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, October 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	66.9	+2.2	Centerville	94	7	Florence	26	29	0.38	−2.64	Addison	1.61	7 stations	0.00
Arizona	60.2	−1.4	Gila Bend	98	1	Springerville	16	----	.42	−.41	Cochise Stronghold	2.67	16 stations	.00
Arkansas	65.4	+2.7	Conway	98	23	2 stations	29	31	1.71	−1.42	Eureka Springs	8.48	Plantersville	.00
California	60.1	−.3	2 stations	105	[1] 12	Tamarack	−1	25	1.07	−.16	Scales	5.46	13 stations	.00
Colorado	47.9	+1.1	Holyoke	93	6	Fraser	−4	30	.59	−.56	Sunbeam (near)	2.31	5 stations	.00
Florida	74.6	+1.6	2 stations	95	[1] 1	Mason	33	[1] 29	2.99	−1.26	Homestead	16.79	do	.00
Georgia	66.9	+2.0	do	95	[1] 7	Blairsville	22	16	.33	−2.40	Carlton Bridge	1.92	3 stations	.00
Idaho	47.4	+.3	Emmett	85	16	2 stations	6	27	1.40	−.08	Deception Creek	3.91	Challis	.24
Illinois	58.0	+2.4	3 stations	96	[1] 7	Quincy	22	31	2.16	−.42	Sycamore	4.89	Carlyle	.47
Indiana	57.6	+2.8	Madison	100	8	2 stations	20	15	2.73	−.04	Winamac	5.27	Salem	.77
Iowa	53.4	+1.8	5 stations	95	7	do	14	28	1.48	−.85	Dubuque	4.19	Sioux City	.26
Kansas	61.1	+3.9	Wellington	101	6	Oberlin	18	28	.60	−1.30	Columbus	2.89	6 stations	.00
Kentucky	60.9	+2.7	Frankfort	95	8	Mammoth Cave	23	29	2.11	−.59	Mammoth Cave	4.37	Middlesboro	.80
Louisiana	69.7	+1.3	Calhoun	98	22	Tallulah	28	31	2.15	−1.15	Melville	8.82	Lake Arthur (near)	.16
Maryland-Delaware	57.2	+1.1	Great Falls, Md	94	9	Oakland, Md	15	15	4.80	+1.78	Oxford, Md	7.02	Mount Savage Summit, Md.	1.57
Michigan	48.6	+.1	2 stations	93	[1] 8	Garnet	11	29	2.57	−.28	Eau Claire (near)	4.71	Channing	.57
Minnesota	44.8	−1.5	Beardsley	88	6	Park Rapids	7	28	1.62	−.22	Red Lake Falls	3.42	Wheaton	.57
Mississippi	67.1	+1.7	Tupelo	95	7	2 stations	25	29	1.17	−1.43	Brookhaven	4.90	2 stations	T
Missouri	61.1	+3.6	Edgerton	100	7	Edgerton	19	31	1.89	−.97	Williamsville	6.98	Oregon	.13
Montana	45.2	+.3	2 stations	82	[1] 1	Simpson (near)	−13	26	.87	−.20	Hebgen Dam	2.35	Malta	.01
Nebraska	53.6	+2.0	Falls City	94	7	Ewing	15	28	.68	−.79	Ashland	2.61	4 stations	.00
Nevada	51.1	+.6	Overton	91	1	Mala Vista Ranch	9	26	1.08	+.51	Marlette Lake	2.88	3 stations	.00
New England	49.5	.0	2 stations	91	10	Chelsea, Vt	10	25	4.68	+1.13	Houlton, Maine	6.64	New Durham, N. H.	1.70
New Jersey	54.9	+.2	Elizabeth	93	10	2 stations	19	[1] 16	4.24	+.83	Toms River	5.79	Long Valley	2.08
New Mexico	52.9	−.8	Carlsbad	95	6	Eagle Nest	7	31	.91	−.22	Cliff	3.31	3 stations	.00
New York	50.0	.0	Scarsdale	91	10	Delhi	11	18	3.52	+.22	Bridgehampton	5.87	Brockport	1.30
North Carolina	62.6	+2.7	6 stations	95	[1] 9	Banner Elk	16	15	2.19	−1.16	New Holland	7.22	2 stations	.26
North Dakota	41.3	−2.5	Oakes	84	1	Parshall	−6	28	.75	−.26	Casselton	2.36	Berthold Agency	T
Ohio	56.1	+2.6	Germantown	98	9	2 stations	19	[1] 15	3.00	+.46	Bellpoint	5.12	Peebles	1.45
Oklahoma	66.0	+4.1	Alva	101	6	Boise City	19	30	1.70	−1.21	Watts	6.40	Boise City	T
Oregon	49.8	+.1	Spray	91	12	2 stations	8	[1] 7	2.02	+.12	Valsetz	9.03	Big Eddy	.08
Pennsylvania	53.6	+1.0	Phoenixville	92	10	Mount Pocono	15	18	3.88	+.64	Graterford	6.69	Kylertown	2.38
South Carolina	66.6	+2.8	2 stations	96	[1] 8	2 stations	27	16	.81	−2.23	Sumter	2.84	Columbia	.04
South Dakota	48.6	+.1	3 stations	90	6	Gelhaus Farm	7	28	1.13	−.03	2 stations	2.08	La Delle	.42
Tennessee	62.9	+3.2	do	95	[1] 8	Coldwater	21	29	1.25	−1.59	Celina	3.88	Chattanooga	.25
Texas	69.5	+1.8	Bonham	103	23	2 stations	22	30	1.42	−1.34	Junction	5.73	Yoakum	.05
Utah	49.5	+.5	Fruita	85	9	do	12	[1] 26	1.25	+.15	Silver Lake	3.04	Hanksville	T
Virginia	58.8	+1.5	Diamond Springs	95	10	do	16	[1] 16	3.17	+.16	Hopewell	7.33	Moores Creek Dam	.37
Washington	50.1	+.6	Castlerock	88	16	Soda Springs Camp	14	25	2.59	−.50	Clearwater	12.44	Naches Heights	.03
West Virginia	55.9	+1.3	5 stations	92	[1] 8	Beckley	14	15	3.24	+.38	Martinsburg	5.58	Kanawha Falls	.85
Wisconsin	48.2	.0	Brodhead	88	7	3 stations	10	17	1.86	−.59	West Bend	3.75	Ladysmith	1.01
Wyoming	44.8	+1.2	Yoder	88	[1] 1	Jenkins Ranch	4	27	.80	−.28	Snake River	2.22	Basin	.00
Alaska (September)	43.9	+.1	3 stations	70	[1] 1	Wiseman	−2	18	4.49	+.97	Yakutat	20.58	Fort Yukon	.47
Hawaii	73.6	−.1	Mana	92	6	Kanalohuluhulu	45	3	8.61	+3.28	Wahiawa Water Intake Co.	30.00	Wahukona	.00
Puerto Rico	78.6	+.4	Ponce	97	9	Garzas	57	30	8.40	+.66	Jayuya	15.16	Playa Grande (Vieques).	2.25

[1] Other dates also.

