CLIMATOLOGICAL DATA

CONDENSED CLIMATOLOGICAL SUMMARY OF TEMPERATURE AND PRECIPITATION BY SECTIONS

[For description of tables and charts, see REVIEW January 1943, p. 15]

In the following table are given for the various sections of the climatological service of the Weather Bureau the monthly average temperature and total rainfall; the stations reporting the highest and lowest temperatures, with dates of occurrence; the stations reporting the greatest and least total precipitation; and other data as indicated by the several headings.

The mean temperature for each section, the highest and lowest temperatures, the average precipitation, and the greatest and least monthly amounts are found by using all trustworthy records available.

The mean departures from normal temperatures and precipitation are based only on records from stations that have 10 or more years of observations. Of course, the number of such records is smaller than the total number of stations.

Section	Temperature								Precipitation					
	Section average	Departure from the normal	Monthly extremes						Section average	Departure from the normal	Greatest monthly		Least monthly	
			Station	Highest	Date	Station	Lowest	Date			Station	Amount	Station	Amount
	°F.	°F.		°F.			°F.		In.	In.		In.		In.
Alabama	80.1	−0.2	2 stations	105	17	Huntsville	49	22	4.21	−1.38	Fairhope	11.41	South Hill	0.46
Arizona	79.2	−1.0	3 stations	114	[1] 1	Fort Valley	33	[1] 10	1.18	−.94	Elgin	4.61	8 stations	.00
Arkansas	81.2	+.6	Conway	108	18	Brinkley	49	22	2.61	−1.12	Perryville	5.85	White Cliffs	.56
California	70.7	−2.7	2 stations	120	[1] 1	Boca	23	9	.08	.00	Blackbear	2.12	239 stations	.00
Colorado	66.5	−.7	do	101	[1] 7	3 stations	26	[1] 7	2.25	+.11	Kauffman	7.84	Greystone	.03
Florida	81.0	−.3	Clermont	101	13	Avon Park	60	10	9.26	+1.93	Isleworth	21.49	Naples	1.30
Georgia	78.8	−1.2	6 stations	103	[1] 17	Blairsville	49	5	4.83	−.92	Brunswick	16.95	Adairsville	.82
Idaho	66.3	−1.8	Lewiston	107	[1] 27	Sun Valley	19	3	.38	−.28	Landmark	2.05	4 stations	.00
Illinois	76.2	−.3	New Burnside	105	11	3 stations	43	21	1.82	−1.42	Waterloo	5.89	Waverly	.09
Indiana	76.2	+.5	Forest Reserve	106	10	Marengo	41	21	1.68	−1.64	Shelbyville	3.78	Kokomo	.37
Iowa	72.6	−2.0	2 stations	98	[1] 10	Decorah	42	21	3.73	+.05	Cushing (near)	8.81	Centerville	.93
Kansas	77.4	−1.8	Medicine Lodge	106	8	Burr Oak	46	21	4.73	+1.60	Oberlin	11.83	Coffeyville	1.18
Kentucky	77.5	+.4	2 stations	103	10	Heidelberg	45	22	1.93	−2.23	Brownsville	4.90	Henderson	.49
Louisiana	83.2	+1.3	Lake Providence	108	17	2 stations	60	[1] 2	3.17	−2.92	Burrwood	9.81	Grand Cane	.37
Maryland-Delaware	76.0	+.7	2 stations	100	[1] 7	Oakland, Md	39	22	2.47	−1.80	Oxford, Md	7.17	Great Falls, Md	1.08
Michigan	68.9	−.4	Wayne	99	7	Grayling	32	21	2.68	−.05	St. Ignace	6.42	Battle Creek	.61
Minnesota	68.2	−1.9	Montevideo	96	2	3 stations	36	20	4.13	+.86	Wadena	9.26	Thief River Falls	.82
Mississippi	81.6	+.5	3 stations	105	[1] 17	Batesville	52	22	3.84	−1.22	Laurel	11.48	Flora	.58
Missouri	77.6	−.5	Poplar Bluff	105	9	Seymour	40	21	2.62	−.95	Lamar	6.75	Topaz	.72
Montana	64.8	−2.3	Libby	103	19	Lima	24	7	.94	−.44	Red Lodge	4.23	Thompson Falls	.17
Nebraska	73.5	−2.0	Box Butte Exp. Farm	102	18	2 stations	42	[1] 12	3.81	+.72	Big Spring	8.65	Loup City	.79
Nevada	71.2	−1.4	2 stations	113	[1] 17	Mala Vista Ranch	28	10	.07	−.31	Paradise Valley	.59	36 stations	.00
New England	70.2	+1.1	do	98	[1] 8	Lake Frontiere, Maine	31	19	3.08	−.67	Turners Falls, Mass	9.93	Shelton, Conn	.33
New Jersey	75.6	+1.8	do	101	28	Runyon	44	22	1.44	−3.25	Culvers Lake	3.89	Long Branch	.22
New Mexico	71.9	−.4	Corona	110	8	Eagle Nest	28	28	2.37	−.10	White Tail	7.49	2 stations	T
New York	71.2	+1.4	Dansville	99	7	Cherryplain	35	18	2.71	−1.19	Spencertown	9.13	Long Beach	.38
North Carolina	75.5	−1.4	2 stations	102	27	Mount Mitchell	41	4	6.44	+.48	Pinehurst	14.00	Hot Springs	1.90
North Dakota	67.6	−1.4	Carrington	102	24	Kenmare	33	8	1.74	−.69	Milnor	10.61	Underwood	T
Ohio	74.3	+.6	Peebles	104	11	Canton	42	17	1.69	−2.11	Valley Crossing	3.93	Springfield [1]	.60
Oklahoma	81.5	−.3	Hollis	114	27	Sallisaw	49	28	3.05	+.27	Hooker	7.20	Northside Disposal Plant.	.22
Oregon	64.9	−1.6	Illahe	107	17	4 stations	25	[1] 2	.45	+.03	Crescent	4.62	16 stations	.00
Pennsylvania	72.2	.0	2 stations	100	[1] 12	Kane	37	17	2.39	−1.87	Lycippus	5.19	Conshohocken	.05
South Carolina	78.0	−2.0	Orangeburg	105	17	2 stations	53	4	5.90	+.02	Florence Airport	13.36	Greenville	2.40
South Dakota	70.4	−2.8	Ottumwa	102	24	Ralph	37	8	3.49	+1.06	Bowdler	8.00	McIntosh	.83
Tennessee	78.0	+.2	2 stations	104	[1] 9	Bolivar	43	22	2.14	−2.34	Chattanooga	6.93	Etowah	.16
Texas	83.8	+.8	Eagle Pass	115	25	Mount Locke	48	24	1.68	−.90	Shamrock	8.44	2 stations	.00
Utah	71.2	−.6	2 stations	108	17	Panguitch	33	[1] 4	.27	−.63	Fruita	1.86	9 stations	.00
Virginia	75.3	−.1	Diamond Springs	102	[1] 26	2 stations	40	[1] 4	3.48	−1.14	Dahlgren	9.78	Mount Weather	.78
Washington	67.2	+.7	Dallesport	110	18	do	31	1	.22	−.45	Startup	1.75	20 stations	.00
West Virginia	72.6	−.6	Great Cacapon	102	[1] 7	Cranberry Glades	34	[1] 4	2.65	−1.97	Shinniston	6.22	Wayne	.68
Wisconsin	69.2	−1.0	Kenosha	97	9	Danbury	35	20	2.43	−1.02	West Bend	4.94	Mondovi	.88
Wyoming	64.1	−1.7	Lovell	100	1	4 stations	28	[1] 11	1.43	+.10	Albin	9.96	Afton	.19
Alaska (June)	53.0	+.4	Eagle	88	17	2 stations	23	[1] 2	1.53	−.19	Whittier	4.94	Wainwright	.15
Hawaii	74.2	−.1	Waiane	94	14	Haleakala Ranger Station.	41	4	5.79	−.23	Makahanaloa No. 2	28.80	21 stations	.00
Puerto Rico	78.8	+.2	Utuado	96	[1] 15	Guineo Reservoir	57	3	9.64	+3.59	Rio Blanco (1800 ft.)	25.57	Mora Camp	1.76

[1] Other dates also.

