

Climatology of the United States

No. 20

1971-2000

Station: PRYOR, OK

COOP ID: 347309

Climate Division: OK 3

NWS Call Sign:

Elevation: 625 Feet Lat: 36°18N Lon: 95°19W

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	45.0	23.0	34.0	79	1950	25	42.0	1990	-20	1984	19	22.9	1979	961	0	.0	.0	12.0	5.4	26.1	.7
Feb	51.8	27.4	39.6	88	1996	23	48.0	1976	-14+	1996	4	27.3	1978	712	0	.0	.0	16.2	3.1	19.9	.5
Mar	61.5	36.8	49.2	93+	1967	11	53.6	1985	-5	1948	12	42.4	1975	492	0	.0	@	25.4	.5	12.0	.0
Apr	70.8	45.7	58.3	97	1972	12	66.4	1981	19	1957	13	53.3	1983	223	21	.0	.2	29.3	.0	2.1	.0
May	78.1	55.6	66.9	97	1953	31	72.5	1987	32	1963	1	59.5	1976	71	128	.0	.7	31.0	.0	.0	.0
Jun	85.9	64.8	75.4	105	1953	20	79.3	1980	45	1983	1	71.2	1976	3	314	.1	9.4	30.0	.0	.0	.0
Jul	91.9	69.5	80.7	112	1954	13	86.4	1980	49	1971	31	77.1	1976	0	487	2.8	22.2	31.0	.0	.0	.0
Aug	92.0	67.7	79.9	110+	1956	7	85.7	1983	48+	1967	28	73.4	1992	2	462	3.4	21.3	31.0	.0	.0	.0
Sep	83.4	59.7	71.6	106+	2000	2	78.8	1998	31	1984	30	63.7	1974	34	230	.7	8.0	30.0	.0	@	.0
Oct	73.2	47.3	60.3	99	1953	1	64.2	2000	17	1993	31	53.3	1976	184	36	.0	.7	30.4	.0	2.0	.0
Nov	59.1	36.3	47.7	86	1952	16	56.4	1999	6	1976	29	41.4	1976	520	1	.0	.0	23.3	.4	12.2	.0
Dec	48.4	26.9	37.7	80	1948	14	44.1	1984	-14+	1989	23	24.2	1983	847	0	.0	.0	15.4	3.1	22.6	.5
Ann	70.1	46.7	58.4	112	Jul 1954	13	86.4	Jul 1980	-20	Jan 1984	19	22.9	Jan 1979	4049	1679	7.0	62.5	305.0	12.5	96.9	1.7

+ 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/normals/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: PRYOR, OK

COOP ID: 347309

Climate Division: OK 3

NWS Call Sign:

Elevation: 625 Feet Lat: 36°18N

Lon: 95°19W

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	1.97	1.82	3.00	2001	29	5.20	1975	.00	1986	5.2	3.5	1.3	.6	.14	.35	.66	.95	1.25	1.58	1.96	2.43	3.05	4.07	5.05
Feb	2.09	1.74	5.24	1985	23	6.47	1985	.34	1982	5.2	3.9	1.3	.7	.33	.51	.81	1.10	1.40	1.72	2.09	2.55	3.15	4.14	5.08
Mar	4.01	3.76	3.14	1998	8	10.73	1973	.22	1971	7.6	5.6	2.9	1.2	.71	1.07	1.65	2.20	2.76	3.37	4.06	4.89	6.01	7.80	9.52
Apr	4.17	3.73	3.71	1999	26	10.22	1999	.03	1989	8.2	6.5	3.2	1.3	.63	.98	1.59	2.16	2.76	3.42	4.17	5.09	6.33	8.34	10.27
May	5.10	5.27	4.22	1957	25	8.71	2000	1.86	1972	10.0	7.3	4.1	1.4	2.08	2.55	3.21	3.75	4.27	4.79	5.35	5.99	6.82	8.07	9.21
Jun	4.70	4.27	4.00	1948	22	10.15	2000	.79	1988	8.6	6.6	3.4	1.4	1.56	2.00	2.66	3.21	3.75	4.30	4.90	5.61	6.51	7.92	9.22
Jul	3.27	3.35	5.20	1961	15	10.27	1994	.25	1978	5.4	4.4	2.1	1.0	.48	.75	1.22	1.68	2.15	2.67	3.26	4.00	4.98	6.58	8.13
Aug	3.21	2.79	3.47	1994	26	10.38	1997	.00	2000	5.8	4.6	2.2	1.1	.31	.68	1.21	1.68	2.16	2.67	3.26	3.97	4.91	6.44	7.89
Sep	5.10	4.50	8.56	1975	19	12.52	1986	.00	1978	8.0	5.8	2.9	1.6	.44	1.00	1.83	2.58	3.35	4.18	5.13	6.29	7.85	10.36	12.77
Oct	3.90	3.02	6.20	1998	5	10.56	1998	.61	1995	7.0	5.0	2.5	1.3	.72	1.06	1.63	2.16	2.70	3.28	3.95	4.75	5.81	7.53	9.16
Nov	4.27	4.00	3.89	1987	25	7.99	1992	.12	1989	6.7	5.6	2.6	1.5	.79	1.17	1.80	2.38	2.97	3.60	4.33	5.20	6.37	8.24	10.02
Dec	2.58	2.21	2.75	1965	24	6.75	1984	.26	1996	6.0	4.3	2.0	.8	.28	.48	.84	1.20	1.58	2.01	2.52	3.15	4.00	5.42	6.80
Ann	44.37	42.85	8.56	Sep 1975	19	12.52	Sep 1986	.00+	Aug 2000	83.7	63.1	30.5	13.9	31.20	33.74	36.99	39.47	41.67	43.80	46.00	48.44	51.40	55.69	59.41

