CONDENSED CLIMATOLOGICAL SUMMARY.

In the following table are given, for the various sections of the Climatological Service of the Weather Bureau, the average temperature and rainfall, the stations reporting the highest and lowest temperatures with dates of occurrence, the stations reporting the greatest and least monthly precipitation, and other data, as indicated by the several headings.

The mean temperatures for each section, the highest and lowest temperatures, the average precipitation, and the greatest and least monthly amounts are found by using all trustworthy records available.

The mean departures from normal temperature and precipitation are based only on records from stations that have 10 or more years of observations. Of course the number of such records is smaller than the total number of stations.

Temperature and precipitation, by sections, October, 1911.

Section.	Temperature—in degrees Fahrenheit.								Precipitation—in inches and hundredths.					
	Section average.	Departure from the normal.	Monthly extremes.						Section average.	Departure from the normal.	Greatest monthly.		Least monthly.	
			Station.	Highest.	Date.	Station.	Lowest.	Date.			Station.	Amount.	Station.	Amount.
Alabama	68.6	+ 4.8	3 stations	101	3†	Riverton	30	23	3.12	+ 0.51	Mentone	6.58	Evergreen	0.35
Arizona	61.9	− 1.3	Casa Grande	105	11	Flagstaff (2)	12	22	1.98	+ 1.47	Fort Apache	4.41	Gila Bend	0.05
Arkansas	62.7	+ 0.6	Lewisville	101	4	2 stations	25	22	1.67	− 0.84	Dodd City	4.18	2 stations	0.41
California	59.1	− 0.8	Lemon Cove	108	8	Tamarack	13	2†	0.58	− 1.04	Laporte	4.11	23 stations	0.00
Colorado	43.4	− 2.7	Lamar	99	2	Dillon	−17	21	2.26	+ 0.81	Gladstone	10.85	Denver	0.33
Florida	76.6	+ 4.6	2 stations	99	5†	Molino	40	23	5.25	+ 1.16	Pinellas Park	11.87	Gainesville	1.50
Georgia	69.1	+ 4.9	2 stations	101	6†	Mineral Bluff	30	24†	4.96	+ 2.27	Valona	10.63	Allapaha	1.22
Hawaii (September)	73.1	.....	3 stations	92	3†	Humuula, Hawaii	41	9	10.30	.....	Keanae Valley, Maui	43.91	Waiopae R'ch, Maui	0.00
Idaho	44.7	− 2.9	3 stations	88	8	Chesterfield	5	30	1.52	+ 0.30	Middle Fork	3.90	Porthill	0.13
Illinois	54.0	− 0.6	Mascoutah	92	6	Lanark	19	28	2.90	+ 0.60	Greenville	5.59	Metropolis	0.94
Indiana	54.7	0.0	Huntingburg	92	3	2 stations	23	28†	4.07	+ 1.51	Vevay	9.20	Mount Vernon	1.50
Iowa	48.7	− 3.2	2 stations	87	3	Washta	14	28	3.34	+ 0.99	Marshalltown	7.03	Northboro	0.73
Kansas	58.4	− 1.9	2 stations	97	1†	Russell Springs	15	31	1.36	− 0.79	Oketo	6.80	2 stations	T.
Kentucky	59.9	+ 2.5	2 stations	94	3	2 stations	27	24†	3.61	+ 1.52	Farmers	8.42	Blandville	0.78
Louisiana	70.0	+ 2.6	Liberty Hill	103	2	Grand Cane	26	23	3.29	+ 0.69	Donaldsonville	8.91	Ferriday	0.29
Maryland and Delaware	56.3	+ 1.0	2 stations	85	4	Deer Park, Md	23	26†	3.40	+ 0.31	Deer Park, Md	6.23	Seaford, Del	2.03
Michigan	47.1	− 1.3	3 stations	78	4†	Watersmeet	10	31	4.52	+ 1.89	Croton	7.33	Humboldt	1.38
Minnesota	43.4	− 2.7	Winnebago	76	3	2 stations	6	31	3.85	+ 2.38	Red Wing	9.60	Little Fork	0.29
Mississippi	68.1	+ 3.8	2 stations	100	4	3 stations	30	23	2.01	− 0.28	Pascagoula	6.51	Lula	0.27
Missouri	56.9	− 0.7	.....	.....	.....	.....	.....	.....	3.35	+ 0.87	.....	.....	.....	.....
Montana	41.6	− 3.0	Culbertson	90	8†	Bowen	− 4	27	1.55	+ 0.62	Philipsburg	3.57	Plains	T.
Nebraska	47.9	− 3.4	Holdrege	87	11	Canton (near)	− 5	27	3.19	+ 1.26	Dubois	10.86	Nebraska City	0.50
Nevada	47.7	− 1.6	Logan	90	18	Halleck	6	28	0.36	− 0.19	2 stations	1.30	Geyser	0.00
New England	48.6	− 0.7	Farmington, Me	78	11	Norfolk, Mass	15	30	4.04	+ 0.52	Canton, Conn	9.58	Patten, Me	1.54
New Jersey	53.9	− 0.1	Bridgeton	80	4	Layton	18	29	5.49	+ 1.70	Culver's lake	8.23	Cape May	2.61
New Mexico	52.1	− 1.4	Carlsbad	97	3	2 stations	− 1	21	2.16	+ 1.06	Harvey's upper ranch.	6.86	Cambray	0.15
New York	48.7	− 0.6	Addison	82	4	Griffin Corners	12	29*	4.09	+ 0.66	Mohonk Lake	10.51	Adams Center	1.43
North Carolina	62.7	+ 3.3	3 stations	96	2†	Banners Elk	27	26	4.31	+ 1.09	Manteo	8.42	Scotland Neck	1.83
North Dakota	42.5	− 1.2	Medora	86	9	Medora	−10	31	1.32	+ 0.33	Bottineau	2.48	Edmore	0.13
Ohio	53.3	+ 0.1	2 stations	88	1	4 stations	20	29	4.99	+ 2.79	Piqua	8.32	Kenton	2.30
Oklahoma	62.1	+ 0.5	Waukomis	101	2	Hurley	21	29	1.71	− 0.82	Webbers Falls	5.42	Elk City	0.15
Oregon	51.2	− 1.2	Pendleton	93	8	Cliff	6	27	1.49	− 1.55	Pompeii	5.55	Huntington	0.04
Pennsylvania	52.3	+ 0.6	Marion	83	4	2 stations	18	29†	4.83	+ 1.32	Hamburg	9.23	Hanover	2.59
Porto Rico	78.2	+ 0.5	Arecibo	98	5†	2 stations	58	18†	9.94	+ 0.12	Lares	28.41	Vieques	3.14
South Carolina	67.5	+ 4.5	Walterboro	99	7	Heath Springs	37	29	5.89	+ 2.75	Liberty	14.17	Smith Mills	2.70
South Dakota	44.8	− 3.7	Sorum	92	9	Murdo	0	30	2.66	+ 2.21	Parkston	7.77	Frederick	0.21
Tennessee	63.0	+ 4.2	Union City	99	2	2 stations	25	23	3.26	+ 0.82	Harriman	7.38	Memphis	0.36
Texas	67.4	0.0	Fort McIntosh	104	2	4 stations	24	22†	2.09	− 0.34	Port Arthur	7.75	5 stations	0.00
Utah	45.2	− 2.0	Low	89	13	Scofield	4	20	1.08	+ 0.17	Monticello	6.31	Emery	0.00
Virginia	58.4	+ 0.2	2 stations	92	7	Burkes Garden	21	26	4.24	+ 1.07	Mendota	6.84	Cape Henry	1.70
Washington	49.1	− 0.7	Mottinger	99	7	Lake Kachess	9	28	0.91	− 1.60	Quetts River	4.94	White Salmon	T.
West Virginia	56.3	+ 2.1	Williamson	88	1	Bayard	23	25	5.28	+ 2.80	Princeton	9.65	Lost City	3.27
Wisconsin	45.8	− 2.0	Merrill	79	12	2 stations	9	31	5.59	+ 3.17	Eau Claire	10.35	Superior	1.73
Wyoming	38.9	− 3.3	Eaton's ranch	86	8	Foxpark	−12	21	1.44	+ 0.33	Bechler River, Y.N.P	6.94	Cody	0.22

† Other dates also.

TABLE I.—*Climatological data for United States Weather Bureau stations, October, 1911.*

