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: 462522

Lon: 82°24W

Station: DUNLOW 1 SW, WV

Climate Division: WV 3 NWS Call Sign:

Temperature (°F) Degree Days (1) Mean (1) Mean Number of Days (3) **Extremes** Base Temp 65 Max Max Max Max Min Min Highest Lowest Daily Daily Highest Lowest Month(1) Month(1) Cooling >= >= >= <= <= <= Month Mean Year Day Year Year Day Year Heating Max Min Daily(2) Daily(2) Mean Mean 100 90 50 32 32 0 40.6 22.5 31.6 73+ 1972 13 40.4+ 1990 -20 1994 20 16.8 1977 1038 0 .0 .0 8.5 7.8 24.3 1.3 Jan .5 46.0 25.0 35.5 80 1977 26 45.1 1976 -10 1979 10 24.6 1978 826 0 .0 .0 11.5 4.3 20.3 Feb Mar 55.6 32.3 44.0 87+ 1973 14 52.2 1973 2 1986 8 37.4 +1996 652 0 .0 .0 21.3 1.0 15.6 .1 48.7 1997 5 Apr 66.4 41.7 54.1 90 1986 28 59.5 1991 11 1987 333 .0. @ 27.3 .1 6.4 .0 May 74.0 50.3 62.2 90 1986 8 69.1 1991 26 1986 4 57.0 1997 152 64 .0 @ 30.9 .0 .6 .0 27 73.6 36 Jun 80.4 58.8 69.6 94+ 1978 1971 1977 10 65.3 1972 23 160 .0 1.2 30.0 .0 .0 .0 Jul 84.0 63.1 73.6 100 +1988 9 77.5 1999 43 1986 4 69.3 1984 2 4.2 31.0 0. 266 .1 .0 .0 9 82.3 61.7 72.0 100 1988 18 76.5 1995 33 +1986 29 68.6 1992 227 @ 2.7 31.0 .0 .0 .0 Aug 27 81 Sep 76.5 54.3 65.4 97 1973 1 71.1 1978 1989 24 61.5 1984 93 .0 .8 30.0 .0 .1 .0 42.5 1975 28 48.3 345 Oct 66.1 54.3 86 14 62.0 1971 19 1976 1988 13 .0 .0 29.7 .0 4.4 .0 55.3 34.6 45.0 82 1975 3 50.7 1994 1986 14 37.8 1976 602 0 .0 .0 12.7 .0 Nov 19.6 .5 Dec 45.0 26.1 35.6 78 1982 4 45.2 1971 -15 1983 25 23.3 1989 914 0 .0 .0 12.3 4.9 21.2 .6 Aug Jul Jan Jan 42.7 53.6 100 +1988 18 77.5 1999 -20 1994 20 16.8 1977 4977 828 8.9 283.1 105.6 2.5 64.4 .1 18.6 Ann

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

Issue Date: February 2004 014-A

Elevation: 1,200 Feet Lat: 37°57N

⁺ Also occurred on an earlier date(s)

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

⁽¹⁾ From the 1971-2000 Monthly Normals

⁽²⁾ Derived from station's available digital record: 1971-2001

⁽³⁾ Derived from 1971-2000 serially complete 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: 462522

Station: DUNLOW 1 SW, WV

Climate Division: WV 3 NWS Call Sign: Elevation: 1,200 Feet Lat: 37°57N Lon: 82°24W

