

Climatology of the United States

No. 20

1971-2000

Station: CAYEY 1 E, PR

COOP ID: 661901

Climate Division: PR 5

NWS Call Sign:

Elevation: 1,370 Feet Lat: 18°07N

Lon: 66°09W

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 >= 90	Max >= 70	Max >= 50	Max <= 32	Min <= 32	Min <= 0
Jan	77.9	60.5	69.2	88+	1983	3	72.3	1998	48+	2000	20	66.8	1979	3	134	.0	31.0	31.0	.0	.0	.0
Feb	78.3	60.2	69.3	88+	1960	7	71.4	1998	48	1982	16	67.2+	1999	0	119	.0	28.3	28.3	.0	.0	.0
Mar	79.4	60.6	70.0	89+	1963	25	72.7	1983	48	1979	6	67.7	1979	0	157	.0	30.9	31.0	.0	.0	.0
Apr	81.0	62.8	71.9	89+	1958	24	74.2	1987	50+	1967	5	70.3	1976	0	207	.0	30.0	30.0	.0	.0	.0
May	82.7	66.1	74.4	90+	1998	11	76.2	1998	53	1974	1	73.0+	1982	0	290	.1	31.0	31.0	.0	.0	.0
Jun	84.1	68.4	76.3	91+	1959	30	78.3	1997	54	2001	23	74.5	1978	0	337	.0	30.0	30.0	.0	.0	.0
Jul	84.5	68.7	76.6	94	1959	4	78.2	1989	56+	1965	31	74.5	1978	0	358	@	31.0	31.0	.0	.0	.0
Aug	84.6	68.1	76.4	93	1984	21	77.8	1997	57	1982	21	74.3	1978	0	352	.1	31.0	31.0	.0	.0	.0
Sep	84.3	67.3	75.8	92+	1962	7	77.8	1998	57+	1980	19	74.2	1978	0	324	@	30.0	30.0	.0	.0	.0
Oct	83.3	66.3	74.8	90+	1963	24	77.2	1998	57	1959	22	72.9	1978	0	304	.0	31.0	31.0	.0	.0	.0
Nov	81.3	64.8	73.1	90+	1964	20	75.0	1997	52	1966	28	71.3	1978	0	241	.0	29.9	30.0	.0	.0	.0
Dec	78.8	62.0	70.4	88+	1962	7	72.8	1987	48	1964	30	68.3	1996	2	168	.0	31.0	31.0	.0	.0	.0
Ann	81.7	64.7	73.2	94	Jul 1959	4	78.3	Jun 1997	48+	Jan 2000	20	66.8	Jan 1979	5	2991	.2	365.1	365.3	.0	.0	.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: May 2005

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1955-2001

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

008-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: CAYEY 1 E, PR

COOP ID: 661901

Climate Division: PR 5

NWS Call Sign:

Elevation: 1,370 Feet Lat: 18°07N

Lon: 66°09W

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	3.30	2.55	19.56	1992	6	21.15	1992	.82	1978	17.7	8.3	.9	.3	.55	.83	1.32	1.77	2.24	2.74	3.32	4.03	4.97	6.50	7.97
Feb	2.78	2.01	5.70	1998	5	8.21	1998	.60	1999	14.6	6.0	1.3	.4	.55	.80	1.20	1.58	1.96	2.36	2.82	3.38	4.11	5.29	6.41
Mar	2.53	2.16	3.98	1969	1	6.55	1972	.69	1993	13.7	6.4	1.1	.4	.72	.96	1.33	1.64	1.95	2.27	2.62	3.04	3.58	4.43	5.22
Apr	3.25	2.43	4.10	1985	24	8.34	1986	.88	1972	12.3	6.1	1.6	.7	.83	1.13	1.61	2.02	2.44	2.87	3.35	3.92	4.67	5.85	6.96
May	5.17	4.15	6.50	1981	23	15.64	1985	.54	1990	15.7	8.5	2.7	1.0	.65	1.07	1.80	2.52	3.28	4.12	5.11	6.32	7.96	10.65	13.26
Jun	3.53	2.59	4.07	1956	18	15.63	1979	.51	1985	13.9	7.5	1.8	.7	.59	.90	1.41	1.90	2.39	2.93	3.55	4.30	5.31	6.93	8.49
Jul	4.87	4.42	4.41	1991	16	9.51	1993	1.79	1974	16.7	9.6	2.6	1.1	1.72	2.18	2.85	3.41	3.94	4.49	5.09	5.79	6.68	8.06	9.33
Aug	6.49	5.34	14.60	1979	31	22.18	1979	1.83	1984	16.7	10.0	3.3	1.2	1.87	2.48	3.41	4.22	5.01	5.83	6.74	7.81	9.19	11.36	13.38
Sep	8.12	6.12	17.60	1998	22	25.23	1996	1.24	1971	16.0	9.6	4.1	1.9	1.27	1.97	3.14	4.26	5.42	6.69	8.14	9.92	12.29	16.15	19.85
Oct	6.68	5.51	11.60	1985	7	24.43	1985	1.09	1989	17.1	9.9	3.3	1.6	1.17	1.75	2.73	3.64	4.58	5.59	6.75	8.15	10.02	13.03	15.92
Nov	6.18	4.58	6.82	1984	3	19.76	1984	1.29	1973	18.1	10.0	3.3	1.5	1.07	1.61	2.52	3.36	4.23	5.17	6.24	7.54	9.28	12.08	14.76
Dec	3.48	3.16	3.45	1960	3	8.55	1998	.28	1989	18.4	9.1	1.6	.5	.83	1.16	1.67	2.12	2.57	3.04	3.58	4.21	5.04	6.35	7.59
Ann	56.38	53.96	19.56	Jan 1992	6	25.23	Sep 1996	.28	Dec 1989	190.9	101.0	27.6	11.3	34.95	38.88	44.03	48.03	51.63	55.15	58.83	62.95	68.00	75.44	81.97

