U. S. DEPARTMENT OF AGRICULTURE.

WEATHER BUREAU.

REPORT

OF THE

CHIEF OF THE WEATHER BUREAU.

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National Oceanic and Atmospheric Administration

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[CONCURRENT RESOLUTION FEBRUARY 19, 1893.]

Resolved by the House of Representatives (the Senate concurring), That there be printed in quarto form of the annual report of the Chief of the Weather Bureau, with appendixes, 9,000 copies, of which 1,000 copies will be for the use of the Senate, 2,000 copies for the use of the House of Representatives, and 6,000 copies for the use of the Weather Bureau.

CONTENTS.

	Page.
PART I	7
Introduction	9
List of observing stations	11
Table I.—Latitude, longitude, and elevation of first, second, and third order stations	11
Table II.—Changes during 1891 and 1892, stations established, discontinued, etc	16
Description of instruments	19
Instrumental corrections; methods of reduction; resulting accuracy	37
Temperature of the air	37
Pressure	41
Moisture of the air	44
Winds	45
Sunshine and cloudiness	46
Evaporation	47
Precipitation	47
PART II.—Monthly averages for each hour of the day at 28 stations	49
Pressure, 1891	50
Pressure, 1892	64
Temperature, 1891	78
Temperature, 1892	92
Wind, 1891	108
Wind, 1892	124
PART III.—Monthly and annual meteorological summaries for Weather Bureau stations	141
1891	142
1892	222
PART IV.—Monthly and annual mean temperature, annual extremes of temperature, and dates of first and last killing frost, 1891–'92	305
1891	307
1892	336
PART V.—Monthly and annual precipitation at all stations	367
1891	369
1892	401
PART VI.—Miscellaneous meteorological tables and reports	435
Normal pressure (monthly)	438
Normal temperature (monthly)	442
Normal precipitation (monthly)	444
Snowfall, 1891–'92	447
Sunshine, 1891	457
Sunshine, 1892	469
River stages	483
Local storms in the United States during 1890, 1891, and 1892	505
Casualties due to lightning	510
High and low areas of barometric pressure, 1891–'92	511
A balloon ascension	517
Report on the relations of solar magnetism to terrestrial magnetism and meteorology	519
Report on condensation of atmospheric moisture	526

38893

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LIST OF ILLUSTRATIONS.

		Page.
FIG. 1.	Robinson's cup anemometer	20
2.	Standard anemometer, U. S. Weather Bureau	20
3.	Anemometer bearings	20
4.	U. S. Weather Bureau combined wind vane and anemometer support	21
5.	Single anemometer register	22
6.	Register pen	22
7.	Cam collars for electrical contacts	23
8.	Electrical contacts complete	23
9.	Improved triple register	24
10.	Section of Tuch's barometer cistern	25
11.	Richard's barograph	26
12.	Rain and snow gauge, ordinary	26
13.	Rain and snow gauge, with support	27
14.	Rain and snow gauge supports	27
15.	Maximum and minimum thermometers	28
16.	Richard's thermograph	29
17.	Semi-weekly thermograph curve	29
18.	Sunshine recorder	30
19.	Eccard recording rain gauge	32
20.	Weighing rain and snow-gauge—receiving mechanism	34
21.	Weighing rain and snow-gauge—recording mechanism	35
22.	Conventional diagram of circuits	36
23.	Diagram of centers of magnetic curves	523
PLATE I.	Diagram—Composite hydrographs, Ohio river and tributaries	528
II.	Diagram—Composite hydrographs, Tennessee, Cumberland, Ohio, and Mississippi rivers	528
III.	Diagram—Composite hydrographs, Missouri, Mississippi, and other rivers	528
IV.	Diagram—The coronal period, 1886–'87	528

38893

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PART I.

INTRODUCTION.
LIST OF OBSERVING STATIONS.
DESCRIPTION OF INSTRUMENTS.
INSTRUMENTAL CORRECTIONS—METHODS OF REDUCTION; RESULTING ACCURACY.

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REPORT OF THE CHIEF OF THE WEATHER BUREAU.

INTRODUCTION.

There will be found in this, the initial volume of meteorological data published by the Weather Bureau, the results of observations made during 1891 and 1892—continuing the series heretofore published by the War Department—and other climatological tables of general interest and importance in connection with the current work of the Bureau.

A word of explanation in regard to the tables selected for publication may be necessary. It has been impossible to follow the plan originally intended, owing to a variety of causes, chief of which was the absolute necessity of crowding two years' observations into the space intended for one. In condensing the work the detailed hourly and twice daily observations have been omitted; it should be remembered, however, that detailed observations from about 150 stations are regularly published on the daily weather maps, and that the latter can be obtained by anyone desiring them on conditions made known on application. As regards the character of the data given in the tables and the form in which the tables are cast, I would say that it has been the endeavor to follow, as closely as the varied requirements of this Bureau will permit, the plan recommended by the International Meteorological Congress for adoption by meteorological services the world over.

In addition to the results of observations for 1891 and 1892, tables of monthly and annual normal pressure, temperature, and precipitation will be found in Part VI; the conditions upon which this volume is printed, however, will not admit of presenting a series of suitable charts to further illustrate the geographical distribution of these and other important meteorological elements.

Attention is directed to the description of the instrumental equipment of observing stations drawn up by Prof. Charles F. Marvin, and also to the report of Prof. Cleveland Abbe on the instrumental corrections, methods of reduction, and the probable resulting accuracy of the observations, and the means which appear in this volume. Both reports supply much valuable information not heretofore accessible to the general public. In another year it may be possible to furnish a brief account of the local topography of each station in so far as it may affect the value of the observations.

The meteorological data published by the Weather Service of the United States while under military control—1870 to 1890—will be found in the stated reports of the Chief Signal Officer and the Monthly Weather Reviews published by the War Department.

The publications of the Weather Bureau, other than the present volume, containing meteorological data are the Monthly Weather Review and the Weekly Weather Crop Bulletin, both of which are more or less fully described in the reports of the honorable Secretary of Agriculture for 1891 and 1892.

The special publications of the Weather Bureau to December 31, 1892, are as follows:

BULLETINS OF THE WEATHER BUREAU.

No. 1.—Notes on the climate and meteorology of Death Valley, California, by Mark W. Harrington, Chief of the Weather Bureau. June, 1892. (Octavo) 50 pp.

No. 2.—Notes on a new method for the discussion of magnetic observations, by Frank H. Bigelow, Professor of Meteorology. July, 1892. (Octavo) 41 pp.

No. 3.—A report on the relations of soil to climate, by E. W. Hilgard, Professor of Agriculture and Agricultural Chemistry, University of California. July, 1892. (Octavo) 59 pp.

No. 4.—Some physical properties of soils in their relation to moisture and crop distribution, by Milton Whitney, Professor of Geology and Soil Physics, Maryland Agricultural College; Physicist, Maryland Agricultural Experiment Station; Fellow by Courtesy, Johns Hopkins University. August, 1892. (Octavo) 90 pp.

No. 5.—Observations and experiments on the fluctuations in the level and rate of movement of ground-water on the Wisconsin Agricultural Experiment Station Farm and at Whitewater, Wis., by Franklin H. King, Professor of Agricultural Physics, University of Wisconsin; Physicist, Wisconsin Agricultural Experiment Station. December, 1892. (Octavo) 75 pp.

No. 6.—The diurnal variation of barometric pressure, by Frank N. Cole, PH. D., Assistant Professor of Mathematics, University of Michigan. December, 1892. (Octavo) 32 pp.

MARK W. HARRINGTON,
Chief of Weather Bureau.

WASHINGTON, D. C., *May 20, 1893.*

LIST OF OBSERVING STATIONS.

The following table contains the geographical coördinates of the several stations whose summaries are published in Part III, the height of the barometer cistern above mean sea level, and of other instruments above ground, the difference between local and standard time, and the date on which observations began. The standard time used by the Weather Bureau in all of its synchronous work is that of the seventy-fifth meridian (Eastern time), which standard is always understood unless otherwise expressed.

The elevations given are for January 1, 1891, except at stations established subsequent to that date. (See Table II.) Elevations followed by the letter "B" have been determined by the barometer; all others are the results of precise levels. Changes made during 1891 and 1892 are given in the second or third set of figures, as the case may be.

The significance of the bold face letter or letters following the name of station is as follows:

P=continuous records of pressure (on December 31, 1892);

T=continuous records of temperature (on December 31, 1892);

W=continuous records of wind (direction and velocity) (on December 31,1892);

V=continuous records of wind (velocity only) (on December 31, 1892);

R=continuous records of rainfall (on December 31, 1892);

S=continuous records of sunshine (on December 31, 1892).

Stations having no letter make an observation of temperature, precipitation, direction of the wind, and the state of the weather daily at 8 p. m.

TABLE I.—LATITUDE, LONGITUDE, ELEVATION, ETC., OF WEATHER BUREAU STATIONS.

Stations.	Latitude.	Longitude.	Local meridian time faster or slower than 75th meridian.	Elevation January 1, 1891.				Observations began.	Date of changes in elevation.
				Barometer above sea.	Thermometer above ground.	Rain gauge above ground.	Anemometer above ground.		
	° ′	° ′	h. m.	Feet.	Feet.	Feet.	Feet.		
Abilene, **P T W**	32 23	99 40	1 39 S.	1,748	64	53	70	Sept. 14, 1885	
Albany, **P T W**	42 39	73 45	05 F.	85	84	99	113	Dec. 22, 1873	
Alpena, **P T W**	45 05	83 30	34 S.	609	61	54	71	Sept. 10, 1872	
Amarillo, **T V**	35 13	101 50	1 47 S.	3,691	53	46	61	Jan. 1, 1892	
Assinaboine, **P T W**	48 32	109 42	2 19 S.	2,690 B.	16	2	36	Aug. 1, 1880	
Astoria	46 57	124 00	3 15 S.	41	39	56	60	Nov. 1, 1883	
Atlanta, **P T W R**	33 45	84 23	37 S.	1,139 1,131	98 92	95 85	107 123	Sept. 25, 1878	May 31, 1891
Atlantic City, **V**	39 22	74 25	03 F.	53	68	57	76	Dec. 10, 1873	
Auburn	32 40	85 30	42 S.	831	4	2	.....	Feb. 1, 1888	
Augusta, **P T W**	33 28	81 54	27 S.	183 209	45 89	40 54	58 103	Nov. 2, 1870	May 1, 1891
Baker City, **T V**	44 50	117 50	2 51 S.	3,430	49	38	53	July 9, 1889	
Baltimore, **W**	39 18	76 37	06 S.	76 179	86 87	79 80	94 100	Jan. 1, 1871	June 1, 1891
Bismarck, **P T W R**	46 47	100 38	1 42 S.	1,681 1,698	16 59	2 52	46 69	Sept. 15, 1874	July 1, 1891
Block Island, **V**	41 10	71 36	14 F.	27	39	33 3	48 48	Sept. 1, 1880	Apr. 1, 1891
Boston, **P T W R**	42 21	71 04	16 F.	126	115	174 154	182 182	Nov. 1, 1870	July 1, 1891

TABLE I.—LATITUDE, LONGITUDE, ELEVATION, ETC., OF WEATHER BUREAU STATIONS—Continued.

Stations.	Latitude.	Longitude.	Local meridian time faster or slower than 75th meridian.	Elevation January 1, 1891. Barometer above sea.	Thermometer above ground.	Rain gauge above ground.	Anemometer above ground.	Observations began.	Date of changes in elevation.
	° ′	° ′	h. m.	Feet.	Feet.	Feet.	Feet.		
Brownsville, V	25 53	97 26	1 30 S.	57	17	1	57	Nov. 13, 1875	
				57	47	36	57	.....	July 1, 1891
Buffalo, P T W R S	42 53	78 53	15 S.	690	103	93	108	Nov. 1, 1870	
Buford, Fort, T V	48 00	103 56	1 56 S.	1,900	17	3	24	Jan. 13, 1879	
				1,899	17	2	27	.....	Sept. 15, 1891
Cairo, V	37 00	89 10	56 S.	359	87	78	93	June 1, 1871	
Canby, Fort, V	46 16	124 04	3 16 S.	179	10	2	34	Sept. 1, 1883	
Cape Henry, V	36 56	76 00	04 S.	.....	5	6	34	Dec. 15, 1873	
Carson City, V	39 08	119 47	2 59 S.	4,680	21	42	.....	Dec. 1, 1887	
				4,720	44	42	.....	.....	Nov. 21, 1891
Charleston, V	32 47	79 56	20 S.	52	60	55	72	Jan. 5, 1871	
Charlotte, T V	35 13	80 51	23 S.	808	56	47	68	Oct. 6, 1878	
				773	52	56	68	.....	Apr. 1, 1891
Chattanooga, V	35 04	85 15	41 S.	783	71	60	76	Sept. 12, 1875	
Cheboygan, V	45 39	84 29	38 S.	591	45	38	55	May 1, 1892	
Cheyenne, T V	41 08	104 48	1 59 S.	6,105	58	50	60	Nov. 1, 1870	
Chicago, P T W R	41 52	87 38	50 S.	824	241	238	274	....do	
Cincinnati, P T W R S	39 06	84 30	38 S.	628	153	145	157	....do	
Cleveland, P T W R S	41 30	81 42	27 S.	751	97	89	125	....do	
				740	122	109	130	.....	May 1, 1892
Columbia, Mo., V	38 58	92 14	1 09 S.	763	4	2	41	Aug. 21, 1889	
Columbia, S. C	34 00	81 03	24 S.	.....	72	63	.....	June 5, 1887	
Columbus, P T W	39 58	83 00	32 S.	837	94	76	100	July 1, 1878	
Concordia, V	39 35	97 41	1 31 S.	1,410	42	34	47	May 1, 1885	
Corpus Christi, V	27 49	97 25	1 30 S.	20	42	34	50	Feb. 1, 1887	
Crete	40 38	96 59	1 28 S.	1,440	9	2	.....	July 12, 1887	
Custer, Fort, V	45 42	107 34	2 10 S.	3,040 B.	18	26	31	Aug. 12, 1879	
Custer Station, V	46 07	107 39	2 11 S.	2,733 B.	17	31	13	Aug. 1, 1891	
Davenport, P T W	41 30	90 38	1 02 S.	613	100	93	110	May 24, 1871	
Denver, P T W R S	39 45	105 00	2 00 S.	5,281	86	79	103	Nov. 19, 1871	
				5,287	108	107	120	.....	May 1, 1891
Des Moines, P T W	41 35	93 37	1 14 S.	869	84	75	88	July 29, 1877	
Detroit, P T W R S	42 20	83 03	32 S.	724	158	144	161	Nov. 1, 1870	
Dodge City, P T W R S	37 45	100 00	1 40 S.	2,523	44	37	55	Sept. 15, 1874	
Dubuque, V	42 30	90 44	1 03 S.	651	60	50	60	July 10, 1873	
Du Chesne, Fort, V	40 35	109 50	2 19 S.	4,900 B.	12	4	32	Dec. 1, 1887	
Duluth, P T W R	46 48	92 06	1 08 S.	670	70	56	71	Nov. 1, 1870	
				656				.....	Apr. 1, 1891
Eastport, P T W R S	44 54	66 59	32 F.	53	51	43	56	Apr. 1, 1873	
El Paso, P T W	31 47	106 30	2 06 S.	3,796	69	62	80	Apr. 1, 1878	
Erie, V	42 07	80 05	20 S.	714	92	82	102	May 25, 1873	
Escanaba	45 48	87 05	48 S.	.....	15	2	.....	May 24, 1871	
Eureka, V	40 48	124 11	3 17 S.	64	60	52	69	Jan. 1, 1887	
Fort Smith, V	35 22	94 24	1 17 S.	492	73	65	81	Apr. 13, 1879	
Fresno, V	36 43	119 49	2 59 S.	338	78	66	77	Aug. 16, 1887	
Galveston, P T W R S	29 18	94 50	1 19 S.	42	85	80	96	Apr. 19, 1871	
Grand Haven, V	43 05	86 13	45 S.	621	55	47	64	May 24, 1871	
				628	55	48	64	.....	Aug. 1, 1891
Grant, Fort, V	32 39	109 57	2 20 S.	4,844 B.	15	4	26	July 14, 1877	
				4,780	15	20	30	.....	July 2, 1891
Green Bay, V	44 31	88 00	52 S.	616	50	41	59	Sept. 1, 1886	
				617	45	35	57	.....	May 1, 1891
Hannibal, V	39 41	91 20	1 05 S.	534	75	68	107	Apr. 16, 1892	
Harrisburg, V	40 16	76 52	07 S.	377	94	87	102	July 1, 1888	
Hatteras, V	35 15	75 40	02 S.	11	18	2	36	Dec. 1, 1880	
Havre, P T W	48 34	109 40	2 19 S.	2,477	15	2	33	May 16, 1892	
Helena, P T W	46 34	112 04	2 28 S.	4,069	64	51	61	Apr. 1, 1880	
				4,118	85	75	91	.....	May 1, 1891
Huron, P T W	44 21	98 14	1 32 S.	1,307	47	39	55	July 1, 1881	
				1,310	63	56	72	.....	May 1, 1891
Idaho Falls, V	43 29	112 04	2 28 S.	4,733	12	12	15	June 1, 1892	
				4,742	11	1	45	.....	Dec. 1, 1892
Indianapolis, P T W R	39 46	86 10	44 S.	766	75	72	87	Feb. 10, 1871	
Jacksonville, P T W R	30 20	81 39	26 S.	43	69	56	84	Sept. 11, 1871	
Jupiter, V R	26 57	80 07	20 S.	28	13	1	30	Jan. 1, 1888	
Kansas City, T W R S	39 05	94 37	1 18 S.	963	78	81	95	Apr. 21, 1873	
Kearney, V	40 41	99 05	1 36 S.	2,206	87	82	90	Mar. 18, 1892	

TABLE I.—LATITUDE, LONGITUDE, ELEVATION, ETC., OF WEATHER BUREAU STATIONS—Continued.

Stations.	Latitude.		Longitude.		Local meridian time faster or slower than 75th meridian.	Elevation January 1, 1891. Barometer above sea.	Thermometer above ground.	Rain gauge above ground.	Anemometer above ground.	Observations began.	Date of changes in elevation.
	°	′	°	′	h. m.	Feet.	Feet.	Feet.	Feet.		
Keeler, P T	36	35	117	50	2 51 S.	3,622	29	20	28	Mar. 1, 1885	
						3,632	19	2	36	.....	Feb. 1, 1892
Keokuk, V	40	22	91	26	1 06 S.	613	64	56	72	July 16, 1871	
Key West, P T W R	24	34	81	49	27 S.	22	41	44	50	Nov. 1, 1870	
Kitty Hawk, V	36	00	75	42	03 S.	9	11	21	22	Jan. 15, 1875	
						9	12	21	30	.....	Feb. 3, 1891
Knoxville, P T W	35	56	83	58	36 S.	980	80	71	88	Jan. 20, 1871	
La Crosse, V	43	49	91	15	1 05 S.	736	70	61	78	Oct. 15, 1872	
						*720				.....	Sept. 1, 1891
Lander, T	42	50	108	45	2 15 S.	5,377	16	16	34	Aug. 1, 1891	
Lansing, V	42	44	84	32	38 S.	883	45	43	55	Jan. 1, 1887	
Leavenworth, V	39	19	94	57	1 20 S.	842	56	50	66	May 24, 1871	
						857	95	86	100	.....	Jan. 1, 1892
Lexington, V	38	02	84	33	38 S.	989	75	67	122	Oct. 1, 1872	
								2	122	.....	Feb. 6, 1892
Little Rock, V	34	45	92	06	1 08 S.	309	75	54	72	Apr. 21, 1873	
						302	72	62	79	.....	Nov 16, 1892
Los Angeles, V	34	03	118	15	2 53 S.	330	74	66	76	July 1, 1877	
Louisville, V	38	15	85	45	43 S.	551	100	103	116	Sept. 11, 1871	
Lynchburg, P T W	37	25	79	09	16 S.	685	82	76	88	May 24, 1871	
Manchester, V	42	58	71	28	14 F.	247	76	68	81	Mar. 1, 1887	
McKinney, Fort, V	44	23	106	46	2 05 S.	5,000 B.	15	36	40	Dec. 1, 1887	
Manistee, P T W	44	13	86	16	45 S.	615	43	28	46	July 1, 1888	
Marquette, P W R	46	34	87	24	49 S.	734	67	58	95	May 11, 1871	
Memphis, P T W R S	35	09	90	03	1 00 S.	330	108	100	116	Feb. 28, 1871	
Meridian, V	32	21	88	40	55 S.	358	68	58	72	Sept. 1, 1889	
Micco	27	53	80	33	22 S.	.....	5	2	.....	Sept. 1, 1888	
Miles City, V	46	25	105	49	2 03 S.	2,374	40	34	53	Oct. 1, 1891	
Milwaukee, P T W R	43	02	87	54	51 S.	699	105	100	152	Nov. 1, 1870	
						673	106	100	149	.....	Sept. 25, 1891
Mobile, V	30	41	88	02	52 S.	35	87	81	94	Nov. 7, 1870	
						57	87	78	96	.....	Oct. 10, 1892
Montgomery, T V	32	23	86	18	45 S.	217	68	60	77	Nov. 9, 1870	
						257	99	92	110	.....	Aug. 1, 1892
Montrose, T V	38	30	107	56	2 12 S.	5,795	43	34	43	Feb. 5, 1885	
									46	.....	June 6, 1892
Moorhead, P T W	46	52	96	44	1 27 S.	935	54	44	60	Jan. 1, 1881	
Nantucket, P T W	41	17	70	06	20 F.	14	43	38	54	Oct. 18, 1886	
Narragansett Pier	41	19	71	17	15 F.	22	9	2	46	Sept. 12, 1882	
Nashville, P T W	36	10	86	47	47 S.	553	98	85	107	Nov. 1, 1870	
Neah Bay	48	23	124	36	3 18 S.	.....	8	6 in.	.....	Dec. 1, 1883	
New Brunswick	40	30	74	27	02 F.	.....	.....	.....	.....	Oct. 1, 1890	
New Haven, V	41	18	72	56	08 F.	107	118	110	126	Dec. 10, 1872	
New London, V	41	21	72	05	12 F.	47	50	42	54	Jan. 10, 1871	
New Orleans, P T W R S	29	58	90	04	1 00 S.	54	112	111	120	Nov. 1, 1870	
New York City, P T W R	40	43	74	00	04 F.	185	183	155	200	....do	
Norfolk, P T W R	36	51	76	17	05 S.	43	88	80	93	Jan. 1, 1871	
						57	88	80	93	.....	May 18, 1892
Northfield, V	44	10	72	41	09 F.	872	15	2	59	Mar. 1, 1887	
North Platte, T V	41	08	100	45	1 43 S.	2,841	45	34	52	Sept. 18, 1874	
Oklahoma City, V	35	26	97	33	1 30 S.	1,239	54	45	53	Nov. 1, 1890	
Olympia, P T W	47	03	122	53	3 11 S.	36	46	41	54	July 1, 1877	
						44	39	33	47	.....	Oct. 5, 1891
						52	56	51	67	.....	Dec. 29, 1892
Omaha, P T W R	41	16	95	56	1 24 S.	1,113	88	76	90	Nov. 1, 1870	
Oswego, V	43	29	76	35	06 S.	335	76	83	87	....do	
Palestine, V	31	45	95	40	1 22 S.	511	42	43	51	Dec. 3, 1881	
Parkersburg, T V	39	16	81	36	26 S.	638	77	69	84	July 1, 1888	
Pensacola, V	30	25	87	13	49 S.	56	78	79	90	Oct. 27, 1879	
Philadelphia, P T W R S	39	57	75	09	00	117	168	166	184	Jan. 1, 1871	
Pierre, V	44	24	100	17	1 41 S.	1,470	50	47	54	July 1, 1891	
Pikes Peak, P T W	38	50	105	02	2 01 S.	14,134	.....	.....	.....	Nov. 1, 1873	Closed Sept. 30, 1888; reopened Sept. 1892.

* Recomputed Sept. 1, 1891.

TABLE I.—LATITUDE, LONGITUDE, ELEVATION, ETC., OF WEATHER BUREAU STATIONS—Continued.

Stations.	Latitude.	Longitude.	Local meridian time faster or slower than 75th meridian.	Elevation January 1, 1891. Barometer above sea.	Thermometer above ground.	Rain gauge above ground.	Anemometer above ground.	Observations began.	Date of changes in elevation.
	° ′	° ′	h. m.	Feet.	Feet.	Feet.	Feet.		
Pittsburg, P T W R	40 32	80 02	20 S.	847	130	124	138	Nov. 1, 1870	
				820	115	107	123	.....	June 1, 1892
Point Reyes Light, V	38 11	122 51	3 11 S.	.....	12	1	60	Mar. 1, 1889	
Port Angeles, V	48 07	123 06	3 14 S.	14	20	1	25	Nov. 1, 1883	
				29	47	35	59	.....	July 1, 1892
Port Huron, V	43 00	82 26	30 S.	639	70	63	108	July 25, 1874	
Portland, Me., V	43 39	70 15	19 F.	103	81	71	87	Jan. 15, 1871	
Portland, Ore., P T W R S	45 32	122 43	3 11 S.	80	85	80	92	Nov. 1, 1870	
				157	200	196	209	.....	Oct. 5, 1892
Pueblo, V	38 18	104 36	1 58 S.	4,753	23	13	31	July 1, 1888	
				4,734	74	65	81	.....	Mar. 1, 1891
Raleigh, V	35 45	78 37	14 S.	388	70	2	80	Apr. 1, 1884	
Rapid City, T V	44 04	103 12	1 53 S.	3,280	53	46	61	Jan. 24, 1881	
Red Bluff, T V	40 10	122 15	3 09 S.	342	54	44	58	July 1, 1877	
Red Wing, V	44 34	92 38	1 10 S.	758	63	55	71	Oct. 19, 1890	
Rio Grande City, T V	26 23	98 48	1 35 S.	160	6	1	22	Mar. 12, 1876	
				170	11	3	33	.....	July 1, 1891
Rochester, P T W	43 08	77 42	11 S.	623	129	125	161	Nov. 1, 1870	
				523	81	81	90	.....	Feb. 10, 1891
Roseburg, T V	43 13	123 20	3 13 S.	523	57	47	67	July 15, 1877	
Sacramento, V	38 35	121 30	3 06 S.	64	61	57	70	July 1, 1877	
St. Louis, P T W R S	38 38	90 12	1 01 S.	571	110	100	210	Nov. 1, 1870	
St. Paul, P T W R	44 58	93 03	1 12 S.	831 / * 850	114	108	120	....do	
St. Vincent, V	48 56	97 14	1 29 S.	805	8	6	24	Sept. 5, 1880	
Salt Lake, P T W R	40 46	111 54	2 27 S.	4,348	90	77	89	Mar. 19, 1874	
				4,345	83	75	90	.....	Aug. 1, 1891
San Antonio, V	29 27	98 28	1 34 S.	781	17	1	90	Jan. 2, 1876	
				705	58	50	85	.....	July 15, 1891
				679	66	60	75	.....	Feb. 1, 1892
San Diego, P T W R	32 43	117 10	2 49 S.	93	73	66	85	Nov. 1, 1871	
Sandusky, V	41 25	82 40	30 S.	629	62	55	74	Aug. 2, 1877	
San Francisco, P T W R S	37 48	122 26	3 10 S.	109	109	101	109	Feb. 2, 1871	
				153	161	154	167	.....	Nov. 1, 1892
Santa Fe, P T W S	35 41	105 57	2 04 S.	7,026	35	29	36	Nov. 20, 1871	
				7,059	59	52	60	.....	Jan. 1, 1892
Sault Ste. Marie, P T W	46 28	84 22	37 S.	642	56	48	65	Aug. 5, 1877	
Savannah, P T W R S	32 05	81 05	24 S.	87	66	56	70	Jan. 1, 1871	
				98	63	55	86	.....	Sept. 9, 1892
Shreveport, T V	32 30	93 40	1 14 S.	249	77	76	84	Sept. 3, 1871	
Sill, Fort, V	34 40	98 23	1 33 S.	1,200 B.	10	3	24	Sept. 22, 1875	
Sioux City, V	42 29	96 24	1 26 S.	1,158	89	78	99	Dec. 1, 1887	
				1,165	96	92	109	.....	Aug. 1, 1892
Southport, V	38 35	78 01	12 S.	34	11	3	46	Sept. 27, 1875	
Spokane, P T W R	47 40	117 25	2 49 S.	1,938	100	92	109	Feb. 1, 1881	
				1,930	99	90	107	.....	Aug. 1, 1892
Springfield, Ill., V	39 48	89 39	58 S.	644	82	60	85	July 1, 1879	
Springfield, Mo., V	37 12	93 18	1 13 S.	1,356	77	74	90	June 3, 1882	
Stanton, Fort, V	33 30	105 26	2 02 S.	6,150 B.	17	2	18	Jan. 1, 1884	
							27	.....	June 30, 1892
Sully, Fort, V	44 39	100 39	1 42 S.	1,600	16	2	32	May 2, 1872	
Tampa, P T W	27 57	82 27	30 S.	36	45	36	52	Mar. 13, 1890	
				36	12	16	52	.....	Nov. 18, 1891
				36	60	52	68	.....	Apr. 16, 1892
Tatoosh Island, V	48 23	124 44	3 19 S.	86	12	1	33	Oct. 1, 1883	
Titusville, T V	28 34	80 51	23 S.	44	15	1	72	June 10, 1887	
Toledo, P T W	41 40	83 34	34 S.	674	122	113	127	Nov. 1, 1870	
Topeka	39 03	95 41	1 23 S.	998	81	73	89	June 1, 1887	
Tucson, T V	32 14	110 53	2 24 S.	2,432	15	4	45	Oct. 30, 1875	
University	34 20	89 27	58 S.	463	6	6	.....	June 1, 1887	
Valentine, V	42 50	100 32	1 42 S.	2,613	37	26	48	Sept. 1, 1885	
Vicksburg, T V	32 22	90 53	1 03 S.	222	60	54	68	Sept. 10, 1871	
				254	65	58	73	.....	July 1, 1891
Vineyard Haven, V	41 26	70 43	17 F.	.....	30	47	55	Oct. 1, 1891	

*Recomputed September 1, 1891.

TABLE I.—LATITUDE, LONGITUDE, ELEVATION, ETC., OF WEATHER BUREAU STATIONS—Continued.

Stations.	Latitude.		Longitude.		Local meridian time faster or slower than 75th meridian.	Elevation January 1, 1891.				Observations began.	Date of changes in elevation.
						Barometer above sea.	Thermometer above ground.	Rain gauge above ground.	Anemometer above ground.		
	°	′	°	′	h. m.	Feet.	Feet.	Feet.	Feet.		
Walla Walla, **V**	46	02	118	20	2 53 S.	1,018	65	56	73	Dec. 1, 1885	
Washakie, Fort, **V**	43	01	108	54	2 16 S.	5,580 B.	23	16	31	Feb. 15, 1882	
Washington City, **P T W R S.**	38	54	77	03	08 S.	112	59	42	67	Nov. 1, 1870	
Wichita, **V**	37	41	97	20	1 29 S.	1,366	78	71	85	July 1, 1888	
Wilmington, **P T W R**	34	14	77	57	12 S.	78	82	76	88	Jan. 1, 1871	
Winnemucca, **T V**	40	58	117	43	2 51 S.	4,340	62	54	69	July 1, 1877	
Woods Holl, **V**	41	33	70	40	17 F.	22	51	39	57	Jan. 1, 1873	
Yankton, **V**	42	54	97	28	1 30 S.	1,232	51	43	57	Apr. 1, 1873	
Yuma, **P T W**	32	45	114	36	2 38 S.	141	16	2	50	Oct. 4, 1875	

TABLE II.—*Changes in Weather Bureau stations during the years 1891–'92.*

ESTABLISHED.

Station.	Latitude.		Longitude.		Date of establishment or discontinuance.	Remarks.
SECOND ORDER.	°	′	°	′		
Pierre, S. Dak	44	24	100	17	July 1, 1891	By transfer from Fort Sully.
Custer Station, Mont	46	07	107	39	....do	By transfer from Fort Custer.
Miles City, Mont	46	25	105	49	Oct. 1, 1891	By transfer from Custer Station.
Lander, Wyo	42	50	108	45	July 1, 1891	By transfer from Fort Washakie.
Tucson, Ariz	32	14	110	53	Aug. 1, 1891	By transfer from Fort Grant.
Amarillo, Tex	35	13	101	50	Dec. 1, 1891	By transfer from Fort Sill.
Yankton, S. Dak	42	54	97	28	July 15, 1891	Closed temporarily from April 1 to September 5, 1891.
Kitty Hawk, N. C	36	00	75	42	July 1, 1891	Changed from third order; formerly maintained as second order station.
Tatoosh Island, Wash	48	23	124	44	Aug. 1, 1891	Re-opened as a second order station.
Southport, N. C	38	35	78	01	Aug. 31, 1891	Do.
Lexington, Ky	38	02	84	33	Dec. 5, 1891	Do.
Kearney, Nebr	40	41	99	05	Feb. 1, 1892	
Pikes Peak, Colo	38	50	105	02	Sept. 8, 1892	Reëstablished.
Hannibal, Mo	39	41	91	20	Mar. 1, 1892	
Cheboygan, Mich	45	39	84	29	Apr. 1, 1892	
Idaho Falls, Idaho	43	29	112	04	May 1, 1892	
Havre, Mont	48	34	109	40	May 15, 1892	By transfer from Fort Assinaboine.
THIRD ORDER.						
Clallam Bay, Wash	48	14	124	13	June 1, 1892	Changed from repair.
Neah Bay, Wash	48	22	124	37	....do	Do.
Port Crescent, Wash	48	08	123	45	....do	Do.
Pysht, Wash	48	12	124	04	....do	Do.
REPAIR.						
Neah Bay, Wash	48	22	124	37	Aug. 1, 1891	
Port Crescent, Wash	48	08	123	45	....do	
Clallam Bay, Wash	48	14	124	13	....do	
COTTON REGION.						
Thomasville, Ala	31	55	87	42	July 1, 1891	
Union Springs, Ala	32	12	85	39	May 1, 1892	
Greensboro, N. C	36	04	79	49	Apr. 1, 1892	
Rolling Fork, Miss	32	54	90	53	Sept. 15, 1892	
Greenville Miss	33	27	91	01	Oct. 1, 1892	
Green Pond, S. C	32	44	80	36	Feb. 1, 1892	By transfer from Jacksonboro, S. C.
SUGAR AND RICE.						
Lake Charles, La	30	12	93	07	Apr. 1, 1892	
Schriever, La	29	44	90	48	....do	
Baton Rouge, La	30	26	91	11	....do	
Rayne, La	30	14	92	12	....do	
Covington, La	30	30	90	04	....do	
Opelousas, La	30	32	92	02	....do	
Point à la Hache, La	29	38	89	44	....do	
Donaldsonville, La	30	06	90	58	....do	
Franklin, La	29	46	91	25	....do	
SPECIAL RIVER STATIONS.						
Red River City, Tex	33	44	96	30	Nov. 1, 1891	
Edinburg, Tex	26	02	98	12	Dec. 1, 1891	
Rio Grande City, Tex	26	27	98	47	Jan. 1, 1892	
Eugene, Oregon	44	05	123	05	....do	
Albany, Oregon	44	38	123	03	....do	
Salem, Oregon	44	58	123	01	....do	
Fairmont, W. Va	39	27	80	10	....do	
Philippi, W. Va	39	07	80	04	....do	
The Dalles, Oregon	45	25	121	12	Feb. 1, 1892	
Umatilla, Oregon	45	54	119	19	....do	
Canton, Ga	34	13	84	36	July 1, 1891	
Resaca, Ga	34	34	85	05	....do	
Davis Island Dam, Pa	40	30	80	05	Feb. 11, 1892	

TABLE II.—*Changes in Weather Bureau stations during the years 1891–'92*—Continued.

ESTABLISHED—Continued.

Station.	Latitude.		Longitude.		Date of establishment or discontinuance.	Remarks.
SPECIAL RIVER STATIONS—continued.	°	′	°	′		
Eufaula, Ala	31	54	85	07	Apr. 1, 1892	
Chattahoochee Landing, Fla	30	41	84	53	....do	
Albany, Ga	31	34	84	14	....do	
Bainbridge, Ga	30	52	84	36	....do	
Columbus, Ga	32	28	85	05	....do	
Everetts Station, Ga	32	33	84	04	....do	
Whitesburg, Ga	33	28	85	02	....do	
Coronaco, S. C	34	18	82	06	....do	
Quincy, Ill	39	55	91	25	....do	
St. Stephens, S. C	33	26	79	50	....do	
Greenville, Miss	33	24	91	01	....do	
Demopolis, Ala	32	31	87	48	Oct. 1, 1892	
Eddyville, Ky	37	01	88	00	Oct. 15, 1892	
Riverton, Va	38	57	78	11	Oct. 17, 1892	
Buchanan, Va	37	31	79	44	....do	
Richmond, Va	37	32	77	26	....do	
Tazewell, Tenn	36	26	83	33	Dec. 22, 1892	
Towanda, Pa	41	46	76	30	....do	
Reynolds, Ga	32	27	84	11	....do	
Tuscumbia, Mo	38	15	92	28	....do	
Wittsburg, Ark	35	13	90	40	....do	
Cedar Rapids, Iowa	41	57	91	39	....do	
Columbia, Va	37	46	78	09	....do	
Dayton, Ohio	39	46	84	10	....do	
Iowa City, Iowa	41	39	91	33	....do	
La Fayette, Ind	40	26	86	54	....do	
Macon, Ga	32	47	83	43	....do	
Madison, Ind	38	44	85	24	....do	
Maysville, Ky	38	40	83	45	....do	
Mount Vernon, Ga	32	08	82	39	....do	
Selin's Grove, Pa	40	48	76	55	....do	
Eagle Pass, Tex	28	40	100	29	Aug. 1, 1891	
Laredo, Tex	27	31	99	30	....do	
Wallula, Wash	46	02	118	56	Feb. 1, 1892	
SPECIAL RAINFALL STATIONS.						
Lillington, N. C	35	26	78	50	July 1, 1891	
Toccoa, Ga	34	36	83	27	Nov. 1, 1891	
Washington, Ga	33	43	82	53	....do	
Anderson, S. C	34	30	82	38	....do	
Mt. Carmel, S. C	33	57	82	32	....do	
Elberton, Ga	34	04	82	59	Dec. 1, 1891	
Warrior, Ala	34	00	86	43	Sept. 15, 1892	

STATIONS DISCONTINUED.

SECOND ORDER.						
Fort Assinaboine	48	32	109	42	May 15, 1892	
Fort Grant, Ariz	32	36	109	53	July 31, 1891	
Lansing, Mich	42	44	84	32	Aug. 1, 1891	
Rawlins, Wyo	41	45	107	24	....do	
Fort Sill, Okla	34	40	98	23	Nov. 30, 1891	
Furnace Creek, Cal	36	28	116	51	Sept. 30, 1891	
Fort Du Chesne, Utah	40	35	109	50	Sept. 10, 1891	
Rio Grande City, Tex	26	28	98	48	Dec. 31, 1892	
Fort McKinney, Wyo	44	23	106	46	Jan. 1, 1892	
Brownsville, Tex	25	53	97	30	Aug. 15, 1892	
Custer Station, Mont	46	7	107	39	Sept. 30, 1891	
THIRD ORDER.						
Fort Apache, Ariz	33	48	109	57	July 9, 1891	
Fort Bowie, Ariz	32	12	109	20	....do	
Carthage, N. Mex	33	51	106	49	....do	

TABLE II.—*Changes in Weather Bureau stations during the years 1891–'92*—Continued.

STATIONS DISCONTINUED—Continued.

Station.	Latitude.		Longitude.		Date of establishment or discontinuance.	Remarks.
THIRD ORDER—continued.	°	′	°	′		
Holbrook, Ariz	34	52	110	09	July 9, 1891	
Fort Reno, Okla	35	33	98	01	....do	
San Carlos, Ariz	33	12	110	27	....do	
Taylors Ranch, Utah	?		?		....do	
Fort Thomas, Ariz	33	04	109	51	....do	
Willcox, Ariz	32	20	109	42	....do	
Fort Yates, N. Dak	46	05	100	34	....do	
REPAIR.						
Cooleys, Ariz	34	13	109	47	July 9, 1891	
Durango, Colo	37	15	107	50	....do	
Edinburg, Tex	26	06	98	12	....do	
Santa Maria, Tex	26	06	97	48	....do	
El Reno, Ind. T	35	29	97	58	....do	
Marfa, Tex	30	22	104	16	....do	
Price, Utah	39	38	110	42	....do	
Watrous, N. Mex	35	48	104	56	....do	
Woodward, Ind. T	36	20	99	18	....do	
SPECIAL SUGAR AND RICE STATION.						
Point à la Hache, La	29	38	89	44	Sept. 15, 1892	
SPECIAL RIVER.						
Lillington, N. C	35	26	78	50	July 1, 1891	
Burksville, Ky	36	47	85	24	Nov. 30, 1891	
Warrior, Ala	34	00	86	43	July 1, 1892	
Everetts Station, Ga	32	33	84	04	Dec. 22, 1892	
SPECIAL RAINFALL.						
Phillips, Wis	45	40	90	24	July 1, 1892	
Oberlin, Kans	39	48	100	32	Nov. 1, 1892	
SPECIAL COTTON REGION.						
Branchville, S. C	33	16	80	47	Jan. 7, 1892	
Cartersville, Ga	34	09	84	54	....do	
Devalls Bluff, Ark	34	47	91	25	....do	
Edwards, Miss	32	19	90	34	....do	
Grand Junction, Tenn	35	05	89	05	....do	
Jacksonboro, S. C.*	32	44	80	26	Jan. 31, 1892	
Monticello, Ark	33	38	91	44	Jan. 7, 1892	
Selma, Ala	32	25	87	00	....do	
Wadesboro, N. C	34	58	80	03	....do	
Chester, S. C	34	58	81	14	....do	

* Removed to Green Pond, S. C.

DESCRIPTION OF INSTRUMENTS.

By Prof. C. F. MARVIN.

The instrumental equipment of the principal stations of the Weather Bureau is set forth in the accompanying lists:

Equipment of instruments, etc., at second-order stations:
Two anemometers, Robinson pattern, 4-inch cups, arms 6.72 inches.
One anemometer register, single.
Two mercurial barometers (Fortin ¾-inch tube).
One glass barometer case.
One set maximum and minimum thermometers, with mountings.
One extra set maximum and minimum thermometers.
Two sets wet and dry bulb mercurial thermometers.
One whirling apparatus for wet and dry bulb thermometers.
One standard instrument shelter, about 3 feet cube, with supports.
One standard anemoscope, tail 3 feet by 10 inches.
One iron anemoscope support, with anti-friction mountings, etc.
One iron anemometer support, or parts to combine with support for anemoscope.
One 8-inch brass rain gauge, with support and measuring sticks.
One 8-inch galvanized iron snow gauge, with support. Batteries, wire, etc.
Additional instruments at first-order stations:
One double or triple register, recording wind and rain (Weather Bureau pattern).
One set electrical contacts, and box, for anemoscope.
One sunshine recorder (Jordan—Weather Bureau pattern).
One electrically recording rain gauge (Marvin's pattern, 1888).
One aneroid barograph (Richard Bros.).
One thermograph (Richard Bros.).
One thermograph recording electrically at a distance (Richard Bros.).

In the case of the equipment of stations of the second order no variation or departure from the above list of instruments occurs, but owing to limited supplies and other circumstances the first-order stations do not in every case have all the additional instruments cited. Thus, only a portion are supplied with sunshine recorders and the electrically recording rain-gauge, and only seven electrically recording thermographs are in use.

On the other hand, about 20 stations of the second order have either thermograph or barograph, or both, in use.

Again, the station at Washington has a still more complete equipment than the regular first-order stations, and the instruments in many respects are of much superior pattern, as will be seen from the descriptions following.

DESCRIPTION OF INSTRUMENTS.

Anemometer.—The standard anemometer used by this Bureau since November, 1870, is of the Robinson pattern, as shown in Fig. 1. In point of portability and facility of exposure, in point of durability, with little attention and convenience of access to all parts, in point of its sensitiveness to light winds (actuated by winds of one-half mile per hour, 0.2 meter per second) and ability to withstand violent storms, indicating sometimes velocities of from 80 to 100 miles per hour, 36 to 45 meters per second, the Weather Bureau anemometer possesses advantages over other forms. Its dimensions and construction are as follows: Diameter of spun brass or alumi-

num cups, 4 inches. Length of arms from axis to cup centers, 6.72 inches. Revolution of cups per nominal mile of wind movement, 500. Dials graduated to miles and tenths. The maximum count in one complete cycle of dial movements, 990 miles. Distance of dials below the cups, 10.5 inches. Weight of cups and spindle, brass, 16 ounces (453 grammes); aluminum, 10.2 ounces (289 grammes); weight of spindle, 2 ounces (57 grammes).

The construction of the dial and registering mechanisms, the insulated binding post, and the oil cup construction of the bottom bearing is shown in Figs. 2 and 3. The outer dial makes one

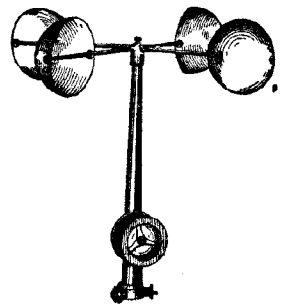

FIG. 1.—Robinson's cup anemometer.

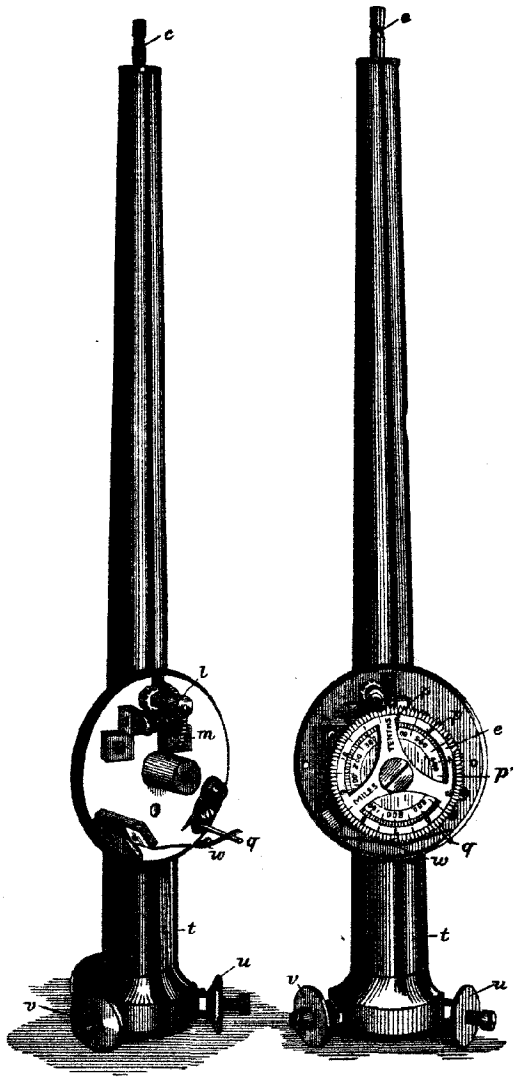

FIG. 2.—Standard anemometer, U. S. Weather Bureau.

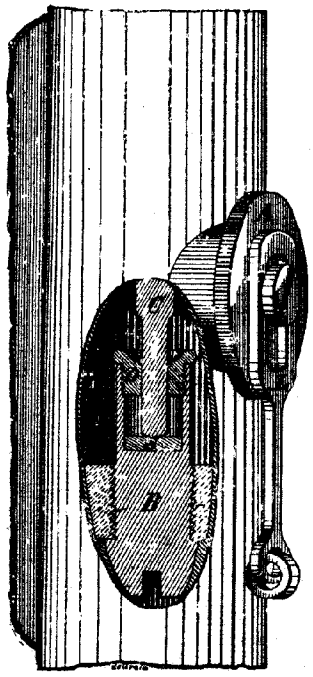

FIG. 3.—Anemometer bearings.

complete revolution for 5,000 revolutions of the spindle; that is, for 10 miles of wind movement. Each mile is registered electrically by a system of ten dial pins, which, as they pass, deflect a spring and momentarily close an electric circuit. The pins at the points marked 4—5 Fig. 2 are joined as shown, the effect of which is to prolong the closure of the circuit until both pins have passed. The resulting record shows a peculiar mark for each 10 miles of wind movement. This mark affords a very satisfactory check upon the accidental omission of a mile mark or so and greatly facilitates counting up the records.

The construction of the oil cup and pivot bearing is shown in Fig. 3. Access is conveniently provided to these parts by means of a comparatively large opening in the case, closed by the cap *A*. This is held in place only by gentle spring friction, but is prevented from being lost by the link, *L*, which secures it to the case. The oil-cup bearing for the spindle *C* is readily understood.

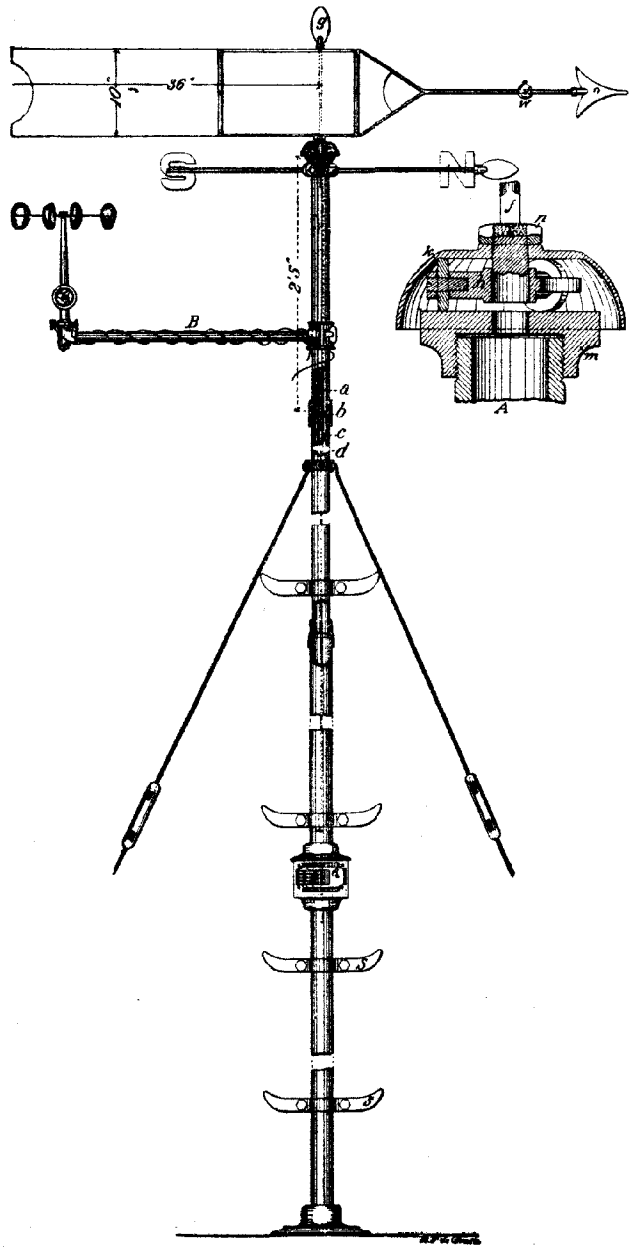

FIG. 4.—U. S. Weather Bureau combined wind vane and anemometer support.

S is a small, flat disc of glass-hard and highly polished steel. *C* is also hardened at the end and highly polished. The annular space between *S* and *D* is filled with the best quality of clock oil, selected with a view to its low freezing point.

Anemometer support.—The anemometer is generally exposed at a height of about 16 to 20 feet above the roof of the office building, the support being made up of 1½ and 2 inch iron pipe, braced

with suitable guy rods. Access to the anemometer was had in the earlier days by causing the top portion of the support to telescope into the bottom portion, thus lowering the instrument to a convenient point. Such a support is not sufficiently rigid and manageable. The Maring support, also formerly used, operated somewhat like the old well sweep to lower the anemometer to the roof. In the more recent and best forms the support is perfectly rigid and fitted with iron foot rests forming a ladder, enabling the observer to climb to the anemometer.

The anemometer is often supported upon a cross arm secured to the wind-vane support, see *B*, Fig. *4*.

Registration.—The automatic registration of the wind movement is effected by means of a special chronograph register, shown in Fig. 5.

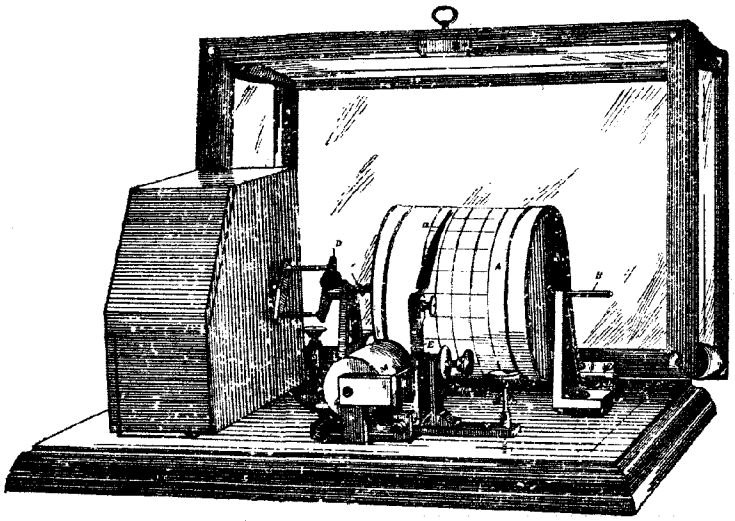

FIG. 5.—Single anemometer register.

The cylinder *A* carrying its record sheet is revolved at the rate of one revolution in 6 hours, moving endwise at the same time by the action of the steep screw or worm *C* on the axis *B*. The mile and ten-mile marks corresponding to the movement of the anemometer dials are made by the action of the electro magnet on the armature and pen, at *a*. An enlarged view of the pen is shown in Fig. 6.

The sheets are changed and set at noon each day.

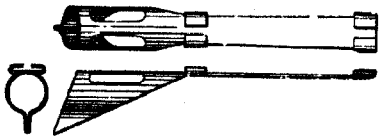

FIG. 6.—Register pen.

Anemoscope.—The construction of the wind vane and support, with accessories for electrical registration, is shown in Fig. 4. This design, especially of the moving parts, aims to insure the very least frictional resistance, even with little or no oil, and as far as possible to require no special skill or care in the erection of the apparatus. The axis of the vane is a solid iron rod about 42 inches long, tapered at the top and squared to fit a corresponding opening edgewise through the vane. The entire weight of the vane and moving parts is supported upon a system of three hard brass rollers or wheels, partly shown in the enlarged view at one side. These wheels are mounted in a carriage, *h*, slipping loosely around the axis, *f*. The friction wheels revolve between the under surface of the bell cover, *n*, and the cap, *m*. The former, being only loosely centered and not held rigidly on the axis, *f*, is free to adjust itself perfectly to the plane of the three anti-friction wheels, notwithstanding irregularities in angles and alignments that unavoidably occur in setting up such apparatus. The lower end of the axis, *f*, passes loosely through a diaphragm or bearing of brass inserted at *b*, within the coupling of the pipe. This construction furnishes strong and durable bearings remarkably free from friction.

The tail of the vane is made of two thin wooden boards of dimensions shown, and which are spread about 9 inches apart at the end.

The support is of wrought-iron pipe 2 inches inside diameter at the bottom and 1½ inches at the top portions. The total height is rarely less than 18 feet, sometimes 24 or more. A set of three iron guy rods, which can be strained taut by turn-buckles, renders the support perfectly rigid.

Iron foot steps, as shown at *s*, *s*, afford access to the vane or to the anemometer when the latter is supported on the cross-arm as shown. In this case the cups of the anemometer are from 18 to 24 inches below the lower edge of the vane.

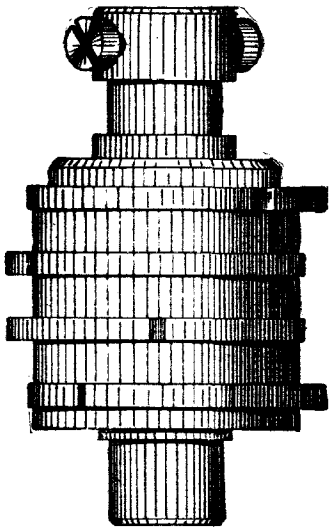

FIG. 7.—Cam collars for electrical contacts.

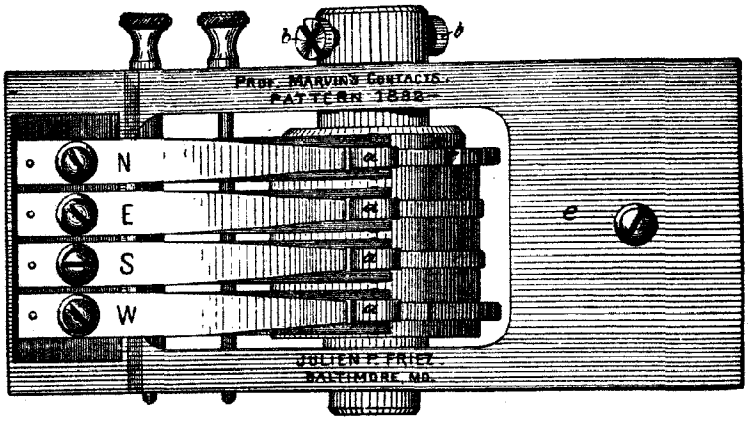

FIG. 8.—Electrical contacts complete.

Electrical registration.—For purposes of electrical registration of the wind direction a contact box is inserted at a convenient height above the base of the support, as seen in Figure 4. The axis of the vane is extended by screwing into the pipe coupling at *d*, Fig. 4, a length of ⅛-inch gas pipe sufficient to pass through the contact box. This pipe is aligned as perfectly as possible, but if not perfectly straight it is so slender and flexible as to readily transmit the motion of the vane with little frictional resistance.

The contact mechanisms are shown separately in Figs. 7 and 8.

The ⅛-inch pipe passes through the center of the cam collars, which are firmly clamped to it by suitable screws. The acting surfaces of the four exactly similar cams embrace just three-

eighths of a circumference, the surfaces of two adjacent cams overlapping just one-eighth of a circumference. These cams, acting upon the rollers *a*, *a*, *a*, *a*, of the contact levers and insulated springs *N*, *E*, *S*, *W*, cause always one, sometimes two of the levers to be in contact each with its corresponding insulated spring, thus indicating, within one-eighth of the circumference, the azimuth of the vane.

The automatic record of these directions, together with record of other elements, is obtained by use of the meteorograph, which is shown in Fig. 9. The chronograph cylinder, *A*, makes 4 revolutions each 24 hours, shifting endwise about three-eighths of an inch per revolution. Four electro-magnets, partly seen, at *W*, *W*, are joined separately, each to each, to the four-contact springs, *N*, *E*, *S*, *W*, of the contact mechanism of the wind vane. The armatures of these magnets are provided with projecting arms carrying rounded points, or letters, on the outer ends. A small swinging ink-pad rests lightly against these points. When the magnet is momentarily actuated by an electric current the letter, or point, of the corresponding arm is impressed against the record

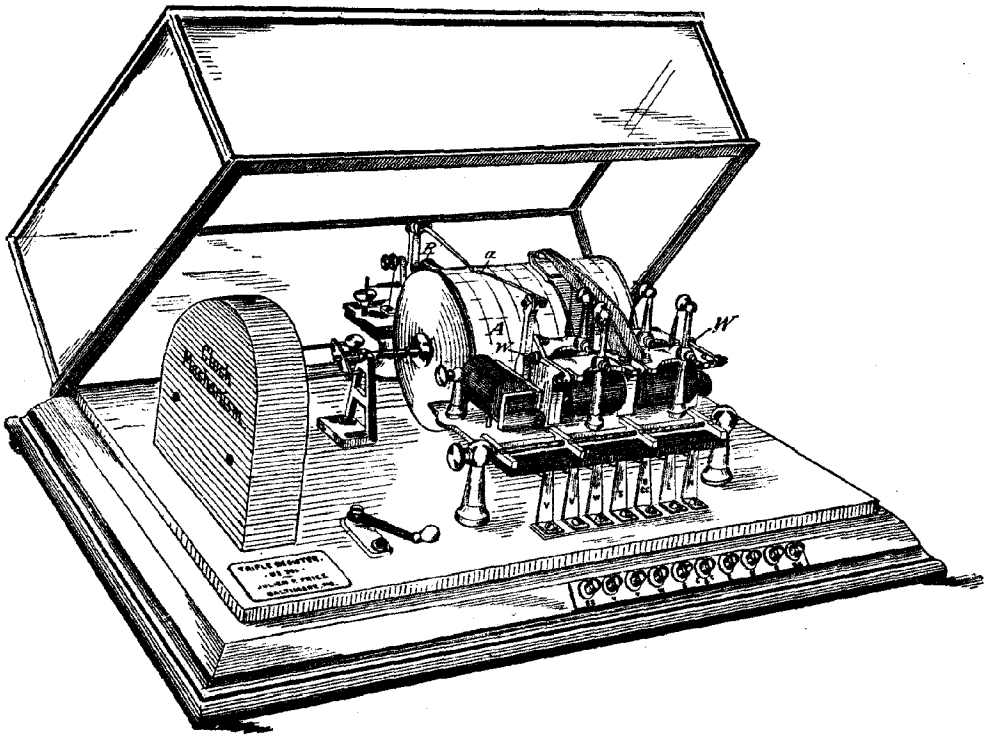

FIG. 9.—Improved triple register.

sheet, imprinting the letter, or simply a small dot. The momentary closure of the electric circuit is produced by a contact-maker attached to the clock movement which drives the record cylinder. Formerly this mechanism closed the circuit only once each five minutes, but in the latter forms of the instrument a one-minute contact-circuit-maker has been introduced, chiefly because of the advantage offered in securing a shorter closure and a simpler construction.

The registration of the wind velocity is effected by means of the electro-magnet, *V*, in the manner already described for the anemometer.

Rainfall.—An electro-magnet, *R*, on the rear side of the cylinder, is connected with the recording rain gauge described below, and produces on the sheet a record of rainfall near to, and in a trace parallel with, the wind-velocity record.

Barometers.—The mercurial barometers are of the usual Fortin cistern type, except that, in later years, many barometers have been fitted with a metal cistern of the piston type, devised by Mr. Chas. B. Tuch, of the Instrument Room. This is shown in section in Fig. 10, from which the construction will be readily understood. The tubes of all barometers are from one-fourth to five-

sixteenths of an inch in diameter inside, and are, with rare exceptions, filled at this office. The boiling process is used in this operation, the mercury being purified by distillation in vacuo. The verniers read to one one-hundredth of an inch in some instruments, and in others to one five-hundredth part of an inch.

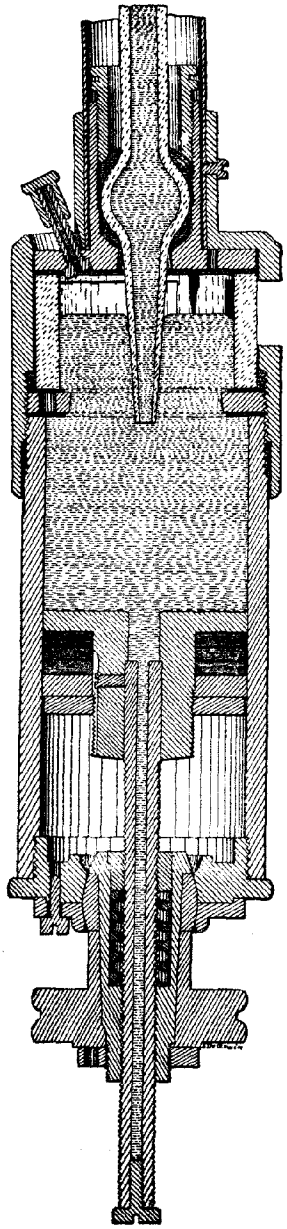

FIG. 10.—Section of Tuch's barometer cistern.

For the better protection from dust, temperature changes, etc., the barometers are suspended in a box. The cistern of each barometer is encircled very loosely by a ring and the top support is adjustable, so that the barometer may be centered within the ring and thus secure free suspension and verticality, affording at the same time means for steadying the cistern against the ring for setting without sensible error in verticality.

Barograph.—The only form of barograph in use at the regular stations, Washington excepted,

is the aneroid barograph of the construction of Richard Bros. This is shown in Fig. 11, and consists essentially of a system of corrugated aneroid cells communicating their motion by means of magnifying levers to the pen, tracing its successive positions upon the sheet of the recording cylinder, as shown. The sheet contains the records for seven days; the vertical scale being full

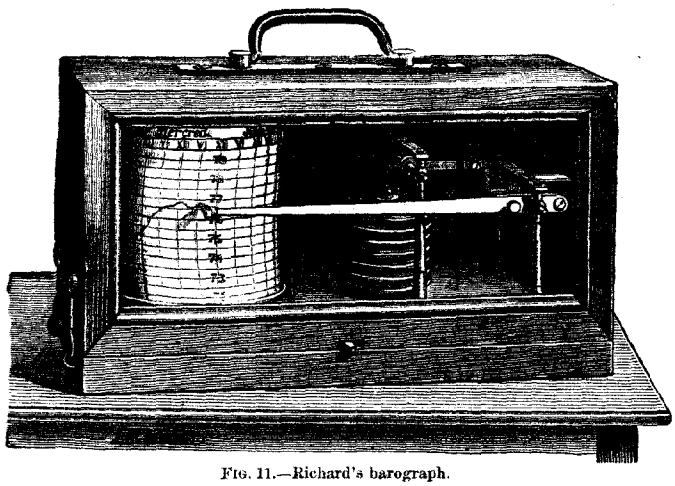

FIG. 11.—Richard's barograph.

size, that is, 1 inch on the sheet represents 1 inch of barometric pressure. The finest rulings represent 0.05 inch of pressure, and the time scale is ruled for intervals of two hours. The limit of accuracy of readings is about 10 to 15 minutes in time and from 0.02 to 0.03 inch of pressure.

Corrections.—The readings at 8 a. m and 8 p. m., as taken from the sheet, are compared with the eye readings of the standard mercurial barometer, and, when necessary, the barograph readings

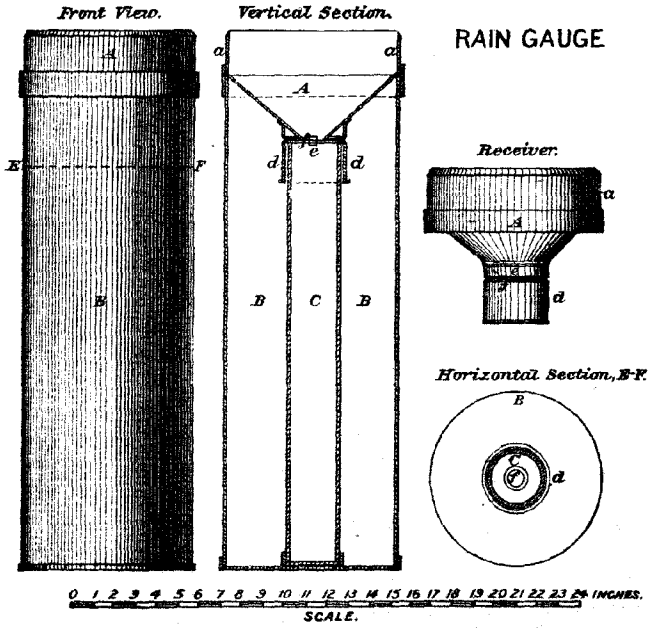

FIG. 12.—Rain and snow gauge, ordinary.

for each hour, as obtained from the sheet, are corrected by interpolated values, if need be, so as to conform throughout to the mercurial barometers.

Rain and Snow Gauges.—These instruments are of very simple construction and will be fully understood from the drawing, Fig. 12.

The receiver of the rain gauge is made of drawn brass tubing, 8 inches in diameter and beveled to a sharp edge at the top. This empties into the measuring tube, also of drawn-brass tubing, having one-tenth the sectional area, and 20 inches high. The measuring sticks are made of cedar, of sectional area generally little less than one one-hundredth that of the measuring tube. The large

Rain Gauge and Support.

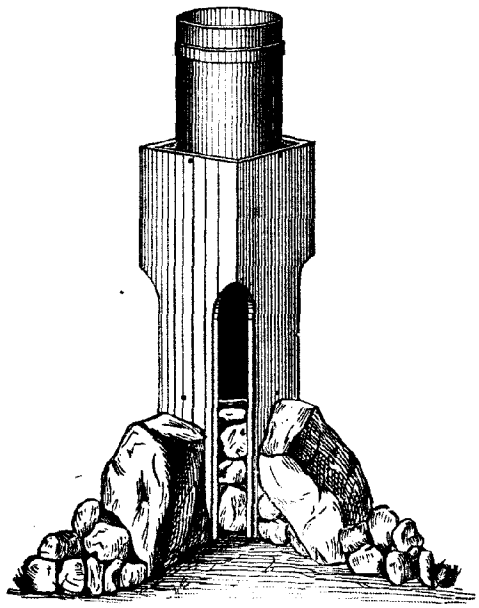

FIG. 13.—Rain and snow gauge, with ground support.

galvanized-iron vessel, or overflow, as it is generally called, is also 8 inches in diameter, and, in general, is used as a snow gauge during the winter season. Several forms of support are used for gauges. That shown in Fig. 13 is typical for a ground exposure.

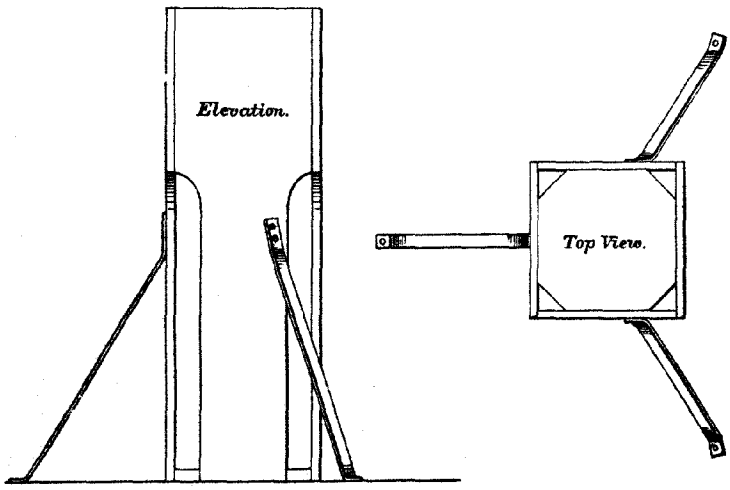

FIG. 14.—Rain and snow gauge supports.

Fig. 14 shows the method of supporting gauges on the roof.

Exposure of Gauges.—Rain and snow gauges at regular stations are generally exposed upon the roofs of buildings which are flat as far as possible, with the gauge near the center. In other

instances the gauge is properly protected from disturbing wind effects, but the exposures, in a few cases, are, at the best, more or less imperfect.

Thermometers.—Four thermometers are used in the regular daily observations, namely: One mercurial maximum thermometer and one alcohol minimum thermometer, mounted as shown in Fig. 15.

The two remaining are the ordinary mercurial wet and dry bulb thermometers. These latter are mounted upon a special form of whirling apparatus.

The maximum thermometer operates to register the highest temperature by virtue of the effects of a constriction in the bore of the tube near the bulb. The mercury is squeezed through under the action of rising temperature, but can not withdraw again with falling temperature.

The minimum thermometer is provided with a slender glass index sliding freely within the alcohol column in the stem of the thermometer. The index being set against the end of the alcohol column withdraws as the column contracts and remains at the lowest point reached, the alcohol flowing past the index for rising temperature.

The maximum and minimum thermometers have spherical bulbs. They are graduated to degrees Fahrenheit, about 12 to 16 degrees to the inch.

The wet and dry bulb thermometers have cylindrical bulbs, and are mounted upon a special whirling apparatus for the purpose of securing the necessary ventilation in making the humidity observations. Just previous to the hour of observation the muslin of the wet bulb is moistened and the thermometers whirled until the wet bulb reaches its lowest temperature, as shown by successive readings.

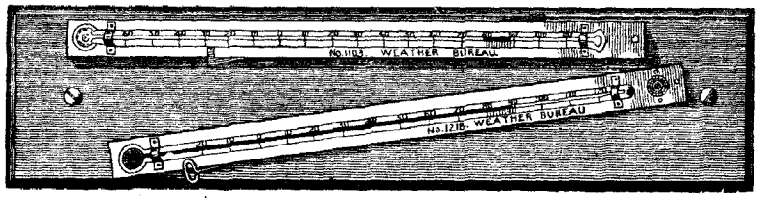

FIG. 15.—Maximum and minimum thermometers.

Each new thermometer, when received, is compared with the standard mercurials of the Bureau, and the correction for instrumental error determined so as to reduce all readings to the standard air thermometer. These corrections are determined at intervals of every ten degrees, 32°, 42°, 52°, etc., from the lowest to the highest temperature to which the thermometer is graduated, ranging from −48°, or, in special cases, −60°, for the lowest reading minimums to +112° for the highest reading maximum and dry-bulb thermometers.

Occasional recomparisons of thermometers are made at the freezing point, when sensible changes are found to have taken place after the first comparison.

Thermographs.—For the continuous registration of temperature the Richard thermographs have been used. (See Fig. 16). These, in a few special cases, record electrically at a distance. The construction of the plain thermograph is very simple. The metal bulb of the thermometer is curved and a very flat ellipse in cross section, after the fashion of the Bourdon pressure tubes. This is completely filled with alcohol or similar liquid, under pressure, which, changing as it does with varying temperatures, produces corresponding changes in the curvature of the bulb. These movements are magnified by suitable arrangements of levers, and inscribed upon a cylinder of paper in the ordinary manner.

In the case of the thermographs which record electrically at a distance the magnified movements of the thermometer are reproduced at the receiving end of the instrument by means of electrical mechanisms which are too complicated to be described here. These instruments, making their record always under inspection, leave little to be desired in point of convenience, but very few observers are thoroughly successful in keeping them in operation.

The record sheets are ruled to degrees, Fahr., one degree being about one-thirtieth of an inch, and the time scale is the same as for the barograph with lines for every two hours. The inaccura-

cies of the record due to small errors in time may be very great at times of sudden changes of temperature, and on this account the Weather Bureau has had made up special a number of thermographs in which the record cylinder makes two revolutions per week, and with the sheet ruled to hours, instead of every two hours. In nearly all cases these sheets are allowed to make two revolutions during the week. The thermal curves very rarely interfere, as the daily maxima for the last half occur with the minima of the first half of the week. The diagram, Fig. 17, is a copy of such a record.

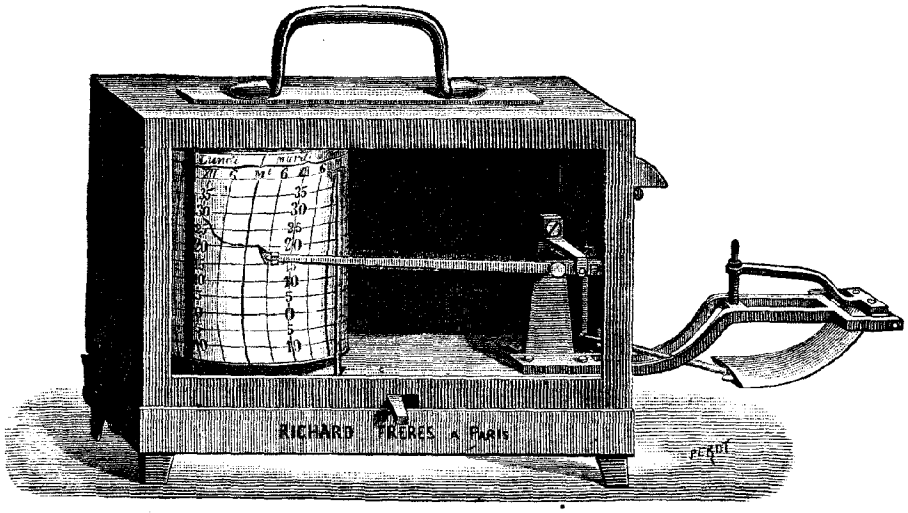

FIG. 16.—Richards thermograph.

Corrections for instrumental errors are worked out for the thermal traces in the same manner as described for the barograph, comparisons being made with eye readings of the whirled dry-bulb thermometers at 8 a. m. and 8 p. m., 75th meridian time.

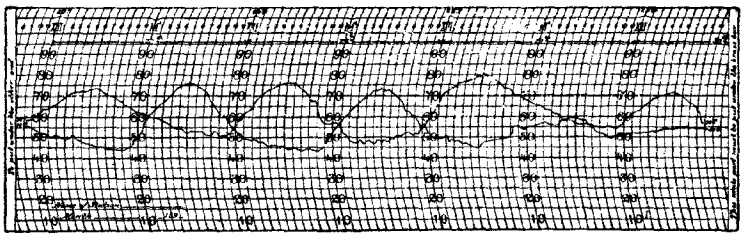

FIG. 17.—Semi-weekly thermograph curve.

Thermometer exposure.—The pattern of instrument shelter used almost exclusively for the past 7 years was first introduced by Prof. Hazen in 1885. The shelter measures very nearly 36 inches cube, inside; the roof is double and open on the north and south ends, sloping to the south at a small angle. The louvres are 3½ inches wide, set 1 inch apart and at an angle of 45° to the vertical. The supports are generally about 10 feet high. With very few exceptions the shelter is placed upon the roofs of buildings freely exposed to the air currents, and removed from the effects of local influences. The sides of the shelter are placed north and south and east and west, respectively, and the bulbs of the maximum and minimum thermometers are near the eastern side of the shelter at about mid-height, while the whirling apparatus with the wet and dry bulb thermometers occupy the western half of the shelter.

Sunshine recorder.—The pattern of sunshine recorder used on stations is a modified design of the Jordan photographic recorder. Its construction will be understood from the illustration, Fig. 18. The large cylinder is adjustable in its supports, which are provided with a graduated arc by

which the axis of the cylinder, when adjusted properly north and south, can be made parallel with the earth's axis. This cylinder can also be entirely removed from the support without affecting the adjustment for latitude. The two sheets of ferro-prussiate paper adapted to receive the records of the forenoon and afternoon sunshine, respectively, are inserted at the bottom end of the instrument and made to conform to the concave surfaces of the segments of corresponding forenoon and afternoon cylinders within, as may be seen in the figure. The slides, *A*, *B*, are pierced each with a fine hole beveled out to a sharp edge and at a wide angle, thus permitting a small beam of sunlight to pass and form an image of the sun on the paper beyond. The hole in the slide *A* is shown at *h*. Each slide is notched and adjustable to 31 different positions corresponding to the days of the month. The sheets of paper are ruled vertically with a set of lines representing hours of time from about 4 a. m. to noon on the forenoon sheet and from noon to about 8 p. m. on the afternoon sheet.

In order that the trace indicating sunshine for any particular day of the month shall occur at a predetermined place on the sheet, notwithstanding the changes in declination of the sun from

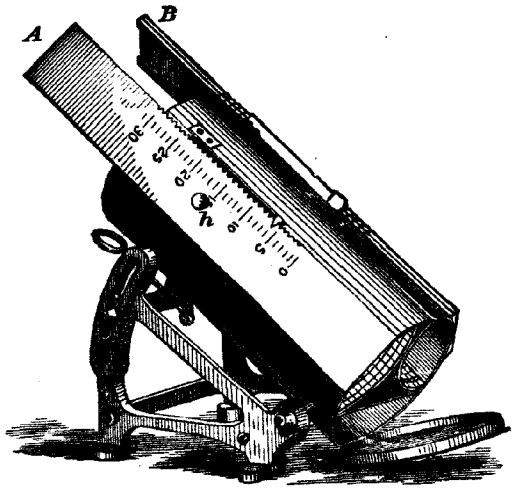

FIG. 18.—Sunshine recorder.

month to month, a series of lines are ruled across the bottom of the sheet, each line corresponding to a month of the year, and the position of the line so related to the declination of the sun for that month that if the sheet be cut off across the bottom at this line and inserted in the recorder with this edge flush with the bottom of the instrument the traces of sunshine from day to day will fall upon predetermined positions and can thus be identified with any particular day of the month, whereas, without this provision, if, for example, the first day or two of a month were cloudy and no record produced, uncertainty might arise as to the correct identification of the traces since these would occupy different positions on the sheet from month to month.

The use of this recorder has not been attended with much satisfaction, owing wholly to the imperfect and irregular action of the photographic paper. The best records are obtained from stations in the West, where there is a large proportion of bright sunshine and the air is comparatively dry.

Special instruments.—In addition to such instruments as have thus far been described, the records of hourly pressure and rainfall for the Washington office have been derived from instruments of special construction, designed and used only in that office.

The barograph (Foreman's).—This instrument was invented by Mr. A. L. Foreman in 1874, during his connection with the Signal Service. The barometer is of the siphon pattern, with a tube about three-fourths inch inside diameter. An iron float attached to the short end of a delicately poised lever rests upon the mercury in the short leg. The long end of the poised lever is tipped with platinum and plays between two platinum-tipped electrodes. The lever is connected

electrically with a battery. Either of the above-described electrodes connects electrically with a corresponding electro-magnet. These two electro-magnets actuate the same armature, but in such a manner that the one draws the armature in one direction while the other magnet draws the armature in the opposite direction. The terminal ends of the two electro-magnet coils—that is, the ends not connected with the platinum electrodes—are joined to each other and to the battery, thus completing the circuit. The delicately poised lever mentioned above, together with the two platinum-tipped electrodes, is mounted upon a nut moving upon a finely threaded screw A second screw, of much coarser pitch, is connected to the first screw by gears in such relation that the simultaneous movement of the nut on the coarse screw, which carries the pens that produce the record, is eight times as great as the movement of the nut on the fine screw The gearing by which these two screws are actuated is further connected, mechanically, with a train of gears driven by a suitable weight and locked by the armature of the electro-magnets.

The action of the mechanisms is as follows: Whenever the float in the short leg of the siphon is either buoyed up too much by a rise of the mercury or insufficiently supported in consequence of a fall of mercury, the poised lever will be deflected and thereby come in contact with one or the other of the platinum electrodes, thus sending a current through the corresponding magnet. The armature is drawn and releases the clockwork, so that a certain wheel makes one complete revolution and in such manner as to revolve the two screws above mentioned in a direction such as to readjust the equilibrium of the float and move the record pens. If equilibrium is not restored and the contact of the poised lever broken after one revolution, the action is repeated as long as contact continues. If the contact of the poised lever is made with the other electrode, the action of the clock is to move the float and record pens in the opposite direction The float, therefore, must always rise and fall with every variation in the level of the mercury surface, which variations are recorded on a magnified scale on the record sheets. In this instrument two cylinders are used, one revolving in 24 hours, giving a time scale of about 0.65 of an inch per hour, the other cylinder revolving only once in 16 days. The pressure scale on the sheets is subdivided to represent 0.02 inch, being a fourfold magnification.

The performance of this instrument is, on the whole, very satisfactory; still, when the most minute accuracy is required it becomes unreliable. There is entirely too much lack of rigidity in the mounting of the float mechanisms in relation to the mercurial surface, in consequence of which false movements of the pens are possible. Moreover, the system of mechanisms and barometric heights of the mercurial column is not independent of temperature changes.

The pens are adjusted as nearly as may be to the correct pressure when new sheets are placed in position, and the true pressure, as given by a standard barometer, is noted on the sheet each 24 hours. The final hourly readings taken from the sheet are adjusted to conform to the eye readings in the manner already described. These readings are entered in the nearest hundredth inch only.

Recording rain-gauges.—Two special pluviographs have been in use at the Washington office for many years, though the rainfall trace, or record from one of these, known as the Gibbons gauge, being made by the abrasion of a strip of silver upon so-called metallic paper, after the method introduced by Beckley in his anemograph, was so faint and imperfect as to be quite unreliable. The rain-gauge was reconstructed during the past year and a much more perfect ink record secured.

A third gauge of improved pattern was also used during a portion of the year, and with much success. The greater part of the past records have, therefore, been derived from but one gauge, known as the Eccard gauge. The construction and exposure of this will be understood from Fig. 19. The receiver of the gauge is 12 inches in diameter and constructed with an enlarged bowl beneath for the purpose of better retaining the snow that should enter the mouth of the gauge and that might otherwise be blown out. The bowl of the gauge is encased in a wooden boxing passing entirely through the roof and communicating with the rooms below, thus providing a flue for the passage of the warm air from the room to the bowl of the gauge, which is thus warmed to such an extent that, except in rare cases of very cold weather or very heavy snowfall, all such precipitation is melted as it falls. The bowl of the gauge is connected by a block-tin tube with

the measuring cylinder attached to the registering part of the gauge, in the office below. The registration is effected as follows:

A counterpoise *c*, Fig. 19, carries the tracing pen, or pencil, which marks against the record cylinder in the usual manner. The counterpoise slides freely between appropriate guides and parallel to the axis of the cylinder, being sustained by a thread passing over pulleys and fastened to

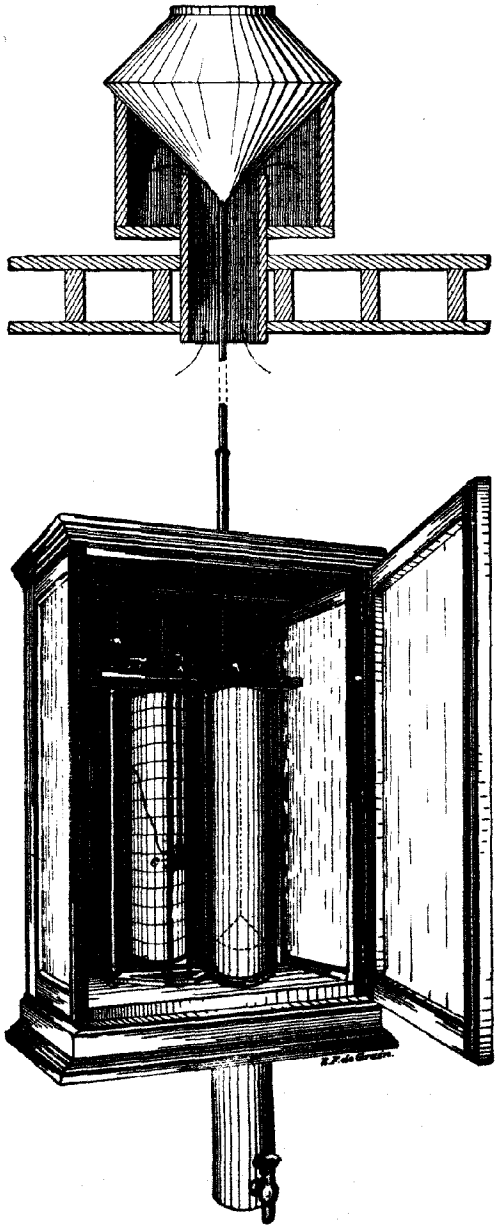

FIG. 19.—Eccard recording rain-gauge.

a float resting upon the water surface in the measuring cylinder. As the water surface rises the counterpoise descends half as far, but still with a five-fold magnification of the actual precipitation. The time scale on the record sheet is subdivided into hours only, at the rate of one-half inch per hour, the vertical scale being subdivided only to half-inch spaces, representing one-tenth inch of precipitation.

All gauges of this type—that is, in which the bowl is artificially warmed to any extent whatever and in which the water is conducted a distance through a long tube for measuring—are open to serious objection and show a deficiency of precipitation. Prolonged drizzling rains and light snows may be entirely evaporated and not recorded. An uncertain loss and delay of record also arise in the action of the water wetting the conducting tube before making its way finally into the measuring tube.

The Gibbon gauge, as it is now constructed, is much superior to the Eccard gauge, and is described below. The alterations related entirely to the registering mechanisms, with the exception that the warming flues for heating the bowl of the receiver so as to melt snowfall were discarded. The gauge, therefore, now records only rainfall, and, as it is, some few hundredths of inches are always lost in wetting the long tube.

The registering mechanisms are actuated electrically. A float rests upon the surface of water in the measuring tube; its supporting thread passes first over a guide wheel which is at one end of a lever poised freely upon knife-edges. The opposite end of the lever is weighted and when the tension on the float thread is relaxed the weighted end of the lever falls upon a platinum-tipped screw, thereby closing an electric circuit through an electro-magnet forming part of the mechanisms. The float thread, after passing over the lever wheel, has its end fixed to a small drum upon a suitable axis. Upon this same axis is also secured, first, a pair of ratchet wheels and, second, a large gear wheel. A pawl attached to the armature of the electro-magnet engages the teeth of one of the ratchet wheels in such manner that the wheel is revolved tooth by tooth by the vibratory action of the electro-magnet. The second ratchet wheel serves merely as a locking mechanism to prevent the wheels being ever revolved more than just one tooth at a time. The above-mentioned large gear wheel communicates motion to a small gear fixed upon the extremity of a large right and left hand threaded screw, having only two threads to the inch. The nut upon this screw carries a long adjustable pen arm and pen, which may be placed in gentle contact with the record cylinder.

When the nut is set at one end of the right and left hand screw, the action of the double thread is such that when the screw is revolved continuously in one direction the nut passes regularly back and forth across the screw from end to end, the motion of translation at all times being strictly proportional to the motion of revolution. The slight departure from absolute proportionality that occurs at the ends of the thread is reduced to a minimum and is quite insignificant.

As long as the tension on the float thread is sufficient to depress the wheel end of the poised lever, the electrical circuit is broken at the opposite end of the lever. When, however, a perceptible rise of water occurs in the measuring tube the float is buoyed up, the tension relaxed slightly, and the weighted end of the poised lever makes contact and closes the electric circuit, whereupon the ratchet wheels are advanced one tooth by the action of the electro-magnet, the float thread wound up a little, and the pen advanced a proportionate amount.

Other very simple yet ingenious mechanisms, not here described, are attached to the armature of the electro-magnet and operate in such manner that a very slight and momentary closure of the circuit at the lever contact is sufficient to produce a complete movement of the armature, which, after being once started, operates by virtue of a circuit independent of the one through the lever contact. This circuit can not be opened until the armature reaches its lowermost position, and the circuit can not then be closed again until the armature has returned to its highest position. If, however, the winding up of the float thread due to one stroke of the armature is not sufficient to lift the depressed contact lever, the armature upon its return will immediately take a second, and, in rapid succession, a third and many other strokes until the circuit is broken.

The action of these mechanisms has proved extremely reliable.

The magnification of the precipitation record is tenfold, that is, 0.1 inch on the sheet represents 0.01 inch of rainfall and the scale is subdivided to represent hundredths of inches. The pen will pass entirely across the sheet from side to side for one-half inch of rainfall. The sheet makes two revolutions in twenty-four hours, and, if no precipitation occurs, the pen during the last twelve hours retraces the line followed during the first twelve hours. The sheets, in general, are not changed except after precipitation, but the pen is set each day to trace a new line so that every day has its record whether rain occurs or not.

The time scale is subdivided into ten-minute spaces, from which minutes are easily estimated. When in normal action, during rainfall, one movement of the electro-magnet is always sufficient to break the contact, notwithstanding that this movement represents only one-quarter of one one-hundredth inch of precipitation.

Marvin's Weighing Gauge.—It is quite evident that at once the simplest and most accurate method of measuring snow is by weighing the quantity collected within or upon any given receptacle. No loss need occur in this method either from evaporation or by melting processes or in the wetting of conducting tubes, etc. Even the bowl of the gauge may be dispensed with, allowing the precipitation to pass at once into the receiving vessel. The method is equally applicable to registration of rainfall.

It is very undesirable to subject the clock movements and other parts of registering mechanisms to all the extremes of heat and cold, rain and moisture, of outdoor exposures, although this is done in some cases.

In the form of gauge described here, however, the precipitation is automatically and almost continuously counterpoised upon a sensitive balance and the amount simultaneously registered, electrically, within the office. The weighing mechanism consists of the usual balance on knife-edges with a beam and sliding counterpoise. The movement of this counterpoise is effected by means of a long screw set parallel to the beam upon which the weight slides. This screw is caused to revolve and move the weight by the vibratory action of the armature of an electro-magnet. The balance, with the receiving vessel in position, is adjusted by hand to a condition of equilibrium. No action ensues until the end with the receptacle becomes heavier, whereupon the deflection of the beam of the balance closes an electric circuit through the electro-magnet. When the armature of this magnet moves a little its own circuit is closed independently of the contact at the beam, and, with the object of securing registration, a second and separate circuit is closed through an electro-magnet on the register. These two circuits are closed during the first slight movement of the armature on the balance. During the further movement of this armature the screw actuating the sliding weight is revolved slightly and the weight moves so as to restore the equilibrium. The armature, however, after moving the weight, can not return until a corresponding movement has taken place in the pen of the register. To secure this the electric circuit which includes the electro-magnet on the balance is passed through the armature of the magnet on the register in such manner that the circuit is broken whenever the armature of this magnet is attracted, but only at a moment just before the movement of the armature is completed. The breaking of this circuit, however, does not interrupt the current flowing through the register magnet. This circuit is

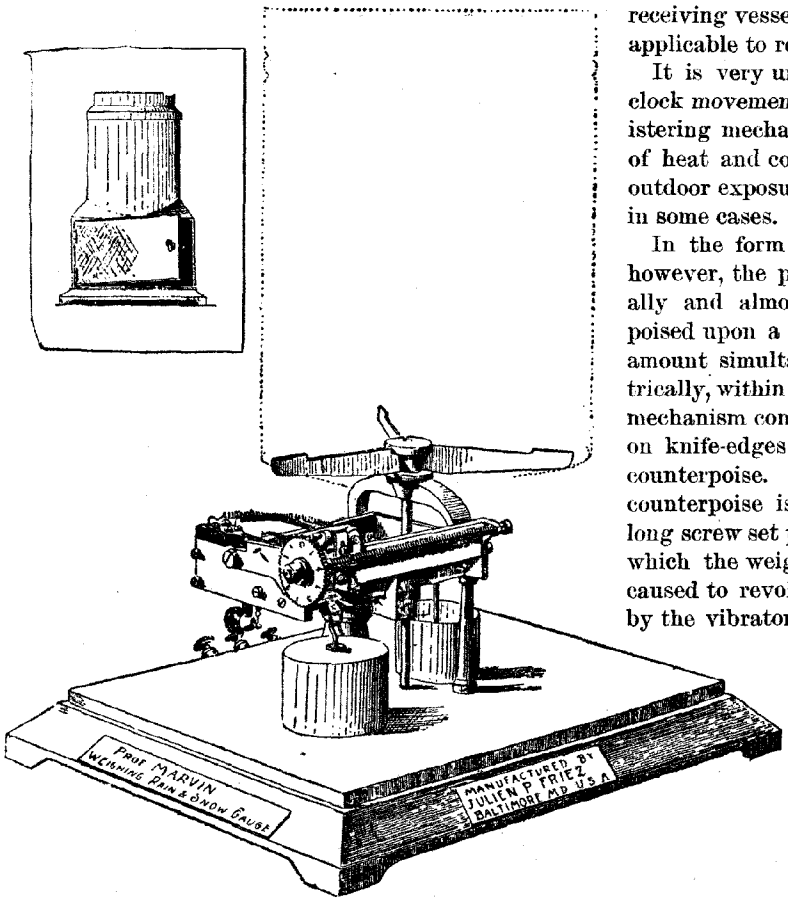

FIG. 20.—Weighing rain and snow gauge—receiving mechanism.

broken only when the armature of the balance magnet, having been drawn is released, and returns to its normal position, whereupon the register magnet releases its armature, which also returns to its normal position, and, in doing so, closes again the break it had made in the circuit through the balance magnet.

By the arrangement of circuits and mechanisms thus described, complete synchronisms in the action of the two magnets is secured, each movement of the weight being accompanied by a corresponding movement of the recording pen.

This gauge is shown in Figs. 20 and 21. The cover of the receiving mechanism, attached to the base and with door ajar, is shown in small cut at left, Fig. 20.

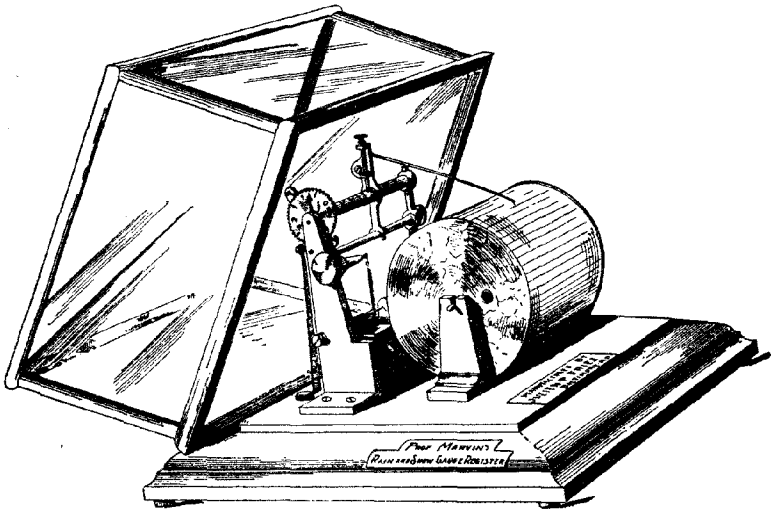

FIG. 21.—Weighing rain and snow gauge—recording mechanism.

The following explanation of circuits, in connection with Fig. 20, will enable the reader to better understand the action of the gauge:

Three wires and one battery are required. One pole of the battery is connected to the gauge at *B;* the other pole is joined to the register at *A*. The remaining posts are joined, No. 1 to No. 1, and No. 2 to No. 2.

The action is as follows: When the equilibrium is disturbed the circuit is closed at *d*. This contact is often light and momentary in character. The armature of the magnet, however, is free to move a short distance with only slight resistance, and during this initial movement closes a circuit firmly and permanently, insuring thereby the complete attraction of the armature and a corresponding movement of the counterpoise. The armature also closes a second circuit at the register contact spring *b*. The current at this instant divides, part flowing through the magnet *M* on the gauge and an equal part passing through the magnet coil *N* on the register. When the armature of the register magnet has made its movement, the current through circuit No. 1 is interrupted at the contact pin *m*. This releases the armature of the magnet *M* on the gauge, and when said armature has returned to its normal position the circuits through the contact springs *c* and *b* are each broken. When the No. 2 circuit through *b* is broken the register armature is released, closing again the No. 1 circuit at *m*.

If by these actions the equilibrium of the balance has been restored the contact at *d* will have been broken. If this is not the case, however, the cycle of actions will be repeated over and over again until the circuit is broken at *d*.

The construction of the register is, in a slight degree, similar, but much simpler than the corresponding parts of the modified Gibbon register. The armature of the electro-magnet engages directly a notched wheel upon the right and left hand screw, and in such manner as to cause it to revolve tooth by tooth, always in one direction. The sleeve nut upon the screw carries an adjustable pen arm and pen in the usual manner.

The receiver of these gauges is 8 inches in diameter. A single stroke of the magnet moves the sliding weight only one eight-hundredth part of an inch and represents one one-thousandth inch rainfall; that is, about 0.82 gram. The record pen for one stroke of the magnet moves one one-hundred-and-fiftieth part of an inch; that is, the scale of precipitation is magnified $6\frac{2}{3}$ times. The pen will pass once across the sheet for each one-half inch of precipitation, and the sheet is sub-

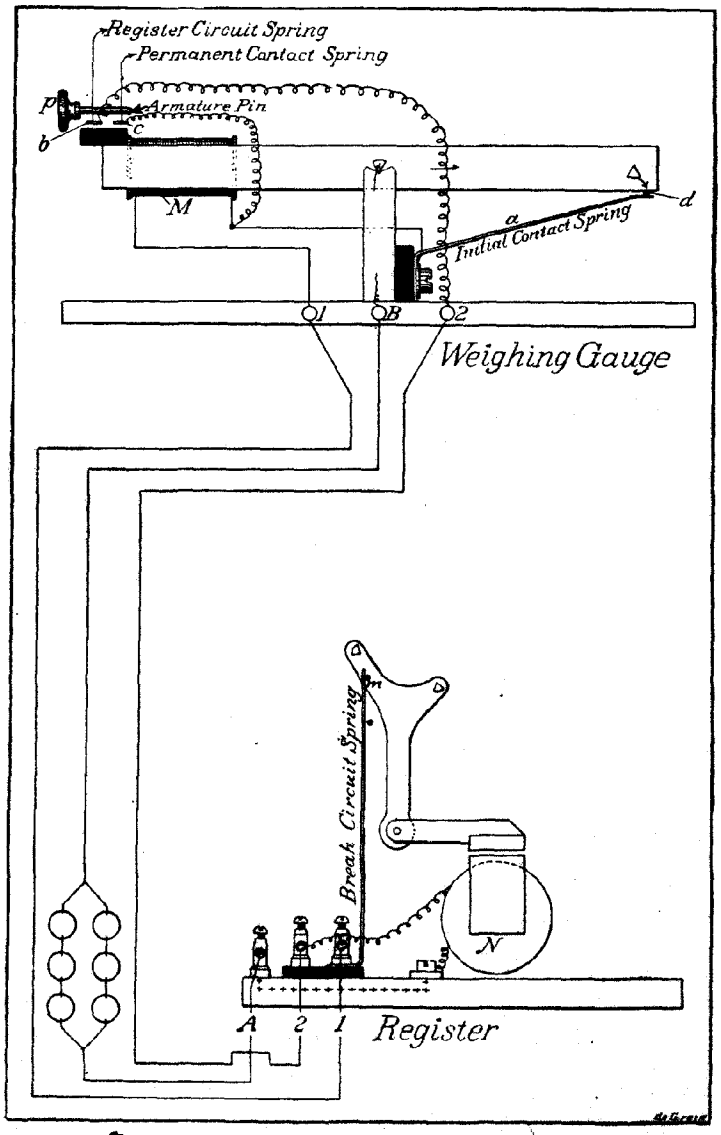

FIG. 22.—Conventional diagram of circuits.

divided to represent hundredths of inches of precipitation. The cylinder is 12 inches in circumference and revolves twice in 24 hours. The sheet is subdivided into ten-minute spaces, and minutes are discernable.

In the normal action of the gauge the electro-magnets rarely or never make but one stroke to restore a condition of equilibrium, notwithstanding that this represents only one one-thousandth of an inch of rainfall.

INSTRUMENTAL CORRECTIONS; METHODS OF REDUCTION; RESULTING ACCURACY.

By Prof. CLEVELAND ABBE.

The respective sections of the present chapter explain the numerical corrections or reductions that have been applied to the original instrumental readings in order to obtain the data published in this volume. A general estimate is also given of the accuracy that attaches to the numbers here given.

TEMPERATURE OF THE AIR.

(1) *Thermometric standard.*—The standard of the Weather Bureau is the air thermometer of constant volume and is identical, within 0.02° C. or 0.05° Fah., with the standard of the International Bureau of Weights and Measures at Paris. This standard was decided upon in 1881 and definitive action taken during the months of July to November, 1882, when Prof. Thomas Russell first compared three substandard mercurial thermometers with the air thermometer of Prof. Rowland of the Johns Hopkins University in Baltimore. Since that year the thermometers issued from this bureau have been carefully compared at each ten-degree point with those and other mercurial substandards. The corrections thus determined within a tenth of a degree Fahr. reduced all Weather Bureau observations to the air thermometer and were actually applied by the observers to all their observations and the official observations were made and the records were kept to the nearest tenth degree, until January 1, 1888, when, in order to diminish the work of our observers and in view of the fact that no thermometer was issued whose corrections exceeded one-half of a degree Fahr., it was ordered that in using such thermometers the known scale corrections be neglected when they are only 0.3 or less. Consequently the records in the present volume for the years 1891–'92 have an outstanding uncertainty, due to the scale errors, that may be assumed as equal to the average amount of these neglected corrections, plus the secular rise of the zero point, plus an additional uncertainty whenever the temperatures have exceeded or fallen below the range for which the thermometers had been accurately investigated, *i. e.* below —28° and above 112°. During the winter season it occasionally happens that unusually low temperatures occur at stations whose thermometers have not been tested for such extremes. In these cases an extrapolated correction has been used as being the nearest approximation available. So far as the accuracy of the thermometer is concerned it will be possible, in future years, to apply the known corrections throughout the length of the scale. Under the present system the uncertainty due to scale corrections is for the dry and wet bulbs plus or minus 0.2; for the maximum thermometers plus or minus 0.2; for minimum temperatures plus 0.4; the plus correction for the minimum thermometer increases as the temperature falls and as the alcohol has less time to drain downwards.

(2) *Ordinary station mercurial thermometers.*—The observations whose monthly means are given in Parts II and III, for 8 a. m. and 8 p. m., standard time, have been made personally by each observer on eastern, or seventy-fifth meridian, time and are the fundamental simultaneous observations made primarily for use on daily charts for weather predictions and atmospheric studies. The temperature of the air is deduced from the readings of the whirled, dry-bulb thermometer, which is a part of the whirled psychrometer established in the light wooden thermometer-shelters originally known as the "Hazen" shelter; this shelter was introduced into the service as the result of the investigations made by Prof. H. A. Hazen in 1885 and replaced the large double louvre shelter that was adopted in 1870. These thermometers are all made of uniform pattern,

having cylindrical bulbs about 0.8 inch long and 0.2 inch in diameter they are graduated on the glass stem, and the endeavor has been to secure for the use of Weather Bureau stations thermometers whose errors shall not be greater than one-half degree Fahr., within the range of temperatures at which they are ordinarily used; all the thermometers are appropriately tested at the time of their purchase in order to insure their accuracy in this respect. The thermometers purchased for Weather Bureau stations also fulfill the condition that they shall have been filled eighteen months before graduation, so as to insure approximate stability of the 32° point.

(3) *The thermometer shelter.*—The Weather Bureau shelter is a cube of about 1 yard on a side, having a sloping, double roof, closed bottom, and single louvre sides. As this shelter is exposed freely to sunshine, wind, and rain there is an occasional possibility that the thermometers are wetted by the rain. Whenever such is the case a note is made on the record and the readings are entered as made.

The heat of the sunshine on the side and the top of the shelter, as well as the impediment offered by the slats to the free circulation of the wind, as also the gentleness of the natural current of air that flows past the thermometers, all tend to make the latter give a higher reading than belongs to the free air at the same level outside. Numerous experiments by Prof. Hazen appear to have shown that the errors thus introduced into the monthly means of the maximum and minimum temperatures by the peculiarities of the shelter, as such, will not exceed a degree at midday in the climate of Washington; similar investigations in Europe confirm this conclusion.

Both temperature and moisture of the air are determined more accurately by mounting the dry and wet bulb thermometers upon a pair of arms that can be rapidly revolved. The whirled psychrometer thus mounted, within the thermometer shelter and in close proximity to the maximum and minimum thermometers, undoubtedly gives the average temperature and moisture that prevail within the shelter at the time. To what extent these conditions within the shelter differ from those outside may be inferred from corresponding observations made by Prof. Hazen with the naked sling thermometer just outside of the shelter, or from the observations made by Wild with his ventilated shelter, in which the artificial ventilation rapidly renews the air within the shelter, or from those made by Assmann, in which the aspiration psychrometer is adopted as the standard. If any wind is blowing while the observer is whirling the psychrometer within his shelter, the result will be very much the same as in the use of Wild's "shelter with ventilator" and the observed temperature and moisture must be considered as that of the free air to within half a degree Fahrenheit. If, however, a calm prevails during full sunshine the Weather Bureau temperature may be too high and the relative humidity correspondingly too low. As Assmann's newest form of ventilated psychrometer with rapid ventilation gives results free from error due to the shelter and is more convenient than the whirled or sling thermometers it is now recognized as the ultimate standard in meteorology, and any equivalent apparatus that can be economically constructed may be adopted for use at ordinary meteorological stations. It is not likely that the monthly means or the daily temperatures recorded in Parts II and III of the present volume differ in any individual case by more than one-half of a degree Fahrenheit from what would be given by such a standard ventilated shelter or ventilated pyschrometer at the same altitude above ground.

(4) *Altitude of shelter.*—That feature of thermometer exposure which most affects the extremes of temperature, as recorded by the Weather Bureau, is the altitude of the thermometer-shelter, and that, too, not only above the roof of the building and above the ground at its base, but especially in its relation to the topography of the ground for several miles around the station. As the Weather Bureau thermometers are established at an elevation of 10 to 15 feet above the roofs of high buildings, or, failing these, 15 feet above some elevated ground, and are therefore exposed to any breeze that may blow, therefore the maxima, or midday, temperatures are not often so largely affected by the height above ground as are the minima or nocturnal readings. During calms, and especially during calm nights, the cold air settles in the lowlands and flows down river valleys and ravines as fast as fresh, cool air can be supplied from above. Thermometers stationed on high buildings are often entirely above the layer of cold air near the ground beneath them, and similarly with the thermometers in low valleys as compared with those on bluffs and hills near by. Consequently minimum temperatures, as reported from regular Weather Bureau stations, which are

always elevated as much as possible above the surrounding region, are appreciably higher than those reported from voluntary stations in the neighborhood, since the latter are almost invariably near the ground. No correction has been made for this source of discrepancy; the very object of exposure at such altitudes above the ground as are adopted by the Weather Bureau is to obtain an approximation to the average temperature of a large mass of air flowing by the station and forming an integral part of the circulation around the areas of high and low pressure; the temperatures thus observed are especially adapted to the needs of dynamic meteorology, whereas those observed by thermometers nearer the earth's surface are appropriate to the study of climate in its relations to animal and vegetable life within very restricted areas.

(5) *Influence of large cities.*—The fact that the Weather Bureau stations are located in the midst of cities tends to elevate both the maximum and minimum temperatures above the values that would obtain in the surrounding open country and thus elevates the annual and monthly mean temperatures. For thermometers that have perfectly similar exposures and are at the same heights above ground, this influence is appreciable in such large cities as London and Paris; but it diminishes with the height of the thermometers above ground, and especially with an increase in the average force of the wind. This effect is probably inappreciable in such a case as Chicago, where the Weather Bureau thermometers are 241 feet above ground and where the annual movement of wind is quite large. No correction has been applied to the published observations for this feature in the location of our thermometers.

(6) *Maximum temperature.*—The maximum thermometer is of the mercurial Negretti and Zambra pattern, having the bore of the tube constricted below the bottom of the scale. This style of thermometer is subject to the following corrections: (1) The mercury does not rise above the constriction except by virtue of a pressure from below, and if, at the time of maximum temperature, the rise of temperature is quite slow, as is usually the case, it is quite possible that the capillary resistance at the constriction will prevent the registration of the rise during the last tenth of a degree; therefore, strictly speaking, the maximum registered temperature may on the average be about 0.1° F. below the truth. On the other hand, when the temperatures are quite low and the column of mercury above the constriction is quite short, then the capillary action at the lower end of the column tends to elevate the mercury and to give too high a reading. Finally, the fact that the maximum temperature is registered in the warmest part of the day while the reading is made at a subsequent cooler portion causes the reading to be too low, owing to the contraction of the mercurial thread. The maximum thermometers, whose records are here given, have not been corrected for any of these sources of error, but special samples of these maximum thermometers have been studied sufficiently to insure against the probability that any error, amounting to half a degree Fahrenheit, has been introduced. The actual readings are always made to the nearest tenth of a degree; they are made and recorded twice daily, at 8 a. m. and 8 p. m., standard time, and the index is set daily at 8 a. m. If the maximum has occurred between 8 p. m. and 8 a. m., collateral evidence is at once obtained by the observer, who credits the maximum to the proper date, so that the maxima here published represent the highest temperatures during the twenty-four hours of the civil date, on eastern standard time reckoning, to which they are accredited.

(7) *Minimum temperature.*—The minimum temperatures are recorded by the "Rutherford" alcohol minimum thermometer. The instrument is read twice daily, but is only set at 8 p. m., standard time. Owing to the fact that at Washington the morning minimum occurs before 8 a. m., but at San Francisco after 8 a. m., standard time, which is 5 a. m. of local time, it can easily happen that no proper minimum is recorded at the Pacific and Rocky Mountain stations at 8 a. m., eastern time, and that the minimum thermometer, in fact, at that moment agrees with the ordinary thermometer. This trouble is remedied by the requirement that the observer shall read and record his minimum thermometer at both the observations at 8 a. m. and 8 p. m., and the true daily minimum is frequently given by the 8 p. m. observations; in all cases the published minimum belongs to the civil date, standard eastern time reckoning, for which it is given. This class of thermometer is subject to errors, due to an evaporation or diffusion from the alcohol column, and especially to the adhesion of the alcohol to the upper end of the tube; the temperature record may therefore be too low, but numerous experiments on the so-called drainage error have failed to

show any satisfactory method of correcting this error, except by long waiting, which is not practicable.

(8) *Hourly records by thermographs.*—Continuous records of temperature are made by means of the thermographs manufactured by Richard Bros. of Paris. The space upon the record sheet corresponding to 1° Fahrenheit is about 0.03 inch. This instrument is only a differential apparatus, and its indications are frequently checked by comparisons with the readings of the mercurial thermometer in the same shelter. In transcribing the hourly values of the temperature, the plan followed, which is almost identical with that adopted in reading off the barograph sheets, is as follows: The 8 a. m. and 8 p. m. personal readings of the standard whirled psychrometer, located in the same thermometer shelter that contains the thermograph, are adopted as the fundamental basis. The difference between these standard temperatures and the readings of the thermograph sheet gives the thermograph corrections for 8 a. m. and 8 p. m. The corrections for all other hours are obtained by simple interpolation, and the values thus corrected are entered in the appropriate column of a form on which the monthly means for each hour are computed, as given in Part II.

The monthly extremes, published in Part III, are as given by standard self-registering maximum and minimum thermometers.

The monthly mean temperatures in Part II are the simple arithmetical means of the twenty-four hourly readings (from midnight, Eastern time, to 23 hours) without reduction to the middle of the day.

It is very possible that the records given by the Richard thermograph may be subject to systematic sources of error that are not wholly eliminated by the above-described simple checks and interpolations; especially are the extreme thermograph readings liable to show systematic differences from the self-registering maximum and minimum thermometers. It will, however, generally be found that the differences are not larger than the inherent imperfections of the two methods of recording temperatures. As stated in another place the uncertainties of temperatures given by maximum thermometers, as used by the Weather Bureau, are about one-half degree Fahr. and those of the minimum temperatures still larger. The uncertainty of the thermograph, as compared with the whirled thermometer, is fully 1° Fahr., to which must be added the uncertainties arising from the neglect of 0.3° Fahr. in the thermometer corrections and the error introduced by the shelter itself, as is also explained above in paragraph 3. The uncertainties of these hourly temperature readings are appreciably increased by the influence of the irregularities of the clocks that drive the record sheets.

(9) *Voluntary stations.*—Of the voluntary observers whose records are given in Part IV, probably one-half have standard thermometers furnished by the Weather Bureau or the respective State weather services; but very few have standard shelters or exposures, and the hours of observations are quite varied. The mean monthly and annual temperatures, as here published, have been deduced from the hours of observation adopted by the observer without correction for diurnal variation, except in a few cases where the simple means could not possibly give an approximate daily mean.

(10) *Daily mean temperatures.*—The monthly mean daily temperatures, given in Part III, are the averages of the daily mean temperatures without attempting to correct for the influence of any date that may be missing, and in general there has been no reduction to the mean of the normal month or year, so that the following monthly and annual means refer to the current calendar months and years. These daily mean temperatures are themselves the mean of the daily maximum and minimum without applying any reduction to the mean of 24 hourly observations. A similar daily mean temperature might be computed from the average of the observations at 8 a. m. and 8 p. m. standard time, but this has not been done. A correction for diurnal variation is necessary in either of these cases, the value of which may be approximately deduced from the work of Mr. McAdie; but such has not been applied in this volume. For the territory covered by the Weather Bureau stations, the mean of the four observations here given (at 8 a. m., 8 p. m., maximum and minimum) represents the daily mean temperature with an accuracy that is within the range of probable errors introduced by peculiarities of exposures, observers, and neglected thermometer corrections.

11) *Frequency of high and low temperatures.*—The number of days on which the maximum erature fell below 32° and the number on which it rose above 90°, also the number of days hich the minimum temperature fell below 32°, are given for each month in Part III.

12) *Reduction to sea level.*—In drawing isothermal lines it is necessary that mean tempera- should be reduced to a homogeneous system as to exposure and location; among the reduc- thus required the most important is generally conceded to be the reduction to a uniform alti- or to sea level. This reduction becomes an obscure and complex problem when we have to with the varied surface of the whole United States. Some attempts to devise philosophical ms of reduction have been made by Messrs. Upton and Ferrel in connection with the cognate lem of the reduction of the barometer to sea level. It is considered that the object of the nt publication is to present only the original data for use in such problems as may interest eader, consequently no attempt has been made to reduce either pressure or temperature to evel. The comparison made by Prof. Ferrel between the mean monthly temperatures at high low stations in the United States (see Annual Report of the Chief Signal Officer, 1886, ap- ix 23), seems to show that a diminution of one degree Fahr. for each 600 feet of altitude leads homogeneous system of isobars for each month, as well as for the year; this rate may there- be provisionally adopted for studies in the mechanics of the atmosphere, but in local climato- al studies no such reduction is necessary.

PRESSURE.

(13) *Barometric standard.*—On several occasions before 1881 there were imported by Gen. A. yer copies of the substandard barometer manufactured by Adie & Sons, of London, with mpanying "Kew" certificates; these were compared among themselves and with the barome- that had been temporarily used as substandards, as furnished by James and H. J. Green, of York, and by the Surgeon-General of the Army, and it was concluded that the system of ections adopted in 1870 had effected a fair agreement between the English and American dards.

In 1883 Prof. Frank Waldo made a careful comparison between the standards used by various orological services in Europe and America, from which it may be concluded that the baromet- standard then used by the Signal Service was about 0.007 of an inch above Wild's normal at Petersburg and about 0.003 above Welsh's normal at Kew, but about 0.001 below the Marek nal (I) at the International Bureau of Weights and Measures at Paris. Similar comparisons, histoni in 1881, Sundell in 1886, and Brunnow in 1887, show that these international compari- of normal barometers have not yet been executed with sufficient accuracy to insure against ncertainty of plus or minus 0.002 inch in the result. We may therefore conclude that in the ideal standard of the Weather Bureau agreed with that of the "International Bureau of ghts and Measures," which is now adopted as the recognized authority for all meteorologists. actual barometers then used, as representing the ideal standard, are still preserved in the ather Bureau, and numerous intercomparisons among them, as well as comparisons with new ruments constructed as normals of independent character, seem to assure that no change has taken place in our barometric standard greater than plus or minus 0.003, which limit includes influence of the adopted reduction of the mercurial thermometer to the standard air ther- meter. Our knowledge of this whole subject is, however, not entirely satisfactory.

(14) *Station barometers.*—The barometer used at Weather Bureau stations for personal obser- ons is the ordinary portable mercurial open cistern; it is kept in a glass case for better preser- on against dust and accident and changes of instrumental temperature. Each observation ires an adjustment of the zero point and of the upper vernier, together with a reading of attached thermometer. Such mercurial barometers are called substandards when the tube cistern are large and the instrument is regarded as a permanent fixture. The station barom- s have been compared with the substandard at Washington before being issued to the ions, and each has a correction card showing both the corrections to the attached thermometer the so-called correction for instrumental error. This latter is determined in the instrument

room of the Washington office and at the ordinary atmospheric pressures and temperatures, and usually by the same person. It represents the average total influence of any remnant of air in the vacuum chamber, of capillarity, of verticality, of errors in the attached thermometer or in the graduation of the barometer scale, of the observer's peculiarities, and especially of the difference in temperature between the mercury, the scale, and the attached thermometer. None of these sources of error are likely to continue unchanged when the barometer is removed to a distant station; therefore reasonable doubt may exist as to how far the "correction for instrumental error," which is really a reduction to the ideal standard of pressure, applies to the instrument in its new location. By means of similar portable barometers in the hands of inspectors, the relation of the barometers, at the stations, to the standard at Washington is frequently checked, but here again sources of error exist, and unless such inspections are performed by skilled observers it is considered preferable to send a new barometer to any station whose instrument is apparently out of order.

(15) *Barometer corrections and reductions.*—Experience has shown that it is impracticable to secure an agreement to within 0.001 of an inch between the standard and the station barometers by any system of comparisons and corrections, such as was formerly attempted; therefore, since 1889 the rule has been adopted of omitting all consideration of the instrumental error when that is only 0.006 of an inch or less. Corrections that are larger than this are, however, properly made, as also the ordinary corrections for the temperature of the attached thermometer. This latter correction becomes quite uncertain when the temperature of the barometer is rapidly changing, errors of 5 degrees of temperature or 0.013 inch of barometric pressure being quite possible; therefore, although both these corrections are applied as given to the nearest 0.001 inch, still the resulting pressure is published only to the nearest hundredth of an inch. If the deterioration of the station barometer becomes appreciable at any time, as shown by comparisons with an inspector's or the extra station barometer, then a new value of the "instrumental correction" is determined and authorized to be used.

(16) *Reduction to sea level.*—The daily telegraphic reports give the barometric pressure as further reduced to sea level; these are charted on the morning and evening maps daily at Washington and serve, by their agreement with each other, to detect the occurrence of any accidental change in any station barometer. There is good reason to believe that except for the effect introduced by the variation of gravity, our entire system of barometric pressures is consistent to within 0.01 or 0.02 inch with those made with the standard barometer at Washington; the only room for serious doubt occurs in the case of very high or very distant stations.

(17) *Reduction to standard gravity.*—In order to reduce pressures measured by the mercurial barometer to the standard ordinarily used for such measurements of pressure, a correction is still required for the influence of the variation of gravity upon the mercurial barometer. This rather large correction is nearly constant for a given station and is easily combined with the other reductions to standard. The use of this reduction was given up in 1888, and therefore in the present volume it has not been applied, although, on the other hand, its value is given at the head of the table for each station in Parts II and III, so that the reader can apply it as there directed.

(18) *Corrections for local wind effect.*—As the pressure within the room of the observing station only agrees with the pressure of the free air outside when no appreciable wind is blowing, it has been a question as to whether observations made during high winds should be corrected for such wind influence or should be rejected altogether; the latter policy has been adopted at the Ben Nevis station and the former has been suggested as a possible alternative; but neither method has been adopted by the Weather Bureau. Fortunately some observations which have been made on Mount Washington would seem to show that the wind effect on the barometer at that station, as the building stood in 1886, was only about one-third of the maximum possible. In the absence of similar studies for other stations it may be assumed that the same rule is approximately true for them also, viz, that when any wind is blowing the pressure within the observing room may be higher than that in the free air outside by an amount equal to one-third, or it may be lower by an amount equal to one-tenth of the maximum effect given in the following table:

Wind velocity.	Maximum wind effect.
Miles per hour.	*Barometric inch.*
20	0.015
40	0.061
60	0.138
80	0.245
100	0.383
120	0.548

A simple method of mounting the barometer so as to entirely avoid this annoying local wind effect has been devised, but its introduction into use at stations has not yet been decided on.

(19) *Personal observations.*—The observations whose means are given in Part III are those made by the observer personally at each station at 8 a. m. and 8 p. m., standard time, as corrected only for "instrumental errors" and temperature of attached thermometer; their mean values relate to the altitude of the barometer above sea level, as given at the top of each table. They receive a further "reduction to sea level" for use in the daily weather maps, but the method of reduction is especially adapted to the special needs of the daily telegraphic service rather than to climatic studies; wherefore the reduced observations are not given in this volume.

(20) *Hourly barograph readings.*—The hourly records, whose means are given in Part II, are taken from the self-registering instruments. The barograph in use at the Washington station is known as Foreman's barograph and consists substantially of a siphon barometer and an electrical recording apparatus that communicates the motion of a float in the short leg of the siphon to a pen which traces the record on the revolving cylinders driven by clockwork. Two cylinders are operated in connection with this instrument, one making a complete revolution in twenty-four hours and the other in fifteen days. The barometric changes are magnified four times. The daily record sheet, from which the published readings have been obtained, has quite an open time scale, a movement of about eleven-sixteenths of an inch corresponding to an hour of time. The horizontal rulings on the sheet are almost one-tenth of an inch apart, each vertical space representing .02 of an inch of pressure. The effect of temperature upon this siphon barograph is very complex, and its magnitude is not easily determined *a priori;* by keeping the instrument in a room of comparatively uniform temperature, it is presumed that the instrumental errors have been kept correspondingly steady; the record sheets for this barograph are changed daily at noon, standard time, which is eight minutes faster than Washington local time; at the same time a personal reading of a substandard mercurial barometer is made, and, after proper reduction for temperature and instrumental error, is entered on the margin of the sheet; the new sheet is so adjusted that the pen takes up the new record at the point corresponding to this corrected reading, so that the barograph trace is always a very close presentation of the local atmospheric pressure.

The Foreman barograph is located some 20 or 30 feet below the so-called station barometer, and its records, therefore, require a minus correction in order to reduce them to the local or station pressure. The sum of this and of all other corrections that the barograph trace may require is determined by the process that is employed in filling up the monthly sheet of hourly pressures, as deduced from barograph readings, which process is as follows:

The readings of the mercurial barometer in the station room, as made by the regular observer personally at 8 a. m. and at 8 p. m., seventy-fifth meridian time, having been corrected for temperature and instrumental error, are entered in the columns for those hours respectively, as being the standard to which all barograph readings must be reduced. The barograph readings for those same hours are then compared with these standards and the corresponding corrections required to be added to the barograph readings at those hours in order to reduce them to standard pressure are entered in red ink alongside the figures in the 8 a. m. and 8 p. m. columns. If these corrections agree for any two consecutive standard pressures, it is assumed that the intermediate readings of the barograph require the same correction; if they differ, then the corrections for the intermediate hours are found by using a very simple device for interpolation. These corrections generally amount to only a few hundreths of an inch and are applied mentally to the hourly

readings of the barograph traces, which corrected readings are then entered in the monthly table of hourly readings. The figures in these tables are given to the hundredths of an inch; they are affected by several sources of error, namely: (1) The error of personal readings, as explained above. (2) The errors of reading from the barograph sheets. (3) Any systematic error in the barograph curves that is not eliminated by the comparison at 8 a. m. and 8 p. m. These generally vary with the temperature and pressure and irregularities in time scale. Apparently the sum total of these uncertainties, and for rapidly changing pressure, may amount to 0.05 of an inch, but the probable error of the data here published is about 0.02.

The further correction for reduction to standard gravity has not been applied, but is given at the head of each table.

The reduction to sea level is not applied, as being inappropriate to local climatic data; it is described in connection with the publication and use of daily weather charts.

The barographs used at all other stations except Washington are the self-registering aneroids constructed by Richard Bros., Paris. The scale of the record is such that 0.01 inch barometric pressure is represented by 0.01 inch on the record sheet; the time scale is such that 0.01 inch on the record corresponds to 9 minutes of time. The uncertainty of a pressure, as read off from the sheet, is probably more than 0.01 inch, and the probable error of the data here published is greater than that of the data taken from the Washington barograph.

The Richard barograph is imperfectly compensated, mechanically, for the effect of the temperature of the instrument; on the other hand, the apparatus is kept in a room of fairly uniform temperature and the errors due to temperature variations are partially allowed for by the daily reduction to 8 a. m. and 8 p. m. standard observations. The register sheets are renewed weekly, at noon Monday; the hourly readings and the reduction to the personal observations at 8 a. m. and 8 p. m. are made precisely as in the case of the Foreman mercurial barometer at Washington.

(21) *Extremes of pressure.*—The averages of the maximum and minimum values of barometric pressure, as given in Part II, have been computed from the daily extremes; the latter were selected from among the hourly readings and do not refer to any extremes that may have occurred between those readings. The extreme pressures that are given in Part III are selections from the personal readings made at 8 a. m. and 8 p. m., or occasional possible intermediate values. It is therefore quite possible that higher maxima may have occurred at about 10 a. m. local time at our western stations, or lower minima at 3 p. m. local time, especially at our western stations, since these are the approximate hours of the diurnal maximum and minimum.

(22) *Normal mean pressures.*—No corrections have been applied to the daily means of twenty-four observations, or to the monthly means of calendar number of days, or to the annual means of twelve months, in order to reduce them approximately to the central point of the respective normal periods; those who desire to apply such corrections will compute them by the methods introduced by De Forrest and Kleiber; such reductions will be of importance only in dealing with normals based on many years of observations, and it is not considered proper to apply them to these annual means.

MOISTURE OF THE AIR.

(23) *Methods.*—The whirled psychrometer was adopted by the Weather Bureau in 1886. As before stated, this psychrometer is whirled inside of the light wooden thermometer shelter, and therefore gives the average condition of the air within it. The adopted rate of whirling is such that the air flows past the thermometer bulbs at the rate of from 10 to 25 feet, or from 3 to 8 meters per second.

(24) *Tables.*—The physical theory and the corresponding numerical tables by means of which the amount of atmospheric moisture is computed from the readings of the whirled psychrometer are those devised by Ferrel, as given in the Annual Report, Chief Signal Officer, 1886, Appendix 24, except only that a revision of the tables has been made to accord with Marvin's revised values of the tension of aqueous vapor at low temperatures. The newer tables, thus revised, are given in "Instructions to Voluntary Observers of the Weather Bureau," by Thomas Russell, Washington, 1892.

In using these tables, that one which gives the influence on the psychrometer of the prevailing barometric pressure, namely, Table III, page 91, "Instructions to Voluntary Observers" of 1892, has generally been neglected, and is at present only considered when an observer at a very high station computes special tables for his own station from the general tables given by Ferrel and Russell. This correction for barometric pressure was adopted in 1882, but discontinued in 1888. At present it is intended to be neglected only when it seems to be smaller than errors arising from other sources, and in so far as it is neglected the vapor pressure, dew-point, and relative humidity for high stations, as computed by tables appropriate for low stations, are all too small by quantities that may sometimes be as large as 0.05 inch, 15° F., and 50 per cent, respectively.

Both the dry- and wet-bulb and dew-point temperatures should be reduced by proper corrections to the adopted thermometric standard, namely, the normal air thermometer; but the observed dew-point unreduced has been accepted by meteorologists as the standard determination of the atmospheric moisture, and the psychrometric tables of Regnault and Ferrel are simply used to enable us to deduce from the psychrometer that which would have been observed on the dew-point apparatus if that had been used. The correction to the observed dew-point in order to convert it into standard degrees often amounts to half a degree F., and the correction to the corresponding wet bulb or to the depression of the wet bulb is somewhat less.

In order to obtain the temperature of the dew-point within 1° F., the difference between the wet and dry bulbs should be correctly given to within 0.1° F. This necessitates correcting every observed temperature for all sources of error to which mercurial thermometers are liable in order to obtain the equivalent indications of the standard thermometer; but, as has been before stated, this is not now attempted.

(25) *Accuracy of observed values.*—Since the corrections just explained are neglected there is, therefore, a corresponding uncertainty in individual dew-points of 1° or 2° at high temperatures, increasing up to a possible 5° or 10° at zero Fahrenheit, and a possible 10° or 20° at the lowest temperatures. The uncertainty of the monthly mean dew-point will, however, scarcely reach 3° F. in winter or 1° in summer; the corresponding uncertainty of the monthly means of observed vapor pressure is 0.03 inch in summer and 0.01 in winter, and the uncertainty of the monthly means of observed relative humidity will be about 2 per cent in summer and 10 per cent in winter. These ranges of uncertainty can not be materially diminished except by simultaneously changing both the style of the thermometer-shelter, the psychrometric tables, and the method of dealing with small corrections to the thermometers. The accuracy at present attained is confessedly below the demands of special laboratory studies, but compares fairly well with the irregularities of local atmospheric temperatures and moisture, with the accuracy of weather predictions, with the demands of international climatic studies, and with our present theoretical knowledge of meteorology.

(26) *Accuracy of mean values.*—The monthly means of observed dew-points (but not of *observed* vapor pressures and relative humidities) are given in Part III for 8 a. m. and 8 p. m. As pressure and humidity are not simple linear functions of the dew-point, therefore the monthly means of the observed pressures and humidities will not rigorously correspond to the monthly mean of the dew-points, therefore in Part III the mean vapor pressures and relative humidities are given as computed directly from the mean temperatures of the dew-point and the air; the pressures thus computed from the mean dew-points are somewhat lower than if the means of original daily obsevations had been given.

The diurnal variation in the moisture of the air is not known with sufficient accuracy to justify computing mean daily values (and corresponding monthly means) from the psychrometric observations made at 8 a. m. and 8 p. m.; therefore such normal values are omitted

WINDS.

(27) *Self-registers.*—The velocity of the wind is recorded at all Weather Bureau stations; the direction and velocity are recorded at about one-third of the stations on what is known as the "double register," which is, however, now being replaced in some cases by a "triple register" in order to provide for recording the rainfall, the sunshine, or some other meteorological element. The records from 28 of the stations that are furnished with double or triple registers will be found in

Part II. On these instruments the direction of the wind is recorded every five minutes to the nearest one of the eight principal points of the compass; the record is made by the impression of type letters, N. S. E. W., so that the wind direction is read off from the register without further trouble. The horizontal movement of the air is given by the ordinary Robinson cup anemometer, constructed on the assumption that the cups move one-third as fast as the wind; each mile of wind motion is recorded by a dash on the register simultaneous with the completion of the electric contacts within the anemometer. The hourly movements, whose averages are given in Part II, are obtained by counting the number of dashes recorded each hour upon the register. The numbers represent the total record for the hour ending at the time that is given at the head of the column. No corrections have been applied to convert the anemometer records into true velocities; neither have any been applied to correct for orographical peculiarities of location.

The summary of wind directions, as given in Part II, include only those that were recorded most frequently during the hour.

Accuracy.—The anemometers are all compared at Washington before being issued to stations. They are oiled frequently, and at each station a spare instrument, that is kept in good condition, is occasionally compared with the one in constant use. The records of these comparisons show that so far as the instruments are concerned the registered horizontal movement of the air is within 2 per cent of what would be given by a normal Robinson anemometer. Those who desire to reduce the data here published into standard miles, namely, to correct for the peculiarities of the Robinson anemometer, should make use of the results of Prof. Marvin's investigations (see Ann. Rep. C. S. O., 1890, p. 693), according to which the true velocity (V) may be computed from the Robinsonian velocity, or the simple reading (D) of the anemometer dial, by the formula

$$\log. V = 0.079 + 0.9012 \log. D,$$

or it may be taken from the following table:

Velocities.		Velocities.	
By Robinson anemometer dial.	True velocity.	By Robinson anemometer dial.	True velocity.
M. p. h.	*M. p. h.*	*M. p. h.*	*M. p. h.*
5	5.1	35	29.6
10	9.6	40	33.3
15	13.8	45	37.1
20	17.8	50	40.8
25	21.8	55	44.4
30	25.7	60	48.0

SUNSHINE AND CLOUDINESS.

(28) *Sunshine recorder.*—Continuous records of sunshine have been obtained by an apparatus known as the "Weather Bureau Photographic Sunshine Recorder," which may be described as Marvin's modification of Jordan's Sunshine Recorder. The record sheets, after the proper photographic development, show a continuous line corresponding to steady sunshine, with blank spaces corresponding to cloudy obscuration. The percentage of continuous line included between each calendar hour of standard time is read off by the observer and given in Part VI as sunshine; the difference between this number and unity represents cloudiness; the time scale is such that one hour occupies a half inch on the form. The apparatus is sufficiently sensitive to make a record of sunshine when the sun is about half an hour high on an ordinary cloudless day. A faint trace is made on hazy days even with the sun in the meridian; the absence of sunshine, as recorded by this apparatus, corresponds to the presence of a layer of air or haze or cloud, sufficiently thick to so reduce the direct light of the sun that its disk is not distinguishable from the region surrounding it.

(29) *Cloudiness.*—The cloudiness recorded in Part III is derived from personal observations. The proportion of sky covered by clouds is estimated by the observer at 8 a. m. and 8 p. m. standard

time and recorded on the scale of 0 to 10. The two simultaneous observations can not be combined into a normal daily mean in the present state of our knowledge of the diurnal variation in cloudiness, and are therefore given separately in Part III. In order, however, to obtain a general record of the sunshine as affecting the growth of plants, the observer keeps some memoranda of the cloudiness, sufficient to enable him at the end of the day to assign a percentage representing the average condition of the sky from sunrise to sunset; the resulting average for each month is given in Part III in the column of "cloudiness during daylight."

The number of days that are clear, as given in Part III, includes those on which the daylight cloudiness has been 0, 1, 2, or 3 tenths; the days partly cloudy are those on which the daylight cloudiness has been 4, 5, 6, or 7 tenths; the cloudy days are those having 8, 9, or 10 tenths of cloudiness during daylight.

EVAPORATION.

(30) *The Piche evaporometer.*—The Piche evaporometer has been used at numerous Weather Bureau stations. It may be considered as an instrument for determining the average hygrometric condition of the atmosphere during any interval of time and can only give a crude idea of the actual evaporation from the natural surfaces of land and water. Owing to the want of space these records are not given in the present volume.

PRECIPITATION.

(31) *Rain gauges.*—The rain gauges, almost universally used at the regular Weather Bureau stations, have a circular catchment area of about 8 inches diameter, and the snow, hail, or sleet caught within them is melted and measured as water. The rain gauge proper is set within an inclosing cylinder of 8 inches diameter and 2 feet high, which serves as an overflow attachment in the case of heavy rains and as a snow gauge in the winter season. The gauges used by the voluntary observers represent a large variety of patterns. The discrepancies introduced by this variety of patterns are believed to be inappreciable in comparison with the variations due to location and wind.

On account of the location of the regular stations of this service in large cities the gauges whose readings are given in Part III are usually placed on the roofs of large buildings, but the records for voluntary stations, as given in Part V, are derived from gauges that are generally near the ground and in open fields.

(32) *Times of observations.*—The sum total of the depth of rain and melted snow is measured to within 0.01 inch, not only at the end of every shower, but also at 8 a. m. and 8 p. m. standard time daily. By adding these two regular observations we obtain the total precipitation for the 24 hours preceding 8 p. m. of the civil day to which it is accredited.

(33) *Accuracy.*—The snow caught and retained in the gauge is melted and measured as water. No correction is applied for the snow that is lost out of the gauge by the eddying action of the wind; consequently in some cases the record is less than would be given if the observer had measured cylinders of snow cut from the spots representing the average snowfall on the ground. The loss of both rain and snow caused by high winds is undoubtedly larger at the regular telegraph stations of the Weather Bureau than is the case at the voluntary stations whose gauges are located in the open country and near the ground, but this loss does not appear to be so large as to make the monthly and annual sums derived from these two classes of gauges wholly inconsistent with each other; on the contrary, except at a few stations, the differences between the annual rainfall at city and country gauges are not larger than is plausibly due to actual differences in the geographical distribution of rain.

By the maximum precipitation in twenty-four hours, given in Part III, is meant the actual measurements for any twenty-four hours; it does not refer to the rate of rainfall for twenty-four hours, as deduced from short heavy showers.

The number of days with precipitation amounting to 0.01 and 0.04 inch, respectively, relates to the rainfall from 8 p. m. to 8 p. m. and not from midnight to midnight.

The number of days with snow includes all those on which at least 0.01 inch of melted snow, corresponding to about one-tenth of an inch of unmelted snow, has fallen in the twenty-four hours preceding 8 p. m.

The number of days with hail includes all those on which at least a trace of hail fell.

No record of amounts of dew is given.

The number of days of fog includes all those on which fog prevailed for at least an hour and was dense enough to obscure objects a thousand feet distant.

REPORT OF THE CHIEF OF THE WEATHER BUREAU.

PART II.

HOURLY AVERAGES OF ATMOSPHERIC PRESSURE, TEMPERATURE, AND WIND FROM THE RECORDS OF SELF-RECORDING INSTRUMENTS AT TWENTY-EIGHT STATIONS,

1891-'92.

Pressure.—The values for 8 a. m. and 8. p. m. are those of the station mercurial barometer; all other hourly values have been obtained as described on page 43. The means of the maxima and minima pressures given on the extreme right of the tables have been computed from the daily extremes. The latter were selected from among the twenty-four hourly readings, and do not include, therefore, maxima and minima values that may have occurred between the hourly readings.

Temperature.—The averages for each hour of the day, except 8 a. m. and 8 p. m., have been obtained from the thermograph record as described on page 40. The 8 a. m. and 8 p. m. averages are those of the station dry thermometer. The means of maxima and minima temperatures have been derived from readings of standard self-registering thermometers.

Wind.—The average velocity for each hour of the day, as given in the tables, is the simple arithmetical mean of the velocities for the hours ending with those printed at the head of the table. The maximum velocity is for a five-minute period. No corrections to reduce to true velocities have been applied. A summary of wind direction is given on the right of the tables of average velocity. The entries under the several headings, "N.," "NE.," etc., represent the number of *hours* during the month that the prevailing direction of the wind was from the point indicated by the heading. The direction of the wind is registered every five minutes, but only the direction that prevailed during the hour has been given.

References: H=Height of barometer above sea level.
h_t=Height of thermometer above ground.
h_a—Height of anemometer above ground.

The inches have been omitted in the pressure tables except for January; the reader will have no difficulty in supplying the proper values for the remaining months.

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME.

FORT ASSINABOINE, MONT.

[λ = 48° 32′ N.; φ = 109° 42′ W.]

1891.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan	27.19	27.18	27.18	27.18	27.18	27.18	27.18	27.18	27.20	27.21	27.21	27.22	27.21
Feb	.05	.05	.04	.04	.03	.03	.02	.03	.04	.06	.06	.07	.08
Mar	.13	.12	.12	.11	.10	.09	.10	.10	.11	.12	.13	.14	.14
Apr	.10	.10	.10	.10	.10	.10	.11	.11	.12	.12	.12	.12	.11
May	.18	.18	.18	.18	.18	.19	.20	.20	.20	.21	.21	.21	.20
June	.06	.06	.06	.06	.06	.07	.07	.07	.07	.07	.08	.07	.07
July	.19	.19	.19	.19	.19	.19	.19	.20	.20	.20	.20	.20	.20
Aug	.18	.18	.18	.18	.18	.19	.20	.20	.21	.22	.22	.22	.21
Sept	.12	.12	.12	.13	.12	.13	.13	.14	.15	.16	.16	.16	.16
Oct	.22	.22	.22	.22	.22	.21	.21	.22	.22	.22	.23	.23	.22
Nov	.12	.12	.12	.12	.12	.12	.12	.12	.12	.13	.14	.15	.15
Dec	.98	.96	.96	.95	.95	.95	.94	.94	.96	.98	.99	.00	.00
Year	.13	.12	.12	.12	.12	.12	.12	.13	.13	.14	.14	.15	.14

BISMARCK, N. DAK.

[λ = 46° 47′ N.; φ = 100° 38′ W.]

Jan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Feb	28.13	28.14	28.14	28.14	28.14	28.14	28.14	28.14	28.14	28.14	28.14	28.14	28.13
Mar	.22	.22	.21	.21	.20	.20	.20	.21	.21	.21	.21	.21	.21
Apr	.13	.14	.13	.13	.13	.13	.13	.14	.14	.14	.14	.14	.14
May	.22	.22	.23	.22	.22	.23	.24	.24	.24	.24	.24	.24	.23
June	.06	.06	.06	.05	.06	.06	.06	.07	.08	.07	.06	.06	.06
July	.22	.22	.22	.22	.22	.22	.22	.22	.23	.23	.22	.22	.22
Aug	.19	.19	.19	.19	.19	.19	.20	.20	.20	.20	.20	.20	.19
Sept	.14	.14	.14	.14	.15	.15	.16	.16	.16	.16	.16	.15	.14
Oct	.20	.20	.20	.20	.20	.21	.21	.22	.22	.23	.23	.23	.22
Nov	.17	.17	.16	.16	.16	.16	.15	.15	.16	.16	.16	.16	.15
Dec	.01	.01	.01	.01	.01	.01	.01	.01	.02	.02	.03	.03	.02
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

BOSTON, MASS.

[λ = 42° 21′ N.; φ = 71° 4′ W.]

Jan	29.87	29.88	29.87	29.86	29.86	29.86	29.87	29.88	29.88	29.88	29.87	29.85	29.84
Feb	.91	.91	.91	.91	.91	.92	.92	.93	.93	.93	.93	.91	.90
Mar	.97	.96	.96	.96	.98	.98	.00	.00	.00	.99	.98	.98	.96
Apr	.82	.82	.81	.80	.81	.82	.82	.82	.82	.81	.80	.79	.78
May	.87	.87	.87	.88	.88	.89	.90	.90	.89	.89	.88	.86	.85
June	.79	.80	.79	.80	.81	.82	.82	.83	.82	.82	.81	.81	.80
July	.88	.87	.87	.87	.88	.89	.89	.90	.89	.89	.89	.88	.88
Aug	.86	.86	.86	.86	.87	.88	.88	.88	.88	.88	.88	.87	.86
Sept	.99	.99	.99	.99	.00	.01	.02	.02	.03	.02	.02	.00	.99
Oct	.91	.90	.90	.90	.90	.90	.92	.92	.92	.92	.91	.90	.89
Nov	.00	.00	.00	.01	.01	.02	.03	.04	.04	.04	.02	.01	.99
Dec	.94	.96	.96	.95	.96	.97	.98	.99	.00	.00	.98	.96	.94
Year	.90	.90	.90	.90	.90	.91	.92	.93	.93	.92	.91	.90	.89

BUFFALO, N. Y.

[λ = 42° 53′ N.; φ = 78° 53′ W.]

Jan	29.26	29.26	29.26	29.26	29.26	29.26	29.26	29.27	29.28	29.28	29.28	29.27	29.24
Feb	.21	.20	.20	.19	.19	.20	.21	.22	.23	.23	.23	.23	.22
Mar	.32	.32	.31	.30	.31	.31	.31	.32	.32	.32	.32	.31	.30
Apr	.23	.23	.22	.22	.23	.24	.25	.25	.26	.25	.25	.24	.24
May	.29	.28	.28	.29	.30	.31	.32	.32	.32	.33	.32	.31	.31
June	.22	.22	.22	.22	.23	.24	.25	.25	.25	.25	.24	.23	.22
July	.25	.24	.24	.25	.25	.26	.26	.27	.27	.27	.26	.26	.25
Aug	.23	.23	.22	.22	.23	.24	.25	.25	.25	.26	.25	.24	.24
Sept	.37	.37	.37	.37	.38	.39	.40	.40	.40	.41	.40	.39	.38
Oct	.33	.32	.32	.33	.33	.34	.35	.36	.36	.36	.35	.33	.32
Nov	.28	.28	.28	.28	.28	.29	.31	.32	.32	.32	.32	.29	.28
Dec	.30	.31	.32	.32	.31	.31	.32	.33	.34	.34	.34	.32	.30
Year	.28	.27	.27	.27	.28	.28	.29	.30	.30	.30	.30	.29	.27

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME.

FORT ASSINABOINE, MONT.

[H = 2,690; gravity correction, + .01 in.; local time, 2h 19m slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean max.	Mean min.	1891.
27.20	27.19	27.17	27.17	27.17	27.17	27.17	27.18	27.18	27.18	27.19	27.19	27.30	27.08	Jan.
.08	.07	.06	.06	.05	.05	.05	.06	.06	.06	.06	.05	.17	.93	Feb.
.13	.12	.12	.12	.12	.12	.11	.13	.13	.14	.14	.12	.23	.01	Mar.
.10	.09	.08	.08	.07	.07	.06	.08	.09	.09	.10	.10	.18	.01	Apr.
.18	.18	.17	.16	.16	.16	.14	.15	.15	.16	.17	.18	.26	.09	May.
.06	.05	.05	.04	.04	.04	.04	.04	.05	.06	.07	.06	.13	.99	June.
.19	.18	.18	.17	.17	.16	.16	.16	.16	.17	.18	.18	.24	.12	July.
.20	.20	.18	.18	.17	.16	.16	.17	.18	.18	.18	.19	.26	.12	Aug.
.14	.13	.12	.11	.11	.11	.11	.11	.12	.12	.12	.13	.21	.02	Sept.
.22	.20	.20	.20	.20	.20	.20	.21	.22	.22	.22	.21	.32	.12	Oct.
.14	.12	.10	.10	.09	.09	.08	.08	.08	.09	.09	.11	.24	.96	Nov.
.99	.98	.97	.98	.98	.98	.99	.99	.99	.99	.99	.98	.12	.83	Dec.
.14	.13	.12	.11	.11	.11	.11	.11	.12	.12	.12	.12	.22	.02	Year.

BISMARCK, N. DAK.

[H = 1,681; gravity correction, 0; local time, 1h 42m slow.]

.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jan.
28.12	28.10	28.10	28.10	28.10	28.11	28.11	28.12	28.13	28.13	28.13	28.13	28.25	28.01	Feb.
.20	.19	.18	.18	.18	.19	.20	.20	.21	.21	.21	.20	.33	.09	Mar.
.13	.12	.11	.10	.10	.10	.10	.11	.12	.13	.13	.12	.24	.02	Apr.
.22	.21	.20	.19	.18	.18	.17	.18	.20	.21	.21	.21	.31	.11	May.
.05	.04	.04	.03	.03	.03	.03	.04	.04	.06	.06	.05	.15	.95	June.
.21	.20	.20	.19	.18	.18	.18	.19	.20	.21	.21	.21	.29	.13	July.
.18	.17	.16	.16	.15	.15	.15	.16	.18	.18	.19	.18	.26	.10	Aug.
.12	.11	.10	.09	.09	.10	.10	.12	.13	.13	.14	.13	.25	.01	Sept.
.21	.20	.19	.20	.20	.20	.21	.22	.22	.22	.22	.21	.32	.10	Oct.
.14	.12	.12	.13	.13	.14	.14	.14	.14	.14	.14	.15	.30	.01	Nov.
.00	.99	.99	.00	.02	.02	.03	.03	.03	.03	.03	.02	.14	.90	Dec.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Year.

BOSTON, MASS.

[H = 126; gravity correction, — .01; local time, 0h 16m fast.]

29.84	29.84	29.85	29.85	29.86	29.87	29.87	29.87	29.87	29.87	29.86	29.86	30.02	29.68	Jan.
.89	.89	.89	.90	.91	.92	.92	.93	.93	.92	.92	.92	.14	.68	Feb.
.95	.94	.94	.95	.96	.96	.97	.97	.97	.97	.97	.97	.10	.83	Mar.
.78	.77	.77	.78	.78	.80	.81	.82	.82	.82	.82	.80	.92	.69	Apr.
.84	.83	.83	.83	.84	.85	.86	.88	.88	.88	.88	.87	.96	.78	May.
.79	.78	.77	.77	.77	.78	.79	.80	.80	.80	.80	.80	.86	.74	June.
.87	.86	.86	.86	.87	.87	.88	.88	.88	.88	.88	.88	.95	.80	July.
.86	.85	.85	.85	.85	.86	.86	.87	.87	.87	.87	.87	.93	.80	Aug.
.98	.97	.97	.97	.98	.99	.00	.00	.00	.01	.01	.00	.08	.92	Sept.
.88	.88	.88	.88	.89	.89	.90	.90	.90	.90	.90	.90	.02	.78	Oct.
.98	.99	.99	.00	.01	.02	.02	.02	.02	.02	.02	.01	.14	.88	Nov.
.94	.94	.95	.95	.95	.96	.96	.95	.95	.96	.95	.96	.09	.78	Dec.
.88	.88	.88	.88	.89	.90	.90	.91	.91	.91	.91	.90	.00	.78	Year.

BUFFALO, N. Y.

[H = 690; gravity correction, 0; local time, 0h 15m slow.]

29.23	29.23	29.24	29.24	29.25	29.26	29.26	29.26	29.26	29.26	29.26	29.26	29.41	29.11	Jan.
.21	.21	.22	.22	.23	.24	.24	.25	.25	.25	.24	.22	.42	.02	Feb.
.29	.29	.29	.29	.30	.30	.31	.32	.31	.31	.31	.31	.45	.16	Mar.
.23	.22	.22	.22	.22	.22	.22	.23	.23	.23	.24	.23	.33	.11	Apr.
.30	.29	.28	.28	.28	.28	.28	.30	.30	.30	.30	.30	.36	.23	May.
.21	.20	.20	.20	.19	.20	.20	.21	.22	.22	.22	.22	.28	.16	June.
.24	.24	.23	.23	.23	.23	.24	.25	.25	.25	.25	.25	.32	.18	July.
.23	.22	.22	.21	.21	.22	.23	.24	.24	.24	.25	.23	.30	.16	Aug.
.37	.36	.35	.35	.35	.36	.36	.37	.37	.38	.38	.38	.44	.30	Sept.
.31	.30	.29	.29	.30	.30	.30	.31	.31	.31	.31	.32	.42	.22	Oct.
.26	.27	.27	.27	.28	.29	.29	.28	.29	.29	.30	.29	.43	.14	Nov.
.29	.29	.30	.30	.31	.32	.32	.31	.31	.31	.31	.31	.44	.17	Dec.
.26	.26	.26	.26	.26	.27	.27	.28	.28	.28	.28	.28	.38	.18	Year.

NOTE.—The inches have been omitted in the above tables except for January. The reader will have no difficulty in supplying the proper values for the remaining months.

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

CHICAGO, ILL.

[λ=41° 52′ N.; φ=87° 38′ W.]

1891.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan	29.15	29.15	29.16	29.15	29.14	29.14	29.15	29.16	29.16	29.16	29.16	29.15	29.13
Feb	.09	.09	.09	.09	.09	.10	.10	.12	.12	.12	.13	.12	.11
Mar	.16	.16	.15	.14	.14	.15	.15	.15	.15	.14	.14	.14	.14
Apr	.12	.12	.11	.11	.12	.12	.13	.14	.14	.14	.15	.14	.14
May	.22	.22	.22	.22	.23	.24	.25	.26	.26	.26	.26	.26	.25
June ...	.06	.06	.06	.06	.07	.08	.09	.09	.10	.10	.10	.10	.09
July	.15	.15	.14	.15	.15	.16	.17	.18	.18	.18	.18	.18	.18
Aug	.12	.11	.11	.12	.12	.13	.13	.14	.14	.14	.15	.14	.13
Sept	.24	.24	.24	.25	.25	.26	.27	.27	.28	.28	.28	.27	.26
Oct.	.22	.22	.22	.22	.22	.22	.23	.23	.23	.24	.23	.23	.21
Nov	.18	.18	.18	.17	.16	.17	.17	.17	.18	.18	.18	.17	.16
Dec	.15	.15	.15	.15	.15	.15	.16	.16	.17	.17	.17	.16	.14
Year....	.16	.15	.15	.15	.15	.16	.17	.17	.18	.18	.18	.17	.16

CINCINNATI, OHIO.

[λ=39° 6′ N.; φ=84° 30′ W.]

Jan	29.42	29.42	29.42	29.42	29.42	29.42	29.43	29.43	29.44	29.45	29.45	29.43	29.40
Feb	.37	.37	.37	.37	.38	.38	.39	.39	.42	.42	.43	.42	.41
Mar	.38	.37	.37	.37	.37	.38	.38	.40	.40	.40	.39	.38	.37
Apr	.36	.36	.36	.36	.36	.37	.38	.40	.39	.39	.39	.38	.37
May	.42	.41	.41	.41	.42	.43	.45	.46	.46	.46	.46	.45	.44
June ...	.29	.29	.29	.30	.30	.32	.32	.33	.33	.33	.33	.32	.31
July	.38	.38	.37	.38	.38	.39	.40	.40	.41	.41	.41	.40	.39
Aug	.34	.33	.34	.34	.34	.36	.36	.36	.37	.38	.37	.36	.35
Sept....	.48	.48	.48	.48	.49	.50	.52	.52	.53	.53	.53	.51	.50
Oct.	.47	.47	.47	.47	.47	.48	.49	.50	.51	.50	.50	.48	.46
Nov	.44	.44	.44	.44	.44	.45	.45	.46	.48	.48	.48	.46	.44
Dec	.48	.48	.49	.48	.48	.49	.50	.51	.52	.52	.53	.51	.48
Year....	.40	.40	.40	.40	.40	.41	.42	.43	.44	.44	.44	.43	.41

CLEVELAND, OHIO.

[λ=41° 30′ N.; φ=81° 42′ W.]

Jan	29.24	29.24	29.25	29.25	29.25	29.25	29.26	29.26	29.27	29.27	29.26	29.24	29.22
Feb	.18	.18	.18	.18	.18	.19	.20	.22	.22	.23	.23	.23	.22
Mar	.26	.26	.26	.26	.26	.27	.27	.28	.28	.27	.27	.26	.25
Apr	.22	.21	.21	.21	.21	.22	.23	.24	.24	.24	.24	.24	.23
May	.28	.28	.28	.29	.30	.31	.32	.33	.33	.33	.32	.32	.31
June ...	.18	.17	.18	.18	.19	.20	.21	.21	.21	.21	.21	.21	.20
July	.24	.23	.23	.24	.24	.25	.26	.26	.26	.26	.26	.26	.26
Aug	.20	.20	.20	.20	.21	.22	.23	.24	.24	.24	.24	.24	.23
Sept....	.33	.33	.33	.34	.34	.35	.37	.38	.38	.38	.38	.38	.36
Oct.	.30	.30	.30	.30	.30	.31	.32	.32	.33	.32	.32	.31	.29
Nov	.27	.28	.28	.28	.28	.28	.29	.29	.30	.29	.29	.27	.25
Dec	.31	.31	.32	.32	.32	.32	.32	.33	.33	.34	.34	.32	.30
Year ...	.25	.25	.25	.25	.26	.26	.27	.28	.28	.28	.28	.27	.26

DETROIT, MICH.

[λ=42° 20′ N.; φ=83° 3′ W.]

Jan	29.25	29.25	29.26	29.26	29.25	29.25	29.26	29.26	29.27	29.27	29.27	29.26	29.23
Feb	.19	.18	.18	.18	.18	.18	.20	.21	.22	.23	.22	.22	.21
Mar	.28	.28	.28	.28	.28	.28	.29	.29	.30	.30	.29	.28	.27
Apr	.23	.23	.22	.22	.22	.23	.24	.24	.25	.25	.24	.24	.23
May	.31	.31	.30	.30	.31	.32	.34	.34	.34	.34	.34	.34	.33
June ...	.20	.20	.20	.20	.21	.22	.22	.23	.23	.22	.22	.22	.21
July	.25	.24	.24	.24	.25	.26	.26	.27	.27	.27	.27	.26	.26
Aug	.22	.22	.22	.22	.22	.23	.24	.25	.25	.25	.24	.24	.22
Sept....	.36	.36	.36	.36	.36	.37	.38	.39	.40	.40	.39	.38	.37
Oct.	.32	.32	.32	.32	.32	.32	.33	.34	.34	.34	.34	.33	.31
Nov	.27	.26	.27	.27	.27	.27	.28	.28	.29	.28	.28	.27	.25
Dec	.28	.28	.29	.29	.28	.28	.29	.30	.30	.31	.31	.30	.28
Year....	.26	.26	.26	.26	.26	.27	.28	.28	.29	.29	.29	.28	.26

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

CHICAGO, ILL.

[H = 824; gravity correction, —.01; local time, 50m slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean max.	Mean min.	1891.
29.12	29.12	29.12	29.13	29.14	29.15	29.16	29.16	29.17	29.17	29.16	29.15	29.27	29.03	Jan.
.09	.08	.08	.08	.08	.09	.10	.11	.11	.12	.12	.10	.26	.95	Feb.
.12	.11	.11	.11	.12	.12	.12	.13	.14	.14	.14	.14	.27	.02	Mar.
.13	.12	.12	.11	.11	.11	.11	.12	.13	.13	.13	.12	.22	.03	Apr.
.24	.22	.21	.20	.20	.20	.20	.20	.22	.22	.22	.23	.29	.15	May.
.08	.07	.06	.05	.04	.05	.05	.06	.07	.07	.07	.07	.13	.01	June.
.16	.16	.15	.14	.14	.14	.14	.14	.14	.14	.14	.16	.21	.08	July.
.12	.11	.10	.10	.10	.10	.11	.12	.12	.12	.12	.12	.18	.06	Aug.
.25	.23	.22	.22	.22	.22	.22	.23	.24	.24	.24	.25	.30	.18	Sept.
.20	.20	.19	.19	.20	.21	.22	.22	.22	.22	.22	.22	.30	.14	Oct.
.15	.14	.14	.15	.16	.17	.17	.17	.18	.18	.18	.17	.29	.04	Nov.
.12	.11	.11	.12	.12	.12	.13	.13	.14	.14	.14	.14	.28	.00	Dec.
.15	.14	.14	.13	.13	.14	.14	.15	.16	.16	.16	.16	.25	.06	Year.

CINCINNATI, OHIO.

[H = 628; gravity correction, —.02; local time, 38m slow.]

29.38	29.38	29.38	29.39	29.40	29.41	29.41	29.42	29.42	29.42	29.42	29.42	29.55	29.30	Jan.
.39	.38	.38	.38	.39	.40	.39	.40	.41	.40	.40	.39	.57	.22	Feb.
.35	.34	.34	.34	.34	.35	.36	.36	.36	.36	.36	.37	.50	.23	Mar.
.36	.34	.34	.33	.33	.34	.35	.36	.36	.37	.36	.36	.43	.28	Apr.
.43	.42	.40	.40	.40	.40	.41	.42	.42	.42	.42	.42	.49	.35	May.
.30	.29	.28	.27	.27	.28	.28	.29	.30	.30	.30	.30	.36	.24	June.
.38	.37	.36	.36	.36	.35	.36	.37	.38	.38	.38	.38	.44	.32	July.
.34	.33	.32	.32	.31	.32	.32	.34	.35	.35	.35	.34	.41	.30	Aug.
.48	.46	.45	.45	.45	.45	.46	.47	.48	.48	.49	.49	.57	.46	Sept.
.44	.43	.42	.42	.43	.44	.44	.45	.46	.46	.46	.46	.57	.41	Oct.
.42	.42	.42	.42	.43	.44	.44	.45	.45	.45	.45	.45	.59	.34	Nov.
.46	.46	.46	.46	.46	.47	.47	.47	.48	.48	.48	.48	.62	.34	Dec.
.40	.38	.38	.38	.38	.39	.39	.40	.40	.41	.41	.41	.51	.32	Year.

CLEVELAND, OHIO.

[H = 751; gravity correction, —.01; local time, 27m slow.]

29.21	29.20	29.21	29.21	29.21	29.22	29.22	29.22	29.23	29.23	29.24	29.24	29.37	29.10	Jan.
.20	.19	.20	.19	.20	.21	.21	.21	.22	.22	.22	.20	.37	.02	Feb.
.23	.22	.22	.22	.22	.22	.22	.23	.23	.24	.24	.25	.38	.11	Mar.
.22	.21	.20	.19	.19	.19	.19	.20	.21	.22	.22	.22	.29	.12	Apr.
.30	.29	.28	.27	.27	.26	.27	.27	.28	.28	.28	.29	.35	.22	May.
.19	.18	.17	.17	.16	.16	.17	.17	.18	.18	.18	.19	.24	.12	June.
.25	.24	.23	.23	.22	.23	.23	.24	.24	.24	.24	.24	.30	.18	July.
.22	.21	.20	.20	.19	.20	.20	.21	.21	.21	.21	.21	.27	.14	Aug.
.35	.33	.32	.32	.32	.32	.33	.34	.34	.34	.34	.35	.41	.28	Sept.
.28	.27	.27	.27	.27	.28	.29	.29	.30	.30	.29	.30	.38	.20	Oct.
.24	.24	.24	.24	.25	.26	.27	.27	.27	.28	.28	.27	.40	.12	Nov.
.28	.28	.28	.29	.30	.30	.30	.30	.30	.30	.30	.31	.44	.16	Dec.
.25	.24	.24	.23	.23	.24	.24	.25	.25	.25	.25	.26	.35	.15	Year.

DETROIT, MICH.

[H = 724; gravity correction, —.01; local time, 32m slow.]

29.22	29.22	29.22	29.22	29.23	29.24	29.24	29.25	29.25	29.25	29.25	29.25	29.38	29.12	Jan.
.20	.19	.19	.20	.21	.22	.22	.22	.22	.22	.22	.20	.38	.03	Feb.
.26	.25	.24	.24	.24	.25	.26	.26	.26	.26	.26	.27	.41	.13	Mar.
.22	.21	.20	.20	.20	.21	.22	.23	.23	.23	.24	.23	.31	.14	Apr.
.31	.30	.29	.29	.28	.28	.29	.30	.31	.31	.31	.31	.37	.25	May.
.20	.19	.19	.18	.17	.18	.18	.19	.20	.20	.21	.20	.26	.14	June.
.25	.24	.24	.23	.22	.23	.23	.24	.24	.24	.25	.25	.31	.18	July.
.22	.21	.20	.20	.20	.20	.21	.22	.22	.22	.23	.22	.28	.16	Aug.
.36	.35	.34	.34	.34	.34	.34	.35	.36	.36	.36	.36	.43	.30	Sept.
.30	.28	.28	.28	.29	.30	.30	.31	.31	.31	.31	.31	.40	.22	Oct.
.24	.24	.24	.24	.25	.26	.26	.27	.27	.27	.27	.26	.39	.13	Nov.
.27	.26	.27	.27	.28	.28	.28	.28	.28	.28	.28	.28	.41	.14	Dec.
.25	.24	.24	.24	.24	.25	.25	.26	.26	.26	.27	.26	.36	.16	Year.

NOTE.—The inches have been omitted in the above tables except for January. The reader will have no difficulty in supplying the proper values for the remaining months.

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

DODGE CITY, KANS.

[λ=37° 45′ N.; φ=100° 0′ W.]

1891.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan	27.45	27.45	27.44	27.44	27.44	27.44	27.43	27.44	27.45	27.46	27.47	27.48	27.47
Feb	.33	.32	.32	.31	.30	.30	.30	.31	.32	.33	.34	.35	.34
Mar	.34	.34	.33	.33	.32	.32	.33	.34	.35	.36	.37	.37	.36
Apr	.37	.37	.36	.36	.36	.36	.38	.39	.40	.40	.40	.41	.40
May	.44	.44	.43	.43	.43	.43	.44	.45	.45	.46	.45	.45	.45
June	.29	.29	.29	.29	.29	.29	.30	.31	.32	.33	.33	.33	.32
July	.44	.44	.43	.43	.42	.43	.44	.45	.45	.46	.45	.45	.44
Aug	.43	.43	.43	.43	.43	.43	.44	.45	.45	.45	.45	.45	.44
Sept	.48	.48	.47	.47	.47	.48	.48	.49	.50	.50	.50	.50	.48
Oct	.50	.50	.50	.50	.50	.50	.51	.52	.53	.54	.55	.55	.54
Nov	.44	.44	.43	.43	.42	.42	.43	.43	.44	.45	.46	.46	.44
Dec	.34	.33	.33	.34	.33	.32	.32	.33	.34	.36	.36	.37	.35
Year	.40	.40	.40	.40	.39	.39	.40	.41	.42	.42	.43	.43	.42

EASTPORT, ME.

[λ=44° 54′ N.; φ=66° 59′ W.]

Jan	29.89	29.89	29.89	29.89	29.89	29.90	29.90	29.91	29.92	29.92	29.91	29.89	29.88
Feb	.93	.93	.92	.92	.93	.93	.93	.94	.95	.95	.94	.93	.93
Mar	.01	.00	.00	.00	.00	.01	.02	.03	.04	.04	.03	.02	.01
Apr	.83	.82	.82	.82	.82	.83	.84	.84	.84	.85	.84	.83	.82
May	.89	.88	.88	.88	.90	.90	.91	.92	.92	.92	.91	.90	.90
June	.81	.81	.81	.81	.82	.83	.84	.84	.84	.83	.83	.82	.82
July	.92	.91	.91	.91	.92	.92	.93	.93	.93	.94	.93	.93	.92
Aug	.90	.90	.90	.90	.90	.91	.92	.93	.93	.93	.92	.92	.91
Sept	.00	.00	.00	.00	.01	.02	.03	.04	.05	.05	.04	.03	.02
Oct	.94	.93	.92	.92	.93	.93	.94	.95	.95	.94	.93	.92	.91
Nov	.03	.03	.03	.02	.02	.03	.04	.05	.06	.06	.05	.04	.03
Dec	.92	.93	.93	.93	.94	.94	.95	.96	.98	.98	.96	.94	.93
Year	.92	.92	.92	.92	.92	.93	.94	.94	.95	.95	.94	.93	.92

GALVESTON, TEX.

[λ=29° 18′ N.; φ=94° 50′ W.]

Jan	30.10	30.10	30.10	30.09	30.08	30.09	30.09	30.11	30.12	30.14	30.16	30.15	30.13
Feb	.00	.00	.99	.99	.98	.99	.00	.01	.02	.04	.05	.05	.04
Mar*	.02	.01	.00	.00	.00	.00	.01	.02	.04	.04	.04	.04	.04
Apr	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
June	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Aug	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sept	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oct	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nov	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dec	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

KEY WEST, FLA.

[λ=24° 34′ N.; φ=81° 49′ W.]

Jan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Feb†	30.09	30.09	30.08	30.07	30.07	30.08	30.10	30.11	30.12	30.13	30.13	30.12	30.10
Mar	.03	.02	.01	.01	.02	.03	.04	.05	.06	.06	.06	.05	.04
Apr	.03	.02	.01	.01	.02	.03	.04	.05	.06	.07	.07	.06	.05
May	.02	.00	.00	.00	.00	.01	.02	.03	.04	.04	.04	.04	.02
June	.96	.95	.95	.94	.95	.96	.98	.98	.99	.99	.99	.98	.98
July	.05	.04	.04	.03	.04	.04	.06	.06	.07	.07	.07	.07	.06
Aug	.02	.00	.00	.00	.00	.01	.02	.03	.04	.04	.04	.04	.03
Sept	.00	.99	.98	.98	.98	.99	.01	.02	.02	.03	.03	.02	.00
Oct	.00	.99	.98	.97	.98	.99	.00	.01	.02	.02	.02	.01	.99
Nov	.06	.06	.05	.04	.05	.06	.08	.09	.10	.10	.10	.08	.06
Dec	.14	.14	.13	.13	.13	.13	.14	.16	.18	.18	.18	.16	.13
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

* For 24 days; instrument recalled for repairs. † 27 days.

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

DODGE CITY, KANS.

[H = 2,523; gravity correction, — .02; local time, 1h 40m slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean max.	Mean min.	1891.
27.44	27.43	27.43	27.43	27.44	27.44	27.44	27.45	27.46	27.46	27.46	27.45	27.54	27.36	Jan.
.32	.30	.29	.29	.30	.30	.31	.32	.32	.32	.32	.32	.46	.18	Feb.
.35	.33	.32	.31	.30	.30	.30	.31	.32	.33	.33	.33	.42	.24	Mar.
.39	.37	.36	.35	.34	.34	.34	.35	.37	.38	.38	.37	.48	.27	Apr.
.44	.42	.41	.39	.38	.38	.38	.39	.41	.42	.42	.42	.50	.34	May.
.31	.30	.30	.28	.27	.26	.26	.28	.28	.30	.30	.30	.36	.22	June.
.44	.43	.42	.40	.39	.39	.39	.40	.41	.43	.43	.42	.49	.36	July.
.44	.42	.41	.40	.39	.38	.38	.40	.42	.43	.44	.42	.49	.36	Aug.
.47	.45	.43	.42	.42	.42	.43	.45	.46	.47	.47	.47	.54	.38	Sept.
.51	.49	.48	.48	.48	.48	.49	.50	.51	.52	.52	.51	.60	.43	Oct.
.41	.39	.38	.38	.38	.39	.40	.41	.42	.42	.42	.42	.53	.31	Nov.
.32	.30	.30	.31	.31	.32	.33	.34	.34	.35	.35	.33	.47	.20	Dec.
.40	.39	.38	.37	.37	.37	.37	.38	.39	.40	.40	.40	.49	.30	Year.

EASTPORT, ME.

[H = 53; gravity correction, 0; local time, 32m fast.]

29.88	29.88	29.89	29.89	29.89	29.90	29.90	29.90	29.90	29.90	29.89	29.90	30.07	29.68	Jan.
.92	.92	.92	.93	.93	.93	.93	.94	.94	.95	.94	.93	.17	.68	Feb.
.00	.00	.00	.00	.00	.01	.01	.01	.01	.00	.00	.01	.14	.87	Mar.
.81	.80	.80	.80	.80	.81	.82	.83	.82	.82	.82	.82	.93	.71	Apr.
.89	.88	.88	.88	.88	.89	.90	.90	.90	.90	.90	.90	.98	.80	May.
.81	.81	.81	.80	.80	.81	.81	.82	.82	.82	.82	.82	.88	.76	June.
.92	.91	.91	.91	.91	.91	.91	.91	.91	.91	.91	.92	.98	.84	July.
.91	.90	.90	.90	.90	.91	.92	.92	.92	.92	.92	.91	.97	.84	Aug.
.01	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.11	.89	Sept.
.90	.90	.90	.91	.91	.91	.91	.92	.92	.91	.91	.92	.07	.78	Oct.
.03	.03	.04	.04	.04	.04	.04	.04	.04	.04	.05	.04	.16	.90	Nov.
.93	.93	.94	.94	.94	.94	.93	.94	.93	.93	.93	.94	.11	.73	Dec.
.92	.92	.91	.92	.92	.92	.92	.93	.93	.93	.92	.93	.05	.79	Year.

GALVESTON, TEX.

[H = 42; gravity correction, — .04; local time, 1h 19m slow.]

30.10	30.08	30.08	30.08	30.08	30.09	30.09	30.10	30.11	30.12	30.12	30.10	30.20	30.02	Jan.
.01	.00	.98	.98	.98	.98	.98	.00	.00	.01	.01	.00	.10	.91	Feb.
.02	.00	.98	.97	.97	.97	.97	.98	.00	.00	.00	.00	.10	.92	Mar.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	May.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	June.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	July.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Aug.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Sept.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Oct.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Nov.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dec.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Year.

KEY WEST, FLA.

[H = 22; gravity correction, — .05; local time, 27m slow.]

.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jan.
30.08	30.07	30.06	30.06	30.06	30.07	30.08	30.09	30.10	30.10	30.10	30.09	30.15	30.04	Feb.
.02	.00	.00	.99	.00	.00	.02	.02	.03	.03	.02	.03	.07	.98	Mar.
.03	.01	.00	.00	.00	.02	.03	.04	.04	.05	.04	.03	.08	.98	Apr.
.01	.00	.98	.98	.98	.99	.00	.01	.02	.03	.02	.01	.05	.97	May.
.96	.95	.94	.93	.94	.95	.96	.96	.97	.98	.97	.96	.00	.32	June.
.05	.04	.02	.02	.02	.04	.05	.06	.06	.07	.06	.05	.08	.01	July.
.02	.00	.98	.98	.98	.99	.01	.02	.03	.03	.02	.01	.05	.97	Aug.
.99	.97	.96	.96	.97	.98	.00	.01	.01	.01	.01	.00	.03	.95	Sept.
.98	.96	.96	.96	.97	.98	.00	.01	.02	.02	.01	.99	.04	.95	Oct.
.04	.04	.03	.03	.04	.06	.07	.08	.08	.08	.08	.06	.11	.02	Nov.
.12	.11	.10	.11	.12	.13	.14	.15	.16	.16	.15	.14	.19	.10	Dec.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Year.

NOTE.—The inches have been omitted in the above tables except for January. The reader will have no difficulty in supplying the proper values for the remaining months.

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

MEMPHIS, TENN.

[λ = 35° 9′ N.; φ = 90° 3′ W.]

1891.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan	29.78	29.77	29.77	29.77	29.76	29.77	29.78	29.79	29.80	29.81	29.82	29.82	29.80
Feb	.70	.70	.71	.70	.70	.71	.72	.74	.75	.76	.77	.77	.76
Mar	.68	.68	.68	.67	.68	.68	.70	.71	.71	.72	.72	.72	.71
Apr	.71	.71	.71	.70	.71	.71	.72	.74	.75	.75	.76	.76	.74
May	.74	.73	.72	.72	.73	.74	.76	.77	.77	.77	.77	.77	.76
June ...	.58	.58	.58	.58	.58	.59	.61	.62	.63	.63	.63	.63	.62
July....	.69	.69	.69	.69	.69	.70	.71	.72	.73	.73	.73	.73	.72
Aug	.68	.68	.68	.68	.69	.70	.71	.72	.73	.74	.74	.73	.72
Sept....	.77	.77	.77	.77	.77	.78	.80	.81	.82	.83	.83	.82	.80
Oct	.82	.82	.82	.82	.83	.84	.84	.86	.87	.88	.88	.87	.86
Nov	.79	.79	.78	.79	.79	.79	.80	.81	.82	.83	.84	.83	.81
Dec	.83	.83	.83	.83	.83	.83	.84	.84	.86	.87	.88	.87	.84
Year ...	.73	.73	.73	.73	.73	.74	75	.76	.77	.78	.78	.78	.76

NEW ORLEANS, LA.

[λ = 29° 58′ N.; φ = 90° 4′ W.]

Jan	30.09	30.09	30.08	30.08	30.08	30.08	30.09	30.10	30.12	30.13	30.13	30.12	30.09
Feb	.01	.01	.00	.00	.00	.00	.01	.02	.03	.04	.04	.04	.02
Mar	.97	.96	.96	.95	.96	.97	.98	.99	.00	.01	.01	.00	.98
Apr	.01	.01	.00	.00	.00	.01	.02	.03	.04	.05	.05	.04	.03
May	.02	.01	.00	.00	.02	.03	.04	.04	.05	.05	.05	.04	.02
June ...	.90	.89	.89	.90	.90	.91	.92	.92	.92	.92	.92	.92	.90
July....	.98	.98	.98	.98	.98	.99	.00	.01	.01	.01	.00	.00	.99
Aug	.99	.98	.98	.98	.99	.00	.01	.02	.02	.02	.02	.01	.00
Sept....	.01	.01	.01	.01	.02	.02	.03	.04	.05	.06	.05	.04	.02
Oct	.09	.09	.09	.08	.09	.10	.11	.11	.13	.14	.14	.13	.11
Nov	.08	.08	.08	.08	.08	.09	.10	.11	.13	.14	.14	.13	.10
Dec	.14	.14	.14	.14	.14	.14	.15	.16	.18	.19	.19	.18	.15
Year ...	.02	.02	.02	.02	.02	.03	.04	.05	.06	.06	.06	.05	.04

NEW YORK CITY.

[λ = 40° 43′ N.; φ = 74° 0′ W.]

Jan	29.83	29.83	29.82	29.81	29.81	29.81	29.82	29.83	29.84	29.85	29.84	29.82	29.80
Feb	.88	.88	.87	.87	.88	.88	.89	.90	.90	.90	.90	.89	.87
Mar	.90	.90	.89	.89	.90	.90	.92	.92	.92	.92	.92	.91	.89
Apr	.80	.80	.80	.79	.80	.81	.82	.82	.82	.81	.80	.79	.78
May	.84	.83	.82	.82	.83	.84	.85	.85	.85	.85	.84	.83	.82
June ...	.76	.76	.75	.76	.77	.78	.78	.79	.78	.78	.78	.77	.76
July....	.82	.82	.82	.82	.82	.84	.84	.85	.85	.85	.85	.84	.83
Aug	.80	.80	.80	.80	.80	.81	.81	.82	.82	.82	.82	.81	.80
Sept....	.95	.94	.94	.94	.94	.95	.96	.97	.97	.97	.96	.95	.94
Oct	.88	.87	.86	.86	.87	.87	.88	.89	.89	.88	.88	.87	.85
Nov	.96	.96	.96	.96	.96	.96	.98	.98	.98	.98	.97	.95	.93
Dec	.96	.96	.96	.97	.97	.97	.98	.99	.99	.99	.98	.96	.94
Year ...	.86	.86	.86	.86	.86	.87	.88	.88	.88	.88	.88	.87	.85

PHILADELPHIA, PA.

[λ = 39° 57′ N.; φ = 75° 9′ W.]

Jan	29.93	29.93	29.93	29.92	29.92	29.93	29.94	29.95	29.96	29.97	29.96	29.94	29.92
Feb	.97	.97	.96	.96	.96	.97	.98	.99	.00	.00	.99	.98	.96
Mar	.98	.98	.97	.97	.98	.99	.00	.01	.01	.01	.00	.00	.98
Apr	.90	.89	.90	.89	.90	.91	.92	.93	.92	.92	.91	.90	.89
May	.92	.92	.92	.92	.92	.93	.94	.94	.94	.94	.94	.93	.92
June ...	.84	.84	.84	.84	.85	.86	.87	.87	.87	.87	.86	.85	.84
July....	.91	.90	.90	.90	.91	.92	.93	.94	.93	.93	.93	.92	.91
Aug	.88	.87	.87	.87	.88	.88	.89	.90	.90	.90	.90	.89	.88
Sept....	.03	.03	.02	.03	.03	.04	.05	.06	.06	.07	.06	.05	.03
Oct	.97	.96	.96	.96	.96	.97	.98	.99	.99	.99	.98	.96	.95
Nov	.05	.05	.05	.05	.05	.06	.07	.08	.08	.08	.07	.04	.02
Dec	.06	.07	.07	.07	.08	.08	.09	.10	.11	.12	.10	.08	.06
Year ...	.95	.95	.95	.95	.95	.96	.97	.98	.98	.98	.98	.96	.95

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

MEMPHIS, TENN.

[H = 330; gravity correction, —.03; local time, 1h 0m slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean Max.	Mean Min.	1891.
29.78	29.77	29.76	29.77	29.77	29.78	29.79	29.80	29.80	29.80	29.79	29.78	29.88	29.69	Jan.
.74	.72	.71	.70	.70	.71	.71	.72	.72	.72	.72	.72	.85	.58	Feb.
.70	.68	.66	.66	.65	.65	.66	.66	.67	.67	.67	.68	.78	.58	Mar.
.73	.71	.70	.68	.68	.67	.67	.69	.70	.71	.71	.71	.78	.64	Apr.
.75	.74	.72	.71	.70	.70	.70	.72	.73	.73	.74	.74	.79	.68	May.
.60	.59	.58	.57	.56	.56	.56	.57	.58	.59	.59	.59	.64	.54	June.
.71	.69	.68	.68	.67	.67	.67	.68	.68	.68	.69	.70	.75	.65	July.
.70	.69	.68	.67	.66	.66	.66	.68	.69	.69	.69	.70	.75	.65	Aug.
.78	.76	.75	.75	.74	.75	.75	.76	.77	.77	.77	.78	.83	.73	Sept.
.83	.82	.80	.80	.80	.80	.81	.82	.82	.83	.83	.83	.89	.77	Oct.
.79	.77	.76	.77	.77	.78	.78	.79	.79	.80	.80	.80	.89	.69	Nov.
.82	.80	.79	.79	.79	.80	.80	.80	.81	.81	.82	.82	.93	.71	Dec.
.74	.73	.72	.71	.71	.71	.72	.72	.73	.73	.73	.74	.81	.66	Year.

NEW ORLEANS, LA.

[H = 54; gravity correction, —.04; local time, 1h 0m slow.]

30.06	30.05	30.04	30.05	30.05	30.06	30.06	30.08	30.09	30.09	30.09	30.08	30.17	29.99	Jan.
.00	.98	.98	.97	.98	.99	.00	.01	.02	.02	.02	.01	.09	.93	Feb.
.96	.94	.93	.92	.93	.93	.94	.95	.96	.96	.96	.96	.04	.89	Mar.
.02	.00	.99	.98	.98	.98	.98	.00	.01	.02	.02	.01	.07	.96	Apr.
.01	.00	.98	.97	.97	.97	.98	.99	.00	.01	.01	.01	.06	.96	May.
.89	.89	.87	.86	.86	.87	.87	.88	.90	.90	.90	.90	.94	.85	June.
.98	.97	.96	.96	.95	.96	.96	.97	.98	.99	.98	.98	.02	.94	July.
.99	.97	.96	.95	.95	.95	.96	.97	.98	.99	.99	.99	.03	.94	Aug.
.01	.99	.98	.98	.98	.98	.99	.01	.01	.01	.01	.01	.06	.96	Sept.
.08	.07	.06	.05	.05	.06	.07	.08	.10	.10	.10	.09	.14	.04	Oct.
.07	.06	.05	.04	.05	.05	.06	.08	.08	.09	.09	.08	.17	.01	Nov.
.12	.11	.11	.11	.11	.12	.12	.14	.14	.14	.14	.14	.22	.06	Dec.
.02	.00	.99	.99	.99	.99	.00	.01	.02	.03	.03	.02	.08	.96	Year.

NEW YORK CITY.

[H = 185; gravity correction, — .01; local time, 0h 4m fast.]

29.80	29.80	29.80	29.81	29.82	29.83	29.84	29.83	29.84	29.83	29.83	29.82	29.98	29.65	Jan.
.85	.85	.85	.85	.86	.87	.88	.88	.89	.89	.89	.88	.09	.66	Feb.
.88	.87	.86	.87	.87	.87	.88	.88	.89	.89	.89	.89	.01	.76	Mar.
.77	.76	.75	.75	.76	.76	.78	.79	.79	.79	.80	.79	.90	.69	Apr.
.81	.80	.80	.80	.80	.81	.82	.83	.84	.84	.85	.83	.91	.75	May.
.75	.74	.74	.73	.74	.74	.74	.76	.76	.76	.76	.76	.82	.71	June.
.82	.82	.81	.81	.81	.82	.82	.83	.83	.83	.83	.83	.89	.76	July.
.80	.79	.78	.78	.78	.79	.80	.81	.81	.81	.81	.80	.86	.75	Aug.
.93	.92	.92	.92	.92	.93	.94	.95	.95	.96	.96	.94	.02	.88	Sept.
.84	.83	.83	.84	.84	.85	.85	.86	.87	.86	.86	.86	.98	.76	Oct.
.92	.92	.92	.93	.94	.95	.96	.97	.97	.98	.98	.96	.08	.84	Nov.
.93	.93	.93	.93	.94	.94	.95	.95	.96	.96	.96	.96	.09	.81	Dec.
.84	.84	.83	.84	.84	.85	.86	.86	.87	.87	.87	.86	.97	.75	Year.

PHILADELPHIA, PA.

[H = 117; gravity correction, — .01.]

29.91	29.91	29.91	29.92	29.93	29.94	29.94	29.94	29.94	29.93	29.93	29.93	30.08	29.76	Jan.
.94	.93	.94	.94	.95	.96	.97	.98	.99	.99	.98	.97	.17	.76	Feb.
.96	.95	.94	.94	.95	.95	.96	.97	.97	.97	.97	.98	.09	.84	Mar.
.87	.86	.85	.85	.85	.86	.87	.88	.89	.89	.89	.89	.00	.80	Apr.
.90	.89	.89	.89	.89	.90	.91	.92	.93	.93	.93	.92	.99	.84	May.
.83	.81	.81	.80	.81	.82	.82	.84	.84	.84	.84	.84	.90	.79	June.
.90	.89	.89	.88	.88	.89	.89	.90	.91	.91	.91	.91	.97	.84	July.
.88	.86	.86	.86	.86	.86	.87	.88	.88	.89	.89	.88	.94	.82	Aug.
.02	.01	.01	.01	.01	.02	.03	.04	.04	.04	.04	.04	.09	.98	Sept.
.94	.93	.93	.93	.94	.95	.96	.96	.96	.96	.95	.96	.06	.86	Oct.
.01	.01	.02	.03	.04	.05	.06	.07	.07	.07	.07	.05	.17	.93	Nov.
.04	.04	.04	.04	.05	.06	.06	.07	.07	.08	.07	.07	.19	.93	Dec.
.94	.92	.92	.92	.93	.94	.95	.95	.96	.96	.96	.95	.05	.85	Year.

NOTE.—The inches have been omitted in the above tables except for January. The reader will have no difficulty in supplying the proper values for the remaining months.

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

PITTSBURG, PA.

[λ = 40° 32′ N; φ = 80° 2′ W.]

1891.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan.*	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Feb	29.10	29.10	29.10	29.10	29.10	29.10	29.11	29.12	29.13	29.13	29.13	29.12	29.10
Mar	.17	.17	.16	.16	.17	.17	.17	.17	.17	.17	.16	.16	.14
Apr	.14	.13	.13	.13	.13	.14	.14	.14	.14	.14	.13	.12	.11
May	.18	.18	.18	.18	.18	.19	.20	.21	.21	.20	.20	.19	.17
June	.08	.08	.08	.08	.09	.10	.11	.12	.12	.11	.10	.09	.08
July	.15	.15	.15	.15	.16	.17	.17	.17	.17	.17	.16	.16	.14
Aug	.12	.11	.11	.12	.12	.14	.14	.14	.14	.14	.14	.13	.12
Sept	.26	.26	.26	.26	.27	.28	.29	.30	.30	.30	.28	.27	.25
Oct	.22	.22	.22	.22	.23	.23	.24	.24	.24	.24	.23	.22	.19
Nov	.21	.21	.21	.21	.21	.21	.22	.22	.22	.22	.22	.21	.19
Dec	.25	.25	.26	.26	.26	.26	.26	.26	.27	.27	.26	.24	.22
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

PORTLAND, OREGON.

[λ = 45° 32′ N; φ = 122° 43′ W.]

Jan	30.13	30.13	30.13	30.12	30.13	30.13	30.12	30.12	30.12	30.13	30.13	30.14	30.15
Feb	.80	.80	.80	.80	.80	.79	.78	.78	.78	.78	.79	.79	.80
Mar	.01	.01	.02	.02	.03	.02	.02	.02	.03	.03	.04	.05	.06
Apr	.92	.93	.93	.93	.93	.93	.92	.92	.92	.93	.93	.94	.94
May	.92	.93	.93	.93	.93	.93	.94	.94	.94	.94	.94	.94	.94
June	.91	.91	.91	.91	.91	.91	.91	.91	.92	.92	.92	.92	.91
July	.94	.94	.95	.96	.96	.96	.97	.97	.98	.98	.98	.98	.97
Aug	.91	.92	.92	.93	.93	.93	.93	.94	.95	.95	.96	.96	.95
Sept	.94	.93	.94	.94	.94	.94	.94	.94	.94	.95	.96	.97	.96
Oct	.97	.97	.97	.97	.97	.97	.98	.98	.98	.98	.99	.00	.01
Nov	.05	.05	.05	.04	.03	.04	.03	.02	.02	.02	.03	.05	.05
Dec	.93	.94	.94	.94	.94	.94	.95	.95	.94	.95	.95	.96	.97
Year	.95	.96	.96	.96	.96	.96	.96	.96	.96	.96	.97	.98	.98

SAINT LOUIS MO.

[λ = 38° 38′ N; φ = 90° 12′ W.]

Jan	29.48	29.48	29.48	29.48	29.48	29.48	29.48	29.48	29.49	29.50	29.51	29.50	29.48
Feb	.41	.42	.42	.42	.42	.43	.44	.45	.47	.47	.48	.47	.45
Mar	.42	.41	.41	.40	.40	.40	.40	.41	.42	.42	.42	.42	.41
Apr	.41	.41	.40	.41	.41	.42	.43	.44	.45	.45	.45	.45	.43
May	.48	.48	.48	.48	.49	.50	.51	.52	.52	.52	.52	.52	.50
June	.31	.31	.30	.30	.31	.32	.33	.35	.34	.34	.34	.34	.33
July	.43	.43	.43	.43	.44	.44	.45	.46	.47	.47	.46	.46	.45
Aug	.40	.40	.40	.40	.41	.41	.42	.43	.44	.44	.44	.43	.42
Sept	.54	.54	.54	.54	.55	.56	.57	.58	.58	.58	.58	.57	.55
Oct	.54	.54	.54	.54	.54	.55	.56	.57	.58	.58	.58	.58	.56
Nov	.48	.48	.48	.48	.48	.48	.48	.50	.51	.52	.52	.52	.50
Dec	.48	.48	.48	.48	.48	.48	.48	.49	.49	.50	.50	.49	.47
Year	.45	.45	.45	.45	.45	.46	.46	.47	.48	.48	.48	.48	.46

SAINT PAUL, MINN.

[λ = 44° 58′ N; φ = 93° 3′ W.]

Jan	28.14	28.14	28.14	28.14	28.14	28.14	28.14	28.14	28.16	28.16	28.17	28.16	28.15
Feb	.06	.06	.06	.05	.05	.05	.06	.06	.07	.07	.07	.07	.07
Mar	.16	.16	.15	.15	.15	.15	.15	.14	.15	.15	.15	.14	.13
Apr	.06	.07	.06	.07	.07	.08	.08	.09	.10	.09	.09	.09	.08
May	.17	.17	.17	.18	.18	.19	.20	.21	.21	.21	.20	.19	.18
June	.02	.02	.02	.02	.02	.02	.03	.04	.04	.03	.03	.02	01
July	.12	.12	.12	.12	.12	.13	.14	.14	.14	.14	.14	.13	.12
Aug	.09	.08	.08	.09	.09	.10	.11	.12	.12	.12	.12	.11	.10
Sept	.14	.14	.14	.14	.14	.15	.15	.16	.16	.15	.15	.14	.13
Oct	.16	.16	.16	.15	.15	.16	.16	.16	.17	.17	.17	.17	.16
Nov	.15	.15	.15	.15	.15	.14	.14	.15	.15	.15	.15	.14	.12
Dec	.97	.97	.97	.97	.97	.97	.97	.98	.98	.99	.00	.99	.97
Year	.10	.10	.10	.10	.10	.11	.11	.12	.12	.12	.12	.11	.10

* No record.

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

PITTSBURG, PA.

[H = 847; gravity corr. — .01; local time 0^h 20^m slow.]

2^h	3^h	4^h	5^h	6^h	7^h	8^h	9^h	10^h	11^h	Mid.	Mean.	Mean Max.	Mean Min.	1891.
														Jan.
29.09	29.10	29.10	29.10	29.11	29.12	29.13	29.13	29.13	29.13	29.13	29.11	29.28	28.93	Feb.
.13	.12	.12	.12	.12	.13	.14	.15	.15	.15	.16	.15	.28	.03	Mar.
.10	.09	.09	.09	.09	.10	.11	.12	.13	.14	.14	.12	.21	.04	Apr.
.16	.15	.14	.14	.15	.16	.17	.18	.18	.18	.18	.18	.25	.10	May.
.07	.06	.05	.05	.05	.06	.07	.08	.08	.08	.08	.08	.14	.02	June.
.13	.12	.12	.12	.12	.13	.14	.14	.15	.15	.16	.15	.22	.09	July.
.10	.10	.09	.09	.09	.09	.10	.11	.12	.12	.12	.12	.18	.08	Aug.
.24	.23	.22	.22	.23	.24	.24	.25	.26	.26	.26	.26	.32	.19	Sept.
.18	.17	.17	.17	.18	.19	.19	.20	.20	.20	.21	.21	.30	.12	Oct.
.18	.18	.18	.18	.19	.20	.20	.21	.22	.22	.22	.21	.33	.07	Nov.
.21	.21	.21	.22	.23	.24	.24	.24	.24	.25	.25	.24	.37	.11	Dec.
														Year.

PORTLAND, OREGON.

[H = 80; gravity corr., 0; local time 3^h 11^m slow.]

30.16	30.14	30.13	30.12	30.11	30.10	30.10	30.10	30.10	30.11	30.12	30.12	30.21	30.03	Jan.
.82	.81	.80	.79	.79	.79	.78	.79	.79	.80	.80	.79	.92	.68	Feb.
.06	.06	.05	.03	.02	.00	.99	.99	.00	.00	.01	.02	.11	.92	Mar.
.94	.94	.93	.92	.91	.90	.90	.90	.90	.91	.92	.92	.00	.84	Apr.
.93	.93	.92	.91	.89	.88	.87	.87	.88	.89	.90	.92	.98	.84	May.
.91	.91	.90	.90	.89	.88	.88	.88	.88	.89	.90	.90	.96	.83	June.
.96	.95	.94	.93	.91	.90	.89	.90	.90	.92	.93	.94	.01	.86	July.
.94	.94	.92	.91	.90	.89	.88	.88	.89	.90	.91	.92	.97	.87	Aug.
.96	.95	.94	.93	.92	.91	.90	.91	.91	.92	.92	.94	.00	.86	Sept.
.00	.00	.99	.98	.97	.96	.95	.95	.96	.96	.96	.98	.04	.90	Oct.
.06	.06	.05	.04	.04	.04	.03	.03	.04	.04	.04	.04	.11	.96	Nov.
.98	.96	.94	.93	.92	.91	.91	.92	.92	.93	.93	.94	.10	.74	Dec.
.98	.97	.96	.95	.94	.93	.92	.93	.93	.94	.95	.95	.03	.86	Year.

SAINT LOUIS, MO.

[H = 571; gravity corr., — .02; local time 1^h 1^m slow.]

29.45	29.45	29.45	29.46	29.47	29.47	29.47	29.48	29.49	29.49	29.49	29.48	29.58	29.38	Jan.
.42	.40	.40	.40	.40	.41	.41	.42	.43	.43	.44	.43	.57	.27	Feb.
.39	.38	.37	.37	.37	.38	.38	.40	.40	.41	.41	.40	.52	.29	Mar.
.42	.41	.40	.39	.38	.39	.38	.40	.41	.42	.42	.42	.49	.33	Apr.
.49	.48	.46	.45	.44	.44	.44	.45	.46	.47	.47	.48	.54	.41	May.
.32	.31	.30	.29	.28	.28	.28	.29	.30	.31	.31	.31	.37	.25	June.
.44	.43	.42	.41	.40	.39	.40	.40	.41	.42	.42	.43	.48	.37	July.
.41	.40	.39	.38	.38	.38	.38	.40	.41	.41	.41	.41	.46	.35	Aug.
.53	.52	.50	.50	.49	.49	.50	.51	.52	.53	.53	.54	.59	.48	Sept.
.54	.52	.52	.51	.51	.52	.52	.54	.54	.54	.55	.54	.62	.47	Oct.
.48	.47	.47	.46	.47	.48	.47	.47	.48	.48	.48	.49	.60	.36	Nov.
.44	.43	.43	.44	.44	.45	.46	.46	.46	.47	.47	.47	.60	.34	Dec.
.45	.43	.42	.42	.42	.42	.42	.44	.44	.45	.45	.45	.54	.36	Year.

SAINT PAUL, MINN.

[H = 850; gravity corr., 0; local time 1^h 12^m slow.]

28.13	28.12	28.13	28.13	28.13	28.14	28.14	28.14	28.15	28.15	28.15	28.14	28.25	28.03	Jan.
.06	.05	.04	.05	.05	.06	.06	.07	.07	.08	.08	.06	.19	.92	Feb.
.12	.11	.11	.11	.10	.11	.11	.13	.13	.14	.14	.13	.25	.02	Mar.
.07	.06	05	.05	.04	.04	.04	.05	.06	.06	.07	.07	.16	.96	Apr.
.17	.16	.15	.14	.13	.12	.13	.13	.15	.15	.16	.17	.26	.08	May.
.01	.01	.00	.00	.00	.99	.00	.00	.02	.02	.02	.02	.08	.94	June.
.11	.11	.10	.10	.09	.09	.09	.10	.11	.12	.12	.12	.18	.05	July.
.09	.08	.07	.07	.06	.06	.07	.08	.09	.10	.10	.09	.16	.02	Aug.
.12	.11	.10	.10	.10	.10	.11	.12	.13	.13	.13	.13	.22	.05	Sept.
.15	.15	.14	.14	.15	.16	.16	.16	.17	.17	.17	.16	.30	.09	Oct.
.11	.10	.10	.10	.10	.11	.11	.12	.12	.12	.12	.13	.27	.98	Nov.
.96	.95	.95	.96	.96	.97	.97	.98	.97	.98	.97	.97	.11	.82	Dec.
.09	.08	.08	.08	.08	.08	.08	.09	.10	.10	.10	.10	.20	.00	Year.

NOTE.—The inches have been ommitted in the above tables except for January. The reader will have no difficulty in supplying the proper values for the remaining months.

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

SALT LAKE, UTAH.

[λ=40° 46′ N.; φ=111° 54′ W.]

1891.	1h a.m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p.m.
Jan	25.79	25.79	25.78	25.78	25.79	25.79	25.78	25.79	25.79	25.79	25.80	25.81	25.81
Feb	.53	.53	.52	.52	.52	.52	.52	.52	.52	.52	.53	.54	.55
Mar	.59	.59	.59	.59	.58	.58	.58	.58	.58	.59	.60	.60	.59
Apr	.62	.62	.62	.62	.62	.62	.62	.62	.63	.64	.65	.65	.65
May	.59	.59	.59	.59	.59	.59	.59	.60	.61	.62	.62	.61	.60
June	.55	.55	.55	.55	.55	.55	.56	.57	.58	.58	.58	.58	.58
July	.66	.66	.66	.66	.66	.67	.68	.69	.70	.70	.70	.70	.70
Aug	.68	.68	.68	.68	.69	.69	.70	.71	.72	.73	.73	.73	.73
Sept	.66	.66	.66	.66	.66	.66	.66	.67	.68	.68	.69	.70	.69
Oct	.77	.77	.77	.77	.77	.77	.78	.78	.79	.80	.81	.82	.81
Nov	.74	.74	.74	.73	.73	.73	.73	.73	.74	.74	.75	.76	.76
Dec	.67	.67	.66	.66	.66	.66	.65	.65	.65	.66	.67	.69	.69
Year	.65	.65	.65	.65	.65	.65	.66	.66	.67	.67	.68	.68	.68

SAN DIEGO, CAL.

[λ=32° 43′ N.; φ=117° 10′ W.]

Jan	30.04	30.03	30.02	30.02	30.02	30.02	30.01	30.01	30.01	30.02	30.04	30.05	30.06
Feb	.95	.95	.95	.95	.94	.92	.92	.92	.93	.93	.94	.95	.96
Mar	.93	.93	.92	.92	.91	.90	.90	.90	.91	.92	.93	.94	.95
Apr	.94	.93	.93	.92	.91	.91	.90	.91	.92	.93	.94	.94	.94
May	.93	.93	.92	.92	.91	.90	.90	.90	.91	.92	.93	.93	.93
June	.81	.80	.80	.79	.78	.78	.78	.79	.80	.80	.81	.81	.81
July	.83	.83	.82	.82	.81	.81	.81	.82	.83	.84	.85	.85	.85
Aug	.84	.84	.84	.84	.83	.83	.83	.83	.84	.85	.86	.86	.86
Sept	.84	.84	.84	.84	.83	.83	.82	.83	.84	.85	.86	.86	.86
Oct	.92	.91	.91	.91	.90	.90	.90	.91	.92	.93	.94	.95	.94
Nov	.97	.97	.97	.97	.96	.96	.96	.95	.96	.97	.98	.98	.99
Dec	.07	.07	.07	.06	.06	.06	.05	.05	.06	.07	.09	.10	.11
Year	.92	.92	.92	.91	.91	.90	.90	.90	.91	.92	.93	.94	.94

SAN FRANCISCO, CAL.

[λ=37° 48′ N.; φ=122° 26′ W.]

Jan	30.10	30.10	30.10	30.10	30.10	30.10	30.10	30.09	30.10	30.10	30.11	30.12	30.14
Feb	.86	.87	.88	.88	.88	.88	.88	.88	.88	.89	.90	.91	.92
Mar	.98	.98	.98	.98	.97	.97	.96	.97	.97	.98	.00	.00	.01
Apr	.96	.95	.95	.95	.94	.94	.94	.94	.95	.96	.96	.97	.97
May	.89	.89	.89	.88	.88	.87	.87	.87	.88	.89	.90	.90	.90
June	.85	.84	.84	.84	.83	.83	.83	.83	.84	.85	.86	.86	.86
July	.83	.83	.83	.82	.82	.82	.82	.83	.84	.84	.85	.86	.86
Aug	.84	.85	.85	.84	.84	.84	.84	.84	.85	.86	.87	.88	.88
Sept	.87	.87	.87	.87	.86	.86	.86	.86	.87	.88	.90	.90	.90
Oct	.93	.94	.94	.94	.94	.94	.94	.94	.95	.95	.96	.97	.98
Nov	.01	.01	.01	.01	.00	.00	.00	.00	.01	.02	.03	.04	.04
Dec	.12	.12	.11	.10	.10	.10	.10	.09	.09	.10	.11	.13	.14
Year	.94	.94	.94	.93	.93	.93	.93	.93	.94	.94	.95	.96	.97

SANTA FE, N. MEX.

[λ=35° 41′ N.; φ=105° 57′ W.]

Jan	23.25	23.25	23.25	23.25	23.25	23.24	23.24	23.23	23.24	23.24	23.25	23.26	23.26
Feb	.17	.17	.17	.17	.16	.16	.15	.15	.15	.16	.17	.17	.18
Mar	.15	.15	.15	.15	.14	.14	.14	.15	.15	.16	.16	.17	.16
Apr	.27	.27	.27	.27	.27	.27	.27	.28	.29	.29	.29	.30	.30
May	.34	.34	.34	.34	.33	.33	.34	.35	.35	.36	.36	.36	.36
June	.27	.28	.28	.28	.27	.28	.28	.29	.29	.30	.30	.30	.29
July	.43	.44	.43	.44	.44	.44	.44	.45	.46	.46	.46	.46	.45
Aug	.44	.44	.44	.44	.44	.44	.45	.46	.46	.47	.47	.47	.46
Sept	.42	.42	.42	.42	.42	.42	.42	.43	.44	.44	.44	.45	.44
Oct	.42	.42	.42	.42	.42	.42	.42	.43	.43	.44	.45	.45	.45
Nov	.30	.30	.30	.30	.30	.29	.29	.29	.30	.30	.31	.32	.32
Dec	.22	.22	.21	.21	.20	.20	.18	.18	.19	.20	.21	.22	.22
Year	.31	.31	.31	.30	.30	.30	.30	.31	.31	.32	.32	.33	.32

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

SALT LAKE, UTAH.

[H=4,348; gravity correction—.01; local time 2h 27m slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean Max.	Mean Min.	1891.
25.80	25.78	25.76	25.76	25.76	25.75	25.75	25.76	25.76	25.77	25.77	25.78	25.85	25.71	Jan.
.54	.52	.51	.50	.50	.50	.51	.51	.52	.53	.53	.52	.62	.42	Feb.
.59	.58	.58	.58	.58	.58	.58	.58	.59	.59	.60	.59	.69	.50	Mar.
.65	.64	.63	.62	.61	.60	.60	.60	.60	.61	.62	.62	.70	.53	Apr.
.60	.59	.58	.57	.56	.55	.55	.55	.55	.56	.57	.58	.64	.52	May.
.57	.57	.57	.56	.55	.54	.54	.55	.55	.56	.56	.56	.63	.48	June.
.69	.68	.66	.65	.64	.64	.63	.64	.64	.65	.66	.67	.72	.61	July.
.72	.70	.69	.68	.66	.65	.64	.64	.65	.66	.67	.69	.74	.63	Aug.
.67	.66	.64	.63	.62	.62	.62	.62	.63	.64	.64	.65	.72	.59	Sept.
.80	.79	.78	.77	.77	.76	.77	.77	.78	.78	.79	.78	.85	.72	Oct.
.75	.74	.72	.72	.72	.72	.72	.72	.73	.73	.73	.73	.81	.66	Nov.
.68	.66	.65	.65	.66	.66	.67	.67	.68	.68	.68	.67	.80	.54	Dec.
.67	.66	.65	.64	.64	.63	.63	.64	.64	.65	.65	.65	.73	.58	Year.

SAN DIEGO, CAL.

[H=93; gravity correction, —.03; local time 2h 49m slow.]

30.05	30.03	30.00	29.99	29.98	29.98	29.99	30.00	30.01	30.02	30.02	30.02	30.07	29.98	Jan.
.96	.95	.93	.92	.92	.91	.92	.93	.93	.94	.95	.94	.02	.86	Feb.
.95	.94	.92	.91	.90	.90	.90	.90	.90	.91	.92	.92	.97	.87	Mar.
.94	.93	.93	.92	.91	.90	.90	.91	.92	.93	.93	.92	.96	.89	Apr.
.93	.93	.92	.92	.91	.90	.90	.90	.91	.92	.92	.92	.95	.88	May.
.81	.81	.80	.80	.79	.78	.78	.78	.79	.79	.80	.80	.83	.76	June.
.84	.84	.84	.82	.82	.81	.80	.81	.81	.82	.82	.82	.86	.80	July.
.86	.85	.84	.83	.82	.82	.81	.81	.82	.83	.84	.84	.87	.80	Aug.
.85	.84	.83	.82	.81	.81	.80	.81	.82	.83	.84	.83	.87	.80	Sept.
.94	.92	.90	.90	.89	.89	.90	.90	.91	.92	.93	.92	.96	.88	Oct.
.98	.96	.94	.93	.93	.93	.93	.94	.95	.96	.96	.96	.00	.92	Nov.
.10	.08	.05	.05	.04	.05	.05	.06	.06	.07	.08	.07	.15	.99	Dec.
.94	.92	.91	.90	.89	.89	.89	.89	.90	.91	.92	.91	.96	.87	Year.

SAN FRANCISCO, CAL.

[H=109; gravity correction, —.02; local time 3h 10m slow.]

30.14	30.11	30.09	30.08	30.07	30.06	30.06	30.07	30.07	30.07	30.08	30.10	30.16	30.04	Jan.
.92	.91	.89	.87	.86	.86	.85	.85	.85	.86	.86	.88	.98	.76	Feb.
.00	.00	.98	.97	.96	.96	.95	.96	.96	.96	.97	.98	.03	.92	Mar.
.97	.96	.96	.95	.94	.94	.93	.93	.93	.94	.95	.95	.00	.89	Apr.
.91	.90	.90	.89	.88	.87	.87	.87	.87	.88	.89	.88	.92	.85	May.
.86	.86	.85	.85	.84	.83	.82	.82	.83	.84	.84	.84	.88	.81	June.
.86	.85	.84	.84	.83	.82	.81	.81	.82	.82	.83	.83	.87	.80	July.
.88	.87	.86	.85	.84	.83	.82	.82	.82	.83	.84	.85	.89	.81	Aug.
.90	.89	.88	.87	.85	.84	.84	.84	.84	.85	.86	.87	.90	.82	Sept.
.97	.96	.94	.93	.92	.92	.91	.91	.92	.93	.94	.94	.99	.89	Oct.
.04	.02	.01	.00	.99	.98	.98	.98	.99	.00	.00	.01	.05	.96	Nov.
.14	.13	.11	.10	.10	.10	.10	.10	.11	.11	.12	.11	.20	.02	Dec.
.96	.96	.94	.93	.92	.92	.91	.91	.92	.92	.93	.94	.99	.88	Year.

SANTA FE, N. MEX.

[H=7,026; gravity correction, —.02; local time 2h 4m slow.]

23.24	23.22	23.22	23.21	23.22	23.22	23.23	23.24	23.24	23.25	23.25	23.24	23.31	23.18	Jan.
.17	.16	.15	.15	.15	.15	.16	.17	.17	.18	.18	.16	.23	.10	Feb.
.16	.14	.12	.11	.11	.11	.12	.12	.13	.14	.14	.14	.21	.08	Mar.
.29	.27	.26	.25	.24	.24	.24	.25	.26	.27	.28	.27	.33	.21	Apr.
.34	.33	.32	.31	.30	.30	.30	.30	.31	.32	.33	.33	.38	.28	May.
.29	.28	.27	.26	.25	.25	.24	.24	.25	.27	.28	.27	.32	.22	June.
.44	.43	.42	.41	.40	.39	.39	.40	.40	.42	.43	.43	.47	.38	July.
.45	.43	.42	.41	.40	.40	.40	.40	.41	.43	.44	.44	.48	.38	Aug.
.43	.42	.40	.39	.38	.38	.38	.38	.40	.40	.40	.41	.46	.36	Sept.
.44	.43	.41	.40	.40	.40	.40	.41	.41	.42	.42	.42	.47	.37	Oct.
.31	.29	.28	.27	.27	.27	.27	.28	.28	.29	.30	.29	.36	.24	Nov.
.21	.19	.18	.18	.19	.19	.20	.20	.21	.22	.22	.20	.31	.11	Dec.
.31	.30	.29	.28	.28	.27	.28	.28	.29	.30	.31	.30	.36	.24	Year.

NOTE.—The inches have been omitted in the above tables except for January. The reader will have no difficulty in supplying the proper values for the remaining months.

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

SAVANNAH, GA.

[λ = 32° 5′ N.; φ = 81° 5′ W.]

1891.	1 h a. m.	2 h	3 h	4 h	5 h	6 h	7 h	8 h	9 h	10 h	11 h	Noon.	1 h p. m.
Jan.	30.06	30.06	30.06	30.06	30.06	30.06	30.07	30.08	30.10	30.11	30.11	30.09	30.05
Feb.	.05	.05	.04	.04	.05	.06	.07	.08	.09	.09	.09	.08	.05
Mar	.96	.96	.96	.95	.96	.97	.98	.99	.99	.00	.99	.98	.96
Apr.	.98	.98	.98	.98	.99	.00	.02	.02	.02	.03	.02	.01	.99
May	.94	.94	.93	.94	.94	.95	.97	.97	.98	.98	.97	.96	.94
June	.89	.89	.88	.88	.89	.90	.91	.92	.92	.91	.91	.91	.89
July	.98	.98	.97	.97	.98	.99	.00	.01	.02	.02	.01	.00	.99
Aug	.96	.95	.95	.95	.95	.96	.97	.98	.99	.99	.98	.98	.96
Sep.	.03	.02	.02	.02	.02	.03	.05	.05	.06	.06	.06	.05	.03
Oct.	.02	.02	.02	.02	.02	.03	.04	.06	.06	.06	.06	.04	.02
Nov	.08	.08	.08	.08	.08	.09	.10	.11	.12	.12	.11	.09	.07
Dec.	.16	.16	.16	.16	.16	.16	.17	.18	.19	.20	.19	.17	.15
Year	.01	.01	.00	.00	.01	.02	.03	.04	.04	.05	.04	.03	.01

WASHINGTON, D. C.

[λ = 38° 54′ N.; φ = 77° 3′ W.]

Jan.	29.94	29.95	29.95	29.95	29.95	29.96	29.96	29.98	29.99	30.00	29.99	29.96	29.95
Feb.	.97	.98	.98	.98	.98	.99	.00	.01	.02	.02	.01	.00	.98
Mar	.99	.99	.98	.98	.99	.00	.01	.02	.02	.02	.00	.99	.98
Apr.	.93	.92	.92	.92	.93	.94	.95	.95	.95	.95	.94	.93	.92
May	.94	.93	.93	.94	.94	.95	.96	.97	.97	.97	.97	.96	.95
June	.86	.85	.85	.86	.87	.88	.88	.89	.89	.89	.89	.88	.87
July	.92	.92	.91	.92	.92	.93	.94	.94	.95	.95	.95	.94	.93
Aug.	.89	.89	.88	.88	.89	.90	.90	.91	.92	.92	.92	.91	.90
Sep.	.04	.04	.03	.04	.04	.05	.06	.07	.07	.08	.08	.06	.05
Oct.	.00	.99	.99	.99	.99	.00	.01	.02	.02	.02	.02	.01	.98
Nov.	.06	.06	.06	.06	.07	.07	.08	.09	.09	.09	.09	.06	.05
Dec.	.09	.09	.10	.10	.10	.10	.11	.12	.13	.13	.12	.10	.07
Year	.97	.97	.97	.97	.97	.98	.99	.00	.00	.00	.00	.98	.97

WILMINGTON, N. C.

[λ = 34° 14′ N.; φ = 77° 57′ W.]

Jan.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Feb.	30.07	30.06	30.06	30.06	30.06	30.08	30.09	30.09	30.10	30.10	30.10	30.08	30.06
Mar	.98	.98	.97	.97	.98	.99	.00	.01	.01	.00	.00	.98	.96
Apr.	.99	.99	.99	.99	.00	.01	.02	.03	.03	.02	.02	.00	.99
May	.96	.95	.95	.95	.96	.97	.98	.98	.99	.98	.98	.96	.95
June	.90	.89	.89	.89	.90	.91	.92	.93	.93	.93	.92	.92	.90
July	.98	.97	.97	.97	.98	.99	.00	.00	.01	.01	.01	.00	.99
Aug	.95	.95	.94	.95	.95	.96	.97	.98	.98	.99	.99	.98	.96
Sep.	.05	.04	.04	.04	.05	.06	.07	.08	.08	.09	.08	.07	.06
Oct.	.02	.02	.01	.01	.02	.03	.04	.04	.05	.05	.05	.03	.01
Nov	.09	.09	.09	.09	.09	.10	.11	.12	.13	.13	.13	.10	.08
Dec.	.18	.18	.18	.18	.18	.19	.20	.21	.22	.22	.22	.19	.17
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

SAVANNAH, GA.

[H = 87; gravity correction, —.03; local time, 0h, 24m slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean Max.	Mean Min.	1891.
30.03	30.02	30.02	30.03	30.04	30.05	30.06	30.07	30.07	30.07	30.06	30.06	30.15	29.96	Jan.
.03	.01	.02	.02	.03	.04	.05	.06	.06	.06	.06	.05	.16	.94	Feb.
.95	.93	.93	.92	.93	.94	.94	.95	.96	.96	.95	.96	.05	.86	Mar.
.98	.96	.96	.96	.96	.97	.97	.98	.99	.99	.99	.99	.06	.92	Apr.
.93	.92	.91	.91	.91	.92	.93	.94	.95	.95	.95	.94	.00	.88	May.
.88	.86	.86	.85	.86	.87	.88	.89	.89	.90	.90	.89	.93	.84	June.
.98	.97	.96	.96	.97	.97	.98	.98	.99	.99	.99	.99	.03	.95	July.
.94	.93	.92	.92	.93	.94	.95	.96	.97	.97	.97	.96	.00	.91	Aug.
.02	.00	.00	.00	.00	.01	.02	.03	.03	.03	.03	.03	.07	.99	Sep.
.00	.99	.99	.99	.00	.01	.02	.03	.04	.03	.03	.03	.09	.96	Oct.
.05	.05	.04	.05	.06	.07	.08	.09	.09	.09	.09	.08	.16	.99	Nov.
.13	.13	.13	.14	.15	.16	.16	.17	.17	.17	.16	.16	.24	.09	Dec.
.99	.98	.98	.98	.99	.00	.00	.01	.02	.02	.02	.01	.08	.94	Year.

WASHINGTON, D. C.

[H = 112; gravity correction, —.02; local time 0h, 8m slow.]

29.94	29.94	29.94	29.95	29.96	29.96	29.96	29.96	29.96	29.96	29.95	29.96	30.10	29.80	Jan.
.95	.95	.95	.96	.98	.99	.99	.01	.01	.00	.00	.99	.18	.78	Feb.
.96	.95	.94	.95	.95	.96	.97	.97	.98	.98	.98	.98	.10	.85	Mar.
.90	.88	.88	.87	.88	.88	.90	.91	.91	.92	.92	.92	.02	.83	Apr.
.94	.92	.91	.91	.91	.92	.93	.94	.95	.95	.95	.94	.01	.87	May.
.86	.85	.84	.83	.83	.84	.84	.85	.85	.86	.86	.86	.91	.80	June.
.92	.91	.90	.90	.90	.90	.90	.92	.92	.92	.92	.92	.98	.85	July.
.89	.88	.87	.87	.87	.87	.88	.90	.90	.90	.90	.89	.95	.84	Aug.
.04	.03	.02	.02	.02	.03	.04	.04	.05	.05	.05	.05	.10	.99	Sep.
.98	.97	.96	.96	.97	.98	.98	.99	.99	.99	.99	.99	.09	.90	Oct.
.03	.03	.04	.04	.06	.07	.07	.08	.09	.09	.09	.07	.19	.95	Nov.
.06	.06	.06	.06	.08	.09	.09	.10	.10	.10	.10	.09	.21	.96	Dec.
.96	.95	.94	.94	.95	.96	.96	.97	.98	.98	.97	.97	.07	.87	Year.

WILMINGTON, N. C.

[H = 78; gravity correction, —.03; local time, 0h, 12m slow.]

.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jan.
30.04	30.03	30.03	30.04	30.05	30.06	30.06	30.08	30.08	30.08	30.08	30.07	30.21	29.92	Feb.
.94	.94	.92	.92	.93	.94	.95	.96	.97	.97	.97	.97	.08	.86	Mar.
.97	.96	.96	.96	.96	.97	.98	.00	.00	.00	.00	.99	.08	.91	Apr.
.94	.93	.93	.93	.94	.94	.96	.97	.97	.96	.96	.96	.02	.89	May.
.89	.88	.87	.87	.87	.88	.89	.90	.90	.91	.90	.90	.95	.85	June.
.98	.97	.97	.97	.97	.98	.98	.98	.99	.99	.98	.98	.03	.93	July
.95	.94	.94	.94	.94	.95	.96	.96	.96	.97	.96	.96	.00	.91	Aug.
.05	.04	.03	.03	.03	.04	.05	.06	.06	.06	.06	.06	.10	.01	Sep.
.00	.99	.99	.00	.00	.02	.02	.03	.03	.03	.02	.02	.10	.94	Oct.
.07	.06	.07	.07	.08	.09	.10	.10	.11	.11	.11	.10	.20	.99	Nov.
.16	.16	.16	.16	.17	.18	.19	.19	.19	.19	.19	.18	.27	.09	Dec.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Year.

