DESCRIPTION OF TABLES AND CHARTS.

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Table I gives the data ordinarily needed for climatological studies for about 157 Weather Bureau stations making simultaneous observations at 8 a. m. and 8 p. m., seventy-fifth meridian time daily, and for about 37 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 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

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

Table III gives, for about 30 stations of the Canadian Meteorological Service, the means of pressure and temperature, total precipitation and depth of snowfall, and the respective departures from normal values, except in the case of snowfall.

Table IV gives the heights of rivers referred to zeros of gages. These zeros are arbitrarily fixt, but, as a rule, are set at the plane of lowest water, if possible. The river gages are read once daily (8 a. m., seventy-fifth meridian time), and in times of emergency more frequently. The table shows the highest and lowest of all readings taken, the means of the regular daily readings, and the absolute monthly ranges.

The publication of the data from cooperative observers, heretofore appearing as Table II, was discontinued with the issue for December, 1907. The values will continue to be published in the monthly reports of the climatological services of the several States, and in the usual manner in the quarto Annual Report of the Chief of the Weather Bureau and are used in compiling charts IV, VII, and VIII.

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

Chart II, tracks of centers of high areas, and Chart III, tracks of centers of low areas. The roman numerals show number and chronological order of the centers. The figures within the circles show the days of the month; the letters *a* and *p* indicate, respectively, the positions at 8 a. m. and 8 p. m., seventy-fifth meridian time. Within each circle is also given (Chart II) 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.—Total precipitation. This chart is based on all reports from regular and cooperative observers. The scale of shades showing the amount is given on the chart. Where the monthly amounts are too small to justify shading, and over sections of the country where the stations are too widely separated or the topography is too diversified to warrant reasonable accuracy in shading, the actual amounts 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 V.—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 which does not relate to the nighttime.

The monthly totals of hours and the percentages of possible sunshine as taken from records by Marvin's thermometric sunshine recorder, will be found in Part VI of the quarto Annual Report of the Chief of the Weather Bureau for the current year.

Chart VI.—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 MONTHLY WEATHER REVIEW for January, 1902. The pressures have also been reduced to the mean of the twenty-four 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 8 p. m. observation, respectively, at stations taking but a single observation. The diurnal corrections so applied will be found in Annual Report of the Chief of the Weather Bureau, 1900–1901, Volume II, Table 27, pp. 140–164.

The isotherms on the sea-level plane have been constructed by means of the data summarized in the Annual Report of the Chief of the Weather Bureau for 1900–1901, Volume II, chapter 8, Table 48, pp. 640–771. The correction $t_0 - t$, or temperature on the sea-level plane minus the station temperature, as given by Table 48 of the above report, is added to the observed surface temperature to obtain the adopted sea-level temperature.

The prevailing wind directions are determined from the continuous records for the month 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.

Chart VII.—Total snowfall. This Chart 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.—Depth of snow on ground at the end of month, exprest in inches and tenths.

