CLIMATOLOGICAL TABLES[1]

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, September 1938*

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	75.3	−0.4	Greensboro	102	9	St. Bernard	39	22	1.40	−2.12	Evergreen	5.06	2 stations	0.10
Arizona	74.6	+1.8	2 stations	112	[2] 9	Alpine	28	22	.87	−.38	Tombstone	4.84	3 stations	.00
Arkansas	75.7	+1.3	Conway	107	1	Thornburg	32	20	1.55	−1.82	St. Charles	4.32	Calico Rock	.11
California	69.6	+2.0	Cow Creek	114	[2] 2	Boca	20	6	.37	−.07	Cummings	1.98	31 stations	.00
Colorado	60.3	+2.3	2 stations	99	[2] 26	Fraser	17	28	3.01	+1.66	Waterdale	10.22	Trinidad	.43
Florida	78.7	−.7	Ocala	100	[2] 5	Mason	40	23	5.84	−.85	Apalachicola	14.45	Pensacola	.54
Georgia	74.8	−.6	2 stations	100	[2] 1	Blairsville	32	22	2.70	−.97	Savannah No. 2	8.46	Canton	.01
Idaho	63.2	+6.2	Orofino	107	3	Obsidian (near)	20	6	.54	−.49	Mullan	1.91	9 stations	T
Illinois	69.0	+1.2	2 stations	102	[2] 8	3 stations	35	19	3.11	−.66	Dixon	8.79	Grand Chain	.53
Indiana	68.2	+1.0	Johnson	104	7	Collegeville	32	19	2.94	−.47	Brookville	9.85	Seymour	.81
Iowa	66.8	+3.0	Ottumwa	101	7	Inwood	29	19	5.67	+1.82	Britt	13.64	Albia	.68
Kansas	72.3	+2.6	2 stations	103	10	7 stations	31	[2] 19	2.19	−.63	Paola	6.29	Cawker City	.29
Kentucky	70.3	−.2	Henderson	101	8	Mammoth Cave	37	20	3.52	+.53	Smith's Grove	8.98	Carrollton	1.00
Louisiana	77.2	−.8	Plain Dealing	104	1	Tallulah	41	[2] 21	2.85	−1.02	Crowley	7.80	Bastrop	.39
Maryland-Delaware	65.8	−1.9	3 stations	92	[2] 4	Grantsville, Md	32	26	6.11	+2.94	Princess Anne, Md	9.72	Mount Savage Summit, Md.	1.59
Michigan	58.5	−1.9	Monroe	92	12	Sidnaw	27	29	2.73	−.60	Sack Bay	5.37	Sidnaw	.79
Minnesota	60.6	+1.5	Waseca	97	4	Hallock	24	19	3.62	+.75	Worthington	11.16	Big Falls	.10
Mississippi	76.1	+.2	2 stations	102	[2] 6	Batesville	38	20	1.41	−1.62	Hickory	5.17	Fulton	.08
Missouri	71.6	+2.3	4 stations	103	[2] 7	Dean	30	20	1.85	−2.25	Willow Springs (near)	5.89	Philadelphia	.19
Montana	62.5	+7.5	Libby	100	[2] 1	Wisdom	22	[2] 26	.87	−.47	Glasgow	4.72	3 stations	.00
Nebraska	67.4	+3.2	Fairbury	103	10	2 stations	27	19	2.88	+.82	Virginia	9.32	Benkelman	.88
Nevada	66.0	+4.8	Las Vegas	107	3	San Jacinto	28	9	.16	−.24	Searchlight	.75	2 stations	.00
New England	57.9	−2.3	Nashua, N. H.	88	21	First Connecticut, Lake, N. H.	25	9	9.27	+5.42	Hubbardston, Mass.	18.28	Presque Isle, Maine	2.8
New Jersey	63.6	−2.3	Canoe Brook	95	4	Charlottebury	30	10	9.67	+6.11	Long Branch	11.81	Newark	6.29
New Mexico	63.7	−.7	Carlsbad	97	30	Elizabethtown	21	30	3.30	+1.61	Lee Ranch	9.26	Gower	.11
New York	57.6	−3.6	Brockport	90	1	Indian Lake	24	30	7.59	+4.10	Setauket	13.15	Auburn	3.56
North Carolina	70.8	−.2	2 stations	98	[2] 14	Mount Mitchell	26	22	5.90	+1.87	Swansboro	22.50	Greensboro	1.05
North Dakota	61.9	+5.1	do	99	22	2 stations	21	19	.63	−.90	Hankinson	4.24	Hansboro	.00
Ohio	65.7	+.1	Gallipolis	98	[2] 5	do	34	[2] 20	4.02	+1.02	Jefferson	9.29	Larue	1.29
Oklahoma	75.6	+1.4	2 stations	105	[2] 1	do	32	20	1.84	−1.31	Waukomis	8.13	Wyandotte	.16
Oregon	61.9	+4.2	do	103	[2] 14	Chemult	24	13	.85	−.34	Rujada	4.09	Canyon City	.02
Pennsylvania	62.0	−2.2	Marcus Hook	95	4	Coudersport	26	26	4.74	+1.34	Mount Pocono	10.46	Kylertown	1.39
South Carolina	74.5	.0	3 stations	99	[2] 3	Longcreek (near)	39	22	4.92	+.78	Lake City	13.63	Walhalla	.77
South Dakota	65.4	+3.9	Armour	104	23	LaDelle (near)	22	19	2.34	+.82	Canistota	7.76	Hardy Ranger Station	.38
Tennessee	71.1	−.4	Union City	101	9	Rugby	35	21	2.73	−.33	Celina	6.15	Chattanooga	.32
Texas	77.7	+.4	Henrietta	106	[2] 1	Bridgeport	39	21	1.57	−1.32	Galveston	7.13	2 stations	.00
Utah	64.2	+3.5	St. George	99	[2] 3	Woodruff	24	26	.76	−.23	Monticello	2.90	4 stations	.00
Virginia	67.5	−1.1	3 stations	95	[2] 4	Big Meadows	35	22	3.99	+.84	Onley	9.82	Roanoke	1.23
Washington	64.0	+5.9	4 stations	104	[2] 2	Deer Park	29	[2] 5	.92	−.94	Clearwater	6.14	Sunnyside	T
West Virginia	65.8	−.6	3 stations	95	[2] 4	Bayard	28	26	3.59	+.67	Spruce Knob	7.30	New Martinsville	1.63
Wisconsin	59.6	−.7	Wisconsin Dells	94	4	Long Lake	28	21	7.27	+3.56	Brodhead	13.59	Plum Island	2.39
Wyoming	59.0	+4.3	Thermopolis	95	[2] 19	Gallatin	18	17	1.27	+.14	Archer	5.43	Basin	.00
Alaska (August)	53.2	+.5	2 stations	82	[2] 7	Stuyahok	26	24	4.25	+.90	Scotch Cap	10.54	Whale Island	.29
Hawaii	75.5	+.8	Mahukona	93	7	Kanalohuluhulu	41	13	2.95	−3.05	Keauhou No. 2	17.93	12 stations	.00
Porto Rico	78.4	−.2	3 stations	96	[2] 15	Guineo Reservoir	59	[2] 11	8.35	−.28	La Fe	19.51	Culebra Island	2.56

[1] For description of tables and charts, see Review, January, p. 29.
[2] Other dates also.

TABLE 2.—*Climatological data for Weather Bureau stations, September 1938*

[Compiled by Annie E. Small, by official authority U. S. Weather Bureau]

