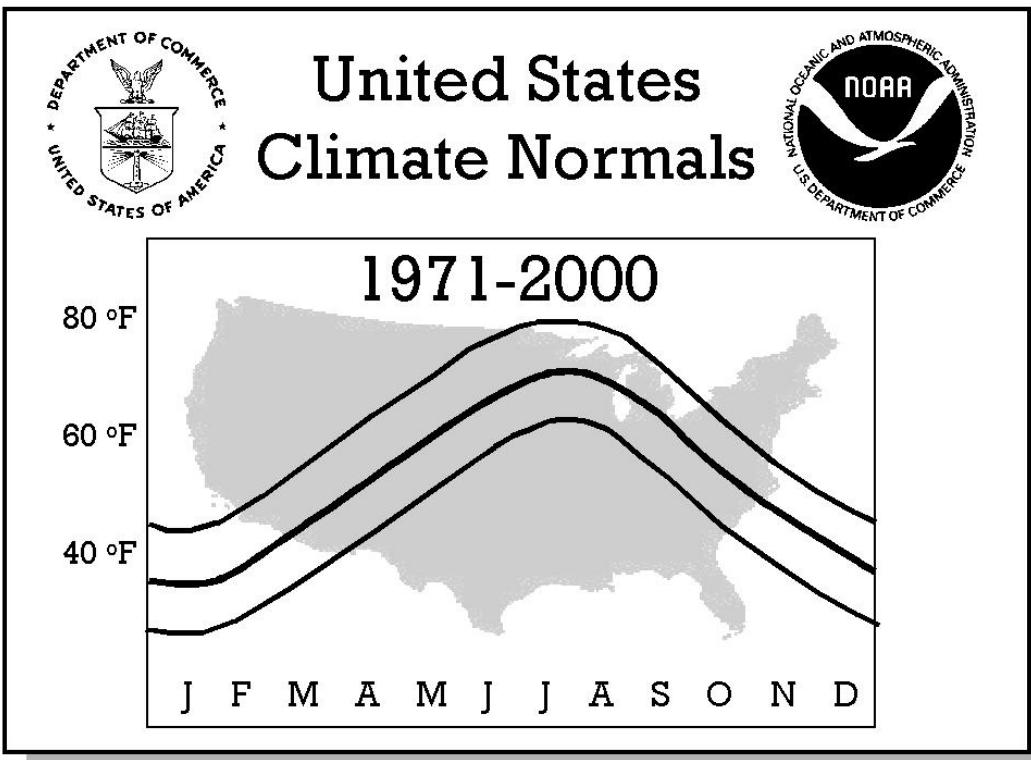


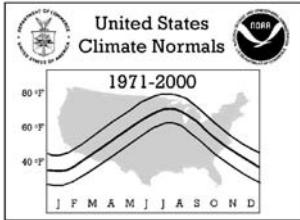


State, Regional, And National Monthly Cooling Degree Days

Weighted By Population (2000 Census)
1971 – 2000 (and previous normals periods)



NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE
NATIONAL CLIMATIC DATA CENTER
ASHEVILLE, NC



Population-Weighted Monthly Normals, 1971-2000 (and previous periods)

HISTORICAL CLIMATOGRAPHY SERIES 5-2

Cooling Degree Days

Page 2

Historical Climatology Series: Normals (Present Series Highlighted):

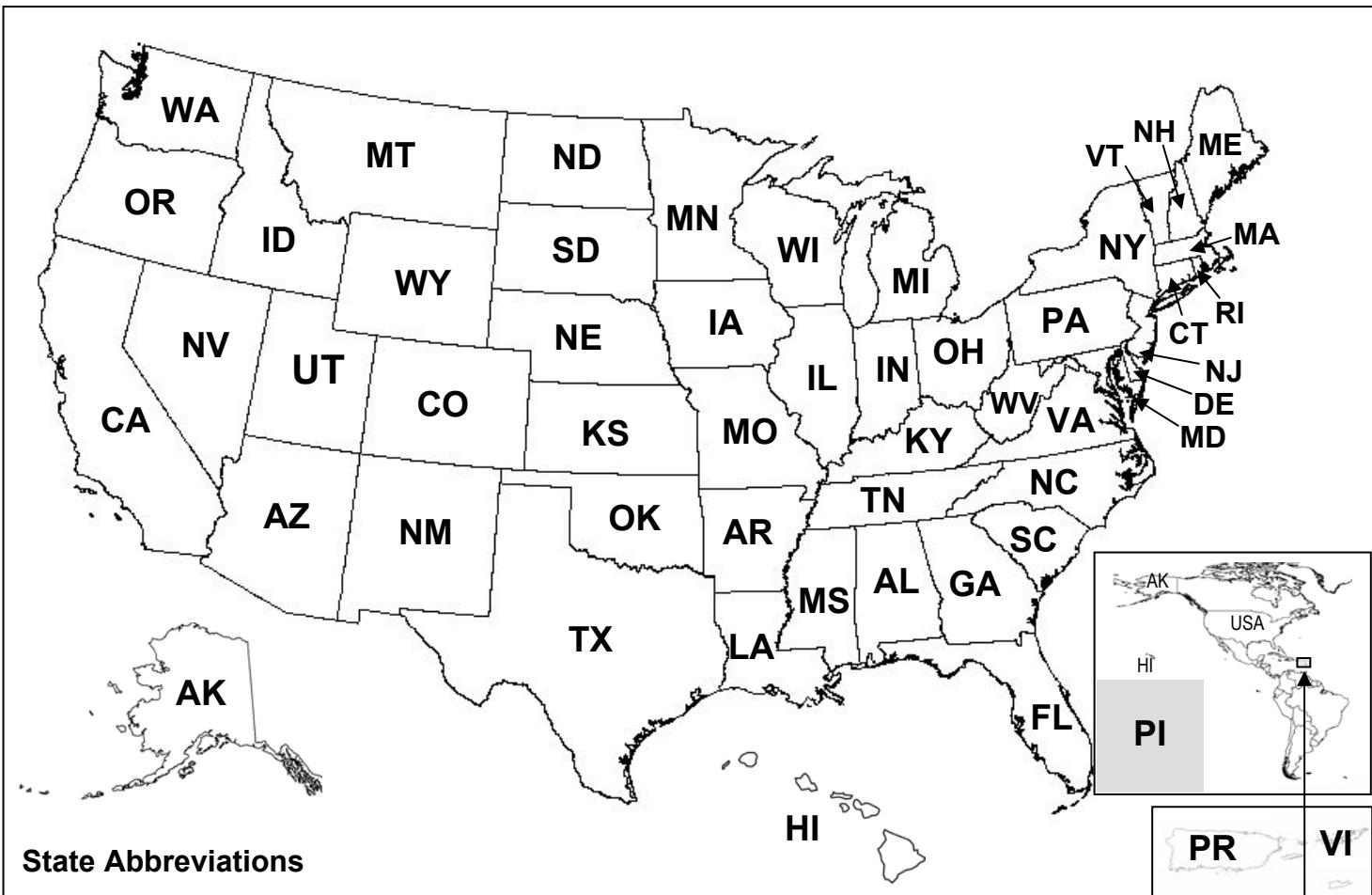
HCS 4-1: Area-Weighted Temperature

HCS 5-1: Population-Weighted Heating Degree Days

HCS 4-2: Area-Weighted Precipitation

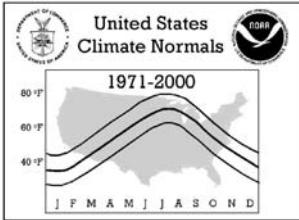
HCS 5-2: Population-Weighted Cooling Degree Days

HCS 4-3: Area-Weighted Seasonal Temperature and Precipitation



State Identification Codes (Code/State Name/Abbreviation)

01 Alabama	AL	16 Louisiana	LA	31 North Carolina	NC	46 West Virginia	WV
02 Arizona	AZ	17 Maine	ME	32 North Dakota	ND	47 Wisconsin	WI
03 Arkansas	AR	18 Maryland	MD	33 Ohio	OH	48 Wyoming	WY
04 California	CA	19 Massachusetts	MA	34 Oklahoma	OK	50 Alaska	AK
05 Colorado	CO	20 Michigan	MI	35 Oregon	OR	51 Hawaii	HI
06 Connecticut	CT	21 Minnesota	MN	36 Pennsylvania	PA	66 Puerto Rico	PR
07 Delaware	DE	22 Mississippi	MS	37 Rhode Island	RI	67 Virgin Islands	VI
08 Florida	FL	23 Missouri	MO	38 South Carolina	SC	91 Pacific Islands	PI
09 Georgia	GA	24 Montana	MT	39 South Dakota	SD		
10 Idaho	ID	25 Nebraska	NE	40 Tennessee	TN		
11 Illinois	IL	26 Nevada	NV	41 Texas	TX		
12 Indiana	IN	27 New Hampshire	NH	42 Utah	UT		
13 Iowa	IA	28 New Jersey	NJ	43 Vermont	VT		
14 Kansas	KS	29 New Mexico	NM	44 Virginia	VA		
15 Kentucky	KY	30 New York	NY	45 Washington	WA		



Population-Weighted Monthly Normals, 1971-2000 (and previous periods)

HISTORICAL CLIMATOGRAPHY SERIES 5-2

Cooling Degree Days

NOTES

Page 3

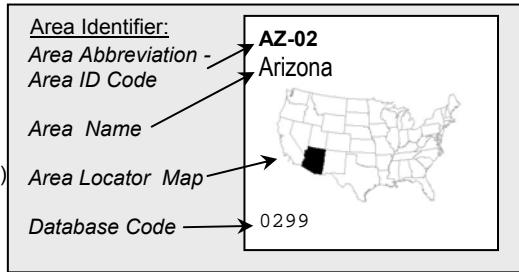
Product Description:

*Historical Climatology Series (HCS) 4-1,2,3 and 5-1,2 include normals and standard deviations for the five 30-year normals periods and the 70-year period between 1931-2000 for U.S. States, regions, and the conterminous United States. Statistics are based on weighted divisional data from *Climatology of the United States, Number 85* for U.S. States, and in turn from these state values for regional and national computations. Two sets of regions are included: 1.) U.S. Census Bureau regions, excluding Hawaii and Alaska from the Western Region; and 2.) NCDC regions used for climate monitoring (Karl and Koss, 1984). HCS 4-1,2, and 3 provide area-weighted temperature and precipitation statistics, while HCS 5-1,2 provide population-weighted degree day statistics. Population weights are based on the 2000 U.S. Census. Both area and population weights are provided on pages 4 and 5.*

The normals and standard deviations include values for each of the 12 calendar months and an annual value, plus 4 seasonal averages in HCS 4-3. The data are presented by abbreviation/name and number for a state, region, or the conterminous U.S. State data for the conterminous United States are presented alphabetically, followed by data for Alaska, Hawaii, Puerto Rico, the Virgin Islands, and Pacific trust territories, followed by regional/national data. Data elements include time of observation-corrected mean temperature ($^{\circ}$ F), precipitation (inches), and heating and cooling degree days (base 65° F).

Abbreviations:

AVERAGE = Mean of Element for all Months (or Annual Values) for the Given Period of Record.
STD DEV = Standard Deviation for all Months (or Annual Values) for the Given Period of Record.
31-00 = 1931 through 2000 Long-Term Period of Record. **WIN** = Winter Season (Dec-Feb)
31-60 = 1931 through 1960 Normal Period of Record. **SPR** = Spring Season (Mar-May)
41-70 = 1941 through 1970 Normal Period of Record. **SUM** = Summer Season (Jun-Aug)
51-80 = 1951 through 1980 Normal Period of Record. **AUT** = Autumn (Fall) Season (Sep-Nov)
61-90 = 1961 through 1990 Normal Period of Record. **Temp** = Temperature (deg F)
71-00 = 1971 through 2000 Normal Period of Record. **Prcp** = Precipitation (inches)



Computational Procedures:

State, regional, and national values are derived from divisional data. Monthly divisional average temperature and total precipitation data are derived by giving equal weight to all stations reporting both temperature and precipitation within an area, except for Hawaii, where any available stations (including precipitation-only stations) are used. The number of reporting stations within a division varies from month-to-month and year-to-year. Station data are *not* adjusted for inhomogeneities.

