U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: ANNETTE AP, AK **COOP ID: 500352**

Climate Division: AK 1 **NWS Call Sign: ANN** **Elevation: 109 Feet** **Lat: 55˚03N** **Lon: 131˚34W**

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	39.7	30.4	35.1	61+	1981	14	45.6	1981	1	1982	4	26.7	1972	928	0	.0	.0	1.8	4.6	16.8	.0
Feb	41.9	32.3	37.1	65	1993	9	43.7	1977	2	1956	14	30.1	1972	781	0	.0	.0	2.5	2.1	13.2	.0
Mar	44.7	34.2	39.5	64	1994	28	43.6	1984	1	1955	3	35.1	1975	775	0	.0	.0	4.3	.4	11.1	.0
Apr	49.8	37.7	43.8	82	1976	29	47.8	1995	21	1954	3	38.0	1972	637	0	.0	.4	12.5	.0	3.9	.0
May	55.7	43.1	49.4	88	1963	21	55.7	1993	31	1971	8	45.1	1999	484	0	.0	1.4	26.7	.0	.2	.0
Jun	60.3	48.3	54.3	89+	1969	9	57.6+	1998	37	1965	3	50.6	1974	321	0	.0	3.1	29.7	.0	.0	.0
Jul	64.1	52.4	58.2	89	1976	30	62.1	1990	40	1973	6	54.6	1973	215	5	.0	6.0	31.0	.0	.0	.0
Aug	64.6	52.6	58.6	90	1960	8	62.9	1977	40	1973	31	55.4	1973	206	8	.0	6.1	31.0	.0	.0	.0
Sep	59.6	48.0	53.8	82	1989	8	57.9	1995	33+	1996	30	50.1	1999	337	0	.0	1.5	29.8	.0	.0	.0
Oct	51.4	41.7	46.5	71	1964	5	51.3	1986	18+	1984	31	43.4	1985	572	0	.0	.0	21.6	.1	1.9	.0
Nov	44.2	35.1	39.7	67	1970	1	43.9	1991	-3	1985	26	27.6	1985	760	0	.0	.0	4.8	1.3	10.0	@
Dec	40.7	32.1	36.4	62	1962	12	43.1	1989	1	1964	15	30.0	1977	885	0	.0	.0	1.4	3.2	14.2	.0
Ann	51.4	40.7	46.0	90	Aug 1960	8	62.9	Aug 1977	-3	Nov 1985	26	26.7	Jan 1972	6901	13	.0	18.5	197.1	11.7	71.3	@

\+ 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/normals/usnormals.html

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1949-2001

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

Issue Date: May 2005

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: ANNETTE AP, AK **COOP ID: 500352**

Climate Division: AK 1 **NWS Call Sign: ANN** **Elevation: 109 Feet** **Lat: 55˚03N** **Lon: 131˚34W**

Precipitation (inches)

Precipitation Totals

Month	Means/ Medians(1) Mean	Means/ Medians(1) Median	Extremes Highest Daily(2)	Year	Day	Highest Monthly(1)	Year	Lowest Monthly(1)	Year
Jan	9.67	9.66	3.89	1962	29	16.61	1976	3.01	1978
Feb	8.05	7.83	3.87	1965	18	16.53	1993	.12	1989
Mar	7.96	7.92	3.96	1966	28	13.92	2000	2.13	1983
Apr	7.37	7.41	4.75	1956	17	16.88	1980	1.93	1989
May	5.73	4.95	4.29	1958	14	12.05	1999	2.43	1997
Jun	4.72	4.86	3.38	1962	6	9.37	1984	.61	1982
Jul	4.26	4.20	2.60	1967	27	8.16	1991	.56	1971
Aug	6.12	5.68	3.82	1956	30	13.78	1998	1.85	1982
Sep	9.49	9.09	3.47	1976	8	17.40	1987	4.78	1972
Oct	13.86	13.97	6.67	1958	20	23.51	1986	7.04	1987
Nov	12.21	12.05	4.57	1959	30	23.32	1991	4.77	1985
Dec	11.39	10.42	4.83	1959	5	22.89	1991	3.86	1983
Ann	100.83	101.34	6.67	Oct 1958	20	23.51	Oct 1986	.12	Feb 1989

Mean Number of Days (3)

Daily Precipitation

Month	>= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	20.1	16.0	6.8	2.7
Feb	18.5	14.3	5.6	1.8
Mar	20.8	15.3	5.5	1.6
Apr	19.2	13.4	5.2	1.9
May	16.7	11.7	3.8	1.3
Jun	15.4	10.2	3.4	.7
Jul	14.5	9.0	3.1	.9
Aug	15.2	9.7	4.0	1.9
Sep	17.7	13.5	7.1	2.8
Oct	23.7	19.2	9.7	4.6
Nov	22.5	18.1	8.9	4.0
Dec	22.8	17.8	8.4	3.3
Ann	227.1	168.2	71.5	27.5

