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: 303294

Lon: 73°37W

Station: GLENS FALLS AP, NY

Climate Division: NY 5 NWS Call Sign: GFL

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 28.5 7.9 18.2 64 1995 15 28.9 1990 -35 1994 27 6.8 1982 1450 0 .0 .0 .8 19.3 29.8 9.1 Jan 1222 32.1 10.6 21.4 65 1981 21 32.4 1981 -30 1994 10 10.7 1979 0 .0 .0 .9 14.5 26.5 7.1 Feb Mar 42.6 22.2 32.4 86 1998 31 39.0 1973 -24 1950 4 27.4 1982 1011 0 .0 .0 6.9 4.9 26.0 1.3 9 1972 Apr 56.1 33.6 44.9 90+1990 28 49.4 1986 1974 11 38.8 604 0 .0 .1 20.6 14.3 .0 May 68.7 44.5 56.6 93 1979 9 62.0 1998 22 1966 11 51.8 1976 274 14 .0 .2 30.5 .0 1.8 .0 53.1 97+ 32 60.9 76.8 65.0 1995 19 67.8 1983 1967 1 1985 65 63 .0 1.3 30.0 .0 .0 .0 Jun Jul 81.6 58.2 69.9 100 10 74.0 1995 40+ 1979 4 65.2 1992 15 167 (a) 3.4 31.0 1988 .0 .0 .0 1982 79.0 56.4 67.7 98 1949 9 72.6 1973 31 1982 29 63.9 28 113 .0 1.4 31.0 .0 @ 0. Aug 2 Sep 70.2 47.6 58.9 97 1953 63.9 1971 25+2000 29 55.0 1978 198 14 .0 .2 29.9 .0 1.1 .0 58.3 7 54.0 24 42.9 1974 Oct 36.3 47.3 87+ 1963 1971 15 1969 550 0 .0 .0 25.8 .0 11.2 .0 45.9 28.4 37.2 78+ 1982 2 42.6 1999 1951 28 32.3 1996 835 0 .0 .0 9.8 21.1 .0 Nov -1 2.1 Dec 33.9 16.5 25.2 69 1982 4 32.3 1996 -29 1980 26 8.6 1989 1234 0 .0 .0 1.7 13.0 28.4 4.0 Jul Jul Jan Jan 34.6 45.4 100 1988 10 74.0 1995 -35 1994 27 6.8 1982 7486 371 (a) 218.9 54.0 160.2 21.5 56.1 6.6 Ann

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

Issue Date: February 2004 037-A

(1) From the 1971-2000 Monthly Normals

Elevation: 321 Feet Lat: 43°21N

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

⁺ Also occurred on an earlier date(s)

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

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Station: GLENS FALLS AP, NY

Climate Division: NY 5 NWS Call Sign: GFL Elevation: 321 Feet Lat: 43°21N Lon: 73°37W

