

Climatology of the United States

No. 20

1971-2000

Station: SUSSEX 2 NE, NJ

COOP ID: 288644

Climate Division: NJ 1

NWS Call Sign:

Elevation: 450 Feet Lat: 41° 14N Lon: 74° 37W

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	34.5	14.2	24.4	68	1950	26	33.4	1998	-29	1994	21	15.1	1977	1259	0	.0	.0	2.6	12.9	29.6	3.9
Feb	37.9	15.9	26.9	71	1985	25	35.2	1998	-23	1967	9	16.3	1979	1066	0	.0	.0	4.0	8.4	26.2	2.8
Mar	47.4	25.3	36.4	86	1998	31	41.7	2000	-10	1967	19	30.6	1984	888	0	.0	.0	12.1	2.2	24.7	.1
Apr	59.1	35.2	47.2	93	1976	20	50.3	1991	10	1970	1	42.0	1975	537	0	.0	.2	23.8	.1	12.4	.0
May	70.5	44.8	57.7	95	1996	21	63.6	1991	24+	1966	3	53.8	1971	242	13	.0	.6	30.7	.0	2.0	.0
Jun	78.4	53.8	66.1	98	1952	26	69.3	1973	33	1980	11	62.9	1985	48	81	.0	2.0	30.0	.0	.0	.0
Jul	83.3	59.1	71.2	101+	1954	31	75.8	1999	41+	1951	21	68.0	2000	6	198	.1	5.0	31.0	.0	.0	.0
Aug	81.6	57.2	69.4	102	2001	10	72.8	1988	34	1965	31	65.8	1982	14	149	.0	2.7	31.0	.0	.0	.0
Sep	73.8	48.9	61.4	102	1953	3	65.2	1999	27+	1957	27	57.6	1975	135	26	.0	.6	30.0	.0	.8	.0
Oct	62.9	37.1	50.0	89	1949	10	55.9	1971	17	1988	31	45.8	1972	467	1	.0	.0	29.2	.0	11.2	.0
Nov	51.0	29.5	40.3	84	1950	1	45.5	1975	6	1989	25	34.7	1976	742	0	.0	.0	16.1	.6	20.3	.0
Dec	39.4	20.8	30.1	75	1998	8	36.9	1998	-13	1950	28	16.8	1989	1082	0	.0	.0	4.5	6.9	27.6	1.1
Ann	60.0	36.8	48.4	102+	Aug 2001	10	75.8	Jul 1999	-29	Jan 1994	21	15.1	Jan 1977	6486	468	.1	11.1	245.0	31.1	154.8	7.9

+ 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: 1948-2001

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

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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: SUSSEX 2 NE, NJ

COOP ID: 288644

Climate Division: NJ 1

NWS Call Sign:

Elevation: 450 Feet Lat: 41°14N

Lon: 74°37W

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	3.83	3.38	2.40	1996	8	10.17	1979	.94	1981	11.5	7.4	2.5	.8	1.09	1.46	2.01	2.49	2.95	3.44	3.98	4.61	5.43	6.73	7.93
Feb	2.96	2.76	2.90	1968	3	4.98+	1998	.70	1987	9.2	6.3	2.0	.5	1.07	1.34	1.75	2.09	2.41	2.74	3.10	3.52	4.05	4.88	5.63
Mar	3.79	3.55	2.70	1977	23	7.13	1977	.77	1981	11.1	7.3	2.6	.8	1.59	1.94	2.42	2.81	3.19	3.56	3.97	4.43	5.02	5.92	6.74
Apr	4.44	4.56	3.20	1997	1	10.00	1983	1.42	1978	12.5	7.5	3.1	1.0	1.79	2.20	2.77	3.25	3.70	4.16	4.65	5.23	5.95	7.06	8.06
May	4.46	4.31	3.09	1984	30	10.58	1984	.97	1993	13.0	8.4	2.9	1.2	1.24	1.66	2.30	2.86	3.41	3.98	4.62	5.37	6.34	7.87	9.30
Jun	4.57	3.90	3.00	1952	1	11.18	1972	.51	1999	11.9	8.3	2.6	1.2	1.05	1.47	2.14	2.74	3.34	3.98	4.69	5.55	6.67	8.45	10.12
Jul	4.22	3.96	3.80	1951	28	10.01	1975	1.22	1999	11.0	6.8	2.8	1.1	1.38	1.78	2.37	2.87	3.35	3.85	4.40	5.04	5.86	7.14	8.32
Aug	4.23	4.22	6.33	1971	28	8.96	1971	.57	1995	11.1	7.0	2.9	.9	1.34	1.74	2.33	2.84	3.34	3.85	4.41	5.06	5.91	7.22	8.44
Sep	4.45	3.50	5.63	1999	17	12.63	1996	1.71	1984	10.2	6.7	2.8	1.2	1.24	1.66	2.30	2.86	3.41	3.98	4.61	5.35	6.32	7.84	9.26
Oct	3.72	3.69	4.80	1995	6	9.50	1995	1.06	2000	10.2	6.3	2.2	.9	1.06	1.42	1.95	2.41	2.86	3.34	3.86	4.47	5.27	6.52	7.68
Nov	3.73	3.48	4.00	1950	25	10.20	1972	1.18	1976	10.3	6.2	2.8	1.0	1.28	1.64	2.15	2.58	3.00	3.43	3.89	4.44	5.14	6.22	7.21
Dec	3.63	3.40	3.05	2000	17	8.48	1972	.75	1980	11.7	6.7	2.6	.9	.81	1.14	1.68	2.15	2.64	3.15	3.72	4.41	5.31	6.75	8.11
Ann	48.03	47.83	6.33	Aug 1971	28	12.63	Sep 1996	.51	Jun 1999	133.7	84.9	31.8	11.5	34.81	37.39	40.69	43.18	45.39	47.52	49.72	52.15	55.09	59.34	63.01