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							**59.6**	**−1.2**										**80**	**8.47**	**+5.4**										**5.3**		
Eastport	75	67	85	29.94	30.02	−0.01	56.0	+0.2	72	21	63	43	26	49	23	52	50	85	5.44	+2.7	15	10.5	sw.	32	se.	21	10	7	13	6.0	0.0	0.0
Greenville, Me.	1,069	4	41	28.96	30.02	------	52.7	------	74	11	64	27	29	42	38	49	47	----	5.32	------	15	------	nw.	----	------	----	7	6	17	----	.0	.0
Portland, Me.	103	82	117	29.89	30.02	−.03	58.7	−.9	80	1	66	44	30	51	29	53	49	76	6.47	+3.4	11	9.3	n.	43	s.	21	14	6	10	4.4	.0	.0
Concord	289	54	72	29.71	30.02	−.04	58.4	−.9	79	4	69	37	10	48	37	----	----	----	10.68	+7.2	14	5.6	n.	56	se.	21	13	6	11	4.8	.0	.0
Burlington	403	11	48	29.55	29.99	−.07	55.3	−5.0	78	4	64	34	30	46	31	52	49	81	6.87	+3.4	13	9.1	s.	47	s.	21	9	4	17	5.9	.0	.0
Northfield	876	12	60	29.07	30.02	−.04	53.0	−3.1	76	4	64	28	30	42	39	49	47	86	7.58	+4.5	14	7.3	s.	47	s.	21	8	5	17	6.6	.0	.0
Boston [1]	29	33	62	29.98	30.01	−.06	62.2	−1.0	82	1	70	45	8	54	27	56	52	77	6.00	+2.9	12	12.0	nw.	73	s.	21	10	7	12	5.4	.0	.0
Nantucket	12	14	90	30.01	30.02	−.06	63.0	+.2	70	19	68	52	25	58	17	59	57	82	9.55	+7.1	14	14.9	s.	52	se.	21	16	7	7	4.2	.0	.0
Block Island	26	11	46	29.99	30.02	−.06	62.5	−.9	74	1	68	50	9	57	20	59	58	82	6.31	+3.6	14	15.0	sw.	82	se.	21	13	6	11	4.5	.0	.0
Providence	159	215	251	29.85	30.02	−.05	62.6	−.6	85	1	72	44	9	54	28	57	53	76	5.16	+2.0	11	11.6	nw.	87	sw.	21	13	4	13	5.3	.0	.0
Hartford	159	66	100	29.85	30.02	−.05	61.7	.0	83	4	71	40	10	52	29	----	----	----	14.59	+11.1	13	7.7	n.	46	ne	21	13	4	13	5.4	.0	.0
New Haven	106	74	153	29.91	30.02	−.05	62.3	−1.2	83	4	71	43	10	54	26	57	53	77	14.52	+11.0	14	9.5	n.	38	ne.	21	10	6	14	5.6	.0	.0
Middle Atlantic States							**65.7**	**−1.3**										**78**	**6.52**	**+3.3**										**6.5**		
Albany [1]	292	26	37	29.68	30.00	−.07	58.6	−4.5	83	4	69	34	26	48	39	53	50	82	8.76	+5.6	14	8.7	s.	42	w.	21	9	9	12	6.0	.0	.0
Binghamton	871	57	79	29.10	30.04	−.03	58.9	−2.4	84	4	69	36	26	49	39	53	50	82	5.74	+2.6	13	6.0	ne.	20	nw.	21	3	8	19	7.7	.0	.0
New York	314	415	454	29.68	30.01	−.07	64.9	−1.9	82	4	72	49	25	58	23	58	53	73	8.77	+5.4	11	13.5	n.	70	nw.	21	9	7	14	5.9	.0	.0
Harrisburg	374	94	104	29.62	30.02	−.06	64.1	−1.7	90	4	72	44	26	56	28	57	53	72	4.41	+1.4	14	6.8	ne.	22	nw.	21	9	9	12	5.9	.0	.0
Philadelphia	114	174	367	29.91	30.02	−.06	66.3	−1.7	85	4	74	51	22	59	24	59	55	74	7.35	+4.2	15	12.1	n.	37	nw.	21	8	8	14	6.1	.0	.0
Reading	323	283	306	29.68	30.03	------	64.1	−2.2	86	4	72	43	26	56	31	58	54	74	4.70	+1.5	13	9.7	n.	31	nw.	21	8	9	13	5.7	.0	.0
Scranton	805	72	104	29.16	30.02	−.05	60.6	−2.3	84	4	70	36	26	51	37	54	50	74	5.42	+2.2	14	6.4	n.	24	nw.	24	7	12	11	6.3	.0	.0
Atlantic City	52	37	172	29.96	30.01	−.06	67.0	+.2	84	24	72	51	26	62	23	62	59	79	11.76	+9.1	14	15.0	n.	61	w.	21	7	11	12	6.2	.0	.0
Sandy Hook	22	10	57	29.99	30.01	------	65.8	−1.7	83	4	71	53	30	60	19	60	56	76	11.15	+7.7	14	13.7	sw.	56	n.	21	9	7	14	5.9	.0	.0
Trenton	190	89	107	29.82	30.02	------	64.4	−2.5	86	4	73	46	26	56	28	58	55	77	9.04	+5.6	11	8.2	n.	37	nw.	21	8	8	14	6.3	.0	.0
Baltimore	123	100	215	29.89	30.02	−.06	68.0	−.5	90	15	75	48	22	61	27	61	57	74	5.05	+1.7	14	9.5	sw.	35	nw.	21	8	6	16	6.6	.0	.0
Washington	112	62	85	29.90	30.02	−.06	67.4	−.7	90	4	75	48	26	60	31	61	58	78	4.27	+1.0	13	5.8	sw.	27	nw.	21	6	9	15	6.6	.0	.0
Cape Henry	18	8	54	29.99	30.01	------	71.6	−.2	90	15	78	49	22	65	24	67	65	84	8.38	+5.5	14	11.5	sw.	54	nw.	21	6	8	16	6.9	.0	.0
Lynchburg	686	144	184	29.31	30.05	−.03	68.9	−.1	92	5	77	48	22	60	29	62	59	79	1.87	−1.4	13	6.2	w.	30	nw.	21	3	9	18	7.5	.0	.0
Norfolk	91	80	125	29.92	30.02	−.04	71.8	+.2	93	15	79	50	22	65	26	65	63	81	7.76	+4.5	15	8.7	sw.	34	nw.	21	6	5	19	7.5	.0	.0
Richmond	144	11	52	29.88	30.03	−.04	69.0	−1.5	90	5	78	46	22	60	31	63	61	83	3.85	+.6	10	6.9	ne.	28	n.	21	8	9	13	6.2	.0	.0
Wytheville	2,304	49	55	------	30.06	−.01	65.0	+1.4	85	5	74	46	22	56	29	----	----	----	2.59	−.7	15	5.4	w.	19	nw.	21	4	8	18	----	.0	.0
South Atlantic States							**74.6**	**+1.3**										**79**	**5.64**	**+1.4**										**5.9**		
Asheville	2,253	89	104	27.74	30.05	−.02	67.4	+2.4	88	8	78	42	22	57	35	60	58	83	4.72	+1.7	12	6.1	nw.	21	nw.	21	6	16	8	6.1	.0	.0
Charlotte	779	63	86	29.20	30.02	−.05	73.0	+1.5	93	5	82	49	21	64	30	64	61	74	3.44	+.4	5	6.0	sw.	21	ne.	29	5	13	12	6.7	.0	.0
Greensboro [1]	886	6	56	29.11	30.06	------	70.0	------	92	5	80	41	22	60	35	63	61	82	.89	------	5	7.1	ne.	24	ne.	29	5	7	18	7.1	.0	.0
Hatteras	11	5	50	29.99	30.00	−.06	75.5	+1.0	87	5	81	61	22	70	15	71	69	83	10.17	+5.6	12	11.9	sw.	61	nw.	21	9	15	6	5.1	.0	.0
Raleigh	376	103	140	29.62	30.01	−.06	71.6	+.5	93	5	80	51	22	63	26	65	62	80	4.85	+1.2	10	7.6	ne.	27	nw.	21	10	11	9	5.3	.0	.0
Wilmington	72	73	107	29.94	30.01	−.04	74.9	+1.8	92	15	83	55	22	67	24	69	67	83	16.28	+11.8	15	7.8	sw.	26	nw.	21	8	11	11	5.8	.0	.0
