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: 460939

Lon: 80°53W

Station: BLUESTONE LAKE, WV

Climate Division: WV 5 NWS Call Sign:

	Ionth Daily Max Daily Max Mean Highest Daily(2) Year Day Month(1) Mean Year Day Month(1) Mean Year Day Month(1) Mean Year Mean Heating Mean Cooling Search >= </th <th></th>																				
	Mea	n (1)						Extr	emes					_	-		Mean	Numb	er of I	Days (3)	
Month			Mean	-	Year	Day	Month(1)	Year		Year	Day	Month(1)	Year	Heating	Cooling	>=	>=	>=	<=	<=	Min <= 0
Jan	40.4	22.0	31.2	77	1950	26	42.0	1974	-17+	1985	21	18.8	1977	1048	0	.0	.0	6.4	6.7	25.4	1.2
Feb	45.4	24.1	34.8	77	1977	27	41.9	1990	-13+	1996	5	24.6	1978	846	0	.0	.0	10.6	4.3	22.5	.2
Mar	55.1	31.1	43.1	85+	1998	28	49.7	1973	0	1993	15	36.8	1996	678	0	.0	.0	20.5	.9	17.9	@
Apr	65.7	38.9	52.3	90+	1950	30	56.2	1999	18	1964	1	47.8	1997	382	2	.0	.0	26.8	@	7.0	.0
May	74.0	47.9	61.0	93	1949	6	67.0	1991	28	1986	4	55.2	1997	177	52	.0	.1	30.9	.0	.9	.0
Jun	80.8	57.3	69.1	98	1952	28	71.9	1987	36	1966	2	63.8	1972	28	148	.0	1.2	30.0	.0	.0	.0
Jul	84.6	62.0	73.3	100+	1952	29	77.1	1993	45+	1963	10	70.0	1976	1	259	.0	4.7	31.0	.0	.0	.0
Aug	83.4	61.1	72.3	103	1948	29	75.6	1995	41+	1986	30	69.0	1976	4	229	.0	3.0	31.0	.0	.0	.0
Sep	77.2	54.8	66.0	99+	1953	2	70.8	1998	31	1989	24	63.1	1974	62	93	.0	.7	30.0	.0	@	.0
Oct	66.8	42.0	54.4	94	1953	1	63.1	1984	18	1962	27	48.4	1988	344	16	.0	.0	29.7	.0	3.7	.0
Nov	55.1	32.8	44.0	83	1950	1	52.5	1985	8+	1950	25	36.1	1976	632	0	.0	.0	20.0	.3	15.1	.0
Dec	43.9	25.2	34.6	77	2001	1	42.1	1984	-9+	1989	23	23.9	1989	943	0	.0	.0	9.5	4.4	23.2	.2
Ann	64.4	41.6	53.0	103	Aug 1948	29	77.1	Jul 1993	-17+	Jan 1985	21	18.8	Jan 1977	5145	799	.0	9.7	276.4	16.6	115.7	1.6

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 008-A

(1) From the 1971-2000 Monthly Normals

Elevation: 1,390 Feet Lat: 37°38N

- (2) Derived from station's available digital record: 1948-2001
- (3) Derived from 1971-2000 serially complete daily data

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

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Climate Division: WV 5 NWS Call Sign: Elevation: 1,390 Feet Lat: 37°38N Lon: 80°53W