+ 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: 1948-2001

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

Complete documentation available from:
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Station: SUSSEX 2 NE, NJ

COOP ID: 288644

Climate Division: NJ 1

NWS Call Sign:

Elevation: 450 Feet

Lat: 41° 14N

Lon: 74° 37W

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	10.9	7.0	3	2	24.0	1996	8	39.0	1996	32	1996	8	12	1996	4.2	3.2	1.6	1.0	.3	8.8	5.2	3.1	.4
Feb	7.1	6.0	3	1	9.0	1971	8	16.5	1980	19	1978	9	11	1978	3.0	2.4	1.3	.3	.0	5.1	2.9	1.8	.1
Mar	4.8	3.0	1	#	16.0	1994	4	17.7	1996	22	1994	4	5	1993	2.0	1.6	.8	.4	.1	1.8	.9	.5	.1
Apr	2.2	.0	#	0	18.5	1997	1	18.5	1997	19	1997	1	2	1997	.4	.4	.3	.2	@	.4	.4	.2	.2
May	.0	.0	#	0	.0	0	0	.0	0	#	1996	30	#	1996	.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	.8	1972	19	.8	1972	1	1972	19	#	1972	@	.0	.0	.0	.0	@	.0	.0	.0
Nov	1.9	.0	#	0	10.0	1971	25	12.5	1971	12	1971	26	1	1995	.8	.6	.2	.1	@	.5	.3	.2	.1
Dec	6.8	5.5	1	#	21.2	2000	30	27.9	2000	21	2000	31	5	1995	2.4	2.0	1.0	.4	.1	5.4	2.1	.9	.5
Ann	33.7	21.5	N/A	N/A	24.0	Jan 1996	8	39.0	Jan 1996	32	Jan 1996	8	12	Jan 1996	12.8	10.2	5.2	2.4	.5	22.0	11.8	6.7	1.4

+ 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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NWS Call Sign:

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Lat: 41° 14N

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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	6/05	5/31	5/27	5/24	5/21	5/18	5/15	5/11	5/06
32	5/21	5/17	5/14	5/12	5/09	5/07	5/04	5/01	4/27
28	5/05	5/01	4/28	4/25	4/23	4/20	4/17	4/14	4/10
24	4/20	4/16	4/13	4/11	4/09	4/07	4/04	4/02	3/29
20	4/03	3/31	3/29	3/27	3/25	3/23	3/20	3/18	3/15
16	3/30	3/26	3/23	3/21	3/19	3/17	3/14	3/12	3/08
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	9/11	9/15	9/17	9/20	9/22	9/24	9/26	9/29	10/03
32	9/18	9/23	9/27	9/30	10/03	10/05	10/09	10/12	10/17
28	10/01	10/06	10/10	10/13	10/16	10/19	10/22	10/26	10/31
24	10/13	10/19	10/23	10/26	10/29	11/02	11/05	11/09	11/15
20	10/26	11/01	11/05	11/08	11/11	11/15	11/18	11/22	11/28
16	11/11	11/17	11/21	11/25	11/28	12/02	12/05	12/09	12/15
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	141	135	130	127	123	120	116	111	105
32	162	156	152	149	146	142	139	135	129
28	197	190	185	180	176	172	167	162	155
24	223	216	211	207	203	199	195	190	183
20	252	245	239	235	231	227	223	218	211
16	276	269	263	258	254	249	244	238	231

* 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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NWS Call Sign:

Elevation: 450 Feet Lat: 41°14N Lon: 74°37W

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	1259	1066	888	537	242	48	6	14	135	467	742	1082	6486
60	1104	926	733	388	126	9	0	1	52	320	592	927	5178
57	1011	842	640	300	75	2	0	0	24	241	502	834	4471
55	949	786	578	245	50	1	0	0	13	194	443	772	4031
50	794	646	428	126	13	0	0	0	2	99	302	623	3033
32	304	210	60	0	0	0	0	0	0	0	18	185	777

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	67	68	195	453	795	1023	1216	1158	881	558	265	126	6805
55	0	0	0	8	132	334	503	445	204	38	1	0	1665
57	0	0	0	3	95	275	441	383	155	24	0	0	1376
60	0	0	0	1	53	192	348	291	92	10	0	0	987
65	0	0	0	0	13	81	198	149	26	1	0	0	468
70	0	0	0	0	2	19	80	51	3	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	8	11	70	244	556	792	978	920	647	330	110	22	8	19	89	333	889	1681	2659	3579	4226	4556	4666	4688
45	0	1	33	135	401	642	823	765	498	197	53	7	0	1	34	169	570	1212	2035	2800	3298	3495	3548	3555
50	0	0	12	69	257	492	668	610	351	101	22	1	0	0	12	81	338	830	1498	2108	2459	2560	2582	2583
55	0	0	4	28	145	347	514	455	220	45	5	0	0	0	4	32	177	524	1038	1493	1713	1758	1763	1763
60	0	0	2	10	68	210	361	305	123	13	0	0	0	0	2	12	80	290	651	956	1079	1092	1092	1092
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	4	10	58	160	346	505	647	611	413	222	75	11	4	14	72	232	578	1083	1730	2341	2754	2976	3051	3062

(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