TABLE 2.—*Climatological data for Weather Bureau Stations, October, 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							51.4	+0.3										78	3.93	+0.6										5.9		
Eastport	76	67	85	29.88	29.96	−0.04	47.7	+0.2	68	5	54	30	18	42	22	45	43	85	3.96	+0.4	16	11.3	nw.	41	s.	31	7	5	19	6.9	T	0.0
Greenville, Maine	1,069	4	41																													
Portland, Maine	103	82	117	29.87	29.99	−.05	49.8	−.1	72	10	58	29	24	42	26	45	40	72	3.34	−.2	10	8.5	n.	27	nw.	24	11	12	8	4.8	T	.0
Concord	288	54	72	29.69	30.01	−.04	49.6	−.1	86	10	60	22	30	39	37				2.77	−.1	12	6.0	nw.	25	w.	28	10	7	14	6.1	T	.0
Burlington	403	11	48	29.54	29.98	−.06	47.6	−1.6	77	10	56	23	25	39	35	43	39	75	2.19	−.8	11	10.2	s.	34	s.	19	5	7	19	7.0	T	.0
Northfield	876	12	60	29.05	30.01	−.03	45.4	−.1	82	10	56	18	25	35	42	41	38	80	2.94	+.1	11	8.0	sw.	27	s.	21	4	8	19	7.2	T	.0
Boston [1]	29	33	62	29.96	29.99	−.06	54.2	+.6	87	10	63	31	24	45	30	47	42	69	4.77	+1.6	12	11.5	nw.	37	ne.	3	9	8	14	5.9	.0	.0
Nantucket	12	14	90	29.99	30.00	−.05	55.2	+1.0	76	11	62	35	18	49	23	52	49	83	4.56	+1.2	12	15.5	sw.	39	ne.	2	9	9	13	5.9	.0	.0
Block Island	26	11	46	29.98	30.01	−.04	54.8	−.1	73	9	61	34	18	48	23	51	47	77	4.27	+.7	11	17.3	sw.	45	nw.	28	13	7	11	4.8	.0	.0
Providence	159	215	251	29.95	30.02	−.03	53.7	+1.5	86	10	63	30	18	45	29	48	45	82	4.31	+1.2	11	11.6	nw.	38	nw.	23	11	8	12	5.3	.0	.0
Hartford	159	66	100	29.97	30.01	−.05	53.0	+1.8	89	10	63	29	18	43	33	46	42	80	4.64	+1.1	11	8.5	s.	28	w.	23	9	9	13	5.8	.0	.0
New Haven	106	74	153	30.01	30.03	−.03	54.1	+.3	87	10	63	31	18	46	31	49	45	77	5.46	+1.8	13	9.0	n.	25	n.	30	11	9	11	5.5	.0	.0
Middle Atlantic States							57.3	+0.8										75	3.87	+0.8										5.4		
Albany [1]	292	26	40	29.68	30.01	−.05	49.0	−3.1	89	10	59	22	25	39	38	44	40	76	3.22	+.5	13	9.4	s.	35	nw.	28	8	10	13	6.2	T	.0
Binghamton	871	57	79	29.11	30.04	−.02	51.2	+1.2	87	10	61	26	25	41	36	45	41	75	3.02	.0	18	6.2	nw.	28	nw.	28	4	11	16	6.9	T	.0
New York	314	415	454	29.68	30.02	−.04	56.4	+.1	86	10	64	33	18	48	28	50	45	69	3.96	+.4	11	14.4	nw.	53	nw.	28	9	10	12	5.7	.0	.0
Harrisburg [1]	351	30	49	29.68	30.06	−.02	55.7	+.9	89	10	66	30	16	46	37	49	44	74	3.88	+1.0	10	7.1	w.	31	nw.	28	12	4	15	5.9	T	.0
Philadelphia	114	174	367	29.92	30.05	−.02	57.6	−.2	90	10	66	26	18	50	27	51	46	71	4.30	+1.5	8	12.0	sw.	34	nw.	28	10	9	12	5.5	.0	.0
Reading	323	283	306	29.71	30.06		56.0	+1.3	88	10	65	33	30	47	32	49	43	68	4.03	+.9	9	10.0	nw.	42	nw.	28	12	8	11	5.2	.0	.0
Scranton	805	72	104	29.17	30.04	−.03	51.7	−.2	86	10	61	28	18	42	33	46	42	75	3.11	+.1	13	6.5	sw.	34	nw.	28	9	8	14	6.2	T	.0
Atlantic City	52	37	172	29.98	30.03	−.04	58.6	+1.7	87	9	66	33	18	51	28	54	50	78	5.11	+1.9	10	15.0	w.	53	ne.	2	11	9	11	5.3	.0	.0
Sandy Hook	22	10	57	30.00	30.02		56.8	−.1	84	10	64	37	18	50	24	52	47	76	4.50	+.7	10	14.2	sw.	41	nw.	28	11	9	11	5.1	.0	.0
Trenton	190	89	107	29.84	30.04		55.6	.0	89	10	65	34	18	46	31	50	45	74	2.85	+.1	9	8.1	n.	31	nw.	28	8	11	12	5.7	.0	.0
Baltimore [2]	123	100	215	30.04	30.06	−.02	59.6	+1.4	93	10	68	37	29	51	29	52	48	77	4.01	+1.1	7	9.4	sw.	38	nw.	28	12	9	10	5.2	.0	.0
Washington	112	62	85	29.94	30.06	−.02	58.4	+1.0	92	10	68	35	16	49	34	52	47	75	4.06	+1.2	9	5.6	nw.	27	nw.	28	10	10	11	5.2	.0	.0
Cape Henry	18	8	54	30.03	30.05		65.0	+2.9	93	10	72	45	17	58	29	59	56	80	6.68	+3.7	8	13.1	sw.	40	n.	28	15	6	10	4.7	.0	.0
Lynchburg	686	144	184	29.37	30.10	+.01	60.2	+1.7	92	9	72	31	16	48	39	52	48	74	2.73	+.4	8	6.1	w.	31	nw.	28	16	6	9	4.5	.0	.0
Norfolk	91	80	125	29.97	30.07	.00	64.3	+1.8	92	10	72	44	29	56	29	57	54	77	5.04	+2.0	7	9.4	sw.	26	n.	28	12	8	11	5.4	.0	.0
Richmond [2]	144	11	52	29.89	30.07	−.01	60.6	+1.0	92	9	71	35	16	50	36	53	51	85	4.33	+1.4	7	7.3	sw.	24	nw.	28	15	8	8	4.3	.0	.0
Wytheville	2,304	49	55	27.70	30.11	+.02	56.6	+3.0	84	9	69	25	16	44	43	48	43	71	1.00	−1.8	8	6.1	w.	24	nw.	28	15	9	7	4.2	.0	.0
South Atlantic States							67.1	+2.8										78	1.91	−1.3										4.5		
Asheville	2,253	89	104	27.78	30.13	+.04	59.6	+4.3	85	10	73	29	16	46	41	50	46	73	.82	−1.9	4	6.6	nw.	26	nw.	28	14	12	5	4.3	.0	.0
Charlotte [2]	779	63	86	29.26	30.08	.00	65.5	+3.8	92	9	77	35	16	54	34	55	51	74	1.09	−1.9	4	6.7	ne.	21	sw.	27	16	9	6	4.3	.0	.0
Greensboro [1]	886	6	56	29.15	30.10		61.2		91	9	74	29	16	48	43	53	50	80	2.12		5	7.5	sw.	25	nw.	28	14	8	9	4.3	.0	.0
Hatteras	11	5	50	30.04	30.05	−.01	68.8	+2.9	84	1	75	53	29	63	21	63	61	82	5.72	+.8	10	13.0	sw.	40	nw.	31	12	9	10	5.1	.0	.0
Raleigh [2]	376	103	146	29.70	30.08	+.01	63.6	+1.6	92	9	74	37	16	53	32	55	53	81	3.02	+.2	7	8.1	sw.	27	nw.	28	11	12	8	5.0	.0	.0
