DESCRIPTION OF TABLES AND CHARTS.

(Revised and corrected, September 1, 1917.)

Table I gives the data ordinarily needed for climatological studies for about 158 Weather Bureau stations making simultaneous observations at 8 a. m. and 8 p. m. daily, 75th meridian time, and for about 41 others making only one observation. The altitudes of the instruments above ground are also given.

Table II gives a record of precipitation, the intensity of which at some period of the storm's continuance equaled or exceeded the following rates:

Duration (minutes).....	5	10	15	20	25	30	35	40	45	50	60
Rates per hour (inches)....	3.00	1.80	1.40	1.20	1.08	1.00	0.94	0.90	0.87	0.84	0.80

It is impracticable to make this table sufficiently wide to accommodate on one line the record of accumulated falls that continue at an excessive rate for several hours. In this case *the record is broken at the end of each 50 minutes*, the accumulated amounts being recorded on successive lines until the excessive rate ends.

In cases where no storm of sufficient intensity to entitle it to a place in the full table has occurred, the greatest precipitation of any single storm has been given; also the greatest hourly fall during that storm.

The tipping-bucket mechanism is *dismounted* and removed when there is danger of snow or water freezing in the same. Table II records this condition by entering an asterisk (*).

Table III gives, for about 30 stations of the Canadian Meteorological Service, the means of pressure and temperature, total precipitation and depth of snowfall, and the respective departures from normal values except in the case of snowfall. The sealevel pressures have been computed at Washington by the method employed for reducing United States observations and described by Prof. F. H. Bigelow in this REVIEW, January, 1902, pages 13–16; the altitudes are those furnished us on January 1, 1916.

Chart I.—*Hydrographs* for several of the principal rivers of the United States.

Chart II.—*Tracks of centers* of HIGH areas; and

Chart III.—*Tracks of centers* of LOW areas. The roman numerals show the chronological order of the centers. The figures within the circles show the days of the month; the letters *a* and *p* indicate, respectively, the observations at 8 a. m. and 8 p. m., 75th meridian time. Within each circle is also given (Chart II) the last three figures of the highest barometric reading, or (Chart III) the lowest reading reported at or near the center at that time, and in both cases as reduced to sealevel and standard gravity.

Chart IV.—*Temperature departures.* This chart presents the departures of the monthly mean surface temperatures from the monthly normals. The normals used in computing the departures were computed for a period of 33 years (1873 to 1905) and are published in Weather Bureau Bulletin R, Washington, 1908. Stations whose records were too short to justify the preparation of normals in 1908, have been provided with normals as adequate records became available, and all have been reduced to the 33-year interval 1873–1905. The shaded portions of the chart indicate areas of positive departures and unshaded portions indicate areas of negative departures. Generalized lines connect places having approximately equal departures of like sign. This chart of monthly surface temperature departures in the United States was first published in the MONTHLY WEATHER REVIEW for July, 1909.

Chart V.—*Total precipitation.* The scale of shades showing the depth is given on the chart. Where the monthly amounts are too small to justify shading and over sections of the country where stations are too widely separated or the topography is too diversified to warrant reasonable accuracy in shading, the actual depths are given for a limited number of representative stations. Amounts less than 0.005 inch are indicated by the letter T, and no precipitation by 0.

Chart VI.—*Percentage of clear sky between sunrise and sunset.* The average cloudiness at each Weather Bureau station is determined by numerous personal observations between sunrise and sunset. The difference between the observed cloudiness and 100 is assumed to represent the percentage of clear sky, and the values thus obtained are the basis of this chart. The chart does not relate to the nighttime.

Chart VII.—*Isobars and isotherms at sealevel, and prevailing wind directions.* The pressures have been reduced to sealevel and standard gravity by the method described by Prof. Frank H. Bigelow on pages 13–16 of the REVIEW for January, 1902. The pressures have also been reduced to the mean of the 24 hours by the application of a suitable correction to the mean of the 8 a. m. and 8 p. m. readings at stations taking two observations daily, and to the 8 a. m. or the 8 p. m. observation, respectively, at stations taking but a single observation. The diurnal corrections so applied will be found in the Annual Report of the Chief of the Weather Bureau, 1900–1901, volume 2, Table 27, pages 140–164.

The isotherms on the sealevel plane have been constructed by means of the data summarized in chapter 8 of volume 2 of the annual report just mentioned. The correction, $t_0 - t$, or temperature on the sealevel plane minus the station temperature as given by Table 48 of that report, is added to the observed surface temperature to obtain the adopted sealevel temperature.

The prevailing wind directions are determined from hourly observations at the great majority of the stations. A few stations having no self-recording wind-direction apparatus determine the prevailing direction from the daily or twice-daily observations only.

Chart VIII.—*Total snowfall.* This is based on the reports from regular and cooperative observers and shows the depth in inches of the snowfall during the month. In general, the depth is shown by lines inclosing areas of equal snowfall, but in special cases figures are also given. Chart VIII is published only when the general snow cover is sufficiently extensive to justify its preparation.

Chart IX.—Average values of pressure, temperature, and prevailing wind directions, and storm tracks over the North Atlantic Ocean *for the corresponding month of last year.*

Chart X.—Presents *annually* the tracks of *hurricanes of the year;* tracks of the same month are all in one color. This chart was first published in the issue for September, 1916.

Chart XI.—Presents *annually*, by means of a dot for each report, the *frequency of earthquakes* in the United States during the year. This chart was first published in the REVIEW for December, 1915.

