CLIMATOLOGICAL TABLES

CONDENSED CLIMATOLOGICAL SUMMARY

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.

TABLE 1.—*Condensed climatological summary of temperature and precipitation by sections, August 1939*

[For description of tables and charts, see REVIEW, January, p. 31]

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	78.6	−1.1	Centerville	99	10	Oneonta	53	27	10.59	+6.06	Geneva	23.73	Waterloo	1.63
Arizona	79.2	+.7	3 stations	114	[1] 12	Big Springs	37	26	2.38	+.04	Nogales	7.01	Fredonia	.01
Arkansas	80.2	+.1	Texarkana	107	[1] 17	Lead Hill	49	21	2.50	−1.03	Mount Ida	6.84	Index	.27
California	73.2	+.8	Cow Creek	122	17	2 stations	24	[1] 30	.07	−.03	Seven Oaks	1.66	111 stations	.00
Colorado	66.5	+.9	2 stations	103	[1] 5	Pearl	18	21	1.08	−.86	Westcliffe	4.75	2 stations	T
Florida	80.1	−1.3	Raeford	99	22	2 stations	60	[1] 17	10.78	+3.71	De Funiak Springs	25.18	Daytona Beach	3.00
Georgia	78.3	−1.2	Stillmore	104	10	Blairsville	48	31	7.09	+1.84	Fort Gaines	15.51	Fairmont	3.84
Idaho	67.7	+1.3	Lewiston	107	11	Big Creek	22	7	.16	−.48	American Falls	.97	10 stations	.00
Illinois	73.5	−1.0	2 stations	99	[1] 15	2 stations	48	[1] 23	4.74	+1.38	New Boston	11.97	Golconda	1.10
Indiana	73.8	+.3	do	99	[1] 11	Marengo	46	22	2.65	−.71	Goshen	7.45	Kokoma	.78
Iowa	70.7	−1.5	Thurman	99	30	Sibley	38	21	4.72	+1.15	Ottumwa	9.16	Little Sioux	1.37
Kansas	78.1	+.2	Wellington	112	30	Oberlin	45	21	3.50	+.40	Lyons	9.40	Richfield	T
Kentucky	75.3	−.5	Henderson	99	13	Middlesboro	43	23	2.88	−.91	La Grange	6.98	Oneonta	.72
Louisiana	82.0	+.1	Calhoun	105	17	St. Joseph	58	29	4.86	−.22	Paradis (near)	11.13	Urania	1.03
Maryland-Delaware	76.3	+3.0	College Park, Md.	99	9	2 stations	44	[1] 5	5.03	+.44	Dover, Del.	16.08	Chewsville, Md.	.64
Michigan	68.4	+2.4	3 stations	95	[1] 1	Watersmeet	35	22	4.48	+1.79	Gull Lake (near)	9.13	Ann Arbor	.76
Minnesota	68.8	+1.2	Wadena	99	5	Mizpah	36	21	3.88	+.69	Two Harbors	10.86	Fergus Falls	1.41
Mississippi	80.6	−.2	2 stations	100	11	Holly Springs	55	28	2.83	−1.39	Merrill	8.15	Stoneville	.51
Missouri	75.4	−1.1	Caruthersville	106	14	Greenville	45	22	4.80	+1.00	Monroe City	13.04	Owensville	1.26
Montana	66.2	+1.2	2 stations	103	[1] 3	Summit	19	7	.62	−.46	Savage	2.27	Heron	T
Nebraska	73.5	+.3	Alma	106	29	2 stations	36	[1] 8	2.04	−.69	Pawnee City	5.45	Dalton	.25
Nevada	73.3	+2.7	Overton	117	13	San Jacinto	26	29	.34	−.15	Charleston Ranger Station.	2.57	5 stations	.00
New England	70.9	+3.8	2 stations	95	[1] 5	First Conn. Lake, N. H.	37	2	3.98	+.12	Fort Kent, Maine	9.97	Eastport, Maine	.99
New Jersey	75.3	+3.5	Elizabeth	98	9	3 stations	50	[1] 5	7.03	+2.28	Tuckerton	19.38	Phillipsburg	2.93
New Mexico	70.5	−.2	Animas	101	22	2 stations	30	12	1.76	−.66	Valley View	5.14	Pankey Ranch	.00
New York	71.6	+4.0	Angelica	98	18	Lake Placid Club	40	28	2.86	−.93	Riverhead	7.70	Dansville	.39
North Carolina	75.9	.0	2 stations	99	[1] 10	Banners Elk	43	31	6.98	+1.47	Weldon	13.45	Hot Springs	1.94
North Dakota	68.6	+2.1	New England	105	26	2 stations	32	[1] 9	2.10	+.10	Berthold Agency	4.57	Crosby	.88
Ohio	72.7	+1.0	Gallipolis (near)	100	12	do	44	[1] 23	2.02	−1.37	Athens	5.50	Ohio State University.	.24
Oklahoma	82.2	+.7	Alva	112	30	do	48	21	2.66	−.24	Carter Tower	6.82	Hooker	.14
Oregon	66.8	+1.5	Echo	109	3	Austin	15	29	.35	−.06	Newport	2.08	14 stations	.00
Pennsylvania	73.3	+3.0	Marcus Hook	98	8	Somerset	41	5	2.98	−1.23	Colebrook	9.65	Clearfield	.41
South Carolina	78.4	−.4	2 stations	101	[1] 9	Longcreek (near)	53	31	7.37	+1.67	Caesars Head	15.47	Little Mountain	3.00
South Dakota	71.9	+1.0	Camp Crook	108	3	Castlewood	34	21	1.92	−.18	Custer	4.76	Dupree	.05
Tennessee	76.5	−.2	4 stations	98	[1] 9	Waynesboro	42	22	3.19	−.81	Morgan Springs	7.73	Milan	.77
Texas	82.3	−.5	do	110	[1] 16	2 stations	50	[1] 9	2.21	−.10	Livingston	8.32	Sinton	.17
Utah	71.0	+1.2	Springdale	112	16	Silver Lake	30	8	.66	−.38	Gooseberry Ranger Station.	2.41	2 stations	.00
Virginia	75.0	+.9	Diamond Springs	100	9	Mountain Lake	44	30	5.51	+1.13	Emporia	13.81	Monterey	1.79
Washington	67.6	+2.0	3 stations	107	[1] 3	Signal Peak	28	29	.43	−.42	Paradise Inn	2.73	13 stations	.00
West Virginia	72.7	+.9	Williamson	99	11	Bayard	38	5	2.19	−1.86	Pickens	6.33	Buckhannon No. 2	.11
Wisconsin	68.6	+1.0	Stevens Point	98	1	Laona	33	22	3.53	+.27	Pine River	7.90	Portage	1.32
Wyoming	63.4	−.5	Yoder	102	15	Snake River	18	10	.78	−.30	Newcastle	3.55	Eden	.00
Alaska (July)	55.8	+.3	No Grub	91	20	Susitna	25	28	3.26	+.68	Little Port Walter	19.14	Pilgrim Springs	.23
Hawaii	74.6	−.3	Mana (Kauai)	94	5	Kanalohuluhulu	42	15	4.85	−1.40	Kukui	38.00	10 stations	.00
Puerto Rico	78.9	.0	Utuado	99	27	Guineo Reservoir	59	[1] 8	7.14	−.27	La Mina (El Yunque)	16.01	Ensenada	1.13

[1] Other dates also.

