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: 502785

Lon: 136°40W

Station: ELFIN COVE, AK

Climate Division: AK 1 NWS Call Sign: ELV

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 90 70 50 32 32 0 34.4 28.3 31.4 50+ 2001 7 39.4 1981 1989 30 22.9 1972 1044 0 .0 .0 .1 9.5 20.2 0. Jan 22.3 36.7 29.7 33.2 57 1991 27 40.4 1977 -10 1975 14 1979 891 0 .0 .0 .3 5.8 16.8 .1 Feb 1981 Mar 39.7 31.6 35.7 56 20 40.0 1981 9 1989 10 31.1 1972 895 0 .0 .0 .9 2.0 16.4 0. 35.3 20 1972 Apr 45.4 40.4 66+ 1995 28 44.3 1990 1996 2 34.4 740 0 .0 0. 5.7 .1 6.7 0. May 50.3 40.3 45.3 74 1983 30 49.5 1981 31+ 1982 14 40.6 1971 611 0 .0 .2 16.7 .0 .5 .0 54.4 45.9 53.3 35 27.5 Jun 50.2 80 1991 21 1990 1976 46.4 1975 445 0 .0 .6 .0 .0 .0 Jul 57.3 49.5 53.4 77 1999 4 55.8 40 1988 13 51.3 1973 358 .0 .7 31.0 0. .0 1997 0 .0 1973 58.6 49.9 54.3 85 1990 12 57.4 1997 39 1984 28 51.3 334 0 .0 .8 31.0 .0 .0 .0 Aug 30 Sep 54.9 46.5 50.7 74+ 1986 6 55.4 1995 1983 27 46.4 1992 429 0 .0 .3 28.2 .0 .1 .0 40.2 8 47.7 40.5 1971 Oct 46.9 43.6 60 1977 1979 20 1984 30 665 0 .0 .0 10.2 (a) 1.8 .0 39.3 33.5 54 1976 12 41.1 1976 5 1985 26 28.1 1985 859 0 .0 .0 .5 2.7 11.4 .0 Nov 36.4 Dec 36.0 30.5 33.3 50+ 1999 27 38.2 1976 5+ 1990 1 27.0 1971 984 0 .0 .0 .1 6.4 16.5 .0 Feb Aug Aug Feb 46.2 38.4 42.3 85 1990 12 57.4 1997 -10 1975 14 22.3 1979 8255 0 .0 2.6 152.2 26.5 90.4 .1 Ann

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

Issue Date: May 2005 017-A

(1) From the 1971-2000 Monthly Normals

20 Feet Lat: 58°12N

Elevation:

- (2) Derived from station's available digital record: 1975-2001
- (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

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: 502785

Station: ELFIN COVE, AK

Climate Division: AK 1 NWS Call Sign: ELV Elevation: 20 Feet Lat: 58°12N Lon: 136°40W