CLIMATOLOGICAL DATA FOR WEATHER BUREAU STATIONS

District and station	Elevation of instruments: Barometer above sea level	Elevation of instruments: Thermometer above ground	Elevation of instruments: Anemometer above ground	Pressure: Station	Pressure: Sea level	Pressure: Departure from normal	Temperature of the air: Mean	Temperature of the air: Departure from normal	Temperature of the air: Maximum	Temperature of the air: Date	Temperature of the air: Mean maximum	Temperature of the air: Minimum	Temperature of the air: Date	Temperature of the air: Mean minimum	Temperature of the air: Greatest daily range	Total degree days	Mean temperature of the dew-point	Mean relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: Days with 0.01 inch or more	Wind: Average hourly velocity	Wind: Prevailing direction	Wind: Maximum velocity: Miles per hour	Wind: Maximum velocity: Direction	Wind: Maximum velocity: Date	Clear days	Partly cloudy days	Cloudy days	Average cloudiness, tenths	Total snowfall	Snow, sleet, and ice on ground at end of month	Number of days with thunderstorms
	Ft.	Ft.	Ft.	Mbs.	Mbs.	Mbs.	°F.	°F.	°F		°F	°F.		°F.	°F		°F.	%	In.	In.	In.		Mls								0–10	In.	In.	
New England							**70.6**	**+2.1**										**77**	**1.83**	**−1.7**											**5.1**			
Eastport	75	67	85	1,011.5	1,014.6	+1.1	61.6	+1.2	85	8	70	46	6	53	36	120	54	81	1.75	−1.3	.63	12	7.4	sw.	29	e.	27	13	8	10	5.1	0.0	0.0	3
Greenville, Maine	1,070	6	41	976.3	1,015.2	----	64.4	−.7	92	8	78	36	19	51	44	62	58	---	2.36	−1.9	.57	15	---	s.	---	---	---	7	15	9	---	.0	.0	7
Portland, Maine [1]	103	5	43	1,010.5	1,014.6	+.4	68.4	+.2	92	9	79	47	19	58	32	18	62	83	3.03	−.2	1.29	10	7.6	s.	27	s.	12	14	8	9	4.6	.0	.0	7
Concord [1]	289	4	45	1,004.1	1,014.9	+.3	70.3	+2.9	96	8	84	44	19	57	39	6	61	76	2.35	−1.2	.68	11	6.4	nw.	32	nw.	10	7	16	8	5.5	.0	.0	10
Burlington [1]	403	6	51	999.0	1,013.5	−.4	72.1	+1.8	96	8	84	49	2	60	35	2	62	72	3.63	+.1	.90	11	8.2	s.	28	s.	12	7	12	12	5.9	.0	.0	10
Boston [1]	124	33	62	1,010.2	1,014.9	+.3	73.8	+2.1	95	10	82	59	22	65	26	0	62	69	1.61	−1.9	1.06	8	9.6	sw.	33	sw.	12	11	11	9	5.0	.0	.0	6
Nantucket	12	11	59	1,014.9	1,015.9	+.7	70.2	+2.4	84	7	77	55	3	63	22	2	65	86	1.04	−1.8	.35	6	10.4	sw.	25	sw.	13	16	5	10	4.7	.0	.0	2
Block Island	26	11	46	1,014.6	1,015.9	+1.0	71.2	+2.8	85	31	78	56	4	64	20	2	65	87	.42	−2.7	.25	7	12.3	sw.	36	nw.	16	3	11	7	4.6	.0	.0	4
Providence [2]	159	46	60	1,009.8	1,015.9	+1.0	76.0	+2.6	95	9	86	55	3	66	29	0	62	74	.96	−2.3	.43	7	8.1	sw.	29	nw.	16	7	17	7	5.4	.0	.0	7
Hartford [1]	159	5	44	1,009.5	1,015.6	+.7	74.2	+2.6	94	9	86	52	22	62	32	0	63	72	2.26	−2.1	.80	10	7.4	s.	28	sw.	12	7	17	7	5.4	.0	.0	8
New Haven [1]	107	5	39	1,011.5	1,015.6	+.7	74.2	+4.9	90	5	84	52	3	64	33	1	63	73	.73	−3.3	.20	10	6.7	sw.	19	sw.	12	8	19	4	4.7	.0	.0	7
Middle Atlantic							**76.9**	**+1.9**										**71**	**2.25**	**−2.0**											**4.9**			
Albany [1]	97	26	40	1,010.5	1,014.6	.0	73.8	+2.9	96	7	86	51	22	62	34	1	62	70	1.82	−1.0	.52	13	7.0	s.	28	nw.	27	11	12	8	5.3	.0	.0	14
Binghamton [2]	871	60	79	984.1	1,015.9	+1.0	71.8	+1.8	94	11	84	49	22	59	34	5	61	78	2.17	−1.5	1.42	8	5.0	w.	20	w.	12	7	15	9	5.4	.0	.0	10
New York	314	415	454	1,003.7	1,014.9	−.3	77.2	+3.4	92	8	86	60	22	69	24	0	62	66	2.20	−2.0	.93	8	12.3	s.	40	n.	16	12	14	5	4.5	.0	.0	8
Harrisburg [1]	374	30	49	1,002.0	1,015.6	+.4	77.1	+2.3	97	7	89	55	22	65	33	0	63	66	.88	−3.0	.36	7	7.0	sw.	32	se.	19	10	12	9	5.4	.0	.0	4
Philadelphia [1]	114	6	56	1,011.5	1,015.9	+.7	78.4	+3.1	97	7	89	56	22	67	31	0	64	66	1.05	−3.1	.61	7	7.6	sw.	25	sw.	30	9	15	7	5.3	.0	.0	6
Reading	323	47	306	1,003.7	1,015.6	----	78.2	+2.8	95	7	90	57	22	67	30	0	---	---	.93	−3.3	.35	9	8.9	s.	40	nw.	29	12	14	5	4.4	.0	.0	4
Scranton	805	72	104	986.8	1,015.6	+.4	73.7	+2.0	94	8	86	51	22	62	32	0	---	---	2.60	−1.4	1.17	7	5.6	n.	43	nw.	16	15	13	3	4.4	.0	.0	6
Atlantic City	52	37	172	1,013.9	1,015.9	+.7	73.3	+1.2	92	5	79	60	22	68	25	0	66	82	1.50	−2.4	.78	6	14.1	s.	36	s.	12	14	11	6	4.5	.0	.0	5
Trenton	190	89	107	1,008.8	1,015.9	----	77.8	+3.3	95	28	88	58	22	67	28	0	62	63	.37	−3.6	.13	5	8.1	sw.	24	sw.	12	11	15	5	4.9	.0	.0	6
Baltimore [2]	123	100	215	1,011.2	1,015.9	+.7	79.7	+2.5	97	25	89	61	22	70	27	0	65	67	2.81	−1.8	1.83	7	9.3	s.	36	sw.	30	12	16	3	4.4	.0	.0	6
Washington [2]	112	56	100	1,011.9	1,016.3	+.4	79.2	+2.4	97	6	90	60	22	69	31	0	64	66	2.44	−2.3	1.05	11	6.0	s.	24	w.	24	9	16	6	4.9	.0	.0	7
Cape Henry	18	8	54	1,015.6	1,016.3	----	78.4	+.9	98	27	86	63	5	70	26	0	67	74	3.78	−1.6	1.28	9	10.6	sw.	32	w.	27	9	16	6	5.1	.0	.0	7
Lynchburg	686	144	184	991.9	1,016.3	.0	77.2	−.3	96	27	88	56	22	66	33	0	63	72	4.21	.0	2.03	15	6.2	sw.	37	sw.	27	8	14	9	5.2	.0	.0	11
Norfolk [2]	91	80	125	1,013.5	1,016.9	+1.0	79.2	+.5	97	27	88	64	4	70	28	0	68	75	1.43	−4.3	.80	7	9.3	sw.	34	nw.	27	7	18	6	5.3	.0	.0	8
Richmond	144	11	52	1,010.5	1,015.6	−.7	78.4	−.1	98	6	89	58	4	68	32	0	66	72	5.51	+.8	1.69	9	7.2	sw.	27	nw.	13	12	12	7	5.0	.0	.	10
South Atlantic							**78.4**	**−0.8**										**78**	**6.58**	**+0.8**											**6.1**			
Asheville	2,253	77	92	939.4	1,016.6	.0	72.6	+.9	92	17	84	53	22	61	32	0	60	76	6.24	+1.9	2.40	14	5.7	se.	24	nw.	19	3	14	14	6.5	.0	.0	10
Charlotte [2]	779	63	86	988.8	1,016.6	.0	77.4	−1.0	99	27	87	60	4	68	29	0	66	77	11.68	+6.6	6.59	15	5.9	s.	26	nw.	1	6	10	15	6.5	.9	.0	10
Greensboro [1]	886	6	56	985.4	1,016.9	----	76.0	----	94	27	87	56	4	65	35	0	66	78	6.63	----	4.43	12	6.9	s.	25	nw.	13	3	16	12	6.4	.0	.0	11
