

Climatology of the United States

No. 20

1971-2000

Station: LIVINGSTON, AL

COOP ID: 014798

Climate Division: AL 6

NWS Call Sign:

Elevation: 128 Feet Lat: 32° 35N Lon: 88° 11W

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	55.5	32.3	43.9	83+	1957	31	53.6	1974	-3	1982	11	33.9	1977	654	0	.0	.0	22.3	.5	16.9	.1
Feb	60.7	34.8	47.8	86	1962	13	55.6	1990	2	1963	13	39.4	1978	483	0	.0	.0	23.4	.4	12.1	.0
Mar	68.6	41.5	55.1	89+	1995	24	60.8	1997	16	1980	2	49.6	1983	324	14	.0	.0	29.9	@	4.9	.0
Apr	75.3	47.8	61.6	95	1987	22	69.0	1999	27	1973	11	58.0	1983	138	35	.0	.3	29.9	.0	.9	.0
May	82.7	57.3	70.0	97	1977	31	74.6	2000	36	1976	4	64.1	1976	30	185	.0	4.0	31.0	.0	.0	.0
Jun	89.1	65.1	77.1	105	1969	30	82.0	1998	42	1972	1	71.5	1983	1	363	.7	16.7	30.0	.0	.0	.0
Jul	91.8	68.8	80.3	106	1977	9	83.7	1986	56	1972	8	77.2	1975	0	475	1.4	23.9	31.0	.0	.0	.0
Aug	91.1	67.7	79.4	105+	2000	29	84.3	1995	52	1983	17	76.4	1982	0	446	1.0	23.2	31.0	.0	.0	.0
Sep	86.5	61.7	74.1	103+	1980	16	78.5	1972	35+	1983	23	69.3	1982	9	282	.2	12.1	30.0	.0	.0	.0
Oct	76.9	48.7	62.8	99	1954	6	69.5	1984	24	1952	30	57.2	1976	141	73	.0	1.2	30.9	.0	1.0	.0
Nov	67.6	39.6	53.6	88+	2000	4	61.3	1985	13+	1976	30	46.0	1976	357	14	.0	.0	29.0	.0	7.6	.0
Dec	58.7	34.5	46.6	88	1971	13	54.6	1984	2	1989	23	38.4	1989	571	1	.0	.0	24.8	.3	14.9	.0
Ann	75.4	50.0	62.7	106	Jul 1977	9	84.3	Aug 1995	-3	Jan 1982	11	33.9	Jan 1977	2708	1888	3.3	81.4	343.2	1.2	58.3	.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: 1948-2001

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

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No. 20 1971-2000

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

Station: LIVINGSTON, AL

COOP ID: 014798

Climate Division: AL 6

NWS Call Sign:

Elevation: 128 Feet Lat: 32°35N

Lon: 88°11W

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	5.57	5.28	6.10	1987	18	12.12	1998	1.57	1981	8.9	7.5	3.5	1.8	1.90	2.43	3.20	3.85	4.47	5.11	5.81	6.63	7.68	9.30	10.80
Feb	4.76	3.90	4.59	1990	16	11.00	1990	1.10	2000	6.7	5.8	3.4	1.9	1.51	1.96	2.63	3.20	3.75	4.32	4.95	5.69	6.64	8.11	9.48
Mar	6.31	5.32	6.00	1951	28	15.35	1980	2.28	1988	8.0	6.8	4.1	2.7	1.91	2.51	3.40	4.17	4.92	5.70	6.56	7.57	8.87	10.90	12.79
Apr	5.26	4.39	6.42	1974	13	14.87	1979	.77	1987	6.4	5.4	3.3	1.7	1.11	1.60	2.37	3.07	3.77	4.53	5.38	6.39	7.74	9.88	11.91
May	4.50	4.06	4.99	1986	19	12.40	1991	.38	1998	6.8	5.7	3.1	1.5	.71	1.10	1.75	2.37	3.01	3.71	4.51	5.49	6.80	8.92	10.96
Jun	4.17	4.04	3.64	1974	6	8.10	1989	.25	1988	7.6	6.4	3.2	1.2	1.11	1.51	2.11	2.64	3.16	3.71	4.32	5.03	5.97	7.44	8.82
Jul	5.23	5.42	3.15	1970	30	10.39	1989	.59	1983	8.5	7.2	3.7	1.8	1.59	2.09	2.83	3.47	4.09	4.73	5.44	6.27	7.35	9.02	10.58
Aug	3.32	2.94	3.10	1987	19	7.77	1992	1.03	1980	6.2	4.9	2.3	1.0	1.13	1.44	1.90	2.29	2.66	3.04	3.46	3.95	4.58	5.55	6.44
Sep	3.33	2.80	4.33	1949	5	8.61	1979	.42	1984	5.9	4.6	2.1	1.1	.81	1.12	1.61	2.04	2.47	2.92	3.43	4.03	4.82	6.07	7.24
Oct	3.60	2.85	5.00	1985	1	14.67	1985	.02	1987	4.1	3.3	2.1	1.2	.22	.43	.87	1.36	1.92	2.56	3.35	4.35	5.75	8.14	10.51
Nov	4.45	3.85	4.00	1986	20	10.86	1986	.79	1981	6.1	5.1	2.8	1.6	1.24	1.66	2.30	2.86	3.41	3.98	4.61	5.36	6.32	7.85	9.26
Dec	5.04	4.53	4.78	1968	22	10.38	1973	.72	1980	7.8	6.7	3.6	1.5	1.69	2.17	2.87	3.46	4.03	4.62	5.26	6.01	6.98	8.47	9.85
Ann	55.54	53.72	6.42	Apr 1974	13	15.35	Mar 1980	.02	Oct 1987	83.0	69.4	37.2	19.0	38.55	41.81	45.99	49.19	52.03	54.78	57.63	60.79	64.63	70.21	75.05

