

Climatology of the United States

No. 20

1971-2000

Station: ILIAMNA AP, AK

COOP ID: 503905

Climate Division: AK 6

NWS Call Sign: ILI

Elevation: 186 Feet Lat: 59°45N Lon: 154°55W

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	22.4	10.3	16.4	48	1942	6	37.2	1977	-47	1947	22	-3.2	1971	1507	0	.0	.0	.0	17.6	26.6	9.4
Feb	23.2	9.5	16.4	49+	1991	28	33.9	1977	-46	1947	2	1.1	1984	1361	0	.0	.0	.0	16.0	24.7	9.7
Mar	30.0	15.5	22.8	50	1983	29	34.6	1981	-30+	1971	7	4.8	1972	1311	0	.0	.0	@	13.1	27.1	5.5
Apr	38.9	25.7	32.3	59	1958	27	40.0	1993	-16+	1956	7	18.9	1985	981	0	.0	.0	2.0	4.4	21.8	.9
May	49.9	36.2	43.1	73+	1997	24	48.3	1993	4	1949	4	37.8	1971	679	0	.0	.3	17.1	@	6.4	.0
Jun	58.0	43.7	50.9	91	1953	27	54.7	1997	30+	1963	5	46.9	1972	425	0	.0	1.5	28.0	.0	.1	.0
Jul	62.4	49.1	55.8	83+	1993	10	59.3	1997	34	1944	16	52.4	1982	288	0	.0	4.6	31.0	.0	.0	.0
Aug	60.6	48.4	54.5	83+	1968	7	58.3	1978	31	1984	31	51.1	1986	326	0	.0	2.7	30.7	.0	@	.0
Sep	53.2	42.0	47.6	70+	1979	13	52.6	1995	21	1981	29	40.4	1992	522	0	.0	.1	24.6	.0	2.5	.0
Oct	40.0	29.2	34.6	66	1976	4	40.5	1979	-4	1985	30	27.1	1982	942	0	.0	.0	2.9	4.9	18.5	.2
Nov	30.4	19.4	24.9	52+	1991	5	33.9	2000	-20+	1963	26	16.2	1975	1202	0	.0	.0	.2	13.9	24.3	2.3
Dec	25.0	13.1	19.1	48	2001	31	35.0	1985	-31+	1975	7	5.5	1980	1424	0	.0	.0	.0	16.9	26.6	8.1
Ann	41.2	28.5	34.9	91	Jun 1953	27	59.3	Jul 1997	-47	Jan 1947	22	-3.2	Jan 1971	10968	0	.0	9.2	136.5	86.8	178.6	36.1

+ 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: 1939-2001

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

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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: ILIAMNA AP, AK

COOP ID: 503905

Climate Division: AK 6

NWS Call Sign: ILI

Elevation: 186 Feet Lat: 59°45N

Lon: 154°55W

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	1.33	1.22	2.18	1957	11	2.83	1987	.44	1983	10.0	4.7	.4	.1	.38	.50	.69	.86	1.02	1.19	1.38	1.60	1.88	2.33	2.75
Feb	.98	.86	.97	1990	24	2.10	1990	.15	1982	8.3	3.7	.3	.0	.19	.28	.42	.56	.69	.83	1.00	1.20	1.46	1.88	2.27
Mar	1.03	.93	1.48	1946	30	2.61	1988	.00	1986	8.1	3.1	.3	.0	.08	.19	.36	.51	.66	.83	1.03	1.27	1.59	2.11	2.60
Apr	.97	.88	1.16	1942	9	2.50	1983	.15	1992	8.3	3.6	.3	.0	.18	.26	.40	.54	.67	.82	.98	1.19	1.45	1.88	2.30
May	1.27	1.30	2.00	1985	7	4.06	1985	.04	1995	8.0	3.7	.2	.1	.21	.32	.51	.68	.86	1.06	1.28	1.56	1.92	2.51	3.07
Jun	1.54	1.21	2.08	1985	13	4.33	1980	.02	1991	9.2	4.0	.6	.2	.15	.26	.47	.68	.92	1.18	1.49	1.88	2.42	3.31	4.19
Jul	2.38	2.19	1.61	1980	11	6.61	1980	.17	1997	11.7	6.0	1.2	.1	.51	.73	1.08	1.39	1.71	2.05	2.44	2.90	3.50	4.47	5.39
Aug	4.26	3.90	3.50	1985	7	10.51	1985	1.81	1991	14.2	8.8	3.2	.8	1.76	2.15	2.70	3.15	3.57	4.00	4.46	4.99	5.66	6.69	7.62
Sep	4.32	4.07	2.28	1965	26	9.12	1982	1.46	1984	15.5	9.7	2.9	.8	1.52	1.93	2.52	3.02	3.50	3.98	4.52	5.14	5.93	7.16	8.28
Oct	3.10	3.13	2.44	1958	14	7.99	1989	.33	1997	11.8	7.8	1.7	.5	.85	1.14	1.59	1.98	2.37	2.77	3.21	3.74	4.42	5.50	6.50
Nov	2.25	1.73	1.79	1983	8	7.87	1979	.14	1975	10.7	5.6	1.3	.4	.24	.41	.72	1.03	1.37	1.75	2.19	2.74	3.49	4.74	5.96
Dec	1.66	1.54	2.30	1943	4	4.64	1976	.05	1980	11.1	5.5	.8	.1	.25	.39	.63	.86	1.10	1.36	1.66	2.03	2.52	3.32	4.09
Ann	25.09	25.15	3.50	Aug 1985	7	10.51	Aug 1985	.00	Mar 1986	126.9	66.2	13.2	3.1	16.53	18.14	20.23	21.83	23.27	24.67	26.12	27.74	29.71	32.60	35.12