NOTE.—The inches have been omitted in the above tables except for January. The reader will have no difficulty in supplying the proper values for the remaining months.

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

BISMARCK, N. DAK.

[$\gamma = 46^\circ 47'$ N.; $\Phi = 100^\circ 38'$ W.]

1892.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan	28.24	28.24	28.24	28.24	28.24	28.23	28.23	28.24	28.24	28.24	28.25	28.25	28.24
Feb	.24	.24	.24	.24	.23	.24	.24	.24	.25	.25	.25	.26	.25
Mar	.24	.24	.23	.23	.22	.22	.22	.22	.22	.22	.22	.22	.21
Apr	.18	.17	.17	.16	.16	.17	.17	.18	.18	.18	.18	.18	.18
May	.19	.19	.19	.19	.19	.19	.20	.20	.20	.20	.20	.19	.19
June ...	.13	.12	.12	.13	.13	.13	.14	.14	.14	.14	.13	.14	.14
July ...	.18	.17	.18	.18	.18	.18	.19	.19	.19	.19	.19	.19	.19
Aug	.18	.18	.18	.18	.18	.18	.19	.19	.19	.18	.18	.18	.17
Sept ...	.17	.18	.18	.17	.18	.18	.19	.19	.19	.19	.19	.19	.17
Oct	.18	.18	.19	.19	.19	.19	.20	.20	.21	.21	.21	.21	.20
Nov ...	.14	.14	.13	.14	.13	.13	.13	.13	.13	.14	.14	.13	.12
Dec	.23	.22	.22	.22	.21	.21	.21	.21	.21	.21	.21	.22	.20
Year ...	.19	.19	.19	.19	.19	.19	.19	.20	.20	.20	.20	.20	.19

BOSTON, MASS.

[$\lambda = 42^\circ 21'$ N.; $\Phi = 71^\circ 4'$ W.]

Jan	29.87	29.87	29.87	29.86	29.86	29.87	29.87	29.88	29.89	29.89	29.87	29.84	29.83
Feb	.98	.97	.97	.97	.98	.98	.99	.01	.01	.01	.00	.99	.97
Mar	.77	.77	.76	.77	.77	.78	.79	.79	.79	.78	.78	.76	.75
Apr	.87	.86	.86	.86	.87	.88	.89	.89	.89	.88	.87	.86	.85
May	.85	.85	.84	.84	.85	.85	.86	.86	.86	.86	.85	.85	.84
June ...	.84	.83	.83	.84	.85	.85	.86	.86	.86	.86	.85	.84	.83
July....	.88	.88	.88	.88	.89	.90	.91	.91	.91	.91	.91	.90	.89
Aug	.87	.86	.86	.86	.87	.88	.88	.89	.89	.88	.88	.87	.86
Sept	.01	.00	.00	.00	.00	.02	.02	.03	.03	.02	.01	.00	.99
Oct	.80	.79	.79	.79	.79	.80	.81	.81	.81	.80	.79	.78	.76
Nov	.91	.91	.91	.90	.90	.90	.91	.91	.91	.90	.89	.87	.86
Dec	.83	.83	.84	.83	.83	.84	.84	.85	.86	.86	.84	.82	.80
Year....	.87	.87	.87	.87	.87	.88	.89	.89	.89	.89	.88	.86	.85

BUFFALO, N. Y.

[$\lambda = 42^\circ 53'$ N.; $\Phi = 78^\circ 53'$ W.]

Jan	29.23	29.24	29.23	29.22	29.21	29.22	29.22	29.23	29.25	29.25	29.25	29.23	29.21
Feb	.33	.33	.33	.33	.34	.34	.35	.35	.36	.36	.35	.34	.32
Mar	.26	.26	.25	.24	.25	.25	.26	.26	.27	.27	.27	.27	.26
Apr	.29	.29	.29	.29	.30	.31	.32	.32	.32	.32	.32	.31	.30
May	.19	.18	.18	.18	.18	.19	.20	.20	.20	.20	.20	.19	.19
June ...	.20	.19	.19	.20	.20	.21	.22	.22	.22	.22	.22	.22	.21
July	.32	.31	.31	.32	.32	.33	.34	.34	.34	.34	.34	.33	.32
Aug	.27	.26	.26	.26	.26	.27	.27	.28	.28	.28	.28	.27	.26
Sept	.35	.35	.35	.35	.36	.37	.38	.38	.39	.39	.38	.38	.37
Oct	.24	.24	.24	.24	.25	.26	.27	.28	.28	.28	.27	.27	.25
Nov	.27	.26	.26	.26	.26	.26	.27	.28	.28	.28	.29	.28	.26
Dec.....	.28	.28	.28	.28	.28	.28	.29	.30	.30	.31	.31	.29	.27
Year....	.27	.27	.26	.26	.27	.27	.28	.29	.29	.29	.29	.28	.27

CHICAGO, ILL.

[$\lambda = 41^\circ 52'$ N.; $\Phi = 87^\circ 38'$ W.]

Jan	29.18	29.18	29.19	29.19	29.19	29.18	29.19	29.20	29.21	29.22	29.22	29.21	29.19
Feb	.20	.19	.19	.19	.19	.19	.19	.20	.20	.21	.20	.20	.19
Mar	.17	.17	.17	.16	.16	.16	.17	.18	.19	.19	.19	.19	.18
Apr	.16	.15	.14	.14	.14	.15	.16	.17	.17	.17	.18	.17	.17
May	.02	.02	.02	.02	.02	.02	.03	.04	.04	.04	.04	.04	.03
June ...	.04	.04	.04	.05	.05	.06	.07	.07	.08	.08	.08	.08	.07
July	.20	.20	.20	.20	.20	.21	.21	.22	.22	.22	.22	.22	.21
Aug	.14	.14	.14	.14	.14	.15	.16	.17	.17	.18	.18	.18	.16
Sept	.21	.21	.20	.20	.21	.21	.22	.22	.23	.23	.23	.22	.21
Oct	.19	.19	.18	.18	.19	.19	.19	.20	.20	.20	.20	.19	.18
Nov	.16	.16	.16	.16	.16	.16	.17	.18	.18	.18	.18	.17	.16
Dec	.21	.20	.21	.20	.20	.19	.19	.20	.20	.21	.22	.20.	.19
Year....	.16	.15	.15	.15	.15	.16	.16	.17	.18	.18	.18	.17	.16

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

BISMARCK, N. DAK.

[H = 1,698; gravity corr. 0; local time 1h 42m slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean Max.	Mean Min.	1892.
28.23	28.22	28.22	28.23	28.24	28.24	28.24	28.25	28.25	28.25	28.25	28.24	28.36	28.10	Jan.
.24	.22	.22	.22	.22	.23	.24	.24	.24	.24	.24	.24	.37	.10	Feb.
.20	.19	.18	.18	.18	.19	.20	.21	.21	.22	.22	.21	.33	.09	Mar.
.17	.16	.16	.15	.16	.16	.16	.17	.19	.19	.20	.17	.28	.07	Apr.
.18	.18	.17	.16	.16	.16	.16	.17	.18	.19	.19	.19	.11	.15	May.
.13	.12	.12	.11	.11	.10	.10	.10	.11	.12	.12	.12	.22	.02	June.
.18	.18	.17	.16	.16	.15	.15	.16	.18	.18	.18	.18	.26	.08	July.
.17	.16	.15	.14	.14	.13	.13	.14	.16	.17	.17	.17	.24	.08	Aug.
.16	.15	.14	.14	.14	.14	.15	.16	.17	.18	.18	.17	.27	.07	Sept.
.18	.17	.16	.16	.16	.17	.17	.18	.18	.18	.19	.19	.29	.07	Oct.
.11	.10	.10	.11	.12	.13	.13	.13	.14	.14	.14	.13	.28	.99	Nov.
.19	.18	.18	.19	.20	.21	.22	.22	.23	.22	.22	.21	.34	.09	Dec.
.18	.17	.16	.16	.16	.17	.17	.18	.19	.19	.19	.18	.28	.08	Year.

BOSTON, MASS.

[H = 126; gravity corr. −.01; local time 0h 16m fast.]

29.83	29.84	29.84	29.85	29.86	29.86	29.87	29.87	29.87	29.86	29.85	29.86	29.99	29.71	Jan.
.96	.96	.96	.98	.98	.99	.99	.99	.99	.99	.99	.98	.10	.86	Feb.
.74	.74	.74	.74	.75	.76	.77	.77	.78	.78	.78	.77	.90	.65	Mar.
.84	.83	.83	.83	.84	.85	.87	.88	.87	.88	.88	.86	.97	.76	Apr.
.83	.82	.82	.82	.83	.84	.84	.86	.86	.85	.85	.84	.95	.73	May.
.82	.81	.80	.80	.80	.81	.82	.83	.83	.83	.83	.83	.92	.73	June.
.89	.88	.87	.87	.87	.88	.88	.89	.89	.89	.89	.89	.96	.81	July.
.86	.85	.85	.84	.85	.86	.86	.87	.87	.87	.87	.87	.92	.81	Aug.
.98	.98	.98	.98	.98	.00	.00	.01	.02	.01	.01	.00	.10	.91	Sept.
.76	.76	.76	.77	.78	.79	.79	.80	.80	.80	.80	.79	.88	.69	Oct.
.85	.86	.87	.88	.89	.90	.90	.90	.90	.90	.90	.89	.02	.77	Nov.
.80	.80	.81	.82	.82	.83	.83	.84	.84	.84	.84	.83	.94	.72	Dec.
.85	.84	.84	.85	.85	.86	.87	.88	.88	.88	.87	.87	.97	.76	Year.

BUFFALO, N. Y.

[H = 690; gravity corr. 0; local time 0h 15m slow.]

29.21	29.22	29.22	29.23	29.24	29.25	29.25	29.24	29.24	29.24	29.24	29.23	29.37	29.10	Jan.
.31	.31	.31	.31	.32	.32	.33	.33	.33	.33	.33	.33	.46	.19	Feb.
.24	.24	.34	.24	.25	.26	.27	.27	.27	.27	.27	.26	.38	.14	Mar.
.28	.28	.27	.27	.27	.28	.29	.29	.29	.30	.30	.30	.40	.19	Apr.
.19	.18	.18	.18	.18	.19	.20	.21	.21	.20	.20	.19	.29	.09	May.
.20	.20	.19	.18	.18	.19	.19	.20	.21	.21	.20	.20	.28	.13	June.
.31	.30	.30	.29	.29	.29	.30	.31	.32	.32	.32	.32	.38	.25	July.
.26	.26	.25	.25	.25	.25	.26	.27	.27	.27	.27	.26	.33	.20	Aug.
.36	.34	.34	.33	.33	.34	.34	.35	.35	.35	.35	.36	.44	.27	Sept.
.24	.24	.23	.23	.23	.24	.24	.24	.24	.24	.24	.25	.35	.14	Oct.
.26	.25	.26	.26	.27	.27	.28	.28	.28	.28	.28	.27	.37	.15	Nov.
.26	.26	.27	.27	.28	.29	.29	.29	.29	.28	.28	.28	.39	.16	Dec.
.26	26	.25	.26	.26	.26	.27	.27	.27	.27	.27	.27	.37	.17	Year.

CHICAGO, ILL.

[H = 824; gravity corr. −.01; local time 0h 50m slow.]

29.18	29.17	29.18	29.18	29.18	29.19	29.19	29.19	29.19	29.19	29.19	29.19	29.30	29.04	Jan.
.18	.17	.17	.18	.18	.19	.19	.20	.20	.20	.20	.19	.32	.07	Feb.
.17	.16	.15	.15	.15	.16	.16	.17	.17	.17	.16	.17	.29	.04	Mar.
.16	.15	.14	.13	.13	.13	.14	.15	.15	.16	.16	.15	.26	.04	Apr.
.02	.02	.01	.00	.01	.01	.01	.02	.03	.03	.03	.02	.13	.91	May.
.06	.05	.04	.04	.04	.03	.04	.05	.05	.06	.06	.06	.12	.99	June.
.20	.19	.19	.18	.18	.18	.18	.19	.20	.20	.20	.20	.26	.13	July.
.15	.14	.14	.13	.13	.13	.13	.14	.15	.15	.15	.15	.20	.09	Aug.
.20	.19	.19	.18	.19	.19	.20	.20	.21	.21	.21	.21	.27	.15	Sept.
.16	.15	.15	.15	.16	.17	.17	.17	.18	.18	.18	.18	.26	.08	Oct.
.14	.14	.14	.15	.16	.16	.16	.17	.17	.17	.17	.16	.29	.03	Nov.
.18	.17	.18	.18	.19	.19	.20	.20	.20	.20	.20	.20	.31	.08	Dec.
.15	.14	.14	.14	.14	.14	.15	.15	.16	.16	.16	.16	.25	.06	Year.

NOTE.—The inches have been omitted in the above tables except for January. The reader will have no difficulty in supplying the proper values for the remaining months.

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

CLEVELAND, OHIO.

[λ=41° 30′ N.; φ=81° 42′ W.]

1892.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan	29.24	29.24	29.25	29.25	29.24	29.24	29.25	29.26	29.27	29.28	29.28	29.26	29.24
Feb	.32	.32	.32	.32	.32	.33	.32	.33	.33	.33	.33	.32	.30
Mar	.26	.26	.26	.25	.25	.26	.26	.27	.27	.27	.27	.27	.26
Apr	.28	.28	.28	.28	.29	.30	.31	.31	.31	.31	.31	.30	.29
May	.14	.14	.13	.13	.14	.15	.16	.17	.17	.17	.16	.16	.15
June	.15	.15	.15	.15	.16	.17	.18	.19	.19	.19	.19	.18	.17
July	.29	.29	.29	.29	.30	.31	.32	.32	.32	.32	.32	.32	.31
Aug	.23	.23	.23	.23	.24	.24	.25	.26	.26	.26	.26	.26	.24
Sept	.31	.32	.31	.32	.32	.34	.35	.36	.36	.36	.35	.34	.33
Oct	.25	.25	.25	.25	.26	.27	.28	.29	.29	.29	.28	.27	.25
Nov	.23	.23	.24	.24	.25	.25	.26	.28	.28	.28	.28	.26	.25
Dec	.28	.29	.29	.29	.29	.29	.30	.30	.31	.31	.31	.29	.27
Year	.25	.25	.25	.25	.26	.26	.27	.28	.28	.28	.28	.27	.26

CINCINNATI, OHIO.

[λ=39° 6′ N.; φ=84° 30′ W.]

Jan	29.43	29.44	29.45	29.44	29.44	29.45	29.46	29.47	29.48	29.49	29.49	29.47	29.45
Feb	.44	.44	.44	.43	.43	.43	.44	.45	.45	.45	.45	.45	.42
Mar	.40	.39	.39	.38	.38	.39	.40	.41	.41	.41	.41	.41	.40
Apr	.40	.39	.39	.39	.39	.40	.41	.42	.42	.42	.42	.41	.40
May	.32	.28	.28	.28	.28	.30	.27	.31	.31	.31	.31	.31	.30
June	.30	.29	.29	.29	.30	.31	.32	.33	.33	.33	.32	.32	.31
July	.43	.42	.42	.43	.44	.44	.45	.45	.46	.46	.46	.45	.44
Aug	.36	.36	.36	.36	.36	.38	.38	.39	.39	.39	.39	.38	.37
Sept	.46	.46	.46	.46	.47	.48	.49	.49	.50	.50	.49	.48	.46
Oct	.43	.43	.43	.44	.44	.46	.46	.47	.48	.48	.47	.46	.43
Nov	.43	.43	.44	.44	.44	.45	.45	.46	.47	.47	.47	.46	.43
Dec	.46	.46	.46	.46	.46	.46	.47	.48	.49	.50	.49	.48	.45
Year	.40	.40	.40	.40	.40	.41	.42	.43	.43	.43	.43	.42	.40

DETROIT, MICH.

[λ=42° 20′ N.; φ=83° 3′ W.]

Jan	29.24	29.24	29.24	29.24	29.23	29.23	29.24	29.24	29.26	29.26	29.26	29.26	29.24
Feb	.32	.32	.32	.31	.31	.32	.32	.32	.33	.33	.33	.33	.31
Mar	.27	.27	.26	.26	.26	.26	.27	.28	.28	.28	.28	.27	.27
Apr	.28	.28	.28	.28	.28	.29	.30	.30	.30	.30	.30	.29	.28
May	.15	.14	.13	.14	.14	.15	.16	.16	.16	.17	.16	.16	.16
June	.16	.16	.15	.16	.16	.17	.18	.19	.19	.19	.19	.18	.18
July	.30	.30	.30	.30	.31	.32	.33	.33	.33	.33	.32	.32	.31
Aug	.25	.24	.24	.24	.25	.26	.26	.27	.27	.27	.27	.27	.26
Sept	.33	.33	.33	.33	.33	.34	.35	.35	.36	.36	.35	.34	.33
Oct	.26	.27	.26	.26	.27	.28	.28	.29	.29	.29	.29	.28	.26
Nov	.25	.25	.25	.25	.25	.26	.26	.27	.28	.28	.28	.27	.25
Dec	.29	.29	.30	.29	.29	.29	.29	.30	.31	.31	.31	.29	.27
Year	.26	.26	.26	.26	.26	.26	.27	.28	.28	.28	.28	.27	.26

DODGE CITY, KANS.

[λ=37° 45′ N.; φ=100° 0′ W.]

Jan	27.49	27.49	27.49	27.49	27.48	27.48	27.48	27.49	27.50	27.52	27.53	27.53	27.52
Feb	.42	.42	.42	.42	.42	.42	.42	.43	.44	.45	.46	.46	.44
Mar	.42	.42	.41	.40	.40	.40	.40	.41	.42	.42	.42	.42	.41
Apr	.28	.28	.27	.27	.28	.29	.30	.32	.33	.34	.34	.34	.33
May	.30	.30	.29	.29	.29	.30	.30	.31	.32	.33	.33	.33	.32
June	.33	.33	.33	.32	.33	.34	.34	.35	.36	.36	.35	.35	.34
July	.45	.45	.44	.44	.44	.45	.45	.46	.47	.47	.47	.46	.46
Aug	.43	.43	.43	.43	.43	.43	.44	.44	.45	.46	.46	.45	.44
Sept	.46	.45	.45	.45	.44	.44	.45	.46	.47	.47	.48	.47	.46
Oct	.45	.45	.45	.45	.44	.45	.45	.46	.47	.48	.48	.47	.46
Nov	.42	.41	.40	.41	.41	.41	.42	.43	.45	.46	.47	.47	.46
Dec	.43	.42	.42	.42	.42	.41	.40	.41	.42	.44	.45	.45	.44
Year	.41	.40	.40	.40	.40	.40	.41	.42	.42	.43	.44	.44	.42

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

CLEVELAND, OHIO.

[H=740; gravity correction —.01; local time 0^h 27^m slow.]

2^h	3^h	4^h	5^h	6^h	7^h	8^h	9^h	10^h	11^h	Mid.	Mean.	Mean max.	Mean min.	1892.
29.23	29.24	29.24	29.25	29.25	29.26	29.26	29.25	29.25	29.25	29.25	29.25	29.38	29.12	Jan.
.28	.27	.27	.28	.28	.29	.29	.30	.30	.30	.31	.31	.44	.17	Feb.
.25	.24	.24	.24	.24	.25	.26	.26	.27	.27	.27	.26	.38	.14	Mar.
.28	.27	.26	.26	.26	.26	.27	.27	.28	.28	.28	.28	.38	.19	Apr.
.15	.14	.13	.13	.13	.13	.14	.14	.14	.14	.14	.14	.24	.04	May.
.16	.15	.14	.14	.14	.14	.14	.14	.15	.15	.16	.16	.22	.09	June.
.30	.29	.28	.27	.26	.27	.28	.28	.29	.29	.28	.30	.35	.22	July.
.23	.22	.22	.21	.21	.21	.22	.23	.23	.23	.24	.24	.29	.18	Aug.
.31	.30	.29	.29	.29	.29	.30	.31	.31	.31	.32	.32	.39	.24	Sept.
.24	.23	.23	.22	.23	.23	.23	.23	.24	.24	.23	.25	.34	.14	Oct.
.24	.23	.24	.24	.24	.24	.24	.24	.25	.25	.24	.25	.36	.12	Nov.
.26	.25	.26	.26	.27	.27	.28	.28	.28	.27	.27	.28	.39	.16	Dec.
.24	.24	.23	.23	.23	.24	.24	.24	.25	.25	.25	.25	.35	.15	Year.

CINCINNATI, OHIO.

[H = 628; gravity correction —.02; local time 0^h 38^m slow.]

29.43	29.43	29.43	29.43	29.44	29.44	29.44	29.44	29.45	29.44	29.44	29.45	29.56	29.33	Jan.
.41	.40	.40	.41	.41	.42	.43	.43	.44	.44	.44	.43	.56	.30	Feb.
.38	.37	.36	.37	.37	.38	.39	.40	.40	.40	.40	.39	.51	.27	Mar.
.39	.38	.37	.37	.37	.37	.38	.39	.40	.40	.40	.40	.49	.30	Apr.
.29	.28	.26	.26	.26	.27	.27	.28	.29	.29	.30	.29	.38	.20	May.
.29	.28	.27	.26	.26	.28	.28	.29	.30	.31	.30	.30	.35	.24	June.
.42	.41	.40	.40	.40	.40	.41	.41	.42	.42	.43	.43	.48	.37	July.
.36	.34	.33	.32	.32	.32	.33	.35	.36	.36	.37	.36	.41	.31	Aug.
.44	.43	.42	.42	.42	.43	.43	.45	.45	.46	.46	.46	.52	.39	Sept.
.41	.40	.39	.39	.39	.40	.40	.40	.41	.41	.42	.43	.50	.34	Oct.
.42	.41	.41	.41	.41	.42	.42	.43	.44	.44	.44	.44	.55	.32	Nov.
.44	.43	.43	.43	.44	.44	.45	.45	.45	.45	.45	.46	.56	.34	Dec.
.39	.38	.37	.37	.38	.38	.39	.40	.40	.40	.40	.40	.49	.31	Year.

DETROIT, MICH.

[H=724; gravity correction —.01; local time 0^h 32^m slow.]

29.23	29.24	29.24	29.25	29.25	29.26	29.26	29.26	29.26	29.25	29.25	29.25	29.37	29.12	Jan.
.29	.28	.28	.29	.30	.30	.31	.32	.32	.32	.32	.31	.45	.17	Feb.
.25	.24	.24	.24	.25	.26	.27	.27	.28	.28	.27	.27	.39	.15	Mar.
.27	.26	.26	.26	.26	.26	.27	.28	.29	.29	.28	.28	.39	.18	Apr.
.15	.14	.14	.14	.14	.14	.15	.15	.16	.16	.16	.15	.25	.04	May.
.16	.16	.15	.14	.14	.15	.15	.16	.17	.17	.17	.17	.23	.10	June.
.30	.29	.28	.28	.27	.28	.28	.29	.30	.30	.30	.30	.37	.23	July.
.25	.24	.23	.23	.23	.23	.24	.25	.25	.26	.25	.25	.31	.19	Aug.
.32	.30	.30	.30	.29	.30	.31	.32	.32	.33	.33	.33	.40	.26	Sept.
.25	.24	.24	.24	.24	.25	.25	.26	.26	.26	.26	.26	.36	.16	Oct.
.24	.24	.24	.25	.26	.26	.27	.27	.27	.26	.26	.26	.38	.13	Nov.
.26	.26	.27	.27	.28	.29	.29	.29	.28	.28	.28	.29	.40	.17	Dec.
.25	.24	.24	.24	.24	.25	.25	.26	.26	.26	.26	.26	.36	.16	Year.

DODGE CITY, KANS.

[H = 2.523; gravity correction —.02; local time 1^h 40^m slow.]

27.49	27.47	27.47	27.47	27.47	27.48	27.48	27.49	27.50	27.50	27.50	27.49	27.60	27.39	Jan.
.42	.40	.39	.39	.39	.40	.40	.41	.42	.43	.43	.42	.53	.30	Feb.
.39	.37	.36	.35	.34	.35	.35	.37	.38	.38	.38	.39	.49	.28	Mar.
.32	.30	.29	.28	.27	.28	.28	.28	.30	.31	.30	.30	.43	.15	Apr.
.31	.30	.28	.28	.27	.26	.26	.28	.29	.30	.31	.30	.40	.20	May.
.33	.32	.31	.30	.29	.28	.28	.30	.31	.33	.34	.33	.41	.25	June.
.44	.43	.42	.40	.39	.38	.39	.40	.42	.43	.44	.44	.50	.35	July.
.42	.41	.39	.38	.38	.37	.38	.39	.41	.43	.43	.42	.48	.36	Aug.
.45	.43	.42	.41	.40	.40	.41	.43	.44	.45	.46	.44	.52	.37	Sept.
.44	.42	.41	.40	.40	.41	.42	.42	.43	.44	.44	.44	.52	.37	Oct.
.44	.42	.40	.40	.40	.41	.41	.42	.42	.42	.42	.42	.55	.27	Nov.
.42	.40	.39	.40	.40	.41	.42	.42	.43	.43	.43	.42	.54	.30	Dec.
.41	.39	.38	.37	.37	.37	.37	.38	.40	.40	.41	.40	.50	.30	Year.

NOTE.—The inches have been omitted in the above tables except for January. The reader will have no difficulty in supplying the proper values for the remaining months.

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

EASTPORT, ME.

[λ = 44° 54′ N.; φ = 66° 59′ W.]

1892.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan	29.91	29.92	29.91	29.91	29.91	29.91	29.93	29.93	29.94	29.94	29.93	29.91	29.90
Feb	.00	.00	.00	.00	.00	.00	.00	.01	.03	.04	.03	.02	.01
Mar	.74	.74	.73	.73	.73	.74	.74	.75	.77	.77	.76	.75	.74
Apr	.84	.84	.84	.84	.84	.85	.85	.86	.86	.85	.84	.83	.82
May	.89	.88	.88	.88	.88	.88	.89	.90	.89	.89	.89	.89	.88
June	.87	.86	.87	.87	.88	.89	.90	.90	.89	.89	.88	.88	.87
July	.89	.89	.89	.89	.90	.90	.91	.92	.92	.92	.92	.92	.91
Aug	.92	.92	.92	.92	.92	.93	.94	.94	.94	.94	.94	.94	.93
Sept	.02	.01	.01	.01	.02	.02	.03	.03	.04	.04	.03	.02	.01
Oct	.74	.74	.74	.74	.74	.75	.76	.77	.77	.76	.76	.75	.74
Nov	.94	.94	.94	.95	.95	.96	.96	.96	.97	.97	.96	.94	.93
Dec	.79	.79	.79	.80	.80	.80	.81	.82	.83	.83	.82	.80	.79
Year	.88	.88	.88	.88	.88	.88	.89	.90	.90	.90	.90	.89	.88

GALVESTON, TEX.

[λ = 29° 18′ N.; φ = 94° 50′ W.]

Jan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Feb	30.07	30.07	30.06	30.06	36.06	30.07	30.07	30.09	30.10	30.11	30.11	30.11	30.09
Mar	.06	.06	.05	.05	.05	.05	.06	.07	.08	.09	.10	.10	.09
Apr	.97	.96	.95	.95	.95	.96	.97	.99	.00	.01	.01	.01	.00
May	.95	.94	.94	.93	.94	.94	.96	.97	.98	.99	.99	.99	.98
June	.95	.94	.94	.94	.94	.95	.95	.97	.98	.98	.98	.99	.98
July	.05	.04	.04	.04	.04	.05	.06	.07	.08	.08	.09	.09	.08
Aug	.99	.99	.98	.98	.98	.99	.00	.01	.02	.03	.04	.04	.02
Sept	.02	.01	.01	.00	.01	.01	.02	.03	.04	.04	.05	.05	.04
Oct	.01	.01	.00	.00	.00	.01	.02	.02	.04	.04	.05	.04	.03
Nov	.10	.10	.09	.09	.09	.10	.11	.12	.13	.15	.15	.15	.13
Dec	.08	.08	.08	.08	.07	.07	.08	.09	.10	.11	.12	.12	.09
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

HAVRE,* MONT.

[λ = 48° 34′ N.; φ = 109° 40′ W.]

Jan	27.40	27.39	27.38	27.38	27.38	27.38	27.38	27.38	27.39	27.40	27.41	27.42	27.42
Feb	.34	.35	.34	.34	.34	.34	.34	.34	.35	.35	.36	.36	.36
Mar	.33	.33	.33	.32	.31	.31	.31	.31	.30	.31	.32	.32	.33
Apr	.33	.32	.32	.32	.32	.32	.32	.33	.33	.34	.34	.34	.34
May	.40	.40	.40	.39	.39	.39	.40	.40	.40	.41	.41	.40	.40
June	.32	.32	.31	.31	.31	.31	.32	.32	.32	.32	.31	.31	.31
July	.34	.34	.35	.35	.36	.36	.37	.37	.38	.38	.37	.36	.36
Aug	.36	.36	.36	.37	.37	.37	.38	.38	.39	.39	.39	.39	.38
Sept	.35	.35	.36	.36	.36	.36	.36	.37	.37	.38	.38	.37	.36
Oct	.40	.40	.40	.40	.41	.41	.40	.41	.40	.40	.40	.41	.40
Nov	.28	.28	.28	.28	.28	.28	.27	.26	.26	.26	.26	.26	.26
Dec	.40	.40	.39	.39	.39	.38	.38	.38	.38	.39	.40	.42	.42
Year	.35	.35	.35	.35	.35	.35	.35	.35	.36	.36	.36	.36	.36

KEY WEST, FLA.

[λ = 24° 34′ N.; φ = 81° 49′ W.]

Jan	30.12	30.12	30.11	30.11	30.10	30.11	30.12	30.14	30.16	30.17	30.16	30.14	30.12
Feb	.10	.09	.08	.08	.07	.08	.09	.11	.12	.13	.13	.12	.10
Mar	.10	.09	.08	.07	.07	.08	.09	.10	.11	.12	.12	.12	.10
Apr	.12	.10	.09	.09	.09	.10	.11	.12	.13	.14	.13	.13	.11
May	.07	.06	.05	.04	.05	.06	.07	.08	.08	.08	.08	.08	.07
June	.02	.01	.00	.00	.00	.01	.02	.04	.04	.04	.05	.04	.03
July	.13	.12	.11	.11	.11	.11	.12	.13	.14	.14	.14	.14	.13
Aug	.04	.03	.02	.02	.02	.02	.04	.05	.06	.06	.06	.06	.05
Sept	.98	.97	.96	.96	.96	.97	.99	.00	.01	.01	.01	.00	.99
Oct	.97	.96	.95	.95	.95	.96	.97	.98	.99	.00	.99	.98	.96
Nov	.09	.08	.08	.08	.08	.08	.10	.11	.12	.13	.12	.10	.08
Dec	.09	.09	.08	.08	.07	.08	.10	.11	.12	.13	.12	.11	.08
Year	.07	.06	.05	.05	.05	.06	.07	.08	.09	.10	.09	.08	.07

* About 6 miles southeast of Fort Assinaboine, from which point the Weather Bureau station was transferred on April 15, 1892.

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

EASTPORT, ME.

[H = 53; gravity corr., 0; local time, 0h 32m fast.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean max.	Mean min.	1892.
29.90	29.90	29.90	29.89	29.89	29.89	29.89	29.89	29.89	29.89	29.89	29.91	30.05	29.76	Jan.
.01	.01	.01	.02	.02	.02	.02	.03	.02	.02	.02	.01	.13	.87	Feb.
.73	.72	.72	.73	.73	.74	.75	.76	.76	.75	.75	.74	.88	.61	Mar.
.81	.80	.80	.80	.81	.82	.83	.84	.84	.84	.84	.83	.93	.73	Apr.
.88	.87	.87	.87	.88	.88	.89	.90	.90	.90	.90	.88	.98	.79	May.
.86	.86	.85	.84	.84	.84	.85	.85	.86	.86	.86	.87	.97	.75	June.
.90	.90	.89	.89	.89	.89	.90	.90	.91	.91	.91	.90	.98	.82	July.
.92	.92	.92	.92	.92	.92	.92	.92	.92	.92	.92	.92	.98	.86	Aug.
.00	.00	.00	.00	.00	.00	.01	.01	.01	.01	.01	.01	.12	.91	Sept.
.74	.74	.74	.75	.75	.76	.76	.76	.76	.76	.76	.75	.85	.64	Oct.
.93	.92	.93	.93	.93	.92	.93	.94	.94	.94	.93	.94	.07	.79	Nov.
.79	.79	.79	.80	.80	.80	.80	.80	.80	.80	.80	.80	.90	.70	Dec.
.87	.87	.87	.87	.87	.87	.88	.88	.88	.88	.88	.88	.99	.77	Year.

GALVESTON, TEX.

[H = 42; gravity corr., —.04; local time, 1h 19m slow.]

.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jan.
30.07	30.05	30.04	30.04	30.04	30.05	30.06	30.07	30.08	30.07	30.08	30.07	30.15	30.00	Feb.
.07	.06	.04	.03	.03	.03	.03	.04	.05	.05	.05	.06	.14	.98	Mar.
.99	.98	.96	.95	.95	.95	.95	.96	.97	.98	.98	.97	.03	.91	Apr.
.97	.96	.94	.93	.92	.92	.92	.93	.94	.95	.95	.95	.00	.90	May.
.97	.96	.95	.94	.93	.93	.93	.94	.95	.96	.96	.95	.00	.91	June.
.07	.06	.05	.04	.03	.03	.03	.04	.04	.05	.05	.05	.09	.01	July.
.01	.00	.98	.97	.96	.96	.97	.98	.99	.00	.00	.00	.04	.95	Aug.
.02	.00	.99	.98	.98	.99	.99	.01	.02	.02	.02	.02	.06	.98	Sept.
.01	.99	.98	.98	.98	.99	.00	.01	.01	.02	.01	.01	.06	.97	Oct.
.10	.09	.08	.08	.08	.09	.10	.11	.11	.12	.11	.11	.18	.04	Nov.
.06	.04	.04	.04	.04	.05	.06	.07	.07	.08	.08	.07	.17	.98	Dec.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Year.

HAVRE, MONT.

[H = 2,477; gravity corr., +.01; local time, 2h 19m slow.]

27.41	27.40	27.38	27.38	27.38	27.39	27.39	27.40	27.40	27.40	27.40	27.40	27.52	27.26	Jan.
.35	.34	.32	.32	.31	.31	.31	.32	.33	.33	.34	.34	.44	.24	Feb.
.33	.32	.31	.31	.30	.31	.31	.31	.32	.33	.33	.32	.41	.23	Mar.
.33	.32	.32	.31	.31	.31	.31	.32	.33	.34	.34	.33	.43	.23	Apr.
.39	.38	.38	.37	.37	.36	.36	.37	.38	.38	.39	.39	.47	.32	May.
.30	.29	.28	.28	.28	.27	.27	.28	.29	.30	.31	.30	.38	.22	June.
.35	.34	.33	.33	.32	.31	.30	.31	.32	.33	.34	.34	.42	.25	July.
.37	.36	.34	.34	.33	.32	.32	.33	.34	.35	.36	.36	.43	.28	Aug.
.35	.34	.33	.32	.32	.32	.32	.33	.34	.35	.35	.35	.44	.26	Sept.
.39	.38	.36	.36	.36	.36	.36	.36	.37	.38	.39	.39	.47	.30	Oct.
.25	.24	.23	.23	.23	.23	.23	.24	.24	.25	.26	.26	.41	.09	Nov.
.42	.41	.39	.39	.39	.39	.38	.39	.39	.40	.40	.40	.54	.25	Dec.
.35	.34	.33	.33	.32	.32	.32	.33	.34	.34	.35	.35	.45	.24	Year.

KEY WEST, FLA.

[H = 22; gravity corr., —.05; local time, 0h 27m slow.]

30.10	30.09	30.09	30.09	30.10	30.11	30.12	30.13	30.13	30.13	30.13	30.12	30.18	30.07	Jan.
.08	.07	.06	.06	.07	.08	.09	.10	.10	.10	.10	.09	.14	.04	Feb.
.08	.06	.06	.05	.06	.07	.08	.09	.10	.11	.11	.09	.15	.03	Mar.
.10	.08	.07	.07	.07	.08	.10	.12	.12	.13	.13	.11	.14	.06	Apr.
.06	.04	.02	.02	.02	.03	.05	.06	.07	.07	.07	.06	.10	.01	May.
.02	.01	.99	.99	.99	.01	.02	.03	.04	.04	.04	.02	.06	.98	June.
.12	.11	.09	.08	.09	.10	.12	.12	.13	.14	.13	.12	.15	.08	July.
.03	.02	.00	.99	.00	.01	.03	.04	.04	.05	.04	.03	.07	.99	Aug.
.97	.95	.94	.94	.95	.97	.99	.99	.00	.00	.99	.98	.02	.93	Sept.
.94	.93	.93	.93	.94	.96	.97	.98	.98	.98	.98	.96	.01	.92	Oct.
.06	.06	.05	.06	.07	.08	.09	.10	.10	.10	.10	.09	.14	.04	Nov.
.06	.06	.05	.06	.06	.08	.09	.10	.10	.10	.10	.09	.14	.04	Dec.
.05	.04	.03	.03	.04	.05	.06	.07	.08	.08	.08	.06	.11	.02	Year.

NOTE.—The inches have been omitted in the above tables except for January. The reader will have no difficulty in supplying the proper values for the remaining months.

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

MARQUETTE, MICH.

[λ=46° 34′ N.; φ=87° 24′ W.]

1892.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan	29.13	29.13	29.14	29.14	29.14	29.14	29.14	29.15	29.15	29.17	29.18	29.18	29.16
Feb	.28	.28	.28	.28	.28	.28	.29	.29	.29	.30	.30	.30	.30
Mar	.25	.25	.25	.24	.24	.24	.25	.26	.26	.26	.26	.26	.25
Apr	.23	.22	.22	.22	.22	.22	.23	.23	.23	.23	.24	.24	.23
May	.11	.10	.10	.10	.10	.11	.12	.12	.12	.12	.12	.12	.12
June ...	.11	.11	.11	.11	.12	.12	.13	.13	.14	.14	.14	.14	.13
July ...	.20	.20	.20	.20	.20	.21	.21	.22	.22	.22	.22	.22	.21
Aug	.18	.18	.18	.18	.18	.19	.20	.20	.20	.20	.21	.21	.20
Sept....	.19	.19	.19	.19	.19	.20	.20	.20	.21	.21	.21	.20	.19
Oct	.18	.18	.18	.18	.19	.19	.20	.20	.20	.20	.20	.20	.18
Nov	.17	.16	.17	.16	.17	.17	.18	.18	.18	.19	.19	.19	.18
Dec	.19	.18	.19	.19	.18	.18	.19	.19	.19	.19	.20	.19	.18
Year ...	.18	.18	.18	.18	.18	.19	.19	.20	.20	.20	.20	.20	.20

MEMPHIS, TENN.

[λ=35° 9′ N.; φ=90° 3′ W.]

Jan	29.85	29.85	29.85	29.85	29.85	29.85	29.86	29.87	29.88	29.89	29.90	29.89	29.87
Feb	.77	.76	.76	.76	.76	.77	.78	.79	.80	.81	.81	.81	.79
Mar	.74	.74	.74	.74	.74	.75	.76	.77	.78	.78	.78	.78	.77
Apr	.69	.69	.69	.70	.70	.70	.72	.73	.74	.74	.75	.74	.73
May....	.64	.62	.62	.62	.63	.64	.65	.67	.67	.68	.68	.68	.66
June ...	.63	.62	.62	.63	.63	.65	.66	.67	.68	.68	.68	.67	.66
July ...	.73	.73	.72	.73	.73	.74	.76	.76	.77	.77	.77	.77	.76
Aug	.68	.67	.67	.67	.67	.68	.70	.70	.71	.72	.72	.72	.70
Sept....	.76	.76	.76	.76	.76	.77	.78	.79	.80	.81	.81	.80	.79
Oct	.75	.75	.75	.75	.75	.76	.77	.78	.79	.80	.80	.79	.76
Nov	.79	.78	.79	.78	.78	.78	.79	.81	.82	.83	.83	.82	.80
Dec	.80	.80	.80	.80	.80	.80	.80	.81	.82	.84	.84	.83	.80
Year ...	.74	.73	.73	.73	.73	.74	.75	.76	.77	.78	.78	.78	.76

NEW ORLEANS, LA.

[λ=29° 58′ N.; φ=90° 4′ W.]

Jan	30.12	30.12	30.11	30.11	30.11	30.11	30.12	30.14	30.16	30.17	30.17	30.15	30.12
Feb	.06	.06	.05	.04	.04	.04	.06	.07	.09	.10	.10	.09	.07
Mar	.06	.05	.04	.04	.04	.05	.06	.07	.08	.10	.10	.09	.07
Apr	.00	.00	.99	.99	.00	.00	.02	.03	.04	.05	.05	.05	.04
May....	.97	.97	.96	.97	.97	.98	.99	.00	.01	.01	.01	.00	.99
June ...	.94	.93	.92	.93	.94	.94	.96	.97	.98	.98	.98	.97	.96
July ...	.05	.04	.04	.05	.05	.06	.07	.08	.08	.08	.08	.07	.06
Aug	.96	.96	.96	.96	.96	.97	.98	.99	.00	.00	.00	.00	.98
Sept . .	.97	.97	.96	.96	.97	.98	.00	.01	.01	.02	.01	.00	.98
Oct	.00	.00	.99	.99	.00	.00	.01	.01	.03	.04	.03	.03	.01
Nov	.10	.10	.09	.09	.09	.09	.10	.10	.12	.13	.14	.13	.10
Dec	.07	.07	.06	.06	.06	.06	.06	.07	.08	.10	.10	.09	.06
Year ...	.03	.02	.02	.02	.02	.02	.04	.05	.06	.06	.06	.06	.04

NEW YORK CITY.

[λ=40° 43′ N.; φ=74° 0′ W.]

Jan	29.84	29.84	29.84	29.84	29.83	29.83	29.84	29.85	29.86	29.86	29.84	29.81	29.79
Feb	.94	.94	.94	.94	.94	.94	.95	.95	.95	.95	.95	.94	.92
Mar	.78	.78	.78	.78	.78	.78	.79	.79	.79	.79	.78	.77	.75
Apr	.86	.86	.85	.85	.85	.86	.87	.88	.88	.88	.87	.86	.85
May....	.78	.78	.78	.78	.78	.79	.80	.81	.80	.80	.79	.78	.77
June ...	.79	.79	.79	.79	.79	.80	.81	.81	.82	.82	.81	.80	.79
July ...	.86	.86	.86	.86	.87	.87	.88	.89	.89	.89	.88	.88	.87
Aug	.82	.82	.82	.82	.82	.83	.84	.84	.84	.84	.83	.82	.82
Sept....	.97	.97	.96	.96	.97	.98	.99	.00	.00	.00	.99	.98	.97
Oct	.81	.81	.80	.80	.80	.80	.81	.82	.81	.81	.80	.79	.77
Nov	.88	.87	.87	.86	.86	.86	.87	.88	.88	.88	.86	.84	.84
Dec	.86	.85	.85	.85	.84	.84	.85	.86	.86	.87	.86	.84	.82
Year ...	.85	.85	.84	.84	.84	.85	.86	.86	.86	.86	.86	.84	.83

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

MARQUETTE, MICH.

[H=734; gravity correction, —.0; local time 0h 49m slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean max.	Mean min.	1892.
29.15	29.15	29.16	29.16	29.17	29.16	29.16	29.16	29.16	29.16	29.15	29.15	29.28	29.01	Jan.
.28	.27	.27	.28	.28	.29	.29	.29	.29	.29	.29	.29	.39	.18	Feb.
.25	.24	.24	.24	.24	.24	.24	.24	.24	.24	.24	.25	.36	.13	Mar.
.23	.23	.23	.23	.22	.22	.22	.22	.22	.23	.22	.23	.36	.08	Apr.
.12	.12	.12	.12	.12	.12	.12	.12	.12	.12	.12	.12	.22	.00	May.
.13	.12	.12	11	.11	.11	.11	.11	.11	.11	.11	.12	.19	.04	June.
.20	.20	.19	.19	.19	.19	.19	.19	.20	.20	.20	.20	.27	.12	July.
.20	.19	.18	.18	.18	.18	.18	.19	.19	.19	.19	.19	.27	.10	Aug.
.18	.18	.18	.17	.18	.18	.19	.20	.20	.20	.20	.19	.28	.11	Sept.
.17	.17	.16	.16	.17	.17	.17	.17	.18	.18	.17	.18	.29	.06	Oct.
.17	.17	.17	.17	.18	.18	.18	.18	.18	.18	.18	.18	.31	.02	Nov.
.17	.17	.17	.18	.18	.18	.18	.18	.17	.18	.18	.18	.28	.06	Dec.
.19	.18	.18	.18	.18	.18	.18	.19	.19	.19	.19	.19	.29	.08	Year.

MEMPHIS, TENN.

[H=330; gravity correction, —.03; local time 1h 0m slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean max.	Mean min.	1892.
29.84	29.83	29.83	29.83	29.83	29.84	29.84	29.85	29.85	29.86	29.86	29.86	29.95	29.75	Jan.
.76	.75	.74	.73	.74	.75	.75	.76	.77	.77	.77	.77	.87	.66	Feb.
.75	.72	.71	.70	.70	.70	.71	.72	.72	.73	.73	.74	.83	.65	Mar.
.72	.70	.69	.68	.68	.68	.68	.69	.70	.70	.70	.71	.79	.63	Apr.
.65	.64	.62	.62	.61	.60	.61	.62	.63	.63	.64	.64	.70	.57	May.
.64	.63	.62	.61	.61	.61	.61	.63	.64	.64	.64	.64	.68	.59	June.
.74	.73	.72	.71	.71	.71	.72	.72	.73	.73	.73	.74	.78	.69	July.
.69	.67	.66	.65	.65	.65	.66	.68	.69	.69	.69	.68	.73	.64	Aug.
.78	.76	.75	.74	.74	.74	.74	.75	.76	.76	.76	.77	.82	.72	Sept.
.74	.73	.72	.72	.72	.72	.73	.74	.74	.74	.74	.75	.81	.69	Oct.
.77	.76	.76	.76	.77	.78	.79	.80	.80	.80	.80	.79	.88	.70	Nov.
.78	.77	.77	.77	.77	.77	.77	.78	.78	.78	.78	.79	.89	.68	Dec.
.74	.72	.72	.71	.71	.71	.72	.73	.73	.74	.74	.74	.81	.66	Year.

NEW ORLEANS, LA.

[H=54; gravity corrrection, —.04; local time 1h 0m slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean max.	Mean min.	1892.
30.10	30.09	30.09	30.09	30.10	30.10	30.11	30.12	30.13	30.13	30.10	30.12	30.22	30.10	Jan.
.05	.03	.02	.02	.03	.04	.05	.05	.06	.06	.06	.06	.26	.99	Feb.
.05	.03	.02	.01	.01	.02	.02	.03	.04	.04	.04	.05	.12	.98	Mar.
.02	.01	.00	.00	.99	.00	.00	.01	.02	.02	.02	.01	.06	.96	Apr.
.98	.97	.96	.95	.95	.95	.96	.97	.98	.98	.98	.98	.02	.93	May.
.95	.93	.92	.91	.91	.91	.92	.93	.94	.95	.95	.94	.98	.89	June.
.06	.04	.04	.03	.03	.03	.03	.04	.04	.05	.05	.05	.09	.02	July.
.97	.95	.94	.94	.94	.94	.94	.96	.96	.97	.97	.97	.01	.92	Aug.
.97	.96	.94	.94	.95	.95	.96	.98	.98	.98	.98	.98	.02	.93	Sept.
.98	.97	.97	.96	.96	.98	.98	.99	.00	.00	.00	.00	.05	.95	Oct.
.08	.07	.06	.06	.07	.08	.09	.10	.11	.11	.11	.10	.17	.04	Nov.
.04	.02	.02	.02	.02	.03	.04	.05	.06	.06	.06	.06	.14	.98	Dec.
.02	.01	.00	.00	.00	.00	.01	.02	.03	.03	.03	.02	.10	.97	Year.

NEW YORK CITY.

[H=185; gravity correction, —.01; local time 0h 4m fast.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean max.	Mean min.	1892.
29.79	29.79	29.80	29.80	29.81	29.82	29.83	29.84	29.84	29.83	29.83	29.83	29.97	29.69	Jan.
.91	.90	.90	.91	.92	.92	.92	.93	.94	.94	.94	.93	.06	.81	Feb.
.74	.72	.72	.72	.73	.74	.76	.78	.78	.80	.80	.77	.90	.66	Mar.
.84	.83	.82	.82	.82	.83	.84	.85	.86	.86	.86	.85	.96	.76	Apr.
.76	.75	.75	.74	.74	.75	.76	.77	.78	.78	.78	.78	.87	.67	May.
.79	.78	.77	.76	.76	.77	.77	.78	.79	.79	.79	.79	.87	.70	June.
.86	.84	.84	.83	.83	.84	.84	.85	.85	.86	.86	.86	.93	.79	July.
.81	.80	.79	.79	.79	.80	.81	.82	.82	.83	.83	.82	.87	.76	Aug.
.95	.95	.94	.94	.95	.95	.96	.97	.98	.98	.98	.97	.05	.89	Sept.
.76	.76	.76	.77	.78	.79	.80	.81	.81	.81	.81	.80	.89	.70	Oct.
.83	.83	.84	.84	.85	.86	.86	.87	.87	.88	.88	.86	.98	.75	Nov.
.82	.82	.83	.83	.84	.85	.85	.86	.86	.87	.86	.85	.96	.75	Dec.
.82	.81	.81	.82	.82	.83	.84	.84	.85	.85	.85	.84	.94	.74	Year.

NOTE.—The inches have been omitted in the above tables except for January. The reader will have no difficulty in supplying the proper values for the remaining months.

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued

PHILADELPHIA, PA.

[γ=39° 57′ N.; ϕ=75° 9′ W.]

1892.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan	29.94	29.94	29.94	29.93	29.93	29.93	29.94	29.96	29.96	29.96	29.95	29.92	20.90
Feb	.02	.02	.02	.02	.02	.03	.04	.04	.05	.06	.05	.04	.02
Mar	.89	.88	.88	.88	.89	.90	.91	.91	.91	.91	.90	.88	.86
Apr	.96	.95	.95	.95	.96	.97	.98	.99	.99	.99	.98	.97	.96
May	.87	.87	.87	.87	.88	.89	.90	.90	.90	.90	.89	.88	.86
June	.88	.87	.88	.88	.88	.89	.90	.90	.90	.90	.90	.88	.88
July	.95	.94	.94	.95	.96	.96	.97	.98	.98	.97	.97	.96	.95
Aug	.90	.89	.89	.89	.89	.90	.91	.91	.92	.92	.91	.90	.89
Sept	.04	.04	.04	.04	.05	.06	.07	.08	.08	.08	.07	.06	.05
Oct	.91	.90	.90	.90	.90	.91	.92	.92	.92	.92	.91	.90	.88
Nov	.96	.95	.95	.95	.95	.95	.96	.97	.97	.97	.96	.94	.93
Dec	.95	.95	.95	.95	.95	.95	.96	.97	.98	.98	.97	.96	.94
Year	.94	.94	.93	.94	.94	.95	.96	.96	.96	.96	.96	.94	.93

PITTSBURG, PA.

[λ=40° 32′ N.; ϕ=80° 2′ W.]

Jan	29.18	29.18	29.18	29.17	29.17	29.17	29.17	29.17	29.18	29.18	29.18	29.16	29.15
Feb	.24	.24	.24	.24	.24	.24	.25	.25	.25	.25	.24	.23	.21
Mar	.17	.17	.16	.16	.15	.16	.16	.16	.17	.16	.16	.15	.14
Apr	.20	.20	.20	.20	.20	.22	.23	.22	.22	.22	.22	.20	.19
May	.10	.09	.09	.09	.09	.11	.12	.12	.12	.11	.10	.09	.09
June	.12	.11	.11	.11	.12	.13	.14	.14	.14	.14	.14	.12	.12
July	.22	.23	.23	.23	.24	.24	.25	.26	.26	.25	.25	.24	.23
Aug	.17	.17	.16	.17	.17	.18	.19	.19	.19	.19	.19	.18	.17
Sept	.28	.28	.28	.28	.28	.29	.30	.31	.31	.31	.30	.29	.28
Oct	.19	.19	.19	.19	.20	.21	.22	.22	.23	.23	.22	.21	.19
Nov	.19	.19	.19	.19	.20	.20	.21	.22	.22	.22	.22	.22	.20
Dec	.22	.22	.23	.23	.23	.22	.23	.24	.25	.25	.25	.24	.22
Year	.19	.19	.19	.19	.19	.20	.20	.21	.21	.21	.21	.19	.18

PORTLAND, OREGON.

[λ=45° 32′ N.; ϕ=122° 43′ W.]

Jan	30.00	30.00	30.01	30.01	30.01	30.02	30.01	30.00	30.00	30.00	30.00	30.01	30.03
Feb	.91	.91	.91	.91	.91	.91	.91	.91	.90	.90	.91	.92	.93
Mar	.85	.86	.86	.86	.86	.86	.86	.85	.85	.86	.86	.87	.88
Apr	.90	.90	.90	.90	.89	.89	.89	.89	.89	.89	.89	.90	.90
May	.84	.84	.84	.84	.85	.85	.85	.86	.86	.87	.88	.88	.87
June	.86	.86	.86	.86	.87	.87	.87	.87	.88	.88	.88	.88	.87
July	.92	.92	.93	.93	.93	.93	.93	.94	.94	.94	.94	.94	.94
Aug	.86	.87	.88	.88	.88	.89	.89	.89	.90	.91	.91	.91	.90
Sept	.84	.84	.84	.85	.84	.84	.84	.84	.85	.85	.86	.86	.86
Oct	.89	.90	.90	.90	.90	.90	.90	.90	.91	.91	.92	.92	.92
Nov	.88	.88	.88	.88	.87	.87	.86	.85	.85	.85	.86	.86	.87
Dec	.98	.99	.99	.99	.99	.00	.00	.00	.00	.00	.00	.01	.02
Year	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90	.91	.91	.92

ST. LOUIS, MO.

[λ=38° 38′ N.; ϕ=90° 12′ W.]

Jan	29.55	29.55	29.56	29.56	29.56	29.56	29.56	29.57	29.58	29.59	29.59	29.59	29.56
Feb	.48	.47	.47	.47	.47	.48	.48	.49	.50	.50	.51	.51	.50
Mar	.45	.45	.45	.44	.44	.45	.46	.48	.49	.49	.49	.49	.48
Apr	.40	.40	.40	.40	.40	.40	.42	.43	.43	.44	.44	.44	.43
May	.30	.30	.29	.30	.30	.31	.32	.32	.32	.32	.32	.32	.31
June	.32	.32	.32	.33	.34	.34	.36	.36	.37	.36	.36	.36	.34
July	.46	.45	.45	.45	.46	.47	.47	.48	.48	.49	.49	.49	.48
Aug	.41	.40	.40	.40	.41	.42	.43	.44	.45	.45	.45	.44	.43
Sept	.49	.49	.49	.49	.50	.50	.51	.52	.53	.53	.53	.52	.50
Oct	.48	.48	.48	.48	.49	.50	.50	.51	.52	.52	.52	.50	.48
Nov	.48	.48	.48	.48	.48	.49	.50	.50	.51	.51	.51	.50	.48
Dec	.51	.51	.51	.51	.50	.50	.50	.51	.52	.52	.53	.52	.50
Year	.44	.44	.44	.44	.45	.45	.46	.47	.47	.48	.48	.47	.46

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

PHILADELPHIA, PA.

[H = 117; gravity correction, — .01.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean max.	Mean min.	1892.
29.90	29.90	29.91	29.91	29.92	29.94	29.94	29.94	29.94	29.93	29.93	29.93	30.06	29.79	Jan.
.00	.99	.99	.00	.00	.01	.02	.02	.02	.01	.01	.02	.14	.89	Feb.
.85	.84	.84	.84	.86	.87	.89	.90	.90	.90	.90	.88	.00	.76	Mar.
.95	.93	.93	.93	.93	.93	.95	.96	.96	.96	.96	.96	.06	.86	Apr.
.86	.84	.83	.84	.84	.84	.85	.86	.87	.87	.87	.87	.97	.77	May.
.87	.86	.85	.84	.85	.86	.86	.88	.88	.88	.88	.88	.95	.80	June.
.94	.93	.92	.92	.92	.92	.93	.94	.94	.95	.95	.95	.01	.88	July.
.88	.87	.86	.86	.86	.87	.88	.90	.90	.90	.90	.89	.94	.84	Aug.
.04	.02	.02	.02	.02	.03	.04	.05	.05	.05	.05	.05	.12	.96	Sept.
.87	.86	.87	.87	.88	.90	.90	.91	.91	.91	.91	.90	.99	.81	Oct.
.92	.92	.92	.93	.94	.95	.96	.96	.96	.96	.96	.95	.06	.83	Nov.
.93	.93	.93	.94	.94	.95	.96	.96	.96	.96	.96	.95	.05	.85	Dec.
.92	.91	.91	.91	.91	.92	.93	.94	.94	.94	.94	.94	.03	.84	Year.

PITTSBURG, PA.

[H = 820; gravity correction, — .01; local time 0h 20m slow.]

29.14	29.14	29.15	29.16	29.17	29.18	29.18	29.18	29.18	29.18	29.18	29.17	29.30	29.05	Jan.
.19	.18	.18	.18	.19	.20	.21	.21	.22	.22	.23	.22	.35	.10	Feb.
.12	.12	.12	.12	.13	.15	.16	.16	.17	.18	.18	.15	.28	.04	Mar.
.18	.17	.16	.16	.17	.17	.18	.18	.19	.19	.19	.19	.29	.10	Apr.
.08	.07	.06	.06	.07	.07	.08	.09	.10	.10	.10	.09	.18	.00	May.
.10	.09	.08	.07	.08	.09	.09	.10	.11	.11	.12	.11	.18	.05	June.
.22	.20	.20	.20	.19	.19	.20	.21	.22	.22	.22	.22	.28	.16	July.
.16	.15	.14	.13	.13	.14	.15	.16	.16	.17	.17	.16	.21	.11	Aug.
.26	.24	.23	.23	.24	.25	.26	.27	.27	.28	.28	.28	.34	.20	Sept.
.18	.18	.17	.17	.17	.18	.18	.18	.19	.18	.18	.19	.28	.10	Oct.
.18	.18	.18	.19	.19	.19	.19	.20	.20	.19	.19	.20	.30	.08	Nov.
.20	.20	.20	.20	.21	.21	.22	.22	.22	.22	.21	.22	.33	.10	Dec.
.17	.16	.16	.16	.16	.17	.18	.18	.18	.19	.19	.18	.28	.09	Year.

PORTLAND, OREGON.

[H = 157; gravity correction, .0; local time 3h 11m slow.]

30.04	30.03	30.02	30.00	30.00	29.99	29.98	29.98	29.99	30.00	30.00	30.00	30.08	29.93	Jan.
.94	.94	.93	.91	.90	.89	.88	.88	.89	.90	.90	.91	.99	.83	Feb.
.88	.88	.87	.86	.85	.84	.83	.83	.83	.84	.84	.86	.94	.76	Mar.
.90	.89	.88	.88	.88	.87	.87	.87	.88	.89	.90	.89	.98	.79	Apr.
.87	.86	.85	.84	.83	.82	.81	.81	.82	.82	.84	.84	.93	.75	May.
.86	.86	.85	.84	.83	.82	.82	.82	.83	.84	.85	.86	.92	.79	June.
.93	.92	.92	.91	.90	.88	.88	.88	.88	.89	.90	.92	.98	.84	July.
.89	.88	.88	.86	.85	.83	.83	.83	.83	.85	.86	.87	.92	.81	Aug.
.86	.85	.84	.83	.82	.82	.81	.81	.82	.83	.83	.84	.90	.76	Sept.
.92	.91	.90	.89	.88	.87	.87	.88	.88	.89	.90	.90	.89	.73	Oct.
.87	.86	.85	.84	.84	.84	.84	.84	.84	.84	.85	.86	.89	.66	Nov.
.02	.00	.99	.98	.98	.98	.98	.00	.00	.00	.00	.00	.02	.80	Dec.
.91	.91	.90	.89	.88	.87	.87	.87	.87	.88	.89	.90	.95	.79	Year.

ST. LOUIS, MO.

[H = 571; gravity correction, — .02; local time 1h 1m slow.]

29.55	29.54	29.54	29.54	29.55	29.55	29.55	29.56	29.56	29.56	29.56	29.56	29.65	29.45	Jan.
.48	.47	.46	.47	.47	.48	.48	.48	.48	.48	.48	.48	.60	.35	Feb.
.46	.45	.44	.43	.43	.43	.44	.44	.44	.44	.44	.46	.56	.34	Mar.
.42	.41	.40	.39	.38	.38	.38	.40	.40	.41	.41	.41	.52	.30	Apr.
.30	.30	.28	.28	.28	.28	.28	.30	.30	.31	.30	.30	.38	.22	May.
.33	.31	.31	.30	.30	.30	.30	.31	.32	.33	.33	.33	.38	.27	June.
.47	.46	.45	.44	.43	.43	.43	.44	.45	.46	.46	.46	.52	.40	July.
.42	.40	.39	.38	.38	.38	.38	.40	.40	.41	.41	.41	.46	.36	Aug.
.48	.47	.46	.45	.46	.46	.46	.48	.48	.49	.49	.49	.55	.43	Sept.
.46	.45	.44	.44	.44	.44	.45	.46	.46	.47	.47	.48	.55	.40	Oct.
.46	.45	.45	.46	.47	.48	.49	.50	.50	.50	.49	.48	.59	.37	Nov.
.48	.48	.48	.48	.49	.50	.50	.50	.50	.50	.50	.50	.60	.40	Dec.
.44	.43	.42	.42	.42	.42	.43	.44	.44	.45	.45	.45	.53	.36	Year.

NOTE.—The inches have been omitted in the above tables except for January. The reader will have no difficulty supplying the proper values for the remaining months.

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

ST. PAUL, MINN.

[λ=44° 58′ N.; φ=93° 3′ W.]

1892.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan	29.19	29.19	29.20	29.20	29.20	29.20	29.20	29.20	29.21	29.22	29.22	29.22	29.20
Feb	.19	.19	.19	.18	.18	.18	.19	.19	.20	.20	.21	.21	.20
Mar	.19	.19	.19	.18	.18	.18	.19	.20	.20	.20	.20	.20	.18
Apr	.10	.10	.09	.10	.10	.11	.12	.12	.13	.13	.12	.12	.11
May	.00	.00	.00	.00	.00	.01	.02	.03	.03	.02	.02	.02	.02
June	.02	.02	.03	.03	.03	.04	.05	.05	.04	.04	.04	.04	.03
July	.14	.14	.14	.14	.14	.16	.16	.16	.17	.17	.16	.16	.16
Aug	.12	.12	.12	.12	.12	.13	.14	.14	.14	.15	.16	.14	.14
Sept	.13	.13	.13	.13	.13	.13	.14	.15	.15	.15	.15	.14	.13
Oct	.14	.14	.14	.14	.14	.14	.15	.15	.15	.16	.15	.15	.13
Nov	.14	.14	.14	.14	.14	.15	.15	.15	.16	.16	.16	.16	.14
Dec	.19	.19	.19	.20	.19	.18	.18	.19	.19	.20	.20	.20	.18
Year	.13	.13	.13	.13	.13	.14	.14	.14	.15	.15	.15	.15	.14

SALT LAKE CITY, UTAH.

[λ=40° 46′ N.; φ=111° 54′ W.]

Jan	25.77	25.77	25.76	25.76	25.76	25.76	25.75	25.75	25.75	25.76	25.77	25.78	25.79
Feb	.66	.66	.65	.65	.65	.65	.65	.65	.65	.66	.67	.68	.68
Mar	.58	.58	.57	.57	.57	.57	.57	.57	.58	.58	.58	.59	.58
Apr	.58	.58	.58	.58	.57	.58	.58	.58	.59	.60	.60	.60	.60
May	.58	.58	.58	.58	.58	.59	.59	.60	.61	.61	.62	.62	.62
June	.57	.57	.57	.58	.58	.59	.59	.60	.61	.61	.62	.62	.62
July	.64	.64	.64	.65	.65	.66	.67	.68	.69	.70	.70	.70	.70
Aug	.66	.66	.66	.66	.66	.67	.67	.68	.69	.70	.70	.71	.70
Sept	.67	.67	.68	.68	.68	.68	.69	.70	.70	.71	.72	.72	.72
Oct	.70	.70	.70	.71	.71	.71	.72	.72	.72	.73	.74	.74	.73
Nov	.72	.72	.72	.72	.72	.72	.71	.71	.72	.73	.74	.74	.74
Dec	.71	.72	.71	.71	.71	.71	.71	.70	.71	.72	.73	.74	.74
Year	.65	.65	.65	.65	.65	.66	.66	.66	.67	.68	.68	.69	.69

SAN DIEGO, CAL.

[λ=32° 43′ N.; φ=117° 10′ W.]

Jan	29.98	29.98	29.98	29.98	29.98	29.97	29.96	29.96	29.96	29.97	29.99	30.00	30.01
Feb	.95	.95	.95	.94	.94	.93	.92	.92	.93	.94	.95	.96	.97
Mar	.94	.94	.94	.94	.93	.92	.92	.92	.93	.94	.95	.96	.96
Apr	.96	.96	.95	.94	.94	.93	.93	.93	.94	.96	.96	.97	.97
May	.92	.92	.91	.90	.89	.89	.89	.89	.90	.90	.92	.92	.92
June	.87	.87	.86	.85	.84	.84	.84	.85	.86	.87	.88	.88	.88
July	.89	.89	.88	.88	.87	.87	.87	.88	.89	.90	.91	.91	.91
Aug	.85	.85	.84	.84	.83	.83	.83	.84	.85	.86	.87	.87	.87
Sept	.88	.88	.88	.88	.87	.87	.87	.87	.88	.89	.90	.90	.90
Oct	.89	.89	.89	.88	.87	.87	.87	.88	.89	.90	.91	.91	.91
Nov	.96	.96	.95	.95	.94	.94	.94	.94	.95	.96	.97	.98	.98
Dec	.03	.03	.02	.02	.02	.02	.01	.01	.02	.03	.04	.05	.06
Year	.93	.92	.92	.92	.91	.91	.90	.91	.92	.92	.94	.94	.94

SAN FRANCISCO, CAL.

[λ=37° 48′ N.; φ=122° 26′ W.]

Jan	29.98	29.98	29.98	29.97	29.97	29.97	29.96	29.96	29.96	29.97	29.98	29.99	30.00
Feb	.89	.89	.88	.88	.88	.88	.88	.88	.88	.89	.90	.91	.91
Mar	.88	.88	.88	.88	.88	.87	.87	.87	.88	.88	.89	.90	.90
Apr	.98	.98	.99	.98	.98	.97	.97	.97	.97	.98	.99	.99	.00
May	.85	.85	.84	.84	.84	.83	.83	.83	.84	.85	.86	.86	.86
June	.83	.83	.82	.82	.82	.82	.82	.83	.83	.84	.85	.85	.85
July	.85	.85	.85	.84	.84	.84	.84	.85	.86	.86	.87	.88	.88
Aug	.81	.81	.81	.81	.80	.80	.80	.80	.81	.82	.83	.84	.84
Sept	.86	.87	.86	.86	.86	.86	.86	.86	.87	.88	.89	.90	.90
Oct	.88	.88	.88	.88	.88	.88	.88	.88	.88	.89	.90	.91	.90
Nov	.92	.92	.92	.91	.91	.90	.90	.89	.89	.90	.91	.92	.93
Dec	.98	.99	.99	.98	.99	.99	.98	.98	.98	.98	.99	.01	.02
Year	.89	.89	.89	.89	.89	.88	.88	.88	.89	.90	.90	.91	.92

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

ST. PAUL, MINN.

[H = 850; gravity correction, 0; local time, 1h 12m slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean max.	Mean min.	1892.
29.18	29.17	29.17	29.17	29.18	29.18	29.18	29.18	29.19	29.19	29.20	29.19	29.32	29.06	Jan.
.19	.18	.18	.18	.19	.20	.20	.20	.20	.20	.20	.19	.28	.09	Feb.
.17	.16	.15	.14	.14	.14	.15	.16	.16	.16	.16	.17	.30	.04	Mar.
.10	.09	.08	.08	.08	.08	.08	.09	.10	.10	.10	.10	.23	.96	Apr.
.00	.00	.99	.99	.98	.99	.99	.00	.01	.02	.02	.01	.11	.90	May.
.02	.01	.00	.99	.99	.99	.99	.00	.01	.02	.02	.02	.09	.94	June.
.15	.14	.14	.13	.12	.12	.12	.12	.13	.14	.14	.14	.21	.06	July.
.13	.12	.11	.10	.10	.10	.10	.11	.12	.12	.12	.12	.18	.05	Aug.
.12	.11	.10	.10	.10	.10	.11	.12	.12	.13	.13	.13	.20	.06	Sept.
.12	.11	.10	.10	.10	.11	.11	.11	.12	.12	.12	.13	.22	.03	Oct.
.13	.12	.12	.12	.13	.13	.13	.13	.14	.14	.14	.14	.28	.99	Nov.
.17	.16	.16	.17	.18	.18	.18	.18	.18	.18	.18	.18	.29	.08	Dec.
.12	.11	.11	.11	.11	.11	.11	.12	.12	.13	.13	.13	.23	.03	Year.

SALT LAKE CITY, UTAH.

[H = 4,345; gravity correction, —.01; local time, 2h 27m slow.]

25.78	25.76	25.75	25.74	25.75	25.75	25.75	25.75	25.76	25.76	25.76	25.76	25.84	25.68	Jan.
.67	.66	.64	.61	.64	.64	.64	.64	.65	.65	.65	.65	.73	.58	Feb.
.58	.57	.56	.55	.55	.55	.56	.56	.56	.57	.58	.57	.66	.49	Mar.
.60	.59	.58	.57	.56	.56	.55	.55	.56	.57	.57	.58	.66	.49	Apr.
.61	.61	.60	.59	.58	.58	.57	.57	.58	.58	.59	.59	.66	.51	May.
.61	.60	.59	.58	.56	.55	.54	.54	.54	.55	.56	.58	.64	.50	June.
.70	.69	.67	.66	.65	.63	.62	.62	.62	.63	.64	.66	.71	.59	July.
.69	.68	.66	.65	.64	.63	.62	.63	.63	.61	.65	.66	.71	.60	Aug.
.71	.70	.68	.66	.65	.65	.65	.65	.66	.66	.67	.68	.73	.62	Sept.
.73	.71	.69	.69	.68	.68	.68	.69	.69	.70	.70	.71	.76	.63	Oct.
.73	.71	.69	.69	.68	.68	.69	.70	.70	.70	.71	.71	.81	.61	Nov.
.74	.72	.71	.71	.71	.71	.72	.72	.72	.73	.73	.72	.79	.64	Dec.
.68	.67	.65	.64	.64	.63	.63	.64	.64	.64	.65	.66	.72	.58	Year.

SAN DIEGO, CAL.

[H = 93; gravity correction, —.03; local time, 2h 49m slow.]

30.00	29.98	29.95	29.94	29.94	29.94	29.94	29.94	29.96	29.96	29.97	29.97	30.03	29.90	Jan.
.96	.95	.92	.92	.91	.92	.92	.92	.93	.94	.95	.94	.00	.88	Feb.
.95	.95	.93	.92	.91	.91	.91	.92	.92	.94	.94	.93	.98	.89	Mar.
.97	.96	.95	.94	.93	.93	.93	.93	.94	.95	.96	.95	.00	.91	Apr.
.92	.92	.91	.90	.90	.89	.89	.89	.89	.90	.91	.90	.94	.86	May.
.88	.88	.87	.86	.86	.85	.85	.85	.85	.86	.86	.86	.90	.82	June.
.91	.90	.89	.88	.88	.87	.86	.86	.87	.87	.88	.88	.92	.85	July.
.87	.86	.86	.85	.83	.83	.82	.82	.83	.84	.85	.84	.88	.81	Aug.
.90	.89	.88	.86	.86	.85	.85	.85	.86	.87	.88	.88	.91	.84	Sept.
.90	.88	.87	.86	.86	.86	.87	.88	.88	.89	.89	.88	.93	.84	Oct.
.96	.94	.92	.91	.91	.92	.92	.94	.94	.95	.96	.94	.99	.90	Nov.
.04	.01	.00	.98	.98	.99	.99	.00	.01	.02	.02	.02	.08	.96	Dec.
.94	.93	.91	.90	.90	.90	.90	.90	.91	.92	.92	.92	.96	.87	Year.

SAN FRANCISCO, CAL.

[H = 153; gravity correction, —.02; local time, 3h 10m slow.]

30.00	29.98	29.96	29.95	29.95	29.95	29.95	29.95	29.96	29.96	29.96	29.97	30.03	29.91	Jan.
.92	.91	.89	.88	.87	.87	.87	.88	.88	.88	.89	.89	.95	.82	Feb.
.90	.90	.88	.87	.87	.86	.86	.86	.86	.87	.88	.88	.94	.81	Mar.
.00	.99	.99	.98	.97	.96	.96	.96	.96	.96	.98	.98	.02	.93	Apr.
.86	.86	.86	.85	.84	.84	.83	.83	.83	.84	.84	.84	.90	.79	May.
.85	.85	.85	.84	.83	.83	.82	.82	.82	.82	.83	.83	.88	.78	June.
.88	.88	.87	.86	.85	.84	.83	.82	.83	.83	.84	.85	.90	.80	July.
.84	.84	.83	.82	.81	.79	.78	.78	.79	.81	.81	.81	.85	.77	Aug.
.90	.89	.88	.86	.85	.84	.83	.83	.84	.85	.86	.87	.91	.81	Sept.
.90	.89	.87	.86	.85	.85	.84	.85	.86	.87	.87	.88	.92	.83	Oct.
.93	.92	.90	.89	.88	.88	.87	.88	.89	.90	.91	.90	.97	.85	Nov.
.01	.00	.97	.97	.96	.97	.96	.97	.98	.99	.99	.98	.05	.92	Dec.
.92	.91	.90	.89	.88	.87	.87	.87	.88	.88	.89	.89	.94	.84	Year.

NOTE.—The inches have been omitted in the above tables except for January. The reader will have no difficulty in supplying the proper values for the remaining months.

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

SANTA FE, N. MEX..

[λ = 35° 41′ N.; φ = 105° 57′ W.]

1892.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan	23.25	23.25	23.24	23.24	23.24	23.24	23.24	23.24	23.24	23.25	23.26	23.27	23.27
Feb	.22	.22	.22	.21	.21	.21	.21	.21	.21	.22	.23	.24	.24
Mar	.17	.17	.17	.16	.16	.16	.16	.17	.17	.18	.18	.18	.18
Apr	.19	.20	.20	.20	.19	.19	.20	.20	.21	.21	.21	.22	.21
May	.22	.23	.23	.23	.23	.23	.24	.24	.25	.26	.26	.25	.24
June ...	.29	.29	.29	.30	.30	.30	.30	.31	.32	.32	.33	.33	.32
July ...	.42	.42	.42	.42	.42	.42	.42	.43	.44	.44	.44	.44	.44
Aug	.41	.42	.42	.42	.42	.42	.42	.42	.43	.44	.44	.44	.43
Sept....	.42	.42	.42	.42	.42	.42	.43	.43	.44	.45	.46	.46	.45
Oct.....	.32	.32	.32	.32	.32	.32	.32	.33	.33	.33	.34	.34	.34
Nov	.29	.29	.29	.28	.28	.28	.28	.28	.29	.29	.30	.31	.31
Dec	.20	.21	.20	.20	.20	.20	.20	.20	.20	.21	.22	.22	.22
Year....	.28	.29	.28	.28	.28	.28	.28	.29	.30	.30	.30	.31	.30

SAVANNAH, GA.

[λ = 32° 5′ N.; φ = 81° 5′ W.]

Jan	30.03	30.03	30.03	30.03	30.03	30.03	30.04	30.06	30.07	30.08	30.08	30.05	30.02
Feb	.04	.03	.03	.03	.03	.04	.05	.06	.07	.08	.07	.06	.03
Mar	.97	.97	.96	.96	.97	.98	.00	.01	.02	.02	.01	.00	.98
Apr	.04	.03	.03	.03	.04	.05	.07	.08	.09	.09	.08	.07	.06
May	.98	.97	.97	.97	.98	.99	.00	.01	.02	.01	.01	.00	.98
June ...	.96	.96	.95	.95	.96	.97	.98	.98	.99	.99	.99	.98	.97
July....	.05	.04	.04	.04	.04	.05	.06	.07	.08	.08	.08	.07	.05
Aug	.96	.95	.95	.94	.95	.96	.97	.98	.98	.98	.98	.97	.96
Sept....	.99	.98	.97	.97	.98	.99	.00	.01	.02	.02	.02	.01	.00
Oct.....	.98	.98	.97	.97	.98	.99	.00	.01	.02	.02	.02	.00	.98
Nov	.05	.05	.05	.05	.05	.06	.08	.09	.10	.10	.10	.08	.05
Dec	.01	.01	.01	.01	.01	.02	.03	.04	.05	.06	.06	.03	.01
Year....	.00	.00	.00	.00	.00	.01	.02	.03	.04	.04	.04	.03	.01

WASHINGTON, D. C.

[λ = 38° 54′ N.; 77° 3′ W.]

Jan	29.96	29.96	29.97	29.96	29.95	29.96	29.97	29.98	29.99	29.99	29.99	29.96	29.94
Feb	.03	.03	.03	.02	.03	.03	.04	.05	.06	.07	.07	.06	.03
Mar	.92	.92	.91	.91	.92	.93	.94	.94	.94	.94	.94	.92	.91
Apr	.98	.97	.97	.97	.98	.99	.01	.01	.02	.02	.02	.00	.99
May	.88	.87	.87	.88	.89	.90	.91	.91	.91	.91	.91	.90	.88
June ...	.89	.88	.87	.88	.88	.89	.90	.91	.91	.91	.91	.90	.89
July....	.97	.96	.96	.96	.97	.98	.99	.00	.00	.00	.00	.00	.98
Aug	.91	.90	.90	.90	.90	.91	.92	.92	.93	.93	.93	.93	.92
Sept....	.05	.05	.05	.05	.06	.06	.08	.08	.09	.09	.09	.08	.07
Oct.....	.95	.94	.94	.94	.94	.95	.96	.97	.97	.97	.96	.95	.93
Nov	.98	.98	.98	.98	.98	.98	.98	.00	.00	.00	.00	.98	.96
Dec	.99	.99	.00	.99	.98	.99	.00	.01	.02	.03	.02	.00	.98
Year....	.96	.95	.95	.95	.96	.96	.97	.98	.99	.99	.99	.97	.96

WILMINGTON, N. C.

[λ = 34° 14′ N.; φ = 77° 57′ W.]

Jan	30.02	30.02	30.02	30.02	30.02	30.02	30.03	30.05	30.06	30.06	30.05	30.02	30.00
Feb	.04	.03	.03	.02	.03	.03	.04	.05	.06	.06	.06	.04	.02
Mar	.96	.96	.95	.96	.96	.98	.99	.00	.01	.01	.00	.99	.97
Apr	.05	.05	.04	.05	.06	.08	.09	.09	.10	.10	.09	.08	.07
May	.98	.98	.98	.98	.99	.00	.01	.02	.02	.02	.01	.00	.99
June ...	.98	.98	.97	.98	.98	.00	.01	.01	.01	.01	.01	.00	.99
July....	.04	.03	.03	.03	.04	.05	.06	.07	.07	.07	.06	.06	.04
Aug	.96	.95	.95	.95	.96	.97	.98	.98	.99	.99	.99	.98	.96
Sept....	.03	.02	.02	.02	.03	.04	.05	.06	.07	.06	.06	.05	.04
Oct.....	.99	.99	.98	.99	.00	.01	.02	.03	.04	.03	.02	.00	.98
Nov	.04	.04	.05	.05	.06	.06	.08	.08	.09	.09	.08	.06	.04
Dec	.02	.02	.02	.02	.02	.03	.04	.05	.07	.08	.06	.04	.02
Year....	.01	.01	.00	.00	.01	.02	.03	.04	.05	.05	.04	.03	.01

AVERAGE PRESSURE, IN INCHES AND HUNDREDTHS, FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

SANTA FE, N. MEX.

[H=7,059; gravity correction, —.02; local time 2h 4m slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean max.	Mean min.	1892.
23.26	23.24	23.23	23.22	23.23	23.23	23.23	23.24	23.24	23.24	23.25	23.24	23.31	23.18	Jan.
.23	.21	.20	.19	.19	.19	.20	.20	.21	.22	.22	.21	.28	.15	Feb.
.17	.15	.14	.13	.12	.12	.12	.13	.14	.15	.15	.16	.22	.08	Mar.
.20	.19	.18	.17	.16	.16	.16	.17	.18	.20	.20	.19	.26	.12	Apr.
.24	.22	.21	.20	.19	.18	.18	.19	.20	.22	.23	.22	.28	.16	May.
.32	.30	.29	.28	.26	.26	.25	.25	.26	.28	.29	.29	.34	.23	June.
.43	.42	.41	.40	.39	.38	.38	.38	.39	.40	.42	.42	.46	.36	July.
.42	.41	.40	.38	.37	.36	.36	.36	.38	.39	.40	.41	.45	.35	Aug.
.44	.43	.41	.40	.39	.38	.38	.38	.40	.40	.41	.42	.47	.37	Sept.
.33	.31	.30	.29	.28	.28	.29	.29	.29	.30	.31	.31	.37	.26	Oct.
.29	.28	.26	.26	.26	.26	.27	.28	.28	.29	.29	.28	.35	.21	Nov.
.21	.19	.18	.17	.18	.18	.19	.19	.20	.20	.20	.20	.26	.14	Dec.
.30	.28	.27	.26	.25	.25	.25	.26	.26	.27	.28	.28	.34	.22	Year.

SAVANNAH, GA.

[H=98; gravity correction, —.03; local time 0h 24m slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean max.	Mean min.	1892.
30.00	30.00	30.00	30.01	30.02	30.03	30.04	30.04	30.05	30.04	30.04	30.04	30.14	29.94	Jan.
.01	.00	.00	.00	.01	.02	.02	.03	.03	.03	.03	.03	.11	.95	Feb.
.96	.94	.93	.93	.94	.95	.97	.98	.98	.98	.98	.97	.06	.88	Mar.
.04	.03	.02	.01	.01	.02	.03	.04	.05	.05	.05	.05	.12	.97	Apr.
.97	.95	.95	.94	.94	.95	.96	.97	.98	.98	.98	.98	.04	.91	May.
.95	.94	.94	.93	.94	.94	.95	.96	.96	.97	.97	.96	.01	.92	June.
.04	.02	.01	.01	.02	.02	.03	.04	.05	.06	.05	.05	.09	.00	July.
.94	.92	.92	.92	.92	.93	.95	.96	.96	.96	.96	.95	.99	.91	Aug.
.98	.98	.97	.97	.98	.99	.00	.00	.01	.00	.00	.99	.04	.94	Sept.
.97	.96	.96	.96	.96	.97	.98	.99	.99	.99	.99	.98	.04	.93	Oct.
.03	.02	.02	.02	.03	.03	.04	.05	.05	.05	.05	.06	.13	.98	Nov.
.99	.98	.98	.99	.00	.01	.02	.02	.02	.02	.01	.02	.10	.92	Dec.
.99	.98	.97	.98	.98	.99	.00	.01	.01	.01	.01	.01	.07	.94	Year.

WASHINGTON, D. C.

[H=112; gravity correction, —.02; local time 0h 8m slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean max.	Mean min.	1892.
29.93	29.93	29.94	29.94	29.95	29.96	29.97	29.97	29.96	29.96	29.96	29.96	30.09	29.81	Jan.
.01	.00	.00	.01	.01	.02	.02	.02	.02	.02	.02	.03	.15	.90	Feb.
.90	.88	.88	.89	.90	.91	.93	.93	.94	.94	.94	.92	.04	.80	Mar.
.98	.96	.96	.96	.96	.96	.97	.98	.98	.98	.98	.98	.09	.88	Apr.
.87	.85	.84	.84	.84	.85	.86	.87	.88	.88	.88	.88	.97	.78	May.
.88	.87	.86	.86	.86	.86	.87	.88	.89	.89	.88	.88	.95	.82	June.
.97	.95	.95	.94	.94	.94	.95	.96	.96	.96	.97	.97	.02	.90	July.
.91	.89	.88	.88	.88	.89	.90	.91	.91	.91	.91	.91	.96	.86	Aug.
.05	.04	.03	.03	.03	.04	.04	.05	.06	.06	.06	.06	.13	.97	Sept.
.91	.91	.90	.91	.92	.93	.93	.94	.95	.95	.94	.94	.03	.85	Oct.
.95	.95	.96	.96	.97	.98	.99	.99	.99	.99	.99	.98	.09	.86	Nov.
.97	.96	.97	.97	.98	.98	.99	.00	.00	.00	.99	.99	.10	.87	Dec.
.94	.93	.93	.93	.94	.94	.95	.96	.96	.96	.96	.96	.05	.86	Year.

WILMINGTON, N. C.

[H=78; gravity correction, —.03; local time 0h 12m slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean max.	Mean min.	1892.
29.98	29.99	29.99	29.99	30.00	30.02	30.03	30.03	30.03	30.02	30.02	30.02	30.14	29.90	Jan.
.99	.99	.99	.99	.01	.02	.03	.03	.03	.03	.03	.03	.12	.93	Feb.
.95	.94	.94	.94	.95	.96	.97	.97	.98	.98	.97	.97	.07	.87	Mar.
.05	.04	.04	.04	.04	.05	.05	.06	.07	.07	.07	.06	.15	.98	Apr.
.97	.96	.96	.95	.95	.96	.97	.98	.99	.99	.99	.99	.06	.91	May.
.98	.97	.96	.95	.96	.96	.97	.98	.99	.98	.98	.98	.03	.93	June.
.03	.02	.02	.01	.02	.02	.04	.04	.04	.04	.04	.04	.08	.99	July.
.95	.94	.93	.93	.93	.94	.95	.96	.96	.96	.96	.96	.00	.91	Aug.
.02	.02	.02	.02	.02	.03	.04	.04	.04	.04	.04	.04	.09	.98	Sept.
.97	.96	.96	.97	.98	.98	.99	.99	.00	.00	.99	.00	.06	.92	Oct.
.02	.02	.02	.02	.03	.04	.04	.05	.05	.04	.04	.05	.13	.95	Nov.
.01	.00	.01	.01	.01	.02	.02	.03	.03	.03	.02	.03	.13	.92	Dec.
.00	.99	.98	.98	.99	.00	.01	.01	.02	.02	.01	.01	.09	.93	Year.

NOTE.—The inches have been omitted in the above tables except for January. The reader will have no difficulty in supplying the proper values for the remaining months.

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME.

ASSINABOINE, FORT, MONT.

[λ=48° 32′; φ=109° 42′.]

1891.	1h. a. m.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	Noon.	1h p. m.
Jan	25.4	25.3	25.1	24.6	24.1	24.3	23.4	23.5	22.7	22.2	22.4	24.3	27.3
Feb	− 0.3	− 0.4	− 1.1	− 1.3	− 1.9	− 2.8	− 2.5	− 1.9	− 3.0	− 3.2	− 2.1	− 0.4	1.8
Mar	18.2	17.9	16.9	17.1	16.5	15.9	15.4	16.1	16.0	16.6	18.3	20.6	22.6
Apr	44.6	42.9	41.5	40.7	38.9	37.9	37.7	38.2	40.0	43.5	47.7	50.7	53.8
May	48.4	47.9	47.1	45.3	44.0	43.7	43.2	44.6	46.8	49.3	52.2	55.0	57.0
June ...	54.5	53.4	52.7	52.2	51.2	49.9	49.9	51.4	53.1	55.5	57.2	59.2	60.9
July	61.6	60.8	59.6	58.6	57.4	56.8	56.4	57.9	61.0	63.9	66.6	69.8	72.4
Aug	59.3	59.0	57.6	56.5	54.8	54.5	53.6	54.2	57.5	60.8	64.1	67.1	69.9
Sept....	54.5	53.2	51.9	51.0	50.0	49.2	47.8	46.7	47.5	50.9	54.0	58.3	61.3
Oct.....	43.5	43.0	41.9	41.1	40.3	39.2	38.6	37.5	37.0	38.3	40.8	46.0	49.0
Nov	26.1	26.1	25.8	25.3	25.2	25.6	25.4	24.5	24.6	24.7	25.5	28.1	30.9
Dec	27.1	26.3	26.3	26.4	25.6	25.7	25.4	24.6	24.3	23.9	24.5	26.1	28.0
Year....	38.6	38.0	37.1	36.5	35.5	35.0	34.5	34.8	35.6	37.2	39.3	42.1	44.6

BISMARCK, N. DAK.

[λ=46° 47′; φ=100° 38′.]

Jan	21.1	20.5	19.9	19.4	18.5	18.3	17.7	17.9	16.7	17.3	19.6	22.8	25.6
Feb	3.2	2.2	1.2	0.6	0.0	− 0.6	− 1.3	− 1.9	− 2.0	− 0.8	2.4	5.0	8.4
Mar	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Apr	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	49.8	48.1	46.9	45.7	44.6	43.9	43.7	46.8	50.2	53.7	56.2	58.9	60.4
June ...	56.9	56.0	55.5	55.0	54.4	53.4	54.0	56.3	58.3	60.0	61.9	63.5	64.9
July	60.5	59.4	58.2	57.2	56.5	55.8	55.9	57.9	60.6	63.6	66.8	68.9	70.6
Aug	61.1	59.8	58.7	57.4	56.5	55.7	55.1	56.5	59.8	63.8	67.0	70.1	73.1
Sept....	57.1	56.0	54.6	53.9	52.8	51.8	51.0	50.8	53.9	58.7	62.6	66.0	68.8
Oct.....	42.4	41.5	40.5	39.3	38.3	37.5	36.7	36.2	36.9	39.9	43.5	47.6	51.0
Nov	21.0	20.5	19.8	19.6	19.2	19.1	19.0	19.0	18.7	19.6	21.5	23.8	25.9
Dec	19.5	19.7	19.1	18.3	17.8	17.3	16.3	16.4	16.1	16.4	18.1	20.2	22.1
Year....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

BOSTON, MASS.

[λ=42° 21′; φ=71° 4′.]

Jan	29.5	28.9	28.8	28.6	28.5	28.6	28.4	28.9	29.6	30.5	31.7	32.8	34.4
Feb	30.8	30.6	30.1	29.6	29.1	29.0	28.8	29.4	30.4	31.7	33.2	34.8	35.5
Mar	32.3	31.9	31.3	31.1	30.4	30.2	30.5	31.7	32.6	33.6	34.7	36.1	36.7
Apr	43.7	43.0	42.8	42.3	41.9	42.2	44.0	46.1	48.5	49.7	51.3	52.5	53.1
May	50.4	49.9	49.3	48.9	48.5	49.1	51.0	53.2	55.0	56.7	57.7	58.3	59.1
June ...	60.2	59.8	59.1	58.6	58.5	59.2	61.4	63.3	64.8	65.9	66.7	67.8	68.3
July	64.0	63.6	63.1	62.9	62.7	63.8	66.0	68.2	70.2	71.6	72.6	72.8	72.5
Aug	66.4	66.0	65.4	65.0	64.5	64.9	67.0	69.2	70.6	71.5	72.1	72.8	73.4
Sept....	62.2	61.9	61.5	61.1	60.7	60.8	62.1	64.5	66.5	68.1	69.8	70.7	71.4
Oct.....	47.8	47.3	46.7	46.5	46.3	46.3	46.9	49.2	50.7	52.2	54.2	55.3	56.1
Nov	39.3	38.6	38.1	37.9	37.7	37.4	37.2	38.6	40.0	41.9	44.3	45.8	46.2
Dec	37.3	37.2	36.7	36.5	36.4	36.1	36.3	36.9	38.1	39.8	41.8	43.4	44.6
Year....	47.0	46.6	46.1	45.8	45.4	45.6	46.6	48.3	49.8	51.1	52.5	53.6	54.3

BUFFALO, N. Y.

[λ=42° 53′; φ=78° 53′.]

Jan	27.5	26.9	26.6	26.5	26.5	26.3	26.4	26.8	27.3	28.0	28.8	29.7	30.1
Feb	31.6	31.6	30.9	30.6	30.3	30.4	30.1	30.0	30.3	30.6	31.5	31.9	31.8
Mar	29.5	29.5	29.1	29.2	29.1	28.9	28.8	29.7	30.7	31.9	33.3	34.2	35.1
Apr	43.0	42.6	41.8	40.8	40.4	40.5	40.8	42.5	43.2	45.2	46.6	47.5	47.8
May	50.2	49.3	48.5	48.1	47.4	47.5	48.6	49.9	51.3	52.5	53.6	54.9	55.9
June ...	62.3	61.4	60.7	60.2	60.0	60.8	62.6	64.6	65.7	67.2	68.7	69.8	70.8
July	63.5	63.1	62.3	61.7	61.6	62.0	63.5	65.3	66.4	67.4	68.2	69.0	69.8
Aug	65.5	64.8	64.4	63.9	63.5	63.5	64.7	66.7	68.4	69.6	71.2	72.0	72.8
Sept....	63.2	62.8	62.6	62.1	61.8	61.8	62.0	63.9	65.7	66.9	68.1	68.9	69.9
Oct.....	49.2	48.5	47.8	47.5	47.1	46.8	47.0	48.3	50.2	51.4	53.1	53.7	54.5
Nov	40.0	39.7	39.5	39.2	39.4	38.8	38.4	38.6	39.2	40.4	41.4	42.0	43.2
Dec	36.7	36.7	36.5	36.3	36.4	36.6	36.4	36.4	36.6	37.3	37.9	38.3	38.7
Year....	46.8	46.4	45.9	45.5	45.3	45.3	45.8	46.9	47.9	49.0	50.2	51.0	51.7

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME.

ASSINABOINE, FORT, MONT.

[h = 16 ft.; local time, 2h 19m slow.]

2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	Mid.	Mean.	Mean max.	Mean min.	1891.
31.1	31.9	33.5	34.9	33.8	30.5	29.0	27.9	27.2	26.1	25.4	26.9	37.4	15.9	Jan.
3.6	4.6	5.5	6.5	5.9	4.8	4.6	2.3	1.5	0.9	0.5	0.9	8.6	− 9.1	Feb.
25.0	26.0	26.7	27.6	26.8	25.9	25.6	22.8	21.9	20.7	20.1	20.7	29.5	11.0	Mar.
57.0	57.5	58.6	59.5	59.1	58.0	57.7	52.3	49.3	47.6	46.0	48.4	61.8	34.0	Apr.
59.3	60.0	61.0	62.5	61.8	61.3	61.6	58.5	54.4	51.5	49.5	52.7	65.1	39.9	May.
62.7	64.0	65.5	65.8	65.3	64.6	65.0	62.6	60.2	57.6	56.0	57.9	68.1	48.0	June.
74.1	75.2	76.0	76.9	77.2	75.6	75.4	72.2	68.5	64.5	63.0	66.7	78.1	54.8	July.
72.1	74.3	75.2	75.6	75.6	75.2	74.4	68.8	63.8	61.9	60.1	64.4	77.4	51.4	Aug.
64.1	65.9	67.3	68.0	68.0	67.3	65.1	61.8	57.7	56.2	55.3	57.2	69.9	45.2	Sept.
52.5	54.9	56.4	57.3	56.5	55.3	50.0	48.6	46.8	45.3	43.7	46.0	59.5	34.9	Oct.
33.5	35.1	36.9	37.0	36.4	34.8	31.7	30.7	29.5	28.0	27.2	29.1	39.1	18.7	Nov.
30.8	32.5	33.7	34.0	32.9	32.0	29.9	28.9	27.7	27.2	26.6	27.9	37.3	17.9	Dec.
47.2	48.5	49.7	50.5	49.9	48.8	47.5	44.8	42.4	40.6	39.4	41.6	52.6	30.2	Year.

BISMARCK, N. DAK.

[h = 59 ft.; local time, 1h 42m slow.]

27.6	29.5	31.1	31.5	30.6	27.8	25.9	23.9	23.1	21.9	21.3	22.9	34.4	13.2	Jan.
11.5	13.9	15.4	15.9	15.8	13.4	10.6	8.8	7.0	5.9	4.9	5.8	18.2	−5.3	Feb.
------	------	------	------	------	------	------	------	------	------	------	------	------	------	Mar.
------	------	------	------	------	------	------	------	------	------	------	------	------	------	Apr.
61.7	63.1	63.9	64.3	64.3	63.4	62.1	59.0	56.3	53.9	52.0	54.7	66.9	41.3	May.
66.3	66.8	67.4	67.4	66.7	66.0	64.8	62.9	60.6	59.3	58.1	60.7	69.5	51.4	June.
71.6	72.6	73.4	73.8	73.3	72.8	71.0	69.0	66.3	64.2	62.0	65.1	76.1	53.6	July.
75.0	76.1	77.0	77.0	76.0	75.0	73.1	69.2	66.2	64.1	62.3	66.1	78.8	53.2	Aug.
71.3	72.8	73.9	74.2	73.5	71.1	67.8	63.9	61.9	60.3	58.2	61.9	75.4	48.3	Sept.
53.3	54.8	55.7	55.9	54.8	52.0	49.0	46.3	44.5	43.3	42.2	45.1	57.5	34.1	Oct.
27.8	28.7	29.1	29.1	28.0	26.1	25.1	23.8	23.0	22.4	22.1	23.0	32.7	13.2	Nov.
23.7	25.1	25.6	25.0	23.6	22.5	21.1	20.2	19.8	19.2	19.1	20.1	27.3	11.9	Dec.
------	------	------	------	------	------	------	------	------	------	------	------	------	------	Year.

BOSTON, MASS.

[h = 115 ft.; local time, 0h 16m fast.]

34.6	34.7	34.4	33.9	33.4	32.6	32.2	31.6	31.4	30.9	30.4	31.2	37.6	24.6	Jan.
36.5	36.6	36.0	35.4	34.5	33.6	33.2	32.6	32.2	31.4	31.0	32.3	39.5	24.4	Feb.
37.6	37.6	37.2	36.6	35.8	35.0	34.5	33.7	33.3	33.1	32.6	33.8	40.0	27.3	Mar.
52.6	52.7	52.9	52.7	51.9	49.4	48.3	46.9	46.2	45.3	44.7	47.7	56.8	39.3	Apr.
59.6	59.9	58.8	58.9	58.0	56.9	56.2	54.3	53.4	52.6	51.8	54.5	64.6	47.0	May.
69.0	69.8	70.2	70.0	69.6	67.7	66.2	64.6	63.5	62.1	61.4	64.5	73.4	56.6	June.
73.0	72.8	72.4	72.2	71.3	69.4	68.0	66.9	66.1	65.3	64.7	68.2	76.5	61.4	July.
73.6	73.1	72.9	72.6	72.2	70.7	70.1	69.1	68.5	67.6	67.1	69.4	76.8	63.2	Aug.
71.9	71.2	70.4	69.4	68.2	66.5	66.1	65.1	64.1	63.3	62.6	65.8	73.9	59.5	Sept.
56.4	56.5	55.6	54.5	53.2	52.0	51.5	50.4	49.7	49.2	48.7	51.0	58.6	44.5	Oct.
46.3	46.1	45.6	44.8	43.3	42.3	41.7	41.1	40.5	39.6	39.0	41.4	48.2	34.6	Nov.
45.3	44.6	43.8	42.9	42.2	41.4	40.9	40.1	39.4	38.3	37.9	39.9	47.5	33.4	Dec.
54.7	54.6	54.2	53.7	52.8	51.5	50.7	49.7	49.0	48.2	47.7	50.0	57.8	43.0	Year.

BUFFALO, N. Y.

[h = 103 ft.; local time, 0h 15m slow.]

30.6	30.6	30.2	29.8	29.6	29.5	29.0	28.7	28.5	28.1	27.9	28.3	33.6	22.0	Jan.
32.3	32.3	32.4	32.1	31.9	31.5	31.2	31.0	30.6	30.3	30.6	31.2	37.3	23.7	Feb.
35.9	35.4	35.2	34.6	34.1	33.0	32.4	32.0	31.7	31.0	30.7	31.9	38.2	23.7	Mar.
47.5	47.3	47.0	46.9	46.4	45.3	44.4	44.0	44.0	44.0	43.8	44.3	51.1	36.1	Apr.
56.5	57.1	57.3	56.5	55.3	54.5	53.3	52.2	51.9	51.4	51.0	52.3	59.2	43.6	May.
71.6	72.4	71.6	71.1	70.5	68.9	67.4	66.3	65.2	64.2	63.3	66.1	74.6	56.4	June.
70.7	70.8	71.1	70.5	69.5	69.1	67.9	66.9	66.1	65.0	64.3	66.5	73.1	57.5	July.
73.5	74.4	74.0	73.0	72.3	71.2	69.6	68.5	67.7	66.7	66.2	68.7	76.3	59.4	Aug.
70.4	71.1	70.8	70.1	68.8	67.6	66.5	65.5	64.7	63.6	63.2	65.9	73.0	57.4	Sept.
55.2	55.4	55.3	54.4	53.5	52.5	51.7	51.2	50.6	50.1	50.0	51.0	57.1	43.2	Oct.
42.8	42.7	42.4	41.7	41.1	40.5	40.2	40.1	39.9	39.5	39.5	40.4	45.7	33.0	Nov.
39.3	39.5	39.3	39.0	38.7	38.0	37.9	37.6	37.4	37.3	37.3	37.6	42.6	30.5	Dec.
52.2	52.4	52.2	51.6	51.0	50.1	49.3	48.7	48.2	47.6	47.3	48.7	55.2	40.5	Year.

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

CHICAGO, ILLINOIS.

[λ = 41° 52′; φ = 87° 38′.]

1891.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan	29.8	29.6	29.4	29.3	29.0	28.7	28.5	28.4	28.5	28.9	29.7	30.2	30.8
Feb	27.9	27.2	26.7	26.2	25.7	25.2	25.0	24.7	25.2	26.6	28.0	29.2	30.5
Mar	29.3	28.8	28.6	28.2	28.1	27.6	27.6	27.5	28.3	29.5	30.4	31.1	32.1
Apr	45.8	45.6	45.2	44.9	44.1	43.9	43.9	44.5	45.0	45.8	47.3	47.7	47.9
May	52.7	52.3	51.5	51.0	50.3	49.8	49.7	50.6	51.3	52.8	53.5	53.8	53.9
June	65.0	64.2	63.9	63.6	63.1	62.7	62.5	63.2	63.6	64.8	65.9	66.5	67.1
July	65.4	64.6	64.0	63.5	62.9	62.7	63.2	64.9	65.9	67.3	68.0	68.4	68.5
Aug	67.1	66.3	65.5	64.8	64.4	64.2	64.7	66.1	68.8	70.0	70.8	71.3	71.8
Sept	67.4	66.8	66.2	65.6	65.0	64.1	63.5	64.5	66.4	68.9	70.7	71.6	72.6
Oct	51.3	51.0	50.0	49.4	48.8	48.1	47.5	47.7	49.1	51.0	52.6	53.9	55.3
Nov	33.4	32.7	31.9	31.3	31.3	31.2	31.1	31.0	31.7	32.6	33.6	34.7	35.5
Dec	34.3	33.8	33.3	33.2	32.8	32.5	32.2	32.3	32.5	33.6	35.1	36.1	37.0
Year	47.4	46.9	46.4	45.9	45.5	45.1	45.0	45.4	46.4	47.6	48.8	49.5	50.2

CLEVELAND, OHIO.

[λ = 41° 30′; φ = 81° 42′.]

Jan	31.1	30.7	30.3	30.0	29.9	29.8	29.7	29.7	30.3	31.3	32.0	32.6	33.1
Feb	33.4	33.5	33.1	32.9	32.1	31.7	31.6	31.8	32.6	33.1	33.7	34.8	35.1
Mar	31.3	30.9	30.6	30.3	30.2	30.0	29.6	30.0	30.7	32.0	33.0	34.0	34.9
Apr	46.1	45.7	44.8	44.3	44.1	44.1	44.6	46.4	48.2	49.3	50.5	50.8	51.3
May	50.2	49.3	48.7	48.4	47.7	47.9	49.2	52.3	54.5	55.7	56.2	56.6	57.1
June	64.9	64.0	63.6	63.0	62.6	62.9	64.6	67.3	68.8	69.8	70.6	70.8	71.4
July	65.0	64.4	63.4	62.6	62.3	61.8	63.6	67.3	69.5	70.4	71.5	71.8	72.1
Aug	65.2	64.2	63.4	62.9	62.3	62.0	64.0	67.1	70.5	72.0	73.1	73.3	74.1
Sept	63.2	62.5	61.8	61.2	60.8	60.6	60.9	63.4	67.1	70.5	71.7	72.8	73.5
Oct	49.8	49.4	48.7	48.0	47.5	47.1	46.9	48.3	50.4	53.1	55.2	56.6	57.8
Nov	39.7	38.6	38.4	37.7	37.5	37.3	37.2	37.6	37.8	38.9	40.1	42.1	42.9
Dec	36.9	36.7	36.6	36.3	36.3	36.2	36.3	36.1	36.3	37.9	39.7	41.7	42.9
Year	48.1	47.5	47.0	46.5	46.1	46.0	46.5	48.1	49.7	51.2	52.3	53.2	53.8

CINCINNATI, OHIO.

[λ = 39° 6′; φ = 84° 30′.]

Jan	35.3	35.1	34.8	34.5	34.0	33.7	33.3	33.4	33.8	34.8	35.8	36.7	37.8
Feb	39.6	39.1	38.8	38.4	38.0	37.5	37.4	37.3	37.6	38.4	39.1	39.9	41.1
Mar	36.9	35.8	35.2	34.5	34.0	33.5	33.2	33.6	34.5	35.6	36.7	38.3	39.8
Apr	52.4	51.3	50.5	50.0	49.2	48.8	48.8	50.1	52.8	55.4	57.4	59.2	60.9
May	57.2	56.4	54.9	53.9	52.9	52.2	52.8	54.5	57.4	60.2	62.4	63.6	65.3
June	70.1	69.5	68.2	67.6	66.9	66.8	68.1	69.6	72.5	74.7	76.6	78.1	79.6
July	67.9	66.9	65.5	64.8	64.2	63.7	64.9	67.2	70.1	72.6	74.6	76.0	77.0
Aug	69.6	68.7	67.9	67.2	66.4	65.6	65.6	67.1	68.8	71.5	73.7	75.5	76.9
Sept	65.5	64.9	63.7	62.8	62.2	61.3	60.8	62.5	65.3	69.6	73.6	75.8	77.3
Oct	52.6	51.4	50.2	49.2	48.6	48.0	47.4	47.7	49.8	52.9	55.9	58.5	61.0
Nov	42.4	41.7	40.7	40.1	39.6	39.1	38.4	38.3	38.3	39.5	41.9	43.7	44.8
Dec	41.0	40.1	39.2	38.6	38.0	37.3	36.8	37.0	37.5	39.4	41.4	43.2	45.0
Year	52.5	51.7	50.8	50.1	49.5	49.0	49.0	49.9	51.5	53.7	55.8	57.4	58.9

DETROIT, MICHIGAN.

[λ = 42° 20′; φ = 83° 3′.]

Jan	27.6	27.4	27.2	26.7	26.6	26.4	26.5	26.6	26.8	27.6	28.9	29.5	30.4
Feb	30.0	29.4	29.1	29.0	28.7	28.3	27.8	27.4	27.6	28.4	29.5	30.5	31.4
Mar	28.3	27.9	27.6	27.4	27.1	26.9	26.8	27.4	28.3	29.5	30.8	31.8	32.8
Apr	44.0	43.3	42.7	42.2	41.9	41.6	41.8	43.5	45.7	48.3	50.0	51.3	52.6
May	49.9	49.4	48.5	48.2	47.7	47.7	49.0	50.7	53.7	55.7	57.8	59.3	61.3
June	62.4	61.7	61.2	61.0	60.6	61.2	63.3	65.1	67.6	69.6	71.3	71.8	73.2
July	62.7	62.0	61.2	60.8	60.2	60.1	61.2	63.5	66.5	68.7	70.1	71.2	72.8
Aug	65.2	64.7	64.2	63.6	63.1	62.9	64.3	65.9	68.4	70.3	72.1	72.8	74.0
Sept	62.9	62.4	61.9	61.3	60.7	59.9	60.4	61.9	65.2	67.7	70.4	72.4	73.8
Oct	47.9	47.4	46.9	46.5	46.1	45.6	45.4	46.7	48.9	51.1	53.0	54.4	55.1
Nov	36.5	36.2	35.9	35.7	35.3	34.9	34.7	34.7	35.1	36.3	37.3	38.2	38.8
Dec	34.0	34.2	33.8	33.6	33.4	33.2	32.9	32.5	32.9	33.9	35.3	36.5	37.6
Year	46.0	45.5	45.0	44.7	44.3	44.1	44.5	45.5	47.2	48.9	50.5	51.6	52.8

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

CHICAGO, ILLINOIS.

[h_t = 241 ft.; local time, 0h 50m, slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean max.	Mean min.	1891.
31.4	31.7	31.7	31.6	31.5	31.0	30.5	30.3	30.0	30.0	29.7	30.0	35.0	25.4	Jan.
31.4	32.0	32.6	32.9	32.3	31.3	30.6	30.2	29.8	28.9	28.0	28.7	35.7	21.5	Feb.
32.6	32.9	33.0	33.3	33.1	32.5	32.2	31.7	31.3	31.0	30.4	30.5	36.2	25.1	Mar.
48.7	48.7	49.2	49.5	49.6	48.8	48.0	47.7	47.1	46.7	46.5	46.8	53.9	40.0	Apr.
54.8	54.8	55.3	55.9	54.8	54.3	53.8	53.8	53.6	53.3	53.1	52.9	61.1	45.7	May.
67.7	67.6	67.6	67.4	67.0	66.8	66.2	66.2	66.1	65.6	65.1	65.4	72.2	59.2	June.
68.7	69.0	69.4	69.5	69.3	69.2	68.7	68.1	67.7	67.1	66.4	66.8	73.4	60.5	July.
71.9	72.5	72.8	72.9	72.4	71.5	70.5	69.9	69.2	68.4	67.6	69.0	75.5	62.5	Aug.
72.9	73.0	73.2	73.2	72.7	71.8	70.7	69.9	69.5	68.9	68.1	69.0	76.0	62.1	Sept.
56.3	57.4	57.9	57.8	57.3	56.0	54.4	53.3	52.4	51.9	51.2	52.6	60.0	45.1	Oct.
36.2	36.3	36.5	36.4	36.5	35.9	35.5	35.1	34.7	34.1	33.7	33.9	39.4	28.2	Nov.
38.2	38.8	39.0	38.7	38.2	37.3	36.9	36.6	36.5	36.2	35.7	35.5	41.6	29.1	Dec.
50.9	51.2	51.5	51.6	51.2	50.5	49.8	49.4	49.0	48.5	48.0	48.4	55.0	42.0	Year.

CLEVELAND, OHIO.

[h_t = 97 ft.; local time, 0h 27m, slow.]

33.6	33.1	33.1	32.8	32.7	32.5	32.2	32.2	32.3	31.8	31.6	31.6	35.9	26.7	Jan.
35.8	35.8	36.0	35.8	35.4	34.9	34.4	33.6	33.3	33.2	32.9	33.8	41.2	27.3	Feb.
35.3	34.9	34.7	35.0	34.6	34.0	33.9	33.7	33.3	32.8	32.6	32.6	38.7	26.2	Mar.
52.0	52.6	53.5	53.2	52.6	51.5	50.7	49.4	48.2	47.7	47.1	48.7	56.4	40.6	Apr.
57.8	58.5	59.0	59.2	59.5	59.2	57.2	56.0	54.5	52.9	51.6	54.1	62.5	45.3	May.
71.8	71.3	71.3	71.0	71.2	70.9	69.9	69.0	67.8	66.7	65.9	68.0	76.3	60.3	June.
72.5	72.2	72.5	72.7	72.4	72.3	70.9	69.6	67.9	66.6	65.3	68.4	76.4	59.6	July.
74.2	74.9	75.2	75.1	74.9	73.5	71.9	70.3	68.8	67.0	65.6	69.4	77.6	61.1	Aug.
74.1	73.8	73.9	73.9	72.9	71.5	69.4	67.9	66.2	65.3	64.2	67.6	76.1	58.9	Sept.
58.2	58.5	58.6	58.0	57.0	55.1	53.3	51.9	50.8	50.2	50.2	52.5	60.3	44.5	Oct.
43.0	43.1	43.4	42.9	42.6	41.9	40.9	40.4	40.2	39.8	39.4	40.1	45.4	33.9	Nov.
43.3	43.2	42.7	42.0	40.8	40.2	39.6	39.2	38.4	38.5	38.2	39.0	45.5	32.4	Dec.
54.3	54.3	54.5	54.3	53.9	53.1	52.0	51.1	50.1	49.4	48.7	50.5	57.7	43.1	Year.

CINCINNATI, OHIO.

[h_t = 153 ft.; local time, 0h 38m, slow.]

38.5	39.1	39.2	39.4	39.1	38.8	38.2	37.8	37.2	36.6	35.8	36.4	42.2	30.2	Jan.
41.9	42.7	43.4	43.5	43.0	42.1	41.1	40.4	40.0	39.2	38.8	39.9	48.1	31.9	Feb.
41.0	41.8	42.3	42.5	42.2	41.7	40.8	40.1	39.3	38.9	38.2	37.9	44.7	31.1	Mar.
61.9	62.8	62.4	62.4	62.5	61.5	59.7	58.1	56.6	55.3	54.0	56.0	65.6	46.4	Apr.
66.2	66.9	67.8	67.9	67.6	66.4	64.6	63.2	61.0	59.5	58.2	60.5	69.1	50.2	May.
80.0	79.3	79.4	79.8	79.1	77.4	76.2	75.2	73.9	72.6	71.3	73.8	83.3	65.1	June.
78.1	78.6	78.6	79.1	78.9	78.5	76.5	74.4	72.3	70.7	69.0	72.1	80.9	61.8	July.
78.3	78.4	78.7	78.9	78.7	77.9	76.3	74.5	73.0	71.6	70.3	72.6	80.7	63.9	Aug.
78.7	79.6	79.8	79.6	79.0	77.2	74.5	71.8	69.6	68.0	66.5	70.4	81.0	59.0	Sept.
62.5	63.3	63.2	63.3	62.4	60.7	59.1	57.6	55.9	54.7	53.4	55.4	64.8	44.5	Oct.
45.8	47.0	47.3	47.2	46.8	46.0	45.4	44.5	43.8	43.4	42.4	42.8	49.2	36.0	Nov.
46.8	47.9	48.3	48.1	47.5	46.5	45.4	44.2	43.5	42.8	42.1	42.4	49.5	34.5	Dec.
60.0	60.6	60.9	61.0	60.6	59.6	58.2	56.8	55.5	54.4	53.3	55.0	63.3	46.2	Year.

DETROIT, MICHIGAN.

[h_t = 158 ft.; local time, 0h 32m, slow.]

30.8	30.9	30.7	30.7	30.5	29.9	29.7	29.1	28.7	28.3	28.0	28.6	33.4	24.2	Jan.
32.4	33.0	33.0	32.9	32.1	31.2	31.1	30.6	30.2	29.6	29.3	30.1	36.9	24.3	Feb.
33.4	34.1	34.2	33.8	33.1	32.1	31.6	31.1	30.5	30.0	29.7	30.3	36.9	24.6	Mar.
53.7	54.5	54.8	54.0	53.1	50.7	48.9	47.9	47.1	46.3	45.4	47.7	57.2	39.3	Apr.
62.6	63.3	63.5	62.6	62.2	59.6	57.1	54.3	52.6	51.6	51.1	55.0	66.0	45.4	May.
74.0	74.3	74.3	74.2	73.8	72.0	69.8	67.5	66.2	64.8	63.8	67.7	77.3	59.3	June.
73.3	73.2	73.3	73.0	72.7	71.2	69.5	67.4	66.3	64.8	63.8	67.1	76.4	57.9	July.
74.5	75.4	75.2	74.7	74.2	72.0	70.2	68.8	67.7	66.8	65.9	69.0	78.2	60.9	Aug.
74.4	74.7	74.3	73.4	72.3	70.1	68.1	66.6	65.5	64.6	63.9	67.0	77.1	58.5	Sept.
56.2	56.6	56.1	55.0	53.6	52.4	51.3	50.7	50.1	49.1	48.2	50.6	58.5	43.0	Oct.
39.1	39.4	39.6	39.2	38.4	37.8	37.1	37.2	36.7	36.5	36.2	36.9	41.9	31.1	Nov.
38.3	39.3	39.2	38.5	37.5	36.6	36.0	35.6	35.4	35.0	34.5	35.4	41.7	29.6	Dec.
53.6	54.1	54.0	53.5	52.8	51.3	50.0	48.9	48.1	47.3	46.6	48.8	56.8	41.5	Year.

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

DODGE CITY, KANS.

[λ = 37° 45′; φ = 100° 0′.]

1891.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan	25.8	24.9	24.2	23.6	22.8	22.3	21.5	21.3	22.0	23.2	25.7	29.2	31.8
Feb	28.5	28.0	27.5	26.5	25.7	25.1	24.7	23.9	24.4	26.2	29.7	32.9	35.0
Mar	31.4	31.0	30.1	29.5	28.7	27.9	27.4	25.7	26.6	29.2	31.8	34.0	36.5
Apr	49.0	47.6	46.5	45.3	44.7	44.1	43.6	46.4	50.3	54.3	57.7	60.3	62.6
May	56.7	55.5	54.8	54.3	53.4	52.7	52.5	55.1	58.0	60.9	63.8	66.3	68.3
June	64.9	64.4	63.9	62.8	62.2	61.9	61.9	64.4	66.6	68.8	71.0	72.6	74.6
July	68.6	68.0	67.4	66.2	65.6	65.5	65.8	67.5	69.9	72.9	75.8	78.4	80.7
Aug	67.5	66.7	66.0	65.3	64.2	63.4	62.6	65.1	68.3	72.3	76.9	80.1	82.2
Sept	62.7	62.1	61.7	61.1	60.1	59.6	59.0	59.8	62.4	66.3	69.7	72.8	75.4
Oct	49.5	47.9	47.3	46.5	45.6	44.5	44.0	43.1	45.5	51.6	57.1	60.5	63.6
Nov	35.6	34.5	34.4	33.8	32.9	32.6	32.1	31.7	32.5	36.5	41.4	44.2	47.0
Dec	32.4	31.6	31.0	30.4	29.9	29.8	29.5	28.7	28.5	30.5	34.6	37.9	40.8
Year	47.7	46.8	46.2	45.4	44.6	44.1	43.7	44.4	46.2	49.4	52.9	55.8	58.2

EASTPORT, ME.

[λ = 44° 54′; φ 66° 59′.]

Jan	24.6	24.3	24.0	23.8	23.5	23.0	22.9	22.7	22.8	23.8	24.5	24.9	25.6
Feb	24.9	24.6	24.2	23.6	23.0	22.1	21.4	21.5	21.9	22.6	23.1	23.8	24.5
Mar	27.9	27.6	27.0	26.7	26.0	25.8	26.1	26.7	27.7	28.5	29.5	30.5	31.4
Apr	37.2	36.9	36.6	36.1	35.9	36.3	37.0	38.2	39.3	40.9	42.2	42.6	43.1
May	43.0	42.6	42.3	41.8	41.8	42.9	44.4	46.5	48.3	49.4	50.0	50.6	51.7
June	50.9	50.3	50.1	49.8	49.6	50.8	51.7	53.0	54.3	55.7	57.0	57.7	58.9
July	52.6	52.3	52.1	52.0	52.5	53.6	55.7	57.4	58.0	59.1	60.5	61.0	61.5
Aug	56.5	55.8	55.9	55.3	55.0	56.3	57.8	60.0	61.6	63.0	64.4	64.7	65.5
Sept	55.3	55.2	54.5	54.2	53.3	53.3	54.8	56.7	58.5	60.6	61.7	62.6	62.6
Oct	44.2	44.1	43.9	43.7	43.7	43.6	44.1	45.3	46.3	47.3	48.4	49.4	49.9
Nov	37.8	37.6	37.4	37.1	37.0	36.9	37.3	38.0	39.4	40.1	41.0	41.6	42.1
Dec	32.9	32.9	32.4	32.1	31.6	31.6	31.4	31.7	32.9	33.8	34.7	35.5	36.1
Year	40.6	40.4	40.0	39.7	39.4	39.7	40.4	41.5	42.6	43.7	44.8	45.4	46.1

GALVESTON, TEX.

[λ = 29° 18′; φ 94° 50′.]

Jan	52.2	52.0	51.6	51.7	51.4	50.9	50.7	51.3	51.4	51.8	52.4	53.0	53.9
Feb	59.3	59.2	59.0	59.0	58.6	58.3	58.2	58.4	58.5	59.0	59.8	60.3	61.2
Mar	59.4	58.9	58.7	58.4	58.1	57.9	57.7	57.8	58.6	59.9	60.5	61.5	62.3
Apr	67.7	67.0	66.6	66.4	66.2	65.9	65.8	66.6	67.3	68.1	69.1	69.6	70.2
May	72.7	72.3	71.9	71.6	71.4	71.2	71.3	72.4	73.1	74.0	75.0	75.4	76.0
June	80.9	80.6	80.0	79.7	79.5	79.3	79.7	80.7	81.3	82.0	82.5	83.1	83.6
July	82.2	82.1	81.7	81.5	81.2	81.0	80.9	81.6	82.6	83.4	84.3	84.5	84.7
Aug	81.6	81.5	81.2	80.9	80.7	80.3	79.8	80.6	81.8	82.5	83.5	84.1	84.8
Sept	79.3	78.8	78.7	78.4	77.8	77.3	77.0	77.4	78.1	79.3	80.1	80.4	80.9
Oct	70.9	70.7	70.2	69.9	69.5	69.2	68.8	68.9	70.0	71.1	72.0	72.8	73.5
Nov	63.1	62.6	61.8	61.1	61.1	60.5	60.4	60.9	61.6	62.4	63.6	64.7	65.2
Dec	57.4	57.2	57.2	57.2	56.9	56.8	56.8	57.0	57.6	58.1	58.6	59.0	59.5
Year	68.9	68.6	68.2	68.0	67.7	67.4	67.3	67.8	68.5	69.3	70.1	70.7	71.3

KANSAS CITY, MO.

[λ = 39° 5′; φ 94° 37′.]

Jan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Feb*	29.5	29.3	28.9	28.3	27.7	27.3	27.0	26.7	26.9	27.8	29.5	30.9	31.7
Mar	33.2	32.3	31.7	31.3	30.8	30.1	29.5	28.9	29.3	30.1	31.1	32.7	34.1
Apr	54.5	53.3	52.5	51.7	51.2	50.7	49.9	50.1	51.0	52.8	55.1	57.4	58.8
May	59.3	58.3	57.4	56.3	55.4	54.8	54.3	55.5	57.0	59.3	61.3	63.2	64.5
June	68.5	67.8	67.2	66.6	65.9	65.6	65.7	66.8	68.5	70.2	71.9	73.4	74.7
July	69.6	68.7	67.9	67.4	66.6	66.1	66.3	67.3	68.9	70.8	72.6	74.2	75.5
Aug	70.1	69.2	68.5	67.8	67.2	66.6	66.0	66.9	68.2	71.2	73.4	75.4	76.9
Sept	67.5	66.8	65.8	65.1	64.4	64.2	63.5	63.1	64.6	68.0	71.6	74.2	76.3
Oct	54.2	53.4	52.5	51.7	50.7	50.0	49.3	48.3	49.2	52.2	56.0	58.8	60.8
Nov	37.8	37.3	36.4	35.6	35.3	34.6	33.7	33.1	33.2	34.3	36.6	39.0	41.3
Dec	37.4	36.9	36.4	35.6	35.0	34.5	34.4	34.0	34.5	35.8	38.0	40.0	42.0
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

* For 21 days only.

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

DODGE CITY, KANS.

[h_t = 44 ft.; local time 1h 40m slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean Max.	Mean Min.	1891.
34.5	35.8	36.5	37.1	36.4	35.0	30.6	29.3	28.4	27.5	26.5	28.2	38.2	19.5	Jan.
38.2	39.7	40.9	41.4	40.6	38.4	33.2	31.8	30.6	29.8	29.3	31.3	44.5	19.6	Feb.
40.3	41.4	42.4	43.4	42.8	41.7	37.7	36.2	35.0	33.9	32.7	34.1	44.2	25.5	Mar.
64.6	66.5	67.6	68.1	67.5	66.5	61.3	57.6	55.0	53.1	51.8	55.5	69.1	41.6	Apr.
70.2	70.8	71.9	71.8	71.1	68.7	66.5	63.4	61.2	59.3	58.1	61.9	73.4	49.9	May.
76.7	77.6	77.4	77.3	76.5	75.4	73.7	70.2	68.0	66.7	66.0	69.4	79.7	59.5	June.
82.5	83.4	84.1	83.8	83.1	80.8	78.3	74.5	72.6	70.8	69.9	74.0	84.5	63.1	July.
83.8	85.4	85.9	85.8	85.0	83.1	79.1	74.3	52.0	70.3	69.0	73.9	86.7	61.3	Aug.
77.4	78.4	78.9	78.3	77.1	74.7	70.7	68.3	67.0	65.6	64.2	68.1	80.2	56.7	Sept.
65.9	67.5	68.1	67.9	66.7	61.8	57.2	55.2	53.4	51.5	50.1	54.7	69.0	41.4	Oct.
49.6	51.1	51.3	50.7	48.9	45.1	42.0	40.6	38.6	37.8	36.9	40.1	53.4	28.4	Nov.
43.0	44.7	45.8	45.5	43.3	40.0	37.1	35.9	34.7	33.7	33.0	35.5	48.6	26.1	Dec.
60.6	61.9	62.6	62.6	61.6	59.3	55.6	53.1	51.4	50.0	49.0	52.2	64.3	40.9	Year.

EASTPORT, ME.

[h_t = 51 ft.; local time 0h 32m fast.]

26.4	26.7	26.9	26.4	26.3	26.0	26.1	26.1	25.7	25.8	25.7	24.9	30.3	18.2	Jan.
25.2	25.4	25.4	25.6	25.6	25.6	25.8	25.8	25.4	25.2	25.0	24.2	29.6	15.9	Feb.
31.9	32.4	32.3	32.0	31.6	31.1	30.3	30.0	29.4	28.7	28.1	29.1	34.6	23.4	Mar.
43.2	43.1	42.9	42.1	41.5	40.4	39.5	38.9	38.7	38.3	38.0	39.5	45.6	33.5	Apr.
51.5	51.7	51.2	50.5	49.2	47.7	46.1	45.6	45.1	44.6	43.9	46.8	55.0	40.3	May.
58.9	58.5	58.1	57.8	57.0	55.3	54.1	53.8	52.8	52.2	51.4	54.2	62.2	48.0	June.
61.2	61.0	60.5	60.4	58.5	56.9	55.4	54.5	54.2	53.2	52.7	56.5	65.4	50.2	July.
65.4	65.3	64.3	63.5	61.8	60.2	59.5	58.5	58.0	57.7	56.9	60.1	68.3	53.8	Aug.
62.6	62.5	61.6	59.6	58.5	57.5	56.8	56.7	56.5	56.1	55.8	57.8	64.9	51.9	Sept.
50.1	50.0	48.9	47.8	46.9	46.1	45.7	45.3	44.9	44.7	44.4	46.2	51.6	40.8	Oct.
42.1	41.3	40.5	39.8	39.4	39.0	38.5	38.2	37.9	37.4	37.0	38.9	43.5	33.3	Nov.
36.4	36.2	35.4	34.6	34.1	33.6	33.5	33.4	33.4	33.1	33.1	33.6	38.6	27.4	Dec.
46.2	46.2	45.7	45.0	44.2	43.3	42.6	42.2	41.8	41.4	41.0	42.6	49.1	36.4	Year.

GALVESTON, TEX.

[h_t = 85 ft.; local time 1h 19m slow.]

54.8	55.3	55.3	55.5	54.9	54.6	54.8	54.3	53.8	53.3	52.9	53.1	57.1	48.2	Jan.
61.8	61.9	61.8	62.0	61.2	60.8	60.9	60.4	60.1	60.0	59.8	60.0	64.7	54.3	Feb.
62.8	63.2	63.2	63.3	62.8	61.8	61.3	61.2	60.9	60.5	60.2	60.5	64.9	54.1	Mar.
70.4	70.6	70.9	70.9	70.2	69.6	69.5	69.0	68.8	68.6	68.2	68.5	72.8	63.7	Apr.
76.6	76.8	76.9	76.9	76.3	75.5	74.9	74.0	73.6	73.4	73.0	74.0	78.2	69.5	May.
83.9	83.8	84.0	83.7	83.3	82.8	81.9	81.5	81.4	81.2	81.1	81.7	85.4	77.2	June.
85.0	85.0	84.8	85.0	84.7	84.1	83.5	82.9	82.7	82.5	82.4	83.1	86.9	78.2	July.
84.8	84.9	85.0	84.9	84.4	83.7	82.5	82.1	82.0	81.8	81.7	82.5	86.5	77.4	Aug.
81.2	81.5	81.6	81.3	81.0	80.5	79.9	79.8	79.8	79.6	79.5	79.6	82.9	73.7	Sept.
74.0	74.2	74.2	74.1	73.4	72.6	72.2	72.0	71.5	71.3	70.8	71.6	75.5	66.4	Oct.
66.0	66.2	66.1	65.6	65.2	65.0	64.9	64.5	64.0	63.3	62.8	63.4	67.7	57.6	Nov.
59.9	60.4	60.4	60.2	59.4	59.1	58.9	58.8	58.5	58.1	57.9	58.4	62.2	52.3	Dec.
71.8	72.0	72.0	72.0	71.4	70.8	70.4	70.0	69.8	69.5	69.2	69.7	73.7	64.4	Year.

KANSAS CITY, MO.

[h_t = 78 ft.; local time 1h 18m slow.]

.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jan.
32.6	33.4	34.1	34.3	34.1	33.2	31.5	30.7	30.0	29.2	28.8	30.1	40.1	20.2	Feb.
35.6	36.8	38.0	38.7	39.3	39.1	37.9	37.3	36.6	35.7	39.4	34.0	41.6	26.2	Mar.
60.4	61.7	62.7	63.4	63.7	63.0	61.3	60.2	58.5	57.3	56.0	56.6	66.2	47.6	Apr.
65.8	66.1	66.5	66.5	66.4	65.6	64.8	63.7	62.5	61.4	60.4	61.1	70.4	51.2	May.
75.3	76.4	76.8	76.9	77.1	75.7	74.5	72.7	71.5	70.4	69.6	71.2	79.5	63.4	June.
77.0	77.9	78.4	78.5	78.3	77.6	76.3	74.9	73.3	72.0	70.8	72.4	81.0	63.7	July.
78.7	79.8	80.4	79.7	79.4	78.8	76.7	75.2	73.6	72.2	71.0	73.0	83.0	64.0	Aug.
77.9	79.2	79.8	79.4	78.9	77.3	74.2	73.0	71.4	70.1	69.0	71.1	81.9	61.2	Sept.
62.6	63.8	64.7	65.1	64.9	62.1	59.8	58.6	56.9	55.5	54.5	56.5	67.3	46.1	Oct.
42.7	43.8	44.5	44.6	44.0	42.3	41.0	40.3	39.3	38.9	38.4	38.7	47.3	30.8	Nov.
43.9	45.1	45.4	45.2	44.5	43.1	41.5	40.9	40.0	39.1	38.4	39.2	48.6	30.7	Dec.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Year.

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

KEY WEST, FLA.

[λ = 24° 34′; φ = 81° 49′.]

1891.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Feb	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mar	71.9	71.5	71.2	71.1	71.2	71.1	71.3	72.2	73.1	73.6	74.3	75.1	75.6
Apr	72.5	72.0	71.6	71.3	71.2	71.3	71.8	72.5	73.3	74.1	74.6	75.2	75.5
May	75.6	75.1	74.7	74.7	74.5	74.5	75.4	76.2	77.0	77.9	78.3	78.9	79.3
June	79.8	79.6	78.9	79.0	79.0	79.2	80.6	81.8	82.5	83.4	84.0	84.2	84.0
July	82.3	81.9	81.4	81.3	81.3	81.2	82.3	83.9	85.0	85.9	86.6	87.2	87.5
Aug	81.7	81.1	80.4	80.5	80.2	80.0	81.4	83.3	84.1	84.9	85.6	85.6	86.1
Sept	80.0	79.7	79.1	79.4	79.1	79.4	79.8	81.6	82.8	83.6	83.9	84.9	85.3
Oct	75.6	75.3	75.0	74.9	74.6	74.5	74.5	75.3	76.2	76.9	77.8	77.7	77.4
Nov	72.7	72.4	72.2	72.0	71.7	71.5	71.5	72.2	73.2	74.0	74.7	75.2	75.4
Dec	71.7	71.6	71.1	70.9	70.9	70.6	70.6	71.3	72.4	73.5	74.6	75.4	75.6
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

MEMPHIS, TENN.

[λ = 35° 9′; φ = 90° 3′.]

Jan	41.2	40.8	40.0	39.6	39.2	38.7	38.1	37.9	38.5	39.9	41.3	42.7	43.8
Feb	47.9	47.5	46.7	46.1	45.6	44.9	44.4	43.8	44.2	45.2	46.4	47.6	48.8
Mar	46.1	45.7	44.5	43.8	43.2	42.8	42.4	42.5	43.2	44.6	46.1	47.9	49.3
Apr	59.7	58.8	58.4	57.8	57.4	56.8	57.0	58.6	60.2	62.5	65.0	66.6	68.2
May	64.3	63.4	62.7	62.2	61.6	60.6	61.0	63.0	65.3	68.0	70.7	73.0	73.9
June	75.2	74.7	73.8	73.3	72.8	72.3	73.0	75.3	76.9	79.4	81.4	83.0	83.7
July	73.2	72.5	71.9	71.1	70.3	69.7	70.3	72.7	74.7	77.1	79.0	80.9	81.5
Aug	72.7	71.7	70.9	70.3	69.6	69.2	69.5	72.0	74.6	77.4	79.3	80.9	82.3
Sept	69.8	69.1	68.1	67.1	66.2	65.6	65.1	67.4	70.8	74.8	77.5	80.2	82.0
Oct	57.2	56.2	55.1	54.2	53.3	52.6	52.3	52.9	54.8	58.1	61.5	64.3	66.2
Nov	46.9	46.4	46.0	45.4	44.9	44.2	43.8	44.1	44.9	46.7	48.8	51.0	52.6
Dec	46.0	45.5	45.0	44.6	44.3	43.7	43.5	43.4	44.1	45.7	47.5	50.1	51.5
Year	58.4	57.7	56.9	56.3	55.7	55.1	55.0	56.1	57.7	60.0	62.0	64.0	65.3

NEW ORLEANS, LA.

[λ = 29° 58′; φ = 90° 4′.]

Jan	49.8	49.5	49.1	48.9	48.7	48.4	48.3	48.0	48.1	49.7	51.7	53.8	55.8
Feb	60.1	60.2	60.0	59.8	59.4	59.2	58.9	58.7	59.0	60.0	61.8	63.8	65.0
Mar	58.5	58.1	57.4	56.9	56.5	56.2	55.9	55.7	56.5	58.3	59.6	61.6	63.0
Apr	65.3	64.7	64.1	63.5	63.3	62.9	62.6	64.0	65.2	67.2	69.1	70.2	70.9
May	71.0	70.4	69.5	69.1	68.8	68.5	68.5	70.2	71.5	72.7	74.4	75.8	77.2
June	77.4	77.0	76.5	76.0	75.7	75.6	77.0	78.4	80.1	81.4	82.8	83.4	84.0
July	78.1	77.8	77.9	77.6	77.5	77.5	77.6	78.9	79.7	81.1	82.3	83.3	83.7
Aug	78.0	77.5	77.4	76.7	76.6	76.2	76.3	77.2	78.6	80.4	82.0	83.6	84.2
Sept	74.4	74.0	73.5	73.3	73.0	72.8	72.7	73.0	74.4	76.4	78.5	80.3	80.8
Oct	64.3	63.8	63.4	62.7	62.2	61.7	61.3	61.5	62.8	65.0	67.8	69.8	71.0
Nov	57.5	57.1	56.4	55.7	55.2	54.9	54.4	54.2	55.0	56.8	59.2	61.5	63.0
Dec	54.4	53.9	53.2	52.9	52.5	52.3	52.3	52.2	52.6	53.7	55.5	57.8	59.1
Year	65.7	65.3	64.9	64.4	64.1	63.8	63.8	64.3	65.3	66.9	68.7	70.4	71.5

NEW YORK CITY.

[λ = 40° 43′; φ = 74° 0′.]

Jan	32.0	31.6	30.9	30.8	30.6	30.6	31.0	31.5	32.3	33.4	34.8	35.5	36.2
Feb	35.3	34.7	33.8	33.3	33.1	33.2	33.4	34.1	34.9	36.1	37.3	38.4	39.2
Mar	33.7	33.2	32.8	32.6	32.2	32.0	32.2	32.7	33.9	35.2	36.9	38.1	39.4
Apr	47.2	46.7	46.4	45.9	45.8	45.6	46.5	47.7	49.9	51.9	53.3	54.9	56.6
May	55.3	54.8	54.1	53.6	53.3	53.2	54.0	55.2	57.1	59.4	61.1	62.6	64.2
June	64.6	63.9	63.2	62.7	62.3	62.1	63.2	64.7	66.6	69.2	71.5	73.3	74.6
July	67.7	67.3	66.4	65.6	65.4	65.6	66.5	67.7	69.5	71.2	72.7	73.7	74.2
Aug	70.6	70.1	69.3	68.8	68.5	67.9	68.5	69.9	71.4	73.4	75.1	76.4	77.5
Sept	66.9	66.4	65.7	65.3	64.9	64.9	64.8	65.9	67.0	68.9	70.6	72.5	73.7
Oct	51.7	51.5	50.9	50.8	50.2	49.7	49.6	50.2	50.8	52.7	54.4	55.7	56.7
Nov	42.8	42.4	42.2	42.1	42.1	41.0	40.9	41.0	41.8	42.6	43.7	45.1	45.9
Dec	40.3	40.0	39.8	39.6	39.5	38.8	38.7	38.7	39.3	40.0	41.5	42.9	43.8
Year	50.7	50.2	49.6	49.3	49.0	48.7	49.1	49.9	51.2	52.8	54.4	55.8	56.8

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

KEY WEST, FLA.

[h_t = 41 ft.; local time 0h 27m slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean max.	Mean min.	1891.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jan.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Feb.
76.0	76.0	75.6	75.1	74.5	73.2	73.0	72.7	72.5	72.5	72.4	73.2	76.6	68.9	Mar.
75.2	75.8	75.6	74.9	74.4	73.7	73.6	73.2	73.1	72.9	72.7	73.4	77.2	69.1	Apr.
79.5	79.7	79.4	79.1	78.3	77.5	76.9	76.7	76.6	76.4	75.9	77.0	80.7	73.2	May.
84.7	84.9	84.5	84.0	83.5	82.4	81.7	81.3	81.1	80.7	80.3	81.9	86.4	77.1	June.
87.8	87.4	87.0	86.1	85.2	84.3	83.5	83.3	83.1	82.8	82.3	84.2	88.4	79.4	July.
85.9	86.0	85.4	85.5	84.6	83.6	82.8	82.4	82.2	81.9	81.8	83.2	87.8	76.5	Aug.
85.3	85.4	84.7	84.5	83.3	81.9	82.0	81.6	81.4	81.3	80.4	82.1	86.5	75.4	Sept.
77.9	77.9	78.0	74.6	76.5	76.2	76.0	75.7	75.8	75.6	75.5	76.2	79.4	72.5	Oct.
75.7	75.7	75.1	74.5	73.8	73.4	73.4	73.2	73.1	72.5	72.4	73.4	76.5	69.4	Nov.
76.0	75.7	75.4	74.1	73.4	73.0	72.7	72.6	72.6	72.5	72.2	73.0	76.5	68.7	Dec.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Year.

MEMPHIS, TENN.

[h_t = 108 ft.; local time 1h 0m slow.]

44.8	45.4	45.8	45.9	45.2	44.3	43.8	42.7	42.1	41.5	41.2	41.9	48.4	36.1	Jan.
50.0	51.2	51.9	52.0	51.5	50.6	49.7	49.1	48.5	48.5	48.1	47.9	55.0	40.4	Feb.
50.6	51.5	52.5	52.9	53.1	52.1	51.0	49.9	49.3	48.7	48.1	47.6	55.4	40.5	Mar.
69.2	69.6	70.9	71.1	70.1	68.6	66.6	65.0	63.6	62.4	61.3	63.6	73.5	54.9	Apr.
74.5	75.2	75.5	75.5	74.5	73.4	71.8	69.8	68.3	66.7	65.7	68.4	77.7	58.7	May.
85.5	86.1	85.2	84.6	83.9	82.2	80.3	78.7	77.7	76.3	76.0	78.8	88.8	70.2	June.
82.6	72.9	82.9	81.4	81.2	80.1	79.0	77.2	76.2	75.0	74.0	76.6	85.7	68.2	July.
83.0	83.3	83.5	83.2	82.3	81.1	79.1	77.0	75.9	74.6	73.3	76.5	85.6	67.8	Aug.
83.3	84.0	84.0	83.6	82.0	79.5	77.4	75.5	73.8	72.5	71.0	74.6	86.0	63.8	Sept.
67.9	68.8	69.1	68.5	67.5	65.5	63.5	61.4	60.0	58.9	58.0	60.3	71.3	50.7	Oct.
54.1	55.1	55.1	54.6	53.4	51.3	50.3	49.3	48.0	47.2	46.6	48.8	58.0	40.3	Nov.
53.3	54.5	55.0	54.7	53.5	52.0	50.7	49.8	49.0	48.1	47.6	48.5	56.9	41.5	Dec.
66.6	67.3	67.6	67.6	66.5	65.1	63.6	62.1	61.0	60.0	59.2	61.1	70.2	52.8	Year.

NEW ORLEANS, LA.

[h_t = 112 ft.; local time 1h 0m slow.]

56.8	57.6	57.7	57.9	57.3	55.1	53.6	52.9	52.2	51.4	50.8	52.2	59.9	46.6	Jan.
65.9	66.3	67.1	66.8	66.3	64.6	63.6	62.5	61.7	60.8	60.2	62.2	69.2	55.9	Feb.
64.4	65.0	65.2	65.4	65.1	64.1	61.9	61.3	60.5	59.7	59.2	60.3	67.4	53.8	Mar.
72.2	72.5	72.6	72.9	72.4	71.6	69.3	68.5	67.5	66.7	66.0	67.7	75.1	60.9	Apr.
78.0	78.5	78.7	78.8	78.7	77.6	75.6	74.4	73.3	72.4	71.8	73.6	81.6	65.9	May.
84.4	84.1	84.5	84.4	83.5	82.6	81.5	79.7	79.3	78.5	77.9	80.2	88.4	73.1	June.
82.7	82.5	82.6	82.5	82.5	81.9	80.9	80.2	79.6	78.9	78.3	80.2	87.7	74.6	July.
84.8	84.2	84.1	83.7	83.4	83.0	81.4	80.8	79.9	79.3	78.6	80.3	88.3	74.0	Aug.
81.5	81.8	81.4	81.5	80.7	79.4	77.4	76.7	75.9	75.2	74.7	76.8	85.1	70.7	Sept.
72.3	72.6	73.1	73.1	73.0	71.8	69.1	68.2	67.0	65.8	64.8	67.0	76.2	59.5	Oct.
64.0	64.9	65.4	65.2	64.4	62.3	60.5	59.5	58.6	58.0	57.3	59.2	68.1	51.7	Nov.
59.8	60.2	60.4	60.2	59.8	58.9	57.4	56.7	56.2	55.8	55.4	56.0	62.6	49.2	Dec.
72.2	72.5	72.7	72.7	72.3	71.1	69.4	68.4	67.6	66.9	66.2	68.0	75.8	61.3	Year.

NEW YORK CITY.

[h_t = 183 ft.; local time 0h 4m fast.]

37.2	37.5	37.5	36.5	36.0	35.2	34.6	34.3	33.8	33.1	32.8	33.7	41.0	28.4	Jan.
39.7	40.2	39.7	39.6	39.2	38.9	38.4	37.6	37.1	36.0	35.5	36.6	44.2	30.8	Feb.
40.0	40.3	40.7	40.4	39.5	38.5	37.6	36.6	35.9	35.2	34.6	36.0	44.7	30.8	Mar.
57.1	57.6	57.6	56.4	55.1	53.6	52.8	51.5	50.6	49.8	49.1	51.2	60.8	43.3	Apr.
65.4	65.6	65.4	64.3	63.2	61.5	60.2	59.4	58.2	57.0	55.8	58.9	68.4	51.4	May.
74.9	74.9	74.9	74.6	73.5	71.5	70.4	69.2	68.0	66.7	65.5	68.6	78.3	60.8	June.
74.7	75.0	75.0	74.5	74.0	72.8	71.7	70.9	70.2	69.2	68.6	70.4	78.0	63.6	July.
77.9	77.8	77.3	76.5	75.5	74.6	73.5	73.1	72.5	71.7	71.3	72.9	80.5	66.8	Aug.
74.0	74.5	74.7	74.0	72.6	71.3	70.3	69.7	69.1	68.0	67.6	69.3	77.4	62.8	Sept.
57.3	57.9	57.6	57.4	56.3	55.2	54.4	53.6	53.0	52.7	52.3	53.4	61.5	46.9	Oct.
46.5	46.5	46.3	46.0	45.9	45.4	44.9	44.3	43.9	43.3	42.4	43.7	50.3	37.3	Nov.
45.0	45.3	45.3	44.7	44.5	43.9	43.0	42.2	41.8	41.5	41.1	41.7	48.9	34.7	Dec.
57.5	57.8	57.7	57.1	56.3	55.2	54.3	53.5	52.8	52.0	51.4	53.0	61.2	46.5	Year.

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

PHILADELPHIA, PA.

[λ = 39° 57′; φ 75° 9′.]

1891.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan	33.9	33.7	33.5	33.1	32.8	32.9	32.7	32.8	33.7	34.9	36.6	37.8	38.9
Feb	37.1	37.0	36.8	36.6	36.2	36.0	35.9	36.7	38.0	39.4	41.1	41.5	42.1
Mar	35.2	34.7	34.2	33.7	33.2	32.9	33.0	34.0	35.2	36.5	38.4	39.5	40.5
Apr	49.6	49.1	48.3	47.4	47.0	46.7	47.7	49.7	51.8	53.9	56.3	57.8	59.1
May	55.3	54.8	54.7	54.2	53.8	53.8	54.9	57.2	59.0	61.0	63.2	64.7	65.7
June ...	66.1	65.2	64.3	63.6	63.0	63.3	65.2	67.7	69.7	71.9	74.2	75.8	77.3
July ...	66.9	66.5	66.2	65.7	65.1	65.1	66.0	68.7	70.0	71.8	73.3	74.8	75.9
Aug	70.0	69.4	69.1	68.7	68.4	68.1	68.5	70.4	71.9	73.7	75.9	77.1	78.2
Sept....	66.3	65.9	65.7	65.1	64.3	64.0	64.5	66.4	67.9	70.5	72.4	74.6	75.8
Oct	51.0	50.9	50.4	50.1	49.7	49.6	49.6	51.4	52.8	54.5	56.2	57.6	59.1
Nov	41.8	41.3	40.8	40.4	39.9	39.8	39.7	40.4	41.2	43.0	44.5	46.5	48.1
Dec	39.4	39.1	39.3	38.9	38.4	38.5	38.3	39.2	40.0	41.4	43.1	45.1	46.4
Year ...	51.0	50.6	50.3	49.8	49.3	49.2	49.7	51.2	52.6	54.4	56.3	57.7	58.9

PITTSBURG, PA.

[λ = 40° 32′; φ 80° 2′.]

Jan	34.4	33.8	33.4	33.1	33.0	32.9	33.0	33.1	33.5	34.3	35.3	36.5	37.0
Feb	38.7	38.0	37.4	37.2	37.2	37.1	37.3	37.8	38.6	39.8	41.1	42.2	42.8
Mar	35.9	35.2	34.7	34.1	33.7	33.4	33.5	34.3	35.2	37.0	38.7	40.2	40.6
Apr	49.3	48.1	47.3	46.6	46.0	45.6	46.3	49.2	51.8	55.1	57.4	58.8	60.0
May	54.6	53.4	52.3	51.5	50.9	50.7	52.0	55.1	57.5	60.6	62.6	64.4	65.5
June ...	66.7	65.7	64.9	64.3	63.6	63.9	66.2	69.1	71.8	74.4	76.2	77.7	78.3
July ...	65.4	64.6	63.9	63.1	62.2	62.3	63.9	67.3	70.0	71.8	73.5	74.9	76.4
Aug	67.9	67.1	66.5	65.7	65.1	64.6	64.9	66.8	70.1	72.9	75.7	77.2	78.2
Sept ...	65.0	64.0	62.9	62.4	61.8	61.2	61.4	62.9	66.1	70.5	73.7	76.0	77.3
Oct	50.8	49.9	49.1	48.7	48.2	47.5	47.3	47.6	49.5	52.8	55.8	57.8	59.7
Nov	42.9	42.2	41.6	41.1	40.9	40.5	39.7	39.3	39.7	41.2	43.1	44.6	45.7
Dec	41.1	40.8	40.5	39.8	39.4	39.2	39.0	38.7	39.1	40.4	42.5	44.1	45.6
Year ...	51.1	50.2	49.5	49.0	48.5	48.2	48.7	50.1	51.9	54.2	56.3	57.9	58.9

PORTLAND, OREGON.

[λ = 45° 32′; φ 122° 43′.]

Jan	42.6	42.1	41.9	41.6	41.2	40.9	40.5	40.3	40.4	40.3	40.3	41.1	42.6
Feb	35.9	35.7	35.5	35.3	34.9	34.8	34.4	34.0	33.9	34.1	34.2	34.9	36.3
Mar	43.0	42.2	41.3	40.5	39.8	39.2	38.5	38.1	37.9	37.9	38.4	39.9	42.3
Apr	50.1	49.2	48.4	47.7	47.2	46.5	46.4	46.2	45.6	46.2	47.9	49.8	52.5
May	57.5	56.2	54.6	53.4	52.4	51.5	50.6	50.4	50.9	52.6	54.7	56.5	59.1
June ...	58.0	57.0	55.8	55.0	54.2	53.4	52.9	52.5	53.4	55.0	56.9	58.9	61.2
July ...	66.7	65.1	63.1	61.8	60.8	59.7	58.7	58.0	59.1	61.2	63.0	64.8	67.2
Aug	68.1	66.2	64.2	63.2	62.2	61.1	60.1	59.3	58.9	60.8	63.4	66.0	68.8
Sept....	59.0	57.8	56.5	55.9	55.0	54.3	53.7	53.1	52.7	53.1	54.5	56.3	59.1
Oct	54.7	54.0	53.2	52.7	52.3	52.1	51.8	51.7	51.6	52.2	53.3	55.2	57.3
Nov	47.4	47.0	46.9	46.7	46.4	46.3	46.4	46.3	46.0	46.1	46.7	47.6	49.1
Dec	41.3	41.3	41.4	41.1	40.8	40.6	40.3	40.3	40.3	40.4	40.4	40.8	41.5
Year ...	52.0	51.2	50.2	49.6	48.9	48.4	47.9	47.5	47.6	48.3	49.5	51.0	53.1

ST. LOUIS, MO.

[λ = 38° 38′; φ 90° 12′.]

Jan	35.1	34.6	34.1	33.6	33.3	33.2	32.9	32.9	33.2	34.4	36.0	37.3	38.5
Feb	35.1	34.0	32.8	32.4	31.8	31.5	31.0	30.8	31.2	32.4	33.7	36.0	37.8
Mar	36.3	35.8	35.4	35.0	34.8	34.6	34.5	34.5	35.4	36.7	38.3	40.2	42.0
Apr	55.6	54.8	54.0	53.0	52.2	51.6	51.4	52.3	54.3	56.9	59.2	61.3	63.1
May	60.4	59.4	58.2	57.3	56.6	55.9	56.3	57.9	60.0	62.3	64.6	66.3	68.3
June ...	72.6	71.6	70.7	69.9	69.6	68.9	69.5	71.0	72.4	74.4	76.9	78.5	80.0
July ...	71.5	70.5	69.8	69.2	68.9	68.2	68.2	69.7	71.4	73.5	75.8	77.9	79.1
Aug	71.4	70.8	70.1	69.3	69.0	68.5	68.2	68.9	70.0	72.4	74.8	77.0	77.7
Sept....	69.6	68.5	67.5	66.7	65.8	65.0	64.7	65.7	67.7	71.9	75.7	78.4	80.0
Oct....	54.0	53.2	52.2	51.4	50.8	50.1	49.5	49.4	50.3	53.3	56.5	59.6	62.1
Nov	40.3	39.8	39.3	38.9	38.5	38.1	38.0	38.1	38.4	39.3	41.0	42.5	43.9
Dec	39.4	39.2	38.8	38.5	38.1	37.9	37.5	37.6	37.9	38.9	40.8	43.2	45.1
Year ...	53.4	52.7	51.9	51.3	50.8	50.3	50.1	50.7	51.8	53.9	56.1	58.2	59.8

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—*Continued.*

PHILADELPHIA, PA.

[h_t = 168 ft.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean max.	Mean min.	1891.
40.1	39.9	39.5	38.6	37.8	37.1	36.8	35.9	35.4	34.9	34.6	35.8	43.2	29.7	Jan.
43.1	43.4	43.3	42.9	42.0	40.8	40.2	39.2	38.8	37.9	37.5	39.3	46.8	32.4	Feb.
41.5	41.9	42.1	41.7	40.9	39.5	38.9	37.6	37.1	36.6	36.1	37.3	45.2	30.9	Mar.
60.1	60.5	60.9	60.7	59.9	58.3	55.8	54.4	53.1	52.3	51.4	53.8	63.4	45.2	Apr.
66.9	67.3	67.4	66.6	65.3	63.2	61.3	59.9	58.6	57.5	56.6	60.1	70.1	51.8	May.
78.6	78.7	78.9	77.9	76.5	74.1	72.0	70.4	69.0	67.8	67.1	70.8	81.8	61.8	June.
76.3	76.0	76.0	75.4	74.8	73.3	71.8	70.4	69.1	68.2	67.5	70.6	80.0	63.8	July.
77.9	77.7	77.9	77.5	77.0	75.8	74.2	73.0	72.0	71.2	70.5	73.1	82.0	66.6	Aug.
77.0	77.1	77.4	76.8	75.3	73.0	70.7	69.4	68.2	67.3	66.6	70.1	80.3	63.0	Sept.
60.0	59.8	59.8	58.9	57.6	56.1	54.8	53.8	53.0	52.3	51.6	54.2	62.8	47.0	Oct.
49.1	49.0	48.9	47.8	46.5	45.2	44.4	43.5	42.7	42.1	41.4	43.7	51.6	36.9	Nov.
47.4	47.1	46.9	46.1	45.0	43.9	43.2	42.2	41.5	40.6	40.2	42.1	50.7	34.8	Dec.
59.8	59.9	59.9	59.2	58.2	56.7	55.3	54.1	53.2	52.4	51.8	54.2	63.2	47.0	Year.

PITTSBURG, PA.

[h_t = 130 ft.; local time 0h 20m slow.]

37.7	38.1	38.4	38.4	37.7	37.3	37.3	36.7	36.1	35.7	35.1	35.5	40.0	29.9	Jan.
43.7	43.5	43.8	43.5	42.6	41.6	40.5	39.4	38.9	38.5	37.9	40.0	47.2	31.3	Feb.
41.7	42.4	42.7	42.6	41.9	40.6	39.9	38.7	38.5	38.0	37.4	38.0	45.5	29.8	Mar.
60.8	60.5	60.9	60.6	59.9	58.4	56.6	54.9	53.2	51.9	50.7	53.7	63.2	43.7	Apr.
66.3	67.1	67.3	66.4	65.2	63.3	61.8	60.1	58.7	57.5	56.0	59.2	68.9	48.8	May.
80.0	79.7	79.5	78.3	77.5	75.6	73.5	71.6	70.1	68.8	67.8	71.9	82.1	62.5	June.
77.5	77.5	77.1	76.3	75.4	73.5	71.8	70.2	68.6	67.4	66.2	70.0	79.9	60.2	July.
79.1	79.1	79.0	78.5	77.6	76.1	74.3	72.7	71.3	70.1	69.0	72.1	81.0	62.4	Aug.
78.2	77.9	78.0	77.6	76.7	74.5	72.1	70.4	68.8	67.3	66.0	69.7	79.7	59.0	Sept.
61.0	61.2	60.8	59.9	59.0	57.5	55.5	54.7	53.8	52.7	51.7	53.9	62.6	44.2	Oct.
46.8	47.0	46.7	46.3	45.8	45.2	44.3	43.8	43.3	43.0	42.5	43.2	49.6	35.0	Nov.
47.3	47.5	47.4	46.9	46.1	44.9	43.8	43.3	42.7	42.2	41.9	42.7	50.2	34.0	Dec.
60.0	60.1	60.1	59.6	58.8	57.4	56.0	54.7	53.7	52.8	51.8	54.2	62.5	45.1	Year.

PORTLAND, OREGON.

[h_t = 85 ft.; local time 3h 11m slow.]

44.1	45.3	46.2	47.0	47.4	47.2	45.9	45.3	44.2	43.6	43.1	43.1	48.8	37.5	Jan.
37.4	38.9	39.4	40.0	40.0	39.9	38.8	37.8	37.1	36.4	36.0	36.5	42.3	31.7	Feb.
44.6	46.6	48.1	49.4	49.8	50.2	49.6	48.3	46.6	45.5	44.5	43.4	51.8	36.3	Mar.
54.5	56.1	57.0	57.6	57.3	56.9	56.6	55.4	54.3	52.8	52.2	51.4	60.5	44.1	Apr.
61.5	64.0	65.5	67.0	68.0	68.3	68.4	67.0	65.3	61.9	59.5	59.0	70.4	49.4	May.
62.5	63.9	64.3	64.9	65.5	65.2	65.4	64.6	63.4	61.6	59.9	59.4	68.7	51.6	June.
69.7	72.5	74.6	77.1	78.0	79.1	78.5	77.5	75.6	71.5	68.8	68.0	80.5	57.0	July.
71.7	74.6	76.7	78.5	79.5	80.1	80.4	78.5	75.5	72.0	70.0	69.2	82.1	57.8	Aug.
61.3	63.7	65.5	67.2	67.7	68.0	67.0	65.2	63.2	61.2	59.9	59.6	70.1	51.4	Sept.
59.1	60.6	61.8	63.0	62.8	62.5	61.6	59.0	57.7	56.5	55.6	56.3	65.0	50.1	Oct.
50.2	50.8	51.9	52.1	51.8	50.8	50.3	49.4	48.7	48.1	47.7	48.4	53.6	44.3	Nov.
42.4	42.9	43.5	43.6	43.8	43.6	43.2	42.2	42.2	41.6	41.4	41.7	46.1	37.5	Dec.
54.9	56.7	57.9	59.0	59.3	59.3	58.8	57.5	56.2	54.4	53.2	53.0	61.7	45.7	Year.

ST. LOUIS, MO.

[h_t = 110 ft.; local time 1h 1m slow.]

39.6	40.2	40.6	40.7	39.9	39.4	38.7	37.9	36.9	35.8	35.3	36.4	42.8	30.5	Jan.
39.4	40.8	41.6	41.9	41.5	40.2	39.5	38.9	38.1	36.8	35.4	36.0	43.9	27.9	Feb.
43.0	43.2	43.5	43.4	43.0	41.9	40.8	39.8	39.1	38.5	37.8	38.6	45.9	32.0	Mar.
64.2	65.5	65.0	65.1	64.5	63.2	61.3	60.2	58.8	57.7	57.1	58.4	67.4	50.0	Apr.
69.8	70.7	71.4	71.1	70.4	68.5	66.8	65.4	63.8	62.6	61.8	63.6	72.8	54.3	May.
80.7	81.0	80.8	81.1	80.8	79.8	78.0	76.7	75.3	74.0	73.4	75.3	84.1	67.3	June.
80.6	81.0	81.0	80.9	80.6	79.3	78.3	76.6	75.0	73.8	72.7	74.7	83.8	66.0	July.
78.8	79.8	80.8	80.5	79.8	78.9	77.6	75.5	74.1	72.8	71.8	74.1	83.4	66.2	Aug.
81.7	81.9	82.6	82.3	81.1	79.2	77.4	75.7	74.0	72.3	71.1	73.6	84.3	63.8	Sept.
64.0	65.0	65.4	65.4	64.4	62.4	60.3	58.7	57.3	55.9	54.4	56.9	67.2	47.9	Oct.
45.0	45.7	46.1	45.9	45.1	44.3	43.7	42.7	41.7	41.1	40.4	41.6	47.4	35.1	Nov.
47.1	48.2	46.2	47.6	46.6	45.4	44.7	44.0	43.0	42.2	41.3	42.1	50.8	34.7	Dec.
61.2	61.9	62.2	62.2	61.5	60.2	58.9	57.7	56.4	55.3	54.4	55.9	64.5	48.0	Year.

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

SAINT PAUL, MINN.

[λ = 44° 58′; φ = 93° 3′.]

1891.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan	20.6	19.6	18.9	18.7	18.2	17.5	17.3	17.1	17.2	18.4	20.2	22.3	24.0
Feb	10.6	9.8	9.0	8.6	7.8	7.2	6.2	6.0	6.4	7.8	10.4	12.8	15.0
Mar	22.2	21.5	20.7	20.2	19.9	19.3	19.0	18.7	19.3	21.6	23.5	25.6	27.1
Apr	45.4	44.5	43.5	42.6	42.1	41.3	41.1	42.1	44.2	47.0	49.1	51.1	52.9
May ...	55.3	53.8	52.5	51.1	50.2	48.8	48.7	50.7	54.2	58.3	60.7	63.3	64.8
June ...	62.5	61.7	61.1	60.4	59.7	59.2	59.6	61.4	63.2	65.3	67.1	69.0	70.0
July	62.7	61.4	60.6	59.6	58.8	57.9	57.7	60.5	63.5	66.6	68.7	70.6	71.4
Aug	64.3	63.0	62.0	61.0	60.4	59.2	58.8	60.4	63.0	67.0	69.5	72.2	74.0
Sept....	62.8	61.6	60.9	60.1	59.4	58.4	58.0	58.2	60.5	64.8	68.3	71.5	73.5
Oct.....	45.9	45.0	44.2	43.7	42.9	42.6	42.2	42.0	42.7	44.9	47.1	49.9	51.4
Nov	25.5	24.7	24.1	23.4	23.1	22.6	22.1	21.1	21.0	22.1	24.0	26.6	28.4
Dec	27.9	27.4	26.8	26.4	26.2	25.9	25.5	25.0	25.0	25.3	26.4	27.9	29.1
Year.	42.1	41.2	40.4	39.6	39.1	38.3	38.0	38.6	40.0	42.4	44.6	46.9	48.5

SALT LAKE CITY, UTAH.

[λ = 40° 46′; φ = 111° 54′.]

Jan	28.0	27.6	27.1	26.9	26.5	26.3	25.9	25.7	25.4	25.4	25.6	26.9	28.9
Feb	28.8	28.5	28.2	28.1	28.2	27.8	27.5	27.7	27.1	27.1	28.2	29.9	31.8
Mar	37.7	37.3	36.6	35.9	35.8	35.0	34.6	34.5	34.2	34.9	36.8	38.9	40.8
Apr	48.6	47.7	47.1	46.3	45.5	45.0	44.1	43.6	43.5	45.4	48.3	51.4	53.2
May ...	58.2	57.0	56.2	55.1	54.9	54.5	54.0	53.5	53.9	56.8	59.6	62.9	65.0
June ...	60.9	59.8	58.6	57.5	56.7	56.1	55.4	55.8	56.6	59.4	62.3	65.5	66.8
July	70.4	69.5	68.0	66.3	65.5	64.0	63.4	65.0	66.8	70.6	74.7	78.2	80.5
Aug	71.9	70.6	69.2	68.7	66.6	66.3	65.6	64.9	66.5	70.2	74.5	78.4	81.0
Sept....	62.5	61.9	61.1	60.8	59.9	59.1	58.8	58.1	57.9	60.9	64.2	67.5	70.0
Oct.....	49.5	48.9	48.1	47.8	46.9	46.4	45.7	46.5	46.7	49.2	53.0	56.6	59.8
Nov	42.5	42.2	41.6	41.1	40.8	40.1	39.8	39.5	39.2	40.4	42.3	45.5	48.3
Dec	28.3	27.8	27.6	26.9	26.5	26.4	26.5	25.9	25.9	26.4	27.8	29.3	31.5
Year.	48.9	48.2	47.4	46.8	46.2	45.6	45.1	45.1	45.3	47.2	49.8	52.6	54.8

SAN DIEGO, CAL.

[λ = 32° 43′; φ = 117° 10′.]

Jan	52.3	52.3	50.8	50.4	49.7	48.8	48.5	48.1	48.1	48.0	51.0	55.5	58.6
Feb	52.4	51.8	51.3	51.1	50.7	50.0	49.8	49.7	49.5	49.5	52.4	55.0	57.6
Mar	55.9	55.3	54.6	54.4	53.9	53.6	53.4	52.8	52.9	54.0	57.1	59.2	61.1
Apr	55.8	55.4	54.9	54.6	54.3	53.9	53.9	53.6	53.8	55.9	58.6	60.5	62.7
May ...	59.8	59.7	59.5	59.3	58.9	58.9	58.6	58.6	59.0	59.8	61.2	62.2	63.3
June ...	62.4	61.7	61.3	61.3	61.0	60.8	60.6	60.1	61.3	62.7	64.2	65.9	67.0
July	67.3	66.7	66.4	66.2	66.2	66.2	66.0	65.7	65.7	67.2	68.6	70.5	72.2
Aug	70.8	70.1	69.7	69.5	69.2	69.2	69.2	69.1	69.3	70.3	72.3	74.1	75.8
Sept....	68.7	68.0	67.6	67.1	66.6	66.5	66.1	65.7	65.4	67.4	70.4	72.7	74.3
Oct.....	62.4	62.0	61.8	61.6	61.1	61.0	60.4	59.7	59.6	61.1	63.3	65.8	68.1
Nov	57.3	56.7	55.9	55.5	55.0	54.8	54.4	54.0	53.8	54.1	58.0	60.9	64.6
Dec	50.9	50.3	49.4	49.1	48.5	48.4	47.5	46.9	47.0	47.3	50.1	54.2	56.9
Year.	59.7	59.2	58.6	58.3	57.9	57.7	57.4	57.0	57.1	58.1	60.6	63.0	65.2

SAN FRANCISCO, CAL.

[λ = 37° 48′; φ = 122° 26′.]

Jan	50.5	49.8	49.2	48.6	48.2	47.8	47.3	47.3	47.2	47.1	47.4	49.0	50.7
Feb	49.4	49.2	48.7	48.2	48.1	47.9	47.5	47.5	46.9	47.0	47.6	48.4	49.7
Mar	51.7	51.3	50.9	50.8	50.5	50.1	49.7	49.5	49.5	50.1	51.4	53.2	54.7
Apr	50.6	50.4	50.3	49.9	49.6	49.5	49.2	49.1	49.2	50.4	51.9	53.1	55.2
May	53.5	53.3	53.0	52.7	52.6	52.5	52.3	52.4	52.7	53.6	54.8	55.9	57.1
June ...	55.4	55.2	54.8	54.7	54.4	54.3	54.1	54.3	54.9	56.9	59.2	61.1	62.9
July	55.8	55.5	55.3	54.8	54.7	54.5	54.3	54.1	54.5	56.2	58.1	60.1	61.2
Aug	57.7	57.5	57.2	56.6	56.4	56.2	55.8	55.6	56.0	57.8	59.6	62.0	63.9
Sept....	58.6	58.0	57.8	57.7	57.4	57.2	56.9	56.7	56.6	57.2	58.3	60.8	62.6
Oct.....	56.6	56.5	56.0	55.4	55.0	54.8	54.5	54.3	54.3	54.7	56.0	57.5	59.0
Nov	56.4	55.7	55.1	54.5	54.0	53.8	53.5	53.2	53.1	53.0	53.8	55.3	56.9
Dec	48.9	48.7	48.5	48.3	48.0	47.7	47.4	47.0	46.8	46.8	47.1	48.2	49.4
Year.	53.8	53.4	53.1	52.7	52.4	52.2	51.9	51.8	51.8	52.6	53.8	55.4	56.9

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

SAINT PAUL, MINN.

[h_1=114 ft; local time 1h 12m slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean max.	Mean min.	1891.
25.6	26.3	26.8	27.2	26.3	25.6	25.2	24.0	23.0	22.0	20.9	21.8	28.5	14.0	Jan.
16.9	17.3	17.8	17.9	17.2	16.0	14.8	13.9	13.2	12.0	11.2	11.9	20.7	1.6	Feb.
28.6	29.2	29.8	29.9	29.5	28.6	27.7	26.6	25.8	25.2	24.2	24.3	30.9	16.1	Mar.
54.6	55.5	56.0	56.1	56.1	55.2	53.7	52.0	50.3	48.7	47.1	48.8	57.7	38.7	Apr.
66.1	66.8	67.0	67.5	67.0	66.1	65.1	63.2	61.1	59.3	57.3	59.1	69.8	45.6	May.
70.4	70.8	70.9	71.0	70.5	69.8	68.7	67.4	65.7	64.4	63.0	65.5	73.6	57.4	June.
72.6	73.4	73.8	73.8	73.5	72.4	71.1	69.3	67.2	65.9	64.3	66.6	75.5	55.9	July.
75.3	75.9	76.1	76.2	75.3	73.9	71.9	70.0	68.2	66.6	65.1	67.9	78.1	56.9	Aug.
74.3	75.1	75.5	75.5	74.5	72.5	70.7	68.6	66.9	65.5	63.9	66.7	77.2	54.1	Sept.
52.6	53.3	54.0	53.9	53.3	52.0	50.5	49.1	47.8	46.7	45.9	47.6	57.1	39.2	Oct.
30.1	31.1	31.6	31.8	30.9	30.0	28.8	28.0	27.3	26.7	26.2	26.3	33.8	17.9	Nov.
30.9	31.8	32.2	32.2	31.5	31.0	30.1	29.5	29.2	28.8	28.4	28.3	34.0	20.6	Dec.
49.8	50.5	51.0	51.1	50.5	49.4	48.2	46.8	45.5	44.3	43.1	44.6	53.1	34.8	Year.

SALT LAKE CITY, UTAH.

[h_1=83 ft.; local time 2h 27m slow.]

30.3	31.6	32.4	32.5	32.5	32.0	31.0	30.0	29.5	28.8	28.2	28.5	34.9	22.7	Jan.
33.0	33.6	34.8	35.4	35.4	34.8	33.6	32.6	31.2	30.3	29.8	30.6	38.5	22.6	Feb.
41.6	42.6	43.0	43.0	42.9	42.9	42.0	41.1	39.6	38.5	37.5	38.7	45.9	30.2	Mar.
54.8	55.8	56.6	57.2	57.1	57.1	56.6	55.6	53.9	51.7	50.3	50.7	59.9	39.4	Apr.
66.6	67.3	67.5	67.6	67.4	67.0	66.8	65.6	63.6	61.8	60.1	61.0	70.9	49.2	May.
68.5	69.3	69.8	70.1	70.1	70.5	70.5	69.0	66.5	64.2	62.4	63.4	73.1	50.9	June.
81.8	83.0	84.2	84.9	84.3	84.1	82.9	80.1	76.0	74.4	72.9	74.7	87.0	59.6	July.
83.1	84.1	84.8	84.7	84.7	84.2	83.1	80.8	76.8	74.6	73.8	75.4	87.3	61.4	Aug.
71.5	73.0	73.6	74.1	73.8	73.0	70.9	67.9	65.3	64.1	62.3	65.5	75.6	54.4	Sept.
61.6	62.6	63.2	62.7	61.9	60.1	56.6	51.0	52.7	51.2	50.3	53.4	64.4	41.9	Oct.
49.8	50.8	51.4	50.9	49.6	48.1	45.8	45.0	44.3	43.7	43.2	44.4	52.2	36.1	Nov.
32.2	32.8	33.3	33.5	32.6	31.2	30.2	29.0	28.3	27.5	27.5	28.9	35.5	21.8	Dec.
56.2	57.2	57.9	58.0	57.7	57.1	55.8	54.2	52.3	50.9	49.9	51.3	60.4	40.8	Year.

SAN DIEGO, CAL.

[h_1=73 ft.; local time 2h 49m slow.]

61.3	63.3	63.8	63.6	63.4	62.0	60.5	58.1	56.1	54.2	53.0	55.1	65.2	44.0	Jan.
58.9	59.6	59.9	60.4	59.9	59.0	58.1	56.6	55.3	53.7	54.0	54.4	61.2	45.4	Feb.
62.1	62.8	63.0	62.8	62.8	61.7	61.0	59.4	57.9	57.0	56.2	57.7	64.4	49.4	Mar.
63.5	64.1	63.9	64.1	63.8	63.2	62.4	60.6	59.2	58.0	57.1	58.7	65.7	50.6	Apr.
63.5	64.2	64.3	64.2	64.1	63.5	62.9	61.5	60.7	60.3	60.3	61.2	65.4	56.2	May.
68.0	68.4	68.8	68.9	68.7	68.1	67.8	66.1	64.8	63.9	63.5	64.5	69.8	57.5	June.
73.2	73.5	73.4	73.5	73.3	72.5	71.9	70.6	68.9	68.1	67.9	69.2	75.0	63.1	July.
76.7	76.9	76.8	77.0	76.8	76.2	75.7	74.3	72.6	71.8	71.4	72.7	78.1	66.8	Aug.
75.3	75.5	75.7	75.5	75.4	74.8	73.8	72.1	71.0	70.1	69.4	70.6	77.4	62.9	Sept.
69.3	70.3	70.1	69.6	69.3	68.1	66.9	65.5	64.5	63.7	62.9	64.5	71.2	56.5	Oct.
66.1	66.8	66.3	65.7	65.5	64.6	62.5	61.5	60.0	58.7	58.1	59.6	68.4	50.3	Nov.
58.8	59.6	59.7	59.5	59.2	58.0	56.2	54.8	52.9	52.0	51.2	52.9	61.5	42.9	Dec.
66.4	67.1	67.1	67.1	66.8	66.0	65.0	63.4	62.0	60.9	60.3	61.8	68.6	53.8	Year.

SAN FRANCISCO, CAL.

[h_1=109 ft.; local time 3h 10m slow.]

52.3	54.1	55.5	56.4	56.2	55.7	54.5	53.1	52.4	51.9	51.2	51.0	59.2	45.3	Jan.
51.0	52.0	53.0	53.4	53.0	52.8	52.4	51.3	50.8	50.2	49.9	49.8	57.1	45.4	Feb.
55.8	57.2	57.8	57.9	57.5	56.6	55.7	53.9	52.8	52.5	51.8	53.0	62.2	47.8	Mar.
56.7	57.3	57.6	57.3	56.6	56.0	55.3	53.5	52.3	51.5	51.1	52.7	60.4	46.3	Apr.
57.9	58.4	58.3	58.1	57.6	57.2	56.6	55.7	54.8	54.1	53.7	54.9	60.9	50.5	May.
64.5	65.0	64.9	64.4	63.9	62.8	61.9	60.1	58.5	56.7	56.4	58.8	68.5	51.9	June.
62.2	62.6	62.5	62.2	61.5	60.8	60.2	58.3	57.0	56.2	55.7	57.9	66.2	52.7	July.
65.2	66.3	66.1	65.6	64.9	63.9	62.8	61.0	59.7	58.9	58.4	60.2	69.3	54.2	Aug.
64.5	65.4	65.6	65.2	64.8	64.1	62.6	61.0	59.7	59.3	58.6	60.3	68.2	55.4	Sept.
61.5	63.0	64.0	63.5	62.5	61.0	59.1	58.3	57.8	57.4	56.9	57.9	66.5	52.9	Oct.
59.3	61.4	63.2	63.9	63.6	62.3	59.9	59.0	58.3	57.7	57.1	57.2	65.6	51.5	Nov.
50.5	51.4	52.4	52.8	52.6	51.9	50.5	50.3	49.6	49.4	48.9	49.3	54.3	44.9	Dec.
58.4	59.5	60.1	60.1	59.6	58.8	57.6	56.3	55.3	54.6	54.1	55.2	63.2	49.9	Year.

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

SANTA FE, N. MEX.

[λ=35° 41′; φ=105° 57′.]

1891.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan	20.8	20.3	19.4	18.7	18.3	17.8	17.8	17.2	17.4	19.3	22.1	23.9	25.6
Feb	27.1	26.8	26.6	26.5	25.8	25.6	24.7	24.5	24.2	26.0	28.6	30.5	31.9
Mar	34.5	33.7	32.7	32.1	31.4	30.3	29.3	28.2	29.4	32.4	34.9	37.1	39.3
Apr	44.3	43.1	42.0	41.2	40.2	38.8	38.0	37.6	41.7	44.9	47.0	49.5	52.0
May	50.9	50.2	49.3	48.4	47.5	46.6	45.5	46.7	49.7	52.0	54.3	56.5	58.5
June ...	59.1	58.0	57.2	56.0	55.1	54.2	53.4	55.9	59.7	61.6	63.0	64.9	66.4
July	64.5	63.7	62.5	61.4	60.7	59.7	58.4	60.5	65.2	67.6	70.0	72.1	74.5
Aug	64.8	64.0	62.4	61.1	60.5	58.8	58.3	58.7	63.7	66.7	68.9	71.3	73.5
Sept....	57.8	56.9	56.1	55.3	54.3	53.7	52.6	52.5	55.3	59.3	62.2	64.3	66.4
Oct.....	46.9	46.2	45.4	44.3	43.0	42.1	41.3	40.6	42.5	48.9	52.0	54.4	56.3
Nov	37.9	37.3	35.9	35.4	34.6	33.9	33.0	31.8	33.2	37.1	41.0	43.7	45.6
Dec	22.6	22.6	22.3	21.6	21.4	21.0	21.5	20.9	21.1	21.7	24.3	26.7	28.1
Year....	44.3	43.6	42.6	41.8	41.1	40.2	39.5	39.6	41.9	44.8	47.4	49.6	51.5

SAVANNAH, GA.

[λ=32° 5′; φ=81° 5′.]

Jan	46.9	46.4	45.9	45.5	45.0	44.5	44.2	44.4	45.0	47.4	50.3	52.7	55.7
Feb	57.4	57.2	56.9	56.6	56.0	56.0	55.6	55.1	56.5	58.8	61.9	63.7	65.5
Mar	53.7	53.6	53.2	53.1	52.4	52.4	52.1	52.4	53.0	54.5	56.3	57.5	59.5
Apr	60.9	60.4	59.5	59.0	58.4	58.4	59.2	62.0	64.8	66.7	68.1	69.2	70.7
May	65.6	65.1	64.5	63.9	63.5	63.4	64.9	67.6	70.1	72.2	74.4	75.5	76.4
June ...	74.9	74.4	74.1	73.8	73.3	73.6	75.0	77.4	79.6	81.6	83.1	84.3	85.1
July	75.4	74.9	74.3	73.7	73.2	73.3	74.7	77.0	78.6	80.3	81.7	83.7	83.7
Aug	76.2	75.6	75.6	74.6	74.5	74.2	75.3	77.9	79.8	82.2	84.2	85.3	85.7
Sept....	71.9	71.4	70.7	70.3	69.9	69.5	69.8	71.7	73.8	76.6	78.7	80.4	81.1
Oct.....	59.6	59.2	58.4	57.9	57.3	56.7	56.4	57.5	60.6	63.9	66.3	68.3	69.4
Nov	52.8	52.1	51.6	51.0	50.4	50.0	49.7	50.4	52.4	55.9	59.0	61.3	62.7
Dec	51.3	51.0	50.7	50.2	50.1	50.2	50.2	50.9	52.2	54.9	57.6	59.3	61.4
Year....	62.2	61.8	61.2	60.8	60.3	60.2	60.6	62.0	63.9	66.2	68.5	70.1	71.4

WASHINGTON, D. C.

[λ=38° 54′; φ=77° 3′.]

Jan	34.6	34.3	33.9	33.7	33.7	33.5	33.3	33.6	34.7	36.6	38.4	39.5	41.0
Feb	39.4	39.0	38.9	38.7	38.4	38.1	38.1	38.5	39.6	41.3	42.8	43.7	44.8
Mar	36.2	36.1	35.5	34.9	34.6	34.3	34.3	34.8	36.0	37.2	39.0	39.9	40.8
Apr	50.3	49.2	48.3	47.8	47.1	46.7	48.3	51.8	54.0	56.4	58.8	60.5	61.5
May	56.6	56.1	55.2	54.6	53.9	54.2	55.6	58.2	60.3	62.4	64.0	65.3	66.4
June ...	65.8	65.4	64.7	63.9	63.1	63.9	66.2	69.1	71.4	73.4	74.7	76.4	77.5
July	67.1	65.5	65.9	65.4	65.2	65.6	67.3	69.6	71.7	73.5	75.2	76.3	77.1
Aug	69.5	69.1	68.6	68.3	67.9	67.7	68.9	71.1	73.3	75.4	77.1	78.2	78.5
Sept....	64.7	64.2	63.4	63.0	62.6	62.3	63.3	66.7	69.5	72.4	74.7	76.4	77.3
Oct.....	49.9	49.6	49.5	49.4	49.0	48.5	48.5	50.0	52.3	55.0	56.9	58.8	59.9
Nov	40.4	40.2	39.3	39.0	38.2	38.1	38.2	39.3	41.9	45.2	47.9	49.9	49.7
Dec	39.1	38.7	38.1	37.2	36.9	36.7	36.5	37.4	39.6	42.3	44.7	46.5	48.3
Year....	51.1	50.7	50.1	49.7	49.2	49.1	49.9	51.7	53.7	55.9	57.8	59.3	60.2

WILMINGTON, N. C.

[λ=34° 14′; φ=77° 57′.]

Jan	44.6	44.3	43.8	43.2	42.6	42.4	42.0	42.3	43.9	46.3	48.6	51.0	52.8
Feb	53.4	52.9	52.1	51.5	51.0	51.1	51.1	51.7	53.4	55.8	58.8	59.9	61.0
Mar	48.9	48.6	48.0	47.5	47.2	46.9	46.7	47.8	49.5	51.5	53.8	55.2	56.8
Apr	58.0	57.8	57.6	57.1	56.4	56.4	57.0	59.7	62.0	63.9	65.4	66.4	67.2
May	62.9	62.4	61.8	61.4	60.9	60.9	62.5	65.7	67.6	69.8	71.9	72.8	73.4
June ...	72.2	71.4	70.6	70.1	69.7	70.1	71.8	74.7	76.7	79.0	80.9	82.4	82.3
July	73.8	73.5	73.1	72.5	72.1	72.0	72.9	75.1	76.1	77.7	78.6	79.9	80.4
Aug	74.7	74.5	74.3	74.1	73.9	73.9	74.9	77.2	78.2	79.6	80.9	82.6	83.4
Sept....	69.6	69.2	68.7	68.2	67.8	67.3	67.9	70.1	72.0	75.2	77.0	78.2	78.6
Oct.....	56.6	56.2	55.5	54.8	54.4	53.8	53.8	55.6	58.5	61.2	63.7	65.1	66.3
Nov	49.3	48.7	48.3	48.0	47.7	47.7	47.4	48.7	50.5	53.0	55.6	57.6	59.0
Dec	49.1	48.5	48.0	47.7	47.4	47.4	47.5	47.7	49.7	53.1	56.0	57.9	58.5
Year....	59.4	59.0	58.5	58.0	57.6	57.5	58.0	59.7	61.5	63.8	65.9	67.4	68.3

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

SANTA FE, N. MEX.

[h_t=35 ft.; local time 2h 4m slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean max.	Mean min.	1891.
27.4	28.4	28.7	29.2	28.8	27.2	23.5	22.1	21.8	21.2	21.2	22.4	32.6	12.8	Jan.
33.5	34.2	34.6	35.4	35.0	34.0	31.8	30.3	29.2	28.6	28.4	29.3	38.2	20.8	Feb.
40.7	42.4	43.5	44.0	44.0	43.0	41.3	39.2	37.4	36.0	35.1	36.3	46.4	26.3	Mar.
54.0	55.4	56.6	56.7	56.5	55.8	54.2	51.6	48.9	47.6	46.4	47.7	59.0	33.9	Apr.
59.4	60.8	60.7	60.4	59.8	58.9	58.3	56.5	54.0	52.6	52.0	53.7	64.6	41.2	May.
68.3	69.8	70.4	71.2	71.1	70.4	69.8	67.7	64.8	61.9	60.5	62.9	74.1	51.1	June.
76.1	77.4	77.3	77.9	78.4	77.1	75.6	72.9	69.6	67.5	65.9	69.0	81.2	57.2	July.
75.6	76.8	77.4	77.6	77.5	75.5	74.4	71.9	68.0	66.6	65.7	68.3	80.3	56.3	Aug.
68.5	69.6	69.5	69.7	69.2	68.1	66.1	61.8	60.1	59.4	59.2	61.2	72.5	51.1	Sept.
57.0	59.9	61.0	61.4	60.8	59.0	55.3	50.9	49.3	48.5	47.5	50.6	62.8	39.6	Oct.
47.6	49.4	50.5	51.1	50.4	46.6	43.5	41.4	40.4	39.4	38.8	40.8	51.7	29.8	Nov.
29.4	30.6	31.5	31.7	31.4	28.9	26.3	25.0	24.5	24.0	23.2	25.1	34.2	16.9	Dec.
53.1	54.6	55.1	55.5	55.2	53.7	51.7	49.3	47.3	46.1	45.3	47.3	58.1	36.4	Year.

SAVANNAH, GA.

[h_t=66 ft.; local time 0h 24m slow.]

57.0	57.7	57.2	56.5	54.5	52.4	51.3	50.1	49.5	48.8	48.0	49.9	59.3	41.6	Jan.
66.8	66.5	65.2	63.6	61.5	59.4	58.8	58.2	57.7	57.2	57.1	59.6	68.9	52.2	Feb.
60.7	61.2	60.2	59.7	59.3	58.0	56.8	56.1	55.7	55.1	54.6	55.9	63.3	48.9	Mar.
71.4	71.3	70.2	69.1	67.8	65.7	64.2	63.2	62.9	62.3	61.6	64.5	73.9	56.4	Apr.
76.5	76.8	76.1	74.8	73.5	71.6	69.6	68.6	67.7	67.1	66.4	69.8	79.3	62.0	May.
85.0	84.7	83.3	82.0	80.8	79.5	78.1	77.4	76.6	76.1	75.6	78.7	87.9	71.9	June.
83.4	83.0	82.2	80.7	79.5	78.4	77.5	76.8	76.6	76.2	75.7	78.1	87.2	71.8	July.
85.2	84.8	83.9	82.4	81.1	79.7	78.8	77.3	76.5	76.1	76.0	79.3	88.5	72.1	Aug.
81.6	81.7	80.6	79.3	77.7	76.0	75.1	74.0	73.3	73.1	72.4	75.0	83.3	68.4	Sept.
70.2	70.5	70.2	68.8	66.5	64.5	63.5	62.5	61.8	60.9	60.0	63.0	71.9	55.0	Oct.
63.2	63.3	62.6	60.7	58.1	56.6	55.6	54.8	54.1	53.2	52.5	55.6	64.7	46.6	Nov.
62.1	62.3	61.4	59.9	57.8	56.2	55.0	54.2	53.5	52.8	52.1	54.9	64.0	46.7	Dec.
71.9	72.0	71.1	69.8	68.2	66.5	65.4	64.4	63.8	63.2	62.7	65.4	74.4	57.8	Year.

WASHINGTON, D. C.

[h_t=59 ft.; local time 0h 8m slow.]

42.0	42.2	42.0	40.8	39.6	38.4	37.2	36.8	36.4	35.8	35.5	37.0	44.2	30.5	Jan.
45.6	46.3	46.2	45.8	44.8	43.1	42.0	41.2	40.5	39.9	39.2	41.5	48.6	34.3	Feb.
41.5	42.3	42.3	42.1	41.5	40.4	39.6	38.7	38.1	37.5	37.0	38.1	44.7	32.4	Mar.
62.8	63.6	64.1	63.4	62.8	60.4	57.8	56.0	54.7	53.5	51.9	55.5	65.7	45.2	Apr.
67.6	68.3	68.6	68.3	67.3	64.5	62.2	60.6	59.5	58.2	57.5	61.1	70.6	52.1	May.
78.3	78.7	78.5	78.0	77.1	75.5	72.2	70.3	69.2	68.1	67.1	71.2	81.2	61.9	June.
77.4	77.2	77.6	76.3	75.6	74.0	71.6	69.7	68.8	68.2	67.5	71.3	80.6	63.3	July.
80.0	80.3	80.2	79.8	77.3	75.7	73.7	72.5	71.4	70.6	70.2	73.6	82.7	66.3	Aug.
77.8	78.0	77.6	76.7	74.7	71.7	69.3	68.0	67.0	66.4	65.4	69.7	79.8	60.8	Sept.
60.7	60.8	60.7	59.5	57.2	55.0	53.6	52.3	51.9	51.3	50.7	53.8	62.7	46.1	Oct.
50.6	50.9	50.2	48.7	46.6	44.9	43.6	42.5	41.8	40.6	39.8	43.6	53.5	34.4	Nov.
49.6	50.2	49.7	48.2	46.7	45.1	43.6	42.4	41.8	40.6	40.0	42.5	53.0	33.3	Dec.
61.2	61.6	61.5	60.6	59.3	57.4	55.5	54.2	53.4	52.6	51.8	54.9	63.9	46.7	Year.

WILMINGTON, N. C.

[h_t=82 ft.; local time 0h 12m slow.]

54.0	53.8	53.0	51.6	50.2	48.8	47.9	47.1	46.5	45.8	45.6	47.2	56.2	39.1	Jan.
61.4	62.0	61.0	60.0	58.5	57.0	55.8	55.2	54.7	54.1	53.6	55.7	64.2	47.5	Feb.
57.7	57.9	57.5	56.6	55.5	54.0	53.2	52.2	51.3	50.5	49.7	51.9	59.8	44.7	Mar.
67.4	67.5	66.9	65.9	64.8	63.2	61.4	60.5	60.0	59.5	59.1	61.7	70.1	54.1	Apr.
73.7	72.9	71.8	70.9	69.8	67.9	66.2	65.3	64.6	64.0	63.3	66.9	76.3	58.9	May.
82.1	82.6	81.7	81.3	79.1	77.7	75.6	74.8	74.2	73.6	72.9	76.1	85.5	68.8	June.
80.7	80.7	80.0	79.6	78.1	77.0	75.7	75.1	74.6	74.4	74.0	76.2	83.1	70.1	July.
82.9	82.3	81.1	79.8	78.7	77.7	76.8	76.4	75.5	75.1	74.8	77.6	86.1	71.8	Aug.
79.2	79.4	78.3	77.5	76.4	74.4	73.0	72.3	71.6	70.8	70.2	73.0	81.6	66.4	Sept.
67.2	67.3	66.6	65.1	62.8	61.1	59.5	59.0	58.2	57.5	57.0	59.9	69.5	51.7	Oct.
59.6	59.5	59.0	57.4	55.5	54.1	52.4	51.6	50.8	49.9	49.0	52.5	62.3	43.4	Nov.
59.3	59.6	59.4	57.7	55.6	54.1	52.9	52.1	51.6	51.1	50.5	52.6	62.3	43.9	Dec.
68.8	68.8	68.0	67.0	65.4	63.9	62.5	61.8	61.1	60.5	60.0	62.6	71.4	55.0	Year.

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

*FORT ASSINABOINE, MONT.

[λ=48° 34′; φ=109° 42′.]

1892.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan	15.6	15.4	15.4	14.3	12.9	12.8	13.0	12.5	12.3	11.9	12.5	14.5	16.8
Feb	18.8	17.6	17.0	17.7	16.9	16.6	16.3	15.6	15.9	16.4	17.6	20.4	22.3
Mar	29.9	29.2	28.1	27.3	27.1	26.0	25.1	24.8	24.7	26.6	29.6	34.0	36.7
Apr	35.3	34.1	33.3	32.6	31.2	30.4	29.6	29.2	30.4	32.9	36.2	39.4	41.3
May	43.4	41.9	41.1	39.7	39.2	38.6	38.6	40.0	42.8	45.5	47.5	50.1	51.4
June ...	54.7	53.5	52.0	50.7	49.7	48.3	48.5	51.0	54.5	58.5	61.6	64.5	66.4
July	61.2	59.5	57.7	57.2	56.3	54.8	53.3	55.8	59.2	63.1	66.4	69.8	72.4
Aug	59.0	57.7	56.0	55.2	54.0	52.8	51.5	51.8	55.6	60.2	65.2	69.4	72.9
Sept	53.1	51.4	49.9	48.7	47.2	45.7	44.8	43.9	45.6	50.1	55.8	60.4	64.5
Oct.	41.9	40.5	39.2	38.0	36.8	35.7	35.7	34.5	34.3	36.7	42.5	48.1	52.1
Nov	24.3	23.8	23.4	22.7	22.2	22.5	22.0	22.7	22.8	23.1	24.8	27.2	28.8
Dec	9.1	9.1	10.4	11.1	11.3	11.1	11.4	11.5	11.0	11.0	11.5	13.0	14.5
Year....	37.2	36.1	35.3	34.6	33.7	32.9	32.5	32.8	34.1	36.3	39.3	42.6	45.0

BISMARCK, N. DAK.

[λ=46° 47′; φ=100° 38′.]

Jan	6.1	5.7	5.5	5.1	4.6	4.4	4.0	3.5	3.3	3.8	5.5	8.2	10.6
Feb	9.1	8.8	8.1	7.3	6.8	6.1	5.7	5.4	5.4	6.1	8.2	10.4	12.3
Mar	22.9	22.6	21.9	21.6	20.9	20.5	19.9	19.5	20.1	22.7	25.7	28.4	30.6
Apr	35.0	34.7	34.4	33.8	33.1	32.7	32.2	32.3	33.9	36.0	38.1	39.8	41.3
May	42.5	41.5	41.1	40.8	40.2	39.3	39.3	41.1	43.2	45.6	47.6	49.3	50.7
June ...	55.7	55.2	53.8	52.9	52.4	51.5	52.0	54.2	56.4	59.0	61.1	62.3	63.9
July	64.0	62.9	62.2	61.2	60.2	59.1	59.3	62.2	65.3	68.3	71.0	73.6	75.5
Aug	64.3	63.2	62.1	61.1	60.1	58.9	57.7	58.9	62.2	65.8	70.1	73.9	76.8
Sept	55.7	54.7	53.5	52.6	51.7	50.6	49.7	49.8	52.6	56.5	60.5	64.0	67.1
Oct.	44.6	43.9	42.8	42.1	41.3	40.8	40.2	39.8	41.3	44.7	48.7	52.5	55.5
Nov	23.2	22.6	22.1	21.7	21.3	21.8	21.7	21.1	20.9	22.0	24.0	26.8	29.3
Dec	8.3	7.6	7.4	7.2	7.6	7.4	7.4	8.0	8.3	8.7	10.6	12.5	14.5
Year....	36.0	35.3	34.6	34.0	33.4	32.8	32.4	33.0	34.4	36.6	39.3	41.8	44.0

BOSTON, MASS.

[λ=42° 21′; φ=71° 4′.]

Jan	27.4	27.3	27.4	27.2	26.8	26.9	27.3	27.5	28.0	29.3	30.7	32.2	33.1
Feb	26.9	26.8	26.6	26.2	25.9	25.8	25.7	26.2	27.1	28.6	29.7	30.8	31.8
Mar	30.2	29.5	28.8	28.3	27.8	27.9	28.9	30.1	31.8	33.4	34.7	36.0	36.9
Apr	44.0	43.4	42.8	42.2	41.6	42.0	44.2	46.8	48.8	50.6	52.1	53.1	53.7
May	51.0	50.8	50.3	50.1	50.1	50.7	51.7	53.8	55.0	56.5	57.7	58.7	59.5
June ...	64.8	64.2	64.2	63.6	63.2	63.9	65.3	67.7	69.4	71.1	72.7	73.8	74.8
July	67.9	67.4	66.7	66.0	65.6	66.7	68.9	72.3	74.5	76.4	76.8	77.0	77.3
Aug	66.1	65.7	65.4	65.1	64.9	65.0	66.0	68.2	69.8	71.5	72.3	73.1	73.7
Sept	58.5	58.1	57.6	57.0	56.5	56.1	56.9	59.5	61.6	64.2	65.8	67.7	68.9
Oct.	49.0	48.8	48.3	48.3	47.8	47.6	48.2	49.7	51.7	53.4	55.3	56.8	57.9
Nov	39.3	39.1	38.9	38.6	38.5	38.5	38.6	39.3	40.1	41.2	42.9	44.2	44.8
Dec	28.1	28.0	27.7	27.4	27.1	27.0	27.0	27.3	28.3	29.8	31.5	33.3	34.4
Year....	46.1	45.8	45.4	45.0	44.6	44.8	45.7	47.4	48.8	50.5	51.8	53.1	53.9

BUFFALO, N. Y.

[λ=42° 53′; φ=78° 53′.]

Jan	22.8	22.8	22.7	22.6	22.5	22.4	22.3	22.7	23.2	23.7	24.2	24.9	25.4
Feb	27.1	27.0	26.6	26.4	26.4	26.4	26.4	26.4	27.4	28.3	29.7	30.5	31.3
Mar	26.9	26.8	26.4	26.1	26.2	25.9	25.8	26.6	27.4	28.5	29.5	30.2	30.9
Apr	39.6	39.0	38.8	38.3	37.9	37.8	38.3	39.7	41.3	42.4	43.6	44.5	45.2
May	49.5	49.3	49.4	49.3	49.5	49.8	50.6	51.6	52.5	53.1	53.8	54.5	55.0
June ...	64.4	64.1	63.2	62.9	62.8	63.5	64.6	65.5	66.1	66.9	68.0	69.0	69.1
July	66.5	65.9	65.3	65.2	64.7	65.3	66.9	68.7	70.0	71.0	72.0	73.0	73.9
Aug	66.7	66.3	65.7	65.3	64.8	64.8	66.0	68.0	69.8	71.0	72.3	73.4	74.0
Sept	60.1	59.6	59.1	58.7	58.2	57.9	58.8	60.5	62.5	64.2	65.5	66.3	67.0
Oct.	50.2	49.7	49.0	48.5	48.1	47.8	47.8	48.2	49.5	51.3	52.6	53.8	54.6
Nov	37.5	37.1	36.7	36.5	36.6	36.5	36.7	37.1	37.4	38.0	38.3	38.7	39.0
Dec	26.7	26.9	27.0	27.0	26.9	26.6	26.3	26.2	26.5	27.1	28.1	29.0	29.2
Year....	44.8	44.5	44.2	43.9	43.7	43.7	44.2	45.1	46.1	47.1	48.1	49.0	49.6

* Station at Fort Assinaboine from January 1 to May 15, and at Havre from May 16 to December 31.

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—*Continued.*

*FORT ASSINABOINE, MONT.

[h_t=16 ft.; local time 2^h 19^m slow.]

2^h	3^h	4^h	5^h	6^h	7^h	8^h	9^h	10^h	11^h	Mid.	Mean.	Mean max.	Mean min.	1892.
19.5	21.7	22.4	23.9	23.7	22.5	20.5	19.8	18.8	18.2	16.6	17.0	26.9	5.5	Jan.
25.3	27.4	29.3	29.7	30.1	29.0	25.7	23.2	21.1	20.2	20.1	21.3	33.1	10.4	Feb.
39.3	41.5	42.2	43.3	43.5	42.5	40.8	36.7	34.2	32.6	31.2	33.2	46.0	21.7	Mar.
43.3	44.7	46.1	45.9	45.7	45.4	44.5	42.1	39.1	37.8	36.5	37.8	48.4	27.5	Apr.
53.1	54.4	55.3	55.7	55.5	55.1	54.2	52.5	49.4	47.5	44.7	47.4	58.9	37.0	May.
68.1	69.4	69.7	70.0	69.4	68.5	68.1	66.2	61.8	58.8	56.6	60.0	72.3	46.6	June.
74.5	75.9	77.3	78.0	78.5	78.2	76.5	74.8	70.2	66.0	63.2	66.7	80.5	51.7	July.
75.9	77.8	79.2	79.9	79.7	79.6	78.1	74.3	68.4	64.7	61.0	65.8	81.8	49.1	Aug.
68.4	70.9	72.0	73.2	73.0	72.1	68.1	64.0	59.6	57.3	54.9	58.1	74.8	42.0	Sept.
56.6	59.2	61.0	62.1	61.8	59.0	53.0	50.1	47.1	45.1	42.4	46.4	63.4	32.2	Oct.
31.3	32.4	32.4	32.5	31.8	29.4	27.4	26.1	25.1	24.4	24.4	26.1	36.2	16.5	Nov.
15.3	15.9	16.5	15.8	14.7	13.4	13.2	11.2	10.0	9.9	10.2	12.2	20.3	1.7	Dec.
47.6	49.3	50.3	50.8	50.6	49.6	47.5	45.1	42.1	40.2	38.5	41.0	53.6	28.5	Year.

BISMARCK, N. DAK.

[h_t=59 ft.; local time 1^h 42^m slow.]

2^h	3^h	4^h	5^h	6^h	7^h	8^h	9^h	10^h	11^h	Mid.	Mean.	Mean max.	Mean min.	1892.
12.0	13.0	13.5	13.2	12.2	10.8	9.5	8.9	8.6	8.0	7.4	7.8	15.7	—1.0	Jan.
14.1	15.7	16.9	17.3	16.8	14.8	12.5	11.0	10.2	9.6	9.2	10.3	21.9	1.0	Feb.
32.0	33.2	33.7	33.9	34.0	32.8	29.8	28.0	26.6	25.2	24.3	26.3	36.2	16.6	Mar.
42.6	43.8	44.4	44.8	44.6	43.8	41.9	39.4	37.9	36.5	35.4	38.0	46.3	30.3	Apr.
51.6	52.4	53.3	53.6	54.1	53.7	52.7	50.3	47.7	45.6	44.0	46.7	55.4	37.2	May.
65.1	66.4	67.2	67.6	67.8	67.1	66.4	64.4	61.0	59.1	57.2	60.0	68.9	49.5	June.
76.7	77.6	78.5	78.8	78.5	77.5	76.2	73.0	69.7	67.0	65.2	69.3	80.3	56.9	July.
78.5	79.4	80.3	80.3	79.5	78.6	75.5	71.9	69.0	67.1	65.5	69.2	81.6	55.4	Aug.
69.5	70.7	71.6	71.9	70.9	68.6	65.0	62.0	60.0	58.5	56.8	60.2	72.8	47.6	Sept.
57.6	59.3	60.0	60.1	58.9	55.5	52.7	50.3	48.4	47.0	45.2	48.9	61.4	37.1	Oct.
31.3	32.3	32.7	32.0	29.9	27.8	26.2	24.6	24.0	23.3	22.9	25.2	35.2	16.2	Nov.
16.1	17.0	17.1	16.8	15.6	14.2	12.8	11.4	10.6	9.7	9.1	11.1	20.1	0.7	Dec.
45.6	46.7	47.4	47.5	46.9	45.4	43.4	41.3	39.5	38.0	36.8	39.4	49.6	29.0	Year.

BOSTON, MASS.

[h_t=115 ft.; local time 0^h 16^m fast.]

2^h	3^h	4^h	5^h	6^h	7^h	8^h	9^h	10^h	11^h	Mid.	Mean.	Mean max.	Mean min.	1892.
32.9	32.5	32.1	31.5	30.7	30.1	29.5	28.8	28.2	27.9	27.6	29.3	35.8	20.8	Jan.
32.4	32.6	32.6	31.6	30.8	30.0	29.5	28.7	28.3	28.1	27.9	28.8	33.8	23.0	Feb.
37.8	38.0	37.6	36.8	35.6	34.7	33.8	32.9	32.2	31.5	31.1	32.8	39.7	26.1	Mar.
54.3	54.1	53.3	52.5	51.4	49.0	48.0	46.8	45.9	45.3	44.9	47.9	57.4	39.3	Apr.
60.2	59.3	58.3	58.1	57.6	56.3	55.6	54.3	53.4	53.0	52.1	54.8	63.1	48.7	May.
75.8	75.6	75.0	73.9	72.9	71.0	69.3	67.9	67.0	66.3	65.5	69.1	78.1	61.0	June.
78.0	77.9	77.5	77.1	76.5	74.4	73.1	71.9	70.6	69.5	68.7	72.4	81.3	64.6	July.
74.6	74.0	73.7	73.2	72.7	71.3	70.0	69.2	68.4	67.8	67.3	69.5	76.7	63.6	Aug.
69.4	68.6	68.3	67.5	66.2	64.2	62.6	61.5	60.7	59.9	59.2	62.4	70.8	54.2	Sept.
58.1	58.0	57.3	56.4	55.1	53.7	52.7	51.8	50.9	50.0	49.5	52.4	60.0	45.4	Oct.
45.2	45.1	44.3	43.4	42.9	42.1	41.3	40.4	40.0	39.5	39.1	41.1	47.1	35.2	Nov.
34.8	34.4	34.0	33.3	32.2	31.1	30.5	29.9	29.5	28.8	28.3	30.2	36.3	23.5	Dec.
54.5	54.2	53.7	52.9	52.0	50.7	49.7	48.7	47.9	47.3	46.8	49.2	56.7	42.1	Year.

BUFFALO, N. Y.

[h_t=103 ft.; local time 0^h 15^m slow.]

2^h	3^h	4^h	5^h	6^h	7^h	8^h	9^h	10^h	11^h	Mid.	Mean.	Mean max.	Mean min.	1892.
25.5	25.9	25.9	25.6	25.5	25.2	24.7	24.0	23.6	23.2	22.8	23.9	28.8	17.1	Jan.
32.0	32.3	32.3	32.0	31.3	30.3	30.1	29.5	29.0	28.4	27.5	29.0	34.3	22.1	Feb.
31.0	31.5	31.5	31.6	31.2	30.5	29.5	28.7	28.1	27.8	27.5	28.6	34.3	22.3	Mar.
45.9	45.8	45.6	45.0	44.2	43.1	42.8	42.2	41.6	41.0	40.5	41.8	49.1	33.5	Apr.
55.6	55.7	55.5	55.2	54.7	53.8	53.1	52.2	51.9	51.3	51.0	52.4	60.3	44.6	May.
69.3	69.3	69.4	69.2	68.3	67.6	66.0	65.6	65.2	64.9	64.2	66.2	73.4	59.5	June.
74.5	74.7	74.9	74.3	73.0	71.8	70.8	70.1	69.6	68.7	67.6	69.9	77.7	62.2	July.
74.9	75.0	74.6	74.2	73.3	71.9	70.6	69.7	68.6	67.5	66.9	69.8	77.3	62.0	Aug.
67.8	68.2	68.3	67.9	66.8	65.4	64.2	63.1	62.3	61.7	61.0	63.1	69.9	54.4	Sept.
55.3	55.2	55.3	54.8	54.0	53.5	52.7	52.1	51.2	50.8	50.3	51.5	56.9	43.7	Oct.
39.4	39.6	39.4	39.1	38.6	38.0	37.6	37.3	37.2	37.0	37.0	37.8	41.9	31.3	Nov.
29.4	29.5	29.2	29.0	29.0	28.7	28.4	27.9	27.3	26.8	26.7	27.7	32.3	21.7	Dec.
50.0	50.2	50.2	49.8	49.2	48.3	47.5	46.9	46.3	45.8	45.2	46.8	53.0	39.5	Year.

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

CHICAGO, ILL.

[λ=41° 52′; φ=87° 38′.]

1892.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan	18.9	18.8	18.5	18.0	17.7	17.5	17.2	17.1	17.4	18.4	19.6	21.0	22.1
Feb	29.7	29.3	29.0	28.8	28.4	28.5	28.2	28.0	28.0	28.5	29.2	30.1	30.9
Mar	30.0	29.8	29.5	29.4	29.1	28.6	28.5	28.8	29.1	30.2	30.5	30.7	30.9
Apr	43.0	42.5	42.2	42.0	41.4	41.2	41.6	42.1	42.8	43.8	44.4	45.1	46.0
May	51.2	50.9	51.1	50.9	50.5	50.1	50.2	51.5	51.7	52.7	53.6	54.4	54.4
June ...	62.2	62.1	61.4	60.9	60.8	60.5	61.1	62.6	63.4	64.7	65.3	66.2	66.3
July	69.3	68.9	68.4	68.0	67.7	67.6	68.3	69.5	70.6	71.7	72.6	73.4	73.4
Aug	69.9	69.6	69.1	68.5	67.9	67.8	68.0	69.2	70.2	70.9	71.1	71.8	72.3
Sept....	62.0	61.4	60.4	59.9	59.4	59.1	59.0	59.8	61.7	64.0	65.5	66.7	67.6
Oct	52.6	52.1	51.3	50.6	50.0	49.7	49.4	49.5	50.7	52.9	54.7	56.0	56.7
Nov	33.8	33.5	33.4	33.1	32.6	32.6	32.5	32.5	33.0	33.8	34.7	35.7	36.4
Dec	22.8	22.4	22.2	22.0	21.7	21.7	21.7	22.0	22.3	23.2	24.0	25.3	25.9
Year ...	45.4	45.1	44.7	44.3	43.9	43.7	43.8	44.4	45.1	46.2	47.1	48.0	48.6

CLEVELAND, OHIO.

[λ=41° 30′; φ=81° 42′.]

Jan	23.3	23.0	23.0	23.0	22.9	22.2	21.9	22.0	22.2	23.3	24.4	26.0	26.6
Feb	30.3	30.2	30.3	30.1	30.0	29.6	29.2	29.6	30.3	31.7	33.0	34.1	34.8
Mar	29.8	29.1	28.8	28.5	28.4	28.3	28.6	29.4	30.4	31.5	32.3	33.2	32.8
Apr	43.3	42.7	42.9	42.5	42.0	41.2	42.2	43.5	45.2	46.0	47.4	48.4	49.7
May	53.5	52.7	52.3	51.4	51.3	51.7	52.5	54.1	55.6	57.2	58.3	59.1	59.5
June ...	67.3	66.7	65.8	65.5	65.2	65.3	67.2	69.5	71.2	72.3	73.3	74.3	74.0
July	67.0	66.3	65.4	64.9	64.6	65.0	66.9	70.5	72.9	74.5	75.2	75.6	76.1
Aug	67.3	66.5	65.9	65.5	65.1	65.0	66.4	69.1	71.6	73.8	74.7	75.4	75.8
Sept....	60.5	59.9	59.2	58.6	57.8	57.1	57.3	59.8	63.3	66.1	67.9	68.7	69.4
Oct	50.3	49.7	49.2	48.8	48.3	48.1	48.0	49.4	51.7	54.0	55.7	57.2	57.7
Nov	38.0	37.9	37.9	37.6	37.4	37.3	37.3	37.3	37.6	38.5	39.0	39.7	40.1
Dec	28.3	27.6	27.3	27.1	27.0	26.4	26.4	26.2	26.5	27.4	28.5	30.1	30.8
Year ...	46.6	46.0	45.7	45.3	45.0	44.8	45.3	46.7	48.2	49.7	50.8	51.8	52.3

CINCINNATI, OHIO.

[λ=39° 6′; φ=84° 30′.]

Jan	26.1	25.5	24.8	24.4	23.5	23.1	22.8	22.9	23.5	24.4	25.9	27.2	28.4
Feb	37.7	37.4	37.1	36.6	36.3	36.0	35.8	35.6	36.3	37.3	38.9	39.9	41.7
Mar	36.7	36.2	35.6	34.9	34.4	34.1	33.8	34.1	35.4	36.9	38.1	39.4	40.6
Apr	50.5	49.4	48.4	47.7	47.1	46.7	47.1	48.2	50.8	52.2	54.1	55.8	57.0
May	59.2	58.6	57.7	57.2	56.6	56.6	57.8	59.5	61.5	63.2	64.5	65.7	66.5
June ...	71.2	70.6	69.9	69.3	68.7	68.5	70.0	72.1	74.7	76.4	77.6	79.3	80.3
July	71.9	71.1	69.8	69.0	68.4	67.8	69.1	71.3	74.4	76.7	78.4	80.1	81.2
Aug	72.2	71.1	70.1	69.4	68.5	67.6	68.1	70.1	73.2	75.5	77.7	79.1	80.6
Sept....	64.1	63.3	61.8	61.2	60.3	59.7	59.8	61.0	64.9	68.3	71.4	73.3	74.8
Oct	53.9	52.6	51.3	50.3	49.5	48.6	48.1	48.5	51.5	55.0	58.4	60.8	62.8
Nov	40.3	39.6	38.9	38.4	37.8	37.5	37.2	37.0	37.7	38.6	40.4	41.6	42.8
Dec	31.7	31.1	30.5	30.0	29.6	29.2	29.1	29.1	29.6	30.5	31.9	33.2	34.6
Year ...	51.3	50.5	49.7	49.0	48.4	48.0	48.2	49.1	51.1	52.9	54.8	56.3	57.6

DETROIT, MICH.

[λ=42° 20′; φ=83° 3′.]

Jan	19.8	19.7	19.5	19.1	18.9	18.6	18.1	17.9	18.5	19.2	20.9	21.8	22.8
Feb	27.6	27.5	27.2	27.1	27.0	26.9	26.8	27.1	27.7	28.1	29.0	29.8	30.5
Mar	27.9	27.5	26.9	26.7	26.5	26.4	26.2	26.8	28.1	29.5	30.8	31.9	33.1
Apr	40.9	40.1	39.3	38.7	38.1	37.9	38.7	40.5	42.2	44.0	46.4	47.7	49.0
May	51.8	51.1	50.6	50.3	50.0	50.0	50.6	52.2	53.1	54.5	56.1	57.7	58.6
June ...	64.4	64.0	63.7	63.4	62.8	63.1	64.4	67.0	68.5	69.9	71.3	73.0	73.6
July	67.6	67.0	66.5	65.6	64.4	64.8	66.7	70.0	72.3	74.4	75.9	76.5	77.2
Aug	67.5	67.2	66.9	66.4	65.3	65.4	66.3	68.5	71.1	73.5	75.4	76.2	77.1
Sept....	60.6	60.1	59.6	58.8	58.3	58.0	58.1	59.8	62.8	65.4	67.2	68.9	70.3
Oct	48.8	48.4	48.0	47.6	47.2	46.6	46.4	47.3	49.5	52.1	54.5	56.4	57.9
Nov	35.7	35.6	35.4	35.1	34.9	34.7	34.7	34.6	35.0	36.0	36.7	37.6	38.3
Dec	26.5	26.1	25.9	25.8	25.6	25.5	25.4	25.5	25.8	26.7	27.8	28.5	29.1
Year ...	44.9	44.5	44.1	43.7	43.2	43.2	43.5	44.8	46.2	47.8	49.3	50.5	51.5

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

CHICAGO, ILL.

[h_t=241 ft.; local time 0^h 50^m slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean max.	Mean min.	1892.
23.0	23.5	23.7	23.3	22.5	21.7	20.9	20.5	19.8	19.5	19.1	20.0	25.6	13.4	Jan.
31.3	31.7	31.9	32.2	32.1	32.1	31.9	31.4	31.1	30.6	30.0	30.1	35.0	25.3	Feb.
31.5	31.8	32.6	33.1	33.1	32.2	32.4	31.7	31.3	30.9	30.8	30.7	36.5	25.4	Mar.
46.7	47.2	47.4	46.9	46.8	46.6	45.9	45.3	44.8	44.5	44.0	44.3	50.4	37.5	Apr.
54.8	55.3	54.8	54.6	54.3	53.4	53.2	52.6	52.2	51.8	51.5	52.6	58.7	46.0	May.
67.5	67.2	67.2	66.9	66.8	66.2	65.4	64.5	64.3	62.7	62.6	64.1	71.8	57.0	June.
74.2	74.5	74.7	74.8	74.3	73.5	72.6	71.3	70.8	70.2	70.1	71.3	78.0	65.1	July.
72.9	73.7	73.8	74.0	73.9	73.0	72.3	71.5	71.2	70.6	70.1	71.0	75.9	65.9	Aug.
68.4	69.1	69.5	69.1	68.5	67.0	65.9	65.1	64.6	63.8	63.2	64.2	71.0	56.8	Sept.
58.0	58.4	59.0	58.5	57.2	56.2	55.3	54.7	54.1	53.4	52.7	53.9	60.9	46.4	Oct.
37.3	37.6	37.7	37.5	37.0	36.2	35.7	35.0	34.5	34.1	33.8	34.7	40.3	29.1	Nov.
26.6	26.5	26.5	26.2	25.5	24.8	24.2	24.0	23.6	23.3	23.0	23.8	29.1	17.8	Dec.
49.4	49.7	49.9	49.8	49.3	48.6	48.0	47.3	46.9	46.3	45.9	46.7	52.8	40.5	Year.

CLEVELAND, OHIO.

[h_t=122 ft.; local time 0^h 27^m slow.]

27.4	27.5	27.5	26.9	26.5	25.9	25.4	25.1	24.5	24.0	23.6	24.5	29.4	17.8	Jan.
34.8	34.4	34.7	34.6	34.2	33.5	32.6	32.0	31.1	30.6	30.1	31.9	37.3	25.8	Feb.
32.9	33.0	33.3	33.4	33.6	33.0	32.3	31.8	31.5	31.2	30.6	31.2	36.6	25.5	Mar.
50.6	51.1	50.7	50.9	50.1	49.5	47.9	47.3	46.3	45.5	44.8	46.3	53.1	38.6	Apr.
60.2	59.7	60.1	59.6	59.6	59.1	57.8	57.2	56.6	55.4	54.8	56.2	63.4	48.3	May.
73.9	73.4	73.3	73.1	73.4	72.5	71.1	70.3	69.2	68.2	67.3	70.1	78.0	63.6	June.
76.2	75.8	76.0	76.0	76.0	75.2	73.6	72.3	70.5	69.3	68.3	71.4	78.9	62.9	July.
75.9	75.8	76.1	75.5	75.6	74.4	72.8	71.6	70.3	69.0	68.2	71.1	78.3	63.3	Aug.
70.1	70.4	70.4	69.9	69.1	67.7	65.9	64.5	63.4	62.1	61.2	64.2	72.1	55.8	Sept.
58.2	58.3	58.2	57.7	56.6	55.2	53.8	52.6	51.8	51.5	50.6	53.0	59.9	45.1	Oct.
40.5	40.9	40.9	40.7	40.0	39.4	38.4	37.9	37.8	37.7	37.5	38.6	43.7	33.8	Nov.
31.4	31.5	31.5	31.4	31.0	30.2	29.5	29.2	28.9	28.6	28.5	28.8	33.8	23.3	Dec.
52.7	52.6	52.7	52.5	52.1	51.3	50.1	49.3	48.5	47.8	47.1	48.9	55.4	42.0	Year.

CINCINNATI, OHIO.

[h_t=153 ft.; local time 0^h 38^m slow.]

29.4	30.5	30.8	30.8	30.5	29.9	29.5	28.8	28.0	27.3	26.6	26.8	32.4	19.7	Jan.
42.4	43.1	43.3	43.3	43.0	42.3	41.0	40.0	39.1	38.6	38.1	39.2	45.6	32.0	Feb.
41.9	42.7	43.3	43.0	42.8	42.1	41.5	40.5	39.8	38.9	38.2	38.5	45.7	30.6	Mar.
58.3	59.2	59.4	59.5	58.8	57.6	56.7	54.9	53.7	52.4	51.3	53.2	61.1	44.1	Apr.
67.5	67.7	68.0	68.2	67.3	66.3	65.1	63.6	62.5	61.4	60.6	62.6	70.4	54.3	May.
81.3	81.8	82.1	81.7	80.4	78.6	77.6	75.7	74.4	72.7	71.7	75.3	83.7	67.0	June.
81.8	82.8	82.8	81.6	81.5	80.5	79.0	77.2	76.0	74.7	73.7	75.9	85.1	66.7	July.
81.2	81.9	82.5	82.8	82.5	80.7	79.0	77.0	75.8	74.4	73.0	75.6	84.3	66.0	Aug.
75.9	76.4	76.7	76.4	76.1	73.9	72.3	69.6	68.3	66.9	65.7	68.4	77.9	57.6	Sept.
63.7	65.0	65.2	65.2	64.4	63.0	61.6	59.7	58.4	56.7	55.3	57.1	65.7	46.0	Oct.
43.7	43.9	44.3	44.2	43.9	43.5	43.2	42.1	41.2	40.6	40.0	40.8	47.1	33.1	Nov.
35.4	36.0	36.3	36.3	36.2	35.7	35.2	34.5	33.8	33.0	32.4	32.7	38.1	25.1	Dec.
58.5	59.2	59.6	59.4	59.0	57.8	56.8	55.3	54.2	53.1	52.2	53.8	61.4	45.2	Year.