Districts and stations.	Elevation of instruments.			Pressure in inches.			Temperature of the air, in degrees Fahrenheit.												Precipitation, inches.			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, miles.	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.
New England.							**50.2**	**− 0.2**										**80**	**3.66**	**+ 0.1**										**6.1**		
Eastport	76	67	85	29.99	30.07	+ .07	46.5	− 0.1	68	11	52	29	28	41	21	43	40	81	1.57	− 2.3	8	7,746	nw.	40	nw.	13	5	12	14	6.9	....	....
Greenville	1,070	6	....	28.90	30.08	.....	43.4	.....	71	11	52	20	28	35	39	....	....	....	2.63	.....	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.2	....
Portland, Me.	103	81	117	29.98	30.10	+ .06	49.4	+ 0.3	71	12	57	28	29	42	26	44	38	69	1.85	− 1.8	12	6,524	nw.	37	nw.	5	13	5	13	5.4	....	....
Concord	288	70	79	29.79	30.11	+ .06	47.1	− 1.6	70	16	57	23	29	37	36	....	....	....	3.73	+ 0.5	12	3,371	nw.	26	nw.	5	10	7	14	5.9	0.2	....
Burlington	404	11	48	29.65	30.09	+ .05	46.7	− 0.2	67	10	55	25	28	38	30	....	....	....	2.84	− 0.3	10	8,246	s.	45	s.	4	7	11	13	6.4	0.9	....
Northfield	876	16	60	29.15	30.12	+ .08	43.8	+ 0.2	68	10	54	19	28	33	39	40	37	83	3.96	+ 1.5	13	5,119	s.	34	n.	12	8	11	12	6.0	2.2	....
Boston	125	115	188	29.96	30.10	+ .05	52.6	+ 0.3	73	12	59	34	28	46	26	48	44	76	2.27	− 1.6	11	7,023	nw.	33	nw.	5	11	6	14	6.0	....	....
Nantucket	12	14	90	30.08	30.08	+ .03	53.6	− 0.9	70	22	59	37	29	48	18	51	49	86	2.57	− 0.8	12	10,774	ne.	58	ne.	2	10	7	14	6.3	....	....
Block Island	26	11	46	30.05	30.08	+ .03	54.0	− 1.3	66	4	58	40	28	50	15	52	49	85	3.94	− 0.2	12	12,119	sw.	49	nw.	5	6	9	16	6.9	....	....
Narragansett	....	9	....	.....	.....	.....	51.6	− 0.5	72	12	59	27	29	44	28	....	....	....	3.44	.....	12	.....	w	....	.....	....	15	3	13	....	....	....
Providence	160	141	165	29.93	30.11	+ .06	52.0	− 0.2	70	9	60	29	29	44	26	48	45	84	2.79	− 1.0	12	6,381	n.	40	nw.	5	11	7	13	5.5	....	....
Hartford	159	122	140	29.92	30.10	+ .04	51.8	+ 0.6	71	10	60	31	29	43	31	46	43	79	7.30	+ 3.4	13	4,859	n.	28	nw.	5	7	9	15	6.4	....	....
New Haven	106	116	155	29.97	30.09	+ .03	53.2	+ 0.4	71	16	61	32	29	45	28	48	44	75	7.44	+ 3.5	11	6,725	n.	34	n.	7	11	7	13	5.3	....	....
Middle Atlantic States.							**55.9**	**+ 0.5**										**80**	**3.82**	**+ 0.6**										**5.9**		
Albany	97	102	115	29.99	30.10	+ .04	50.6	+ 0.2	70	9	59	31	29	43	30	46	42	78	5.00	+ 2.0	12	5,056	s.	35	s.	4	15	6	10	4.9	....	....
Binghamton	871	78	88	29.16	30.10	+ .04	49.1	− 0.1	75	4	58	25	29	41	35	....	....	....	3.37	+ 0.2	13	3,641	e.	24	se.	17	4	7	20	7.6	....	....
New York	365	414	454	29.75	30.08	+ .02	55.6	0.0	72	4	62	39	28	50	23	50	45	73	5.38	+ 1.7	12	11,022	sw.	54	nw.	5	8	8	15	6.4	....	....
Harrisburg	374	94	104	29.70	30.11	+ .03	54.6	+ 0.6	79	4	62	33	29	47	25	49	45	76	2.80	− 0.2	10	4,348	n.	26	nw.	5	8	10	13	6.2	....	....
Philadelphia	117	123	184	29.97	30.10	+ .03	57.4	+ 1.1	76	4	64	41	29	50	22	51	47	74	4.20	+ 1.1	13	6,169	n.	33	sw.	4	8	9	14	6.2	....	....
Scranton	805	111	119	29.24	30.11	+ .04	51.0	− 0.4	74	4	60	26	29	43	34	47	44	80	4.00	+ 1.1	14	4,256	n.	28	sw.	4	9	6	16	6.6	....	....
Atlantic City	52	37	48	30.03	30.09	+ .02	57.2	− 0.2	73	4	64	41	29	50	22	53	50	80	2.73	− 0.6	12	5,914	n.	29	s.	18	12	8	11	5.4	....	....
Cape May	17	9	56	30.08	30.10	+ .03	58.0	− 1.6	76	4	65	38	29	51	22	54	51	80	2.61	− 0.7	15	6,067	n.	44	se.	18	9	12	10	5.5	....	....
Baltimore	123	100	113	29.97	30.10	+ .02	58.3	+ 0.8	78	4	66	41	29	51	26	53	49	76	3.31	+ 0.3	12	4,725	n.	23	n.	27	7	11	13	6.2	....	....
Washington	112	62	85	29.97	30.09	+ .01	57.2	+ 0.6	80	4	66	38	26	48	29	52	49	80	4.07	+ 1.0	11	4,287	n.	22	ne.	7	12	7	12	5.5	....	....
Lynchburg	681	83	88	29.36	30.10	+ .01	59.2	+ 2.3	87	7	69	35	25	50	38	53	51	84	3.87	+ 0.5	12	2,316	nw.	20	se.	17	7	12	12	6.0	....	....
Mount Weather	1,725	10	54	28.25	30.08	− .01	52.5	+ 1.0	75	4	60	35	28	46	30	48	45	82	4.37	+ 2.0	15	11,201	nw.	52	nw.	5	8	10	13	5.9	....	....
Norfolk	91	102	111	29.99	30.09	+ .02	62.6	+ 1.3	89	7	69	48	27	56	33	58	55	82	2.77	− 1.1	13	6,314	ne.	30	ne.	7	9	7	15	6.3	....	....
Richmond	144	189	197	29.95	30.11	+ .03	59.2	− 0.6	85	4	69	40	29	50	34	54	52	82	3.61	+ 0.3	11	5,098	ne.	27	sw.	4	9	8	14	5.4	....	....
Wytheville	2,293	40	47	27.72	30.10	+ .01	56.4	+ 2.8	79	7	66	30	25	46	38	51	50	88	5.16	+ 2.0	12	2,596	e.	23	w.	4	14	9	8	4.6	....	....
South Atlantic States.							**67.4**	**+ 3.8**										**83**	**4.72**	**+ 0.8**										**5.6**		
Asheville	2,255	53	75	27.75	30.09	.00	59.2	+ 3.9	85	7	69	35	26	49	35	53	50	83	3.83	+ 0.9	9	5,235	se.	27	n.	22	10	12	9	5.2	....	....
Charlotte	773	68	76	29.25	30.09	+ .01	63.4	+ 2.3	91	7	72	41	25	55	26	57	55	81	3.51	+ 0.4	8	4,104	ne.	20	sw.	17	11	6	14	5.8	....	....
Hatteras	11	12	47	30.04	30.05	− .01	67.2	+ 1.2	85	2	72	55	14	62	17	63	61	85	2.43	− 3.6	10	10,923	ne.	40	n.	7	8	16	7	5.2	....	....
Manteo	12	12	46	.....	.....	.....	61.4	.....	92	7	71	42	14	58	....	....	....	....	8.42	+ 2.4	8	.....	ne.	....	.....	....	21	2	8	....	....	....
Raleigh	376	103	110	29.68	30.08	+ .01	62.5	+ 2.0	92	7	71	43	25	54	39	57	54	82	3.08	− 0.4	14	5,205	ne.	28	ne.	7	9	9	13	5.9	....	....
Wilmington	78	81	91	29.98	30.07	+ .01	67.2	+ 3.9	91	7	76	50	27	58	26	62	60	84	2.75	− 1.0	9	5,425	ne.	23	ne.	24	7	15	9	5.5	....	....
Charleston	48	11	92	30.00	30.04	− .02	71.6	+ 4.5	93	7	78	54	29	65	17	67	65	86	3.92	0.0	8	7,980	n.	28	ne.	3	7	14	10	5.7	....	....
Columbus, S. C.	351	41	57	29.69	30.07	.00	67.0	+ 3.0	92	7	76	46	25	58	27	60	58	81	6.63	+ 3.8	10	4,424	ne.	22	ne.	24	8	11	12	6.1	....	....
Augusta	180	89	97	29.86	30.06	− .01	68.9	+ 5.3	93	7	77	47	23	60	25	62	59	80	7.46	+ 5.1	8	3,942	ne.	19	w.	2	8	11	12	5.8	....	....
Savannah	65	150	194	29.97	30.04	− .01	71.5	+ 5.2	93	5	79	53	30	64	21	66	63	83	4.58	+ 1.0	8	7,741	ne.	39	e.	31	8	11	12	6.2	....	....
Jacksonville	43	96	129	29.96	30.01	− .01	75.9	+ 6.3	95	8	83	58	24	69	22	70	68	83	5.26	+ 0.2	9	6,557	ne.	39	nw.	31	12	8	11	5.1	....	....