Hatteras	11	5	50	1,016.6	1,016.9	+.6	78.6	+.4	86	27	84	66	24	74	18	0	71	80	4.75	−.7	3.11	7	11.9	sw.	28	nw.	28	7	18	6	5.1	.0	.0	5
Raleigh [1]	376	27	69	1,003.4	1,016.9	+.3	78.0	−.8	96	27	89	58	4	67	32	0	66	76	5.31	−.1	2.94	13	8.1	sw.	24	s.	29	9	15	7	5.2	.0	.0	7
Wilmington	72	73	107	1,014.2	1,016.6	+.3	78.6	−.5	94	17	86	64	4	71	21	0	70	80	5.14	−2.0	1.17	15	8.8	s.	29	s.	28	7	14	10	5.8	0	.0	12
Charleston [2]	48	11	92	1,014.2	1,016.3	−.6	80.0	−1.4	94	29	86	68	22	74	23	0	72	84	4.29	−2.6	2.01	12	10.0	s.	26	e.	4	3	18	10	6.3	.0	.0	5
Columbia, S. C. [2]	347	70	91	1,003.7	1,016.6	.0	78.9	−2.0	98	27	89	62	4	69	25	0	68	78	8.54	+3.2	5.00	12	6.7	s.	25	sw.	28	7	11	13	5.9	.0	.0	10
Greenville, S. C. [1]	1,040	18	36	979.7	1,016.3	----	76.9	.0	98	27	87	61	6	67	28	0	64	71	2.40	−3.0	1.19	13	7.8	ne.	27	n.	20	6	12	13	6.4	.0	.0	7
Augusta [2]	182	62	77	1,009.1	1,015.6	−1.0	80.3	−1.0	100	27	90	64	6	70	27	0	66	72	2.72	−2.7	1.03	12	5.5	s.	24	w.	31	7	14	10	6.0	.0	.0	10
Savannah [2]	65	73	152	1,013.9	1,016.3	−.6	80.2	−1.3	100	17	88	65	7	72	26	0	72	84	7.14	+.5	2.43	14	9.1	s.	38	sw.	29	1	22	8	6.4	.0	.0	12
Jacksonville [2]	43	86	140	1,014.9	1,016.6	−.3	80.4	−1.7	96	18	88	68	3	72	26	0	72	84	14.20	+7.5	5.00	23	7.0	sw.	31	ne.	18	4	17	10	6.2	.0	.0	17
Florida Peninsula							**83.2**	**+1.0**										**77**	**4.28**	**−1.3**											**5.7**			
Key West [2]	21	10	64	1,015.2	1,016.3	−.6	85.3	+1.8	92	7	90	72	30	80	17	0	74	72	3.38	+.1	1.67	9	7.3	e.	24	sw.	20	8	19	4	4.8	.0	.0	10
Miami [2]	25	242	249	1,015.2	1,016.6	−.7	81.6	−.2	92	4	87	71	20	76	16	0	74	82	5.43	−.2	2.45	18	10.2	se.	29	ne.	29	5	20	6	5.9	.0	.0	17
Tampa [1]	35	6	43	1,015.2	1,016.6	−.7	82.6	+1.4	93	18	90	72	12	75	19	0	73	78	4.04	−3.9	1.11	15	8.1	s.	26	se.	28	2	21	8	6.3	.0	0	19
East Gulf							**80.4**	**−0.4**										**76**	**5.36**	**−0.4**											**5.7**			
Atlanta [1]	1,173	33	72	974.9	1,015.6	−1.0	78.3	−.8	100	17	89	63	7	68	28	0	64	70	2.30	−2.5	.54	12	7.9	e.	40	nw.	19	5	14	12	6.1	.0	.0	10
Macon [2]	370	79	87	1,002.4	1,015.6	−1.0	79.4	−1.8	100	17	89	63	4	70	28	0	67	72	3.86	−.9	1.21	11	5.7	s.	25	n.	19	10	13	8	5.7	.0	.0	7
Thomasville	273	49	58	1,007.1	1,016.9	.0	79.6	−2.2	98	17	88	66	6	71	24	0	---	---	10.16	+3.5	4.80	12	---	---	---	---	---	0	14	17	---	.0	.0	12
Apalachicola	35	11	51	1,014.6	1,015.9	----	80.0	−1.7	92	9	86	70	4	74	20	0	74	82	10.97	+3.2	1.81	20	6.4	w.	26	ne.	29	4	14	13	6.4	.0	.0	15
Pensacola	56	54	79	1,013.9	1,015.9	−.4	81.0	.0	95	9	89	68	5	73	22	0	73	82	8.28	+1.5	4.57	17	6.1	w.	25	sw.	19	9	15	7	5.1	.0	.0	15
Anniston	741	9	---	---	---	---	78.0	−.5	100	17	90	55	22	66	34	1	---	---	2.50	−2.7	.72	9	---	se.	---	---	---	9	13	9	---	.0	.0	7
Birmingham [1]	700	5	62	991.2	1,015.9	−.4	78.8	−.9	100	17	91	57	5	67	33	0	64	70	3.76	----	1.24	13	6.2	e.	32	nw.	27	6	20	5	5.5	.0	.0	8
Mobile [2]	57	86	161	1,013.9	1,015.9	−.4	81.6	+.2	97	27	90	68	5	73	28	0	71	82	4.12	−2.8	1.58	15	5.5	w.	27	n.	27	6	17	8	6.0	.0	.0	13
Montgomery [2]	218	92	105	1,008.1	1,015.9	−.7	81.3	−.4	100	17	92	65	5	71	30	0	70	77	2.96	−1.9	1.21	11	6.0	sw.	38	n.	19	9	14	8	5.5	.0	.0	11
Meridian [2]	375	67	92	1,002.4	1,015.6	−1.0	80.4	.0	102	18	92	62	5	69	29	0	69	75	6.55	+1.7	2.45	16	5.2	sw.	32	n.	3	4	21	6	5.8	.0	.0	16
Vicksburg [2]	247	82	102	1,006.4	1,014.9	−.7	82.4	+1.1	100	18	92	66	22	72	25	0	70	77	2.06	−2.5	1.27	6	7.3	sw.	35	nw.	28	10	14	7	4.8	.0	.0	8
New Orleans [4]	53	50	84	1,013.5	1,015.6	−.3	84.0	+2.6	98	18	91	71	14	75	23	0	73	76	5.25	−1.1	2.00	12	5.2	w.	29	ne.	14	5	15	11	5.9	.0	.0	13
West Gulf							**84.3**	**+1.3**										**70**	**1.71**	**−1.6**											**4.6**			
Shreveport [1]	249	5	64	1,005.8	1,014.2	−1.0	85.2	+2.0	103	18	96	68	21	74	30	0	69	66	1.35	−2.2	.55	3	7.7	sw.	34	w.	19	14	8	9	4.7	.0	.0	5
Fort Smith	463	57	82	998.0	1,013.5	−1.4	82.7	+1.2	101	10	94	65	6	72	27	0	70	67	2.28	−1.1	.78	6	6.0	e.	42	nw.	27	6	19	6	5.5	.0	.0	8
Little Rock [1]	357	5	58	1,002.4	1,014.9	−.7	82.7	+1.8	105	18	95	58	22	70	37	0	66	62	3.35	−.2	2.44	5	7.2	sw.	40	w.	27	12	13	6	4.7	.0	.0	8
Austin [1]	605	10	41	992.9	1,013.5	----	84.4	+.4	103	26	96	67	3	73	27	0	68	66	.32	−2.0	.18	3	9.0	s.	24	n.	16	13	15	3	4.1	.0	.0	4
Brownsville [1]	57	5	54	1,011.2	1,013.2	----	84.8	+1.2	98	31	93	72	1	77	20	0	75	81	2.41	+.1	1.45	5	10.3	s.	23	s.	25	9	16	6	5.2	.0	.0	5
Corpus Christi [1]	20	4	33	1,013.2	1,013.9	−.7	84.0	+2.4	98	26	93	71	14	75	22	0	74	80	T	----	T	0	11.8	se.	28	se.	25	21	6	4	3.1	.0	.0	3
Dallas [1]	512	5	45	995.6	1,013.5	----	85.4	+1.2	105	28	96	67	4	74	28	0	69	65	3.70	+.8	2.23	8	9.1	s.	33	sw.	1	14	11	6	4.7	.0	.0	5
Fort Worth [1]	679	5	56	990.2	1,013.2	−1.4	85.5	+1.9	106	27	96	67	22	75	27	0	66	60	2.52	−.1	1.94	4	9.6	s.	35	n.	20	12	11	8	4.7	.0	.0	5
Galveston [2]	54	106	114	1,013.2	1,014.9	−.3	83.6	+.2	94	16	88	75	22	80	14	0	76	78	.79	−2.9	.51	4	10.0	s.	26	s.	3	17	12	2	3.5	.0	.0	4
Houston [2]	138	157	190	1,009.8	1,014.6	----	85.6	+1.9	100	16	95	71	22	76	25	0	73	76	.24	−3.8	.11	5	8.8	s.	24	se.	30	9	16	6	5.0	.0	.0	8
Palestine	510	64	72	997.3	1,014.6	−.3	83.2	+1.0	102	19	93	67	21	73	30	0	69	68	2.05	−.6	1.32	7	6.3	s.	26	w.	19	12	16	3	4.6	.0	.0	5
Port Arthur	34	59	134	1,013.9	1,014.9	----	84.2	+1.4	99	17	92	69	15	76	26	0	74	81	1.52	−5.4	.61	7	10.9	sw.	42	n.	15	12	14	5	4.7	.0	.0	12
San Antonio [1]	693	6	51	989.5	1,013.2	−1.0	84.4	+.6	103	26	96	67	1	73	30	0	68	66	T	−2.2	T	0	8.6	se.	31	e.	3	9	17	5	4.9	.0	.0	2

See footnotes at end of table.