DETROIT, MICH.

[h_t=158 ft.; local time, 0^h 32^m slow.]

23.6	24.5	24.6	24.1	23.3	22.7	22.2	21.4	21.2	20.7	20.1	21.0	27.1	14.3	Jan.
31.0	31.4	31.5	31.3	30.8	30.2	29.7	29.0	28.7	27.9	27.8	28.8	34.6	23.6	Feb.
34.2	34.6	34.6	34.7	33.9	32.4	31.6	30.7	30.1	29.6	29.1	30.2	37.2	24.4	Mar.
50.4	51.1	51.3	51.1	50.5	49.0	46.3	45.2	43.4	42.3	41.5	44.4	53.5	36.1	Apr.
59.2	60.1	60.8	59.8	59.1	58.0	56.5	55.6	54.8	53.9	53.2	54.9	63.3	47.8	May.
74.5	74.4	74.8	74.3	73.3	71.7	69.9	67.9	66.8	65.6	64.6	68.6	77.7	61.4	June.
78.2	78.5	78.2	78.4	77.6	76.4	74.3	72.1	70.8	69.7	68.9	72.2	81.7	62.5	July.
77.7	78.4	78.0	77.5	76.1	74.1	72.3	70.5	69.3	68.3	67.6	71.5	79.3	62.5	Aug.
71.2	71.1	71.2	70.8	69.2	66.5	64.7	63.4	62.7	62.1	61.4	64.3	72.1	54.7	Sept.
58.6	59.0	58.6	57.5	55.8	53.9	52.6	51.5	50.6	49.7	49.0	52.0	59.4	43.6	Oct.
38.8	38.9	38.8	38.6	37.8	37.0	36.9	36.3	36.0	35.7	35.6	36.4	40.2	31.1	Nov.
29.6	29.8	29.7	29.3	28.8	28.5	28.2	27.7	27.5	27.3	26.9	27.4	31.0	22.1	Dec.
52.2	52.6	52.7	52.3	51.4	50.0	48.8	47.6	46.8	46.1	45.5	47.6	54.8	40.3	Year.

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

DODGE CITY, KANS.

[λ=37° 45′; φ=100° 0′.]

1892.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan	22.8	21.5	21.0	20.7	20.7	20.4	20.3	20.1	20.2	21.9	26.1	30.4	33.6
Feb	30.9	29.7	29.3	29.0	28.4	28.1	27.7	27.1	27.2	29.2	32.4	35.1	38.1
Mar	32.5	32.0	31.2	30.4	29.5	28.5	27.6	27.1	28.1	31.8	35.8	38.4	41.3
Apr	46.1	45.2	44.2	43.1	42.1	41.5	40.9	42.8	45.0	50.1	53.7	56.8	59.3
May	52.8	51.6	50.6	50.2	49.7	49.4	49.3	51.4	53.0	55.2	57.2	59.4	61.5
June ...	64.4	63.6	62.7	62.0	61.6	60.8	60.4	63.6	67.2	70.5	74.3	76.7	79.7
July	70.2	69.5	68.6	67.9	67.0	66.2	65.7	68.8	72.1	75.5	79.0	82.0	84.5
Aug	68.9	67.6	66.2	65.8	64.8	64.1	63.4	65.4	70.0	74.7	79.0	82.6	85.2
Sept....	62.8	62.1	61.1	60.1	59.2	58.4	57.4	57.0	60.6	66.4	72.0	75.3	78.3
Oct	50.7	49.9	48.8	48.3	47.5	47.1	46.6	45.3	46.5	52.4	57.8	61.3	63.9
Nov	36.2	35.5	34.6	34.0	33.3	32.8	32.4	32.2	32.6	35.7	42.4	46.9	49.4
Dec	23.3	22.9	22.5	22.3	21.9	21.6	21.2	20.5	20.2	21.0	23.0	25.4	27.0
Year ...	46.8	45.9	45.1	44.5	43.8	43.2	42.7	43.4	45.2	48.7	52.7	55.9	58.5

EASTPORT, ME.

[λ=44° 54′; φ=66° 59′.]

Jan	25.0	24.8	24.4	24.0	23.7	23.4	23.3	23.7	24.3	25.0	25.7	26.6	27.4
Feb	23.4	23.0	22.5	22.0	21.9	21.8	21.8	22.1	22.7	23.9	25.1	26.3	27.3
Mar	26.2	26.0	25.7	25.4	25.2	24.9	25.5	26.4	27.7	28.9	29.9	30.9	31.6
Apr	37.5	36.7	36.3	36.1	35.6	36.3	37.7	39.4	41.3	43.1	45.1	46.0	46.6
May	43.2	42.6	42.0	41.7	42.0	42.8	44.3	45.7	47.2	48.1	48.9	49.9	50.9
June ...	50.9	50.4	49.6	49.5	50.2	51.8	53.4	55.3	56.7	58.7	60.1	61.0	60.3
July	56.2	55.9	55.5	55.1	55.2	55.8	58.6	60.4	63.3	65.3	66.6	67.5	68.6
Aug	57.2	57.0	56.5	56.3	56.0	56.9	58.5	60.1	61.8	63.3	64.7	65.0	66.2
Sept....	52.5	51.9	51.6	51.4	51.4	52.2	54.2	56.3	58.4	60.1	61.0	61.7	62.2
Oct	44.4	43.8	43.6	43.6	43.2	43.1	43.8	45.4	46.8	48.0	49.5	50.3	50.3
Nov	37.7	37.5	37.3	37.4	37.4	37.4	37.3	37.6	38.1	39.1	40.0	40.5	40.7
Dec	23.5	23.3	23.0	22.6	22.5	22.3	22.1	22.3	22.9	24.0	25.0	25.9	26.7
Year ...	39.8	39.4	39.0	38.8	38.7	39.1	40.0	41.2	42.6	44.0	45.1	46.0	46.6

GALVESTON, TEX.

[λ=29° 18′; φ=94° 50′.]

Jan	48.5	47.9	47.6	47.1	46.8	46.6	46.6	46.2	47.1	48.4	49.2	50.5	51.3
Feb	59.6	59.3	59.0	58.6	58.2	57.7	57.8	57.7	57.8	58.8	59.8	60.7	61.3
Mar	56.8	56.5	56.1	55.8	55.6	55.4	55.0	55.5	56.0	56.9	57.9	58.5	59.2
Apr	68.2	68.0	67.6	67.4	67.3	67.1	67.0	67.4	67.9	68.9	69.7	70.4	70.6
May	73.6	73.3	73.3	73.1	72.8	72.6	72.5	73.3	74.1	75.1	75.8	76.4	76.7
June ...	78.1	77.6	77.5	77.3	77.2	77.2	77.4	78.4	78.5	79.4	80.2	80.7	81.0
July	80.7	80.5	80.5	80.4	80.1	79.9	79.8	81.0	81.9	82.5	83.2	83.5	83.4
Aug	80.7	80.7	80.2	79.9	79.5	79.6	79.4	80.5	80.9	81.4	82.4	83.1	84.0
Sept....	78.0	77.5	77.1	76.7	76.4	75.8	75.5	75.7	76.7	77.5	78.4	79.3	79.9
Oct	73.0	72.8	72.6	72.3	72.2	71.9	71.8	71.8	72.5	73.7	74.5	75.5	75.8
Nov	64.6	64.3	64.1	63.9	63.8	63.5	63.3	63.5	63.7	64.6	65.5	66.0	66.7
Dec	56.6	56.2	56.0	55.7	55.6	55.5	55.0	54.9	55.0	54.8	55.0	55.6	56.3
Year ...	68.2	67.9	67.6	67.4	67.1	66.9	66.8	67.2	67.7	68.5	69.3	70.0	70.5

KANSAS CITY, MO.

[λ=39° 5′; φ=94° 37′.]

Jan	23.9	23.1	22.3	21.6	21.1	20.5	20.1	19.5	19.4	19.8	21.3	22.8	24.8
Feb	36.8	35.9	34.9	34.4	33.9	33.4	33.1	32.2	32.1	32.6	33.6	35.4	37.1
Mar	36.2	35.5	35.2	34.7	33.9	33.5	33.0	32.6	32.7	33.4	35.0	36.2	38.0
Apr	51.3	50.6	49.7	49.4	48.5	47.8	47.5	47.2	48.2	49.7	51.0	52.8	54.2
May	59.3	58.2	57.3	56.8	56.2	55.7	55.5	56.6	57.3	58.7	60.3	61.5	62.7
June ...	72.2	71.3	70.4	69.8	69.0	68.4	68.0	68.9	70.3	72.2	74.5	76.3	77.8
July	73.9	73.5	72.4	71.4	70.7	70.1	69.9	70.8	72.4	75.1	77.3	79.3	80.5
Aug	73.9	73.1	72.0	71.0	70.2	69.4	68.7	69.6	71.8	75.0	77.8	80.3	82.5
Sept....	67.7	66.6	65.7	64.8	64.1	63.2	62.5	62.2	63.7	67.0	70.5	73.1	75.6
Oct	56.8	55.9	54.9	53.9	53.1	52.4	51.8	51.6	52.2	55.1	58.5	61.5	63.4
Nov	39.9	39.3	38.6	37.8	37.3	36.6	36.1	35.4	35.8	36.9	39.2	41.6	43.5
Dec	27.8	27.0	26.3	25.9	25.3	25.0	24.7	24.5	24.4	24.8	25.7	27.1	28.4
Year ...	51.6	50.8	50.0	49.3	48.6	48.0	47.6	47.6	48.4	50.0	52.1	54.0	55.7

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

DODGE CITY, KANS.

[h_t=44 ft.; local time, 1h 40m slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean max.	Mean min.	1892.
35.7	37.9	39.1	39.5	38.7	35.0	30.8	28.9	27.0	25.4	24.2	27.6	41.1	16.7	Jan.
39.8	41.3	42.3	43.0	43.2	41.0	36.6	34.8	33.3	31.9	30.9	33.8	44.7	24.7	Feb.
43.0	44.2	45.3	45.6	45.4	43.7	40.1	38.1	36.3	34.9	33.7	36.0	47.3	25.7	Mar.
61.1	62.6	63.5	63.6	63.0	61.4	57.3	53.9	51.6	49.3	47.8	51.9	64.5	39.0	Apr.
63.6	65.4	66.3	66.4	66.1	65.3	62.5	59.4	56.9	55.4	53.9	57.2	68.5	47.0	May.
81.6	83.3	84.2	84.1	83.3	81.4	78.2	74.5	70.7	68.1	66.4	71.8	85.2	58.6	June.
86.1	87.2	88.1	88.4	88.2	86.5	82.9	78.5	75.6	74.0	71.9	76.9	89.6	64.4	July.
87.1	88.6	88.5	87.7	86.7	85.1	80.8	75.9	73.4	71.4	69.9	75.5	90.1	62.0	Aug.
80.5	82.5	82.9	83.0	81.7	78.9	72.9	69.5	67.3	65.7	64.2	69.2	81.6	55.0	Sept.
66.1	67.2	67.8	67.5	66.2	63.1	58.0	55.7	54.2	52.2	51.0	55.6	69.3	43.1	Oct.
51.2	52.8	53.5	53.6	51.3	47.2	43.3	41.6	39.9	38.7	37.5	41.2	55.0	29.9	Nov.
28.5	30.1	31.0	30.5	29.5	27.7	26.4	25.6	24.8	24.2	23.5	24.8	34.0	17.2	Dec.
60.4	61.9	62.7	62.7	61.9	59.7	55.8	53.0	50.9	49.3	47.9	51.8	64.5	40.3	Year.

EASTPORT, ME.

[h_t=51 ft.; local time, 0h 32m fast.]

27.9	27.7	27.5	27.2	27.2	27.2	27.2	26.7	26.3	26.0	25.7	25.8	31.0	19.0	Jan.
28.0	28.3	28.2	27.8	27.1	26.7	26.0	25.3	24.7	24.2	23.8	24.8	29.3	19.4	Feb.
32.0	32.1	32.2	31.8	30.8	29.9	29.1	28.6	27.8	27.2	26.7	28.4	34.2	22.6	Mar.
46.9	47.0	46.9	45.6	44.2	42.3	41.1	40.1	39.3	38.3	37.8	41.1	49.5	34.6	Apr.
51.5	51.6	50.8	49.5	48.0	46.8	46.1	45.6	44.8	44.5	44.1	46.4	53.1	41.0	May.
59.9	59.9	59.5	58.0	57.3	55.5	54.6	53.6	52.9	52.0	51.7	55.1	64.4	48.2	June.
68.3	67.7	67.0	66.3	64.6	62.0	59.8	59.3	58.5	57.6	56.9	61.3	71.4	52.9	July.
66.4	66.2	65.0	64.1	61.9	60.5	59.9	59.4	59.0	58.2	57.9	60.7	68.9	54.9	Aug.
61.8	61.6	60.7	58.8	57.0	55.8	55.3	54.7	54.2	53.9	53.3	56.3	64.0	50.3	Sept.
50.4	50.0	49.3	48.1	47.3	46.4	46.1	45.6	45.2	44.8	44.4	46.4	51.4	40.7	Oct.
40.8	40.7	40.4	39.8	39.5	39.0	38.8	38.3	38.0	37.8	37.7	38.7	42.8	34.6	Nov.
27.3	27.4	27.1	26.6	26.1	25.5	25.0	24.5	24.1	23.7	23.4	24.4	28.8	18.9	Dec.
46.8	46.7	46.2	45.3	44.2	43.1	42.4	41.8	41.2	40.7	40.3	42.4	49.1	36.4	Year.

GALVESTON, TEX.

[h_t=85 ft.; local time, 1h 19m slow.]

51.8	52.0	51.8	51.4	50.2	49.5	49.1	48.8	48.7	48.5	48.5	48.9	54.2	42.2	Jan.
62.2	62.6	62.4	62.4	61.7	60.7	60.4	60.2	60.1	59.8	59.7	59.9	65.2	55.8	Feb.
59.8	60.4	60.3	60.4	60.1	59.5	58.7	58.5	58.1	57.7	57.5	57.8	63.1	53.7	Mar.
71.2	71.2	71.0	70.7	70.4	69.9	69.4	69.2	68.9	68.7	68.5	69.0	73.4	65.0	Apr.
77.0	77.2	77.1	76.9	76.5	75.9	75.4	74.7	74.5	74.3	74.1	74.8	79.3	71.8	May.
81.2	81.6	81.6	81.2	80.9	80.2	79.5	78.9	78.7	78.6	78.5	79.2	84.0	75.3	June.
83.5	83.4	83.2	83.3	83.1	82.4	81.9	81.2	80.9	80.9	80.7	81.8	86.1	78.1	July.
84.5	84.6	84.5	84.3	84.0	83.5	82.5	81.8	81.7	81.2	80.9	81.9	87.6	78.2	Aug.
80.6	80.8	81.1	80.9	80.6	79.8	79.2	78.9	78.5	78.2	78.0	78.4	83.1	74.2	Sept.
76.1	76.4	76.5	76.5	75.7	74.9	74.8	74.2	74.0	73.7	73.4	74.0	78.5	70.0	Oct.
67.1	67.4	67.4	67.1	66.5	65.8	65.3	65.0	64.9	64.8	64.6	65.2	70.0	60.7	Nov.
56.7	57.4	57.5	57.5	57.5	57.1	57.1	57.0	56.9	56.7	56.6	56.3	61.0	51.4	Dec.
71.0	71.2	71.2	71.0	70.6	69.9	69.4	69.0	68.8	68.6	68.4	68.9	73.8	64.7	Year.

KANSAS CITY, MO.

[h_t=78 ft.; local time, 1h 18m slow.]

26.9	28.4	29.4	29.8	29.5	28.7	27.7	26.7	26.2	25.3	24.6	24.3	34.6	16.5	Jan.
38.7	39.8	40.7	41.1	40.9	40.5	39.5	38.7	38.0	37.2	36.6	36.5	43.5	30.1	Feb.
39.4	40.8	41.7	42.5	42.8	42.7	41.6	40.5	39.6	39.1	38.5	37.5	44.8	30.3	Mar.
55.8	56.8	57.6	58.0	57.8	57.2	56.2	55.0	53.8	52.8	52.0	52.5	60.5	44.5	Apr.
63.1	63.9	64.5	65.3	65.5	64.9	63.7	62.2	61.3	60.1	59.4	60.4	67.7	51.8	May.
79.4	80.4	81.3	81.8	81.8	81.3	79.8	78.8	76.6	75.1	73.6	75.0	83.4	64.7	June.
81.2	82.1	82.8	82.8	82.7	82.3	81.0	79.6	78.0	76.4	75.2	76.7	85.1	66.7	July.
83.7	83.9	84.3	84.6	84.5	83.5	81.3	79.1	77.5	76.2	75.0	77.0	86.9	66.2	Aug.
77.1	78.3	78.7	78.6	78.3	77.1	74.3	73.1	71.5	70.2	68.7	70.5	80.7	59.5	Sept.
65.1	65.9	66.6	66.7	66.2	64.5	62.7	61.0	59.9	58.7	57.8	59.0	68.7	49.2	Oct.
44.7	46.0	46.7	47.1	46.6	45.4	43.8	43.1	42.2	41.6	40.6	41.1	47.9	32.9	Nov.
29.9	30.8	31.5	31.4	31.1	30.5	29.5	29.1	28.6	28.1	27.6	27.7	33.8	20.5	Dec.
57.1	58.1	58.8	59.1	59.0	58.2	56.8	55.6	54.4	53.4	52.5	53.2	61.5	44.4	Year.

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

KEY WEST, FLA.

[λ=24° 34′; φ=81° 49′.]

1892.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan	66.8	66.9	66.4	66.1	65.9	65.6	65.6	66.1	66.9	68.2	69.9	70.3	70.4
Feb	69.0	68.8	68.2	68.0	68.0	67.8	67.8	68.7	69.9	71.0	72.0	72.2	72.8
Mar	68.0	67.7	67.6	67.6	67.7	67.3	67.5	68.7	70.0	70.8	71.7	71.8	72.0
Apr	74.2	73.6	73.4	73.3	73.0	72.9	74.1	75.6	76.9	77.5	78.3	78.9	78.7
May	75.8	75.5	75.4	75.3	75.2	75.1	77.2	78.6	79.7	80.5	81.2	81.0	81.1
June	78.2	78.2	77.9	77.8	77.7	77.7	78.6	79.7	80.2	81.0	82.1	82.3	82.6
July	80.0	79.7	79.5	79.3	79.4	79.5	80.7	82.5	83.6	84.2	84.9	84.7	84.9
Aug	81.2	81.5	81.2	80.8	81.0	80.9	81.3	83.3	84.4	85.5	85.7	86.3	86.1
Sept	80.1	79.8	79.6	79.5	79.6	79.7	80.1	82.1	83.3	84.2	85.0	84.8	84.8
Oct	76.0	75.9	75.9	75.7	75.6	75.5	75.9	77.2	77.7	78.5	79.4	79.5	79.6
Nov	70.8	70.6	70.3	70.2	70.0	70.0	70.0	71.0	72.3	73.3	73.9	74.1	74.4
Dec	69.6	69.6	69.6	69.5	69.3	69.2	69.4	70.2	71.4	72.5	73.5	74.2	74.5
Year	74.1	74.0	73.8	73.6	73.5	73.4	74.0	75.3	76.4	77.3	78.1	78.3	78.5

MARQUETTE, MICH.

[λ=46° 34′; φ=87° 24′.]

Jan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Feb	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mar	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Apr	32.7	32.4	32.1	32.2	31.9	31.5	31.7	33.8	34.6	35.2	36.1	36.5	36.7
May	44.0	43.9	43.9	43.7	43.2	43.2	43.9	46.0	46.8	47.5	47.5	47.7	47.4
June	55.0	54.6	53.7	53.3	52.8	53.1	54.8	56.8	57.7	58.9	59.4	59.7	60.1
July	64.4	64.2	64.4	64.0	63.0	63.2	65.3	68.0	68.5	69.8	70.8	71.8	72.1
Aug	61.5	61.3	61.2	60.8	60.6	60.5	61.8	63.9	65.7	67.4	68.5	69.3	69.8
Sept	56.0	55.2	54.5	54.4	54.3	54.4	54.1	55.3	57.4	60.2	62.1	63.8	64.7
Oct	47.1	46.9	46.4	46.0	45.5	45.2	44.7	44.9	45.6	47.2	48.6	49.9	51.1
Nov	29.6	29.1	29.2	28.9	28.8	28.6	28.4	28.6	28.8	29.3	30.1	30.8	31.4
Dec	18.5	18.1	17.7	17.2	17.2	16.8	16.5	16.4	16.1	16.7	18.2	19.3	20.1
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

MEMPHIS, TENN.

[λ=35° 9′; φ=90° 3′.]

Jan	33.4	32.6	32.2	31.6	31.2	30.8	30.6	30.5	31.0	32.7	34.3	36.4	38.1
Feb	48.2	47.6	47.1	46.5	45.9	45.3	44.7	44.7	45.5	47.2	48.8	50.6	52.7
Mar	45.8	45.3	44.6	43.9	43.3	42.6	42.2	42.3	43.0	45.0	46.9	48.8	50.5
Apr	59.5	59.4	58.8	58.0	57.3	56.8	56.8	58.1	59.4	61.0	62.2	63.8	65.3
May	65.4	64.8	64.1	64.0	63.5	63.2	63.4	65.0	66.1	67.7	68.5	70.2	71.7
June	72.8	72.0	71.3	71.0	70.5	70.4	72.1	74.5	76.4	78.4	79.7	81.6	82.3
July	74.3	73.7	73.1	72.6	72.1	71.8	72.4	74.5	76.2	78.5	80.3	81.6	82.7
Aug	74.4	73.7	73.0	72.5	72.1	71.6	71.8	73.1	75.1	77.6	79.3	81.4	82.4
Sept	67.1	66.1	65.1	64.1	63.4	62.8	62.5	65.2	68.5	71.9	74.5	76.4	78.1
Oct	60.6	59.6	58.1	57.8	57.0	56.4	55.9	56.4	59.4	62.5	65.8	68.0	70.1
Nov	48.1	47.3	46.6	45.9	45.5	45.1	44.9	44.5	45.4	47.0	48.9	50.8	52.4
Dec	40.2	39.7	39.4	38.9	38.8	38.1	38.0	37.9	38.2	39.4	40.4	41.6	42.5
Year	57.5	56.8	56.1	55.6	55.0	54.6	54.6	55.6	57.0	59.1	60.8	62.6	64.1

NEW ORLEANS, LA.

[λ=29° 58′; φ=90° 4′.]

Jan	47.3	47.0	46.5	46.2	45.6	45.0	44.7	44.4	44.4	45.3	46.8	48.6	50.3
Feb	58.2	57.6	57.1	56.4	56.0	55.8	55.2	55.2	55.8	57.0	59.0	61.4	63.2
Mar	55.8	55.2	54.5	54.0	53.5	53.2	52.9	53.3	54.4	55.9	58.2	60.1	61.9
Apr	66.7	66.4	66.1	65.8	65.2	64.7	64.8	65.6	66.6	68.4	69.9	70.6	71.4
May	70.7	70.3	69.5	69.3	68.9	68.6	70.0	71.2	72.8	74.5	76.0	76.9	77.8
June	75.3	75.0	74.5	74.3	73.9	73.9	75.1	76.5	77.6	79.2	80.3	81.1	81.3
July	77.0	76.5	76.3	76.1	76.0	76.0	76.5	78.2	79.0	79.8	81.0	82.1	82.2
Aug	78.1	77.6	77.1	76.9	76.7	76.5	77.3	78.2	79.8	81.3	82.9	83.8	84.5
Sept	74.5	73.9	73.7	73.1	72.6	72.1	71.7	72.4	73.6	75.0	76.4	77.8	79.0
Oct	67.7	67.5	67.2	66.9	66.6	66.3	66.1	66.5	67.9	69.4	71.4	72.9	74.0
Nov	58.8	58.3	57.7	57.3	57.1	56.9	56.7	57.0	59.4	61.6	63.1	64.8	65.7
Dec	53.2	52.8	52.3	52.1	51.8	51.8	51.6	51.3	51.4	52.2	54.2	55.9	57.6
Year	65.3	64.8	64.4	64.0	63.7	63.4	63.6	64.2	65.2	66.6	68.3	69.7	70.7

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

KEY WEST, FLA.

[h=42 ft.; local time 0h 27m slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean Max.	Mean Min.	1892.
70.6	70.5	69.8	69.5	68.5	67.8	67.5	67.2	67.0	67.0	66.9	67.8	71.2	63.5	Jan.
73.0	73.2	72.6	72.2	71.1	70.0	69.8	69.3	69.4	69.4	69.0	70.1	73.9	65.9	Feb.
72.6	72.4	71.7	71.2	70.6	69.3	69.1	68.9	68.8	68.6	68.5	69.6	74.0	65.0	Mar.
79.7	79.7	79.3	78.0	77.1	75.8	75.1	74.9	74.8	74.6	74.3	76.0	80.5	71.6	Apr.
81.5	80.9	80.7	79.9	79.4	78.2	77.6	77.5	77.1	76.9	76.4	78.2	82.6	73.7	May.
82.4	83.0	82.3	82.0	81.4	80.1	79.7	79.4	79.3	78.7	78.6	80.0	84.6	75.0	June.
85.0	85.0	84.7	84.4	83.6	82.3	81.5	80.9	80.6	80.5	80.3	82.1	86.7	77.2	July.
86.3	86.5	85.9	85.5	84.7	83.4	82.5	82.2	81.4	81.3	81.3	83.3	88.0	78.8	Aug.
84.7	85.3	85.1	84.3	82.8	81.7	81.2	80.9	80.9	80.7	80.3	82.1	87.0	76.7	Sept.
79.5	79.7	79.3	78.4	77.6	77.1	77.1	76.8	76.4	76.3	76.1	77.4	81.5	73.5	Oct.
74.7	74.5	74.0	73.4	72.2	71.8	71.6	71.4	71.2	70.9	70.8	72.0	75.8	68.1	Nov.
74.4	74.0	73.5	72.5	71.6	71.0	70.7	70.5	70.3	69.9	69.9	71.3	75.4	67.1	Dec.
78.7	78.7	78.2	77.6	76.7	75.7	75.3	75.0	74.8	74.6	74.4	75.8	80.1	71.3	Year.

MARQUETTE, MICH.

[h=67 ft.; local time 0h 49m slow.]

.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	22.7	7.1	Jan.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	26.0	14.3	Feb.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	31.4	18.6	Mar.
37.0	36.6	36.9	36.5	36.4	35.2	34.2	33.8	33.6	33.4	33.1	34.3	39.9	27.3	Apr.
47.7	47.7	47.0	46.8	46.7	46.5	45.9	44.9	44.4	44.3	44.1	45.6	51.9	39.9	May.
60.7	59.9	60.4	60.0	60.5	60.3	59.4	57.7	56.8	56.7	55.9	57.4	65.6	49.4	June.
72.2	72.3	71.2	71.0	70.3	70.3	68.8	67.3	65.7	65.5	65.3	67.9	76.7	59.8	July.
69.8	69.9	69.9	69.8	68.9	67.6	65.6	63.4	62.3	61.9	61.5	65.1	72.9	57.6	Aug.
65.1	65.5	64.9	64.6	63.5	61.2	58.9	57.8	57.2	56.6	56.5	59.1	68.4	50.4	Sept.
51.8	52.1	52.1	51.5	50.5	49.0	48.1	47.6	47.3	46.9	46.9	48.0	54.1	42.5	Oct.
31.8	31.9	32.0	31.9	31.4	31.0	30.5	30.3	29.8	29.5	29.4	30.0	34.0	25.2	Nov.
20.7	20.9	21.2	20.8	19.9	19.3	19.2	19.0	18.7	18.6	18.6	18.6	23.3	13.9	Dec.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47.3	33.8	Year.

MEMPHIS, TENN.

[h=108 ft.; local time 1h 0m slow.]

39.6	40.4	40.7	40.5	39.6	38.5	37.6	36.6	35.7	34.5	33.7	35.1	44.5	27.5	Jan.
54.4	55.8	56.4	55.9	54.6	53.1	51.9	50.9	49.7	49.1	48.4	49.8	58.1	41.9	Feb.
52.0	53.6	54.0	54.2	53.9	52.8	51.7	50.1	49.4	48.5	47.4	48.0	57.0	40.0	Mar.
65.8	66.2	66.4	66.5	66.1	64.8	63.8	62.4	61.5	60.7	59.9	61.7	69.5	53.9	Apr.
72.6	72.9	73.5	73.1	72.9	72.2	70.5	69.1	68.1	67.3	66.1	68.2	77.0	60.3	May.
83.2	83.7	84.1	82.8	80.9	80.3	79.2	76.8	75.7	74.7	74.0	77.0	86.8	68.6	June.
83.3	84.2	83.8	83.1	82.5	81.6	80.0	78.3	77.0	76.1	75.3	77.9	86.7	70.6	July.
83.8	84.6	84.5	83.7	82.3	80.7	79.1	77.7	76.4	75.4	74.8	77.5	87.0	70.4	Aug.
79.3	80.3	80.1	79.4	78.7	76.5	74.1	72.4	70.9	69.8	68.4	71.5	82.5	61.5	Sept.
71.2	72.1	72.4	71.8	70.8	68.3	66.5	64.7	63.6	62.5	61.5	63.9	74.8	54.1	Oct.
54.0	55.1	55.6	55.2	54.1	53.0	51.7	50.9	49.9	49.3	48.6	49.6	57.9	41.4	Nov.
43.4	43.8	43.7	43.4	43.0	42.5	42.0	41.5	40.9	40.8	40.5	40.8	46.3	35.2	Dec.
65.2	66.1	66.3	65.8	65.0	63.7	62.3	61.0	59.9	59.1	58.2	60.1	69.0	52.1	Year.

NEW ORLEANS, LA.

[h=112 ft.; local time 1h 0m slow.]

50.9	52.0	52.8	52.9	52.8	51.7	50.5	50.0	49.1	48.1	47.5	48.3	58.0	40.6	Jan.
64.3	64.9	65.4	65.7	65.4	64.0	62.5	61.4	60.6	59.6	59.1	60.0	68.2	53.1	Feb.
62.8	63.7	64.2	64.2	63.7	61.7	60.4	59.3	58.4	57.5	56.8	58.2	66.9	50.2	Mar.
72.0	72.7	72.9	72.9	72.5	71.4	69.9	69.1	68.4	67.7	67.2	68.7	75.7	62.3	Apr.
78.7	79.1	78.7	78.5	78.2	76.0	75.1	73.9	73.0	72.2	71.5	73.8	81.4	66.5	May.
81.9	82.4	82.7	82.7	81.8	80.1	79.2	77.9	77.4	76.6	76.0	78.2	86.1	71.7	June.
82.3	82.7	82.5	82.3	81.6	80.6	79.3	78.8	78.2	77.7	77.3	79.2	86.5	73.7	July.
84.7	84.9	83.5	83.4	82.9	81.5	80.5	79.8	79.5	79.1	78.6	80.4	88.3	75.1	Aug.
79.1	79.8	80.6	80.6	80.1	79.3	78.3	77.2	76.2	75.5	75.0	76.1	83.1	70.1	Sept.
74.5	74.7	74.8	74.6	73.7	72.4	71.0	70.0	69.2	68.4	67.8	70.1	77.6	64.3	Oct.
65.8	66.3	66.7	66.2	64.9	63.5	62.4	61.3	60.5	59.9	59.4	61.3	69.7	54.5	Nov.
58.5	58.9	59.1	58.8	58.2	57.3	56.1	55.5	54.6	53.8	53.3	54.7	63.5	48.2	Dec.
71.3	71.8	72.0	71.9	71.3	70.0	68.8	67.8	67.1	66.3	65.8	67.4	75.4	60.9	Year.

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

NEW YORK CITY.

[λ=40° 43′; φ=74° 0′.]

1892.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan	28.7	28.5	28.5	28.6	27.8	27.2	27.3	27.6	28.5	29.7	31.3	32.5	33.5
Feb	31.4	30.9	30.5	30.1	29.8	29.6	29.9	30.5	31.2	32.6	34.3	35.3	35.7
Mar	31.3	32.1	30.2	29.9	29.6	29.6	30.3	31.5	32.9	34.4	35.5	36.7	38.7
Apr	46.2	45.4	44.6	44.3	44.0	44.3	45.2	46.9	48.4	50.3	51.8	53.2	54.3
May	54.7	54.1	53.6	53.4	53.1	53.0	54.3	56.0	57.9	60.0	61.8	63.1	63.9
June	68.0	67.4	66.8	66.3	66.0	65.9	67.3	69.5	71.1	72.9	74.2	75.9	76.8
July	70.0	69.3	68.4	67.8	67.4	67.7	69.6	71.6	74.3	76.3	78.2	80.0	81.2
Aug	70.2	69.5	69.1	68.9	68.4	68.3	68.8	70.7	72.5	74.3	76.0	77.3	78.1
Sept	62.6	62.0	61.5	61.0	60.4	60.2	60.7	62.3	64.2	66.4	68.1	69.3	70.5
Oct	52.4	51.7	51.3	51.1	50.8	50.3	50.2	50.9	52.3	54.5	56.7	58.4	60.0
Nov	41.6	41.3	41.1	40.8	40.8	40.5	40.6	40.9	41.9	42.6	43.7	44.7	45.5
Dec	30.2	29.9	29.5	29.2	29.2	29.1	29.1	29.1	29.1	29.9	31.0	32.2	33.6
Year	48.9	48.5	47.9	47.6	47.3	47.1	47.8	49.0	50.4	52.0	53.6	54.9	56.0

PHILADELPHIA, PA.

[λ=39° 57′; φ=75° 9′.]

Jan	30.1	29.9	29.9	29.5	29.4	29.1	28.8	28.6	28.7	29.7	30.9	31.9	33.1
Feb	33.9	33.6	33.4	32.9	32.6	32.5	32.2	32.2	33.0	33.9	35.7	36.6	37.5
Mar	33.9	33.2	32.5	32.1	31.6	31.5	31.6	32.4	33.6	35.3	36.5	37.9	38.9
Apr	47.1	46.6	46.3	46.0	45.6	45.3	46.3	48.1	49.4	50.9	52.5	54.1	55.2
May	56.4	55.7	55.2	54.6	54.2	54.5	55.7	57.8	59.3	61.4	63.2	64.8	66.6
June	69.5	68.9	68.9	68.5	68.3	68.7	70.1	72.0	73.6	75.1	76.7	78.0	78.4
July	71.4	70.7	70.2	69.6	69.2	69.4	71.0	73.5	75.1	77.1	79.1	80.6	81.3
Aug	70.8	70.3	70.1	69.5	69.1	68.8	70.0	72.2	74.2	75.9	77.6	78.7	79.5
Sept	62.7	62.1	61.6	60.9	60.5	59.9	60.0	62.3	64.3	66.8	68.9	70.4	71.7
Oct	51.9	51.5	51.0	50.7	50.2	50.0	50.3	51.9	54.3	57.1	59.5	61.1	62.4
Nov	41.6	41.2	41.1	40.8	40.7	40.6	40.6	41.4	42.4	44.0	45.7	46.6	47.5
Dec	31.1	30.7	30.3	30.1	29.9	29.6	29.5	29.7	30.5	31.4	32.5	33.3	34.3
Year	50.0	49.5	49.2	48.8	48.4	48.3	48.8	50.2	51.5	53.2	54.9	56.2	57.2

PITTSBURG, PA.

[λ=40° 32′; φ=80° 2′.]

Jan	27.6	27.2	27.1	26.9	26.6	26.3	26.3	26.4	26.7	27.5	28.3	29.2	29.9
Feb	34.2	33.5	33.2	32.9	32.6	32.7	32.8	33.4	33.7	35.1	36.2	37.9	38.8
Mar	32.3	31.8	31.4	31.1	30.8	30.8	30.7	31.7	32.6	33.8	35.4	37.0	38.6
Apr	47.5	46.7	45.6	45.0	44.4	43.9	44.3	46.3	48.0	50.2	51.9	53.7	55.2
May	57.1	56.4	55.8	55.6	55.2	55.5	56.4	58.6	60.9	62.9	64.3	64.9	66.1
June	70.2	69.2	68.6	67.9	67.6	67.5	68.9	71.3	73.3	75.6	77.0	78.4	79.1
July	68.7	67.8	67.0	66.3	65.7	65.6	67.1	69.8	72.9	75.5	77.5	79.3	80.5
Aug	68.4	67.3	66.4	65.6	65.0	64.6	65.5	67.6	71.2	74.4	77.1	78.6	79.4
Sept	62.5	61.5	60.4	59.8	59.1	58.6	58.9	60.3	63.3	67.5	69.8	72.3	73.6
Oct	51.8	51.3	50.5	49.8	49.2	48.3	47.9	48.3	50.3	53.0	56.3	58.7	60.0
Nov	41.3	40.9	40.9	40.8	40.6	40.2	39.8	39.7	40.5	41.4	42.6	43.6	44.1
Dec	30.9	30.3	30.2	29.9	29.6	29.5	29.3	29.4	29.4	30.1	30.9	31.9	33.2
Year	49.4	48.7	48.1	47.6	47.2	47.0	47.3	48.6	50.2	52.2	53.9	55.5	56.5

PORTLAND, OREGON.

[λ=45° 32′; φ=122° 43′.]

Jan	38.4	37.9	38.0	37.9	37.8	37.7	37.6	37.5	37.2	37.0	37.2	37.7	38.3
Feb	42.1	41.4	40.7	40.2	39.8	39.4	38.8	38.8	38.6	38.6	38.7	39.4	41.2
Mar	47.9	47.1	46.5	45.6	45.1	44.4	44.0	43.9	43.8	43.6	44.4	45.6	47.7
Apr	47.2	46.2	45.3	44.6	44.0	43.5	43.2	42.4	42.6	43.2	45.1	47.3	48.9
May	56.8	55.6	54.2	52.9	51.8	51.0	50.2	49.7	50.7	52.6	54.6	56.4	59.1
June	60.1	58.6	57.4	56.3	55.0	54.3	53.3	53.1	54.1	56.0	57.8	59.6	61.8
July	63.4	62.1	60.1	58.9	57.5	56.6	55.8	55.1	56.3	58.0	59.7	61.6	63.6
Aug	66.5	65.5	63.4	62.0	60.5	59.0	57.8	56.7	56.9	58.5	61.2	63.3	66.1
Sept	61.3	60.2	59.1	58.1	57.1	56.0	55.0	54.7	54.3	54.9	56.4	58.5	61.3
Oct	51.0	49.9	49.0	48.5	47.6	47.3	47.0	47.0	46.6	46.4	46.8	48.0	50.2
Nov	44.6	44.2	43.8	43.7	43.4	43.2	43.0	43.1	43.3	43.1	43.3	44.0	44.9
Dec	37.3	36.9	36.6	36.4	36.4	36.0	35.7	35.7	35.6	35.5	35.5	36.4	37.2
Year	51.4	50.5	49.5	48.8	48.0	47.4	46.8	46.5	46.7	47.3	48.4	49.8	51.7

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

NEW YORK CITY.

[h_t=183 ft.; local time 0^h 4^m fast.]

2^h	3^h	4^h	5^h	6^h	7^h	8^h	9^h	10^h	11^h	Mid.	Mean.	Mean Max.	Mean Min.	1892.
33.5	34.1	33.5	33.2	33.0	32.2	31.8	30.9	30.6	30.0	29.2	30.5	36.6	24.0	Jan.
36.4	36.7	36.7	36.2	35.8	35.0	34.4	33.6	32.9	32.2	31.8	33.1	38.7	27.4	Feb.
39.1	40.0	39.8	39.0	38.3	36.9	36.0	35.1	34.1	33.0	32.1	34.4	41.4	27.9	Mar.
54.9	55.4	54.8	54.2	53.4	52.2	50.7	49.5	48.5	47.7	47.2	49.5	58.0	41.8	Apr.
64.7	65.1	65.1	63.8	62.6	61.3	59.6	58.7	57.6	56.5	55.8	58.7	68.1	50.8	May.
77.8	76.7	76.8	76.0	75.1	73.7	72.2	70.8	70.1	69.4	68.7	71.5	79.8	64.3	June.
81.4	81.2	80.5	79.0	78.2	76.9	75.6	74.3	73.2	71.7	70.8	74.3	83.6	66.0	July.
78.8	79.0	79.0	78.5	77.7	76.2	75.2	74.0	72.6	71.4	70.9	73.6	81.2	66.6	Aug.
71.4	71.9	71.6	70.9	69.6	68.4	67.1	66.4	65.7	64.5	63.3	65.8	73.4	58.5	Sept.
61.0	61.4	61.0	60.0	58.9	57.1	55.8	54.7	54.1	53.3	52.7	55.0	62.9	48.0	Oct.
46.1	46.0	45.8	45.5	44.5	43.8	43.0	42.8	42.1	41.6	41.3	42.8	48.1	37.0	Nov.
34.4	35.0	34.8	34.5	34.0	33.5	32.9	32.4	31.9	31.4	31.1	31.5	36.6	26.0	Dec.
56.6	56.9	56.6	55.9	55.1	53.9	52.9	51.9	51.1	50.2	49.6	51.7	59.0	44.9	Year.

PHILADELPHIA, PA.

[h_t=168 ft.]

33.8	34.6	34.9	34.2	33.4	32.4	32.1	31.4	30.9	30.5	30.4	31.2	38.1	24.8	Jan.
38.3	38.4	38.6	38.4	37.4	36.5	35.8	35.4	35.1	34.6	34.3	35.1	41.1	29.3	Feb.
39.6	39.8	39.4	39.4	39.0	38.0	37.2	36.5	35.8	35.2	34.5	35.6	42.5	29.1	Mar.
55.7	55.5	55.7	55.4	54.6	53.5	52.0	50.7	49.6	48.6	50.0	50.5	58.8	43.0	Apr.
67.7	67.9	67.9	67.3	65.7	64.3	62.3	61.0	59.7	58.7	57.8	60.8	71.1	52.7	May.
79.2	79.2	79.3	78.6	77.6	76.0	74.2	72.9	71.8	71.0	70.3	73.6	83.1	65.9	June.
81.8	82.5	82.3	81.3	80.0	78.1	76.1	75.0	73.6	72.9	72.2	75.6	85.6	67.6	July.
80.1	80.1	80.5	80.0	79.1	77.2	75.8	74.0	73.0	72.0	71.3	74.6	83.8	67.5	Aug.
72.6	73.2	72.9	72.2	70.6	68.2	66.5	65.3	64.4	63.7	63.0	66.0	75.5	58.0	Sept.
63.1	62.9	62.3	61.0	59.1	57.0	55.7	54.5	53.8	52.9	52.4	55.7	65.0	47.9	Oct.
47.6	47.0	46.6	46.0	45.1	44.2	43.4	42.9	42.4	41.9	41.5	43.4	50.0	37.3	Nov.
34.7	35.4	35.4	34.8	34.3	33.7	33.4	32.7	32.3	32.0	31.6	32.2	38.0	27.5	Dec.
57.8	58.0	58.0	57.4	56.3	54.9	53.7	52.7	51.9	51.2	50.8	52.9	61.0	45.9	Year.

PITTSBURG, PA.

[h_t=115 ft.; local time 0^h 20^m slow.]

30.8	31.1	30.8	30.5	30.0	29.4	29.2	28.7	28.4	27.9	27.7	28.4	34.1	22.0	Jan.
39.9	40.6	40.9	40.8	40.0	39.1	38.6	37.2	36.8	35.6	35.0	36.3	43.3	29.0	Feb.
39.6	40.0	40.1	39.4	38.5	37.2	36.6	35.2	34.7	33.6	33.0	34.8	42.7	27.1	Mar.
55.9	56.3	56.7	56.5	55.5	54.0	53.1	51.9	50.7	49.6	48.8	50.5	59.2	41.2	Apr.
66.2	66.8	66.9	66.3	65.5	64.6	63.4	61.7	60.2	59.3	58.5	61.2	69.7	52.5	May.
80.1	80.1	80.2	79.7	78.9	77.7	76.2	73.9	72.5	71.5	70.5	74.0	83.3	65.8	June.
81.3	80.3	79.9	79.9	79.8	78.5	77.0	75.0	72.8	71.4	70.2	73.8	83.3	63.4	July.
80.5	80.7	81.0	80.5	79.8	78.7	77.5	74.9	73.1	71.2	70.1	73.3	83.5	63.5	Aug.
74.6	74.9	74.7	74.2	72.6	71.0	69.5	67.7	65.7	64.6	63.3	66.7	76.7	56.3	Sept.
60.9	61.5	61.7	61.5	60.3	58.5	57.1	55.5	54.2	52.9	52.1	54.6	63.5	44.6	Oct.
44.6	44.5	44.3	44.1	43.7	43.2	42.9	42.5	41.9	41.6	41.2	42.1	47.8	35.3	Nov.
33.7	34.3	34.6	34.5	34.2	33.6	33.2	32.6	32.2	31.8	31.5	31.7	37.7	24.9	Dec.
57.3	57.6	57.6	57.3	56.6	55.5	54.5	53.1	51.9	50.9	50.2	52.3	60.4	43.8	Year.

PORTLAND, OREGON.

[h_t=85 ft.; local time 3^h 11^m slow.]

39.4	40.4	41.5	42.8	42.9	42.7	42.2	41.2	40.4	39.8	39.3	39.3	44.7	35.1	Jan.
43.2	44.6	46.2	47.1	47.8	48.2	48.2	46.3	44.9	43.6	43.0	42.5	50.0	36.9	Feb.
49.8	51.5	53.0	54.2	54.8	55.3	55.1	53.7	52.2	50.5	48.9	48.7	57.4	42.4	Mar.
50.7	52.0	53.0	52.5	53.6	53.5	53.1	52.2	51.0	49.3	48.1	48.0	56.8	41.3	Apr.
61.6	64.1	65.6	66.4	67.1	67.3	66.5	65.3	63.3	60.8	59.0	58.4	69.2	48.9	May.
64.1	65.6	67.3	69.1	70.1	70.7	70.1	69.5	67.7	64.8	62.5	61.6	72.4	51.9	June.
65.8	67.9	69.6	71.6	72.8	73.4	73.1	72.1	70.8	67.8	65.6	64.1	75.0	54.4	July.
68.8	72.0	73.8	75.7	76.7	76.9	76.8	75.6	73.4	70.3	68.3	66.9	78.5	55.2	Aug.
64.0	67.2	69.2	70.6	71.2	71.3	70.5	68.3	66.3	*64.0	62.5	62.2	72.7	53.1	Sept.
51.9	54.1	56.1	57.7	58.7	58.7	58.1	56.5	54.5	53.1	51.9	51.5	*61.2	*45.1	Oct.
45.7	46.8	48.1	48.6	48.7	48.1	47.2	46.7	46.3	45.7	44.8	45.2	50.5	40.9	Nov.
38.1	38.7	39.8	40.2	40.2	39.8	39.6	39.3	38.8	38.5	38.0	37.6	42.7	33.9	Dec.
53.6	55.4	56.9	58.0	58.7	58.8	58.4	57.2	55.8	54.0	52.7	52.2	60.9	44.9	Year.

* Record for 28 days.

38893

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

ST. LOUIS, MO.

[λ=38° 38′; φ=90° 12′.]

1892.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan	25.1	24.3	23.6	23.3	22.6	22.1	22.0	21.9	22.2	23.0	24.5	26.5	27.9
Feb	39.4	38.9	38.4	38.0	37.4	37.1	37.2	37.2	37.2	37.7	38.4	39.8	40.9
Mar	38.5	38.1	37.4	36.9	36.3	35.9	35.7	36.0	36.5	37.2	38.4	40.3	41.7
April ...	52.5	51.6	50.9	50.2	49.6	49.0	48.8	49.2	50.2	51.9	53.1	54.6	55.5
May	60.4	59.6	58.9	58.4	57.9	57.5	57.7	58.9	59.7	61.4	62.8	64.4	65.1
June ...	73.0	72.3	71.5	70.9	70.3	70.1	70.7	72.2	74.2	76.0	77.9	79.4	81.3
July....	73.8	73.1	72.4	71.9	71.5	71.0	71.9	73.3	75.3	76.6	78.0	79.3	80.8
Aug	75.0	74.1	73.2	72.3	72.0	71.3	71.0	72.0	74.2	76.0	78.5	80.2	82.1
Sept....	66.6	65.7	64.7	64.0	63.2	62.6	62.3	62.8	64.9	68.3	71.4	73.8	75.3
Oct	57.6	56.4	55.6	54.5	53.6	52.9	52.3	52.5	53.5	56.7	59.8	62.3	64.1
Nov	41.1	40.3	39.8	39.1	38.4	37.9	37.5	37.3	37.8	39.2	40.9	42.6	43.6
Dec	32.5	32.0	31.7	31.3	30.9	30.8	30.7	30.5	30.6	31.3	32.4	33.6	34.9
Year ...	53.0	52.2	51.5	50.9	50.3	49.8	49.8	50.3	51.4	52.9	54.7	56.4	57.8

ST. PAUL, MINN.

[λ=44° 58′; φ=93° 3′.]

Jan	11.0	10.1	9.3	8.5	7.7	6.7	6.1	5.3	5.1	5.4	6.3	9.0	11.3
Feb	21.7	21.4	21.1	20.9	20.3	20.0	19.6	19.3	18.8	18.8	19.7	20.9	22.0
Mar	27.2	26.3	25.7	25.3	24.5	23.9	23.0	22.5	23.1	24.8	27.1	29.5	30.9
Apr	40.1	39.1	38.4	37.9	37.1	36.2	35.7	36.5	37.4	39.5	41.8	43.7	45.4
May ...	49.2	48.2	47.7	46.9	46.3	45.8	45.9	47.0	48.5	50.0	51.4	53.0	54.0
June ...	62.6	61.7	61.1	60.3	59.6	59.2	59.3	60.3	61.2	63.1	64.4	65.9	67.2
July....	67.5	66.5	65.7	65.0	64.3	63.8	63.9	66.2	68.8	70.9	73.6	75.3	76.5
Aug	65.6	64.7	63.5	62.9	62.1	61.5	61.4	63.3	65.3	68.8	71.1	73.5	75.3
Sept....	58.0	57.4	56.9	56.3	55.7	55.2	54.6	55.0	56.8	59.7	63.0	65.6	68.0
Oct.....	47.6	46.7	46.1	45.4	44.8	44.2	43.6	43.4	43.8	46.8	50.2	53.3	55.8
Nov	26.8	26.7	26.5	26.1	25.6	25.2	25.0	25.1	25.1	25.9	27.0	28.7	30.2
Dec	15.1	15.0	14.6	14.2	13.7	13.2	13.1	13.1	12.9	13.4	14.3	15.9	17.5
Year ...	41.0	40.3	39.7	39.1	38.5	37.9	37.6	38.1	38.9	40.6	42.5	44.5	46.2

SALT LAKE CITY, UTAH.

[λ=40° 46′; φ=111° 54′.]

Jan	24.0	23.6	23.5	23.4	22.4	22.7	22.3	22.1	21.9	22.4	23.7	25.4	27.5
Feb	31.8	31.4	30.9	30.7	30.6	30.2	29.8	29.4	29.6	29.8	30.9	33.1	35.3
Mar	41.9	40.8	40.5	39.9	39.4	39.0	38.6	38.4	38.0	39.4	41.9	45.5	47.4
Apr	46.0	45.3	44.1	44.0	43.6	43.1	42.5	41.7	42.1	43.2	45.4	47.7	49.6
May....	54.3	53.3	52.8	52.0	51.3	50.2	49.5	49.5	51.4	54.3	56.9	58.7	60.4
June ...	64.3	62.7	61.5	59.8	58.9	58.2	57.0	57.6	59.9	63.4	67.0	69.6	71.7
July....	74.0	72.5	71.7	70.5	69.7	68.8	67.2	67.2	69.5	72.8	76.7	80.1	82.8
Aug	72.9	71.0	69.9	69.1	68.0	66.7	65.6	65.4	67.2	70.5	75.4	79.6	82.9
Sept....	65.3	64.2	63.8	62.2	61.8	61.1	60.2	59.8	61.2	64.6	68.8	73.9	77.3
Oct.....	49.7	49.1	48.5	47.9	47.5	46.5	45.7	45.6	45.5	48.2	51.7	55.5	57.6
Nov	40.9	40.3	39.4	39.4	39.2	39.1	38.9	37.9	36.8	37.3	39.7	43.3	45.4
Dec.....	27.5	27.4	27.5	27.4	27.3	26.8	26.5	26.1	25.4	24.9	25.3	26.7	28.4
Year ...	49.4	48.5	47.8	47.2	46.6	46.0	45.3	45.1	45.7	47.6	50.3	53.3	55.5

SAN DIEGO, CAL.

[λ=32° 43′; φ=117° 10′.]

Jan....	52.3	52.0	51.4	51.0	50.6	50.4	50.1	50.1	49.7	49.6	51.6	55.4	58.6
Feb	53.6	53.6	53.4	53.0	52.7	52.2	52.0	51.8	51.7	51.8	53.4	55.1	56.9
Mar	55.2	54.8	54.3	53.9	53.5	53.0	52.7	52.2	52.0	53.0	55.7	57.7	59.2
Apr	55.1	54.2	53.9	53.6	53.3	53.3	53.2	52.9	53.0	55.3	57.4	59.3	61.4
May	59.8	58.9	58.5	58.4	58.1	57.8	57.3	57.3	58.2	59.7	61.4	62.3	63.7
June ...	60.6	60.0	59.6	59.3	59.2	58.8	58.3	58.2	58.9	60.5	62.1	63.3	64.3
July....	63.1	62.9	62.4	62.4	61.9	61.6	61.4	61.3	61.6	62.2	63.8	65.4	67.0
Aug	66.1	65.9	65.6	65.4	65.3	65.3	65.2	65.0	65.1	66.2	67.4	69.0	70.8
Sept....	63.9	63.6	63.2	63.0	62.7	62.6	62.6	62.3	62.3	63.3	65.3	67.1	69.3
Oct.....	61.0	60.8	60.1	59.8	59.2	58.9	58.6	58.4	58.1	60.2	63.9	65.7	67.7
Nov	58.0	57.3	56.5	55.7	55.5	55.4	55.7	55.3	55.4	55.7	60.4	63.2	66.3
Dec	52.3	51.8	50.9	50.6	50.1	49.8	49.4	48.9	48.7	48.7	51.4	55.2	58.4
Year ...	58.4	58.0	57.5	57.2	56.8	56.6	56.4	56.1	56.2	57.2	59.5	61.6	63.6

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

ST. LOUIS, MO.

[h_t = 110 ft.; local time, 1h 1m, slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean max.	Mean min.	1892.
28.8	29.8	30.4	30.3	29.9	29.0	28.1	27.6	26.9	26.4	25.6	25.9	33.3	18.5	Jan.
42.3	43.2	43.8	43.9	43.7	42.7	42.0	41.1	40.7	40.0	39.3	40.0	46.7	33.4	Feb.
43.1	43.7	44.6	45.0	45.0	44.4	43.3	42.5	41.3	40.9	40.2	40.1	47.6	33.3	Mar.
57.0	58.7	59.2	59.3	59.3	58.6	57.4	56.4	55.5	54.5	53.7	54.0	61.4	46.6	Apr.
66.6	67.8	68.3	68.3	67.3	66.6	65.7	64.1	63.1	62.5	61.5	62.7	70.4	55.3	May.
82.1	82.5	82.9	83.1	82.4	80.7	79.2	77.9	76.5	75.5	74.4	76.5	84.4	68.8	June.
81.7	82.0	82.5	82.2	82.1	81.0	79.8	78.5	77.5	76.5	75.5	77.0	84.6	69.6	July.
83.5	83.8	84.5	84.4	84.0	82.6	80.9	79.2	78.0	76.7	75.6	77.7	86.3	69.2	Aug.
76.7	77.6	78.3	78.2	77.0	75.1	73.4	72.0	70.4	69.1	67.7	70.1	79.9	60.7	Sept.
65.7	66.7	67.3	67.3	66.1	64.7	63.2	61.9	60.6	59.5	58.3	59.7	69.3	51.0	Oct.
45.0	45.7	45.9	45.6	45.1	44.1	43.6	42.8	42.1	41.5	41.0	41.6	47.8	35.2	Nov.
35.8	36.4	36.4	36.3	35.9	35.3	34.5	34.0	33.4	32.9	32.6	33.2	38.7	27.2	Dec.
59.0	59.8	60.3	60.3	59.8	58.7	57.6	56.5	55.5	54.7	53.8	54.9	62.5	47.4	Year.

ST. PAUL, MINN.

[h_t = 114 ft.; local time, 1h 12m, slow.]

13.5	15.4	16.4	16.5	16.0	15.4	14.1	13.7	13.0	12.3	11.6	10.8	17.8	2.2	Jan.
22.9	23.8	24.2	24.4	24.4	23.9	23.6	22.9	22.5	22.0	21.6	21.7	26.1	15.5	Feb.
32.1	33.2	33.8	34.2	34.2	33.5	32.2	31.6	30.5	29.7	28.9	28.6	36.2	19.6	Mar.
46.8	47.8	48.4	48.5	48.2	47.6	46.4	44.9	43.5	42.6	41.3	42.3	50.8	33.6	Apr.
54.9	55.5	55.6	56.0	56.2	55.5	54.3	53.5	51.9	51.2	50.3	51.2	58.2	43.5	May.
68.0	68.8	69.1	69.9	69.9	69.4	68.7	67.1	66.2	64.8	63.9	64.6	73.0	57.3	June.
77.5	77.9	78.5	78.0	77.8	77.4	76.0	73.8	72.1	70.3	68.8	71.5	80.3	62.3	July.
76.3	77.3	77.5	77.5	76.9	75.5	73.5	71.4	69.7	67.9	66.6	69.5	79.1	59.6	Aug.
69.3	70.6	71.1	71.1	70.1	67.8	65.3	63.3	61.8	60.6	59.5	62.2	72.1	53.0	Sept.
57.4	58.7	59.1	58.9	58.3	56.2	54.0	52.6	50.8	49.2	48.1	50.6	61.6	40.9	Oct.
31.2	31.9	32.3	31.8	31.2	30.4	30.0	29.0	28.5	27.7	27.3	28.1	34.1	21.0	Nov.
18.7	19.5	19.7	19.6	18.9	18.1	17.5	16.8	16.5	15.8	15.4	15.9	21.1	8.6	Dec.
47.4	48.4	48.8	48.9	48.5	47.6	46.3	45.0	43.9	42.8	41.9	43.1	50.9	34.8	Year.

SALT LAKE CITY, UTAH.

[h_t = 83 ft.; local time, 2h 27m, slow.]

28.8	29.9	30.8	30.9	30.3	29.2	28.1	27.1	26.3	25.7	25.3	25.7	32.5	19.0	Jan.
37.5	37.9	39.0	39.1	39.1	38.1	36.5	35.1	34.2	33.2	32.2	33.6	40.9	26.3	Feb.
49.1	49.8	50.0	49.3	49.1	48.6	47.7	45.5	43.9	42.9	42.2	43.7	52.4	34.4	Mar.
51.0	51.9	53.1	53.4	54.1	53.1	53.4	52.1	50.4	48.9	47.4	47.8	55.8	38.9	Apr.
61.3	62.1	62.6	62.9	63.3	63.2	62.4	61.2	58.8	57.1	55.7	56.9	65.2	45.5	May.
73.2	74.1	74.8	75.4	76.0	75.6	75.3	74.3	70.5	68.0	66.0	67.3	78.0	53.6	June.
84.2	85.0	85.8	86.0	86.0	86.0	85.0	84.0	80.3	77.4	75.3	77.4	88.3	63.7	July.
84.7	85.8	86.7	86.9	87.0	86.0	85.0	82.7	78.7	76.0	74.0	76.6	89.1	61.6	Aug.
79.1	80.4	81.4	81.7	80.8	79.5	76.5	73.5	70.6	68.8	66.5	70.1	82.9	56.3	Sept.
59.0	60.2	60.5	59.8	59.7	58.1	55.3	53.5	52.1	50.5	49.6	52.4	61.8	41.7	Oct.
47.2	48.7	49.7	49.8	49.4	47.0	45.1	44.1	43.1	42.6	41.7	42.7	51.3	33.2	Nov.
29.9	30.9	31.4	31.4	31.7	30.9	29.4	28.7	28.1	27.3	26.8	28.1	34.4	20.7	Dec.
57.1	58.1	58.8	58.9	58.9	58.0	56.6	55.2	53.1	51.5	50.3	51.9	61.0	41.2	Year.

SAN DIEGO, CAL.

[h_t = 73 ft.; local time, 2h 49m, slow.]

60.5	61.6	62.1	61.8	61.1	60.1	59.0	56.9	55.6	53.8	53.1	54.9	64.2	46.0	Jan.
58.6	59.4	59.5	59.3	59.1	58.2	57.3	55.8	55.1	54.5	54.1	55.1	61.2	48.9	Feb.
61.0	61.4	61.3	61.3	61.3	60.6	59.7	58.3	57.4	56.2	55.7	56.7	62.8	49.3	Mar.
62.6	63.4	64.2	64.0	63.7	62.7	62.2	59.9	58.6	57.5	56.4	58.0	66.2	49.3	Apr.
64.7	65.5	65.3	65.3	65.1	64.8	64.3	62.9	62.5	61.5	60.9	61.4	67.2	54.9	May.
65.5	66.1	66.5	66.9	66.5	66.0	65.3	63.9	62.7	61.9	61.4	62.3	68.4	55.7	June.
67.7	68.2	68.6	68.8	68.6	68.2	67.7	66.1	64.7	63.9	63.6	64.7	70.3	59.5	July.
71.5	71.5	71.6	71.4	70.9	70.5	69.8	68.2	67.2	66.7	66.6	67.8	73.0	62.5	Aug.
70.1	70.4	70.6	70.7	70.3	69.3	68.3	66.3	65.4	64.8	64.4	65.9	71.7	59.1	Sept.
68.6	68.9	69.0	68.6	68.2	66.8	65.4	64.4	63.6	62.8	62.0	63.4	70.6	54.8	Oct.
67.5	67.9	67.7	67.5	67.0	65.5	63.5	61.7	59.9	58.7	58.2	60.6	69.9	51.9	Nov.
59.9	60.5	60.9	60.8	60.6	59.7	57.5	55.7	54.2	52.9	52.5	54.2	63.0	45.5	Dec.
64.8	65.4	65.6	65.5	65.2	64.4	63.3	61.7	60.6	59.6	59.1	60.4	67.4	53.1	Year.

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

SAN FRANCISCO, CAL.

[λ = 37° 48′; φ = 122° 26′.]

1892.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.
Jan ...	50.4	50.2	49.6	49.2	48.7	48.4	48.1	47.8	47.5	47.5	47.9	49.3	50.8
Feb ...	50.8	50.5	50.2	50.2	49.8	49.5	49.0	48.9	48.7	48.8	49.0	50.1	51.9
Mar ...	52.6	52.2	51.7	51.3	51.2	51.0	50.9	50.6	50.7	50.9	51.7	53.2	54.6
Apr ...	50.6	50.3	49.6	49.2	48.7	48.5	48.4	47.9	48.1	49.0	50.4	52.0	54.2
May ...	54.7	54.4	53.9	53.7	53.3	53.0	52.8	52.6	52.9	54.2	55.9	58.0	59.6
June ..	53.9	53.4	53.1	52.9	52.7	52.5	52.3	51.8	52.3	53.4	54.7	56.5	58.2
July...	54.9	54.5	54.2	54.0	53.6	53.4	53.2	53.1	53.0	53.7	55.5	57.2	59.3
Aug ...	56.4	56.0	55.7	55.5	55.3	55.0	54.7	54.3	54.5	55.4	57.0	58.7	60.4
Sept...	56.6	56.4	56.3	56.1	55.9	55.5	55.6	55.7	55.6	55.8	57.1	58.5	59.6
Oct....	55.2	54.8	54.6	54.3	54.1	53.9	53.7	53.9	53.6	53.9	55.0	56.7	58.8
Nov ...	55.9	55.5	54.8	54.4	54.0	53.6	53.4	53.0	53.2	52.9	53.6	54.6	56.2
Dec ...	51.3	50.9	50.4	50.2	49.9	49.4	49.1	49.0	48.9	48.7	49.1	49.7	50.5
Year ..	53.6	53.3	52.8	52.6	52.3	52.0	51.8	51.6	51.6	52.0	53.1	54.5	56.2

SANTA FE, N. MEX.

[λ = 35° 41′; φ = 105° 57′.]

Jan ...	26.9	25.9	25.5	24.5	24.1	23.7	23.1	22.3	21.9	22.8	25.1	27.6	30.1
Feb ...	32.1	31.7	31.1	30.6	29.8	29.5	29.1	27.9	27.8	28.8	31.0	33.2	34.9
Mar ...	37.4	36.6	35.9	35.3	34.6	34.0	33.3	30.9	31.3	33.7	36.4	37.9	39.8
Apr ...	43.0	42.1	41.1	40.5	39.7	38.8	37.3	36.5	40.6	42.6	44.7	46.7	49.2
May ...	52.0	50.7	48.9	47.7	46.4	45.3	44.2	45.7	49.4	51.0	53.1	55.4	58.1
June ..	63.4	62.1	60.5	59.3	57.7	56.5	55.1	58.3	62.1	64.1	66.2	68.7	71.2
July...	65.6	64.9	63.9	63.2	62.4	61.6	60.3	61.3	64.4	66.8	69.1	71.4	73.2
Aug ...	65.6	64.5	63.2	62.1	60.9	60.1	58.8	58.5	61.8	64.8	68.0	70.2	72.7
Sept...	61.8	61.0	59.9	58.4	57.3	56.1	55.0	54.0	56.1	60.4	63.9	66.1	69.2
Oct....	48.4	47.7	46.4	45.5	44.6	43.7	42.7	40.7	41.1	44.1	46.6	49.1	51.3
Nov ...	34.9	34.4	33.9	33.2	32.4	32.1	31.9	31.4	31.6	32.9	36.6	39.1	40.8
Dec ...	27.1	26.2	25.4	24.9	24.2	24.0	22.8	22.6	22.0	23.1	26.3	29.5	31.2
Year...	46.5	45.6	44.6	43.8	42.8	42.1	41.1	40.8	42.5	44.6	47.2	49.6	51.8

SAVANNAH, GA.

[λ = 32° 5′; φ = 81° 5′.]

Jan ...	46.0	45.6	45.0	44.4	44.2	43.7	43.1	42.8	44.2	46.5	49.0	51.4	52.9
Feb ...	51.4	50.7	50.1	49.4	48.9	48.1	47.7	47.9	49.8	52.6	55.1	57.7	59.6
Mar ...	52.5	51.9	51.3	50.6	49.8	49.1	49.0	50.1	53.0	56.2	58.8	60.6	62.0
Apr ...	61.4	60.7	60.1	59.1	58.6	58.1	59.0	61.3	63.9	66.6	69.0	70.8	71.9
May ...	68.2	67.6	67.0	66.4	65.8	65.5	67.5	70.6	73.1	75.6	77.7	79.0	79.5
June ..	73.3	73.1	72.7	72.2	71.8	71.8	73.2	75.7	77.4	79.3	80.2	81.7	82.1
July...	74.7	74.4	73.9	73.7	73.5	73.5	74.9	77.5	79.9	82.4	84.3	85.5	86.2
Aug ...	75.9	75.6	75.2	74.9	74.5	74.3	75.4	77.9	81.1	83.8	85.9	87.5	87.8
Sept...	70.9	70.6	70.2	70.0	69.7	69.5	69.8	71.9	74.1	76.4	78.2	79.4	80.0
Oct....	62.6	62.0	61.2	60.2	59.7	59.3	59.2	61.0	64.5	68.3	71.1	73.0	73.7
Nov ...	53.6	53.0	52.2	51.4	50.3	49.8	49.2	50.0	53.6	58.1	61.4	64.0	65.3
Dec ...	50.1	49.5	49.0	48.3	47.8	47.3	47.3	47.4	49.2	52.3	55.8	58.3	59.6
Year...	61.7	61.2	60.7	60.0	59.6	59.2	59.6	61.2	63.6	66.5	68.9	70.7	71.7

WASHINGTON, D. C.

[λ = 38° 54′; φ = 77 3′.]

Jan ...	29.7	29.6	29.5	29.5	29.7	29.4	28.9	28.7	29.8	31.5	32.8	34.5	35.5
Feb ...	34.5	33.9	33.5	33.0	32.9	32.5	32.4	32.7	33.7	35.3	36.7	38.6	39.7
Mar ...	35.3	34.6	33.9	33.5	33.0	32.6	32.6	34.2	35.7	37.0	38.5	40.1	40.5
Apr ...	48.2	47.9	47.3	46.7	46.3	46.0	46.5	49.0	51.0	52.5	53.9	54.9	55.8
May ...	58.5	57.9	57.2	56.3	55.5	55.6	57.7	60.5	62.6	64.6	66.6	68.6	70.0
June ..	70.3	69.5	68.8	68.6	68.0	68.8	71.2	73.9	75.9	78.1	79.6	80.9	82.1
July...	70.2	69.5	69.0	68.5	68.0	68.0	69.9	73.1	75.3	77.3	79.6	81.3	82.6
Aug ...	70.3	69.8	69.1	68.6	68.2	68.0	70.0	73.3	75.8	78.0	79.6	81.5	83.1
Sept...	60.8	59.9	59.4	58.5	57.8	57.4	58.8	62.5	65.3	68.1	70.1	72.2	73.1
Oct....	49.5	48.5	48.0	47.4	47.0	46.8	47.0	50.0	53.7	57.3	59.9	62.1	63.3
Nov ...	41.3	41.0	40.5	40.3	40.2	40.0	40.0	40.9	43.0	43.7	45.5	47.0	47.9
Dec ...	30.3	30.1	29.9	29.4	29.1	29.1	29.1	29.6	31.2	33.1	34.8	36.3	37.4
Year...	49.9	49.4	48.8	48.4	48.0	47.8	48.7	50.7	52.8	54.7	56.5	58.2	59.2

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

SAN FRANCISCO, CAL.

[h_t = 109 ft.; local time 3h 10m slow.]

2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Mid.	Mean.	Mean Max.	Mean Min.	1892.
52.4	53.5	54.6	54.9	55.3	54.7	53.3	52.0	51.4	51.3	50.6	50.8	57.5	45.9	Jan.
53.1	54.4	55.2	55.4	55.3	55.1	54.1	52.9	52.0	51.7	51.2	51.6	57.4	47.3	Feb.
55.5	56.5	57.2	57.4	57.3	56.8	55.7	54.4	53.7	53.2	52.9	53.5	60.1	48.4	Mar.
55.8	56.7	57.4	57.2	56.5	55.6	54.8	53.9	52.6	51.8	51.2	52.1	59.6	46.7	Apr.
61.2	61.6	61.7	61.8	61.4	60.3	59.3	58.3	56.7	55.5	55.0	56.7	64.8	51.2	May.
59.5	59.9	60.1	60.4	60.0	59.3	58.1	57.3	56.0	54.7	54.1	55.7	62.9	50.8	June.
60.4	60.8	60.7	60.8	60.6	60.0	59.2	58.3	56.9	55.9	55.2	56.6	64.2	52.0	July.
61.7	62.8	63.0	62.9	62.4	61.4	60.0	58.9	57.6	57.1	56.7	58.1	65.5	53.3	Aug.
61.0	62.5	63.0	63.1	62.8	61.9	60.3	58.9	57.6	57.3	56.8	58.3	66.1	54.2	Sept.
60.9	61.9	62.8	62.9	61.9	60.4	58.6	57.1	56.5	56.0	55.5	57.0	66.7	52.5	Oct.
57.8	59.6	60.9	61.1	60.4	59.7	58.4	58.0	57.6	57.0	56.4	56.3	63.7	50.1	Nov.
52.0	52.9	53.8	54.5	55.0	54.9	54.0	53.5	52.8	52.4	51.9	51.4	56.4	45.8	Dec.
57.6	58.6	59.2	59.4	59.1	58.3	57.2	56.1	55.1	54.5	54.0	54.8	62.1	49.8	Year.

SANTA FE, N. MEX.

[h_t = 59 ft.; local time 2h 4m slow.]

31.9	33.3	34.3	35.5	35.6	34.4	30.5	29.4	28.9	28.4	28.0	28.1	37.4	20.7	Jan.
36.6	38.0	39.5	40.5	40.9	40.8	38.7	36.4	34.9	33.9	33.1	33.8	42.8	26.9	Feb.
41.8	43.2	43.6	45.4	45.5	45.2	43.3	41.2	39.7	38.6	37.8	38.4	48.6	29.9	Mar.
51.0	52.7	54.1	55.4	55.3	54.9	53.3	50.9	48.5	46.6	45.5	46.3	57.3	36.1	Apr.
59.9	61.4	63.0	63.6	63.9	63.5	61.9	60.1	57.4	54.7	53.4	54.6	66.4	43.5	May.
73.0	74.5	75.3	76.3	76.7	76.0	75.5	74.1	70.3	66.6	65.3	67.0	78.0	53.9	June.
75.1	76.5	75.7	76.4	75.8	75.5	74.7	72.6	70.5	68.4	67.4	69.0	80.4	59.1	July.
74.3	75.4	74.6	75.4	75.7	75.2	74.3	71.7	69.2	67.8	66.7	68.0	78.9	57.5	Aug.
70.8	72.8	73.7	74.3	74.6	74.5	72.4	68.6	66.1	63.8	62.7	64.7	76.6	53.0	Sept.
53.3	54.8	55.5	56.0	56.6	56.0	53.1	51.9	51.1	49.8	48.5	49.1	59.0	38.7	Oct.
42.6	44.3	45.5	46.3	46.2	44.4	39.8	38.5	37.4	36.5	35.9	37.6	48.7	28.3	Nov.
32.7	34.2	35.1	35.2	34.6	32.3	29.3	28.2	27.8	27.3	27.0	28.0	37.0	20.3	Dec.
53.6	55.1	55.8	56.7	56.8	56.1	53.9	52.0	50.2	48.5	47.6	48.7	59.3	39.0	Year.

SAVANNAH, GA.

[h_t = 63 ft.; local time 0h 24m slow.]

53.8	54.6	54.4	53.5	51.6	50.1	48.9	48.2	47.1	46.7	46.0	48.1	55.7	39.4	Jan.
60.7	61.4	61.3	60.2	58.1	56.0	54.7	53.9	53.3	52.6	51.8	53.9	63.1	45.8	Feb.
63.2	64.0	63.7	62.5	60.5	57.6	56.1	55.3	54.5	53.9	52.9	55.8	65.6	46.8	Mar.
72.5	72.3	71.3	70.1	67.9	65.9	64.2	63.3	62.7	62.2	61.9	64.8	74.2	56.8	Apr.
79.8	79.2	78.3	77.1	75.3	73.4	71.4	70.4	70.1	69.5	69.0	72.4	81.8	63.9	May.
81.6	81.7	80.3	79.2	78.1	77.1	75.7	75.2	74.7	74.1	73.7	76.5	84.6	70.5	June.
85.3	84.2	82.8	81.8	80.3	78.7	77.4	76.7	76.2	75.7	75.1	78.7	88.6	72.0	July.
87.8	85.5	84.3	83.2	82.1	79.8	78.4	77.8	77.0	76.6	76.3	79.9	89.8	72.7	Aug.
79.7	79.2	78.9	78.2	76.5	74.5	73.5	72.7	72.3	71.6	71.1	74.1	81.8	68.1	Sept.
74.0	73.9	72.7	71.1	68.7	66.9	65.5	64.8	64.0	63.2	62.6	66.0	75.2	57.0	Oct.
66.1	66.5	65.6	63.5	60.4	68.6	57.1	56.4	55.3	54.6	53.8	57.1	67.2	46.9	Nov.
60.3	60.5	59.9	58.4	56.3	54.9	53.6	52.8	52.4	51.5	51.1	53.1	62.2	44.4	Dec.
72.1	71.9	71.1	69.9	68.0	66.1	64.7	64.0	63.3	62.7	62.1	65.0	74.2	57.0	Year.

WASHINGTON, D. C.

[h_t = 58 ft.; local time 0h 8m slow.]

36.2	36.5	36.6	35.7	34.6	33.5	32.5	31.4	31.3	30.6	30.0	32.0	38.7	24.5	Jan.
41.2	42.1	42.1	41.4	40.1	39.0	38.3	37.2	36.4	35.8	35.1	36.6	44.3	29.7	Feb.
41.8	42.4	42.5	42.2	41.1	39.7	38.5	37.6	37.1	36.5	35.9	37.4	45.3	30.1	Mar.
56.5	57.2	57.8	57.6	56.9	55.3	53.8	52.1	50.8	50.5	49.8	51.8	59.7	43.2	Apr.
70.6	70.9	71.4	70.6	69.2	67.2	65.0	63.2	61.9	60.7	60.1	63.4	73.8	53.9	May.
82.9	82.0	81.4	81.2	79.5	78.1	76.2	74.5	73.2	72.0	71.0	75.3	85.2	67.3	June.
83.3	83.5	82.6	81.8	80.8	78.5	76.0	73.9	73.4	72.4	71.4	75.4	85.4	66.3	July.
83.9	84.0	83.6	82.9	81.8	79.0	76.3	74.2	72.9	71.9	70.8	75.7	85.7	66.8	Aug.
74.2	74.4	74.5	73.6	72.1	68.9	66.7	64.6	63.5	62.4	61.4	65.8	76.2	56.0	Sept.
64.4	64.6	64.1	62.1	58.9	56.2	54.3	52.5	51.6	50.4	49.6	54.6	66.3	44.5	Oct.
48.8	48.9	48.3	47.0	45.7	44.7	43.9	42.9	42.4	41.9	41.4	43.6	50.9	36.5	Nov.
38.5	39.1	38.7	38.0	36.1	34.5	33.4	32.5	31.8	31.1	30.6	33.1	40.2	26.1	Dec.
60.2	60.5	60.3	59.5	58.1	56.2	54.6	53.0	52.2	51.4	50.6	53.7	62.6	45.4	Year.

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

WILMINGTON, N. C.

[λ = 34° 14′; φ = 77° 57′.]

1892.	1h a.m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p.m.
Jan	43.3	43.1	42.5	42.0	41.2	41.0	40.9	40.7	42.0	44.2	46.5	48.4	49.7
Feb	45.4	45.0	44.6	44.3	44.0	43.8	43.6	43.8	45.4	47.4	49.8	51.4	52.7
Mar	48.0	47.7	47.1	46.1	45.3	45.0	45.0	46.1	47.7	49.6	51.8	53.4	54.6
Apr	56.8	56.4	55.8	55.3	54.9	54.4	55.5	57.8	59.3	61.1	62.8	64.4	65.3
May	65.3	65.0	64.3	64.1	63.7	63.4	64.9	67.7	69.3	71.3	73.2	74.4	74.7
June ...	72.7	72.4	72.1	71.7	71.6	71.9	73.8	76.0	77.1	78.5	79.6	80.3	79.7
July ...	73.7	73.5	73.0	72.7	72.5	72.8	74.3	76.2	78.0	79.8	81.0	82.1	82.5
Aug	74.6	73.9	73.2	72.9	72.5	72.5	74.7	77.4	80.3	82.4	83.9	85.0	84.3
Sept....	68.4	68.0	67.3	66.9	66.5	66.4	67.6	69.3	72.6	75.0	76.8	78.1	78.3
Oct	57.9	57.5	56.8	56.5	55.9	55.6	56.3	57.7	60.9	63.8	66.4	68.1	69.5
Nov	50.9	50.1	49.1	48.6	47.8	47.5	47.4	48.1	50.0	53.0	55.7	57.0	58.4
Dec	43.9	43.7	43.4	43.1	42.7	42.2	41.6	41.7	43.2	45.2	47.8	49.9	51.6
Year ...	58.4	58.0	57.4	57.0	56.6	56.4	57.1	58.5	60.5	62.6	64.6	66.0	66.8

MONTHLY AVERAGES OF TEMPERATURE (DEGREES FAHRENHEIT) FOR EACH HOUR OF SEVENTY-FIFTH MERIDIAN TIME—Continued.

WILMINGTON, N. C.

[h_t = 82 ft.; local time 0^h 12^m slow.]

2^h	3^h	4^h	5^h	6^h	7^h	8^h	9^h	10^h	11^h	Mid.	Mean.	Mean. Max.	Mean Min.	1892.
50.5	50.8	50.5	49.2	47.8	47.0	46.2	45.6	45.3	44.7	44.1	45.3	53.1	36.6	Jan.
53.8	54.1	54.3	53.3	51.8	50.5	48.9	48.3	47.8	47.1	46.4	48.2	56.0	40.3	Feb.
55.4	55.1	55.0	54.4	53.5	51.8	50.5	50.2	49.8	49.6	49.2	50.1	58.4	41.8	Mar.
65.7	65.6	65.0	64.1	63.1	61.4	60.0	59.2	58.3	57.5	57.0	59.9	68.2	52.2	Apr.
74.8	74.5	73.9	72.7	71.5	69.7	68.3	67.5	67.2	66.7	66.3	68.9	77.7	61.7	May.
79.7	79.6	79.5	78.6	77.5	76.2	74.7	74.3	73.8	73.5	73.1	75.7	82.0	70.2	June.
82.4	81.9	81.3	80.1	79.0	77.3	75.9	75.2	74.8	74.4	73.9	77.0	85.0	71.2	July.
83.1	83.0	82.5	81.5	79.9	77.8	77.1	76.4	76.0	75.5	75.0	78.1	87.1	71.9	Aug.
78.6	78.1	77.5	76.2	74.5	72.9	71.9	71.0	70.4	69.3	68.8	72.1	80.1	65.0	Sept.
69.5	69.4	68.8	66.9	64.7	62.9	61.9	60.9	60.2	59.2	58.4	61.9	71.4	53.8	Oct.
59.0	59.1	58.6	56.8	55.0	53.6	53.0	52.5	52.1	51.3	50.8	52.7	62.2	43.6	Nov.
52.8	52.8	52.3	50.4	49.0	47.9	47.3	46.3	45.7	45.1	44.9	46.4	56.2	38.5	Dec.
67.1	67.0	66.6	65.4	63.9	62.4	61.3	60.6	60.1	59.5	59.0	61.4	69.8	53.9	Year.

WIND—VELOCITY AND FREQUENCY.

FORT ASSINABOINE, MONT.

[λ=48° 32′ N.; φ=109° 42′ W.] [Seventy-fifth Meridian Time.]

1891.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.	2h	3h	4h	5h
Jan.....	12.1	12.5	12.9	13.0	12.1	12.8	12.0	13.0	12.9	13.2	13.0	13.1	13.6	15.3	15.9	15.2	14.5
Feb.....	9.2	9.2	9.0	8.8	10.0	10.6	10.1	10.7	10.4	10.0	10.8	10.4	11.3	11.0	10.7	10.2	9.1
Mar	6.9	7.0	8.0	8.4	8.7	8.3	8.7	9.3	9.2	10.0	11.2	13.2	13.0	13.9	13.9	13.5	13.5
Apr.....	9.9	9.1	8.8	8.7	8.9	9.8	9.2	9.3	9.1	10.4	11.5	12.4	13.1	13.0	13.5	13.8	13.9
May	9.0	8.1	8.6	8.7	8.3	8.1	6.8	7.5	9.0	9.9	9.8	10.1	10.0	11.5	11.0	10.5	11.2
June....	9.3	9.0	8.2	7.5	7.2	7.8	7.4	7.8	9.6	10.7	11.1	11.2	11.6	11.7	12.3	12.2	12.4
July	8.9	8.7	8.0	8.3	7.9	7.6	7.5	7.2	8.2	8.9	10.7	10.6	10.3	10.2	9.9	9.7	9.4
Aug	9.0	8.6	7.0	7.6	7.7	7.8	7.2	7.5	7.2	8.3	10.2	10.9	10.9	9.4	9.5	10.1	10.5
Sept	9.6	9.1	8.9	10.0	9.1	9.0	9.3	9.6	9.4	9.4	11.4	13.5	13.6	14.6	15.1	14.7	14.5
Oct.....	9.5	9.3	9.5	10.0	10.0	10.3	10.5	10.3	10.1	9.2	9.9	10.9	13.0	13.1	13.8	13.7	13.8
Nov.....	11.8	12.2	12.5	12.2	12.5	13.5	13.2	11.9	11.8	12.2	11.8	13.0	12.9	14.5	15.5	15.6	15.3
Dec.....	14.6	14.6	14.7	15.8	16.1	16.5	16.2	16.0	15.8	15.2	15.6	15.8	18.8	19.4	20.2	20.1	17.4
Year	10.0	9.8	9.7	9.9	9.9	10.2	9.8	10.0	10.2	10.6	11.4	12.1	12.7	13.1	13.4	13.3	13.0

BISMARCK, N. DAK.

[λ=46° 47′ N.; φ=100° 38′ W.]

Jan.....	9.5	10.2	8.4	8.8	8.8	9.1	8.6	8.9	8.6	8.4	8.3	9.6	12.5	13.8	14.3	14.0	13.5
Feb.....	8.9	9.0	7.6	8.1	8.5	7.8	8.2	8.0	8.0	8.7	10.6	11.8	12.8	14.0	14.8	14.8	14.6
Mar	7.7	7.5	7.3	7.1	7.5	7.3	8.1	8.3	8.1	8.9	10.0	11.4	12.8	13.3	13.3	13.2	13.3
Apr.....	10.7	9.9	9.8	10.0	10.1	11.5	10.8	10.1	11.5	12.7	13.7	14.2	15.9	17.2	17.7	17.3	16.5
May	9.5	9.3	9.2	9.3	9.3	9.2	8.7	9.5	11.1	12.3	13.6	14.5	15.1	16.1	16.2	16.3	15.6
June....	11.2	11.3	10.9	11.5	11.1	9.7	9.9	10.4	11.4	13.4	14.7	15.5	16.5	16.7	17.3	16.8	16.8
July	8.1	7.7	6.6	6.8	7.2	6.9	6.8	6.7	7.5	8.7	10.4	11.3	11.7	10.8	11.0	11.0	10.8
Aug	8.0	6.9	5.5	5.5	6.0	6.1	5.7	5.4	6.4	7.2	7.8	9.1	10.1	10.6	11.1	11.5	11.6
Sept	7.9	6.8	5.7	7.0	7.7	7.0	6.6	7.0	7.0	8.7	10.7	12.1	12.5	12.8	13.1	13.6	13.6
Oct.....	9.3	8.6	9.7	10.3	10.2	10.2	10.5	9.0	9.2	9.5	11.5	13.2	13.7	14.7	14.8	15.1	15.1
Nov.....	9.2	9.2	9.3	8.5	8.4	7.6	7.8	8.0	9.4	9.7	10.7	11.7	12.8	12.7	13.1	12.9	11.5
Dec.....	9.4	9.7	9.9	9.2	9.9	10.0	9.5	8.7	8.8	8.7	9.5	10.3	10.9	11.7	11.7	12.2	12.0
Year	9.1	8.8	8.3	8.5	8.7	8.5	8.4	8.3	8.9	9.7	11.0	12.1	13.1	13.7	14.0	14.1	13.7

BOSTON, MASS.

[λ=42° 21′ N.; φ=71° 4′ W.]

Jan.....	*10.8	*10.3	*10.3	*10.6	*11.3	*12.0	*11.2	*11.2	*11.6	12.6	12.8	14.0	13.5	13.5	13.1	13.2	12.6
Feb.....	12.4	13.0	12.7	11.6	10.4	11.3	10.8	10.8	11.0	12.4	13.3	14.5	16.0	16.0	16.6	16.2	16.4
Mar	14.4	14.1	13.6	13.7	13.7	14.7	14.2	14.6	15.5	15.4	15.7	16.1	16.3	15.9	16.7	15.6	15.2
Apr.....	11.5	11.4	11.2	11.3	11.4	11.8	12.1	12.2	12.4	12.4	13.3	13.9	14.8	15.1	15.6	14.6	14.5
May	10.5	10.1	9.9	9.8	10.1	10.0	10.3	10.5	11.6	11.9	12.1	12.5	12.5	12.5	13.2	12.4	12.3
June....	10.0	9.7	9.5	10.0	9.7	10.6	10.4	10.8	10.5	11.0	11.3	11.4	11.9	11.3	11.7	12.0	10.7
July	9.0	8.5	8.7	7.7	7.5	7.4	7.7	8.4	9.7	10.8	11.2	12.9	13.7	13.2	13.6	13.2	12.0
Aug	8.7	8.0	8.4	8.2	8.2	8.2	8.8	8.9	9.3	10.5	11.5	11.8	12.0	12.1	11.7	11.6	10.9
Sept	8.0	7.7	7.9	7.9	8.0	8.1	7.9	8.4	8.5	9.1	9.7	10.0	9.8	10.3	10.6	10.5	10.2
Oct.....	11.9	11.8	11.5	12.2	11.7	12.0	12.0	12.1	13.6	13.5	13.2	13.9	13.2	13.2	13.0	13.0	12.2
Nov.....	12.0	11.7	11.2	11.7	11.7	11.9	11.2	11.1	11.6	11.4	11.8	13.6	13.3	13.3	13.7	13.8	12.3
Dec.....	14.4	13.3	12.9	13.3	12.5	12.7	12.2	11.9	12.3	13.4	14.0	15.2	15.2	15.4	15.4	14.7	13.9
Year	11.1	10.8	10.6	10.7	10.5	10.9	10.7	10.9	11.5	12.0	12.5	13.3	13.5	13.5	13.7	13.4	12.8

BUFFALO, N. Y.

[λ=42° 53′ N.; φ=78° 53′ W.]

Jan.....	12.2	11.8	11.6	11.6	11.5	11.5	12.0	12.2	12.0	11.3	11.2	12.4	13.5	13.9	13.5	12.9	12.9
Feb.....	14.8	15.3	15.4	14.7	14.7	14.8	14.3	13.1	13.6	14.9	14.7	14.8	14.8	14.9	15.0	15.0	14.4
Mar	11.1	10.9	10.5	10.7	10.3	11.0	11.4	11.3	12.4	13.1	13.7	13.4	12.8	13.0	13.8	13.6	13.6
Apr.....	9.7	9.2	9.2	9.5	9.8	9.9	9.8	9.8	10.2	10.7	11.4	12.5	13.8	14.4	14.6	14.1	12.9
May	8.5	8.7	9.0	8.4	8.8	8.9	9.4	10.0	11.1	11.2	10.9	11.3	12.1	12.1	12.0	11.5	10.4
June....	5.7	5.0	5.2	5.2	5.1	5.5	6.1	6.3	7.1	7.9	8.6	9.0	9.6	9.6	9.9	9.2	8.9
July	8.9	8.5	8.0	8.4	8.6	8.7	9.2	9.5	10.2	10.8	12.0	12.2	12.9	12.9	13.0	12.3	12.0
Aug	7.7	7.6	7.2	6.8	7.3	7.2	7.8	7.9	8.0	9.0	10.3	10.0	10.5	10.1	10.0	9.6	9.5
Sept	6.4	6.7	7.1	7.2	7.6	7.9	7.7	8.0	9.0	9.8	9.8	10.0	10.7	10.4	11.5	10.2	9.8
Oct.....	10.0	9.6	9.3	9.5	9.5	9.7	9.4	9.5	10.1	10.9	11.3	12.0	11.8	11.4	11.7	11.4	10.7
Nov.....	15.2	15.6	15.0	14.3	13.5	14.5	14.7	13.7	14.4	14.2	14.9	15.6	16.2	16.8	16.9	16.1	15.3
Dec.....	14.9	14.5	15.1	14.9	15.5	16.5	16.7	15.7	16.3	15.8	16.3	16.5	16.8	18.3	18.3	17.8	17.3
Year	10.4	10.3	10.2	10.1	10.2	10.5	10.7	10.6	11.2	11.6	12.1	12.5	13.0	13.2	13.4	12.8	12.3

* Average for 30 days.

WIND—VELOCITY AND FREQUENCY.

FORT ASSINABOINE, MONT.

[h_a = 36 ft. N.; local time, 2h 19m S.] [Seventy-fifth Meridian Time.]

6h	7h	8h	9h	10h	11h	Mid.	Mean.	Max. vel.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Calm.	1891.
13.7	11.5	12.2	13.5	13.5	13.6	13.3	13.3	44	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jan.
8.8	8.3	8.1	8.2	8.5	8.6	8.4	9.6	48	.....	.....	.....	.....	.....	.....	.....	.....	.....	Feb.
13.1	12.1	11.0	8.3	8.1	7.4	7.1	10.2	50	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mar.
13.1	12.6	13.5	11.6	10.4	10.4	10.4	11.1	44	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr.
10.8	10.1	9.9	9.5	8.4	8.4	8.9	9.3	46	.....	.....	.....	.....	.....	.....	.....	.....	.....	May.
12.6	12.4	12.3	10.9	9.5	9.7	10.1	10.2	38	64	58	19	15	56	187	97	91	13	June.
9.5	9.5	10.2	8.8	7.7	8.4	9.3	9.0	36	108	141	153	14	71	85	62	102	8	July.
10.2	8.4	7.9	6.3	6.6	8.1	8.9	8.6	40	73	193	61	11	136	104	71	93	2	Aug.
13.7	11.7	8.9	7.3	9.0	10.4	10.1	10.9	44	32	102	43	10	90	224	101	117	1	Sept.
12.4	10.2	8.7	8.6	9.4	9.5	9.8	10.7	35	76	62	38	17	107	222	129	92	1	Oct.
14.2	11.9	11.1	11.4	11.2	11.4	12.3	12.8	60	62	32	.....	.....	.....	336	164	126	.....	Nov.
15.3	13.8	13.9	13.7	14.0	14.7	14.9	16.0	60	36	37	.....	.....	2	477	87	105	.....	Dec.
12.3	11.0	10.6	9.8	9.7	10.0	10.3	11.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Year.

BISMARCK, N. DAK.

[h_a = 46 ft.; local time, 1h 42m S.]

11.5	9.9	9.4	10.0	9.6	10.0	9.2	10.2	48	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jan.
14.0	12.7	10.9	10.8	10.1	9.2	9.6	10.6	48	.....	.....	.....	.....	.....	.....	.....	.....	.....	Feb.
13.1	11.5	9.5	8.7	8.6	8.7	8.8	9.7	36	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mar.
15.8	14.9	13.0	11.7	10.1	10.5	10.5	12.8	48	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr.
15.0	15.0	12.9	10.6	9.7	8.3	9.3	11.9	42	.....	.....	.....	.....	.....	.....	.....	.....	.....	May.
17.3	17.1	15.0	12.7	11.4	10.5	11.1	13.3	54	.....	.....	.....	.....	.....	.....	.....	.....	.....	June.
11.4	11.0	9.6	9.0	8.2	8.8	7.7	9.0	48	109	98	85	106	17	29	63	231	6	July.
12.0	11.4	9.3	8.5	8.8	8.5	8.3	8.4	38	145	89	90	51	56	41	71	195	6	Aug.
13.1	12.0	10.1	10.0	9.6	9.1	9.1	9.7	40	81	47	60	139	62	28	54	246	3	Sept.
13.4	11.1	10.4	9.6	9.0	8.7	9.1	11.1	54	54	24	30	94	99	42	163	237	1	Oct.
10.8	8.7	8.7	8.4	8.4	8.8	9.3	9.8	50	38	43	70	98	87	32	43	309	.....	Nov.
10.8	9.7	9.5	8.9	9.1	8.1	9.1	9.9	42	30	11	133	75	24	47	89	331	4	Dec.
13.2	12.1	10.7	9.9	9.4	9.1	9.3	10.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Year.

BOSTON, MASS.

[h_a = 182 ft.; local time, 0h 16m F.]

12.3	11.9	11.2	11.5	11.1	10.9	11.5	†11.9	48	111	36	16	27	73	116	195	168	2	Jan.
16.4	15.4	14.9	14.5	14.5	14.2	13.9	13.7	41	50	49	28	18	82	123	220	101	1	Feb.
15.8	13.6	13.1	13.3	13.2	13.2	14.1	14.7	45	50	142	122	33	36	54	133	174	.....	Mar.
13.7	11.9	10.7	11.3	11.0	11.3	12.2	12.6	60	52	51	114	13	56	114	218	102	.....	Apr.
12.9	11.3	10.3	10.3	10.4	10.6	11.1	11.2	36	47	89	104	36	59	181	134	94	.....	May.
10.0	9.7	9.2	9.7	9.9	9.7	10.2	10.5	28	45	138	94	19	15	86	201	122	.....	June.
11.9	10.4	10.0	9.7	9.5	9.4	9.8	10.3	30	10	35	110	37	81	273	134	64	.....	July.
9.3	8.7	8.4	8.8	8.2	7.8	8.8	9.5	36	49	74	100	64	70	222	96	69	.....	Aug.
9.8	9.6	9.6	9.0	8.6	8.4	8.7	9.0	27	53	70	88	31	70	207	119	79	3	Sept.
12.3	12.2	11.8	12.5	12.0	11.5	12.3	12.4	40	88	99	65	24	37	143	136	152	.....	Oct.
12.4	12.0	11.6	12.0	11.6	11.7	12.3	12.1	48	65	29	52	58	102	121	151	142	.....	Nov.
14.8	14.3	14.4	14.7	14.7	14.3	14.3	13.9	52	45	35	25	37	50	204	204	143	1	Dec.
12.6	11.8	11.3	11.4	11.2	11.1	11.6	11.8	.....	665	847	918	397	731	1,844	1,941	1,410	7	Year.

BUFFALO, N. Y.

[h_a = 108 ft.; local time, 0h 15m S.]

13.5	12.8	11.8	11.6	12.7	12.7	13.0	12.3	59	14	137	20	43	31	261	38	198	2	Jan.
15.0	14.5	13.7	13.2	13.2	13.7	14.4	14.5	45	20	95	29	89	49	201	90	99	.....	Feb.
13.2	13.1	12.7	11.8	12.2	12.0	11.5	12.2	60	72	277	41	57	39	146	38	74	.....	Mar.
12.3	12.1	10.6	9.9	9.0	9.5	9.8	11.0	39	26	48	49	70	30	290	101	106	.....	Apr.
10.8	10.3	9.2	8.7	8.6	8.4	8.4	9.9	34	36	118	23	31	47	296	60	129	4	May.
8.9	8.4	7.1	6.3	5.9	5.9	6.0	7.2	24	23	191	70	36	37	253	59	48	3	June.
11.6	10.9	9.4	9.4	9.5	9.0	8.2	10.3	46	40	62	14	89	113	283	86	57	.....	July.
9.6	9.3	8.4	7.2	7.3	7.6	6.8	8.5	42	55	150	25	77	101	227	65	40	4	Aug.
9.3	7.6	7.3	7.5	7.8	7.3	6.8	8.5	38	48	85	33	98	80	229	96	47	4	Sept.
10.4	10.4	10.0	9.9	10.3	10.5	11.0	10.4	47	24	126	32	125	68	125	128	116	.....	Oct.
15.2	15.3	15.1	14.4	14.7	14.7	14.0	15.0	66	39	84	38	187	56	123	172	21	.....	Nov.
16.9	16.1	16.1	15.5	14.8	14.6	14.5	16.1	66	20	85	16	98	80	285	109	48	3	Dec.
12.2	11.7	11.0	10.4	10.5	10.5	10.4	11.3	.....	417	1,458	390	1,000	731	2,719	1,042	983	20	Year.

† Average for 734 hours.

WIND—VELOCITY AND FREQUENCY—Continued.

CHICAGO, ILL.

[λ = 41° 52′ N.; Φ = 87° 38′ W.] [Seventy-fifth Meridian Time.]

1891.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.	2h	3h	4h	5h
Jan.....	15.5	14.5	13.8	13.9	14.3	14.7	14.9	14.1	15.0	15.5	15.6	15.9	15.6	16.1	16.3	16.1	15.5
Feb.....	20.9	19.2	18.5	18.2	18.5	19.0	20.4	18.8	19.6	20.2	19.9	20.9	20.8	20.1	20.5	20.7	20.4
Mar.....	19.5	17.6	17.6	17.6	17.4	18.5	19.5	18.9	19.0	19.2	19.5	18.6	19.7	19.5	19.1	19.7	19.6
Apr.....	18.1	16.0	16.7	16.0	16.4	18.6	17.4	15.7	15.6	16.1	16.4	17.2	17.6	17.6	18.7	18.8	18.5
May	17.0	15.8	16.5	16.4	17.5	17.6	17.2	15.1	14.7	15.0	15.4	15.6	16.2	15.4	15.5	15.6	16.4
June....	14.6	14.3	13.2	13.7	13.9	13.6	14.0	13.6	13.3	13.0	13.4	14.1	13.7	13.1	13.9	14.5	14.6
July	14.0	12.6	12.6	11.4	12.2	13.4	14.6	12.8	12.6	13.3	14.2	15.5	16.4	14.9	14.2	13.5	13.8
Aug	14.0	13.8	14.2	13.1	13.1	12.3	12.6	10.5	9.9	10.0	10.8	11.7	12.1	12.6	13.6	13.3	12.9
Sept	14.5	14.0	15.1	14.8	14.9	14.7	15.4	13.8	12.5	11.5	11.9	13.8	14.9	15.2	15.9	16.1	15.5
Oct.....	17.2	17.2	17.6	16.9	16.3	16.3	17.6	17.4	17.4	17.6	17.5	18.1	19.1	19.0	18.8	18.6	17.4
Nov.....	21.2	20.3	20.4	21.4	20.9	20.9	21.8	20.0	20.1	20.4	20.6	20.8	20.8	19.9	19.9	19.1	19.0
Dec.....	22.8	21.4	21.9	20.8	20.7	20.1	21.6	19.9	20.3	20.6	21.7	22.8	22.9	22.2	22.6	20.9	20.8
Year	17.4	16.4	16.5	16.2	16.3	16.5	17.2	15.9	15.8	16.0	16.4	17.1	17.5	17.1	17.4	17.2	17.0

CLEVELAND, OHIO.

[λ = 41° 30′ N.; Φ = 81° 42′ W.]

Jan.....	7.1	7.3	7.8	7.6	7.8	7.9	7.7	7.2	7.5	8.4	8.3	8.6	8.6	8.5	9.0	8.5	8.6
Feb.....	10.9	11.2	11.7	11.1	10.5	10.2	10.1	9.0	9.3	9.2	9.8	9.2	9.8	10.3	10.1	9.7	9.3
Mar.....	8.6	8.1	8.1	7.7	7.5	7.9	8.3	9.1	9.8	10.0	10.9	11.3	11.1	10.7	10.9	11.1	10.5
Apr.....	6.2	6.4	6.5	6.6	6.5	6.6	7.0	7.7	8.0	9.3	8.8	9.2	9.3	9.5	9.2	8.5	7.9
May	6.7	6.8	6.7	6.8	6.7	7.0	6.9	6.7	7.4	7.7	8.2	8.0	8.5	8.1	8.5	8.0	7.5
June....	5.4	5.6	5.1	5.4	5.8	5.2	5.0	5.0	6.0	6.7	7.2	8.0	8.1	7.9	7.5	7.4	6.8
July	5.7	5.5	5.4	5.8	6.6	6.1	5.7	6.4	6.8	7.6	8.5	8.5	9.3	9.2	9.5	9.1	8.3
Aug	7.0	6.7	6.6	6.6	6.8	6.6	6.3	6.3	6.4	6.5	7.5	8.1	9.2	8.7	8.5	8.7	8.0
Sept	7.5	7.5	7.2	6.7	6.8	6.9	7.3	6.9	6.8	6.4	6.9	7.4	7.8	8.2	8.3	7.6	7.1
Oct.....	8.6	8.9	8.0	7.6	7.6	7.9	7.9	8.1	8.7	9.4	8.8	8.4	8.5	8.6	9.1	8.9	8.7
Nov.....	8.5	8.0	8.2	8.5	8.5	8.7	8.4	8.6	9.5	9.7	10.0	10.8	11.6	11.0	11.5	11.1	10.6
Dec.....	9.7	10.2	10.5	9.8	10.1	10.3	10.3	10.5	11.4	11.6	10.8	11.4	11.6	11.4	11.3	10.7	10.3
Year	7.7	7.7	7.6	7.5	7.6	7.6	7.6	7.6	8.1	8.5	8.8	9.1	9.4	9.3	9.4	9.1	8.6

CINCINNATI, OHIO.

[λ = 39° 6′ N.; Φ = 84° 30′ W.]

Jan.....	6.5	6.1	6.0	5.7	5.9	6.7	6.4	6.7	7.0	7.5	8.5	9.3	9.4	9.3	9.8	9.8	9.4
Feb.....	8.6	8.9	8.4	8.9	8.7	8.6	8.4	8.4	9.1	9.9	10.0	9.7	10.4	10.2	10.6	11.2	11.1
Mar.....	7.8	7.6	7.2	7.8	7.3	7.9	8.0	8.4	9.2	10.3	10.3	10.8	10.5	10.1	10.2	9.9	10.1
Apr.....	5.0	4.5	4.8	4.6	4.6	5.1	5.2	6.0	7.1	7.7	8.2	8.7	9.1	9.0	8.6	9.5	9.2
May	3.7	3.6	3.8	3.7	4.3	4.4	4.8	5.9	6.6	7.3	8.0	8.7	8.9	8.7	8.6	8.3	8.2
June....	3.5	3.4	3.6	3.4	3.1	3.6	3.8	3.9	4.3	4.3	4.6	4.5	4.8	5.5	5.1	6.0	4.8
July	3.0	3.5	3.2	3.0	3.0	2.9	3.6	4.8	5.0	5.7	6.5	7.0	7.4	6.8	6.6	6.7	6.1
Aug	2.6	3.0	2.4	2.7	3.1	3.6	3.4	3.8	4.2	4.5	5.0	5.8	6.5	5.7	6.1	5.8	5.6
Sept	2.3	2.5	2.2	2.1	1.6	2.4	2.5	3.0	3.9	4.0	4.8	5.2	5.1	4.8	4.6	4.8	4.5
Oct.....	5.1	4.9	4.1	4.2	4.4	4.2	4.3	4.8	5.9	6.5	8.1	8.6	8.8	8.7	9.3	9.5	8.9
Nov.....	5.7	5.6	5.6	5.7	6.1	6.4	6.7	6.5	7.9	8.3	8.5	8.8	8.7	9.1	8.5	8.1	7.1
Dec.....	4.6	4.0	3.6	3.8	4.3	4.2	4.5	4.1	4.0	5.1	6.1	7.5	7.2	6.9	7.5	7.1	6.0
Year	4.9	4.8	4.6	4.6	4.7	5.0	5.1	5.5	6.2	6.8	7.4	7.9	8.1	7.9	8.0	8.1	7.6

DETROIT, MICH.

[λ = 42° 20′ N.; Φ = 83° 3′ W.]

Jan.....	8.5	7.9	7.8	7.7	7.6	7.9	7.7	7.7	8.1	8.5	9.5	10.1	10.1	10.1	10.0	9.7	9.6
Feb.....	12.5	12.6	13.1	13.0	†12.4	†12.6	†11.3	†12.7	12.5	13.8	14.4	15.0	14.4	14.9	15.2	14.8	15.2
Mar.....	11.6	11.6	11.6	11.3	11.1	11.3	10.4	10.6	11.6	12.5	13.0	13.7	13.6	14.0	14.3	14.2	13.0
Apr.....	8.8	8.1	8.1	7.8	7.7	9.1	9.1	9.0	9.1	10.1	11.4	12.1	12.9	12.3	12.9	13.4	12.8
May	7.7	7.4	7.0	7.6	7.3	8.0	7.6	7.5	8.1	8.9	9.1	10.3	10.7	10.3	10.5	10.7	11.3
June....	5.4	5.8	5.8	6.2	5.7	6.0	5.3	6.3	7.3	7.8	7.9	9.3	9.4	9.2	9.6	10.1	9.2
July	7.9	7.8	7.3	7.5	7.6	7.9	9.8	7.5	8.6	9.0	9.8	11.6	11.9	11.7	12.1	11.7	11.8
Aug	6.3	5.9	5.9	6.1	6.5	6.9	6.5	6.1	6.7	7.4	7.5	9.3	9.6	9.5	9.2	9.7	10.0
Sept	7.4	7.0	7.2	7.4	7.1	7.3	7.6	7.6	7.6	9.1	9.4	9.8	11.0	11.4	12.4	12.6	11.4
Oct.....	10.5	10.3	10.4	10.2	10.1	10.4	10.0	10.0	10.6	11.4	11.8	13.1	13.7	13.2	12.6	12.8	11.5
Nov.....	13.9	13.4	12.4	12.3	12.6	13.3	13.1	13.3	13.9	15.6	16.4	17.1	16.9	17.0	16.1	15.7	14.9
Dec.....	13.9	14.0	13.3	13.3	12.7	13.2	12.8	12.5	12.7	13.4	14.2	15.2	15.9	15.7	15.4	14.9	14.1
Year	9.5	9.3	9.2	9.2	9.0	9.5	9.1	9.2	9.7	10.6	11.2	12.2	12.5	12.4	12.5	12.5	12.2

† Sums and means for 27 days.

WIND—VELOCITY AND FREQUENCY—Continued.

CHICAGO, ILL.

[h_a = 274 ft.; local time 0h 50m S.] [Seventy-fifth Meridian Time.]

6h	7h	8h	9h	10h	11h	Mid.	Mean.	Max. vel.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Calm.	1891.
15.7	15.1	13.9	14.0	14.2	14.3	15.1	15.0	54	52	79	62	64	54	177	132	120	4	Jan.
21.3	21.4	19.8	19.6	19.1	19.3	19.8	19.9	60	40	79	31	63	85	142	162	70	.....	Feb.
20.5	20.0	19.6	20.6	20.5	20.5	19.9	19.2	56	49	197	104	108	41	108	74	63	.....	Mar.
17.9	17.1	15.7	16.1	14.9	14.6	15.8	16.7	50	89	155	78	75	71	97	98	56	1	Apr.
17.3	17.1	15.2	14.6	15.1	15.0	15.7	15.9	51	77	285	27	89	71	130	43	20	2	May.
14.8	15.6	13.8	13.6	13.3	13.3	13.3	13.8	45	47	204	106	129	64	80	51	36	3	June.
12.8	12.9	11.1	10.8	9.9	10.3	12.1	13.0	50	32	162	59	116	76	150	84	57	8	July.
12.5	12.4	11.2	11.6	12.5	12.9	14.1	12.4	48	61	158	49	93	72	168	54	87	2	Aug.
14.1	13.1	13.1	12.9	13.9	14.3	13.9	14.1	40	25	110	52	103	103	205	40	67	15	Sept.
16.5	16.2	16.0	16.2	16.6	17.2	17.5	17.3	46	82	108	21	84	88	158	105	98	.....	Oct.
18.5	18.9	18.1	18.4	19.3	19.6	20.5	20.0	51	39	109	8	81	112	129	140	102	.....	Nov.
20.4	21.6	20.2	21.7	21.7	22.3	22.1	21.4	57	25	55	5	99	207	214	89	50	.....	Dec.
16.9	16.8	15.6	15.8	15.9	16.1	16.6	16.6	.....	618	1,701	602	1,104	1,044	1,758	1,072	826	35	Year.

CLEVELAND, OHIO.

[h_a = 125 ft.; local time 0h 27m S.]

8.2	8.2	7.7	7.9	7.3	6.8	7.3	7.9	30	30	74	29	102	62	201	82	164	.....	Jan.
8.2	8.1	8.6	8.6	8.7	9.1	9.7	9.7	32	33	37	11	115	67	136	56	201	16	Feb.
9.7	8.3	8.7	9.3	8.8	8.6	8.7	9.3	34	46	162	54	159	45	127	55	96	.....	Mar.
7.3	6.7	6.1	6.6	6.2	6.2	5.9	7.4	30	58	84	16	106	49	143	109	155	.....	Apr.
6.5	5.5	5.0	6.2	6.8	6.0	6.4	7.0	30	112	184	12	52	67	94	21	189	13	May.
6.3	5.3	5.3	4.9	5.2	5.7	5.5	6.1	26	112	232	30	35	97	94	60	54	6	June.
8.2	7.3	6.8	6.8	6.7	6.5	6.0	7.2	30	*169	*88	*18	*57	*74	*95	*68	*139	.....	July.
7.1	5.8	6.0	5.8	5.9	6.2	6.5	7.0	28	141	118	41	35	75	121	80	133	.....	Aug.
6.6	5.2	5.1	5.7	6.4	6.5	6.7	6.9	28	133	76	24	44	112	126	94	110	1	Sept.
8.2	8.0	8.5	8.9	9.0	9.3	9.4	8.5	33	42	47	35	227	75	152	35	131	.....	Oct.
10.3	9.9	9.0	9.2	9.0	8.9	9.1	9.5	41	9	11	10	299	77	239	42	33	.....	Nov.
10.1	10.0	9.9	10.1	10.1	10.3	9.9	10.5	38	1	52	14	273	135	159	50	60	.....	Dec.
8.1	7.4	7.2	7.5	7.5	7.5	7.6	8.1	.....	886	1,165	294	1,504	935	1,687	752	1,465	36	Year.

CINCINNATI, OHIO.

[h_a = 157 ft.; local time 0h 38m S.]

9.2	7.7	7.9	7.4	6.8	6.9	7.0	7.6	27	59	83	52	78	153	109	57	146	7	Jan.
11.0	9.5	8.2	8.2	7.6	8.2	8.7	9.3	30	10	50	88	104	135	85	43	154	3	Feb.
10.3	9.2	8.6	9.1	8.3	7.7	8.3	8.9	26	68	192	113	38	64	123	40	102	4	Mar.
9.2	7.8	7.0	6.5	5.9	5.0	4.8	6.8	35	22	130	73	101	100	109	15	146	24	Apr.
8.4	7.9	6.6	4.9	4.1	3.9	3.7	6.1	26	106	154	60	60	103	42	12	163	44	May.
5.1	5.5	4.9	4.3	3.9	3.4	3.6	4.3	36	68	120	92	135	102	83	12	68	40	June.
5.9	5.5	5.4	4.8	3.8	3.3	3.3	4.9	24	54	63	100	127	100	102	41	110	47	July.
5.6	5.1	4.3	4.0	3.0	3.4	3.0	4.3	34	26	43	63	129	121	141	31	142	48	Aug.
4.6	4.0	3.2	3.1	3.2	3.0	3.0	3.5	26	53	74	70	147	64	97	31	70	114	Sept.
8.4	8.0	7.1	6.6	5.6	5.4	5.6	6.5	33	87	76	52	135	98	87	49	146	14	Oct.
7.5	7.0	6.6	5.7	5.5	5.0	5.5	6.9	28	34	60	37	136	125	110	42	122	54	Nov.
4.9	4.4	4.5	4.5	4.6	5.2	5.0	5.2	30	16	30	33	132	203	60	25	69	176	Dec.
7.5	6.8	6.2	5.8	5.2	5.0	5.1	6.2	.....	603	1,075	833	1,322	1,368	1,148	398	1,438	575	Year.

DETROIT, MICH.

[h_a = 161 ft.; local time 0h 32m S.]

9.5	8.9	8.8	9.0	8.7	9.0	9.2	8.8	33	67	68	13	23	122	236	69	146	.....	Jan.
15.0	13.6	13.6	14.3	13.5	13.2	14.0	†13.7	45	26	50	46	65	25	242	50	168	.....	Feb.
14.2	12.9	11.6	11.5	12.1	12.0	12.6	12.4	42	13	162	128	155	4	110	26	146	.....	Mar.
12.6	10.8	8.4	8.6	7.9	7.8	9.1	10.0	42	44	92	91	88	21	148	59	177	.....	Apr.
11.3	9.8	8.5	8.0	7.8	7.8	7.7	8.8	37	25	212	84	57	9	141	111	104	1	May.
10.2	8.8	7.8	7.4	7.2	7.1	6.7	7.6	28	3	121	163	103	37	157	108	28	.....	June.
11.6	10.7	8.5	6.9	6.7	6.7	7.7	9.1	36	44	95	69	39	29	190	117	161	.....	July.
9.5	8.0	7.0	6.9	6.9	6.8	7.0	7.6	28	21	141	23	127	29	180	118	96	9	Aug.
10.4	7.8	7.6	7.2	6.9	7.0	7.3	8.6	34	63	110	58	55	57	149	90	129	9	Sept.
12.7	10.7	10.5	10.5	10.9	11.7	11.7	11.4	61	91	95	48	56	24	162	91	177	.....	Oct.
14.6	13.5	13.0	12.5	13.3	13.7	14.6	14.3	48	41	68	21	27	28	236	77	222	.....	Nov.
14.0	13.4	13.8	13.4	13.2	13.1	14.0	13.8	42	24	58	24	65	49	394	80	50	.....	Dec.
12.1	10.7	9.9	9.7	9.6	9.7	10.1	10.5	.....	462	1,272	768	860	434	2,345	996	1,604	19	Year.

* Record broken for 36 hours. † For 668 $\frac{4}{12}$ hours.

WIND—VELOCITY AND FREQUENCY—Continued.

DODGE CITY, KANS.

[λ=37° 45′ N.; φ=100° 0′ W.] [Seventy-fifth Meridian Time.]

1891.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.	2h	3h	4h	5h
Jan	10.4	9.9	10.0	9.8	10.5	10.2	10.9	10.3	10.0	10.2	10.8	11.9	12.4	12.4	12.7	11.6	11.3
Feb	12.3	11.0	10.9	11.5	12.1	12.4	12.0	11.0	10.8	11.2	12.5	14.4	15.5	16.1	16.1	16.5	16.5
Mar	14.3	14.1	13.2	12.7	12.7	12.5	11.6	11.6	12.5	13.7	15.0	15.3	15.0	14.6	15.2	14.9	14.8
Apr	11.5	10.6	10.1	10.2	10.7	11.0	9.5	9.8	12.2	14.6	15.8	15.9	14.5	15.7	16.1	16.4	16.4
May	11.9	10.7	10.2	10.2	9.5	9.1	9.8	9.8	11.9	13.7	13.8	14.2	13.9	14.5	14.8	15.0	14.9
June	12.9	11.9	12.4	12.8	12.5	12.2	11.9	11.5	13.5	14.7	15.2	15.2	15.0	16.4	16.0	15.6	15.7
July	10.8	11.0	9.8	11.0	10.1	9.5	9.2	9.3	9.9	11.7	13.3	13.3	12.9	12.7	13.6	13.6	14.0
Aug	9.5	9.0	9.5	8.4	7.6	7.5	7.0	7.3	9.5	11.6	12.3	13.3	13.8	13.6	14.8	14.6	14.5
Sept	11.5	10.5	10.8	10.7	10.5	10.4	10.5	10.3	12.2	16.1	18.4	19.1	19.3	18.8	18.9	18.8	18.9
Oct	9.7	9.5	9.1	9.7	9.1	9.2	9.1	8.0	9.3	11.1	13.4	14.3	14.3	14.2	14.8	14.5	14.2
Nov	9.1	9.0	9.3	9.3	9.4	8.8	9.0	9.1	8.7	10.0	11.6	13.8	14.1	14.6	14.6	14.4	14.2
Dec	11.1	11.0	10.9	10.3	9.9	10.4	10.5	10.6	10.6	10.5	12.6	14.7	15.8	16.9	16.7	16.9	15.9
Year	11.2	10.7	10.5	10.6	10.4	10.3	10.1	9.9	10.9	12.4	13.7	14.6	14.7	15.0	15.4	15.2	15.1

EASTPORT, ME.

[λ=44° 54′ N.; φ=66° 59′ W.]

Jan	12.7	12.9	13.6	13.0	13.2	13.0	12.8	12.7	13.2	12.8	12.5	13.7	14.1	13.4	12.8	12.5	12.6
Feb	12.9	13.9	14.0	12.7	12.5	13.0	12.1	11.7	11.3	12.0	12.3	11.6	10.7	11.0	11.0	11.3	11.6
Mar	13.4	14.3	14.1	14.3	14.2	13.9	14.0	14.6	15.7	16.7	16.7	15.9	15.5	14.6	14.9	14.8	14.3
Apr	6.8	6.7	7.6	7.8	7.3	7.7	9.0	9.8	10.5	10.1	10.7	12.3	12.2	11.7	12.0	10.3	10.4
May	4.7	4.7	4.5	4.7	4.7	5.2	5.3	5.5	6.1	6.2	6.9	7.7	8.1	8.5	8.4	9.1	9.5
June	7.8	7.5	7.2	7.7	7.4	8.2	8.0	8.3	8.2	9.0	9.4	10.4	10.4	9.6	9.1	9.1	9.4
July	4.2	4.1	4.6	4.4	4.4	5.5	6.1	5.6	5.4	6.1	6.8	7.6	8.4	8.9	9.0	8.9	8.2
Aug	5.2	5.0	5.2	5.4	6.0	6.0	5.8	5.8	6.6	7.6	8.8	9.5	9.5	9.5	9.2	7.9	7.5
Sept	6.6	6.0	5.7	5.8	5.4	5.1	5.8	6.1	7.0	7.8	8.3	8.7	9.6	9.5	9.4	8.7	7.8
Oct	9.0	8.5	9.0	9.6	9.7	10.2	10.6	11.0	11.4	11.8	12.0	11.4	11.1	10.6	11.0	10.9	10.2
Nov	9.3	9.4	8.9	9.9	10.4	10.9	10.3	10.8	11.4	11.2	11.7	11.5	11.3	10.9	10.5	10.5	9.6
Dec	13.0	12.6	13.0	13.3	12.5	12.1	11.1	9.6	10.0	11.1	11.8	12.1	11.6	11.8	10.4	10.2	10.0
Year	8.8	8.8	9.0	9.0	9.0	9.2	9.2	9.3	9.7	10.2	10.7	11.0	11.0	10.8	10.6	10.4	10.1

GALVESTON, TEX.

[λ=29° 18′ N.; φ=94° 50′ W.]

Jan	10.8	10.3	10.0	9.5	9.2	9.2	10.1	10.0	10.1	10.8	10.6	10.8	11.1	11.5	11.9	10.6	10.4
Feb	12.3	11.9	12.1	11.5	11.1	11.4	11.9	11.9	12.2	12.3	13.2	13.5	14.8	13.8	13.5	12.5	12.6
Mar	13.3	13.5	13.1	12.8	13.3	13.9	12.7	11.8	11.9	12.1	12.9	13.0	13.8	12.9	13.2	13.0	12.6
Apr	11.5	11.4	11.3	11.5	10.8	11.4	10.5	11.0	11.3	11.3	12.1	12.8	12.8	11.7	12.2	12.5	12.2
May	10.5	10.1	9.7	9.8	9.2	9.1	9.4	9.7	10.4	10.9	10.7	10.8	11.6	11.3	11.7	12.1	11.3
June	9.5	9.2	9.0	9.0	8.6	8.7	8.1	8.2	9.7	10.1	10.5	10.5	10.8	11.4	11.5	11.9	12.1
July	11.1	10.8	10.6	10.2	9.6	10.0	10.3	10.1	10.8	10.1	10.2	9.9	11.3	11.4	11.8	11.4	11.1
Aug	7.5	7.7	7.5	7.3	7.4	7.8	7.8	7.0	8.1	8.8	9.0	9.4	9.7	10.5	11.6	10.9	11.1
Sept	9.8	10.0	10.3	9.9	9.8	10.3	11.3	11.4	11.4	12.3	12.4	11.9	12.7	12.1	12.2	12.3	12.3
Oct	10.7	10.3	9.9	9.4	9.0	9.5	10.2	10.4	10.8	11.0	11.3	10.4	9.9	10.1	10.4	10.4	10.1
Nov	11.3	11.7	11.1	11.5	12.3	12.5	13.2	12.1	12.3	12.1	13.0	12.4	13.2	13.5	13.7	13.6	13.4
Dec	13.3	13.2	13.0	12.3	12.1	12.5	12.7	12.5	12.3	12.6	13.0	12.5	12.9	12.9	12.6	12.7	12.4
Year	11.0	10.8	10.6	10.4	10.2	10.5	10.7	10.5	10.9	11.2	11.6	11.5	12.0	11.9	12.2	12.0	11.8

KANSAS CITY, MO.

[λ=39° 5′ N.; φ=94° 37′ W.]

Jan	8.1	8.2	7.9	7.1	6.6	6.7	6.9	7.3	7.7	7.5	7.3	8.3	9.4	8.9	9.0	9.2	9.2
Feb	10.2	10.0	9.8	9.4	9.1	9.2	8.5	8.3	8.3	9.2	9.5	9.6	10.6	10.4	11.0	11.4	11.0
Mar	9.5	9.3	8.9	9.7	10.1	10.2	11.1	10.6	10.9	11.7	12.2	12.2	13.2	12.7	11.8	11.9	11.3
Apr	8.1	7.5	7.3	7.7	7.8	8.2	8.0	8.2	8.6	9.3	9.7	10.0	11.2	10.2	10.6	10.7	11.3
May	6.2	5.7	5.8	5.8	6.0	6.5	6.4	6.8	7.5	8.5	9.2	9.2	9.6	9.5	9.6	9.8	9.2
June	5.2	5.3	5.5	5.5	5.0	5.0	5.8	5.9	7.1	7.4	8.1	8.5	8.4	8.5	9.2	9.2	9.3
July	5.1	5.3	5.6	5.7	5.5	5.6	6.0	6.3	6.8	7.5	8.0	7.9	9.0	8.7	8.7	9.5	9.5
Aug	6.2	6.1	5.7	6.0	5.6	6.3	6.7	6.4	7.5	8.4	8.5	9.2	9.5	8.8	9.2	9.6	9.8
Sept	6.8	6.9	6.7	6.8	6.9	6.6	6.8	6.6	7.7	8.5	8.7	9.7	10.4	10.5	10.8	10.9	10.7
Oct	8.3	7.7	7.1	7.2	7.5	7.4	7.4	7.3	7.9	8.5	9.5	10.6	11.1	11.0	11.4	11.0	10.8
Nov	10.2	10.1	10.0	9.9	9.1	9.2	8.8	8.6	9.3	9.8	10.6	11.2	11.1	10.7	10.5	11.1	10.2
Dec	10.3	9.6	9.7	9.5	9.4	8.4	9.1	9.4	10.1	10.6	11.9	12.1	12.6	12.3	12.4	12.1	12.1
Year	7.8	7.6	7.5	7.5	7.4	7.4	7.6	7.6	8.3	8.9	9.4	9.9	10.5	10.2	10.4	10.5	10.4

WIND—VELOCITY AND FREQUENCY—Continued.

DODGE CITY, KANS.

[h_a=55 ft.; local time 1h 40m S.] [Seventy-fifth Meridian Time.]

6h	7h	8h	9h	10h	11h	Mid.	Mean.	Max. vel.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Calm.	1891.
10.7	9.3	8.1	8.5	8.5	8.8	8.9	10.3	48	177	103	13	91	38	42	29	250	1	Jan.
16.1	14.1	11.2	11.6	12.9	12.6	12.5	13.1	44	128	97	33	145	116	45	14	94	.....	Feb.
14.1	14.0	12.5	11.7	12.9	14.3	14.5	13.7	37	141	90	20	54	125	84	28	201	1	Mar.
16.7	16.5	15.0	12.9	12.5	11.8	11.8	13.3	58	88	53	12	32	229	73	24	209	.....	Apr.
15.2	17.2	16.5	14.8	12.2	12.2	13.2	12.9	48	62	115	35	86	325	50	6	64	1	May.
16.7	18.0	15.9	13.1	12.2	12.0	12.1	14.0	48	99	49	27	23	370	71	29	48	1	June.
13.8	13.6	13.0	11.3	11.7	10.6	11.0	11.7	47	37	86	52	133	327	38	13	58	.....	July.
14.2	14.2	12.1	10.1	10.8	11.0	10.8	11.1	35	77	75	35	57	365	47	11	74	3	Aug.
19.3	18.6	14.4	12.6	12.7	12.2	12.2	14.5	45	89	65	50	26	385	54	13	35	3	Sept.
13.7	10.7	9.0	9.0	9.2	9.3	9.2	11.0	44	143	73	1	14	221	74	46	169	3	Oct.
12.5	9.9	9.1	9.5	10.0	10.2	10.0	10.8	50	105	38	13	60	139	47	79	238	1	Nov.
13.4	10.3	9.7	9.7	10.5	11.5	11.5	12.2	42	63	41	6	15	217	81	51	264	3	Dec.
14.7	13.9	12.2	11.2	11.3	11.4	11.5	12.4	.....	1,209	888	297	736	2,857	706	343	1,704	20	Year.

EASTPORT, ME.

[h_a=56 ft.; local time 0h 32m F.]

13.0	13.8	14.0	14.1	13.4	12.7	13.2	†13.2	48	159	115	38	77	9	97	101	124	24	Jan.
11.7	11.6	12.9	12.6	13.4	13.0	13.6	12.3	33	94	77	16	51	32	126	71	182	23	Feb.
13.7	13.5	13.5	13.2	13.8	13.3	13.4	14.4	42	120	145	64	48	34	75	43	200	15	Mar.
9.5	7.2	7.6	6.3	6.7	7.3	7.7	9.0	60	93	100	29	37	97	94	150	106	14	Apr.
8.6	6.8	5.9	5.3	4.9	4.5	5.1	6.3	24	94	34	6	33	168	169	115	48	77	May.
8.2	7.9	7.0	7.8	8.1	7.9	7.6	8.4	35	150	129	54	29	157	60	73	57	11	June.
7.8	7.1	6.3	5.9	5.1	4.8	4.7	6.2	26	31	52	1	42	280	194	85	52	7	July.
6.5	5.8	5.6	5.2	5.5	5.4	5.1	6.7	30	83	78	15	13	176	215	57	92	15	Aug.
7.4	6.9	6.7	6.5	6.5	6.4	6.4	7.1	28	98	43	34	12	118	224	90	94	7	Sept.
9.4	9.1	8.9	8.8	9.1	8.9	9.2	10.1	38	186	86	25	20	65	139	102	112	9	Oct.
10.9	10.4	10.1	9.8	9.2	9.1	9.1	10.3	38	56	81	17	36	69	179	97	153	32	Nov.
10.4	11.3	11.8	12.3	12.4	13.1	13.6	11.7	47	52	23	22	54	34	174	194	180	11	Dec.
9.8	9.3	9.2	9.0	9.0	8.9	9.1	9.6	.....	1,216	963	321	452	1,239	1,746	1,178	1,400	245	Year.

GALVESTON, TEX.

[h_a=96 ft.; local time 1h 19m S.]

10.8	11.3	10.6	10.6	10.9	10.5	9.8	10.5	42	52	121	87	185	35	30	20	157	39	Jan.
12.9	12.0	11.6	11.6	12.5	12.6	12.5	12.4	46	107	58	51	160	150	38	28	64	16	Feb.
13.1	13.4	13.2	13.9	13.5	13.7	13.2	13.1	38	158	106	52	167	169	32	16	44	.....	Mar.
12.4	12.2	11.5	11.1	11.9	12.0	12.1	11.7	38	113	49	32	297	130	49	21	29	.....	Apr.
10.9	10.8	10.4	10.2	10.4	10.0	9.9	10.5	30	56	107	20	224	226	77	10	22	2	May.
12.1	11.6	11.0	10.1	9.7	9.5	9.3	10.1	28	23	31	21	289	223	94	19	15	5	June.
11.3	11.4	10.9	10.6	10.5	10.9	10.7	10.7	60	6	63	45	263	88	226	19	32	2	July.
10.6	10.0	9.1	8.1	7.5	7.4	7.3	8.7	31	25	88	65	203	120	190	16	35	2	Aug.
11.7	10.7	9.9	9.6	10.2	10.0	10.4	11.0	40	32	169	124	358	14	2	4	13	4	Sept.
9.7	9.5	9.3	9.7	10.2	10.2	10.5	10.1	33	67	166	73	287	52	25	8	59	7	Oct.
12.2	11.7	11.2	11.1	11.7	11.8	11.6	12.3	40	42	82	101	110	120	87	36	135	7	Nov.
12.4	12.9	13.2	12.7	13.5	13.3	13.4	12.8	40	77	40	38	171	249	25	36	105	3	Dec.
11.7	11.5	11.0	10.8	11.0	11.0	10.9	11.2	.....	758	1,080	709	2,714	1,576	875	233	710	87	Year.

KANSAS CITY, MO.

[h_a=95 ft.; local time 1h 18m S.]

9.2	8.9	8.7	8.6	8.5	8.3	8.6	8.2	32	99	76	60	40	84	201	63	120	1	Jan.
10.7	10.8	10.5	10.5	9.6	9.1	9.3	9.8	32	50	76	31	84	95	79	55	202	.....	Feb.
11.0	9.8	8.8	8.6	8.4	8.2	8.3	10.4	30	140	98	69	73	76	62	45	181	.....	Mar.
11.3	10.9	9.0	7.6	8.2	8.2	8.1	9.1	30	80	74	72	134	55	115	26	160	4	Apr.
9.1	8.6	7.6	6.4	6.2	6.6	6.7	7.6	42	149	169	71	141	99	61	17	30	7	May.
9.4	8.5	7.3	7.0	5.4	5.8	5.4	7.0	24	130	55	51	219	66	40	34	119	6	June.
8.9	8.1	6.7	6.0	5.6	5.4	5.2	6.9	30	118	94	47	215	98	49	14	102	7	July.
9.9	9.1	7.0	6.5	6.5	7.0	6.5	7.6	48	124	61	35	200	119	43	27	125	10	Aug.
9.5	7.9	6.2	6.7	6.9	7.2	7.1	8.1	25	66	36	44	307	145	57	6	51	8	Sept.
10.1	8.9	7.9	7.8	8.2	8.6	8.1	8.8	28	204	14	7	226	117	21	28	119	8	Oct.
9.7	9.0	9.0	9.2	9.5	9.9	10.3	9.9	30	202	40	33	162	75	63	25	118	2	Nov.
10.7	10.4	10.4	10.5	10.1	9.8	9.6	10.5	33	44	73	28	108	194	128	52	117	.....	Dec.
10.0	9.2	8.3	8.0	7.8	7.8	7.8	8.7	.....	1,406	866	548	1,909	1,223	919	392	1,444	53	Year.

* 18 hours missing in January. † 737½ hours.

WIND—VELOCITY AND FREQUENCY—Continued.

KEY WEST, FLA.

[λ = 24° 34′ N.; φ = 81° 49′ W.] [Seventy-fifth Meridian Time.]

1891.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.	2h	3h	4h	5h
Jan.....	10.4	10.2	10.4	10.4	10.8	11.5	10.9	11.1	11.4	11.2	12.2	12.1	11.6	12.3	12.5	11.9	11.7
Feb.....	11.0	11.4	10.7	10.6	10.3	9.3	10.0	10.4	10.6	11.2	11.7	12.2	12.0	12.4	12.0	12.0	11.3
Mar.....	8.9	9.2	8.9	9.8	10.4	9.9	10.5	10.6	10.8	11.3	11.3	11.0	11.0	10.8	10.2	9.9	9.7
Apr.....	11.0	11.5	10.9	11.0	10.6	10.4	11.1	11.4	11.6	12.4	12.5	12.6	13.0	13.4	12.2	12.5	12.6
May	9.8	10.3	10.3	9.7	9.2	8.9	9.6	9.8	10.1	10.3	10.3	10.3	10.5	10.8	10.5	10.7	10.7
June....	5.3	5.4	5.2	5.1	4.8	4.9	5.4	5.8	6.0	6.7	7.1	7.4	7.8	7.6	7.5	7.4	6.8
July	8.4	7.7	7.7	7.2	7.2	6.7	7.1	8.0	9.0	9.7	9.7	10.0	10.1	9.9	9.6	9.4	9.1
Aug	6.8	6.6	5.2	4.9	4.6	4.3	4.5	5.5	5.9	7.1	7.1	7.2	7.3	7.5	7.4	7.6	6.1
Sept	7.7	6.8	6.6	6.2	6.4	6.4	6.6	6.8	7.5	7.6	8.2	8.3	8.3	8.7	7.9	7.6	7.9
Oct.....	12.7	12.8	13.0	12.7	13.3	12.9	13.6	13.6	13.5	13.6	13.5	12.7	13.1	13.2	13.2	12.8	12.9
Nov.....	11.9	12.1	12.5	12.0	12.3	11.9	12.1	12.1	12.3	12.3	12.6	11.6	11.5	12.0	12.0	10.9	11.3
Dec.....	10.4	10.6	10.1	10.0	10.0	9.4	9.8	10.1	10.4	10.8	11.5	11.3	12.7	12.7	12.4	11.7	11.7
Year....	9.5	9.6	9.3	9.1	9.2	8.9	9.3	9.6	9.9	10.4	10.6	10.6	10.7	10.9	10.6	10.4	10.2

MARQUETTE, MICH.

[λ = 46° 34′ N.; φ = 87° 24′ W.]

Jan.....	6.5	6.9	6.8	6.4	6.7	6.3	6.3	6.4	6.2	6.2	6.9	7.7	7.9	7.2	7.4	7.2	7.0
Feb.....	9.9	9.7	9.8	9.8	9.7	9.9	9.9	9.7	9.5	10.1	9.6	9.5	9.6	9.4	9.5	9.4	8.6
Mar.....	6.7	6.7	7.0	7.3	7.2	7.0	6.8	6.4	6.5	7.1	8.1	9.4	9.6	10.0	10.0	9.4	8.3
Apr.....	8.8	8.7	8.8	8.7	8.7	8.2	7.5	8.0	8.9	9.5	10.5	11.4	11.6	11.9	11.3	10.4	9.5
May	11.6	11.4	11.5	11.5	11.3	10.6	10.4	11.2	12.5	12.4	12.8	13.5	14.1	13.7	12.7	11.7	11.7
June....	8.5	8.4	7.2	7.6	6.9	6.3	6.2	6.4	7.7	8.7	9.8	10.2	11.0	10.6	11.0	10.2	10.1
July	7.6	7.9	8.6	8.5	8.4	8.0	8.5	8.6	9.8	10.0	10.5	10.0	11.2	10.7	10.5	9.8	8.7
Aug	7.5	7.5	7.5	7.2	7.3	6.9	7.0	5.8	6.0	6.6	6.7	7.4	8.0	7.5	8.3	8.1	8.0
Sept	10.7	10.6	10.2	10.0	10.6	10.7	10.5	10.7	11.0	11.4	12.1	13.5	14.5	14.7	14.3	13.0	12.0
Oct.....	10.3	10.2	10.0	9.8	9.7	9.9	10.4	10.7	10.1	10.6	11.1	11.1	11.9	11.3	11.1	11.7	10.8
Nov.....	10.7	10.6	10.8	10.6	10.7	10.2	10.3	9.8	10.0	10.2	10.9	11.1	11.3	10.6	10.3	10.6	9.6
Dec.....	12.3	12.5	13.1	13.4	13.2	12.9	12.4	11.3	11.7	11.7	12.7	12.8	13.5	13.7	13.2	12.8	11.7
Year....	9.3	9.3	9.3	9.2	9.2	8.9	8.8	8.8	9.2	9.5	10.1	10.6	11.2	10.9	10.8	10.4	9.7

MEMPHIS, TENN.

[λ = 35° 9′ N.; φ = 90° 3′ W.]

Jan.....	6.5	5.9	6.6	6.6	6.3	6.2	6.2	5.8	7.0	7.6	8.2	8.0	8.6	8.4	8.5	8.3	7.9
Feb.....	8.8	8.4	9.1	9.4	9.4	9.9	9.4	9.1	10.2	10.7	10.4	10.6	10.9	9.4	9.5	9.8	9.2
Mar.....	10.0	9.2	9.5	8.9	8.7	8.2	8.2	8.0	8.6	8.9	8.9	9.8	9.9	9.0	9.3	9.7	9.5
Apr.....	5.9	5.7	5.5	5.9	5.7	5.7	5.9	5.9	6.9	6.8	7.2	8.1	8.8	8.3	8.9	8.6	8.6
May	5.3	5.6	5.7	5.3	4.8	4.8	5.0	5.5	6.1	7.2	7.6	7.8	8.2	7.6	8.4	8.1	8.5
June....	4.4	4.2	4.6	3.7	3.8	4.5	4.3	4.8	5.6	5.9	6.0	6.7	7.4	8.0	7.9	8.7	8.8
July	4.0	3.6	4.1	4.0	3.9	3.9	4.2	4.4	5.5	6.2	6.8	6.6	6.9	6.7	6.8	7.6	7.3
Aug	3.8	4.1	4.0	3.8	3.9	4.0	3.8	4.6	5.5	6.7	6.8	7.4	7.4	7.5	7.2	8.0	7.6
Sept	4.3	3.9	3.7	3.7	4.1	4.0	4.0	4.4	5.2	5.9	5.9	5.7	6.2	6.7	6.9	7.1	6.7
Oct.....	5.9	6.1	5.6	5.5	5.6	5.6	5.4	5.8	6.6	8.0	8.3	8.4	9.5	8.6	8.5	8.2	7.8
Nov.....	7.6	7.3	7.2	7.5	7.3	7.0	7.4	7.4	7.8	8.5	8.6	8.2	8.2	7.6	7.4	7.6	7.9
Dec.....	8.5	8.2	8.2	7.6	7.3	7.8	7.6	7.9	8.5	9.3	9.3	8.7	9.6	8.4	8.6	8.6	8.8
Year....	6.2	6.0	6.2	6.0	5.9	6.0	6.0	6.1	7.0	7.6	7.8	8.0	8.5	8.0	8.2	8.4	8.2

NEW ORLEANS, LA.

[λ = 29° 58′ N.; φ = 90° 4′ W.]

Jan.....	8.8	9.0	8.9	8.9	9.0	8.8	9.1	8.7	8.5	8.9	10.1	10.6	10.8	10.2	10.7	10.8	10.2
Feb.....	12.5	12.0	11.3	10.7	11.1	10.7	10.9	11.1	11.1	11.7	12.2	13.1	14.0	13.2	13.6	13.3	13.6
Mar.....	8.4	8.5	9.3	9.4	8.8	8.8	9.5	9.5	10.8	11.9	12.3	11.9	12.2	12.2	13.0	13.2	12.5
Apr.....	8.0	7.3	6.5	6.5	6.3	6.3	6.7	7.2	8.9	9.7	10.8	11.3	11.9	11.8	12.2	12.3	11.7
May	7.9	7.1	6.8	6.5	5.7	6.2	5.8	6.3	7.5	8.3	7.7	8.1	9.3	9.1	9.8	10.3	10.8
June....	5.2	4.7	4.6	4.1	4.2	4.0	5.3	5.9	7.3	7.8	8.1	8.4	9.6	8.7	9.3	9.9	9.4
July *...	5.4	5.5	5.9	5.4	5.5	5.5	5.7	6.3	8.2	9.0	9.3	10.1	10.3	10.2	10.1	9.7	8.9
Aug	5.7	5.4	5.3	5.1	4.7	4.7	4.8	5.0	6.5	7.3	7.6	7.6	8.9	8.5	8.8	8.7	7.9
Sept	6.1	5.5	5.0	5.2	5.5	5.8	5.8	6.9	8.1	9.6	9.8	10.0	11.1	11.4	11.3	11.3	10.1
Oct.....	8.1	7.2	7.2	6.5	6.8	6.5	7.4	7.2	7.7	8.6	9.1	10.2	10.5	10.2	10.7	10.4	9.4
Nov.....	8.9	8.8	8.8	8.7	8.5	9.2	9.7	9.4	9.8	10.2	10.1	11.4	11.0	10.7	11.0	11.0	11.2
Dec.....	8.5	8.5	8.9	8.5	7.8	8.3	9.2	9.0	9.3	9.8	10.1	10.6	11.6	11.6	11.7	11.4	10.6
Year....	7.8	7.5	7.4	7.1	7.0	7.1	7.5	7.7	8.6	9.4	9.8	10.3	10.9	10.6	11.0	11.0	10.5

* 164 hours missing from the frequency record for July.

WIND—VELOCITY AND FREQUENCY—Continued.

KEY WEST, FLA.

[h_a = 50 ft.; local time 0h 27m S.] [Seventy-fifth Meridian Time.]

6h	7h	8h	9h	10h	11h	Mid.	Mean.	Max. vel.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Calm.	1891.
11.8	11.4	11.2	11.2	11.3	12.0	11.1	11.4	32	124	231	107	180	32	22	5	43	.....	Jan.
10.3	9.8	11.1	11.2	11.2	11.3	11.0	11.0	44	45	106	151	317	13	12	3	25	.....	Feb.
9.0	8.6	8.6	8.2	8.7	8.9	8.6	9.8	33	34	134	84	299	26	25	18	122	2	Mar.
12.1	12.1	12.1	12.5	12.1	11.0	10.1	11.8	38	125	94	274	34	19	57	23	94	.....	Apr.
11.0	11.4	11.1	10.6	10.7	10.7	10.1	10.3	36	108	137	171	26	1	5	40	252	4	May.
6.7	7.1	5.9	6.1	6.0	5.4	5.4	6.2	24	94	68	136	296	97	15	4	9	1	June.
8.5	8.6	8.2	8.2	8.6	8.4	8.1	8.5	24	2	.....	272	350	87	6	1	26	.....	July.
6.4	7.0	7.0	7.3	7.1	6.9	6.7	6.4	30	49	71	222	238	71	36	12	41	4	Aug.
7.3	6.9	6.6	7.2	7.6	8.3	7.5	7.4	31	20	126	343	168	36	13	2	12	.....	Sept.
12.4	12.5	12.8	12.7	12.8	14.1	13.2	13.1	36	76	355	135	21	32	42	21	62	.....	Oct.
10.9	11.7	12.1	12.3	12.5	12.8	11.9	12.0	37	78	389	110	80	13	16	5	29	.....	Nov.
10.2	9.9	10.3	10.3	10.3	10.9	10.5	10.8	35	48	273	194	128	19	1	7	71	3	Dec.
9.7	9.8	9.8	9.8	9.9	10.1	9.5	9.9	.....	803	1,984	2,199	2,137	446	250	141	786	14	Year.

MARQUETTE, MICH.

[h_a = 95 ft.; local time 0h 49m S.]

6.7	7.5	7.3	7.0	6.7	6.8	6.8	6.9	38	76	84	6	23	60	38	90	241	126	Jan.
8.0	8.2	7.6	7.4	8.3	8.6	8.9	9.2	38	72	63	42	49	50	31	106	212	47	Feb.
8.2	6.0	5.6	5.9	6.2	6.5	6.6	7.4	36	27	108	90	83	80	55	103	159	39	Mar.
9.1	9.3	8.5	8.2	8.5	8.7	8.5	9.3	49	82	77	69	73	32	66	79	206	36	Apr.
10.9	9.9	8.5	7.8	8.3	10.4	11.6	11.3	36	143	73	44	41	59	153	84	146	1	May.
10.0	9.5	8.2	6.4	6.8	7.2	8.0	8.5	33	122	126	47	47	120	70	78	106	4	June.
7.9	7.3	5.4	5.6	6.7	7.3	7.5	8.5	29	173	78	42	54	78	94	76	136	13	July.
6.8	6.1	5.1	4.8	4.9	6.1	6.9	6.8	46	92	197	35	46	68	81	101	105	19	Aug.
10.9	9.2	9.1	10.2	11.0	11.0	11.4	11.4	42	56	35	17	59	115	215	82	141	.....	Sept.
10.1	8.9	8.7	9.4	9.3	10.0	9.9	10.3	34	181	27	24	42	149	97	127	96	1	Oct.
10.3	10.1	10.8	11.5	11.9	11.7	11.4	10.7	40	59	9	5	40	122	99	173	210	3	Nov.
10.4	11.6	11.9	12.1	12.1	12.4	11.7	12.4	39	16	11	30	68	234	121	145	118	1	Dec.
9.1	8.6	8.1	8.0	8.4	8.9	9.1	9.4	.....	1,099	888	451	625	1,167	1,120	1,244	1,876	290	Year.

MEMPHIS, TENN.

[h_a = 116 ft.; local time 1h 0m S.]

7.1	6.8	6.8	7.2	6.9	6.6	6.7	7.1	35	91	99	30	56	67	88	174	131	8	Jan.
8.8	8.1	7.9	7.8	7.9	7.9	8.7	9.2	30	163	24	23	101	86	45	87	143	.....	Feb.
9.3	9.0	7.7	8.2	8.5	9.0	9.9	9.0	38	188	98	38	60	35	84	154	87	.....	Mar.
8.3	7.7	6.1	5.5	5.7	5.9	6.4	6.8	35	163	40	24	46	183	138	44	75	7	Apr.
7.8	7.2	5.3	4.3	4.4	4.4	5.2	6.3	26	114	199	22	47	93	99	20	144	6	May.
8.7	7.6	6.7	4.5	4.4	4.0	4.0	5.8	42	44	110	61	131	116	131	95	23	9	June.
7.2	6.0	5.0	4.4	4.6	4.7	4.3	5.4	24	106	66	85	115	86	86	60	124	16	July.
7.0	5.8	4.3	4.2	3.6	3.7	3.5	5.3	35	131	57	57	21	69	204	34	165	6	Aug.
7.0	5.7	4.3	4.2	4.1	4.5	4.4	5.1	25	149	120	141	89	72	3	8	126	12	Sept.
7.0	5.1	4.4	5.1	5.2	5.3	5.5	6.5	24	112	76	26	118	99	108	5	188	12	Oct.
7.2	6.9	7.1	6.9	7.6	7.7	8.0	7.6	36	82	103	81	125	97	62	66	84	20	Nov.
8.2	7.9	8.2	9.7	9.6	10.1	10.0	8.6	36	54	77	20	297	130	36	94	34	2	Dec.
7.8	7.0	6.2	6.0	6.0	6.2	6.4	6.9	.....	1,397	1,069	608	1,206	1,133	1,084	841	1,324	98	Year.

NEW ORLEANS, LA.

[h_a = 120 ft.; local time 1h 0m S.]

9.0	8.3	8.2	8.6	9.4	8.6	8.8	9.3	35	84	69	71	170	63	25	96	144	22	Jan.
13.1	12.1	10.5	10.4	10.4	11.5	11.4	11.9	34	55	129	55	149	160	68	11	45	.....	Feb.
12.0	10.8	9.5	9.1	9.0	8.9	8.5	10.4	36	88	153	58	92	122	68	64	86	13	Mar.
11.7	11.6	9.5	9.0	8.3	8.2	7.9	9.2	26	94	47	60	254	118	39	28	80	.....	Apr.
10.6	10.0	8.4	7.3	8.1	8.1	8.0	8.1	33	123	76	34	91	142	165	59	52	2	May.
9.8	9.6	7.8	7.1	6.8	5.9	5.5	7.0	30	11	35	75	170	195	156	62	12	4	June.
8.8	7.9	7.2	6.2	6.0	5.8	5.6	7.4	36	11	15	70	126	121	162	56	15	4	July.
7.6	7.4	6.3	5.5	5.3	5.4	6.0	6.5	28	181	40	59	89	119	140	63	40	13	Aug.
10.2	9.0	6.9	6.3	5.7	5.9	6.4	7.9	48	140	206	193	122	27	2	20	3	7	Sept.
8.2	6.4	6.4	8.1	8.3	8.0	7.7	8.2	28	197	188	87	51	15	69	40	83	14	Oct.
10.6	9.3	9.1	10.0	9.8	10.1	10.1	9.9	36	115	180	41	169	64	62	42	47	.....	Nov.
9.7	9.1	9.2	9.8	9.3	8.8	9.1	9.6	36	94	224	122	135	61	21	13	69	5	Dec.
10.1	9.3	8.2	8.1	8.0	7.9	7.9	8.8	.....	1,193	1,362	925	1,618	1,207	977	554	676	84	Year.

WIND—VELOCITY AND FREQUENCY—Continued.

NEW YORK CITY.

[λ=40° 43′ N.; φ=74° 0′ W.] [Seventy-fifth Meridian Time.]

1891.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.	2h	3h	4h	5h
Jan	12.2	12.1	11.7	11.9	12.2	11.6	11.8	11.5	12.7	13.6	13.6	13.6	14.3	13.8	13.4	13.4	13.2
Feb	12.4	11.6	10.7	10.2	10.7	10.8	10.2	10.6	11.9	11.9	13.3	13.8	14.0	13.7	14.0	13.6	13.4
Mar	16.1	15.2	14.7	14.9	14.9	14.6	15.0	15.3	15.7	15.9	15.5	15.1	15.5	14.8	14.7	14.3	14.3
Apr	10.7	10.1	9.2	9.1	8.8	9.5	10.5	10.8	12.2	13.0	13.2	13.5	14.1	14.1	14.9	15.3	14.9
May	10.8	9.8	10.4	9.8	10.4	10.2	10.8	10.7	11.3	11.6	11.8	11.5	12.1	13.0	13.3	13.8	13.2
June	8.6	8.2	8.0	7.7	7.2	7.5	7.9	8.3	8.9	8.9	8.8	9.0	9.9	10.3	11.2	11.2	10.6
July	8.3	7.5	7.9	7.9	7.7	7.8	8.0	8.4	9.5	10.3	10.3	11.5	12.0	11.8	11.8	10.9	11.3
Aug	7.7	6.9	7.2	6.9	7.3	7.7	7.7	7.9	8.6	7.9	8.0	8.4	8.5	9.4	10.1	9.9	10.2
Sept	6.9	6.7	6.6	6.6	6.2	6.9	6.2	6.9	8.5	8.9	9.4	9.8	10.1	10.0	9.8	9.6	10.5
Oct	11.8	11.2	11.3	11.4	11.5	11.6	11.2	11.6	12.3	13.9	14.3	13.7	14.1	13.8	14.5	15.0	14.0
Nov	11.3	11.4	11.0	10.7	10.7	11.9	12.3	11.8	12.1	12.2	12.2	13.1	14.2	14.4	14.4	14.0	13.3
Dec	12.5	11.6	11.8	12.6	12.7	12.7	12.8	12.5	13.0	13.5	14.4	15.1	15.1	14.9	14.8	13.8	14.8
Year	10.8	10.2	10.0	10.0	10.0	10.2	10.4	10.5	11.4	11.8	12.1	12.3	12.8	12.8	13.1	12.9	12.8

PHILADELPHIA, PA.

[λ=39° 57′ N.; φ=75° 9′ W.]

Jan	11.4	11.4	11.3	11.2	11.0	11.5	11.5	11.8	12.6	13.0	13.7	13.8	14.1	13.4	14.1	13.9	12.5
Feb	10.8	10.2	10.0	10.5	11.2	11.0	11.3	11.5	11.5	13.2	14.3	14.9	15.3	15.7	15.5	14.6	13.8
Mar	14.8	14.0	14.1	14.0	13.4	13.2	13.4	13.7	14.9	15.8	15.9	16.2	15.5	14.6	14.7	15.3	15.0
Apr	9.5	8.8	8.3	7.6	8.3	8.2	8.7	10.1	11.8	12.8	13.0	13.5	14.7	14.7	14.3	14.9	14.6
May	10.5	9.5	9.7	10.1	9.6	9.2	9.4	10.5	10.9	11.3	11.6	12.0	12.9	13.2	13.0	13.0	13.5
June	9.2	9.1	8.6	8.6	9.3	9.0	9.1	9.0	9.5	9.6	9.8	10.4	10.8	11.0	11.7	12.2	12.7
July	7.4	7.1	7.1	7.4	7.5	7.7	8.7	9.4	9.7	10.0	10.8	11.3	11.6	11.3	11.8	11.4	11.9
Aug	6.8	6.5	5.9	5.9	6.7	6.7	7.2	7.8	8.5	8.9	8.9	9.2	9.6	10.9	10.5	10.3	9.1
Sept	5.6	5.4	5.4	5.5	5.7	6.2	7.0	7.2	8.6	9.0	9.0	8.9	9.1	8.8	9.4	9.5	9.3
Oct	10.0	10.2	10.0	9.5	10.3	10.3	10.2	10.7	11.8	13.2	14.1	13.5	13.5	13.9	14.2	13.8	11.9
Nov	10.2	9.8	10.3	10.1	10.5	10.2	10.5	10.3	11.5	11.7	12.8	12.9	13.4	13.4	13.8	13.7	12.5
Dec	10.5	10.3	9.3	10.0	9.6	9.9	9.4	10.4	10.5	11.6	12.4	13.7	14.1	13.5	14.0	13.2	11.9
Year	9.7	9.4	9.2	9.2	9.4	9.4	9.7	10.2	11.0	11.7	12.2	12.5	12.9	12.9	13.1	13.0	12.4

PITTSBURG, PA.

[λ=40° 32′ N.; φ=80° 2′ W.]

Jan	5.2	5.0	5.1	5.4	5.3	5.7	5.6	6.5	6.1	7.0	7.0	6.7	6.8	7.1	6.5	6.2	6.5
Feb	7.4	7.4	7.0	7.2	7.1	6.7	7.2	7.1	7.0	8.0	8.3	7.7	8.2	9.1	8.7	8.4	7.9
Mar	6.6	6.5	6.6	6.9	6.8	6.5	6.7	7.1	8.4	8.7	8.7	8.2	8.5	8.7	8.7	8.2	8.2
Apr	4.1	4.4	3.9	3.8	4.0	3.8	4.2	5.1	6.0	6.4	7.2	6.7	7.7	7.8	7.6	7.4	7.1
May	3.1	3.1	2.6	2.5	3.2	2.9	3.7	4.5	5.5	6.2	6.7	6.3	7.2	7.4	7.5	6.8	6.7
June	2.9	3.3	3.1	3.2	3.2	3.5	3.9	4.7	5.1	5.5	5.8	6.1	6.9	6.7	6.4	6.5	6.8
July*	3.4	2.8	2.7	3.1	2.8	3.2	3.5	4.3	5.0	5.9	6.5	6.1	7.0	7.4	7.1	6.9	6.6
Aug	3.8	3.7	3.3	3.1	3.0	2.9	3.1	3.6	3.7	4.2	4.9	5.0	6.4	5.8	5.8	5.8	5.9
Sept	2.0	1.9	1.9	1.9	2.1	2.1	2.5	3.2	3.3	4.2	5.2	5.2	6.0	6.0	6.6	6.4	6.0
Oct	5.0	4.4	4.3	4.4	4.3	4.5	4.7	5.2	5.2	5.7	6.5	7.2	7.0	7.0	7.5	7.5	6.7
Nov	6.3	5.8	5.6	5.9	5.2	5.4	5.8	5.7	6.3	6.7	7.7	7.8	8.5	8.7	8.8	8.5	8.1
Dec	5.9	6.5	6.5	6.4	6.2	5.9	5.8	6.2	7.3	7.0	7.2	7.4	8.4	8.9	8.6	7.9	7.7
Year	4.6	4.6	4.4	4.5	4.4	4.4	4.7	5.3	5.7	6.3	6.8	6.7	7.4	7.6	7.5	7.2	7.0

PORTLAND, OREGON.

[λ=45° 32′ N.; φ=122° 43′ W.]

Jan	4.8	4.2	4.6	4.5	4.1	4.4	4.6	4.5	4.8	5.0	5.5	5.7	6.6	6.9	6.8	6.6	6.5
Feb	5.2	5.3	5.4	5.2	4.8	4.9	4.5	4.4	4.4	4.7	4.8	5.1	6.2	6.3	6.5	7.0	6.8
Mar	4.3	3.7	4.2	4.5	3.8	3.8	3.8	3.4	3.7	4.0	4.1	4.4	5.2	5.2	5.7	6.1	6.8
Apr	4.5	4.0	3.9	4.3	3.8	4.0	4.3	3.5	3.8	3.6	4.3	5.3	6.4	6.6	7.0	7.6	8.3
May	6.2	5.3	5.2	4.3	4.1	4.3	3.8	4.0	3.4	4.0	5.0	5.4	5.6	5.3	5.0	5.8	6.2
June	4.6	3.9	3.4	2.6	2.4	2.8	2.8	2.6	2.9	3.9	5.1	5.5	6.7	6.7	6.8	6.9	7.0
July	7.2	6.3	5.3	4.4	4.7	4.4	3.6	3.0	2.8	3.8	5.1	6.0	6.7	5.9	6.4	6.4	6.4
Aug	4.7	4.3	3.8	2.9	2.5	2.5	2.7	2.6	2.5	2.7	3.6	5.2	6.5	5.8	5.5	5.8	5.9
Sept	3.6	3.6	3.8	3.8	4.2	4.1	4.2	4.1	3.9	3.4	4.1	4.8	6.3	6.6	6.7	6.5	6.3
Oct	4.6	5.2	4.7	5.0	4.8	5.1	4.8	4.3	4.3	4.6	4.4	5.5	5.9	5.8	6.3	6.9	6.3
Nov	4.3	4.0	4.4	4.1	4.6	4.3	4.8	5.2	5.1	5.1	6.0	5.9	6.9	7.1	7.2	6.9	6.8
Dec	6.9	6.5	7.4	7.5	6.7	6.4	6.8	6.5	6.9	6.8	7.5	7.7	8.7	8.5	8.6	9.3	9.8
Year	5.1	4.7	4.7	4.4	4.2	4.2	4.2	4.0	4.0	4.3	5.0	5.5	6.5	6.4	6.5	6.8	6.9

*Four hours' record missing.

WIND—VELOCITY AND FREQUENCY—Continued.

NEW YORK CITY.

[h_a = 200 ft. local time 0h 4m F.] [Seventy-fifth Meridian Time.]

6h	7h	8h	9h	10h	11h	Mid.	Mean.	Max. vel.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Calm.	1891.
12.7	11.7	11.3	11.4	11.8	12.1	12.2	12.5	44	118	50	43	18	149	142	79	145	.....	Jan.
13.1	13.8	13.1	12.9	12.9	13.0	13.3	12.5	38	28	92	30	65	103	98	87	169	.....	Feb.
14.8	15.8	15.5	15.6	15.8	15.9	15.9	15.2	45	50	260	20	43	48	86	37	200	.....	Mar.
14.6	14.5	13.3	12.7	12.4	11.2	11.0	12.2	37	14	64	35	71	74	169	91	199	.....	Apr.
13.0	13.4	12.1	11.6	11.2	11.6	10.7	11.6	38	50	114	22	135	92	119	37	175	.....	May.
10.5	9.8	8.8	9.5	8.7	8.5	8.9	9.0	35	29	108	28	99	103	157	28	168	.....	June.
11.0	10.5	9.3	9.1	8.1	8.4	8.1	9.5	31	32	65	48	69	231	145	43	119	1	July.
10.0	8.9	8.6	7.9	8.1	8.4	8.6	8.4	27	48	96	35	69	239	108	47	99	3	Aug.
10.4	8.9	7.8	7.5	6.9	6.9	7.0	8.1	28	63	43	18	23	301	87	50	135	.....	Sept.
14.3	13.6	14.5	14.0	13.3	12.5	13.0	13.0	42	54	117	16	51	66	149	43	248	.....	Oct.
13.0	13.4	13.2	12.7	12.2	11.8	11.6	12.5	47	59	80	32	130	63	127	73	156	.....	Nov.
14.8	14.2	13.7	13.6	13.7	13.2	13.5	13.6	53	26	56	15	40	123	260	72	152	.....	Dec.
12.7	12.4	11.8	11.5	11.3	11.1	11.2	11.5	.....	571	1,145	342	804	1,592	1,647	690	1,965	4	Year.

PHILADELPHIA, PA.

[h_a = 184 ft. local time 0h 0m .]

11.9	11.1	10.5	11.0	11.0	11.6	11.1	12.1	48	11	117	20	60	39	172	26	286	13	Jan.
12.6	12.6	12.8	12.7	13.2	11.9	11.9	12.6	36	16	87	24	74	52	166	13	240	.....	Feb.
14.0	14.2	14.0	14.4	14.1	13.6	13.4	14.4	37	15	272	38	47	9	95	23	245	.....	Mar.
13.5	12.6	11.3	10.6	10.2	9.1	9.5	11.3	36	22	51	34	66	39	177	69	271	.....	Apr.
13.0	11.9	11.4	11.0	10.8	10.7	10.4	11.2	34	33	148	40	52	32	204	39	195	1	May.
12.7	12.1	10.0	9.4	9.4	9.2	9.2	10.1	31	41	95	55	51	26	225	18	209	.....	June.
11.6	10.7	9.2	8.6	8.2	7.5	7.2	9.4	31	41	88	60	127	60	172	30	166	.....	July.
8.5	8.0	7.1	7.8	8.0	7.9	7.3	8.1	32	26	138	53	61	55	185	42	184	.....	Aug.
9.0	7.9	7.9	7.9	7.5	6.9	6.2	7.6	26	20	106	48	56	84	207	36	161	2	Sept.
11.3	11.4	11.3	10.9	10.7	10.2	10.0	11.5	36	56	150	51	31	9	147	34	266	.....	Oct.
11.6	11.4	11.4	11.7	10.7	10.3	10.1	11.5	42	73	80	49	64	51	112	29	261	1	Nov.
11.2	10.9	10.3	10.3	10.9	9.8	9.7	11.1	42	5	79	27	56	37	249	58	233	.....	Dec.
11.7	11.2	10.6	10.5	10.4	9.9	9.7	10.9	.....	359	1,411	499	745	484	2,111	417	2,717	17	Year.

PITTSBURG, PA.

[h_a = 138 ft. local time 0h 20m S.]

6.0	5.5	5.9	5.6	5.4	5.7	5.4	6.0	28	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jan.
7.4	6.8	7.1	7.2	7.2	7.1	6.9	7.5	27	.....	.....	.....	.....	.....	.....	.....	.....	.....	Feb.
8.2	7.4	7.1	7.0	6.8	6.7	7.0	7.5	42	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mar.
6.6	6.0	5.0	5.1	4.8	4.5	4.0	5.5	30	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr.
6.7	5.5	4.7	4.0	3.6	3.4	3.4	4.9	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	May.
6.2	5.5	4.5	3.8	3.5	3.1	2.9	4.7	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	June.
5.8	5.5	4.6	4.4	3.5	3.4	3.4	4.8	20	58	29	24	67	18	193	110	231	10	July.
5.7	5.3	4.5	4.3	3.9	3.4	3.5	4.4	18	93	27	94	27	71	92	86	239	15	Aug.
5.7	5.1	3.8	3.7	3.0	2.7	2.5	3.9	38	167	5	73	39	82	99	59	150	46	Sept.
6.1	6.0	5.5	5.2	5.0	4.7	5.0	5.6	18	90	42	84	70	57	101	90	190	11	Oct.
7.8	7.4	7.3	7.6	6.8	6.7	6.2	7.0	28	66	12	45	148	122	116	66	145	.....	Nov.
7.0	6.7	6.0	6.5	6.5	6.3	6.2	6.9	28	60	10	27	78	172	148	109	139	1	Dec.
6.6	6.1	5.5	5.4	5.0	4.8	4.7	5.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Year.

PORTLAND, OREGON.

[h_a = 92 ft. local time 3h 11m S.]

6.9	6.3	6.0	5.2	5.5	5.3	5.2	5.4	29	18	137	54	59	323	68	11	55	19	Jan.
6.9	7.0	7.0	6.1	5.8	5.6	5.4	5.6	30	30	111	46	82	280	67	5	28	23	Feb.
7.0	7.1	6.9	6.3	6.0	5.4	5.3	5.0	28	143	134	76	41	192	50	24	55	29	Mar.
8.2	8.1	7.4	6.3	5.0	4.3	4.5	5.4	27	110	31	21	33	286	116	36	61	26	Apr.
5.9	6.8	6.8	7.5	7.9	6.6	5.7	5.4	24	284	26	4	21	182	66	30	101	30	May.
6.8	7.0	6.9	6.6	5.9	4.9	4.7	5.0	24	184	12	10	43	226	107	19	77	42	June.
6.9	7.2	7.8	8.6	8.4	7.4	7.3	5.9	22	432	20	13	22	57	30	1	141	28	July.
5.8	6.0	5.8	6.1	5.3	5.2	5.2	4.5	22	321	22	11	20	119	65	11	105	70	Aug.
6.5	6.5	6.2	5.9	5.1	4.2	3.6	4.9	22	213	39	14	32	224	47	8	65	78	Sept.
6.2	6.4	5.3	4.9	4.1	4.7	4.6	5.2	25	223	66	32	81	229	23	14	46	30	Oct.
6.5	6.4	5.4	4.9	4.0	3.9	4.5	5.3	31	60	99	62	55	327	43	17	28	29	Nov.
9.1	8.0	6.9	6.9	6.9	6.5	6.3	7.5	44	10	63	26	27	495	41	7	50	25	Dec.
6.9	6.9	6.5	6.3	5.8	5.3	5.2	5.4	.....	2,028	760	369	516	2,940	723	183	812	429	Year.

WIND—VELOCITY AND FREQUENCY—Continued.

ST. LOUIS, MO.

[λ=38° 38′ N.; φ=90° 12′ W.] [Seventy-fifth Meridian Time.]

1891.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.	2h	3h	4h	5h
Jan	10.7	10.3	10.7	10.5	10.3	10.1	10.2	9.3	9.5	9.8	10.2	11.3	11.9	11.6	11.7	11.8	11.9
Feb	13.9	13.8	13.4	12.7	13.1	12.9	12.4	12.5	13.5	13.8	14.1	14.1	15.4	14.5	15.3	15.3	14.2
Mar	13.7	12.8	12.1	12.1	11.6	11.9	12.4	12.5	12.8	13.1	13.7	14.2	15.2	15.6	16.3	16.0	15.7
Apr	10.7	10.1	10.3	10.6	11.0	10.8	11.8	11.2	11.9	12.8	14.2	14.3	14.1	14.4	14.7	15.0	15.0
May	8.7	8.6	8.4	7.9	7.8	8.8	9.8	9.0	10.4	10.6	10.4	10.5	11.6	11.0	11.5	11.6	12.1
June	8.6	7.9	7.1	6.9	7.2	7.6	7.0	7.5	8.7	9.1	9.3	10.0	10.8	11.0	11.9	12.2	11.2
July	8.4	7.9	7.5	7.0	7.2	7.2	7.2	7.7	8.5	9.3	9.7	10.7	10.6	10.3	11.2	10.6	10.3
Aug	7.5	7.1	7.3	7.5	7.7	8.3	8.0	7.8	8.3	8.4	9.1	10.3	10.6	10.7	11.0	10.3	10.5
Sept	8.3	7.4	6.6	6.1	6.2	6.2	5.7	5.8	6.1	7.7	9.1	10.5	10.4	10.7	10.6	10.9	10.6
Oct	10.6	10.8	10.0	10.2	10.0	10.7	9.5	9.2	9.6	11.2	11.9	12.5	12.3	12.2	12.9	13.2	13.0
Nov	11.7	11.9	12.5	11.9	12.3	13.1	12.7	12.6	13.0	13.3	13.1	13.7	14.1	13.2	13.7	13.6	14.0
Dec	13.5	12.7	13.0	12.6	12.6	12.7	13.2	12.5	13.3	13.6	13.8	14.2	15.2	15.3	16.2	16.5	15.8
Year	10.5	10.1	9.9	9.7	9.8	10.0	10.0	9.8	10.5	11.1	11.6	12.2	12.7	12.5	13.1	13.1	12.9

ST. PAUL, MINN.

[λ=44° 58′ N.; φ=93° 3′ W.]

Jan	5.6	5.3	5.2	5.4	5.4	5.4	5.0	5.3	5.4	5.8	6.5	7.0	7.7	8.0	8.2	7.8	7.5
Feb	7.3	6.9	6.5	6.4	6.1	5.7	5.9	5.6	6.1	6.0	6.3	7.4	8.2	8.9	9.4	10.6	10.6
Mar	6.1	6.3	6.4	6.0	5.7	5.3	5.4	5.3	5.7	6.7	7.8	8.2	8.8	9.2	10.1	10.3	9.9
Apr	6.0	6.1	6.2	6.0	6.8	6.0	6.0	6.0	7.2	9.0	9.7	11.0	11.0	11.3	11.5	10.8	11.3
May	4.9	4.6	4.1	4.6	4.1	4.4	4.7	5.2	5.7	6.9	8.0	8.6	8.8	9.1	9.3	9.6	9.2
June	5.9	5.4	5.3	5.1	5.7	5.8	5.7	6.2	7.4	8.2	9.2	10.0	10.9	10.1	10.5	10.2	9.5
July	4.4	4.6	4.8	4.5	4.4	4.3	4.3	5.0	6.0	6.7	7.7	8.7	9.7	9.6	10.2	9.6	9.5
Aug	4.7	4.4	4.5	4.1	4.6	4.5	4.4	4.6	6.2	6.6	7.6	8.0	8.9	8.2	8.7	9.1	9.5
Sept	5.1	5.1	4.3	4.5	4.2	4.1	4.2	4.3	5.3	6.3	7.6	8.8	9.6	10.4	10.8	10.8	10.2
Oct	6.4	6.0	5.9	5.5	5.5	5.6	5.8	5.6	6.2	7.1	7.6	8.3	9.0	8.5	9.1	8.8	8.3
Nov	5.8	5.4	5.4	5.4	5.1	5.2	5.5	5.1	5.3	5.4	6.2	7.6	8.2	8.0	8.5	8.5	8.3
Dec	6.1	6.1	6.1	6.6	6.7	6.6	6.8	6.9	6.6	6.8	7.1	7.9	7.8	7.6	7.8	7.9	7.1
Year	5.7	5.5	5.4	5.3	5.4	5.2	5.3	5.4	6.1	6.8	7.6	8.5	9.0	9.1	9.5	9.5	9.2

SALT LAKE CITY, UTAH.

[λ=40° 46′ N.; φ=111° 54′ W.]

Jan	2.2	2.2	2.2	1.9	2.1	1.6	1.7	1.8	2.0	2.3	2.1	2.4	3.4	4.0	4.8	5.4	5.8
Feb	4.1	4.2	4.5	4.4	4.6	4.4	4.6	4.8	4.6	4.9	5.5	6.5	7.1	9.1	10.4	9.9	10.4
Mar	3.0	2.9	3.1	3.0	2.6	2.7	2.7	2.9	2.8	3.0	3.5	4.5	5.5	6.8	7.9	8.6	8.3
Apr	3.3	3.0	3.4	3.3	3.4	2.6	2.7	2.6	2.8	3.3	4.6	6.8	7.3	8.8	9.1	9.1	9.0
May	3.8	3.9	3.2	3.4	3.7	3.5	3.5	3.1	3.1	3.1	3.9	4.8	7.1	9.1	9.5	10.1	10.5
June	4.4	4.4	4.1	3.4	3.2	3.2	3.3	2.9	2.5	3.0	4.5	6.4	7.7	9.4	10.0	9.9	9.2
July	4.1	3.7	3.1	2.8	2.5	2.7	2.4	2.8	2.0	2.5	3.3	4.3	6.1	7.1	7.4	7.5	8.2
Aug	5.0	5.0	4.9	4.8	4.1	4.7	4.3	4.4	3.7	3.4	3.3	4.2	5.7	6.6	6.9	6.8	7.9
Sept	5.3	5.3	4.9	5.8	5.0	5.7	4.4	5.3	5.3	5.6	5.9	6.4	7.7	8.5	10.0	10.3	10.8
Oct	3.7	4.1	4.0	3.9	3.7	3.4	4.2	4.1	4.6	4.0	3.7	3.3	4.9	6.3	8.2	9.4	10.1
Nov	3.3	3.7	3.6	3.1	3.2	3.0	3.2	3.1	3.4	4.0	3.9	3.6	4.6	6.3	8.1	8.1	7.8
Dec	4.4	4.3	4.6	4.7	4.7	5.1	5.0	5.1	4.7	5.3	5.8	5.5	6.4	7.9	9.0	8.9	7.9
Year	3.9	3.9	3.8	3.7	3.6	3.6	3.5	3.6	3.5	3.7	4.2	4.9	6.1	7.5	8.4	8.7	8.8

SAN DIEGO, CAL.

[λ=32° 43′ N.; φ=117° 10′ W.]

Jan	3.7	3.6	3.4	3.6	3.4	2.9	2.8	3.3	3.2	3.2	2.9	2.5	3.0	4.0	4.9	6.8	7.8
Feb	4.5	4.5	4.0	3.8	4.3	4.2	3.9	4.8	5.0	5.3	5.5	5.0	5.6	6.4	7.6	8.1	9.4
Mar	4.0	4.3	3.9	3.8	4.0	4.2	3.7	4.3	4.2	3.8	3.0	3.5	5.2	6.3	7.4	8.4	9.2
Apr	2.0	1.8	2.0	2.0	2.6	3.0	2.9	3.2	3.3	2.5	2.7	3.5	5.8	7.5	9.0	9.9	10.1
May	2.9	2.9	3.1	3.3	3.1	3.1	3.9	3.4	3.0	3.3	3.6	4.4	6.5	7.8	8.8	9.3	9.7
June	1.6	1.6	2.0	2.1	2.4	2.6	2.2	2.2	2.0	2.1	3.2	4.9	7.0	7.8	8.6	9.0	8.8
July	1.4	1.4	1.4	1.0	0.8	1.1	1.5	1.7	2.0	1.8	2.3	3.7	5.7	6.7	7.8	8.4	8.4
Aug	.9	1.0	.9	.8	1.1	1.0	.8	1.1	1.1	1.5	1.9	3.4	5.5	7.4	8.4	8.5	8.5
Sept	2.4	2.7	2.5	2.1	2.6	2.4	2.4	2.2	2.7	2.7	2.7	4.0	6.0	7.7	8.9	9.4	9.2
Oct	2.2	2.1	2.2	2.1	2.1	2.0	1.7	2.2	2.2	2.1	1.8	2.4	3.7	5.9	7.4	7.8	8.4
Nov	2.9	2.7	2.0	2.3	2.6	2.5	2.6	2.7	2.6	2.6	2.0	1.7	3.4	5.2	6.4	8.1	8.5
Dec	4.7	5.0	4.9	5.3	4.8	4.5	4.2	4.4	4.4	4.8	4.7	4.4	4.4	5.0	6.6	7.8	9.2
Year	2.8	2.8	2.7	2.7	2.8	2.8	2.7	3.0	3.0	3.0	3.0	3.6	5.2	6.5	7.6	8.5	8.9

WIND—VELOCITY AND FREQUENCY—Continued.

ST. LOUIS, MO.

[h_a=210 ft.; local time 1h 1m S.] [Seventy-fifth Meridian Time.]

6h	7h	8h	9h	10h	11h	Mid.	Mean.	Max. vel.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Calm.	1891.
11.1	10.4	9.7	10.0	10.3	10.4	9.9	10.6	48	42	91	57	91	35	172	99	153	4	Jan.
14.4	13.8	12.0	12.1	12.9	13.8	13.1	13.6	44	72	48	23	87	51	173	49	169	.....	Feb.
16.5	15.7	13.8	13.5	13.1	12.9	13.4	13.8	37	244	32	90	54	57	98	96	73	.....	Mar.
14.8	15.1	12.6	11.6	11.4	11.2	10.5	12.5	40	84	78	41	117	69	167	59	104	1	Apr.
12.6	12.1	10.3	9.4	8.8	8.7	9.1	10.0	36	287	56	20	66	85	131	17	80	2	May.
11.1	10.8	9.7	8.9	9.3	9.2	8.6	9.2	59	124	21	55	45	155	199	44	74	3	June.
11.7	11.7	10.2	8.7	8.2	8.2	8.6	9.1	35	130	106	13	41	86	185	77	104	2	July.
10.6	9.0	7.9	7.9	7.6	8.2	8.6	8.8	38	162	88	10	35	98	227	44	77	3	Aug.
11.0	9.5	8.3	8.4	8.8	9.1	9.5	8.5	45	107	67	37	94	58	296	13	37	11	Sept.
12.6	11.0	11.0	11.3	10.6	10.5	10.6	11.1	30	147	45	27	63	115	150	53	142	2	Oct.
14.2	12.8	12.9	13.3	12.7	12.5	12.8	13.0	37	150	59	33	79	96	142	56	105	.....	Nov.
15.7	14.7	14.0	14.3	14.6	14.2	14.3	14.1	45	38	88	28	89	172	187	83	59	.....	Dec.
13.0	12.2	11.0	10.8	10.7	10.7	10.8	11.2	.....	1,587	779	434	861	1,077	2,127	690	1,177	28	Year.

ST. PAUL, MINN.

[h_a=120 ft.; local time 1h 12m S.]

7.2	6.9	6.3	6.4	5.7	5.8	6.0	6.3	30	13	16	34	267	26	80	55	228	25	Jan.
9.8	9.3	8.6	8.6	8.2	8.1	7.8	7.7	25	12	44	31	212	23	117	84	141	8	Feb.
9.4	8.1	6.9	6.7	6.7	6.5	6.4	7.2	36	21	140	86	152	15	93	44	187	6	Mar.
11.0	10.3	8.3	7.2	7.5	7.4	6.8	8.3	33	25	58	71	173	57	65	85	172	14	Apr.
8.3	7.7	6.5	5.4	5.2	5.2	5.3	6.5	24	28	55	73	196	93	63	65	125	46	May.
9.7	9.6	8.4	7.1	6.1	5.8	6.2	7.7	36	47	119	75	285	21	48	78	44	3	June.
9.4	8.8	7.6	5.8	4.8	4.4	4.6	6.7	25	33	56	53	217	42	90	99	144	10	July.
8.7	8.0	6.2	5.5	5.0	4.7	4.8	6.3	30	49	23	105	208	49	50	73	178	9	Aug.
9.7	7.6	6.6	6.0	5.8	5.4	5.5	6.8	29	11	4	43	291	106	60	109	52	44	Sept.
7.6	6.8	6.6	6.3	5.9	6.1	6.4	6.9	29	6	7	28	220	53	93	136	133	68	Oct.
7.5	6.4	6.6	6.7	6.1	6.2	5.9	6.4	24	17	1	59	179	25	57	215	114	53	Nov.
6.5	5.9	5.7	6.4	6.0	5.6	5.8	6.7	28	15	8	44	299	76	132	108	37	25	Dec.
8.7	8.0	7.0	6.5	6.1	5.9	6.0	7.0	.....	277	531	702	2,699	586	948	1,151	1,555	311	Year.

SALT LAKE CITY, UTAH.

[h_a=90 ft.; local time 2h 27m S.]

5.5	4.7	3.7	2.6	2.3	2.4	2.3	3.0	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jan.
9.6	9.8	7.6	6.4	6.5	5.7	4.7	6.4	36	.....	.....	.....	.....	.....	.....	.....	.....	.....	Feb.
7.5	6.5	5.2	3.5	3.2	3.1	3.5	4.4	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mar.
7.9	7.3	6.7	5.3	5.2	4.3	3.6	5.2	36	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr.
9.1	9.0	8.4	6.1	4.4	5.3	4.2	5.7	30	.....	.....	.....	.....	.....	.....	.....	.....	.....	May.
8.9	7.7	7.7	6.6	4.8	5.5	5.0	5.7	36	.....	.....	.....	.....	.....	.....	.....	.....	.....	June.
8.3	7.3	6.4	6.0	5.4	6.2	4.7	4.9	28	.....	.....	.....	.....	.....	.....	.....	.....	.....	July.
9.1	8.0	7.2	5.6	4.9	5.2	4.6	5.4	32	.....	.....	.....	.....	.....	.....	.....	.....	.....	Aug.
10.2	8.9	7.9	6.2	5.4	6.0	5.2	6.8	38	29	89	50	254	77	44	28	149	.....	Sept.
9.3	7.7	5.5	3.5	3.4	3.6	3.9	5.1	26	71	28	20	218	71	34	55	243	4	Oct.
7.0	5.8	3.8	3.5	4.1	4.2	4.2	4.5	26	56	34	54	243	48	51	43	180	11	Nov.
7.5	7.2	6.0	5.8	5.5	5.2	4.4	5.9	35	32	33	40	241	38	110	51	176	23	Dec.
8.3	7.5	6.3	5.1	4.6	4.7	4.2	5.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Year.

SAN DIEGO, CAL.

[h_a=85 ft.; local time 2h 49m S.]

8.8	8.8	6.6	4.5	4.0	4.0	3.5	4.4	30	197	75	14	48	19	60	118	148	65	Jan.
9.6	9.3	7.9	6.2	4.8	4.9	5.0	5.8	30	61	46	35	72	52	94	162	130	20	Feb.
9.2	8.8	7.9	6.7	4.9	4.0	3.6	5.3	24	39	28	2	10	19	153	250	202	41	Mar.
9.7	9.0	8.2	6.9	5.1	3.6	2.3	4.9	24	13	.....	.....	.....	2	44	306	278	77	Apr.
9.3	8.5	8.1	6.6	6.0	4.8	3.6	5.4	25	6	2	15	2	20	85	429	158	27	May.
8.5	7.9	7.4	5.9	4.3	3.3	2.6	4.6	20	5	9	7	14	107	190	259	39	90	June.
8.2	7.4	6.6	5.6	4.4	3.5	2.3	4.0	22	25	11	6	3	70	198	256	72	103	July.
8.1	7.6	6.8	5.9	4.0	2.8	1.6	3.8	21	19	3	.....	12	47	108	301	98	156	Aug.
8.7	7.9	7.5	5.7	3.8	3.2	2.8	4.7	24	51	20	3	7	45	83	321	136	54	Sept.
8.4	7.5	6.1	4.1	2.7	2.1	2.3	3.8	21	98	39	3	10	18	60	251	174	91	Oct.
7.9	7.0	5.0	3.0	2.6	2.5	2.3	3.8	17	102	101	14	23	27	116	140	158	39	Nov.
8.7	7.7	6.5	4.8	4.0	4.4	4.7	5.4	30	110	150	63	40	41	62	154	105	19	Dec.
8.8	8.1	7.0	5.5	4.2	3.6	3.0	4.7	.....	726	484	162	241	467	1,253	2,947	1,698	782	Year.

WIND—VELOCITY AND FREQUENCY—Continued.

SAN FRANCISCO, CAL.

[λ = 37° 48′ N.; φ = 122° 26′ W.] [Seventy-fifth Meridian Time.]

1891.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.	2h	3h	4h	5h
Jan	3.2	3.0	2.7	3.4	3.4	3.4	3.5	3.5	3.8	3.7	3.7	4.1	4.6	4.9	5.6	6.0	7.0
Feb	8.9	8.0	7.9	8.0	7.3	6.8	6.8	6.6	6.5	5.9	6.2	7.7	9.1	8.7	9.4	9.7	10.6
Mar	7.5	7.2	6.3	5.5	5.3	5.7	5.8	5.9	5.1	5.1	5.3	5.3	6.3	6.8	7.9	9.2	10.9
Apr	7.9	6.6	6.0	5.8	5.1	4.5	4.4	4.6	4.6	4.8	5.7	6.9	8.3	8.7	10.6	12.2	13.8
May	9.4	8.5	8.2	7.5	7.3	6.4	7.0	6.1	6.4	7.0	7.2	7.7	9.4	10.2	13.5	14.9	16.0
June	10.1	8.7	8.4	7.7	6.7	6.1	6.0	5.2	5.0	5.2	5.7	7.1	8.6	10.5	13.3	15.6	17.9
July	11.8	9.5	8.7	8.8	7.7	7.4	7.2	6.6	6.5	6.6	7.3	7.5	9.9	11.5	14.4	16.1	17.3
Aug	9.7	8.5	7.6	7.4	7.4	6.9	6.9	6.3	6.1	5.6	6.4	6.4	8.0	9.0	12.0	14.0	15.9
Sept	8.9	7.7	7.2	6.5	5.9	5.6	5.7	5.5	6.3	6.1	7.1	6.5	7.6	8.0	10.4	12.7	14.3
Oct	6.4	5.4	5.0	4.8	4.6	4.5	4.2	3.9	4.2	4.1	4.7	4.9	5.7	6.3	7.9	9.1	11.4
Nov	3.3	2.6	2.8	2.7	2.6	2.5	2.4	2.8	2.4	2.3	3.0	3.5	4.1	4.2	4.5	5.5	6.8
Dec	5.5	5.5	5.6	5.9	5.8	5.9	6.4	5.7	5.4	5.0	5.0	6.2	7.1	7.0	7.4	7.5	8.1
Year	7.7	6.8	6.4	6.2	5.8	5.5	5.5	5.2	5.2	5.1	5.6	6.2	7.4	8.0	9.7	11.0	12.5

SANTA FE, N. MEX.

[λ = 35° 41′ N.; φ = 105° 57′ W.]

Jan	5.0	4.8	4.6	4.6	5.6	5.6	5.6	6.6	6.4	6.5	6.3	7.4	9.2	9.4	9.5	8.1	7.5
Feb	5.8	5.9	6.6	7.0	6.8	6.8	6.6	6.7	7.5	6.8	8.0	7.9	8.8	8.9	9.4	9.6	9.4
Mar	6.4	5.6	5.6	5.2	5.4	5.4	5.2	4.9	4.3	5.7	7.9	9.4	10.5	11.7	12.2	12.0	11.8
Apr	7.8	7.7	7.3	7.5	7.2	6.2	6.1	5.6	5.9	7.4	9.4	9.9	10.7	11.4	12.0	11.2	11.8
May	6.5	6.6	5.8	5.6	4.6	4.6	4.4	3.8	3.9	4.8	6.2	7.4	9.0	8.9	9.7	11.6	11.4
June	8.1	7.7	6.6	5.5	5.9	5.7	5.1	5.2	5.0	6.9	8.2	8.4	9.3	9.6	11.0	10.6	11.2
July	7.1	7.2	6.6	5.5	4.9	4.6	3.9	3.5	3.8	5.2	6.5	7.7	8.9	8.9	9.4	10.0	10.1
Aug	6.5	6.0	6.0	5.2	5.1	5.0	4.4	4.5	4.4	4.9	6.7	7.5	8.4	9.1	8.9	9.4	8.8
Sept	6.9	6.5	6.4	5.7	5.5	5.1	5.1	4.4	4.3	3.9	5.3	5.9	6.6	7.6	8.9	9.8	10.7
Oct	5.9	5.5	5.2	5.0	4.3	4.1	4.3	4.3	4.4	4.2	4.4	5.8	7.0	7.1	7.7	7.9	8.5
Nov	5.7	5.5	5.5	5.3	5.7	6.3	7.1	7.0	6.7	6.1	7.4	9.9	11.3	11.5	11.2	10.9	10.0
Dec	6.7	7.6	6.6	6.2	6.3	6.5	7.3	7.7	7.5	8.0	8.3	8.6	9.0	9.5	10.2	10.8	10.0
Year	6.5	6.4	6.1	5.8	5.6	5.5	5.4	5.4	5.3	5.9	7.0	8.0	9.1	9.5	10.0	10.2	10.1

SAVANNAH, GA.

[λ = 32° 5′ N.; φ = 81° 5′ W.]

Jan	7.3	6.6	6.7	6.8	6.5	6.0	5.7	5.5	6.4	7.3	8.1	8.5	9.6	9.6	9.7	9.4	9.1
Feb	7.7	7.4	7.0	7.3	7.6	8.0	7.6	7.4	7.8	8.9	10.4	11.2	11.3	11.4	11.9	11.2	10.4
Mar	7.5	7.4	7.5	6.7	6.6	6.8	7.0	8.0	9.7	10.6	10.2	10.6	10.6	10.7	10.8	11.3	10.4
Apr	5.2	4.9	5.1	4.8	4.4	5.4	5.4	5.5	7.6	8.6	9.3	9.8	10.2	10.6	10.9	11.0	10.8
May	5.3	5.1	5.2	5.2	5.8	5.5	5.8	6.2	7.2	7.3	7.6	8.8	8.8	9.6	9.5	9.8	9.4
June	4.8	4.7	4.8	4.7	4.1	4.6	5.7	6.3	7.0	7.4	7.7	8.2	9.1	9.9	10.3	9.8	10.7
July	5.4	5.5	5.4	5.5	5.8	5.5	5.7	6.2	6.8	6.8	6.7	7.4	8.1	9.0	9.4	9.6	9.4
Aug	4.8	4.8	5.1	4.6	4.3	4.5	4.5	4.8	5.8	6.1	6.4	7.1	7.5	7.2	7.4	8.4	8.0
Sept	3.1	3.7	3.7	3.7	4.1	4.2	4.4	4.9	5.5	6.6	7.7	8.2	8.6	8.4	8.8	8.9	8.5
Oct	7.4	6.8	7.3	7.3	7.5	7.6	7.4	8.0	8.2	8.5	8.6	8.9	9.3	9.6	9.7	9.8	9.0
Nov	5.7	5.8	5.9	5.7	5.9	6.3	6.0	6.2	6.9	7.8	8.3	8.4	8.2	8.7	8.6	9.2	8.3
Dec	6.9	6.6	7.1	6.7	6.3	6.7	6.2	6.3	7.2	8.2	8.6	8.7	9.0	8.9	9.2	9.1	8.2
Year	5.9	5.8	5.9	5.8	5.7	5.9	6.0	6.3	7.2	7.8	8.3	8.8	9.2	9.5	9.7	9.8	9.4

WASHINGTON, D. C.

[λ = 38° 54′ N.; φ = 77° 3′ W.]

Jan	6.2	5.7	5.9	6.3	6.1	5.7	6.6	6.2	6.3	8.5	9.7	10.2	10.9	10.8	10.9	10.3	8.2
Feb	6.5	7.0	6.7	7.3	7.1	6.8	7.3	7.2	8.6	10.2	10.8	11.5	12.2	11.8	11.4	11.0	10.0
Mar	9.0	8.4	8.0	7.8	7.1	6.7	6.6	7.4	8.6	10.1	10.0	10.3	11.6	10.9	11.1	11.0	10.6
Apr	4.8	4.7	4.0	4.6	4.5	4.2	4.7	6.5	8.4	8.8	9.5	10.4	11.4	11.5	11.7	12.1	11.5
May	4.5	4.5	4.7	4.5	4.6	4.9	5.4	6.6	7.7	8.7	8.7	8.9	8.9	9.1	8.7	8.8	8.8
June	4.1	3.7	3.1	3.2	3.3	3.7	4.6	5.0	5.7	6.5	7.0	7.5	7.7	8.0	7.7	8.1	7.5
July	4.3	3.8	3.9	3.8	3.6	3.8	4.3	5.0	5.9	7.0	7.4	7.8	7.7	7.8	7.6	7.6	6.9
Aug	2.8	2.9	3.1	3.0	3.2	3.1	4.0	4.9	4.8	5.3	6.0	6.6	6.9	6.7	6.9	6.5	6.0
Sept	2.9	2.8	2.6	2.7	2.6	2.6	2.4	3.1	4.0	5.3	6.1	6.5	7.2	7.4	7.2	6.8	6.2
Oct	4.9	4.8	5.2	5.5	4.9	5.0	5.4	5.4	7.1	8.9	9.0	9.3	9.9	10.5	9.9	8.7	7.4
Nov	5.4	5.5	4.9	4.9	4.5	4.9	5.1	5.1	5.9	7.0	7.9	8.0	9.8	9.6	9.5	8.8	8.6
Dec	5.8	5.5	5.0	4.7	4.9	4.4	4.6	4.7	5.2	6.9	8.2	8.4	8.7	8.5	8.5	7.8	7.0
Year	5.1	4.9	4.8	4.9	4.7	4.6	5.1	5.6	6.5	7.8	8.4	8.8	9.4	9.4	9.3	9.0	8.2

WIND—VELOCITY AND FREQUENCY—Continued.

SAN FRANCISCO, CAL.

[h_a = 109 ft.; local time 3^h 10^m S.] [Seventy-fifth Meridian Time.]

6h	7h	8h	9h	10h	11h	Mid.	Mean.	Max. vel.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Calm.	1891.
7.5	7.3	5.9	5.0	4.7	3.7	3.7	4.5	28	186	98	35	117	49	78	92	67	22	Jan.
11.4	10.9	10.9	9.9	10.0	10.2	9.6	8.6	48	89	56	22	135	90	120	100	56	4	Feb.
12.2	13.7	13.1	11.6	10.3	8.9	8.3	7.9	26	45	24	4	32	94	198	277	66	4	Mar.
14.6	15.6	14.6	14.1	12.3	10.6	9.5	8.8	28	3	16	4	73	81	231	289	16	7	Apr.
16.5	16.8	15.7	15.7	13.1	11.4	10.6	10.5	28	4	5	1	23	53	344	312	.....	2	May.
18.3	18.6	17.9	17.4	16.2	14.4	12.3	11.0	32	4	9	2	22	24	208	435	4	12	June.
18.5	19.1	17.5	17.3	15.6	14.0	13.1	11.7	36	.....	5	1	6	31	474	222	3	2	July.
17.5	18.0	17.1	16.9	15.9	13.2	11.0	10.6	34	.....	8	.....	5	24	400	297	1	9	Aug.
16.0	16.1	15.2	14.5	12.6	11.4	10.2	9.5	29	4	8	2	28	52	272	311	31	12	Sept.
13.0	13.5	13.0	12.4	10.4	8.9	6.7	7.3	24	31	43	9	41	43	209	299	52	17	Oct.
7.4	8.0	7.0	7.0	5.5	5.0	4.3	4.3	24	104	66	12	66	32	100	207	72	61	Nov.
8.3	8.4	7.2	6.7	6.4	5.9	6.0	6.4	34	130	72	17	113	72	46	136	146	12	Dec.
13.4	13.8	12.9	12.4	11.1	9.8	8.8	8.4	.....	600	410	109	661	645	2,680	2,977	514	164	Year.

SANTA FE, N. MEX.

[h_a = 36 ft.; local time 2^h 4^m S.]

6.7	4.8	4.1	4.0	4.1	4.5	4.6	6.1	28	146	180	134	73	52	100	43	15	1	Jan.
8.7	7.9	6.6	5.3	5.4	5.4	5.4	7.2	36	122	89	69	43	101	119	95	34	.....	Feb.
10.9	10.1	9.2	7.3	6.7	5.6	6.1	7.7	40	149	95	56	59	92	164	82	46	1	Mar.
11.8	11.3	10.5	8.5	7.6	8.1	8.0	8.8	32	132	76	92	95	98	96	89	42	.....	Apr.
12.2	10.8	9.1	8.4	8.1	7.3	6.4	7.4	30	59	82	118	120	115	138	89	23	.....	May.
11.5	11.8	11.0	9.8	7.5	8.5	8.8	8.3	31	67	82	68	164	95	169	62	13	.....	June.
9.8	10.1	10.5	10.1	7.6	6.8	7.5	7.3	36	94	86	141	127	69	81	100	45	1	July.
9.1	10.0	9.3	7.9	7.2	7.1	7.0	7.0	32	106	126	126	163	73	55	70	25	.....	Aug.
10.3	9.7	8.3	8.0	8.0	8.2	8.8	7.1	40	60	117	98	135	115	72	96	27	.....	Sept.
8.1	7.4	4.4	3.9	5.0	5.4	5.8	5.7	27	48	87	57	241	74	145	64	26	2	Oct.
9.1	6.6	4.7	5.4	5.6	5.8	6.1	7.4	32	208	120	54	139	56	80	42	16	5	Nov.
9.8	7.8	6.1	6.9	7.4	7.9	8.2	8.0	37	146	210	131	17	10	45	166	18	1	Dec.
9.8	9.0	7.8	7.1	6.7	6.7	6.9	7.3	.....	1,337	1,350	1,144	1,376	950	1,264	998	330	11	Year.

SAVANNAH, GA.

[h_a = 70 ft.; local time 0^h 24^m S.]

8.1	7.5	7.2	7.4	7.5	7.3	7.8	7.6	30	7	52	37	43	115	149	164	172	5	Jan.
10.1	8.5	8.0	7.6	7.4	7.4	7.7	8.8	33	48	95	75	91	83	166	40	72	2	Feb.
9.1	8.5	7.6	7.4	7.0	7.3	7.5	8.6	35	64	155	92	35	77	72	53	195	1	Mar.
9.9	8.0	6.5	6.0	5.8	5.2	5.5	7.3	24	12	58	98	145	156	86	66	94	5	Apr.
8.9	7.8	6.4	5.7	5.5	5.3	5.2	7.0	30	85	93	121	124	76	102	58	81	4	May.
10.9	9.3	7.0	6.7	5.5	5.3	4.7	7.1	26	30	99	99	124	125	159	67	15	2	June.
8.3	6.9	5.5	6.4	5.7	5.7	5.9	6.8	24	36	99	18	66	142	228	119	35	1	July.
8.0	6.9	5.5	4.8	4.1	4.2	4.6	5.8	38	73	19	11	103	198	208	86	45	1	Aug.
7.1	5.4	4.5	4.5	3.9	3.2	3.5	5.6	26	115	214	132	199	26	7	8	16	3	Sept.
7.8	7.1	6.4	6.1	6.2	6.4	6.8	7.8	26	146	190	57	46	23	50	86	145	1	Oct.
7.5	7.1	6.4	6.6	6.6	6.3	6.1	7.0	26	94	143	70	85	65	62	96	104	1	Nov.
7.1	6.6	6.3	6.5	6.9	6.8	6.9	7.4	36	109	168	87	99	78	57	34	111	1	Dec.
8.6	7.5	6.4	6.3	6.0	5.9	6.0	7.2	.....	819	1,385	897	1,160	1,164	1,346	877	1,085	27	Year.

WASHINGTON, D. C.

[h_a = 67 ft.; local time 0^h 8^m S.]

7.3	8.1	7.3	6.8	6.5	6.3	6.1	7.6	42	102	51	30	37	170	73	97	179	5	Jan.
8.5	9.6	8.1	7.9	7.4	6.7	7.0	8.7	36	97	47	27	35	220	55	34	152	5	Feb.
10.3	10.0	8.6	8.9	8.7	9.1	8.9	9.2	34	181	187	66	36	72	28	59	115	.....	Mar.
9.4	7.7	6.1	5.4	5.9	5.9	4.7	7.4	28	80	42	33	76	156	25	58	244	6	Apr.
8.1	7.7	6.2	5.6	5.4	4.5	4.4	6.7	26	93	128	61	54	124	78	65	130	11	May.
6.5	5.4	4.6	3.8	3.7	4.1	4.2	5.4	27	70	138	27	57	202	10	36	161	19	June.
6.8	5.7	4.8	4.5	4.3	3.6	3.8	5.5	34	115	111	39	40	119	59	79	172	10	July.
5.5	4.4	3.8	3.4	3.4	3.5	3.1	4.6	34	122	110	47	31	159	75	31	150	19	Aug.
4.7	3.4	2.7	2.7	2.7	2.9	3.0	4.2	18	91	112	42	29	273	35	39	70	29	Sept.
5.9	5.5	5.5	5.5	5.7	5.5	5.0	6.7	34	87	116	45	33	112	67	41	229	14	Oct.
7.2	6.7	5.9	5.0	5.0	5.3	5.0	6.5	54	95	48	34	90	144	51	31	216	11	Nov.
5.8	5.5	6.0	5.9	5.5	5.4	5.4	6.2	35	17	24	38	45	245	87	83	187	18	Dec.
7.2	6.6	5.8	5.4	5.4	5.2	5.0	6.6	.....	1,150	1,114	489	563	1,996	643	653	2,005	147	Year.

WIND—VELOCITY AND FREQUENCY—Continued.

WILMINGTON, N. C.

[λ=34° 14′ N.; φ=77° 57′ W.] [Seventy-fifth Meridian Time.]

1891.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.	2h	3h	4h	5h
Jan	7.4	7.5	7.6	7.3	7.5	7.3	7.2	7.4	8.3	8.9	9.4	9.1	9.8	10.4	10.7	10.8	10.5
Feb	10.8	11.0	9.8	9.8	9.3	8.9	8.9	8.9	10.2	11.2	12.2	13.5	13.4	13.4	13.1	12.3	11.8
Mar	8.5	8.7	8.7	8.2	8.2	7.2	7.2	8.0	9.4	9.4	9.7	9.9	10.8	11.8	12.6	12.6	12.3
Apr	4.8	4.8	4.9	4.4	4.5	4.6	5.0	5.9	7.9	8.2	8.5	8.8	9.5	10.0	11.3	11.2	11.4
May	5.5	4.9	4.5	4.9	5.0	5.4	5.6	6.6	7.4	8.1	8.2	8.4	8.9	9.9	11.0	12.1	11.7
June	6.0	5.7	5.4	5.4	4.8	5.2	5.8	6.6	7.1	7.9	8.3	7.9	8.6	10.1	10.1	11.2	11.8
July	5.9	5.9	5.6	6.1	5.3	5.4	5.9	7.1	7.5	7.9	8.3	8.3	9.1	9.7	10.2	10.5	10.7
Aug	5.5	5.0	4.6	5.1	5.1	4.8	4.6	6.1	6.4	7.3	6.8	6.7	7.1	8.5	8.7	9.4	9.5
Sept	4.4	4.9	4.7	5.4	5.2	5.3	5.3	5.3	6.2	6.8	7.3	7.6	7.8	8.1	8.9	8.6	8.0
Oct	6.8	6.9	6.7	6.7	6.9	7.3	7.2	7.5	9.0	9.3	9.5	8.9	9.4	9.3	9.5	9.8	8.9
Nov	7.6	7.3	6.9	7.2	7.6	7.5	7.8	7.4	9.0	10.7	11.3	10.5	10.8	10.4	10.0	9.9	8.6
Dec	7.8	7.4	6.9	7.1	7.3	7.1	6.9	7.3	7.8	8.5	9.4	10.9	11.2	9.8	10.3	10.1	9.4
Year	6.8	6.7	6.4	6.5	6.4	6.3	6.4	7.0	8.0	8.7	9.1	9.2	9.7	10.1	10.5	10.7	10.4

WIND—VELOCITY AND FREQUENCY—Continued

WILMINGTON, N. C.

[h_a=88 ft.; local time 0^h 12^m S.] [Seventy-fifth Meridian Time.]

6^h	7^h	8^h	9^h	10^h	11^h	Mid.	Mean.	Max. vel.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Calm.	1891.
8.5	7.5	7.7	8.0	7.6	7.5	7.7	8.4	43	73	62	58	31	113	147	112	145	3	Jan.
9.9	9.5	9.8	10.2	10.9	9.4	9.4	10.7	45	70	177	49	13	47	211	25	70	10	Feb.
11.0	8.9	8.5	9.2	7.9	8.8	8.9	9.4	41	92	194	72	46	40	59	29	174	38	Mar.
10.4	8.1	5.8	5.9	5.2	5.0	5.0	7.1	29	29	67	95	95	171	70	49	88	56	Apr.
10.5	8.7	6.9	6.5	6.7	6.0	5.6	7.4	29	44	121	135	65	154	84	22	110	9	May.
11.6	10.3	7.7	6.5	5.9	5.8	5.6	7.6	40	50	106	165	42	175	44	99	30	9	June.
9.2	7.9	7.3	6.7	6.6	7.0	6.1	7.5	34	88	89	49	43	269	115	81	6	4	July.
8.6	6.7	6.3	6.2	6.4	6.3	5.3	6.5	26	58	10	33	40	210	233	100	55	5	Aug.
6.8	5.6	4.6	4.8	4.7	5.2	4.7	6.1	24	73	229	135	71	90	24	7	85	6	Sept.
6.8	6.0	6.1	5.9	6.3	6.5	6.0	7.6	28	141	235	45	22	3	95	71	115	17	Oct.
7.1	7.4	7.6	8.0	7.7	7.6	8.1	8.5	36	129	185	63	48	54	90	55	87	9	Nov.
7.5	7.6	7.5	7.0	7.2	7.5	7.9	8.2	44	100	159	68	38	85	117	69	99	9	Dec.
9.0	7.8	7.2	7.1	6.9	6.9	6.7	7.9	.....	947	1,634	967	564	1,411	1,289	719	1,064	175	Year.

WIND—VELOCITY AND FREQUENCY—Continued.

ASSINABOINE, FORT, MONT.

[λ = 48° 32′ N.; φ = 109° 42′ W.] [Seventy-fifth Meridian Time.]

1892.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.	2h	3h	4h	5h
Jan.....	11.3	10.4	10.8	11.7	11.4	11.0	11.1	10.4	9.9	10.1	9.9	11.5	13.8	13.7	14.6	14.1	13.5
Feb.....	7.0	7.1	6.9	7.3	8.0	7.6	7.4	6.4	6.9	7.3	7.2	8.1	8.5	7.8	8.8	10.2	10.3
Mar	11.9	11.7	11.4	11.6	11.7	11.9	10.9	10.8	11.2	11.5	13.4	15.2	16.2	15.2	14.9	14.9	14.1
Apr.....	10.7	10.6	10.4	10.4	10.4	10.4	10.3	9.3	9.1	9.8	11.0	12.3	12.5	11.3	12.5	14.2	14.8
May* ...	7.4	6.8	7.5	8.0	8.1	7.7	8.0	8.2	8.6	10.3	10.4	10.5	10.7	10.9	11.2	11.5	12.3
June....	7.2	6.5	6.1	6.4	6.2	6.3	6.2	6.4	8.1	9.7	10.6	11.1	12.1	11.3	11.7	11.8	11.6
July	4.8	5.5	5.6	5.2	5.4	5.8	5.4	4.9	6.2	7.8	9.2	8.9	10.7	10.6	10.6	10.7	10.7
Aug	4.3	5.0	4.5	5.4	5.2	5.7	6.1	5.2	5.8	6.6	7.7	7.9	10.0	9.3	9.8	10.1	10.5
Sept	7.2	6.6	5.9	5.6	6.0	6.3	5.8	5.4	5.9	7.6	8.8	10.2	11.4	11.3	12.6	12.8	13.1
Oct.....	5.9	6.2	6.0	5.9	6.3	7.0	6.9	7.1	7.6	7.6	8.7	10.1	10.7	10.9	10.7	10.9	10.3
Nov.....	10.7	10.6	9.5	9.6	9.7	9.5	9.4	9.1	9.2	9.2	9.5	10.1	12.6	14.3	15.1	15.7	14.4
Dec.....	8.3	9.3	10.3	11.5	11.5	11.0	10.4	10.0	10.0	8.8	9.2	9.1	10.3	9.9	10.0	10.6	10.9
Year	8.1	8.0	7.9	8.2	8.3	8.4	8.2	7.8	8.2	8.9	9.6	10.4	11.6	11.4	11.9	12.3	12.2

BISMARCK, N. DAK.

[λ = 46° 47′ N.; φ = 100° 38′ W.]

Jan.....	10.7	9.3	9.1	9.2	9.3	8.7	7.8	8.1	7.0	6.5	7.5	8.6	10.5	12.0	12.0	12.3	12.0
Feb.....	6.1	6.5	7.2	8.2	8.6	9.1	9.3	9.0	8.4	8.9	9.4	10.2	11.6	11.9	11.6	11.2	11.1
Mar.....	7.9	7.7	7.5	6.9	6.4	6.2	6.7	6.4	7.0	8.5	9.5	9.5	11.0	11.7	11.7	12.4	12.4
Apr.....	13.5	12.5	13.6	12.8	12.3	12.3	13.1	13.2	14.3	16.0	16.6	17.2	17.8	17.9	18.0	18.1	18.6
May	8.6	8.8	8.2	8.9	9.1	8.7	9.0	9.7	11.2	11.7	13.2	14.3	14.5	14.8	14.5	14.4	14.4
June....	8.8	8.3	8.5	7.4	8.6	8.7	8.1	8.0	9.2	10.1	12.0	12.5	12.6	12.7	13.4	13.7	13.6
July	8.1	7.7	7.2	6.9	7.4	7.7	7.7	6.4	7.4	9.2	10.4	11.9	12.8	13.7	13.5	13.3	12.9
Aug	7.6	6.5	6.5	6.2	6.2	6.1	5.1	5.5	5.8	7.1	8.3	9.5	10.6	11.2	11.1	11.1	10.8
Sept	6.8	7.1	7.2	7.0	6.6	6.7	6.7	7.1	6.9	8.3	9.3	10.1	10.4	10.9	11.1	11.0	11.4
Oct.....	6.8	6.4	7.2	6.6	7.5	7.6	7.7	7.7	7.7	8.4	9.5	11.1	11.8	12.3	12.9	12.9	12.3
Nov	9.4	9.7	9.5	9.4	9.4	10.4	10.7	10.2	9.4	9.2	10.4	11.6	12.9	13.3	13.3	13.7	13.7
Dec.....	5.9	6.0	5.9	6.1	6.9	6.1	5.5	6.2	5.9	6.0	6.0	6.6	7.5	9.1	9.0	9.2	8.7
Year	8.4	8.0	8.1	8.0	8.2	8.2	8.1	8.1	8.4	9.2	10.2	11.1	12.0	12.6	12.7	12.8	12.7

BOSTON, MASS.

[λ = 42° 21′ N.; φ = 71° 4′ W.]

Jan.....	12.3	11.7	11.5	11.5	11.9	12.5	12.7	12.1	13.3	13.9	15.2	15.5	15.7	15.4	15.2	14.8	14.0
Feb.....	11.1	10.4	10.3	10.5	11.4	11.6	11.6	11.6	11.9	12.6	12.9	13.8	13.4	12.6	13.0	12.4	11.7
Mar	14.1	13.4	12.8	12.8	13.1	13.4	13.8	14.6	16.0	16.5	17.6	19.2	19.1	18.8	19.0	19.4	18.9
Apr.....	11.5	10.8	10.1	10.0	9.8	10.1	10.9	11.9	12.4	12.4	13.2	14.3	15.0	15.1	15.9	16.0	15.6
May	10.3	10.5	10.2	9.8	10.0	10.8	11.8	12.3	13.5	13.5	13.2	14.4	14.3	14.7	15.5	15.3	14.8
June....	10.2	10.6	10.2	10.3	10.4	10.3	10.8	11.0	11.3	11.3	12.3	13.1	13.8	14.5	15.3	15.0	14.4
July	9.3	9.3	8.9	8.9	8.3	8.0	8.4	8.4	9.0	9.1	9.8	10.6	10.7	10.6	11.5	11.6	10.6
Aug	8.9	8.9	8.8	9.0	8.6	8.8	8.7	9.2	9.4	9.7	10.9	11.4	11.7	12.0	12.4	12.1	11.7
Sept	9.3	9.0	9.2	9.1	9.2	9.7	9.2	9.5	10.4	11.0	11.9	12.2	12.6	13.3	13.5	12.9	11.7
Oct.....	9.7	9.3	9.9	9.7	10.1	9.8	9.5	10.1	11.3	12.3	13.0	13.6	13.9	13.9	13.3	12.8	11.9
Nov.....	12.2	12.3	11.6	11.6	10.9	11.5	12.4	12.5	13.2	13.2	13.2	13.1	14.1	14.1	13.7	13.2	11.8
Dec.....	11.4	11.4	11.7	11.4	11.2	11.1	11.7	11.7	12.0	13.3	13.1	14.0	13.8	13.0	13.1	12.4	11.2
Year	10.9	10.6	10.4	10.4	10.4	10.6	11.0	11.2	12.0	12.4	13.0	13.8	14.0	14.0	14.3	14.0	13.2

BUFFALO, N. Y.

[λ = 42° 53′ N.; φ = 78° 53′ W.]

Jan.....	13.4	12.9	12.9	13.5	13.3	12.8	13.5	12.9	13.7	13.5	14.0	13.8	14.2	14.5	15.1	14.7	14.5
Feb.....	9.3	9.7	9.8	9.2	9.1	9.0	9.9	9.7	9.8	10.8	10.8	10.5	10.3	10.2	10.7	11.1	11.2
Mar	11.3	10.8	10.3	9.9	10.1	10.7	10.5	10.4	10.9	11.9	12.7	13.3	13.5	14.1	14.3	14.1	12.9
Apr.....	8.7	8.9	9.0	9.6	9.8	10.2	10.5	10.6	11.8	12.2	12.4	13.8	14.3	14.2	14.8	14.7	14.2
May	8.7	8.4	7.9	7.6	7.5	7.5	8.3	9.1	10.4	10.9	11.8	11.5	10.7	10.4	10.9	10.9	10.5
June....	8.1	8.6	9.1	8.8	8.7	8.6	8.5	9.6	9.3	9.7	10.3	11.2	11.2	11.4	10.9	10.9	10.3
July	6.9	6.4	6.4	6.5	6.2	6.2	6.6	7.3	8.3	9.2	9.8	10.5	11.1	10.9	10.9	11.1	10.2
Aug	6.6	7.2	7.0	6.5	6.9	6.9	6.8	7.7	8.3	9.0	9.8	10.4	11.0	11.2	11.2	10.7	10.1
Sept	10.4	10.0	10.3	9.9	9.6	9.4	7.6	9.3	10.2	10.9	10.5	11.5	12.2	12.4	12.4	11.7	10.9
Oct.....	11.0	10.4	10.3	9.8	9.7	9.8	9.7	10.1	10.6	10.9	11.5	12.5	12.8	13.3	13.6	13.4	12.7
Nov.....	12.5	11.7	11.3	10.5	11.0	10.2	11.1	12.9	13.2	13.5	13.4	12.8	13.4	12.9	12.9	12.9	12.2
Dec.....	12.9	13.0	13.5	13.5	13.4	13.8	13.8	12.8	12.9	13.5	14.0	14.8	15.8	16.0	15.4	14.3	14.3
Year	10.0	9.8	9.8	9.6	9.6	9.6	9.9	10.2	10.8	11.3	11.8	12.2	12.5	12.6	12.8	12.5	12.0

* No record from 12 noon, 15th, to 12 midnight, 19th; 108 hours missing from May record.

WIND—VELOCITY AND FREQUENCY—Continued.

ASSINABOINE, FORT, MONT.

[h_a = 36 ft.; local time 2h 19m S.] [Seventy-fifth Meridian Time.]

6h	7h	8h	9h	10h	11h	Mid.	Mean.	Max. vel.	N.	NE.	E.	SE	S.	SW.	W.	NW.	Calm.	1892.
12.6	10.6	10.6	10.3	9.6	10.5	11.4	11.4	48	59	57	.....	.....	.....	393	75	146	14	Jan.
9.5	9.0	7.4	7.0	7.4	6.9	6.7	7.8	57	52	188	19	.....	21	291	54	62	9	Feb.
14.0	13.3	11.6	11.7	11.1	11.4	11.0	12.6	60	30	167	100	2	.....	264	90	91	.....	Mar.
13.8	14.0	14.1	12.7	10.9	11.8	11.7	11.6	52	69	95	72	19	55	157	99	153	1	Apr.
12.4	12.5	12.5	11.8	9.8	8.0	7.4	9.9	33	38	160	158	37	18	91	52	81	1	May.*
12.2	12.6	11.8	11.1	10.1	8.4	7.6	9.3	44	72	172	86	84	11	140	70	83	2	June.
10.8	10.5	9.6	8.7	7.8	7.1	6.5	7.9	41	45	50	68	53	25	232	149	104	18	July.
10.1	9.4	8.9	8.4	6.9	6.1	4.8	7.2	40	65	101	73	31	5	234	111	110	14	Aug.
13.2	12.6	11.1	9.6	7.9	8.2	7.2	8.8	48	39	92	133	14	19	217	94	102	10	Sept.
9.4	8.8	7.4	6.4	6.1	5.9	5.8	7.9	28	40	21	114	64	2	261	159	78	5	Oct.
12.7	11.2	10.1	10.0	9.5	9.3	9.7	10.9	48	22	61	31	25	27	276	151	84	43	Nov.
10.9	9.8	8.6	8.8	8.8	9.0	9.3	9.9	38	59	74	65	.....	.....	204	191	94	57	Dec.
11.8	11.2	10.3	9.7	8.8	8.6	8.3	9.6	.....	590	1,238	919	329	183	2,760	1,295	1,188	174	Year.

BISMARCK, N. DAK.

[h_a = 69 ft.; local time 1h 42m S.]

10.5	10.2	9.3	8.5	8.9	10.0	11.2	9.6	42	23	13	86	93	6	25	18	441	39	Jan.
9.9	7.9	6.9	5.8	6.0	5.9	5.8	8.6	40	83	38	118	132	39	38	17	200	31	Feb.
11.9	11.4	10.7	9.7	9.4	9.0	8.5	9.2	72	25	63	145	182	53	54	8	153	61	Mar.
18.7	17.9	16.5	14.7	14.0	13.8	13.4	15.3	50	36	101	201	168	9	13	10	174	8	Apr.
13.7	13.3	13.6	12.1	9.8	8.3	8.3	11.4	48	119	69	257	45	31	.....	35	176	12	May.
13.4	13.3	12.0	10.0	9.5	10.1	9.6	10.6	56	102	155	125	85	52	53	38	102	8	June.
11.9	11.4	10.3	8.4	8.8	10.0	10.0	9.8	46	50	58	112	184	137	38	6	145	14	July.
11.0	10.3	10.5	9.7	8.9	8.2	7.7	8.4	36	65	84	127	162	146	15	33	100	12	Aug.
10.8	10.0	8.8	7.9	7.5	7.5	6.6	8.5	33	75	53	92	126	106	31	23	201	13	Sept.
11.4	8.2	7.3	7.5	6.9	7.0	7.1	8.8	44	63	43	144	106	31	12	46	265	34	Oct.
13.4	12.3	11.5	10.9	10.0	9.4	9.6	11.0	50	29	23	162	169	48	22	50	207	10	Nov.
8.0	7.0	7.2	7.2	7.3	6.5	5.5	6.9	30	75	25	120	45	29	5	86	327	32	Dec.
12.0	11.1	10.4	9.4	8.9	8.8	8.6	9.8	.....	745	725	1,689	1,497	687	306	370	2,491	274	Year.

