of Teneriffe. Saussure gives numerous similar instances, and suggests the desirability of recording with each observation, not the absolute height above the level of the sea, but the relative height of the place of observation above its surroundings.

With regard to the yearly period, all the various observations seem to agree in this, that the average electrification of winter is always stronger than that of summer, while during spring and autumn a mean value prevails. This relation is confirmed by Quetelet from five years' continuous observations at Brussels, which give a maximum in January and a minimum in June or July. The same relation of yearly maxima and minima is shown in the observations at Kew, at Naples, at Windsor, and at Saint Louis. The ratio of the values of winter and summer at Brussels is about 13 to 1, and at Saint Louis about 5 to 1. The cause of this difference is, in some way, connected with the amount of water vapor in the atmosphere,

With regard to the daily period, Saussure, Schübler, Crosse, Quetelet, Dellmann, Secchi, Wislicenus, W. Thomson, Everett, F. Denza, Roiti, and Palmieri agree as to the existence of two daily maxima and minima. Most of these tend to prove the existence of a strong maximum about the time of sunset, or shortly after, and a maximum about noon. Two maxima of less degree, and more or less uncertainty, are shown in the morning hours, and two feeble minima during the night. On the other hand, Mascart found at Paris but one maximum and minimum, which perhaps may be accounted for by the influences of the surrounding great city, and although observations made at Lisbon during 1877–'78 show but one maximum and minimum, yet we may safely say that, in general, there are two maxima and minima daily.

Saussure, Schübler, and Crosse have all advanced the statement that a heavy formation of dew is always accompanied by a maximum, and that the chief maximum occurs at the time of sunset and a secondary one at sunrise, while the chief minimum always occurs at the time of the greatest heat of the day. Quetelet also came to the conclusion that the daily variation was inversely as the temperature. Dellman found that the daily maximum occurred about the time of minimum temperature and the minimum electricity with the maximum temperature. There is also some connection between the electrification and the humidity of the air. At times of prolonged dryness the values are less variable than at times of rapid moisture changes; and, in general, we may say the electrification of the air varies inversely as the temperature and humidity of the air.

With regard to the geographical position of the place of observation, and its possible influence on the indications, we know only that stations near together, omitting local influences, will give comparable results.

It has been known for some time that with fog or haze generally a strong positive charge was noted, and it is characteristically so with fogs that appear early in the morning and which, in lifting, foretell a clear, fine day. This has been often noted, and is mentioned by Beccaria, Ronayne, Henley, Volta, Saussure, Crosse, Schübler, Everett, Wislicenus, and was particularly studied by Dellman. This may be due to the accumulation of positive electricity by the fall in temperature and increase in the fog particles.

We next come to the question of the influence exerted on the electricity of the air by the formation of clouds and the occurrence of rain. The experience of all observers is that the rain drops are negatively electrified. Positive rains occur but seldom, and then mainly during winter or when the precipitation occurs as snow from high, cold regions. Everett and Lephay, and some modern observers, have found that hail and rain were generally negatively electrified, and the more sudden and heavy the rain, the stronger the electrification. The clouds and vapor in the air appear to be negatively electrified as well as the rain. This is important, inasmuch as it shows that the cause of the negative electrification is not to be sought in the friction of the falling drops with the air. Palmieri and Quetelet found that large cloud masses are electrified negatively in their centre, but positively electrified at the edges. As a rule, the clearer and colder the weather, the greater the electrification.

FOG PREDICTIONS FOR THE BANKS OF NEWFOUNDLAND.

[By Sergeant E. B. GARRIOTT, Signal Corps.]

With the solution in recent years of many of the problems of meteorology the science has assumed a prominence proportional to the practical value of the discoveries made. Prominent among subjects which have more latterly received special consideration is ocean meteorology, more particularly as relates to North Atlantic storms, ice, and fog. As regards the storms which traverse, or have their origin over, the ocean, the general laws attending their development and movement have been fairly well determined, and valuable information and forecasts are furnished for the benefit of foreign and domestic maritime interests. It has also been found possible to furnish information relative to the location and movement of ice-fields in the vicinity of the Banks of Newfoundland. Not the least valuable, in probable results, have been the investigations made in connection with fog, as encountered in the trans-Atlantic routes. Observations made during the past six months, with special reference to the denser fog formations over the Banks of Newfoundland, show that these conditions, in every instance reported, have been observed within areas of low barometric pressure, and, as a rule, in the eastern quadrants, considerably in advance of the centres of the depression. The fact that storms move eastward from the North American continent has been established, and it is possible to calculate their rate of progression. It has been shown by observation that the conditions favorable for the development of fog over the Banks accompany the the shift of wind to southerly with the approach of cyclonic areas, whereby the warm air of more southern latitudes is drawn in contact with the ice-fields and cold Arctic currents. This shift of wind precedes the arrival in these longitudes of the centres of low barometer areas of average strength from one to two days. This period, considered with the time occupied by storm-centres in reaching the coast after having been located over the North American continent, allows a considerable margin of time for forecasting the probable presence of fog over the Banks. The average time occupied by trans-Atlantic steamers between the port of New York and the fiftieth meridian is from three to four days, and it is not unreasonable to anticipate, for the near future, the forecasting of fog in the trans-Atlantic routes, not only for cabling, but for the benefit of outward-bound steamers.

METEOROLOGICAL TABLES.

Table showing the dates of the last snowfall at stations of the Signal Service, east of the Rocky Mountains, for each winter from 1873–'74 *to the winter of* 1885–'86, *inclusive.*

Districts and stations.	Stations established.	Winter of—												
		1873–'74.	1874–'75.	1875–'76.	1876–'77.	1877–'78.	1878–'79.	1879–'80.	1880–'81.	1881–'82.	1882–'83.	1883–'84.	1884–'85.	1885–'86.
New England.														
Eastport, Me	Apr. 1, 1873	Apr. 30	Apr. 21	May 12	Apr. 12	Apr. 7	Apr. 19	Apr. 17	Apr. 16	May 15	May 15	May 12	May 2	Mar. 23
Portland, Me	Jan. 15, 1871	Apr. 30	Apr. 14	Apr. 19	Apr. 12	Apr. 1	Apr. 19	Apr. 17	Apr. 16	May 15	Apr. 8	May 10	May 2	Apr. 8
Mount Washington, N. H	Dec. 1, 1870	*a*	*a*	*a*	*a*	*a*	*a*	*a*	*a*	*a*	*a*	May 30	*a*	*a*
Boston, Mass	Nov. 1, 1870	Apr. 28	Apr. 19	May 5	Apr. 12	Mar. 25	Apr. 19	Apr. 24	Apr. 14	Apr. 10	Apr. 24	Apr. 9	Apr. 2	Apr. 8
Block Island, R. I	Sept. 1, 1880	.....	.....	.....	.....	.....	.....	.....	Mar. 19	Apr. 11	Mar. 30	Apr. 3	Mar. 29	Apr. 5
New Haven, Conn	Dec. 10, 1872	Apr. 28	Apr. 19	May 1	Mar. 28	Mar. 17	Apr. 19	May 1	Apr. 12	May 9	Apr. 29	Apr. 18	Apr. 11	Apr. 5
New London, Conn	Jan. 10, 1871	Apr. 28	Apr. 19	May 11	Apr. 21	May 15	Apr. 19	May 1	Apr. 15	Apr. 10	Apr. 29	Apr. 3	Mar. 29	Apr. 5
Middle Atlantic states.														
Albany, N. Y	Dec. 22, 1873	Apr. 29	Apr. 18	Apr. 30	Mar. 28	Apr. 5	Apr. 19	May 1	Apr. 13	May 1	Apr. 23	Apr. 5	May 1	Apr. 8
New York City	Nov. 1, 1870	Apr. 29	Apr. 24	Mar. 25	Mar. 28	Mar. 25	Mar. 17	Apr. 7	Mar. 31	Apr. 11	Apr. 29	Apr. 5	Apr. 29	Apr. 5
Philadelphia, Pa	Jan. 1, 1871	Apr. 29	Apr. 19	Mar. 24	Mar. 28	Apr. 24	Apr. 18	Apr. 12	Apr. 6	Apr. 10	Mar. 30	Apr. 9	Apr. 15	Apr. 4
Atlantic City, N. J	Dec. 10, 1873	Apr. 29	Apr. 18	Mar. 20	Mar. 28	Feb. 26	Feb. 20	Mar. 19	Apr. 6	Mar. 22	Apr. 1	Apr. 7	Apr. 11	Feb. 4
Barnegat City, N. J. *b*	Dec. 10, 1873	Apr. 29	Apr. 13	Mar. 20	Mar. 28	Feb. 2	Apr. 4	Mar. 29	Mar. 31	Apr. 10	Apr. 1	Apr. 9	Apr. 29	.....
Cape May, N. J. c	May 24, 1871	*d*	Apr. 19	Mar. 20	Mar. 28	Feb. 26	Mar. 29	Mar. 28	Mar. 31	Mar. 16	Mar. 31	Mar. 5	Mar. 22	.....
Sandy Hook, N. J	Dec. 10, 1873	*d*	Apr. 4	Apr. 18	Mar. 30	Mar. 25	Mar. 17	Mar. 14	Apr. 6	Mar. 16	Apr. 29	Mar. 6	Apr. 11	Apr. 4
Baltimore, Md	Jan. 1, 1871	Apr. 29	Apr. 18	Mar 30	Mar. 28	Feb. 15	Apr. 5	Mar. 29	Apr. 4	Apr. 11	Mar. 31	Apr. 9	Apr. 11	Mar. 8
Washington City	Nov. 1, 1870	Apr. 29	Apr. 18	Mar. 30	Mar. 28	Feb. 15	Feb. 19	Mar. 12	Apr. 4	Apr. 23	Apr. 1	Apr. 9	Apr. 11	Mar. 12
Cape Henry, Va	Dec. 15, 1873	.....	Feb. 7	Feb. 4	Mar. 16	Jan. 18	Feb. 20	Feb. 10	Apr. 4	Jan. 4	Jan. 16	Feb. 23	Apr. 10	Mar. 8
Chincoteague, Va	Mar. 16, 1880	.....	.....	.....	.....	.....	.....	.....	Apr. 4	Mar. 18	Apr. 2	Apr 9	Mar. 22	Mar. 10
Lynchburg, Va	May 24, 1871	Apr. 29	Apr. 17	Mar. 20	Apr. 13	Jan. 31	Feb. 17	Mar. 12	Mar. 30	Mar. 15	Apr. 2	Apr. 9	Apr. 13	Apr. 7
Norfolk, Va	Jan. 1, 1871	*d*	Apr. 18	Mar. 20	Mar. 18	Jan. 8	Feb. 16	Jan. 13	Mar. 31	Mar. 12	Mar. 23	Mar. 5	Apr. 13	Mar. 8
South Atlantic states.														
Charlotte, N. C	Oct. 6, 1878	.....	.....	.....	.....	.....	Feb. 14	Feb. 2	Apr. 1	Jan. 31	Mar. 26	Mar. 1	Mar. 23	Mar. 10
Cape Hatteras and Hatteras, N. C	Sept. 1, 1874	.....	.....	Mar. 22	Dec. 1	Dec. 27	Feb. 1	Jan. 19	Jan. 24	*e*	Mar. 22	Jan. 17	Mar. 23	Feb. 4
Kitty Hawk, N. C	Jan. 15, 1875	.....	Apr. 18	Feb. 2	Mar. 18	Dec. 2	Feb. 20	Mar. 30	Feb. 23	Jan. 4	Mar. 22	Jan. 17	Mar. 23	Feb. 4
Macon, Fort, N. C	May 23, 1878	.....	.....	.....	.....	.....	*e*	*e*	Jan. 25	Jan. 1	Mar. 22	Jan. 17	Mar. 23	Feb. 4
Smithville, N. C	Oct. 15, 1875	.....	.....	*e*	*e*	*e*	*e*	*e*	Jan. 24	*e*	*e*	Jan. 5	*e*	*e*
Wilmington, N. C	Jan. 1, 1871	*e*	*e*	*e*	*e*	Feb. 3	Jan. 19	Nov. 20	Jan. 24	Jan. 30	Mar. 22	Jan. 17	Mar. 23	Feb. 28
Charleston, S. C	Jan. 5, 1871	*e*	*e*	*e*	*e*	*c*	*e*	*e*	*e*	Jan. 30	*e*	*e*	*e*	Feb. 4
Augusta, Ga	Nov. 2, 1870	Feb. 8	*e*	Mar. 19	Jan. 1	Jan. 8	Feb. 17	Mar. 12	Jan. 14	Jan. 30	Jan. 9	Jan. 7	Mar. 23	Feb. 27
Savannah, Ga	Jan. 1, 1871	*e*	*e*	*e*	*e*	*e*	*e*	*e*	*e*	*e*	*e*	*e*	*e*	Jan. 9
Jacksonville, Fla	Sept. 11, 1871	*e*	*e*	*e*	*e*	*e*	*e*	*e*	*e*	*e*	*e*	*e*	*e*	*e*

