DESCRIPTION OF TABLES AND CHARTS.

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 Meterological 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.

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

Chart II.—Tracks of centers of high area; 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., seventy-fifth meridian time. Within each circle is also given (Chart II) the last three figures of the highest barometric reading and (Chart III) the lowest reading reported at or near the center at that time, and in both cases as reduced to sea level and standard gravity.

Chart IV.—Temperature departures. This chart presents the departures of the monthly mean 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 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 sea level and prevailing wind directions. The pressures have been reduced to sea level 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 sea-level 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 sea-level plane minus the station temperature as given by Table 48 of that report, is added to the observed surface temperature to obtain the adopted sea-level 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 and tenths 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 direction, and storm tracks over the North Atlantic Ocean, *for the corresponding month of last year*.

[Charts XLIII–112 to 114 are figures illustrating the New Orleans hurricane of Sept. 29–30, 1915.]

TABLE I.—*Climatological data for United States Weather Bureau stations, September, 1915.*

Districts and stations.	Elevation of instruments.			Pressure.			Temperature of the air.												Precipitation.			Wind.										
	Barometer above sea level, feet.	Thermometer above ground.	Anemometer abo ground.	Station, reduced to mean of 24 hours.	Sea level, reduced to mean of 24 hours.	Departure from normal.	Mean max.+mean min.÷2.	Departure from normal.	Maximum.	Date.	Mean maximum.	Minimum.	Date.	Mean minimum.	Greatest daily range.	Mean wet thermometer.	Mean temperature of the dew point.	Mean relative humidity, per cent.	Total.	Departure from normal.	Days with 0.01 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		
New England.							63.9	+ 3.2										71	1.07	− 2.1										4.4		
Eastport	76	67	85	29.89	29.97	−0.06	57.0	+ 1.8	80	11	64	38	27	50	26	51	47	76	1.21	− 1.8	7	6,899	s.	43	s.	26	11	6	13	5.7	.....	.....
Greenville	1,070	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Portland, Me.	103	82	117	29.92	30.03	− .01	61.4	+ 1.8	89	17	70	40	28	53	28	56	51	74	0.62	− 2.6	3	6,726	s.	50	nw.	27	18	6	6	3.8	.....	.....
Concord	288	70	79	29.75	30.06	.00	63.4	+ 4.3	92	15	74	39	23	52	36	.....	.....	.....	1.21	− 2.0	5	3,812	nw.	29	nw.	26	20	4	6	3.5	.....	.....
Burlington	404	11	48	29.62	30.05	− .01	62.6	+ 3.7	92	18	73	34	30	52	31	.....	.....	.....	0.97	− 2.4	9	7,352	s.	50	nw.	26	11	13	6	4.8	.....	.....
Northfield	876	12	60	29.13	30.07	+ .01	59.4	+ 4.8	89	15	71	30	30	48	41	54	52	84	1.36	− 1.4	10	5,059	s.	39	sw.	26	8	12	10	5.7	.....	.....
Boston	125	115	188	29.91	30.05	− .02	66.8	+ 4.1	94	15	74	44	28	59	33	60	57	74	0.69	− 2.5	2	6,633	sw.	42	w.	26	14	6	10	4.4	.....	.....
Nantucket	12	14	90	30.04	30.05	− .03	65.0	+ 2.2	81	14	71	46	28	59	18	60	58	82	0.85	− 1.9	4	10,243	sw.	59	sw.	26	15	12	3	4.0	.....	.....
Block Island	26	11	46	30.03	30.06	− .02	65.4	+ 1.3	83	10	71	46	28	60	17	62	60	86	1.35	− 1.6	5	11,336	sw.	60	nw.	26	15	5	9	4.2	.....	.....
Narragansett Pier	.....	9	.....	.....	.....	.....	64.7	+ 1.9	89	10	74	35	28	56	30	.....	.....	.....	1.77	.....	7	.....	sw.	.....	.....	.....	22	3	5	.....	.....	.....
Providence	160	215	251	29.88	30.05	− .02	66.2	+ 3.0	92	16	75	41	28	57	27	60	56	75	0.88	− 2.3	6	8,222	nw.	62	nw.	26	18	7	5	3.5	.....	.....
Hartford	159	122	140	29.89	30.07	.00	67.4	+ 5.7	92	16	77	42	28	58	30	60	57	76	1.29	− 2.2	7	4,860	s.	37	nw.	26	12	10	8	4.7	.....	.....
New Haven	106	117	155	29.95	30.06	− .01	68.0	+ 4.1	91	16	77	43	28	59	28	62	58	78	1.35	− 2.4	6	6,031	nw.	34	sw.	26	16	7	7	4.2	.....	.....
Middle Atlantic States.							69.5	+ 3.0										77	2.10	− 1.4										4.4		
Albany	97	102	115	29.96	30.06	− .01	66.9	+ 4.6	92	15	76	41	30	58	29	60	57	77	2.17	− 1.0	9	4,926	s.	33	nw.	26	15	12	3	3.7	.....	.....
Binghamton	871	10	69	29.17	30.09	+ .02	65.8	+ 5.8	91	15	76	35	23	55	33	.....	.....	.....	1.85	− 0.9	10	2,904	nw.	25	nw.	26	13	7	10	5.0	.....	.....
New York	314	414	454	29.74	30.07	− .01	69.0	+ 2.5	90	9	77	44	28	61	23	61	57	71	2.52	− 1.1	6	10,756	nw.	72	nw.	26	11	13	6	4.8	.....	.....
Harrisburg	374	94	104	29.70	30.10	+ .02	68.8	+ 3.9	91	15	78	42	29	60	27	62	59	76	3.10	+ 0.2	8	3,718	s.	28	nw.	17	13	10	7	4.3	.....	.....
Philadelphia	117	123	190	29.97	30.09	+ .01	71.4	+ 4.0	92	9	80	47	28	63	22	64	61	75	0.46	− 2.9	6	6,205	sw.	34	nw.	26	12	10	8	4.8	.....	.....
Reading	325	81	98	29.75	30.10	.....	69.4	.....	92	14	79	42	23	59	32	62	58	76	2.26	− 1.4	8	3,983	sw.	25	nw.	21	12	8	10	5.1	.....	.....
Scranton	805	111	119	29.24	30.10	+ .03	65.8	+ 3.6	92	15	76	36	23	55	33	60	56	77	2.91	0.0	11	3,716	sw.	32	sw.	26	11	11	8	5.0	.....	.....
Atlantic City	52	37	48	30.03	30.09	+ .02	69.6	+ 2.0	92	9	76	41	28	63	29	64	62	80	0.60	− 2.4	2	5,282	sw.	24	s.	21	18	3	9	4.2	.....	.....
Cape May	18	13	49	30.09	30.11	+ .04	70.0	+ 1.0	92	9	77	45	23	63	23	.....	.....	.....	0.70	− 2.3	4	5,509	nw.	28	nw.	21	17	10	3	3.3	.....	.....
Sandy Hook	22	10	57	30.05	30.07	.....	69.5	.....	92	9	76	48	28	63	22	64	62	82	1.02	.....	4	10,507	nw.	51	nw.	26	15	10	5	4.0	.....	.....
Trenton	190	159	183	29.87	30.07	.....	69.4	.....	91	9	79	43	29	60	29	62	59	76	0.62	− 3.0	8	6,909	nw.	37	nw.	21	11	11	8	4.7	.....	.....
Baltimore	123	100	113	29.97	30.10	+ .02	71.5	+ 2.9	93	9	80	46	29	63	25	64	60	71	2.30	− 1.6	7	4,382	n.	28	n.	27	17	8	5	3.9	.....	.....
Washington	112	62	85	29.97	30.09	+ .01	71.0	+ 2.9	94	13	81	43	30	61	31	63	60	76	1.39	− 2.2	7	3,415	s.	28	nw.	21	15	10	5	3.6	.....	.....
Lynchburg	681	153	188	29.36	30.09	+ .01	70.6	+ 2.2	93	12	81	41	23	60	32	64	61	81	3.26	− 0.4	7	3,577	n.	26	w.	26	14	7	9	4.9	.....	.....