Wilmington	72	73	107	29.99	30.07	+.01	66.8	+1.5	87	9	76	42	17	57	34	60	58	82	3.00	−.3	4	8.6	n.	22	sw.	28	11	9	11	4.9	.0	.0
Charleston [2]	48	11	92	30.02	30.07	+.01	69.4	+1.6	87	22	78	48	17	61	25	60	58	87	.89	−2.4	2	9.8	n.	26	n.	14	14	8	9	4.5	.0	.0
Columbia, S. C.	347	70	91	29.71	30.09	+.02	68.4	+4.1	92	9	79	41	16	57	38	58	52	65	.04	−2.5	1	7.5	ne.	24	sw.	22	16	8	7	4.0	.0	.0
Greenville, S. C.	1,040	70	78	28.99	30.08		64.9	+4.7	90	9	76	37	29	53	36	55	49	66	1.14	−2.0	4	6.1	sw.	24	sw.	27	14	13	4	3.8	.0	.0
Augusta [2]	182	62	77	29.62	30.07	.00	68.3	+3.0	91	8	80	39	17	57	40	58	53	70	.14	−2.3	3	4.9	nw.	19	ne.	29	15	9	7	4.3	.0	.0
Savannah [2]	65	73	152	30.01	30.06	+.01	71.0	+3.1	91	12	81	45	17	61	33	61	60	87	1.10	−1.9	4	8.7	ne.	26	w.	31	18	6	7	3.8	.0	.0
Jacksonville	43	86	110	30.00	30.05	+.03	71.8	+.7	88	27	80	48	31	63	28	66	64	84	4.06	−.4	5	7.4	ne.	26	ne.	15	11	7	13	5.6	.0	.0
Florida Peninsula							78.8	+2.0										82	9.54	+3.7										5.3		
Key West [2]	21	10	64	29.94	29.95	+.01	80.2	+1.1	91	1	86	68	31	75	16	75	74	82	11.82	+5.8	19	9.2	e.	32	nw.	31	9	16	6	5.5	.0	.0
Miami	25	124	168	29.94	29.98	+.01	79.6	+2.6	90	2	85	58	31	74	20	73	71	78	14.42	+6.0	14	8.8	ne.	31	ne.	4	9	14	8	5.4	.0	.0
Tampa [2]	35	88	197	30.00	30.01	+.03	76.6	+2.3	90	3	84	52	31	69	21	70	68	85	2.38	−.7	6	10.2	ne.	32	n.	31	13	7	11	4.9	.0	.0
East Gulf States							68.4	+1.6										76	0.34	−2.6										3.7		
Atlanta [1]	976	5	72	29.06	30.08	+.01	64.7	+1.7	89	8	77	36	31	52	34	56	51	74	.12		3	7.8	nw.	32	nw.	31	14	10	7	4.1	.0	.0
Macon [2]	370	79	87	29.58	30.07	+.01	66.4	+1.9	91	8	78	37	17	54	41	58	53	74	T	−2.3	0	5.7	n.	24	nw.	31	8	15	8	4.9	.0	.0
Thomasville	273	49	58	29.78	30.08	+.04	70.0	+1.8	89	8	81	43	31	59	31	61	58		.02	−2.9	1						21	5	5	3.4	.0	.0
Apalachicola	35	11	51	30.00	30.04		71.8	+1.2	88	22	80	47	31	64	23	65	63	80	.22	−3.0	3	8.4	ne.	22	nw.	31	16	7	8	4.3	.0	.0
Pensacola	56	149	185	30.00	30.06	+.03	70.4	+.5	87	11	78	43	31	63	26	63	59	72	.07	−4.1	2	10.9	ne.	26	n.	30	19	8	4	3.1	.0	.0
Anniston	741	9					64.5	+2.1	85	10	77	31	29	52	37				.27	−2.4	4		se.				22	6	3		.0	.0
Birmingham [2]	630	11	48	29.44	30.10	+.03	66.6	+1.8	88	9	78	36	29	56	33	55	53	83	.17	−2.2	3	6.1	s.	16	se.	24	17	8	6	3.4	.0	.0
Mobile	57	86	161	30.01	30.07	+.03	70.1	+.8	88	23	80	41	31	60	28	62	59	77	.13	−3.5	2	9.2	n.	33	nw.	28	21	7	3	3.1	.0	.0
Montgomery [2]	218	92	105	29.83	30.08	+.02	68.8	+2.2	90	8	80	40	29	58	31	57	54	77	.24	−2.2	3	6.3	n.	18	n.	28	19	7	5	3.3	.0	.0
Meridian [2]	375	67	92	29.76	30.09	+.03	67.0	+2.7	90	7	80	35	29	54	37	56	53	83	.26	−2.1	2	5.2	n.	17	n.	28	16	7	8	3.6	.0	.0
Vicksburg	247	82	102	29.82	30.08	+.02	68.2	+1.5	91	7	79	37	31	58	29	59	54	70	2.15	−.6	4	8.2	n.	27	nw.	27	17	8	6	3.8	.0	.0
New Orleans [2]	53	76	84	30.02	30.06	+.03	72.5	+1.5	89	26	80	49	31	65	21	65	61	71	.17	−3.1	2	7.1	ne.	18	ne.	1	18	8	5	3.6	.0	.0
West Gulf States							71.4	+2.6										68	1.36	−1.7										3.8		
Shreveport [2]	249	92	227	29.88	30.07	+.02	69.2	+2.6	94	22	81	39	31	57	36	58	53	70	.70	−2.0	6	10.9	s.	27	nw.	30	17	8	6	3.7	.0	.0
Bentonville	1,303	12	51																													
Fort Smith	463	57	82	29.59	30.07	+.02	67.0	+4.2	94	6	80	33	31	54	36	56	48	59	4.09	+1.1	4	7.3	e.	34	nw.	9	19	8	4	2.8	.0	.0
Little Rock [2]	357	94	102	29.79	30.08	+.02	66.0	+2.4	92	23	77	34	31	55	33	56	51	73	.66	−2.0	4	7.1	s.	21	nw.	30	20	5	6	2.9	.0	.0
Austin [2]	605	68	90	29.39	30.04		71.5	+3.2	91	6	83	40	31	60	36	61	54	63	1.62	−1.6	6	7.2	s.	22	n.	30	14	10	7	4.5	.0	.0
Brownsville [2]	57	88	96	29.98	30.00		75.6	+.7	89	6	83	44	31	68	32	68	65	81	50	−2.8	4	10.5	se.	32	nw.	30	13	10	8	4.5	.0	.0
Corpus Christi [2]	20	11	78	29.97	30.02	+.02	75.3	+2.1	90	5	81	51	31	69	24	66	63	79	1.14	−1.3	3	11.1	se.	30	ne.	28	15	10	6	4.0	.0	.0
Dallas [2]	512	220	227	29.53	30.04		70.6		93	6	81	42	31	60	31	58	51	59	2.13	−.6	3	11.9	s.	33	n.	29	16	7	8	3.7	.0	.0
Fort Worth [2]	679	92	110	29.31	30.05	+.02	71.4	+4.7	96	6	83	40	31	60	36	58	50	55	.55	−2.3	2	10.1	s.	31	n.	30	21	5	5	2.5	.0	.0
Galveston [2]	54	106	114	30.04	30.05	+.02	73.2	+.5	87	10	78	51	31	68	17	65	62	75	2.22	−2.1	6	9.9	s.	28	n.	30	17	11	3	3.5	.0	.0
Houston [2]	138	157	190	29.99	30.06		72.4	+2.1	90	6	82	44	31	63	28	62	58	76	1.64	−2.1	7	10.2	se.	35	se.	20	10	14	7	4.6	.0	.0
Palestine	510	64	72	29.54	30.08	+.05	70.0	+2.8	93	22	81	39	31	59	33	58	50	57	1.37	−2.0	5	7.4	s.	18	nw.	30	16	11	4	3.4	.0	.0
Port Arthur	34	59	134	30.02	30.06		72.0		88	5	80	42	31	64	25	64	59	73	.98	−2.4	5	12.0	s.	33	n.	30	12	14	5	4.5	.0	.0
San Antonio [2]	693	111	301	29.43	30.04	+.03	73.4	+2.9	93	8	83	44	31	64	32	63	57	63	.07	−2.2	3	11.7	se.	32	n.	30	12	10	9	5.2	.0	.0