Table showing the dates of the last snowfall at stations of the Signal Service, &c.—Continued.

Districts and stations.	Stations established.	Winter of—												
		1873-'74.	1874-'75.	1875-'76.	1876-'77.	1877-'78.	1878-'79.	1879-'80.	1880-'81.	1881-'82.	1882-'83.	1883-'84.	1884-'85.	1885-'86.
Florida Peninsula.														
Cedar Keys, Fla	Nov. 7, 1879							e	e	e	e	e	e	e
Key West, Fla	Nov. 1, 1870	e	e	e	e	e	e	e	e	e	e	e	e	e
Sanford, Fla	Sept. 1, 1882											e	e	Jan. 12
Eastern Gulf states.														
Atlanta, Ga	Sept. 25, 1878						Dec 27	Feb. 2	Mar. 29	Jan. 30	Jan. 9	Mar. 2	Mar. 18	Feb. 27
Pensacola, Fla	Oct. 27, 1879							e	e	e	e	e	e	e
Mobile, Ala	Nov. 7, 1870	e	e	e	e	e	Jan. 4	e	Jan. 24	e	Jan. 9	e	e	e
Montgomery, Ala	Nov. 9, 1870	e	Dec. 31	e	Jan. 1	e	Jan. 5	e	Jan. 24	e	Jan. 9	Jan. 24	Feb. 12	Jan. 9
Vicksburg, Miss	Sept. 10, 1871	Mar. 23	Mar. 7	Mar. 20	Jan. 1	Feb. 10	Jan. 9	Feb. 2	Jan. 10	e	e	Jan. 8	Feb. 12	e
New Orleans, La	Nov. 1, 1870	e	e	e	e	Jan. 1	Dec. 26	Jan. 5	Jan. 24	Dec. 25	e	e	e	e
Western Gulf states.														
Shreveport, La	Sept. 3, 1871	Jan. 16	Mar. 16	e	Dec. 31	Jan. 3	Jan. 8	Dec. 25	Jan. 20	Jan. 29	Jan. 20	Jan. 7	Feb. 21	Jan. 3
Fort Smith, Ark	June 1, 1882										Jan. 27	Mar. 8	Feb. 16	Apr. 5
Little Rock, Ark	July 1, 1879							Feb. 2	Mar. 21	Jan. 30	Feb. 17	Feb. 27	Feb. 16	Apr. 5
Galveston, Tex	Apr. 19, 1871	Jan. 5	e	e	e	e	e	e	Jan. 23	e	e	e	e	Jan. 12
Indianola, Tex	May 1, 1872	Jan. 5	e	e	e	e	e	e	Jan. 24	e	Feb. 18	e	e	Jan. 12
Palestine, Tex. *f*	Dec. 3, 1881		Mar. 6	Mar. 20	Dec. 28	Jan. 3	Jan. 3	Feb. 2	Jan. 9	e	Feb. 17	Feb. 29	Feb. 13	Jan. 23
San Antonio, Tex	Sept. 22, 1875			e	e	e	Feb. 6	Mar. 14	Jan. 9	e	e	d	e	Jan. 13
Rio Grande Valley.														
Brownsville, Tex	Aug. 25, 1875			e	e	e	e	Dec. 25	Dec. 31	e	e	e	e	e
Rio Grande City, Tex	May 28, 1875			e	e	e	e	e	e	e	e	e	e	Jan. 12
Ohio Valley and Tennessee.														
Chattanooga, Tenn	Jan. 8, 1879						Feb. 16	Apr. 8	Apr. 4	Jan. 31	Mar. 21	Mar. 4	Mar. 18	Apr. 5
Knoxville, Tenn	Jan. 1, 1871	Apr. 29	Mar. 7	Mar. 28	Mar. 9	Feb. 11	Feb. 18	Feb. 3	Apr. 5	Feb. 4	Mar. 21	Apr. 9	Apr. 13	Apr. 6
Memphis, Tenn	Feb. 28, 1871	Apr. 9	Mar. 7	Mar. 19	Mar. 25	Feb. 3	Feb. 5	Feb. 2	Mar. 19	Jan. 31	Mar. 21	Mar. 4	Mar. 8	Mar. 31
Nashville, Tenn	Nov. 1, 1870	Feb. 25	Mar. 22	Mar. 28	Mar. 9	Feb. 10	Mar. 15	Feb. 3	Apr. 4	Feb. 21	Mar. 21	Mar. 2	Mar. 28	Apr. 7
Louisville, Ky	Sept. 11, 1871	Jan. 7	Feb. 25	Feb 15	Feb. 14	Feb. 10	Feb. 17	Feb. 3	Feb. 28	Feb. 21	Apr. 1	Apr. 10	Apr. 14	Apr. 7
Greencastle, Ind	July 23, 1884												Apr. 14	Apr. 6
Indianapolis, Ind	Feb. 10, 1871	Feb. 13	Apr. 17	Mar. 28	Apr. 30	Feb. 25	Mar. 20	Mar. 25	Apr. 4	Apr. 11	Apr. 22	Apr. 9	Apr. 14	Apr. 6
Cincinnati, Ohio	Nov. 1, 1870	Apr. 9	Apr. 24	Mar. 28	May 1	Mar. 24	Mar. 19	Mar. 25	Apr. 15	Apr. 10	May 22	Apr. 8	Mar. 28	Apr. 7
Columbus, Ohio	July 1, 1878						Apr. 3	Mar. 15	Apr. 5	Apr. 10	May 21	Apr. 9	Apr. 15	Apr. 7
Pittsburg, Pa	Nov. 1, 1870	Apr. 28	May 2	Apr. 30	May 1	Mar. 25	Apr. 5	Apr. 11	Apr. 6	Apr. 15	Apr. 24	Apr. 9	May 10	Apr. 7
Lower lakes.														
Buffalo, N. Y	Nov. 1, 1870	Apr. 26	Apr. 17	Apr. 30	Apr. 5	Mar. 25	May 1	May 1	Apr. 13	May 2	Apr. 28	Apr. 17	May 9	Apr. 8
Oswego, N. Y	Nov. 1, 1870	May 2	May 2	Apr. 30	Apr. 21	Mar. 26	Apr. 11	Apr. 30	Apr. 13	Apr. 11	Apr. 28	May 16	May 10	Apr. 8
Rochester, N. Y	Nov. 1, 1870	May 2	May 2	Apr. 30	Apr. 5	May 12	May 2	Apr. 12	Apr. 13	Apr. 12	Apr. 28	May 16	May 10	Apr. 8
Erie, Pa	May 25, 1873	Apr. 11	May 2	Apr. 30	Apr. 5	Mar. 24	Apr. 5	Apr. 10	Apr. 13	Apr. 12	Apr. 24	Apr. 17	May 9	Apr. 7
Cleveland, Ohio	Nov. 1, 1870	Apr. 30	May 2	Mar. 30	May 1	Mar. 24	Apr. 5	Apr. 30	Apr. 13	Apr. 15	Mar. 27	Apr. 8	May 9	Apr. 7
Sandusky, Ohio	Aug. 2, 1877					Mar. 24	Apr. 20	Apr. 10	Apr. 15	Apr. 10	d	Apr. 9	May 9	Apr. 6
Toledo, Ohio	Nov. 1, 1870	Apr. 30	May 2	Mar. 30	May 1	Mar. 24	Apr. 15	Apr. 10	Apr. 13	Apr. 11	May 21	Apr. 9	May 9	Apr. 7
Detroit, Mich	Nov. 1, 1870	Apr. 30	May 1	Mar. 30	May 1	Mar. 30	Apr. 4	Apr. 11	Apr. 12	Apr. 10	May 21	Apr. 16	Apr. 14	Apr. 7
Upper lakes.														
Alpena, Mich	Sept. 10, 1872	d	Apr. 21	Apr. 18	Apr. 27	June 8	June 7	June 3	June 11	May 23	May 21	May 15	May 10	Apr. 4
Escanaba, Mich	May 24, 1871	Apr. 20	May 5	May 3	May 3	May 12	Apr. 3	Apr. 16	Apr. 5	May 16	Apr. 27	May 2	May 10	Apr. 24
Grand Haven, Mich	May 24, 1871	Apr. 11	May 1	Mar. 30	May 1	Mar. 30	Apr. 3	Apr. 10	Apr. 13	Apr. 20	Apr. 22	Apr. 16	May 8	Apr. 2
Mackinaw City, Mich	Aug. 20, 1882										Apr. 26	Apr. 16	May 8	May 16
Marquette, Mich	May 1, 1871	Apr. 22	May 4	May 4	Apr. 30	May 11	May 5	Apr. 30	Apr. 29	May 22	May 20	May 2	May 10	May 6
Port Huron, Mich	July 25, 1874		Apr. 24	Apr. 30	May 1	Mar. 30	Apr. 5	Apr. 30	Apr. 11	May 2	May 22	Apr. 6	May 9	Apr. 7
Chicago, Ill	Nov. 1, 1870	May 27	May 1	Apr. 14	Mar. 25	Mar. 30	Apr. 2	Apr. 30	Apr. 13	May 23	Apr. 6	Apr. 20	Apr. 14	Mar. 31
