

Climatology of the United States No. 20

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

Station: BIG DELTA ALLEN AAF, AK

1971-2000

COOP ID: 500770

Climate Division: AK 8

NWS Call Sign: BIG

Elevation: 1,268 Feet Lat: 64°00N

Lon: 145°43W

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 >= 90	Max >= 70	Max >= 50	Max <= 32	Min <= 32	Min <= 0
Jan	4.4	-9.6	-2.6	48+	1981	15	24.1	1981	-63	1947	30	-22.7	1971	2097	0	.0	.0	.0	28.7	30.9	19.7
Feb	10.9	-6.4	2.3	51	1943	24	20.5	1997	-60	1947	2	-19.6	1979	1759	0	.0	.0	.0	25.2	28.2	16.7
Mar	25.1	3.2	14.2	58	1981	18	30.1	1981	-49	1964	15	-1.7	1972	1576	0	.0	.0	.2	20.3	30.4	13.2
Apr	42.5	21.7	32.1	72	1979	30	40.3	1993	-37	1944	2	18.9	1972	987	0	.0	@	7.7	5.5	25.1	2.4
May	57.8	37.7	47.8	90+	1947	29	54.2	1981	-1	1945	4	40.7	1992	536	0	.0	2.5	26.7	.2	7.0	.0
Jun	67.3	47.6	57.5	92	1969	15	60.7	1997	30+	1997	1	53.3	1985	228	1	.1	11.4	29.9	.0	.2	.0
Jul	70.4	51.1	60.8	91	1958	4	63.4	1978	32	1971	1	57.7	2000	144	12	.0	17.3	31.0	.0	@	.0
Aug	64.8	46.1	55.5	90	1994	6	61.6	1977	22	1948	24	49.2	2000	308	12	@	8.8	30.1	.0	1.1	.0
Sep	53.2	35.6	44.4	79	1963	1	52.0	1995	-2	1983	27	29.9	1992	620	2	.0	.4	20.7	.9	10.1	.1
Oct	31.1	17.0	24.1	66	1969	13	34.9	1979	-39	1975	31	13.1	1982	1270	0	.0	.0	2.2	17.5	27.7	3.9
Nov	13.5	-.8	6.4	52	1979	6	24.3	1979	-47	1986	27	-7.6	1975	1761	0	.0	.0	.1	27.4	29.8	15.3
Dec	7.2	-7.1	.1	55	1985	11	16.0	1985	-62	1946	14	-21.2	1980	2016	0	.0	.0	.2	29.0	30.8	20.1
Ann	37.4	19.7	28.6	92	Jun 1969	15	63.4	Jul 1978	-63	Jan 1947	30	-22.7	Jan 1971	13302	27	.1	40.4	148.8	154.7	221.3	91.4

+ 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: May 2005

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1937-2001

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

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Elevation: 1,268 Feet Lat: 64°00N

Lon: 145°43W

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	.34	.25	.73	1957	19	1.19	1993	.01	1981	5.7	.9	.0	.0	.02	.04	.08	.13	.18	.24	.32	.41	.54	.76	.99
Feb	.41	.28	.59	1996	11	2.48	1996	.00	1975	4.9	1.5	.0	.0	.01	.04	.10	.16	.22	.30	.38	.50	.65	.92	1.18
Mar	.22	.17	.53	1995	18	1.14	1995	.00+	1999	3.5	.6	.0	.0	.00	.00	.02	.06	.10	.15	.20	.28	.37	.53	.69
Apr	.20	.12	.94	1963	29	.68	1999	.00+	1995	3.3	.5	.0	.0	.00	.00	.02	.05	.09	.13	.18	.24	.34	.50	.66
May	.77	.56	1.16	1962	28	3.07	1988	.06	1985	7.0	2.4	.4	.0	.08	.13	.24	.34	.46	.59	.75	.94	1.21	1.65	2.09
Jun	2.38	2.17	2.14	1943	6	5.42	1985	.81	2000	12.2	6.9	1.3	.1	.87	1.09	1.41	1.68	1.94	2.20	2.48	2.82	3.24	3.89	4.48
Jul	2.77	2.49	2.06	1975	21	5.98	1984	.56	1994	13.7	7.3	1.7	.3	.95	1.21	1.59	1.91	2.22	2.54	2.89	3.29	3.81	4.62	5.36
Aug	2.11	2.12	1.34	1995	14	4.81	2000	.55	1994	12.8	6.4	.8	.0	.77	.97	1.25	1.49	1.72	1.96	2.21	2.51	2.88	3.47	4.00
Sep	1.03	.94	1.17	1952	1	2.88	1990	.14	1984	8.7	3.4	.3	.0	.26	.36	.51	.64	.77	.91	1.06	1.24	1.48	1.86	2.21
Oct	.73	.67	.54	1952	30	2.07	1989	.08	1979	9.1	2.7	.0	.0	.12	.18	.28	.39	.49	.60	.74	.90	1.11	1.46	1.79
Nov	.59	.39	.50	1989	14	2.82	1994	.02	1998	7.8	2.1	.0	.0	.03	.06	.13	.20	.29	.40	.53	.70	.94	1.36	1.77
Dec	.39	.24	.90	1955	29	1.54	1990	.00	1973	6.3	1.6	.0	.0	.01	.04	.09	.14	.21	.28	.37	.48	.64	.90	1.17
Ann	11.94	11.58	2.14	Jun 1943	6	5.98	Jul 1984	.00+	Mar 1999	95.0	36.3	4.5	.4	7.89	8.65	9.64	10.40	11.08	11.74	12.42	13.19	14.12	15.48	16.67

