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: DOS BOCAS, PR 1971-2000 COOP ID: 663431

Climate Division: PR 6 NWS Call Sign: Elevation: 200 Feet Lat: 18°20N Lon: 66°40W

									r												
	Mea	n (1)						Extr	emes					J	Days (1) emp 65		Mean	Numb	er of I	Days (3)	1
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	84.2	64.2	74.2	95+	1982	17	76.2	1998	52+	1993	18	72.6	1993	0	285	.9	31.0	31.0	.0	.0	.0
Feb	84.6	63.5	74.1	94+	1964	29	75.7	1981	51+	1993	11	71.7	1999	0	254	1.1	28.3	28.3	.0	.0	.0
Mar	85.6	63.9	74.8	96+	1997	22	78.0	1983	51	1937	6	71.6	2000	0	302	3.6	31.0	31.0	.0	.0	.0
Apr	86.8	65.5	76.2	98+	1966	30	78.1	1987	54+	1980	1	74.2	1976	0	334	6.4	30.0	30.0	.0	.0	.0
May	88.1	68.1	78.1	98	1977	29	80.6	1981	52	1984	7	76.4	1974	0	406	12.1	31.0	31.0	.0	.0	.0
Jun	90.1	69.7	79.9	99+	1982	2	82.0	1983	59+	1992	2	77.9	1976	0	446	19.4	30.0	30.0	.0	.0	.0
Jul	90.0	70.4	80.2	98+	1957	29	82.2	1983	58	1980	7	79.1	1976	0	471	19.2	31.0	31.0	.0	.0	.0
Aug	90.2	70.6	80.4	99	1961	23	82.1	1987	60	1993	29	78.5	1992	0	478	20.3	31.0	31.0	.0	.0	.0
Sep	89.7	70.0	79.9	97+	1966	9	81.6	1983	59	1982	21	78.4	1992	0	445	18.6	30.0	30.0	.0	.0	.0
Oct	88.6	69.3	79.0	98+	1947	25	81.0	1980	58	1984	12	77.0	1985	0	433	13.2	31.0	31.0	.0	.0	.0
Nov	86.4	68.3	77.4	97	1983	26	78.9	1981	58	1981	12	75.8	1984	0	371	4.7	30.0	30.0	.0	.0	.0
Dec	84.4	66.0	75.2	96	1948	1	77.8	1983	50	1991	23	72.7	1991	0	317	1.4	31.0	31.0	.0	.0	.0
Ann	87.4	67.5	77.5	99+	Jun 1982	2	82.2	Jul 1983	50	Dec 1991	23	71.6	Mar 2000	0	4542	120.9	365.3	365.3	.0	.0	.0

⁺ Also occurred on an earlier date(s)

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

Issue Date: May 2005 016-A

- (2) Derived from station's available digital record: 1937-2001
- (3) Derived from 1971-2000 serially complete daily data

[@] Denotes mean number of days greater than 0 but less than .05

⁽¹⁾ From the 1971-2000 Monthly Normals

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

COOP ID: 663431

Station: DOS BOCAS, PR

Climate Division: PR 6 NWS Call Sign: Elevation: 200 Feet Lat: 18°20N Lon: 66°40W

										Pı	recipi	tation	(incl	nes)										
	Mea	ans/	P	recip	itatio	n Total						ays (3)	Proba	ability th		nonthly/	annual j indic	precipita ated am	ount	ies (1)		less tha	ın the
	Medi	ans(1)				Extremes	•			ս	aily Pre	приацо	n		Th	ese value	s were det	ermined	from the	incomplet	te gamma	distributi	ion	
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	3.38	2.58	4.32	1952	12	12.32	1981	.31	1983	12.6	6.5	2.2	.7	.44	.71	1.19	1.66	2.15	2.70	3.34	4.13	5.19	6.94	8.63
Feb	3.24	3.02	4.17	1960	13	7.05	1995	.27	1975	10.3	5.8	2.0	.9	.73	1.03	1.51	1.94	2.36	2.82	3.33	3.93	4.73	6.01	7.21
Mar	4.05	3.70	7.15	1963	25	11.22	1981	1.10	1997	10.7	6.7	2.4	1.1	.96	1.34	1.93	2.46	2.98	3.54	4.16	4.90	5.87	7.41	8.86
Apr	5.97	5.68	4.28	1982	5	17.30	1986	.87	1975	12.1	8.0	3.5	1.9	1.31	1.86	2.74	3.53	4.32	5.16	6.11	7.25	8.75	11.13	13.38
May	10.49	10.74	4.54	1963	10	19.14	1986	3.50	1972	15.3	11.6	6.3	3.6	3.94	4.92	6.33	7.50	8.61	9.75	10.98	12.41	14.23	17.03	19.59
Jun	5.92	5.83	6.06	1938	14	14.32	1981	.80	1977	11.8	7.7	3.9	1.9	1.11	1.64	2.51	3.32	4.13	5.01	6.01	7.22	8.82	11.39	13.84
Jul	4.37	3.82	3.03	1980	28	10.60	1973	1.35	1971	13.2	8.4	3.0	.9	1.51	1.92	2.52	3.03	3.52	4.02	4.56	5.20	6.02	7.28	8.44
Aug	6.86	6.34	4.35	1979	31	11.63	1997	3.21	1978	14.7	10.6	4.5	2.0	3.68	4.23	4.97	5.56	6.09	6.62	7.19	7.82	8.61	9.79	10.83
Sep	10.15	9.05	23.07	1975	16	35.32	1975	2.28	1994	15.9	11.4	5.9	2.8	2.74	3.70	5.16	6.45	7.71	9.03	10.50	12.24	14.51	18.05	21.37
Oct	9.59	8.28	7.00	1985	7	21.96	1974	3.58	1975	17.0	12.3	5.7	2.9	3.76	4.65	5.91	6.96	7.95	8.95	10.04	11.30	12.89	15.34	17.58
Nov	6.58	5.89	7.40	2001	8	19.89	1981	1.63	1988	15.5	9.8	4.1	1.9	1.45	2.06	3.02	3.89	4.76	5.69	6.73	7.98	9.63	12.25	14.72
Dec	4.01	3.52	9.63	1965	10	13.14	1981	.01	1997	13.4	7.7	2.3	1.0	.18	.39	.85	1.37	1.99	2.73	3.63	4.81	6.47	9.33	12.20
Ann	74.61	72.58	23.07	Sep 1975	16	35.32	Sep 1975	.01	Dec 1997	162.5	106.5	45.8	21.6	51.47	55.89	61.59	65.94	69.81	73.57	77.46	81.76	87.00	94.63	101.25