Norfolk	91	170	205	30.00	30.10	+ .04	74.2	+ 2.5	92	12	81	57	22	68	23	67	63	75	1.76	− 2.3	7	7,524	ne.	36	nw.	19	14	9	7	4.5	.....	.....
Richmond	144	11	52	29.95	30.10	+ .03	72.4	+ 1.6	93	13	82	45	23	63	28	65	62	78	1.99	− 1.4	9	4,285	ne.	32	sw.	26	16	5	9	4.4	.....	.....
Wytheville	2,293	40	47	27.77	30.10	+ .03	65.6	+ 2.0	88	11	76	35	23	55	33	60	58	87	5.73	+ 2.4	14	2,422	e.	19	nw.	21	11	12	7	4.8	.....	.....
South Atlantic States.							75.9	+ 2.8										80	3.17	− 1.8										4.4		
Asheville	2,255	70	84	27.79	30.10	+ .03	67.4	+ 2.4	86	10	78	40	23	57	33	61	59	83	4.09	+ 1.0	11	4,379	s.	44	e.	30	12	14	4	4.3	.....	.....
Charlotte	763	153	161	29.26	30.08	+ .01	73.2	+ 2.5	93	10	82	48	23	64	27	65	62	74	2.37	− 0.8	6	6,281	ne.	31	sw.	20	10	16	4	5.1	.....	.....
Hatteras	11	12	50	30.06	30.07	+ .01	77.1	+ 2.4	91	10	82	60	28	72	17	72	69	80	1.26	− 4.1	9	8,043	ne.	41	ne.	2	12	14	4	4.4	.....	.....
Manteo	12	4	46	.....	.....	.....	74.5	.....	93	18	83	53	29	66	.....	.....	.....	.....	1.04	− 4.3	4	.....	ne.	.....	.....	.....	20	3	7	.....	.....	.....
Raleigh	376	103	110	29.69	30.08	+ .01	73.8	+ 3.2	94	11	83	50	23	65	30	66	63	76	2.54	− 0.8	11	4,517	ne.	24	w.	26	12	10	8	4.6	.....	.....
Wilmington	78	81	91	29.99	30.07	+ .02	76.0	+ 2.9	96	10	84	54	23	68	22	70	68	84	2.71	− 2.6	10	4,931	ne.	28	ne.	22	12	12	6	4.7	.....	.....
Charleston	48	11	92	30.00	30.06	+ .02	79.2	+ 3.0	95	10	85	63	23	73	20	73	71	80	2.07	− 3.4	9	7,357	e.	29	e.	15	15	11	4	3.8	.....	.....
Columbia	351	41	57	29.70	30.07	+ .02	76.8	+ 3.1	98	11	87	53	23	67	20	68	65	75	0.96	− 2.5	6	4,372	ne.	26	ne.	22	18	7	5	3.8	.....	.....
Augusta	180	89	97	29.87	30.06	+ .01	77.2	+ 2.8	97	11	86	55	23	68	26	70	67	78	4.91	+ 1.2	6	3,609	ne.	24	n.	4	13	9	8	4.8	.....	.....
Savannah	65	150	194	29.98	30.04	+ .01	78.5	+ 3.1	96	11	86	60	25	71	23	72	71	83	4.49	− 1.1	9	7,481	ne.	39	se.	15	12	10	8	4.8	.....	.....
Jacksonville	43	209	245	29.97	30.02	+ .02	79.8	+ 2.5	94	9	86	67	23	73	21	73	71	82	8.41	+ 0.4	13	8,224	ne.	41	s.	30	15	8	7	4.2	.....	.....
Florida Peninsula.							81.7	+ 0.9										78	4.96	− 3.0										5.2		
Key West	22	10	61	29.90	29.92	− .02	82.4	− 0.1	90	4	88	72	15	77	16	77	74	78	7.32	+ 0.5	20	7,651	e.	38	s.	3	14	7	9	5.0	.....	.....
Miami	25	71	79	29.93	29.96	.....	81.0	− 0.5	88	4	86	71	15	76	15	76	73	77	5.47	− 4.1	15	7,458	e.	32	e.	2	8	13	9	5.8	.....	.....
Sand Key	23	39	72	29.87	29.90	− .04	81.1	.....	88	4	84	70	3	78	12	77	75	80	5.27	.....	11	11,306	e.	58	se.	27	15	6	9	4.8	.....	.....
Tampa	35	79	96	29.94	29.97	.00	81.7	+ 3.4	93	11	90	70	15	74	20	74	72	77	2.08	− 5.3	12	5,304	ne.	38	ne.	15	12	12	6	5.0	.....	.....
East Gulf States.							78.0	+ 3.2										78	4.72	+ 0.8										4.4		
Atlanta	1,175	190	216	28.85	30.07	+ .02	74.9	+ 2.8	92	12	84	51	22	66	25	66	62	70	3.53	0.0	7	6,130	e.	40	se.	4	11	13	6	4.9	.....	.....
Macon	370	78	87	29.64	30.04	+ .01	77.5	+ 4.6	98	10	88	51	23	67	28	69	65	73	1.35	− 2.0	5	3,937	ne.	32	s.	4	14	10	6	4.5	.....	.....
Thomasville	273	8	57	29.72	30.01	.00	80.3	+ 3.5	99	9	91	63	23	69	31	71	69	82	4.41	+ 0.2	11	3,794	ne.	24	s.	4	5	25	5	5.5	.....	.....
Pensacola	56	140	182	29.93	29.99	.00	79.6	+ 1.7	94	11	86	66	1	74	19	73	70	77	1.55	− 3.7	7	9,018	ne.	61	s.	30	9	11	10	5.2	.....	.....
Anniston	711	9	57	29.28	30.07	+ .04	75.0	+ 3.7	93	13	86	48	22	61	32	.....	.....	.....	5.07	+ 1.5	7	3,541	se.	24	e.	30	22	5	3	2.9	.....	.....
Birmingham	700	11	48	29.30	30.05	+ .02	76.3	+ 2.3	95	13	86	49	22	66	29	67	64	74	6.54	+ 3.0	9	4,124	e.	35	se.	30	15	11	4	4.0	.....	.....
Mobile	57	125	161	29.92	29.98	− .02	79.8	+ 3.3	97	11	88	61	23	71	26	72	70	79	4.08	− 0.9	8	6,468	ne.	61	se.	29	12	14	4	4.0	.....	.....
Montgomery	223	100	112	29.78	30.02	.00	78.6	+ 3.2	94	12	88	56	22	68	27	69	65	72	4.91	+ 2.0	5	4,151	e.	34	n.	4	19	6	5	3.2	.....	.....
Meridian	375	85	93	29.61	29.99	− .03	76.8	+ 4.1	96	13	88	54	22	66	30	68	64	71	7.25	+ 3.8	3	3,577	ne.	33	se.	30	13	11	6	4.7	.....	.....
Vicksburg	247	65	74	29.73	30.01	− .01	78.1	+ 3.3	94	12	88	53	22	69	24	70	67	77	2.36	− 1.0	6	4,174	se.	33	n.	30	14	10	5	4.4	.....	.....
New Orleans	51	76	84	29.89	29.94	− .04	81.2	+ 3.2	95	12	88	66	1	74	19	73	71	78	10.83	+ 6.0	7	5,203	se.	86	se.	29	10	15	5	4.7	.....	.....
West Gulf States.							78.1	+ 2.4										78	2.76	− 0.7										4.7		
Shreveport	249	77	93	29.73	29.99	− .01	77.6	+ 1.9	92	20	87	56	22	68	24	70	68	79	1.75	− 1.5	3	4,169	ne.	21	nw.	20	13	12	5	4.1	.....	.....
Bentonville	1,303	11	43	28.66	30.00	− .02	71.3	+ 2.5	89	11	81	45	22	62	25	.....	.....	.....	3.59	+ 0.1	7	3,568	s.	21	s.	13	12	8	10	5.0	.....	.....
Fort Smith	457	79	99	29.51	29.98	− .03	76.4	+ 3.7	94	11	86	52	22	67	26	68	65	76	1.67	− 1.5	6	4,874	e.	35	w.	27	13	9	8	4.8	.....	.....
Little Rock	357	139	147	29.64	30.01	− .02	76.0	+ 2.9	92	11	84	51	22	68	24	68	65	76	1.16	− 2.1	3	5,277	s.	26	sw.	26	16	7	7	4.3	.....	.....
Brownsville	57	3	40	.....	.....	.....	82.2	.....	95	30	91	63	3	74	27	.....	.....	.....	2.54	.....	11	.....	e.	.....	.....	.....	.....	.....	.....	.....	.....	.....
Corpus Christi	20	69	77	29.91	29.93	− .02	81.8	+ 2.8	93	29	87	68	3	77	29	76	74	84	11.09	+ 7.1	7	8,941	se.	36	se.	25	6	17	7	5.9	.....	.....
Dallas	512	109	117	29.43	29.97	.....	77.8	.....	92	20	86	60	2	70	23	.....	.....	.....	0.53	.....	4	6,402	se.	28	se.	25	12	11	7	4.7	.....	.....
Fort Worth	670	106	114	29.24	29.94	− .05	77.1	+ 0.4	95	28	85	58	2	69	21	68	65	73	1.62	− 1.3	7	6,823	se.	31	se.	25	8	12	10	5.6	.....	.....
Galveston	54	106	114	29.91	29.97	− .01	81.2	+ 1.8	90	20	85	69	1	77	12	75	73	79	2.12	− 3.3	10	8,030	se.	32	s.	24	13	14	3	4.4	.....	.....
Houston	138	111	121	29.81	29.95	.....	80.9	+ 2.4	94	19	89	62	2	72	23	.....	.....	.....	1.14	.....	5	5,363	se.	23	se.	13	19	7	4	3.5	.....	.....
Palestine	510	64	72	29.44	29.96	− .03	78.2	+ 3.5	92	28	87	57	1	70	25	71	69	82	0.47	− 2.7	6	4,320	s.	21	n.	20	14	11	5	4.7	.....	.....
San Antonio	701	109	132	29.22	29.93	− .03	79.8	+ 2.7	94	10	88	61	2	71	26	71	69	78	2.39	− 0.6	7	5,735	s.	28	e.	15	11	12	7	4.7	.....	.....
Taylor	582	55	63	29.37	29.98	+ .01	78.4	+ 1.5	91	10	87	58	1	70	24	.....	.....	.....	1.74	− 1.3	8	5,547	s.	27	se.	25	7	20	3	5.1	.....	.....

