typhoon had definitely recurved, it manifested its energy over the Eastern Sea and neighboring regions. Oshima, at noon, July 23, reported pressure as low as 739 millimeters (29.094 inches), Kagoshima had a value of 740 millimeters (29.134 inches) at noon of July 25, and Nagasaki at the same time had a value of 739 millimeters (29.094 inches). The typhoon appeared to be weakening when it took its course through the Sea of Japan, July 26 and 27.

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, July 1937*

[For description of tables and charts, see REVIEW, January, p. 29]

Section	Temperature								Precipitation					
	Section average	Departure from the normal	Monthly extremes						Section average	Departure from the normal	Greatest monthly		Least monthly	
			Station	Highest	Date	Station	Lowest	Date			Station	Amount	Station	Amount
	°F.	°F.		°F.			°F.		In.	In.		In.		In.
Alabama	80.0	−0.3	2 stations	101	[1] 15	2 stations	49	[1] 1	4.46	−0.90	Jackson Shoals	9.04	Fort Payne	0.80
Arizona	81.9	+.5	Quartzsite	121	[1] 2	Fort Defiance (near)	36	11	1.68	−.62	Nogales	5.60	Mesa Expt. Station	.10
Arkansas	80.4	−.1	Booneville	106	5	Wynne	52	1	3.71	−.09	St. Francis	9.77	Highland	.44
California	74.1	+.5	Cow Creek	124	3	Twin Lakes	27	[1] 18	.11	+.04	Ellery Lake	2.31	107 stations	.00
Colorado	69.7	+2.6	2 stations	109	[1] 22	Pearl	29	21	1.83	−.38	Leadville	8.70	Malachite Ranger Station.	.06
Florida	81.2	−.1	Blountstown	100	11	Mason (near)	60	24	6.92	−.29	Clearwater	22.31	Mason (near)	2.43
Georgia	79.8	−.3	3 stations	101	[1] 13	Blairsville	40	3	4.96	−.77	Quitman	12.92	Atlanta No. 2	1.00
Idaho	69.6	+1.5	Lapwai	111	24	2 stations	28	[1] 6	.97	+.31	Driggs	4.10	2 stations	T
Illinois	75.7	−.7	2 stations	100	[1] 10	Danville	43	1	3.18	−.07	Havana	10.95	Rockford	.05
Indiana	74.6	−1.1	4 stations	101	[1] 8	2 stations	40	1	3.67	+.35	Crawfordville	8.38	Salem	.82
Iowa	75.9	+1.3	Atlantic	107	7	4 stations	46	[1] 26	2.63	−1.03	Riverton (near)	8.35	Forest City	.13
Kansas	81.7	+2.7	2 stations	113	5	2 stations	52	[1] 2	3.14	−.06	Howard	14.86	Tribune	.54
Kentucky	75.6	−1.5	Bowling Green	102	[1] 15	Cutbank	41	2	3.04	−1.07	Glasgow	6.71	Irvington	.76
Louisiana	82.0	+.2	Minden	102	5	Tallulah	54	1	4.66	−1.48	Cheneyville	9.77	Burrwood	.59
Maryland-Delaware	74.9	−.3	Annapolis, Md	100	9	2 stations	39	28	3.82	−.40	Parkton, Md	7.29	Keedysville, Md	1.29
Michigan	70.1	+1.0	Baldwin	99	11	Vanderbilt	33	3	3.53	+.63	Monroe	8.46	Webber Dam	.78
Minnesota	72.3	+2.3	Beardsley	105	6	Meadowland	37	1	3.11	−.18	Baudette	12.50	Winona	.13
Mississippi	80.5	−.6	Aberdeen	102	17	Eupora	49	1	3.46	−1.56	Cleveland	6.89	Dlo	1.35
Missouri	77.9	−.1	Lamar	105	5	Greenville	45	1	4.06	+.37	Fisk	10.90	St. Louis	.67
Montana	69.8	+2.9	Medicine Lake	117	5	Birch Creek Camp	27	15	1.70	+.23	Scobey	4.90	Browning	.23
Nebraska	78.5	+3.4	North Loup	113	8	Gordon	43	25	2.70	−.45	Ewing	10.37	Bridgeport	.32
Nevada	75.3	+2.8	Logandale	118	4	San Jacinto	33	8	.67	+.29	McGill	3.03	4 stations	.00
New England	70.6	+1.5	Waterbury, Conn	102	9	Somerset, Vt	39	19	2.90	−.78	West Lebanon, N. H.	7.69	East Wareham, Mass.	.07
New Jersey	74.6	+.9	Charlotteburg	103	10	2 stations	43	2	2.83	−1.96	Long Valley	5.98	Camden	.58
New Mexico	73.2	+.9	Hagerman	108	30	Elizabethtown	32	22	1.46	−1.06	Corona	5.52	Loving	.00
New York	71.0	+1.3	West Point	102	8	Allegany State Park	38	2	3.19	−.70	North Lake	9.33	Waterloo	.59
North Carolina	76.7	−.3	Lumberton	104	10	Mount Mitchell	36	1	6.26	+.41	Beaufort	19.91	Monroe	1.91
North Dakota	71.7	+2.9	3 stations	111	5	2 stations	40	[1] 17	2.93	+.51	Grafton	9.48	Granville	.78
Ohio	73.2	−.5	Gallipolis (near)	102	9	Kenton (near)	41	1	4.27	+.48	Alliance	10.25	Chilo	1.53
Oklahoma	84.2	+2.5	2 stations	111	[1] 5	Hooker	51	10	2.01	−.85	Grove	7.31	Carnegie	.02
Oregon	67.3	+.8	do	106	[1] 4	Austin	20	8	.35	−.06	Spray	2.50	4 stations	.00
Pennsylvania	72.4	+.2	do	101	[1] 8	Somerset	37	28	4.47	+.19	Uniontown	8.69	Ansonia	.97
South Carolina	79.5	−.4	Walterboro	103	14	Long Creek (near)	45	2	5.09	−.72	Landrum	9.91	Calhoun Falls	.59
South Dakota	76.0	+3.0	Academy	112	6	Kennebec	45	15	2.83	+.37	Vale	9.27	Geddes	.36
Tennessee	76.9	−.8	Etowah	102	15	Crossville	42	1	4.24	−.21	Wildersville	7.55	Worsham	1.90
Texas	83.9	+.9	Clarendon	113	14	2 stations	55	[1] 6	1.98	−.65	Comanche	7.59	2 stations	.00
Utah	72.2	+.5	St. George	110	3	Thistle	36	3	1.89	+.96	Mount Baldy Ranger Station.	4.35	Leeds (near)	T
Virginia	74.5	−.9	4 stations	101	[1] 10	Mountain Lake	37	2	4.88	+.38	Martinsville	9.27	Radford	1.89
Washington	67.4	+1.1	Wahluke (near)	110	24	Stockdill Ranch	30	31	.38	−.28	Laurier	2.18	7 stations	.00
West Virginia	72.4	−.7	Martinsburg	101	16	Bayard	37	28	3.96	−.62	Richwood	7.96	Kearnysville	1.07
Wisconsin	72.2	+2.1	7 stations	101	[1] 7	Coddington	32	27	2.14	−1.38	Flambeau Reservoir	7.63	Mather	.03
Wyoming	66.9	+1.3	Chugwater	110	5	2 stations	30	[1] 15	2.86	+1.52	Ervay	7.87	Cody	.47
Alaska (June)	54.1	+1.6	Nenana	94	18	do	22	[1] 4	1.04	+.41	Cordova	15.77	3 stations	T
Hawaii	74.5	+.2	Kaanapali	94	[1] 12	Kanalohuluhulu	47	10	9.12	+2.95	Puosakamoa No. 2	52.00	do	.00
Puerto Rico	79.3	+1.0	Juana Diaz	100	2	Garzas	58	9	5.09	−1.15	Bayaney	12.67	Mona Island	.00

[1] Other dates also.