TABLE I.—*Climatological data for Weather Bureau stations, July, 1917.*

Districts and stations.	Elevation of instruments.			Pressure.			Temperature of the air.												Precipitation.			Wind.										
	Barometer above sealevel.	Thermometer above ground.	Anemometer above ground.	Station, reduced to mean of 24 hours.	Sealevel, reduced to mean of 24 hours.	Departure from normal.	Mean max.+mean min.÷2.	Departure from normal.	Maximum.	Date.	Mean maximum.	Minimum.	Date.	Mean minimum.	Greatest daily range.	Mean wet thermometer.	Mean temperature of the dew point.	Mean relative humidity.	Total.	Departure from normal.	Days with 0.01 inch or more.	Total movement.	Prevailing direction.	Maximum velocity. Miles per hour.	Maximum velocity. Direction.	Maximum velocity. Date.	Clear days.	Partly cloudy days.	Cloudy days.	Average cloudiness, tenths.	Total snowfall.	Snow 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.							69.7	+0.8										82	2.35	-1.2										5.8		
Eastport	76	67	85	29.85	29.93	0.00	58.4	-1.4	84	31	68	45	23	49	32	56	54	90	1.90	-1.5	11	5,165	s.	24	ne.	10	5	14	12	6.2		
Greenville	1,070	6		28.79	29.94		66.4		90	26	77	48	5	56	32				6.97		17						12	14	5			
Portland, Me	103	82	117	29.83	29.95	.00	68.8	+0.8	92	31	78	54	12	60	26	63	60	78	1.92	-1.3	12	5,468	s.	26	nw.	27	10	8	13	5.5		
Concord	288	70	79	29.64	29.95	-.01	71.4	+2.3	98	30		51	6		33				1.27	-2.5	7	3,137	sw.	30	n.	24	12	16	3	4.2		
Burlington	404	11	48	29.50	29.93	-.01	70.9	+1.7	94	30	80	50	5	62	28				1.88	-1.9	15	6,204	s.	26	s.	1	8	14	9	5.8		
Northfield	876	12	60	29.02	29.95	+.01	67.8	+1.2	94	30	80	43	5	56	38	63	61	79	3.08	-0.6	13	4,126	s.	36	ne.	22	2	22	7	5.9		
Boston	125	115	188	29.82	29.95	-.01	73.3	+2.0	98	30	81	56	10	66	25	67	65	77	1.10	-2.3	7	6,603	sw.	27	n.	27	10	15	6	5.0		
Nantucket	12	14	90	29.96	29.97	-.01	67.5	0.0	90	31	74	54	12	61	21	64	64	92	3.32	+0.6	10	11,039	sw.	48	sw.	13	5	14	12	6.5		
Block Island	26	11	46	29.94	29.97	.00	68.4	+0.3	89	31	74	56	10	63	22	66	66	94	2.90	-0.4	9	10,811	sw.	34	e.	11	7	8	16	6.4		
Narragansett Pier		9					69.0	-0.9	97	31	76	53	10	62	24				1.79		13		sw.				17	6	8			
Providence	160	215	251	29.79	29.96	-.01	73.6	+0.2	100	31	82	54	10	65	25	66	63	76	1.09	-2.4	6	7,387	sw.	38	sw.	14	7	15	9	5.9		
Hartford	159	122	140	29.79	29.96	-.01	73.6	+2.0	97	31	82	57	6	65	28	67	64	78	4.07	0.0	10	5,094	s.	35	w.	2	5	14	12	6.0		
New Haven	106	117	155	29.86	29.97	.00	73.2	+1.3	99	31	81	58	12	66	29	67	64	78	3.35	-1.4	12	5,642	s.	34	nw.	27	8	13	10	5.9		
Middle Atlantic States.							74.6	-0.1										79	5.03	+0.7										6.3		
Albany	97	102	115	29.84	29.94	-0.02	73.4	+1.4	99	30	82	55	5	64	29	66	62	73	1.70	-2.2	9	4,488	s.	22	s.	18	9	16	6	4.9		
Binghamton	871	10	69	29.04	29.95	-.02	71.6	+1.7	94	31	81	52	1	62	27				3.55	0.0	18	2,805	sw.	19	nw.	15	6	13	12	6.3		
New York	314	414	454	29.64	29.97	-.01	74.1	+0.6	98	31	81	58	11	67	22	67	65	78	5.96	+1.4	10	9,914	sw.	50	sw.	2	3	13	15	7.1		
Harrisburg	374	94	104	29.58	29.97	-.01	74.7	+0.2	100	31	83	58	1	67	27	67	64	74	3.12	-0.8	12	4,031	sw.	28	sw.	14	3	11	17	7.0		
Philadelphia	117	123	190	29.86	29.98	.00	76.4	+0.6	101	31	84	60	12	69	24	69	66	75	5.63	+1.3	11	6,667	sw.	29	se.	10	5	9	17	6.8		
Reading	325	81	98	29.63	29.97		75.5		99	31	84	58	1	67	30	68	64	74	2.76	-1.5	11	4,254	s.	32	n.	14	5	9	17	6.7		
Scranton	805	111	119	29.13	29.98	.00	72.7	+0.9	98	31	82	52	1	64	26	67	65	82	2.27	-1.6	14	3,932	sw.	24	sw.	14	4	11	16	6.8		
Atlantic City	52	37	48	29.93	29.98	.00	73.1	+0.6	99	31	78	60	2	68	21	69	68	87	4.35	+0.6	12	4,983	sw.	25	sw.	12	7	15	9	5.6		
Cape May	18	13	49	30.00	30.02		73.2	-0.2	98	31	80	61	3	67	24	69			5.81	+2.0	13	4,743	s.	30	nw.	14	7	16	8	5.6		
Sandy Hook	22	10	57	29.95	29.97		73.3		98	31	79	60	3	67	25	69	67	85	6.59		13	8,783	sw.	71	s.	2	5	15	11	5.9		
Trenton	190	159	183	29.77	29.97		75.1		98	31	83	59	12	67	28	68	66	79	4.24	-0.5	14	7,060	sw.	52	w.	2	5	11	15	7.0		
Baltimore	123	100	113	29.85	29.97	-.01	77.2	-0.1	99	31	84	63	10	70	24	70	67	77	7.09	+2.3	15	4,495	s.	26	nw.	12	4	14	13	6.5		
Washington	112	62	85	29.86	29.97	-.03	76.6	-0.2	99	31	85	62	11	68	27	70	68	80	9.41	+4.8	14	3,569	sw.	44	nw.	14	6	14	11	6.2		
Lynchburg	681	153	188	29.27	29.99	-.02	76.4	-0.9	98	31	86	59	1	67	33	69	66	78	2.97	-1.1	12	4,098	w.	33	nw.	16	7	10	14	6.1		
Norfolk	91	170	205	29.91	30.01	+.01	77.2	-1.2	98	31	85	64	10	69	24	71	69	82	11.73	+5.9	22	7,873	s.	66	nw.	10	7	13	11	5.9		
Richmond	144	11	52	29.85	30.00	-.01	76.8	-2.4	96	31	86	62	11	68	24	70	69	83	6.28	+1.9	17	4,932	s.	41	nw.	14	5	7	19	6.9		
Wytheville	2,293	49	55	27.69	29.99	-.02	70.6	-2.0	90	31	80	50	5	61	35	64	62	80	3.68	-0.8	14	3,615	w.	26	sw.	14	10	11	10	5.3		
South Atlantic States.							78.9	-0.2										82	7.31	+1.3										5.6		
Asheville	2,255	70	84	27.74	30.02	0.00	72.0	+0.3	91	31	82	55	5	62	30	65	63	82	3.84	-1.0	16	3,901	se.	31	n.	12	6	15	10	5.9		
Charlotte	773	153	161	29.19	30.01	-.01	77.4	-1.3	97	31	86	63	5	69	24	70	68	78	5.85	+0.4	13	5,899	sw.	37	sw.	15	6	12	13	6.5		
Hatteras	11	12	50	30.02	30.03	+.02	78.4	-0.2	91	31	83	69	11	74	14	75	73	88	3.83	-2.3	16	10,223	sw.	38	sw.	12	10	13	8	5.5		
Manteo	12	5	43				77.2		96	30	86	58	29	69					7.86	+1.8	11		sw.				17	3	11			
Raleigh	376	103	110	29.62	30.00	-.02	77.8	-0.7	98	31	87	63	5	69	25	71	69	82	7.82	+1.7	19	3,830	sw.	26	sw.	12	9	14	8	5.3		
Wilmington	78	81	91	29.95	30.03	+.02	78.9	+0.2	97	31	86	67	1	72	21	73	72	84	12.37	+5.4	17	5,408	sw.	34	e.	27	9	10	12	5.4		
Charleston	48	11	92	29.99	30.04	+.01	80.8	-0.5	95	28	87	66	8	74	21	75	74	80	9.95	+2.7	16	7,087	s.	46	ne.	8	11	14	6	4.8		
Columbia, S. C.	351	41	57	29.65	30.03	+.01	80.5	-0.6	96	31	89	66	17	72	25	71	69	78	4.41	-1.6	14	4,730	sw.	45	sw.	17	9	10	12	5.6		
Augusta	180	62	77	29.82	30.01	-.01	81.0	+0.5	96	31	91	67	17	71	26	73	71	78	5.75	+0.5	12	3,680	se.	39	w.	17	11	9	11	5.4		
Savannah	65	150	194	29.97	30.04	+.01	81.2	+0.7	96	27	89	68	13	73	23	74	73	83	8.39	+2.2	17	5,997	sw.	44	w.	7	4	16	11	6.2		
Jacksonville	43	200	245	30.01	30.06	+.03	81.0	+0.1	94	31	89	69	4	73	23	74	72	83	10.36	+4.2	17	8,276	sw.	60	sw.	14	9	16	6	5.2		
Florida Peninsula.							82.1	+0.2										75	3.50	-2.9										4.1		
Key West	22	10	64	30.02	30.04	+0.01	83.4	-0.3	91	30	88	74	10	79	16	75	72	72	0.80	-2.8	11	6,818	se.	36	sw.	10	18	12	1	3.3		
Miami	25	71	79	30.05	30.08		81.0	-0.9	89	11	86	67	10	76	21	75	72	75	2.48	-4.8	10	5,652	e.	36	sw.	10	14	11	6	4.5		
Sand Key	23	39	72	30.00	30.03	.00	81.8		89	30	84	72	25	79	12	76	73	75	0.93		8	8,946	e.	46	s.	10	18	13	0	3.1		
Tampa	35	79	92	30.03	30.06	+.02	81.9	+1.9	94	16	90	68	13	74	25	74	72	78	7.21	-1.2	21	4,473	se.	26	se.	14	2	25	4	5.6		
East Gulf States.							80.2	-0.1										78	5.69	+0.4										5.5		
Atlanta	1,174	190	216	28.82	30.03	+0.01	78.0	+0.4	93	31	87	65	17	69	23	70	67	75	1.98	-2.8	12	6,615	w.	48	e.	31	10	7	14	5.6		
Macon	370	78	87	29.65	30.04	+.02	80.6	+0.9	97	31	91	67	12	70	24	72	69	75	4.54	-0.1	15	3,791	s.	36	s.	13	8	13	10	5.8		
Thomasville	273	49	58	29.75	30.04	+.01	80.4	-1.4	95	28	90	67	14	71	27	73	72	82	9.11	+3.8	17	2,742	sw.	19	n.	25	3	19	9	6.3		
Pensacola	56	149	185	29.98	30.04	+.03	80.0	-1.4	91	29	85	68	7	75	19	75	73	81	3.96	-3.3	13	7,935	sw.	44	n.	6	5	13	13	6.5		
Anniston	741	9	57	29.26	30.04	+.02	77.6	-0.3	94	31	88	61	11	68	29				5.03	+0.3	15	2,953	s.	23	sw.	16	8	19	4	4.8		
Birmingham	700	11	48	29.29	30.04	+.03	79.5	-2.0	96	31	89	64	11	70	26	71	69	80	3.71	-1.0	16	3,665	s.	30	w.	10	5	16	10	5.8		
Mobile	57	125	161	29.97	30.02	+.02	81.4	+0.9	96	30	89	67	6	74	23	74	72	78	10.54	+3.5	18	6,269	sw.	50	n.	6	5	17	9	5.8		
Montgomery	223	100	112	29.79	30.03	+.01	80.4	-0.6	95	31	90	66	22	71	23	72	70	79	5.26	+0.6	15	3,768	s.	35	nw.	2	7	14	10	5.8		
Corinth	469	6					79.0		98	31	90	60	11	68	33				7.52		13		s.				7	21	3			
Jackson	304	5					82.7		101	13	94	68	10	71	31				2.98		8		sw.				7	19	5			
Meridian	375	85	93	29.62	30.00	-.02	80.5	+0.5	96	1	90	67	6	71	25	72	69	77	5.12	+0.6	14	3,467	sw.	33	nw.	6	12	13	6	4.5		
Vicksburg	247	65	74	29.74	30.02	+.02	80.8	+0.4	96	1	90	67	19	72	26	73	71	76	4.97	+0.6	9	4,190	sw.	27	ne.	7	17	5	9	3.9		
New Orleans	51	76	84	29.97	30.02	+.02	82.6	+1.3	98	10	91	68	18	75	24	75	73	79	8.35	+1.9	14	4,097	sw.	38	ne.	7	5	15	11	6.1		
West Gulf States.							82.7	+0.8										69	3.73	+0.6										3.6		
Shreveport	249	77	93	29.72	29.99	+0.01	83.3	+1.2	103	10	94	67	16	73	31	72	68	66	9.30	+5.6	6	4,634	s.	24	se.	8	22	7	2	2.9		
Bentonville	1,303	11	44	28.62	29.96	-.01	77.3	-1.2	98	7	89	57	3	66	31				5.66	+1.4	9	3,575	s.	20	nw	14	22	7	2	3.1		
Fort Smith	457	79	94	29.47	29.94	-.03	81.8	+0.8	103	1	93	65	13	71	36	71	67	66	2.00	-1.8	11	4,896	e.	30	sw.	23	12	12	7	4.5		
Little Rock	357	139	147	29.60	29.97	-.02	80.1	-0.5	99	7	89	65	17	71	28	72	68	71	4.54	+0.6	9	5,750	s.	44	n.	23	12	10	9	4.5		
Brownsville	57	4	26				84.2		99	10	94	72	17	75	26				4.52		5		se.									
Corpus Christi	20	69	77	29.97	29.99	+.03	82.2	-0.5	92	10	87	73	21	77	17	77	75	83	0.95	-0.7	1	11,366	se.	46	se.	21	14	13	4	4.3		
Dallas	512	109	117	29.42	29.95		84.7		104	10	94	68	16	75	31				2.35		8	6,811	s.	33	s.	14	12	5	4	4.4		
Fort Worth	670	106	114	29.23	29.92	-.04	84.6	+0.9	107	10	95	68	4	74	31	70	64	56	2.65	-0.4	5	7,588	s.	35	s.	14	15	10	6	4.0		
Galveston	54	106	114	29.96	30.02	+.04	83.3	+0.3	93	12	87	73	20	79	18	76	74	78	0.46	-3.5	3	8,167	s.	26	sw.	11	17	13	1	3.1		
Houston	138	111	121	29.86	30.00		84.2	+1.2	101	11	94	68	2	75	29				3.30		7	5,689	s.	32	ne.	3	19	12	0	3.2		
Palestine	510	64	72	29.45	29.96	-.01	83.4	+1.9	105	10	94	65	16	73	28	73	68	69	7.73	+4.7	6	5,193	s.	35	ne.	16	17	8	6	4.0		
Port Arthur, Tex.	34	58	66	29.96	30.00		82.8		97	10	90	68	4	76	22	78	77	87	6.42		13	6,866	s.	28	sw.	12	11	16	4	4.4		
San Antonio	701	119	132	29.23	29.94	-.01	84.8	+2.4	104	11	96	68	20	73	30	72	66	64	2.19	0.0	4	6,046	s.	41	nw.	20	28	3	0	1.4		
Taylor	583	55	63	29.39	30.00	+.04	84.6	+1.9	106	11	96	67	20	73	33				1.84	-0.8	7	7,415	s.	38	n.	20	11	19	1	3.9		

TABLE I.—*Climatological data for Weather Bureau stations, July, 1917*—Continued.