TABLE I.—*Climatological data for United States Weather Bureau stations, September, 1915*—Continued.

Districts and stations.	Elevation of instruments.			Pressure.			Temperature of the air.														Precipitation.			Wind.										
	Barometer above sea level, feet.	Thermometer above ground.	Anemometer above ground.	Station, reduced to mean of 24 hours.	Sea level, reduced to mean of 24 hours.	Departure from normal.	Mean max.+mean min.÷2.	Departure from normal.	Maximum.	Date.	Mean maximum.	Minimum.	Date.	Mean minimum.	Greatest daily range.	Mean wet thermometer.	Mean temperature of the dew point.	Mean relative humidity, per cent.	Total.	Departure from normal.	Days with 0.01 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		
Ohio Valley and Tennessee.							65.4	+ 2.2										77	3.84	+1.3										4.5		
Chattanooga	762	189	213	29.27	30.07	+0.01	73.4	+ 2.2	92	12	83	58	23	64	26	66	64	78	6.91	+ 3.7	9	3,716	w.	27	ne.	4	14	12	4	4.2	.....	.....
Knoxville	996	93	100	29.05	30.06	.00	72.8	+ 3.4	91	17	85	58	23	63	29	65	62	76	4.01	+ 1.2	7	2,768	ne.	18	sw.	5	14	6	10	4.7	.....	.....
Memphis	369	76	97	29.65	30.05	+ .02	76.0	+ 3.2	91	13	85	59	22	68	22	68	65	76	0.55	− 2.5	4	4,739	sw.	36	sw.	20	22	3	5	3.0	.....	.....
Nashville	546	168	191	29.48	30.06	.00	73.8	+ 2.5	94	13	81	47	23	61	28	66	62	74	4.63	+ 1.0	8	5,045	ne.	37	ne.	30	16	10	4	3.5	.....	.....
Lexington	989	193	230	29.02	30.08	+ .01	69.5	+ 1.6	90	13	75	44	22	61	28	.....	.....	.....	3.74	+ 1.5	9	8,348	sw.	39	nw.	18	15	10	5	4.6	.....	.....
Louisville	525	219	255	29.50	30.08	+ .02	71.7	+ 1.8	92	13	84	46	22	62	31	63	60	72	2.31	− 0.3	7	7,152	s.	38	w.	18	19	8	8	4.6	.....	.....
Evansville	431	72	82	29.58	30.04	− .02	72.6	+ 2.9	92	13	82	46	22	63	28	65	62	77	2.98	+ 0.3	7	4,609	s.	30	s.	14	16	11	3	4.1	.....	.....
Indianapolis	822	194	236	29.19	30.07	+ .01	68.1	+ 1.4	96	14	77	43	23	59	28	61	58	77	4.17	+ 1.1	11	7,420	s.	48	w.	14	11	9	10	5.3	.....	.....
Terre Haute	575	96	129	29.45	30.04	.....	69.6	.....	94	14	79	44	22	60	30	62	59	77	5.19	.....	12	6,061	s.	43	s.	15	7	15	8	5.8	.....	.....
Cincinnati	628	11	51	29.46	30.07	.00	68.3	− 0.6	90	13	78	42	29	56	29	62	59	79	5.85	+ 3.3	10	4,364	s.	26	sw.	26	11	9	10	5.1	.....	.....
Columbus	824	173	222	29.22	30.06	+ .02	68.0	+ 2.1	90	13	78	41	29	59	27	61	59	79	4.43	+ 1.9	11	6,582	s.	32	sw.	26	17	8	5	5.3	.....	.....
Dayton	899	181	216	29.12	30.06	.....	68.0	+ 0.6	89	13	77	42	29	59	31	62	59	80	5.44	+ 2.9	10	6,205	ne.	34	sw.	7	13	10	7	4.9	.....	.....
Pittsburgh	842	353	410	29.20	30.09	+ .01	68.8	+ 2.7	90	14	78	43	28	60	26	64	56	68	1.71	− 0.8	9	6,850	sw.	48	w.	18	12	11	7	4.7	.....	.....
Elkins	1,940	41	50	28.09	30.12	+ .04	65.8	+ 3.9	89	14	78	37	23	53	38	58	56	87	3.04	+ 0.2	13	1,983	w.	18	se.	5	7	14	9	5.7	.....	.....
Parkersburg	638	77	84	29.45	30.10	+ .02	69.4	+ 3.3	92	15	80	43	23	59	29	62	60	82	4.19	+ 1.5	14	2,888	se.	23	se.	5	17	6	7	3.9	.....	.....
Lower Lake region.							65.3	+ 2.2										78	3.69	+ 0.9										4.9		
Buffalo	767	247	280	29.25	30.07	+ .01	64.6	+ 1.7	87	14	72	39	27	57	25	60	57	78	1.35	− 1.8	8	9,609	sw.	72	sw.	26	13	7	10	4.8	.....	.....
Canton	448	10	61	29.58	30.05	.....	61.4	+ 2.1	88	14	72	30	30	51	34	.....	.....	.....	1.32	− 1.5	10	6,402	sw.	46	w.	26	14	11	5	3.7	.....	.....
Oswego	335	76	91	29.69	30.06	.00	64.4	+ 1.7	90	14	72	42	30	57	26	59	56	78	3.44	+ 0.6	7	6,081	s.	35	nw.	26	10	11	9	5.4	.....	.....
Rochester	523	97	113	29.52	30.09	+ .03	65.4	+ 3.5	92	14	75	39	29	56	28	58	55	74	2.26	− 0.1	7	4,984	sw.	36	w.	26	13	9	8	4.6	.....	.....
Syracuse	597	97	113	29.45	30.10	+ .03	64.7	+ 3.1	89	14	73	38	28	56	30	59	56	79	5.11	+ 2.3	13	6,983	s.	48	nw.	26	8	11	11	5.6	.....	.....
Erie	714	130	166	29.31	30.07	+ .01	66.4	+ 2.5	91	14	74	41	28	58	26	61	58	78	4.19	+ 0.7	12	8,462	s.	48	sw.	26	7	17	6	5.0	.....	.....
Cleveland	762	190	201	29.27	30.08	+ .02	67.0	+ 2.7	89	13	74	43	29	60	23	60	57	74	4.23	+ 1.0	12	8,801	s.	41	w.	26	11	11	8	4.8	.....	.....
Sandusky	629	62	103	29.39	30.07	+ .01	67.3	+ 2.0	91	14	75	45	22	60	25	61	58	77	5.11	+ 2.4	10	7,534	sw.	36	nw.	10	11	8	11	5.0	.....	.....
Toledo	628	208	243	29.40	30.08	+ .02	66.3	+ 2.2	89	14	74	38	29	58	25	61	58	80	5.45	+ 3.1	9	9,732	sw.	52	w.	10	14	9	7	4.5	.....	.....
Fort Wayne	856	113	124	29.16	30.08	.....	65.8	+ 0.3	90	14	75	37	29	57	30	61	59	84	3.70	.....	13	6,035	sw.	37	w.	10	10	10	10	5.6	.....	.....
Detroit	730	218	245	29.28	30.07	+ .01	65.0	+ 1.9	89	14	73	37	29	57	28	60	57	80	4.47	+ 2.0	11	7,492	sw.	42	nw.	10	9	13	8	4.8	.....	.....
Upper Lake region.							60.7	+ 1.5										82	4.42	+ 1.1										5.7		
Alpena	609	13	92	29.40	30.07	+ .04	58.9	+ 1.6	89	14	67	33	30	50	30	54	52	82	2.37	− 1.1	15	7,410	nw.	40	nw.	26	6	15	9	5.9	.....	.....
Escanaba	612	54	60	29.37	30.03	+ .02	57.6	+ 0.7	78	4	65	34	29	50	24	53	51	82	1.88	− 1.7	13	6,273	s.	39	n.	26	11	6	13	5.5	.....	.....
Grand Haven	632	54	92	29.37	30.04	.00	62.2	+ 1.1	83	4	70	37	29	54	26	58	55	83	8.05	+ 4.9	13	7,267	s.	38	nw.	20	11	6	13	5.3	.....	.....
Grand Rapids	707	70	87	29.29	30.06	+ .01	64.4	+ 2.0	90	14	74	35	29	55	31	58	55	78	8.11	+ 5.0	14	3,920	e.	26	nw.	12	8	8	14	5.8	.....	.....
Houghton	684	62	72	29.27	30.00	.00	57.2	+ 1.1	85	5	65	35	29	49	30	.....	.....	.....	4.30	+ 0.8	14	5,838	w.	37	nw.	20	3	14	13	6.5	.....	.....
Lansing	878	11	62	29.11	30.04	.....	63.2	+ 1.9	89	4	74	33	23	53	37	58	56	88	6.55	+ 3.9	11	3,553	sw.	19	nw.	26	9	13	8	5.0	.....	.....
Ludington	637	60	66	29.35	30.01	.....	60.2	.....	83	4	68	35	28	52	25	56	54	84	8.14	.....	15	6,801	s.	37	s.	23	8	11	11	5.6	.....	.....
Marquette	734	77	111	29.24	30.05	+ .05	57.6	+ 0.8	83	1	64	33	29	51	25	52	49	78	3.68	+ 0.2	13	6,992	e.	48	w.	14	7	9	14	6.3	.....	.....