TABLE I.—*Climatological data for U. S. Weather Bureau stations, January, 1909.*

Stations.	Elevation of instruments.			Pressure, in inches.			Temperature of the air, in degrees Fahrenheit.									Mean wet thermometer.	Mean temperature of the dew-point.	Mean relative humidity, per cent.	Precipitation, in inches.			Wind.					Clear days.	Partly cloudy days.	Cloudy days.	Average cloudiness during daylight, tenths.	Total snowfall.
	Barometer above sea level, feet.	Thermometers above ground.	Anemometer above ground.	Actual, reduced to mean of 24 hours.	Sea level, reduced to mean of 24 hrs.	Departure from normal.	Mean max. + mean min. ÷ 2.	Departure from normal.	Maximum.	Date.	Mean maximum.	Minimum.	Date.	Mean minimum.	Greatest daily range.				Total.	Departure from normal.	Days with .01, or more.	Total movement, miles.	Prevailing direction.	Maximum velocity. Miles per hour.	Maximum velocity. Direction.	Maximum velocity. Date.					
New England.							26.9	+ 2.5										77	3.58	+ 0.4										7.1	
Eastport	76	67	85	30.00	30.09	+ .09	21.6	+ 1.5	52	6	30	− 6	16	13	47	20	16	79	7.09	+ 3.2	16	11,541	w.	60	s.	6	7	6	18	7.3	26.0
Greenville	1,070	6	....	29.88	30.11	.....	13.0	.....	46	6	23	−21	17	3	41	.....	.....	....	4.51	.....	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Portland, Me.	103	81	117	29.99	30.12	+ .07	23.0	+ 1.0	54	6	31	− 4	19	15	32	20	16	74	4.71	+ 0.9	11	8,300	nw.	35	nw.	28	8	9	14	6.5	32.3
Concord	288	70	79	29.80	30.14	+ .09	23.5	+ 2.3	55	6	32	−11	19	15	36	.....	.....	....	2.98	− 0.4	11	4,055	nw.	30	nw.	28	10	5	16	6.3	18.6
Burlington	404	12	47	29.67	30.14	+ .09	18.6	+ 2.3	46	5	28	−18	19	9	39	.....	.....	....	2.38	+ 0.6	14	11,016	s.	54	s.	19	6	8	17	7.2	18.4
Northfield	876	16	70	29.14	30.14	+ .09	18.3	+ 3.2	50	11	29	−26	19	7	54	17	15	87	3.55	+ 1.1	17	7,658	s.	41	nw.	28	1	13	17	7.8	37.0
Boston	125	115	188	29.98	30.12	+ .07	30.3	+ 3.3	60	5	38	3	19	22	32	28	23	74	3.94	+ 0.1	14	8,742	w.	39	nw.	26	2	10	19	7.6	11.2
Nantucket	12	14	90	30.07	30.08	+ .04	34.8	+ 2.7	53	6	41	20	18	29	24	33	29	81	4.54	+ 1.1	16	12,831	nw.	48	sw.	6	6	5	20	7.7	5.9
Block Island	26	11	46	30.08	30.11	+ .04	33.2	+ 1.8	56	6	39	11	19	28	29	31	27	77	3.95	+ 0.1	14	15,046	nw.	55	nw.	28	7	4	20	7.1	6.2
Narragansett	.....	9	....	.....	.....	.....	30.6	+ 2.2	57	6	39	3	19	22	33	.....	.....	....	5.07	.....	15	.....	nw.	.....	.....	.....	10	5	16	.....	8.5
Providence	160	141	165	29.95	30.14	+ .08	29.6	+ 2.4	59	5	38	3	19	22	33	27	22	74	3.06	− 0.8	16	8,113	n.	41	nw.	26	4	10	17	7.1	10.4
Hartford	159	122	140	29.96	30.14	+ .07	29.0	+ 3.5	56	22	37	− 2	19	21	32	26	21	75	2.80	− 1.0	15	6,319	n.	32	nw.	26	4	8	19	7.7	9.4
New Haven	106	116	155	30.00	30.12	+ .04	30.7	+ 3.4	58	6	38	1	19	23	34	27	22	73	3.38	− 0.5	16	7,693	ne.	37	nw.	28	10	6	15	6.3	9.6
Mid. Atlantic States.							35.8	+ 4.0										77	2.57	− 0.7										6.6	
Albany	97	102	115	30.05	30.16	+ .09	25.6	+ 3.1	53	6	34	−12	19	18	35	23	19	78	3.00	+ 0.4	16	6,925	s.	31	s.	19	6	7	18	7.1	13.6
Binghamton	871	78	90	29.17	30.13	+ .05	26.8	+ 3.7	56	24	35	−11	19	19	36	.....	.....	....	2.92	+ 0.9	17	5,022	w.	24	nw.	31	2	2	27	8.6	12.5
New York	314	108	350	29.78	30.14	+ .04	33.2	+ 3.0	57	5	40	7	19	27	27	30	26	75	3.33	− 0.5	11	10,231	nw.	57	nw.	28	6	10	15	6.7	9.5
Harrisburg	374	94	104	29.75	30.17	+ .07	31.2	+ 2.5	55	25	38	5	19	24	29	28	23	74	1.83	− 1.0	12	5,408	e.	36	w.	27	6	10	15	6.7	7.8
Philadelphia	117	116	184	30.04	30.17	+ .06	35.6	+ 3.8	58	5	42	9	19	29	27	32	28	75	2.52	− 0.9	14	8,140	nw.	38	nw.	28	8	10	13	6.3	2.9
Scranton	805	111	119	29.26	30.15	+ .06	29.2	+ 3.7	56	22	37	− 2	19	22	35	26	20	70	2.86	+ 0.1	17	5,400	sw.	34	w.	27	3	5	23	8.4	11.6
Atlantic City	52	37	48	30.08	30.14	+ .03	37.1	+ 4.6	64	24	45	11	19	30	26	34	30	79	3.29	− 0.1	13	6,683	nw.	30	se.	17	7	6	18	6.9	4.5
Cape May	17	48	52	30.15	30.17	+ .05	37.5	+ 3.4	63	24	44	10	19	31	26	35	.....	....	2.79	− .06	12	7,283	nw.	36	nw.	28	7	12	12	6.1	4.0
Baltimore	123	100	113	30.04	30.17	+ .05	35.6	+ 2.2	61	25	42	12	19	29	25	32	28	75	2.78	− 0.4	12	5,067	nw.	30	nw.	6	5	6	20	7.3	4.4
Washington	112	59	76	30.04	30.17	+ .04	36.0	+ 3.1	61	25	43	13	19	29	25	32	28	75	2.84	− 0.5	9	5,389	nw.	39	nw.	28	7	8	16	6.7	3.7
Cape Henry	18	9	58	30.12	30.14	+ .01	41.6	+ 4.4	74	24	52	25	31	37	31	.....	.....	....	1.73	− 1.6	11	10,875	n.	58	nw.	28	15	5	11	4.8	0.5
Lynchburg	681	83	88	29.42	30.19	+ .06	41.2	+ 5.4	77	24	51	15	31	31	36	36	32	76	1.36	− 2.4	8	3,588	nw.	36	nw.	27	9	7	15	6.5	0.1
Mount Weather	1,725	10	54	28.25	30.14	+ .01	33.6	+ 6.3	67	24	42	7	8	26	31	30	26	79	2.84	− 0.5	9	12,739	nw.	69	nw.	31	9	10	12	6.2	5.0
Norfolk	91	102	111	30.06	30.16	+ .03	46.1	+ 5.7	74	24	54	22	31	38	32	11	38	81	1.49	− 1.9	10	7,205	n.	34	nw.	28	11	8	12	5.7	1.0
Richmond	144	145	153	30.02	30.18	+ .05	42.2	+ 4.2	74	24	51	20	7	34	34	.....	.....	....	3.00	0.0	11	6,183	s.	35	nw.	26	10	6	15	6.0	0.2
Wytheville	2,298	40	47	27.73	30.18	+ .04	38.6	+ 5.6	65	24	48	3	31	30	34	34	32	84	2.53	− 1.8	9	4,408	w.	30	w.	29	12	8	16	5.7	2.4
S. Atlantic States.							50.2	+ 5.0										80	1.63	− 2.1										5.6	
Asheville	2,255	53	75	27.76	30.19	+ .04	42.4	+ 7.0	71	24	52	2	31	33	36	37	35	82	1.58	− 3.1	11	6,846	se.	38	nw.	30	10	9	12	6.2	0.3
Charlotte	773	68	76	29.33	30.19	+ .04	45.2	+ 4.8	75	25	54	14	31	36	28	40	36	76	1.64	− 2.6	9	5,242	ne.	40	sw.	29	7	15	9	5.9	T.
Hatteras	11	12	47	30.13	30.14	.00	50.6	+ 4.8	72	23	57	25	31	44	28	47	45	88	3.05	− 1.9	9	11,192	ne.	44	nw.	30	16	6	9	4.9	
Manteo	.....	.....	.....	.....	.....	.....	49.2	.....	75	25	58	24	31	40	51	.....	.....	....	3.70	+ 0.9	5	.....	n.	.....	.....	.....	17	6	8	.....	
Raleigh	376	71	79	29.76	30.18	+ .05	46.0	+ 5.6	76	25	56	16	31	36	29	40	34	72	1.90	− 1.6	10	6,034	ne.	35	nw.	30	9	12	10	5.7	
Wilmington	78	81	91	30.09	30.18	+ .04	50.6	+ 5.0	79	25	60	19	31	42	26	45	41	80	1.06	− 2.4	6	5,819	n.	36	sw.	29	10	12	9	5.0	
Charleston	48	14	92	30.11	30.16	+ .01	53.6	+ 4.3	78	25	61	19	31	46	28	48	45	82	0.61	− 2.8	5	7,574	n.	37	w.	30	9	10	12	5.5	
Columbia, S. C.	351	41	57	29.79	30.18	+ .03	49.2	+ 4.1	79	25	59	15	31	40	32	43	38	73	1.54	− 1.8	5	5,196	ne.	36	w.	30	9	10	12	5.7	
Augusta	180	89	97	29.98	30.18	+ .02	50.2	+ 4.3	77	25	60	16	31	41	34	45	41	79	0.99	− 3.2	6	4,720	ne.	36	w.	29	9	8	14	6.0	
Savannah	65	81	89	30.10	30.17	+ .02	55.0	+ 5.1	80	25	64	19	31	46	24	49	46	82	0.65	− 2.5	4	5,168	ne.	35	w.	30	11	9	11	5.5	
Jacksonville	43	101	129	30.11	30.16	+ .01	59.2	+ 5.3	79	24	67	23	31	51	24	54	53	91	1.17	− 2.0	5	6,548	ne.	56	sw.	29	12	9	10	5.1	
Florida Peninsula.							68.3	+ 4.8										83	2.62	0.0										4.6	
Jupiter	28	10	48	30.08	30.11	+ .01	68.6	+ 4.3	80	26	75	37	31	62	22	63	60	81	5.98	+ 2.4	17	7,876	e.	35	w.	30	10	15	6	5.0	