Districts and stations.	Elevation of instruments.			Pressure.			Temperature of the air.													Precipitation.			Wind.										
	Barometer above sealevel.	Thermometer above ground.	Anemometer above ground.	Station, reduced to mean of 24 hours.	Sealevel, reduced to mean of 24 hours.	Departure from normal.	Mean max.+mean min.÷2.	Departure from normal.	Maximum.	Date.	Mean maximum.	Minimum.	Date.	Mean minimum.	Greatest daily range.	Mean wet thermometer.	Mean temperature of the dew point.	Mean relative humidity.	Total.	Departure from normal.	Days with 0.01 inch or more.	Total movement.	Prevailing direction.	Maximum velocity. Miles per hour.	Maximum velocity. Direction.	Maximum velocity. Date.	Clear days.	Partly cloudy days.	Cloudy days.	Average cloudiness, tenths.	Total snowfall.	Snow on ground at end of month.
	Ft.	Ft.	Ft.	In.	In.	In.	°F.	°F.	°F	°F	°F	°F	°F	°F	°F.	°F.	°F.	%	In.	In.		Miles								0-10	In.	In.
Ohio Valley and Tennessee.							75.1	−1.4										75	4.28	+0.3										5.4		
Chattanooga	762	189	213	29.22	30.01	−0.01	77.0	−0.8	94	31	86	63	11	69	26	69	66	74	4.84	+1.0	14	5,025	w.	46	sw.	15	5	18	8	5.9	....	....
Knoxville	996	102	111	28.97	30.00	−.02	76.2	0.0	93	30	85	61	11	67	27	70	68	80	13.16	+9.0	13	3,701	sw.	31	n.	14	2	11	18	6.9	....	....
Memphis	399	76	97	29.59	30.01	+.01	79.0	−1.7	95	1	87	62	19	72	23	72	69	75	5.96	+2.4	12	5,441	sw.	64	nw.	19	16	10	5	4.0	....	....
Nashville	546	168	191	29.43	30.00	−.01	77.2	−2.2	95	14	87	60	13	68	30	69	66	73	3.25	−1.1	11	4,375	sw.	37	n.	14	9	13	9	5.4	....	....
Lexington	989	193	230	28.94	29.99	−.02	74.4	−2.2	92	31	82	58	11	66	22	....	....	....	2.80	−1.6	14	7,631	sw.	30	sw.	13	11	14	6	5.0	....	....
Louisville	525	219	255	29.42	30.00	.00	76.4	−2.2	94	31	85	60	4	68	24	68	64	69	1.86	−1.9	13	6,847	s.	34	s.	13	9	12	10	5.7	....	....
Evansville	431	139	175	29.52	29.98	−.02	78.2	−1.1	94	1	87	63	4	69	26	69	65	68	2.26	−1.6	8	6,548	s.	41	s.	13	9	20	2	4.7	....	....
Indianapolis	822	194	230	29.10	29.97	−.02	74.0	−2.2	93	30	83	53	11	65	24	66	62	69	3.20	−0.9	9	6,599	sw.	33	w.	26	12	10	9	4.8	....	....
Terre Haute	575	96	129	29.34	29.95	....	75.6	....	94	30	85	55	4	66	27	67	63	69	4.02	....	7	5,765	sw.	30	nw.	26	5	21	5	5.4	....	....
Cincinnati	628	11	51	29.31	29.97	−.03	74.0	+0.2	94	31	84	54	11	64	27	67	64	76	4.04	+0.5	16	3,949	sw.	25	nw.	1	9	12	10	5.7	....	....
Columbus	824	173	222	29.11	29.97	−.03	73.6	−1.7	95	31	83	57	13	64	28	68	66	80	4.09	+0.4	11	5,990	sw.	58	nw.	1	15	8	8	4.2	....	....
Dayton	899	181	216	29.01	29.94	....	73.2	−3.0	93	31	82	53	11	64	26	68	65	79	3.34	+0.1	10	5,771	sw.	37	ne.	23	8	12	11	5.8	....	....
Pittsburgh	842	353	410	29.08	29.97	−.03	73.6	−1.0	93	31	82	55	4	65	26	66	62	72	2.33	−2.1	11	6,773	sw.	46	w.	2	9	7	15	5.8	....	....
Elkins	1,940	41	50	28.00	29.99	−.02	70.4	−0.1	90	31	82	49	5	59	37	63	61	81	2.6	−2.0	17	2,174	w.	17	w.	7	2	11	18	7.1	....	....
Parkersburg	638	77	84	29.34	29.99	−.02	74.4	−1.2	94	31	84	57	3	65	30	68	66	80	6.17	+1.5	15	3,163	sw.	27	nw.	26	13	11	7	4.8	....	....
Lower Lake Region.							71.4	−0.3										74	2.63	−0.8										4.7		
Buffalo	767	247	280	29.12	29.93	−0.04	69.5	−0.7	93	25	75	56	4	64	23	64	62	79	4.46	+1.1	11	10,320	sw.	72	nw.	9	13	11	7	4.9	....	....
Canton	448	10	61	29.44	29.91	....	70.0	−0.5	93	31	79	49	4	61	28	....	....	....	2.22	−1.0	10	6,421	sw.	37	sw.	30	15	11	5	4.1	....	....
Oswego	335	76	91	29.56	29.92	−.04	70.1	+0.5	92	30	77	54	5	63	22	64	61	76	1.49	−1.7	12	5,420	s.	27	sw.	30	8	12	11	5.4	....	....
Rochester	523	97	113	29.38	29.94	−.03	71.7	+1.3	93	30	80	52	4	63	23	65	62	73	4.22	+1.1	11	5,245	sw.	32	sw.	30	11	12	8	5.3	....	....
Syracuse	597	97	113	29.32	29.96	−.01	71.1	+0.3	93	30	79	51	4	63	25	65	61	73	1.80	−1.9	13	6,611	s.	31	nw.	21	8	15	8	5.5	....	....
Erie	714	130	166	29.18	29.93	−.05	71.6	−0.2	92	31	78	52	4	65	22	66	62	74	4.33	+1.1	9	9,012	sw.	44	sw.	13	17	10	4	3.8	....	....
Cleveland	762	190	201	29.14	29.95	−.04	71.4	−1.1	95	31	78	53	4	65	22	65	62	76	3.60	0.0	12	7,418	s.	36	n.	27	16	10	5	4.5	....	....
Sandusky	629	62	103	29.28	29.95	−.04	73.0	−0.6	99	31	81	55	4	65	23	66	62	72	0.46	−3.3	7	7,271	sw.	34	se.	21	9	16	6	4.8	....	....
Toledo	628	208	243	29.28	29.95	−.04	73.2	−0.5	97	31	82	53	4	65	24	66	62	72	1.51	−1.7	10	8,644	sw.	41	sw.	1	17	11	3	3.8	....	....
Fort Wayne	856	113	124	29.06	29.96	−.02	72.0	−1.5	95	31	82	50	11	62	27	65	62	74	4.98	....	11	5,645	sw.	31	sw.	6	9	18	4	4.7	....	....
Detroit	730	218	245	29.16	29.94	−.04	72.2	+0.2	95	31	80	53	4	64	20	65	62	73	2.21	−1.3	11	7,246	sw.	36	sw.	1	10	13	8	5.2	....	....
Upper Lake Region.							67.8	0.0										78	2.91	−0.2										4.8		
Alpena	609	13	92	29.26	29.92	−0.05	66.6	+0.8	101	29	75	46	5	58	30	62	59	78	2.54	−0.5	9	6,120	se.	38	se.	1	13	12	6	4.3	....	....
Escanaba	612	54	60	29.25	29.91	−.06	65.9	−0.7	90	30	74	45	3	58	25	61	59	81	2.57	−0.8	11	5,738	s.	28	sw.	29	10	15	6	4.6	....	....
Grand Haven	632	54	92	29.26	29.92	−.06	68.0	−1.7	92	25	75	48	10	61	24	62	60	77	2.62	0.0	8	7,377	w.	37	sw.	1	18	7	6	3.4	....	....
Grand Rapids	707	70	87	29.18	29.93	−.05	71.6	−1.0	98	31	81	49	4	62	26	65	62	74	6.91	+4.3	11	3,909	sw.	22	nw.	2	12	11	8	4.6	....	....
Houghton	684	62	99	29.16	29.88	−.08	65.4	+0.1	103	29	76	45	10	55	31	....	....	....	2.51	−0.6	9	6,765	e.	36	nw.	30	18	9	4	3.5	....	....
Lansing	878	11	62	29.01	29.93	....	70.0	−1.1	96	31	80	47	4	60	30	64	62	80	3.06	−0.2	11	3,222	sw.	20	s.	1	12	9	10	5.4	....	....
Ludington	637	60	66	29.24	29.93	....	65.4	....	92	25	72	48	11	58	23	63	61	88	1.58	....	8	6,589	s.	38	w.	1	13	13	5	4.3	....	....
Marquette	734	77	111	29.13	29.93	−.05	64.6	−0.3	105	29	73	45	4	56	29	59	55	73	1.99	−1.1	11	6,282	nw.	36	sw.	28	9	11	11	6.0	....	....