Port Huron	638	70	120	29.38	30.06	.00	63.2	+ 2.3	87	14	71	35	29	55	26	59	56	82	2.40	− 0.3	11	7,242	sw.	34	nw.	26	9	17	4	4.7	.....	.....
Saginaw	641	48	82	29.36	30.06	.....	62.8	.....	84	14	72	33	29	53	30	58	56	86	4.55	+ 1.4	13	5,785	s.	28	s.	14	8	7	15	6.1	.....	.....
Sault Ste. Marie	614	11	61	29.36	30.06	+ .04	56.0	+ 1.7	84	14	66	30	28	46	32	51	49	84	4.15	+ 0.7	15	5,105	e.	40	nw.	20	7	10	13	6.2	.....	.....
Chicago	823	140	310	29.16	30.04	.00	67.2	+ 2.6	90	14	73	46	21	61	22	62	58	76	3.53	+ 0.5	14	8,436	ne.	41	sw.	10	10	8	12	5.9	.....	.....
Green Bay	617	109	144	29.36	30.02	.00	61.2	+ 2.1	84	8	70	39	29	53	30	55	53	81	5.10	+ 2.0	13	7,268	s.	54	sw.	8	2	16	12	6.8	.....	.....
Milwaukee	681	119	133	29.31	30.04	+ .01	64.2	+ 2.7	87	13	71	43	21	57	28	58	55	78	4.03	+ 2.0	14	6,722	sw.	34	ne.	10	9	10	11	5.8	.....	.....
Duluth	1,133	11	47	28.79	30.01	+ .03	55.6	− 1.1	83	3	64	36	15	47	29	50	48	82	2.28	− 1.3	12	9,233	ne.	50	nw.	25	11	10	9	5.2	.....	.....
North Dakota.							55.3	− 1.9										78	1.93	+ 0.5										5.8		
Moorhead	940	8	57	28.95	29.97	+ .01	57.8	+ 1.2	88	2	69	35	15	47	37	52	49	82	1.34	− 1.0	9	5,993	s.	30	nw.	20	16	4	10	4.2	.....	.....
Bismarck	1,674	8	57	28.19	29.97	+ .03	56.0	− 1.1	92	2	67	32	21	45	36	49	45	77	1.68	+ 0.5	9	6,389	nw.	35	ne.	24	12	9	9	5.1	.....	.....
Devils Lake	1,482	11	44	28.36	29.93	− .01	55.0	− 0.6	96	2	66	33	26	44	36	48	44	77	3.11	+ 1.7	15	7,339	w.	37	w.	19	6	7	17	6.5	T.	.....
Williston	1,872	40	47	27.96	29.95	+ .02	52.3	− 7.2	94	1	62	26	13	42	38	46	42	74	1.60	+ 0.7	10	4,560	nw.	34	nw.	19	1	13	16	7.3	0.8	.....
Upper Mississippi Valley.							66.4	+ 1.5										81	5.20	+ 2.3										5.4		
Minneapolis	918	10	208	29.00	29.98	.....	60.6	.....	87	6	69	40	27	52	26	.....	.....	.....	2.57	− 1.1	13	7,824	se.	46	nw.	20	11	2	17	6.1	.....	.....
St. Paul	837	201	236	29.08	29.99	.00	60.0	− 0.3	86	6	69	39	27	51	29	.....	.....	.....	2.92	− 0.5	12	7,669	se.	45	nw.	20	10	8	12	5.6	.....	.....
La Crosse	714	11	48	29.24	30.00	− .01	61.6	− 0.1	85	5	71	38	21	52	31	.....	.....	.....	5.55	+ 1.4	16	2,878	s.	17	s.	14	7	3	20	6.8	.....	.....
Madison	974	70	78	29.00	30.04	+ .01	62.6	+ 1.5	85	13	71	42	21	54	28	57	55	81	10.69	+ 7.5	15	5,759	s.	30	s.	23	6	5	19	7.1	.....	.....
Charles City	1,015	10	49	28.94	30.01	+ .01	61.0	− 0.7	84	6	71	36	21	51	32	56	54	84	4.18	+ 1.4	16	4,113	se.	24	sw.	14	8	9	13	5.8	.....	.....
Davenport	606	71	79	29.36	30.02	− .01	66.7	+ 2.0	88	12	76	40	21	58	32	61	58	82	5.75	+ 2.6	12	5,029	e.	29	sw.	8	11	11	8	5.0	.....	.....
Des Moines	861	84	97	29.08	29.98	− .04	65.6	+ 0.6	89	13	75	40	21	57	28	60	58	81	4.51	+ 1.4	11	4,855	s.	30	s.	17	9	7	14	5.9	.....	.....
Dubuque	698	81	96	29.29	30.04	+ .01	64.4	+ 0.8	87	12	74	42	21	55	31	59	56	80	9.62	+ 6.0	14	3,825	s.	23	nw.	20	8	9	13	6.2	.....	.....
Keokuk	614	64	78	29.35	30.02	− .01	68.4	+ 2.0	88	12	78	42	21	59	30	63	60	81	6.16	+ 2.2	10	4,859	ne.	33	w.	14	11	13	6	4.6	.....	.....
Cairo	356	87	93	29.64	30.02	− .03	73.8	+ 3.0	92	13	82	49	22	66	22	66	64	78	4.16	+ 1.7	4	5,395	s.	30	n.	18	15	10	5	3.9	.....	.....
Peoria	609	11	45	29.38	30.03	− .01	67.8	+ 3.5	89	8	78	40	22	58	34	62	60	86	4.88	+ 1.8	10	4,030	s.	31	w.	8	10	12	8	4.6	.....	.....
Springfield, Ill	644	10	91	29.35	30.03	− .02	69.2	+ 2.8	90	13	79	44	22	60	29	62	60	80	3.31	− 0.1	12	5,023	s.	28	nw.	10	9	11	10	5.2	.....	.....
Hannibal	534	74	109	29.45	30.01	− .02	69.2	+ 1.3	89	10	79	43	22	60	32	.....	.....	.....	7.16	+ 3.6	11	5,766	sw.	31	w.	8	11	12	7	4.8	.....	.....
St. Louis	567	265	303	29.42	30.02	− .02	72.4	+ 2.4	91	12	81	47	21	64	22	66	64	81	1.41	− 1.5	8	8,430	s.	40	s.	14	11	13	6	4.6	.....	.....
Missouri Valley.							65.7	+ 0.4										78	4.48	+ 1.8										4.9		
Columbia, Mo	781	11	84	29.18	30.00	− .03	70.2	+ 2.4	91	11	80	44	21	60	27	.....	.....	.....	6.89	+ 4.0	12	4,692	s.	26	n.	8	11	11	8	4.9	.....	.....
Kansas City	963	161	181	28.96	29.98	− .04	70.0	+ 2.5	89	12	78	47	21	62	23	64	61	77	5.88	+ 2.1	13	7,698	s.	46	nw.	8	14	5	11	5.0	.....	.....
St. Joseph	967	11	49	28.95	29.98	.....	69.6	.....	91	12	79	44	21	60	29	63	60	81	4.30	.....	15	2,175	s.	25	nw.	10	13	9	8	4.7	.....	.....
Springfield, Mo	1,324	98	104	28.64	30.02	− .01	70.7	+ 2.8	87	11	79	45	21	62	22	64	61	78	3.06	−0.07	9	6,639	s.	28	n.	6	17	10	3	3.0	.....	.....
Iola	984	11	50	28.95	29.97	− .04	70.6	+ 2.0	90	11	80	44	21	61	33	.....	.....	.....	13.22	− 9.9	12	4,765	s.	28	n.	6	11	10	9	4.7	.....	.....
Topeka	983	85	101	.....	.....	.....	69.0	+ 0.7	90	12	78	43	21	60	27	.....	.....	.....	5.00	+ 1.4	12	6,564	s.	41	sw.	13	9	8	13	5.7	.....	.....
Drexel	1,209	10	53	28.60	29.98	.....	64.4	.....	87	13	74	35	21	54	32	59	57	86	2.01	.....	11	6,480	se.	31	s.	22	9	10	11	5.9	.....	.....
Lincoln	1,189	11	84	28.71	29.95	− .04	66.3	+ 1.1	91	13	77	39	21	56	33	60	58	82	3.92	+ 1.3	9	6,376	se.	38	nw.	19	10	11	9	5.1	.....	.....
Omaha	1,105	115	121	28.81	29.97	− .03	66.4	+ 0.6	90	13	76	40	21	57	29	60	58	80	2.17	− 0.9	10	5,151	s.	33	n.	20	9	12	9	5.4	.....	.....
Valentine	2,598	47	54	27.26	29.96	.00	60.3	− 2.0	93	1	72	36	21	48	36	52	47	71	2.73	+ 0.9	13	6,888	s.	34	s.	9	14	9	7	4.4	.....	.....
Sioux City	1,135	94	164	28.77	29.97	− .01	62.0	− 2.1	83	5	71	38	21	53	31	57	55	82	3.48	+ 1.0	12	7,996	se.	45	n.	20	11	10	9	4.9	.....	.....
Huron	1,306	59	74	28.59	29.99	+ .03	59.2	− 0.4	86	1	70	35	21	48	34	53	50	78	1.69	0.0	15	7,819	se.	39	se.	10	11	10	9	4.8	.....	.....
Pierre	1,572	70	75	28.31	29.96	+ .01	61.2	− 1.6	93	1	72	36	30	50	34	52	47	67	2.18	+ 1.1	9	6,433	se.	32	nw.	7	14	8	8	4.7	.....	.....
Yankton	1,233	49	57	28.65	29.96	+ .02	62.3	− 1.0	86	19	72	37	21	52	34	.....	.....	.....	3.49	+ 1.0	9	5,080	se.	32	nw.	19	8	12	10	5.8	.....	.....