CLIMATOLOGICAL DATA FOR WEATHER BUREAU STATIONS—Continued

District and station	Elevation of instruments: Barometer above sea level	Elevation of instruments: Thermometer above ground	Elevation of instruments: Anemometer above ground	Pressure: Station	Pressure: Sea level	Pressure: Departure from normal	Temperature of the air: Mean	Temperature of the air: Departure from normal	Temperature of the air: Maximum	Temperature of the air: Date	Temperature of the air: Mean maximum	Temperature of the air: Minimum	Temperature of the air: Date	Temperature of the air: Mean minimum	Temperature of the air: Greatest daily range	Total degree days	Mean temperature of the dew point	Mean relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: Days with 0.01 inch or more	Wind: Average hourly velocity	Wind: Prevailing direction	Wind: Maximum velocity: Miles per hour	Wind: Maximum velocity: Direction	Wind: Maximum velocity: Date	Clear days	Partly cloudy days	Cloudy days	Average cloudiness, tenths	Total snowfall	Snow, sleet, and ice on ground at end of month	Number of days with thunderstorms
	Ft.	Ft.	Ft.	Mbs.	Mbs.	Mbs.	°F.	°F.	°F.		°F	°F.		°F.	°F		°F.	%	In.	In.	In.		Mls								0-10	In.	In.	
Ohio Valley and Tennessee							**77.2**	**+1.2**										**64**	**2.33**	**−1.5**											**4.8**			
Chattanooga [1]	762	6	66	988.8	1,015.9	−.7	78.3	+.9	100	17	90	57	22	66	35	0	66	72	6.93	+2.7	2.89	9	5.7	s.	40	nw.	20	6	14	11	6.3	.0	.0	8
Knoxville [1]	995	27	53	980.7	1,015.6	−.3	78.4	+1.7	99	17	90	59	5	67	33	0	61	60	1.40	−3.0	1.03	6	7.3	ne.	35	nw.	20	10	15	6	5.1	.0	.0	5
Memphis [4]	399	5	86	1,000.7	1,014.6	−1.3	81.0	+1.1	102	18	93	53	22	69	38	0	65	64	1.69	−1.5	1.12	6	7.2	e.	32	nw.	27	6	20	5	4.9	.0	.0	5
Nashville [1]	546	5	72	995.6	1,015.2	−1.1	80.0	+.9	100	16	92	54	22	68	38	0	62	62	.87	−3.0	.42	9	7.1	s.	35	w.	26	9	14	8	5.2	.0	.0	7
Lexington	989	6	----	980.7	1,016.3	.0	77.7	+1.8	99	10	92	53	21	64	39	0	----	---	2.77	−.9	1.79	7	----	s.	----	------	---	21	8	2	----	.0	.0	7
Louisville [3]	525	106	120	996.3	1,014.9	−1.0	79.0	+.4	97	10	89	59	21	69	27	0	61	60	3.80	+.1	2.58	8	7.4	sw.	35	sw.	26	11	17	3	4.5	.0	.0	9
Evansville [1]	431	12	40	999.3	1,014.9	−1.0	77.8	+1.3	98	11	91	52	21	65	38	0	61	61	.99	−2.4	.49	8	6.2	nw.	24	w.	11	9	15	7	5.3	.0	.0	9
Indianapolis [1]	823	5	54	985.4	1,014.9	−.7	75.8	+1.5	97	10	89	46	21	63	34	3	60	64	1.99	-----	.90	9	8.1	sw.	42	sw.	26	10	16	5	5.0	.0	.0	6
Terre Haute [3]	575	68	149	994.6	1,014.9	-----	78.4	+1.4	98	10	90	54	21	66	30	0	59	60	1.10	−2.1	.69	9	7.8	n.	27	sw.	11	14	14	3	4.2	.0	.0	8
Cincinnati [3]	627	11	51	992.6	1,014.9	−1.0	78.0	+2.9	101	11	92	51	21	65	36	0	61	66	2.27	−1.0	1.17	8	5.6	ne.	24	sw.	11	15	11	5	4.2	.0	.0	11
Columbus [3]	822	90	110	986.1	1,014.9	−1.0	77.3	+2.4	100	11	89	54	21	66	30	0	60	62	1.99	−1.6	1.03	4	8.0	s.	39	sw.	26	13	14	4	4.6	.0	.0	2
Dayton [1]	1,003	6	55	979.7	1,014.9	-----	76.7	+1.8	97	11	89	50	21	65	31	1	57	55	.79	−2.5	.31	6	9.2	sw.	39	w.	29	12	16	3	4.4	.0	.0	7
Elkins [3]	1,947	61	78	949.2	1,016.9	−.6	69.3	−1.0	89	31	82	46	22	57	37	11	60	80	2.53	−2.8	.70	13	4.6	se.	24	w.	19	14	8	9	4.9	.0	.0	7
Parkersburg	637	77	84	992.6	1,015.6	−.7	75.8	+.4	95	11	88	52	22	64	34	0	60	66	1.74	−2.6	.82	11	5.7	se.	20	e.	19	16	8	7	4.1	.0	.0	11
Pittsburgh [1]	842	39	54	985.4	1,015.9	.0	73.8	+.8	94	11	85	54	21	63	28	1	58	62	3.70	−4.1	.38	11	8.3	s.	34	sw.	28	13	14	4	4.7	.0	.0	9
Lower Lakes							**73.0**	**+2.1**										**65**	**1.46**	**−1.8**											**4.5**			
Buffalo [1]	768	34	96	987.5	1,015.2	+.3	72.4	+2.4	94	11	83	53	1	62	31	1	60	67	1.04	−2.0	.35	5	10.9	s.	34	nw.	20	11	15	5	4.9	.0	.0	6
Canton	448	10	61	997.6	1,013.5	-----	71.6	+3.0	94	8	84	45	17	59	35	6	58	64	.85	−2.6	.25	8	7.2	sw.	25	sw.	22	10	15	6	5.3	.0	.0	5
Oswego	335	71	85	1,002.0	1,014.6	.0	71.0	+.6	91	7	80	56	14	62	25	1	60	69	1.93	−1.0	.69	10	7.0	s.	19	n.	16	16	11	4	4.1	.0	.0	5
Rochester [1]	523	5	69	995.9	1,015.2	+.3	72.6	+2.8	93	11	84	53	1	61	31	0	58	66	1.78	−1.2	.82	8	7.6	sw.	35	sw.	28	7	15	9	5.6	.0	.0	7
Syracuse [1]	596	5	57	993.2	1,014.9	.0	72.2	+2.9	93	9	84	51	14	60	33	2	60	68	1.43	−2.2	.63	9	8.2	sw.	28	s.	29	11	15	5	5.1	.0	.0	6
Erie [3]	714	57	81	989.8	1,015.6	+.4	73.3	+2.3	92	11	81	58	17	65	21	0	60	66	2.56	−.4	.97	7	6.3	sw.	20	sw.	28	11	15	5	4.5	.0	.0	6
Cleveland [1]	762	27	54	987.8	1,015.2	+.4	74.0	+2.1	97	6	86	51	17	62	39	0	59	62	1.29	−2.2	.75	6	8.7	s.	32	sw.	28	13	14	4	4.1	.0	.0	7
Sandusky	629	5	67	992.6	1,015.2	+.4	74.8	+1.4	96	11	84	59	22	65	33	0	----	---	.80	−2.6	.40	3	7.5	sw.	22	w.	28	17	8	6	3.5	.0	.0	5
Toledo [1]	628	5	47	992.2	1,015.2	+.4	73.4	+1.6	97	11	86	50	1	60	34	0	60	66	1.94	−1.1	1.12	7	8.9	sw.	34	sw.	26	19	10	2	3.2	.0	.0	6
Fort Wayne [1]	857	5	33	984.1	1,014.9	-----	73.8	+1.4	96	10	87	44	21	61	35	7	58	62	1.28	−2.3	.56	6	6.9	sw.	34	nw.	27	13	11	7	4.6	.0	.0	5
Detroit [1]	730	5	78	989.2	1,015.2	.0	73.6	+2.6	94	8	85	51	21	62	30	0	58	61	1.20	−2.1	.70	5	8.2	nw.	31	nw.	27	10	15	6	4.9	.0	.0	4
Upper Lakes							**69.0**	**+1.2**										**69**	**2.68**	**−0.5**											**5.2**			
Alpena	609	5	89	991.9	1,014.2	−.7	67.4	+1.5	94	7	77	46	21	58	34	29	57	70	3.65	+.9	1.23	11	9.1	nw.	28	se.	26	7	14	10	5.6	.0	.0	7
Escanaba	612	51	72	991.5	1,013.5	−1.4	67.2	+1.2	86	23	76	48	13	59	25	31	58	74	1.75	−1.6	.59	11	9.8	s.	32	n.	12	10	10	11	5.6	.0	.0	4