Temperature (and, resultantly, degree day) values are corrected for time of observation in the conterminous U.S. In the conterminous U.S., observers at National Weather Service cooperative stations often take one observation per day, and the ending time of the climatological day can vary from station-to-station as well as year-to-year. Differences of the 24-hour period over which maximum and minimum temperature (as well as average temperature) is reported impact the calculated monthly mean temperature. These potential biases are rectified by adjusting for varying observation times using a model (Karl et al., 1986) to adjust the climate division averages so that stations end the climatological day at midnight (*i.e.*, climatological/calendar day coincide).

Monthly divisional temperature normals and 70-year averages are computed by adding the yearly values for a given month and then dividing by the number of years in the period. The annual normal and 70-year average are computed by adding all of the monthly normal or long-term average values and then dividing by 12. Precipitation normals and long-term means are computed in a similar manner, except for the annual, which is the sum of monthly values.

Sequential monthly degree days are derived using a modification of the Rational Conversion Formulae developed by Thom (1954, 1966). This technique utilizes the historical monthly average temperature and its corresponding standard deviation (over the standardizing period 1931-2000) to compute degree days. The modified Thom technique derives the monthly degree days using a spline fit of the monthly mean temperature and standard deviations to ameliorate the month-to-month step function that is inherent with only a single monthly input. The procedure for the computation of the divisional degree day normals involves i.) Calculation of the standard deviations of the temperatures for each of the 12 calendar months over the standardizing period; ii.) Use of the modified Thom technique to compute the heating and cooling degree days for every month and year in the period 1931-2000; and iii.) Calculation of the 30-year normals and 70-year (1931-2000) long-term averages of the degree days using the procedure discussed above. Standard deviations are computed using the sum and sum square values from the corresponding period of month-year sequential values. For annual temperature, the sum and sum square of the annual values are used, while for annual precipitation, the sum and sum square of monthly values are used.

Database Codes:

Database codes include four digits. The first two digits match the state identification codes listed on page 2 for U.S. States/Territories, or are assigned 56 for NCDC regions, 58 for U.S. Census regions, and 59 for the conterminous U.S. The second two digits are assigned 99 for U.S. States/Territories and the conterminous U.S., and the following values for regions:

U.S. Census Regions: 01=New England, 02=Middle Atlantic, 03=East North Central, 04=West North Central, 05=South Atlantic, 06=East South Central, 07=West South Central, 08=Mountain, 09=Pacific.

NCDC Regions: 01=Northeast, 02=East North Central, 03=Central, 04=Southeast, 05=West North Central, 06=South, 07=Southwest, 08=Northwest, 09=West.

References:

Karl, T.R., C.N. Williams, Jr., P.J. Young, and W.M. Wendland, 1986: "A model to estimate the time of observation bias associated with monthly mean maximum, minimum, and mean temperatures for the United States," *Journal of Climate and Applied Meteorology*, Vol. 25, pp. 145-160.

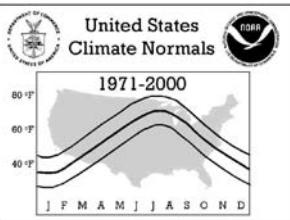
Karl, T.R. and W.J. Koss, 1984: *Historical Climatology Series 4-3: Regional and National Monthly, Seasonal and Annual Temperature Weighted by Area, 1895-1983*, NOAA/NESDIS/NCDC.

Guttman, N.B. and R.G. Quayle, 1995: "A Historical Perspective of U.S. Climate Divisions", *Bulletin of the American Meteorological Society, Statistical descriptors of climate*, Bulletin of the American Meteorological Society, Vol. 77, no. 2, pp. 293-303.

NOAA, 2002: *Hawaii Precipitation Frequency Study: Update of Technical Paper No. 43*, NOAA/NWS/Office of Hydrology.

Thom, H.C.S., 1954: "The rational relationship between heating degree days and temperature," *Monthly Weather Review*, Vol. 82, pp. 1-6.

Thom, H.C.S., 1966: "Normal degree days above any base by the universal truncation coefficient," *Monthly Weather Review*, Vol. 94, pp. 461-465.



Population-Weighted Monthly Normals, 1971-2000 (and previous periods)

HISTORICAL CLIMATOGRAPHY SERIES 5-2

Cooling Degree Days

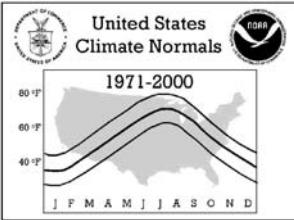
Area and Population Weights (State in Region)

Page 4

State Code	State Abbreviation	Area (sq. miles)	Census 2000 Population	U.S. Census Region [‡]	NCDC Region [‡]	Weights Within Region		
						Census Area	Census Pop	NCDC Area
01	AL	51,610	4,447,100	6	4	0.28363	0.26124	0.17577
02	AZ	113,909	5,130,632	8	7	0.13186	0.28233	0.26819
03	AR	53,104	2,673,400	7	6	0.12100	0.08502	0.09335
04	CA	158,693	33,871,648	9	9	0.49000	0.78430	0.58943
05	CO	104,246	4,301,261	8	7	0.12067	0.23669	0.24544
06	CT	5,009	3,405,565	1	1	0.07520	0.24461	0.02752
07	DE	2,057	783,600	5	1	0.00738	0.01514	0.01130
08	FL	58,560	15,982,378	5	4	0.21002	0.30872	0.19944
09	GA	58,876	8,186,453	5	4	0.21115	0.15813	0.20051
10	ID	83,557	1,293,953	8	8	0.09672	0.07121	0.33593
11	IL	56,399	12,419,293	3	3	0.22716	0.27504	0.18169
12	IN	36,291	6,080,485	3	3	0.14617	0.13466	0.11691
13	IA	56,288	2,926,324	4	2	0.10882	0.15211	0.22098
14	KS	82,264	2,688,418	4	6	0.15904	0.13975	0.14461
15	KY	40,395	4,041,769	6	3	0.22199	0.23743	0.13013
16	LA	48,522	4,468,976	7	6	0.11056	0.14212	0.08530
17	ME	33,215	1,274,923	1	1	0.49866	0.09157	0.18251
18	MD*	10,578	5,868,545	5	1	0.03794	0.11336	0.05812
19	MA	8,257	6,349,097	1	1	0.12396	0.45603	0.04537
20	MI	58,214	9,938,444	3	2	0.23447	0.22010	0.22854
21	MN	84,068	4,919,479	4	2	0.16253	0.25572	0.33004
22	MS	47,715	2,844,658	6	6	0.26222	0.16711	0.08388
23	MO	69,686	5,595,211	4	3	0.13473	0.29085	0.22449
24	MT	147,138	902,195	8	5	0.17032	0.04965	0.31307
25	NE	77,227	1,711,263	4	5	0.14930	0.08895	0.16432
26	NV	110,540	1,998,257	8	9	0.12796	0.10996	0.41057
27	NH	9,304	1,235,786	1	1	0.13968	0.08876	0.05112
28	NJ	7,836	8,414,350	2	1	0.07627	0.21210	0.04306
29	NM	121,666	1,819,046	8	7	0.14084	0.10010	0.28645
30	NY	49,576	18,976,457	2	1	0.48251	0.47833	0.27241
31	NC	52,712	8,049,313	5	4	0.18904	0.15549	0.17952
32	ND	70,665	642,200	4	5	0.13662	0.03338	0.15035
33	OH	41,222	11,353,140	3	3	0.16603	0.25143	0.13280
34	OK	69,920	3,450,654	7	6	0.15931	0.10974	0.12291
35	OR	96,981	3,421,399	9	8	0.29945	0.07922	0.38990
36	PA	45,334	12,281,054	2	1	0.44122	0.30957	0.24910
37	RI	1,214	1,048,319	1	1	0.01823	0.07530	0.00667
38	SC	31,055	4,012,012	5	4	0.11137	0.07750	0.10576
39	SD	77,047	754,844	4	5	0.14896	0.03924	0.16393
40	TN	42,244	5,689,283	6	3	0.23216	0.33422	0.13609
41	TX	267,340	20,851,820	7	6	0.60913	0.66312	0.46995
42	UT	84,916	2,233,169	8	7	0.09830	0.12289	0.19993
43	VT	9,610	608,827	1	1	0.14427	0.04373	0.05281
44	VA	40,816	7,078,515	5	4	0.14638	0.13673	0.13901
45	WA	68,192	5,894,121	9	8	0.21056	0.13648	0.27416
46	WV	24,180	1,808,344	5	3	0.08672	0.03493	0.07790
47	WI	56,154	5,363,675	3	2	0.22617	0.11877	0.22045
48	WY	97,914	493,782	8	5	0.11334	0.02717	0.20833

*Maryland includes area and population for the District of Columbia.

†Region codes are defined on page 5.



Population-Weighted Monthly Normals, 1971-2000 (and previous periods)

HISTORICAL CLIMATOGRAPHY SERIES 5-2

Cooling Degree Days

Area and Population Weights (Region in Nation)

Page 5

U.S. Census Regions

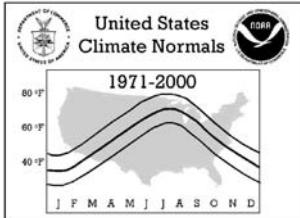
Region Code	Region Name	States Within Region	Area (sq. miles)	Census 2000 Population	Weights Within Nation^	
					Area	Population
01	New England	CT,ME,MA,NH,RI,VT	66,609	13,922,517	0.02204	0.04980
02	Middle Atlantic	NJ,NY,PA	102,746	39,671,861	0.03400	0.14190
03	East North Central	IL,IN,MI,OH,WI	248,280	45,155,037	0.08215	0.16151
04	West North Central	IA,KS,MN,MO,NE,ND,SD	517,245	19,237,739	0.17114	0.06881
05	South Atlantic	DE,FL,GA,MD*,NC,SC,VA,WV	278,834	51,769,160	0.09226	0.18517
06	East South Central	AL,KY,MS,TN	181,964	17,022,810	0.06021	0.06089
07	West South Central	AR,LA,OK,TX	438,886	31,444,850	0.14522	0.11247
08	Mountain	AZ,CO,ID,MT,NV,NM,UT,WY	863,886	18,172,295	0.28584	0.06500
09	Pacific (AK,HI Omitted)	CA,OR,WA	323,866	43,187,168	0.10716	0.15447

NCDC Regions

Region Code	Region Name	States Within Region	Area (sq. miles)	Census 2000 Population	Weights Within Nation^	
					Area	Population
01	Northeast	CT,DE,ME,MD*,MA,NH,NJ,NY,PA,RI,VT	181,990	60,246,523	0.06022	
02	East North Central	IA,MI,MN,WI	254,724	23,147,922	0.08428	
03	Central	IL,IN,KY,MO,OH,TN,WV	310,417	46,987,525	0.10271	
04	Southeast	AL,FL,GA,NC,SC,VA	293,629	47,755,771	0.09715	
05	West North Central	MT,NE,ND,SD,WY	469,991	4,504,284	0.15551	
06	South	AR,KS,LA,MS,OK,TX	568,865	36,977,926	0.18822	
07	Southwest	AZ,CO,NM,UT	424,737	13,484,108	0.14053	
08	Northwest	ID,OR,WA	248,730	10,609,473	0.08230	
09	West	CA,NV	269,233	35,869,905	0.08908	
	Conterminous United States		3,022,316	279,583,437		

*Maryland includes area and population for the District of Columbia.

^Nation refers to 48 conterminous United States.



