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: 508494

Station: SITKA JAPONSKI AP, AK

Climate Division: AK 1 NWS Call Sign: SIT Elevation: 14 Feet Lat: 57°03N Lon: 135°22W

									r	Temp	eratui	re (°F)											
	Mea	n (1)						Extr	emes					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	39.0	30.7	34.9	59	1961	20	44.1	1981	0+	1971	15	25.6	1972	935	0	.0	.0	1.3	4.8	15.9	@		
Feb	40.7	31.5	36.1	61	1968	27	43.0	1977	1+	1954	14	27.2	1979	810	0	.0	.0	1.5	3.0	14.1	.0		
Mar	43.5	33.2	38.4	59	1969	29	42.5	1984	4+	1951	5	34.9	1972	810	0	.0	.0	2.4	.6	12.5	.0		
Apr	48.5	36.7	42.6	76	1976	29	46.0	1993	22	1954	3	36.8	1972	672	0	.0	.2	11.1	@	4.9	.0		
May	53.2	41.7	47.5	82	1963	21	51.4	1981	29	1965	5	42.8	1971	543	0	.0	.3	23.4	.0	.1	.0		
Jun	57.7	47.1	52.4	85	1958	19	55.4	1983	35	1955	6	49.1	1975	378	0	.0	.5	29.2	.0	.0	.0		
Jul	61.0	51.5	56.3	88	1976	30	58.7	1993	42+	1990	26	54.4	1999	271	0	.0	1.4	31.0	.0	.0	.0		
Aug	62.1	52.2	57.2	84	1950	18	60.1	1997	40	1960	30	54.5	1973	244	0	.0	2.0	31.0	.0	.0	.0		
Sep	58.2	47.8	53.0	77+	1986	5	57.3	1995	31	1956	26	48.7	1992	360	0	.0	.7	29.6	.0	.0	.0		
Oct	50.5	41.6	46.1	68	1969	6	50.6	1986	20	1984	30	42.0	1971	588	0	.0	.0	19.4	.1	1.7	.0		
Nov	43.5	35.1	39.3	65+	1970	2	44.1	1979	2	1985	26	28.8	1985	771	0	.0	.0	3.6	1.4	8.4	.0		
Dec	40.2	32.4	36.3	59	1969	19	42.4	1989	1+	1970	3	29.1	1977	890	0	.0	.0	1.3	3.1	12.7	.0		
Ann	49.8	40.1	45.0	88	Jul 1976	30	60.1	Aug 1997	0+	Jan 1971	15	25.6	Jan 1972	7272	0	.0	5.1	184.8	13.0	70.3	@		

⁺ Also occurred on an earlier date(s)

