

Climatography of the United States

No. 20

1971-2000

Station: SOUTH HERO, VT

COOP ID: 437607

Climate Division: VT 2

NWS Call Sign:

Elevation: 110 Feet

Lat: 44° 38N

Lon: 73° 18W

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 >= 100	Max >= 90	Max >= 50	Max <= 32	Min <= 32	Min <= 0
Jan	26.5	9.9	18.2	61	1996	19	29.1	1990	-31	1994	27	5.8	1994	1451	0	.0	.0	.6	20.4	29.7	8.3
Feb	29.1	11.5	20.3	60+	1981	18	31.6	1981	-27	1993	7	9.4	1979	1252	0	.0	.0	.6	16.7	26.5	6.3
Mar	39.5	22.0	30.8	79	1998	31	37.3	1977	-15	1989	7	23.1	1984	1062	0	.0	.0	5.5	7.6	25.6	1.3
Apr	52.7	34.3	43.5	88	1990	27	49.1	1986	8+	1972	7	36.5	1972	644	0	.0	.0	17.8	.5	12.6	.0
May	66.8	46.4	56.6	90+	1977	22	62.8	1998	26	1978	1	51.2+	1997	278	18	.0	.2	30.2	.0	.5	.0
Jun	75.7	55.9	65.8	96+	1988	15	70.6	1999	34	1986	3	62.5	1985	57	81	.0	1.1	30.0	.0	.0	.0
Jul	80.7	61.4	71.1	98	1995	14	74.9	1975	37	1990	6	67.0	1992	7	195	.0	2.1	31.0	.0	.0	.0
Aug	78.3	59.7	69.0	99	1975	1	73.1	1973	41	1986	29	66.2	1982	19	143	.0	1.1	31.0	.0	.0	.0
Sep	69.1	51.7	60.4	96	1999	4	65.2	1999	29+	1980	29	57.2	1978	160	21	.0	.1	29.9	.0	.2	.0
Oct	56.6	41.0	48.8	81+	1990	6	54.6	1971	21+	1986	31	44.3	1972	503	0	.0	.0	24.5	.0	4.3	.0
Nov	44.0	31.4	37.7	71+	1982	3	42.4	1999	7	1989	29	33.7	1980	819	0	.0	.0	8.7	2.7	15.9	.0
Dec	32.3	18.5	25.4	65	1998	7	32.6	1996	-22	1980	26	8.7	1989	1227	0	.0	.0	1.3	13.6	27.0	2.7
Ann	54.3	37.0	45.6	99	Aug 1975	1	74.9	Jul 1975	-31	Jan 1994	27	5.8	Jan 1994	7479	458	.0	4.6	211.1	61.5	142.3	18.6

+ 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: February 2004

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1969-2001

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

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No. 20 1971-2000

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

Station: SOUTH HERO, VT

COOP ID: 437607

Climate Division: VT 2

NWS Call Sign:

Elevation: 110 Feet Lat: 44°38N

Lon: 73°18W

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	1.95	1.73	2.51	1998	8	6.10	1998	.25	1980	9.9	4.8	1.0	.2	.34	.51	.80	1.06	1.34	1.63	1.97	2.37	2.91	3.79	4.62
Feb	1.41	1.34	1.08	1977	25	3.46	1981	.10	1978	7.2	3.6	.9	.1	.32	.45	.66	.84	1.03	1.23	1.45	1.71	2.06	2.61	3.12
Mar	2.06	2.06	1.58	1971	4	3.42	1991	.48	1996	9.7	5.6	1.2	.1	.92	1.11	1.36	1.57	1.76	1.96	2.16	2.40	2.70	3.16	3.57
Apr	2.51	2.47	1.09	1985	18	5.17	1983	.27	1999	10.7	6.2	1.5	.1	.73	.97	1.33	1.64	1.94	2.26	2.60	3.01	3.54	4.37	5.14
May	2.93	2.82	1.93	2000	9	6.26	1984	.53	1977	12.0	7.4	1.7	.3	.85	1.12	1.54	1.91	2.26	2.63	3.04	3.53	4.15	5.13	6.04
Jun	3.21	3.15	2.09	1998	26	7.14	1973	.90	1979	12.1	7.3	2.1	.5	.91	1.22	1.68	2.08	2.47	2.88	3.33	3.86	4.55	5.64	6.65
Jul	3.41	3.37	1.85	1998	1	6.44	1998	.67	1979	11.3	7.8	2.3	.6	1.51	1.82	2.24	2.58	2.90	3.23	3.58	3.97	4.48	5.24	5.92
Aug	3.85	3.71	2.94	1995	4	6.72	1995	1.58	1993	11.6	7.9	2.6	.9	1.88	2.21	2.66	3.02	3.35	3.68	4.04	4.44	4.95	5.71	6.39
Sep	3.46	3.46	2.56	1979	6	7.24	1999	1.06	1972	11.0	7.0	2.3	.7	1.34	1.66	2.12	2.50	2.86	3.23	3.63	4.09	4.68	5.58	6.40
Oct	2.98	2.95	1.75	1995	6	6.32	1995	.66	1994	11.4	6.2	2.1	.6	1.00	1.29	1.70	2.05	2.39	2.73	3.11	3.55	4.12	5.00	5.81
Nov	2.93	2.95	2.27	1996	9	6.18	1996	.61	1998	11.0	6.3	2.0	.5	1.03	1.30	1.70	2.04	2.36	2.69	3.06	3.48	4.02	4.85	5.62
Dec	1.87	1.62	1.62	1996	2	5.05	1973	.36	1998	10.0	4.8	.8	.2	.51	.68	.95	1.19	1.42	1.66	1.93	2.25	2.67	3.32	3.93
Ann	32.57	31.83	2.94	Aug 1995	4	7.24	Sep 1999	.10	Feb 1978	127.9	74.9	20.5	4.8	25.09	26.58	28.47	29.89	31.13	32.33	33.56	34.90	36.52	38.85	40.85

+ 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: 1969-2001

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

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

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Station: SOUTH HERO, VT

COOP ID: 437607

Climate Division: VT 2

NWS Call Sign:

Elevation: 110 Feet

Lat: 44° 38N

Lon: 73° 18W

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	13.2	12.5	5	5	11.1	1978	18	31.1	1978	26	1978	21	14	1971	8.6	3.9	1.3	.6	@	22.6	15.7	13.1	5.6
Feb	9.8	10.5	6	6	13.0	1995	4	19.7	1972	26	1971	25	19	1987	5.7	2.7	1.1	.6	@	23.2	19.3	15.3	7.2
Mar	9.5	8.1	4	2	17.0	1993	13	28.5	1971	36	1971	7	23	1971	4.9	2.8	1.0	.6	.1	15.6	10.3	8.2	3.2
Apr	2.4	.6	1	#	8.0	2000	9	10.5	2000	23	1972	24	22	1972	1.6	.8	.3	.2	.0	2.4	1.4	1.0	.1
May	#	.0	0	0	#	1983	9	#	1983	0	0	0	0	0	.0	.0	.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	.0	.0	#	0	1.0	1997	24	1.0	1997	1	2000	29	#	2000	.1	.1	.0	.0	.0	@	.0	.0	.0
Nov	3.7	2.5	#	#	9.2	1986	21	13.8	1971	10	1986	22	2	1997	2.0	1.0	.5	.2	.0	3.3	1.3	.6	.1
Dec	9.7	8.4	2	2	15.6	1978	25	27.2	1972	16	1978	25	9	1995	6.8	3.0	.9	.4	.1	14.9	9.1	6.3	1.3
Ann	48.3	42.6	N/A	N/A	17.0	Mar 1993	13	31.1	Jan 1978	36	Mar 1971	7	23	Mar 1971	29.7	14.3	5.1	2.6	.2	82.0	57.1	44.5	17.5

+ 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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Station: SOUTH HERO, VT

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Climate Division: VT 2

NWS Call Sign:

Elevation: 110 Feet

Lat: 44°38N

Lon: 73°18W

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	5/26	5/21	5/18	5/15	5/13	5/10	5/08	5/05	4/30
32	5/09	5/05	5/03	4/30	4/28	4/26	4/24	4/21	4/18
28	4/26	4/23	4/21	4/19	4/17	4/16	4/14	4/12	4/09
24	4/20	4/16	4/13	4/11	4/09	4/07	4/04	4/02	3/29
20	4/16	4/11	4/08	4/06	4/03	4/01	3/29	3/26	3/21
16	4/07	4/03	3/31	3/28	3/26	3/23	3/21	3/18	3/14
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	9/22	9/26	9/29	10/01	10/03	10/05	10/07	10/10	10/13
32	9/27	10/02	10/06	10/09	10/12	10/15	10/18	10/21	10/27
28	10/14	10/19	10/23	10/26	10/29	11/01	11/04	11/07	11/13
24	10/31	11/03	11/06	11/08	11/10	11/12	11/14	11/17	11/20
20	11/09	11/12	11/15	11/17	11/19	11/21	11/24	11/26	11/30
16	11/16	11/21	11/24	11/26	11/29	12/02	12/04	12/07	12/12
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	158	152	149	145	142	139	136	132	126
32	183	177	173	169	166	162	159	155	149
28	212	206	201	197	194	190	186	181	175
24	229	224	220	217	214	211	208	204	199
20	246	241	237	233	230	226	223	219	213
16	267	260	256	251	248	244	240	235	228

* 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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COOP ID: 437607

Climate Division: VT 2 NWS Call Sign: Elevation: 110 Feet Lat: 44° 38N Lon: 73° 18W

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	1451	1252	1062	644	278	57	7	19	160	503	819	1227	7479
60	1296	1112	907	496	163	14	0	2	66	353	669	1072	6150
57	1203	1028	814	409	109	4	0	0	34	270	579	979	5429
55	1141	972	752	354	80	2	0	0	19	219	519	917	4975
50	986	832	597	228	31	0	0	0	3	113	371	765	3926
32	457	358	145	9	0	0	0	0	0	0	33	293	1295

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	29	30	106	355	763	1014	1211	1147	851	520	204	89	6319
55	0	0	0	9	130	326	498	434	180	26	0	0	1603
57	0	0	0	5	97	269	436	372	134	15	0	0	1328
60	0	0	0	2	58	188	343	280	77	6	0	0	954
65	0	0	0	0	18	81	195	143	21	0	0	0	458
70	0	0	0	0	3	20	80	50	2	0	0	0	155

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	1	2	33	168	524	781	973	911	622	298	83	7	1	3	36	204	728	1509	2482	3393	4015	4313	4396	4403
45	0	0	10	85	373	631	818	756	472	174	37	1	0	0	10	95	468	1099	1917	2673	3145	3319	3356	3357
50	0	0	3	37	234	482	663	601	326	85	12	0	0	0	3	40	274	756	1419	2020	2346	2431	2443	2443
55	0	0	0	13	125	334	508	446	195	34	3	0	0	0	0	13	138	472	980	1426	1621	1655	1658	1658
60	0	0	0	4	55	204	353	294	98	8	0	0	0	0	0	4	59	263	616	910	1008	1016	1016	1016
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	0	0	15	94	296	490	653	600	358	135	32	1	0	0	15	109	405	895	1548	2148	2506	2641	2673	2674

(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/normal/usnormals.html
- f. Mean "number of days statistics" for temperature and precipitation were calculated from a serially complete daily data set.
Documentation of the serially complete data set is available from the link below:
- g. Snowfall and snow depth statistics were derived from 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 difference 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.

- | | |
|---|---|
| <ol style="list-style-type: none">a. Temperature/ Precipitation Tables<ol style="list-style-type: none">1. 1971-2000 Monthly Normals2. Cooperative Summary of the Day3. National Weather Service station records4. 1971-2000 serially complete daily datab. Degree Day Table<ol style="list-style-type: none">1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data | <ol style="list-style-type: none">c. Snow Tables<ol style="list-style-type: none">1. Snow Climatology2. Cooperative Summary of the Dayd. Freeze Data Table
1971-2000 serially complete daily data |
|---|---|

References

U.S. Climate Normals 1971-2000, www.ncdc.noaa.gov/normal.html
U.S. Climate Normals 1971-2000-Products Clim20, www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html
Snow Climatology Project Description, www.ncdc.noaa.gov/oa/climate/monitoring/snowclim/mainpage.html
Eischeid, J. K., P. Pasteris, H. F. Diaz, M. Plantico, and N. Lott, 2000: Creating a serially complete, national daily time series of temperature and precipitation for the Western United States. J. Appl. Meteorol., 39, 1580-1591,
www1.ncdc.noaa.gov/pub/data/special/serialcomplete_jam_0900.pdf