Charleston	48	11	92	29.96	30.01	−.03	77.6	+1.0	94	14	85	58	21	71	22	71	68	79	5.24	+.7	11	8.5	s.	43	sw.	29	7	9	14	6.4	.0	.0
Columbia, S. C.	347	70	91	29.65	30.03	−.02	75.4	+.9	93	8	85	49	22	66	32	66	63	74	3.03	−.4	8	7.0	ne.	25	ne.	29	7	18	5	5.2	.0	.0
Greenville, S. C.	1,040	70	78	28.94	30.02	------	72.7	+2.1	93	1	83	46	22	62	32	64	60	73	2.77	−.9	9	5.7	sw.	18	n.	21	5	16	9	6.1	.0	.0
Augusta	182	62	77	29.81	30.00	−.05	76.4	+1.1	95	8	86	49	22	66	35	67	63	74	1.36	−2.0	9	4.8	nw.	21	sw.	15	8	11	11	5.6	.0	.0
Savannah	65	73	152	29.94	30.00	−.03	78.1	+1.9	95	14	87	53	22	69	29	70	68	82	4.25	−1.2	12	8.4	sw.	21	sw.	15	11	9	10	5.2	.0	.0
Jacksonville	43	86	110	29.96	30.01	+.01	77.9	−.4	91	4	86	58	22	70	25	71	69	82	5.91	−1.4	14	6.7	e.	21	sw.	29	7	12	11	5.7	.0	.0
Florida Peninsula							**80.8**	**+0.3**										**80**	**6.50**	**−0.6**										**5.0**		
Key West	21	10	64	29.92	29.94	.00	82.8	+.6	91	17	88	74	24	77	15	76	75	81	3.72	−3.0	18	8.9	e.	32	s.	17	10	15	5	5.0	.0	.0
Miami	25	124	168	29.94	29.97	.00	81.4	+1.3	90	20	87	67	22	76	21	75	72	77	11.30	+3.0	14	8.7	e.	28	se.	7	10	14	6	4.9	.0	.0
Tampa	35	88	197	29.94	29.98	+.01	79.8	−.1	94	4	88	63	21	72	21	72	70	82	5.48	−.9	16	10.2	e.	32	e.	2	7	17	6	5.1	.0	.0
Titusville	43	5	36	------	------	------	79.4	−.4	94	4	89	59	21	70	26	73	71	----	5.50	−1.4	17	------	ne.	----	------	----	5	19	6	----	.0	.0
East Gulf States							**76.2**	**+0.3**										**74**	**2.90**	**−1.3**										**4.8**		
Atlanta [1]	976	5	53	29.01	30.01	−.04	73.8	+1.4	96	8	85	46	22	63	36	64	60	75	3.47	+.5	7	6.7	nw.	27	n.	20	7	15	8	5.7	.0	.0
Macon	370	79	87	29.62	30.01	−.02	75.5	+.7	94	13	86	47	22	65	35	66	62	71	.82	−2.4	4	5.6	nw.	19	ne.	29	9	9	12	5.6	.0	.0
Thomasville	273	49	58	29.72	30.01	.00	76.7	−.1	94	9	86	52	22	67	30	70	67	----	5.30	+.4	9	------	e.	----	------	----	13	8	9	5.1	.0	.0
Apalachicola	35	11	----	29.95	29.99	------	77.1	−1.4	90	14	83	57	21	71	26	72	70	83	14.45	+6.4	16	8.0	n.	29	se.	27	10	8	12	5.6	.0	.0
Pensacola	56	149	185	29.94	30.00	+.01	77.0	−1.0	88	13	84	56	21	70	23	69	65	73	.54	−4.8	5	10.3	n.	28	ne.	28	15	7	8	4.2	.0	.0
Anniston	741	9	----	------	------	------	72.8	+1.5	92	5	81	42	22	63	36	----	----	----	1.06	−2.6	6	------	s.	----	------	----	15	11	4	----	.0	.0
Birmingham	700	11	48	29.26	30.02	−.01	75.1	+.3	93	2	86	48	22	64	32	65	61	72	1.59	−1.8	2	5.2	nw.	25	se.	26	14	12	4	3.6	.0	.0
Mobile	57	86	161	29.94	30.00	.00	77.5	−.6	94	4	87	52	21	68	31	68	65	76	.97	−4.0	7	7.9	n.	34	e.	10	11	11	8	5.0	.0	.0
Montgomery	218	92	105	29.78	30.02	.00	76.9	+.6	95	1	87	54	22	67	33	67	63	71	.18	−2.8	3	5.7	n.	17	e.	26	11	10	9	4.8	.0	.0
Meridian	375	67	92	29.63	30.01	−.01	75.9	+1.4	95	9	88	47	22	64	37	66	63	76	.89	−2.1	8	4.2	n.	18	ne.	28	12	16	2	3.7	.0	.0
Vicksburg	247	82	102	29.76	30.01	−.01	76.8	+.5	95	9	88	50	21	67	25	67	64	72	.96	−1.9	4	6.7	s.	27	e.	2	15	11	4	4.1	.0	.0
New Orleans	53	76	84	29.93	30.00	+.02	79.4	+.2	93	2	87	61	21	72	21	70	67	72	4.54	−.5	8	5.9	ne.	16	se.	9	11	8	11	5.0	.0	.0
West Gulf States							**78.7**	**+1.6**										**67**	**2.37**	**−1.3**										**3.7**		
Shreveport	249	92	227	29.75	30.01	+.01	79.4	+2.5	98	1	90	54	21	68	29	68	63	66	1.33	−1.5	5	8.7	s.	31	nw.	2	15	13	2	3.6	.0	.0
Bentonville	1,303	12	38	29.69	30.03	+.01	72.8	+3.9	96	1	86	37	20	60	38	----	----	----	1.46	−2.2	5	5.0	s.	15	s.	11	16	12	2	----	.0	.0
Fort Smith	463	57	82	29.55	30.02	+.01	77.4	+3.4	100	1	89	46	20	65	36	65	59	61	2.13	−.9	5	6.3	e.	21	s.	5	13	14	3	3.8	.0	.0
Little Rock	357	94	102	29.64	30.01	−.02	76.6	+2.5	99	1	87	48	20	66	33	65	59	63	.99	−2.2	7	7.0	sw.	22	ne.	7	11	14	5	4.4	.0	.0
Austin	605	68	90	29.36	29.99	------	79.4	+1.1	97	27	91	57	22	68	36	68	63	66	2.85	−.6	7	5.8	s.	30	ne.	14	18	11	1	2.5	.0	.0
Brownsville	57	88	96	29.90	29.96	------	80.8	+.2	96	29	89	66	21	73	25	72	70	78	1.65	−3.9	7	8.1	se.	26	ne.	10	15	11	4	4.1	.0	.0
Corpus Christi	20	11	78	29.96	29.98	+.03	80.6	+.9	93	28	87	66	22	74	23	73	70	76	1.44	−3.0	8	8.7	se.	25	se.	12	12	12	6	4.2	.0	.0
Dallas	512	220	227	29.45	29.99	------	79.2	------	97	27	90	50	21	68	32	65	56	51	.51	−2.2	2	9.7	s.	29	nw.	27	17	8	5	3.3	.0	.0
Fort Worth	679	92	110	29.30	30.00	+.01	80.3	+3.4	97	9	92	50	21	69	39	----	----	----	.78	−1.7	3	8.1	s.	24	n.	15	21	6	3	2.0	.0	.0
Galveston	54	106	114	29.94	30.00	+.02	80.2	+.1	90	9	85	67	21	75	17	72	68	70	7.13	+1.6	9	8.4	s.	28	se.	10	12	13	5	4.1	.0	.0
Houston	138	157	190	29.86	30.00	------	79.0	.0	94	28	88	58	21	70	24	----	----	----	4.25	+.2	8	7.8	s.	22	se.	4	12	11	7	4.6	.0	.0
Palestine	510	64	72	29.49	30.01	+.02	78.2	+1.2	96	27	90	55	21	67	34	66	60	64	1.29	−1.6	3	5.9	s.	22	ne.	10	20	7	3	2.6	.0	.0
Port Arthur	34	59	134	29.96	30.00	------	79.0	------	94	1	87	58	21	71	26	70	67	75	5.61	+.8	10	9.5	e.	42	e.	9	13	10	7	4.3	.0	.0
San Antonio	693	111	301	29.28	29.98	+.02	79.6	+.6	96	28	90	59	22	69	30	67	61	62	1.82	−1.2	7	9.5	e.	37	se.	5	12	13	5	4.4	.0	.0

