Climatography of the United States No. 20

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

COOP ID: 308383

Station: SYRACUSE HANCOCK INTL AP, NY

1971-2000

Climate Division: NY10 NWS Call Sign: SYR Elevation: 410 Feet Lat: 43°07N Lon: 76°06W

									, , , , , , , , , , , , , , , , , , ,	Tempe	eratui	re (°F)									
	Mea	n (1)						Extr	emes						Days (1) emp 65		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	31.4	14.0	22.7	70+	1967	25	33.2	1990	-26	1966	26	12.7	1994	1296	0	.0	.0	1.8	16.5	28.2	4.2
Feb	33.5	15.5	24.5	69	1981	19	32.5	1981	-26	1979	18	11.7	1979	1131	0	.0	.0	2.5	13.5	25.1	2.8
Mar	43.1	24.2	33.6	87	1986	30	41.3	1973	-16	1950	4	23.7	1984	959	1	.0	.0	8.5	5.6	23.4	.7
Apr	55.7	34.9	45.3	92	1990	28	51.1	1987	7	1923	1	38.6	1975	579	4	.0	@	20.6	.3	11.2	.0
May	68.5	45.8	57.1	96	1977	21	62.9	1998	15	1930	8	51.7	1984	258	29	.0	.4	30.1	.0	.5	.0
Jun	77.0	54.6	65.8	100	1934	2	69.8	1999	34	1945	1	61.5	1985	66	105	.0	1.5	30.0	.0	.0	.0
Jul	81.7	60.1	70.9	102	1936	9	75.0	1999	44	1946	16	66.2	1976	10	203	.0	3.9	31.0	.0	.0	.0
Aug	79.6	58.8	69.2	100	2001	9	73.5	1980	40+	1965	31	65.4	1982	25	158	.0	1.7	31.0	.0	.0	.0
Sep	71.4	51.1	61.3	97+	1953	4	65.3	1971	25	1947	28	56.8	1975	158	48	.0	.3	30.0	.0	.2	.0
Oct	59.8	40.4	50.1	87	1963	7	56.1	1971	18	1940	29	46.0+	1974	460	3	.0	.0	26.6	.0	5.0	.0
Nov	47.4	32.0	39.7	81	1950	1	45.9	1975	1	1942	25	34.7	1996	748	0	.0	.0	11.8	1.7	15.3	.0
Dec	36.3	20.9	28.6	72	2001	6	35.4	1998	-26	1942	20	14.7	1989	1113	0	.0	.0	3.2	10.3	26.0	1.4
Ann	57.1	37.7	47.4	102	Jul 1936	9	75.0	Jul 1999	-26+	Feb 1979	18	11.7	Feb 1979	6803	551	.0	7.8	227.1	47.9	134.9	9.1

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 079-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: 1922-2001

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

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COOP ID: 308383

Climate Division: NY10 NWS Call Sign: SYR Elevation: 410 Feet Lat: 43°07N Lon: 76°06W