+ 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: 1937-2001

(3) Derived from 1971-2000 daily data

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

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COOP ID: 500770

Climate Division: AK 8

NWS Call Sign: BIG

Elevation: 1,268 Feet

Lat: 64°00N

Lon: 145°43W

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	4.2	3.7	6	4	4.8	1975	28	9.9	1989	31	1992	31	27	1992	4.9	1.8	.2	.0	.0	28.6	23.0	13.8	4.4
Feb	5.3	3.4	6	4	9.1	1996	11	29.6	1996	25	1996	20	22	1979	4.7	2.0	.4	.0	.0	26.5	20.8	14.0	7.4
Mar	3.2	2.6	7	5	4.6+	1995	18	11.4	1995	38	1992	9	33	1992	3.5	1.5	.2	.0	.0	27.8	20.1	15.6	7.4
Apr	2.2	1.0	3	2	3.0+	1992	10	7.8	1971	30	1992	15	20	1992	2.5	.9	.1	.0	.0	19.0	9.1	6.7	2.0
May	.9	.0	#	0	9.3	1989	9	10.9	1989	9	1989	9	1+	1989	.4	.3	.1	.1	.0	1.7	.6	.3	.0
Jun	#	.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
Sep	2.2	.0	#	0	8.5	1992	14	14.0	1981	11	1992	30	6	1992	1.1	.7	.2	.2	.0	1.5	.7	.5	.3
Oct	11.0	11.6	2	2	10.4	1981	18	23.0	1997	13	1997	17	7	1997	8.2	4.0	1.0	.3	@	17.0	10.8	5.6	1.2
Nov	9.5	8.0	5	4	9.5	1994	21	34.4	1994	29	1994	30	16	1994	7.6	3.5	.9	.2	.0	25.5	17.6	12.0	5.7
Dec	5.8	5.4	6	5	4.0	1983	3	14.2	1984	30	1994	7	19	1991	6.4	2.5	.3	.0	.0	29.1	22.9	16.3	5.7
Ann	44.3	35.7	N/A	N/A	10.4	Oct 1981	18	34.4	Nov 1994	38	Mar 1992	9	33	Mar 1992	39.3	17.2	3.4	.8	@	176.7	125.6	84.8	34.1

+ 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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NWS Call Sign: BIG

Elevation: 1,268 Feet

Lat: 64° 00N

Lon: 145° 43W

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	6/17	6/12	6/08	6/04	6/01	5/29	5/26	5/22	5/17
32	6/07	6/02	5/29	5/25	5/22	5/19	5/16	5/12	5/06
28	5/19	5/16	5/13	5/11	5/09	5/07	5/05	5/03	4/29
24	5/10	5/06	5/03	4/30	4/28	4/25	4/23	4/20	4/16
20	5/04	4/29	4/25	4/22	4/20	4/17	4/14	4/11	4/06
16	4/26	4/22	4/19	4/17	4/15	4/13	4/10	4/08	4/04
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	8/15	8/18	8/20	8/22	8/23	8/25	8/27	8/29	8/31
32	8/20	8/23	8/26	8/28	8/31	9/02	9/04	9/07	9/10
28	8/28	9/03	9/07	9/11	9/15	9/18	9/22	9/26	10/02
24	9/14	9/18	9/21	9/23	9/26	9/28	10/01	10/04	10/08
20	9/18	9/22	9/25	9/28	9/30	10/03	10/06	10/09	10/13
16	9/24	9/28	10/01	10/04	10/06	10/08	10/11	10/14	10/18
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	102	95	90	86	82	78	74	69	63
32	118	111	107	103	100	96	92	88	81
28	149	142	136	132	128	123	119	114	106
24	169	163	158	154	150	146	142	137	131
20	182	175	171	167	163	159	155	150	144
16	190	184	180	177	173	170	167	163	157

* 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

Complete documentation available from:

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Climate Division: AK 8

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Elevation: 1,268 Feet Lat: 64°00N Lon: 145°43W

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	2097	1759	1576	987	536	228	144	308	620	1270	1761	2016	13302
60	1942	1619	1421	838	390	97	47	184	478	1115	1611	1861	11603
57	1849	1535	1328	752	307	46	16	127	397	1022	1521	1768	10668
55	1787	1479	1266	695	257	25	7	96	347	960	1461	1706	10086
50	1640	1339	1112	558	155	4	0	40	236	807	1311	1551	8753
32	1124	879	603	182	9	0	0	0	24	330	800	1012	4963

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	50	45	49	185	497	763	891	727	396	84	29	18	3734
55	0	0	0	8	31	98	185	110	29	0	0	0	461
57	0	0	0	5	19	59	132	79	20	0	0	0	314
60	0	0	0	1	9	20	70	43	10	0	0	0	153
65	0	0	0	0	0	1	12	12	2	0	0	0	27
70	0	0	0	0	0	0	0	0	0	0	0	0	0

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	0	0	0	33	265	537	655	492	189	13	0	0	0	0	0	33	298	835	1490	1982	2171	2184	2184	2184
45	0	0	0	6	143	387	501	341	95	2	0	0	0	0	0	6	149	536	1037	1378	1473	1475	1475	1475
50	0	0	0	0	59	239	346	200	34	0	0	0	0	0	0	0	59	298	644	844	878	878	878	878
55	0	0	0	0	17	118	196	95	4	0	0	0	0	0	0	0	17	135	331	426	430	430	430	430
60	0	0	0	0	1	42	79	31	0	0	0	0	0	0	0	0	1	43	122	153	153	153	153	153
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	0	0	0	23	146	285	360	259	99	3	0	0	0	0	0	23	169	454	814	1073	1172	1175	1175	1175

(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/normals/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/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 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