[1] Observations taken at airport.

TABLE 2.—*Climatological data for Weather Bureau stations, September 1938*—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							**69.6**	**+0.9**										**74**	**2.95**	**0.0**										**5.4**		
Chattanooga	762	71	214	29.22	30.02	−0.04	74.2	+2.0	95	8	85	46	22	64	33	64	60	70	.32	−2.8	5	6.6	w.	26	w.	14	9	11	10	5.3	0.0	0.0
Knoxville	995	66	84	28.99	30.03	−.03	71.9	+1.3	92	6	82	47	21	62	33	64	61	78	3.13	+.4	9	4.5	ne.	17	w.	14	14	9	7	4.5	.0	.0
Memphis	399	78	86	29.59	30.01	−.02	76.1	+2.5	96	9	85	49	20	67	26	66	62	68	1.38	−1.4	3	6.7	sw.	18	n.	3	13	13	4	4.3	.0	.0
Nashville	546	168	188	29.47	30.05	−.01	71.8	.0	93	8	82	46	20	62	29	64	60	75	3.40	.0	9	6.3	nw.	31	n.	10	10	11	9	5.0	.0	.0
Lexington	989	6	----	----	----	----	69.8	+1.3	96	6	81	41	20	58	35	----	----	----	2.29	−.8	11	----	n.	----	----	----	13	7	10	----	.0	.0
Louisville	525	188	234	29.45	30.03	−.03	71.2	+.7	92	7	80	48	19	63	24	63	59	73	2.99	+.2	8	9.0	sw.	26	sw.	12	15	9	6	4.2	.0	.0
Evansville	431	76	116	29.55	30.01	−.05	72.6	+1.9	95	8	83	47	19	62	27	63	59	70	1.81	−1.5	8	7.3	sw.	25	n.	8	12	10	8	5.0	.0	.0
Indianapolis	822	194	230	29.14	30.02	−.04	68.8	+1.9	91	5	78	45	19	59	29	60	56	70	1.74	−1.7	6	9.7	sw.	25	nw.	22	9	10	11	5.5	.0	.0
Terre Haute	575	63	149	29.38	30.00	----	71.2	----	94	5	82	44	19	60	31	62	58	72	1.50	−2.1	6	8.0	sw.	20	nw.	15	12	11	7	4.3	.0	.0
Cincinnati	627	11	51	29.35	30.02	−.05	68.6	+1.5	92	12	78	46	20	59	29	61	58	79	3.80	+1.2	9	6.3	sw.	21	sw.	14	10	9	11	5.8	.0	.0
Columbus	822	90	210	29.15	30.02	−.05	67.4	+.9	91	4	77	46	21	58	32	59	54	70	5.40	+2.8	7	8.1	s.	33	w.	12	6	10	14	6.1	.0	.0
Dayton	899	186	213	29.06	30.00	----	67.4	+.8	90	4	76	46	30	58	29	60	56	72	4.00	+1.1	6	8.8	sw.	27	sw.	14	8	11	11	5.8	.0	.0
Elkins	1,947	65	83	28.03	30.06	−.02	63.5	+.5	85	6	73	43	26	54	39	58	56	86	4.64	+1.5	15	4.8	se.	19	nw.	21	6	4	20	7.4	.0	.0
Parkersburg	637	77	84	29.34	30.01	−.07	68.0	+.7	90	4	77	44	20	58	31	58	57	76	3.61	+.8	9	5.6	se.	21	nw.	12	9	8	13	5.6	.0	.0
Pittsburgh [1]	1,273	39	54	28.67	30.02	−.06	63.6	−2.8	86	4	73	44	22	54	31	56	56	74	4.30	+1.7	9	9.6	sw.	29	w.	12	6	8	16	6.5	.0	.0
Lower Lake Region							**60.9**	**−2.1**										**76**	**4.61**	**+1.6**										**6.0**		
Buffalo	768	243	280	29.18	30.00	−.06	59.2	−3.2	76	4	66	44	30	52	28	54	51	76	3.57	+.6	12	13.3	nw.	54	sw.	22	7	13	10	5.8	.0	.0
Canton	448	10	61	29.52	29.99	----	54.9	−4.4	78	4	65	31	9	44	34	51	47	78	5.80	+2.4	13	7.1	sw.	38	sw.	22	10	5	15	6.2	.0	.0
Ithaca	836	77	100	29.12	30.02	----	57.8	−3.8	82	4	68	38	6	48	36	53	50	80	6.71	+3.6	15	8.6	nw.	29	nw.	21	3	11	16	7.2	.0	.0
Oswego	335	71	85	29.63	30.00	−.06	58.2	−3.0	77	4	66	42	26	51	32	53	50	75	4.91	+2.2	13	9.2	se.	30	nw.	21	7	8	15	6.5	.0	.0
Rochester	523	86	102	29.45	30.02	−.04	59.5	−2.9	80	4	67	42	25	52	29	53	49	72	5.27	+2.8	11	7.7	sw.	30	sw.	4	8	11	11	6.0	.0	.0
Syracuse	596	65	79	29.37	30.02	−.05	58.9	−2.9	80	4	67	40	25	51	36	----	----	----	4.90	+2.2	14	7.3	s.	23	nw.	21	8	10	12	6.3	.0	.0
Erie	714	130	81	29.24	30.00	−.06	61.8	−1.8	82	26	70	47	25	54	29	56	53	79	7.42	+4.0	14	8.2	se.	20	se.	11	9	11	10	5.6	.0	.0
Cleveland	762	267	318	29.19	30.01	−.05	63.4	−.5	83	12	70	46	21	57	24	56	52	71	6.17	+2.8	10	14.2	se.	44	w.	12	8	9	13	5.9	.0	.0
Sandusky	629	5	67	29.33	30.01	−.05	64.8	−.5	92	12	73	44	20	57	30	----	----	----	4.42	+1.5	10	8.1	sw.	18	nw.	21	6	7	17	6.7	.0	.0
Toledo	628	79	87	29.35	30.03	−.03	63.8	−.6	89	12	72	46	19	56	29	57	53	74	2.44	−.4	8	8.8	w.	23	w.	18	11	7	12	5.1	.0	.0
Fort Wayne	857	69	84	29.10	30.02	----	65.4	.0	90	12	75	43	19	56	30	58	53	73	2.15	−.9	9	8.0	sw.	24	sw.	18	7	15	8	5.3	.0	.0
Detroit [1]	626	5	78	29.34	30.02	−.04	61.8	−1.7	87	12	71	42	25	53	29	55	52	77	1.51	−1.4	8	8.6	nw.	24	sw.	18	10	5	15	5.9	.0	.0
Upper Lake Region							**59.2**	**−0.3**										**80**	**3.44**	**+0.1**										**5.8**		
Alpena	609	13	89	29.36	30.03	.00	57.2	−.4	84	23	65	40	20	49	33	52	49	78	2.90	−.1	9	11.0	nw.	38	se.	18	9	8	13	5.6	.0	.0
Escanaba	612	41	49	29.36	30.02	+.01	57.4	+.3	80	26	66	42	29	49	28	53	50	81	2.68	−.6	11	10.8	n.	30	n.	18	8	8	14	6.3	.0	.0
Grand Rapids	707	70	244	29.25	30.02	−.03	61.7	−1.0	82	4	71	45	16	53	28	56	54	83	2.21	−1.3	12	10.0	e.	39	sw.	18	10	7	13	5.8	.0	.0
Lansing	878	5	90	29.08	30.02	----	59.6	−1.8	83	4	69	40	25	50	30	54	52	82	1.64	−1.3	10	7.4	n.	25	sw.	18	11	5	14	5.8	.0	.0