										Pı	ecipi	tation	(incl	nes)										
			P	recip	itatio	on Total	s			M	ean N	lumbo ays (3		Proba	ability th	nat the n	nonthly/	indic	precipita ated am	ntion wi	ll be equ		less tha	n the
	Medi					Extremes	i.			D	aily Pre	cipitatio	n		Th	Mese values	-		-		bility Leve e gamma		on	
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	2.60	2.43	2.30+	1945	22	5.77	1978	1.06	1989	19.7	7.3	1.1	.2	.98	1.22	1.57	1.86	2.13	2.41	2.72	3.07	3.52	4.21	4.84
Feb	2.12	2.16	2.31	1940	19	4.07	1971	.63	1987	15.5	6.2	1.0	.2	.89	1.08	1.35	1.57	1.78	2.00	2.22	2.49	2.82	3.33	3.79
Mar	3.02	2.92	1.45	1932	6	5.14	1994	1.01	1981	16.5	7.7	1.9	.2	1.49	1.74	2.09	2.37	2.63	2.89	3.17	3.48	3.87	4.46	4.98
Apr	3.39	3.24	2.42	1970	2	8.12	1976	1.22	1985	14.0	8.5	1.9	.5	1.19	1.51	1.97	2.36	2.74	3.12	3.54	4.02	4.65	5.61	6.49
May	3.39	3.04	2.36	1969	19	7.41	1976	.75	1977	12.7	8.1	2.2	.4	1.06	1.38	1.86	2.27	2.67	3.08	3.53	4.06	4.75	5.82	6.81
Jun	3.71	3.16	4.79	1922	11	12.30	1972	1.00	1995	12.2	7.8	2.4	.7	1.06	1.41	1.94	2.41	2.86	3.33	3.85	4.46	5.26	6.51	7.67
Jul	4.02	3.54	3.90	1974	3	9.52	1974	1.98	1995	11.3	7.1	2.8	1.0	1.52	1.89	2.43	2.88	3.30	3.73	4.20	4.75	5.44	6.51	7.48
Aug	3.56	3.60	3.26	1943	13	6.73	1976	1.02	1999	11.1	6.8	2.4	.7	1.46	1.78	2.24	2.62	2.98	3.34	3.73	4.18	4.74	5.61	6.40
Sep	4.15	4.03	2.59	2001	24	8.81	1975	1.88	1988	12.6	7.4	2.6	.9	2.02	2.38	2.86	3.25	3.61	3.97	4.35	4.79	5.33	6.15	6.89
Oct	3.20	2.84	3.55	1955	6	6.66	1981	.72	1982	13.2	7.6	1.9	.7	1.02	1.32	1.77	2.16	2.53	2.92	3.34	3.83	4.47	5.46	6.38
Nov	3.77	3.51	3.56	1996	8	6.79	1972	1.25	1978	16.8	9.2	2.0	.4	1.80	2.12	2.57	2.93	3.26	3.60	3.95	4.36	4.87	5.64	6.33
Dec	3.12	3.03	2.35	1942	30	5.50	1983	1.40	1999	18.3	8.7	1.5	.4	1.47	1.74	2.11	2.42	2.69	2.97	3.27	3.61	4.04	4.69	5.27
Ann	40.05	37.06	4.79	Jun 1922	11	12.30	Jun 1972	.63	Feb 1987	173.9	92.4	23.7	6.3	28.60	30.82	33.66	35.82	37.73	39.58	41.49	43.60	46.16	49.86	53.07

⁺ 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

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COOP ID: 308383

Station: SYRACUSE HANCOCK INTL AP, NY

Climate Division: NY10 NWS Call Sign: SYR Elevation: 410 Feet Lat: 43°07N Lon: 76°06W

		Median Mean Median Snow Snow Snow Snow Snow Snow Snow Sno																					
		Show Fall Show Depth Median Show Fall Show F															Mea	n Nu	mber	of Day	ys (1)		
	Mean	s/Medi	ans (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	33.2	30.1	5	4	18.0	1994	4	72.2	1978	26	1994	9	16	1994	17.2	8.1	3.1	1.1	.2	23.6	19.1	13.9	5.7
Feb	24.0	24.1	5	4	15.4	1972	19	51.3	1993	29	1993	25	13+	1993	13.3	5.8	2.3	.9	.1	21.0	16.4	12.3	5.1
Mar	18.8	15.1	3	3	22.1	1993	13	54.4	1993	35	1993	15	14	1993	9.7	4.6	1.7	.8	.0	13.1	8.6	6.1	2.6
Apr	4.8	3.9	#	1	7.1	1975	4	16.4	1983	8+	1975	6	2	1975	3.0	1.5	.5	.2	.0	1.9	.7	.3	.0
May	.1	#	#	0	2.1	1996	12	2.1	1996	1	1996	12	#	2000	.1	.1	.0	.0	.0	@	.0	.0	.0
Jun	.0	.0	#	0	.0	0	0	.0	0	0	0	0	#	1996	.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	#	1992	30	#	1992	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Oct	.5	#	#	0	2.9	1988	30	5.7	1988	1	1974	3	#	1974	.7	.2	.0	.0	.0	@	.0	.0	.0
Nov	11.1	9.1	1	0	11.9	1973	6	34.2	1995	14	1973	7	2+	1997	6.3	2.9	1.2	.5	.1	5.3	2.6	1.2	.1
Dec	28.6	26.0	2	2	18.6	1997	30	70.3	2000	21	1978	28	8	1989	14.0	6.8	2.4	1.3	.2	16.6	10.2	6.0	2.1
Ann	121.1	108.3	N/A	N/A	22.1	Mar 1993	13	72.2	Jan 1978	35	Mar 1993	15	16	Jan 1994	64.3	30.0	11.2	4.8	.6	81.5	57.6	39.8	15.6

