

Climatography of the United States No. 20

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

Station: LONG VALLEY, NJ

1971-2000

COOP ID: 285003

Climate Division: NJ 1

NWS Call Sign:

Elevation: 550 Feet

Lat: 40° 47N

Lon: 74° 47W

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	36.5	16.8	26.7	71	1950	27	37.3	1998	-23	1961	22	17.8	1977	1188	0	.0	.0	3.4	10.3	28.7	2.8
Feb	39.4	18.3	28.9	76	1985	25	37.3	1998	-24	1943	16	16.0	1979	1013	0	.0	.0	4.8	7.4	25.5	1.8
Mar	48.5	26.1	37.3	85+	1945	30	42.7	1973	-4	1967	19	32.0	1978	859	0	.0	.0	13.1	1.6	24.2	.1
Apr	59.7	35.2	47.5	93+	1976	19	51.3	1976	9	1944	6	43.8	1975	527	0	.0	.2	24.8	.1	11.5	.0
May	69.9	45.3	57.6	96	1962	19	61.8	1975	26+	1947	10	54.0	1992	243	13	.0	.3	30.7	.0	1.4	.0
Jun	77.2	53.9	65.6	98	1952	27	69.2	1973	33	1945	6	60.4	1979	64	79	.0	1.0	30.0	.0	.0	.0
Jul	81.7	59.1	70.4	100+	1949	5	75.7	1999	38	1945	12	66.5	1978	15	181	.0	3.2	31.0	.0	.0	.0
Aug	79.6	57.8	68.7	100+	1948	27	72.5	1983	35	1986	30	63.9	1992	26	140	.0	1.3	31.0	.0	.0	.0
Sep	72.3	49.8	61.1	102	1953	3	64.8	1971	25	1963	24	57.1	1978	142	22	.0	.3	30.0	.0	.4	.0
Oct	62.5	38.1	50.3	91	1941	6	56.8	1971	18+	1944	23	44.7	1987	458	3	.0	.0	29.3	.0	9.5	.0
Nov	52.1	30.5	41.3	82	1950	3	46.2	1975	4+	1938	26	36.1+	1995	711	0	.0	.0	17.5	.4	19.3	.0
Dec	41.0	22.2	31.6	73+	1984	30	38.4	1998	-13+	1948	27	19.6	1989	1035	0	.0	.0	5.8	5.7	27.1	.7
Ann	60.0	37.8	48.9	102	Sep 1953	3	75.7	Jul 1999	-24	Feb 1943	16	16.0	Feb 1979	6281	438	.0	6.3	251.4	25.5	147.6	5.4

+ 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: 1931-2001

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

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NWS Call Sign:

Elevation: 550 Feet Lat: 40°47N

Lon: 74°47W

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	4.30	3.92	3.38	1979	25	12.37	1979	.94	1981	10.4	7.4	3.2	1.1	1.19	1.59	2.21	2.75	3.28	3.84	4.45	5.18	6.12	7.60	8.98
Feb	3.23	3.02	2.35	1965	8	6.01	1981	1.26	1980	8.7	6.5	2.2	.7	1.28	1.58	2.00	2.35	2.68	3.02	3.38	3.81	4.34	5.16	5.91
Mar	4.18	4.01	3.26	1977	23	8.64	1977	1.62	1981	10.3	7.2	3.0	1.1	1.73	2.11	2.65	3.09	3.51	3.93	4.38	4.91	5.57	6.58	7.50
Apr	4.54	4.16	3.05	1983	16	11.43	1983	1.04	1985	10.7	7.4	3.2	1.4	1.49	1.92	2.55	3.09	3.61	4.14	4.73	5.41	6.29	7.66	8.92
May	4.93	4.72	3.35	1984	30	10.69	1984	.65	1993	11.7	8.5	3.3	1.3	1.62	2.09	2.77	3.36	3.92	4.50	5.14	5.88	6.84	8.33	9.70
Jun	4.78	4.24	3.92	1972	1	14.52	1972	.86	1988	10.6	7.3	3.1	1.3	1.35	1.80	2.49	3.09	3.67	4.28	4.96	5.75	6.79	8.41	9.92
Jul	5.03	4.11	6.22	1951	28	12.56	1984	1.07	1999	10.0	7.6	3.4	1.3	1.24	1.72	2.45	3.10	3.74	4.42	5.18	6.08	7.26	9.13	10.88
Aug	4.78	4.09	5.90	1971	28	12.48	1971	1.58	1996	9.1	6.7	3.1	1.5	1.62	2.07	2.73	3.29	3.83	4.38	4.98	5.69	6.59	7.99	9.28
Sep	5.09	4.58	5.57	1989	20	13.23	1999	1.08	1980	9.4	6.8	3.1	1.7	1.38	1.86	2.59	3.24	3.87	4.53	5.27	6.14	7.28	9.05	10.72
Oct	4.05	4.15	6.16	1996	20	10.00	1995	.72	2000	8.8	5.7	2.4	1.2	1.08	1.47	2.05	2.57	3.07	3.60	4.19	4.88	5.79	7.22	8.55
Nov	4.32	3.64	4.95	1972	9	12.46	1972	.85	1976	9.2	6.3	2.8	1.4	1.08	1.49	2.12	2.68	3.23	3.81	4.46	5.23	6.23	7.82	9.31
Dec	4.05	3.47	2.89	1996	2	9.64	1973	.53	1989	10.4	6.9	2.9	1.2	.91	1.29	1.88	2.42	2.95	3.52	4.15	4.91	5.91	7.50	9.00
Ann	53.28	49.77	6.22	Jul 1951	28	14.52	Jun 1972	.53	Dec 1989	119.3	84.3	35.7	15.2	39.01	41.80	45.36	48.05	50.44	52.73	55.10	57.71	60.87	65.43	69.36