TABLE 2.—*Climatological data for Weather Bureau stations, July 1937*

[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: Departure from normal	Temperature: Maximum	Temperature: Date	Temperature: Mean maximum	Temperature: Minimum	Temperature: Date	Temperature: Mean minimum	Temperature: 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							70.6	+1.7										77	2.21	−1.3										5.2		
Eastport	76	67	85	29.87	29.95	+0.02	63.1	+2.7	87	8	73	49	1	54	36	59	56	81	0.75	−2.3	5	7.3	sw.	21	ne.	13	7	10	14	6.1	0.0	0.0
Greenville, Maine	1,070	6	40	28.81	29.95	------	67.1	------	86	23	78	49	2	57	32	62	59	----	3.29	------	11	3.0	n.	12	------	6	6	13	12	----	.0	.0
Portland, Maine	103	82	117	29.83	29.95	.00	70.6	+2.5	98	8	78	56	2	63	30	64	60	71	.95	−2.3	6	7.4	s.	25	w.	24	16	14	1	3.5	.0	.0
Concord	289	60	----	29.64	29.95	−.01	71.2	+2.7	95	8	83	49	14	59	34	----	----	----	2.76	−.8	7	------	nw.	----	------	----	12	14	5	----	.0	.0
Burlington	403	11	48	29.50	29.92	−.02	71.0	+.7	92	23	81	53	19	61	28	64	60	72	2.97	−.5	8	7.6	s.	26	s.	15	11	8	12	5.4	.0	.0
Northfield	876	12	60	29.03	29.95	+.01	67.6	+1.7	91	8	80	46	19	55	35	62	60	79	4.75	+1.2	11	6.2	s.	21	sw.	30	7	15	9	5.7	.0	.0
Boston [1]	29	31	50	29.92	29.96	.00	73.2	+1.5	99	8	82	55	14	65	27	65	62	71	1.17	−2.3	8	8.5	sw.	37	n.	9	9	13	9	5.5	.0	.0
Nantucket	12	14	90	29.96	29.97	−.01	68.6	+.8	86	8	75	58	23	62	20	65	64	90	1.26	−1.6	8	11.3	sw.	30	ne.	13	12	7	12	5.5	.0	.0
Block Island	26	11	46	29.94	29.97	.00	69.7	+1.3	88	10	76	58	14	64	19	66	65	89	1.22	−1.9	7	11.1	sw.	27	sw.	16	8	16	7	5.3	.0	.0
Providence	159	215	251	29.80	29.97	.00	73.5	+.1	97	8	83	53	14	64	31	66	62	69	1.16	−2.1	7	9.0	nw.	27	s.	26	14	10	7	4.8	.0	.0
Hartford	159	66	100	29.80	29.96	−.01	73.8	+2.2	97	9	84	54	4	64	29	----	----	----	3.11	−1.3	7	6.8	s.	25	sw.	26	14	12	5	4.5	.0	.0
New Haven	106	74	153	29.86	29.98	+.01	73.8	+2.0	98	9	82	55	2	65	25	66	63	71	4.21	−.1	8	7.5	s.	30	sw.	26	8	14	9	5.4	.0	.0
Middle Atlantic States							75.6	+0.7										72	3.41	−0.9										5.5		
Albany	97	97	112	29.85	29.95	−.01	74.4	+1.8	98	8	85	55	2	64	31	66	62	69	4.35	+.9	11	6.8	s.	24	sw.	26	11	11	9	5.2	.0	.0
Binghamton	871	57	79	29.07	29.98	+.01	72.1	+2.1	95	8	84	49	2	61	34	----	----	----	1.33	−2.4	10	5.3	e.	18	sw.	15	6	10	15	6.7	.0	.0
New York	314	415	454	29.64	29.97	−.01	75.4	+1.6	96	10	83	58	2	68	21	67	63	70	4.41	+.2	8	11.1	w.	49	nw.	26	11	8	12	5.3	.0	.0
Harrisburg	374	94	104	29.58	29.97	−.01	74.8	.0	96	8	84	55	2	66	25	66	62	69	4.83	+1.0	11	6.4	w.	24	nw.	16	8	18	5	5.2	.0	.0
Philadelphia	114	174	367	29.87	29.99	+.01	77.1	+.9	98	10	85	59	1	69	26	68	63	66	1.16	−3.0	11	10.3	sw.	29	sw.	26	6	16	9	5.7	.0	.0
Reading	323	283	306	29.63	29.97	------	74.8	−.7	96	9	84	55	2	66	24	66	62	68	4.10	−.2	15	8.7	nw.	49	e.	23	7	20	4	5.5	.0	.0
Scranton	805	72	104	29.13	29.98	.00	73.0	+1.3	94	10	84	49	2	62	35	65	61	70	2.67	−1.4	11	5.3	n.	19	sw.	26	6	17	8	5.6	.0	.0
Atlantic City	52	37	172	29.92	29.97	−.01	75.8	+3.7	97	16	82	61	22	70	21	70	67	77	.96	−3.0	8	13.0	s.	36	se.	26	10	14	7	5.2	.0	.0
Sandy Hook	22	10	57	29.95	29.97	------	75.4	+1.9	98	10	82	62	2	68	23	68	65	75	1.71	−3.4	8	10.4	w.	32	nw.	26	14	5	12	4.7	.0	.0
Trenton	190	88	106	29.77	29.97	------	75.8	+1.3	99	9	85	56	2	66	27	67	63	69	1.84	−2.1	9	7.7	s.	26	s.	26	10	12	9	5.4	.0	.0
Baltimore	123	100	215	29.85	29.97	−.01	78.3	+1.1	97	9	86	59	1	70	22	69	65	66	3.81	−.8	11	9.3	sw.	37	ne.	31	7	17	7	5.2	.0	.0
Washington	112	62	85	29.86	29.97	−.03	77.2	+.4	96	16	86	58	1	68	24	69	66	72	3.67	−1.0	12	5.9	nw.	24	nw.	11	8	17	6	5.4	.0	.0
Cape Henry	18	8	54	29.97	29.99	------	78.2	+.7	95	16	85	62	1	72	25	72	70	79	3.49	−1.9	13	9.8	sw.	35	ne.	20	12	10	9	5.2	.0	.0
Lynchburg	686	148	184	29.30	30.03	+.02	75.8	−1.7	98	9	86	57	2	66	29	68	65	74	5.97	+1.8	12	5.9	nw.	36	nw.	10	7	15	9	5.4	.0	.0
Norfolk	91	80	125	29.90	30.00	.00	79.4	+.7	98	16	87	63	1	72	26	72	69	76	5.69	−.1	13	7.6	w.	31	nw.	17	7	11	13	6.4	.0	.0
Richmond	144	11	52	29.86	30.00	−.01	77.0	−1.5	97	16	86	58	2	68	26	70	68	79	6.00	+1.3	14	6.3	sw.	24	sw.	26	9	12	10	5.4	.0	.0
Wytheville	2,304	49	55	------	30.04	+.03	70.5	−2.1	91	9	81	50	2	60	29	----	----	78	1.98	−2.0	18	5.2	w.	20	sw.	16	7	11	13	----	.0	.0
South Atlantic States							79.5	+0.3										79	6.49	+0.7										5.9		
Asheville	2,253	89	104	27.75	30.03	+.01	73.3	+1.6	93	15	84	49	1	62	36	65	62	77	4.18	−.1	14	6.0	nw.	21	sw.	11	7	17	7	5.4	.0	.0
Charlotte	779	63	86	29.20	30.02	.00	79.0	+.6	98	16	89	61	2	69	27	70	67	74	4.19	−.9	11	6.1	sw.	21	se.	25	5	13	13	6.2	.0	.0
Greensboro	886	6	56	29.08	30.02	------	76.1	------	96	16	87	55	3	66	32	68	66	79	2.75	------	15	6.6	sw.	34	sw.	16	9	15	7	5.5	.0	.0
Hatteras	11	5	50	29.99	30.00	−.01	78.7	+.5	89	10	83	69	1	74	15	75	73	84	10.94	+5.4	19	11.3	sw.	65	nw.	31	6	13	12	6.0	.0	.0
Raleigh	376	103	146	29.60	29.99	−.03	78.6	−.2	100	16	88	61	1	69	27	71	68	78	4.33	−1.1	11	7.1	sw.	40	w.	17	6	19	6	5.2	.0	.0
Wilmington	72	73	107	29.94	30.01	.00	79.8	+.7	95	11	88	66	1	72	22	74	72	83	6.45	−.7	17	8.5	sw.	30	nw.	13	5	20	6	6.0	.0	.0
Charleston	48	11	92	29.98	30.03	.00	81.0	−.4	96	16	88	67	22	74	23	75	73	80	9.62	+2.7	14	8.7	s.	29	ne.	12	0	17	14	7.1	.0	.0
Columbia, S. C.	347	70	91	29.65	30.02	.00	80.5	−.4	100	16	90	62	2	70	32	71	68	75	4.79	−.6	7	6.9	s.	24	w.	4	10	17	4	4.8	.0	.0
Greenville, S. C.	1,039	139	----	------	------	------	79.0	+2.1	98	16	89	60	1	69	24	----	----	----	3.77	−1.6	9	------	w.	----	------	----	13	11	7	----	.0	.0
Augusta	182	62	77	29.81	30.00	−.02	81.2	−.1	99	14	91	62	3	71	31	72	69	76	4.54	−.8	13	5.5	s.	20	w.	17	3	18	10	6.1	.0	.0
Savannah	65	73	152	29.96	30.03	.00	81.3	−.2	97	13	90	68	5	73	25	74	72	82	8.91	+2.3	15	9.1	sw.	30	ne.	14	3	17	11	6.2	.0	.0
Jacksonville	43	86	110	30.00	30.05	+.02	81.6	−.5	96	12	90	69	23	74	25	74	72	82	9.69	+3.0	17	7.2	sw.	23	sw.	23	5	12	14	6.4	.0	.0
Florida Peninsula							81.8	+0.1										78	5.69	+0.6										6.1		
Key West	22	10	64	30.02	30.04	+.01	82.9	−.6	91	30	88	70	1	78	19	77	75	78	4.11	+.8	10	8.4	e.	26	s.	1	7	12	12	5.7	.0	.0
Miami	25	124	168	30.03	30.06	+.02	81.8	+.8	90	21	87	72	2	76	16	75	73	75	5.70	+.3	17	8.3	se.	40	s.	1	7	12	12	5.9	.0	.0
Tampa	35	88	197	30.02	30.06	+.02	82.0	+.8	95	5	89	70	2	75	20	75	73	80	8.32	+.4	18	9.1	w.	51	se.	29	4	17	10	6.6	.0	.0
Titusville	43	5	36	30.00	30.05	------	80.6	−.6	95	13	90	65	5	71	26	74	73	----	4.64	+1.0	13	------	se.	----	------	----	3	14	14	----	.0	.0
East Gulf States							80.8	0.0										73	3.88	−1.8										5.6		
Atlanta [1]	976	5	53	29.01	30.00	−.02	79.6	+1.5	97	16	90	58	2	70	26	70	66	70	2.30	−2.4	7	7.0	nw.	29	sw.	4	3	18	10	6.1	.0	.0
Macon	370	79	87	29.63	30.02	.00	80.4	−.8	97	11	90	58	2	71	28	72	68	73	4.71	.0	14	6.1	sw.	22	nw.	4	5	19	7	6.2	.0	.0
Thomasville	273	49	58	29.76	30.03	.00	80.7	−1.1	95	11	91	66	31	71	27	74	72	----	5.49	−1.2	14	------	sw.	----	------	----	----	----	----	----	.0	.0
Apalachicola	35	11	----	30.01	30.04	------	81.8	+.1	94	12	88	73	23	75	18	76	73	77	2.95	−4.8	15	6.6	w.	26	se.	26	4	16	11	6.4	.0	.0
Pensacola	56	149	185	29.98	30.04	+.03	80.8	−.2	93	29	87	68	6	75	19	74	72	76	3.50	−3.3	9	9.8	sw.	38	sw.	23	12	15	4	4.5	.0	.0
Anniston	741	9	----	------	------	------	77.6	−.3	95	16	88	53	2	67	33	----	----	----	6.47	+1.3	12	------	w.	----	------	----	19	8	4	----	.0	.0
Birmingham	700	11	48	29.27	30.02	+.01	79.7	−.5	96	31	90	58	1	69	28	70	66	71	4.11	−1.1	10	5.6	s.	26	s.	4	12	14	5	4.8	.0	.0
Mobile	57	86	161	29.97	30.03	+.02	81.9	+.5	94	30	91	67	2	73	24	74	71	74	7.27	+.4	7	7.7	sw.	38	nw.	6	7	17	7	5.7	.0	.0
Montgomery	218	92	105	29.79	30.04	+.02	81.4	−.3	96	31	91	65	2	72	24	72	69	74	2.17	−2.7	10	6.4	sw.	27	w.	31	8	17	6	5.2	.0	.0
Meridian	375	67	92	29.63	30.02	.00	80.6	+.2	96	31	92	61	2	69	30	71	67	71	2.68	−2.2	10	5.2	sw.	21	n.	4	14	9	8	4.8	.0	.0
Vicksburg	247	82	102	29.76	30.02	+.02	81.0	−.3	95	3	89	65	1	73	23	73	70	74	1.57	−3.0	4	7.2	sw.	21	nw.	21	7	13	11	5.9	.0	.0
New Orleans	53	76	84	29.99	30.04	+.04	83.8	+1.4	95	27	91	71	7	76	18	75	72	74	3.38	−3.0	13	5.5	sw.	27	ne.	5	2	21	8	5.9	.0	.0
Port Eads, La.	9	4	35	------	------	------	83.6	------	93	15	90	72	7	77	19	----	----	----	3.07	------	11	7.6	s.	30	sw.	19	18	11	2	----	.0	.0
West Gulf States							83.0	+0.4										71	2.50	−0.8										4.5		
Shreveport	249	92	227	29.73	29.99	+.01	83.6	+.4	100	5	93	68	1	74	26	74	70	71	1.42	−2.1	7	9.2	sw.	28	s.	11	10	10	11	5.3	.0	.0
Bentonville	1,303	12	38	28.58	29.90	−.07	78.6	+.1	99	5	89	59	26	68	31	----	----	----	7.10	+2.8	7	5.7	sw.	25	sw.	5	8	17	6	----	.0	.0
Fort Smith	457	79	94	29.48	29.95	−.02	83.0	+1.5	100	5	93	66	1	73	32	72	67	63	3.24	−.1	8	7.5	e.	24	sw.	6	10	17	4	4.7	.0	.0
Little Rock	357	94	102	29.62	29.99	.00	80.6	−.3	95	3	90	66	1	72	24	72	68	68	1.62	−1.9	9	7.3	sw.	34	w.	5	8	14	9	5.8	.0	.0
Austin	605	68	90	29.34	29.96	------	84.7	+.7	100	21	95	69	8	75	27	73	68	66	.69	−1.6	4	8.1	s.	24	s.	8	18	11	2	3.4	.0	.0
Brownsville	57	88	96	29.90	29.96	------	82.2	−1.4	94	1	89	68	7	76	18	76	74	84	3.81	+1.8	11	10.1	se.	26	se.	3	14	9	8	4.7	.0	.0
Corpus Christi	20	11	78	29.95	29.97	+.01	82.8	+.1	93	30	88	67	8	77	17	76	74	80	2.07	+.5	11	12.1	s.	31	se.	8	16	8	7	4.2	.0	.0
Dallas	512	220	227	29.42	29.95	------	84.3	------	100	28	94	70	9	75	25	72	66	61	2.22	−.6	5	10.0	s.	38	w.	20	13	9	9	4.4	.0	.0
Fort Worth	679	92	110	29.27	29.96	.00	85.0	+1.4	101	28	95	69	1	75	27	----	----	----	1.93	−.7	4	9.9	s.	25	nw.	7	19	10	2	2.9	.0	.0
Galveston	54	106	114	29.95	30.01	+.03	84.0	+.6	90	31	88	72	9	80	12	76	74	75	2.02	−1.7	7	11.1	s.	23	sc.	3	20	8	3	3.5	.0	.0
Houston	138	292	314	29.86	30.00	------	84.0	+.3	97	6	93	70	22	75	27	----	----	----	2.94	−1.0	9	10.1	s.	38	ne.	22	14	11	6	4.7	.0	.0
Palestine	510	64	72	29.48	30.00	+.03	83.4	+1.2	99	26	94	69	23	73	26	72	68	67	1.62	−1.1	5	7.5	s.	25	s.	8	11	15	5	4.5	.0	.0
Port Arthur	34	98	106	29.98	30.02	------	82.8	------	94	29	90	65	8	76	23	76	73	75	2.57	−4.4	9	9.5	s.	27	se.	8	4	22	5	5.1	.0	.0
San Antonio	693	242	301	29.25	29.95	.00	83.6	−.2	99	27	94	67	8	73	27	72	68	68	1.82	−.4	7	10.6	se.	38	se.	7	10	18	3	4.7	.0	.0