TABLE 2.—*Climatological data for Weather Bureau Stations, August 1939*

District and station	Elevation of instruments: Barometer above sea level	Elevation of instruments: Thermometer above ground	Elevation of instruments: Anemometer above ground	Pressure: Station, reduced to mean of 24 hours	Pressure: Sea level, reduced to mean of 24 hours	Pressure: Departure from normal	Temperature of the air: Mean max. + mean min. ÷ 2	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	Mean wet thermometer	Mean temperature of the dew-point	Mean relative humidity	Precipitation: Total	Precipitation: Departure from normal	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
	Ft.	Ft.	Ft.	In.	In.	In.	° F.	° F.	°F.		°F	°F.		°F.	°F.	° F.	° F.	%	In.	In.		Miles								0–10	In.	In.
New England							71.5	+4.1										83	3.76	+0.2										5.3		
Eastport	75	67	85	29.92	30.00	+0.04	63.6	+2.9	81	11	72	49	3	55	25	60	58	86	0.99	−2.0	6	7.0	s.	23	e.	30	11	10	10	5.3	0.0	0.0
Greenville, Me	1,069	4	41	28.86	30.01	.....	65.4	.....	84	12	72	43	2	59	39	62	60	..	2.19	.....	11	.....	s.	.....	.....	..	12	11	8	....	.0	.0
Portland, Me	103	82	117	29.88	30.00	+.02	69.7	+3.3	84	10	76	58	31	63	26	64	62	83	2.87	−.3	13	7.0	s.	23	s.	3	19	5	7	4.2	.0	.0
Concord	288	54	72	29.69	30.00	+.02	72.0	+5.2	90	16	83	53	6	61	34	..	..	..	5.64	+1.5	8	4.6	se.	15	sw.	13	11	11	9	5.4	.0	.0
Burlington	403	11	48	29.53	29.96	−.01	70.8	+2.9	89	3	81	52	28	60	30	64	61	76	2.78	−.6	7	6.7	s.	26	s.	13	11	13	7	4.9	.0	.0
Northfield	876	12	60	29.06	29.99	+.01	67.6	+4.2	88	3	81	44	30	54	37	62	60	83	2.69	−.8	9	6.0	sw.	21	se.	8	8	15	8	5.5	0	.0
Boston [1]	29	33	62	.....	29.98	−.01	73.8	+3.9	92	22	82	60	31	60	21	66	..	76	2.14	−1.5	9	10.0	s.	32	ne.	30	6	14	11	....	.0	.0
Nantucket	12	14	90	29.98	29.99	.00	70.6	+2.8	84	10	78	60	2	64	21	67	66	91	4.41	+1.0	8	12.2	s.	36	ne.	31	12	7	12	5.3	.0	.0
Block Island	26	11	46	29.95	29.98	−.01	72.8	+4.3	85	22	78	61	31	67	17	69	67	87	5.22	+1.6	9	12.5	s.	38	ne.	31	16	5	10	4.3	.0	.0
Providence	159	215	251	29.93	30.00	+.01	75.0	+4.0	92	22	83	60	30	67	26	68	66	82	4.08	+.6	9	10.1	s.	33	se.	20	9	10	12	5.7	.0	.0
Hartford	159	66	100	29.91	29.96	−.03	75.2	+6.3	91	1	84	59	29	66	27	67	65	81	3.68	−.6	10	7.7	s.	25	w.	4	9	7	15	6.3	.0	.0
New Haven	106	74	153	29.96	29.98	−.01	75.2	+4.9	92	1	83	60	29	68	22	69	67	82	7.46	+3.2	9	8.7	s.	27	e.	26	9	11	11	5.9	.0	.0
Middle Atlantic States							76.4	+3.1										84	5.21	+0.9										5.9		
Albany [1]	292	26	40	29.65	29.96	−.02	73.8	+3.0	93	18	86	52	5	62	35	66	62	73	1.96	−1.8	8	6.7	s.	33	w.	13	11	10	10	5.4	.0	.0
Binghamton	871	57	79	29.07	29.98	−.01	73.8	+5.8	93	16	87	55	5	61	34	65	59	68	1.01	−2.6	8	5.7	ne.	21	w.	3	6	14	11	5.7	.0	.0
New York	314	415	454	29.63	29.95	−.05	76.8	+3.7	91	21	81	60	30	70	26	68	65	73	4.37	.0	12	11.1	s.	41	s.	3	6	14	11	6.2	.0	.0
Harrisburg [1]	351	30	49	29.60	29.97	−.04	77.2	+4.6	95	13	88	58	22	66	32	68	64	71	4.09	.0	10	6.8	w.	34	e.	19	10	6	15	6.0	.0	.0
Philadelphia	114	174	367	29.85	29.97	−.03	77.8	+3.0	93	13	85	58	30	70	20	70	67	74	6.90	+2.3	13	10.6	s.	39	s.	3	9	9	13	5.8	.0	.0
Reading	323	283	306	29.63	29.97	....	75.7	+3.3	91	13	84	62	6	67	25	67	64	71	3.38	−.8	10	9.1	se.	35	e.	19	10	8	13	5.7	.0	.0
Scranton	805	72	104	29.13	29.97	−.03	74.0	+4.2	91	13	85	56	5	63	30	65	60	68	3.87	+.2	10	5.3	sw.	20	sw.	9	10	14	7	4.8	.0	.0
Atlantic City	52	37	172	29.90	29.95	−.05	76.4	+3.9	92	1	81	59	30	71	20	72	70	82	8.95	+4.5	9	14.6	s.	52	se.	19	12	3	16	6.1	.0	.0
Sandy Hook	22	10	57	29.94	29.96	....	76.6	+4.1	91	9	82	61	30	71	18	70	68	79	7.31	+2.3	12	12.3	s.	42	ne.	29	7	10	14	6.4	.0	.0
Trenton	190	89	107	29.76	29.96	....	76.2	+3.2	93	9	84	58	30	68	27	69	66	76	7.55	+2.8	12	7.6	s.	26	s.	18	6	7	18	7.1	.0	.0
Baltimore [2]	123	100	215	29.95	29.97	−.04	80.0	+4.5	97	9	88	67	31	72	21	71	68	75	3.52	−.8	10	9.5	s.	43	ne.	19	13	5	13	5.5	.0	.0
Washington	112	62	85	29.85	29.96	−.05	78.8	+3.8	96	9	88	64	29	70	25	70	....	72	3.22	−.8	7	5.8	sw.	16	n.	28	10	11	10	5.5	.0	.0
Cape Henry	18	8	54	29.94	29.96	....	78.5	+1.6	95	21	85	65	30	72	20	73	71	84	6.63	+1.8	11	10.4	sw.	47	nw.	29	8	13	10	5.8	.0	.0
Lynchburg	686	144	184	29.27	30.00	−.02	76.4	+.8	93	2	86	61	31	67	28	68	66	79	7.66	+3.9	10	5.6	sw.	27	e.	18	9	11	11	5.9	.0	.0
Norfolk	91	80	125	29.88	29.97	−.03	79.2	+1.8	94	9	86	63	29	72	23	72	70	80	9.20	+4.0	15	8.3	sw.	33	nw.	29	5	12	14	6.9	.0	.0
Richmond [2]	144	11	52	29.80	29.97	−.04	77.8	+1.3	95	9	86	63	30	69	24	71	70	87	5.84	+1.4	12	6.6	sw.	21	se.	18	13	7	11	5.3	.0	.0
Wytheville	2,304	49	55	.....	30.02	+.01	70.4	−.1	86	9	80	54	31	60	....	....	....	82	3.11	−1.1	12	4.6	w.	16	w.	20	6	14	11	....	.0	.0
South Atlantic States							78.8	+0.7											6.69	+1.0										5.9		
Asheville	2,253	89	104	27.73	30.02	.00	73.0	+2.5	91	10	84	53	31	62	31	65	63	83	5.14	+1.0	15	5.7	nw.	20	e.	5	4	15	12	6.4	.0	.0
Charlotte [2]	779	63	86	29.18	29.98	−.04	78.6	+1.5	94	10	88	60	29	69	24	70	69	85	5.85	+.8	12	6.2	s.	27	sw.	31	7	14	10	6.0	.0	.0
Greensboro [1]	886	6	56	29.08	30.01	.....	76.2	.....	91	9	86	59	29	67	25	70	68	86	12.53	.....	12	6.3	sw.	28	se.	6	6	11	14	6.4	.0	.0