+ 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

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Station: PRYOR, OK

COOP ID: 347309

Climate Division: OK 3

NWS Call Sign:

Elevation: 625 Feet

Lat: 36°18N

Lon: 95°19W

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	3.1	2.0	#	#	7.0	1997	9	10.0	1988	10	1988	9	2	1988	1.4	.8	.4	.2	.0	3.1	1.7	.6	.1
Feb	1.7	.5	#	#	4.5	1996	2	6.1	1986	5+	1996	4	1	1996	1.2	.7	.1	.0	.0	2.0	.7	.2	.0
Mar	1.2	.0	#	0	10.0	1989	6	10.1	1989	10	1989	6	1	1994	.3	.2	.1	.1	@	.4	.2	.2	@
Apr	#	.0	#	0	#	1994	6	#	1994	#	1994	6	#	1994	.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	#+	1995	27	#+	1995	.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	#	1992	10	#	1992	.0	.0	.0	.0	.0	.0	.0	.0	.0
Oct	#	.0	#	0	#	1993	30	#	1993	#	1993	30	#	1993	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nov	.6	.0	#	0	5.0	1971	23	5.0+	1972	4	1971	23	#+	2000	.3	.3	.1	@	.0	.3	@	.0	.0
Dec	1.6	.0	#	#	8.0	2000	13	8.0	2000	8	2000	15	2	2000	1.1	.6	.2	.1	.0	2.4	.6	.2	.0
Ann	8.2	2.5	N/A	N/A	10.0	Mar 1989	6	10.1	Mar 1989	10+	Mar 1989	6	2+	Dec 2000	4.3	2.6	.9	.4	@	8.2	3.2	1.2	.1

+ 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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Elevation: 625 Feet

Lat: 36° 18N

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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	5/06	5/01	4/28	4/25	4/22	4/19	4/17	4/13	4/08
32	4/19	4/14	4/11	4/08	4/06	4/03	3/31	3/28	3/24
28	4/15	4/09	4/04	3/31	3/27	3/24	3/20	3/15	3/09
24	4/02	3/27	3/22	3/18	3/15	3/11	3/07	3/03	2/24
20	3/21	3/14	3/08	3/04	2/28	2/23	2/19	2/13	2/06
16	3/09	3/02	2/25	2/20	2/16	2/12	2/07	2/02	1/25
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	9/25	10/01	10/05	10/08	10/11	10/14	10/18	10/22	10/27
32	10/12	10/17	10/20	10/24	10/26	10/29	11/01	11/05	11/10
28	10/20	10/26	10/30	11/03	11/07	11/10	11/14	11/18	11/25
24	10/30	11/06	11/11	11/15	11/19	11/23	11/27	12/02	12/08
20	11/09	11/16	11/21	11/25	11/30	12/04	12/08	12/13	12/20
16	11/12	11/24	12/02	12/09	12/15	12/22	12/29	1/06	1/17
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	196	187	181	176	171	166	161	155	146
32	220	214	210	206	203	199	196	192	186
28	252	242	235	229	223	218	212	205	195
24	276	266	260	254	249	243	238	231	222
20	302	293	286	280	274	269	263	256	246
16	335	318	310	303	297	291	284	277	267

* 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

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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	961	712	492	223	71	3	0	2	34	184	520	847	4049
60	806	580	346	118	24	0	0	0	10	88	381	695	3048
57	714	503	264	71	10	0	0	0	4	50	302	608	2526
55	654	452	216	48	6	0	0	0	1	32	255	551	2215
50	511	335	120	13	0	0	0	0	0	8	156	413	1556
32	126	66	4	0	0	0	0	0	0	0	8	84	288

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	188	278	535	789	1080	1301	1510	1484	1186	875	479	260	9965
55	3	20	35	146	372	611	797	771	498	194	36	13	3496
57	1	15	21	110	315	551	735	709	440	150	23	9	3079
60	0	8	10	66	236	461	642	616	356	95	12	3	2505
65	0	0	0	21	128	314	487	462	230	36	1	0	1679
70	0	0	0	4	54	181	332	315	132	9	0	0	1027

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	65	142	323	554	840	1067	1266	1234	947	626	273	99	65	207	530	1084	1924	2991	4257	5491	6438	7064	7337	7436
45	30	78	210	412	685	917	1111	1079	797	476	174	49	30	108	318	730	1415	2332	3443	4522	5319	5795	5969	6018
50	7	38	121	279	530	767	956	924	648	334	98	19	7	45	166	445	975	1742	2698	3622	4270	4604	4702	4721
55	2	14	58	167	378	617	801	769	499	210	46	7	2	16	74	241	619	1236	2037	2806	3305	3515	3561	3568
60	0	2	25	87	240	467	646	614	359	111	16	1	0	2	27	114	354	821	1467	2081	2440	2551	2567	2568
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	53	111	217	356	546	731	853	824	628	409	183	77	53	164	381	737	1283	2014	2867	3691	4319	4728	4911	4988

(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