+ 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

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

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Station: LIVINGSTON, AL

COOP ID: 014798

Climate Division: AL 6

NWS Call Sign:

Elevation: 128 Feet

Lat: 32°35N

Lon: 88°11W

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	0	0	4.5	1977	31	8.0	1977	0	0	0	0	0	.1	.1	.1	.0	.0	.0	.0	.0	.0
Feb	#	.0	#	0	#	1984	28	#	1984	#	1996	2	#	1996	.0	.0	.0	.0	.0	.0	.0	.0	.0
Mar	.3	.0	0	0	6.0	1993	13	6.0	1993	0	0	0	0	0	@	@	@	@	.0	.0	.0	.0	.0
Apr	.1	.0	0	0	3.0	1987	3	3.0	1987	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	#	.0	0	0	#	1989	18	#+	1989	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Ann	.8	.0	N/A	N/A	6.0	Mar 1993	13	8.0	Jan 1977	#	Feb 1996	2	#	Feb 1996	.1	.1	.1	@	.0	.0	.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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Climate Division: AL 6

NWS Call Sign:

Elevation: 128 Feet

Lat: 32°35N

Lon: 88°11W

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	4/25	4/20	4/17	4/13	4/10	4/08	4/04	4/01	3/27
32	4/13	4/09	4/05	4/02	3/31	3/28	3/25	3/21	3/17
28	3/27	3/21	3/16	3/12	3/09	3/05	3/01	2/25	2/19
24	3/16	3/07	3/01	2/24	2/19	2/14	2/08	2/02	1/24
20	3/06	2/26	2/20	2/15	2/11	2/06	2/01	1/26	1/16
16	2/17	2/09	2/02	1/27	1/21	1/14	1/03	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	10/03	10/08	10/12	10/16	10/19	10/22	10/25	10/29	11/04
32	10/13	10/19	10/24	10/28	10/31	11/04	11/08	11/13	11/19
28	11/03	11/08	11/12	11/15	11/18	11/21	11/25	11/28	12/04
24	11/07	11/16	11/22	11/28	12/03	12/09	12/14	12/21	12/30
20	11/18	12/01	12/10	12/18	12/26	1/02	1/11	1/21	2/05
16	12/03	12/13	12/22	12/29	1/05	1/14	1/27	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	212	205	199	195	190	186	182	176	169
32	235	228	223	218	214	210	206	201	193
28	277	269	263	258	254	249	244	239	231
24	323	311	302	294	287	280	272	263	250
20	>365	354	333	321	312	303	294	284	271
16	>365	>365	>365	>365	>365	336	325	315	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	654	483	324	138	30	1	0	0	9	141	357	571	2708
60	513	351	200	56	6	0	0	0	1	67	234	427	1855
57	429	276	143	27	2	0	0	0	0	38	174	344	1433
55	376	230	110	15	0	0	0	0	0	24	139	293	1187
50	259	135	47	2	0	0	0	0	0	7	70	186	706
32	28	3	0	0	0	0	0	0	0	0	0	10	41

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	396	444	714	887	1178	1353	1498	1469	1263	955	648	463	11268
55	31	27	110	211	465	663	785	756	573	267	97	34	4019
57	22	17	81	163	404	603	723	694	513	218	71	23	3532
60	13	8	46	103	316	513	630	601	424	154	41	12	2861
65	0	0	14	35	185	363	475	446	282	73	14	1	1888
70	0	0	3	7	88	221	320	293	159	26	3	0	1120

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	210	290	513	683	963	1139	1271	1247	1046	723	446	270	210	500	1013	1696	2659	3798	5069	6316	7362	8085	8531	8801
45	122	184	370	534	808	989	1116	1092	896	568	308	164	122	306	676	1210	2018	3007	4123	5215	6111	6679	6987	7151
50	61	102	244	388	653	839	961	937	746	417	196	95	61	163	407	795	1448	2287	3248	4185	4931	5348	5544	5639
55	29	53	140	249	498	689	806	782	596	277	109	47	29	82	222	471	969	1658	2464	3246	3842	4119	4228	4275
60	5	20	65	140	344	539	651	627	446	159	46	19	5	25	90	230	574	1113	1764	2391	2837	2996	3042	3061
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	142	203	339	452	644	775	864	841	704	477	304	182	142	345	684	1136	1780	2555	3419	4260	4964	5441	5745	5927

(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