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: 301966

Station: DANNEMORA, NY

Lon: 73°43W **Climate Division: NY 7 NWS Call Sign:** Elevation: 1,340 Feet Lat: 44°43N

									ŗ	Гетр	eratur	e (°F)									
	Mea	n (1)						Extr	emes					Degree Base To	·		Mean	Numb	er of I	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	26.0	7.9	17.0	65	1937	9	27.5	1990	-34	1981	4	5.3	1994	1490	0	.0	.0	.7	21.9	30.2	10.1
Feb	29.1	10.8	20.0	62	1994	20	30.7	1981	-35	1943	15	9.9	1979	1261	0	.0	.0	1.2	17.8	27.0	6.5
Mar	38.9	20.9	29.9	79	1945	28	38.3	1973	-22	1989	7	21.9	1984	1087	0	.0	.0	5.6	8.9	26.7	1.7
Apr	51.8	33.3	42.6	86+	1990	27	48.0	1987	0	1943	6	35.9	1972	673	0	.0	.0	16.6	.6	14.6	.0
May	66.2	45.2	55.7	90+	1975	23	61.9	1975	18	1983	9	49.2	1997	307	18	.0	.1	29.3	@	1.9	.0
Jun	74.4	54.0	64.2	97	1947	11	68.5	1999	30	1945	1	60.4	1985	81	56	.0	.6	30.0	.0	.1	.0
Jul	78.8	58.9	68.9	98	1978	20	73.4	1975	42+	2001	2	63.6	1992	25	144	.0	1.4	31.0	.0	.0	.0
Aug	76.2	57.0	66.6	98	1944	11	71.4	1973	33	1982	28	63.7	1982	46	96	.0	.4	31.0	.0	.0	.0
Sep	67.6	48.7	58.2	95	1961	4	63.0	1971	25	1980	29	55.2	1995	212	7	.0	.1	29.4	.0	.7	.0
Oct	55.9	38.4	47.2	88	1950	2	54.0	1971	14+	1936	27	42.0	1976	553	0	.0	.0	21.9	@	9.7	.0
Nov	42.0	28.2	35.1	74	1938	7	40.4	1979	-4	1933	16	30.0	1996	898	0	.0	.0	7.4	5.6	21.2	.1
Dec	30.9	14.9	22.9	65	2001	6	30.6	1982	-36	1933	29	7.6	1989	1307	0	.0	.0	1.4	17.3	29.5	4.7
Ann	53.2	34.9	44.0	98+	Jul 1978	20	73.4	Jul 1975	-36	Dec 1933	29	5.3	Jan 1994	7940	321	.0	2.6	205.5	72.1	161.6	23.1

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 027-A

- (1) From the 1971-2000 Monthly Normals
- (2) Derived from station's available digital record: 1926-2001
- (3) Derived from 1971-2000 serially complete daily data

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

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COOP ID: 301966

Station: DANNEMORA, NY

Climate Division: NY 7 NWS Call Sign: Elevation: 1,340 Feet Lat: 44°43N Lon: 73°43W