Milwaukee, Wis	Nov. 1, 1870	Apr. 11	May 2	Apr. 30	Apr. 29	Mar. 31	Apr. 2	Apr. 16	Apr. 12	Mar. 22	Apr. 7	Apr. 20	Apr. 14	Apr. 1
Duluth, Minn	Nov. 1, 1870	Apr. 21	May 1	May 3	Apr. 5	Mar. 26	Apr. 2	Apr. 19	Apr. 14	May 22	May 6	Apr. 27	May 7	Apr. 1
Upper Mississippi valley.														
Saint Paul, Minn	Nov. 1, 1870	Apr. 14	Apr. 29	May 3	Apr. 9	Mar. 31	Apr. 2	Apr. 20	Apr. 11	Mar. 21	Apr. 22	Apr. 9	May 8	Apr. 1
La Crosse, Wis	Oct. 5, 1872	Apr. 20	May 1	Apr. 3	Apr. 29	May 4	Apr. 2	Apr. 16	Apr. 12	Mar. 21	Apr. 21	Apr. 15	May 9	Apr. 1
Davenport, Iowa	May 24, 1871	Apr. 27	Apr. 16	Mar. 28	Apr. 29	Mar. 30	Apr. 2	Mar. 18	Apr. 12	Mar. 23	Apr. 6	Apr. 8	Apr. 12	Apr. 1
Des Moines, Iowa	Aug. 1, 1878						Mar. 22	Mar. 18	Apr. 12	Apr. 10	Apr. 23	Apr. 8	Apr. 9	Mar. 31
Dubuque, Iowa	July 10, 1873	Apr. 6	May 1	Apr. 2	Apr. 29	Mar. 30	Apr. 2	Apr. 16	Apr. 12	Mar. 21	Apr. 6	Apr. 8	May 7	Apr. 1
Keokuk, Iowa	July 16, 1871	Apr. 16	Apr. 10	Mar. 28	Apr. 29	May 11	Mar. 21	Mar. 16	Apr. 12	Mar. 9	Apr. 23	Apr. 8	Apr. 9	Apr. 3
Cairo, Ill	June 1, 1871	Apr. 9	Mar. 7	Mar. 28	Mar. 8	Feb. 10	Mar. 16	Mar. 13	Apr. 3	Jan. 31	Mar. 23	Mar. 9	Mar. 28	Mar. 31
Springfield, Ill	July 1, 1879							Apr. 19	Apr. 12	Apr. 10	Apr. 23	Apr. 22	Apr. 9	Apr. 3
Saint Louis, Mo	Nov. 1, 1870	Mar. 31	Apr. 12	Mar. 28	Apr. 29	Feb. 24	Mar. 16	Mar. 16	Apr. 4	Mar. 13	Apr. 1	Apr. 22	Apr. 9	Apr. 4
Missouri Valley.														
Lamar, Mo	Oct. 17, 1884												May 7	Mar. 31
Leavenworth, Kans	May 21, 1871	Apr. 7	Apr. 11	Apr. 13	Apr. 28	Mar. 29	Feb. 25	Mar. 15	Apr. 12	Apr. 11	Mar. 21	Apr. 21	Mar. 28	Apr. 3
Omaha, Nebr	Nov. 1, 1870	Apr. 20	May 2	Apr. 13	Apr. 29	Mar. 30	Mar. 21	Apr. 19	Apr. 4	Apr. 13	Apr. 6	Apr. 21	Apr. 9	Apr. 29
Valentine, Nebr	Jan. 27, 1885													Apr. 28
Bennett, Fort, Dak. *g*	Dec. 22, 1879								Apr. 7	Apr. 12	May 4	Apr. 15	May 6	
Huron, Dak	July 1, 1881									May 21	May 2	Apr. 8	May 6	Apr. 29
Yankton, Dak	Apr. 1, 1873	Apr. 4	Apr. 11	Apr. 4	Apr. 28	May 11	Mar. 20	Apr. 18	Apr. 10	Apr. 13	Apr. 23	Apr. 9	May 7	Apr. 28
Extreme northwest.														
Moorhead, Minn. *h*	Jan. 1, 1881	Apr. 6	Apr. 29	June 3	Apr. 4	May 10	Apr. 2	Apr. 25	Apr. 14	May 21	Apr. 15	May 1	May 8	Apr. 27
Saint Vincent, Minn. *i*	Sept. 5, 1880	Apr. 27	May 4	Apr. 30	June 8	May 10	May 5	Apr. 25	Apr. 2	May 21	Apr. 30	Apr. 9	May 8	May 14
Bismarck, Dak	Sept. 15, 1874		Apr. 29	Apr. 9	Apr. 23	May 11	Apr. 2	Apr. 25	Apr. 11	May 20	Apr. 22	Apr. 28	May 7	Mar. 28
Buford, Fort, Dak	Oct. 23, 1878						Mar. 21	Apr. 14	Apr. 10	May 22	Apr. 4	Apr. 30	May 6	May 1
Totten, Fort, Dak	Oct. 8, 1883												May 7	Apr. 27
Northern slope.														
Assinaboine, Fort, Mont	Oct. 6, 1879							Apr. 16	Apr. 11	May 19	Apr. 4	Apr. 27	May 7	May 13
Benton, Fort, Mont	Nov. 25, 1871	d	d	d	d	d	d	Apr. 23	Apr. 22	Apr. 25	May 5	Apr. 27	Apr. 20	Apr. 3
Custer, Fort, Mont	Dec. 5, 1878								Apr. 11	May 20	d	Apr. 30	Apr. 21	Apr. 28
Helena, Mont	Oct. 15, 1879							May 28	Apr. 27	May 19	May 2	Apr. 27	June 7	May 13
Maginnis, Fort, Mont	July 14, 1882										d	d	May 6	May 13
Poplar River, Mont	May 1, 1882										Apr. 4	Apr. 29	May 7	May 1
Shaw, Fort, Mont	Apr. 1, 1880							Apr. 24	May 23	May 20	May 1	Apr. 26	May 6	Apr. 28
Deadwood, Dak	Dec. 18, 1877						May 3	May 23	May 17	May 22	May 29	May 12	May 10	May 1
Cheyenne, Wyo	Nov. 1, 1870	May 12	Apr 24	May 31	Apr. 28	May 17	Apr. 23	May 30	May 17	May 22	May 28	May 13	May 7	Apr. 28
North Platte, Nebr	Sept. 18, 1874		Apr. 25	May 6	May 23	May 12	Mar. 20	June 27	Apr. 12	May 22	May 2	Apr. 11	Mar. 27	Apr. 4
Middle slope.														
Denver, Colo	Nov. 19, 1871	Apr. 21	Apr. 25	May 6	Apr. 28	Apr. 9	Apr. 22	May 31	May 17	May 8	May 29	May 1	May 11	Apr. 19
Pike's Peak, Colo	Nov. 1, 1873	a	a	a	a	a	a	a	a	a	a	a	a	a
West Las Animas, Colo	Oct. 1, 1881										Apr. 14	May 2	Apr. 24	Apr. 4
Concordia, Kans	Jan. 27, 1885													Apr. 3
Dodge City, Kans	Sept. 15, 1874		Apr. 25	Apr. 13	Mar. 23	Feb. 13	Feb. 17	Apr. 7	Apr. 12	Apr. 14	Feb. 24	May 1	May 7	Apr. 4
Elliott, Fort, Tex	Nov. 29, 1879								Mar. 15	Feb. 18	Feb. 2	Feb. 27	Mar. 24	Apr. 4
Southern slope.														
Sill, Fort, Ind T	June 23, 1875			d	d	Feb. 8	Feb. 14	Mar. 15	Feb. 18	Mar. 9	Feb. 3	Mar. 7	Feb. 12	Apr. 4
Abilene, Tex	Sept. 15, 1885													Mar. 29
Concho, Fort, Tex. *j*	Oct. 10, 1875				d	Jan. 7	Feb. 6	Mar. 15	Jan. 9	e	Feb. 5	Apr. 20	Feb. 13	
Davis, Fort, Tex	Dec. 24, 1877						Feb. 6	Mar. 15	Mar. 20	Apr. 13	Mar. 7	Apr. 20	Feb. 13	Mar. 29
Stockton, Fort, Tex	Feb. 26, 1876				Feb. 28	Jan. 6	Jan. 8	Feb. 2	Jan. 9	Feb. 3	e	Jan. 23	Feb. 13	d
Stanton, Fort, N. Mex	Jan. 1, 1885													Mar. 29

a Snow every month. *b* Station closed December 31, 1885. *c* Station closed October 31, 1885. *d* No reliable record. *e* None fall. *f* Corsicana data used prior to 1882-'83. *g* Station closed November 30, 1885. *h* Breckenridge data used prior to 1882-'83. *i* Pembina, Dak., data used prior to 1880-'81. *j* Station closed September 15, 1885.