Marquette	734	44	69	29.22	30.02	+.02	56.0	−1.5	86	23	64	42	5	48	33	52	48	79	1.87	−1.4	8	7.6	w.	26	sw.	25	6	11	13	6.3	.0	.0
Sault Sainte Marie	614	11	52	29.35	30.05	+.03	54.9	−.6	78	23	63	39	29	47	30	50	48	84	2.55	−1.6	9	7.5	nw.	24	nw.	4	8	6	16	6.0	.0	.0
Chicago	673	7	131	29.29	30.01	−.03	65.0	−.2	89	4	72	42	19	59	26	59	56	80	5.29	+2.2	13	9.3	ne.	25	nw.	12	11	6	13	5.4	.0	.0
Green Bay	617	109	141	29.35	30.02	.00	59.9	−.5	80	23	68	44	29	52	27	54	51	79	6.31	+2.8	15	9.4	ne.	30	n.	18	10	5	15	6.2	.0	.0
Milwaukee	681	97	221	29.26	30.01	−.02	62.8	+.3	86	4	69	45	19	56	27	57	55	80	6.12	+2.8	13	12.4	n.	32	se.	18	12	2	16	5.8	.0	.0
Duluth	1,133	5	47	28.80	30.02	+.04	57.9	+2.8	83	23	67	38	18	49	30	51	48	78	2.85	−.5	6	12.5	ne.	28	nw.	18	11	6	13	5.1	.0	.0
North Dakota							**61.7**	**+4.7**										**62**	**0.95**	**−0.7**										**3.8**		
Moorhead, Minn	940	50	58	29.02	30.03	+.07	61.1	+2.9	91	25	73	33	19	49	45	53	47	66	1.97	−.2	7	7.4	n.	20	n.	26	20	2	8	3.9	.0	.0
Bismarck	1,674	8	57	28.27	30.03	+.09	63.6	+5.5	94	22	76	32	19	51	44	53	45	60	1.11	−.1	3	7.1	e.	22	e.	7	16	6	8	4.0	.0	.0
Devils Lake	1,478	11	44	28.47	30.03	+.09	60.5	+4.6	94	22	74	29	18	47	47	50	42	59	.02	−1.6	1	8.0	e.	20	sw.	10	14	10	6	4.5	.0	.0
Grand Forks	833	12	67	----	----	----	59.5	+3.1	94	25	74	25	20	45	57	51	46	----	1.14	−.9	5	7.8	n.	----	----	----	12	12	6	----	.0	.0
Williston	1,878	42	50	28.05	30.01	+.08	63.8	+7.2	93	22	77	33	18	50	44	53	46	61	.49	−.6	2	7.0	se.	27	w.	10	21	2	7	3.0	.0	.0
Upper Mississippi Valley							**67.6**	**+2.3**										**76**	**4.76**	**+1.1**										**4.6**		
Minneapolis and St. Paul, Minn [1]	848	32	61	29.11	30.01	+.02	62.2	+.8	89	23	72	40	18	52	37	55	52	77	3.24	+.1	8	9.0	n.	25	se.	8	12	5	13	5.1	.0	.0
La Crosse	714	11	48	29.25	30.02	+.01	62.6	+.4	87	4	72	43	21	54	31	57	55	85	7.60	+3.6	13	4.5	n.	12	n.	18	12	4	14	5.7	.0	.0
Madison	974	70	78	28.97	30.01	−.02	62.0	−.4	87	4	69	44	19	55	30	57	54	81	10.29	+6.6	13	7.8	n.	29	ne.	17	11	5	14	5.7	.0	.0
Charles City	1,015	10	51	28.94	30.02	+.02	64.2	+3.2	90	9	75	41	19	53	36	58	55	81	8.97	+5.3	10	5.2	se.	15	se.	6	15	8	7	4.3	.0	.0
Davenport	606	66	161	29.36	30.01	−.02	68.4	+2.8	94	7	78	41	19	58	33	61	57	76	5.74	+2.2	12	8.3	ne.	32	n.	9	12	10	8	4.9	.0	.0
Des Moines	861	5	99	29.11	30.00	−.02	69.0	+3.4	97	8	81	39	19	57	37	60	56	70	2.55	−1.1	7	7.7	sw.	29	sw.	10	15	11	4	3.6	.0	.0
Dubuque	699	60	79	29.26	30.01	−.02	65.2	+1.2	92	4	74	44	19	56	35	58	56	79	9.09	+5.1	11	5.4	nw.	18	nw.	11	13	7	10	5.1	.0	.0
Keokuk	614	64	78	29.35	30.00	−.03	70.4	+2.9	96	9	80	40	19	60	34	62	58	73	3.49	−.4	6	5.8	sw.	18	nw.	19	14	6	10	4.8	.0	.0
Cairo	358	87	93	29.63	30.00	−.05	73.2	+1.7	96	9	83	48	20	63	28	65	62	75	.99	−1.9	6	6.8	s.	23	e.	1	15	9	6	4.2	.0	.0
Peoria	609	11	45	29.35	30.02	−.02	68.1	+3.8	94	7	79	38	19	57	38	60	58	79	2.12	−1.9	9	4.7	w.	17	nw.	18	17	8	5	3.5	.0	.0
Springfield, Ill	636	5	191	29.33	30.00	−.05	71.9	+4.3	99	9	83	43	19	61	30	62	57	69	1.98	−1.7	6	9.4	w.	31	se.	9	14	8	8	4.5	.0	.0
St. Louis	568	179	303	29.40	30.00	−.04	74.0	+3.5	98	8	83	45	19	65	28	63	57	63	1.01	−2.4	6	9.1	sw.	24	nw.	17	17	8	5	3.3	.0	.0
Missouri Valley							**70.1**	**+4.0**										**65**	**2.66**	**−0.6**										**3.7**		
Columbia, Mo	784	6	66	29.18	30.00	−.03	71.6	+3.4	99	10	83	40	19	60	37	----	----	----	1.49	−2.9	7	5.8	s.	28	nw.	17	16	6	8	4.1	.0	.0
Kansas City [1]	750	32	45	29.21	30.00	−.02	72.3	+3.4	99	9	84	40	19	60	38	62	57	67	1.84	−2.7	9	7.2	sw.	35	w.	10	17	8	5	3.5	.0	.0
St. Joseph	967	11	49	28.99	30.01	----	71.7	----	98	9	84	39	19	60	39	61	55	64	1.24	−2.7	9	6.5	s.	21	nw.	17	19	8	3	2.9	.0	.0
Springfield, Mo	1,324	5	78	28.64	30.02	−.01	72.9	+4.0	96	10	84	44	21	62	37	61	56	65	1.81	−1.7	8	6.8	s.	22	w.	13	15	10	5	3.4	.0	.0
Topeka	987	65	87	28.97	30.01	----	72.8	+4.1	100	10	86	38	19	60	40	61	55	61	.37	−3.4	4	7.8	s.	23	nw.	14	18	9	3	3.3	.0	.0
Lincoln	1,189	11	81	28.75	30.00	+.01	71.3	+4.9	98	9	83	38	19	60	37	60	54	64	2.94	.0	6	7.9	s.	32	s.	5	15	10	5	4.0	.0	.0
Omaha [1]	982	31	44	28.97	30.01	+.01	70.4	+3.6	98	9	83	38	20	58	39	61	57	72	4.84	+1.6	8	7.8	s.	32	sw.	5	16	6	8	3.9	.0	.0
Valentine	2,598	47	54	27.35	30.04	+.08	66.0	+3.5	95	9	80	35	18	52	48	56	49	64	1.23	−.1	7	6.9	n.	25	sw.	25	14	9	7	4.2	.0	.0
Sioux City	1,138	64	106	28.80	30.00	+.02	68.3	+4.9	97	9	80	35	19	56	43	59	54	66	7.94	+4.9	9	7.2	s.	25	nw.	18	15	8	7	4.1	.0	.0
Huron	1,307	59	74	28.65	30.04	+.08	65.7	+4.4	92	22	78	33	1	53	42	56	49	64	2.95	+1.4	6	7.5	n.	36	w.	9	16	10	4	3.5	.0	.0

