

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: MOORESTOWN, NJ

1971-2000

COOP ID: 285728

Climate Division: NJ 2

NWS Call Sign:

Elevation: 45 Feet

Lat: 39° 58N

Lon: 74° 58W

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	41.4	23.2	32.3	73	1950	26	41.6	1998	-10	1985	21	21.6	1977	1013	0	.0	.0	7.2	6.5	26.0	.7
Feb	45.4	25.2	35.3	79	1930	25	42.0	1997	-13	1934	9	24.5	1978	832	0	.0	.0	9.8	4.1	21.8	.2
Mar	54.9	32.3	43.6	91	1998	30	48.9	2000	2	1984	10	37.8	1984	663	0	.0	.1	20.7	.5	16.5	.0
Apr	65.7	40.7	53.2	97	1990	26	58.0	1994	22+	1976	12	47.4	1975	357	3	.0	.5	28.2	.0	5.2	.0
May	75.8	50.2	63.0	96+	1991	27	67.7	1991	26	1978	1	57.6	1973	130	69	.0	1.7	31.0	.0	.2	.0
Jun	83.7	59.6	71.7	100+	1952	26	75.2	1994	36	1938	1	66.2	1974	15	213	@	6.9	30.0	.0	.0	.0
Jul	87.8	64.7	76.3	106	1936	10	81.1	1999	42	1975	1	71.8	1975	0	348	.7	12.1	31.0	.0	.0	.0
Aug	85.6	62.9	74.3	104	2001	9	79.3	1980	42	1965	31	70.6	1974	2	288	.1	7.6	31.0	.0	.0	.0
Sep	79.3	55.7	67.5	99+	1953	2	73.0	1980	32+	1957	27	64.0	1975	38	113	.0	2.7	30.0	.0	.0	.0
Oct	67.9	43.9	55.9	95	1941	5	62.6	1984	20	1972	21	50.1	1972	302	20	.0	@	30.3	.0	3.1	.0
Nov	56.1	35.7	45.9	84	1950	1	51.5	1985	8+	1938	25	38.3	1976	574	0	.0	.0	22.3	@	12.1	.0
Dec	45.9	27.7	36.8	75+	1998	4	43.3	1984	-10	1983	25	24.6	1989	875	0	.0	.0	10.6	3.1	21.8	.1
Ann	65.8	43.5	54.7	106	Jul 1936	10	81.1	Jul 1999	-13	Feb 1934	9	21.6	Jan 1977	4801	1054	.8	31.6	282.1	14.2	106.7	1.0

+ 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: 1926-2001

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

020-A

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No. 20 1971-2000

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Station: MOORESTOWN, NJ

COOP ID: 285728

Climate Division: NJ 2

NWS Call Sign:

Elevation: 45 Feet

Lat: 39°58N

Lon: 74°58W

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	3.90	3.63	3.15	1979	21	9.09	1978	.17	1981	10.9	6.5	2.9	1.0	.92	1.28	1.85	2.36	2.87	3.41	4.01	4.72	5.66	7.15	8.55
Feb	2.95	2.78	2.09	1966	14	6.28	1979	.89	1991	9.4	5.6	2.2	.7	1.09	1.36	1.76	2.09	2.41	2.74	3.09	3.50	4.02	4.83	5.56
Mar	4.17	3.85	3.40	1932	28	8.31	1994	1.49	1981	10.6	7.3	3.2	1.2	1.70	2.08	2.62	3.06	3.48	3.91	4.37	4.90	5.57	6.59	7.52
Apr	4.02	4.07	2.95	1952	28	9.92	1983	1.01	1985	11.5	7.1	2.8	1.0	1.48	1.85	2.40	2.85	3.28	3.73	4.21	4.77	5.48	6.58	7.58
May	4.36	4.40	3.71	1947	1	8.82	1989	.82	1993	12.0	7.5	3.1	1.0	1.41	1.82	2.43	2.95	3.45	3.97	4.54	5.21	6.06	7.40	8.63
Jun	3.93	3.90	4.50	1968	13	8.42	1975	1.19	1988	9.9	6.4	2.6	1.3	1.38	1.75	2.29	2.74	3.18	3.62	4.11	4.67	5.40	6.52	7.55
Jul	4.84	4.12	4.82	1989	5	10.23	1988	1.24	1983	10.4	6.9	2.9	1.4	1.50	1.96	2.64	3.23	3.80	4.39	5.04	5.80	6.78	8.31	9.73
Aug	5.18	5.01	7.00	1971	28	11.53	1971	1.01	1995	9.3	6.6	3.4	1.7	1.59	2.08	2.81	3.44	4.05	4.69	5.38	6.20	7.26	8.91	10.44
Sep	4.17	3.51	5.35	1985	27	10.34	1993	.81	1997	9.4	6.0	2.6	1.2	1.07	1.47	2.07	2.61	3.14	3.69	4.31	5.04	5.99	7.50	8.91
Oct	3.53	3.53	3.45	1972	7	6.70	1972	.55	1994	8.3	4.9	2.4	1.1	1.15	1.49	1.98	2.40	2.80	3.22	3.68	4.22	4.91	5.98	6.97
Nov	3.51	3.01	3.38	1932	9	8.76	1972	.43	1976	9.5	5.9	2.5	.9	.71	1.03	1.54	2.01	2.49	3.00	3.58	4.27	5.19	6.66	8.05
Dec	3.69	3.22	3.83	1992	11	9.74	1996	.67	1989	10.8	6.6	2.5	1.0	.83	1.18	1.72	2.20	2.69	3.21	3.79	4.48	5.39	6.84	8.20
Ann	48.25	48.25	7.00	Aug 1971	28	11.53	Aug 1971	.17	Jan 1981	122.0	77.3	33.1	13.5	35.69	38.16	41.30	43.68	45.77	47.79	49.87	52.16	54.93	58.93	62.37