										Pı	recipi	tation	(incl	nes)										
		ans/	P	recip	itatio	on Total					Mean Number of Days (3) Probability that the monthly/annual precipitation will be equal to indicated amount Monthly/Annual Precipitation vs Probability Levels These values were determined from the incomplete gamma distri										els		ın the	
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	2.41	1.94	2.79	1998	9	6.32	1998	.12	1981	12.5	6.1	1.4	.3	.50	.72	1.08	1.40	1.72	2.07	2.46	2.93	3.54	4.53	5.47
Feb	2.03	1.72	2.32	1954	17	4.79	1971	.32	1980	9.0	5.1	1.0	.2	.57	.76	1.06	1.31	1.56	1.82	2.10	2.44	2.88	3.57	4.21
Mar	2.34	2.42	1.78	1993	14	3.45	1999	.54	1988	10.6	6.4	1.1	.2	.99	1.20	1.50	1.75	1.97	2.21	2.45	2.74	3.10	3.65	4.15
Apr	3.05	2.93	2.30	2000	9	7.07	2000	.99	1986	11.0	7.4	1.9	.3	1.28	1.56	1.95	2.26	2.56	2.87	3.19	3.57	4.04	4.76	5.42
May	3.27	2.84	2.22	1956	27	7.59	1973	.92	1980	13.3	8.2	2.2	.3	.96	1.27	1.74	2.14	2.53	2.94	3.39	3.92	4.61	5.68	6.68
Jun	3.63	3.27	2.52	1926	15	10.20	1998	1.04	1979	12.7	8.6	2.3	.5	1.21	1.55	2.06	2.48	2.89	3.32	3.78	4.32	5.02	6.10	7.09
Jul	3.70	3.65	3.40	1970	11	6.94	1996	1.29	1983	12.1	8.4	2.5	.6	1.52	1.86	2.33	2.73	3.10	3.48	3.88	4.35	4.94	5.85	6.67
Aug	4.33	3.93	2.63	1995	4	7.78	1997	1.80	1999	12.6	8.3	3.5	.9	1.93	2.31	2.85	3.28	3.69	4.10	4.54	5.04	5.67	6.63	7.50
Sep	3.93	3.74	4.55	1999	17	8.81	1977	1.43	1972	12.6	8.1	2.6	.8	1.48	1.84	2.37	2.81	3.23	3.65	4.11	4.65	5.33	6.38	7.35
Oct	3.29	3.04	3.09	1995	22	9.40	1995	.47	1994	12.5	7.5	2.0	.5	.94	1.25	1.72	2.13	2.53	2.95	3.41	3.95	4.65	5.75	6.78
Nov	3.33	2.86	3.64	1996	9	10.49	1988	.96	1976	12.4	7.5	1.8	.8	1.09	1.40	1.87	2.26	2.65	3.04	3.47	3.98	4.63	5.64	6.58
Dec	2.80	2.63	2.41	1983	13	6.33	1983	.42	1989	12.9	6.9	1.5	.3	.93	1.19	1.58	1.91	2.23	2.56	2.92	3.34	3.88	4.71	5.48
Ann	38.11	37.55	4.55	Sep 1999	17	10.49	Nov 1988	.12	Jan 1981	144.2	88.5	23.8	5.7	29.09	30.88	33.15	34.85	36.35	37.79	39.27	40.90	42.86	45.67	48.09

⁺ Also occurred on an earlier date(s)

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: 1926-2001

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

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COOP ID: 301966

Station: DANNEMORA, NY

Climate Division: NY 7 NWS Call Sign: Elevation: 1,340 Feet Lat: 44°43N Lon: 73°43W

			Snow Fall Median Mean Median Snow Fall Highest Monthly Snow Fall Median Median Fall Snow Depth																				
		Snow Fall Snow Depth Median Med															Mea	n Nui	mber	of Day	ys (1)		
	Mean	s/Medi	ans (1)	1					Extre	mes (2)							ow Fa					Depth esholo	
Month	Snow Fall Mean	Fall	Depth	Depth	Daily Snow	Year	Day	Monthly Snow	Year	Daily Snow	Year	Day	Monthly Mean Snow	Year	0.1	1.0	3.0	5.0	10.0	1	3	5	10
Jan	11.1	11.5	#	0	13.5	1977	10	21.5	1974	#	2000	7	#	2000	5.6	3.4	.9	.2	.1	-9.9	-9.9	-9.9	-9.9
Feb	15.5	14.9	9	9	12.0	1972	4	27.5	1971	29	1997	15	18	1997	4.9	3.6	1.5	.7	.1	-9.9	-9.9	-9.9	-9.9
Mar	13.6	13.9	#	0	12.0	1977	23	26.3	1974	7	1989	30	1	1989	3.2	2.5	1.1	.5	.1	-9.9	-9.9	-9.9	-9.9
Apr	6.8	.0	#	0	9.0	1973	5	28.5	1975	#+	2000	5	#+	2000	1.2	.8	.5	.3	.0	-9.9	-9.9	-9.9	-9.9
May	.0	.0	0	0	.5	1974	6	.5	1974	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	#	1974	23	#	1974	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Oct	.3	.0	#	0	4.0	1979	9	4.0	1979	#	1974	2	#	1974	.2	.1	.1	.0	.0	.0	.0	.0	.0
Nov	8.1	4.0	#	0	14.0	1971	30	24.1	1971	5	1971	25	#+	1999	1.3	.9	.4	.3	.1	-9.9	-9.9	-9.9	-9.9
Dec	5.0	-99.9	#	0	16.0	2000	31	20.0	1973	#	1999	7	#	1999	5.1	3.8	1.6	.8	.3	-9.9	-9.9	-9.9	-9.9
Ann	60.4	-9.9	N/A	N/A	16.0	Dec 2000	31	28.5	Apr 1975	29	Feb 1997	15	18	Feb 1997	21.5	15.1	6.1	2.8	.7	-9.9	-9.9	-9.9	-9.9

