

Climatology of the United States

No. 20

1971-2000

Station: JOHNSTON 4 SW, SC

COOP ID: 384607

Climate Division: SC 5

NWS Call Sign:

Elevation: 620 Feet Lat: 33°47N Lon: 81°51W

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	53.8	28.8	41.3	79	1975	31	53.2	1974	-2+	1985	22	30.6	1977	736	0	.0	.0	19.7	.7	17.1	.1
Feb	58.3	30.3	44.3	83+	1996	27	52.2	1990	8	1958	18	35.8	1978	580	0	.0	.0	21.0	.4	13.1	.0
Mar	66.2	37.3	51.8	88	1974	11	59.5	1997	1	1980	3	44.8	1971	417	6	.0	.0	29.1	.1	6.7	.0
Apr	74.5	44.3	59.4	93	1986	28	64.5	1999	26+	2000	6	54.7	1983	192	24	.0	.6	29.8	.0	1.0	.0
May	82.1	53.6	67.9	100+	2000	28	73.9	2000	36	1989	8	64.0	1971	57	145	.1	5.0	31.0	.0	.0	.0
Jun	88.5	61.7	75.1	106	1958	15	79.7	1998	46+	2000	8	70.4	1979	3	305	.9	13.6	30.0	.0	.0	.0
Jul	91.8	66.0	78.9	107	1980	14	84.8	1993	53	1979	8	75.6	1971	0	431	3.0	21.2	31.0	.0	.0	.0
Aug	89.7	64.8	77.3	107	1999	15	82.2	1999	46	1969	30	74.1	1981	0	380	1.6	16.7	31.0	.0	.0	.0
Sep	84.4	59.6	72.0	105	1999	7	76.7	1980	36	1967	30	69.3	1974	7	217	.1	7.9	30.0	.0	.0	.0
Oct	75.1	47.8	61.5	93	1986	6	67.7	1984	24+	2001	28	55.1	1987	163	52	.0	.2	31.0	.0	.8	.0
Nov	66.1	39.4	52.8	89	1961	3	60.9	1985	15+	1970	25	46.0	1976	375	7	.0	.0	28.6	.0	6.6	.0
Dec	56.6	31.4	44.0	81	1998	7	51.7	1971	3	1962	13	36.0	1989	650	0	.0	.0	22.5	.2	15.4	.0
Ann	73.9	47.1	60.5	107+	Aug 1999	15	84.8	Jul 1993	-2+	Jan 1985	22	30.6	Jan 1977	3180	1567	5.7	65.2	334.7	1.4	60.7	.1

+ 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: 1957-2001

(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: JOHNSTON 4 SW, SC

COOP ID: 384607

Climate Division: SC 5

NWS Call Sign:

Elevation: 620 Feet Lat: 33°47N

Lon: 81°51W

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	5.12	5.03	3.50	1979	21	9.14	1974	1.11	1981	12.3	7.7	3.7	1.5	2.28	2.73	3.37	3.88	4.36	4.85	5.37	5.96	6.71	7.85	8.87
Feb	4.22	4.20	3.35	1995	11	8.48	1985	1.18	1978	9.9	6.6	3.1	1.3	1.27	1.67	2.27	2.79	3.29	3.81	4.38	5.06	5.93	7.29	8.55
Mar	4.88	4.73	3.03	1977	13	12.09	1980	.76	1985	10.4	7.1	3.6	1.5	1.39	1.86	2.55	3.16	3.75	4.37	5.06	5.86	6.91	8.55	10.08
Apr	3.38	2.75	3.70	1961	1	8.09	1998	.55	1986	8.1	5.4	2.1	.8	.71	1.02	1.52	1.97	2.42	2.91	3.45	4.11	4.97	6.35	7.65
May	3.45	3.32	3.01	1967	23	7.34	1979	.48	2000	9.1	6.1	2.4	.9	.90	1.22	1.72	2.17	2.60	3.06	3.57	4.17	4.96	6.20	7.36
Jun	4.54	4.21	5.13	1994	28	13.93	1973	.20	1993	9.3	6.5	2.8	1.3	.83	1.24	1.90	2.52	3.15	3.83	4.60	5.54	6.78	8.78	10.69
Jul	4.29	3.73	3.44	1984	19	12.48	1975	.16	1980	10.3	6.7	2.7	1.3	.81	1.19	1.82	2.40	2.99	3.63	4.36	5.23	6.39	8.26	10.03
Aug	4.97	5.04	6.35	1964	30	10.03	1992	1.70	1976	10.6	6.7	3.2	1.4	1.47	1.95	2.65	3.27	3.86	4.48	5.16	5.97	7.01	8.64	10.15
Sep	3.96	4.05	5.36	1998	4	10.23	2000	.15	1985	9.1	5.4	2.3	1.2	.49	.80	1.36	1.91	2.50	3.15	3.91	4.84	6.11	8.20	10.23
Oct	3.16	2.64	5.03	1985	2	12.18	1990	.09	2000	7.4	4.1	1.9	.9	.18	.37	.75	1.18	1.67	2.24	2.93	3.82	5.06	7.18	9.29
Nov	3.17	2.60	2.85	1983	25	6.74	1976	.76	1981	9.4	5.1	2.3	.9	.86	1.16	1.62	2.02	2.41	2.82	3.28	3.81	4.51	5.61	6.64
Dec	3.51	3.12	2.79	1964	26	8.06	1981	.68	1988	11.5	6.4	2.5	.9	1.03	1.36	1.87	2.30	2.72	3.16	3.65	4.22	4.96	6.11	7.19
Ann	48.65	48.86	6.35	Aug 1964	30	13.93	Jun 1973	.09	Oct 2000	117.4	73.8	32.6	13.9	37.81	39.98	42.72	44.78	46.58	48.32	50.09	52.04	54.38	57.74	60.62