Hattaras	11	5	50	29.97	29.98	−.02	79.6	+1.6	88	21	85	67	29	75	16	75	74	85	6.52	+.8	8	9.7	sw.	34	w	29	8	14	9	5.6	.0	.0
Raleigh [2]	376	103	146	29.61	29.98	−.03	77.9	+.9	93	9	88	60	28	69	23	72	71	87	9.99	+4.6	12	6.9	sw.	30	sw.	3	4	16	11	6.2	.0	.0
Wilmington	72	73	107	29.92	29.99	−.01	78.8	+1.2	92	10	86	63	29	72	21	74	72	87	7.21	+.8	18	7.6	sw.	31	sw.	18	7	15	9	5.9	.0	.0
Charleston [2]	48	11	92	29.94	29.99	−.02	80.2	−.8	93	1	87	64	29	73	22	73	72	91	8.78	+2.2	16	8.9	s.	27	ne.	5	9	13	9	5.6	.0	.0
Columbia, S. C	347	70	91	29.63	30.00	−.01	79.6	.0	97	9	89	62	29	70	26	71	69	80	6.16	+.7	15	6.8	s.	31	sw.	3	13	8	10	5.2	.0	.0
Greenville, S. C	1,040	70	78	28.91	29.98	.....	77.0	+1.2	97	10	87	61	31	67	30	66	67	79	7.16	+1.7	12	5.5	sw.	23	w.	1	7	15	9	5.5	.0	.0
Augusta [2]	182	62	77	29.54	29.98	−.03	80.2	−.2	97	10	89	63	31	71	24	71	70	83	5.42	+.4	16	5.1	s.	20	nw.	29	9	13	9	5.5	.0	.0
Savannah [2]	65	73	152	29.94	29.99	−.02	81.2	+.5	97	10	90	66	31	73	24	74	73	87	5.37	−1.9	15	9.0	sw.	34	w.	18	6	16	9	6.2	.0	.0
Jacksonville	43	86	110	29.96	30.00	−.01	80.8	−.9	94	22	90	68	31	72	23	73	72	84	5.97	+.2	14	6.8	s.	26	sw.	1	3	21	7	6.2	.0	.0
Florida Peninsula							81.9	−0.2										80	8.28	+2.0										6.4		
Key West [2]	21	10	64	29.97	29.98	.00	83.2	−.3	92	3	89	69	8	77	20	77	75	78	3.73	−.8	16	7.8	e.	24	nw.	31	6	13	12	6.3	.0	.0
Miami	25	124	168	29.97	30.00	−.02	81.8	+.4	90	28	87	69	6	76	19	76	74	79	6.81	+.6	19	7.5	se.	29	s.	12	5	11	15	7.0	.0	.0
Tampa [2]	35	88	197	29.98	30.00	.00	80.7	−.8	94	20	88	70	15	73	21	75	73	84	14.29	+6.1	19	8.7	s.	45	s.	12	5	14	12	6.0	.0	.0
East Gulf States							79.8	−0.1										83	8.38	+3.1										5.9		
Atlanta [1]	976	5	72	28.97	29.97	−.04	77.8	+.8	99	9	87	62	31	69	27	70	68	80	5.91	+1.5	10	7.9	se.	31	se.	11	8	12	11	6.1	.0	.0
Macon [2]	370	79	87	29.48	29.97	−.04	78.8	−1.1	94	10	87	63	31	70	23	72	71	88	9.29	+5.0	17	6.2	s.	24	s.	16	1	15	15	7.3	....	....
Thomasville	273	49	58	.....	.....	.....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Apalachicola	35	11	....	29.93	29.97	.....	80.4	−.8	92	10	86	68	31	74	18	75	73	81	9.12	+1.6	13	8.0	sw.	52	ne.	12	6	10	15	6.8	.0	.0
Pensacola	56	149	185	29.91	29.97	−.01	79.2	−1.7	92	11	85	68	24	74	19	74	72	83	19.02	+11.0	15	11.5	sw.	40	sw.	16	11	13	7	5.2	.0	.0
Anniston	741	9	....	.....	.....	.....	77.2	+.8	93	10	86	58	31	68	27	....	....	..	5.88	+1.8	11	.....	s.	....	....	..	12	12	7	....	.0	.0
Birmingham [2]	700	11	48	29.31	29.97	−.02	78.4	−.8	93	11	87	65	25	70	24	71	69	85	8.50	+4.2	13	5.7	s.	21	s.	3	11	8	12	5.6	.0	.0
Mobile	57	86	161	29.90	29.96	−.02	80.8	−.2	94	11	89	69	28	73	23	74	72	84	8.81	+1.9	16	8.1	sw.	36	ne.	11	8	15	8	5.5	.0	.0
Montgomery [2]	218	92	105	29.71	29.96	−.03	79.6	−1.2	95	10	88	64	31	72	24	72	71	87	15.58	+11.4	18	6.7	sw.	26	se.	13	9	11	11	5.5	.0	.0
Meridian [2]	375	67	92	29.63	29.95	−.03	80.6	+1.1	96	9	90	66	30	71	27	72	71	85	2.23	−2.3	6	5.1	sw.	22	ne.	11	10	15	6	5.1	.0	.0
Vicksburg	247	82	102	29.70	29.95	−.03	81.8	+1.0	94	17	91	68	29	73	22	73	71	77	2.16	−1.3	10	6.6	sw.	30	sw.	17	9	15	7	5.5	.0	.0
New Orleans [2]	53	76	84	29.93	29.96	−.02	82.7	+.5	96	11	91	71	4	75	23	75	74	82	5.68	−.3	16	5.8	sw.	21	ne.	11	3	15	13	6.4	.0	.0
West Gulf States							83.2	+1.2										72	2.24	−0.8										4.6		
Shreveport [2]	249	92	227	29.75	29.94	−.03	85.3	+3.3	102	12	97	66	17	74	34	74	71	72	2.66	.0	5	8.7	s.	36	sw.	2	14	14	3	4.3	.0	.0
Bentonville	1,303	12	51	28.58	29.91	−.06	77.7	+1.2	99	30	90	54	21	66	38	....	....	..	3.30	−.7	8	5.5	s.	18	sw.	24	12	14	5	....	.0	.0
Fort Smith	463	57	82	29.48	29.94	−.03	83.6	+3.1	102	31	96	66	19	72	34	70	64	59	1.21	−2.1	4	6.3	e.	31	nw.	24	13	14	4	4.4	.0	.0
Little Rock [2]	357	94	102	.....	29.94	−.04	80.8	+1.0	97	12	90	65	27	71	24	72	70	77	2.92	−.8	10	6.8	sw.	38	nw.	27	14	14	3	4.0	.0	.0
Austin [2]	605	68	90	29.30	29.93	.....	84.0	+.2	101	19	95	68	29	73	29	72	69	72	1.62	−.4	6	6.2	s.	29	se.	16	14	11	6	4.2	.0	.0
Brownsville [2]	57	88	96	29.90	29.92	.....	83.1	−.8	94	19	91	72	28	76	19	75	73	81	1.92	−.6	9	9.3	se.	25	s.	7	4	22	5	5.5	.0	.0
Corpus Christi [2]	20	11	78	29.89	29.94	+.01	83.8	+1.3	94	17	90	74	2	78	17	75	74	83	1.36	−.9	2	10.7	s.	27	se.	8	13	14	4	4.2	.0	.0
Dallas [2]	512	220	227	29.40	29.91	.....	85.0	.....	104	31	95	65	23	75	25	72	66	60	1.16	−1.6	5	9.7	s.	44	n.	23	14	13	4	4.3	.0	.0
Fort Worth [2]	679	92	110	29.20	29.92	−.02	85.4	+2.4	105	31	97	69	14	74	32	71	64	58	1.44	−1.2	4	8.4	s.	33	sw.	14	17	12	2	3.0	.0	.0
Galveston [2]	54	106	114	29.95	29.96	.00	83.5	+.5	93	29	88	72	2	79	16	76	74	79	1.99	−2.3	5	8.9	s.	22	s.	7	12	15	4	4.3	.0	.0
Houston [2]	138	157	190	29.89	29.95	.....	83.8	+.6	98	13	92	71	27	75	24	74	72	80	1.52	−3.6	4	8.0	s.	25	s.	23	7	19	5	5.4	.0	.0
Palestine	510	64	72	29.43	29.95	−.02	83.8	+2.0	102	31	94	68	23	73	27	72	68	67	2.69	+.5	8	6.5	s.	27	s.	19	11	15	5	5.1	.0	.0
Port Arthur	34	59	106	29.92	29.96	.....	83.8	.....	96	13	92	72	21	76	22	75	73	79	2.44	−.8	12	10.1	s.	29	s.	2	5	18	8	5.6	.0	.0
San Antonio	693	111	301	29.34	29.93	.00	83.4	−.1	99	19	94	67	29	73	27	73	69	71	5.08	+2.7	9	9.3	se.	38	e.	13	8	14	9	5.3	.0	.0