BOSTON, MASS.

[h_a = 182 ft.; local time 0h 16m F.]

13.5	14.0	13.4	13.1	12.3	12.8	12.0	13.3	40	102	23	16	39	65	151	168	180	.....	Jan.
11.4	10.9	10.9	11.0	11.0	11.1	10.8	11.7	32	120	139	66	30	4	10	154	173	.....	Feb.
18.7	17.0	15.4	15.3	14.6	13.4	14.0	15.9	48	83	68	34	10	34	56	308	151	.....	Mar.
14.6	12.7	11.9	12.0	11.2	10.8	10.7	12.5	36	37	18	65	30	45	142	288	95	.....	Apr.
13.5	12.1	11.5	12.1	11.9	11.5	10.8	12.4	42	26	66	144	27	84	155	136	106	.....	May.
13.1	12.1	11.8	11.6	11.4	11.0	11.3	12.0	38	23	51	110	23	87	212	188	26	.....	June.
10.2	9.6	9.0	9.2	9.6	9.7	9.5	9.6	34	8	32	102	19	59	227	188	109	.....	July.
10.7	10.1	9.7	9.3	9.3	9.1	8.9	10.0	36	109	74	105	47	66	137	117	88	1	Aug.
11.1	11.0	11.1	10.8	10.3	9.7	9.6	10.7	36	32	18	71	39	74	223	188	75	.....	Sept.
10.8	10.1	10.4	10.3	10.5	10.5	10.2	11.1	31	41	26	16	13	29	148	260	211	.....	Oct.
12.0	12.4	12.2	12.6	12.9	12.5	12.4	12.6	42	85	60	53	28	85	65	198	146	.....	Nov.
11.8	11.6	11.7	12.1	11.5	11.3	11.5	12.0	35	60	17	25	5	10	106	317	204	.....	Dec.
12.6	12.0	11.6	11.6	11.4	11.1	11.0	12.0	.....	726	592	807	310	642	1,632	2,510	1,564	1	Year.

BUFFALO, N. Y.

[h_a = 108 ft.; local time 0h 15m S.]

13.8	13.9	13.6	13.5	13.4	12.9	13.4	13.6	55	26	69	33	59	64	222	185	86	.....	Jan.
11.0	10.8	9.7	9.6	9.7	9.9	9.2	10.0	42	6	244	49	72	31	92	133	69	.....	Feb.
12.3	11.7	10.9	11.2	10.8	10.5	10.9	11.7	43	45	129	23	44	19	154	143	187	.....	Mar.
14.3	13.1	11.8	10.7	9.6	9.4	9.2	11.6	42	9	131	43	55	29	244	58	151	.....	Apr.
9.4	9.0	8.3	7.9	8.4	8.1	9.0	9.3	44	42	93	96	50	34	275	83	71	.....	May.
9.9	9.3	9.1	8.6	7.9	7.7	8.0	9.4	42	13	154	17	41	57	317	53	64	4	June.
9.4	9.8	8.5	7.9	7.4	7.7	7.9	8.5	46	33	101	10	35	65	361	55	82	2	July.
9.3	8.2	8.0	7.9	7.4	7.5	7.2	8.4	34	39	130	30	73	57	210	74	129	2	Aug.
11.0	10.7	10.6	10.7	11.3	10.4	9.8	10.7	48	14	58	32	106	101	232	71	106	.....	Sept.
11.5	11.5	11.3	10.8	10.7	10.7	10.9	11.2	42	14	68	11	23	54	239	68	266	1	Oct.
12.7	12.6	12.2	11.9	11.9	12.1	12.8	12.3	50	36	134	37	63	28	125	54	243	.....	Nov.
14.3	14.2	13.4	13.2	12.5	12.5	12.0	13.7	49	21	32	21	61	39	172	55	343	.....	Dec.
11.6	11.2	10.6	10.3	10.1	10.0	10.0	10.9	.....	298	1,343	402	682	578	2,643	1,032	1,797	9	Year.

* The record was maintained at Havre, Mont., from May 16 to Dec. 31, 1892.

WIND—VELOCITY AND FREQUENCY—Continued.

CLEVELAND, OHIO.

[λ=41° 30′ N.; φ=81° 42′ W.] [Seventy-fifth Meridian Time.]

1892.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.	2h	3h	4h	5h
Jan....	10.5	10.6	10.5	10.5	10.5	9.7	9.2	9.1	9.7	9.6	9.2	8.9	10.0	9.8	10.0	9.3	9.1
Feb....	8.1	8.4	8.2	8.0	8.0	8.3	8.4	8.7	9.7	9.1	9.4	9.2	9.5	9.4	9.5	9.8	9.3
Mar....	7.4	7.5	7.2	7.6	7.2	7.0	7.3	7.6	8.1	8.7	9.4	10.1	9.7	9.6	9.7	9.0	8.6
Apr....	9.4	9.0	8.9	8.9	9.0	8.8	9.5	9.6	10.0	10.6	11.3	11.5	11.2	11.3	11.3	10.3	9.6
May ...	10.9	11.6	12.0	11.8	11.6	11.3	11.8	11.9	12.8	13.6	15.0	16.2	15.7	15.2	14.4	13.7	13.9
June...	9.3	10.1	10.1	10.9	10.7	10.4	10.6	10.9	11.4	12.3	13.1	12.9	12.9	12.4	12.2	12.9	11.7
July...	8.5	8.8	8.8	8.4	8.4	8.0	8.0	7.6	8.5	8.7	9.5	9.6	9.5	11.1	11.4	11.3	10.8
Aug....	8.9	9.2	9.5	9.2	9.4	9.5	9.2	9.3	9.7	10.0	11.0	11.8	12.8	13.4	13.5	13.1	12.6
Sept...	12.7	13.0	12.5	12.1	12.2	12.6	12.0	12.0	11.8	11.9	12.1	12.2	12.7	13.5	13.4	12.6	12.1
Oct....	13.1	14.0	13.9	13.9	13.9	13.9	13.5	13.9	14.1	14.5	14.8	15.3	15.4	15.6	15.9	15.3	14.1
Nov....	13.8	14.4	14.3	15.6	15.9	16.6	15.8	15.7	15.9	15.8	16.3	15.7	16.0	16.2	17.0	16.7	15.9
Dec....	12.8	14.0	13.6	13.4	13.6	13.0	12.5	12.3	12.7	13.2	12.8	13.0	13.4	14.0	13.8	13.3	13.1
Year...	10.4	10.9	10.8	10.9	10.9	10.8	10.6	10.7	11.2	11.5	12.0	12.2	12.4	12.6	12.7	12.3	11.7

CHICAGO, ILL.

[λ=41° 52′ N.; φ=87° 38′ W.]

Jan....	21.9	20.8	20.7	20.4	19.0	18.4	19.6	18.6	18.3	19.5	19.6	19.1	19.5	19.6	19.5	19.7	19.0
Feb....	15.6	14.5	14.3	14.7	15.1	14.9	16.9	15.8	17.2	17.8	18.3	18.7	17.9	17.4	17.9	18.6	18.2
Mar....	19.9	18.6	18.6	18.5	18.8	19.0	19.2	17.8	18.2	17.3	17.3	18.0	18.2	19.5	21.0	20.6	20.2
Apr....	21.7	21.0	21.2	22.0	21.1	20.9	21.0	21.2	21.3	22.5	23.0	22.6	22.5	22.8	23.3	23.1	23.4
May ...	17.7	17.5	17.3	18.3	18.1	17.9	17.6	17.2	17.4	17.8	18.1	17.8	18.3	19.3	20.0	20.4	19.9
June ..	10.9	13.2	12.8	13.6	13.6	13.4	13.5	13.4	14.2	13.4	14.0	13.1	13.2	13.2	13.4	13.9	14.9
July...	12.7	12.5	12.8	12.5	13.2	13.7	13.2	13.2	13.0	13.1	13.3	13.3	14.0	15.3	15.6	16.9	16.0
Aug....	11.9	11.6	12.3	12.5	12.8	12.5	12.8	12.9	13.0	13.4	14.0	13.7	14.3	15.4	15.5	16.5	15.9
Sept...	15.7	15.6	15.5	15.8	16.2	16.0	16.1	15.2	14.7	15.0	14.5	15.3	15.9	16.2	17.0	17.1	16.6
Oct....	17.4	17.6	17.5	17.6	17.2	17.3	17.4	17.2	16.7	15.2	15.0	15.3	17.4	17.4	18.0	17.7	18.4
Nov....	16.6	16.2	16.4	16.6	16.8	17.3	17.7	18.0	18.6	18.7	18.8	18.7	18.8	18.2	19.0	19.1	19.1
Dec....	15.8	14.9	14.6	14.5	14.5	14.4	15.0	14.5	14.9	15.4	15.4	15.0	15.7	15.8	16.7	16.5	15.8
Year...	16.5	16.2	16.2	16.4	16.4	16.3	16.7	16.2	16.5	16.6	16.8	16.7	17.1	17.5	18.1	18.3	18.1

CINCINNATI, OHIO.

[λ=39° 6′ N.; φ=84° 30′ W.]

Jan....	7.1	6.5	6.3	6.2	6.7	7.3	6.7	6.3	6.5	7.7	8.6	8.9	8.9	8.9	9.0	8.8	8.6
Feb....	4.9	4.2	4.2	4.8	5.1	5.4	5.9	5.6	6.9	8.1	8.6	8.7	9.3	10.0	9.9	9.6	9.0
Mar ...	5.7	5.6	5.5	5.2	5.9	5.4	6.1	6.7	7.6	8.8	9.6	10.5	10.2	10.0	9.7	9.6	9.2
Apr....	5.5	5.1	4.8	4.9	4.4	4.3	4.1	4.5	6.1	7.8	7.8	9.1	10.6	9.5	9.8	9.9	9.4
May ...	4.3	4.4	4.2	4.2	3.8	3.5	3.9	5.6	7.3	8.1	8.4	8.5	9.4	9.7	8.6	8.5	9.5
June...	4.4	4.4	4.3	4.2	4.0	3.9	4.3	4.9	6.1	7.0	7.5	7.9	8.3	8.6	8.4	8.3	8.0
July...	4.2	4.3	4.0	3.7	3.5	3.4	3.5	4.6	5.4	6.8	7.9	8.6	9.2	9.4	9.7	9.7	8.3
Aug....	3.9	4.1	4.0	3.7	3.7	3.7	3.8	4.6	5.1	6.1	6.7	7.7	8.1	7.9	8.1	8.3	8.3
Sept...	4.1	3.7	3.7	3.6	3.5	3.8	3.5	4.2	5.2	5.7	6.7	7.7	7.7	8.1	8.8	8.3	7.4
Oct....	5.7	5.2	4.8	5.0	4.4	4.6	4.4	5.0	5.6	6.2	7.6	8.0	8.5	8.8	9.1	8.9	8.3
Nov....	8.5	8.0	7.9	7.7	7.4	6.9	7.3	7.9	8.7	9.8	10.0	10.2	10.2	10.7	10.5	10.1	9.3
Dec....	6.3	6.2	6.5	6.4	6.0	5.9	6.4	6.1	6.9	7.0	7.2	7.7	8.1	8.1	8.5	8.3	8.4
Year...	5.4	5.1	5.5	5.0	4.9	4.8	5.0	5.5	6.4	7.4	8.0	8.6	9.9	9.1	9.1	9.0	8.6

DETROIT, MICH.

[λ=42° 20′ N.; φ=83° 3′ W.]

Jan....	11.4	10.8	11.0	11.5	11.5	12.1	11.7	10.7	10.3	10.7	11.7	13.8	14.6	14.4	13.6	13.1	12.5
Feb....	9.7	8.4	8.3	7.8	8.0	8.8	8.4	8.2	8.3	9.3	10.4	11.4	11.4	11.8	11.6	11.7	11.5
Mar....	8.5	8.0	8.4	8.1	8.9	9.6	9.5	10.0	10.1	10.4	10.2	11.5	12.3	11.4	12.0	12.6	11.9
Apr....	11.7	11.2	10.9	10.6	9.9	10.3	9.7	10.3	11.2	11.6	12.5	13.8	14.4	14.4	15.4	15.0	16.0
May ...	9.2	8.9	9.2	9.5	9.7	9.9	9.8	10.5	11.8	12.6	13.2	14.1	14.1	14.8	14.4	13.5	12.3
June...	8.7	8.5	8.3	7.8	7.5	8.0	7.9	8.6	10.4	10.6	11.4	12.0	11.7	11.4	11.9	11.6	10.3
July...	6.2	7.0	6.7	5.7	6.1	6.5	5.6	5.5	6.4	7.2	8.9	10.3	10.9	11.4	12.1	12.2	11.7
Aug....	7.4	6.8	7.1	6.8	6.5	7.0	7.5	8.4	9.1	9.7	10.4	11.4	11.6	11.7	11.5	11.6	11.4
Sept...	7.6	7.8	7.1	7.4	7.7	8.2	8.1	8.1	8.7	9.6	10.5	11.4	11.3	11.4	11.9	11.4	11.4
Oct....	10.2	10.1	10.5	9.9	9.8	10.0	9.9	10.2	10.8	11.5	11.6	12.8	12.7	12.6	12.8	12.8	12.3
Nov....	10.4	10.3	9.9	10.6	10.2	10.9	10.4	11.0	11.0	11.9	12.2	12.4	12.6	12.6	13.1	12.5	12.2
Dec....	10.7	10.7	10.7	11.1	11.1	11.5	11.2	11.1	11.0	10.9	11.6	12.4	12.7	12.4	12.6	12.2	11.7
Year...	9.3	9.0	9.0	8.9	8.9	9.4	9.1	9.4	9.9	10.5	11.2	12.3	12.5	12.5	12.7	12.5	12.1

WIND—VELOCITY AND FREQUENCY—Continued.

CLEVELAND, OHIO.

[h_a=130 ft.; local time 6h 27m S.] [Seventy-fifth Meridian Time.]

6h	7h	8h	9h	10h	11h	Mid.	Mean.	Max. vel.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Calm.	1892.
8.9	8.7	8.9	10.5	10.5	10.7	10.3	9.8	26	47	50	4	96	167	221	67	92	.....	Jan.
8.2	7.6	8.1	7.8	8.3	8.3	8.2	8.6	33	54	111	27	177	81	78	123	45	.....	Feb.
8.8	8.3	8.1	7.6	7.7	7.4	7.2	8.2	30	87	123	33	87	35	123	133	123	.....	Mar.
8.6	7.7	7.4	7.5	8.1	8.6	9.0	9.5	36	125	85	22	96	54	97	88	137	.....	Apr.*
12.7	11.3	10.9	9.5	9.5	10.3	10.7	12.4	43	39	98	26	154	73	152	28	136	.....	May.†
10.2	8.5	9.1	8.4	8.6	9.3	8.7	10.7	51	31	146	14	143	91	141	16	137	1	June.
10.0	9.1	8.1	6.8	7.1	7.8	8.3	8.9	64	49	154	39	155	102	80	7	156	2	July.
11.5	10.0	9.4	9.8	9.5	9.4	9.9	10.5	40	56	157	35	180	94	103	13	104	2	Aug.
10.6	8.5	9.1	11.0	12.7	13.4	12.9	12.1	54	38	89	30	249	61	122	14	117	.....	Sept.
12.2	12.0	12.7	13.6	14.0	14.2	13.0	14.0	60	14	46	17	116	88	158	36	269	.....	Oct.
15.9	16.5	15.6	15.4	15.1	14.3	14.8	15.6	49	23	57	13	134	55	172	68	198	.....	Nov.
12.8	12.6	12.4	12.4	11.6	11.8	12.3	12.9	39	27	39	13	93	79	266	42	185	.....	Dec.
10.9	10.1	10.0	10.0	10.2	10.5	10.4	11.1	....	590	1,155	273	1,680	980	1,713	635	1699	5	Year.

CHICAGO, ILL.

[h_a=274 ft.; local time 6h 50m S.]

18.3	19.3	18.5	18.8	19.2	20.0	20.6	19.5	60	68	33	1	34	94	175	143	196	.....	Jan.
16.9	17.7	16.9	17.3	15.9	15.8	16.0	16.7	55	42	158	38	120	48	81	76	132	1	Feb.
19.6	19.8	19.2	19.2	20.5	20.8	19.9	19.2	57	103	173	34	110	33	110	19	162	.....	Mar.
24.1	24.4	22.2	22.1	22.3	21.7	21.7	22.2	65	20	201	51	146	38	127	55	82	.....	Apr.
19.4	18.5	16.5	16.6	17.0	16.7	16.3	18.0	60	42	205	40	130	39	135	108	45	.....	May.
14.8	13.6	13.6	12.3	11.0	12.0	12.9	13.2	72	88	159	51	121	55	125	71	50	.....	June.
15.3	13.9	13.0	12.0	12.5	12.4	12.5	13.6	45	45	230	26	134	68	181	38	22	.....	July.
15.6	15.5	14.8	14.4	13.6	13.4	12.6	13.8	40	69	239	66	114	79	118	32	27	.....	Aug.
15.1	13.9	13.3	14.5	13.9	14.4	16.1	15.4	40	46	70	18	144	65	230	65	82	.....	Sept.
18.2	16.6	16.1	16.6	16.5	16.4	16.4	17.0	58	67	113	6	94	63	175	92	134	.....	Oct.
18.5	17.9	17.6	17.9	17.6	17.0	17.1	17.8	55	32	85	23	108	58	135	123	156	.....	Nov.
16.1	16.3	16.9	17.1	17.0	16.9	16.4	15.7	50	13	70	11	119	22	181	169	159	.....	Dec.
17.7	17.3	16.6	16.6	16.4	16.5	16.5	16.8	.....	635	1,736	365	1,374	662	1,773	991	1,247	1	Year.

CINCINNATI, OHIO.

[h_a=157 ft.; local time 0h 38m S.]

8.1	7.2	6.3	6.5	6.7	6.6	7.1	7.4	32	38	114	50	75	83	157	42	161	24	Jan.
8.2	7.3	6.4	5.7	5.5	5.9	5.7	6.9	32	49	100	39	102	93	73	24	164	52	Feb.
9.5	7.1	6.5	6.0	5.5	5.6	5.5	7.4	32	87	64	57	82	54	97	33	183	87	Mar.
8.8	8.0	6.7	5.6	5.7	5.9	5.9	6.8	32	11	135	49	63	91	63	17	185	106	Apr.
8.9	7.4	4.9	4.2	4.8	4.3	4.6	6.3	34	16	43	37	98	138	138	13	148	113	May.
7.1	6.8	5.5	5.0	4.9	4.8	4.6	6.0	26	23	17	22	57	95	139	9	57	301	June.
8.6	7.1	5.7	4.6	4.4	4.0	4.1	6.0	42	13	45	65	35	42	122	3	74	345	July.
8.1	6.7	5.5	5.1	4.7	4.4	4.5	5.7	25	37	101	63	53	90	85	15	111	189	Aug.
7.0	6.0	4.6	4.4	4.3	4.1	4.0	5.4	36	18	94	132	148	103	113	10	88	14	Sept.
6.9	5.6	5.7	5.7	5.6	5.8	6.1	6.3	27	27	115	88	129	84	66	24	195	16	Oct.
8.9	8.2	7.3	8.3	8.3	8.2	8.2	8.7	42	36	67	62	135	83	114	22	201	.....	Nov.
7.6	7.9	7.6	7.4	7.2	6.5	6.7	7.1	32	32	156	87	118	86	141	9	114	1	Dec.
8.1	7.1	6.1	5.7	5.6	5.5	5.6	6.7	.....	387	1,051	751	1,095	1,042	1,308	221	1,681	1,248	Year.

DETROIT, MICH.

[h_a=161 ft.; local time 0h 32m S.]

12.4	10.6	10.3	10.3	10.6	10.8	11.6	11.7	42	52	33	4	16	20	371	105	143	.....	Jan.
11.6	10.6	10.6	10.8	11.0	11.4	11.5	10.1	36	32	219	74	45	31	144	80	71	.....	Feb.
11.9	11.0	9.9	9.7	8.6	8.7	9.5	10.1	43	36	250	53	25	22	165	63	130	.....	Mar.
16.1	13.9	11.8	11.3	11.6	11.9	12.2	12.4	57	29	207	46	48	15	197	99	79	.....	Apr.
13.0	11.1	9.7	9.4	10.1	10.8	9.8	11.3	40	57	148	91	50	38	244	41	75	.....	May.
10.2	9.7	8.5	8.3	7.9	7.8	7.6	9.4	46	22	150	65	61	28	281	58	55	.....	June.
11.5	9.6	7.8	7.7	6.5	6.5	6.5	8.2	44	41	116	58	35	32	343	41	71	7	July.
11.4	10.0	8.1	7.5	7.8	8.0	7.7	9.0	33	48	177	106	32	27	248	39	62	5	Aug.
11.2	9.3	9.4	9.0	8.9	8.1	8.2	9.3	34	40	105	49	96	26	283	62	58	1	Sept.
11.6	10.2	10.0	9.3	8.9	9.3	10.0	10.8	56	9	51	48	25	22	304	96	188	1	Oct.
11.8	11.1	10.6	11.7	11.0	10.9	10.9	11.4	50	25	92	28	49	43	203	96	184	.....	Nov.
11.0	10.2	10.1	9.7	10.1	9.6	10.2	11.1	39	27	35	32	42	27	360	97	124	.....	Dec.
12.0	10.6	9.7	9.6	9.4	9.5	9.6	10.4	.....	418	1,583	654	524	331	3,143	877	1,240	14	Year.

* 16 hours missing from frequency record. † 38 hours missing from frequency record.

WIND—VELOCITY AND FREQUENCY—Continued.

DODGE CITY, KANS.

[λ=37° 45′ N.; ϕ=100° 0′ W.] [Seventy-fifth Meridian Time.]

1892.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.	2h	3h	4h	5h
Jan	8.3	8.0	8.1	7.7	8.9	9.1	8.6	8.8	9.2	9.6	11.2	13.1	13.3	13.5	13.3	12.9	12.4
Feb	9.7	8.8	8.9	8.2	7.6	7.7	7.9	7.6	7.6	8.0	10.1	11.1	11.7	11.3	13.3	10.9	10.1
Mar	11.1	11.2	11.1	10.6	10.4	10.9	10.4	10.4	10.5	11.5	13.1	14.6	14.8	16.2	16.8	16.6	17.3
Apr	14.1	13.9	13.4	14.6	14.2	14.2	13.8	13.6	15.9	18.3	18.7	19.3	18.8	19.3	19.3	19.4	18.8
May	11.6	11.2	10.6	10.5	10.6	10.7	10.5	11.0	13.1	13.8	14.1	14.5	14.3	15.0	14.8	15.3	14.6
June	11.7	11.5	11.3	10.5	11.6	11.1	11.2	11.6	13.4	15.4	14.7	15.1	14.3	14.4	15.0	15.9	16.3
July	11.3	10.1	9.2	8.6	8.1	8.5	8.3	8.8	10.8	13.4	14.6	15.3	14.1	13.7	14.2	14.1	14.1
Aug	8.9	7.0	6.9	7.2	7.2	6.8	6.9	6.3	7.8	10.2	11.9	12.6	13.2	13.1	13.0	13.0	14.0
Sept	9.8	9.3	9.3	8.7	7.9	7.9	8.1	7.6	8.1	11.0	12.4	13.3	13.4	13.6	14.4	15.0	15.6
Oct	8.9	8.8	8.8	9.1	9.8	9.1	8.5	7.6	7.0	8.6	10.8	12.1	12.8	13.6	14.5	14.8	14.8
Nov	8.4	8.5	8.7	8.8	8.9	9.1	8.9	8.4	8.2	8.7	11.0	14.3	15.5	15.0	15.1	14.3	13.7
Dec	7.0	8.0	8.0	8.1	8.4	8.2	9.0	9.1	8.9	9.0	8.9	10.0	10.2	9.7	9.4	9.0	9.2
Year	10.1	9.7	9.5	9.4	9.5	9.4	9.3	9.2	10.0	11.5	12.6	13.8	13.9	14.0	14.3	14.3	14.2

EASTPORT, ME.

[λ=44° 54′ N.; ϕ=66° 59′ W.]

Jan	13.0	12.3	12.7	12.9	13.1	13.1	12.5	11.9	11.9	11.3	11.9	11.7	13.3	11.2	11.8	11.9	11.7
Feb	15.3	15.0	14.9	14.5	14.9	14.8	14.3	14.9	15.2	15.3	14.5	14.1	13.6	13.8	13.7	12.9	12.4
Mar	13.3	12.7	12.7	14.0	13.3	14.0	13.4	14.3	14.5	14.6	14.6	14.6	14.6	14.4	14.1	14.0	13.6
Apr	7.4	7.3	7.6	7.4	7.5	8.4	9.4	9.7	9.6	9.5	9.8	9.6	9.5	9.7	9.6	9.2	9.4
May	9.1	8.9	10.1	10.3	9.5	10.3	10.8	11.3	11.3	12.5	12.9	13.0	13.1	13.7	13.5	13.0	12.2
June	5.1	5.4	5.2	5.8	6.0	6.5	6.0	6.3	6.5	7.3	8.0	8.5	9.1	9.1	9.0	9.0	8.0
July	6.1	5.8	5.3	4.8	5.0	5.1	5.3	5.3	6.3	6.4	7.3	7.8	8.8	9.7	10.4	10.3	8.8
Aug	5.7	4.9	5.3	5.3	5.1	5.1	5.8	6.3	6.6	7.4	7.3	7.9	8.1	8.9	8.5	8.3	7.9
Sept	5.6	5.2	5.3	5.8	6.1	6.8	6.3	7.4	8.8	9.1	9.5	9.9	10.1	10.3	10.0	10.0	8.7
Oct	8.5	8.1	8.2	8.2	8.4	8.5	8.6	9.3	10.5	10.8	10.5	10.9	11.1	11.5	10.8	10.0	8.5
Nov	12.0	12.6	12.8	12.6	12.8	12.7	13.2	13.5	13.9	13.9	13.4	14.4	14.4	14.5	14.6	13.5	13.2
Dec	10.9	10.1	11.5	11.2	10.9	11.4	11.0	10.8	10.8	12.0	11.8	12.5	11.3	10.8	11.3	10.6	10.1
Year	9.3	9.0	9.3	9.4	9.4	9.7	9.7	10.1	10.5	10.8	11.0	11.2	11.2	11.5	11.4	11.1	10.4

GALVESTON, TEX.

[λ=29° 18′ N.; ϕ=94° 50′ W.]

Jan	13.6	13.1	12.8	13.0	12.4	11.6	11.9	11.6	11.8	12.3	12.9	12.8	13.3	13.7	13.5	14.0	14.1
Feb	11.0	11.0	11.1	9.7	9.4	9.4	10.3	10.2	10.3	10.2	10.9	10.8	11.0	10.1	9.8	10.0	9.9
Mar	12.2	11.6	11.5	11.2	11.1	11.5	12.0	12.0	12.3	13.1	12.7	12.5	12.8	13.1	13.2	13.2	12.7
Apr	12.2	11.8	12.6	12.8	12.5	11.7	12.0	12.2	12.5	12.7	12.8	12.7	13.2	13.2	13.1	13.4	13.7
May	15.3	14.9	14.5	14.1	14.4	13.8	13.9	14.5	15.3	15.3	15.6	15.3	16.0	15.8	16.1	16.0	15.3
June	11.2	10.3	10.2	9.5	8.8	8.4	8.2	8.3	9.2	9.1	8.8	9.3	10.5	10.0	10.6	11.3	11.5
July	9.2	9.1	9.2	8.8	8.5	8.0	7.1	6.7	7.4	8.3	8.9	9.3	10.2	10.9	11.3	11.5	11.4
Aug	7.7	7.2	7.2	7.5	7.4	6.7	7.0	7.2	7.3	8.8	8.5	7.8	8.2	8.0	9.0	9.6	10.0
Sept	9.5	9.8	9.9	9.7	9.8	10.1	9.7	10.1	10.8	11.6	12.0	12.0	12.7	12.0	12.3	11.8	11.7
Oct	12.4	12.3	11.9	11.5	11.1	11.2	10.9	10.7	11.3	11.2	11.3	11.5	11.5	11.9	11.3	11.8	11.9
Nov	10.8	10.7	10.8	10.4	10.6	10.7	10.5	9.9	10.5	11.7	11.8	12.6	13.2	13.3	13.2	13.1	12.3
Dec	12.8	12.9	13.3	12.8	12.9	13.1	12.7	12.9	13.0	13.9	14.2	14.0	14.0	13.8	13.7	13.7	13.1
Year	11.5	11.2	11.2	10.9	10.7	10.5	10.5	10.5	11.0	11.5	11.7	11.7	12.2	12.2	12.3	12.4	12.3

KANSAS CITY, MO.

[λ=39° 5′ N.; ϕ=94° 37′ W.]

Jan	7.9	7.3	7.8	7.9	7.3	7.5	7.7	7.9	8.3	8.0	8.7	9.4	9.8	10.0	10.1	10.2	10.0
Feb	7.5	7.6	8.3	8.6	8.8	8.3	9.0	8.2	8.2	8.6	8.7	8.9	9.5	9.6	9.3	9.8	9.7
Mar	10.5	9.9	9.8	9.9	10.5	10.2	10.4	10.0	10.9	11.9	12.1	12.3	12.4	12.1	12.2	12.5	12.2
Apr	8.0	7.9	8.5	8.8	8.7	8.4	8.8	8.9	9.3	10.3	10.7	10.4	10.4	11.1	11.2	11.3	11.5
May	7.5	6.9	7.5	7.0	6.9	6.7	7.0	7.0	7.3	8.7	8.9	9.0	9.5	9.1	9.0	8.9	9.2
June	6.3	6.3	6.4	6.1	5.6	5.5	5.9	6.3	7.2	7.6	7.9	8.5	8.9	8.6	8.7	9.1	9.0
July	6.8	6.4	6.2	6.7	6.2	6.2	6.3	6.7	6.8	7.4	7.9	8.3	8.2	8.0	8.2	8.1	7.8
Aug	5.8	5.4	5.5	5.3	5.2	5.0	5.0	5.3	5.8	6.2	7.2	7.1	7.9	7.7	8.2	8.5	8.3
Sept	5.6	5.5	5.7	5.8	5.8	5.7	5.9	6.1	6.3	7.1	7.9	8.1	8.1	8.5	8.2	8.8	8.9
Oct	6.9	6.3	6.5	7.3	6.7	6.5	6.4	6.4	6.7	6.8	7.3	8.3	9.0	8.6	9.1	9.6	9.4
Nov	8.5	8.3	8.0	8.2	8.3	7.3	7.9	8.2	8.5	9.5	10.0	9.7	10.0	9.7	9.8	9.7	9.0
Dec	6.0	5.6	5.6	5.4	5.3	5.6	5.5	6.0	6.3	6.8	7.5	7.6	7.8	8.0	8.4	8.6	8.6
Year	7.3	7.0	7.2	7.2	7.1	6.9	7.2	7.2	7.6	8.2	8.7	9.0	9.3	9.2	9.4	9.6	9.5

WIND—VELOCITY AND FREQUENCY—Continued.

DODGE CITY, KANS.

[h_a=55 ft.; local time 1h 40m S.] [Seventy-fifth Meridian Time.]

6h	7h	8h	9h	10h	11h	Mid.	Mean.	Max. vel.	N.	NE.	E.	SE.	S.	SW.	W.	N.W.	Calm.	1892.
11.6	8.6	7.3	6.8	6.9	6.8	7.7	9.7	38	121	71	1	28	121	45	35	318	4	Jan.
9.7	9.5	8.4	8.2	8.3	8.6	9.1	9.2	36	60	18	43	52	131	91	44	256	1	Feb.
17.4	15.8	13.0	10.6	11.2	11.4	11.1	12.8	51	90	117	19	7	179	57	66	209	.....	Mar.
18.4	17.6	15.9	14.7	14.6	15.2	14.6	16.3	58	41	131	15	143	134	66	23	166	1	Apr.
14.1	14.4	14.2	13.0	12.4	11.5	11.6	12.8	46	213	205	93	125	9	18	4	74	3	May.
16.9	17.3	15.1	12.5	12.8	13.0	12.8	13.6	51	61	107	27	328	69	37	50	40	1	June.
14.3	14.3	13.5	12.2	11.6	11.6	12.1	11.9	50	65	58	21	485	92	8	8	6	1	July.
14.0	14.2	13.5	9.6	9.6	9.8	10.3	10.3	50	43	78	26	396	152	19	5	21	4	Aug.
14.9	14.1	11.1	9.9	10.5	11.3	10.4	11.2	40	67	138	21	366	65	32	22	5	4	Sept.
14.2	11.1	8.9	9.2	9.2	8.8	9.2	10.4	50	97	178	25	229	49	30	30	91	15	Oct.
12.1	9.8	8.3	8.5	9.5	9.3	9.4	10.5	43	123	85	26	257	48	16	50	109	6	Nov.
7.9	7.2	7.4	7.6	7.9	6.7	6.6	8.4	39	129	107	49	158	56	24	72	138	11	Dec.
13.8	12.8	11.4	10.2	10.4	10.3	10.4	11.4	.....	1,110	1,293	366	2,574	1,105	443	409	1,433	51	Year.

EASTPORT, ME.

[h_a=56 ft.; local time 0h 32m F.]

12.2	12.4	12.6	13.4	14.0	13.5	13.5	12.4	48	82	134	24	77	15	159	45	186	22	Jan.
12.6	12.4	12.4	14.0	13.6	14.6	15.1	14.1	60	78	214	40	37	18	65	55	189	.....	Feb.
13.2	12.8	12.8	12.9	12.9	13.4	13.5	13.7	42	96	60	28	30	21	103	226	180	.....	Mar.
9.3	8.3	8.0	7.8	7.9	7.9	7.9	8.7	30	76	14	16	11	75	174	214	137	3	Apr.
11.0	9.4	8.4	8.2	8.1	8.0	8.4	10.7	38	89	117	61	32	143	155	49	90	8	May.
7.1	6.7	5.7	6.5	5.6	6.2	5.9	6.9	39	82	80	18	24	142	237	45	85	7	June.
8.2	7.6	6.7	6.1	5.8	5.4	5.4	6.8	29	52	26	3	7	258	256	56	79	7	July.
7.1	6.3	5.9	6.2	6.3	6.0	6.0	6.6	36	87	148	28	22	139	171	55	75	19	Aug.
7.6	7.0	7.0	6.8	6.4	6.1	5.4	7.6	28	37	37	3	11	168	263	133	65	3	Sept.
8.0	7.9	7.7	7.7	7.8	8.1	8.8	9.1	30	122	22	18	22	47	155	147	205	6	Oct.
13.5	13.2	12.7	12.5	12.3	12.5	12.4	13.2	42	105	136	46	49	28	100	114	141	1	Nov.
10.0	10.0	10.1	10.5	10.5	10.6	10.8	10.9	28	77	35	12	28	8	39	210	335	.....	Dec.
10.0	9.5	9.2	9.4	9.3	9.4	9.4	10.1	.....	983	1,023	297	350	1,062	1,877	1,349	1,767	76	Year.

GALVESTON, TEX.

[h_a=95 ft.; local time 1h 19m S.]

14.0	13.6	13.0	13.7	13.7	13.5	13.2	13.1	37	452	77	43	124	92	100	18	138	.....	Jan.
10.1	9.7	8.9	9.2	10.3	10.0	10.3	10.2	34	106	84	126	158	147	43	8	24	.....	Feb.
12.8	13.1	12.4	13.1	13.3	12.7	12.5	12.4	38	69	113	31	256	86	63	14	110	2	Mar.
13.1	12.6	12.1	11.8	12.1	12.2	12.1	12.5	36	11	66	65	353	161	27	4	31	2	Apr.
14.8	14.6	14.6	15.3	15.5	15.8	15.7	15.1	34	35	57	13	304	248	41	1	45	.....	May.
11.6	10.9	10.8	10.3	10.4	10.8	10.6	10.0	44	16	25	10	208	240	168	30	23	.....	June.
11.1	10.5	9.8	9.2	9.7	9.2	9.2	9.3	25	6	29	16	106	351	199	20	17	.....	July.
9.9	8.9	8.5	7.6	6.8	6.9	7.5	8.0	36	38	79	27	66	184	212	54	80	4	Aug.
11.3	10.3	9.7	9.6	9.8	9.7	10.0	10.7	33	61	205	179	157	57	15	3	41	2	Sept.
11.5	10.9	10.5	11.2	11.7	12.4	12.8	11.5	35	58	131	104	293	45	48	10	55	.....	Oct.
11.9	11.5	10.9	11.3	11.0	10.8	10.6	11.4	48	44	76	57	123	146	146	34	94	.....	Nov.
12.7	12.6	12.0	12.3	12.3	12.5	12.6	13.1	45	50	148	84	124	123	69	23	120	3	Dec.
12.1	11.6	11.1	11.2	11.4	11.4	11.4	11.4	.....	646	1,090	755	2,272	1,880	1,131	219	768	13	Year.

KANSAS CITY, MO.

[h_a=95 ft.; local time 1h 18m S.]

9.1	8.3	7.7	8.3	8.5	8.0	7.7	8.5	34	117	61	16	34	128	144	43	200	1	Jan.
8.8	8.7	7.1	6.9	8.0	8.2	8.2	8.5	35	120	96	60	108	68	70	42	132	.....	Feb.
12.1	11.9	10.4	10.0	10.9	10.3	10.0	11.1	42	122	121	17	135	70	85	41	152	1	Mar.
11.3	10.4	9.7	8.8	8.0	7.5	7.7	9.5	52	55	115	55	112	129	153	30	71	.....	Apr.
9.0	8.5	7.8	7.4	7.1	7.6	7.2	8.0	34	66	126	47	87	102	88	41	186	1	May.
8.4	8.1	6.6	5.6	5.5	5.4	6.0	7.1	20	104	65	14	177	155	94	13	95	3	June.
7.7	7.4	6.6	6.1	6.3	6.8	6.7	7.1	38	34	133	97	205	189	50	5	28	3	July.
7.5	7.2	5.9	5.3	5.6	5.5	5.9	6.3	22	62	162	83	174	127	73	15	47	1	Aug.
8.5	7.2	6.0	5.9	6.4	6.2	5.8	6.8	22	98	28	24	264	165	43	21	73	4	Sept.
8.3	6.6	6.2	6.1	6.4	6.4	6.9	7.3	31	119	76	19	180	121	99	33	103	3	Oct.
7.5	7.2	7.4	8.5	8.7	8.4	8.3	8.6	36	77	81	50	83	116	112	56	144	1	Nov.
7.6	7.5	7.8	7.4	7.3	7.1	6.4	6.9	30	145	148	62	64	89	107	53	69	7	Dec.
8.8	8.2	7.4	7.2	7.4	7.3	7.2	8.0	.....	1,119	1,212	544	1,623	1,459	1,109	393	1,300	25	Year.

WIND—VELOCITY AND FREQUENCY—Continued.

KEY WEST, FLA.

[λ=24° 34′ N.; φ=81° 49′ W.] [Seventy-fifth Meridian Time.]

1892.	1h a.m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p.m.	2h	3h	4h	5h
Jan	11.8	12.6	12.7	12.0	12.6	11.9	12.2	12.1	11.6	11.5	11.8	11.5	11.7	11.3	11.5	11.6	11.2
Feb	11.0	11.2	10.7	10.1	10.5	10.6	10.5	11.3	12.1	12.0	12.2	12.0	12.0	12.3	11.9	11.8	11.6
Mar	10.3	10.7	10.7	10.7	11.0	11.0	11.0	11.3	12.2	12.6	13.3	12.7	13.0	13.6	14.0	13.3	12.9
Apr	10.7	10.5	10.2	10.4	10.0	10.4	10.4	10.4	11.5	11.9	12.3	12.4	12.3	12.2	12.2	12.3	12.3
May	8.6	8.0	7.9	7.6	7.2	6.7	6.8	8.5	9.5	9.6	9.8	10.1	9.9	10.1	10.5	10.4	10.5
June	6.2	6.2	6.0	5.7	5.3	5.1	6.0	6.6	7.2	6.8	7.6	7.7	7.7	8.7	8.3	8.4	8.1
July	6.8	6.8	6.4	7.0	7.0	6.6	7.3	8.7	9.9	10.4	10.8	11.1	10.2	11.0	10.5	10.1	9.4
Aug	5.3	6.0	6.0	5.5	5.4	5.1	5.1	5.6	7.1	7.2	7.7	7.8	7.7	7.4	7.3	6.9	7.0
Sept	6.5	6.6	6.7	6.3	6.7	6.1	5.8	6.7	7.5	8.5	8.8	9.0	8.9	8.4	7.9	7.1	7.3
Oct	11.9	11.5	11.4	10.5	10.5	10.8	10.4	11.4	12.4	12.4	12.7	13.2	12.7	12.8	12.5	12.8	13.3
Nov	12.1	12.4	12.3	12.5	12.3	11.4	11.1	11.5	11.7	11.3	12.0	12.4	12.1	12.6	12.9	12.2	13.0
Dec	9.8	10.0	9.7	9.5	9.8	9.8	9.6	9.8	10.1	10.2	10.8	10.3	11.0	11.5	11.4	11.0	10.6
Year	9.2	9.4	9.2	9.0	9.0	8.8	8.8	9.5	10.2	10.4	10.8	10.8	10.8	11.0	10.9	10.7	10.6

MARQUETTE, MICH.

[λ=46° 34′ N.; φ=87° 24′ W.]

Jan	11.6	11.7	11.7	10.9	11.1	10.5	10.2	9.5	9.8	9.7	10.0	9.6	10.0	9.7	10.1	9.7	9.1
Feb	7.8	8.4	8.6	8.9	9.1	9.2	9.3	8.6	9.0	9.2	9.2	9.1	8.6	8.2	8.1	7.6	8.0
Mar	7.3	7.3	7.2	7.0	7.4	7.6	7.9	7.6	8.0	8.6	8.3	8.5	8.9	8.7	8.7	8.9	8.5
Apr	8.3	8.7	8.9	8.3	8.9	8.8	8.8	9.6	11.4	12.4	13.1	13.5	13.9	13.8	13.9	13.7	13.4
May	7.2	6.4	6.5	5.9	5.8	6.0	6.5	6.8	7.5	9.3	9.6	9.9	11.0	11.2	11.0	10.6	8.9
June	6.6	6.5	7.3	6.6	6.3	5.4	5.6	5.5	6.3	7.2	7.8	8.3	8.1	8.6	8.9	8.4	8.3
July	7.5	7.5	8.3	8.5	8.0	7.7	8.2	7.5	7.8	8.0	9.0	9.7	10.4	9.6	9.1	8.8	7.5
Aug	9.4	8.6	8.3	8.2	8.6	8.3	8.9	8.9	9.7	10.5	10.7	10.3	10.4	10.0	9.6	10.1	9.8
Sept	10.3	9.8	9.2	8.9	9.1	9.7	9.6	10.0	10.6	11.8	12.5	12.9	13.6	14.3	14.0	13.3	12.5
Oct	11.8	11.6	11.4	11.1	10.9	10.8	10.1	11.1	12.7	12.4	12.8	13.2	12.8	13.3	12.9	12.0	11.3
Nov	11.8	11.8	11.8	12.0	11.9	11.6	11.2	10.8	10.7	11.3	11.8	11.9	12.3	12.7	12.7	12.2	11.4
Dec	10.5	10.3	10.4	9.9	9.7	9.7	10.2	10.5	10.5	11.2	11.1	11.3	10.8	10.8	10.3	9.7	9.0
Year	9.2	9.0	9.1	8.8	8.9	8.8	8.9	8.9	9.5	10.1	10.5	10.7	10.9	10.9	10.8	10.4	9.8

MEMPHIS, TENN.

[λ=35° 9′ N.; φ=90° 3′ W.]

Jan	8.2	8.1	7.8	7.8	8.0	7.3	7.3	7.0	7.4	8.4	8.2	8.0	8.1	8.0	7.7	8.0	7.6
Feb	7.7	7.3	7.3	7.0	7.7	7.6	7.9	7.6	7.9	8.1	9.1	9.2	8.9	8.8	8.6	8.9	9.4
Mar	8.0	7.5	7.7	7.6	7.4	7.4	7.5	7.1	7.8	8.8	9.3	9.3	9.8	9.7	10.2	10.6	10.3
Apr	7.5	8.0	8.0	8.4	9.3	8.6	9.0	9.3	10.7	10.6	11.1	11.0	10.5	10.4	10.2	10.4	9.8
May	7.7	7.0	7.3	7.4	7.0	7.1	7.6	7.6	8.7	9.7	9.6	9.4	10.6	10.4	10.5	9.8	8.9
June	4.6	4.2	3.9	3.8	4.2	4.1	4.4	4.9	5.2	6.0	6.2	6.4	7.0	7.1	7.2	7.7	7.5
July	4.8	4.8	4.6	4.3	3.8	4.1	4.3	4.5	5.2	6.3	6.8	7.0	7.5	7.5	7.6	7.5	7.3
Aug	4.0	4.3	4.2	4.2	4.0	3.9	4.3	4.5	5.1	5.2	5.5	6.0	6.8	6.6	7.3	7.4	7.3
Sept	4.6	5.0	4.4	4.0	4.3	4.1	4.2	4.3	5.0	5.7	5.9	7.2	6.9	6.4	6.5	6.5	6.3
Oct	6.0	6.2	5.9	5.5	5.4	5.4	5.5	5.5	6.1	7.2	7.2	7.5	8.5	8.0	8.0	7.8	7.5
Nov	7.8	7.6	7.6	7.0	6.6	7.0	7.4	7.6	8.5	8.3	8.8	8.6	9.6	9.8	9.6	9.6	8.9
Dec	6.6	7.0	6.5	6.9	7.2	7.2	6.9	6.9	7.1	7.9	7.8	8.5	7.9	7.5	7.7	8.0	7.5
Year	6.5	6.4	6.3	6.2	6.2	6.2	6.4	6.4	7.1	7.7	8.0	8.2	8.5	8.4	8.4	8.5	8.2

NEW ORLEANS, LA.

[λ=29° 58′ N.; φ=90° 4′ W.]

Jan	7.8	7.8	7.8	8.5	8.2	8.5	9.0	8.0	7.9	8.5	9.6	9.6	9.6	9.5	10.0	9.7	9.4
Feb	7.5	7.5	7.2	7.9	7.8	7.9	7.3	7.3	7.7	7.8	8.5	10.6	11.3	11.4	11.0	11.1	10.2
Mar	9.4	9.2	8.8	8.7	8.3	7.5	7.5	7.2	8.4	9.5	9.9	10.7	10.6	10.7	10.8	11.6	10.8
Apr	10.8	10.8	10.5	10.1	9.7	10.3	9.9	10.4	11.3	12.8	14.2	14.6	14.7	14.8	15.0	14.7	14.0
May	9.2	8.7	8.4	7.4	6.6	6.8	6.9	7.2	8.9	11.1	11.8	11.7	12.4	12.0	11.9	12.3	12.5
June	6.0	6.0	5.4	5.0	4.6	4.8	4.9	5.2	6.5	8.1	8.5	10.0	10.5	10.5	9.8	9.4	9.3
July	5.6	5.4	4.9	4.7	4.3	4.2	4.5	4.1	5.3	7.0	7.5	7.3	8.4	8.3	8.3	9.2	9.2
Aug	4.8	5.0	4.7	4.3	4.2	4.6	4.0	4.4	5.0	6.5	6.6	6.7	8.1	8.0	8.2	8.8	8.4
Sept	7.5	7.8	7.7	8.0	8.1	8.3	8.5	8.5	9.8	10.6	11.2	11.5	12.3	11.7	11.5	11.0	10.3
Oct	8.1	7.9	8.1	8.0	8.6	9.1	8.8	8.8	9.5	10.3	11.1	11.9	12.6	11.9	12.1	11.4	10.9
Nov	8.0	8.3	7.9	7.9	7.9	7.9	8.4	7.5	8.3	8.8	9.8	9.9	10.8	10.4	10.4	10.6	10.5
Dec	9.6	9.2	9.7	9.5	9.3	9.1	9.4	9.3	9.5	10.3	10.4	10.5	11.6	11.7	12.1	12.3	10.9
Year	7.9	7.8	7.6	7.5	7.3	7.4	7.4	7.3	8.2	9.3	9.9	10.4	11.1	10.9	10.9	11.0	10.5

WIND—VELOCITY AND FREQUENCY—Continued.

KEY WEST, FLA.

[h_a=50 ft.; local time 0h 27m S.] [Seventy-fifth Meridian Time.]

6h	7h	8h	9h	10h	11h	Mid.	Mean.	Max. vel.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Calm.	1892.
10.3	10.3	10.1	10.1	10.7	11.0	11.1	11.5	46	125	206	108	134	46	24	.....	101	.....	Jan.
11.1	10.6	11.0	10.8	11.0	11.3	10.8	11.3	38	57	207	131	148	50	17	5	78	3	Feb.
12.3	11.2	10.9	11.3	10.7	11.1	10.4	11.8	43	65	200	155	155	20	39	.....	110	.....	Mar.
12.4	11.9	11.7	11.7	11.8	11.5	11.1	11.4	36	17	52	266	303	21	17	2	42	.....	Apr.
10.3	10.3	9.6	9.9	9.7	9.9	9.1	9.2	26	54	57	283	267	18	12	8	40	5	May.
7.4	7.7	7.5	7.0	6.4	6.9	6.2	6.9	30	8	22	130	380	69	55	20	9	27	June.
9.1	8.7	8.4	8.3	7.7	7.9	7.5	8.7	36	1	5	468	258	1	.....	3	5	3	July.
6.1	5.6	5.3	5.7	6.1	6.0	5.7	6.3	26	27	46	268	263	61	31	2	33	13	Aug.
7.1	6.0	6.3	6.1	5.1	6.3	6.8	7.0	34	15	114	231	145	123	58	13	19	2	Sept.
12.2	12.1	11.9	11.9	11.5	11.2	12.1	11.9	36	41	208	274	82	18	57	8	54	2	Oct.
12.9	12.4	12.9	12.7	12.1	12.8	12.4	12.3	39	105	325	218	29	1	5	9	26	2	Nov.
9.5	9.1	8.9	9.5	9.3	9.5	9.2	10.0	35	71	229	155	144	67	31	10	35	2	Dec.
10.1	9.7	9.5	9.6	9.3	9.6	9.4	9.9	.....	586	1,671	2,687	2,308	495	346	80	552	59	Year.

MARQUETTE, MICH.

[h_a=95 ft.; local time 0h 49m S.]

8.5	9.1	10.1	10.5	10.6	10.8	11.1	10.2	44	62	4	.....	17	101	88	283	189	.....	Jan.
7.5	6.7	6.8	6.9	7.8	7.6	8.1	8.3	32	109	77	22	46	148	76	66	152	.....	Feb.
8.5	7.6	6.4	6.3	7.1	6.8	6.7	7.7	31	188	75	57	62	77	8	62	209	6	Mar.
12.6	10.7	8.4	7.4	7.6	8.6	9.3	10.6	40	137	199	13	33	58	32	76	169	3	Apr.
7.8	7.5	6.8	6.1	5.9	6.2	6.3	7.8	48	253	159	53	73	35	36	33	96	6	May.
8.0	7.1	5.7	5.3	4.5	5.5	6.4	6.8	30	223	103	9	70	63	50	58	137	7	June.
6.6	5.1	4.4	4.1	4.6	5.3	7.0	7.5	32	126	63	54	60	48	141	93	147	12	July.
9.7	8.6	7.1	6.5	7.1	8.5	9.3	9.0	34	131	151	17	49	68	163	57	108	.....	Aug.
11.6	9.4	8.7	8.5	9.3	10.0	10.9	10.8	36	99	55	23	77	106	137	68	154	1	Sept.
10.9	10.3	10.9	11.5	11.9	12.1	11.7	11.7	46	137	70	16	23	89	125	107	177	0	Oct.
11.4	11.6	11.4	11.4	12.2	12.0	12.1	11.8	36	75	49	14	53	149	84	99	196	1	Nov.
9.5	9.9	10.6	11.0	11.3	10.9	11.0	10.4	28	13	27	12	15	81	126	291	179	.....	Dec.
9.4	8.6	8.1	8.0	8.3	8.7	9.2	9.4	.....	1,553	1,032	290	578	1,023	1,066	1,293	1,913	36	Year.

MEMPHIS, TENN.

[h_a=116 ft.; local time 1h 0m S.[

7.9	7.0	7.2	7.2	8.0	8.3	8.0	7.8	40	207	101	72	27	80	135	53	65	4	Jan.
9.0	8.6	8.2	8.4	8.1	8.1	8.0	8.2	31	186	51	23	8	233	27	51	117	.....	Feb.
9.5	9.0	7.9	8.3	7.9	8.6	9.2	8.6	42	135	42	53	128	85	76	111	112	2	Mar.
9.4	8.1	7.6	8.0	7.7	8.0	7.6	9.1	42	95	83	53	221	67	30	69	101	1	Apr.
8.6	7.8	6.6	5.9	6.3	6.4	7.1	8.1	36	72	75	14	168	128	132	99	53	3	May.
7.5	6.9	4.9	4.8	4.1	4.3	3.9	5.4	52	16	34	21	43	262	141	28	170	5	June.
7.2	6.2	4.8	3.8	4.2	3.9	4.6	5.5	29	105	125	38	119	109	94	90	51	13	July.
6.5	6.6	4.2	4.2	4.0	4.1	4.5	5.2	39	123	180	35	78	147	128	22	26	5	Aug.
5.9	4.8	3.8	3.9	4.3	4.3	4.5	5.1	32	215	134	24	130	51	53	62	21	30	Sept.
7.1	5.6	5.3	5.1	5.5	6.0	6.4	6.4	23	185	104	22	142	118	46	45	68	14	Oct.
7.7	7.3	7.2	7.2	8.2	7.9	7.8	8.1	50	114	106	77	79	128	25	74	117	.....	Nov.
7.2	7.1	6.6	6.8	7.0	7.1	7.7	7.3	36	169	186	113	39	63	41	53	79	1	Dec.
7.8	7.1	6.2	6.1	6.3	6.4	6.6	7.1	.....	1,622	1,221	545	1,182	1,471	928	757	980	78	Year.

NEW ORLEANS, LA.

[h_a=120 ft.; local time 1h 0m S.]

8.1	7.1	7.1	7.5	8.0	8.1	8.1	8.5	32	158	105	95	37	14	109	35	150	41	Jan.
9.6	7.8	7.7	7.8	8.1	7.9	7.5	8.6	29	137	147	77	108	121	40	3	43	20	Feb.
11.0	10.4	9.0	9.0	9.4	9.4	10.0	9.5	40	103	54	149	120	118	35	70	89	6	Mar.
13.7	12.6	10.7	10.3	10.3	11.1	10.9	12.0	40	97	104	196	134	142	10	21	15	1	Apr.
12.1	11.8	9.7	8.3	7.9	8.0	8.9	9.7	45	40	13	16	318	106	156	21	73	1	May.
9.0	8.9	7.8	7.2	6.5	5.9	6.2	7.3	39	49	42	37	123	100	212	93	59	5	June.
8.2	7.8	7.2	6.3	5.8	5.8	5.5	6.4	24	10	19	58	145	122	199	56	134	1	July.
7.2	7.2	6.0	5.7	5.3	5.0	5.2	6.0	27	3	90	50	80	37	184	137	163	.....	Aug.
10.0	8.6	7.7	6.9	7.0	6.8	7.7	9.1	30	63	291	79	36	0	20	4	226	1	Sept.
10.6	8.7	8.0	8.6	9.4	8.4	7.9	9.6	50	99	491	44	.....	24	2	26	58	.....	Oct.
9.8	8.6	8.6	8.6	8.6	8.5	8.7	8.9	36	312	98	109	16	147	.....	2	36	.....	Nov.
10.3	9.1	8.9	9.6	9.1	9.0	9.5	10.0	40	341	.....	53	32	206	27	25	60	.....	Dec.
10.0	9.0	8.2	8.0	8.0	7.8	8.0	8.8	.....	1,412	1,454	963	1,149	1,137	994	493	1,106	76	Year.

WIND—VELOCITY AND FREQUENCY—Continued.

NEW YORK CITY.

[λ=40° 43′ N.; φ=74° 0′ W.] [Seventy-fifth Meridian Time.]

1892.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.	2h	3h	4h	5h
Jan.	12.2	11.3	11.6	11.5	11.7	13.7	14.1	13.8	13.4	13.4	14.8	15.2	14.8	14.2	14.1	13.5	12.5
Feb.	12.8	12.2	11.4	12.3	12.7	13.3	13.8	13.5	14.8	14.6	14.9	15.0	15.0	15.0	14.9	15.0	14.1
Mar.	13.7	14.1	13.6	13.4	13.0	12.7	12.9	13.5	14.6	15.5	16.1	17.2	16.4	16.9	17.3	16.6	16.8
Apr.	9.4	9.3	9.9	9.4	9.2	9.2	9.7	10.8	12.3	12.0	12.4	12.3	13.5	14.2	13.7	13.6	13.0
May	9.1	9.3	9.0	8.5	9.2	8.4	9.2	10.2	10.2	9.9	9.8	10.5	11.6	12.2	12.5	12.8	13.1
June	7.8	6.9	7.0	7.2	8.1	7.8	8.1	8.3	9.3	9.9	10.4	10.4	10.7	11.4	12.0	12.7	13.3
July	7.3	7.0	6.3	5.9	5.9	5.8	5.7	6.4	6.7	6.9	7.6	7.5	9.0	8.9	8.9	9.7	9.4
Aug	5.5	5.7	4.9	4.5	5.4	6.1	6.3	7.1	7.3	7.5	7.7	8.0	8.1	8.1	8.1	8.7	8.8
Sept	7.8	7.9	7.7	7.5	7.7	7.5	7.7	7.6	8.2	8.8	8.9	9.5	10.1	10.4	10.7	11.0	10.5
Oct.	8.4	8.6	8.6	8.6	9.1	9.4	8.2	8.9	10.0	10.5	11.1	11.9	12.3	13.0	13.6	13.5	12.9
Nov*	11.9	11.9	12.5	11.9	11.6	11.6	11.0	11.7	12.4	12.9	13.3	13.0	13.4	13.2	14.0	13.4	12.6
Dec.	10.8	10.6	10.2	10.1	10.0	10.4	10.1	10.0	10.7	11.0	12.3	12.8	13.3	13.1	13.1	12.6	11.5
Year	9.7	9.6	9.4	9.3	9.5	9.7	9.7	10.2	10.8	11.1	11.6	11.9	12.4	12.6	12.7	12.8	12.4

PHILADELPHIA, PA.

[λ=39° 57′ N.; φ=75° 9′ W.]

Jan.	9.8	9.5	9.9	10.2	10.8	11.4	11.6	11.8	12.8	13.3	12.9	12.8	12.9	12.0	11.6	11.7	11.7
Feb.	11.9	11.4	11.9	12.6	12.2	12.3	12.1	12.3	13.2	13.7	13.5	13.5	14.1	13.8	13.7	13.6	13.6
Mar.	12.7	12.4	12.1	11.8	12.0	12.2	12.4	12.9	13.7	14.9	15.2	15.2	15.6	15.9	15.2	15.1	14.4
Apr.	9.2	8.8	8.1	8.7	8.8	9.3	9.0	10.8	11.9	12.3	12.1	11.6	12.2	12.5	12.4	11.9	11.7
May	8.3	8.0	7.7	7.6	7.3	7.2	7.6	8.1	8.7	8.9	9.2	9.4	9.7	10.3	10.8	11.0	10.8
June	7.3	7.1	7.3	7.0	7.2	7.3	7.7	8.6	9.6	9.9	10.8	11.2	12.4	11.8	12.5	13.1	12.9
July	6.9	7.3	6.9	6.0	6.4	6.1	7.1	8.0	8.4	9.0	9.3	9.6	9.7	10.5	10.6	10.9	11.0
Aug	6.1	6.0	6.1	6.3	6.6	6.6	6.7	7.9	7.9	8.2	8.7	9.7	10.0	10.3	10.3	10.6	10.2
Sept	7.3	6.9	6.8	7.5	7.4	7.9	7.9	8.2	9.0	9.3	9.9	10.5	10.6	10.8	11.2	10.9	11.0
Oct.	7.5	7.3	7.6	7.7	7.5	7.8	7.6	8.6	10.1	11.2	11.5	12.7	13.1	12.9	12.5	12.0	11.9
Nov.	9.3	9.5	9.6	9.1	9.0	9.3	9.4	9.0	10.2	11.7	12.4	13.7	13.1	13.3	13.0	12.1	11.3
Dec.	9.1	8.9	9.0	8.4	8.2	8.3	8.6	8.9	9.7	11.0	11.7	12.0	12.3	12.5	12.5	11.6	10.7
Year	8.8	8.6	8.6	8.6	8.6	8.8	9.0	9.6	10.4	11.1	11.4	11.8	12.1	12.2	12.2	12.0	11.8

PITTSBURG, PA.

[λ=40° 32′ N.; φ=80° 2′ W.]

Jan.	6.1	5.9	6.0	5.8	5.8	5.9	6.0	5.8	6.6	6.9	7.4	7.8	8.2	7.5	7.8	7.9	7.3
Feb.	6.3	6.1	6.2	6.1	5.8	5.3	5.9	6.2	6.8	7.7	8.4	8.2	9.1	8.6	8.4	8.3	7.5
Mar.	5.8	5.5	5.5	6.1	5.8	5.5	5.5	5.5	6.1	6.9	7.4	7.0	7.9	8.0	7.8	8.0	7.7
Apr.	5.4	5.5	5.4	5.1	5.3	5.1	5.8	6.3	7.2	7.8	7.8	8.1	8.2	7.8	8.2	8.1	8.0
May	4.6	4.4	4.8	5.0	4.6	5.4	6.0	6.2	6.3	7.3	7.3	8.0	8.6	8.2	8.2	7.9	7.3
June	5.2	4.9	5.3	5.0	4.7	5.0	5.9	6.4	6.9	7.6	7.9	8.2	8.3	8.2	8.7	7.8	8.0
July	3.2	3.3	3.5	3.1	3.2	3.0	3.3	3.4	4.2	5.0	5.3	5.6	6.6	6.6	6.3	6.6	7.0
Aug	4.4	4.2	4.0	3.9	3.9	3.9	3.6	4.0	4.4	5.7	6.4	6.9	7.7	7.2	7.3	7.6	7.6
Sept	4.6	4.4	4.3	4.4	4.4	4.5	4.3	5.2	5.5	6.3	7.0	7.0	7.9	7.8	8.0	8.3	8.2
Oct.	5.3	5.5	5.6	5.4	5.1	5.2	5.2	5.1	5.8	6.4	7.7	7.1	8.3	8.3	8.3	8.6	8.1
Nov	7.3	7.2	6.9	7.0	7.7	7.6	7.6	7.9	7.9	9.1	9.4	9.6	10.5	9.7	9.6	9.6	9.2
Dec.	5.6	5.8	5.8	5.7	6.4	6.4	6.4	6.6	6.8	7.5	7.8	7.7	8.7	8.5	8.4	7.8	7.3
Year	5.3	5.2	5.3	5.2	5.2	5.2	5.5	5.7	6.2	7.0	7.5	7.6	8.3	8.0	8.1	8.0	7.8

PORTLAND, OREGON.

[λ=45° 32′ N.; φ=122° 43′ W.]

Jan.	5.0	4.2	3.9	4.1	3.7	4.0	4.3	4.2	4.3	4.7	4.3	4.5	4.4	4.6	5.4	5.2	5.4
Feb.	4.1	3.5	3.8	3.1	3.3	3.6	3.6	3.8	4.4	4.9	4.4	5.0	6.0	5.5	6.1	6.9	6.7
Mar	3.9	4.2	4.3	3.8	4.2	4.1	3.8	3.9	3.9	4.0	4.0	4.1	5.0	5.5	6.1	6.3	6.4
Apr.	5.7	5.1	4.9	4.7	4.6	4.7	5.0	5.3	5.4	5.3	6.2	7.3	8.1	7.9	8.9	9.2	9.0
May	5.5	5.5	5.1	4.0	3.3	3.3	3.2	3.0	3.5	4.7	5.5	6.8	6.8	6.4	6.3	7.0	7.2
June	5.6	5.1	4.6	4.1	3.9	3.9	3.2	3.2	3.8	4.6	5.7	6.6	6.6	6.7	6.7	6.5	6.7
July	6.9	5.8	5.5	5.5	4.7	3.9	3.7	4.0	4.2	5.1	5.8	6.7	7.0	6.7	6.9	6.9	6.7
Aug	6.4	5.9	4.7	3.9	3.5	3.2	2.5	2.8	2.9	3.4	4.8	6.1	7.1	6.8	7.3	7.9	8.3
Sept	4.9	4.3	4.2	4.0	3.9	3.5	3.5	3.6	3.8	3.9	4.4	5.5	6.1	6.1	6.2	6.9	6.8
Oct †	5.7	6.6	6.3	6.3	7.0	6.6	7.4	7.9	8.1	7.8	7.1	7.6	8.4	7.9	7.2	7.1	6.9
Nov	7.5	7.9	8.5	8.9	8.8	8.7	9.1	8.9	8.5	8.5	8.7	9.4	9.6	10.3	10.3	10.3	10.1
Dec.	7.2	7.8	7.3	7.4	6.3	6.2	6.5	6.4	6.3	5.9	6.4	7.5	8.6	8.6	8.2	7.8	7.8
Year	5.7	5.5	5.3	5.0	4.8	4.6	4.6	4.8	4.9	5.2	5.6	6.4	7.0	6.9	7.1	7.3	7.3

* 12 hours missing in the record of frequency.

† 54 hours record missing from frequency record.

WIND—VELOCITY AND FREQUENCY—Continued.

NEW YORK CITY.

[h_a=200 ft.; local time 0^h 4^m.] [Seventy-fifth Meridian Time.]

6h	7h	8h	9h	10h	11h	Mid.	Mean.	Max. vel.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Calm.	1892.
12.7	12.2	11.8	11.7	11.7	12.2	12.3	12.9	49	125	25	8	.....	122	224	42	196	2	Jan.
14.2	13.1	12.7	13.8	13.9	13.6	14.0	13.8	36	67	235	10	19	32	79	43	211	.....	Feb.
15.3	13.7	13.4	12.9	13.6	13.5	13.8	14.6	40	41	73	12	53	35	146	116	262	6	Mar.
12.9	11.3	11.2	10.9	10.5	10.0	9.5	11.3	39	55	49	10	89	125	121	80	191	.....	Apr.
13.2	12.2	11.3	11.2	10.4	10.5	9.5	10.6	35	31	92	60	157	77	139	45	143	.....	May.
12.0	10.4	10.6	10.8	10.1	9.6	8.9	9.7	30	16	89	32	191	112	203	16	60	1	June.
8.4	7.7	7.0	7.1	6.9	7.1	7.0	7.3	40	12	67	4	162	151	178	45	124	1	July.
8.8	7.3	6.9	6.6	6.7	6.2	5.3	6.9	28	55	94	44	141	90	114	40	165	1	Aug.
9.8	8.9	9.1	8.6	7.9	7.9	8.2	8.8	36	42	84	30	170	81	156	54	102	1	Sept.
11.9	11.4	10.7	10.6	10.5	9.4	8.7	10.5	34	12	29	18	47	49	261	75	252	1	Oct.
12.8	13.2	12.5	12.6	12.2	12.2	12.1	12.5	40	17	116	10	85	49	148	37	246	.....	Nov.
11.2	10.9	10.3	10.9	10.3	10.4	10.3	11.1	38	21	37	20	9	14	243	102	297	1	Dec.
11.9	11.0	10.6	10.6	10.4	10.2	10.0	10.8	.....	494	990	258	1,123	937	2,012	695	2,249	14	Year.

PHILADELPHIA, PA.

[h_a=184 ft.; local time 0^h 0^m.]

11.5	11.0	10.2	10.7	11.0	10.2	9.8	11.3	45	36	130	34	38	35	173	32	266	.....	Jan.
13.5	13.2	12.1	12.9	12.8	12.9	12.9	12.9	44	35	269	36	14	18	54	39	231	.....	Feb.
13.2	11.9	11.3	11.6	12.3	11.9	11.9	13.2	36	56	125	41	34	11	54	23	400	.....	Mar.
11.6	10.2	9.0	8.7	9.2	9.4	9.1	10.4	31	50	120	43	26	28	174	33	246	.....	Apr.
10.5	8.8	8.4	8.4	8.8	8.8	8.3	8.9	38	47	51	74	72	77	153	50	219	1	May.
12.6	10.8	9.5	9.1	8.8	8.4	8.5	9.6	32	8	93	72	70	75	257	88	56	1	June.
10.8	9.9	9.5	8.8	8.1	7.8	7.2	8.6	36	23	92	57	51	77	156	112	175	1	July.
9.8	8.7	7.8	7.5	7.6	6.7	6.3	8.0	24	24	155	43	91	73	166	35	157	.....	Aug.
10.5	9.3	8.7	8.4	7.6	7.7	7.2	8.8	41	8	133	87	170	25	115	43	138	1	Sept.
10.3	10.6	9.6	8.9	8.7	8.3	7.3	9.7	31	31	78	7	17	53	179	82	294	3	Oct.
10.9	10.3	10.2	10.8	10.4	9.9	9.9	10.7	37	74	101	13	49	63	111	97	207	5	Nov.
9.5	9.6	9.0	9.5	9.6	9.0	8.8	9.9	36	21	45	16	6	31	150	74	399	2	Dec.
11.2	10.4	9.6	9.6	9.6	9.2	8.9	10.2	.....	413	1,392	523	638	566	1,742	708	2,788	14	Year.

PITTSBURG, PA.

[h_a=138 ft.; local time 0^h 20^m S.]

6.9	6.5	6.4	6.5	7.1	7.2	6.5	6.7	26	66	24	20	78	29	163	89	275	.....	Jan.
6.9	7.3	6.6	6.7	6.3	6.3	6.1	7.0	36	34	34	104	121	51	88	47	215	2	Feb.
7.4	7.2	6.6	6.6	6.4	6.8	6.4	6.6	28	122	62	60	100	18	41	46	294	1	Mar.
6.8	6.8	6.5	6.3	5.9	5.6	5.6	6.6	30	71	87	48	79	30	106	64	234	1	Apr.
7.0	6.6	5.7	5.2	5.2	4.6	4.8	6.2	24	65	23	89	33	57	121	144	200	12	May.
8.2	7.5	6.5	5.8	5.3	5.4	4.9	6.6	33	11	77	58	96	156	210	76	34	2	June.
5.7	5.6	4.6	4.2	4.0	3.6	3.2	4.6	38	40	78	122	184	147	72	38	63	.....	July.
7.6	6.4	5.8	5.0	4.8	4.6	4.7	5.5	24	199	42	55	33	72	66	84	187	6	Aug.
7.8	7.2	6.8	6.5	6.0	5.7	5.4	6.1	38	90	51	78	117	59	94	137	82	12	Sept.
7.3	6.6	6.3	6.4	6.0	5.8	5.5	6.4	36	60	20	14	79	18	90	162	300	1	Oct.
9.1	8.5	8.4	8.2	8.0	8.0	7.5	8.4	30	52	8	27	106	38	114	125	250	.....	Nov.
7.0	6.6	6.3	6.3	6.2	6.1	5.5	6.8	24	63	50	16	48	17	87	205	258	.....	Dec.
7.3	6.9	6.4	6.1	5.9	5.8	5.5	6.5	.....	873	556	691	1,074	692	1,252	1,217	2,392	37	Year.

PORTLAND, OREGON.

[h_a=209 ft.; local time 3^h 11^m S.]

5.5	5.5	5.2	4.6	4.5	4.0	4.0	4.6	26	55	186	86	50	184	92	35	38	18	Jan.
6.3	5.7	5.2	4.5	3.8	3.3	4.0	4.6	30	165	190	31	45	171	17	16	30	31	Feb.
6.4	6.4	6.6	6.3	5.0	4.0	4.1	4.8	27	39	2	5	69	328	106	42	127	26	Mar.
8.7	7.6	8.1	8.1	7.0	6.0	5.3	6.6	40	93	54	9	145	214	108	7	72	18	Apr.
7.5	7.4	7.6	7.8	7.6	6.9	5.5	5.7	23	164	84	41	87	104	90	9	140	25	May.
7.1	7.1	7.0	7.4	7.3	6.3	6.2	5.7	26	198	122	9	118	73	58	8	123	11	June.
7.3	7.9	8.0	8.9	8.1	7.1	7.3	6.3	23	324	53	5	36	133	54	2	125	12	July.
8.9	9.2	9.1	8.8	7.3	6.4	6.2	6.0	20	287	17	4	27	59	22	9	309	10	Aug.
7.2	6.3	6.8	6.0	5.6	5.0	4.8	5.1	34	224	26	39	41	209	43	4	119	15	Sept.
6.3	6.4	6.1	5.6	5.9	5.6	6.1	6.8	37	97	7	3	93	119	150	18	195	8	Oct.
10.1	9.8	9.2	8.8	9.4	9.4	9.2	9.2	41	61	1	14	112	147	184	24	168	9	Nov.
7.3	7.0	6.4	6.9	7.4	6.7	6.2	7.1	37	101	27	21	182	146	89	29	145	4	Dec.
7.4	7.2	7.1	7.0	6.6	5.9	5.7	6.0	.....	1,808	769	267	1,005	1,887	1,013	203	1,591	187	Year.

WIND—VELOCITY AND FREQUENCY—Continued.

ST. LOUIS, MO.

[λ = 38° 38′ N.; φ = 90° 12′ W.] [Seventy-fifth Meridian Time.]

1892.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.	2h	3h	4h	5h
Jan	14.0	12.4	12.8	13.0	12.7	13.0	13.6	12.4	12.5	12.8	12.8	13.4	13.8	13.9	14.2	14.5	14.5
Feb	12.5	11.4	11.4	11.7	11.9	11.7	12.2	11.8	12.8	13.3	13.9	13.5	13.4	12.8	12.8	13.2	13.5
Mar	13.0	11.5	11.5	11.9	12.1	11.7	12.3	12.0	12.7	12.9	13.2	12.6	13.4	13.3	13.6	14.3	14.3
Apr	11.3	12.1	11.3	11.0	11.5	11.9	12.3	12.1	13.3	13.2	13.4	12.5	13.0	13.6	14.0	14.1	14.2
May	11.4	10.3	11.6	11.5	10.9	11.3	11.2	12.6	12.5	12.6	13.3	12.8	13.7	14.1	13.8	14.0	14.1
June	8.9	9.1	8.8	8.8	8.0	8.4	8.9	9.0	9.5	10.6	10.6	9.5	11.8	11.9	12.3	12.2	12.5
July	7.6	7.2	7.7	8.2	8.6	9.1	8.0	8.5	9.4	10.1	10.5	10.7	11.1	11.4	11.9	12.6	12.1
Aug	7.3	6.7	6.6	6.6	6.5	6.1	6.5	7.2	7.9	8.5	9.1	9.5	9.8	9.8	9.7	9.4	9.6
Sept	7.4	7.0	6.9	6.9	6.7	6.6	6.1	6.5	7.1	7.6	8.2	9.6	9.5	9.9	10.3	10.3	10.8
Oct	9.2	9.4	9.0	8.2	7.7	7.5	7.4	7.4	8.4	9.2	9.8	10.5	10.7	10.9	11.3	11.3	11.1
Nov	12.1	11.6	11.4	11.2	11.6	11.6	11.1	10.9	11.4	12.0	13.1	13.2	13.1	13.1	13.0	13.2	13.1
Dec	10.4	9.9	9.9	10.1	10.2	10.3	9.8	9.6	9.2	9.5	10.1	9.8	10.6	11.0	11.5	11.5	11.9
Year	10.4	9.9	9.9	9.9	9.9	9.9	10.0	10.0	10.6	11.0	11.5	11.5	12.0	12.1	12.4	12.6	12.6

ST. PAUL, MINN.

[λ = 44° 58′ N.; φ = 93° 3′ W.]

Jan	5.6	5.6	5.4	5.3	5.4	5.7	5.5	5.5	6.1	6.3	7.0	7.9	8.7	8.3	8.7	8.7	8.8
Feb	7.5	7.3	7.2	6.9	7.3	7.1	7.4	6.8	6.7	6.8	7.3	8.2	8.8	8.4	8.6	9.0	9.4
Mar.*	5.7	5.0	4.7	5.0	5.2	5.2	5.4	5.1	5.4	5.8	6.7	7.3	8.2	8.0	8.2	7.8	7.6
Apr.*	8.6	8.3	8.3	8.2	8.8	9.6	9.2	9.5	9.8	10.8	11.9	13.4	14.1	12.6	12.5	12.8	11.9
May	7.7	7.3	7.8	7.7	8.2	8.0	7.8	8.3	8.5	9.2	9.6	10.4	10.0	10.6	10.7	10.5	10.0
June	5.7	5.0	5.9	5.6	5.7	5.2	5.7	5.7	7.0	8.0	8.2	8.8	8.8	8.9	9.0	8.8	8.4
July	4.5	4.7	4.3	4.0	3.9	4.8	5.2	5.3	5.3	5.8	6.8	7.7	7.9	7.8	8.1	7.9	7.3
Aug	4.0	3.8	4.5	4.0	4.0	3.6	3.8	4.0	4.7	5.2	6.2	7.1	7.8	8.4	8.6	8.1	8.5
Sept	5.5	5.0	4.9	5.6	5.5	5.7	5.3	5.5	6.1	6.8	8.4	9.5	9.8	10.0	10.3	10.0	9.7
Oct	5.5	5.5	5.3	5.0	5.5	5.7	6.0	5.7	6.4	6.5	7.6	8.8	9.7	9.5	10.0	8.9	8.6
Nov	8.1	8.3	8.2	8.0	8.3	8.9	8.8	8.5	7.8	8.5	9.1	9.7	10.7	10.0	9.4	8.7	8.9
Dec	6.1	5.9	6.1	6.3	6.6	6.8	6.5	6.3	6.4	6.8	7.2	7.5	7.7	7.5	7.7	7.7	7.3
Year	6.2	6.0	6.0	6.0	6.2	6.4	6.4	6.4	6.7	7.2	8.0	8.9	9.4	9.2	9.3	9.1	8.9

SALT LAKE CITY, UTAH.

[λ = 40° 46′ N.; φ = 111° 54′ W.]

Jan.†	2.4	2.8	2.9	2.7	2.4	2.5	2.9	2.8	2.5	2.5	3.1	2.7	3.7	4.5	5.0	5.0	5.3
Feb	2.2	2.4	2.3	2.3	2.0	2.0	1.9	2.0	1.9	2.0	2.0	2.4	4.1	4.8	5.3	5.6	6.0
Mar	4.8	5.1	5.2	5.0	4.6	4.2	4.5	4.0	4.6	4.5	4.8	6.0	7.7	9.9	11.3	11.7	12.2
Apr	3.0	2.6	2.7	2.3	3.4	3.8	3.5	3.4	3.5	4.2	4.7	6.3	7.2	8.4	10.2	10.4	9.9
May	3.2	3.4	3.2	3.2	3.0	3.8	3.1	3.4	2.9	3.4	5.4	7.4	7.5	8.1	9.2	9.3	8.4
June	5.5	5.2	5.0	5.0	5.3	4.7	3.8	3.8	3.5	4.2	5.2	6.5	8.3	9.0	9.9	9.3	9.1
July	5.6	5.9	5.6	5.3	5.2	5.6	5.3	4.6	4.5	4.2	4.7	5.9	7.9	9.3	9.4	9.6	9.5
Aug	5.4	5.3	4.9	4.4	4.4	4.1	4.2	4.0	3.7	3.4	3.5	5.0	6.1	6.9	7.9	8.5	9.1
Sept	4.2	4.6	4.4	4.5	4.4	4.1	4.0	4.3	4.1	3.4	4.0	5.0	6.7	8.7	11.0	10.9	10.7
Oct	3.5	3.5	3.5	3.2	3.0	3.6	3.7	3.6	3.2	2.8	3.2	4.3	5.9	7.4	8.6	9.7	10.4
Nov	6.7	5.9	5.5	6.0	6.0	6.4	6.6	6.3	6.2	6.5	6.4	6.2	7.9	8.9	10.3	10.8	11.3
Dec	4.9	5.3	5.1	5.3	4.8	5.0	5.0	4.6	4.8	4.5	4.4	4.5	5.1	5.1	5.6	6.1	6.1
Year	4.3	4.3	4.2	4.1	4.0	4.2	4.0	3.9	3.8	3.8	4.3	5.2	6.5	7.6	8.6	8.9	9.0

SAN DIEGO, CAL.

[λ = 32° 43′ N.; φ 117° 10′ W.]

Jan	3.1	3.0	2.7	2.6	2.8	3.3	3.0	3.5	3.0	3.2	2.8	1.8	1.9	3.1	4.5	5.9	6.6
Feb	3.9	3.3	3.4	3.1	3.1	3.2	3.1	2.9	3.0	3.1	3.0	3.3	4.2	5.0	6.8	7.8	8.5
Mar	2.7	2.8	3.1	3.1	3.5	3.2	3.4	3.1	3.1	2.8	2.8	3.6	5.2	6.5	8.0	8.5	8.5
Apr	3.6	3.3	3.4	3.6	3.6	3.4	3.4	3.8	3.9	3.3	3.8	4.9	6.6	7.6	8.2	9.0	9.4
May	3.3	3.4	3.4	3.3	3.7	4.1	4.3	3.6	3.2	3.4	4.2	5.8	7.0	7.9	8.8	9.1	9.2
June	3.2	3.3	3.2	3.1	3.4	3.5	3.4	3.0	3.4	2.9	3.7	5.2	7.0	8.1	9.3	9.4	9.5
July	2.6	2.3	2.5	2.4	2.5	2.7	2.6	2.6	2.4	2.5	3.1	4.2	6.4	7.9	9.1	9.2	9.4
Aug	2.7	2.6	2.8	2.5	2.5	2.5	2.4	2.4	2.6	2.7	3.2	4.0	5.9	7.6	9.1	9.3	9.4
Sept	2.5	2.5	2.4	2.3	2.5	2.6	2.6	2.4	2.5	2.2	2.9	4.1	6.0	7.6	8.9	9.4	9.3
Oct	2.4	2.5	2.5	2.0	2.7	2.8	2.7	2.6	2.6	2.9	2.9	3.0	5.0	6.6	7.7	8.5	8.4
Nov	2.5	2.1	2.6	2.6	2.5	2.5	2.5	2.7	3.0	2.9	2.2	1.6	3.3	4.4	6.2	7.5	7.9
Dec	3.7	3.2	3.6	3.9	3.3	3.6	3.4	3.3	3.5	3.8	3.5	2.7	3.1	4.3	5.9	6.7	7.9
Year	3.0	2.9	3.0	2.9	3.0	3.1	3.1	3.0	3.0	3.0	3.2	3.7	5.1	6.4	7.7	8.4	8.7

* 19½ days (464 hours) record of frequency missing in March and April.

WIND—VELOCITY AND FREQUENCY—Continued.

ST. LOUIS, MO.

[h_a = 210 ft.; local time 1h 1m S.] [Seventy-fifth Meridian Time.]

6h	7h	8h	9h	10h	11h	Mid.	Mean.	Max. vel.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Calm.	1892.
14.1	13.7	13.7	13.9	13.1	13.4	13.4	13.4	43	70	98	13	41	82	116	83	241	.....	Jan.
13.3	12.4	11.2	11.9	11.3	11.5	11.9	12.4	42	108	112	79	103	47	92	41	114	.....	Feb.
14.5	13.7	12.2	12.2	12.6	12.3	12.8	12.8	46	41	158	50	126	39	92	47	193	.....	Mar.
13.6	13.0	11.5	11.0	10.8	11.2	11.4	12.4	42	32	79	63	154	125	61	80	126	.....	Apr.
13.7	13.6	11.8	11.9	11.8	11.8	11.1	12.4	47	50	121	32	116	57	201	90	77	.....	May.
12.3	11.7	11.0	10.0	9.0	9.2	9.2	10.1	36	30	50	30	85	111	283	87	43	1	June.
11.1	10.8	10.4	9.3	8.9	8.7	7.9	9.7	48	57	100	69	95	75	272	35	41	.....	July.
9.6	9.3	8.5	8.1	7.7	7.8	7.2	8.1	32	46	189	123	115	37	134	70	28	2	Aug.
10.7	9.8	9.1	8.4	8.3	7.8	7.9	8.3	25	77	111	19	88	113	183	34	93	2	Sept.
10.2	9.2	9.2	9.9	10.0	10.4	9.7	9.5	30	100	90	37	43	121	139	96	117	1	Oct.
12.1	11.4	10.9	11.3	11.1	11.3	12.0	11.9	43	52	82	23	175	58	87	78	165	.....	Nov.
11.8	11.6	11.2	11.0	11.2	11.3	10.9	10.6	42	82	54	43	175	65	105	59	161	.....	Dec.
12.2	11.7	10.9	10.7	10.5	10.6	10.4	11.0	.....	745	1,244	581	1,316	928	1,765	800	1,399	6	Year.

ST. PAUL, MINN.

[h_a = 120 ft.; local time 1h 12m S.]

7.8	6.6	6.2	6.4	6.3	6.0	5.9	6.7	28	25	11	13	127	26	201	158	134	49	Jan.
9.1	8.2	7.3	7.4	6.8	7.4	7.6	7.7	24	34	89	37	202	51	79	74	129	1	Feb.
7.3	6.4	5.7	5.2	5.2	5.3	5.5	6.1	48	25	60	39	100	26	30	35	204	25	Mar.
11.4	11.9	9.2	8.2	8.2	8.5	8.1	10.3	40	5	120	42	74	19	41	57	91	7	Apr.
10.1	9.7	8.7	8.2	8.0	7.5	7.8	8.8	36	53	174	25	112	23	85	32	232	8	May.
8.1	7.5	6.8	6.3	5.4	5.1	5.9	6.9	30	21	119	36	195	23	81	53	186	6	June.
7.5	6.8	5.8	5.7	4.6	4.4	4.5	5.9	25	5	38	21	346	33	89	41	140	31	July.
8.3	7.0	5.9	4.7	4.4	3.9	3.9	5.6	42	16	64	42	276	12	60	66	165	43	Aug.
9.2	7.2	6.2	5.7	5.9	6.1	6.1	7.1	24	10	64	34	275	39	105	72	107	14	Sept.
7.3	5.8	5.2	4.7	5.3	5.5	5.8	6.7	44	9	54	39	220	26	151	76	143	26	Oct.
8.2	7.9	8.0	8.3	7.9	7.9	8.1	8.6	35	13	62	12	277	18	102	77	156	3	Nov.
7.0	7.0	6.2	5.9	5.9	6.1	6.2	6.7	24	12	28	29	192	31	99	126	227	0	Dec.
8.4	7.7	6.8	6.4	6.2	6.1	6.3	7.3	.....	228	883	369	2,396	327	1,123	867	1,914	213	Year.

SALT LAKE CITY, UTAH.

[h_a = 90 ft.; local time 2h 27m S.]

4.9	4.1	3.8	3.1	2.6	2.9	2.8	3.3	24	37	14	283	3	13	2	167	169	32	Jan.
5.8	5.3	4.1	3.3	2.6	2.4	2.4	3.2	16	25	35	44	152	42	73	73	213	39	Feb.
10.9	9.8	8.6	6.3	4.7	4.2	4.2	6.6	36	120	46	50	139	99	59	30	188	13	Mar.
10.4	9.3	6.5	4.6	3.7	3.7	4.2	5.5	26	74	56	43	104	61	81	47	175	79	Apr.
8.1	7.6	7.6	5.6	3.6	4.0	3.4	5.3	34	50	49	58	129	43	96	45	196	78	May.
9.6	8.1	7.4	6.0	5.0	5.6	5.1	6.3	34	82	28	56	207	49	104	27	151	16	June.
9.9	9.1	8.6	7.5	6.6	6.6	6.0	6.8	34	68	64	72	225	92	56	20	147	.....	July.
9.7	8.7	7.4	5.9	6.5	5.9	5.5	5.9	28	55	41	63	236	59	81	29	180	.....	Aug.
10.7	8.8	7.2	4.9	4.9	4.3	3.9	6.0	36	51	67	49	247	61	78	16	149	2	Sept.
9.3	7.6	5.6	4.8	4.0	3.5	4.0	5.1	37	85	52	56	174	39	33	24	221	60	Oct.
10.6	8.8	7.3	7.0	7.0	6.9	7.8	7.5	36	59	34	53	261	38	69	56	148	2	Nov.
5.3	4.5	4.3	3.8	4.0	4.1	4.3	4.9	35	21	20	48	330	99	82	36	106	2	Dec.
8.8	7.6	6.5	5.2	4.6	4.5	4.5	5.5	.....	727	506	875	2,207	695	814	570	2,043	323	Year.

SAN DIEGO, CAL.

[h_a = 85 ft.; local time 2h 49m S.]

7.3	7.0	5.5	4.5	3.5	2.5	2.5	3.7	17	181	143	22	35	48	50	86	142	37	Jan.
8.4	8.3	7.1	5.3	4.5	3.9	4.1	4.7	24	60	61	30	56	79	104	175	89	42	Feb.
8.6	8.5	7.5	5.7	4.2	3.3	2.9	4.8	26	44	72	19	26	46	62	273	102	100	Mar.
9.6	8.8	8.0	7.1	5.4	4.6	3.6	5.5	26	53	60	7	8	39	87	335	127	4	Apr.
9.6	8.9	8.2	7.1	5.7	4.9	4.1	5.7	24	14	20	7	22	87	215	249	121	9	May.
9.6	9.2	8.3	7.5	6.1	4.6	3.8	5.6	20	46	11	1	8	42	195	302	105	10	June.
9.0	8.4	7.6	6.8	5.8	4.8	3.4	5.0	17	23	5	.....	6	67	213	298	130	2	July.
9.0	8.1	6.9	6.5	5.4	3.9	3.0	4.9	14	18	3	.....	6	53	304	252	93	15	Aug.
9.4	8.5	7.4	6.4	4.9	3.8	2.9	4.8	18	37	8	4	5	5	69	287	292	13	Sept.
8.3	7.1	5.4	4.0	3.2	2.8	2.5	4.2	18	106	31	12	47	72	116	163	142	55	Oct.
7.8	6.5	5.0	2.8	2.2	2.5	2.8	3.7	18	109	75	28	54	79	63	88	145	79	Nov.
7.6	6.9	5.5	4.0	3.7	3.4	3.3	4.3	17	62	185	58	20	91	44	90	174	20	Dec.
8.7	8.0	6.9	5.9	4.6	3.8	3.2	4.7	.....	753	674	188	293	708	1,522	2,598	1,662	386	Year.

† No record of direction, noon 19th to noon 20th.

WIND—VELOCITY AND FREQUENCY—Continued.

SAN FRANCISCO, CAL.

[λ=37° 48′ N.; φ=122° 26′ W.] [Seventy-fifth Meridian Time.]

1892.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.	2h	3h	4h	5h
Jan	4.3	4.0	3.6	3.5	3.6	3.4	3.7	3.0	3.3	3.4	3.4	4.3	5.2	5.0	5.2	5.4	6.5
Feb	5.8	5.0	4.2	4.3	4.4	3.9	3.7	3.3	3.4	3.4	3.6	4.5	5.3	5.2	5.2	6.7	8.1
Mar	6.3	5.4	5.5	5.5	4.6	5.0	4.7	4.6	4.7	4.5	5.0	5.5	6.5	7.6	8.3	9.9	11.4
Apr	9.3	7.5	6.7	5.5	5.3	4.5	4.1	3.8	3.9	4.9	5.8	6.6	7.8	8.4	10.2	12.9	15.5
May	7.4	6.4	6.5	6.0	5.6	5.5	5.5	5.0	5.2	5.2	5.9	6.7	7.8	8.7	11.5	13.1	14.2
June	10.5	9.3	9.1	7.9	7.5	6.9	7.2	6.8	6.7	7.1	8.3	8.8	10.2	11.3	14.8	16.2	17.3
July	11.3	9.5	9.5	8.2	8.0	7.5	7.9	7.1	7.2	7.2	7.8	8.5	10.0	10.7	14.2	16.3	17.9
Aug	9.8	8.9	8.1	7.0	6.9	6.6	6.2	6.2	6.1	5.8	6.3	7.0	8.5	9.6	12.3	13.6	16.2
Sept	8.7	7.8	7.1	6.3	5.7	5.7	5.5	4.9	4.8	4.7	5.4	6.1	7.3	8.1	10.3	12.6	14.7
Oct	7.2	5.3	5.0	4.5	4.3	4.3	3.5	3.5	3.9	3.4	3.9	3.8	4.5	5.0	6.5	8.1	10.2
Nov	7.3	7.5	7.4	7.6	7.8	8.8	8.3	9.4	9.8	9.1	8.6	7.9	7.3	7.3	7.8	7.9	10.3
Dec	8.5	8.7	8.8	8.7	7.8	7.6	7.7	8.7	9.3	9.1	9.3	10.0	10.3	9.8	10.5	9.9	9.8
Year	8.0	7.1	6.8	6.2	6.0	5.8	5.7	5.5	5.7	5.6	6.1	6.6	7.6	8.1	9.7	11.0	12.7

SANTA FÉ, N. MEX.

[λ=35° 41′ N.; φ=105° 57′ W.]

Jan	6.3	6.5	6.1	5.7	6.5	6.5	6.4	6.3	6.7	6.8	6.2	6.4	7.6	8.7	9.1	8.5	7.8
Feb	6.0	5.2	5.4	5.0	5.1	6.0	6.0	5.8	5.8	6.6	7.1	7.9	9.1	8.5	9.6	9.2	9.1
Mar	7.0	6.7	7.2	7.2	7.0	6.7	6.0	6.0	5.8	6.1	8.8	10.3	12.4	12.5	13.5	13.4	13.0
Apr	6.9	6.2	6.1	6.1	6.0	5.0	5.0	4.9	4.4	5.7	7.9	9.8	11.9	13.0	14.5	14.2	14.5
May	7.1	7.6	7.4	6.1	5.5	6.0	6.2	6.2	5.9	7.7	9.6	10.8	10.9	11.7	22.8	13.0	14.3
June	8.9	8.6	8.1	7.1	6.4	6.3	6.1	4.9	4.5	5.6	6.9	7.8	9.0	10.7	12.4	13.2	12.4
July	8.0	7.9	7.5	7.2	6.5	5.1	4.9	3.9	3.9	4.1	5.2	6.2	7.4	8.3	8.8	10.0	10.3
Aug	7.3	7.0	5.5	5.9	5.6	4.9	4.6	4.0	3.5	3.6	4.6	6.1	7.3	7.8	9.0	10.4	9.5
Sept	8.2	7.2	6.5	5.0	4.8	4.1	4.7	3.8	4.0	3.7	4.5	5.1	6.0	7.5	8.4	9.1	9.5
Oct	7.8	7.3	6.8	6.1	6.2	6.0	5.6	4.7	5.1	5.9	6.3	6.9	8.6	9.4	10.1	11.0	11.3
Nov	6.1	6.4	6.3	6.6	5.6	6.0	6.9	7.4	7.6	7.0	7.3	8.4	8.3	9.0	8.9	9.3	9.6
Dec	6.8	6.9	6.1	6.2	6.2	5.7	5.4	5.9	6.0	6.2	6.6	7.3	8.0	8.5	8.5	8.5	8.5
Year	7.2	7.0	6.6	6.2	6.0	5.7	5.6	5.3	5.3	5.8	6.8	7.8	8.9	9.6	10.5	10.8	10.8

SAVANNAH, GA.

[λ=32° 5′ N.; φ=81° 5′ W.]

Jan	7.8	7.6	7.7	8.0	7.7	7.6	8.3	8.0	8.3	9.0	9.6	9.7	10.0	10.6	10.4	10.6	9.5
Feb	7.7	6.9	6.9	7.2	7.9	8.1	8.0	7.6	8.2	9.9	10.5	10.7	10.6	10.7	10.6	10.7	10.6
Mar	7.7	7.4	6.9	6.9	6.5	6.7	6.6	7.2	8.5	9.3	9.5	9.9	10.4	10.4	10.2	10.7	10.6
Apr	7.4	6.6	6.2	6.1	6.1	6.2	6.6	7.6	8.9	9.9	10.2	10.3	10.9	11.4	12.3	12.4	12.4
May	7.7	6.6	6.0	6.0	5.7	5.9	6.3	8.0	9.5	9.5	9.3	9.5	9.7	11.3	12.0	13.4	13.1
June	5.5	5.4	5.1	4.6	4.5	4.7	5.4	6.3	7.5	8.2	8.6	9.1	9.0	10.1	11.0	11.9	11.6
July	6.5	5.9	5.8	5.3	5.4	5.6	5.1	6.7	6.7	6.6	6.6	6.9	7.0	8.4	9.0	9.0	9.4
Aug	5.0	4.8	4.3	4.4	4.0	3.7	3.8	4.5	5.5	5.5	5.9	6 6	7.1	8.1	9.5	9.5	9.4
Sept	5.9	6.2	6.6	6.6	6.5	6.1	6.2	6.9	7.8	9.6	10.6	11.3	11.5	11.6	11.5	10.5	9.4
Oct	5.5	5.6	6.1	5.7	5.8	6.2	6.0	5.8	7.1	8.1	9.0	9.4	9.6	9.9	9.6	9.7	9.6
Nov	6.6	6.5	6.1	6.4	6.1	6.6	6.9	6.4	6.6	7.4	8.1	8.8	9.0	9.4	9.2	9.3	8.4
Dec	6.5	6.4	6.1	6.5	6.4	6.7	6.4	6.1	6.5	6.7	7.7	8.4	8.6	8.0	8.1	8.3	7.5
Year	6.6	6.3	6.2	6.1	6.0	6.2	6.3	6.8	7.6	8.3	8.8	9.2	9.4	10.0	10.3	10.5	10.1

WASHINGTON, D. C.

[λ=38° 54′ N.; φ=77° 3′ W.]

Jan	5.8	6.1	6.3	7.3	7.6	7.3	7.7	8.2	7.5	8.6	9.3	8.9	9.9	10.3	10.3	9.9	9.1
Feb	7.4	7.7	7.6	7.6	6.9	7.0	7.5	7.3	8.2	9.7	9.9	9.8	11.1	11.3	11.1	11.0	9.7
Mar	7.5	7.6	7.8	8.1	7.6	7.2	7.2	7.5	9.8	11.7	11.2	11.2	12.5	12.3	12.9	12.7	11.2
Apr	5.6	6.4	5.7	5.7	5.5	6.0	6.0	8.0	8.9	10.5	10.2	10.7	10.2	10.9	10.6	10.6	10.1
May	5.1	4.7	4.6	4.4	4.4	4.2	4.9	6.5	7.7	8.9	9.0	9.7	9.4	9.1	9.7	9 3	10.0
June	3.7	3.7	3.8	3.4	3.3	3.6	4.4	6.5	7.3	7.9	8.4	9.1	9.5	9.8	10.7	9.9	9.0
July	3.4	3.6	3.8	3.2	3.0	2.9	3.3	4.4	5.1	5.6	5.9	6.0	6.6	7.1	7.5	7.5	7.1
Aug	3.2	3.4	3.3	3.4	3.4	3.3	3.5	3.8	5.3	6.0	6.5	6.5	7.0	7.2	7.6	7.4	7.5
Sept	4.2	3.6	3.6	3.2	2.7	3.5	3.7	4.7	6.2	7.8	7.8	8.3	8.4	8.2	8.2	8.1	7.8
Oct	3.6	3.7	3.7	3.9	3.8	3.8	4.3	3.9	5.6	7.9	9.8	10.1	10.1	10.2	9.7	9.5	8.4
Nov	6.1	5.8	5.9	6.1	6.3	6.3	6.5	6.6	7.9	9.3	10.6	11.5	11.5	12.2	11.7	10.5	8.8
Dec	4.9	5.0	4.2	4.3	4.9	5.1	5.8	5.5	6.0	7.5	9.0	9.4	9.8	9.4	9.1	7.8	6.4
Year	5.0	5.1	5.0	5.0	5.0	5.0	5.4	6.1	7.1	8.4	9.0	9.3	9.7	9.8	9.9	9.5	8.8

WIND-VELOCITY AND FREQUENCY—Continued.

SAN FRANCISCO, CAL.

[h_a = 167 ft.; local time, 3^h 10^m S.] [Seventy-fifth Meridian Time.]

6h	7h	8h	9h	10h	11h	Mid.	Mean.	Max. vel.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Calm.	1892.
6.6	6.5	5.8	5.6	4.6	4.3	4.5	4.5	34	211	75	29	87	57	75	118	58	34	Jan.
8.9	9.5	9.3	8.1	7.6	7.2	6.2	5.7	24	65	48	19	79	108	137	173	51	16	Feb.
11.8	12.1	11.5	10.7	9.2	8.2	7.3	7.3	36	53	28	20	34	81	185	274	50	19	Mar.
16.9	17.6	16.0	14.3	12.4	11.0	9.5	9.2	36	16	9	7	45	71	168	331	61	12	Apr.
15.1	15.2	15.0	14.0	12.5	9.9	8.4	9.0	32	16	19	7	30	80	305	236	42	9	May.
18.3	18.4	18.6	18.4	15.8	13.6	11.4	11.7	36	4	4	2	11	33	302	345	19	.....	June.
19.2	19.5	18.6	18.1	16.5	15.0	12.7	12.0	36	.....	.....	3	3	44	333	354	4	3	July.
16.9	16.8	17.1	16.3	13.9	12.6	10.5	10.4	28	1	7	5	4	124	304	298	1	.....	Aug.
15.7	15.5	15.4	14.7	12.9	11.2	10.2	9.2	30	4	4	3	13	92	263	321	5	15	Sept.
11.7	11.7	12.4	12.0	9.9	8.8	7.4	6.7	36	65	13	10	23	58	156	368	25	26	Oct.
12.0	12.3	13.1	12.1	10.8	9.5	8.4	9.1	56	66	22	58	100	82	149	124	111	8	Nov.
10.1	9.6	9.7	10.3	8.1	8.6	8.8	9.2	60	111	47	67	157	38	85	74	162	3	Dec.
13.6	13.7	13.5	12.9	11.2	10.0	8.8	8.7	.....	612	276	230	586	868	2,462	3,016	589	145	Year.

SANTA FÉ, N. MEX.

[h_a = 60 ft.; local time, 2^h 4^m S.]

6.8	5.7	4.1	3.5	4.2	4.6	5.7	6.4	32	107	325	57	48	26	66	59	53	3	Jan.
8.6	7.9	6.5	5.7	5.8	5.8	6.0	6.8	33	87	149	104	82	32	108	44	90	.....	Feb.
14.0	12.9	11.3	8.6	8.0	8.1	7.9	9.2	48	68	82	99	94	85	177	35	103	1	Mar.
14.2	12.5	12.3	9.5	7.1	7.2	7.5	8.9	33	64	78	63	115	43	214	63	80	.....	Apr.
14.3	15.2	13.8	10.2	7.1	6.3	6.4	9.2	38	41	120	40	142	33	213	40	113	2	May.
12.3	11.8	11.0	9.7	8.4	9.0	9.3	8.8	38	45	93	61	193	30	185	35	77	1	June.
10.1	9.4	9.2	9.7	8.4	8.2	7.7	7.4	37	64	86	68	230	51	140	40	65	.....	July.
10.0	9.4	8.3	8.7	9.0	9.3	8.6	7.1	31	53	108	114	249	30	78	23	87	2	Aug.
9.6	8.7	7.9	6.5	6.6	7.7	8.0	6.5	31	25	88	81	217	20	163	34	89	3	Sept.
10.6	9.5	8.6	8.0	7.9	8.0	8.1	7.7	45	34	106	70	224	47	149	46	62	6	Oct.
8.8	7.9	6.2	6.1	6.5	6.7	6.9	7.3	35	51	226	59	125	16	132	34	74	3	Nov.
7.8	6.5	6.0	5.9	6.1	6.8	7.8	6.8	25	75	295	32	120	26	103	19	65	9	Dec.
10.6	9.8	8.8	7.7	7.1	7.3	7.5	7.7	.....	714	1,756	848	1,839	439	1,728	472	958	30	Year.

SAVANNAH, GA.

[h_a = 86 ft.; local time, 0^h 24^m S.]

8.6	8.2	7.6	8.0	7.7	8.0	7.9	8.6	32	62	151	36	10	26	115	161	183	.....	Jan.
9.6	8.0	7.1	6.9	7.3	7.0	7.2	8.6	30	96	149	19	56	61	99	84	130	2	Feb.
9.6	8.6	7.9	7.4	7.3	7.0	7.8	8.4	27	22	50	78	66	79	146	118	184	1	Mar.
11.6	10.2	8.5	8.4	8.5	8.2	8.0	9.0	26	37	63	90	90	201	115	40	75	9	Apr.
12.7	10.5	8.5	8.0	7.7	7.9	7.9	8.9	27	9	19	62	140	255	94	90	72	3	May.
10.6	9.1	7.3	6.3	6.2	5.6	6.2	7.5	25	9	53	40	204	208	141	55	6	4	June.
9.7	8.1	6.9	6.7	6.3	5.8	6.7	6.9	24	20	49	24	51	278	226	74	20	2	July.
9.3	8.3	6.7	6.4	6.6	5.6	5.4	6.2	28	1	42	63	133	184	237	58	24	2	Aug.
9.1	7.6	7.2	6.5	5.8	5.6	5.7	8.0	28	40	331	78	106	70	36	45	13	1	Sept.
8.3	7.1	6.8	6.5	6.2	5.6	6.1	7.3	26	100	230	47	128	58	50	30	100	1	Oct.
6.7	5.9	6.0	6.4	6.1	5.8	6.4	7.1	28	39	70	52	94	95	89	84	194	3	Nov.
7.0	6.5	6.1	6.3	6.6	6.6	7.0	6.9	29	54	136	13	60	87	106	97	187	4	Dec.
9.4	8.2	7.2	7.0	6.9	6.6	6.9	7.8	.....	489	1,343	602	1,138	1,602	1,454	936	1,188	32	Year.

WASHINGTON, D. C.

[h_a = 67 ft.; local time, 0^h 8^m S.]

7.5	7.5	7.5	7.1	7.3	6.7	6.1	7.9	36	104	105	32	35	67	111	79	211	.....	Jan.
9.0	8.4	7.9	7.5	7.9	7.0	7.1	8.6	39	90	218	23	6	60	87	52	160	.....	Feb.
10.2	8.5	7.7	7.6	7.7	7.6	7.1	9.3	44	105	110	23	20	54	70	36	326	.....	Mar.
9.6	7.6	6.5	6.2	6.3	6.2	6.0	7.9	35	67	92	43	46	138	47	57	229	1	Apr.
9.5	8.8	7.2	6.2	5.9	5.2	5.3	7.1	42	61	46	50	44	235	73	77	156	2	May.
8.5	6.3	5.1	5.0	4.5	4.1	4.1	6.3	36	40	49	31	54	329	135	48	34	.....	June.
6.1	5.5	3.3	3.3	2.8	3.2	3.4	4.7	36	53	50	46	89	213	82	70	124	17	July.
6.5	5.1	3.8	3.4	3.2	3.1	3.2	4.9	18	102	107	119	55	133	41	41	135	11	Aug.
6.4	4.7	4.1	3.9	3.6	3.5	4.0	5.4	36	43	86	171	87	114	45	44	118	12	Sept.
6.1	5.0	4.6	4.2	4.4	4.4	4.6	6.1	34	66	44	13	38	115	83	94	260	31	Oct.
7.1	6.4	6.9	7.1	7.4	6.7	6.3	8.0	38	70	38	36	24	164	31	76	276	5	Nov.
5.5	5.2	5.6	5.2	4.9	4.5	4.7	6.2	35	176	16	35	3	121	52	74	357	10	Dec.
7.7	6.6	5.8	5.6	5.5	5.2	5.2	6.9	.....	977	961	622	501	1,743	857	748	2,286	89	Year.

WIND—VELOCITY AND FREQUENCY—Continued.

WILMINGTON, N. C.

[$\lambda = 34° 14'$ N.; $\phi = 77° 57'$ W.] [Seventy-fifth Meridian Time.]

1892.	1h a. m.	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	1h p. m.	2h	3h	4h	5h
Jan	9.4	9.3	9.7	9.1	9.1	8.8	8.4	8.3	8.8	9.6	10.2	10.4	11.1	11.4	12.2	11.6	11.2
Feb	10.0	9.7	9.3	9.2	8.7	8.8	8.4	8.8	9.7	10.8	12.1	12.9	12.9	12.5	12.7	12.3	12.3
Mar	9.0	8.5	8.4	8.3	8.2	7.7	7.5	8.3	10.1	11.0	11.4	12.0	12.4	12.9	13.3	13.0	12.9
Apr	8.0	8.3	7.7	7.4	7.1	7.4	8.1	8.9	10.9	11.9	12.3	12.1	12.9	13.9	13.7	14.7	14.2
May	8.5	8.1	7.7	7.1	7.0	7.5	8.1	8.5	9.5	10.1	10.2	10.0	12.3	12.7	12.9	13.2	13.7
June	6.3	6.0	5.4	4.9	5.5	4.8	6.1	7.2	8.0	8.8	9.4	10.0	12.1	12.0	12.3	12.6	12.4
July	4.7	4.6	4.4	4.2	4.5	4.7	4.7	5.7	6.0	5.6	6.0	6.2	7.3	8.8	9.5	9.5	9.5
Aug	5.2	4.6	4.6	4.5	4.8	4.7	4.9	5.6	6.4	6.7	7.2	7.7	8.4	9.5	9.3	9.6	9.6
Sept	6.7	6.9	6.8	6.3	6.6	6.7	6.9	7.7	8.3	8.8	9.3	9.3	10.2	10.1	9.5	8.6	8.6
Oct	5.5	5.5	5.7	6.1	6.4	6.6	6.5	6.7	7.4	8.3	8.3	8.6	9.0	8.5	8.6	8.7	8.3
Nov	6.3	6.7	7.0	7.0	6.4	5.9	6.0	6.3	7.7	8.7	9.5	9.9	10.4	10.3	10.1	10.1	8.7
Dec	6.2	6.4	6.7	7.2	7.0	6.8	6.7	6.8	7.5	8.1	8.5	8.3	9.1	9.1	8.9	8.4	6.8
Year	7.2	7.0	7.0	6.8	6.8	6.7	6.9	7.4	8.4	9.0	9.5	9.8	10.7	11.0	11.1	11.0	10.7

WIND—VELOCITY AND FREQUENCY—Continued.

WILMINGTON, N. C.

[h_2 = 88 ft.; local time 0h 12m S.] [Seventy-fifth Meridian Time.]

6h	7h	8h	9h	10h	11h	Mid.	Mean.	Max. vel.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Calm.	1892.
9.3	8.7	9.1	9.2	9.4	9.4	9.6	9.7	46	108	118	25	14	64	145	120	149	1	Jan.
11.8	9.5	9.6	9.9	9.7	10.3	10.2	10.5	42	172	131	44	12	33	132	66	104	2	Feb.
11.8	9.8	8.0	8.4	8.5	8.2	8.5	9.9	38	49	122	92	10	39	130	122	180	.....	Mar.
12.8	10.2	9.1	9.1	9.3	8.4	8.4	10.3	38	58	129	66	20	58	269	21	99	.....	Apr.
13.0	11.2	8.5	7.9	7.7	8.2	8.1	9.7	36	19	55	25	58	135	331	38	79	4	May.
11.6	10.7	8.2	7.2	6.6	6.5	6.3	8.4	40	3	63	81	66	155	313	14	4	21	June.
8.7	7.7	6.6	6.1	5.6	5.7	4.9	6.3	26	6	89	36	31	84	339	67	21	71	July.
9.0	7.4	6.0	5.7	5.5	5.5	5.0	6.6	22	15	77	64	87	103	310	67	21	.....	Aug.
6.8	6.1	6.2	6.4	6.2	6.5	6.4	7.6	25	48	356	126	61	41	55	18	12	3	Sept.
6.5	5.8	5.5	5.2	5.5	5.5	5.3	6.8	26	80	262	72	46	25	100	45	106	8	Oct.
6.6	5.6	5.8	6.3	6.0	6.9	6.6	7.5	40	127	76	55	45	80	124	60	142	11	Nov.
5.8	6.0	6.4	6.9	6.5	6.5	6.5	7.2	44	137	171	83	12	44	113	25	155	4	Dec.
9.5	8.2	7.4	7.4	7.2	7.3	7.2	8.4	.....	822	1,649	769	462	861	2,361	663	1,072	125	Year.

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REPORT OF THE CHIEF OF THE WEATHER BUREAU.

PART III.

MONTHLY AND ANNUAL METEOROLOGICAL SUMMARIES FOR WEATHER BUREAU STATIONS.

1891-'92.

A detailed account of the instrumental equipment of observing stations, the corrections applied to the various readings, and finally the probable accuracy of the results will be found in the article by Professor Cleveland Abbe, page 37; some of the leading features in regard to the reduction of observations are repeated here, however, for convenience of reference.

Pressure.—The monthly means and extremes of pressure have been reduced to 32° Fahrenheit, and corrected for instrumental error when the value of the latter correction is more than $\pm$ .006 of an inch.

Temperature.—The monthly means have been obtained by the formula $\frac{\text{max.} + \text{min.}}{2}$. The extremes are for the civil day, midnight to midnight.

Moisture.—The monthly mean vapor pressure has been obtained directly from the monthly mean temperature of the dew-point. The relative humidity and the dew-point have been obtained from the individual values for 8 a. m. and 8 p. m.

The maximum precipitation in 24 hours is for any period of 24 hours. The daylight cloudiness is the average of a number of personal estimates made during the day.

Wind.—The average hourly velocity is the total wind travel divided by the number of hours in the month. Maximum velocities are for a 5-minute period. A wind velocity of 40 miles per hour is considered as a gale.

The word "Calm" appears in the column headed "Prevailing direction" whenever the number of "Calms" observed has been greater than any direction.

Number of days.—The designation of a day with no clouds or less than three-tenths cloudiness has been changed from "Cloudless," heretofore used, to "Clear."

Time.—Eastern time (75th meridian) is the standard used in all of the observation and map work of the Weather Bureau.

References and abbreviations.—H = Height of barometer cistern above mean sea level; h_t. = height of thermometer above ground; h_r. = height of rain-gauge above ground; h_a. = height of anemometer above ground.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891.

ABILENE, TEX.

[Lat. 32° 23′ N.; long. 99° 40′ W.; gravity corr., —.03.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	28.29	28.64	27.93	35.4	44.2	50.2	34.6	42.1	66	15	31	34	85	68	.172	.195	2.11	.72	4.2	3.7	4.7
February	28.19	.60	.80	37.7	52.9	60.1	36.0	48.0	84	16	29	31	74	47	.157	.172	.76	.76	3.2	2.6	3.4
March	28.16	.52	.79	40.8	55.9	60.5	38.8	49.6	88	17	34	33	78	48	.195	.187	1.79	1.14	3.8	3.8	4.5
April	28.21	.62	.94	54.3	67.6	73.5	52.3	62.9	86	34	46	44	75	48	.310	.237	1.95	.90	3.1	3.6	3.6
May	28.23	.50	.93	61.5	72.2	77.7	59.8	68.8	90	50	58	58	88	63	.481	.481	1.83	.86	6.2	5.4	5.6
June	28.08	.31	.73	70.8	83.4	88.9	68.6	78.8	104	59	66	63	85	54	.638	.575	2.04	.63	3.2	3.3	3.1
July	28.19	.40	.97	73.5	89.4	93.8	71.0	82.4	101	65	67	64	80	44	.660	.595	1.10	.48	3.5	2.9	3.6
August	28.24	.50	28.01	71.1	84.5	90.0	69.3	80.1	102	55	65	62	81	50	.616	.555	2.03	.70	3.0	3.9	4.2
September	28.26	.44	.06	66.3	80.3	85.7	65.7	75.7	95	51	61	58	84	50	.536	.481	.64	.44	3.4	3.2	4.3
October	28.35	.70	.03	54.4	69.2	76.7	53.1	64.9	86	40	45	43	73	42	.298	.277	.60	.52	2.0	1.5	2.1
November	28.27	.90	27.82	45.8	57.1	65.5	43.1	54.3	84	20	36	36	70	48	.211	.211	.12	.06	2.5	2.3	3.3
December	28.25	.75	.76	40.8	51.4	58.0	38.7	48.4	75	22	33	33	76	54	.187	.187	2.60	1.40	4.0	2.1	3.3
Year	28.23	.90	.73	54.4	67.3	73.5	52.5	63.0	104	15	48	47	79	51	.372	.350	17.57	.....	3.5	3.2	3.8

ALBANY, N. Y.

[Lat. 42° 39′ N.; long. 73° 45′ W.; gravity corr., —.01.]

January	29.96	30.53	28.74	22.0	27.7	32.1	17.6	24.8	48	—2	16	21	79	76	.085	.108	6.12	1.62	8.0	6.9	7.8
February	29.98	.64	29.32	26.1	30.0	35.2	21.3	28.2	54	—5	22	25	84	81	.113	.130	4.14	.92	6.9	5.0	6.4
March	30.05	.54	.26	30.0	34.5	40.3	24.3	32.3	60	2	25	27	82	76	.130	.143	3.12	.88	5.8	4.7	5.7
April	29.89	.45	.31	44.8	50.3	57.9	39.3	48.6	81	25	38	39	78	66	.228	.237	2.27	1.14	6.3	4.9	4.6
May	29.94	.32	.65	54.0	58.7	68.3	46.2	57.2	89	34	45	43	72	58	.298	.277	1.69	1.08	6.1	5.0	5.2
June	29.86	.18	.64	65.1	69.6	78.7	58.0	68.4	95	42	58	59	77	71	.481	.499	2.65	1.79	5.4	5.1	4.9
July	29.91	.29	.62	65.8	69.6	78.1	60.1	69.1	91	50	59	60	79	74	.499	.517	6.11	1.27	5.5	5.4	5.1
August	29.90	.20	.56	68.0	71.5	79.8	62.6	71.2	93	54	62	64	82	76	.555	.595	5.88	1.92	6.7	6.2	6.2
September	30.05	.34	.76	63.0	67.0	76.3	58.6	67.4	91	48	58	60	83	78	.481	.517	1.94	.87	4.7	3.6	3.8
October	29.98	.62	.57	45.8	50.4	58.4	41.9	50.2	86	24	41	42	84	75	.256	.266	2.13	1.08	6.4	4.4	5.8
November	30.06	.68	.09	36.0	38.4	46.4	31.3	38.8	64	6	29	31	76	77	.157	.172	2.40	.90	4.4	4.3	5.2
December	30.04	.55	.36	34.1	36.9	44.3	29.6	37.0	61	8	29	32	82	82	.157	.180	3.23	.86	6.4	4.5	6.0
Year	29.97	.68	28.74	46.2	50.4	58.0	40.9	49.4	95	—5	40	42	80	74	.287	.303	41.68	.....	6.0	5.0	5.6

ALPENA, MICH.

[Lat. 45° 5′ N.; long. 83° 30′ W.; gravity corr., 0.]

January	29.35	30.01	28.66	20.7	23.7	27.7	18.1	22.9	38	—1	18	20	87	85	.093	.103	2.26	.68	8.8	6.7	8.5
February	29.29	29.85	.44	20.2	23.3	29.5	15.2	22.4	49	—7	17	19	87	86	.089	.098	2.46	.54	7.3	5.8	7.8
March	29.41	.89	.93	22.9	27.9	30.7	20.0	25.4	48	—8	18	23	82	81	.093	.119	3.47	.83	6.4	5.2	6.9
April	29.33	.75	.86	38.6	41.0	49.2	32.8	41.0	79	16	31	33	77	76	.172	.187	1.21	.30	5.9	5.6	6.4
May	29.42	.66	29.12	47.8	49.5	58.3	39.0	48.6	82	26	34	35	60	59	.195	.203	.10	.10	3.4	3.1	3.5
June	29.33	.69	.05	60.5	61.9	68.4	52.2	60.3	89	34	51	51	73	69	.373	.373	2.29	1.00	4.5	5.9	5.9
July	29.34	.69	.09	59.7	64.0	71.9	52.0	62.0	91	40	52	52	78	67	.387	.387	2.05	1.06	4.7	5.3	5.1
August	29.33	.52	28.89	61.2	64.1	71.5	55.3	63.4	85	41	56	58	85	80	.448	.481	7.80	2.43	5.4	4.9	5.8
September	29.44	.79	29.09	58.3	63.0	70.8	52.7	61.8	91	37	54	57	86	82	.417	.465	1.79	.85	3.8	3.1	4.1
October	29.41	.94	.04	44.0	46.7	55.0	39.2	47.1	87	25	40	40	86	78	.246	.246	1.43	.80	6.8	3.9	5.4
November	29.32	.85	28.54	31.9	33.4	38.9	28.2	33.6	52	14	29	29	88	85	.157	.157	3.79	1.12	8.4	8.0	8.4
December	29.30	.84	.56	30.7	33.1	40.1	26.9	33.5	53	11	26	26	85	78	.137	.137	2.96	1.43	7.2	6.2	6.5
Year	29.36	30.01	28.44	41.4	44.3	51.0	36.0	43.5	91	—8	36	37	81	77	.234	.246	31.61	.....	6.0	5.3	6.2

FORT ASSINABOINE, MONT.

[Lat. 48° 32′ N.; long. 109° 42′ W.; gravity corr., +.01.]

January	27.18	27.53	26.73	23.7	29.2	37.4	15.9	26.6	54	—11	16	17	73	65	.085	.089	.06	0.02	3.9	4.9	5.5
February	27.04	.57	.65	—2.0	4.6	8.6	—9.1	—.2	36	—34	—6	0	84	82	.028	.038	.11	.05	5.7	7.2	6.8
March	27.10	.51	.62	16.0	25.7	29.5	11.0	20.2	58	—34	12	19	87	80	.070	.098	.15	.04	5.9	6.1	6.5
April	27.09	.53	.68	38.2	57.7	61.8	34.0	47.9	84	14	29	27	72	34	.157	.143	1.01	.60	4.7	5.5	5.8
May	27.17	.45	.80	44.7	61.8	65.1	39.9	52.5	92	22	36	35	75	44	.211	.203	3.79	1.66	4.5	5.2	6.0
June	27.06	.43	.75	51.5	65.0	68.1	48.0	58.0	83	38	46	45	81	52	.310	.298	3.92	2.08	6.1	6.7	7.2
July	27.13	.52	.92	57.9	75.4	78.1	54.8	66.4	89	47	52	51	82	44	.387	.373	4.68	2.83	3.7	4.5	4.6
August	27.18	.50	.91	54.1	74.4	77.4	51.4	64.4	91	39	48	49	81	44	.334	.347	1.67	1.38	3.5	4.1	4.5
September	27.13	.52	.70	46.8	65.2	69.9	45.2	57.6	84	32	39	40	77	41	.237	.246	.87	.41	3.4	4.0	4.8
October	27.21	.52	.86	37.5	50.0	59.5	34.9	47.2	79	19	29	31	74	52	.157	.172	.59	.19	4.8	4.6	5.7
November	27.10	.60	.55	24.4	31.7	39.1	18.7	28.9	66	—11	17	20	77	65	.089	.103	.15	.05	3.5	3.3	5.7
December	26.97	.55	.26	24.7	29.9	37.3	17.9	27.6	61	—20	15	16	70	59	.081	.085	.08	.04	3.8	4.2	5.7
Year	27.12	.60	.26	34.8	47.6	52.6	30.2	41.4	92	—34	28	29	78	55	.179	.183	17.08	.....	4.5	5.0	5.7

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891.

ABILENE, TEX.

[H=1,748 feet; h_t=63 feet; h_r=53 feet; h_a=70 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorm.	Aurora.
	Miles.		*Mi.*																								
January	8.8	S.	44	W.	1	9	3	2	4	19	3	5	14	3	12	11	8	11	11	5	0	3	1	0	12	0	0
February	13.1	N.	52	N.	3	17	5	0	6	16	4	3	4	1	12	16	0	1	1	0	0	1	0	0	8	1	0
March	13.3	S.	48	S.	2	10	1	0	10	22	6	1	12	0	12	13	6	6	4	1	0	3	0	0	8	4	0
April	12.0	S.	48	NW.	4	7	7	2	6	29	3	2	2	2	18	5	7	6	5	0	0	0	0	0	0	7	0
May	11.8	S.	40	S.	1	7	7	4	8	32	2	0	1	1	7	15	9	7	6	0	2	0	0	0	0	3	0
June	12.4	S.	37	S.	0	1	4	3	18	25	2	1	6	0	16	14	0	8	7	0	0	0	0	9	0	7	0
July	10.6	SE.	38	NE.	0	3	2	8	26	29	2	0	1	1	17	10	4	4	4	0	0	0	0	25	0	2	0
August	10.0	SE.	48	NE.	2	3	2	5	20	22	2	1	4	3	13	13	5	7	6	0	0	0	0	22	0	6	0
September	10.2	SE.	36	NE.	0	4	3	9	32	8	1	0	1	2	11	14	5	4	2	0	0	0	0	5	0	2	0
October	11.0	S.	36	SE.	0	13	0	2	19	18	2	1	5	2	21	8	2	3	3	0	0	1	0	0	0	0	0
November	12.9	S.	44	NW.	1	7	1	4	12	20	3	2	11	0	16	9	5	2	2	0	0	....	0	0	4	0	0
December	15.7	S.	48	SW.	2	5	3	2	8	22	5	5	12	0	15	13	3	7	7	0	1	3	0	0	6	2	0
Year	11.8	S.	....	.....	1.3	86	38	41	169	252	35	21	73	15	170	141	54	66	58	6	3	....	1	61	38	34	0

ALBANY, N. Y.

[H=85 feet; h_t=84 feet; h_r=99 feet; h_a=113 feet.]

Month.	Average hourly velocity.	Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorm.	Aurora.
January	7.6	NW.	44	N.	1	13	1	0	4	12	4	1	26	1	2	9	20	19	9	14	0	1	16	0	27	0	0
February	8.9	NW.	30	SE.	0	6	2	0	13	9	1	6	17	2	2	13	13	17	14	9	0	1	7	0	26	0	0
March	9.0	NW.	28	SE.	0	11	3	0	5	8	2	4	29	0	6	13	12	15	9	6	0	0	7	0	24	0	0
April	8.3	NW.	26	NW.	0	3	6	0	9	10	1	9	21	1	9	14	7	11	5	4	0	1	0	0	7	2	0
May	7.1	NW.	30	NW.	0	7	7	1	14	9	0	5	15	4	5	18	8	12	7	1	0	0	0	0	0	0	0
June	6.3	S.	24	N.	0	10	6	1	13	15	0	6	6	3	6	17	7	12	7	0	0	1	0	4	0	1	0
July	6.9	S.	24	SE.	0	8	3	1	13	23	2	6	1	5	7	15	9	18	11	0	0	0	0	2	0	3	0
August	5.1	Calm. S.	32	SE.	0	12	5	2	11	17	0	4	6	5	0	21	10	18	11	0	0	1	0	2	0	3	0
September	6.0	Calm. S.	30	SE.	0	5	1	1	3	26	3	3	10	8	11	14	5	8	7	0	0	0	0	1	0	0	0
October	6.1	Calm. NW.	34	N.	0	13	3	1	3	17	0	8	15	2	6	13	12	8	4	3	0	8	0	0	3	0	0
November	8.2	S.	40	SE.	1	8	4	3	14	11	6	3	10	1	8	13	9	11	7	2	0	5	2	0	16	0	0
December	5.7	Calm. S.	48	SE.	1	5	0	0	3	26	0	9	15	4	4	15	12	13	9	2	0	1	3	0	17	0	0 0
Year	7.1	S.	....	.....	3	101	41	10	105	183	19	64	171	36	66	175	124	162	100	41	0	19	35	9	120	9	

ALPENA, MICH.

[H=609 feet; h_t=61 feet; h_r=54 feet; h_a=71 feet.]

Month.	Average hourly velocity.	Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorm.	Aurora.
January	7.7	W.	28	W.	0	5	3	3	5	5	12	20	8	1	1	6	24	18	12	24	0	1	20	0	30	0	0
February	10.4	W.	32	E.	0	3	4	6	5	9	2	19	8	0	0	13	15	19	15	18	0	1	15	0	27	0	0
March	11.2	E.	42	E.	1	10	9	16	4	6	3	10	4	0	6	9	16	16	13	15	0	0	16	0	26	0	0
April	9.5	NW.	36	NW.	0	8	2	8	10	5	6	3	17	1	7	11	12	12	9	1	0	1	2	0	9	2	0
May	9.6	NW.	39	NW.	0	7	4	3	13	4	8	5	13	5	16	11	4	1	1	2	0	1	0	0	5	1	0
June	7.1	SE.	27	SE.	0	4	6	11	18	6	0	3	6	6	10	6	14	10	6	0	0	1	0	0	0	3	0
July	8.7	NW.	33	SE.	0	4	3	4	10	6	2	7	23	3	9	15	7	10	7	0	0	0	0	1	0	3	0
August	7.1	Calm. SE.	38	NW.	0	3	12	6	11	6	3	9	10	2	8	15	8	15	13	0	0	0	0	0	0	4	1
September	8.3	NW.	36	SW.	0	1	4	4	13	8	7	8	12	3	16	8	6	6	5	0	0	1	0	2	0	2	1
October	9.8	NW.	33	W.	0	4	2	5	5	12	9	6	19	0	6	17	8	8	5	1	0	0	0	0	5	0	0
November	11.0	W.	41	SE.	1	3	0	0	7	11	7	25	6	1	2	6	22	17	12	12	0	0	6	0	19	0	0
December	13.0	SW.	44	SW.	1	0	2	4	10	9	21	11	5	0	8	10	13	13	8	9	0	0	5	0	20	0	1
Year	9.4	NW.	....	.....	3	52	51	70	111	87	80	126	131	22	89	127	149	145	106	82	....	6	64	3	141	15	3

FORT ASSINABOINE, MONT.

[H=2,690 feet; h_t=16 feet; h_r=2 feet; h_a=36 feet.]

Month.	Average hourly velocity.	Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorm.	Aurora.
January	13.3	SW.	44	SW.	3	3	3	3	5	5	32	7	4	0	8	13	10	5	0	7	0	0	7	0	29	0	0
February	9.6	SW.	48	SW.	2	2	4	5	1	3	27	5	5	4	3	8	17	6	0	12	0	0	25	0	28	0	0
March	10.2	SW.	50	W.	1	4	6	5	2	0	34	2	3	6	6	6	19	9	1	8	0	0	13	0	30	0	0
April	11.1	SW.	44	SW.	1	3	2	10	2	2	26	7	7	1	6	13	11	11	3	1	1	0	1	0	10	0	0
May	9.3	E.	46	NE.	1	13	8	14	5	7	8	5	0	2	9	9	13	12	10	2	1	1	0	1	4	3	0
June	10.2	SW.	38	NW.	0	5	8	3	1	5	20	7	8	3	1	9	20	13	10	0	0	1	0	0	0	1	0
July	9.0	Calm. E.	36	NE.	0	7	11	13	0	7	8	2	13	1	11	15	5	12	8	0	0	0	0	0	0	4	0
August	8.6	Calm. NE.	40	SW.	1	6	13	4	0	10	6	9	13	1	14	4	13	9	5	0	0	0	0	1	0	1	1
September	10.9	SW.	44	W.	2	2	7	4	1	7	16	10	12	1	11	12	7	4	4	1	0	0	0	0	1	1	4
October	10.7	SW.	35	NW.	0	7	5	3	1	8	17	11	10	0	8	16	7	6	5	3	0	0	3	0	10	0	3
November	12.8	SW.	60	NW.	5	5	3	0	0	0	27	15	9	1	8	14	8	6	2	5	0	1	9	0	19	0	1
December	16.0	SW.	60	NW.	5	3	2	0	0	0	40	5	11	1	8	15	8	5	1	6	0	0	7	0	28	0	3
Year	11.0	SW.	....	.....	21	60	72	64	18	54	261	85	95	21	93	134	138	98	49	45	2	3	65	2	159	10	12

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

ASTORIA, OREGON.

[Lat. 46° 57′ N.; long. 124° W.; gravity corr., 0.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January						49.5	40.7	45.1	56	31							6.01	.73			
February						45.1	33.6	39.4	50	29							8.01	1.01			
March						50.7	38.0	44.4	56	27							5.40	.82			
April						56.4	43.9	50.2	68	34							5.11	1.24			
May						61.5	48.3	54.9	72	38							1.80	1.10			
June						63.8	50.9	57.4	72	42							4.72	.97			
July						69.7	54.8	62.2	88	46							1.06	.51			
August						72.5	57.8	65.2	82	52							1.46	.45			
September						65.0	52.9	59.0	82	45							6.14	1.08			
October						62.0	51.4	56.7	73	46							7.06	1.09			
November						54.1	44.9	49.5	66	37							15.18	2.28			
December						48.9	38.4	43.6	62	30							15.79	2.04			
Year						58.3	46.3	52.3	88	27							77.74				

ATLANTA, GA.

[Lat. 33° 45′ N.; long. 84° 23′ W.; gravity corr., —.03.]

January	28.93	29.23	28.41	37.7	44.3	49.8	35.1	42.4	72	25	32	35	82	72	.180	.203	6.73	1.61	5.0	5.0	6.3
February	28.93	.29	.41	46.4	51.3	58.0	42.9	50.4	78	20	43	45	88	81	.277	.298	8.50	1.53	6.9	6.9	7.0
March	28.85	.25	.46	42.4	49.1	54.6	39.4	47.0	73	23	38	42	85	78	.228	.266	10.16	2.35	5.7	5.8	6.3
April	28.89	.12	.49	56.8	65.2	72.9	52.6	62.8	86	28	47	47	70	55	.322	.322	1.58	.83	3.8	4.8	4.4
May	28.88	.24	.73	61.8	69.9	77.8	57.0	67.4	89	42	51	50	70	53	.373	.360	2.17	.96	4.4	3.5	3.8
June	28.82	.01	.58	74.0	79.6	86.8	68.7	77.8	94	62	68	66	82	65	.684	.636	4.71	1.93	4.9	4.3	5.1
July	28.90	.07	.68	71.4	77.4	84.0	66.9	75.4	90	58	65	64	81	66	.616	.595	5.38	1.61	6.5	6.5	6.4
August	28.88	.01	.66	72.0	76.9	85.3	67.8	76.6	93	55	67	67	85	72	.660	.660	2.59	.59	5.1	6.2	6.5
September	28.98	.18	.80	67.5	74.2	81.6	63.0	72.3	90	53	61	61	80	66	.536	.536	1.19	.61	4.0	2.6	3.7
October	28.97	.30	.68	52.8	61.2	69.3	49.5	59.4	84	36	44	42	72	52	.287	.266	.02	.02	3.2	1.6	2.6
November	28.97	.47	.53	44.0	50.7	57.6	40.7	49.2	75	18	38	37	79	63	.228	.219	3.26	1.43	5.0	3.8	4.5
December	29.05	.33	.70	42.6	48.9	54.5	39.6	47.0	65	25	36	37	78	67	.211	.219	3.68	.97	5.8	4.5	5.6
Year	28.92	.47	.41	55.8	62.4	69.4	51.9	60.6	94	18	49	49	79	66	.384	.382	49.97		5.0	4.6	5.2

ATLANTIC CITY, N. J.

[Lat. 39° 22′ N.; long. 74° 25′ W.; gravity corr., —.01.]

January	30.01	30.46	29.17	33.4	36.0	40.5	30.1	35.3	55	16	30	31	86	83	.164	.172	4.41	1.19	4.7	2.2	5.0
February	30.06	.64	.38	37.6	39.8	45.0	32.5	38.8	68	14	32	34	82	81	.180	.195	5.89	1.27	4.5	4.6	5.6
March	30.04	.49	.44	35.5	38.4	42.4	31.5	37.0	55	14	29	31	80	77	.157	.172	3.32	1.07	4.3	4.5	5.7
April	29.98	.50	.42	47.9	49.1	55.5	42.5	49.0	79	28	40	40	75	75	.246	.246	2.28	.98	2.7	2.9	3.7
May	30.00	.42	.71	55.9	55.4	62.8	50.4	56.6	83	33	48	49	75	82	.334	.347	3.93	1.16	5.2	4.7	5.0
June	29.93	.18	.68	65.7	65.4	72.6	59.5	66.0	91	48	59	60	80	83	.499	.517	1.67	.75	2.0	4.3	3.3
July	29.99	.30	.71	68.5	68.9	73.5	64.1	68.8	78	52	63	64	84	85	.575	.595	7.05	1.77	5.4	5.6	5.2
August	29.96	.17	.67	71.9	71.9	76.8	67.1	72.0	87	56	66	68	82	86	.638	.684	2.87	1.10	4.5	4.4	5.0
September	30.12	.37	.78	68.2	69.4	75.1	62.8	69.0	86	50	62	64	81	82	.555	.595	.90	.49	2.7	1.7	2.9
October	30.03	.44	.64	53.0	54.8	61.1	48.1	54.6	85	30	47	48	80	78	.322	.334	5.39	1.85	4.6	4.2	4.6
November	30.14	.78	.37	42.0	44.5	50.3	36.8	43.6	60	14	36	38	79	80	.211	.228	2.24	.88	3.8	2.6	4.6
December	30.16	.56	.53	38.7	42.2	48.5	34.5	41.5	56	15	32	36	79	78	.180	.211	3.19	1.36	2.9	3.0	4.2
Year	30.04	.78	.17	51.5	53.0	58.7	46.7	52.7	91	14	45	47	80	81	.338	.358	43.14		3.9	3.7	4.6

AUGUSTA, GA.

[Lat. 33° 28′ N.; long. 81° 54′ W.; gravity corr., —.03.]

January	29.94	30.26	29.49	39.8	47.9	56.4	37.2	46.8	76	26	35	37	85	68	.203	.219	3.29	1.26	4.0	4.4	4.7
February	29.94	.38	.32	52.1	56.6	65.0	48.2	56.6	82	26	46	48	83	75	.310	.334	3.71	.86	6.1	7.4	7.2
March	29.86	.31	.43	47.4	53.0	60.6	43.5	52.0	79	30	41	43	80	72	.256	.277	8.44	1.74	6.2	5.7	6.0
April	29.87	.13	.44	59.1	66.9	77.7	53.4	65.6	90	31	51	51	75	57	.373	.373	.71	.68	3.7	4.3	3.6
May	29.84	.23	.65	64.2	71.6	80.3	57.7	69.0	93	42	57	54	79	57	.465	.417	4.57	1.98	3.9	4.6	3.7
June	29.78	29.96	.50	76.3	80.7	90.5	70.4	80.4	98	65	70	68	81	66	.732	.684	4.47	1.96	5.1	5.7	4.8
July	29.87	30.06	.64	74.0	77.6	86.7	69.4	78.0	95	64	68	68	81	73	.684	.684	6.41	1.92	7.2	8.5	6.9
August	29.84	29.96	.61	74.6	77.0	88.1	70.1	79.1	94	60	71	71	89	83	.757	.757	8.10	2.43	5.2	8.1	5.8
September	29.94	30.14	.76	69.4	75.5	84.5	65.5	75.0	92	62	65	66	86	74	.616	.638	2.15	1.45	3.5	3.8	4.2
October	29.94	.35	.62	53.8	61.7	71.5	50.1	60.8	90	32	47	50	80	66	.322	.360	.59	.34	3.7	3.0	3.3
November	29.99	.53	.58	45.9	53.5	62.8	42.0	52.4	81	26	40	44	82	72	.246	.287	2.56	.92	3.8	3.6	4.0
December	30.07	.38	.72	44.2	52.0	60.4	40.5	50.4	73	22	40	42	88	70	.246	.266	2.76	.79	5.8	5.2	5.5
Year	29.91	30.53	.32	58.4	64.5	73.7	54.0	63.8	98	22	53	54	82	69	.434	.441	47.76		4.8	5.4	5.0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

ASTORIA, OREGON.

[H=41 feet; h_t=39 feet; h_r=55.8 feet; h_a=60 feet.]

Month.	Wind. By self-registers: Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m.: North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days: Clear.	Partly cloudy.	Cloudy.	Precipitation: .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp.: Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity: Thunderstorms.	Auroras.
	Miles.		Mi.																								
January		E.													6	6	19	22		0	0	1	0	0	1	0	0
February		E.													5	4	19	23		8	0	0	0	0	7	0	0
March		SW.													6	8	17	25		2	0	0	0	0	2	0	0
April		SW.													3	6	21	24		0	0	0	0	0	0	0	0
May		W.													10	4	17	9		0	0	0	0	0	0	0	0
June		W.													3	6	21	20		0	0	0	0	0	0	0	0
July		NW.													14	10	7	5		0	0	0	0	0	0	0	0
August		SW.													16	6	9	8		0	0	0	0	0	0	0	0
September		SW.													8	7	15	17		0	0	3	0	0	0	2	0
October		SW.													8	5	18	18		0	0	3	0	0	0	0	0
November		SW.													2	2	26	26		0	1	1	0	0	0	1	0
December		E.													1	7	23	28		1	1	0	0	0	1	0	0
Year		SW.													82	71	212	225		11	2	8	0	0	11	3	0

ATLANTA, GA.

[H=1,131 feet; h_t=92 feet; h_r=85 feet; h_a=107 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	10.2	NW.	30	NW.	0	5	2	9	5	7	2	7	23	2	9	6	16	16	15	1	0	2	0	0	9	1	0
February	9.9	NW.	36	NW.	0	2	1	13	8	7	4	3	15	3	5	6	17	19	17	1	0	0	0	0	6	0	0
March	8.9	NW.	36	SE.	0	5	2	13	15	1	1	1	20	4	8	9	14	19	18	0	0	6	0	0	4	1	0
April	7.3	NW.	30	NW.	0	5	0	3	10	13	7	3	14	5	12	11	7	12	8	3	0	0	0	0	3	2	0
May	6.3	NW.	27	N.	0	9	3	6	3	8	2	4	20	7	17	7	7	10	8	0	0	0	0	0	0	3	0
June	6.3	E.	39	S.	0	5	8	11	1	4	9	7	9	6	10	14	6	12	7	0	0	0	0	10	0	3	0
July	7.7	SW.	42	N.	1	3	5	9	3	3	13	5	16	5	6	9	16	18	11	0	0	0	0	0	0	1	0
August	6.6	Calm. SW.	36	W.	0	4	3	3	10	5	13	8	12	4	4	17	10	20	12	0	0	0	0	5	0	7	0
September	7.3	E.	24	NE.	0	4	18	19	2	0	1	1	11	4	17	6	7	8	6	0	0	0	0	1	0	0	0
October	9.4	NW.	30	N.	0	6	13	13	2	2	2	7	17	0	22	5	4	2	0	0	0	0	0	0	0	0	0
November	10.8	SE.	36	NW.	0	11	3	7	14	3	3	9	9	1	15	5	10	9	8	0	0	0	0	0	4	0	0
December	10.0	SE.	36	W.	0	6	10	3	19	9	3	4	8	0	11	5	15	12	10	0	0	0	0	0	7	0	0
Year	8.4	NW.			1	65	68	109	92	62	60	59	174	41	136	100	129	157	120	5	0	8	0	16	33	18	0

ATLANTIC CITY, N. J.

[H=53 feet; h_t=68 feet; h_r=57 feet; h_a=76 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	13.6	NW.	54	NW.	3	11	5	3	3	7	7	12	14	0	11	12	8	11	11	2	0	5	4	0	18	0	0
February	12.8	NW.	38	NW.	0	7	1	7	3	7	13	2	16	0	11	6	11	17	14	0	0	5	2	0	9	0	0
March	15.4	NE.	44	NE.	1	10	16	9	3	3	5	6	10	0	11	7	13	14	13	5	1	8	3	0	15	0	0
April	12.4	SW.	38	N.	0	4	4	5	3	8	14	11	11	0	15	10	5	11	8	0	0	4	0	0	4	1	0
May	12.8	S.	47	NW.	1	6	12	6	4	12	7	6	9	0	11	9	11	13	10	2	0	2	0	0	0	1	0
June	10.6	S.	29	N.	0	6	9	8	4	15	10	0	8	0	19	5	6	8	6	0	0	6	0	1	0	2	0
July	10.4	S.	36	NE.	0	5	8	8	7	14	7	7	6	0	10	14	7	15	11	0	0	1	0	0	0	1	0
August	9.1	S.	29	W.	0	6	13	4	2	19	10	4	4	0	9	13	9	12	9	0	0	1	0	0	0	1	0
September	9.0	SE.	28	N.	0	6	5	6	11	10	8	5	8	1	17	11	2	5	4	0	0	1	0	0	0	0	0
October	14.5	NW.	47	NE.	4	12	6	7	0	6	10	6	14	1	13	9	9	12	11	0	0	1	0	0	1	0	0
November	12.7	NW.	44	SE.	2	8	3	3	9	6	4	8	17	2	12	10	8	10	8	1	0	0	2	0	6	0	0
December	12.4	SW.	48	NW.	3	5	3	1	5	7	20	15	6	0	15	7	9	9	8	0	0	1	1	0	11	0	0
Year	12.1	NW.			14	86	85	67	54	114	115	82	123	4	154	113	98	137	113	10	1	35	12	1	64	6	0

AUGUSTA, GA.

[H=209 feet; h_t=89 feet; h_r=54 feet; h_a=103 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	3.9	W.	23	SW.	0	2	9	1	4	7	6	17	6	10	14	5	12	12	8	0	0	4	0	0	12	0	0
February	4.8	NE.	26	W.	0	4	13	6	4	9	5	10	2	3	2	13	13	13	12	0	0	2	0	0	2	1	0
March	4.6	NE.	20	W.	0	5	16	9	2	5	0	13	9	3	9	8	14	16	15	0	0	2	0	0	1	3	0
April	3.2	SE.	18	SW.	0	4	4	6	14	4	5	12	2	9	14	12	4	4	2	0	0	1	0	0	2	2	0
May	4.2	SE.	22	NE.	0	8	10	2	12	9	1	8	10	2	19	4	8	7	7	0	0	1	0	2	0	3	0
June	3.5	NE.	24	S.	0	3	13	6	11	10	6	4	5	2	9	15	6	11	9	0	0	0	0	18	0	7	0
July	4.0	S.	30	S.	0	6	6	5	12	17	6	4	5	1	2	13	16	14	12	0	0	0	0	8	0	8	0
August	3.4	SE.	40	SE.	1	5	5	6	13	13	5	5	5	5	7	15	9	17	16	0	0	0	0	15	0	12	0
September	3.1	NE.	17	NE.	0	5	18	10	4	1	2	1	13	6	13	11	6	6	5	0	0	1	0	4	0	2	0
October	4.5	NE.	22	N.	0	9	18	3	1	1	2	5	11	12	19	6	6	5	4	0	0	2	0	0	0	0	0
November	4.5	Calm. NE.	28	SW.	0	2	15	4	8	3	6	6	11	5	16	6	8	10	8	1	0	4	0	0	4	0	0
December	4.7	Calm. NE.	26	SW.	0	4	14	4	6	4	4	7	13	6	9	10	12	11	11	0	0	2	0	0	6	1	0
Year	4.0	NE.			1	57	141	62	91	83	48	92	92	64	133	118	114	126	109	1	0	19	0	47	27	39	0

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

BAKER CITY, OREGON.

[Lat. 44° 50′ N.; long. 117° 50′ W.; gravity corr., 0.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	26.64	27.00	26.16	18.5	27.2	32.9	16.0	24.4	44	0	14	19	84	72	.077	.098	2.04	.65	8.6	8.1	8.4
February	26.26	26.74	25.37	16.3	26.2	33.2	12.1	22.6	48	—11	12	17	83	70	.070	.089	2.59	.66	7.7	7.0	7.4
March	26.45	.65	26.13	24.3	38.0	42.2	21.1	31.6	53	— 6	17	22	76	56	.089	.113	1.40	.46	7.0	5.6	6.3
April	26.41	.78	25.96	37.3	56.1	59.4	32.7	46.0	77	19	26	31	64	41	.137	.172	.37	.16	5.4	6.6	6.0
May	26.39	.64	26.21	44.4	65.0	69.6	42.5	56.0	81	24	31	38	61	41	.172	.228	1.37	.33	4.3	6.0	5.1
June	26.38	.72	.13	46.1	62.1	66.1	44.9	55.5	85	35	35	42	68	51	.203	.266	2.59	.57	5.9	6.5	6.2
July	26.47	.63	.27	54.2	76.0	79.3	52.3	65.8	98	38	44	50	68	42	.287	.360	1.83	1.16	3.0	3.5	3.2
August	26.48	.67	.32	53.6	80.8	82.7	51.3	67.0	96	43	38	46	58	32	.228	.310	.43	.32	2.7	2.5	2.6
September	26.44	.67	.26	45.9	66.9	70.4	43.2	56.8	90	28	35	41	68	41	.203	.256	.14	.08	5.6	3.8	4.7
October	26.54	.80	.26	38.3	59.2	63.2	35.6	49.4	77	23	26	36	64	44	.137	.211	.16	.09	3.4	5.0	4.2
November	26.54	.80	.14	32.1	41.2	44.6	29.4	37.0	63	2	27	31	84	68	.143	.172	1.31	.34	6.5	6.6	6.5
December	26.45	.96	.03	20.9	26.4	31.2	17.5	24.4	44	— 6	13	16	73	60	.074	.085	4.00	1.42	4.9	6.5	5.7
Year	26.45	27.00	25.37	36.0	52.1	56.2	33.2	44.7	98	—11	26	32	71	52	.152	.197	18.23	.....	5.4	5.6	5.5

BALTIMORE, MD.

[Lat. 39° 18′ N.; long. 76° 37′ W.; gravity corr., — .01.]

January	29.89	30.35	29.07	34.5	38.0	43.3	31.9	37.6	60	21	27	27	76	65	.143	.143	4.89	1.44	4.8	3.7	4.5
February	29.92	.50	.32	38.7	42.1	48.3	34.6	41.4	73	16	30	32	74	70	.164	.180	5.52	1.50	6.5	4.8	5.8
March	29.92	.40	.32	35.4	40.2	44.5	32.6	38.6	60	16	27	31	73	72	.143	.172	7.94	1.54	5.8	5.8	6.2
April	29.84	.29	.33	52.2	58.3	65.0	47.1	56.0	86	30	38	39	62	52	.228	.237	2.48	1.08	3.8	3.3	3.8
May	29.87	.22	.62	59.4	63.4	70.6	53.8	62.2	88	40	45	48	61	60	.298	.334	3.11	.90	5.5	4.2	5.1
June	29.78	.06	.49	69.4	73.0	80.7	62.3	71.5	94	47	59	62	72	71	.499	.555	5.45	2.05	3.4	4.4	4.2
July	29.84	.14	.57	69.1	72.5	79.5	63.7	71.6	89	55	63	64	81	76	.575	.595	7.79	2.59	5.6	5.9	6.1
August	29.81	.04	.52	71.6	74.9	81.8	66.8	74.3	94	54	65	68	81	80	.616	.684	4.24	1.43	6.7	5.8	6.4
September	29.97	.23	.72	67.3	71.4	79.0	62.3	70.6	90	51	62	64	83	79	.555	.595	5.46	4.00	3.6	2.1	3.1
October	29.91	.34	.51	50.9	54.8	62.7	46.8	54.8	85	33	44	46	77	73	.287	.310	2.76	1.06	4.6	4.5	4.5
November	30.00	.63	.24	40.3	44.5	51.8	36.7	44.2	64	18	34	34	81	68	.195	.195	1.33	.51	4.7	3.3	4.4
December	30.01	.47	.44	38.9	44.5	51.0	36.4	43.7	67	17	30	33	74	67	.164	.187	3.24	1.16	2.6	3.2	4.2
Year	29.90	.63	.07	52.3	56.5	63.2	47.9	55.5	94	16	44	46	75	69	.322	.349	54.21	.....	4.8	4.2	4.9

BISMARCK, N. DAK.

[Lat. 46° 47′ N.; long. 100° 38′ W.; gravity corr., 0.]

January	28.21	28.66	27.74	17.9	26.0	34.4	13.2	23.8	50	— 9	16	22	92	88	.085	.113	.05	.02	3.8	4.1	4.2
February	28.12	.60	.76	—1.9	10.6	18.2	—5.3	6.4	48	—23	—4	8	90	90	.031	.057	.57	.27	3.7	3.8	4.3
March	28.20	.72	.68	8.5	20.6	25.4	5.7	15.6	50	—33	6	18	92	92	.052	.093	1.24	.81	4.6	5.6	5.2
April	28.12	.67	.73	39.1	53.6	58.4	36.0	47.2	90	8	36	48	91	83	.211	.334	2.40	.94	3.1	5.1	4.7
May	28.21	.64	.80	46.8	62.2	66.9	41.3	54.1	93	20	39	44	78	56	.237	.287	2.92	1.16	3.5	4.5	4.6
June	28.05	.50	.69	56.3	64.8	69.5	51.4	60.4	87	40	52	54	85	70	.387	.417	4.19	1.47	6.3	7.9	6.8
July	28.20	.57	.93	57.8	71.0	76.1	53.6	64.8	86	41	54	55	87	59	.417	.432	4.20	1.85	5.3	5.2	5.4
August	28.18	.54	.85	56.5	73.1	78.8	53.2	66.0	94	35	51	52	82	49	.373	.387	1.43	.97	3.5	3.4	3.8
September	28.13	.50	.65	50.8	67.8	75.4	48.3	61.8	92	32	45	44	81	47	.298	.287	.87	.41	3.9	4.0	4.8
October	28.21	.63	.77	36.2	49.0	57.5	34.1	45.8	78	23	31	33	84	57	.172	.187	.99	.37	4.6	4.4	4.9
November	28.15	.66	.55	19.0	25.0	32.7	13.2	23.0	63	—11	16	18	87	76	.085	.093	1.20	.56	6.9	5.4	6.5
December	28.02	.65	.45	16.4	21.2	27.3	11.9	19.6	46	—22	13	14	87	75	.074	.077	.44	.22	3.9	3.2	4.3
Year	28.15	.72	.45	33.6	45.4	51.7	29.7	40.7	94	—33	30	34	86	70	.202	.230	20.50	.....	4.4	4.7	5.0

BLOCK ISLAND, R. I.

[Lat. 41° 10′ N.; long. 71° 36′ W.; gravity corr., — .01.]

January	30.00	30.53	28.92	33.5	35.1	39.6	29.2	34.4	52	20	28	30	83	82	.150	.180	4.25	1.41	5.6	4.6	5.7
February	30.06	.71	29.27	34.3	35.7	40.0	28.9	34.9	52	12	29	30	82	82	.157	.164	3.97	.83	5.8	5.3	6.0
March	30.09	.52	.45	34.2	36.0	40.2	30.1	35.2	59	9	28	29	78	78	150	.157	2.42	.69	4.4	4.2	5.0
April	29.96	.57	.07	44.1	44.9	50.3	39.5	44.9	67	30	37	39	78	81	.219	.237	2.81	1.62	3.4	2.5	4.3
May	30.01	.49	.66	50.5	51.3	57.9	45.9	51.9	70	36	47	48	88	90	.322	.334	2.14	.61	5.8	4.0	6.1
June	29.93	.21	.71	61.0	59.0	66.9	55.2	61.0	79	46	57	57	88	92	.465	.465	1.83	1.06	3.2	4.9	5.2
July	30.02	.37	.74	64.8	64.1	69.7	60.2	65.0	79	53	61	62	89	91	.536	.555	3.38	1.28	4.0	4.2	5.9
August	29.99	.24	.70	63.8	69.0	73.8	64.6	69.2	85	56	65	66	88	90	.616	.638	3.51	1.15	4.6	3.7	4.8
September	30.13	.37	.80	65.1	65.4	70.7	60.8	65.8	81	56	61	61	88	88	.536	.536	1.69	1.26	4.8	3.4	4.7
October	30.01	.49	.55	52.4	53.5	58.1	48.1	53.1	74	34	47	48	82	82	.322	.334	7.33	2.30	6.5	3.7	5.7
November	30.14	.79	.41	42.7	44.4	48.1	38.6	43.4	61	19	37	39	82	83	.219	.237	2.89	1.63	4.7	4.8	5.6
December	30.12	.49	.35	40.7	42.8	47.4	36.0	41.7	59	12	35	36	81	80	.203	.211	2.81	.94	5.3	3.8	5.0
Year	30.04	.79	28.92	49.3	50.2	55.3	44.8	50.0	85	9	44	45	84	85	.324	.337	39.03	.....	4.8	4.1	5.3

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

BAKER CITY, OREGON.

[H = 3,430 feet; h_t = 49 feet; h_r = 38 feet; h_a = 53 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a.m. and 8 p.m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	4.4	S.	16	SW.	0	1	1	0	12	25	7	1	12	3	1	7	23	12	10	15	0	1	12	0	31	0	0
February	5.5	SE.	28	SW.	0	0	0	0	15	9	14	0	14	4	5	5	18	16	11	22	0	0	10	0	28	0	0
March	5.2	NW.	24	NW.	0	0	1	0	17	8	7	1	28	0	4	14	13	9	5	6	0	0	5	0	28	0	0
April	6.3	NW.	23	S.	0	0	0	0	18	13	10	0	19	0	6	10	14	7	5	0	0	0	0	0	13	0	0
May	5.5	NW.	24	NW.	0	1	2	0	14	6	10	0	23	6	9	11	11	9	8	0	0	0	0	0	2	2	0
June	4.8	NW.	22	NW.	0	2	0	1	5	13	7	0	22	10	6	11	13	15	9	0	0	0	0	0	0	1	0
July	4.5	SE.	18	N.	0	7	2	1	23	2	0	0	19	8	17	9	5	8	7	0	0	0	0	5	0	0	0
August	4.5	NW.	15	N.	0	4	1	0	24	2	0	1	25	5	22	4	5	3	2	0	0	0	0	7	0	0	0
September	4.9	SE.	24	NW.	0	4	5	0	25	4	3	1	8	10	13	7	10	3	3	1	0	0	0	1	3	0	0
October	5.9	SE.	28	NW.	0	0	1	0	38	7	1	0	11	4	13	10	8	4	1	0	0	0	0	0	8	0	0
November	4.7	SE.	30	SE.	0	0	3	1	23	8	2	0	12	11	5	10	15	14	12	5	0	0	2	0	18	0	0
December	6.1	SE.	26	SW.	0	0	0	0	31	6	8	0	5	12	8	11	12	17	16	15	0	0	16	0	30	0	0
Year	5.2	SE.	....	.....	0	19	16	3	245	103	69	4	198	73	109	109	147	117	89	64	0	1	45	13	161	3	0

BALTIMORE, MD.

[H = 179 feet; h_t = 87 feet; h_r = 79 feet; h_a = 94 feet.]

Month.	Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	5.0	NW.	28	SW.	0	9	4	5	2	5	7	8	12	10	15	8	8	13	11	5	0	4	1	0	16	1	0
February	6.5	NW.	26	S.	0	4	5	7	5	9	6	5	14	1	8	10	10	16	13	3	0	2	2	0	11	0	0
March	8.1	NE.	26	NE.	0	14	18	4	3	5	6	1	11	0	11	5	15	18	14	6	0	0	2	0	15	0	0
April	6.2	NW.	20	SW.	0	7	4	4	9	4	8	7	16	1	15	9	6	10	8	0	0	0	0	0	1	1	0
May	6.5	NE.	25	N.	0	10	10	8	5	8	7	8	6	0	13	5	13	14	12	1	0	0	0	0	0	3	0
June	7.1	NW.	40	NE.	1	1	9	5	11	8	10	2	14	0	16	6	8	11	8	0	0	0	0	5	0	6	0
July	7.4	SW.	36	NW.	0	6	6	4	15	2	15	3	11	0	7	14	10	14	12	0	0	0	0	0	0	4	0
August	5.9	NW.	36	NW.	0	2	7	3	11	4	16	0	18	1	4	16	11	13	9	0	0	0	0	5	0	3	0
September	5.6	NW.	24	SW.	0	4	10	2	9	3	11	3	14	4	17	11	2	5	4	0	0	0	0	1	0	2	0
October	8.2	NW.	36	NW.	0	6	12	1	4	1	5	6	25	2	14	8	9	9	8	0	0	0	0	0	0	1	0
November	8.2	NW.	48	S.	2	10	9	3	8	1	6	0	23	0	12	12	6	11	7	2	0	6	1	0	5	1	0
December	7.8	NW.	40	NW.	1	2	1	2	14	4	10	4	21	4	15	8	8	9	8	1	0	13	0	0	8	1	9
Year	6.9	NW.	...	.....	4	75	95	48	96	54	107	47	185	23	147	112	106	143	114	18	0	25	6	11	56	23	0

BISMARCK, N. DAK.

[H = 1,698 feet; h_t = 59 feet; h_r = 52 feet; h_a = 69 feet.]

Month.	Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	10.2	NW.	48	NW.	1	11	5	2	4	3	4	10	23	0	18	8	5	3	0	7	0	0	10	0	31	0	0
February	10.6	NW.	48	NW.	2	10	9	3	2	4	4	0	24	0	17	3	8	9	2	7	0	0	21	0	28	0	0
March	9.7	N.	36	NW.	0	15	8	4	14	6	0	2	13	0	14	6	11	8	4	10	0	0	20	0	30	0	0
April	12.8	NW.	48	NW.	2	10	7	5	8	5	6	2	17	0	15	6	9	8	5	3	0	0	2	1	12	0	0
May	11.9	NE.	42	SE.	2	11	15	0	9	10	3	3	9	2	10	15	6	6	5	2	0	0	0	1	4	5	0
June	13.3	NW.	54	NE.	7	8	11	9	7	6	1	6	12	0	4	13	13	14	8	0	1	1	0	0	0	6	0
July	9.0	NW.	48	NE.	1	6	8	8	10	0	2	5	18	5	7	17	7	13	9	0	0	2	0	0	0	11	0
August	8.4	NW.	38	NW.	0	10	9	5	5	5	1	5	15	7	13	17	1	9	5	0	0	0	0	6	0	6	2
September	9.7	NW.	40	SE.	1	7	6	4	10	4	3	2	20	4	11	13	6	7	5	0	0	1	0	3	1	5	3
October	11.1	NW.	54	NW.	3	3	5	2	9	6	3	13	17	4	12	10	9	8	6	5	0	0	1	0	11	1	1
November	9.8	NW.	50	NW.	5	3	2	9	7	7	3	3	23	3	4	15	11	12	7	13	0	0	16	0	28	0	0
December	9.9	NW.	42	NW.	0	7	1	10	8	1	4	6	23	2	14	12	5	5	4	9	0	2	16	0	31	0	1
Year	10.5	NW.	....	.....	24	101	86	61	93	57	34	57	234	27	139	135	91	102	60	56	1	6	86	11	176	34	7

BLOCK ISLAND, R. I.

[H = 27 feet; h_t = 39 feet; h_r = 3 feet; h_a = 48 feet.]

Month.	Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	18.4	NE.	72	NE.	7	6	15	1	5	4	6	14	11	0	8	12	11	14	12	4	0	5	3	0	19	0	0
February	19.3	SW.	55	E.	7	5	6	2	4	2	18	5	14	0	7	10	11	17	14	3	1	6	2	0	16	1	0
March	22.5	NE.	70	NE.	17	7	17	7	6	1	7	2	14	1	12	8	11	11	8	2	0	2	4	0	17	0	0
April	17.4	SW.	70	SE.	3	3	4	3	2	4	18	7	18	1	14	9	7	7	6	2	0	6	0	0	1	0	2
May	14.3	SW.	38	NE.	0	2	7	7	3	3	22	7	11	0	2	19	10	9	8	0	0	4	0	0	0	0	0
June	14.4	SW.	44	NE.	2	3	12	4	3	1	21	8	6	2	11	10	9	8	5	0	0	5	0	0	0	0	0
July	11.8	SW.	36	NW.	0	3	5	4	7	0	27	6	7	3	10	10	11	13	9	0	0	8	0	0	0	0	0
August	12.6	SW.	46	NE.	2	1	11	2	5	2	30	5	5	1	10	14	7	8	8	0	0	5	0	0	0	0	0
September	11.1	SW.	34	SE.	0	3	10	1	10	1	15	8	10	2	12	12	6	7	5	0	0	3	0	0	0	0	1
October	20.9	NE.	72	NE.	13	6	17	5	3	0	9	8	14	0	9	12	10	11	10	0	0	1	0	0	0	0	0
November	18.7	NE.	63	NE.	7	1	18	3	6	5	5	7	14	1	10	10	10	10	7	0	0	2	2	0	5	0	0
December	20.1	NW.	60	W.	9	3	3	4	3	2	11	11	23	2	15	5	11	11	9	0	0	2	1	0	7	0	0
Year	16.8	SW.	....	.....	67	43	125	43	57	25	189	88	147	13	120	131	114	126	101	11	1	49	12	0	65	1	3

a By eye observations at 8 a.m. and 8 p.m. when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

BOSTON, MASS.

[Lat. 42° 21′ N.; long. 71° 4′ W.; gravity corr., —.01.]

Month.	Pressure.			Temperature.							Moisture.											
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.87	30.47	28.63	28.9	32.2	37.6	24.6	31.1	56	12	24	27	82	81	.125	.143	4.39	1.14	7.0	6.3	6.8
February	29.93	.59	29.21	29.7	33.2	39.5	24.4	32.0	62	2	24	27	81	80	.125	.143	3.66	.66	6.3	4.8	5.8
March	29.99	.43	.26	31.7	34.4	40.0	27.3	33.6	55	3	24	25	76	70	.125	.130	3.94	1.45	5.2	5.0	5.5
April	29.82	.45	28.83	46.1	48.2	56.8	39.3	48.0	78	27	39	40	77	73	.237	.246	1.71	.91	6.0	4.8	5.0
May	29.88	.34	29.55	53.2	56.2	64.6	47.0	55.8	81	33	43	46	71	70	.277	.310	1.56	.92	6.2	5.1	5.8
June	29.81	.09	.56	63.3	66.2	73.4	56.6	65.0	96	45	53	55	71	70	.402	.432	3.06	1.39	6.6	6.2	5.9
July	29.89	.27	.59	68.2	68.0	76.5	61.4	69.0	90	56	58	58	71	73	.481	.481	3.73	.91	6.1	5.0	4.9
August	29.87	.17	.58	69.2	70.1	76.8	63.2	70.0	90	54	61	63	76	80	.536	.575	3.87	1.32	5.5	5.5	5.2
September	30.01	.28	.66	64.5	66.1	73.9	59.5	66.7	90	50	58	58	79	77	.481	.481	2.29	1.70	3.4	3.9	3.8
October	29.91	.51	.47	49.2	51.5	58.6	44.5	51.6	83	28	42	43	77	73	.266	.277	5.56	2.08	6.1	4.6	5.5
November	30.03	.67	.34	38.6	41.7	48.2	34.6	41.4	66	9	30	32	71	69	.164	.180	2.35	1.25	4.0	5.0	4.7
December	29.97	.33	.15	37.0	41.0	47.5	33.4	40.4	64	11	27	29	70	65	.149	.157	3.58	1.22	4.7	4.8	4.7
Year	29.92	.67	28.63	48.3	50.7	57.8	43.0	50.4	96	2	40	42	75	73	.280	.296	39.70	.....	5.6	5.1	5.3

BROWNSVILLE, TEX.

[Lat. 25° 53′ N.; long. 97° 26′ W.; gravity corr., —.05.]

January	30.04	30.49	29.68	55.9	61.7	72.9	52.9	62.9	85	36	51	53	84	74	.373	.402	1.65	.96	5.4	3.6	4.7
February	29.94	.33	29.64	61.1	65.4	75.7	57.5	66.6	88	40	56	57	86	75	.448	.465	1.02	.94	7.3	5.2	5.8
March	29.89	.29	29.46	60.1	66.2	73.8	57.9	65.8	88	42	56	60	86	80	.448	.517	1.80	1.40	7.0	6.4	6.5
April	29.94	.34	29.63	67.3	71.1	81.3	63.3	72.3	89	50	63	62	86	74	.575	.555	3.05	1.85	7.6	6.3	7.2
May	29.96	.17	29.80	73.8	76.4	83.9	68.5	76.2	89	56	69	68	86	76	.707	.684	1.21	.64	4.9	5.6	5.8
June	29.81	.00	29.59	80.2	82.7	91.7	75.8	83.8	96	72	75	74	85	76	.866	.838	.26	.16	4.5	3.6	4.6
July	29.91	.08	29.75	79.7	84.1	91.3	76.2	83.8	95	72	76	75	87	74	.896	.866	3.00	2.72	3.3	3.7	3.7
August	29.94	.06	29.78	76.9	82.7	90.6	73.6	82.1	94	64	73	73	88	74	.810	.810	2.47	1.24	4.2	3.1	3.8
September	29.93	.10	29.75	73.3	80.0	87.6	70.5	79.0	92	64	71	74	92	81	.757	.838	6.73	2.90	5.2	4.8	5.9
October	30.07	.30	29.79	65.4	71.5	81.3	63.6	72.4	86	51	63	67	91	85	.575	.660	3.13	1.74	2.9	1.2	2.8
November	30.04	.51	29.62	60.1	66.8	76.5	57.3	66.9	84	39	58	62	94	86	.481	.555	.82	.31	4.4	2.7	4.4
December	30.07	.54	29.71	58.3	63.5	71.5	55.0	63.2	81	38	56	58	92	82	.448	.481	3.11	1.95	5.4	5.0	5.5
Year	29.96	.54	29.46	67.7	72.7	81.5	64.3	72.9	96	36	64	65	88	78	.615	.639	28.25	.....	5.2	4.3	5.1

BUFFALO, N. Y.

[Lat. 42° 53′ N.; long. 78° 53′ W.; gravity corr., 0.]

January	29.27	29.82	28.49	26.8	29.0	33.6	22.0	27.8	50	8	22	24	82	83	.113	.125	2.25	.60	8.2	7.9	7.8
February	29.23	.86	.55	29.9	31.2	37.3	23.7	30.5	53	6	23	24	76	76	.119	.125	4.14	.84	7.1	6.2	7.1
March	29.31	.81	.77	29.7	32.4	38.2	23.7	31.0	54	4	22	22	74	69	.113	.113	2.14	.30	7.4	6.5	6.6
April	29.24	.68	.82	42.5	44.3	51.1	36.1	43.6	74	23	32	35	69	71	.180	.203	1.28	.47	5.0	5.8	5.6
May	29.30	.53	29.10	49.9	53.3	59.2	43.6	51.4	78	28	39	39	67	60	.237	.237	1.36	.51	6.1	4.4	5.3
June	29.23	.52	28.89	64.6	67.4	74.6	56.4	65.5	83	39	53	53	67	63	.402	.402	1.64	.92	5.0	4.7	4.3
July	29.25	.58	.98	65.2	67.9	73.1	57.5	65.3	90	48	53	54	66	62	.402	.417	4.27	1.41	4.9	4.9	5.0
August	29.24	.48	.80	66.6	69.6	76.3	59.4	67.8	88	48	57	58	71	67	.465	.481	3.15	1.33	5.3	5.5	5.3
September	29.38	.68	29.14	63.8	66.5	73.0	57.4	65.2	82	46	55	56	73	70	.432	.448	1.79	.52	3.5	2.3	3.1
October	29.33	.87	28.90	48.2	51.7	57.1	43.2	50.2	80	29	38	38	70	61	.228	.228	1.35	.49	5.4	4.5	5.8
November	29.30	.81	.15	38.6	40.2	45.7	33.0	39.4	70	10	29	28	70	64	.157	.150	3.13	.66	8.1	7.4	8.2
December	29.32	.84	.78	36.4	38.0	42.6	30.5	36.6	63	10	30	28	77	68	.164	.150	4.24	1.17	7.2	5.0	6.3
Year	29.28	.87	28.15	46.8	49.3	55.2	40.5	47.9	90	4	38	38	72	68	.251	.256	30.74	.....	6.1	5.4	5.9

FORT BUFORD, N. DAK.

[Lat. 48° 0′ N.; long. 103° 56′ W.; gravity corr., + .01.]

January	27.97	28.41	27.47	17.4	25.7	32.7	9.6	21.2	50	—11	13	17	85	73	.074	.089	.19	.11	4.0	5.7	5.5
February	27.91	.46	.56	—3.9	5.5	13.2	—9.1	2.0	39	—34	—6	1	91	82	.028	.040	.14	.06	5.1	5.4	5.7
March	27.96	.45	.29	10.3	24.7	29.5	7.2	18.4	58	—32	8	17	89	75	.057	.089	.27	.08	6.9	7.0	6.9
April	27.91	.42	.53	37.8	55.5	60.6	35.4	48.0	87	10	32	31	81	46	.180	.172	1.84	.96	5.5	6.1	6.1
May	27.99	.31	.60	45.0	63.0	66.8	40.0	53.4	90	17	36	35	71	40	.211	.203	1.49	1.02	4.5	4.0	5.3
June	27.85	.27	.43	53.7	64.5	67.2	48.1	57.2	82	36	49	52	86	66	.347	.387	7.08	1.75	6.1	5.4	6.1
July	27.99	.32	.74	58.7	71.3	75.4	53.7	64.6	84	43	54	56	83	61	.417	.448	2.99	1.20	3.6	3.6	4.4
August	27.97	.30	.62	55.3	73.8	78.8	49.9	64.4	97	37	49	51	79	47	.347	.373	.78	.32	2.5	2.7	2.8
September	27.94	.28	.55	48.2	66.1	72.5	44.7	58.6	87	36	42	44	80	47	.266	.287	.66	.36	3.8	3.8	4.4
October	28.01	.39	.60	34.1	46.3	54.4	30.5	42.4	75	15	27	34	76	65	.143	.195	1.96	.72	4.2	3.5	4.8
November	27.93	.43	.36	19.5	25.5	32.8	13.9	23.4	68	— 8	15	19	81	78	.081	.098	1.44	1.04	3.5	3.3	5.2
December	27.80	.34	.19	16.7	22.3	29.0	13.2	21.1	47	—15	10	14	74	70	.063	.077	.14	.07	4.1	3.0	5.4
Year	27.94	.46	.19	33.7	45.4	51.1	28.1	39.6	97	—34	27	31	81	62	.184	.205	18.98	.....	4.6	4.5	5.2

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

BOSTON, MASS.

[H = 126 feet; h_t = 115 feet; h_r = 154 feet; h_a = 182 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		Mi.																								
January	11.9	W.	48	SW.	4	8	4	1	2	6	12	14	14	1	5	11	15	14	10	9	0	0	9	0	25	0	0
February	13.7	W.	41	W.	2	4	4	1	1	8	10	19	9	0	8	9	11	15	13	8	0	1	7	0	21	0	0
March	14.7	NW.	45	S.	2	4	14	7	3	2	7	11	14	0	11	6	14	14	8	6	0	6	5	0	19	0	0
April	12.6	W.	60	NE.	2	3	6	9	0	5	9	17	11	0	11	11	8	7	5	2	0	1	0	0	5	1	0
May	11.2	SW.	36	SW.	0	5	11	4	2	5	19	8	8	0	7	16	8	8	5	0	0	0	0	0	0	0	0
June	10.5	W.	28	NE.	0	7	11	6	2	1	8	16	9	0	7	11	12	6	6	0	0	3	0	2	0	1	0
July	10.3	SW.	30	SW.	0	2	3	4	3	8	23	13	6	0	10	12	9	10	9	0	0	0	0	1	0	1	0
August	9.5	SW.	36	SW.	0	6	7	6	6	9	15	5	8	0	9	14	8	13	12	0	0	1	0	1	0	2	0
September	9.0	SW.	27	SW.	0	4	5	5	5	5	20	7	9	0	18	6	6	11	6	0	0	2	0	0	0	1	1
October	12.4	NW.	40	NW.	1	7	8	3	4	1	12	13	14	0	10	8	13	11	8	1	0	1	0	0	2	0	0
November	12.1	W.	48	S.	1	8	0	3	4	8	10	15	11	1	13	6	11	9	5	0	0	5	2	0	10	0	0
December	13.9	SW.	52	S.	3	4	3	2	5	2	18	17	11	0	14	7	10	12	9	0	0	5	2	0	9	0	0
Year	11.8	SW.	....	.....	15	62	76	51	37	60	163	155	124	2	123	117	125	130	96	26	0	25	25	4	91	6	1

BROWNSVILLE, TEX.

[H = 57 feet; h_t = 17 feet; h_r = 1 foot; h_a = 57 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	8.0	N.	38	SW.	0	14	4	7	10	13	3	2	6	3	12	11	8	10	7	0	0	....	0	0	0	1	0
February	11.0	S.	42	S.	1	10	5	6	5	21	0	1	4	4	8	10	10	4	2	0	1	....	0	0	0	1	0
March	10.1	S.	46	S.	1	16	3	8	14	17	1	0	2	1	5	12	14	10	3	0	0	....	0	0	0	1	0
April	9.1	SE.	30	S.	0	6	2	9	18	14	3	1	2	5	5	7	18	8	6	0	0	....	0	0	0	3	0
May	8.2	SE.	24	SE., S.	0	1	4	6	34	15	0	0	0	2	10	9	12	4	4	0	0	....	0	0	0	0	0
June	9.1	S.	47	SE.	1	0	0	1	23	28	0	0	0	8	14	8	8	3	2	0	0	....	0	22	0	0	0
July	6.6	SE.	26	S.	0	3	0	4	19	18	2	0	3	13	20	8	3	6	3	0	0	....	0	28	0	0	0
August	4.8	Calm, S.	30	SW.	0	2	2	13	7	15	2	0	1	20	16	10	5	10	6	0	0	....	0	19	0	2	0
September	4.0	Calm, E.	30	S.	0	4	4	14	8	0	0	0	2	28	6	12	12	17	13	0	0	....	0	5	0	1	0
October	3.7	Calm, E.	24	N.	0	8	2	10	2	0	0	1	5	34	18	10	3	9	6	0	0	....	0	0	0	0	0
November	4.9	Calm, S.	36	N.	0	3	1	0	4	9	0	1	6	36	14	8	8	11	8	0	0	....	6	0	0	0	0
December	7.6	Calm, S.	30	N.	0	7	3	4	8	12	3	0	4	21	8	11	12	9	5	0	0	....	0	0	0	0	0
Year	7.3	S.	....	.....	3	74	30	82	152	162	14	6	35	175	136	116	113	101	65	0	1	....	0	74	0	9	0

BUFFALO, N. Y.

[H = 690 feet; h_t = 103 feet; h_r = 93 feet; h_a = 108 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	12.3	SW.	59	SW.	4	0	14	0	4	7	14	8	15	0	2	7	22	19	11	23	0	1	10	0	27	1	0
February	14.5	SW.	45	NW.	4	2	7	2	8	4	16	3	14	0	1	13	14	20	13	15	0	1	7	0	23	0	0
March	12.2	NE.	60	SW.	6	0	27	3	7	1	15	1	8	0	4	13	14	18	13	17	0	0	7	0	23	0	0
April	11.0	SW.	39	SW.	0	2	5	2	9	2	24	4	11	1	8	11	11	10	8	5	0	4	1	0	6	1	0
May	9.9	SW.	34	SW.	0	0	13	0	6	2	21	8	11	1	7	20	4	12	4	3	0	1	0	0	2	0	0
June	7.2	SW.	24	SW.	0	2	19	5	2	3	20	7	2	0	12	12	6	10	6	0	0	1	0	0	0	2	0
July	10.3	SW.	46	SW.	1	2	5	2	5	9	25	5	9	0	10	16	5	16	14	0	0	0	0	1	0	6	0
August	8.5	SW.	42	SW.	1	3	15	3	9	8	14	7	2	1	4	25	2	15	13	0	1	2	0	0	0	5	1
September	8.5	SW.	38	SW.	0	4	10	3	12	4	15	8	2	2	20	7	3	9	8	0	0	0	0	0	0	3	3
October	10.4	SW.	47	SW.	1	2	12	1	15	4	8	7	13	0	8	12	11	8	4	2	0	0	0	0	5	0	0
November	15.0	SE.	66	SW.	7	1	9	1	19	2	10	10	8	0	0	7	23	14	11	8	0	1	2	0	13	0	0
December	16.1	SW.	66	SW.	6	1	6	3	9	6	24	7	4	2	7	11	13	15	9	9	0	0	3	0	16	0	0
Year	11.3	SW.	....	.....	30	19	142	25	105	52	206	75	99	7	83	154	128	166	114	82	1	11	30	1	115	18	4

FORT BUFORD, N. DAK.

[H = 1,899 feet; h_t = 17 feet; h_r = 2 feet; h_a = 27 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	9.0	NW.	38	NW.	0	3	2	3	3	10	7	8	25	1	6	16	9	4	2	8	0	1	10	0	31	0	0
February	8.5	NW.	40	NW.	1	5	8	8	0	4	10	4	17	0	6	13	9	6	1	10	0	1	23	0	28	0	0
March	8.4	SW.	48	NW.	1	6	10	11	3	5	12	6	9	0	4	9	18	8	3	12	0	0	16	0	28	0	2
April	8.8	NW.	42	NW.	1	8	6	10	6	5	4	5	15	1	3	18	9	10	8	3	0	3	1	0	9	3	0
May	9.8	SE.	34	NE.	0	6	9	6	12	8	8	5	7	1	10	12	9	6	5	2	0	0	0	1	4	0	1
June	10.2	E.	48	NW.	1	1	11	13	9	6	5	5	10	0	7	12	11	20	17	0	0	0	0	0	0	1	0
July	7.9	E.	36	N.	0	7	10	20	4	3	2	4	11	1	13	12	6	10	9	0	1	0	0	0	0	2	0
August	6.4	E.	42	NW.	1	8	5	17	5	2	3	2	13	7	22	8	1	4	3	0	0	0	0	4	0	0	2
September	7.5	NW.	36	N.	0	8	2	12	7	2	1	4	17	7	12	12	6	5	5	0	0	0	0	0	0	0	1
October	8.0	NW.	36	NW.	0	8	3	1	5	6	3	5	23	8	13	8	10	10	6	8	0	0	1	0	16	0	0
November	7.7	NW.	46	W.	2	1	6	8	3	10	1	13	15	3	11	8	11	7	5	10	0	0	16	0	28	0	0
December	6.9	W.	36	SW.	0	2	3	3	4	12	4	17	15	2	8	13	10	5	1	5	0	3	17	0	29	0	2
Year	8.3	NW.	....	.....	7	63	75	112	61	73	60	78	177	31	115	141	109	95	65	58	1	8	84	5	173	6	8

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

CAIRO, ILL.

[Lat. 37° 0′ N.; long. 89° 10′ W.; gravity corr., —.02.]

Month.	Pressure.			Temperature.									Moisture.								
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.74	30.10	28.95	34.6	39.7	44.4	32.6	38.5	60	20	30	32	83	77	.164	.180	3.95	1.81	6.5	5.3	6.0
February	29.69	.12	29.13	38.0	44.9	48.4	35.0	41.7	69	16	32	35	82	71	.180	.203	3.20	.80	7.2	4.8	5.3
March	29.65	.12	.21	38.8	45.3	48.8	36.7	42.8	64	17	32	37	80	76	.180	.219	5.86	1.15	6.8	7.2	7.2
April	29.66	29.94	.39	55.4	62.6	68.7	52.2	60.4	82	29	46	47	72	58	.310	.322	1.55	.34	4.3	5.4	4.7
May	29.71	30.02	.41	59.2	68.1	73.0	55.9	64.4	87	41	50	51	74	57	.360	.373	2.48	1.63	4.8	3.9	4.1
June	29.55	29.76	.25	73.3	78.0	85.5	69.0	77.2	93	62	67	67	81	70	.660	.660	3.97	1.36	5.5	3.9	5.1
July	29.67	.84	.34	70.8	77.1	83.2	66.5	74.8	90	57	62	65	76	67	.555	.616	2.21	.66	4.5	4.6	4.6
August	29.65	.85	.32	69.4	75.7	83.4	65.3	74.4	92	52	65	65	85	70	.616	.616	4.77	1.70	3.7	3.2	4.1
September	29.77	.94	.61	65.9	75.3	83.2	62.3	72.8	93	52	60	63	82	68	.517	.575	.29	.29	2.3	1.9	2.4
October	29.79	30.12	.51	49.9	60.7	68.5	47.5	58.0	88	33	43	46	79	61	.277	.310	.49	.20	2.6	2.2	2.8
November	29.75	.40	.07	40.7	46.7	51.7	37.1	44.4	72	14	34	37	79	71	.195	.219	7.30	2.43	5.6	5.0	5.6
December	29.77	.21	.10	41.1	47.9	53.1	38.1	45.6	66	22	35	37	79	68	.203	.219	3.49	1.16	4.9	4.4	4.9
Year	29.70	30.40	28.95	53.1	60.2	66.0	49.8	57.9	93	14	46	48	79	68	.351	.376	39.56	.....	4.9	4.3	4.7

FORT CANBY, WASH.

[Lat. 46° 16′ N.; long. 124° 4′ W.; gravity corr., 0.]

January	29.94	30.24	29.41	44.9	47.3	49.6	41.7	45.6	58	33	43	45	94	92	.278	.298	6.55	1.05	6.4	6.7	7.4
February	29.62	.32	28.78	37.7	40.6	43.8	34.0	38.9	47	30	36	38	96	92	.211	.228	5.99	.76	6.5	7.4	6.8
March	29.88	.21	29.31	41.2	45.8	49.1	38.5	43.8	55	31	40	43	96	91	.246	.247	5.98	1.38	6.3	7.6	7.0
April	29.78	.23	.24	47.0	49.8	53.6	43.7	48.6	64	40	45	46	93	88	.298	.310	7.80	1.39	8.9	7.9	8.2
May	29.83	.10	.45	49.8	53.7	57.5	47.2	52.4	66	41	48	50	96	89	.334	.360	2.68	1.52	7.7	6.2	6.6
June	29.79	.16	.28	52.8	57.2	61.1	50.6	55.8	69	46	52	56	99	96	.387	.448	3.26	.57	8.3	7.0	6.5
July	29.88	.14	.66	55.7	61.3	64.9	53.7	59.3	87	47	55	60	99	96	.432	.517	.99	.72	5.8	3.7	3.6
August	29.84	.05	.66	59.4	64.3	68.4	56.8	62.6	80	52	59	62	98	94	.499	.555	1.38	.54	5.4	3.3	4.4
September	29.82	.16	.53	54.8	57.8	60.9	51.8	56.4	80	47	54	56	100	95	.417	.448	4.77	.86	5.9	4.7	6.7
October	29.83	.19	.53	53.6	56.3	60.3	50.7	55.5	74	46	53	54	98	94	.402	.417	6.01	1.02	4.6	5.8	6.8
November	29.86	.26	.21	49.0	50.4	52.9	45.5	49.2	61	39	48	49	97	96	.334	.347	14.10	2.05	6.9	9.0	8.6
December	29.74	.37	.06	44.2	45.3	48.5	39.2	43.8	57	32	43	43	96	92	.277	.277	12.50	1.58	7.0	7.4	8.1
Year	29.82	.37	28.78	49.2	52.5	55.9	46.1	51.0	87	30	48	50	97	93	.343	.371	72.01	.....	6.6	6.4	6.7

CARSON CITY, NEV.

[Lat. 39° 8′ N.; long. 119° 47′ W.; gravity corr., —.02.]

January	.....	25.71	25.05	.....	40.4	44.8	21.6	33.2	54	8	....	20	....	45	.....	.103	.10	.10	.....	1.6	1.8
February	.....	.50	24.56	.....	39.9	43.8	25.4	34.6	55	7	....	19	....	46	.....	.098	4.02	1.40	.....	4.9	4.0
March	.....	.40	.96	.....	48.1	51.1	31.2	41.2	64	20	....	21	....	37	.....	.108	2.50	1.46	.....	4.9	4.3
April	.....	.42	.88	.....	57.1	60.2	35.3	47.8	75	26	....	19	....	25	.....	.098	1.72	1.34	.....	4.7	3.6
May	.....	.33	25.10	.....	61.4	66.2	41.6	53.9	75	32	....	32	....	37	.....	.180	2.64	.63	.....	5.4	4.4
June	.....	.38	.03	.....	71.1	73.2	44.5	58.8	92	37	....	35	....	28	.....	.203	.32	.16	.....	2.9	2.8
July	.....	.44	.16	.....	81.2	82.9	51.8	67.4	90	40	....	42	....	26	.....	.266	.28	.23	.....	1.9	2.4
August	(d)	.41	.22	.....	82.6	81.9	50.7	67.8	92	37	....	36	....	20	.....	.211	T.	T.	.....	1.3	1.5
September	25.30	.49	24.98	50.2	69.2	71.5	44.9	58.2	86	31	39	39	66	36	.237	.237	.88	.70	2.6	2.7	3.9
October	25.38	.62	25.10	37.7	62.5	68.2	34.2	51.2	76	23	25	26	62	26	.130	.137	T.	T.	.9	2.8	1.6
November	25.40	.59	.12	32.4	54.5	61.3	27.6	44.4	72	16	22	24	69	32	.113	.125	T.	T.	1.7	2.5	1.3
December	25.35	.72	24.68	27.2	36.4	43.2	21.3	32.2	60	0	19	22	73	57	.098	.113	5.62	1.78	3.8	5.3	4.6
Year	.....	.72	.56	.....	58.7	62.6	35.8	49.2	92	0	....	28	....	35	.....	.156	18.08	.....	.....	3.4	3.0

CHARLESTON, S. C.

[Lat. 32° 47′ N.; long. 79° 56′ W.; gravity corr., —.03.]

January	30.09	30.43	29.54	45.6	50.7	58.0	43.0	50.5	72	32	44	46	95	85	.287	.310	2.33	.83	3.9	2.8	4.3
February	30.10	.48	.50	55.1	58.1	65.8	51.1	58.4	80	29	52	56	91	94	.387	.448	.99	.25	6.5	5.1	6.9
March	30.00	.46	.58	51.5	55.8	62.2	48.0	55.1	74	34	50	52	93	87	.360	.387	5.47	2.13	5.1	5.7	7.0
April	30.02	.30	.60	62.3	64.2	71.6	57.9	64.8	80	38	55	58	79	81	.432	.481	2.07	.95	3.2	1.3	3.1
May	29.98	.37	.75	67.9	69.9	77.7	62.7	70.2	92	51	60	63	78	79	.517	.575	3.85	1.43	4.0	4.2	5.0
June	29.92	.12	.64	78.4	78.7	86.7	73.8	80.2	95	66	72	73	81	83	.783	.810	1.20	.25	5.1	4.5	5.1
July	30.02	.20	.81	77.6	78.1	86.5	72.9	79.7	95	65	72	72	82	83	.783	.783	8.98	3.81	5.6	7.2	6.9
August	29.99	.10	.76	79.0	80.3	88.4	74.6	81.5	94	64	74	75	85	83	.838	.866	6.96	2.33	4.3	5.1	4.8
September	30.07	.29	.90	73.0	75.8	82.9	69.7	76.3	89	64	70	70	89	84	.732	.732	6.06	2.36	4.8	4.2	4.5
October	30.07	.49	.72	59.1	63.3	71.4	56.3	63.8	89	42	53	56	81	77	.402	.448	4.20	2.98	4.3	3.4	4.3
November	30.14	.65	.71	52.0	55.3	63.9	48.4	56.2	80	30	47	49	84	79	.322	.347	1.77	.43	4.6	3.6	4.3
December	30.23	.52	.90	51.4	55.1	62.3	48.0	55.2	73	29	46	49	82	80	.310	.347	1.62	.70	5.2	4.2	5.5
Year	30.05	.65	.50	63.7	65.4	73.1	58.9	66.0	95	29	58	60	85	83	.513	.544	45.50	.....	4.7	4.3	5.1

d 8 a. m. observation resumed August 29.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

CAIRO, ILL.

[H = 359 feet; h_t = 87 feet; h_r = 78 feet; h_a = 93 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	7.6	N.	44	W.	2	13	7	4	2	11	8	9	7	1	9	9	13	13	8	4	0	1	1	0	15	2	0
February	10.8	SE.	36	NW.	0	6	4	4	15	7	2	4	14	0	9	9	10	13	12	1	0	0	4	0	12	2	0
March	11.2	NE.	40	W.	1	1	13	6	7	8	6	12	8	1	7	6	18	19	16	2	0	0	2	0	10	4	0
April	9.3	W.	42	W.	1	8	4	8	10	7	7	11	5	0	11	12	7	14	11	0	0	1	0	0	1	9	0
May	8.2	N.	52	NW.	1	24	4	4	5	10	2	1	10	2	15	9	7	6	6	0	1	0	0	0	0	2	0
June	6.4	W.	84	W.	2	6	4	5	9	12	5	14	3	2	9	14	7	10	8	0	0	0	0	7	0	8	0
July	5.9	S.	30	SW.	0	7	1	10	5	13	6	10	6	4	12	14	5	8	7	0	0	0	0	1	0	3	0
August	5.9	SW.	42	NW.	2	6	5	4	1	11	12	11	10	2	16	5	10	8	7	0	0	0	0	4	0	6	0
September	5.2	NW.	30	N.	0	6	11	1	9	9	1	5	12	6	23	3	4	1	1	0	0	0	0	6	0	0	0
October	7.5	NW.	37	N.	0	9	2	2	8	14	2	7	17	1	20	6	5	5	3	1	0	0	0	0	0	0	0
November	9.4	SE.	40	SW.	1	11	2	1	13	10	4	5	11	3	10	9	11	12	11	1	1	0	3	0	7	1	0
December	10.9	S.	52	S.	3	6	2	1	15	19	6	8	3	2	14	5	12	11	9	0	0	0	1	0	8	0	0
Year	8.2	S.	....	.....	13	103	59	50	99	131	61	97	106	24	155	101	109	120	99	9	2	2	11	18	53	37	0

FORT CANBY, WASH.

[H = 179 feet; h_t = 10 feet; h_r = 2 feet; h_a = 34 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	15.1	SE.	70	SE.	11	2	7	15	18	4	13	0	0	3	4	7	20	20	19	0	1	10	0	0	0	0	0
February	11.2	SE.	60	SW.	5	4	5	12	17	5	10	2	1	0	3	10	15	23	20	7	5	0	0	0	5	0	0
March	11.3	SE.	56	SE.	9	8	4	10	15	7	6	10	1	1	4	13	14	24	22	1	0	1	0	0	2	0	0
April	13.8	SE.	68	SE.	6	8	3	9	19	9	10	1	1	0	2	6	22	23	21	0	1	1	0	0	0	0	0
May	8.8	N.	48	S.	1	24	3	0	0	10	3	11	10	1	6	9	16	9	8	0	0	2	0	0	0	0	0
June	10.5	NW.	60	S.	4	13	1	0	2	15	2	4	23	0	6	11	13	21	16	0	0	0	0	0	0	0	0
July	7.0	N.	29	N.	0	36	0	0	4	1	2	2	17	0	23	4	4	7	3	0	0	2	0	0	0	0	0
August	7.0	N.	44	S.	2	28	2	2	4	7	0	7	11	1	19	5	7	9	7	0	0	3	0	0	0	0	0
September	12.6	S.	72	SE.	5	15	0	4	7	18	0	3	12	1	9	3	18	18	14	0	1	4	0	0	0	0	0
October	12.2	S.	61	S.	7	9	3	3	17	17	2	2	5	4	7	4	20	16	15	0	0	1	0	0	0	0	0
November	16.7	S.	63	S.	14	6	1	4	15	16	3	5	8	2	0	4	26	27	22	0	0	1	0	0	0	0	0
December	20.6	SE.	98	S.	18	5	1	2	20	14	0	10	7	3	2	5	24	28	27	1	1	0	0	0	0	0	0
Year	12.2	N.	....	.....	82	158	30	61	138	123	51	57	96	16	85	81	199	225	194	9	9	25	0	0	7	0	0

CARSON CITY, NEV.

[H = 4,660 feet; h_t = 44 feet; h_r = 42 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	26	4	1	1	1	2	0	0	1	0	29	0	0
February	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	14	6	8	11	6	14	0	0	1	0	22	0	0
March	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	12	14	5	8	5	5	0	0	0	0	15	0	0
April	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	15	13	2	2	2	3	0	0	0	0	8	0	0
May	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	12	13	6	13	11	2	0	2	0	0	0	6	0
June	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	18	7	5	5	3	0	1	0	0	1	0	1	0
July	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	23	3	5	2	2	0	0	0	0	0	0	3	0
August	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	28	1	2	0	0	0	0	0	0	3	0	0	0
September	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	17	4	9	4	4	0	0	0	0	0	1	2	0
October	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	26	5	0	0	0	0	0	0	0	0	12	0	0
November	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	26	3	1	0	0	0	0	0	0	0	22	0	0
December	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	15	5	11	13	10	9	0	0	3	0	27	0	0
Year	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	232	78	55	59	44	35	1	2	5	4	136	12	0

CHARLESTON, S. C.

[H = 52 feet; h_t = 60 feet; h_r = 55 feet; h_a = 72 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	7.9	W.	36	SW.	0	10	6	2	4	0	13	20	6	1	13	9	9	9	6	0	0	3	0	0	0	0	0
February	10.3	SW.	36	W.	0	7	11	8	3	1	19	3	3	1	3	12	13	12	8	0	0	4	0	0	1	1	0
March	8.6	NE.	36	NE.	0	6	18	6	2	1	10	4	9	6	5	6	20	12	11	0	0	2	0	0	0	1	0
April	6.6	SW.	26	E.	0	0	7	8	6	3	13	5	5	13	19	10	1	6	6	0	0	0	0	0	0	0	0
May	6.2	NE.	30	NW.	0	5	14	12	8	2	6	3	7	5	11	12	8	12	10	0	0	0	0	1	0	7	0
June	6.1	SW.	32	E.	0	2	10	12	3	6	18	2	2	5	8	13	9	11	7	0	0	0	0	5	0	5	0
July	5.1	SW.	28	SW.	0	2	7	1	3	8	15	10	5	11	6	9	16	15	14	0	1	0	0	4	0	3	0
August	4.3	SW.	26	SW.	0	6	2	5	5	2	25	5	3	9	11	17	3	13	9	0	0	0	0	11	0	2	0
September	5.8	NE.	36	NE.	0	12	20	12	4	3	0	0	1	8	11	14	5	11	9	0	0	1	0	0	0	2	0
October	8.6	N.	29	NE.	0	20	14	3	2	1	7	7	8	0	14	9	8	8	7	0	0	0	0	0	0	0	0
November	8.1	NE.	36	NW.	0	7	24	3	4	2	7	8	5	0	12	12	6	8	7	1	0	0	0	0	1	1	0
December	8.2	NE.	30	NE.	0	14	17	6	5	3	8	2	6	1	7	15	9	12	9	0	0	6	0	0	1	1	0
Year	7.2	NE.	....	.....	....	91	150	78	42	32	141	69	60	60	120	138	107	129	103	1	1	16	0	21	3	23	0

a By eye observations at 8 a. m. and 8 p. m., where there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

CHARLOTTE, N. C.

[Lat. 35° 13′ N.; long. 80° 51′ W.; gravity corr., —.02.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.28	29.65	28.70	37.2	43.6	51.5	34.7	43.1	69	24	32	33	81	68	.180	.187	3.92	1.00	3.6	4.4	4.7
February	29.30	.78	.61	45.3	49.4	57.1	41.0	49.0	78	23	40	40	84	74	.246	.246	6.95	1.62	6.2	6.0	6.6
March	29.24	.69	.80	41.5	46.6	53.7	37.8	45.8	70	23	36	37	83	72	.219	.228	11.13	2.22	5.6	5.5	6.5
April	29.23	.53	.84	54.8	63.8	72.0	50.3	61.2	85	26	46	47	74	56	.310	.322	2.79	1.37	4.5	3.4	3.2
May	29.22	.64	29.00	60.1	67.2	76.3	54.6	65.4	90	38	52	51	76	61	.387	.373	7.58	3.00	4.1	5.0	4.3
June	29.17	.36	28.86	71.9	76.9	86.6	66.5	76.6	95	56	66	67	83	74	.638	.660	3.77	.78	4.8	5.4	5.1
July	29.25	.45	.98	70.2	74.4	84.1	65.3	74.7	90	55	65	65	83	75	.616	.616	3.79	.90	7.0	5.9	6.4
August	29.22	.36	.92	71.4	75.3	85.4	67.6	76.5	95	55	68	68	89	79	.684	.684	6.82	2.00	6.0	6.7	6.0
September	29.35	.57	29.19	67.0	72.7	82.1	62.5	72.3	90	57	62	62	84	70	.555	.555	.76	.33	3.5	2.0	3.2
October	29.32	.70	28.98	50.6	57.5	67.1	46.6	56.8	88	31	43	42	76	60	.277	.266	.68	.32	2.9	2.5	3.4
November	29.36	30.02	.74	41.8	48.8	57.1	38.4	47.8	78	19	35	34	78	60	.203	.195	3.05	1.01	4.4	4.2	4.2
December	29.43	29.74	29.02	41.4	48.7	55.5	37.9	46.7	68	24	34	36	78	65	.195	.211	1.26	.44	4.8	3.3	4.7
Year	29.28	30.02	28.61	54.4	60.4	69.0	50.3	59.7	95	19	48	48	81	68	.376	.379	52.50	.....	4.8	4.5	4.9

CHATTANOOGA, TENN.

[Lat. 35° 4′ N.; long. 85° 15′ W.; gravity corr., —.03.]

January	29.36	29.65	28.70	36.4	43.5	50.4	34.5	42.4	69	26	32	35	83	73	.180	.203	6.31	1.69	6.8	5.4	6.6
February	29.28	.66	.83	45.2	50.4	58.0	41.2	49.6	76	21	39	40	82	71	.237	.246	10.30	2.71	6.9	5.8	6.2
March	29.22	.66	.85	42.2	50.0	56.0	39.3	47.6	69	24	37	38	82	68	.219	.228	9.16	3.09	7.8	5.5	6.5
April	29.24	.45	.93	55.6	64.1	72.6	51.9	62.2	89	32	47	46	75	57	.322	.310	2.42	0.86	4.8	4.6	4.5
May	29.25	.59	29.06	61.1	69.0	78.6	56.4	67.5	90	42	52	53	73	59	.387	.402	1.39	0.53	4.6	4.2	4.8
June	29.17	.36	28.89	73.1	78.3	88.6	68.6	78.6	96	60	67	68	82	71	.660	.684	7.58	2.94	5.4	5.7	5.3
July	29.26	.44	29.00	70.5	76.5	84.5	66.2	75.4	91	59	64	64	81	68	.595	.595	6.18	2.18	6.3	5.6	5.7
August	29.23	.38	28.97	70.7	77.7	86.7	66.5	76.6	95	54	66	67	85	69	.638	.660	3.17	1.48	5.5	5.2	5.3
September	29.35	.58	29.16	64.8	73.8	83.2	61.1	72.2	91	54	61	64	87	72	.536	.595	2.06	1.26	3.8	2.5	4.3
October	29.35	.69	.02	51.4	61.4	70.5	48.1	59.3	88	33	44	47	77	61	.287	.322	0.29	0.17	2.6	2.4	3.1
November	29.35	.87	28.83	43.0	50.2	57.7	39.8	48.8	72	18	36	37	79	62	.211	.219	4.49	1.66	7.0	3.8	5.8
December	29.43	.72	.96	38.8	48.6	54.9	36.3	45.6	64	21	34	36	83	65	.195	.211	5.38	2.04	5.6	3.0	5.3
Year	29.29	.87	28.70	54.4	62.0	70.1	50.8	60.5	96	18	48	50	81	66	.372	.390	58.73	.....	5.6	4.5	5.3

CHEYENNE, WYO.

[Lat. 41° 8′ N.; long. 104° 48′ W.; gravity corr., —.01.]

January	23.95	24.20	23.59	21.4	26.8	34.9	16.4	25.6	49	—3	11	10	66	54	.067	.063	2.03	.86	3.4	5.3	5.3
February	23.74	.06	.36	19.7	26.2	34.0	12.7	23.4	52	—7	10	11	68	54	.063	.067	.89	.33	3.9	5.0	5.4
March	23.84	.11	.57	22.1	29.2	38.5	16.9	27.7	56	—4	13	14	70	59	.074	.077	1.61	.50	4.9	6.1	6.2
April	23.97	.39	.52	34.7	50.1	55.8	31.7	43.8	77	14	21	14	61	31	.108	.077	1.18	.48	4.7	5.1	5.0
May	24.04	.23	.75	43.5	55.3	63.5	39.3	51.4	78	30	37	32	80	52	.219	.180	4.72	2.24	3.9	6.4	5.7
June	23.97	.28	.61	50.4	64.1	70.0	46.3	58.2	81	39	44	40	79	46	.287	.246	1.84	.70	3.4	5.4	4.9
July	24.13	.36	.86	55.1	72.0	78.1	52.0	65.0	87	44	49	40	81	37	.347	.246	.82	.21	3.4	4.7	4.7
August	24.15	.34	.98	55.3	70.0	79.4	51.3	65.4	89	38	46	36	74	40	.310	.211	2.16	.84	2.4	6.1	5.1
September	24.10	.32	.66	47.6	63.1	72.0	45.0	59.0	86	32	39	32	73	40	.237	.180	2.09	.64	3.8	4.3	4.4
October	24.14	.40	.73	36.5	49.4	60.5	33.4	47.0	74	19	22	18	62	35	.113	.093	.25	.25	2.1	2.8	2.7
November	23.97	.21	.72	29.9	34.5	45.6	23.0	34.3	75	—4	16	19	62	59	.085	.098	.82	.18	4.7	3.8	4.9
December	23.87	.39	.52	24.6	28.6	37.7	18.9	28.3	56	—2	13	10	67	50	.074	.063	.56	.20	4.9	2.5	4.1
Year	23.99	.40	.36	36.7	47.4	55.9	32.2	44.1	89	—7	27	23	70	46	.165	.133	18.97	.....	3.8	4.8	4.9

CHICAGO, ILL.

[Lat. 41° 52′ N.; long. 87° 38′ W.; gravity corr., —.01.]

January	29.16	29.75	28.29	28.3	30.5	35.0	25.4	30.2	54	10	24	25	85	79	.125	.130	1.99	1.25	7.2	6.4	7.1
February	29.11	.60	.34	24.7	30.7	35.7	21.5	28.6	58	—8	20	24	82	79	.103	.125	1.95	.99	5.6	5.5	5.5
March	29.14	.59	.63	27.5	32.2	36.2	25.1	30.6	57	7	23	27	84	84	.119	.143	2.13	.58	7.8	7.2	7.7
April	29.12	.40	.86	44.5	47.9	53.9	40.0	47.0	75	23	38	37	80	70	.228	.219	3.14	1.48	5.4	5.6	5.2
May	29.23	.55	.96	51.2	54.7	61.1	45.7	53.4	81	35	42	41	71	62	.266	.256	2.09	.84	4.5	5.1	4.1
June	29.07	.37	.70	63.2	66.1	72.2	59.2	65.7	88	44	57	59	82	80	.465	.499	2.42	.79	4.5	5.3	5.6
July	29.16	.41	.94	64.9	68.7	73.4	60.5	67.0	87	55	56	56	74	66	.448	.448	2.47	1.28	3.1	4.0	3.9
August	29.12	.30	.77	66.2	70.5	75.5	62.5	69.0	96	49	58	60	77	72	.481	.517	4.52	1.92	3.7	6.2	4.7
September	29.25	.49	29.00	64.4	70.7	76.0	62.1	69.0	91	48	53	57	68	64	.402	.465	.32	.20	3.1	2.3	2.2
October	29.22	.58	28.94	47.7	54.5	60.0	45.1	52.6	86	33	39	40	73	60	.237	.246	.36	.21	5.9	2.6	4.3
November	29.17	.72	.60	31.1	35.4	39.4	28.2	33.8	60	3	26	28	81	77	.137	.150	3.83	.84	7.5	6.3	7.2
December	29.14	.74	.49	32.3	37.0	41.6	29.1	35.4	57	9	26	30	78	76	.137	.164	1.32	.56	6.4	5.2	5.2
Year	29.16	.75	28.29	45.5	49.9	55.0	42.0	48.5	96	—8	38	40	78	72	.262	.280	26.54	.....	5.4	5.2	5.2

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

CHARLOTTE, N. C.

[H=773 feet; h_t=52 feet; h_r=56 feet; h_a=68 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		Mi.																								
January	5.3	SW.	30	SW.	0	12	4	2	5	4	18	7	5	5	16	2	13	12	11	0	0	4	0	0	13	0	0
February	6.1	S.	26	W.	0	6	10	4	3	10	8	6	7	2	9	3	16	15	13	2	1	7	0	0	5	1	0
March	5.7	NW.	25	W.	0	12	10	7	3	4	1	8	12	5	8	6	17	17	16	2	0	3	0	0	7	0	0
April	6.9	S.	27	SW.	0	1	9	9	2	17	11	5	2	4	17	11	2	5	5	0	0	0	0	0	2	0	0
May	6.2	S.	36	W.	0	7	12	9	7	17	3	1	6	0	18	4	9	12	10	0	1	1	0	1	0	7	0
June	5.3	SW.	30	NW.	0	3	12	11	2	10	14	3	3	2	10	13	7	14	9	0	0	1	0	9	0	10	0
July	5.8	E.	36	S.	0	5	7	14	6	14	9	5	1	1	5	12	14	14	10	0	0	3	0	1	0	11	0
August	5.4	SW.	36	S.	0	0	12	9	3	10	16	5	2	5	9	11	11	18	12	0	0	0	0	8	0	13	0
September	4.7	NE.	18	NE.	0	4	23	16	7	2	3	0	1	4	18	9	3	5	3	0	0	0	0	0	0	2	0
October	6.8	NE.	24	NW.	0	6	21	5	3	6	7	6	7	1	19	6	6	6	6	0	0	2	0	0	1	0	0
November	7.3	NE.	48	SW.	2	7	17	6	7	5	13	1	3	1	16	5	9	10	9	1	0	2	0	0	4	0	0
December	7.8	S.	36	W.	0	6	10	6	2	15	12	5	4	2	16	3	12	11	8	0	0	4	0	0	8	0	0
Year	6.1	NE.	....	.....	2	69	147	98	50	114	115	52	53	32	161	85	119	139	112	5	2	27	0	19	40	46	0

CHATTANOOGA, TENN.

[H=783 feet; h_t=71 feet; h_r=60 feet; h_a=76 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.2	NE.	30	SW.	0	5	14	1	3	6	9	11	13	0	5	11	15	15	13	2	0	6	0	0	14	1	0
February	8.0	S.	26	NW.	0	5	5	0	8	14	5	7	12	0	5	14	9	13	14	2	0	2	0	0	6	3	0
March	6.6	S.	30	NW.	0	2	12	5	8	14	2	8	11	0	6	11	14	21	16	....	0	3	0	0	6	4	0
April	5.9	NW.	30	NW.	0	6	8	2	10	2	8	9	12	3	13	10	7	12	7	....	0	3	0	0	1	3	0
May	5.6	NE.	25	N.	0	11	13	5	3	6	2	9	12	1	11	14	6	9	5	0	0	3	0	1	0	4	0
June	4.3	W.	32	NW.	0	1	12	7	9	2	7	14	6	2	7	15	8	18	14	0	0	1	0	11	0	13	0
July	4.2	W.	29	SW.	0	3	13	7	1	4	4	14	9	7	10	9	12	11	11	0	0	0	0	5	0	4	0
August	3.9	NE.	26	NW.	0	7	14	3	0	4	7	13	11	3	7	18	6	10	9	0	0	4	0	11	0	6	0
September	3.6	NE.	17	SE.	0	2	27	9	5	3	1	4	2	7	13	12	5	8	7	0	0	6	0	1	0	2	0
October	5.2	NW.	26	NW.	0	7	14	3	4	7	2	6	15	4	18	9	4	5	3	0	0	0	0	0	0	0	0
November	6.4	S.	34	SW.	0	6	4	7	6	12	3	10	11	1	9	10	11	9	7	2	0	3	1	0	6	1	0
December	5.5	NE.	36	S.	0	1	14	2	5	10	1	11	11	7	9	11	11	11	9	0	0	9	0	0	11	0	0
Year	5.4	NE.	....	.....	0	56	150	51	62	84	51	116	125	35	113	144	108	148	115	6	0	40	1	29	44	41	0

CHEYENNE, WYO.

[H=6,105 feet; h_t=58 feet; h_r=50 feet; h_a=60 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	11.7	NW.	35	W.	0	5	4	3	0	3	5	13	29	0	10	13	8	8	4	10	0	0	11	0	30	0	0
February	13.3	W.	46	NW.	4	2	2	1	0	4	14	16	16	1	10	10	8	5	4	0	0	0	10	0	28	0	0
March	12.3	NW.	46	NW.	3	12	2	1	5	7	8	8	19	0	8	10	13	12	9	14	0	0	8	0	29	0	0
April	11.9	NW.	54	NW.	3	9	2	3	2	5	3	5	31	0	8	14	8	5	4	3	0	0	1	0	13	1	0
May	10.5	NW.	36	NW.	0	5	6	5	3	15	4	8	16	0	6	15	10	11	8	2	0	3	0	0	2	2	0
June	10.7	S.	37	W.	0	3	8	2	4	17	2	9	15	0	7	20	3	12	10	0	1	3	0	0	0	2	0
July	9.5	S.	34	W.	0	8	1	1	6	22	5	6	12	1	12	17	2	8	7	0	1	2	0	0	0	2	0
August	7.9	NW.	40	E.	1	2	8	4	0	9	7	7	24	1	7	22	2	13	9	0	0	1	0	0	0	3	0
September	8.6	NW.	37	NW.	0	6	3	1	1	14	8	9	17	1	9	18	3	13	11	0	0	0	0	0	0	1	0
October	8.6	NW.	38	N.	0	8	3	0	1	4	4	12	29	1	17	12	2	1	1	1	0	0	0	0	10	0	0
November	11.1	NW.	48	W.	3	10	0	0	0	2	9	9	23	7	9	16	5	10	9	10	0	0	3	0	24	0	0
December	13.1	NW.	58	NW.	6	6	0	1	0	2	7	13	29	4	11	16	4	7	5	6	0	0	7	0	29	0	0
Year	10.8	NW.	....	.....	20	76	39	22	22	104	76	115	260	16	114	183	68	105	81	52	2	9	40	0	165	11	0

CHICAGO, ILL.

[H=824 feet; h_t=241 feet; h_r=238 feet; h_a=274 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	15.0	SW.	54	NE.	3	4	7	4	7	6	13	9	12	0	3	9	19	11	5	12	0	4	9	0	25	0	0
February	19.9	SW.	60	SW.	8	5	3	4	7	4	13	13	7	0	10	8	10	12	6	8	1	4	9	0	23	1	0
March	19.2	NE.	56	SW.	7	3	19	8	11	0	9	8	4	0	2	12	17	15	11	10	0	2	10	0	24	1	0
April	16.7	NE.	50	SE.	9	11	12	3	9	4	8	8	5	0	10	10	10	15	12	3	0	0	2	0	5	2	0
May	15.9	NE.	51	S.	3	9	23	1	11	3	11	3	0	1	14	10	7	7	5	1	1	0	0	0	0	2	0
June	13.8	NE.	45	E.	2	3	21	7	11	7	3	2	5	1	7	12	11	11	9	0	1	7	0	0	0	6	0
July	13.0	SW.	50	NE.	6	3	10	4	9	7	14	6	7	2	13	13	5	8	5	0	0	0	0	0	0	4	0
August	12.4	SW.	48	NE.	2	4	12	3	9	5	15	4	9	1	10	14	7	10	7	0	0	1	0	3	0	4	0
September	14.1	SW.	40	SW.	1	3	7	2	10	10	14	7	5	2	20	9	1	4	2	0	0	12	0	1	0	2	0
October	17.3	SW.	46	NE.	6	5	5	2	8	10	12	6	13	1	13	11	7	5	4	0	1	6	0	0	0	1	0
November	20.0	SW.	51	S.	10	4	9	0	6	11	8	14	8	0	6	5	19	11	9	8	0	4	7	0	17	1	0
December	21.4	SW.	57	SE.	14	2	5	0	12	16	16	9	2	0	11	9	11	9	7	4	0	6	4	0	16	0	0
Year	16.6	SW.	....	.....	71	56	133	38	110	83	136	89	77	8	119	122	124	118	82	46	4	46	41	4	110	24	0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

CINCINNATI, OHIO.

[Lat. 39° 6′ N.; long. 84° 30′ W.; gravity corr., −.02.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.42	29.94	28.62	33.4	38.2	42.2	30.2	36.2	62	18	28	30	81	73	.150	.164	3.31	1.31	7.9	5.9	7.1
February	29.39	.86	.81	37.4	41.1	48.1	31.9	40.0	72	4	31	31	79	69	.172	.172	3.87	1.18	7.1	5.2	6.4
March	29.38	.85	.88	33.6	40.9	44.7	31.1	37.9	66	13	26	32	75	71	.137	.180	4.86	1.21	6.9	6.2	7.0
April	29.37	.58	.96	50.1	59.8	65.6	46.4	56.0	85	26	40	42	71	55	.246	.266	1.55	.44	4.6	4.9	4.4
May	29.43	.70	29.19	54.5	64.8	69.1	50.2	59.6	85	36	45	44	71	51	.298	.287	1.08	.54	4.1	5.0	5.1
June	29.30	.49	28.94	69.6	76.2	83.3	65.1	74.2	92	54	60	64	73	68	.517	.595	4.83	.96	4.7	6.1	4.8
July	29.38	.58	29.14	67.2	76.4	80.9	61.8	71.4	89	53	57	57	71	52	.465	.465	5.13	2.43	2.9	3.9	5.0
August	29.34	.54	.07	67.2	76.3	80.7	63.9	72.3	92	51	61	62	82	62	.536	.655	2.83	.81	4.8	4.4	5.5
September	29.49	.70	.31	62.5	74.5	81.0	59.0	70.0	90	50	57	62	82	67	.465	.555	2.65	1.57	2.7	2.3	2.8
October	29.47	.83	.17	47.7	59.1	64.8	44.5	54.6	85	30	41	46	78	62	.256	.310	1.16	.75	3.5	3.6	4.5
November	29.45	30.04	28.68	38.3	45.4	49.2	36.0	42.6	71	16	32	36	79	70	.180	.211	5.03	1.59	6.5	6.3	6.7
December	29.49	29.95	.99	37.0	45.4	49.5	34.5	42.0	65	20	31	38	80	78	.172	.228	2.14	.93	4.5	3.9	4.5
Year	29.41	30.04	28.62	49.9	58.2	63.3	46.2	54.7	92	4	42	45	77	65	.300	.332	38.44	.....	5.0	4.8	5.3

CLEVELAND, OHIO.

[Lat. 41° 30′ N.; long. 81° 42′ W.; gravity corr., −.01.]

January	29.24	29.83	28.42	29.8	32.3	35.9	26.7	31.3	54	18	25	26	84	78	.130	.137	2.19	.74	8.1	8.0	8.7
February	29.21	.76	.54	31.8	34.5	41.2	27.3	34.2	62	7	26	26	81	72	.137	.137	5.15	1.45	8.1	6.2	8.1
March	29.25	.75	.69	30.0	33.9	38.7	26.2	32.4	60	11	24	26	80	74	.125	.137	2.93	.75	7.5	6.9	7.2
April	29.22	.55	.79	46.4	50.6	56.4	40.6	48.5	82	23	37	39	72	67	.219	.237	1.52	.29	5.1	4.0	5.5
May	29.30	.52	29.04	52.1	57.2	62.5	45.3	53.9	82	32	42	44	70	64	.266	.287	2.59	1.58	5.1	4.3	5.4
June	29.19	.44	28.83	67.4	69.9	76.3	60.3	68.3	87	47	58	60	73	72	.481	.517	4.07	1.39	4.8	4.5	4.4
July	29.25	.53	.99	67.3	70.9	76.4	59.6	68.0	90	51	58	59	72	68	.481	.499	1.48	.47	3.5	4.5	3.6
August	29.22	.42	.86	67.2	71.9	77.6	61.1	69.4	96	49	59	62	75	72	.499	.555	2.89	1.21	4.8	3.9	4.2
September	29.35	.62	29.15	63.4	69.4	76.1	58.9	67.5	92	47	56	59	77	70	.448	.499	2.01	1.37	4.0	2.0	3.4
October	29.31	.72	28.94	48.3	53.3	60.3	44.5	52.4	85	32	42	44	78	72	.266	.287	1.72	.57	5.8	4.2	6.2
November	29.28	.80	28.14	37.6	41.0	45.4	33.9	39.6	71	15	31	33	78	75	.172	.187	5.41	2.19	9.2	6.7	8.5
December	29.31	.82	.74	36.0	39.7	45.5	32.4	39.0	62	20	28	30	74	71	.150	.164	2.22	.75	6.0	3.5	7.1
Year	29.26	.83	.14	48.1	52.0	57.7	43.1	50.4	96	7	40	42	76	71	.281	.304	34.18	.....	6.0	4.9	6.0

COLUMBIA, MO.*

[Lat. 38° 58′ N.; long. 92° 14′ W.; gravity corr., −.02.