										Pı	recipi	tation	(incl	nes)										
		Precipitation Totals Means/ Medians(1) Extremes									lean N of D	ays (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										
	Medi	ans(1)								y <u>-</u>				These values were determined from the incomplete gamma distribution										ā.
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	3.12	2.57	2.55	1999	13	7.49	1999	.68	1989	11.9	6.5	1.9	.6	.89	1.19	1.64	2.03	2.41	2.80	3.24	3.75	4.42	5.47	6.45
Feb	2.16	2.30	1.89	1974	22	4.85	1981	.54	1987	9.0	4.9	1.3	.4	.79	1.00	1.29	1.53	1.76	2.00	2.26	2.56	2.94	3.53	4.07
Mar	3.08	2.90	3.36	1994	3	6.59	1994	.40	1981	10.7	6.6	2.0	.6	1.01	1.31	1.74	2.10	2.45	2.82	3.21	3.68	4.27	5.20	6.06
Apr	3.01	2.64	2.66	1968	24	6.46	1983	.58	1999	10.9	6.8	2.1	.5	1.15	1.43	1.83	2.16	2.48	2.80	3.15	3.55	4.07	4.86	5.58
May	3.75	3.27	2.30	1992	31	7.80	1984	1.10	1980	12.1	8.0	2.7	.9	1.10	1.46	1.99	2.45	2.90	3.37	3.89	4.50	5.29	6.52	7.66
Jun	3.41	3.11	3.44	1987	22	8.20	1998	.80	1988	11.3	7.4	2.4	.5	.84	1.16	1.65	2.10	2.53	3.00	3.51	4.13	4.93	6.21	7.40
Jul	3.62	3.52	2.84	1988	21	8.31	1994	.84	1993	10.1	6.5	2.5	.8	1.14	1.48	1.99	2.42	2.85	3.28	3.76	4.33	5.05	6.18	7.23
Aug	3.66	3.08	3.65	1971	28	8.07	1990	1.39	1996	10.6	6.6	2.2	1.0	1.35	1.69	2.18	2.60	2.99	3.39	3.83	4.33	4.98	5.98	6.89
Sep	3.45	2.96	3.55	1999	16	7.75	1987	1.13	1988	9.6	6.7	2.2	.8	.95	1.28	1.77	2.21	2.63	3.08	3.57	4.15	4.91	6.10	7.21
Oct	3.15	2.69	3.57	1972	7	7.53	1995	.81	1974	10.0	6.1	2.1	.6	1.02	1.31	1.76	2.13	2.50	2.87	3.28	3.76	4.38	5.35	6.24
Nov	3.23	3.08	2.08	1990	10	6.45	1972	1.16	1976	11.3	6.9	2.3	.4	1.45	1.73	2.13	2.46	2.76	3.06	3.39	3.76	4.23	4.95	5.59
Dec	2.93	2.43	2.91	1948	30	7.61	1973	1.04	1999	11.5	6.1	1.8	.7	.86	1.13	1.55	1.92	2.27	2.64	3.04	3.52	4.14	5.11	6.01
Ann	38.57	38.69	3.65	Aug 1971	28	8.31	Jul 1994	.40	Mar 1981	129.0	79.1	25.5	7.8	28.54	30.51	33.02	34.91	36.58	38.20	39.85	41.68	43.89	47.08	49.82

⁺ 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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Station: GLENS FALLS AP, NY

Climate Division: NY 5 NWS Call Sign: GFL Elevation: 321 Feet Lat: 43°21N Lon: 73°37W

										Snov	v (incl	hes)													
						Sno	ow To	tals							Mean Number of Days (1)										
	Mean	s/Medi	ians (1)	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	20.0	17.7	6	6	15.7	1986	26	51.2	1987	30+	1987	24	15+	1987	8.7	4.9	2.7	1.2	.2	24.3	20.6	16.5	8.8		
Feb	12.6	13.1	7	6	12.2	1993	16	33.4	1993	26+	1971	12	20	1971	6.8	3.3	1.4	.8	.1	22.8	19.5	16.5	9.2		
Mar	12.5	10.0	4	3	20.2	1994	3	33.9	1971	34	1971	12	18	1971	4.7	2.7	1.6	.9	.2	14.4	10.8	9.0	5.3		
Apr	2.9	.3	#	0	10.6	2000	9	12.5	1983	10	2000	10	1+	2000	1.3	.8	.4	.2	@	1.5	.6	.2	@		
May	.0	.0	#	0	.3	1976	19	.3	1976	0	0	0	#	2000	.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	1.1	1987	4	1.2	1987	#	1976	24	0	0	.1	.0	.0	.0	.0	.0	.0	.0	.0		
Nov	4.2	1.6	#	0	18.0	1971	25	19.5	1972	18	1971	26	3	1997	2.1	1.0	.5	.3	.1	2.8	1.6	.8	.2		
Dec	13.8	14.0	3	2	15.5	1978	25	31.3	1972	30	1990	4	9	1995	6.8	3.6	1.5	.9	.1	16.5	11.2	7.3	1.9		
Ann	66.0	56.7	N/A	N/A	20.2	Mar 1994	3	51.2	Jan 1987	34	Mar 1971	12	20	Feb 1971	30.5	16.3	8.1	4.3	.7	82.3	64.3	50.3	25.4		