[1] Observations taken at airport.

TABLE 2.—*Climatological data for Weather Bureau stations, July 1937*—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							**76.0**	**−0.4**										**68**	**3.56**	**−0.2**										**4.7**		
Chattanooga	762	71	214	29.21	30.00	−0.02	79.8	+1.4	99	15	90	57	1	69	30	69	64	64	3.34	−.9	9	6.6	w.	34	nw.	17	8	19	4	4.7	0.0	0.0
Knoxville	995	66	84	28.98	30.01	−.01	78.0	+.9	96	15	88	55	2	68	34	69	65	71	6.33	+2.0	12	5.0	w.	21	sw.	19	10	16	5	4.3	.0	.0
Memphis	399	78	86	29.58	30.00	.00	79.8	−.9	93	14	87	64	1	72	22	71	67	68	4.32	+1.1	6	6.7	sw.	41	nw.	16	9	13	9	5.3	.0	.0
Nashville	546	168	198	29.45	30.03	+.02	78.2	−.9	96	15	88	55	2	68	30	68	63	67	2.49	−1.4	9	7.0	w.	36	nw.	17	12	14	5	4.3	.0	.0
Lexington	989	6					76.2	+.3	95	10	89	47	2	64	36				3.17	−.5	9		n.				16	13	2			.0
Louisville	525	188	234	29.44	30.02	+.02	77.2	−1.4	94	16	87	56	1	68	26	67	62	64	.93	−2.8	7	8.4	sw.	29	w.	16	12	13	6	4.4	.0	.0
Evansville	431	76	116	29.54	30.00	.00	78.1	−.8	95	15	88	55	1	68	26	68	63	63	1.76	−1.7	9	7.2	sw.	30	nw.	16	12	12	7	4.4	.0	.0
Indianapolis	822	194	230	29.13	30.00	+.01	75.4	−.3	93	7	85	51	1	66	25	65	60	63	5.37	+2.0	9	8.4	sw.	44	w.	25	11	16	4	4.6	.0	.0
Terre Haute	575	63	149	29.37	29.97		77.4		97	9	89	53	1	66	28	67	62	64	2.78	−.4	6	7.2	sw.	36	w.	25	18	11	2	3.5	.0	.0
Cincinnati	627	11	51	29.34	30.00	.00	75.3	+.2	94	9	86	50	1	64	30	66	62	71	3.94	+.6	6	5.8	sw.	24	sw.	25	14	10	7	4.5	.0	.0
Columbus	822	90	210	29.13	29.99	−.01	75.1	+.2	94	10	85	54	2	65	26	66	62	66	3.91	+.4	11	7.7	s.	31	w.	10	14	11	6	4.1	.0	.0
Dayton	900	60	163	29.05	29.98		74.8	−.6	92	9	85	52	1	65	29				3.39	+.1	9	6.8	sw.	31	w.	25	14	11	6	4.1	.0	.0
Elkins	1,947	59	78	28.04	30.03	+.02	69.0	−1.3	88	9	80	45	2	58	34	62	60	79	2.77	−2.6	15	4.8	w.	21	nw.	10	5	14	12	6.5	.0	.0
Parkersburg	637	77	84	29.33	29.98	−.03	74.5	−.9	94	10	85	52	2	64	32	67	64	74	3.26	−1.0	12	5.1	se.	24	sw.	14	10	16	5	4.8	.0	.0
Pittsburgh [1]	1,273	39	54	28.67	30.00	.00	72.9	−1.7	94	8	84	50	1	62	28	64	61	72	5.63	+1.6	14	8.7	sw.	42	nw.	25	7	12	12	6.1	.0	.0
Lower Lake Region							**72.7**	**+1.2**										**68**	**3.06**	**−0.2**										**4.9**		
Buffalo	768	243	280	29.14	29.95	−.02	71.0	+1.2	87	5	77	52	27	65	26	65	61	73	3.00	.0	8	13.0	sw.	50	sw.	26	10	11	10	5.3	.0	.0
Canton	448	10	61	29.46	29.92		71.1	+.6	90	23	82	52	19	60	31	65	61	73	.96	−2.5	8	7.1	sw.	24	sw.	27	10	12	9	5.4	.0	.0
Ithaca	836	77	100	29.08	29.96		71.8	+1.3	96	8	84	49	2	60	34	64	60	67	1.61	−1.9	11	6.9	nw.	22	s.	2	10	11	10	5.5	.0	.0
Oswego	335	71	85	29.58	29.94	−.02	71.2	+.8	90	23	79	52	2	63	24	65	61	70	1.33	−1.6	8	7.1	s.	22	n.	17	14	8	9	5.0	.0	.0
Rochester	523	86	102	29.41	29.97	.00	72.8	+2.1	93	10	82	54	2	64	27	64	59	64	1.92	−1.0	9	7.7	sw.	30	w.	17	14	8	9	4.7	.0	.0
Syracuse	596	65	79	29.33	29.97	.00	73.4	+2.8	93	8	83	55	2	64	27				2.85	−.8	15	6.6	s.	23	nw.	17	11	12	8	5.0	.0	.0
Erie	714	130	166	29.22	29.97	−.01	73.1	+2.1	91	8	80	56	2	66	24	65	61	68	1.60	−1.4	11	10.5	nw.	35	sw.	25	10	17	4	4.6	.0	.0
Cleveland	762	267	318	29.17	29.98	−.01	73.2	+1.8	89	8	80	54	1	66	22	65	61	67	4.87	+1.4	11	11.6	s.	56	w.	15	11	14	6	4.6	.0	.0
Sandusky	629	5	67	29.30	29.98	−.01	74.1	+.7	95	9	83	51	27	65	30				3.54	+.1	12	7.4	sw.	30	nw.	16	8	17	6	5.1	.0	.0
Toledo	628	79	87	29.32	29.99	.00	74.0	+.8	95	8	83	51	1	65	25	65	61	67	4.55	+1.5	11	8.1	w.	29	w.	14	14	14	3	4.2	.0	.0
Fort Wayne	857	69	84	29.08	29.99		73.8	−.7	93	11	84	48	1	64	27	65	60	67	3.51	−.1	9	7.2	sw.	38	w.	15	8	18	5	5.0	.0	.0
Detroit	626	5	78	29.30	29.97	−.01	72.8	+.7	95	8	82	50	3	63	28	65	61	68	7.03	+3.7	13	8.4	sw.	31	nw.	9	13	10	8	4.8	.0	.0
Upper Lake Region							**70.2**	**+2.3**										**70**	**2.74**	**−0.4**										**4.4**		
Alpena	609	13	89	29.29	29.95	−.02	69.0	+3.1	97	7	78	48	3	60	32	62	59	75	3.75	+1.0	10	9.0	nw.	30	nw.	10	11	16	4	4.5	.0	.0
Escanaba	612	41	49	29.30	29.95	−.02	67.9	+1.9	89	23	77	45	31	59	31	61	57	71	2.98	−.4	12	7.6	s.	23	nw.	25	8	19	4	4.5	.0	.0
Grand Rapids	707	70	244	29.21	29.96	−.02	74.3	+2.0	95	11	85	49	1	64	28	65	60	64	1.33	−1.6	9	9.0	sw.	33	sw.	15	15	8	8	4.0	.0	.0
Lansing	878	5	90	29.04	29.96		70.6	−.3	91	10	81	44	1	60	31	65	62	76	1.64	−1.5	9	6.9	s.	21	w.	26	15	9	7	4.1	.0	.0
Ludington	637	5	54	29.26	29.95		69.6	+3.4	89	9	78	48	1	61	25	64	60		1.83	−1.2	9		s.				19	11	1			.0
Marquette	734	44	69	29.15	29.94	−.02	67.2	+2.3	96	7	76	47	31	58	30	60	56	71	5.03	+1.9	12	7.1	nw.	26	sw.	23	10	12	9	5.5	.0	.0
Sault Sainte Marie	614	11	52	29.28	29.96	−.01	66.6	+2.8	93	7	77	44	1	56	36	59	55	71	4.22	+1.3	10	6.5	nw.	21	nw.	9	11	14	6	4.7	.0	.0
Chicago	673	7	131	29.26	29.97	−.01	74.4	+1.9	92	11	82	54	1	66	22	66	62	70	1.41	−1.9	10	8.3	sw.	28	sw.	12	17	11	3	3.6	.0	.0
Green Bay	617	109	141	29.28	29.94	−.03	73.0	+3.0	97	11	83	49	27	63	30	63	57	62	2.15	−1.3	7	9.7	s.	31	nw.	25	11	15	5	4.6	.0	.0
Milwaukee	681	97	221	29.28	29.96	−.01	73.5	+3.4	97	11	82	56	1	65	28	64	59	64	3.06	+.2	8	10.5	w.	34	n.	10	14	12	5	4.1	.0	.0
Duluth	1,133	5	47	28.73	29.93	−.02	66.0	+2.1	90	2	76	48	17	56	39	59	56	77	2.73	−1.0	7	10.1	ne.	27	ne.	16	11	13	7	4.9	.0	.0