+ 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: 1955-2001

(3) Derived from 1971-2000 daily data

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

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: CAYEY 1 E, PR

COOP ID: 661901

Climate Division: PR 5

NWS Call Sign:

Elevation: 1,370 Feet

Lat: 18°07N

Lon: 66°09W

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:

www.ncdc.noaa.gov/oa/climate/normal/usnormals.html

Climatography of the United States

No. 20 1971-2000

Station: CAYEY 1 E, PR

COOP ID: 661901

Climate Division: PR 5

NWS Call Sign:

Elevation: 1,370 Feet

Lat: 18°07N

Lon: 66°09W

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	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00
32	0/00	0/00	0/00	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	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00
32	0/00	0/00	0/00	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	>365
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:

www.ncdc.noaa.gov/oa/climate/normal/usnormals.html

**Climatography
of the United States
No. 20
1971-2000**

Station: CAYEY 1 E, PR

COOP ID: 661901

Climate Division: PR 5 NWS Call Sign: Elevation: 1,370 Feet Lat: 18°07N Lon: 66°09W

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	3	0	0	0	0	0	0	0	0	0	0	2	5
60	0	0	0	0	0	0	0	0	0	0	0	0	0
57	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0	0
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	1154	1043	1179	1197	1313	1327	1381	1375	1314	1327	1231	1189	15030
55	441	399	466	507	600	637	668	662	624	614	541	476	6635
57	379	343	404	447	538	577	606	600	564	552	481	414	5905
60	286	259	311	357	445	487	513	507	474	459	391	321	4810
65	134	119	157	207	290	337	358	352	324	304	241	168	2991
70	27	16	38	65	135	187	203	197	174	149	93	47	1331

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	916	857	941	965	1073	1094	1142	1140	1083	1089	999	950	916	1773	2714	3679	4752	5846	6988	8128	9211	10300	11299	12249
45	761	712	786	815	918	944	987	985	933	934	849	795	761	1473	2259	3074	3992	4936	5923	6908	7841	8775	9624	10419
50	606	567	631	665	763	794	832	830	783	779	699	640	606	1173	1804	2469	3232	4026	4858	5688	6471	7250	7949	8589
55	451	422	476	515	608	644	677	675	633	624	549	485	451	873	1349	1864	2472	3116	3793	4468	5101	5725	6274	6759
60	296	277	321	365	453	494	522	520	483	469	399	330	296	573	894	1259	1712	2206	2728	3248	3731	4200	4599	4929
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	606	567	631	665	763	793	831	826	781	778	699	640	606	1173	1804	2469	3232	4025	4856	5682	6463	7241	7940	8580

(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/normals/usnormals.html

f. Mean "number of days statistics" for temperature were calculated from a serially complete daily data set. A serial dataset was not available for precipitation,

To ensure that a station's data was adequate to estimate these statistics, the following criteria were used:

1. A station must have 80% of its data for the 1971-2000 time period.
2. Only months with at least 21 days are used.
3. There must be a least 21 months (meeting criteria 2.) in the sample.

g. Snowfall and snow depth statistics were derived daily values quality controlled to be consistent with 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 differences 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. Other inconsistencies may appear from comparing statistically modeled values such as degree days to observed temperatures.

a. Temperature/ Precipitation Tables

1. 1971-2000 Monthly Normals
2. Cooperative Summary of the Day
3. National Weather Service station records
4. 1971-2000 serially complete daily data

c. Snow Tables

1. Cooperative Summary of the Day

d. Freeze Data Table

1971-2000 serially complete daily data

b. Degree Day Table

1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals
2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data

References

U.S. Climate Normals 1971-2000, www.ncdc.noaa.gov/normals.html

U.S. Climate Normals 1971-2000-Products Clim20, www.ncdc.noaa.gov/oa/climate/normals/usnormalsprods.html

Snow Climatology Project Description, www.ncdc.noaa.gov/oa/climate/monitoring/snowclim/mainpage.html