[1] Observations taken at airport.

TABLE 2.—*Climatological data for Weather Bureau stations, September 1938*—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 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.
Northern Slope							64.0	+7.1										56	1.41	+0.2										3.5		
Havre	2,507	11	67	27.40	30.01	+0.07	65.6	+9.2	92	22	82	42	19	49	47	53	44	55	1.34	.0	6	7.2	e.	28	e.	5	21	7	2	2.5	0.0	0.0
Helena	4,124	85	111	25.88	30.00	+.03	64.2	+7.6	86	18	78	44	12	50	38	50	38	43	.72	−.5	5	7.2	sw.	37	s.	4	18	6	6	3.3	.0	.0
Missoula	3,263	80	91	------	------	------	66.2	+10.8	93	3	82	41	27	51	43	----	----	----	.66	−.8	7	6.1	s.	38	sw.	29	18	9	3	3.0	.0	.0
Kalispell	2,973	48	56	27.00	30.01	+.05	62.4	+8.9	91	1	77	36	6	48	37	52	44	58	1.14	−.1	8	5.3	nw.	27	sw.	29	19	4	7	3.3	.0	.0
Miles City	2,371	48	55	27.54	29.99	+.04	67.6	+6.4	95	22	81	46	18	54	43	55	45	51	.34	−.7	5	4.9	s.	22	nw.	9	16	10	4	3.6	.0	.0
Rapid City	3,259	50	58	26.71	30.03	+.07	65.9	+5.5	90	29	78	39	19	54	46	55	46	54	1.29	+.1	8	6.7	w.	21	s.	30	18	5	7	3.5	.0	.0
Cheyenne [1]	6,144	5	39	24.10	30.04	+.08	60.0	+3.0	83	29	74	36	19	46	44	50	44	65	3.33	+2.1	8	8.7	w.	34	sw.	9	17	7	6	3.5	.0	.0
Lander	5,352	60	68	24.78	30.02	+.06	62.2	+6.5	84	19	77	40	28	48	42	49	38	50	.65	−.3	5	4.6	sw.	25	sw.	8	16	8	6	4.1	.0	.0
Sheridan	3,790	10	47	26.18	30.04	------	62.6	------	92	21	81	33	19	44	55	50	43	59	.04	−1.2	2	4.1	s.	16	se.	1	15	10	5	3.8	.0	.0
Yellowstone Park	6,241	12	46	24.04	30 13	+.16	57.8	+7.7	80	21	73	35	17	42	44	45	36	52	.54	−.7	8	6.5	sw.	26	w.	29	13	14	3	3.6	.0	.0
North Platte	2,821	11	51	27.14	30.03	+.06	67.7	+5.6	94	9	81	37	19	54	46	57	52	68	5.41	+4.1	10	6.0	w.	20	sw.	7	17	4	9	4.2	.0	.0
Middle Slope							71.5	+3.4										58	2.22	+0.1										3.1		
Denver	5,292	106	113	24.86	30.05	+.09	65.4	+2.5	86	9	76	48	19	54	31	52	43	55	3.42	+2.4	8	7.0	s.	24	n.	9	18	5	7	3.7	.0	.0
Pueblo	4,685	80	86	25.40	30.02	+.06	67.4	+2.8	89	9	81	44	30	54	42	55	46	56	1.80	+1.0	5	6.1	nw.	28	w.	7	17	8	5	3.5	.0	.0
Concordia	1,392	50	58	28.56	30.01	+.02	72.2	+3.9	98	10	85	36	19	59	40	60	54	62	1.52	−1.1	7	7.5	s.	21	s.	5	18	9	3	2.9	.0	.0
Dodge City	2,509	10	86	27.44	30.00	+.02	73.0	+3.6	94	23	86	43	19	60	39	59	52	58	2.73	+.8	8	10.0	s.	33	sw.	5	20	4	6	3.0	.0	.0
Wichita	1,358	85	93	28.59	30.00	.00	74.2	+3.6	96	30	85	43	19	63	35	61	54	56	2.62	−.5	7	8.7	se.	25	n.	17	24	3	3	2.1	.0	.0
Oklahoma City	1,214	10	47	28.73	29.99	.00	76.6	+3.8	99	1	88	47	20	65	37	63	56	59	1.23	−1.8	3	7.5	s.	26	s.	2	18	6	6	3.4	.0	.0
Southern Slope							76.2	+2.6										53	0.93	−1.6										3.3		
Abilene	1,738	10	56	28.21	29.98	+.02	79.0	+3.7	97	9	92	54	17	66	36	62	53	48	.29	−2.4	4	8.1	s.	18	n.	16	18	8	4	3.3	.0	.0
Amarillo	3,676	10	49	26.35	30.01	+.05	73.6	+4.3	94	26	86	53	20	61	38	58	49	51	1.62	−.7	8	7.9	se.	19	se.	3	20	6	4	3.0	.0	.0
Del Rio	960	63	71	28.96	29.93	−.01	80.4	+1.2	98	10	91	60	18	70	32	66	59	55	.36	−2.6	3	8.1	se.	24	n.	14	14	11	5	3.7	.0	.0
Roswell	3,566	75	85	26.44	29.99	+.07	71.6	+1.3	91	13	85	52	25	58	38	59	51	59	1.45	−.7	8	6.0	s.	26	s.	6	18	6	6	3.3	.0	.0
Southern Plateau							72.5	+2.1										52	1.08	+0.2										3.1		
El Paso	3,778	82	101	26.23	29.94	+.06	73.8	−.1	91	25	86	55	24	62	36	60	52	54	2.31	+1.1	7	6.2	e.	26	e.	6	23	6	1	2.1	.0	.0
Albuquerque [1]	4,972	5	39	25.15	29.97	------	67.4	−.5	86	29	80	49	25	54	36	55	48	61	2.36	+1.5	8	6.4	n.	35	nw.	16	17	6	7	3.6	.0	.0
Santa Fe	7,013	38	53	23.40	30.03	+.10	61.7	+.8	79	26	73	44	17	51	29	49	41	56	1.48	.0	11	5.0	e.	15	ne.	23	12	9	9	5.3	.0	.0
Flagstaff	6,907	10	59	23.47	29.93	+.04	59.8	+4.3	80	9	76	38	19	44	39	----	----	56	.97	−.5	9	6.6	nw.	24	nw.	23	4	21	5	----	.0	.0
Phoenix	1,107	39	51	28.69	29.81	.00	86.8	+4.1	107	9	101	67	13	72	38	66	54	38	T	−.8	0	5.5	e.	30	nw.	10	20	6	4	2.9	.0	.0
Yuma	141	9	54	29.64	29.78	.00	87.4	+3.7	108	13	103	64	8	72	38	70	60	47	.35	.0	2	4.4	s.	26	s.	30	25	4	1	1.4	.0	.0
Independence	3,957	5	26	25.99	29.95	+.09	70.4	+2.4	94	3	86	48	7	55	40	53	36	----	.08	.0	1	------	s.	----	------	---	19	7	4	----	.0	.0
Middle Plateau							65.2	+3.7										42	0.96	+0.4										3.2		
Reno	4,527	61	76	25.50	29.96	+.01	65.2	+4.7	91	15	82	40	29	49	42	50	38	44	.07	−.2	2	5.5	w.	23	w.	4	23	6	1	1.8	.0	.0
Tonopah	6,090	12	20	------	------	------	67.8	------	86	2	79	40	6	57	38	49	34	31	T	------	0	7.8	se.	17	se.	29	---	---	---	----	.0	.0
Winnemucca	4,344	18	56	25.64	29.97	+.04	64.4	+5.2	95	3	84	34	7	44	54	48	33	38	.17	−.2	1	6.7	ne.	22	s.	27	20	5	5	2.9	.0	.0
Modena	5,473	10	43	24.69	29.95	+.03	63.0	+3.0	85	3	80	40	26	46	44	49	38	48	1.17	+.4	6	9.0	w.	32	s.	29	13	10	7	4.2	.0	.0
Salt Lake City [1]	4,227	32	46	25.77	29.95	.00	68.7	------	90	4	84	47	11	54	37	53	40	40	.09	------	3	9.6	se.	31	sw.	22	16	12	2	3.4	.0	.0
Grand Junction	4,602	60	68	25.47	30.01	+.06	68.2	+2.0	87	28	81	49	13	56	33	55	46	52	2.41	+1.5	6	5.9	se.	27	nw.	10	14	11	5	3.8	.0	.0
Northern Plateau							68.2	+7.8										44	0.28	−0.4										3.0		
Baker	3,471	36	54	26.49	30.01	+.02	63.4	+7.4	94	2	80	37	9	47	44	51	41	51	.73	.0	6	5.8	s.	22	s.	23	17	7	6	3.5	.0	.0
Boise	2,739	79	87	27.17	29.98	+.01	68.6	+6.7	96	3	83	42	9	54	38	54	42	44	.34	−.2	3	4.9	nw.	17	se.	23	22	4	4	2.3	.0	.0
Pocatello [1]	4,441	5	31	25.54	29.99	+.03	65.4	------	90	18	83	37	11	48	47	50	36	39	.02	------	1	7.3	sw.	26	sw.	7	23	5	2	2.5	.0	.0
Spokane	1,929	101	110	27.97	29.98	.00	67.8	+8.6	98	18	83	45	12	53	41	54	43	47	.09	−.8	6	4.7	s.	21	sw.	23	20	3	7	3.2	.0	.0
Walla Walla	991	57	65	28.91	29.96	−.04	71.2	+7.4	98	1	84	51	25	59	35	56	45	41	.15	−.8	4	4.8	s.	18	w.	4	18	10	2	3.1	.0	.0
Yakima	1,076	58	67	28.84	29.97	------	69.8	+8.7	96	2	84	45	30	56	35	56	45	45	.09	−.4	3	5.6	nw.	23	nw.	18	16	10	4	3.3	.0	.0
North Pacific Coast Region							63.0	+4.0										74	1.38	−0.8										5.3		
North Head	211	11	56	29.82	30.04	+.01	57.8	+1.3	74	13	62	49	14	54	23	56	55	94	3.12	+.1	13	11.9	n.	39	s.	19	5	8	17	7.1	.0	.0
Seattle	125	90	321	29.89	30.02	+.01	63.4	+5.3	87	14	72	50	16	55	32	58	54	73	.48	−1.3	7	6.6	n.	21	sw.	4	11	8	11	5.2	.0	.0
Tacoma	194	172	201	29.83	30.03	+.01	61.7	+4.4	86	14	70	47	27	54	32	----	----	----	.48	−1.6	9	6.2	n.	23	sw.	4	6	13	11	6.0	.0	.0
Tatoosh Island	86	10	54	29.94	30.04	+.03	55.2	+2.2	67	13	60	46	17	51	19	54	53	91	1.95	−2.7	11	9.0	s.	35	e.	14	8	.6	16	6.5	.0	.0
Medford	1,329	29	58	28.59	29.97	------	67.9	+4.6	102	16	85	44	30	51	50	56	46	55	.58	+.1	5	------	nw.	----	------	---	19	4	7	3.5	.0	.0
Portland Oreg.	153	68	106	29.84	30.00	−.03	67.5	+5.8	95	17	78	53	20	57	36	60	54	67	1.38	−.6	8	5.4	nw.	15	s.	4	10	13	7	4.7	.0	.0
Roseburg	510	45	76	29.45	29.99	−.03	67.2	+4.3	96	13	81	48	26	53	44	58	51	62	1.64	+.4	5	3.9	nw.	21	sw.	28	14	8	8	4.0	.0	.0
Middle Pacific Coast Region							67.0	+2.1										64	0.90	+0.2										4.2		
Eureka	60	72	88	29.96	30.03	+.02	57.0	+1.1	68	28	62	48	13	52	16	54	53	90	1.74	+.7	7	5.4	n.	18	n.	5	3	10	17	7.4	.0	.0
Redding [1]	722	20	34	------	------	------	76.7	+3.2	105	14	88	56	30	65	34	58	42	34	1.39	+.6	2	8.0	nw.	24	nw.	4	17	7	6	3.1	.0	.0
Sacramento	66	92	115	29.83	29.90	+.01	73.1	+3.8	101	14	88	54	20	59	39	60	50	51	.30	−.1	2	6.1	s.	17	s.	16	23	5	2	2.0	.0	.0
San Francisco	155	112	132	29.78	29.94	.00	61.2	+.3	89	9	68	51	22	54	35	56	54	83	.15	−.3	1	9.0	w.	27	w.	3	8	19	3	4.5	.0	.0
South Pacific Coast Region							73.7	+3.9										64	0.05	−0.1										3.1		
Fresno	327	97	105	29.54	29.88	+.01	76.8	+3.4	102	15	92	55	23	62	34	61	49	44	.13	−.1	1	6.2	nw.	16	nw.	3	22	2	6	2.4	.0	.0
Los Angeles	338	159	191	29.53	29.89	+.01	74.0	+5.0	94	13	84	57	11	64	29	63	58	67	.01	−.2	1	5.2	sw.	18	w.	17	21	5	4	2.7	.0	.0
San Diego	87	62	70	29.79	29.88	−.01	70.4	+3.3	88	26	77	58	12	64	27	65	62	80	.00	−.1	0	6.5	nw.	21	nw.	26	15	9	6	4.3	.0	.0
West Indies																																
San Juan, P. R.	82	9	54	29.86	29.94	------	80.5	.0	91	14	85	71	30	76	15	----	----	----	5.57	−.3	18	10.0	e.	26	e.	24	7	19	4	4.9	.0	.0

[1] Observations taken at airport.