January	.....	29.62	28.69	.....	34.8	45.4	26.1	35.8	62	13	....	26	....	73	.....	.137	0.97	.34	.....	4.4	5.6
February	.....	.63	.70	.....	33.7	47.7	21.4	34.6	75	−2	....	25	....	73	.....	.130	2.63	1.34	.....	4.3	6.1
March	.....	.55	.82	.....	36.8	46.7	27.3	37.0	69	0	....	31	....	80	.....	.172	3.43	.68	.....	7.3	8.1
April	.....	.49	.93	.....	57.6	69.2	45.4	57.3	84	22	....	49	....	74	.....	.347	4.97	2.07	.....	4.3	6.1
May	.....	.53	.91	.....	63.6	75.2	47.8	61.5	91	32	....	54	....	71	.....	.417	4.29	2.63	.....	5.1	6.0
June	.....	.32	.71	.....	74.6	85.6	63.0	74.3	95	55	....	67	....	78	.....	.660	4.69	.71	.....	5.9	7.3
July	.....	.38	29.00	.....	75.0	85.3	59.5	72.4	90	47	....	66	....	74	.....	.638	3.74	1.73	.....	4.5	4.8
August	.....	.40	28.89	.....	73.5	86.7	59.5	73.1	96	42	....	66	....	78	.....	.638	5.52	2.04	.....	5.9	5.2
September	.....	.42	29.07	.....	69.3	86.9	56.3	71.6	96	38	....	61	....	76	.....	.536	.46	.34	.....	3.0	3.0
October	.....	.62	.06	.....	54.1	71.3	40.9	56.1	92	25	....	45	....	73	.....	.208	1.51	.62	.....	1.8	1.8
November	.....	.84	28.74	.....	39.1	51.5	30.7	41.1	72	5	....	31	....	76	.....	.172	3.90	1.66	.....	4.4	6.1
December	.....	.77	.59	.....	40.0	52.9	30.4	41.6	65	11	....	31	....	72	.....	.172	1.04	.65	.....	3.4	5.3
Year	.....	.84	.59	.....	54.3	67.0	42.4	54.7	96	−2	....	46	....	75	.....	.360	37.15	.....	.....	4.5	5.4

* One observation at 8 p. m. daily.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

CINCINNATI, OHIO.

[H=628 feet; h_t=153 feet; h_v=145; h_a=157 feet.]

Month.	Wind. By self-register. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Aurorae.
	Miles.		Mi.																								
January	7.6	Calm. S.	27	S.	0	8	4	5	5	13	10	1	14	2	7	7	17	12	9	8	0	2	2	0	19	0	0
February	9.3	S.	30	S.	0	1	5	9	5	13	6	5	10	2	5	9	14	13	11	5	0	1	3	0	12	1	0
March	8.9	NE.	26	S.	0	5	16	11	2	5	8	4	11	0	5	9	17	17	16	6	0	1	3	0	12	0	0
April	6.8	Calm. NW.	35	S.	0	5	10	7	13	4	9	0	11	1	17	6	7	12	9	3	0	0	0	0	4	4	0
May	6.1	Calm. NW.	26	NW.	0	15	10	7	2	9	3	2	10	4	13	7	11	8	7	0	0	1	0	0	0	1	0
June	4.3	Calm. NE.	36	SW.	0	5	12	7	11	4	7	3	4	7	6	20	4	15	15	0	1	0	0	2	0	10	0
July	4.9	Calm. NW.	24	W.	0	6	4	10	10	7	7	3	10	5	10	15	6	9	7	0	0	0	0	0	0	3	0
August	4.3	Calm. NW.	34	NW.	0	2	3	5	9	11	11	1	11	9	9	14	8	14	10	0	0	4	0	3	0	3	0
September	3.5	Calm. N.	26	W.	0	8	4	6	12	2	3	0	6	19	21	7	2	7	6	0	0	1	0	1	0	1	0
October	6.5	Calm. NW.	33	NW.	0	7	5	5	15	7	4	2	13	4	15	11	5	8	3	0	0	3	0	0	1	1	0
November	6.9	Calm. NW.	28	W.	0	4	9	5	7	11	7	4	7	6	5	18	17	15	8	7	0	6	3	0	10	1	0
December	5.2	Calm. S.	30	W.	0	2	4	2	10	5	11	2	5	21	14	9	8	8	8	0	0	2	1	0	14	0	0
Year	6.2	NW.	....	.....	0	68	86	79	101	91	86	27	112	80	127	122	116	138	109	29	1	21	12	6	72	25	0

CLEVELAND, OHIO.

[H=751 feet; h_t=97 feet; h_v=89 feet; h_a=125 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Aurorae.
January	7.9	Calm. SW.	30	SW	0	4	7	1	6	10	15	9	9	1	3	3	25	14	10	17	0	0	11	0	26	1	0
February	9.7	NW.	32	SW.	0	3	3	2	10	9	5	12	12	0	5	1	22	15	14	9	0	0	7	0	20	1	0
March	9.3	NE.	34	SE.	0	4	14	5	13	7	7	7	5	0	6	7	18	13	10	12	0	0	8	0	20	0	0
April	9.4	Calm. SW.	30	SE.	0	4	8	1	11	4	10	8	13	1	13	7	10	10	8	3	0	0	1	0	7	2	0
May	7.0	Calm. NW.	30	SW.	0	7	16	2	5	6	8	1	15	2	9	13	9	10	8	0	1	0	0	0	0	1	0
June	6.1	Calm. NE.	26	NE.	0	7	18	3	3	10		5	5	2	13	9	8	14	12	0	0	0	0	0	0	9	0
July	7.2	Calm. NW.	30	S.	0	13	10	0	6	8	8	7	10	0	20	8	3	12	8	0	0	0	0	1	0	5	0
August	7.0	Calm. N.	28	S.	0	11	9	3	4	8	11	5	11	0	14	14	3	11	9	0	0	0	0	2	0	2	0
September	6.9	Calm. S.	28	S.	0	9	7	4	4	8	13	5	9	1	17	11	2	5	4	0	0	0	0	2	0	2	2
October	8.5	SE.	33	S.	0	7	3	4	18	9	11	3	7	0	8	8	15	12	11	1	0	1	0	0	1	0	0
November	9.5	SE.	41	SE.	1	0	3	1	24	8	18	4	2	0	2	5	23	17	15	10	0	0	4	0	13	0	0
December	10.5	SE.	38	SE.	0	2	4	1	22	12	12	7	2	0	6	9	16	12	9	8	0	0	2	0	14	0	0
Year	8.1	SE.	....	.....	1	71	102	27	126	99	125	73	100	7	116	95	154	145	118	69	1	1	33	5	101	23	2

COLUMBIA, MO.

[H=763 feet; h_t=4 feet; h_v=2 feet; h_a=41 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Aurorae.
January	6.9	NW.	36	S.	0	2	2	4	6	1	4	5	7	0	9	10	12	12	8	6	0	0	0	0	27	0	0
February	9.3	NW.	44	S.	1	0	1	5	5	4	0	6	7	0	10	5	13	6	5	9	0	0	3	0	22	5	0
March	9.4	NW.	30	S.	0	2	7	4	2	4	2	2	8	0	3	5	23	14	12	9	0	2	3	0	17	2	0
April	8.3	E.	30	SW.	0	0	4	6	4	2	2	6	6	0	8	8	14	12	11	2	3	0	0	0	6	8	0
May	5.3	NE.	24	SE.	0	4	9	5	4	3	1	2	3	0	9	8	14	11	10	0	3	0	0	1	1	5	0
June	5.2	S.	40	W.	1	0	4	6	2	6	5	3	1	3	5	6	19	19	14	0	0	0	0	7	0	10	0
July	5.0	NW.	26	NW.	0	0	5	4	4	4	1	3	8	2	11	15	5	9	8	0	0	0	0	2	0	10	0
August	5.0	SE.	25	SW.	0	3	5	1	9	2	4	1	6	0	11	11	9	11	9	0	0	1	0	9	0	10	0
September	5.3	SW.	20	S.	0	3	1	3	3	8	8	1	3	0	19	7	4	3	3	0	0	0	0	11	0	2	0
October	6.8	NW.	24	SE.	0	1	1	1	5	8	1	5	9	0	25	2	4	6	5	0	0	0	0	2	8	0	0
November	8.5	NW.	30	SW.	0	3	2	2	6	4	1	4	8	0	8	6	16	9	6	3	0	0	1	0	16	2	0
December	9.8	SE.	36	S.	0	0	4	2	11	1	4	4	5	0	13	5	13	6	4	0	0	0	0	0	16	0	0
Year	7.1	NW.	....	.....	2	18	45	43	61	47	33	42	71	5	131	88	146	118	95	29	6	3	7	32	113	54	0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

COLUMBUS, OHIO.

[Lat. 39° 58′ N.; long. 83° 0′ W.; gravity corr., —.01.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.17	29.72	28.38	30.4	34.7	37.8	28.1	33.0	57	17	26	28	84	78	.137	.150	2.84	.82	8.0	8.1	8.1
February	29.15	.62	.55	34.7	38.0	43.8	29.8	36.8	68	5	28	28	78	68	.150	.150	5.42	2.54	7.0	5.3	6.0
March	29.14	.64	.62	30.7	37.8	41.4	28.3	34.8	63	6	24	29	77	73	.125	.157	4.64	.88	7.4	5.5	7.0
April	29.13	.38	.74	48.2	55.8	62.2	43.6	52.9	83	28	40	42	74	62	.246	.266	2.26	.66	5.6	5.2	5.5
May	29.20	.42	.93	53.9	61.0	68.1	47.2	57.6	84	34	43	44	69	57	.277	.287	2.73	1.07	5.6	4.7	4.9
June	29.08	.28	.70	68.4	73.6	82.3	62.6	72.4	91	52	61	62	76	68	.536	.555	4.98	1.22	5.6	6.1	5.4
July	29.16	.40	.92	67.1	72.6	80.3	59.8	70.0	89	52	57	56	70	58	.465	.448	4.69	1.43	3.0	4.0	3.6
August	29.12	.32	.88	67.0	73.5	80.5	61.6	71.0	94	48	59	59	77	63	.499	.499	2.64	.85	5.2	3.6	4.6
September	29.27	.50	29.10	63.8	72.0	80.8	57.9	69.4	92	45	56	55	75	57	.448	.432	1.05	.47	2.9	2.0	2.7
October	29.24	.58	28.88	45.9	54.4	63.1	42.4	52.8	86	27	39	40	77	59	.237	246	2.94	1.60	4.5	3.3	5.4
November	29.22	.75	.35	36.9	41.8	47.7	32.9	40.3	70	13	30	31	78	66	.164	.172	5.44	1.79	7.2	5.5	7.4
December	29.25	.70	.74	35.4	41.6	47.9	32.0	40.0	60	20	28	29	76	63	.150	.157	2.42	.54	5.4	3.8	5.9
Year	29.18	.75	.35	48.5	54.7	61.3	43.8	52.6	94	5	41	42	76	64	.286	.293	42.05	.....	5.6	4.8	5.5

CONCORDIA, KANS.

[Lat. 39° 35′ N.; long. 97° 41′ W.; gravity corr., —.01.]

January	28.61	28.93	28.17	25.0	30.6	40.9	22.3	31.6	57	6	22	22	87	71	.113	.113	2.15	1.06	3.7	3.1	4.8
February	28.52	.98	27.88	26.8	27.8	39.0	16.2	27.6	65	— 3	16	19	85	72	.085	.098	.59	.32	3.4	2.7	3.7
March	28.53	.93	28.11	25.7	34.6	42.2	24.0	33.1	70	— 2	22	28	88	76	.113	.150	3.72	1.50	4.7	4.8	5.1
April	28.50	.96	.15	46.9	60.5	69.8	43.9	56.8	96	21	39	41	76	54	.237	.256	3.02	.70	3.5	3.0	4.1
May	28.58	.94	.15	53.8	65.9	71.5	50.2	60.8	89	34	46	48	77	56	.310	.334	4.12	2.18	4.3	3.2	4.6
June	28.42	.68	.16	64.2	73.7	79.3	60.8	70.0	92	51	59	60	86	66	.499	.517	6.94	1.80	4.8	4.4	5.5
July	28.55	.85	.28	65.9	77.3	83.8	61.9	72.8	94	49	61	61	84	60	.536	.536	3.46	.88	3.2	3.8	4.8
August	28.54	.87	.25	65.5	79.6	86.8	62.0	74.4	100	41	59	61	82	54	.499	.536	.69	.26	3.3	.8	2.7
September	28.60	.80	.34	61.7	72.7	81.8	59.3	70.6	94	38	55	57	80	60	.432	.465	3.14	1.56	2.7	3.0	2.9
October	28.65	29.06	.30	43.7	55.7	67.7	41.6	54.6	86	29	38	42	82	63	.228	.266	5.24	2.90	1.4	1.7	2.3
November	28.59	.18	.07	30.2	40.7	50.4	27.9	39.2	82	6	26	30	85	67	.137	.164	.20	.10	3.1	4.2	5.1
December	28.49	.13	27.86	30.6	37.8	47.9	27.5	37.7	68	3	27	26	88	64	.143	.137	1.20	.91	4.1	1.9	3.8
Year	28.55	.18	.86	44.5	54.7	63.4	41.5	52.4	100	— 3	39	41	83	64	.278	.298	34.47	.....	3.5	3.0	4.1

CORPUS CHRISTI, TEX.

[Lat. 27° 49′ N.; long. 97° 25′ W.; gravity corr., —.04.]

January	30.11	30.55	29.76	53.0	58.4	61.9	49.2	55.6	75	33	48	51	85	78	.334	.373	2.85	1.24	5.0	3.7	6.2
February	30.00	.41	.68	57.6	63.1	68.0	53.9	61.0	80	34	53	54	84	76	.402	.417	.31	.16	6.0	4.8	6.9
March	29.97	.38	.56	57.5	62.0	66.2	53.7	60.0	80	37	52	54	83	76	.387	.417	2.18	1.04	7.7	6.8	7.9
April	30.01	.46	.72	66.6	70.8	73.8	62.6	68.2	86	46	61	63	83	77	.536	.575	2.14	.96	5.8	4.9	6.8
May	30.01	.24	.82	73.7	76.5	78.5	69.9	74.2	84	64	67	68	80	74	.660	.684	.38	.32	4.6	4.9	6.2
June	29.86	.06	.62	80.4	82.6	84.8	75.7	80.2	90	64	75	76	84	80	.866	.896	1.68	1.10	3.1	3.6	6.2
July	29.96	.14	.77	80.0	84.1	87.8	76.7	82.2	95	70	75	76	83	76	.866	.896	1.57	1.42	2.5	2.6	6.2
August	30.00	.12	.82	78.5	83.0	85.9	75.1	80.5	93	65	74	73	86	72	.838	.810	6.31	4.80	2.4	1.9	4.7
September	30.00	.16	.81	76.1	81.3	83.8	73.5	78.6	90	66	71	72	85	74	.757	.783	4.65	2.04	3.3	4.1	6.1
October	30.13	.38	.86	67.0	74.1	77.5	64.3	70.9	84	51	61	64	81	72	.536	.595	.12	.12	2.9	1.0	4.3
November	30.09	.65	.62	59.9	67.3	71.4	57.1	64.2	86	34	53	56	78	70	.402	.448	2.53	1.60	4.5	3.5	4.4
December	30.12	.59	.69	55.1	61.2	65.2	52.3	58.8	76	36	50	52	83	74	.360	.387	.91	.42	6.4	4.4	6.4
Year	30.02	.65	.56	67.2	72.0	75.4	63.7	69.5	95	33	62	63	83	75	.579	.607	25.63	.....	4.5	3.8	6.0

FORT CUSTER, MONT.

[Lat. 45° 42′ N.; long. 107° 34′ W.; gravity corr., 0.]

January	26.87	27.20	26.47	23.4	31.0	37.8	19.3	28.6	55	— 1	19	23	85	75	.098	.119	.20	.10	4.5	4.9	5.2
February	26.70	.24	.33	—.3	9.1	17.3	—3.9	6.7	40	—36	—1	8	97	95	.036	.057	.35	.16	3.2	5.9	5.2
March	26.77	.15	.34	17.7	30.1	35.4	14.7	25.0	61	—30	15	22	90	77	.081	.113	.60	.30	5.8	6.1	6.1
April	26.78	.17	.23	37.9	57.8	61.3	35.8	48.6	86	17	30	32	76	43	.164	.180	.68	.18	5.3	5.4	5.4
May	26.81	.10	.51	46.6	64.7	69.1	43.7	56.4	94	27	38	36	73	41	.228	.211	1.39	.38	5.5	5.8	5.8
June	26.72	.18	.41	53.7	67.6	71.1	50.5	60.8	85	38	48	45	82	48	.334	.298	5.06	1.30	5.3	6.4	6.4
July *a*	26.82	.07	.60	57.8	74.8	78.2	54.6	66.4	90	48	52	48	80	42	*a*.387	*a*.394	.60	.24	*a*4.6	*a*5.3	5.3
August *b*	27.12	27.44	26.80	57.2	81.1	84.9	54.1	69.5	97	42	48	43	41	28	.334	.277	.98	.44	3.0	4.3	3.7
September	27.10	.50	.77	48.3	69.6	76.5	46.0	61.2	90	34	41	42	43	39	.256	.266	1.02	.44	4.3	5.4	5.1
October	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

a For sixteen days. *b* August and September records made at Custer Station, Mont., about 20 miles due north.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

COLUMBUS, OHIO.

[H=837 feet; h_t=94 feet; h_r=76 feet; h_a=100 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Aurorus.
	Miles.		*Mi.*																								
January	6.9	S.	34	SW.	0	6	7	4	4	14	13	6	5	3	3	7	21	12	11	12	0	0	8	0	21	0	0
February	9.5	S.	28	NW.	0	5	0	4	4	17	6	11	9	0	7	8	13	16	13	7	0	0	4	0	17	2	0
March	9.7	E.	34	W.	0	9	8	13	8	7	4	8	3	2	7	6	18	17	14	5	0	1	7	0	14	0	0
April	7.4	S.	33	SW.	0	11	2	4	4	12	5	11	9	2	12	5	13	12	10	4	0	0	0	0	5	5	0
May	6.5	N.	24	NE.	0	21	8	2	3	9	8	7	3	1	10	13	8	12	10	0	0	0	0	0	0	3	0
June	5.8	S.	28	W.	0	5	10	7	5	15	9	6	1	2	9	12	9	17	13	0	0	0	0	3	0	9	0
July	6.2	S.	28	W.	0	9	4	3	9	17	3	9	7	1	15	13	3	12	9	0	0	0	0	0	0	4	0
August	5.5	S.	26	W.	0	7	11	3	10	13	5	6	4	3	12	12	7	16	9	0	0	2	0	3	0	3	0
September	5.1	S.	26	S.	0	7	5	5	6	21	2	4	4	6	21	5	4	6	5	0	0	1	0	4	0	1	0
October	6.9	S.	28	SW.	0	11	2	5	8	17	4	8	7	0	7	16	8	9	7	0	0	0	0	0	2	0	0
November	9.1	SE.	42	SW.	1	10	2	2	12	11	11	9	3	0	2	8	20	15	10	4	0	3	4	0	15	1	0
December	9.0	S.	39	W.	0	3	1	3	9	26	8	8	3	1	8	11	12	11	8	3	0	2	2	0	15	0	0
Year	7.3	S.	....	.....	1	104	60	55	82	179	78	93	58	21	113	116	136	155	119	35	....	9	25	10	89	28	0

CONCORDIA, KANS.

[H=1,410 feet; h_t=42 feet; h_r=34 feet; h_a=47 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Aurorus.
January	7.8	N.	38	NW.	0	11	4	5	2	6	10	10	10	4	14	8	9	11	4	4	0	2	3	0	28	0	0
February	9.1	N.	34	S.	0	12	3	4	7	10	3	5	8	4	17	4	7	5	2	10	0	1	9	0	26	0	0
March	9.7	N.	30	W.	0	16	9	7	8	4	2	5	9	2	11	12	8	12	11	8	0	0	4	0	23	1	0
April	9.6	NW.	40	S.	1	4	4	4	9	13	5	2	16	3	15	11	4	12	9	1	0	0	0	1	3	6	0
May	9.2	S.	36	S.	0	6	15	8	7	24	1	0	1	0	11	14	6	12	11	0	1	1	0	0	0	6	0
June	7.1	S.	28	S.	0	11	4	4	10	17	2	0	8	4	8	13	9	14	9	0	1	0	0	4	0	8	0
July	5.7	S.	32	S.	0	7	8	8	13	13	4	2	5	2	8	19	4	11	9	0	1	1	0	3	0	10	0
August	6.3	S.	28	S.	0	10	7	5	7	18	4	1	6	4	21	8	2	5	4	0	0	0	0	12	0	5	0
September	8.7	S.	36	S.	0	6	2	5	5	34	1	2	4	1	18	11	1	5	5	0	0	0	0	3	0	2	0
October	6.8	S.	30	S.	0	17	2	3	3	17	3	8	4	5	24	4	3	7	6	0	0	0	0	0	5	0	0
November	7.6	N.	34	S.	0	16	1	5	9	9	6	8	5	1	8	14	8	6	4	3	0	5	3	0	20	0	0
December	9.0	S.	36	S.	0	7	3	2	9	17	7	8	7	2	13	15	3	7	5	4	0	1	2	0	22	0	0
Year	8.0	S.	....	.....	1	123	62	60	89	182	48	51	83	32	168	133	64	107	79	30	3	11	21	23	127	38	0

CORPUS CHRISTI, TEX.

[H=20 feet; h_t=42 feet; h_r=34 feet; h_a=50 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Aurorus.
January	11.3	N.	42	NE.	1	14	10	4	13	4	2	3	12	0	7	10	14	10	8	0	0	0	0	0	0	1	0
February	11.5	SE.	30	N.	0	13	6	4	16	9	0	0	7	1	5	10	13	4	2	0	0	0	0	0	0	0	0
March	12.2	SE.	47	NE.	2	19	3	9	19	4	1	1	4	2	1	7	23	8	3	0	0	0	0	0	0	1	0
April	12.7	SE.	63	NW.	2	6	3	7	32	4	3	1	4	0	7	5	18	8	6	0	0	0	0	0	0	2	0
May	13.7	SE.	36	SE.	0	8	2	7	45	0	0	0	0	0	5	15	11	2	2	0	0	0	0	0	0	0	0
June	14.6	SE.	36	NW.	0	1	1	4	52	2	0	0	0	0	2	22	6	3	3	0	0	0	0	0	0	1	0
July	12.7	SE.	34	E.	0	2	2	4	38	8	5	2	1	0	0	27	4	3	3	0	0	0	0	7	0	0	0
August	11.2	SE.	32	S.	0	9	0	9	32	6	1	2	2	1	7	19	5	6	5	0	0	0	0	3	0	2	0
September	11.9	SE.	42	E.	1	7	7	16	22	1	5	2	0	0	6	8	16	14	12	0	0	0	0	0	0	0	0
October	10.1	SE.	39	N.	0	17	1	11	22	3	2	2	3	1	11	19	1	2	1	0	0	0	0	0	0	0	0
November	11.6	SE.	48	NW.	2	14	4	4	21	7	4	4	2	0	13	9	8	7	4	0	0	0	0	0	0	0	0
December	11.7	SE.	38	SE.	0	16	5	3	24	2	1	2	8	1	6	13	12	6	4	0	0	0	0	0	0	0	0
Year	12.1	SE.	....	.....	8	126	44	82	336	50	24	19	43	6	70	164	131	73	53	0	0	0	0	10	0	7	0

FORT CUSTER, MONT.

[H=3,040.8 feet; h_t=18 feet; h_r=26 feet; h_a=31 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Aurorus.
January	6.5	SW.	34	SW.	0	5	5	0	19	3	20	4	6	0	9	14	8	3	2	5	0	1	7	0	27	0	0
February	6.6	SE.	27	NW.	0	12	16	0	17	6	3	0	2	0	9	8	11	7	5	10	0	0	23	0	28	0	0
March	7.3	SE.	36	N.	0	2	8	1	24	3	9	6	7	2	6	12	13	6	5	9	0	0	12	0	28	0	0
April	8.1	SE.	54	N.	2	7	8	1	26	2	7	2	6	1	8	12	10	8	4	1	2	1	0	0	7	1	0
May	8.5	SE.	40	NE.	1	2	13	5	26	1	11	0	4	0	8	11	12	8	7	0	1	0	0	1	2	0	2
June	8.2	SE.	49	N.	3	5	12	2	19	1	10	2	9	0	4	12	14	14	12	0	0	0	0	0	0	1	0
July	7.1	SW	38	NW.	0	3	6	1	7	0	9	0	5	1	5	7	4	6	4	0	0	0	0	1	0	0	0
August	7.5	NE.	48	SE.	1	4	20	3	7	3	4	9	7	5	15	13	3	8	7	0	1	0	0	11	0	0	2
September	6.8	E.	60	NE.	2	5	11	11	5	4	5	11	6	2	7	16	7	7	6	0	0	1	0	0	0	0	2
October	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

a By eye observations at 8 a. m., and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

DAVENPORT, IOWA.

[Lat. 41° 30′ N.; long. 90° 38′ W.; gravity corr., −.01.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.42	29.93	28.59	25.0	30.0	33.8	21.9	27.8	44	3	21	24	85	80	.108	.125	2.38	1.42	4.3	6.1	5.9
February	29.37	.85	.71	21.4	28.3	34.5	18.2	26.4	66	−8	16	20	81	71	.085	.103	.89	.38	3.9	4.2	5.0
March	29.39	.87	.88	26.1	31.3	35.0	22.6	28.8	58	1	21	24	83	75	.108	.125	1.68	.30	7.4	6.9	7.3
April	29.36	.68	29.07	46.4	55.0	60.5	43.2	51.8	77	21	40	45	79	71	.246	.298	3.30	1.14	4.8	5.1	4.9
May	29.46	.84	.14	53.3	64.0	68.7	47.9	58.3	80	35	44	48	70	58	.287	.334	2.74	.81	3.1	4.0	3.6
June	29.28	.59	28.92	66.1	73.7	79.1	62.1	70.6	92	49	60	62	82	69	.517	.555	3.56	.78	5.6	5.0	5.4
July	29.39	.66	29.13	64.7	74.4	79.0	59.5	69.2	87	49	56	56	74	55	.448	.448	3.29	2.18	3.2	2.8	3.7
August	29.37	.59	.08	64.4	72.8	79.1	61.0	70.0	94	46	58	60	81	66	.481	.517	5.54	1.04	4.2	4.3	4.8
September	29.48	.74	.25	62.0	72.4	80.4	59.0	69.7	91	44	55	56	78	56	.432	.448	1.50	.87	2.1	2.0	2.1
October	29.48	.91	.23	45.8	54.9	62.7	43.5	53.1	87	31	38	40	77	59	.228	.246	1.37	.69	3.7	2.6	3.6
November	29.44	30.02	28.94	28.5	33.9	39.1	25.8	32.4	58	−10	24	26	83	73	.125	.137	3.56	1.27	5.7	4.5	5.9
December	29.37	.00	.59	30.7	36.7	41.5	28.0	34.8	57	5	24	28	79	74	.125	.150	1.64	.52	4.9	3.5	4.7
Year	29.40	.02	.59	44.5	52.3	57.8	41.1	49.4	94	−10	38	41	79	67	.266	.290	31.45	.....	4.4	4.2	4.7

DENVER, COLO.

[Lat. 39° 45′ N.; long. 105° 00′ W.; gravity corr., −.01.]

January	24.76	25.02	24.40	18.8	29.5	37.3	13.4	25.4	49	−7	5	13	56	56	.049	.074	1.60	.86	4.0	5.1	4.9
February	24.55	24.86	.14	20.1	31.1	39.8	13.8	26.8	61	−6	5	12	55	48	.049	.070	.27	.19	3.6	4.5	4.8
March	24.62	.90	.30	25.5	35.5	43.2	21.3	32.2	68	4	12	16	61	54	.070	.085	3.10	1.28	4.6	6.6	5.7
April	24.72	25.14	.29	37.2	55.0	61.3	34.7	48.0	82	6	21	20	56	30	.108	.103	2.49	.88	4.2	5.4	5.0
May	24.77	.00	.41	47.5	61.2	67.7	44.6	56.2	83	32	37	35	68	46	.219	.203	4.15	2.02	4.3	7.0	5.9
June	24.69	.03	.34	54.7	70.2	75.7	51.1	63.4	91	43	43	42	67	41	.277	.266	2.93	1.32	4.1	5.9	4.9
July	24.85	.09	.52	59.7	75.1	81.3	56.5	68.9	93	51	48	45	67	38	.334	.298	.59	.22	3.5	6.1	4.5
August	24.86	.08	.68	58.0	74.8	83.0	55.5	69.2	94	46	46	43	67	36	.310	.277	2.84	1.05	2.7	6.4	4.7
September	24.82	.07	.30	52.8	71.0	77.6	50.8	64.2	91	37	38	37	61	33	.228	.219	.73	.24	4.5	5.1	4.6
October	24.88	.17	.41	39.6	59.2	66.9	37.6	52.2	78	26	21	18	52	25	.108	.093	.48	.31	1.9	2.8	2.7
November	24.74	.01	.48	31.3	41.4	50.0	25.6	37.8	75	2	14	18	52	43	.077	.093	.69	.28	4.9	2.6	4.4
December	24.64	.17	.25	26.6	33.5	41.5	21.1	31.3	65	−4	10	17	54	52	.063	.089	1.56	.62	4.2	2.8	3.9
Year	24.74	.17	.14	39.3	53.1	60.4	35.5	48.0	94	−7	25	26	60	42	.158	.156	21.43	.....	3.9	5.0	4.7

DES MOINES, IOWA.

[Lat. 41° 35′ N.; long. 93° 37′ W.; gravity corr., −.01.]

January	29.14	29.59	28.37	23.8	29.3	36.6	20.0	28.3	47	6	19	24	84	80	.093	.125	1.82	.92	3.6	3.6	4.2
February	29.08	.55	.24	17.7	24.6	32.7	13.7	23.2	55	−10	13	18	82	75	.074	.093	1.13	.52	4.4	3.8	4.2
March	29.09	.50	.55	24.6	31.3	36.6	21.1	28.8	60	−5	20	25	83	80	.103	.130	2.25	.46	8.4	6.2	6.6
April	29.06	.47	.72	45.7	56.7	61.1	43.0	52.0	81	20	39	42	78	62	.237	.266	2.12	.67	4.7	4.5	4.4
May	29.16	.56	.76	52.4	64.0	68.7	46.9	57.8	83	34	44	45	73	53	.287	.298	3.29	2.02	4.6	5.6	5.3
June	28.99	.30	.69	64.7	72.2	77.1	61.2	69.2	90	49	60	63	87	75	.517	.575	5.60	2.43	6.8	5.8	6.8
July	29.11	.41	.86	63.3	74.0	78.6	58.7	68.6	88	49	58	61	84	65	.481	.536	2.78	2.12	6.0	4.9	5.4
August	29.09	.38	.79	63.7	73.5	79.6	60.1	69.8	93	40	58	60	84	64	.481	.517	4.22	2.10	5.9	4.8	5.4
September	29.17	.42	.93	59.7	72.3	79.6	56.9	68.2	90	39	53	56	80	57	.402	.448	1.64	.88	2.2	2.6	3.0
October	29.19	.64	.92	43.7	54.9	62.9	41.5	52.2	81	28	37	39	79	57	.219	.237	2.41	.98	3.1	3.0	3.5
November	29.14	.71	.63	26.9	34.5	40.1	23.8	32.0	66	−10	21	25	80	70	.108	.130	1.34	.46	5.7	4.7	5.7
December	29.04	.73	.38	30.7	35.3	43.1	26.2	34.6	61	0	25	26	80	72	.130	.137	1.54	.50	4.1	2.7	4.1
Year	29.10	.73	.24	43.1	51.9	58.1	39.4	48.7	93	−10	37	40	81	68	.261	.291	30.14	.....	5.0	4.4	4.9

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

DAVENPORT, IOWA.

[H=613 feet; h_t=100 feet; h_r=93 feet; h_a=85 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	7.7	SW.	30	NW.	0	4	11	8	2	4	12	9	7	5	12	3	16	11	7	11	0	8	14	0	27	0	0
February	11.2	NW.	42	NW.	1	2	3	5	6	4	5	9	16	6	11	7	10	12	10	6	0	3	12	0	25	0	0
March	12.1	NE.	38	SE.	0	1	14	14	3	1	7	10	9	3	4	7	20	17	9	10	0	0	12	0	24	0	0
April	10.6	NW.	36	SE.	0	3	3	12	7	3	7	11	13	1	10	12	8	16	11	2	0	0	0	0	5	4	0
May	8.3	NE.	36	S.	0	2	14	10	5	6	13	4	7	1	17	7	7	12	8	0	0	1	0	0	0	2	0
June	9.0	E.	36	SW.	0	2	3	16	8	6	13	2	10	0	10	10	10	17	11	0	1	2	0	3	0	10	0
July	7.7	Calm. NW.	42	SW.	1	3	7	10	6	3	12	11	9	1	14	15	2	7	4	0	0	1	0	0	0	4	0
August	6.6	Calm. SW.	42	SW.	1	5	1	6	2	6	12	8	19	3	10	15	6	15	12	0	0	2	0	3	0	5	0
September	6.8	Calm. SW.	34	NW.	0	1	3	5	1	8	24	2	11	5	22	7	1	4	3	0	0	1	0	3	0	3	0
October	9.0	SW.	34	NW.	0	5	1	4	5	2	13	15	11	6	17	6	8	7	5	0	0	3	0	0	2	1	0
November	10.7	W.	36	NW.	0	6	3	6	3	6	9	17	9	1	9	6	15	14	9	5	0	0	8	0	19	2	0
December	10.4	SW.	42	SW.	1	0	4	3	8	8	19	10	5	5	14	9	8	10	7	2	0	3	4	0	20	0	0
Year	9.2	SW.	....	.....	4	34	67	99	56	57	146	108	126	37	150	104	111	142	96	36	1	24	50	9	122	31	0

DENVER, COLO.

[H=5,287 feet; h_t=108 feet; h_r=107 feet; h_a=103 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	5.9	SW.	26	N.	0	1	12	2	1	10	29	1	4	2	11	13	7	6	4	6	0	0	10	0	31	0	0
February	6.9	SW.	36	NE.	0	5	6	1	1	5	27	7	4	0	12	9	7	5	2	7	0	0	7	0	26	0	0
March	7.6	NE.	36	NE.	0	3	20	5	6	3	18	2	5	0	10	11	10	14	11	14	1	1	8	0	26	1	0
April	7.8	SW.	38	SW.	0	4	8	4	4	5	24	4	7	0	9	16	5	6	6	2	0	0	0	0	8	0	0
May	7.3	SW.	28	NW.	0	5	4	1	5	6	23	7	11	0	5	18	8	12	10	1	2	2	0	0	0	8	0
June	7.4	NE.	30	NW.	0	3	13	1	4	8	17	5	8	1	16	12	8	11	8	0	1	0	0	1	0	13	0
July	6.5	SW.	44	NE.	1	3	7	2	3	18	14	6	9	0	11	14	6	6	3	0	0	1	0	3	0	8	0
August	6.2	SW.	30	N.	0	8	6	2	4	17	18	2	5	0	9	18	4	11	10	0	3	1	0	4	0	13	0
September	6.6	SW.	30	N.	0	2	7	5	3	14	17	6	6	0	11	15	4	12	7	0	0	1	0	1	0	4	0
October	6.7	S.	30	NW.	0	4	9	4	7	21	7	3	7	0	22	8	1	6	4	4	0	0	0	0	6	0	0
November	7.7	NW.	50	NW.	1	5	3	4	1	11	13	8	15	0	11	15	4	7	5	9	0	0	3	0	20	0	0
December	8.0	S.	36	NW.	0	5	8	2	3	13	17	8	6	0	17	9	5	8	5	7	0	0	6	0	28	0	0
Year	7.0	SW.	....	.....	2	48	103	33	42	131	224	59	87	3	138	158	69	104	73	50	7	6	34	9	145	47	0

DES MOINES, IOWA.

[H=869 feet; h_t=84 feet; h_r=75 feet; h_a=88 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	8.4	NW.	29	NW.	0	8	7	6	5	5	11	6	13	1	17	5	9	5	4	3	0	0	8	0	31	0	0
February	10.0	W.	36	W.	0	4	0	9	4	7	6	19	6	1	14	6	8	10	5	10	0	0	13	0	27	0	0
March	11.0	NE.	30	SE.	0	11	12	10	2	5	4	11	7	0	7	10	14	13	10	12	0	0	11	0	24	1	0
April	9.6	S.	37	E.	0	6	2	12	5	12	3	8	11	1	14	7	9	11	10	2	0	0	1	0	5	7	0
May	7.6	NE.	25	N.	0	7	12	6	8	11	9	3	2	4	12	7	12	8	8	0	0	0	0	0	0	1	0
June	7.9	S.	38	NW.	0	11	6	7	10	11	4	4	6	1	3	12	15	14	12	0	1	0	0	0	0	8	0
July	6.7	Calm NW.	40	E.	1	9	6	8	8	5	7	9	6	4	5	18	8	10	6	0	0	0	0	0	0	9	0
August	6.4	Calm SW.	30	E.	0	14	8	4	5	12	9	0	4	6	7	15	9	7	7	0	0	0	0	4	0	9	0
September	8.0	Calm S.	34	W.	0	6	3	6	4	16	7	10	8	0	19	7	4	5	3	0	0	0	0	1	0	2	0
October	7.9	NW.	32	SW.	0	15	1	1	6	6	10	6	13	4	20	5	6	8	7	0	0	0	0	0	3	2	0
November	8.1	NW.	36	SW.	0	9	7	8	3	6	8	6	11	2	11	8	11	9	8	9	0	0	8	0	22	2	0
December	8.6	Calm SW.	32	S.	0	4	3	1	12	7	13	12	6	4	14	12	5	9	7	3	0	0	4	0	20	1	0
Year	8.4	N.	....	.....	1	104	67	78	72	103	91	94	93	28	143	112	110	109	87	39	1	0	45	5	132	42	0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

DETROIT MICH.

[Lat. 42° 20′ N.; long 83° 3′ W.; gravity corr.,—.01.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8. a. m.	8. p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.25	29.86	28.38	26.6	29.8	33.4	24.2	28.8	50	14	23	25	86	82	.119	.130	.92	.58	7.8	7.1	8.3
February	29.21	.76	.53	27.5	31.1	36.9	24.3	30.6	53	2	22	24	81	75	.113	.125	3.07	1.32	7.4	6.1	6.7
March	29.28	.77	.76	27.3	31.6	36.9	24.6	30.8	52	6	22	24	82	75	.113	.125	2.23	1.00	7.5	7.0	7.0
April	29.23	.59	.88	43.4	48.9	57.2	39.3	48.2	79	21	36	38	75	67	.211	.228	2.72	1.10	5.6	5.2	5.6
May	29.32	.52	29.08	50.7	57.2	66.0	45.4	55.7	81	29	39	40	66	56	.237	.246	1.68	.52	4.1	3.7	4.3
June	29.21	.50	28.88	65.1	69.7	77.3	59.3	68.3	88	42	56	56	74	64	.448	.448	2.28	.82	4.9	4.7	4.9
July	29.25	.55	29.01	63.6	69.5	76.4	57.9	67.2	89	49	54	54	71	58	.417	.417	2.90	1.04	3.7	4.5	5.2
August	29.23	.42	28.87	65.9	70.2	78.2	60.9	69.6	96	48	57	56	73	64	.465	.448	2.86	.83	5.2	5.4	5.4
September	29.37	.64	29.11	61.9	68.1	77.1	58.5	67.8	93	47	55	55	80	65	.432	.432	1.33	.97	2.6	2.8	3.4
October	29.32	.74	28.99	46.8	51.3	58.5	43.0	50.8	85	28	40	40	79	68	.246	.246	1.93	1.19	5.7	4.4	4.9
November	29.27	.77	.43	34.8	37.2	41.9	31.1	36.5	64	10	29	31	81	79	.157	.172	5.30	1.43	7.9	6.3	7.7
December	29.29	.82	.66	32.6	35.9	41.7	29.6	35.6	58	17	27	28	81	74	.143	.150	1.61	.54	6.1	2.9	5.6
Year	29.27	.86	.38	45.5	50.0	56.8	41.5	49.2	96	2	38	39	77	69	.258	.264	28.83	.....	5.7	5.0	5.8

DODGE CITY, KANS.

[Lat. 37° 45′ N.; long. 100° 0′ W.; gravity corr.,—.02.]

January	27.44	27.70	27.07	21.4	30.6	38.2	19.5	28.8	55	0	18	24	86	78	.093	.125	.98	.66	3.4	4.5	5.1
February	27.31	.70	26.78	23.9	33.2	44.5	19.6	32.0	76	2	18	20	81	61	.093	.103	.27	.08	4.0	3.3	4.1
March	27.32	.65	.98	25.7	37.7	44.2	23.5	33.8	68	4	22	27	86	69	.113	.143	3.32	1.33	4.8	4.7	5.1
April	27.36	.83	.98	46.4	61.3	69.1	41.6	55.4	90	18	38	37	74	44	.278	.217	2.76	1.42	2.6	3.7	3.7
May	27.42	.73	27.01	55.1	66.5	73.4	49.9	61.6	89	32	50	51	83	59	.360	.373	3.36	1.30	4.9	4.8	4.8
June	27.29	.55	26.99	64.4	73.7	79.7	59.5	69.6	95	50	59	60	84	65	.499	517	6.27	2.34	5.9	5.0	4.9
July	27.42	.69	27.12	67.6	78.3	84.5	63.1	73.8	99	52	62	65	82	64	.555	.616	5.16	1.34	5.6	5.1	5.2
August	27.42	.74	.16	65.2	79.0	86.7	61.3	74.0	96	46	58	60	78	52	.481	.517	1.36	1.17	3.2	2.1	3.2
September	27.46	.69	.18	59.8	70.7	80.2	56.7	68.4	93	39	54	54	82	58	.417	.417	4.56	2.35	4.2	3.8	4.0
October	27.50	.87	.15	43.1	57.2	69.0	41.4	55.2	85	32	36	38	77	53	.211	.228	3.33	2.16	2.3	1.8	2.4
November	27.42	.94	.06	31.8	42.0	53.4	28.4	40.9	81	4	25	25	78	54	.130	.130	.12	.08	4.3	3.9	4.5
December	27.33	.92	26.79	28.7	37.1	48.6	26.1	37.4	69	3	20	23	72	60	.103	.119	.85	.72	3.7	3.6	4.0
Year	27.39	.94	.78	44.4	55.6	64.3	40.9	52.6	99	0	38	40	80	60	.274	.292	32.34	.....	4.1	3.9	4.2

DUBUQUE, IOWA.

[Lat. 42° 30′ N.; long. 90° 44′ W.; gravity corr., —.01.]

January	29.36	29.91	28.64	22.4	28.9	33.7	19.8	26.8	46	4	18	23	84	81	.093	.119	1.27	.99	5.2	5.4	5.6
February	29.30	.78	.62	18.5	24.8	31.8	14.4	23.1	61	—13	13	18	79	77	.074	.093	.98	.36	4.2	4.0	4.9
March	29.32	.80	.77	24.0	29.7	34.4	21.0	27.7	54	— 1	19	24	81	79	.098	.125	2.69	.82	7.4	6.6	7.0
April	29.29	.62	.99	45.9	54.1	59.4	42.1	50.8	78	20	39	45	78	72	.237	.298	1.63	.44	4.9	5.0	5.5
May	29.40	.80	29.07	52.7	64.4	69.4	47.1	58.2	82	36	45	52	76	66	.298	.387	2.54	1.57	3.0	4.5	3.7
June	29.23	.56	28.91	65.3	72.3	78.0	61.5	69.8	92	47	59	63	82	74	.499	.575	2.34	.79	5.7	6.3	6.9
July	29.33	.60	29.04	63.8	74.1	78.9	58.7	68.8	89	49	55	63	75	70	.432	.575	4.59	2.06	3.7	3.1	5.3
August	29.31	.53	.02	64.3	73.3	79.8	60.5	70.2	96	45	57	62	77	68	.465	.555	3.31	.86	4.4	4.3	5.4
September	29.41	.67	.17	61.6	71.7	80.8	57.8	69.3	94	40	54	58	78	64	.417	.481	.68	.55	2.5	2.1	3.6
October	29.41	.86	.17	44.8	52.7	60.1	41.8	51.0	87	29	38	43	79	72	.228	.277	2.20	1.04	4.4	3.8	5.0
November	29.36	.92	28.88	27.7	32.8	37.3	24.7	31.0	57	—7	22	26	79	78	.113	.137	3.24	1.70	5.8	5.6	6.4
December	29.28	.93	.45	29.5	34.8	39.7	26.2	33.0	54	—1	23	28	78	75	.119	.150	2.08	1.09	5.7	3.8	6.1
Year	29.33	.93	.45	43.4	51.1	56.9	39.6	48.3	96	—13	37	42	79	73	.256	.314	27.55	.....	4.7	4.5	5.4

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

DETROIT, MICH.

[H=724 feet; h_t=158 feet; h_r=144 feet; h_a=161 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	8.8	SW.	33	S.	0	5	9	2	0	9	20	6	11	0	0	8	23	8	6	15	0	2	11	0	27	0	1
February	13.7	SW.	45	SW.	2	2	5	3	7	1	20	5	13	0	3	11	14	11	9	12	0	2	9	0	22	1	0
March	12.4	NE.	42	SW.	1	0	17	11	12	1	8	3	10	0	5	9	17	13	10	13	1	1	10	0	24	0	0
April	10.0	NW.	42	NW.	2	5	8	6	9	1	16	3	12	0	8	12	10	11	9	2	0	0	0	0	7	3	0
May	8.8	NE.	37	NW.	0	1	17	9	6	1	12	7	8	1	15	10	6	7	6	0	0	0	0	0	1	1	0
June	7.6	SW.	28	W.	0	0	8	17	7	2	13	9	3	1	13	9	8	10	10	0	0	1	0	0	0	5	0
July	9.1	SW.	36	SW.	0	5	8	7	2	5	14	6	15	0	10	14	7	6	6	0	1	0	0	0	0	2	0
August	7.6	SW.	28	NW.	0	3	9	3	9	5	11	7	10	5	8	15	8	11	9	0	1	1	0	4	0	4	2
September	8.6	SW.	34	NW.	0	7	11	4	5	5	9	10	8	1	18	11	1	4	4	0	0	3	0	2	0	3	1
October	11.4	NW.	61	NW.	1	8	8	4	5	1	14	7	15	0	11	12	8	6	6	1	0	1	0	0	2	0	0
November	14.3	SW.	48	SW.	4	4	8	0	3	3	19	6	17	0	3	7	20	13	12	8	0	1	7	0	17	0	0
December	13.8	SW.	42	SW.	2	1	3	2	7	7	30	6	5	1	12	6	13	9	8	7	0	10	6	0	16	0	0
Year	10.5	SW.	....	.....	12	41	111	68	72	41	186	75	127	9	106	124	135	109	95	58	3	22	43	6	116	19	5

DODGE CITY, KANS.

[H=2,523 feet; h_t=44 feet; h_r=37 feet; h_a=55 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	10.3	NW.	48	N.	1	14	7	1	7	3	4	4	22	0	12	12	7	6	6	7	0	3	7	0	30	0	0
February	13.1	SE.	44	SE.	5	12	7	2	9	12	3	3	8	0	13	12	3	4	4	4	0	2	6	0	25	0	0
March	13.7	NW.	37	S.	0	12	7	2	6	9	4	2	19	1	9	15	7	9	7	7	1	1	7	0	24	0	0
April	13.3	S.	58	SW.	5	9	2	1	1	23	2	5	17	0	14	13	3	5	5	1	2	1	0	0	5	4	0
May	12.9	S.	48	S.	2	6	11	4	5	26	6	0	4	0	10	15	6	7	7	0	0	1	0	0	1	4	0
June	14.0	S.	48	S.	3	11	3	2	3	31	4	3	3	0	10	13	7	11	9	0	1	0	0	4	0	8	0
July	11.7	S.	47	SE.	3	2	8	4	8	28	4	2	6	0	5	22	4	13	13	0	2	1	0	4	0	9	0
August	11.1	S.	35	S.	0	6	7	4	4	32	1	1	6	1	19	10	2	3	2	0	1	0	0	12	0	4	0
September	14.5	S.	45	S.	1	7	3	5	3	35	0	1	6	0	14	11	5	9	7	0	0	0	0	6	0	1	0
October	11.0	S.	44	S.	2	10	11	1	2	17	4	5	12	0	23	4	4	6	6	0	0	0	0	0	1	1	0
November	10.8	NW.	50	SW.	2	13	6	0	3	13	2	8	13	2	10	16	4	2	2	2	0	3	2	0	20	0	0
December	12.2	NW.	42	SW.	2	7	3	2	1	19	2	6	19	3	16	12	3	5	3	6	0	1	2	0	22	0	0
Year	12.4	S.	....	.....	26	109	75	28	52	248	36	40	135	7	155	155	55	80	71	27	7	13	24	26	128	31	0

DUBUQUE, IOWA.

[H=651 feet; h_t = 60 feet; h_r = 50 feet; h_a = 60 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	4.4	NW.	26	NW.	0	6	1	6	6	7	1	12	14	9	11	8	12	6	2	6	0	3	12	0	28	0	0
February	6.2	NW.	25	NW.	0	1	2	4	11	4	4	10	15	5	11	8	9	12	8	9	0	0	16	0	27	0	0
March	6.8	NE.	25	E.	0	3	15	9	5	8	3	8	8	3	7	5	19	12	10	11	0	0	15	0	22	1	0
April	6.1	W.	30	W.	0	5	1	11	8	5	5	12	9	4	9	11	10	10	8	2	0	1	1	0	4	2	0
May	3.4	Calm. NE.	22	NE.	0	3	10	2	5	7	4	6	7	18	15	9	7	10	7	1	0	2	0	0	0	1	0
June	3.6	E.	22	E.	0	4	7	13	6	9	3	5	4	9	3	11	16	11	10	0	1	0	0	2	0	5	0
July	2.6	Calm. NW.	22	NE.	0	4	5	0	9	5	3	6	9	21	10	14	7	8	8	0	0	0	0	0	0	3	0
August	2.5	Calm. NW.	20	W.	0	9	1	0	3	8	4	6	11	20	8	14	9	9	8	0	0	0	0	4	0	3	0
September	4.1	S.	24	NW.	0	5	0	1	5	20	8	8	5	8	15	13	2	3	2	0	0	3	0	3	0	0	0
October	3.9	NW.	25	W.	0	4	1	3	8	9	5	7	14	11	12	11	8	6	6	0	0	2	0	0	3	0	0
November	6.2	NW.	25	W.	0	3	1	1	9	9	1	15	18	3	7	7	16	10	6	6	0	0	9	0	20	2	0
December	6.3	S.	28	NW.	0	2	1	1	11	21	5	13	6	2	7	12	12	9	7	2	0	0	4	0	21	0	0
Year	4.7	NW.	....	.....	0	49	45	51	86	112	46	108	120	113	115	123	127	106	82	37	1	11	57	9	125	17	0

a By eye observations at 8 a. m. and 8. p. m., when there is no self register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

DU CHESNE, FORT, UTAH.

[Lat. 40° 35′ N.; long. 109° 50′ W.; gravity corr., —.01.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a.m.	8 p.m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a.m.	8 p.m.	8 a.m.	8 p.m.	8 a.m.	8 p.m.	Total.	Maximum in 24 hours.	8 a.m.	8 p.m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	25.16	25.47	24.73	8.0	21.0	28.8	5.0	16.9	37	—11	3	16	80	82	.045	.085	.30	.20	4.5	4.7	4.5
February	24.94	.36	.42	10.9	25.7	32.6	8.1	20.4	48	—12	6	19	80	76	.052	.098	.58	.24	3.9	6.1	5.4
March	24.93	.19	.63	26.0	42.1	48.3	22.6	35.4	62	11	18	22	72	49	.093	.113	1.24	.55	5.5	5.7	5.5
April	25.01	.36	.65	34.8	55.3	61.4	30.9	46.2	79	19	21	21	58	31	.108	.108	.83	.46	4.2	5.9	5.1
May	24.99	.16	.71	47.5	67.2	73.0	41.5	57.2	85	34	24	20	41	20	.125	.103	1.09	.70	3.1	5.4	4.7
June	24.95	.24	.64	52.1	73.7	79.4	45.8	62.6	90	38	31	20	45	17	.172	.103	.34	.29	2.4	4.2	3.9
July	25.08	.30	.82	60.2	82.8	89.3	51.9	70.6	97	42	36	25	40	19	.211	.130	.24	.13	3.5	5.4	5.0
August	25.12	.32	.93	56.0	81.1	87.6	51.1	69.4	94	45	39	40	54	30	.237	.246	1.87	.56	2.5	5.2	4.4
September *a*	25.12	.29	.94	51.2	77.9	83.7	48.4	66.0	90	44	38	37	61	27	.228	.219	.62	.25	2.6	4.8	4.3
October	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

DULUTH, MINN.

[Lat. 46° 48′ N.; long. 92° 06′ W.; gravity corr., 0.]

January	29.31	29.88	28.67	17.3	23.5	27.6	13.4	20.5	46	— 9	12	14	82	68	.070	.077	.67	.22	6.3	5.6	6.3
February	29.23	.68	.46	7.1	16.0	20.1	4.2	12.2	43	—22	3	9	82	75	.045	.060	2.07	.84	5.9	5.8	6.5
March	29.33	.83	.73	15.1	23.5	26.5	12.5	19.5	38	—12	10	16	81	75	.063	.085	3.13	.83	5.1	5.2	5.6
April	29.27	.70	.67	35.1	41.6	46.9	31.7	39.3	81	11	29	32	79	72	.157	.180	1.71	.61	4.7	5.3	5.3
May	29.35	.87	.89	45.5	51.4	58.5	38.8	48.6	86	26	35	31	67	50	.203	.172	2.28	1.74	2.4	3.3	4.8
June	29.23	.69	.94	51.7	57.0	60.8	46.7	53.8	85	35	43	42	74	62	.277	.266	2.67	1.03	4.8	5.7	6.4
July	29.29	.57	29.08	58.2	63.7	69.7	52.9	61.3	84	47	50	51	76	67	.360	.373	3.82	1.50	4.3	4.0	5.0
August	29.26	.56	28.95	59.2	63.7	69.0	55.6	62.3	85	44	52	53	77	70	.387	.402	3.11	1.08	5.0	3.6	4.3
September	29.29	.60	.97	57.1	63.1	70.0	53.1	61.6	90	42	51	52	80	68	.373	.387	3.31	1.80	4.1	4.6	4.8
October	29.32	.82	.92	42.1	47.1	52.7	40.2	46.4	72	29	37	35	82	64	.219	.203	1.83	.83	6.4	4.0	5.6
November	29.29	.82	.81	22.1	26.8	31.0	19.4	25.2	48	— 8	18	20	83	77	.093	.103	1.11	.58	6.1	5.7	6.5
December	29.12	.75	.13	24.0	28.7	33.5	20.3	26.9	54	— 8	20	24	84	82	.103	.125	3.76	1.84	6.1	4.3	5.6
Year	29.27	.88	.13	36.2	42.2	47.2	32.4	39.8	90	—22	30	32	79	69	.196	.203	29.47	.....	5.1	4.8	5.6

EASTPORT, ME.

[Lat. 44° 54′ N.; long. 66° 59′ W.; gravity corr., 0.]

January	29.90	30.61	28.85	22.7	26.0	30.3	18.2	24.2	49	—1	16	18	74	74	.085	.096	5.50	1.20	5.8	6.2	6.0
February	29.94	.51	29.01	21.5	25.8	29.6	15.9	22.8	45	—8	14	20	75	78	.077	.103	3.13	.58	5.6	6.3	6.4
March	30.02	.47	.36	26.7	30.3	34.6	23.4	29.0	46	2	19	22	72	72	.098	.113	2.75	.86	6.0	2.3	5.7
April	29.83	.45	.16	38.1	39.4	45.6	33.5	39.6	61	27	29	31	70	73	.157	.172	1.37	.31	6.5	5.1	6.3
May	29.91	.44	.54	46.5	46.0	55.0	40.3	47.6	70	34	36	39	70	77	.211	.237	1.64	.51	3.7	5.4	6.0
June	29.83	.08	.51	53.0	54.1	62.2	48.0	55.1	79	41	45	47	75	78	.298	.322	3.00	.99	5.0	4.7	6.6
July	29.92	.32	.48	57.5	55.4	65.4	50.2	57.8	77	46	51	50	82	84	.373	.360	2.61	.90	2.5	2.3	5.8
August	29.92	.20	.54	60.0	59.5	68.3	53.8	61.0	79	48	53	54	80	82	.402	.417	4.06	1.38	4.0	3.1	6.2
September	30.02	.30	.52	56.7	56.8	64.9	51.9	58.4	76	44	51	52	81	85	.373	.387	2.65	2.00	3.1	3.8	6.0
October	29.95	.59	.21	45.3	45.7	51.6	40.8	46.2	68	24	38	39	77	78	.228	.237	4.43	1.04	6.2	4.5	6.6
November	30.04	.65	.21	38.0	38.4	43.5	33.3	38.4	58	7	30	29	72	71	.164	.157	2.31	1.06	4.9	3.9	5.7
December	29.95	.41	.06	31.7	33.4	38.6	27.4	33.0	52	7	24	24	73	70	.125	.125	2.99	.86	5.4	3.9	6.7
Year	29.93	.65	28.85	41.5	42.6	49.1	36.4	42.8	79	—8	34	35	75	77	.216	.227	36.44	.....	4.9	4.3	6.2

a 16 days, station closed on September 16.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

DU CHESNE, FORT, UTAH.

[H=4,900 feet; h_t = 12 feet; h_r = 4 feet; h_a = 32 feet.]

Month.	Wind. By self-register. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	2.4	Calm. N.	23	E.	0	12	1	2	5	9	2	1	4	26	14	6	11	2	3	2	0	0	23	0	31	0	0
February	5.0	Calm. N.	38	W.	0	9	5	1	7	3	9	4	7	11	9	8	11	5	5	5	0	1	11	0	28	0	0
March	6.4	SW.	48	W.	1	4	9	10	8	2	11	7	5	6	7	14	10	7	4	4	0	0	1	0	29	0	0
April	6.7	SE.	50	SW.	2	2	12	2	16	0	13	8	3	4	10	11	9	3	3	0	1	1	0	0	15	2	0
May	6.8	SW.	42	NW.	1	2	10	5	13	2	14	4	10	2	11	12	8	6	4	0	1	0	0	0	0	0	0
June	7.9	SW.	51	W.	3	5	11	6	7	2	13	7	7	2	14	8	8	2	2	0	0	0	0	1	0	4	0
July	6.6	NW.	44	SE.	3	2	6	6	10	0	11	12	14	1	9	10	12	5	3	0	0	0	0	14	0	0	0
August	4.8	NW.	42	NW.	1	6	9	2	5	0	5	10	21	4	14	8	9	8	5	0	0	0	0	10	0	1	1
September	5.2	NW.	38	SW.	0	3	4	2	3	0	6	4	9	1	7	5	4	6	4	0	0	0	0	1	0	3	0
October	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

DULUTH, MINN.

[H=656 feet; h_t = 70 feet; h_r = 56 feet; h_a = 71 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	5.8	Calm. NW.	25	NW.	0	4	1	4	1	4	6	8	20	14	8	10	13	12	7	12	0	0	22	0	31	0	0
February	7.1	Calm. NW.	34	NW.	0	3	10	3	0	2	6	6	17	9	5	11	12	13	10	15	0	0	25	0	28	0	0
March	6.5	NE.	30	NE.	0	1	26	3	0	0	4	5	11	12	8	12	11	15	14	19	0	0	22	0	31	0	0
April	7.1	Calm. NE.	36	NW.	0	4	26	3	0	2	3	1	10	11	12	7	11	9	6	7	0	1	2	0	13	2	0
May	6.8	Calm. NE.	26	W.	0	5	22	4	5	3	7	6	5	5	14	11	6	6	4	0	0	2	0	0	3	1	0
June	6.6	Calm. NE.	30	NE.	0	1	38	3	0	3	1	6	4	4	7	10	13	13	9	0	0	4	0	0	0	4	0
July	6.2	Calm. NW.	34	NW.	0	5	20	4	1	1	4	7	12	8	15	7	9	13	13	0	0	2	0	0	0	2	0
August	5.7	Calm. NW.	25	NW.	0	11	23	6	3	0	1	6	10	2	15	10	6	10	5	0	0	0	0	0	0	4	0
September	5.3	Calm. NW.	35	W.	0	2	8	8	2	5	2	8	12	13	14	5	11	9	7	0	0	0	0	0	0	3	0
October	7.1	Calm. NW.	26	NW.	0	8	14	0	6	3	10	3	12	6	14	2	15	10	7	1	1	0	0	0	2	1	0
November	5.9	NW.	30	NW.	0	6	2	4	0	3	5	12	23	5	8	9	13	8	4	7	0	0	14	0	22	0	0
December	7.3	Calm. NW.	38	NW.	0	3	8	4	5	2	6	10	15	9	12	7	12	12	9	8	0	0	13	0	25	0	0
Year	6.4	NE.	.....	.....	0	53	198	46	23	28	55	78	151	98	132	101	132	130	95	69	1	9	98	0	155	17	0

EASTPORT, ME.

[H=53 feet; h_t = 51 feet; h_r = 43 feet; h_a = 56 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	13.2	N.	48	NE.	5	13	9	5	5	2	8	5	10	5	12	4	15	16	15	12	0	0	18	0	29	0	0
February	12.3	NW.	33	NE.	0	7	6	1	5	1	11	6	14	5	8	4	16	16	14	11	0	0	13	0	26	0	3
March	14.4	NW.	42	SE.	2	10	9	6	3	1	7	4	17	5	9	8	14	12	8	8	0	1	9	0	22	0	5
April	9.0	Calm. W.	60	E.	1	8	11	1	3	3	13	9	9	3	7	10	13	11	9	3	0	1	0	0	10	0	3
May	6.3	Calm. S.	24	SE.	0	10	3	0	1	8	14	8	3	15	9	11	11	10	10	1	0	1	0	0	0	0	0
June	8.4	Calm. N.	35	E.	0	16	11	3	1	12	4	5	1	7	6	13	11	11	9	0	0	3	0	0	0	3	1
July	6.2	S.	26	SE.	0	1	4	1	3	20	18	7	2	6	8	13	10	12	8	0	0	9	0	0	0	3	0
August	6.7	Calm. S.	30	SW.	0	3	4	2	1	11	17	4	13	7	9	9	13	13	9	0	0	5	0	0	0	2	3
September	7.1	SW.	28	NW.	0	10	3	3	0	9	20	6	3	6	9	10	11	7	6	0	0	5	0	0	0	2	6
October	10.1	N.	38	E.	0	14	8	2	1	4	13	10	9	1	7	11	13	13	9	1	0	1	0	0	4	0	3
November	10.3	SW.	38	E.	0	5	8	1	3	7	12	9	11	4	7	14	9	10	8	2	0	2	2	0	11	0	2
December	11.7	NW.	47	NW.	3	4	4	1	4	1	15	16	13	4	4	16	11	11	10	4	0	2	7	0	17	0	1
Year	9.6	SW.	.....	.....	11	101	80	26	30	79	152	89	105	68	95	123	147	142	115	42	0	30	49	0	119	10	27

a By eye observation at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

EL PASO, TEX.

[Lat. 31° 47′ N.; long. 106° 30′ W.; gravity corr. —.03.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	26.25	26.54	25.88	30.3	47.0	51.7	28.1	39.9	63	16	21	30	70	53	.108	.164	.27	.21	2.8	3.4	3.6
February	26.16	.45	.85	38.0	58.4	63.3	35.9	49.6	76	15	25	30	60	36	.130	.164	.09	.08	3.7	4.7	4.1
March	26.10	.36	.76	42.8	63.7	67.1	41.9	54.5	78	21	26	24	54	28	.137	.125	.16	.05	4.5	4.8	4.6
April	26.16	.46	.94	50.8	74.0	77.2	48.9	63.0	88	35	19	9	29	9	.098	.060	0	0	1.7	2.7	1.9
May	26.18	.40	.96	60.1	77.2	82.6	57.7	70.2	91	44	34	23	46	23	.195	.119	.38	.14	3.0	3.5	3.5
June	26.08	.32	.89	66.8	88.6	92.3	65.0	78.6	101	52	36	20	39	12	.211	.103	.40	.40	2.5	3.1	2.6
July	26.20	.41	26.04	73.4	92.0	97.7	71.8	84.4	104	67	50	40	44	18	.360	.246	.06	.04	3.7	5.3	3.9
August	26.21	.45	.05	70.9	87.5	92.8	69.2	81.0	102	60	48	44	46	25	.334	.287	.13	.04	1.9	3.4	2.8
September	26.22	.44	25.92	66.2	83.4	89.4	65.0	77.2	98	55	48	41	54	26	.334	.256	.23	.07	2.9	3.7	3.2
October	26.30	.64	.97	51.5	72.0	78.7	49.9	64.3	86	40	28	25	42	20	.150	.130	T.	T.	1.3	1.2	1.2
November	26.25	.58	26.00	43.4	61.7	68.3	41.3	54.8	81	27	18	15	38	18	.093	.081	T.	T.	1.2	2.0	1.9
December	26.24	.66	25.88	32.3	47.5	54.1	29.2	41.6	72	8	11	4	46	23	.067	.047	.50	.43	1.1	2.2	2.0
Year	26.20	.66	.76	52.2	71.1	76.2	50.3	63.3	104	8	30	25	47	24	.185	.148	2.22	.....	2.5	3.3	2.9

ERIE, PA.

[Lat. 42° 7′ N.; long. 80° 5′ W.; gravity corr. —.01.]

January	29.25	29.80	28.47	28.1	30.2	37.0	24.4	30.7	52	14	24	25	85	82	.125	.130	2.32	.56	8.8	7.6	7.9
February	29.22	.79	.50	31.3	32.9	41.0	25.1	33.0	60	0	26	27	83	80	.137	.143	4.95	1.57	8.6	6.0	7.5
March	29.27	.76	.69	30.1	32.3	40.9	24.4	32.6	58	7	24	26	81	81	.125	.137	2.44	.82	7.7	7.0	7.7
April	29.23	.62	.82	45.5	47.8	54.8	38.9	46.8	78	24	39	40	78	76	.237	.246	1.34	.43	5.4	5.1	5.1
May	29.30	.51	29.08	52.2	55.3	60.3	45.2	52.8	80	32	43	47	73	74	.277	.322	1.49	.77	5.1	4.7	4.9
June	29.21	.48	28.85	66.5	67.4	73.4	58.8	66.1	86	44	57	57	72	71	.465	.465	1.22	.70	5.0	4.9	5.4
July	29.24	.54	.99	66.2	67.3	73.1	59.2	66.2	87	47	55	56	69	67	.432	.448	2.66	.78	5.1	5.0	4.6
August	29.22	.44	.80	68.1	69.5	75.7	61.3	68.5	89	51	58	59	72	70	.481	.499	1.96	.78	5.2	5.1	6.1
September	29.37	.64	29.15	64.4	66.8	72.8	58.7	65.8	85	48	56	58	75	73	.448	.481	2.82	.89	5.0	3.0	4.6
October	29.32	.79	28.95	49.2	51.9	58.5	44.6	51.6	83	30	39	40	70	66	.237	.246	1.78	.60	6.4	4.7	5.7
November	29.29	.80	.19	38.3	40.9	46.2	33.7	40.0	73	18	30	31	74	71	.164	.172	3.99	.64	8.9	7.9	7.8
December	29.32	.80	.80	35.9	38.8	44.4	31.2	37.8	69	17	28	29	75	70	.150	.157	3.27	.90	7.2	4.4	6.1
Year	29.27	.80	.19	48.0	50.1	56.5	42.1	49.3	89	0	40	41	76	73	.273	.287	30.24	.....	6.5	5.4	6.1

EUREKA, CAL.

[Lat. 40° 48′ N.; long. 124° 11′ W.; gravity corr. —.01.]

January	30.16	30.42	29.75	44.0	51.6	54.6	41.4	48.0	63	31	42	48	92	88	.266	.334	3.33	.94	3.8	6.4	6.3
February	29.88	.37	28.91	42.4	48.8	51.2	39.5	45.4	63	31	40	44	93	83	.246	.287	9.81	1.96	6.8	6.4	6.9
March	30.06	.27	29.77	46.0	51.2	54.1	43.8	49.0	60	34	45	48	96	88	.298	.334	5.83	1.24	5.9	6.9	7.1
April	29.99	.30	.51	47.1	53.6	57.2	44.6	50.9	73	39	45	48	92	82	.298	.334	6.37	2.09	6.5	6.2	6.6
May	29.95	.12	.71	50.2	55.3	57.8	48.7	53.2	67	42	48	50	94	82	.334	.360	1.55	.76	7.5	6.4	7.2
June	29.96	.16	.66	52.7	59.1	61.8	50.9	56.4	73	44	50	51	91	75	.360	.373	1.53	.48	5.6	4.6	5.1
July	29.97	.14	.82	52.6	58.3	60.7	51.2	56.0	66	46	52	52	96	82	.387	.387	.29	.14	2.2	2.0	5.5
August	29.97	.10	.81	55.8	61.6	64.1	54.6	59.4	72	50	55	57	98	85	.432	.465	.31	.24	3.0	2.8	6.1
September	29.97	.11	.64	52.7	59.4	62.5	50.9	56.7	70	43	51	53	95	81	.373	.402	1.45	.73	3.8	2.9	5.3
October	30.00	.21	.76	50.0	56.7	60.6	47.6	54.1	75	40	48	53	95	88	.334	.402	1.64	.52	3.3	3.7	5.7
November	30.09	.35	.84	49.4	54.8	58.2	46.6	52.4	72	36	48	52	96	89	.334	.387	2.72	.99	3.0	4.6	5.6
December	30.12	.49	.77	43.3	48.3	51.7	39.2	45.4	70	30	40	44	91	87	.246	.287	10.97	2.22	6.5	7.6	7.2
Year	30.01	.49	28.91	48.8	54.9	57.9	46.6	52.2	75	30	47	50	94	84	.326	.363	45.80	.....	4.8	5.0	6.2

FORT SMITH, ARK.

[Lat. 35° 22′ N.; long. 94° 24′ W.; gravity corr. —.03.]

January	29.62	29.94	29.05	34.5	43.9	49.1	31.6	40.4	64	22	29	33	82	67	.157	.187	3.69	1.23	5.6	4.8	5.1
February	29.53	.98	28.97	36.6	47.8	54.3	32.6	43.4	80	14	30	35	78	64	.164	.203	.75	.63	5.6	4.0	5.2
March	29.50	.99	29.22	39.1	49.2	55.6	34.6	45.1	76	18	32	36	78	63	.180	.211	4.32	1.90	6.2	5.2	5.8
April	29.51	.90	.18	55.6	67.8	74.8	50.6	62.7	86	28	47	47	74	51	.322	.322	3.66	1.62	4.1	3.4	3.8
May	29.55	.88	.19	61.6	70.8	77.9	55.2	66.6	89	42	54	56	77	62	.417	.448	2.68	1.14	4.7	4.6	5.0
June	29.39	.56	.00	73.2	79.4	87.4	66.6	77.0	95	61	67	67	82	67	.660	.660	4.69	1.44	5.8	4.8	5.5
July	29.51	.70	.26	71.9	79.9	87.1	65.4	76.2	97	56	66	67	82	66	.638	.660	9.88	3.55	4.9	3.9	4.5
August	29.52	.72	.24	71.2	80.0	87.6	65.4	76.5	97	45	66	66	83	64	.638	.638	1.80	1.68	3.0	2.3	2.9
September	29.60	.74	.40	66.0	77.0	86.2	60.8	73.5	94	48	60	62	81	61	.517	.555	.87	.51	3.3	2.6	3.3
October	29.66	.95	.42	48.7	65.8	76.3	46.5	61.4	90	34	42	46	78	50	.266	.310	.39	.22	2.4	0.5	1.7
November	29.60	30.21	.12	41.3	50.6	57.8	37.4	47.6	85	19	35	39	80	66	.203	.237	5.35	2.22	5.2	4.3	4.8
December	29.60	.03	.09	39.9	48.7	56.0	36.0	46.0	67	18	34	38	47	67	.195	.226	2.41	1.13	4.5	4.2	4.5
Year	29.55	.21	28.97	53.3	63.4	70.8	48.6	59.7	97	14	47	49	77	62	.363	.388	40.49	.....	4.6	3.7	4.3

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued

EL PASO, TEX.

[H=3,796 feet; h_t=69 feet; h_r=62 feet; h_a=80 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature, below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	7.8	NW.	48	W.	2	8	13	5	1	0	1	5	22	7	18	7	6	2	2	1	0	1	1	0	22	0	0
February	9.3	NW.	42	W.	1	5	9	4	0	0	0	7	24	7	13	8	7	2	1	1	0	1	0	0	9	0	0
March	10.4	NW.	42	W.	2	2	9	4	2	1	2	11	27	4	14	6	11	4	3	1	0	0	0	0	3	0	0
April	9.2	NW.	40	N.	1	6	8	11	1	0	2	8	19	5	24	6	0	0	0	0	0	0	0	0	0	0	0
May	9.0	E.	46	W.	1	4	12	20	1	0	1	9	13	2	14	14	3	6	3	0	0	0	0	1	0	0	0
June	8.8	E.	42	NE.	1	1	0	15	13	3	2	14	10	2	20	8	2	1	1	0	0	0	0	21	0	1	0
July	7.3	SE.	44	W.	1	0	8	10	19	3	3	6	9	4	14	16	1	3	1	0	0	0	0	30	0	0	0
August	7.8	SE.	40	NE.	1	2	11	11	25	1	1	4	4	3	21	6	4	4	2	0	0	0	0	24	0	0	0
September	6.9	SE.	37	NE.	0	3	3	11	24	2	2	4	7	4	16	13	1	7	2	0	0	0	0	11	0	3	0
October	6.2	Calm. SE.	39	NE.	0	1	0	14	22	1	3	5	10	6	26	5	0	0	0	0	0	0	0	0	0	0	0
November	7.6	Calm. NW.	36	NW.	0	1	4	14	3	1	1	10	21	5	24	5	1	0	0	0	0	0	0	0	6	0	0
December	8.6	Calm. NW.	40	N.	1	0	7	7	3	0	3	6	35	1	22	7	2	4	3	1	0	0	0	0	21	0	0
Year	8.2	NW.	....	.....	11	33	84	126	114	12	21	89	201	50	226	101	38	33	18	4	0	0	1	87	61	4	0

ERIE, PA.

[H=714 feet; h_t=92 feet; h_r=82 feet; h_a=102 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature, below 32°.	Thunderstorms.	Auroras.
January	10.0	SW.	37	S.	0	4	3	3	6	9	10	7	10	10	1	7	23	18	13	18	1	1	8	0	26	1	0
February	15.1	S.	46	NW.	2	3	6	1	4	14	7	14	7	0	3	7	18	19	13	14	0	0	5	0	23	0	0
March	14.0	NE.	38	SW.	0	2	14	5	8	11	7	11	3	1	5	5	21	10	11	16	0	0	6	0	25	0	0
April	11.0	W.	38	SE.	0	1	3	2	9	6	11	22	6	0	12	8	10	13	7	2	0	0	0	0	6	2	0
May	9.5	NW.	30	SW.	0	4	11	3	0	5	13	11	13	2	11	9	11	11	6	2	0	0	0	0	1	1	0
June	8.4	W.	30	NE.	0	1	17	3	3	8	7	18	3	0	11	5	14	8	5	0	0	3	0	0	0	8	0
July	9.6	S.	34	W.	0	4	10	4	0	14	8	12	10	0	12	10	9	11	8	0	0	0	0	0	0	5	0
August	8.0	NE.	36	S.	0	2	13	2	3	12	11	10	4	5	4	15	12	11	8	0	0	0	0	0	0	3	0
September	8.0	S.	31	S.	0	5	4	4	4	16	13	6	4	4	14	9	7	11	9	0	0	3	0	0	0	5	2
October	12.2	S.	36	W.	0	5	3	4	4	21	10	4	11	0	8	8	15	11	8	0	0	0	0	0	1	1	0
November	16.0	S.	54	W.	5	6	0	1	11	16	14	8	4	0	2	6	22	20	16	1	0	0	3	0	10	0	0
December	15.5	SW.	48	SE.	3	0	2	4	5	13	26	5	7	0	10	9	12	17	12	7	0	1	2	0	13	0	0
Year	11.4	S.	....	.....	10	37	86	36	57	145	137	128	82	22	93	98	174	169	116	60	1	8	24	0	105	26	2

EUREKA, CAL.

[H=64 feet; h_t=60 feet; h_r=52 feet; h_a=69 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature, below 32°.	Thunderstorms.	Auroras.
January	5.0	SE.	36	N.	0	17	0	3	17	5	10	1	2	7	7	13	11	15	11	0	1	6	0	0	2	0	0
February	7.0	SE.	37	SE.	0	8	1	0	15	13	9	0	8	2	7	5	16	20	19	2	1	0	0	0	2	1	0
March	7.3	NW.	30	N.	0	10	1	0	11	1	14	2	19	4	5	7	19	16	13	0	0	5	0	0	0	0	0
April	8.6	NW.	35	NW.	0	3	2	2	10	8	13	4	15	3	5	11	14	17	14	0	0	2	0	0	0	1	0
May	8.2	NW.	38	NW.	0	10	1	1	6	4	7	4	24	5	5	6	20	11	5	0	0	3	0	0	0	0	0
June	8.0	NW.	35	N.	0	9	0	1	3	2	5	8	21	11	9	12	9	10	8	0	0	0	0	0	0	0	0
July	6.0	NW.	37	N.	0	14	0	0	3	3	6	4	27	5	9	10	12	4	2	0	0	18	0	0	0	0	0
August	4.9	NW.	28	NW.	0	10	0	0	4	1	8	6	26	7	7	11	13	5	1	0	0	17	0	0	0	0	0
September	4.6	NW.	35	N.	0	7	0	0	10	3	7	3	21	9	8	14	8	6	6	0	0	7	0	0	0	0	0
October	4.2	Calm. SE.	36	N.	0	7	1	2	11	4	7	5	11	14	9	8	14	11	10	0	0	13	0	0	0	0	0
November	4.5	N.	30	SE.	0	15	1	3	8	8	3	3	4	15	9	10	11	14	10	0	0	10	0	0	0	0	0
December	7.0	SE.	40	NW.	2	9	2	1	26	3	7	4	6	4	4	7	20	25	24	0	1	1	0	0	2	1	0
Year	6.3	NW.	....	.....	2	119	9	13	124	55	96	44	184	86	84	114	167	154	123	2	3	82	0	0	6	3	0

FORT SMITH, ARK.

[H=492 feet; h_t=73 feet; h_r=65 feet; h_a=81 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature, below 32°.	Thunderstorms.	Auroras.
January	6.7	E.	40	W.	1	2	8	19	4	1	10	11	7	0	14	6	11	9	8	1	0	0	0	0	16	1	0
February	8.3	E.	26	NW.	0	3	1	22	5	5	4	2	14	0	11	9	8	7	3	0	0	0	0	0	13	2	0
March	8.7	E.	30	W.	0	4	6	20	5	5	4	10	8	0	10	8	13	14	10	2	0	0	1	0	12	4	0
April	7.5	E.	33	W.	0	4	5	20	6	6	3	4	12	0	14	12	4	11	8	0	0	0	0	0	2	3	0
May	5.7	E.	24	SE.	0	2	8	21	10	9	2	4	6	0	12	13	6	14	8	0	0	0	0	0	0	2	0
June	5.7	E.	36	W.	0	3	10	23	4	8	2	6	4	0	7	19	4	20	11	0	1	0	0	12	0	12	0
July	5.6	E.	24	N.	0	2	15	28	5	0	6	2	4	0	13	11	7	14	9	0	0	0	0	12	0	4	0
August	4.8	E.	33	N.	0	9	8	24	8	7	1	2	3	0	24	6	1	5	4	0	0	0	0	12	0	2	0
September	5.1	E.	24	NW.	0	2	5	33	13	3	2	1	0	1	20	7	3	6	3	0	0	0	0	10	0	2	0
October	6.0	E.	24	NW.	0	7	10	19	8	2	6	0	5	5	25	5	1	3	2	0	0	1	0	1	0	0	0
November	8.0	E.	24	N.	0	7	4	26	1	5	3	6	8	0	12	7	11	12	7	0	1	0	0	0	10	1	0
December	7.6	E.	25	W.	0	1	2	30	7	4	4	10	4	0	15	4	12	13	5	0	0	1	0	0	12	0	0
Year	6.6	E.	....	.....	1	46	82	285	76	55	47	58	75	6	177	107	81	128	78	3	2	2	1	47	65	33	0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

FRESNO, CAL.

[Lat. 36° 43′ N.; long. 119° 49′ W.; gravity corr.,—.02.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.82	30.04	29.52	37.6	53.4	56.3	34.6	45.4	66	26	36	41	94	64	.211	.256	.88	.54	1.6	3.1	4.3
February	29.63	.04	28.96	42.7	55.5	58.3	38.7	48.5	68	27	38	38	83	55	.228	.228	2.24	.50	3.7	4.3	4.2
March	29.67	29.81	29.43	46.5	62.5	64.9	44.0	54.4	78	32	43	43	87	51	.277	.277	.81	.26	2.4	3.6	3.6
April	29.64	.81	.38	47.6	69.4	72.4	45.7	59.0	91	37	44	40	87	36	.287	.246	.49	.29	3.3	4.0	3.6
May	29.54	.69	.25	53.5	79.2	81.6	52.6	67.1	95	47	47	41	78	26	.322	.256	.03	.02	2.0	2.6	2.5
June	29.50	.72	.34	58.6	86.3	88.2	57.9	73.0	112	50	45	39	63	21	.298	.237	.02	.02	1.5	1.4	1.8
July	29.48	.66	.32	67.6	99.2	100.8	66.5	83.6	114	51	45	39	48	13	.298	.237	0	0	.6	.8	.6
August	29.49	.62	.36	67.4	99.2	101.6	65.5	83.6	112	56	47	40	50	13	.322	.246	0	0	.3	.3	.3
September	29.53	.71	.29	62.3	86.1	89.0	60.1	74.6	104	51	46	43	58	24	.310	.277	.27	.27	1.6	1.3	1.9
October	29.63	.80	.40	54.3	79.9	82.6	51.4	67.0	94	40	42	41	64	27	.266	.256	0	0	.8	1.4	1.5
November	29.73	.94	.53	45.6	65.8	70.0	42.5	56.2	81	34	38	40	76	42	.228	.246	.21	.21	.4	2.4	2.4
December	29.84	30.18	.25	38.3	49.1	52.5	35.3	43.9	66	27	35	37	87	64	.203	.219	3.99	2.10	3.4	3.9	4.5
Year	29.62	.18	28.96	51.8	73.8	76.5	49.6	63.0	114	26	42	40	73	36	.271	.248	8.94	.....	1.8	2.4	2.6

GALVESTON, TEX.

[Lat. 29° 18′ N.; long. 94° 50′ W.; gravity corr.,—.04.]

January	30.10	30.50	29.76	51.3	54.9	57.1	48.2	52.6	66	34	48	52	89	90	.334	.387	6.79	1.52	3.9	4.5	5.9
February	30.00	.36	.73	58.3	60.9	64.7	54.3	59.5	75	34	55	55	90	83	.432	.432	4.35	2.14	6.0	5.1	6.7
March	29.97	.39	.59	57.8	61.4	64.9	54.1	59.5	74	37	53	57	86	86	.402	.465	2.55	1.17	6.5	6.6	6.5
April	30.02	.40	.78	66.6	69.4	72.8	63.7	68.2	81	49	61	62	83	80	.536	.555	1.73	.83	4.2	5.4	5.5
May	30.03	.29	.87	72.4	74.9	78.2	69.5	73.8	86	60	65	64	78	71	.616	.595	.25	.12	4.3	4.5	4.0
June	29.88	.10	.65	80.8	81.9	85.4	77.2	81.3	90	69	74	74	80	78	.838	.838	3.52	1.88	4.8	5.1	4.6
July	29.97	.13	.58	81.6	83.4	86.9	78.2	82.6	92	69	75	74	82	75	.866	.838	4.31	1.84	4.2	4.3	4.8
August	30.00	.12	.85	80.6	82.5	86.5	77.4	82.0	90	68	72	71	76	70	.783	.757	4.01	3.44	3.3	3.7	2.7
September	30.01	.15	.88	77.4	80.0	82.9	73.7	78.3	87	67	71	70	82	73	.757	.732	7.01	2.75	4.3	3.9	2.9
October	30.13	.32	.88	68.8	72.1	75.5	66.4	71.0	84	56	60	60	74	66	.517	.517	1.06	.69	2.1	.9	2.8
November	30.10	.62	.65	61.1	65.0	67.7	57.6	62.6	79	36	54	55	80	71	.417	.432	3.44	.88	3.9	2.6	3.9
December	30.13	.57	.68	57.1	59.0	62.2	52.3	57.2	75	39	51	50	81	74	.373	.360	2.49	1.17	5.4	6.0	6.5
Year	30.03	.62	.58	67.8	70.4	73.7	64.4	69.0	92	34	62	62	82	76	.572	.576	41.51	.....	4.2	4.4	4.7

GRAND HAVEN, MICH.

[Lat. 43° 5′ N.; long. 86° 13′ W.; gravity corr., .0.]

January	29.33	29.96	28.45	26.6	28.6	33.9	22.6	28.2	45	8	23	22	87	78	.119	.113	2.13	1.23	8.6	7.0	7.7
February	29.28	.80	.50	26.1	29.5	34.4	21.5	28.0	51	4	22	23	85	85	.113	.119	2.45	.63	7.0	6.6	7.0
March	28.34	.85	.79	26.4	31.3	36.2	23.3	29.8	57	4	20	22	80	72	.103	.113	2.48	1.01	8.3	7.1	7.8
April	29.31	.59	.98	42.2	45.8	51.9	37.0	44.4	81	20	34	35	74	68	.195	.203	1.76	.59	5.0	5.1	5.4
May	29.41	.70	29.12	49.5	53.7	60.4	42.6	51.5	78	30	37	37	63	56	.219	.219	1.31	.78	3.0	5.0	3.6
June	29.27	.60	28.92	64.1	67.8	73.9	57.8	65.8	84	40	56	57	76	70	.448	.465	3.32	1.71	5.0	5.5	5.1
July	29.33	.61	29.12	62.6	66.4	72.0	56.2	64.1	84	44	55	52	77	61	.432	.387	1.81	.93	4.3	3.6	3.8
August	29.31	.49	28.92	63.9	67.5	74.3	58.1	66.2	88	47	57	57	79	70	.465	.465	1.47	.66	4.6	3.9	4.6
September	29.44	.69	29.12	60.9	66.4	73.6	55.0	64.3	85	41	54	55	80	68	.417	.432	.89	.60	2.4	1.2	2.1
October	29.40	.84	.08	46.8	51.2	58.1	42.0	50.0	81	28	40	41	78	69	.246	.256	1.38	.35	6.4	4.7	5.4
November	29.34	.86	28.71	34.1	35.3	40.2	29.7	35.0	58	16	28	29	80	77	.150	.157	5.41	1.20	9.2	8.5	9.1
December	29.32	.90	.66	34.6	37.0	41.6	30.7	36.2	58	17	28	29	78	74	.150	.157	1.85	.82	6.9	5.5	6.3
Year	29.34	.96	.45	44.8	48.4	54.2	39.7	47.0	88	4	38	38	78	70	.255	.257	26.26	.....	5.9	5.3	5.7

FORT GRANT, ARIZ.

[Lat. 32° 39′ N.; long. 109° 57′ W.; gravity corr.,—.03.]

January	25.23	25.44	24.98	32.6	41.1	49.2	30.1	39.6	60	20	24	28	70	60	.125	.150	.82	.70	1.1	2.2	2.2
February	25.19	.39	.07	38.3	47.7	53.0	36.0	44.5	67	19	31	36	74	63	.172	.211	3.78	1.61	4.2	3.8	4.6
March	25.14	.37	.89	42.2	54.3	60.0	39.6	49.8	73	22	30	33	62	46	.164	.187	.28	.12	3.1	5.0	4.4
April	25.19	.39	25.00	49.8	66.6	70.5	47.6	59.0	83	37	26	30	39	24	.137	.164	.00	0	1.4	2.3	2.0
May	25.20	.31	.03	56.3	72.7	76.6	53.9	65.2	84	42	32	26	43	21	.180	.137	1.40	.67	2.8	2.2	2.8
June	25.14	.33	.01	63.1	80.8	85.2	60.8	73.0	95	49	33	28	35	18	.187	.150	.10	.10	1.8	3.2	2.8
July	25.25	.40	.16	71.1	87.0	93.0	69.1	81.0	98	63	46	39	44	21	.310	.237	1.19	.82	4.1	6.3	5.6
August	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
September	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
October	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

FRESNO, CAL.

[H=338 feet; h_t=78 feet; h_r=66 feet; h_a=77 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	3.6	NW.	18	NW.	0	5	0	9	10	12	4	10	12	0	11	17	3	3	3	0	0	19	0	0	7	0	0
February	6.0	NW.	24	NW.	0	6	0	2	15	8	1	7	16	1	14	6	8	11	11	0	0	2	0	0	3	0	0
March	6.2	NW.	25	NW.	0	11	1	7	7	3	1	1	30	1	13	13	5	5	5	0	0	4	0	0	1	0	0
April	7.0	NW.	30	S.	0	11	0	4	2	5	1	1	36	0	13	15	2	4	4	0	0	1	0	1	0	0	0
May	8.2	NW.	30	W.	0	4	0	3	4	1	1	6	43	0	19	11	1	2	0	0	0	0	0	2	0	0	0
June	10.0	NW.	30	NW.	0	5	0	0	1	0	0	2	52	0	25	4	1	2	0	0	0	0	0	10	0	0	0
July	7.5	NW.	24	NW.	0	3	1	1	4	3	1	0	48	1	30	1	0	0	0	0	0	0	0	26	0	0	0
August	7.1	NW.	24	NW.	0	3	2	2	2	0	0	1	50	2	31	0	0	0	0	0	0	0	0	29	0	0	0
September	6.6	NW.	26	NW.	0	4	1	2	5	3	3	3	39	0	22	6	2	2	1	0	1	0	0	13	0	1	0
October	4.3	NW.	20	NW.	0	7	1	6	4	4	0	3	35	2	24	7	0	0	0	0	0	0	0	6	0	0	0
November	3.1	NW.	18	NW.	0	0	1	9	10	2	1	3	29	5	20	9	1	1	1	0	0	6	0	0	0	0	0
December	5.6	NW.	24	NW.	0	3	0	6	17	7	5	1	19	4	13	9	9	11	10	0	0	12	0	0	9	0	0
Year	6.3	.....	....	.....	0	62	7	51	81	48	18	38	409	16	235	98	32	41	35	0	1	44	0	87	20	1	0

GALVESTON, TEX.

[H=42 feet; h_t=85 feet; h_r=80 feet; h_a=96 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	10.5	NW.	42	NE.	1	2	8	8	14	3	1	1	17	8	11	5	15	12	10	0	0	4	0	0	0	1	0
February	12.4	SE.	46	NW.	1	4	5	3	14	11	4	2	9	4	8	5	15	10	7	0	0	8	0	0	0	1	0
March	13.1	SE.	38	N.	0	13	8	5	11	16	1	1	7	0	8	8	15	12	7	0	0	1	0	0	0	1	0
April	11.7	SE	38	N.	0	9	3	4	23	11	5	2	3	0	13	6	11	5	5	0	0	2	0	0	0	2	0
May	10.5	S.	30	NE.	0	4	10	1	15	21	8	0	3	0	16	12	3	4	2	0	0	0	0	0	0	3	0
June	10.1	SE.	28	SE.	0	0	5	0	19	23	9	2	1	1	13	11	4	7	5	0	0	0	0	1	0	5	0
July	10.7	SE.	60	SE.	3	0	7	2	21	10	15	1	3	3	11	15	5	9	8	0	0	0	0	1	0	6	0
August	8.7	SW.	31	NW.	0	1	8	5	17	9	18	1	3	0	23	7	1	6	5	0	0	0	0	2	0	9	0
September	11.0	SE.	40	NE.	1	0	20	9	26	4	0	0	0	1	22	4	4	12	8	0	0	0	0	0	0	2	0
October	10.1	SE.	33	NE.	0	6	16	4	26	3	1	0	4	2	23	5	3	6	6	0	0	0	0	0	0	0	0
November	12.3	SE.	40	NW.	1	6	6	8	12	9	9	4	6	0	19	6	5	11	9	0	0	0	0	0	0	3	0
December	12.8	S.	40	NW.	1	4	5	3	15	20	4	2	9	0	9	6	16	10	8	0	0	2	0	0	0	0	0
Year	11.2	SE.	....	.....	8	49	101	52	213	140	75	16	65	19	176	92	97	104	80	0	0	17	0	4	0	33	0

GRAND HAVEN, MICH.

[H=623 feet; h_t=55 feet; h_r=48 feet; h_a=64 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	10.5	W.	45	SW.	2	12	7	10	5	8	6	12	1	1	5	4	22	13	8	17	0	2	7	0	30	0	0
February	14.1	W.	42	SW.	2	7	4	5	8	7	6	12	7	0	7	5	16	16	13	18	0	1	10	0	25	1	0
March	13.4	E.	43	SW.	1	8	13	17	1	8	5	6	4	0	4	4	23	14	9	13	0	0	11	0	26	0	0
April	11.6	N.	36	N.	0	11	4	10	3	11	10	4	7	0	9	9	12	16	7	4	0	2	0	0	7	2	0
May	10.3	N.	36	S.	0	12	5	6	3	12	11	6	4	3	17	7	7	9	6	0	0	1	0	0	1	1	0
June	7.8	E.	28	NW.	0	3	8	16	3	12	8	3	2	5	11	13	6	9	6	0	0	4	0	0	0	4	0
July	9.4	S.	32	N.	0	9	2	4	1	17	9	8	11	1	16	12	3	9	7	0	0	0	0	0	0	2	0
August	7.3	SW.	24	NW.	0	4	7	8	1	11	13	6	11	1	9	15	7	9	7	0	0	3	0	0	0	1	2
September	8.6	S.	35	SW.	0	4	2	15	6	15	2	4	12	0	23	3	4	6	4	0	0	0	0	0	0	2	3
October	10.1	NW.	35	W.	0	6	5	11	8	8	6	5	13	0	11	9	11	7	6	0	0	1	0	0	3	0	0
November	12.6	W.	40	SW.	1	7	6	4	13	3	7	13	7	0	1	4	25	20	17	12	0	1	6	0	17	0	0
December	14.9	SW.	51	SW.	2	2	4	2	17	6	17	10	4	0	6	12	13	10	7	4	0	0	5	0	14	0	0
Year	10.9	S.	....	.....	8	85	67	108	69	118	100	89	83	11	119	97	149	138	97	68	0	15	39	0	123	13	5

FORT GRANT, ARIZ.

[H=4780 B feet; h_t=15 feet; h_r=4 feet; h_a=26 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.1	W.	36	E.	0	13	6	10	2	0	3	14	13	1	22	6	3	3	3	2	0	0	0	0	21	0	0
February	6.6	W.	24	W.	0	7	4	12	1	2	2	17	11	0	11	11	6	6	6	0	0	0	0	0	4	0	0
March	7.1	NW.	26	W.	0	10	8	0	7	2	6	11	17	1	13	12	6	7	4	2	0	0	0	0	3	0	0
April	7.4	NW.	27	SE.	0	11	6	1	7	4	3	11	17	0	21	8	1	0	0	0	0	0	0	0	0	0	0
May	7.2	W.	34	SE.	0	6	8	7	12	1	7	15	6	0	18	10	3	6	6	1	1	0	0	0	0	3	0
June	6.2	NW.	32	NE.	0	6	12	0	3	5	2	9	23	0	20	5	5	1	1	0	0	0	0	8	0	3	0
July	6.3	N.	42	N.	1	14	10	9	1	1	6	10	9	2	10	9	12	6	4	0	1	0	0	29	0	4	0
August	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
September	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
October	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

a By eye observations at 8 a. m and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

GREEN BAY, WIS

[Lat. 44° 31′ N.; long. 88° 0′ W.; gravity corr., 0.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°		°	%	%	In.	In.	In.	In.			
January	29.38	30.02	28.80	18.9	24.2	29.2	16.0	22.6	39	0	16	20	88	84	.085	.103	2.30	.70	7.0	5.4	6.1
February	29.31	29.79	.52	14.8	21.4	25.6	10.3	18.0	44	—21	10	16	83	81	.063	.085	1.96	.56	5.2	4.6	6.1
March	29.39	.88	.75	19.7	26.8	31.5	16.5	24.0	42	— 2	16	21	85	79	.085	.108	3.33	.87	6.7	5.3	6.6
April	29.34	.64	.95	40.4	46.9	54.0	36.3	45.2	78	18	33	35	76	67	.187	.203	1.93	.82	5.9	5.9	6.1
May	29.44	.80	29.02	49.9	58.8	68.8	42.6	55.7	82	26	36	37	61	46	.211	.219	.12	.06	3.2	5.5	5.0
June	29.31	.69	.02	63.1	67.4	75.2	55.9	65.6	93	40	54	53	73	62	.417	.402	1.73	.97	6.2	5.8	6.4
July	29.36	.65	.17	61.0	67.8	76.7	54.3	65.5	90	44	52	53	72	61	.387	.402	1.80	.76	3.8	5.5	5.5
August	29.33	.56	28.99	62.5	69.0	76.6	57.4	67.0	98	44	56	54	78	62	.448	.417	4.02	1.06	6.2	6.5	6.9
September	29.42	.68	29.09	59.6	66.8	77.3	54.8	66.0	92	40	52	53	78	63	.387	.402	.60	.30	4.1	4.7	5.1
October	29.42	.84	29.08	43.8	48.3	57.2	39.8	48.5	84	28	36	38	76	70	.211	.228	2.24	1.20	6.4	4.6	6.8
November	29.36	.88	28.76	27.6	31.6	36.0	24.4	30.2	50	0	21	24	77	74	.108	.125	2.32	.72	7.2	6.8	8.1
December	29.27	.86	.44	27.5	32.6	37.4	24.9	31.2	50	0	22	26	80	78	.113	.137	3.68	2.50	6.8	5.5	6.8
Year	29.36	30.02	.44	40.7	46.8	53.8	36.1	45.0	98	—21	34	36	77	69	.225	.236	26.03	.....	5.7	5.5	6.3

HARRISBURG, PA.

[Lat. 40° 16′ N.; long. 76° 52′ W.; gravity corr., —.01.]

January	29.66	30.12	28.86	30.7	33.7	37.7	26.8	32.2	53	14	26	27	82	78	.137	.143	4.73	1.30	6.5	5.6	6.0
February	29.69	.24	29.07	34.9	38.4	43.4	29.9	36.6	65	14	27	29	73	72	.143	.159	3.31	.72	7.7	5.9	6.8
March	29.70	.18	.20	32.5	36.7	41.1	28.8	35.0	53	10	24	26	75	68	.125	.137	4.25	1.14	6.1	5.9	6.0
April	29.61	.08	.11	50.0	56.0	62.3	43.4	52.8	84	26	35	38	58	55	.203	.228	1.70	.99	2.9	4.3	3.5
May	29.65	29.96	.43	56.6	62.5	70.0	50.0	60.0	89	36	44	46	64	58	.287	.310	1.77	.52	5.7	6.6	6.2
June	29.57	.84	.33	67.9	72.3	79.7	60.1	69.9	93	43	57	61	70	70	.432	.536	3.76	1.12	3.7	4.8	4.2
July	29.63	.94	.34	67.4	72.2	78.6	60.6	69.6	87	52	59	60	76	68	.499	.517	8.40	2.13	5.2	5.6	5.1
August	29.60	.84	.34	69.3	73.1	80.2	64.2	72.2	92	54	62	64	78	75	.555	.595	5.20	1.85	5.9	6.5	6.2
September	29.76	30.02	.52	64.7	70.6	78.7	60.2	69.4	88	50	58	60	81	71	.481	.517	1.75	.69	5.1	2.3	3.8
October	29.70	.26	.30	48.7	54.1	60.8	44.1	52.4	85	32	40	43	75	67	.246	.277	2.87	1.19	5.9	4.6	5.3
November	29.77	.39	28.75	38.3	42.4	48.9	33.3	41.1	68	14	30	30	74	64	.164	.164	1.95	.99	5.8	4.8	5.2
December	29.78	.23	29.21	36.6	41.3	47.4	32.3	39.8	63	14	27	28	70	63	.143	.150	3.71	.81	5.3	4.5	4.9
Year	29.68	.39	28.75	49.8	54.4	60.7	44.5	52.6	93	10	41	43	73	67	.284	.311	43.40	.....	5.5	5.1	5.3

HATTERAS, N. C.

[Lat. 35° 15′ N.; long. 75° 40′ W.; gravity corr., —.03.]

January	30.12	30.50	29.51	45.5	47.9	52.5	41.8	47.2	67	32	41	44	86	86	.256	.287	6.05	2.89	4.5	4.1	4.9
February	30.16	.64	.45	53.3	53.8	59.3	47.1	53.2	71	33	50	51	89	91	.360	.373	3.43	.75	7.1	6.6	7.4
March	.....	.....	.....	.....	49.1	56.1	42.4	49.2	68	30	.....	.....	.....	.....	.....	.....	5.07	.80	.....	.....	.....
April	.....	.....	.....	.....	57.9	65.2	53.7	59.4	74	41	.....	.....	.....	.....	.....	.....	.91	.40	.....	.....	.....
May	.....	.....	.....	.....	.....	71.7	60.9	66.3	78	50	.....	.....	.....	.....	.....	.....	5.98	1.27	.....	.....	.....
June	.....	.....	.....	.....	.....	80.2	70.1	75.2	87	63	.....	.....	.....	.....	.....	.....	1.59	.50	.....	.....	.....
July	30.07	30.28	29.82	75.9	75.2	80.4	71.9	76.2	85	66	70	70	83	85	.732	.732	9.12	2.09	6.8	6.4	6.7
August	30.04	.23	.74	78.5	77.6	83.0	74.4	78.7	86	68	74	73	85	87	.838	.810	8.62	1.96	5.7	4.2	5.4
September	30.14	.36	.87	74.3	72.9	78.9	70.1	74.5	83	66	68	67	81	82	.684	.660	4.64	2.10	4.8	3.2	4.1
October	30.08	.56	.73	60.9	62.0	66.4	58.0	62.2	81	44	55	56	82	80	.432	.448	7.74	4.48	4.7	3.4	5.2
November	30.18	.73	.66	52.8	53.5	57.9	49.1	53.5	70	31	47	48	81	82	.322	.334	3.14	.90	5.4	3.9	5.8
December	30.28	.61	.83	51.2	53.1	58.1	47.4	52.8	70	31	45	48	82	84	.298	.334	3.21	.77	4.6	2.5	4.2
Year	.....	.....	.....	.....	.....	67.5	57.2	62.4	87	30	.....	.....	.....	.....	.....	.....	59.50	.....	.....	.....	.....

HELENA, MONT.

[Lat. 46° 34′ N.; long. 112° 04′ W.; gravity corr., 0.]

January	25.85	26.17	25.46	25.7	29.5	33.8	21.2	27.5	50	— 7	14	16	63	60	.077	.085	.31	.16	5.3	6.8	5.8
February	25.61	.11	.22	3.3	8.9	13.0	—1.0	6.4	45	—24	3	2	77	77	.033	.043	1.68	.36	5.6	7.9	7.4
March	25.73	.02	.27	18.8	26.7	30.5	15.8	23.2	54	—20	10	16	68	65	.063	.085	1.37	.60	6.5	6.0	5.6
April	25.74	.10	.22	38.1	54.6	58.2	36.7	47.4	82	19	24	36	58	52	.125	.211	.76	.66	5.1	6.9	5.4
May	25.77	.01	.53	46.1	61.9	66.5	43.3	54.9	88	26	a33	b30	x62	b37	x.187	b.164	2.51	.83	6.8	7.4	6.4
June	25.73	.12	.51	49.8	60.8	64.1	46.3	55.2	82	35	39	37	67	48	.237	.219	4.67	1.06	7.4	8.6	7.8
July c	25.85	.10	.62	57.6	72.9	77.8	53.7	65.8	89	46	45	42	63	39	b.298	b.266	2.73	.74	3.6	6.0	4.5
August	25.86	.13	.61	55.9	75.2	79.5	53.5	66.5	89	46	b42	36	b62	29	b.266	.211	1.02	.42	4.9	4.2	4.2
September	25.81	.16	.45	49.0	63.6	68.4	46.8	57.6	82	30	35	32	60	34	.203	.180	.72	.24	6.5	6.4	5.7
October	25.89	.17	.54	39.3	50.9	58.3	37.2	47.8	75	19	27	b28	64	b45	.143	b.150	2.40	2.23	5.3	6.3	5.6
November	25.80	.14	.36	30.4	36.1	42.1	26.3	34.2	68	— 8	20	20	67	55	.103	.103	.82	.36	6.0	5.1	5.9
December	25.68	.23	.08	26.5	29.4	34.7	22.3	28.5	47	— 8	16	17	65	61	.085	.089	.40	.15	4.7	5.5	6.4
Year	25.78	.23	.08	36.7	47.5	52.3	33.5	42.9	89	—24	25	26	65	50	.152	.150	19.39	.....	5.6	6.4	5.9

a For 29 days. b For 30 days. c One 8 a. m. and one 8 p. m. observation missed.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

GREEN BAY, WIS.

[H = 617 feet; h_t = 45 feet; h_r = 35 feet; h_a = 59 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	6.5	S.	42	N.	1	9	4	1	5	16	6	7	7	7	8	8	15	12	9	16	0	1	20	0	31	0	0
February	8.5	S.	30	SW.	0	11	1	2	3	15	11	5	1	7	7	9	12	10	9	11	0	2	18	0	27	0	0
March	8.1	N.	36	E.	0	27	5	6	5	7	5	4	2	1	7	9	15	14	10	13	2	1	16	0	27	1	0
April	8.8	N.	38	SW.	0	14	1	6	10	14	4	4	5	2	8	9	13	9	8	3	0	0	1	0	7	0	0
May	9.2	S.	30	N.	0	5	6	8	9	13	11	1	9	0	9	18	4	2	2	0	0	0	0	0	4	1	0
June	9.0	NE.	30	N.	0	12	14	2	7	9	8	5	3	0	3	17	10	7	4	0	0	0	0	2	0	4	0
July	7.8	S.	45	SW.	1	9	3	4	7	13	11	4	11	0	8	16	7	12	8	0	0	0	0	1	0	6	0
August	7.3	NW.	36	N.	0	7	9	8	4	7	9	8	9	1	2	15	14	12	8	0	0	0	0	3	0	1	0
September	7.5	S.	36	SW.	0	4	4	1	13	18	12	4	3	1	8	17	5	5	5	0	0	3	0	3	0	2	0
October	8.9	S.	32	W.	0	10	4	3	3	18	7	10	7	0	2	15	13	9	8	0	0	3	0	0	2	0	0
November	9.2	S.	32	W.	0	5	1	2	2	15	8	15	12	0	0	10	20	12	10	6	0	1	9	0	19	0	0
December	10.9	SW.	38	SW.	0	2	3	1	6	16	24	3	7	0	5	12	14	8	6	3	0	0	7	0	21	1	0
Year	8.5	S.	....	.....	2	115	55	44	74	161	116	70	76	19	68	155	142	112	87	52	2	11	71	9	138	16	0

HARRISBURG, PA.

[H = 377 feet; h_t = 94 feet; h_r = 87 feet; h_a = 102 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	8.1	W.	42	W.	1	7	2	8	5	3	4	18	12	3	5	15	11	13	11	5	0	4	5	0	23	0	0
February	9.4	NW.	42	NW.	2	1	3	9	10	2	8	3	20	0	6	7	15	14	10	4	0	2	2	0	19	0	0
March	9.8	NE.	36	NW.	0	9	12	11	9	2	3	5	11	0	11	4	16	15	14	7	0	0	5	0	19	0	0
April	8.5	NW.	32	NW.	0	1	10	1	10	2	6	7	23	0	17	5	8	9	8	0	0	0	0	0	5	2	0
May	7.3	NW.	30	NW.	0	4	10	9	6	7	4	10	11	1	8	8	15	10	8	1	0	0	0	0	0	1	0
June	5.6	W.	41	N.	1	5	8	10	4	7	8	10	8	0	14	9	7	12	9	0	0	1	0	3	0	4	0
July	6.1	W.	36	W.	0	8	2	8	11	8	4	12	9	0	10	11	10	14	14	0	0	0	0	0	0	4	0
August	4.7	E.	24	NW.	0	5	7	13	6	4	8	9	10	0	6	12	13	11	9	0	0	0	0	2	0	2	0
September	4.8	W.	24	W.	0	7	4	11	11	5	3	12	6	1	13	11	6	8	4	0	0	1	0	0	0	2	0
October	6.7	NW.	28	W.	0	10	4	5	5	3	2	10	16	7	12	5	14	11	8	0	0	0	0	0	1	1	0
November	7.6	W.	54	SE.	2	7	5	8	6	7	5	10	8	4	8	13	9	12	7	2	0	2	1	0	15	1	0
December	7.0	NW.	54	SE.	2	2	3	10	3	4	5	11	14	10	11	10	10	10	7	1	0	4	2	0	17	0	0
Year	7.1	NW.	....	.....	8	66	70	103	86	54	60	117	148	26	121	110	134	139	109	20	0	14	15	5	99	17	

HATTERAS, N. C.

[H = 11 feet; h_t = 18 feet; h_r = 2 feet; h_a = 36 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	14.5	N	52	W.	2	12	10	2	1	6	12	10	9	0	12	10	9	10	9	0	0	1	0	0	1	0	0
February	16.6	NE.	45	N.	1	9	14	2	3	8	12	3	5	0	2	10	16	19	16	0	0	2	0	0	0	1	0
March	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13	13	0	0	1	0	0	1	.....	.....
April	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	5	0	0	0	0	0	0	.....	.....
May	.....	S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	7	17	13	13	0	1	0	0	0	0	.....	.....
June	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	12	7	8	7	0	0	0	0	0	0	.....	.....
July	11.7	S.	38	W.	0	6	4	7	4	19	12	6	4	0	5	12	14	20	19	0	0	0	0	0	0	3	0
August	10.7	S.	44	W.	1	5	3	4	7	21	14	4	4	0	9	13	9	16	15	0	0	0	0	0	0	6	0
September	10.0	N.	42	N.	2	16	13	16	6	2	1	4	2	0	16	8	6	10	10	0	0	0	0	0	0	0	0
October	16.6	N.	72	N.	5	27	9	2	3	4	2	10	5	0	13	8	10	8	8	0	0	0	0	0	0	1	0
November	16.7	N.	50	N.	3	24	9	4	3	7	4	6	2	1	8	12	10	12	8	1	0	1	0	0	1	0	0
December	13.2	N.	56	NW.	1	19	5	2	3	10	8	10	4	1	16	7	8	12	11	1	0	2	0	0	1	0	0
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	146	134	2	1	7	0	0	4	.....	.....

HELENA, MONT.

[H = 4,118 feet; h_t = 85 feet; h_r = 75 feet; h_a = 91 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	5.9	SW.	48	SW.	1	2	1	0	1	1	27	14	14	2	9	8	14	6	3	12	0	0	11	0	26	0	0
February	4.8	SW.	27	NW.	0	5	5	0	0	2	21	7	14	2	3	9	16	16	10	20	0	0	23	0	28	0	0
March	6.3	SW.	48	SW.	2	7	4	2	0	4	19	6	16	4	8	11	12	10	6	14	0	0	14	0	27	0	0
April	7.3	SW.	42	SW.	1	3	3	1	1	5	32	9	3	3	7	13	10	8	3	5	1	0	0	0	6	0	0
May	7.5	SW.	36	W.	0	3	13	6	3	3	17	10	6	1	7	9	15	13	9	3	1	0	0	0	2	1	0
June	7.3	SW.	35	SW.	0	5	4	3	1	1	30	5	8	3	3	5	22	24	16	0	0	0	0	0	0	4	0
July g	6.7	SW.	48	SW.	1	1	5	8	1	3	28	12	4	0	11	7	9	16	10	0	1	0	0	0	0	4	0
August	6.6	SW.	42	SW.	1	6	5	5	1	1	22	13	5	4	17	6	8	7	7	0	0	0	0	0	0	2	0
September	6.9	SW.	36	SW.	0	6	0	3	3	3	27	15	1	2	10	6	14	9	3	0	1	0	0	0	1	0	0
October	7.0	SW.	42	SW.	1	4	1	0	0	0	49	4	2	2	7	14	10	7	3	5	0	0	1	0	7	0	0
November h	8.8	SW.	48	SW.	3	3	0	0	1	2	41	6	5	2	8	6	16	7	3	6	0	0	7	0	17	0	
December	8.5	SW.	44	SW.	2	2	1	3	1	0	42	9	3	1	9	8	14	10	3	9	0	0	9	0	25	0	
Year	7.0	SW.	....	.....	12	47	42	31	13	25	355	110	81	26	103	102	160	128	76	74	4	0	65	0	139	11	

a By eye observation at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

HURON, S. DAK.

[Lat. 44° 21′ N.; long. 98° 14′ W.; gravity corr., 0.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	28.66	29.08	28.23	17.4	26.9	35.3	12.9	24.1	55	—8	12	17	78	68	.070	.089	.07	.03	5.5	3.8	4.9
February	28.56	28.94	.10	.9	11.4	17.6	—3.8	6.9	46	—22	—3	6	84	78	.033	.052	1.32	.74	4.6	3.7	4.5
March	28.62	29.07	.16	13.5	23.1	28.0	10.6	19.3	50	—24	10	17	85	78	.063	.089	1.64	.62	6.0	6.0	6.3
April	28.54	.04	.10	40.6	54.3	61.2	35.9	48.6	87	11	35	37	80	56	.203	.219	3.45	1.14	4.6	5.4	5.3
May	28.63	.11	.13	48.0	64.1	70.0	42.0	56.0	92	29	39	40	72	44	.237	.246	.44	.16	4.9	4.4	4.8
June	28.47	28.89	.16	58.9	69.4	73.8	54.4	64.1	92	43	54	56	84	64	.417	.448	8.08	1.98	6.7	5.4	6.5
July	28.60	.99	.30	60.9	73.6	79.4	54.9	67.2	90	41	55	56	80	55	.432	.448	1.01	.76	3.2	5.0	4.4
August	28.58	.94	.32	58.8	74.6	81.5	54.0	67.8	97	34	54	54	84	49	.417	.417	1.43	.56	3.6	4.7	4.2
September	28.56	.90	.24	55.0	71.7	80.5	51.5	66.0	96	30	48	49	80	48	.334	.347	.47	.24	3.7	4.0	3.9
October	28.66	29.08	.22	38.2	51.2	60.9	35.2	48.0	82	20	32	31	79	48	.180	.172	.78	.46	4.0	3.7	3.7
November	28.62	.17	.15	19.1	26.1	35.1	13.3	24.2	62	—18	14	18	81	74	.077	.093	.94	.30	5.3	2.8	4.9
December	28.48	.20	.01	19.4	25.6	33.5	15.5	24.5	55	—20	15	21	83	84	.081	.108	.54	.28	3.3	5.0	4.2
Year	28.58	.20	.01	35.9	47.7	54.7	31.4	43.1	97	—24	30	34	81	62	.212	.227	20.17	.....	4.6	4.5	4.8

INDIANAPOLIS, IND.

[Lat. 39° 46′ N.; long. 86° 10′ W.; gravity corr., —.01.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	29.24	29.75	28.44	30.7	35.4	39.4	29.0	34.2	58	14	27	27	86	72	.143	.143	2.00	.61	6.9	6.3	7.0
February	29.22	.67	.65	31.0	36.8	41.7	27.4	34.6	61	—3	25	27	80	69	.130	.143	5.97	2.86	7.1	5.3	6.5
March	29.20	.65	.72	30.6	38.4	42.1	28.9	35.5	65	8	25	28	80	69	.130	.150	5.77	1.50	7.1	7.1	7.8
April	29.20	.42	.82	50.1	57.6	65.0	45.9	55.4	84	25	40	43	69	61	.246	.277	2.30	.73	5.4	5.1	6.0
May	29.28	.55	.97	55.1	63.2	69.5	49.6	59.6	86	36	44	46	68	56	.287	.310	1.61	.56	4.8	4.1	4.8
June	29.13	.34	.76	69.7	75.7	83.5	64.5	74.0	94	54	61	62	75	65	.536	.555	2.90	.76	4.9	4.9	5.8
July	29.23	.45	29.01	67.9	76.2	83.0	60.8	71.9	94	52	55	54	65	47	.432	.417	1.93	1.21	3.3	3.0	5.0
August	29.20	.38	28.91	66.5	74.8	81.4	62.8	72.1	94	50	59	58	77	58	.499	.481	5.79	1.65	5.2	4 5	5.7
September	29.34	.56	29.15	63.1	73.7	81.9	59.4	70.6	93	48	54	55	74	53	.417	.432	.74	.32	2.4	2.4	3.6
October	29.32	.65	.04	46.9	55.9	65.0	44.2	54.6	85	31	39	40	75	58	.237	.246	1.18	.57	3.3	2.8	4.8
November	29.27	.87	28.52	35.9	41.3	46.1	32.8	39.4	65	7	31	33	84	73	.172	.187	5.08	1.39	6.4	5.4	7.0
December	29.29	.80	.68	35.2	42.8	48.0	33.1	40.6	61	20	30	31	81	65	.164	.172	2.96	.66	4.4	4.4	4.9
Year	29.24	.87	.44	48.6	56.0	62.2	44.9	53.5	94	—3	41	42	76	62	.283	.293	38.23	.....	5.1	4.6	5.7

JACKSONVILLE, FLA.

[Lat. 30° 20′ N.; long. 81° 39′ W.; gravity corr., —.04.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	30.12	30.32	29.75	47.4	54.6	64.0	44.5	54.2	80	30	41	44	80	70	.256	.287	1.19	.71	5.2	2.6	5.1
February	30.10	.42	.59	60.3	64.7	74.4	56.9	65.6	86	31	56	56	85	74	.432	.448	.32	.17	4.6	3.7	6.0
March	30.00	.39	.60	56.8	62.2	70.1	53.2	61.6	82	38	50	52	79	71	.360	.387	4.02	1.40	6.5	4.3	6.4
April	30.03	.28	.65	64 1	66.7	76.6	58.2	67.4	86	34	56	55	76	69	.432	.432	1.72	.64	4.5	4.6	5.5
May	29.99	.30	.81	69.4	72.7	82.5	63.0	72.8	92	54	61	59	75	64	.536	.499	2.78	1.26	3.5	4.4	5.0
June	29.94	.12	.76	77.9	79.4	90.0	72.2	81.1	100	68	71	70	80	75	.757	.732	3.31	1.05	5.1	5.9	5.9
July	30.04	.18	.92	78.7	79.7	89.4	73.1	81.2	95	66	72	71	80	75	.783	.757	4.08	1.96	5.5	8.0	7.1
August	30.00	.12	.86	79.6	80.5	91.1	73.5	82.3	97	70	73	73	81	78	.810	.810	3.67	1.38	3.9	5.1	6.0
September	30.05	.25	.93	74.9	76.5	85.0	70.3	77.6	89	65	70	70	85	82	.732	.732	10.83	3.79	4.7	4.9	6.5
October	30.06	.40	.72	62.3	66.2	75.5	58.3	66.9	89	45	56	56	80	73	.432	.448	4.43	1.35	3.6	2.6	4.0
November	30.12	.44	.82	55.3	59.3	69.2	50.8	60.0	80	33	50	52	84	76	.360	.387	1.53	.65	4.2	3.7	5.6
December	30.19	.45	.99	54.7	59.0	68.1	51.1	59.6	80	32	51	54	88	84	.373	.417	3.46	1.77	4.8	5.0	6.1
Year	30.05	.45	.59	65.1	68.5	78.0	60.4	69.2	100	30	59	59	81	74	.522	.528	41.34	.....	4.7	4.6	5.8

JUPITER, FLA.

[Lat. 26° 57′ N.; long. 80° 7′ W.; gravity corr., —.05.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	30.14	30.28	29.87	60.7	62.8	70.5	54.7	62.6	79	38	56	58	85	83	.448	.481	2.78	1.32	4.6	3.4	4.4
February	30.11	.31	.83	70.5	71.5	77.1	66.0	71.6	82	45	66	66	86	83	.638	.638	2.47	1.30	4.5	2.8	5.5
March	30.01	.28	.73	68.2	69.7	77.0	62.1	69.6	84	51	62	62	82	78	.555	.555	1.19	.60	3.9	2.3	4.1
April	30.03	.30	.68	70.5	71.4	78.2	63.3	70.8	88	39	62	62	76	74	.555	.555	2.95	1.15	4.2	3.7	5.1
May	29.99	.19	.84	73.7	74.1	82.2	66.5	74.4	89	58	69	70	85	86	.707	.732	6.30	2.60	3.6	3.8	4.5
June	29.96	.13	.85	79.3	77.4	85.6	72.3	79.0	92	68	75	74	88	90	.866	.838	4.17	1.00	4.4	5.4	5.9
July	30.06	.17	.93	80.7	78.7	86.3	74.3	80.3	90	70	77	76	88	91	.926	.896	9.80	3.40	5.0	4.5	5.8
August	30.02	.14	.86	81.5	79.6	87.1	74.0	80.6	90	68	77	76	87	90	.926	.896	4.20	1.20	4.7	4.1	4.7
September	30.01	.16	.94	79.8	78.7	84.7	73.2	79.0	90	69	76	75	88	89	.896	.866	11.77	1.90	5.3	6.5	6.1
October	30.00	.27	.66	72.8	73.4	79.9	67.3	73.6	86	55	68	68	85	84	.684	.684	8.38	2.20	4.9	4.4	5.8
November	30.07	.30	.84	69.0	70.3	77.1	64.3	70.7	82	46	64	65	83	84	.595	.616	2.16	1.06	3.9	3.8	5.0
December	30.16	.35	.98	69.0	70.0	76.3	65.0	70.6	86	51	66	66	88	88	.638	.638	1.45	.48	6.1	5.1	6.6
Year	30.05	.35	.66	73.0	73.1	80.2	66.9	73.6	92	38	68	68	85	85	.703	.700	57.62	.....	4.6	4.2	5.3

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

HURON, S. DAK.

[H = 1,310 feet; h_t = 63 feet; h_r = 56 feet; h_a = 55 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.64 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	10.5	N.	36	N.	0	18	0	0	10	11	5	5	13	0	14	7	10	4	0	12	0	0	11	0	31	0	0
February	11.7	NW.	48	N.	2	15	0	1	14	7	1	3	15	0	10	11	7	9	6	12	0	0	24	0	28	0	0
March	12.0	NW.	35	NE.	0	5	3	1	20	5	0	1	27	0	6	10	15	12	7	19	0	0	17	0	30	0	0
April	14.0	SE.	42	NW.	2	11	2	2	19	5	4	4	13	0	10	10	10	11	8	2	2	0	0	0	10	2	0
May	15.2	S.	50	S.	4	12	6	6	12	21	3	1	7	0	12	9	10	5	4	3	0	0	0	1	2	3	0
June	16.2	SE.	56	SE.	5	7	6	4	21	10	0	6	6	0	4	14	12	12	9	0	2	1	0	1	0	8	0
July	11.7	SE.	44	NW.	2	9	5	6	21	8	2	1	9	1	11	17	3	4	2	0	0	0	0	0	0	6	0
August	11.8	SE.	44	NW.	1	14	3	1	26	4	2	1	11	0	12	18	1	9	4	0	0	0	0	3	0	9	3
September	16.8	SE.	63	SE.	9	3	1	3	31	7	0	6	7	2	13	12	5	7	4	0	0	0	0	7	1	4	6
October	14.9	NW.	66	SE.	6	2	0	0	20	7	1	9	23	0	20	4	7	5	4	0	0	0	0	0	12	0	0
November	14.1	SE.	46	SE.	5	5	3	1	22	6	0	7	14	2	9	13	8	8	6	13	0	1	16	0	28	0	0
December	14.0	NW.	46	NW.	2	3	0	2	15	12	2	9	18	1	14	11	6	6	5	7	0	0	14	0	31	0	0
Year	13.6	SE.	....	.....	38	104	29	21	231	103	20	53	163	6	135	136	94	92	59	68	4	2	82	12	173	32	9

INDIANAPOLIS, IND.

[H = 766 feet; h_t = 75 feet; h_r = 72 feet; h_a = 87 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.64 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.6	W.	24	NW.	0	6	6	7	2	11	10	13	7	0	8	3	20	11	8	7	0	0	7	0	19	0	0
February	8.8	W.	28	S.	0	2	3	4	4	13	4	16	9	1	6	9	13	13	12	4	0	0	6	0	16	0	0
March	8.2	NE.	30	NW.	0	4	14	11	7	3	5	12	6	0	4	6	21	21	16	8	0	0	5	0	14	1	0
April	7.0	N.	24	NW.	0	12	4	7	6	10	5	8	7	1	7	13	10	16	10	4	0	0	1	0	5	3	0
May	5.8	N.	26	NW.	0	15	11	4	8	5	8	0	7	4	13	6	12	12	8	0	1	0	0	0	0	2	0
June	5.7	S.	24	SW.	0	1	9	9	11	16	5	3	5	1	7	12	11	14	13	0	0	0	0	5	0	4	0
July	5.8	Calm. NW.	20	NW.	0	5	4	3	6	17	7	5	11	4	11	15	5	9	6	0	0	0	0	3	0	1	0
August	4.3	Calm. NW.	26	NW.	0	5	3	2	3	9	13	5	14	8	9	11	11	13	12	0	0	0	0	6	0	6	0
September	4.5	Calm. S.	24	SW.	0	8	6	2	7	12	10	1	9	5	18	8	4	4	4	0	0	0	0	11	0	1	0
October	6.1	Calm. NW.	36	NW.	0	3	5	2	11	11	5	2	18	5	11	11	9	6	5	0	1	2	0	0	2	1	0
November	7.8	SE.	28	W.	0	6	2	2	18	6	8	8	10	0	5	8	17	14	12	4	0	0	4	0	11	1	0
December	8.2	SE.	24	SE.	0	1	4	4	19	14	7	7	4	2	13	7	11	12	10	2	0	1	2	0	13	1	0
Year	6.6	S.	....	.....	0	68	71	57	102	127	87	80	107	31	112	109	144	145	116	29	2	3	25	25	80	21	0

JACKSONVILLE, FLA.

[H = 43 feet; h_t = 69 feet; h_r = 56 feet; h_a = 84 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.64 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.5	NW.	40	W.	1	3	8	4	7	8	3	5	15	9	10	14	7	6	5	0	0	1	0	0	1	0	0
February	8.6	S.	56	W.	2	6	5	9	3	11	6	11	1	4	3	16	9	6	2	0	0	4	0	0	1	0	0
March	8.3	NE.	34	SW.	0	7	17	8	0	2	6	14	7	5	5	14	12	13	11	0	0	2	0	0	0	1	0
April	7.1	E.	30	W.	0	7	10	11	10	4	6	0	5	2	6	12	12	6	6	0	0	0	0	0	0	5	0
May	6.6	NE.	37	NW.	0	10	13	4	8	6	13	5	3	1	11	11	9	10	9	0	0	0	0	2	0	6	0
June	7.3	SW.	35	W.	0	4	12	5	13	6	17	3	0	0	5	14	11	12	12	0	0	0	0	15	0	9	0
July	7.3	SW.	33	SW.	0	6	4	8	7	6	21	4	3	3	2	12	17	16	10	0	0	0	0	13	0	12	0
August	6.6	Calm. SE.	41	SW.	1	6	5	3	20	7	10	3	5	3	2	21	8	14	11	0	0	0	0	19	0	16	0
September	5.6	Calm. NE.	26	W.	0	21	26	5	2	0	2	0	2	2	5	11	14	11	9	0	0	2	0	0	0	2	0
October	6.7	N.	24	W.	0	29	8	2	1	1	6	3	10	2	15	7	9	8	8	0	0	1	0	0	0	0	0
November	6.8	Calm. N.	28	SW.	0	23	1	8	8	1	7	4	5	3	8	11	11	9	8	0	0	3	0	0	0	0	0
December	7.2	Calm. N.	30	NE.	0	16	16	2	6	6	5	0	11	0	7	11	13	11	6	0	0	3	0	0	0	0	0
Year	7.0	N.	....	.....	4	138	125	69	85	58	102	52	67	34	79	154	132	122	97	0	0	16	0	49	2	51	0

JUPITER, FLA.

[H = 28 feet; h_t = 13 feet; h_r = 1 foot; h_a = 30 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.64 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	10.1	NW.	25	S.	0	5	2	5	9	10	1	11	19	0	16	9	6	8	6	0	0	0	0	0	0	0	0
February	11.7	S.	36	S.	0	2	3	8	15	15	3	5	5	0	11	7	10	11	10	0	0	0	0	0	0	1	0
March	10.0	S.	25	S.	0	5	3	7	1	17	4	12	12	1	17	9	5	7	6	0	0	0	0	0	0	1	0
April	10.5	E.	32	SW.	0	9	2	20	4	3	7	3	12	0	7	17	6	8	8	0	0	0	0	0	0	0	0
May	10.2	S.	36	N.	0	9	6	9	6	10	8	7	7	0	14	8	9	11	11	0	0	0	0	0	0	1	0
June	6.4	S.	24	S.	0	3	5	12	7	15	7	9	0	2	8	11	11	16	14	0	0	0	0	1	0	10	0
July	7.5	SE.	36	NW.	0	0	3	8	20	18	3	6	4	0	7	19	5	15	15	0	0	0	0	1	0	14	0
August	7.6	SE.	36	SE.	0	6	5	10	20	9	4	5	3	0	8	19	4	15	9	0	0	0	0	0	0	4	0
September	8.1	NE.	36	NE.	0	5	19	16	9	2	2	5	2	0	5	15	10	21	20	0	0	0	0	0	0	10	0
October	11.1	NE.	36	NE.	0	12	16	8	1	5	3	4	13	0	10	10	11	13	13	0	0	0	0	0	0	2	0
November	12.0	NE.	42	NW.	1	10	12	12	4	4	3	7	8	0	10	16	4	10	5	0	0	0	0	0	0	0	0
December	10.4	E.	25	NE.	0	3	8	19	7	8	8	5	4	0	1	20	10	17	10	0	0	0	0	0	0	0	0
Year	9.6	E.	....	.....	1	69	84	134	103	116	53	79	89	3	114	160	91	152	127	0	0	0	0	2	0	43	0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

KANSAS CITY, MO.

[Lat. 39° 5′ N.; long. 94° 37′ W.; gravity corr., —.01.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.06	29.38	28.29	29.5	34.9	41.0	26.9	34.0	59	16	22	27	74	75	.113	.143	2.20	1.39	4.9	4.6	5.5
February	28.99	.43	.31	25.0	31.9	40.1	20.2	30.2	69	— 4	18	23	77	71	.093	.119	2.08	1.41	4.1	4.2	4.5
March	28.98	.45	.59	28.9	37.9	41.6	26.2	33.9	64	2	25	30	87	76	.130	.164	3.82	1.26	6.7	5.5	6.5
April	28.98	.37	.64	50.2	61.3	66.2	47.6	56.9	84	24	43	49	78	67	.277	.347	3.62	1.16	5.7	4.3	4.8
May	29.06	.46	.69	55.6	64.8	70.4	51.2	60.8	88	40	49	52	79	65	.347	.387	6.85	2.28	4.9	4.9	5.5
June	28.89	.11	.58	66.8	74.5	79.5	63.4	71.4	93	53	63	65	89	75	.575	.616	6.19	1.87	5.9	5.7	6.7
July	29.02	.29	.77	67.2	76.3	81.0	63.7	72.4	88	54	62	64	83	68	.555	.595	2.34	.86	5.4	4.6	5.3
August	29.01	.28	.66	66.9	76.7	83.0	64.0	73.5	95	46	62	65	84	70	.555	.616	6.25	1.99	3.5	3.5	4.2
September	29.09	.29	.88	63.0	74.3	81.9	61.2	71.6	91	46	56	59	79	60	.448	.499	.36	.28	3.3	3.5	3.5
October	29.12	.52	.87	48.3	59.9	67.3	46.1	56.7	88	32	41	41	75	53	.256	.256	.85	.29	4.0	1.8	3.0
November	29.06	.64	.54	33.1	41.0	47.3	30.8	39.0	79	7	27	30	79	68	.143	.164	.95	.24	5.3	4.0	5.7
December	28.98	.60	.40	34.1	41.6	48.6	30.7	39.6	64	10	27	30	76	65	.143	.164	1.54	.52	4.1	3.0	4.9
Year	29.02	.64	.29	47.4	56.3	62.3	44.3	53.3	95	— 4	41	45	80	68	.303	.339	37.05	.....	4.8	4.1	4.9

KEELER, CAL.

[Lat. 36° 35′ N.; long. 117° 50′ W.; gravity corr., —.02.]

January	26.42	26.66	26.11	35.5	47.1	51.2	31.4	41.3	66	23	18	16	51	31	.093	.085	.....	.....	1.4	3.0	3.0
February	26.21	.60	25.61	37.2	47.0	57.3	32.6	42.0	65	20	25	26	64	47	.130	.137	.98	.58	3.5	4.3	4.9
March	26.26	.46	.85	43.3	57.5	61.3	39.3	50.3	74	30	28	26	56	33	.150	.137	.16	.12	2.8	4.4	4.6
April	26.24	.47	.96	49.1	64.9	68.9	46.0	57.4	84	32	26	30	42	31	.137	.164	.10	.06	2.3	4.0	4.1
May	26.20	.36	.82	55.9	72.2	75.4	52.9	64.2	86	36	34	37	47	29	.195	.219	.37	.22	2.0	4.6	4.4
June	26.17	.41	.95	61.9	82.0	84.4	59.6	72.0	97	46	36	37	41	22	.211	.219	.30	.29	2.2	3.4	3.2
July	26.26	.45	26.09	72.1	90.9	94.3	69.0	81.6	100	57	42	50	36	26	.266	.360	.06	.06	1.5	3.0	2.7
August	26.29	.43	.11	72.7	90.6	94.2	69.3	81.8	101	60	46	53	41	29	.310	.402	.02	.02	.9	2.4	1.9
September	26.27	.47	25.77	63.5	78.2	83.0	59.1	71.0	98	43	40	46	44	33	.246	.310	.19	.16	.3	3.2	3.1
October	26.38	.58	26.10	55.2	72.8	76.3	51.8	64.0	83	35	33	40	43	33	.187	.246	.04	.04	1.6	2.0	2.6
November	26.39	.60	.10	47.0	59.8	65.1	43.3	54.2	73	35	28	30	48	33	.150	.164	.....	.....	1.1	2.7	3.1
December	26.38	.81	25.73	33.7	42.3	48.4	29.3	38.8	63	17	20	16	57	38	.103	.085	.31	.23	1.6	4.0	4.2
Year	26.29	.81	.61	52.3	67.0	71.2	48.6	59.9	101	17	31	34	48	32	.182	.211	2.53	.....	1.8	3.4	3.5

KEOKUK, IOWA.

[Lat. 40° 22′ N.; long. 91° 26′ W.; gravity corr., —.01.]

January	29.44	29.90	28.51	28.0	32.8	39.1	24.2	31.6	55	6	22	26	80	76	.113	.137	2.59	1.98	3.9	4.6	4.4
February	29.37	.84	.66	23.4	31.1	38.6	19.7	29.2	70	— 6	18	25	80	78	.093	.120	1.32	1.18	3.2	4.4	4.2
March	29.36	.80	.84	28.1	34.0	38.1	24.1	31.1	65	— 1	23	28	81	78	.119	.150	2.27	.51	7.5	6.4	7.0
April	29.35	.66	29.07	46.5	56.4	63.2	44.9	54.0	80	22	41	45	78	67	.256	.298	5.06	1.46	3.2	4.3	4.3
May	29.44	.80	.12	56.0	64.7	70.6	50.4	60.5	85	36	47	49	74	60	.322	.347	2.56	1.33	2.8	4.1	3.2
June	29.25	.54	28.89	67.8	74.9	80.0	65.0	71.5	94	49	63	67	85	78	.575	.660	3.66	.88	4.9	5.4	5.3
July	29.38	.62	29.14	66.3	75.3	80.3	60.9	70.6	89	52	59	61	77	63	.499	.536	2.77	.88	3.4	2.8	3.8
August	29.36	.59	.05	65.3	73.8	80.9	61.3	71.1	95	47	59	62	81	69	.499	.555	6.10	1.90	3.4	4.0	4.4
September	29.46	.70	.24	62.6	73.2	82.2	59.5	70.8	92	45	55	58	76	59	.432	.481	.49	.40	1.7	1.7	2.3
October	29.47	.91	.21	47.4	56.0	65.0	44.0	54.5	89	33	39	41	74	61	.237	.256	1.49	.69	3.0	2.3	2.4
November	29.42	30.03	28.82	31.6	36.7	42.0	28.2	35.6	68	— 1	26	28	79	74	.137	.150	3.60	1.10	5.6	5.1	5.5
December	29.37	29.98	.55	33.0	39.4	46.1	29.7	37.9	62	6	25	30	74	71	.130	.164	1.33	.48	4.4	3.5	4.1
Year	29.39	30.03	.51	46.5	54.0	60.6	42.5	51.5	95	— 6	40	43	78	70	.284	.322	33.24	.....	3.9	4.0	4.2

KEY WEST, FLA.

[Lat. 24° 34′ N.; long. 81° 49′ W.; gravity corr., —.05.]

January	30.15	30.30	29.96	65.3	66.9	70.5	62.3	66.4	79	53	59	60	80	79	.499	.517	2.22	1.81	5.5	3.2	4.9
February	30.10	.29	.88	72.4	73.2	77.2	69.2	73.2	81	58	66	66	82	79	.638	.638	.74	.47	4.5	1.7	4.0
March	30.03	.26	.80	72.3	73.0	76.6	68.9	72.8	81	64	64	64	75	74	.595	.595	1.93	.75	4.1	2.6	4.0
April	30.04	.32	.77	72.5	73.6	77.2	69.1	73.2	82	54	64	65	75	74	.595	.616	.81	.55	4.4	2.5	4.3
May	30.02	.15	.88	76.2	76.9	80.7	73.2	77.0	86	67	66	66	72	71	.638	.638	.24	.24	3.8	2.8	2.9
June	29.97	.14	.86	81.7	81.7	86.4	77.1	81.8	89	73	72	74	74	77	.783	.838	2.76	1.02	5.5	5.2	5.3
July	30.06	.15	.97	83.9	83.6	88.4	79.4	83.9	90	70	74	74	72	74	.838	.838	.88	.74	5.8	4.8	5.2
August	30.02	.13	.86	83.2	82.8	87.8	76.5	82.2	92	70	74	75	75	79	.838	.866	10.13	4.04	5.8	4.9	5.8
September	30.01	.11	.91	81.6	82.0	86.5	75.4	81.0	90	70	74	74	78	76	.838	.838	10.39	2.29	6.2	3.9	5.6
October	30.01	.22	.74	75.3	76.1	79.4	72.5	76.0	86	67	68	68	79	77	.684	.684	6.42	1.24	5.9	4.2	5.7
November	30.08	.23	.90	72.2	73.4	76.5	69.4	73.0	81	61	66	65	81	76	.638	.616	2.02	1.14	4.8	3.7	4.6
December	30.15	.28	30.00	71.3	72.8	76.5	68.7	72.6	83	62	66	66	84	80	.638	.638	1.21	.72	6.1	3.1	5.2
Year	30.05	.32	29.74	75.7	76.3	80.3	71.8	76.1	92	53	68	68	77	76	.685	.694	39.75	.....	5.2	3.6	4.8

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

KANSAS CITY, MO.

[H = 963 feet; h_t = 78 feet; h_r = 81 feet; h_a = 95 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.64 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		Mi.																								
January	8.2	SW.	32	NW.	0	8	6	6	4	6	16	5	10	1	10	10	11	8	7	8	0	0	6	0	26	1	0
February	9.8	NW.	32	SE.	0	5	2	5	9	9	3	5	18	0	11	11	6	10	5	13	0	0	7	0	24	0	0
March	10.4	NW.	30	S.	0	14	10	5	8	3	3	6	12	1	6	12	13	14	12	14	1	1	7	0	20	1	0
April	9.1	SE.	30	SE.	0	7	8	7	10	1	10	5	12	0	12	8	10	12	11	3	2	0	1	0	3	12	0
May	7.6	NE.	42	SW.	2	11	17	3	12	7	5	0	3	4	9	12	10	11	9	0	1	2	0	0	0	6	0
June	7.0	SE.	24	SE.	0	8	5	6	19	3	3	1	11	4	4	13	13	18	15	0	0	6	0	2	0	9	0
July	6.9	SE.	30	SW.	0	10	8	1	23	3	5	2	9	1	7	17	7	12	9	0	0	4	0	0	0	10	0
August	7.6	SE.	48	N.	1	11	5	2	20	8	4	1	6	5	11	16	4	8	6	0	1	2	0	6	0	12	0
September	8.1	SE.	25	S.	0	6	5	3	31	7	4	0	4	0	17	7	6	4	3	0	0	0	0	5	0	2	0
October	8.8	SE.	28	SE.	0	16	1	0	21	10	1	4	6	3	21	5	5	7	4	1	0	6	0	0	0	1	0
November	9.9	N.	30	S.	0	15	5	1	15	5	7	1	11	0	9	11	10	7	4	3	0	0	5	0	14	2	0
December	10.5	S.	33	W.	0	3	6	2	9	17	10	6	9	0	15	9	7	8	6	4	0	0	2	0	16	3	0
Year	8.7	SE.	....	.....	3	114	78	41	181	79	71	36	111	19	132	131	102	119	91	46	5	21	28	13	103	59	0

KEELER, CAL.

[H = 3,622 feet; h_t = 29 feet; h_r = 20 feet; h_a = 28 feet.]

January	8.0	N.	43	NW.	1	13	9	13	7	3	3	1	9	4	19	8	4	0	0	0	0	0	0	0	19	0	0
February	8.5	NW.	46	NW.	5	3	9	7	7	8	5	7	9	1	11	7	10	5	4	3	0	0	0	0	14	0	0
March	8.6	NW.	54	NW.	3	5	7	12	7	6	9	0	12	4	13	8	10	4	1	1	1	0	0	0	3	1	0
April	7.1	S.	36	S.	0	6	6	9	6	10	8	2	9	4	14	11	5	3	1	1	0	0	0	0	0	0	0
May	8.0	N.	38	N.	0	13	5	6	7	11	9	5	3	3	13	11	7	7	2	0	0	0	0	0	0	1	0
June	6.5	E.	36	SW.	0	3	4	13	6	7	8	6	11	2	18	6	6	2	1	0	0	0	0	7	0	0	0
July	5.5	E.	40	NE.	1	8	6	13	5	10	8	3	5	4	19	7	5	1	1	0	0	0	0	24	0	3	0
August	5.0	S.	36	S.	0	8	4	12	2	12	9	1	6	8	25	3	3	1	0	0	0	0	0	27	0	1	0
September	8.5	S.	49	SW.	3	12	2	9	6	13	5	2	8	3	19	5	6	4	2	0	0	0	0	5	0	1	0
October	4.4	E.	26	NE.	0	7	4	19	6	10	1	0	2	13	19	9	3	1	1	0	0	0	0	0	0	1	0
November	4.4	E.	30	N.	0	10	2	22	6	1	0	0	6	13	19	1	10	0	0	0	0	0	0	0	0	0	0
December	9.2	N.	50	N.	2	16	6	14	7	5	0	1	10	3	15	7	9	3	2	2	0	0	0	0	18	0	0
Year	7.0	E.	....	.....	15	104	64	149	72	96	65	28	90	62	204	83	78	31	15	7	1	0	0	63	54	8	0

KEOKUK, IOWA.

[H = 613 feet; h_t = 64 feet; h_r = 56 feet; h_a = 72 feet.]

January	5.7	SW.	30	NW.	0	4	5	5	4	6	12	5	10	11	15	6	10	9	6	5	0	1	5	0	26	0	0
February	8.1	NW.	36	NW.	0	2	1	4	7	7	9	6	17	3	14	5	9	6	5	7	0	2	10	0	23	0	0
March	8.0	NW.	25	W.	0	9	10	8	1	4	8	6	13	3	5	7	19	15	11	9	0	0	11	0	21	0	0
April	7.5	NW.	30	E.	0	3	6	9	7	6	6	9	13	1	14	7	9	12	8	1	0	2	0	0	5	7	0
May	4.9	E.	36	SW.	0	9	9	9	7	7	4	4	6	7	19	6	6	8	7	0	0	0	0	0	0	2	0
June	5.6	SE.	36	SW.	0	6	5	8	10	9	9	5	6	2	8	11	11	14	9	0	0	1	0	2	0	9	0
July	5.2	NW.	27	W.	0	5	4	7	6	7	8	8	14	3	15	13	3	8	7	0	0	0	0	0	0	2	0
August	4.4	S.	35	NW.	0	12	2	4	3	12	10	3	11	5	14	11	6	14	13	0	1	2	0	4	0	12	0
September	4.7	SW.	25	NW.	0	6	1	8	4	11	12	3	5	10	20	10	0	4	3	0	0	1	0	9	0	2	0
October	6.4	NW.	26	NW.	0	1	3	4	4	10	10	8	18	4	21	6	4	6	5	1	0	1	0	0	0	1	0
November	7.8	NW.	28	NW.	0	2	5	5	7	8	6	8	19	0	11	5	14	13	11	4	0	1	4	0	18	2	0
December	7.9	S.	32	SW.	0	3	3	2	13	14	8	13	3	3	17	6	8	6	5	3	0	2	3	0	18	0	0
Year	6.4	NW.	....	.....	0	62	54	73	73	101	102	78	135	52	173	93	99	115	90	30	1	13	33	15	111	38	0

KEY WEST, FLA.

[H = 22 feet; h_t = 41 feet; h_r = 44 feet; h_a = 50 feet.]

January	11.4	NE.	32	NW.	0	10	19	11	13	2	2	1	4	0	11	12	8	4	4	0	0	1	0	0	0	1	0
February	11.0	SE.	44	NW.	3	4	10	21	18	0	1	0	2	0	12	15	1	4	4	0	0	1	0	0	0	0	0
March	9.8	SE.	33	N.	0	1	12	8	24	2	2	1	11	1	17	9	5	4	4	0	0	0	0	0	0	2	0
April	11.8	E.	38	N.	0	10	10	21	4	1	4	3	7	0	14	12	4	5	4	0	0	0	0	0	0	1	0
May	10.3	NW.	36	NE.	0	9	12	16	1	0	1	2	21	0	22	4	5	1	1	0	0	0	0	0	0	0	0
June	6.2	SE.	24	S.	0	6	5	13	22	8	1	3	0	2	8	15	7	10	10	0	0	0	0	0	0	3	0
July	8.5	SE.	24	NE.	0	1	0	26	27	6	0	0	2	0	8	19	4	3	2	0	0	0	0	0	0	5	0
August	6.4	SE.	30	NE.	0	4	8	18	20	3	4	0	5	0	8	15	8	20	16	0	0	0	0	1	0	10	0
September	7.4	E.	31	NE.	0	0	13	30	14	2	1	0	0	0	4	20	6	18	18	0	0	0	0	0	0	11	0
October	13.1	NE.	36	NE.	0	8	31	10	1	2	4	1	4	1	8	10	13	9	9	0	0	0	0	0	0	4	0
November	12.0	NE.	37	NE.	0	8	32	9	6	1	1	0	3	0	11	14	5	4	3	0	0	0	0	0	0	1	0
December	10.8	NE.	35	N.	0	7	20	21	6	3	0	0	4	1	7	19	5	8	6	0	0	1	0	0	0	0	0
Year	9.9	E.	....	.....	3	68	172	204	156	30	21	11	63	5	130	164	71	90	81	0	0	3	0	1	0	38	0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

KITTY HAWK, N. C.

[Lat. 36° 0′ N.; long. 75° 42′ W.; gravity corr., —.02.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	.....	.....	.....	.....	.....	a 54.7	a 38.8	a 46.8	a 68	a 26	.....	.....	.....	.....	.....	.....	3.50	1.50	.....	.....	.....
February	30.13	b 30.68	b 29.46	c 48.4	c 51.3	60.6	44.0	52.3	76	30	c 43	c 45	c 82	g 80	c .277	c .298	3.92	.88	6.4	6.0	7.1
March	30.03	.51	.33	44.0	47.6	53.5	39.9	46.7	72	26	39	41	82	80	.237	.256	5.33	1.01	6.7	5.6	7.4
April	30.06	.45	.57	56.5	57.2	66.4	48.6	57.5	84	36	49	51	77	80	.347	.373	1.40	.72	3.4	1.9	4.1
May	30.03	.47	.68	61.8	d 61.3	69.1	55.3	62.2	81	45	57	d 58	85	d 89	.465	d .481	2.97	.68	4.7	e 4.6	5.8
June	f 29.93	.13	.71	73.7	73.1	g 79.2	a 67.3	h 73.2	g 92	a 57	g 66	68	g 79	84	g .638	i .684	3.23	1.63	g 2.1	c 2.9	3.2
July	30.03	.26	.70	74.3	74.7	80.6	69.6	75.1	89	62	68	68	81	81	.684	.684	6.56	1.64	6.3	5.4	6.7
August	30.00	.19	.68	77.7	77.5	84.5	73.0	78.8	91	68	72	72	82	84	.783	.783	7.63	1.52	5.8	4.7	5.5
September	i 30.12	.34	.84	j 73.5	j 73.0	77.8	69.2	73.5	87	62	j 66	j 65	j 76	j 77	.638	j .616	2.05	.96	j 3.9	j 2.6	3.1
October	30.06	.54	.70	59.8	60.4	65.7	54.9	60.3	84	40	53	54	80	80	.402	.417	2.79	1.76	5.6	3.8	5.3
November	30.16	.73	.62	50.5	51.3	56.6	45.8	51.2	71	28	43	45	77	79	.277	.298	2.23	.98	5.5	3.7	5.7
December	30.25	.58	.76	48.0	49.9	56.7	42.2	49.4	72	28	40	42	75	76	.246	.266	1.03	.46	3.3	3.2	4.1
Year	.....	.73	.33	.....	.....	67.1	54.0	60.6	92	26	.....	.....	.....	.....	.416	.430	42.64	.....	.....	.....	.....

KNOXVILLE, TENN.

[Lat. 35° 56′ N.; long. 83° 58′ W.; gravity corr., —.02.]

January	29.09	29.43	28.44	34.7	41.8	46.4	33.1	39.8	71	22	30	33	85	72	.164	.187	4.36	1.58	6.9	5.8	6.5
February	29.07	.42	.60	43.0	49.4	54.6	39.7	47.2	72	21	38	38	85	67	.228	.228	10.15	2.97	7.5	5.2	6.4
March	29.01	.46	.62	41.2	48.6	53.0	38.3	45.6	71	21	35	37	80	68	.203	.219	7.87	1.44	8.1	5.2	7.0
April	29.04	.24	.72	54.3	63.0	70.5	49.5	59.9	86	29	46	44	76	55	.310	.287	2.06	.92	5.3	4.5	4.6
May	29.05	.39	.85	58.5	67.1	74.3	53.4	63.8	88	38	51	49	78	56	.373	.347	1.91	.71	5.0	4.8	4.9
June	28.97	.15	.66	71.7	77.3	86.9	66.3	76.6	93	57	66	66	82	69	.638	.638	3.33	.78	4.8	5.4	5.3
July	29.05	.22	.76	69.2	75.4	82.3	64.4	73.4	90	58	62	62	80	64	.555	.555	4.66	1.76	5.0	4.5	5.2
August	29.02	.16	.74	69.1	75.8	83.7	66.0	74.8	90	53	65	66	87	72	.616	.638	2.92	.96	4.7	3.7	4.6
September	29.15	.37	.94	64.0	73.4	81.9	60.3	71.1	90	52	59	61	84	66	.499	.536	1.59	.78	3.0	1.7	2.9
October	29.14	.48	.80	48.3	58.8	66.7	45.3	56.0	85	31	42	43	80	57	.266	.277	.50	.28	2.7	2.3	2.8
November	29.13	.65	.59	40.4	48.6	55.8	37.6	46.7	75	18	33	33	76	56	.187	.187	3.01	.96	4.8	3.4	4.8
December	29.20	.50	.79	36.6	46.4	53.4	33.9	43.6	70	20	32	35	84	66	.180	.203	4.25	1.10	4.1	2.8	4.2
Year	29.08	.65	.44	52.6	60.5	67.5	49.0	58.2	93	18	47	47	81	64	.352	.358	46.61	.....	5.2	4.1	4.9

LA CROSSE, WIS.

[Lat. 43° 49′ N.; long. 91° 15′ W.; gravity corr., —.0.]

January	29.28	29.86	28.73	19.4	26.7	32.7	16.6	24.6	44	4	15	21	84	79	.081	.108	2.10	1.32	5.6	4.3	6.0
February	29.21	.70	.51	12.6	19.8	26.3	8.0	17.2	50	—24	6	12	77	74	.052	.070	1.33	.39	4.0	2.9	5.1
March	29.26	.72	.62	20.9	29.4	35.3	18.5	26.9	53	— 8	14	21	76	72	.077	.108	2.58	1.14	6.4	6.8	6.5
April	29.22	.59	.81	43.8	52.9	57.7	40.3	49.0	80	18	36	38	77	62	.211	.228	2.14	.76	5.0	4.3	5.6
May	29.33	.77	.96	50.7	64.9	71.0	45.9	58.4	83	32	39	38	65	39	.237	.228	.69	.40	3.5	3.3	4.5
June	29.17	.51	.90	62.9	69.7	77.3	58.8	68.0	90	44	56	58	78	68	.448	.481	5.62	2.44	5.4	5.4	6.0
July	29.26	.53	29.02	60.1	71.5	77.6	56.1	66.8	87	47	55	58	83	64	.432	.481	2.92	.97	4.4	3.7	4.9
August	29.23	.48	28.91	60.5	71.4	78.6	57.4	68.0	97	39	56	58	84	64	.448	.481	1.48	.70	4.5	3.6	5.3
September	29.32	.61	29.02	50.2	71.5	79.3	55.4	67.4	93	37	53	57	81	60	.402	.465	1.77	1.11	2.8	3.3	4.1
October	29.32	.78	.02	43.5	52.5	59.4	41.0	50.2	78	27	36	39	77	63	.211	.237	1.87	.84	5.0	3.7	5.3
November	29.27	.79	28.79	26.1	32.0	38.6	21.8	30.2	58	— 4	19	23	75	70	.098	.110	1.21	.54	5.7	5.0	6.2
December	29.16	.85	.36	29.7	34.6	39.9	24.1	32.0	70	— 2	22	26	73	72	.113	.137	3.27	1.63	5.5	4.4	5.5
Year	29.25	.86	.36	40.8	49.7	56.1	37.0	46.6	97	—24	34	37	78	66	.234	.262	26.98	.....	4.9	4.2	5.4

LANDER, WYO.

[Lat. 42° 50′ N.; long. 108° 45′ W.; gravity corr., —.01.]

January	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
June	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
August	24.74	24.97	24.49	52.6	76.2	82.1	48.9	65.5	90	38	41	41	66	31	.256	.256	1.00	.68	2.7	5.6	4.2
September	24.69	.98	.21	44.1	64.6	72.9	40.5	56.7	85	29	34	36	68	39	.195	.211	.77	.57	2.7	5.2	4.4
October	24.77	25.05	.41	30.0	46.4	58.5	26.6	42.6	72	10	22	27	74	50	.113	.143	1.50	1.50	2.3	2.4	2.4
November	24.63	24.88	.31	21.4	30.8	42.6	16.6	29.6	69	—15	13	18	71	63	.074	.093	.76	.28	3.7	4.4	4.2
December	24.53	25.08	.06	14.6	22.8	34.3	8.7	21.5	50	—25	6	11	68	63	.052	.067	.56	.42	4.4	2.7	3.6
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

a For 19 days.
b For 25½ days.
c For 25 days.
d For 30 days.
e For 19 days.
f For 20½ days.
g For 21 days.
h For 18 days.
i For 20 days.
j For 28 days.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

KITTY HAWK, N. C.

[$H = 9$ feet; $h_t = 11$ feet; $h_r = 21$ feet; $h_a = 22$ feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		Mi.																								
January	.....	b SW.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	b7	b3	b10	.....	.....	0	0	1	0	0	5	0	0
February	17.2	SW.	50	NW.	2	7	15	8	0	4	16	3	3	0	4	11	13	16	13	0	0	4	0	0	3	2	0
March	18.2	NE.	54	E.	9	7	21	11	2	3	3	7	8	0	3	12	16	20	16	0	0	2	0	0	2	3	0
April	14.1	SW.	50	NE.	2	5	8	9	7	7	12	7	5	0	15	13	2	10	6	0	0	0	0	0	0	0	0
May	14.1	NE.	48	NE.	6	8	16	7	7	11	11	1	1	0	10	7	14	14	11	0	1	7	0	0	0	7	0
June	12.2	SE.	36	NE.	0	3	6	7	13	2	8	1	1	1	c11	c6	c1	3	3	0	0	1	d0	d1	e0	0	0
July	13.1	SW.	50	SW.	1	7	7	4	14	12	14	4	0	0	6	11	14	18	12	0	0	0	0	0	0	3	0
August	11.5	SW.	44	SW.	2	4	6	8	9	9	17	6	7	0	9	11	11	18	17	0	0	0	0	4	0	5	0
September	12.1	NE.	44	NE.	2	4	18	17	8	3	5	1	2	2	20	5	5	7	6	0	0	0	0	0	0	0	0
October	18.3	NE.	78	NE.	8	5	22	2	2	3	8	8	10	2	9	11	11	10	7	0	0	0	0	0	0	0	0
November	17.6	NE.	53	NE.	6	8	14	7	5	6	5	5	8	2	9	8	13	11	5	1	0	0	0	0	2	0	0
December	13.9	SW.	48	NW.	5	7	11	1	1	5	22	6	7	2	16	7	8	12	5	1	0	0	0	0	2	0	0
Year	.....	NE.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	119	105	118	.....	.....	2	1	15	0	5	14	20	0

KNOXVILLE, TENN.

[$H = 980$ feet; $h_t = 80$ feet; $h_r = 71$ feet; $h_a = 88$ feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.2	SW.	30	SW.	0	7	10	11	3	1	12	11	3	4	7	10	14	14	12	3	0	1	1	0	16	1	0
February	6.3	E.	30	SW.	0	9	7	11	3	1	10	5	7	3	7	8	13	17	16	2	0	0	0	0	7	1	0
March	5.5	NE.	26	W.	0	7	14	12	1	4	3	13	5	3	5	10	16	19	16	2	0	0	0	0	4	1	0
April	5.5	W.	28	SW.	0	10	9	4	7	6	5	13	3	3	12	11	7	12	9	3	0	0	0	0	3	2	0
May	4.5	N.	26	SW.	0	12	11	9	5	4	8	9	3	1	11	11	9	11	7	0	0	1	0	0	0	4	0
June	4.4	E.	28	E.	0	6	4	15	4	3	11	10	4	3	10	13	7	18	15	0	0	0	0	10	0	11	0
July	4.2	Calm. SW.	28	SW.	0	8	11	7	4	3	12	9	4	4	11	12	8	9	8	0	0	0	0	0	0	1	0
August	3.9	Calm. W.	25	N.	0	5	9	9	4	4	10	14	3	4	9	17	5	19	7	0	0	2	0	1	0	2	0
September	3.2	Calm. E.	16	S.	0	4	14	16	2	1	5	5	0	13	20	7	3	6	4	0	0	0	0	0	0	0	0
October	4.8	Calm. NE.	22	N.	0	7	14	11	1	1	3	11	3	11	19	9	3	5	2	0	0	0	0	0	2	0	0
November	5.3	Calm. N.	38	SW.	0	11	14	9	1	1	7	10	2	5	10	13	7	8	6	0	0	0	1	0	5	0	0
December	4.3	Calm. NE.	30	S.	0	6	11	10	1	2	6	6	2	18	15	9	7	9	8	0	0	0	0	0	14	0	0
Year	4.8	NE.	.....	.....	0	92	128	124	36	31	92	116	39	72	136	130	93	147	110	10	0	4	2	11	51	23	0

LA CROSSE, WIS.

[$H = 720$ feet; $h_t = 70$ feet; $h_r = 61$ feet; $h_a = 78$ feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	5.3	S.	26	N.	0	10	4	0	0	18	1	8	6	15	9	9	13	8	6	11	0	0	15	0	30	0	0
February	6.1	S.	26	W.	0	7	3	3	4	13	4	5	9	8	11	12	5	11	11	10	0	2	16	0	27	0	0
March	5.6	NE.	26	E.	0	6	13	6	6	3	7	8	7	6	8	8	15	10	7	9	1	0	13	0	27	1	0
April	6.9	S.	32	W.	0	11	1	3	8	11	3	5	8	10	10	10	10	9	7	1	1	1	1	0	6	1	0
May	5.7	S.	24	N.	0	7	3	1	8	20	2	3	6	12	13	14	4	5	4	0	0	1	0	0	0	2	0
June	5.4	S.	24	NW.	0	10	6	3	8	18	0	5	4	6	4	17	9	11	11	0	1	1	0	0	0	7	0
July	4.8	S.	24	S.	0	9	4	2	3	17	3	7	8	9	9	20	2	10	8	0	1	1	0	0	0	3	0
August	4.5	S.	20	N.	0	14	1	0	6	21	3	3	6	8	7	17	7	8	6	0	0	4	0	2	0	1	0
September	5.4	S.	27	W.	0	3	0	0	5	28	2	4	1	17	16	10	4	4	4	0	0	3	0	6	0	3	1
October	6.6	S.	28	NW.	0	9	1	2	11	19	1	4	7	8	12	8	11	8	6	0	0	4	0	0	0	1	0
November	6.7	S.	26	NW.	0	10	1	1	3	16	3	16	5	5	7	13	10	8	4	5	0	2	7	0	22	0	0
December	7.8	S.	30	SW.	0	5	1	1	6	28	6	7	2	6	10	10	11	9	8	3	0	1	7	0	20	0	0
Year	5.9	S.	.....	.....	0	101	38	22	68	212	35	75	69	110	116	148	101	101	82	39	4	20	59	8	138	19	1

LANDER, WYO.

[$H = 5,377$ feet; $h_t = 16$ feet; $h_r = 16$ feet; $h_a = 34$ feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
June	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
August	4.1	SW.	46	SW.	1	9	5	2	5	10	14	4	6	7	14	12	5	4	2	0	1	0	0	1	0	0	0
September	5.0	S.	42	SW.	1	5	4	7	5	20	6	6	2	5	11	15	4	5	3	1	0	0	0	0	3	0	0
October	2.9	SW.	36	SW.	0	1	3	2	2	3	31	5	2	13	23	7	1	1	1	2	0	0	0	0	26	0	0
November	2.9	SW.	30	SW.	0	1	3	5	9	8	18	6	3	7	12	16	2	6	4	8	0	1	7	0	27	0	0
December	4.3	SW.	50	SW.	1	8	1	6	2	11	25	6	0	3	15	13	3	3	3	5	1	0	14	0	30	0	0
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

a From 8 a. m. and 8 p. m. observations. b For 20 days. c For 18 days. d For 16 days. e For 19 days.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

LANSING, MICH.

[Lat. 42° 44′ N.; long. 84° 32′ W.; gravity corr., —.01.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.10	29.71	28.20	24.3	27.5	32.5	21.2	26.8	51	7	21	23	89	82	.108	.119	1.33	.79	8.7	6.7	8.0
February	29.05	.58	.41	25.3	29.1	35.5	21.9	28.7	55	—1	20	22	82	76	.103	.113	2.49	1.12	7.6	5.8	6.9
March	29.12	.60	.58	25.4	30.5	36.7	22.0	29.4	56	—1	19	23	77	74	.098	.119	2.69	1.30	6.9	6.6	7.3
April	29.08	.38	.76	43.4	49.7	58.2	38.2	48.2	81	18	34	37	71	64	.195	.219	2.35	1.08	5.7	5.8	5.5
May	29.18	.41	.94	50.6	57.9	68.0	43.4	55.7	82	26	39	42	66	57	.237	.266	1.95	1.39	3.6	4.1	3.8
June	29.06	.38	.73	64.6	68.9	79.1	56.4	67.8	91	37	56	57	76	68	.448	.465	2.46	.91	5.2	5.1	5.3
July	29.11	.39	.89	62.4	69.1	78.1	53.4	65.8	87	44	53	52	73	56	.402	.387	2.77	1.49	4.2	3.7	4.4
August	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
September	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
October	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

LEAVENWORTH, KANS.

[Lat. 39° 19′ N.; long. 94° 57′ W.; gravity corr., —.01.]

January	29.22	29.54	28.48	27.9	34.2	40.7	25.7	33.2	58	12	24	27	86	77	.125	.143	2.66	1.66	5.8	4.9	6.5
February	29.15	.61	.44	25.9	31.1	40.1	19.5	29.8	67	—2	19	22	82	69	.098	.113	1.39	.79	4.2	3.8	6.0
March	29.14	.61	.71	28.9	37.3	41.8	26.6	34.2	68	1	24	28	83	72	.125	.150	3.16	.63	6.4	6.0	7.3
April	29.12	.54	.85	49.9	61.4	67.0	46.9	57.0	84	25	43	46	79	60	.277	.310	3.95	1.40	5.0	4.4	5.8
May	29.21	.60	.80	54.8	65.0	70.7	50.7	60.7	89	38	49	51	81	64	.347	.373	7.32	2.27	5.5	5.3	5.8
June	29.03	.27	.69	67.2	74.4	79.8	63.6	71.7	92	53	62	64	86	72	.555	.595	6.12	1.40	6.3	5.4	a6.2
July	29.16	.44	.92	67.5	77.3	81.9	63.3	72.6	91	55	61	63	81	63	.536	.575	2.19	.57	4.1	4.2	a4.1
August	29.14	.43	.88	66.6	77.6	83.6	63.5	73.6	96	45	61	64	84	63	.536	.595	6.45	2.10	3.0	2.8	2.9
September	29.22	.41	29.01	62.5	74.6	82.0	59.5	70.8	92	41	57	59	82	59	.465	.490	.57	.43	3.0	2.6	3.9
October	29.26	.67	.00	46.4	58.1	67.6	44.2	55.9	89	30	39	41	77	56	.237	.256	1.39	.97	3.4	1.7	3.2
November	29.20	.80	28.66	32.1	41.1	47.3	30.1	38.7	80	8	25	29	77	64	.130	.157	.80	.24	5.4	3.8	6.0
December	29.13	.75	.52	33.2	41.2	48.1	30.5	39.3	64	10	26	30	74	65	.137	.164	1.71	.63	4.7	3.2	5.2
Year	29.16	.80	.44	46.7	56.1	62.6	43.7	53.1	96	—2	41	44	81	65	.297	.328	37.71	.....	4.7	4.0	5.2

LEXINGTON, KY.

[Lat. 38° 2′ N.; long. 84° 33′ W.; gravity corr., —.02.]

January	28.96	29.40	28.25	33.2	38.1	42.7	31.5	37.1	62	20	30	30	88	75	.164	.164	4.70	1.60	7.7	6.2	6.0
February	28.95	.37	.40	38.5	42.3	48.9	33.3	41.1	72	8	34	34	86	73	.195	.195	4.36	1.11	7.8	5.5	6.2
March	28.99	.35	.48	36.1	42.3	47.3	33.5	40.4	67	15	32	36	87	78	.100	.211	7.63	1.45	6.9	6.9	7.1
April	28.93	.10	.55	52.8	59.1	66.3	48.5	57.4	87	28	45	46	76	65	.208	.310	1.85	.37	5.4	4.4	4.9
May	28.98	.20	.74	57.7	63.5	69.5	53.3	61.4	84	36	47	47	68	56	.322	.322	1.17	.41	6.1	5.4	5.0
June	28.86	.05	.51	72.0	75.8	84.8	66.8	75.8	91	58	66	66	81	73	.638	.638	5.33	1.18	5.7	6.5	5.8
July	28.94	.13	.70	69.2	74.4	81.9	63.7	72.8	90	51	61	61	75	65	.536	.536	3.23	1.45	4.0	4.6	5.5
August	28.91	.07	.65	68.9	74.6	80.7	64.9	72.8	92	52	63	64	82	72	.575	.595	6.48	2.34	6.0	5.3	6.1
September	29.05	.24	.87	65.8	73.4	81.7	61.7	71.7	91	50	58	58	76	60	.481	.481	1.26	.45	3.8	2.2	3.6
October	29.02	.30	.75	49.0	58.2	65.7	45.2	55.4	88	33	40	39	72	52	.246	.237	1.33	.76	3.2	3.6	5.8
November	28.96	.55	.35	38.6	45.6	51.4	34.9	43.2	74	14	30	32	73	61	.164	.180	5.35	1.79	6.5	6.0	7.8
December	29.09	.53	.55	37.3	45.3	51.2	34.6	42.9	65	18	29	32	74	62	.157	.180	2.82	.59	5.2	3.9	4.6
Year	28.96	.55	.25	51.6	57.7	64.3	47.7	56.0	92	8	45	45	78	66	.330	.337	45.51	.....	5.7	5.0	5.7

LITTLE ROCK, ARK.

[Lat. 34° 45′ N.; long. 92° 6′ W.; gravity corr., —.03.]

January	29.80	30.14	29.07	37.4	44.6	48.7	35.4	42.0	63	26	34	39	89	82	.195	.237	7.68	3.57	6.0	5.0	5.9
February	29.72	.16	.22	42.0	50.4	53.6	39.7	46.6	78	22	38	44	86	79	.228	.287	3.99	1.39	7.5	5.5	6.9
March	29.68	.19	.28	41.7	51.1	54.6	34.3	47.0	70	23	37	45	85	81	.219	.298	5.43	1.80	7.1	5.4	6.4
April	29.71	.06	.46	57.5	67.1	73.5	54.0	63.8	83	30	51	57	80	71	.373	.465	3.29	1.59	5.0	5.1	4.9
May	29.74	.06	.43	62.6	71.5	76.5	58.6	67.6	89	47	57	59	82	67	.465	.499	2.38	1.46	4.8	6.0	5.7
June	29.59	29.81	.27	74.2	81.1	87.8	69.8	78.8	96	64	68	68	83	67	.684	.684	2.81	.99	6.0	5.7	6.0
July	29.70	.86	.41	72.8	78.8	85.1	68.1	76.6	93	60	67	68	82	70	.660	.684	9.23	3.71	5.3	5.7	6.4
August	29.70	.88	.40	76.7	78.9	85.6	67.4	76.5	94	52	66	69	87	72	.638	.707	2.06	1.21	3.4	3.3	4.5
September	29.78	.95	.63	66.7	77.0	85.2	63.8	74.5	93	52	61	63	82	63	.536	.575	.87	.83	3.3	3.9	3.8
October	29.84	30.16	.62	51.5	64.3	73.4	49.1	61.2	88	37	43	46	75	53	.277	.310	1.30	1.16	1.7	1.5	2.2
November	29.80	.43	.32	44.2	51.1	58.3	39.8	49.0	82	20	37	37	77	61	.219	.219	5.32	2.29	5.7	4.4	5.5
December	29.81	.22	.26	42.2	50.4	56.2	39.0	47.6	70	23	35	38	78	64	.203	.228	6.40	3.42	4.9	5.1	5.4
Year	29.74	.43	.07	55.3	63.9	69.9	52.0	60.9	96	20	50	53	82	69	.391	.433	51.41	.....	5.1	4.6	5.3

a From 8 a. m. and 8 p. m. observations.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

LANSING, MICH.

[H=883 feet; h_t=45 feet; h_r=43 feet; h_a=55 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	5.9	SW.	24	SW.	0	4	10	2	8	9	13	6	9	1	3	7	21	13	8	14	0	2	14	0	29	0	0
February	b 8.6	W.	27	W.	0	4	3	1	6	12	10	13	6	1	4	10	14	14	11	14	0	2	9	0	26	0	0
March	9.0	NE.	28	SW.	0	5	21	7	3	7	5	9	4	1	6	7	18	19	11	14	0	0	11	0	25	0	0
April	7.8	SW.	32	SW.	0	9	3	8	4	5	12	8	11	0	9	12	9	14	10	4	0	0	0	0	7	3	0
May	6.4	SW.	26	NW.	0	9	11	4	6	1	14	7	8	2	17	7	7	11	6	0	0	0	0	0	3	1	0
June	5.5	NE.	19	NE.	0	5	12	8	10	9	9	5	1	1	8	13	9	12	9	0	0	3	0	2	0	8	0
July	5.5	S.	24	SW.	0	4	6	2	2	15	14	9	9	1	14	13	4	8	6	0	0	0	0	0	0	4	0
August																											
September																											
October																											
November																											
December																											
Year																											

LEAVENWORTH, KANS.

[H = 842 feet; h_t = 56 feet; h_r = 50 feet; h_a = 66 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	5.9	NW.	30	NW.	0	7	1	4	6	8	6	6	20	4	10	5	16	9	6	7	1	1	5	0	26	0	0
February	7.6	NW.	25	N.	0	10	3	4	7	9	5	3	15	0	7	10	11	6	3	9	0	4	8	0	24	0	0
March	8.6	NW.	30	SE.	0	13	8	6	6	5	4	3	16	1	6	8	17	13	13	9	0	0	6	0	19	1	0
April	7.3	NW.	36	SW.	0	7	3	5	11	11	2	3	12	6	8	10	12	10	9	2	1	2	1	0	3	5	0
May	5.5	SE.	24	SW.	0	6	12	10	15	10	2	1	4	2	9	8	14	12	11	0	2	2	0	0	0	5	0
June	5.8	SE.	22	S.	0	11	3	6	15	12	0	1	11	1	5	13	12	17	17	0	0	1	0	4	0	7	0
July	5.6	SE.	30	S.	0	7	9	3	19	9	5	2	6	2	c14	c12	c5	12	8	0	0	0	0	1	0	6	0
August	5.5	S.	38	N.	0	12	3	5	7	16	5	1	8	5	c18	c12	c1	7	6	0	0	0	0	7	0	4	0
September	5.8	S.	24	S.	0	5	1	5	9	25	5	0	4	5	17	8	5	5	3	0	0	2	0	8	0	1	0
October	6.5	NW.	30	S.	0	6	0	0	7	12	2	2	21	12	21	7	3	6	4	0	0	5	0	0	1	0	0
November	7.6	N.	28	S.	0	12	4	5	5	12	5	2	11	4	7	12	11	6	6	2	0	3	6	0	15	0	0
December	8.1	S.	28	NW.	0	7	1	2	8	19	8	4	10	3	13	10	8	7	6	3	0	2	2	0	17	1	0
Year	6.6	S.	....	.....	0	103	48	55	115	148	49	28	138	45	135	115	115	110	92	32	4	22	28	20	105	30	0

LEXINGTON, KY.

[H =989 feet; h_t =75 feet; h_r =67 feet; h_a =122 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	14.0	SW.	60	SW.	3	1	9	0	11	0	23	4	14	0	11	6	14	13	9	9	0	....	4	0	19	1	0
February	17.1	NW.	53	SE.	6	1	8	2	12	5	11	0	17	0	7	9	12	17	15	4	0	....	4	0	11	0	0
March	15.5	NW.	50	NW.	4	2	13	3	17	1	5	1	20	0	7	7	17	18	14	4	0	....	3	0	11	3	0
April	13.0	NW.	40	S.	1	2	11	1	13	2	11	2	17	1	12	11	7	12	9	5	0	....	0	0	4	3	0
May	10.9	NW.	60	SE.	3	3	16	0	7	3	7	3	23	0	10	14	7	10	6	0	0	....	0	0	0	2	0
June	9.7	NE.	60	SW.	2	3	20	3	8	10	10	2	4	0	5	18	7	16	13	0	0	....	0	2	0	0	0
July	9.6	NW.	42	SW.	1	3	13	1	9	5	15	0	16	0	10	10	11	8	8	0	0	....	0	1	0	0	0
August	8.3	NW.	36	NW.	0	1	6	1	9	4	19	1	20	1	10	8	13	13	10	0	0	....	0	3	0	0	0
September	8.1	SW.	24	NW.	0	5	11	0	10	10	13	1	9	1	21	5	4	4	3	0	0	....	0	4	0	0	0
October	11.8	SW.	36	NW.	0	2	11	0	8	13	14	1	13	0	12	13	6	6	4	0	0	....	0	0	0	1	0
November	14.9	S.	60	SW.	5	3	9	4	8	17	5	4	9	1	3	7	20	12	9	3	0	....	2	0	11	0	0
December	15.9	SE.	54	SW.	5	1	4	2	19	18	9	3	6	0	14	6	11	8	8	3	0	....	0	0	13	0	0
Year	12.4	NW.	....	.....	30	27	131	17	131	88	142	22	168	4	122	114	129	137	108	28	0	....	13	10	69	10	0

LITTLE ROCK, ARK.

[H = 309 feet; h_t = 75 feet; h_r = 54 feet; h_a = 72 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.0	W.	34	SW.	0	4	7	3	4	4	11	13	10	6	9	7	15	11	10	1	0	1	0	0	8	2	0
February	7.5	NE.	26	S.	0	6	11	4	10	10	3	5	6	1	6	8	14	12	9	2	0	0	0	0	7	3	0
March	7.3	NE.	27	W.	0	8	11	8	7	10	1	9	8	0	8	8	15	12	11	2	0	0	0	0	8	5	0
April	6.6	SE.	28	SW.	0	5	4	6	10	10	10	4	9	2	10	10	10	11	7	0	2	1	0	0	1	5	0
May	5.7	NE.	26	S.	0	9	14	1	8	8	9	3	8	2	7	11	13	10	9	0	0	0	0	0	0	5	0
June	5.1	SW.	32	NW.	0	3	7	7	9	7	20	4	2	1	6	14	10	8	7	0	0	0	0	7	0	9	0
July	4.6	NE.	23	N.	0	5	13	7	9	10	4	5	8	1	7	11	13	11	10	0	0	0	0	9	0	11	0
August	4.5	SW.	27	NW.	0	2	9	8	4	5	19	0	12	3	10	17	4	9	8	0	0	1	0	8	0	5	0
September	3.6	SE.	29	NW.	0	9	11	4	12	6	3	1	3	11	14	12	4	3	3	0	0	0	0	7	0	2	0
October	5.2	NW.	21	NW.	0	7	8	2	6	4	8	1	15	11	23	5	3	3	3	0	0	0	0	0	0	0	0
November	6.1	SE.	30	NW.	0	12	7	4	13	6	3	9	3	3	10	8	12	8	7	2	0	1	0	0	9	2	0
December	7.1	S.	27	W.	0	6	7	1	10	17	7	6	7	1	12	6	13	8	7	0	0	1	0	0	8	0	0
Year	5.8	NE.	....	.....	0	76	109	55	102	97	98	60	91	42	122	117	126	106	91	7	2	5	0	31	41	49	0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

b For 267 hours.

c From 8 a. m. and 8 p. m. observations.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

LOS ANGELES, CAL.

[Lat. 34° 3′ N.; long. 118° 15′ W.; gravity corr., —.03.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.74	29.96	29.50	47.6	59.5	68.4	43.2	55.8	80	34	29	37	50	46	.157	.219	.25	.25	1.7	2.0	2.6
February	29.65	.96	.16	46.9	55.7	61.5	44.3	52.9	71	33	38	43	75	66	.228	.277	8.56	2.75	3.9	4.6	5.2
March	29.64	.79	.34	50.5	61.1	68.3	48.5	58.4	82	40	44	46	80	61	.287	.310	.41	.22	3.0	3.3	4.1
April	29.64	.79	.50	50.3	61.9	70.7	48.0	59.4	86	42	44	49	80	63	.287	.347	1.26	.85	2.1	4.0	4.5
May	29.63	.74	.48	54.6	62.2	69.4	53.7	61.6	74	47	51	51	88	68	.373	.373	.31	.30	6.9	3.6	6.0
June	29.52	.72	.42	56.0	69.4	77.9	54.8	66.4	89	49	52	54	87	59	.387	.417	.00	.00	2.2	1.0	2.9
July	29.55	.66	.45	62.2	75.7	86.4	61.0	73.7	109	54	58	60	87	59	.481	.517	T	T	3.7	1.3	3.4
August	29.57	.68	.48	64.1	76.4	86.9	62.8	74.8	96	54	60	63	86	63	.517	.575	.00	.00	3.5	.7	3.2
September	29.56	.70	.26	62.6	74.6	85.4	60.6	73.0	100	52	56	58	79	59	.448	.481	.06	.06	2.4	.6	2.2
October	29.65	.76	.39	56.3	66.1	77.9	54.1	66.0	89	46	48	55	78	72	.334	.432	.00	.00	3.8	1.6	3.5
November	29.69	.83	.58	51.4	61.1	74.8	47.5	61.2	85	40	41	53	71	76	.256	.402	.00	.00	2.4	1.1	2.2
December	29.78	30.12	.38	46.7	54.9	63.3	42.3	52.8	75	33	30	38	59	56	.164	.228	1.99	1.04	2.2	2.3	2.8
Year	29.64	.12	.16	54.1	64.9	74.2	51.7	63.0	109	33	46	51	77	62	.326	.382	12.84	.....	3.2	2.2	3.6

LOUISVILLE, KY.

[Lat. 38° 15′ N.; long. 85° 45′ W.; gravity corr., —.02.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	29.50	29.95	28.73	34.7	39.6	45.9	32.6	39.2	62	24	27	29	74	68	.143	.157	5.21	1.90	6.3	5.9	6.4
February	29.47	.92	.88	38.9	43.1	49.7	33.9	41.8	74	7	31	30	74	62	.172	.164	3.94	.92	6.9	6.1	6.3
March	29.44	.91	29.00	36.4	43.4	49.7	33.7	41.7	69	16	28	32	74	66	.150	.180	6.57	1.62	6.1	7.3	6.7
April	29.44	.66	.03	53.5	61.5	69.9	49.1	59.5	88	28	43	44	69	55	.277	.287	2.42	.69	4.8	6.0	4.8
May	29.49	.80	.24	58.0	66.3	72.8	53.9	63.4	84	38	46	47	66	53	.310	.322	1.56	.64	4.7	4.6	4.5
June	29.36	.54	.00	72.3	79.4	87.3	68.1	77.7	95	59	61	64	70	61	.536	.595	2.00	.47	4.9	4.9	5.0
July	29.46	.66	.16	68.8	77.9	84.1	63.9	74.0	92	56	57	58	67	53	.465	.481	4.08	1.64	3.1	4.8	4.1
August	29.44	.62	.15	68.6	76.8	82.8	65.1	74.0	93	50	60	62	76	61	.517	.555	5.42	2.82	5.3	4.0	5.8
September	29.58	.77	.39	64.0	76.2	83.4	60.2	71.8	92	51	54	57	71	54	.417	.465	1.99	1.09	2.4	2.4	3.3
October	29.57	.91	.32	49.7	60.3	68.9	46.5	57.7	86	31	40	42	69	52	.246	.266	.35	.14	3.0	2.2	4.2
November	29.54	30.14	28.80	38.7	47.6	52.8	35.9	44.4	71	15	31	36	75	66	.172	.211	6.23	2.40	5.7	6.2	7.3
December	29.58	.04	.98	38.8	47.2	52.7	36.4	44.6	65	21	32	36	76	66	.180	.211	3.65	1.18	5.3	4.2	5.5
Year	29.49	.14	.73	51.9	59.9	66.7	48.3	57.5	95	7	42	45	72	60	.299	.324	43.42	.....	4.9	4.9	5.3

LYNCHBURG, VA.

[Lat. 37° 25′ N.; long. 79° 9′ W.; gravity corr., —.02.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	29.37	29.77	28.61	35.0	38.5	45.9	31.1	38.5	64	19	27	30	74	72	.143	.164	6.04	2.36	3.8	3.3	4.6
February	29.39	.91	.77	40.6	44.7	51.1	36.1	43.6	74	17	33	33	77	66	.187	.187	5.59	1.40	7.6	6.4	6.8
March	29.36	.81	.82	36.8	41.9	47.3	33.9	40.6	64	19	28	32	73	69	.150	.180	7.44	1.65	7.0	6.3	7.1
April	29.32	.69	.92	53.5	61.0	69.0	47.3	58.2	87	30	39	42	61	52	.237	.266	3.39	1.91	4.3	3.9	4.3
May	29.34	.70	29.10	59.2	63.5	72.4	52.0	62.2	90	34	48	48	69	62	.334	.334	5.95	1.92	6.0	5.9	6.0
June	29.27	.53	28.92	71.6	74.5	84.5	63.0	73.8	94	52	62	62	72	68	.555	.555	1.70	.40	4.0	5.6	5.2
July	29.34	.60	29.11	70.2	73.6	82.9	63.4	73.2	89	55	61	61	74	67	.536	.536	5.46	1.52	4.2	5.0	4.7
August	29.32	.51	.05	71.0	72.7	82.0	66.2	74.1	94	54	65	66	82	80	.616	.638	5.76	2.34	7.0	7.0	6.6
September	29.45	.70	.25	66.9	70.3	82.0	61.3	71.6	93	48	61	63	81	78	.536	.575	1.69	1.01	4.1	1.8	3.5
October	29.41	.80	.05	49.1	54.3	65.3	44.4	54.8	85	30	40	43	74	68	.246	.277	.62	.28	5.7	2.6	4.4
November	29.45	30.07	28.60	38.9	44.7	54.6	34.5	44.6	69	16	33	34	81	68	.187	.195	2.35	.63	4.6	2.8	4.8
December	29.50	29.89	29.02	37.0	45.0	55.4	33.2	44.3	71	16	30	32	78	62	.164	.180	3.98	1.59	5.6	3.2	4.8
Year	29.38	30.07	28.60	52.5	57.1	66.0	47.2	56.6	94	16	44	46	75	68	.324	.340	49.97	.....	5.3	4.5	5.2

MANCHESTER, N. H.

[Lat. 42° 58′ N.; long. 71° 28′ W.; gravity corr., 0.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	29.74	30.36	28.44	22.3	26.7	33.7	17.5	25.6	53	0	17	20	81	76	.089	.103	6.10	1.49	6.4	5.6	6.1
February	29.78	.40	29.06	24.2	28.8	35.8	18.2	27.0	56	—7	17	20	77	73	.089	.103	3.26	.73	6.1	5.1	5.8
March	29.85	.28	.09	28.5	31.8	38.9	23.6	31.2	55	2	17	19	63	63	.089	.098	3.94	1.25	5.3	5.3	5.2
April	29.68	.30	28.83	43.6	46.3	57.4	35.4	46.4	80	22	30	32	61	58	.164	.180	1.63	.08	4.6	4.8	4.5
May	29.75	.19	29.44	53.0	54.9	67.0	43.4	55.2	88	32	37	39	56	58	.219	.237	1.90	.83	4.0	5.4	4.9
June	29.68	29.96	.45	63.3	64.7	75.6	52.9	64.2	96	37	52	54	68	69	.387	.417	3.58	1.14	5.9	5.6	5.4
July	29.75	30.15	.46	66.6	66.8	77.5	56.6	67.0	90	46	56	56	69	70	.448	.448	3.14	.87	3.9	4.6	4.6
August	29.74	.04	.42	66.3	67.9	78.8	59.4	69.1	92	48	58	60	75	76	.481	.517	2.01	.62	5.9	5.8	5.6
September	29.88	.16	.53	61.9	63.3	75.3	53.7	64.5	88	40	54	56	77	77	.417	.448	1.61	.40	3.5	4.0	3.5
October	29.78	.44	.36	44.3	47.3	58.6	38.2	48.4	89	22	36	38	73	72	.211	.228	2.16	.89	5.4	4.0	4.9
November	29.89	.59	.14	34.7	37.0	46.8	29.1	38.0	65	6	26	27	73	69	.137	.143	1.74	.79	3.6	5.1	4.5
December	29.83	.23	.02	31.3	37.1	44.7	27.4	36.0	60	8	24	24	74	62	.125	.125	3.27	1.05	4.9	4.7	4.9
Year	29.78	.50	28.44	45.0	47.7	57.5	38.0	47.7	96	—7	35	37	71	69	.238	.254	34.34	.....	5.0	5.0	5.0

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

LOS ANGELES, CAL.

[H=330 feet; h_t=74 feet; h_r=66 feet; h_a=76 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a.m. and 8 p.m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Aurora.
	Miles.		Mi.																								
January	4.1	W.	19	NW.	0	16	10	2	1	2	3	17	11	0	18	11	2	1	1	0	0	0	0	0	0	0	0
February	4.9	W.	24	E.	0	11	7	9	3	5	1	18	2	0	10	7	11	12	10	0	0	0	0	0	0	0	0
March	4.1	W.	24	W.	0	6	11	10	1	2	4	18	10	0	14	10	7	4	4	0	0	2	0	0	0	0	0
April	3.8	W.	16	E.	0	6	11	7	1	0	3	26	2	4	10	13	7	3	2	0	0	8	0	0	0	0	0
May	3.9	W.	18	W.	0	1	7	11	3	3	3	31	3	0	4	20	7	2	1	0	0	6	0	0	0	0	0
June	3.8	W.	16	W.	0	3	9	8	3	0	5	27	0	5	15	14	1	0	0	0	0	12	0	0	0	0	0
July	3.5	W.	15	W.	0	0	8	9	1	4	4	27	4	5	8	23	0	0	0	0	0	12	0	9	0	0	0
August	3.5	W.	13	W.	0	4	6	8	1	1	1	30	5	6	9	22	0	0	0	0	0	8	0	5	0	0	0
September	3.5	W.	20	NW.	0	1	15	5	3	2	5	23	3	3	17	13	0	1	1	0	0	2	0	9	0	0	0
October	2.8	W.	16	W.	0	6	10	6	0	0	3	24	7	6	10	20	1	0	0	0	0	9	0	0	0	0	0
November	2.8	W.	12	W.	0	7	16	1	3	0	1	22	7	3	20	10	0	0	0	0	0	3	0	0	0	0	0
December	4.7	N.	28	N.	0	14	12	2	2	1	4	14	11	2	19	9	3	4	3	0	0	0	0	0	0	0	0
Year	3.8	W.	....	.....	0	75	122	78	22	20	37	277	65	34	154	172	39	27	22	0	0	62	0	23	0	0	0

LOUISVILLE, KY.

[H=551 feet; h_t=100 feet; h_r=103 feet; h_a=116.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Aurora.
January	8.1	SW.	29	SW.	0	6	9	3	5	5	20	8	5	1	7	11	13	12	9	7	0	2	1	0	16	0	0
February	9.9	S.	40	S.	1	2	3	4	10	10	10	8	9	0	6	10	12	14	11	4	0	0	2	0	12	2	0
March	9.4	NE.	30	SW.	0	4	19	2	8	3	9	13	4	0	7	5	19	16	14	3	0	1	3	0	10	0	0
April	7.6	NE.	36	SW.	0	8	10	4	9	10	5	8	6	0	12	11	7	12	8	1	0	0	0	0	2	4	0
May	6.9	N.	34	S.	0	17	14	3	7	7	5	3	5	1	15	7	9	7	5	0	0	0	0	0	0	3	0
June	6.0	NE.	34	SW.	0	2	16	4	12	8	8	5	0	5	11	8	11	10	9	0	0	0	0	8	0	3	0
July	6.3	NE.	26	W.	0	4	13	5	8	5	8	8	9	2	15	9	7	10	9	0	0	0	0	2	0	4	0
August	5.0	SW.	20	NW.	0	5	7	4	6	7	14	4	9	6	9	12	10	15	11	0	0	0	0	4	0	6	0
September	4.2	NE.	23	W.	0	6	16	6	7	7	7	1	2	8	18	8	4	6	5	0	0	0	0	11	0	1	0
October	7.3	NE.	33	NW.	0	1	13	5	9	8	7	6	12	1	14	11	6	6	3	0	0	0	0	0	1	1	0
November	9.0	SE.	35	W.	0	7	6	2	16	8	9	7	5	0	5	9	16	14	9	4	0	0	0	0	11	1	0
December	9.2	SE.	37	SW.	0	3	7	1	18	16	7	7	1	2	12	8	11	9	8	0	0	0	0	0	11	1	0
Year	7.4	NE.	....	.....	1	65	133	43	115	94	109	78	67	26	131	109	125	131	101	19	0	3	6	25	63	26	0

LYNCHBURG, VA.

[H=685 feet; h_t=82 feet; h_r=76 feet; h_a=88.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Aurora.
January	4.7	W.	24	W.	0	7	4	3	2	2	6	17	11	10	14	6	11	13	11	5	0	10	1	0	16	0	0
February	5.0	NW.	28	NW.	0	8	6	1	4	13	6	2	14	2	5	10	12	16	12	2	0	3	1	0	9	0	0
March	5.6	E.	34	N.	0	8	12	13	7	3	5	3	11	0	5	9	17	16	15	6	0	1	3	0	13	0	0
April	4.8	NW.	25	NW.	0	3	7	6	12	9	7	3	13	0	16	7	7	5	5	1	0	0	0	0	3	1	0
May	4.7	S.	25	NW.	0	8	7	10	4	10	10	3	9	1	8	10	13	19	14	0	0	0	0	1	0	8	0
June	3.3	Calm. W.	42	N.	1	4	6	7	8	9	2	11	1	12	12	10	8	12	10	0	0	1	0	8	0	7	0
July	3.8	Calm. SE.	20	N.	0	3	8	7	10	8	7	12	2	5	13	10	8	10	9	0	0	0	0	0	0	5	0
August	3.0	Calm. SE.	22	SE.	0	1	16	2	7	7	7	9	7	6	3	15	13	20	14	0	0	0	0	4	0	6	0
September	2.7	Calm. SE.	14	E.	0	0	8	10	20	1	4	5	5	7	17	11	2	6	5	0	0	2	0	3	0	1	0
October	4.5	Calm. NW.	30	NW.	0	6	12	3	4	3	10	3	15	6	16	9	6	9	5	0	0	4	0	0	1	0	0
November	4.2	Calm. NW.	32	SE.	0	2	4	6	5	3	9	6	18	7	10	13	7	10	6	1	0	8	1	0	9	0	0
December	4.0	Calm. NW.	24	SE.	0	2	2	2	5	3	13	8	13	14	13	9	9	9	9	0	0	6	0	0	14	0	0
Year	4.2	NW.	....	.....	1	52	92	70	88	71	86	82	119	70	132	119	114	145	115	15	0	35	6	16	65	28	0

MANCHESTER, N. H.

[H=247 feet; h_t=76 feet; h_r=68 feet; h_a=81 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Aurora.
January	5.5	NW.	25	W.	0	14	2	3	5	4	5	6	22	1	8	9	14	16	13	12	0	1	13	0	28	0	0
February	6.2	NW.	25	NW.	0	6	4	1	4	8	3	7	22	1	6	13	9	14	13	10	0	2	11	0	27	0	0
March	7.8	NW.	28	NW.	0	6	13	4	4	3	4	5	21	2	15	5	11	15	9	6	0	2	6	0	22	1	0
April	6.8	NW.	30	NE.	0	3	4	3	6	4	11	5	24	0	13	9	8	8	6	4	0	0	0	0	10	1	0
May	5.2	NW.	30	W.	0	3	7	4	9	9	7	3	19	1	14	8	9	7	5	1	0	0	0	0	0	0	0
June	4.4	NW.	22	SW.	0	4	7	2	7	2	10	2	23	3	8	13	9	8	5	0	0	1	0	2	0	2	0
July	4.5	NW.	19	NW.	0	2	2	1	12	12	11	7	13	2	15	8	8	10	10	0	0	1	0	2	0	1	0
August	4.2	NW.	18	NE.	0	8	6	2	11	6	10	2	12	5	9	11	11	13	7	0	1	1	0	1	0	1	0
September	3.8	NW.	20	W.	0	7	5	1	5	14	3	1	18	6	18	7	5	11	9	0	0	0	0	0	0	2	2
October	5.7	NW.	28	NW.	0	8	6	0	2	6	3	3	31	3	11	11	9	7	6	0	0	3	0	0	6	0	0
November	6.2	NW.	26	W.	0	5	1	2	9	6	9	6	22	0	14	8	8	8	5	3	1	0	2	0	21	0	0
December	6.5	NW.	33	NW.	0	6	1	0	8	5	16	5	17	4	16	4	11	11	9	2	0	5	2	0	20	0	0
Year	5.6	NW.	....	.....	0	72	58	23	82	79	92	52	244	28	147	106	112	128	97	38	2	16	34	5	134	8	2

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

MANISTEE, MICH.

[Lat. 44° 13′ N.; long. 86° 16′ W.; gravity corr., 0.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.35	30.00	28.65	24.6	27.6	31.6	21.1	26.4	41	6	20	22	82	79	.103	.113	2.32	1.15	7.9	6.4	7.3
February	29.28	29.82	.51	23.1	27.2	30.7	19.3	25.0	54	2	18	20	80	76	.093	.103	2.25	.45	7.1	6.5	6.4
March	29.37	.85	.78	24.9	30.6	34.1	22.2	28.2	56	3	19	23	78	76	.098	.119	2.92	.62	7.1	5.3	6.3
April	29.32	.62	.92	41.8	43.8	49.9	36.9	43.4	75	18	35	34	77	71	.203	.195	.91	.42	5.1	4.4	4.0
May	29.43	.72	29.08	48.0	52.6	58.3	41.9	50.1	77	30	36	36	65	54	.211	.211	.12	.08	2.5	1.6	2.4
June	29.30	.67	28.99	63.0	65.0	72.2	56.0	64.1	85	41	53	53	72	68	.402	.402	2.43	1.00	4.5	3.6	3.7
July	29.35	.64	29.18	61.1	64.7	69.8	55.5	62.6	84	44	52	52	73	66	.387	.387	1.86	.74	3.6	4.1	3.7
August	29.32	.52	28.96	62.8	66.1	72.6	58.4	65.2	91	50	56	55	78	69	.448	.432	3.16	.95	5.4	4.3	3.6
September	29.44	.70	29.07	58.7	65.2	71.9	54.9	63.4	89	40	53	54	81	70	.402	.417	2.40	1.64	3.5	2.0	2.4
October	29.43	.87	.08	45.5	50.7	55.6	42.0	48.8	83	30	39	39	78	68	.237	.237	1.95	.98	6.9	4.4	5.1
November	29.35	.84	28.72	33.0	34.1	37.3	29.1	33.2	53	16	28	28	82	80	.150	.150	5.03	1.22	9.5	6.4	8.0
December	29.31	.88	.55	33.3	35.9	39.6	29.7	34.6	54	16	27	28	78	73	.143	.150	3.44	2.12	6.9	4.5	5.2
Year	29.35	30.00	.51	43.3	47.0	51.9	38.9	45.4	91	2	36	37	77	71	.240	.243	28.79	.....	5.8	4.5	4.8

FORT McKINNEY, WYO.

[Lat. 44° 23′, N; long. 106° 46′, W; gravity corr., 0.]

January	25.05	25.30	24.70	28.1	29.7	40.2	21.3	30.8	58	0	20	21	72	70	.103	.108	1.31	1.16	4.3	5.0	4.7
February	24.79	.29	.30	16.6	18.9	28.9	3.2	16.0	54	−25	11	13	78	77	.007	.074	.05	.04	4.8	5.4	5.0
March	24.91	.29	.50	22.8	28.7	37.3	16.1	26.7	60	−14	17	21	78	72	.089	.108	1.06	.52	5.1	6.8	6.0
April	25.00	.40	.50	41.6	50.3	56.2	35.2	45.7	80	10	32	35	70	60	.180	.203	1.13	.64	6.1	6.9	6.3
May	25.07	.30	.70	48.8	58.3	62.5	40.4	51.4	85	15	32	38	58	52	.180	.228	2.08	.54	4.7	7.5	6.4
June	24.94	.26	.56	53.7	61.9	66.9	46.4	56.6	82	35	42	44	68	56	.266	.287	4.14	1.45	5.5	6.8	6.2
July	25.10	.36	.76	62.4	71.9	76.4	53.9	65.2	84	44	50	54	65	56	.360	.417	1.19	.43	2.9	6.1	4.4
August	25.10	.36	.86	62.9	74.9	79.0	55.6	67.3	89	42	48	53	59	50	.334	.402	.78	.22	3.8	4.7	4.4
September	25.06	.36	.56	56.3	63.6	71.6	48.5	60.0	85	33	42	45	62	55	.266	.298	.68	.24	4.2	5.1	4.7
October	25.12	.36	.76	43.1	47.9	58.7	37.9	48.3	73	22	26	30	58	53	.137	.164	.59	.20	4.1	3.7	3.9
November	24.96	.26	.66	29.9	33.4	42.2	22.2	32.2	74	−14	18	20	67	61	.093	.103	.77	.40	5.6	4.5	5.1
December	24.84	.36	.36	27.5	28.3	36.7	19.2	28.0	55	−13	20	20	74	74	.103	.103	.41	.12	3.5	3.2	3.5
Year	25.00	.40	.30	41.1	47.3	54.7	33.3	44.0	89	−25	30	33	67	61	.182	.208	14.19	.....	4.6	5.5	5.0

MARQUETTE, MICH.

[Lat. 46° 34′ N.; long. 87° 24′ W.; gravity corr., 0.]

January	29.21	29.83	28.58	20.7	22.7	27.9	16.0	22.0	40	− 5	15	16	77	75	.061	.085	4.08	.64	7.4	6.8	7.4
February	29.13	.62	.29	14.4	18.7	24.1	9.7	16.9	50	−12	10	14	82	81	.063	.077	3.42	.70	6.4	6.2	6.9
March	29.26	.76	.65	18.4	24.2	29.5	14.2	21.8	46	− 6	12	17	76	73	.070	.089	4.45	.96	6.5	5.5	5.8
April	29.17	.49	.66	39.8	41.9	47.6	31.7	39.6	87	13	31	32	73	71	.172	.180	2.18	.77	5.1	5.1	5.6
May	29.25	.64	.80	48.8	51.0	59.6	38.4	49.0	86	26	37	36	65	60	.219	.211	0.21	.13	3.4	2.5	3.9
June	29.16	.57	.84	57.8	61.6	68.3	49.9	59.1	94	31	50	50	76	67	.360	.360	2.32	.65	4.2	4.8	5.3
July	29.18	.46	.87	59.9	61.0	67.9	51.5	59.7	84	38	50	50	72	70	.360	.360	2.74	1.65	5.3	6.0	5.7
August	29.16	.44	.80	62.6	62.8	69.1	54.5	61.8	86	45	54	55	75	77	.417	.432	4.71	2.06	5.4	4.2	4.9
September	29.22	.48	.73	60.1	62.6	71.7	54.6	63.2	91	43	52	53	77	74	.387	.402	1.21	.63	5.8	3.0	4.9
October	29.22	.71	.77	43.8	46.5	52.8	39.1	46.0	75	30	38	39	79	77	.228	.237	2.56	.80	7.8	5.8	6.9
November	29.14	.64	.52	28.1	30.4	34.7	23.9	29.3	52	2	23	23	80	76	.119	.119	3.32	1.25	7.7	6.6	7.4
December	29.03	.59	.05	29.7	31.4	36.4	23.5	30.0	55	8	23	24	79	75	.119	.125	2.58	1.50	6.7	5.5	6.5
Year	29.18	.83	.05	40.3	42.9	49.1	33.9	41.5	94	−12	33	34	76	73	.216	.223	33.78	.....	6.0	5.2	5.9

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

MANISTEE, MICH.

[H=615 feet; h_t=43 feet; h_r=28 feet; h_a=46 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Wind. Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles		*Mi.*																								
January	6.5	E.	28	W.	0	6	9	11	8	5	9	9	2	3	5	5	21	16	12	17	0	0	14	0	29	0	0
February	10.3	W.	36	SW.	0	7	1	8	8	8	5	15	2	2	7	6	15	16	14	17	0	0	14	0	26	0	0
March	9.0	E.	29	NW.	0	8	5	19	9	6	6	2	6	1	7	7	17	17	13	11	0	0	13	0	26	0	0
April	8.6	S.	24	S.	0	8	3	6	5	11	9	9	7	2	15	9	6	11	5	0	0	0	2	0	6	0	0
May	8.3	S.	24	S.	0	15	3	3	4	17	8	5	6	1	22	8	1	2	2	0	0	3	0	0	3	0	0
June	6.4	E.	18	S.	0	6	6	14	7	8	12	4	1	2	13	12	5	8	6	0	0	1	0	0	0	1	0
July	6.9	S.	21	SW.	0	9	8	3	4	14	13	7	2	2	16	14	1	13	10	0	0	0	0	0	0	0	0
August	6.4	Calm. SW.	21	SW.	0	11	13	5	8	4	13	2	5	1	18	9	4	13	9	0	0	2	0	1	0	0	0
September	7.5	SW.	40	W.	1	5	10	8	9	11	10	2	3	2	23	4	3	6	4	0	0	1	0	0	0	1	1
October	9.4	SE.	32	NE.	0	5	10	6	12	6	8	8	5	2	9	13	9	9	6	0	1	0	0	0	1	0	0
November	10.7	NW.	40	NW.	1	5	7	2	11	3	10	11	10	1	3	5	22	19	17	11	0	1	8	0	17	0	0
December	12.2	SW.	44	SW.	1	1	3	5	9	14	17	6	6	1	9	11	11	13	9	6	0	0	5	0	15	0	0
Year	8.5	SW.	....	.....	3	86	78	90	94	107	120	80	55	20	147	103	115	143	107	62	1	8	56	1	123	2	1

FORT McKINNEY, WYO.

[H=5,000 feet; h_t=15 feet; h_r=36 feet; h_a=40 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	7.8	W.	50	N.	3	17	1	2	3	2	4	25	5	3	12	10	9	5	2	10	0	0	7	0	29	0	0
February	8.1	N.	65	N.	3	17	8	2	2	4	8	10	2	3	11	6	11	2	1	8	0	0	16	0	28	0	0
March	10.2	N.	50	NW.	7	22	4	0	1	6	3	10	9	7	6	13	12	9	4	13	0	0	10	0	30	0	0
April	11.6	N.	48	N.	6	24	2	3	3	10	2	9	5	2	9	5	16	5	2	5	0	0	1	0	11	0	0
May	11.3	N.	40	SE.	1	18	4	4	7	15	3	7	3	1	8	8	15	11	10	0	0	0	0	0	5	1	0
June	8.9	N.	40	S.	1	21	5	4	5	7	7	7	4	0	6	13	11	14	11	0	3	0	0	0	0	6	0
July	8.8	N.	48	NE.	3	17	6	6	2	5	1	14	10	1	12	14	5	18	9	0	3	0	0	0	0	9	0
August	8.8	N.	36	W.	0	19	3	3	2	4	3	17	10	1	14	8	9	10	5	0	0	0	0	0	0	4	0
September	9.5	N.	48	N.	6	14	7	4	3	4	6	14	7	1	13	9	8	8	7	1	0	0	0	0	0	1	0
October	8.5	W.	56	W.	1	7	2	0	3	1	6	32	9	2	16	7	8	6	5	9	0	0	0	0	12	0	0
November	8.7	N.	55	N.	8	16	4	1	2	2	8	14	13	0	10	11	9	7	3	9	0	0	6	0	23	0	0
December	10.6	W.	60	SE.	6	11	0	0	2	3	13	22	11	0	15	11	5	10	5	13	0	0	10	0	26	0	0
Year	9.4	N.	....	.....	45	203	46	29	35	63	64	181	88	21	132	115	118	105	64	68	6	0	50	0	164	21	0

MARQUETTE, MICH.

[H=734 feet; h_t=67 feet; h_r=58 feet; h_a=95 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.9	Calm. NW.	38	SW.	0	8	4	0	3	7	2	6	21	11	3	11	17	22	16	22	0	0	20	0	31	0	0
February	9.2	NW.	38	SW.	0	5	4	2	5	4	1	10	15	10	2	15	11	18	14	18	0	0	22	0	28	0	0
March	7.4	Calm. NW.	36	SE.	0	2	3	6	7	8	1	10	16	9	10	9	12	18	0	18	0	0	17	0	31	0	0
April	9.3	Calm. NW.	49	W.	1	4	4	3	6	3	5	4	20	11	10	9	11	8	7	6	0	1	4	0	13	0	2
May	11.3	SW.	36	S.	0	11	4	3	8	5	11	8	12	0	14	11	6	4	3	0	0	1	0	0	6	1	0
June	8.5	Calm. N.	33	S.	0	9	9	5	5	11	5	4	11	1	10	10	10	10	8	0	0	2	0	2	1	6	0
July	8.5	Calm. N.	29	S.	0	13	4	2	6	4	7	10	11	5	6	14	11	14	7	0	0	1	0	0	0	4	0
August	6.8	Calm. NE.	46	W.	1	4	8	3	5	4	7	8	14	9	10	15	6	15	12	0	0	1	0	0	0	5	1
September	11.4	SW.	42	S.	1	3	3	1	4	11	17	7	14	0	11	13	6	10	6	0	0	1	0	2	0	2	3
October	10.3	N.	34	SW.	0	12	2	1	3	12	11	9	12	0	7	8	16	14	12	3	0	0	0	0	2	0	0
November	10.7	NW.	40	SW.	1	5	0	1	3	10	9	17	15	0	5	7	18	18	13	15	0	1	9	0	20	0	0
December	12.4	S.	39	SW.	0	1	2	2	6	19	9	13	10	0	8	8	15	14	10	15	0	0	8	0	24	0	0
Year	9.4	NW.	....	.....	4	77	47	29	61	98	85	106	171	56	96	130	139	165	122	97	0	8	80	4	156	18	6

a By eye observation at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

MEMPHIS, TENN.

[Lat. 35° 9′ N.; long. 90° 3′ W.; gravity corr., —.03.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.79	30.13	29.08	38.0	43.8	48.4	36.1	42.2	64	28	36	38	92	81	.211	.228	7.33	3.96	6.6	5.7	6.7
February	29.73	.12	.28	43.8	49.8	55.0	40.4	47.7	74	25	41	42	91	76	.256	.266	4.07	1.29	7.1	5.7	6.4
March	29.68	.15	.28	42.6	51.0	55.4	40.5	48.0	76	26	40	40	90	70	.246	.246	7.37	2.85	6.3	6.6	6.0
April	29.71	.00	.46	58.5	66.7	73.5	54.9	64.2	86	33	54	53	86	62	.417	.402	2.72	1.20	5.2	4.3	3.8
May	29.74	.02	.44	63.0	71.9	77.7	58.7	68.2	91	45	59	57	87	61	.499	.465	1.75	1.28	4.8	4.6	3.7
June	29.59	29.82	.31	75.3	80.3	88.8	70.2	79.5	97	62	72	69	89	71	.783	.707	4.74	1.31	5.2	5.3	3.5
July	29.70	.85	.39	72.7	79.1	85.7	68.2	77.0	94	58	70	68	91	71	.732	.684	6.06	3.56	4.5	6.3	4.5
August	29.69	.86	.41	72.0	79.0	85.6	67.8	76.7	94	53	70	68	92	69	.732	.684	3.18	1.02	3.4	3.3	2.8
September	29.76	.95	.65	67.4	77.4	86.0	63.8	74.9	95	53	64	61	89	59	.595	.536	.59	.39	1.7	2.5	2.3
October	29.83	30.14	.59	52.9	63.5	71.3	50.7	61.0	88	39	51	46	92	56	.373	.310	2.21	2.07	2.0	1.6	1.8
November	29.80	.41	.30	44.1	50.3	58.0	40.3	49.2	75	20	41	38	90	66	.256	.228	4.79	1.44	5.6	4.0	5.6
December	29.82	.19	.24	43.4	50.8	56.9	41.5	49.2	71	27	40	40	90	68	.246	.246	6.50	3.53	5.7	3.7	5.9
Year	29.74	.41	.08	56.1	63.6	70.2	52.8	61.5	97	20	53	52	90	68	.446	.417	51.31	.....	4.8	4.5	4.4

MERIDIAN, MISS.

[Lat. 32° 21′ N.; long. 88° 40′ W.; gravity corr., —.03.]

January	29.76	30.09	29.29	39.0	46.3	54.2	37.3	45.8	75	25	35	38	88	74	.203	.228	9.18	2.34	6.2	4.5	5.8
February	29.70	.07	.26	52.0	56.8	64.6	48.0	56.3	79	22	47	48	84	73	.322	.334	8.15	1.31	7.5	5.0	6.6
March	29.65	.07	.32	48.5	56.9	63.6	45.4	54.5	80	30	42	41	80	60	.266	.256	10.59	4.86	5.9	4.7	5.9
April	29.70	29.98	.39	57.4	66.8	74.8	52.7	63.8	86	28	51	50	80	57	.373	.360	1.95	.74	4.6	3.0	4.2
May	29.69	.95	.54	62.9	72.8	81.5	56.1	68.8	90	41	56	56	77	57	.448	.448	1.36	1.06	2.5	3.5	3.5
June	29.58	.81	.36	74.9	81.1	90.6	68.9	79.4	98	64	68	68	81	67	.684	.684	6.65	3.67	4.2	5.4	5.2
July	29.68	.83	.46	74.2	78.7	87.1	68.0	77.6	94	60	70	70	86	75	.732	.732	10.13	3.49	5.8	5.3	5.6
August	29.66	.80	.45	72.2	80.2	89.3	66.7	78.0	96	49	68	68	85	68	.684	.684	0.86	.51	2.7	3.5	3.6
September	29.74	.94	.63	66.4	76.7	86.6	60.5	73.6	93	49	61	63	84	64	.536	.575	0.36	.30	3.2	2.8	3.8
October	29.80	30.07	.47	49.7	61.8	74.4	44.7	59.6	88	29	44	47	81	60	.287	.322	0.07	.03	1.5	1.2	1.9
November	29.79	.32	.35	44.8	54.0	62.7	41.5	52.1	82	21	40	45	84	73	.246	.298	6.80	3.15	4.8	2.7	4.9
December	29.84	.19	.28	44.8	52.5	59.4	41.5	50.4	73	20	41	48	88	84	.256	.334	7.47	2.66	6.3	6.3	6.3
Year	29.72	.32	.26	57.2	65.4	74.0	52.6	63.3	98	20	52	54	83	68	.420	.438	63.57	.....	4.6	4.0	4.8

MILES CITY, MONT.

[Lat. 46° 25′ N.; long. 105° 49′ W.; gravity corr. 0.]

January	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
June	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
August	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
September	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
October	27.54	27.85	27.21	37.7	53.0	60.9	36.0	48.4	81	23	32	36	81	56	.180	.211	1.26	.50	4.6	3.0	3.9
November	27.46	.94	.03	22.8	32.0	40.8	10.0	29.9	73	—10	19	25	86	78	.098	.130	0.46	.14	5.2	3.9	5.0
December	27.34	.91	26.84	21.7	30.7	39.0	18.8	28.9	56	— 8	18	24	88	79	.093	.125	0.10	.06	3.1	4.7	5.1
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

MEMPHIS, TENN.

[H=330 feet; h_t=108 feet; h_r=100 feet; h_a=116 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°	Above 90°	Minimum temperature below 32°	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	7.1	Calm. W.	35	SW.	0	9	7	2	5	7	6	16	10	0	8	6	17	13	10	2	0	0	1	0	7	1	0
February	9.2	N.	30	NW.	0	14	2	3	9	5	5	7	11	0	5	10	13	15	12	1	0	0	0	0	7	2	0
March	9.0	N.	38	W.	0	16	6	4	5	3	7	13	8	0	11	5	15	14	13	1	0	0	0	0	7	3	0
April	6.8	Calm. S.	35	W.	0	13	4	2	3	13	8	10	6	1	15	10	5	7	7	0	0	0	0	0	0	3	0
May	6.3	Calm. NE.	26	NW.	0	9	14	2	2	9	8	1	17	0	16	9	6	4	3	0	0	0	0	1	0	0	0
June	5.8	Calm. SE.	42	NW.	1	3	14	7	8	11	8	7	2	0	16	10	4	13	10	0	1	0	0	14	0	7	0
July	5.4	Calm. NW.	24	SE.	0	9	10	7	10	4	4	6	11	1	16	4	11	44	12	0	0	0	0	9	0	3	0
August	5.3	Calm. SW.	35	NW.	0	11	5	4	1	6	14	3	17	1	21	6	4	7	7	0	0	0	0	10	0	2	0
September	5.1	Calm. N.	25	SE.	0	16	5	13	5	4	0	1	11	5	24	2	4	2	2	0	0	0	0	12	0	0	0
October	6.5	Calm. NW.	24	NW.	0	9	6	4	8	8	6	0	18	3	26	2	3	3	3	0	0	0	0	0	0	0	0
November	7.6	Calm. SE.	36	NW.	0	8	7	7	10	5	7	5	8	3	11	4	15	10	9	2	0	0	0	0	7	3	0
December	8.6	SE.	36	NW.	0	3	9	0	26	11	4	6	3	0	8	9	14	9	9	0	0	0	0	0	7	0	0
Year	6.9	NW.	.....	.....	1	120	89	55	92	86	77	75	122	14	177	77	111	111	97	6	1	0	1	46	35	24	0

MERIDIAN, MISS.

[H=358 feet; h_t=68 feet, h_r=58 feet; h_a=72 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°	Above 90°	Minimum temperature below 32°	Thunderstorms.	Auroras.
January	5.3	Calm. NW.	34	S.	0	8	6	1	1	4	1	5	11	25	9	13	9	15	11	0	0	7	0		11	2	0
February	7.6	S.	28	N.	0	9	4	8	3	15	0	2	6	9	3	15	10	16	16	2	0	0	0	0	5	3	0
March	6.4	Calm. E.	28	W.	0	7	5	13	1	10	0	3	9	14	10	10	11	11	11	0	0	4	0	0	2	5	0
April	5.4	Calm. N.	29	N.	0	13	1	4	6	12	2	1	3	18	14	12	4	7	5	1	0	1	0	0	2	3	0
May	4.5	Calm. N.	26	N.	0	10	3	2	0	10	3	5	9	20	18	9	4	8	5	0	1	0	0	0	0	3	0
June	4.7	S.	38	N.	0	10	3	4	8	13	8	4	4	6	11	11	8	11	8	0	2	0	0	14	0	10	0
July	4.9	S.	28	S.	0	9	10	12	0	13	6	2	5	5	9	11	11	12	9	0	0	0	0	7	0	4	0
August	4.1	Calm. S.	32	N.	0	7	5	7	3	11	7	0	9	13	16	14	1	4	2	0	0	0	0	20	0	3	0
September	4.4	E.	21	NW.	0	10	10	21	1	1	0	0	3	14	17	8	5	3	2	0	0	0	0	6	0	0	0
October	5.0	Calm. NE.	24	N.	0	10	12	10	1	0	3	2	6	18	26	3	2	3	0	1	0	8	0	0	2	0	0
November	6.6	N.	28	NW.	0	16	7	8	10	7	2	3	3	4	15	8	7	8	8	1	0	6	0	0	5	2	0
December	6.4	SE.	42	SE.	2	8	7	13	15	6	1	2	4	6	7	8	16	11	9	1	0	2	0	0	8	2	0
Year	5.4	Calm. N.	.....	.....	2	117	73	103	49	102	33	29	72	152	155	122	88	109	86	6	3	28	0	47	35	37	0

MILES CITY, MONT.

[H=2,374 feet; h_t=40 feet; h_r=34 feet; h_a=53 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°	Above 90°	Minimum temperature below 32°	Thunderstorms.	Auroras.
January	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
June	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
August	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
September	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
October	5.7	W.	28	W.	0	2	1	2	14	3	2	22	11	5	13	13	5	9	6	4	0	0	0	0	5	0	0
November	5.4	W.	40	W.	1	2	1	2	7	7	7	17	10	7	11	9	10	8	6	4	0	2	8	0	22	0	0
December	5.9	S.	29	SW.	0	0	3	0	4	23	11	10	6	5	12	10	9	3	1	5	0	1	5	0	28	0	1
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

a By eye observation at 8 a. m. and 8 p. m., when there is no self register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

MILWAUKEE, WIS.