Key West	22	10	53	30.07	30.09	− .01	71.0	+ 2.2	79	29	76	54	31	66	15	66	64	82	1.82	− 0.2	5	7,044	ne.	58	w.	5	18	7	6	3.8	
Sand Key	25	41	71	30.06	30.09	− .01	71.2	.....	78	28	73	58	31	69	10	.....	.....	....	0.89	− 1.1	6	12,447	ne.	55	nw.	5	15	12	4	4.5	
Tampa	35	79	96	30.10	30.14	+ .02	65.2	+ 7.8	81	24	74	30	31	57	24	59	57	85	1.78	− 1.0	4	5,459	ne.	37	w.	29	10	13	8	5.1	
East Gulf States.							52.5	+ 5.1										78	1.85	− 3.1										5.6	
Atlanta	1,174	190	216	28.92	30.19	+ .04	46.1	+ 3.9	72	25	54	8	31	38	31	42	39	80	1.82	− 3.5	7	9,742	e.	60	nw.	29	11	6	14	5.9	T.
Macon	370	78	87	29.77	30.18	+ .02	50.1	+ 4.5	77	24	59	14	31	42	32	.....	.....	....	1.54	− 3.6	7	4,771	ne.	32	w.	29	10	8	13	5.7	T.
Thomasville	273	8	58	29.87	30.17	+ .01	57.0	+ 6.0	82	24	68	19	31	46	33	50	46	80	0.51	− 3.6	5	3,934	e.	30	nw.	30	13	9	9	4.8	
Pensacola	56	79	96	30.11	30.17	+ .03	56.6	+ 4.3	76	26	64	22	31	49	27	.....	.....	....	1.71	− 2.3	6	6,503	ne.	43	nw.	29	11	12	8	4.9	
Anniston	741	9	58	29.40	30.21	+ .05	48.4	+ 6.2	75	25	58	10	31	39	35	.....	.....	....	2.27	− 3.0	9	5,396	se.	35	w.	29	7	5	19	6.9	T.
Birmingham	700	11	48	29.42	30.21	+ .05	49.4	+ 4.1	76	25	58	11	31	41	33	44	40	76	2.65	− 2.7	10	6,210	se.	36	nw.	29	8	11	12	6.3	T.
Mobile	57	98	106	30.11	30.17	+ .02	56.5	+ 6.7	76	26	66	28	31	48	29	51	47	78	1.50	− 3.4	10	5,500	n.	34	w.	29	16	10	5	4.3	
Montgomery	223	100	112	29.94	30.20	+ .04	52.1	+ 4.4	77	25	62	16	31	43	32	47	43	76	2.13	− 3.0	5	5,301	nw.	35	nw.	30	11	6	14	5.4	
Meridian	375	84	93	29.78	30.19	+ .03	50.8	+ 5.8	76	23	61	16	31	41	35	46	43	79	1.30	− 4.2	7	4,258	n.	38	w	29	11	6	14	5.8	
Vicksburg	247	62	74	29.91	30.20	+ .04	51.6	+ 4.6	77	24	60	20	31	43	32	46	42	74	1.24	− 4.4	9	5,433	e.	44	nw.	29	8	7	16	6.2	
New Orleans	51	88	121	30.11	30.17	+ .04	58.4	+ 5.4	79	23	66	29	31	51	26	53	51	84	3.72	− 0.9	7	6,155	n.	37	nw.	29	8	14	9	5.5	
West Gulf States.							50.4	+ 4.9										78	0.39	− 2.6										6.5	
Shreveport	249	77	84	29.90	30.18	+ .04	51.6	+ 5.4	79	23	60	20	12	43	40	46	43	77	0.63	− 3.8	6	5,906	se.	40	nw.	29	7	7	17	6.4	0.8
Bentonville	1,303	11	44	28.73	30.14	.00	37.6	+ 3.5	73	23	46	− 6	12	30	51	.....	.....	....	1.57	− 1.1	9	6,317	s.	38	sw.	28	4	4	23	8.2	9.9
Fort Smith	457	79	94	29.65	30.14	.00	42.4	+ 4.1	77	22	50	6	12	34	47	38	34	76	0.62	− 1.9	7	7,251	e.	64	w.	28	4	5	22	7.8	3.8
Little Rock	357	139	147	29.78	30.17	+ .02	43.8	+ 3.2	74	23	51	13	12	37	37	40	36	74	0.71	− 4.1	10	7,846	s.	56	nw.	29	4	7	20	7.7	0.4
Brownsville	57	4	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Corpus Christi	20	69	77	30.12	30.14	+ .04	59.4	+ 5.9	79	4	66	24	12	53	43	55	51	82	T.	− 2.2	0	9,526	se.	39	s.	21	10	12	9	5.4	T.
Fort Worth	670	106	114	29.43	30.15	+ .03	49.0	+ 4.7	85	22	59	8	12	39	58	.....	.....	....	0.09	− 0.8	2	9,469	s.	48	nw.	29	8	15	8	5.4	T.
Galveston	54	106	112	30.12	30.18	+ .05	57.8	+ 5.1	74	26	63	28	12	52	34	56	54	91	0.02	− 3.6	2	8,188	se.	50	nw.	29	14	8	9	4.9	
Palestine	510	73	79	29.61	30.15	+ .03	52.0	+ 5.5	80	22	61	14	12	44	43	47	43	78	0.19	− 3.7	3	6,817	s.	37	s.	28	0	12	19	8.0	0.1
San Antonio	701	80	91	29.38	30.12	+ .02	57.2	+ 6.1	83	23	67	20	12	47	35	49	43	68	0.10	− 1.6	1	5,791	se.	42	n.	29	8	14	9	5.7	T.
Taylor	583	55	63	29.54	30.16	+ .05	53.0	+ 5.5	82	23	63	15	12	43	44	.....	.....	....	0.01	− 2.8	1	7,743	n.	42	n.	29	11	9	11	5.5	T.
Ohio Val. and Tenn.							33.6	+ 4.5										80	2.36	− 1.0										8.0	
Chattanooga	762	106	112	29.38	30.21	+ .05	46.1	+ 5.5	74	25	54	6	31	38	36	41	37	76	3.44	− 2.1	10	5,152	s.	36	sw.	29	4	4	23	7.5	0.2
Knoxville	1,004	93	100	29.10	30.18	+ .03	43.8	+ 6.3	72	25	52	10	31	36	33	40	37	81	3.17	− 1.8	10	4,130	ne.	32	sw.	29	1	5	25	8.6	T.
Memphis	399	76	97	29.77	30.21	+ .05	43.6	+ 3.3	73	23	51	11	31	36	36	39	36	78	1.19	− 4.0	7	7,560	s.	64	w.	29	4	2	25	8.1	0.6
Nashville	546	79	91	29.61	30.21	+ .05	42.8	+ 3.8	73	23	51	5	31	34	35	39	36	81	2.34	− 2.5	13	5,325	se.	36	sw.	29	3	6	22	8.1	0.5
Lexington	989	75	102	29.08	30.18	+ .05	37.2	+ 4.2	68	24	45	2	31	30	37	.....	.....	....	3.35	− 0.5	14	9,205	s.	48	sw.	29	3	5	23	8.1	10.0
Louisville	525	111	132	29.60	30.20	+ .06	37.8	+ 3.5	72	24	45	3	31	30	38	35	31	76	3.25	− 0.6	12	6,889	s.	42	sw.	29	1	7	23	8.4	10.0
Evansville	431	72	82	29.69	30.18	+ .04	35.8	+ 3.5	70	23	43	2	31	29	43	.....	.....	....	2.84	− 0.8	14	6,715	s.	38	w.	29	2	7	22	8.2	10.5
Indianapolis	822	154	164	29.24	30.16	+ .04	31.3	+ 3.1	67	23	38	4	31	24	28	29	27	83	2.76	0.0	15	8,469	s.	39	sw.	29	4	3	24	8.3	10.7
Cincinnati	628	152	160	29.48	30.18	+ .06	35.7	+ 3.4	69	24	43	7	31	29	27	33	29	77	2.57	− 0.8	15	5,613	se.	36	w.	29	3	6	22	8.0	11.3
Columbus	824	173	224	29.25	30.16	+ .05	32.8	+ 4.2	66	24	40	4	31	26	27	30	27	81	2.52	− 0.4	15	9,892	s.	44	nw.	30	3	10	18	7.6	13.4
Pittsburg	842	336	352	29.22	30.16	+ .05	35.1	+ 4.4	66	24	43	10	13	28	32	32	28	76	3.10	+ 0.2	15	8,844	s.	42	nw.	27	5	8	18	7.5	16.3
Parkersburg	638	77	84	29.50	30.17	+ .05	38.0	+ 6.7	71	24	46	11	31	30	31	34	31	84	3.62	+ 0.4	13	4,816	s.	28	nw.	29	4	6	21	8.0	8.4
Elkins	1,940	41	50	28.06	30.19	+ .07	35.8	+ 6.8	70	22	46	6	31	26	41	32	30	86	2.98	− 0.4	16	3,137	w.	34	w.	27	7	6	18	7.1	4.8
Lower Lake Region.							28.3	+ 4.2										80	2.93	+ 0.3										7.9	
Buffalo	767	178	206	29.26	30.12	+ .05	28.7	+ 4.0	57	24	35	3	31	22	29	27	24	81	3.12	− 0.2	18	13,442	sw.	60	sw.	19	4	6	21	7.6	19.5
Canton	448	10	71	29.63	30.13	.....	18.3	+ 2.0	48	5	28	−23	13	9	49	.....	.....	....	3.00	− 0.2	15	9,378	sw.	46	w.	6	3	8	20	8.0	13.4
Oswego	335	76	91	29.74	30.13	+ .06	26.6	+ 2.7	56	24	34	− 8	19	19	42	25	22	83	3.38	+ 0.7	19	9,954	s.	38	nw.	28	0	5	26	9.0	25.7
Rochester	523	81	102	29.54	30.14	+ .07	28.8	+ 4.8	64	24	35	0	13	22	32	26	22	78	2.82	− 0.3	15	7,223	sw.	37	w.	25	0	7	24	8.5	22.5
Syracuse	597	97	113	29.46	30.12	+ .05	27.0	+ 4.0	60	24	35	− 9	19	19	39	.....	.....	....	3.00	+ 0.9	18	9,924	s.	46	w.	6	1	4	26	8.8	32.5
Erie	713	92	102	29.32	30.12	+ .04	31.8	+ 5.3	65	24	38	6	13	26	26	29	25	76	2.44	− 0.6	16	9,792	s.	36	nw.	27	3	4	24	8.3	17.1
Cleveland	762	190	201	29.28	30.13	+ .04	31.2	+ 5.0	65	24	38	1	13	25	24	29	25	77	2.96	+ 0.5	18	12,877	s.	44	nw.	31	1	9	21	8.0	23.5
Sandusky	629	62	70	29.42	30.13	+ .04	31.3	+ 5.0	65	24	38	2	13	25	26	.....	.....	....	2.52	+ 0.4	14	7,057	sw.	31	n.	30	6	7	18	7.1	15.3
Toledo	628	207	246	29.44	30.14	+ .05	30.6	+ 5.0	66	23	38	3	13	23	28	28	25	81	3.01	+ 1.1	13	11,695	sw.	43	ne.	16	7	8	16	6.5	15.8
Detroit	730	218	258	29.31	30.13	+ .05	28.6	+ 4.3	61	24	35	4	7	22	29	26	23	81	2.51	+ 0.5	11	11,911	sw.	50	e.	29	5	7	19	7.1	11.4

TABLE I.—*Climatological data for U. S. Weather Bureau stations, January, 1909.*—Continued.