North Dakota							**72.0**	**+3.7**										**64**	**2.90**	**+0.3**										**4.7**		
Moorhead, Minn	940	50	58	28.92	29.91	−.03	72.1	+4.0	101	6	84	50	17	61	31	64	59	68	2.68	−.8	9	8.1	s.	27	nw.	24	10	12	9	5.5	.0	.0
Bismarck	1,674	8	57	28.16	29.90	−.03	73.6	+3.8	100	5	85	50	28	62	36	63	57	62	2.17	−.1	9	8.3	nw.	30	nw.	24	11	14	6	4.7	.0	.0
Devils Lake	1,478	11	44	28.39	29.93	.00	70.6	+3.2	96	9	82	49	28	59	37	62	57	70	3.26	+.7	14	8.0	n.	27	n.	22	12	10	9	5.0	.0	.0
Grand Forks	833	12	67				69.6	+2.1	95	6	81	48	25	58	36	64			4.66	+1.9	10		se.	29	nw.	16	8	14	9		.0	.0
Williston	1,878	42	50	27.97	29.89	−.03	74.1	+5.2	108	5	86	50	28	62	36	61	52	54	1.75	−.1	10	7.6	se.	29	se.	11	16	11	4	3.7	.0	.0
Upper Mississippi Valley							**77.0**	**+1.9**										**63**	**2.33**	**−1.2**										**4.1**		
Mpls.-St. P., Minn	919	105	208	28.96	29.92	−.03	77.0	+4.7	100	10	88	52	17	67	26	65	58	55	.48	−3.2	5	9.7	s.	35	w.	16	16	7	8	4.0	.0	.0
La Crosse	714	11	48	29.18	29.92	−.04	75.7	+2.9	96	10	87	52	27	64	32	66	62	67	1.63	−2.3	5	4.9	s.	18	nw.	25	17	12	2	3.4	.0	.0
Madison	974	70	78	28.93	29.94	−.03	75.0	+2.9	94	8	84	55	26	66	24	64	59	61	1.49	−2.4	5	6.1	sw.	22	nw.	25	17	8	6	4.1	.0	.0
Charles City	1,015	10	51	28.90	29.96	.00	74.8	+2.5	97	10	86	50	26	63	32	65	60	64	.70	−3.1	4	5.7	se.	19	nw.	16	19	10	2	2.8	.0	.0
Davenport	606	66	161	29.32	29.97	.00	77.8	+2.5	97	10	88	57	27	68	28	67	61	61	4.99	+1.7	9	7.5	sw.	37	w.	15	14	11	6	4.3	.0	.0
Des Moines	861	5	99	29.06	29.94	−.02	77.6	+2.2	96	10	89	57	26	66	31	68	63	64	.58	−2.9	6	7.4	s.	25	nw.	25	11	13	7	4.6	.0	.0
Dubuque	699	60	79	29.22	29.95	−.02	75.9	+1.8	97	10	87	53	27	65	31	66	61	63	1.57	−2.4	7	5.1	s.	19	nw.	25	16	9	6	3.8	.0	.0
Keokuk	614	64	78	29.32	29.96	−.02	77.9	+1.0	96	10	88	58	1	68	27	68	62	63	5.34	+1.9	13	5.5	sw.	31	ne.	8	8	16	7	5.2	.0	.0
Cairo	358	87	93	29.61	29.98	−.02	79.2	−.4	95	15	87	61	1	71	24	70	67	71	1.53	−1.5	6	7.1	s.	24	n.	16	9	12	10	5.5	.0	.0
Peoria	609	11	45	29.33	29.99	+.01	75.8	+.4	95	10	87	51	27	65	31	67	63	67	2.32	−1.3	6	4.8	sw.	18	nw.	25	19	9	3	3.1	.0	.0
Springfield, Ill	636	5	191	29.31	29.97	−.01	78.0	+1.5	96	10	88	57	1	68	25	67	62	63	6.70	+3.8	6	8.9	s.	28	nw.	13	11	17	3	4.4	.0	.0
St. Louis	568	179	303	29.38	29.97	−.02	79.8	+1.0	96	16	89	62	1	71	23	68	63	62	.67	−2.3	9	9.8	sw.	29	sw.	16	13	16	2	3.8	.0	.0
Missouri Valley							**79.4**	**+3.6**										**60**	**3.13**	**−0.6**										**3.7**		
Columbia, Mo	784	6	66	29.14	29.95	−.03	79.0	+2.1	96	10	90	56	27	68	28				2.92	−.6	9	6.4	e.	27	ne.	18	11	18	2	4.3	.0	.0
Kansas City [1]	750	32	45	29.15	29.93	−.04	81.4	+3.3	103	4	92	61	26	70	34	70	65	62	3.11	−1.0	10	8.0	sw.	45	nw.	15	11	16	4	4.5	.0	.0
St. Joseph	967	11	49	28.93	29.93		80.5		100	4	92	60	26	69	31	69	64	63	7.89	+4.1	9	7.2	se.	30	nw.	15	19	10	2	2.8	.0	.0
Springfield, Mo	1,324	98	104	28.60	29.97	−.01	77.8	+1.0	95	4	87	60	26	69	26	69	65	69	3.95	−.3	11	8.5	s.	27	n.	19	13	15	3	4.0	.0	.0
Topeka	987	65	87	28.89	29.91		82.6	+4.8	105	4	96	61	26	70	36	70	64	60	1.65	−2.6	9	8.5	s.	33	n.	18	11	18	2	4.0	.0	.0
Lincoln	1,189	11	81	28.68	29.90	−.05	80.8	+4.3	105	6	93	57	2	69	38	67	61	56	3.10	−.8	6	8.6	s.	38	s.	29	14	12	5	3.7	.0	.0
Omaha [1]	982	31	44	28.90	29.92	−.03	79.6	+2.9	100	7	91	60	26	68	33	68	62	61	5.04	+1.5	6	8.5	se.	39	nw.	29	20	7	4	3.6	.0	.0
Valentine	2,598	47	54	27.29	29.94	+.01	77.9	+4.2	104	5	92	56	16	64	37	63	55	54	1.08	−1.9	8	9.1	s.	27	se.	10	13	17	1	3.3	.0	.0
Sioux City	1,138	64	106	28.73	29.91	−.04	78.6	+4.3	103	7	90	55	17	67	32	66	60	58	1.61	−1.9	8	7.8	s.	29	s.	29	13	15	3	4.2	.0	.0
Huron	1,307	59	74	28.54	29.90	−.04	77.3	+5.5	109	6	91	52	17	64	36	64	57	57	.98	−2.2	5	8.7	se.	26	sw.	10	20	10	1	2.9	.0	.0
Northern Slope							**71.6**	**+3.9**										**55**	**1.93**	**+0.4**										**4.3**		
Havre	2,507	11	67	27.34	29.92	+.01	72.6	+4.3	105	4	87	52	7	59	41	58	48	52	2.19	+.3	8	7.9	e.	43	sw.	13	13	13	5	4.2	.0	.0
Helena	4,124	85	111	25.85	29.95	+.02	70.8	+5.1	97	4	84	50	15	57	34	55	44	45	1.38	+.2	13	8.4	sw.	32	s.	30	9	15	7	4.7	.0	.0
Missoula	2,263	80	91				72.6	+5.0	101	4	88	48	31	57	40				.47	−.5	6	7.3	nw.	29	e.	11	13	13	5	3.6	.0	.0
Kalispell	2,973	48	56	26.95	29.94	+.01	68.0	+3.9	93	4	82	49	31	54	39	55	45	52	.83	−.3	6	6.2	w.	23	nw.	11	14	11	6	3.9	.0	.0
Miles City	2,371	48	55	27.44	29.92	.00	76.7	+3.8	107	5	89	54	15	64	39	62	52	50	1.76	+.2	11	6.0	s.	35	nw.	5	12	11	8	4.6	.0	.0
Rapid City	3,259	50	58	26.65	29.97	+.04	74.6	+3.6	102	5	86	54	17	63	39	62	54	55	3.45	+1.1	11	7.2	n.	27	n.	16	18	11	2	3.5	.0	.0
Cheyenne [1]	6,144	5	39	24.07	29.95	+.03	69.4	+2.7	93	22	85	49	18	54	40	55	49	59	1.97	−.1	11	9.8	w.	41	nw.	18	11	17	3	4.5	.0	.0
Lander	5,372	60	68	24.74	29.96	+.04	69.4	+2.0	96	4	84	46	15	55	39	56	48	57	2.79	+2.1	12	5.0	sw.	41	w.	28	9	14	8	5.4	.0	.0
Sheridan	3,790	10	47	26.13	29.95		70.4		103	5	85	47	16	56	47	60	54	64	1.78	+.6	12	4.4	nw.	23	nw.	28	15	7	9	4.4	.0	.0
Yellowstone Park	6,241	12	46	24.01	30.06	+.14	63.1	+2.2	86	21	77	38	15	49	36	51	44	61	2.42	+1.2	13	7.1	sw.	27	sw.	31	10	11	10	5.5	.0	.0
North Platte	2,821	11	51	27.06	29.90	−.03	79.0	+6.1	104	5	93	60	20	65	36	64	58	56	2.21	−.5	11	7.2	se.	25	nw.	23	18	13	0	3.2	.0	.0