TABLE 2.—*Climatological data for Weather Bureau stations, September 1938*—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 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.
Panama Canal																																
Balboa Heights	118	6	92	------	[2] 29.84	+0.02	79.4	−0.4	89	23	85	71	14	74	16	----	----	[2] 86	8.23	+0.1	20	4.8	nw.	18	se.	14	0	23	7	6.6	0.0	0.0
Cristobal	36	6	97	------	[2] 29.84	+.01	81.1	+.7	90	26	86	74	20	76	15	76	75	[2] 85	10.50	−2.0	19	5.7	se.	21	se.	6	0	12	18	7.7	.0	.0
Alaska																																
Fairbanks	454	11	87	[3] 29.11	[3] 29.61	------	49.3	+5.9	73	14	59	28	20	39	33	46	42	75	.58	−.8	12	6.3	s.	27	s.	15	0	8	22	8.2	.7	T
Juneau	80	96	116	[3] 29.80	[3] 29.89	------	54.1	+3.9	77	1	60	41	17	49	29	51	48	82	13.23	+2.8	24	7.8	se.	27	s.	20	2	1	27	8.9	.0	.0
Nome	22	5	32	------	[3] 29.61	------	41.8	+.2	61	13	50	26	18	34	24	----	----	76	2.09	−.7	13	8.9	n.	27	sw.	29	6	5	19	----	T	.0
Hawaiian Islands																																
Honolulu	38	86	100	29.93	29.97	------	78.6	+.4	85	8	83	71	15	74	14	71	67	69	.33	−1.0	12	8.8	e.	22	e.	19	13	15	2	3.8	.0	.0
Panama Canal																Late reports for August 1938																
Balboa Heights	118	6	92	------	[2] 29.84	+.01	79.4	−1.8	89	21	86	70	17	73	16	----	----	[2] 86	11.82	+4.0	21	4.9	nw.	20	s.	10	0	18	13	7.0	.0	.0
Cristobal	36	6	97	------	[2] 29.84	.00	80.6	+.4	90	30	86	73	11	75	15	75	74	[2] 85	22.32	+7.0	30	6.2	w.	24	w.	16	1	6	24	8.3	.0	.0

[1] Observations taken at airport. [2] Observations taken bihourly. [3] Pressure not reduced to a mean of 24 hours.

TABLE 3.—*Data furnished by the Canadian Meteorological Service, September 1938*

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	----	----	----	----	----	----	----	----	----	----	----	----
Sydney, Cape Breton Island	48	29.88	30.01	−0.03	59.4	+2.4	68.0	50.9	81	40	5.79	+2.42	0.0
Halifax, Nova Scotia	88	29.77	30.03	−.02	59.7	+1.4	66.1	53.3	75	46	8.24	+4.50	.0
Yarmouth, Nova Scotia	65	29.91	30.02	−.04	57.6	+1.6	65.5	49.6	81	39	5.91	+2.40	.0
Charlottetown, Prince Edward Island	38	29.93	30.02	.00	58.2	+1.3	64.9	51.4	80	40	4.24	+.55	.0
Chatham, New Brunswick	28	29.85	29.97	.00	55.4	−1.0	64.7	46.1	81	34	3.04	+.01	.0
Father Point, Quebec	20	29.91	29.93	−.05	48.2	−1.5	55.2	41.1	70	29	3.30	+.32	.0
Quebec, Quebec	296	29.66	29.98	−.04	54.8	−.8	62.0	47.7	73	37	5.54	+1.52	.0
Doucet, Quebec	1,236	28.68	30.02	−.01	48.5	+.1	58.3	38.6	73	21	4.24	−.11	.0
Montreal, Quebec	187	----	----	----	----	----	----	----	----	----	----	----	----
Ottawa, Ontario	236	29.74	30.00	−.03	54.2	−3.8	63.4	45.0	74	33	3.90	+1.10	.0
Kingston, Ontario	285	29.68	30.00	−.05	58.3	−1.7	65.3	51.3	81	40	5.57	+2.77	.0
Toronto, Ontario	379	29.60	30.02	−.03	58.9	−1.5	67.2	50.7	82	42	3.98	+1.02	.0
Cochrane, Ontario	930	29.97	29.99	−.03	50.8	−.6	60.0	41.6	80	31	2.15	−.92	.0
White River, Ontario	1,244	28.74	30.10	+.11	49.2	−.8	61.5	36.9	78	23	2.21	−.82	.0
London, Ontario	808	29.15	30.03	−.03	57.3	−3.2	67.1	47.5	80	37	2.57	−.31	.0
Southampton, Ontario	656	29.30	30.02	−.02	55.8	−3.4	65.0	46.5	79	36	2.50	−.38	.0
Parry Sound, Ontario	688	29.32	30.02	−.01	55.8	−1.6	64.8	46.9	76	38	2.76	−.85	.0
Port Arthur, Ontario	644	29.32	30.04	+.06	52.6	−.6	63.0	42.2	82	32	1.25	−2.13	.0
Winnipeg, Manitoba	760	29.18	30.04	+.07	59.4	+5.2	73.3	45.4	90	28	.24	−2.02	.0
Minnedosa, Manitoba	1,690	28.24	30.04	+.13	57.8	+5.8	72.7	42.8	89	27	.28	−1.32	.0
Le Pas, Manitoba	860	29.05	30.01	+.11	58.2	+9.0	71.2	45.2	84	28	.40	−1.41	.0
Qu'Appelle, Saskatchewan	2,115	27.78	30.04	+.08	61.1	+9.2	74.9	47.3	94	31	.89	−.74	.0
Moose Jaw, Saskatchewan	1,759	28.05	30.01	+.09	63.1	+9.6	77.6	48.7	95	36	1.04	−.23	.0
Swift Current, Saskatchewan	2,392	27.22	30.00	+.05	63.2	+9.9	76.5	49.9	89	39	1.72	+.45	.0
Medicine Hat, Alberta	2,365	27.52	30.00	+.07	64.3	+8.3	80.0	48.6	91	39	2.36	+1.20	.0
Calgary, Alberta	3,540	26.38	30.00	+.04	60.8	+10.3	76.7	44.8	88	35	.82	−.71	.0
Banff, Alberta	4,521	----	----	----	----	----	----	----	----	----	----	----	----
Prince Albert, Saskatchewan	1,450	28.46	30.00	+.06	59.6	+9.4	71.7	47.5	84	34	1.30	−.25	.0
Battleford, Saskatchewan	1,592	28.26	29.98	+.04	61.6	+10.1	76.3	46.8	90	33	3.99	+2.66	.0
Edmonton, Alberta	2,150	27.70	30.00	+.09	59.9	+9.7	75.1	44.7	90	36	.21	−1.10	.0
Kamloops, British Columbia	1,262	28.70	30.04	+.06	63.4	+4.8	75.5	51.4	89	45	1.41	+.59	.0
Victoria, British Columbia	230	29.80	30.05	+.06	58.8	+2.8	66.0	51.7	80	49	1.62	−.03	.0
Barkerville, British Columbia	4,180	----	----	----	----	----	----	----	----	----	----	----	----
Estevan Point, British Columbia	20	----	----	----	----	----	----	----	----	----	----	----	----
Prince Rupert, British Columbia	170	29.82	30.00	+.03	59.7	+6.1	62.5	56.9	78	41	8.33	+.54	.0
St. George's, Bermuda	158	----	30.07	.00	79.5	+1.7	85.3	73.6	90	68	4.51	−1.05	.0
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Cape Race, Newfoundland	99	----	----	----	60.4	+3.8	66.4	54.4	78	47	5.30	+1.29	0.0
Father Point, Quebec	20	29.85	29.88	−0.04	59.6	+3.9	65.6	53.5	76	40	5.53	+2.42	.0
Winnipeg, Manitoba	760	29.03	29.88	−.08	67.2	+3.2	80.1	54.2	92	41	1.74	−.60	.0
Kamloops, British Columbia	1,262	28.68	30.00	+.08	65.3	−3.0	77.8	52.8	86	46	2.94	+1.86	.0
Estevan Point, British Columbia	20	30.09	30.11	+.07	55.8	−1.0	61.0	50.6	65	43	2.07	−1.21	.0

TABLE 4.—*Severe local storms, September 1938*

[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 Yearbook]