Florida Peninsula.							**80.2**	**+ 3.9**										**81**	**4.84**	**+ 0.6**										**4.8**		
Key West	22	10	53	29.92	29.94	.00	81.8	+ 3.1	89	23	87	72	30	77	15	76	75	80	5.32	− 0.1	18	4,849	e.	23	se.	30	13	14	4	4.6	....	....
Miami	25	37	72	29.94	29.97	.....	80.6	+ 2.8	90	15	86	70	13	75	16	75	73	79	3.53	− 0.7	13	6,020	ne.	26	ne.	26	12	11	8	5.2	....	....
Tampa	35	79	96	29.94	29.97	− .01	78.3	+ 5.7	92	6	86	62	24	70	21	72	71	85	5.66	+ 2.7	9	4,996	ne.	22	sw.	17	13	10	8	4.8	....	....
Titusville	25	6	....	29.94	29.99	.....	79.2	.....	96	8	88	61	20	71	27	....	....	....	3.79	.....	13	.....	e.	....	.....	....	15	8	8	4.5	....	....
East Gulf States.							**70.1**	**+ 4.6**										**79**	**3.96**	**+ 1.2**										**5.1**		
Atlanta	1,174	190	216	28.84	30.07	.00	65.8	+ 3.4	94	3	74	39	23	57	26	60	56	78	4.81	+ 2.5	8	7,359	ne.	33	w.	17	10	11	10	5.5	....	....
Macon	370	78	87	29.65	30.05	− .01	69.4	+ 5.7	95	3	78	43	23	61	27	....	....	....	5.96	+ 3.8	8	4,001	ne.	18	ne	24	12	9	10	5.4	....	....
Thomasville	273	8	57	29.72	30.01	− .03	73.4	+ 5.2	97	5	84	48	23	63	29	66	64	84	4.90	+ 1.4	7	3,471	ne.	19	ne	31	16	5	10	5.0	....	....
Pensacola	56	140	183	29.96	30.02	− .01	73.1	+ 3.7	88	5	80	46	23	67	23	....	....	....	8.63	+ 4.6	10	8,225	ne.	37	s.	16	13	5	13	5.6	....	....
Anniston	741	9	57	29.29	30.08	+ .01	67.6	+ 5.2	94	3	78	36	23	57	30	....	....	....	2.16	− 0.2	8	3,460	se.	23	w.	16	12	7	12	5.6	....	....
Birmingham	700	11	48	29.30	30.06	− .01	68.0	+ 3.6	93	6	78	37	23	58	29	60	57	76	6.07	+ 3.7	6	3,872	n.	22	se.	16	11	15	5	4.6	....	....
Mobile	57	98	106	29.96	30.02	− .02	72.6	+ 5.5	93	5	80	44	23	65	26	66	63	78	2.89	− 0.3	7	4,949	n.	26	nw.	22	11	7	13	5.3	....	....
Montgomery	223	100	112	29.80	30.05	− .01	70.8	+ 5.5	95	5	80	42	23	62	27	63	60	76	2.91	+ 0.5	7	4,199	ne.	23	sw.	16	11	13	7	5.1	....	....
Meridian	375	84	93	29.64	30.04	− .02	67.8	+ 4.8	92	4	78	36	23	57	31	61	58	81	2.56	− 0.1	8	3,015	ne.	31	sw.	16	15	9	7	4.7	....	....
Vicksburg	247	62	74	29.79	30.07	+ .01	68.8	+ 3.5	92	4	78	39	23	59	31	61	57	76	0.67	− 2.1	7	3,930	n.	24	nw.	21	16	7	8	4.4	....	....
New Orleans	51	90	121	29.96	30.01	− .02	74.0	+ 4.5	93	2	81	52	23	67	19	67	65	81	1.99	− 0.9	7	5,209	n.	26	n.	22	14	10	7	4.6	....	....
West Gulf States.							**66.9**	**+ 4.6**										**74**	**2.05**	**− 1.5**										**4.7**		
Shreveport	249	77	84	29.78	30.05	.00	66.9	+ 1.3	94	6	77	38	22	57	31	59	56	76	0.73	− 2.4	6	3,697	se.	18	n.	21	15	6	10	4.4	....	....
Bentonville	1,303	11	44	28.69	30.05	.00	59.0	+ 1.0	89	2	68	30	22	49	31	....	....	....	1.98	− 8.3	8	3,642	s.	24	sw.	6	13	8	10	5.2	....	....
Fort Smith	457	79	94	29.56	30.04	− .01	62.7	+ 1.0	90	2	72	35	22	54	34	55	51	74	1.23	− 1.6	7	5,514	e.	33	nw.	15	14	4	13	5.2	....	....
Little Rock	357	139	147	29.69	30.07	+ .01	63.2	+ 0.3	89	3	72	37	28	54	29	58	56	84	0.41	− 2.1	3	5,935	sw.	27	nw.	21	15	6	10	4.5	....	....
Brownsville	57	4	....	29.90	29.96	.....	75.3	.....	94	14	86	44	23	65	35	....	....	....	0.66	.....	6	.....	se.	....	.....	....	....	....	....	....	....	....
Corpus Christi	20	69	77	29.99	30.01	+ .01	73.6	+ 1.0	89	7	80	47	22	67	22	67	64	77	0.86	− 1.2	12	9,310	n.	40	e.	30	13	10	8	4.6	....	....
Fort Worth	670	106	114	29.32	30.03	.00	66.2	− 0.1	95	1	76	36	22	56	35	57	50	64	0.99	− 1.5	5	7,786	s.	38	nw.	15	12	13	6	4.4	....	....
Galveston	54	106	112	29.97	30.04	+ .01	72.7	+ 0.3	88	3	78	49	22	68	26	67	65	80	5.92	+ 1.7	9	7,882	n.	42	nw.	21	16	4	11	4.8	....	....
Houston	138	111	121	29.87	30.02	.....	71.2	.....	92	4	80	43	22	62	26	....	....	....	4.72	.....	9	5,218	n.	27	nw.	21	16	7	8	4.7	....	....
Palestine	510	73	79	29.51	30.04	+ .01	66.9	− 0.7	94	3	76	38	22	58	28	59	55	74	3.04	− 0.6	8	5,099	ne.	22	nw.	16	14	8	9	4.8	....	....
San Antonio	701	80	91	29.30	30.02	+ .01	70.4	+ 1.2	95	3	80	40	22	60	33	60	55	66	3.57	+ 2.1	5	3,840	n.	22	n.	21	12	9	10	5.3	....	....
Taylor	583	55	63	29.43	30.04	+ .02	67.6	− 0.7	95	4	78	38	22	58	33	....	....	....	1.77	− 0.8	9	5,862	n.	27	nw.	21	19	3	9	3.9	....	....
Ohio Valley and Tenn.							**58.9**	**+ 1.9**										**80**	**3.75**	**+ 1.2**										**6.0**		
Chattanooga	702	189	213	29.27	30.08	− .01	65.6	+ 4.8	92	3	75	39	23	56	29	59	56	78	4.87	+ 2.0	8	4,837	n.	28	nw.	17	10	12	9	5.1	....	....
Knoxville	996	93	100	29.02	30.07	− .02	64.0	+ 5.9	90	3	73	38	25	55	33	58	55	80	3.78	+ 1.2	8	3,127	ne.	24	sw.	1	10	12	9	5.2	....	....
Memphis	399	76	97	29.66	30.09	+ .02	63.9	+ 1.4	89	3	72	37	28	56	26	57	53	74	0.36	− 2.4	6	5,727	n.	28	sw.	6	16	4	11	4.5	....	....
Nashville	546	108	191	29.50	30.08	.00	63.0	+ 2.7	90	3	73	35	23	53	33	56	53	76	2.21	− 0.3	6	5,565	ne.	30	se.	16	11	10	10	5.1	....	....
Lexington	989	75	102	29.00	30.07	− .01	58.2	+ 1.7	85	3	67	35	28	50	32	....	....	....	3.67	+ 1.4	12	5,744	ne.	36	w.	1	6	10	15	6.5	....	....
Louisville	525	111	132	29.50	30.08	.00	59.6	+ 1.2	89	3	68	38	28	51	33	54	50	78	2.89	+ 0.3	15	4,932	n.	38	w.	1	7	10	14	6.5	....	....
Evansville	431	72	82	29.61	30.08	.00	59.6	+ 1.6	88	3	68	38	24	51	31	54	50	78	1.64	− 1.5	11	4,515	ne.	30	sw.	6	6	17	8	5.7	....	....
Indianapolis	822	154	164	29.19	30.08	+ .01	54.8	− 0.2	84	6	63	32	29	47	32	49	46	79	4.03	+ 1.2	12	6,172	n.	35	s.	16	7	13	11	6.2	....	....
Cincinnati	628	152	160	29.41	30.09	+ .01	57.4	+ 0.4	84	6	66	35	28	49	33	52	49	80	4.54	+ 2.2	14	4,079	ne.	24	w.	4	6	11	14	6.4	....	....
Columbus	824	173	222	29.20	30.09	+ .01	54.1	0.0	82	6	63	32	28	46	34	50	47	81	5.21	+ 2.9	11	6,817	se.	45	nw.	6	7	11	13	6.1	....	....
Dayton	899	181	216	29.12	30.08	.....	54.7	.....	83	6	63	32	29	46	35	50	47	83	4.34	.....	13	6,161	ne.	36	sw.	6	7	5	19	7.1	....	....
Pittsburgh	842	353	410	29.18	30.09	+ .01	54.2	− 0.7	77	4	62	29	29	46	29	49	45	76	4.94	+ 2.6	14	6,943	nw.	50	nw.	4	9	8	14	6.3	....	....
Parkersburg	638	77	84	29.44	30.10	+ .02	56.6	+ 2.0	83	1	66	33	25	48	32	52	50	85	4.45	+ 2.0	11	3,089	n.	23	w.	22	8	5	18	7.1	....	....
Elkins	1,940	41	50	28.05	30.11	+ .01	54.9	+ 3.5	80	6	66	27	25	44	41	49	47	87	6.11	+ 3.7	13	2,363	nw.	19	w.	17	11	6	14	5.9	....	....