+ 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: 1957-2001

(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: JOHNSTON 4 SW, SC

COOP ID: 384607

Climate Division: SC 5

NWS Call Sign:

Elevation: 620 Feet

Lat: 33°47N

Lon: 81°51W

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	.4	#	#	0	6.1	2000	25	6.1	2000	6	2000	25	#	2000	.2	.2	.1	.1	.0	.1	.1	.1	.0
Feb	1.2	.0	#	0	14.0	1973	10	14.0	1973	1	1984	6	#+	1999	.3	.2	.2	.1	.1	.1	.0	.0	.0
Mar	.3	.0	#	0	3.8	1993	14	3.8	1993	2	1980	3	#+	1980	.1	.1	.1	.0	.0	@	.0	.0	.0
Apr	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.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	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nov	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Dec	.2	.0	#	0	3.8	1993	23	3.8	1993	#	2000	3	#	2000	.1	.1	.1	.0	.0	.0	.0	.0	.0
Ann	2.1	#	N/A	N/A	14.0	Feb 1973	10	14.0	Feb 1973	6	Jan 2000	25	#+	Dec 2000	.7	.6	.5	.2	.1	.2	.1	.1	.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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Climate Division: SC 5

NWS Call Sign:

Elevation: 620 Feet

Lat: 33° 47N

Lon: 81° 51W

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	4/26	4/21	4/17	4/14	4/10	4/07	4/04	3/31	3/25
32	4/16	4/10	4/06	4/03	3/30	3/27	3/23	3/19	3/13
28	4/05	3/29	3/24	3/19	3/15	3/11	3/07	3/02	2/23
24	3/12	3/06	3/02	2/27	2/24	2/20	2/17	2/13	2/07
20	3/12	3/02	2/23	2/18	2/12	2/07	1/31	1/24	1/13
16	3/02	2/19	2/10	2/02	1/25	1/16	1/05	0/00	0/00
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	10/09	10/14	10/17	10/20	10/23	10/26	10/29	11/01	11/06
32	10/15	10/22	10/26	10/30	11/03	11/06	11/10	11/14	11/21
28	11/02	11/08	11/12	11/16	11/19	11/22	11/26	11/30	12/06
24	11/13	11/22	11/28	12/03	12/08	12/13	12/18	12/24	1/01
20	11/27	12/07	12/15	12/21	12/27	1/02	1/08	1/16	1/28
16	12/09	12/20	12/28	1/05	1/12	1/20	2/01	0/00	0/00
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	217	209	204	199	195	191	186	181	173
32	241	233	227	221	217	212	207	200	192
28	274	265	259	253	248	243	237	231	222
24	313	304	298	292	287	281	276	269	260
20	>365	343	327	318	310	304	297	289	279
16	>365	>365	>365	>365	>365	334	324	314	304

* 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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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	736	580	417	192	57	3	0	0	7	163	375	650	3180
60	593	448	279	94	17	0	0	0	1	81	245	501	2259
57	507	370	208	53	7	0	0	0	0	47	179	414	1785
55	452	321	168	33	3	0	0	0	0	31	141	359	1508
50	327	212	87	8	0	0	0	0	0	9	68	236	947
32	52	17	1	0	0	0	0	0	0	0	0	17	87

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	340	360	613	822	1111	1292	1454	1403	1200	912	622	390	10519
55	27	20	67	165	401	602	741	690	510	230	73	19	3545
57	19	14	45	125	343	542	679	628	450	184	51	12	3092
60	12	8	23	76	260	452	586	535	361	125	27	7	2472
65	0	0	6	24	145	305	431	380	217	52	7	0	1567
70	0	0	0	4	65	173	281	229	97	15	0	0	864

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	176	233	436	639	914	1099	1246	1194	995	693	421	223	176	409	845	1484	2398	3497	4743	5937	6932	7625	8046	8269
45	95	141	302	490	759	949	1091	1039	845	539	286	130	95	236	538	1028	1787	2736	3827	4866	5711	6250	6536	6666
50	43	71	184	352	604	799	936	884	695	389	177	64	43	114	298	650	1254	2053	2989	3873	4568	4957	5134	5198
55	15	31	96	221	452	649	781	729	545	250	92	32	15	46	142	363	815	1464	2245	2974	3519	3769	3861	3893
60	0	8	38	120	304	499	626	574	397	137	42	6	0	8	46	166	470	969	1595	2169	2566	2703	2745	2751
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	112	157	280	414	599	741	835	811	663	450	272	142	112	269	549	963	1562	2303	3138	3949	4612	5062	5334	5476

(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