										Pı	recipit	tation	(incl	nes)										
	Precipitation Totals Means/ Medians(1) Extremes									Mean Number of Days (3) Daily Precipitation				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	9.88	9.36	3.30	1985	16	21.87	1985	2.49	1995	21.9	17.2	6.9	2.9	3.94	4.85	6.14	7.21	8.22	9.24	10.35	11.63	13.25	15.73	18.00
Feb	7.86	7.65	4.56	1997	23	14.68	1997	.79	1989	17.6	13.8	5.4	1.8	2.15	2.90	4.03	5.02	5.99	7.01	8.14	9.47	11.20	13.93	16.47
Mar	7.38	7.73	2.51	1987	28	12.49	1986	2.58	1974	20.3	15.5	5.1	1.3	3.40	4.05	4.94	5.67	6.34	7.01	7.74	8.56	9.60	11.17	12.58
Apr	5.95	5.32	2.98+	1999	15	12.21	1977	1.73	1979	18.6	13.6	3.6	1.3	2.01	2.57	3.40	4.09	4.76	5.45	6.20	7.08	8.21	9.96	11.57
May	4.76	4.56	2.32	1992	4	9.41	1992	1.98	1977	17.6	12.1	2.9	.5	2.22	2.64	3.21	3.67	4.10	4.53	4.99	5.51	6.17	7.17	8.06
Jun	3.37	3.32	1.85	1985	17	6.98	1987	1.57	1982	16.6	9.7	1.5	.3	1.66	1.95	2.34	2.65	2.94	3.23	3.53	3.88	4.32	4.97	5.56
Jul	4.32	4.21	1.75	2000	1	8.96	1997	.94	1996	19.1	12.0	2.1	.4	1.75	2.14	2.71	3.17	3.61	4.05	4.53	5.08	5.78	6.86	7.83
Aug	6.37	6.53	2.22	1984	25	14.82	1983	2.24	1989	18.8	13.0	4.5	1.4	2.19	2.79	3.67	4.41	5.12	5.85	6.65	7.58	8.77	10.62	12.31
Sep	12.17	11.02	8.61	1996	25	19.92	1987	3.73	1986	21.7	17.8	9.2	3.3	6.21	7.22	8.59	9.69	10.69	11.69	12.75	13.96	15.46	17.72	19.73
Oct	16.16	14.72	7.20	1994	3	31.12	1978	3.32	1975	25.7	21.8	12.1	5.3	7.43	8.85	10.81	12.40	13.88	15.36	16.95	18.76	21.04	24.49	27.60
Nov	11.43	12.03	4.25	1976	2	18.74	1987	3.34	1983	22.2	18.1	9.0	3.0	4.70	5.75	7.22	8.43	9.57	10.73	11.97	13.41	15.23	18.01	20.53
Dec	11.39	11.26	3.60	1989	13	21.46	1997	2.67	1983	23.0	18.4	8.3	3.2	4.55	5.60	7.09	8.32	9.48	10.66	11.94	13.41	15.28	18.14	20.74
Ann	101.04	100.50	8.61	Sep 1996	25	31.12	Oct 1978	.79	Feb 1989	243.1	183.0	70.6	24.7	79.82	84.10	89.48	93.50	97.03	100.41	103.87	107.66	112.20	118.71	124.28

⁺ 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: 1975-2001

⁽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: 502785

Station: ELFIN COVE, AK

Climate Division: AK 1 NWS Call Sign: ELV Elevation: 20 Feet Lat: 58°12N Lon: 136°40W

										Snov	w (incl	hes)												
						Sno	ow To	tals							Mean Number of Days (1)									
	Mean	ans (1))		Extremes (2)											Snow Fall >= Thresholds						n ds		
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	28.4	26.8	9	10	29.0	1983	11	72.7	1994	49	1983	13	32	1980	10.1	6.3	3.0	1.5	.6	21.3	19.4	16.7	12.5	
Feb	19.6	14.1	8	2	22.0	1999	5	60.9	1990	49	1999	7	32	1999	8.0	4.4	2.4	1.3	.2	16.3	14.3	12.2	9.7	
Mar	11.9	8.9	4	1	19.0	1995	11	42.8	1995	39	1982	1	24	1982	6.8	3.0	1.4	.7	.1	12.6	9.5	7.5	5.7	
Apr	1.8	.3	#	0	4.5	1986	7	14.1	1986	12	1982	1	5	1982	2.3	.5	.2	.0	.0	1.6	1.0	.8	.2	
May	#	.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	
Oct	1.4	.0	#	0	6.0	1991	30	12.2	1991	10	1991	30	1	1991	1.2	.4	.2	.1	.0	.4	.2	.1	.0	
Nov	13.6	6.9	1	0	20.0	1994	23	82.5	1994	41	1994	25	12	1994	5.7	2.8	1.4	.8	.2	7.0	5.7	3.7	1.7	
Dec	23.3	21.2	4	2	21.0	1995	5	59.3	1979	35	1990	3	22	1994	10.0	5.8	2.7	1.4	.3	15.3	11.5	9.0	5.9	
Ann	100.0	78.2	N/A	N/A	29.0	Jan 1983	11	82.5	Nov 1994	49+	Feb 1999	7	32+	Feb 1999	44.1	23.2	11.3	5.8	1.4	74.5	61.6	50.0	35.7	