⁺ Also occurred on an earlier date(s)

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

[#] 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: 1937-2001

⁽³⁾ Derived from 1971-2000 daily data

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

COOP ID: 663431

Station: DOS BOCAS, PR

Climate Division: PR 6 NWS Call Sign: Elevation: 200 Feet Lat: 18°20N Lon: 66°40W

										Snov	w (incl	hes)											
						Sn	ow To	tals									Mea	n Nui	mber	of Day	ys (1)		
	Mean	s/Medi	ians (1)						Extre	mes (2)							ow Fa				Snow = Thr	_	
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

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

[@] 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

Climatography of the United States No. 20

National Climatic Data Center Federal Building 151 Patton Avenue Asheville, North Carolina 28801 www.ncdc.noaa.gov

COOP ID: 663431

1971-2000

Station: DOS BOCAS, PR

Climate Division: PR 6 NWS Call Sign:

Lat: 18°20N Lon: 66°40W Elevation: 200 Feet

				Freez	e Data				
			Spri	ng Freeze Da	ates (Month/	(Day)			
Temp (F)		P	robability of	later date i	n spring (thr	u Jul 31) tha	n indicated(*)	
remp (r)	.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
			Fal	ll Freeze Dat	tes (Month/D	Oay)			
Temp (F)		Pro	bability of ea	arlier date ir	n fall (beginn	ing Aug 1) t	han indicate	d(*)	
remp (r)	.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 F	ree Period	•			
Temp (F)			Probability	of longer tha	an indicated	freeze free p	eriod (Days)		
remp (r)	.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.

Complete documentation available from:

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

COOP ID: 663431

Station: DOS BOCAS, PR

Climate Division: PR 6 NWS Call Sign: Elevation: 200 Feet Lat: 18°20N Lon: 66°40W

				Deg	ree Days t	o Selected	Base Tem	peratures	(°F)				
Base						Heatin	g Degree l	Days (1)					
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	0	0	0	0	0	0	0	0	0	0	0	0	0
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						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	1308	1178	1325	1324	1429	1436	1494	1501	1435	1456	1361	1340	16587
55	595	534	612	634	716	746	781	788	745	743	671	627	8192
57	533	478	550	574	654	686	719	726	685	681	611	565	7462
60	440	394	457	484	561	596	626	633	595	588	521	472	6367
65	285	254	302	334	406	446	471	478	445	433	371	317	4542
70	132	114	149	184	251	296	316	323	295	278	221	164	2723

										Gro	wing	Degre	e Uni	ts (2)										
Base					Growing	g Degree	Units (N	(Ionthly)					Growing Degree Units (Accumulated Monthly)											
	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec													Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	1058	984	1070	1082	1184	1196	1242	1250	1199	1212	1118	1086	1058	2042	3112	4194	5378	6574	7816	9066	10265	11477	12595	13681
45	903	839	915	932	1029	1046	1087	1095	1049	1057	968	931	903	1742	2657	3589	4618	5664	6751	7846	8895	9952	10920	11851
50	748	694	760	782	874	896	932	940	899	902	818	776	748	1442	2202	2984	3858	4754	5686	6626	7525	8427	9245	10021
55	593	549	605	632	719	746	777	785	749	747	668	621	593	1142	1747	2379	3098	3844	4621	5406	6155	6902	7570	8191
60	438	404	450	482	564	596	622	630	599	592	518	466	438	842	1292	1774	2338	2934	3556	4186	4785	5377	5895	6361
Base	Growing Degree Units for Corn (Monthly)														Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)	l .	
50/86	/ 86 740 684 742 753 830 834 870 869 840 855 796 76												740	1424	2166	2919	3749	4583	5453	6322	7162	8017	8813	9579

(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

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.

Compete 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 are 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