[1] Observations taken at airport.

TABLE 2.—*Climatological data for Weather Bureau stations, July 1937*—Continued

District and station	Elevation of instruments: Barometer above sea level	Elevation of instruments: Thermometer above ground	Elevation of instruments: Anemometer above ground	Pressure: Station, reduced to mean of 24 hours	Pressure: Sea level, reduced to mean of 24 hours	Pressure: Departure from normal	Temperature of the air: Mean max.+mean min.÷2	Temperature of the air: Departure from normal	Temperature of the air: Maximum	Temperature of the air: Date	Temperature of the air: Mean maximum	Temperature of the air: Minimum	Temperature of the air: Date	Temperature of the air: Mean minimum	Temperature of the air: Greatest daily range	Mean wet thermometer	Mean temperature of the dew-point	Mean relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Days with 0.01 inch or more	Wind: Average hourly velocity	Wind: Prevailing direction	Wind: Maximum velocity: Miles per hour	Wind: Maximum velocity: Direction	Wind: Maximum velocity: Date	Clear days	Partly cloudy days	Cloudy days	Average cloudiness, tenths	Total snowfall	Snow, sleet, and ice, on ground at end of month
	Ft.	Ft.	Ft.	In.	In.	In.	°F.	°F.	°F.		°F.	°F.		°F.	°F.	°F.	°F.	%	In.	In.		Miles								0-10	In.	In.
Middle Slope							80.4	+3.3										52	2.20	−0.6										3.9		
Denver	5,292	106	113	24.82	29.95	+0.04	74.8	+2.6	96	22	87	57	14	62	32	57	48	46	.95	−.7	7	7.6	s.	32	n.	22	13	14	4	4.3	0.0	0.0
Pueblo	4,685	80	86	25.35	29.90	−.01	77.6	+3.4	100	22	92	55	19	63	39	58	47	42	.68	−1.3	6	7.3	e.	34	nw.	24	17	11	3	3.8	.0	.0
Concordia	1,392	50	58	28.47	29.90	−.05	81.8	+3.8	108	5	94	59	26	70	34	68	61	56	4.06	+.3	10	7.6	s.	28	ne.	25	17	12	2	3.6	.0	.0
Dodge City	2,509	10	86	27.36	29.88	−.05	82.0	+3.6	103	4	96	60	26	68	37	66	58	52	1.99	−1.2	8	11.6	se.	36	n.	19	16	13	2	3.2	.0	.0
Wichita	1,358	85	93	28.52	29.91	−.05	81.8	+2.4	106	5	93	63	26	71	33	69	63	59	4.77	+1.4	10	11.0	se.	37	ne.	5	16	12	3	3.7	.0	.0
Oklahoma City	1,214	10	47	28.67	29.91	−.05	84.4	+3.8	102	7	95	64	26	73	28	70	64	57	.74	−2.1	7	10.1	s.	23	s.	14	11	15	5	4.6	.0	.0
Southern Slope							82.9	+1.7										50	0.88	−1.5										3.4		
Abilene	1,738	10	52	28.16	29.91	−.02	85.5	+2.7	103	30	97	66	27	74	35	68	60	50	.22	−1.9	4	10.3	s.	28	nw.	20	12	13	6	4.5	.0	.0
Amarillo	3,676	10	49	26.29	29.90	−.02	81.0	+4.2	101	31	94	60	9	68	32	63	54	47	1.49	−1.4	5	9.0	s.	27	ne.	25	17	12	2	3.6	.0	.0
Del Rio	960	63	71	28.92	29.86	−.04	85.1	−1.2	103	1	95	66	8	75	25	71	64	57	.88	−1.5	5	10.7	se.	34	se.	4	14	13	4	4.2	.0	.0
Roswell	3,566	75	85	26.38	29.89	+.01	80.0	+1.1	102	16	94	59	9	66	35	63	52	46	.94	−1.3	4	7.7	s.	35	ne.	20	26	5	0	1.5	.0	.0
Southern Plateau							80.1	+1.5										45	0.82	−0.7										3.0		
El Paso	3,778	82	101	26.16	29.82	−.02	84.4	+3.3	102	16	97	63	8	72	31	63	50	36	.39	−1.6	4	8.0	e.	27	ne.	8	19	12	0	2.5	.0	.0
Albuquerque [1]	4,972	5	39	25.10	29.87	----	76.8	+.1	99	24	92	55	12	62	38	60	51	50	1.02	−.4	9	7.2	n.	33	w.	31	15	13	3	3.7	.0	.0
Santa Fe	7,013	38	53	23.38	29.93	+.05	69.8	+.8	90	22	82	50	12	58	33	55	46	51	.71	−1.7	7	5.6	e.	24	ne.	22	13	11	7	4.6	.0	.0
Flagstaff	6,907	10	59	23.47	29.88	+.05	66.4	+1.4	92	21	81	46	12	52	43	53	----	57	2.69	−.5	15	7.1	nw.	22	nw.	11	5	13	13	----	.0	.0
Phoenix	1,107	39	51	28.66	29.77	−.01	91.8	+2.0	114	2	105	68	11	78	38	70	57	37	.49	−.6	5	6.8	w.	32	ne.	7	21	8	2	2.6	.0	.0
Yuma	141	9	54	29.62	29.76	.00	92.8	+2.0	117	2	107	72	17	78	40	73	63	41	.46	+.3	5	5.6	sw.	24	e.	7	26	5	0	1.7	.0	.0
Independence	3,957	5	26	25.96	29.90	+.07	78.7	+.6	103	3	96	52	31	62	45	56	37	----	T	−.1	0	----	s.	----	----	----	21	5	5	----	.0	.0
Middle Plateau							74.8	+2.6										41	1.02	+0.5										3.6		
Reno	4,527	61	76	25.49	29.92	+.05	73.2	+3.1	98	3	90	49	14	56	45	54	41	39	.36	+.1	4	6.7	sw.	29	se.	9	23	6	2	1.9	.0	.0
Tonopah	6,090	12	20	----	----	----	75.9	----	94	3	88	56	13	64	29	54	38	31	.05	----	3	----	se.	----	----	----	----	----	----	----	----	----
Winnemucca	4,344	18	56	25.61	29.90	.00	75.4	+4.8	102	3	94	46	19	56	51	54	38	34	.30	+.1	5	7.6	sw.	32	se.	22	18	12	1	3.2	.0	.0
Modena	5,473	10	43	24.67	29.89	+.03	72.2	+1.6	97	2	88	50	13	57	45	56	46	50	2.49	+1.4	13	9.3	sw.	35	nw.	8	13	9	9	4.5	.0	.0
Salt Lake City [1]	4,227	32	46	25.73	29.87	−.03	77.6	----	104	21	92	57	15	63	43	60	49	45	1.21	----	11	9.1	se.	45	nw.	28	11	14	6	4.5	.0	.0
Grand Junction	4,602	60	68	25.42	29.92	+.03	78.6	+.9	100	3	91	60	10	66	32	60	50	45	.94	+.3	7	6.9	se.	27	sw.	7	16	9	6	3.9	.0	.0
Northern Plateau							74.4	+3.8										41	0.36	−0.1										2.6		
Baker	3,471	36	54	26.47	29.98	+.03	69.4	+3.8	99	4	86	40	31	53	44	54	43	46	.27	−.3	3	6.3	n.	26	sw.	17	22	7	2	2.2	.0	.0
Boise	2,739	79	87	27.12	29.91	−.02	76.9	+4.0	106	4	92	55	15	62	42	58	45	38	.07	−.2	2	5.7	nw.	27	nw.	31	19	11	1	2.9	.0	.0
Pocatello	4,477	60	68	25.50	29.89	−.03	74.4	+3.6	98	4	89	48	15	60	40	56	44	41	1.10	+.3	7	8.5	se.	32	s.	30	12	12	7	4.5	.0	.0
Spokane	1,929	101	110	27.94	29.94	−.02	72.4	+3.4	98	24	86	52	7	59	38	57	46	46	.56	−.1	5	6.2	s.	27	s.	27	22	5	4	2.7	.0	.0
Walla Walla	991	57	65	28.89	29.94	−.03	77.6	+3.6	103	27	90	56	31	65	36	59	45	37	.15	−.2	2	6.1	w.	20	w.	27	26	4	1	1.7	.0	.0
Yakima	1,076	58	67	28.83	29.96	----	75.9	+4.5	100	24	90	50	31	62	37	58	45	39	T	−.3	0	7.7	nw.	20	nw.	18	25	6	0	1.4	.0	.0
North Pacific Coast Region							64.8	+1.4										71	0.30	−0.4										4.3		
North Head	211	11	56	29.91	30.14	+.06	57.4	+.2	65	18	61	52	16	54	10	55	54	90	.14	−.8	5	15.5	nw.	34	nw.	7	10	8	13	5.9	.0	.0
Seattle	125	90	321	29.95	30.08	+.04	65.8	+2.7	89	24	75	53	2	56	32	58	52	65	.69	+.1	6	7.5	ne.	21	s.	28	14	11	6	4.1	.0	.0
Tatoosh Island	86	10	54	30.03	30.13	+.08	55.4	+.3	64	19	58	48	31	52	13	53	52	91	.42	−1.1	6	9.1	sw.	28	s.	27	5	9	17	7.3	.0	.0
Medford [1]	1,329	29	58	28.59	29.97	----	72.6	+1.6	99	23	89	46	6	56	43	59	51	56	.30	−.1	2	----	w.	----	----	----	24	7	0	1.6	.0	.0