NOTE.—A table showing the dates of the *first* snowfall of each winter from 1873-'74 to 1885-'86 inclusive, is published in the MONTHLY WEATHER REVIEW of September, 1886.

Table of miscellaneous meteorological data for April, 1887—Signal Service observations.

Stations and districts.	Elevation above sea-level, feet.	Atmospheric pressure: Mean actual barometer.	Mean reduced barometer.	Departure from normal.	Extremes: Highest barometer	Date.	Lowest barometer	Date.	Monthly range of barometer.	Temperature of the air: Monthly mean.	Departure from normal.	Extremes: Max.	Date.	Mean max	Min.	Date.	Mean min.	Monthly range.	Daily ranges: Greatest.	Date.	Least.	Date.	Mean relative humidity, per cent.	Mean temperature of the dew-point (degrees Fahrenheit).	Precipitation (in inches).	Departure from normal precipitation (in inches).	Winds: Total movement, miles.	Prevailing direction.	Maximum velocity: Miles p. h.	Direction.	Date.	No. of rainy days.	No. of cloudy days.	No. of fair days.	No. of clear days.
New England.										41.4	− 2.1														3.48	− 0.06									
Eastport	53	29.84	29.90	.00	30.60	8	29.18	29	1.41	37.5	− 0.5	66.2	11	44.5	20.5	8	30.3	45.7	28.4	11	5.7	4	72.2	28.7	2.92	− 0.69	9,242	n.	50	ne.	2	12	9	9	12
Portland	99	29.83	29.94	+.02	30.64	8	29.11	29	1.53	40.2	− 2.8	70.2	10	47.3	21.5	1	32.3	48.7	26.8	22	4.0	16	62.8	27.1	4.96	+ 2.02	6,311	nw.	36	se.	29	13	11	9	10
Manchester	...	29.69	...	...	...	...	...	...	...	41.6	− 3.4	79.0	10	51.3	18.2	8	30.5	60.8	40.0	10	5.4	2	65.0	29.1	2.54	...	5,137	nw.	31	w.	6	12	9	9	12
Mount Washington	6,279	23.54	29.97	+.05	30.74	8	29.03	30	1.71	19.0	− 3.0	42.1	10	25.7	− 8.3	16	10.6	50.4	32.5	5	6.7	23	89.6	16.4	5.17	− 0.27	*a*	nw.	118	nw.	9	16	6	13	11
Northfield	871	29.01	...	...	...	...	...	...	...	35.4	− 6.6	67.8	10	46.0	− 1.0	1	24.1	68.8	40.0	9	6.2	16	68.4	25.4	3.37	...	6,253	s.	46	n.	30	13	8	11	11
Boston	124	29.82	29.95	.00	30.68	8	29.13	29	1.55	43.9	− 1.1	79.6	12	52.4	23.0	6	36.1	56.6	29.7	9	7.0	16	62.2	30.4	2.62	− 1.25	9,315	w.	40	n.	2	10	7	14	9
Nantucket	14	29.94	...	...	...	...	...	...	...	42.6	...	66.8	11	48.8	27.0	1	35.1	39.8	25.1	10	4.8	2	76.5	35.2	6.23	...	8,575	w.	53	ne.	2	14	8	11	11
Wood's Holl *b*	...	...	...	...	...	...	...	...	...	44.7	...	64.1	10	52.7	26.1	2	36.7	38.0	24.7	12	10.3	13	...	...	4.42	...	...	sw.	...	...	...	11	...	...	...
Vineyard Haven	...	...	...	...	...	...	...	...	...	44.8	...	71.0	10	53.5	22.0	7	36.1	49.0	29.5	10	7.8	13	...	...	4.08	...	...	s.	...	...	...	12	...	...	...
Block Island	27	29.93	29.95	.00	30.66	8	29.14	29	1.53	43.2	+ 0.2	66.8	11	49.7	25.0	6	38.1	41.8	21.9	10	4.3	2	78.5	36.6	3.49	+ 0.12	12,232	sw.	56	ne.	2	14	8	11	11
Narragansett Pier	...	...	...	...	...	...	...	...	...	42.8	...	77.0	10	51.5	23.0	6	34.2	54.0	...	...	...	...	...	...	4.01	+ 0.78	...	...	...	...	...	12	...	...	...
New Haven	107	29.86	29.97	−.01	30.69	8	29.15	29	1.54	44.4	− 1.6	80.0	10	53.8	23.0	6	35.5	57.0	38.8	10	7.6	1	60.5	30.4	2.75	− 1.21	6,476	nw.	31	ne.	2	13	12	13	5
New London	47	29.91	29.95	−.02	30.66	8	29.14	29	1.52	45.0	− 1.0	79.4	15	53.8	23.6	6	36.8	55.8	37.0	10	5.7	2	69.7	34.7	3.63	− 0.22	4,302	n.	26	s.	29	12	8	13	9
Mid. Atlantic States.										49.5	− 1.5														2.85	− 0.13									
Albany	85	29.91	30.00	+.02	30.71	8	29.13	29	1.58	43.2	− 3.8	72.5	10	52.5	18.0	1	39.2	54.5	31.8	22	5.9	23	71.2	34.0	2.49	− 0.38	5,066	nw.	24	s.	23	11	9	12	9
New York City	158	29.82	29.98	−.01	30.66	8	29.18	29	1.48	47.7	− 0.3	80.3	10	56.7	25.8	6	39.2	54.5	38.6	10	8.0	1	55.9	31.3	3.67	+ 0.40	6,067	nw.	29	nw.	30	12	7	17	6
Philadelphia	117	29.90	30.01	+.02	30.67	8	29.25	29	1.42	49.8	− 0.2	84.2	11	60.4	27.8	6	41.1	56.4	39.8	10	7.5	1	57.8	33.8	2.00	− 0.98	8,446	nw.	37	nw.	30	11	8	14	8
Atlantic City	13	30.01	30.01	+.03	30.65	8	29.25	29	1.40	46.3	− 0.7	84.0	11	54.1	26.6	2	40.0	57.4	40.0	10	3.7	1	82.6	40.9	2.85	− 0.52	7,033	nw.	37	ne.	18	13	6	13	11
Cape Henlopen	...	...	...	...	...	...	...	...	...	46.4	...	74.8	11	53.6	30.4	2	39.3	44.4	34.1	12	5.4	1	...	...	2.62	+ 1.81	...	nw.	...	...	...	13	...	...	...
Baltimore	45	29.97	30.00	.00	30.63	8	29.30	29	1.33	51.2	− 1.8	85.0	11	61.2	29.5	6	41.8	55.5	38.2	10	7.4	1	58.9	35.7	2.44	− 0.57	4,963	nw.	24	nw.	29	13	7	13	10
Ocean City	...	...	...	...	...	...	...	...	...	47.5	...	78.8	10	53.9	31.0	2	41.0	47.8	35.3	10	5.5	13	...	...	2.03	+ 0.02	...	s.	...	...	...	13	...	...	...
Washington City	106	29.92	30.02	+.02	30.63	8	29.34	29	1.29	51.6	− 0.4	83.9	11	61.3	28.0	6	42.1	55.9	38.8	10	5.2	1	61.7	37.0	3.24	+ 0.35	4,984	nw.	32	nw.	29	14	8	12	10
Cape Henry	16	...	...	...	...	...	...	...	...	53.9	...	81.8	28	62.5	33.2	2	45.2	48.6	33.7	18	6.0	8	...	...	2.84	− 2.07	...	se.	...	...	...	14	...	...	...
Chincoteague	8	30.01	30.00	+.01	30.61	8	29.33	29	1.28	49.0	− 1.0	81.4	11	56.8	30.2	1	42.0	51.2	34.2	10	8.1	29	77.8	41.8	3.34	+ 1.13	9,953	se.	50	n.	25	14	8	12	10
Lynchburg	652	29.34	30.01	+.01	30.62	8	29.35	18	1.27	53.5	− 2.5	85.4	12	64.9	30.9	3	42.2	54.5	41.2	10	5.0	22	66.5	40.6	3.29	− 0.20	2,882	nw.	24	nw.	29	13	7	15	8
Norfolk	30	30.01	30.02	+.03	30.60	8	29.38	18	1.23	53.0	− 3.0	84.5	11	63.5	31.5	6	43.7	53.0	34.8	10	7.0	14	67.9	41.3	3.37	− 0.55	5,439	e.	32	sw.	28	12	9	11	10
South Atlantic States.										61.8	− 1.0														2.86	− 1.20									
