

Climatography of the United States

No. 20

1971-2000

Station: VALDEZ, AK

COOP ID: 509686

Climate Division: AK 2

NWS Call Sign: VWS

Elevation: 23 Feet

Lat: 61°08N

Lon: 146°21W

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	26.6	17.2	21.9	46+	1991	26	33.5	1981	-20	1972	12	7.5	1971	1336	0	.0	.0	.0	20.2	29.7	1.3
Feb	30.0	19.6	24.8	52	1991	27	32.0	1977	-23	1968	4	15.5+	1990	1126	0	.0	.0	.1	14.1	26.7	.5
Mar	35.8	23.8	29.8	57	1965	25	35.1	1984	-6	1972	10	19.6	1971	1091	0	.0	.0	.1	6.8	28.5	.1
Apr	44.4	30.9	37.7	68	1965	18	41.8	1993	5	1972	20	28.8	1972	821	0	.0	.0	5.9	.8	16.6	.0
May	52.9	38.6	45.8	78	1993	29	50.2	1993	19	1967	7	40.4	1971	596	0	.0	.6	21.4	.0	1.2	.0
Jun	59.4	45.0	52.2	86	1997	26	56.7	1997	31+	1972	7	48.5	1985	383	0	.0	2.4	28.7	.0	.1	.0
Jul	62.3	48.0	55.2	85+	1999	3	58.7	1993	33	1972	13	52.8	1978	306	0	.0	4.2	31.0	.0	.0	.0
Aug	60.8	46.4	53.6	82	1994	13	56.4	1994	32	1984	29	50.8	1986	353	0	.0	3.0	30.8	.0	@	.0
Sep	53.3	40.9	47.1	74	1996	4	49.8	1979	25	1983	27	43.3	1992	537	0	.0	.3	22.4	.0	1.5	.0
Oct	43.0	33.4	38.2	64	1967	1	41.5	1979	8	1975	31	34.1	1982	832	0	.0	.0	3.9	1.2	12.2	.0
Nov	32.7	23.9	28.3	50	1977	21	33.9	1980	1+	1989	12	21.7	1985	1101	0	.0	.0	@	12.4	27.2	.0
Dec	29.1	20.2	24.7	54	1966	1	31.1	1986	-15	1964	14	14.5	1980	1251	0	.0	.0	.1	18.8	29.8	.7
Ann	44.2	32.3	38.3	86	Jun 1997	26	58.7	Jul 1993	-23	Feb 1968	4	7.5	Jan 1971	9733	0	.0	10.5	144.4	74.3	173.5	2.6

+ 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: 1964-2001

(3) Derived from 1971-2000 serially complete 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