Stations.	Elevation of instruments.			Pressure, in inches.			Temperature of the air, in degrees Fahrenheit.												Precipitation, in inches.			Wind.										
	Barometer above sea level, feet.	Thermometers above ground.	Anemometer above ground.	Actual, reduced to mean of 24 hours.	Sea level, reduced to mean of 24 hrs.	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 .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 during daylight, tenths.	Total snowfall.
Upper Lake Region.							21.4	+ 3.3										81	1.59	— 0.4										7.1	
Alpena	609	13	92	29.42	30.11	+ .07	22.2	+ 3.5	49	24	29	— 5	7	16	27	21	18	85	1.18	— 1.0	11	9,899	sw.	44	w.	24	3	10	18	7.5	3.8
Escanaba	612	40	82	29.42	30.12	+ .07	18.6	+ 4.1	43	25	26	—17	12	12	33	17	13	78	0.74	— 0.8	12	8,223	sw.	40	n.	30	8	5	18	6.7	4.5
Grand Haven	682	54	92	29.41	30.13	+ .06	26.7	+ 2.2	57	23	33	1	6	21	22	25	23	84	2.44	— 0.4	12	10,586	se.	40	n.	30	5	7	19	7.3	11.3
Grand Rapids	707	121	162	29.33	30.13	+ .07	27.4	+ 3.6	59	24	34	1	6	21	25	25	23	83	2.20	— 0.6	8	9,557	s.	42	w.	24	4	9	18	7.7	9.0
Houghton	668	66	74	29.32	30.09	+ .04	16.4	+ 1.9	47	26	24	—17	7	9	33	....	....	....	1.51	— 0.5	19	6,127	nw.	38	n.	29	4	7	20	7.5	17.7
Marquette	734	77	116	29.27	30.11	+ .07	18.8	+ 2.9	48	26	26	—15	7	12	24	16	12	75	1.07	— 1.0	13	10,174	w.	46	nw.	29	7	9	15	6.4	8.4
Port Huron	638	70	120	29.40	30.12	+ .06	27.1	+ 5.3	62	24	34	2	13	20	29	25	21	80	2.37	+ 0.5	11	10,022	nw.	45	w.	24	8	3	20	7.2	14.5
Sault Sainte Marie	614	40	61	29.39	30.12	+ .09	16.6	+ 3.3	40	4	24	—14	31	9	30	15	11	82	1.61	— 0.6	15	8,015	e.	52	w.	25	5	4	22	8.0	10.3
Chicago	823	140	310	29.23	30.15	+ .05	28.8	+ 4.1	65	23	35	—10	6	22	42	27	24	81	1.96	0.0	8	9,946	sw.	48	nw.	29	4	5	22	7.7	8.6
Milwaukee	681	122	139	29.38	30.15	+ .07	24.4	+ 4.6	54	4	31	—17	6	17	40	23	20	84	2.29	+ 0.3	8	8,955	nw.	37	e.	29	7	10	14	6.1	12.8
Green Bay	617	49	86	29.42	30.12	+ .06	19.3	+ 4.7	41	26	27	—20	6	12	42	17	14	78	0.66	— 1.0	7	8,867	sw.	47	n.	29	6	7	18	7.4	4.8
Duluth	1,133	11	47	28.83	30.12	+ .03	10.0	— 0.4	40	26	19	—34	6	1	40	9	7	86	1.02	0.0	11	12,382	w.	71	nw.	29	7	12	12	5.9	3.7
North Dakota.							4.3	+ 0.2										88	0.42	— 0.2										5.3	
Moorhead	940	8	57	29.10	30.17	+ .03	5.3	+ 2.6	37	18	15	—28	6	—4	41	4	2	89	0.96	+ 0.2	10	7,836	nw.	44	nw.	28	14	5	12	4.9	10.3
Bismarck	1,674	8	57	28.28	30.19	+ .06	6.3	— 0.4	48	20	16	—30	6	—4	42	4	1	83	0.21	— 0.3	5	8,007	nw.	52	nw.	28	10	12	9	5.4	2.1
Devils Lake	1,482	11	44	28.44	30.13	+ .01	1.2	+ 0.9	41	20	10	—37	6	—8	34	0	—1	89	0.26	— 0.3	5	10,427	w.	48	n.	28	11	10	10	5.3	4.5
Williston	1,875	14	56	28.00	30.08	— .03	4.4	— 2.1	46	20	16	—37	6	—7	46	3	1	89	0.31	— 0.3	5	6,963	sw.	41	nw.	16	12	8	11	5.6	3.1
Upper Miss. Valley.							24.9	+ 3.4										83	1.86	+ 0.1										7.3	
Minneapolis	....	102	208	....	....	....	14.5	....	44	26	22	—26	6	6	43	....	....	....	1.37	+ 0.7	8	9,287	se.	53	n.	29	10	7	14	6.0	12.7
St. Paul	837	171	179	29.19	30.14	+ .03	14.4	+ 2.8	43	26	23	—27	6	6	41	13	9	77	1.56	+ 0.7	6	8,628	se.	54	n.	29	8	13	10	5.4	13.2
La Crosse	714	10	49	29.34	30.16	+ .05	18.3	+ 3.1	46	26	26	—22	6	10	38	....	....	....	1.53	+ 0.4	8	4,712	s.	24	s.	18	7	7	17	6.7	12.5
Madison	974	70	78	29.05	30.16	+ .06	20.0	+ 3.5	50	23	28	—22	6	13	39	18	15	81	2.33	+ 0.8	6	8,534	nw.	40	ne.	29	8	5	18	6.9	13.6
Charles City	1,015	10	49	29.03	30.16	+ .02	17.2	+ 5.8	53	23	26	—23	6	9	38	16	15	93	1.99	+ 1.0	10	6,387	s.	36	n.	29	5	5	21	7.7	14.1
Davenport	606	71	79	29.47	30.17	+ .05	24.9	+ 4.1	66	23	33	—15	6	17	37	23	21	87	1.72	+ 0.2	10	5,846	nw.	36	nw.	29	4	7	20	7.8	6.6
Des Moines	861	84	101	29.20	30.15	+ .01	22.8	+ 2.4	59	23	31	—15	6	15	37	21	19	85	1.61	+ 0.4	7	6,884	sw.	44	nw.	29	4	6	21	7.7	11.5
Dubuque	698	100	117	29.40	30.19	+ .07	21.4	+ 3.1	55	23	30	—19	6	13	35	20	18	86	1.98	+ 0.5	11	5,279	s.	31	nw.	29	5	5	21	7.3	10.0
Keokuk	614	64	77	29.47	30.18	+ .04	28.5	+ 4.8	72	23	37	—10	7	20	41	25	22	81	1.26	— 0.4	6	6,030	nw.	37	nw.	29	8	7	16	6.6	4.6
Cairo	356	87	93	29.80	30.20	+ .04	37.4	+ 2.6	72	23	45	5	31	30	44	34	29	74	2.54	— 1.3	12	8,628	s.	56	w.	29	4	2	25	8.2	4.1
La Salle	536	56	64	29.58	30.18	+ .07	26.7	+ 4.4	68	23	34	—11	6	19	36	....	....	....	1.28	— 0.9	10	6,605	nw.	39	nw.	29	2	9	20	7.7	2.9
Peoria	609	11	45	29.48	30.17	+ .05	26.3	+ 3.2	71	23	34	— 9	6	18	40	25	22	84	1.55	— 0.6	9	6,901	s.	38	nw.	29	4	9	18	7.4	2.7
Springfield, Ill.	644	10	92	29.45	30.16	+ .03	29.1	+ 2.8	73	23	37	— 3	6	22	44	27	23	80	2.03	— 0.2	12	7,508	s.	36	nw.	29	4	2	25	8.1	6.4
Hannibal	534	75	109	29.57	30.17	+ .04	29.4	+ 2.7	77	23	38	— 7	12	21	45	....	....	....	1.95	— 0.2	8	7,571	s.	46	nw.	29	6	4	21	7.5	5.3
St. Louis	567	208	217	29.53	30.16	+ .02	32.8	+ 1.8	73	23	40	— 1	31	25	46	30	27	80	3.20	+ 0.9	11	8,680	s.	52	nw.	29	3	5	23	8.2	13.6
Missouri Valley.							23.8	+ 2.7										80	0.95	0.0										6.5	
Columbia, Mo.	784	11	84	29.30	30.16	+ .03	30.6	+ 3.4	77	23	39	—11	12	22	39	....	....	....	2.48	+ 0.2	7	7,205	s.	60	nw	29	8	6	17	6.5	11.6
Kansas City	963	116	181	29.08	30.16	+ .01	29.5	+ 2.3	69	23	38	— 6	6	22	32	27	23	78	1.25	+ 0.1	8	9,849	s.	74	nw.	29	5	10	16	6.9	5.3
Springfield, Mo	1,324	98	104	28.70	30.14	.00	34.0	+ 2.7	75	23	42	— 3	12	26	48	32	30	87	1.71	— 1.0	6	8,961	s.	59	sw.	28	5	6	20	7.4	10.8
Iola	984	11	50	29.09	30.18	+ .04	32.2	+ 4.6	70	23	40	— 6	12	24	33	....	....	....	0.64	— 0.3	8	7,423	s.	44	nw.	29	2	6	23	8.4	3.5
Topeka	....	85	89	....	....	....	28.2	+ 2.6	66	22	37	—10	12	20	32	....	....	....	0.44	— 0.5	7	7,978	s.	58	nw.	29	7	10	14	6.6	5.1
Lincoln	1,189	11	84	28.84	30.17	+ .02	23.3	+ 2.1	63	3	33	—14	6	14	36	20	15	75	0.85	+ 0.2	4	8,856	s.	72	nw.	28	6	8	17	6.8	5.2
Omaha	1,105	115	121	28.93	30.17	+ .02	22.8	+ 2.3	57	23	31	—13	6	15	36	21	16	78	1.00	+ 0.4	5	7,892	s.	66	nw.	28	5	8	18	7.1	5.0
Valentine	2,598	47	54	27.27	30.14	+ .02	19.4	+ 1.2	58	27	31	—23	11	8	46	16	12	80	0.75	+ 0.2	6	7,764	w.	56	nw.	28	12	18	1	4.1	8.4
Sioux City	1,135	96	164	28.89	30.17	+ .02	19.2	+ 3.6	54	3	27	—17	5	11	36	....	....	....	0.60	0.0	5	11,096	nw.	72	nw.	29	8	8	15	6.5	7.0
Pierre	1,572	70	75	28.40	30.17	+ .04	15.8	+ 1.9	51	20	25	—18	6	6	39	13	7	71	0.27	— 0.2	6	7,533	e.	61	nw.	28	9	11	11	5.4	3.9
Huron	1,306	56	67	28.70	30.18	+ .02	12.2	+ 2.7	44	27	22	—25	5	3	40	10	9	89	0.60	+ 0.1	7	9,539	nw.	56	n.	28	13	3	15	5.3	6.5
Yankton	1,233	49	57	28.78	30.16	.00	18.6	+ 3.1	53	27	28	—18	5	10	45	....	....	....	0.77	+ 0.2	8	7,267	nw.	58	nw.	29	7	5	19	6.7	7.9
Northern Slope.							13.3	— 0.7										75	0.82	0.0										5.7	
Havre	2,505	11	44	27.28	30.07	— .03	5.3	— 8.2	50	19	17	—40	6	—6	54	5	2	83	1.30	+ 0.6	9	6,682	sw.	36	sw.	18	10	10	11	5.7	13.0
Miles City	2,371	26	48	27.46	30.16	— .04	11.6	— 2.9	49	3	23	—30	11	0	38	8	4	79	0.65	0.0	9	3,629	s.	30	nw.	28	12	15	4	4.6	7.1
Helena	4,110	8	56	25.66	30.06	— .09	11.8	— 8.2	51	21	21	—30	10	2	37	10	5	72	1.38	+ 0.4	12	3,786	nw.	37	sw.	18	5	15	11	6.2	19.8
Kalispell	2,962	11	34	26.79	29.99	— .13	13.8	— 5.8	48	3	22	—34	11	5	48	12	8	79	1.80	+ 0.2	17	3,838	nw.	25	n.	4	5	9	17	7.1	15.6
Rapid City	3,234	46	50	26.54	30.12	+ .02	21.6	+ 0.1	60	27	34	—18	11	9	52	16	10	72	0.10	— 0.3	2	6,055	se.	36	n.	18	10	5	16	5.8	1.1
Cheyenne	6,088	56	64	23.90	30.02	— .03	30.4	+ 4.8	59	8	42	— 9	11	19	49	24	16	59	0.33	— 0.1	4	8,979	w.	46	w.	31	10	16	5	5.0	4.1
Lander	5,372	26	36	24.51	30.02	— .10	24.4	+ 7.0	55	19	39	—15	29	10	48	20	15	71	0.43	0.0	4	3,374	ne.	28	sw.	7	6	20	5	5.2	4.3
Sheridan	3,790	9	47	25.99	30.07	.....	15.9	.....	56	18	27	—22	12	4	52	12	9	81	0.30	.....	6	3,997	nw.	42	nw.	28	12	13	6	4.4	6.5
Yellowstone Park	6,200	11	48	23.70	29.98	— .16	21.2	+ 3.6	41	17	30	—18	5	12	46	19	16	77	1.61	— 0.6	21	8,987	s.	40	sw.	7	1	6	24	8.4	23.3
North Platte	2,821	11	51	27.10	30.16	+ .04	25.0	+ 3.6	61	18	38	—10	7	12	44	19	14	76	0.29	— 0.2	5	6,077	se.	58	nw.	28	13	11	7	4.8	3.3
Middle Slope.							32.5	+ 3.5										69	0.22	— 0.4										5.8	
Denver	5,291	129	136	24.64	30.00	— .05	36.6	+ 7.5	69	8	50	— 1	10	24	55	28	20	58	0.21	— 0.2	3	5,326	sw.	45	n.	28	8	18	5	4.9	2.1
Leadville	10,248	7	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pueblo	4,685	80	86	25.24	30.01	— .04	35.4	+ 6.3	69	9	50	—11	12	20	55	28	17	53	0.24	— 0.1	5	6,067	nw.	48	w.	28	11	15	5	4.5	3.9
Concordia	1,398	42	50	28.64	30.18	+ .04	25.0	+ 0.6	64	28	34	— 7	6	16	37	22	19	81	0.21	— 0.5	3	5,511	s.	45	nw.	28	1	20	10	6.4	1.9
Dodge City	2,509	44	54	27.45	30.15	+ .04	30.0	+ 2.7	74	22	42	— 8	11	18	42	24	19	70	0.29	— 0.2	4	7,267	se.	43	nw.	28	14	14	3	4.2	2.7
Wichita	1,358	90	120	28.70	30.19	+ .06	30.6	+ 0.9	69	22	40	— 5	12	22	35	28	23	78	0.27	— 0.5	6	9,013	s.	62	nw.	29	3	11	17	7.3	3.0
Oklahoma	1,214	10	47	28.82	30.14	+ .03	37.6	+ 2.9	79	22	47	— 2	12	28	57	34	29	75	0.12	— 1.2	5	13,384	s.	66	nw.	29	2	15	14	7.2	0.8
Southern Slope.							47.7	+ 6.2										50	0.04	— 0.9										4.8	
Abilene	1,788	45	54	28.28	30.12	+ .03	48.9	+ 6.3	82	23	61	7	12	37	60	41	34	50	0.06	— 0.8	1	6,741	s.	38	w.	28	5	20	6	6.0	1.0
Amarillo	3,676	10	49	26.28	30.07	+ .01	40.8	+ 6.9	80	8	56	3	12	26	63	32	24	61	0.07	— 0.5	2	10,167	s.	64	w.	28	26	4	1	3.0	0.6
Del Rio	944	8	57	29.10	30.10	+ .04	56.6	+ 6.4	87	28	69	21	12	44	45	....	....	....	0.01	— 1.7	1	5,768	e.	33	nw.	29	9	16	6	5.3	....
Roswell	3,578	9	57	26.40	30.09	+ .05	44.4	+ 5.2	81	9	62	13	13	27	57	35	26	57	0.02	— 0.5	1	4,671	se.	48	nw.	28	11	15	5	4.7	0.2
Southern Plateau.							45.6	+ 4.8										59	1.22	+ 0.2										4.4	
El Paso	3,762	110	133	26.24	30.04	+ .03	50.6	+ 6.5	76	9	64	26	13	37	42	39	24	39	0.04	— 0.5	1	7,622	w.	43	w.	28	13	14	4	3.9	T.
Santa Fe	7,013	33	39	23.24	30.10	+ .06	35.0	+ 6.5	57	9	46	1	11	24	39	27	20	58	0.79	+ 0.2	5	6,352	ne.	39	nw.	28	18	8	5	3.7	5.2
Flagstaff	6,907	8	57	23.33	30.02	— .03	33.0	+ 6.3	56	19	44	6	26	22	39	28	24	76	3.10	+ 1.0	8	5,132	sw.	37	sw.	22	6	10	15	6.5	14.1
Phoenix	1,108	50	56	28.86	30.03	.00	55.6	+ 5.6	77	17	68	35	28	44	35	46	37	56	0.09	— 1.1	2	2,399	e.	17	w.	23	13	11	7	4.5	....
Yuma	141	9	58	29.88	30.03	— .02	57.6	+ 2.9	80	17	71	35	28	44	34	47	37	52	0.05	— 0.4	2	4,261	ne.	29	n.	11	26	4	1	1.7	....
Brawley	†105	11	31	.....	.....	.....	56.9	.....	80	17	71	33	30	43	37	49	42	61	0.02	.....	1	3,970	nw.	34	sw.	22	14	12	5	4.5	....
Independence	3,910	11	42	25.95	29.97	— .10	41.6	+ 1.1	66	6	52	22	24	31	30	37	31	69	3.27	+ 1.7	10	4.098	s.	38	s.	21	6	15	10	5.8	0.8
Middle Plateau.							34.5	+ 7.1										72	2.10	+ 1.0										6.4	
Reno	4,532	56	63	25.35	29.93	— .20	37.8	+ 5.3	59	16	46	4	11	30	25	33	27	68	4.75	+ 2.8	14	5,253	sw.	52	sw.	30	5	13	13	6.5	6.0
Tonopah	6,089	12	20	23.98	30.06	.....	33.8	+ 8.9	56	14	40	11	11	28	19	30	25	69	0.45	— 0.3	4	9,260	se.	40	se.	8	7	19	5	5.2	4.0
Winnemucca	4,344	18	56	25.50	29.93	— .23	36.9	+ 8.1	58	16	47	4	11	27	37	33	28	75	2.98	+ 1.9	13	7,462	sw.	42	sw.	14	3	9	19	7.5	5.5
Modena	5,479	10	43	24.59	30.01	— .09	34.8	+ 7.3	58	18	44	8	11	26	27	31	28	76	0.60	— 0.1	8	8,860	w.	46	sw.	21	6	10	15	6.6	2.5
Salt Lake City	4,366	105	110	25.55	29.97	— .18	38.2	+ 9.4	56	15	46	8	11	31	25	33	26	63	2.70	+ 1.4	15	4,886	se.	40	w.	22	9	7	15	6.2	6.9
Durango	6,546	18	56	23.66	30.13	+ .08	29.7	+ 5.2	51	8	40	— 2	29	19	34	25	21	76	2.59	+ 1.3	11	3,719	nw.	30	w.	28	9	11	11	6.0	17.3
Grand Junction	4,608	43	51	25.41	30.08	+ 0.2	30.2	+ 5.5	53	22	38	7	1	22	26	27	23	79	0.66	0.0	7	3,005	nw.	28	nw.	28	7	6	18	6.8	0.4
Northern Plateau.							29.0	+ 0.3										76	2.72	+ 1.1										7.6	
Baker City	3,471	48	58	26.27	29.91	— .25	30.3	+ 6.4	50	21	38	— 3	10	23	36	27	24	77	1.61	+ 0.3	15	5,424	se.	32	s.	19	4	7	20	7.3	15.1
Boise	2,739	79	86	27.07	29.97	— .22	36.4	+ 7.1	56	17	44	10	12	29	28	33	27	69	4.33	+ 2.4	19	5,216	se.	31	se.	20	4	6	21	7.9	15.9
Lewiston	757	16	[illegible]	29.15	29.99	— .17	26.6	— 7.9	53	3	33	—10	14	20	24	....	....	....	1.91	+ 0.3	14	4,174	e.	47	w.	21	4	6	21	7.5	19.4
Pocatello	4,477	46	54	25.38	29.98	— .22	33.2	+ 8.1	52	17	40	6	29	26	29	30	25	72	3.13	+ 2.5	19	8,153	se.	44	sw.	28	7	5	19	6.9	5.4
Spokane	1,929	101	110	27.84	29.96	— .16	21.6	— 5.1	49	21	28	—16	14	15	35	20	16	80	3.10	+ 0.8	22	4,996	n.	28	sw.	19	2	6	23	8.2	20.2
Walla Walla	1,000	71	79	28.87	29.98	— .17	26.2	— 7.0	62	19	34	—12	9	19	38	24	20	81	2.27	+ 0.3	15	4,858	s.	43	se.	20	5	2	24	7.6	21.1
N. Pac. Coast Reg.							35.2	— 4.3										86	8.66	+ 1.8										8.4	
Blaine	57	4	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
North Head	211	11	56	29.53	29.76	— .29	38.2	— 3.6	52	15	42	20	12	34	19	37	35	89	8.43	+ 0.8	24	15,965	e.	84	se.	15	1	2	28	9.3	10.1
Port Crescent	259	12	29	29.51	29.80	— .19	30.6	— 5.4	55	19	36	7	11	25	21	....	....	....	8.17	+ 2.6	28	6,244	se.	40	ne.	7	0	12	19	8.0	14.2