TABLE I.—*Climatological data for United States Weather Bureau stations, September, 1915*—Continued.

Districts and stations.	Elevation of instruments. Barometer above sea level, feet.	Thermometer above ground.	Anemometer above ground.	Pressure. Station, reduced to mean of 24 hours.	Sea level, reduced to mean of 24 hours.	Departure from normal.	Temperature of the air. 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, per cent.	Precipitation. Total.	Departure from normal.	Days with 0.01 or more.	Wind. Total movement.	Prevailing direction.	Maximum velocity. Miles per hour.	Direction.	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		
Northern Slope.							54.2	− 3.3										70	2.16	− 1.1										5.9		
Havre	2,505	11	44	27.33	29.96	+0.02	51.8	− 5.8	81	5	63	28	20	41	41	47	43	78	2.05	+ 1.0	12	4,209	nw.	25	w.	14	7	8	15	6.5	2.2	....
Helena	4,110	87	114	25.79	29.97	.00	52.0	− 4.2	80	6	62	27	13	42	35	44	38	65	2.13	+ 1.1	11	5,866	sw.	39	sw.	2	3	14	13	6.4	3.6	....
Kalispell	2,962	11	34	26.91	29.96	.00	51.4	− 2.5	79	5	63	31	13	40	37	45	41	75	2.04	+ 0.7	13	2,309	w.	21	sw.	23	7	9	14	5.9	....	....
Miles City	2,371	26	48	27.45	30.00	+ .05	57.0	− 4.2	94	6	68	34	14	46	40	49	45	73	1.38	+ 0.5	8	3,441	w.	26	n.	9	11	11	8	5.4	....	....
Rapid City	3,259	50	58	26.58	29.98	+ .02	57.3	− 1.8	95	1	68	33	21	46	37	48	42	64	1.81	+ 0.6	9	5,627	n.	36	n.	19	10	10	10	5.6	....	....
Cheyenne	6,088	84	101	24.02	29.93	− .03	54.6	− 2.6	84	1	66	33	26	43	40	45	39	66	2.10	+ 1.2	12	8,213	s.	44	w.	7	8	14	8	5.7	....	....
Lander	5,272	60	68	24.63	29.92	− .04	54.0	− 1.2	87	1	68	24	14	40	41	44	35	57	4.31	+ 3.5	8	3,306	sw.	38	sw.	23	8	13	9	5.8	T.	....
Sheridan	3,790	10	47	26.09	29.98	.....	52.8	.....	88	1	65	29	15	41	45	46	42	76	3.75	.....	12	3,086	s.	22	nw.	7	6	8	16	7.0	0.3	....
Yellowstone Park	6,200	11	48	23.87	29.95	− .02	47.4	− 6.0	74	1	59	24	14	34	39	40	36	71	1.79	+ 0.8	15	4,525	nw.	49	s.	1	6	5	19	7.0	0.6	....
North Platte	2,821	11	51	27.08	29.98	+ .01	62.1	− 1.1	89	19	74	38	21	50	38	54	51	75	1.81	+ 0.5	9	5,672	ne.	25	ne.	25	17	5	8	3.8	....	....
Middle Slope.							67.8	+ 0.3										71	3.11	+ 1.2										4.7		
Denver	5,291	129	172	24.72	29.90	− .06	61.7	− 1.0	94	1	75	40	21	49	42	49	41	57	1.68	+ 0.8	9	5,296	sw.	33	n.	12	12	14	4	4.2	....	....
Pueblo	4,685	80	86	25.27	29.88	− .08	64.2	− 0.2	90	22	78	40	21	50	44	51	43	55	1.42	+ 0.8	4	4,278	se.	37	w.	13	20	7	3	3.1	....	....
Concordia	1,392	50	58	28.51	29.96	− .03	68.6	+ 0.5	95	12	79	38	21	58	31	61	58	77	3.47	+ 0.9	7	5,803	s.	38	s.	14	3	19	8	6.2	....	....
Dodge	2,509	11	51	27.39	29.95	− .03	68.4	+ 0.2	96	13	79	42	21	58	33	60	56	76	3.79	+ 2.0	7	7,650	s.	35	ne.	20	9	15	6	5.1	....	....
Wichita	1,358	139	158	28.52	29.93	− .07	70.4	+ 0.6	92	11	79	44	21	62	27	64	61	79	4.69	+ 1.6	14	9,505	s.	42	s.	14	14	6	10	4.7	....	....
Oklahoma	1,214	10	47	28.70	29.95	− .04	73.8	+ 1.7	93	11	83	52	21	65	27	66	64	80	3.62	+ 0.9	11	9,591	s.	40	s.	13	12	12	6	4.9	....	....
Southern Slope.							73.5	+ 0.7										68	3.22	+ 0.6										4.2		
Abilene	1,738	10	52	28.15	29.92	− .04	75.9	+ 1.7	99	9	85	52	3	67	32	67	63	74	3.00	− 0.1	7	7,217	s.	31	se.	25	14	6	10	4.8	....	....
Amarillo	3,676	10	49	26.26	29.92	− .04	68.8	+ 1.1	94	10	80	47	30	57	33	58	53	69	4.69	+ 2.3	12	7,840	s.	33	sw.	13	23	4	3	3.2	....	....
Del Rio	944	64	71	28.92	29.88	− .06	79.7	+ 0.8	98	9	88	63	1	72	25	....	....	....	2.90	+ 0.4	8	6,709	se.	36	e.	15	13	11	6	4.5	....	....
Roswell	3,566	75	85	26.34	29.88	− .04	69.5	− 0.8	96	11	82	42	29	57	37	58	51	60	2.20	0.0	11	4,945	s.	40	nw.	23	11	7	9	4.5	....	....
Southern Plateau.							72.1	− 1.4										48	0.19	0.0										2.0		
El Paso	3,762	110	133	26.14	29.82	− .06	73.6	+ 0.9	95	11	85	52	27	62	36	59	50	52	2.68	+ 1.2	10	7,707	e.	45	ne.	29 13	13	15	2	3.6	....	....
Santa Fe	7,013	57	62	23.30	29.87	− .06	59.6	− 1.0	79	10	71	36	26	48	29	47	40	56	1.62	0.0	8	4,967	se.	37	sw.	....	13	17	0	3.7	....	....
Flagstaff	6,908	8	57	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....
Phoenix	1,108	76	81	28.64	29.76	− .05	79.9	− 1.5	102	21	94	53	15	66	36	61	49	38	0.10	− 0.9	2	3,841	e.	33	w.	24	28	2	0	0.8	....	....
Yuma	141	9	54	29.61	29.75	− .03	81.4	− 2.5	109	22	98	54	15	65	42	65	55	50	0.10	− 0.1	1	3,090	w.	33	w.	12	29	1	0	0.5	....	....
Independence	3,910	11	42	25.88	29.80	− .06	66.2	− 2.9	91	22	82	38	26	51	40	51	39	43	0.01	− 0.1	1	3,890	nw.	27	sw.	....	25	3	2	1.6	....	....
Middle Plateau.							60.9	− 1.4										41	0.88	+ 0.2										2.9		
Reno	4,532	74	81	25.43	29.87	− .08	60.8	+ 1.1	89	19	77	33	14	45	45	46	32	41	0.06	− 0.2	3	5,069	w.	36	w.	23	24	3	3	1.7	....	....
Tonopah	6,090	12	20	24.04	29.86	.....	61.0	.....	82	22	71	33	14	50	27	45	31	37	0.27	− 0.2	2	5,412	w.	42	nw.	24	21	6	3	2.4	....	....
Winnemucca	4,344	18	56	25.57	29.92	− .01	57.1	− 3.4	89	20	76	32	14	38	51	43	29	43	0.94	+ 0.6	3	3,983	ne.	32	s.	1	21	6	3	2.2	....	....
Modena	5,479	10	43	24.59	29.85	− .07	58.8	− 1.4	84	20	74	30	30	44	42	45	30	40	1.44	+ 0.3	4	7,584	sw.	48	s.	24	19	6	5	3.1	....	....
Salt Lake City	4,360	147	189	25.56	29.87	− .08	62.4	− 2.7	86	21	73	40	15	52	31	49	38	45	1.60	+ 0.8	10	5,562	se.	46	nw.	1	13	10	7	4.4	....	....
Grand Junction	4,602	82	96	25.33	29.86	− .09	65.6	− 0.8	90	1	78	42	14	53	33	50	37	42	0.65	0.0	5	5,623	se.	45	se.	24	15	12	3	3.8	....	....
Northern Plateau.							59.5	− 1.7										47	0.72	− 0.1										4.6		
Baker	3,471	48	53	26.43	29.99	.00	54.6	− 2.4	87	5	69	28	14	40	42	44	32	48	0.07	− 0.7	2	4,299	s.	26	nw.	24	14	12	4	3.9	....	....
Boise	2,739	78	86	27.10	29.94	− .03	60.4	− 1.5	88	5	73	36	14	48	40	48	35	44	0.26	− 0.2	2	3,407	nw.	29	nw.	13	14	8	8	4.3	....	....
Lewiston	757	40	48	29.14	29.94	− .04	62.2	− 1.3	93	4	76	39	13	48	40	....	....	....	0.49	− 0.2	4	1,980	e.	18	w.	8	12	7	11	4.9	....	....
Pocatello	4,477	46	54	25.42	29.89	− .07	58.4	− 2.3	85	21	71	28	14	46	39	45	32	43	2.39	+ 1.5	5	5,738	sw.	30	sw.	26	13	10	7	4.6	T.	....
Spokane	1,929	101	110	27.92	29.96	− .02	58.0	− 0.8	85	4	70	34	13	46	37	48	38	54	0.43	− 0.6	4	3,792	sw.	26	sw.	8	9	9	12	5.7	....	....
Walla Walla	1,000	57	65	28.87	29.94	− .06	63.4	− 2.0	89	4	75	42	13	52	31	52	41	47	0.70	− 0.2	4	3,419	s.	24	w.	26	15	10	5	4.1	....	....
North Pacific Coast region.							57.8	+ 0.9										79	0.87	− 1.6										5.5		
North Head	211	11	56	29.81	30.03	.00	56.4	+ 0.2	64	1	59	49	28	54	15	54	53	91	1.09	− 0.8	13	8,221	nw.	37	nw.	8	5	12	12	5.9	....	....
Port Crescent	259	8	53	29.76	30.05	− .03	52.3	− 0.2	69	10	61	37	28	43	30	....	....	....	0.66	− 1.0	4	3,135	nw.	13	nw.	26	7	17	6	5.5	....	....
Seattle	125	215	250	29.91	30.04	+ .03	59.1	+ 1.2	77	3	66	45	28	52	24	55	52	79	0.65	− 1.5	6	4,241	se.	24	s.	21	3	14	13	6.8	....	....
Tacoma	213	113	120	29.80	30.03	+ .01	58.9	+ 1.3	76	3	67	43	28	51	27	53	49	74	1.12	− 1.4	6	3,143	n.	25	sw.	11	4	14	12	6.0	....	....
Tatoosh Island	109	7	57	29.92	30.02	+ .01	53.9	+ 0.9	62	22	58	46	19	50	14	52	52	94	1.50	− 4.6	6	6,406	s.	36	s.	21	8	10	12	5.5	....	....
Portland, Oreg.	153	68	106	29.84	30.00	− .03	62.4	+ 1.8	84	3	72	46	28	53	30	56	51	70	0.53	− 1.3	6	3,261	n.	21	n.	10	5	12	13	6.6	....	....
Roseburg	510	9	57	29.46	30.01	− .01	61.7	+ 1.2	90	4	76	38	28	47	43	52	45	64	0.57	− 0.5	4	2,003	n.	17	sw.	26	19	10	1	2.4	....	....
Middle Pacific Coast region.							63.3	− .01										59	0.02	− 0.5										2.2		
Eureka	62	73	89	29.94	30.01	.00	54.5	− 0.4	66	16	60	45	28	49	16	52	50	87	0.11	− 1.0	5	3,776	n.	31	n.	24	11	9	10	4.9	....	....
Mount Tamalpais	2,375	11	18	27.48	29.92	− .02	64.9	− 1.2	83	19	72	44	23	58	23	51	38	42	0.00	− 0.6	0	12,747	nw.	80	nw.	23	27	3	0	0.6	....	....
Point Reyes Light	490	7	18	29.37	29.88	.....	55.5	− 0.6	66	29	59	49	28	52	16	....	....	....	0.00	0.0	0	15,299	nw.	72	nw.	23	13	6	11	5.0	....	....
Red Bluff	332	50	56	29.49	29.84	− .09	72.8	− 1.1	98	8	87	53	12	58	37	56	40	35	0.00	− 0.8	0	3,427	se.	28	w.	23	27	2	1	1.1	....	....
Sacramento	69	106	117	29.78	29.85	− .04	68.9	− 0.2	94	18	84	48	27	54	37	57	47	54	T.	− 0.4	0	5,052	s.	30	sw.	25	27	2	1	0.9	....	....
San Francisco	155	209	213	29.74	29.91	− .03	62.4	+ 3.1	82	29	70	52	25	55	27	55	52	77	0	− 0.3	0	7,134	sw.	34	sw.	2	20	10	0	3.0	....	....
San Jose	141	12	110	29.78	29.93	.....	64.4	− 0.3	89	18	79	44	28	50	41	....	....	....	0	− 0.3	0	2,562	nw.	15	w.	23	28	2	0	1.2	....	....
South Pacific Coast region.							67.9	+ 0.6										68	T.	− 0.2										2.4		
Fresno	327	89	98	29.50	29.85	− .02	73.0	− 1.3	97	20	88	48	27	58	38	56	42	39	T.	− 0.3	0	5,036	nw.	31	nw.	12	25	4	1	1.1	....	....
Los Angeles	338	159	191	29.51	29.87	− .01	68.0	+ 1.5	86	22	77	54	28	59	26	60	57	76	T.	− 0.1	0	3,733	sw.	19	s.	14	18	9	3	2.7	....	....
San Diego	87	62	70	29.78	29.87	− .02	66.4	− 0.5	77	22	72	56	27	61	17	62	60	83	T.	− 0.1	0	4,576	nw.	20	s.	24	17	11	2	3.1	....	....
San Luis Obispo	201	32	40	29.71	29.92	− .01	64.1	+ 2.6	97	17	76	47	24	52	40	56	51	72	0	− 0.4	0	2,741	w.	16	w.	27	22	8	0	2.5	....	....
West Indies.																																
San Juan	82	8	54	29.83	29.93	− .02	81.4	.....	92	3	87	73	18	76	16	....	....	....	4.21	− 2.6	15	6,250	se.	40	e.	22	9	15	6	5.3	....	....
Panama.																																
Balboa Heights	116	7	97	29.70	29.82	.....	80.2	.....	91	27	86	72	16	74	15	76	75	90	3.69	− 3.9	15	4,841	n.	32	sw.	26	0	9	21	8.4	....	....
Colon	25	5	71	29.80	29.83	.....	81.4	.....	91	27	86	72	22	76	15	78	77	90	13.85	+ 1.3	20	5,447	se.	32	s.	27	1	17	12	7.0	....	....