⁺ 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: 502785

Station: ELFIN COVE, AK

Climate Division: AK 1 NWS Call Sign: ELV

NWS Call Sign: ELV Elevation: 20 Feet Lat: 58°12N Lon: 136°40W

				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	5/27	5/24	5/21	5/19	5/17	5/15	5/13	5/10	5/07							
32	5/13	5/07	5/02	4/28	4/24	4/21	4/17	4/12	4/06							
28	4/17	4/10	4/05	4/01	3/28	3/24	3/20	3/15	3/08							
24	4/02	3/23	3/17	3/11	3/05	2/28	2/22	2/15	2/06							
20	3/23	3/11	3/01	2/21	2/14	2/06	1/28	1/17	12/28							
16	3/12	2/27	2/18	2/09	2/01	1/23	1/11	12/21	0/00							
			Fal	l Freeze Da	tes (Month/D	ay)										
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	9/24	9/30	10/04	10/07	10/11	10/14	10/18	10/22	10/28							
32	10/05	10/13	10/18	10/22	10/26	10/30	11/04	11/09	11/16							
28	10/24	11/02	11/08	11/14	11/19	11/25	11/30	12/07	12/16							
24	10/29	11/11	11/21	11/30	12/08	12/16	12/24	1/03	1/17							
20	11/06	11/19	11/28	12/06	12/14	12/22	12/31	1/13	0/00							
16	11/22	12/05	12/15	12/25	1/03	1/13	1/27	0/00	0/00							
			•	Freeze F	ree Period											
Temp (F)			Probability	of longer th	an indicated	freeze free p	eriod (Days)									
remp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90							
36	168	160	155	151	146	142	137	132	125							
32	213	203	196	190	184	178	172	165	155							
28	274	261	251	243	236	228	220	211	198							
24	323	305	293	284	275	266	257	246	231							
20	>365	>365	332	313	300	289	278	266	250							
16	>365	>365	>365	>365	337	318	303	290	273							

^{*} 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: 502785

Station: ELFIN COVE, AK

Climate Division: AK 1 NWS Call Sign: ELV Elevation: 20 Feet Lat: 58°12N Lon: 136°40W

	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	1044	891	895	740	611	445	358	334	429	665	859	984	8255		
60	889	751	755	590	456	295	203	183	280	510	709	829	6450		
57	796	667	662	500	363	207	117	103	196	417	619	736	5383		
55	734	611	600	440	301	152	69	64	145	355	559	674	4704		
50	586	475	445	293	161	50	7	9	51	207	415	519	3218		
32	160	99	30	5	0	0	0	0	0	2	53	95	444		

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	139	132	142	254	413	545	665	689	561	359	184	135	4218
55	0	0	0	0	1	7	21	40	16	0	0	0	85
57	0	0	0	0	0	2	6	17	7	0	0	0	32
60	0	0	0	0	0	0	0	4	1	0	0	0	5
65	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0	0

										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										Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
40	0	2	6	56	183	327	438	457	336	137	19	0	0	2	8	64	247	574	1012	1469	1805	1942	1961	1961
45	0	0	0	9	60	177	283	302	187	35	0	0	0	0	0	9	69	246	529	831	1018	1053	1053	1053
50	0	0	0	0	8	54	128	147	58	0	0	0	0	0	0	0	8	62	190	337	395	395	395	395
55	0	0	0	0	1	5	26	30	4	0	0	0	0	0	0	0	1	6	32	62	66	66	66	66
60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Base				Gro	wing Deg	gree Unit	s for Co	rn (Mont	thly)				Growing Degree Units for Corn (Accumulated Monthly)											
50/86	0	0	0	10	42	91	150	168	97	11	0	0	0	0	0	10	52	143	293	461	558	569	569	569

(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