See footnotes at end of table.

TABLE 2.—*Climatological data for Weather Bureau stations, August 1939*—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, reduced to mean of 24 hours	Pressure: Sea level, reduced to mean of 24 hours	Pressure: Departure from normal	Temperature of the air: Mean max.+mean min.÷2	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	Mean wet thermometer	Mean temperature of the dew-point	Mean relative humidity	Precipitation: Total	Precipitation: Departure from normal	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
	Ft.	Ft.	Ft.	In.	In.	In.	°F.	°F.	°F.		°F.	°F.		°F.	°F.	°F.	°F.	%	In.	In.		Miles								0-10	In.	In.
Ohio Valley and Tennessee							**75.7**	**+0.7**										**75**	**2.07**	**−1.4**										**4.7**		
Chattanooga [2]	762	71	214	29.26	29.98	−0.02	78.8	+1.3	96	9	89	61	31	68	30	69	67	82	2.62	−1.4	14	6.9	w.	28	nw.	9	11	10	10	5.4	0.0	0.0
Knoxville [2]	995	66	84	28.97	29.98	−.03	77.6	+1.4	97	11	88	58	23	68	32	68	65	77	2.12	−1.8	12	4.6	e.	18	nw.	9	15	8	8	4.6	.0	.0
Memphis [2]	399	78	86	29.64	29.93	−.05	80.2	+.8	95	13	88	64	23	72	23	72	69	77	2.23	−1.1	5	6.5	sw.	28	ne.	23	7	17	7	5.3	.0	.0
Nashville [2]	546	168	188	29.33	29.96	−.04	77.8	.0	91	11	88	56	22	68	29	69	66	75	1.87	−1.8	10	6.6	w.	33	se.	15	8	13	10	5.5	.0	.0
Lexington	989	6	----	28.96	30.00	−.01	75.0	+.5	95	12	87	52	22	63	33	----	----	----	1.80	−1.6	6	----	n.	----	----	----	----	22	4	5	.0	.0
Louisville [2]	525	106	120	29.39	29.97	−.03	76.4	−.6	91	13	85	60	22	67	24	68	65	77	2.98	−.4	12	6.5	ne.	27	sw.	8	16	13	2	3.4	.0	.0
Evansville	431	76	116	29.50	29.96	−.03	77.7	+.3	94	15	87	62	22	68	25	68	64	68	3.65	+.3	11	6.4	s.	33	n.	12	14	9	8	4.6	.0	.0
Indianapolis [2]	823	98	129	29.12	29.97	−.03	74.6	+.9	90	16	84	57	27	65	26	65	62	76	2.91	−.4	7	6.5	ne.	22	sw.	8	12	14	5	4.3	.0	.0
Terre Haute	575	63	149	29.35	29.96	----	76.2	----	93	14	87	57	21	65	29	66	62	68	3.57	+.3	8	7.3	sw.	30	sw.	8	16	9	6	4.2	.0	.0
Cincinnati [2]	627	11	51	29.32	29.99	−.02	74.6	+1.0	92	12	85	58	27	64	29	66	63	75	2.16	−1.2	5	5.3	ne.	23	nw.	3	16	8	7	4.2	.0	.0
Columbus [2]	822	90	110	29.10	29.97	−.04	74.9	+1.9	93	13	85	56	27	64	28	65	61	72	.49	−2.8	4	7.7	s.	41	s.	12	12	16	3	4.1	.0	.0
Dayton	900	186	213	29.04	29.97	----	73.6	+.2	90	15	84	56	7	64	28	65	61	69	1.47	−1.8	7	7.5	n.	27	sw.	8	16	11	4	3.8	.0	.0
Elkins [2]	1,947	65	83	27.96	30.03	+.01	70.1	+1.0	89	11	82	51	23	58	37	63	62	88	.83	−3.0	11	4.3	se.	24	w.	9	4	15	12	6.5	.0	.0
Parkersburg	637	77	84	29.31	29.98	−.03	74.7	+.8	92	13	85	56	23	64	31	67	64	75	1.13	−2.4	7	4.7	se.	14	sw.	21	13	14	4	4.2	.0	.0
Pittsburgh [1]	1,273	39	54	28.66	29.99	−.02	73.5	+.6	90	12	84	57	26	63	30	65	61	70	1.25	−2.0	8	8.2	sw.	25	w.	7	8	12	11	5.7	.0	.0
Lower Lake Region							**72.8**	**+3.2**										**73**	**1.72**	**−1.3**										**4.2**		
Buffalo [2]	768	243	280	29.22	29.98	−.01	72.0	+3.4	88	19	79	59	29	65	23	64	60	73	3.79	+.7	9	12.1	sw.	47	w.	12	15	13	3	3.8	.0	.0
Canton	448	10	61	29.48	29.95	----	70.0	+3.4	90	12	82	49	2	58	34	64	60	71	1.74	−1.9	11	6.4	w.	29	w.	9	11	16	4	4.4	.0	.0
Ithaca	836	77	100	29.09	29.97	----	73.6	+5.0	94	18	86	53	28	61	37	64	60	70	1.46	−1.9	6	6.6	nw.	26	se.	19	7	21	3	5.0	.0	.0
Oswego	335	71	85	29.60	29.96	−.03	72.1	+3.7	94	12	80	58	28	64	27	66	63	74	1.36	−1.2	7	6.8	s.	22	nw.	30	9	16	6	4.6	.0	.0
Rochester [2]	523	86	102	29.38	29.98	−.01	73.4	+4.2	95	12	82	58	27	65	29	64	62	76	1.65	−1.2	7	7.0	sw.	29	sw.	9	13	15	3	4.4	.0	.0
Syracuse [2]	596	65	79	29.53	29.96	−.03	74.2	+5.4	93	12	84	57	30	64	26	66	62	74	1.40	−1.5	8	5.7	s.	19	nw.	3	11	14	6	4.8	.0	.0
Erie	714	57	81	29.22	29.96	−.05	72.7	+3.1	91	12	80	60	11	65	25	66	63	73	2.10	−1.2	11	6.7	s.	20	sw.	9	15	12	4	3.7	.0	.0
Cleveland [2]	762	267	318	29.12	29.98	−.03	73.2	+3.2	90	12	80	59	22	66	26	65	61	72	.72	−2.0	6	11.8	s.	32	sw.	9	16	10	5	3.4	.0	.0
Sandusky	629	5	67	29.28	29.96	−.05	74.0	+2.2	91	12	83	58	24	65	28	----	----	----	2.28	−.9	5	7.4	sw.	24	sw.	12	15	9	7	4.4	.0	.0
Toledo [2]	628	79	87	29.30	29.98	−.02	72.4	+1.1	88	1	82	57	26	63	26	64	61	75	1.08	−1.8	6	8.4	w.	28	w.	21	18	10	3	3.3	.0	.0
Fort Wayne	857	69	84	29.10	29.97	----	72.8	+1.1	89	15	83	56	22	63	28	64	60	73	1.61	−1.5	6	7.5	ne.	26	s.	8	14	12	5	4.5	.0	.0
Detroit [1]	626	5	78	29.30	29.96	−.05	73.0	+2.7	92	1	83	56	25	63	27	64	60	70	1.39	−1.4	8	8.6	s.	27	sw.	21	11	12	8	4.6	.0	.0
Upper Lake Region							**68.8**	**+2.4**										**78**	**3.71**	**+0.8**										**5.0**		
Alpena	609	13	89	29.30	29.97	−.03	68.4	+4.3	92	6	78	51	25	59	34	62	60	78	4.08	+1.2	13	9.1	nw.	28	nw.	29	13	12	6	4.7	.0	.0
Escanaba	612	41	49	29.30	29.95	−.04	66.6	+2.3	86	5	75	49	22	58	25	61	59	82	2.62	−.6	14	9.8	s.	28	nw.	9	10	8	13	5.9	.0	.0
Grand Rapids [2]	707	70	244	29.22	29.95	−.05	72.4	+2.7	91	2	82	56	22	63	27	63	60	75	6.22	+3.6	9	9.2	sw.	34	sw.	2	13	11	7	4.6	.0	.0
Lansing	878	5	90	29.04	29.96	----	70.0	+1.5	90	1	80	53	26	60	30	63	60	77	1.97	−.8	9	7.0	sw.	22	sw.	2	15	13	3	4.2	.0	.0
Marquette	734	44	69	29.15	29.94	−.04	65.8	+2.0	86	17	73	52	22	58	27	60	57	77	3.28	+.6	11	6.5	nw.	26	sw.	28	6	12	13	6.1	.0	.0
Sault Saint Marie [1]	724	5	33	29.16	29.94	−.05	64.6	+2.5	84	14	75	48	25	54	34	60	58	84	4.48	+1.9	16	6.1	nw.	21	nw.	20	8	9	14	6.1	.0	.0
Chicago	673	7	131	29.26	29.97	−.03	72.6	+1.0	90	15	80	56	22	65	25	65	62	75	1.47	−1.7	11	8.5	sw.	26	sw.	8	15	9	7	4.0	.0	.0
Green Bay	617	109	141	29.29	29.95	−.04	70.0	+2.3	91	5	79	52	22	61	30	62	59	72	2.27	−.9	8	8.9	sw.	32	ne.	21	10	7	14	5.6	0	0
Milwaukee [2]	681	97	221	29.22	29.97	−.03	72.0	+2.8	90	5	80	55	22	64	24	63	60	77	5.03	+2.4	8	9.8	w.	33	w.	8	13	10	8	4.7	0	0
Duluth	1,133	5	47	28.73	29.92	−.05	65.6	+3.0	91	5	74	50	23	57	29	59	57	79	5.66	+2.5	12	10.5	ne.	29	nw.	8	11	13	7	4.5	.0	.0