⁺ Also occurred on an earlier date(s) #Denotes trace amounts

- (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

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^{-9/-9.9} represents missing values Annual statistics for Mean/Median snow depths are not appropriate

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Elevation: 410 Feet

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COOP ID: 308383

Lon: 76°06W

Lat: 43°07N

Station: SYRACUSE HANCOCK INTL AP, NY

Climate Division: NY10

NWS Call Sign: SYR

				Freez	e Data									
			Spri	ng Freeze D	ates (Month/	Day)								
Spring Freeze Dates (Month/Day) Temp (F)														
Temp (I')	.10	.20	.30	.40	.50	.60	.70	.80	.90					
36	5/24	5/20	5/17	5/14	5/12	5/10	5/07	5/04	4/30					
32	5/08	5/04	5/02	4/30	4/28	4/26	4/24	4/21	4/18					
28	4/28	4/25	4/22	4/20	4/18	4/16	4/14	4/11	4/08					
24	4/17	4/14	4/11	4/08	4/06	4/04	4/01	3/30	3/26					
20	4/07	4/03	3/31	3/29	3/27	3/25	3/22	3/20	3/16					
16	4/03	3/30	3/27	3/24	3/22	3/19	3/17	3/14	3/09					
•			Fal	l Freeze Da	tes (Month/D	ay)	•	•	•					
Toman (E)		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	9/17	9/21	9/24	9/26	9/28	9/30	10/03	10/05	10/09					
32	9/29	10/04	10/07	10/10	10/13	10/16	10/19	10/23	10/28					
28	10/09	10/15	10/18	10/22	10/25	10/28	10/31	11/04	11/09					
24	10/20	10/26	10/30	11/02	11/06	11/09	11/12	11/16	11/22					
20	11/05	11/11	11/15	11/18	11/21	11/25	11/28	12/02	12/08					
16	11/18	11/23	11/26	11/29	12/02	12/04	12/07	12/11	12/15					
•				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	156	150	145	142	138	135	131	127	121					
32	188	181	176	172	168	164	160	155	148					
28	209	202	197	193	189	185	181	176	169					
24	237	229	223	218	213	208	203	197	189					
20	261	253	248	243	239	235	230	224	217					
16	273	267	262	258	254	250	246	242	235					

^{*} 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.

Complete documentation available from:

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of the United States
No. 20
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Station: SYRACUSE HANCOCK INTL AP, NY

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Climate Division: NY10 NWS Call Sign: SYR Elevation: 410 Feet Lat: 43°07N Lon: 76°06W

				Deg	ree Days t	o Selected	Base Tem	peratures	(°F)				
Base						Heatin	g Degree l	Days (1)					
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	1296	1131	959	579	258	66	10	25	158	460	748	1113	6803
60	1156	995	818	444	157	18	0	2	52	314	609	973	5538
57	1063	911	725	359	106	6	0	0	24	234	519	880	4827
55	1001	855	663	305	78	3	0	0	12	186	459	818	4380
50	846	715	516	187	31	0	0	0	2	91	319	666	3373
32	343	270	118	6	0	0	0	0	0	0	26	215	978

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	54	76	177	401	805	1066	1186	1158	915	570	244	102	6754
55	0	0	10	11	147	381	473	445	249	38	4	0	1758
57	0	0	8	7	112	325	411	384	201	23	2	0	1473
60	0	0	6	5	70	245	318	292	138	9	0	0	1083
65	0	0	1	4	29	105	203	158	48	3	0	0	551
70	0	0	1	0	7	48	72	50	17	0	0	0	195

										Gro	wing	Degre	e Uni	ts (2)										
Base													Growing Degree Units (Accumulated Monthly)											
														Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	11	10	65	224	563	796	975	915	648	333	113	26	11	21	86	310	873	1669	2644	3559	4207	4540	4653	4679
45												6	2	6	41	171	580	1226	2046	2806	3305	3514	3568	3574
50												0	0	0	15	83	352	849	1514	2119	2473	2583	2606	2606
55	0	0	7	34	156	353	510	451	223	48	6	0	0	0	7	41	197	550	1060	1511	1734	1782	1788	1788
60	0	0	2	12	77	218	355	301	117	13	1	0	0	0	2	14	91	309	664	965	1082	1095	1096	1096
Base	e Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	50/86 3 6 45 137 328 504 649 601 390 180 55 7												3	9	54	191	519	1023	1672	2273	2663	2843	2898	2905

(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