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
Albuquerque, N. Mex	Aug. 31–Sept. 1					Rain	Underpasses flooded; streets washed out; adobe houses undermined; many cellars flooded.
Diamond, Mo., vicinity of	1		880	0		Tornado	Trees blown down; roofs damaged; windows blown out; 1 person injured. Storm moved from northwest to southeast over a path 4 miles long.
Oklahoma City, Okla	2				$1,500	Wind and rain	Property damaged in southwest portion of the city.
Colorado, Fort Collins to Pueblo and vicinities.	2–3			7		Heavy rain and flood.	Much property damage; loss to crops.
Custer and Fall River Counties, S. Dak.	4	7–10 p. m		2	54,000	do	Damage to railroad property, buildings, bridges, highways, and farms; loss to livestock.
Pondora County, Mont	5	2 p. m	[1] 3		60,000	Hail	Loss to standing wheat, mustard, and sugar beets; path 22 miles long.
Yellowstone County, Mont., western portion.	5	3:30 p. m	[1] 1		1,200	do	Loss to crops; path 2 miles long.
Phillips County, Mont., southern portion.	5	6–7 p. m				Heavy hail and rain.	Considerable damage to gardens; hay lands flooded.
Subiaco, Ark	5				2,500	Electrical	Farmhouse destroyed by lightning.
Big Horn County, Mont	5		[1] 4		5,000	Hail	Loss to sugar beets; path 10 miles long.
Landeau to Trail City, S. Dak	5			3	56,500	Torrential rain and flood.	7 miles of telegraph line destroyed; several bridges, buildings, farm machinery and a mile of track of a branch line of the Milwaukee R. R. washed out.
Pondora County, Mont	6	2 a. m	[1] 39		40,000	Hail	Loss to crops; path 30 miles long.
Jerome to Flagstaff, Ariz	6				550	Rain	A 300-ton landslide caused damage to highway.
Minnesota, extreme southeastern counties.	6–10			3	100,000	Rain and flood	Several short stretches of railroad tracks, some bridges and small buildings washed out; many basements flooded; number of houses and stores partially submerged; highways under water; poultry and hogs drowned; communication systems disrupted. In portions of Winona and Wabasha Counties 50 percent of late crops ruined. Greatest damage occurred in the Alba-Beaver area.
Toole County, Mont., northern portion.	7	3–4 a. m	[1] 3			Heavy hail	Loss of crops; path 10 miles long. This storm reported to have been the second worst hailstorm in 36 years.
Fergus County, Mont., northern and western portions.	7	3:30–10 p. m	[1] 6		17,500	Hail	Loss to crops; property damage, $5,000; path 60 miles long.
Salem, S. Dak., 6 miles south	7	7 p. m	227–1,760	0	30,000	Tornado	Telephone lines and several farm buildings wrecked; house twisted on its foundation. Property damage, $25,000 crop loss, $5,000 path from 6 to 8 miles long.
Freeport, Ill	7				2,200	Electrical	17 cows killed by lightning.
Pana, Ill	7				1,000	Wind	Trees and several greenhouses damaged.
Nobles, Rock, Pipestone, Cottonwood, and Jackson Counties, Minn.	7–8				16,000	Rain and flood	Heavy to excessive rains caused a number of washouts on the Chicago, St. Paul, Minneapolis and Omaha Railroads between Worthington, Minn., and Sioux Falls, S. Dak. Many basements flooded in Worthington where 4.42 inches of rain occurred within a few hours with some highways under water. Crop loss, $5,000.
Blaine County, Mont	8	5:30 p. m	[1] 5		25,000	Heavy hail	Loss to wheat and hay; path 10 miles long.
Yellowstone County, Mont	8	do	[1] 2		5,000	do	Loss to beans and hay; path 5 miles long.
Wolsey, S. Dak	9	9:30 p. m	[1] 1		10,000	Wind	Several barns, garage, and outbuildings wrecked; roofs damaged; windows broken.
Canton, Ill.[2]	9	P. m				Heavy rain	City in darkness; in some sections water 3 feet deep in streets.
Chicago, Ill	9					Electrical	Man and horse killed; street car struck by lightning and 9 persons injured.
Phoenix to Tucson, Ariz	10	A. m				Duststorm	Visibility in some sections reduced to 880 yards.
Wilder, Kans., vicinity of	10	2:30 p. m	200		800	Wind	Damage to small buildings and telephone lines; path 1 mile long.
McLouth, Kans., vicinity of	10	4 p. m	2,610		20,000	Tornadic winds	Tornado cloud observed, but did not reach the ground. Damage from side winds only. Loss to crops, $9,000, included in the estimate; path 3 miles long.
Fremont County, Iowa	10	5 p. m		1	15,000	Wind	Property damage, $5,000; loss to crops, $10,000. Man fatally injured.
Charlotte, Iowa	11	1:50 a. m				Thunderstorm and hail.	Excessive rain caused small streams to overflow, flooding many acres of land. Hail caused loss to corn crop. Bandstand in city park wrecked; many trees, telephone and telegraph poles down; electric service interrupted until noon.
San Pedro Valley, Ariz., upper portion.	11				905	Heavy rain	Damage to railroad property.
Fort Cobb, Okla	12	6 p. m	[1] 2		1,800	Wind	Loss to crops, $800; property damage, $1,000; path 3 miles long.
Rock Island and Mercer Counties, Ill.[2]	13	4 p. m				Tornadic winds and rain.	Property damaged.
Suffolk, Va	13	5:05-5:20 p. m.			20,000	Thunderstorm	Warehouse struck by lightning and destroyed.
Clinton, Iowa	13				25,000	Heavy rain and wind.	Several blocks in northern section of the city flooded and tons of silt, rock and debris, carried down from side streets on to main highways. Property damage includes city streets, sewer system and bridges.
Jamestown, N. Y., and vicinity	13–14					Heavy rains	Highways flooded and washed out; bridge destroyed; many cellars flooded.
The following is a brief summary of the tropical hurricane, Sept. 21, 1938:							
Norfolk, Va., and vicinity	21				1,000	Tropical hurricane	Loss to bean crop and shocked hay.
New Jersey	21	1:10 p. m		3	200,000	do	The center of this storm passed about 75 miles east of Atlantic City. Trees uprooted; property damaged.
Long Island and eastern New York.	21			69	5,220,000	Tropical storm with hurricane winds and tidal wave.	On Long Island many lives were lost with millions in property damage. Much loss to apple crop in eastern New York. In the Albany district, estimated damage from floods, wind and heavy rain, $5,220,000.
Connecticut	21	P. m		85	100,000,000	Tropical hurricane and flood.	The center of the storm in Connecticut passed a short distance west of New Haven. Here 17 deaths and damage amounting to $3,000,000 occurred. 3,600 trees blown down and 415 buildings damaged. Much loss to Public Utilities. East of New Haven, many cottages were washed away and a number of persons along the Connecticut coast drowned.
Rhode Island	21	1–4:10 p. m		380	100,000,000	Tropical hurricane and tidal wave.	76 persons missing. 2,380 houses totally destroyed; 5,480 houses damaged. The totally destroyed houses and cottages were affected principally by the accompanying tidal wave.

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

TABLE 4.—*Severe local storms, September 1938*—Continued

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
The following is a brief summary of the tropical hurricane, Sept. 2., 1938—Continued.							
Boston, Mass., and vicinity	21			99	$3,000,000	Hurricane	Damage mostly from falling trees on wires. Storm-wave caused greatest material damage and loss of life in Narragansett Bay, Buzzards Bay, and parts of the southern Massachusetts shore. Almost total loss of remaining crops. In Nantucket abnormally high tide and heavy swells on the ocean side of the island did considerable damage to shore property.
New Hampshire	21	3:30-8:30 p.m.		14	22,000,000	Tropical hurricane.	At 9:30 a. m., many houses and industrial establishments in Concord, Manchester, Nashua, Lowell and Lawrence were under water due to previous heavy rain. Peak of the storm at 5:45 p. m. Widespread damage throughout the State with greatest damage in the southern and central portions. Thousands of large trees uprooted. Much property damage. Principal loss incurred by Public Utilities.
Vermont	21			7	15,000,000	Wind and rain	Storm of tropical origin caused damage over all of Vermont. Poles, wires, and trees down. Loss to farmers, crops and public utilities. In this State, mostly, maple sugar growth will not recover for 20 to 25 years.
Maine	21				135,000	Hurricane	Loss to Cumberland Power & Light Co., $100,000, to Boston & Maine R. R., $25,000; loss to trees, $10,000.
Buffalo, N. Y	22	10:53 a. m				Wind and rain	Maximum wind velocity of 54 miles from the southwest recorded. Streets flooded making motor traffic difficult. Small property damage. On the Lake, several small boats were driven ashore or tipped over. Large vessels unable to leave port. This storm is what was left of the destructive hurricane that caused great damage and loss of life the previous day on and near the North Atlantic coast, particularly Connecticut, Long Island, Rhode Island, and Massachusetts.
Charleston, S. C	29	7:50 a. m		32	2,000,000	2 tornadoes	Several hundred persons injured; much property damage. This storm one of the most destructive occurrences of its kind in the history of the State. A more detailed report will appear elsewhere in this issue of the REVIEW.
Sanders, Lake, and Flathead Counties, Mont.	29	5-7 p. m				Straight-line wind.	Winds, in some sections, accompanied by severe dust and followed by rain. Much commercial timber blown down, trees falling on highways interrupting traffic. Electric service dalayed for several hours when poles and wires blew down. Minor property damage.
New Orleans, La., and vicinity	29				700	Electrical	2 buildings struck by lightning; electric service interrupted in several localities.
Kalispell, Mont., vicinity of	29					Wind	Considerable damage to small farm buildings, telephone and power lines. Many trees blown down; much loss to fruit crop.
Wilmington, N. C	29					Heavy rain	Cellars and streets flooded, the latter to the depth of 5 feet in some sections.

[3] A more detailed report appears elsewhere in this issue of the REVIEW.

U. S. GOVERNMENT PRINTING OFFICE: 1938