Station: VALDEZ, AK

COOP ID: 509686

Climate Division: AK 2

NWS Call Sign: VWS

Elevation: 23 Feet

Lat: 61°08N

Lon: 146°21W

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	6.02	5.50	2.79	1981	14	12.53	1981	.23	1996	17.1	11.9	4.4	1.5	.96	1.48	2.35	3.18	4.04	4.97	6.04	7.35	9.10	11.94	14.66
Feb	5.53	5.78	3.05	1996	10	14.47	1996	.57	1989	14.8	9.7	3.8	1.5	1.21	1.72	2.53	3.26	4.00	4.78	5.66	6.71	8.10	10.31	12.39
Mar	4.49	3.71	1.85	1981	11	9.99	1979	.81	1983	15.3	10.3	3.1	.8	1.02	1.44	2.10	2.69	3.28	3.90	4.60	5.44	6.54	8.29	9.94
Apr	3.55	2.98	2.03	1989	25	8.11	1977	.57	1981	14.2	8.7	1.9	.5	.89	1.22	1.74	2.20	2.65	3.13	3.66	4.29	5.12	6.42	7.65
May	3.08	2.60	1.40	1964	25	6.65	1998	.70	1996	16.6	8.9	1.3	.2	.81	1.10	1.55	1.94	2.33	2.73	3.18	3.71	4.41	5.50	6.53
Jun	3.01	2.99	1.30	1992	21	6.05	1987	.93	1983	15.0	7.8	1.5	.2	1.12	1.40	1.81	2.14	2.46	2.79	3.15	3.56	4.09	4.90	5.64
Jul	3.84	3.36	1.84	1981	10	8.96	1981	1.25	1993	16.9	10.1	2.1	.3	1.43	1.79	2.31	2.74	3.15	3.57	4.02	4.55	5.22	6.25	7.19
Aug	6.62	6.16	3.17	1993	15	18.23	1981	2.08	1987	17.3	11.8	4.4	1.5	1.73	2.36	3.32	4.16	5.00	5.87	6.84	7.99	9.50	11.87	14.08
Sep	9.59	9.38	2.98	1975	11	16.69	1982	2.78	1973	20.6	15.7	7.0	3.0	3.94	4.81	6.05	7.07	8.03	9.00	10.05	11.25	12.78	15.12	17.24
Oct	8.58	8.34	3.28	1983	10	15.43	1979	2.49	1990	19.1	13.6	5.9	2.3	3.20	4.00	5.16	6.12	7.03	7.96	8.97	10.15	11.65	13.95	16.06
Nov	5.51	4.47	3.93	1976	30	20.59	1976	.42	1975	15.0	9.7	3.5	1.5	.61	1.03	1.79	2.56	3.38	4.30	5.38	6.73	8.55	11.58	14.52
Dec	7.59	6.89	4.06	1999	22	17.34	1989	1.34	1983	17.9	12.7	5.6	2.5	1.54	2.23	3.34	4.36	5.39	6.49	7.73	9.23	11.21	14.38	17.39
Ann	67.41	67.81	4.06	Dec 1999	22	20.59	Nov 1976	.23	Jan 1996	199.8	130.9	44.5	15.8	46.91	50.84	55.90	59.75	63.18	66.50	69.94	73.74	78.36	85.09	90.92

+ 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: 1964-2001

(3) Derived from 1971-2000 daily data

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

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: VALDEZ, AK

COOP ID: 509686

Climate Division: AK 2

NWS Call Sign: VWS

Elevation: 23 Feet

Lat: 61°08N

Lon: 146°21W

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	57.0	56.5	30	27	47.5	1990	16	126.6	1990	89	1990	20	67	1990	11.8	8.1	5.1	3.6	1.6	23.7	22.6	22.6	22.2
Feb	51.8	49.7	41	38	30.7	1996	5	155.5	1996	94	1990	28	77	1990	10.3	7.0	4.6	2.9	1.6	21.9	21.8	21.8	21.8
Mar	50.0	43.3	43	39	30.9	1982	21	102.1	1985	104	1990	2	90	1990	11.0	7.8	4.5	3.1	1.3	24.2	24.2	24.2	24.2
Apr	19.4	15.6	28	24	31.8	1992	11	69.5	1999	88	1990	6	68	1990	6.8	3.8	1.8	1.1	.3	24.6	24.0	23.5	21.6
May	1.2	.0	2	0	8.6	1998	3	10.4	1998	51	1977	1	17	1977	.6	.3	.1	.1	.0	3.8	3.3	3.0	2.4
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	.4	.0	#	0	5.4	1996	23	6.0	1996	1	1996	24	0	0	.2	.1	.1	@	.0	@	.0	.0	.0
Oct	11.5	6.4	#	0	23.6	1999	31	39.0	1983	11	1976	29	1+	2000	4.9	2.7	1.1	.6	.1	2.7	1.3	.5	@
Nov	38.8	33.8	5	5	25.7	1994	17	106.7	1994	33+	1972	11	20	1971	11.2	7.2	4.4	2.6	.9	20.2	15.2	11.2	5.6
Dec	67.6	68.2	20	20	27.6	1987	23	132.7	1991	58+	1989	30	35	1976	13.6	10.5	6.8	4.7	1.8	22.2	21.5	21.4	19.8
Ann	297.7	273.5	N/A	N/A	47.5	Jan 1990	16	155.5	Feb 1996	104	Mar 1990	2	90	Mar 1990	70.4	47.5	28.5	18.7	7.6	143.3	133.9	128.2	117.6