North Dakota							**69.7**	**+3.7**										**58**	**2.06**	**−0.2**										**4.2**		
Moorhead, Minn	940	50	58	28.94	29.89	−.07	70.5	+4.4	94	5	83	44	21	58	37	60	53	62	1.49	−1.4	12	8.1	s.	27	sw.	26	10	14	7	4.5	.0	.0
Bismarck [2]	1,677	8	57	28.18	29.92	−.02	69.9	+2.6	99	26	84	43	9	55	44	56	47	56	1.81	.0	9	7.5	nw.	27	nw.	21	15	9	7	4.3	.0	.0
Devils Lake	1,478	11	44	28.35	29.90	−.04	69.0	+4.2	98	6	83	44	9	55	40	57	50	60	2.76	+.3	8	8.2	nw.	27	nw.	2	12	8	11	5.1	.0	.0
Lemmon, S. Dak	2,602	4	38	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Grand Forks	832	11	71	----	----	----	70.3	+4.9	96	5	84	44	9	56	42	60	54	----	1.95	−.7	10	8.1	se.	----	----	----	----	----	----	----	.0	.0
Williston	1,878	42	50	27.97	29.91	−.02	68.6	+2.5	98	26	82	43	23	55	42	55	46	54	2.31	+.8	11	7.2	se.	36	w.	15	21	7	3	2.7	.0	.0
Upper Mississippi Valley							**73.0**	**+0.2**										**74**	**4.70**	**+1.4**										**5.0**		
Minneapolis-St. Paul, Minn. [1]	838	32	61	29.04	29.93	−.04	71.2	+1.3	94	5	82	52	24	60	33	63	58	71	3.65	+.5	12	8.1	s.	45	se.	10	12	10	9	4.9	.0	.0
Springfield, Minn	1,025	4	42	----	----	----	70.8	----	94	5	83	46	21	59	37	62	58	----	4.92	----	11	5.1	s.	----	----	----	----	----	----	----	.0	.0
La Crosse [2]	714	11	48	29.23	29.94	−.04	71.2	+1.2	91	5	82	53	24	61	33	64	61	75	6.74	+3.0	9	4.2	s.	19	se.	10	12	11	8	5.1	.0	.0
Madison	974	70	78	28.93	29.95	−.04	71.3	+1.5	91	1	80	54	9	62	24	63	59	71	2.61	−.6	9	6.2	s.	29	se.	11	9	7	15	6.2	.0	.0
Charles City	1,015	10	51	28.90	29.97	.00	69.3	+.2	90	1	80	48	9	58	33	62	59	75	3.75	+.3	8	5.0	se.	19	sw.	1	10	10	11	5.6	.0	.0
Davenport	606	66	161	29.32	29.97	−.01	73.2	+.1	92	1	83	56	23	63	28	65	61	73	5.60	+2.1	11	7.7	w.	38	se.	16	12	10	9	5.2	.0	.0
Des Moines [2]	860	5	99	28.94	29.95	−.02	71.7	−1.4	89	1	82	53	9	62	30	63	60	73	5.58	+2.1	11	7.6	se.	30	nw.	10	13	9	9	5.0	.0	.0
Dubuque	699	60	79	29.22	29.96	−.02	71.9	+.2	92	1	82	54	23	62	28	64	61	74	4.27	+1.0	10	4.6	s.	18	se.	11	12	5	14	5.6	.0	.0
Keokuk	614	64	78	29.31	29.96	−.02	74.0	−1.0	93	7	84	56	21	64	29	66	62	71	4.81	+1.6	12	5.8	e.	25	nw.	20	12	11	8	5.3	.0	.0
Cairo	358	87	93	29.58	29.95	−.04	77.8	.0	93	13	87	61	22	69	25	70	67	75	1.22	−1.8	8	5.9	s.	23	n.	22	14	7	10	4.7	.0	.0
Peoria [2]	609	11	45	29.27	29.97	−.02	73.2	+.7	92	1	85	54	22	62	31	65	62	79	2.38	−.7	9	4.1	ne.	16	w.	22	18	9	4	3.6	.0	.0
Springfield, Ill. [2]	636	5	191	29.31	29.96	−.03	75.3	+.8	95	1	86	57	21	65	29	66	63	79	5.75	+2.6	10	9.1	s.	42	n.	6	11	11	9	4.9	.0	.0
St. Louis [2]	568	179	303	29.37	29.96	−.03	76.4	−1.1	93	7	85	60	21	68	25	67	63	68	10.06	+7.1	10	9.3	ne.	32	sw.	20	19	7	5	3.3	.0	.0
Missouri Valley							**74.9**	**+0.7**										**67**	**3.26**	**−0.2**										**4.7**		
Columbia, Mo. [2]	784	6	66	29.13	29.94	−.03	75.4	−.2	97	7	87	53	21	64	30	66	63	76	8.71	+5.1	11	6.7	e.	26	n.	22	10	15	6	5.1	.0	.0
Kansas City [1]	750	32	45	29.14	29.92	−.05	77.0	+.4	100	30	88	55	23	66	33	67	62	67	4.64	+.6	11	7.4	e.	33	w.	7	11	13	7	5.0	.0	.0
St. Joseph [2]	967	11	49	29.08	29.93	----	76.2	−.3	97	30	87	55	23	65	32	66	63	74	2.40	−1.4	10	7.7	e.	27	nw.	7	12	15	4	4.7	.0	.0
Springfield, Mo	1,324	5	78	28.55	29.96	−.01	76.2	+.5	95	6	87	52	21	66	31	67	65	78	3.60	−.5	10	6.9	e.	24	w.	20	10	14	7	5.0	.0	.0
Topeka	987	65	87	28.90	29.92	----	77.8	+1.6	107	30	89	54	21	66	35	67	61	70	3.51	−.6	10	8.3	e.	27	se.	12	10	14	7	5.1	.0	.0
Lincoln [1]	1,189	11	81	28.68	29.91	−.04	75.0	+.6	99	30	87	52	21	63	35	63	57	61	2.61	−1.0	12	8.6	e.	27	s.	15	12	11	8	4.6	.0	.0
Omaha [1]	982	31	44	28.91	29.94	−.02	74.6	+.2	96	3	86	51	21	63	36	64	59	65	2.03	−1.0	12	8.8	se.	31	nw.	20	14	7	10	5.0	.0	.0
Valentine	2,598	47	54	27.28	29.94	.00	71.4	−.3	99	13	86	43	23	57	41	59	50	56	2.19	.0	7	8.4	w.	30	nw.	9	15	12	4	3.5	.0	.0
Sioux City	1,138	64	106	28.74	29.93	−.02	72.6	+.6	95	14	84	47	21	61	39	63	57	63	1.97	−1.2	11	7.9	se.	31	nw.	8	12	9	10	4.9	.0	.0
Huron	1,289	27	41	28.57	29.92	−.03	73.2	+3.8	98	4	88	44	21	59	46	60	51	56	.99	−1.5	6	12.5	se.	34	nw.	19	15	13	3	3.8	.0	.0
Northern Slope							**68.4**	**+2.3**										**47**	**0.73**	**−0.5**										**4.0**		
Billings	3,140	5	----	26.35	29.97	----	69.4	----	96	28	84	40	10	54	42	54	41	42	.76	----	4	9.7	sw.	42	n.	6	13	12	6	4.2	.0	.0
Havre	2,507	11	67	27.36	29.95	+.04	68.8	+3.4	98	28	86	39	10	52	47	53	40	44	.58	−.6	5	7.4	sw.	30	s.	25	19	9	3	3.1	.0	.0
Helena	4,124	85	111	25.86	29.97	+.03	67.8	+2.8	93	3	82	39	10	54	42	51	37	38	.48	−.3	5	8.0	sw.	27	sw.	26	17	8	6	3.8	.0	.0
Missoula	3,263	80	91	----	----	----	70.2	+4.6	99	3	88	44	8	53	47	53	40	43	.10	−.8	3	7.0	e.	37	e.	19	19	9	3	3.1	.0	.0
Kalispell	2,973	48	56	26.95	29.94	+.01	66.0	+3.2	92	4	82	38	7	50	41	51	39	42	.21	−.7	6	6.7	nw.	23	w.	25	15	11	5	3.7	.0	.0
Miles City [2]	2,371	48	55	27.23	29.92	−.01	71.8	+.3	98	4	86	44	8	57	42	55	43	43	.50	−.6	7	5.8	s.	28	nw.	6	15	11	5	4.1	.0	.0
Rapid City [2]	3,259	50	58	26.69	29.94	+.01	71.6	+2.1	98	13	85	44	10	58	39	55	44	46	1.28	−.4	9	7.9	w.	32	sw.	18	16	11	4	3.8	.0	.0
Cheyenne [1]	6,144	5	39	24.07	29.96	+.04	66.2	+.6	90	4	82	37	20	50	48	50	40	50	.43	−1.1	9	9.4	nw.	35	n.	7	11	15	5	4.9	.0	.0
Lander	5,352	60	68	24.74	29.94	+.02	67.1	+1.6	92	13	83	38	8	51	40	51	38	43	.20	−.3	4	4.7	sw.	29	se.	24	16	10	5	4.2	.0	.0
Sheridan	3,790	10	47	26.15	29.99	----	66.3	----	95	4	84	35	20	48	48	54	46	60	2.22	+1.3	6	4.5	s.	22	nw.	6	18	10	3	3.4	.0	.0
Yellowstone Park	6,235	12	46	24.02	30.07	+.14	60.8	+1.7	85	16	77	31	10	44	47	46	35	46	.91	−.3	6	7.2	sw.	33	sw.	28	11	13	7	4.5	.0	.0
North Platte [2]	2,821	11	51	27.10	29.93	−.01	73.4	+2.6	98	5	88	46	8	59	44	61	55	63	1.17	−1.2	4	6.8	se.	23	n.	7	11	12	8	4.9	.0	.0