TABLE I.—*Climatological data for U. S. Weather Bureau stations, October, 1911*—Continued.

Districts and stations.	Elevation of instruments.			Pressure in inches.			Temperature of the air, in degrees Fahrenheit.												Precipitation, inches.			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, miles.	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.
Lower Lake Region.							**50.7**	**− 0.9**										**79**	**3.72**	**+ 0.8**										**6.1**		
Buffalo	767	178	206	29.24	30.08	+ .03	51.2	− 0.3	71	10	58	33	28	44	25	47	43	77	3.68	+ 0.2	11	9,675	sw.	64	sw.	4	9	12	10	5.5	T.	....
Canton	448	10	71	29.60	30.08	.....	47.5	+ 0.3	73	4	56	24	28	39	28	....	....	....	3.52	+ 0.2	11	7,214	sw.	48	w.	4	4	12	15	7.0	2.2	....
Oswego	335	76	91	29.70	30.08	+ .03	50.0	− 1.2	74	4	56	30	28	44	26	46	42	80	3.03	− 0.3	11	7,302	se.	35	nw.	4	9	7	15	6.1	....	....
Rochester	523	86	102	29.52	30.10	+ .05	50.4	− 0.4	75	4	58	28	28	43	28	45	41	77	2.41	− 0.4	13	5,708	sw.	44	w.	4	6	14	11	5.9	....	....
Syracuse	597	97	113	29.45	30.10	+ .04	50.1	− 0.9	78	4	57	29	28	43	30	....	....	....	2.16	− 1.0	11	7,895	s.	48	sw.	4	5	11	15	6.4	T.	....
Erie	714	92	102	29.31	30.08	+ .03	51.5	− 1.6	73	4	58	33	28	45	24	46	42	74	3.47	− 0.3	13	7,586	s.	38	w.	4	5	10	16	6.6	....	....
Cleveland	762	190	201	29.26	30.09	+ .03	51.9	− 1.2	75	6	58	34	29	46	27	48	44	79	5.16	+ 2.4	12	9,779	se.	54	nw.	4	9	5	17	6.5	....	....
Sandusky	629	62	70	29.39	30.08	+ .02	52.4	− 1.5	79	6	59	32	29	46	30	....	....	....	5.06	+ 2.6	15	5,543	sw.	34	w.	4	10	6	15	5.7	....	....
Toledo	628	208	246	29.40	30.09	+ .04	51.4	− 1.2	78	6	59	33	29	44	31	47	44	80	4.46	+ 2.2	17	9,701	sw.	53	sw.	4	13	3	15	5.5	....	....
Fort Wayne	856	113	124	29.15	30.08	.....	51.2	.....	80	6	60	29	29	43	32	47	44	82	3.51	.....	18	5,926	ne.	35	w.	4	5	9	17	6.5	....	....
Detroit	730	218	258	29.29	30.09	+ .04	50.8	− 0.9	70	16	57	32	28	45	21	46	43	81	4.30	+ 1.9	12	9,554	e.	53	w.	4	9	9	13	5.9	....	....
Upper Lake Region.							**47.2**	**− 0.4**										**81**	**3.98**	**+ 1.2**										**6.9**		
Alpena	609	13	92	29.41	30.09	+ .06	46.5	+ 0.6	67	18	54	27	30	39	31	42	39	81	3.92	+ 0.5	13	7,639	sw.	42	se.	3	5	14	12	6.3	T.	....
Escanaba	612	48	82	29.40	30.07	+ .06	45.6	+ 0.5	62	8	52	24	28	39	24	41	38	77	4.63	+ 1.5	12	6,398	w.	39	nw.	4	6	7	18	6.8	T.	....
Grand Haven	632	54	92	29.37	30.06	+ .03	49.4	− 0.8	76	16	56	32	26	43	26	45	42	82	6.74	+ 4.2	15	7,767	e.	46	w.	4	5	9	17	6.9	0.3	....
Grand Rapids	675	70	87	29.30	30.08	+ .04	49.6	− 0.5	74	16	57	32	28	43	26	46	43	84	6.71	+ 4.2	15	4,508	se.	35	w.	4	4	8	19	7.4	T.	....
Lansing	863	11	62	29.13	30.08	.....	48.0	.....	71	16	57	26	28	40	30	43	41	86	5.00	+ 2.8	14	4,143	e.	25	w.	4	6	9	16	6.6	0.3	....
Houghton	684	62	72	29.29	30.03	+ .03	44.7	− 0.4	62	9	50	23	31	39	22	....	....	....	1.88	− 1.3	11	6,082	w.	42	w.	28	6	4	21	7.3	0.1	....
Marquette	734	77	116	29.26	30.08	+ .07	45.2	− 0.5	70	8	51	25	30	39	26	41	38	79	1.90	− 1.3	13	6,403	w.	38	w.	4	3	12	16	7.2	0.2	....
Port Huron	638	78	120	29.38	30.08	+ .04	49.1	− 0.4	68	16	56	29	28	42	25	45	42	80	4.10	+ 1.4	11	7,919	ne.	44	w.	4	10	7	14	6.1	....	....
Sault Ste. Marie	614	11	61	29.38	30.09	+ .08	43.8	+ 0.4	70	9	52	21	30	36	33	40	38	84	3.17	− 0.1	15	5,494	e.	48	w.	4	5	3	23	7.9	0.1	....
Chicago	823	140	310	29.18	30.07	+ .03	53.2	0.0	79	3	59	32	27	48	25	48	45	76	3.79	+ 1.2	12	9,507	w.	44	w.	4	7	9	15	6.4	T.	....
Milwaukee	681	119	133	29.32	30.06	+ .03	50.3	+ 0.1	70	3	56	28	27	45	20	46	43	79	3.89	+ 1.5	12	8,129	nw.	42	se.	3	7	5	19	6.7	0.1	....
Green Bay	617	49	86	29.38	30.05	+ .03	47.2	+ 0.1	67	16	54	24	27	41	22	42	39	79	4.68	+ 2.3	10	7,845	sw.	46	w.	4	5	8	18	7.4	T.	....
Duluth	1,133	11	47	28.83	30.07	+ .07	41.9	− 3.3	66	8	49	16	31	35	26	38	35	82	1.37	− 1.4	9	9,226	w.	40	sw.	3	9	9	13	6.2	T.	....
North Dakota.							**42.9**	**+ 0.3**										**80**	**0.98**	**− 0.3**										**5.8**		
Moorhead	940	8	57	29.05	30.08	+ .08	43.5	+ 0.7	72	8	53	14	31	34	34	39	36	85	1.02	− 1.0	7	5,542	se.	34	nw.	3	11	6	14	5.5	....	....
Bismarck	1,674	4	57	28.29	30.10	+ .11	43.8	− 0.3	80	8	54	7	31	34	38	38	35	79	0.71	− 0.3	12	7,409	nw.	56	w.	3	8	9	14	6.0	T.	T.
Devils Lake	1,482	11	44	28.46	30.06	+ .07	41.5	+ 1.0	77	8	50	8	31	33	32	37	34	82	1.65	+ 0.4	10	7,597	se.	35	nw.	3	9	8	14	5.9	0.1	0.1
Williston	1,896	40	47	28.05	30.06	+ .08	42.8	− 0.1	81	9	53	6	31	32	42	36	32	75	0.53	− 0.2	9	5,641	nw.	48	nw.	3	10	7	14	6.0	0.3	0.2
Upper Miss. Valley.							**51.5**	**− 1.4**										**79**	**3.15**	**+ 0.7**										**6.2**		
Minneapolis	918	102	208	.....	.....	.....	45.8	.....	72	12	53	23	31	39	25	....	....	....	6.42	+ 3.8	11	8,069	w.	48	e.	6	9	8	14	6.0	T.	....
St. Paul	940	203	212	29.14	30.06	+ .05	45.8	− 2.3	70	12	53	22	31	39	25	41	36	75	7.55	+ 5.2	13	4,924	se.	40	nw.	4	8	10	13	5.8	....	....
La Crosse	714	11	48	29.27	30.05	+ .03	47.0	− 2.9	73	3	55	24	28	39	32	....	....	....	6.39	+ 3.9	13	3,373	s.	23	w.	4	9	6	16	6.2	....	....
Madison	974	70	78	29.01	30.08	+ .05	48.4	− 0.4	72	3	55	28	27	42	23	44	40	77	2.92	+ 0.5	12	6,452	nw.	35	ne.	5	6	7	18	7.0	0.7	....
Charles City	1,015	10	49	28.98	30.08	+ .06	47.0	− 1.2	76	3	55	24	28	38	30	42	40	85	2.81	+ 0.8	12	4,584	se.	24	w.	3	8	9	14	6.2	1.0	....
Davenport	606	71	79	29.40	30.06	+ .02	51.0	− 1.6	84	3	59	28	27	43	29	47	44	83	1.57	− 0.8	9	5,123	nw.	28	sw.	3	11	6	14	5.8	T.	....
Des Moines	861	84	101	29.14	30.05	+ .02	50.6	− 1.9	78	3	58	26	28	43	28	45	41	75	2.61	− 0.1	14	5,552	nw.	29	se.	13	8	10	13	5.8	T.	....
Dubuque	698	100	115	29.33	30.09	+ .05	48.9	− 3.1	76	3	57	27	28	41	30	44	40	78	2.34	− 0.3	10	3,983	nw.	19	nw.	4	8	7	16	6.3	0.5	....
Keokuk	614	64	78	29.40	30.08	+ .03	52.6	− 1.9	86	3	60	31	22	45	30	48	45	82	2.19	− 0.3	8	5,163	nw.	24	w.	23	10	7	14	6.0	T.	....
Cairo	350	87	93	29.69	30.08	+ .01	60.3	− 1.2	89	3	68	37	21	52	24	54	52	80	1.08	− 1.6	7	5,996	n.	34	n.	27	9	5	17	6.1	....	....
La Salle	536	56	64	29.50	30.08	+ .04	51.8	− 0.1	85	3	60	30	27	43	31	....	....	....	2.40	− 0.2	12	5,116	w.	26	sw.	3	6	12	13	6.0	T.	....
Peoria	609	11	45	29.41	30.08	+ .03	51.4	− 0.6	86	3	61	25	29	41	31	46	44	84	2.65	+ 0.1	11	4,631	n.	25	sw.	6	5	11	15	6.7	T.	....
Springfield, Ill	644	10	91	29.38	30.08	+ .03	54.4	− 0.2	86	3	62	34	27	46	27	49	45	77	2.00	− 0.6	8	5,714	s.	25	sw.	6	5	14	12	6.3	....	....
Hannibal	534	74	109	29.49	30.06	+ .01	54.4	− 1.5	88	3	62	31	29	46	29	....	....	....	1.66	0.0	11	6,125	sw.	30	sw.	6	8	8	15	6.3	T.	....
St. Louis	567	208	317	29.45	30.06	.00	57.4	− 1.0	88	3	64	35	27	50	27	52	48	76	2.63	+ 0.2	10	7,021	ne.	30	sw.	6	9	6	16	6.5	T.	....
Missouri Valley.							**51.5**	**− 1.5**										**78**	**2.81**	**+ 0.9**										**5.7**		
Columbia, Mo.	784	11	84	29.24	30.07	+ .02	55.2	+ 0.4	88	3	64	30	22	47	30	....	....	....	3.87	+ 1.4	13	5,218	s.	23	sw.	6	6	11	14	6.5	T.	....
Kansas City	963	161	181	29.02	30.06	+ .02	55.4	− 0.4	84	3	63	32	27	48	27	49	46	76	4.06	+ 1.8	10	8,446	n.	42	n.	12	6	8	17	6.7	T.	....
St. Joseph	967	11	49	29.01	30.06	.....	53.7	− 2.1	80	3	62	32	31	46	28	49	46	82	5.44	.....	8	5,344	nw.	31	nw.	12	6	12	13	6.3	T.	....
Springfield, Mo.	1,324	98	104	28.66	30.07	+ .02	57.6	− 0.3	88	2	65	33	22	50	30	52	49	82	3.04	+ 0.2	9	7,281	se.	28	se.	5	12	7	12	5.4	0.1	....
Iola	984	11	50	29.00	30.05	+ .01	56.8	− 0.1	88	1	67	30	22	46	35	....	....	....	2.23	0.0	9	5,380	ne.	26	s.	24	6	14	11	5.7	T.	....
Topeka	983	85	101	.....	.....	.....	55.0	− 1.3	84	5	64	34	31	46	30	....	....	....	0.81	− 1.1	7	6,882	n.	36	s.	6	10	10	11	5.5	T.	....
Lincoln	1,189	11	84	28.78	30.06	+ .03	51.8	− 1.5	75	3	61	27	31	42	32	45	41	77	1.63	− 0.2	9	6,955	se.	38	n.	16	11	7	13	5.7	T.	....
Omaha	1,105	115	121	28.87	30.06	+ .03	51.8	− 2.4	76	3	60	29	31	44	30	45	41	73	1.26	− 1.1	7	5,903	n.	27	nw.	22	8	12	11	5.7	T.	....
Valentine	2,598	47	54	27.35	30.10	+ .09	44.6	− 3.9	77	9	56	17	28	34	38	39	35	78	4.80	+ 3.5	11	6,461	nw.	36	w.	3	17	9	5	3.9	3.9	....
Sioux City	1,135	94	164	28.84	30.07	+ .05	48.0	− 3.1	73	3	56	23	28	40	29	43	40	80	3.22	+ 1.4	11	7,972	nw.	39	nw.	3	13	9	9	4.8	1.6	....
Pierre	1,572	70	75	28.42	30.10	+ .09	46.8	− 2.3	77	8	55	19	30	38	34	41	36	72	0.48	− 0.3	8	6,591	nw.	54	w.	3	11	7	13	5.3	0.4	T.
Huron	1,306	56	67	28.68	30.11	+ .10	45.0	+ 0.3	71	11	54	19	30	36	32	40	37	81	2.36	+ 1.0	11	6,855	se.	42	w.	3	9	6	16	6.3	0.1	T.
Yankton	1,233	49	57	28.73	30.06	+ .05	47.2	− 3.3	73	3	56	21	28	39	28	....	....	....	5.91	+ 4.3	10	5,393	w.	30	nw.	22	8	12	11	5.9	4.6	T.
Northern Slope.							**42.6**	**− 2.1**										**72**	**1.41**	**+ 0.5**										**4.6**		
Havre	2,505	11	44	27.43	30.08	+ .10	44.2	+ 0.6	79	9	55	11	31	34	40	39	36	80	0.80	+ 0.3	4	5,057	nw.	30	nw.	18	16	9	6	4.4	0.6	....
Miles City	2,371	26	48	27.52	30.12	+ .12	47.2	+ 0.7	85	8	58	15	31	36	46	40	36	78	0.94	+ 0.2	8	4,372	nw.	33	nw.	18	13	10	8	4.2	0.5	0.3
Helena	4,110	8	56	25.87	30.13	+ .10	40.7	− 3.3	76	9	51	16	27	31	38	35	31	75	2.40	+ 1.6	9	4,308	sw.	35	w.	15	12	11	8	4.7	8.2	T.
Kalispell	2,962	11	34	27.01	30.11	+ .10	42.4	− 0.1	70	9	54	18	28	31	35	36	32	74	0.84	− 0.3	3	2,942	w.	18	n.	17	16	6	9	4.2	T.	....
Rapid City	3,234	46	50	26.66	30.13	+ .12	44.8	− 1.8	79	9	55	13	31	35	40	37	30	63	1.21	+ 0.1	10	5,832	w.	38	w.	3	15	5	11	4.6	2.9	0.4
Cheyenne	6,088	56	64	24.04	30.08	+ .07	42.6	− 2.7	74	14	54	13	21	31	38	35	28	65	0.95	+.0.2	8	7,335	nw.	46	w.	3	13	11	7	4.8	2.1	....
Lander	5,372	26	36	24.70	30.14	+ .10	40.1	− 2.0	69	9	54	12	21	26	39	32	26	64	0.73	− 0.3	6	2,288	ne.	26	nw.	14	17	9	5	3.7	3.4	....
Sheridan	3,790	9	47	26.17	30.13	.....	41.0	.....	82	8	55	11	27	27	51	34	28	71	1.22	.....	10	4,807	nw.	46	nw.	14	10	5	16	5.7	5.6	0.3
Yellowstone Park	6,200	11	48	23.93	30.16	+ .14	35.6	− 5.9	69	8	47	5	27	24	37	28	23	68	1.17	0.0	9	4,711	sw.	29	nw.	14	11	10	10	4.4	5.9	T.
North Platte	2,821	11	51	27.15	30.11	+ .09	46.0	− 4.0	77	10	58	20	31	34	40	39	36	78	3.66	+ 2.5	8	5,128	n.	30	w.	3	9	12	10	5.4	T.	....
Middle Slope.							**58.6**	**− 2.0**										**66**	**0.77**	**− 0.8**										**4.6**		
Denver	5,291	129	136	24.77	30.06	+ .05	47.0	− 4.0	80	14	59	17	21	35	37	38	28	54	0.33	− 0.6	7	5,642	s.	41	nw.	15	16	9	6	3.9	5.5	....
Pueblo	4,685	80	86	25.33	30.04	+ .05	49.4	− 2.9	86	14	63	19	21	36	50	39	31	60	1.09	+ 0.4	7	4,557	nw.	48	nw.	15	16	9	6	3.5	4.7	....
Concordia	1,398	42	50	28.58	30.07	+ .04	53.0	− 2.4	86	5	63	28	31	43	34	46	42	72	0.35	− 1.6	5	4,853	nw.	26	nw.	16	5	15	11	6.1	....	....
Dodge City	2,509	11	51	27.47	30.08	+ .06	53.6	− 1.1	90	14	66	25	22	41	42	45	40	70	0.63	− 0.8	6	8,212	n.	44	s.	5	15	9	7	4.6	3.2	....
Wichita	1,364	139	158	28.64	30.07	+ .04	57.2	− 1.6	89	14	68	30	22	47	37	50	44	71	0.94	− 1.4	5	9,375	ne.	48	s.	24	11	14	6	5.1	T.	....
Oklahoma	1,214	10	47	28.77	30.05	+ .02	61.6	+ 0.3	93	1	72	34	22	51	34	52	47	68	1.29	− 0.5	6	11,216	s.	40	s.	5	10	16	5	4.7	....	....

