

Climatography of the United States

No. 20

1971-2000

Station: ATHENS, WV

COOP ID: 460355

Climate Division: WV 5

NWS Call Sign:

Elevation: 2,565 Feet Lat: 37° 25N

Lon: 81° 01W

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	40.1	19.8	30.0	74	1950	25	41.2	1974	-22	1985	21	17.4	1977	1087	0	.0	.0	9.1	6.6	25.8	1.6
Feb	44.4	21.4	32.9	78	1967	3	42.1	1990	-12	1996	5	23.2	1978	898	0	.0	.0	11.7	4.1	22.2	1.0
Mar	53.0	28.4	40.7	82+	1985	30	46.7	1973	-3	1996	9	33.8	1981	754	0	.0	.0	21.7	1.0	17.6	.1
Apr	62.6	37.3	50.0	88	1967	14	55.3	1981	10	1985	10	45.8	1982	453	1	.0	.0	27.3	.1	8.5	.0
May	71.1	46.8	59.0	91	1996	20	64.9	1991	24+	1966	10	54.4	1994	214	26	.0	.1	30.8	.0	1.5	.0
Jun	77.4	55.1	66.3	94	1952	18	68.6+	2000	32	1966	2	62.3	1972	44	81	.0	.2	30.0	.0	.0	.0
Jul	81.0	59.1	70.1	97+	1988	9	74.6	1993	40+	1983	7	67.5	2000	8	166	.0	1.3	31.0	.0	.0	.0
Aug	80.1	57.1	68.6	95+	1988	17	72.0	1987	36	1986	29	65.4	1976	18	129	.0	1.2	31.0	.0	.0	.0
Sep	73.8	50.7	62.3	94	1998	15	66.4	1998	25	1983	24	59.1	1976	116	34	.0	.1	29.9	.0	.5	.0
Oct	64.5	38.9	51.7	89	1970	6	58.3	1984	13	1962	27	44.8	1988	417	5	.0	.0	29.6	.0	7.3	.0
Nov	53.9	30.7	42.3	80	1994	4	49.7	1985	3	1970	25	35.2	1976	681	0	.0	.0	20.9	.5	15.8	.0
Dec	44.3	24.1	34.2	76	1956	6	41.9	1971	-22	1989	23	22.9	1989	955	0	.0	.0	11.9	3.5	22.4	.7
Ann	62.2	39.1	50.7	97+	Jul 1988	9	74.6	Jul 1993	-22+	Dec 1989	23	17.4	Jan 1977	5645	442	.0	2.9	284.9	15.8	121.6	3.4

+ 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: 1948-2001

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

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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: ATHENS, WV

COOP ID: 460355

Climate Division: WV 5

NWS Call Sign:

Elevation: 2,565 Feet Lat: 37°25N

Lon: 81°01W

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	2.95	2.66	2.60	1998	28	7.00	1998	.79	1983	15.7	6.9	2.0	.3	.92	1.20	1.61	1.97	2.31	2.67	3.06	3.53	4.12	5.05	5.91	
Feb	2.72	2.57	2.24	1969	1	5.01	1990	.38	1978	14.1	6.9	1.7	.5	.93	1.18	1.56	1.88	2.18	2.50	2.84	3.24	3.76	4.55	5.28	
Mar	3.27	2.98	2.36	1955	6	7.03	1975	1.13	1995	15.2	7.7	2.2	.6	1.43	1.72	2.13	2.46	2.78	3.09	3.43	3.82	4.31	5.06	5.73	
Apr	3.29	3.39	2.80	1987	24	5.63	1977	1.02	1976	14.3	7.6	2.1	.5	1.13	1.44	1.90	2.28	2.65	3.03	3.44	3.92	4.54	5.50	6.38	
May	3.84	4.09	3.11	2001	17	6.90	1979	1.43	1977	15.3	8.6	2.5	.7	1.63	1.98	2.47	2.87	3.24	3.62	4.03	4.50	5.09	5.99	6.81	
Jun	3.21	2.81	3.50	1949	17	8.71	1979	.47	1999	13.0	7.1	2.2	.6	.88	1.18	1.65	2.05	2.45	2.86	3.32	3.87	4.58	5.69	6.73	
Jul	3.89	3.70	3.20	2001	9	7.17	1980	1.76	1987	13.6	8.5	2.5	.7	1.72	2.06	2.55	2.94	3.31	3.68	4.08	4.54	5.11	5.99	6.78	
Aug	3.06	2.66	2.23	1980	12	6.21	1980	.98	1976	11.8	6.5	1.9	.7	1.21	1.49	1.90	2.23	2.54	2.86	3.20	3.60	4.11	4.88	5.59	
Sep	2.99	2.72	2.37	1959	30	5.61	1979	.18	1985	11.6	6.2	1.9	.6	.83	1.11	1.54	1.92	2.28	2.67	3.09	3.60	4.25	5.27	6.23	
Oct	2.51	2.35	2.25	1974	16	6.54	1976	.00	2000	11.0	5.0	2.0	.3	.53	.88	1.30	1.64	1.96	2.28	2.64	3.06	3.61	4.45	5.24	
Nov	2.81	2.72	2.70	1985	3	9.85	1985	.82	1974	12.6	6.1	1.7	.4	.66	.93	1.34	1.70	2.07	2.45	2.88	3.40	4.07	5.15	6.15	
Dec	2.67	2.66	1.92	1996	2	5.16	1991	.66	2000	14.2	6.5	1.8	.3	.87	1.13	1.50	1.82	2.12	2.44	2.78	3.19	3.70	4.51	5.25	
Ann	37.21	36.09	3.50	Jun 1949	17	9.85	Nov 1985	.00	Oct 2000	162.4	83.6	24.5	6.2	26.62	28.68	31.30	33.30	35.07	36.78	38.54	40.49	42.85	46.28	49.24	