+ 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: 1939-2001

(3) Derived from 1971-2000 daily data

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

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1971-2000

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151 Patton Avenue
Asheville, North Carolina 28801
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Station: ILIAMNA AP, AK

COOP ID: 503905

Climate Division: AK 6

NWS Call Sign: ILI

Elevation: 186 Feet

Lat: 59°45N

Lon: 154°55W

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	10.9	8.9	5	4	11.4	1986	4	29.1	1972	37+	1975	14	25	1972	5.4	3.6	1.2	.4	.1	19.2	14.2	10.6	5.5
Feb	8.6	7.7	4	3	11.0	1972	1	26.0	1971	34	1990	28	25	1972	4.8	3.3	.7	.3	.1	18.2	12.1	7.0	3.4
Mar	8.4	8.2	6	3	9.0	1992	19	19.5	1977	37+	1975	31	28	1972	5.5	3.2	.7	.2	.0	20.4	16.5	10.7	4.7
Apr	4.9	3.0	4	0	8.0+	1975	9	24.0	1972	55+	1975	17	46	1972	3.5	2.0	.5	.1	.0	9.8	6.9	5.4	3.8
May	.7	.0	#	0	3.0	1994	4	5.1	1985	30+	1975	1	8	1972	.6	.3	@	.0	.0	1.0	.6	.6	.3
Jun	#	.0	0	0	.5	1985	13	.5	1985	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	1.0	1996	24	1.0	1996	0	0	0	0	0	@	@	.0	.0	.0	.0	.0	.0	.0
Oct	2.7	1.7	#	0	10.0	1982	28	18.0	1982	18	1982	31	3	1982	1.4	1.1	.2	.1	@	3.3	1.2	.5	.2
Nov	9.1	8.9	1	1	10.3	1984	21	26.2	1994	20	1982	1	8	1982	5.2	4.1	.9	.3	.1	13.6	6.5	4.6	1.0
Dec	10.8	8.1	3	3	12.5	1978	12	35.3	1971	19	1988	8	11	1994	5.2	3.3	1.0	.5	.1	16.8	11.3	8.0	2.7
Ann	56.1	46.5	N/A	N/A	12.5	Dec 1978	12	35.3	Dec 1971	55+	Apr 1975	17	46	Apr 1972	31.6	20.9	5.2	1.9	.4	102.3	69.3	47.4	21.6

+ 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:

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Elevation: 186 Feet

Lat: 59° 45N

Lon: 154° 55W

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	6/15	6/10	6/07	6/04	6/01	5/29	5/26	5/23	5/18
32	6/01	5/27	5/23	5/20	5/17	5/14	5/11	5/07	5/02
28	5/20	5/14	5/09	5/06	5/02	4/29	4/25	4/21	4/15
24	5/06	5/01	4/27	4/24	4/22	4/19	4/16	4/12	4/07
20	5/01	4/26	4/22	4/19	4/16	4/13	4/09	4/06	3/31
16	4/26	4/20	4/16	4/13	4/09	4/06	4/02	3/29	3/24
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	8/25	8/31	9/05	9/09	9/12	9/16	9/20	9/24	9/30
32	9/12	9/16	9/19	9/21	9/24	9/26	9/28	10/01	10/05
28	9/19	9/24	9/27	9/30	10/03	10/06	10/09	10/12	10/17
24	9/26	10/01	10/04	10/07	10/10	10/13	10/16	10/19	10/24
20	10/08	10/13	10/17	10/20	10/23	10/26	10/29	11/01	11/06
16	10/14	10/19	10/23	10/26	10/29	11/01	11/04	11/08	11/13
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	128	119	113	107	102	97	92	85	77
32	149	142	137	133	129	125	121	116	109
28	176	168	162	157	153	148	144	138	130
24	193	185	180	175	171	166	161	156	148
20	213	205	199	194	189	185	180	174	166
16	227	218	212	207	202	197	191	185	177

* 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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No. 20
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Elevation: 186 Feet Lat: 59° 45N Lon: 154° 55W

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	1507	1361	1311	981	679	425	288	326	522	942	1202	1424	10968
60	1368	1221	1156	831	524	277	142	179	372	787	1052	1270	9179
57	1279	1141	1063	741	431	195	75	106	287	694	962	1181	8155
55	1221	1091	1003	681	371	145	43	69	233	632	902	1123	7514
50	1077	960	862	544	233	56	5	14	121	479	752	978	6081
32	618	528	399	157	9	0	0	0	1	78	275	504	2569

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	134	90	112	166	353	565	735	697	469	158	63	103	3645
55	24	10	2	0	2	21	66	53	11	0	0	8	197
57	20	4	0	0	0	10	36	28	5	0	0	5	108
60	16	0	0	0	0	2	10	8	1	0	0	0	37
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

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	10	136	345	507	467	253	40	3	0	0	0	0	10	146	491	998	1465	1718	1758	1761	1761
45	0	0	0	0	45	199	352	312	128	7	0	0	0	0	0	0	45	244	596	908	1036	1043	1043	1043
50	0	0	0	0	10	77	198	163	36	0	0	0	0	0	0	0	10	87	285	448	484	484	484	484
55	0	0	0	0	0	16	67	49	0	0	0	0	0	0	0	0	0	16	83	132	132	132	132	132
60	0	0	0	0	0	0	6	2	0	0	0	0	0	0	0	0	0	0	6	8	8	8	8	8
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	0	0	0	1	52	142	219	198	78	4	0	0	0	0	0	1	53	195	414	612	690	694	694	694

(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