+ 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: 1926-2001

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

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

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Station: MOORESTOWN, NJ

COOP ID: 285728

Climate Division: NJ 2

NWS Call Sign:

Elevation: 45 Feet

Lat: 39°58N

Lon: 74°58W

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	.5	-99.9	#	0	2.5	1985	11	2.5	1985	1	1971	25	#+	1981	-9.9	-9.9	-9.9	-9.9	-9.9	.1	.0	.0	.0
Feb	6.1	2.5	1	0	22.0	1983	11	22.0	1983	7	1974	9	7	1974	-9.9	-9.9	-9.9	-9.9	-9.9	.0	.0	.0	.0
Mar	.7	.0	#	0	4.6	1981	5	4.6	1981	2	1971	4	#	1971	-9.9	-9.9	-9.9	-9.9	-9.9	.0	.0	.0	.0
Apr	#	.0	#	0	#	1972	8	#	1972	3	1971	7	#	1971	.0	.0	.0	.0	.0	.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	#	.0	#	0	#	1972	19	#	1972	#	1972	20	#	1972	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nov	.0	.0	0	0	.3	1978	27	.3	1978	0	0	0	0	0	.1	.0	.0	.0	.0	.0	.0	.0	.0
Dec	-99.9	-99.9	#	0	#	1974	31	#+	1974	7	2000	30	#	2000	-9.9	-9.9	-9.9	-9.9	-9.9	.0	.0	.0	.0
Ann	-9.9	-9.9	N/A	N/A	22.0	Feb 1983	11	22.0	Feb 1983	7+	Dec 2000	30	7	Feb 1974	-9.9	-9.9	-9.9	-9.9	-9.9	.1	.0	.0	.0

+ 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:

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No. 20
1971-2000**

Station: MOORESTOWN, NJ

COOP ID: 285728

Climate Division: NJ 2

NWS Call Sign:

Elevation: 45 Feet

Lat: 39° 58N

Lon: 74° 58W

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	5/20	5/15	5/11	5/08	5/05	5/02	4/29	4/26	4/21
32	5/08	5/03	4/29	4/26	4/23	4/20	4/16	4/13	4/07
28	4/27	4/21	4/17	4/13	4/10	4/06	4/03	3/30	3/24
24	4/09	4/04	4/01	3/29	3/26	3/23	3/20	3/16	3/11
20	3/26	3/22	3/18	3/15	3/13	3/10	3/07	3/04	2/27
16	3/19	3/13	3/09	3/05	3/02	2/27	2/23	2/19	2/13
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	9/24	9/29	10/02	10/05	10/08	10/11	10/14	10/17	10/22
32	10/06	10/11	10/14	10/17	10/20	10/23	10/25	10/29	11/03
28	10/15	10/21	10/25	10/28	10/31	11/03	11/06	11/10	11/15
24	10/28	11/03	11/08	11/12	11/15	11/19	11/22	11/27	12/03
20	11/08	11/15	11/20	11/24	11/28	12/02	12/06	12/11	12/17
16	11/30	12/06	12/10	12/14	12/17	12/21	12/24	12/29	1/04
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	178	170	165	160	155	150	146	140	132
32	204	195	189	184	180	175	170	164	155
28	229	220	214	208	203	198	193	186	178
24	261	251	245	239	234	229	223	216	207
20	282	274	268	264	259	255	250	245	237
16	312	304	299	294	289	285	280	274	266

* 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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Station: MOORESTOWN, NJ

COOP ID: 285728

Climate Division: NJ 2 NWS Call Sign: Elevation: 45 Feet Lat: 39°58N Lon: 74°58W

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	1013	832	663	357	130	15	0	2	38	302	574	875	4801
60	858	692	508	222	57	2	0	0	9	186	426	720	3680
57	765	608	418	153	29	0	0	0	3	130	341	627	3074
55	706	552	361	113	17	0	0	0	1	99	287	572	2708
50	563	424	227	44	3	0	0	0	0	44	168	427	1900
32	163	88	10	0	0	0	0	0	0	0	3	80	344

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	173	180	370	636	961	1189	1371	1309	1065	741	419	228	8642
55	3	0	8	59	265	499	658	596	377	127	13	7	2612
57	0	0	2	38	215	439	596	534	318	96	6	0	2244
60	0	0	0	17	150	351	503	441	234	58	2	0	1756
65	0	0	0	3	69	213	348	288	113	20	0	0	1054
70	0	0	0	0	23	104	204	151	34	5	0	0	521

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	43	64	179	410	714	955	1133	1066	825	497	219	69	43	107	286	696	1410	2365	3498	4564	5389	5886	6105	6174
45	17	24	98	271	559	805	978	911	675	347	121	32	17	41	139	410	969	1774	2752	3663	4338	4685	4806	4838
50	4	6	50	155	407	655	823	756	525	217	63	7	4	10	60	215	622	1277	2100	2856	3381	3598	3661	3668
55	0	0	20	78	265	505	668	601	378	115	26	3	0	0	20	98	363	868	1536	2137	2515	2630	2656	2659
60	0	0	4	32	147	356	513	446	244	49	4	0	0	0	4	36	183	539	1052	1498	1742	1791	1795	1795
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	29	40	117	249	447	629	765	723	535	304	127	38	29	69	186	435	882	1511	2276	2999	3534	3838	3965	4003

(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/normal/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