[Lat. 43° 2′ N.; long. 87° 54′ W.; gravity corr. 0.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.31	29.91	28.52	26.1	28.7	32.5	23.2	27.8	40	9	21	23	83	78	.108	.119	2.10	1.23	7.2	5.2	6.6
February	29.25	.74	.46	21.6	27.8	32.1	18.1	25.1	59	—12	17	21	83	76	.089	.108	1.67	.47	5.6	4.7	5.6
March	29.30	.76	.72	26.3	31.3	34.2	23.3	28.8	50	4	21	24	82	76	.108	.125	3.17	.88	7.2	7.0	7.0
April	29.28	.54	.97	42.6	46.1	52.4	37.9	45.2	74	22	34	36	73	70	.195	.211	3.27	2.00	5.4	4.4	5.2
May	29.38	.73	29.06	50.6	55.1	62.0	43.0	52.5	81	31	38	39	63	56	.228	.237	1.47	1.14	2.2	4.1	3.5
June	29.24	.57	28.90	61.0	63.2	70.2	55.0	62.6	87	41	55	55	81	77	.432	.432	4.98	2.53	6.3	5.4	6.3
July	29.30	.58	29.12	63.5	67.2	73.4	57.6	65.5	83	49	54	55	73	67	.417	.432	3.57	1.44	2.7	4.4	3.9
August	29.27	.47	28.93	64.4	69.3	76.5	59.8	68.2	96	47	57	58	78	69	.465	.481	2.83	1.01	5.1	5.8	5.4
September	29.39	.64	29.13	62.5	68.1	76.2	58.3	67.2	93	45	54	55	76	65	.417	.432	0.18	.14	3.9	2.6	3.1
October	29.36	.75	.04	45.9	52.2	58.5	43.1	50.8	87	30	38	40	76	65	.228	.246	1.66	.93	5.4	4.4	4.9
November	29.31	.84	28.78	29.9	33.7	38.2	27.3	32.8	53	5	24	26	78	75	.125	.137	3.40	1.37	7.1	6.6	6.8
December	29.26	.87	.53	30.1	34.9	40.5	27.8	34.2	55	7	23	27	76	74	.119	.143	1.46	.65	5.3	5.3	5.4
Year	29.30	.91	28.46	43.7	48.1	53.9	39.5	46.7	96	—12	36	38	77	71	.244	.258	29.76	.....	5.3	5.0	5.3

MOBILE, ALA.

[Lat. 30° 41′ N.; long. 88° 2′ W.; gravity corr. —.04.]

January	30.11	30.39	29.67	43.1	50.8	56.7	41.6	49.2	68	30	41	47	94	87	.256	.322	6.50	1.49	5.8	3.8	6.6
February	30.05	.39	.62	55.5	59.8	65.6	52.4	59.0	76	30	54	57	93	92	.417	.465	4.54	1.59	6.5	5.8	7.4
March	29.99	.38	.68	52.8	59.4	66.6	50.9	58.8	78	38	50	53	89	80	.360	.402	6.96	2.31	6.3	5.7	7.2
April	30.04	.35	.69	60.4	66.2	74.3	57.1	65.7	84	32	58	61	91	83	.481	.536	1.65	1.10	4.0	4.0	5.1
May	30.02	.29	.83	66.7	72.9	81.8	62.6	72.2	90	50	61	64	83	73	.536	.595	0.67	.27	2.7	4.4	4.2
June	29.92	.15	.68	77.6	81.0	88.7	72.3	80.5	96	64	73	73	87	78	.810	.810	7.09	1.80	4.1	5.6	6.0
July	30.01	.17	.85	77.5	79.4	87.4	72.7	80.0	93	67	73	73	87	82	.810	.810	7.50	3.26	6.1	7.6	7.1
August	29.99	.12	.82	75.7	80.4	88.7	71.5	80.1	94	57	71	72	86	77	.757	.783	3.50	1.43	4.2	5.2	5.3
September	30.04	.25	.90	70.6	77.0	86.0	67.3	76.6	91	57	67	69	89	77	.660	.707	4.05	1.85	4.7	4.9	5.2
October	30.12	.39	.84	57.0	66.3	75.5	53.9	64.7	86	42	50	54	78	65	.360	.417	0.20	.20	1.1	1.6	1.8
November	30.12	.61	.70	50.0	58.9	66.1	48.2	57.2	82	28	45	52	83	78	.298	.387	7.60	3.06	3.9	2.9	4.7
December	30.18	.54	.73	49.1	55.0	60.9	46.0	53.4	72	30	45	50	86	84	.298	.360	6.81	4.32	6.9	6.4	7.5
Year	30.05	.61	.62	61.3	67.3	74.9	58.0	66.4	96	28	57	60	87	80	.504	.550	57.07	.....	4.7	4.8	5.7

MONTGOMERY, ALA.

[Lat. 32° 23′ N.; long. 86° 18′ W.; gravity corr., —.03.]

January	29.91	30.17	29.39	40.0	50.2	56.1	38.1	47.1	76	28	36	39	87	66	.211	.237	3.57	.73	6.7	4.4	6.2
February	29.86	.19	.36	53.0	59.9	66.2	50.8	58.5	83	27	50	52	88	76	.360	.387	8.43	1.91	7.5	6.6	8.1
March	29.82	.23	.50	49.2	58.2	64.2	46.3	55.2	78	32	45	45	85	65	.298	.298	9.73	2.62	6.9	5.8	7.2
April	29.84	.11	.47	58.9	69.4	76.7	55.4	66.0	86	31	51	51	76	54	.373	.373	1.96	.80	3.7	3.0	3.2
May	29.82	.16	.65	64.7	74.5	83.2	59.6	71.4	93	46	55	55	72	54	.432	.432	3.46	1.03	2.7	3.5	3.1
June	29.73	29.95	.53	76.6	82.3	92.0	71.1	81.6	99	65	70	68	80	64	.732	.684	6.44	1.93	4.8	5.8	5.3
July	29.82	.99	.63	75.1	80.0	88.6	70.6	79.6	94	65	69	69	82	73	.707	.707	4.36	.83	5.9	6.3	6.2
August	29.79	.93	.58	74.8	81.3	90.9	71.0	81.0	96	58	69	69	83	67	.707	.707	9.01	.98	4.4	7.7	4.3
September	29.87	30.09	.72	69.2	78.2	86.7	65.3	76.0	94	56	62	64	81	62	.575	.595	2.15	1.68	3.9	2.9	3.1
October	29.92	.24	.61	54.2	67.1	75.8	51.1	63.4	89	36	46	46	73	49	.310	.310	.01	.01	1.7	1.3	1.5
November	29.93	.44	.47	46.4	58.0	65.0	43.7	54.4	82	23	39	43	75	58	.237	.277	3.32	1.54	4.9	3.5	4.5
December	30.01	.32	.61	45.9	54.5	60.9	42.7	51.8	75	28	40	45	82	74	.246	.298	4.61	2.06	6.6	5.5	6.6
Year	29.86	.44	.36	59.0	67.8	75.5	55.5	65.5	99	23	53	54	80	64	.432	.442	51.05	.....	5.0	4.7	4.9

MONTROSE, COLO.

[Lat. 38° 30′ N.; long. 107° 56′ W. gravity corr.. —.02.]

January	25.32	24.01	23.86	13.7	18.6	30.1	7.7	18.9	40	— 5	4	9	64	65	.047	.060	.94	.74	3.3	3.6	3.4
February	24.15	.47	.78	20.8	27.0	34.8	16.0	25.4	52	—12	11	18	67	69	.067	.093	.93	.51	5.5	6.6	6.2
March	24.15	.39	.83	30.0	39.7	45.5	26.5	36.0	67	11	19	22	64	52	.093	.113	1.14	.45	5.9	6.3	5.4
April	24.26	.58	.85	36.7	55.0	59.2	32.9	46.0	76	17	24	24	63	34	.125	.125	.64	.14	4.6	5.6	4.4
May	24.26	.45	.99	48.1	65.3	70.3	43.4	56.8	80	35	34	37	61	41	.195	.219	1.25	.44	4.2	5.6	4.1
June	24.21	.44	.94	55.0	74.5	78.7	50.1	64.4	88	42	33	31	45	22	.187	.172	.08	.07	2.7	4.4	2.5
July	24.36	.55	24.14	61.5	79.6	84.9	55.7	70.3	92	48	40	36	50	27	.246	.211	1.65	.92	3.8	4.7	4.5
August	24.38	.51	.25	58.2	77.7	84.4	54.5	69.4	89	46	42	42	55	30	.266	.266	1.08	.90	2.3	4.4	3.6
September	24.35	.55	23.82	51.6	69.0	75.3	48.6	62.0	86	36	37	37	61	38	.219	.219	1.73	.53	3.2	3.9	3.6
October	24.42	.69	.86	36.5	57.0	65.4	33.9	49.6	71	24	22	20	57	26	.113	.103	.12	.12	1.4	1.3	1.3
November	24.31	.59	24.04	30.9	43.2	53.2	28.1	40.6	69	13	19	14	66	33	.098	.077	.01	.01	5.1	3.4	4.2
December	24.24	.69	23.83	17.8	21.2	33.0	11.2	22.1	52	—17	13	13	83	72	.074	.074	1.81	.52	6.5	4.5	5.6
Year	24.28	.69	.78	38.4	52.3	59.6	34.0	46.8	92	—17	25	25	61	42	.144	.144	11.38	.....	4.0	4.5	4.1

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

MILWAUKEE, WIS.

[H=673 feet; h_1=106 feet; h_r=100 feet; h_a=152 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	10.6	W.	50	N.	2	10	1	4	3	2	11	20	11	0	6	9	16	12	6	18	1	1	17	0	26	0	0
February	13.4	W.	46	W.	2	5	5	2	6	6	10	14	8	0	9	9	10	14	9	7	0	1	12	0	24	2	0
March	13.3	NE.	37	SE.	0	4	17	9	3	5	7	10	7	0	5	8	18	14	10	13	0	0	12	0	23	1	0
April	11.5	N.	40	W.	1	13	3	5	9	4	8	11	7	0	12	6	12	10	8	4	0	2	1	0	6	2	0
May	10.4	N.	34	S.	0	13	7	3	6	11	10	8	4	0	20	6	5	8	6	0	0	0	0	0	1	2	0
June	9.6	N.	37	N.	0	19	5	7	6	4	7	7	5	0	5	15	10	11	9	0	1	5	0	0	0	10	0
July	9.4	SW.	34	W.	0	8	12	4	4	7	10	9	6	2	12	17	2	12	10	0	0	0	0	0	0	4	0
August	8.8	SW.	26	NE.	0	8	5	4	6	8	14	4	13	0	5	17	9	8	6	0	0	0	0	2	0	2	0
September	9.8	SW.	36	W.	0	2	4	4	8	9	17	8	7	1	17	13	0	2	2	0	0	0	0	4	0	3	0
October	11.2	N.	36	NW.	0	13	1	2	8	3	11	13	11	0	8	14	9	10	5	0	0	0	0	0	1	0	0
November	12.1	NW.	34	NW.	0	6	2	0	10	3	9	10	20	0	7	6	17	14	9	13	0	2	9	0	17	1	0
December	13.7	SW.	44	W.	3	4	0	0	14	5	23	8	8	0	9	11	11	9	6	4	0	1	6	0	19	0	0
Year	11.2	SW.	....	.....	8	105	62	44	83	67	137	122	107	3	115	131	119	124	86	59	2	12	57	6	117	27	0

MOBILE, ALA.

[H=35 feet; h_1=87 feet; h_r=81 feet; h_a=94.]

January	7.8	N.	35	SW.	0	16	1	5	4	13	5	6	10	2	5	12	14	13	11	0	0	3	0	0	2	0	0
February	10.0	S.	31	NW.	0	15	3	2	8	19	3	1	3	2	3	10	15	19	10	0	0	2	0	0	1	0	0
March	9.0	S.	33	N.	0	11	9	3	5	16	6	0	10	2	2	14	15	16	10	0	0	1	0	0	0	1	0
April	7.6	S.	25	N.	0	12	3	2	7	24	1	1	6	4	8	18	4	7	3	0	0	4	0	0	0	1	0
May	7.6	N.	30	NW.	0	14	8	2	1	10	6	8	10	3	14	13	4	7	6	0	0	0	0	1	0	3	0
June	7.2	S.	30	NW.	0	7	4	6	2	22	7	5	6	1	7	14	9	10	10	0	0	0	0	10	0	2	0
July	6.8	SW.	30	S.	0	10	5	6	3	13	14	3	5	3	1	16	14	21	16	0	0	0	0	6	0	12	0
August	6.4	SW.	30	E.	0	13	1	5	2	9	13	6	11	2	6	20	5	15	11	0	0	0	0	14	0	10	0
September	6.2	N.	36	N.	0	20	5	6	2	9	6	2	8	2	9	15	6	12	8	0	0	1	0	1	0	3	0
October	7.5	N.	25	N.	0	22	5	2	3	1	10	2	17	0	25	5	1	2	2	0	0	0	0	0	0	0	0
November	8.5	N.	33	NW.	0	21	4	4	6	8	4	5	8	0	11	11	8	12	11	0	0	2	0	0	2	3	0
December	7.4	N.	34	NW.	0	21	3	9	9	6	4	0	9	1	3	11	17	15	13	0	0	3	0	0	4	2	0
Year	7.7	N.	....	.....	0	182	51	52	52	150	79	39	103	22	94	159	112	149	111	0	0	16	0	32	9	37	0

MONTGOMERY, ALA.

[H=217 feet; h_1=68 feet; h_r=60 feet; h_a=77 feet.]

January	5.5	W.	24	NW.	0	0	5	10	7	2	11	13	12	2	8	8	15	13	12	0	0	2	0	0	9	0	0
February	7.4	E.	26	SW.	0	5	6	11	10	8	7	1	7	1	3	5	20	16	14	1	0	0	0	0	3	1	0
March	7.0	E.	28	SE.	0	7	7	12	11	2	6	11	6	0	7	7	17	15	11	0	0	0	0	0	0	1	0
April	5.1	SW.	22	NW.	0	11	2	5	9	8	11	2	9	3	17	9	4	8	6	0	0	0	0	0	2	2	0
May	4.4	SW.	24	SW.	0	8	9	6	7	1	11	10	8	2	22	3	6	10	9	0	0	0	0	2	0	6	0
June	4.6	E.	30	NE.	0	4	2	15	9	7	13	8	1	1	10	7	13	13	10	0	0	0	0	21	0	9	0
July	4.8	SW.	29	SE.	0	5	8	7	7	7	17	8	3	0	10	5	16	14	11	0	0	0	0	11	0	9	0
August	3.9	SW.	22	SW.	0	10	7	6	7	4	14	11	2	1	11	15	5	10	9	0	0	0	0	19	0	8	0
September	4.3	NE.	22	W.	0	15	18	13	4	2	1	0	4	3	20	4	6	8	4	0	0	0	0	6	0	2	0
October	4.9	N.	20	N.	0	15	10	15	0	0	6	8	8	0	25	5	1	1	0	0	0	0	0	0	0	0	0
November	5.9	N.	24	NW.	0	12	6	10	8	4	7	8	5	0	12	10	8	7	5	0	0	0	0	0	3	0	0
December	5.6	NE.	24	SE.	0	3	16	15	10	2	5	2	8	1	8	7	16	13	9	0	0	0	0	0	6	0	0
Year	5.3	E.	....	.....	0	95	96	125	89	47	109	82	73	14	153	85	127	128	100	1	0	2	0	59	23	38	0

MONTROSE, COLO.

[H=5,795 feet; h_1=43 feet; h_r=34 feet; h_a=43 feet.]

January	4.6	S.	24	NW.	0	3	0	1	23	32	0	1	2	0	18	7	6	5	4	7	0	0	19	0	31	0	0
February	5.7	S.	32	N.	0	4	0	4	15	18	3	6	5	1	6	10	12	8	4	10	0	0	10	0	23	0	0
March	6.4	SE.	45	N.	2	7	3	3	15	14	4	2	12	2	9	13	9	14	10	10	0	1	2	0	24	0	0
April	6.4	SE.	36	SW.	0	9	2	2	18	15	7	3	4	0	10	14	6	7	5	3	1	0	0	0	10	1	0
May	6.5	S.	29	W.	0	4	0	3	8	23	8	8	3	5	15	12	4	11	7	0	0	0	0	0	0	0	0
June	7.0	S.	36	S.	0	9	2	3	11	17	6	4	4	4	24	2	4	2	1	0	0	0	0	0	0	0	0
July	5.9	S.	32	S.	0	7	2	8	14	20	4	0	7	0	12	12	7	8	7	0	1	0	0	4	0	1	0
August	4.9	S.	30	SE.	0	9	1	4	18	22	0	4	4	0	15	14	2	10	4	0	0	0	0	0	0	3	0
September	5.7	S.	42	S.	1	3	2	4	16	17	5	2	10	1	18	5	7	9	8	0	0	0	0	0	0	0	0
October	5.0	SE.	36	SW.	0	7	1	5	26	9	4	4	3	3	27	3	1	1	1	0	0	0	0	0	11	0	0
November	4.5	SE.	30	N.	0	7	1	4	21	17	4	0	4	2	16	6	8	1	0	0	0	0	0	0	18	0	0
December	4.7	S.	38	S.	0	3	1	4	21	22	2	2	4	3	11	4	16	11	7	17	0	0	13	0	30	0	0
Year	5.6	S.	....	.....	3	72	15	45	206	226	47	36	62	21	181	102	82	87	58	47	2	1	44	4	147	5	0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

MOORHEAD, MINN.

[Lat. 46° 52′ N.; long. 96° 44′ W.; gravity corr., 0.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.03	29.53	28.44	10.7	16.4	23.2	5.0	14.1	42	—17	8	12	88	84	.057	.070	.91	.32	4.0	4.5	5.5
February	28.95	.34	.37	—3.6	6.3	12.7	—8.5	2.1	37	—35	—6	2	90	83	.028	.043	1.36	.74	5.1	3.2	4.3
March	29.03	.56	.53	6.7	18.7	23.9	3.5	13.7	48	—23	4	15	90	85	.047	.081	1.46	.74	4.9	4.4	4.9
April	28.93	.42	.51	39.6	51.6	58.2	35.6	46.9	91	11	34	38	80	62	.195	.228	1.91	.70	3.3	4.5	4.1
May	29.00	.58	.54	47.3	63.5	68.7	39.8	54.2	91	22	36	34	66	38	.211	.195	1.03	.52	2.5	2.9	3.1
June	28.85	.34	.55	58.0	67.3	71.7	52.7	62.2	95	40	53	55	83	67	.402	.432	4.32	1.30	6.8	5.7	6.4
July	28.98	.33	.59	58.1	70.3	74.6	52.1	63.4	83	42	53	56	84	62	.402	.448	3.57	2.00	3.6	3.5	3.6
August	28.95	.32	.67	56.7	70.7	77.9	51.9	64.9	96	34	52	54	85	58	.387	.417	2.54	.72	2.6	2.6	2.8
September	28.93	.29	.64	52.9	65.8	74.5	49.5	62.0	92	32	48	50	84	61	.334	.360	3.50	1.34	3.7	4.1	4.3
October	29.00	.49	.51	37.7	46.2	55.3	34.7	45.0	79	24	32	34	50	64	.180	.195	1.65	.82	5.1	4.4	5.0
November	28.99	.52	.47	15.9	22.2	29.5	11.2	20.4	62	—24	13	18	89	86	.074	.093	.99	.39	6.7	5.5	6.5
December	28.83	.48	.12	16.1	19.6	26.9	9.5	18.2	47	—20	13	16	89	86	.074	.085	1.07	.70	4.7	4.3	5.3
Year	28.96	.58	.12	33.0	43.2	49.8	28.1	38.9	96	—35	28	32	82	70	.199	.220	24.31	.....	4.4	4.1	4.6

NANTUCKET, MASS.

[Lat. 41° 17′ N.; long. 70° 6′ W.; gravity corr., —.01.]

January	30.00	30.54	28.99	34.3	34.8	38.9	28.9	33.9	52	12	29	31	83	86	.157	.172	4.51	1.32	6.8	5.0	6.2
February	30.06	.70	29.26	34.2	35.6	39.4	28.1	33.8	51	10	26	33	74	89	.137	.1-7	3.30	.56	6.9	5.3	6.4
March	30.08	.48	.48	36.0	35.2	39.6	30.2	34.9	54	16	27	31	74	86	.143	.172	1.86	.61	5.3	3.9	4.5
April	29.97	.59	.12	45.5	43.8	50.1	38.3	44.2	65	30	35	37	69	78	.203	.219	1.47	.61	5.4	3.8	5.1
May	30.02	.53	.65	53.0	50.7	57.3	45.4	51.4	70	37	44	45	72	82	.287	.298	2.05	1.00	5.4	5.0	4.8
June	29.93	.20	.68	61.9	58.4	66.0	53.7	59.8	76	43	55	55	79	88	.432	.432	2.83	1.28	5.4	4.5	5.3
July	30.03	.37	.73	65.4	63.2	70.2	58.9	64.6	78	48	60	60	84	89	.517	.517	3.16	1.35	6.3	4.4	5.2
August	30.01	.28	.73	70.1	67.9	74.4	63.3	68.8	84	57	63	64	81	88	.575	.595	3.41	1.69	4.8	2.7	3.2
September	30.14	.38	.77	66.4	64.0	70.8	59.9	65.4	77	56	59	59	79	85	.499	.499	3.12	2.32	4.2	3.1	3 6
October	30.01	.50	.39	53.6	52.1	56.3	48.5	52.4	68	36	46	47	76	81	.310	.322	4.96	1.97	6.4	4.1	5.7
November	30.15	.79	.52	44.2	44.2	48.2	39.2	43.7	60	24	36	38	73	79	.211	.228	1.02	.32	5.7	4.7	5.8
December	30.13	.52	.38	41.4	42.5	46.8	36.0	41.4	56	14	34	36	77	80	.195	.211	3.14	.82	4 4	4.2	5.2
Year	30.04	.79	.99	50.5	49.4	54.8	44.2	49.5	84	10	43	45	77	84	.306	.321	34.83	.....	5.6	4.2	5.1

NASHVILLE, TENN.

[Lat. 36° 10′ N.; long. 86° 47′ W.; gravity corr., —.02.]

January	29.54	29.90	28.90	36.9	41.8	47.3	33.7	40.5	71	25	32	35	82	79	.180	.203	6.15	1.24	7.6	5.8	7.2
February	29.50	.90	.98	42.6	47.6	54.0	38.5	46.2	75	20	37	39	81	74	.219	.237	6.96	1.25	7.4	5.0	6.5
March	29.45	.92	29.05	41.4	48.4	54.0	38.2	46.1	67	20	35	37	80	69	.203	.219	10.31	4.35	6.6	6.0	7.3
April	29.48	.73	.14	54.1	64.2	71.0	50.4	60.7	86	31	46	46	76	53	.310	.310	2.24	0.60	4.7	5.1	4.9
May	29.50	.79	.27	59.0	69.7	76.2	54.6	65.4	87	39	50	49	72	50	.360	.347	2.39	1.62	5.2	5.3	5.1
June	29.39	.56	.06	73.9	79.4	88.0	68.2	78.1	97	63	67	66	80	66	.660	.638	6.50	2.13	6.3	5.7	5.5
July	29.48	.65	.16	69.6	78.5	84.7	65.4	75.0	95	56	62	62	78	58	.555	.555	1.49	0.59	5.3	6.2	5.5
August	29.45	.60	.16	68.7	77.9	85.9	64.8	75.4	96	51	63	64	82	62	.575	.595	3.72	1.68	4.5	4.8	4.6
September	29.57	.76	.40	63.7	75.5	84.3	59.9	72.1	93	53	58	59	82	58	.481	.499	1.25	0.63	3.0	3.1	3.6
October	29.58	.89	.34	50.1	62.5	70.0	47.4	58.7	88	31	41	41	71	47	.256	.256	0.84	0.47	2.5	2.5	3.0
November	29.55	30.14	28.98	42.0	49.1	55.1	38.9	47.0	73	17	34	36	73	62	.195	.211	6.71	3.04	6.3	5.9	5.6
December	29.60	29.95	29.07	40.4	48.7	54.3	37.8	46.0	67	22	33	36	75	62	.187	.211	4.26	1.29	5.9	3.8	5.5
Year	29.51	30.14	28.90	53.5	61.9	68.7	49.8	59.3	97	17	46	48	78	62	.348	.357	52.82	.....	5.4	4.9	5.4

NEW HAVEN, CONN.

[Lat. 41° 18′ N.; long. 72° 56′ W.; gravity corr., —.01.]

January	29.91	30.45	28.80	28.0	31.6	37.5	24.0	30.8	51	10	22	25	78	77	.113	.130	6.77	1.32	6.3	5.2	6.1
February	29.96	.60	29.25	29.5	33.8	39.1	25.5	32.3	54	8	24	27	80	78	.125	.143	5.88	.87	6.6	5.0	6.2
March	29.90	.46	.31	31.7	35.6	42.5	27.7	35.1	63	3	23	28	72	75	.119	.150	3.68	.99	5.5	5.0	5.6
April	29.86	.46	.13	46.7	48.9	57.5	39.8	48.6	79	24	36	36	68	65	.211	.211	2.35	.94	5.2	3.9	4.8
May	29.91	.35	.57	55.0	56.9	65.5	46.4	56.0	86	31	44	45	69	67	.287	.298	1.92	.79	4.6	5.2	5.6
June	29.84	.10	.62	65.8	66.3	75.7	56.6	66.2	93	45	57	57	76	74	.465	.465	1.90	.65	4.4	4.8	5.1
July	29.90	.26	.62	67.2	68.2	76.3	59.0	67.6	86	49	59	61	76	78	.499	.535	4.52	1.97	5.6	6.0	5.7
August	29.88	.14	.59	69.3	71.4	78.9	62.4	70.6	90	49	63	65	81	80	.575	.616	3.14	.79	6.5	6.9	6.1
September	30.02	.27	.73	64.7	66.8	75.1	57.8	66.4	88	45	59	60	82	81	.499	.517	3.96	2.65	4.7	2.9	4.4
October	29.93	.42	.52	48.5	51.0	59.9	41.6	50.8	83	26	42	44	78	77	.266	.387	4.62	1.86	5.3	4.2	5.4
November	30.04	.69	.19	38.8	41.5	48.9	32.8	40.8	62	9	31	33	75	73	.172	.187	2.21	.82	4.7	4.8	4.9
December	30.02	.45	.26	36.7	40.3	47.3	31.2	39.2	60	11	29	31	74	72	.157	.172	3.74	.85	5.3	4.0	5.0
Year	29.94	.69	28.80	48.5	51.0	58.7	42.1	50.4	93	3	41	43	76	75	.291	.309	44.69	.....	5.4	4.8	5.4

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

MOORHEAD, MINN.

[H = 935 feet; h_t = 54 feet; h_r = 44 feet; h_a = 60 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	10.2	S.	38	S.	0	18	0	0	4	20	4	4	11	1	12	6	13	8	7	12	0	4	25	0	31	0	0
February	10.7	NW.	36	SE.	0	14	3	0	11	8	1	1	15	3	14	7	7	12	7	9	0	1	24	0	28	0	0
March	9.6	N.	36	SE.	0	17	3	2	12	6	1	2	14	5	14	7	10	10	5	13	0	0	20	0	27	0	0
April	13.2	SE.	45	E.	2	12	2	4	17	7	1	2	15	0	17	6	7	11	8	4	0	0	2	1	9	1	0
May	11.8	N.	36	SE.	0	18	2	3	11	13	2	3	9	1	18	10	3	7	6	0	0	0	0	1	8	2	0
June	12.1	SE.	44	SE.	2	9	5	3	16	10	5	6	5	1	6	9	15	16	12	0	0	1	0	1	0	3	0
July	7.7	Calm N.	36	SE.	0	12	5	6	7	8	0	9	8	7	17	8	6	12	9	0	0	0	0	0	0	2	0
August	8.7	S.	46	SW.	1	19	2	4	6	14	0	4	10	3	22	6	3	7	7	0	0	1	0	3	0	3	0
September	11.9	S.	54	SW.	3	11	3	1	13	16	1	5	10	0	14	5	11	12	7	0	1	1	0	3	1	1	0
October	12.5	S.	52	SE.	2	11	3	3	7	16	4	10	8	0	14	5	12	11	6	2	0	0	1	0	9	0	0
November	11.7	S. b	32c	SE. c	0	9	0	1	13	15	0	5	14	3	6	12	12	8	4	10	0	0	19	0	27	0	0
December	10.8	NW.	42	NW.	1	7	0	0	9	18	2	4	14	8	11	8	12	8	3	11	0	1	20	0	31	0	0
Year	10.9	N.	....	.....	11	157	28	27	126	151	21	55	133	32	165	89	111	122	81	61	1	9	111	9	171	12	0

NANTUCKET, MASS.

[H = 14 feet; h_t = 43 feet; h_r = 38 feet; h_a = 54 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	12.3	NW.	50	N.	2	9	2	5	5	10	7	9	15	0	10	7	14	13	10	5	0	4	7	0	22	0	0
February	13.9	NW.	40	NW.	1	8	5	4	2	11	8	4	14	0	7	7	14	16	14	5	0	6	6	0	17	0	0
March	17.1	NW.	50	SE.	3	8	12	9	8	4	2	7	12	0	16	4	11	12	6	4	0	3	4	0	18	0	0
April	11.7	W.	52	SE.	1	7	2	5	2	5	16	20	3	0	11	11	8	9	6	0	0	4	0	0	1	0	0
May	10.9	SW.	38	NE.	0	8	5	4	7	8	21	6	3	0	12	14	5	7	5	0	0	0	0	0	0	0	0
June	10.4	SW.	46	N.	2	9	5	6	3	1	21	10	3	2	11	9	10	9	6	0	0	2	0	0	0	3	0
July	8.9	SW.	46	NE.	1	1	3	4	7	10	24	13	0	0	12	9	10	9	8	0	0	1	0	0	0	0	0
August	8.8	SW.	30	E.	0	3	4	9	4	9	24	6	2	1	21	6	4	8	8	0	0	3	0	0	0	1	0
September	8.6	SW.	48	NE.	1	7	6	4	7	7	15	12	2	0	17	9	4	7	5	0	0	1	0	0	0	0	0
October	15.5	NE.	58	NE.	5	5	15	13	3	1	10	7	8	0	11	7	13	13	10	0	0	2	0	0	0	0	0
November	13.6	N.	54	NE.	1	10	8	8	3	7	7	10	6	1	12	6	12	12	6	3	0	2	1	0	5	0	0
December	13.4	NW.	42	NW.	1	2	4	0	6	9	7	16	18	0	13	8	10	11	8	1	0	0	2	0	7	0	0
Year	12.1	SW.	....	.....	18	77	71	71	57	82	162	120	86	4	153	97	115	126	92	18	0	28	20	0	70	4	0

NASHVILLE, TENN.

[H = 553 feet; h_t = 98 feet; h_r = 85 feet; h_a = 107 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	5.7	NE.	26	S.	0	2	13	10	3	12	5	4	10	3	6	7	18	13	11	5	0	0	0	0	14	1	0
February	7.6	NW.	27	W.	0	4	5	8	10	7	3	2	17	0	7	7	14	18	15	2	0	0	1	0	8	3	0
March	6.7	NW.	30	NW.	0	2	10	8	11	7	1	4	16	3	4	10	17	15	12	2	0	0	0	0	8	2	0
April	5.1	NW.	24	NW.	0	4	0	6	11	9	7	6	13	4	10	13	7	11	7	3	0	0	0	0	2	4	0
May	5.0	N.	24	NW.	0	17	10	5	0	10	5	3	12	0	11	11	9	6	5	0	0	0	0	0	0	1	0
June	4.6	W.	25	SW.	0	4	3	4	12	8	2	15	12	0	6	19	5	16	12	0	0	0	0	13	0	11	0
July	4.1	NW.	20	SW.	0	3	6	7	10	6	7	9	14	0	9	13	9	9	7	0	0	0	0	4	0	0	0
August	4.2	Calm. NW.	25	NW.	0	5	5	3	1	4	13	11	13	7	14	10	7	9	8	0	0	2	0	11	0	7	0
September	3.7	Calm. NE.	16	NW.	0	6	9	16	8	2	2	3	5	9	18	7	5	4	4	0	0	4	0	11	0	0	0
October	5.2	Calm. NW.	23	SE.	0	2	10	5	9	7	6	6	13	4	20	7	4	4	4	0	0	0	0	0	1	0	0
November	7.2	Calm. SE.	26	SW.	0	4	5	5	19	5	8	3	9	2	11	4	15	9	9	1	0	0	2	0	9	1	0
December	6.6	SE.	34	SE.	0	0	2	7	22	8	7	1	7	8	12	5	14	9	8	1	0	0	0	0	10	0	0
Year	5.5	NW.	....	.....	0	53	78	84	116	85	66	67	141	40	128	113	124	123	102	14	0	6	3	39	52	30	0

NEW HAVEN, CONN.

[H = 107 feet; h_t = 118 feet; h_r = 110 feet; h_a = 126 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	9.8	NW.	46	S.	3	6	10	1	1	3	16	7	18	0	8	10	13	15	14	7	0	1	8	0	25	0	0
February	9.1	N.	33	S.	0	12	7	3	0	8	7	7	11	1	7	9	12	17	17	7	0	8	6	0	22	1	0
March	11.8	NE.	34	NE.	0	11	19	6	3	2	4	6	11	0	12	6	13	11	9	2	0	0	4	0	19	1	0
April	9.1	NW.	38	NE.	0	4	4	1	8	5	11	11	16	0	15	7	8	8	6	3	0	1	0	0	6	3	0
May	7.9	SW.	31	S.	0	5	8	3	5	12	14	5	10	0	7	15	9	5	4	0	0	4	0	0	1	0	0
June	7.0	SW.	26	N.	0	12	11	2	2	8	19	2	4	0	11	10	9	11	6	0	0	1	0	2	0	5	0
July	7.2	S.	28	W.	0	9	3	3	7	13	11	7	9	0	10	9	12	16	12	0	0	0	0	0	0	5	0
August	6.6	NE.	40	W.	1	5	15	3	6	14	10	6	2	1	5	15	11	11	9	0	1	1	0	2	0	6	0
September	6.3	SW.	22	SW.	0	11	8	3	4	11	13	3	6	1	12	14	4	6	4	0	0	3	0	0	0	2	1
October	8.7	N.	30	NE.	0	15	13	1	3	1	12	6	9	2	10	9	12	8	7	3	0	4	0	0	4	1	0
November	9.7	N.	39	S.	0	12	7	2	6	9	5	9	10	0	13	4	13	8	6	5	0	3	2	0	16	0	0
December	9.4	SW.	48	SW.	1	3	6	1	2	5	19	12	13	1	13	7	11	12	9	0	0	4	2	0	13	0	0
Year	8.5	SW.	....	.....	5	105	111	29	47	91	141	81	119	6	123	115	127	128	103	27	1	30	22	4	106	24	1

a By eye observations at 8 a. m. and 8 p. m. when there is no self-register at station. b For 26 days. c For 19 days.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

NEW LONDON, CONN.

[Lat. 41° 21′ N.; long. 72° 05′ W.; gravity corr., —.01.]

Month.	Pressure.			Temperature.									Moisture.								
		Extremes.		Mean.					Extremes.		Dew Point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.96	30.50	28.86	29.9	33.3	38.9	24.6	31.8	51	13	24	26	79	74	.125	.137	6.36	1.40	6.6	5.3	6.5
February	30.02	.68	29.27	30.7	34.4	39.5	25.3	32.4	53	7	24	27	79	76	.125	.143	6.46	1.35	6.4	5.3	6.5
March	30.05	.51	.39	33.1	35.7	42.2	29.0	35.6	61	7	22	27	65	71	.113	.143	3.99	1.10	5.5	4.6	5.3
April	29.92	.52	.05	45.4	47.1	55.5	39.8	47.6	75	27	35	36	67	69	.203	.211	3.12	1.51	4.6	3.4	5.3
May	29.97	.43	.61	53.7	54.2	62.9	46.5	54.7	79	31	45	46	74	76	.298	.310	1.42	.85	6.4	6.7	6.5
June	29.89	.17	.69	64.2	63.4	72.6	56.3	64.4	88	45	56	56	75	79	.448	.448	2.81	.68	4.5	5.8	5.4
July	29.97	.33	.71	66.2	65.9	73.3	59.8	66.6	84	52	60	60	80	83	.517	.517	3.37	1.02	6.1	6.3	6.0
August	29.95	.20	.66	69.2	69.7	77.3	63.9	70.6	92	52	63	65	81	84	.575	.616	4.99	2.24	6.4	6.1	6.2
September	30.09	.34	.78	64.7	65.4	73.4	59.4	66.4	86	48	59	60	82	84	.499	.517	2.60	1.20	4.3	3.0	4.4
October	29.99	.50	.56	49.0	51.3	58.8	44.1	51.4	83	27	42	43	77	76	.266	.277	6.50	2.88	6.1	4.0	5.6
November	30.11	.76	.32	38.7	41.8	47.9	34.4	41.2	61	10	32	35	76	77	.180	.203	3.37	1.25	4.6	5.3	5.7
December	30.09	.48	.31	37.4	40.5	46.9	32.4	39.6	58	10	30	32	74	74	.164	.180	3.74	.83	5.1	4.5	5.0
Year	30.00	.76	28.86	48.6	50.2	57.4	43.0	50.2	92	7	41	43	76	77	.293	.308	48.73	.....	5.6	5.0	5.7

NEW ORLEANS, LA.

[Lat. 29° 58′ N.; long. 90° 04′ W.; gravity corr., —.04.]

January	30.08	30.42	29.65	47.9	53.6	59.9	46.6	53.2	77	32	44	45	88	74	.287	.298	3.75	1.75	5.5	5.3	5.8
February	30.01	.37	.62	58.7	63.6	69.2	55.9	62.6	80	34	55	58	90	83	.432	.481	7.42	2.60	5.5	5.0	6.5
March	29.97	.36	.61	55.7	62.0	67.4	53.8	60.6	80	39	51	56	84	68	.373	.360	2.67	1.04	6.1	5.3	5.9
April	30.01	.35	.69	63.9	69.3	75.1	60.9	68.0	84	41	57	55	80	64	.465	.432	.26	.18	2.7	3.6	4.5
May	30.01	.24	.79	70.2	75.6	81.6	65.9	73.8	89	53	62	61	75	68	.555	.536	.76	.75	1.8	3.3	2.8
June	29.90	.17	.69	78.4	81.5	88.4	73.1	80.8	94	66	72	71	81	72	.783	.757	4.45	2.10	3.3	3.9	5.5
July	29.98	.12	.83	78.9	80.9	87.7	74.6	81.2	92	68	73	72	81	76	.810	.783	4.57	1.45	4.2	5.8	5.5
August	29.99	.07	.84	77.3	81.4	88.3	74.0	81.2	93	63	70	70	78	70	.732	.732	1.69	.40	2.5	5.6	4.9
September	30.02	.20	.86	73.0	77.5	85.1	70.7	77.9	90	63	69	68	88	76	.707	.517	3.43	2.21	4.8	3.3	4.5
October	30.09	.30	.82	61.5	69.1	76.2	59.5	67.8	85	50	55	60	82	72	.432	.517	2.38	1.65	2.3	1.1	2.2
November	30.09	.57	.71	54.2	60.5	68.1	51.7	59.9	80	30	50	52	84	76	.360	.387	3.31	1.45	3.6	3.4	5.1
December	30.14	.53	.76	52.2	57.3	62.6	49.2	55.9	78	36	48	51	85	81	.334	.373	3.93	2.92	6.5	6.6	7.3
Year	30.02	.57	.61	64.3	69.4	75.8	61.3	68.6	94	30	59	59	83	73	.522	.514	38.62	.....	4.1	4.4	5.0

NEW YORK CITY.

[Lat. 40° 43′ N.; long. 74° 0′ W.; gravity corr., —.01.]

January	29.83	30.31	28.82	31.6	34.8	41.0	28.4	34.7	60	16	26	29	81	81	.137	.157	5.73	1.18	6.1	4.9	6.3
February	29.89	.51	29.22	34.1	38.5	44.2	30.8	37.5	61	13	27	32	77	78	.143	.180	4.69	.82	6.6	5.6	6.8
March	29.90	.37	.33	32.7	37.7	44.7	30.8	37.8	61	9	24	29	72	73	.125	.157	4.22	.87	6.0	5.6	6.8
April	29.80	.36	.19	47.7	52.8	60.8	43.3	52.0	80	28	38	41	71	66	.228	.256	2.37	1.07	4.1	3.8	4.9
May	29.84	.25	.55	55.2	60.1	68.4	51.4	59.9	84	38	45	48	70	66	.298	.334	3.10	1.30	4.4	6.5	6.5
June	29.76	.02	.55	64.7	70.4	78.3	60.8	69.6	94	51	58	59	79	69	.481	.499	1.18	.39	3.5	4.8	4.4
July	29.83	.17	.56	67.7	71.6	78.0	63.6	70.8	89	58	60	62	78	72	.517	.555	4.11	1.02	5.6	6.6	6.2
August	29.81	.05	.53	69.9	73.4	80.5	66.8	73.6	94	57	64	67	82	80	.595	.660	5.87	3.20	5.9	7.0	7.1
September	29.96	.20	.68	65.9	70.4	77.4	62.8	70.1	87	54	61	62	84	77	.536	.555	2.12	1.59	3.2	3.3	4.5
October	29.87	.33	.47	50.2	54.4	61.5	46.9	54.2	83	34	44	44	80	70	.287	.287	2.69	.91	5.1	3.9	5.5
November	29.97	.60	.10	41.1	44.9	50.3	37.3	43.8	64	10	34	36	77	74	.195	.211	2.06	.53	4.7	4.1	5.7
December	29.97	.38	.25	38.7	43.0	48.9	34.7	41.8	68	14	31	35	74	74	.172	.203	3.30	.86	3.7	4.6	5.2
Year	29.87	.60	28.82	50.0	54.3	61.2	46.5	53.8	94	9	43	45	77	73	.310	.338	41.44	.....	4.9	5.1	5.8

NORFOLK, VA.

[Lat. 36° 51′ N.; long. 76° 17′ W.; gravity corr., —.02.]

January	30.06	30.48	29.30	39.7	43.5	50.2	35.8	43.0	67	25	35	38	84	80	.203	.228	2.86	.77	4.4	3.5	4.5
February	30.09	.66	.47	47.6	48.9	57.1	40.8	49.0	78	24	43	43	83	80	.277	.277	5.10	1.71	6.6	6.5	7.1
March	30.03	.51	.34	40.7	44.4	50.7	36.5	43.6	74	23	35	38	82	78	.203	.228	8.09	2.03	5.3	5.6	6.3
April	30.02	.43	.51	55.1	57.8	66.9	49.3	58.1	84	33	47	46	76	67	.322	.310	1.88	.81	3.3	3.0	3.1
May	30.01	.45	.72	60.9	62.7	72.2	55.6	63.9	89	44	54	56	79	79	.417	.448	3.58	1.25	4.8	5.6	5.4
June	29.94	.17	.62	72.8	73.3	83.3	66.0	74.6	97	56	66	67	81	81	.638	.660	1.56	.54	3.8	4.0	3.7
July	30.01	.25	.67	73.0	73.4	83.0	67.1	75.0	91	59	67	68	82	84	.660	.684	8.90	1.80	5.4	5.5	4.7
August	29.97	.16	.88	75.4	75.2	84.7	70.1	77.4	94	61	70	70	85	84	.732	.732	5.87	2.47	5.7	5.5	4.5
September	30.11	.36	.85	70.4	71.1	80.6	66.0	73.3	90	59	65	64	84	78	.616	.595	2.43	.75	4.5	1.7	3.1
October	30.06	.50	.67	55.2	57.6	66.0	51.3	58.6	88	36	50	50	82	76	.360	.360	6.89	2.95	6.1	3.4	4.6
November	30.15	.76	.58	46.7	49.0	56.9	42.7	49.8	74	23	40	38	79	69	.246	.228	2.11	1.13	4.6	3.1	4.4
December	30.21	.59	.71	43.9	48.4	57.0	40.0	48.5	75	22	37	36	77	64	.219	.211	1.96	.58	4.0	1.9	3.9
Year	30.06	.76	.30	56.8	58.8	67.4	51.8	59.6	97	22	51	51	81	77	.408	.413	50.63	.....	4.9	4.1	4.6

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

NEW LONDON, CONN.

[H = 47 feet; h_t = 50 feet; h_r = 42 feet; h_a = 54 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	7.7	NW.	54	SE.	3	8	4	0	5	2	10	8	16	9	6	13	12	17	12	7	0	8	5	0	26	0	0
February	8.3	NW.	36	S.	0	8	2	1	3	5	9	6	18	4	8	7	13	18	17	7	0	10	5	0	21	0	0
March	10.6	NW.	48	SE.	1	13	13	6	3	1	7	2	17	0	12	9	10	12	10	4	0	6	3	0	18	0	0
April	8.5	NW.	36	S.	0	4	2	2	5	4	17	4	20	2	10	12	8	11	6	3	0	6	0	0	4	1	0
May	7.2	SW.	25	NW.	0	9	6	6	3	8	15	5	10	0	3	19	9	11	5	2	0	8	0	0	1	1	0
June	6.0	N.	21	SW.	0	12	4	4	4	7	11	10	8	0	9	13	8	12	10	0	0	7	0	0	0	3	0
July	6.5	SW.	26	SW.	0	7	3	11	5	11	12	5	7	1	8	11	12	18	14	0	0	7	0	0	0	2	0
August	6.4	N.	28	S.	0	12	2	4	10	10	11	1	8	4	6	14	11	12	8	0	0	7	0	1	0	3	0
September	5.5	N.	23	S.	0	13	3	6	0	9	9	9	6	5	12	14	4	9	4	0	0	11	0	0	0	1	1
October	8.3	N.	34	E.	0	17	7	3	0	1	13	5	17	1	8	14	9	10	8	1	0	5	0	0	2	0	0
November	9.3	N.	46	SE.	2	17	2	4	5	4	7	6	15	0	9	11	10	12	9	1	0	7	2	0	11	1	0
December	9.5	SW.	52	S.	2	5	3	1	3	5	19	13	12	1	11	12	8	12	11	0	0	8	1	0	11	0	0
Year	7.8	NW.	....	.....	8	125	51	48	46	67	138	74	154	27	102	149	114	154	114	25	0	90	16	1	94	12	1

NEW ORLEANS, LA.

[H = 54 feet; h_t = 112 feet; h_r = 111 feet; h_a = 120 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	9.3	Calm. SE.	35	NW.	0	3	5	6	17	4	2	9	11	5	11	8	12	11	9	0	0	7	9	0	0	0	0
February	11.9	S.	34	E.	0	3	13	4	13	15	5	1	2	0	5	9	14	15	13	0	0	5	0	0	0	0	0
March	10.4	NE.	36	NE.	0	7	14	5	9	11	2	7	6	1	11	9	11	8	5	0	0	5	0	0	0	1	0
April	9.2	SE.	26	NW.	0	10	6	5	21	7	4	0	7	0	11	13	6	2	2	0	0	3	0	0	0	1	0
May	8.1	SW.	33	SE.	0	11	5	4	8	10	12	5	3	4	23	8	0	3	2	0	0	0	0	0	0	1	0
June	7.0	S.	30	N.	0	1	2	5	12	24	13	3	0	0	8	14	8	14	9	0	0	0	0	8	0	1	0
July	7.4	SE.	36	SE.	0	4	7	8	13	11	9	5	0	5	7	18	6	18	15	0	0	0	0	8	0	2	0
August	6.5	N.	28	N.	0	11	7	2	11	7	15	4	2	3	7	19	5	11	9	0	0	0	0	11	0	3	0
September	7.9	NE.	48	NE.	2	9	22	14	9	2	0	2	1	1	10	17	3	12	6	0	0	0	0	1	0	3	0
October	8.2	NE.	28	N.	0	9	19	6	3	3	3	5	9	5	24	6	1	3	3	0	0	2	0	0	0	0	0
November	9.9	NE.	36	N.	0	12	12	4	14	5	4	5	3	1	15	3	12	10	7	0	0	2	0	0	1	0	0
December	9.6	NE.	36	SW.	0	7	19	10	13	2	4	0	5	2	4	9	18	12	9	0	0	3	0	0	0	0	0
Year	8.8	SE.	....	.....	2	87	131	73	143	101	73	46	49	27	136	133	96	119	89	0	0	27	0	28	1	12	0

NEW YORK CITY.

[H = 185 feet; h_t = 183 feet; h_r = 155 feet; h_a = 200 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	12.5	NW.	44	S.	3	8	4	3	3	12	12	8	12	0	4	17	10	16	12	9	0	9	3	0	19	0	0
February	12.5	NW.	38	SW.	0	3	9	3	4	7	9	7	14	0	5	10	13	16	16	5	0	13	2	0	15	0	0
March	15.2	NE.	45	SW.	3	6	23	0	5	2	9	6	11	0	5	11	15	13	10	5	0	11	2	0	13	1	0
April	12.2	NW.	37	NW.	0	2	6	2	7	7	11	10	15	0	13	11	6	10	8	1	0	8	0	0	3	2	0
May	11.6	NW.	38	NW.	0	2	14	2	11	7	7	8	11	0	3	16	12	11	7	1	0	7	0	0	0	0	0
June	9.0	NW.	35	NW.	0	3	9	3	7	9	15	1	13	0	14	8	8	11	7	0	1	10	0	3	0	6	0
July	9.5	S.	31	SE.	0	2	8	4	8	16	10	6	8	0	5	16	10	15	11	0	0	10	0	0	0	5	0
August	8.4	S.	27	S.	0	2	10	4	7	17	9	3	10	0	4	11	16	17	11	0	0	18	0	2	0	6	0
September	8.1	S.	28	N.	0	7	2	4	1	23	8	1	14	0	12	13	5	9	7	0	0	16	0	0	0	1	0
October	13.0	NW.	42	NW.	1	4	11	0	5	6	10	6	20	0	9	13	9	10	9	0	0	13	0	0	0	1	0
November	12.5	NW.	47	SE.	2	2	7	3	12	5	8	8	15	0	10	8	12	9	7	2	0	14	2	0	5	0	0
December	13.6	SW.	53	NW.	3	1	6	1	4	12	22	4	12	0	10	12	9	10	8	1	0	11	1	0	8	0	0
Year	11.5	NW.	....	.....	12	42	109	29	74	123	130	68	155	0	94	146	125	147	113	24	1	140	10	5	63	22	0

NORFOLK, VA.

[H = 43 feet; h_t = 88 feet; h_r = 80 feet; h_a = 93 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	9.0	N.	44	NW.	2	16	7	2	2	10	7	9	6	3	15	8	8	11	10	0	0	1	0	0	10	0	0
February	10.9	NE.	48	NW.	2	6	14	4	6	4	11	4	6	1	5	8	15	16	12	2	0	1	0	0	5	0	0
March	10.4	NW.	48	NW.	4	14	14	10	5	3	4	2	10	0	11	3	17	18	15	1	0	6	0	0	6	1	0
April	9.5	SW.	38	SW.	0	5	12	7	7	8	12	5	4	0	19	5	6	8	8	0	1	0	0	0	0	2	0
May	8.9	NE.	40	NW.	1	7	15	7	11	9	9	1	3	0	15	3	13	13	10	0	0	2	0	0	0	6	0
June	7.1	Calm. E.	40	NW.	1	5	7	12	12	8	5	1	10	0	18	7	5	10	9	0	0	0	0	6	0	4	0
July	8.2	SW.	41	SW.	1	6	11	5	7	14	13	0	6	0	12	11	8	19	17	0	0	0	0	2	0	5	0
August	7.5	Calm. S.	32	W.	0	5	13	5	5	19	0	11	4	0	10	15	6	15	14	0	0	1	0	6	0	4	0
September	5.8	Calm. NE.	21	NW.	0	8	25	2	10	7	4	1	3	0	20	7	3	8	7	0	0	1	0	0	0	0	0
October	9.1	N.	48	NW.	1	14	16	0	1	6	3	10	9	3	14	8	9	14	11	0	0	1	0	0	0	0	0
November	9.1	N.	40	SW.	1	16	11	2	6	7	6	1	9	2	14	6	10	10	7	1	0	4	2	0	4	0	0
December	9.0	SW.	36	SW.	0	11	5	4	3	11	8	9	7	4	15	8	8	9	4	0	0	3	1	0	6	1	0
Year	8.7	NE.	....	.....	13	113	150	60	75	106	82	54	77	13	168	89	108	151	124	4	1	20	3	14	31	23	0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

NORTHFIELD, VT.

[Lat. 44° 10′ N.; long. 72° 41′ W.; gravity corr., —0.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.05	29.66	27.81	15.3	21.1	26.6	8.7	17.6	44	—15	9	16	78	81	.060	.085	3.79	2.00	7.1	6.8	7.5
February	29.06	.65	28.43	19.4	23.7	30.4	11.4	20.9	51	—17	13	16	77	74	.074	.085	2.13	.56	7.3	6.1	6.9
March	29.16	.58	.32	21.8	27.5	33.4	16.1	24.8	49	—15	15	21	75	76	.081	.108	2.68	.60	6.0	5.9	6.4
April	28.99	.59	.39	40.7	44.3	51.6	31.0	41.3	78	10	31	33	70	66	.172	.187	2.41	.94	6.6	5.8	6.5
May	29.07	.46	.76	51.2	52.9	62.8	38.6	50.7	85	27	42	42	73	69	.266	.266	2.46	1.42	5.6	5.1	6.1
June	29.03	.29	.82	61.2	62.6	73.0	49.7	61.4	91	30	54	56	79	78	.417	.448	2.04	.86	5.6	5.7	6.4
July	29.07	.45	.76	64.1	64.0	74.2	51.9	63.0	87	40	56	57	77	79	.448	.465	3.20	.97	5.0	5.5	5.8
August	29.08	.38	.74	62.5	65.0	74.8	54.2	64.5	89	42	57	59	83	83	.465	.499	4.78	1.75	6.3	6.3	6.8
September	29.21	.54	.90	58.0	59.6	72.0	49.1	60.6	85	36	53	55	84	85	.402	.432	.98	.30	4.1	3.0	5.4
October	29.12	.76	.71	39.8	43.2	54.2	33.2	43.7	83	16	35	37	84	79	.203	.219	1.87	1.00	6.3	5.7	6.5
November	29.17	.73	.32	29.9	32.7	41.5	23.6	32.6	62	—14	24	24	78	72	.125	.125	2.14	.94	5.5	4.2	6.3
December	29.12	.61	.35	28.1	31.7	39.5	21.8	30.6	54	— 4	20	23	73	72	.103	.119	2.63	.90	6.1	4.8	6.4
Year	29.09	.76	27.81	41.0	44.0	52.8	32.4	42.6	91	—17	34	37	78	76	.235	.253	31.11	.....	6.0	5.4	6.4

NORTH PLATTE, NEBR.

[Lat. 41° 8′ N.; long. 100° 45′ W.; gravity corr. —.01.]

January	27.13	27.38	26.78	19.7	27.6	39.2	15.8	27.5	56	0	13	18	75	67	.074	.093	.65	.28	4.5	3.7	4.9
February	26.98	.28	.42	9.8	22.4	31.5	6.6	19.0	61	—14	4	14	76	70	.047	.077	.49	.14	4.7	4.8	5.0
March	27.04	.34	.71	18.3	31.5	38.9	16.1	27.5	68	— 6	13	22	81	71	.074	.113	2.19	1.16	5.1	5.4	5.5
April	27.05	.50	.60	41.1	56.4	64.2	37.5	50.8	90	14	34	36	77	50	.195	.211	2.58	1.52	4.6	4.5	5.0
May	27.12	.41	.67	50.6	64.2	71.4	46.6	59.0	91	34	44	44	78	51	.287	.287	1.69	.72	5.6	5.1	5.5
June	27.00	.31	.66	57.7	68.4	73.8	54.8	64.3	87	46	53	56	85	67	.402	.448	7.19	1.88	6.1	5.9	6.0
July	27.14	.41	.86	62.6	73.4	80.6	58.8	69.7	93	45	58	61	86	66	.481	.536	3.91	1.26	5.6	5.2	5.4
August	27.12	.47	.87	60.6	74.7	82.7	57.2	70.0	97	41	56	60	86	62	.448	.517	2.45	.82	3.5	4.5	4.5
September	27.12	.37	.69	55.2	69.4	78.8	52.9	65.8	94	38	49	53	82	59	.347	.402	.87	.49	4.6	3.7	4.3
October	27.18	.54	.68	37.0	55.2	67.8	34.8	51.3	83	22	30	34	78	47	.164	.195	.57	.51	2.4	2.1	2.6
November	27.10	.56	.72	25.6	37.0	49.2	22.6	35.9	76	— 5	20	24	78	61	.103	.125	.08	.06	5.4	3.8	5.5
December	27.00	.66	.58	23.4	30.4	42.4	19.2	30.8	59	— 9	17	22	78	70	.089	.113	.69	.27	5.3	3.9	5.6
Year	27.08	.66	.42	38.5	50.9	60.0	35.2	47.6	97	—14	33	37	80	62	.226	.260	23.36	.....	4.8	4.4	5.0

OKLAHOMA CITY, OKLA.

[Lat. 35° 26′ N.; long. 97° 33′ W.; gravity corr. —.02.]

January	28.81	29.11	28.43	31.4	39.4	46.2	29.5	37.8	62	10	27	29	84	69	.143	.157	2.48	1.00	4.9	5.1	5.3
February	28.71	.10	.27	30.6	41.4	50.9	27.6	39.2	80	10	25	25	80	56	.120	.130	.44	.42	4.8	3.3	4.9
March	28.68	.14	.33	35.3	47.7	54.2	32.9	43.6	81	14	31	36	85	68	.171	.211	3.04	1.76	5.2	4.3	5.4
April	28.72	.16	.39	52.7	64.5	72.3	49.4	60.8	85	22	47	50	82	62	.322	.360	4.30	2.96	3.6	3.2	3.9
May	28.76	.06	.40	59.3	68.1	74.1	54.7	64.4	88	40	55	60	87	76	.432	.517	5.92	2.31	5.4	5.4	6.0
June	28.61	28.84	.21	69.7	78.3	83.5	65.1	74.3	94	57	66	68	88	71	.638	.684	4.73	.94	4.2	4.8	5.1
July	28.73	.96	.52	69.7	80.8	85.7	66.8	76.2	94	56	66	68	88	67	.638	.684	6.17	1.69	5.5	2.4	4.2
August	28.75	.99	.49	68.4	81.5	88.1	65.5	76.8	99	49	63	64	82	56	.575	.595	.79	.52	3.1	2.4	3.2
September	28.80	.97	.64	64.2	75.2	83.4	61.5	72.4	89	46	60	61	86	64	.517	.536	5.43	4.52	4.0	2.9	3.4
October	28.86	29.20	.58	50.0	64.0	74.0	47.7	60.8	92	33	40	38	70	42	.246	.228	.31	.14	2.2	0.8	1.5
November	28.78	.38	.31	40.1	49.3	58.0	36.1	47.0	86	13	33	34	78	58	.187	.195	1.17	.92	3.1	2.8	3.0
December	28.74	.19	.24	37.2	47.3	54.0	34.7	44.4	74	14	31	33	80	60	.172	.187	2.65	1.06	3.8	2.3	3.7
Year	28.75	.38	.21	50.7	61.5	68.7	47.6	58.1	99	10	45	47	82	62	.348	.374	37.43	.....	4.2	3.3	4.1

OLYMPIA, WASH.

[Lat. 47° 03′ N.; long. 122° 53′ W.; gravity corr., 0.]

January	30.12	30.48	29.62	40.2	44.6	46.5	38.3	42.4	60	24	39	41	96	88	.237	.256	5.15	1.17	8.1	7.9	8.5
February	29.80	.50	.01	32.1	37.9	39.8	30.9	35.4	45	22	30	33	95	84	.164	.187	4.80	.72	6.4	7.0	7.1
March	30.03	.35	.56	36.2	48.3	50.4	34.7	42.6	63	21	34	41	94	76	.195	.256	3.04	.88	5.2	6.1	6.1
April	29.94	.41	.44	41.9	54.8	58.1	40.6	49.4	68	28	40	46	94	75	.246	.310	4.89	1.12	6.5	7.8	6.8
May	29.95	.21	.64	45.8	65.8	68.3	44.7	56.5	84	34	44	51	93	62	.287	.373	1.95	.62	4.5	3.5	4.6
June	29.93	.32	.58	50.1	64.4	67.0	48.4	57.7	82	40	48	51	93	64	.334	.373	3.56	.93	6.4	6.2	6.8
July	29.99	.23	.75	51.3	75.1	76.7	49.6	63.2	96	40	49	55	91	51	.347	.432	.23	.19	3.8	1.5	2.5
August	29.97	.17	.77	53.3	74.3	76.7	51.4	64.0	87	44	52	59	95	60	.387	.499	1.36	.76	4.5	4.0	4.5
September	29.96	.28	.67	49.6	62.7	65.5	48.0	56.8	76	40	49	54	97	74	.347	.417	3.65	.95	6.4	5.6	7.0
October	30.01	.35	.71	48.4	57.2	60.3	45.8	53.0	73	37	47	52	96	85	.322	.387	5.66	1.35	6.3	6.5	7.3
November	30.03	.41	.47	44.9	48.9	51.7	42.6	47.2	61	29	44	45	95	88	.287	.298	10.83	2.07	7.1	8.2	8.6
December	29.90	.55	.04	38.7	41.7	44.4	35.9	40.2	56	24	37	39	93	89	.219	.237	13.61	2.05	6.2	7.2	8.4
Year	29.97	.55	.01	44.4	56.3	58.8	42.6	50.7	96	21	43	47	94	75	.281	.335	58.73	.....	6.0	6.0	6.5

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

NORTHFIELD, VT.

[H = 872 feet; h_t = 15 feet; h_r = 2 feet; h_a = 59 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	8.5	S	45	SW.	2	15	6	0	0	25	5	7	1	3	5	6	20	17	9	17	0	0	18	0	31	0	0
February	12.4	S.	40	S.	1	17	3	0	0	24	8	2	2	0	4	11	13	13	10	11	0	0	15	0	27	0	0
March	10.7	S.	60	SW.	2	19	3	3	0	33	2	1	1	0	7	11	13	15	11	7	0	0	15	0	26	0	2
April	10.0	N.	36	W.	0	18	4	0	0	17	10	7	4	0	6	11	13	10	5	7	0	0	1	0	14	0	0
May	8.7	S.	54	W.	2	17	7	1	1	20	9	5	1	1	7	11	13	13	8	2	0	0	0	0	7	0	0
June	8.2	S.	36	NE.	0	14	10	0	1	19	11	2	3	0	4	14	12	13	7	0	0	0	0	2	1	3	0
July	8.2	S.	30	N.	0	9	4	1	1	31	11	4	0	1	5	15	11	16	11	0	0	0	0	0	0	2	0
August	6.4	S.	30	SW.	0	6	10	2	1	26	8	4	0	5	1	15	15	14	10	0	0	0	0	0	0	3	0
September	7.4	S.	33	S.	0	6	4	1	1	29	5	4	2	8	7	16	7	12	7	0	0	0	0	0	0	3	4
October	7.9	S.	42	N.	1	17	2	0	1	26	8	2	5	1	4	14	13	9	5	4	0	0	1	0	12	0	0
November	10.6	S.	45	S.	3	9	2	0	1	26	8	5	1	8	6	10	14	10	7	7	0	0	3	0	21	0	0
December	10.7	S.	48	S.	8	14	1	0	3	30	9	3	1	1	6	11	14	11	8	7	0	0	5	0	25	0	0
Year	9.1	S.	....	.....	19	161	56	8	10	306	94	46	21	28	62	145	158	153	98	62	0	0	58	2	164	11	6

NORTH PLATTE, NEBR.

[H = 2,841 feet; h_t = 45 feet; h_r = 34 feet; h_a = 52 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum below 32°.	Thunderstorms.	Auroras.
January	9.5	W.	40	NW.	1	4	3	1	6	2	15	17	14	0	13	13	5	6	4	5	0	1	10	0	31	0	0
February	9.8	W.	48	NW.	2	7	1	5	4	6	9	15	9	0	11	8	9	10	6	11	0	0	13	0	28	0	0
March	10.8	NW.	34	NW.	0	11	6	2	9	3	9	10	12	0	10	12	9	8	6	11	0	1	8	0	30	0	0
April	11.5	NW.	44	W.	1	2	0	5	12	3	8	14	16	0	11	14	5	6	4	1	0	0	0	0	8	4	0
May	11.4	SE.	36	S.	0	10	5	7	15	13	2	7	3	0	7	20	4	10	6	0	0	0	0	1	0	1	0
June	11.7	SE.	36	SE.	0	6	5	7	12	10	6	4	10	0	9	9	12	18	13	0	2	0	0	0	0	7	0
July	7.6	SE.	48	NW.	2	4	3	10	21	6	4	6	8	0	5	23	3	12	11	0	1	0	0	1	0	13	0
August	7.3	SE.	42	NW.	2	8	6	5	20	9	4	6	4	0	11	17	3	13	8	0	0	2	0	4	0	8	0
September	9.8	SE.	36	S.	0	5	1	3	21	15	0	8	7	0	13	11	6	8	5	0	0	0	0	2	0	2	0
October	7.6	W.	38	S.	0	2	3	1	12	7	4	20	12	1	22	7	2	3	2	0	0	0	0	0	8	0	0
November	8.0	W.	46	NW.	1	3	1	7	8	2	8	13	12	6	5	18	7	4	1	6	0	0	2	0	25	0	0
December	8.6	NW.	37	NW.	0	4	0	3	9	4	13	13	15	1	8	13	10	8	7	8	0	0	3	0	28	0	0
Year	9.5	SE.	....	.....	9	66	34	56	149	80	82	133	122	8	125	165	75	106	73	42	3	4	36	8	158	35	0

OKLAHOMA CITY, OKLA.

[H = 1,239 feet; h_t = 54 feet; h_r = 45 feet; h_a = 53 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum below 32°.	Thunderstorms.	Auroras.
January	7.4	NW.	36	N.	0	11	6	2	7	7	9	2	15	3	9	11	11	13	9	3	0	1	3	0	20	2	0
February	11.3	N.	45	S.	1	17	4	2	11	13	2	1	4	2	9	12	7	4	1	1	0	3	1	0	21	1	0
March	12.3	N.	48	N.	1	16	5	5	10	13	3	3	7	0	9	14	8	8	5	3	1	1	1	0	14	0	0
April	9.3	SE.	50	N.	1	7	6	3	13	10	7	1	8	5	16	6	8	8	7	0	0	0	0	0	3	3	0
May	8.0	S.	36	N.	0	11	11	4	15	15	2	0	1	3	7	11	13	16	12	0	1	1	0	0	0	9	0
June	8.3	SE.	34	S.	0	7	5	4	27	9	3	1	3	1	11	11	8	13	10	0	2	1	0	4	0	6	0
July	7.5	SE.	30	NW.	0	3	9	7	26	12	3	1	1	0	14	14	3	16	12	0	0	1	0	8	0	3	0
August	7.9	S.	28	S.	0	10	4	3	19	23	1	0	2	0	19	11	1	5	3	0	0	2	0	16	0	4	0
September	7.7	SE.	38	N.	0	5	6	4	32	11	1	0	0	1	16	7	7	7	6	0	1	1	0	0	0	2	0
October	9.7	SE.	34	SE.	0	17	4	2	19	11	5	1	0	3	25	4	2	4	3	0	0	0	0	1	0	0	0
November	11.0	SE.	48	NW.	1	14	7	1	15	12	6	1	3	1	17	10	3	10	6	1	0	0	1	0	12	0	0
December	11.3	S.	36	SE.	0	8	8	0	14	18	5	1	6	2	16	11	4	8	5	0	1	0	1	0	14	2	0
Year	9.3	SE.	....	.....	4	126	75	37	208	154	47	12	50	21	168	122	75	112	79	8	6	11	7	29	84	32	0

OLYMPIA, WASH.

[H = 44 feet; h_t = 39 feet; h_r = 33 feet; h_a = 54 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum below 32°.	Thunderstorms.	Auroras.
January	3.6	S.	18	S.	0	2	2	4	8	34	3	4	3	2	0	10	21	18	16	0	0	3	0	0	7	0	0
February	4.4	S.	18	S.	0	9	9	0	1	23	8	2	2	2	6	6	16	19	17	9	0	0	1	0	14	0	0
March	3.7	S.	17	W.	0	11	1	0	0	26	11	6	6	1	9	7	15	18	14	2	0	1	0	0	13	0	0
April	3.6	S.	20	S.	0	7	4	1	1	27	3	7	10	0	5	9	16	17	16	0	0	0	0	0	2	0	0
May	3.4	N.	14	N.	0	22	3	1	2	10	4	9	11	0	11	12	8	8	4	0	0	1	0	0	0	0	0
June	3.3	S.	15	W.	0	9	0	0	0	29	9	14	6	2	7	5	18	16	11	0	0	0	0	0	0	1	0
July	3.7	N.	16	W.	0	18	7	3	0	10	4	11	8	1	21	8	2	3	2	0	0	2	0	1	0	0	0
August	2.8	NW.	18	NW.	0	8	7	1	2	8	2	4	23	7	14	8	9	6	4	0	0	5	0	0	0	0	0
September	3.4	S.	19	SW.	0	8	4	3	3	13	9	5	8	7	6	4	20	15	12	0	1	5	0	0	0	1	0
October	2.0	Calm. SW.	13	SW.	0	7	8	2	0	2	16	1	1	25	5	7	19	14	12	0	1	9	0	0	0	1	0
November	3.9	SW.	24	W.	0	4	3	1	0	8	25	5	0	14	0	7	23	24	18	1	0	5	0	0	1	0	0
December	5.9	S.	32	SW.	0	3	0	1	0	35	11	5	0	7	0	11	20	24	22	2	1	5	1	0	6	1	0
Year	3.6	S.	....	.....	0	108	48	17	17	216	105	73	78	68	84	94	187	182	148	14	3	36	2	1	43	4	0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

OMAHA, NEBR.

[Lat. 41° 16′ N.; long. 95° 56′ W.; gravity corr. —01.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	28.91	29.27	28.37	24.5	31.7	38.0	21.1	29.6	56	8	20	22	84	68	.103	.113	2.11	.95	4.5	3.2	5.8
February	28.83	.31	.10	15.4	21.7	28.9	10.5	19.7	53	—9	11	14	82	74	.067	.077	1.02	.35	4.5	3.1	4.3
March	28.85	.25	.32	24.0	30.9	35.6	21.6	28.6	62	—6	20	24	84	75	.103	.125	2.26	.84	6.9	5.9	7.3
April	28.82	.26	.43	47.2	58.8	64.3	43.9	54.1	90	17	39	40	75	52	.237	.246	2.80	.97	4.8	4.5	4.9
May	28.91	.31	.46	53.3	65.1	69.6	49.1	59.4	83	38	42	44	68	50	.266	.287	4.94	1.71	5.4	5.2	5.7
June	28.74	.06	.48	65.3	72.7	76.9	62.0	69.4	92	46	60	59	84	65	.517	.499	6.66	2.32	6.5	5.7	6.6
July	28.87	.21	.62	65.0	75.7	79.8	62.7	71.2	90	51	59	61	80	61	.499	.536	3.54	1.33	5.7	4.8	5.4
August	28.85	.20	.60	65.3	75.3	80.9	63.6	72.2	97	44	59	61	80	62	.499	.536	2.02	.89	4.5	3.4	4.4
September	28.91	.14	.66	61.6	73.4	79.7	60.3	70.0	91	43	53	57	75	58	.402	.465	1.76	1.02	4.2	3.6	5.2
October	28.95	.49	.61	44.7	55.5	63.3	43.0	53.2	84	31	36	39	74	57	.211	.237	5.37	2.77	3.8	2.5	4.1
November	28.90	.46	.35	28.4	36.4	42.2	26.3	34.2	68	—2	21	24	74	64	.108	.125	.37	.15	5.5	5.4	5.9
December	28.79	.48	.22	29.5	36.3	42.5	27.2	34.8	60	2	23	24	76	63	.119	.125	2.07	1.06	4.3	2.2	5.2
Year	28.86	.48	.10	43.7	52.8	58.5	40.9	49.7	97	—9	37	39	78	62	.261	.281	34.92	.....	5.0	4.1	5.4

OSWEGO, N. Y.

[Lat. 43° 29′ N.; long. 76° 35′ W.; gravity corr., 0.]

January	29.65	30.20	28.81	24.4	25.8	30.8	19.9	24.9	46	1	21	21	88	83	.108	.108	3.01	1.22	9.1	8.1	8.7
February	29.63	.29	29.00	26.9	28.2	34.1	21.4	27.8	57	4	22	22	82	77	.113	.113	2.81	.51	8.5	6.4	7.8
March	29.72	.19	.04	27.5	30.5	34.8	23.8	29.3	52	1	21	22	78	73	.108	.113	4.15	1.57	7.3	6.9	6.8
April	29.60	.08	.20	42.2	45.1	50.5	37.5	44.0	79	24	35	36	78	74	.203	.211	1.68	.62	5.9	5.8	5.4
May	29.67	29.93	.46	50.2	52.7	58.5	43.4	51.0	80	32	43	43	78	70	.277	.277	1.08	1.56	5.8	5.9	5.5
June	29.60	.92	.33	61.9	63.5	70.7	55.3	63.0	87	42	52	53	72	69	.387	.402	1.58	.64	4.8	5.6	4.8
July	29.62	.95	.28	64.1	65.2	71.4	57.8	64.6	90	48	55	54	74	68	.432	.417	4.10	1.11	5.3	5.4	5.0
August	29.61	.88	.20	66.0	67.7	74.2	60.4	67.3	90	49	59	59	80	75	.499	.499	2.11	.68	5.5	7.1	6.3
September	29.75	30.06	.50	62.1	64.8	71.6	57.1	64.4	88	46	55	55	79	72	.432	.432	1.28	.63	4.6	2.2	3.5
October	29.70	.30	.31	46.4	50.2	55.9	42.4	49.2	84	28	38	39	72	66	.228	.237	2.89	1.28	6.6	4.5	5.4
November	29.71	.28	28.68	37.2	38.6	44.8	32.3	38.6	68	8	29	29	74	69	.157	.157	2.66	.74	8.0	7.6	7.6
December	29.72	.31	29.07	34.3	36.1	41.8	29.6	35.7	61	7	28	27	78	71	.150	.143	4.09	1.20	8.2	6.8	7.5
Year	29.66	.31	28.68	45.3	47.4	53.3	40.0	46.6	90	1	38	38	78	72	.258	.259	31.44	.....	6.6	6.0	6.2

PALESTINE, TEX.

[Lat. 31° 45′ N.; long. 95° 40′ W.; gravity. corr., —.03.]

January	29.57	29.91	29.24	41.2	48.8	53.3	38.9	46.1	69	26	35	35	78	62	.203	.203	11.11	4.84	5.9	5.0	6.2
February	29.47	.88	.14	46.9	56.5	62.7	44.5	53.6	82	21	41	42	81	61	.256	.266	1.92	1.61	5.6	4.2	5.1
March	29.48	.87	.11	45.8	56.0	62.8	42.5	52.6	80	26	41	43	83	62	.256	.277	2.63	.76	6.2	5.8	6.5
April	29.49	.84	.28	58.1	70.3	76.6	54.9	65.8	87	36	53	55	82	61	.402	.432	8.95	3.33	4.9	4.5	5.4
May	29.51	.77	.32	63.7	72.9	79.6	60.0	69.8	87	46	58	55	84	57	.481	.432	1.67	.93	5.6	4.1	5.2
June	29.36	.61	.06	73.8	83.7	90.6	69.2	79.9	96	60	69	62	84	50	.707	.555	2.27	1.18	4.2	3.4	5.7
July	29.46	.62	.27	74.2	83.9	90.5	70.0	80.2	96	64	69	62	84	50	.707	.555	2.89	.98	3.5	2.9	4.7
August	29.50	.62	.30	71.6	81.2	90.3	67.9	79.1	96	54	66	63	82	56	.638	.575	3.44	1.16	3.5	3.7	4.2
September	29.52	.67	.39	67.6	79.9	86.4	64.9	75.6	92	52	63	62	85	57	.575	.555	1.53	.67	4.2	4.8	5.3
October	29.61	.84	.39	55.2	72.3	78.1	53.9	66.0	88	41	50	52	82	49	.360	.387	.12	.12	2.1	1.4	2.3
November	29.57	30.14	.15	48.9	59.5	66.3	46.0	56.2	86	26	43	44	80	58	.277	.287	4.09	1.83	4.6	4.3	5.0
December	29.59	29.96	.13	46.3	55.0	61.2	43.2	52.2	76	26	41	41	81	60	.256	.256	4.65	1.38	4.8	4.9	5.8
Year	29.51	30.14	29.06	57.8	68.3	74.9	54.7	64.8	96	21	52	51	82	57	.426	.398	45.27	.....	4.6	4.1	5.1

PARKERSBURG, W. VA.

[Lat. 39° 16′ N.; long. 81° 36′ W.; gravity corr., —.01.]

January	29.40	29.93	28.64	32.6	36.6	41.2	29.8	35.5	60	19	28	32	85	83	.150	.180	4.10	1.18	8.6	6.6	7.5
February	29.38	.88	.84	38.3	41.1	48.4	30.8	39.6	76	8	34	35	84	81	.195	.203	4.61	.85	7.0	5.1	6.5
March	29.36	.88	.70	35.0	40.4	47.1	30.4	38.8	66	10	30	34	81	80	.164	.195	4.66	.87	6.8	6.9	6.5
April	29.35	.64	.93	50.0	56.8	65.7	43.4	54.6	86	26	42	43	76	64	.266	.277	2.20	.78	4.8	4.1	4.8
May	29.40	.65	.15	53.7	62.1	69.9	47.9	58.9	85	33	47	47	78	61	.322	.322	1.53	.46	6.5	5.8	6.2
June	29.30	.47	.06	69.1	74.2	83.5	62.0	72.8	92	52	62	64	80	73	.555	.595	3.93	1.07	4.8	5.4	5.0
July	29.38	.62	.12	66.8	73.6	81.0	59.1	70.0	90	50	60	59	78	62	.517	.499	5.67	2.34	3.5	4.4	4.2
August	29.35	.55	.06	66.5	73.4	81.5	61.4	71.4	94	46	62	63	85	72	.555	.575	5.38	2.23	4.7	4.7	5.5
September	29.50	.73	.31	61.7	69.7	80.6	57.3	69.0	92	46	58	60	88	72	.481	.517	1.72	.66	2.6	2.7	3.3
October	29.47	.83	28.99	45.7	53.8	64.1	41.1	52.6	86	24	40	44	83	70	.246	.287	2.07	.70	3.8	3.5	4.6
November	29.47	30.03	.60	38.1	43.2	51.7	32.6	42.2	75	15	33	34	82	70	.187	.195	3.46	1.00	6.6	5.4	6.8
December	29.52	29.95	.99	35.7	42.4	50.9	30.4	40.6	65	16	30	33	81	71	.164	.187	2.51	.65	5.1	4.0	4.7
Year	29.41	30.03	28.06	49.4	55.6	63.8	43.8	53.8	94	8	44	46	82	72	.317	.336	41.84	.....	5.4	4.9	5.5

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

OMAHA, NEBR.

[H=1,113 feet; h_t=88 feet; h_r=76 feet; h_a=90 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	7.3	NW.	30	NW.	0	12	1	3	6	12	4	3	18	3	10	8	13	7	5	12	0	0	10	0	29	0	0
February	8.5	NW.	36	NW.	0	9	1	4	7	10	4	4	14	3	15	4	9	7	4	7	0	0	14	0	27	0	0
March	9.8	NW.	34	NW.	0	13	7	3	7	7	1	2	18	4	4	10	17	13	9	12	0	0	12	0	25	0	0
April	9.3	NW.	32	NW.	0	9	2	8	7	12	4	0	15	3	9	13	8	10	7	1	1	0	0	0	4	3	0
May	8.6	S.	45	NW.	1	11	12	4	5	22	6	0	2	0	10	9	12	11	10	0	0	0	0	0	0	5	0
June	8.2	S.	26	S.	0	7	10	4	6	13	5	6	7	2	8	7	15	15	10	0	0	0	0	2	0	6	0
July	7.1	SE.	30	NW.	0	9	5	2	18	7	5	4	9	3	8	15	8	15	11	0	0	0	0	1	0	8	0
August	6.7	SE.	26	SW.	0	9	3	1	16	10	9	0	11	3	12	15	4	8	8	0	0	0	0	4	0	3	0
September	8.1	S.	26	S.	0	2	1	3	14	20	9	2	8	1	13	10	7	9	6	0	0	0	0	4	0	5	0
October	7.7	NW.	24	NW.	0	7	1	0	5	13	9	1	21	5	15	9	7	10	8	0	0	0	0	0	1	0	0
November	8.4	NW.	34	NW.	0	11	8	3	9	9	4	1	14	1	8	10	12	5	3	0	0	0	6	0	20	0	0
December	8.5	S.	30	NW.	0	6	1	0	5	20	10	7	13	0	10	13	8	9	8	4	0	0	3	0	22	2	0
Year	8.2	S.	....	.....	1	105	52	35	105	155	70	30	150	28	122	123	120	119	89	36	1	0	45	11	128	32	0

OSWEGO, N. Y.

[H=335 feet; h_t=76 feet; h_r=83 feet; h_a=87 feet.]

Month.	Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	11.7	SE.	38	NW.	0	9	2	1	16	11	7	6	8	2	2	4	25	15	11	19	0	6	14	0	29	0	0
February	15.8	S.	40	W.	1	6	2	1	7	15	3	8	14	0	1	9	18	16	13	13	0	1	12	0	23	0	0
March	13.9	SE.	41	SW.	1	12	8	3	17	5	4	5	8	0	6	7	18	14	11	11	0	1	12	0	23	0	0
April	11.4	W.	29	W.	0	7	0	1	6	7	10	19	10	0	10	9	11	10	7	6	0	3	0	0	6	0	0
May	9.4	W.	32	NW.	0	10	0	0	4	11	10	16	10	1	11	9	11	6	4	1	0	2	0	0	0	0	0
June	8.0	W.	27	N.	0	13	3	1	8	8	5	16	4	2	14	6	10	9	6	0	0	1	0	0	0	3	0
July	9.2	S.	26	N.	0	7	1	2	3	22	4	19	3	1	12	10	9	14	8	0	0	0	0	1	0	5	0
August	7.3	S.	28	SW.	0	7	5	2	10	14	6	13	4	1	4	17	10	12	10	0	0	1	0	0	0	5	2
September	8.6	S.	30	W.	0	7	2	2	13	16	6	7	7	0	14	10	6	7	6	0	0	6	0	0	0	4	4
October	10.7	SE.	37	SW.	0	5	2	3	16	15	4	2	15	0	10	10	11	11	9	2	0	0	0	0	4	1	0
November	14.7	S.	42	W.	4	1	2	3	12	20	11	5	6	0	4	4	22	16	12	10	0	0	3	0	14	0	0
December	13.7	S.	40	NW.	1	2	3	0	8	22	11	5	11	0	5	7	19	15	10	12	0	2	4	0	15	0	0
Year	11.2	S.	....	.....	7	86	30	19	120	166	81	121	100	7	93	102	170	145	107	74	0	23	45	1	114	18	6

PALESTINE, TEX.

[H=511 feet; h_t=42 feet; h_r=43 feet; h_a=51 feet.]

Month.	Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.4	NE.	26	SE.	0	5	17	6	3	5	4	7	15	0	10	7	14	15	15	0	0	0	0	0	5	1	0
February	8.5	S.	29	S.	0	9	8	2	3	19	2	3	10	0	10	12	6	5	4	0	0	1	0	0	5	1	0
March	8.2	NW.	26	S.	0	4	10	1	6	14	3	8	16	0	5	14	12	10	9	2	0	0	0	0	4	0	0
April	6.8	NW.	36	S.	0	8	3	1	11	15	5	0	16	1	12	4	14	13	12	0	1	1	0	0	0	8	0
May	5.9	S.	36	NE.	0	8	9	2	5	24	3	2	8	1	11	9	11	6	6	0	0	0	0	0	0	3	0
June	5.8	S.	24	E.	0	1	4	5	18	23	3	3	3	0	5	19	6	5	5	0	0	0	0	18	0	6	0
July	5.1	NE.	19	N.	0	10	18	11	4	1	8	7	3	0	12	14	5	7	7	0	0	0	0	19	0	4	0
August	4.7	NE.	23	NW.	0	7	16	5	6	4	6	14	3	1	15	11	5	8	7	0	0	0	0	19	0	5	0
September	4.7	NE.	24	E.	0	2	32	12	10	3	0	0	1	0	9	11	10	6	6	0	0	1	0	4	0	5	0
October	4.9	S.	18	N.	0	14	10	3	6	14	3	9	2	1	22	5	4	1	1	0	0	0	0	0	0	0	0
November	6.7	NE.	24	NW.	0	10	12	2	5	11	6	7	7	0	13	6	11	7	6	0	0	1	0	0	5	1	0
December	8.4	NW.	32	W.	0	11	3	7	8	11	7	3	12	0	11	4	16	8	7	0	0	0	0	0	0	3	1
Year	6.3	S.	....	.....	0	89	142	57	85	144	50	63	96	4	135	116	114	91	85	2	1	4	0	60	22	36	0

PARKERSBURG, W. VA.

[H = 638 feet; h_t=76 feet; h_r=67 feet; h_a=84 feet.]

Month.	Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.1	SW.	28	S.	0	4	4	8	7	11	12	8	5	3	6	4	21	19	11	12	0	0	5	0	21	1	0
February	7.8	W.	34	W.	0	1	0	6	7	13	6	13	9	1	8	4	16	21	14	6	0	2	4	0	15	0	0
March	6.6	W.	30	W.	0	6	5	10	8	6	5	11	8	3	8	4	19	19	16	9	0	2	4	0	14	0	0
April	5.2	W.	26	W.	0	7	1	4	5	7	7	16	6	7	13	6	11	15	9	4	0	0	0	0	5	2	0
May	4.7	S.	30	W.	0	6	7	5	5	12	4	9	9	5	10	4	17	11	7	0	0	2	0	0	0	3	0
June	4.0	S.	30	W.	0	3	4	9	9	13	5	7	4	6	12	10	8	16	13	0	0	0	0	3	0	8	0
July	4.2	W.	30	W.	0	3	2	4	10	7	3	17	3	13	13	16	2	13	9	0	1	1	0	1	0	5	0
August	3.6	Calm SW.	26	W.	0	1	10	5	7	6	10	6	4	13	9	14	8	15	12	0	1	6	0	4	0	4	0
September	3.0	Calm S.	15	W.	0	4	1	3	3	18	5	3	4	19	15	12	3	6	6	0	0	2	0	5	0	1	0
October	5.1	SE.	24	W.	0	6	3	7	10	8	4	6	8	10	11	14	6	9	8	0	0	7	0	0	3	1	0
November	7.0	S.	37	W.	0	2	5	1	8	14	5	10	8	7	3	16	11	13	9	5	0	1	2	0	14	0	0
December	6.4	S.	30	NW.	0	4	1	1	15	25	6	3	4	3	14	6	11	9	8	1	0	1	2	0	16	0	0
Year	5.3	S.	....	.....	0	47	43	63	94	140	72	109	72	90	122	110	133	166	122	37	2	31	17	13	90	25	0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

PENSACOLA, FLA.

[Lat. 30° 25′ N.; long. 87° 13′ W.; gravity corr., —.04.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	30.08	30.35	29.65	46.1	52.7	57.6	43.8	50.7	67	30	43	48	90	85	.277	.334	4.18	.84	3.9	3.3	4.9
February	30.03	.47	.62	58.3	61.8	65.9	55.4	60.6	74	30	55	58	90	88	.432	.481	3.39	1.41	5.9	6.3	7.4
March	29.96	.34	.69	56.0	60.6	65.9	52.9	59.4	77	39	51	53	84	79	.373	.402	6.94	2.64	5.7	3.6	4.8
April	30.01	.33	.64	64.1	67.0	73.3	59.2	66.2	84	34	57	59	79	76	.465	.499	1.65	1.36	3.9	1.9	3.1
May	29.99	.26	.80	69.6	73.0	79.5	64.6	72.0	87	54	60	61	73	68	.517	.536	2.25	1.20	2.2	2.5	2.3
June	29.89	.10	.68	79.6	81.3	86.7	74.2	80.4	95	68	72	72	80	75	.783	.783	2.57	1.98	3.3	3.1	3.3
July	29.98	.12	.83	79.3	80.2	85.3	74.3	79.8	90	69	74	74	84	81	.838	.838	5.59	1.68	5.0	5.4	5.8
August	29.96	.09	.80	78.6	80.5	87.6	73.7	80.6	94	62	72	72	82	77	.783	.783	.72	.28	3.5	3.1	3.7
September	30.00	.21	.84	73.6	78.2	85.0	69.0	77.0	89	61	68	69	84	75	.684	.707	1.50	.73	3.4	2.7	3.4
October	30.07	.35	.80	60.5	68.2	76.4	57.3	66.8	88	44	52	52	74	60	.387	.387	.04	.04	1.1	.9	.9
November	30.09	.54	.70	54.0	60.3	66.6	50.9	58.8	80	29	48	51	80	73	.334	.373	3.88	2.13	3.3	1.9	2.8
December	30.16	.48	.78	51.6	56.8	61.3	48.6	55.0	73	32	48	51	88	82	.334	.373	2.87	1.74	5.3	6.1	6.5
Year	30.02	.54	.62	64.3	68.4	74.3	60.3	67.3	95	29	58	60	82	77	.517	.541	35.58	.....	3.9	3.4	4.1

PHILADELPHIA, PA.

[Lat. 39° 57′ N.; long. 75° 9′ W.; gravity corr., .—01]

January	29.94	30.42	29.10	32.8	36.8	43.2	29.7	36.4	56	17	26	27	78	69	.137	.143	3.65	.98	6.3	5.9	5.6
February	29.98	.58	.35	36.6	40.2	46.8	32.4	39.6	69	15	29	30	77	70	.157	.164	4.71	.78	6.9	5.4	6.6
March	29.98	.44	.41	34.0	39.0	45.2	30.9	38.0	61	12	25	28	72	67	.130	.150	4.42	1.37	6.6	6.4	6.9
April	29.90	.41	.35	49.8	55.8	63.4	45.2	54.3	83	30	37	38	64	54	.219	.228	2.34	1.03	4.6	4.5	4.6
May	29.93	.30	.64	57.2	61.3	70.1	51.8	61.0	90	36	44	47	64	62	.287	.322	1.74	.50	6.1	6.5	6.8
June	29.85	.11	.61	67.8	72.0	81.8	61.8	71.8	96	49	57	59	71	66	.465	.499	2.51	.80	4.1	4.3	4.2
July	29.91	.24	.65	68.7	71.9	80.0	63.8	71.9	89	54	59	60	73	69	.499	.517	4.65	1.60	5.8	6.6	5.8
August	29.88	.12	.59	70.6	74.1	82.0	66.6	74.3	97	54	64	65	80	74	.595	.616	4.22	.95	7.2	6.4	6.2
September	30.04	.30	.76	66.4	70.7	80.3	63.0	71.6	91	51	60	62	80	74	.517	.555	1.90	1.26	4.1	2.2	3.5
October	29.97	.41	.56	51.4	54.8	62.8	47.0	54.9	86	36	43	43	74	66	.277	.277	2.57	1.17	5.2	4.6	4.8
November	30.07	.71	.18	40.5	44.4	51.6	36.9	44.2	66	15	33	34	76	68	.187	.195	1.70	.53	4.8	3.3	5.3
December	30.08	.49	.43	39.3	43.4	50.7	34.8	42.8	66	15	32	31	75	63	.180	.172	3.78	1.63	3.7	4.1	5.1
Year	29.96	.71	.10	51.3	55.4	63.2	47.0	55.1	97	12	42	44	74	67	.304	.320	38.19	.....	5.4	5.0	5.4

PIERRE, S. DAK.

[Lat. 44° 24′ N.; long. 100° 17′ W.; gravity corr., 0.]

January	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
June	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	a28.44	a28.74	a28.13	b63.8	a77.3	b83.1	b58.6	b70.8	b90	b46	b55	a53	b75	a46	b.432	a.402	1.21	.30	c5.6	d6.1	5.9
August	28.41	.72	.12	62.3	79.4	84.4	58.6	71.5	104	42	55	56	79	48	.432	.448	1.50	.45	5.3	5.9	5.9
September	28.37	.74	.00	58.2	75.7	82.1	54.7	68.4	101	38	49	47	72	39	.347	.322	.70	.45	4.4	4.1	4.8
October	28.49	.90	.02	40.0	e54.4	62.9	37.3	50.1	81	27	33	e36	77	e52	.187	.211	1.10	.66	4.2	3.8	4.2
November	28.45	.02	27.95	23.8	29.9	40.9	18.5	29.7	80	— 8	20	22	85	76	.103	.113	.47	.23	6.6	5.9	6.7
December	28.32	.04	.76	22.8	29.6	36.0	19.5	27.8	56	—11	18	23	84	78	.093	.119	.56	.45	4.4	4.4	5.0
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

a For 26 days. b For 25 days. c For 24½ days. d 29 days. e 30 days.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

PENSACOLA, FLA.

[H = 56 feet; h_t = 79 feet; h_r = 80 feet; h_a = 90 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	10.0	NW.	50	SW.	4	8	5	10	7	2	5	10	14	1	13	6	12	10	10	0	1	4	0	0	2	2	0
February	11.3	SE.	36	NW.	0	8	9	5	14	6	11	1	1	1	4	7	17	13	12	0	0	3	0	0	1	1	0
March	10.7	NE.	32	NW.	0	8	13	4	10	3	12	3	8	1	11	12	8	11	10	0	0	0	0	0	0	3	0
April	8.9	E.	41	E.	1	9	5	11	10	5	9	4	5	2	17	11	2	5	4	0	0	2	0	0	0	1	0
May	9.7	SW.	33	S.	0	9	7	4	1	3	16	8	11	3	22	8	1	6	4	0	0	1	0	0	0	5	0
June	9.6	SW.	42	SW.	1	0	8	5	8	4	25	3	7	0	15	13	2	5	4	0	0	0	0	7	0	3	0
July	9.4	SW.	35	SW.	0	3	8	9	1	8	17	9	4	3	8	11	12	15	14	0	0	0	0	0	0	6	0
August	8.0	N.	30	W.	0	16	11	1	0	1	14	9	6	4	14	14	3	9	3	0	0	0	0	5	0	7	0
September	8.1	NE.	32	SE.	0	4	23	8	7	1	5	4	5	3	19	8	3	7	4	0	0	0	0	0	0	3	0
October	10.1	N.	27	N.	0	22	17	5	1	1	1	8	5	2	27	4	0	2	0	0	0	1	0	0	0	0	0
November	10.2	NE.	46	W.	1	7	16	8	9	1	3	5	11	0	18	8	4	7	6	0	0	0	0	0	2	2	0
December	10.2	NE.	40	SW.	1	14	20	12	5	5	1	1	4	0	8	7	16	12	10	0	0	3	0	0	0	0	0
Year	9.7	NE.	....	.....	8	108	142	82	73	40	119	65	81	20	176	109	80	102	81	0	1	14	0	12	5	33	0

PHILADELPHIA, PA.

[H = 117 feet; h_t = 168 feet; h_r = 166 feet; h_a = 184 feet.]

January	12.1	NW.	48	NE.	2	3	9	4	2	5	12	2	23	2	11	9	11	10	10	3	0	3	1	0	19	0	0
February	12.6	NW.	36	SW.	0	3	6	4	7	5	9	2	20	0	8	6	14	15	14	5	0	4	2	0	14	0	0
March	14.4	NE.	37	NE.	0	1	21	5	3	2	6	3	20	1	7	8	16	15	14	4	0	3	2	0	14	1	0
April	11.3	NW.	36	S.	0	0	5	2	8	1	13	4	27	0	15	7	8	10	8	1	0	2	0	0	1	2	0
May	11.2	NW.	34	NW.	0	2	13	3	4	1	16	5	18	0	5	10	16	12	11	1	0	0	0	0	0	3	0
June	10.1	SW.	31	NW.	0	2	10	4	6	4	16	4	14	0	17	6	7	7	5	0	0	1	0	5	0	3	0
July	9.4	SW.	31	SE.	0	2	9	4	11	10	8	4	14	0	10	9	12	13	10	0	1	2	0	0	0	5	0
August	8.1	SW.	32	S.	0	2	8	6	7	3	16	5	13	2	7	10	14	14	11	0	0	2	0	3	0	7	0
September	7.6	Calm SW.	26	NW.	0	3	8	4	6	7	14	2	13	3	20	5	5	7	6	0	0	2	0	1	0	1	0
October	11.5	NW.	36	NW.	0	7	8	6	2	2	13	4	20	0	13	9	9	9	7	0	0	3	0	0	0	0	0
November	11.5	NW.	42	S.	2	4	11	3	6	6	6	4	20	0	11	10	9	9	6	1	0	2	2	0	5	0	0
December	11.1	SW.	42	SW.	1	3	5	3	3	6	18	8	16	0	15	5	11	11	8	0	0	4	1	0	8	1	0
Year	10.9	NW.	....	.....	5	32	113	48	65	52	147	47	218	8	139	94	132	132	110	15	1	27	8	9	61	23	0

PIERRE, S. DAK.

[H = 1,470 feet; h_t = 50 feet; h_r = 47 feet; h_a = 54 feet.]

January	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
June	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	9.1	SE.	b35	SW.	0	3	5	8	19	3	2	3	10	5	6	14	11	11	6	0	1	1	0	1	0	10	0
August	7.5	SE.	38	W.	0	12	1	8	18	2	4	2	7	8	5	15	11	12	8	0	0	1	0	12	0	8	0
September	9.7	SE.	38	NW.	0	11	5	2	15	6	2	2	11	6	12	11	7	6	4	0	0	0	0	6	0	4	1
October	7.4	NW.	42	W.	1	3	6	2	12	2	2	14	16	5	15	8	8	7	2	1	0	0	0	0	0	1	0
November	8.1	SE.	42	NW.	1	5	3	12	18	1	2	6	11	2	5	9	16	9	3	16	0	0	10	0	25	0	0
December	7.7	NW.	36	NW.	0	5	5	8	14	3	2	5	19	1	13	7	11	3	2	5	0	0	9	0	26	0	0
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

a By eye observations at 8 a. m. and 8 p. m. when there is no self-register at station. b For 24½ days.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

PITTSBURG, PA.

[Lat. 40° 32′ N.; long. 80° 2′ W.; gravity corr., —.01.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.14	29.70	28.34	33.0	37.3	40.0	29.9	35.0	57	18	28	32	84	81	.150	.180	2.43	.64	8.3	8.1	8.3
February	29.13	.65	.57	37.8	40.6	47.2	31.3	39.2	68	9	32	34	81	78	.180	.195	6.09	1.64	6.8	6.9	7.1
March	29.16	.65	.44	34.3	39.9	45.5	29.8	37.6	65	11	27	28	76	67	.143	.150	3.11	.79	6.5	6.6	7.0
April	29.13	.47	.64	49.3	56.6	63.2	43.7	53.4	81	24	38	37	67	52	.228	.219	1.18	.49	4.4	4.4	4.8
May	29.19	.39	.96	55.1	61.8	68.9	48.8	58.8	84	34	44	44	69	56	.287	.287	3.23	.96	5.8	6.5	6.3
June	29.09	.31	.74	69.2	73.5	82.1	62.5	72.3	92	50	60	60	74	64	.517	.517	3.90	1.08	4.6	5.9	5.2
July	29.16	.41	.94	67.3	71.8	79.9	60.2	70.0	89	52	58	57	72	60	.481	.465	7.65	1.69	4.5	5.0	5.5
August	29.12	.33	.80	66.9	74.4	81.0	62.4	71.7	94	48	60	60	80	61	.517	.517	1.60	.54	4.5	4.7	6.0
September	29.27	.52	29.09	63.0	72.1	79.7	59.0	69.4	90	46	58	60	85	67	.481	.517	1.90	.58	3.1	2.2	4.0
October	29.22	.60	28.83	47.7	55.4	62.6	44.2	53.4	85	31	39	40	74	59	.237	.246	1.53	1.00	3.6	4.5	4.9
November	29.21	.75	.18	39.3	44.3	49.6	35.0	42.3	76	16	32	29	75	57	.180	.157	2.61	.70	6.8	6.3	7.8
December	29.25	.71	.74	38.7	43.7	50.2	34.0	42.1	63	16	28	27	69	54	.150	.143	3.05	1.01	5.2	5.3	5.6
Year	29.17	.75	.18	50.1	56.0	62.5	45.1	53.8	94	9	42	42	76	63	.296	.300	38.28	.....	5.3	5.5	6.0

PORT ANGELES, WASH.

[Lat. 48° 7′ N.; long. 123° 6′ W.; gravity corr., +.01.]

January	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	29.93	30.46	29.44	40.1	49.2	52.9	36.5	44.7	67	27	38	45	94	87	.228	.298	3.03	1.15	6.9	7.2	6.3
May	29.97	.22	.60	44.0	55.7	58.7	42.5	50.6	70	33	42	50	94	80	.266	.360	.92	.35	4.2	4.1	4.1
June	29.93	.35	.51	48.6	57.6	60.2	46.3	53.2	70	36	47	53	93	84	.322	.402	.83	.19	6.7	6.4	5.0
July	30.01	.27	.81	51.2	62.8	65.4	49.2	57.3	81	40	49	54	93	74	.347	.417	.22	.11	5.5	1.3	2.7
August	29.99	.20	.80	51.5	64.3	67.8	50.8	59.3	78	45	50	55	95	73	.360	.452	1.46	.74	3.5	3.9	3.7
September	29.94	.31	.58	47.8	58.1	60.8	46.3	53.6	73	38	46	52	95	80	.310	.387	3.65	1.18	5.6	5.8	6.6
October	30.00	.41	.66	45.8	52.5	55.9	44.2	50.0	64	36	45	49	97	88	.298	.347	1.34	.33	5.5	6.9	7.2
November	30.00	.40	.39	42.6	45.7	55.6	39.2	44.9	60	29	41	43	96	89	.256	.277	6.24	1.25	8.5	7.5	8.3
December	29.84	.45	28.83	36.5	39.1	45.6	33.8	39.7	58	28	34	36	94	90	.195	.211	8.95	1.97	5.0	6.7	7.7
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

PORT HURON, MICH.

[Lat. 43° 0′ N.; long. 82° 26′ W.; gravity corr., 0.]

January	29.35	29.97	28.51	25.5	28.9	32.1	22.9	27.5	49	10	21	24	83	82	.108	.125	1.81	.75	8.4	8.3	8.9
February	29.31	.88	.57	26.9	29.2	35.0	22.8	28.9	52	2	21	21	79	72	.108	.108	2.33	.86	7.3	5.9	7.1
March	29.39	.88	.89	26.1	29.9	33.7	22.9	28.3	50	6	20	22	78	73	.103	.113	2.18	.65	7.2	6.3	6.9
April	29.33	.71	.99	42.6	44.8	52.9	35.9	44.4	79	20	34	36	74	73	.195	.211	2.60	1.46	5.4	4.8	4.9
May	29.42	.64	29.19	49.7	51.6	61.2	41.0	51.1	82	27	38	38	65	63	.228	.228	2.17	1.56	4.3	3.4	3.5
June	29.31	.62	28.99	63.8	64.6	73.8	55.2	64.5	89	45	54	55	73	72	.417	.432	2.13	.70	4.6	5.1	4.9
July	29.36	.67	29.00	62.7	66.4	73.7	55.5	64.6	87	44	54	55	76	68	.417	.432	3.93	1.72	2.7	4.2	4.4
August	29.33	.53	28.97	64.7	67.6	76.4	58.8	67.6	99	46	57	58	77	72	.465	.481	4.28	1.01	3.8	4.9	5.4
September	29.47	.77	29.18	60.0	65.3	74.7	55.2	65.0	90	43	55	56	83	72	.432	.448	3.28	1.47	2.5	2.6	4.2
October	29.41	.89	.08	45.1	49.8	57.8	41.0	49.4	84	25	38	39	78	68	.228	.237	1.86	.73	4.8	3.8	5.4
November	29.37	.87	28.41	34.6	36.6	41.8	30.2	36.0	65	9	28	30	77	78	.150	.164	5.26	1.39	6.5	7.1	7.7
December	29.39	30.02	.73	32.5	34.9	40.8	28.6	34.7	56	16	25	26	74	71	.130	.137	1.98	.69	4.9	3.9	5.3
Year	29.37	.02	.41	44.5	47.5	54.5	39.2	46.8	99	2	37	38	76	72	.248	.260	33.81	.....	5.2	5.0	5.7

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

PITTSBURG, PA.

[H = 847 feet; h_t = 130 feet; h_r = 124 feet; h_a = 138 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Wind. Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorm.	Auroras.
	Miles.		*Mi.*																								
January	6.0	Calm. W.	28	W.	0	6	3	8	5	6	9	11	11	3	2	5	24	17	11	15	1	6	6	0	19	1	0
February	7.5	NW.	27	NW.	0	5	3	3	11	3	10	8	13	0	5	6	17	14	11	6	0	1	2	0	13	0	0
March	7.5	Calm. SE.	42	SW.	1	12	4	6	12	5	4	8	10	1	6	7	18	17	13	10	0	2	4	0	15	0	0
April	5.5	Calm. NW.	30	SW.	0	18	3	4	5	4	5	11	5	5	12	10	8	11	8	4	0	4	0	0	5	3	0
May	4.9	Calm. W.	24	S.	0	17	6	4	2	4	8	6	10	5	8	8	15	10	9	0	2	1	0	0	0	2	0
June	4.7	Calm. NW.	16	S.	0	8	8	3	9	6	4	9	4	9	11	7	12	10	10	0	0	0	0	3	0	8	0
July	4.8	Calm. NW.	20	NW.	0	11	4	5	4	5	10	7	10	6	10	13	8	17	14	0	1	0	0	0	0	9	0
August	4.4	Calm. NW.	18	S.	0	13	5	6	3	5	5	6	13	6	7	14	10	11	9	0	0	8	0	4	0	1	0
September	3.9	Calm. SW.	38	SW.	0	11	2	6	3	6	12	2	7	11	15	10	5	7	5	0	0	18	0	1	0	2	0
October	5.6	Calm. NW.	18	SW.	0	10	6	4	4	9	6	14	8	1	9	14	8	10	8	2	1	7	0	0	1	1	0
November	7.0	SW.	28	SE.	0	8	2	1	14	10	10	8	7	0	3	7	20	14	9	6	0	6	3	0	11	1	0
December	6.9	SW.	28	NW.	0	8	0	2	4	15	13	14	4	2	10	8	13	12	9	5	0	5	2	0	13	0	0
Year	5.7	N.	....	.....	1	127	46	52	76	78	96	104	102	49	98	109	158	150	116	48	5	58	17	8	77	28	0

PORT ANGELES, WASH.

[H = 14 feet; h_t = 20 feet; h_r = 1 foot; h_a = 25 feet.

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorm.	Auroras.
January	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
February	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
March	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
April	3.5	S.	20	NW.	0	1	4	2	0	28	5	15	3	2	4	13	13	15	14	0	0	0	0	0	7	0	0
May	4.5	W.	15	SW.	0	2	0	8	1	19	8	22	0	2	13	10	8	9	6	0	0	2	0	0	0	1	0
June	3.6	W.	14	N.	0	5	2	5	0	12	13	16	2	5	8	16	6	14	7	0	0	1	0	0	0	0	0
July	3.8	W.	11	W.	0	0	0	1	3	17	8	31	1	1	20	8	3	4	3	0	0	1	0	0	0	1	0
August	2.7	W.	15	E.	0	0	0	10	3	21	2	21	0	5	16	8	7	5	5	0	0	0	0	0	0	0	0
September	2.6	S.	12	SW.	0	0	2	8	4	19	10	8	2	7	7	5	18	14	12	0	1	1	0	0	0	1	0
October	2.6	S.	13	SW.	0	0	1	12	9	18	11	5	0	6	2	11	18	12	10	0	0	2	0	0	0	0	0
November	3.6	S.	34	W.	0	0	1	3	16	23	9	6	0	2	0	9	21	21	19	1	0	0	0	0	5	0	0
December	5.2	S.	40	SW.	1	0	0	1	8	32	19	2	0	0	1	12	18	20	17	2	0	0	0	0	11	0	0
Year	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

PORT HURON, MICH.

[H = 639 feet; h_t = 70 feet; h_r = 63 feet; h_a = 108 feet.

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorm.	Auroras.
January	11.1	NW.	34	NW.	0	4	5	3	5	12	13	3	16	1	2	3	26	14	10	13	0	3	15	0	27	0	0
February	14.0	S.	44	SW.	1	5	5	2	2	16	7	8	11	0	4	11	13	13	8	9	0	1	10	0	25	0	0
March	14.1	N.	51	S.	2	12	11	11	5	7	4	6	6	0	8	5	18	15	7	6	0	1	12	0	28	0	0
April	11.5	N.	51	SW.	1	15	9	2	5	13	4	6	6	0	11	10	9	11	8	1	0	0	1	0	7	1	0
May	11.6	N.	38	W.	0	26	6	1	4	10	9	1	4	1	14	11	6	9	7	1	0	0	0	0	3	1	0
June	8.8	N.	33	N.	0	18	9	6	4	13	3	7	0	0	12	8	10	11	6	0	0	1	0	0	0	5	0
July	10.4	S.	42	W.	1	7	12	2	1	21	6	9	4	0	12	18	1	8	6	0	0	0	0	0	0	3	0
August	9.2	S.	30	W.	0	11	9	4	7	11	10	6	4	0	8	15	8	11	10	0	0	1	0	2	0	2	0
September	9.3	S.	36	W.	0	8	5	5	7	15	5	5	9	1	15	13	2	11	9	0	2	8	0	0	0	3	0
October	11.6	S.	52	SW.	2	2	5	5	6	15	8	9	12	0	7	18	6	11	8	0	1	0	0	0	2	0	0
November	13.0	W.	47	NW.	3	2	1	3	6	13	12	17	6	0	1	11	18	18	13	7	0	2	7	0	18	0	0
December	15.2	S.	48	SW.	5	2	2	2	6	21	18	7	4	0	11	12	8	12	9	5	0	2	6	0	17	0	0
Year	11.6	S.	....	.....	15	112	79	46	58	167	99	84	82	3	105	135	125	144	101	42	3	19	51	2	127	15	0

a By eye observations at 8 a. m. and 8 p. m. when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

PORTLAND, ME.

[Lat. 40° 39′ N.; long. 70° 15′ W.; gravity corr., 0.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a.m.	8 p.m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a.m.	8 p.m.	8 a.m.	8 p.m.	8 a.m.	8 p.m.	Total.	Maximum in 24 hours.	8 a.m.	8 p.m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.88	30.54	28.58	22.0	25.8	30.4	17.4	23.9	48	1	17	20	83	80	.089	.103	7.72	2.31	6.5	5.9	6.9
February	29.92	.56	29.13	23.7	27.9	33.1	17.5	25.3	51	— 4	18	20	81	74	.093	.103	4.31	1.00	6.3	4.7	6.0
March	30.00	.42	.26	28.3	31.4	36.7	24.0	30.4	53	2	18	21	68	68	.093	.108	5.48	2.19	5.0	4.0	5.1
April	29.80	.44	.05	43.3	43.2	51.8	35.3	43.6	76	26	33	33	69	69	.187	.187	1.89	.59	5.8	5.5	5.9
May	29.88	.34	.58	49.7	49.1	57.4	42.1	49.8	69	32	40	41	73	77	.246	.256	3.47	1.31	5.5	6.0	5.8
June	29.81	.06	.54	61.2	60.6	69.5	53.1	61.3	95	42	53	53	76	79	.402	.402	2.77	1.24	5.5	6.3	5.5
July	29.88	.29	.55	64.9	63.0	72.5	57.5	65.0	91	52	57	58	78	83	.465	.481	4.78	1.42	4.7	5.5	4.8
August	29.87	.17	.53	65.8	65.3	73.0	59.1	66.0	88	50	59	60	80	83	.499	.517	1.15	.54	5.0	5.0	5.9
September	30.00	.30	.60	61.7	62.0	70.7	54.9	62.8	89	45	55	57	80	84	.432	.465	1.94	.51	3.6	3.7	4.5
October	29.92	.61	.42	45.0	47.8	54.8	40.0	47.4	77	27	38	41	77	79	.228	.256	3.22	1.28	5.6	3.9	5.5
November	30.02	.63	.30	36.1	38.5	44.8	31.3	38.0	56	6	29	29	76	71	.157	.157	2.38	1.10	4.9	4.7	5.5
December	29.95	.38	.12	32.1	36.6	42.5	28.6	35.6	56	8	24	28	74	71	.125	.150	4.17	1.30	5.1	4.3	5.1
Year	29.91	.63	28.58	44.5	45.9	53.1	38.4	45.8	95	— 4	37	38	76	76	.251	.265	43.28	.....	5.3	5.0	5.5

PORTLAND, OREGON.

[Lat. 45° 32′ N.; long. 122° 43′ W.; gravity corr., 0.]

January	30.11	30.41	29.65	40.3	45.9	48.8	37.5	43.2	61	25	37	40	90	80	.219	.246	3.62	1.11	6.3	6.7	6.3
February	29.78	.47	28.98	34.0	38.9	42.3	31.7	37.0	48	25	32	33	92	80	.180	.187	6.26	1.07	7.0	7.7	7.1
March	30.01	.33	29.55	38.2	49.6	51.8	36.3	44.0	60	23	35	37	90	63	.203	.219	2.06	.47	6.5	7.0	6.1
April	29.91	.36	.40	46.3	56.6	60.5	44.1	52.3	72	37	41	44	83	65	.256	.287	4.00	1.28	8.0	8.1	6.9
May	29.90	.21	.62	50.4	68.3	70.4	49.4	59.9	84	39	47	48	88	53	.322	.334	1.83	1.05	5.9	4.5	4.8
June	29.90	.28	.52	52.6	65.5	68.7	51.6	60.2	87	42	49	49	87	58	.347	.347	4.07	.80	7.8	7.4	6.8
July	29.93	.18	.68	57.9	78.5	80.5	57.0	68.8	102	50	52	52	81	42	.387	.387	.24	.24	4.9	3.2	3.9
August	29.91	.12	.73	59.0	80.4	82.1	57.8	70.0	97	51	56	56	90	47	.448	.448	.93	.45	4.4	3.1	4.0
September	29.92	.24	.69	53.0	67.1	70.1	51.4	60.8	88	39	50	52	90	61	.360	.387	2.17	.61	5.2	4.5	5.5
October	29.96	.31	.72	51.7	61.7	65.0	50.1	57.6	83	40	49	52	92	72	.347	.387	5.04	1.41	5.4	5.7	5.8
November	30.02	.38	.49	46.3	50.3	53.6	44.3	49.0	68	34	44	46	92	86	.287	.310	5.74	1.59	7.5	7.4	8.1
December	29.93	.54	.28	40.4	43.2	46.1	37.5	41.8	58	28	38	40	92	89	.228	.246	11.45	1.34	7.6	7.8	8.2
Year	29.94	.54	28.98	47.5	58.8	61.7	45.7	53.7	102	23	44	46	89	66	.299	.315	47.41	.....	6.4	6.1	6.1

PUEBLO, COLO.

[Lat. 38° 18′ N.; long. 104° 36′ W.; gravity corr., —.02.]

January	25.28	25.57	24.92	14.8	28.8	36.9	10.6	23.8	50	—13	7	16	75	62	.054	.085	1.30	.71	3.5	4.6	4.5
February	25.09	.40	.68	22.8	35.2	45.1	17.8	31.4	68	— 7	10	11	61	43	.063	.067	.07	.04	3.2	3.6	3.6
March	25.14	.38	.80	26.3	42.1	48.5	23.2	35.8	70	6	13	13	61	41	.074	.074	1.37	.81	4.5	5.5	5.3
April	25.22	.69	.85	39.6	61.1	65.4	35.8	50.6	84	18	19	11	51	19	.098	.067	.48	.36	4.2	5.2	4.8
May	25.27	.54	.88	50.1	66.6	72.4	45.5	59.0	86	37	36	32	63	34	.211	.180	2.92	.82	5.6	7.0	6.4
June	25.18	.56	.83	57.8	76.3	80.6	52.4	66.5	96	42	43	34	61	27	.277	.195	1.26	.67	3.8	4.6	4.2
July	25.34	.58	25.00	62.8	79.2	87.4	57.5	72.4	98	51	49	42	62	34	.347	.266	2.70	.98	4.1	6.6	5.8
August	25.35	.61	.15	60.2	80.9	89.3	56.4	72.8	98	46	47	39	63	24	.322	.237	.21	.18	2.3	6.8	4.4
September	25.33	.58	24.87	54.3	74.3	81.2	50.9	66.0	94	37	38	35	57	28	.228	.203	.54	.27	4.6	4.8	4.6
October	25.38	.72	.85	40.5	60.5	69.2	36.3	52.8	81	28	24	21	56	26	.125	.106	.96	.52	2.4	2.1	2.8
November	25.25	.60	.97	29.4	44.7	54.9	24.5	39.7	77	8	12	16	52	35	.070	.085	.18	.14	5.0	2.9	4.4
December	25.17	.75	.74	28.1	34.7	42.8	21.2	32.0	69	— 2	14	16	59	50	.077	.085	1.10	.56	4.8	3.9	5.1
Year	25.25	.75	.68	40.6	57.0	64.5	36.0	50.2	98	—13	26	24	60	35	.162	.138	13.09	.....	4.0	4.8	4.7

RALEIGH, N. C.

[Lat. 35° 45′ N.; long. 78° 37′ W.; gravity corr. —.02.]

January	29.70	30.10	29.00	37.6	44.8	51.3	33.7	42.5	68	22	31	32	78	62	.172	.180	3.96	.90	4.7	5.1	5.7
February	29.72	.22	.10	46.7	50.5	57.0	40.8	48.9	77	21	40	41	79	72	.246	.256	5.10	1.94	7.0	8.0	8.1
March	29.66	.14	.16	41.6	46.5	52.7	37.7	45.2	72	22	34	35	77	68	.195	.203	7.25	1.77	7.0	6.6	7.6
April	29.65	29.99	.23	55.3	62.0	70.1	49.2	59.6	85	31	45	46	70	59	.298	.310	2.98	.98	3.7	4.1	4.3
May	29.64	30.04	.38	61.6	66.2	74.5	54.5	64.5	90	38	53	52	75	65	.402	.387	9.24	2.22	5.1	5.3	5.3
June	29.57	29.78	.23	73.4	76.6	85.6	65.8	75.7	95	55	66	67	79	74	.638	.660	4.12	1.33	4.5	5.3	4.5
July	29.66	.86	.42	72.5	74.0	82.7	65.4	74.0	90	55	67	67	83	82	.660	.660	10.99	1.80	6.5	7.0	6.6
August	29.62	.70	.32	73.1	76.2	83.8	68.1	76.0	93	56	70	71	90	85	.732	.757	10.42	3.30	6.1	7.0	6.7
September	29.75	.99	.56	69.0	73.0	81.3	62.8	72.0	89	51	65	66	86	78	.616	.638	1.76	1.14	4.8	2.9	3.6
October	29.72	30.13	.35	52.2	57.2	65.7	47.2	56.4	88	32	47	47	83	71	.322	.322	2.64	1.14	4.8	3.3	4.1
November	29.78	.38	.14	43.1	49.1	57.2	38.2	47.7	76	17	38	40	84	72	.228	.246	3.71	1.62	4.1	3.4	4.3
December	29.84	.18	.40	42.7	49.8	57.5	38.1	47.8	72	19	37	40	81	71	.219	.246	1.24	.35	4.7	3.9	4.3
Year	29.69	.38	.00	55.7	60.5	68.3	50.1	59.2	95	17	49	50	80	72	.394	.405	63.41	.....	5.2	5.2	5.4

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

PORTLAND, ME.

[H=103 feet; h_t=81 feet; h_r=71 feet; h_a=87 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	b8.8	N.	50	SE.	2	24	3	1	1	5	6	11	9	2	7	9	15	16	15	12	0	1	18	0	30	0	0
February	c9.2	NW.	36	S.	0	10	4	0	2	4	12	9	14	1	8	9	11	15	13	14	0	3	11	0	27	0	2
March	10.8	NW.	33	E.	0	9	11	4	3	8	6	8	13	0	13	8	10	13	10	5	0	5	8	0	24	0	0
April	8.2	NW.	40	NE.	1	7	3	7	1	8	9	11	12	2	9	11	10	10	7	4	0	0	0	0	11	1	1
May	7.7	E.	39	SW.	0	10	4	12	1	9	9	7	7	3	9	10	12	16	11	0	0	5	0	0	0	0	0
June	7.1	W.	24	NE.	0	9	9	8	1	7	7	10	8	1	10	11	9	11	7	0	0	5	0	2	0	0	0
July	8.0	S.	27	SE.	0	4	2	5	7	19	11	4	9	1	13	9	9	14	10	0	0	6	0	1	0	4	0
August	6.7	S.	24	S.	0	9	4	10	2	14	13	3	6	1	9	10	12	11	7	0	0	4	0	0	0	1	0
September	7.1	SW.	26	SW.	0	3	6	4	5	11	12	6	12	1	13	9	8	9	8	0	0	6	0	0	0	3	1
October	8.0	NW.	32	N.	0	16	3	2	1	7	6	8	17	2	10	12	9	8	6	0	0	2	0	0	5	0	1
November	9.1	N.	46	S.	2	14	0	1	3	9	12	8	12	1	10	8	12	8	7	2	0	3	2	0	16	0	0
December	9.6	SW.	48	SE.	2	6	3	0	2	6	18	13	12	2	14	6	11	12	10	2	0	3	3	0	17	0	0
Year	8.4	NW.	....	.....	7	121	52	54	29	107	121	98	131	17	125	112	128	143	111	39	0	43	42	3	130	9	5

PORTLAND, OREGON.

[H=80 feet; h_t=85 feet; h_r=80 feet; h_a=92 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	5.4	Calm. S.	29	S.	0	3	13	2	7	26	5	1	4	1	8	9	14	16	12	0	0	4	0	0	4	0	0
February	5.6	Calm. S.	30	S.	0	3	9	5	3	18	8	0	1	9	4	5	19	22	21	11	0	0	0	0	13	0	0
March	5.0	Calm. S.	28	S.	0	8	7	5	5	13	5	1	5	13	6	14	11	16	14	2	1	3	0	0	10	0	0
April	5.4	Calm. S.	27	S.	0	10	3	0	3	22	13	0	1	8	3	10	17	20	15	0	1	0	0	0	0	0	0
May	5.4	Calm. N.	24	SW.	0	19	4	0	1	15	7	1	8	7	12	13	6	9	5	0	1	4	0	0	0	2	0
June	5.0	Calm. S.	24	S.	0	15	0	1	2	16	9	1	8	8	4	13	13	20	18	0	2	2	0	0	0	0	0
July	5.9	N.	22	NW.	0	27	3	1	2	5	3	0	9	12	15	14	2	2	2	0	0	4	0	2	0	0	0
August	4.5	Calm. N.	22	S.	0	20	2	2	1	9	4	1	6	17	16	9	6	5	4	0	1	7	0	7	0	2	0
September	4.9	Calm. S.	22	S.	0	15	3	0	3	14	7	1	2	15	8	12	10	14	10	0	0	8	0	0	0	2	0
October	5.2	Calm. S.	25	S.	0	18	3	3	7	15	2	1	3	10	10	9	12	14	11	0	0	9	0	0	0	1	0
November	5.3	Calm. S.	31	S.	0	2	7	4	6	23	5	1	2	10	0	12	18	21	19	0	0	5	0	0	0	0	0
December	7.5	S.	44	S.	1	1	4	1	1	39	3	3	3	7	1	11	19	27	24	4	0	8	0	0	6	0	0
Year	5.4	S.	....	.....	1	141	58	24	41	215	71	11	52	117	87	131	147	186	155	17	6	54	0	9	33	7	0

PUEBLO, COLO.

[H=4,734 feet; h_t=74 feet; h_r=65 feet; h_a=81 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	5.9	W.	36	N.	0	8	2	2	2	3	4	25	14	2	11	17	3	4	4	5	0	0	10	0	31	0	0
February	9.2	W.	48	E.	3	3	6	12	2	2	6	14	11	0	15	10	3	4	1	3	0	0	3	0	23	0	0
March	7.8	E.	44	NW.	2	7	2	14	7	5	4	12	11	0	8	15	8	9	8	8	0	0	5	0	26	0	0
April	9.1	NW.	48	NW.	2	6	3	12	6	0	7	11	14	1	11	14	5	4	2	2	0	0	0	0	8	0	0
May	7.6	N.	40	E.	1	15	4	10	4	3	7	7	10	2	4	13	14	10	10	0	1	0	0	0	0	3	0
June	8.5	SW.	36	N.	0	11	3	9	8	1	14	5	6	3	14	10	6	6	4	0	0	0	0	3	0	2	0
July	7.6	NW.	54	W.	2	9	8	10	6	3	5	9	12	0	5	18	8	10	7	0	0	0	0	10	0	13	0
August	6.6	NW.	48	W.	1	7	5	9	5	3	6	6	19	2	12	16	3	3	1	0	0	0	0	18	0	2	0
September	6.5	NW.	35	E.	0	10	4	10	7	5	8	2	13	1	11	10	9	6	3	0	0	0	0	5	0	0	0
October	5.6	NW.	44	SW.	1	5	1	9	9	4	3	7	21	3	21	8	2	5	4	1	0	0	0	0	5	0	0
November	7.1	NW.	60	NW.	1	6	6	10	6	1	4	11	15	1	8	20	2	2	2	4	0	0	1	0	22	0	0
December	9.4	NW.	60	N.	5	8	1	5	2	2	7	15	18	4	9	13	9	8	7	8	0	0	4	0	26	0	0
Year	7.6	NW.	....	.....	18	95	45	112	64	32	75	124	164	19	129	164	72	71	53	31	1	0	23	36	141	26	0

RALEIGH, N. C.

[H=388 feet; h_t=70 feet; h_r=2 feet; h_a=80 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.4	W.	30	SW.	0	8	7	1	1	9	9	12	12	3	13	3	15	12	9	0	0	2	0	0	13	0	0
February	7.1	SW.	35	N.	0	10	8	6	3	8	11	3	7	0	3	3	22	17	11	1	0	6	0	0	5	0	0
March	7.4	N.	26	NW.	0	15	13	5	3	5	3	2	15	1	5	5	21	18	14	1	0	6	0	0	9	0	0
April	6.1	S.	36	N.	0	7	7	3	2	18	6	3	10	4	14	8	8	7	7	0	1	3	0	0	2	2	0
May	5.4	N.	36	N.	0	20	7	3	1	13	9	5	1	3	15	5	11	15	13	0	1	0	0	0	0	8	0
June	4.3	NE.	38	N.	0	7	15	3	2	10	12	2	5	4	13	10	7	12	8	0	0	1	0	6	0	9	0
July	4.6	SW.	25	NW.	0	12	7	1	4	12	15	3	5	3	5	11	15	19	15	0	0	1	0	0	0	11	0
August	4.2	SW.	20	NW.	0	4	9	1	5	10	15	4	11	3	6	11	14	15	12	0	0	1	0	4	0	7	0
September	4.1	NE.	24	NE.	0	13	13	2	12	5	1	0	7	7	18	5	7	5	5	0	0	4	0	0	0	0	0
October	6.6	N.	28	NW.	0	22	4	1	0	4	10	4	15	2	18	5	8	9	7	0	0	2	0	0	1	0	0
November	6.3	N.	36	SW.	0	21	6	1	5	8	10	2	7	0	16	3	11	7	6	1	0	1	1	0	4	0	0
December	6.6	SW.	32	SW.	0	11	1	2	3	10	22	1	11	1	14	7	10	8	6	0	0	4	0	0	9	1	0
Year	5.8	N.	....	.....	0	150	97	29	41	112	123	41	106	31	140	76	149	144	113	3	2	31	1	10	43	38	0

a By eye observations at 8 a. m. and 8 p. m, when there is no self-register at station. b For 740½ hours. c For 661 hours.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

RAPID CITY, S. DAK.

[Lat. 44° 4′ N.; long 103° 12′ W.; gravity corr., 0.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	26.64	26.98	26.27	27.8	32.4	41.8	21.8	31.8	59	2	17	18	66	59	.089	.093	.27	.13	4.3	4.6	4.7
February	26.48	.81	.05	8.4	14.8	23.3	1.6	12.4	55	—22	0	7	73	72	.038	.054	.87	.45	5.5	4.4	5.6
March	26.56	.99	.09	18.7	27.2	34.9	15.3	25.1	64	—17	12	17	78	69	.070	.089	1.96	.72	6.2	6.0	6.4
April	26.57	27.03	.17	40.1	52.7	58.2	35.9	47.0	87	19	29	27	67	44	.157	.143	2.74	1.63	5.5	6.1	5.9
May	26.64	26.94	.27	48.9	61.5	66.4	43.6	55.0	88	23	38	38	68	48	.228	.228	1.72	.59	4.4	6.3	5.6
June	26.52	.84	.17	56.5	67.2	72.7	52.5	62.6	89	42	49	49	77	56	.347	.347	3.25	1.62	6.2	7.2	6.9
July	26.66	.95	.30	61.3	76.1	80.7	56.0	68.4	92	47	51	49	69	41	.373	.347	2.09	1.35	3.5	5.5	4.6
August	26.65	.96	.43	61.2	76.5	81.9	56.6	69.2	100	42	49	49	67	42	.347	.347	1.97	.67	5.3	4.9	5.2
September	26.61	.92	.14	55.0	69.6	78.2	50.6	64.4	94	38	40	43	60	41	.246	.277	1.32	.54	4.4	4.8	4.6
October	26.70	27.03	.34	41.3	51.7	62.5	37.7	50.1	79	22	27	32	61	50	.143	.180	.34	.17	3.1	3.8	3.8
November	26.59	26.99	.19	29.1	35.4	46.4	22.9	34.6	77	—3	19	22	67	61	.098	.113	.17	.05	5.1	4.3	5.1
December	26.48	27.14	25.90	27.0	33.2	43.3	21.3	32.3	60	—3	14	19	62	58	.077	.098	.05	.02	4.2	3.6	3.6
Year	26.59	.14	.90	39.6	49.9	57.5	34.6	46.1	100	—22	29	31	68	53	.184	.193	16.75	.....	4.8	5.1	5.2

RED BLUFF, CAL.

[Lat. 40° 10′ N.; long. 122° 15′ W.; gravity corr., —.01.]

January	29.86	30.12	29.53	41.6	55.7	58.1	28.7	48.4	74	26	36	36	82	58	.211	.211	1.36	.92	3.9	3.7	4.7
February	29.60	.06	.67	40.0	50.7	53.3	35.4	44.4	62	27	36	39	86	68	.211	.237	10.68	3.80	4.9	4.8	5.4
March	29.70	29.91	.43	48.1	62.9	64.7	45.4	55.0	78	38	42	44	84	56	.266	.287	1.42	.56	4.1	6.0	5.7
April	29.65	.88	.30	49.5	66.5	67.9	47.6	57.8	89	37	45	46	86	53	.298	.310	2.27	.82	5.5	4.9	5.3
May	29.57	.71	.37	56.9	75.5	77.7	54.9	66.3	92	46	49	50	77	45	.347	.360	1.50	.48	3.5	3.6	4.1
June	29.54	.75	.40	61.7	83.0	84.5	59.8	72.2	110	50	47	46	63	31	.322	.310	.55	.32	3.5	3.0	3.4
July	29.52	.70	.34	69.2	96.3	97.5	67.5	82.5	112	54	50	49	53	23	.360	.347	.17	.16	1.2	1.4	1.5
August	29.54	.67	.38	70.0	97.5	98.7	67.5	83.1	114	60	51	48	51	20	.373	.334	.00	.00	1.0	.9	1.2
September	29.58	.76	.40	63.0	83.4	85.3	60.6	73.0	107	48	48	46	60	30	.334	.310	.19	.10	1.9	2.6	2.3
October	29.67	.86	.45	56.0	77.4	79.6	52.5	66.0	94	44	43	44	64	35	.277	.287	.64	.44	1.9	2.5	2.7
November	29.77	.98	.58	49.0	65.2	68.5	45.5	57.0	79	36	41	43	75	49	.256	.277	.46	.19	2.9	3.2	3.2
December	29.87	30.23	.28	38.3	46.4	49.6	35.5	42.6	64	26	34	36	87	72	.195	.211	3.80	.81	3.8	5.8	5.5
Year	29.66	.23	.28	53.6	71.7	73.8	50.9	62.4	114	26	44	44	72	45	.268	.290	23.04	.....	3.2	3.5	3.8

RED WING, MINN.

[Lat. 44° 34′ N.; long. 92° 38′ W.; gravity corr., 0.]

January	29.24	29.80	28.67	17.6	25.4	29.7	13.4	21.6	46	0	12	18	79	74	.070	.093	2.06	1.30	5.5	4.1	6.3
February	29.16	.65	.44	6.7	15.2	22.2	1.5	11.8	46	—28	2	8	80	75	.043	.057	1.66	.50	4.5	4.0	5.0
March	29.22	.68	.58	18.3	27.1	31.3	15.4	23.4	47	—11	15	20	86	75	.081	.103	2.27	.90	7.1	6.0	6.3
April	29.15	.60	.64	43.6	52.9	57.4	39.1	48.2	84	18	37	40	78	64	.219	.246	2.40	1.14	4.4	4.2	4.9
May	29.26	.77	.82	52.5	65.3	70.6	45.9	58.2	84	30	39	40	61	42	.237	.246	1.16	.59	3.3	3.0	3.9
June	29.10	.48	.78	63.3	70.0	74.5	57.6	66.0	88	43	56	59	77	68	.448	.499	5.98	1.63	7.2	5.1	6.3
July	29.19	.49	.94	61.6	71.7	76.0	55.8	65.9	84	46	54	57	78	60	.417	.465	2.50	1.83	5.1	4.1	4.9
August	29.17	.47	.86	62.1	71.5	76.3	57.0	67.6	96	40	56	57	80	61	.448	.465	2.88	1.63	5.4	3.7	5.0
September	29.22	.52	.89	60.0	70.0	78.2	55.9	67.0	93	40	52	53	74	56	.387	.402	1.13	.67	3.8	3.0	3.9
October	29.25	.74	.92	42.9	50.6	57.2	39.4	48.3	77	24	35	37	76	61	.203	.219	1.87	1.32	5.7	3.4	4.7
November	29.22	.74	.76	22.9	30.2	35.0	19.4	27.2	59	—9	16	20	77	66	.085	.103	.67	.32	6.0	4.3	5.6
December	29.08	.75	.26	26.6	31.8	35.7	22.2	29.0	55	—9	20	24	76	73	.103	.125	4.35	2.38	5.7	4.3	5.0
Year	29.19	.80	.26	39.9	48.5	53.8	35.2	44.5	96	—28	33	36	77	65	.228	.252	28.93	.....	5.3	4.1	5.2

RIO GRANDE CITY, TEX.

[Lat. 26° 23′ N.; long. 98° 48′ W.; gravity corr., —.05.]

January	29.91	30.36	29.49	50.9	62.6	70.2	48.6	59.4	88	31	47	46	89	56	.322	.310	2.69	1.75	6.6	4.5	6.2
February	29.79	.26	.45	55.6	70.0	78.7	53.0	65.8	97	34	51	50	85	52	.373	.360	.05	.03	5.4	3.6	5.3
March	29.75	.18	.35	56.8	68.7	75.7	55.4	65.6	94	39	52	55	86	64	.387	.432	.99	.65	7.3	6.3	6.5
April	29.78	.21	.43	64.5	75.8	84.2	60.7	72.4	93	46	59	59	86	59	.499	.499	2.72	1.12	6.2	5.4	5.5
May	29.78	.02	.55	71.7	80.6	87.9	69.4	78.6	97	58	68	68	89	67	.684	.684	3.23	2.76	7.5	6.6	6.1
June	29.62	29.80	.35	77.9	88.7	98.9	74.7	86.8	103	69	72	68	83	52	.783	.684	1.72	.81	3.3	4.4	4.2
July	29.74	.96	.54	78.6	90.7	100.8	74.5	87.6	105	70	73	68	84	49	.810	.684	.22	.11	2.8	3.9	4.4
August	29.78	.94	.58	76.1	89.8	98.2	72.4	85.3	105	59	70	64	80	46	.732	.595	.02	.01	3.5	4.7	5.0
September	29.78	.98	.60	72.2	84.7	93.3	69.5	81.4	100	61	68	57	86	59	.684	.660	3.77	.84	4.1	5.4	5.1
October	29.92	30.21	.61	60.9	74.9	84.4	58.8	71.6	92	41	57	57	87	56	.465	.465	1.29	.77	2.8	1.6	2.3
November	29.89	.42	.42	56.3	69.9	78.5	53.9	66.2	91	33	47	49	74	50	.322	.347	.08	.08	4.3	3.1	4.0
December	29.91	.42	.50	52.4	65.8	72.3	49.6	61.0	88	25	44	48	75	49	.287	.277	.25	.14	6.5	5.1	5.9
Year	29.80	.42	.35	64.5	76.8	85.3	61.7	73.5	105	25	59	58	84	55	.529	.492	17.03	.....	5.0	4.0	5.0

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

RAPID CITY, S. DAK.

[H=3,280 feet; h_t=53 feet; h_r=46 feet; h_a=61 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	8.5	W.	36	NW.	0	6	1	0	2	2	6	20	17	8	13	11	7	4	3	6	0	0	3	0	28	0	0
February	6.3	N.	42	NW.	1	13	1	4	4	1	7	9	9	8	8	12	8	13	6	11	0	0	19	0	28	0	0
March	8.3	NW.	42	NW.	1	6	5	5	11	0	5	7	14	9	6	12	13	14	9	10	0	0	14	0	29	0	0
April	10.0	NW.	39	NW.	0	5	4	4	9	6	3	9	18	2	9	10	11	9	5	4	0	0	0	0	10	1	0
May	10.1	SE.	36	SW.	0	10	4	3	11	10	7	11	5	1	7	14	10	14	7	3	0	0	1	0	5	5	0
June	10.2	N.	44	SW.	1	12	7	4	10	3	3	9	11	1	3	12	15	18	8	0	1	0	0	0	0	8	0
July	8.9	SE.	57	NW.	1	10	2	5	12	9	8	9	7	0	9	19	3	11	6	0	3	0	0	1	0	8	0
August	7.7	W.	36	W.	0	10	3	3	7	5	12	16	6	0	8	20	3	16	9	0	0	0	0	5	0	7	1
September	9.0	SW.	38	NW.	0	7	2	3	5	5	12	12	11	3	11	16	3	9	5	0	0	0	0	2	0	2	4
October	8.9	W.	42	W.	1	3	4	1	5	3	10	24	10	2	17	7	7	6	4	4	0	0	0	0	8	1	0
November	9.3	W.	47	NW.	2	5	5	2	7	1	8	19	13	0	8	16	6	8	2	4	0	0	6	0	24	0	0
December	10.6	W.	48	SW.	3	1	4	1	3	3	15	22	13	0	16	10	5	3	0	3	0	0	5	0	27	0	0
Year	9.0	W.	....	.....	10	88	42	35	86	48	96	167	134	34	115	159	91	125	64	45	4	0	48	8	159	32	5

RED BLUFF, CAL.

[H=342 feet; h_t=54 feet; h_r=44 feet; h_a=58 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.6	NW.	33	NW.	0	4	0	0	8	2	1	1	39	7	11	13	7	8	6	0	0	0	0	0	4	0	0
February	9.6	NW.	52	SE.	2	4	1	1	15	8	2	2	18	5	8	10	10	14	12	0	1	0	0	0	7	0	0
March*	7.6	NW.	30	N.	0	14	0	0	4	9	2	1	24	1	10	7	11	11	8	0	1	0	0	0	0	0	0
April	8.6	SE.	39	SE.	0	2	0	0	21	13	4	1	16	3	8	17	5	10	9	0	0	0	0	0	0	0	0
May	7.7	SE.	40	NW.	1	3	1	2	20	15	1	2	14	4	15	13	3	8	7	0	0	1	0	2	0	1	0
June	7.0	NW.	31	NW.	0	4	2	2	16	4	3	5	24	0	14	13	3	4	4	0	0	0	0	7	0	0	0
July	5.9	NW.	22	S.	0	3	2	1	17	10	2	3	19	5	28	1	2	2	1	0	0	0	0	26	0	0	0
August	4.7	NW.	24	NW.	0	3	0	0	20	6	2	2	20	9	27	4	0	0	0	0	0	0	0	28	0	0	0
September	7.6	NW.	32	NW.	0	2	1	0	12	9	2	3	27	4	22	7	1	6	1	0	0	0	0	11	0	0	0
October	5.5	NW.	30	NW.	0	5	1	0	11	4	4	0	27	10	20	8	3	5	3	1	0	0	0	5	0	0	0
November	5.7	NW.	30	SE.	0	1	1	0	8	3	0	0	39	8	19	7	4	6	3	0	0	0	0	0	0	0	0
December	6.3	NW.	44	SE.	1	8	2	1	8	6	1	4	23	9	11	8	12	17	15	2	0	4	0	0	6	0	0
Year	6.9	NW.	....	.....	4	53	11	7	160	89	24	24	290	65	193	108	61	91	69	3	2	5	0	79	17	1	0

RED WING, MINN.

[H=758 feet; h_t=63 feet; h_r=55 feet; h_a=71 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	7.1	W.	50	W.	1	7	2	12	5	5	5	18	4	4	7	11	13	6	4	14	0	4	20	0	31	0	0
February	10.1	W.	46	W.	3	3	7	11	3	1	2	14	13	2	12	7	9	11	10	10	0	1	21	0	28	0	1
March	7.9	E.	38	SW.	0	5	4	20	7	2	4	7	8	5	7	10	14	10	7	12	0	0	14	0	28	1	0
April	10.6	W.	57	W.	2	5	3	11	11	7	1	13	9	0	13	9	8	8	6	4	2	0	1	0	8	1	0
May	8.7	S.	35	S.	0	7	3	7	7	17	4	10	7	0	16	12	3	5	4	0	0	0	0	0	3	3	1
June	7.8	E.	39	S.	0	3	5	19	10	8	0	12	2	1	3	18	9	14	10	0	2	0	0	0	0	8	0
July	6.3	W.	35	W.	0	0	3	10	12	6	2	15	12	2	9	15	7	10	7	0	1	1	0	0	0	4	0
August	6.5	W.	30	NW.	0	4	4	12	7	8	3	15	7	2	10	16	5	9	7	0	0	2	0	3	0	2	0
September	9.3	SE.	37	NW.	0	1	0	7	19	13	3	10	6	1	15	11	4	7	4	0	0	3	0	4	0	1	0
October	9.3	W.	54	W.	1	1	1	8	12	6	9	19	5	1	12	13	6	6	4	0	0	4	0	0	6	1	0
November	9.2	W.	32	NW.	0	2	1	7	12	4	2	20	6	6	10	12	8	5	4	11	0	0	13	0	24	0	0
December	11.1	W.	48	W.	1	1	0	11	13	6	9	17	4	1	11	11	9	11	9	5	0	0	10	0	23	0	0
Year	8.7	W.	....	.....	8	39	33	135	118	83	44	170	83	25	125	145	95	102	76	56	5	15	79	7	151	21	2

RIO GRANDE CITY, TEX.

[H=170 feet; h_t=11 feet; h_r=3 feet; h_a=22 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	7.5	NW.	40	NW.	1	4	11	14	3	1	1	6	17	5	4	19	8	6	5	0	1	1	0	0	1	1	0
February	7.6	E.	36	NW.	0	9	7	12	6	1	0	2	7	12	9	15	4	2	0	0	0	2	0	2	0	0	0
March	7.1	Calm. NE.	36	N.	0	9	11	11	10	0	1	1	6	13	5	14	12	6	4	0	0	1	0	5	0	0	0
April	7.4	E.	44	W.	1	2	15	25	5	1	2	1	3	5	10	13	7	7	6	0	0	0	0	6	0	3	0
May	7.9	SE.	26	E.	0	1	7	19	28	1	0	0	1	5	3	21	7	4	4	0	0	0	0	13	0	0	0
June	10.2	SE.	28	SE.	0	0	0	7	51	0	0	0	0	2	15	11	4	4	3	0	0	0	0	30	0	1	0
July	9.4	SE.	32	SE.	0	2	6	20	32	0	0	0	1	1	14	14	3	6	1	0	0	0	0	31	0	0	0
August	8.4	E.	32	SE.	0	1	11	24	23	0	0	1	0	2	11	15	5	2	0	0	0	0	0	30	0	2	0
September	6.3	E.	36	NE.	0	5	13	20	8	2	1	0	2	9	10	13	7	11	10	0	0	0	0	23	0	1	0
October	5.8	E.	24	N.	0	10	15	19	7	0	0	2	6	3	25	5	1	4	3	0	0	1	0	1	0	0	0
November	7.2	SE.	36	N.	0	8	5	16	19	1	1	4	4	2	17	4	9	1	1	0	0	4	0	1	0	0	0
December	7.9	SE.	30	NW.	0	8	2	16	16	0	2	4	9	5	11	5	15	5	2	0	0	0	0	0	3	0	0
Year	7.7	SE.	....	.....	2	60	103	203	208	7	8	21	56	64	134	149	82	58	39	0	1	9	0	142	4	8	0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

* Record for three days missing.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

ROCHESTER, N. Y.

[Lat. 43° 8′ N.; long. 77° 42′ W.; gravity corr., 0.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.46	30.02	28.66	26.2	28.0	32.4	21.8	27.1	47	8	21	23	81	82	.108	.119	3.75	1.18	9.0	8.2	8.5
February	29.44	.08	.77	29.3	29.9	36.7	23.8	30.2	60	6	24	24	82	79	.125	.125	4.17	1.30	8.7	6.3	7.8
March	29.52	.00	.87	29.6	31.3	37.7	24.3	31.0	60	6	23	25	77	80	.119	.130	4.44	1.25	7.0	6.5	6.7
April	29.42	29.89	29.00	45.8	48.6	56.2	38.5	47.4	83	23	36	37	69	66	.211	.219	1.89	.56	5.7	5.3	5.8
May	29.49	.75	.30	52.3	55.8	63.3	44.4	53.8	82	30	42	43	68	62	.266	.277	1.12	.47	5.9	6.0	5.9
June	29.42	.74	.12	65.3	68.7	76.7	56.2	66.4	94	39	55	55	70	64	.432	.432	1.56	1.04	4.8	4.5	5.3
July	29.43	.77	.14	65.7	68.4	76.5	57.7	67.1	92	46	55	56	69	65	.432	.448	3.62	1.42	4.2	5.0	5.1
August	29.43	.69	.01	66.6	69.1	78.2	59.5	68.8	93	45	59	60	76	73	.499	.517	3.01	.70	4.9	5.9	5.7
September	29.58	.88	.35	62.6	66.3	75.6	56.4	66.0	90	44	56	56	79	72	.448	.448	1.41	.39	3.8	2.5	3.4
October	29.52	30.09	.12	47.7	51.2	58.1	42.7	50.4	86	28	40	42	78	71	.246	.266	2.36	1.52	5.1	4.3	4.8
November	29.51	.08	28.47	37.8	40.0	46.5	33.0	39.8	72	11	29	31	71	72	.157	.172	2.46	.68	7.6	6.7	7.2
December	29.53	.10	.95	34.9	37.4	43.7	28.6	36.2	63	8	27	28	74	71	.143	.150	3.85	.90	6.5	4.2	5.6
Year	29.48	.10	.47	47.0	49.6	56.8	40.6	48.7	94	6	39	40	74	71	.266	.275	33.64	.....	6.1	5.4	6.0

ROSEBURG, OREGON.

[Lat. 43° 13′ N.; long. 123° 20′ W.; gravity corr., 0.]

January	29.68	29.98	29.19	38.7	46.5	47.9	36.8	42.4	61	26	36	41	92	82	.211	.256	3.59	.98	7.0	7.5	7.6
February	29.35	.94	28.55	36.1	43.8	44.9	34.6	39.8	51	24	34	35	92	74	.195	.203	11.50	2.90	7.9	7.5	7.9
March	29.56	.85	29.24	41.2	52.4	54.0	39.9	47.0	66	31	38	39	89	63	.228	.237	4.13	1.34	8.0	7.8	7.9
April	29.46	.88	28.95	45.2	58.6	60.4	44.0	52.2	76	33	40	41	85	55	.216	.256	1.47	.43	7.6	8.3	7.8
May	29.45	.73	29.18	47.4	66.6	68.4	46.9	57.6	82	34	45	45	90	51	.298	.298	3.97	1.46	5.2	5.0	5.1
June	29.45	.77	.07	50.5	68.2	69.3	49.7	59.5	89	38	48	47	90	48	.334	.322	1.87	.51	7.1	6.7	6.9
July	29.48	.68	.24	54.7	78.7	81.1	54.3	67.7	102	44	52	52	91	42	.387	.387	.84	.44	3.6	2.8	3.1
August	29.46	.61	.26	56.8	83.3	84.7	56.1	70.4	99	50	53	52	88	36	.402	.387	.40	.20	4.4	2.7	3.5
September	29.48	.75	.24	51.7	70.0	73.6	50.7	62.2	91	38	49	49	90	49	.347	.347	.95	.22	4.3	5.6	5.0
October	29.51	.82	.30	49.2	65.9	68.2	48.0	58.1	87	35	47	50	94	59	.322	.360	3.03	.84	4.7	6.0	5.5
November	29.60	.87	.18	46.4	54.6	57.5	44.2	50.8	74	32	43	46	90	74	.277	.310	3.13	1.56	5.7	7.0	6.4
December	29.56	30.07	.00	39.8	44.5	47.4	36.7	42.0	66	27	36	39	88	81	.211	.237	12.02	1.64	7.4	8.3	8.1
Year	29.50	.07	28.55	46.5	61.1	63.1	45.2	54.1	102	24	43	45	90	60	.288	.300	46.90	.....	6.1	6.3	6.2

SACRAMENTO, CAL.

[Lat. 38° 35′ N.; long. 121° 30′ W.; gravity corr., —.02.]

January	30.12	30.34	29.79	40.1	53.8	56.6	37.2	46.9	66	28	35	40	83	60	.203	.246	.53	.38	2.2	3.2	3.0
February	29.90	.35	.08	41.8	53.9	56.7	39.7	48.2	66	28	38	42	86	65	.228	.266	6.61	2.14	3.9	4.6	5.4
March	29.97	.12	.71	49.8	61.5	63.6	48.5	56.0	76	40	44	45	82	58	.287	.298	1.78	.96	2.9	3.7	3.7
April	29.95	.13	.64	48.8	64.4	68.4	47.5	58.0	84	40	46	49	89	60	.310	.347	2.04	.70	3.8	4.3	4.7
May	29.86	.00	.57	53.5	70.5	73.7	51.7	62.7	88	46	49	56	87	62	.347	.448	.66	.52	2.2	3.0	3.3
June	29.81	.04	.64	57.0	79.9	82.3	55.8	69.0	106	48	50	53	79	41	.360	.402	.05	.05	1.1	1.7	2.0
July	29.80	29.99	.64	61.1	88.8	92.3	60.4	76.4	106	52	53	57	75	36	.402	.465	T.	T.	1.1	0.8	1.2
August	29.81	.91	.68	60.7	88.5	92.8	59.4	76.1	106	50	53	60	78	40	.402	.517	0	0	0.6	0.7	0.8
September	29.85	30.01	.68	57.9	79.2	83.4	56.2	69.8	100	50	48	51	72	39	.334	.373	.10	.06	2.5	1.5	2.9
October	29.94	.12	.73	52.1	73.8	78.8	50.2	64.5	90	38	44	46	74	41	.287	.310	.10	.06	0.4	1.5	1.3
November	30.04	.25	.87	46.3	63.1	68.2	43.6	55.9	77	34	42	43	84	50	.266	.277	.48	.26	2.0	1.7	2.2
December	30.14	.51	.53	39.3	48.7	52.4	35.9	44.2	65	26	34	36	83	64	.195	.211	3.28	.86	3.6	5.3	5.1
Year	29.93	.51	.08	50.7	68.8	72.4	48.8	60.6	106	26	45	48	81	51	.302	.347	15.63	.....	2.2	2.7	3.0

ST. LOUIS, MO.

[Lat. 38° 38′ N.; long. 90° 12′ W.; gravity corr., —.02.]

January	29.48	29.90	28.64	32.9	38.7	42.8	30.5	36.6	59	15	28	31	84	76	.150	.172	1.35	.76	5.4	4.5	5.2
February	29.43	.88	.77	30.9	39.4	43.9	27.9	35.9	69	4	24	31	78	72	.125	.172	2.95	.90	5.4	4.5	4.7
March	29.40	.81	.94	34.5	40.8	45.9	32.0	39.0	68	9	29	34	81	77	.157	.195	2.29	.70	6.4	6.2	6.4
April	29.41	.70	29.12	52.2	61.2	67.4	50.0	58.7	82	27	43	47	72	62	.277	.322	2.29	.54	3.6	4.0	4.4
May	29.48	.81	.10	57.9	66.8	72.8	54.3	63.6	89	42	48	51	72	59	.334	.373	2.73	1.11	4.4	3.8	3.8
June	29.31	.56	28.96	71.0	78.0	84.1	67.3	75.7	93	54	65	67	82	70	.616	.660	5.97	1.69	4.9	5.1	5.0
July	29.43	.65	29.14	69.8	78.3	83.8	66.0	74.9	91	55	60	61	73	56	.517	.536	1.50	1.07	3.7	4.6	3.7
August	29.41	.63	.10	68.9	77.7	83.4	66.2	74.8	96	53	63	62	81	61	.575	.555	2.75	.89	3.4	5.7	5.2
September	29.54	.75	.34	65.8	77.4	84.3	63.8	74.0	94	51	56	56	72	50	.448	.448	1.43	.96	2.6	1.4	2.1
October	29.55	.92	.25	49.6	60.3	67.2	47.9	57.6	88	37	42	44	78	58	.266	.287	.65	.26	2.9	1.3	2.4
November	29.49	30.13	28.96	38.1	43.8	47.4	35.1	41.2	68	10	32	32	80	66	.180	.180	5.30	1.84	6.5	5.0	5.6
December	29.47	.02	.75	37.6	44.8	50.8	34.7	42.8	64	14	30	32	75	63	.164	.180	1.32	.90	3.6	3.1	3.6
Year	29.45	.13	.64	50.8	58.9	64.5	48.0	56.2	96	4	43	46	77	64	.317	.340	30.53	.....	4.4	4.1	4.3

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

ROCHESTER, N. Y.

[H = 523 feet; h_t = 81 feet; h_r = 81 feet; h_a = 90 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	8.4	NW.	34	NW.	0	5	3	2	8	4	13	11	16	0	2	5	24	17	15	19	0	0	12	0	26	1	0
February	b10.8	NW.	34	NW.	0	5	3	2	9	1	10	11	15	0	0	10	18	20	16	18	0	0	10	0	23	0	0
March	9.9	NW.	48	W.	2	5	6	11	11	5	5	8	11	0	3	15	13	21	19	15	0	0	13	0	22	0	0
April	10.2	NW.	38	W.	0	8	4	2	2	5	7	13	19	0	9	8	13	12	7	2	0	0	0	0	6	0	0
May	8.3	N.	34	NW.	0	15	3	4	3	2	12	9	13	1	6	15	10	8	3	3	0	0	0	0	2	0	0
June	6.4	NE.	25	SW.	0	8	15	3	5	2	6	14	6	1	11	10	9	10	5	0	0	0	0	3	0	2	0
July	7.7	SW.	28	SW.	0	8	3	1	4	3	24	11	8	0	12	8	11	16	12	0	0	0	0	2	0	5	0
August	6.5	SW.	34	SW.	0	4	8	5	5	2	20	13	4	1	8	14	9	16	14	0	0	1	0	2	0	5	1
September	6.7	SW.	36	SW.	0	2	4	8	2	2	23	10	8	1	17	9	4	8	7	0	0	1	0	0	0	4	3
October	8.0	SW.	30	SW.	0	0	4	6	8	3	24	5	12	0	14	5	12	9	8	3	0	0	0	0	1	0	0
November	9.3	SW.	44	SW.	2	0	3	2	11	6	27	8	3	0	5	9	16	17	9	12	0	1	2	0	14	0	0
December	10.1	SW.	42	SW.	1	1	1	3	5	8	27	10	5	2	13	5	13	16	13	12	0	2	3	0	20	0	0
Year	8.5	SW.	....	.....	5	61	57	49	73	43	198	123	120	6	100	113	152	170	128	84	0	5	40	7	114	17	4

ROSEBURG, OREGON.

[H = 523 feet; h_t = 54 feet; h_r = 47 feet; h_a = 67 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	2.1	Calm. S.	24	W.	0	3	3	8	2	8	7	6	3	22	3	6	22	18	16	0	0	8	1	0	6	0	0
February	3.2	SW.	24	S.	0	2	3	5	3	10	14	4	5	10	3	6	19	22	20	7	0	3	0	0	0	0	0
March	3.6	E.	27	SW.	0	11	5	13	0	2	5	4	12	10	4	4	23	19	13	0	0	1	0	0	4	0	0
April	4.1	NW.	24	W.	0	7	4	7	1	5	9	6	11	10	4	4	22	16	10	0	0	2	0	0	0	0	0
May	4.0	Calm. N.	26	SW.	0	18	6	3	0	0	3	2	11	19	11	9	11	11	8	0	0	0	0	0	0	1	0
June	3.8	Calm. N.	24	SW.	0	12	7	5	0	3	5	2	11	15	6	7	17	14	8	0	0	2	0	0	0	0	0
July	3.2	Calm. N.	18	NE.	0	12	7	4	0	0	0	2	9	28	21	5	5	5	4	0	0	1	0	3	0	0	0
August	2.4	Calm. NE.	16	W.	0	11	13	0	1	0	1	3	5	28	17	10	4	4	4	0	0	0	0	10	0	0	0
September	3.2	Calm. N.	21	SW.	0	9	8	6	1	4	3	5	8	16	8	14	8	10	7	0	0	7	0	3	0	0	0
October	2.6	Calm. N.	24	SW.	0	11	2	7	3	8	4	5	6	16	8	11	12	12	9	0	0	11	0	0	0	0	0
November	2.7	S.	21	S.	0	6	3	10	3	10	7	4	8	9	6	11	13	16	11	0	0	10	0	0	1	0	0
December	4.5	S.	36	S.	0	2	3	3	7	25	9	2	2	9	2	8	21	24	20	2	0	8	0	0	5	0	0
Year	3.3	Calm. N.	....	.....	0	104	64	71	21	75	67	45	91	192	93	95	177	171	130	9	0	53	1	16	22	1	0

SACRAMENTO, CAL.

[H = 64 feet; h_t = 61 feet; h_r = 57 feet; h_a = 70 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	5.9	N.	33	NW.	0	16	1	2	16	5	3	1	13	5	21	5	5	5	3	0	0	2	0	0	3	0	0
February	9.6	SE.	39	S.	0	5	1	2	16	10	7	2	9	4	11	7	10	13	13	0	0	0	0	0	2	0	0
March	8.3	NW.	33	NW.	0	9	1	3	10	10	11	0	18	0	15	10	6	10	8	0	0	1	0	0	0	0	0
April	6.9	SW.	24	SW.	0	5	1	0	17	14	18	1	3	1	9	16	5	8	8	0	0	0	0	0	0	1	0
May	8.0	SW.	36	NW.	0	1	1	0	13	18	19	0	10	0	19	9	3	4	4	0	0	0	0	0	0	0	0
June	8.0	SW.	24	SW.	0	4	0	0	16	8	20	1	11	0	22	6	2	1	1	0	0	0	0	5	0	0	0
July	6.9	SW.	24	SW.	0	1	2	0	14	16	21	1	5	2	27	2	2	0	0	0	0	0	0	22	0	0	0
August	6.3	SE.	24	SW.	0	2	0	0	22	19	9	1	5	4	27	3	1	0	0	0	0	0	0	21	0	0	0
September	7.0	SW.	33	NW.	0	5	0	0	13	14	15	0	11	2	21	9	0	3	1	0	0	0	0	7	0	1	0
October	5.5	NW.	24	NW.	0	3	2	2	11	10	8	2	15	9	25	5	1	2	2	0	0	0	0	2	0	0	0
November	4.4	N.	24	NW.	0	14	1	1	13	7	3	1	11	9	22	6	2	4	4	0	0	0	0	0	0	0	0
December	8.0	SE.	34	SE.	0	13	0	0	17	7	4	2	16	3	11	12	8	11	10	0	0	0	0	0	6	0	0
Year	7.1	SE.	....	.....	0	78	10	10	178	138	138	12	127	39	230	90	45	61	54	0	0	3	0	57	11	2	0

ST. LOUIS, MO.

[H = 571 feet; h_t = 110 feet; h_r = 100 feet; h_a = 210 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	10.6	SW.	48	SW.	2	1	10	5	6	2	17	6	13	2	13	5	13	9	4	6	0	0	1	0	21	0	0
February	13.6	SW.	44	W.	1	9	3	3	9	2	14	4	12	0	12	6	10	12	9	7	0	1	6	0	17	1	0
March	13.8	N.	37	SW.	0	22	1	7	5	3	8	8	7	1	8	7	16	13	10	9	0	0	5	0	16	0	0
April	12.5	SW.	40	SW.	1	3	11	1	14	3	14	4	10	0	13	8	9	10	9	3	0	0	0	0	3	3	0
May	10.0	N.	36	SW.	0	21	5	2	8	5	11	1	7	2	16	10	5	7	5	0	0	0	0	0	0	4	0
June	9.2	SW.	59	W.	3	10	2	6	3	16	12	3	5	3	11	10	9	15	11	0	0	0	0	4	0	6	0
July	9.1	SW.	35	NW.	0	11	11	2	3	6	16	4	9	0	14	15	2	6	3	0	0	0	0	1	0	1	0
August	8.8	SW.	38	W.	0	13	8	0	2	5	22	4	8	0	11	11	9	12	8	0	0	0	0	6	0	3	0
September	8.5	SW.	45	SW.	1	6	6	5	5	8	19	3	5	3	24	4	2	4	4	0	0	0	0	12	0	1	0
October	11.1	SW.	30	NW.	0	12	4	3	5	13	8	4	13	0	21	7	3	6	5	0	0	0	0	0	0	0	0
November	13.0	SW.	37	NW.	0	9	6	3	7	10	8	6	11	0	10	7	13	12	11	6	0	0	4	0	9	2	0
December	14.1	SW.	45	SW.	2	2	8	2	10	13	16	5	6	0	19	7	5	8	6	2	0	1	1	0	11	0	0
Year	11.2	SW.	....	.....	10	119	75	39	77	86	165	52	106	11	172	97	96	114	85	33	0	2	17	23	77	21	0

a By eye observations at 8 a. m. and 8. p. m., when there is no self-register at station.

b For 659 hours.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER, 31, 1891—Continued.

SAINT PAUL, MINN.

[Lat. 44° 58′ N.; long. 93° 03′ W.; gravity corr., 0.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.14	29.70	28.56	17.2	25.1	28.5	14.0	21.2	46	—2	13	18	84	76	.074	.093	1.01	.42	5.6	5.2	6.1
February	29.06	.55	.36	6.0	14.8	20.7	1.6	11.2	44	—25	2	8	82	75	.043	.057	1.18	.42	3.9	3.6	5.5
March	29.13	.61	.51	18.7	27.7	30.9	16.1	23.5	48	—9	13	18	79	69	.074	.093	.94	.29	6.4	6.4	6.4
April	29.07	.52	.51	42.2	53.7	57.7	38.7	48.2	83	13	36	41	80	65	.211	.256	1.71	.64	4.8	4.9	5.2
May	29.17	.68	.72	50.7	65.1	69.8	45.6	57.7	83	28	42	48	71	54	.266	.334	1.33	.90	3.7	4.1	4.3
June	29.02	.41	.76	61.4	68.9	73.6	57.4	65.5	89	40	56	58	84	70	.448	.481	4.08	1.36	7.0	5.8	7.1
July	29.12	.41	.84	60.5	71.0	75.5	55.9	65.7	84	47	54	56	81	62	.417	.448	2.07	1.30	5.5	4.7	5.6
August	29.09	.41	.81	60.4	71.9	78.1	56.9	67.5	95	40	56	58	85	63	.448	.481	3.42	1.80	5.2	4.4	4.9
September	29.13	.41	.82	58.1	70.6	77.2	54.1	65.6	92	39	52	54	80	57	.387	.417	.58	.40	4.1	4.5	5.0
October	29.16	.66	.80	42.0	50.5	57.1	39.2	48.2	76	24	36	38	81	63	.211	.228	1.57	.72	5.8	3.9	5.5
November	29.13	.67	.69	21.2	28.8	33.8	17.9	25.8	58	—12	16	20	82	72	.085	.103	1.03	.69	6.5	4.5	6.0
December	28.97	.69	.18	25.0	30.0	34.0	20.6	27.3	53	—8	20	24	80	78	.103	.125	2.87	1.50	5.6	4.7	5.5
Year	29.10	.70	.18	38.6	48.2	53.1	34.8	44.0	95	—25	33	37	81	67	.231	.260	21.79	.....	5.3	4.7	5.6

ST. VINCENT, MINN.

[Lat. 48° 56′ N.; long. 97° 14′ W.; gravity corr., +.01.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	29.18	29.66	28.53	7.9	11.7	20.3	1.7	11.0	41	—27	.....	.....	.....	.....	.....	.....	0.78	.20	6.1	6.9	a6.5
February	29.13	.66	.56	—8.5	—0.5	8.1	—13.4	—2.6	31	—34	.....	.....	.....	.....	.....	.....	2.04	.70	4.8	3.5	a4.2
March	29.20	.71	.78	4.0	14.3	23.5	—0.4	11.6	46	—29	.....	.....	.....	.....	.....	.....	1.23	.45	5.6	3.4	a4.5
April	29.08	.67	.46	36.7	49.6	56.0	32.2	44.1	90	6	.....	.....	.....	.....	.....	.....	1.68	.80	4.5	4.6	a4.6
May	29.16	.76	.70	43.6	58.7	67.4	35.5	51.4	92	16	.....	.....	.....	.....	.....	.....	1.29	.53	3.6	3.7	a3.7
June	29.00	.55	.61	56.9	67.6	72.4	50.5	61.4	90	32	.....	.....	.....	.....	.....	.....	8.17	4.50	6.4	4.6	a5.5
July	29.13	.45	.83	55.7	68.8	73.0	48.9	61.0	81	37	.....	.....	.....	.....	.....	.....	2.56	.90	4.5	4.3	a3.5
August	29.08	.39	.83	55.7	68.8	75.1	49.2	62.2	88	32	.....	.....	.....	.....	.....	.....	3.12	1.52	2.7	3.5	a3.2
September	29.06	.44	.73	48.9	61.3	70.8	45.6	58.2	88	29	.....	.....	.....	.....	.....	.....	2.43	.98	4.7	4.1	b5.2
October	29.12	.63	.40	35.4	42.8	53.4	32.7	43.0	71	20	29	35	78	76	.157	.203	2.38	1.11	5.5	4.5	5.6
November	29.10	.64	.62	14.9	19.3	28.2	9.2	18.7	63	—24	9	14	79	79	.060	.077	0.88	.24	7.0	4.7	5.1
December	28.96	.54	.22	11.0	13.5	22.9	3.5	13.2	46	—27	6	8	79	81	.052	.057	1.79	.80	5.8	4.6	4.9
Year	29.10	.76	.22	30.2	39.7	47.6	24.6	36.1	92	—34	.....	.....	.....	.....	.....	.....	28.35	.....	5.1	4.4	4.8

SALT LAKE CITY, UTAH.

[Lat. 40° 46′ N.; long. 111° 54′ W.; gravity corr., —.01.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	25.78	26.09	25.37	25.7	31.2	34.9	22.7	28.8	46	12	19	20	76	66	.098	.103	.74	.37	5.5	5.4	6.5
February	25.51	25.98	.00	27.7	33.6	38.5	22.6	30.6	55	3	20	26	73	74	.103	.137	.76	.28	4.9	6.1	5.5
March	25.58	.80	.20	34.5	42.0	45.9	30.2	38.0	64	12	25	27	68	59	.130	.143	4.66	.84	5.0	5.4	5.8
April	25.61	.92	.23	43.7	56.6	59.9	39.4	49.6	79	24	30	33	60	44	.164	.187	1.49	.44	4.0	5.1	5.1
May	25.58	.78	.27	53.6	66.8	70.9	49.2	60.0	86	38	36	40	53	40	.211	.246	.72	.36	4.2	4.8	5.2
June	25.56	.82	.21	55.8	70.5	73.1	50.9	62.0	84	41	40	44	57	41	.246	.287	1.08	.83	2.9	4.8	4.3
July	25.66	.84	.38	65.0	82.9	87.0	59.6	73.3	98	45	46	48	51	33	.310	.334	.47	.34	3.2	4.0	3.5
August	25.68	.88	.41	64.9	83.2	87.3	61.4	74.4	95	50	46	50	52	35	.310	.360	.46	.16	1.6	3.1	3.0
September	25.64	.85	.14	58.1	70.9	75.6	54.4	65.0	89	38	41	46	56	45	.256	.310	1.19	.63	3.0	4.4	4.4
October	25.78	26.04	.27	46.5	56.6	64.4	41.9	53.2	77	30	29	39	53	54	.157	.237	1.26	.64	1.8	1.9	2.2
November	25.72	.00	.43	39.5	45.8	52.2	36.1	44.2	72	20	28	34	65	65	.150	.195	.90	.48	4.4	5.6	5.6
December	25.66	.16	.05	25.9	30.2	35.5	21.8	28.6	51	0	17	22	70	73	.089	.113	2.19	.42	6.3	6.7	6.5
Year	25.65	.16	.00	45.1	55.9	60.4	40.8	50.6	98	0	31	36	61	52	.185	.221	15.92	.....	3.9	4.8	4.8

SAN ANTONIO, TEX.

[Lat. 29° 27′ N.; long. 98° 28′ W.; gravity corr., —.04.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	29.41	29.80	29.07	42.6	53.7	60.9	40.9	50.9	73	25	34	38	74	59	.195	.228	5.63	1.35	4.5	3.9	4.8
February	29.30	.72	28.98	48.8	61.7	68.4	46.3	57.4	86	27	38	41	70	48	.228	.256	1.38	1.29	4.4	3.3	4.5
March	29.27	.68	.90	49.3	61.0	67.6	47.0	57.3	85	29	40	40	72	49	.246	.246	1.18	.46	6.4	5.3	6.1
April	29.30	.74	29.09	59.4	71.5	77.9	56.9	67.4	86	39	51	52	76	53	.373	.387	4.57	2.24	5.8	4.5	4.7
May	29.32	.54	29.11	65.3	75.7	80.9	62.6	71.8	88	47	59	59	82	56	.499	.499	2.36	.91	5.8	4.5	5.4
June	29.17	.34	28.86	74.4	86.7	92.4	70.9	81.6	100	62	68	65	80	50	.684	.616	2.16	.98	4.6	3.0	3.5
July	29.27	.48	29.05	76.2	89.4	96.1	72.6	84.4	104	69	67	64	75	45	.660	.595	0.85	.34	3.7	2.7	2.9
August	29.31	.48	.09	74.0	88.5	95.1	70.5	82.8	101	57	65	62	75	42	.616	.555	1.06	.50	2.8	3.4	2.9
September	29.32	.47	.17	70.3	80.9	89.7	67.4	78.6	96	57	62	62	76	56	.555	.555	3.60	1.33	3.9	3.6	3.7
October	29.44	.71	.15	59.7	72.4	80.8	57.0	68.9	88	45	50	51	71	48	.360	.373	.60	.24	3.5	1.9	2.5
November	29.40	.96	.01	52.4	64.5	72.2	50.0	61.1	88	32	42	43	70	48	.266	.277	.92	.58	3.4	2.9	3.6
December	29.41	.87	.01	47.5	57.8	65.1	45.1	55.1	80	26	37	40	69	55	.219	.246	5.73	2.59	5.3	3.6	4.4
Year	29.33	.96	28.86	60.0	72.0	78.9	57.3	68.1	104	25	51	51	74	51	.408	.403	30.04	.....	4.5	3.6	4.1

a From 8 a. m. and 8 p. m. observations. b For 17 days.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER, 31, 1891—Continued

SAINT PAUL, MINN.

[H = 850 feet; h_t = 114 feet; h_c = 108; h_a = 120 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.	(b)	Mi.	(b)																							
January	6.3	NW.	30	NW.	0	2	0	2	23	3	4	7	17	4	8	12	11	6	4	12	0	0	23	0	31	0	0
February	7.7	NW.	25	NW.	0	2	3	4	17	0	13	5	10	2	9	11	8	11	8	9	0	4	23	0	28	0	0
March	7.2	NW.	36	NE.	0	1	11	9	9	2	7	6	13	4	9	5	17	10	6	14	0	0	14	0	27	0	1
April	8.3	NW.	33	NW.	0	3	4	7	12	4	6	6	13	5	13	6	11	9	5	5	2	0	1	0	7	2	0
May	6.5	SE.	24	NW.	0	1	6	4	20	6	7	3	10	5	13	11	7	7	5	2	0	0	0	0	2	2	0
June	7.7	SE.	36	NW.	0	6	6	5	27	2	6	6	1	1	4	11	15	13	9	0	0	0	0	0	0	7	0
July	6.7	SE.	25	SW.	0	3	4	8	19	1	9	7	9	2	6	17	8	9	7	0	0	1	0	0	0	5	0
August	6.3	SE.	30	NW.	0	3	4	7	17	4	7	9	10	1	6	21	4	9	6	0	0	0	0	2	0	5	0
September	6.8	SE.	29	SE.	0	0	0	1	26	9	2	5	7	10	10	12	8	6	3	0	1	3	0	1	0	2	0
October	6.9	SE.	29	SW.	0	0	0	1	18	4	7	11	11	10	8	12	11	8	7	0	0	1	0	0	5	1	0
November	6.4	SE.	24	SE.	0	2	1	4	13	0	11	12	8	9	7	11	12	5	3	9	0	0	13	0	25	0	0
December	6.7	SE.	28	SW.	0	1	0	5	23	8	11	7	4	3	8	12	11	11	9	5	0	0	11	0	26	0	0
Year	7.0	SE.	....	.....	0	24	39	57	224	43	90	84	113	56	101	141	123	104	72	56	3	9	85	3	151	24	0

ST. VINCENT, MINN.

[H = 805 feet; h_t = 8 feet; h_r = 6 feet; h_a = 24 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	.....	N.	36	NE.	0	20	3	3	0	20	6	4	3	3	c6	c10	c15	8	7	5	0	0	27	0	31	0	
February	.....	dCalm. N.	35e	N.	0	d14	d3	d4	d1	d6	d1	d4	d7	d15	c10	c12	c6	9	8	8	0	0	28	0	28	0	
March	.....	N.	36	SE.	0	14	4	10	6	13	0	9	2	4	c12	c11	c8	8	6	6	0	0	20	0	30	0	
April	.....	N.	40	SE.	1	14	1	11	9	8	2	5	8	2	c12	c9	c9	6	5	1	0	0	2	0	17	0	
May	.....	N.	44	S.	3	20	3	4	2	16	2	9	6	0	c15	c8	c8	6	5	0	0	0	0	1	11	0	
June	.....	E.	46	S.	3	10	5	15	7	7	4	8	3	1	c9	c10	c11	10	7	0	0	0	0	0	1	0	
July	.....	N.	42	E.	1	15	6	7	6	6	0	9	10	3	c14	c8	c9	11	11	0	0	0	0	0	0	0	
August	.....	W.	42	SE.	1	8	0	6	12	4	0	18	10	4	c15	c14	c2	6	6	0	0	0	0	0	0	0	
September	.....	NW.	41	SE.	1	8	2	9	10	2	3	7	15	4	f7	f4	f6	9	7	0	0	1	0	0	3	0	
October	11.1	NW.	43	SE.	1	9	3	4	8	11	3	6	15	3	10	8	13	11	8	4	0	1	1	0	10	0	
November	11.5	N.	36	S.	0	12	0	1	10	12	1	12	10	2	14	3	13	8	6	5	0	0	19	0	28	0	
December	12.9	N.	48	N.	2	17	3	3	4	13	0	15	6	1	13	6	12	7	6	5	0	0	20	0	30	0	
Year	.....	N.	....	.....	13	161	33	77	75	118	22	106	95	42	137	103	112	99	82	34	0	2	117	1	189	0	

SALT LAKE CITY, UTAH.

[H = 4,345 feet; h_t = 83 feet; h_r = 75 feet; h_a = 89 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	3.0	NW.	18	NW.	0	2	2	2	6	9	4	0	22	14	7	10	13	7	4	10	0	0	8	0	29	0	0
February	6.4	NW.	36	SW.	0	3	0	1	5	12	12	2	12	9	11	4	13	10	7	11	0	0	7	0	22	1	0
March	4.4	NW.	25	SW.	0	10	2	2	10	4	4	0	25	5	7	16	8	15	13	6	0	0	3	0	16	0	0
April	5.2	SE.	36	S.	0	7	7	1	21	4	2	1	13	4	9	12	9	8	7	1	0	0	0	0	3	0	0
May	5.7	SE.	30	NW.	0	8	5	7	13	8	8	0	8	5	10	12	9	12	4	0	0	0	0	0	0	5	0
June	5.7	N.	36	N.	0	14	6	9	7	6	5	1	6	6	12	11	7	5	4	0	1	0	0	0	0	2	0
July	4.9	SE.	28	S.	0	8	6	5	11	9	8	3	6	6	17	10	4	4	2	0	1	0	0	13	0	3	0
August	5.4	SE.	32	W.	0	2	6	4	19	10	0	3	16	2	21	4	6	6	4	0	0	0	0	13	0	3	0
September	6.8	SE.	38	SW.	0	2	7	7	17	6	2	4	14	1	15	7	8	9	6	0	0	0	0	0	0	3	0
October	5.1	NW.	26	NW.	0	3	2	0	22	1	0	9	21	4	23	4	4	2	2	2	0	0	0	0	2	0	0
November	4.5	NW.	26	NW.	0	3	4	6	21	2	4	1	13	6	11	4	15	8	3	2	0	0	0	0	11	0	0
December	5.9	Calm. NW.	35	SW.	0	5	3	0	14	9	6	4	10	11	10	4	17	15	12	14	4	0	9	0	29	0	0
Year	5.2	NW.	....	.....	0	67	50	44	166	80	55	28	166	73	153	98	113	101	68	46	6	0	27	26	112	17	0

SAN ANTONIO, TEX.

[H = 705 feet; h_t = 58 feet; h_r = 50 feet; h_a = 85 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	8.5	N.	34	NW.	0	23	15	2	7	5	0	3	5	2	14	6	11	11	11	0	1	2	0	0	5	3	0
February	9.0	N.	42	N.	2	17	9	6	16	4	0	2	1	1	13	8	9	2	2	0	1	3	0	0	3	1	0
March	9.5	NE.	36	SW.	0	15	17	4	16	9	0	0	0	1	7	13	11	5	5	0	0	0	0	0	1	0	0
April	8.2	SE.	36	N.	0	13	9	8	22	4	1	1	1	1	14	7	9	10	8	0	0	0	0	0	0	9	0
May	7.5	SE.	36	N.	0	5	11	9	34	1	2	0	0	0	8	14	9	8	6	0	0	0	0	0	0	4	0
June	8.7	SE.	37	NE.	0	2	9	4	40	3	0	0	1	1	14	15	1	6	3	0	0	0	0	23	0	3	0
July	6.8	SE.	29	N.	0	2	15	10	32	1	0	0	0	2	20	11	0	8	7	0	0	0	0	29	0	2	0
August	6.1	SE.	29	N.	0	5	5	7	31	2	1	0	1	10	20	11	0	4	3	0	0	0	0	28	0	1	0
September	6.1	E.	36	NE.	0	6	14	17	16	0	0	1	3	3	14	11	5	11	9	0	0	0	0	14	0	3	0
October	5.7	SE.	27	N.	0	19	6	5	22	3	0	0	2	5	22	8	1	4	3	0	0	2	0	0	0	0	0
November	7.2	SE.	37	N.	0	10	7	6	17	3	0	2	8	7	15	8	7	4	3	0	1	5	0	0	1	0	0
December	8.0	SE.	40	NW.	1	13	5	6	23	2	0	3	10	0	16	4	11	10	7	0	0	0	0	0	4	1	0
Year	7.6	SE.	...	.....	3	130	122	84	276	37	4	12	32	33	177	114	74	83	67	0	3	12	0	94	14	27	0

a By eye observations, 8 a. m. and 8 p. m. when there is no self-register at station.
b During all months, except June and December, "Calms" (winds of 4 miles per hour or less) were reported more frequently than directions.
c From 8 a. m. and 8 p. m. observations. d For 27½ days. e For 27 days. f For 17 days.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

SAN DIEGO, CAL.

[Lat. 32° 43′ N.; long. 117° 10′ W.; gravity corr., —.03.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	30.00	30.20	29.74	48.1	60.4	65.2	44.0	54.6	76	35	35	43	62	55	.203	.277	1.21	1.08	1.6	2.0	2.4
February	29.92	.21	.50	49.6	58.1	61.2	45.4	53.3	70	34	42	47	78	68	.266	.322	4.84	1.35	4.8	5.9	6.2
March	29.90	.08	.72	52.7	61.0	64.4	49.4	56.9	76	41	47	50	80	69	.322	.360	.27	.17	5.0	4.6	4.6
April	29.91	.04	.77	53.6	62.4	65.7	50.6	58.2	77	44	49	51	85	68	.347	.373	.76	.55	5.2	3.5	3.7
May	29.90	.02	.75	58.6	63.0	65.4	56.2	60.8	67	53	52	53	80	70	.387	.402	.35	.34	9.5	5.4	5.7
June	29.78	29.99	.70	60.0	67.8	69.8	57.5	63.6	78	53	55	56	83	66	.432	.448	.05	.05	6.5	2.6	3.7
July	29.81	.94	.72	65.7	72.0	75.0	63.1	69.0	88	58	61	62	86	71	.536	.555	T	T	7.7	2.6	3.2
August	29.82	.91	.74	69.1	75.7	78.1	66.8	72.4	85	60	64	66	84	71	.595	.638	.00	.00	8.5	2.0	3.0
September	29.82	.95	.55	65.7	73.8	77.4	62.9	70.2	89	55	60	63	83	70	.517	.575	.08	.08	5.0	2.3	3.3
October	29.90	30.00	.64	59.6	66.9	71.2	56.5	63.8	84	50	54	58	83	74	.417	.481	.04	.02	4.6	5.8	3.4
November	29.94	.07	.85	54.0	62.5	68.4	50.3	59.4	82	44	45	53	76	73	.298	.402	.10	.09	2.1	2.4	2.4
December	30.05	.34	.68	46.8	56.2	61.5	42.9	52.2	72	32	35	44	66	64	.203	.287	1.29	.69	2.1	3.1	3.3
Year	29.90	.34	.50	57.0	65.0	68.6	53.8	61.2	89	32	50	54	79	68	.377	.427	8.99	.....	5.2	3.4	3.7

SANDUSKY, OHIO.

[Lat. 41° 25′ N.; long. 82° 40′ W.; gravity corr., —.01.]

January	29.37	29.95	28.51	29.1	31.7	36.2	25.0	30.6	56	14	25	26	85	81	.130	.137	2.00	.50	9.5	7.3	9.1
February	29.34	.87	.65	31.4	33.5	42.0	26.8	34.4	58	6	25	26	79	74	.130	.137	4.05	1.24	7.8	5.4	8.2
March	29.58	.87	.88	29.2	33.2	38.7	25.9	32.3	60	8	24	26	81	76	.125	.137	2.27	.66	7.6	6.8	8.7
April	29.34	.65	.97	47.3	49.2	58.0	40.8	49.4	86	26	38	39	71	69	.228	.237	2.14	.65	5.2	4.3	5.7
May	29.42	.62	29.18	53.3	57.1	65.4	47.5	56.4	85	35	42	42	88	60	.266	.266	1.48	.72	5.0	5.6	5.3
June	29.30	.55	28.97	67.3	69.4	77.2	61.9	69.6	89	51	59	60	75	73	.499	.517	4.38	1.38	5.4	5.7	5.7
July	29.36	.63	29.12	66.4	70.4	78.4	59.9	69.2	92	53	57	57	72	63	.465	.465	2.05	.78	3.4	5.6	4.6
August	29.33	.52	.01	68.0	72.4	80.8	62.8	71.8	98	49	57	60	69	65	.465	.517	1.53	.61	5.7	5.4	5.6
September	29.47	.72	.26	65.5	70.3	79.7	60.5	70.1	95	49	55	57	70	64	.432	.465	1.10	.64	3.4	2.4	3.7
October	29.43	.83	.10	48.4	53.9	61.8	44.3	53.0	90	29	38	40	69	63	.228	.246	2.64	1.21	5.8	3.9	6.3
November	29.40	.92	28.57	36.6	40.1	46.6	33.2	39.9	73	13	28	31	71	72	.150	.172	5.45	2.06	8.2	6.3	8.1
December	29.43	.92	.82	35.4	39.2	46.5	31.5	39.0	64	17	26	29	70	68	.137	.157	1.60	.35	6.3	3.2	6.9
Year	29.38	.95	28.18	48.2	51.7	59.3	43.3	51.3	98	6	40	41	73	69	.271	.288	30.69	.....	6.1	5.2	6.5

SAN FRANCISCO, CAL.

[Lat. 37° 48′ N.; long. 122° 26′ W.; gravity corr., —.02.]

January	30.08	30.29	29.77	47.4	54.6	59.2	45.3	52.2	72	39	42	44	83	69	.266	.287	.98	.75	4.1	4.2	4.6
February	29.86	.30	.01	47.4	52.5	57.1	45.4	51.2	63	40	43	44	86	76	.277	.287	7.26	3.38	5.5	5.6	6.6
March	29.96	.10	.75	49.5	55.8	62.2	47.8	55.0	76	43	46	48	88	75	.310	.334	1.96	.68	4.4	4.2	4.5
April	29.93	.11	.61	49.2	55.3	60.4	46.3	53.4	81	40	46	48	91	76	.310	.334	2.44	1.20	6.7	4.3	4.9
May	29.87	29.99	.66	52.4	56.6	60.9	50.5	55.7	75	48	48	50	87	77	.334	.360	1.25	.61	7.1	5.8	6.3
June	29.83	30.05	.67	54.3	61.9	68.5	51.9	60.2	100	48	49	50	84	68	.347	.360	.11	.10	3.0	2.1	3.1
July	29.82	29.98	.68	54.1	60.2	66.2	52.7	59.4	81	50	51	52	90	75	.373	.387	.10	.09	3.8	3.4	2.7
August	29.83	.92	.72	55.6	62.8	69.3	54.2	61.8	92	50	53	54	93	74	.402	.417	.02	.02	2.2	1.6	3.3
September	29.85	.99	.68	56.8	62.6	68.2	55.4	61.8	86	51	54	53	89	71	.417	.402	.77	.63	5.2	3.3	3.0
October	29.93	30.09	.69	54.4	59.1	66.5	52.9	59.7	85	48	50	50	88	75	.360	.360	.04	.03	2.9	3.0	3.3
November	29.99	.20	.86	53.1	59.8	65.6	51.5	58.6	78	47	48	48	84	68	.334	.334	.56	.26	1.8	1.6	2.4
December	30.10	.42	.53	46.9	50.6	54.3	44.9	49.6	64	37	41	40	80	71	.256	.246	5.62	2.21	3.3	4.2	5.0
Year	29.92	.42	.01	51.8	57.6	63.2	49.9	56.6	100	37	48	48	87	73	.332	.342	21.11	.....	4.2	3.6	4.1

SANTA FÉ, N. M.

[Lat. 35° 41′ N.; long. 105° 57′ W.; gravity corr., —.02.]

January	23.23	23.47	22.89	17.2	23.5	32.6	12.8	22.7	42	—1	9	13	71	67	.060	.074	1.32	.48	2.7	3.5	4.0
February	23.15	.41	.87	24.4	31.7	38.2	20.8	29.5	50	—6	16	18	72	60	.085	.098	1.91	.78	4.8	5.7	5.8
March	23.13	.40	.87	28.2	41.3	46.4	26.3	36.4	63	9	16	19	62	45	.085	.098	.59	.27	4.5	5.5	5.1
April	23.26	.58	23.04	37.6	54.3	59.0	33.9	46.4	74	18	18	12	48	21	.093	.070	.17	.14	2.7	5.7	4.5
May	23.32	.51	.10	46.7	58.3	64.6	41.2	52.9	74	30	37	36	72	52	.219	.211	3.21	.87	3.9	6.3	6.0
June	23.26	.49	.03	56.0	69.8	74.1	51.1	62.6	84	38	42	35	62	33	.266	.203	1.26	.36	3.0	3.8	3.5
July	23.42	.63	.26	60.6	75.6	81.2	57.2	69.2	87	52	46	35	59	28	.310	.203	.84	.42	1.5	5.2	3.8
August	23.43	.56	.27	58.7	74.4	80.3	56.3	68.3	87	45	41	36	54	30	.256	.211	1.02	.44	1.0	4.4	3.4
September	23.41	.62	.08	52.5	66.1	72.5	51.1	61.8	82	38	40	42	66	46	.246	.266	4.69	1.42	2.1	4.4	3.9
October	23.42	.68	.04	40.8	55.3	62.8	39.6	51.2	69	30	20	27	46	36	.103	.143	.12	.06	.9	1.1	1.2
November	23.28	.50	.04	31.8	43.5	51.7	29.8	40.8	66	17	14	15	49	34	.077	.081	.18	.13	2.1	2.1	2.7
December	23.19	.49	22.81	20.9	26.3	34.2	16.9	25.6	52	—1	9	12	62	56	.060	.076	1.53	.71	4.6	3.0	4.5
Year	23.29	.68	.81	39.6	51.7	58.1	36.4	47.3	87	—6	26	25	60	42	.155	.144	16.79	.....	2.8	4.2	4.0

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

SAN DIEGO, CAL.

[H = 93 feet; h_t = 73 feet; h_r = 66 feet; h_a = 85 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.	(b)	*Mi.*																								
January	4.4	C. W.	30	NE.	0	11	6	3	3	1	4	8	15	11	22	7	2	5	3	0	0	1	0	0	0	0	0
February	5.8	C. W.	30	SE.	0	6	4	4	4	4	7	11	11	5	9	6	13	11	9	0	0	0	0	0	0	0	0
March	5.3	C. W.	24	W.	0	3	1	0	1	0	10	19	17	11	13	9	9	5	2	0	0	2	0	0	0	0	0
April	4.9	C. W.	24	SW.	0	1	0	0	0	0	3	23	22	11	16	9	5	3	3	0	0	3	0	0	0	0	0
May	5.4	C. W.	25	S.	0	0	0	0	0	2	4	26	18	12	9	12	10	3	2	0	0	0	0	0	0	0	0
June	4.6	C. W.	20	W.	0	1	1	1	2	6	9	22	2	16	16	12	2	1	1	0	0	1	0	0	0	0	0
July	4.0	C. W.	22	NW.	0	2	0	1	0	4	14	17	2	22	21	8	2	0	0	0	0	2	0	0	0	0	0
August	3.8	C. W.	21	NW.	0	0	0	0	1	2	10	20	4	25	23	8	0	0	0	0	0	0	0	0	0	0	0
September	4.7	C. W.	24	S.	0	6	1	0	1	3	6	19	9	15	20	5	5	2	1	0	0	3	0	0	0	0	0
October	3.8	C. W.	21	NW.	0	7	3	0	1	1	3	22	11	14	17	8	6	2	0	0	0	3	0	0	0	0	0
November	3.8	C. W.	17	NW.	0	7	8	1	0	1	5	10	13	15	22	6	2	2	1	0	0	7	0	0	0	0	0
December	5.4	C. W.	30	S.	0	8	10	5	1	2	4	12	11	9	19	4	8	7	6	0	0	0	0	0	0	0	0
Year	4.7	W.	....	.....	0	5[illegible]	34	15	14	26	79	209	135	166	207	94	64	39	28	0	0	22	0	0	0	0	0

SANDUSKY, OHIO.

[H = 629 feet; h_t = 62 feet; h_r = 55 feet; h_a = 74 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	8.0	W.	33	W.	0	12	4	7	2	2	12	17	6	0	0	4	27	14	9	10	1	0	9	0	26	1	0
February	11.1	NW.	36	N.	0	3	1	7	6	5	10	8	15	1	0	10	18	14	11	8	0	0	6	0	22	0	0
March	10.3	E.	36	N.	0	7	6	20	4	5	7	6	6	1	1	5	25	15	11	11	0	0	8	0	23	0	0
April	8.5	SW.	40	NW.	1	12	4	9	8	3	13	6	5	0	7	12	11	14	11	2	1	0	0	0	6	4	0
May	8.3	E.	29	N.	0	8	9	13	8	3	8	8	3	2	10	14	7	8	8	1	0	0	0	0	0	1	0
June	7.6	E.	40	SW.	1	2	5	21	7	3	13	5	4	0	8	11	11	15	13	0	1	0	0	0	0	11	0
July	8.1	W.	36	N.	0	1	6	8	8	7	8	13	10	1	8	21	2	7	6	0	0	0	0	2	0	5	0
August	7.4	SW.	28	NW.	0	3	7	12	5	9	14	8	4	0	7	17	7	14	9	0	0	0	0	5	0	5	0
September	7.4	SE.	27	NW.	0	9	1	8	10	8	9	9	6	0	15	12	3	6	5	0	0	5	0	8	0	4	1
October	9.7	SW.	36	NW.	0	8	3	2	6	6	18	9	9	1	7	13	11	11	7	0	0	0	0	1	2	0	0
November	9.1	SW.	35	NW.	0	7	3	1	4	8	17	14	5	1	1	9	20	14	12	5	0	0	3	0	14	1	0
December	10.4	SW.	34	NW.	0	2	2	3	3	10	27	9	6	0	2	15	14	13	10	3	0	0	1	0	15	0	0
Year	8.8	SW.	....	.....	2	74	51	111	71	69	156	112	79	7	66	143	156	145	112	40	3	5	27	17	108	32	1

SAN FRANCISCO, CAL.

[H = 109 feet; h_t = 109 feet; h_r = 101 feet; h_a = 109 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	4.5	Calm N.	28	SW.	0	10	4	3	6	3	8	10	11	7	11	12	8	6	4	0	0	4	0	0	0	0	0
February	8.6	Calm SW.	48	SW.	2	2	5	1	10	6	12	9	6	5	5	9	14	19	15	2	1	0	0	0	0	0	0
March	7.9	Calm SW.	26	W.	0	1	1	0	1	9	14	27	8	1	17	3	11	12	10	0	0	0	0	0	0	0	0
April	8.8	W.	28	SW.	0	0	1	0	6	5	20	25	1	2	12	13	5	9	7	0	2	0	0	0	0	0	0
May	10.5	SW.	28	SW.	0	0	0	1	0	4	29	24	2	2	4	14	13	5	3	0	0	0	0	0	0	0	0
June	11.0	W.	32	SW.	0	0	0	0	0	5	14	33	3	5	20	7	3	2	1	0	0	0	0	2	0	0	0
July	11.7	SW.	36	NW.	0	0	0	0	0	16	35	10	0	1	21	7	3	2	1	0	0	7	0	0	0	0	0
August	10.6	SW.	34	SW.	0	0	0	0	0	4	32	22	0	4	21	6	4	1	0	0	0	15	0	1	0	0	0
September	9.5	W.	29	W.	0	0	0	0	1	7	22	23	2	5	20	8	2	5	1	0	0	4	0	0	0	0	0
October	7.3	W.	24	W.	0	3	2	1	0	6	7	35	0	8	17	11	3	2	0	0	0	10	0	0	0	0	0
November	4.3	Calm W.	24	W.	0	7	3	0	3	0	10	22	5	10	23	3	4	5	4	0	0	5	0	0	0	0	0
December	6.4	Calm W.	34	SW.	0	13	2	0	7	7	5	12	10	6	14	7	10	13	12	0	0	1	0	0	0	0	0
Year	8.4	W.	....	.....	2	36	18	6	34	72	208	252	48	56	185	100	80	81	58	2	3	46	0	3	0	0	0

SANTA FÉ, N. M.

[H = 7,026 feet; h_t = 35 feet; h_r = 29 feet; h_a = 36 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.1	C. NE.	28	NE.	0	9	19	13	4	4	9	4	0	0	19	4	8	9	7	11	0	1	14	0	31	0	0
February	7.2	C. NE.	36	NW.	0	8	10	6	5	11	7	7	2	0	7	11	10	11	11	8	0	0	4	0	24	0	0
March	7.7	C. SW.	40	NW.	1	9	12	6	5	10	7	9	4	0	11	12	8	10	3	12	0	0	2	0	25	0	0
April	8.8	C. SW.	32	NE.	0	10	10	6	10	6	9	2	7	0	12	14	4	3	1	3	0	0	0	0	14	0	0
May	7.4	C. SW.	30	SE.	0	4	7	14	14	2	8	9	3	1	9	11	11	12	10	0	3	0	0	0	1	2	0
June	8.3	SW.	31	NE.	0	2	5	8	16	7	11	7	4	0	19	6	5	5	5	0	1	0	0	0	0	3	0
July	7.3	C. SE.	36	NW.	0	4	12	16	8	7	5	6	4	0	19	9	3	9	6	0	0	0	0	0	0	0	0
August	7.0	C. SE.	32	NE.	0	4	13	13	19	4	4	2	3	0	19	10	2	10	4	0	0	0	0	0	0	3	0
September	7.1	C. SE.	40	NW.	1	3	11	7	14	10	6	4	5	0	17	10	3	13	12	0	0	0	0	0	0	4	0
October	5.7	C. SE.	27	NE.	0	3	5	8	16	5	16	4	5	0	26	4	1	2	2	0	0	0	0	0	2	1	0
November	7.4	C. N.	32	NE.	0	15	11	4	8	5	7	4	3	3	22	6	2	1	1	0	0	0	0	0	18	0	0
December	8.0	C. NE.	37	NE.	0	8	22	12	2	1	4	12	1	0	15	10	6	7	6	13	0	0	12	0	30	0	0
Year	7.3	NE.	....	.....	2	79	137	113	121	72	93	70	41	4	195	107	63	92	68	41	4	1	32	0	145	13	0

a By eye observations at 8 a. m. and 8 p. m. when there is no self-register at station.

b Calm and direction as given.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

SAULT DE STE. MARIE, MICH.

[Lat. 46° 28′ N.; long. 84° 22′ W.; gravity corr., .0.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.31	29.94	28.69	13.4	18.5	23.3	9.6	16.4	36	—15	12	16	94	91	.070	.085	2.06	.52	8.5	6.9	8.3
February	29.22	.82	.38	12.0	16.6	22.4	6.7	14.6	43	—25	11	14	94	88	.067	.077	3.16	.60	7.7	6.2	8.1
March	29.37	.85	.83	17.8	25.0	30.1	13.2	21.6	55	—14	14	19	87	80	.077	.098	2.49	1.08	6.0	5.9	6.7
April	29.28	.72	.78	33.5	38.5	47.0	28.8	37.9	75	7	29	30	86	75	.157	.164	2.11	.80	5.2	4.7	6.7
May	29.36	.65	29.00	43.5	48.3	58.9	36.0	47.4	78	28	33	34	68	59	.187	.195	.50	.26	5.5	5.0	6.7
June	29.29	.66	.00	57.6	64.3	72.7	49.3	61.0	87	34	48	48	72	58	.334	.334	.95	.36	5.1	4.2	5.7
July	29.28	.63	.08	55.7	59.0	68.2	47.9	58.0	83	40	49	47	79	66	.347	.322	2.22	1.23	6.3	5.6	7.1
August	29.28	.53	28.83	58.0	63.6	72.3	52.0	62.2	89	39	52	53	82	69	.387	.402	3.44	1.51	5.8	5.3	6.6
September	29.37	.75	.97	54.0	60.4	69.1	49.2	59.2	87	36	50	52	88	74	.360	.387	.98	.52	5.4	3.2	6.5
October	29.34	.89	.91	40.8	44.0	51.5	36.5	44.0	77	24	36	38	85	80	.211	.228	2.76	.95	6.6	5.4	7.7
November	29.24	.78	.58	29.1	30.6	34.2	25.5	29.8	47	— 2	23	27	82	86	.119	.143	5.85	1.44	9.0	8.4	9.5
December	29.20	.73	.42	28.9	30.8	35.1	24.5	29.8	48	4	25	26	87	82	.130	.137	3.05	.74	8.5	6.5	8.4
Year	29.30	.94	.38	37.0	41.6	48.7	31.6	40.2	89	—25	32	34	84	76	.204	.214	29.57	.....	6.6	5.6	7.3

SAVANNAH, GA.

[Lat. 32° 5′ N.; long. 81° 5′ W.; gravity corr., —.03.]

January	30.07	30.36	29.56	44.4	51.3	59.3	41.6	50.4	77	30	39	39	82	66	.237	.237	1.00	.59	4.0	2.5	4.2
February	30.07	.44	.51	55.1	58.8	68.9	52.2	60.6	84	28	52	53	89	82	.387	.402	2.23	.67	6.1	6.8	6.1
March	29.96	.40	.56	52.3	56.8	63.3	48.9	56.1	78	35	47	47	82	72	.322	.322	5.08	2.04	5.7	5.0	6.3
April	30.00	.26	.58	61.9	64.2	73.9	56.4	65.2	83	34	56	55	80	74	.448	.432	2.91	1.70	3.6	2.4	3.5
May	29.95	.32	.76	67.6	69.6	79.3	62.0	70.6	91	50	60	61	76	76	.517	.536	1.87	1.12	4.4	4.9	4.5
June	29.90	.10	.64	77.4	78.2	87.9	71.9	79.9	97	68	71	71	82	79	.757	.757	1.98	1.09	4.8	5.3	5.7
July	30.00	.16	.80	77.0	77.5	87.2	71.8	79.5	94	64	70	71	81	82	.732	.757	9.70	2.09	5.1	7.7	6.7
August	29.96	.08	.75	77.9	78.7	88.5	72.1	80.3	95	65	73	73	85	83	.810	.810	11.54	3.30	4.3	6.3	6.7
September	30.04	.26	.89	71.8	75.1	83.3	68.4	75.8	89	64	69	69	92	81	.707	.707	2.69	1.14	4.7	2.4	5.8
October	30.04	.44	.70	57.6	63.5	71.9	55.0	63.4	89	41	51	53	80	72	.373	.402	2.46	1.07	4.2	2.8	4.3
November	30.10	.58	.70	50.4	55.5	64.7	46.6	55.6	79	30	46	47	86	74	.310	.322	2.05	.95	4.7	3.9	4.1
December	30.17	.45	.88	50.9	55.0	64.0	46.7	55.4	77	27	47	48	86	80	.322	.334	1.26	.31	6.0	3.9	5.6
Year	30.02	.58	.51	62.0	65.4	74.4	57.8	66.1	97	27	57	57	83	77	.494	.502	44.77	.....	4.8	4.5	5.3

SHREVEPORT, LA.

[Lat. 32° 30′ N.; long. 93° 40′ W.; gravity corr., —.03.]

January	29.86	30.21	29.33	41.1	47.9	52.3	38.3	45.3	64	29	37	38	86	73	.219	.228	5.10	1.75	6.3	5.2	6.3
February	29.75	.20	.36	48.2	56.7	62.0	45.4	53.7	81	25	43	46	84	68	.277	.310	2.73	1.41	7.0	4.7	6.5
March	29.73	.21	.36	46.9	57.4	63.6	44.1	53.8	78	30	41	44	80	64	.256	.287	3.11	.83	6.4	6.2	6.0
April	29.76	.15	.52	59.5	69.6	75.6	56.4	66.0	85	36	54	53	84	60	.417	.402	2.95	.85	4.5	3.6	4.6
May	29.78	.08	.55	64.6	74.2	79.8	60.7	70.2	88	48	60	59	87	61	.517	.499	.88	.48	5.3	4.3	4.5
June	29.64	29.89	.32	75.7	83.2	91.0	71.3	81.2	97	62	71	70	87	67	.757	.732	1.34	.36	4.3	4.4	4.4
July	29.74	.90	.40	75.3	82.8	89.6	71.4	80.5	96	64	71	72	87	70	.757	.783	2.57	1.23	4.2	4.0	4.3
August	29.77	.92	.51	72.3	80.4	89.3	68.5	78.9	97	54	68	69	87	70	.684	.707	2.14	.93	2.9	3.3	3.2
September	29.82	30.00	.66	68.6	78.3	86.3	65.0	75.6	91	54	65	66	88	68	.616	.638	4.35	4.01	3.8	3.6	4.1
October	29.90	.16	.67	54.4	67.6	75.3	51.1	63.2	87	38	50	51	85	56	.360	.373	.22	.13	2.0	.9	2.0
November	29.85	.46	.39	48.2	57.2	64.6	44.3	54.4	85	25	44	45	85	64	.287	.298	3.76	1.36	4.4	2.9	4.0
December	29.87	.27	.34	45.4	54.6	60.3	41.8	51.0	73	26	41	43	86	66	.256	.277	6.85	4.64	5.1	5.7	5.3
Year	29.79	.46	.32	58.4	67.5	74.1	54.9	64.5	97	25	54	55	86	66	.450	.461	36.00	.....	4.7	4.1	4.6

FORT SILL, OKLA.

[Lat. 34° 40′ N.; long. 98° 23′ W.; gravity corr., —.02.]

January	28.87	29.19	28.50	32.0	40.4	47.5	30.2	38.8	63	12	28	32	85	75	.150	.180	2.72	1.45	4.5	3.7	4.3
February	28.75	.17	.32	30.5	44.1	55.8	29.4	42.6	85	12	24	27	79	54	.125	.143	.12	.12	3.0	2.3	3.2
March	28.72	.15	.33	35.1	49.5	57.3	33.5	45.4	83	16	30	35	83	60	.164	.203	2.66	1.95	4.4	3.8	4.0
April	28.76	.21	.41	52.5	65.0	72.4	49.2	60.8	85	27	46	48	81	58	.310	.334	4.99	3.25	4.7	3.8	4.3
May	28.79	.09	.42	60.0	69.6	75.5	56.3	65.9	89	43	57	61	91	75	.465	.536	3.72	1.09	5.8	5.6	6.1
June	28.64	28.91	.26	69.6	78.9	85.7	65.8	75.8	95	57	67	69	92	73	.660	.707	4.96	1.15	5.9	5.0	5.9
July	28.77	29.00	.54	70.1	83.1	90.1	67.1	78.6	100	58	68	69	92	64	.684	.707	6.27	2.45	6.7	3.8	5.4
August	28.78	.02	.53	68.6	81.5	90.4	66.1	78.2	101	52	64	66	87	61	.595	.638	1.32	.65	4.0	3.8	3.7
September	28.83	.02	.65	63.4	76.2	86.6	61.7	74.2	94	49	60	63	90	65	.517	.575	1.01	.36	4.9	3.7	4.8
October	28.88	.24	.54	48.9	64.3	76.9	47.5	62.2	92	35	43	46	80	52	.277	.310	.36	.30	2.1	1.0	1.7
November	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

SAULT DE STE. MARIE, MICH.

[H=642 feet; h_t=56 feet; h_r=48 feet; h_a=65 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	6.0	SE.	26	N.	0	8	3	8	25	3	1	4	7	3	3	4	24	19	13	21	0	4	26	0	31	0	0
February	9.7	SE.	37	NW.	0	9	1	7	23	0	0	5	9	2	1	7	20	18	17	20	0	0	23	0	28	0	1
March	9.7	SE.	42	SE.	1	7	0	11	25	3	0	6	10	0	6	8	17	15	12	16	0	0	18	0	30	0	0
April	8.7	NW.	37	NW.	0	3	1	7	18	0	2	7	19	3	4	12	14	15	8	4	0	5	3	0	14	1	2
May	9.3	NW.	42	NW.	1	3	2	6	19	2	3	5	22	0	3	14	14	7	5	2	0	3	0	0	10	2	1
June	7.3	Calm. SE.	28	NW.	0	2	5	11	17	0	5	8	12	0	7	10	13	8	5	0	0	1	0	0	0	2	3
July	8.0	NW.	30	NW.	0	5	2	2	13	4	2	8	24	2	3	9	19	13	10	0	1	0	0	0	0	4	0
August	6.3	Calm. NW.	28	SE.	0	4	6	4	15	2	6	4	19	2	4	14	13	15	12	0	0	1	0	0	0	3	7
September	8.0	SE.	41	NW.	2	1	2	3	21	5	8	5	12	3	5	11	14	10	7	0	0	6	0	0	0	3	4
October	8.4	SE.	36	NE.	0	8	6	5	19	5	4	3	11	1	1	9	21	11	11	2	0	3	0	0	7	0	0
November	8.5	SE.	37	SE.	0	2	10	3	18	4	4	3	15	1	0	2	28	25	20	16	0	1	10	0	19	0	0
December	11.6	SE.	42	NW.	3	2	3	2	26	1	6	5	15	2	1	5	25	16	13	12	0	0	7	0	22	0	0
Year	8.5	SE.	....	.....	7	54	41	69	239	29	41	63	175	19	38	105	222	172	133	93	1	24	87	0	161	15	18

SAVANNAH, GA.

[H=87 feet; h_t=66 feet; h_r=56 feet; h_a=70 feet.]

Month.	Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	7.6	NW.	30	W.	0	0	5	3	4	9	15	11	14	1	14	10	7	6	5	0	0	3	0	0	3	0	0
February	8.8	SW.	33	NE.	0	6	10	2	9	4	14	4	6	1	5	14	9	12	8	0	0	5	0	0	1	0	0
March	8.6	NW.	35	NW.	0	1	15	9	3	6	6	5	16	1	7	12	12	14	12	0	0	3	0	0	0	1	0
April	7.3	Calm. SE.	24	NW.	0	0	8	2	13	16	7	6	6	2	16	12	2	6	6	0	0	1	0	0	0	1	0
May	7.0	Calm. SW.	30	NE.	0	5	8	7	12	10	7	6	7	0	14	8	9	11	7	0	0	0	0	1	0	4	0
June	7.1	SW.	26	NW.	0	1	14	2	10	10	10	9	1	3	7	15	8	11	6	0	0	1	0	10	0	1	0
July	6.8	SW.	24	NE.	0	3	10	1	3	9	21	12	1	2	3	14	14	17	15	0	0	0	0	8	0	3	0
August	5.8	Calm. SW.	38	NW.	0	9	1	0	10	16	16	8	2	0	5	11	15	18	15	0	0	0	0	13	0	8	0
September	5.6	Calm. NE.	26	NE.	0	11	20	7	17	2	1	0	2	0	8	11	11	8	6	0	0	3	0	0	0	0	0
October	7.8	NE.	26	SE.	0	12	14	5	4	2	4	8	13	0	16	6	9	8	8	1	0	1	0	0	0	0	0
November	7.0	NE.	26	NE.	0	10	11	4	9	4	4	11	7	0	15	8	7	10	8	0	0	2	0	0	2	0	0
December	7.4	NE.	36	W.	0	9	12	8	8	6	7	1	10	1	7	14	10	14	11	1	0	1	0	0	1	0	0
Year	7.2	NE.	....	.....	0	67	128	50	102	94	112	81	85	11	117	135	113	135	107	2	0	20	0	32	7	18	0

SHREVEPORT, LA.

[H=249 feet; h_t=77 feet; h_r=76 feet; h_a=84 feet.]

Month.	Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	7.1	SE.	40	N.	1	6	6	7	18	1	1	12	11	0	10	5	16	17	11	0	0	1	0	0	4	0	0
February	8.7	SE.	36	NW.	0	8	4	6	20	2	0	6	9	1	8	5	15	10	5	1	0	1	0	0	5	0	0
March	8.6	SE.	30	NW.	0	3	5	10	20	0	1	9	11	3	9	8	14	12	8	0	0	0	0	0	2	2	0
April	7.3	SE.	36	SE.	0	5	3	1	28	3	1	2	9	8	15	4	11	11	7	0	0	0	0	0	0	2	0
May	5.7	SE.	23	SE.	0	5	12	4	23	4	2	5	6	1	12	11	8	7	5	0	0	0	0	0	0	2	0
June	5.7	SE.	32	NE.	0	2	7	4	30	5	3	5	1	3	10	16	4	10	6	0	0	0	0	19	0	4	0
July	5.4	SE.	29	NW.	0	1	7	6	22	5	6	1	9	5	15	13	3	6	5	0	0	0	0	21	0	1	0
August	4.6	SE.	28	N.	0	5	5	7	27	2	5	7	3	1	20	5	6	8	6	0	0	0	0	17	0	4	0
September	4.7	SE.	26	SE.	0	6	10	10	20	1	0	1	7	5	17	6	7	5	3	0	0	3	0	5	0	0	0
October	5.6	SE.	21	N.	0	5	10	7	15	5	5	2	7	6	24	5	2	3	2	1	0	1	0	0	0	0	0
November	7.6	S.	31	NW.	0	7	5	6	12	14	3	4	5	4	16	8	6	9	8	1	0	0	0	0	5	1	0
December	9.2	S.	36	W.	0	5	3	5	13	22	2	3	8	1	12	6	13	10	5	1	0	0	0	0	7	0	0
Year	6.7	SE.	....	.....	1	58	77	73	248	64	29	57	86	38	168	92	105	108	71	4	0	6	0	62	23	16	0

FORT SILL, OKLA.

[H=1,200 feet; h_t=10 feet; h_r=3 feet; h_a=24 feet.]

Month.	Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.3	N.	36	S.	0	22	4	3	3	8	2	1	6	13	14	8	9	11	8	2	0	0	2	0	19	0	0
February	12.0	N.	48	W.	3	20	3	1	4	15	0	1	1	11	14	12	2	2	1	0	0	0	0	0	20	0	0
March	11.7	N.	48	N.	4	16	5	6	3	16	2	0	7	7	10	13	8	4	2	1	0	0	1	0	13	1	0
April	9.4	S.	60	W.	4	14	4	3	4	20	1	1	6	7	13	8	9	7	6	0	1	0	0	0	3	2	0
May	10.8	S.	42	S.	1	8	11	5	8	23	0	1	5	1	6	12	13	12	7	0	1	0	0	0	0	3	0
June	10.2	S.	40	SE.	1	10	8	8	11	14	2	3	3	1	6	15	9	11	9	0	1	1	0	8	0	4	0
July	9.3	SE.	34	SE.	0	14	7	13	15	9	1	0	2	1	8	15	8	12	12	0	0	1	0	13	0	3	0
August	8.7	SE.	40	W.	1	11	4	9	16	15	3	0	2	2	17	9	5	7	5	0	0	0	0	19	0	4	0
September	9.5	S.	46	S.	1	12	2	12	13	16	0	0	1	4	9	15	6	11	4	0	0	0	0	12	0	2	0
October	10.9	N.	40	S.	1	24	1	2	8	20	2	0	2	3	24	4	3	3	2	0	0	0	0	1	0	0	0
November	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

SIOUX CITY, IOWA.

[Lat. 42° 29′ N.; long. 96° 24′ W.; gravity corr., 0.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	28.83	29.24	28.42	21.2	29.3	37.4	17.6	27.5	58	3	17	21	84	72	.089	.108	1.66	.80	5.2	3.1	5.4
February	28.74	.20	.07	8.2	16.1	23.0	3.9	13.4	45	—17	5	10	87	78	.049	.063	1.26	.66	3.2	3.1	4.7
March	28.78	.15	.18	20.4	27.2	32.4	17.7	25.0	53	—14	16	21	83	77	.085	.108	2.01	.92	5.9	6.1	6.3
April	28.74	.20	.39	44.8	56.5	63.7	41.4	52.6	93	16	37	37	77	53	.219	.219	2.22	1.02	4.0	3.7	5.1
May	28.83	.26	.33	51.4	64.3	70.8	47.1	59.0	87	36	41	41	70	46	.256	.256	2.41	1.37	4.2	4.5	5.2
June	28.66	.02	.38	62.9	70.6	76.0	59.7	67.8	94	48	58	58	84	68	.481	.481	7.62	1.89	6.3	5.8	6.7
July	28.79	.15	.54	62.9	73.4	80.1	58.2	69.2	88	47	56	59	80	63	.448	.499	5.77	2.14	4.5	3.9	4.9
August	28.76	.13	.51	62.8	73.9	81.0	59.5	70.2	98	40	58	61	85	65	.481	.536	3.54	1.01	4.8	4.4	5.9
September	28.80	.05	.53	59.5	71.1	79.0	57.1	68.0	92	38	52	57	78	62	.387	.465	.91	.44	3.6	3.5	4.7
October	28.86	.31	.51	42.2	52.7	61.2	39.5	50.4	80	26	35	37	78	58	.203	.219	3.04	1.92	3.2	2.3	3.7
November	28.81	.37	.29	24.7	32.6	39.2	21.3	30.2	64	—9	19	22	81	67	.098	.113	.37	.19	5.0	3.9	6.0
December	28.68	.39	.11	26.6	31.8	39.5	22.3	30.9	60	—6	21	23	79	70	.108	.119	2.48	1.18	3.5	3.1	4.6
Year	28.77	.39	.07	40.6	50.0	56.9	37.1	47.0	98	—17	35	37	80	65	.242	.266	33.29	.....	4.4	4.0	5.3

SOUTHPORT, N. C.

[Lat. 33° 35′ N.; long. 78° 1′ W.; gravity corr., —.03.]

January	.....	.....	.....	.....	.....	53.6	39.5	46.6	64	28	.....	.....	.....	.....	.....	.....	5.38	2.60	.....	.....	.....
February	.....	.....	.....	.....	.....	60.7	47.0	53.8	68	30	.....	.....	.....	.....	.....	.....	1.87	.72	.....	.....	.....
March	.....	.....	.....	.....	.....	59.4	44.8	52.1	69	29	.....	.....	.....	.....	.....	.....	4.83	1.28	.....	.....	.....
April	.....	.....	.....	.....	.....	69.0	54.9	62.0	79	33	.....	.....	.....	.....	.....	.....	1.73	.87	.....	.....	.....
May	.....	.....	.....	.....	.....	75.0	59.9	67.4	82	40	.....	.....	.....	.....	.....	.....	2.24	.81	.....	.....	.....
June	.....	.....	.....	.....	.....	83.4	70.6	77.0	92	62	.....	.....	.....	.....	.....	.....	4.35	1.42	.....	.....	.....
July	.....	.....	.....	.....	.....	83.5	71.7	77.6	89	61	.....	.....	.....	.....	.....	.....	7.05	1.55	.....	.....	.....
August	.....	30.13	29.77	79.0	.....	84.8	74.1	79.4	88	62	75	.....	88	.....	.866	.....	7.46	2.20	4.3	.....	.....
September	30.08	.29	.88	72.0	74.8	79.6	67.0	73.3	84	58	69	70	90	86	.707	.752	5.04	2.20	4.8	3.5	5.1
October	30.07	.51	.72	58.3	61.2	67.9	53.0	60.4	80	36	53	57	83	86	.402	.465	6.40	1.90	4.3	3.0	4.3
November	30.16	.68	.70	50.2	52.6	60.5	44.1	52.3	72	25	47	48	88	85	.322	.334	2.08	.69	4.1	3.0	4.4
December	30.24	.56	.89	49.0	52.5	59.2	43.8	51.5	69	22	45	48	87	85	.298	.334	1.15	.42	4.2	3.7	4.9
Year	.....	.....	.....	.....	.....	69.7	55.9	62.8	92	22	.....	.....	.....	.....	.....	.....	49.58	.....	.....	.....	.....

SPOKANE, WASH.

[Lat. 47° 40′ N.; long. 117° 25′ W.; gravity corr., +.01.]

January	28.13	28.58	27.58	32.1	36.4	39.8	30.0	34.9	50	16	28	30	87	77	.150	.164	1.04	.45	7.4	8.4	8.9
February	27.80	.38	26.98	21.2	29.1	32.6	17.7	25.2	38	1	18	21	89	73	.093	.108	2.40	.54	7.4	6.9	7.6
March	27.98	.26	27.54	25.4	39.9	43.1	23.6	33.4	56	—10	20	22	83	53	.103	.113	1.03	.47	4.4	5.8	5.9
April	27.92	.36	.41	39.9	58.7	61.5	38.5	50.0	76	27	32	24	73	30	.180	.125	.81	.32	5.4	6.8	6.2
May	27.90	.19	.67	48.2	69.4	72.2	47.1	59.6	88	32	39	31	73	28	.237	.172	.60	.22	4.0	5.9	5.7
June	27.88	.24	.61	51.9	66.9	70.3	50.2	60.2	84	34	42	38	70	38	.266	.228	3.28	1.59	6.6	8.1	7.6
July	27.95	.21	.68	58.4	80.8	82.5	57.1	69.8	97	42	46	37	66	23	.310	.219	1.12	.47	3.5	4.7	4.5
August	27.96	.18	.81	57.3	81.5	83.9	55.9	69.9	95	44	44	36	63	25	.287	.211	.66	.43	3.4	3.6	3.6
September	27.94	.20	.64	49.9	69.5	72.2	48.3	60.2	89	36	37	31	64	26	.219	.172	.66	.28	4.7	4.9	5.0
October	28.04	.31	.76	42.8	60.1	63.4	40.8	52.1	78	29	35	34	76	42	.203	.195	.59	.40	4.5	6.0	5.8
November	28.02	.40	.55	35.8	43.2	46.9	32.8	39.8	69	14	31	33	83	69	.172	.187	1.46	.62	4.7	6.1	6.0
December	27.96	.51	.25	31.3	34.4	37.8	28.3	33.0	46	15	26	27	81	77	.137	.143	3.04	.71	6.5	7.9	7.8
Year	27.95	.58	26.98	41.2	55.8	58.8	39.2	49.0	97	—10	33	30	76	47	.196	.170	16.69	.....	5.3	6.3	6.2

SPRINGFIELD, ILL.