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 September, 1915, 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.	14-15			1.86														0.40			
Albany, N. Y.	21			1.00														*			
Alpena, Mich.	16			1.07														.38			
Amarillo, Tex.	25	1:45 p.m.	6:10 p.m.	0.98	3:22 p.m.	3:43 p.m.	0.36	0.06	0.19	0.32	0.45	0.48									
Anniston, Ala.	4-5	7:13 a.m.	6:44 a.m.	2.44	6:56 p.m.	7:32 p.m.	1.34	.07	.16	.24	.27	.37	0.49	0.70	0.72						
Asheville, N. C.	21			0.55														.30			
Atlanta, Ga.	13	4:23 p.m.	5:10 p.m.	0.70	4:39 p.m.	4:54 p.m.	.03	.16	.40	.67											
Atlantic City, N. J.	19			0.36														.32			
Augusta, Ga.	4	9:35 p.m.	D.N.p.m.	1.47	10:46 p.m.	11:21 p.m.	.07	.08	.19	.33	.60	.97	1.19	1.28	1.37						
	29	10:15 a.m.	1:00 p.m.	0.81	11:13 a.m.	11:56 a.m.	.07	.14	.25	.31	.32	.39	.51	.55	.64	0.68					
Baker, Oreg.	12			0.06														.02			
Baltimore, Md.	18	9:45 p.m.	11:55 p.m.	0.78	10:04 p.m.	10:34 p.m.	.01	.18	.28	.32	.38	.47	.55								
Bentonville, Ark.	17	11:40 a.m.	1:15 p.m.	1.27	11:48 a.m.	12:13 p.m.	.01	.23	.58	.79	1.11	1.22									
Binghamton, N. Y.	17	1:25 p.m.	3:45 p.m.	0.60	1:53 p.m.	2:13 p.m.	.01	.17	.28	.42	.53										
Birmingham, Ala.	19	3:47 p.m.	5:53 p.m.	1.29	4:33 p.m.	5:34 p.m.	.10	.15	.21	.33	.44	.52	.64	.79	.86	.89	0.91	1.19	1.19		
	29-1[1]	6:20 p.m.	D.N.a.m.	2.91	10:38 a.m.	11:17 a.m.	2.00	.07	.14	.24	.29	.35	.48	.51	.62						
Bismarck, N. Dak.	13			0.44														.20			
Block Island, R. I.	21			0.66														.39			
Boise, Idaho.	1			0.24														.11			
Boston, Mass.	21			0.59														.45			
Buffalo, N. Y.	6			0.39														.30			
Burlington, Vt.	21			0.53														.30			
Cairo, Ill.	20	9:15 a.m.	1:20 p.m.	1.68	11:32 a.m.	11:44 a.m.	.42	.21	.34	.40											
					12:15 p.m.	12:36 p.m.	.93	.14	.24	.51	.64	.68									
Canton, N. Y.	8			0.25														.23			
Charles City, Iowa.	19-20			0.90														.63			
Charleston, S. C.	21			0.58														.58			
Charlotte, N. C.	4	5:35 p.m.	6:28 p.m.	0.43	5:37 p.m.	5:53 p.m.	.01	.11	.26	.37	.41										
Chattanooga, Tenn.	4-5	4:14 p.m.	4:22 a.m.	2.15	11:51 p.m.	12:45 a.m.	1.04	.07	.24	.43	.50	.59	.63	.67	.71	.81	.85	.90			
	30	3:08 a.m.	8:48 p.m.	4.07	3:25 p.m.	4:04 p.m.	2.56	.10	.20	.28	.37	.56	.64	.70	.78						
Cheyenne, Wyo.	25			1.08														.30			
Chicago, Ill.	10	1:24 p.m.	3:28 p.m.	0.53	1:41 p.m.	1:54 p.m.	.01	.26	.32	.37											
Cincinnati, Ohio.	7	4:30 p.m.	8:25 p.m.	0.72	7:52 p.m.	8:12 p.m.	.26	.16	.33	.39	.45										
Cleveland, Ohio.	15	5:31 p.m.	7:10 p.m.	0.78	5:33 p.m.	5:56 p.m.	.01	.43	.45	.55	.61	.69									
	18	3:08 p.m.	6:01 p.m.	1.02	3:16 p.m.	3:51 p.m.	.02	.06	.18	.25	.46	.52	.55	.63							
Columbia, Mo.	8	6:25 p.m.	10:30 p.m.	1.60	7:03 p.m.	8:36 p.m.	.02	.25	.45	.45	.47	.58	.62	.69	.80	.89	.94	1.08	1.17	1.43	
	8-9	10:57 p.m.	7:12 a.m.	1.87	5:47 a.m.	6:44 a.m.	.53	.08	.23	.40	.58	.82	.95	1.02	1.02	1.03	1.15	1.32			
	11	7:14 a.m.	8:40 a.m.	1.38	7:31 a.m.	7:58 a.m.	.06	.20	.51	.73	1.05	1.26	1.31								
Columbia, S. C.	4			0.21														.19			
Columbus, Ohio.	17	2:30 p.m.	6:15 p.m.	0.69	2:51 p.m.	3:12 p.m.	.06	.06	.16	.26	.40	.47									
Concord, N. H.	17	3:28 p.m.	4:31 p.m.	0.53	3:37 p.m.	3:51 p.m.	T.	.25	.47	.52											
Concordia, Kans.	17-18	10:06 p.m.	1:15 a.m.	1.82	11:04 p.m.	11:36 p.m.	.12	.22	.47	.67	.97	1.24	1.30								
Corpus Christi, Tex.	18	3:05 a.m.	3:30 a.m.	0.94	3:07 a.m.	3:27 a.m.	.01	.10	.34	.76	.91										
	22	12:02 a.m.	10:32 a.m.	6.85	6:22 a.m.	7:31 a.m.	1.52	.08	.19	.22	.45	.82	.90	.93	1.13	1.39	1.58	2.15	2.50		
					8:32 a.m.	9:12 a.m.	4.35	.21	.36	.52	.67	.95	1.16	1.32	1.40						
					9:42 a.m.	10:00 a.m.	5.94	.22	.55	.77	.85										
Davenport, Iowa.	10	10:55 a.m.	12:35 p.m.	0.62	11:00 a.m.	11:15 a.m.	.01	.06	.18	.52											
		4:45 p.m.	8:45 p.m.	0.82	1:50 p.m.	5:14 p.m.	.02	.18	.35	.48	.56	.64									
Dayton, Ohio.	9	4:22 p.m.	7:01 p.m.	1.12	4:40 p.m.	5:05 p.m.	.01	.11	.24	.49	.67	.80									
Del Rio, Tex.	22-24			1.49														.50			
Denver, Colo.	25			1.13														.26			
Des Moines, Iowa.	10	2:05 p.m.	3:57 p.m.	0.66	2:27 p.m.	2:39 p.m.	.04	.16	.50	.53											
Detroit, Mich.	16	8:40 p.m.	D.N.p.m.	0.60	9:05 p.m.	9:29 p.m.	.01	.08	.20	.33	.36	.48	.53								
Devils Lake, N. Dak.	7			0.34														.28			
Dodge City, Kans.	25	D.N.a.m.	1:50 p.m.	2.05	10:57 a.m.	11:54 a.m.	.04	.06	.19	.23	.26	.31	.36	.55	.74	.87	1.02	1.16			
Dubuque, Iowa.	10	9:10 a.m.	11:35 a.m.	0.71	9:52 a.m.	10:13 a.m.	.03	.10	.44	.53	.58	.62									
Do.	25-26	2:34 p.m.	9:00 a.m.	4.79	1:14 a.m.	3:42 a.m.	1.86	.08	.15	.23	.28	.33	.50	.60	.65	.77	.84				
								.98	1.11	1.23	1.31	1.42	1.48	1.60	1.68	1.76	1.88				
								1.97	2.03	2.09	2.21	2.29	2.38	2.42	2.48	2.55	2.60				
Duluth, Minn.	24-25			0.92														.20			
Eastport, Me.	21-22			0.50														.32			
Elkins, W. Va.	19	D.N.a.m.	8:30 a.m.	1.27	12:29 a.m.	12:51 a.m.	.01	.30	.36	.60	.79	.84									
El Paso, Tex.	3-4			0.83														.75			
Erie, Pa.	13	4:03 a.m.	6:45 a.m.	0.50	5:39 a.m.	5:59 a.m.	.09	.18	.32												
Escanaba, Mich.	14			0.32														.24			
Eureka, Cal.	26			0.05														.03			
Evansville, Ind.	18	2:35 p.m.	3:00 p.m.	0.33	2:46 p.m.	2:55 p.m.	.07	.13	.31												
Fort Smith, Ark.	20	7:43 a.m.	12:06 p.m.	0.82	5:51 a.m.	8:04 a.m.	.01	.19	.29	.42											
Fort Wayne, Ind.	14			0.40														.40			
Fort Worth, Tex.	15			0.66														.36			
Fresno, Cal.	1			T.														T.			
Galveston, Tex.	18			0.39														.30			
Grand Haven, Mich.	10	11:46 a.m.	1:45 p.m.	1.72	11:51 a.m.	12:19 p.m.	T.	.16	.41	.60	.71	.82	.89								
					12:46 p.m.	1:26 p.m.	.92	.08	.15	.18	.29	.38	.51	.65	.75						
Do.	12	9:50 p.m.	D.N.p.m.	1.23	10:52 p.m.	11:22 p.m.	.15	.16	.35	.62	.81	.89	1.02								
Grand Junction, Colo.	25			0.81														.18			
Grand Rapids, Mich.	7-8	6:30 p.m.	D.N.a.m.	0.82	10:45 p.m.	10:58 p.m.	.11	.24	.46	.51											
	10	11:58 a.m.	3:10 p.m.	2.02	12:35 p.m.	2:23 p.m.	.02	.48	.89	1.07	1.10	1.11	1.12	1.13	1.15	1.21	1.28	1.39	1.64	1.83	1.99
Green Bay, Wis.	13	9:10 a.m.	10:20 a.m.	0.88	9:10 a.m.	9:24 a.m.	.00	.25	.69	.81											
Hannibal, Mo.	10-11	9:55 p.m.	7:10 a.m.	1.79	12:03 a.m.	12:22 a.m.	.63	.10	.34	.64	.81										
Harrisburg, Pa.	18	D.N.a.m.	6:55 a.m.	0.75	4:36 a.m.	4:49 a.m.	.11	.36	.51	.59											
	11	5:02 p.m.	7:32 p.m.	1.39	5:07 p.m.	5:32 p.m.	.01	.18	.47	.87	1.17	1.23									
	21	3:30 a.m.	6:30 a.m.	0.62	5:43 a.m.	6:03 a.m.	.09	.10	.22	.36	.50										
Hartford, Conn.	21			0.91														.51			
Hatteras, N. C.	21	4:11 p.m.	4:45 p.m.	0.41	4:19 p.m.	4:37 p.m.	.01	.17	.30	.35	.40										
Havre, Mont.	9			0.58														.25			
Helena, Mont.	1			0.39														.25			
Houghton, Mich.	13-14	5:25 p.m.	7:30 a.m.	0.94	10:59 p.m.	11:11 p.m.	.12	.12	.41	.50											
Houston, Tex.	15	12:43 p.m.	1:12 p.m.	0.43	12:48 p.m.	1:06 p.m.	.02	.22	.25	.32	.41										
Huron, S. Dak.	11-14			1.01														.19			
Independence, Cal.	25			0.01														.01			
Indianapolis, Ind.	4	4:35 p.m.	6:07 p.m.	0.80	5:28 p.m.	5:53 p.m.	.02	.14	.36	.50	.64	.77									
Iola, Kans.	6	9:05 a.m.	11:25 a.m.	0.77	9:21 a.m.	9:51 a.m.	.01	.18	.37	.45	.51	.61	.66								
	6-7	6:47 p.m.	4:55 a.m.	6.00	8:33 p.m.	9:08 p.m.	.48	.08	.13	.21	.30	.51	.81	1.02							
					10:04 p.m.	11:24 p.m.	1.69	.17	.42	.78	1.24	1.73	2.11	2.44	2.63	2.64	2.64	2.73	3.22		
	14	4:00 a.m.	7:15 a.m.	0.75	5:59 a.m.	6:19 a.m.	.17	.10	.28	.48	.53										
	22	2:00 p.m.	4:15 p.m.	0.73	2:12 p.m.	2:30 p.m.	.02	.14	.36	.47	.52										
Jacksonville, Fla.	23-24	9:55 p.m.	4:00 a.m.	1.92	11:02 p.m.	11:52 p.m.	.08	.06	.12	.18	.31	.39	.49	.67	.87	1.05	1.14				
	28-29	6:00 p.m.	D.N.a.m.	0.42	9:52 p.m.	10:29 p.m.	.21	.15	.17	.20	.48	.71	.78	.96	1.05						

* Self-register not working.