										Pı	recipi	tation	(incl	nes)										
	Medi Medi		P	recip	itatio	on Total					ean N of D	ays (3)	Proba		M	nonthly/ onthly/Ar	annual j indic	precipitation	babilit ation will nount vs Probal incomplet	ll be equ	els		ın the
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	3.04	2.88	2.71	1998	28	6.99	1998	.50	1983	10.8	7.1	2.0	.4	.82	1.11	1.55	1.93	2.31	2.71	3.15	3.67	4.35	5.41	6.41
Feb	2.67	2.36	1.90	1984	24	4.96	1994	.34	1978	10.1	6.3	1.8	.4	.80	1.05	1.43	1.76	2.08	2.41	2.77	3.20	3.76	4.62	5.43
Mar	3.45	3.13	3.31	1963	12	7.15	1993	.94	1988	11.4	7.5	2.7	.7	1.20	1.52	2.00	2.40	2.78	3.17	3.61	4.11	4.75	5.74	6.66
Apr	3.27	2.91	2.11	1987	25	7.75	1987	.82	1976	11.9	7.2	2.0	.5	1.16	1.47	1.92	2.29	2.65	3.02	3.42	3.88	4.48	5.40	6.24
May	3.95	3.58	3.50	1954	27	7.71	1998	1.77	1977	13.0	8.7	2.9	.6	1.83	2.17	2.65	3.04	3.40	3.76	4.14	4.58	5.13	5.97	6.72
Jun	3.33	3.03	2.76	1992	5	7.04	1979	.75	1988	12.0	7.5	2.0	.6	1.16	1.47	1.93	2.32	2.68	3.06	3.47	3.95	4.57	5.52	6.40
Jul	4.19	4.36	2.79	1986	2	7.38	1980	1.19	1987	11.6	8.3	2.7	1.0	1.64	2.03	2.58	3.04	3.47	3.91	4.38	4.93	5.63	6.70	7.68
Aug	3.29	3.31	3.94	1969	20	5.05	1994	1.31	1971	9.9	6.8	2.3	.6	1.53	1.81	2.21	2.53	2.83	3.13	3.45	3.82	4.28	4.98	5.61
Sep	2.83	2.86	2.82	1966	14	5.47	1975	.42	1983	9.4	5.9	1.9	.6	.65	.91	1.33	1.70	2.07	2.46	2.90	3.43	4.12	5.22	6.25
Oct	2.60	2.53	2.34	1954	16	6.43	1983	.14	2000	8.0	5.4	1.7	.6	.51	.75	1.13	1.48	1.83	2.21	2.64	3.16	3.84	4.94	5.98
Nov	2.52	2.53	2.10	1962	10	5.74	1985	.93	1976	9.7	5.7	1.7	.3	.99	1.22	1.56	1.83	2.09	2.36	2.64	2.97	3.39	4.04	4.62
Dec	2.58	2.26	1.63+	1990	28	5.78	1991	.64	1980	10.0	6.1	1.8	.4	.82	1.06	1.43	1.74	2.03	2.34	2.68	3.08	3.59	4.39	5.12
Ann	37.72	37.05	3.94	Aug 1969	20	7.75	Apr 1987	.14	Oct 2000	127.8	82.5	25.5	6.7	30.93	32.32	34.05	35.34	36.47	37.54	38.64	39.83	41.26	43.30	45.03

⁺ 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: 1948-2001

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

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Climate Division: WV 5 NWS Call Sign: Elevation: 1,390 Feet Lat: 37°38N Lon: 80°53W

										Snov	w (incl	nes)											
		Snow Fall Snow Fall Median Medi															Mea	n Nui	mber	of Day	VS (1)		
	Snow Fall Snow Fall Median Medi																ow Fa					Depth esholo	
Month	Fall	Fall	Depth	Depth	Daily Snow	Year	Day	Monthly Snow	Year	Daily Snow	Year	Day	Monthly Mean Snow	Year	0.1	1.0	3.0	5.0	10.0	1	3	5	10
Jan	7.8	5.0	1	#	16.0	1996	7	34.5	1996	23	1996	8	7	1996	2.9	2.9	1.0	.5	.1	7.5	3.9	1.5	.5
Feb	5.8	3.0	1	#	12.0	1983	11	23.0	1987	14	1983	12	4	1979	2.3	2.3	.6	.3	@	5.7	3.0	1.4	.1
Mar	3.2	1.0	#	#	12.0	1980	2	19.0	1993	19	1993	14	3	1993	1.1	1.1	.4	.2	.1	1.7	.8	.3	.1
Apr	.4	#	#	0	3.0	1985	9	4.0	1985	7	1987	5	1	1987	.3	.2	.1	.0	.0	.1	.0	.0	.0
May	#	.0	0	0	#	1989	8	#	1989	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Jun	.0	.0	#	0	.0	0	0	.0	0	#	1998	4	#	1998	.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	1.0	1993	31	1.0	1993	1	1993	31	#	1993	@	@	.0	.0	.0	@	.0	.0	.0
Nov	.8	#	#	0	4.0	1977	28	4.0+	1989	3	1989	23	#+	2000	.3	.3	.1	.0	.0	.3	.1	.0	.0
Dec	3.2	2.0	#	#	11.0	1997	30	14.0	1997	12	1997	30	3	1989	1.5	1.4	.4	.2	@	2.8	1.0	.4	.1
Ann	21.2	11.0	N/A	N/A	16.0	Jan 1996	7	34.5	Jan 1996	23	Jan 1996	8	7	Jan 1996	8.4	8.2	2.6	1.2	.2	18.1	8.8	3.6	.8