See footnotes at end of table.

TABLE 2.—*Climatological data for Weather Bureau Stations, August 1939*—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, reduced to mean of 24 hours	Pressure: Sea level, reduced to mean of 24 hours	Pressure: Departure from normal	Temperature of the air: Mean max.+mean min.÷2	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	Mean wet thermometer	Mean temperature of the dew-point	Mean relative humidity	Precipitation: Total	Precipitation: Departure from normal	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
	Ft.	Ft.	Ft.	In.	In.	In.	°F.	°F.	°F.		°F.	°F.		°F.	°F.	°F.	°F.	%	In.	In.		Miles								0-10	In.	In.
Middle Slope							**77.1**	**+1.2**										**55**	**3.16**	**+0.7**										**4.2**		
Denver [2]	5,292	106	113	24.78	29.93	+0.01	71.8	+1.1	92	17	85	46	20	58	38	54	43	45	0.43	−1.0	6	7.7	s.	26	nw.	21	10	15	6	4.7	0.0	0.0
Pueblo [2]	4,690	79	86	25.23	29.91	.00	73.2	+.5	95	24	88	48	21	58	43	57	48	51	.68	−1.1	7	6.7	e.	26	ne.	16	16	12	3	4.2	.0	.0
Chadron, Nebr	3,439	4	58																													
Concordia	1,392	50	58	28.48	29.91	−.04	76.8	+.3	100	29	89	56	21	65	33	66	69	62	4.37	+1.5	10	7.9	se.	19	se.	5	14	12	5	4.5	.0	.0
Dodge City	2,509	10	86	27.36	29.89	−.04	79.0	+1.3	102	30	92	54	8	66	34	64	56	55	2.09	−.6	8	11.2	sw.	31	se.	19	13	16	2	3.7	.9	.0
Wichita [2]	1,358	85	93	28.47	29.90	−.05	80.0	+1.7	105	30	92	57	21	68	32	67	60	60	5.84	+2.7	7	9.8	se.	38	ne.	15	13	15	3	4.0	.0	.0
Oklahoma City [2]	1,214	10	47	28.57	29.90	−.04	82.1	+2.4	101	30	94	60	21	71	32	68	62	58	5.52	+2.6	9	7.7	s.	26	ne.	22	14	12	5	4.2	.0	.0
Southern Slope							**79.9**	**+0.2**										**61**	**2.77**	**+0.5**										**4.0**		
Abilene [2]	1,738	10	56	28.14	29.90	−.02	83.2	+1.2	101	31	95	64	8	72	32	68	61	60	1.95	−.3	5	8.4	s.	27	s.	6	14	9	8	4.6	.0	.0
Amarillo [2]	3,676	10	49	26.36	29.91	−.01	77.7	+2.0	99	30	90	55	8	65	35	65	56	61	3.28	+.2	7	7.8	s.	21	ne.	7	18	13	0	3.4	.0	.0
Del Rio	960	63	71	28.92	29.88	−.02	82.2	−2.0	96	25	91	68	9	73	21	71	67	66	4.47	+2.8	11	8.1	se.	41	e.	16	11	11	9	5.0	.0	.0
Roswell	3,566	75	85	26.39	29.92	+.04	76.4	−.2	95	19	89	56	31	64	36	63	55	56	1.38	−.8	8	7.2	s.	36	se.	10	18	13	0	3.0	.0	.0
Southern Plateau							**81.2**	**+1.9**										**50**	**0.66**	**−0.5**										**3.4**		
El Paso [2]	3,778	82	101	26.05	29.85	+.01	80.7	+1.5	98	22	93	65	12	69	33	63	53	49	.91	−.8	7	7.6	e.	26	ne.	11	19	11	1	2.8	.0	.0
Albuquerque [1]	5,314	5	39	24.80	29.87		75.7	+1.8	94	19	90	56	14	62	33	59	50	51	.54	−.7	5	8.3	se.	38	nw.	18	15	11	5	3.9	.0	.0
Santa Fe	7,013	38	53	23.38	29.95	+.06	67.8	+.4	87	19	80	50	8	55	33	53	45	52	.94	−1.3	10	5.4	e.	24	ne.	16	7	18	6	5.3	.0	.0
Flagstaff	6,907	10	59																													
Phoenix [2]	1,107	39	51	28.66	29.77	−.02	90.2	+1.7	109	21	102	70	7	78	31	71	62	44	.84	−.1	7	6.0	w.	30	e.	16	17	9	5	3.5	.0	.0
Yuma	141	9	54	29.63	29.77	+.01	92.6	+2.2	111	21	106	74	21	79	37	75	67	50	.12	−.4	1	5.6	s.	22	se.	22	25	4	2	1.6	.0	.0
Independence	3,957	5	26	25.96	29.90	+.09	79.9	+3.8	102	16	96	55	31	64	40				.59	+.5	2										.0	.0
Middle Plateau							**74.7**	**+3.3**										**36**	**0.54**	**−0.2**										**3.2**		
Reno [2]	4,527	61	76	25.60	29.92	+.08	74.3	+5.6	97	2	91	47	29	57	42	53	40	44	.48	+.3	2	6.5	w.	29	s.	22	24	6	1	1.9	.0	.0
Tonopah	6,090	12	20				75.4		93	16	87	55	21	64	31	54	38		.08		3		se.								.0	.0
Winnemucca	4,344	18	56	25.62	29.91	+.03	73.4	+4.1	102	3	93	40	29	52	51	51	30	28	.04	−.2	2	6.8	sw.	28	s.	24	20	9	2	2.4	.0	.0
Modena	5,473	10	46	24.67	29.88	+.02	71.8	+2.6	95	16	88	48	31	55	41	54	42	42	1.22	−.1	8	9.3	w.	30	nw.	6	7	19	5	4.9	.0	.0
Salt Lake City [1]	4,227	32	46	25.74	29.88	+.02	76.8	+2.3	98	14	91	54	8	63	35	56	41	36	.23	−.6	3	6.7	n.	29	n.	28	18	10	3	3.4	.0	.0
Grand Junction	4,602	60	68	25.40	29.90	.00	77.2	+1.8	98	16	91	55	7	63	38	57	42	35	.68	−.5	2	5.9	se.	24	w.	28	20	6	5	3.2	.0	.0
Northern Plateau							**73.0**	**+3.6**										**36**	**0.06**	**−0.4**										**2.6**		
Baker	3,471	36	54	26.56	29.97	+.02	68.4	+3.8	94	4	87	39	7	50	47	49	35	43	.04	−.4	1	6.5	n.	22	n.	6	18	11	2	3.0	.0	.0
Boise [2]	2,739	79	87	27.15	29.90	−.03	74.7	+2.9	100	3	91	46	7	59	42	56	43	44	T	−.2	0	5.2	se.	21	nw.	24	21	6	4	3.0	.0	.0
Pocatello [1]	4,478	5	31	25.51	29.92	.00	70.6	+1.0	96	14	89	40	29	53	50	51	34	32	.10	−.6	4	8.8	w.	35	n.	30	20	8	3	3.0	.0	.0
Spokane [2]	1,929	101	110	27.90	29.93	−.02	72.6	+4.5	101	3	88	48	29	53	44	53	38	36	.04	−.6	1	6.2	s.	23	s.	28	27	3	1	1.8	.0	.0
Walla Walla	991	57	65	28.88	29.92	−.03	76.4	+3.7	102	3	91	50	29	62	40	56	38	28	T	−.5	0	5.8	s.	19	s.	24	21	7	3	2.5	.0	.0
Yakima	1,076	58	67	28.82	29.95		75.1	+5.6	102	3	90	42	29	60	40	57	43	33	.18	.0	1	6.5	nw.	22	sw.	28	22	5	4	2.6	.0	.0
North Pacific Coast Region							**65.9**	**+2.5**										**66**	**0.60**	**−0.2**										**3.9**		
North Head	211	8	56	29.83	30.05	+.02	58.8	+1.2	86	8	64	49	9	53	35	56	54	88	.47	−.6	8	11.4	n.	41	s.	28	9	6	16	6.2	.0	.0
Seattle [2]	125	90	321	29.99	30.03	+.03	66.6	+3.5	91	3	77	59	30	57	31	58	52	67	.59	−.1	4	7.4	n.	26	s.	28	15	5	11	4.3	.0	.0
Tacoma	263	172	201	29.83	30.03	+.01	65.2	+2.6	91	3	75	49	29	56	33				.34	−.4	4	7.3	n.	24	sw.	25	17	6	8	3.7	.0	.0
Tatoosh Island	86	9	55	29.95	30.05	+.05	56.2	+.9	74	8	61	49	18	52	21	52	52	86	.51	−1.5	12	10.7	s.	33	ne.	19	11	7	13	5.7	.0	.0
Medford [1]	1,329	29	58	28.55	29.93		74.0	+2.6	104	19	93	43	29	55	51	57	45	44	T	−.2	0		nw.				25	4	2	1.7	.0	.0
Portland, Oreg. [2]	154	68	108	29.96	30.00	−.01	70.0	+3.3	100	2	82	49	29	58	36	60	53	62	1.52	+.9	6	6.6	nw.	19	nw.	1	16	9	6	3.5	.0	.0
Roseburg	510	45	76	29.43	29.97	−.03	70.8	+2.8	104	2	87	43	29	54	47	58	48	52	.74	+.4	3	4.5	n.	17	nw.	6	26	2	3	2.0	.0	.0
Middle Pacific Coast Region							**68.8**	**+1.6**										**60**	**0.02**	**0.0**										**3.6**		
Eureka	60	72	88	29.95	30.02	+.02	56.8	+.8	67	30	61	50	30	52	17	54	52	86	.06	−.1	4	6.2	nw.	18	sw.	7	3	11	17	7.3	.0	.0
Redding [1]	722	20	34	29.10	29.86		82.7	+2.2	107	17	97	56	28	68	36	59	39	23	.00	.0	0	7.4	nw.	25	nw.	27	26	3	2	1.4	.0	.0
Sacramento [2]	66	92	115	29.94	29.87	+.02	75.0	+2.1	105	17	92	51	28	58	44	59	49	51	.03	.0	0	7.9	s.	18	sw.	31	27	4	0	.9	.0	.0
San Francisco	155	112	132	29.78	29.94	+.02	60.6	+1.5	81	17	66	52	5	56	24	56	54	82	T	.0	0	10.9	w.	28	w.	27	10	15	6	4.7	.0	.0
South Pacific Coast Region							**74.7**	**+1.2**										**62**	**T**	**0.0**										**2.9**		
Fresno [1]	327	97	105	29.55	29.84	+.02	81.0	+.3	107	18	99	53	29	63	44	62	47	37	T	.0	0	7.0	nw.	19	nw.	27	28	1	2	1.4	.0	.0
Los Angeles	338	159	191	29.54	29.89	+.01	73.0	+1.9	89	17	82	60	29	64	27	64	63	70	.01	.0	1	5.2	sw.	15	w.	26	19	11	1	2.7	.0	.0
San Diego [2]	87	62	70	29.87	29.90	+.01	70.1	+1.4	81	25	75	61	30	65	19	65	62	78	T	.0	0	6.6	w.	16	s.	17	11	15	5	4.5	.0	.0
West Indies																																
San Juan, P. R.	82	9	54	29.90	29.98		80.5	.0	90	8	85	74	6	76	16				3.99	−2.0	16	9.8	e.	27	e.	11	2	21	8	5.9	.0	.0
Panama Canal																																
Balboa Heights	118	6	92		[3]29.80	−.03	81.7	+.5	92	26	88	72	3	75	16			[3]86	5.13	−2.6	20	6.5	nw.	21	n.	17	0	8	23	8.0	.0	.0
Cristobal	36	6	97		[3]29.81	−.03	82.0	+1.8	89	16	86	73	11	78	14	77	76	[3]84	11.66	−3.6	23	8.9	n.	26	nw.	11	0	4	27	8.8	.0	.0
Alaska																																
Fairbanks	451	11	87	[4]29.26	[4]29.77		53.6	−1.6	76	9	65	32	23	42	32	49	44	72	1.44	−.6	12	6.4	e.	22	se.	3	0	3	23	8.6	.0	.0
Juneau	80	96	116	[4]29.93	[4]30.02		53.6	−1.7	73	9	58	44	24	49	21	50	48	81	12.24	+5.0	24	7.0	s.	24	se.	3	0	2	29	9.6	.0	.0
Nome	22	5	57																													
Hawaiian Islands																																
Honolulu	38	86	100	29.93	29.97	−.01	77.7	−.7	84	25	82	70	6	74	13	70	70	72	.53	−.8	13	10.3	e.	22	ne.	2	2	20	9	6.1	.0	.0

[1] Data are airport records.
[2] Barometric and hygrometric data from airport, other data city-office records.
[3] Observations taken bihourly.
[4] Pressure not reduced to a mean of 24 hours.