+ 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:

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

Climatography of the United States

No. 20 1971-2000

Station: VALDEZ, AK

COOP ID: 509686

Climate Division: AK 2

NWS Call Sign: VWS

Elevation: 23 Feet

Lat: 61°08N

Lon: 146°21W

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	6/08	6/02	5/29	5/25	5/22	5/19	5/15	5/11	5/05
32	5/15	5/10	5/07	5/04	5/01	4/29	4/26	4/22	4/18
28	4/28	4/24	4/22	4/19	4/17	4/15	4/13	4/10	4/06
24	4/20	4/15	4/12	4/09	4/06	4/04	4/01	3/29	3/24
20	4/12	4/07	4/03	3/30	3/27	3/24	3/21	3/17	3/11
16	4/04	3/27	3/21	3/16	3/12	3/07	3/02	2/25	2/17
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	8/31	9/06	9/09	9/13	9/16	9/19	9/22	9/26	10/02
32	9/14	9/19	9/22	9/25	9/28	10/01	10/04	10/07	10/12
28	10/04	10/09	10/12	10/14	10/17	10/19	10/22	10/25	10/29
24	10/16	10/21	10/25	10/28	10/31	11/03	11/06	11/09	11/14
20	10/25	10/30	11/02	11/05	11/08	11/11	11/14	11/18	11/22
16	10/29	11/05	11/10	11/15	11/19	11/23	11/27	12/03	12/10
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	139	131	126	121	116	112	107	101	93
32	171	164	158	154	149	145	140	134	127
28	198	193	189	185	182	179	175	171	166
24	229	221	216	211	207	202	197	192	184
20	251	242	236	230	225	220	215	209	200
16	285	273	265	258	251	245	237	229	217

* 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/normal/usnormals.html

**Climatology
of the United States**
No. 20
1971-2000

Station: VALDEZ, AK

COOP ID: 509686

Climate Division: AK 2

NWS Call Sign: VWS

Elevation: 23 Feet

Lat: 61°08N

Lon: 146°21W

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	1336	1126	1091	821	596	383	306	353	537	832	1101	1251	9733
60	1181	986	936	671	441	236	155	200	387	677	951	1096	7917
57	1088	902	843	581	349	156	79	119	298	584	861	1003	6863
55	1026	846	781	521	291	111	44	76	239	522	801	941	6199
50	879	706	626	374	160	34	4	13	108	367	651	786	4708
32	395	257	152	30	1	0	0	0	0	19	179	269	1302

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	82	55	84	199	428	607	717	670	453	209	68	41	3613
55	0	0	0	0	5	27	48	33	2	0	0	0	115
57	0	0	0	0	2	13	21	14	0	0	0	0	50
60	0	0	0	0	0	3	4	3	0	0	0	0	10
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	29	197	384	486	437	226	36	0	0	0	0	0	29	226	610	1096	1533	1759	1795	1795	1795
45	0	0	0	0	70	234	331	282	93	3	0	0	0	0	0	0	70	304	635	917	1010	1013	1013	1013
50	0	0	0	0	15	97	177	132	16	0	0	0	0	0	0	0	15	112	289	421	437	437	437	437
55	0	0	0	0	1	22	52	33	1	0	0	0	0	0	0	0	1	23	75	108	109	109	109	109
60	0	0	0	0	0	0	9	1	0	0	0	0	0	0	0	0	0	9	10	10	10	10	10	10
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	0	0	0	9	69	155	207	185	72	4	0	0	0	0	0	9	78	233	440	625	697	701	701	701

(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