+ 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: 1931-2001

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

Complete documentation available from:
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Station: LONG VALLEY, NJ

COOP ID: 285003

Climate Division: NJ 1

NWS Call Sign:

Elevation: 550 Feet

Lat: 40°47N

Lon: 74°47W

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	10.6	9.0	1	#	23.0	1996	8	27.0	1987	17	1978	23	6	1978	4.1	4.0	1.5	.6	.1	-9.9	-9.9	-9.9	-9.9
Feb	7.9	6.5	1	0	17.0	1983	12	23.0	1983	25	1978	9	18	1978	3.2	3.1	1.2	.4	@	-9.9	-9.9	-9.9	-9.9
Mar	6.1	5.0	#	0	16.0	1993	14	27.0	1993	19	1978	6	9	1978	2.4	2.4	1.0	.3	.1	-9.9	-9.9	-9.9	-9.9
Apr	1.9	.0	0	0	15.0	1997	1	17.0	1997	0	0	0	0	0	.6	.6	.2	.1	@	.0	.0	.0	.0
May	.0	.0	0	0	.0	0	0	.0	0	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	.2	.0	#	0	5.0	1979	11	5.0	1979	2	1979	11	#	1979	.1	.1	@	@	.0	.1	.0	.0	.0
Nov	1.0	.0	#	0	4.0	1978	28	4.0+	1985	4	1978	28	#+	1999	.4	.4	.2	.0	.0	.3	.1	.0	.0
Dec	5.0	4.0	#	0	11.0	1995	20	22.0	1995	6	1973	17	#+	1998	2.2	2.2	.6	.3	.1	-9.9	-9.9	-9.9	-9.9
Ann	32.7	24.5	N/A	N/A	23.0	Jan 1996	8	27.0+	Mar 1993	25	Feb 1978	9	18	Feb 1978	13.0	12.8	4.7	1.7	.3	-9.9	-9.9	-9.9	-9.9

+ 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/normal/usnormals.html

Climatography of the United States

No. 20 1971-2000

Station: LONG VALLEY, NJ

COOP ID: 285003

Climate Division: NJ 1

NWS Call Sign:

Elevation: 550 Feet

Lat: 40° 47N

Lon: 74° 47W

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	6/03	5/29	5/24	5/21	5/17	5/14	5/10	5/06	4/30
32	5/20	5/15	5/11	5/08	5/05	5/02	4/29	4/25	4/20
28	5/01	4/27	4/24	4/21	4/19	4/16	4/13	4/10	4/06
24	4/18	4/14	4/10	4/07	4/05	4/02	3/30	3/27	3/22
20	4/06	4/02	3/29	3/27	3/24	3/22	3/19	3/16	3/12
16	3/29	3/24	3/20	3/17	3/14	3/12	3/08	3/05	2/28
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	9/14	9/18	9/21	9/24	9/26	9/28	10/01	10/04	10/08
32	9/22	9/27	10/01	10/04	10/07	10/10	10/13	10/16	10/21
28	10/05	10/10	10/14	10/17	10/20	10/24	10/27	10/31	11/05
24	10/19	10/25	10/29	11/01	11/05	11/08	11/11	11/15	11/21
20	10/27	11/03	11/08	11/12	11/16	11/20	11/24	11/29	12/05
16	11/17	11/22	11/26	11/29	12/03	12/06	12/09	12/13	12/19
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	153	146	140	135	131	127	122	116	109
32	172	166	161	158	154	151	147	142	136
28	210	201	195	189	184	179	173	167	158
24	236	228	223	218	213	209	204	198	190
20	256	249	244	240	236	232	227	222	215
16	286	278	272	267	262	258	253	247	239

* 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

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COOP ID: 285003

Climate Division: NJ 1

NWS Call Sign:

Elevation: 550 Feet Lat: 40° 47N Lon: 74° 47W

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	1188	1013	859	527	243	64	15	26	142	458	711	1035	6281
60	1033	873	704	378	127	16	1	3	54	315	561	880	4945
57	940	789	611	291	75	5	0	0	26	238	471	787	4233
55	878	733	549	237	49	2	0	0	15	193	412	725	3793
50	724	593	401	121	12	0	0	0	3	102	271	578	2805
32	258	183	48	0	0	0	0	0	0	0	10	154	653

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	93	94	211	463	793	1006	1189	1138	871	568	289	142	6857
55	0	0	0	10	129	317	476	425	195	48	1	0	1601
57	0	0	0	4	93	260	414	363	147	31	0	0	1312
60	0	0	0	1	52	181	322	273	85	15	0	0	929
65	0	0	0	0	13	79	181	140	22	3	0	0	438
70	0	0	0	0	2	21	79	53	2	0	0	0	157

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	12	19	77	248	552	777	948	897	640	334	125	31	12	31	108	356	908	1685	2633	3530	4170	4504	4629	4660
45	3	3	35	140	399	627	793	742	490	205	60	8	3	6	41	181	580	1207	2000	2742	3232	3437	3497	3505
50	0	0	13	68	255	477	638	587	342	107	24	3	0	0	13	81	336	813	1451	2038	2380	2487	2511	2514
55	0	0	3	29	140	329	483	433	214	43	6	0	0	0	3	32	172	501	984	1417	1631	1674	1680	1680
60	0	0	0	9	65	193	331	280	109	14	0	0	0	0	0	9	74	267	598	878	987	1001	1001	1001
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	8	15	66	166	335	491	632	593	393	212	85	20	8	23	89	255	590	1081	1713	2306	2699	2911	2996	3016

(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