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

TABLE 3.—*Data furnished by the Canadian Meteorological Service, August 1939*

Stations	Altitude above mean sea level, Jan. 1, 1919	Pressure: Station reduced to mean of 24 hours	Pressure: Sea level reduced to mean of 24 hours	Pressure: Departure from normal	Temperature of the air: Mean max.+mean min.÷2	Temperature of the air: Departure from normal	Temperature of the air: Mean maximum	Temperature of the air: Mean minimum	Temperature of the air: Highest	Temperature of the air: Lowest	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Total snowfall
	Feet	*In.*	*In.*	*In.*	*° F.*	*° F.*	*° F.*	*° F.*	*° F.*	*° F.*	*In.*	*In.*	*In.*
Cape Race, Newfoundland	99				55.6	−1.0	62.4	48.7	73	40	5.53	+1.52	
Sydney, Cape Breton Island	48	29.89	30.02	+0.04	67.3	+3.6	76.5	58.1	87	39	1.62	−2.08	
Halifax, Nova Scotia	88	29.76	30.02	+.03	60.4	+4.9	76.4	62.3	86	53	2.13	−2.30	
Yarmouth, Nova Scotia	65	29.00	30.01	+.01	65.2	+4.6	74.3	56.1	82	48	1.90	−1.60	
Charlottetown, Prince Edward Island	38	29.93	30.01	+.05	69.4	+5.0	78.5	60.4	86	46	1.54	−1.63	
Chatham, New Brunswick	28	29.85	29.95	.00	68.6	+4.1	80.5	56.8	88	42	.79	−3.28	
Father Point, Quebec	20												
Quebec, Quebec	296												
Doucet, Quebec	1,236	28.58	29.91	−.08	61.4	+4.4	74.0	48.9	83	32	4.42	+.92	
Montreal, Quebec	187												
Ottawa, Ontario	236	29.58	29.95	+.01	69.6	+3.9	80.5	58.6	89	49	1.77	−1.11	
Kingston, Ontario	285	29.66	29.97	−.01	70.1	+3.5	80.3	59.9	88	53	2.68	−.07	
Toronto, Ontario	379	29.56	29.96	−.03	72.2	+5.2	81.3	63.2	87	57	4.17	+1.37	
Cochrane, Ontario	930				62.0	+2.0	71.5	52.5	83	44	4.24	+.94	
White River, Ontario	1,244	28.63	29.95	−.01	59.6	+1.9	73.5	45.6	80	36	2.22	−.73	
London, Ontario	808	29.11	29.97		69.4	+3.0	81.2	57.5	87	50	1.22	−1.62	
Southampton, Ontario	656	29.26	29.96	−.04	67.4	+2.6	76.3	58.6	85	51	3.88	+1.58	
Parry Sound, Ontario	688	29.29	29.97	−.01	69.2	+5.0	78.0	60.3	86	55	7.50	+4.74	
Port Arthur, Ontario	644	29.22	29.93	−.04	62.0	+1.6	72.6	51.4	83	40	2.13	−.66	
Winnipeg, Manitoba	760	29.05	29.90	−.06	67.8	+3.8	79.8	55.8	94	46	5.51	+3.17	
Minnedosa, Manitoba	1,690	28.14	29.92	−.01	65.1	+4.5	79.8	50.4	97	35	2.34	+.21	
Le Pas, Manitoba	860	28.91	29.86	−.05	63.4	+2.8	75.3	51.5	86	41	1.43	−.65	
Qu'Appelle, Saskatchewan	2,115	27.68	29.92	−.02	64.6	+2.8	79.8	49.5	95	35	1.19	−.74	
Moose Jaw, Saskatchewan	1,759				67.7	+4.4	82.7	52.7	99	38	.36	−1.32	
Swift Current, Saskatchewan	2,392	27.16	29.93	+.01	64.1	+.8	78.8	49.4	93	39	.29	−1.55	
Medicine Hat, Alberta	2,365	27.49	29.94	+.04	67.2	+.5	83.9	50.5	97	38	.43	−.99	
Calgary, Alberta	3,540	26.38	30.00	+.06	61.1	+2.4	77.6	44.6	91	32	.51	−1.82	
Banff, Alberta	4,521				57.6	+3.8	74.7	40.4	85	30	.44	−1.87	
Prince Albert, Saskatchewan	1,450	28.37	29.90	−.03	64.2	+4.1	76.8	51.5	94	41	.62	−1.62	
Battleford, Saskatchewan	1,592	28.21	29.92	−.01	65.4	+4.9	81.3	49.4	100	36	.75	−1.15	
Edmonton, Alberta	2,150	27.61	29.93		61.1	+1.7	76.6	45.6	90	36	.03	−2.37	
Kamloops, British Columbia	1,262												
Victoria, British Columbia	230	29.79	30.04	+.02	62.2	+2.3	71.3	53.0	87	50	.31	−.30	
Barkerville, British Columbia	4,180												
Estevan Point, British Columbia	20												
Prince Rupert, British Columbia	170												
St. George's, Bermuda	158												

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Quebec, Quebec	296	29.58	29.90	0.00	68.8	+2.1	77.0	60.6	90	51	4.26	+0.06	
Kamloops, British Columbia	1,262	28.63	29.95	+.01	70.6	+.8	84.7	56.4	107	48	.67	−.35	
Estevan Point, British Columbia	20	30.00	30.03	−.05	56.2	+.8	61.1	51.2	72	42	4.96	+2.04	

TABLE 4.—*Severe local storms, August 1939*

[Compiled by Mary O. Souder from reports submitted by Weather Bureau officials]

[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
Luverne, Minn., and vicinity	1	P. m.			$10,500	Rain and flood	240 feet of railroad track washed out; highways to south and west inundated in places; $10,000 property damage; $500 loss to crops.
Pratt and Cunningham, Kans.	1				3,000	Tornadic winds	Damage to farm buildings; telephone and power lines down.
Gillespie, Ill., vicinity of	2	3:30 p. m.	250		2,500	do	Property damage, $2,000; loss to crops, $500. Greatest destruction over a strip 690 yards long; entire path 7 miles long.
Pratt County, Kans.	2	P. m.		0		Tornado	Buildings on one farm badly damaged. Twice before during the past year the buildings on this farm have been destroyed by tornadoes. Damage not estimated.
Lebanon, Tenn.	2-3	do			100,000	Rainfall	Water 3 to 4 feet deep flooded stores and downtown areas; 2 railroad bridges washed out; light and power service interrupted; much loss to crops and damage to farmlands.
Lake Worth, Fla., south of	4			0		Tornado	Little damage reported.
Pima and Cochise Counties, Ariz.	5				1,550	Heavy rains	Railroad bridges and grades damaged.
Franklin, Ill.	6				50,000	Heavy hail	Loss to crops.
Murrayville, Ill.	6				1,000	Wind	Property damaged.
Sabetha, Kans., and vicinity	7	2 p. m.	[1] 3½		5,000	do	Loss to crops, $2,500; damage to farm buildings, power, and telephone lines, $2,500; path 10 miles long.
Roy, N. Mex.	7	2:30 p. m.	[1] 3		10,000	Heavy hail	Chief loss to crops.
Garfield, Kans., vicinity of	7	3:30 p. m.		0		Tornado	Buildings on one farm damaged.
Clinton County, Iowa	7			1	100,000	Heavy rain	In the open country roads were badly damaged by the downpour, small streams overflowed their banks flooding lowlands and washing out many culverts and several bridges. A truck plunged into a swollen creek about three-fourths of a mile north of Elvira at the approach to a bridge washout and a boy, age 7, was swept away by the floodwaters and drowned. Sewers damaged, basements flooded, streets covered with mud and debris; sidewalks undermined.

[1] Miles instead of yards.