Charlotte	808	29.20	30.03	+.03	30.53	9	29.38	18	1.16	59.3	+ 0.3	89.3	13	71.4	32.1	2	48.0	57.2	36.3	3	6.6	1	66.1	46.7	1.84	− 2.63	4,284	sw.	35	sw.	18	9	4	11	15
Hatteras	11	30.06	30.05	+.05	30.56	8	29.52	29	1.05	57.0	0.0	75.6	23	64.5	36.7	2	50.4	38.9	23.3	19	7.2	14	78.5	50.0	2.71	− 2.61	11,666	ne.	47	w.	28	9	4	14	12
Kitty Hawk	9	...	...	...	...	...	...	...	...	55.3	...	80.0	23	64.2	33.2	2	46.4	46.8	35.0	4	5.6	10	...	...	2.39	− 3.15	...	sw.	...	...	...	12	...	...	...
Raleigh	439	29.59	30.06	...	30.59	8	29.38	18	1.21	57.2	...	86.0	12	68.9	30.4	2	46.5	55.6	33.6	3	2.1	1	61.4	41.9	2.10	...	5,586	n.	33	n.	29	8	7	8	15
Smithville	34	...	...	...	...	...	...	...	...	60.4	...	77.2	30	68.5	34.0	2	52.4	43.2	27.1	30	8.8	8	...	...	2.27	− 1.03	...	sw.	...	...	...	8	...	...	...
Wash Woods	...	...	...	...	...	...	...	...	...	54.4	...	80.0	23	62.8	30.0	6	46.1	50.0	32.0	18	5.0	14	...	...	2.96	+ 0.56	...	se.	...	...	...	12	...	...	...
Wilmington	52	30.00	30.03	+.02	30.49	9	29.53	18	0.96	59.9	− 1.1	85.7	12	69.8	32.9	2	49.3	52.8	33.6	13	13.3	23	68.5	48.1	3.96	+ 0.62	6,029	s.	30	s.	18	8	4	8	18
Charleston	52	30.03	30.04	+.04	30.45	9	29.58	29	0.87	62.6	− 1.4	85.3	16	71.7	33.4	2	55.5	51.9	27.0	11	7.8	22	73.5	52.5	3.53	− 0.92	6,783	sw.	30	ne.	8	5	5	7	18
Augusta	183	29.89	30.05	+.02	30.49	9	29.51	18	0.98	63.4	− 0.6	92.6	12	77.2	29.2	2	49.2	63.4	43.7	12	10.6	1	65.3	49.8	2.77	− 1.41	2,985	w.	23	sw.	18	6	2	10	18
Savannah	87	30.00	30.06	+.04	30.42	9	29.59	18	0.84	63.7	− 2.3	89.0	16	74.9	35.5	2	54.7	53.5	31.0	12	7.7	24	68.4	51.2	2.06	− 2.32	6,298	s.	32	e.	8	6	3	7	20
Jacksonville	43	30.04	30.05	+.03	30.33	9	29.67	25	0.66	67.0	− 2.0	88.7	29	77.3	37.6	2	58.2	51.1	26.7	2	7.0	24	73.2	56.9	4.15	+ 0.87	5,173	ne.	39	sw.	18	7	5	5	20
Florida Peninsula.										70.4	− 1.3														3.53	+ 0.74									
Cedar Keys	22	30.04	30.03	+.02	30.26	4	29.72	25	0.54	67.3	− 2.7	82.2	12	75.7	41.6	2	60.2	40.6	23.9	6	8.5	18	76.1	59.6	6.63	+ 4.25	7,545	w.	28	s.	23	6	5	9	16
Key West	22	30.05	30.02	+.03	30.21	3	29.85	5	0.36	74.3	− 2.7	84.0	20	79.2	61.2	2	70.4	22.8	14.9	1	5.1	30	77.2	66.5	0.78	− 0.59	7,570	e.	38	nw.	1	7	4	19	7
Sanford	25	30.04	30.03	+.03	30.27	3	29.71	25	0.56	69.5	+ 1.5	89.8	22	79.5	44.0	2	60.9	45.8	29.8	21	9.6	8	73.5	59.5	3.19	− 1.43	5,782	e.	34	n.	23	11	5	10	15
Eastern Gulf States.										66.1	+ 0.1														1.46	− 4.26									
Atlanta	1,129	28.90	30.05	+.03	30.49	9	29.52	18	0.96	62.7	+ 1.7	88.1	12	73.1	36.3	2	50.3	51.8	33.2	11	13.2	29	50.5	41.8	1.38	− 3.47	7,913	nw.	37	w.	18	8	4	9	17
Pensacola	30	30.05	30.04	+.04	30.34	9	29.68	18	0.66	67.2	− 0.8	92.0	29	75.5	44.4	2	60.0	47.6	26.9	12	2.5	23	74.3	58.0	0.95	− 4.38	5,428	s.	21	sw.	28	4	2	12	16
Mobile	35	30.05	30.05	+.04	30.36	9	29.69	18	0.67	66.2	− 0.8	85.8	29	76.3	41.0	1	55.9	44.8	32.6	12	8.0	22	68.5	54.0	1.93	− 4.03	6,285	s.	23	sw.	18	5	2	12	16
Montgomery	219	29.84	30.04	+.03	30.42	9	29.61	18	0.81	66.0	+ 1.0	87.1	30	77.9	39.7	6	54.4	47.4	32.0	11	11.5	7	61.6	50.4	1.18	− 5.16	4,123	w.	22	w.	18	5	3	11	16
Vicksburg	222	29.83	30.03	+.04	30.36	5	29.48	17	0.88	66.6	+ 0.6	92.0	29	77.8	42.6	1	55.1	49.4	29.9	12	10.0	23	59.0	50.3	*c*0.75	...	4,898	se.	42	w.	22	4	3	9	18
New Orleans	52	30.02	30.04	+.06	30.29	9	29.68	17	0.61	67.9	− 1.1	86.8	22	77.6	48.5	1	60.1	38.3	24.8	12	9.4	9	71.4	57.0	1.87	− 4.27	5,548	s.	28	sw.	22	6	1	14	15
Western Gulf States.										67.1	+ 1.1														0.76	− 3.90									
Shreveport	227	29.80	30.00	+.04	30.34	5	29.52	17	0.81	67.6	+ 0.6	96.2	29	81.8	38.9	1	55.9	57.3	36.4	26	11.7	17	66.5	54.6	0.44	− 5.58	4,611	s.	21	n.	4	4	2	6	22
Fort Smith	500	29.50	29.98	+.02	30.36	5	29.49	17	0.87	63.8	+ 3.8	91.3	28	76.4	30.0	5	50.3	61.3	39.8	2	13.1	16	70.0	52.4	2.31	− 3.16	4,557	s.	26	n.	22	9	5	14	11
Little Rock	309	29.70	30.00	+.04	30.37	5	29.48	17	0.89	64.0	+ 1.0	89.8	28	75.8	33.5	5	50.1	56.3	36.5	26	11.1	22	65.6	50.9	0.49	− 5.30	5,117	s.	24	s.	3	4	1	9	20
Corpus Christi	18	29.99	29.97	+.04	30.25	1	29.55	17	0.70	70.1	+ 0.1	88.3	17	74.5	46.1	2	65.4	42.2	23.4	2	3.5	10	80.5	62.9	0.00	...	11,594	se.	32	se.	17	0	3	17	10
Galveston	40	30.02	30.02	+.07	30.26	5	29.60	17	0.66	69.4	− 0.6	81.4	28	74.7	51.2	1	65.0	30.2	16.0	25	6.1	17	76.1	61.2	0.01	− 3.22	9,036	se.	31	n.	23	0	7	9	14
Palestine	533	29.49	30.01	+.05	30.31	5	29.56	17	0.76	66.0	+ 1.0	87.6	30	77.0	39.9	5	55.4	47.7	31.1	19	10.4	16	66.6	53.4	0.74	− 3.69	7,753	s.	33	nw.	17	3	3	12	15
San Antonio	781	29.17	29.94	+.03	30.26	5	29.52	17	0.74	69.0	+ 2.0	95.1	30	80.2	37.3	1	58.4	57.8	37.6	1	8.5	10	65.8	55.1	0.60	− 2.45	7,886	se.	36	w.	17	5	12	10	8
Rio Grande Valley.										73.9	− 1.1														0.16	− 0.62									
Brownsville	57	29.93	29.93	+.05	30.23	1	29.52	17	0.71	72.1	− 1.9	91.7	17	80.8	50.7	1	65.7	41.0	26.7	1	7.0	4	80.8	65.1	0.07	− 0.54	7,361	se.	30	s.	17	1	2	18	10
Rio Grande City	230	29.76	29.96	+.09	30.33	1	29.58	17	0.75	75.7	− 0.3	104.0	22	88.1	48.0	2	66.0	56.0	36.2	18	11.6	9	61.5	59.3	0.26	− 0.70	6,840	s.	27	s.	12	2	2	14	14
Ohio Val. & Tenn.										56.5	+ 0.5														4.14	− 0.22									
Chattanooga	783	29.25	30.05	+.04	30.49	9	29.50	18	1.00	61.5	+ 1.5	88.6	12	73.8	34.3	6	49.4	54.3	37.5	12	13.0	29	49.7	40.1	3.06	− 2.08	4,932	w.	32	sw.	18	6	3	15	12
Knoxville	980	29.04	30.06	+.03	30.52	9	29.46	18	1.05	59.0	+ 1.0	88.7	13	70.7	29.1	6	46.3	59.6	39.0	12	11.5	29	65.5	46.2	4.33	− 1.18	4,756	sw.	36	sw.	18	10	4	12	14