Port Huron	638	70	120	29.24	29.93	−.05	69.6	+0.6	96	29	78	50	3	61	23	64	62	79	4.61	+1.9	13	6,186	sw.	29	nw.	9	12	14	5	4.6	....	....
Saginaw	641	48	82	29.24	29.92	....	71.4	....	98	31	81	49	4	62	28	65	62	75	2.04	−1.7	12	5,363	sw.	32	sw.	20	8	8	15	6.4	....	....
Sault Sainte Marie	614	11	61	29.23	29.91	−.06	63.0	+1.1	95	31	74	43	4	52	40	59	56	82	1.95	−0.8	11	4,842	w.	31	nw.	10	6	13	12	6.0	....	....
Chicago	823	140	310	29.08	29.94	−.04	72.2	−0.2	98	30	79	55	10	65	26	64	61	71	2.68	−1.0	7	7,491	sw.	36	w.	2	15	8	8	4.3	....	....
Green Bay	617	109	144	29.25	29.90	−.07	70.1	+0.6	96	31	79	50	4	61	29	64	61	75	1.52	−2.0	10	7,156	sw.	40	sw.	1	7	18	6	5.7	....	....
Milwaukee	681	119	133	29.20	29.93	−.04	70.2	+0.5	98	30	78	53	11	63	27	64	61	75	1.53	−1.5	8	6,052	sw.	30	nw.	1	14	11	6	4.0	....	....
Duluth	1,133	11	47	28.70	29.90	−.05	64.5	+1.5	94	29	74	45	11	55	34	60	57	78	4.29	+0.6	12	6,839	ne.	54	sw.	29	14	8	9	4.5	....	....
North Dakota.							71.9	+2.8										61	1.07	−1.8										3.2		
Moorhead	940	8	57	28.90	29.90	−0.04	72.5	+3.8	110	28	86	42	2	59	37	64	61	71	0.81	−2.9	8	5,360	se.	28	nw.	21	26	5	0	1.5	....	....
Bismarck	1,674	8	57	28.16	29.90	−.03	73.2	+3.0	107	28	87	44	3	60	40	62	54	58	1.50	−0.6	12	7,478	nw.	37	nw.	31	15	15	1	3.3	....	....
Devils Lake	1,482	11	44	28.32	29.86	−.07	70.0	+1.9	106	28	84	37	2	56	40	60	55	63	1.60	−2.2	16	7,034	s.	34	w.	29	9	15	7	4.8	....	....
Grand Forks	835	12	89	....	....	....	68.8	....	106	28	82	40	2	56	41	65	....	....	2.84	....	7	....	s.	48	nw.	8	22	3	6	....	....	....
Williston	1,872	41	48	27.91	29.83	−.09	72.1	+2.7	106	27	87	39	2	58	41	59	50	52	0.36	−1.7	7	6,329	se.	40	w.	4	17	13	1	3.4	....	....
Upper Mississippi Valley.							75.2	−0.2										70	3.40	−0.2										4.2		
Minneapolis	918	10	208	28.93	29.89	....	73.0	....	99	28	82	52	2	64	24	....	....	....	4.09	+0.2	14	7,790	se.	44	nw.	30	15	10	6	3.9	....	....
St. Paul	837	201	236	29.00	29.89	−0.06	72.4	+0.3	99	28	82	49	4	63	26	....	....	....	4.12	+0.7	14	7,692	se.	46	nw.	30	17	14	5	4.3	....	....
La Crosse	714	11	48	29.14	29.89	−.07	72.7	+0.1	97	31	83	51	4	63	29	....	....	....	6.93	+2.9	12	3,007	s.	30	nw.	31	14	9	8	4.5	....	....
Madison	974	70	78	28.91	29.93	−.04	71.8	−0.6	95	31	81	55	3	63	31	65	62	76	3.10	−0.9	8	5,460	w.	35	sw.	22	8	16	7	5.3	....	....
Wausau	1,247	4	....	28.60	29.91	....	68.4	....	97	30	79	42	4	58	31	....	....	....	4.91	....	12	....	nw.	....	....	....	....	11	13	7	4.8	....	....
Charles City	1,015	10	49	28.87	29.92	−.04	72.4	−1.1	98	30	83	46	3	61	29	66	62	73	5.00	+1.4	10	4,051	nw.	24	se.	5	16	12	3	4.3	....	....
Davenport	606	71	79	29.28	29.93	−.04	75.8	+0.4	98	30	86	52	3	66	27	67	63	69	2.72	−0.8	10	4,636	sw.	27	s.	22	17	10	4	3.9	....	....
Des Moines	861	84	97	29.01	29.90	−.06	76.6	+1.1	101	30	87	52	3	66	27	67	62	63	1.58	−2.3	8	5,009	n.	35	sw.	31	17	11	3	3.3	....	....
Dubuque	698	81	96	29.21	29.94	−.03	73.8	−0.9	99	30	83	51	4	64	28	66	62	70	2.10	−2.2	11	4,040	s.	20	nw.	11	12	12	7	4.7	....	....
Keokuk	614	64	78	29.28	29.94	−.04	76.6	−0.4	100	30	87	55	3	66	25	68	64	67	2.65	−1.4	9	4,640	s.	32	sw.	22	17	14	0	2.7	....	....
Cairo	356	87	93	29.58	29.95	−.05	78.0	−0.6	93	1	86	63	16	70	22	71	68	76	4.74	+1.3	11	4,977	sw.	40	nw.	26	10	14	7	4.9	....	....
Peoria	609	11	45	29.30	29.96	−.02	75.0	−0.4	98	30	86	49	3	64	29	67	64	74	1.92	−1.0	9	3,587	s.	21	s.	1	13	18	0	3.9	....	....
Springfield, Ill	644	10	91	29.27	29.93	−.05	76.7	+0.2	98	30	87	55	4	66	27	68	64	70	3.86	+1.0	10	4,755	s.	26	e.	23	14	14	3	3.9	....	....
Hannibal	534	74	109	29.37	29.93	−.05	77.2	−0.2	102	30	88	54	4	67	27	....	....	....	1.71	−2.0	13	5,700	sw.	40	s.	6	16	14	1	3.7	....	....
St. Louis	567	265	303	29.35	29.94	−.05	78.9	−0.2	96	13	88	62	4	70	27	69	65	67	3.17	−0.3	10	7,777	sw.	47	nw.	27	11	18	2	4.5	....	....
Missouri Valley.							77.7	+2.0										60	1.85	−2.0										2.7		
Columbia, Mo.	781	11	84	29.12	29.93	−0.05	77.6	+0.2	102	30	89	54	4	66	27	....	....	....	0.93	−2.7	7	4,722	s.	34	nw.	6	17	11	3	3.5	....	....
Kansas City	963	161	181	28.91	29.90	−.07	79.9	+2.3	100	30	90	60	17	70	28	67	61	56	1.02	−3.8	8	7,433	s.	35	ne.	22	21	9	1	2.6	....	....
St. Joseph	967	11	49	28.91	29.90	....	79.7	....	103	30	91	56	3	68	31	68	62	61	1.04	....	9	5,136	s.	43	nw.	12	22	8	1	2.2	....	....
Springfield, Mo	1,324	98	104	28.59	29.96	−.02	76.5	+0.1	94	7	86	59	16	67	25	68	63	68	4.15	−0.6	9	6,624	s.	33	nw.	14	20	8	3	3.2	....	....
Iola	984	11	50	28.90	29.92	−.06	80.5	+2.4	103	13	93	57	17	68	37	....	....	....	4.22	+0.3	9	4,597	s.	32	ne.	18	18	13	0	2.7	....	....
Topeka	987	85	101	....	....	....	80.4	+2.8	102	30	92	58	16	68	35	....	....	....	0.57	−4.3	7	6,685	s.	33	nw.	15	20	10	1	2.4	....	....
Drexel	1,299	10	54	28.55	29.90	....	76.2	....	103	29	88	50	3	64	33	67	62	64	0.70	....	6	6,574	s.	36	sw.	21	22	8	1	2.3	....	....
Lincoln	1,189	11	84	28.66	29.89	−.06	78.4	+2.0	106	30	91	54	3	66	38	66	60	59	0.56	−3.3	5	6,601	s.	38	w.	31	21	8	2	2.3	....	....
Omaha	1,105	115	122	28.76	29.90	−.05	79.0	+2.5	104	29	89	58	3	69	26	67	60	57	0.78	−3.6	7	5,115	nw.	31	n.	11	23	7	1	2.4	....	....
Valentine	2,598	47	54	27.26	29.91	−.02	75.7	+2.5	103	28	90	48	2	61	39	62	54	53	0.84	−2.6	7	6,926	s.	38	s.	6	22	9	0	2.7	....	....
Sioux City	1,135	94	164	28.72	29.90	−.05	76.3	+2.1	103	29	88	45	3	65	32	67	62	62	0.85	−2.8	8	7,517	s.	39	n.	11	22	9	0	2.1	....	....
Huron	1,306	59	74	28.53	29.90	−.04	74.0	+2.5	104	28	87	42	3	61	35	64	58	62	3.65	−0.7	7	6,976	se.	44	sw.	31	22	7	2	2.5	....	....
Pierre	1,572	70	75	28.24	29.86	−.07	78.2	+3.0	109	28	92	46	3	64	36	65	57	56	2.68	+0.3	7	6,937	se.	70	w.	30	19	8	4	2.9	....	....
Yankton	1,233	49	57	28.60	29.89	−.05	75.9	+1.3	103	29	87	47	3	65	31	....	....	....	1.96	+1.6	9	4,988	se.	44	nw.	21	17	13	1	3.5	....	....