[Lat. 39° 48′ N.; long. 89° 39′ W.; gravity corr., —.01.]

January	29.38	29.85	28.50	28.2	33.2	39.7	25.0	32.4	54	1	24	25	85	73	.125	.130	1.16	.60	6.5	4.8	5.6
February	29.34	.80	.66	25.3	35.4	39.8	22.9	31.4	67	—5	20	25	82	68	.103	.130	2.59	2.08	5.6	5.6	5.4
March	29.32	.74	.82	29.8	35.3	41.3	26.2	33.8	65	2	25	28	84	76	.130	.150	3.21	1.43	7.1	6.8	7.0
April	29.32	.53	29.06	49.1	57.6	64.6	45.2	54.9	81	25	42	43	78	71	.266	.334	2.81	1.32	4.6	6.0	5.1
May	29.41	.73	.12	55.4	64.9	71.5	49.6	60.6	84	36	46	49	72	58	.310	.347	1.96	.73	4.5	4.8	4.6
June	29.24	.49	28.88	68.9	75.4	82.4	64.1	73.2	95	50	62	62	81	66	.555	.555	2.11	.81	6.1	5.8	6.0
July	29.35	.58	29.14	66.3	75.7	81.3	60.7	71.0	89	49	58	57	74	54	.481	.465	4.44	2.17	4.8	4.6	4.4
August	29.33	.54	.01	65.6	73.8	81.3	61.7	71.5	94	48	60	61	82	65	.517	.536	4.65	1.72	4.1	5.3	4.8
September	29.45	.69	.26	61.7	74.4	83.0	58.7	70.8	94	44	54	54	76	51	.417	.417	1.38	1.30	2.9	2.5	2.5
October	29.45	.83	.18	46.1	56.5	65.1	43.8	54.4	88	32	38	41	76	60	.228	.256	1.88	.82	3.1	1.5	3.0
November	29.40	30.02	28.87	33.8	38.5	43.8	30.4	37.1	68	4	27	29	76	71	.143	.157	5.49	1.42	6.5	5.5	6.1
December	29.37	29.94	.63	33.4	39.7	46.4	30.1	38.2	62	12	27	32	78	76	.143	.180	1.59	.94	5.0	4.7	5.0
Year	29.36	30.02	28.50	47.0	55.0	61.7	43.2	52.4	95	—5	40	43	79	66	.285	.305	33.27	.....	5.1	4.8	5.0

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

SIOUX CITY, IOWA.

[H=1,158 feet; h_t=89 feet; h_r=78 feet; h_a=99 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	7.7	Calm. NW.	37	NW.	0	9	5	2	7	12	0	2	12	13	9	13	9	8	5	10	0	2	8	0	30	0	0
February	8.6	NW.	44	NW.	2	3	2	3	10	7	1	0	17	13	13	5	10	8	3	9	0	3	20	0	28	0	0
March	10.2	NW.	31	SE.	0	8	8	9	4	9	0	0	19	5	9	4	18	10	6	10	1	0	14	0	26	0	0
April	12.0	NW.	53	S.	4	5	1	5	6	16	0	5	18	4	11	9	10	10	6	2	1	2	0	1	6	5	0
May	10.4	S.	46	S.	1	4	9	6	9	26	0	1	4	3	10	10	11	11	10	0	1	0	0	0	0	4	0
June	10.3	S.	52	SE.	1	2	11	10	7	18	1	2	9	0	5	11	14	14	11	0	0	0	0	1	0	7	0
July	8.7	SE.	46	SE.	1	4	11	1	18	15	0	1	10	2	11	12	8	14	12	0	1	0	0	0	0	8	0
August	8.5	SE.	40	SE.	1	5	10	1	15	13	2	3	11	2	9	8	14	14	11	0	0	2	0	3	0	8	0
September	12.5	S.	50	S.	4	4	1	4	19	20	2	0	8	2	12	9	9	5	4	0	0	0	0	2	0	3	0
October	9.9	NW.	46	S.	2	11	4	1	11	11	2	4	17	1	17	7	7	8	5	1	0	2	0	0	9	1	0
November	10.9	NW.	41	S.	2	6	6	4	11	11	2	2	17	1	8	9	13	10	3	11	0	3	9	0	24	0	0
December	11.1	S.	42	NW.	1	4	1	2	11	21	1	1	18	3	13	9	9	10	9	6	0	2	5	0	26	0	0
Year	10.1	S.	....	.....	19	65	69	48	128	179	11	21	160	49	127	106	132	122	85	49	4	16	56	7	149	36	0

SOUTHPORT, N. C.

[H=34 feet; h_t=11 feet; h_r=13 feet; h_a=46 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	8.6	SW.	....	.....	....	....	....	....	....	....	....	....	....	....	14	7	10	9	....	0	0	7	0	0	6	0	0
February	11.3	NE.	....	.....	....	....	....	....	....	....	....	....	....	....	4	10	14	11	....	0	0	5	0	0	3	1	0
March	10.6	NE.	....	.....	....	....	....	....	....	....	....	....	....	....	5	11	15	12	....	0	0	2	0	0	1	2	0
April	9.4	S.	....	.....	....	....	....	....	....	....	....	....	....	....	22	5	3	3	....	0	0	1	0	0	0	1	0
May	8.8	S.	....	.....	....	....	....	....	....	....	....	....	....	....	19	6	6	8	....	0	0	0	0	0	0	4	0
June	9.8	SW.	....	.....	....	....	....	....	....	....	....	....	....	....	11	15	4	12	....	0	0	0	0	1	0	6	0
July	10.5	SW.	....	.....	....	....	....	....	....	....	....	....	....	....	4	9	18	19	....	0	0	0	0	0	0	4	0
August	9.9	SW.	42	SW.	1	4	4	1	2	6	24	14	7	0	7	14	10	18	12	0	0	0	0	0	0	8	0
September	7.6	NE.	29	SE.	0	11	19	10	6	3	4	4	3	0	13	9	8	11	9	0	0	1	0	0	0	2	0
October	8.1	N.	25	E.	0	25	12	2	1	1	5	5	11	0	17	5	9	9	9	0	0	1	0	0	0	0	0
November	9.1	N.	34	S.	0	21	11	3	2	3	6	6	8	0	13	11	6	7	6	0	0	0	0	0	4	0	0
December	8.1	NE.	36	S.	0	15	16	1	0	5	13	6	6	0	12	11	8	8	8	0	0	2	0	0	4	1	0
Year	9.3	NE. SW.	....	.....	....	....	....	....	....	....	....	....	....	....	141	113	111	127	....	0	0	19	0	1	18	29	0

SPOKANE, WASH.

[H=1,938 feet; h_t=100 feet; h_r=92 feet; h_a=109 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	3.3	SW.	24	SW.	0	5	8	4	6	11	17	4	6	1	1	4	26	12	9	5	0	7	4	0	19	0	0
February	4.3	SW.	24	SE.	0	1	4	12	7	10	13	2	1	6	1	11	16	17	15	20	0	2	12	0	28	0	0
March	5.1	SW.	36	SW.	0	5	11	4	10	7	18	2	3	2	7	11	13	13	6	4	0	5	6	0	18	0	0
April	5.4	SW.	24	SW.	0	1	10	2	6	9	19	3	3	7	8	8	14	6	6	0	1	0	0	0	3	0	0
May	5.6	NE.	30	SW.	0	3	17	3	8	6	11	4	7	3	9	9	13	7	4	1	0	1	0	0	0	0	0
June	6.3	SW.	30	SW.	0	3	6	1	7	9	29	2	2	1	1	11	18	13	9	0	0	0	0	0	0	1	0
July	5.3	SW.	24	W.	0	2	12	5	7	9	15	4	1	7	12	14	5	7	5	0	0	0	0	8	0	2	0
August	4.7	Calm. SW.	24	SW.	0	4	6	3	4	16	20	2	3	4	16	11	4	5	5	0	1	1	0	9	0	1	0
September	5.8	Calm. SW.	36	SW.	0	5	7	0	5	15	16	3	3	6	9	12	9	7	5	0	0	0	0	0	0	1	0
October	5.0	Calm. S.	24	SW.	0	11	9	6	0	12	12	2	1	9	9	7	15	8	2	0	0	0	0	0	3	0	0
November	5.7	Calm. S.	42	SW.	1	4	9	4	2	24	11	2	3	1	6	15	9	12	8	3	0	1	1	0	13	0	0
December	7.4	Calm. SW.	48	SW.	3	3	3	5	17	15	16	3	0	0	3	9	19	16	16	12	0	3	2	0	24	0	0
Year	5.3	SW.	....	.....	4	47	102	49	79	143	197	33	33	47	82	122	161	123	90	45	2	20	25	17	108	5	0

SPRINGFIELD, ILL.

[H=644 feet; h_t=82 feet; h_r=60 feet; h_a=85 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	8.4	Calm. NW.	36	W.	0	4	2	6	3	9	8	6	10	14	8	11	12	8	5	9	0	2	6	0	25	0	0
February	11.1	NW	36	S.	0	3	3	2	6	16	3	4	19	0	9	8	11	10	8	7	0	1	9	0	22	1	0
March	11.8	W.	36	SW.	0	5	9	9	6	7	1	12	12	1	5	8	18	15	12	9	0	1	8	0	18	1	0
April	10.5	NW.	36	W.	0	4	6	3	11	7	8	8	13	0	11	10	9	10	9	2	1	0	0	0	5	7	0
May	8.4	N.	30	S.	0	14	12	1	3	12	11	3	6	0	15	8	8	9	7	0	0	0	0	0	0	4	0
June	7.6	S.	34	SW.	0	2	6	7	7	13	7	6	10	2	6	13	11	11	7	0	0	0	0	4	0	9	0
July	7.4	NW.	36	SW.	0	8	7	4	5	10	8	7	12	1	13	14	4	7	6	0	0	0	0	0	0	4	0
August	6.5	N.	32	NW.	0	15	3	2	4	12	9	1	10	6	11	12	8	12	9	0	1	1	0	3	0	13	0
September	7.0	S.	28	W.	0	6	5	5	4	14	10	4	9	3	22	4	4	2	2	0	0	0	0	11	0	3	0
October	8.6	NW.	32	NW.	0	5	1	2	2	20	1	7	23	1	18	11	2	6	6	0	0	0	0	0	1	1	0
November	10.6	NW.	32	SW.	0	11	3	3	5	12	5	4	16	1	9	7	14	13	11	5	0	1	4	0	17	1	0
December	12.1	S.	36	S.	0	6	2	1	3	27	8	7	7	1	13	9	9	9	7	2	0	3	3	0	16	0	0
Year	9.2	S.	....	.....	0	83	59	45	59	159	79	69	147	30	140	115	110	112	89	34	2	9	30	18	104	44	0

a By eye observations at 8 a. m. and 8 p. m. when there is no self register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

SPRINGFIELD, MO.

[Lat. 37° 12′ N.; long. 93° 18′ W.; gravity corr., —.02.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	28.64	28.94	27.85	30.9	37.6	43.4	28.9	36.2	61	14	27	29	85	74	.143	.157	2.10	.75	4.7	4.9	5.8
February *a*	28.59	.94	28.04	28.9	37.9	45.7	25.7	35.7	72	6	23	28	81	70	.119	.150	2.30	1.16	5.8	4.7	4.8
March	28.54	.98	.26	33.3	41.5	48.2	30.8	39.5	68	9	26	30	76	67	.137	.164	1.47	.40	6.5	6.1	6.3
April	28.58	.88	.28	50.6	61.1	67.8	47.6	57.7	82	26	42	43	74	56	.266	.277	4.32	1.12	5.2	3.8	4.8
May	28.64	.96	.31	57.5	65.1	72.8	52.1	62.4	86	39	49	51	74	62	.347	.373	3.78	1.08	4.8	5.5	4.8
June	28.50	.68	.17	68.8	74.7	81.7	64.3	73.0	92	57	63	65	83	73	.575	.616	6.90	2.09	5.4	5.0	5.3
July	28.63	.84	.35	67.0	74.5	81.6	62.9	72.2	91	53	61	63	83	70	.536	.575	5.21	1.14	4.8	3.9	4.8
August	28.62	.83	.35	66.5	75.2	83.2	63.1	73.2	94	44	62	64	86	68	.555	.595	4.23	1.81	3.7	3.0	3.9
September	28.71	.85	.52	63.1	73.4	82.4	60.4	71.4	90	44	55	57	76	57	.432	.465	1.29	.82	2.8	3.1	3.2
October	28.72	29.02	.52	47.4	59.5	69.6	45.2	57.4	87	30	40	42	76	56	.246	.266	.77	.38	2.6	1.2	2.8
November	28.64	.20	.21	35.5	43.6	49.7	32.7	41.2	78	10	31	34	84	71	.172	.195	5.39	1.28	5.4	4.9	5.5
December	28.62	.12	.15	36.3	43.2	51.5	32.7	42.1	65	13	30	30	80	64	.164	.164	1.35	.95	4.7	3.6	5.1
Year	28.62	.20	27.85	48.8	57.3	64.8	45.5	55.2	94	6	42	45	80	66	.308	.333	39.11	.....	4.7	4.1	4.8

FORT STANTON, N. MEX.

[Lat. 33° 30′ N.; long. 105° 26′ W.; gravity corr., —.03.]

January	23.94	24.21	23.60	23.1	32.1	40.1	16.1	28.1	54	— 6	15	21	72	66	.081	.108	1.00	.57	3.4	3.6	4.2
February	23.86	.12	.55	32.1	42.6	50.7	25.2	38.0	67	— 3	20	20	61	46	.103	.103	1.66	1.06	3.0	4.6	4.9
March	23.83	.07	.53	33.5	47.3	53.7	29.3	41.5	69	11	14	10	52	30	.077	.063	.98	.38	3.6	5.3	5.0
April	23.94	.31	.74	37.7	58.1	65.2	33.2	49.2	78	16	12	3	36	13	.070	.045	.02	.02	3.1	4.8	3.9
May	23.98	.19	.79	48.5	61.5	67.9	43.5	55.7	78	36	27	30	48	44	.143	.164	2.83	.56	5.4	5.6	5.5
June	23.93	.16	.70	56.2	73.6	79.1	49.1	64.1	89	40	36	27	51	25	.211	.143	2.37	.66	4.0	5.6	5.6
July	24.06	.26	.93	60.7	76.1	84.6	55.1	69.8	91	50	49	44	66	35	.347	.287	1.30	.42	3.4	7.7	6.5
August	24.07	.23	.94	57.6	75.6	81.1	53.4	67.2	92	44	45	36	65	31	.298	.211	1.65	.43	3.2	4.8	5.2
September	24.06	.26	.75	53.7	67.7	76.2	49.8	63.0	86	40	45	44	73	46	.298	.287	1.33	.89	3.6	5.1	5.1
October	24.09	.38	.77	39.2	58.0	68.4	34.4	51.4	73	27	23	28	56	34	.119	.150	.12	.12	1.9	1.3	2.1
November	23.96	.23	.73	34.6	48.5	58.2	28.9	43.6	71	15	14	21	48	38	.077	.108	.19	.11	3.2	2.6	3.6
December	23.88	.23	.50	25.3	33.2	43.4	20.0	31.7	62	10	8	14	49	48	.057	.077	1.23	.46	2.5	2.9	3.7
Year	23.97	.38	.50	41.8	56.2	64.0	36.5	50.3	92	— 6	26	25	56	38	.157	.146	14.68	.....	3.4	4.5	4.6

FORT SULLY, S. DAK.

[Lat. 44° 39′ N.; long. 100° 39′ W.; gravity corr., 0.]

January	28.35	28.77	27.93	21.7	30.6	37.3	18.5	27.9	53	— 2	16	21	81	69	.085	.108	.28	.20	4.4	4.4	4.9
February	28.26	.57	.83	2.6	13.4	17.8	—.7	8.6	44	—18	—1	8	87	81	.036	.057	.78	.26	5.4	4.2	4.8
March	28.31	.77	.85	16.1	26.1	30.7	13.3	22.0	56	—24	13	20	90	78	.074	.103	.65	.30	7.3	5.8	6.0
April	28.23	.76	.73	40.8	56.6	60.9	37.9	49.4	93	14	34	33	79	47	.195	.187	2.64	1.11	5.5	5.9	6.0
May	28.31	.72	.85	49.1	65.2	69.3	44.1	56.7	93	24	39	40	70	45	.237	.246	1.98	.83	4.2	5.3	5.3
June	28.15	.60	.76	59.4	70.1	74.8	55.5	65.2	91	44	53	52	81	57	.402	.387	2.13	.96	7.4	7.3	7.5
July	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
August	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
September	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
October	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

TAMPA, FLA.

[Lat. 27° 57′ N.; long. 82° 27′ W.; gravity corr., —.04.]

January	30.15	30.32	29.89	52.1	56.9	67.4	47.6	57.5	82	33	47	51	84	80	.322	.373	1.95	.96	4.7	2.2	4.7
February	30.11	.38	.75	64.3	68.0	78.0	60.1	69.0	86	38	62	63	90	85	.555	.575	.98	.45	5.7	2.6	5.9
March	30.01	.32	.78	62.0	65.5	75.1	57.4	66.2	82	46	57	60	85	82	.465	.517	3.24	1.99	4.8	3.9	5.3
April	30.04	.34	.68	66.3	67.8	78.3	58.9	68.6	87	38	60	61	80	78	.517	.596	2.77	1.04	2.9	3.4	5.0
May	30.01	.23	.88	72.2	73.2	83.5	64.1	73.8	88	56	65	64	78	73	.616	.595	.69	.30	2.7	1.6	4.6
June	29.95	.13	.84	78.5	79.1	89.8	71.2	80.5	95	66	74	74	86	85	.838	.838	7.12	2.10	2.9	3.9	4.3
July	30.05	.17	.92	79.8	79.9	90.7	73.4	82.0	94	70	75	75	86	87	.866	.866	4.52	1.64	3.9	5.3	5.3
August	30.01	.14	.85	79.9	80.1	90.3	72.1	81.2	94	70	75	76	86	89	.866	.896	9.48	2.96	3.5	5.4	5.8
September	30.02	.20	.95	76.3	77.2	88.4	70.7	79.6	92	68	72	72	86	85	.782	.782	7.96	1.70	3.7	5.1	5.8
October	30.04	.32	.70	66.3	68.4	79.2	60.8	70.0	87	44	60	62	82	81	.517	.555	2.61	1.37	3.4	3.7	5.0
November	30.11	.38	.86	60.4	64.2	74.9	55.3	65.1	82	34	55	57	84	78	.432	.465	1.99	1.26	4.2	3.0	4.9
December	30.17	.36	.98	60.5	65.5	74.7	56.8	65.8	83	40	58	60	90	83	.481	.517	1.15	.47	4.6	4.2	5.8
Year	30.06	.38	.68	68.2	70.5	80.9	62.4	71.6	95	33	63	65	85	82	.605	.626	44.46	.....	3.9	3.6	5.2

a Two 8 a. m. and 3 8 p. m. observations missed.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

SPRINGFIELD, MO.

[H=1,356 feet; h_t=77 feet; h_r=74 feet; h_a=90 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		Mi.																								
January	7.3	NW.	36	NW.	0	2	2	5	5	9	8	5	17	9	8	10	13	10	6	9	0	2	1	0	21	1	0
February	11.4	SE.	36	SE.	0	9	3	3	15	5	3	3	9	1	11	7	7	10	5	6	0	1	6	0	17	1	0
March	10.7	SE.	38	NW.	0	3	9	6	15	5	4	6	12	2	8	9	14	13	7	5	0	0	1	0	16	1	0
April	9.2	SE.	48	SW.	3	7	2	4	17	9	7	1	8	5	11	11	8	11	10	0	1	0	0	0	3	9	0
May	7.1	SE.	30	NW.	0	6	8	8	12	10	4	1	4	9	9	16	6	12	10	0	1	0	0	0	0	7	0
June	5.8	SE.	38	NW.	0	3	6	6	20	9	3	4	2	7	5	20	5	16	11	0	0	0	0	2	0	10	0
July	6.0	SE.	36	NW.	0	3	5	7	22	7	2	3	4	9	5	21	5	12	8	0	0	0	0	1	0	7	0
August	5.7	S.	36	N.	0	10	4	4	3	17	8	0	2	9	15	14	2	8	6	0	0	0	0	9	0	8	0
September	5.9	SE.	22	N.	0	4	5	9	24	9	1	0	1	7	16	11	3	4	3	0	0	0	0	0	0	2	0
October	10.0	SE.	36	NW.	0	10	3	3	22	7	4	5	8	0	18	10	3	3	2	0	0	0	0	0	1	0	0
November	11.7	SE.	34	SE.	0	11	4	3	17	9	3	1	12	0	9	10	11	15	11	2	1	1	2	0	14	4	0
December	12.6	SE.	38	S.	0	5	3	4	22	14	6	5	3	0	14	6	11	8	4	4	0	0	1	0	14	0	0
Year	8.6	SE.	....	.....	3	73	54	62	199	110	53	34	82	58	129	145	88	122	83	26	3	4	11	12	86	50	0

FORT STANTON, N. MEX.

[H=6,150 feet; h_t=17 feet; h_r=2 feet; h_a=18 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	b5.2	Calm. NW.	36	SW.	0	3	0	1	3	4	10	5	11	25	15	11	5	7	2	6	0	0	4	0	31	0	0
February	c8.7	Calm. W.	48	NW.	7	2	0	2	4	3	9	14	7	15	12	9	7	6	4	3	0	0	1	0	19	0	0
March	5.6	Calm. SW.	36	SW.	0	7	1	1	5	5	12	3	9	19	8	16	7	9	6	8	0	0	0	0	21	0	0
April	5.8	Calm. S.	32	SW.	0	5	1	2	10	12	4	3	5	18	14	11	5	1	0	0	0	0	0	0	11	0	0
May	d5.7	SE.	30	SE.	0	3	1	2	20	12	1	2	4	17	11	9	11	14	12	0	0	0	0	0	0	0	0
June	e6.1	SW.	36	SE.	0	4	2	3	8	8	18	3	5	9	8	14	8	8	7	0	1	0	0	0	0	6	0
July	2.8	Calm. SW.	36	NW.	0	2	0	5	6	1	15	7	2	24	3	16	12	15	8	0	0	0	0	2	0	14	0
August	5.3	SW.	28	SW.	0	1	0	10	11	5	19	8	2	6	10	15	6	12	8	0	2	0	0	2	0	5	0
September	5.3	SW.	30	SW.	0	3	3	9	7	7	21	7	2	1	9	16	5	8	6	0	0	0	0	0	0	1	0
October	4.5	SW.	38	SW.	0	3	1	5	10	2	18	14	1	8	23	7	1	1	1	0	0	0	0	0	17	0	0
November	5.1	W.	36	SW.	0	2	4	1	4	7	13	20	7	2	13	16	1	2	2	1	0	0	0	0	18	0	0
December	7.6	SW.	42	SW.	2	1	4	3	4	6	23	20	1	0	16	11	4	8	7	10	0	0	4	0	29	0	0
Year	5.6	SW.	....	.....	9	36	17	44	92	72	163	106	56	144	142	151	72	91	64	28	3	0	9	4	146	26	0

FORT SULLY, S. DAK.

[H=1,600 feet; h_t=16 feet; h_r=2 feet; h_a=32 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	9.6	NW.	46	NW.	1	8	4	5	9	2	1	1	30	2	12	9	10	4	2	11	0	4	7	0	30	0	0
February	9.8	NW.	52	NW.	1	6	6	4	8	5	0	4	22	1	10	10	8	11	7	13	0	1	23	0	28	0	2
March	11.9	NW.	38	N.	0	17	5	4	13	0	1	1	19	2	8	8	15	10	5	15	0	2	16	0	31	0	0
April	13.5	NW.	47	NW.	6	8	4	5	14	3	1	4	20	1	9	11	10	10	7	3	0	0	0	2	7	1	0
May	11.8	SE.	58	SW.	2	9	7	3	22	7	2	0	11	1	11	9	11	10	6	2	0	1	2	2	2	8	2
June	13.6	SE.	50	SE.	6	11	4	2	21	3	1	1	17	0	5	6	19	14	8	0	1	0	0	3	0	9	0
July	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
August	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
September	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
October	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

TAMPA, FLA.

[H=36 feet; h_t=12 feet; h_r=16 feet; h_a=52 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	5.6	NW.	24	S.	0	6	6	8	6	7	0	6	20	3	13	13	5	7	6	0	0	2	0	0	0	0	0
February	6.5	NE.	28	NW.	0	4	11	8	9	2	11	7	3	1	5	16	7	6	6	0	0	0	0	0	0	0	0
March	6.7	N.	25	SE.	0	5	9	5	9	5	4	13	12	0	10	13	8	8	8	0	0	2	0	0	0	0	0
April	6.2	NE.	21	E.	0	6	20	11	2	1	6	10	4	0	11	12	7	10	7	0	0	0	0	0	0	4	0
May	6.2	W.	24	E.	0	4	13	10	2	2	7	15	9	0	11	15	5	3	3	0	0	0	0	0	0	0	0
June	5.1	NE.	24	SE.	0	3	15	0	14	3	12	8	5	0	16	13	1	14	11	0	0	0	0	14	0	2	0
July	4.7	SE.	19	NW.	0	2	10	12	14	6	8	5	5	0	8	19	4	20	13	0	0	0	0	18	0	2	0
August	4.4	E.	24	E.	0	6	8	14	11	4	8	7	2	2	3	19	9	23	21	0	0	0	0	18	0	11	0
September	4.6	NE.	27	E.	0	5	32	13	5	1	1	1	2	0	9	9	12	20	14	0	0	0	0	5	0	4	0
October	5.4	NE.	19	N.	0	11	26	3	0	0	0	5	10	7	14	8	9	11	9	0	0	0	0	0	0	0	0
November	5.6	NE.	24	N.	0	13	20	7	4	2	2	4	8	0	8	17	5	6	6	0	0	0	0	0	0	0	0
December	4.6	NE.	14	SW.	0	9	14	11	3	5	6	4	7	3	7	15	9	8	5	0	0	0	0	0	0	0	0
Year	5.5	NE.	....	.....	0	74	184	102	79	38	65	85	87	16	115	169	81	136	109	0	0	4	0	55	0	23	0

a By eye observations at 8 a. m. and 8 p. m. when there is no self-register at station.
b For 715½ hours.
c For 670 hours.
d For 724 hours.
e For 713 hours.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

TATOOSH ISLAND, WASH.

[Lat. 48° 23′ N.; long. 124° 44′ W; gravity corr., +.01.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January						48.2	41.4	44.8	54	36							11.91	2.42			
February						41.0	32.6	36.8	45	27							5.15	.85			
March						46.7	38.1	42.4	53	30							8.67	1.86			
April						51.1	42.3	46.7	57	39							9.62	1.78			
May						53.3	45.7	49.5	60	42							1.90	.48			
June						57.7	48.7	52.2	65	43							7.74	.57			
July						60.8	51.1	56.0	78	46							1.08	.36			
August *a*	29.94	30.16	29.73	55.5	60.2	62.7	50.0	56.4	72	43	54	58	95	93	.417	.481	3.10	2.78	5.0	3.7	5.0
September	.89	.26	.44	52.7	55.6	57.8	49.2	53.5	67	45	51	54	95	94	.373	.417	11.06	3.40	7.1	6.2	7.1
October	.92	.33	.58	51.1	52.6	55.9	47.9	51.9	61	38	49	51	94	93	.347	.373	7.48	1.47	6.5	7.4	7.3
November	.91	.36	.23	47.8	49.3	51.1	44.4	47.8	60	34	45	46	91	89	.298	.310	17.68	2.84	9.4	8.9	8.3
December	.76	.39	.96	43.5	43.6	46.6	39.2	42.9	56	33	40	40	88	88	.246	.246	20.08	4.21	8.1	8.2	8.1
Year						52.7	44.2	48.5	78	27							105.47				

TITUSVILLE, FLA.

[Lat. 28° 34′ N.; long. 80° 51′ W.; gravity corr., —.04.]

January	30.15	30.31	29.82	51.4	56.7	65.0	48.8	56.9	76	34	48	52	88	86	.334	.387	.90	.46	3.1	2.5	4.1
February	30.11	.37	.73	65.1	63.2	75.7	61.5	68.6	85	37	61	64	89	87	.536	.595	1.85	.78	4.0	3.0	5.2
March	30.01	.32	.74	62.2	65.5	73.4	57.4	65.4	84	46	58	60	86	83	.481	.517	4.43	2.10	3.4	3.1	4.3
April	30.04	.30	.64	65.7	67.7	74.9	59.7	67.3	87	34	61	63	87	84	.536	.575	4.45	1.62	3.6	3.2	4.6
May	29.99	.24	.84	71.9	73.5	81.6	65.5	73.6	90	58	67	68	86	82	.660	.684	2.46	.82	3.0	3.0	3.8
June	29.96	.13	.83	78.0	78.4	86.7	71.9	79.3	94	67	73	73	86	85	.810	.810	10.65	3.69	4.3	5.3	4.9
July	30.06	.18	.92	80.0	79.6	88.6	73.9	81.2	94	69	74	74	82	84	.838	.838	5.75	1.50	3.0	5.0	4.6
August	30.02	.14	.88	80.7	80.6	88.7	75.0	81.8	96	72	75	76	84	86	.866	.896	3.48	.74	2.4	3.3	3.4
September	30.03	.21	.96	77.5	77.5	83.8	72.3	78.0	88	68	73	73	86	85	.810	.810	11.75	4.00	4.5	4.7	5.8
October	30.03	.33	.64	69.2	69.9	76.9	64.8	70.8	84	51	63	62	82	78	.575	.555	8.38	1.86	4.3	3.2	4.5
November	30.10	.38	.83	63.0	65.2	72.8	59.0	65.9	79	41	58	58	84	80	.481	.481	2.12	1.20	3.6	3.0	4.2
December	30.17	.38	.99	63.3	65.8	71.9	60.6	66.2	82	48	59	62	86	88	.499	.555	3.90	2.02	4.7	4.8	5.7
Year	30.06	.38	.64	69.0	70.7	78.3	64.2	71.2	96	34	64	65	86	84	.619	.642	60.18	.....	3.7	3.7	4.6

TOLEDO, OHIO.

[Lat. 41° 40′ N.; long. 83° 34′ W.; gravity corr., —.01.]

January	29.34	29.92	28.48	27.9	30.9	36.1	24.8	30.4	54	12	24	24	85	77	.125	.125	1.08	.32	8.5	6.6	7.8
February	29.31	.82	.68	29.4	33.0	39.2	25.8	32.5	58	4	24	24	80	72	.125	.125	3.08	1.30	7.9	5.5	7.2
March	29.35	.84	.84	28.3	33.1	38.2	25.7	32.0	56	8	22	28	76	82	.113	.150	2.27	.94	6.8	6.6	6.7
April	29.31	.60	.97	45.8	51.5	58.2	41.8	50.0	79	23	41	43	83	74	.256	.277	1.89	.74	5.6	5.2	5.0
May	29.39	.61	29.14	52.0	59.5	66.2	46.7	56.4	82	32	44	43	74	57	.287	.277	.79	.28	4.3	3.8	4.4
June	29.27	.54	28.94	67.1	70.4	77.6	61.2	69.4	89	48	62	61	83	74	.555	.536	3.39	1.05	6.1	5.5	6.0
July	29.33	.62	29.07	64.8	70.9	78.0	57.9	68.0	89	49	58	59	78	68	.481	.499	3.44	1.00	2.7	4.4	3.9
August	29.30	.49	28.96	66.0	72.2	79.0	61.3	70.2	96	46	59	60	79	67	.499	.517	1.91	.69	5.1	4.6	4.6
September	29.45	.70	29.23	63.1	70.3	78.8	59.2	69.0	92	46	56	56	79	61	.448	.448	.84	.59	2.7	2.4	3.0
October	29.41	.80	.11	45.7	52.8	59.5	42.8	51.2	86	27	39	40	78	63	.237	.246	2.47	.91	5.5	3.4	5.1
November	29.37	.86	28.64	34.9	38.1	43.3	31.2	37.2	67	11	28	30	79	73	.150	.164	4.47	1.24	8.1	6.1	7.0
December	29.39	.89	28.80	33.7	38.2	44.7	30.4	37.6	59	16	27	28	76	70	.143	.150	1.49	.40	5.4	3.6	5.0
Year	29.35	.92	.48	46.6	51.7	58.2	42.4	50.3	96	4	40	41	79	70	.285	.293	27.12	.....	5.7	4.8	5.5

TUCSON, ARIZ.

[Lat. 32° 14′ N.; long. 110° 53′ W.; gravity corr., —.03.]

January																					
February																					
March																					
April																					
May																					
June																					
July																					
August																					
September																					
October	27.49	27.68	27.18	56.2	80.9	87.1	54.6	70.8	91	35	28	27	36	15	.150	.143	0	0	1.3	1.6	1.7
November	27.52	.68	.36	43.2	68.2	76.5	41.3	58.9	89	30	21	26	43	21	.108	.137	T.	T.	1.5	2.2	2.6
December	27.55	.89	.24	32.9	52.5	60.0	28.8	44.4	77	11	16	16	54	27	.085	.085	.25	.24	2.4	2.8	3.0
Year																					

a For 21 days.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

TATOOSH ISLAND, WASH.

[H = 86 feet; h_t = 12 feet; h_r = 1 foot; h_a = 33 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	.....	E.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	7	18	20	.....	.....	.....	.....	0	0	0	0	...
February	.....	E.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	11	14	16	.....	.....	.....	.....	0	0	7	.....	...
March	.....	E.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	11	14	21	.....	.....	.....	.....	0	0	2	.....	...
April	.....	E.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	7	22	24	.....	.....	.....	.....	0	0	0	.....	...
May	.....	SW.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	8	15	11	.....	.....	.....	.....	0	0	0	.....	...
June	.....	SW.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	10	15	16	.....	.....	.....	.....	0	0	0	.....	...
July	.....	S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	6	15	6	.....	.....	.....	.....	0	0	0	.....	...
August	.....	SE.	.....	.....	0	2	2	4	10	8	10	4	3	0	10	4	17	8	6	0	0	9	0	0	0	0	0
September	12.1	E.	49	E.	4	0	2	18	3	18	11	8	0	0	6	6	18	18	15	0	1	9	0	0	0	1	0
October	16.8	E.	54	E.	11	2	1	31	9	6	8	3	2	0	6	5	20	19	18	0	0	4	0	0	0	0	0
November	19.0	E.	66	E.	9	0	0	17	9	12	8	12	2	0	1	7	22	24	24	1	1	0	0	0	0	1	0
December	20.2	E.	66	E.	20	0	3	13	11	9	11	8	7	0	4	4	23	28	25	1	2	0	0	0	0	1	0
Year	.....	E.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66	86	213	211	.....	.....	.....	.....	0	0	9	.....	...

TITUSVILLE, FLA.

[H = 44 feet; h_t = 16 feet; h_r = 1 foot; h_a = 72 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	10.1	NW.	36	W.	0	4	6	3	9	8	4	6	22	0	18	8	5	7	7	0	0	0	0	0	0	0	0
February	13.5	SE.	42	E.	0	4	3	8	14	12	7	3	5	0	10	10	8	13	8	0	0	2	0	0	0	0	0
March	12.4	W.	37	N.	0	6	6	4	13	5	4	14	10	0	17	8	6	8	7	0	0	0	0	0	0	0	0
April	12.2	E.	38	E.	0	3	8	16	13	2	4	3	11	0	14	8	8	13	11	0	0	0	0	0	0	2	0
May	12.6	SE.	40	N.	1	6	8	9	16	2	5	9	7	0	14	13	4	12	11	0	0	0	0	0	0	2	0
June	9.3	SE.	30	NW.	0	3	6	7	17	2	16	6	3	0	12	8	10	16	14	0	0	0	0	7	0	5	0
July	9.1	SW.	48	SW.	1	0	8	2	15	10	19	5	3	0	10	19	2	16	16	0	0	0	0	12	0	3	0
August	9.3	SE.	32	SE.	0	2	5	7	22	6	12	3	5	0	20	11	0	13	10	0	0	0	0	7	0	3	0
September	9.7	NE.	40	E.	1	2	23	20	6	1	1	1	6	0	9	11	10	21	21	0	0	0	0	0	0	0	0
October	13.0	NE.	36	NE.	0	8	21	9	2	1	4	2	15	0	15	7	9	15	13	0	0	0	0	0	0	0	0
November	12.8	NW.	48	N.	2	10	8	6	8	2	1	2	23	0	17	9	4	7	7	0	0	0	0	0	0	0	0
December	10.6	E.	45	NE.	1	10	7	14	9	4	3	5	10	0	10	10	11	13	9	0	0	0	0	0	0	0	0
Year	11.2	SE.	.....	.....	6	58	109	105	144	55	80	59	120	0	166	122	77	154	134	0	0	2	0	26	0	15	0

TOLEDO, OHIO.

[H = 674 feet; h_t = 122 feet; h_r = 113 feet; h_a = 127 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	7.6	NW.	32	W.	0	6	6	2	2	6	14	6	15	5	3	8	20	12	8	11	0	1	8	0	25	0	0
February	10.2	NW.	37	W.	0	1	3	5	4	7	12	8	13	3	3	10	15	15	9	6	0	1	7	0	22	0	0
March	11.6	NE.	36	NE.	0	2	16	13	6	5	5	7	8	0	9	6	16	16	6	10	0	1	9	0	21	0	0
April	9.4	SW.	37	W.	0	4	5	10	2	5	13	9	11	1	12	8	10	13	9	4	1	0	0	0	5	4	0
May	7.5	NE.	28	NW.	0	7	10	7	7	4	6	5	8	8	12	12	7	8	6	0	0	0	0	0	0	1	0
June	8.0	E.	30	NE.	0	2	11	15	4	7	7	10	3	1	9	9	12	13	11	0	1	2	0	0	0	6	0
July	7.9	W.	36	NW.	0	2	3	6	3	6	12	18	10	2	15	11	5	7	7	0	1	0	0	0	0	4	0
August	7.7	W.	26	W.	0	5	7	5	4	11	3	15	12	0	14	8	9	10	8	0	0	0	0	3	0	2	0
September	8.2	W.	29	W.	0	9	4	8	3	11	4	13	8	0	22	5	3	5	5	0	0	2	0	2	0	0	1
October	10.1	SW.	37	SW.	0	4	2	7	5	6	14	9	15	0	13	9	9	7	7	0	0	0	0	0	2	0	0
November	11.6	SW.	36	SE.	0	6	2	0	11	9	16	9	7	0	5	9	16	15	10	5	0	0	5	0	17	0	0
December	12.6	SW.	40	SW.	1	2	1	2	11	4	25	6	7	4	15	6	10	12	8	4	0	0	2	0	16	0	0
Year	9.4	SW.	.....	.....	1	50	70	80	62	81	131	115	117	24	132	101	132	133	94	40	3	7	31	5	108	17	1

TUCSON, ARIZ.

[H = 2,432 feet; h_t = 15 feet; h_r = 4 feet; h_a = 5 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
February	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
March	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
April	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
May	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
June	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
July	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
August	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
September	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
October	8.3	SE.	34	SE.	0	6	0	7	16	13	4	5	11	0	24	4	3	0	0	0	0	0	0	7	0	0	0
November	6.9	NW.	34	NW.	0	4	0	4	13	10	6	2	21	0	19	9	2	0	0	0	0	0	0	0	4	0	0
December	8.3	SE.	40	SW.	1	6	1	3	19	9	4	6	14	0	18	9	4	2	1	1	0	0	0	0	21	0	0
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...

a By eye observations at 8 a. m. and 8 p. m. when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

VALENTINE, NEBR.

[Lat. 42° 50′ N.; long. 100°32′ W.; gravity corr., —.01.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	27.32	27.65	26.92	21.7	30.2	37.9	18.2	28.0	54	0	18	21	85	70	.093	.108	.61	.32	5.0	2.9	4.8
February	27.18	.47	.67	5.4	16.1	24.6	0.6	12.6	45	—18	0	9	77	75	.038	.060	1.55	.64	4.2	3.5	5.2
March	27.25	.65	.86	14.7	26.1	31.5	11.8	21.6	55	—26	10	19	80	76	.063	.098	2.58	1.20	4.1	5.2	6.3
April	27.24	.68	.76	39.9	54.2	60.0	36.4	48.2	89	13	32	35	76	54	.180	.203	3.12	1.75	4.9	4.2	5.7
May	27.33	.65	.82	49.5	63.0	68.7	44.6	56.6	92	26	42	41	76	48	.266	.256	1.33	.48	4.6	4.5	5.0
June	27.20	.54	.82	58.4	67.2	72.8	54.6	63.7	87	45	53	54	82	66	.402	.417	6.36	2.96	5.8	6.2	6.5
July	27.34	.64	27.08	61.6	72.7	78.3	57.2	67.8	84	44	56	56	82	58	.448	.448	4.29	1.38	3.8	3.9	4.8
August	27.32	.67	.04	60.4	73.8	80.5	56.7	68.6	99	39	56	59	85	62	.448	.499	4.68	1.52	3.2	4.1	4.5
September	27.30	.56	26.89	55.2	70.7	77.9	52.3	65.1	95	37	48	51	79	52	.334	.373	.40	30	3.5	3.5	4.4
October	27.37	.74	.88	39.0	53.5	64.6	36.6	50.6	84	24	33	33	79	50	.187	.187	1.65	1.16	2.3	2.4	4.0
November	27.28	.76	.83	26.6	34.3	44.1	21.4	32.8	75	—18	21	24	79	68	.108	.125	.78	.46	5.0	2.3	5.0
December	27.17	.86	.70	24.6	31.3	40.3	20.9	30.6	60	— 8	18	22	77	69	.093	.113	.42	.38	3.9	2.3	4.9
Year	27.28	.86	.67	38.1	49.4	56.8	34.3	45.5	99	—26	32	35	80	62	.222	.241	27.77	.....	4.2	3.8	5.1

VICKSBURG, MISS.

[Lat. 32° 22′ N.; long. 90° 53′ W.; gravity corr., —.03.]

January	29.86	30.20	29.30	41.9	49.3	54.8	39.7	47.2	73	28	38	39	88	71	.228	.237	8.79	2.02	5.1	5.6	5.4
February	29.77	.18	.43	52.3	58.1	64.9	48.4	56.6	82	29	49	51	89	79	.347	.373	4.22	1.15	7.6	5.2	6.1
March	29.73	.17	.29	49.6	58.4	64.3	46.5	55.4	81	33	44	44	80	63	.287	.287	10.51	6.47	5.6	5.8	5.5
April	29.78	.10	.52	59.6	68.6	75.5	56.4	66.0	85	33	53	52	80	58	.402	.387	3.09	1.60	4.2	3.2	3.7
May	29.79	.05	.61	66.0	73.7	80.9	61.4	71.2	89	48	59	56	79	57	.499	.448	1.00	.63	3.5	3.3	3.7
June	29.66	29.90	.41	75.4	82.9	91.2	71.5	81.4	98	67	71	69	87	64	.757	.707	4.55	2.07	3.9	4.4	4.2
July	29.74	.89	.51	74.8	79.4	87.7	70.9	79.3	93	62	70	69	86	71	.732	.707	4.54	1.68	5.7	5.1	5.5
August	29.76	.86	.52	72.0	79.8	87.7	69.2	78.4	93	54	68	68	86	68	.684	.684	0.91	.38	2.7	3.6	2.9
September	29.80	.99	.66	69.1	78.6	87.0	66.1	76.6	94	53	63	66	81	66	.575	.638	0.35	.14	3.1	4.1	3.8
October	29.88	30.14	.62	54.5	65.8	74.2	52.7	63.4	89	40	48	49	80	57	.334	.347	0.75	.63	2.4	1.8	2.1
November	29.85	.42	.38	47.4	56.3	64.4	44.9	54.6	82	22	42	44	83	65	.266	.287	8.66	4.28	3.9	2.8	3.7
December	29.89	.28	.33	46.9	55.0	61.2	45.0	53.1	72	28	40	45	78	71	.246	.298	3.17	1.09	4.8	5.1	5.4
Year	29.79	.42	.29	59.1	67.2	74.5	56.1	65.3	98	22	54	54	83	66	.446	.450	50.54	.....	4.4	4.2	4.3

WALLA WALLA, WASH.

[Lat. 46° 2′ N.; long. 118° 20′ W.; gravity corr., 0.]

January	29.15	29.63	28.66	36.6	41.8	45.6	33.2	39.4	64	19	32	34	86	78	.180	.195	1.18	.29	7.0	7.1	7.0
February	28.82	.43	.11	27.0	32.5	37.2	23.4	30.3	50	6	23	24	86	73	.119	.125	2.70	.58	7.6	6.3	6.6
March	29.02	.28	.62	33.3	43.9	47.1	31.5	39.3	61	2	28	30	84	63	.150	.164	1.16	.56	5.9	6.5	6.0
April	28.90	.35	.48	46.8	63.5	66.0	44.6	55.3	76	30	35	32	65	33	.203	.180	.73	.44	5.1	6.1	5.2
May	28.85	.14	.63	55.3	73.7	76.8	52.3	64.6	93	37	43	40	86	32	.277	.246	.88	.58	4.5	5.5	5.0
June	28.86	.22	.58	56.7	70.9	75.0	53.5	64.2	92	46	46	45	68	45	.310	.298	3.61	1.62	6.7	5.8	5.7
July	28.90	.23	.60	64.5	84.3	87.4	61.4	74.4	108	45	49	44	59	28	.347	.287	1.33	1.08	3.4	3.9	3.5
August	28.90	.11	.74	64.6	87.7	89.4	62.5	76.0	105	52	45	41	51	22	.298	.256	.24	.15	2.4	2.6	2.2
September	28.91	.19	.59	55.0	73.0	76.1	52.7	64.4	90	41	40	40	59	33	.246	.246	.41	.18	3.8	4.5	3.9
October	29.01	.26	.78	49.5	63.7	68.4	46.6	57.5	80	33	39	42	68	48	.237	.266	.47	.26	4.5	4.9	4.3
November	29.04	.43	.56	42.0	48.7	52.7	38.6	45.6	76	18	35	38	79	67	.203	.228	1.57	.52	7.1	6.6	6.4
December	28.93	.55	.30	37.9	40.3	46.1	33.6	39.8	59	20	30	31	76	72	.164	.172	1.83	.45	6.3	7.2	6.5
Year	28.94	.63	.11	47.4	60.3	64.0	44.5	54.2	108	2	37	37	71	50	.228	.222	16.11	.....	5.4	5.6	5.2

FORT WASHAKIE, WYO.

[Lat. 43° 1′ N.; long. 108° 54′ W.; gravity corr., 0].

January	24.47	24.73	24.09	15.7	22.0	32.1	8.6	20.4	46	— 9	8	11	74	66	.057	.067	1.91	1.13	3.9	4.6	4.0
February	24.20	.54	23.66	11.8	22.6	29.1	4.9	17.0	48	—28	3	11	68	63	.045	.067	.18	.07	3.8	4.6	3.9
March	24.32	.61	24.00	17.4	31.2	36.8	12.0	24.4	53	— 8	12	18	80	62	.070	.093	3.58	.82	4.0	5.3	4.4
April	24.41	.82	.01	34.7	49.0	53.5	30.0	41.8	75	6	24	25	67	46	.125	.130	2.23	.80	4.8	4.9	4.6
May	24.45	.67	.17	45.4	58.7	63.7	38.5	51.1	81	28	32	31	63	42	.180	.172	4.58	1.67	4.2	5.7	4.8
June	24.38	.75	.06	52.5	64.3	69.8	42.9	56.4	82	33	37	35	58	38	.219	.203	1.30	.53	3.9	5.1	4.2
July	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
August	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
September	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
October	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

VALENTINE, NEBR.

[$H = 2,613$ feet; $h_t = 37$ feet; $h_r = 26$ feet; $h_a = 48$ feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a.m. and 8 p.m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	10.8	NW.	36	NW.	0	8	5	1	3	2	11	14	16	2	15	9	7	9	5	9	0	0	7	0	31	0	0
February	10.4	SW.	54	NW.	1	8	1	2	4	5	13	11	6	6	12	9	7	9	6	9	0	0	19	0	28	0	0
March	11.2	NW.	36	NW.	0	8	8	2	7	2	6	8	14	7	11	6	14	13	7	12	0	0	15	0	29	0	0
April	13.3	NW.	48	NW.	2	8	3	1	9	7	5	9	16	2	7	15	8	9	7	5	0	0	2	0	12	2	0
May	12.1	S.	38	S.	0	8	11	3	7	12	6	5	8	2	7	19	5	9	7	2	2	0	0	1	2	3	0
June	12.9	S.	48	S.	1	10	9	3	10	13	1	6	6	2	3	15	12	16	15	0	1	0	0	0	0	7	0
July	9.3	S.	34	SE.	0	7	9	6	8	11	6	9	5	1	5	24	2	12	12	0	0	0	0	0	0	10	0
August	7.6	S.	42	SW.	1	2	11	3	5	13	10	6	8	4	14	12	5	12	11	0	0	0	0	4	0	10	0
September	11.7	S.	48	S.	2	5	5	0	1	22	9	7	7	4	15	10	5	5	3	0	0	0	0	5	0	4	0
October	9.7	NW.	36	N.	0	7	4	3	2	5	7	12	16	6	15	14	2	5	4	1	0	0	0	0	6	1	0
November	10.0	NW.	52	NW.	1	7	4	0	5	3	5	12	16	8	9	14	7	9	4	2	0	0	6	0	26	0	0
December	11.2	SW.	40	NW.	1	4	2	0	1	5	18	15	15	2	11	14	6	3	1	5	0	0	6	0	27	0	0
Year	10.8	NW.	....	.....	9	82	72	24	62	100	97	114	133	46	124	161	80	111	82	45	3	0	55	10	161	37	0

VICKSBURG, MISS.

[$H = 254$ feet; $h_t = 65$ feet; $h_r = 58$ feet; $h_a = 68$ feet.]

January	6.5	E.	40	SW.	1	7	9	12	7	8	2	7	7	3	11	6	14	15	14	0	1	2	0	0	2	3	0
February	8.0	S.	36	NW.	0	9	9	10	10	12	0	0	6	0	4	13	11	18	14	1	0	0	0	0	4	3	0
March	7.6	SE.	33	NW.	0	10	7	12	12	5	1	4	11	0	11	9	11	10	9	0	0	1	0	0	0	7	0
April	6.3	SE.	26	SE.	0	5	10	7	16	6	5	2	9	0	15	7	8	9	8	0	1	0	0	0	0	9	0
May	5.3	N.	36	NW.	0	14	10	4	7	12	2	4	8	1	15	9	7	7	5	0	0	0	0	0	0	5	0
June	5.4	S.	40	NW.	1	7	3	9	10	20	5	1	5	0	11	14	5	8	6	0	0	0	0	21	0	8	0
July	6.4	SE.	27	SE.	0	8	10	8	12	11	8	2	2	1	11	9	11	16	10	0	0	0	0	9	0	4	0
August	5.3	SW.	36	NW.	0	11	8	5	5	6	13	0	11	3	18	11	2	6	4	0	0	1	0	14	0	5	0
September	5.4	N.	26	SE.	0	19	15	14	10	0	0	0	1	1	16	7	7	4	3	0	0	0	0	14	0	2	0
October	6.3	N.	25	NW.	0	21	7	13	6	9	2	1	2	1	23	3	5	6	3	0	0	0	0	0	0	1	0
November	7.8	SE.	42	W.	2	10	5	8	20	4	5	5	3	0	18	4	8	10	8	0	0	0	0	0	5	6	0
December	8.8	SE.	48	W.	1	3	6	11	24	5	3	4	6	0	12	3	16	8	6	0	0	0	0	0	3	3	0
Year	6.6	SE.	....	.....	5	124	99	113	139	98	46	30	71	10	165	95	105	117	90	1	2	4	0	58	14	56	0

WALLA WALLA, WASH.

[$H = 1,018$ feet; $h_t = 66$ feet; $h_r = 56$ feet; $h_a = 73$ feet.]

January	4.9	SW.	24	SW.	0	3	1	4	3	20	21	4	5	1	4	11	16	12	10	2	1	1	0	0	12	0	0
February	5.9	SW.	28	SW.	0	2	4	4	8	13	20	3	2	0	3	15	10	14	14	11	1	1	8	0	19	0	0
March	5.3	SW.	40	SW.	1	2	0	3	2	16	18	11	9	1	5	14	12	12	9	2	0	1	6	0	12	0	0
April	6.5	S.	27	SE.	0	4	3	3	7	21	7	6	9	0	8	16	6	5	3	0	0	0	0	0	1	0	0
May	5.3	S.	28	NW.	0	11	4	6	6	19	7	6	3	0	8	19	4	5	4	0	0	0	0	3	0	1	0
June	6.3	S.	24	SE.	0	1	2	7	5	23	14	7	1	0	7	13	10	12	10	0	0	0	0	1	0	1	0
July	5.1	S.	44	SW.	1	9	1	1	8	21	9	9	3	1	17	10	4	8	5	0	0	0	0	15	0	2	0
August	4.6	S.	16	S.	0	6	1	3	4	18	12	12	5	1	22	7	2	5	2	0	0	0	0	18	0	0	0
September	5.2	S.	24	SW.	0	6	1	0	3	20	15	12	2	1	13	14	3	4	4	0	0	0	0	0	0	0	0
October	4.0	S.	24	W.	0	11	6	0	3	16	13	9	3	1	13	9	9	8	3	0	0	0	0	0	0	0	0
November	5.4	S.	30	W.	0	5	3	1	6	20	16	6	1	2	4	17	9	9	9	1	0	0	1	0	8	0	0
December	8.5	S.	45	SW.	2	4	1	2	8	24	12	10	1	0	2	15	14	12	7	7	0	2	0	0	12	0	0
Year	5.6	S.	....	.....	4	64	27	34	63	231	164	95	44	8	106	160	99	106	80	23	2	5	15	37	64	4	0

FORT WASHAKIE, WYO.

[$H = 5,580$ feet; $h_t = 23$ feet; $h_r = 16$ feet; $h_a = 31$ feet.]

January	3.9	SW.	26	W.	0	0	2	1	2	1	41	14	1	0	14	13	4	5	5	5	0	0	18	0	31	0	0
February	5.0	SW.	39	W.	0	0	3	1	3	3	22	19	5	0	11	14	3	5	3	5	0	0	17	0	28	0	0
March	5.6	SW.	40	W.	2	2	11	4	3	6	27	7	0	2	13	11	7	10	8	9	0	2	9	0	31	0	0
April	6.0	SW.	36	NW.	0	1	3	0	6	5	22	18	4	1	10	15	5	7	7	0	3	0	1	0	20	1	0
May	5.9	W.	40	SW.	1	1	8	1	9	6	15	17	2	3	11	14	6	10	9	3	1	0	0	0	6	0	0
June	5.9	W.	36	NW.	0	2	8	3	5	7	13	17	5	0	12	14	4	6	5	0	1	0	0	0	0	2	0
July	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
August	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
September	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
October	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
November	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
December	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Year	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

a By eye observations at 8 a.m and 8 p.m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

WASHINGTON, D. C.

[Lat. 38° 54′ N.; long. 77° 3′ W.; gravity corr.—.02.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.97	30.46	29.16	33.6	37.2	44.2	30.5	37.4	60	21	27	28	79	70	.143	.150	6.14	1.58	5.8	4.8	5.6
February	30.09	.55	.39	38.4	42.0	48.6	34.3	41.4	74	16	32	32	79	70	.180	.180	4.49	1.10	7.6	5.9	6.3
March	29.99	.46	.38	34.8	39.7	44.7	32.4	38.6	60	17	28	29	77	69	.150	.157	8.84	1.83	6.5	6.4	6.5
April	29.92	.35	.42	51.8	57.8	65.7	45.2	55.4	85	29	40	41	67	56	.246	.256	2.94	1.77	4.4	4.0	3.6
May	29.95	.29	.71	58.2	62.2	70.6	52.1	61.4	89	38	48	50	70	66	.334	.360	3.72	1.22	5.7	6.4	5.9
June	29.87	.14	.56	69.2	72.2	81.2	61.9	71.6	94	45	60	62	75	73	.517	.555	4.61	1.63	4.4	4.5	3.8
July	29.93	.21	.66	69.6	71.6	80.6	63.3	72.0	89	54	62	63	78	76	.555	.575	8.40	2.31	5.7	5.1	5.2
August	29.90	.11	.62	71.1	73.7	82.7	66.3	74.5	95	54	65	67	83	81	.616	.660	4.18	1.59	6.5	5.1	6.0
September	30.05	.31	.82	66.7	69.3	79.8	60.8	70.3	90	49	61	64	83	82	.536	.595	3.12	1.67	3.4	1.5	3.0
October	30.00	.42	.69	59.0	53.7	62.7	46.1	54.4	84	30	42	44	76	70	.266	.287	2.24	1.13	4.3	4.0	4.4
November	30.08	.72	.37	39.3	43.6	53.5	34.4	44.0	68	17	32	33	78	68	.180	.187	1.47	.43	5.1	3.6	5.1
December	30.11	.54	.51	37.4	43.6	53.0	33.3	43.2	67	15	30	31	76	64	.164	.172	2.80	.97	4.4	4.5	4.7
Year	29.98	.72	.16	51.7	55.6	63.9	46.7	55.4	95	15	44	45	77	70	.324	.344	52.95	.....	5.3	4.6	5.0

WICHITA, KANS.

[Lat. 37° 41′ N.; long. 97° 20′ W.; gravity corr.—.02.]

January	28.64	28.91	28.17	28.1	35.2	41.2	25.9	33.6	58	11	24	29	86	78	.125	.157	2.66	1.50	5.4	4.5	5.0
February	28.51	.97	27.97	26.0	34.5	43.8	22.2	33.0	72	4	20	22	80	64	.103	.113	1.95	1.36	5.5	4.1	5.0
March	28.52	.96	28.11	30.6	42.0	46.9	28.6	37.8	68	6	26	29	84	62	.137	.157	3.36	1.56	5.6	6.3	6.4
April	28.54	.98	.22	50.0	61.0	70.5	46.5	58.5	81	22	41	39	73	44	.256	.237	1.26	.68	4.6	5.2	4.5
May	28.60	.94	.23	56.2	67.0	72.7	52.1	62.4	87	35	49	52	78	60	.347	.387	9.15	3.19	5.6	4.9	5.0
June	28.45	.68	.12	67.0	74.9	81.0	62.9	72.0	94	52	62	63	86	68	.555	.575	4.90	1.09	5.8	5.7	5.4
July	28.58	.82	.34	68.4	78.9	84.2	64.9	74.6	92	55	63	65	84	63	.575	.616	5.59	1.73	5.6	3.5	4.2
August	28.57	.86	.32	67.2	80.0	87.6	64.4	76.0	98	47	60	61	80	54	.517	.536	.49	.30	4.0	1.9	2.5
September	28.64	.83	.44	62.9	75.1	82.4	60.5	71.4	92	42	57	57	83	56	.465	.465	.72	.33	4.0	3.2	3.0
October	28.69	29.04	.40	47.1	60.9	70.5	45.2	57.8	87	32	38	40	74	48	.228	.246	2.95	.88	2.4	1.7	1.8
November	28.61	.22	.15	34.6	45.4	52.8	32.3	42.6	83	10	27	30	75	58	.143	.164	.47	.32	4.2	3.8	3.9
December	28.55	.10	.01	33.8	42.1	50.3	31.5	40.9	66	9	26	28	76	61	.137	.050	1.12	.52	4.5	2.4	3.1
Year	28.58	.22	27.97	47.7	58.3	65.3	44.8	55.0	98	4	41	43	80	60	.299	.317	34.53	.....	4.8	3.9	4.2

WILMINGTON, N. C.

[Lat. 34° 14′ N.; long. 77° 57′ W.; gravity corr.—.03.]

January	30.06	30.41	29.43	42.3	47.9	56.2	39.1	47.6	75	26	38	42	87	81	.228	.266	4.46	3.22	4.0	4.0	4.9
February	30.08	.53	.42	51.7	55.8	64.2	47.5	55.8	80	30	48	50	89	80	.334	.360	1.54	.32	6.4	5.6	7.1
March	29.98	.48	.43	47.8	53.1	59.8	44.7	52.2	72	30	44	45	86	76	.287	.298	5.15	.90	6.7	5.8	6.5
April	30.01	.33	.55	59.7	61.3	70.1	54.1	62.1	82	36	52	53	78	75	.387	.402	1.15	.52	4.3	2.1	3.7
May	29.97	.40	.66	65.7	66.2	76.3	58.9	67.6	85	41	57	58	74	75	.465	.481	1.03	.39	4.3	3.8	4.8
June	29.91	.08	.60	74.8	75.7	85.5	68.8	77.2	95	60	68	70	79	82	.684	.732	3.47	1.60	4.2	4.6	4.4
July	29.99	.19	.75	75.0	75.6	83.1	70.1	76.6	92	61	68	70	80	82	.684	.732	6.21	1.65	6.9	6.8	6.8
August	29.97	.12	.68	77.1	76.8	86.1	71.8	79.0	93	60	72	72	83	87	.783	.783	11.96	2.15	5.0	6.6	5.5
September	30.06	.23	.87	70.1	73.1	81.6	66.4	74.0	91	58	65	67	84	81	.616	.660	4.61	1.52	4.3	4.1	4.2
October	30.04	.48	.70	55.6	59.5	69.5	51.7	60.6	89	36	49	53	79	79	.347	.402	6.01	2.40	4.2	3.1	3.9
November	30.11	.67	.65	48.8	52.4	62.3	43.4	52.8	78	25	43	43	81	72	.277	.277	1.46	.40	4.8	3.4	5.2
December	30.29	.52	.82	47.7	52.9	62.3	43.9	53.1	73	23	40	44	77	75	.246	.287	.95	.30	4.4	3.8	5.7
Year	30.03	.67	.42	59.7	62.5	71.4	55.0	63.2	95	23	54	56	81	79	.445	.473	48.00	.....	5.0	4.5	5.2

WINNEMUCCA, NEV.

[Lat. 40° 58′ N.; long. 117° 43′ W.; gravity corr.—.01.]

January	25.81	26.13	25.41	20.6	33.1	37.4	15.7	26.6	47	−3	16	21	85	62	.085	.108	.23	.07	3.8	6.1	5.3
February	25.49	25.92	24.81	27.4	36.6	39.8	23.6	31.7	53	2	19	17	74	48	.098	.089	1.20	.34	6.1	5.5	5.9
March	25.62	.79	25.30	32.5	45.6	47.8	29.0	38.4	62	12	23	18	70	37	.119	.093	.90	.35	6.1	7.0	6.5
April	25.50	.89	.18	36.6	57.2	60.1	33.9	47.0	74	18	23	12	61	25	.119	.070	.86	.36	5.9	7.6	6.5
May	25.58	.76	.41	44.5	63.0	67.1	42.7	54.9	83	33	32	23	65	32	.160	.119	2.32	.52	4.8	6.7	6.1
June	25.59	.88	.32	47.2	68.3	70.9	45.2	58.0	90	30	33	22	62	22	.187	.113	1.11	.47	4.8	4.8	4.6
July	25.66	.81	.47	57.7	84.1	86.4	55.6	71.0	93	40	33	19	42	12	.187	.098	.28	.16	3.4	4.0	3.5
August	25.68	.86	.50	56.0	86.4	88.5	52.0	70.2	95	36	21	16	28	8	.108	.085	.06	.06	2.0	2.9	2.5
September	25.65	.85	.38	50.4	70.6	73.6	47.3	60.4	92	30	30	26	51	22	.164	.137	.81	.32	3.8	4.3	4.4
October	25.78	.99	.42	36.5	62.7	67.5	32.9	50.2	79	20	18	15	50	19	.093	.081	.03	.02	2.9	3.9	3.8
November	25.76	.96	.52	32.0	49.6	54.5	27.4	41.0	73	12	21	20	68	34	.108	.103	.14	.06	4.5	5.0	5.2
December	25.73	26.12	.06	22.8	29.4	34.8	17.9	26.4	52	−8	16	17	77	62	.085	.089	1.74	.39	5.4	7.1	6.6
Year	25.66	.13	24.81	38.7	57.2	60.7	35.3	48.0	98	−8	24	19	61	32	.128	.099	9.68	.....	4.5	5.4	5.1

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

WASHINGTON, D. C.

[H=112 feet; h_t=59 feet; h_r=42 feet; h_a=67 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.	*	*Mi.*																								
January	7.6	NW.	42	NW.	1	8	6	0	3	14	4	10	15	2	10	10	11	13	11	5	0	2	1	0	19	0	0
February	8.7	S.	36	NW.	0	9	5	3	6	15	4	4	9	1	8	7	13	15	10	1	0	0	2	0	13	0	0
March	9.2	NE.	34	N.	0	16	16	2	6	4	4	4	10	0	12	1	18	15	14	5	0	0	2	0	13	0	0
April	7.4	NW.	28	NW.	0	6	4	3	6	11	4	5	20	1	17	7	6	8	6	0	0	0	0	0	4	3	0
May	6.7	NW.	26	NW.	0	5	12	7	2	9	10	1	14	2	12	6	13	13	10	0	0	0	0	0	0	2	0
June	5.4	S.	27	N.	0	3	14	2	4	16	0	5	13	3	18	5	7	11	8	0	0	0	0	4	0	6	0
July	5.5	NW.	34	NW.	0	10	9	3	4	10	6	6	13	1	9	17	5	16	14	0	0	0	0	0	0	7	0
August	4.6	S.	34	NW.	0	7	11	3	1	14	6	2	14	4	8	10	13	16	11	0	0	0	0	4	0	8	0
September	4.2	S.	18	NW.	0	6	9	2	1	16	2	3	6	15	20	7	3	5	5	0	0	0	0	1	0	1	0
October	6.7	NW.	34	NW.	0	8	10	2	3	5	6	4	16	8	16	6	9	10	8	0	0	0	0	0	1	1	0
November	6.5	NW.	54	SW.	1	9	5	2	8	8	5	0	17	6	12	7	11	8	7	2	0	0	1	0	10	1	0
December	6.2	NW.	35	NW.	0	1	3	3	1	16	11	6	13	5	13	7	11	8	6	1	0	1	0	0	15	0	0
Year	6.6	NW.	....	.....	2	88	104	32	48	138	62	50	160	48	155	90	120	138	110	11	0	3	6	9	75	29	0

WICHITA, KANS.

[H=1,366 feet; h_t=78 feet; h_r=71 feet; h_a=85 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	8.9	N.	47	N.	1	12	4	5	5	6	10	8	10	2	13	6	12	8	6	7	0	1	5	0	28	0	0
February	11.2	N.	40	N.	1	17	7	4	4	16	0	1	7	0	10	8	10	6	4	5	0	1	6	0	23	0	0
March	12.6	N.	39	N.	0	15	11	5	5	12	2	2	10	0	7	10	14	10	6	7	0	1	5	0	15	0	0
April	11.1	S.	49	N.	1	12	3	4	8	19	3	0	9	2	13	7	10	6	4	1	1	0	0	0	4	3	0
May	9.2	S.	36	S.	0	7	12	8	14	17	2	0	2	0	9	13	9	10	8	0	0	0	0	0	0	5	0
June	8.3	S.	41	NW.	1	10	6	4	13	17	1	0	7	2	10	11	9	13	10	0	1	0	0	4	0	9	0
July	6.8	S.	30	N.	0	3	10	4	13	20	2	5	3	2	13	16	2	9	8	0	0	0	0	3	0	10	0
August	7.6	S.	28	NW.	0	12	4	1	11	23	7	0	2	2	20	11	0	5	2	0	0	0	0	14	0	1	0
September	8.6	S.	28	S.	0	3	6	4	16	26	1	1	1	2	17	9	4	5	4	0	0	1	0	2	0	2	0
October	8.8	S.	30	S.	0	17	6	0	9	18	3	2	6	1	24	5	2	6	5	0	0	0	0	0	0	1	0
November	10.4	N.	47	N.	1	17	6	5	4	15	6	2	4	0	14	10	6	7	2	2	0	0	3	0	14	0	0
December	11.4	S.	38	S.	0	10	6	1	10	21	7	2	4	1	18	11	2	6	4	3	0	0	1	0	17	1	0
Year	9.6	S.	....	.....	5	135	81	45	112	210	44	23	65	14	168	117	80	91	63	25	2	4	20	23	101	32	0

WILMINGTON, N. C.

[H=78 feet; h_t=82 feet; h_r=76 feet; h_a=88 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	8.4	Calm. NW.	43	SW.	1	5	5	6	2	9	13	10	9	3	13	8	10	7	6	0	0	1	0	0	7	0	0
February	10.7	SW.	45	SW.	3	7	14	5	1	7	15	1	4	2	2	11	15	14	11	0	0	3	0	0	2	3	0
March	9.4	NE.	41	NW.	1	7	18	2	2	5	4	3	11	10	3	13	15	12	11	0	0	0	0	0	2	2	0
April	7.1	Calm. S.	29	W.	0	3	6	5	7	13	7	3	6	10	16	11	3	3	3	0	0	0	0	0	0	1	0
May	7.4	Calm. S.	29	NW.	0	5	10	12	5	12	8	1	9	0	10	14	7	8	4	0	1	0	0	0	0	5	0
June	7.6	S.	40	N.	1	5	9	14	1	12	4	12	1	2	9	18	3	17	12	0	0	0	0	9	0	10	0
July	7.5	S.	34	SW.	0	5	9	3	3	24	10	8	0	0	2	16	13	23	17	0	0	0	0	2	0	8	0
August	6.5	Calm. S.	26	S.	0	4	0	4	2	18	18	7	4	5	8	14	9	20	18	0	0	1	0	5	0	12	0
September	6.1	NE.	24	NE.	0	6	21	10	7	7	3	0	5	1	14	11	5	12	8	0	0	2	0	1	0	2	0
October	7.6	NE.	28	NW.	0	14	19	2	0	0	10	4	7	0	15	10	6	9	8	0	0	3	0	0	0	0	0
November	8.5	NE.	36	S.	0	8	17	6	3	5	7	5	7	2	13	9	8	9	6	1	0	0	0	0	4	0	0
December	8.2	Calm. NE.	44	NW.	1	9	11	7	4	6	11	4	6	4	8	13	10	9	6	0	0	2	0	0	4	1	0
Year	7.9	NE.	....	.....	7	78	139	76	37	118	110	58	69	45	113	148	104	143	110	1	1	12	0	17	19	44	0

WINNEMUCCA, NEV.

[H=4,340 feet; h_t=62 feet; h_r=52 feet; h_a=69 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	8.0	NE.	46	W.	1	8	14	11	1	3	13	6	2	4	8	15	8	8	3	9	0	1	5	0	31	0	0
February	14.3	SW.	58	SW.	8	4	5	8	0	6	18	12	2	1	5	14	9	13	7	15	0	1	4	0	23	0	0
March	10.6	SW.	48	SW.	2	3	6	5	0	10	20	8	10	0	4	16	11	13	5	11	0	0	1	0	19	0	0
April	10.9	SW.	48	SW.	4	2	6	9	2	12	19	6	3	1	3	15	12	6	5	3	1	0	0	0	10	1	0
May	9.2	SW.	48	W.	2	9	7	6	3	9	17	5	5	1	5	12	14	16	10	3	5	0	0	0	0	9	0
June	10.0	SW.	50	W.	5	3	7	4	2	10	19	6	6	3	11	13	6	7	4	0	2	0	0	0	1	1	0
July	9.7	SW.	42	W.	1	3	11	8	1	2	19	7	9	2	15	11	5	5	3	0	0	0	0	14	0	5	0
August	8.6	SW.	34	NW.	0	3	11	3	1	3	20	11	7	3	19	12	0	1	1	0	0	0	0	15	0	0	0
September	8.8	SW.	42	SW.	1	7	6	8	2	7	16	8	2	4	11	13	6	7	4	0	0	0	0	1	1	0	0
October	8.6	NE.	58	S.	1	5	22	13	1	4	8	6	2	1	15	10	6	2	0	3	0	0	0	0	13	1	0
November	8.9	SW.	40	SW.	1	5	9	10	0	4	23	8	1	0	8	11	11	3	2	6	0	2	0	0	21	0	0
December	12.2	SW.	60	SW.	4	2	6	10	3	6	20	6	6	3	6	11	14	16	10	18	....	3	11	0	30	0	0
Year	10.0	SW.	....	.....	30	54	110	95	16	76	212	89	55	23	110	153	102	97	54	68	8	7	21	30	149	17	0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

* During all months except February and March, "Calms" were reported more frequently than any direction.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

WOODS HOLL, MASS.

[Lat. 41° 33′ N.; long. 70° 40′ W.; gravity corr., —.01.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	.....	30.56	29.36	.....	33.2	38.5	26.0	32.2	52	14	....	30	....	88	.....	.164	6.95	1.77	.....	5.4	6.4
February	.....	.58	.33	.....	34.0	39.5	26.8	33.2	52	9	....	31	....	89	.....	.172	6.26	1.16	.....	5.6	6.4
March	.....	.46	.45	.....	33.8	40.5	28.4	34.4	52	9	....	30	....	87	.....	.164	4.15	1.79	.....	4.1	5.1
April	.....	.53	.02	.....	44.0	51.6	37.9	44.8	64	29	....	40	....	85	.....	.246	2.84	1.46	.....	4.1	5.2
May	.....	.50	.68	.....	51.1	58.6	46.2	52.4	67	35	....	47	....	87	.....	.322	1.94	.56	.....	5.1	6.1
June	.....	.14	.67	.....	59.4	67.0	54.9	61.0	77	45	....	55	....	87	.....	.432	1.16	.57	.....	5.7	5.6
July	.....	.34	.75	.....	64.0	70.6	60.1	65.4	76	54	....	60	....	89	.....	.517	2.18	.71	.....	5.5	6.4
August	.....	.18	.74	.....	68.4	74.5	64.1	69.3	83	58	....	65	....	89	.....	.616	3.57	1.28	.....	5.6	5.1
September	.....	.37	.76	.....	64.6	71.2	60.4	65.8	80	54	....	60	....	87	.....	.517	3.72	2.09	.....	3.9	4.7
October	.....	.47	.59	.....	51.7	57.4	46.5	52.0	70	31	....	47	....	85	.....	.322	7.09	2.24	.....	4.7	6.2
November	.....	.73	.49	.....	43.3	48.6	37.2	42.9	62	19	....	37	....	78	.....	.219	1.65	.52	.....	5.6	6.1
December	.....	.45	.56	.....	41.3	7.2	34.5	40.8	57	14	....	34	....	78	.....	.195	3.68	1.13	.....	4.0	5.6
Year	.....	.73	.02	.....	49.1	55.4	43.6	49.5	83	9	....	45	....	86	.....	.324	45.19	.....	.....	4.9	5.7

YANKTON, S. DAK.

[Lat. 42° 54′ N.; long. 97° 28′ W.; gravity corr., 0.]

January	28.73	29.15	28.37	20.4	29.1	37.4	16.8	27.1	57	1	16	21	81	72	.085	.108	.78	.47	5.9	3.1	4.9
February	28.65	.08	.10	0.4	13.9	21.6	1.4	11.5	42	—19	3	9	83	79	.045	.060	1.47	.75	4.4	3.9	4.8
March	28.72	.08	.14	17.6	25.7	31.0	15.1	23.0	49	—17	14	20	84	81	.077	.103	1.75	.68	6.0	6.5	6.6
April	.....	.....	.....	43.6	58.1	62.8	39.4	51.1	92	15	38	40	81	54	.228	.246	3.79	1.43	5.0	6.1	....
May	28.73	.18	.23	51.8	64.8	70.2	46.3	58.2	89	32	44	46	77	53	.287	.310	1.45	.58	6.1	5.3	5.5
June	28.57	28.94	.25	61.8	59.6	74.3	58.0	66.2	90	49	57	58	86	69	.465	.481	4.97	1.64	8.2	6.4	7.3
July	28.69	29.02	.43	62.9	73.9	80.1	59.0	69.6	86	46	57	60	83	64	.465	.517	3.27	.82	5.3	5.3	5.3
August	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
September	28.69	28.98	.39	59.7	71.9	79.6	57.0	68.3	92	38	54	58	82	63	.417	.481	.36	.20	5.1	4.7	5.3
October	28.78	29.23	.38	41.8	53.2	63.7	39.8	51.8	86	26	35	36	77	54	.203	.211	.62	.54	4.2	2.4	4.3
November	28.74	.25	.22	24.3	31.6	40.7	20.2	30.4	65	— 8	20	23	85	73	.103	.119	.34	.11	6.0	5.3	6.9
December	28.60	.29	.07	26.0	30.4	40.6	21.8	31.2	61	— 6	21	24	84	80	.108	.125	2.33	.67	4.8	3.9	5.1
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

YUMA, ARIZ.

[Lat. 32° 45′ N.; long. 114° 36′ W.; gravity corr., —.03.]

January	29.94	30.18	29.66	44.9	61.2	66.3	40.6	53.4	76	27	23	20	45	22	.119	.103	.00	.00	1.5	2.5	1.9
February	29.84	.18	.41	48.2	62.7	66.0	44.4	55.2	74	32	32	30	60	35	.180	.164	2.53	1.24	3.9	4.5	4.3
March	29.77	.01	.44	53.2	73.1	76.1	50.6	63.4	87	42	39	30	01	23	.237	.164	T.	T.	2.2	2.8	2.6
April	29.74	29.96	.57	56.8	82.3	85.5	53.9	69.7	102	44	38	29	52	16	.228	.157	.00	.00	1.7	1.1	1.3
May	29.68	.86	.47	62.1	85.7	88.9	59.5	74.2	100	54	47	35	59	18	.322	.203	T.	T.	0.9	1.7	1.2
June	29.57	.79	.41	67.8	95.2	98.2	65.3	81.8	116	52	51	43	57	18	.373	.277	.00	.00	0.8	0.9	0.9
July	29.62	.83	.49	79.4	103.9	107.5	76.5	92.0	114	64	60	52	52	20	.517	.387	.04	.04	1.3	0.9	1.1
August	29.72	.85	.59	79.3	100.5	105.3	77.7	91.5	113	72	66	59	65	29	.638	.499	.05	.03	1.4	1.6	1.4
September	29.71	.89	.29	70.4	93.9	99.1	67.8	83.4	110	54	54	49	56	24	.417	.347	T.	T.	1.4	1.2	1.2
October	29.78	.93	.57	62.4	86.2	93.5	59.5	76.5	102	50	42	42	51	23	.266	.266	.00	.00	1.0	1.0	0.9
November	29.86	30.05	.67	52.4	72.6	81.2	48.2	64.7	92	36	31	32	49	24	.172	.180	.00	.00	0.5	1.0	0.9
December	29.98	.42	.57	41.3	57.4	64.8	37.8	51.3	77	25	22	20	50	25	.113	.103	.05	.05	0.7	1.9	1.5
Year	29.77	.42	.29	59.8	81.2	86.0	56.8	71.4	116	25	42	37	55	23	.298	.237	2.67	.....	1.4	1.8	1.6

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1891—Continued.

WOODS HOLL, MASS.

[H=22 feet; h_t=51 feet; h_r=39 feet; h_a=57 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	17.3	NW.	72	W.	7	4	4	1	2	3	4	6	7	0	9	9	13	13	12	4	0	0	2	0	24	0	0
February	19.1	NW.	56	NW.	7	3	1	2	2	5	4	3	8	0	6	10	12	14	13	4	0	0	4	0	21	0	0
March	17.7	NE.	62	NW.	6	4	6	3	5	3	0	3	6	0	13	8	10	7	7	2	0	0	2	0	19	1	0
April	16.4	SW.	54	W.	4	0	2	3	3	3	8	3	8	0	11	12	7	9	8	1	0	2	0	0	6	1	0
May	14.0	SW.	46	W.	3	2	1	0	5	6	10	4	3	0	5	16	10	7	5	0	0	5	0	0	0	0	0
June	12.4	S.	35	SW.	0	3	4	0	2	12	5	1	3	0	11	9	10	8	6	0	0	3	0	0	0	2	0
July	11.7	SE.	45	E.	1	0	1	5	10	9	3	1	2	0	7	11	13	11	9	0	0	9	0	0	0	1	0
August	11.2	S.	38	S.	0	1	4	5	6	7	6	1	1	0	9	16	6	8	8	0	0	2	0	0	0	1	0
September	11.3	S.	41	N.	1	4	2	4	0	13	5	1	1	0	15	8	7	8	6	0	0	1	0	0	0	1	0
October	17.6	E.	61	NE.	4	1	6	8	0	3	7	1	5	0	7	11	13	12	11	0	0	1	0	0	1	0	0
November	16.8	SW.	49	SE.	7	3	6	5	2	1	8	1	4	0	10	6	14	13	8	1	0	2	2	0	7	0	0
December	20.3	W.	63	SE.	11	1	2	3	2	4	3	8	6	2	11	9	11	10	8	1	0	3	2	0	8	0	0
Year	15.5	S.	....	.....	51	26	39	39	39	69	63	33	54	2	114	125	126	120	101	13	0	28	12	0	86	7	0

YANKTON, S. DAK.

[H=1,232 feet; h_t=51 feet; h_r=43 feet; h_a=57 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	9.3	NW.	45	NW.	1	3	6	3	6	2	9	8	24	1	12	11	8	7	5	4	0	2	11	0	30	0	0
February	9.8	NW.	46	NW.	2	4	5	2	9	3	6	4	23	0	13	7	8	10	7	8	0	2	23	0	28	0	0
March	10.3	NW.	32	NW.	0	6	9	4	11	2	6	3	19	0	7	10	13	10	5	10	0	0	13	0	25	0	0
April	.....	NW.	36	NW.	....	4	3	6	11	7	7	3	18	1	11	10	9	7	....	....	....	....	0	1	8	1	0
May	.....	S.	48	S.	3	3	11	4	12	12	12	1	5	2	7	12	12	11	9	0	0	0	0	0	0	...	...
June	.....	NE.	57	S.	4	0	17	3	7	12	6	4	10	0	4	4	22	13	11	0	0	0	0	1	0	...	...
July	.....	SE.	50	N.	3	6	10	2	14	9	8	1	12	0	9	13	9	13	10	0	0	0	0	0	0	0	0
August	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
September	12.1	S.	48	SE.	5	0	3	4	8	16	11	0	7	4	8	12	7	4	3	0	0	0	0	3	0	1	1
October	9.9	NW.	36	SE.	0	3	1	1	12	5	10	0	26	4	12	15	4	4	1	0	0	0	0	0	6	0	0
November	9.2	NW.	38	NW.	0	2	3	3	14	9	2	3	23	1	4	12	14	5	3	12	0	0	7	0	25	0	0
December	9.6	NW.	35	NW.	0	2	4	2	10	3	15	5	19	2	12	7	12	8	8	8	0	0	3	0	28	0	0
Year	....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

YUMA, ARIZ.

[H=141 feet; h_t=16 feet; h_r=2 feet; h_a=50 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	7.3	N.	34	N.	0	32	13	6	1	5	0	0	4	1	25	4	2	0	0	0	0	1	0	0	5	0	0
February	6.7	N.	40	N.	1	20	10	4	6	5	1	5	3	2	15	5	8	6	5	1	0	4	0	0	1	1	0
March	8.3	W.	48	W.	1	11	7	4	4	6	10	14	4	2	21	8	2	0	0	0	0	0	0	0	0	0	0
April	7.1	W.	36	W.	0	12	8	3	2	6	9	13	2	5	26	3	1	0	0	0	0	0	0	8	0	0	0
May	7.0	SW.	36	NW.	0	3	4	4	5	9	15	12	7	3	28	3	0	0	0	0	0	0	0	13	0	1	0
June	6.6	SW.	34	W.	0	0	0	3	5	5	22	17	5	3	27	3	0	0	0	0	0	1	0	25	0	0	0
July	6.4	Calm. SW.	30	NW.	0	3	5	4	4	10	21	12	2	1	29	2	0	1	1	0	0	0	0	31	0	2	0
August	6.4	Calm. SW.	30	S.	0	3	5	2	6	10	21	14	1	0	26	4	1	3	0	0	0	0	0	31	0	2	0
September	6.0	Calm. W.	35	NW.	0	4	6	1	6	7	15	11	10	0	27	1	2	0	0	0	0	0	0	26	0	0	0
October	5.1	Calm. NE.	24	N.	0	4	20	8	1	5	2	8	12	2	26	5	0	0	0	0	0	0	0	25	0	0	0
November	5.3	Calm. N.	33	N.	0	15	8	9	6	8	0	6	5	3	28	2	0	0	0	0	0	1	0	3	0	0	0
December	7.3	Calm. N.	38	W.	0	20	8	3	5	9	1	9	7	0	25	5	1	1	1	0	0	0	0	0	6	0	0
Year	6.6	N.	....	.....	2	127	94	51	51	85	117	121	62	22	303	45	17	11	7	1	0	7	0	162	12	6	0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892.

ABILENE, TEX.

[Lat. 32° 23′ N.; long. 99° 40′ W.; gravity corr., —.03.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	28.35	28.67	27.92	32.8	44.6	50.4	30.8	40.6	73	2	24	28	73	56	.125	.150	.30	.26	3.5	3.1	3.5
February	28.25	28.62	27.75	43.7	54.7	59.8	41.8	50.8	73	29	39	39	86	58	.237	.237	1.04	.66	4.1	3.6	5.2
March	28.22	28.69	27.64	42.9	55.6	60.5	41.4	51.0	89	18	36	37	79	54	.211	.219	2.59	.79	3.9	3.9	4.2
April	28.14	28.57	27.56	57.4	71.8	77.4	55.7	66.6	92	39	47	42	71	41	.322	.266	1.68	.76	3.9	3.3	3.4
May	28.09	28.40	27.83	64.7	77.4	83.4	62.0	72.7	100	48	57	53	78	48	.465	.402	6.12	2.14	3.6	3.7	4.4
June	28.14	28.36	27.95	70.7	86.5	91.0	68.5	79.8	100	48	63	60	79	44	.575	.517	1.34	.62	2.8	2.8	3.3
July	28.22	28.41	27.99	74.5	89.3	92.6	72.7	82.6	98	64	66	58	76	37	.638	.481	1.41	1.00	2.5	1.6	2.9
August	28.22	28.40	28.04	70.3	82.8	88.8	68.6	78.7	96	63	66	61	87	52	.638	.536	3.58	1.70	3.3	3.7	5.4
September	28.27	28.47	28.08	64.3	79.2	85.0	63.6	74.3	94	52	59	58	85	51	.499	.481	1.85	1.12	2.9	1.3	2.3
October	28.25	28.59	27.91	57.0	67.4	74.1	55.9	65.0	87	37	53	54	88	63	.402	.417	6.03	2.42	4.3	3.4	4.4
November	28.28	28.74	27.81	46.8	57.7	65.2	45.1	55.2	81	31	40	39	78	52	.246	.237	.45	.32	3.2	2.2	3.7
December	28.27	28.63	27.96	37.4	44.1	51.1	35.0	43.0	78	18	35	35	91	73	.203	.203	2.09	.88	3.6	4.8	5.5
Year	28.22	28.74	27.56	55.2	67.6	73.3	53.4	63.4	100	2	49	47	81	52	.380	.346	28.48	.....	3.5	3.1	4.0

ALBANY, N. Y.

[Lat. 42° 39′ N.; long. 73° 45′ W.; gravity corr., —.01.]

January	29.94	30.57	29.16	21.0	25.3	30.5	16.5	23.5	55	—5	16	21	82	83	.085	.108	4.08	.95	6.5	5.9	6.5
February	30.07	30.67	29.13	22.7	28.0	33.3	18.8	26.0	46	0	17	24	79	85	.089	.125	2.13	.70	6.9	6.5	6.6
March	29.89	30.43	29.24	27.0	31.0	36.7	22.9	29.8	57	12	21	24	77	77	.108	.125	1.64	.61	5.0	4.5	5.8
April	29.95	30.47	29.50	43.7	47.9	55.3	36.9	46.1	74	24	34	36	71	65	.195	.211	.56	.36	5.0	4.2	4.6
May	29.88	30.26	29.44	54.3	57.4	64.5	48.9	56.7	83	37	48	50	81	77	.334	.360	5.30	1.10	7.4	7.5	7.0
June	29.87	30.25	29.48	68.5	71.0	80.1	62.3	71.2	96	50	64	62	85	74	.595	.555	4.41	2.54	7.5	6.4	7.0
July	29.94	30.46	29.49	69.9	73.5	83.5	62.5	73.0	95	49	63	62	79	69	.575	.555	4.22	1.15	4.4	4.9	5.0
August	29.91	30.18	29.64	68.2	71.1	80.4	62.6	71.5	91	54	62	62	81	74	.555	.555	6.70	2.02	5.9	5.5	5.9
September	30.05	30.36	29.49	58.5	62.3	71.6	53.2	62.4	80	44	52	54	80	76	.387	.417	2.08	.84	3.5	2.0	3.7
October	29.88	30.36	29.44	46.9	50.8	59.4	42.7	51.0	74	35	42	42	84	73	.266	.266	.60	.28	6.0	5.2	5.8
November	29.97	30.39	29.49	37.2	38.9	44.0	32.9	38.4	67	18	32	32	80	77	.180	.180	2.29	1.31	6.8	6.4	7.0
December	29.95	30.45	29.35	23.8	27.1	31.6	20.7	26.2	44	0	20	23	83	83	.103	.119	.82	.42	6.8	5.5	6.9
Year	29.94	30.67	29.13	45.1	48.7	55.9	40.1	48.0	96	—5	39	41	80	76	.289	.298	34.63	.....	6.0	5.4	6.0

ALPENA, MICH.

[Lat. 45° 5′ N.; long. 83° 30′ W.; gravity corr., 0.]

January	29.32	29.84	28.68	15.2	18.7	25.9	9.9	17.9	43	—2	11	13	84	78	.067	.074	1.77	.48	7.2	5.7	6.0
February	29.45	30.02	28.72	20.4	23.3	28.0	15.8	21.9	38	—8	17	18	86	81	.089	.093	1.69	.50	8.2	6.5	7.3
March	29.40	29.84	28.65	19.7	26.2	31.6	16.9	24.2	42	0	15	20	81	78	.081	.103	.59	.22	3.9	4.9	5.0
April	29.39	29.90	28.67	36.0	37.7	46.7	29.6	38.2	70	17	29	30	76	74	.157	.164	1.93	.80	4.2	4.3	4.7
May	29.28	29.82	28.76	46.6	49.3	57.9	41.0	49.4	80	33	41	42	81	78	.256	.266	3.38	.71	7.3	7.0	7.1
June	29.28	29.59	28.76	59.7	61.0	69.2	52.4	60.8	94	45	55	55	85	82	.432	.432	6.66	1.80	7.1	5.6	6.5
July	29.40	29.89	29.12	65.0	68.0	77.5	55.5	66.5	91	44	57	59	77	75	.465	.499	3.92	1.11	5.2	4.1	4.8
August	29.37	29.58	29.07	63.2	66.8	74.7	56.2	65.4	91	45	58	60	85	78	.481	.517	3.44	1.18	5.3	4.4	4.7
September	29.41	29.75	28.78	54.8	59.2	68.2	48.5	58.4	92	37	52	54	90	83	.387	.417	2.85	1.80	4.2	3.7	4.1
October	29.35	29.80	28.58	43.0	46.5	54.8	38.7	46.8	75	29	40	41	88	80	.246	.256	1.70	.78	5.9	3.8	5.1
November	29.36	29.84	28.49	31.3	33.1	37.6	27.7	32.6	53	13	28	28	89	82	.150	.150	2.36	1.24	9.0	8.8	8.9
December	29.36	29.77	28.65	22.6	23.9	28.7	19.0	23.8	42	—2	19	19	85	81	.098	.098	1.86	.88	8.3	8.0	7.9
Year	29.36	30.02	28.49	39.8	42.8	50.1	34.3	42.2	94	—8	35	37	84	79	.242	.256	32.15	.....	6.3	5.6	6.0

AMARILLO, TEX.

[Lat. 35° 13′ N.; long. 101° 50′ W.; gravity corr., —.02.]

January	26.32	26.64	25.98	24.1	35.4	43.9	21.7	32.8	68	—4	18	19	80	56	.093	.098	.42	.32	3.5	3.6	3.7
February	26.25	26.55	25.70	32.1	45.0	53.9	29.9	41.9	67	19	27	27	84	53	.143	.143	.57	.35	3.3	4.0	4.5
March	26.21	26.62	25.71	32.6	45.9	52.9	30.8	41.8	77	7	26	28	80	57	.137	.150	2.10	.97	3.9	5.1	5.1
April	26.18	26.62	25.64	44.6	63.6	69.5	43.3	56.4	89	31	33	31	66	33	.187	.172	.21	.18	4.8	5.1	5.1
May	26.17	26.46	25.94	54.5	70.2	74.8	51.4	63.1	91	40	41	41	67	40	.256	.236	2.70	2.30	3.6	5.4	4.4
June	26.22	26.48	25.93	64.4	82.1	86.0	61.7	73.8	100	42	54	51	70	40	.417	.373	1.49	1.04	3.7	4.1	3.9
July	26.33	26.50	26.09	67.5	84.7	87.6	66.2	76.9	97	56	57	53	70	36	.465	.402	1.85	.76	4.1	4.2	4.1
August	26.33	26.52	26.10	64.7	81.0	85.2	61.7	74.4	97	54	56	54	76	45	.448	.417	1.93	.68	2.9	4.0	3.5
September	26.34	26.55	26.11	59.5	78.8	84.9	59.4	72.2	93	48	49	45	70	33	.347	.298	.24	.20	3.7	3.3	3.3
October	26.31	26.57	25.87	47.7	60.2	65.8	46.7	56.2	83	32	39	40	74	53	.237	.246	2.85	1.04	4.2	3.2	3.5
November	26.29	26.65	25.86	37.1	48.2	55.9	35.9	45.9	72	29	27	26	68	46	.143	.137	.16	.09	3.6	3.0	3.4
December	26.25	26.55	25.99	27.6	33.9	40.6	24.0	32.3	73	10	22	24	79	71	.113	.125	1.08	.53	5.0	5.3	5.4
Year	26.27	26.65	25.64	46.4	60.8	66.8	44.6	55.6	100	—4	37	37	74	47	.249	.235	15.60	.....	3.9	4.2	4.2

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892.

ABILENE, TEX.

[H = 1,748 feet; h_t = 64 feet; h_r = 53 feet; h_a = 70 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	11.9	S.	48	W.	2	12	2	1	9	19	2	6	8	3	15	10	6	3	1	2	0	....	4	0	16	0	0
February	11.5	N.	54	SW.	2	10	7	2	10	11	3	5	6	4	6	16	7	5	4	0	0	....	0	0	2	1	0
March	14.4	SE.	48	SE.	4	12	4	2	14	12	4	4	10	0	15	8	8	9	6	1	0	....	3	0	4	8	0
April	15.6	SE.	42	SW.	2	11	4	2	19	12	6	3	3	0	15	12	3	5	4	0	1	....	0	1	0	1	0
May	15.6	SE.	66	SW.	6	9	1	4	22	16	3	0	7	0	12	13	6	6	6	0	2	....	0	8	0	7	0
June	12.7	SE.	42	NW.	1	1	1	7	39	9	0	0	3	0	16	12	2	6	6	0	0	....	0	19	0	6	0
July	9.5	SE.	35	S.	0	1	6	6	24	21	1	1	1	1	19	9	3	5	3	0	0	....	0	22	0	3	0
August	5.3	S.	40	SW.	1	1	10	5	23	19	1	1	1	1	8	16	7	11	9	0	0	....	0	12	0	5	0
September	8.4	S.	34	NW.	0	7	2	2	27	18	0	0	3	1	21	7	2	4	4	0	0	....	0	7	0	2	0
October	9.7	SE.	31	S.	0	7	8	2	17	11	2	4	11	0	14	10	7	8	7	0	0	....	0	0	0	2	0
November	11.4	S.	42	NW.	1	12	1	1	4	27	5	1	9	0	15	12	3	5	5	0	0	....	0	0	1	0	0
December	11.0	S.	48	W.	1	17	2	1	5	17	5	1	14	0	9	10	12	8	7	2	0	....	1	0	14	3	0
Year	11.4	SE.	66	.....	20	100	48	35	213	192	32	26	76	10	165	135	66	75	62	5	3	....	8	69	37	38	0

ALBANY, N. Y.

[H = 85 feet; h_t = 84 feet; h_r = 99 feet; h_a = 113 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.8	S.	36	W.	0	15	1	0	2	21	3	3	12	5	4	13	14	15	8	11	0	....	20	0	27	0	0
February	7.1	N.	30	N.	0	13	8	1	5	8	2	7	13	1	6	10	13	10	7	6	0	....	10	0	25	0	1
March	10.1	NW.	42	W.	1	22	1	0	2	4	4	16	13	0	9	11	11	9	6	6	0	....	13	0	30	0	1
April	9.3	NW.	34	SE.	0	8	9	1	2	12	3	11	14	0	8	18	4	4	3	0	0	....	0	0	9	0	2
May	8.3	S.	36	SW.	0	9	2	1	6	19	2	11	11	1	4	11	16	19	15	0	0	....	0	0	0	2	1
June	8.4	S.	28	SE.	0	9	2	0	4	30	6	4	5	0	3	13	14	16	10	0	0	....	0	3	0	10	0
July	6.4	S.	27	S.	0	5	4	0	5	32	2	12	1	1	7	19	5	12	9	0	0	....	0	9	0	11	2
August	6.1	S.	26	W.	0	12	2	0	4	24	5	8	7	0	6	14	11	15	13	0	1	....	0	2	0	7	0
September	6.4	S.	35	SE.	0	7	5	2	8	23	5	4	4	2	17	8	5	9	6	0	0	....	0	0	0	2	0
October	6.7	S.	27	SE.	0	5	1	1	4	16	3	12	19	1	4	17	10	11	4	0	0	....	0	0	0	0	0
November	8.2	NW.	52	SE.	1	7	1	1	6	15	1	7	22	0	4	9	17	9	8	3	0	....	3	0	16	0	0
December	6.7	NW.	30	NW.	0	8	1	0	6	13	6	8	20	0	3	12	16	6	4	3	0	....	13	0	27	0	0
Year	7.5	S.	52	.....	2	120	37	7	54	217	42	103	141	11	75	155	136	135	93	29	1	....	59	14	134	32	7

ALPENA, MICH.

[H = 609 feet; h_t = 61 feet; h_r = 54 feet; h_a = 71 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	9.8	W.	36	W.	0	5	0	0	2	7	12	29	7	0	7	13	11	11	8	10	0	....	21	0	30	0	1
February	9.8	W.	35	E.	0	7	3	9	6	6	3	14	10	0	4	8	17	15	10	15	0	....	18	0	29	0	1
March	9.7	NW.	42	S.	1	8	7	5	6	5	1	14	16	0	12	10	9	7	4	7	0	....	17	0	29	0	1
April	12.4	NW.	45	SW.	2	3	6	6	10	4	5	7	19	0	12	10	8	7	5	1	0	....	0	0	19	1	2
May	10.9	E.	40	E.	1	6	10	17	12	2	3	6	6	0	5	9	17	16	12	0	0	....	0	0	0	1	1
June	8.1	E.	39	W.	0	6	9	13	10	2	6	7	7	0	3	16	11	16	15	0	0	....	0	2	0	4	1
July	8.1	SE.	47	W.	1	3	2	2	24	2	8	8	13	0	9	16	6	13	8	0	0	....	0	1	0	5	3
August	7.3	NW.	27	NW.	0	11	3	5	8	2	11	7	13	2	13	11	7	10	10	0	0	....	0	1	0	4	1
September	8.5	SE.	27	S.	0	2	3	3	14	7	11	13	6	1	13	10	7	9	9	0	0	....	0	1	0	5	1
October	8.9	NW.	40	SE.	1	7	0	4	5	7	11	10	16	2	12	11	8	10	7	2	0	....	0	0	3	1	2
November	10.9	NW.	43	SE.	1	4	6	4	6	8	6	10	15	1	1	5	24	19	11	12	0	....	6	0	23	0	0
December	9.5	W.	30	E.	0	4	0	5	0	4	11	31	7	0	2	10	19	16	7	16	0	....	19	0	30	0	0
Year	9.5	W.	47	.....	7	66	49	73	103	56	88	156	135	6	93	129	144	149	106	63	0	....	81	5	163	21	14

AMARILLO, TEX.

[H = 3,691 feet; h_t = 53 feet; h_r = 46 feet; h_a = 61 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	b15.5	S.	b46	S.	b1	13	3	4	3	17	7	3	13	0	14	12	5	5	2	4	0	....	8	0	26	0	0
February	16.9	S.	60	SW.	8	10	1	5	9	18	11	1	1	2	13	9	7	7	3	0	0	....	0	0	19	0	0
March	18.8	S.	80	W.	7	18	6	5	2	19	2	8	2	0	10	10	11	9	4	4	1	....	4	0	16	1	0
April	21.1	S.	66	S.	17	13	2	1	8	21	11	3	1	0	7	16	7	3	1	0	0	....	0	0	1	0	0
May	17.2	N.	60	S.	12	14	3	4	9	14	5	5	7	1	14	10	7	5	4	0	2	....	0	1	0	3	0
June	19.2	S.	56	SE.	14	5	2	7	10	25	4	2	3	2	16	10	4	7	4	0	1	....	0	10	0	1	0
July	16.7	S.	50	S.	4	6	1	5	13	28	5	3	1	0	14	13	4	11	7	0	0	....	0	18	0	4	0
August	12.7	S.	42	N.	2	5	1	4	13	25	10	2	0	2	17	8	6	10	6	0	0	....	0	8	0	4	0
September	15.4	S.	50	N.	2	7	3	4	6	30	4	3	0	3	15	11	4	4	1	0	0	....	0	9	0	3	0
October	15.3	S.	72	SW.	5	13	3	7	8	17	6	5	3	0	17	7	7	8	6	0	0	....	0	0	0	1	0
November	16.0	S.	58	W.	7	14	2	3	6	17	7	3	8	0	17	9	4	4	2	1	0	....	0	0	9	0	0
December	16.2	N.	50	N.	6	16	0	3	5	14	8	4	11	1	11	9	11	9	6	8	0	....	12	0	26	0	0
Year	16.8	S.	80	.....	85	134	27	52	92	245	80	42	49	11	165	124	77	82	46	17	4	....	24	46	97	17	0

a By eye observations at 8 a. m. and 3 p. m., when there is no self-register at station. *b* For 23 days.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

ASTORIA, OREGON.

[Lat. 46° 57′ N.; long. 124° W.; gravity corr. 0.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	.....	.....	.....	.....	.....	47.9	37.0	42.4	54	32	.....	.....	.....	.....	.....	.....	5.46	1.10	.....	.....	.....
February	.....	.....	.....	.....	.....	49.3	38.8	44.0	58	31	.....	.....	.....	.....	.....	.....	6.69	1.33	.....	.....	.....
March	.....	.....	.....	.....	.....	53.8	42.9	48.4	64	35	.....	.....	.....	.....	.....	.....	3.47	.75	.....	.....	.....
April	.....	.....	.....	.....	.....	53.4	41.4	47.4	67	33	.....	.....	.....	.....	.....	.....	10.27	1.24	.....	.....	.....
May	.....	.....	.....	.....	.....	62.0	47.3	54.6	79	40	.....	.....	.....	.....	.....	.....	3.84	1.32	.....	.....	.....
June	.....	.....	.....	.....	.....	64.9	50.7	57.8	81	44	.....	.....	.....	.....	.....	.....	1.42	.47	.....	.....	.....
July	.....	.....	.....	.....	.....	66.1	54.0	60.0	74	47	.....	.....	.....	.....	.....	.....	2.00	.63	.....	.....	.....
August	.....	.....	.....	.....	.....	68.4	55.8	62.1	77	50	.....	.....	.....	.....	.....	.....	1.29	1.02	.....	.....	.....
September	.....	.....	.....	.....	.....	64.6	52.9	58.8	75	44	.....	.....	.....	.....	.....	.....	4.24	2.10	.....	.....	.....
October	.....	.....	.....	.....	.....	60.2	48.9	54.6	68	41	.....	.....	.....	.....	.....	.....	4.30	1.15	.....	.....	.....
November	.....	.....	.....	.....	.....	51.8	43.5	47.6	60	36	.....	.....	.....	.....	.....	.....	16.78	2.76	.....	.....	.....
December	.....	.....	.....	.....	.....	45.3	37.2	41.2	54	27	.....	.....	.....	.....	.....	.....	10.25	2.45	.....	.....	.....
Year	.....	.....	.....	.....	.....	57.3	45.9	51.6	81	27	.....	.....	.....	.....	.....	.....	70.01	.....	.....	.....	.....

ATLANTA, GA.

[Lat. 33° 45′ N.; long. 84° 23′ W.; gravity corr. —.03.]

January	28.94	29.21	28.28	33.5	40.5	45.7	30.9	38.3	65	17	29	33	84	77	.157	.187	8.93	3.28	5.1	3.7	4.8
February	28.95	29.33	28.55	42.4	50.0	56.0	39.7	47.8	65	26	38	40	87	72	.228	.246	3.44	1.28	4.8	2.9	4.7
March	28.88	29.14	28.32	43.2	52.0	57.3	38.7	48.0	77	17	36	38	78	63	.211	.226	5.71	2.01	5.0	3.6	4.8
April	28.94	29.19	28.54	54.7	62.8	68.8	49.2	59.0	82	32	48	49	79	62	.334	.347	4.75	3.19	5.8	3.5	4.5
May	28.88	29.17	28.60	64.2	72.1	78.0	59.5	68.8	88	45	53	55	70	56	.402	.432	1.37	.41	5.0	4.4	4.8
June	28.88	29.04	28.66	72.0	76.8	85.3	67.0	76.2	93	62	65	65	80	69	.616	.616	4.65	2.59	6.5	5.4	5.2
July	28.97	29.19	28.83	72.7	77.7	84.1	68.6	76.4	94	59	68	68	86	74	.684	.684	3.77	1.06	6.7	7.5	7.3
August	28.89	29.01	28.78	72.5	76.3	83.9	68.5	76.2	91	62	68	67	86	75	.684	.660	6.66	1.56	5.8	6.9	6.3
September	28.96	29.14	28.56	64.6	71.4	78.9	61.1	70.0	85	50	59	59	82	66	.499	.499	2.70	2.37	4.3	1.9	3.7
October	28.93	29.16	28.72	56.1	64.5	71.9	53.3	62.6	82	35	48	48	74	56	.334	.334	.59	.34	3.6	2.0	3.3
November	28.96	29.15	28.62	43.1	51.1	59.0	40.7	49.8	76	24	35	38	73	62	.203	.228	4.41	1.71	4.9	3.7	4.2
December	28.93	29.26	28.56	37.5	44.4	49.6	35.2	42.4	69	13	33	36	84	72	.187	.211	2.89	1.57	4.3	4.3	5.5
Year	28.93	29.33	28.28	54.7	61.6	68.2	51.0	59.6	94	13	48	50	80	67	.378	.389	49.87	.....	5.2	4.2	4.9

ATLANTIC CITY, N. J.

[Lat. 39° 22′ N.; long. 74° 25′ W.; gravity corr. —.01.]

January	30.01	30.57	29.22	31.1	33.6	38.6	26.5	32.6	53	10	26	28	82	80	.137	.150	3.02	.70	5.1	3.9	5.5
February	30.09	30.62	29.29	33.7	35.6	40.5	29.3	34.9	57	10	29	31	82	83	.157	.172	1.43	.46	5.9	4.7	6.4
March	29.96	30.47	29.27	32.7	35.9	41.8	28.3	35.0	55	14	27	30	81	82	.143	.164	3.69	1.09	4.5	4.1	5.9
April	30.04	30.44	29.57	45.3	46.3	53.3	39.7	46.5	76	28	38	39	76	77	.228	.237	3.05	.87	3.8	4.1	5.3
May	29.95	30.36	29.55	56.7	56.7	63.9	50.8	57.4	80	40	49	51	78	84	.347	.373	5.51	1.92	4.5	5.4	5.4
June	29.97	30.27	29.67	67.9	66.8	73.9	62.8	68.4	89	51	64	64	88	91	.595	.595	4.44	2.79	3.5	4.6	4.3
July	30.03	30.45	29.73	70.3	69.4	76.5	64.3	70.4	90	57	64	65	82	86	.595	.616	4.23	1.95	3.9	6.4	4.8
August	29.97	30.14	29.72	73.2	74.3	79.1	68.0	73.6	86	61	67	67	82	79	.660	.660	3.26	1.03	3.5	2.9	4.7
September	30.13	30.36	29.64	64.8	66.8	71.9	59.2	65.6	80	48	57	59	77	76	.465	.499	1.08	.53	3.5	1.6	3.7
October	29.98	30.39	29.58	52.0	55.2	63.1	46.8	55.0	80	33	45	46	77	72	.298	.310	.30	.12	3.2	2.7	3.9
November	30.03	30.40	29.44	42.7	43.4	49.9	38.1	44.0	68	19	37	38	81	81	.219	.228	5.14	2.77	5.8	3.9	5.1
December	30.03	30.56	29.49	29.2	33.0	38.2	25.9	32.0	54	9	24	29	78	84	.125	.157	2.12	1.03	4.6	5.0	5.4
Year	30.02	30.62	29.22	50.0	51.4	57.6	45.0	51.3	90	9	44	46	80	81	.331	.347	37.27	.....	4.3	4.1	5.0

AUBURN, ALA.

[Lat. 32° 40′ N.; long. 85° 30′ W.; gravity corr.—.03.]

January	30.16	30.49	29.46	40.4	43.6	50.8	24.8	37.8	65	13	34	35	75	74	.....	.....	3.13	2.59	5.7	4.4	....
February	30.15	30.43	29.78	49.5	55.1	59.9	35.2	47.6	70	22	42	43	75	66	.....	.....	3.72	1.87	5.1	4.3	....
March	30.09	30.44	29.51	50.8	56.2	61.5	35.0	48.2	76	14	40	44	70	65	.....	.....	7.49	2.02	5.6	4.3	....
April	30.19	30.41	29.78	61.5	66.7	72.8	56.3	64.6	82	30	53	51	74	57	.....	.....	3.01	1.67	5.6	3.9	....
May	30.16	30.35	29.94	68.6	73.3	80.5	61.9	71.2	88	47	60	61	74	63	.....	.....	2.23	.93	3.9	3.4	....
June	30.12	30.31	29.91	76.3	78.9	85.7	69.2	77.5	94	63	69	67	78	70	.....	.....	4.94	2.01	5.3	5.0	....
July	30.20	30.38	30.02	75.5	77.8	83.7	70.6	77.2	92	64	72	72	87	80	.....	.....	5.05	1.16	7.1	7.0	....
August	30.10	30.27	30.00	76.6	78.2	84.4	70.2	77.2	89	60	72	73	85	84	.....	.....	5.13	2.07	5.5	6.7	....
September	30.12	30.34	29.78	69.0	73.2	80.4	63.1	71.6	86	52	63	65	82	78	.....	.....	2.67	1.94	3.8	3.1	....
October	30.16	30.49	29.93	60.2	68.4	74.9	58.8	64.8	83	34	54	56	81	66	.....	.....	.52	.40	3.2	2.9	....
November	30.23	30.44	29.88	49.1	56.4	63.9	42.1	53.0	79	28	41	46	75	70	.....	.....	3.20	.87	4.5	3.8	....
December	30.04	30.50	29.86	44.1	49.7	55.7	38.9	47.3	72	10	40	44	87	81	.....	.....	3.18	2.20	6.8	4.7	....
Year	30.14	30.50	29.46	60.1	64.8	71.2	51.8	61.5	94	10	53	55	79	71	.....	.....	49.17	.....	5.2	4.5	....

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

ASTORIA, OREGON.

[H=41 feet; h_t=39 feet; h_r=56 feet; h_a=60 feet.]

Month.	Wind.													Number of days.												
	By self-registers.					Number of winds, 8 a. m. and 8 p. m.											Precipitation.					Maximum temp.			Electricity.	
	Average hourly velocity.	Prevailing directions.a	Maximum velocity.	Directions at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
	Miles.		Mi.																								
January	.....	E.	....	.....	....	0	4	10	4	2	5	5	1	0	4	6	21	23	18	0	0	....	0	0	1	0	0
February	.....	W.	....	.....	....	1	1	7	0	0	7	9	4	0	9	6	14	17	14	0	0	....	0	0	1	0	0
March	.....	SW.	....	.....	....	1	1	2	1	1	17	4	4	0	3	8	20	21	17	0	0	....	0	0	0	0	1
April	.....	SW.	....	.....	....	0	1	3	0	2	12	7	5	0	4	10	16	26	23	0	0	....	0	0	0	0	0
May	.....	W.	....	.....	....	0	0	0	0	0	7	15	9	0	11	5	15	12	10	0	0	....	0	0	0	0	2
June	.....	NW.	....	.....	....	0	0	0	0	1	10	6	13	0	10	9	11	11	8	0	0	....	0	0	0	0	0
July	.....	W.	....	.....	....	0	0	0	0	0	5	14	12	0	9	11	11	14	9	0	0	....	0	0	0	0	0
August	.....	NW.	....	.....	....	1	0	0	0	2	7	7	14	0	17	6	8	7	3	0	0	....	0	0	0	0	0
September	.....	SW.	....	.....	....	0	0	0	0	4	16	8	2	0	10	5	15	12	9	0	0	....	0	0	0	0	0
October	.....	SW.	....	.....	....	1	1	4	3	1	12	3	5	1	10	8	13	13	10	0	0	....	0	0	0	0	0
November	.....	S.	....	.....	....	0	1	6	4	8	4	4	3	0	2	1	27	24	24	0	0	....	0	0	0	0	0
December	.....	E.	....	.....	....	1	3	15	4	4	0	3	1	0	4	3	24	26	23	3	0	....	0	0	3	1	0
Year	.....	SW.	....	.....	....	5	12	47	16	25	102	85	73	1	93	78	195	206	168	3	0	....	0	0	5	1	3

ATLANTA, GA.

[H=1,131 feet; h_t=92 feet; h_r=85 feet; h_a=123 feet.]

Month.	Average hourly velocity.	Prevailing directions.a	Maximum velocity.	Directions at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	12.9	NE.	42	N.	2	11	18	13	7	4	4	0	4	1	14	5	12	14	12	2	0	....	2	0	18	2	0
February	10.8	E.	48	NW.	2	6	6	15	8	4	2	9	8	0	14	7	8	11	10	0	0	....	0	0	3	0	0
March	10.9	W.	48	NW.	2	1	9	9	3	2	9	18	10	1	15	6	10	12	11	1	0	....	1	0	7	0	0
April	8.4	SE.	48	SW.	2	0	6	11	13	4	7	6	10	3	14	9	7	8	5	0	1	....	0	0	1	2	0
May	5.3	SW.	38	W.	0	2	1	3	10	3	16	12	12	3	13	10	8	9	6	0	0	....	0	0	0	2	0
June	7.4	SE.	36	NW.	0	5	8	9	15	3	8	6	6	0	11	11	8	13	11	0	0	....	0	3	0	6	0
July	7.9	SW.	32	W.	0	1	11	6	3	8	16	14	3	0	2	14	15	12	11	0	0	....	0	5	0	4	0
August	6.8	SW.	35	W.	0	8	12	5	6	7	9	8	7	0	8	8	15	15	14	0	0	....	0	1	0	5	0
September	8.5	NE.	26	NE.	0	3	27	16	0	1	1	2	10	0	15	12	3	5	5	0	0	....	0	0	0	0	0
October	8.4	NW.	24	W.	0	2	16	9	5	1	6	2	20	1	19	9	3	3	2	0	0	....	0	0	0	1	0
November	10.6	NW.	36	SW.	0	2	4	2	8	4	5	10	25	0	15	5	10	10	9	0	0	....	0	0	3	1	0
December	9.5	NW.	36	NW.	0	1	5	4	7	1	3	11	30	0	9	10	12	11	9	1	0	....	2	0	13	0	0
Year	9.0	NW.	48	.....	8	42	123	102	85	42	86	98	145	9	149	106	111	123	105	4	1	....	5	9	45	23	0

ATLANTIC CITY, N. J.

[H=53 feet; h_t=68 feet; h_r=57 feet; h_a=76 feet.]

Month.	Average hourly velocity.	Prevailing directions.a	Maximum velocity.	Directions at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	13.7	NW.	55	NW.	3	10	5	3	4	4	5	13	18	0	11	7	13	11	8	2	0	....	5	0	21	0	0
February	16.2	NE.	40	NW.	2	8	16	7	2	2	4	5	14	0	8	6	15	10	5	1	0	....	4	0	15	0	1
March	15.0	NW.	46	NE.	5	9	8	5	4	2	4	9	21	0	10	8	13	14	12	7	0	....	3	0	19	0	1
April	12.1	SW.	36	SE.	0	5	6	5	6	5	16	2	15	0	10	11	9	10	8	1	0	....	0	0	4	1	0
May	12.1	SW.	34	NW.	0	5	3	6	6	11	17	4	10	0	9	13	9	15	14	0	0	....	0	0	0	3	0
June	11.5	SW.	36	SW.	0	0	7	5	7	8	30	3	0	0	11	14	5	8	5	0	0	....	0	0	0	3	0
July	8.9	SW.	40	SW.	1	5	5	3	4	9	26	3	7	0	7	19	5	7	5	0	0	....	0	1	0	1	1
August	8.6	SW.	26	NW.	0	7	6	10	5	9	14	4	7	0	11	12	8	11	9	0	0	....	0	0	0	4	0
September	10.5	E.	38	SE.	0	4	9	11	7	4	10	8	7	0	14	13	3	6	5	0	0	....	0	0	0	1	0
October	11.4	W.	40	NW.	1	11	1	4	0	2	11	20	13	0	12	17	2	3	3	0	0	....	0	0	0	1	0
November	12.9	NW.	44	W.	2	10	2	3	3	7	10	8	17	0	10	8	12	12	9	0	0	....	0	0	0	0	0
December	10.5	N.	46	NW.	1	20	1	1	1	0	8	11	18	2	11	8	12	10	8	3	0	....	7	0	22	0	0
Year	12.0	SW.	55	.....	15	94	69	63	49	63	155	90	147	2	124	136	106	117	91	14	0	....	19	1	90	14	3

AUBURN, ALA.

[H=830 feet; h_t=4 feet; h_r=2 feet; h_a=8 feet.]

Month.	Average hourly velocity.	Prevailing directions.a	Maximum velocity.	Directions at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	.....	NW.	....	.....	....	1	2	10	1	0	0	6	11	0	12	9	10	9	6	1	0	....	0	0	25	2	...
February	.....	E.	....	.....	....	5	0	17	0	0	0	3	4	0	9	12	8	5	5	0	0	....	0	0	7	1	...
March	.....	NW.	....	.....	....	3	3	7	0	0	1	7	10	0	12	8	11	6	6	0	0	....	0	0	9	1	...
April	.....	E.	....	.....	....	2	2	14	1	0	3	1	7	0	6	20	4	5	5	0	0	....	0	0	0	...	...
May	.....	NW.	....	.....	....	0	0	7	5	1	-2	8	8	0	12	14	5	3	3	0	0	....	0	0	0	...	...
June	.....	SE.	....	.....	....	1	3	5	10	1	1	2	7	0	6	18	6	6	6	0	0	....	0	3	0	...	...
July	.....	E.	....	.....	....	c1	c0	c10	c3	c0	c5	c9	c2	0	4	10	17	18	15	0	0	....	0	2	0	...	...
August	.....	E.	....	.....	....	1	1	14	0	0	1	13	1	0	4	14	13	10	9	0	0	....	0	0	0	2	...
September	.....	E.	....	.....	....	5	1	13	2	0	0	1	7	1	15	11	4	4	4	0	0	....	0	0	0	1	...
October	.....	E.	....	.....	....	4	2	14	1	0	5	0	5	0	13	14	4	3	3	0	0	....	0	0	0	1	...
November	.....	NW.	....	.....	....	d3	d4	d0	d2	d0	d8	d2	d10	d0	13	9	7	6	5	0	0	....	0	0	5	2	...
December	.....	NW.	....	.....	....	1	3	0	4	0	6	0	17	0	7	12	12	5	6	1	0	....	0	0	9	2	...
Year	.....	E.	....	.....	....	27	21	111	29	2	32	52	89	1	113	151	101	80	73	2	0	....	0	5	55	12	...

a By eye observations at 8 a. m. and 8 p. m. when there is no self-register at station. c For 30 days. d For 29 days.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

AUGUSTA, GA.

[Lat. 33° 28′ N.; long. 81° 54′ W.; gravity corr., —.03.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.94	30.31	29.33	38.2	45.5	51.4	34.5	43.0	69	23	32	34	79	68	.180	.195	7.75	2.07	5.6	4.7	5.1
February	29.94	30.37	29.50	44.2	53.5	60.2	41.8	51.0	70	28	38	40	80	63	.228	.246	2.96	1.28	5.7	4.3	4.7
March	29.88	30.20	29.26	46.3	54.8	61.7	43.0	52.4	79	25	40	40	79	60	.246	.246	4.55	2.45	4.6	3.7	4.4
April	29.94	30.22	29.50	57.5	65.4	73.0	52.3	62.6	85	35	50	49	78	58	.360	.347	1.34	.55	5.7	4.5	4.4
May	29.86	30.22	29.54	66.6	74.1	82.5	60.6	71.6	92	47	58	56	74	55	.481	.448	2.95	1.81	3.2	5.7	3.5
June	29.85	30.06	29.62	74.8	78.1	87.4	69.1	78.2	95	65	69	68	83	73	.707	.684	4.83	1.28	5.5	6.4	5.1
July	29.93	30.19	29.78	75.6	79.1	87.3	71.0	79.2	97	64	70	71	84	77	.732	.757	4.13	1.95	5.5	6.9	5.5
August	29.85	29.98	29.72	75.4	79.7	89.1	71.1	80.1	96	68	70	70	84	74	.732	.732	2.46	.72	5.3	6.0	4.8
September	29.93	30.11	29.57	67.8	74.2	82.1	63.7	72.9	90	51	62	62	82	67	.555	.555	5.49	3.22	5.1	4.4	4.4
October	29.91	30.19	29.64	57.4	64.2	74.5	53.3	63.9	85	33	52	54	82	71	.387	.417	.27	.09	3.1	2.9	2.4
November	29.96	30.20	29.62	44.9	54.3	64.4	41.7	53.0	83	23	40	43	85	68	.246	.277	1.32	.58	3.2	3.7	3.3
December	29.93	30.31	29.56	41.4	49.4	57.8	38.6	48.2	76	23	38	42	89	77	.228	.266	1.22	.68	5.6	5.5	5.6
Year	29.91	30.37	29.26	57.5	64.4	72.6	53.4	63.0	97	23	52	52	82	68	.424	.431	39.27	....	4.8	4.9	4.4

BAKER CITY, OREGON.

[Lat. 44° 50′ N.; long. 117° 50′ W.; gravity corr., .0.]

January	26.57	26.95	26.23	16.5	23.6	28.6	12.2	20.4	39	—3	9	13	73	64	.060	.074	.39	.13	4.5	6.4	5.4
February	26.47	26.76	26.16	20.6	30.6	35.3	16.9	26.1	47	—12	14	21	77	69	.077	.108	.78	.22	4.6	5.8	5.2
March	26.39	26.74	26.00	31.5	44.3	48.1	28.8	38.4	61	9	26	31	82	62	.137	.172	1.77	1.00	4.7	5.9	5.4
April	26.41	26.71	26.05	32.5	46.9	49.9	31.1	40.5	60	23	26	28	79	51	.137	.150	1.82	.28	6.8	6.4	6.6
May	26.41	26.80	26.00	41.1	59.6	63.0	39.5	51.2	83	32	34	38	78	49	.195	.228	2.84	.64	4.3	5.9	5.1
June	26.41	26.63	26.21	46.7	67.5	72.3	45.0	58.6	97	27	37	40	70	40	.219	.246	1.24	.60	3.6	5.4	4.5
July	26.48	26.80	26.27	48.8	77.9	80.8	47.2	64.0	100	37	37	43	65	30	.219	.277	.03	.03	1.2	1.6	1.4
August	26.48	26.76	26.19	50.1	79.1	82.3	48.3	65.3	97	40	37	46	62	33	.219	.310	T.	T.	1.1	2.0	1.5
September	26.47	26.70	26.18	45.2	70.9	74.7	43.1	58.9	88	30	35	45	68	42	.203	.298	.76	.10	3.4	3.9	3.6
October	26.52	26.85	26.16	36.6	55.0	62.0	33.8	47.9	83	24	28	39	70	57	.150	.237	.39	.12	3.0	3.9	3.5
November	26.44	26.86	25.84	31.6	40.1	45.5	28.2	36.8	65	15	24	29	72	64	.125	.157	.65	.40	5.8	6.9	6.4
December	26.50	26.80	25.95	25.2	30.5	35.2	22.5	28.8	53	1	20	22	78	71	.103	.113	1.89	.51	6.2	5.4	5.8
Year	26.46	26.95	25.84	35.5	52.2	56.5	33.0	44.7	100	—12	27	33	73	53	.154	.198	12.56	.....	4.1	5.0	4.5

BALTIMORE, MD.

[Lat. 39° 18′ N.; long. 76° 37′ W.; gravity corr., —.01.]

January	29.88	30.45	29.10	29.2	33.5	37.7	25.9	31.8	58	12	23	26	80	77	.119	.137	6.42	1.40	5.6	4.7	5.5
February	29.95	30.53	29.13	32.6	37.4	42.8	30.7	36.8	57	14	26	31	79	78	.137	.172	2.41	.92	6.2	5.9	5.9
March	29.84	30.33	29.12	33.8	38.4	43.7	31.1	37.4	65	20	25	30	73	73	.130	.164	7.20	1.23	5.2	4.4	5.3
April	29.90	30.21	29.48	49.1	53.1	58.9	44.2	51.6	83	32	36	41	64	65	.211	.256	3.15	.64	4.7	5.2	5.2
May	29.80	30.13	29.40	60.4	64.3	72.6	54.3	63.4	87	46	50	53	70	69	.360	.402	6.35	1.85	4.5	5.2	5.0
June	29.80	30.07	29.46	74.3	75.6	84.9	66.9	75.9	94	54	66	68	76	78	.638	.684	4.87	1.60	4.4	4.5	4.7
July	29.88	30.32	29.59	74.4	77.5	85.4	67.3	76.4	99	58	65	67	73	72	.616	.660	4.07	.31	3.5	4.5	4.1
August	29.82	30.00	29.55	73.3	76.9	84.5	67.8	76.2	95	60	65	66	76	71	.616	.638	1.83	.34	4.7	3.1	4.5
September	29.98	30.23	29.55	63.4	67.9	74.8	57.7	66.2	88	49	54	58	72	72	.417	.481	2.36	1.24	3.7	2.6	3.4
October	29.85	30.27	29.43	51.6	56.3	65.5	46.1	55.8	83	34	42	43	72	62	.266	.277	.26	.24	3.8	1.8	3.0
November	29.90	30.27	29.43	41.0	44.0	50.2	37.3	43.8	70	21	35	36	78	73	.203	.211	3.85	1.20	5.3	4.2	5.1
December	29.90	30.42	29.37	30.3	34.4	39.0	27.7	33.4	64	14	24	26	77	72	.125	.137	2.28	1.34	5.6	3.8	4.9
Year	29.88	30.53	29.10	51.1	54.9	61.7	46.4	54.1	99	12	43	45	74	72	.320	.352	45.05	.....	4.8	4.2	4.7

BISMARCK, N. DAK.

[Lat. 46° 47′ N.; long. 100° 38′ W.; gravity corr. .0.]

January	28.24	28.74	27.84	3.5	9.5	15.7	—1.0	7.4	44	—34	0	3	86	76	.038	.045	.29	.12	3.6	3.6	4.0
February	28.24	28.58	27.49	5.4	12.6	21.9	1.0	11.4	48	—26	3	6	90	74	.045	.052	.55	.13	7.0	3.9	5.4
March	28.21	28.83	27.60	19.4	30.0	36.2	16.0	26.4	60	—10	16	23	88	76	.085	.119	.95	.56	4.6	7.3	5.7
April	28.17	28.63	27.59	32.4	42.0	46.3	30.3	38.3	64	16	28	29	86	65	.150	.157	3.23	.90	7.1	7.5	6.8
May	28.18	28.57	27.58	41.1	52.9	55.4	37.2	46.3	76	24	35	34	81	54	.203	.195	1.79	.85	6.7	7.8	6.6
June	28.11	28.51	27.63	54.2	66.5	68.9	49.5	59.2	84	39	49	50	82	59	.347	.360	3.49	1.49	5.9	6.4	6.3
July	28.17	28.49	27.84	62.2	76.3	80.3	56.9	68.6	90	44	56	57	79	53	.448	.465	3.13	1.72	4.0	3.9	3.8
August	28.16	28.47	27.92	58.9	75.5	81.6	55.4	68.5	98	41	54	56	84	54	.417	.448	2.40	1.33	3.9	4.7	3.9
September	28.17	28.45	27.74	49.8	65.6	72.8	47.6	60.2	94	36	45	48	81	56	.298	.334	.66	.37	3.0	5.3	4.4
October	28.19	28.57	27.68	39.8	52.7	61.4	37.1	49.2	86	17	34	36	82	58	.195	.211	.86	.72	3.4	2.8	3.9
November	28.13	28.73	27.61	21.1	26.2	35.2	16.2	25.7	57	—4	18	21	88	78	.093	.108	.66	.30	5.4	6.1	6.0
December	28.21	28.72	27.90	8.0	12.8	20.1	0.7	10.4	42	—20	3	7	80	76	.045	.054	.16	.08	6.4	4.6	6.3
Year	28.18	28.83	27.49	33.0	43.5	49.6	29.0	39.3	98	—34	28	31	84	65	.197	.212	18.17	.....	5.1	5.3	5.2

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

AUGUSTA, GA.

[H=209 feet; h_t=89 feet; h_r=54 feet; h_a=103 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southeast.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	6.1	NE.	29	SW.	0	7	10	2	4	5	9	15	7	3	13	6	12	13	13	1	0	....	0	0	12	1	0
February	5.5	NE.	30	W.	0	7	15	0	8	3	1	13	8	3	13	5	11	8	7	0	0	....	0	0	3	0	0
March	5.4	NE.	30	SW.	0	3	11	8	2	3	10	10	5	10	16	6	9	10	8	0	0	....	0	0	4	0	0
April	5.1	SE.	30	SW.	0	1	13	1	11	7	6	5	9	7	14	8	8	6	4	0	0	....	0	0	0	1	0
May	4.3	SE.	24	SW.	0	1	3	3	17	14	3	9	4	8	18	9	4	7	7	0	0	....	0	4	0	2	0
June	2.6	SE.	24	SW.	0	0	1	5	17	7	3	4	3	20	9	13	8	15	14	0	0	....	0	10	0	8	0
July	3.0	S.	24	NW.	0	0	8	5	14	11	10	5	0	9	10	12	9	11	9	0	0	....	0	11	0	8	0
August	2.9	W.	26	W.	0	3	4	3	8	10	10	9	6	9	12	12	7	13	10	0	0	....	0	13	0	7	0
September	5.4	E.	26	S.	0	4	18	14	6	3	0	3	3	9	16	7	7	7	7	0	0	....	0	0	0	2	0
October	4.1	NE.	40	NW.	1	9	10	9	2	1	1	2	6	22	22	6	3	5	2	0	0	....	0	0	0	0	0
November	4.9	NW.	34	SW.	0	3	3	3	1	6	1	8	9	26	18	7	5	9	8	0	0	....	0	0	7	1	0
December	4.4	NW.	32	NW.	0	6	9	2	5	1	4	8	13	14	11	5	15	11	9	1	0	....	1	0	10	1	0
Year	4.5	NE.	...	.....	1	44	105	55	95	71	58	91	73	140	172	96	98	115	98	2	0	....	1	38	36	31	0

BAKER CITY, OREGON.

[H=3,430 feet; h_t=49 feet; h_r=38 feet; h_a=53 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southeast.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	5.1	SE.	23	SE.	0	1	2	0	27	12	0	0	11	9	10	8	13	10	4	8	0	....	20	0	30	0	0
February	4.2	SE.	20	NW.	0	1	2	0	26	0	3	1	13	12	9	11	9	9	7	4	0	....	8	0	26	0	0
March	4.8	SE.	28	NW.	0	4	0	0	20	4	6	0	18	10	9	11	11	11	8	2	0	....	0	0	21	0	0
April	6.1	NW.	26	NW.	0	4	1	1	15	7	9	0	19	4	7	6	17	16	14	2	0	....	0	0	18	0	0
May	5.5	NW.	26	N.	0	6	0	0	20	6	1	1	22	6	10	11	10	12	11	0	0	....	0	0	1	1	0
June	5.6	NW.	46	S.	1	3	0	0	15	9	4	0	21	8	12	8	10	6	6	0	1	....	0	4	1	2	0
July	5.4	NW.	24	SW.	0	6	1	0	16	11	3	0	19	6	26	3	2	1	0	0	0	....	0	3	0	0	0
August	5.6	NW.	18	SE.	0	3	0	1	12	13	3	1	26	3	25	4	2	0	0	0	0	....	0	4	0	0	0
September	5.3	SE.	24	S.	0	5	0	0	16	14	8	0	14	3	17	5	8	2	2	0	0	....	0	0	1	0	0
October	5.2	SE.	32	SW.	0	2	1	0	18	15	4	0	11	11	19	3	9	8	5	2	0	....	0	0	17	0	0
November	5.9	SE.	32	SE.	0	0	0	0	26	5	4	0	12	13	7	8	15	7	5	3	0	....	2	0	19	0	0
December	5.0	SE.	39	SE.	0	2	0	0	26	12	1	0	15	6	7	13	11	11	9	3	0	....	11	0	28	0	0
Year	5.3	SE.	46	.....	1	37	7	2	237	108	46	3	201	91	158	91	117	93	71	24	1	....	41	11	162	3	0

BALTIMORE, MD.

[H=179 feet; h_t=87 feet; h_r=80 feet; h_a=100 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southeast.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	8.5	NW.	37	E.	0	12	7	2	9	2	5	5	20	0	10	10	11	12	11	4	0	....	9	0	23	0	0
February	9.2	NE.	36	NW.	0	6	22	2	5	3	3	1	15	1	7	10	12	14	7	3	0	....	3	0	12	0	1
March	9.8	NW.	42	NW.	1	12	5	4	7	2	2	2	27	1	13	7	11	13	13	7	0	....	4	0	14	0	0
April	8.9	NW.	35	NW.	0	5	8	2	13	2	9	1	20	0	11	8	11	12	11	0	0	....	0	0	0	1	0
May	8.0	NW.	32	NW.	0	3	3	5	12	7	6	5	17	4	9	16	6	15	12	0	1	....	0	0	0	7	1
June	7.8	SW.	42	SW.	1	0	7	4	10	7	22	6	4	0	8	19	3	13	11	0	1	....	0	5	0	9	0
July	6.0	SW.	36	SW.	0	10	2	4	2	7	12	9	12	4	16	12	3	9	7	0	0	....	0	10	0	5	1
August	6.1	NW.	35	NW.	0	6	9	2	13	3	9	4	13	3	11	16	4	10	8	0	0	....	0	3	0	4	0
September	6.8	SE.	38	NW.	0	3	9	5	16	1	7	4	11	4	19	6	5	9	7	0	0	....	0	0	0	0	0
October	7.4	NW.	36	NW.	0	7	4	0	4	2	11	5	26	3	17	14	0	3	1	0	0	....	0	0	0	0	0
November	9.1	NW.	42	NE.	2	2	5	4	7	2	5	6	26	3	9	14	7	11	8	4	0	....	0	0	6	0	0
December	7.5	NW.	30	NW.	0	10	1	4	1	3	5	10	23	5	13	8	10	8	5	3	0	....	10	0	16	0	0
Year	7.9	NW.	42	.....	4	76	82	38	99	41	96	58	214	28	143	140	83	129	101	21	2	....	26	18	71	26	3

BISMARCK, N. DAK.

[H=1,698 feet; h_t=59 feet; h_r=52 feet; h_a= 69 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southeast.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	9.6	NW.	42	NW.	1	2	2	7	8	0	2	2	30	9	14	12	5	7	3	7	0	....	22	0	31	0	1
February	8.6	NW.	40	NW.	1	6	5	12	9	3	0	1	17	5	10	8	11	11	8	11	0	....	21	0	29	0	3
March	9.2	SE.	72	NW.	3	2	7	13	13	3	3	1	10	10	8	12	11	7	3	5	0	....	12	0	26	0	0
April	15.3	E.	50	NW.	3	3	8	20	12	0	2	0	13	2	5	11	14	11	8	6	0	....	1	0	20	0	0
May	11.4	E.	48	NW.	4	11	7	17	6	3	0	2	14	2	6	9	16	12	8	4	0	....	0	0	8	0	2
June	10.6	NE.	56	N.	4	9	13	11	8	3	4	4	8	0	4	12	14	14	13	0	1	....	0	0	0	9	1
July	9.8	SE.	46	E.	1	4	4	9	17	8	2	0	12	6	14	14	3	8	4	0	2	....	0	2	0	8	3
August	8.4	SE.	36	NW.	0	7	8	9	15	8	0	2	7	6	15	11	5	10	6	0	1	....	0	6	0	7	2
September	8.5	NW.	33	NE.	0	7	5	9	9	8	2	1	13	6	13	9	8	7	5	0	0	....	0	1	0	1	0
October	8.8	NW.	44	NW.	2	7	5	15	6	2	0	3	19	5	19	7	5	4	2	0	0	....	0	0	11	2	1
November	11.0	NW.	50	NW.	2	1	3	14	12	3	1	3	19	4	6	12	12	11	3	6	0	....	11	0	27	0	0
December	6.9	NW.	30	NW.	0	8	1	12	2	1	0	7	26	5	5	16	10	7	1	7	0	....	25	0	31	0	2
Year	9.8	NW.	....	.....	21	67	68	148	117	42	16	26	188	60	119	133	114	109	64	46	4	....	92	9	183	27	15

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

BLOCK ISLAND, R. I.

[Lat. 41° 10′ N.; long. 71° 36′ W.; gravity corr., —.01.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	30.00	30.64	29.24	32.5	33.9	38.5	26.3	32.4	57	3	26	27	78	78	.137	.143	4.19	1.27	6.7	4.6	6.4
February	30.10	30.62	29.09	30.5	33.0	37.0	27.2	32.1	46	10	24	26	78	78	.125	.137	1.35	.56	6.0	5.6	6.2
March	29.91	30.46	29.28	31.0	35.1	38.3	28.3	33.3	49	17	24	28	76	77	.125	.150	4.93	1.26	4.6	3.3	4.4
April	30.02	30.54	29.55	42.7	43.8	50.2	38.2	44.2	65	31	36	38	79	80	.211	.228	2.79	.83	3.8	4.0	5.0
May	29.98	30.41	29.45	51.1	50.6	56.8	46.8	51.8	69	42	46	47	84	88	.310	.322	4.27	.92	5.6	5.1	6.3
June	29.98	30.38	29.62	62.5	61.9	67.1	57.5	62.3	80	50	59	59	89	90	.499	.499	1.43	.56	3.9	5.3	5.6
July	30.03	30.49	29.70	68.0	67.7	74.9	62.4	68.6	88	54	63	63	86	85	.575	.575	2.45	.76	3.8	4.6	4.5
August	29.99	30.21	29.78	68.5	68.9	73.5	64.7	69.1	85	57	64	66	87	90	.595	.638	5.71	2.18	5.2	4.5	4.8
September	30.14	30.41	29.57	62.8	62.9	67.2	58.0	62.6	71	51	56	57	81	83	.448	.465	3.77	1.54	4.3	2.0	3.5
October	29.94	30.43	29.44	53.0	53.9	58.3	48.7	53.5	73	41	46	46	78	78	.310	.310	2.12	.87	4.3	1.9	4.4
November	30.02	30.39	29.57	42.8	43.8	47.6	38.7	43.2	60	22	36	38	79	80	.211	.228	8.31	3.18	6.4	5.0	6.2
December	29.98	30.52	29.42	31.5	33.4	36.9	27.8	32.4	54	9	24	26	72	72	.125	.137	1.74	.46	6.4	4.9	5.8
Year	30.01	30.64	29.09	48.1	49.1	53.9	43.7	48.8	88	3	42	43	81	82	.306	.319	43.06	.....	5.1	4.2	5.3

BOSTON, MASS.

[Lat. 42° 21′ N.; long. 71° 4′ W.; gravity corr., —.01.]

January	29.88	30.56	29.15	27.5	29.5	35.8	20.8	28.3	63	1	20	20	75	71	.103	.103	4.62	1.26	6.5	6.0	6.0
February	30.00	30.61	28.89	26.2	29.6	33.8	23.0	28.4	46	5	20	23	78	78	.103	.119	2.15	1.13	5.6	5.3	5.8
March	29.78	30.34	29.10	30.1	33.9	39.7	26.1	32.9	56	14	18	21	63	61	.093	.108	3.91	1.35	4.5	4.1	3.9
April	29.88	30.40	29.34	46.8	48.1	57.4	39.3	48.4	77	27	31	30	55	53	.172	.164	.93	.43	4.7	4.3	4.0
May	29.85	30.30	29.35	53.7	55.6	63.1	48.7	55.9	78	39	43	43	70	67	.277	.277	5.15	1.19	7.0	6.4	6.5
June	29.84	30.29	29.46	67.7	69.2	78.1	61.0	69.6	96	49	57	58	71	69	.465	.481	3.05	.99	6.5	7.0	5.9
July	29.90	30.38	29.52	72.3	73.1	81.3	64.6	73.0	96	54	59	60	64	64	.499	.517	2.56	.95	3.6	4.7	3.6
August	29.88	30.13	29.66	68.1	70.0	76.7	63.6	70.2	94	55	61	62	79	77	.536	.555	4.87	2.29	6.9	5.1	5.3
September	30.02	30.30	29.39	59.5	62.7	70.8	54.2	62.5	80	46	51	53	75	72	.373	.402	1.90	1.29	4.4	2.7	3.1
October	29.80	30.32	29.36	49.7	52.8	60.0	45.4	52.7	78	36	40	40	71	64	.246	.246	2.31	1.75	5.0	4.7	4.5
November	29.91	30.32	29.37	39.2	41.4	47.1	35.2	41.2	66	20	33	33	77	71	.187	.187	4.45	1.65	6.6	6.3	6.1
December	29.84	30.38	29.27	27.3	30.6	36.3	23.5	29.9	48	0	19	21	70	66	.098	.108	1.12	.61	5.8	4.1	4.5
Year	29.88	30.61	28.89	47.3	49.7	56.7	42.1	49.4	96	0	38	39	71	68	.263	.272	37.02	.....	5.6	5.1	4.9

BUFFALO, N. Y.

[Lat. 42° 53′ N.; long. 78° 53′ W.; gravity corr., .0.]

January	29.24	29.77	28.61	22.8	24.6	28.8	17.1	23.0	54	—2	18	18	83	76	.093	.093	4.47	.99	8.7	7.7	7.6
February	29.34	29.91	28.49	26.5	30.0	34.3	22.1	28.2	47	4	22	23	83	75	.113	.119	3.66	1.13	7.2	7.1	7.0
March	29.26	29.73	28.56	26.7	29.5	34.3	22.3	28.3	59	10	21	22	80	74	.108	.113	1.74	.42	6.5	6.1	6.5
April	29.31	29.79	28.94	39.7	42.7	49.1	33.5	41.3	68	23	31	28	72	60	.172	.150	1.16	.29	5.4	5.4	5.1
May	29.20	29.63	28.81	51.6	53.1	60.3	44.6	52.4	88	36	44	44	78	75	.287	.287	7.35	1.55	6.9	5.9	7.3
June	29.21	29.43	28.77	65.4	66.0	73.4	59.5	66.4	82	53	50	58	80	76	.499	.481	9.52	2.67	6.1	5.4	6.2
July	29.32	29.81	28.96	68.7	70.7	77.7	62.0	69.8	84	50	59	60	73	70	.499	.517	2.98	1.57	3.4	4.5	4.3
August	29.27	29.46	28.98	68.1	70.5	77.3	62.2	69.8	84	52	60	60	75	70	.517	.517	4.42	1.25	4.4	5.7	5.0
September	29.36	29.63	28.70	60.5	64.2	69.9	54.4	62.2	80	43	50	53	71	67	.360	.402	2.27	.70	4.9	2.4	3.9
October	29.26	29.68	28.60	48.2	52.7	56.9	43.7	50.3	71	34	40	41	74	67	.246	.256	2.10	.57	6.4	5.8	6.2
November	29.28	29.69	28.76	37.2	37.6	41.9	31.3	36.6	61	18	31	29	78	72	.172	.157	3.95	1.14	9.6	7.7	8.5
December	29.29	29.74	28.73	26.2	28.3	32.3	21.7	27.0	56	0	22	22	85	74	.113	.113	2.24	.45	9.3	7.1	7.8
Year	29.28	29.91	28.49	45.1	47.5	53.0	39.5	46.3	88	—2	38	38	78	71	.265	.267	45.87	.....	6.6	5.9	6.3

FORT BUFORD, N. DAK.

[Lat. 48° 0′ N.; long. 103° 56′ W.; gravity corr., +.01.]

January	28.00	28.54	27.51	3.4	10.8	18.6	—2.3	8.2	46	—40	—3	4	76	75	.033	.047	.14	.05	3.9	4.1	4.7
February	27.99	28.36	27.22	7.0	15.7	24.2	2.2	13.2	45	—24	3	10	82	78	.045	.063	.38	.12	5.9	5.3	6.0
March	27.97	28.56	27.34	19.1	33.2	39.7	16.8	28.2	58	— 7	13	23	78	68	.074	.119	.38	.19	4.4	5.2	6.1
April	27.96	28.43	27.63	31.8	43.9	48.4	29.3	38.8	66	10	26	33	81	68	.137	.187	2.85	1.53	6.1	6.1	6.8
May	27.99	28.41	27.38	40.8	53.9	57.7	36.6	47.2	85	21	34	34	79	53	.195	.195	.48	.12	6.6	6.5	6.7
June	27.90	28.30	27.42	52.5	67.7	71.1	47.6	59.4	88	39	46	45	79	47	.310	.298	2.41	.86	4.8	5.4	5.7
July	27.93	28.21	27.55	60.5	78.6	83.4	56.0	69.7	100	43	53	49	78	38	.402	.347	4.49	3.51	3.9	2.5	3.4
August	27.93	28.28	27.60	57.3	76.2	82.2	53.4	67.8	100	41	49	49	76	43	.347	.347	.62	.36	3.6	4.4	4.5
September	27.98	28.25	27.56	46.6	66.0	74.6	45.2	59.9	93	33	41	43	81	46	.256	.277	.11	.06	5.1	4.7	5.1
October	27.98	28.37	27.48	37.0	52.4	62.8	34.6	48.7	85	19	30	35	77	54	.164	.203	.15	.07	5.2	4.8	5.3
November	27.90	28.42	27.41	20.6	27.5	35.1	15.7	25.4	62	—12	15	21	78	77	.081	.108	1.12	.50	7.2	6.4	6.5
December	28.00	28.52	27.61	6.4	9.8	17.6	—2.4	7.6	37	—25	1	4	77	77	.040	.047	1.33	.32	7.2	6.8	7.0
Year	27.96	28.56	27.22	31.9	44.6	51.3	27.7	39.5	100	—40	26	29	78	60	.174	.186	14.26	.....	5.3	5.2	5.6

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

BLOCK ISLAND, R. I.

[H = 27 feet; h_t = 39 feet; h_r = 3 feet; h_a = 48 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	20.8	NW.	65	NE.	10	9	10	2	2	3	11	7	18	0	5	13	13	10	9	4	0	....	6	0	23	0	1
February	20.5	NE.	64	NE.	7	8	18	5	4	0	2	6	15	0	7	7	15	8	7	1	0	....	5	0	17	0	1
March	21.7	NW.	77	NE.	9	5	11	1	1	2	8	9	24	1	15	8	8	12	12	6	0	....	5	0	18	0	4
April	16.2	SW.	54	NE.	4	0	6	2	1	1	24	5	21	0	10	12	8	10	7	0	0	....	0	0	1	0	4
May	16.0	SW.	58	E.	4	2	4	4	9	4	25	1	12	1	7	11	13	15	10	0	0	....	0	0	0	0	0
June	15.6	SW.	46	NE.	1	0	5	5	6	7	25	10	2	0	9	13	8	8	6	0	0	....	0	0	0	0	0
July	12.9	SW.	44	SW.	1	1	7	2	2	1	23	13	12	1	11	16	4	11	9	0	0	....	0	0	0	0	1
August	12.3	SW.	48	NE.	2	2	12	4	5	2	18	9	8	2	14	8	9	8	7	0	0	....	0	0	0	1	0
September	13.4	SW.	48	SW.	3	0	7	2	7	3	23	5	12	1	19	5	6	9	8	0	0	....	0	0	0	0	1
October	15.8	NW.	42	NE.	1	4	9	1	2	2	12	7	23	2	15	12	4	6	5	0	0	....	0	0	0	1	0
November	19.7	NW.	70	NE.	7	4	7	7	5	2	9	6	20	0	9	9	12	13	13	1	0	....	0	0	5	0	0
December	17.3	NW.	50	NW.	6	5	8	3	1	0	2	8	35	0	10	11	10	10	8	4	0	....	8	0	18	0	0
Year	16.8	NW.	77	.....	55	40	104	38	45	27	182	86	202	8	131	125	110	120	101	16	0	....	24	0	82	2	12

BOSTON, MASS.

[H = 126 feet; h_t = 115 feet; h_r = 154 feet; h_a = 182 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	13.3	NW.	40	NE.	1	7	1	1	2	8	13	12	18	0	10	9	12	16	12	6	0	....	11	0	26	0	1
February	11.7	NW.	32	W.	0	10	11	6	1	0	1	14	15	0	10	5	14	10	6	3	0	....	8	0	22	0	1
March	15.9	W.	48	W.	5	9	5	2	3	3	5	24	11	0	17	7	7	11	9	5	0	....	4	0	22	0	1
April	12.5	W.	36	SW.	0	5	2	3	2	6	11	23	8	0	14	10	6	7	6	0	0	...	0	0	3	0	3
May	12.4	W.	42	E.	1	5	7	6	5	7	9	15	8	0	6	11	14	14	13	0	0	....	0	0	0	1	1
June	12.0	SW.	38	NE.	0	3	6	6	4	10	12	16	3	0	7	10	13	10	8	0	0	....	0	5	0	3	0
July	9.6	SW.	34	SW.	0	1	5	1	4	6	18	13	13	1	15	13	3	11	9	0	0	....	0	6	0	2	4
August	10.0	SW.	36	NE.	0	3	8	7	3	6	13	7	10	0	9	12	10	8	7	0	0	....	0	2	0	3	0
September	10.7	SW.	36	W.	0	5	0	3	4	9	18	13	8	0	21	3	6	8	4	0	0	....	0	0	0	1	0
October	11.1	W.	31	NW.	0	3	4	0	2	2	13	23	15	0	15	7	9	7	6	0	0	....	0	0	0	0	0
November	12.6	W.	42	SE.	1	10	5	2	4	6	7	18	8	0	8	9	13	12	11	4	0	....	0	0	12	0	0
December	12.0	W.	35	W.	0	4	1	2	1	1	9	27	17	0	13	11	7	9	6	4	0	....	7	0	27	0	1
Year	12.0	W.	48	.....	8	70	55	39	35	64	129	205	134	1	145	107	114	123	97	22	0	....	30	13	112	10	12

BUFFALO, N. Y.

[H = 690 feet; h_t = 103 feet; h_r = 93 feet; h_a = 108 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	13.6	SW.	55	SW.	6	2	5	3	5	2	21	15	9	0	0	15	16	22	15	21	0	....	17	0	30	0	0
February	10.0	NE.	42	SW.	3	1	20	6	8	1	4	12	6	0	2	15	12	16	13	11	0	....	11	0	26	1	1
March	11.7	NW.	43	SW.	2	5	11	2	4	1	12	10	16	1	3	15	13	17	12	13	0	....	13	0	28	0	2
April	11.6	SW.	42	SW.	2	2	11	2	5	5	18	5	11	1	7	17	6	9	7	2	0	....	0	0	16	2	2
May	9.3	SW.	44	SW.	1	3	10	7	7	4	19	8	4	0	4	9	18	19	16	0	0	....	0	0	0	2	3
June	9.4	SW.	42	SW.	1	3	12	3	1	5	27	4	4	1	5	16	9	15	13	0	0	....	0	0	0	9	0
July	8.5	SW.	46	SW.	1	4	9	0	2	3	32	5	7	0	12	18	1	9	6	0	1	....	0	0	0	3	5
August	8.4	SW.	34	SW.	0	5	12	3	4	5	19	5	8	1	9	15	7	14	10	0	0	....	0	0	0	3	0
September	10.7	SW.	48	SW.	2	2	6	3	14	11	11	4	8	1	11	16	3	11	10	0	0	....	0	0	0	5	0
October	11.2	NW.	42	SW.	1	4	6	1	3	6	13	10	19	0	5	14	12	15	9	0	0	....	0	0	0	2	0
November	12.3	NW.	50	SW.	4	2	12	6	3	6	7	3	21	0	0	8	22	19	12	9	0	....	3	0	20	1	0
December	13.7	NW.	49	SW.	3	2	1	3	8	2	12	7	27	0	0	14	17	18	11	11	0	....	13	0	27	1	0
Year	10.9	SW.	....	.....	26	35	115	39	64	51	195	88	140	5	58	172	136	184	134	67	1	....	57	0	147	29	13

FORT BUFORD, N. DAK.

[H = 1,899 feet; h_t = 17 feet; h_r = 2 feet; h_a = 27 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	8.0	W.	38	W.	0	3	4	4	1	7	9	21	9	4	10	14	7	6	2	6	0	....	21	0	31	0	1
February	7.2	NE.	40	W.	1	2	15	12	1	3	3	8	10	4	8	9	12	9	3	9	0	....	19	0	29	0	2
March	8.8	NE.	48	NW.	1	4	19	9	4	7	4	6	6	3	10	4	17	3	3	3	0	....	9	0	26	0	2
April	12.0	NE.	40	NW.	1	6	19	11	6	0	1	7	7	3	4	11	15	11	6	3	2	....	1	0	21	0	2
May	10.4	NW.	42	NW.	2	4	13	10	4	3	0	10	17	1	6	11	14	9	7	7	1	....	1	0	10	0	0
June	8.6	W.	46	NE.	1	9	11	7	9	3	1	11	9	0	10	10	10	6	6	0	0	....	0	0	0	5	0
July	8.3	NE.	44	E.	1	2	14	12	10	1	2	8	13	0	19	9	3	10	7	0	1	....	0	6	0	6	2
August	7.3	E.	42	N.	1	6	12	13	5	1	3	9	10	3	13	12	6	8	3	0	0	....	0	8	0	4	3
September	7.2	W.	32	NW.	0	5	6	11	3	7	5	14	5	4	11	9	10	3	2	0	0	....	0	1	0	1	2
October	7.9	W.	34	W.	0	5	9	7	3	6	4	14	8	6	12	7	12	4	2	1	0	....	0	0	15	1	3
November	10.0	W.	44	N.	3	1	6	11	2	11	5	22	1	1	7	8	15	5	4	5	0	....	13	0	27	0	0
December	6.9	W.	36	W.	0	3	10	0	0	7	8	18	11	5	3	13	15	16	9	16	0	....	26	0	31	0	4
Year	8.6	W.	48	.....	11	50	138	107	48	56	45	148	106	34	113	117	136	90	54	50	4	....	90	15	190	17	21

a By eye observations at 6 a. m. and 6 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

CAIRO, ILL.

[Lat. 37° 0′ N.; long. 89° 10′ W.; gravity corr., —.02.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.81	30.17	29.25	24.7	31.8	37.4	21.2	29.3	62	0	18	23	78	71	.093	.119	2.01	.67	4.5	3.9	4.2
February	29.73	30.21	29.11	40.1	46.4	51.7	37.4	44.6	67	24	35	36	82	70	.203	.211	3.32	.86	6.6	6.1	6.7
March	29.70	30.06	29.22	39.3	46.9	51.5	36.6	44.0	79	20	34	34	83	65	.195	.195	2.29	.94	6.2	5.6	5.8
April	29.67	29.95	29.24	54.7	60.5	65.2	51.2	58.2	80	34	46	48	74	66	.310	.334	5.28	1.48	5.1	6.0	5.6
May	29.57	29.84	29.24	62.5	68.2	73.0	58.9	66.0	83	46	55	57	78	68	.432	.465	5.55	1.37	7.0	7.2	6.2
June	29.59	29.75	29.44	73.5	78.5	84.6	68.8	76.7	93	58	68	68	82	70	.684	.684	3.55	.72	4.5	4.6	4.7
July	29.70	29.94	29.49	73.5	79.5	84.7	68.7	76.7	94	60	67	70	81	74	.660	.732	1.73	.68	5.3	5.5	5.8
August	29.65	29.89	29.43	71.9	78.0	84.5	67.9	76.2	93	57	67	71	85	80	.660	.757	5.23	2.80	4.8	3.7	4.9
September	29.73	29.91	29.39	64.2	73.0	80.2	59.7	70.0	88	49	59	65	83	78	.499	.616	.90	.83	3.1	2.5	3.2
October	29.73	30.00	29.42	53.9	62.8	69.9	50.0	60.0	85	31	48	56	81	78	.334	.448	.74	.26	3.2	2.7	3.4
November	29.76	30.12	29.15	40.2	46.5	52.4	36.1	44.2	64	21	35	40	83	79	.203	.246	4.20	.93	4.8	4.9	5.2
December	29.76	30.20	29.21	33.6	38.1	42.7	29.4	36.0	71	6	30	33	85	82	.164	.187	3.91	1.70	7.6	6.1	6.9
Year	29.70	30.21	29.11	52.7	59.2	64.8	48.8	56.8	94	0	47	50	81	73	.370	.416	38.71	.....	5.2	4.9	5.2

FORT CANBY, WASH.

[Lat. 46° 16′ N.; long. 124° 4′ W.; gravity corr., 0.]

January	29.91	30.23	29.24	42.1	44.4	47.3	38.1	42.7	57	33	41	42	95	93	.256	.266	4.80	1.02	6.4	8.1	7.5
February	29.85	30.17	29.51	42.6	46.6	48.5	39.4	44.0	59	34	41	44	94	91	.256	.287	4.89	1.65	5.3	4.9	6.6
March	29.80	30.19	29.28	45.5	48.5	52.4	42.7	47.6	63	35	45	46	97	96	.298	.310	4.19	.81	6.4	7.6	7.2
April	29.81	30.22	29.18	44.9	48.1	52.6	41.9	47.2	64	36	43	44	94	87	.287	.287	8.32	1.31	8.1	7.1	7.0
May	29.82	30.28	29.37	49.6	54.5	58.2	47.1	52.6	78	43	48	50	94	86	.334	.360	2.94	.99	6.4	5.3	5.6
June	29.86	30.09	29.66	52.8	57.6	60.7	50.3	55.5	76	44	50	53	90	84	.360	.402	1.30	.26	.5	5.5	6.1
July	29.92	30.22	29.73	55.4	60.1	62.8	53.3	58.0	68	49	53	55	93	84	.402	.432	1.98	.42	7.8	6.0	6.4
August	29.88	30.14	29.65	56.4	60.2	63.4	54.3	58.8	77	52	54	56	94	83	.417	.448	1.26	.59	6.3	4.1	5.6
September	29.79	30.10	29.26	54.4	57.7	61.1	52.0	56.6	75	47	53	55	97	90	.402	.432	4.00	2.24	4.4	4.1	7.5
October	29.82	30.12	29.38	52.2	56.3	59.1	49.3	54.2	73	43	50	52	94	86	.360	.387	3.81	.65	6.0	4.6	5.9
November	29.73	30.29	28.71	47.5	49.0	51.7	43.7	47.7	61	34	45	47	92	92	.298	.322	15.71	2.45	7.5	8.2	8.6
December	29.89	30.36	28.91	42.1	43.2	47.1	38.0	42.6	53	29	41	42	94	95	.256	.266	9.72	1.50	6.6	8.3	8.5
Year	29.84	30.36	28.71	48.8	52.2	55.4	45.8	50.6	78	29	47	49	94	89	.326	.350	62.92	.....	6.6	6.2	6.9

CAPE HENRY, VA.

[Lat. 36° 56′ N.; long. 76° 00′ W.; gravity corr., —.02.]

January	.....	.....	.....	.....	.....	48.3	34.0	41.2	72	20	.....	.....	.....	.....	.....	.....	3.59	.82	.....	.....	.....
February	.....	.....	.....	.....	.....	50.1	34.5	42.3	64	20	.....	.....	.....	.....	.....	.....	3.66	.62	.....	.....	.....
March	.....	.....	.....	.....	.....	51.3	35.0	43.2	70	23	.....	.....	.....	.....	.....	.....	3.38	.80	.....	.....	.....
April	.....	.....	.....	.....	.....	63.0	46.2	54.6	83	35	.....	.....	.....	.....	.....	.....	7.61	2.60	.....	.....	.....
May	.....	.....	.....	.....	.....	75.2	57.0	66.1	87	46	.....	.....	.....	.....	.....	.....	4.34	1.62	.....	.....	.....
June	.....	.....	.....	.....	.....	82.3	68.5	75.4	93	61	.....	.....	.....	.....	.....	.....	4.83	.94	.....	.....	.....
July	.....	.....	.....	.....	.....	81.9	68.8	75.4	98	59	.....	.....	.....	.....	.....	.....	5.87	1.14	.....	.....	.....
August	.....	.....	.....	.....	.....	84.5	70.9	77.7	94	66	.....	.....	.....	.....	.....	.....	7.81	3.94	.....	.....	.....
September	.....	.....	.....	.....	.....	75.5	65.0	70.2	84	54	.....	.....	.....	.....	.....	.....	1.40	.72	.....	.....	.....
October	.....	.....	.....	.....	.....	67.9	52.0	60.0	83	37	.....	.....	.....	.....	.....	.....	.89	.51	.....	.....	.....
November	.....	.....	.....	.....	.....	56.9	42.0	49.4	78	25	.....	.....	.....	.....	.....	.....	2.77	.99	.....	.....	.....
December	.....	.....	.....	.....	.....	46.1	34.0	40.0	73	19	.....	.....	.....	.....	.....	.....	3.29	1.40	.....	.....	.....
Year	.....	.....	.....	.....	.....	65.2	50.7	58.0	98	19	.....	.....	.....	.....	.....	.....	49.44	.....	.....	.....	.....

CARSON CITY, NEV.

[Lat. 39° 8′ N.; long. 119° 47′ W.; gravity corr., —.02.]

January	25.38	25.70	24.96	28.0	39.7	44.9	24.3	34.6	58	17	22	24	80	56	.113	.125	.20	.10	2.8	3.8	4.6
February	25.27	25.51	24.93	29.6	46.8	49.5	26.5	38.0	66	2	24	27	79	50	.125	.143	1.61	1.00	4.8	4.0	4.8
March	25.24	25.61	24.90	35.2	54.1	57.0	31.8	44.4	73	22	26	24	70	35	.137	.125	1.25	.51	4.2	4.9	4.4
April	25.26	25.55	24.94	41.2	59.1	60.6	35.7	48.2	73	25	23	26	52	29	.110	.137	.55	.26	4.2	3.3	3.3
May	25.28	25.63	24.86	41.9	66.3	60.5	39.0	54.2	86	24	31	28	64	26	.172	.150	.50	.40	3.6	3.8	3.7
June	25.28	25.45	25.04	49.7	70.4	73.8	46.1	60.0	90	31	35	31	58	26	.203	.172	1.44	1.39	1.6	2.5	2.1
July	25.32	25.52	25.19	54.8	80.8	82.2	50.8	66.5	90	42	34	32	46	18	.195	.180	.00	.00	.9	.8	.5
August	25.31	25.48	25.08	56.2	82.1	84.5	52.0	68.2	90	42	34	34	45	18	.195	.195	.02	.01	.5	2.2	1.3
September	25.30	25.47	25.09	52.6	75.6	78.6	47.1	62.8	87	36	31	28	45	18	.172	.150	.31	.31	1.7	1.5	1.4
October	25.33	25.56	24.99	39.5	58.8	62.9	33.9	48.4	80	23	26	26	59	30	.137	.137	.25	.19	2.4	2.6	3.0
November	25.32	25.59	24.77	35.2	53.6	57.9	28.1	43.0	72	18	18	23	49	33	.093	.119	5.97	1.99	1.4	4.3	2.7
December	25.35	25.66	25.03	28.3	37.3	43.2	22.2	32.7	60	7	18	20	63	47	.093	.103	2.75	1.37	3.4	4.2	4.4
Year	25.30	25.70	24.77	41.0	60.4	63.7	36.5	50.1	90	2	27	27	59	32	.146	.145	14.85	.....	2.6	3.2	3.0

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

CAIRO, ILL.

[H = 359 feet; h_t = 87 feet; h_r = 78 feet; h_a = 93 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	9.6	NW.	38	S.	0	15	1	2	7	7	6	6	17	1	15	6	10	7	6	7	0	....	10	0	25	0	0
February	9.4	NW.	38	SE.	0	10	10	3	5	10	1	8	11	0	5	10	14	12	11	0	0	....	0	0	5	0	0
March	11.2	NW.	54	W.	3	7	8	5	8	6	4	6	18	0	9	10	12	12	9	5	0	....	2	0	10	0	0
April	10.5	SE.	48	SE.	2	10	6	6	11	9	2	7	7	2	9	9	12	12	11	0	0	....	0	0	0	5	0
May	10.5	S.	48	W.	4	4	7	3	8	18	9	7	5	1	6	14	11	15	12	0	0	....	0	0	0	6	0
June	6.4	S.	38	W.	0	4	0	1	16	19	8	6	5	1	8	19	3	14	9	0	0	....	0	5	0	12	0
July	6.4	S.	36	NW.	0	11	8	1	3	16	15	1	5	2	6	17	8	9	7	0	0	....	0	7	0	2	0
August	6.1	S.	38	W.	0	13	8	3	4	15	10	2	6	1	9	17	5	14	7	0	0	....	0	2	0	5	0
September	5.1	S.	26	NW.	0	7	3	3	8	16	4	5	7	7	16	10	4	3	2	0	0	....	0	0	0	0	0
October	6.4	S.	24	SW.	0	11	2	4	8	16	6	4	9	2	17	9	5	6	5	0	0	....	0	0	1	0	0
November	8.3	N.	54	SW.	1	9	1	6	7	7	9	7	9	5	13	5	12	14	10	2	0	....	0	0	8	0	0
December	7.8	SE.	45	SW.	1	7	5	6	12	4	8	6	8	6	7	6	18	13	7	2	0	....	6	0	16	0	0
Year	8.1	S.	....	.....	11	108	59	43	97	143	82	65	107	28	120	132	114	131	96	16	0	....	18	14	65	30	0

FORT CANBY, WASH.

[H = 179 feet; h_t = 10 feet; h_r = 2 feet; h_a = 34 feet.]

Month.	Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	13.1	SE.	69	SE.	8	9	2	8	23	5	2	1	7	5	5	6	20	23	14	0	0	....	0	0	0	0	0
February	8.9	SE.	60	S.	3	5	1	2	18	7	1	8	7	9	8	8	13	15	13	0	0	....	0	0	0	0	0
March	11.7	S.	60	S.	5	9	1	1	14	19	5	3	10	0	5	10	16	22	17	0	0	....	0	0	0	0	0
April	15.0	S.	82	S.	10	7	0	5	7	17	0	8	15	1	3	10	17	25	24	0	0	....	0	0	0	0	0
May	10.3	N.	60	S.	3	19	1	7	1	8	2	9	13	2	12	7	12	14	10	0	0	....	0	0	0	0	0
June	8.3	N.	40	S.	1	14	1	1	4	14	2	8	13	3	9	9	12	12	10	0	0	....	0	0	0	0	0
July	8.1	NW.	50	S.	1	16	2	1	0	11	1	4	23	4	5	11	15	12	10	0	0	....	0	0	0	0	0
August	8.8	N.	56	S.	1	34	1	0	3	7	0	0	11	6	9	13	9	11	8	0	0	....	0	0	0	0	0
September	11.4	S.	60	S.	6	11	1	0	5	26	2	2	4	9	6	4	20	10	8	0	0	....	0	0	0	1	0
October	10.6	S.	72	S.	4	15	1	3	13	15	5	2	6	2	11	6	14	13	13	0	0	....	0	0	0	0	0
November	18.4	SE.	72	SE.	13	3	0	0	25	16	2	2	11	1	2	3	25	24	23	1	5	....	0	0	0	1	0
December	14.9	SE.	67	SE.	10	8	2	16	18	10	0	4	2	2	1	8	22	26	24	1	0	....	0	0	3	1	0
Year	11.6	S.	....	.....	65	150	13	44	131	155	22	51	122	44	76	95	195	207	174	2	5	....	0	0	3	3	0

CAPE HENRY, VA.

[H = .. feet; h_t = 5 feet; h_r = 5.6 feet; h_a = 34 feet.]

Month.	Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	15.8	W.	....	.....	....	4	2	3	2	5	4	6	5	0	10	6	15	15	14	1	0	....	2	0	14	0	0
February	15.3	NE.	....	.....	....	6	8	1	1	0	6	3	4	0	9	4	16	13	11	0	0	....	1	0	9	0	1
March	15.3	N.	....	.....	....	13	2	1	1	2	4	2	6	0	8	2	21	14	12	0	0	....	0	0	11	0	0
April	14.3	S.	....	.....	....	2	4	3	5	6	6	0	3	1	13	9	8	13	13	0	0	....	0	0	0	2	0
May	12.8	SW.	....	.....	....	1	2	2	4	9	10	2	1	0	17	9	5	10	9	0	1	....	0	0	0	4	0
June	11.6	SW.	....	.....	....	1	2	0	3	10	13	1	0	0	12	11	7	12	9	0	0	....	0	3	0	6	0
July	10.4	SW.	....	.....	....	1	2	3	2	6	15	0	1	1	15	9	7	14	12	0	0	....	0	6	0	7	0
August	8.2	SE.	....	.....	....	1	1	5	8	7	5	0	4	0	14	10	7	11	11	0	0	....	0	3	0	6	0
September	13.1	NE.	....	.....	....	1	8	7	7	2	3	1	1	0	17	7	6	6	5	0	0	....	0	0	0	1	0
October	13.6	NE.	....	.....	....	4	7	1	2	5	4	4	4	0	23	2	6	4	2	0	0	....	0	0	0	1	0
November	16.1	NW.	....	.....	....	0	1	1	3	4	6	1	14	0	14	7	9	9	7	0	0	....	0	0	4	3	0
December	15.2	NW.	....	.....	....	6	0	4	5	0	4	2	10	0	14	6	11	7	7	2	0	....	4	0	13	0	0
Year	13.5	SW.	....	.....	....	40	39	31	43	56	80	22	53	2	186	82	118	128	112	3	1	....	7	12	51	30	1

CARSON CITY, NEV.

[H = 4,720 feet; h_t = 47 feet; h_r = 42 feet.]

Month.	Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	16	5	10	3	2	2	0	....	1	0	26	0	0
February	....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	13	4	12	7	4	5	0	....	1	0	19	0	0
March	....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	16	6	9	10	6	3	1	....	0	0	16	0	0
April	....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	18	5	7	8	5	4	1	....	0	0	11	0	0
May	....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	14	12	5	5	2	1	1	....	0	0	5	1	0
June	....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	22	5	3	4	2	0	0	....	0	0	1	0	0
July	....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	31	0	0	0	0	0	0	....	0	0	0	0	0
August	....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	27	3	1	2	0	0	0	....	0	0	0	2	0
September	....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	27	3	0	1	1	0	0	....	0	0	0	2	0
October	....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	20	7	4	4	1	1	0	....	0	0	14	1	0
November	....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	24	3	3	6	6	5	0	....	0	0	24	0	0
December	....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	17	2	12	10	4	4	0	....	0	0	23	0	0
Year	....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	245	55	66	60	33	26	3	....	2	0	139	6	0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

CHARLESTON, S. C.

[Lat. 32° 47′ N.; long. 79° 56′ W.; gravity corr., —.03.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	30.10	30.43	29.46	44.0	48.5	55.6	39.9	47.8	68	29	37	40	77	74	.219	.246	4.00	1.44	4.5	4.8	5.4
February	30.09	30.52	29.59	47.9	52.7	60.6	45.3	53.0	73	32	41	45	77	76	.256	.298	1.54	.68	6.1	5.1	5.7
March	30.03	30.35	29.43	50.5	54.1	62.5	47.2	54.8	76	28	41	44	72	70	.256	.287	2.84	1.26	4.3	3.8	4.7
April	30.10	30.37	29.70	61.5	62.5	71.0	56.8	63.9	80	42	53	54	75	77	.402	.417	.51	.20	5.0	5.9	5.5
May	30.03	30.35	29.67	71.1	70.6	78.8	65.2	72.0	89	53	61	62	70	77	.536	.555	3.03	1.18	3.8	2.9	3.6
June	30.02	30.23	29.79	76.0	75.9	83.6	71.6	77.6	94	67	70	71	83	84	.732	.757	10.32	2.71	7.3	5.9	6.6
July	30.10	30.30	29.94	78.3	77.9	86.9	73.4	80.2	95	65	72	72	81	83	.783	.783	10.33	3.68	5.9	5.9	5.8
August	30.01	30.14	29.88	78.7	79.1	88.5	74.5	81.5	94	70	72	72	80	80	.783	.783	4.73	2.13	3.8	5.2	5.6
September	30.06	30.22	29.77	72.2	74.4	80.2	69.0	74.6	89	63	67	69	84	82	.660	.707	11.77	2.72	5.9	5.2	6.2
October	30.05	30.33	29.78	62.5	65.5	73.8	58.8	66.3	84	41	57	58	82	78	.465	.481	.75	.34	4.3	2.9	3.7
November	30.11	30.37	29.80	52.6	57.2	65.0	48.9	57.0	82	29	43	47	71	71	.277	.322	.98	.74	3.7	3.2	3.4
December	30.08	30.46	29.69	48.3	52.5	59.4	45.2	52.3	76	25	44	45	84	78	.287	.298	2.52	.68	5.5	5.2	5.4
Year	30.06	30.52	29.43	62.0	64.2	72.2	58.0	65.1	95	25	55	57	78	78	.471	.494	53.32	.....	5.0	4.7	5.1

CHARLOTTE, N. C.

[Lat. 35° 13′ N.; long. 80° 51′ W.; gravity corr., —.02.]

January	29.27	29.71	28.59	33.0	39.8	46.1	30.2	38.2	64	18	26	30	78	71	.137	.164	7.66	1.31	6.2	3.5	5.5
February	29.30	29.78	28.75	38.9	46.9	54.3	36.9	45.6	68	20	35	40	85	78	.203	.246	3.36	1.24	4.2	4.7	4.3
March	29.21	29.61	28.55	41.5	49.8	56.4	38.7	47.6	71	21	36	42	82	75	.211	.266	4.05	1.14	5.3	4.5	5.3
April	29.30	29.64	28.82	51.8	59.7	65.5	47.9	56.7	78	31	45	47	80	66	.298	.322	3.50	1.16	4.6	4.9	5.5
May	29.22	29.59	28.90	63.1	70.5	78.6	57.9	68.2	89	44	55	54	76	57	.432	.417	2.28	.80	3.7	5.8	4.3
June	29.24	29.47	28.95	71.8	75.1	86.0	66.6	76.3	96	60	66	66	83	75	.638	.638	5.51	1.32	5.5	6.8	5.7
July	29.32	29.61	29.15	72.5	76.0	85.5	68.0	76.8	97	58	67	68	84	76	.660	.684	5.89	1.46	4.8	5.5	5.4
August	29.24	29.39	29.08	72.8	77.7	88.0	67.8	77.9	92	62	67	67	83	70	.660	.660	2.31	1.35	4.6	4.8	5.0
September	29.34	29.56	28.91	63.9	70.3	79.7	59.6	69.6	89	49	57	57	80	64	.465	.465	2.27	1.07	3.2	2.8	3.9
October	29.28	29.55	29.01	53.4	61.0	70.7	49.7	60.2	83	34	44	45	72	57	.287	.298	.23	.18	2.6	2.1	3.0
November	29.30	29.57	28.91	41.7	50.2	58.6	39.0	48.8	79	20	34	36	75	59	.195	.211	2.99	.94	4.5	3.8	3.7
December	29.28	29.72	28.82	36.4	43.4	50.5	33.7	42.1	69	18	30	32	78	66	.164	.180	2.68	1.15	4.7	4.6	4.3
Year	29.28	29.78	28.55	53.4	60.0	68.3	49.7	59.0	97	18	47	49	80	68	.362	.379	42.73	.....	4.5	4.5	4.7

CHATTANOOGA, TENN.

[Lat. 35° 4′ N.; long. 85° 15′ W.; gravity corr., —.03.]

January	29.33	29.65	28.65	32.4	39.0	44.2	29.9	37.0	66	12	26	28	78	70	.137	.150	7.39	1.94	6.6	4.7	5.6
February	29.32	29.74	28.87	41.1	50.2	56.3	39.0	47.6	68	23	34	37	79	62	.195	.219	3.61	.91	6.2	5.0	6.0
March	29.26	29.53	28.65	41.4	50.9	56.8	38.9	47.8	81	20	33	36	75	62	.187	.211	3.35	1.03	6.1	5.4	6.2
April	29.30	29.54	28.80	54.9	62.5	68.8	51.4	60.1	83	34	46	48	72	60	.319	.334	8.28	2.96	6.5	6.7	5.8
May	29.23	29.50	28.98	62.6	69.8	79.0	57.4	68.2	90	44	54	56	76	64	.417	.448	3.29	1.25	6.8	6.5	5.9
June	29.23	29.40	29.01	71.9	76.8	87.8	66.6	77.2	95	61	66	67	81	73	.638	.660	8.32	2.90	5.9	5.9	5.2
July	29.32	29.55	29.20	73.0	77.2	86.8	69.0	77.9	94	62	68	70	86	79	.684	.732	6.40	1.40	6.8	6.7	6.2
August	29.25	29.36	29.15	71.0	75.9	84.4	67.8	76.1	91	62	66	68	86	78	.638	.684	5.61	.78	6.8	5.9	6.0
September	29.33	29.52	28.85	62.8	70.1	79.9	59.3	69.6	87	49	58	62	86	75	.481	.555	5.42	2.00	4.2	2.9	3.9
October	29.31	29.59	29.07	53.2	62.1	72.5	50.2	61.4	85	31	48	51	83	68	.334	.373	.20	.12	4.6	2.3	4.3
November	29.34	29.60	28.90	42.0	49.6	56.6	39.5	48.0	74	22	36	39	80	69	.211	.237	6.32	1.36	5.6	4.2	5.2
December	29.33	29.68	28.95	35.5	42.1	47.5	33.3	40.4	66	12	34	37	92	82	.195	.219	4.49	1.51	6.5	5.1	6.3
Year	29.30	29.74	28.65	53.5	60.5	68.4	50.2	59.3	95	12	47	50	81	70	.369	.402	62.68	.....	6.0	5.1	5.6

CHEBOYGAN, MICH.

[Lat. 45° 39′ N.; long. 84° 29′ W.; gravity corr., 0.]

January	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	29.29	29.86	28.74	48.1	49.8	56.4	41.5	49.0	72	33	40	42	76	74	.246	.266	3.31	.82	7.0	6.3	6.0
June	29.29	29.61	28.81	56.1	60.2	68.0	51.0	59.5	88	43	53	53	85	78	.402	.402	4.44	1.69	6.1	5.4	5.7
July	29.40	29.89	29.08	65.7	67.8	76.8	56.7	66.8	92	46	58	58	77	74	.481	.481	3.69	1.30	4.5	3.8	3.9
August	29.38	29.66	29.04	63.8	66.3	73.4	55.7	64.6	87	44	57	58	79	74	.465	.481	3.03	.97	4.5	4.2	4.5
September	29.41	29.76	28.99	55.7	58.2	66.9	49.1	58.0	88	35	50	52	83	78	.360	.387	2.32	.97	4.2	4.0	4.4
October	29.36	29.81	28.56	44.3	45.7	52.4	39.3	45.8	70	31	39	39	83	77	.237	.237	1.39	.60	6.5	4.3	5.5
November	29.36	29.84	28.42	30.4	32.2	35.0	26.8	30.9	51	15	29	28	82	82	.157	.150	2.44	.80	8.6	9.4	8.9
December	29.35	29.71	28.59	21.8	23.5	25.8	18.5	22.2	36	— 3	16	19	78	82	.085	.098	1.74	.46	8.7	8.7	8.3
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

CHARLESTON, S. C.

[H=52 feet; h_t=60 feet; h_r=55 feet; h_a=72 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	9.9	W.	34	SW.	0	13	11	2	0	5	13	16	2	0	10	8	13	12	11	0	0	....	0	0	5	0	0
February	9.8	SW.	28	NW.	0	9	13	5	1	2	14	7	7	0	9	11	9	10	8	0	0	....	0	0	1	0	0
March	9.5	SW.	34	W.	0	6	10	7	2	3	13	12	9	0	14	9	8	7	5	0	0	....	0	0	1	1	0
April	10.0	SW.	34	S.	0	9	10	8	0	10	18	2	3	0	5	18	7	7	4	0	0	....	0	0	0	2	0
May	10.0	SW.	31	SW.	0	2	2	7	8	11	22	6	4	0	15	13	3	6	5	0	0	....	0	0	0	5	0
June	9.1	SW.	31	SW.	0	0	7	8	8	12	20	4	1	0	2	20	8	20	17	0	0	....	0	3	0	8	0
July	8.2	SW.	26	NE.	0	2	7	7	2	7	30	6	1	0	5	19	7	16	13	0	0	....	0	8	0	20	0
August	7.3	SW.	30	NW.	0	2	7	9	0	8	18	10	8	0	1	27	3	10	8	0	0	....	0	9	0	25	0
September	9.7	NE.	42	E.	1	1	34	10	5	2	4	2	2	0	2	19	9	12	11	0	0	....	0	0	0	11	0
October	7.9	NE.	27	NE.	0	7	25	6	2	2	8	4	8	0	16	11	4	5	4	0	0	....	0	0	0	1	0
November	7.2	W.	30	SW.	0	11	7	6	3	6	10	12	5	0	14	13	3	6	5	0	0	....	0	0	2	2	0
December	7.3	NE.	34	SE.	0	11	16	6	0	4	9	8	8	0	9	13	9	9	9	0	0	....	1	0	5	1	0
Year	8.8	SW.	42	SW.	1	73	149	81	31	72	179	89	58	0	102	181	83	120	100	0	0	....	1	20	14	76	0

CHARLOTTE, N. C.

[H=773 feet; h_t=52 feet; h_r=56 feet; h_a=68 feet.]

Month.	Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	8.1	NE.	32	SW.	0	4	18	6	2	3	17	5	5	2	12	6	13	12	12	3	0	....	1	0	18	0	0
February	9.3	NE.	32	N.	0	4	23	3	1	8	10	2	6	1	16	3	10	10	10	0	0	....	0	0	7	0	1
March	8.3	E.	49	SW.	1	3	8	13	3	9	11	6	9	0	12	8	11	11	10	1	0	....	1	0	8	2	0
April	8.5	SW.	34	SW.	0	2	13	8	4	9	14	6	4	0	11	7	12	11	10	0	0	....	0	0	1	5	0
May	7.8	SW.	24	S.	0	3	5	4	8	12	20	3	6	1	15	8	8	9	7	0	0	....	0	0	0	6	0
June	5.7	S.	27	SE.	0	2	5	7	6	20	12	5	2	1	10	9	11	14	12	0	0	....	0	10	0	13	0
July	5.7	SW.	34	SE.	0	2	9	7	7	11	18	6	2	0	12	9	10	14	13	0	0	....	0	12	0	6	0
August	4.4	NE.	24	SE.	0	5	9	7	8	7	9	8	7	2	9	14	8	6	5	0	0	....	0	8	0	3	0
September	5.8	NE.	23	SW.	0	1	33	10	3	2	4	2	3	2	17	6	7	7	6	0	0	....	0	0	0	0	0
October	6.2	NE.	24	NW.	0	5	13	7	0	9	13	3	9	3	19	8	4	3	2	0	0	....	0	0	0	0	0
November	7.1	NW.	28	S.	0	2	8	3	3	10	13	5	16	0	16	7	7	10	7	0	0	....	0	0	7	3	0
December	6.1	NE.	24	NE.	0	3	19	7	5	7	10	4	5	2	15	8	8	10	8	1	0	....	1	0	13	1	0
Year	6.9	NE.	49	SW.	1	36	163	82	50	107	151	55	74	14	164	93	109	117	102	5	0	....	3	30	54	39	1

CHATTANOOGA, TENN.

[H=783 feet; h_t=71 feet; h_r=60 feet; h_a=76 feet.]

Month.	Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.7	NW.	32	SE.	0	6	13	3	3	2	5	12	16	2	11	5	15	13	12	4	0	....	4	0	19	1	0
February	6.0	NE.	28	NW.	0	9	11	1	6	10	2	7	10	2	4	17	8	10	9	0	0	....	0	0	4	2	0
March	6.7	NE.	30	NW.	0	7	17	2	3	4	4	9	15	1	9	8	14	13	11	2	1	....	1	0	8	1	0
April	7.5	SE.	35	W.	0	4	9	0	13	11	7	5	9	2	7	11	12	12	11	0	1	....	0	0	0	8	0
May	5.4	W.	30	NE.	0	4	8	3	8	5	11	15	6	2	4	23	4	14	8	0	1	....	0	0	0	14	0
June	3.9	W.	27	S.	0	4	5	6	9	7	9	11	6	3	8	16	6	16	11	0	0	....	0	10	0	20	0
July	4.0	W.	26	N.	0	3	13	9	1	5	10	19	1	1	2	22	7	17	12	0	0	....	0	11	0	16	0
August	4.0	NE.	23	N.	0	9	17	5	3	1	6	14	6	1	5	17	9	17	15	0	0	....	0	1	0	10	0
September	3.4	N.	19	W.	0	10	9	9	6	4	2	6	7	7	13	14	3	6	6	0	0	....	0	0	0	4	0
October	3.9	NW.	17	SW.	0	8	11	2	3	10	3	8	12	5	12	14	5	3	3	0	0	....	0	0	2	1	0
November	5.1	NE.	28	SW.	0	9	15	2	2	11	2	9	8	2	12	8	10	12	11	0	0	....	0	0	6	2	0
December	4.9	NE.	20	SW.	0	9	16	2	4	6	2	8	15	0	6	11	14	11	8	0	0	....	3	0	14	0	0
Year	5.1	NE.	35	W.	0	82	144	44	61	76	63	123	111	28	93	166	107	144	117	6	3	....	8	22	53	79	0

CHEBOYGAN, MICH.

[H=591 feet; h_t=45 feet; h_r=38 feet; h_a=55 feet.]

Month.	Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
February	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
March	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
April	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
May	9.0	N.	36	E.	0	14	10	8	6	7	4	3	9	1	6	12	13	15	10	0	1	....	0	0	0	1	0
June	8.3	N.	30	NE.	0	12	11	6	2	9	9	4	7	0	10	9	11	11	10	0	0	....	0	0	0	0	0
July	7.2	SW.	38	NW.	0	10	2	3	2	14	15	2	12	2	14	13	4	11	10	0	0	....	0	1	0	1	2
August	6.1	S.	33	SW.	0	13	3	5	6	13	10	6	6	0	13	9	9	12	12	0	0	....	0	0	0	5	0
September	6.7	S.	30	SW.	0	4	3	5	8	20	7	5	7	1	12	10	8	7	7	0	0	....	0	0	0	3	0
October	8.1	S.	48	NW.	1	10	3	2	6	20	6	7	7	1	8	10	13	9	7	2	0	....	0	0	3	0	2
November	10.3	S.	38	NE.	0	6	5	1	12	13	10	6	7	0	1	5	24	15	10	11	0	....	12	0	22	0	0
December	8.7	SW.	30	SW.	0	2	4	2	8	12	26	6	2	0	1	7	23	21	13	19	0	....	22	0	29	0	0
Year	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

CHEYENNE, WYO.

[Lat. 41° 8′ N.; long. 104° 48′ W.; gravity corr., —.01.]

Month.	Pressure.			Temperature.							Moisture.											
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	23.95	24.33	23.66	20.5	26.5	34.6	14.1	24.4	62	—29	9	12	67	60	.060	.070	.99	.28	3.7	3.7	4.0
February	23.93	24.24	23.54	25.6	32.8	38.8	21.9	30.4	54	9	17	21	73	65	.089	.108	1.17	.46	4.1	4.2	4.6
March	23.90	24.19	23.46	25.9	35.1	41.9	22.4	32.2	63	—12	19	19	77	59	.098	.098	.62	.14	5.7	4.9	5.4
April	23.91	24.26	23.42	32.6	45.2	50.1	29.7	39.9	71	18	24	22	74	49	.125	.113	1.21	.43	6.3	5.9	6.1
May	23.98	24.33	23.71	39.3	51.6	55.5	36.4	46.0	76	25	34	32	83	55	.195	.180	3.46	.86	6.3	5.8	6.4
June	24.02	24.26	23.68	50.2	67.2	71.6	46.8	59.2	86	33	45	45	82	51	.298	.298	2.01	1.40	3.5	4.6	4.5
July	24.14	24.32	23.91	58.4	73.3	80.2	54.1	67.2	93	45	51	46	78	44	.373	.310	.90	.36	3.4	5.3	4.9
August	24.14	24.37	23.87	54.6	74.8	81.1	50.8	66.0	93	30	47	48	76	43	.322	.334	.60	.20	2.1	4.4	3.9
September	24.14	24.27	23.88	49.0	69.7	76.9	45.5	61.2	85	28	40	38	72	36	.246	.228	.22	.20	2.4	4.5	4.1
October	24.07	24.36	23.52	36.7	49.2	56.6	33.7	45.2	83	22	27	24	69	42	.143	.125	1.12	.79	3.2	3.3	3.5
November	23.97	24.26	23.38	32.6	38.1	47.4	26.9	37.2	64	15	24	17	68	44	.125	.089	.31	.19	4.0	2.6	3.5
December	23.92	24.14	23.68	21.8	26.1	34.6	15.7	25.2	58	—17	14	13	71	58	.074	.074	.89	.32	4.6	4.1	4.4
Year	24.01	24.37	23.38	37.3	49.1	55.8	33.2	44.5	93	—29	29	28	74	50	.179	.169	13.50	.....	4.1	4.4	4.6

CHICAGO, ILL.

[Lat. 41° 53′ N.; long. 87° 37′ W.; gravity corr., —.01.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	29.20	29.63	28.41	17.1	20.8	25.6	13.4	19.5	55	—5	12	16	81	84	.070	.085	1.99	.57	6.6	6.2	5.6
February	29.20	29.72	28.50	28.0	31.9	35.0	25.3	30.2	49	2	25	27	88	82	.130	.143	1.57	.42	7.2	6.6	7.3
March	29.17	29.66	28.41	28.7	32.5	36.5	25.4	31.0	53	5	23	24	79	72	.119	.125	2.21	.59	6.6	5.8	5.8
April	29.15	29.56	28.53	42.2	45.8	50.4	37.5	44.0	78	23	31	36	67	69	.172	.211	2.17	.70	6.8	6.7	6.3
May	29.02	29.48	28.28	51.5	53.2	58.7	46.0	52.4	76	37	45	46	81	78	.298	.310	6.77	1.66	6.4	6.9	6.8
June	29.06	29.33	28.74	62.6	65.5	71.8	57.0	64.4	91	43	58	59	86	82	.481	.499	10.58	3.11	5.1	4.9	7.2
July	29.20	29.62	28.78	69.5	72.6	78.0	65.1	71.6	94	53	60	61	74	69	.517	.536	2.23	1.41	4.9	5.1	4.4
August	29.15	29.32	28.90	69.2	72.3	75.9	65.9	70.9	93	50	60	62	74	70	.517	.555	1.85	.61	4.3	5.2	4.5
September	29.21	29.43	28.79	59.8	65.9	71.0	65.8	63.9	88	46	52	53	75	66	.387	.402	1.34	.82	4.8	2.8	4.0
October	29.18	29.45	28.61	49.4	55.3	60.9	46.4	53.6	80	32	40	41	71	61	.246	.256	1.54	.78	5.5	3.3	4.3
November	29.17	29.57	28.14	32.6	35.7	40.3	29.1	34.7	58	12	28	28	82	73	.150	.150	2.68	1.43	8.0	6.4	6.6
December	29.20	29.64	28.48	22.0	24.2	29.1	17.8	23.4	57	—10	19	19	87	79	.098	.098	1.63	.86	6.4	6.1	6.6
Year	29.16	29.72	28.14	44.4	48.0	52.8	40.5	46.6	94	—10	38	39	79	74	.265	.281	36.56	.....	6.0	5.5	5.8

CINCINNATI, OHIO.

[Lat. 39° 6′ N.; long. 84° 30′ W.; gravity corr., —.02.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	29.45	29.87	28.90	22.9	29.5	32.4	19.7	26.0	56	2	17	23	80	78	.089	.119	1.62	.47	4.6	5.3	7.1
February	29.44	29.96	28.82	35.6	41.1	45.6	32.0	38.8	65	15	30	33	81	74	.164	.187	2.33	.67	7.3	6.0	7.6
March	29.40	29.82	28.79	34.1	41.4	45.7	30.6	38.2	68	13	28	32	78	72	.150	.180	1.96	.53	5.8	5.4	6.3
April	29.40	29.73	29.02	48.2	56.7	61.1	44.1	52.6	80	30	39	43	72	63	.237	.277	5.66	1.78	4.8	5.5	5.6
May	29.29	29.64	28.82	59.4	65.1	70.4	54.3	62.4	87	41	50	53	72	67	.360	.402	3.95	1.04	6.0	5.6	6.3
June	29.30	29.47	29.03	72.2	77.6	83.7	67.0	75.4	94	58	64	64	77	64	.595	.595	3.81	.96	4.0	5.1	5.8
July	29.43	29.78	29.16	71.2	79.0	85.1	66.7	75.9	98	54	64	65	80	63	.595	.616	1.43	.77	3.8	4.5	6.2
August	29.36	29.51	29.19	70.1	79.1	84.3	66.0	75.2	93	56	63	63	79	59	.575	.575	3.03	1.07	4.6	3.6	5.0
September	29.46	29.65	28.85	61.1	72.3	77.9	57.6	67.8	86	48	56	58	84	63	.448	.481	3.78	2.02	3.5	2.5	4.2
October	29.44	29.73	29.01	48.5	61.6	65.7	46.0	55.8	84	31	41	44	77	54	.256	.287	.40	.17	3.5	3.7	5.2
November	29.44	29.82	28.81	37.0	43.2	47.1	33.1	40.1	66	19	33	34	85	70	.187	.195	2.26	.54	6.2	5.5	6.6
December	29.46	29.92	28.85	29.2	35.2	38.1	25.1	31.6	67	2	26	30	88	82	.137	.164	1.22	.68	6.0	5.1	7.1
Year	29.41	29.96	28.79	49.1	56.8	61.4	45.2	53.3	98	2	43	45	79	67	.316	.340	31.95	.....	5.0	4.8	6.1

CLEVELAND, OHIO.

[Lat. 41° 30′ N.; long. 81° 42′ W.; gravity corr., —.01]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	29.25	29.73	28.64	22.0	25.5	29.4	17.8	23.6	54	—7	17	17	83	72	.089	.089	2.52	.73	8.5	8.0	6.3
February	29.30	29.87	28.56	29.6	32.6	37.3	25.8	31.6	56	10	25	27	83	81	.130	.143	3.10	.71	8.0	5.7	6.6
March	29.25	29.72	28.62	29.4	32.3	36.6	25.5	31.0	60	12	23	24	78	72	.119	.125	3.17	1.23	6.6	6.0	6.0
April	29.28	29.70	28.95	43.3	47.9	53.1	38.6	45.8	78	25	36	37	75	67	.211	.219	3.02	.79	4.9	5.8	4.8
May	29.15	29.55	28.70	54.1	57.9	63.4	48.3	55.8	86	38	50	50	87	78	.360	.360	6.81	1.70	8.2	6.7	6.2
June	29.16	29.33	28.76	69.5	71.1	78.0	63.6	70.8	88	56	62	62	79	74	.555	.555	5.51	1.17	6.4	6.6	6.0
July	29.30	29.72	28.95	70.5	73.5	78.9	62.9	70.9	95	50	62	61	74	67	.565	.536	3.44	1.28	3.4	3.3	4.3
August	29.24	29.41	29.00	69.0	72.8	78.3	63.3	70.8	92	54	62	63	78	72	.555	.575	2.96	1.41	5.6	4.1	4.7
September	29.33	29.56	28.64	59.8	65.9	72.1	55.8	64.0	84	45	54	57	80	74	.417	.465	2.53	.78	3.7	2.5	3.8
October	29.26	29.61	28.67	49.4	53.8	59.9	45.1	52.5	79	36	42	45	78	72	.266	.298	1.08	.37	6.0	5.4	5.7
November	29.26	29.62	28.63	37.3	38.4	43.7	33.8	38.8	68	20	31	32	78	79	.172	.180	2.29	.85	8.2	6.7	8.3
December	29.29	29.76	28.70	26.1	29.5	33.8	23.3	28.6	66	4	21	24	80	78	.108	.125	1.08	.33	9.3	7.9	8.1
Year	29.26	29.88	28.57	46.7	50.1	55.4	42.0	48.7	95	—7	40	42	79	74	.295	.306	36.51	.....	6.6	5.7	5.9

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

CHEYENNE, WYO.

[H=6.105 feet; h_t=58 feet; h_r=50 feet; h_a=60 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	10.5	NW.	48	W.	3	7	1	1	0	4	9	16	20	4	13	14	4	8	6	8	0	0	12	0	27	0	0
February	9.4	NW.	44	W.	1	6	0	1	4	9	5	9	18	6	10	15	4	5	4	5	0	0	8	0	26	0	0
March	9.4	NW.	48	NW.	2	7	0	0	1	13	3	6	14	18	8	15	8	9	7	8	0	0	8	0	27	0	0
April	11.5	N.	58	NW.	3	13	5	0	1	8	2	12	12	7	3	20	7	11	6	10	0	0	2	0	19	0	0
May	8.5	NW.	35	SE.	0	10	7	2	7	7	2	4	11	12	6	13	12	12	11	5	0	0	0	0	9	0	0
June	10.0	NW.	48	NW.	2	4	7	3	2	12	6	5	18	3	10	17	3	7	6	1	0	0	0	0	0	1	0
July	7.3	NW.	38	NW.	0	7	3	2	7	9	4	2	15	13	7	21	3	7	5	0	0	0	0	2	0	4	0
August	6.4	NW.	30	W.	0	7	4	6	2	7	8	5	19	4	14	15	2	6	5	0	0	0	0	7	1	3	0
September	6.5	NW.	34	W.	0	6	3	2	3	8	5	10	19	4	11	16	3	3	2	0	0	0	0	0	1	0	0
October	8.0	NW.	38	S.	0	5	2	1	1	9	2	3	29	10	14	13	4	4	3	4	0	0	0	0	16	0	0
November	12.4	W.	52	SW.	5	4	0	0	0	0	14	19	16	7	13	15	2	5	2	5	0	0	0	0	22	0	0
December	10.7	NW.	56	W.	2	7	0	0	0	2	3	10	29	11	11	15	5	8	4	8	0	0	15	0	29	0	0
Year	9.2	NW.	56	W.	18	83	32	18	28	88	63	101	220	99	120	189	57	85	61	54	0	0	45	9	177	8	0

CHICAGO, ILL.

[H=824 feet; h_t=241 feet; h_r=238 feet; h_a=274 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	19.5	NW.	60	NW.	7	5	2	0	2	7	14	15	17	0	8	12	11	10	6	9	0	....	23	0	30	0	0
February	16.7	NE.	55	SW.	2	5	11	5	6	5	6	7	13	0	4	8	17	14	12	5	0	....	6	0	24	0	1
March	19.2	NE.	57	SW.	11	9	9	2	11	4	6	5	16	0	7	13	11	14	7	9	1	....	10	0	23	0	0
April	22.2	NE.	65	N.	11	5	9	5	12	4	11	5	9	0	7	11	12	11	8	1	0	....	0	0	3	4	0
May	18.0	NE.	60	SW.	6	5	14	3	13	3	10	8	6	0	6	9	16	17	15	0	0	....	0	0	0	5	0
June	13.2	NE.	72	NW.	4	10	11	3	10	5	9	7	5	0	2	12	16	19	16	0	0	....	0	2	0	12	0
July	13.6	NE.	45	SW.	2	8	14	2	10	5	17	5	0	1	11	15	5	9	6	0	0	....	0	5	0	2	2
August	13.8	NE.	40	S.	1	8	16	8	8	8	9	2	3	0	14	11	6	8	8	0	0	....	0	2	0	3	0
September	15.4	SW.	40	SW.	1	6	2	1	14	2	24	4	7	0	15	10	5	10	6	0	0	....	0	0	0	3	0
October	17.0	SW.	58	NW.	3	9	5	0	8	7	16	6	11	0	12	12	7	6	6	0	0	....	0	0	0	1	0
November	17.8	NW.	55	SW.	8	2	7	2	10	9	7	8	15	0	6	11	13	12	9	1	0	....	5	0	21	0	0
December	15.7	SW.	50	SW.	3	2	5	1	10	2	16	12	14	0	5	12	14	11	5	6	0	....	16	0	29	1	0
Year	16.8	SW.	72	NW.	59	74	105	32	114	61	145	84	116	1	97	136	133	141	104	31	1	....	60	9	130	31	3

CINCINNATI, OHIO.

[H=628 feet; h_t=153 feet; h_r=145 feet; h_a=157 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	7.4	NW.	32	S.	0	3	7	7	5	7	11	2	16	4	4	10	17	12	9	10	0	....	17	0	28	0	0
February	6.9	NW.	32	NW.	0	1	10	3	6	4	6	2	16	10	3	10	16	13	9	4	0	....	1	0	10	0	1
March	7.4	NW.	32	W.	0	8	6	5	2	5	6	4	13	13	4	16	11	13	12	5	0	....	5	0	16	1	0
April	6.8	NW.	32	NW.	0	1	9	6	6	4	5	3	17	9	8	14	8	14	9	9	0	....	0	0	3	0	0
May	6.3	Calm. S.	34	S.	0	3	3	7	7	9	10	3	11	9	5	14	12	22	15	0	0	....	0	0	0	8	0
June	6.0	Calm. SW.	26	W.	0	0	2	3	3	7	9	2	4	30	6	17	7	14	11	0	0	....	0	4	0	7	0
July	6.0	Calm. SW.	42	NW.	1	2	0	5	2	3	2	2	5	41	4	19	8	6	6	0	0	....	0	9	0	3	1
August	5.7	Calm. NW.	25	NW.	0	4	7	6	4	9	2	2	8	20	10	17	4	8	7	0	0	....	0	2	0	4	0
September	5.4	SE.	36	NW.	0	4	7	10	9	9	7	1	8	5	14	8	8	7	6	0	0	....	0	0	0	6	0
October	6.3	NW.	27	NW.	0	2	14	8	11	3	6	2	14	2	11	10	10	4	3	0	0	....	0	0	1	1	0
November	8.7	NW.	42	SW.	1	3	5	5	12	7	9	2	17	0	8	9	13	13	11	2	0	....	1	0	17	0	0
December	7.1	NE.	32	S.	0	6	13	6	9	8	7	4	8	1	6	7	18	9	5	4	0	....	11	0	23	0	0
Year	6.7	Calm. NW.	42 42	NW. SW.	2	37	83	71	76	75	80	29	137	144	83	151	132	135	103	25	0	....	35	15	98	30	2

CLEVELAND, OHIO.

[H=740 feet; h_t=122 feet; h_r=109 feet; h_a=130 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	9.8	SW.	26	NW.	0	3	5	0	10	15	14	7	8	0	6	12	13	15	12	13	0	....	17	0	28	0	1
February	8.6	SE.	33	S.	0	2	10	3	15	7	6	10	4	0	6	9	14	18	11	11	0	....	7	0	21	1	1
March	8.2	NW.	30	S.	0	3	13	3	9	3	11	8	12	0	9	6	16	17	14	12	0	....	12	0	23	2	0
April	9.5	NW.	36	S.	0	10	11	1	9	3	8	8	10	0	12	11	7	11	9	3	0	....	1	0	6	0	0
May	12.4	SW.	43	S.	3	3	7	4	12	9	13	2	11	1	7	12	12	22	21	0	1	....	0	0	0	6	0
June	10.7	NE.	51	NW.	2	1	9	2	13	9	12	1	13	0	7	12	11	20	17	0	1	....	0	0	0	12	0
July	8.9	NW.	64	NW.	1	0	11	9	9	8	12	2	10	1	12	13	6	8	5	0	1	....	0	4	0	5	1
August	10.5	SE.	40	NW.	1	6	9	6	14	9	8	2	8	0	14	10	7	9	8	0	0	....	0	1	0	6	0
September	12.1	SE.	54	NW.	2	3	4	6	24	5	10	3	5	0	17	5	8	12	9	0	0	....	0	0	0	2	0
October	14.0	NW.	60	NW.	3	1	1	5	11	10	12	4	18	0	8	11	12	11	6	0	1	....	0	0	0	1	0
November	15.6	NW.	49	SW.	4	1	5	0	9	6	13	3	23	0	1	5	24	19	12	7	0	....	3	0	15	0	0
December	12.9	SW.	39	NW.	0	3	5	2	10	5	24	6	7	0	1	9	21	17	10	10	0	....	12	0	25	0	0
Year	11.1	NW.	64	NW.	16	36	90	41	146	89	143	56	129	2	100	115	151	179	134	56	4	....	52	5	118	35	3

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

COLUMBIA, MO.

[Lat. 38° 58′ N.; long. 92° 14′ W.; gravity corr., —.02.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	.....	29.64	28.84	.....	24.3	37.0	12.8	24.9	63	—13	....	17	....	74	.....	.089	2.27	2.12	.....	3.4	5.7
February	.....	29.64	28.69	.....	38.9	48.8	30.5	39.6	65	14	....	33	....	80	.....	.187	6.80	2.78	.....	6.4	7.3
March	.....	29.58	28.85	.....	39.4	49.2	30.3	39.8	82	13	....	32	....	77	.....	.180	3.50	.67	.....	5.6	7.0
April	.....	29.42	28.62	.....	54.4	63.9	42.8	53.4	79	26	....	42	....	65	.....	.266	5.60	2.06	.....	4.5	5.0
May	.....	29.32	28.73	.....	61.9	71.5	50.8	61.2	84	35	....	54	....	76	.....	.417	10.58	3.24	.....	6.1	6.2
June	.....	29.33	28.92	.....	76.0	85.1	63.1	74.1	94	51	....	67	....	74	.....	.660	3.60	1.02	.....	2.7	3.6
July	.....	29.48	28.89	.....	76.5	85.9	64.2	75.0	97	45	....	68	....	77	.....	.684	7.62	1.49	.....	3.6	4.0
August	.....	29.35	29.01	.....	74.8	85.9	63.5	74.7	96	47	....	68	....	80	.....	.684	3.56	1.99	.....	2.7	2.6
September	.....	29.48	29.04	.....	66.2	78.7	54.7	66.7	91	40	....	59	....	79	.....	.499	4.50	2.07	.....	2.4	2.5
October	.....	29.48	28.94	.....	56.3	70.6	44.4	57.5	85	24	....	48	....	75	.....	.334	1.87	.85	.....	2.7	2.8
November	.....	29.67	28.84	.....	40.2	50.0	30.1	40.0	66	17	....	32	....	74	.....	.180	2.44	1.32	.....	3.5	4.3
December	.....	29.67	28.76	.....	30.4	38.3	22.2	30.2	70	— 7	....	22	....	70	.....	.113	2.28	1.67	.....	5.7	6.6
Year	.....	29.67	28.62	.....	53.3	63.7	42.4	53.1	97	—13	....	45	....	75	.....	.358	54.62	.....	.....	4.1	4.8

COLUMBIA, S. C.

[Lat. 34° 0′ N.; long. 81° 3′ W.]

January	.....	.....	.....	.....	.....	54.0	32.0	43.0	68.0	19.0	....	....	....	....	.....	.....	7.63	.....	.....	....	....
February	.....	.....	.....	.....	.....	60.9	38.5	49.7	69.0	23.0	....	....	....	....	.....	.....	4.41	.....	.....	....	....
March	.....	.....	.....	.....	.....	62.5	41.2	51.8	78.0	24.0	....	....	....	....	.....	.....	3.78	.....	.....	....	....
April	.....	.....	.....	.....	.....	73.5	51.7	62.6	84.0	33.0	....	....	....	....	.....	.....	1.43	.....	.....	....	....
May	.....	.....	.....	.....	.....	83.4	59.5	71.4	94.0	48.0	....	....	....	....	.....	.....	2.59	.....	.....	....	....
June	.....	.....	.....	.....	.....	89.0	68.6	78.8	98.0	64.0	....	....	....	....	.....	.....	3.12	.....	.....	....	....
July	.....	.....	.....	.....	.....	90.0	74.7	82.4	101.0	54.0	....	....	....	....	.....	.....	4.71	.....	.....	....	....
August	.....	.....	.....	.....	.....	90.4	70.3	80.4	96.0	66.0	....	....	....	....	.....	.....	9.72	.....	.....	....	....
September	.....	.....	.....	.....	.....	81.6	68.1	74.8	92.0	58.0	....	....	....	....	.....	.....	4.64	.....	.....	....	....
October	.....	.....	.....	.....	.....	74.0	57.4	65.7	84.0	34.0	....	....	....	....	.....	.....	.27	.....	.....	....	....
November	.....	.....	.....	.....	.....	64.6	42.1	53.4	80.0	21.0	....	....	....	....	.....	.....	1.55	.....	.....	....	....
December	.....	.....	.....	.....	.....	57.9	38.7	48.3	74.0	20.0	....	....	....	....	.....	.....	1.67	.....	.....	....	....
Year	.....	.....	.....	.....	.....	73.5	53.6	63.5	101.0	19.0	....	....	....	....	.....	.....	45.52	.....	.....	....	....

COLUMBUS, OHIO.

[Lat. 39° 58′ N.; long. 83° 0′ W.; gravity corr., —.01.]

January	29.19	29.66	28.62	20.9	26.3	30.4	17.6	24.0	55	— 5	16	18	83	72	.085	.093	2.21	.48	6.7	5.4	6.4
February	29.21	29.76	28.53	32.6	37.5	42.7	28.7	35.7	61	8	28	29	83	73	.150	.157	3.35	.82	7.8	6.0	7.5
March	29.16	29.57	28.55	31.7	38.0	43.9	28.2	36.0	64	14	24	27	74	66	.125	.143	2.23	.51	6.6	4.8	6.4
April	29.19	29.53	28.85	45.1	52.5	58.2	40.6	49.4	79	24	36	38	71	61	.211	.228	2.67	.72	6.2	6.4	6.9
May	29.08	29.44	28.65	57.9	62.1	70.4	51.6	61.0	86	35	50	52	75	71	.360	.387	3.58	1.06	7.1	7.0	7.5
June	29.10	29.26	28.73	71.5	74.8	83.5	64.9	74.2	93	55	64	64	78	69	.595	.595	4.96	1.91	5.5	5.7	6.7
July	29.21	29.59	28.91	71.0	77.0	83.8	64.2	74.0	97	51	62	62	75	61	.555	.555	3.31	1.66	4.5	5.3	5.4
August	29.16	29.31	28.95	68.9	75.3	82.4	63.6	73.0	91	52	62	62	79	64	.555	.555	5.12	1.61	5.1	3.7	5.7
September	29.25	29.45	28.78	60.2	68.4	77.4	55.4	66.4	85	42	54	54	79	62	.417	.417	1.47	.65	3.6	2.5	4.5
October	29.20	29.50	28.72	46.1	56.3	64.4	42.9	53.6	83	30	39	40	77	54	.237	.246	.84	.48	4.3	3.9	5.1
November	29.20	29.53	28.49	35.2	39.1	44.0	32.5	38.2	68	17	30	32	81	74	.164	.180	2.20	.42	7.1	6.5	7.8
December	29.22	29.70	28.63	26.4	31.5	35.8	24.2	30.0	64	2	24	26	88	80	.125	.137	1.60	.66	8.0	6.7	8.0
Year	29.18	29.76	28.49	47.3	53.2	59.7	42.9	51.3	97	— 5	41	42	79	67	.298	.308	33.54	.....	6.0	5.3	6.5

CONCORDIA, KANS.

[Lat. 39° 35′ N.; long. 97° 41′ W.; gravity corr., —.01.]

January	28.70	29.06	28.21	15.9	25.7	35.5	13.2	24.4	62	—24	12	16	86	68	.070	.085	.53	.26	3.8	1.2	2.1
February	28.61	28.91	27.96	27.2	34.5	42.7	25.3	34.0	59	10	25	26	91	73	.130	.137	2.32	1.48	4.9	5.0	5.5
March	28.57	29.02	27.83	30.3	40.7	47.6	28.0	37.8	75	9	26	31	86	72	.137	.173	3.61	1.38	5.4	4.3	5.1
April	28.46	28.94	27.51	44.5	54.6	61.9	40.7	51.3	86	24	38	41	80	63	.228	.256	1.56	.40	6.5	5.0	5.3
May	28.44	28.75	27.98	51.3	58.9	64.2	47.3	55.8	84	36	47	48	85	71	.322	.334	9.51	2.22	5.5	6.1	6.6
June	28.44	28.78	28.14	65.3	79.0	85.7	60.6	73.2	99	43	58	60	80	53	.481	.517	1.23	.50	2.7	1.8	3.4
July	28.56	28.84	28.21	70.1	82.7	88.9	64.7	76.8	104	53	63	64	80	54	.575	.595	3.30	1.49	2.6	1.8	3.4
August	28.54	28.78	28.27	67.7	80.7	88.2	63.2	75.7	101	48	61	62	81	55	.538	.553	3.04	1.49	2.6	1.7	2.9
September	28.56	28.83	28.24	59.4	73.4	83.4	56.8	70.1	98	38	54	57	83	58	.417	.465	.95	.44	1.3	2.0	1.8
October	28.58	28.90	28.21	47.8	58.8	70.1	45.3	57.7	89	28	41	46	79	64	.256	.310	.83	.58	2.6	2.4	3.3
November	28.58	28.97	28.15	31.7	43.2	52.8	29.8	41.3	72	16	28	30	84	60	.150	.164	.44	.42	3.2	2.9	4.1
December	28.62	29.04	28.23	20.4	26.5	33.0	16.8	24.9	57	— 8	19	19	93	73	.098	.098	1.19	.68	4.3	5.7	6.5
Year	28.56	29.06	27.51	44.3	54.9	62.8	41.0	51.9	104	—24	39	42	84	64	.293	.307	28.41	.....	3.8	3.3	4.2

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

COLUMBIA, MO.

[H=763 feet; h_t=4 feet; h_r=2 feet; h_a=41 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.64 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		Mi.																								
January	7.5	NW.	36	NW.	0	2	4	0	6	1	5	6	7	0	11	6	14	4	4	4	0	....	11	0	28	0	0
February	8.2	NW.	28	NW.	0	2	2	5	7	0	0	4	9	0	6	6	17	14	11	0	0	....	0	0	15	2	0
March	9.5	NW.	38	NW.	0	3	2	5	5	0	3	4	7	2	7	8	16	10	10	2	0	....	1	0	16	0	0
April	9.5	SE.	44	SW.	2	0	3	4	8	1	2	7	3	2	13	7	10	16	12	0	0	....	0	0	2	6	0
May	6.9	SE.	36	SE.	0	1	2	3	9	0	2	5	4	5	5	15	11	22	19	0	0	....	0	0	0	11	1
June	4.5	SE.	34	S.	0	1	1	0	8	3	2	1	0	14	17	8	5	10	10	0	0	....	0	12	0	8	0
July	5.4	E.	34	NW.	0	3	3	10	6	8	1	0	0	0	13	14	4	11	11	0	0	....	0	12	0	6	0
August	4.5	SE.	25	W.	0	3	4	7	9	3	2	0	3	0	21	7	3	7	7	0	0	....	0	7	0	3	0
September	5.4	SE.	24	N.	0	3	2	4	10	5	1	2	3	0	23	2	5	6	5	0	0	....	0	1	0	2	0
October	5.6	SE.	25	NE.	0	4	2	3	10	4	0	0	8	0	20	8	3	5	5	0	0	....	0	0	5	1	0
November	7.3	W.	30	W.	0	1	1	6	3	2	2	10	5	0	18	2	10	7	5	1	0	....	0	0	20	2	0
December	6.3	SW.	36	SW.	0	6	2	2	5	2	9	3	2	0	7	9	15	7	6	5	0	....	10	0	24	1	0
Year	6.7	SE.	44	SW.	2	29	28	49	86	29	29	42	51	23	161	92	113	119	105	12	0	....	22	32	110	42	1

COLUMBIA, S. C.

[H=— feet; h_t=72 feet; h_r=63 feet; h_a=— feet.]

Month.	By self-registers. Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.64 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	....	NW.	....	....	....	2	7	1	3	0	8	2	8	0	16	5	10	13	12	0	0	....	0	0	13	1	0
February	....	NW.	....	....	....	1	8	1	4	0	6	0	9	0	19	3	7	10	8	0	0	....	0	0	6	0	0
March	....	NW.	....	....	....	0	9	1	2	0	8	0	11	0	17	2	12	8	8	0	0	....	0	0	6	3	0
April	....	SW.	....	....	....	0	8	0	5	1	9	1	6	0	17	5	8	6	4	0	0	....	0	0	....	4	0
May	....	SW.	....	....	....	0	1	0	7	0	15	1	7	0	18	9	4	6	5	0	0	....	0	7	0	2	0
June	....	SE.	....	....	....	0	4	1	10	6	7	0	2	0	14	10	6	13	12	0	0	....	0	15	0	3	0
July	....	SW.	....	....	....	0	4	2	10	1	11	1	2	0	10	12	9	11	8	0	0	....	0	20	0	3	0
August	....	SW.	....	....	....	1	5	0	8	2	8	0	7	0	10	14	7	15	15	0	0	....	0	19	0	8	0
September	....	NE.	....	....	....	0	16	3	5	0	4	0	2	0	16	5	9	10	10	0	0	....	0	1	0	2	0
October	....	SW.	....	....	....	2	7	1	5	0	8	1	7	0	26	2	3	3	2	0	0	....	0	0	0	1	0
November	....	SW.	....	....	....	0	4	0	5	1	10	3	7	0	21	4	5	8	7	0	0	....	0	0	4	0	0
December	....	NW.	....	....	....	0	6	1	4	0	9	2	9	0	17	2	12	7	6	1	0	....	0	0	11	0	0
Year	....	SW.	....	....	....	6	79	11	68	11	103	11	77	0	201	73	92	110	97	1	0	....	0	62	40	27	0

COLUMBUS, OHIO.

[H=837 feet; h_t=94 feet; h_r=76 feet; h_a=100 feet.]

Month.	By self-registers. Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.64 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	9.0	SW.	31	W.	0	10	7	0	2	10	12	10	7	4	6	7	18	14	12	11	0	....	18	0	29	0	0
February	9.0	NE.	30	SW.	0	3	14	6	7	7	5	8	8	0	3	11	15	13	8	3	0	....	2	0	14	0	1
March	9.4	N.	36	W.	0	12	10	6	4	6	6	11	7	0	5	15	11	15	13	7	0	....	6	0	19	1	0
April	9.4	N.	30	SW.	0	10	10	4	10	6	6	8	5	1	3	13	14	16	12	3	0	....	0	0	6	2	0
May	9.0	SW.	36	SW.	0	9	3	4	5	6	21	7	5	2	1	11	19	17	15	0	1	....	0	0	0	5	0
June	6.9	SE.	40	W.	1	5	0	6	21	6	13	5	3	1	4	12	14	21	15	0	0	....	0	3	0	15	0
July	5.0	SE.	28	W.	0	7	7	4	12	14	6	1	4	7	6	18	7	12	8	0	0	....	0	6	0	6	0
August	5.5	SE.	36	NW.	0	13	2	7	14	5	5	2	8	6	5	16	10	10	7	0	0	....	0	1	0	6	0
September	5.8	SE.	32	SW.	0	7	5	7	14	5	12	4	2	4	14	10	6	9	7	0	0	....	0	0	0	2	0
October	6.4	NW.	34	S.	0	4	3	3	8	8	5	11	11	9	10	13	8	7	2	0	0	....	0	0	2	1	0
November	8.5	S.	35	S.	0	4	1	4	4	13	13	11	9	1	2	9	19	10	13	4	0	....	2	0	16	0	0
December	7.4	SW.	30	SW.	0	6	1	3	6	9	19	7	10	1	1	10	20	12	5	8	0	....	12	0	24	0	0
Year	7.6	SW.	40	W.	1	90	63	54	107	95	123	85	79	36	60	145	161	162	117	36	1	....	40	10	110	38	1

CONCORDIA, KANS.