TABLE 4.—*Severe local storms, August 1939*—Continued

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
Pleasant Plains, Ill.	7				$3,000	Electrical	Residence and barn damaged.
Kalamazoo County, Mich.	8	2:45-3:15 p. m.	83-167	2	1,050,000	Tornado	The tornado made its first dip in Pretty Lake, having started just southwest of it, producing a waterspout witnessed by several persons. The cloud roared above the trees as it passed northeastward. It dipped again in the vicinity of Texas Corners damaging buildings, trees, and poles. In southern Kalamazoo damage to industrial buildings was $150,000. In the southern portion of Comstock 25 homes, many garages, buildings, and hundreds of trees were demolished. 6 large pine trees in one farm yard lifted out of the ground, carried to the height of 100 feet and dropped in the yard and adjoining fields. 75 persons injured; property damage, $1,000,000; loss to crops, $50,000; path 20 miles long.
Kent County, Mich.	8	3 p. m.	50-100	0	550,000	do	This storm did not strike a thickly settled area. 10 persons were injured; $500,000 property damage; loss to crops, $50,000; path 25 miles long.
Isabella County, Mich.	8	4:30 p. m.	100-167	0	90,000	do	Property damage, $80,000; crop loss, $10,000.
Lake Pleasant, Mich.	8			0	35,000	do	Funnel-cloud dipped into the lake 3 times, each time water, mud, and weeds were churned into the air to a height of about 50 feet. Damage to cottages and resort buildings; 2 persons injured.
Swan Creek and Freeland, Mich., and vicinity.	8				10,000	Wind	Property damage, $10,000; considerable crop loss not estimated.
Pajarito Plateau to Frijoles Canyon, N. Mex.	9	12:30-1 p. m.	[1] 2		500	Heavy hail	Property damaged.
Vester, Tenn., vicinity of	9	2:30 p. m.		0		Tornado	Residents reported that 7 inches of rain fell in a belt about ½ mile wide; cedar trees broken off 3 feet above the ground; number of barns and houses twisted or unroofed; church demolished, the roof of the structure falling almost vertically to the ground; path narrow and short.
Montgomery County, Iowa	10	3 p. m.			10,500	Heavy hail	Crop loss, $10,000; property damage, $500.
Shelby County, Iowa	10	3 p. m.	100-333	0	14,300	Tornado	Buildings on 5 farms damaged; loss to crops; livestock killed; 1 person injured; path 5 miles long.
Des Moines, Iowa, and vicinity.	10	4:55 p. m.			55,000	Rain	Over 2 inches of rain fell in about 80 minutes; traffic interrupted; 6,000 automobiles stalled; number of stores flooded; damage to streets, sewers, and sidewalks.
Clarke and Warren Counties, Iowa.	10	5-5:40 p. m.		0	132,500	Tornado and rain	Storm originated southwest of Osceola, Clarke County and traveled northeastward to near Milo in Warren County. Man injured when his barn was wrecked. Damage in Clarke County, $30,500. The storm lifted as it passed over the northern part of Clarke County lowering again as it reached the Warren County border. Buildings were demolished on at least 10 farms in Warren County and corn was flattened in an area about 1 mile wide and 15 miles long. On a farm equipped for livestock feeding, 18 of 22 buildings were damaged or wrecked with $102,000 damage. Terrific downpours of rain added to the storm damage by washing out roads, covering low fields, and breaking down corn.
Seneca and Sabetha, Kans., and vicinities.	10	6 p. m.				Wind	Trees broken; small buildings damaged; corn lodged; 2 threshing machine separators blown over and damaged.
Bern, Kans., vicinity of	10	P. m.				do	Number of trees uprooted; barn destroyed.
Spartanburg and Cherokee Counties, S. C.	10	do			1,000	Thunderstorm	Property damaged.
Michigan, western and central portions.	10			3	1,000,000	Tornadic winds	Scores of persons injured; damage to buildings; loss to crops. The Red Cross mobilized forces to dispense food and medical aid.
Minneapolis and St. Paul, Minn., and vicinity.	10				5,000	Thundersquall	Property damaged; trees uprooted; wires down; path about 25 miles long.
Kearney, Nebr., vicinity of	11	7-7:10 p. m.	[1] 1-4		100,000	Heavy hail	Much damage to roofs, windows, and greenhouses; small crop loss.
Collinsville, Ill.	11				2,500	Wind	Property damage.
Florida, southern and extreme northwestern portions.	11-12			1	2,000	Tropical disturbance	Property damage greatest and crop loss worst in the northwestern section. Several small boats sunk at Apalachicola and a warehouse at Port St. Joe damaged to the extent of $2,000. Man drowned at Cedar Key when rowboat capsized.
Buffalo and western New York	12-13			1	35,000	Thunderstorms	Lightning caused $10,000 damage in Buffalo and vicinity. In western New York damage of $25,000 occurred. 1 person drowned near Dunkirk when a boat overturned in a squall.
Mescalero, N. Mex.	13	2-3:40 p. m.	[1] 2½		1,000	Heavy hail and rain	$500 loss to crops; $500 property damage.
Buckeye, Ariz., vicinity of	13			1	85,000	Wind, rain, and hail	1,200 acres of cotton destroyed; buildings wrecked; 2 persons injured.
Lynchburg, Va.	14	1 p. m.			3,900	Thunderstorm	Barn and silo struck by lightning.
Sabetha, Kans.	14	P. m.				Wind	Trees uprooted; telephone and light wires blown down; damage not estimated.
Selma, Ala.,[2] and vicinity	14-15					Torrential rain and wind.	The Red Cross sent boats to Bogue Chitto Creek, 10 miles south of Selma, to rescue marooned cattle. 9 inches of rain recorded in 48 hours. Power service disrupted. U. S. highway 80 closed to traffic between Uniontown and Mobile. Much crop loss and property damage.
Hinton, Okla.	15	6:40 p. m.	[1] 14		15,000	Hail	Loss to cotton, late corn and gardens, $5,000; damage to property, $10,000; path 16 miles long.
Walston Springs, Tex.	16	3 p. m.				do	Loss to crops.
Wichita, Kans.	16	4-6 p. m.	[1] 10		28,000	Wind and rain	Damage to roofs, porches, and small buildings; interior of buildings damaged by rain; path 10 miles long.
Fountain Inn, S. C., and vicinity.	17	P. m.	20-50	0	5,000	Tornado	Farm residence and outbuildings demolished, a residence damaged; livestock killed; path 5 miles long. Greatest destruction over a path 20 yards wide.
Oconee, Anderson and Greenville Counties, S. C.	17-18				48,500	Heavy rain	Number of bridges over small streams damaged or washed with local damage to highways, $30,000; loss to crops, $18,500.
McCullers, N. C.	18	Noon	200	1		Tornado and rain	Small tenant house and number of outbuildings destroyed; chickens killed; trees uprooted; much loss to crops; 2 persons injured; path 440 yards long.
Malaga, N. Mex.	18	3-4 p. m.	[1] 1		25,000	Heavy hail	Loss to crops.
Callahan, Fla.	18			0		Tornado	Little damage reported.
Baltimore, Md., and vicinity	18-19	5:29-6:15 a. m.				Tornadic wind and rain.	6 houses unroofed; 2 boats disabled in the bay; other property damaged.
Fleeton, Va., to Leonardtown, Md.	19	12:15 a. m.		1	100,000	Tornado	8 persons injured; property damaged.
Des Moines, N. Mex.	19	Midnight			1,000	Heavy hail	Loss to crops.
Bassetts, Va., vicinity of	19				12,000	Flood	Damage to roads and bridges.
Cayuga, N. Y.	20					Wind and hail	Barn wrecked; many trees blown over; much loss to crops.
Cold Springs, Okla.	22	8-9 p. m.	[1] 1		600	Wind	Property damaged; path 3 miles long.
Eureka, Kans., vicinity of	24	3:10 a. m.	880		1,000	Heavy hail	Crops damaged; leaves stripped from corn; telephone and power service interrupted; path 6 miles long.

[1] Miles instead of yards.
[2] From press reports.

TABLE 4.—*Severe local storms, August 1939*—Continued

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
Cowley County, Kans	24	4:15 p. m	[1] 1		$10,000	Tornadic winds	Chief damage to buildings; path 10 miles long.
Weir to Chetopa and vicinities	24	7 p. m	[1] 1-5		85,000	Wind and hail	Corn lodged; windows and trees broken; barns and silos destroyed; houses twisted on foundations; path 30 miles long.
Ponca City and Blackwell, Okla.	24	7 p. m	[1] 7	1	25,000	Wind	Trees and power lines blown down; considerable damage to buildings; path 20 miles long.
Ottawa and Craig Counties, Okla.	24	7-9 p. m		2	500,000	Wind, rain, and hail	More than 100 buildings completely or partially destroyed; many farm animals and fowls killed by hail or drowned. One area, east of Vinita, Craig County, about 5 miles wide and extending northward 20 miles to the Kansas line, completely denuded by hail. Many families made homeless; the American Red Cross established headquarters in the high school to provide food and sleeping accommodations.
Wagoner and Muskogee, Okla.	24	9:30 p. m	[1] 10		20,000	Wind	This storm doubtless in connection with the one that occurred over the extreme northeastern portion of the State in Ottawa and Craig Counties a few hours earlier. Loss to crops, $10,000; property damage, $10,000.
Lincoln County, Mont	25	3-4 p. m	[1] 2		1,200	Wind and hail	Loss to crops, $500; property damage, $700.
Hamburg, Ill	25				2,000	Hail	Loss to crops.
Mount Olive, Ill	25				100,000	Heavy hail	Property damage, $85,000; loss to crops, $15,000.
Issaquena County, Miss	30	P. m	[1] 2½		60,000	Hail	Path 15 miles long; no details.
Sunflower County, Miss	30	P. m	[1] 2		40,000	do	Path 5 miles long; no details.
Washington County, Miss	30	P. m			10,000	Thundersquall and hail.	No details.
Montgomery County, Tenn	30				50,000	Heavy hail	Much corn damaged; loss in tobacco, $50,000.
St. Joseph, La., vicinity of	31	12:30 a. m	[1] 2		3,000	Straight-line wind	Loss to crops, $2,500; property damage, $500.
Dumas, Ark	31				500	Wind	Property damaged.

[1] Miles instead of yards.

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