Population-Weighted Monthly Normals, 1971-2000 (and previous periods)

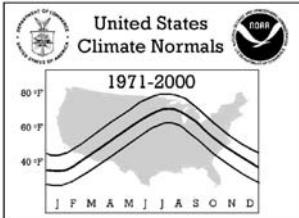
HISTORICAL CLIMATOGRAPHY SERIES 5-2

Cooling Degree Days

Alabama – Connecticut

Page 6

State/Region	Element	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
AL-01 Alabama	31-00 AVERAGE	15	8	27	55	195	364	456	437	280	91	12	7	1947
	STD DEV	17	8	20	27	55	58	47	51	60	41	11	8	198
	31-60 AVERAGE	22	11	29	60	213	394	469	457	299	107	11	8	2078
	STD DEV	21	10	25	25	53	57	42	44	61	45	9	8	141
	41-70 AVERAGE	16	9	25	68	206	371	451	436	278	95	10	5	1970
	STD DEV	19	9	22	29	53	63	49	53	58	46	7	5	184
	51-80 AVERAGE	12	7	25	60	189	350	447	429	279	81	10	5	1894
	STD DEV	13	8	17	28	55	62	52	53	63	35	8	7	196
	61-90 AVERAGE	10	6	26	54	178	341	438	419	266	78	13	6	1835
	STD DEV	12	7	16	28	50	47	49	46	61	38	12	8	163
0199	71-00 AVERAGE	12	6	27	46	178	344	455	429	268	80	14	6	1864
	STD DEV	12	5	16	25	52	50	47	52	57	36	13	8	181
AZ-02 Arizona	31-00 AVERAGE	2	10	31	104	259	485	658	601	430	175	23	1	2779
	STD DEV	2	8	21	44	66	69	41	50	55	50	14	2	206
	31-60 AVERAGE	1	8	28	105	250	472	657	592	438	174	20	1	2745
	STD DEV	1	8	19	41	64	63	42	39	46	49	13	1	178
	41-70 AVERAGE	1	9	23	97	244	457	652	585	424	174	23	1	2690
	STD DEV	2	9	13	42	54	70	40	50	55	53	14	1	179
	51-80 AVERAGE	2	9	25	88	239	479	657	581	416	173	21	1	2690
	STD DEV	2	8	20	35	58	69	40	50	48	49	12	2	163
	61-90 AVERAGE	2	9	30	101	254	491	655	591	407	169	23	1	2734
	STD DEV	3	6	23	48	56	73	38	50	55	53	11	2	189
0299	71-00 AVERAGE	3	12	37	110	274	513	660	613	435	179	24	1	2861
	STD DEV	3	7	24	48	71	64	42	53	60	52	15	2	214
AR-03 Arkansas	31-00 AVERAGE	1	2	16	39	157	348	479	448	249	66	3	1	1810
	STD DEV	2	3	14	23	51	61	61	78	68	33	4	2	221
	31-60 AVERAGE	2	2	16	39	159	365	487	471	268	77	3	1	1889
	STD DEV	3	3	16	24	46	69	62	80	71	35	4	2	217
	41-70 AVERAGE	1	2	14	46	163	350	470	442	241	69	3	1	1801
	STD DEV	2	2	14	26	50	64	61	73	53	39	3	2	200
	51-80 AVERAGE	1	2	15	42	161	343	476	435	245	63	3	1	1785
	STD DEV	2	3	13	25	53	70	66	68	65	35	4	1	225
	61-90 AVERAGE	0	1	17	40	154	335	470	425	236	58	4	1	1742
	STD DEV	1	3	13	25	54	51	62	64	63	33	4	2	199
0399	71-00 AVERAGE	1	2	17	34	152	338	478	440	238	57	4	1	1762
	STD DEV	1	3	10	21	55	57	60	76	67	25	4	2	215
CA-04 California	31-00 AVERAGE	2	2	6	19	50	114	222	220	149	48	7	1	838
	STD DEV	2	2	6	12	26	37	42	43	41	22	6	1	124
	31-60 AVERAGE	1	1	5	17	46	103	218	201	143	41	7	1	786
	STD DEV	2	2	7	10	21	31	45	36	33	18	6	2	108
	41-70 AVERAGE	1	2	4	15	41	99	214	205	143	44	7	1	775
	STD DEV	2	2	4	9	17	34	41	43	35	23	6	1	101
	51-80 AVERAGE	2	2	4	14	43	112	222	214	147	48	7	1	815
	STD DEV	2	3	5	9	18	37	38	44	37	24	5	2	91
	61-90 AVERAGE	2	2	5	18	49	122	225	226	147	51	7	1	855
	STD DEV	3	2	5	14	21	41	43	41	49	24	5	1	117
0499	71-00 AVERAGE	3	2	7	22	58	131	228	233	159	54	7	1	905
	STD DEV	3	3	6	15	30	37	40	44	47	23	6	1	119
CO-05 Colorado	31-00 AVERAGE	0	0	0	0	5	59	128	93	22	1	0	0	308
	STD DEV	0	0	0	1	5	31	39	34	14	1	0	0	84
	31-60 AVERAGE	0	0	0	0	7	68	143	109	26	1	0	0	355
	STD DEV	0	0	0	1	7	35	40	30	13	2	0	0	81
	41-70 AVERAGE	0	0	0	0	6	57	128	96	22	1	0	0	310
	STD DEV	0	0	0	1	5	34	37	31	13	2	0	0	80
	51-80 AVERAGE	0	0	0	0	5	62	129	87	20	1	0	0	304
	STD DEV	0	0	0	1	5	34	39	32	13	1	0	0	85
	61-90 AVERAGE	0	0	0	0	4	54	119	78	17	0	0	0	272
	STD DEV	0	0	0	0	3	26	33	29	12	1	0	0	61
	71-00 AVERAGE	0	0	0	0	4	56	114	81	18	0	0	0	273
0599	STD DEV	0	0	0	0	4	26	33	32	13	0	0	0	69
CT-06 Connecticut	31-00 AVERAGE	0	0	0	0	16	89	214	171	40	3	0	0	533
	STD DEV	0	0	0	0	11	33	49	47	21	3	0	0	104
	31-60 AVERAGE	0	0	0	0	15	87	211	165	39	3	0	0	519
	STD DEV	0	0	0	0	10	35	48	51	20	3	0	0	104
	41-70 AVERAGE	0	0	0	0	12	83	200	154	38	3	0	0	490
	STD DEV	0	0	0	0	9	33	50	44	23	3	0	0	100
	51-80 AVERAGE	0	0	0	0	13	82	204	166	40	3	0	0	508
	STD DEV	0	0	0	0	10	32	47	44	24	4	0	0	93
	61-90 AVERAGE	0	0	0	0	15	85	212	174	41	2	0	0	529
	STD DEV	0	0	0	0	10	30	39	45	24	4	0	0	89
0699	71-00 AVERAGE	0	0	0	0	18	94	226	185	42	2	0	0	568
	STD DEV	0	0	0	0	13	34	49	42	18	4	0	0	99



Population-Weighted Monthly Normals, 1971-2000 (and previous periods)

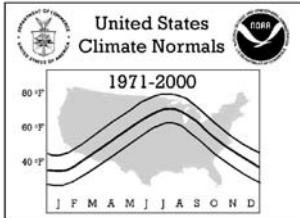
HISTORICAL CLIMATOGRAPHY SERIES 5-2

Cooling Degree Days

Delaware – Indiana

Page 7

State/Region	Element	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
DE-07 Delaware	31-00 AVERAGE	0	0	0	2	55	201	340	289	123	19	0	0	1030
	STD DEV	1	0	1	3	28	47	50	51	42	15	0	0	128
	31-60 AVERAGE	1	0	1	2	56	200	336	284	124	22	0	0	1025
	STD DEV	2	0	2	3	26	49	49	51	43	16	0	0	129
	41-70 AVERAGE	0	0	1	2	54	195	328	275	119	21	0	0	995
	STD DEV	1	0	2	3	28	46	48	47	46	16	0	0	125
	51-80 AVERAGE	0	0	0	2	51	189	328	291	123	18	0	0	1003
	STD DEV	0	0	1	3	25	46	46	48	45	14	0	0	117
	61-90 AVERAGE	0	0	0	1	53	197	335	291	122	18	0	0	1017
	STD DEV	0	0	1	2	24	46	45	50	45	16	1	0	116
0799	71-00 AVERAGE	0	0	0	2	57	205	351	299	124	19	0	0	1056
	STD DEV	0	0	1	3	29	52	54	52	34	16	1	0	128
FL-08 Florida	31-00 AVERAGE	95	89	133	202	348	453	514	517	452	305	151	96	3356
	STD DEV	49	43	48	46	37	31	26	20	23	48	50	43	176
	31-60 AVERAGE	101	96	128	201	347	452	506	516	450	306	144	98	3345
	STD DEV	52	48	49	49	39	26	23	19	25	53	49	48	148
	41-70 AVERAGE	89	86	128	212	348	451	507	516	450	301	140	87	3315
	STD DEV	41	47	48	50	30	30	22	20	22	51	52	40	153
	51-80 AVERAGE	85	77	132	205	347	445	509	513	451	293	140	84	3281
	STD DEV	45	42	44	38	29	30	22	20	23	46	42	39	123
	61-90 AVERAGE	86	80	135	199	342	450	512	514	450	300	153	93	3315
	STD DEV	49	40	44	42	25	32	25	19	23	47	53	43	174
0899	71-00 AVERAGE	97	90	141	197	352	461	522	521	458	309	171	102	3420
	STD DEV	51	38	47	45	41	34	27	22	22	47	47	40	189
GA-09 Georgia	31-00 AVERAGE	12	6	21	43	174	337	429	403	247	71	11	5	1759
	STD DEV	14	6	16	22	51	60	52	46	54	34	11	6	187
	31-60 AVERAGE	16	7	21	47	192	369	439	422	267	82	10	6	1880
	STD DEV	16	7	19	22	47	51	43	36	54	36	8	7	127
	41-70 AVERAGE	12	6	19	51	183	339	417	402	244	74	9	4	1758
	STD DEV	13	6	17	23	51	62	45	47	53	38	7	4	181
	51-80 AVERAGE	9	5	19	46	167	314	412	398	245	64	8	4	1691
	STD DEV	12	6	12	21	54	62	51	48	55	29	7	5	190
	61-90 AVERAGE	8	4	20	40	156	311	410	388	233	64	12	5	1650
	STD DEV	11	5	12	20	46	54	55	47	52	34	13	6	167
0999	71-00 AVERAGE	10	5	22	37	159	320	432	396	237	65	13	5	1700
	STD DEV	11	4	14	21	48	55	56	48	47	32	13	6	172
ID-10 Idaho	31-00 AVERAGE	0	0	0	1	15	64	184	148	40	1	0	0	453
	STD DEV	0	0	0	2	11	31	46	46	22	2	0	0	87
	31-60 AVERAGE	0	0	0	1	16	59	194	139	38	2	0	0	450
	STD DEV	1	0	0	2	13	27	38	33	16	2	0	0	72
	41-70 AVERAGE	0	0	0	1	14	56	184	139	39	2	0	0	434
	STD DEV	1	0	0	1	11	28	37	44	21	2	0	0	82
	51-80 AVERAGE	0	0	0	1	13	64	184	138	39	1	0	0	439
	STD DEV	1	0	0	1	10	32	37	52	21	2	0	0	85
	61-90 AVERAGE	0	0	0	1	13	72	178	149	38	1	0	0	451
	STD DEV	0	0	0	2	8	36	45	54	26	2	0	0	88
1099	71-00 AVERAGE	0	0	0	1	14	69	175	155	41	1	0	0	456
	STD DEV	0	0	0	2	11	34	55	51	25	2	0	0	91
IL-11 Illinois	31-00 AVERAGE	0	0	1	4	70	192	295	251	89	18	0	0	919
	STD DEV	0	0	2	4	38	59	63	67	38	16	0	0	157
	31-60 AVERAGE	0	0	1	4	69	203	312	274	99	22	0	0	984
	STD DEV	0	0	4	4	35	71	67	65	43	16	0	0	158
	41-70 AVERAGE	0	0	1	4	69	193	285	254	88	22	0	0	916
	STD DEV	0	0	4	4	37	58	59	67	33	20	1	0	142
	51-80 AVERAGE	0	0	1	4	70	190	285	243	90	19	0	0	902
	STD DEV	0	0	1	4	38	58	57	54	35	19	1	0	132
	61-90 AVERAGE	0	0	1	4	70	185	283	232	84	15	0	0	873
	STD DEV	0	0	1	4	41	48	54	59	31	18	1	0	122
1199	71-00 AVERAGE	0	0	1	3	70	183	286	237	82	13	0	0	876
	STD DEV	0	0	1	4	39	50	58	69	34	12	0	0	153
IN-12 Indiana	31-00 AVERAGE	0	0	2	4	75	200	296	245	101	18	0	0	942
	STD DEV	0	0	4	4	40	58	64	65	42	14	0	0	166
	31-60 AVERAGE	0	0	2	5	76	215	319	272	114	22	0	0	1024
	STD DEV	0	0	6	5	34	70	70	61	47	15	0	0	166
	41-70 AVERAGE	0	0	2	5	75	200	286	242	99	21	0	0	930
	STD DEV	0	0	6	5	40	58	58	62	39	16	0	0	144
	51-80 AVERAGE	0	0	2	5	73	189	281	233	100	17	0	0	899
	STD DEV	0	0	3	5	41	57	55	52	40	15	0	0	134
	61-90 AVERAGE	0	0	2	4	74	186	280	224	95	15	0	0	880
	STD DEV	0	0	3	4	45	46	52	57	36	15	0	0	124
1299	71-00 AVERAGE	0	0	2	4	75	189	285	233	92	14	0	0	894
	STD DEV	0	0	3	4	43	50	56	66	35	13	0	0	150