TABLE I.—*Climatological data for U. S. Weather Bureau stations, October, 1911*—Continued.

Districts and stations.	Elevation of instruments.			Pressure in inches.			Temperature of the air, in degrees Fahrenheit.												Precipitation, inches.			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, miles.	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.
Southern Slope.							**62.4**	**0.0**										**65**	**1.12**	**− 0.7**										**4.2**		
Abilene	1,738	10	52	28.24	30.04	+ .03	64.7	+ 0.5	94	3	76	32	22	54	34	54	47	62	1.37	− 1.0	5	7,314	s.	37	s.	5	16	8	7	4.1	....	....
Amarillo	3,676	10	49	26.31	30.04	+ .04	57.1	+ 1.0	91	1	70	26	28	44	45	46	40	67	0.84	− 0.9	6	8,363	s.	44	se.	5	18	8	5	4.3	3.1	....
Del Rio	944	8	57	29.01	29.99	+ .01	70.8	+ 0.9	97	6	82	34	23	60	39	....	....	....	1.11	− 0.4	5	5,883	se.	30	ne.	7	9	15	7	4.9	....	....
Roswell	3,578	9	57	26.40	30.04	+ .08	57.2	− 2.3	92	2	73	26	22	41	51	46	40	65	1.14	− 0.4	7	3,793	w.	30	sw.	20	17	9	5	3.5	T.	....
Southern Plateau.							**58.8**	**− 1.2**										**54**	**1.55**	**+ 0.8**										**2.5**		
El Paso	3,762	110	133	26.19	29.92	.00	63.3	+ 0.9	91	2	76	35	22	51	38	49	37	45	0.43	− 0.5	5	7,669	e.	48	ne.	15	21	8	2	1.9	....	....
Santa Fe	7,013	8	56	23.30	30.02	+ .06	46.8	− 3.2	74	2	58	21	21	36	34	38	31	62	3.13	+ 2.1	8	5,528	ne.	33	n.	15	22	4	5	2.9	3.0	....
Flagstaff	6,907	8	57	23.38	29.96	+ .04	45.4	+ 0.7	72	17	60	18	22	30	47	36	28	64	2.68	+ 0.8	8	5,232	e.	38	sw.	5	19	5	7	3.1	T.	....
Phoenix	1,108	50	56	28.73	29.88	.00	69.0	− 1.2	94	13	83	47	22	55	39	56	45	50	2.24	+ 1.9	5	2,683	e.	17	ne.	7	20	8	3	2.2	....	....
Yuma	141	9	58	....	....	....	72.8	− 0.6	101	14	....	49	23	....	45	....	....	....	0.84	+ 0.6	3	....	n.	....	....	....	26	5	0	....	....	....
Independence	3,910	11	42	25.98	29.96	+ .01	55.2	− 4.1	81	14	71	34	11	39	42	42	30	48	T.	− 0.3	0	4,637	nw.	50	se.	9	24	6	1	2.4	....	....
Middle Plateau.							**47.9**	**− 2.5**										**52**	**1.29**	**+ 0.3**										**3.2**		
Reno	4,532	56	63	25.49	30.02	+ .03	50.0	+ 0.3	80	17	66	27	10	34	45	39	27	48	0.11	− 0.3	3	3,812	w.	35	w.	1	20	7	4	2.7	....	....
Tonopah	6,090	12	20	24.09	29.98	....	49.6	....	71	17	60	27	10	40	27	38	24	39	0.40	− 0.4	3	7,464	se.	40	nw	9	20	8	3	2.6	....	....
Winnemucca	4,344	18	56	25.66	30.08	+ .03	46.2	− 2.4	79	8	65	17	20	28	51	36	26	54	0.22	− 0.3	2	4,063	ne.	38	s.	8	19	3	9	3.7	T.	....
Modena	5,479	10	43	24.64	30.01	+ .05	46.1	− 4.0	74	17	62	18	21	30	44	35	22	44	0.04	− 0.8	2	6,850	w.	50	sw.	9	18	10	3	3.0	....	....
Salt Lake City	4,360	147	189	25.66	30.04	+ .03	50.0	− 2.2	77	8	60	31	21	40	37	41	32	53	1.65	+ 0.2	3	5,209	se.	38	e.	26	20	5	6	3.4	2.0	....
Durango	6,546	18	56	23.69	30.02	+ .05	45.9	− 3.0	71	14	60	17	21	32	38	37	29	63	5.07	+ 3.3	8	4,038	nw.	24	ne.	15	17	8	6	3.6	0.5	....
Grand Junction	4,608	43	51	25.43	30.03	+ .04	49.4	− 3.9	74	9	62	23	21	37	36	41	33	60	1.53	+ 0.6	6	2,814	nw.	19	sw.	2	19	7	5	3.2	T.	....
Northern Plateau.							**48.3**	**− 1.1**										**57**	**1.32**	**+ 0.1**										**4.0**		
Baker	3,466	48	53	26.53	30.14	+ .06	44.7	− 0.8	76	8	57	22	28	33	36	38	30	61	1.45	+ 0.5	6	4,664	s.	26	se.	8	19	7	5	3.2	T.	....
Boise	2,739	78	86	27.23	30.11	+ .05	49.0	− 1.3	82	8	61	28	20	37	38	41	32	56	2.45	+ 1.2	6	3,508	nw.	25	nw.	9	19	4	8	3.7	....	....
Lewiston	757	10	51	29.31	30.13	+ .06	50.2	− 1.6	88	8	62	24	29	38	43	....	....	....	1.19	0.0	7	2,541	e.	36	w.	2	16	9	6	3.9	....	....
Pocatello	4,477	46	54	25.54	30.10	+ .06	44.8	− 3.2	73	9	58	20	19	32	37	36	27	56	1.74	+ 0.8	5	5,269	se.	36	sw.	9	18	8	5	3.5	0.2	....
Spokane	1,929	101	110	28.05	30.13	+ .07	47.9	+ 0.6	84	8	60	19	29	36	36	40	32	58	0.39	− 1.1	3	3,062	sw.	24	s.	8	10	13	8	5.2	....	....
Walla Walla	1,045	107	115	29.03	30.11	+ .04	53.2	− 0.5	86	8	63	32	28	44	31	44	35	54	0.72	− 0.8	8	4,061	s.	28	se.	8	17	7	7	4.3	....	....
N. Pac. Coast Region.							**51.6**	**+ 0.5**										**82**	**1.48**	**− 2.5**										**6.2**		
North Head	211	11	56	29.86	30.09	....	53.6	+ 0.7	71	21	58	45	29	50	20	51	49	87	2.32	− 1.6	13	10,393	se.	74	se.	8	10	8	13	5.6	....	....
Port Crescent	259	8	53	29.83	30.12	+ .10	46.4	− 1.0	62	7	54	30	29	38	24	....	....	....	1.11	− 2.4	7	3,672	s.	15	se.	25	3	19	9	6.3	....	....
Seattle	125	185	224	29.99	30.12	+ .07	52.5	+ 1.7	74	7	59	36	27	46	28	49	45	80	1.00	− 1.9	8	4,445	n.	32	s.	9	5	10	16	6.8	....	....
Tacoma	213	113	120	29.88	30.11	+ .07	51.2	+ 0.6	73	7	59	33	27	43	28	....	....	....	0.96	− 2.4	9	3,082	n.	29	sw.	9	5	8	18	7.5	....	....
Tatoosh Island	86	7	57	29.97	30.07	+ .06	51.7	+ 1.8	62	20	55	44	29	48	14	49	47	86	2.78	− 5.2	12	9,568	ne.	49	sw.	13	11	3	17	6.2	....	....
Portland, Oreg.	153	68	106	29.93	30.09	+ .03	54.2	+ 0.9	78	7	62	34	29	46	34	50	46	77	0.99	− 2.7	5	3,940	nw.	25	s.	13	6	11	14	6.4	....	....
Roseburg	510	9	57	29.53	30.09	+ .01	51.8	− 1.0	78	7	63	32	27	41	34	48	45	79	1.21	− 1.4	6	1,487	s.	16	s.	8	8	17	6	4.8	....	....
Mid. Pac. Coast Region.							**59.4**	**− 0.1**										**67**	**0.60**	**− 0.9**										**3.3**		
Eureka	80	73	89	30.00	30.07	+ .01	53.4	+ 0.3	73	19	60	41	10	47	26	50	48	86	1.68	− 1.0	7	3,738	se.	28	sw.	8	10	11	10	5.2	....	....
Mount Tamalpais	2,375	11	18	27.55	30.02	+ .01	57.4	....	82	16	64	41	1	50	25	48	40	59	0.29	− 1.6	3	10,200	nw.	62	nw.	26	17	9	5	3.3	....	....
Point Reyes Light	490	7	18	29.45	29.97	....	56.8	....	87	16	62	48	29	52	23	....	....	....	0.20	....	4	12,586	nw.	67	nw.	25	15	8	8	4.2	....	....
Red Bluff	332	50	56	29.63	29.98	− .05	62.2	− 1.6	90	15	75	42	2	50	35	51	39	50	0.82	− 0.8	5	3,880	nw.	24	nw.	18	21	6	4	2.8	....	....
Sacramento	69	106	117	29.91	29.98	− .01	61.6	− 0.6	86	16	74	44	5	49	34	54	48	66	0.18	− 0.9	1	4,452	se.	25	sw.	8	24	6	1	1.8	....	....
San Francisco	155	200	204	29.84	30.00	− .01	60.9	+ 2.5	87	16	68	50	29	53	29	53	48	72	0.28	− 1.0	3	4,370	sw.	30	sw.	25	18	9	4	3.2	....	....
San Jose	141	12	110	29.85	30.00	....	59.0	− 1.3	90	16	74	38	5	44	46	....	....	....	0.80	− 0.1	5	3,143	nw.	20	nw.	7	23	7	1	2.5	....	....
Southeast Farallon	30	9	17	29.98	30.01	....	56.0	....	77	16	58	49	12	54	19	....	....	....	0.12	− 1.2	3	9,689	nw.	41	nw.	25	18	5	8	3.7	....	....
S. Pac. Coast Region.							**63.6**	**+ 1.2**										**64**	**0.16**	**− 0.6**										**2.4**		
Fresno	330	62	70	29.61	29.97	+ .01	63.8	− 1.1	91	16	79	41	31	49	40	51	40	51	0.09	− 0.6	2	2,988	w.	18	w.	8	25	6	0	1.4	....	....
Los Angeles	338	159	191	29.57	29.93	− .02	66.4	+ 4.1	95	16	77	51	28	56	35	55	48	62	0.16	− 0.6	1	3,976	sw.	20	nw.	2	18	11	2	2.6	....	....
San Diego	87	94	102	29.84	29.93	− .02	63.0	0.0	84	7	71	50	15	55	28	57	53	75	0.28	− 0.2	2	3,876	nw.	21	nw.	2	23	8	0	1.9	....	....
San Luis Obispo	201	47	54	29.77	29.98	− .01	61.2	+ 2.0	95	16	74	41	23	49	43	52	46	67	0.12	− 1.2	1	3,742	nw.	22	ne.	10	15	10	6	3.5	....	....
West Indies.																																
San Juan	82	48	90	29.84	29.92	+ .02	80.8	....	91	13	87	72	7	75	16	....	....	....	3.30	− 2.8	19	4,766	se.	25	se.	27	11	15	5	4.6	....	....

