	8478	9076

(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