Memphis	320	29.70	30.01	+.04	30.39	9	29.46	17	0.93	63.6	+ 1.6	87.2	13	74.2	38.4	1	53.7	48.8	29.5	12	9.9	22	54.2	45.1	2.34	− 3.83	5,241	se.	29	nw.	4	6	2	7	21
Nashville	549	29.45	30.01	+.02	30.46	9	29.40	18	1.05	59.8	+ 0.8	88.7	13	71.8	31.9	1	46.8	56.8	38.2	2	9.2	22	55.4	41.6	2.67	− 2.66	5,059	w.	29	w.	15	8	3	16	11
Louisville	551	29.44	30.02	+.04	30.43	9	29.31	18	1.12	56.4	− 0.6	87.0	13	67.4	30.3	2	45.0	56.7	34.4	13	9.4	17	55.3	38.1	7.31	+ 2.79	6,125	s.	36	nw.	29	9	6	13	11
Indianapolis	766	29.19	30.00	+.02	30.42	8	29.37	22	1.05	52.3	+ 0.3	85.0	13	62.9	22.4	5	41.4	62.6	33.6	13	8.1	16	59.6	36.7	3.92	+ 0.38	4,974	sw.	26	nw.	28	9	5	17	8
Cincinnati	628	29.35	30.01	+.02	30.46	8	29.32	18	1.13	53.3	− 0.7	84.4	14	63.3	27.2	5	42.8	57.2	34.3	13	6.1	18	60.4	38.3	5.86	+ 2.69	5,994	se.	38	w.	28	9	4	16	10
Columbus	812	29.14	30.00	.00	30.48	8	29.37	28	1.10	51.2	+ 0.2	83.1	14	61.6	23.8	5	40.1	59.3	37.5	9	7.1	18	59.7	35.5	3.44	+ 0.18	6,626	sw.	45	w.	28	8	6	16	8
Pittsburg	847	29.08	29.96	−.01	30.52	8	29.27	18	1.24	51.3	+ 0.3	83.8	14	62.3	24.0	6	41.4	59.8	36.7	9	8.2	29	64.8	38.7	4.29	+ 1.69	5,054	w.	30	sw.	28	10	6	14	10
Lower lake region										43.4	− 0.8														1.85	− 0.53									
Buffalo	690	29.24	29.99	.00	30.61	8	29.16	28	1.45	39.6	− 1.4	65.2	22	49.0	19.1	5	32.8	46.1	28.5	15	5.9	24	72.8	31.1	1.47	− 1.02	7,834	sw.	44	w.	5	10	7	13	10
Oswego	335	29.61	29.98	−.01	30.64	8	29.12	29	1.51	40.5	− 1.5	66.2	10	48.9	15.5	1	32.1	50.7	31.5	9	5.7	24	65.0	22.8	1.58	− 0.52	8,354	se.	31	s.	23	12	9	10	11
Rochester	621	29.32	30.00	.00	30.63	8	29.13	29	1.49	41.9	− 0.1	71.9	10	52.2	19.5	5	32.9	52.4	33.3	3	7.0	18	63.4	29.6	2.51	− 0.13	9,577	w.	40	w.	23	9	7	19	4
Erie	681	29.26	30.00	.00	30.56	8	29.17	28	1.38	42.2	− 1.8	72.5	15	53.2	17.3	5	33.7	55.2	37.0	15	10.9	13	71.4	32.9	2.55	+ 0.01	8,535	w.	36	s.	23	13	4	18	8
Cleveland	690	29.24	29.98	−.02	30.49	8	29.29	28	1.21	45.1	+ 0.1	76.0	10	54.4	19.3	5	36.2	56.7	36.0	4	6.3	29	70.4	35.1	1.82	− 0.58	6,900	w.	31	s.	23	10	6	16	8
Sandusky	638	29.31	30.00	.00	30.50	8	29.33	29	1.17	45.2	− 0.8	81.1	15	54.5	19.3	5	36.7	61.8	41.8	4	5.1	13	66.4	33.3	2.10	− 0.12	10,469	e.	52	ne.	18	11	4	19	7
Toledo	651	29.29	29.99	.00	30.50	8	29.32	28	1.17	45.8	− 1.2	77.0	10	56.0	18.4	5	36.4	58.6	45.3	4	7.3	18	62.0	32.3	1.57	− 0.69	7,351	sw.	52	ne.	18	12	5	20	5
Detroit	662	29.27	29.98	−.02	30.52	8	29.30	28	1.22	46.5	+ 0.5	72.3	10	54.4	17.6	5	37.1	54.7	33.5	4	4.8	18	71.0	37.1	1.19	− 1.15	6,888	w.	33	w.	23	10	7	19	4
Upper lake region.										39.2	− 0.3														1.69	− 0.58									
Alpena	609	29.28	29.96	−.05	30.57	7	29.14	23	1.43	35.7	− 0.3	75.0	9	44.7	9.2	5	28.4	65.8	40.8	9	3.2	13	79.3	29.6	2.66	+ 0.69	6,632	se.	32	sw.	23	15	10	17	3
Escanaba	608	29.26	29.93	−.07	30.49	7	29.14	23	1.35	34.4	− 1.6	57.3	10	42.2	8.5	5	27.4	48.8	24.2	5	7.4	13	83.9	29.9	2.65	+ 0.69	6,082	s.	27	w.	10	12	12	12	6
Grand Haven	620	29.26	29.94	−.05	30.47	8	29.19	22	1.28	43.5	− 0.5	72.8	13	54.3	15.5	5	35.4	57.3	37.7	4	7.0	16	64.3	31.3	1.09	− 1.55	9,576	s.	44	w.	4	13	9	19	2
Lansing	870	29.03	29.98	+.01	30.52	8	29.34	28	1.18	48.4	...	74.8	9	59.0	19.1	5	37.3	55.7	40.7	4	8.6	22	67.8	37.6	1.02	...	6,225	sw.	36	sw.	4	11	6	15	9
Mackinaw City	605	29.26	29.94	−.07	30.51	7	29.07	23	1.44	33.9	− 2.1	68.7	10	42.8	8.9	5	26.5	59.8	31.7	9	2.8	13	77.3	27.2	1.46	+ 0.24	7,760	e.	46	se.	12	11	11	10	9
Marquette	672	29.18	29.92	−.11	30.45	7	29.17	23	1.27	35.5	− 1.5	81.5	9	45.0	9.2	5	27.8	72.3	44.5	10	4.8	12	77.5	28.8	3.44	+ 1.70	6,436	nw.	37	sw.	9	13	9	15	6
Port Huron	639	29.28	29.98	−.01	30.55	8	29.28	28	1.27	41.7	+ 0.7	73.8	10	49.9	16.0	5	32.6	57.8	40.5	9	4.5	18	75.1	34.2	0.80	− 1.38	8,999	sw.	48	sw.	23	11	10	16	4
Chicago	715	29.18	29.94	−.04	30.41	8	29.25	22	1.12	47.4	+ 1.4	82.2	13	60.2	19.1	5	37.2	63.1	45.4	12	10.0	18	62.2	33.9	0.46	− 3.02	8,786	sw.	38	sw.	23	5	3	22	5
Green Bay	616	29.25	29.93	−.06	30.45	7	29.24	22	1.20	40.9	+ 1.9	74.0	9	50.7	16.5	4	31.6	57.5	32.7	11	6.0	13	71.8	31.2	1.76	...	6,978	sw.	32	nw.	28	10	15	11	4
Milwaukee	697	29.18	29.94	−.05	30.44	8	29.20	22	1.24	42.4	+ 0.4	77.8	9	52.2	17.6	5	35.5	60.2	37.3	14	5.5	27	70.3	32.7	1.05	− 1.90	8,273	se.	44	nw.	4	8	7	17	6
Duluth	672	29.18	29.92	−.10	30.42	7	29.44	29	0.98	36.7	− 1.3	79.9	9	46.7	6.6	4	27.5	73.3	37.6	9	3.3	14	74.0	27.9	1.58	− 0.68	5,516	ne.	35	ne.	11	13	8	12	10
Extreme northwest.										40.6	+ 1.8														1.56	− 0.30									
Moorhead	926	28.88	29.89	−.12	30.32	4	29.22	30	1.11	41.2	+ 1.2	86.4	8	54.1	4.1	4	29.7	82.3	49.4	8	3.0	11	73.2	32.6	2.45	+ 0.07	10,162	n.	49	s.	29	15	13	12	5
Saint Vincent	804	29.06	29.96	−.09	30.39	4	29.37	30	1.02	38.0	+ 2.0	83.5	30	49.7	− 3.6	4	26.5	87.1	38.8	27	7.1	11	85.3	33.8	1.43	+ 0.07	6,040	n.	30	s.	29	8	12	10	8
Bismarck	1,694	28.09	29.91	−.07	30.41	4	29.24	30	1.17	42.8	+ 2.8	87.3	30	56.3	11.8	3	32.5	75.5	37.7	29	9.5	11	68.7	31.5	1.52	− 1.26	6,358	n.	40	ne.	9	14	12	13	5
Fort Buford	1,854	27.86	29.86	−.07	30.34	3	29.25	29	1.09	43.3	+ 3.3	87.8	29	55.4	11.6	3	31.6	76.2	41.4	28	8.4	11	65.2	30.2	1.09	− 0.36	7,737	n.	43	nw.	30	5	12	18	0
Fort Totten	1,487	28.29	29.93	−.09	30.42	4	29.22	30	1.20	37.8	− 0.2	84.2	30	48.9	1.0	4	27.4	83.2	44.2	30	4.8	11	73.2	29.3	0.63	− 1.47	10,308	n.	42	s.	7	10	9	14	7
Fort Yates	...	...	...	...	...	...	...	...	...	46.6	...	92.4	30	59.4	15.2	3	33.8	77.2	40.8	29	11.2	15	...	...	2.24	+ 1.17	...	nw.	...	...	...	10	...	...	...