⁺ 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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Lon: 73°43W

Lat: 44°43N

Station: DANNEMORA, NY

Climate Division: NY 7 NWS Call Sign:

VS Call Sign: Elevation: 1,340 Feet

				Freez	e Data				
			Spri	ng Freeze D	ates (Month/	(Day)			
Temp (F)		F	Probability of	later date i	n spring (thr	u Jul 31) tha	n indicated	(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	6/06	5/31	5/28	5/24	5/21	5/18	5/15	5/11	5/06
32	5/26	5/20	5/16	5/12	5/09	5/05	5/02	4/27	4/21
28	5/09	5/04	5/01	4/29	4/26	4/24	4/21	4/18	4/14
24	4/30	4/26	4/22	4/19	4/17	4/14	4/11	4/08	4/03
20	4/23	4/18	4/15	4/12	4/09	4/06	4/04	3/31	3/26
16	4/12	4/07	4/04	4/01	3/30	3/27	3/24	3/21	3/17
·			Fal	l Freeze Da	tes (Month/D	ay)		-	
Tomp (F)		Pro	bability of ea	arlier date i	n fall (beginn	ing Aug 1) t	han indicate	ed(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	9/09	9/14	9/17	9/19	9/22	9/25	9/27	9/30	10/05
32	9/22	9/26	9/29	10/01	10/04	10/06	10/08	10/11	10/15
28	9/29	10/04	10/08	10/12	10/15	10/19	10/22	10/26	11/01
24	10/12	10/17	10/21	10/24	10/27	10/30	11/02	11/06	11/11
20	10/25	10/30	11/02	11/04	11/07	11/09	11/12	11/15	11/19
16	11/01	11/06	11/09	11/12	11/15	11/18	11/21	11/25	11/29
·				Freeze F	ree Period			-	
Tomp (F)			Probability	of longer th	an indicated	freeze free p	eriod (Days))	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	140	134	130	126	123	119	116	112	106
32	169	162	156	152	147	143	138	133	125
28	193	185	180	176	171	167	162	157	150
24	215	208	202	197	193	188	184	178	170
20	229	223	218	214	211	207	204	199	193
16	252	244	239	234	230	225	221	215	208

^{*} 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.

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	Degree Days to Selected Base Temperatures (°F)														
Base						Heatin	g Degree	Days (1)							
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann		
65	1490	1261	1087	673	307	81	25	46	212	553	898	1307	7940		
60	1335	1121	932	525	189	23	4	8	98	404	748	1152	6539		
57	1242	1037	839	438	133	8	0	1	53	319	658	1059	5787		
55	1180	981	777	382	102	4	0	0	33	267	598	997	5321		
50	1025	841	623	253	45	0	0	0	7	156	450	842	4242		
32	486	363	165	14	0	0	0	0	0	3	65	340	1436		

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	19	25	100	331	735	965	1143	1073	784	473	156	57	5861
55	0	0	0	9	123	279	430	360	127	24	0	0	1352
57	0	0	0	5	93	223	368	299	87	14	0	0	1089
60	0	0	0	2	56	148	279	213	42	6	0	0	746
65	0	0	0	0	18	56	144	96	7	0	0	0	321
70	0	0	0	0	4	11	56	28	0	0	0	0	99

										Gro	wing]	Degre	e Uni	ts (2)										
Base					Growin	g Degree	Units (M	(Ionthly)					Growing Degree Units (Accumulated Monthly)											
	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec													Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	2	4	39	155	489	728	894	824	541	251	54	4	2	6	45	200	689	1417	2311	3135	3676	3927	3981	3985
45	0	1	17	85	344	578	739	669	393	144	24	1	0	1	18	103	447	1025	1764	2433	2826	2970	2994	2995
50	60 0 0 4 39 214 429 584 514 258 69 7											0	0	0	4	43	257	686	1270	1784	2042	2111	2118	2118
55	0	0	1	19	120	285	429	360	144	24	1	0	0	0	1	20	140	425	854	1214	1358	1382	1383	1383
60	0	0	0	7	54	161	281	215	67	4	0	0	0	0	0	7	61	222	503	718	785	789	789	789
Base	Growing Degree Units for Corn (Monthly)													Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)			
50/86	50/86 0 0 22 90 281 447 583 516 307 129 30 0											0	0	0	22	112	393	840	1423	1939	2246	2375	2405	2405

(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 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 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.

- 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. Snow Climatology
 - 2. 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

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