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	.05	.10	.20	.30	.40	.50	.60	.70	.80	.90	.95
Jan	4.55	5.39	6.55	7.48	8.35	9.22	10.14	11.20	12.53	14.53	16.34
Feb	2.04	2.80	3.97	5.00	6.02	7.10	8.30	9.72	11.59	14.52	17.28
Mar	3.56	4.26	5.25	6.05	6.80	7.55	8.35	9.28	10.44	12.20	13.80
Apr	3.11	3.78	4.71	5.48	6.21	6.94	7.73	8.63	9.78	11.52	13.10
May	2.20	2.74	3.50	4.13	4.73	5.34	6.00	6.76	7.73	9.23	10.59
Jun	1.39	1.84	2.51	3.09	3.66	4.25	4.90	5.66	6.65	8.21	9.65
Jul	1.11	1.51	2.13	2.67	3.21	3.77	4.40	5.15	6.12	7.65	9.08
Aug	1.95	2.53	3.39	4.12	4.83	5.57	6.37	7.32	8.54	10.43	12.18
Sep	4.37	5.20	6.35	7.28	8.15	9.02	9.95	11.02	12.35	14.38	16.20
Oct	8.23	9.25	10.59	11.63	12.58	13.51	14.48	15.58	16.93	18.92	20.67
Nov	5.74	6.80	8.26	9.44	10.54	11.63	12.81	14.14	15.82	18.36	20.64
Dec	5.31	6.30	7.67	8.78	9.81	10.84	11.95	13.21	14.79	17.18	19.34
Ann	79.45	83.76	89.18	93.23	96.79	100.20	103.69	107.51	112.10	118.68	124.30

+ 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: 1949-2001
(3) Derived from 1971-2000 daily data

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Services

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: ANNETTE AP, AK **COOP ID: 500352**

Climate Division: AK 1 **NWS Call Sign: ANN** **Elevation: 109 Feet** **Lat: 55°03N** **Lon: 131°34W**

Snow (inches)

Snow Totals

Means/Medians (1)

Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median
Jan	10.1	9.2	#	0
Feb	9.7	4.7	#	0
Mar	6.5	4.1	#	0
Apr	2.8	.2	#	0
May	#	.0	0	0
Jun	.0	.0	0	0
Jul	.0	.0	0	0
Aug	.0	.0	0	0
Sep	.0	.0	0	0
Oct	.1	.0	0	0
Nov	3.5	1.5	#	0
Dec	8.0	6.7	#	0
Ann	40.7	26.4	N/A	N/A

Extremes (2)

Month	Highest Daily Snow Fall	Year	Day	Highest Monthly Snow Fall	Year	Highest Daily Snow Depth	Year	Day	Highest Monthly Mean Snow Depth	Year
Jan	12.3	1972	3	33.2	1972	15	1972	14	7	1972
Feb	10.5	1975	14	33.4	1974	12	1972	19	5	1979
Mar	11.8	1971	18	43.1	1971	18	1972	9	2	1972
Apr	14.0	1971	1	25.7	1971	3	1972	6	0	0
May	.4	1985	11	.4	1985	0	0	0	0	0
Jun	.0	0	0	.0	0	0	0	0	0	0
Jul	.0	0	0	.0	0	0	0	0	0	0
Aug	.0	0	0	.0	0	0	0	0	0	0
Sep	.0	0	0	.0	0	0	0	0	0	0
Oct	1.5	1985	27	1.5+	1985	0	0	0	0	0
Nov	8.6	1994	30	24.8	1994	10	1973	23	1	1973
Dec	7.8	1980	7	35.6	1971	12	1971	16	7	1971
Ann	14.0	Apr 1971	1	43.1	Mar 1971	18	Mar 1972	9	7+	Jan 1972

Mean Number of Days (1)

Snow Fall >= Thresholds

Month	0.1	1.0	3.0	5.0	10.0
Jan	5.6	3.1	1.2	.4	@
Feb	5.4	3.0	1.1	.3	@
Mar	3.9	1.7	.6	.4	.1
Apr	1.8	.8	.4	.1	@
May	.1	.0	.0	.0	.0
Jun	.0	.0	.0	.0	.0
Jul	.0	.0	.0	.0	.0
Aug	.0	.0	.0	.0	.0
Sep	.0	.0	.0	.0	.0
Oct	.2	.1	.0	.0	.0
Nov	2.4	1.1	.3	.1	.0
Dec	5.0	2.6	1.0	.3	.0
Ann	24.4	12.4	4.6	1.6	.1