+ 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: 1948-2001

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

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Station: ATHENS, WV

COOP ID: 460355

Climate Division: WV 5

NWS Call Sign:

Elevation: 2,565 Feet

Lat: 37°25N

Lon: 81°01W

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	8.5	6.6	1	1	22.0	1998	28	28.0	1998	25	1998	29	5+	1998	5.6	3.0	.7	.1	@	9.1	3.9	2.7	.0
Feb	7.4	8.0	1	1	7.5	1987	27	15.0	1971	15	1983	12	4	1998	5.1	2.8	.7	.3	.0	5.2	2.2	1.0	.0
Mar	3.2	2.2	#	#	13.0	1999	13	13.0	1999	13	1999	13	1+	1999	2.6	1.3	.3	.1	@	1.1	.4	.2	.0
Apr	1.0	.0	#	0	5.1	1971	7	8.6	1971	4	1971	7	#+	2000	.8	.3	.1	@	.0	.4	.1	.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	.1	.0	0	0	1.5	1979	10	1.5	1979	0	0	0	0	0	.1	.1	.0	.0	.0	.0	.0	.0	.0
Nov	1.3	.5	#	0	6.0	1976	12	11.1	1976	5	1976	12	1	1976	1.0	.5	.1	@	.0	.5	.1	@	.0
Dec	4.3	2.0	#	#	17.0	1974	1	21.0	1974	17	1974	1	6	1974	2.7	1.4	.2	.2	@	1.6	.4	.2	.0
Ann	25.8	19.3	N/A	N/A	22.0	Jan 1998	28	28.0	Jan 1998	25	Jan 1998	29	6	Dec 1974	17.9	9.4	2.1	.7	@	17.9	7.1	4.1	.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

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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	6/05	5/30	5/26	5/22	5/18	5/15	5/11	5/07	5/01
32	5/21	5/16	5/12	5/08	5/05	5/02	4/28	4/24	4/19
28	5/14	5/07	5/03	4/29	4/26	4/22	4/18	4/14	4/08
24	4/26	4/20	4/15	4/12	4/08	4/05	4/01	3/28	3/22
20	4/14	4/07	4/03	3/30	3/27	3/23	3/19	3/15	3/08
16	4/01	3/26	3/21	3/17	3/13	3/10	3/06	3/01	2/22
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	9/14	9/19	9/22	9/25	9/28	9/30	10/03	10/06	10/11
32	9/20	9/25	9/29	10/02	10/05	10/08	10/11	10/14	10/20
28	9/29	10/04	10/07	10/10	10/13	10/15	10/18	10/22	10/26
24	10/12	10/17	10/21	10/25	10/28	10/31	11/03	11/07	11/13
20	10/20	10/27	10/31	11/05	11/08	11/12	11/16	11/21	11/28
16	11/05	11/12	11/16	11/20	11/24	11/28	12/02	12/07	12/13
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	152	145	140	135	131	127	123	118	111
32	176	167	162	156	152	147	142	136	128
28	194	185	179	174	169	165	159	153	145
24	225	217	211	206	202	197	192	186	178
20	252	243	237	231	226	221	215	209	200
16	281	272	266	260	255	250	244	238	229

* 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

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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	1087	898	754	453	214	44	8	18	116	417	681	955	5645
60	932	758	599	309	112	8	0	1	42	279	532	800	4372
57	839	674	508	231	68	2	0	0	19	207	445	707	3700
55	777	618	449	184	45	1	0	0	10	166	390	645	3285
50	636	485	310	90	13	0	0	0	2	86	260	503	2385
32	213	113	28	0	0	0	0	0	0	0	17	117	488

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	149	139	297	538	835	1027	1181	1134	909	611	326	184	7330
55	0	0	6	31	167	338	468	421	228	64	9	0	1732
57	0	0	2	19	127	279	406	359	177	43	4	0	1416
60	0	0	0	7	79	195	313	267	110	22	1	0	994
65	0	0	0	1	26	81	166	129	34	5	0	0	442
70	0	0	0	0	5	18	60	39	5	0	0	0	127

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	46	73	193	383	635	825	959	919	711	422	191	82	46	119	312	695	1330	2155	3114	4033	4744	5166	5357	5439
45	22	35	108	256	480	675	804	764	561	285	106	38	22	57	165	421	901	1576	2380	3144	3705	3990	4096	4134
50	2	12	53	152	330	526	649	609	412	165	51	18	2	14	67	219	549	1075	1724	2333	2745	2910	2961	2979
55	0	0	19	77	204	377	494	454	272	79	14	1	0	0	19	96	300	677	1171	1625	1897	1976	1990	1991
60	0	0	4	29	100	235	340	302	150	26	1	0	0	0	4	33	133	368	708	1010	1160	1186	1187	1187
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	31	54	136	249	399	537	647	608	451	271	124	48	31	85	221	470	869	1406	2053	2661	3112	3383	3507	3555

(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