See footnotes at end of table.

TABLE 2.—*Climatological data for Weather Bureau Stations, October 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							60.3	+2.6										69	2.25	−0.5										4.1		
Chattanooga [2]	762	71	214	29.37	30.10	+0.01	66.4	+4.5	92	7	78	38	31	54	37	54	49	70	.25	−2.8	2	7.3	w.	25	sw.	27	17	7	7	3.6	0.0	0.0
Knoxville [2]	995	66	84	29.06	30.10	+.01	63.6	+3.7	90	8	76	36	29	51	38	52	47	69	.38	−2.2	4	5.2	sw.	20	nw.	22	17	9	5	3.5	.0	.0
Memphis [2]	399	78	86	29.77	30.07	.00	66.6	+3.3	89	23	76	35	31	57	27	56	52	77	.94	−1.7	4	8.2	sw.	25	nw.	27	20	6	5	3.1	.0	.0
Nashville [2]	546	168	188	29.44	30.08	.00	64.6	+3.6	91	8	76	33	29	54	38	54	48	66	1.13	−1.4	6	8.5	sw.	28	nw.	27	19	6	6	3.7	.0	.0
Lexington	989	6	...	...	...	...	59.9	+2.5	91	9	74	29	29	46	40	...	...	...	2.58	.0	5	...	s.	...	...	...	18	8	5	...	.0	.0
Louisville [2]	525	106	120	29.48	30.07	−.01	61.6	+2.3	89	8	72	35	29	51	34	50	45	67	1.38	−1.3	4	9.1	sw.	31	sw.	25	20	5	6	4.1	.0	.0
Evansville	431	76	116	29.69	30.07	−.01	62.6	+3.2	91	7	74	35	31	52	36	52	45	60	1.91	−.9	6	9.2	sw.	28	n.	27	18	5	8	3.6	T	.0
Indianapolis [2]	823	98	129	29.18	30.05	−.02	58.7	+3.0	89	8	69	32	29	48	34	47	42	70	2.90	+.2	7	8.3	sw.	25	nw.	22	15	7	9	4.1	.0	.0
Terre Haute	575	63	149	29.42	30.04	...	60.2	...	93	8	72	32	15	48	36	50	43	62	1.89	−.8	10	10.0	s.	29	sw.	27	15	8	8	4.3	.0	.0
Cincinnati [2]	627	11	51	29.53	30.07	−.01	59.0	+3.3	90	8	70	30	29	48	39	49	44	72	2.18	−.3	6	7.3	sw.	22	sw.	27	19	6	6	3.6	.0	.0
Columbus	822	90	110	29.17	30.06	−.02	57.2	+2.0	89	8	68	31	15	47	35	47	41	69	3.17	+.7	4	9.7	s.	31	w.	22	16	5	10	4.6	T	0
Dayton	900	186	213	29.10	30.06	...	57.3	+2.3	87	8	68	28	15	47	36	49	43	61	2.25	−.3	6	10.8	sw.	36	nw.	22	16	8	7	4.0	.0	.0
Elkins [2]	1,947	65	83	27.98	30.11	+.01	53.4	+1.1	84	8	67	21	15	40	44	45	41	80	4.32	+1.4	9	5.5	w.	27	w.	28	8	8	15	6.2	T	T
Parkersburg	637	77	84	29.39	30.07	−.01	58.2	+2.1	89	9	70	28	15	46	40	49	44	68	3.13	+.6	8	6.2	se.	24	w.	28	16	8	7	3.8	.0	.0
Pittsburgh [1]	1,273	39	54	28.71	30.06	−.02	55.5	−.2	87	9	66	27	29	45	33	47	41	67	3.14	+.6	12	11.0	s.	34	w.	28	11	8	12	5.4	T	.0
Lower Lake Region							52.9	+0.8										75	2.51	−0.4										5.9		
Buffalo [2]	768	243	280	29.24	30.01	−.04	52.0	+.1	74	9	59	31	28	45	27	45	42	77	1.83	−1.5	12	16.0	sw.	49	nw.	28	10	8	13	5.9	T	.0
Canton	448	10	61	29.50	29.99	...	47.0	−.2	77	10	58	20	18	36	37	42	38	77	2.42	−.6	13	8.6	w.	30	w.	14	6	7	18	6.9	T	.0
Ithaca	836	77	100	29.12	30.04	...	51.2	+.1	87	10	61	27	25	42	34	45	42	77	2.49	−.5	16	9.3	nw.	29	nw.	28	5	14	12	6.5	T	.0
Oswego	335	71	85	29.63	30.00	−.05	51.4	+.2	82	10	60	27	25	43	34	46	41	71	2.54	−.7	14	10.2	se.	30	nw.	28	6	6	19	7.3	T	.0
Rochester [2]	523	86	102	29.41	30.02	−.03	52.0	+.5	81	5	60	30	24	44	33	45	42	82	1.53	−1.1	14	8.6	sw.	30	sw.	19	6	8	17	6.6	T	.0
Syracuse [2]	596	65	79	29.57	30.01	−.05	52.0	+.4	86	10	62	28	24	42	36	45	41	78	2.79	.0	15	7.2	s.	23	nw.	28	7	9	15	6.5	T	.0
Erie	714	57	81	29.25	30.02	−.03	54.6	+1.2	82	8	62	34	18	47	26	49	45	74	4.56	+.9	15	8.8	s.	26	w.	28	9	7	15	6.0	.1	T
Cleveland [2]	762	267	318	29.16	30.04	−.02	56.2	+2.6	88	8	64	33	29	49	27	48	43	72	1.84	−.9	13	16.8	s.	43	nw.	28	11	8	12	5.2	T	.0
Sandusky	629	5	67	29.36	30.05	−.01	55.8	+1.5	82	8	66	29	29	46	33	...	...	...	2.21	−.2	10	9.5	sw.	27	w.	28	13	5	13	5.2	.1	.0
Toledo [2]	628	79	87	29.35	30.04	−.01	54.8	+1.4	91	8	64	31	15	46	30	46	42	73	2.54	+.2	9	9.6	w.	31	nw.	21	16	5	10	4.5	T	.0
Fort Wayne	857	69	84	29.14	30.03	...	54.5	+1.0	89	8	65	30	29	44	33	46	42	73	3.71	+1.1	11	9.4	sw.	29	w.	19	12	9	10	4.9	T	.0
Detroit [1]	626	5	78	29.34	30.02	−.03	52.9	+.4	89	8	63	29	15	43	29	46	42	73	1.66	−1.0	14	10.5	nw.	34	w.	19	10	10	11	5.5	T	.0
Upper Lake Region							48.4	0.0										76	2.51	−0.2										6.3		
Alpena	609	13	89	29.30	29.96	−.07	47.2	+.1	80	4	56	25	24	39	30	42	39	79	1.10	−1.6	12	11.3	nw.	32	nw.	21	7	10	14	6.4	T	.0
Escanaba	612	51	72	29.29	29.96	−.05	45.4	−.6	70	5	52	27	28	39	25	42	38	78	2.16	−.5	14	11.4	nw.	31	s.	15	6	12	13	6.6	.5	.0
Grand Rapids [2]	707	70	244	29.24	29.99	−.05	52.8	+1.6	84	9	62	32	17	43	32	45	42	80	2.64	−.2	17	11.9	sw.	42	sw.	21	7	9	15	6.2	T	T
Lansing	878	5	90	29.06	30.01	...	50.9	+.6	84	8	61	26	15	41	35	45	42	80	3.60	+1.1	14	9.0	s.	22	w.	12	10	11	10	5.5	T	T
Ludington	637	60	66	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marquette	734	44	69	29.12	29.93	−.08	44.4	−2.3	77	7	51	25	28	38	31	40	36	78	2.55	−.2	16	8.6	nw.	36	sw.	15	2	12	17	7.2	9.1	.5
Sault Ste. Marie [1]	724	5	33	29.14	29.94	−.07	42.0	−2.6	68	5	50	21	24	34	34	39	36	84	3.90	+.2	16	9.2	se.	30	nw.	16	2	6	23	7.9	4.0	.1
Chicago	673	7	131	29.28	30.01	−.02	56.0	+2.0	84	7	65	32	31	47	32	48	42	66	1.79	−.7	10	11.3	sw.	31	sw.	21	13	8	10	4.8	.0	.0
Green Bay	617	109	141	29.28	29.95	−.07	49.0	+.5	77	7	57	27	17	41	29	42	38	71	2.83	+.3	8	10.8	s.	31	sw.	5	6	11	14	6.5	T	.0