Snow Depth >= Thresholds

Month	1	3	5	10
Jan	6.8	3.8	1.8	.2
Feb	4.1	2.1	1.5	.1
Mar	1.7	.8	.5	.1
Apr	.2	@	.0	.0
May	.0	.0	.0	.0
Jun	.0	.0	.0	.0
Jul	.0	.0	.0	.0
Aug	.0	.0	.0	.0
Sep	.0	.0	.0	.0
Oct	.0	.0	.0	.0
Nov	1.3	.2	.1	@
Dec	3.7	2.2	1.4	.5
Ann	17.8	9.1	5.3	.9

+ 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

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: ANNETTE AP, AK **COOP ID: 500352**

Climate Division: AK 1 **NWS Call Sign: ANN** **Elevation: 109 Feet** **Lat: 55˚03N** **Lon: 131˚34W**

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	5/23	5/17	5/13	5/09	5/06	5/03	4/29	4/25	4/20
32	5/02	4/26	4/22	4/19	4/16	4/12	4/09	4/05	3/30
28	4/06	3/29	3/24	3/19	3/15	3/10	3/06	2/28	2/21
24	3/20	3/09	2/28	2/21	2/14	2/07	1/31	1/22	1/07
20	3/15	3/03	2/23	2/15	2/09	2/02	1/25	1/16	1/01
16	3/06	2/22	2/13	2/05	1/28	1/21	1/12	1/01	12/12

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	9/26	10/01	10/05	10/08	10/11	10/13	10/17	10/20	10/25
32	10/12	10/18	10/21	10/24	10/27	10/30	11/02	11/06	11/11
28	10/22	10/29	11/03	11/07	11/11	11/15	11/20	11/25	12/02
24	11/05	11/15	11/23	11/29	12/05	12/11	12/17	12/25	1/07
20	11/10	11/23	12/03	12/11	12/19	12/27	1/05	1/15	1/31
16	11/25	12/08	12/17	12/25	1/01	1/09	1/18	1/29	2/18

Freeze Free Period

Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	182	173	167	162	157	152	146	140	132
32	217	209	203	199	194	189	184	179	171
28	271	261	253	247	241	235	229	221	211
24	>365	320	309	300	292	285	277	268	256
20	>365	>365	327	316	307	300	292	284	273
16	>365	>365	>365	>365	337	324	314	304	291

***** 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:
www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: ANNETTE AP, AK **COOP ID: 500352**

Climate Division: AK 1 **NWS Call Sign: ANN** **Elevation: 109 Feet** **Lat: 55˚03N** **Lon: 131˚34W**

Degree Days to Selected Base Temperatures (˚F)

Heating Degree Days (1)

Base Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	928	781	775	637	484	321	215	206	337	572	760	885	6901
60	773	641	636	487	332	184	93	90	194	417	610	730	5187
57	685	557	543	397	246	116	45	43	120	324	522	637	4235
55	626	504	481	338	193	81	23	22	80	264	466	575	3653
50	483	373	328	201	91	22	2	2	18	130	330	427	2407
32	116	54	10	0	0	0	0	0	0	1	35	53	269

Cooling Degree Days (1)

Base Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	210	196	242	353	539	669	813	825	654	451	265	191	5408
55	8	2	0	2	19	60	123	134	44	1	6	0	399
57	4	0	0	0	10	35	84	93	24	0	2	0	252
60	0	0	0	0	3	13	38	46	7	0	0	0	107
65	0	0	0	0	0	0	5	8	0	0	0	0	13
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	41	44	51	132	300	436	574	585	422	219	71	36	41	85	136	268	568	1004	1578	2163	2585	2804	2875	2911
45	1	5	3	41	152	286	419	430	274	87	13	0	1	6	9	50	202	488	907	1337	1611	1698	1711	1711
50	0	0	0	9	50	141	264	275	131	15	0	0	0	0	0	9	59	200	464	739	870	885	885	885
55	0	0	0	2	10	47	117	127	33	0	0	0	0	0	0	2	12	59	176	303	336	336	336	336
60	0	0	0	0	1	11	36	38	2	0	0	0	0	0	0	0	1	12	48	86	88	88	88	88
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	0	0	0	39	106	172	270	281	164	44	2	0	0	0	0	39	145	317	587	868	1032	1076	1078	1078

(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.
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

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

c. Snow Tables
1. Cooperative Summary of the Day

d. Freeze Data Table
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