[1] Oct. 1.

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 September, 1915, 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.
Kalispell, Mont.	8-9			0.54														0.21			
Kansas City, Mo.	8	4:05 p.m.	6:20 p.m.	0.81	4:22 p.m.	4:40 p.m.	0.04	0.12	0.28	0.55	0.66										
Keokuk, Iowa.	10	1:03 p.m.	1:43 p.m.	0.52	1:24 p.m.	1:37 p.m.	T.	.31	.47	.51											
		7:03 p.m.	8:45 p.m.	1.84	7:03 p.m.	8:23 p.m.	.00	.10	.23	.39	.49	0.57	0.65	0.79	1.06	1.17	1.27	1.47	1.79		
	11	3:45 a.m.	6:40 a.m.	0.68	3:50 a.m.	4:26 a.m.	.01	.05	.23	.30	.33	.40	.45	.58	.61						
Key West, Fla.	3	4:25 p.m.	D.N.p.m.	1.16	5:59 p.m.	6:54 p.m.	.08	.10	.22	.48	.58	.69	.71	.74	.89	.91	.93	1.03			
	15	7:42 p.m.	8:35 p.m.	0.94	7:49 p.m.	8:26 p.m.	.01	.11	.34	.50	.53	.56	.76	.89	.93						
Knoxville, Tenn.	20	7:15 p.m.	D.N.p.m.	1.00	8:38 p.m.	8:57 p.m.	.21	.06	.21	.39	.50										
La Crosse, Wis.	12	D.N.a.m.	8:05 p.m.	1.36	6:56 a.m.	7:06 a.m.	.06	.18	.34												
					5:05 p.m.	5:12 p.m.	.87	.34	.46												
Lander, Wyo.	2-3			1.62														.30			
Lansing, Mich.	12	5:30 a.m.	8:10 a.m.	0.73	5:48 a.m.	6:15 a.m.	.02	.08	.15	.20	.29	.52	.56								
Lewiston, Idaho.	12			0.33														.13			
Lexington, Ky.	30			1.49														.27			
Lincoln, Nebr.	17	6:45 p.m.	10:10 p.m.	1.64	7:03 p.m.	7:25 p.m.	.01	.13	.28	.47	.60	.76									
					8:06 p.m.	8:24 p.m.	.89	.06	.25	.43	.49										
Little Rock, Ark.	28			0.63														.43			
Los Angeles, Cal.	10, 24			T.														T.			
Louisville, Ky.	30			1.46														.30			
Ludington, Mich.	8	7:06 p.m.	9:30 p.m.	1.33	8:02 p.m.	8:32 p.m.	.40	.13	.14	.30	.49	.75	.89								
	15-16	D.N.p.m.	11:10 a.m.	1.61	5:04 a.m.	5:36 a.m.	.34	.10	.24	.31	.41	.45	.53	.57							
Lynchburg, Va.	5	9:45 p.m.	10:50 p.m.	0.51	9:57 p.m.	10:04 p.m.	.02	.32	.38												
Macon, Ga.	29-1[1]			1.38														.28			
Madison, Wis.	10	8:12 a.m.	11:35 a.m.	1.64	10:49 a.m.	11:16 a.m.	.57	.13	.45	.62	.88	1.01	1.03								
	12	2:40 p.m.	9:05 p.m.	3.10	3:02 p.m.	4:27 p.m.	.05	.08	.13	.23	.46	.75	.95	1.05	1.12	1.16	1.23	1.23	1.66	1.81	
					6:10 p.m.	6:34 p.m.	2.09	.09	.22	.35	.43	.52									
	12-13	10:30 p.m.	3:00 a.m.	2.10	12:51 a.m.	2:52 a.m.	.15	.24	.34	.41	.44	.46	.48	.51	.56	.58	.60				
								.81	.91	1.06	1.09	1.18	1.20	1.32	1.35	1.40	1.64				
								1.74	1.80	1.85	1.92	1.94									
Marquette, Mich.	13	12:42 p.m.	4:57 p.m.	0.89	3:14 p.m.	3:26 p.m.	.27	.22	.42	.50											
Memphis, Tenn.	17			0.13														.13			
Meridian, Miss.	29-30	5:15 p.m.	3:44 p.m.	6.83	10:15 p.m.	1:55 a.m.	1.40	.07	.10	.15	.33	.53	.95	1.14	1.18	1.24	1.29				
								1.34	1.38	1.40	1.51	1.63	1.94	2.03	2.05	2.13	2.22				
								2.29	2.36	2.43	2.48	2.54	2.57	2.58	2.60	2.62	2.65				
								2.71	2.76	2.81	2.89	2.95	2.99	3.11	3.18	3.25	3.31				
								3.48	3.60	3.66	3.71										
					3:44 a.m.	4:14 a.m.	5.50	.07	.21	.42	.45	.51	.65								
Miami, Fla.	15	2:33 p.m.	3:20 p.m.	0.48	2:47 p.m.	2:58 p.m.	.05	.18	.35	.41											
Milwaukee, Wis.	10	10:25 a.m.	2:30 p.m.	0.98	10:30 a.m.	11:00 a.m.	0.02	.06	.15	.29	.40	.55	.65								
Minneapolis, Minn.	14			1.29														.55			
Mobile, Ala.	29-30			3.12														.65			
Modena, Utah.	3			1.27														.43			
Montgomery, Ala.	4	5:20 a.m.	8:00 p.m.	3.50	1:54 p.m.	2:38 p.m.	1.22	.05	.11	.16	.22	.31	.36	.46	.60	.65					
Moorhead, Minn.	11			0.39														.13			
Mount Tamalpais, Cal.	‡																				
Nantucket, Mass.	21			0.37														.30			
Nashville, Tenn.	28	2:43 p.m.	3:35 p.m.	0.54	2:45 p.m.	2:59 p.m.	.01	.17	.35	.47											
New Haven, Conn.	21	7:00 a.m.	12:25 p.m.	0.81	11:46 a.m.	11:55 a.m.	.31	.28	.45												
New Orleans, La.	29	2:35 a.m.	11:30 p.m.	8.20	10:50 a.m.	1:26 p.m.	2.02	.10	.24	.35	.45	.56	.65	.74	.88	1.11	1.25				
								1.40	1.58	1.69	1.82	1.89	2.04	2.15	2.24	2.30	2.35				
								2.40	2.48	2.52	2.54	2.59	2.67	2.81	2.97	3.09	3.16				
								3.27	3.31												
					4:34 p.m.	5:10 p.m.	6.80	.06	.17	.30	.42	.66	.90	1.16	1.21						
New York, N. Y.	17	4:48 p.m.	5:11 p.m.	0.46	4:51 p.m.	5:06 p.m.	T.	.22	.38	.45											
Norfolk, Va.	19	1:58 p.m.	2:35 p.m.	0.50	2:01 p.m.	2:09 p.m.	.01	.30	.42												
Northfield, Vt.	19			0.34														.33			
North Head, Wash.	7			0.26														.08			
North Platte, Nebr.	5	6:48 p.m.	8:55 p.m.	0.40	8:08 p.m.	8:23 p.m.	.08	.20	.29	.37											
Oklahoma, Okla.	14-15			1.14														.55			
Omaha, Nebr.	17			0.52														.24			
Oswego, N. Y.	8	2:00 p.m.	2:50 p.m.	1.13	2:13 p.m.	2:33 p.m.	T.	.18	.72	1.05	1.12										
Palestine, Tex.	15			0.33														.31			
Parkersburg, W. Va.	18	9:50 p.m.	11:04 p.m.	1.16	10:03 p.m.	10:36 p.m.	.04	.17	.20	.31	.60	.71	1.01	1.08							
Pensacola, Fla.	21	1;35 p.m.	3:15 p.m.	0.81	2:05 p.m.	2:33 p.m.	.08	.16	.27	.40	.51	.59	.65								
Peoria, Ill.	10	6:49 p.m.	11:00 p.m.	0.94	6:49 p.m.	7:09 p.m.	.00	.18	.49	.55	.63										
Philadelphia, Pa.	21			0.18														.16			
Phoenix, Ariz.	2			0.09														.07			
Pierre, S. Dak.	12-14			1.11														*			
Pittsburgh, Pa.	18			0.56														.46			
Pocatello, Idaho.	25-26			1.92														.35			
Point Reyes Light, Cal.	‡																				
Port Huron, Mich.	16			0.41														.35			
Portland, Me.	13			0.24														.16			
Portland, Oreg.	10			0.18														.17			
Providence, R. I.	21			0.52														.38			
Pueblo, Colo.	25	3:37 p.m.	5:10 p.m.	0.98	4:11 p.m.	4:31 p.m.	.01	.44	.80	.90	.95										
Raleigh, N. C.	4	8:07 p.m.	8:38 p.m.	0.44	8:10 p.m.	8:26 p.m.	T.	.18	.37	.43	.44										
Rapid City, S. Dak.	26			0.87														.15			
Reading, Pa.	21	4:10 a.m.	10:15 a.m.	1.09	7:34 a.m.	7:54 a.m.	.35	.29	.43	.51	.62										
Red Bluff, Cal.	‡																				
Reno, Nev.	1			0.03														.02			
Richmond, Va.	18	6:26 p.m.	7:07 p.m.	0.63	6:34 p.m.	6:47 p.m.	.02	.13	.51	.59											
Rochester, N. Y.	13			0.80														.40			
Roseburg, Oreg.	10			0.35														.35			
Roswell, N. Mex.	29	8:32 p.m.	10:48 p.m.	0.56	8:38 p.m.	8:46 p.m.	.02	.40	.46												
Sacramento, Cal.	24			T.														T.			
Saginaw, Mich.	12-13			1.15														.27			
St. Joseph, Mo.	10	7:35 p.m.	8:15 p.m.	0.62	7:37 p.m.	7:59 p.m.	.01	.27	.38	.50	.57	.60									
St. Louis, Mo.	16	11:35 a.m.	12:20 p.m.	0.43	11:38 a.m.	11:46 a.m.	.01	.29	.38												
St. Paul, Minn.	14	12:30 a.m.	4:15 a.m.	1.06	2:15 a.m.	2:47 a.m.	.10	.06	.19	.21	.26	.71	.78	.80							
Salt Lake City, Utah.	2-3			0.66														.18			
San Antonio, Tex.	16	8:50 a.m.	10:15 a.m.	0.58	9:00 a.m.	9:18 a.m.	.03	.06	.18	.39	.45										
San Diego, Cal.	3			T.														T.			
Sand Key, Fla.	3	4:05 p.m.	8:20 p.m.	1.64	5:12 p.m.	5:25 p.m.	.32	.10	.43	.59											
Sandusky, Ohio.	18	12:35 p.m.	4:00 p.m.	1.70	1:47 p.m.	2:36 p.m.	.06	.07	.35	.66	.71	.73	.92	1.01	1.22	1.32	1.44				
San Francisco, Cal.	‡																				
San Jose, Cal.	‡																				
San Luis Obispo, Cal.	‡																				