Grand Rapids [3]	707	70	244	989.5	1,014.9	−.3	73.4	+1.1	95	6	84	50	21	63	30	8	58	64	2.68	−.2	1.20	7	9.4	sw.	42	sw.	23	13	15	3	4.3	.0	.0	2
Lansing [3]	878	5	90	983.4	1,015.2	-----	70.4	−.5	90	8	82	45	21	59	34	10	56	60	1.03	−2.1	.48	5	7.0	w.	23	w.	27	15	11	5	4.3	.0	.0	5
Marquette	734	44	73	986.1	1,013.2	−1.4	66.8	+1.9	92	25	77	47	20	57	34	69	56	68	5.17	+2.0	2.56	10	8.1	sw.	28	sw.	6	5	14	12	6.1	.0	.0	4
Sault Sainte Marie [1]	614	11	52	991.2	1,013.9	−1.0	64.7	+2.0	87	6	76	46	17	53	36	63	57	79	3.67	+1.0	1.23	11	9.7	nw.	32	sw.	25	8	8	15	6.3	.0	.0	6
Chicago [1]	673	5	36	990.9	1,014.9	−.3	74.2	+1.5	96	8	86	52	21	63	33	3	58	64	1.93	−1.5	.77	8	7.5	s.	30	n.	27	13	15	3	4.2	.0	.0	4
Green Bay	617	109	141	991.9	1,014.6	−.3	70.6	+.6	90	4	81	52	20	60	32	8	56	63	2.25	−1.2	1.28	6	9.6	s.	28	sw.	23	8	13	10	5.7	.0	.0	3
Milwaukee [1]	681	33	66	990.2	1,014.6	−.3	70.4	+2.2	93	6	81	49	1	60	31	11	59	69	2.77	−.1	.95	8	10.1	sw.	53	sw.	23	12	14	5	4.5	.0	.0	4
Duluth [3]	1,133	5	47	972.9	1,013.9	−.3	64.8	+.9	84	25	74	44	20	55	29	66	58	80	1.89	−1.9	.56	13	9.7	nw.	31	w.	28	10	15	6	5.2	.0	.0	4
North Dakota							**68.7**	**+0.3**										**67**	**3.15**	**+0.6**											**4.3**			
Fargo [1]	940	5	43	978.7	1,012.2	−1.7	69.3	+1.2	90	24	80	45	20	58	35	24	58	72	6.95	+3.5	1.75	10	11.4	s.	40	s.	2	10	16	5	4.7	.0	.0	12
Bismarck [1]	1,677	5	43	953.6	1,012.9	−.6	69.4	.0	96	24	83	43	20	56	41	19	56	65	1.01	−1.2	.75	7	9.5	nw.	56	sw.	5	16	14	1	3.7	.0	.0	8
Devils Lake	1,478	11	44	960.0	1,012.9	−.6	67.6	+.2	95	24	80	46	20	56	38	39	56	70	2.90	+.3	1.75	9	7.7	nw.	36	sw.	5	9	16	6	4.8	.0	.0	7
Grand Forks [1]	832	4	41	982.4	1,012.5	-----	68.2	-----	96	24	81	42	20	55	43	37	56	---	1.93	-----	1.09	8	----	s.	----	------	---	10	18	3	----	.0	.0	7
Williston	1,878	42	50	946.5	1,011.9	−1.3	68.6	−.3	95	24	82	43	8	56	34	25	52	60	1.73	−.2	1.19	7	6.8	se.	30	w.	7	13	14	4	4.0	.0	.0	3
Upper Mississippi							**74.5**	**−0.3**										**66**	**2.96**	**−0.5**											**4.9**			
Minneapolis-St. Paul [1]	919	43	74	980.7	1,013.5	−.7	71.4	−.9	89	4	81	53	21	62	28	2	59	69	4.39	+.7	2.63	10	9.8	se.	43	se.	1	8	10	13	5.8	.0	.0	6
Springfield, Minn.	1,025	4	42	977.3	1,013.9	-----	72.2	-----	92	1	84	51	21	61	33	3	59	69	2.84	-----	1.06	11	----	s.	----	------	---	15	8	8	----	.0	.0	7
La Crosse [1]	714	5	29	988.5	1,014.2	−.4	69.8	−2.0	95	23	81	48	21	59	31	8	60	74	3.43	−.5	1.86	8	7.3	s.	40	sw.	14	10	11	10	5.3	.0	.0	7
Madison [3]	974	70	78	980.0	1,014.9	.0	71.4	−.7	88	5	80	54	20	62	24	6	58	66	3.57	−.3	1.03	8	6.5	nw.	23	nw.	27	6	20	5	5.0	.0	.0	6
Charles City	1,015	10	51	979.3	1,015.6	+1.0	70.4	−1.9	90	23	81	49	21	60	30	6	----	---	4.72	+1.0	3.01	13	5.3	nw.	20	ne.	1	15	12	4	3.9	.0	.0	8
Davenport [1]	606	6	50	993.2	1,015.2	+.3	73.8	+.3	94	10	85	50	21	62	36	2	60	66	2.40	−.9	.82	10	7.5	e.	33	nw.	26	8	12	11	5.5	.0	.0	8
Des Moines [3]	860	5	99	983.7	1,014.6	.0	75.0	−.4	93	23	86	53	21	64	31	0	59	64	1.29	−2.2	.49	10	8.7	se.	32	nw.	23	14	12	5	4.3	.0	.0	9
Dubuque	699	81	96	989.8	1,014.9	.0	72.9	−1.2	91	23	83	53	21	62	28	1	60	67	5.16	+1.2	2.84	8	4.6	nw.	17	sw.	23	8	19	4	5.0	.0	.0	6
Burlington [1]	702	4	36	990.2	1,015.2	.0	75.4	−.4	98	10	88	53	21	63	36	0	59	62	3.41	−.2	1.89	7	8.3	s.	40	nw.	23	9	13	9	5.5	.0	.0	8
Cairo	357	5	99	1,002.4	1,014.9	−1.0	80.2	−.4	98	10	91	60	21	69	29	0	----	---	1.11	−2.0	.45	7	6.5	sw.	28	nw.	26	11	10	10	5.4	.0	.0	8
Peoria [1]	609	6	26	993.6	1,015.6	−.4	74.8	+.4	95	10	87	51	21	63	33	0	60	64	1.73	−1.8	1.28	5	7.4	sw.	34	w.	23	15	11	5	4.2	.0	.0	6
Springfield, Ill. [3]	636	5	191	992.2	1,014.9	−.3	79.0	+2.5	98	10	90	58	21	68	30	0	60	63	.81	−2.0	.29	9	9.7	s.	33	nw.	23	8	15	8	5.4	.0	.0	5
St Louis [3]	568	6	303	994.9	1,015.2	−.4	79.8	+1.0	96	24	89	62	21	70	25	0	59	58	3.45	+.5	1.60	7	9.2	sw.	34	sw.	25	16	11	4	3.9	.0	.0	4
Missouri Valley							**76.2**	**+0.4**										**66**	**3.65**	**0.0**											**4.2**			
Columbia, Mo. [3]	784	6	66	987.1	1,014.9	−.3	79.0	+1.7	97	24	91	50	21	67	36	0	60	60	2.38	−1.1	2.00	5	6.1	s.	17	sw.	29	16	14	1	3.6	.0	.0	5
Kansas City [1]	963	38	76	980.7	1,014.2	−.7	78.8	+.7	96	29	89	57	22	69	32	0	62	64	3.54	−.3	1.67	8	8.4	ne.	37	sw.	24	11	14	6	4.7	.0	.0	8
St. Joseph [3]	967	11	49	980.4	1,014.2	-----	77.3	−.1	95	2	88	53	21	67	30	0	63	66	2.38	−1.4	1.07	10	7.0	se.	23	w.	8	19	9	3	3.0	.0	.0	7
Springfield, Mo. [1]	1,324	5	60	968.8	1,014.9	−.3	77.0	+.8	96	16	90	52	21	64	31	0	63	66	5.92	+1.7	2.08	7	7.3	s.	38	se.	24	11	16	4	4.7	.0	.0	9
Topeka	987	65	87	979.7	1,014.2	-----	79.0	+1.2	97	7	90	57	21	68	32	0	64	65	3.43	−.8	1.38	11	7.3	s.	29	nw.	7	16	9	6	4.1	.0	.0	12
Lincoln [3]	1,189	11	81	972.2	1,013.5	−.7	77.6	+1.1	97	7	88	54	21	67	29	0	62	64	2.17	−1.7	.92	7	8.0	s.	27	nw.	7	15	10	6	4.4	.0	.0	6
Omaha [1]	1,105	5	68	975.6	1,014.6	+.4	76.1	+.9	93	7	86	57	21	66	28	0	62	66	2.37	−1.2	1.19	9	9.7	s.	45	sw.	14	11	14	6	4.6	.0	.0	9
Valentine	2,598	46	54	924.1	1,014.2	+.7	71.7	−2.0	97	1	84	50	12	59	40	5	57	66	6.04	+3.0	1.72	14	8.4	s.	29	sw.	30	17	9	5	4.1	.0	.0	15
Sioux City [1]	1,138	5	40	973.9	1,014.6	+.4	74.0	+.7	95	2	86	53	21	62	34	0	60	70	4.18	+.6	1.14	11	9.3	s.	35	n.	16	13	15	3	4.3	.0	.0	10
Huron [1]	1,301	5	41	967.5	1,013.5	−.4	71.2	−.6	96	1	84	48	28	59	40	9	60	74	4.08	+.9	1.90	11	11.3	s.	38	nw.	16	12	14	5	4.6	.0	.0	12