Population-Weighted Monthly Normals, 1971-2000 (and previous periods)

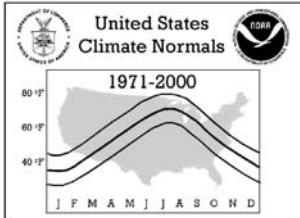
HISTORICAL CLIMATOGRAPHY SERIES 5-2

Cooling Degree Days

Iowa – Maryland

Page 8

State/Region	Element	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL	
IA-13 Iowa	31-00 AVERAGE	0	0	1	4	68	183	290	233	71	14	0	0	863	
	STD DEV	0	0	2	4	38	61	70	69	35	14	0	0	164	
	31-60 AVERAGE	0	0	1	4	66	188	307	253	81	17	0	0	917	
	STD DEV	0	0	3	5	41	75	81	74	40	16	0	0	182	
	41-70 AVERAGE	0	0	1	4	64	171	274	234	64	17	0	0	828	
	STD DEV	0	0	3	5	35	56	63	68	28	18	0	0	142	
	51-80 AVERAGE	0	0	1	4	67	179	282	224	65	14	0	0	836	
	STD DEV	0	0	2	5	34	56	66	50	27	15	0	0	124	
	61-90 AVERAGE	0	0	1	4	69	181	287	218	65	11	0	0	837	
	STD DEV	0	0	2	4	38	49	57	60	27	14	0	0	131	
1399	71-00 AVERAGE	0	0	1	4	68	182	281	223	69	10	0	0	837	
	STD DEV	0	0	2	4	36	50	62	68	31	8	0	0	146	
KS-14 Kansas	31-00 AVERAGE	0	1	6	15	104	292	453	408	184	37	1	0	1501	
	STD DEV	0	2	7	13	46	75	84	87	64	27	1	0	237	
	31-60 AVERAGE	0	1	5	15	103	309	467	436	205	45	0	0	1587	
	STD DEV	0	2	8	15	42	90	101	91	71	32	1	0	263	
	41-70 AVERAGE	0	0	4	18	108	287	435	405	178	41	1	0	1475	
	STD DEV	0	2	7	15	51	79	84	77	58	33	1	0	232	
	51-80 AVERAGE	0	1	5	16	108	294	451	400	178	37	0	0	1491	
	STD DEV	0	2	5	13	50	78	91	67	60	28	1	0	233	
	61-90 AVERAGE	0	1	6	17	106	283	449	385	169	31	1	0	1447	
	STD DEV	0	2	5	14	50	60	74	74	51	25	1	0	187	
1499	71-00 AVERAGE	0	1	7	14	98	283	441	392	175	29	1	0	1441	
	STD DEV	0	2	5	13	41	65	68	82	58	13	2	0	189	
KY-15 Kentucky	31-00 AVERAGE	1	0	7	12	100	242	352	311	155	30	1	0	1213	
	STD DEV	3	1	9	10	45	57	60	62	55	20	2	1	175	
	31-60 AVERAGE	2	0	7	12	104	263	367	329	170	35	0	1	1291	
	STD DEV	4	1	11	10	39	66	63	59	58	21	2	1	168	
	41-70 AVERAGE	1	0	7	15	105	246	342	306	152	32	0	1	1207	
	STD DEV	3	0	10	11	46	62	62	59	51	22	0	1	163	
	51-80 AVERAGE	0	0	7	14	98	229	339	305	157	27	0	0	1177	
	STD DEV	1	1	7	11	46	60	56	53	55	20	1	1	168	
	61-90 AVERAGE	1	0	8	12	94	224	334	296	147	26	1	1	1143	
	STD DEV	2	1	7	9	48	45	53	59	52	21	2	2	149	
	71-00 AVERAGE	1	0	8	11	94	230	350	305	147	26	1	1	1172	
	STD DEV	2	1	7	9	46	50	54	65	49	20	2	2	162	
1599	LA-16 Louisiana	31-00 AVERAGE	30	22	53	116	283	448	526	517	376	162	40	17	2591
	STD DEV	25	18	32	42	51	40	35	41	51	53	25	15	166	
	31-60 AVERAGE	39	27	53	113	283	457	527	522	383	179	36	19	2636	
	STD DEV	31	20	37	36	55	38	29	34	50	58	20	15	119	
	41-70 AVERAGE	31	24	48	130	287	449	522	516	371	165	37	15	2594	
	STD DEV	29	20	32	45	46	41	35	39	45	61	20	10	145	
	51-80 AVERAGE	28	20	52	124	280	442	523	507	375	151	37	15	2552	
	STD DEV	22	19	30	45	49	42	39	40	54	50	25	13	161	
	61-90 AVERAGE	23	17	53	122	276	437	518	505	367	147	46	16	2526	
	STD DEV	19	15	28	46	41	39	39	36	56	50	28	16	167	
1699	71-00 AVERAGE	27	20	56	108	285	445	529	518	374	152	45	16	2575	
	STD DEV	19	12	26	41	53	41	38	46	54	44	28	16	189	
ME-17 Maine	31-00 AVERAGE	0	0	0	0	2	25	103	81	9	0	0	0	220	
	STD DEV	0	0	0	0	2	14	34	32	9	0	0	0	63	
	31-60 AVERAGE	0	0	0	0	2	22	101	81	9	0	0	0	215	
	STD DEV	0	0	0	0	2	12	36	37	5	0	0	0	70	
	41-70 AVERAGE	0	0	0	0	2	25	101	74	9	0	0	0	210	
	STD DEV	0	0	0	0	2	13	38	31	10	0	0	0	65	
	51-80 AVERAGE	0	0	0	0	2	27	105	78	9	0	0	0	220	
	STD DEV	0	0	0	0	2	14	38	29	10	0	0	0	61	
	61-90 AVERAGE	0	0	0	0	2	26	104	80	8	0	0	0	221	
	STD DEV	0	0	0	0	2	13	29	31	10	0	0	0	54	
	71-00 AVERAGE	0	0	0	0	2	27	107	84	8	0	0	0	228	
	STD DEV	0	0	0	0	2	16	31	27	9	0	0	0	60	
1799	MD-18 Maryland (and D.C.)	31-00 AVERAGE	0	0	0	3	61	198	331	281	116	17	0	0	1009
	STD DEV	1	0	2	4	31	47	54	52	41	13	0	0	129	
	31-60 AVERAGE	1	0	1	4	63	199	329	278	115	19	0	0	1008	
	STD DEV	2	0	3	4	29	48	50	52	40	14	0	0	117	
	41-70 AVERAGE	0	0	1	4	62	194	322	270	113	19	0	0	984	
	STD DEV	1	0	2	4	33	45	48	47	43	14	0	0	118	
	51-80 AVERAGE	0	0	0	3	57	185	319	281	119	16	0	0	983	
	STD DEV	0	0	1	4	30	45	47	47	44	13	0	0	116	
	61-90 AVERAGE	0	0	0	2	58	192	323	280	116	16	0	0	987	
	STD DEV	0	0	1	3	27	45	48	50	44	14	0	0	118	
1899	71-00 AVERAGE	0	0	0	3	61	199	340	287	118	16	0	0	1026	
	STD DEV	0	0	1	4	32	52	61	56	37	14	0	0	147	



Population-Weighted Monthly Normals, 1971-2000 (and previous periods)