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

Issue Date: May 2005 041-A

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

⁽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

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Climate Division: AK 1

Elevation: 14 Feet Lat: 57°03N Lon: 135°22W

										Pı	ecipit	tation	(incl	ies)													
			P	recipi	itatio	n Total	S			M	Mean Number of Days (3)				Precipitation Probabilities (1) Probability that the monthly/annual precipitation will be equal to or less than to indicated amount												
	Medi					Extremes	3			D	aily Pred	cipitatio	n	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	8.02	7.79	3.85	1963	4	14.71	1984	2.12	1995	20.8	14.8	5.2	1.8	3.31	4.04	5.08	5.93	6.72	7.53	8.40	9.41	10.68	12.62	14.39			
Feb	6.22	5.90	4.09	1988	19	14.91	1985	.23	1989	16.0	12.2	3.7	1.0	1.37	1.95	2.86	3.68	4.51	5.38	6.37	7.55	9.10	11.58	13.91			
Mar	5.93	5.82	3.19	1955	6	11.16	1986	.87	1974	19.8	13.5	3.8	1.0	2.32	2.87	3.65	4.30	4.91	5.53	6.21	6.99	7.98	9.50	10.89			
Apr	4.67	4.32	3.13	1983	16	9.60	1983	1.14	1989	17.7	11.5	2.7	.5	1.70	2.14	2.77	3.30	3.80	4.32	4.88	5.53	6.36	7.64	8.81			
May	4.38	4.31	3.71	1952	12	10.04	1982	1.22	1990	18.1	11.1	2.6	.6	1.45	1.86	2.47	2.99	3.49	4.00	4.57	5.22	6.07	7.38	8.59			
Jun	3.28	2.84	2.36	1996	30	6.98	1987	.89	1982	15.7	9.3	1.6	.5	1.16	1.47	1.92	2.30	2.66	3.03	3.43	3.90	4.50	5.43	6.28			
Jul	3.85	3.44	2.14	1959	16	7.47	1997	1.65	1972	17.9	10.5	1.8	.3	1.79	2.13	2.59	2.97	3.31	3.66	4.04	4.47	5.00	5.81	6.54			
Aug	6.30	5.78	4.36	1961	11	16.82	1983	1.72	1977	18.5	12.2	4.1	1.3	2.20	2.79	3.66	4.39	5.08	5.80	6.58	7.49	8.66	10.47	12.12			
Sep	11.16	11.01	8.50	1967	1	20.59	1987	3.94	1986	21.0	15.9	8.3	3.8	5.02	6.01	7.38	8.50	9.54	10.58	11.70	12.99	14.60	17.05	19.27			
Oct	14.14	13.02	5.53	1972	5	30.84	1978	7.18	1975	24.7	21.1	10.8	3.8	7.34	8.50	10.07	11.32	12.47	13.61	14.82	16.19	17.90	20.46	22.74			
Nov	9.17	9.35	4.27	1957	2	16.78	1993	1.67	1973	21.2	16.3	7.3	2.3	3.30	4.17	5.41	6.46	7.45	8.47	9.58	10.88	12.53	15.07	17.41			
Dec	9.01	8.51	3.28	1985	17	18.36	1997	2.25	1983	21.5	16.4	6.3	1.7	3.40	4.24	5.44	6.45	7.40	8.38	9.43	10.66	12.22	14.62	16.81			
Ann	86.13	85.73	8.50	Sep 1967	1	30.84	Oct 1978	.23	Feb 1989	232.9	164.8	58.2	18.6	63.44	67.89	73.56	77.85	81.64	85.29	89.05	93.19	98.20	105.44	111.67			

⁺ Also occurred on an earlier date(s)

NWS Call Sign: SIT

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: 1949-2001

⁽³⁾ Derived from 1971-2000 daily data

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Climate Division: AK 1 NWS Call Sign: SIT Elevation: 14 Feet Lat: 57°03N Lon: 135°22W

										Snov	w (inc	hes)														
						Sn	ow To	tals							Mean Number of Days (1)											
	Mean	s/Medi	ians (1))					Extre	mes (2)							ow Fa		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	8.7	8.9	1	0	8.8	1990	23	27.2	1990	13	1971	3	5+	1972	4.5	2.9	.9	.4	.0	7.3	4.2	2.5	.9			
Feb	5.5	4.2	#	0	7.5	1991	6	16.5	1996	12+	1976	14	5	1976	3.0	1.9	.5	.2	.0	4.5	2.5	1.2	.4			
Mar	5.5	4.0	#	0	7.7	1989	3	21.0	1985	18	1971	9	3+	1982	4.1	2.1	.4	.1	.0	4.7	2.6	1.3	.5			
Apr	1.2	.0	#	0	7.8	1972	18	9.5	1972	2+	1986	10	0	0	1.0	.3	.1	@	.0	.2	.0	.0	.0			
May	.1	.0	0	0	1.2	1971	7	1.2	1971	0	0	0	0	0	.1	@	.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	.5	.0	#	0	3.0	1975	31	3.5	1971	1	1971	29	0	0	.3	.2	@	.0	.0	@	.0	.0	.0			
Nov	3.6	.5	#	0	8.4	1990	29	28.1	1990	6	1990	12	1+	1990	2.7	1.4	.3	@	.0	2.9	.4	@	.0			
Dec	5.8	5.0	#	0	9.2	1979	28	20.5	1979	15	1990	2	2+	1995	3.4	1.9	.6	.1	.0	6.5	2.0	.8	.2			
Ann	30.9	22.6	N/A	N/A	9.2	Dec 1979	28	28.1	Nov 1990	18	Mar 1971	9	5+	Feb 1976	19.1	10.7	2.8	.8	.0	26.1	11.7	5.8	2.0			