See footnotes at end of table.

CLIMATOLOGICAL DATA FOR WEATHER BUREAU STATIONS—Continued

District and station	Elevation of instruments: Barometer above sea level	Elevation of instruments: Thermometer above ground	Elevation of instruments: Anemometer above ground	Pressure: Station	Pressure: Sea level	Pressure: Departure from normal	Temperature of the air: Mean	Temperature of the air: Departure from normal	Temperature of the air: Maximum	Temperature of the air: Date	Temperature of the air: Mean maximum	Temperature of the air: Minimum	Temperature of the air: Date	Temperature of the air: Mean minimum	Temperature of the air: Greatest daily range	Total degree days	Mean temperature of the dew point	Mean relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: Days with 0.01 inch or more	Wind: Average hourly velocity	Wind: Prevailing direction	Wind: Maximum velocity: Miles per hour	Wind: Maximum velocity: Direction	Wind: Maximum velocity: Date	Clear days	Partly cloudy days	Cloudy days	Average cloudiness, tenths	Total snowfall	Snow, sleet, and ice on ground at end of month	Number of days with thunderstorms
	Ft.	Ft.	Ft.	Mbs.	Mbs.	Mbs.	°F.	°F.	°F		°F	°F.		°F.	°F		°F.	%	In.	In.	In.		Mls								0-10	In.	In.	
Northern Slope							67.8	−0.6										57	2.04	+0.5											4.4			
Billings [1]	3,570	16	40	892.0	1,013.5	----	69.4	−2.6	96	1	82	49	11	57	35	20	46	52	1.29	----	.63	7	9.7	sw.	45	nw.	5	11	16	4	4.3	.0	.0	8
Havre	2,507	11	67	926.2	1,013.2	+.3	68.6	+.3	98	28	84	39	8	54	42	36	46	52	1.09	−.8	.41	10	8.0	nw.	31	nw.	13	13	13	5	4.5	.0	.0	8
Helena [1]	4,124	5	43	875.0	1,014.6	+1.1	64.6	−1.1	92	28	80	39	8	50	43	71	45	56	1.42	+.3	.47	8	7.8	w.	44	sw.	12	14	10	7	4.2	.0	.0	12
Missoula [2]	3,205	80	91	902.8	1,014.9	----	68.0	+.5	95	18	83	43	3	53	40	29	44	52	.45	−.5	.24	6	6.6	w.	31	nw.	1	16	14	1	4.0	.0	.0	7
Kalispell	2,973	48	56	912.0	1,012.9	−.6	65.7	+1.6	93	19	80	41	3	51	40	54	42	50	.60	−.5	.28	9	6.2	w.	25	sw.	1	13	13	5	4.3	.0	.0	7
Miles City [1]	2,371	5	28	930.9	1,013.2	.0	70.1	----	95	29	83	49	9	57	35	19	51	58	.68	----	.34	7	----	nw.	----	----	----	13	17	1	3.9	.0	.0	10
Rapid City [1]	3,259	5	63	902.8	1,014.2	+.7	69.0	−2.0	94	28	82	47	8	56	43	18	54	66	4.54	+2.5	2.51	14	12.8	nw.	63	w.	9	13	12	6	4.5	.0	.0	17
Cheyenne [1]	6,094	5	40	816.5	1,014.2	+1.0	66.4	−.3	90	17	81	46	26	52	41	27	46	60	4.00	+1.9	1.70	11	9.4	nw.	34	w.	5	6	17	8	5.4	.0	.0	13
Lander	5,352	60	68	837.1	1,012.9	−.3	66.2	−1.2	89	17	82	46	20	51	41	21	44	50	1.06	+.4	.45	7	5.3	sw.	26	w.	4	14	15	2	4.0	.0	.0	11
Sheridan [1]	3,790	5	38	885.5	1,014.6	----	67.0	−1.4	94	1	82	46	11	52	37	33	50	64	1.55	+.3	.69	8	6.8	s.	43	w.	22	10	14	7	4.8	.0	.0	13
North Platte [2]	2,821	11	51	916.7	1,013.2	−.3	73.6	+.7	95	2	85	55	12	62	31	1	59	68	3.67	+.9	1.71	16	7.5	s.	28	s.	5	10	16	5	4.9	.0	.0	18
Middle Slope							77.5	−0.2										63	3.51	+0.6											4.9			
Denver [2]	5,292	106	113	840.5	1,013.9	+1.0	71.8	−.4	96	30	84	53	19	60	34	6	48	54	1.92	+.2	.74	12	7.1	s.	26	nw.	7	9	15	7	5.2	.0	.0	14
Pueblo [1]	4,690	5	36	858.8	1,013.2	+.3	73.4	−.8	100	30	89	54	27	58	46	4	50	58	2.91	+1.0	1.50	8	7.6	nw.	43	ne.	18	11	15	5	5.0	.0	.0	12
Concordia	1,392	50	58	965.5	1,013.9	−.3	77.5	−.5	102	7	88	54	21	67	36	0	62	64	5.15	+1.4	1.50	12	7.0	s.	43	nw.	7	15	10	6	4.5	.0	.0	12
Dodge City [1]	2,509	5	58	927.5	1,012.9	−.6	77.0	−1.4	99	17	90	57	20	64	35	0	63	68	5.40	+2.3	4.17	9	12.8	s.	39	w.	24	11	11	9	5.3	.0	.0	12
Wichita [1]	1,358	6	64	966.8	1,013.9	−.7	79.6	+.2	100	7	91	58	21	68	31	0	64	64	5.49	+2.1	3.18	9	11.6	s.	57	nw.	27	12	13	6	4.8	.0	.0	10
Oklahoma City [2]	1,214	10	47	971.2	1,013.5	−1.1	82.6	+2.0	102	17	94	62	20	72	29	0	66	64	1.79	−1.1	.91	4	7.4	s.	24	s.	30	11	13	7	4.8	.0	.0	9
Tulsa [1]	674	10	61	990.5	1,013.9	----	80.9	−.2	102	26	92	60	22	70	30	0	67	70	1.89	−1.4	.57	7	7.8	s.	46	nw.	27	10	18	3	5.0	.0	.0	8
Southern Slope							82.2	+1.6										58	2.59	+0.2											4.5			
Abilene [1]	1,738	4	41	953.3	1,012.2	−1.3	84.0	+2.9	107	27	96	65	21	72	34	0	65	62	3.76	+1.6	1.86	5	10.8	8se.	30	sw.	23	12	12	7	4.4	.0	.0	6
Amarillo [1]	3,676	5	42	890.6	1,012.5	−.7	77.1	+1.2	104	31	89	59	21	65	37	3	60	64	5.06	+2.2	3.22	11	12.9	se.	52	sw.	11	11	13	7	5.1	.0	.0	11
Del Rio	960	63	71	979.0	1,010.8	−1.7	87.7	+1.4	108	26	98	69	1	77	29	0	65	54	.01	−2.4	.01	1	10.0	se.	25	e.	21	11	20	0	4.1	.0	.0	2
Roswell	3,566	75	85	893.0	1,011.5	−.4	79.8	+.9	102	31	93	60	14	66	37	0	56	54	1.52	−.7	.48	10	7.2	s.	28	w.	13	14	16	1	4.4	.0	.0	12
Southern Plateau							81.9	+0.4										39	1.22	−0.4											3.9			
El Paso [1]	3,778	5	85	886.2	1,009.8	−.7	82.3	+2.6	104	31	95	63	23	70	32	0	52	43	1.52	−.5	1.00	4	8.9	n.	38	e.	13	9	17	5	4.9	.0	.0	13
Albuquerque [1]	5,314	5	48	840.2	1,010.8	----	76.4	−.3	97	30	90	57	21	63	35	0	52	48	1.58	+.2	.72	11	9.4	se.	50	se.	18	12	13	6	4.8	.0	.0	13