TABLE I.—*Climatological data for Weather Bureau stations, July, 1917*—Continued.

Districts and stations.	Elevation of instruments.			Pressure.			Temperature of the air.										Mean wet thermometer.	Mean temperature of the dew point.	Mean relative humidity.	Precipitation.			Wind.					Clear days.	Partly cloudy days.	Cloudy days.	Average cloudiness, tenths.	Total snowfall.	Snow on ground at end of month.
	Barometer above sealevel.	Thermometer above ground.	Anemometer above ground.	Station, reduced to mean of 24 hours.	Sealevel, reduced to mean of 24 hours.	Departure from normal.	Mean max.+mean min.÷2.	Departure from normal.	Maximum.	Date.	Mean maximum.	Minimum.	Date.	Mean minimum.	Greatest daily range.				Total.	Departure from normal.	Days with 0.01 inch or more.	Total movement.	Prevailing direction.	Maximum velocity. Miles per hour.	Direction.	Date.						
	Ft.	Ft.	F.	In.	In.	In.	°F.	°F.	°F.		°F	°F.		°F	°F.	°F.	°F.	%	In.	In.		Miles								0-10	In.	In.
Northern Slope.							71.7	+3.6										48	0.62	−0.9										3.0		
Billings	3,140	5	....	.....	.....	.....	73.6	.....	102	23	92	44	1	55	48	....	....	....	1.00	.....	7	.....	sw.	....	.....	....	20	11	0	....	.....	....
Havre	2,505	11	44	27.28	29.85	−0.06	73.7	+5.6	100	26	89	43	30	58	46	58	48	48	0.45	−1.5	6	5,019	sw.	33	w.	29	26	5	0	2.0	.....	....
Helena	4,110	87	114	25.80	29.89	− .04	72.2	+5.6	96	22	87	44	1	57	40	54	40	36	0.28	−0.8	5	6,430	sw.	36	se.	8	19	11	1	3.0	.....	....
Kalispell	2,962	11	34	26.90	29.88	− .05	67.4	+3.1	95	19	85	33	31	50	43	52	41	48	0.09	−0.8	2	3,583	w.	20	w.	30	24	8	2	2.6	.....	....
Miles City	2,371	48	55	27.41	29.88	− .04	78.0	+5.1	106	27	92	53	2	64	46	63	55	50	0.63	−0.7	5	4,407	n.	24	n.	6	24	7	0	2.6	.....	....
Rapid City	3,259	50	58	26.60	29.91	− .02	74.6	+4.4	101	28	88	50	2	61	35	60	49	44	0.98	−1.6	4	6,122	n.	44	w.	4	17	13	1	3.3	.....	....
Cheyenne	6,088	84	101	24.12	29.95	+ .03	67.4	0.0	88	24	81	41	1	54	36	54	47	56	1.62	−0.4	10	7,256	w.	43	sw.	21	10	20	1	4.3	.....	....
Lander	5,372	60	68	24.71	29.91	− .01	71.8	+3.8	96	22	88	42	1	55	41	54	42	41	T.	−0.9	0	3,451	sw.	34	w.	30	12	18	1	4.1	.....	....
Sheridan	3,790	10	47	26.11	29.92	.....	71.2	.....	100	23	89	43	1	54	46	57	47	47	0.17	.....	7	3,589	s.	32	ne.	13	17	11	3	3.5	.....	....
Yellowstone Park	6,200	11	48	23.98	29.95	+ .03	64.0	+2.5	87	9	80	36	1	48	43	50	40	49	0.41	−0.8	7	5,342	s.	39	sw.	19	17	14	0	3.1	.....	....
North Platte	2,821	11	51	27.07	29.93	.00	76.2	+2.3	104	28	91	50	16	61	44	65	60	64	1.13	−1.6	14	4,382	se.	48	ne.	21	27	3	1	1.7	.....	....
Middle Slope.							79.3	+2.6										51	1.56	−1.4										3.5		
Denver	5,292	106	113	24.81	29.94	+0.03	73.6	+1.8	94	27	86	52	3	61	30	58	50	50	0.31	−1.3	5	5,401	s.	36	nw.	10	10	18	3	4.5	.....	....
Pueblo	4,685	80	86	25.34	29.91	.00	76.0	+1.8	99	5	91	53	4	61	43	58	49	47	1.32	−0.6	10	4,953	nw.	33	nw.	22	11	19	1	4.2	.....	....
Concordia	1,392	50	58	28.47	29.90	− .05	81.1	+3.0	106	30	94	56	17	68	36	66	57	50	0.60	−3.0	8	5,843	s.	27	sw.	29	14	17	0	3.6	.....	....
Dodge City	2,509	11	51	27.37	29.90	− .03	80.4	+2.7	103	13	94	57	2	67	38	65	57	52	2.76	−0.6	11	7,430	s.	36	n.	1	20	10	1	2.8	.....	....
Wichita	1,358	139	158	28.50	29.88	− .08	82.2	+3.2	103	8	94	62	16	71	31	67	58	51	1.41	−2.2	4	9,573	s.	42	s.	31	22	8	1	2.4	.....	....
Altus	1,410	5	....	.....	.....	.....	85.4	.....	110	9	99	63	19	72	40	....	....	....	1.47	.....	5	.....	s.	....	.....	....	21	3	7	....	.....	....
Muskogee	652	4	....	.....	.....	.....	82.1	.....	107	1	95	61	12	69	37	....	....	....	1.70	.....	9	.....	s.	....	.....	....	18	5	8	....	.....	....
Oklahoma	1,214	10	47	28.67	29.91	− .05	82.6	+2.8	105	13	95	63	17	70	36	69	63	58	2.96	−0.7	8	9,425	s.	44	w.	17	16	13	2	3.5	.....	....
Southern Slope.							82.7	+2.2										47	1.00	−1.8										2.9		
Abilene	1,738	10	52	28.15	29.89	−0.04	85.0	+2.8	104	10	97	66	18	73	30	68	59	48	0.90	−1.5	3	7,840	s.	34	s.	31	14	13	4	4.1	.....	....
Amarillo	3,676	10	49	26.28	29.91	− .01	79.4	+3.3	100	14	93	58	4	66	33	64	56	53	2.68	−0.5	7	8,394	se.	32	s.	30	23	8	0	2.7	.....	....
Del Rio	944	64	71	28.94	29.90	.00	86.0	+1.3	103	11	96	70	21	76	27	....	....	....	0.37	−1.9	3	8,634	e.	33	e.	17	23	7	1	2.2	.....	....
Roswell	3,566	75	85	26.34	29.84	− .04	80.4	+1.5	102	14	94	62	3	67	33	61	49	39	0.07	−3.4	3	6,286	s.	33	ne.	19	18	12	1	2.6	.....	....
Southern Plateau.							80.8	+1.8										43	1.07	−0.2										4.3		
El Paso	3,762	110	133	26.15	29.78	−0.06	83.9	+3.4	103	14	95	66	28	73	31	63	50	37	0.41	−1.7	6	7,643	se.	39	s.	4	13	16	2	4.2	.....	....
Santa Fe	7,013	57	66	23.35	29.84	− .04	71.5	+2.8	90	14	84	55	31	59	29	54	44	45	0.45	−2.3	9	5,463	e.	33	e.	15	1	29	1	5.3	.....	....
Flagstaff	6,908	8	57	23.46	29.86	+ .03	66.5	+1.5	88	15	80	46	1	52	42	55	....	....	5.93	.....	14	.....	nw.	39	sw.	26	4	27	0	....	.....	....
Phoenix	1,108	11	81	28.65	29.76	− .02	90.0	−0.4	111	15	103	71	26	77	35	72	63	46	3.97	+2.9	7	4,440	w.	45	e.	26	22	8	1	3.0	.....	....
Yuma	141	9	54	29.62	29.76	.00	92.2	+1.3	113	14	105	74	24	80	34	75	68	52	0.50	+0.4	3	4,296	sw.	37	s.	17	9	17	5	4.8	.....	....
Independence	3,910	11	42	.....	29.84	+ .01	80.5	+2.0	102	11	97	54	9	64	43	....	....	36	T.	−0.1	0	.....	w.	....	.....	....	14	15	2	....	.....	....
Needles	488	4	....	29.21	29.69	.....	94.8	.....	115	8	110	74	8	80	41	....	....	....	0.54	.....	4	.....	s.	....	.....	....	12	15	4	....	.....	....
Middle Plateau.							76.6	+3.8										36	0.40	−0.1										2.9		
Reno	4,532	74	81	25.49	29.89	+0.02	74.0	+6.5	101	11	92	47	28	56	44	54	40	38	0.04	−0.1	1	5,262	w.	33	s.	15	25	4	2	1.6	.....	....
Tonopah	6,090	12	20	24.13	29.89	.....	76.8	.....	96	12	89	56	29	65	30	56	42	35	0.31	0.0	4	5,530	se.	28	se.	14	17	13	1	3.1	.....	....
Winnemucca	4,344	18	56	25.61	29.89	− .01	75.9	+4.3	102	12	94	48	10	58	48	54	38	32	0.06	−0.1	3	4,319	sw.	46	s.	15	23	7	1	1.9	.....	....
Modena	5,479	10	43	24.66	29.86	.00	74.5	+4.8	97	12	90	46	1	59	47	56	43	41	1.03	−0.2	7	7,380	sw.	42	s.	13	14	11	6	4.4	.....	....
Salt Lake City	4,360	163	203	25.62	29.88	− .02	79.0	+2.8	97	22	90	60	1	68	31	59	46	36	0.68	+0.1	4	5,184	nw.	36	sw.	22	18	10	3	3.4	.....	....
Grand Junction	4,602	82	96	25.39	29.88	− .01	79.8	+0.6	99	14	94	55	1	66	36	58	44	34	0.28	−0.2	2	5,768	se.	42	se.	24	20	10	1	3.0	.....	....
Northern Plateau.							74.7	+3.8										38	0.40	−0.4										2.4		
Baker	3,471	48	53	26.45	29.96	+0.01	69.4	+4.4	96	11	86	40	29	53	41	53	42	43	0.04	−0.4	1	4,481	nw.	24	nw.	24	23	8	0	1.9	.....	....
Boise	2,739	78	86	27.11	29.89	− .04	77.4	+4.6	103	26	93	52	29	61	42	58	45	37	T.	−0.2	0	3,363	nw.	21	se.	24	21	10	0	2.3	.....	....
Lewiston	757	40	48	29.13	29.92	− .03	76.8	+3.2	105	16	94	49	29	60	46	....	....	....	0.07	−0.4	2	2,447	ne.	25	w.	28	22	8	1	2.1	.....	....
Pocatello	4,477	60	68	25.48	29.88	− .04	74.4	+3.2	97	26	90	46	1	59	43	55	41	37	0.16	−0.5	3	6,139	se.	38	sw.	22	18	10	3	3.5	.....	....
Spokane	1,929	101	110	27.91	29.91	− .05	72.8	+4.0	100	16	88	45	29	58	40	55	39	37	T.	−0.7	0	5,037	sw.	27	w.	28	18	11	2	2.7	.....	....
Walla Walla	991	57	65	28.86	29.91	− .06	77.2	+3.1	106	16	92	50	29	62	41	58	43	34	T.	−0.4	0	3,365	s.	19	w.	28	22	9	0	1.9	.....	....
North Pacific Coast Region.							64.1	+1.2										68	0.20	−0.5										3.2		
North Head	211	11	56	29.85	30.07	−0.01	54.8	−2.9	62	3	57	47	26	52	9	54	53	93	0.24	−0.3	7	14,057	nw.	40	s.	26	9	10	12	5.9	.....	....
North Yakima	1,071	4	....	.....	.....	.....	74.0	.....	101	18	91	44	29	57	40	....	....	....	0.01	.....	1	.....	nw.	....	.....	....	29	1	1	....	.....	....
Port Angeles	42	8	48	30.07	30.10	.....	55.7	.....	77	14	64	41	24	47	30	....	....	....	0.09	−0.3	4	5,290	nw.	27	nw.	28	23	5	3	2.7	.....	....
Seattle	125	215	250	29.93	30.06	+ .02	63.4	−0.1	82	17	73	49	29	54	27	55	49	65	0.09	−0.6	4	5,432	n.	26	s.	28	17	10	4	3.4	.....	....
Tacoma	213	113	120	29.83	30.05	− .01	63.4	0.0	83	18	74	48	23	53	30	56	51	68	0.12	−0.5	3	4,494	n.	23	sw.	28	17	11	3	3.8	.....	....
Tatoosh Island	109	7	57	29.98	30.08	+ .03	53.5	−1.6	63	13	57	47	23	50	13	52	51	94	0.90	−0.9	9	8,444	s.	44	s.	26	8	8	15	5.9	.....	....
Medford	1,425	4	....	.....	.....	.....	74.6	.....	107	15	95	44	29	54	51	....	....	....	T.	.....	0	.....	nw.	....	.....	....	26	5	0	....	.....	....
Portland, Oreg.	153	68	106	29.84	30.00	− .05	69.0	+2.7	91	14	81	50	23	57	32	58	51	57	0.01	−0.5	1	5,461	nw.	27	sw.	26	22	7	2	2.6	.....	....
Roseburg	510	9	57	29.45	29.98	− .05	71.2	+5.1	100	15	88	48	29	55	44	58	49	55	0.01	−0.3	1	2,808	n.	16	nw.	12	30	1	0	0.6	.....	....
Middle Pacific Coast Region.							67.8	+2.3										55	0.00	0.0										2.8		
Eureka	62	73	89	29.94	30.01	−0.04	54.8	−0.5	67	26	59	48	23	50	15	52	50	86	0.00	−0.1	0	4,827	n.	25	sw.	26	6	16	9	5.8	.....	....
Mount Tamalpais	2,375	11	18	27.50	29.92	− .03	74.0	+3.5	94	20	82	44	8	66	23	55	39	32	0.02	0.0	1	11,615	w.	64	nw.	20	29	2	0	0.8	.....	....
Point Reyes Light	490	7	18	29.38	29.89	.....	52.8	−0.9	62	22	57	46	3	49	16	....	....	....	T.	.....	0	14,944	nw.	50	nw.	27	1	8	22	8.1	.....	....
Red Bluff	332	50	56	29.47	29.81	− .08	84.8	+2.7	110	12	101	58	27	68	41	61	41	27	0.00	0.0	0	3,089	se.	15	se.	7	27	4	0	0.8	.....	....
Sacramento	69	106	117	29.76	29.83	.....	78.6	+6.1	107	20	96	52	9	61	45	62	51	49	T.	0.0	0	5,989	s.	20	s.	31	28	3	0	0.8	.....	....
San Francisco	155	209	213	29.74	29.91	− .04	59.8	+2.5	88	21	68	49	3	52	32	54	51	80	T.	0.0	0	9,307	sw.	37	sw.	11	21	10	0	2.1	.....	....
San Jose	141	12	110	29.78	29.93	.....	69.9	+3.0	102	21	86	48	27	54	46	....	....	....	T.	0.0	0	4,375	nw.	21	se.	8	30	1	0	1.5	.....	....
South Pacific Coast Region.							73.4	+3.5										64	0.00	0.0										2.9		
Fresno	327	89	98	29.46	29.80	−0.03	86.0	+4.0	109	13	102	60	27	70	38	61	42	27	T.	0.0	0	6,397	nw.	27	nw.	20	27	4	0	1.2	.....	....
Los Angeles	338	159	191	29.53	29.88	− .02	72.3	+4.9	88	1	82	60	9	63	26	64	61	77	T.	0.0	0	4,240	sw.	17	sw.	30	19	8	4	3.4	.....	....
San Diego	87	62	70	29.80	29.89	− .03	68.9	+2.0	78	2	74	61	7	64	15	64	62	82	T.	0.0	0	4,342	w.	21	nw.	8	14	13	4	4.4	.....	....
San Luis Obispo	201	32	40	29.72	29.93	− .02	66.4	+3.2	89	10	80	73	1	52	43	57	52	69	0.01	0.0	1	2,273	s.	12	w.	26	27	4	0	2.5	.....	....
West Indies.																																	
San Juan, P. R.	82	8	54	29.95	30.04	+0.05	79.6	.....	90	22	84	71	13	75	17	76	74	79	4.67	−1.8	2	213,9	54 e.		50 e.	12	8	17	6	5.3	.....	....
Panama Canal.																																	
Balboa Heights	118	7	97	29.74	29.86	.....	79.1	.....	89	5	85	71	25	73	17	75	74	92	10.17	+2.2	23	3,887	nw.	28	nw.	8	0	8	23	8.0	.....	....
Colon	36	5	71	29.82	29.86	.....	79.0	.....	87	21	83	71	22	74	13	76	75	89	13.58	−2.6	23	4,435	s.	29	nw.	8	0	8	23	8.2	.....	....
Alaska.																																	
Juneau	80	11	49	.....	.....	.....	52.7	.....	73	22	58	41	9	47	30	51	50	90	10.49	.....	23	2,788	s.	13	se.	1	4	2	25	8.5	.....	....