Milwaukee [2]	681	97	221	29.23	29.99	−.04	53.2	+2.1	83	7	62	31	28	44	29	45	40	73	2.43	+.1	13	13.3	w.	34	sw.	5	10	8	13	5.7	T	.0
Duluth	1,133	5	47	28.68	29.91	−.09	43.0	−1.1	71	2	51	20	17	35	28	37	33	76	2.09	−.2	11	13.0	nw.	40	nw.	12	7	13	11	6.2	1.2	T
North Dakota							41.4	−2.3										70	0.99	−0.3										6.8		
Moorhead, Minn	940	50	58	28.96	29.94	−.06	42.6	−1.9	79	1	52	13	28	34	40	37	31	71	1.43	−.3	8	9.3	nw.	26	nw.	11	4	7	20	7.4	1.4	.0
Bismarck [2]	1,677	8	57	28.19	29.98	−.01	43.0	−1.9	76	1	54	8	28	32	45	36	29	66	.81	−.1	6	8.8	nw.	32	nw.	11	2	19	10	6.8	.7	.0
Devils Lake	1,478	11	44	28.35	29.95	−.04	39.2	−3.2	71	19	48	11	28	30	43	35	30	75	.68	−.6	8	10.0	nw.	33	nw.	15	4	7	20	7.6	1.3	T
Lemmon, S. Dak	2,602	4	38	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Grand Forks	832	11	71	...	...	...	40.3	−3.3	70	19	49	19	28	32	44	37	32	...	1.74	+.3	9	10.0	nw.	...	...	...	...	...	...	...	2.5	T
Williston	1,878	42	50	27.97	29.98	.00	42.0	−1.4	73	1	53	10	16	31	41	36	30	66	.31	−.6	5	8.9	nw.	32	nw.	10	9	14	8	5.3	.1	.0
Upper Mississippi Valley							55.5	+2.2										66	2.03	−0.4										4.5		
Minneapolis, St. Paul, Minn. [1]	838	32	61	29.03	29.94	−.07	47.5	−1.4	77	1	57	23	28	38	36	41	35	67	1.56	−.5	13	12.3	nw.	34	se.	4	8	9	14	6.4	.6	.0
Springfield, Minn	1,025	4	42	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
La Crosse [2]	714	11	48	29.23	29.96	−.06	50.7	+.4	79	7	60	25	17	41	32	43	38	71	1.71	−1.2	10	6.0	s.	19	s.	15	10	10	11	5.5	.5	.0
Madison	974	70	78	29.04	29.98	−.05	52.0	+1.7	84	7	62	29	28	42	34	44	39	71	1.93	−.5	11	9.1	s.	24	se.	15	11	6	14	5.9	T	.0
Charles City	1,015	10	51	28.88	29.98	−.04	49.9	+1.3	80	7	61	24	28	38	42	42	36	67	1.55	−.8	10	7.3	se.	23	sw.	18	14	8	9	4.6	T	.0
Davenport	606	66	161	29.34	30.00	−.04	56.0	+2.3	89	7	67	28	14	45	38	47	40	62	1.91	−.5	8	10.7	sw.	27	s.	15	13	8	10	4.7	T	.0
Des Moines [2]	860	5	99	28.93	29.96	−.07	54.8	+1.4	92	7	68	26	14	42	44	46	38	60	1.16	−1.3	7	10.6	nw.	30	sw.	18	17	8	6	3.5	.0	.0
Dubuque	699	60	79	29.23	29.98	−.06	53.4	+1.5	87	7	64	28	28	42	38	45	39	65	4.19	+1.7	11	6.6	s.	22	nw.	13	13	7	11	5.1	T	.0
Keokuk	614	64	78	29.35	30.00	−.05	58.6	+3.2	94	7	70	27	14	47	38	48	40	58	2.35	+.1	8	8.2	sw.	25	w.	27	15	8	8	4.4	T	.0
Cairo	358	87	93	29.69	30.07	.00	63.3	+2.9	87	7	74	34	31	53	34	54	49	67	1.47	−1.3	7	8.4	s.	24	nw.	27	18	10	3	3.3	T	.0
Peoria [2]	609	11	45	29.30	30.02	−.03	57.1	+5.1	89	6	70	29	14	44	40	47	42	70	3.80	+1.5	11	6.0	s.	16	w.	23	16	11	4	3.5	.0	.0
Springfield, Ill. [2]	636	5	191	29.37	30.03	−.02	59.6	+3.8	90	8	72	30	31	47	37	47	43	72	1.99	−.5	7	12.3	s.	31	w.	9	14	7	10	4.3	.0	.0
St. Louis [5]	568	179	303	29.43	30.04	−.02	62.6	+3.8	93	7	73	33	31	52	36	52	44	58	.77	−2.0	9	12.7	sw.	32	sw.	25	19	9	3	2.9	T	.0
Missouri Valley							56.9	+2.7										60	1.13	−1.1										3.8		
Columbia, Mo. [2]	784	6	66	29.18	30.02	−.03	61.1	+4.5	96	7	74	25	31	48	40	50	43	62	1.33	−1.3	5	8.1	s.	29	sw.	8	17	7	7	4.1	.0	.0
Kansas City [1]	750	32	45	29.18	29.99	−.05	62.1	+4.4	98	7	75	28	31	49	43	51	42	53	.95	−2.0	3	10.0	sw.	34	n.	29	20	5	6	3.2	.0	.0
St. Joseph [2]	967	11	49	29.11	29.99	...	60.0	+4.0	96	7	72	29	31	48	38	48	42	64	.95	−1.9	4	9.1	s.	26	s.	4	23	4	4	2.5	.0	.0
Springfield, Mo. [2]	1,324	5	78	28.62	30.06	+.01	62.2	+4.0	92	7	75	27	31	50	36	50	45	70	2.26	−.8	6	8.5	s.	25	sw.	9	19	7	5	3.3	T	.0
Topeka	987	65	87	28.93	29.98	...	62.2	+5.2	97	7	76	31	31	49	43	50	40	51	.83	−1.6	4	10.3	s.	28	s.	4	19	9	3	3.0	.0	.0
Lincoln [2]	1,189	11	81	28.70	29.97	−.06	56.4	+2.2	87	6	70	27	30	43	39	44	36	57	.93	−1.0	4	9.9	s.	33	sw.	4	16	9	6	3.7	T	.0
Omaha [1]	982	31	44	28.92	29.97	−.06	55.4	+1.1	87	6	68	27	28	42	39	45	37	58	1.09	−1.1	4	11.1	nw.	45	sw.	4	15	10	6	3.9	T	.0
Valentine	2,598	47	54	27.26	29.98	−.03	49.6	+.3	83	6	62	24	30	37	47	41	34	61	1.88	+.8	5	9.7	w.	25	nw.	29	14	9	8	4.5	T	.0
Sioux City	1,138	64	106	28.74	29.97	−.05	52.5	+1.6	84	6	65	22	28	40	41	44	36	60	.26	−1.5	4	10.6	nw.	37	nw.	29	15	6	10	4.6	.0	.0
Huron [1]	1,289	27	41	28.58	29.97	−.04	47.6	−.1	87	6	61	13	28	34	46	40	32	62	.81	−.5	8	14.5	nw.	40	w.	11	15	7	9	5.0	T	.0
Northern Slope							47.4	+2.4										59	0.62	−0.4										5.5		
Billings	3,570	17	31	26.32	30.02	...	49.2	...	78	22	61	24	24	37	40	40	32	60	.92	...	6	11.9	sw.	40	nw.	19	5	11	15	6.3	1.4	.0
Havre	2,507	11	67	27.34	30.00	+.02	43.6	−.9	77	14	56	4	26	31	49	37	30	62	.37	−.3	4	10.0	sw.	43	sw.	20	13	9	9	5.2	2.3	.0
Helena	4,124	85	111	25.83	30.04	+.01	46.7	+1.8	72	23	56	12	25	37	35	39	30	57	1.24	+.4	8	7.9	sw.	27	sw.	28	3	11	17	7.3	4.5	.0
Missoula	3,263	90	91	...	...	...	48.2	+3.4	73	23	59	23	25	38	35	41	35	69	.86	−.3	9	5.6	se.	30	ne.	24	7	8	16	6.3	3.0	.0
Kalispell	2,973	48	56	26.97	30.04	+.03	46.4	+2.9	72	14	57	14	25	36	40	40	32	61	.22	−.8	4	6.2	nw.	24	n.	24	2	7	22	7.6	2.9	.0
Miles City [1]	2,371	48	55	27.23	30.00	.00	48.2	+1.7	78	1	61	26	27	36	43	38	31	60	.06	−.8	4	6.8	s.	31	nw.	28	4	14	13	6.7	T	.0