⁺ Also occurred on an earlier date(s) #Denotes trace amounts

- (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/normals/usnormals.html

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^{-9/-9.9} represents missing values Annual statistics for Mean/Median snow depths are not appropriate

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Station: BLUESTONE LAKE, WV

Climate Division: WV 5 NWS Call Sign:

NWS Call Sign: Elevation: 1,390 Feet

				Freez	e Data				
			Spri	ng Freeze D	ates (Month/	Day)			
Temp (F)		P	robability of	later date i	n spring (thr	u Jul 31) tha	n indicated((*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	5/16	5/12	5/09	5/06	5/04	5/01	4/29	4/26	4/22
32	5/13	5/06	5/02	4/28	4/24	4/21	4/17	4/12	4/06
28	4/22	4/17	4/14	4/10	4/08	4/05	4/01	3/29	3/24
24	4/05	3/30	3/26	3/22	3/19	3/16	3/12	3/08	3/02
20	3/26	3/20	3/15	3/10	3/06	3/02	2/26	2/21	2/15
16	3/16	3/10	3/06	3/02	2/26	2/23	2/19	2/14	2/08
<u>.</u>			Fal	l Freeze Da	tes (Month/D	ay)			
Tomp (F)		Pro	bability of e	arlier date i	n fall (beginn	ing Aug 1) t	han indicate	d(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	10/02	10/05	10/08	10/11	10/13	10/15	10/17	10/20	10/24
32	10/09	10/14	10/17	10/20	10/23	10/25	10/28	11/01	11/05
28	10/18	10/24	10/28	11/01	11/04	11/08	11/11	11/15	11/21
24	11/01	11/07	11/12	11/15	11/19	11/22	11/26	11/30	12/06
20	11/12	11/17	11/22	11/25	11/29	12/02	12/06	12/10	12/16
16	11/21	11/27	12/02	12/06	12/10	12/13	12/17	12/22	12/29
<u>.</u>				Freeze F	ree Period				
Temp (F)			Probability	of longer th	an indicated	freeze free p	eriod (Days)		
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	177	171	167	164	161	158	155	151	146
32	204	196	190	185	181	176	171	165	157
28	235	226	220	215	210	205	200	194	185
24	268	260	254	249	244	239	234	228	220
20	290	282	276	271	266	262	257	251	243
16	312	303	296	291	286	281	275	269	260

^{*} 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.

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				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	1048	846	678	382	177	28	1	4	62	344	632	943	5145
60	893	706	525	242	89	5	0	0	19	220	485	788	3972
57	800	622	437	169	52	2	0	0	8	160	401	695	3346
55	738	566	381	127	34	1	0	0	4	126	348	633	2958
50	597	435	251	51	9	0	0	0	0	61	227	489	2120
32	185	87	18	0	0	0	0	0	0	0	13	102	405

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	161	165	363	610	898	1111	1281	1249	1021	695	371	182	8107
55	0	0	13	47	219	421	568	536	335	107	16	0	2262
57	0	0	7	28	176	362	506	474	279	80	10	0	1922
60	0	0	2	12	120	276	413	381	200	47	4	0	1455
65	0	0	0	2	52	148	259	229	93	16	0	0	799
70	0	0	0	0	16	58	124	102	28	3	0	0	331

										Gro	wing]	Degre	e Uni	ts (2)										
Base					Growing	g Degree	Units (M	(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	35	62	180	391	664	885	1044	1008	790	461	189	58	35	97	277	668	1332	2217	3261	4269	5059	5520	5709	5767
45												25	11	33	131	391	901	1636	2525	3378	4018	4333	4435	4460
50	0 0 5 43 154 362 585 734 698 490 190 49											5	0	5	48	202	564	1149	1883	2581	3071	3261	3310	3315
55	0	0	12	77	226	435	579	543	344	95	15	0	0	0	12	89	315	750	1329	1872	2216	2311	2326	2326
60	0	0	2	31	117	290	424	388	210	37	1	0	0	0	2	33	150	440	864	1252	1462	1499	1500	1500
Base	Growing Degree Units for Corn (Monthly)														Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)		
50/86	50/86 23 51 130 250 415 583 716 687 504 278 121 3°											37	23	74	204	454	869	1452	2168	2855	3359	3637	3758	3795

(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 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 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.

- 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. Snow Climatology
 - 2. 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

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