TABLE II.—*Accumulated amounts of precipitation for each 5 minutes, for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes, or 0.80 in 1 hour, during July, 1917, at all stations furnished with self-registering gages.*

Stations.	Date.	Total duration.		Total amount of precipitation.	Excessive rate.		Amount before excessive rate began.	Depths of precipitation (in inches) during periods of time indicated.													
		From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min	100 min.	120 min.
Abilene, Tex.	18			0.77														0.67			
Albany, N. Y.	15			0.48														0.45			
Alpena, Mich.	20			0.43														0.36			
Amarillo, Tex.	10	2:40 a. m.	D. N. a. m.	0.87	2:50 a. m.	3:15 a. m.	0.01	0.12	0.31	0.50	0.62	0.67									
Anniston, Ala.	28	12:45 p. m.	1:50 p. m.	0.86	12:59 p. m.	1:21 p. m.	0.01	0.24	0.46	0.64	0.77	0.81									
Asheville, N. C.	31			0.49														0.49			
Atlanta, Ga.	31	12:50 p. m.	2:05 p. m.	0.60	1:13 p. m.	1:38 p. m.	0.01	0.05	0.18	0.37	0.50	0.55									
Atlantic City, N. J.	10–11	10:14 p. m.	D. N. a. m.	1.51	10:36 p. m.	11:08 p. m.	0.02	0.05	0.14	0.28	0.50	0.90	1.16	1.22							
Augusta, Ga.	9	6:10 p. m.	8:20 p. m.	0.75	6:50 p. m.	7:10 p. m.	0.01	0.20	0.45	0.66	0.72										
	17	2:40 p. m.	3:00 p. m.	1.05	2:32 p. m.	2:54 p. m.	0.01	0.30	0.56	0.91	1.03	1.04									
	20	2:35 p. m.	5:00 p. m.	1.53	3:09 p. m.	3:47 p. m.	0.05	0.30	0.62	0.86	1.05	1.12	1.20	1.26	1.30						
Baker Oreg.	19			0.04														0.04			
Baltimore, Md.	2–3	5:25 p. m.	D. N. a. m.	1.23	5:44 p. m.	6:02 p. m.	0.12	0.13	0.37	0.55	0.62										
	10	3:54 p. m.	8:10 p. m.	1.69	4:24 p. m.	5:06 p. m.	0.04	0.06	0.19	0.36	0.72	1.00	1.22	1.34	1.42	1.46					
Bentonville, Ark.	14	4:35 p. m.	8:20 p. m.	2.47	4:42 p. m.	5:32 p. m.	0.01	0.15	0.55	0.88	1.15	1.20	1.24	1.35	1.40	1.45	1.61				
					5:32 p. m.	6:05 p. m.		1.64	1.65	1.70	1.85	1.94	2.00								
Binghamton, N. Y.	29			0.68														0.47			
Birmingham, Ala.	22	10:08 a. m.	12:32 p. m.	0.87	10:13 a. m.	10:25 a. m.	0.01	0.65	0.72												
Bismarck, N. Dak.	30			0.24														0.24			
Block Island, R. I.	19	10:32 a. m.	11:55 a. m.	1.22	10:52 a. m.	11:08 a. m.	0.24	0.23	0.35	0.66	0.75										
Boise, Idaho	26			T.														T.			
Boston, Mass.	27	3:18 p. m.	3:50 p. m.	0.57	3:27 p. m.	3:42 p. m.	T.	0.25	0.33	0.57											
Buffalo, N. Y.	9	8:45 p. m.	11:30 p. m.	0.70	8:59 p. m.	9:09 p. m.	0.03	0.34	0.53												
	10	3:28 p. m.	10:55 p. m.	1.34	3:30 p. m.	3:58 p. m.	0.01	0.13	0.44	0.69	0.77	0.96	1.02								
Burlington, Vt.	30			0.39														0.38			
Cairo, Ill.	14	2:30 p. m.	4:42 p. m.	1.23	2:46 p. m.	3:16 p. m.	0.01	0.12	0.37	0.54	0.85	1.08	1.13								
	14	7:22 p. m.	9:35 p. m.	1.23	7:53 p. m.	8:20 p. m.	0.01	0.27	0.63	0.94	1.07	1.13	1.16								
	16	4:50 p. m.	5:49 p. m.	0.83	5:09 p. m.	5:22 p. m.	0.01	0.16	0.54	0.67											
Canton, N. Y.	19			0.81														0.64			
Charles City, Iowa	20–21	9:44 p. m.	1:50 p. m.	1.81	9:40 a. m.	9:55 a. m.	1.05	0.19	0.40	0.51											
	31	6:15 p. m.	11:20 p. m.	1.59	7:02 p. m.	7:27 p. m.	0.17	0.11	0.33	0.55	0.60										
Charleston, S. C.	2–3	D. N. p. m.	D. N. a. m.	1.56	12:18 a. m.	12:48 a. m.	0.03	0.12	0.31	0.55	0.88	1.18	1.27								
	4	7:07 p. m.	8:55 p. m.	0.63	7:21 p. m.	7:35 p. m.	0.05	0.13	0.33	0.50											
	7	12:38 p. m.	2:10 p. m.	1.57	1:00 p. m.	1:35 p. m.	0.03	0.37	0.72	1.00	1.16	1.26	1.32	1.38							
	8	7:56 p. m.	9:50 p. m.	1.00	7:56 p. m.	8:28 p. m.	0.00	0.22	0.51	0.71	0.82	0.89	0.94	0.97							
	19	8:23 p. m.	10:30 p. m.	1.30	8:27 p. m.	9:00 p. m.	0.01	0.07	0.23	0.39	0.49	0.70	0.89	0.99							
	19–20	D. N. p. m.	D. N. a. m.	1.13	11:54 p. m.	12:07 a. m.	0.02	0.28	0.53	0.58											
Charlotte, N. C.	6	5:26 p. m.	6:18 p. m.	0.84	5:26 p. m.	5:51 p. m.	0.00	0.22	0.35	0.58	0.72	0.79									
	9–10	D. N. p. m.	D. N. a. m.	1.44	10:41 p. m.	11:14 p. m.	0.01	0.15	0.39	0.60	0.72	0.93	1.15	1.19							
Chattanooga, Tenn.	2	7:35 p. m.	9:18 p. m.	0.66	8:00 p. m.	8:23 p. m.	0.01	0.07	0.19	0.32	0.50	0.58									
Cheyenne, Wyo.	10			0.36														0.34			
Chicago, Ill.	26	2:12 p. m.	3:10 p. m.	0.58	2:32 p. m.	2:47 p. m.	0.01	0.23	0.41	0.57											
Cincinnati, Ohio	26	10:20 a. m.	11:30 a. m.	1.05	10:32 a. m.	10:51 a. m.	0.05	0.22	0.61	0.84	0.96										
Cleveland, Ohio	14	7:24 p. m.	10:30 p. m.	1.80	9:38 p. m.	10:08 p. m.	0.79	0.20	0.26	0.40	0.66	0.83	0.93								
Columbia, Mo.	6			0.30														0.23			
Columbia, S. C.	4	3:00 p. m.	4:10 p. m.	0.67	3:09 p. m.	3:36 p. m.	0.03	0.08	0.23	0.41	0.51	0.58	0.62								
	17	4:10 p. m.	7:10 p. m.	0.78	4:14 p. m.	4:32 p. m.	0.01	0.18	0.30	0.39	0.46										
Columbus, Ohio	7			1.40														0.59			
Concord, N. H.	11			0.85														0.30			
Concordia, Kans.	31			0.32														0.25			
Corpus Christi, Tex.	21			0.95														0.49			
Dallas, Tex.	4	8:01 a. m.	10:39 a. m.	0.94	8:17 a. m.	8:54 a. m.	0.03	0.14	0.27	0.36	0.45	0.57	0.73	0.78	0.81						
Davenport, Iowa	8	3:48 p. m.	6:25 p. m.	1.10	4:32 p. m.	5:06 p. m.	0.08	0.13	0.20	0.22	0.31	0.60	0.81	0.87							
Dayton, Ohio	13	5:20 p. m.	7:48 p. m.	0.77	6:42 p. m.	7:26 p. m.	0.04	0.12	0.19	0.27	0.32	0.33	0.35	0.40	0.64	0.72					
Del Rio, Tex.	22			0.32														0.15			
Denver, Colo.	24			0.11														0.10			
Des Moines, Iowa	5			0.70														0.63			
Detroit, Mich.	7			1.08														0.35			
Devils Lake, N. Dak.	12			0.30														0.23			
Dodge City, Kans.	31	4:10 p. m.	5:25 p. m.	0.95	4:16 p. m.	4:41 p. m.	T.	0.05	0.18	0.61	0.82	0.90									
Dubuque, Iowa	23			0.83														0.61			
Duluth, Minn.	31			1.32														0.78			
Eastport, Me.	12			0.47														0.33			
Elkins, W. Va.	7			0.59														0.58			
El Paso, Tex.	20			0.27														0.27			
Erie, Pa.	9	8:11 p. m.	10:55 p. m.	1.18	8:26 p. m.	8:46 p. m.	0.11	0.16	0.36	0.47	0.54										
	17	6:10 p. m.	7:35 p. m.	0.66	6:23 p. m.	6:43 p. m.	0.03	0.08	0.18	0.40	0.52										
Escanaba, Mich.	1	D. N. a. m.	D. N. a. m.	0.60	2:32 a. m.	2:52 a. m.	0.01	0.17	0.32	0.47	0.53										
Eureka	†			†																	
Evansville, Ind.	18			0.70														0.64			
Flagstaff, Ariz.	25–26			1.77														*			
Fort Smith, Ark.	15	7:12 a. m.	9:10 a. m.	0.65	7:32 a. m.	7:58 a. m.	0.01	0.08	0.18	0.27	0.35	0.47	0.53								
Fort Wayne, Ind.	6–7	9:25 p. m.	D. N. a. m.	1.70	9:28 p. m.	9:44 p. m.	0.01	0.23	0.33	0.50	0.52										
	9	2:47 p. m.	3:21 p. m.	0.87	2:55 p. m.	3:12 p. m.	0.02	0.24	0.50	0.83	0.85										
Fort Worth, Tex.	19			1.46														0.59			
Fresno, Cal.	31			T.														T.			
Galveston, Tex.	20			0.17														0.16			
Grand Haven, Mich.	6			1.20														0.55			
Grand Junction, Colo.	30			0.21														0.14			
Grand Rapids, Mich.	6–7	5:00 p. m.	D. N. a. m.	2.07	7:57 p. m.	9:00 p. m.	0.44	0.14	0.27	0.39	0.53	0.56	0.59	0.61	0.63	0.65	0.71	0.93			
	16	4:27 p. m.	6:10 a. m	1.20	5:21 p. m.	5:42 p. m.	0.07	0.08	0.17	0.28	0.48	0.52									
	22	3:33 p. m.	4:25 p. m.	1.56	3:36 p. m.	4:15 p. m.	0.01	0.28	0.67	0.82	0.87	0.99	1.05	1.42	1.53						
	23	3:05 p. m.	D. N. p. m.	0.94	3:05 p. m.	3:30 p. m.	0.00	0.16	0.36	0.62	0.82	0.87									
Green Bay, Wis.	15			0.29														0.29			
Hannibal, Mo.	8	4:02 p. m.	6:12 p. m.	0.70	4:12 p. m.	4:25 p. m.	0.01	0.22	0.55	0.64											
Harrisburg, Pa.	16			0.80														0.54			
Hartford, Conn.	2	4:15 p. m.	4:42 p. m.	0.56	4:26 p. m.	4:37 p. m.	0.03	0.20	0.52	0.53											
	24	5:57 p. m.	7:45 p. m.	1.41	6:02 p. m.	6:45 p. m.	0.01	0.09	0.28	0.50	0.79	1.02	1.15	1.22	1.28	1.33					
Hatteras, N. C.	7	6:20 a. m.	7:25 a. m.	0.58	6:29 a. m.	6:57 a. m.	0.02	0.12	0.25	0.32	0.38	0.47	0.52								
	9	6:07 p. m.	8:15 p. m.	0.95	6:26 p. m.	7:02 p. m.	0.01	0.07	0.18	0.38	0.46	0.65	0.79	0.88	0.90						
Havre, Mont.	31			0.25														0.08			
Helena, Mont.	6			0.15														0.13			
Houghton, Mich.	8			0.73														0.72			
Houston, Tex.	2	5:07 p. m.	6:50 p. m.	0.60	5:17 p. m.	5:39 p. m.	0.03	0.13	0.30	0.41	0.47	0.51									
	20	2:02 p. m.	7:00 p. m.	2.08	3:53 p. m.	4:30 p. m.	0.54	0.19	0.43	0.71	0.91	1.12	1.28	1.35	1.40						
Huron, S. Dak.	30–31	11:25 p. m.	D. N. a. m.	2.21	11:58 p. m.	12:50 a. m.	0.03	0.14	0.21	0.27	0.62	0.96	1.34	1.52	1.58	1.75	1.88	1.94			
Indianapolis, Ind.	31	2:55 p. m.	3:30 p. m.	0.81	2:57 p. m.	3:15 p. m.	0.01	0.22	0.46	0.74	0.78										
	13	4:15 p. m.	5:35 p. m.	0.56	5:05 p. m.	5:27 p. m.	0.04	0.12	0.24	0.34	0.49	0.51									
	16	9:13 a. m.	12:53 p. m.	1.48	9:32 a. m.	10:45 a. m.	0.01	0.27	0.44	0.51	0.55	0.58	0.60	0.63	0.71	0.78	0.81	0.84	1.16		
	26	7:02 a. m.	9:40 a. m.	0.75	7:07 a. m.	7:20 a. m.	0.01	0.35	0.59	0.66											

* Self-register not in use. † Record partly estimated. ‡ No precipitation occurred during month.

TABLE II.—*Accumulated amounts of precipitation for each 5 minutes, for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes, or 0.80 in 1 hour, during July, 1917, at all stations furnished with self-registering gages*—Continued.