Table of miscellaneous meteorological data for April, 1887—Signal Service observations—Continued.

Stations and districts.	Elevation above sea-level, feet.	Atmospheric pressure (in inches and hundredths). Mean actual barometer.	Mean reduced barometer.	Departure from normal.	Extremes. Highest barometer	Date.	Lowest barometer	Date.	Monthly range of barometer.	Temperature of the air (in degrees Fahrenheit). Monthly mean.	Departure from normal.	Extremes. Max.	Date.	Mean max	Min.	Date.	Mean min.	Monthly range.	Daily ranges. Greatest.	Date.	Least.	Date.	Mean relative humidity, per cent.	Mean temperature of the dew-point (degrees Fahrenheit).	Precipitation (in inches).	Departure from normal precipitation (in inches).	Winds. Total movement, miles.	Prevailing direction.	Maximum velocity. Miles p. h.	Direction.	Date.	No. of rainy days.	No. of cloudy days.	No. of fair days.	No. of clear days.
Upper Miss. Valley.										53.1	+ 1.8														2.36	− 0.68									
Saint Paul	831	29.99	29.89	−.07	30.31	7	29.45	30	0.86	45.0	− 1.0	84.2	30	56.6	13.8	4	34.1	70.4	39.7	8	7.2	24	70.6	35.0	3.14	+ 0.89	5,936	e. nw.	29	nw.	28	11	10	13	7
La Crosse	744	29.13	29.93	−.01	30.41	7	29.35	22	1.06	47.7	− 0.3	79.1	9	58.7	11.5	4	36.6	67.6	36.6	8	7.3	24	64.3	34.7	1.94	− 0.06	6,921	s.	40	n.	23	12	11	16	3
Davenport	615	29.28	29.93	−.04	30.34	7	29.27	22	1.06	52.3	+ 2.3	82.2	13	64.4	16.4	4	40.9	65.8	36.0	2	12.3	16	56.8	35.7	1.17	− 1.78	7,752	s., sw.	36	nw.	28	7	4	19	7
Des Moines	866	29.00	29.92	−.01	30.32	4	29.28	22	1.04	52.5	+ 2.5	86.8	8	64.4	18.1	4	40.8	68.7	45.4	8	8.4	7	58.5	36.5	2.48	− 0.50	6,177	sw.	32	nw.	3	7	8	11	11
Dubuque	665	29.22	29.93	−.04	30.38	5	29.21	22	1.17	50.7	+ 2.7	82.6	13	62.0	15.8	4	39.0	66.8	37.8	8	11.9	23	63.6	37.8	1.37	− 1.54	3,977	s.	25	w.	28	7	3	16	11
Keokuk	618	29.29	29.94	−.01	30.36	5	29.33	22	1.03	53.6	− 1.6	83.9	13	66.5	22.1	4	41.8	61.8	44.1	3	15.2	17	59.9	38.1	1.84	− 1.17	8,532	s.	38	nw.	3	9	5	13	12
Cairo	359	29.65	30.01	+.03	30.39	9	29.43	17	0.95	60.1	+ 1.1	87.0	13	69.2	32.9	1	50.2	54.1	28.5	12	6.8	25	57.8	43.5	2.09	− 2.19	6,430	s.	35	s.	3	7	5	15	10
Springfield	644	29.30	29.98	.00	30.37	5	29.40	22	0.97	55.2	+ 2.2	84.5	13	66.4	26.0	4	43.0	58.5	41.3	4	9.2	16	62.8	41.5	2.89	− 0.72	8,246	s.	34	w.	23	8	5	13	12
Saint Louis	571	29.37	29.96	−.01	30.36	5	29.38	22	0.98	60.7	+ 4.7	86.7	13	70.3	31.6	5	51.1	55.1	37.1	4	8.8	17	48.0	39.1	4.36	+ 0.94	9,653	s.	40	nw.	4	9	3	16	11
Missouri Valley.										51.4	+ 3.8														2.31	− 0.62									
Lamar	1,028																																		
Leavenworth	842	29.06	29.94	−.01	30.37	4	29.34	22	1.03	57.3	+ 3.3	87.2	30	70.0	26.4	4	46.0	60.8	49.3	3	7.2	21	58.8	40.7	1.99	− 1.72	6,805	s.	29	nw.	3	8	4	16	10
Omaha	1,113	28.75	29.93	−.03	30.37	4	29.42	30	0.94	54.5	+ 4.5	88.0	30	67.1	23.4	4	44.3	64.6	37.3	8	7.4	12	61.3	39.8	0.88	− 2.56	7,376	nw.	36	n.	22	8	8	15	7
Valentine	2,614	27.17	29.88	−.07	30.41	4	29.21	30	1.20	47.1	+ 3.1	89.2	30	60.1	13.6	22	35.4	75.6	46.2	30	3.9	16	56.7	30.0	2.52	+ 1.13	10,340	nw.	58	n.	22	9	6	17	7
Huron	1,307	28.49	29.89	−.07	30.36	4	29.23	30	1.14	47.1	+ 2.1	94.1	8	60.5	15.8	4	35.1	78.3	45.6	29	9.5	15	61.3	32.2	3.72	+ 1.00	8,158	nw.	48	sw.	8	15	8	14	8
Yankton	1,234	28.54	29.85	−.11	30.32	4	29.24	30	1.08	50.9	+ 5.9	90.1	8	64.2	18.9	4	40.3	71.2	43.7	6	5.8	13	69.2	39.8	2.45	− 0.94	8,239	nw.	46	s.	9	9	8	16	6
Northern slope.										44.4	+ 2.2														2.54	+ 0.75									
Fort Assinaboine	2,690	27.07	29.92	−.04	30.36	22	29.46	29	0.90	45.4	+ 2.4	78.6	28	56.4	21.4	4	33.8	57.2	36.2	4	8.8	11	48.8	25.9	1.64	+ 0.68	9,595	sw.	49	w.	27	8	5	23	2
Fort Custer	3,040	26.74	29.89	−.06	30.40	3	29.38	30	1.02	46.3	+ 1.3	82.0	28	58.4	24.7	3	34.9	57.3	40.5	28	9.6	3	60.1	29.8	2.16	+ 0.97	6,017	n.	41	nw.	27	9	12	15	3
Fort Maginnis	4,320	25.46	29.88	−.06	30.32	22	29.39	29	0.93	41.1	+ 3.1	76.2	28	51.9	18.5	4	32.6	57.7	32.7	4	7.5	18	56.8	25.6	2.16	+ 1.36	8,717	nw.	52	nw.	30	14	15	14	1
Helena	4,069	25.74	29.90	−.04	30.40	22	29.47	29	0.94	42.4	+ 0.4	74.0	28	52.2	21.7	4	33.2	52.3	37.3	4	7.9	21	70.3	32.6	1.93	− 0.50	5,865	sw.	30	w.	2	9	15	14	1
Poplar River	2,002	27.76	29.90	−.09	30.39	3	29.33	30	1.06	43.1	+ 2.1	87.3	29	56.6	12.0	3	29.8	75.3	47.4	28	11.1	11	68.3	32.2	0.31	− 0.48	7,423	n.	48	nw.	30	4	4	21	5
Deadwood	4,600	25.27	29.94	−.05	30.44	3	29.42	21	1.02	41.2	+ 2.2	73.4	7	50.6	15.8	4	33.5	57.0	30.1	7	6.0	19	71.5	31.8	6.47	+ 1.45	3,700	sw.	23	ne.	20	15	8	13	9
Cheyenne	6,105	23.90	29.88	−.04	30.40	4	29.32	30	1.09	42.9	+ 2.9	75.6	28	54.9	16.0	4	32.1	59.6	38.0	4	9.9	17	49.7	21.5	2.20	+ 0.97	8,613	nw.	44	nw.	21	11	10	11	9
Fort Laramie										46.6		83.2	29	60.8	14.0	4	32.4	69.2	48.4	7	10.0	14			1.46			n., e.				10			
North Platte	2,841	26.96	29.89	−.05	30.44	4	29.23	30	1.20	49.9	+ 2.9	93.2	29	64.0	18.0	4	37.6	75.2	45.8	7	5.4	16	65.9	36.2	3.41	+ 1.57	9,290	nw.	52	s.	9	9	5	13	12
Middle slope.										53.5	+ 2.5														2.82	+ 0.50									
Denver	5,294	24.65	29.85	−.03	30.41	4	29.28	30	1.13	48.7	+ 1.7	82.5	29	60.3	20.5	24	36.3	62.0	42.2	4	8.1	15	47.1	25.5	2.16	+ 0.06	6,755	s.	47	w.	21	10	8	14	8
Pike's Peak	14,134	17.64	29.94	.....	30.44	19	29.46	30	0.98	14.7	+ 1.9	37.5	28	22.0	− 6.2	22	8.6	43.7	21.7	4	7.1	13	80.1	9.0	4.52	+ 0.81	17,217	w.	72	w.	30	13	4	14	12
Las Animas	3,899	25.94	29.84	+.01	30.44	4	29.30	30	1.14	51.8	+ 1.8	87.4	7	67.1	21.3	4	37.7	60.1	53.8	7	8.1	18	73.2	42.0	2.55	+ 1.34	7,215	w.	48	n.	22	10	6	17	7
Concordia	1,384	28.47	29.92	−.01	30.48	4	29.34	30	1.10	55.9	+ 5.9	92.6	29	68.5	20.1	4	42.6	72.2	47.1	2	3.0	17	67.3	43.7	1.95	− 1.44		s.	44	s.	9	8	6	9	15
Dodge City	2,523	27.34	29.95	+.03	30.50	4	29.40	30	1.10	54.4	+ 2.4	91.1	29	68.1	23.9	23	41.6	67.2	53.1	6	1.7	17	55.4	34.3	2.46	+ 1.16	8,576	se.	52	nw.	22	9	5	7	18
Fort Reno c										63.4		93.9	28	74.9	30.1	23	51.8	63.8							1.31	− 1.47						6			
Fort Supply										59.6		93.4	29	73.5	31.0	1	45.6	62.4	49.2	3	5.8	13			3.26	− 0.61		s.				8			
Fort Elliott	2,700	27.20	29.88	+.08	30.35	4	29.38	21	0.97	56.9	+ 0.9	90.2	29	70.6	29.0	23	43.0	61.2	51.3	6	8.1	17	58.6	38.8	6.06	+ 4.48	10,369	nw.	56	nw.	22	9	6	9	15
Southern slope.										59.5	+ 0.8														1.19	− 0.14									
Fort Sill	1,200	28.73	29.95	+.03	30.45	4	29.47	21	0.98	62.8	+ 1.8	95.0	29	76.3	35.0	4	49.8	60.0	45.6	2	7.7	17	59.8	46.4	2.06	− 0.30	9,920	s.	52	n.	4	6	4	8	18
Abilene	1,748	28.15	29.92	+.01	30.36	4	29.53	30	0.83	65.3	+ 1.3	98.6	28	78.5	38.2	25	53.8	60.4	35.8	4	10.7	16	50.8	43.3	2.45	+ 0.78	10,270	sw.	48	nw.	4	7	4	15	11
Fort Davis	4,928	25.13	29.87	−.02	30.30	4	29.52	16	0.77	61.3	+ 1.3	86.3	29	76.5	34.7	23	47.1	51.6	38.1	2	20.8	16	30.5	23.3	0.20	− 0.33	6,571	sw.	36	sw.	12	2	1	6	23