TABLE I.—*Climatological data for U. S. Weather Bureau stations, January, 1909*—Continued.

Stations.	Elevation of instruments.			Pressure, in inches.			Temperature of the air, in degrees Fahrenheit.									Mean wet thermometer.	Mean temperature of the dew-point.	Mean relative humidity, per cent.	Precipitation, in inches.			Wind.					Clear days.	Partly cloudy days.	Cloudy days.	Average cloudiness during daylight, tenths.	Total snowfall.
	Barometer above sea level, feet.	Thermometers above ground.	Anemometer above ground.	Actual, reduced to mean of 24 hours.	Sea level, reduced to mean of 24 hrs.	Departure from normal.	Mean max. + mean min. ÷ 2.	Departure from normal.	Maximum.	Date.	Mean maximum.	Minimum.	Date.	Mean minimum.	Greatest daily range.				Total.	Departure from normal.	Days with .01, or more.	Total movement, miles.	Prevailing direction.	Maximum velocity. Miles per hour.	Maximum velocity. Direction.	Maximum velocity. Date.					
N.P. Coast Reg—Cont.																															
Seattle	128	185	224	29.71	29.84	— .21	34.2	— 5.1	54	19	39	12	13	30	20	33	30	85	6.90	+ 2.4	25	7,091	se.	42	sw.	19	1	5	25	8.6	14.6
Tacoma	213	113	120	29.59	29.82	— .18	34.0	— 4.1	54	19	39	9	13	29	21	33	31	88	8.20	+ 2.4	23	4,606	sw.	36	ne.	5	0	4	27	9.2	26.2
Tatoosh Island	86	7	57	29.64	29.73	— .25	35.6	— 5.6	50	19	39	14	7	32	16	34	30	81	9.26	— 2.9	25	22,180	e.	76	e.	5	3	4	24	7.9	14.5
Portland, Oreg.	153	68	106	29.70	29.86	— .22	32.8	— 6.3	59	19	38	6	12	28	24	31	29	86	9.29	+ 2.8	23	5,707	e.	36	s.	20	3	4	24	8.4	15.1
Roseburg	510	9	57	29.27	29.83	— .27	41.3	+ 0.5	63	29	48	18	10	34	32	39	37	86	10.38	+ 4.7	22	2,144	s.	26	s.	21	2	10	19	7.6	11.7
Mid. Pac. Coast Reg.							50.4	+ 3.3										88	11.36	+ 6.9										8.1	
Eureka	62	62	80	29.81	29.88	— .12	49.2	+ 2.3	62	15	54	29	10	44	17	47	44	81	14.41	+ 6.8	25	6,910	se.	48	sw.	8	1	13	17	7.3	
Mount Tamalpais	2,375	11	18	27.47	29.97	— .14	43.1	.....	56	17	46	28	11	40	16	42	42	98	15.63	+11.3	26	17,323	se.	66	sw.	20	2	3	26	8.8	0.9
Point Reyes Light	490	7	18	29.40	29.92	.....	49.6	.....	58	3	53	38	10	46	14	.....	.....	.....	9.78	.....	26	19,898	s.	71	s.	25	2	3	26	8.5	
Red Bluff	332	50	56	29.58	29.94	— .18	48.4	+ 3.0	63	14	52	30	10	44	17	47	46	92	13.42	+ 9.5	24	6,787	se.	29	s.	21	2	2	27	8.9	
Sacramento	69	106	117	29.92	29.99	— .13	50.6	+ 5.0	63	16	55	35	11	46	19	49	47	87	9.65	+ 6.0	25	8,738	se.	48	se.	20	2	10	19	7.7	
San Francisco	155	200	204	29.82	29.99	— .12	51.5	+ 2.0	60	15	55	38	12	48	18	49	46	84	10.51	+ 6.2	26	7,504	s.	48	sw.	20	2	6	23	8.6	
San Jose	141	78	88	29.86	30.02	.....	52.4	+ 4.1	69	17	59	32	10	46	23	.....	.....	.....	7.69	+ 4.8	24	6,722	se.	36	se.	25	0	15	16	7.2	
Southeast Farallon	30	9	17	29.94	29.97	.....	51.4	.....	58	3	54	41	12	49	10	.....	.....	.....	8.18	+ 3.9	27	14,767	s.	56	se.	25	4	5	22	8.0	
S. Pac. Coast Reg.							53.4	+ 2.5										85	3.07	+ 5.3										7.6	
Fresno	330	67	70	29.69	30.05	— .05	51.8	+ 6.4	71	16	59	33	10	44	26	49	47	86	4.44	+ 2.8	17	4,273	se.	30	s.	21	2	0	29	8.7	
Los Angeles	338	159	191	29.71	30.08	.00	54.6	+ 1.5	76	17	62	41	23	48	25	50	47	82	7.27	+ 4.4	13	4,579	ne.	31	ne.	24	1	12	18	7.4	
San Diego	87	94	102	29.98	30.08	+ .01	54.2	+ 0.2	70	17	60	42	28	48	21	51	49	87	3.57	+ 1.6	7	4,247	nw.	31	sw.	22	11	6	14	5.9	
San Luis Obispo	201	47	54	29.35	30.07	— .02	53.0	+ 2.0	69	17	59	33	29	47	28	50	48	86	17.00	+12.3	21	4,088	s.	24	se.	25	1	6	24	8.3	
West Indies.																															
Grand Turk	11	6	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
San Juan	82	48	90	29.87	29.98	— .04	74.6	.....	86	31	80	64	27	69	15	69	67	80	6.16	+ 3.2	15	6,701	ne.	28	se.	31	15	12	4	3.9	
Panama.																															
Christobal	17	5	60	29.86	29.87	.....	77.5	.....	83	13	81	70	24	74	10	75	74	88	10.61	.....	25	8,767	n.	32	n.	28	6	16	9	6.0	
Bas Obispo	172	4	30	29.70	29.88	.....	76.8	.....	87	20	84	63	17	70	20	72	72	94	2.59	.....	22	3,336	nw.	26	ne.	9	0	30	1	6.0	
Ancon	92	6	69	29.76	29.85	.....	79.4	.....	90	14	88	68	24	71	22	72	72	89	2.90	.....	23	6,118	nw.	24	n.	8	1	25	5	6.0	
Alhajuela	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.72	.....	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Bohio	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7.29	.....	29	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Gatun	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7.17	.....	28	.....	.....	.....	.....	.....	.....	.....	.....	.....	

† Below sea level.

TABLE II.—*Accumulated amounts of precipitation for each 5 minutes, for storms in which the rate of fall equaled or exceeded 0.25 in any 5 minutes, or 0.80 inch in 1 hour, during January, 1909, at all stations furnished with self-registering gages.*

Stations.	Date.	Total duration. From—	Total duration. To—	Total amount of precipitation.	Excessive rate. Began—	Excessive rate. Ended—	Amount before excessive began.	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.†	11			0.06														*			
Albany, N. Y.	16–17			0.81														*			
Alpena, Mich.	22			0.49														*			
Amarillo, Tex.†	2			0.01														0.01			
Anniston, Ala.	13			0.64														0.21			
Asheville, N. C.	4–5			0.78														0.17			
Atlanta, Ga.	16			0.96														0.22			
Atlantic City, N. J.	5			1.11														0.30			
Augusta, Ga.	5			0.33														0.22			
Baker City, Oreg.	7–8			0.34														*			
Baltimore, Md	5			0.54														0.19			
Bentonville, Ark.	28			0.21														0.16			
Binghamton, N. Y.	17			0.71†														*			
Birmingham, Ala.	5			0.56														0.33			
Bismarck, N. Dak.	7			0.11														*			
Block Island, R. I.	6			1.48														0.54			
Boise, Idaho	21			0.23†														0.15			
Boston, Mass.	6			0.71														0.28			
Buffalo, N. Y.	23			0.66														*			
Burlington, Vt.	17			0.61														*			
Cairo, Ill.	5			1.14														0.57			
Canton, N. Y.	5–6			0.85														*			
Charles City, Iowa	28–29			1.29														*			
Charleston, S. C.	5			0.34														0.21			
Charlotte, N. C.	16			0.70														0.17			
Chattanooga, Tenn.	16			0.99														0.38			
Cheyenne, Wyo.	23			0.18														*			
Chicago, Ill.	28–29			0.86†														*			
Cincinnati, Ohio	29			0.42†														0.21			
Cleveland, Ohio	23			0.18														0.15			
Columbia, Mo.	28			1.16														0.34			
Columbia, S. C.	16			0.44														0.15			
Columbus, Ohio	23			0.28														0.12			
Concord, N. H.	5–6			0.96														*			
Concordia, Kans.	11			0.08														*			
Corpus Christi, Tex.	11			T.														T.			
Davenport, Iowa	28–29			1.04														*			
Del Rio, Tex.	27			0.01														0.01			
Denver, Colo.	10–11			0.16														*			
Des Moines, Iowa	28–29			0.90														*			
Detroit, Mich.	22			0.68														0.15			
Devils Lake, N. Dak.	8			0.18														*			
Dodge City, Kans.	11			0.16														*			
Dubuque, Iowa	28–29			1.40														*			
Duluth, Minn.	22–23			0.53†														*			
Durango, Colo.	13			0.58														*			
Eastport, Me.	5			1.89														0.44			
Elkins, W. Va.	14			0.85														0.15			
El Paso, Tex.	28			0.04														0.03			
Erie, Pa.	11–12			0.96†														*			
Escanaba, Mich.	22–23			0.27														*			
Eureka, Cal.	17			1.08														0.54			
Evansville, Ind.	25			0.69														0.21			
Flagstaff, Ariz.	22–23			1.31														*			

TABLE II.—*Accumulated amounts of precipitation for each 5 minutes, etc.*—Continued.

Stations.	Date.	Total duration. From—	Total duration. To—	Total amount of precipitation.	Excessive rate. Began—	Excessive rate. Ended—	Amount before excessive began.	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.
Fort Smith, Ark.	11			0.42														*			
Fort Worth, Tex.	12			0.12														*			
Fresno, Cal.	13			0.56														0.16			
Galveston, Tex.	11			0.01														T.			
Grand Haven, Mich.	23			0.54														0.46			
Grand Junction, Colo.	22-23			0.55														*			
Grand Rapids, Mich.	22			0.99														0.35			
Green Bay, Wis.	22-23			0.24														*			
Greenville, Me.	17			1.40														*			
Hannibal, Mo.	28			1.19														0.23			
Harrisburg, Pa.	22			0.10														0.05			
Hartford, Conn.	5-6			1.03														*			
Hatteras, N. C.	5	8:45 a. m.	7:35 p. m.	1.97	12:50 p. m.	1:45 p. m.	0.17	0.16	0.19	0.32	0.41	0.52	0.63	0.67	0.69	0.78	0.91	0.99			
Havre, Mont.	8-9			0.61														*			
Helena, Mont.	8-9			0.46														*			
Houghton, Mich.	29-30			0.37†														*			
Huron, S. Dak.	15			0.27														*			
Independence, Cal.	21			1.24														0.27			
Indianapolis, Ind.	22			0.98														*			
Iola, Kans.	25			0.11														0.10			
Jacksonville, Fla.	5			0.98														0.55			
Jupiter, Fla.	1	19:30 p. m.	3:40 a. m.	1.32	12:04 a. m.	12:49 a. m.	0.11	0.09	0.13	0.16	0.27	0.34	0.74	0.57	0.63	0.72					
Do.	4	11:50 a. m.	9:00 p. m.	1.98	2:14 p. m.	2:47 p. m.	0.94	0.08	0.12	0.19	0.28	0.36	0.58	0.64							
Kalispell, Mont.	7-8			0.53†														*			
Kansas City, Mo.	28			0.73														0.23			
Keokuk, Iowa	28			0.70														*			
Key West, Fla.	5	10:36 a. m.	12:06 p. m.	0.44	10:45 p. m.	10:57 p. m.	0.03	0.23	0.36	0.38											
Knoxville, Tenn.	16			0.82														0.30			
La Crosse, Wis.	28-29			1.13†														*			
Lander, Wyo.	28			0.40														*			
La Salle, Ill.	28			0.80														0.22			
Lewiston, Idaho	7			0.64														*			
Lexington, Ky.	16			0.65														0.18			
Lincoln, Nebr.	28			0.59														*			
Little Rock, Ark.	22			0.19														0.19			
Los Angeles, Cal.	21			2.98														0.50			
Louisville, Ky.	28			0.28														0.25			
Lynchburg, Va.	5			0.45														0.15			
Macon, Ga.	5			0.60														0.27			
Madison, Wis.	28-29			1.21														*			
Marquette, Mich.	30			0.30†														*			
Memphis, Tenn.	28			0.23														0.21			
Meridian, Miss.	4			0.32														0.27			
Milwaukee, Wis.	23			0.22														*			
Minneapolis, Minn.	28-29			0.89														*			
Mobile, Ala.	14			0.58														0.32			
Modena, Utah	22			0.39														0.10			
Montgomery, Ala.	15-16	D. N.	8:25 a. m.	1.39	7:03 a. m.	8:00 a. m.	0.34	0.12	0.33	0.47	0.56	0.59	0.62	0.63	0.64	0.66	0.82	1.03			
Moorhead, Minn.	23-24			0.58														*			
Mount Tamalpais, Cal.	8			1.23														0.43			
Mount Weather, Va.	16-17			1.38														*			
Nantucket, Mass.	6			1.97														0.43			
Nashville, Tenn.	4			0.24														0.21			
New Haven, Conn.	5			1.28														0.31			
New Orleans, La.	14	3:55 p. m.	8:50 p. m.	1.35	6:22 p. m.	7:10 p. m.	0.18	0.09	0.17	0.27	0.41	0.55	0.67	0.73	0.82	0.90	0.95				
Do.	15	3:30 p. m.	5:30 p. m.	0.69	4:06 p. m.	4:25 p. m.	0.08	0.11	0.18	0.31	0.39										
Do.	15	D. N.	D. N.	0.45	9:12 p. m.	9:28 p. m.	0.07	0.06	0.25	0.36											
New York, N. Y.	5			1.23														0.38			
Norfolk, Va.	5			0.47														0.10			
Northfield, Vt.	17			0.92														*			
North Head, Wash.	31			1.57														0.25			
North Platte, Nebr.	5-6			0.19														*			
Oklahoma, Okla.	25			0.04														0.04			
Omaha, Nebr.	28-29			0.63														*			
Oswego, N. Y.	12			0.82														*			
Palestine, Tex.	28			0.12														0.12			
Parkersburg, W. Va.	5			0.44														0.19			
Pensacola, Fla.	22	2:30 p. m.	4:55 p. m.	0.60	4:27 p. m.	4:34 p. m.	0.28	0.20	0.31												
Peoria, Ill.	28-29			0.80														*			
Philadelphia, Pa.	4-5			0.95														*			
Phoenix, Ariz.	23			0.08														0.06			
Pierre, S. Dak.	15			0.08														*			
Pittsburg, Pa.	16-17			0.83														*			
Pocatello, Idaho	21-22			0.75														*			
Point Reyes Light, Cal.	23			0.66														0.43			
Port Huron, Mich.	22			0.76														0.15			
Portland, Me.	6			0.79														0.26			
Portland, Oreg.	18-19			1.68														*			
Providence, R. I.	16-17			0.90														*			
Pueblo, Colo.	10-11			0.21														*			
Raleigh, N. C.	16			0.94														0.21			
Rapid City, S. Dak.	6			0.07														*			
Red Bluff, Cal.	14			1.42														0.54			
Reno, Nev.	13-14			1.19														*			
Richmond, Va.	5			0.47														0.39			
Rochester, N. Y.	11-12			0.85														*			
Roseburg, Oreg.	2			0.70														0.35			
Roswell, N. Mex.	12			0.02														*			
Sacramento, Cal.	20			1.20														0.40			
St. Louis, Mo.	28			1.35														0.45			
St. Paul, Minn.	28-29			1.05														*			
Salt Lake City, Utah	21-22			0.53														*			
San Antonio, Tex.	11			0.10														0.08			
San Diego, Cal.	26			0.70														0.33			
Sand Key, Fla.	2			0.59														0.22			
Sandusky, Ohio	11-12			0.55														*			
San Francisco, Cal.	14			0.77														0.39			
San Jose, Cal.	20			0.76														0.29			
San Luis Obispo, Cal.	25			2.22														0.94			
Santa Fe, N. Mex.	27			0.38														0.38			
Sault Sainte Marie, Mich.	6			0.47														*			
Savannah, Ga.	5			0.46														0.26			
Scranton, Pa.	5			0.54†														0.15			
Seattle, Wash.	19			1.24														0.17			

TABLE II.—*Accumulated amounts of precipitation for each 5 minutes, etc.*—Continued.