See footnotes at end of table.

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

	Elevation of instruments			Pressure			Temperature of the air													Precipitation			Wind										
	Barometer above sea level	Thermometer above ground	Anemometer above ground	Station, reduced to mean of 24 hours	Sea level, reduced to mean of 24 hours	Departure from normal	Mean max. + mean min. ÷ 2	Departure from normal	Maximum	Date	Mean maximum	Minimum	Date	Mean minimum	Greatest daily range	Mean wet thermometer	Mean temperature of the dew-point	Mean relative humidity	Total	Departure from normal	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
Northern Slope—Con.	Ft.	Ft.	Ft.	In.	In.	In.	°F.	°F.	°F.	°F.		°F.	°F.		°F.	°F.	°F.	%	In.	In.		Miles								0–10	In.	In.
Rapid City [2]	3,259	50	58	26.66	30.00	−0.01	49.2	+0.7	76	1	61	28	30	38	43	40	32	62	1.34	+0.4	9	7.8	n.	29	ne.	15	10	14	7	5.0	1.2	0.0
Cheyenne [1]	6,144	5	39	23.98	29.97	−.04	48.8	+4.0	74	23	63	24	29	35	42	37	26	48	.37	−.6	5	12.2	nw.	40	w.	28	14	11	6	4.1	2.9	.0
Lander	5,352	60	68	24.66	29.98	−.06	47.6	+4.1	73	33	63	22	30	33	43	38	28	52	.31	−1.0	5	5.0	sw.	32	w.	1	11	14	6	4.4	.9	.0
Sheridan	3,790	10	47	26.11	30.02	-----	47.4	-----	77	17	63	24	28	32	49	39	30	60	.47	−.6	5	5.2	nw.	21	nw.	12	11	15	5	4.8	.8	.0
Yellowstone Park	6,235	12	46	23.93	30.12	+.10	42.7	+3.0	64	22	53	21	25	32	36	35	28	62	1.05	−.2	8	8.2	sw.	28	sw.	23	10	11	10	5.7	3.4	.0
North Platte [2]	2,821	11	51	27.08	29.98	−.04	53.0	+3.3	86	2	68	25	28	38	46	41	33	60	.56	−.5	2	7.6	w.	23	n.	29	22	5	4	2.7	T	.0
Middle Slope							59.9	+4.1										46	0.89	−0.8										2.5		
Denver [2]	5,292	106	113	24.71	29.97	−.04	54.7	+3.5	79	1	68	23	30	42	37	40	26	43	.89	−.2	3	8.1	s.	28	ne.	29	19	10	2	3.0	5.6	.0
Pueblo [2]	4,690	79	86	25.19	29.96	−.03	54.9	+2.9	85	6	71	16	30	38	51	40	24	38	.02	−.6	1	7.2	e.	34	w.	4	24	4	3	2.3	T	.0
Chadron, Nebr.	3,439	4	58	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Concordia	1,392	50	58	28.50	29.98	−.05	59.3	+3.4	90	6	73	29	28	46	43	47	36	49	.60	−1.4	1	8.5	sw.	24	s.	2	20	7	4	2.9	.0	.0
Dodge City	2,509	10	86	27.38	29.96	−.06	59.6	+3.5	90	6	75	28	30	44	40	46	33	43	.28	−1.0	2	12.5	sw.	36	sw.	7	26	3	2	1.9	.0	.0
Wichita [2]	1,358	85	93	28.52	29.98	−.05	64.0	+5.4	95	6	76	35	31	52	36	50	40	51	1.14	−1.4	4	11.3	s.	28	sw.	18	24	4	3	2.1	.0	.0
Oklahoma City [2]	1,214	10	47	28.65	30.02	−.01	67.2	+5.7	94	6	80	37	31	55	40	54	45	53	2.39	−.5	4	9.6	s.	26	n.	29	21	6	4	2.6	.0	.0
Southern Slope							66.4	+3.2										55	1.10	−0.8										3.3		
Abilene [2]	1,738	10	56	28.21	30.01	.00	69.6	+4.2	96	6	82	38	31	57	38	56	48	58	1.92	−.6	5	9.7	s.	28	s.	4	17	6	8	3.4	.0	.0
Amarillo [2]	3,676	10	49	26.37	30.00	.00	63.0	+5.3	90	6	77	32	30	49	36	47	37	52	1.10	−.6	2	9.5	sw.	22	se.	1	25	4	2	1.9	.0	.0
Del Rio	960	63	71	29.01	29.99	+.01	72.6	+2.6	92	6	82	45	31	64	32	62	56	63	1.12	−.7	6	8.4	se.	21	se.	8	10	8	13	5.8	.0	.0
Roswell	3,566	75	85	26.42	30.01	+.05	60.4	+.9	91	6	77	31	30	44	51	47	36	48	.25	−1.2	2	7.1	s.	26	nw.	24	23	6	2	2.0	.0	.0
Southern Plateau							62.7	+0.7										42	0.60	−0.1										1.4		
El Paso [2]	3,778	82	101	26.09	29.97	+.05	64.4	+.9	90	6	77	41	31	51	39	49	36	45	.93	+.1	5	6.7	e.	20	ne.	30	21	8	2	2.3	.0	.0
Albuquerque [1]	5,314	5	34	24.80	29.98	-----	56.0	−.6	80	6	70	28	30	42	38	43	31	45	.83	.0	3	8.1	se.	30	s.	3	27	2	2	1.3	.0	.0
Santa Fe	7,013	38	53	23.32	30.03	+.07	50.2	−.2	71	6	63	24	30	38	34	38	26	45	1.20	.0	3	5.9	e.	27	sw.	26	25	4	2	1.8	.0	.0
Flagstaff	6,907	10	59	23.41	29.97	−	46.4	−	70	31	62	21	27	30	44	36	26	51	.34	−	4	8.7	nw.	26	s.	25	23	7	1	−	1.0	.0
Phoenix [2]	1,107	39	51	28.76	29.91	−.07	70.8	+.2	95	22	87	42	27	55	42	53	39	40	.02	−.4	1	5.2	e.	18	sw.	7	28	3	0	1.1	.0	.0
Yuma	141	9	54	29.77	29.91	+.04	74.2	+.9	96	17	88	51	27	60	36	57	42	37	T	−.3	0	6.6	n.	21	w.	7	31	0	0	.4	.0	.0
Independence	3,957	5	26	26.01	30.03	+.08	60.7	+3.2	83	11	76	28	26	45	38	-----	-----	-----	.21	-----	2	-----	-----	23	n.	3	-----	-----	-----	-----	-----	-----
Middle Plateau							51.6	+1.2										54	1.14	+0.3										3.2		
Reno [2]	4,527	61	76	25.64	30.09	+.10	52.2	+1.4	79	22	67	21	26	37	40	41	33	61	.82	+.5	5	5.6	w.	33	nw.	24	20	6	5	2.9	T	.0
Tonopah	6,090	12	20	-----	-----	-----	51.4	-----	72	23	61	23	26	42	29	41	32	-----	.94	-----	4	-----	se.	-----	-----	-----	-----	-----	-----	-----	T	.0
Winnemucca	4,344	18	56	25.70	30.10	+.05	49.6	+1.3	77	14	66	13	26	34	46	41	32	59	2.40	+1.8	7	6.3	ne.	28	w.	24	14	7	10	4.5	T	.0