Stations.	Date.	Total duration.		Total amount of precipitation.	Excessive rate.		Amount before excessive rate began.	Depths of precipitation (in inches) during periods of time indicated.													
		From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
Iola, Kans.	18	3:10 p.m.	5:30 p.m.	3.15	3:20 p.m.	4:24 p.m.	0.02	0.17	0.38	0.56	0.83	1.06	1.41	1.70	2.10	2.38	2.65	2.92	3.02		
Jacksonville, Fla.	1	8:55 a.m.	10:05 a.m.	0.74	9:06 a.m.	9:44 a.m.	0.02	0.08	0.13	0.24	0.38	0.50	0.58	0.64	0.70						
	4	11:15 a.m.	12:10 p.m.	1.35	11:17 a.m.	11:47 a.m.	0.01	0.11	0.53	0.64	0.99	1.19	1.29								
	27	4:03 p.m.	6:10 p.m.	3.01	4:17 p.m.	5:02 p.m.	0.10	0.11	0.31	0.63	1.10	1.77	2.26	2.57	2.71	2.80					
	30	1:15 p.m.	2:13 p.m.	1.39	1:18 p.m.	1:50 p.m.	0.01	0.27	0.60	0.91	1.10	1.16	1.30	1.36							
Kalispell, Mont.	30			0.07														0.07			
Kansas City, Mo.	6			0.29														0.27			
Keokuk, Iowa	22	1:05 p.m.	3:25 p.m.	0.78	1:17 p.m.	1:32 p.m.	0.03	0.21	0.50	0.63											
	23	5:35 a.m.	7:12 a.m.	0.87	5:38 a.m.	5:58 a.m.	0.01	0.20	0.40	0.58	0.70										
Key West, Fla.	5			0.29														0.27			
Knoxville, Tenn.	12	1:00 p.m.	6:30 p.m.	1.46	2:52 p.m.	3:06 p.m.	0.38	0.21	0.42	0.60											
	14-15	6:05 p.m.	D. N. a.m.	2.14	6:39 p.m.	7:16 p.m.	0.27	0.29	0.34	0.34	0.35	0.37	0.53	0.62	0.67						
					9:01 p.m.	9:20 p.m.	1.11	0.16	0.31	0.54	0.86										
	16	8:02 a.m.	12:30 p.m.	4.01	9:03 a.m.	11:05 a.m.	0.15	0.22	0.29	0.39	0.56	0.81	0.94	1.05	1.18	1.29	1.35	1.62	2.38	2.86	3.30
La Crosse, Wis.	14	4:54 p.m.	6:05 p.m.	0.84	5:02 p.m.	5:19 p.m.	0.02	0.23	0.57	0.74	0.77										
	21-22	9:02 p.m.	.a.m.	3.67	10:09 p.m.	10:59 p.m.	0.14	0.12	0.16	0.18	0.23	0.27	0.29	0.38	0.49	0.53	0.69				
					10:59 p.m.	11:49 p.m.		0.84	0.93	1.00	1.10	1.31	1.53	1.77	1.90	1.94	1.97				
					11:49 p.m.	12:30 a.m.		2.00	2.08	2.14	2.20	2.23	2.25	2.31	2.52	2.56					
Lander, Wyo.	10			T.														T.			
Lansing, Mich.	1			1.28														0.79			
Lewiston, Idaho	8			0.03														0.03			
Lexington, Ky.	19	11:55 a.m.	12:40 p.m.	1.07	12:20 p.m.	12:39 p.m.	0.05	0.28	0.57	0.84	1.02										
Lincoln, Nebr.	14			0.26														*			
Little Rock, Ark.	16	7:14 p.m.	8:45 p.m.	0.97	8:12 p.m.	8:29 p.m.	0.01	0.07	0.39	0.80	0.94										
	23	3:15 p.m.	7:20 p.m.	1.20	5:14 p.m.	6:02 p.m.	0.06	0.14	0.17	0.19	0.21	0.29	0.51	0.78	0.93	1.05	1.09				
Los Angeles, Cal.	22			T.														T.			
Louisville, Ky.	1-2			0.78														0.34			
Ludington, Mich.	16			0.21														0.18			
Lynchburg, Va.	24	5:00 p.m.	6:00 p.m.	1.00	5:08 p.m.	5:29 p.m.	0.01	0.10	0.37	0.68	0.80	0.81									
Macon, Ga.	6	10:48 a.m.	11:45 a.m.	0.83	10:57 a.m.	11:26 a.m.	0.03	0.08	0.37	0.57	0.66	0.73	0.78								
	25	7:00 p.m.	8:40 p.m.	0.61	7:07 p.m.	7:36 p.m.	0.01	0.09	0.27	0.38	0.45	0.53	0.57								
Madison, Wis.	22	2:10 a.m.	4:00 a.m.	1.36	3:18 a.m.	3:45 a.m.	0.16	0.13	0.33	0.58	0.94	1.15	1.19								
Marquette, Mich.	31			0.65														0.44			
Memphis, Tenn.	15	D. N. a.m.	10:50 a.m.	0.94	6:44 a.m.	7:14 a.m.	0.21	0.09	0.22	0.24	0.35	0.48	0.56								
	19	11:22 a.m.	2:20 p.m.	1.62	11:46 a.m.	1:37 p.m.	0.12	0.08	0.24	0.44	0.70	1.00	1.07	1.10	1.13	1.24	1.34	1.40			
	23	8:45 a.m.	10:40 a.m.	0.79	9:31 a.m.	9:50 a.m.	0.15	0.06	0.23	0.44	0.59										
Meridian, Miss.	21	7:44 a.m.	10:05 a.m.	1.43	8:39 a.m.	9:33 a.m.	0.18	0.06	0.10	0.16	0.18	0.25	0.31	0.37	0.48	0.78	1.09	1.21			
Miami, Fla.	10	2:35 p.m.	4:10 p.m.	0.73	2:58 p.m.	3:29 p.m.	0.08	0.07	0.20	0.37	0.42	0.50	0.56	0.59							
Milwaukee, Wis.	22			0.29														0.22			
Minneapolis, Minn.	5-6	10:00 p.m.	D. N. a.m.	0.77	10:12 p.m.	10:27 p.m.	0.04	0.21	0.45	0.54											
	22	2:30 p.m.	3:20 p.m.	0.72	2:37 p.m.	3:03 p.m.	0.01	0.16	0.42	0.51	0.61	0.68	0.69								
Mobile, Ala.	2	11:01 a.m.	12:05 p.m.	0.88	11:08 a.m.	11:29 a.m.	0.01	0.09	0.42	0.65	0.70	0.87									
	12	10:09 a.m.	4:10 p.m.	2.71	10:30 a.m.	11:28 a.m.	0.08	0.07	0.40	0.59	0.85	1.16	1.43	1.63	1.76	1.99	2.23	2.45			
	19	5:10 p.m.	6:56 p.m.	1.62	5:52 p.m.	6:14 p.m.	0.01	0.60	1.33	1.48	1.56	1.59									
Modena, Utah	29			0.32														0.15			
Montgomery, Ala.	17	9:06 a.m.	10:30 a.m.	0.77	9:22 a.m.	9:37 a.m.	0.01	0.25	0.55	0.68											
	20	3:03 p.m.	5:25 p.m.	0.71	3:07 p.m.	3:26 p.m.	0.01	0.29	0.36	0.40	0.50										
	22	2:10 p.m.	3:32 p.m.	0.73	2:12 p.m.	2:30 p.m.	0.01	0.26	0.49	0.59	0.70										
Moorhead, Minn.	21			0.18														0.18			
Mount Tamalpais, Cal.	8			0.02														T.			
Nantucket, Mass.	13			0.76														0.47			
Nashville, Tenn.	23			0.56														0.53			
New Haven, Conn.	24	7:13 p.m.	8:30 p.m.	0.68	7:22 p.m.	7:51 p.m.	0.01	0.20	0.32	0.37	0.41	0.51	0.58								
New Orleans, La.	3	3:41 p.m.	7:30 p.m.	0.86	3:48 p.m.	4:15 p.m.	0.01	0.08	0.26	0.45	0.64	0.75	0.80								
	6	2:15 p.m.	3:20 p.m.	1.41	2:21 p.m.	3:11 p.m.	0.02	0.20	0.34	0.43	0.51	0.64	0.82	0.95	1.04	1.31	1.36				
	7	5:00 p.m.	9:50 p.m.	2.02	5:00 p.m.	5:51 p.m.	0.01	0.13	0.44	1.01	1.24	1.42	1.52	1.61	1.64	1.70	1.79	1.84			
	18	11:55 a.m.	6:35 p.m.	1.28	12:15 p.m.	12:41 p.m.	0.02	0.31	0.62	0.85	1.03	1.11									
	28	4:40 p.m.	5:25 p.m.	0.82	4:52 p.m.	5:08 p.m.	0.02	0.20	0.60	0.74	0.78										
New York, N. Y.	12	9:00 p.m.	10:15 p.m.	1.05	9:32 p.m.	9:57 p.m.	0.05	0.21	0.54	0.76	0.90	0.99									
	22	3:50 p.m.	4:50 p.m.	1.65	3:55 p.m.	4:25 p.m.	T.	0.19	0.39	0.84	1.33	1.51	1.60								
Norfolk, Va.	10	1:49 p.m.	2:31 p.m.	0.96	1:51 p.m	2:18 p.m.	0.01	0.09	0.13	0.27	0.62	0.90	0.95								
	24	D. N. a.m.	D. N. a.m.	1.90	3:47 a.m.	4:25 a.m.	0.92	0.26	0.44	0.52	0.57	0.61	0.69	0.82	0.91						
	26	D. N. a.m.	D. N. a.m.	1.18	3:53 a.m.	4:14 a.m.	0.01	0.21	0.33	0.47	0.75	0.78									
Northfield, Vt.	22			1.06														0.90			
North Head, Wash.																					
North Platte, Nebr.																					
Oklahoma, Okla.	29			0.20														0.17			
Omaha, Nebr.	18			1.22														1.22			
Oswego, N. Y.	31			0.34														0.30			
Palestine, Tex.	13			0.29														0.20			
	16	5:40 a.m.	9:40 a.m.	1.27	5:46 a.m.	6:15 a.m.	T.	0.19	0.38	0.53	0.62	0.68	0.75								
	19	4:35 p.m.	5:40 p.m.	0.79	4:57 p.m.	5:15 p.m.	0.05	0.19	0.48	0.66	0.72										
	19-20	11:05 p.m.	9:20 a.m.	5.38	3:27 a.m.	4:17 a.m.	0.91	0.10	0.30	0.63	1.07	1.40	1.72	1.82	1.92	2.02	2.06				
					4:17 a.m.	5:07 a.m.		2.09	2.11	2.13	2.17	2.19	2.24	2.31	2.38	2.53	2.69				
					5:07 a.m.	5:57 a.m.		2.98	3.22	3.32	3.37	3.43	3.44	3.46	3.48	3.50	3.51				
					5:57 a.m.	6:21 a.m.		3.54	3.69	3.81	3.90	3.97									
Parkersburg, W. Va.	7	1:28 p.m.	2:50 p.m.	0.95	1:28 p.m.	1:58 p.m.	0.00	0.13	0.47	0.59	0.69	0.80	0.91								
	20	9:02 p.m.	9:44 p.m.	1.27	9:02 p.m.	9:40 p.m.	0.00	0.13	0.26	0.43	0.62	0.79	1.06	1.23	1.27						
Pensacola, Fla.	12-13			1.28														0.42			
Peoria, Ill.	12-13			0.93														0.58			
Philadelphia, Pa.	10-11	3:20 p.m.	4:20 p.m.	2.63	4:49 p.m.	6:06 p.m.	0.17	0.13	0.24	0.32	0.36	0.38	0.40	0.46	0.61	0.68	0.74	0.87	1.12		
Phoenix, Ariz.	26	8:13 p.m.	10:50 p.m.	1.38	8:20 p.m.	9:09 p.m.	0.01	0.14	0.30	0.48	0.64	0.74	0.88	0.95	1.03	1.17	1.28				
	29	2:50 a.m.	9:50 a.m.	1.60	3:00 a.m.	4:10 a.m.	0.01	*	*	*	*	*	*	*	*	*	*	†1.02			
Pierre, S. Dak.	30	5:10 p.m.	9:50 p.m.	2.30	7:46 p.m.	9:26 p.m.	0.01	0.36	0.59	0.77	0.90	1.06	1.19	1.20	1.20	1.20	1.21	1.39	1.91	2.25	
Pittsburgh, Pa.	2			0.52														0.44			
Pocatello, Idaho	23			0.06														0.06			
Point Reyes Light, Cal.	16			T.														T.			
Port Angeles, Wash.	3			0.04														0.02			
Port Arthur, Tex.	4	11:35 a.m.	12:25 p.m.	1.00	11:59 p.m.	12:16 p.m.	0.01	0.16	0.57	0.96	0.99										
	19	11:44 a.m.	3:05 p.m.	1.42	12:57 p.m.	1:22 p.m.	0.36	0.06	0.27	0.50	0.74	0.98									
	20	2:30 p.m.	6:40 p.m.	1.42	3:07 p.m.	4:03 p.m.	0.04	0.12	0.27	0.39	0.48	0.53	0.63	0.67	0.70	0.85	0.92	1.01			
Port Huron, Mich.	7	3:38 p.m.	5:40 p.m.	1.27	3:41 p.m.	4:41 p.m.	0.01	0.15	0.34	0.39	0.43	0.43	0.43	0.54	0.80	0.85	0.85	1.02			
Portland, Me.	24			0.58														0.54			
Portland, Oreg.	15			0.01														0.01			
Providence, R. I.	14			0.30														0.28			
Pueblo, Colo.	8			0.47														0.37			
Raleigh, N. C.	3	6:32 p.m.	7:05 p.m.	0.69	6:35 p.m.	6:53 p.m.	0.01	0.25	0.38	0.49	0.66										
	12	5:50 p.m.	10:15 p.m.	1.53	6:14 p.m.	7:43 p.m.	0.01	0.18	0.23	0.25	0.28	0.30	0.35	0.49	0.64	0.73	0.82	0.92	1.21	1.46	
	17	5:16 p.m.	10:30 p.m.	1.74	6:15 p.m.	6:29 p.m.	0.02	0.25	0.58	0.73											
	20	3:56 p.m.	D. N. p.m.	1.11	4:15 p.m.	4:36 p.m.	0.05	0.13	0.29	0.41	0.53	0.56									
Rapid City, S. Dak.	3			0.43														0.43			

* Self-register not working. † Record partly estimated. ‡ No precipitation occurred during month.

TABLE II.—*Accumulated amounts of precipitation for each 5 minutes, for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes, or 0.80 in 1 hour, during July, 1917, at all stations furnished with self-registering gages*—Continued.