* Self-register not working. ‡ No precipitation occurred during the month. [1] October 1.

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 September, 1915, 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.
Santa Fe, N. Mex.	3-4			0.74														0.27			
Sault Ste. Marie, Mich.	24-26			1.60														.27			
Savannah, Ga.	4-5	9:40 p.m.	1:00 a.m.	0.93	12:14 a.m.	12:36 a.m.	0.39	0.08	0.14	0.26	0.48	0.53									
	29-30	8:50 p.m.	7:20 a.m.	1.50	5:28 a.m.	6.09 a.m.	.04	.09	.23	.49	.66	.77	1.07	1.22	1.30	1.35					
Scranton, Pa.	18-19			1.25														.59			
Seattle, Wash.	8			0.17														.13			
Sheridan, Wyo.	5	12:30 a.m.	6:55 a.m.	1.16	1:15 a.m.	1.32 a.m.	.19	.11	.27	.38	.45										
Shreveport, La.	20-21	6:30 p.m.	D. N. a.m.	1.61	10:07 p.m.	11:35 p.m.	.15	.14	.22	.23	.24	.29	.34	.39	.48	.53	0.60	.79	1.07	1.21	
Sioux City, Iowa.	12-14			0.83														.37			
Spokane, Wash.	23			0.17														.10			
Springfield, Ill.	14-15	D. N. p.m.	D. N. a.m.	0.80	2:01 a.m.	2:14 a.m.	.17	.22	.40	.44											
Springfield, Mo.	20	D. N. a.m.	8:15 a.m.	0.84	5:45 a.m.	6:10 a.m.	.12	.07	.16	.26	.36	.50									
Syracuse, N. Y.	13	D. N. a.m.	D. N. a.m.	1.49	3:09 a.m.	3:44 a.m.	.29	.17	.30	.44	.56	.66	.70	.78							
Tacoma, Wash.	11-12	9:14 p.m.	D. N. a.m	0.46	9:59 p.m.	10:18 p.m.	.03	.06	.21	.35	.39										
Tampa, Fla.	6			0.47														.41			
Tatoosh Island, Wash.	1			0.70														.30			
Taylor, Tex.	15	10:03 a.m.	1:32 p.m.	1.40	11:13 a.m.	11:40 a.m.	.68	.09	.20	.24	.33	.50	.54								
Terre Haute, Ind.	16	3:10 p.m.	3:50 p.m.	0.70	3:10 p.m.	3:23 p.m.	.00	.16	.54	.64											
	17	10:04 a.m.	1:58 p.m.	1.69	11:27 a.m.	12:19 p.m.	.05	.29	.47	.69	.87	.95	.97	1.00	1.01	1.11	1.30	1.41			
Thomasville, Ga.	28	4:10 p.m.	5:35 p.m.	1.01	4:16 p.m.	4:37 p.m.	.01	.08	.35	.76	.93	.97									
Toledo, Ohio.	5	11:45 a.m.	8:20 p.m.	1.07	5:24 p.m.	6:05 p.m.	.63	.07	.13	.23	.39	.45	.52	.62	.67	.70					
Tonopah, Nev.	24			0.24														.24			
Topeka, Kans.	25	4:00 a.m.	6:55 a.m.	0.92	6:14 a.m.	6:39 a.m.	.39	.10	.20	.31	.38	.50									
Valentine, Nebr.	13	12:25 a.m.	1:50 a.m.	0.43	12:42 a.m.	12:53 a.m.	T.	.18	.33	.40											
Vicksburg, Miss.	17			0.43														.41			
Walla Walla, Wash.	11-12			0.67														.17			
Washington, D. C.	6			0.61														.34			
Wichita, Kans.	19-20	10:15 p.m.	D. N. a.m.	0.92	11:42 p.m.	12:16 a.m.	.02	.14	.25	.35	.54	.65	.72	.79							
Williston, N. Dak.	24			0.39														.31			
Wilmington, N. C.	21	3:13 p.m.	4:05 p.m.	0.64	3:16 p.m.	3:36 p.m.	.01	.06	.27	.42	.55										
Winnemucca, Nev.	25			0.87														.30			
Wytheville, Va.	29	7:30 a.m.	10:55 a.m.	1.00	8:24 a.m.	8:51 a.m.	.10	.13	.28	.43	.58	.66	.75	.81							
Yankton, S. Dak.	13-14	9:40 p.m.	2:30 a.m.	0.98	10:45 p.m.	10:58 p.m.	.09	.20	.34	.39											
Yellowstone Park, Wyo.	25-27			0.52														*			

* Self-register not working. † Record partly estimated. ‡ No precipitation occurred during month. [1] Oct. 1.

TABLE III.—*Data furnished by the Canadian Meteorological Service, September, 1915.*

Stations.	Pressure.			Temperature.						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.
	Inches.	*Inches.*	*Inches.*	°*F.*	°*F.*	°*F.*	°*F.*	°*F.*	°*F.*	*Inches.*	*Inches.*	*Inches.*
St. Johns, N. F.	29.68	29.82	−0.15	52.8	−1.2	59.3	46.3	78	34	3.94	+0.23	
Sydney, C. B. I.	29.86	29.90	−.11	57.5	+1.0	66.7	48.3	83	36	1.92	−1.36	
Halifax, N. S.	29.86	29.96	−.08	59.4	+1.8	69.1	49.7	85	33	2.58	−1.13	
Yarmouth, N. S.	29.91	29.98	−.07	57.4	+1.3	64.1	50.7	76	36	1.18	−2.27	
Charlottetown, P. E. I.	29.87	29.91	−.10	58.0	+0.7	65.6	50.4	80	38	3.08	−0.32	
Chatham, N. B.	29.90	29.92	−.08	57.3	+1.9	67.4	47.3	88	32	6.17	+3.46	1.2
Father Point, Que.	29.92	29.94	−.04	50.2	−0.2	57.4	43.1	70	32	4.82	+1.64	2.0
Quebec, Que.	29.68	30.00	−.01	57.0	+1.9	65.5	48.6	84	32	5.28	+1.61	
Montreal, Que.	29.82	30.02	−.02	62.0	+3.6	70.6	53.3	88	39	2.57	−0.73	
Stonecliffe, Ont.	29.48	30.08	+.05	58.0	+2.3	68.8	47.3	89	30	2.77	−0.51	
Ottawa, Ont.	29.78	30.10	+.06	60.8	+3.4	70.1	51.5	88	36	3.21	+0.52	
Kingston, Ont.	29.76	30.07	+.03	62.7	+2.7	71.5	54.0	81	32	1.49	−1.31	
Toronto, Ont.	29.66	30.03	−.03	63.3	+4.3	72.9	53.7	87	31	4.24	+0.99	
White River, Ont.	28.69	30.01	−.03	50.4	+0.1	63.4	37.5	83	20	4.15	+1.38	T.
Port Stanley, Ont.	29.44	30.08	+.02	61.8	+2.3	70.3	53.3	81	33	2.90	+0.17	
Southampton, Ont.	29.37			60.0	+2.5	69.1	51.0	87	33	3.18	+0.24	
Parry Sound, Ont.	29.36	30.04	+.01	59.4	+3.4	69.6	49.2	87	28	3.83	+0.16	
Port Arthur, Ont.	29.30	30.01	+.03	53.3	+1.1	62.2	44.4	84	29	4.13	+0.65	
Winnipeg, Man.	29.12	29.95	+.01	54.7	+2.2	64.3	45.1	92	32	4.89	+2.86	
Minnedosa, Man.	28.14	29.95	+.01	49.2	−1.3	59.8	38.6	88	22	2.63	+0.67	
Qu'Appelle, Sask.	27.68	29.92	.00	47.8	−3.3	57.2	38.3	81	26	4.43	+3.10	4.3
Medicine Hat, Alberta.	27.64	29.91	−.01	54.6	−0.4	65.9	43.3	84	28	2.17	+0.99	1.9
Swift Current, Sask.	27.36	29.92	.00	49.9	−3.2	61.7	38.2	85	24	1.27	+0.05	3.0
Calgary, Alberta.	26.32	29.84	−.08	48.8	−1.0	62.1	35.6	82	24	2.33	+0.97	1.0
Banff, Alberta.	25.37	29.93	.00	45.9	+0.1	56.8	35.1	73	18	2.69	+1.02	3.0
Edmonton, Alberta.	27.63	29.92	+.02	48.1	−1.2	59.5	36.7	77	20	0.97	−0.36	0.4
Prince Albert, Sask.	28.37	29.93	+.03	45.7	−2.7	53.7	37.7	74	14	1.16	−0.12	T.
Battleford, Sask.	28.23	29.96	+.06	49.0	−2.8	61.5	36.5	79	14	0.67	−0.58	T.
Kamloops, B. C.	28.73	30.01	+.04	56.8	−0.6	67.6	45.9	84	36	0.61	−0.24	
Victoria, B. C.	29.75	30.00	−.01	56.5	+1.7	63.5	49.6	73	45	0.80	−1.36	
Barkerville, B. C.												
Hamilton, Bermuda.	29.76	29.92	−.15	75.4	−2.0	80.3	70.5	85	66	16.30	+9.79	