Modena	5,473	10	46	24.68	30.01	+.05	48.7	+.7	73	14	64	25	28	33	45	39	28	50	.61	−.1	4	9.6	w.	41	sw.	24	23	5	3	2.2	2.4	.0
Salt Lake City [1]	4,227	32	46	25.79	30.04	+.03	53.8	+1.3	77	16	65	33	26	42	32	43	35	58	1.42	.0	8	6.8	se.	34	se.	24	16	11	4	3.6	T	.0
Grand Junction	4,602	60	68	25.43	30.01	+.02	53.9	+1.1	79	1	68	30	29	40	35	42	29	43	.44	−.5	4	5.9	se.	30	s.	2	19	8	4	2.6	.0	.0
Northern Plateau							51.3	+1.6										63	0.72	−0.4										5.8		
Baker	3,471	36	54	26.62	30.13	+.05	47.3	+.7	75	12	59	25	26	35	40	39	33	68	.50	−.4	5	5.9	s.	17	n.	2	8	8	15	6.1	1.8	SK .0
Boise [2]	2,739	79	87	27.27	30.08	+.02	52.3	+1.2	79	23	64	29	26	41	40	44	39	69	.70	−.5	8	4.4	se.	18	nw.	8	10	10	11	5.4	T	.0
Pocatello [1]	4,478	5	31	25.54	30.06	+.02	49.2	+.8	73	14	62	25	30	37	43	41	32	58	.85	-----	7	9.6	sw.	33	sw.	1	9	8	14	5.7	.6	.0
Spokane [2]	1,929	101	110	27.98	30.07	+.01	49.5	+1.2	73	12	60	29	27	39	35	44	37	66	.95	−.2	7	6.3	s.	20	s.	4	9	6	16	6.3	1.0	.0
Walla Walla	991	57	65	29.01	30.08	+.01	55.4	+1.9	78	14	65	35	30	46	31	48	41	59	1.40	−.1	8	5.5	s.	21	w.	19	11	4	16	6.1	.0	.0
Yakima	1,076	58	67	28.92	30.08	-----	54.3	+4.1	79	13	67	32	25	41	38	46	37	56	.06	−.6	4	4.9	nw.	23	nw.	23	11	8	12	5.5	.0	.0
North Pacific Coast Region							54.1	+1.7										81	3.47	−0.3										6.7		
North Head	211	8	56	29.89	30.12	+.07	53.6	+.7	74	30	58	41	24	49	26	51	49	89	4.21	−.8	21	12.7	s.	51	s.	16	9	6	16	6.5	.0	.0
Seattle [2]	125	90	321	30.07	30.11	+.06	54.2	+2.8	69	13	60	34	25	48	21	50	47	81	2.25	−.6	14	8.9	s.	33	s.	4	6	6	19	6.8	.0	.0
Tacoma	263	172	201	29.91	30.12	+.08	53.2	+2.7	67	22	60	34	25	47	23	-----	-----	-----	2.49	−.8	10	7.8	sw.	28	s.	18	3	9	19	7.4	.0	.0
Tatoosh Island	86	9	55	29.99	30.09	+.08	50.8	+.9	60	13	54	40	25	48	11	49	47	88	8.29	+.2	20	14.4	e.	51	s.	18	8	2	21	7.2	.0	.0
Medford [1]	1,329	29	58	28.70	30.12	-----	54.2	+.5	82	12	68	32	25	40	42	48	42	70	2.15	+.8	9	-----	s.	-----	-----	-----	13	6	12	4.9	.0	.0
Portland, Oreg. [2]	154	68	106	30.07	30.11	+.05	56.6	+2.4	80	13	64	38	25	50	28	52	49	79	2.14	−1.0	13	5.4	nw.	22	s.	26	7	6	18	7.0	.0	.0
Roseburg	510	45	76	29.57	30.12	+.04	55.8	+1.9	79	14	65	37	25	46	34	52	48	78	2.77	+.2	10	3.3	nw.	16	n.	10	3	14	14	6.8	.0	.0
Middle Pacific Coast Region							62.3	+2.0										64	0.80	−0.8										3.3		
Eureka	60	72	88	30.04	30.11	+.05	54.8	+1.2	79	11	60	43	7	49	27	52	50	85	1.82	−.5	7	5.6	n.	24	n.	24	7	11	13	6.1	.0	.0
Redding [1]	722	20	34	29.24	30.01	-----	67.0	+2.7	92	11	78	37	25	56	31	52	38	40	.74	−1.4	3	7.6	nw.	26	nw.	6	21	3	7	2.8	.0	.0
Sacramento [2]	66	92	115	29.98	30.00	+.01	64.5	+1.6	89	14	78	39	26	51	35	53	45	58	.45	−.5	4	5.6	s.	24	nw.	24	24	3	4	1.9	.0	.0
San Francisco	155	112	132	29.85	30.02	+.01	63.0	+2.5	90	11	71	50	26	55	31	56	51	73	.17	−1.0	3	7.5	w.	29	w.	1	24	3	4	2.3	.0	.0
South Pacific Coast Region							69.7	+5.2										56	0.37	−0.2										2.3		
Fresno [1]	327	97	105	29.70	30.01	+.05	63.3	-----	91	13	78	35	26	48	39	54	49	59	.99	-----	4	4.2	nw.	22	nw.	24	22	6	3	2.1	.0	.0
Los Angeles	338	159	191	29.60	29.96	+.01	71.6	+6.3	99	22	82	52	26	61	33	56	45	47	.13	−.6	1	5.9	ne.	15	nw.	25	23	5	3	2.0	.0	.0
San Diego [2]	87	62	70	29.93	29.96	+.01	67.8	+4.1	96	12	77	52	27	59	34	58	51	63	.61	+.1	2	6.0	nw.	17	w.	3	22	4	5	2.7	.0	.0
West Indies																																
San Juan, P. R.	82	9	54	29.80	29.88	-----	80.7	+.9	91	5	86	70	26	76	15	-----	-----	-----	9.54	+3.7	21	10.0	e.	31	e.	19	1	20	10	6.4	.0	.0
Panama Canal																																
Balboa Heights	118	6	92	-----	[3] 29.81	−.01	79.7	+.5	91	7	86	72	19	74	17	-----	-----	[3] 86	12.93	+2.7	23	5.6	nw.	25	s.	28	0	8	23	8.0	.0	.0
Cristobal	36	6	97	-----	[3] 29.82	.00	80.4	+.6	90	31	85	74	17	76	14	75	74	[3] 85	17.52	+2.0	24	6.5	s.	22	sw.	29	3	3	25	8.1	.0	.0
Alaska																																
Fairbanks	454	11	87	[4] 29.28	[4] 29.82	-----	20.6	−5.7	49	1	28	−5	18	13	38	20	16	75	.79	+.1	16	5.8	e.	26	ne.	6	5	6	20	7.6	12.8	2.5
Juneau	80	96	116	[4] 29.72	[4] 29.81	-----	41.2	−2.0	53	41	45	29	23	37	16	38	34	75	19.11	+8.2	26	8.1	se.	30	e.	17	4	1	26	8.4	4.0	.0
Nome	22	5	57	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Hawaiian Islands																																
Honolulu	38	86	100	29.94	29.98	-----	76.6	−.2	84	3	81	69	23	72	11	70	67	74	10.31	+8.8	20	9.0	e.	22	e.	5	2	15	14	7.0	.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.
[5] Barometer data from airport record.