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 October, 1911, 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.	6	3.30 p.m.	5.10 p.m.	0.41	3.32 p.m.	3.45 p.m.	0.01	0.12	0.27	0.38											
Albany, N. Y.	22			0.40														0.39			
Alpena, Mich.	3			0.79														0.19			
Amarillo, Tex.	2			0.13														0.13			
Anniston, Ala.	16	4.55 p.m.	6.10 p.m.	0.57	5.00 p.m.	5.15 p.m.	0.01	0.28	0.38	0.44											
Asheville, N. C.	16-17	11.45 p.m.	6.35 p.m.	2.14	12.30 a.m.	12.40 a.m.	0.11	0.22	0.31												
Atlanta, Ga.	16-17	5.54 p.m.	1.25 a.m.	1.29	7.39 p.m.	8.02 p.m.	0.29	0.27	0.43	0.62	0.75	0.81									
Atlantic City, N.J.	31			0.59														0.59			
Augusta, Ga.	10-11	4.54 p.m.	D. N. a.m.	2.69	5.16 p.m.	5.51 p.m.	0.10	0.05	0.11	0.28	0.51	0.82	1.14	1.26							
Do.	27-28	12.10 p.m.	10.30 a.m.	2.45	1.28 p.m.	1.58 p.m.	0.11	0.06	0.13	0.26	0.34	0.45	0.52								
Baker, Oreg.	1			0.48														0.21			
Baltimore, Md.	18			1.59														0.75			
Bentonville, Ark.	6			0.87														0.28			
Binghamton, N.Y.	1			0.77														0.32			
Birmingham, Ala.	16	2.12 p.m.	4.45 p.m.	1.69	3.31 p.m.	3.56 p.m.	0.48	0.35	0.75	0.86	1.03	1.13									
					11.38 p.m.	12.28 a.m.	0.24	0.14	0.21	0.28	0.33	0.41	0.53	0.63	0.70	0.75	0.84				
Do.	16-17	8.57 p.m.	9.00 a.m.	2.96	12.28 a.m.	1.18 a.m.		0.96	1.00	1.14	1.24	1.40	1.52	1.65	1.73	1.79	1.83				
					1.18 a.m.	1.59 a.m.		1.88	1.94	1.99	2.06	2.11	2.14	2.23	2.28	2.31					
Bismarck, N. Dak.	12			0.36														0.33			
Block Island, R.I.	15			0.42														0.33			
Boise, Idaho.	9			0.61														0.21			
Boston, Mass.	4			0.31														0.14			
Buffalo, N. Y.	17			1.50														0.44			
Burlington, Vt.	4			0.66														0.23			
Cairo, Ill.	7			0.39														0.21			
Canton, N. Y.	4			1.12														0.38			
Charles City, Iowa	3			0.59														0.31			
Charleston, S. C.	1	10.14 a.m.	5.00 p.m.	1.81	10.19 a.m.	10.54 a.m.	0.01	0.19	0.37	0.62	0.81	1.02	1.15	1.21							
Charlotte, N. C.	17			1.63														0.68			
Chattanooga, Tenn	17			1.42														0.42			
Cheyenne, Wyo.	1			0.35														0.17			
Chicago, Ill.	16	2.40 p.m.	4.25 p.m.	0.45	3.01 p.m.	3.11 p.m.	0.01	0.23	0.40												
Cincinnati, Ohio.	17			0.98														0.45			
Cleveland, Ohio.	6			1.42														0.70			
Columbia, Mo.	1	D. N. a.m.	10.41 a.m.	2.14	5.31 a.m.	7.15 a.m.	0.01	0.17	0.43	0.79	0.91	0.95	1.01	1.09	1.15	1.24	1.34	1.42	1.63	1.83	1.90
Columbia, S. C.	1	D. N. a.m.	D. N. a.m.	0.56	4.26 a.m.	4.37 a.m.	0.01	0.21	0.43	0.46											
Columbus, Ohio.	6-7	6.40 p.m.	D. N. a.m.	2.66	6.59 p.m.	7.18 p.m.	0.03	0.06	0.24	0.49	0.57										
					11.08 p.m.	11.22 p.m.	1.26	0.15	0.47	0.65											
Concord, N. H.	18			1.58														0.26			
Concordia, Kans.	12			0.11														0.07			
Corpus Christi, Tex.	16			0.52														0.40			
Davenport, Iowa.	1			0.56														0.24			
Dayton, Ohio.	6-7	7.52 p.m.	4.45 a.m.	1.76	1.14 a.m.	1.29 a.m.	0.62	0.27	0.43	0.53											
Del Rio, Tex.	30			0.36														0.31			
Denver, Colo.	5-6			0.07														0.04			
Des Moines, Iowa.	15	4.15 p.m.	6.34 p.m.	0.68	5.36 p.m.	5.51 p.m.	0.12	0.07	0.27	0.44											
Detroit, Mich.	22			0.90														0.56			
Devils Lake, N. Dak.	12			0.51														0.34			
Dodge City, Kans.	26-27			0.36														(*)			
Dubuque, Iowa.	14			0.48														0.34			
Duluth, Minn.	16			0.49														0.12			
Durango, Colo.	4-5			3.18														(*)			
Eastport, Me.	22			0.41														0.16			
Elkins, W. Va.	7			1.77														0.42			
El Paso, Tex.	4			0.32														0.27			
Erie, Pa.	17			1.17														0.28			
Escanaba, Mich.	6			1.81														0.34			
Eureka, Cal.	8			0.58														0.26			
Evansville, Ind.	1			0.91														0.64			
Flagstaff, Ariz.	26			0.59														0.24			
Fort Smith, Ark.	15			0.52														0.25			
Fort Wayne, Ind.	1			1.26														0.44			
Fort Worth, Tex.	12			0.37														0.22			
Fresno, Cal.	9			0.08														0.06			
Galveston, Tex.	16	8.28 a.m.	5.10 p.m.	1.48	9.29 a.m.	10.00 a.m.	0.17	0.22	0.39	0.63	0.75	0.86	0.98								
Do.	30	3.30 p.m.	7.35 p.m.	1.37	4.37 p.m.	5.12 p.m.	0.07	0.09	0.37	0.61	0.74	0.80	0.91	0.96							
Grand Haven, Mich.	[1] 30-1	D. N. p.m.	9.15 a.m.	2.20	3.42 a.m.	4.46 a.m.	0.92	0.08	0.13	0.17	0.26	0.31	0.38	0.46	0.55	0.64	0.73	0.82	0.96		
Do.	16	4.35 p.m.	7.45 p.m.	0.76	6.09 p.m.	6.31 p.m.	0.07	0.16	0.32	0.42	0.58	0.62									
Grand Junction, Colo.	5			1.03														0.31			
Grand Rapids, Mich.	1			2.10														0.72			
Green Bay, Wis.	3			1.47														0.54			
Hannibal, Mo.	1	4.23 p.m.	5.26 p.m.	0.38	4.52 p.m.	4.58 p.m.	0.03	0.25	0.28												
Harrisburg, Pa.	18			0.86														0.24			
Hartford, Conn.	18			4.01														0.53			
Hatteras, N. C.	18			1.18														0.52			
Havre, Mont.	2			0.48														0.11			
Helena, Mont.	10-11			1.39														(*)			
Houghton, Mich.	16			0.91														0.35			
Houston, Tex.	16	7.00 a.m.	11.35 a.m.	2.35	7.03 a.m.	8.18 a.m.	0.01	0.20	0.41	0.57	0.69	0.86	1.04	1.15	1.23	1.30	1.45	1.76	2.23		
Do.	30	12.45 p.m.	8.15 p.m.	1.26	2.40 p.m.	3.23 p.m.	0.05	0.06	0.13	0.23	0.33	0.45	0.57	0.75	0.85	0.91					
Huron, S. Dak.	2-3			0.33														0.27			
Independence, Cal.	17			T.														T.			
Indianapolis, Ind.	6-7	6.10 p.m.	D. N. a.m.	1.40	6.14 p.m.	7.01 p.m.	0.01	0.17	0.20	0.21	0.24	0.35	0.59	0.61	0.69	0.78	0.81				
Iola, Kans.	15	1.47 p.m.	4.42 p.m.	1.02	2.25 p.m.	2.40 p.m.	0.15	0.08	0.33	0.42											
Jacksonville, Fla.	26-27	12.23 p.m.	D. N. a.m.	1.56	6.05 p.m.	6.32 p.m.	0.42	0.14	0.32	0.39	0.48	0.58	0.65								
Do.	31	D. N. a.m.	3.30 a.m.	1.34	3.10 a.m.	3.35 a.m.	0.11	0.12	0.32	0.46	0.62	0.76									
Do.	31	10.30 a.m.	5.30 p.m.	1.32	3.58 p.m.	4.06 p.m.	0.75	0.36	0.42												
Kalispell, Mont.	2			0.61														0.23			
Kansas City, Mo.	12	7.25 a.m.	9.20 a.m.	0.69	8.21 a.m.	9.02 a.m.	0.03	0.06	0.17	0.28	0.32	0.36	0.40	0.47	0.60	0.64					
Do.	12-13	11.20 p.m.	D. N. a.m.	0.98	11.30 p.m.	12.08 a.m.	0.03	0.09	0.26	0.38	0.54	0.69	0.76	0.83							
Keokuk, Iowa.	1			1.13														(*)			
Key West, Fla.	27	7.31 p.m.	11.35 p.m.	1.18	9.31 p.m.	11.05 p.m.	0.34	0.13	0.31	0.35	0.42	0.51	0.56	0.63	0.64						
Knoxville, Tenn.	10			2.05														0.58			
La Crosse, Wis.	3			1.07														0.69			