Stations.	Date.	Total duration.		Total amount of precipitation.	Excessive rate.		Amount before excessive 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.
Sheridan, Wyo	6-7			0.16														*			
Shreveport, La	4			0.23														0.23			
Sioux City, Iowa	28-29			0.32														*			
Southeast Farallon, Cal	25			1.33														0.36			
Spokane, Wash	19-20			0.56														*			
Springfield, Ill	28			1.15														*			
Springfield, Mo	11			0.95														*			
Syracuse, N. Y	29-30			0.80														*			
Tacoma, Wash	18			0.66														0.16			
Tampa, Fla	4-5	6:37 p. m.	7:10 a. m.	1.67	6:48 p. m.	7:10 p. m.	0.01	0.19	0.52	0.73	0.79	0.83									
Tatoosh Island, Wash	18			0.94														0.43			
Taylor, Tex	9			0.01														0.01			
Thomasville, Ga	29			0.23														0.20			
Toledo, Ohio	22			0.56														0.21			
Tonopah, Nev	21-22			0.36														*			
Topeka, Kans	28			0.14														0.05			
Valentine, Nebr	14-15			0.34														*			
Vicksburg, Miss	28			0.27														0.27			
Walla Walla, Wash	7-8			0.49														*			
Washington, D. C	5			0.57														0.21			
Wichita, Kans	25			0.05														0.05			
Williston, N. Dak	7-8			0.15														*			
Wilmington, N. C	5			0.85														0.25			
Winnemucca, Nev	13-14			0.88†														*			
Wytheville, Va	5			0.66														0.25			
Yankton, S. Dak	28			0.43														*			
Yellowstone Park, Wyo	9			0.29														*			
Yuma, Ariz	22			0.04														●			
Honolulu, T. H																					
San Juan, P. R	6	1:59 p. m.	2:35 p. m.	0.41	2:17 p. m.	2:23 p. m.	0.02	0.30	0.37												
Do	7	4:24 p. m.	8:35 p. m.	1.01	6:35 p. m.	6:55 p. m.	0.14	0.24	0.60	0.68	0.76										
Do	24	9:25 a. m.	3:10 p. m.	2.68	9:53 a. m.	10:48 a. m.	0.04	0.07	0.13	0.23	0.35	0.43	0.49	0.56	0.61	0.77	0.88	0.96			
					12:02 p. m.	12:59 p. m.	1.29	0.09	0.17	0.23	0.31	0.46	0.56	0.74	0.87	0.97	1.04	1.14			

* Self register not working. † Estimated. ‡ December 31, 1908.

TABLE III.—*Data furnished by the Canadian Meteorological Service, January, 1909.*

Stations.	Pressure.			Temperature.				Precipitation.		
	Actual, reduced to mean of 24 hours.	Sea level, reduced to mean of 24 hours.	Departure from normal.	Mean.	Departure from normal.	Mean maximum.	Mean minimum.	Total.	Departure from normal.	Total snowfall.
	Ins.	Ins.	Ins.	°	°	°	°	Ins.	Ins.	Ins.
St. Johns, N. F	29.78	29.93	+.07	24.6	+ 0.8	31.7	17.5	4.18	—1.73	9.0
Sydney, C. B. I	30.00	30.04	+.11	23.0	+ 2.5	30.7	15.2	3.65	—1.45	19.5
Halifax, N. S	29.97	30.08	+.11	23.2	+ 1.4	32.5	13.8	5.16	—0.61	21.0
Grand Manan, N. B	30.01	30.06	+.07	26.4	+ 3.0	35.8	16.9	8.16	+3.25	35.5
Yarmouth, N. S	30.00	30.07	+.07	27.2	+ 0.9	35.3	19.1	3.57	—1.84	17.8
Charlottetown, P. E. I	30.01	30.05	+.09	18.4	+ 1.4	26.4	10.4	3.06	—0.90	15.7
Chatham, N. B	30.07	30.10	+.13	11.8	+ 2.0	22.5	1.0	4.85	+1.26	24.8
Father Point, Que	30.08	30.11	+.13	7.5	+ 0.5	17.1	— 2.1	1.58	—1.27	13.6
Quebec, Que	29.77	30.12	+.10	11.0	+ 1.9	19.1	2.9	5.04	+1.03	40.7
Montreal, Que	29.89	30.11	+.07	15.3	+ 3.6	23.3	7.2	4.58	+0.85	21.3
Rockliffe, Ont.	29.48	30.12	+.10	9.6	+ 3.2	20.7	— 1.5	1.33	—0.99	7.0
Ottawa, Ont	29.87	30.22	+.19	13.7	+ 4.1	21.3	6.0	3.36	+0.37	13.6
Kingston, Ont	29.82	30.16	+.14	21.6	+ 4.5	29.2	13.9	2.48	—0.97	10.6
Toronto, Ont	29.73	30.13	+.08	26.4	+ 5.0	33.6	19.1	2.66	—0.26	17.8
White River, Ont	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Port Stanley, Ont	29.47	30.13	+.06	26.0	+ 3.8	32.8	19.1	2.66	—0.33	12.9
Southampton, Ont	29.36	.....	.....	24.3	+ 3.9	31.9	16.7	7.55	+3.50	33.6
Parry Sound, Ont	29.38	30.12	+.11	19.4	+ 5.6	28.8	10.1	2.66	—1.42	9.5
Port Arthur, Ont	29.37	30.13	+.06	5.4	+ 2.3	16.6	— 5.9	1.20	+0.38	10.9
Winnipeg, Man	.....	.....	.....	—2.5	+ 4.3	7.5	—12.4	0.73	—0.15	6.3
Minnedosa, Man	28.15	30.10	.00	—2.9	+ 4.3	7.4	—13.2	0.45	—0.35	4.3
Qu' Appelle, Assin	27.63	30.03	—.05	—3.4	+ 0.4	6.9	—13.7	0.76	+0.26	7.6
Medicine Hat, Alberta	27.63	30.03	—.04	8.1	+ 2.6	19.1	— 2.8	0.35	—0.22	3.5
Swift Current, Sask	27.33	30.06	—.03	1.6	— 1.5	10.8	— 7.7	0.50	—0.14	5.0
Calgary, Alberta	26.24	29.99	—.04	3.6	— 4.8	14.3	— 7.1	0.58	+0.05	5.8
Banff, Alberta	25.12	29.98	—.02	1.9	—10.2	11.0	— 7.1	3.94	+2.75	39.4
Edmonton, Alberta	27.58	30.04	+.01	—5.0	— 6.8	6.1	—16.2	0.49	—0.19	4.9
Prince Albert, Sask	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Battleford, Sask	28.21	30.09	+.01	—11.7	— 5.8	3.0	—20.5	0.22	—0.18	2.0
Kamloops, B. C	28.61	29.96	.00	9.5	—15.5	15.7	3.3	0.81	+0.01	0.0
Victoria, B. C	29.70	29.80	—.17	32.5	— 6.0	36.5	28.5	3.25	—2.14	0.0
Barkerville, B. C	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hamilton, Bermuda	29.95	30.12	—.01	63.9	+ 1.9	68.4	59.5	5.38	—0.44	0.0
Dawson, Yukon	29.19	.....	.....	—43.2	.....	—37.7	—48.6	0.30	.....	3.0