Portland, Oreg.	153	68	106	29.90	30.06	+.01	68.4	+1.7	89	24	78	50	31	58	27	60	54	64	.20	−.4	3	6.6	nw.	17	nw.	10	15	10	6	4.0	.0	.0
Roseburg	510	45	76	29.50	30.04	+.01	69.2	+1.8	94	25	83	47	31	56	36	59	52	61	.07	−.2	2	5.7	n.	18	n.	6	18	11	2	2.8	.0	.0
Middle Pacific Coast Region							69.2	+1.9										61	0.01	0.0										3.1		
Eureka	62	73	89	29.97	30.04	−.01	55.8	+.3	63	12	60	48	6	52	14	53	51	84	.03	−.1	2	7.3	nw.	24	n.	5	8	14	9	5.2	.0	.0
Redding [1]	722	20	34	----	----	----	84.7	+2.9	107	9	98	60	18	72	33	62	45	29	T	−.1	0	8.6	nw.	26	nw.	4	26	4	1	1.3	.0	.0
Sacramento	66	92	115	29.78	29.86	−.02	76.8	+3.6	107	3	93	53	16	60	40	61	50	48	T	.0	0	7.9	s.	18	s.	30	29	2	0	.6	.0	.0
San Francisco	155	112	132	29.76	29.93	−.02	59.3	+.8	77	20	64	51	5	54	23	55	53	84	T	.0	0	11.1	w.	25	w.	3	10	11	10	5.2	.0	.0
South Pacific Coast Region							74.4	+1.2										63	0.05	0.0										3.5		
Fresno	327	97	105	29.50	29.84	+.01	83.4	+1.3	108	3	98	58	18	68	38	63	48	35	T	.0	0	6.9	nw.	18	nw.	27	23	5	3	2.1	.0	.0
Los Angeles	338	159	191	29.55	29.91	+.01	71.4	+1.2	94	1	80	58	9	62	27	63	60	74	.00	.0	0	5.6	sw.	14	w.	25	20	10	1	3.1	.0	.0
San Diego	87	62	70	29.81	29.90	−.02	68.4	+1.2	85	1	73	61	8	64	20	63	61	81	.16	+.1	2	7.0	w.	16	w.	13	11	12	8	5.3	.0	.0
West Indies																																
San Juan, P. R.	82	9	54	29.94	30.03	----	80.6	+.5	90	14	85	72	17	76	13	----	----	----	5.76	−.2	16	13.0	e.	34	e.	18	9	16	6	4.7	.0	.0
Panama Canal																																
Balboa Heights	118	6	92	----	[3]29.82	.00	80.8	+.5	92	28	87	72	31	74	16	----	----	[2]85	6.57	−.7	20	5.2	nw.	20	nw.	20	0	19	12	7.0	.0	.0
Cristobal	36	6	97	----	[3]29.84	.00	82.0	+1.6	89	19	87	74	21	77	14	77	76	[2]84	9.50	−6.1	25	7.7	n.	23	n.	19	0	8	23	8.3	.0	.0
Alaska																																
Fairbanks	454	11	87	[3]29.34	[3]29.84	----	60.3	+.3	84	13	73	41	28	48	36	52	44	62	1.32	−.6	14	6.1	ne.	30	sw.	2	7	12	12	6.5	.0	.0
Juneau	80	96	116	[3]29.96	[3]30.05	----	55.1	−2.0	72	3	60	44	2	50	27	51	48	79	8.15	+3.0	23	6.2	s.	20	e.	27	0	4	27	9.2	.0	.0
Nome	22	5	32	[3]29.81	[3]29.83	----	53.0	+3.0	72	14	60	33	8	45	28	50	47	80	.90	−1.9	8	7.4	sw.	24	e.	30	5	10	16	6.9	.0	.0
Hawaiian Islands																																
Honolulu	38	86	100	[3]29.98	[3]30.02	----	77.4	−.3	84	26	82	70	28	73	11	70	66	70	1.51	+.3	20	10.7	e.	28	e.	31	12	17	2	4.2	.0	.0

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

LATE REPORTS FOR JUNE 1937

Greenville, Maine	1,070	6	40	28.77	29.92	----	60.2	----	86	1	70	39	16	50	31	56	54	----	5.04	----	15	3.7	n.	18	----	9	5	4	21	----	0.0	0.0
Hatteras, N. C.	11	5	50	29.94	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	4.5	----	----

TABLE 3.—*Data furnished by the Canadian Meteorological Service, July 1937*

Stations	Altitude above mean sea level, Jan. 1, 1919	Pressure			Temperature of the air						Precipitation		
		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	Mean maximum	Mean minimum	Highest	Lowest	Total	Departure from normal	Total snowfall
	Feet	*In.*	*In.*	*In.*	°*F.*	°*F.*	°*F.*	°*F.*	°*F.*	°*F.*	*In.*	*In.*	*In.*
Cape Race, Newfoundland	99	29.86	29.96	−0.03	56.1	+0.9	63.0	49.2	73	42	3.47	−0.18	0.0
Sydney, Cape Breton Island	48	29.86	29.92	−.02	67.4	+3.5	79.0	55.9	92	43	.34	−3.10	.0
Halifax, Nova Scotia	88	29.70	29.96	.00	67.6	+2.8	76.1	59.1	87	54	1.44	−2.40	.0
Yarmouth, Nova Scotia	65	29.87	29.98	+.02	63.2	+2.5	71.8	54.6	84	48	3.68	+.22	.0
Charlottetown, Prince Edward Island	38	29.86	29.94	+.02	68.2	+3.1	77.2	59.3	86	52	.79	−2.25	.0
Chatham, New Brunswick	28	29.80	29.90	.00	68.7	+2.3	79.9	57.5	91	45	2.13	−1.90	.0
Father Point, Quebec	20	29.84	29.86	.00	60.0	+2.2	68.0	52.1	76	46	2.44	−.74	.0
Quebec, Quebec	296	29.60	29.92	+.02	70.1	+3.4	78.7	61.5	89	55	4.38	+.18	.0
Doucet, Quebec	1,236	29.61	29.94	+.01	62.3	+3.8	75.9	48.6	92	33	2.85	−2.18	.0
Montreal, Quebec	187	29.74	29.94	+.03	72.0	+2.5	79.9	64.1	89	56	5.05	+1.35	.0
Ottawa, Ontario	236	29.66	29.90	−.02	69.6	+.8	80.7	58.5	93	49	4.02	+.63	.0
Kingston, Ontario	285	29.62	29.94	.00	70.5	+2.1	77.7	63.3	86	54	1.35	−1.60	.0
Toronto, Ontario	379	29.54	29.95	−.01	71.4	+2.1	80.6	62.2	95	47	2.92	+.04	.0
Cochrane, Ontario	930	28.92	29.92	+.02	62.4	−.2	72.7	52.0	88	39	6.73	+3.31	.0
White River, Ontario	1,244	28.64	29.96	+.04	61.9	+1.3	75.2	48.5	93	30	7.44	+4.33	.0
London, Ontario	808	29.10	29.96	−.02	69.4	+.2	79.9	58.9	91	43	2.72	−.34	.0
Southampton, Ontario	656	29.25	29.95	−.03	66.7	+1.2	76.2	57.2	88	44	.77	−1.61	.0
Parry Sound, Ontario	688	29.27	29.96	+.02	69.2	+2.2	79.3	59.1	90	46	3.33	+.66	.0
Port Arthur, Ontario	644	29.26	29.97	+.04	62.4	−.5	72.6	52.2	88	41	5.31	+1.80	.0
Winnipeg, Manitoba	760	29.10	29.91	−.02	69.6	+2.9	80.9	58.3	92	45	2.83	−.24	.0
Minnedosa, Manitoba	1,690	28.16	29.94	+.04	66.7	+3.0	79.7	53.7	96	41	1.55	−.94	.0
Le Pas, Manitoba	860	28.94	29.90	+.01	68.2	+3.9	81.9	55.6	96	46	.57	−1.75	.0
Qu'Appelle, Saskatchewan	2,115	27.68	29.91	−.01	69.8	+5.8	84.1	55.6	107	44	1.07	−1.60	.0
Moose Jaw, Saskatchewan	1,759	27.96	29.91	+.05	72.3	+6.7	85.4	59.2	110	47	2.82	+.70	.0
Swift Current, Saskatchewan	2,392	27.40	29.90	.00	71.1	+5.4	85.9	56.3	104	42	.98	−1.38	.0
Medicine Hat, Alberta	2,365	27.46	29.89	+.01	72.2	+3.0	85.5	58.6	105	50	.96	−.84	.0
Calgary, Alberta	3,540												
Banff, Alberta	4,521												
Prince Albert, Saskatchewan	1,450	28.40	29.92	+.01	69.2	+6.2	81.2	57.2	98	48	1.46	−.81	.0
Battleford, Saskatchewan	1,592	28.21	29.91	.00	67.6	+4.2	82.2	53.0	102	44	4.07	+1.87	.0
Edmonton, Alberta	2,150	27.68	29.94	+.06	63.2	+1.8	73.7	52.7	86	46	8.31	+5.03	.0
Kamloops, British Columbia	1,262	28.68	30.00	+.06	72.2	+2.4	85.4	58.9	100	50	.78	−.24	.0
Victoria, British Columbia	230	29.82	30.06	+.02	60.1	+.2	67.9	52.3	73	50	.01	−.40	.0
Barkerville, British Columbia	4,180												
Estevan Point, British Columbia	20												
Prince Rupert, British Columbia	170	29.92	30.10	+.02	56.8	+.8	64.5	49.1	75	42	4.25	−.62	.0
St. George's, Bermuda	158		30.17	+.03	81.4	+2.9	87.0	75.8	92	73	1.61	−2.17	.0