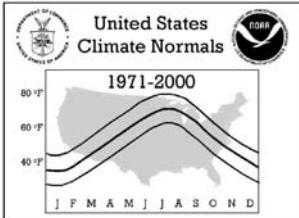
HISTORICAL CLIMATOGRAPHY SERIES 5-2

Cooling Degree Days

Massachusetts – Montana

Page 9

State/Region	Element	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
MA-19 Massachusetts	31-00 AVERAGE	0	0	0	0	10	74	190	151	32	2	0	0	458
	STD DEV	0	0	0	0	8	29	44	43	18	3	0	0	90
	31-60 AVERAGE	0	0	0	0	12	77	195	155	35	3	0	0	476
	STD DEV	0	0	0	0	9	31	46	49	16	3	0	0	94
	41-70 AVERAGE	0	0	0	0	10	76	191	145	34	3	0	0	459
	STD DEV	0	0	0	0	9	31	49	45	21	3	0	0	99
	51-80 AVERAGE	0	0	0	0	9	72	186	146	31	2	0	0	445
	STD DEV	0	0	0	0	7	29	45	39	20	3	0	0	82
	61-90 AVERAGE	0	0	0	0	8	67	182	146	28	1	0	0	434
	STD DEV	0	0	0	0	6	26	33	41	19	3	0	0	74
1999	71-00 AVERAGE	0	0	0	0	9	72	190	151	29	1	0	0	452
	STD DEV	0	0	0	0	7	31	44	37	16	2	0	0	89
MI-20 Michigan	31-00 AVERAGE	0	0	0	1	38	117	206	168	46	7	0	0	583
	STD DEV	0	0	1	1	24	44	53	54	24	8	0	0	119
	31-60 AVERAGE	0	0	0	1	35	123	217	181	51	8	0	0	615
	STD DEV	0	0	1	2	20	50	55	55	27	8	0	0	126
	41-70 AVERAGE	0	0	0	1	34	117	197	166	46	9	0	0	570
	STD DEV	0	0	1	2	23	43	53	58	24	9	0	0	117
	51-80 AVERAGE	0	0	0	1	37	113	195	161	46	7	0	0	560
	STD DEV	0	0	0	2	24	42	49	50	24	9	0	0	105
	61-90 AVERAGE	0	0	0	1	39	111	201	156	44	6	0	0	557
	STD DEV	0	0	0	1	26	41	46	45	22	9	0	0	92
2099	71-00 AVERAGE	0	0	0	1	41	114	203	162	42	5	0	0	568
	STD DEV	0	0	0	1	27	42	51	53	20	7	0	0	120
MN-21 Minnesota	31-00 AVERAGE	0	0	0	1	33	101	188	138	25	3	0	0	490
	STD DEV	0	0	0	2	23	44	57	49	17	5	0	0	114
	31-60 AVERAGE	0	0	0	1	31	101	198	148	28	4	0	0	512
	STD DEV	0	0	0	2	23	51	60	53	20	6	0	0	125
	41-70 AVERAGE	0	0	0	1	26	92	176	139	21	4	0	0	458
	STD DEV	0	0	0	2	15	36	50	49	13	7	0	0	102
	51-80 AVERAGE	0	0	0	1	31	97	179	130	21	3	0	0	462
	STD DEV	0	0	0	3	21	34	54	42	12	5	0	0	87
	61-90 AVERAGE	0	0	0	1	34	100	188	129	22	2	0	0	476
	STD DEV	0	0	0	2	24	37	53	45	13	5	0	0	103
2199	71-00 AVERAGE	0	0	0	2	38	103	182	132	24	2	0	0	483
	STD DEV	0	0	0	2	25	40	55	47	16	2	0	0	110
MS-22 Mississippi	31-00 AVERAGE	16	11	35	74	221	399	491	471	308	106	15	8	2156
	STD DEV	16	11	25	34	54	53	44	52	62	44	12	9	195
	31-60 AVERAGE	22	15	37	77	234	422	501	491	324	123	14	10	2270
	STD DEV	20	13	30	29	56	54	41	50	62	48	11	9	151
	41-70 AVERAGE	16	12	32	88	231	407	488	471	303	110	13	7	2178
	STD DEV	19	12	25	36	52	57	47	54	55	50	10	6	177
	51-80 AVERAGE	13	10	32	79	218	392	487	462	308	96	12	7	2116
	STD DEV	12	11	22	35	55	58	47	50	64	40	11	8	187
	61-90 AVERAGE	10	8	34	75	207	382	478	453	296	92	17	7	2057
	STD DEV	10	9	20	37	48	44	46	41	65	41	13	9	167
2299	71-00 AVERAGE	12	9	35	63	209	385	488	462	299	94	16	7	2079
	STD DEV	10	7	19	32	53	47	41	51	61	38	13	9	181
MO-23 Missouri	31-00 AVERAGE	0	0	6	13	100	258	397	347	153	33	1	0	1308
	STD DEV	1	1	7	12	46	67	75	78	56	25	2	0	212
	31-60 AVERAGE	0	0	5	13	102	278	415	372	171	40	1	0	1399
	STD DEV	1	1	9	13	41	81	91	83	63	26	1	0	233
	41-70 AVERAGE	0	0	5	16	104	257	382	343	149	37	1	0	1294
	STD DEV	0	1	8	13	49	71	72	72	48	30	1	0	196
	51-80 AVERAGE	0	0	4	15	103	256	393	339	153	32	1	0	1298
	STD DEV	0	1	5	13	47	71	75	58	50	27	1	0	195
	61-90 AVERAGE	0	0	6	14	99	246	388	324	143	27	1	0	1248
	STD DEV	1	1	5	12	51	53	62	67	45	25	1	0	166
2399	71-00 AVERAGE	0	0	6	12	95	247	387	335	142	25	1	0	1250
	STD DEV	1	1	5	11	44	54	59	75	51	15	2	0	170
MT-24 Montana	31-00 AVERAGE	0	0	0	0	5	34	106	83	19	0	0	0	248
	STD DEV	0	0	0	1	6	22	38	34	14	1	0	0	67
	31-60 AVERAGE	0	0	0	0	6	31	116	79	18	0	0	0	250
	STD DEV	0	0	0	1	8	20	40	22	11	1	0	0	67
	41-70 AVERAGE	0	0	0	0	4	26	102	78	17	0	0	0	227
	STD DEV	0	0	0	1	4	17	30	30	12	1	0	0	55
	51-80 AVERAGE	0	0	0	0	4	32	100	77	17	0	0	0	231
	STD DEV	0	0	0	0	4	19	30	38	13	1	0	0	52
	61-90 AVERAGE	0	0	0	0	4	38	102	84	18	0	0	0	247
	STD DEV	0	0	1	1	4	26	32	42	15	0	0	0	59
2499	71-00 AVERAGE	0	0	0	0	5	38	99	87	19	0	0	0	247
	STD DEV	0	0	1	1	4	24	38	42	15	0	0	0	65



Population-Weighted Monthly Normals, 1971-2000 (and previous periods)

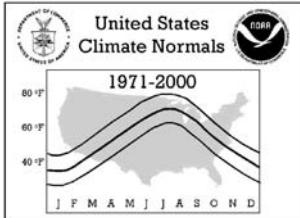
HISTORICAL CLIMATOGRAPHY SERIES 5-2

Cooling Degree Days

Nebraska – New York

Page 10

State/Region	Element	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
NE-25 Nebraska	31-00 AVERAGE	0	0	1	6	75	218	361	295	104	15	0	0	1075
	STD DEV	0	1	3	6	41	69	85	78	46	16	0	0	202
	31-60 AVERAGE	0	0	1	6	76	227	389	327	121	20	0	0	1167
	STD DEV	0	1	4	7	47	84	100	80	51	19	0	0	230
	41-70 AVERAGE	0	0	1	7	72	205	347	299	95	17	0	0	1044
	STD DEV	0	1	4	7	37	69	72	68	39	18	0	0	171
	51-80 AVERAGE	0	0	1	6	75	218	353	288	95	14	0	0	1050
	STD DEV	0	1	2	6	34	66	77	58	39	14	0	0	157
	61-90 AVERAGE	0	0	2	7	76	216	352	274	90	11	0	0	1026
	STD DEV	0	0	2	6	37	57	59	67	35	12	0	0	131
2599	71-00 AVERAGE	0	0	2	5	71	214	335	275	96	10	0	0	1008
	STD DEV	0	0	2	6	33	58	66	74	38	5	0	0	148
NV-26 Nevada	31-00 AVERAGE	0	3	11	51	153	320	508	457	255	79	5	0	1842
	STD DEV	1	4	11	28	51	64	54	58	52	32	4	0	192
	31-60 AVERAGE	0	2	10	52	148	306	504	445	258	75	4	0	1805
	STD DEV	0	3	11	23	48	57	53	52	44	30	4	0	150
	41-70 AVERAGE	0	3	7	46	140	292	494	438	248	75	4	0	1747
	STD DEV	0	3	5	24	40	61	47	56	50	30	4	0	136
	51-80 AVERAGE	0	3	8	40	136	310	500	439	242	76	4	0	1757
	STD DEV	0	3	8	22	44	63	42	57	48	30	3	0	128
	61-90 AVERAGE	0	3	10	46	145	324	502	445	235	76	4	0	1790
	STD DEV	1	3	10	30	42	66	51	52	56	36	3	0	161
2699	71-00 AVERAGE	1	4	15	55	163	346	518	469	263	82	5	0	1921
	STD DEV	1	4	12	31	57	60	56	63	55	35	5	0	213
NH-27 New Hampshire	31-00 AVERAGE	0	0	0	0	8	48	133	97	13	0	0	0	298
	STD DEV	0	0	0	0	6	24	42	38	11	1	0	0	77
	31-60 AVERAGE	0	0	0	0	8	48	135	98	13	0	0	0	303
	STD DEV	0	0	0	0	7	22	43	45	8	1	0	0	83
	41-70 AVERAGE	0	0	0	0	7	47	128	90	13	0	0	0	285
	STD DEV	0	0	0	0	7	23	45	38	13	1	0	0	80
	51-80 AVERAGE	0	0	0	0	7	45	127	92	12	0	0	0	284
	STD DEV	0	0	0	0	7	24	45	35	13	1	0	0	75
	61-90 AVERAGE	0	0	0	0	8	44	130	95	12	0	0	0	288
	STD DEV	0	0	0	0	6	23	35	35	13	1	0	0	63
2799	71-00 AVERAGE	0	0	0	0	8	48	136	101	11	0	0	0	304
	STD DEV	0	0	0	0	7	28	41	33	8	1	0	0	75
NJ-28 New Jersey	31-00 AVERAGE	0	0	0	1	35	145	281	228	76	10	0	0	775
	STD DEV	0	0	0	1	20	40	50	49	32	9	0	0	110
	31-60 AVERAGE	0	0	0	1	37	150	287	231	79	12	0	0	795
	STD DEV	0	0	1	2	20	42	49	54	31	9	0	0	113
	41-70 AVERAGE	0	0	0	1	35	147	278	222	79	12	0	0	774
	STD DEV	0	0	1	2	22	41	51	48	36	9	0	0	114
	51-80 AVERAGE	0	0	0	1	32	139	272	229	79	10	0	0	761
	STD DEV	0	0	0	1	19	42	50	43	36	9	0	0	104
	61-90 AVERAGE	0	0	0	0	32	137	271	226	75	9	0	0	751
	STD DEV	0	0	0	1	18	40	40	44	36	9	0	0	89
2899	71-00 AVERAGE	0	0	0	0	33	141	282	229	73	8	0	0	768
	STD DEV	0	0	0	1	20	44	53	48	24	9	0	0	111
NM-29 New Mexico	31-00 AVERAGE	0	0	0	9	56	200	298	244	99	11	0	0	916
	STD DEV	0	0	1	7	24	43	39	39	30	7	0	0	115
	31-60 AVERAGE	0	0	0	9	55	209	300	255	109	13	0	0	950
	STD DEV	0	0	0	8	20	40	37	34	26	9	0	0	103
	41-70 AVERAGE	0	0	0	9	55	199	304	250	103	11	0	0	931
	STD DEV	0	0	0	8	17	44	40	36	26	9	0	0	109
	51-80 AVERAGE	0	0	0	8	51	203	304	238	95	10	0	0	908
	STD DEV	0	0	1	6	20	45	45	40	28	6	0	0	120
	61-90 AVERAGE	0	0	0	8	51	192	295	230	87	8	0	0	872
	STD DEV	0	0	1	6	22	42	42	39	26	6	0	0	100
2999	71-00 AVERAGE	0	0	0	8	56	200	290	236	94	9	0	0	893
	STD DEV	0	0	1	6	31	48	39	41	33	5	0	0	127
NY-30 New York	31-00 AVERAGE	0	0	0	0	23	109	232	193	59	7	0	0	622
	STD DEV	0	0	0	1	15	34	45	46	26	6	0	0	99
	31-60 AVERAGE	0	0	0	0	22	110	235	194	59	8	0	0	628
	STD DEV	0	0	0	1	13	38	46	52	25	7	0	0	107
	41-70 AVERAGE	0	0	0	0	22	112	229	188	62	8	0	0	621
	STD DEV	0	0	0	1	15	37	48	47	31	7	0	0	108
	51-80 AVERAGE	0	0	0	0	22	107	229	194	62	7	0	0	620
	STD DEV	0	0	0	1	14	34	45	44	31	7	0	0	98
	61-90 AVERAGE	0	0	0	0	22	104	227	192	59	6	0	0	610
	STD DEV	0	0	0	0	14	31	35	40	30	7	0	0	77
3099	71-00 AVERAGE	0	0	0	0	24	107	233	195	56	6	0	0	621
	STD DEV	0	0	0	1	15	35	47	41	21	7	0	0	99



Population-Weighted Monthly Normals, 1971-2000 (and previous periods)