⁺ 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

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Elevation:

14 Feet

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COOP ID: 508494

Lon: 135°22W

Lat: 57°03N

Station: SITKA JAPONSKI AP, AK

Climate Division: AK 1 NWS Call Sign: SIT

Freeze Data Spring Freeze Dates (Month/Day) Probability of later date in spring (thru Jul 31) than indicated(*) Temp (F) .10 .20 .30 .40 .60 .70 .80 .90 36 5/24 5/19 5/16 5/13 5/10 5/07 5/04 5/01 4/26 32 4/13 4/29 4/24 4/21 4/18 4/16 4/10 4/07 4/03 28 4/12 4/03 3/27 3/21 3/16 3/11 3/05 2/26 2/17 2/22 1/23 24 3/21 3/12 3/05 2/27 2/16 2/10 2/03 20 3/17 3/04 2/23 2/14 2/06 1/29 1/20 12/18 1/09 2/15 1/27 16 3/01 2/05 1/17 1/06 12/21 0/00 0/00 Fall Freeze Dates (Month/Day) Probability of earlier date in fall (beginning Aug 1) than indicated(*) Temp (F) .20 .30 .40 .50 .70 .10 .60 .80 .90 36 9/26 10/02 10/07 10/11 10/14 10/18 10/21 10/26 11/01 32 10/13 10/19 10/23 10/27 10/31 11/04 11/08 11/12 11/18 28 10/25 11/03 11/09 11/14 11/19 11/23 11/28 12/04 12/13 24 11/01 11/12 11/20 11/27 12/04 12/10 12/18 12/26 1/09 20 11/14 11/25 12/04 12/11 12/18 12/26 1/03 1/13 2/01 1/04 1/15 1/27 16 12/01 12/15 12/26 2/18 0/00 0/00 Freeze Free Period **Probability of longer than indicated freeze free period (Days)** Temp (F) .10 .20 .30 .40 .50 .60 .70 .80 .90 172 166 157 152 147 141 133 36 180 161 32 223 214 208 203 197 192 187 180 172 28 280 269 261 253 247 240 233 225 213 24 >365 317 303 293 284 276 267 256 242 342 285 20 >365 >365 325 314 305 295 271 16 >365 >365 >365 >365 >365 >365 336 316 296

0/00 Indicates that the probability of occurrence of threshold temperature is less than the indicated probability.

Complete documentation available from:

^{*} Probability of observing a temperature as cold, or colder, later in the spring or earlier in the fall than the indicated date.

Climate Division: AK 1

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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	935	810	810	672	543	378	271	244	360	588	771	890	7272		
60	780	670	671	522	388	228	121	104	215	433	621	735	5488		
57	687	586	578	432	296	145	52	48	138	341	531	642	4476		
55	630	530	516	372	237	97	22	22	96	280	474	580	3856		
50	486	398	361	230	109	22	1	1	26	146	336	432	2548		
32	110	62	9	1	0	0	0	0	0	1	32	56	271		

Base						Coolin	g Degree I	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	198	176	206	319	480	613	752	779	630	435	251	189	5028
55	5	0	0	0	4	19	61	88	36	2	3	0	218
57	0	0	0	0	0	7	28	52	18	0	0	0	105
60	0	0	0	0	0	0	5	15	5	0	0	0	25
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 J													Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec					
40	30	27	28	102	241	381	515	542	399	202	63	33	30	57	85	187	428	809	1324	1866	2265	2467	2530	2563					
45	0	1	0	25	97	231	360	387	250	81	12	1	0	1	1	26	123	354	714	1101	1351	1432	1444	1445					
50	0	0	0	3	21	92	205	232	112	13	0	0	0	0	0	3	24	116	321	553	665	678	678	678					
55	0	0	0	0	0	14	60	85	21	0	0	0	0	0	0	0	0	14	74	159	180	180	180	180					
60	0	0	0	0	0	0	2	8	0	0	0	0	0	0	0	0	0	0	2	10	10	10	10	10					
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)																
50/86	0	0	0	26	67	127	212	237	141	38	2	0	0	0	0	26	93	220	432	669	810	848	850	850					

(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