[1] Sept. 30–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 October, 1911, 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.
Lander, Wyo.	1			0.15														0.08			
Lansing, Mich.	[1] 30–1	D. N. p. m.	6.30 p. m.	1.92	6.47 a. m.	7.03 a. m.	1.22	0.11	0.29	0.36	0.40										
La Salle, Ill.	3	6.21 p. m.	7.38 p. m.	0.47	6.39 p. m.	6.53 p. m.	0.01	0.11	0.32	0.45											
Lewiston, Idaho	1			0.26														0.11			
Lexington, Ky.	1			1.07														0.35			
Lincoln, Nebr.	12	2.08 p. m.	3.50 p. m.	0.45	3.18 p. m.	3.33 p. m.	0.09	0.20	0.28	0.35											
Little Rock, Ark.	21			0.33														0.13			
Los Angeles, Cal.	27			0.16														0.16			
Louisville, Ky.	1			1.05														0.43			
Lynchburg, Va.	7	3.45 p. m.	8.30 p. m.	0.63	4.01 p. m.	4.17 p. m.	0.05	0.19	0.29	0.39	0.43										
Macon, Ga.	10	8.10 p. m.	D. N. p. m.	0.92	9.57 p. m.	10.20 p. m.	0.23	0.06	0.32	0.51	0.62	0.67									
Do.	17	D. N. a. m.	4.55 p. m.	1.65	1.36 p. m.	1.57 p. m.	0.32	0.20	0.35	0.41	0.50	0.54									
Do.	27	D. N. a. m.	7.01 a. m.	1.20	4.12 a. m.	4.39 a. m	0.08	0.17	0.39	0.57	0.68	0.77	0.81								
Madison, Wis.	3			1.11														0.62			
Marquette, Mich.	16			0.44														0.22			
Memphis, Tenn.	9			0.19														0.04			
Meridian, Miss.	15	2.55 p. m.	3.35 p. m.	0.53	3.08 p. m.	3.23 p. m.	0.01	0.12	0.37	0.50											
Miami, Florida	13	6.40 p. m.	8.55 p. m.	2.04	6.42 p. m.	7.52 p. m.	0.01	0.07	0.28	0.45	0.71	1.01	1.35	1.55	1.64	1.68	1.74	1.84	2.02		
Do.	29	5.45 a. m.	6.50 a. m.	0.45	6.10 a. m.	6.28 a. m.	0.01	0.07	0.17	0.36	0.44										
Milwaukee, Wis.	3	3.55 p. m.	6.30 p. m.	1.40	5.27 p. m.	6.07 p. m.	0.20	0.17	0.48	0.64	0.88	1.00	1.03	1.09	1.17						
Minneapolis, Minn	3	2.00 a. m.	1.00 p. m.	1.52	3.46 a. m.	4.11 a. m.	0.37	0.07	0.24	0.36	0.43	0.50									
Mobile, Ala.	16	D. N. a. m.	6.15 a. m.	1.30	5.07 a. m.	5.38 a. m.	0.02	0.17	0.31	0.60	0.80	1.05	1.25	1.27							
Modena, Utah	5			0.03														0.03			
Montgomery, Ala.	10	4.15 p. m.	7.20 p. m.	0.94	4.22 p. m.	5.00 p. m.	0.02	0.18	0.43	0.59	0.69	0.76	0.82	0.88	0.92						
Moorhead, Minn.	3			0.39														0.24			
Mount Tamalpais, Cal.	9			0.12														0.09			
Mount Weather, Va.	17–18	4.10 p. m.	D. N. a. m.	2.13	9.00 p. m.	10.40 p. m.	0.43	0.06	0.14	0.31	0.37	0.46	0.56	0.64	0.69	0.75	0.81	0.91	1.16	1.37	
Nantucket, Mass.	15			0.28														0.25			
Nashville, Tenn.	9			1.13														0.46			
New Haven, Conn	18			4.13														0.59			
New Orleans, La.	11			0.66														0.46			
New York, N. Y.	6			0.46														0.31			
Norfolk, Va.	12			0.35														0.25			
Northfield, Vt.	18			1.72														*			
North Head, Wash	3			0.62														0.24			
North Platte, Nebr	5			2.61														*			
Oklahoma, Okla.	12			0.73														0.45			
Omaha, Nebr.	16			0.65														0.25			
Oswego, N. Y.	4			0.66														0.36			
Palestine, Tex.	13	9.25 a. m.	1.15 p. m.	1.50	9.52 a. m.	10.52 a. m.	0.01	0.10	0.21	0.34	0.50	0.66	0.82	0.99	1.06	1.13	1.19	1.31			
Do.	16	2.15 a. m.	9.00 a. m.	0.89	2.18 a. m.	2.39 a. m.	0.02	0.11	0.24	0.38	0.49	0.53									
Parkersburg, W. Va.	17			1.74														0.45			
Pensacola, Fla.	10	1.45 a. m.	4.25 a. m.	0.95	2.21 a. m.	3.10 a. m.	0.06	0.05	0.19	0.32	0.36	0.43	0.45	0.46	0.51	0.71	0.79				
Do.	10	1.05 p. m.	3.15 p. m.	0.78	1.40 p. m.	2.07 p. m.	0.11	0.06	0.16	0.26	0.39	0.56	0.61								
Do.	10	3.45 p. m.	11.00 p. m.	3.30	3.57 p. m.	4.47 p. m.	0.02	0.04	0.23	0.42	0.43	0.43	0.53	0.81	1.13	1.30	1.40				
					4.47 p. m.	5.37 p. m.		1.47	1.52	1.58	1.61	1.68	1.72	1.75	1.80	1.81	1.85				
					5.37 p. m.	6.08 p. m.		1.93	2.00	2.04	2.11	2.15	2.27	2.29							
					7.12 p. m.	7.41 p. m.	2.47	0.08	0.21	0.28	0.34	0.46	0.53								
Do.	11	3.15 p. m.	4.30 p. m.	0.81	3.19 p. m.	3.46 p. m.	0.01	0.15	0.36												
Peoria, Ill.	6	4.20 p. m.	4.38 p. m.	0.30	4.22 p. m.	4.27 p. m.	0.01	0.26	0.52	0.64	0.78	0.80									
Philadelphia, Pa.	21			0.76														0.54			
Phoenix, Ariz.	27			1.11														0.36			
Pierre, S. Dak.	15			0.20														0.08			
Pittsburgh, Pa.	15			0.54														0.40			
Pocatello, Idaho	10			0.69														0.10			
Point Reyes Light, Cal.	8			0.12														0.07			
Port Huron, Mich.	22			0.88														0.47			
Portland, Me.	4			0.35														0.12			
Portland, Oreg.	1			0.52														0.10			
Providence, R. I.	15			0.40														0.21			
Pueblo, Colo.	4			0.27														0.08			
Raleigh, N. C.	17			1.59														0.65			
Rapid City, S. Dak	1			0.40														0.17			
Red Bluff, Cal.	8			0.57														0.39			
Reno, Nev.	26			0.09														0.07			
Richmond, Va.	12	3.10 a. m.	8.20 a. m.	1.27	3.13 a. m.	3.27 a. m.	0.01	0.26	0.55	0.68											
Rochester, N. Y.	4			0.29														0.27			
Roseburg, Oreg.	13			0.48														0.22			
Roswell, N. Mex.	26			0.17														0.17			
Sacramento, Cal.	1			0.18														0.12			
St. Joseph, Mo.	[1] 30–1	9.20 p. m.	3.20 a. m.	4.01	12.48 a. m.	1.38 a. m.	0.32	0.09	0.19	0.23	0.27	0.33	0.40	0.56	0.62	0.72	0.81				
					1.38 a. m.	2.28 a. m.		0.85	0.96	1.00	1.01	1.11	1.38	1.54	1.74	2.01	2.36				
					2.28 a. m.	3.15 a. m.		2.38	2.40	2.61	2.83	3.03	3.16	3.38	3.56	3.65	3.68				
Do.	12	9.50 p. m.	D. N. p. m.	0.84	9.52 p. m.	10.04 p. m.	0.01	0.13	0.36	0.45											
St. Louis, Mo.	1			1.00														0.35			
St. Paul, Minn.	3	2.20 a. m.	1.25 p. m.	1.69	3.43 a. m.	4.26 a. m.	0.22	0.10	0.14	0.34	0.51	0.65	0.70	0.75	0.84	0.89					
Salt Lake City, Utah	10			0.73														0.20			
San Antonio, Tex.	30	8.30 a. m.	10.15 a. m.	0.90	9.16 a. m.	9.45 a. m.	0.10	0.08	0.30	0.49	0.59	0.66	0.73								
Do.	30	10.50 a. m.	3.10 p. m.	1.41	11.57 a. m.	12.20 p. m.	0.25	0.09	0.22	0.30	0.44	0.56									
San Diego, Cal.	26			0.18														0.09			
Sandusky, Ohio	3			0.57														0.52			
San Francisco, Cal	1			0.16														0.14			
San Jose, Cal.	26			0.47														0.21			
San Luis Obispo, Cal.	27			0.12														0.04			
Santa Fe, N. Mex.	4–5			1.83														(*)			
Sault Ste. Marie, Mich.	16–17			0.92														(*)			
Savannah, Ga.	10	10.23 a. m.	1.58 p. m.	1.65	10.29 a. m.	10.54 a. m.	0.01	0.18	0.28	0.37	0.48	0.54									
					11.28 a. m.	12.06 p. m.	0.61	0.09	0.25	0.44	0.58	0.66	0.70	0.78	0.82						
Do.	11	3.47 p. m.	5.15 p. m.	0.65	4.12 p. m.	4.34 p. m.	0.07	0.07	0.15	0.32	0.50	0.57									
Scranton, Pa.	1			1.02														0.43			
Seattle, Wash.	24			0.25														0.19			
Sheridan, Wyo.	17–18			0.42														(*)			
Shreveport, La.	16			0.35														0.28			