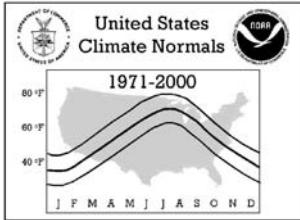
HISTORICAL CLIMATOGRAPHY SERIES 5-2

Cooling Degree Days

North Carolina – Pennsylvania

Page 11

State/Region	Element	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
NC-31 North Carolina	31-00 AVERAGE	4	1	10	18	124	285	391	352	193	46	4	2	1430
	STD DEV	7	2	10	12	44	56	47	43	49	26	5	3	150
	31-60 AVERAGE	6	1	11	21	139	313	398	363	209	54	3	2	1519
	STD DEV	9	2	13	14	41	50	44	34	50	26	3	3	102
	41-70 AVERAGE	4	1	10	23	135	288	382	349	191	49	3	1	1434
	STD DEV	7	1	13	13	48	58	43	39	50	27	3	2	146
	51-80 AVERAGE	3	1	8	20	120	260	376	352	192	41	3	1	1377
	STD DEV	5	1	7	13	48	55	41	42	49	23	2	3	153
	61-90 AVERAGE	3	1	9	16	111	261	375	344	183	41	4	1	1348
	STD DEV	5	2	7	10	41	52	46	48	49	27	7	3	141
	71-00 AVERAGE	3	1	10	16	111	271	396	348	185	40	4	2	1386
	STD DEV	5	2	7	11	40	55	51	50	42	26	7	3	145
3199 ND-32 North Dakota	31-00 AVERAGE	0	0	0	2	25	86	176	142	26	1	0	0	457
	STD DEV	0	0	0	3	20	44	60	50	17	3	0	0	114
	31-60 AVERAGE	0	0	0	2	24	79	191	144	28	1	0	0	468
	STD DEV	0	0	0	3	21	41	68	42	19	2	0	0	122
	41-70 AVERAGE	0	0	0	2	17	74	166	140	23	1	0	0	423
	STD DEV	0	0	0	3	11	36	43	47	17	3	0	0	92
	51-80 AVERAGE	0	0	0	2	23	84	168	137	23	1	0	0	438
	STD DEV	0	0	0	3	19	34	49	52	15	3	0	0	79
	61-90 AVERAGE	0	0	0	2	26	92	176	140	23	1	0	0	460
	STD DEV	0	0	0	3	22	48	48	60	15	3	0	0	104
	71-00 AVERAGE	0	0	0	2	29	93	165	139	24	0	0	0	453
	STD DEV	0	0	0	4	21	48	54	57	16	1	0	0	112
3299 OH-33 Ohio	31-00 AVERAGE	0	0	1	3	59	160	254	208	83	12	0	0	780
	STD DEV	1	0	2	3	34	51	57	56	36	11	0	0	142
	31-60 AVERAGE	0	0	1	3	60	174	270	225	93	15	0	0	842
	STD DEV	1	0	3	4	29	58	62	55	38	11	0	0	145
	41-70 AVERAGE	0	0	1	4	60	163	247	205	84	15	0	0	778
	STD DEV	1	0	3	4	35	49	54	55	36	12	0	0	125
	51-80 AVERAGE	0	0	1	3	58	151	239	202	85	12	0	0	751
	STD DEV	0	0	2	4	34	48	47	49	38	11	0	0	121
	61-90 AVERAGE	0	0	1	2	57	145	238	193	78	11	0	0	725
	STD DEV	0	0	2	3	36	41	45	48	35	11	0	0	104
	71-00 AVERAGE	0	0	1	2	57	149	245	200	74	10	0	0	738
	STD DEV	0	0	2	3	35	46	52	59	30	10	0	0	134
3399 OK-34 Oklahoma	31-00 AVERAGE	0	2	13	39	151	361	524	499	266	70	3	0	1928
	STD DEV	1	3	11	26	50	69	77	85	75	36	4	0	250
	31-60 AVERAGE	1	2	11	38	149	380	530	521	286	80	3	0	2000
	STD DEV	2	3	12	28	47	75	85	94	78	40	3	0	261
	41-70 AVERAGE	0	1	10	46	153	362	515	496	262	72	3	0	1920
	STD DEV	1	3	11	31	51	68	83	84	62	43	3	0	250
	51-80 AVERAGE	0	2	12	43	154	364	529	491	267	68	3	0	1933
	STD DEV	1	4	10	28	54	72	87	76	74	37	4	0	268
	61-90 AVERAGE	0	1	14	43	150	350	520	481	254	62	4	0	1879
	STD DEV	1	3	10	27	50	60	75	67	67	34	4	0	222
	71-00 AVERAGE	0	3	14	35	148	351	518	487	256	60	3	0	1876
	STD DEV	1	4	8	22	51	68	68	79	77	21	5	0	229
3499 OR-35 Oregon	31-00 AVERAGE	0	0	0	0	5	23	83	79	31	1	0	0	222
	STD DEV	0	0	0	1	6	14	32	33	17	2	0	0	62
	31-60 AVERAGE	0	0	0	0	6	21	82	70	28	1	0	0	208
	STD DEV	0	0	0	1	6	13	31	27	15	2	0	0	57
	41-70 AVERAGE	0	0	0	0	5	21	80	70	29	1	0	0	205
	STD DEV	0	0	0	0	5	15	32	36	17	2	0	0	72
	51-80 AVERAGE	0	0	0	0	4	23	82	73	30	1	0	0	213
	STD DEV	0	0	0	0	5	15	29	40	19	2	0	0	72
	61-90 AVERAGE	0	0	0	0	4	25	79	82	29	1	0	0	220
	STD DEV	0	0	0	0	3	15	29	39	19	1	0	0	62
	71-00 AVERAGE	0	0	0	0	5	24	87	87	33	1	0	0	237
	STD DEV	0	0	0	0	6	15	35	32	18	1	0	0	56
3599 PA-36 Pennsylvania	31-00 AVERAGE	0	0	0	1	41	137	246	200	68	9	0	0	703
	STD DEV	1	0	1	2	24	42	49	49	30	8	0	0	115
	31-60 AVERAGE	0	0	0	2	46	150	262	211	75	11	0	0	758
	STD DEV	1	0	1	2	24	45	50	50	30	9	0	0	114
	41-70 AVERAGE	0	0	0	2	42	142	246	197	71	11	0	0	713
	STD DEV	1	0	1	2	26	42	50	47	32	9	0	0	113
	51-80 AVERAGE	0	0	0	1	38	130	236	200	72	9	0	0	687
	STD DEV	0	0	0	2	22	41	48	45	33	8	0	0	102
	61-90 AVERAGE	0	0	0	1	37	124	231	191	65	8	0	0	655
	STD DEV	0	0	0	1	21	36	39	45	33	8	0	0	82
	71-00 AVERAGE	0	0	0	1	38	125	236	194	60	7	0	0	661
	STD DEV	0	0	0	1	23	40	49	48	23	7	0	0	106



Population-Weighted Monthly Normals, 1971-2000 (and previous periods)

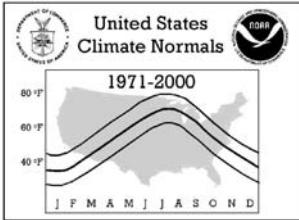
HISTORICAL CLIMATOGRAPHY SERIES 5-2

Cooling Degree Days

Rhode Island – Utah

Page 12

State/Region	Element	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
RI-37 Rhode Island	31-00 AVERAGE	0	0	0	0	6	63	189	163	38	2	0	0	462
	STD DEV	0	0	0	0	5	26	47	47	20	3	0	0	100
	31-60 AVERAGE	0	0	0	0	6	61	189	162	39	3	0	0	459
	STD DEV	0	0	0	0	4	27	49	49	18	4	0	0	97
	41-70 AVERAGE	0	0	0	0	5	61	185	153	37	3	0	0	444
	STD DEV	0	0	0	0	4	28	52	49	22	4	0	0	112
	51-80 AVERAGE	0	0	0	0	5	59	181	158	36	2	0	0	441
	STD DEV	0	0	0	0	4	26	49	45	22	4	0	0	100
	61-90 AVERAGE	0	0	0	0	5	60	184	163	36	2	0	0	450
	STD DEV	0	0	0	0	4	25	37	48	22	4	0	0	94
3799	71-00 AVERAGE	0	0	0	0	7	66	194	169	39	2	0	0	477
	STD DEV	0	0	0	0	6	28	45	40	20	4	0	0	94
SC-38 South Carolina	31-00 AVERAGE	10	4	21	41	185	358	458	421	257	75	10	4	1845
	STD DEV	13	4	16	21	54	59	50	44	53	36	10	5	169
	31-60 AVERAGE	14	5	21	45	201	387	461	432	274	85	9	5	1939
	STD DEV	15	5	20	23	51	49	45	37	54	37	7	6	110
	41-70 AVERAGE	10	4	20	49	197	362	446	420	252	78	9	3	1850
	STD DEV	12	4	19	23	55	62	43	45	55	38	7	5	165
	51-80 AVERAGE	9	3	19	44	183	335	445	422	257	68	9	4	1798
	STD DEV	12	4	13	21	59	61	46	46	54	30	7	6	180
	61-90 AVERAGE	7	3	20	38	170	333	443	412	246	69	11	4	1758
	STD DEV	12	4	13	19	50	57	52	46	52	36	13	5	166
3899	71-00 AVERAGE	9	4	21	37	171	342	463	417	250	69	12	5	1800
	STD DEV	11	4	14	21	50	59	55	48	44	36	13	5	170
SD-39 South Dakota	31-00 AVERAGE	0	0	0	3	46	148	285	224	66	5	0	0	777
	STD DEV	0	0	1	4	31	59	80	66	34	7	0	0	175
	31-60 AVERAGE	0	0	0	3	49	153	310	244	75	7	0	0	842
	STD DEV	0	1	1	4	41	73	90	70	38	9	0	0	206
	41-70 AVERAGE	0	0	0	3	40	134	269	224	58	6	0	0	733
	STD DEV	0	1	1	4	23	52	61	61	27	8	0	0	134
	51-80 AVERAGE	0	0	0	3	42	147	276	218	60	5	0	0	749
	STD DEV	0	1	1	4	21	49	67	57	27	6	0	0	117
	61-90 AVERAGE	0	0	0	3	44	150	281	213	58	4	0	0	753
	STD DEV	0	0	1	4	24	49	60	61	28	5	0	0	115
3999	71-00 AVERAGE	0	0	0	3	45	146	264	210	60	3	0	0	730
	STD DEV	0	0	1	4	24	50	67	63	30	2	0	0	134
TN-40 Tennessee	31-00 AVERAGE	3	1	11	21	123	282	389	354	189	45	2	1	1421
	STD DEV	5	2	11	15	49	60	56	61	58	27	3	2	191
	31-60 AVERAGE	5	2	12	23	135	311	407	381	208	55	1	1	1540
	STD DEV	7	3	14	16	43	66	54	57	60	29	3	3	156
	41-70 AVERAGE	3	1	11	26	132	289	383	353	186	48	1	1	1435
	STD DEV	6	2	13	16	50	67	60	61	53	30	1	2	181
	51-80 AVERAGE	2	1	10	23	121	267	376	346	188	40	1	1	1375
	STD DEV	4	2	9	16	51	65	60	57	57	24	1	2	194
	61-90 AVERAGE	1	1	11	20	112	259	368	333	175	38	2	1	1322
	STD DEV	3	2	9	14	51	44	56	55	55	27	3	2	160
4099	71-00 AVERAGE	2	1	11	17	111	264	384	342	176	38	2	1	1349
	STD DEV	3	2	8	14	48	48	53	59	53	26	3	2	172
TX-41 Texas	31-00 AVERAGE	16	18	57	125	284	463	569	562	379	170	41	12	2696
	STD DEV	12	14	30	42	52	47	45	49	55	49	22	9	198
	31-60 AVERAGE	19	20	56	122	285	478	575	575	390	184	36	13	2753
	STD DEV	14	14	35	38	47	45	37	43	51	57	19	9	162
	41-70 AVERAGE	15	18	51	137	287	467	573	571	380	172	40	13	2723
	STD DEV	14	15	31	46	43	44	43	47	44	57	20	8	180
	51-80 AVERAGE	14	16	57	132	281	463	573	557	379	163	39	11	2685
	STD DEV	12	15	31	47	50	49	54	56	61	52	24	8	226
	61-90 AVERAGE	12	14	58	132	278	446	558	548	368	157	46	11	2629
	STD DEV	10	12	28	47	45	43	50	48	59	43	24	11	199
4199	71-00 AVERAGE	15	18	61	117	283	454	564	549	372	160	43	11	2648
	STD DEV	11	13	23	38	60	50	50	52	61	32	24	9	210
UT-42 Utah	31-00 AVERAGE	0	0	0	4	26	105	255	207	63	7	0	0	667
	STD DEV	0	0	0	4	17	43	46	44	26	5	0	0	109
	31-60 AVERAGE	0	0	0	4	27	103	260	208	68	9	0	0	680
	STD DEV	0	0	0	4	19	41	39	33	22	5	0	0	92
	41-70 AVERAGE	0	0	0	3	25	89	252	201	63	7	0	0	640
	STD DEV	0	0	0	3	15	37	34	44	27	5	0	0	90
	51-80 AVERAGE	0	0	0	2	24	101	253	191	59	6	0	0	635
	STD DEV	0	0	0	2	15	39	30	49	27	5	0	0	87
	61-90 AVERAGE	0	0	0	3	23	107	251	195	55	5	0	0	638
	STD DEV	0	0	0	3	13	45	40	48	30	5	0	0	100
4299	71-00 AVERAGE	0	0	0	4	25	115	250	210	61	6	0	0	669
	STD DEV	0	0	0	4	14	44	55	48	27	4	0	0	119