										Pı	recipi	tation	(incl	nes)												
		Precipitation Totals Means/ Medians(1) Extremes										Numbe Pays (3	5)	Precipitation Probabilities (1) Probability that the monthly/annual precipitation will be equal to or less than the indicated amount 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	2.65	2.08	1999	9	6.80	1979	1.15	1986	12.1	8.3	2.4	.4	1.01	1.33	1.79	2.19	2.58	2.99	3.43	3.95	4.63	5.68	6.65		
Feb	3.21	3.06	2.07	1972	26	7.65	1989	.74	1987	10.6	7.3	2.0	.6	.99	1.30	1.75	2.14	2.51	2.91	3.34	3.84	4.49	5.51	6.45		
Mar	3.88	3.31	2.12	1989	6	9.70	1994	.85	1986	11.9	9.3	2.6	.6	1.25	1.62	2.16	2.63	3.07	3.53	4.04	4.63	5.40	6.59	7.68		
Apr	3.77	3.85	2.11	1977	5	7.07	1972	.82	1976	10.5	8.2	2.6	.7	1.58	1.92	2.41	2.80	3.17	3.55	3.95	4.42	5.01	5.91	6.72		
May	4.92	4.61	2.70	1996	16	10.71	1996	1.63	1999	11.4	9.5	3.5	1.2	2.15	2.59	3.21	3.71	4.18	4.65	5.16	5.74	6.47	7.58	8.59		
Jun	4.20	4.15	2.80	1993	5	7.62	1989	.87	1980	10.5	7.7	2.8	.9	1.57	1.97	2.53	3.00	3.44	3.90	4.39	4.96	5.69	6.82	7.84		
Jul	4.74	4.54	2.64	2000	11	7.81	1979	2.32	1973	10.3	8.4	3.7	1.3	2.62	2.99	3.49	3.88	4.24	4.59	4.97	5.39	5.91	6.68	7.37		
Aug	3.83	3.82	2.90	1978	31	8.64	1978	.92	1971	8.5	6.3	2.8	1.1	1.20	1.57	2.11	2.57	3.02	3.48	3.99	4.58	5.35	6.54	7.65		
Sep	3.39	3.23	3.06	1972	30	7.56	1975	.50	1985	8.0	6.2	2.2	1.0	.86	1.18	1.67	2.11	2.54	3.00	3.50	4.10	4.89	6.13	7.29		
Oct	2.98	2.81	1.68	1989	17	6.31	1983	.51	2000	7.8	6.0	2.2	.7	.92	1.20	1.62	1.98	2.33	2.70	3.10	3.57	4.18	5.13	6.00		
Nov	3.73	3.49	4.17	1973	28	8.69	1973	1.26	1976	9.9	7.7	2.4	.7	1.33	1.68	2.19	2.62	3.03	3.45	3.90	4.43	5.11	6.15	7.11		
Dec	3.76	3.16	3.85	1978	9	11.57	1978	1.00	1989	11.0	7.6	2.5	.6	1.24	1.60	2.12	2.57	3.00	3.44	3.92	4.49	5.22	6.35	7.39		
Ann	45.71	44.69	4.17	Nov 1973	28	11.57	Dec 1978	.50	Sep 1985	122.5	92.5	31.7	9.8	33.85	36.18	39.15	41.39	43.37	45.28	47.24	49.40	52.02	55.79	59.03		

⁺ 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: 1971-2001

⁽³⁾ Derived from 1971-2000 serially complete 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: 462522

Station: DUNLOW 1 SW, WV

Climate Division: WV 3 NWS Call Sign: Elevation: 1,200 Feet Lat: 37°57N Lon: 82°24W

										Snov	w (incl	hes)											
						Sno	ow To	tals									Mea	ın Nu	mber	of Day	VS (1)		
	Mean	s/Medi	ians (1))					Extre	mes (2)				ow Fa	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	8.3	9.1	1	#	12.0	1994	18	28.3	1978	21	1978	21	9	1978	3.3	2.4	.6	.2	.0	5.2	2.2	1.8	.9
Feb	6.6	4.5	1	#	8.0	1998	6	21.7	1979	13	1998	6	6	1978	2.5	1.7	.4	.1	.0	5.4	3.2	1.7	.5
Mar	1.5	.1	#	#	5.0	1999	4	5.2	1978	18	1993	14	2	1993	.9	.6	.2	@	.0	1.1	.6	.1	.0
Apr	.0	.0	#	0	.5	1974	6	.5	1974	1	1974	6	#+	1996	@	.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	.2	1972	19	.2	1972	#+	1974	20	#+	1974	@	.0	.0	.0	.0	.0	.0	.0	.0
Nov	.5	.0	#	0	3.0	1993	1	5.0	1976	5	1995	29	1	1995	.4	.3	@	.0	.0	.3	@	.0	.0
Dec	1.9	1.4	#	#	4.0	1972	1	5.8	1974	6	1995	7	2	1989	1.0	.8	.1	.0	.0	1.5	.3	.1	.0
Ann	18.8	15.1	N/A	N/A	12.0	Jan 1994	18	28.3	Jan 1978	21	Jan 1978	21	9	Jan 1978	8.1	5.8	1.3	.3	.0	13.5	6.3	3.7	1.4

⁺ 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 1971-2000

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

COOP ID: 462522

Lon: 82°24W

Lat: 37°57N

Station: DUNLOW 1 SW, WV

Climate Division: WV 3 NWS Call Sign:

Freeze Data Spring Freeze Dates (Month/Day) Probability of later date in spring (thru Jul 31) than indicated(*) Temp (F) .10 .20 .30 .40 .60 .70 .80 .90 36 5/23 5/16 5/11 5/07 5/04 4/30 4/26 4/21 4/14 32 5/05 4/30 4/23 5/10 4/27 4/20 4/16 4/12 4/06 28 4/29 4/23 4/18 4/14 4/11 4/07 4/03 3/30 3/23 3/10 24 4/17 4/11 4/06 4/02 3/29 3/25 3/21 3/17 20 4/10 4/01 3/26 3/21 3/16 3/11 3/05 2/27 2/18 3/20 3/07 3/02 2/24 16 3/30 3/13 2/18 2/12 2/02 Fall Freeze Dates (Month/Day) Probability of earlier date in fall (beginning Aug 1) than indicated(*) Temp (F) .20 .30 .40 .50 .70 .10 .60 .80 .90 9/27 36 9/16 9/23 10/01 10/05 10/09 10/13 10/17 10/24 32 9/27 10/04 10/08 10/12 10/16 10/19 10/23 10/28 11/03 28 10/06 10/12 10/17 10/21 10/25 10/29 11/02 11/07 11/14 24 10/19 10/27 11/02 11/06 11/11 11/15 11/20 11/25 12/03 20 11/03 11/11 11/16 11/21 11/25 11/29 12/04 12/09 12/17 11/22 11/29 12/04 12/08 12/12 12/20 12/24 12/31 16 12/15 Freeze Free Period **Probability of longer than indicated freeze free period (Days)** Temp (F) .10 .20 .30 .40 .50 .60 .70 .80 .90 185 174 166 160 154 148 141 133 123 36 32 202 193 186 180 175 169 163 156 147 28 224 215 208 202 197 192 179 170 186 24 260 248 240 232 226 219 212 203 191 275 254 247 241 233 222 20 286 267 260

291

0/00 Indicates that the probability of occurrence of threshold temperature is less than the indicated probability.

298

Derived from 1971-2000 serially complete daily data

319

16

307

Complete documentation available from:

270

Elevation: 1,200 Feet

261

249

284

277

^{*} Probability of observing a temperature as cold, or colder, later in the spring or earlier in the fall than the indicated date.

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: DUNLOW 1 SW, WV

COOP ID: 462522

Climate Division: WV 3 NWS Call Sign: Elevation: 1,200 Feet Lat: 37°57N Lon: 82°24W

				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	1038	826	652	333	152	23	2	9	81	345	602	914	4977
60	883	686	504	203	73	4	0	0	30	219	457	759	3818
57	793	603	419	139	40	1	0	0	13	158	374	676	3216
55	737	549	365	104	25	0	0	0	7	123	321	618	2849
50	592	420	245	41	6	0	0	0	1	57	206	478	2046
32	194	87	22	0	0	0	0	0	0	0	12	128	443

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	179	184	393	662	934	1128	1288	1241	1002	691	400	238	8340
55	10	3	23	76	246	438	575	528	319	101	19	14	2352
57	3	0	15	51	199	379	513	466	265	74	12	10	1987
60	0	0	8	25	139	292	420	373	191	43	5	0	1496
65	0	0	0	5	64	160	266	227	93	13	0	0	828
70	0	0	0	0	21	65	130	108	33	2	0	0	359

										Gro	wing l	Degre	e Uni	ts (2)															
Base		Growing Degree Units (Monthly)														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	60	101	239	448	698	901	1050	1007	777	474	238	100	60	161	400	848	1546	2447	3497	4504	5281	5755	5993	6093					
45	28	54	145	315	543	751	895	852	628	330	149	51	28	82	227	542	1085	1836	2731	3583	4211	4541	4690	4741					
50	11	26	79	207	395	601	740	697	479	210	82	21	11	37	116	323	718	1319	2059	2756	3235	3445	3527	3548					
55	2	8	37	118	259	453	585	542	339	113	40	6	2	10	47	165	424	877	1462	2004	2343	2456	2496	2502					
60	0 1 15 61 144 307 430 387 210 51 11 1											0	1	16	77	221	528	958	1345	1555	1606	1617	1618						
Base	Growing Degree Units for Corn (Monthly)														Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)							
50/86	35 63 160 290 442 603 725 682 502 286 139 56													98	258	548	990	1593	2318	3000	3502	3788	3927	3983					

(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