Flagstaff	6,907	36	51	795.1	----	----	65.6	−.1	88	17	82	43	26	49	41	20	38	46	1.74	−1.2	1.02	7	----	nw.	----	----	----	16	10	5	4.1	.0	.0	7
Phoenix [2]	1,107	39	87	971.2	1,008.1	−.4	89.9	+.1	111	29	104	66	13	75	43	0	51	33	.70	−.4	.70	2	6.5	e.	25	ne.	22	18	10	3	3.5	.0	.0	3
Tucson [1]	2,555	6	30	924.5	1,009.1	----	87.4	+1.0	109	29	101	65	12	74	39	0	50	34	1.77	−.5	1.37	6	----	se.	----	----	----	12	8	11	5.1	.0	.0	5
Yuma	142	9	54	1,003.7	1,007.8	.0	89.6	−1.2	114	18	107	65	10	72	42	0	48	32	.00	−.2	.00	0	5.3	s.	20	e.	23	29	2	0	1.0	.0	.0	0
Middle Plateau							72.4	−0.1										34	0.18	−0.4											2.4			
Reno [1]	4,527	20	52	863.2	1,013.5	+2.0	67.3	−.8	97	17	89	36	9	45	52	17	40	48	.28	.0	.23	2	7.7	nw.	36	s.	25	22	9	0	2.1	.0	.0	5
Tonopah	6,090	9	20	815.8	1,010.8	----	72.4	−1.2	89	1	85	52	9	60	31	0	24	16	T	−.4	T	0	----	se.	----	----	----	28	3	0	----	.0	.0	0
Winnemucca	4,339	5	56	867.6	1,011.5	−1.0	71.7	+1.1	98	17	90	42	10	53	47	5	37	34	.01	−.2	.01	1	7.4	sw.	24	nw.	25	26	5	0	2.4	.0	.0	3
Modena	5,473	10	46	835.1	1,011.2	.0	69.1	−1.5	94	18	88	45	5	50	44	0	----	----	T	−1.1	T	0	11.5	sw.	34	s.	1	27	3	1	1.6	.0	.0	1
Salt Lake City [1]	4,227	32	46	866.6	1,010.5	−2.0	76.0	+2.0	99	18	92	48	11	60	40	0	44	36	.04	−.5	.04	2	10.2	s.	36	e.	20	22	9	0	2.4	.0	.0	6
Grand Junction	4,602	60	68	860.1	1,012.9	+.7	77.6	−.1	97	30	92	56	24	63	34	0	40	34	.75	+.1	.40	6	7.0	se.	36	sw.	22	18	10	3	3.3	.0	.0	14
Northern Plateau							71.3	+0.8										46	0.31	−0.2											3.3			
Baker [2]	3,471	36	54	896.7	1,015.2	+1.0	65.4	−.2	96	18	82	37	2	48	44	71	42	56	.19	−.4	.15	3	5.9	n.	22	sw.	28	21	8	2	3.1	.0	.0	4
Boise [1]	2,739	5	49	918.7	1,012.5	−1.0	72.2	−.3	98	28	87	45	2	57	38	8	45	41	.06	−.2	.04	3	9.6	nw.	56	w.	29	17	14	0	3.4	.0	.0	5
Pocatello [1]	4,478	5	31	863.2	1,012.5	−.7	69.5	−.7	96	17	87	44	11	52	46	3	39	42	1.11	+.3	.97	3	8.7	sw.	36	s.	31	15	15	1	3.4	.0	.0	8
Spokane [1]	1,929	27	42	946.2	1,013.9	−.7	69.7	+.7	98	27	85	43	3	54	43	29	42	44	.21	−.5	.21	1	7.7	ne.	29	w.	6	17	11	3	3.6	.0	.0	1
Walla Walla	991	57	65	979.0	1,013.9	−1.0	75.8	+1.8	104	18	89	52	3	63	39	0	----	----	.01	−.4	.01	1	6.6	s.	21	sw.	29	24	4	3	2.3	.0	.0	1
Yakima	1,076	58	67	976.3	1,014.6	----	75.2	+3.8	103	27	89	48	2	61	36	5	----	----	.26	−.1	.26	1	7.7	nw.	21	nw.	6	19	7	5	4.2	.0	.0	1
North Pacific Coast							64.3	+0.4										71	0.30	−0.4											5.1			
North Head	211	5	56	1,012.9	1,020.0	+1.4	56.9	−.3	66	29	61	48	8	53	12	249	54	90	.47	−.5	.09	16	12.1	n.	30	n.	7	2	6	23	8.1	.0	.0	1
Seattle [2]	125	90	321	1,014.2	1,018.6	+1.3	65.4	−.1	96	18	75	51	6	56	36	44	52	65	.33	−.3	.14	8	7.6	n.	21	sw.	5	11	10	10	5.2	.0	.0	0
Tacoma	194	172	201	1,011.9	1,018.3	+.3	64.6	+1.8	88	18	74	50	2	56	29	57	----	----	.01	−.6	.01	1	8.1	n.	26	sw.	18	10	16	5	4.6	.0	.0	0
Tatoosh Island	86	9	61	1,016.9	1,020.0	+2.4	54.4	−.7	66	17	58	45	8	51	14	333	52	92	.99	−.6	.35	11	11.6	s.	37	s.	19	2	8	21	7.7	.0	.0	0
Medford [1]	1,329	29	58	968.8	1,015.2	----	71.5	−1.2	102	17	88	44	2	54	44	3	48	52	.17	−.1	.13	2	----	nw.	----	----	----	22	8	1	2.1	.0	.0	5
Portland, Oreg. [2]	154	68	106	1,012.9	1,018.0	+.4	68.5	+1.8	102	18	79	50	2	58	35	17	54	65	.09	−.5	.06	3	7.0	nw.	22	s.	18	11	14	6	4.7	.0	.0	1
Roseburg	510	45	76	999.3	1,017.3	+.4	68.7	+1.3	94	27	84	46	2	54	39	17	52	60	.01	−.3	.01	1	5.2	n.	16	n.	23	15	16	0	3.5	.0	.0	2
Middle Pacific Coast							66.6	−0.6										65	0.03	0.0											4.2			
Eureka	60	72	88	1,016.3	1,018.3	+.7	55.2	−.3	62	13	59	47	7	52	14	308	50	88	.10	----	.03	7	6.8	nw.	23	n.	1	6	8	17	6.8	.0	.0	1
Redding [1]	722	20	34	986.5	1,011.9	----	81.4	−.4	104	16	94	61	8	68	36	0	46	33	.00	−.1	.00	0	7.8	nw.	22	n.	13	25	5	1	2.2	.0	.0	0
Sacramento	66	92	115	1,010.2	1,011.9	.0	72.5	−.7	102	13	89	52	8	56	43	0	52	58	.00	.0	.00	0	8.8	s.	18	sw.	7	27	4	0	1.3	.0	.0	0
San Francisco [2]	155	112	132	1,009.5	1,014.9	+.7	57.3	−1.2	67	5	62	50	10	53	15	238	52	82	.01	.0	.01	1	11.3	w.	26	w.	22	4	14	13	6.3	.0	.0	0
South Pacific Coast							71.1	−2.2										62	T	0.0											3.1			
Fresno [1]	327	5	35	999.7	1,010.8	+.6	80.0	−1.3	103	21	97	55	9	63	39	0	46	38	.00	.0	.00	0	7.5	nw.	20	nw.	7	30	1	0	1.1	.0	.0	0
Los Angeles	338	223	250	1,003.1	1,014.6	+2.1	66.6	−3.6	84	19	76	55	9	57	27	5	56	74	T	.0	T	0	5.7	w.	16	w.	18	16	15	0	3.5	.0	.0	0
San Diego [1]	87	20	55	1,011.9	1,014.6	+1.4	66.8	−1.7	76	18	73	57	1	60	15	3	57	74	T	.0	T	0	7.1	w.	16	w.	18	6	22	3	4.8	.0	.0	0
West Indies																																		
San Juan, P. R.	82	10	54	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Panama Canal																																		
Balboa Heights	118	6	92	----	[3]1,010.8	+.6	81.0	+.8	92	19	88	72	26	74	17	---	75	[3]87	4.85	−2.2	2.89	14	4.4	nw.	20	s.	14	1	18	12	6.7	.0	.0	9
Cristobal	27	47	97	----	[3]1,010.8	+.3	81.7	+.8	90	27	86	74	6	77	15	---	76	[3]83	11.82	−3.7	1.76	24	7.0	ne.	24	ne.	5	0	10	21	7.9	.0	.0	14

See footnotes at end of table.