Population-Weighted Monthly Normals, 1971-2000 (and previous periods)

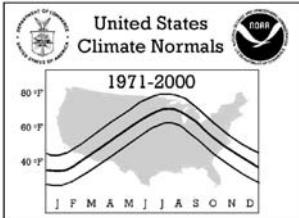
HISTORICAL CLIMATOGRAPHY SERIES 5-2

Cooling Degree Days

Vermont – Wyoming

Page 13

State/Region	Element	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
VT-43 Vermont	31-00 AVERAGE	0	0	0	0	11	44	123	89	15	1	0	0	283
	STD DEV	0	0	0	0	9	23	39	37	13	1	0	0	76
	31-60 AVERAGE	0	0	0	0	11	46	127	94	16	1	0	0	294
	STD DEV	0	0	0	0	9	23	42	44	11	1	0	0	86
	41-70 AVERAGE	0	0	0	0	10	47	123	86	17	1	0	0	283
	STD DEV	0	0	0	0	9	25	42	39	16	1	0	0	84
	51-80 AVERAGE	0	0	0	0	11	45	123	89	15	1	0	0	283
	STD DEV	0	0	0	0	10	22	43	36	16	1	0	0	78
	61-90 AVERAGE	0	0	0	0	11	41	124	88	14	1	0	0	279
	STD DEV	0	0	0	0	10	22	33	33	15	1	0	0	61
4399	71-00 AVERAGE	0	0	0	0	12	42	122	88	12	0	0	0	275
	STD DEV	0	0	0	0	10	23	38	32	8	1	0	0	71
VA-44 Virginia	31-00 AVERAGE	1	0	2	6	75	215	333	287	134	24	0	0	1077
	STD DEV	3	0	4	6	34	49	50	47	44	17	1	1	131
	31-60 AVERAGE	2	0	2	7	83	230	340	295	142	28	0	0	1129
	STD DEV	4	0	5	7	34	50	49	43	45	18	1	1	117
	41-70 AVERAGE	1	0	2	8	82	217	330	285	133	27	0	0	1086
	STD DEV	3	0	5	7	38	48	47	43	44	18	1	1	126
	51-80 AVERAGE	0	0	2	7	73	200	325	294	138	23	0	0	1063
	STD DEV	1	0	3	6	35	48	46	43	45	16	1	1	136
	61-90 AVERAGE	0	0	2	5	68	201	321	284	129	21	1	0	1031
	STD DEV	1	0	3	5	29	45	44	48	45	18	2	1	120
4499	71-00 AVERAGE	0	0	2	6	67	205	334	284	129	21	1	0	1049
	STD DEV	1	0	2	5	31	49	53	54	38	17	2	1	132
WA-45 Washington	31-00 AVERAGE	0	0	0	0	5	23	71	66	19	0	0	0	184
	STD DEV	0	0	0	0	5	14	29	29	12	0	0	0	55
	31-60 AVERAGE	0	0	0	0	6	21	71	56	17	0	0	0	171
	STD DEV	0	0	0	1	6	12	30	21	9	1	0	0	54
	41-70 AVERAGE	0	0	0	0	5	22	71	59	18	0	0	0	175
	STD DEV	0	0	0	0	6	15	31	29	11	0	0	0	65
	51-80 AVERAGE	0	0	0	0	4	23	69	61	18	0	0	0	176
	STD DEV	0	0	0	0	5	16	28	33	12	0	0	0	65
	61-90 AVERAGE	0	0	0	0	4	25	67	71	19	0	0	0	186
	STD DEV	0	0	0	0	2	15	26	33	13	0	0	0	52
	71-00 AVERAGE	0	0	0	0	5	23	73	76	21	0	0	0	198
4599	STD DEV	0	0	0	0	4	13	30	29	13	0	0	0	48
WV-46 West Virginia	31-00 AVERAGE	1	0	2	4	61	163	256	219	92	15	0	0	813
	STD DEV	3	0	4	4	32	48	53	52	38	12	1	0	133
	31-60 AVERAGE	2	0	2	5	66	181	271	232	102	18	0	0	880
	STD DEV	4	0	5	5	30	52	54	48	39	12	0	0	118
	41-70 AVERAGE	1	0	2	5	65	166	251	215	91	17	0	0	813
	STD DEV	3	0	5	5	35	49	52	49	38	13	0	0	122
	51-80 AVERAGE	0	0	2	4	59	147	241	214	95	14	0	0	775
	STD DEV	1	0	3	4	33	47	47	46	40	11	0	1	124
	61-90 AVERAGE	0	0	2	3	55	143	239	209	88	13	0	0	753
	STD DEV	1	0	3	3	32	39	45	51	39	13	1	1	113
4699	71-00 AVERAGE	0	0	2	3	54	149	251	214	85	13	0	0	772
	STD DEV	1	0	3	3	32	44	51	57	32	13	1	1	126
WI-47 Wisconsin	31-00 AVERAGE	0	0	0	1	30	105	195	159	34	5	0	0	528
	STD DEV	0	0	0	1	20	43	55	54	21	8	0	0	122
	31-60 AVERAGE	0	0	0	1	29	111	210	176	40	7	0	0	574
	STD DEV	0	0	1	1	21	51	58	57	25	8	0	0	126
	41-70 AVERAGE	0	0	0	1	27	102	185	163	32	7	0	0	516
	STD DEV	0	0	1	1	18	38	51	57	17	10	0	0	114
	51-80 AVERAGE	0	0	0	1	29	100	184	150	31	6	0	0	500
	STD DEV	0	0	0	1	20	37	50	47	15	8	0	0	94
	61-90 AVERAGE	0	0	0	1	30	99	189	145	30	5	0	0	497
	STD DEV	0	0	0	1	21	37	48	44	14	8	0	0	96
	71-00 AVERAGE	0	0	0	1	31	101	186	148	31	4	0	0	500
4799	STD DEV	0	0	0	1	20	39	53	52	17	5	0	0	117
WY-48 Wyoming	31-00 AVERAGE	0	0	0	0	6	51	130	96	20	1	0	0	304
	STD DEV	0	0	0	1	6	28	39	32	13	1	0	0	68
	31-60 AVERAGE	0	0	0	0	7	50	137	98	21	1	0	0	314
	STD DEV	0	0	0	1	8	29	41	25	11	1	0	0	67
	41-70 AVERAGE	0	0	0	0	5	43	128	97	20	1	0	0	294
	STD DEV	0	0	0	1	5	24	40	32	13	1	0	0	68
	51-80 AVERAGE	0	0	0	0	5	51	131	90	20	1	0	0	298
	STD DEV	0	0	0	0	4	25	41	35	13	1	0	0	61
	61-90 AVERAGE	0	0	0	0	5	53	131	91	18	0	0	0	298
	STD DEV	0	0	0	1	4	30	36	38	14	1	0	0	63
	71-00 AVERAGE	0	0	0	0	6	54	123	94	19	0	0	0	296
4899	STD DEV	0	0	0	0	5	30	37	36	13	1	0	0	66



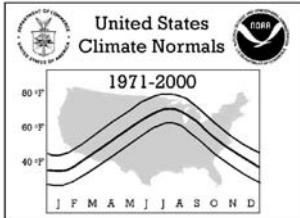
Population-Weighted Monthly Normals, 1971-2000 (and previous periods)

HISTORICAL CLIMATOGRAPHY SERIES 5-2

Cooling Degree Days

Alaska – Hawaii – Territories – Census Regions Page 14

State/Region	Element	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
AK-50 Alaska	31-00 AVERAGE	0	0	0	0	0	1	1	1	0	0	0	0	3
	STD DEV	0	0	0	0	0	2	1	1	0	0	0	0	3
	31-60 AVERAGE	0	0	0	0	0	1	1	0	0	0	0	0	3
	STD DEV	0	0	0	0	0	2	1	1	0	0	0	0	3
	41-70 AVERAGE	0	0	0	0	0	1	1	0	0	0	0	0	3
	STD DEV	0	0	0	0	0	1	1	1	0	0	0	0	2
	51-80 AVERAGE	0	0	0	0	0	1	1	1	0	0	0	0	2
	STD DEV	0	0	0	0	0	1	1	1	0	0	0	0	2
	61-90 AVERAGE	0	0	0	0	0	1	1	1	0	0	0	0	3
	STD DEV	0	0	0	0	0	1	1	1	0	0	0	0	2
5099	71-00 AVERAGE	0	0	0	0	0	1	2	1	0	0	0	0	4
	STD DEV	0	0	0	0	0	1	1	1	0	0	0	0	3
HI-51 Hawaii	61-00 AVERAGE	150	134	175	199	251	296	335	357	342	323	252	191	3003
	STD DEV	29	27	26	25	28	24	23	21	23	25	27	26	190
5199	61-90 AVERAGE	155	136	178	200	253	295	334	356	342	321	251	191	3013
	STD DEV	30	29	26	24	30	23	23	22	23	25	26	24	198
	71-00 AVERAGE	151	135	176	198	245	292	333	357	344	326	253	192	3002
	STD DEV	30	26	27	26	28	25	24	21	21	22	27	27	197
PR-66 Puerto Rico	31-00 AVERAGE	279	250	305	338	401	429	453	459	437	430	369	318	4469
	STD DEV	25	25	31	28	27	23	19	17	17	20	21	27	205
	31-60 AVERAGE	270	240	299	333	396	419	444	454	430	423	364	315	4386
	STD DEV	23	26	35	29	27	19	15	13	13	17	20	20	191
	41-70 AVERAGE	277	250	308	338	398	422	447	455	433	427	365	317	4436
	STD DEV	26	26	35	30	27	20	17	12	14	17	20	24	188
	51-80 AVERAGE	276	250	306	337	400	426	450	455	433	428	366	314	4441
	STD DEV	25	23	31	27	24	19	14	13	15	17	19	26	165
	61-90 AVERAGE	283	255	309	339	401	432	457	458	437	430	368	315	4485
	STD DEV	23	20	28	29	27	21	18	17	17	21	20	27	180
6699	71-00 AVERAGE	286	257	307	342	407	439	462	465	443	434	374	320	4537
	STD DEV	24	21	27	24	28	22	19	20	20	22	21	32	210
VI-67 Virgin Islands	31-00 AVERAGE	362	324	381	405	463	495	528	533	499	497	434	393	5312
	STD DEV	26	23	29	27	28	24	23	23	24	25	28	30	189
	31-60 AVERAGE	360	319	382	405	461	491	525	533	497	496	439	399	5306
	STD DEV	25	24	29	28	24	24	30	24	24	24	25	24	181
	41-70 AVERAGE	366	329	388	410	459	492	523	531	498	500	439	399	5335
	STD DEV	23	21	28	30	26	24	29	24	21	29	26	29	179
	51-80 AVERAGE	359	326	379	403	459	492	520	525	493	491	430	386	5262
	STD DEV	25	20	28	30	26	21	25	18	24	25	26	30	174
	61-90 AVERAGE	360	327	379	401	455	490	526	527	494	493	426	385	5263
	STD DEV	26	19	29	29	26	20	15	21	25	27	31	31	170
6799	71-00 AVERAGE	360	325	377	404	467	501	533	535	499	496	427	385	5306
	STD DEV	28	22	29	24	32	23	15	24	28	24	30	34	214
PI-91 Pacific Islands	61-00 AVERAGE	415	376	438	451	490	486	498	496	485	493	459	443	5530
	STD DEV	19	17	23	24	22	22	22	20	21	18	17	18	203
	61-90 AVERAGE	412	372	434	444	484	479	490	489	480	489	455	438	5465
	STD DEV	19	17	24	23	22	20	19	17	20	17	16	16	187
	71-00 AVERAGE	419	379	443	456	495	492	504	502	493	499	464	448	5594
	STD DEV	18	15	22	23	21	20	20	18	18	14	15	15	177
	31-00 AVERAGE	0	0	0	0	6	62	177	141	24	1	0	0	410
	STD DEV	0	0	0	0	6	25	43	41	16	2	0	0	82
	31-60 AVERAGE	0	0	0	0	6	62	178	142	26	1	0	0	416
	STD DEV	0	0	0	0	6	27	44	46	14	2	0	0	87
Census Region-01 New England	41-70 AVERAGE	0	0	0	0	5	61	173	132	25	1	0	0	397
	STD DEV	0	0	0	0	6	26	47	41	18	2	0	0	88
	51-80 AVERAGE	0	0	0	0	5	59	171	137	23	0	0	0	395
	STD DEV	0	0	0	0	5	25	44	38	19	2	0	0	77
	61-90 AVERAGE	0	0	0	0	5	57	172	139	22	0	0	0	396
	STD DEV	0	0	0	0	5	22	33	39	18	1	0	0	68
	71-00 AVERAGE	0	0	0	0	6	63	180	146	22	0	0	0	418
	STD DEV	0	0	0	0	6	27	43	36	14	1	0	0	81