TABLE IV.—*Heights of rivers referred to zeros of gages, January, 1909.*

Stations.	Distance to mouth of river.	Flood stage on gage.	Highest water.		Lowest water.		Mean stage.	Monthly range.
			Height.	Date.	Height.	Date.		
	Miles.	Feet.	Feet.		Feet.		Feet.	Feet.
Republican River.								
Clay Center, Kans, (29)	42	18	6.2	28, 29	5.9	4	.....	0.3
Smoky Hill-Kansas River.								
Abilene, Kans.	254	22	1.8	2	0.5	1	1.1	1.3
Manhattan, Kans. (2)	160	18	3.2	9–14	1.7	6–8	2.8	1.5
Topeka, Kans. (12)	87	21	6.2	9,10	5.8	2–5	6.0	0.4
Missouri River.								
Bismarck, N. Dak.	1,309	14	4.6	1	2.6	24–26	3.3	2.0
Pierre, S. Dak, (30)	1,114	14	.....	.....	.....	.....	.....	.....
Sioux City, Iowa	784	17	8.9	31	5.5	1–3	6.9	3.4
Blair, Nebr. (25)	705	15	8.6	6	5.8	1	.....	2.8
Omaha, Nebr. (24)	669	18	8.0	7	5.6	6	.....	2.4
St. Joseph, Mo. (16)	481	10	4.5	23	— 1.8	4,9	.....	5.7
Kansas City, Mo.	388	21	8.2	25	2.7	13	4.9	5.5
Glasgow, Mo.	231	21	8.3	23,31	3.5	19	5.9	4.8
Boonville, Mo.	199	20	9.6	31	5.3	12	7.1	4.3
Hermann, Mo. (6)	103	24	8.2	30	3.0	18,19	5.0	5.2
Minnesota River.								
Mankato, Minn	127	18	4.2	29	2.5	1–22	2.7	1.7
St. Croix River.								
Stillwater, Minn. (31)	23	11	.....	.....	.....	.....	.....	.....
Illinois River.								
La Salle, Ill. (12)	197	18	15.2	4	12.2	8	13.4	3.0
Peoria, Ill.	135	14	9.7	30	8.3	4	9.0	1.4
Conemaugh River.								
Johnstown, Pa	64	7	4.8	24	1.0	1–3, 9–11	1.7	3.8
Allegheny River.								
Warren, Pa.	177	14	7.5	6	0.8	18–22	2.8	6.7
Parker, Pa.	73	20	9.6	24	1.5	22	4.0	8.1
Freeport, Pa.	29	20	15.8	25	4.5	1	7.7	11.3
Springdale, Pa	17	27	20.6	25	9.4	1	13.0	11.2
Youghiogheny River.								
Confluence, Pa. (16)	59	10	4.0	24	0.4	5	.....	3.6
West Newton, Pa.	15	23	5.2	24	0.4	1–3	1.8	4.8
Monongahela River.								
Fairmont, W. Va.	119	25	19.0	15	14.3	1,2	15.3	4.7
Greensboro, Pa.	81	18	13.4	15,16	6.8	1	8.2	6.6
Lock No. 4, Pa.	40	28	17.2	16	8.0	29	10.3	9.2
Muskingum River.								
Zanesville, Ohio	70	25	14.6	25	7.9	14	9.4	6.7
Little Kanawha River.								
Creston, W. Va.	38	20	8.9	17	2.1	14	3.6	6.8
New-Great Kanawha River.								
Hinton, W. Va.	153	14	6.4	6	2.9	14,15	4.1	3.5
Charleston, W. Va.	58	30	11.3	17	5.3	14	7.2	6.0
Scioto River.								
Columbus, Ohio	110	17	2.6	24,25	1.6	1–22, 28–31	1.7	1.0
Licking River.								
Falmouth, Ky.	30	25	9.0	18	1.5	6	3.0	7.5
Kentucky River.								
Beattyville, Ky	254	30	17.3	15	0.7	28	3.1	16.6
Frankfort, Ky.	65	31	13.2	17	6.3	7	7.8	6.9
Wabash River.								
Terre Haute, Ind.	171	16	1.3	29–31	0.0	7–22	0.4	1.3
Mount Carmel, Ill. (10)	75	15	1.6	29	1.4	1–12, 21–25	1.4	0.2
Cumberland River.								
Burnside, Ky.	518	50	28.7	16	3.0	13	7.8	25.7
Celina, Tenn.	383	45	28.9	18	5.1	2	10.4	23.8
Carthage, Tenn.	308	40	26.7	19	4.2	1	9.6	22.5
Nashville, Tenn.	193	40	29.2	20	10.2	4,5	15.1	19.0
Clarksville, Tenn.	126	43	29.7	21	7.6	5	14.0	22.1
Clinch River.								
Speers Ferry, Va.	156	20	7.8	17	1.1	31	2.3	6.7
Clinton, Tenn	52	25	20.5	18	5.5	14	8.9	15.0
South Fork Holston River.								
Bluff City, Tenn. (1)	35	12	4.2	17	1.7	14,15	2.4	2.5
Holston River.								
Rogersville, Tenn.	103	14	5.8	18	2.8	14	3.6	3.0
French Broad River.								
Asheville, N. C.	144	4	2.3	6	0.2	28–30	0.7	2.1
Dandridge, Tenn.	46	12	4.8	17	1.2	4	2.5	3.6
Tennessee River.								
Knoxville, Tenn.	635	12	7.3	18	2.2	15	3.4	5.1
Loudon, Tenn.	590	25	9.4	18	1.9	27–29	4.6	7.5
Kingston, Tenn.	556	25	11.8	18	3.9	14	5.7	7.9
Chattanooga, Tenn.	452	33	16.4	19	5.6	29	8.6	10.8
Bridgeport, Ala	402	24	13.0	20	3.8	30	6.7	9.2
Guntersville, Ala.	349	31	20.1	20	7.0	30	11.5	13.1
Florence, Ala.	255	16	11.7	21	4.0	30, 31	6.9	7.7
Riverton, Ala.	225	32	25.2	21	13.1	30, 31	17.7	12.1
Johnsonville, Tenn.	95	21	17.2	22, 23	6.9	31	11.0	10.3
Ohio River.								
Pittsburg, Pa.	966	22	13.2	25	2.1	15	6.0	11.1
Coraopolis, Pa.	956	25	13.2	25	4.0	15	7.7	9.2
Beaver Dam, Pa.	937	27	20.9	25	4.3	1	10.2	16.6
Wheeling, W. Va.	875	36	20.7	26	3.3	1	9.6	17.4
Parkersburg, W. Va.	785	36	20.4	27	3.7	2	10.2	16.7
Point Pleasant, W. Va.	703	39	21.5	27	5.5	5	12.0	16.0
Huntington, W. Va	660	50	25.0	28	8.8	1	16.0	16.2
Catlettsburg, Ky.	651	50	25.4	28	8.0	1	15.8	17.4
Portsmouth, Ohio	612	50	25.0	28	8.2	1	15.9	16.8
Maysville, Ky.	559	50	24.8	29	8.2	7	15.8	16.6
Cincinnati, Ohio	499	50	26.4	30	9.9	2	17.4	16.5
Madison, Ind	413	46	22.5	21	9.2	3,4	14.7	13.3
Louisville, Ky.	367	28	10.4	21	4.9	3,4	7.4	5.5
Evansville, Ind.	184	35	19.9	23	7.1	1	11.9	12.8
Mount Vernon, Ind.	148	35	18.5	22, 23	6.4	1	11.3	12.1
Paducah, Ky.	47	40	20.4	24	8.3	2,3	12.3	12.1
Cairo, Ill.	1	45	23.0	25	10.2	16	15.2	12.8
Neosho River.								
Iola, Kans	262	10	— 0.5	23,24	— 2.3	11	—1.5	1.8
Oswego, Kans.	184	20	0.7	1	0.4	29–31	0.6	0.3
Fort Gibson, Okla	3	22	11.4	31	9.7	12–14	10.2	1.7
Canadian River.								
Calvin, Okla. (2)	99	15	4.0	25	3.0	10, 11, 30	3.4	1.0
Black River.								
Blackrock, Ark.	67	12	7.0	23	2.0	8–14	3.3	5.0
White River.								
Calicorock, Ark	272	18	2.8	23,24	0.0	1–12, 14–16	1.0	2.8
Batesville, Ark.	217	18	5.3	23	1.8	7,8	2.9	3.5
Clarendon, Ark.	75	30	17.8	29	9.2	12–15	11.2	8.6
Arkansas River.								
Wichita, Kans.	832	10	— 0.1	26,27	— 1.4	11–14	—0.9	1.3
Tulsa, Okla. (2)	551	16	4.5	17	2.5	21–24	3.0	2.0
Webbers Falls, Okla.	465	23	7.4	1	6.5	16–18, 31	6.9	0.9
Fort Smith, Ark.	403	22	7.0	29	4.9	15	6.3	2.1
Dardanelle, Ark.	256	21	6.7	23	4.6	15,16	5.6	2.1
Little Rock, Ark.	176	23	7.3	24	3.6	18	5.1	3.7
Yazoo River.								
Greenwood, Miss	175	38	5.1	1,24	3.2	31	4.1	1.9
Yazoo City, Miss.	80	25	3.6	1	1.4	13,14	2.3	2.2
Ouachita River.								
Camden, Ark.	304	39	16.3	26	5.5	14	7.5	10.8
Monroe, La.	122	40	13.5	4	5.9	25,26	9.1	7.6
Red River								
Arthur City, Tex.	688	27	7.6	1	6.7	11–13	7.0	0.9
Fulton, Ark.	515	28	11.5	25	8.7	20,21	9.6	2.8
Shreveport, La.	327	29	2.1	28	0.0	24	1.0	2.1
Alexandria, La.	118	36	6.6	1	3.5	27	5.0	3.1
Mississippi River.								
Fort Ripley, Minn. (31)	2,082	10	.....	.....	.....	.....	.....	.....
St. Paul, Minn. (31)	1,954	14	.....	.....	.....	.....	.....	.....
Red Wing, Minn. (31)	1,914	14	.....	.....	.....	.....	.....	.....
Reeds Landing, Minn. (12),	1,884	12	0.2	23–28, 30, 31	0.1	13–22, 29	0.1	0.1
La Crosse Wis. (31)	1 819	12	.....	.....	.....	.....	.....	.....
Prairie du Chien, Wis. (31)	1,759	18	.....	.....	.....	.....	.....	.....

TABLE IV.—*Heights of rivers referred to zeros of gages*—Continued.

Stations.	Distance to mouth of river.	Flood stage on gage.	Highest water.		Lowest water.		Mean stage.	Monthly range.
			Height.	Date.	Height.	Date.		
Mississippi River.—Cont'd.	*Miles.*	*Feet.*	*Feet.*		*Feet.*		*Feet.*	*Feet.*
Dubuque, Iowa (25)	1,699	18	3.6	4	2.8	1	.....	0.8
Leclaire, Iowa (31)	1,609	10	.....	.....	.....	.....	.....	.....
Davenport, Iowa (12)	1,593	15	7.0	31	1.7	5	3.4	5.3
Muscatine, Iowa	1,562	16	10.0	31	2.6	2,6	5.2	7.4
Galland, Iowa † (12)	1,472	8	2.5	29	0.6	3,8,9	1.6	1.9
Keokuk, Iowa (12)	1,463	15	4.7	29	− 2.1	8	1.9	6.8
Warsaw, Ill (3)	1,458	18	8.4	23	3.5	6-8	5.6	4.9
Hannibal, Mo (15)	1,402	13	4.2	29	− 0.3	10	2.3	4.5
Grafton, Ill	1,306	23	6.6	31	0.3	13	3.7	6.3
St. Louis, Mo	1,264	30	8.0	31	− 1.6	12	3.1	9.6
Chester, Ill (1)	1,189	30	6.9	31	− 0.5	15	2.9	7.4
Cape Girardeau, Mo	1,128	28	10.2	31	0.6	15	5.2	9.6
New Madrid, Mo	1,003	34	18.9	25	8.0	16	12.2	10.9
Memphis, Tenn	843	33	16.0	27	6.7	18	9.9	9.3
Helena, Ark	767	42	19.0	28,29	7.6	19	11.1	11.4
Arkansas City, Ark	635	42	21.9	30	9.1	21	13.0	12.5
Greenville, Miss	595	42	17.6	30	6.9	21	9.7	10.7
Vicksburg, Miss	474	45	18.5	31	6.9	1,2	9.2	11.6
Natchez, Miss	373	46	18.1	31	9.5	23	11.2	8.6
Baton Rouge, La	240	35	10.1	31	5.9	25	6.9	4.2
Donaldsonville, La	188	28	6.5	31	4.1	2,3	4.6	2.4
New Orleans, La	108	18	4.7	12,13	3.6	2	4.2	1.1
Atchafalaya River.								
Simmesport, La	127	41	12.1	31	7.2	25,26	8.6	4.9
Melville, La	103	37	14.7	31	10.3	26,27	11.9	4.4
Morgan City, La	19	8	4.8	23,24	2.6	31	4.0	2.2
Hudson River.								
Troy, N. Y	154	14	11.5	26	1.5	1	4.9	10.0
Albany, N. Y	147	12	10.0	26	0.2	1	4.0	9.8
Delaware River.								
Hancock (E. Branch), N. Y	287	12	13.3	6	3.6	20	4.8	9.7
Hancock (W. Branch), N. Y	287	10	9.5	6	3.2	15	4.8	6.3
Port Jervis, N. Y	215	14	10.0	7	2.4	4	4.4	7.6
Phillipsburg, N. J. (5)	146	26	14.1	7	0.9	1	4.1	13.2
Trenton, N. J	92	18	8.3	7	1.0	3-5	3.4	7.3
North Branch Susquehanna.								
Binghamton, N. Y	183	14	10.8	25	2.2	1,3	4.1	8.6
Wilkes-Barre, Pa	60	17	16.0	26	2.3	1,2	6.8	13.7
West Branch Susquehanna.								
Williamsport, Pa	39	20	10.8	26	1.3	2-4	3.4	9.5
Susquehanna River.								
Harrisburg, Pa	69	17	9.4	27	0.8	1,2	3.2	8.6
Shenandoah River.								
Riverton, Va	58	22	3.4	26	− 0.7	1	0.7	4.1
Potomac River.								
Cumberland, Md	290	8	4.8	25	2.5	2-15	3.3	2.3
Harpers Ferry, W. Va	172	18	8.0	26	0.8	4,15,16	2.3	7.2
James River.								
Lynchburg, Va	260	20	5.7	6	2.3	13,14	3.6	3.4
Columbia, Va	167	18	14.2	6	6.5	13-16	8.7	7.7
Richmond, Va	111	10	7.0	6	1.0	17	2.4	6.0
Dan River.								
Danville, Va	55	8	2.1	6	0.4	13,28,29	0.8	1.7
Roanoke River.								
Clarksville, Va	196	12	4.5	7,19	1.2	14,15	2.3	3.3
Weldon, N. C	129	30	22.7	20	12.1	16	15.3	10.6
Tar River.								
Greenville, N. C	21	22	10.2	1	6.2	15,28	7.6	4.0
Haw River.								
Moncure, N. C	171	25	11.5	17	8.0	11,13-15	8.6	3.5
Cape Fear River.								
Fayetteville, N. C	112	38	17.7	19	5.3	12	8.3	12.4
Pedee River.								
Cheraw, S. C	149	27	14.6	18	4.1	29	6.4	10.5
Smiths Mills, S. C	51	16	14.7	2	8.1	19	11.0	6.6
Lynch Creek.								
Effingham, S. C	35	12	6.5	25,26	4.0	14	5.1	2.5
Black River.								
Kingstree, S. C	45	12	4.0	5-7	2.7	26	3.2	1.3
Catawba-Wateree River.								
Mount Holly, N. C	143	15	3.3	17	2.0	1-6, 8-13, 21-31	2.2	1.3
Catawba, S. C	107	11	6.8	7	2.6	30	4.0	4.2
Camden, S. C	37	24	16.8	18	7.0	30	9.9	9.8
Congaree River.	*Miles.*	*Feet.*	*Feet.*		*Feet.*		*Feet.*	*Feet.*
Columbia, S. C	52	15	6.8	18	2.3	5,26,31	3.1	4.5
Santee River.								
Ferguson, S. C	82	12	13.5	1	11.0	18,19,31	12.3	2.5
Savannah River.								
Calhoun Falls, S. C	347	15	5.0	7,17	2.9	28,29,31	3.7	2.1
Augusta, Ga	268	32	21.0	18	9.4	31	11.4	11.6
Oconee River.								
Dublin, Ga	79	30	6.0	20	1.1	31	3.1	4.9
Ocmulgee River.								
Macon, Ga	134	18	7.3	6	3.0	31	4.5	4.3
Abbeville, Ga	51	11	10.5	1	3.8	31	5.9	6.7
Flint River.								
Montezuma, Ga	152	20	6.0	2	3.7	*0,31	4.9	2.3
Albany, Ga	99	20	6.9	1	1.7	31	2.7	5.2
Bainbridge, Ga	22	22	9.3	1	5.2	31	6.3	4.1
Chattahoochee River.								
Oakdale, Ga	305	18	15.0	6	6.0	12,13,26,27,29-31	7.4	9.0
West Point, Ga	174	20	7.9	7	3.1	31	4.0	4.8
Eufaula, Ala	90	40	11.0	8,9	3.4	2	6.2	7.6
Alaga, Ala	30	25	10.8	9	4.0	31	5.9	6.8
Coosa River.								
Rome, Ga	266	30	13.2	17,18	1.8	30,31	4.8	11.4
Gadsden, Ala	162	22	14.1	19	3.0	31	6.6	11.1
Lock No. 4, Ala	113	17	10.8	19	2.5	31	5.4	8.3
Wetumpka, Ala	12	45	15.6	20	5.0	4	8.8	10.6
Alabama River.								
Montgomery, Ala	323	35	12.0	21	3.0	4,5	6.0	9.0
Selma, Ala	246	35	13.7	22	3.1	6	7.1	10.6
Black Warrior River.								
Tuscaloosa, Ala	90	43	25.3	18	8.1	3,4	14.4	17.2
Tombigbee River.								
Columbus, Miss	316	33	4.9	18,19	− 0.3	31	1.4	5.2
Demopolis, Ala	168	35	19.3	21	5.3	31	7.8	14.0
Pascagoula River.								
Merrill, Miss	78	20	4.4	18,19	1.3	5-7	2.0	3.1
Pearl River.								
Columbia, Miss	110	18	5.5	8	3.8	31	4.6	1.7
Sabine River.								
Logansport, La	315	25	8.0	5	3.7	31	5.2	4.3
Neches River.								
Beaumont, Tex	18	10	1.5	30	0.5	29	1.0	1.0
Trinity River.								
Dallas, Tex	320	25	5.5	21	4.9	29,30	5.2	0.6
Long Lake, Tex	211	40	6.1	3	1.7	29-31	3.4	4.4
Liberty, Tex	20	25	6.7	9	4.7	31	5.6	2.0
Brazos River.								
Waco, Tex	285	24	1.6	1,4,9-12	1.3	29-31	1.5	0.3
Booth, Tex	61	39	4.4	1-4	3.2	27-31	3.8	1.2
Colorado River.								
Austin, Tex	214	18	1.6	1-5	1.2	24-26	1.4	0.4
Columbus, Tex	98	24	9.8	1	5.9	28-31	6.3	3.9
Red River of the North.								
Moorhead, Minn (31)	284	26	.....	.....	.....	.....	.....	.....
Snake River.								
Lewiston, Idaho	144	24	10.4	22	1.5	1	4.5	8.9
Riparia, Wash	67	30	8.8	22	2.1	1	4.5	6.7
Columbia River.								
Wenatchee, Wash	473	40	12.4	22-24	5.1	9	8.7	7.3
Umatilla, Oreg (11)	270	25	7.9	24	1.0	5,6	4.2	6.9
The Dalles, Oreg*	166	40	19.6	21	0.0	10,11	4.0	19.6
Willamette River.								
Albany, Oreg	118	20	23.8	23	5.0	3	12.1	18.8
Portland, Oreg	12	15	20.5	22	2.1	14,15	8.9	18.4
Sacramento River.								
Red Bluff, Cal	265	23	27.9	16	1.8	1	16.4	26.1
Colusa, Cal	156	28	28.0	17	3.7	1	22.6	24.3
Knights Landing, Cal	99	18	19.1	18	2.5	1,2	15.4	16.6
Sacramento, Cal	64	25	29.6	17	7.2	1,2	21.6	22.4
San Joaquin River.								
Pollasky, Cal	203	10	8.5	14	0.0	1-7	1.9	8.5
Firebaugh, Cal	148	14	10.2	24	− 0.5	1-5	4.2	10.7
Lathrop, Cal	49	14	18.7	23,24	0.8	1,2	10.8	17.9