CLIMATOLOGICAL DATA FOR WEATHER BUREAU STATIONS—Continued

District and station	Elevation of instruments			Pressure			Temperatore of the air													Precipitation				Wind											
	Barometer above sea level	Thermometer above ground	Anemometer above ground	Station	Sea level	Departure from normal	Mean	Departure from normal	Maximum	Date	Mean maximum	Minimum	Date	Mean minimum	Greatest daily range	Total degree days	Mean temperature of the dew point	Mean relative humidity	Total	Departure from normal	Greatest in 24 hours	Days with 0.01 inch or more	Average hourly velocity	Prevailing direction	Maximum velocity: Miles per hour	Maximum velocity: Direction	Maximum velocity: Date	Clear days	Partly cloudy days	Cloudy days	Average cloudiness, tenths	Total snowfall	Snow, sleet, and ice on ground at end of month	Number of days with thunderstorms
Alaska	Ft.	Ft.	Ft.	Mbs.	Mbs.	Mbs.	°F.	°F.	°F		°F	°F.		°F.	°F		°F.	%	In.	In.	In.		Mls								0-10	In.	In.	
Anchorage [1]	132	6	44	1,011.2	1,016.3	-----	56.2	−.8	78	6	64	40	29	48	30	---	50	80	2.53	+.9	----	17	5.1	nw.	19	sw.	20	5	3	23	7.7	.0	.0	0
Fairbanks [1]	455	4	63	995.6	1,012.5	-----	61.0	+1.0	85	11	73	41	27	50	33	---	50	72	.90	−.9	----	11	6.9	w.	26	w.	16	1	11	19	7.5	.0	.0	2
Juneau [1]	80	6	21	1,015.6	1,018.6	-----	55.6	-----	76	11	64	43	15	48	31	---	48	78	3.72	-----	----	18	7.4	n.	23	e.	22	2	6	23	8.2	.0	.0	0
Nome	22	25	56	1,012.2	1,012.9	-----	49.5	−.4	67	23	54	37	22	45	23	---	46	88	2.88	+.4	----	11	9.5	w.	25	se.	16	4	8	19	7.4	.0	.0	0
Bethel	28	7	31	1,012.5	1,013.9	-----	57.0	+2.5	78	8	65	42	5	49	29	---	52	82	2.53	+.2	----	19	8.2	nw.	34	------	17	4	8	19	7.3	.0	.0	2
Gambell	32	5	32	1,010.8	1,011.9	-----	43.5	−2.2	59	9	47	37	30	40	21	---	42	95	1.70	+.2	----	15	13.0	sw.	38	sse.	9	0	2	29	9.0	.0	.0	0
Ketchikan	75	69	90	1,018.0	1,018.6	-----	58.4	+.7	79	30	65	50	2	52	26	---	51	78	8.22	+.1	----	16	6.7	se.	23	w.	30	4	5	22	7.9	.0	.0	0
Kotzebue	20	5	31	1,011.5	1,012.2	-----	53.2	+.4	74	9	58	42	13	48	25	---	49	87	1.43	+.1	----	11	----	sw.	----	------	---	2	9	20	8.0	.0	.0	0
McGrath	331	5	31	1,001.0	1,013.5	-----	61.2	-----	84	9	72	42	27	50	33	---	49	68	.76	−1.4	----	12	----	nw.	22	ssw.	17	3	12	16	7.1	.0	.0	2
Northway	1,718	5	32	951.9	------	-----	60.0	-----	83	11	71	42	20	49	32	---	47	68	1.86	-----	----	14	5.8	w.	25	------	5	0	12	19	7.7	.0	.0	4
Summit	2,405	5	30	930.2	1,016.9	-----	53.5	-----	78	10	62	40	21	45	30	---	47	78	3.11	-----	----	14	----	sw.	----	------	---	1	4	26	8.8	.0	.0	2
Hawaii																																			
Honolulu	38	86	100	1,016.3	1,017.3	-----	77.8	+.1	84	11	82	71	3	74	11	0	----	---	.39	−.8	.15	7	10.4	e.	23	e.	2	14	13	4	4.4	.0	.0	0

[1] Data are airport records.
[2] Barometric data (adjusted to old city elevation) and hygrometric data from airport otherwise city office records.
[3] Observations taken bihourly.
[4] Pressure (adjusted to old city elevation), temperature, and hygrometric data from airport; otherwise city office records.
[5] Temperature and precipitation from city records, other data from airport.

NOTE.—Except as indicated by notes [1], [2], [4], and [5] data in table are city office records.

SEVERE LOCAL STORMS, JULY 1944

[Compiled by Mary O. Souder]

[The table herewith contains such data as has been received concerning severe local storms that occurred during the month. A revised list of tornadoes will appear in the United States Meteorological Yearbook]

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
	July						
Fergus County, Mont.	1	4:30 p.m.	[1] 4		$10,000	Moderate hail	Loss in crops; path 6 miles long.
Hamel and Robbinsdale, Minn., and vicinities.	1	p.m.				Hail, electrical	Considerable damage to growing crops in places.
Maple Plain, Minn., vicinity of.	1	do			900	Electrical	7 cows on 1 farm killed by lightning.
Minneapolis, Minn., and vicinity.	1	do			10,000	do	Property damaged.
Minneapolis and St. Paul, Minn., and vicinities.	1	do				Rain and hail	Damages in places to real property and growing crops. In the Diamond Lake district, Minneapolis, the ground was white being covered with hailstones about the size of cherries.
Waukon, Iowa, vicinity of.	1				7,000	Electrical	Barn and contents burned.
Blaine Chounty, Mont.	2	4:30 p.m.	[1] 26		5,500	Light to heavy hail	Loss in wheat and barley; path 30 miles long. Loss in crops, $5,000; property damage, $500.
Fergus Falls, Minn., and vicinity.	2-3	10:15 p.m.-4:15 a.m. C. W. T.			16,400	Electrical and heavy rain.	Church struck by lightning and burned; several residences and barns damaged; cattle killed.
Teton County, Mont.	4	7 p.m.	2		5,000	Light hail	Loss in crops, $5,000; gardens damaged; path 20 miles long.
Gallatin County, Mont.	5	4 p.m.	2		150,000	Heavy hail	Loss in canning peas, hay, and grain; path 10 miles long.
Valley County, Mont.	5	5-6 p.m.	880		15,000	do	Loss in wheat and flax; path 2 miles long.
Lemmon, S. Dak., and vicinity.	5	6:15-6:40 p.m.	[1] 25	0	200,000	Tornado	Numerous buildings wrecked; several roofs sheared off; some stock killed; crops flattened; 3 persons injured; crop loss not serious.
Fallon County, Mont.	5	p.m.	2,640		25,000	Heavy hail	Loss in wheat, barley, and flax; path 5 miles long.
Valley County, Mont.	6	5:30 p.m.	880		500	Hail	Loss in wheat and oats; path 880 yards long.
Chouteau County, Mont.	6	p.m.	2,640		25,000	Light to heavy hail	Loss in wheat, oats, barley, and gardens; path 10 miles long.
Sioux City, Iowa, and vicinity.	6-7	p. m.	880-1,760		2,000,000	Excessive rain, flood, electrical.	Heavy rains fell over lower Floyd River and Perry Creek Valleys. Both streams rose sharply and overflowed, but the Perry Creek flood caused the greatest damage which was estimated at about $1,000,000 in Sioux City. Basements and lower floors were flooded and streets and sidewalks covered with silt and slimy mud. 1,000 acres of land were flooded affecting 1,161 families with 465 houses and 522 other buildings damaged and 10 buildings destroyed. Loss in gardens and crops over an area covering 8 square miles. Electrical service in Morningside was interrupted because of lightning which also caused a fire in a stockyard shed filled with hay and was believed to have been responsible for the cave-in of the roof and large sections of sidewalls of a garage in which large transport trucks were stored.
Ainesworth, Nebr.	7	3:30 p. n., E. S. T.	[1] 5			Heavy hail	All small grain in path of storm damaged with considerable loss; path 8 miles long.
Idalia, Colo.	7	4:30-5 p. m.	[1] 2½		10,000	Moderate hail	Considerable loss in wheat; path 25 miles long.
Beadle, Kingsbury, and Spink Counties, S. Dak.	7	5:30 p. m.	[1] 1-3			Wind, rain, and hail	High northwest to southeast winds accompanied by heavy rain and some hail in the vicinity of Carpenter, S. Dak., wrecked several farm buildings; flattened many grain fields; 1 person injured; path 20 miles long.
Concordia, Kans., and vicinity.	7	6:26 p. m.	[1] 6	0	350,000	Straight-line-wind, tornado and hail.	Chief damage from wind; crop loss, $100,000; property damage, $250,000; path 30 miles long.

[1] Miles instead of yards.