Fort Stanton	6,150	23.90	29.77	.....	30.21	4	29.44	21	0.70	48.7	− 1.3	78.0	28	64.8	21.2	25	33.6	56.8	45.4	26	15.3	21	43.3	23.2	0.04	− 0.73	6,331	nw.	39	sw.	11	1	1	7	22
Southern plateau.										56.5	+ 0.6														0.58	+ 0.23									
El Paso	3,764	26.19	29.87	+.01	30.20	1	29.60	30	0.60	63.0	0.0	90.0	28	78.5	35.0	14	46.3	55.0	44.0	2	20.3	16	29.9	27.7	0.09	− 0.09	3,716	sw.	23	sw.	12	1	0	3	27
Lava										59.0		88.7	30	80.0	31.1	24	37.9	57.6							0.06	− 0.16						2			
Santa Fé	7,026	23.20	29.90	+.01	30.21	4	29.58	21	0.64	46.8	+ 0.8	72.2	28	59.6	23.4	13	33.9	48.8	34.0	26	12.5	8	39.6	20.4	0.74	+ 0.06	3,103	sw.	18	s.	10	5	3	10	17
Fort Apache	5,020	24.99	29.95	+.01	30.26	1	29.66	10	0.59	51.8	+ 1.8	81.9	28	69.6	27.0	25	34.2	54.9	50.8	1	16.7	12	42.5	24.5	0.81	+ 0.02	6,148	w.	42	sw.	8	6	5	9	16
Fort Bowie										59.2		82.5	30	70.3	31.5	13	48.1	51.0							0.23	− 0.21						4			
Fort Grant	4,910	25.18	29.95	+.01	30.15	13	29.75	30	0.40	56.8	− 0.2	80.9	28	68.1	28.1	13	45.9	52.8	29.3	28	13.7	16	32.0	23.2	0.36	+ 0.13	5,747	w.	40	se.	15	4	2	9	19
Fort McDowell										66.0		98.0	28	84.0	38.0	1	48.1	60.0							0.68	+ 0.49						4			
Fort Thomas	2,710									60.9		91.0	7	78.8	33.5	1	43.0	57.5							0.31	+ 0.05						2			
Fort Verde										58.4		90.5	28	74.1	35.0	11	42.8	55.5							0.58	− 0.13						5			
Maricopa										68.2		98.2	27	84.5	36.0	13	51.9	62.2							0.51	+ 0.32						5			
Phœnix										69.6		104.5	5	88.0	40.2	13	51.2	64.3							0.75	+ 0.42						4			
Prescott	5,389	24.68	29.93	+.02	30.21	1	29.67	30	0.54	49.7	+ 0.7	78.6	28	63.0	23.0	12	36.0	55.6	42.0	2	9.4	10	64.8	36.8	2.57	+ 1.65	5,904	sw.	35	sw.	30	8	5	9	16
San Carlos										62.0		92.2	28	80.9	36.2	12	44.3	56.0							0.23	+ 0.03						3			
Willcox										55.0		88.0	28	77.4	18.0	23	32.7	70.0							0.03	+ 0.02						3			
Yuma	141	29.77	29.88	+.01	30.06	13	29.70	2	0.35	69.8	+ 0.8	96.9	27	84.4	43.5	12	55.0	53.4	41.4	2	16.6	22	64.5	56.1	0.20	+ 0.09	5,575	s.	31	w.	10	1	0	10	20
Keeler	3,622	26.25	29.85	.....	30.16	22	29.50	10	0.67	57.4	+ 0.4	81.2	27	68.0	32.2	11	46.8	49.0	31.1	1	10.0	9	36.3	27.2	1.14	+ 0.53	5,499	n.	44	nw.	17	6	6	7	17
Middle plateau.										44.4	− 0.1														1.48	− 0.28									
Fort Bidwell	4,615	25.36	30.03	+.03	30.43	22	29.67	9	0.76	43.5	− 1.5	76.4	28	56.1	19.1	3	31.7	57.3	37.1	3	11.1	9	62.4	29.8	1.96	− 0.87	5,585	w.	36	w.	6	7	8	13	9
Winnemucca	4,358	25.58	29.97	+.07	30.42	22	29.55	29	0.87	45.0	− 1.4	81.1	28	59.5	21.8	22	32.2	59.3	45.1	28	10.4	13	46.9	22.0	1.94	+ 0.87	6,552	sw.	38	sw.	20	8	6	12	12
Frisco	6,406	23.64	29.85	.....	30.19	22	29.38	30	0.81	43.6	− 0.4	72.0	28	54.0	20.9	11	34.3	51.1	31.7	30	10.9	10	53.5	25.4	1.53	+ 1.38	8,375	n.	44	sw.	25	7	4	15	11
Salt Lake City	4,348	25.56	29.91	+.01	30.31	3	29.38	30	0.93	48.6	− 0.4	80.7	28	59.9	27.1	4	38.4	53.6	38.0	6	11.3	18	58.9	33.6	1.67	− 0.81	4,877	nw.	32	s.	7	8	7	13	10
Montrose	5,780	24.22	29.90	+.01	30.26	4	29.35	30	0.91	46.3	+ 1.3	78.5	26	60.1	21.4	4	33.5	57.1	45.6	4	12.2	9	48.7	24.6	1.21	− 1.29	5,126	se., s.	36	sw.	20	6	7	12	11
Fort Bridger	6,643	23.42	29.92	+.01	30.31	4	29.33	30	0.98	38.7	+ 1.7	70.1	28	51.0	7.2	21	28.4	62.9	35.8	8	9.8	17	61.2	25.8	0.37	− 0.99	8,333	w.	40	sw.	20	9	8	17	5
Northern plateau.										49.3	− 0.1														1.92	+ 0.33									
Boisé City	2,750	27.14	30.00	+.06	30.44	3	29.58	6	0.85	49.3	+ 0.3	86.3	28	61.3	22.4	3	36.8	63.9	40.7	28	10.0	9	55.8	32.3	1.54	+ 0.33	3,694	nw.	28	nw.	20	7	12	14	4
Cœur d'Alene										45.9		72.1	28	55.7	23.0	4	36.1	49.1														22			
Ashland										49.0		83.0	28	61.5	25.0	3	36.6	58.0	41.0	3	14.0	29			3.39	+ 1.56		w.				15			
Fort Klamath										42.0		74.0	27	53.4	18.0	3	30.5	56.0							1.80	− 0.12						9			
Lakeview										42.8		76.0	28	54.8	18.5	10	30.9	57.5	35.0	25	9.5	13			1.80	+ 0.27		s.				9			
Linkville										46.7		76.4	28	58.5	26.5	3	34.9	49.9							1.59	− 0.67						11			
Fort Spokane										48.4		77.4	28	60.3	26.7	3	36.5	50.7							1.82	+ 1.01						14			
Spokane Falls	1,909	27.94	29.98	+.03	30.42	3	29.45	6	0.97	47.0	− 1.0	86.2	28	60.2	26.1	4	35.9	60.1	40.8	28	13.2	16	73.3	38.0	1.83	+ 0.37	3,518	sw.	25	sw.	1	13	10	18	2
Walla Walla	1,018	28.92	30.02	+.04	30.48	3	29.40	6	1.08	51.5	+ 0.5	81.2	28	63.0	29.0	4	41.8	52.2	36.2	6	10.1	13	54.9	34.0	1.57	− 0.09	5,965	sw.	30	sw.	24	11	15	12	3
N. Pac. coast region.										47.3	− 1.1														4.88	+ 1.73									
Olympia	36	30.03	30.07	+.07	30.49	3	29.55	6	0.94	47.2	− 0.8	67.0	23	55.7	27.2	3	38.5	39.8	34.0	23	6.2	26	79.2	40.7	3.94	+ 0.15	3,449	sw.	24	sw.	1	18	13	12	5
Port Angeles	14	30.01	30.03	+.03	30.47	21	29.46	6	1.01	43.4	− 0.6	54.2	28	50.6	28.6	3	35.7	25.6	21.6	23	7.9	1	83.8	38.5	1.16	− 0.53	4,326	s.	29	w.	29	14	10	17	3
Tatoosh Island	86	29.93	30.03	+.04	30.51	22	29.47	6	1.04	45.6	− 2.4	53.5	21	49.6	35.0	2	41.2	18.5	13.4	18	3.8	27	81.3	39.8	8.51	+ 4.94	8,632	w.	57	se.	1	19	14	12	4
Astoria		30.07								47.1		61.0	27	52.9	34.6	3	42.9	26.4	22.1	3	3.4	11	80.3	41.1	6.83	+ 3.29	5,569	sw.	32	sw.	1	21	21	8	1
Portland	88	30.00	30.09	+.09	30.48	21	29.54	6	0.94	50.2	− 0.8	68.9	23	59.5	31.2	3	42.0	37.7	31.1	15	9.2	29	74.8	41.9	5.06	+ 1.75	4,577	nw.	26	s.	1	19	13	15	2
Roseburg	523	29.54	30.10	+.08	30.47	21	29.54	6	0.93	50.3	− 0.7	77.0	27	60.8	27.5	3	41.0	49.5	35.7	3	5.4	9	67.6	38.8	3.79	+ 0.77	3,256	w.	26	sw.	6	14	11	16	3
Mid. Pac. coast reg.										56.4	+ 0.4														2.42	− 0.52									
Eureka		30.06								48.5		64.5	4	54.1	36.3	21	43.0	28.2	19.5	3	4.4	1	86.8	44.5	5.55		7,021	nw.	40	nw.	9	13	11	15	4
Red Bluff	342																																		
Sacramento	64	29.94	29.99	+.01	30.26	21	29.70	8	0.56	58.3	+ 1.3	83.5	25	69.5	41.2	8	48.9	42.3	32.0	27	8.3	29	65.5	45.5	2.53	− 0.95	6,320	nw.	30	se.	8	7	3	7	19
San Francisco	50	29.99	30.04	+.02	30.30	21	29.74	8	0.55	54.5	− 0.5	78.5	24	63.1	43.7	11	48.6	34.8	24.2	22	7.1	2	71.6	44.7	2.30	− 0.09	7,235	w.	32	nw.	9	8	7	10	13
S. Pac. coast region.										59.1	+ 1.1														2.25	+ 0.71									
Los Angeles	339	29.64	29.97	−.03	30.15	13	29.79	10	0.36	59.1	+ 1.1	87.0	24	70.8	40.3	11	49.6	46.7	35.9	24	5.1	14	78.9	51.5	2.36	+ 0.21	4,087	w.	37	w.	10	5	9	10	11
San Deigo	66	29.95	29.99	.00	30.16	13	29.86	2	0.30	59.0	+ 1.0	79.6	24	65.4	44.4	12	52.9	35.2	26.6	24	6.5	9	75.8	50.7	2.14	+ 1.20	5,092	nw.	30	nw.	10	8	10	15	5

NOTE.—The data at Mount Washington, N. H., Pike's Peak, Colo., and stations having no departures are not used in computing the district averages.

a 23,045, record for 28 days. b Record for 28 days. c Record for 29 days. d Record for 24 days.