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Montreal, Quebec	187	29.70	29.90	−0.01	66.4	+1.7	74.5	58.2	84	52	4.30	+.82	0.0
Calgary, Alberta	3,540	29.32	29.95	+.07	57.4	+1.5	68.8	46.0	94	36	3.22	+.03	.0
Edmonton, Alberta	2,150	27.63	29.89	+.05	60.4	+3.1	74.1	46.8	99	35	.90	−2.19	.0

TABLE 4.—*Severe local storms, July 1937*

(Compiled by Mary O. Souder from reports submitted by Weather Bureau officials)

[The table herewith contains such data as have 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
Pipestone, Rock, and Martin Counties, Minn.	3	1-4 p. m.			$180,000	Hail	Loss to growing crops, $175,000; property damage, $5,000.
Ackley to Aplington, Iowa, and vicinities.	3	6 p. m.		0		Tornado	Buildings leveled; trees stripped and uprooted.
Mahaska, Wapello, and Davis Counties, Iowa.	3	7-9 p. m.	325	0	25,000	Tornado and hail.	Several buildings wrecked. Loss to crops, $20,000; property damage, $5,000.
Muscatine County, Iowa	3	10 p. m.			2,500	Wind	Loss to wheat and oats.
Springfield, Mo	3				5,000	Thundersquall	Trees uprooted and outbuildings destroyed. Damage over a strip 2 blocks wide and 5 blocks long.
Fond du Lac and Dodge Counties, Wis.	3				25,000	Hail	Windows broken; loss to crops, $25,000.
Swansea, S. C., vicinity of	4	5 p. m.			600	Thunderstorm	Crop loss, $500; property damage, $100.
Fruitland, Idaho, vicinity of	4	8 p. m.	440	1	1,150	Straight-line wind.	Barn and several sheds demolished; some fruit trees blown down.
Charleston, Ill	4				5,000	Wind and hail	Loss to crops.
Tuscola, Ill	4				50,000	Hail	Do.
Burr Oak, Kans	5	3-4:30 p. m.	[1] 3		10,000	do	Chief damage to wheat and oats; path 10 miles long.
Clay County, Kans	5	5 p. m.	[1] 6		5,000	do	Loss mostly to crops; path 7 miles long.
Morris and Lyon Counties, Kans.	5	5-5:30 p. m			10,000	do	Loss mostly to crops; damage to roofs and windows in Council Grove, $2,000.
Chester, S. C., 9 miles south	5		880		2,000	Thundersquall	Number of buildings unroofed; path 3 miles long.
Tallulah, La., vicinity of	7	2-4 p. m.			1,200	Heavy hail	Much loss to crops.
Cleveland County, Iowa	7	10 a. m.	880		1,500	Hail	Loss to cotton and corn; path 4 miles long.
Edmunds County, S. Dak	8	6 p. m.	[1] 1		2,000	Wind	1 barn, several windmills, and chicken houses destroyed; 1 person injured.
Keokuk, Iowa, and vicinity	8	6:30 p. m.			20,000	Thunderstorm and hail.	At Union station, a factory and many trees struck by lightning.
Grand Island, N. Y	10	P. m.			5,000	Electrical	Barn damaged.
Wheeling, W. Va.,[2] and vicinity.	10	do				Wind and rain	More than 500 automobiles abandoned on Route 40, near Elm Grove, with from 4 to 6 feet of water on the highway. A tourist camp, 100 yards of Baltimore & Ohio Railway track, and 2 bridges washed out.
Wye Mills, Md	10				2,500	Electrical	Barn and contents destroyed.
Butte County, S. Dak	10		880		61,300	Heavy rain and flood.	Between Belle Fourche, S. Dak., and Aladdin, Wyo., Hay Creek overflowed, flooding basements in Belle Fourche. Irrigation works damaged and crops washed out.
Oakland, Nebr	11	3-4 p. m.	[1] 2		36,000	Heavy hail	No details.
Dillon County, S. C	11	P. m.	880		5,000	Wind	Loss to tobacco crop; path 10 miles long.
Durand,[2] Mich	11	do				Thundersquall and hail.	Hotel unroofed, trees uprooted, and many windows broken.
Ninety Six and Coronaco Creek, S. C.	11	do			2,000	do	Trees uprooted; several houses unroofed; crop loss because of hail, $1,000.
Sweetwater County, Wyo	11-12				100,000	Heavy rain and flood.	2,000 persons temporarily homeless, being forced to leave 500 homes; much damage to highway, railway, and mine property. Railway service suspended for 24 hours, more than 3,000 feet of track being washed out and much covered by landslides.
Nelson County, Va	12	3 p. m.	[1] 1		8,000	Hail	Loss mostly to corn and fruit.
Sula, Mont., vicinity of	12	5-6 p. m.	1,320		1,000	do	Property damaged.
Zell, S. Dak., vicinity of	12	7:45 p. m.	880	0	1,000	Tornado	Do.
Shannon and Washington Counties, S. Dak.	12			2	60,000	Flood	Heavy rains caused Wounded Knee and White Clay Creeks to overflow, damaging highways, bridges, dams, and reservoirs.
Arkansas City, Kans., vicinity of.	13	4:30 p. m.			800	Wind	No details.
Davidson, Okla	13	5 p. m.	[1] 2		2,000	do	Principal damage to plate-glass windows and roofs; path 10 miles long.
Guthrie, Okla	13	P. m.	[1] 5		3,500	do	Damage principally to buildings; path 12 miles long.
Monmouth, Ill	13				4,000	do	Property damaged.
Pondera County, Mont	13				35,000	Heavy rain and flood.	Fences, gardens, shelterbelts, and crops destroyed. Path about 30 miles long and varied in spotted areas to at least 4 miles wide.
Cassia County, Idaho, north portion.	14	11:45 a. m.-noon.	880		500	Hail	Loss to crops; path 5 miles long.
Power County, Idaho, south portion.	14	Noon-1 p. m.	[1] 1		5,500	Heavy hail	Loss to wheat; path 3 miles long.
Hancock County, Iowa	14	5:30 p. m.			10,000	Wind	Corn and oat crops flattened.
Baltimore, Md., southeast portion.	14	7 p. m.			10,000	Thundersquall	Houses unroofed and damaged; several chimneys blown down; wires broken; more than 40 trees uprooted.
Burden and Winfield, Kans., and vicinity.	14	P. m.				Wind and rain	Many buildings unroofed; barn blown down; loss to growing crops.
Lake of the Woods, Pennington, Roseau, Beltrami, Marshall, Red Lake, and Clearwater Counties, Minn.	14-16				2,000,000	Rain and flood	Many fields inundated; growing crops, culverts, and bridges washed out; highways damaged and basements flooded. Farm buildings in some districts more than half submerged.
Columbia, S. C	15	5:30 p. m.			500	Thundersquall	Section of a building roof at the fair grounds blown off.
Rice County, Kans	15	4 p. m.	880	0	5,000	Tornado	Damage to farm buildings and to fields of corn; path 15 miles long.
Reno County, Kans	15	4:30-5 p. m.	[1] 1		1,500	Wind and hail	Chickens killed; loss to corn and other crops; path from 3 to 4 miles long.
Big Horn, Custer, and Rosebud Counties, Mont.	15	4-7 p. m.	[1] 1			Hail	Considerable damage in Niles City to gardens.
Brown County, S. Dak	15	5:30-6 p.m.	2,640		42,400	Wind and hail	Loss to crops; farm buildings destroyed.
Jefferson County, Kans	15	6 p. m.	[1] 2½		66,000	Heavy hail	Loss chiefly to corn in a strip between Valley Falls and Oskaloosa; path 1: miles long.
Louisa County, Iowa	15	7:30 p. m.			600	Wind	Property damaged.
Monroe, Mich	15	7:30-8 p. m.			100,000	do	150 men of the public utilities worked all night to restore electric and phone service; theater unroofed and scenery thereof blown into the street.
Beardsley, Minn., and vicinity	15	7:45 p. m.	[1] 2½		5,100	Hail	Loss to growing crops, $5,000; property damage, $100; path 8 miles long.
Burchard, Nebr., and vicinity	15	11:30-12 p. m.	[1] 2		52,000	Wind and hail	Loss principally to crops; some old buildings damaged and windows broken.
Williston, S. C., vicinity of	15	P. m.			1,500	Thundersquall	Trees uprooted; several buildings unroofed; church blown over.
Mount Vernon, Ill	15				5,000	Wind	Property damaged.
Rockingham County, Va	16	3-3:30 p. m.	880		5,500	Thundersquall and hail.	Do.
Webster County, Nebr	16	5 p. m.	[1] 2		20,000	Hail	Do.
Gem, Kans., vicinity of	16	6 p. m.	[1] 2		10,000	do	Loss to crops; path 6 miles long.
Marshall and Washington Counties, Kans.	16	6-6:30 p. m.	[1] 4-10		55,000	Wind and hail	Loss to more than 4,000 acres of corn; barns wrecked; farming implements and power lines damaged; path 45 miles long.
Kearney County, Kans	16	8:30 p. m.	[1] 15		75,000	Hail	No details.
Osage and Franklin Counties, Kans.	16	9:55 p. m.-midnight.	[1] 10		50,000	Wind	Many farm buildings damaged; path 25 miles long.
Sorento, Ill	16				1,000	Hail	Loss to crops.
Harrisburg, Pa	16				5,000	Electrical	Property damaged.
North, S. C	17	2 p. m.			1,000	do	Residence destroyed.
Vermont, central and south portions.	17	P. m.				Wind, rain, electrical.	Gardens and shrubbery damaged; telephone and electric service disrupted in many sections; barn destroyed and the farmhouse damaged by lightning.