* 2 days missing. † No observations on 30th and 31st. Figures in parenthesis represent number of days river was frozen during the month.

Honolulu, T. H., latitude 21° 19′ north, longitude 157° 52′ west; barometer above sea, 38 feet; gravity correction, —0.057 inch, applied. January, 1909.

Day.	Pressure, in inches.*		Air temperature, degrees Fahrenheit.				Moisture.				Wind, in miles per hour.				Precipitation, inches.		Clouds.					
							8 a. m.		8 p. m.		8 a. m.		8 p. m.				8 a. m.			8 p. m.		
	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Maximum.	Minimum.	Wet.	Relative humidity.	Wet.	Relative humidity.	Direction.	Velocity.	Direction.	Velocity.	8 a. m.	8 p. m.	Amount.	Kind.	Direction, from.	Amount.	Kind.	Direction, from.
							°	%	°	%												
1	30.00	30.00	69.7	69.0	75	67	61.0	60	63.0	72	ne.	10	ne.	15	0.00	0.00	6 4	A.-s. A.-cu.	w. sw.	8 1	A.-cu. Cu.	nw. ne.
2	30.02	29.98	68.2	67.0	73	63	62.0	70	61.0	71	ne.	4	ne.	4	T.	0.00	8	S.-cu.	ne.	2 1	Cu. S.-cu.	ne. ne.
3	29.99	29.99	69.6	67.0	72	62	61.0	60	60.0	66	ne.	4	n.	4	0.00	0.00	4	Cu.	ne.	9	Cu.	ne.
4	30.02	30.02	66.2	69.0	74	64	59.4	68	60.0	59	ne.	5	ne.	5	0.00	0.00	5	Cu.	ne.	8	Cu.	ne.
5	30.02	30.01	65.4	67.5	74	62	58.2	65	60.0	64	ne.	4	ne.	5	0.00	0.00	9	S.-cu.	e.	6	Cu.	e.
6	29.99	29.99	66.0	66.0	72	61	57.0	57	60.0	71	ne.	5	ne.	8	0.00	0.00	Few	A.-s.	0(?)	Few	S.-cu.	ne.
7	30.01	29.98	69.0	69.0	75	61	59.1	55	62.0	67	e.	4	e.	4	0.00	0.00	9	A.-cu.	s.	Few	Cu.	se.
8	29.97	29.93	71.0	71.0	77	67	64.4	70	65.0	72	ne.	7	e.	5	0.00	0.00	6	A.-cu.	se.	8	A.-s.	nw.
9	29.87	29.86	73.2	73.5	76	71	68.5	79	70.0	84	se.	18	s.	4	0.01	T.	4	Cu.	se.	8	S.	e.
10	29.81	29.86	73.5	73.0	75	72	70.2	83	71.0	91	se.	20	s.	14	0.01	0.05	10	S.	s.	10	S.	s.
11	29.85	29.91	74.0	72.0	74	72	70.0	80	71.0	95	s.	19	s.	10	T.	0.30	10	S.	s.	10	N.	s.
12	29.96	29.96	71.0	72.0	75	70	70.6	98	70.0	91	s.	14	s.	7	1.43	0.01	10	N.	s.	6	Cu.	se.
13	29.99	29.97	70.0	70.0	78	67	67.0	86	66.0	81	ne.	3	ne.	3	0.03	0.00	3	A.-cu.	sw.	0	0	0
14	30.00	29.97	70.1	68.0	74	65	66.0	81	65.5	88	ne.	2	ne.	4	0.00	0.00	Few	Cu.	0	Few	A.-s.	0
15	29.98	30.00	66.0	71.5	75	64	63.2	86	67.0	79	w.	6	sw.	1	0.00	0.00	10	A.-s.	s.	Few	S.	e.
16	30.04	30.01	73.0	71.0	75	67	68.0	78	68.0	86	ne.	2	se.	4	0.00	0.00	7 3	A.-s. Cu.-n.	w. se.	1	S.	e.
17	30.04	30.05	71.5	73.0	76	69	67.0	79	69.0	82	se.	4	s.	8	0.00	0.00	8	Cu.	ne.	4	Cu.	se.
18	30.13	30.07	73.3	69.0	77	67	68.0	76	66.0	85	n.	3	e.	3	0.00	0.00	1	S.-cu.	0	0	0	0
19	30.12	30.13	71.0	70.0	75	64	64.1	68	65.0	77	ne.	2	ne.	5	0.00	0.00	1	A.-cu.	0	1	A.-s.	0(?)
20	30.16	30.12	74.0	72.0	77	70	66.0	65	67.0	77	ne.	6	ne.	5	0.00	T.	3 5	A.-cu. S.-cu.	e. e.	6	N.	e.
21	30.18	30.12	71.1	72.0	76	69	65.2	73	65.0	69	e.	12	e.	7	T.	0.00	9	S.-cu.	e.	0	0	0
22	30.19	30.16	73.4	73.0	77	70	65.0	64	68.0	78	ne.	20	e.	20	0.00	0.00	3 4	A.-cu. S.-cu.	e. e.	1	S.	e.
23	30.21	30.19	72.0	70.0	76	66	65.3	70	65.0	77	e.	13	ne.	12	0.01	0.00	4	Cu.	ne.	5	S.	se.
24	30.19	30.14	70.0	71.0	74	65	64.0	72	64.0	68	e.	8	e.	18	0.03	T.	2 6	S.-cu. N.	e. e.	7	S.	e.
25	30.19	30.14	71.0	70.0	74	69	62.0	60	62.0	64	e.	22	n.	4	0.00	0.00	3 1	Ci.-s. Cu.	w. e.	2	Cu.	ne.
26	30.15	30.11	71.6	71.0	75	67	62.4	60	62.0	60	e.	18	e.	14	T.	0.00	5	Cu.	e.	1 4	A.-s. Cu.	sw. ne.
27	30.11	30.06	71.4	71.0	74	68	63.0	63	65.0	72	e.	15	e.	15	T.	T.	4	Cu.	e.	10	Cu.	ne.
28	30.08	30.05	71.0	68.0	75	65	64.0	68	64.0	80	e.	7	ne.	12	0.13	T.	7	S.-cu.	e.	9	N.	e.
29	30.08	30.05	70.0	70.0	74	64	62.3	65	62.0	64	e.	5	e.	4	0.12	0.00	7	Cu.	e.	8	Cu.	ne.
30	30.10	30.04	67.0	68.0	72	64	63.1	81	64.0	80	e.	6	e.	9	0.08	0.09	3 3	Cu. N.	e. e.	8	Cu.	ne.
31	30.08	30.05	68.5	69.0	74	66	60.6	63	64.0	76	ne.	14	e.	10	0.03	0.00	10	A.-s.	sw.	7	A.-s.	w.
Mean	30.049	30.030	70.4	70.1	74.8	66.4	64.1	71.1	64.9	75.7	ne.	9.1	e.	7.8	1.88	0.45	6.4	Cu.	e.	4.9	Cu.	ne.

Observations are made at 8 a.m. and 8 p. m., local standard time, which is that of 157° 30′ west, and is 5h and 30m slower than 75th meridian time. *Pressure values are reduced to sea level and standard gravity.

RAINFALL IN JAMAICA.

Thru the kindness of Mr. Maxwell Hall, meteorologist to the government of Jamaica and now in charge of the meteorological service of that island, we have received the following data:

Comparative table of rainfall.

[Based upon the average stations only.]

JANUARY, 1909.

Divisions.	Relative area.	Number of stations.	Rainfall.	
			1908.	Average.
Northeastern division	25	17	8.78	5.90
Northern division	22	41	4.08	3.34
West-central division	26	20	2.05	2.36
Southern division	27	26	2.50	1.63
Means	100	.....	4.35	3.31

The rainfall over the island for January was therefore 1 inch above the average.

The greatest rainfall recorded was 27.37 inches, at Greenvale, Portland, and no rain fell at Glasgow Estate and White Hall.

At Georgetown, Grand Cayman, 4.03 inches fell on 10 days. The greatest fall was 2.46 inches on the 8th.