Stations.	Date.	Total duration.		Total amount of precipitation.	Excessive rate.		Amount before excessive rate began.	Depths of precipitation (in inches) during periods of time indicated.													
		From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
Reading, Pa.	14	4:45 p.m.	7:42 p.m.	1.07	4:55 p.m.	5:24 p.m.	0.01	0.13	0.14	0.19	0.26	0.47	0.72								
Red Bluff, Cal.	‡			‡																	
Reno, Nev.	15			0.04														0.03			
Richmond, Va.																					
Rochester, N. Y.	11	3:31 p.m.	6:30 p.m.	1.32	3:36 p.m.	3:56 p.m.	0.01	0.14	0.43	0.59	0.65										
Roseburg, Oreg.	28			0.01														0.01			
Roswell, N. Mex.	19–20			0.06														0.04			
Sacramento, Cal.	14			T.														T.			
Saginaw, Mich.	6			0.64														0.59			
St. Joseph, Mo.	6	12:07 a.m.	D. N. a.m.	0.62	12:18 a.m.	12:37 a.m.	0.01	0.21	0.36	0.45	0.54										
St. Louis, Mo.	27	1:30 a.m.	D. N. a.m.	0.72	2.00 a.m.	2:22 a.m.	0.05	0.19	0.39	0.50	0.61	0.65									
	28	12:48 p.m.	1:44 p.m.	1.29	1:09 p.m.	1:32 p.m.	0.01	0.42	0.77	0.99	1.20	1.28									
St. Paul, Minn.	4	9:55 p.m.	11:45 p.m.	1.05	10:34 p.m.	11:04 p.m.	0.09	0.11	0.17	0.24	0.36	0.45	0.62	0.82							
	5	10:15 p.m.	12:45 a.m.	0.78	10:46 p.m.	11:11 p.m.	0.03	0.15	0.27	0.38	0.50	0.56									
Salt Lake City, Utah.	28			0.38														0.25			
San Antonio, Tex.	20–21	6:40 p.m.	12:15 a.m.	1.20	6:53 p.m.	7:42 p.m.	0.02	0.12	0.29	0.43	0.46	0.48	0.50	0.55	0.63	0.71	0.78				
San Diego, Cal.	17			T.														T.			
Sand Key, Fla.	25			0.45														0.44			
Sandusky, Ohio.	16			0.12														0.12			
Sandy Hook, N. J.	3	10:00 a.m.	3:25 p.m.	2.12	12:48 p.m.	2:01 p.m.	0.33	0.17	0.37	0.59	0.72	0.82	0.90	0.96	1.05	1.14	1.19	1.24	1.45		
	14	6:37 p.m.	8:12 p.m.	0.72	7:13 p.m.	7:31 p.m.	0.05	0.14	0.26	0.42	0.55										
San Francisco, Cal.	31			T.														T.			
San Jose, Cal.	31			T.														T.			
San Luis Obispo, Cal.	31			0.01														0.01			
Santa Fe, N. Mex.	21			0.13														0.13			
Sault Ste. Marie, Mich.	1			0.11														0.47			
Savannah, Ga.	2	D. N. a.m.	10:25 a.m.	1.13	4:22 a.m.	4:47 a.m.	0.05	0.15	0.25	0.41	0.53	0.58									
	4	12:22 p.m.	1:15 p.m.	0.64	12:34 p.m.	12:49 p.m.	0.01	0.10	0.29	0.62											
	6	2:23 p.m.	5:10 p.m.	0.97	2:33 p.m.	2:59 p.m.	0.03	0.08	0.18	0.37	0.49	0.56	0.60								
	7	3:17 p.m.	5:20 p.m.	1.11	3:39 p.m.	4:03 p.m.	0.04	0.27	0.57	0.78	0.91	0.95									
	22	2:18 p.m.	3:40 p.m.	0.76	2:36 p.m.	2:59 p.m.	0.01	0.13	0.31	0.40	0.52	0.57									
	24	2:53 p.m.	3:30 p.m.	0.57	2:54 p.m.	3:18 p.m.	0.01	0.10	0.28	0.33	0.43	0.55									
Scranton, Pa.	20			0.34														0.32			
Seattle, Wash.	3			0.03														0.02			
Sheridan, Wyo.	27			0.08														0.08			
Shreveport, La.	15–16	11:50 p.m.	8:45 a.m.	2.70	4:05 a.m.	4:50 a.m.	0.87	0.05	0.25	0.57	0.79	0.87	0.93	1.05	1.12	1.19					
	20	2:25 a.m.	11:25 a.m.	4.94	2:57 a.m.	3:51 a.m.	0.14	0.09	0.19	0.29	0.42	0.65	0.87	0.98	1.06	1.14	1.19	1.28			
					5:15 a.m.	7:07 a.m.	1.88	0.15	0.22	0.27	0.29	0.33	0.38	0.40	0.45	0.55	0.75	0.95	1.57	2.45	2.64
	24	12:50 a.m.	6:25 a.m.	0.90	2:25 a.m.	3:12 a.m.	0.11	0.16	0.26	0.36	0.42	0.45	0.48	0.49	0.56	0.70	0.78				
Sioux City, Iowa.	15			0.22														0.22			
Spokane, Wash.	4			T.														T.			
Springfield, Ill.	23	1:20 p.m.	4:15 p.m.	2.58	1:29 p.m.	2:14 p.m.	0.01	0.43	1.02	1.41	1.67	1.92	2.08	2.30	2.41	2.52					
Springfield, Mo.	14	3:27 p.m.	4:30 p.m.	0.73	3:44 p.m.	4:00 p.m.	0.01	0.25	0.47	0.67	0.72										
	18–19	8:40 p.m.	D. N. a.m.	1.25	9:11 p.m.	9:59 p.m.	0.04	0.19	0.39	0.51	0.56	0.73	0.77	0.82	0.87	1.02	1.08				
	23	7:29 p.m.	9:45 p.m.	0.60	7:50 p.m.	8:08 p.m.	0.01	0.18	0.43	0.52	0.56										
Syracuse, N. Y.	12			0.29														0.25			
Tacoma, Wash.	28			0.07														0.03			
Tampa, Fla.	13	5:45 p.m.	7:15 p.m.	0.79	5:52 p.m.	6:11 p.m.	0.01	0.12	0.30	0.49	0.65										
	16	5:54 p.m.	7:00 p.m.	0.87	5:54 p.m.	6:18 p.m.	0.00	0.14	0.29	0.45	0.66	0.84									
	18	7:14 p.m.	7:50 p.m.	0.89	7:18 p.m.	7:38 p.m.	0.01	0.26	0.59	0.78	0.87										
Tatoosh Island, Wash.	22			0.08														0.08			
Taylor, Tex.	18	5:50 p.m.	7:48 p.m.	0.85	6:49 p.m.	7:15 p.m.	0.05	0.15	0.31	0.45	0.57	0.68	0.72								
Terre Haute, Ind.	26	D. N. a.m.	10:58 a.m.	2.09	4:57 a.m.	5:16 a.m.	0.17	0.21	0.42	0.65	0.76										
Thomasville, Ga.	4	3:38 p.m.	7:10 p.m.	1.81	4:29 p.m.	5:33 p.m.	0.15	0.15	0.24	0.26	0.41	0.62	0.82	0.94	1.02	1.15	1.29	1.45	1.56		
	7	12:25 p.m.	1:20 p.m.	1.20	12:28 p.m.	12:49 p.m.	0.01	0.18	0.32	0.77	1.14	1.18									
	25	1:35 p.m.	5:54 p.m.	1.20	1:50 p.m.	2:19 p.m.	0.01	0.21	0.45	0.60	0.73	0.82	0.90								
Toledo, Ohio.	18			0.24														0.24			
Tonopah, Nev.	27			0.22														0.10			
Topeka, Kans.	7			0.26														0.26			
Valentine, Nebr.	30			0.38														0.21			
Vicksburg, Miss.	7	10:10 p.m.	11:15 p.m.	1.61	10:13 p.m.	10:52 p.m.	0.01	0.34	0.69	0.93	1.13	1.29	1.39	1.46	1.52						
	20	1:31 p.m.	3:05 p.m.	0.76	1:38 p.m.	1:58 p.m.	0.01	0.22	0.42	0.54	0.61										
Walla Walla, Wash.	8			T.														T.			
Washington, D. C.	2	5:45 p.m.	9:20 p.m.	1.97	7:19 p.m.	8:24 p.m.	0.36	0.11	0.22	0.38	0.43	0.53	0.58	0.61	0.77	0.85	0.99	1.27	1.53		
	14	4:30 p.m.	5:50 p.m.	1.12	4:44 p.m.	5:00 p.m.	0.03	0.13	0.54	1.07	1.08										
	25	10:38 a.m.	1:55 p.m.	3.23	10:56 a.m.	11:13 a.m.	0.02	0.18	0.45	0.70	0.79										
					12:23 p.m.	1:25 p.m.	1.17	0.19	0.32	0.54	0.59	0.61	0.68	0.83	1.01	1.30	1.49	1.89	2.04		
Wausau, Wis.	20	9:50 a.m.	12:10 p.m.	0.68	11:08 a.m.	11:42 a.m.	0.04	0.07	0.17	0.18	0.20	0.20	0.38	0.56							
Wichita, Kans.	18–19	D. N. p.m.	D. N. a.m.	0.87	1:33 a.m.	2:05 a.m.	0.02	0.06	0.16	0.31	0.50	0.67	0.79	0.83							
Williston, N. Dak.	4			0.15														0.14			
Wilmington, N. C.	7	11:11 a.m.	1:10 p.m.	0.91	11:56 a.m.	12:20 p.m.	0.09	0.05	0.12	0.22	0.41	0.50									
		1:55 p.m.	3:20 p.m.	0.72	2:02 p.m.	2:23 p.m.	0.01	0.15	0.23	0.30	0.48	0.50									
	8	1:20 p.m.	2:50 p.m.	0.74	1:26 p.m.	1:54 p.m.	0.01	0.14	0.33	0.52	0.59	0.66	0.72								
	10	12:25 a.m.	2:20 a.m.	1.21	12:35 a.m.	1:03 a.m.	0.01	0.10	0.23	0.51	0.83	1.11	1.16								
	21	9:58 a.m.	11:05 a.m.	1.35	10:00 a.m.	10:30 a.m.	0.01	0.21	0.40	0.50	0.77	0.99	1.18								
	27	2:26 p.m.	3:36 p.m.	0.72	2:27 p.m.	2:58 p.m.	0.01	0.24	0.29	0.32	0.37	0.42	0.57	0.59							
	27	4:05 p.m.	7:25 p.m.	1.38	5:54 p.m.	6:24 p.m.	0.27	0.32	0.50	0.75	0.92	0.98	1.06								
Winnemucca, Nev.	7			0.03														0.03			
Wytheville, Va.	16			0.82														0.62			
Yankton, S. Dak.	21	9:30 p.m.	10:40 p.m.	1.02	9:34 p.m.	10:07 p.m.	0.02	0.15	0.31	0.60	0.80	0.82	0.92	0.99							
Yellowstone Park, Wyo.	22			0.21														0.21			

* Self-register not in use. † Record partly estimated. ‡ No precipitation occurred during month.

TABLE III.—*Data furnished by the Canadian Meteorological Service, July, 1917.*

Stations.	Altitude above M. S. L.* Jan. 1, 1916.	Pressure.			Temperature.						Precipitation.		
		Station, reduced to mean of 24 hours.	Sealevel, 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.	*Inches.*	*Inches.*	*Inches.*	°*F.*	°*F.*	°*F.*	°*F.*	°*F.*	°*F.*	*Inches.*	*Inches.*	*Inches.*
St. Johns, N. F.	125	29.70	29.83	−0.14	59.2	−0.1	66.6	51.9	83	45	2.63	−1.26	.....
Sydney, C. B. I.	48	29.91	29.95	+ .02	63.3	+1.0	74.2	52.5	89	43	4.58	+0.93	.....
Halifax, N. S.	88	29.84	29.94	− .02	64.9	+1.5	74.2	55.6	86	49	2.37	−1.68	.....
Yarmouth, N. S.	65	29.87	29.94	− .01	58.9	−0.6	66.0	51.8	80	47	1.86	−1.76	.....
Charlottetown, P. E. I.	38	29.88	29.92	+ .02	66.7	+2.6	74.3	59.1	87	52	1.68	−1.81	.....
Chatham, N. B.	28	29.89	29.91	+0.03	67.2	+2.2	76.2	58.2	94	47	2.88	−1.31	.....
Father Point, Que.	20	29.86	29.88	+ .03	58.1	+0.5	65.5	50.8	76	42	2.21	−0.83	.....
Quebec, Que.	296	29.60	29.92	+ .01	67.3	+1.8	76.4	58.3	88	52	4.10	−0.16	.....
Montreal, Que.	187	29.71	29.91	− .02	71.5	+3.0	79.9	63.0	93	54	4.46	+0.17	.....
Stonecliffe, Ont.	489	29.28	29.88	− .06	70.9	+5.3	79.0	62.8	94	52	2.32	−0.80	.....
Ottawa, Ont.	236	29.64	29.90	−0.04	70.0	+0.5	79.2	60.9	98	51	3.33	−0.14	.....
Kingston, Ont.	285	29.62	29.92	− .05	68.2	0.0	75.1	61.4	88	51	1.23	−1.66	.....
Toronto, Ont.	379	29.51	29.90	− .07	70.4	+2.4	80.1	60.7	98	49	3.58	+0.66	.....
White River, Ont.	1,244	28.56	29.85	− .09	61.2	+1.7	74.4	48.1	91	31	3.46	+0.66	.....
Port Stanley, Ont.	592	29.31	29.94	− .04	67.5	−0.3	75.5	59.6	90	47	2.19	−0.85	.....
Southampton, Ont.	656	29.22	.....	.....	65.9	+1.2	73.6	58.3	94	45	4.23	+2.25	.....
Parry Sound, Ont.	688	29.23	29.91	−0.05	67.6	+1.6	77.1	58.1	93	45	3.23	+0.61	.....
Port Arthur, Ont.	644	29.18	29.89	− .05	64.0	+2.0	73.0	55.0	89	44	1.45	−2.03	.....
Winnipeg, Man.	760	29.04	29.85	− .08	69.1	+3.1	81.0	57.2	93	42	3.27	+0.21	.....
Minnedosa, Man.	1,690	28.09	29.86	− .07	67.5	+5.3	82.9	52.0	99	32	0.80	−1.80	.....
Qu'Appelle, Sask.	2,115	27.62	29.81	−0.11	66.5	+3.0	80.5	52.6	102	34	0.73	−1.75	.....
Medicine Hat, Alberta	2,144	27.56	29.77	− .13	74.7	+6.9	92.0	57.4	101	46	0.52	−1.57	.....
Swift Current, Sask.	2,392	27.31	29.80	− .11	69.7	+3.2	86.3	53.1	100	41	0.70	−1.74	.....
Calgary, Alberta	3,428	26.39	29.84	− .06	64.5	+3.9	82.2	46.9	91	34	0.47	−2.21	.....
Banff, Alberta	4,521	25.38	29.86	− .04	60.5	+3.9	77.9	43.0	90	35	0.46	−2.78	.....
Edmonton, Alberta	2,150	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Prince Albert, Sask.	1,450	28.28	29.80	−0.11	67.0	+5.1	80.7	53.3	92	42	0.35	−1.70	.....
Battleford, Sask.	1,592	28.12	29.82	− .08	67.3	+2.6	82.5	52.0	94	40	0.79	−1.55	.....
Kamloops, B. C.	1,262	28.67	29.93	− .01	70.8	+2.3	86.1	55.4	98	44	0.11	−1.50	.....
Victoria, B. C.	230	29.79	30.04	− .01	58.8	−1.2	67.0	50.5	81	49	0.16	−0.24	.....
Barkerville, B. C.	4,180	25.72	30.00	+0.09	51.7	−3.4	63.8	39.5	76	32	4.22	+1.20	.....
Hamilton, Bermuda	151	30.07	30.23	+ .09	78.3	0.4	83.2	73.5	87	71	3.00	−1.44	.....

* *See* Explanation of Tables in this REVIEW for July, 1917, page 388.

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