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, October 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, New Foundland	99												
Sydney, Cape Breton Island	48	29.81	29.94	−0.01	49.2	+1.4	55.5	42.9	72	30	5.60	+1.05	0.1
Halifax, Nova Scotia	88	29.69	29.96	−.06	50.6	+1.9	56.3	44.8	72	26	8.36	+3.14	.0
Yarmouth, Nova Scotia	65	29.86	29.97	−.06	49.6	+.8	56.7	42.6	66	26	5.02	+.89	T
Charlottetown, Prince Edward Island	38	29.86	29.95	−.03	48.1	+.3	54.6	41.6	74	26	8.85	+4.55	.5
Chatham, New Brunswick	28	29.81	29.92	−.07	43.6	−1.7	51.8	35.4	69	20	5.49	+1.51	1.4
Father Point, Quebec	20	29.89	29.91	−.05	41.0	+.6	47.0	34.9	57	24	3.69	+.42	2.1
Quebec, Quebec	296												
Doucet, Quebec	1,236	28.55	29.93	−.10	35.2	−2.8	43.4	27.1	66	7	5.08	+1.32	19.5
Montreal, Quebec	187												
Ottawa, Ontario	236	29.60	29.97	−.07	44.7	−1.1	53.8	35.6	72	18	2.70	−.78	T
Kingston, Ontario	285	29.70	30.01	−.03	46.6	−1.8	56.4	36.7	71	18	2.64	−.38	.0
Toronto, Ontario	379	29.59	30.00	−.06	50.1	+1.7	57.2	42.9	76	29	1.89	−.54	T
Cochrane, Ontario	930				36.8	−2.3	44.4	29.1	63	5	3.10	+.48	5.5
White River, Ontario	1,244	28.58	29.94	−.06	36.6	−1.5	45.0	28.3	68	3	3.21	+.64	7.0
London, Ontario	808	29.14	30.02		49.6	+1.4	59.0	40.2	76	24	3.31	+.49	T
Southampton, Ontario	656	29.26	29.98	−.05	49.0	+1.0	58.1	39.8	77	28	4.19	+.99	.0
Parry Sound, Ontario	688	29.28	29.98	−.05	46.2	.0	53.9	38.4	77	20	3.68	−.32	1.4
Port Arthur, Ontario	644	29.20	29.92	−.08	39.4	−2.4	47.5	31.2	64	14	2.32	−.13	2.3
Winnipeg, Manitoba	760	29.08	29.95	−.06	36.8	−4.3	44.5	29.1	63	15	.32	−1.16	.1
Minnedosa, Manitoba	1,690	29.12	29.97	−.02	35.2	−5.0	44.0	26.4	64	8	.60	−.50	1.7
Le Pas, Manitoba	860	28.97	29.97	+.04	29.6	−4.5	38.2	20.9	58	−11	1.15	+.05	.9
Qu'Appelle, Saskatchewan	2,115				36.0	−4.2	46.7	25.4	71	4	1.02	−.11	5.2
Moose Jaw, Saskatchewan	1,759				38.6	−2.6	49.7	27.5	74	1	.77	−.04	6.5
Swift Current, Saskatchewan	2,392	27.15	30.01	+.01	37.1	−4.9	48.0	26.3	71	−5	.93	+.13	6.0
Medicine Hat, Alberta	2,365	27.47	30.00	+.03	41.0	−4.3	53.1	28.8	72	−5	.86	+.27	2.2
Calgary, Alberta	3,540												
Banff, Alberta	4,521												
Prince Albert, Saskatchewan	1,450	28.38	29.97	−.01	34.2	−4.4	42.5	26.0	66	0	.66	−.19	5.3
Battleford, Saskatchewan	1,592												
Edmonton, Alberta	2,150	27.58	29.97		34.2	−6.6	43.2	25.2	62	−13	1.73	+1.02	13.0
Kamloops, British Columbia	1,262												
Victoria, British Columbia	230	29.84	30.09	+.05	51.4	+1.0	56.8	46.0	67	35	3.31	+.59	.0
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	29.66	29.98	−0.04	55.8	+0.2	63.4	48.2	87	32	5.26	+1.24	0.0
Banff, Alberta	4,521				49.6	+2.6	60.8	38.3	78	26	3.01	+1.28	.0

TABLE 4.—*Severe local storms, October 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
Council Bluffs, Iowa	4	6 p. m.				Thunderstorm and wind.	Lightning struck an electric substation; wires down; trees uprooted.
Emmet County, Iowa	4	7:50 p. m.		0	$55,000	Tornado	Buildings on 3 farms wrecked or badly damaged with lesser damage occurring on about 12 other farms; 1 person injured. Loss in crops, mostly corn. Storm of short duration and path narrow.
Garnett, Kans., and vicinity	4	10 p. m.	20	0	5,500	do	Originated about 2 miles southwest of Garnett and passed through the northeastern portion of the city with little damage. Near the city an airplane hangar and 2 planes were destroyed and several farm buildings damaged; path 8 miles long.
Martin and Blue Earth Counties, Minn.	4				6,000	Thundersqualls	In Mankato, where the greatest damage occurred, streets were flooded when 1.33 inches of rain was reported to have fallen in less than 20 minutes. Path about 70 miles long.
Sadler and Southmayde, Tex., vicinity of.	5	9 p. m.	[1] 2		8,000	Wind and hail	Property damage from wind, $7,000; crop loss from hail, $1,000.
Fort Stockton, Tex	8	1:30 p. m.	880		5,000	Hail	Loss to crops; property damage not estimated.
Crane, Tex	8	3:15 p. m.	[1] 2		20,000	Straight-line wind	Property damaged.
Escanaba, Mich	8	4:45 a. m.			12,500	Hail	This is reported to have been the most severe hailstorm in the history of Escanaba. Property damage includes roofs, windows, awnings, signs, automobile tops, and windshields.
Houston, Tex	20	11:20 a. m.			50,000	Wind	Property damaged.
Canton, N. Y	22				5,000	Thunderstorm	Barn and contents destroyed.
Kirkland, Ill., vicinity of	24					Electrical	Large farm residence burned.

[1] Miles instead of yards.

LATE REPORT

Severe local storms, September 1939

[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 Yearbook]

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
St. Marys and southern Calvert Counties, Md.	10	3-4 p. m.	[1] 8		$50,000	Heavy hail	Much loss in tobacco and other late crops; path 25 miles long in St. Marys County.
Farmington, Ark., vicinity of	29	A. m.			2,000	Thunderstorm	Barn and contents destroyed by fire.
Keyser Ridge and Grantsville, Md.	29	2:45-3 p. m.	[1] 3		7,500	Hail	Roofs and automobile tops damaged; windows broken; loss in apple crop; path 6 miles long.
Camden, Ark	29	6 p. m.			1,500	Thundersquall	Property damaged.
El Dorado, Ark	29	P. m.			1,000	Thunderstorm	Do.
Piggott, Ark., vicinity of	29	do			800	do	Livestock killed.
Scott, Ark., vicinity of	29	do			600	do	Do.
Hagerstown, Md., and vicinity.	29				6,000	Electrical	Property damaged.

[1] Miles instead of yards.

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