[1] Sept. 30–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 October, 1911, 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.
Sioux City, Iowa	5			2.03														0.56			
Southeast Faraion, Cal	1			0.06														0.06			
Spokane, Wash	24			0.16														0.08			
Springfield, Ill	3	8.05 p. m.	D. N. p. m.	0.45	9.26 p. m.	9.39 p. m.	0.01	0.21	0.36	0.41											
Springfield, Mo	1–2	11.03 p. m.	D. N. a. m.	0.73	11.33 p. m.	11.55 p. m.	0.10	0.09	0.16	0.27	0.43	0.52									
Syracuse, N. Y	6			0.44														0.16			
Tacoma, Wash	13			0.35														0.10			
Tampa, Fla	18	D. N. a. m.	7.15 a. m.	1.94	1.51 a. m.	2.26 a. m.	0.31	0.25	0.45	0.57	0.63	0.68	0.81	0.88							
Tatoosh Island, Wash	9			0.82														0.24			
Taylor, Tex	16			0.43														0.28			
Thomasville, Ga	17	9.48 a. m.	4.40 p. m.	1.01	3.10 p. m.	3.30 p. m.	0.41	0.08	0.25	0.29	0.42										
Titusville, Fla	27–28			0.86														(*)			
Toledo, Ohio	3	11.33 a. m.	2.15 p. m.	0.79	12.33 p. m.	12.57 p. m.	0.25	0.15	0.27	0.31	0.39	0.47									
Tonopah, Nev	26			0.13														0.12			
Topeka, Kans	13			0.15														0.15			
Valentine, Nebr	15			2.08														0.31			
Vicksburg, Miss	9			0.41														0.21			
Walla Walla, Wash	1–2			0.51														0.11			
Washington, D. C.	18			1.18														0.77			
Wichita, Kans	26			0.36														0.12			
Williston, N. Dak.	2			0.22														0.08			
Wilmington, N. C.	11	12.50 p. m.	3.20 p. m.	1.01	1.41 p. m.	2.16 p. m.	0.01	0.11	0.27	0.40	0.49	0.62	0.72	0.80							
Winnemucca, Nev	9			0.19														0.10			
Wytheville, Va	17	8.25 a. m.	8.45 p. m.	2.05	12.56 p. m.	1.04 p. m.	0.53	0.24	0.33												
Yankton, S. Dak.	16			1.43														0.62			
Yellowstone Park, Wyo	1–2			0.56														(*)			

TABLE III.—*Data furnished by the Canadian Meteorological Service, October, 1911.*

Districts and 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.
	Ins.	*Ins.*	*Ins.*	°*F.*	°*F.*	°*F.*	°*F.*	°*F.*	°*F.*	*Ins.*	*Ins.*	*Ins.*
St. Johns, N. F	29.76	29.90	−0.01	43.7	− 1.7	51.4	35.9	65	25	7.34	+ 1.99	T.
Sydney, C. B. I	30.00	30.04	+ .08	45.5	− 1.0	53.9	37.0	70	26	2.24	− 2.45	T.
Halifax, N. S	29.96	30.07	+ .07	46.5	− 0.7	54.5	38.4	68	26	2.03	− 3.52	0.5
Grand Manan, N. B	30.03	30.08	+ .08	47.9	+ 1.0	54.0	41.9	69	32	0.92	− 3.79	.....
Yarmouth, N. S	30.01	30.08	+ .06	47.9	+ 0.3	55.0	40.8	64	28	1.62	− 3.08	.....
Charlottetown, P. E. I	29.99	30.03	+ .07	45.0	− 1.5	51.9	38.1	66	28	1.03	− 3.87	1.8
Chatham, N. B	30.02	30.04	+ .08	43.5	+ 0.5	53.3	33.7	66	22	0.58	− 3.38	.....
Father Point, Que	29.98	30.00	+ .05	41.3	+ 1.5	48.5	34.1	63	22	2.19	− 0.71	3.1
Quebec, Que	29.71	30.04	+ .04	43.9	+ 1.5	51.2	36.6	65	23	2.82	− 0.33	2.2
Montreal, Que	29.85	30.06	+ .05	48.2	+ 3.4	54.6	41.7	66	27	2.27	− 0.86	1.5
Stonecliffe, Ont	29.42	30.04	+ .03	43.3	+ 0.5	54.6	32.0	70	15	3.01	+ 0.58	0.2
Ottawa, Ont	29.80	30.13	+ .12	46.8	+ 3.0	55.3	38.3	70	24	2.21	− 0.34	0.2
Kingston, Ont	29.78	30.09	+ .06	48.8	+ 1.8	55.9	41.6	72	27	3.31	+ 0.58	0.8
Toronto, Ont	29.70	30.08	+ .04	49.5	+ 2.9	57.7	41.3	75	27	3.57	+ 1.21	1.2
White River, Ont	28.67	30.00	+ .02	36.9	− 0.2	47.7	26.1	70	4	1.49	− 0.86	0.5
Port Stanley, Ont	29.43	30.07	+ .02	48.2	+ 0.4	56.3	40.1	65	28	4.23	+ 1.25	T.
Southampton, Ont	29.38	.....	.....	47.0	+ 0.9	54.2	39.8	69	32	5.18	+ 2.01	.....
Parry Sound, Ont	29.37	30.07	+ .06	45.6	+ 1.7	53.3	37.8	66	25	5.37	+ 1.45	4.0
Port Arthur, Ont	29.32	30.03	+ .05	41.3	+ 1.4	49.1	33.5	72	13	1.65	− 0.91	T.
Winnipeg, Man	29.21	30.06	+ .08	42.9	+ 3.8	51.3	34.6	73	13	1.84	+ 0.14	2.2
Minnedosa, Man	28.19	30.04	+ .07	39.9	+ 2.1	49.1	30.7	75	8	1.86	+ 0.66	0.1
Qu'Appelle, Sask	27.73	30.01	+ .04	39.1	− 0.3	48.7	29.4	79	7	2.40	+ 1.30	1.0
Medicine Hat, Alberta	27.71	30.00	+ .03	44.6	− 0.2	55.7	33.5	80	14	0.45	− 0.13	.....
Swift Current, Sask	27.47	30.07	+ .10	41.1	− 1.0	51.5	30.8	79	11	0.48	− 0.40	0.6
Calgary, Alberta	26.48	30.06	+ .11	40.4	+ 0.3	51.6	29.1	74	14	0.51	+ 0.03	2.0
Banff, Alberta	25.47	30.12	+ .17	37.1	− 2.2	48.8	25.4	64	7	0.56	− 0.46	0.2
Edmonton, Alberta	27.73	30.05	+ .12	41.7	+ 0.6	54.1	29.4	79	11	0.51	− 0.19	.....
Prince Albert, Sask	28.43	30.00	+ .03	40.0	+ 2.9	50.9	29.1	80	5	0.04	− 0.79	0.3
Battleford, Sask	28.28	30.04	+ .07	42.2	+ 2.6	54.1	30.3	82	8	0.11	− 0.34	.....
Kamloops, B. C	28.76	30.05	+ .09	48.0	+ 1.0	60.4	35.6	88	19	0.03	− 0.58	.....
Victoria, B. C	29.99	30.09	+ .08	50.0	+ 0.8	57.3	42.8	66	34	0.61	− 1.76	.....
Barkerville, B. C	25.74	30.09	+ .15	37.6	− 2.1	46.6	28.5	68	14	0.84	− 1.86	3.7
Dawson, Yukon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hamilton, Bermuda	29.90	30.06	+ .04	73.7	+ 0.7	79.0	68.3	82	64	1.40	− 5.31	.....

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