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

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[@] 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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				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((*)								
remp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90							
36	6/07	6/02	5/29	5/26	5/22	5/19	5/16	5/12	5/07							
32	5/18	5/14	5/12	5/10	5/08	5/06	5/04	5/01	4/28							
28	5/08	5/04	5/01	4/28	4/25	4/23	4/20	4/17	4/13							
24	4/28	4/24	4/20	4/18	4/15	4/12	4/09	4/06	4/02							
20	4/15	4/10	4/07	4/05	4/02	3/31	3/28	3/25	3/21							
16	4/05	4/01	3/30	3/27	3/25	3/23	3/21	3/19	3/15							
		•	Fal	ll Freeze Da	tes (Month/D	Day)		•	•							
Tomp (F)		Probability of earlier date in fall (beginning Aug 1) than indicated(*)														
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90							
36	9/05	9/10	9/13	9/16	9/19	9/22	9/24	9/28	10/03							
32	9/16	9/20	9/24	9/26	9/29	10/01	10/04	10/07	10/11							
28	9/24	9/29	10/03	10/06	10/09	10/12	10/15	10/19	10/24							
24	10/10	10/15	10/18	10/21	10/24	10/26	10/29	11/01	11/06							
20	10/20	10/26	10/31	11/03	11/07	11/10	11/14	11/18	11/24							
16	11/05	11/10	11/14	11/18	11/21	11/24	11/28	12/02	12/08							
1			•	Freeze F	ree Period	•	•	1								
Tomp (F)			Probability	of longer th	an indicated	freeze free p	eriod (Days))								
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90							
36	140	133	127	123	119	114	110	105	97							
32	155	151	148	146	143	141	138	135	131							
28	185	178	174	170	166	162	158	153	146							
24	208	202	198	194	191	188	184	180	174							
20	239	232	227	222	218	214	209	204	197							
16	261	254	249	244	240	236	232	227	219							

^{*} 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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	Degree Days to Selected Base Temperatures (°F)														
Base						Heatin	g Degree l	Days (1)							
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann		
65	1450	1222	1011	604	274	65	15	28	198	550	835	1234	7486		
60	1295	1082	856	455	156	16	1	3	94	398	685	1079	6120		
57	1202	998	763	369	102	5	0	0	52	310	595	986	5382		
55	1140	942	701	313	73	2	0	0	33	256	535	924	4919		
50	985	802	546	190	26	0	0	0	7	140	387	769	3852		
32	466	336	116	4	0	0	0	0	0	0	37	294	1253		

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	39	38	129	390	763	988	1175	1108	806	473	192	83	6184
55	0	0	0	9	123	300	462	395	149	16	0	0	1454
57	0	0	0	5	90	243	400	333	108	8	0	0	1187
60	0	0	0	1	51	164	307	243	60	3	0	0	829
65	0	0	0	0	14	63	167	113	14	0	0	0	371
70	0	0	0	0	2	13	68	34	1	0	0	0	118

	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 Fel											Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
40	1	3	38	190	519	759	936	864	573	249	71	7	1	4	42	232	751	1510	2446	3310	3883	4132	4203	4210
45	0	0	14	99	367	609	781	709	424	142	32	2	0	0	14	113	480	1089	1870	2579	3003	3145	3177	3179
50	0	0	5	47	231	459	626	554	285	62	7	0	0	0	5	52	283	742	1368	1922	2207	2269	2276	2276
55	0	0	1	19	126	314	471	399	167	23	1	0	0	0	1	20	146	460	931	1330	1497	1520	1521	1521
60	60 0 0 0 8 54 182 316 253 81 5 0 0									0	0	0	8	62	244	560	813	894	899	899	899			
Base				Gro	wing De	gree Unit	s for Co	rn (Mont	thly)						Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)		
50/86	0	0	31	124	315	476	617	565	347	150	39	4	0	0	31	155	470	946	1563	2128	2475	2625	2664	2668

(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