[1] Miles of instead of yards.

[2] From press reports.

TABLE 4.—*Severe local storms, July 1937*—Continued

[The table herewith contains such data as have 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
Ravenna, Nebr., vicinity of	17		[1] 2		$60,000	Hail	Property damaged.
Syracuse and Onondaga Counties, N. Y.	17					Wind	Many trees blown across highways; wire service crippled; picnic tent blown down; several persons injured.
Culpeper and Fauquier Counties, Va.[2]	17					Wind and rain	Houses unroofed; steeple torn from a church; many trees struck by lightning.
Dallas and Madison Counties, Iowa.	18	2-4 p. m.	[1] 5		50,000	Wind and hail	Hail completely destroyed some crops and wind flattened others.
Franklin, Nebr.	18	5:30-6 p. m	1,320		10,000	Hail	No details.
Lincoln, Nebr.	18	6 p. m.				Wind and rain	Light and telephone service disrupted; roof of a store blown off and the merchandise damaged. One person injured.
Montgomery County, Iowa	18	7:30 p. m.	[1] 2		10,000	Wind and hail	Loss to crops.
Fredonia, Kans.,[2] and vicinity	18	11 p. m.				Wind and rain	Extensive property damage; trees broken and uprooted; wires down.
Barnwell County, S. C.	18	P. m.			4,000	Rain	Roads damaged and bridges washed out.
Page County, Iowa	18				5,000	Wind and hail	Crop loss, $3,000; buildings damaged, $2,000.
Woodside, Md.	18				500	Electrical	House damaged; 2 men stunned.
Omaha, Nebr.	18				40,000	Rain	Streets, sewers, and basements flooded; pavements washed out.
Douglas and Bisbee, Ariz.	19				5,500	Wind and rain	Property damaged.
Pueblo, Colo.	19					Hail	Automobile tops riddled and windows broken in some sections of the city.
Elizabethtown, Black Lake, Sapello, Las Vegas, Tecolore, and Chapelle, N. Mex., and vicinities.	20	Noon-1 p. m.	[1] 10-15		14,000	do	Approximate area of the storm 1,000 square miles.
Charleston, S. C.	20	3 p. m.			500	Tornadic winds	Damage to roofs, awnings, windows, and automobiles.
Marietta, Okla.	20	5 p. m.	1,320		12,500	Wind	Crop loss, $7,500; property damage, $5,000.
River Falls, Wis., vicinity of	21				5,000	Hail	Loss to corn and small grain.
Watonwan, Swift, and Stearns Counties, Minn.	22	3-6 p. m.			60,000	do	Severe damage to growing crops; some loss to property.
Douglas County, Kans.	23	5:15-5:45 p. m.	[1] 5		75,000	Wind and hail	Chief damage to corn and truck crops; path 15 miles long.
Sturgeon Bay, Wis.	23				1,000	Hail	Loss to cherry crop.
Groton, S. Dak., vicinity of	24	3:30 p. m.			5,000	Wind and rain	Buildings wrecked; farm machinery destroyed.
Hartington, Nebr., vicinity of	24	7 p. m.	[1] 3		25,000	Heavy hail	Property damaged.
Plymouth County, Iowa	24	8-10 p. m.	[1] 5		200,000	Hail and wind	Principal damage from hail, in some sections causing complete loss to crops; windows broken.
Albion, N. Y.	24				10,000	Electrical	2 barns and contents burned.
Beresford, S. Dak.[2]	24		[1] 3		10,000	Rain and hail	This storm one of the most severe in this section. Many plate glass windows broken; city without street lights; automobile tops broken. More than an inch of rain recorded.
Philadelphia, Ind., vicinity of	25	1 p. m.		0		Tornado	Large barn demolished, 2 others, only 200 feet away, untouched; trees uprooted.
Grangeville, Idaho	25	2 p. m.	[1] 7½		110,000	Hail	Heavy crop damage over considerable area; property damage negligible; path 8 miles long.
Henriette, Tex., vicinity of	25	4:30 p. m.	[1] 2		7,000	do	Loss to crops; path 10 miles long.
Page, Nebr., vicinity of	25	11 p. m.	[1] 1-3		10,000	Wind and hail	Property damaged.
Olney, Ill.	25				1,000	Wind	Damage to property and shade trees.
Hart to Traverse City, Mich.	25					do	Heavy loss to cherry crop.
Door County, Wis.	25				20,000	do	Loss to cherry crop.
Terryville and Bristol, Conn., and vicinity.	26	3:45 p. m.	150-200		50,000	Tornadic wind and rain.	Storm started south of Terryville at the western end of the Terryville railroad tunnel, passing over Pequabuck, finally disappearing a mile or so east of Bristol after visiting the northern section of that town. Over 1,200 shade and timber trees twisted and broken, others uprooted. Extensive damage to telephone and power equipment. Some loss to crops. Small buildings picked up and moved many feet, a new silo being carried more than 200 yards away.
Castleford, Idaho, vicinity of	26	5 p. m.	880		10,000	Heavy hail	Loss to crops; path 4 miles long.
Buffalo, N. Y., water front	26				20,000	Wind	35 or more small boats torn from their moorings and damaged or wrecked.
Rochester, N. Y., and vicinity	26					Thundersquall	11 buildings struck by lightning and 8 burned. Many trees blown down; much damage to telephone and power lines.
Valentine, Nebr., vicinity of	27	3:55 a. m.			3,000	Electrical	Lumber shed and contents burned.
Emmett, Idaho, vicinity of	27	5 p. m.	880-1,320		5,000	Hail	Loss to crops; path 2 to 3 miles long.
Washington, southeast portion of the State.	27				21,000	Thundersquall and hail.	Loss to wheat from hail; property damaged by fire.
Phoenix, Ariz.	27-28				3,000	Thunderstorm	Damage to electrical equipment.
Russell County, Kans., southwest portion.	28					Heavy hail and wind.	Reported to have been the worst storm locally since 1909; property damaged; barn blown away; gardens destroyed; trees damaged.
Belden to Carroll, Nebr.	29	3:15-3:50 p. m.	[1] 3-10		400,000	Heavy hail	Corn down; crop totally destroyed over most of path.
Memphis, Tenn.	29	3:38 p. m.		0	1,000	Tornado	No details.
Dodge City, Kans., 2 miles north.	29	5:35-5:50 p. m.		0		Tornadoes	5 small tornadoes observed for short intervals. They occurred on the edge of a thunderstorm system that moved slowly from west to east. No damage reported.
Franklinville, Clarksburg, and Jamestown, N. Y., and vicinities.	29	P. m.			13,500	Electrical	Chief damage to barns by fire.
Tucson, Ariz., vicinity of	29			1	800	Thundersquall	Farmer killed when his house collapsed.
Waddington and West Potsdam, N. Y.	30	2 a. m.				Thunderstorm	Barns destroyed.
Pingree, Idaho	30				4,000	Heavy hail	Loss to crops over an area 2 miles square.
Cayuga County, N. Y.	30		880			do	Much loss to buckwheat, corn, and oats.
Carlisle, Pa., vicinity of	30				10,000	Electrical	4 barns destroyed.
Clarke County, Iowa	31	11 a. m.	440	0	4,000	Tornado and rain	Roofs blown off; trees down and basements flooded. Crop loss, $3,000; property damage, $1,000.
Cass County, Iowa	31	12:30 p. m.			7,500	Rain and hail	Houses flooded.
Butte, Mont.	31	2-3 p. m.				do	Considerable damage to gardens and flowers; no loss to crops.
Jefferson County, Iowa	31	6 p. m.	[1] 4		10,000	Wind and hail	Property damaged.
Pearl, Colo., vicinity of	31				1,000	Electrical	Barn damaged.

[1] Miles of instead of yards.

[2] From press reports.

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