Population-Weighted Monthly Normals, 1971-2000 (and previous periods)

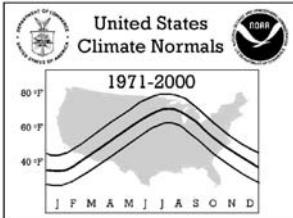
HISTORICAL CLIMATOGRAPHY SERIES 5-2

Cooling Degree Days

Census Regions

Page 15

State/Region	Element	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
Census Region-02 Middle Atlantic	31-00 AVERAGE	0	0	0	0	23	122	248	204	63	6	0	0	667
	STD DEV	0	0	0	0	16	37	47	46	28	7	0	0	101
	31-60 AVERAGE	0	0	0	0	24	127	255	208	66	7	0	0	687
	STD DEV	0	0	0	0	15	41	47	51	27	7	0	0	105
	41-70 AVERAGE	0	0	0	0	23	125	246	200	67	8	0	0	669
	STD DEV	0	0	0	0	17	38	49	46	32	7	0	0	107
	51-80 AVERAGE	0	0	0	0	22	117	242	206	66	6	0	0	659
	STD DEV	0	0	0	0	15	37	47	43	32	6	0	0	98
	61-90 AVERAGE	0	0	0	0	22	114	240	202	61	5	0	0	643
	STD DEV	0	0	0	0	15	33	37	42	32	7	0	0	78
5802	71-00 AVERAGE	0	0	0	0	23	117	247	205	59	5	0	0	655
	STD DEV	0	0	0	0	17	37	49	44	21	6	0	0	101
Census Region-03 East North Central	31-00 AVERAGE	0	0	1	1	48	155	253	207	67	11	0	0	743
	STD DEV	0	0	2	2	30	49	56	59	31	10	0	0	134
	31-60 AVERAGE	0	0	1	1	47	166	269	226	76	13	0	0	799
	STD DEV	1	0	3	3	25	58	60	58	34	10	0	0	137
	41-70 AVERAGE	0	0	1	2	47	156	243	206	67	14	0	0	736
	STD DEV	0	0	3	2	29	47	53	59	28	13	0	0	121
	51-80 AVERAGE	0	0	1	1	48	149	240	199	68	11	0	0	717
	STD DEV	0	0	1	2	31	46	50	49	29	12	0	0	111
	61-90 AVERAGE	0	0	1	1	48	145	241	190	62	10	0	0	699
	STD DEV	0	0	1	2	34	40	47	50	27	12	0	0	100
5803	71-00 AVERAGE	0	0	1	1	49	147	245	197	60	8	0	0	708
	STD DEV	0	0	1	2	33	43	52	60	27	8	0	0	130
Census Region-04 West North Central	31-00 AVERAGE	0	0	3	6	66	195	319	266	94	16	0	0	966
	STD DEV	0	0	4	6	34	55	66	64	38	15	0	0	160
	31-60 AVERAGE	0	0	3	6	66	205	335	286	106	20	0	0	1027
	STD DEV	0	1	5	7	33	67	77	66	43	16	0	0	179
	41-70 AVERAGE	0	0	2	7	65	188	304	265	89	19	0	0	939
	STD DEV	0	1	4	7	33	53	59	58	31	19	0	0	142
	51-80 AVERAGE	0	0	2	6	67	193	313	258	90	17	0	0	946
	STD DEV	0	1	3	6	33	52	63	46	31	17	0	0	132
	61-90 AVERAGE	0	0	3	7	67	190	314	249	85	14	0	0	929
	STD DEV	0	0	3	6	36	45	53	56	28	16	0	0	121
5804	71-00 AVERAGE	0	0	3	6	65	192	308	255	87	12	0	0	928
	STD DEV	0	0	3	6	33	46	54	62	33	8	0	0	131
Census Region-05 South Atlantic	31-00 AVERAGE	35	30	46	72	183	325	420	393	262	121	48	31	1967
	STD DEV	20	15	20	20	34	40	36	33	36	28	18	15	123
	31-60 AVERAGE	38	33	45	74	191	339	421	400	270	126	45	32	2013
	STD DEV	22	17	22	22	33	37	33	26	37	30	17	16	90
	41-70 AVERAGE	32	29	45	78	189	325	412	391	260	122	44	28	1954
	STD DEV	17	16	20	22	34	43	31	30	36	30	18	13	113
	51-80 AVERAGE	30	26	45	74	181	309	409	392	262	115	44	28	1914
	STD DEV	18	14	17	18	35	41	31	31	37	25	15	13	117
	61-90 AVERAGE	30	27	47	71	174	310	409	387	255	117	49	30	1906
	STD DEV	19	14	17	18	28	38	36	35	36	29	19	15	117
5805	71-00 AVERAGE	34	30	49	70	177	319	425	393	259	120	55	33	1964
	STD DEV	20	13	19	20	34	40	40	38	30	28	18	14	133
Census Region-06 East South Central	31-00 AVERAGE	10	5	19	31	148	313	415	385	221	60	5	3	1616
	STD DEV	10	5	15	19	48	55	50	55	57	30	5	5	180
	31-60 AVERAGE	14	7	20	33	159	339	430	406	239	71	4	4	1726
	STD DEV	13	6	19	18	44	60	48	50	60	32	5	5	143
	41-70 AVERAGE	10	6	17	38	157	319	409	383	218	64	4	3	1628
	STD DEV	12	6	16	20	48	62	53	55	52	34	4	3	167
	51-80 AVERAGE	8	5	17	34	145	300	405	377	220	53	4	3	1571
	STD DEV	8	5	12	19	50	60	53	51	57	27	4	4	180
	61-90 AVERAGE	6	4	18	31	136	292	397	366	208	52	6	3	1520
	STD DEV	7	5	12	19	49	42	50	49	56	30	6	5	148
5806	71-00 AVERAGE	8	4	19	26	136	296	412	376	209	53	6	3	1549
	STD DEV	7	4	11	18	49	45	46	55	53	28	6	5	164
Census Region-07 West South Central	31-00 AVERAGE	16	15	48	101	253	439	549	537	352	143	29	11	2491
	STD DEV	12	12	26	37	49	47	44	51	55	44	17	8	187
	31-60 AVERAGE	19	17	47	98	253	453	554	551	364	156	25	12	2549
	STD DEV	14	13	30	33	46	46	38	47	53	50	15	8	152
	41-70 AVERAGE	16	15	42	111	256	442	549	542	351	145	28	11	2507
	STD DEV	13	13	27	41	42	45	44	49	44	51	15	7	168
	51-80 AVERAGE	14	13	46	107	251	438	551	530	351	136	27	10	2475
	STD DEV	12	12	26	41	49	49	53	54	59	46	18	7	210
	61-90 AVERAGE	12	11	48	107	247	424	539	522	340	132	33	10	2426
	STD DEV	9	10	24	41	43	42	49	46	57	40	19	9	186
5807	71-00 AVERAGE	14	15	51	94	252	431	545	527	345	134	31	10	2448
	STD DEV	10	11	20	34	56	48	48	53	60	30	19	8	201



Population-Weighted Monthly Normals, 1971-2000 (and previous periods)

HISTORICAL CLIMATOGRAPHY SERIES 5-2

Cooling Degree Days

Census Regions

Page 16

State/Region	Element	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL	
Census Region-08 Mountain	31-00 AVERAGE	0	2	8	33	92	218	346	300	167	53	4	0	1225	
	STD DEV	1	2	7	15	28	40	32	33	28	18	4	0	106	
	31-60 AVERAGE	0	2	7	34	90	215	352	301	173	53	4	0	1230	
	STD DEV	0	2	6	14	28	37	32	25	22	17	3	0	97	
	41-70 AVERAGE	0	2	6	31	87	204	343	293	165	53	4	0	1188	
	STD DEV	0	2	4	14	23	40	27	32	28	18	4	0	94	
	51-80 AVERAGE	0	2	7	28	84	215	345	287	161	52	4	0	1184	
	STD DEV	0	2	6	12	24	40	25	34	27	17	3	0	89	
	61-90 AVERAGE	0	2	8	32	88	219	341	289	155	52	4	0	1190	
	STD DEV	1	2	7	17	23	42	27	34	29	19	3	0	93	
	71-00 AVERAGE	1	3	10	35	96	229	341	302	167	55	4	0	1244	
	STD DEV	1	2	7	17	29	39	33	36	30	18	4	0	111	
5808	Census Region-09 Pacific	31-00 AVERAGE	1	1	3	12	31	87	182	180	116	32	4	1	650
	STD DEV	2	2	4	9	19	29	36	38	33	17	4	1	101	
	31-60 AVERAGE	1	0	3	11	28	78	179	164	112	27	4	1	607	
	STD DEV	1	1	5	7	16	25	37	31	26	14	5	1	90	
	41-70 AVERAGE	1	1	2	9	25	75	175	167	112	29	4	0	599	
	STD DEV	1	2	2	7	12	26	35	38	29	17	4	1	86	
	51-80 AVERAGE	1	1	2	9	25	85	182	175	115	32	3	1	631	
	STD DEV	2	2	3	7	12	29	31	40	31	18	4	1	79	
	61-90 AVERAGE	1	1	3	12	29	93	184	186	115	35	3	1	663	
	STD DEV	2	2	4	10	15	32	37	37	40	18	3	1	94	
	71-00 AVERAGE	2	1	4	14	36	100	188	193	125	36	4	1	704	
	STD DEV	2	2	4	11	23	29	35	39	38	18	4	1	95	
National Census Region Conterminous U.S.	31-00 AVERAGE	9	8	17	31	98	215	322	292	158	54	13	7	1224	
	STD DEV	5	4	7	8	19	26	29	30	23	12	5	3	83	
	31-60 AVERAGE	10	8	16	31	100	222	328	299	164	57	12	8	1256	
	STD DEV	6	4	8	9	17	29	31	29	24	14	4	4	78	
	41-70 AVERAGE	8	8	15	33	98	213	316	288	156	55	12	7	1211	
	STD DEV	5	4	8	9	19	27	28	27	20	14	4	3	69	
	51-80 AVERAGE	8	7	16	32	96	209	316	287	157	52	12	7	1197	
	STD DEV	5	4	7	9	20	26	28	25	21	12	4	3	77	
	61-90 AVERAGE	8	7	16	32	94	207	314	284	152	52	14	7	1186	
	STD DEV	5	3	6	9	19	22	25	27	20	11	5	3	66	
	71-00 AVERAGE	9	8	18	30	97	213	321	290	155	53	15	8	1215	
5999	STD DEV	5	3	6	8	21	25	26	33	21	10	5	3	83	