[H=1,410 feet; h_t=42 feet; h_r=34 feet; h_a=47 feet.]

Month.	By self-registers. Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.64 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.1	N.	36	S.	0	13	2	4	5	9	2	10	11	6	24	6	1	5	5	5	0	....	12	0	29	0	1
February	6.7	N.	23	N.	0	14	4	4	8	7	7	5	7	2	9	10	10	8	7	4	0	....	5	0	24	0	0
March	10.1	NE.	40	NW.	1	9	11	5	7	10	3	7	9	1	11	11	9	10	9	5	0	....	6	0	19	2	0
April	12.2	S.	60	S.	2	9	9	6	8	13	0	5	8	2	10	9	11	13	11	0	0	....	0	0	1	1	0
May	10.1	N.	36	NW.	0	15	6	10	5	8	1	4	12	1	6	9	16	18	15	0	2	....	0	0	0	7	0
June	9.1	S.	34	S.	0	7	4	5	8	18	9	4	4	1	19	8	3	7	5	0	0	....	0	11	0	3	0
July	7.1	S.	29	NW.	0	5	3	12	11	22	4	2	1	2	16	11	4	8	8	0	0	....	0	15	0	4	0
August	5.8	S.	30	E.	0	4	3	8	16	19	1	3	4	4	19	9	3	6	6	0	0	....	0	12	0	4	0
September	7.1	S.	28	S.	0	11	5	2	10	24	0	2	1	5	23	5	2	4	4	0	0	....	0	5	0	3	0
October	6.8	S.	36	SE.	0	12	3	3	7	20	3	5	6	3	21	2	8	6	5	0	0	....	0	0	5	0	0
November	8.0	S.	36	S.	0	10	1	8	3	14	6	9	6	3	13	12	5	3	1	0	0	....	0	0	16	0	0
December	5.6	N.	28	N.	0	15	1	5	10	13	9	3	6	0	5	13	13	8	6	7	0	....	14	0	28	0	0
Year	7.9	S.	60	S.	3	124	52	72	98	177	45	59	75	30	176	105	85	96	82	21	2	....	37	43	122	24	1

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

CORPUS CHRISTI, TEX.

[Lat. 27° 49′ N.; long. 97° 25′ W.; gravity corr. —.04.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	30.19	30.56	29.69	45.5	51.7	56.6	42.2	49.4	82	25	40	43	82	76	.246	.266	1.14	.35	4.9	3.5	5.1
February	30.06	30.35	29.59	61.6	65.6	69.3	58.7	64.0	83	48	58	57	89	77	.431	.465	1.09	.60	7.5	6.3	8.2
March	30.04	30.57	29.69	57.4	62.8	66.3	53.9	60.1	83	31	51	53	82	72	.373	.402	1.10	.50	5.5	5.1	6.6
April	29.93	30.24	29.52	70.4	73.3	77.2	67.6	72.4	89	49	66	67	85	83	.638	.660	0.26	.13	7.0	4.8	6.6
May	29.90	30.18	29.63	72.0	78.7	81.1	72.3	76.7	88	60	69	71	82	78	.707	.757	1.95	1.88	5.7	5.4	6.7
June	29.93	30.11	29.78	79.2	81.8	84.4	75.1	79.8	94	64	74	74	83	78	.838	.838	.62	.46	3.0	3.5	5.9
July	30.03	30.18	29.86	80.3	83.0	85.5	76.7	81.1	88	72	75	75	84	77	.866	.866	1.15	.56	2.4	3.5	6.4
August	29.98	30.10	29.86	78.8	82.7	85.8	75.9	80.8	90	71	74	74	88	76	.866	.838	2.78	1.91	5.2	5.7	7.9
September	30.02	30.18	29.84	74.9	81.1	84.4	72.5	78.4	92	65	70	71	85	73	.732	.757	2.04	.52	3.9	2.9	5.1
October	30.00	30.34	29.80	71.6	77.0	80.2	69.2	74.7	90	45	64	67	78	72	.595	.660	1.23	.97	3.1	2.1	4.6
November	30.10	30.60	29.77	62.5	68.3	71.9	60.1	66.0	84	42	58	61	84	78	.487	.536	5.55	4.61	3.9	2.2	5.0
December	30.07	30.37	29.76	54.1	60.8	63.7	51.9	57.8	80	27	48	52	80	73	.354	.387	1.70	.90	6.5	4.2	6.5
Year	30.02	30.60	29.52	67.3	72.2	75.5	64.7	70.1	94	25	62	64	84	76	.596	.619	20.61	.....	4.9	4.1	6.2

CRETE, NEBR.

[Lat. 40° 38′ N.; long. 96° 59′ W.; gravity corr. —.]

January	.....	.....	.....	.....	.....	31.5	8.9	20.2	58	—32	.....	.....	.....	.....	.....	.....	0.78	0.45	.....	.....	.....
February	.....	.....	.....	.....	.....	40.5	21.3	30.9	58	0	.....	.....	.....	.....	.....	.....	1.25	0.60	.....	.....	.....
March	.....	.....	.....	.....	.....	44.6	25.4	35.0	75	8	.....	.....	.....	.....	.....	.....	2.43	0.74	.....	.....	.....
April	.....	.....	.....	.....	.....	58.7	38.5	48.6	85	23	.....	.....	.....	.....	.....	.....	3.49	1.09	.....	.....	.....
May	.....	.....	.....	.....	.....	63.1	44.5	53.8	78	35	.....	.....	.....	.....	.....	.....	12.13	3.82	.....	.....	.....
June	.....	.....	.....	.....	.....	83.3	58.8	71.0	97	39	.....	.....	.....	.....	.....	.....	0.95	0.78	.....	.....	.....
July	.....	.....	.....	.....	.....	88.2	63.1	75.6	102	50	.....	.....	.....	.....	.....	.....	4.60	2.43	.....	.....	.....
August	.....	.....	.....	.....	.....	84.9	62.3	73.6	98	47	.....	.....	.....	.....	.....	.....	2.36	0.96	.....	.....	.....
September	.....	.....	.....	.....	.....	82.1	54.3	68.2	96	34	.....	.....	.....	.....	.....	.....	0.18	0.17	.....	.....	.....
October	.....	.....	.....	.....	.....	69.7	42.9	56.3	90	23	.....	.....	.....	.....	.....	.....	1.13	0.50	.....	.....	.....
November	.....	.....	.....	.....	.....	51.0	26.6	38.8	72	13	.....	.....	.....	.....	.....	.....	0.47	0.41	.....	.....	.....
December	.....	.....	.....	.....	.....	32.3	12.6	22.4	59	—12	.....	.....	.....	.....	.....	.....	1.01	0.45	.....	.....	.....
Year	.....	.....	.....	.....	.....	60.8	38.3	49.5	102	—32	.....	.....	.....	.....	.....	.....	30.78	.....	.....	.....	.....

DAVENPORT, IOWA.

[Lat. 41° 30′ N; long. 90° 38′ W; gravity corr. —.01.]

January	29.50	29.89	28.91	12.5	19.6	24.3	9.0	16.6	46	—12	8	14	82	79	.057	.077	1.60	.85	3.5	4.2	4.6
February	29.46	29.96	28.82	27.8	32.1	36.9	25.2	31.0	53	— 1	24	26	86	80	.125	.137	1.38	.60	6.4	6.9	7.3
March	29.43	29.96	28.75	28.3	36.4	41.5	25.7	33.6	65	6	23	27	81	71	.119	.143	3.06	1.08	6.0	5.0	5.3
April	29.39	29.72	28.67	42.2	50.4	55.0	39.3	47.2	74	24	34	35	73	59	.195	.203	5.41	2.25	6.1	6.1	6.3
May	29.26	29.67	28.73	52.8	58.5	63.3	48.8	56.0	76	36	47	49	81	73	.322	.347	8.84	2.13	7.2	6.6	7.3
June	29.29	29.57	29.08	65.6	72.5	78.2	61.1	69.6	92	51	61	63	84	74	.536	.575	10.79	4.36	5.9	4.3	5.1
July	29.43	29.83	29.02	69.4	77.9	82.9	65.2	74.0	94	51	62	64	79	63	.555	.595	4.16	1.80	4.6	3.9	4.4
August	29.39	29.58	29.13	66.9	76.7	83.4	63.3	73.4	93	48	60	63	79	62	.517	.575	1.53	1.15	3.0	3.1	4.3
September	29.45	29.67	29.10	58.2	67.7	75.0	56.2	65.6	90	44	53	55	84	66	.402	.432	2.09	1.72	4.9	4.3	5.1
October	29.45	29.70	28.99	46.1	57.1	66.2	45.1	55.6	82	28	40	43	81	59	.246	.277	0.55	0.45	4.4	2.8	3.9
November	29.45	29.87	28.69	29.3	34.7	38.7	27.4	33.0	56	8	24	28	81	75	.125	.150	2.01	0.84	6.4	5.1	6.8
December	29.48	29.96	28.73	17.8	21.7	26.2	14.6	20.4	52	—10	13	17	81	81	.074	.089	2.79	1.10	5.0	5.2	6.3
Year	29.42	29.96	28.67	43.1	50.4	56.0	40.1	48.0	94	—12	37	40	81	70	.273	.300	44.15	.....	5.3	4.8	5.6

DENVER, COLO.

[Lat. 39° 45′ N.; long. 105° W.; gravity corr. —.01.]

January	24.73	25.11	24.40	20.3	29.0	37.8	14.2	26.0	64	—17	9	11	64	52	.060	.067	0.40	0.19	3.5	4.1	4.1
February	24.69	25.04	24.27	26.3	37.3	44.3	22.7	33.5	63	3	17	20	69	53	.089	.103	0.75	0.32	4.5	4.2	4.4
March	24.66	24.97	24.15	29.6	41.3	46.5	26.4	36.4	74	— 6	20	14	69	44	.103	.077	1.20	0.64	4.3	5.9	5.2
April	24.64	25.05	24.13	35.9	52.8	58.5	33.1	45.8	80	16	23	15	62	32	.119	.081	1.75	1.10	4.0	5.9	4.5
May	24.72	25.10	24.43	44.7	56.3	61.6	41.4	51.5	81	32	34	32	69	49	.195	.180	2.14	0.63	6.7	7.1	6.2
June	24.73	25.04	24.40	56.3	73.7	78.6	51.1	64.8	91	36	41	39	60	33	.256	.237	1.33	0.89	3.0	4.3	4.1
July	24.86	25.06	24.58	62.6	76.7	85.1	58.7	71.9	97	49	49	43	63	36	.347	.277	1.19	0.32	4.0	7.1	5.5
August	24.85	25.14	24.58	59.8	78.7	85.9	56.9	71.4	98	45	42	38	55	28	.266	.228	0.58	0.36	2.7	5.5	4.3
September	24.85	25.02	24.58	51.3	75.6	82.9	49.0	66.0	92	36	36	28	56	19	.211	.150	T	T	2.9	4.4	3.4
October	24.80	25.11	24.26	40.1	55.0	62.7	37.8	50.2	90	29	29	29	65	41	.157	.137	3.92	2.58	3.1	4.1	3.7
November	24.73	25.05	24.12	35.8	45.3	55.0	30.8	42.9	70	19	20	18	55	35	.103	.093	0.44	0.44	3.3	3.0	3.4
December	24.69	24.92	24.45	21.7	28.2	37.5	16.1	26.8	67	— 9	9	16	59	62	.060	.085	1.22	0.54	3.9	5.1	5.0
Year	24.75	25.14	24.12	40.4	54.2	61.4	36.5	48.9	98	—17	27	25	62	46	.164	.145	15.02	.....	3.8	5.1	4.3

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

CORPUS CHRISTI, TEX.

[H=20 feet; h_t=42 feet; h_r=34 feet; h_a=50 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	10.6	N.	30	NW.	0	18	6	9	11	2	3	0	13	0	11	9	11	10	9	1	0	....	0	0	7	0	0
February	11.6	SE.	36	SE.	0	14	8	15	17	1	0	2	0	1	0	10	19	9	8	0	0	....	0	0	0	0	0
March	13.3	SE.	46	N.	1	18	1	4	28	4	1	2	4	0	6	9	16	9	7	0	0	....	0	0	1	0	0
April	16.5	SE.	36	SE.	0	4	5	12	32	4	1	0	1	1	6	8	16	6	2	0	0	....	0	0	0	0	0
May	18.9	SE.	48	SE.	2	5	4	1	47	3	2	0	0	0	4	7	20	3	2	0	0	....	0	0	0	1	0
June	14.6	SE.	31	SE.	0	2	0	1	49	6	1	0	1	0	3	19	8	4	3	0	0	....	0	1	0	2	0
July	13.9	SE.	31	SE.	0	1	1	4	51	2	0	1	0	2	0	25	6	5	4	0	0	....	0	0	0	1	0
August	10.4	SE.	30	SE.	0	2	2	5	43	4	2	1	1	2	0	13	18	10	7	0	0	....	0	1	0	2	0
September	10.3	E.	31	NW.	0	15	1	17	15	1	2	3	6	0	10	12	8	10	7	0	0	....	0	1	0	3	0
October	12.2	SE.	29	E.	0	11	1	11	30	0	1	5	3	0	9	16	6	6	5	0	0	....	0	0	0	0	0
November	10.6	SE.	42	E.	1	14	2	5	28	3	0	3	4	1	8	14	8	7	5	0	0	....	0	0	0	1	0
December	16.6	N.	41	W.	1	25	3	3	14	5	0	3	9	0	5	15	11	12	9	0	0	....	0	0	1	0	0
Year	12.9	SE.	48	SE.	5	129	34	87	365	35	13	20	42	7	62	157	147	91	68	1	0	....	0	3	9	10	0

CRETE, NEBR.

[H= .. feet; h_t=9.2 feet; h_r=2.2 feet; h_a= .. feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	.....	NW.	....	.....	....	5	2	1	2	4	5	2	10	0	15	12	4	4	4	4	0	....	14	0	30	0	0
February	.....	NW.	....	.....	....	7	1	1	4	7	1	0	8	0	6	9	14	7	6	4	0	....	5	0	26	0	0
March	.....	SE.	....	.....	....	6	5	0	7	4	1	2	6	0	8	4	19	12	8	6	0	....	9	0	23	1	0
April	.....	SE.	....	.....	....	4	4	1	10	3	0	1	7	0	5	9	16	12	12	0	0	....	0	0	6	3	0
May	.....	NW.	....	.....	....	4	5	4	2	2	2	0	11	1	2	11	18	18	17	0	0	....	0	0	0	0	1
June	.....	NW.	....	.....	....	4	3	1	2	7	3	0	9	1	20	8	2	3	3	0	0	....	0	7	0	0	0
July	.....	SE.	....	.....	....	1	5	2	9	7	5	0	2	0	21	6	4	6	5	0	0	....	0	14	0	3	3
August	.....	SE.	....	.....	....	2	3	5	15	3	3	0	0	0	19	10	2	5	5	0	0	....	0	9	0	1	0
September	.....	S.	....	.....	....	6	3	1	3	16	1	0	0	0	23	4	3	2	1	0	0	....	0	4	0	0	0
October	.....	S.	....	.....	....	10	2	0	3	11	1	1	2	1	18	7	6	4	4	0	0	....	0	1	6	0	0
November	.....	NW.	....	.....	....	0	2	0	4	9	2	0	12	1	14	11	5	2	2	1	0	....	1	0	23	0	0
December	.....	NW.	....	.....	....	6	1	1	3	8	0	0	10	2	7	8	16	7	6	7	0	....	18	0	29	0	0
Year	.....	S.	....	.....	....	55	36	17	64	81	24	6	77	6	158	99	109	82	73	22	0	....	47	35	143	8	4

DAVENPORT, IOWA.

[H=613 feet; h_t=100 feet; h_r=93 feet; h_a=110 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	8.9	NW.	34	NW.	0	5	3	3	1	3	13	13	14	7	12	12	7	9	6	9	0	....	21	0	29	1	0
February	10.3	E.	31	NW.	0	2	5	16	6	2	4	9	13	1	6	5	18	14	8	5	0	....	8	0	21	0	1
March	11.6	E.	54	W.	1	5	9	13	8	2	4	7	11	3	13	5	13	11	8	4	0	....	6	0	21	1	0
April	15.6	E.	60	SW.	3	1	2	14	11	2	6	14	10	0	5	12	13	14	10	1	0	....	0	0	3	5	6
May	12.3	E.	46	W.	2	4	9	14	7	5	5	13	5	0	4	10	17	20	18	0	0	....	0	0	0	11	0
June	9.2	E.	40	NW.	1	5	5	11	6	10	9	5	9	0	8	14	8	18	14	0	0	....	0	2	0	11	0
July	7.6	SW.	40	NW.	1	1	8	9	17	6	14	2	4	1	15	7	9	10	9	0	0	....	0	6	0	5	1
August	7.1	SE.	28	W.	0	6	7	11	13	7	7	4	5	2	12	16	3	2	2	0	0	....	0	2	0	2	0
September	7.3	SW.	30	NW.	0	2	2	4	10	8	10	10	10	4	11	8	11	4	3	0	0	....	0	0	0	2	0
October	7.6	NW.	46	NW.	1	6	3	1	10	6	9	9	16	3	15	12	4	3	2	0	0	....	0	0	6	0	0
November	10.5	W.	42	NW.	1	2	11	4	9	1	7	19	7	0	7	5	18	7	6	2	0	....	7	0	21	0	0
December	8.0	W.	32	E.	0	4	1	9	6	1	7	24	9	1	8	9	14	11	7	10	0	....	20	0	28	0	0
Year	9.7	W.	60	NW.	10	42	65	109	104	53	95	129	113	22	116	115	135	123	93	31	0	....	62	10	129	38	2

DENVER, COLO.

[H=5,287 feet; h_t=108 feet; h_r=107 feet; h_a=120 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.3	S.	36	NW.	0	5	5	4	4	19	11	5	9	0	14	11	6	8	4	8	0	....	11	0	28	0	0
February	5.3	SW.	34	NW.	0	9	8	2	3	10	8	2	7	9	11	14	4	6	4	6	0	....	4	0	29	0	0
March	8.3	NW.	36	NW.	0	5	8	2	2	9	10	4	21	1	12	10	9	10	4	9	0	....	6	0	20	0	0
April	9.1	NW.	36	NE.	0	9	8	0	3	6	17	4	12	1	11	16	3	9	4	7	1	....	2	0	13	2	0
May	8.8	NW.	40	N.	1	14	12	4	1	5	4	2	20	0	7	12	12	15	12	2	0	....	0	0	1	6	0
June	7.7	SW.	36	SW.	0	3	12	2	6	9	19	3	6	0	14	13	3	5	5	0	1	....	0	1	0	5	0
July	7.3	SW.	40	NE.	1	1	8	0	3	17	12	7	14	0	5	20	6	14	8	0	0	....	0	9	0	10	0
August	6.6	S.	28	NW.	0	4	6	3	4	16	17	4	7	1	8	21	2	5	4	0	0	....	0	11	0	5	0
September	6.4	S.	36	NW.	0	7	6	2	3	22	11	2	7	0	17	13	0	0	0	0	0	....	0	1	0	1	0
October	7.4	S.	48	NW.	1	7	7	4	5	26	6	0	7	0	17	9	5	4	4	2	0	....	0	0	7	0	0
November	8.8	S.	36	NW.	0	4	3	2	5	23	9	4	10	0	17	10	3	2	1	2	0	....	0	0	17	0	0
December	7.1	S.	36	NW.	0	3	7	0	3	25	9	2	13	0	9	16	6	8	6	7	0	....	13	0	28	0	0
Year	7.4	S.	48	NW.	3	71	90	25	42	187	133	39	133	12	142	165	59	86	56	43	2	....	36	22	143	29	0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

DES MOINES, IOWA.

[Lat. 41° 35′ N.; long. 93° 37′ W.; gravity corr., —.01.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a.m.	8 p.m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a.m.	8 p.m.	8 a.m.	8 p.m.	8 a.m.	8 p.m.	Total.	Maximum in 24 hours.	8 a.m.	8 p.m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.23	29.55	28.68	11.6	21.1	26.9	8.6	17.8	50	—26	7	14	81	73	.054	.077	1.60	.92	3.7	1.6	3.4
February	29.17	29.56	28.46	25.8	29.9	35.4	22.8	29.1	50	— 1	22	25	86	82	.113	.130	1.35	.50	6.8	7.0	7.6
March	29.13	29.65	28.56	27.5	36.9	41.7	25.5	33.6	73	6	23	26	82	67	.119	.137	2.47	.83	5.8	6.1	6.0
April	29.05	29.44	28.25	42.0	51.0	55.0	38.9	47.0	72	25	35	35	77	56	.203	.203	3.36	1.57	7.0	6.6	7.3
May	28.96	29.37	28.45	51.0	58.3	61.9	47.8	54.8	75	35	46	48	85	72	.310	.334	8.77	1.40	7.3	7.5	7.6
June	28.99	29.31	28.71	64.0	73.4	77.7	60.4	69.0	92	48	59	60	84	65	.499	.517	3.41	.81	4.7	5.4	6.0
July	29.12	29.50	28.74	68.8	78.1	83.1	64.4	73.8	95	50	63	64	82	61	.575	.595	8.64	2.04	4.5	4.9	4.9
August	29.10	29.32	28.80	65.8	75.5	82.5	61.9	72.2	95	47	60	61	82	62	.517	.536	2.45	1.44	4.1	4.1	4.3
September	29.13	29.35	28.86	57.0	69.4	76.8	54.8	65.8	92	39	52	55	84	62	.387	.432	1.12	.51	3.1	3.7	3.7
October	29.14	29.45	28.81	45.5	57.8	67.1	43.2	55.2	87	25	40	41	81	56	.246	.256	2.54	2.02	2.7	1.9	2.7
November	29.14	29.58	28.66	30.8	36.4	42.3	27.5	34.9	64	12	25	25	80	63	.130	.130	.76	.40	5.3	3.9	5.3
December	29.18	29.64	28.58	16.2	21.9	27.2	11.9	19.6	54	—16	13	16	86	76	.074	.085	1.95	.96	5.1	5.4	5.8
Year	29.11	29.65	28.25	42.2	50.8	56.5	39.0	47.7	95	—26	37	39	82	66	.269	.286	38.42	.....	5.0	4.8	5.4

DETROIT, MICH.

[Lat. 42° 20′ N.; long. 83° 3′ W.; gravity corr., —.01.]

January	29.25	29.72	28.60	17.9	22.2	27.1	14.3	20.7	53	— 3	14	17	85	80	.077	.089	1.45	.42	6.2	5.5	5.8
February	29.32	29.85	28.62	27.2	29.6	34.6	23.6	29.1	50	4	23	25	86	84	.119	.130	2.57	.52	7.9	5.9	7.2
March	29.27	29.72	28.66	26.9	31.6	37.2	24.4	30.8	55	10	22	24	81	73	.113	.125	2.03	.78	5.7	4.7	5.8
April	29.28	29.74	28.84	40.5	46.3	53.5	36.1	44.8	71	22	33	34	74	64	.187	.195	1.78	.71	6.0	5.8	5.7
May	29.16	29.60	28.64	52.2	56.5	63.3	47.8	55.6	82	35	46	48	79	73	.310	.334	7.84	2.22	8.3	8.0	7.5
June	29.17	29.36	28.76	67.0	69.9	77.7	61.4	69.6	91	52	62	62	83	76	.555	.555	8.31	3.39	6.5	6.3	5.9
July	29.31	29.76	28.94	70.1	74.3	81.7	62.5	72.1	96	50	60	60	70	63	.517	.517	2.39	1.07	3.5	4.8	3.1
August	29.26	29.42	29.01	68.6	72.3	79.3	62.5	70.9	92	52	60	59	75	65	.517	.499	2.21	1.09	4.8	4.4	3.9
September	29.33	29.58	28.73	59.8	64.7	72.1	54.7	63.4	86	45	53	56	80	73	.402	.448	3.66	2.75	5.4	2.7	3.8
October	29.27	29.62	28.67	47.3	52.6	59.4	43.6	51.5	77	30	40	41	76	67	.246	.256	0.30	.16	5.0	4.0	4.9
November	29.27	29.65	28.57	34.7	37.0	40.2	31.1	35.6	62	16	30	31	82	80	.164	.172	3.10	1.15	7.6	7.8	8.2
December	29.29	29.76	28.64	25.5	28.2	31.0	22.1	26.6	58	— 1	22	24	84	81	.113	.125	1.47	.42	8.3	6.3	7.8
Year	28.26	29.85	28.57	44.8	48.8	54.8	40.3	47.6	96	— 3	39	40	80	73	.277	.287	37.11	.....	6.3	5.5	5.8

DODGE CITY, KANS.

[Lat. 37° 45′ N.; long. 100° 0′ W.; gravity corr., —.02.]

January	27.49	27.75	27.08	20.1	30.8	41.1	16.7	28.9	71	—11	14	16	76	56	.077	.085	.25	.20	4.0	3.0	3.6
February	27.42	27.72	26.84	27.2	36.6	44.7	24.7	34.7	63	12	24	27	87	72	.125	.143	1.01	.43	3.6	3.8	5.3
March	27.38	27.79	26.64	27.1	40.1	47.3	25.7	36.5	80	— 6	22	27	84	65	.113	.143	2.62	.70	4.7	5.3	5.2
April	27.30	27.74	26.56	42.8	57.2	64.5	39.0	51.8	92	26	35	36	77	50	.203	.211	.40	.14	4.4	4.7	4.6
May	27.29	27.58	26.95	51.4	62.5	68.5	47.0	57.8	83	34	47	49	86	65	.322	.347	3.23	.93	5.8	5.2	5.7
June	27.32	27.62	27.00	63.7	78.2	85.2	58.6	71.9	101	43	56	58	76	51	.448	.481	3.34	2.33	3.4	3.3	2.9
July	27.42	27.65	27.10	68.8	82.9	89.6	64.4	77.0	102	52	60	59	75	47	.517	.499	.66	.29	4.2	4.2	3.9
August	27.41	27.61	27.20	65.4	80.9	90.1	62.0	76.0	103	48	58	56	80	46	.481	.448	4.69	2.28	2.6	3.3	3.2
September	27.44	27.67	27.17	57.0	72.9	84.6	55.0	69.8	96	40	50	50	80	47	.360	.360	1.04	1.04	1.9	2.5	2.2
October	27.44	27.71	26.93	45.3	58.0	69.3	43.1	56.2	88	30	38	37	77	49	.228	.219	.73	.65	3.2	2.3	3.0
November	27.42	27.78	26.99	32.2	43.3	55.0	29.9	42.4	71	20	25	27	73	54	.130	.142	.31	.20	4.0	3.1	4.2
December	27.41	27.76	27.15	20.4	26.4	34.0	17.2	25.6	66	0	17	20	85	76	.089	.103	1.38	.70	4.3	4.4	6.0
Year	27.40	27.79	26.56	43.4	55.8	64.5	40.3	52.4	103	—11	37	38	80	56	.258	.265	19.66	.....	3.8	3.8	4.2

DUBUQUE, IOWA.

[Lat. 42° 30′ N.; long. 90° 44′ W.; gravity corr., —.01.]

January	29.42	29.83	28.78	9.5	17.5	23.4	5.8	14.6	46	—18	3	10	75	74	.045	.062	2.34	1.72	4.0	3.2	4.5
February	29.40	29.88	28.74	26.0	29.3	34.4	22.7	28.6	51	— 5	20	23	80	78	.103	.119	1.02	.36	6.4	6.9	7.3
March	29.37	29.89	28.60	27.1	33.8	39.6	23.2	31.4	56	3	21	26	78	74	.108	.137	1.91	1.14	4.5	5.0	5.7
April	29.32	29.67	28.62	40.9	49.3	54.0	37.4	45.7	73	23	34	40	76	73	.195	.246	4.37	1.80	6.1	5.7	6.7
May	29.19	29.66	28.58	52.2	57.6	62.1	48.4	55.2	75	36	47	52	84	80	.322	.387	9.18	1.37	7.1	8.0	8.1
June	29.22	29.51	28.94	64.3	71.0	76.4	60.3	68.4	93	50	60	64	86	81	.517	.595	14.16	3.48	6.6	5.5	7.1
July	29.36	29.78	28.98	69.6	77.6	81.3	65.1	74.2	95	48	64	67	82	72	.595	.660	5.08	2.66	4.0	4.6	5.2
August	29.33	29.54	29.04	66.5	75.6	82.2	63.0	72.6	94	47	62	66	84	73	.555	.633	2.51	1.38	2.7	3.8	4.6
September	29.37	29.64	29.14	57.8	66.4	73.4	55.1	64.2	84	42	53	57	86	74	.402	.465	3.79	2.57	4.5	4.1	5.0
October	29.36	29.64	29.00	46.5	55.7	64.8	44.5	54.6	82	25	41	47	80	72	.256	.322	.44	.30	3.8	2.9	4.7
November	29.36	29.78	28.59	28.3	33.2	37.3	25.5	31.4	53	5	24	27	81	76	.125	.143	1.89	.77	6.0	4.8	6.8
December	29.40	29.86	28.67	14.6	19.8	24.2	11.6	17.9	45	—12	10	14	81	77	.063	.077	2.08	1.13	6.1	4.0	6.8
Year	29.34	29.89	28.58	41.9	48.9	54.6	38.6	46.6	95	—18	37	41	81	75	.274	.321	48.77	.....	5.2	4.9	6.0

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

DES MOINES, IOWA.

[H=869 feet; h_t=84 feet; h_r=75 feet; h_a=88 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		Mi.																								
January	8.0	NW.	40	NW.	1	10	1	2	3	4	10	9	21	2	17	9	5	7	6	7	0	....	18	0	30	0	0
February	8.4	NW.	24	W.	0	4	9	12	9	1	2	5	13	3	3	8	18	9	7	7	0	....	8	0	24	0	0
March	10.7	NE.	42	NW.	2	5	19	4	8	3	6	2	15	0	10	6	15	13	8	6	0	....	9	0	20	0	0
April	13.4	NW.	64	SW.	4	1	7	13	8	8	4	6	13	0	6	8	16	11	8	2	0	....	0	0	6	4	1
May	10.8	NW.	36	SE.	0	8	6	13	6	4	6	5	13	1	5	5	21	18	15	0	1	....	0	0	0	11	0
June	8.7	SW.	35	SW.	0	7	14	5	7	8	11	2	6	0	6	13	11	12	10	0	0	....	0	2	0	9	0
July	7.1	SE.	36	SE.	0	4	5	9	17	7	16	1	2	1	10	14	7	12	11	0	0	....	0	8	0	8	3
August	5.0	NE.	34	W.	0	7	11	10	8	7	3	1	4	11	13	10	8	8	5	0	0	....	0	3	0	3	0
September	6.6	SW.	34	SE.	0	6	3	2	9	12	8	2	5	13	17	4	9	7	7	0	0	....	0	1	0	4	0
October	5.9	SW.	32	NW.	0	9	2	2	3	12	8	5	7	14	20	6	5	5	4	0	0	....	0	0	7	2	0
November	8.9	NW.	36	NW.	0	5	6	14	7	4	2	8	13	1	14	4	12	4	3	0	0	....	4	0	22	0	0
December	6.6	NW.	32	N.	0	6	4	2	11	1	11	11	13	3	9	7	15	10	8	10	0	....	20	0	28	0	0
Year	8.3	NW.	64	SW.	7	72	87	88	96	71	87	57	125	49	130	94	142	116	92	32	1	....	58	14	137	41	4

DETROIT, MICH.

[H=724 feet; h_t=158 feet; h_r=144 feet; h_a=161 feet.]

Month.	Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	11.7	SW.	42	SW.	2	4	5	1	1	0	29	11	11	0	9	10	12	14	10	13	0	....	21	0	29	0	1
February	10.1	NE.	36	SW.	0	2	18	6	7	3	8	8	4	2	5	9	15	12	10	7	0	....	9	0	24	1	1
March	10.1	NE.	43	SW.	1	7	17	6	4	0	14	4	9	1	9	9	13	12	9	5	0	....	12	0	25	0	1
April	12.4	NE.	57	SW.	3	5	20	3	3	1	15	10	3	0	8	10	12	10	8	1	1	....	1	0	12	2	2
May	11.3	SW.	40	SW.	1	6	13	3	8	5	18	4	4	1	2	9	20	23	17	0	1	....	0	0	0	5	0
June	9.4	SW.	46	SW.	2	1	11	6	5	3	24	4	5	1	7	10	13	17	14	0	0	....	0	1	0	14	0
July	8.2	SW.	44	SW.	2	1	12	4	5	3	25	2	8	2	18	11	2	8	6	0	0	....	0	5	0	8	2
August	9.0	SW.	33	SW.	0	4	13	11	3	2	17	6	5	1	17	7	7	8	6	0	0	....	0	1	0	8	1
September	9.3	SW.	34	NW.	0	3	9	6	7	2	19	8	6	0	14	12	4	8	7	0	0	....	0	0	0	2	0
October	10.8	SW.	56	SW.	2	2	3	4	2	5	23	9	14	0	10	13	8	6	4	0	0	....	0	0	2	0	0
November	11.4	SW.	50	SW.	4	3	7	1	4	4	18	7	15	1	1	8	21	14	9	6	0	....	5	0	17	1	0
December	11.1	SW.	39	SW.	0	2	3	3	3	4	27	11	9	0	1	10	20	13	8	8	0	....	13	0	28	0	0
Year	10.4	SW.	57	SW.	17	40	131	54	52	32	237	84	93	9	101	118	147	145	108	40	2	....	61	7	137	41	8

DODGE CITY, KANS.

[H=2,523 feet; h_t=44 feet; h_r=37 feet; h_a=55 feet.]

Month.	Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	9.7	NW.	38	S.	0	11	7	0	3	12	5	5	18	1	16	11	4	4	2	4	0	....	10	0	28	0	0
February	9.2	NW.	36	NW.	0	6	1	3	5	11	5	3	23	1	12	7	10	10	4	6	0	....	5	0	27	1	0
March	12.8	NW.	51	S.	4	10	9	1	2	13	5	8	14	0	10	12	9	13	10	8	1	....	9	0	21	2	0
April	16.3	NW.	58	NW.	7	5	12	3	11	9	6	2	11	1	11	15	4	7	3	0	0	....	0	2	7	0	0
May	12.8	N.	46	SE.	4	18	18	6	10	1	1	2	5	1	6	16	9	14	10	0	2	....	0	0	0	4	0
June	13.6	SE.	51	SE.	5	5	9	2	26	6	3	4	4	1	20	8	2	5	5	0	2	....	0	6	0	4	0
July	11.9	SE.	50	SE.	3	5	5	2	40	8	1	0	0	1	14	14	3	8	7	0	0	....	0	16	0	2	0
August	10.3	SE.	50	NE.	2	3	7	4	31	11	3	0	3	0	17	13	1	8	7	0	0	....	0	17	0	6	0
September	11.2	SE.	40	NE.	1	8	7	3	28	5	2	2	1	4	21	9	0	2	2	0	0	....	0	5	0	1	0
October	10.4	SE.	50	SE.	4	8	11	2	19	2	3	3	10	4	19	10	2	3	3	0	0	....	0	0	3	1	0
November	10.5	SE.	43	SE.	3	8	11	1	17	2	3	4	11	3	14	11	5	5	3	4	0	....	0	0	29	0	0
December	8.4	SE.	39	SE.	0	12	7	5	10	7	3	6	10	2	5	17	9	7	4	6	0	....	17	0	28	0	0
Year	11.4	SE.	58	NW.	33	99	104	32	202	87	40	39	110	19	165	143	58	86	60	28	5	....	41	46	134	21	0

DUBUQUE, IOWA.

[H=651 feet; h_t=60 feet; h_r=50 feet; h_a=60 feet.]

Month.	Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	5.8	NW.	24	NW.	0	5	2	3	2	12	3	14	18	3	13	10	8	10	7	9	0	....	21	0	30	0	0
February	5.7	SE.	22	NW.	0	5	3	8	15	3	1	7	13	3	5	7	17	7	6	6	0	....	9	0	23	0	1
March	7.0	NW.	36	NW.	0	9	9	7	9	2	4	7	13	2	9	11	11	9	7	4	0	....	7	0	23	0	1
April	8.8	W.	32	SW.	0	3	1	14	13	3	4	14	7	1	5	10	15	10	8	2	0	....	6	0	3	3	1
May	6.6	E.	24	NW.	0	6	5	13	9	6	3	8	10	2	1	9	21	20	19	0	0	....	0	0	0	4	0
June	5.1	SE.	36	N.	0	5	4	5	18	5	4	8	8	3	2	12	16	17	15	0	1	....	0	2	0	11	0
July	4.0	SE.	25	N.	0	5	4	8	18	13	5	2	3	4	12	10	9	12	12	0	0	....	0	7	0	6	1
August	3.8	NW.	45	NE.	1	8	7	3	10	7	5	6	10	6	11	15	5	6	4	0	0	....	0	2	0	0	0
September	4.1	S.	19	NW.	0	1	0	8	8	20	6	5	7	5	9	13	8	5	4	0	2	....	0	0	0	6	0
October	4.7	NW.	30	NW.	0	3	0	3	12	12	7	8	13	4	13	9	9	6	3	0	0	....	0	0	5	0	0
November	6.2	SE.	28	NW.	0	4	2	2	19	3	4	11	13	2	4	10	16	11	7	3	0	....	9	0	22	0	0
December	4.4	W.	20	NE.	0	6	2	4	11	4	7	17	7	4	3	13	15	8	4	7	0	....	23	0	29	0	0
Year	5.5	SE.	45	NE.	1	60	39	78	144	90	53	107	122	39	87	129	150	121	96	31	3	....	69	11	135	30	4

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

DULUTH, MINN.

[Lat. 46° 48′ N.; long. 92° 6′ W.; gravity corr., 0.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.33	29.86	28.80	2.6	11.8	16.7	—0.5	8.1	50	—29	—2	5	82	74	.034	.049	.48	.24	2.9	2.8	4.2
February	29.43	29.94	28.82	13.7	20.4	23.9	11.2	17.6	50	—20	8	12	78	72	.057	.070	1.46	.58	6.3	5.9	6.6
March	29.38	29.94	28.40	18.7	26.9	30.7	16.3	23.5	52	— 6	13	17	78	68	.074	.089	2.02	1.25	6.8	4.8	5.7
April	29.33	29.78	28.37	32.0	36.7	40.2	29.3	34.8	67	14	26	26	78	68	.137	.137	3.70	1.40	4.5	5.2	5.0
May	29.24	29.87	28.62	42.8	46.3	50.2	38.7	44.4	72	32	36	34	80	67	.211	.195	6.54	2.02	6.6	6.8	6.7
June	29.22	29.53	28.73	53.4	58.7	62.9	49.4	56.2	82	41	46	46	78	65	.310	.310	5.32	1.58	6.1	4.7	5.7
July	29.28	29.72	28.95	64.7	73.9	78.7	60.4	69.6	93	50	56	58	73	56	.448	.448	2.18	1.08	4.4	2.8	3.6
August	29.29	29.60	29.00	62.9	69.1	74.6	58.9	66.8	86	44	56	57	79	67	.448	.465	4.28	1.94	3.9	3.0	4.4
September	29.28	29.63	29.00	54.4	60.1	67.0	51.9	59.4	85	44	49	50	83	72	.347	.360	.32	.14	4.8	3.5	5.0
October	29.29	29.71	28.72	44.5	50.5	56.0	41.9	49.0	78	29	37	37	76	62	.219	.219	.38	.16	4.7	2.1	4.3
November	29.32	29.94	28.65	23.4	28.4	31.7	21.1	26.4	46	— 4	18	20	78	70	.093	.103	1.69	.76	7.3	6.6	9.0
December	29.37	29.79	28.82	10.6	16.0	20.0	7.8	13.9	42	—19	2	6	66	62	.043	.052	.15	.06	6.7	4.8	5.8
Year	29.31	29.94	28.37	35.3	41.6	46.0	32.2	39.1	93	—29	29	30	77	67	.202	.208	28.52	.....	5.4	4.4	5.5

EASTPORT, ME.

[Lat. 44° 54′ N.; long. 66° 59′ W.; gravity corr., 0.]

January	29.91	30.66	29.14	23.8	27.2	31.0	19.0	25.0	54	— 1	18	21	80	77	.093	.108	5.76	1.31	7.1	7.2	7.4
February	30.02	30.79	28.57	22.1	26.0	29.3	19.4	24.4	42	2	15	18	74	72	.081	.093	1.88	.98	6.6	4.8	6.3
March	29.75	30.40	29.07	26.4	29.1	34.2	22.6	28.4	51	4	16	19	68	68	.085	.098	3.60	1.56	4.9	4.0	5.3
April	29.84	30.38	29.26	39.4	41.1	49.5	34.6	42.0	66	24	26	28	61	62	.137	.150	1.51	.69	5.1	3.2	5.7
May	29.89	30.28	29.42	45.8	46.1	53.1	41.0	47.0	69	30	36	38	73	77	.211	.228	2.17	.77	5.3	5.0	7.2
June	29.87	30.33	29.52	55.4	54.7	64.4	48.2	56.3	85	40	48	49	77	82	.334	.347	3.54	.93	5.9	4.3	6.9
July	29.91	30.38	29.42	60.4	59.7	71.4	52.9	62.2	88	48	53	53	77	79	.402	.402	1.21	.78	4.8	3.2	5.3
August	29.93	30.22	29.69	60.2	59.9	68.9	54.9	61.9	84	50	56	56	86	89	.448	.448	4.64	1.65	4.3	3.5	6.5
September	30.02	30.38	29.26	56.4	55.3	64.0	50.3	57.2	73	42	49	50	78	83	.347	.360	1.21	.34	3.1	2.4	5.0
October	29.76	30.34	29.33	45.4	46.1	51.4	40.7	46.0	67	34	36	38	72	76	.211	.228	1.49	.40	5.0	5.3	7.3
November	29.95	30.40	29.42	37.6	38.8	42.8	34.6	38.7	61	20	31	32	76	76	.172	.180	3.17	1.14	7.3	6.3	7.8
December	29.81	30.28	29.26	22.3	25.0	28.8	18.9	23.8	50	— 7	14	16	69	68	.077	.085	2.02	.98	5.0	3.7	6.0
Year	29.89	30.79	28.57	41.3	42.4	49.1	36.4	42.7	88	— 7	33	35	74	76	.216	.227	32.20	.....	5.4	4.4	6.4

EL PASO, TEX.

[Lat. 31° 47′ N.; long. 106° 30′ W.; gravity corr., —.03.]

January	26.26	26.62	26.01	33.4	49.7	55.0	31.2	43.1	70	13	19	18	59	35	.098	.093	1.25	.79	2.0	2.6	3.1
February	26.21	26.45	25.91	40.8	57.2	61.6	39.1	50.4	72	27	29	21	65	30	.157	.108	.57	.45	2.9	3.2	3.3
March	26.14	26.48	25.92	44.5	62.6	67.0	42.4	54.7	79	26	23	10	49	19	.119	.063	.30	.29	2.2	2.9	2.3
April	26.14	26.43	25.84	51.7	73.7	76.9	50.2	63.6	90	34	20	0	33	11	.103	.038	.11	.09	1.2	2.2	1.8
May	26.12	26.45	25.91	59.0	81.8	84.0	57.8	70.9	95	48	19	2	23	6	.098	.043	T.	T.	1.2	1.9	1.4
June	26.11	26.38	25.87	68.1	93.2	95.7	65.7	80.7	105	50	28	12	26	7	.150	.070	T.	T.	0.5	1.3	1.1
July	26.22	26.39	26.02	72.5	90.2	94.8	71.2	83.0	102	64	51	44	48	23	.373	.287	1.14	.88	4.2	4.3	3.7
August	26.22	26.39	26.03	67.9	83.9	90.6	67.0	78.8	96	60	52	45	57	29	.387	.298	.07	.03	4.0	5.4	3.9
September	26.26	26.44	26.08	61.6	83.4	88.4	60.7	74.6	94	53	39	34	46	20	.237	.195	.12	.12	2.6	1.9	1.9
October	26.23	26.52	25.90	51.2	69.5	75.3	49.9	62.6	87	37	32	29	52	27	.180	.157	.22	.11	1.9	2.0	2.2
November	26.28	26.63	26.01	41.6	57.5	64.1	39.8	52.0	74	33	27	25	56	31	.143	.130	.93	.55	2.3	2.7	2.8
December	26.22	26.45	26.00	36.0	49.1	54.3	33.4	43.8	74	20	25	26	63	42	.130	.137	.61	.40	3.0	2.7	3.3
Year	26.20	26.63	25.84	52.4	71.0	75.6	50.7	63.2	105	13	30	22	48	23	.181	.135	5.32	.....	2.3	2.8	2.6

ERIE, PA.

[Lat. 42° 7′ N.; long. 80° 5′ W.; gravity corr., —.01.]

January	29.24	29.75	28.64	22.8	24.2	30.2	17.6	23.9	53	2	18	18	84	79	.093	.093	3.26	.72	9.1	6.0	7.2
February	29.31	29.89	28.50	27.7	30.3	35.8	22.8	29.3	50	8	23	26	85	84	.119	.137	2.39	.56	6.7	6.7	7.3
March	29.26	29.71	28.58	27.8	29.5	35.6	23.5	29.6	54	11	22	24	81	81	.113	.125	2.20	.58	6.8	6.6	6.8
April	29.30	29.74	28.96	42.5	45.4	52.6	36.1	44.4	78	23	33	32	69	62	.187	.180	1.14	.40	6.2	4.7	5.2
May	29.18	29.58	28.73	53.3	55.7	60.5	47.3	53.9	87	38	47	49	79	79	.322	.347	8.05	1.36	7.2	7.4	6.8
June	29.19	29.36	28.80	67.9	68.6	75.5	61.8	68.6	86	52	61	61	79	77	.536	.536	6.48	1.85	5.9	7.1	6.2
July	29.31	29.77	28.97	70.5	72.2	77.7	62.9	70.3	90	51	59	60	67	65	.499	.517	2.15	1.32	4.0	4.6	4.0
August	29.25	29.43	28.99	69.5	70.9	76.9	63.2	70.0	88	56	60	60	71	70	.517	.517	6.22	2.54	5.5	5.1	5.6
September	29.35	29.60	28.64	61.1	63.8	70.1	55.8	63.0	83	44	52	54	72	72	.387	.417	3.19	1.07	5.1	2.8	4.6
October	29.26	29.64	28.66	49.9	52.2	58.7	45.6	52.2	75	38	40	42	68	68	.246	.266	1.96	.48	7.2	5.5	6.0
November	29.26	29.64	28.62	38.1	39.0	44.8	34.1	39.4	66	23	32	33	79	78	.180	.187	3.03	.64	9.3	8.3	8.5
December	29.29	29.76	28.75	27.7	28.7	33.4	23.4	28.4	63	5	23	24	81	81	.119	.125	1.60	.22	9.4	7.4	7.9
Year	29.27	29.89	28.50	46.6	48.4	54.3	41.2	47.8	90	2	39	40	76	75	.276	.287	41.67	.....	6.9	6.0	6.8

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

DULUTH, MINN.

[H = 656 feet; h_1 = 70 feet; h_r = 56 feet; h_a = 71 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	6.9	NW.	28	NW.	0	4	0	0	1	2	13	14	21	7	14	8	9	6	2	5	....	....	24	0	31	0	0
February	6.4	NW.	30	NE.	0	6	13	4	2	1	3	8	13	8	11	1	17	14	7	12	....	....	21	0	28	0	2
March	7.7	NE.	60	NE.	2	6	16	17	3	0	0	4	3	13	12	6	13	6	3	4	....	....	17	0	27	0	0
April	9.5	E.	34	NW.	0	7	8	28	3	1	1	0	7	5	14	6	10	8	8	3	....	....	3	0	19	2	0
May	8.6	E.	36	N.	0	7	21	20	1	1	0	2	4	6	7	8	16	16	13	1	....	....	0	0	0	0	0
June	6.2	E.	36	NE.	0	9	12	21	0	0	0	2	6	10	7	13	10	10	9	0	....	....	0	0	0	5	1
July	5.0	E.	24	SE.	0	9	7	5	1	3	5	6	13	13	18	11	2	6	5	0	....	....	0	1	0	3	1
August	4.9	E.	36	N.	0	11	11	19	0	4	0	7	2	8	17	8	6	8	6	0	....	....	0	0	0	5	1
September	6.6	E.	25	NW.	0	8	10	13	1	0	7	4	12	5	16	2	12	5	3	0	....	....	0	0	0	0	0
October	8.2	N.	34	N.	0	15	13	6	3	0	4	3	15	3	19	4	8	4	3	0	....	....	0	0	3	1	0
November	8.1	N.	34	N.	0	12	4	3	11	4	9	7	7	3	1	3	26	9	6	5	....	....	14	0	27	0	0
December	5.9	W.	26	NW.	0	4	0	1	2	4	6	24	21	0	13	3	15	6	2	6	....	....	27	0	30	0	0
Year	7.0	E.	60	NE.	2	98	115	137	28	20	48	81	124	81	149	73	144	98	67	36	....	....	106	1	165	16	5

EASTPORT, ME.

[H = 53 feet; h_1 = 51 feet; h_r = 43 feet; h_a = 56 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	12.4	NW.	48	E.	1	7	10	3	7	1	10	6	13	5	3	10	18	19	17	12	0	....	15	0	27	0	1
February	14.1	NE.	60	NE.	2	7	16	3	3	2	6	6	15	0	6	13	10	12	7	11	0	....	17	0	25	0	3
March	13.7	W.	42	NE.	2	8	5	3	2	2	8	17	17	0	13	7	11	11	10	10	0	....	10	0	28	0	5
April	8.7	W.	30	NW.	0	7	1	0	0	6	13	17	14	2	8	13	9	9	7	1	1	....	0	0	5	0	5
May	10.7	SW.	38	NE.	0	9	14	3	1	8	12	4	4	7	5	9	17	12	11	0	0	....	0	0	1	0	2
June	6.9	SW.	39	NE.	0	9	6	2	1	9	21	2	5	5	3	15	12	19	13	0	1	....	0	0	0	4	1
July	6.8	S.	28	SW.	0	3	1	1	0	19	20	4	11	3	5	23	3	9	7	0	0	....	0	0	0	2	4
August	6.6	SW.	36	NE.	0	5	15	1	2	11	14	3	8	3	6	10	15	14	12	0	0	....	0	0	0	2	1
September	7.6	SW.	28	S.	0	3	2	1	0	14	22	12	6	0	10	16	4	6	5	0	0	....	0	0	0	0	7
October	9.1	NW.	30	NW.	0	11	4	0	1	4	15	10	16	1	1	16	14	10	10	0	0	....	0	0	0	0	3
November	13.2	NW.	42	NE.	2	8	12	3	4	2	8	7	14	2	2	9	19	15	12	4	0	....	2	0	12	0	0
December	10.9	NW.	28	NW.	0	5	2	1	2	1	4	18	28	1	4	16	11	12	7	8	0	....	16	0	27	0	1
Year	10.1	NW. SW.	60	NE.	7	82	88	21	23	79	153	106	151	29	66	157	143	148	118	46	2	....	60	0	125	8	33

EL PASO, TEX.

[H = 3,796 feet; h_1 69; h_r = 62 feet; h_a = 80 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	5.8	NW.	28	NW.	0	2	6	8	8	0	0	14	17	7	19	8	4	4	4	1	0	....	0	0	19	0	0
February	7.9	W.	43	W.	1	2	2	8	9	1	0	18	14	4	16	10	3	5	3	0	0	....	0	0	3	0	0
March	10.6	NW.	68	NW.	5	3	2	8	9	2	7	8	20	3	21	9	1	2	1	0	0	....	0	0	2	0	0
April	12.7	W.	50	SW.	4	2	0	8	0	0	5	27	17	1	24	4	2	2	1	0	0	....	0	0	0	0	0
May	11.6	W.	48	W.	2	1	2	6	0	0	6	26	18	3	27	3	1	0	0	0	0	....	0	3	0	0	0
June	8.2	W.	40	NW.	1	1	5	11	6	0	4	23	9	1	27	3	0	0	0	0	0	....	0	25	0	0	0
July	8.1	NW.	39	NW.	0	6	5	17	9	2	3	2	14	4	13	17	1	4	3	0	0	....	0	25	0	2	0
August	6.3	E.	34	W.	0	1	3	23	14	1	4	3	10	3	14	15	2	4	0	0	0	....	0	19	0	0	0
September	5.2	E.	39	W.	0	7	4	24	4	0	2	0	9	10	22	5	3	1	1	0	0	....	0	13	0	1	0
October	7.3	E.	38	NE.	0	2	2	19	12	0	3	14	7	3	22	8	1	4	2	0	0	....	0	0	0	0	0
November	8.0	E.	50	NW.	1	2	8	17	0	0	0	11	12	10	20	6	4	5	4	0	0	....	0	0	0	0	0
December	8.6	NW.	42	NW.	1	8	2	8	1	0	1	8	31	3	18	11	2	5	4	2	0	....	0	0	15	0	0
Year	8.4	NW.	68	NW.	15	37	41	157	72	6	35	154	178	52	243	99	24	36	23	3	0	....	0	85	39	3	0

ERIE, PA.

[H = 714 feet; h_1 = 92 feet; h_r = 82; h_a = 102 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	14.2	SW.	38	NW.	0	1	6	3	3	13	17	10	9	0	0	14	17	20	13	18	0	....	15	0	31	0	0
February	12.6	NE.	38	S.	0	1	15	2	4	13	8	11	4	0	5	5	19	16	13	9	0	....	9	0	27	1	0
March	12.1	NE.	40	NE.	1	0	16	2	7	3	9	13	11	1	7	6	18	20	13	16	0	....	11	0	27	1	1
April	14.1	NE.	45	SW.	4	1	12	3	8	6	10	11	10	1	9	11	10	10	8	3	0	....	0	0	11	1	2
May	10.7	SW.	36	SE.	0	8	9	0	6	9	19	8	3	0	5	10	16	22	19	0	0	....	0	0	0	8	0
June	8.9	SW.	28	SW.	0	2	11	4	2	12	15	9	5	0	5	14	11	15	14	0	0	....	0	0	0	14	0
July	7.9	SW.	36	W.	0	2	8	3	1	10	20	11	7	0	14	14	3	7	4	0	0	....	0	0	0	5	2
August	8.8	NE.	30	W.	0	5	13	0	7	12	9	10	5	1	8	14	9	11	11	0	0	....	0	0	0	8	0
September	11.6	S.	36	SE.	0	1	5	3	8	17	15	5	6	0	12	10	8	12	10	0	0	....	0	0	0	6	1
October	11.5	SW.	47	SW.	1	6	4	0	4	11	21	1	15	0	7	14	10	13	12	0	0	....	0	0	0	2	1
November	13.3	NW.	40	SE.	1	3	2	4	6	11	11	4	18	1	1	6	23	21	13	15	0	....	2	0	15	0	0
December	11.8	SW.	35	W.	0	6	1	5	2	8	18	13	9	0	1	12	18	21	13	14	0	....	13	0	26	1	0
Year	11.5	SW.	47	SW.	7	36	102	29	56	125	172	106	102	4	74	130	162	188	143	75	0	....	50	0	137	47	7

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

ESCANABA, MICH. a

[Lat. 45° 48′ N.; long. 87° 5′ W.; gravity corr., 0.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	.....	.....	.....	.....	.....	22.1	4.9	13.5	49	—15	.....	.....	.....	.....	.....	.....	1.81	1.21	.....	.....	.....
February	.....	.....	.....	.....	.....	28.9	11.8	20.3	42	—16	.....	.....	.....	.....	.....	.....	2.30	.63	.....	.....	.....
March	.....	.....	.....	.....	.....	33.7	13.9	23.8	48	— 4	.....	.....	.....	.....	.....	.....	1.35	.60	.....	.....	.....
April	.....	.....	.....	.....	.....	46.6	29.2	37.9	58	16	.....	.....	.....	.....	.....	.....	3.10	.95	.....	.....	.....
May	.....	.....	.....	.....	.....	59.3	41.6	50.4	78	33	.....	.....	.....	.....	.....	.....	4.29	1.02	.....	.....	.....
June	.....	.....	.....	.....	.....	71.7	52.6	62.2	90	44	.....	.....	.....	.....	.....	.....	3.03	.88	.....	.....	.....
July	.....	.....	.....	.....	.....	81.8	57.6	69.7	90	46	.....	.....	.....	.....	.....	.....	4.06	1.67	.....	.....	.....
August	.....	.....	.....	.....	.....	76.2	56.2	66.2	87	44	.....	.....	.....	.....	.....	.....	4.09	2.01	.....	.....	.....
September	.....	.....	.....	.....	.....	68.0	48.3	58.2	82	34	.....	.....	.....	.....	.....	.....	1.34	.60	.....	.....	.....
October	.....	.....	.....	.....	.....	55.5	39.7	47.6	66	26	.....	.....	.....	.....	.....	.....	3.36	1.12	.....	.....	.....
November	.....	.....	.....	.....	.....	37.0	25.3	31.2	50	9	.....	.....	.....	.....	.....	.....	2.93	1.16	.....	.....	.....
December	.....	.....	.....	.....	.....	24.7	11.3	18.0	36	— 6	.....	.....	.....	.....	.....	.....	1.05	.47	.....	.....	.....
Year	.....	.....	.....	.....	.....	50.5	32.7	41.6	90	—16	.....	.....	.....	.....	.....	.....	32.76	.....	.....	.....	.....

EUREKA, CAL.

[Lat. 40° 48′ N.; long. 124° 11′ W.; gravity corr., —.01.]

January	30.07	30.26	29.55	45.3	50.9	54.2	41.8	48.0	64	33	43	47	92	88	.277	.322	3.29	1.18	5.7	6.3	6.2
February	29.99	30.32	29.67	45.2	50.0	53.2	42.5	47.8	59	36	44	47	95	90	.287	.322	2.53	.72	4.5	6.2	6.8
March	29.99	30.38	29.57	45.2	51.6	54.3	43.0	48.6	66	36	44	48	95	87	.287	.334	5.32	1.27	5.2	5.3	7.1
April	30.07	30.31	29.69	45.2	51.5	54.6	43.4	49.0	60	36	44	46	95	84	.287	.310	5.54	1.10	6.3	6.7	7.0
May	29.97	30.33	29.59	49.7	54.9	57.6	48.1	52.8	66	42	48	51	94	86	.334	.373	3.63	1.40	4.8	5.4	6.3
June	29.99	30.22	29.67	50.6	56.8	58.8	48.3	53.6	65	43	49	52	96	85	.347	.387	0.45	.14	4.6	4.3	6.0
July	30.02	30.22	29.87	51.9	58.0	60.1	50.6	55.4	64	46	51	54	97	86	.373	.417	.00	.....	3.0	2.0	5.2
August	29.95	30.12	29.78	52.7	58.2	61.1	51.4	56.2	68	47	52	55	98	88	.387	.432	.09	.05	1.0	1.9	5.8
September	29.97	30.14	29.77	52.8	58.1	61.0	51.3	56.2	68	43	52	56	98	92	.387	.448	.99	.63	2.8	4.3	6.7
October	29.99	30.25	29.72	50.1	56.0	59.5	47.8	53.6	69	40	49	53	96	90	.347	.402	2.90	1.27	3.4	4.5	5.8
November	30.00	30.29	29.18	46.0	52.0	55.7	43.5	49.6	67	34	45	49	97	89	.298	.347	8.19	2.33	3.7	4.9	5.7
December	30.05	30.39	29.11	43.6	50.5	52.9	40.2	46.6	65	31	42	46	95	86	.266	.310	6.55	2.73	4.4	5.0	5.0
Year	30.00	30.39	29.11	48.2	54.0	56.9	46.0	51.4	69	31	47	50	96	88	.323	.367	39.48	.....	4.1	4.7	6.1

FORT SMITH, ARK.

[Lat. 35° 22′ N.; long. 94° 24′ W.; gravity corr., —.03.]

January	29.70	30.02	29.11	26.3	37.9	44.5	23.0	33.8	72	—2	20	24	78	61	.103	.125	1.98	.98	3.4	2.6	3.3
February	29.59	30.03	29.01	41.1	50.1	55.8	38.0	46.9	69	26	35	38	79	66	.203	.228	2.51	1.08	5.7	4.7	5.6
March	29.56	29.98	29.11	40.5	52.2	58.0	38.0	48.0	80	20	32	34	73	54	.180	.195	2.71	1.40	4.3	3.8	4.3
April	29.49	29.93	28.88	55.6	65.6	71.8	51.1	61.4	91	36	45	44	69	49	.298	.287	4.91	2.47	5.1	4.3	4.4
May	29.43	29.65	29.12	62.3	69.2	75.2	58.2	66.7	89	42	56	57	80	68	.448	.465	10.59	3.68	6.8	5.8	6.1
June	29.45	29.60	29.28	72.2	80.4	87.2	66.1	76.6	95	52	66	67	80	64	.638	.660	5.60	2.38	3.3	3.5	3.5
July	29.54	29.73	29.36	74.8	82.8	90.6	70.1	80.4	99	64	69	69	82	63	.707	.707	2.96	1.28	5.8	4.8	4.7
August	29.51	29.70	29.38	72.6	80.4	89.8	68.0	78.9	100	55	68	67	84	65	.684	.660	3.36	1.09	4.2	4.4	4.5
September	29.59	29.77	29.40	63.5	74.6	83.8	59.2	71.5	92	48	59	59	85	60	.499	.490	1.84	1.23	2.6	1.9	2.0
October	29.57	29.83	29.33	55.7	66.2	75.0	52.2	63.6	91	33	50	50	82	60	.360	.360	5.73	1.91	4.3	2.8	3.6
November	29.61	29.98	29.09	42.0	52.6	59.4	38.8	49.1	74	29	34	37	75	58	.195	.219	1.94	.45	4.7	5.0	4.9
December	29.61	30.03	29.16	35.5	41.1	46.0	32.2	39.1	72	2	31	34	84	75	.172	.195	6.12	2.33	6.7	6.8	7.0
Year	29.55	30.03	28.88	53.5	62.8	69.8	49.6	59.7	100	—2	47	48	79	62	.374	.383	49.35	.....	4.7	4.2	4.5

FRESNO, CAL.

[Lat. 36° 43′ N.; long. 119° 49′ W.; gravity corr., —.02.]

January	29.75	30.00	29.45	42.6	55.5	58.4	38.6	48.5	69	30	39	41	88	62	.237	.256	0.48	0.24	2.6	4.5	5.3
February	29.65	29.88	29.34	45.9	60.6	63.5	43.0	53.2	70	34	43	44	89	56	.277	.287	1.00	0.38	3.8	4.8	4.9
March	29.63	29.89	29.40	47.6	63.1	66.4	44.9	55.6	78	36	44	44	86	51	.287	.287	1.69	0.53	3.2	5.0	4.7
April	29.69	29.96	29.49	46.2	67.7	71.0	44.2	57.6	80	36	41	38	82	37	.256	.228	0.79	0.43	2.5	3.0	3.1
May	29.56	29.81	29.28	55.4	78.2	80.8	53.7	67.2	104	41	48	43	79	34	.334	.277	1.44	0.82	3.2	3.0	3.3
June	29.52	29.72	29.16	58.0	85.8	88.5	57.0	72.8	106	48	43	38	60	21	.277	.228	0.06	0.06	1.0	1.6	1.7
July	29.52	29.71	29.35	62.8	95.2	97.3	61.4	79.4	110	55	44	37	52	14	.287	.219	0	0	0.4	0.1	0.5
August	29.48	29.62	29.34	65.4	97.2	99.4	63.5	81.4	112	55	45	42	51	16	.298	.266	0	0	0.3	0.5	0.4
September	29.56	29.72	29.38	59.4	87.4	90.0	57.1	73.6	104	52	47	44	65	23	.322	.287	T	T	0.3	0.5	0.7
October	29.61	29.79	29.43	53.2	73.1	77.1	50.7	63.9	94	36	44	44	72	38	.287	.287	0.34	0.32	2.7	3.9	3.9
November	29.69	29.93	29.40	47.7	64.7	69.0	43.7	56.4	80	30	37	39	68	41	.219	.237	0.39	0.22	1.8	4.1	3.1
December	29.78	30.01	29.50	42.7	51.5	55.4	39.4	47.4	79	27	39	43	86	74	.237	.277	2.56	0.66	4.4	4.5	5.0
Year	29.62	30.01	29.16	52.2	73.3	76.4	49.8	63.1	112	27	43	41	73	39	.276	.261	8.75	.....	2.2	3.0	3.1

a Takes one observation daily at 8 p. m.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

ESCANABA, MICH.

[H = — feet; h_t = 15 feet; h_r = 2 feet; h_a = — feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		Mi.																								
January	.....	NW.	....	.....	....	5	0	0	0	6	8	3	8	1	15	9	7	6	5	6	....	....	23	0	31	0	1
February	.....	N.	....	.....	....	13	1	1	1	5	3	1	2	2	8	3	18	15	12	14	....	....	16	0	27	0	4
March	.....	N.	....	.....	....	12	1	2	0	9	1	1	3	2	15	9	7	6	3	5	....	....	12	0	30	0	2
April	.....	N.	....	.....	....	9	4	2	3	3	3	0	4	2	14	7	9	8	8	....	....	....	0	0	18	1	2
May	.....	E.	....	.....	....	7	3	8	2	5	1	2	1	2	5	10	16	17	14	....	2	....	0	0	0	3	0
June	.....	S.	....	.....	....	8	3	6	2	9	0	1	0	1	9	6	15	14	13	....	....	....	0	0	0	0	2
July	.....	S.	....	.....	....	6	0	1	2	15	4	0	1	2	18	9	4	9	7	....	....	....	0	1	0	4	2
August	.....	S.	....	.....	....	6	4	1	5	9	1	1	2	2	14	11	6	6	6	....	....	....	0	0	0	3	0
September	.....	S.	....	.....	....	5	0	3	4	8	4	1	3	2	12	10	8	7	6	....	....	....	0	0	0	1	1
October	.....	S.	....	.....	....	4	1	1	1	9	5	1	7	2	7	12	12	7	6	....	....	....	0	0	5	0	0
November	.....	SW.	....	.....	....	1	3	0	3	5	8	4	6	0	1	4	25	13	12	9	....	....	6	0	22	0	0
December	.....	SW.	....	.....	....	1	2	0	0	3	10	5	9	1	9	3	19	10	7	8	....	....	22	0	31	0	0
Year	.....	S.	....	.....	....	77	22	25	23	86	48	20	46	19	127	93	146	118	99	42	2	....	79	1	164	12	14

EUREKA, CAL.

[H = 64 feet; h_t = 60 feet; h_r = 52 feet; h_a = 69 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	5.2	N.	36	S.	0	16	1	5	10	11	4	0	3	12	8	7	16	11	10	0	0	....	0	0	0	0	0
February	4.1	N.	34	N.	0	17	2	2	7	3	7	2	5	13	3	12	14	13	12	0	0	....	0	0	0	0	0
March	6.5	N.	40	N.	1	19	4	0	12	7	5	3	6	6	4	9	18	13	13	0	0	....	0	0	0	0	0
April	7.5	NW.	36	S.	0	7	1	1	9	5	11	9	13	4	5	6	19	17	15	0	0	....	0	0	0	0	0
May	7.6	NW.	37	N.	0	12	1	0	6	6	11	8	14	4	6	10	15	12	9	0	0	....	0	0	0	0	0
June	8.4	N.	47	N.	2	23	0	0	1	3	4	6	17	6	8	11	11	6	6	0	0	....	0	0	0	0	0
July	7.4	NW.	37	NW.	0	14	1	2	3	2	8	6	21	5	10	13	8	0	0	0	0	....	0	0	0	0	0
August	5.0	NW.	36	NW.	0	5	0	0	5	0	7	8	29	8	7	13	11	2	2	0	0	....	0	0	0	0	0
September	4.0	N.	20	N.	0	18	1	0	4	3	8	3	15	8	2	16	12	5	5	0	0	....	0	0	0	0	0
October	4.3	N.	30	N.	0	16	2	1	9	7	9	2	5	11	11	5	15	9	9	0	0	....	0	0	0	0	0
November	5.4	N.	40	S.	1	13	1	0	9	9	4	4	7	13	9	10	11	15	13	0	2	....	0	0	0	0	0
December	5.7	{Calm N.}	50	SW.	1	15	2	1	9	9	3	1	4	18	13	6	12	13	13	0	0	....	0	0	1	0	0
Year	5.9	N.	50	N.	5	175	16	12	84	65	81	52	139	108	86	118	162	116	107	0	2	....	0	0	1	0	0

FORT SMITH, ARK.

[H = 492 feet; h_t = 73 feet; h_r = 65 feet; h_a = 81 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.8	E.	36	SE.	0	3	5	24	2	1	7	6	14	0	20	3	8	6	5	4	0	....	6	0	26	0	0
February	7.1	E.	26	E.	0	5	5	18	4	1	5	11	9	0	14	2	13	11	7	0	0	....	0	0	7	2	0
March	8.5	E.	36	W.	0	4	9	22	3	4	3	9	8	0	15	5	11	11	5	2	0	....	1	0	8	1	0
April	9.6	E.	36	SW.	0	3	7	21	9	7	4	5	4	0	15	7	8	15	8	0	0	....	0	1	0	4	0
May	8.4	E.	36	N.	0	2	4	18	8	12	3	6	9	0	8	8	15	20	15	0	0	....	0	0	0	3	0
June	5.1	E.	37	NW.	0	3	8	17	13	8	3	4	3	1	18	8	4	11	9	0	0	....	0	13	0	3	0
July	5.3	E.	36	NW.	0	1	6	23	6	14	4	2	3	3	10	15	6	8	5	0	0	....	0	16	0	4	0
August	4.3	E.	24	W.	0	1	6	25	12	9	6	2	1	0	12	14	5	10	9	0	0	....	0	19	0	1	0
September	5.5	E.	18	E.	0	1	9	34	8	4	1	2	1	0	24	4	2	4	3	0	0	....	0	1	0	1	0
October	6.2	E.	22	SE.	0	4	9	25	9	2	6	2	5	0	18	7	6	10	9	0	0	....	0	1	0	0	0
November	7.5	E.	40	W.	1	4	8	25	3	4	5	4	7	0	11	7	12	9	7	0	0	....	0	0	6	0	0
December	6.7	E.	32	W.	0	0	8	22	3	0	2	11	8	2	6	8	17	15	11	1	0	....	2	0	16	0	0
Year	6.8	E.	40	W.	1	37	84	274	80	66	49	64	72	6	171	88	107	130	93	7	0	....	9	51	63	19	0

FRESNO, CAL.

[H = 338 feet; h_t = 78 feet; h_r = 66 feet; h_a = 77 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	4.0	NW.	22	SE.	0	6	5	11	8	7	1	5	18	1	7	14	10	4	2	0	0	....	0	0	1	0	0
February	4.4	NW.	18	NW.	0	2	1	5	6	4	2	1	34	3	8	15	6	5	5	0	0	....	0	0	0	1	0
March	5.5	NW.	25	NW.	0	4	2	10	3	4	2	0	36	1	11	8	12	9	7	0	1	....	0	0	0	2	0
April	7.9	NW.	24	NW.	0	3	1	4	3	0	0	1	48	0	18	9	3	6	5	0	0	....	0	0	0	0	0
May	7.0	NW.	26	NW.	0	2	1	2	9	2	3	2	41	0	20	7	4	8	6	0	0	....	0	10	0	0	0
June	8.8	NW.	24	NW.	0	3	0	2	2	1	1	1	50	0	25	4	1	1	1	0	1	....	0	14	0	0	0
July	7.5	NW.	22	NW.	0	0	0	1	5	3	0	2	51	0	31	0	0	0	0	0	0	....	0	29	0	0	0
August	6.9	NW.	18	NW.	0	1	0	0	1	0	0	1	59	0	31	0	0	0	0	0	0	....	0	26	0	0	0
September	6.3	NW.	18	NW.	0	0	2	0	3	2	0	1	52	0	28	2	0	0	0	0	0	....	0	14	0	4	0
October	5.1	NW.	25	NW.	0	1	0	6	12	6	0	5	30	2	13	13	5	2	1	0	0	....	0	3	0	1	0
November	5.1	NW.	30	SE.	0	3	0	10	15	6	2	2	16	6	19	6	5	4	3	0	0	....	0	0	1	0	0
December	4.1	NW.	22	SE.	0	2	1	14	12	12	2	1	16	2	13	6	12	8	7	0	0	....	0	0	10	0	0
Year	6.0	NW.	30	SE.	0	27	13	65	79	47	13	22	451	15	224	84	58	47	37	0	2	....	0	96	12	8	0

b By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

GALVESTON, TEX.

[Lat. 29° 18′ N.; long. 94° 50′ W.; gravity corr., —.04.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	30.17	30.52	29.60	46.3	49.2	54.2	42.2	48.2	71	25	39	42	78	78	.237	.266	1.99	.68	5.5	4.2	4.7
February	30.07	30.37	29.76	57.7	60.4	65.2	55.8	60.5	76	48	54	56	87	85	.417	.448	1.52	.95	6.5	5.9	5.3
March	30.05	30.50	29.72	55.5	58.8	63.1	53.7	58.4	72	32	50	52	83	80	.360	.387	1.45	.70	3.9	5.6	5.4
April	29.97	30.27	29.65	67.4	69.4	73.4	65.0	69.2	79	51	64	66	89	89	.595	.638	1.14	.84	7.0	6.4	5.2
May	29.95	30.12	29.74	73.4	75.4	79.3	71.8	75.6	84	54	67	68	80	80	.660	.684	.33	.16	4.0	6.0	4.0
June	29.95	30.09	29.82	78.4	79.6	84.0	75.3	79.6	91	61	73	73	83	80	.810	.810	4.26	1.25	4.6	4.5	3.4
July	30.05	30.18	29.89	81.0	82.0	86.1	78.1	82.1	88	71	74	74	79	76	.838	.838	1.50	.45	4.0	4.6	3.2
August	29.99	30.08	29.91	80.5	82.5	87.6	78.2	82.9	92	72	75	74	82	77	.866	.838	5.29	4.32	4.4	5.0	3.3
September	30.01	30.16	29.79	75.8	79.3	83.1	74.2	78.6	88	67	71	69	84	72	.757	.767	.58	.18	3.4	3.2	2.7
October	30.01	30.29	29.86	71.9	74.8	78.5	70.0	74.2	89	53	65	65	80	73	.616	.616	1.69	.78	3.6	2.7	3.0
November	30.11	30.52	29.79	63.5	65.4	70.0	60.7	65.4	80	44	59	60	85	84	.499	.517	2.80	1.69	5.1	2.4	3.5
December	30.07	30.39	29.67	55.0	57.0	61.0	51.4	56.2	76	25	51	52	87	82	.373	.387	2.23	.70	6.7	4.4	6.2
Year	30.03	30.52	29.60	67.2	69.5	73.8	64.7	69.2	92	25	62	63	83	80	.586	.595	24.78	.....	4.9	4.6	4.2

GRAND HAVEN, MICH.

[Lat. 43° 5′ N.; long. 86° 13′ W.; gravity corr., 0.]

January	29.35	29.79	28.64	20.9	22.4	28.0	16.2	22.1	54	— 1	18	18	88	84	.093	.093	3.85	1.36	7.6	6.8	8.0
February	29.40	29.92	28.68	26.1	29.3	33.8	23.3	28.6	45	4	23	24	90	84	.119	.125	2.30	.44	8.6	8.2	8.7
March	29.37	29.83	28.55	26.4	31.4	38.4	23.0	30.7	60	9	21	22	82	71	.108	.113	1.06	.37	5.7	4.5	5.6
April	29.36	29.82	28.77	39.2	43.9	50.9	33.5	42.2	73	22	29	33	67	68	.157	.187	3.46	1.89	6.1	5.7	6.1
May	29.23	29.72	28.56	49.1	52.9	59.7	44.0	51.8	77	33	44	46	83	80	.287	.310	4.05	.89	6.9	7.6	7.8
June	29.25	29.52	28.83	61.2	65.2	71.4	56.3	63.8	86	45	58	60	90	83	.481	.517	5.95	1.42	6.4	6.0	6.3
July	29.40	29.85	29.10	68.0	70.7	77.9	60.1	69.0	90	50	60	60	76	71	.517	.517	1.19	.75	4.7	4.7	4.5
August	29.35	29.54	29.09	65.5	69.6	76.6	59.4	68.0	88	50	59	61	79	75	.499	.536	1.79	.88	4.5	4.5	4.5
September	29.41	29.67	28.99	58.9	62.9	69.6	53.6	61.6	80	42	54	55	83	75	.417	.432	1.72	.71	4.3	4.1	4.6
October	29.37	29.68	28.68	49.2	51.4	59.2	44.2	51.7	76	28	42	43	77	74	.266	.277	1.14	.50	5.0	3.7	5.5
November	29.35	29.76	28.44	33.3	35.3	40.7	29.7	35.2	55	14	28	30	81	78	.150	.164	2.11	.72	9.1	8.3	9.1
December	29.38	29.81	28.61	25.9	26.7	31.3	21.7	26.5	45	3	22	24	86	87	.113	.125	3.15	.78	8.9	8.3	9.0
Year	29.35	29.92	28.44	43.6	46.8	53.1	38.8	45.9	90	— 1	38	40	82	78	.267	.283	31.77	.....	6.5	6.0	6.6

GREEN BAY, WIS.

[Lat. 44° 31′ N.; long. 88° 0′ W.; gravity corr., 0.]

January	29.39	29.86	28.85	8.9	14.1	19.7	5.1	12.4	42	—17	2	7	72	72	.043	.054	1.80	1.27	6.5	3.4	5.5
February	29.45	29.95	28.81	21.2	23.4	27.7	16.4	22.0	43	—13	15	17	78	75	.081	.089	1.84	.66	8.2	6.6	7.8
March	29.42	29.92	28.64	21.6	28.8	35.1	19.1	27.1	54	0	14	21	74	73	.077	.108	.86	.42	5.5	6.0	6.2
April	29.38	29.85	28.63	37.0	43.0	49.6	32.8	41.2	71	21	28	31	70	65	.150	.172	1.67	.87	6.6	6.8	6.6
May	29.26	29.82	28.57	49.5	52.6	58.2	44.4	51.3	76	34	42	44	77	73	.266	.287	5.10	1.01	7.5	8.5	8.5
June	29.27	29.58	28.95	61.9	65.5	71.2	55.9	63.6	92	46	56	57	81	75	.448	.465	5.84	1.51	7.5	7.3	8.0
July	29.40	29.87	29.09	67.3	73.7	80.9	60.3	70.6	94	48	59	62	76	67	.499	.555	2.76	.80	5.3	5.6	6.0
August	29.37	29.60	29.05	63.7	69.6	77.6	58.2	67.9	87	42	58	59	81	70	.481	.499	3.87	1.29	5.6	6.1	6.5
September	29.40	29.71	29.07	55.6	62.0	70.7	50.5	60.6	82	42	50	52	81	70	.360	.387	3.40	1.49	5.8	5.6	5.5
October	29.38	29.76	28.89	45.2	50.3	58.3	42.0	50.2	78	24	39	39	78	66	.237	.237	1.62	.70	6.5	5.7	6.3
November	29.37	29.80	28.45	27.4	31.3	36.2	23.4	29.8	53	8	21	25	75	75	.108	.130	2.93	1.28	8.2	8.3	8.3
December	29.41	29.84	28.73	13.7	17.9	22.7	10.7	16.7	36	—12	8	12	75	75	.057	.070	1.33	.50	7.1	5.5	6.9
Year	29.38	29.95	28.45	39.4	44.4	50.7	34.9	42.8	94	—17	33	36	76	71	.234	.254	33.02	.....	6.7	6.3	6.8

HANNIBAL, MO.

[Lat. 39° 41′ N.; long. 91° 20′ W.; gravity corr., —.02.]

January	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	29.32	29.70	28.89	55.5	62.3	67.8	50.8	59.3	80	36	50	52	82	72	.360	.387	8.28	2.32	7.5	7.4	7.2
June	29.36	29.62	29.16	69.5	77.2	82.6	65.0	73.8	92	52	63	64	82	66	.575	.595	1.69	.41	5.5	3.4	4.8
July	29.49	29.84	29.09	70.6	78.3	83.5	65.3	74.4	95	47	65	66	83	67	.616	.638	3.69	1.24	4.9	5.2	5.1
August	29.45	29.62	29.24	69.0	78.9	85.8	64.8	75.3	95	50	62	63	80	60	.555	.575	.92	.85	3.4	3.9	3.3
September	29.52	29.73	29.26	59.4	70.3	77.7	56.1	66.9	90	44	55	56	85	63	.432	.448	2.36	1.51	3.4	3.2	3.3
October	29.51	29.76	29.22	48.9	60.4	68.7	45.9	57.3	86	26	43	44	81	56	.277	.287	.67	.30	4.3	2.3	3.2
November	29.52	29.92	28.71	33.3	39.8	45.0	30.7	37.8	64	18	28	30	83	70	.150	.164	3.17	1.40	4.9	5.0	4.9
December	29.54	30.05	28.79	25.8	29.9	35.5	21.7	28.6	59	— 7	23	24	91	79	.119	.125	1.63	.74	6.3	5.3	6.9
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

GALVESTON, TEX.

[H = 42 feet; h_t = 85 feet; h_r = 80 feet; h_a = 96 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	13.1	N.	37	NW.	0	10	7	1	12	6	9	0	17	0	17	3	11	10	8	0	0	....	0	0	6	1	0
February	10.2	SE.	34	NE.	0	6	6	12	16	11	4	0	2	1	9	13	7	8	6	0	0	....	0	0	0	1	0
March	12.4	SE.	38	NW.	0	7	7	3	20	7	8	1	9	0	13	7	11	11	7	0	0	....	0	0	1	1	0
April	12.5	SE.	36	NW.	0	0	7	4	26	15	3	1	2	2	10	12	8	7	2	0	0	....	0	0	0	4	0
May	15.1	SE.	34	NE.	0	3	6	1	24	21	5	0	2	0	13	15	3	4	2	0	0	....	0	0	0	3	0
June	10.0	S.	44	N.	1	2	2	1	17	20	14	3	1	0	18	9	3	12	10	0	0	....	0	1	0	5	0
July	9.3	S.	25	NE.	0	0	2	2	7	28	18	5	0	0	20	8	3	11	8	0	0	....	0	0	0	5	0
August	8.0	SW.	36	NE.	0	3	3	2	7	12	21	5	9	0	20	8	3	8	6	0	0	....	0	3	0	10	0
September	10.7	NE.	33	NE.	0	5	24	9	14	4	3	0	1	0	24	4	2	8	4	0	0	....	0	0	0	3	0
October	11.5	SE.	35	NW.	0	4	12	9	26	4	4	1	2	0	21	7	3	9	7	0	0	....	0	0	0	0	0
November	11.4	S.	48	NW.	1	4	6	6	10	11	10	4	8	1	19	8	3	5	3	0	0	....	0	0	0	2	0
December	13.1	NE.	45	NW.	2	4	11	10	10	8	7	2	9	1	9	8	14	9	8	0	0	....	0	0	2	2	0
Year	11.4	SE.	48	NW.	4	48	93	60	189	147	106	22	62	5	193	102	71	102	71	0	0	....	0	4	9	37	0

GRAND HAVEN, MICH.

[H = 628 feet; h_t = 55 feet; h_r = 48 feet; h_a = 64 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	12.0	W.	43	NW.	1	8	7	4	8	4	9	12	10	0	4	3	24	20	13	19	0	....	23	0	30	0	0
February	10.3	E.	30	SW.	0	5	5	22	8	2	3	5	7	1	3	2	24	17	13	11	0	....	9	0	24	0	1
March	10.7	NE.	42	SW.	1	9	13	11	4	0	4	10	11	0	8	14	9	10	8	8	0	....	9	0	25	0	2
April	12.1	E.	39	SW.	0	3	2	17	7	3	11	5	11	1	6	12	12	10	7	1	0	....	1	0	13	3	1
May	10.3	E.	36	E.	0	9	3	15	5	6	8	12	3	1	1	11	19	18	14	0	0	....	0	0	0	3	0
June	8.0	SW.	36	W.	0	2	2	14	5	2	15	9	9	2	6	13	11	19	16	0	0	....	0	0	0	6	0
July	7.5	SW.	35	NW.	0	2	4	8	4	5	16	13	10	0	8	20	3	6	3	0	0	....	0	0	0	2	4
August	7.4	SW.	30	NW.	0	4	9	10	4	3	10	9	10	3	14	12	5	9	6	0	0	....	0	0	0	3	0
September	8.6	SW.	30	NW.	0	1	2	11	6	7	14	4	12	3	14	8	8	11	8	0	0	....	0	0	0	3	1
October	9.8	NW.	52	W.	2	4	2	3	10	3	11	12	17	0	8	13	10	9	6	0	0	....	0	0	1	0	2
November	11.0	SE.	47	W.	2	6	4	9	16	2	5	12	5	1	0	5	25	16	10	6	0	....	2	0	20	0	0
December	10.7	W.	37	SW.	0	6	2	6	15	1	4	19	8	1	0	4	27	19	13	15	0	....	14	0	29	1	0
Year	9.9	E.	52	W.	6	59	55	130	92	38	110	122	113	13	72	117	177	164	117	60	0	....	58	0	142	21	11

GREEN BAY, WIS.

[H = 617 feet; h_t = 45 feet; h_r = 35 feet; h_a = 57 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	9.8	SW.	42	N.	1	9	0	0	0	14	19	6	14	0	9	14	8	7	4	6	0	....	23	0	31	0	0
February	8.6	N.	30	N.	0	18	7	4	3	12	3	2	9	0	3	7	19	14	9	12	0	....	17	0	26	0	0
March	8.2	N.	40	N.	1	14	10	5	7	7	8	2	8	1	7	13	11	7	5	6	0	....	11	0	26	0	0
April	11.3	NE.	48	W.	2	8	18	3	8	6	7	4	6	0	6	13	11	7	6	0	0	....	0	0	15	2	0
May	9.6	N.	42	NW.	1	16	12	5	8	10	3	4	4	0	0	10	21	19	17	0	0	....	0	0	0	1	0
June	8.2	NE.	34	NE.	0	8	12	5	8	8	7	3	8	1	1	9	20	17	17	0	0	....	0	1	0	5	0
July	6.4	S.	36	NW.	0	5	1	2	9	21	12	8	4	0	6	15	10	12	11	0	0	....	0	2	0	8	5
August	6.0	SE.	36	SW.	0	7	10	4	16	9	9	3	2	2	3	18	10	9	8	0	0	....	0	0	0	3	0
September	7.8	S.	30	SW.	0	4	2	0	8	19	13	4	8	2	7	16	7	7	7	0	0	....	0	0	0	3	0
October	8.7	S.	48	NW.	1	5	4	1	4	17	12	5	13	1	6	14	11	8	8	0	0	....	0	0	3	1	0
November	9.2	SW.	40	N.	1	11	3	1	4	12	13	9	5	2	0	11	19	12	12	6	0	....	7	0	24	0	0
December	7.4	SW.	36	N.	0	8	3	0	0	13	20	11	4	3	5	12	14	10	7	7	0	....	23	0	30	0	0
Year	8.4	S.	48	N.	7	113	82	30	75	148	126	61	85	12	53	152	161	129	111	37	0	....	81	3	155	23	5

HANNIBAL, MO.

[H = 534 feet; h_t = 75 feet; h_r = 68 feet; h_a = 107 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
February	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
March	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
April	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
May	10.2	SW.	42	W.	1	5	4	13	4	5	13	10	5	3	3	8	20	24	18	0	0	....	0	0	0	16	0
June	7.7	SW.	38	S.	0	4	0	5	8	8	20	5	7	3	10	11	9	11	8	0	0	....	0	7	0	7	0
July	6.9	SW.	44	NW.	1	5	5	9	6	12	15	1	5	4	12	9	10	11	11	0	0	....	0	8	0	9	1
August	6.5	NE.	24	SW.	0	8	11	6	7	9	5	3	9	4	19	8	4	4	3	0	0	....	0	7	0	4	0
September	6.8	SW.	30	SW.	0	2	4	4	7	12	15	3	7	6	19	6	5	5	4	0	0	....	0	1	0	5	0
October	7.3	SW.	36	NW.	0	7	4	3	10	6	14	5	7	6	18	9	4	3	3	0	0	....	0	0	4	0	0
November	9.0	SW.	36	W.	0	7	5	6	4	11	12	7	5	3	15	4	11	7	7	2	0	....	2	0	29	1	0
December	7.4	NW.	34	SW.	0	10	4	8	4	8	9	6	12	1	6	7	18	8	4	6	0	....	12	0	26	1	0
Year	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

a By eye observations at 8 a. m., and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

HARRISBURG, PA.

[Lat. 40° 16′ N.; long. 76° 52′ W.; gravity corr., — .01.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.66	30.23	28.97	26.6	29.6	33.9	21.6	27.8	54	8	18	19	71	66	.093	.098	5.14	1.32	6.4	5.7	6.0
February	29.75	30.29	28.99	30.6	34.8	38.6	26.7	32.6	50	11	23	25	75	69	.119	.130	1.02	0.43	6.5	6.4	6.5
March	29.62	30.08	28.91	31.3	36.1	39.4	26.5	33.0	57	16	22	24	72	65	.113	.125	4.81	1.21	5.7	5.7	5.7
April	29.60	30.11	29.26	46.2	51.9	57.1	39.9	48.5	80	30	33	35	63	56	.187	.203	2.15	0.54	5.8	5.9	5.9
May	29.58	29.92	29.22	57.7	63.1	68.9	51.1	60.0	83	42	46	52	68	69	.310	.387	3.95	0.86	6.9	6.6	6.6
June	29.59	29.85	29.25	70.2	74.9	81.8	63.2	72.5	91	52	62	64	80	71	.575	.595	4.93	1.88	6.0	5.9	5.9
July	29.67	30.12	29.34	71.5	76.1	84.6	63.7	74.2	98	53	63	64	75	67	.575	.595	6.48	1.84	3.9	5.1	4.5
August	29.62	29.81	29.36	70.2	74.7	83.1	65.3	74.2	93	58	63	64	79	70	.575	.595	2.39	0.75	5.0	4.6	4.8
September	29.77	30.03	29.31	59.9	65.8	73.0	55.9	64.4	85	48	54	57	81	74	.417	.465	3.31	1.45	4.1	2.5	3.3
October	29.64	30.06	29.19	49.0	54.0	62.4	45.0	53.7	77	36	42	43	78	68	.266	.277	0.15	0.06	4.3	2.5	3.4
November	29.68	30.05	29.16	38.5	41.5	46.6	34.5	40.6	62	22	34	36	86	81	.195	.211	4.15	1.46	6.4	5.9	6.2
December	29.68	30.18	29.24	28.3	32.0	36.2	25.5	30.8	62	9	22	26	78	80	.113	.137	1.17	0.60	6.9	4.5	5.7
Year	29.66	30.29	28.91	48.3	52.9	58.8	43.2	51.0	98	8	40	42	76	70	.295	318	30.65	.....	5.7	5.1	5.4

HATTERAS, N. C.

[Lat. 35° 15′ N.; long. 75° 40′ W.; gravity corr., —.03.]

January	30.09	30.51	29.41	44.3	46.6	51.5	40.0	45.8	68	24	40	42	86	86	.246	.266	4.82	1.71	5.5	5.3	5.6
February	30.10	30.61	29.50	44.4	45.0	50.0	40.2	45.1	60	24	41	42	89	89	.256	.266	7.12	2.97	5.1	5.4	6.3
March	30.04	30.50	29.45	46.6	48.2	53.3	41.7	47.5	67	28	42	45	86	89	.266	.298	5.32	1.27	4.8	4.5	5.6
April	30.14	30.44	29.70	56.0	56.3	62.1	51.4	56.8	69	38	50	51	81	84	.360	.373	4.24	1.12	6.1	4.2	5.8
May	30.07	30.45	29.63	67.0	65.8	71.3	61.8	66.6	78	50	60	61	80	86	.517	.536	4.69	1.48	3.7	2.9	3.7
June	30.08	30.36	29.80	76.2	74.6	80.2	71.8	76.0	89	68	71	71	84	88	.757	.757	2.70	1.65	4.8	3.6	4.4
July	30.12	30.36	29.93	76.0	75.0	80.5	71.8	76.2	87	65	72	72	88	90	.783	.783	6.45	1.53	4.3	5.0	4.6
August	30.04	30.18	29.88	79.1	77.3	83.3	74.6	79.0	86	71	73	73	82	87	.810	.810	2.48	.82	4.4	4.2	4.4
September	30.14	30.31	29.85	73.3	72.2	77.5	69.5	73.5	82	61	66	66	79	81	.638	.638	4.49	1.73	5.9	3.5	5.7
October	30.07	30.41	29.73	62.7	62.5	67.5	58.3	62.9	77	46	54	55	74	78	.417	.432	2.74	.93	3.2	2.1	3.0
November	30.13	30.42	29.67	52.1	53.0	58.2	47.0	52.5	75	28	45	46	78	77	.298	.310	4.43	2.53	3.4	3.7	4.1
December	30.10	30.58	29.46	43.7	45.6	50.4	40.1	45.2	69	27	38	40	82	82	.228	.246	3.40	1.00	3.9	3.2	4.4
Year	30.09	30.61	29.41	60.1	60.2	65.5	55.7	60.6	89	24	54	55	82	85	.465	.476	52.88	.....	4.6	4.0	4.8

HAVRE, MONT.

[Lat. 48° 34′ N.; long. 109° 40′ W.; gravity corr., +01.]

January	27.38	27.81	27.06	12.5	20.6	26.9	5.5	16.2	56	—31	7	10	80	67	.054	.063	0.19	0.09	4.0	5.1	5.9
February	27.33	27.69	26.76	15.6	25.7	33.1	10.4	21.8	60	—14	12	16	87	70	.070	.085	0.33	0.10	3.3	5.0	5.1
March	27.31	27.80	26.85	24.8	40.9	46.0	21.7	33.8	65	— 1	18	20	78	46	.093	.103	0.28	0.10	5.7	6.0	6.0
April	27.32	27.76	26.95	29.2	44.5	48.4	27.5	38.0	68	15	25	27	85	55	.130	.143	1.04	0.36	5.5	6.5	6.7
May	27.38	27.80	26.90	40.0	54.2	58.9	37.0	48.0	85	24	34	34	80	51	.195	.195	0.86	0.18	5.8	6.4	6.8
June	27.30	27.61	26.90	51.1	68.1	72.3	46.6	59.4	89	36	44	45	79	47	.287	.298	3.79	2.67	3.8	5.6	5.4
July	27.34	27.60	27.07	55.8	76.5	80.5	51.7	66.1	96	31	48	49	78	42	.334	.347	1.87	0.48	3.0	3.4	4.4
August	27.35	27.69	27.05	51.9	78.2	81.8	49.1	65.4	98	41	46	45	80	34	.310	.298	1.09	0.88	3.5	3.5	3.9
September	27.34	27.71	26.80	44.0	68.1	74.8	42.0	58.4	92	29	38	43	82	43	.228	.277	0.44	0.32	3.5	4.3	4.7
October	27.38	27.85	26.95	34.5	53.0	63.4	32.2	47.8	84	14	28	32	77	48	.150	.180	0.25	0.21	2.2	2.7	3.4
November	27.24	27.67	26.71	22.7	27.5	36.2	16.5	26.4	70	—19	16	19	77	72	.085	.098	1.08	0.70	5.4	6.9	6.9
December	27.38	27.87	27.02	11.6	13.2	20.3	1.7	11.0	49	—22	9	10	88	86	.060	.063	1.18	0.29	6.2	5.1	6.5
Year	27.34	27.87	26.71	32.8	47.5	53.6	28.5	41.0	98	—31	27	29	81	55	.166	.179	12.40	.....	4.3	5.0	5.5

HELENA, MONT.

[Lat. 46° 34′ N.; long. 112° 04′ W.; gravity corr., .0.]

January	25.81	26.17	25.55	18.9	23.9	27.9	14.6	21.2	52	13	11	12	75	65	.067	.074	1.02	.28	5.9	6.0	6.2
February	25.72	26.08	25.33	26.4	36.5	40.6	24.2	32.4	54	6	16	17	66	48	.085	.089	0.17	.10	4.2	5.8	5.8
March	25.74	26.05	25.32	29.7	40.5	44.5	27.9	36.2	65	8	18	17	64	42	.093	.089	0.31	.18	5.2	6.0	6.3
April	25.74	26.13	25.32	32.5	43.6	48.7	31.2	40.0	66	14	21	20	65	42	.108	.103	0.72	.24	5.2	7.1	6.8
May	25.79	26.19	25.49	40.5	54.7	57.4	38.0	47.7	85	24	28	23	64	36	.150	.119	1.54	.58	6.2	6.5	6.7
June	25.77	26.01	25.51	50.0	64.1	68.8	46.4	57.6	89	33	39	35	68	42	.237	.203	5.63	1.61	4.5	6.1	5.7
July	25.83	26.14	25.53	54.9	74.2	77.9	52.2	65.0	91	45	42	40	63	33	.266	.237	2.27	0.74	2.6	4.8	3.8
August	25.84	26.14	25.58	54.2	75.4	79.5	52.5	66.0	94	41	39	35	59	27	.237	.203	0.48	0.15	2.7	4.8	4.5
September	25.83	26.14	25.47	49.5	68.8	73.7	47.8	60.8	89	34	34	34	57	30	.195	.195	0.26	.14	4.3	5.0	4.8
October	25.86	26.28	25.48	38.2	50.8	57.9	36.5	47.2	78	26	29	30	70	45	.157	.164	0.26	.12	3.8	4.0	4.5
November	25.70	26.15	25.27	34.3	38.6	44.4	29.4	36.9	63	—4	24	23	65	53	.125	.119	2.05	1.27	7.1	8.2	8.3
December	25.80	26.10	25.36	21.9	26.1	29.8	18.9	24.4	47	—22	13	15	67	60	.074	.081	0.56	.22	7.9	5.1	6.8
Year	25.79	26.28	25.27	37.6	49.8	54.3	35.0	44.6	94	—22	26	25	65	44	.150	.140	15.27	.....	5.0	5.8	5.8

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

HARRISBURG, PA.

[H=377 feet; h_t=94 feet; h_r=87 feet; h_a=102 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		Mi.																								
January	8.1	W.	39	N.	0	7	7	10	3	1	5	16	10	3	9	6	16	11	11	6	0	....	14	0	24	0	0
February	8.7	E.	36	W.	0	6	12	12	1	3	4	6	12	2	7	7	15	12	6	3	0	....	7	0	20	0	0
March	9.7	NW.	42	NW.	1	11	6	6	3	4	2	10	19	1	8	11	12	15	11	9	0	....	6	0	23	0	0
April	8.4	W.	36	W.	0	6	4	5	2	6	9	14	12	2	8	10	12	13	8	1	0	....	0	0	5	1	0
May	7.6	NW.	39	W.	0	6	0	10	4	12	9	9	12	0	6	10	15	18	13	0	0	....	0	0	0	5	0
June	5.6	W.	27	SE.	0	2	7	10	4	8	10	15	2	2	5	14	11	15	14	0	0	....	0	2	0	6	0
July	4.4	W.	41	SW.	1	7	4	7	5	12	4	13	8	2	10	15	6	11	10	0	1	....	0	6	0	9	2
August	4.7	W.	36	W.	0	11	8	10	7	5	2	11	7	1	11	13	7	10	8	0	0	....	0	2	0	0	0
September	4.1	W.	30	NW.	0	1	6	9	8	1	0	11	5	19	17	7	6	9	9	0	0	....	0	0	0	1	0
October	5.8	W.	36	W.	0	5	1	2	2	2	4	12	10	24	14	14	3	4	2	0	0	....	0	0	0	0	0
November	8.1	NW.	39	W.	0	6	5	7	2	3	2	10	14	11	6	13	11	12	12	4	0	....	1	0	14	0	0
December	8.4	NW.	36	NW.	0	10	2	5	4	2	5	17	17	0	7	12	12	10	7	5	0	....	11	0	22	0	0
Year	70	W.	....	.....	2	78	62	93	45	59	56	144	128	67	108	132	126	140	111	28	1	....	39	10	108	22	2

HATTERAS, N. C.

[H=11 feet; h_t=17.2 feet; h_r=2.5 feet; h_a=36 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	18.1	N.	50	N.	5	18	4	1	3	9	8	12	7	0	10	12	9	13	10	0	0	....	0	0	3	0	0
February	19.5	N.	60	N.	9	26	4	1	3	5	7	8	4	0	10	4	15	17	15	0	0	....	0	0	4	0	0
March	17.1	N.	48	NW.	7	17	9	4	3	5	9	13	2	0	9	9	13	13	12	0	0	....	0	0	2	1	0
April	15.6	S.	48	N.	3	12	12	0	3	21	7	0	4	1	7	13	10	16	13	0	0	....	0	0	0	2	0
May	13.3	S.	42	S.	1	7	6	6	1	26	12	3	1	0	16	11	4	11	10	0	0	....	0	0	0	2	0
June	12.8	S.	48	SW.	1	3	1	5	5	22	20	4	0	0	13	13	4	10	7	0	0	....	0	0	0	3	0
July	11.7	SW.	36	N.	0	6	10	1	3	14	21	6	1	0	14	11	6	11	11	0	0	....	0	0	0	4	0
August	9.7	SW.	36	NW.	0	8	7	6	3	8	19	11	0	0	12	16	3	13	8	0	0	....	0	0	0	1	0
September	12.5	N.	44	NW.	2	19	18	7	5	3	3	4	1	0	7	14	9	14	11	0	0	....	0	0	0	2	0
October	13.6	N.	44	W.	2	21	12	4	0	3	8	7	5	2	20	7	4	7	7	0	0	....	0	0	0	1	0
November	14.8	N.	50	W.	5	17	5	1	2	9	3	10	12	1	15	7	8	10	6	0	0	....	0	0	1	2	0
December	14.7	N.	50	NW.	2	34	6	1	1	6	1	3	8	2	13	9	9	8	7	0	0	....	0	0	9	0	0
Year	14.4	N.	....	.....	37	188	94	37	32	131	118	81	45	6	146	126	94	143	117	0	0	....	0	0	19	18	0

HAVRE, MONT.

[H=2,477 feet; h_t=15 feet; h_r=2 feet; h_a=33 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	11.4	SW.	48	SW.	3	6	4	0	0	0	30	9	11	2	5	19	7	6	2	6	0	....	13	0	30	0	2
February	7.8	SW.	57	NW.	2	3	18	1	0	1	25	4	5	1	9	13	7	8	6	7	0	....	12	0	28	0	3
March	12.6	SW.	60	NW.	3	5	13	9	0	0	19	11	5	0	5	18	8	5	4	5	0	....	6	0	28	0	2
April	11.6	SW.	52	SW.	4	6	9	6	2	6	10	11	10	0	3	17	10	13	8	7	0	....	1	0	24	1	2
May	b9.9	NE.	33	NW.	0	2	15	14	3	1	11	4	11	1	4	17	10	12	11	5	1	....	0	0	8	1	0
June	9.3	NE.	44	NE.	2	8	13	8	8	0	10	8	5	0	6	19	5	9	9	0	1	....	0	0	0	4	1
July	7.9	SW.	41	SW.	1	1	4	5	5	1	17	15	9	5	13	16	2	13	10	0	1	....	0	3	1	7	1
August	7.2	SW.	40	SW.	1	4	5	6	1	0	17	9	14	6	11	19	1	4	2	0	0	....	0	10	0	6	5
September	8.8	SW.	48	SW.	3	4	8	13	1	1	16	9	8	0	12	13	5	5	3	0	0	....	0	1	3	3	2
October	7.9	SW.	28	SW.	0	5	1	8	6	0	19	15	6	2	16	11	4	3	2	2	0	....	0	0	17	0	6
November	10.9	SW.	48	SW.	5	1	4	3	2	2	22	13	8	5	1	19	10	10	5	8	0	....	10	0	25	0	0
December	9.9	W.	38	SW.	0	6	4	5	0	0	16	16	8	7	5	13	13	13	10	11	0	....	24	0	31	0	2
Year	9.6	SW.	....	.....	24	51	98	78	28	12	212	124	100	29	90	194	82	101	72	51	3	....	66	14	195	22	26

HELENA, MONT.

[H=4,118 feet; h_t=85 feet; h_r=75 feet; h_a=91 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.5	SW.	42	SW.	1	0	0	0	0	1	26	26	8	1	11	4	16	12	6	11	0	....	15	0	28	0	0
February	8.0	SW.	48	SW.	1	3	0	3	0	1	38	10	0	3	7	11	11	4	2	2	0	....	8	0	22	0	0
March	8.6	SW.	58	SW.	1	9	1	1	1	3	31	8	8	0	7	9	15	6	2	6	1	....	2	0	20	0	1
April	8.2	SW.	36	SW.	0	8	3	4	4	4	28	5	3	1	4	12	14	15	7	7	1	....	1	0	14	0	2
May	8.2	SW	40	SW.	1	10	3	4	1	2	26	6	9	1	5	11	15	13	10	7	0	....	0	0	8	1	1
June	7.6	SW.	40	SW.	1	8	3	2	1	1	30	10	4	1	8	9	13	12	10	2	0	....	0	0	0	10	2
July	7.7	SW.	54	SW.	2	4	3	4	2	0	36	9	4	0	16	11	4	13	10	0	0	....	0	2	0	10	2
August	7.2	SW.	36	SW.	0	7	2	4	4	1	31	11	2	0	13	9	9	9	5	0	0	....	0	3	0	8	1
September	6.9	SW.	35	SW.	0	4	2	7	2	1	34	6	4	0	12	7	11	5	2	0	0	....	0	0	0	3	0
October	7.8	SW.	34	SW.	0	1	0	4	0	1	52	3	1	0	16	6	9	5	3	1	0	....	0	0	12	0	3
November	10.4	SW.	56	SW.	4	0	0	2	2	4	36	13	3	0	1	6	23	12	9	5	0	....	4	0	14	2	0
December	6.0	SW.	36	SW.	0	3	0	3	1	0	32	14	5	4	5	9	17	14	3	11	1	....	15	0	27	0	1
Year	7.9	SW.	....	.....	11	57	17	38	18	19	400	121	51	11	105	104	157	129	69	52	3	....	45	5	145	34	13

a By eye observations at 8 a. and 8. p. m., when there is no self-register at station.

b For 736 hours.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

HURON, S. DAK.

[Lat. 44° 21′ N.; long. 98° 14′ W.; gravity corr., 0.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	28.72	29.22	28.24	5.1	13.3	20.6	0.1	10.4	52	—34	2	10	88	86	.043	.063	.28	.12	1.8	3.7	3.3
February	28.68	29.00	28.02	12.7	19.1	26.9	7.8	17.4	48	—18	9	14	86	82	.060	.077	.70	.36	5.6	5.1	6.1
March	28.65	29.22	27.90	20.8	33.2	39.3	18.2	28.8	69	— 6	17	25	87	73	.089	.130	1.11	.66	4.9	4.9	5.5
April	28.55	29.01	27.62	37.2	46.3	51.5	32.8	42.2	72	19	32	33	82	64	.180	.187	5.90	1.98	7.0	6.1	6.5
May	28.56	28.94	28.00	44.2	53.3	57.1	39.6	48.4	81	30	38	40	82	65	.228	.246	6.03	2.27	7.1	7.5	7.5
June	28.52	28.91	28.03	58.6	69.8	74.0	52.4	63.2	88	40	53	55	82	61	.402	.432	3.43	.99	5.4	5.4	5.3
July	28.59	28.88	28.20	63.9	76.7	81.0	58.2	69.6	93	46	58	62	83	62	.481	.555	1.51	.68	4.1	3.6	4.3
August	28.58	28.88	28.26	60.5	75.3	82.7	56.9	69.8	99	38	57	61	87	60	.465	.536	2.13	.68	4.2	3.5	4.4
September	28.59	28.89	28.21	50.8	68.2	78.4	47.0	62.7	98	29	46	51	84	56	.310	.373	.59	.36	2.9	3.5	3.6
October	28.62	29.02	28.15	39.8	56.4	66.4	36.9	51.6	94	18	35	38	82	51	.203	.228	2.36	1.72	3.7	2.6	3.5
November	28.58	29.09	28.05	21.9	30.0	40.4	16.0	28.2	72	—12	18	22	84	71	.093	.113	.77	.62	5.0	3.6	5.1
December	28.66	29.16	28.33	11.5	17.0	24.3	5.9	15.1	48	—19	9	11	87	77	.060	.067	.36	.16	6.6	4.7	6.0
Year	28.61	29.22	27.62	35.6	46.6	53.6	31.0	42.3	99	—34	31	35	84	67	.218	.251	25.17	.....	4.9	4.5	5.1

IDAHO FALLS, IDAHO.

[Lat. 43° 29′ N.; long. 112° 4′ W.; gravity corr., 0.]

January	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
June	25.18	25.42	24.84	48.4	69.1	72.3	45.2	58.8	90	34	40	35	74	36	.246	.203	2.05	1.28	4.3	5.7	6.0
July	25.27	25.45	25.13	53.6	81.9	83.4	50.6	67.0	94	43	41	32	63	22	.256	.180	.48	.38	2.8	4.5	4.3
August	25.27	25.45	25.08	51.6	82.7	85.9	48.4	67.2	95	34	40	32	65	18	.246	.180	.20	.10	3.4	4.9	4.9
September	25.28	25.44	25.02	47.0	76.3	79.5	43.9	61.7	88	35	36	34	67	23	.211	.195	.43	.36	3.8	5.0	4.5
October *b*	25.29	25.65	24.91	35.3	55.6	60.7	33.5	47.1	80	23	28	34	74	46	.150	.195	1.77	.78	3.2	5.3	4.7
November	25.23	25.64	24.68	28.5	40.6	45.0	25.6	35.3	60	4	21	26	73	58	.108	.137	.74	.36	3.7	7.2	7.5
December	25.28	25.56	24.98	17.0	21.7	27.0	12.5	19.8	56	—22	13	18	82	84	.074	.093	2.10	.36	7.1	7.3	9.0
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

INDIANAPOLIS, IND.

[Lat. 39° 46′ N.; long. 86° 10′ W.; gravity corr., —.01.]

January	29.29	29.70	28.67	19.4	26.2	30.5	17.0	23.8	54	— 5	15	19	85	74	.081	.098	1.55	.45	4.8	5.5	6.1
February	29.27	29.79	28.64	33.3	38.8	43.0	29.9	36.4	61	11	29	29	84	69	.157	.157	3.53	.89	6.8	6.7	7.3
March	29.25	29.67	28.64	31.9	40.3	45.2	29.7	37.4	69	9	26	27	78	60	.137	.143	1.93	.40	5.5	6.4	6.8
April	29.24	29.57	28.75	46.5	53.9	59.0	42.1	50.6	82	27	36	38	68	57	.211	.228	6.33	2.06	5.9	6.0	6.8
May	29.13	29.48	28.63	56.0	62.0	68.1	52.0	60.0	87	41	50	50	80	67	.360	.360	8.83	2.73	6.0	7.0	7.1
June	29.15	29.32	28.89	70.8	76.6	83.5	65.6	74.6	94	56	63	63	76	64	.575	.575	3.84	.89	5.2	5.4	5.7
July	29.28	29.63	28.98	71.2	78.4	85.5	65.7	75.6	97	50	62	62	74	59	.555	.555	2.93	.88	3.5	5.9	5.9
August	29.23	29.37	29.04	69.2	76.7	83.8	64.7	74.2	94	52	61	61	75	59	.536	.536	1.39	.55	5.1	3.3	4.7
September	29.31	29.50	28.84	59.9	70.0	78.7	56.2	67.4	88	42	53	54	79	58	.402	.417	2.42	1.80	2.9	3.6	4.4
October	29.28	29.59	28.80	48.7	59.1	66.8	45.9	56.4	85	28	40	43	72	58	.246	.277	.28	.13	5.2	3.3	4.4
November	29.28	29.66	28.53	34.5	39.0	44.6	31.9	38.2	62	14	30	29	83	67	.164	.157	4.90	2.01	6.2	4.2	4.9
December	29.30	29.74	28.66	26.7	31.8	36.3	23.7	30.0	63	— 4	22	26	81	81	.113	.137	1.84	.61	7.1	6.4	7.1
Year	29.25	29.79	28.53	47.3	54.4	60.4	43.7	52.0	97	— 5	41	42	78	64	.295	.303	39.77	.....	5.4	5.3	5.9

JACKSONVILLE, FLA.

[Lat. 30° 20′ N.; long. 81° 39′ W.; gravity corr., —.04.]

January	30.11	30.36	29.56	48.0	53.4	61.8	44.1	53.0	77	32	42	42	80	67	.266	.266	3.99	1.59	5.0	3.6	4.7
February	30.10	30.42	29.71	52.9	57.7	66.0	50.1	58.0	78	36	47	48	81	73	.322	.334	.77	.34	6.0	5.0	6.2
March	30.05	30.33	29.50	53.3	60.9	70.5	49.5	60.0	84	29	46	47	77	62	.310	.322	.76	.27	4.0	2.5	4.2
April	30.11	30.30	29.80	64.6	68.6	78.9	59.9	69.4	88	43	56	56	74	66	.448	.448	.11	.09	4.8	3.8	5.2
May	30.04	30.28	29.71	71.7	74.1	85.5	64.9	75.2	92	52	62	62	72	67	.555	.555	1.34	.61	3.3	3.0	4.3
June	30.02	30.10	29.79	76.0	75.6	85.2	70.5	77.8	94	67	70	70	82	83	.732	.732	6.38	1.04	7.2	7.1	7.8
July	30.11	30.23	29.95	78.6	78.8	90.6	72.8	81.7	95	66	72	71	80	78	.783	.757	3.16	.96	4.0	7.4	6.2
August	30.02	30.13	29.87	78.2	77.4	90.8	72.1	81.4	96	68	72	72	83	84	.783	.783	4.84	1.40	3.9	8.0	6.9
September	30.02	30.16	29.80	75.0	75.0	83.9	69.8	76.8	92	66	71	71	87	86	.757	.757	14.04	2.30	7.6	7.8	6.5
October	30.03	30.28	29.78	65.3	68.3	77.5	60.8	69.2	88	42	61	62	86	80	.596	.555	3.34	2.01	4.1	4.4	5.5
November	30.12	30.35	29.89	53.5	60.2	70.3	49.5	59.9	85	35	47	51	80	73	.322	.373	.64	.29	2.9	2.2	3.2
December	30.08	30.37	29.57	51.7	57.8	66.6	48.5	57.6	80	30	48	51	87	79	.334	.373	2.52	1.05	4.8	3.9	5.5
Year	30.07	30.42	29.50	64.1	67.3	77.3	59.4	68.3	96	29	58	59	81	75	.512	.521	41.69	.....	4.8	4.9	5.7

b Two 8 p. m. observations missed.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

HURON, S. DAK.

[H=1,310 feet; h_t=63 feet; h_r=56 feet; h_a=72 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudly.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	12.8	NW.	56	S.	2	9	0	0	12	5	1	16	16	3	18	9	4	10	4	10	0	....	18	0	30	0	2
February	13.8	NW.	42	NW.	2	9	3	2	15	4	0	6	19	0	7	10	12	6	5	6	0	....	21	0	29	0	4
March	14.3	SE.	68	NW.	7	11	7	2	18	5	2	2	15	0	12	7	12	7	6	3	0	....	11	0	27	1	2
April	17.0	SE.	62	W.	11	4	10	6	18	1	2	7	12	0	8	9	13	14	12	5	2	....	0	0	14	3	0
May	14.8	NW.	56	NW.	4	21	8	5	7	0	0	6	15	0	2	12	17	17	13	3	0	....	0	0	4	7	1
June	12.5	SE.	50	SW.	4	12	5	2	16	5	1	4	14	1	11	10	9	11	9	0	1	....	0	0	0	13	0
July	13.6	SE.	60	W.	5	8	3	4	34	4	1	2	6	0	9	20	2	5	5	0	0	....	0	2	0	8	4
August	12.8	SE.	52	NE.	2	9	5	2	32	3	3	1	5	2	16	10	5	12	8	0	2	....	0	0	0	10	2
September	12.5	SE.	48	SE.	5	8	2	4	24	4	1	5	12	0	17	7	6	5	3	0	0	....	0	3	1	4	1
October	11.9	SE.	52	SE.	2	4	3	4	18	7	1	10	12	3	17	9	5	3	3	0	0	....	0	1	12	1	1
November	14.0	SE.	54	W.	6	4	5	0	24	5	0	8	13	1	11	12	7	4	3	3	0	....	9	0	28	0	0
December	10.1	NW.	34	SE.	0	11	0	4	8	4	5	9	20	1	7	11	13	9	3	9	0	....	21	0	31	0	0
Year	13.3	SE.	....	.....	50	110	51	35	226	47	17	76	159	11	135	126	105	103	74	39	5	....	80	15	176	47	17

IDAHO FALLS, IDAHO.

[H=4,742 feet; h_t=11 feet; h_r=1 foot; h_a=45 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudly.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
February	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
March	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
April	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
May	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
June	c9.9	SW.	45	S.	1	7	4	0	8	11	19	1	10	0	6	11	13	8	7	0	0	....	0	1	0	2	0
July	9.3	S.	38	SW.	....	12	3	1	3	20	18	1	4	0	18	7	6	3	3	0	1	....	0	8	0	2	0
August	8.0	S.	36	S.	....	17	2	2	0	19	13	4	5	0	13	7	11	5	2	0	1	....	0	10	0	2	0
September	8.3	SW.	38	S.	....	14	4	3	0	15	17	2	4	1	14	5	11	3	2	0	1	....	0	0	0	1	0
October	6.6	N.	34	S.	....	24	3	2	2	18	7	0	3	1	13	6	12	6	5	1	2	....	0	0	15	0	0
November	9.7	S.	48	SW.	1	11	2	2	2	23	15	0	5	0	4	4	22	5	5	2	0	....	3	0	24	0	0
December	6.2	NW.	48	SW.	1	10	2	2	4	9	10	3	19	3	0	1	30	19	16	17	0	....	19	0	26	0	0
Year	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

INDIANAPOLIS, IND.

[H=766 feet; h_t=75 feet; h_r=72 feet; h_a=87 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudly.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	7.7	SW.	25	SW.	0	8	7	1	8	6	11	5	15	1	10	9	12	12	9	11	....	....	19	0	28	0	0
February	7.8	SE.	24	E.	0	1	13	4	11	8	2	6	13	0	5	4	20	12	10	3	....	....	4	0	12	1	1
March	7.9	N.	28	SW.	0	7	12	5	9	4	6	10	9	0	2	15	14	14	11	5	1	....	4	0	17	1	0
April	8.1	NE.	30	S.	0	2	11	5	10	5	8	6	13	0	7	6	17	16	11	....	....	....	0	0	3	4	0
May	8.0	SW.	24	SW.	0	6	1	5	10	7	12	9	10	2	3	12	16	22	21	....	1	....	0	0	0	11	0
June	5.9	S.	26	NW.	0	5	1	2	7	19	15	5	5	1	3	22	5	14	10	....	....	....	0	5	0	12	0
July	4.8	SW.	20	SW.	0	2	11	2	6	11	18	3	6	3	7	15	9	9	8	....	....	....	0	9	0	7	0
August	5.1	NW.	20	S.	0	13	9	3	6	11	5	3	9	3	12	14	5	9	7	....	....	....	0	2	0	7	0
September	4.9	NW.	22	SW.	0	6	5	5	13	8	6	2	12	3	13	10	7	6	5	....	....	....	0	0	0	4	0
October	5.4	NW.	23	NW.	0	8	1	1	17	6	8	3	15	3	14	9	8	8	3	....	....	....	0	0	1	0	0
November	6.9	NW.	30	SW.	0	3	1	2	13	5	7	11	17	1	14	4	12	15	12	3	....	....	2	0	17	0	0
December	6.0	SE.	24	SW.	0	2	8	2	13	6	12	11	8	0	5	8	18	13	9	7	....	....	12	0	26	0	0
Year	6.5	NW.	....	.....	0	63	80	37	123	96	110	74	132	17	95	128	143	150	116	29	2	....	41	16	104	47	1

JACKSONVILLE, FLA.

[H=43 feet; h_t=69 feet; h_r=56 feet; h_a=84 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudly.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	9.1	N.	34	SW.	0	16	5	2	6	3	11	9	9	1	11	11	9	8	8	0	0	....	0	0	1	2	0
February	7.9	N.	30	SW.	0	10	17	1	6	5	4	7	7	1	7	8	14	7	6	0	0	....	0	0	0	0	0
March	7.2	SW.	33	SW.	0	5	5	6	9	6	13	7	11	0	14	9	8	5	5	0	0	....	0	0	1	0	0
April	9.1	SE.	33	SW.	0	4	12	5	16	6	10	1	6	0	9	11	10	2	1	0	0	....	0	0	0	0	0
May	7.9	SE.	30	SW.	0	2	4	5	22	5	9	5	10	0	12	14	5	5	5	0	0	....	0	2	0	5	0
June	8.4	SE.	38	SE.	0	2	10	4	21	6	13	2	1	1	1	10	19	19	17	0	0	....	0	3	0	10	0
July	6.8	SW.	31	SW.	0	0	5	3	19	14	17	3	1	0	3	18	10	15	11	0	0	....	0	21	0	15	0
August	5.7	SE.	31	SW.	0	4	4	2	15	9	16	6	5	1	0	19	12	20	16	0	0	....	0	17	0	27	0
September	7.2	NE.	31	SW.	0	16	22	5	7	2	3	3	1	1	0	8	22	21	21	0	0	....	0	1	0	11	0
October	6.9	NE.	24	NE.	0	24	15	3	2	2	4	2	10	0	6	14	11	10	6	0	0	....	0	0	0	1	0
November	6.4	N.	24	E.	0	15	9	6	6	5	6	6	5	2	14	12	4	6	4	0	0	....	0	0	0	0	0
December	6.4	N.	42	SW.	1	19	5	4	12	6	6	4	5	1	10	7	14	9	7	0	0	....	0	0	1	0	0
Year	7.4	NE.	....	.....	1	117	113	46	141	69	112	55	71	8	87	141	138	127	107	0	0	....	0	44	3	71	0

a By *eye observations* at 8 a. m. and 8 p. m., when there is no self-register at station.

c For 708 hours.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

JUPITER, FLA.

[Lat. 26° 57′ N.; long. 80° 7′ W.; gravity corr., —.05.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew-point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	30.11	30.28	29.71	59.1	63.2	72.2	54.5	63.4	81	34	55	60	88	88	.432	.517	2.56	1.05	3.6	3.3	4.0
February	30.08	30.29	29.75	62.9	65.6	73.6	58.3	66.0	86	40	59	61	88	85	.499	.536	2.70	1.86	5.5	3.3	4.5
March	30.07	30.28	29.59	63.7	64.7	73.5	56.9	65.2	87	37	58	59	84	82	.481	.499	3.76	3.00	3.1	2.3	3.5
April	30.12	30.27	29.90	72.4	71.8	79.2	66.4	72.8	84	55	66	66	79	81	.638	.638	.53	.35	3.2	2.3	3.0
May	30.06	30.26	29.75	76.0	75.0	83.3	68.4	75.8	93	57	67	68	75	80	.660	.684	2.30	.85	2.1	2.8	3.5
June	30.03	30.20	29.72	78.0	76.0	83.1	71.7	77.4	88	65	75	74	90	92	.866	.838	14.76	3.00	7.3	7.3	8.1
July	30.13	30.25	30.02	81.7	79.3	86.9	74.0	80.4	90	70	75	74	81	85	.866	.838	.08	.05	3.2	2.8	3.2
August	30.03	30.14	29.92	82.8	80.3	87.9	73.5	80.7	90	70	76	76	81	86	.896	.896	2.80	1.55	3.2	3.0	3.5
September	29.99	30.07	29.87	80.0	79.3	85.5	73.2	79.4	91	69	76	75	88	86	.896	.866	14.43	4.20	4.9	6.4	6.3
October	29.98	30.27	29.73	75.6	74.8	80.5	69.2	74.8	86	52	70	70	82	84	.732	.732	14.00	5.95	4.9	5.0	4.8
November	30.10	30.26	29.90	67.9	69.2	76.5	61.8	69.1	85	47	62	63	81	80	.555	.575	.89	.55	2.9	3.6	3.6
December	30.09	30.29	29.73	64.2	66.8	74.4	59.1	66.8	82	36	60	62	87	83	.517	.555	4.44	3.00	3.1	2.8	3.4
Year	30.07	30.29	29.59	72.0	72.2	79.7	65.6	72.6	93	34	67	67	84	84	.670	.681	63.25	.....	3.9	3.7	4.3

KANSAS CITY, MO.

[Lat. 39° 5′ N.; long. 94° 37′ W.; gravity corr., —.01.]

January	29.16	29.45	28.64	19.5	27.7	34.6	16.5	25.6	58	—17	12	18	75	69	.070	.093	2.56	1.56	4.0	3.1	4.0
February	29.06	29.44	28.43	32.2	39.5	43.5	30.1	36.8	60	11	28	32	84	76	.150	.180	4.27	1.28	5.4	6.3	6.6
March	29.03	29.45	28.36	32.6	41.7	44.8	30.3	37.6	80	12	26	31	79	69	.137	.172	4.15	1.14	6.2	4.6	5.6
April	28.95	29.39	28.24	47.2	56.2	60.5	44.5	52.5	80	30	42	47	84	72	.266	.322	4.32	1.35	6.9	5.9	6.8
May	28.88	29.22	28.52	56.6	63.7	67.7	51.8	59.8	81	38	50	56	80	77	.360	.448	8.28	1.75	7.2	7.2	6.9
June	28.91	29.22	28.72	69.0	79.8	83.4	64.7	74.0	95	48	61	61	77	54	.536	.536	2.73	1.97	4.5	3.2	3.7
July	29.03	29.33	28.73	70.8	80.9	85.1	66.7	75.9	98	55	65	68	82	67	.616	.684	4.76	1.37	4.6	3.0	4.6
August	29.01	29.19	28.74	69.6	81.3	86.9	66.2	76.6	99	52	63	65	79	59	.575	.616	1.55	.76	3.5	3.5	3.7
September	29.06	29.25	28.79	62.2	74.3	80.7	59.5	70.1	94	46	55	56	78	54	.432	.448	4.05	2.04	3.1	2.6	3.1
October	29.06	29.34	28.76	51.6	62.7	68.7	49.2	59.0	87	32	44	46	76	58	.287	.310	3.48	2.20	4.5	2.2	4.1
November	29.06	29.45	28.44	35.4	43.7	47.9	32.9	40.4	67	22	29	33	77	68	.157	.187	1.62	1.09	4.5	3.1	4.8
December	29.08	29.54	28.38	24.5	29.5	33.8	20.5	27.2	69	—13	22	24	90	80	.113	.125	1.70	.93	6.4	5.5	6.3
Year	29.03	29.54	28.24	47.6	56.8	61.5	44.4	53.0	99	—17	41	45	80	67	.308	.343	43.47	.....	5.1	4.2	5.0

KEARNEY, NEBR.

[Lat. 40° 41′ N.; long. 99° 5′ W.; gravity corr., —.01.]

January	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	27.62	28.07	26.62	40.0	51.8	56.5	36.8	46.6	90	25	34	35	79	57	.195	.203	2.51	1.07	6.1	6.3	6.3
May	27.64	27.93	27.23	46.9	56.3	59.8	42.8	51.3	84	33	41	41	82	62	.256	.256	4.75	1.54	6.4	6.6	6.9
June	27.62	27.98	27.25	61.0	75.2	79.6	56.1	67.8	93	43	53	55	75	51	.402	.432	.97	.48	3.9	4.0	3.4
July	27.74	27.99	27.33	66.7	79.9	85.0	61.5	73.2	100	46	59	60	76	52	.499	.517	4.39	1.87	4.0	4.0	3.9
August	27.72	27.97	27.49	64.8	79.9	84.8	61.3	73.0	96	45	59	61	83	53	.499	.536	3.68	1.18	3.5	2.8	3.3
September	27.75	28.00	27.45	56.7	73.0	79.7	53.7	66.7	93	42	49	52	77	49	.347	.387	.39	.27	3.5	3.5	3.6
October	27.75	28.09	27.32	45.8	58.8	66.4	42.7	54.6	88	28	37	38	72	49	.219	.228	1.71	.99	3.3	3.7	4.0
November	27.72	28.07	27.26	29.7	40.6	48.9	27.4	38.2	70	14	22	25	74	54	.113	.130	.30	.12	4.2	3.5	4.3
December	27.74	28.10	27.51	18.1	26.5	31.9	16.1	24.0	56	—10	15	21	85	78	.081	.098	.60	.20	4.6	5.5	6.3
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

KEELER, CAL.

[Lat. 36° 35′ N.; long. 117° 50′ W.; gravity corr., —.02.]

January	26.41	26.70	26.10	34.7	43.9	48.6	31.9	40.2	61	23	23	25	64	52	.119	.130	.26	.22	1.6	3.7	3.6
February	26.28	26.53	25.95	40.7	52.6	55.1	38.0	46.6	67	23	30	30	67	44	.164	.164	.19	.09	4.9	6.0	5.6
March	26.21	26.50	25.87	46.7	60.2	63.5	43.5	53.5	75	32	28	28	50	33	.150	.150	.32	.16	2.0	4.0	3.4
April	26.22	26.58	25.88	48.9	66.9	69.9	45.9	57.9	83	35	19	19	34	19	.098	.098	.....	.....	1.2	2.8	2.3
May	26.21	26.48	25.87	56.4	73.4	77.0	53.9	65.4	92	37	28	28	37	21	.150	.150	.56	.27	2.0	4.2	3.4
June	26.19	26.40	25.90	63.2	82.3	86.3	60.3	73.3	102	43	29	33	29	18	.157	.187	T.	T.	1.4	2.7	1.9
July	26.26	26.47	26.12	71.2	90.3	93.4	67.7	80.6	100	62	31	42	24	20	.172	.266	.....	.....	.6	.7	0.7
August	26.26	26.42	26.11	73.1	90.8	94.6	69.4	82.0	103	62	34	41	25	19	.195	.256	T.	T.	.7	1.6	1.3
September	26.28	26.47	26.05	67.7	83.5	87.4	64.0	75.7	96	55	34	43	30	25	.195	.277	T.	T.	.4	.7	.8
October	26.30	26.53	25.95	52.7	65.3	69.9	49.8	59.8	83	35	32	28	46	29	.180	.150	.81	.33	3.3	4.0	4.0
November	26.35	26.63	26.01	46.0	56.5	61.4	42.3	51.8	73	28	29	26	53	32	.157	.137	.11	.11	1.4	4.2	3.8
December	26.36	26.66	26.00	36.6	45.8	51.0	32.4	41.7	63	24	24	23	59	41	.125	.119	.54	.54	2.6	3.2	3.3
Year	26.28	26.69	25.87	53.2	67.6	71.5	49.9	60.7	103	23	28	30	43	29	.155	.174	2.79	.54	1.8	3.2	2.8

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

JUPITER, FLA.

[H=28 feet; h_t=13; h_r=1 foot; h_a=30 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		Mi.																								
January	10.2	NW.	36	W.	0	1	5	5	5	9	3	7	26	1	14	12	5	10	6	....	....	....	0	0	0	0	0
February	10.0	NW.	36	NE.	0	6	6	4	5	7	6	11	12	1	10	17	2	6	4	....	....	....	0	0	0	0	0
March	9.9	W.	24	NW.	0	4	2	6	9	11	2	15	12	1	23	4	4	6	5	....	....	....	0	0	0	2	0
April	11.7	SE.	25	NE.	0	4	5	7	22	14	5	2	1	0	20	10	0	6	3	....	....	....	0	0	0	3	0
May	9.4	SE.	25	SE.	0	5	1	13	21	10	2	10	0	0	19	12	0	8	6	....	....	....	0	1	0	4	0
June	8.9	SE.	36	NE.	0	5	2	6	24	15	4	2	1	1	0	9	21	25	24	....	....	....	0	0	0	10	0
July	7.7	SE.	22	SE.	0	0	0	12	38	8	2	2	0	0	22	9	0	4	1	....	....	....	0	0	0	2	0
August	6.3	S.	21	NE.	0	4	6	10	12	15	7	7	0	1	19	10	2	8	8	....	....	....	0	0	0	8	0
September	7.7	NE.	27	SE.	0	4	12	8	11	8	10	4	3	0	0	24	6	23	21	....	....	....	0	1	0	10	0
October	10.4	E.	30	NE.	0	4	16	16	2	6	1	2	15	0	10	16	5	17	16	....	....	....	0	0	0	5	0
November	9.3	NW.	25	NW.	0	2	7	16	5	2	3	7	18	0	19	9	2	6	6	....	....	....	0	0	0	0	0
December	8.8	NW.	31	NE.	0	4	4	4	5	14	5	9	17	0	19	9	3	11	9	....	....	....	0	0	0	0	0
Year	9.2	SE.	....	.....	0	43	66	107	159	119	50	78	105	5	175	141	50	130	109	....	....	....	0	2	0	44	0

KANSAS CITY, MO.

[H=963 feet; h_t=78 feet; h_r=81 feet; h_a=95 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	8.5	NW.	34	NW.	0	11	7	0	4	10	12	3	15	0	15	9	7	6	6	5	0	....	12	0	24	2	0
February	8.5	NW.	35	N.	0	12	8	4	10	5	7	5	7	0	6	8	15	11	9	0	0	....	3	0	15	2	1
March	11.1	NW.	42	NW.	1	6	14	0	11	6	7	4	14	0	8	11	12	14	12	5	0	....	7	0	17	1	0
April	9.5	SW.	52	SW.	2	4	10	6	6	10	13	7	4	0	3	16	11	17	12	1	1	....	0	0	1	10	0
May	8.0	NW.	34	NW.	0	6	10	7	9	9	6	3	12	0	2	14	15	20	16	0	2	....	0	0	0	15	0
June	7.1	SE.	20	SW.	0	14	4	1	15	14	5	3	4	0	16	10	4	5	5	0	0	....	0	12	0	7	0
July	7.1	SE.	38	NW.	0	4	14	10	12	17	2	0	2	1	10	17	4	10	9	0	0	....	0	12	0	12	2
August	1.3	SE.	22	NW.	0	6	14	7	13	11	5	1	4	1	17	12	2	6	3	0	0	....	0	10	0	7	0
September	6.8	SE.	22	NW.	0	9	1	6	27	7	3	2	5	0	18	9	3	4	4	0	0	....	0	2	0	5	0
October	7.3	SE.	31	NW.	0	10	4	3	18	8	5	4	10	0	13	13	5	5	4	0	2	....	0	0	0	2	0
November	8.6	NW.	36	W.	0	6	6	5	8	9	9	4	13	0	10	14	6	6	3	1	0	....	1	0	16	0	0
December	6.9	N.	30	NW.	0	10	13	5	4	7	9	5	5	4	6	12	13	9	5	6	0	....	15	0	26	0	0
Year	8.0	SE.	....	.....	3	98	105	54	137	113	83	41	95	6	124	145	97	113	88	19	5	....	38	36	99	63	3

KEARNEY, NEBR.

[H=2,206 feet; h_t=87 feet; h_r=82 feet; h_a=90 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
February	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
March	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
April	16.5	NW.	60	NW.	9	4	7	6	14	5	7	1	16	0	6	12	12	11	10	4	0	....	0	0	9	2	0
May	16.4	NE.	48	NW.	3	9	16	3	4	6	4	5	15	0	5	8	18	17	13	1	0	....	0	0	0	5	0
June	13.0	SE.	64	SW.	3	4	11	1	13	8	10	3	10	0	15	12	3	9	4	0	1	....	0	3	0	5	0
July	10.6	S.	54	SE.	4	3	6	4	15	16	11	1	6	0	15	11	5	6	6	0	0	....	0	9	0	6	0
August	9.6	SE.	46	SE.	2	5	10	8	17	9	8	2	3	0	17	12	2	8	6	0	0	....	0	11	0	7	0
September	10.7	NE.	42	S.	1	4	15	2	12	9	12	2	4	0	16	8	6	3	2	0	0	....	0	1	0	1	0
October	11.9	SE.	46	SW.	3	9	7	0	15	8	6	6	11	0	17	7	7	4	3	0	0	....	0	0	3	1	0
November	14.5	SE.	56	NW.	6	6	2	1	15	3	14	5	14	0	13	9	8	5	3	3	0	....	1	0	19	0	0
December	11.3	SW.	42	NW.	1	9	8	0	7	6	13	7	12	0	8	6	17	10	5	8	0	....	14	0	30	0	0
Year	.....	.....	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

KEELER, CAL.

[H=3,632 feet; h_t=19 feet; h_r=2 feet; h_a=36 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	5.7	E.	38	NW.	0	4	6	16	12	3	4	1	11	5	17	9	5	3	2	0	0	0	0	0	19	0	0
February	4.7	SW.	27	S.	0	3	1	13	6	7	18	3	4	3	8	11	10	5	2	3	1	0	0	0	4	0	0
March	11.2	S.	51	N.	2	7	3	5	5	12	12	3	11	4	17	8	6	4	4	1	1	0	0	0	1	1	0
April	9.4	NW.	39	SW.	0	7	4	7	7	7	10	7	11	0	16	12	2	0	0	0	0	0	0	0	0	0	0
May	8.8	W.	50	SW.	2	6	5	7	3	8	11	12	9	1	17	8	6	4	3	0	0	0	0	2	0	3	0
June	8.1	SW.	37	NW.	0	3	2	5	5	11	15	6	12	1	23	5	2	0	0	0	0	0	0	13	0	0	0
July	6.9	SW.	36	SE.	0	10	3	6	2	6	21	3	5	1	29	0	2	0	0	0	0	0	0	27	0	0	0
August	6.3	SW.	30	SW.	0	9	6	7	0	4	18	8	7	3	24	6	1	0	0	0	0	0	0	22	0	0	0
September	6.9	SW.	36	SE.	0	6	6	8	7	6	17	5	3	2	25	5	0	0	0	0	0	0	0	10	0	0	0
October	7.7	E.	38	N.	0	7	3	17	7	2	8	5	10	3	16	4	11	4	3	0	0	0	0	0	0	3	0
November	7.5	SW.	50	SW.	3	4	8	11	18	1	9	2	4	3	15	8	7	1	1	0	0	0	0	0	3	0	0
December	9.3	NW.	50	SW.	4	5	10	5	13	3	9	1	16	0	20	6	5	1	1	0	0	0	0	0	16	0	0
Year	7.7	SW.	....	.....	11	71	62	107	85	70	152	56	103	26	227	82	57	22	16	4	2	0	0	74	43	7	0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31 1892—*Continued.*

KEOKUK, IOWA.

[Lat. 40° 22′ N.; long. 91° 26′ W.; gravity corr., —.01.]

Month.	Pressure.			Temperature.							Moisture.											
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a.m.	8 p.m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a.m.	8 p.m.	8 a.m.	8 p.m.	8 a.m.	8 p.m.	Total.	Maximum in 24 hours.	8 a.m.	8 p.m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.50	29.84	28.86	15.1	22.2	28.0	11.1	19.6	55	—16	10	15	83	75	0.063	0.081	1.96	1.68	3.0	3.5	3.5
February	29.44	29.88	28.76	30.2	35.3	40.0	27.0	33.5	57	5	25	28	82	77	.130	.150	1.61	.71	6.2	6.0	6.4
March	29.40	29.90	28.71	30.7	39.0	44.3	28.2	36.2	72	8	25	28	81	68	.130	.150	2.91	.99	6.4	4.9	5.5
April	29.34	29.70	28.73	43.9	52.9	57.7	40.7	49.2	75	26	37	41	77	65	.219	.256	6.15	2.64	6.7	5.1	5.9
May	29.23	29.62	28.78	54.5	60.4	66.5	49.7	58.1	78	35	48	51	81	74	.334	.373	6.24	1.38	7.0	6.8	6.9
June	29.26	29.54	29.07	68.3	75.6	81.7	64.2	73.0	92	52	62	66	82	74	.555	.638	2.65	1.00	5.0	2.8	4.1
July	29.40	29.76	29.04	70.7	78.6	83.5	65.7	74.6	94	50	64	67	81	68	.595	.660	6.18	2.58	4.2	4.3	4.6
August	29.37	29.54	29.13	69.0	78.2	85.0	64.8	74.9	95	51	62	65	80	65	.555	.616	1.07	.52	2.2	3.5	2.8
September	29.43	29.63	29.18	60.4	69.7	77.5	57.2	67.4	90	45	54	57	82	65	.417	.465	3.21	2.66	3.2	2.6	3.1
October	29.43	29.68	29.10	48.7	59.5	68.4	46.0	57.2	86	28	42	44	77	59	.266	.287	0.71	.46	3.9	2.5	3.1
November	29.43	29.91	28.67	31.8	37.6	43.0	29.7	36.4	62	14	26	29	79	72	.137	.157	3.16	1.64	6.0	4.0	5.5
December	29.45	29.94	28.68	22.9	26.7	32.5	19.3	25.9	59	—9	18	21	82	78	.093	.108	1.50	.65	5.8	4.4	5.9
Year	29.39	29.94	28.67	45.5	53.0	59.0	42.0	50.5	95	—16	39	43	81	70	.291	.328	37.45	.....	5.0	4.2	4.8

KEY WEST, FLA.

[Lat. 24° 34′ N.; long. 81° 49′ W.; gravity corr., —.05.]

January	30.13	30.28	29.86	66.1	67.5	71.2	63.5	67.4	79	53	59	59	78	75	.499	.499	.58	.46	5.7	2.6	4.4
February	30.10	30.26	29.86	68.6	69.8	73.9	65.9	69.9	81	56	61	61	77	73	.536	.536	1.71	1.60	5.3	2.3	4.2
March	30.09	30.26	29.73	68.7	69.2	74.0	65.0	69.5	80	53	60	60	76	74	.517	.517	2.15	1.49	4.7	2.8	4.3
April	30.11	30.22	29.98	75.7	75.2	80.5	71.6	76.0	83	64	65	66	70	72	.616	.638	.72	.58	2.8	2.4	3.5
May	30.06	30.23	29.85	78.6	77.6	82.6	73.7	78.2	86	68	67	67	68	70	.660	.660	.84	.44	4.3	1.9	3.7
June	30.03	30.17	29.68	79.8	79.7	84.6	75.0	79.8	87	70	73	73	81	80	.810	.810	6.10	1.87	8.7	8.4	8.4
July	30.12	30.22	30.04	82.5	81.5	86.7	77.2	82.0	88	71	73	73	73	75	.810	.810	1.69	.36	6.0	5.2	5.6
August	30.04	30.14	29.94	83.3	82.5	88.0	78.6	83.4	90	72	74	73	73	74	.838	.810	1.59	.36	6.2	5.3	6.0
September	29.99	30.07	29.88	82.1	81.2	87.0	76.7	81.8	90	69	74	73	76	77	.838	.810	4.05	1.29	7.0	6.0	6.6
October	29.99	30.26	29.81	77.3	77.0	81.5	73.5	77.5	87	59	70	70	79	78	.732	.732	3.67	.90	6.5	5.7	6.3
November	30.10	30.24	29.97	71.0	71.6	75.8	68.1	72.0	84	60	64	64	79	78	.595	.595	.95	.52	3.0	3.3	3.6
December	30.10	30.30	29.80	70.2	70.7	75.4	67.1	71.2	82	54	63	63	78	78	.575	.575	.86	.72	5.3	3.3	4.8
Year	30.07	30.30	29.68	75.3	75.3	80.1	71.3	75.7	90	53	67	67	76	75	.669	.666	24.91	.....	5.5	4.1	5.1

KITTY HAWK, N. C.

[Lat. 36° 0′; long. 75° 42′; gravity corr., —.02.]

January	30.06	30.55	29.34	41.5	44.0	48.8	36.3	42.6	70	19	33	36	74	76	.187	.211	2.69	.76	5.2	5.4	8.4
February	30.08	30.58	29.44	41.6	43.1	48.4	37.0	42.7	64	21	36	36	81	77	.211	.211	3.66	1.46	6.1	6.2	6.7
March	30.01	30.48	29.38	42.9	44.3	51.0	38.0	44.5	72	25	37	39	80	83	.219	.237	2.88	.94	5.9	5.4	5.4
April	30.11	30.43	29.58	55.0	54.7	62.3	48.8	55.6	81	36	50	50	83	86	.360	.360	1.94	.58	5.7	4.7	5.0
May	30.03	30.42	29.60	65.1	65.8	73.9	58.6	66.2	88	47	58	60	79	81	.481	.517	3.44	1.96	4.0	3.0	4.1
June	30.03	30.32	29.74	74.4	75.0	81.6	68.8	75.2	91	61	70	71	87	88	.732	.757	6.58	3.00	5.5	4.8	5.1
July	30.08	30.37	29.88	74.7	75.1	81.9	69.0	75.4	95	58	70	71	86	88	.732	.757	6.46	2.58	5.1	5.8	5.3
August	30.00	30.16	29.83	78.3	78.5	85.1	74.0	79.6	92	69	72	72	81	81	.783	.783	2.43	1.60	5.5	4.2	5.0
September	30.12	30.32	29.80	71.7	71.1	75.7	68.0	71.8	83	58	65	64	79	78	.616	.595	2.19	1.10	5.1	3.1	5.0
October	30.05	30.37	29.69	59.5	60.6	66.0	54.5	60.6	80	41	51	53	76	77	.372	.402	.78	.39	3.3	3.0	4.2
November	30.10	30.40	29.67	49.6	49.6	56.8	43.4	50.1	76	24	43	43	78	77	.277	.277	3.93	2.30	4.7	3.6	4.6
December	30.08	30.56	29.44	40.9	42.5	48.4	36.5	42.4	68	22	36	38	82	82	.211	.228	1.53	.74	5.4	3.6	4.9
Year	30.06	30.56	29.34	57.9	58.7	65.0	52.7	58.9	95	19	52.8	53.8	80.5	81.2	.432	.445	38.39	.....	5.1	4.4	5.1

KNOXVILLE, TENN.

[Lat. 35° 56′ N.; long. 83° 58′ W.]

January	29.09	29.42	28.39	33.2	37.4	42.1	27.6	34.8	66	9	24	26	81	67	.125	.137	6.16	1.74	5.5	4.8	5.4
February	29.10	29.52	28.61	39.2	48.5	53.9	37.0	45.4	66	23	32	35	78	62	.180	.203	3.35	2.25	4.5	4.7	5.3
March	29.03	29.31	28.40	39.6	48.4	54.3	37.1	45.7	79	18	32	34	77	61	.180	.195	3.68	1.05	5.8	5.7	5.8
April	29.07	29.33	28.70	53.3	60.8	67.3	49.3	58.3	80	31	45	45	74	60	.298	.298	7.58	2.51	5.7	5.8	5.6
May	29.01	29.27	28.68	61.4	68.3	76.5	56.0	66.2	88	42	53	53	76	62	.402	.402	2.81	.91	3.8	4.3	4.7
June	29.02	29.17	28.76	71.0	76.6	85.6	65.6	75.6	94	58	65	66	82	72	.616	.638	3.50	1.15	3.7	4.1	4.1
July	29.11	29.37	28.98	71.7	77.1	85.2	67.0	76.6	95	61	68	69	87	76	.684	.707	4.11	1.30	6.1	4.6	6.3
August	29.05	29.16	28.93	69.9	76.1	84.6	66.3	75.4	89	60	66	66	87	72	.638	.638	3.10	.91	6.5	4.8	5.2
September	29.13	29.34	28.63	62.4	71.7	81.0	57.5	69.2	87	45	57	56	82	60	.465	.448	.63	.26	3.6	2.8	3.0
October	29.10	29.38	28.84	51.9	61.8	70.3	48.2	59.2	84	30	46	45	80	55	.310	.298	.47	.38	4.3	1.9	2.9
November	29.12	29.39	28.70	39.1	46.8	53.3	36.5	44.9	70	19	34	36	85	70	.195	.211	5.91	1.65	6.3	3.4	5.1
December	29.10	29.46	28.67	32.7	40.1	45.4	31.0	38.2	66	12	29	32	87	76	.157	.180	3.32	1.17	6.6	4.5	5.8
Year	29.08	29.52	28.39	51.9	59.5	66.6	48.3	57.5	95	9	46	47	81	66	.354	.363	44.62	.....	5.4	4.3	4.9

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

KEOKUK, IOWA.

[H=613 feet; h_t=64 feet; h_r=56 feet; h_a=72 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	7.0	NW.	32	W.	0	4	3	2	3	8	9	13	20	0	18	6	7	6	5	6	0	....	19	0	30	0	0
February	7.6	NW.	26	W.	0	2	6	11	7	2	5	7	15	3	7	6	16	12	7	4	1	....	4	0	22	1	1
March	9.1	NW.	48	NW.	2	7	11	4	10	1	6	9	14	0	10	11	10	11	9	4	1	....	7	0	19	2	0
April	9.8	SE.	40	SW.	1	1	7	11	11	1	8	9	10	2	6	13	11	14	12	0	0	....	0	0	3	7	0
May	8.5	E.	48	NW.	1	4	4	11	6	6	7	8	11	3	6	8	17	20	16	0	2	....	0	0	0	9	0
June	6.1	S.	30	SW.	0	3	5	5	9	11	8	7	10	2	15	10	5	11	8	0	0	....	0	4	0	4	0
July	5.0	SW.	30	NW.	0	6	4	12	7	10	14	4	1	4	11	13	7	11	11	0	0	....	0	6	0	6	1
August	4.7	N.	22	NW.	0	12	9	5	11	3	10	4	4	4	20	8	3	5	4	0	0	....	0	6	0	4	0
September	4.8	S.	20	SW.	0	2	3	6	7	16	10	5	8	3	19	6	5	5	5	0	0	....	0	1	0	3	0
October	5.1	NW.	30	SW.	0	1	1	2	11	9	12	5	20	1	19	8	4	3	2	0	0	....	0	0	6	1	0
November	7.5	W.	36	NW.	0	9	2	7	8	4	9	15	5	1	11	6	13	6	5	2	0	....	2	0	20	1	0
December	5.7	NW.	26	NW.	0	3	2	9	5	7	9	5	21	1	10	6	15	6	4	4	0	....	14	0	27	0	0
Year	6.7	NW.	....	.....	4	54	57	85	95	78	107	91	139	24	152	101	113	110	88	20	4	....	46	17	127	38	2

KEY WEST, FLA.

[H=22 feet; h_t=41 feet; h_r=44 feet; h_a=50 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	11.5	NE.	46	N.	1	14	14	12	9	4	1	0	8	0	12	15	4	6	2	0	0	....	0	0	0	0	0
February	11.3	NE.	38	NW.	0	5	16	13	5	3	2	0	8	3	10	13	6	4	3	0	0	....	0	0	0	0	0
March	11.8	NE.	43	NW.	1	5	18	14	9	3	2	1	9	1	16	7	8	5	4	0	0	....	0	0	0	2	0
April	11.4	SE.	36	NE.	0	2	5	34	13	1	2	0	3	0	19	8	3	3	2	0	0	....	0	0	0	0	0
May	9.2	E.	26	NW.	0	5	4	33	14	0	2	0	4	0	17	13	1	6	5	0	0	....	0	0	0	1	0
June	6.9	SE.	30	SW.	0	0	1	18	28	5	2	2	1	3	0	10	20	19	15	0	0	....	0	0	0	8	0
July	8.7	E.	36	N.	0	0	0	53	7	1	0	0	0	1	5	19	7	11	9	0	0	....	0	0	0	3	0
August	6.3	E.	26	S.	0	3	5	24	17	4	2	0	4	3	4	20	7	10	7	0	0	....	0	0	0	9	0
September	7.0	E.	34	NE.	0	4	7	23	11	9	3	1	1	1	0	21	9	14	11	0	0	....	0	1	0	12	0
October	11.9	E.	36	N.	0	6	17	24	3	4	4	1	2	1	5	13	13	18	11	0	0	....	0	0	0	5	0
November	12.3	NE.	30	NW.	0	10	25	20	1	0	0	2	2	0	17	11	2	3	3	0	0	....	0	0	0	1	0
December	10.0	NE.	35	NW.	0	9	16	16	12	3	2	2	1	1	12	15	4	5	3	0	0	....	0	0	0	2	0
Year	9.9	E.	....	.....	2	63	128	284	132	37	22	9	43	14	117	165	84	104	75	0	0	....	0	1	0	43	0

KITTY HAWK, N. C.

[H=9 feet; h_t=12 feet; h_r=21 feet; h_a=30 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	17.9	NW.	53	N.	8	9	7	2	4	7	12	6	13	2	8	8	15	14	11	1	1	....	1	0	12	0	0
February	20.1	N.	60	N.	9	19	9	3	2	5	7	5	8	0	7	5	17	13	12	0	0	....	0	0	7	0	1
March	16.6	NW.	54	NW.	5	11	12	5	1	5	7	3	15	3	11	9	11	15	11	1	0	....	0	0	4	2	0
April	15.7	SW.	53	S.	5	10	11	4	4	5	18	3	4	1	12	8	10	15	12	0	0	....	0	0	0	4	0
May	15.0	SW.	53	NW.	2	6	10	3	4	13	19	6	0	1	16	9	6	11	9	0	0	....	0	0	0	3	0
June	14.3	SW.	50	SW.	3	4	3	2	8	3	37	2	1	0	10	13	7	14	11	0	0	....	0	1	0	2	0
July	12.3	SW.	45	W.	1	2	16	1	4	3	22	13	0	1	8	18	5	18	14	0	0	....	0	5	0	5	0
August	10.4	SW.	35	SE.	0	3	10	7	6	5	16	9	3	3	10	14	7	15	11	0	0	....	0	6	0	5	0
September	15.2	NE.	45	NE.	1	6	18	15	7	3	3	4	1	3	9	10	11	10	8	0	0	....	0	0	0	2	0
October	14.7	NE.	40	N.	4	4	17	2	2	4	10	9	13	1	16	13	2	8	5	0	0	....	0	0	0	1	0
November	14.9	NW.	53	SW.	8	6	1	4	1	10	12	3	23	0	14	7	9	11	7	0	0	....	0	0	3	3	0
December	15.5	NW.	58	NE.	4	11	11	4	2	6	7	5	15	1	12	9	10	22	6	2	0	....	0	0	9	0	0
Year	15.2	SW.	....	.....	50	91	125	52	45	69	170	68	96	16	133	123	110	156	117	4	1	....	1	12	35	27	1

KNOXVILLE, TENN.

[H=980 feet; h_t=80 feet; h_r=71 feet; h_a=88 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.3	W.	28	S.	0	9	12	2	2	1	7	15	5	9	13	7	11	13	12	4	0	....	4	0	22	0	0
February	5.6	NE.	26	SW.	0	7	13	5	2	1	9	9	2	10	8	13	8	11	9	1	0	....	1	0	9	0	0
March	5.1	W.	40	W.	1	9	10	6	1	2	9	17	5	3	8	10	13	15	10	1	1	....	1	0	9	1	0
April	6.3	W.	34	SW.	0	7	7	8	1	2	11	17	4	3	8	12	10	13	9	0	0	....	0	0	1	1	0
May	5.7	SW.	30	W.	0	7	5	9	2	1	24	6	5	3	9	16	6	16	12	0	0	....	0	0	0	5	0
June	3.4	SW.	30	SW.	0	3	7	15	3	0	16	6	1	9	13	11	6	15	10	0	0	....	0	6	0	4	0
July	3.9	SW.	32	NW.	0	7	9	8	2	2	20	10	1	3	2	19	10	14	13	0	0	....	0	9	0	6	0
August	3.7	SW.	18	SE.	0	9	13	5	5	2	12	7	1	8	7	17	7	14	11	0	0	....	0	0	0	3	0
September	3.5	NE.	23	E.	0	6	16	15	0	1	2	4	2	14	18	9	3	5	5	0	0	....	0	0	0	2	0
October	4.1	NE.	24	W.	0	7	14	6	2	0	5	5	10	13	21	6	4	4	2	0	0	....	0	0	2	0	0
November	5.0	N.	26	SW.	0	8	10	10	3	0	9	11	3	6	12	8	10	14	12	0	0	....	0	0	8	0	0
December	4.3	NE.	25	W.	0	12	15	9	2	0	4	7	2	11	8	10	13	11	9	0	0	....	4	0	18	0	0
Year	4.8	W.	....	.....	1	91	131	98	25	12	128	114	41	92	127	138	101	145	114	6	1	....	10	15	69	22	0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

LA CROSSE, WIS.

[Lat. 43° 49′ N.; long. 91° 15′ W.; gravity corr., 0.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.33	29.76	28.84	10.5	17.9	23.0	5.6	14.3	50	—20	3	9	73	69	.045	.060	.80	.44	4.1	3.3	4.6
February	29.33	29.81	28.67	25.0	27.7	32.9	18.9	25.9	48	—12	19	21	80	78	.098	.108	1.87	.53	7.6	6.8	7.3
March	29.31	29.84	28.44	26.1	34.6	39.3	21.7	30.5	58	0	19	24	76	68	.098	.125	.53	.22	4.5	4.8	5.1
April	29.25	29.64	28.48	39.5	48.6	53.2	34.7	44.0	72	20	30	33	71	57	.164	.187	4.70	1.47	5.9	5.5	6.0
May	29.13	29.65	28.50	50.1	56.2	60.4	45.5	53.0	76	32	42	44	75	66	.266	.287	7.06	1.64	7.5	7.5	7.3
June	29.15	29.48	28.88	63.5	69.8	74.0	58.8	66.4	92	48	57	58	80	69	.465	.481	8.21	1.89	6.9	5.9	6.0
July	29.29	29.73	28.94	67.9	76.1	81.6	62.7	72.2	93	50	61	62	79	63	.536	.555	3.97	2.33	4.5	4.4	4.7
August	29.27	29.50	28.96	65.1	73.6	80.4	61.0	70.7	92	49	60	61	84	66	.517	.536	1.88	.70	4.2	3.5	4.5
September	29.29	29.55	29.05	55.8	66.1	72.2	52.9	62.6	86	41	49	54	80	67	.347	.417	3.07	1.53	4.1	3.1	4.6
October	29.29	29.61	28.79	45.5	55.4	62.1	42.3	52.2	78	25	38	41	76	60	.228	.256	2.47	1.88	4.3	3.5	4.7
November	29.28	29.76	28.64	27.5	32.6	38.5	24.4	31.4	51	6	21	26	76	77	.108	.137	.59	.22	7.2	6.1	6.8
December	29.33	29.77	28.72	12.5	18.3	24.6	9.2	16.9	45	—14	8	13	81	78	.057	.074	1.04	.74	6.8	5.9	6.5
Year	29.27	29.84	28.44	40.8	48.1	53.5	36.5	45.0	93	—20	34	37	78	68	.244	.269	36.19	.....	5.6	5.0	5.7

LANDER, WYO.

[Lat. 42° 50′ N.; long. 108° 45′ W.; gravity corr., —.01.]

January	24.63	25.04	24.38	6.7	19.4	30.9	2.8	16.8	57	—29	—1	12	72	72	.036	.067	.75	.38	2.8	3.4	3.5
February	24.56	24.93	24.19	14.6	30.4	40.1	11.5	25.8	54	—13	8	17	74	61	.057	.089	.45	.40	3.2	4.0	3.3
March	24.53	24.89	24.01	25.3	41.1	46.5	22.4	34.4	66	— 4	18	24	74	55	.093	.125	1.25	.38	5.7	6.3	5.9
April	24.55	24.92	24.15	28.6	45.1	49.8	24.9	37.4	66	9	23	28	81	56	.119	.150	4.16	1.10	4.9	5.4	5.1
May	24.60	25.03	24.29	39.3	55.7	59.1	34.4	46.8	79	20	32	30	76	49	.180	.184	3.44	1.31	5.8	5.0	4.8
June	24.61	24.89	24.27	50.0	69.6	72.7	42.1	57.4	87	32	41	34	71	34	.256	.195	1.18	.60	3.4	4.2	3.8
July	24.71	24.91	24.53	56.4	78.6	83.5	49.1	66.3	91	43	43	38	62	27	.277	.228	2.05	1.93	2.6	4.7	3.6
August	24.72	25.00	24.49	51.0	76.7	82.7	46.5	64.6	93	33	39	37	66	28	.237	.219	.86	.51	1.8	3.9	3.0
September	24.72	24.93	24.45	44.0	70.2	77.5	40.6	59.0	85	28	31	32	63	26	.172	.180	.06	.04	2.6	3.4	3.0
October	24.69	25.05	24.21	31.2	49.0	60.5	28.0	44.2	76	17	24	27	74	45	.125	.143	1.03	.53	2.7	3.0	3.0
November	24.58	24.94	24.03	25.9	35.8	47.5	19.6	33.6	64	— 3	14	17	63	50	.077	.089	1.15	.62	3.3	3.6	3.7
December	24.60	24.80	24.26	11.7	18.1	29.3	2.3	15.8	50	—29	2	8	66	66	.043	.057	1.60	.54	2.7	4.0	3.5
Year	24.62	25.05	24.01	32.1	49.1	56.7	27.0	41.8	93	—29	23	25	70	47	139	142	17.98	.....	3.5	4.2	3.8

LEAVENWORTH, KANS.

[Lat. 39° 19′ N.; long. 94° 57′ W.; gravity corr., —.01.]

January	29.29	29.58	28.78	17.5	27.3	32.6	15.2	23.9	58	—20	11	17	75	67	.067	.089	1.95	1.04	4.4	2.2	4.7
February	29.19	29.57	28.57	31.0	39.0	43.7	29.2	36.4	61	12	24	30	76	71	.125	.164	3.65	1.28	5.2	6.5	7.3
March	29.16	29.61	28.48	31.6	41.3	45.3	29.9	37.6	78	12	25	30	76	67	.130	.164	4.09	1.22	6.4	5.1	6.6
April	29.06	29.52	28.33	46.8	55.0	59.7	44.0	51.8	78	29	38	40	74	60	.228	.246	4.90	1.15	6.6	6.4	7.0
May	28.99	29.33	28.60	55.1	61.6	67.0	51.1	59.0	82	38	48	50	78	68	.334	.360	8.66	1.92	8.0	7.2	7.5
June	29.02	29.32	28.81	67.5	78.9	83.6	64.7	74.2	94	47	60	62	78	57	.517	.555	2.55	.96	5.3	3.3	4.4
July	29.14	29.46	28.84	70.2	80.5	85.7	66.6	76.2	98	54	64	66	80	61	.595	.638	3.42	1.10	5.4	3.6	5.0
August	29.12	29.32	28.88	68.3	79.6	87.0	65.4	76.2	98	51	62	64	79	60	.555	.595	3.54	2.12	3.6	3.4	4.8
September	29.17	29.38	28.88	61.1	73.0	80.6	58.6	69.6	91	42	55	58	81	60	.432	.481	1.23	.75	4.0	3.6	4.6
October	29.18	29.48	28.84	49.9	61.0	68.7	48.1	58.4	86	32	43	44	80	56	.277	.287	2.80	1.29	4.6	2.9	4.9
November	29.18	29.59	28.63	33.5	42.7	49.2	32.2	40.7	66	21	26	30	74	60	.137	.164	1.53	1.02	5.5	3.6	6.0
December	29.22	29.67	28.55	21.0	28.1	33.1	18.8	26.0	67	—11	17	22	84	75	.089	.113	1.77	.53	4.7	5.6	7.1
Year	29.14	29.67	28.33	46.1	55.7	61.4	43.6	52.5	98	—20	39	43	78	64	.290	.321	40.09	.....	5.3	4.4	5.8

LEXINGTON, KY.

[Lat. 38° 2′ N.; long. 84° 33′ W.; gravity corr., —.02.]

January	29.03	29.41	28.44	24.0	30.5	33.7	21.6	27.6	59	6	18	22	80	74	.093	.113	2.35	.64	5.4	5.8	6.0
February	29.02	29.49	28.43	37.4	42.8	48.8	33.7	41.2	66	11	31	32	80	69	.172	.180	3.10	1.01	7.2	6.1	6.8
March	28.99	29.34	28.37	34.9	41.0	46.0	31.6	38.8	71	12	28	30	77	68	.150	.164	4.01	1.01	6.7	6.7	6.9
April	29.00	29.28	28.50	50.7	56.2	62.7	44.8	53.8	80	26	41	42	70	63	.256	.266	6.57	1.56	5.5	6.6	5.9
May	28.92	29.17	28.50	60.4	64.3	71.6	54.0	62.8	86	41	52	54	73	70	.387	.417	5.32	1.34	6.6	7.0	6.5
June	28.94	29.09	28.71	73.9	75.9	84.1	67.4	75.8	94	61	66	65	76	70	.638	.616	3.81	1.29	3.9	5.3	5.0
July	29.05	20.33	28.78	72.9	76.2	84.3	65.8	75.0	97	54	65	64	77	67	.616	.595	6.22	2.35	5.2	5.6	4.6
August	28.98	29.10	28.83	71.0	75.7	83.6	65.9	74.8	92	54	63	63	78	66	.575	.575	3.28	1.20	5.2	3.9	4.8
September	29.07	29.28	28.54	63.3	70.2	78.0	58.8	68.4	88	47	56	56	78	62	.448	.448	4.10	1.49	3.5	3.2	3.7
October	29.03	29.32	28.65	50.7	59.6	66.5	47.7	57.1	82	32	42	41	72	51	.266	.256	.45	.21	5.1	3.7	4.7
November	29.03	29.39	28.48	37.9	42.7	48.8	34.1	41.4	69	16	32	30	80	64	.180	.164	3.72	.68	6.9	5.4	6.3
December	29.04	29.46	28.49	29.4	34.6	39.4	26.4	32.9	67	7	25	27	83	73	.130	.143	3.03	1.52	7.2	6.8	7.6
Year	29.01	29.49	28.37	50.5	55.8	62.3	46.0	54.1	97	6	43	44	77	66	.326	.328	45.96	.....	5.7	5.5	5.7

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

LA CROSSE, WIS.

[H = 720 feet; h_t = 70 feet; h_r = 61 feet; h_a = 78 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	6.6	N.	36	NW.	0	13	0	0	7	12	5	8	11	6	14	10	7	13	5	12	0	....	20	0	30	0	0
February	5.8	NW.	26	N.	0	10	5	4	7	9	4	3	11	5	4	9	16	10	6	8	0	....	10	0	25	0	1
March	7.4	N.	34	W.	0	15	6	6	7	8	1	5	9	5	11	12	8	5	5	4	0	....	9	0	23	0	3
April	9.4	NW.	38	NE.	0	3	7	11	7	5	4	5	12	6	5	16	9	11	9	3	0	....	0	0	11	3	0
May	6.8	N.	28	NW.	0	12	12	4	9	8	2	7	6	2	2	15	14	21	15	1	0	....	0	0	0	0	0
June	6.3	S.	24	N.	0	9	8	0	7	12	1	8	8	7	6	15	9	18	15	0	0	....	0	1	0	5	0
July	5.4	S.	26	NW.	0	7	3	3	7	27	3	2	5	5	12	16	3	11	10	0	0	....	0	3	0	5	2
August	4.8	S.	24	SW.	0	12	4	1	5	19	2	2	6	11	13	15	3	8	7	0	0	....	0	1	0	2	0
September	6.7	S.	36	NW.	0	5	2	3	8	27	2	5	6	2	13	12	5	4	4	0	0	....	0	0	0	2	0
October	6.9	S.	44	NW.	1	10	1	1	7	23	3	6	6	5	9	17	5	6	5	0	1	....	0	0	7	1	0
November	8.3	S.	30	NW.	0	10	1	1	9	16	1	9	9	4	6	10	14	9	6	4	0	....	6	0	23	0	0
December	5.8	S.	30	NW.	0	6	3	0	5	17	5	10	10	6	6	12	13	12	5	10	0	....	20	0	30	0	0
Year	6.6	S.	....	.....	1	112	52	34	85	183	33	70	99	64	101	159	106	128	92	42	1	....	65	5	149	18	6

LANDER, WYO.

[H = 5,377 feet; h_t = 16 feet; h_r = 16 feet; h_a = 34 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	2.8	SW.	44	SW.	1	6	4	4	4	8	17	7	1	11	17	11	3	4	4	4	0	....	12	0	30	0	0
February	2.3	W.	24	W.	0	3	1	5	4	10	11	14	2	8	15	13	1	3	2	3	1	....	9	0	29	0	0
March	4.0	SW.	48	S.	1	8	6	6	3	7	12	10	2	8	9	9	13	7	6	7	0	....	3	0	31	0	0
April	4.7	W.	29	NW.	0	4	1	5	3	8	13	14	2	10	11	11	8	12	11	10	2	....	1	0	25	0	1
May	4.7	W.	30	SW.	0	8	4	2	1	4	9	18	7	9	11	12	8	10	8	6	0	....	0	0	10	0	2
June	5.0	W.	37	SW.	0	3	4	5	6	5	8	13	5	11	13	13	4	6	4	0	0	....	0	0	1	0	0
July	5.2	SW.	40	S.	1	2	5	3	2	9	16	13	2	10	15	14	2	4	3	0	0	....	0	3	0	2	0
August	4.4	SW.	39	SW.	0	6	4	3	2	8	18	8	5	8	17	12	2	3	3	0	0	....	0	7	0	2	2
September	4.4	SW.	36	S.	0	1	5	3	6	8	18	5	0	14	16	14	0	2	1	0	0	....	0	0	2	1	0
October	3.5	SW.	30	S.	0	2	6	1	2	9	26	9	1	6	21	5	5	5	4	2	0	....	0	0	21	0	0
November	6.1	SW.	40	SW.	1	4	1	2	3	10	23	9	6	2	15	13	2	5	5	5	0	....	3	0	28	0	0
December	3.5	SW.	48	SW.	1	9	3	5	3	5	16	9	6	6	17	10	4	10	9	10	0	....	18	0	30	0	0
Year	4.2	SW.	....	.....	5	56	44	44	39	91	187	129	39	103	177	137	52	71	60	47	3	....	46	10	207	5	5

LEAVENWORTH, KANS.

[H = 857 feet; h_t = 95 feet; h_r = 86 feet; h_a = 100 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	8.1	NW.	34	N.	0	8	2	4	5	12	2	8	18	3	15	10	6	6	6	6	0	....	12	0	25	0	0
February	9.0	NW.	36	NW.	0	9	5	9	3	8	1	5	15	3	6	7	16	9	7	2	0	....	2	0	16	1	0
March	11.6	NW.	52	NW.	3	4	11	5	6	8	3	3	16	6	6	13	12	14	11	2	0	....	6	0	18	0	0
April	11.9	E.	66	SW.	3	4	3	15	12	7	2	5	8	4	2	14	14	13	11	1	0	....	0	0	1	3	0
May	11.1	NW.	48	NW.	3	5	4	9	9	10	1	4	18	2	2	10	19	20	17	0	0	....	0	0	0	4	0
June	9.1	NW.	31	NW.	0	5	2	2	12	12	10	3	13	1	13	14	3	5	4	0	0	....	0	12	0	1	0
July	7.3	S.	32	SW.	0	3	5	14	12	18	4	2	3	1	10	15	6	10	9	0	0	....	0	11	0	5	0
August	6.0	E.	42	SW.	1	6	9	15	8	12	6	1	3	2	12	14	5	8	5	0	0	....	0	9	0	6	0
September	7.5	S.	28	SW.	0	8	0	1	16	19	4	1	8	3	12	12	6	4	3	0	0	....	0	2	0	2	0
October	7.4	NW.	36	NW.	0	5	2	2	14	14	3	3	15	4	13	11	7	5	4	0	0	....	0	0	0	2	0
November	9.0	NW.	42	NW.	1	8	4	3	12	8	4	5	14	2	8	12	10	5	2	1	0	....	0	0	15	0	0
December	6.9	NW.	40	NW.	1	9	5	4	7	4	9	6	15	3	7	8	16	6	5	5	0	....	16	0	26	0	0
Year	8.7	NW.	....	.....	12	74	52	83	116	132	49	46	146	34	106	140	120	105	84	17	0	....	36	34	101	24	0

LEXINGTON, KY.

[H = 989 feet; h_t = 75 feet; h_r = 2 feet; h_a = 122 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	14.0	NW.	50	SE.	2	1	13	1	11	6	12	3	14	1	10	5	16	14	11	11	0	....	15	0	27	0	0
February	15.3	NW.	48	NW.	4	1	11	2	12	8	5	5	14	0	6	9	14	10	9	1	0	....	1	0	10	1	1
March	14.7	NW.	50	NW.	5	2	14	3	6	4	12	4	17	0	4	13	14	16	14	7	0	....	5	0	16	1	0
April	15.1	S.	60	S.	4	1	12	5	8	12	6	5	11	0	6	15	9	15	14	0	0	....	0	0	4	2	0
May	14.1	SW.	48	SW.	2	2	7	2	7	13	15	8	8	0	4	13	14	19	14	0	0	....	0	0	0	9	0
June	9.8	SE.	36	SE.	0	0	2	2	15	15	14	5	7	0	12	14	4	14	11	0	1	....	0	4	0	10	0
July	9.1	SW.	56	NW.	2	1	10	5	7	5	13	9	11	1	11	16	4	15	10	0	0	....	0	7	0	7	0
August	8.3	NE.	48	NE.	1	2	15	7	6	12	9	4	7	0	12	14	5	9	9	0	0	....	0	1	0	4	0
September	8.8	SW.	36	W.	0	1	9	5	11	12	14	2	5	1	17	8	5	9	7	0	1	....	0	0	0	3	0
October	10.2	S.	36	NW.	0	4	10	2	9	13	9	4	11	0	14	11	6	6	4	0	0	....	0	0	0	0	0
November	12.8	NW.	60	SE.	2	2	7	4	9	7	14	1	16	0	6	13	11	18	14	3	0	....	2	0	12	0	0
December	10.8	SW.	42	SW.	4	4	11	5	6	5	16	5	10	0	5	8	18	11	7	5	0	....	10	0	18	1	0
Year	11.9	SW.	....	.....	26	21	121	43	107	112	139	55	131	3	107	139	120	156	124	27	2	....	33	12	87	38	1

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

LITTLE ROCK, ARK.

[Lat. 34° 45′ N.; long. 92° 6′ W.; gravity corr., —.03.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.89	30.25	29.28	29.9	38.5	44.3	27.4	35.8	69	10	23	25	77	60	.119	.130	3.92	1.65	4.0	3.3	3.8
February	29.79	30.24	29.22	44.6	52.7	58.9	42.5	50.7	70	30	38	41	80	66	.228	.256	3.44	1.30	5.2	3.9	5.3
March	29.76	30.18	29.35	42.1	53.0	57.5	39.7	48.6	81	17	33	36	71	56	.187	.211	2.55	1.27	5.4	4.4	5.1
April	29.70	30.07	29.29	57.1	65.1	69.8	53.9	61.8	86	42	48	50	74	60	.334	.360	7.53	3.84	5.9	5.6	5.7
May	29.64	29.86	29.38	63.2	70.6	75.2	59.6	67.4	85	45	58	59	82	68	.481	.499	9.62	1.84	7.5	5.9	6.7
June	29.65	29.78	29.50	73.2	79.7	85.4	68.6	77.0	93	54	67	68	81	68	.660	.684	2.48	1.21	4.3	4.9	5.1
July	29.75	29.89	29.59	74.6	80.3	87.0	71.0	79.0	95	61	70	71	86	74	.732	.757	3.10	1.21	6.5	6.2	6.7
August	29.70	29.87	29.59	73.3	79.4	86.5	70.3	78.4	96	61	69	70	86	73	.707	.732	6.63	3.13	5.6	5.5	5.9
September	29.78	29.94	29.55	64.2	74.4	81.3	61.6	71.4	90	53	59	63	84	68	.499	.575	3.54	3.50	2.3	2.2	2.7
October	29.77	30.02	29.51	56.4	66.6	73.6	54.8	64.2	85	38	52	55	84	68	.387	.432	2.82	1.30	4.5	3.2	4.0
November	29.81	30.14	29.32	44.4	53.0	58.0	42.1	50.0	75	29	38	41	78	66	.228	.256	8.02	3.26	5.9	4.7	5.9
December	29.81	30.25	29.22	37.6	42.4	45.6	35.3	40.4	70	10	34	36	86	78	.195	.211	8.48	2.79	6.5	6.5	7.0
Year	29.75	30.25	29.22	55.0	63.0	68.1	52.2	60.4	96	10	49	51	81	67	.396	.425	62.13	.....	5.3	4.7	5.3

LOS ANGELES, CAL.

[Lat. 34° 3′ N.; long. 118° 15′ W.; gravity corr., —.03.]

January	29.70	30.00	29.43	48.0	58.9	68.4	44.9	56.6	81	37	35	41	64	56	.203	.256	.88	.49	2.8	3.2	4.1
February	29.66	29.85	29.35	48.8	55.4	62.6	46.3	54.4	74	38	44	47	84	75	.287	.322	3.19	1.48	4.9	5.1	6.1
March	29.64	29.84	29.45	48.9	57.8	65.6	46.3	56.0	81	36	45	48	86	71	.298	.334	3.39	1.96	2.9	3.8	4.6
April	29.66	29.92	29.45	48.3	62.1	71.2	46.0	58.6	88	40	43	47	82	60	.277	.322	.22	.22	2.6	2.0	2.6
May	29.62	29.79	29.41	54.6	64.6	72.1	52.9	62.5	99	42	50	52	85	65	.360	.387	2.06	1.76	4.9	4.4	5.3
June	29.58	29.72	29.38	53.6	67.2	75.5	52.0	63.8	88	46	49	52	86	58	.347	.387	.06	.05	1.8	.5	3.3
July	29.60	29.75	29.48	57.7	70.7	80.1	55.9	68.0	90	50	55	57	90	63	.432	.465	.00	.00	4.6	.2	3.7
August	29.57	29.69	29.46	62.7	72.5	82.4	60.8	71.6	94	53	57	59	84	64	.465	.499	.01	.01	6.3	.5	3.5
September	29.60	29.70	29.48	56.9	67.6	80.1	55.4	67.8	95	50	54	57	89	69	.417	.465	.00	.00	2.4	Few.	2.1
October	29.61	29.78	29.46	55.7	64.2	76.0	52.1	64.0	96	40	45	51	73	66	.298	.373	.33	.30	4.5	4.2	4.4
November	29.67	29.82	29.50	52.7	61.8	74.4	49.0	61.7	90	41	38	48	63	65	.228	.334	4.40	3.75	1.9	2.2	2.7
December	29.74	29.92	29.49	48.8	56.2	63.7	45.1	54.4	81	35	39	47	71	73	.237	.322	4.18	2.35	2.6	3.0	3.6
Year	29.64	30.00	29.35	53.1	63.2	72.7	50.6	61.6	99	35	46	50	80	65	.331	.372	18.72	.....	3.5	2.4	3.8

LOUISVILLE, KY.

[Lat. 38° 15′ N.; long. 85° 45′ W.; gravity corr., —.02.]

January	29.56	29.95	28.95	24.4	32.4	36.4	21.9	29.2	60	4	16	23	72	70	.085	.119	1.46	.60	4.3	4.3	5.5
February	29.52	30.02	28.86	38.7	45.1	50.4	35.2	42.8	66	16	32	34	77	67	.180	.195	3.61	1.13	7.1	6.6	7.2
March	29.48	29.83	28.88	36.9	45.1	50.5	33.4	42.0	76	14	28	30	71	59	.150	.164	3.23	1.04	5.8	6.4	6.3
April	29.48	29.78	29.00	50.7	58.9	64.5	46.5	55.5	83	29	41	43	70	58	.256	.277	7.50	3.00	4.8	6.1	6.4
May	29.38	29.66	28.98	60.9	66.6	73.3	56.1	64.7	88	45	51	54	72	66	.373	.417	4.44	.89	6.6	5.4	6.0
June	29.39	29.56	29.16	73.1	78.7	85.3	67.9	76.6	96	59	62	64	69	62	.555	.595	3.89	.96	4.2	4.5	5.2
July	29.51	29.80	29.30	72.2	79.4	85.9	67.5	76.7	98	58	62	65	70	62	.556	.616	3.93	2.41	5.0	4.5	5.5
August	29.45	29.56	29.28	71.1	78.9	85.8	67.4	76.6	93	53	62	63	73	60	.555	.575	1.84	1.16	4.5	3.6	5.1
September	29.53	29.73	28.98	62.4	72.9	80.3	58.6	69.4	89	47	53	56	72	57	.402	.448	2.43	2.22	2.8	2.4	4.1
October	29.51	29.82	29.12	50.6	62.8	69.8	47.9	58.8	85	32	40	43	68	50	.246	.277	.86	.64	4.0	3.4	4.6
November	29.53	29.89	28.91	38.1	45.2	50.9	34.8	42.8	70	16	30	33	72	62	.164	.187	2.87	.54	5.9	4.8	6.3
December	29.55	29.99	28.92	30.4	37.9	42.5	27.6	35.0	71	4	23	28	74	67	.119	.150	2.07	1.11	6.5	5.2	6.9
Year	29.49	30.02	28.86	50.8	58.7	64.6	47.1	55.8	98	4	42	45	72	62	.303	.335	38.13	.....	5.1	4.8	5.8

LYNCHBURG, VA.

[Lat. 37° 25′ N.; long. 79° 9′ W.; gravity corr., —.02.]

January	29.35	29.87	28.67	31.8	35.7	42.6	27.6	35.1	66	10	24	22	76	62	.125	.113	5.62	1.36	5.7	3.8	5.4
February	29.41	29.92	28.73	35.7	41.6	49.1	32.0	40.6	67	16	28	28	75	62	.150	.150	3.11	1.58	6.3	4.3	5.3
March	29.31	29.75	28.62	37.9	43.5	51.1	34.3	42.7	70	20	28	28	68	58	.150	.150	3.40	1.18	6.2	5.8	5.8
April	29.39	29.75	28.90	50.4	56.0	62.6	45.1	53.8	82	31	39	39	67	56	.237	.237	4.13	1.04	5.9	5.5	5.8
May	29.29	29.63	28.94	63.3	68.2	77.1	55.3	66.2	92	43	50	49	63	53	.360	.347	2.51	.75	5.6	5.5	4.7
June	29.31	29.58	29.01	74.0	75.7	86.5	66.5	76.5	95	54	65	64	74	69	.616	.595	3.45	.71	5.6	6.0	4.6
July	29.39	29.77	29.18	73.8	77.1	87.0	66.5	76.8	100	54	64	67	72	72	.595	.660	5.74	2.41	5.9	6.5	5.1
August	29.32	29.49	29.15	73.4	77.1	88.2	66.8	77.5	95	60	65	66	75	69	.616	.638	.80	.37	3.7	4.8	4.0
September	29.46	29.69	28.93	62.5	67.7	77.9	56.6	67.2	87	46	56	60	80	78	.448	.517	2.31	.94	3.7	2.6	3.5
October	29.36	29.71	29.01	50.1	56.7	68.6	45.2	56.9	83	29	42	46	75	69	.266	.310	.04	.04	3.1	2.8	3.1
November	29.39	29.69	28.90	39.2	44.8	53.2	36.2	44.7	72	20	33	37	79	75	.187	.219	4.68	1.31	4.8	3.8	4.8
December	29.37	29.89	28.83	31.4	38.7	47.3	28.6	38.0	66	12	27	33	83	79	.143	.187	1.75	.99	4.3	3.0	3.9
Year	29.36	29.92	28.62	52.0	56.9	65.9	46.7	56.3	100	10	43	45	74	67	.324	.344	37.54	.....	5.1	4.5	4.7

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—*Continued.*

LITTLE ROCK, ARK.

[H = 302 feet; h_t = 72 feet; h_r = 62 feet; h_a = 79 feet.]

Month.	Wind. By self-register. Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	7.1	NW.	36	SW.	0	10	6	6	5	4	11	7	11	2	19	3	9	10	8	2	1	....	6	0	20	1	0
February	6.8	N.	24	S.	0	12	6	5	7	5	8	6	7	2	10	9	10	11	10	0	1	....	0	0	3	2	0
March	7.6	NW.	33	W.	0	8	8	1	11	6	6	6	11	5	13	6	12	9	7	2	0	....	0	0	8	2	0
April	7.7	S.	32	W.	0	4	5	7	11	13	4	1	11	4	10	8	12	12	9	0	0	....	0	0	0	4	0
May	7.2	S.	39	NW.	0	2	7	2	14	14	10	6	7	0	5	13	13	16	13	0	0	....	0	0	0	12	0
June	4.6	S.	29	SW.	0	3	3	3	12	13	12	5	6	3	10	12	8	10	6	0	0	....	0	9	0	7	0
July	5.2	SW.	28	N.	0	1	17	3	6	9	22	1	2	1	6	9	16	15	10	0	0	....	0	8	0	8	0
August	4.5	NE.	33	SW.	0	8	14	6	5	13	2	2	8	4	8	13	10	12	9	0	0	....	0	6	0	5	0
September	3.8	E.	18	NE.	0	6	11	13	6	10	1	1	8	4	23	4	3	2	2	0	0	....	0	1	0	0	0
October	4.9	NE.	19	SE.	0	6	14	0	12	3	4	4	11	8	16	8	7	8	5	0	0	....	0	0	0	2	0
November	6.5	E.	36	W.	0	8	7	8	3	7	5	8	8	6	9	7	14	12	11	1	0	....	0	0	2	2	0
December	7.2	E.	40	SE.	1	9	9	11	10	3	5	4	9	2	8	3	20	13	12	1	0	....	2	0	13	1	0
Year	6.1	NE.	....	.....	1	77	107	65	102	100	90	51	99	41	137	95	134	130	102	6	2	....	8	24	46	46	0

LOS ANGELES, CAL.

[H = 330 feet; h_t = 74 feet; h_r = 66 feet; h_a = 76 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	3.2	NE.	17	E.	0	9	15	5	0	4	1	12	13	3	14	9	8	6	4	0	0	....	0	0	0	0	0
February	3.2	W.	17	E.	0	5	9	9	2	5	3	12	7	6	6	10	13	11	10	0	0	....	0	0	0	0	0
March	3.8	W.	21	W.	0	1	12	5	1	3	2	26	5	7	11	17	3	6	5	0	0	....	0	0	0	0	0
April	4.1	W.	23	W.	0	4	17	4	0	1	5	24	1	4	17	11	2	1	1	0	0	....	0	0	0	0	0
May	3.9	W.	26	W.	0	2	11	4	0	4	5	33	1	2	10	6	15	5	2	0	0	....	0	3	0	0	0
June	3.9	W.	24	W.	0	1	7	6	3	4	3	26	1	9	12	17	1	2	1	0	0	....	0	0	0	0	0
July	3.4	W.	13	W.	0	1	6	8	1	4	5	26	3	8	9	22	0	0	0	0	0	....	0	1	0	0	0
August	3.3	W.	13	SW.	0	3	2	5	3	7	6	25	1	10	12	19	0	1	0	0	0	....	0	4	0	0	0
September	3.0	W.	14	W.	0	3	7	1	0	3	8	22	3	13	20	10	0	0	0	0	0	....	0	1	0	0	0
October	3.1	W.	16	SW.	0	11	5	3	0	2	12	18	3	8	12	13	6	4	1	0	0	....	0	3	0	0	0
November	3.1	W.	21	N.	0	6	15	6	1	3	3	17	8	1	21	4	5	6	3	0	0	....	0	0	0	0	0
December	3.7	W.	24	NE.	0	9	14	6	1	5	2	15	5	5	18	8	5	6	5	0	0	....	0	0	0	0	0
Year	3.5	W.	....	.....	0	55	120	62	12	45	55	256	51	76	162	146	58	48	32	0	0	....	0	12	0	0	0

LOUISVILLE, KY.

[H = 551 feet; h_t = 100 feet; h_r = 103 feet; h_a = 116 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	9.1	SW.	34	W.	0	7	11	0	8	4	17	6	9	0	11	7	13	10	8	8	0	....	11	0	27	0	0
February	9.2	NE.	36	W.	0	1	15	3	10	6	4	8	9	2	3	8	18	10	9	1	0	....	1	0	9	0	1
March	9.7	NE	40	W.	1	7	14	7	4	5	7	12	5	1	6	12	13	15	11	5	1	....	1	0	13	2	0
April	9.5	NE.	34	S.	0	1	15	2	6	10	5	11	9	1	6	12	12	13	10	0	0	....	0	0	3	4	0
May	9.5	SW.	37	W.	0	2	6	4	9	10	21	4	6	0	4	18	9	17	16	0	0	....	0	0	0	10	0
June	6 5	SW.	30	W.	0	3	4	3	13	5	23	5	2	2	8	16	6	13	11	0	0	....	0	9	0	7	0
July	6.1	SW.	44	NW.	1	4	8	5	8	8	18	5	3	3	10	12	9	11	7	0	0	....	0	10	0	6	0
August	5.7	NE.	26	N.	0	9	12	7	5	9	11	3	2	4	10	17	4	9	4	0	0	....	0	5	0	2	0
September	4.6	SE.	26	W.	0	8	9	4	11	9	4	3	3	9	15	8	7	4	4	0	0	....	0	0	0	1	0
October	4.6	N.	25	SW.	0	14	7	1	9	8	9	3	6	5	13	11	7	6	4	0	0	....	0	0	0	0	0
November	7.7	SW.	36	SW.	0	5	4	5	7	9	11	6	11	2	10	8	12	15	10	2	0	....	0	0	12	0	0
December	6.7	NE.	29	S.	0	6	12	4	9	10	10	6	4	1	5	10	16	9	5	1	0	....	9	0	18	0	0
Year	7.4	SW.	....	.....	2	67	117	45	99	93	140	72	69	30	101	139	126	132	99	17	1	....	22	24	82	32	1

LYNCHBURG, VA.

[H = 685 feet; h_t = 82 feet; h_r = 76 feet; h_a = 88 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	5.4	NW.	28	NW.	0	7	4	9	1	1	10	5	16	9	11	8	12	12	12	5	0	....	2	0	21	0	0
February	5.3	E.	24	NW.	0	5	6	12	1	6	7	5	10	6	9	10	10	10	8	2	0	....	1	0	15	0	1
March	5.6	NW.	25	NW.	0	5	5	9	5	6	3	9	13	7	9	11	11	12	10	4	0	....	1	0	11	0	0
April	5.1	SW.	24	N.	0	6	3	9	4	4	16	3	13	2	8	11	11	13	11	0	1	....	0	0	2	2	0
May	3.6	SW.	24	NW.	0	4	0	4	6	11	11	6	12	8	10	18	3	11	9	0	0	....	0	3	0	6	0
June	3.8	SW.	36	N.	0	3	2	4	8	9	19	4	7	4	9	18	3	14	13	0	0	....	0	9	0	10	0
July	3.7	SW.	27	NE.	0	0	2	9	6	4	14	12	11	4	8	18	5	11	7	0	0	....	0	13	0	9	0
August	3.4	SE.	24	N.	0	4	2	7	11	8	4	8	11	7	12	17	2	8	4	0	0	....	0	11	0	6	0
September	3.4	Calm. E.	23	E.	0	2	9	14	9	2	2	0	13	9	18	9	3	9	6	0	0	....	0	0	0	0	0
October	4.0	NW.	24	W.	0	2	0	6	5	3	6	9	25	6	19	11	1	1	1	0	0	....	0	0	2	1	0
November	5.7	NW.	24	NE.	0	1	5	2	2	4	5	7	29	5	11	13	6	12	11	1	0	....	0	0	11	0	0
December	4.4	NW.	24	NW.	0	12	6	0	1	1	3	8	25	6	15	12	4	6	5	1	0	....	3	0	20	0	0
Year	4.4	NW.	....	.....	0	51	44	85	59	59	100	76	185	73	139	156	71	119	97	13	1	....	7	36	82	34	1

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

MANCHESTER, N. H.

[Lat. 42° 58′ N.; long. 71° 28′ W.; gravity corr., 0.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.74	30.41	29.05	20.5	25.2	31.4	15.2	23.3	56	— 2	15	16	80	71	.081	.085	3.46	1.09	6.3	5.3	6.0
February	29.87	30.51	28.79	22.8	26.5	33.0	18.3	25.6	48	— 1	16	18	76	73	.085	.093	2.18	1.11	6.0	4.9	5.6
March	29.64	30.19	28.91	27.6	31.1	38.1	22.5	30.3	54	10	14	17	60	58	.077	.089	2.29	.46	4.3	4.0	4.0
April	29.73	30.26	29.21	44.8	46.1	57.1	34.4	45.8	73	23	25	25	47	46	.130	.130	.69	.47	4.0	3.9	4.0
May	29.72	30.12	29.23	52.3	54.6	63.4	44.5	54.0	80	28	38	41	64	64	.228	.256	5.42	1.32	6.2	6.2	6.3
June	29.70	30.17	29.29	67.1	68.3	79.8	58.1	69.0	95	40	56	56	69	67	.448	.448	4.68	1.60	5.6	6.1	5.5
July	29.76	30.26	29.35	70.3	70.4	82.4	59.2	70.8	93	47	58	59	64	68	.481	.499	1.72	.87	3.2	4.3	3.6
August	29.75	30.04	29.51	66.7	68.1	77.0	59.5	68.2	93	51	59	60	78	78	.499	.517	6.43	2.41	5.7	5.4	5.8
September	29.88	30.18	29.22	57.3	58.7	71.4	48.3	59.8	79	34	49	51	74	75	.347	.373	1.39	.99	3.6	2.8	3.3
October	29.67	30.19	29.22	46.4	48.1	58.3	39.4	48.8	75	27	37	37	71	68	.219	.219	1.01	.30	5.7	2.8	4.4
November	29.78	30.20	29.23	35.1	37.6	43.9	30.8	37.4	64	16	29	29	77	72	.157	.157	3.89	1.25	6.5	5.6	6.2
December	29.70	30.20	29.09	22.2	26.0	33.0	17.9	25.4	46	— 3	16	18	75	68	.085	.093	.86	.54	4.2	4.0	4.1
Year	29.74	30.51	28.79	44.4	46.7	55.7	37.3	46.5	95	— 3	34	36	70	67	.236	.247	34.02	.....	5.1	4.6	4.9

MANISTEE, MICH.

[Lat. 44° 13′ N.; long. 86° 16′ W.; gravity corr., 0.]

January	29.36	29.82	28.70	20.2	21.3	24.9	15.8	20.4	47	— 3	16	16	83	80	.085	.085	4.45	1.90	7.9	8.0	8.0
February	29.44	29.95	28.71	23.5	27.4	29.8	20.8	25.3	38	1	20	23	88	84	.103	.119	1.94	.51	9.8	7.4	8.1
March	29.41	29.88	28.71	24.2	30.1	34.3	21.3	27.8	56	— 1	19	21	81	69	.098	.108	.86	.31	5.9	4.6	3.8
April	29.39	29.87	28.71	38.0	42.4	47.1	33.4	40.2	73	22	28	31	68	67	.150	.172	1.73	.88	4.3	4.7	4.1
May	29.25	29.79	28.60	48.7	50.6	57.6	43.4	50.5	73	33	42	42	78	74	.266	.266	3.58	.58	7.0	6.2	6.1
June	29.28	29.54	28.82	60.3	61.0	68.5	54.2	61.4	86	46	55	55	84	82	.432	.432	5.11	1.00	5.1	5.5	5.3
July	29.41	29.90	29.10	66.3	68.2	75.5	58.3	66.9	90	45	58	57	75	69	.481	.465	2.37	.77	3.6	4.2	3.7
August	29.37	29.59	29.04	63.5	67.1	72.6	57.7	65.2	86	49	57	59	81	75	.465	.499	4.59	1.81	5.0	3.6	4.5
September	29.41	29.71	29.02	57.5	61.9	68.5	52.6	60.6	82	42	52	54	83	76	.387	.417	3.62	1.43	3.9	3.8	4.2
October	29.36	29.70	28.63	47.8	50.0	55.5	42.5	49.0	76	30	43	45	85	84	.277	.298	2.07	.60	5.5	4.8	5.5
November	29.35	29.79	28.41	33.0	34.4	37.7	28.3	33.0	52	16	29	30	84	85	.157	.164	2.86	1.11	9.1	8.6	9.4
December	29.37	29.76	28.63	24.8	25.6	28.3	21.3	24.8	39	4	22	23	90	89	.113	.119	1.97	.48	8.8	9.3	9.1
Year	29.37	29.95	28.41	42.3	45.0	50.0	37.5	43.8	90	— 3	37	38	82	78	.251	.262	35.15	.....	6.3	5.9	6.0

MARQUETTE, MICH.

[Lat. 46° 34′ N.; long. 87° 24′ W.; gravity corr., 0.]

January	29.15	29.62	28.72	12.5	15.5	22.7	7.1	14.9	49	—10	7	8	80	73	.054	.057	2.88	1.80	6.5	4.8	5.5
February	29.29	29.84	28.94	18.7	21.5	26.0	14.3	20.2	46	— 9	16	17	88	84	.085	.089	2.77	.99	8.5	6.7	7.9
March	29.25	29.66	28.45	21.9	25.7	31.4	18.6	25.0	52	0	18	20	84	78	.093	.103	3.15	1.47	6.4	6.2	6.6
April	29.23	29.72	28.33	33.7	34.2	39.9	27.3	33.6	60	16	27	27	78	75	.143	.143	1.66	.65	5.6	4.4	5.1
May	29.12	29.72	28.54	46.0	46.0	51.9	39.9	45.9	79	32	38	36	76	72	.228	.211	2.99	.91	6.9	6.8	6.8
June	29.12	29.44	28.75	56.8	59.4	65.6	49.4	57.5	94	36	50	50	79	72	.360	.360	1.58	.30	6.5	5.7	6.1
July	29.20	29.68	28.81	68.0	68.9	76.7	59.8	68.2	92	47	56	56	66	65	.448	.448	1.50	.60	4.1	3.6	4.0
August	29.19	29.46	28.72	63.9	65.5	72.9	57.6	65.2	89	44	56	56	76	74	.448	.448	.45	.15	4.6	4.5	4.6
September	29.20	29.55	28.92	55.4	58.8	68.4	50.4	59.4	89	40	49	51	80	76	.347	.373	1.18	.33	4.6	3.6	4.1
October	29.19	29.70	28.49	44.9	48.0	54.1	42.5	48.3	78	30	40	40	84	77	.246	.246	3.97	.97	7.8	4.9	6.7
November	29.18	29.63	28.30	28.6	30.6	34.0	25.2	29.6	48	12	26	28	88	88	.137	.150	3.74	.98	9.3	8.8	9.1
December	29.18	29.52	28.54	16.4	19.3	23.9	13.9	18.9	37	— 7	15	16	94	86	.081	.085	1.41	.83	7.2	5.8	7.2
Year	29.19	29.84	28.30	38.9	41.1	47.3	33.8	40.6	94	—10	33	34	81	77	.222	.226	27.28	.....	6.5	5.5	6.1

MEMPHIS, TENN.

[Lat. 35° 9′ N.; long. 90° 3′ W.; gravity corr., 0.]

January	29.86	30.21	29.26	30.6	37.6	44.5	27.5	36.0	66	12	23	26	76	67	.119	.107	3.06	1.09	4.9	3.0	4.4
February	29.77	30.20	29.24	44.7	51.8	58.1	41.9	50.0	71	30	37	38	76	62	.219	.228	3.15	1.16	5.5	4.3	5.9
March	29.74	30.14	29.30	42.3	51.6	57.0	40.0	48.5	81	18	31	34	67	54	.172	.195	4.05	1.89	5.6	4.4	5.5
April	29.70	30.00	29.25	58.2	63.7	69.5	53.9	61.7	86	39	48	48	70	61	.334	.334	8.26	3.54	5.1	5.6	5.1
May	29.64	29.85	29.36	65.0	70.6	77.0	60.3	68.6	86	48	57	60	77	69	.465	.517	7.46	2.69	6.5	5.4	4.8
June	29.64	29.77	29.48	74.5	79.3	86.8	68.6	77.7	97	59	67	68	78	69	.860	.684	4.60	1.71	4.1	4.7	3.6
July	29.74	29.89	29.61	74.6	80.0	86.7	70.6	78.6	96	63	70	70	85	74	.732	.732	7.55	3.74	5.7	6.6	4.5
August	29.68	29.83	29.60	73.2	79.1	87.0	70.4	78.7	95	61	68	70	85	74	.684	.732	3.52	1.59	5.6	6.0	3.5
September	29.77	29.92	29.48	65.2	74.1	82.5	61.5	72.0	90	52	58	60	78	62	.481	.517	.98	.48	2.5	2.3	1.8
October	29.76	30.02	29.50	56.4	66.5	74.8	54.1	64.4	86	35	48	50	75	58	.334	.360	.62	.40	3.3	2.0	2.5
November	29.80	30.12	29.26	44.5	51.6	57.9	41.4	49.6	76	25	38	38	79	61	.228	.228	6.26	1.42	5.8	4.7	5.4
December	29.79	30.22	29.31	37.9	41.9	46.3	35.2	40.8	76	13	34	34	86	76	.195	.195	11.95	4.50	7.4	6.0	7.1
Year	29.74	30.22	29.24	55.6	62.3	69.0	52.1	60.6	97	12	48	50	78	66	.385	.405	61.46	.....	5.2	4.6	4.5

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—*Continued.*

MANCHESTER, N. H.

[H = 247 feet; h_t = 76 feet; h_r = 68 feet; h_a = 81 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras
	Miles.		*Mi.*																								
January	5.8	NW.	29	NW.	0	8	3	1	3	7	11	6	22	1	8	10	13	14	10	10	0	....	19	0	29	0	1
February	5.1	NW.	24	NW.	0	8	11	7	3	1	0	3	24	1	10	7	12	13	7	11	0	....	14	0	23	0	1
March	9.0	NW.	32	W.	0	10	3	2	3	1	4	13	26	0	17	5	9	10	9	7	0	....	10	0	28	0	3
April	6.8	NW.	30	W.	0	3	1	1	7	1	6	8	31	2	15	7	8	5	4	0	0	....	0	0	14	0	5
May	6.1	NW.	25	NW.	0	4	6	4	8	8	9	4	15	4	8	10	13	15	12	0	1	....	0	0	1	0	2
June	4.4	SW.	28	W.	0	0	4	1	14	9	15	6	8	3	8	10	12	14	11	0	2	....	0	3	0	5	0
July	3.6	NW.	27	NW.	0	4	1	1	5	11	11	5	13	11	17	10	4	12	7	0	0	....	0	6	0	7	2
August	3.7	NW.	18	NW.	0	7	7	1	10	5	6	4	16	6	10	9	12	12	8	0	0	....	0	2	0	4	0
September	4.3	NW.	27	W.	0	8	0	1	8	6	8	4	15	10	17	8	5	4	4	0	0	....	0	0	0	1	0
October	5.0	NW.	26	NW.	0	3	1	1	3	8	9	3	27	7	16	8	7	7	5	0	0	....	0	0	5	0	0
November	6.6	NW.	24	NW.	0	8	7	2	6	6	2	4	22	3	7	9	14	11	11	4	0	....	2	0	20	0	0
December	6.2	NW.	25	NW.	0	7	1	1	1	1	7	7	32	5	15	10	6	9	4	6	0	....	10	0	30	0	0
Year	5.6	NW.	32	W.	0	70	45	23	71	64	88	67	251	53	148	103	115	126	92	38	3	....	55	11	150	17	14

MANISTEE, MICH.

[H = 615 feet; h_t = 43 feet; h_r = 28 feet; h_a = 46 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras
January	11.3	W.	42	SW.	2	10	1	4	3	6	7	10	9	3	3	8	20	22	13	21	0	....	23	0	30	0	0
February	7.6	E.	30	W.	0	3	12	18	4	1	1	8	7	4	3	5	21	15	12	13	0	....	14	0	26	0	2
March	8.2	NW.	30	SW.	0	9	16	8	5	3	6	4	10	1	17	9	5	9	5	8	1	....	13	0	25	0	0
April	10.0	NE.	32	SW.	0	16	11	5	6	3	9	3	4	3	14	9	7	9	7	2	0	....	2	0	13	2	0
May	7.8	N.	30	W.	0	15	8	8	7	6	4	7	5	2	5	14	12	19	15	0	0	....	0	0	0	0	0
June	6.5	SW.	24	SW.	0	8	9	7	3	8	10	3	8	4	8	13	9	18	14	0	0	....	0	0	0	3	0
July	6.1	SW.	27	NW.	0	5	7	8	10	7	16	3	2	4	15	11	5	9	8	0	0	....	0	0	0	3	1
August	5.9	NW.	36	SW.	0	14	13	6	0	6	11	1	5	6	13	10	8	14	9	0	0	....	0	0	0	2	0
September	7.7	SW.	36	NW.	0	5	7	10	6	13	9	2	6	2	13	12	5	13	9	0	0	....	0	0	0	3	0
October	8.8	NW.	48	W.	1	5	10	9	9	5	8	2	12	2	7	12	12	17	13	0	0	....	0	0	1	0	0
November	9.7	E.	36	SW.	0	0	14	18	2	2	5	9	10	0	0	2	28	20	12	12	0	....	8	0	22	0	0
December	9.9	W.	26	SW.	0	2	8	17	0	1	4	23	7	0	0	4	27	20	13	17	0	....	17	0	31	0	0
Year	8.3	NW.	48	W.	3	92	116	118	55	61	90	84	85	31	98	109	159	185	130	73	1	....	77	0	148	13	3

MARQUETTE, MICH.

[H = 734 feet; h_t = 67 feet; h_r = 58 feet; h_a = 95 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras
January	10.2	W.	44	NW.	2	5	0	0	0	11	7	20	19	0	9	11	11	13	10	13	0	....	22	0	31	0	0
February	8.3	NW.	32	SW.	0	8	6	3	4	14	5	5	12	1	3	5	21	18	14	16	0	....	20	0	28	0	4
March	7.7	NW.	31	N.	0	13	7	3	6	6	0	5	21	1	9	5	17	13	8	12	0	....	14	0	27	1	3
April	10.6	NE.	40	SE.	1	13	13	0	2	7	2	7	14	2	10	9	11	11	7	5	0	....	5	0	21	2	7
May	7.8	N.	48	S.	2	22	11	3	8	2	1	3	9	3	4	12	15	13	9	4	1	....	0	0	0	2	5
June	6.8	N.	30	S.	0	19	9	0	5	6	2	7	11	1	6	11	13	12	9	0	0	....	0	1	0	2	1
July	7.5	SW.	32	NW.	0	9	3	2	2	7	10	7	14	8	16	10	5	7	6	0	0	....	0	2	0	4	4
August	9.0	SW.	34	SW.	0	10	12	0	4	9	10	3	13	1	11	16	4	7	5	0	0	....	0	0	0	4	1
September	10.8	NW.	36	W.	0	9	4	2	6	8	11	6	14	0	15	9	6	10	7	0	0	....	0	0	0	1	4
October	11.7	NW.	46	N.	1	11	5	3	0	8	12	7	16	0	4	12	15	10	9	3	0	....	0	0	1	2	4
November	11.8	NW.	36	NE.	0	3	7	0	2	18	3	6	20	1	1	2	27	19	13	17	0	....	13	0	25	0	0
December	10.4	W.	28	NW.	0	0	3	0	4	6	11	26	12	0	5	5	21	12	7	12	0	....	25	0	31	0	1
Year	9.4	NW.	48	S.	6	122	80	16	43	102	74	102	175	18	93	107	166	145	104	82	1	....	99	3	164	18	34

MEMPHIS, TENN.

[H = 330 feet; h_t = 108 feet; h_r = 100 feet; h_a = 116 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras
January	7.8	N.	40	SE.	1	18	8	5	1	7	11	5	5	2	16	5	10	8	8	3	0	....	6	0	21	0	0
February	8.2	S.	31	S.	0	18	2	2	1	18	3	4	10	0	6	11	12	10	6	0	0	....	0	0	3	1	0
March	8.6	N.	42	SW.	1	11	4	5	10	7	5	10	8	2	11	6	14	9	7	3	0	....	1	0	8	0	0
April	9.1	SE.	42	SE.	1	11	8	4	17	7	2	5	6	0	11	8	11	14	10	0	0	....	0	0	0	1	0
May	8.1	SE.	36	NW.	0	5	6	2	13	11	12	8	5	0	10	14	7	15	14	0	0	....	0	0	0	2	0
June	5.4	S.	52	NW.	2	2	2	1	3	23	10	4	12	3	18	6	6	10	9	0	0	....	0	10	0	7	0
July	5.5	NE.	29	NW.	0	7	10	3	10	12	6	7	4	3	14	9	8	11	10	0	0	....	0	11	0	7	0
August	5.2	NE.	39	SW.	0	11	15	3	6	11	10	2	2	2	17	9	5	8	7	0	0	....	0	7	0	4	0
September	5.1	N.	32	SW.	0	22	6	2	10	3	7	4	1	5	24	3	3	5	5	0	0	....	0	1	0	1	0
October	6.4	N.	23	SE.	0	19	7	2	10	11	2	3	4	4	23	4	4	3	3	0	0	....	0	0	0	1	0
November	8.1	S.	50	SW.	1	11	7	8	7	7	4	6	10	0	9	11	10	12	12	1	0	....	0	0	3	3	0
December	7.3	NE.	36	SW.	0	15	15	5	7	5	3	4	8	0	5	7	19	14	12	1	0	....	3	0	9	2	0
Year	7.1	N.	52	NW.	6	150	90	42	95	122	75	62	75	21	164	93	109	119	103	8	0	....	10	29	44	29	0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

MERIDIAN, MISS.

[Lat. 32° 21′; long. 88° 40′; gravity corr., —03.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.81	30.14	29.13	34.6	42.5	49.3	31.4	40.4	70	16	31	36	87	78	.172	.211	8.20	3.04	4.3	4.5	4.8
February	29.76	30.10	29.41	46.0	55.5	62.5	43.2	52.8	76	31	43	50	90	81	.277	.360	2.77	1.22	4.6	3.2	5.0
March	29.71	30.10	29.26	44.4	54.6	61.6	40.0	50.8	80	17	40	44	87	69	.246	.287	6.50	1.80	4.3	3.4	4.8
April	29.69	29.90	29.41	59.8	67.5	74.6	56.1	65.4	88	36	55	58	85	72	.432	.481	2.03	.55	7.5	5.2	6.5
May	29.64	29.88	29.47	65.5	73.1	82.0	59.6	70.8	88	44	61	62	86	71	.536	.555	8.42	2.46	6.3	3.9	5.3
June	29.62	29.78	29.46	73.9	78.5	87.9	66.7	77.3	94	59	68	69	83	74	.684	.707	5.20	2.22	4.7	4.4	4.9
July	29.72	29.88	29.62	74.4	77.1	87.1	69.4	78.2	95	61	71	72	89	85	.757	.783	11.41	1.92	6.0	6.8	6.8
August	29.65	29.79	29.54	73.7	77.6	87.8	69.8	78.8	92	67	70	72	89	84	.732	.783	3.37	.72	5.1	6.2	6.5
September	29.70	29.85	29.36	65.0	72.9	82.1	59.5	70.8	89	48	61	65	88	76	.536	.616	.57	.34	1.5	1.8	2.4
October	29.70	29.97	29.54	55.5	66.3	77.5	51.1	64.3	86	31	51	53	84	64	.373	.402	.46	.46	2.6	1.4	2.6
November	29.77	30.00	29.44	47.8	54.8	64.9	43.4	54.2	76	27	42	45	83	71	.206	.298	3.11	1.19	5.8	2.8	3.9
December	29.73	30.08	29.12	42.1	48.4	53.6	38.6	46.1	75	15	38	42	87	79	.228	.266	6.57	1.86	7.3	5.1	7.0
Year	29.71	30.14	29.12	56.9	64.1	72.6	52.4	62.5	95	15	53	56	86	75	.437	.479	58.61	1.47	5.0	4.1	5.0

MICCO, FLA.

[Lat. 27° 53′ N.; long. 80° 33′ W.; gravity corr., ...]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	.....	.....	.....	.....	.....	66.9	46.2	56.6	75	30	.....	.....	.....	.....	.....	.....	.70	.33	.....	.....	.....
February	.....	.....	.....	.....	.....	69.7	54.5	62.1	83	39	.....	.....	.....	.....	.....	.....	2.97	.86	.....	.....	.....
March	.....	.....	.....	.....	.....	72.8	53.2	63.0	87	35	.....	.....	.....	.....	.....	.....	1.41	.85	.....	.....	.....
April	.....	.....	.....	.....	.....	83.5	63.1	73.3	92	48	.....	.....	.....	.....	.....	.....	2.76	1.64	.....	.....	.....
May	.....	.....	.....	.....	.....	87.8	65.7	76.8	94	52	.....	.....	.....	.....	.....	.....	2.42	1.10	.....	.....	.....
June	.....	.....	.....	.....	.....	88.3	71.9	80.1	100	68	.....	.....	.....	.....	.....	.....	11.72	2.22	.....	.....	.....
July	.....	.....	.....	.....	.....	95.0	73.1	84.0	99	69	.....	.....	.....	.....	.....	.....	1.10	.60	.....	.....	.....
August	.....	.....	.....	.....	.....	93.5	72.2	82.8	101	68	.....	.....	.....	.....	.....	.....	2.63	.94	.....	.....	.....
September	.....	.....	.....	.....	.....	.....	72.2	80.5	92	70	.....	.....	.....	.....	.....	.....	7.01	.....	.....	.....	.....
October	.....	.....	.....	.....	.....	80.2	67.3	73.8	87	46	.....	.....	.....	.....	.....	.....	9.44	2.84	.....	.....	.....
November	.....	.....	.....	.....	.....	73.1	57.2	65.2	82	43	.....	.....	.....	.....	.....	.....	1.17	.86	.....	.....	.....
December	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.26	1.20	.....	.....	.....
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	44.59	2.84	.....	.....	.....

MILES CITY, MONT.

[Lat. 46° 25′ N.; long. 105° 49′ W.; gravity corr., 0.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	27.53	27.96	27.10	7.3	17.5	24.1	2.5	13.3	48	—45	6	14	94	88	.052	.077	.39	.21	3.2	5.5	5.0
February	27.47	27.83	26.86	12.9	25.8	30.9	9.4	20.2	47	—10	11	21	93	82	.067	.108	.34	.09	5.3	4.3	6.6
March	27.46	27.97	26.84	25.5	39.4	45.5	23.5	34.5	69	2	21	25	83	63	.108	.130	.26	.06	5.3	6.1	6.1
April	27.43	27.94	27.04	34.2	49.7	53.9	31.9	42.9	76	16	30	30	86	54	.104	.164	1.39	.44	6.7	7.3	6.9
May	27.49	27.91	26.96	43.2	55.0	58.7	40.3	49.5	88	24	36	34	75	53	.211	.195	1.43	.43	7.1	7.5	7.2
June	27.41	27.78	26.97	54.5	69.5	73.1	50.7	61.9	90	41	48	46	80	49	.334	.310	3.16	.96	4.7	6.6	5.6
July	27.44	27.88	27.03	63.7	83.5	87.9	59.5	73.7	103	47	52	46	67	30	.387	.310	1.15	.78	1.8	2.7	2.5
August	27.46	27.85	27.16	60.3	80.9	86.3	57.1	71.7	105	44	48	47	67	34	.334	.322	.60	.48	3.2	4.5	3.8
September	27.47	27.82	27.09	51.1	71.2	78.1	49.4	63.8	93	39	43	42	77	38	.277	.266	.52	.30	5.0	3.8	4.3
October	27.51	27.92	26.99	39.9	55.9	64.7	37.5	51.1	85	22	34	37	81	54	.195	.219	.98	.38	3.0	3.0	3.5
November	27.40	27.77	26.86	24.5	33.9	40.8	20.6	30.7	69	—18	20	25	80	70	.103	.130	.70	.58	7.2	5.3	6.5
December	27.50	27.94	27.03	12.8	16.8	23.3	6.8	15.0	41	—19	8	10	80	74	.057	.063	.56	.17	5.5	6.0	6.1
Year	27.46	27.97	26.84	35.8	49.9	55.6	32.4	44.0	105	—45	30	31	80	57	.191	.191	11.48	.....	4.8	5.2	5.3

MILWAUKEE, WIS.

[Lat. 43° 21′; long. 87° 54′; gravity corr., 0.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	29.34	29.82	28.54	14.7	17.8	22.6	10.2	16.4	44	— 7	8	12	76	77	.057	.070	2.29	1.38	5.2	4.4	5.5
February	29.37	29.91	28.68	26.0	29.7	32.6	23.7	28.2	44	— 4	21	23	83	77	.108	.119	1.76	.75	7.1	7.0	7.8
March	29.34	29.82	28.51	26.5	30.3	35.7	23.2	29.4	53	5	20	25	78	82	.103	.130	1.76	.74	5.4	4.5	4.9
April	29.31	29.74	28.62	39.5	43.1	49.0	35.4	42.2	74	23	31	39	73	85	.172	.237	2.78	.76	6.1	5.5	5.7
May	29.18	29.68	28.46	49.0	50.6	57.0	44.0	50.5	77	36	43	43	81	77	.277	.277	8.12	1.55	6.4	6.4	6.5
June	29.21	29.50	28.87	59.3	61.1	68.3	54.1	61.2	88	42	55	56	86	86	.432	.448	6.33	1.04	6.1	4.9	5.6
July	29.35	29.80	29.07	67.9	72.0	78.7	61.6	70.2	95	51	60	61	77	69	.517	.536	1.20	.61	4.2	5.0	4.0
August	29.32	29.50	29.01	65.9	70.4	75.9	61.5	68.7	93	45	59	60	79	70	.499	.517	3.47	2.52	4.3	5.2	4.9
September	29.35	29.60	29.02	57.6	64.1	70.2	54.7	62.4	85	45	52	53	81	68	.367	.402	2.21	1.20	4.7	3.4	3.8
October	29.32	29.61	28.64	47.2	52.7	59.4	44.9	52.2	74	29	40	41	77	64	.246	.256	1.66	.92	4.3	3.5	4.6
November	29.32	29.75	28.28	31.0	33.8	38.7	27.6	33.2	57	11	27	27	83	76	.143	.143	1.84	.49	8.0	6.1	7.2
December	29.36	29.78	28.58	18.6	21.3	25.8	15.3	20.6	44	—10	15	14	84	72	.081	.077	1.61	.77	6.6	5.0	5.8
Year	29.31	29.91	28.28	41.9	45.6	51.2	38.0	44.6	95	—10	36	38	80	75	.252	.268	35.03	.....	5.7	5.1	5.5

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

MERIDIAN, MISS.

[H = 358 feet; h_t = 68 feet; h_r = 58 feet; h_a = 72 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	6.6	N.	34	W.	0	17	11	7	1	3	5	7	4	7	13	8	10	9	7	0	0	....	2	0	16	1	0
February	6.4	NE.	28	S.	0	9	12	7	4	5	5	4	7	5	10	11	8	6	5	0	0	....	0	0	3	1	0
March	6.5	SE.	34	NW.	*0	7	8	7	12	4	4	3	10	7	16	4	11	9	7	0	0	....	0	0	8	2	0
April	9.3	S.	40	SE.	1	5	13	2	12	16	4	3	4	1	8	9	13	8	8	0	0	....	0	0	0	2	0
May	6.3	SE.	30	SE.	0	3	1	4	22	13	9	5	4	1	7	18	6	9	7	0	2	....	0	0	0	7	0
June	3.9	SE.	31	N.	0	7	12	8	14	5	8	0	3	3	12	12	6	11	10	0	0	....	0	7	0	8	0
July	4.7	SW.	28	N.	0	5	3	8	8	7	16	5	7	3	1	19	11	24	20	0	0	....	0	8	0	15	0
August	4.1	SW.	29	N.	0	11	10	6	2	11	13	3	3	3	2	22	7	15	13	0	0	....	0	7	0	14	0
September	5.0	NE.	21	S.	0	12	28	8	3	0	3	0	4	2	19	10	1	6	2	0	0	....	0	0	0	3	0
October	4.8	NE.	24	SE.	0	12	20	8	4	3	3	1	3	8	22	8	1	1	1	0	0	....	0	0	2	0	0
November	6.3	S.	44	W.	1	9	8	4	5	12	6	3	5	8	16	6	8	9	6	0	0	....	0	0	7	0	0
December	6.2	N.	30	SE.	0	21	5	5	12	5	7	0	5	2	6	8	17	13	11	0	0	....	0	0	10	3	0
Year	5.8	NE.	31	SE.	2	118	131	74	99	84	83	34	59	50	132	135	99	120	97	0	2	....	2	22	46	56	0

MICCO, FLA.

[H = .. feet; h_t = 5 feet; h_r = 2 feet; h_a = .. feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January *e*	.....	N.	....	.....	....	6	4	1	2	1	0	5	4	1	10	9	5	3	3	0	0	....	0	0	1	0	0
February *d*	.....	N.	....	.....	....	8	2	2	4	3	1	2	1	2	8	6	11	9	7	0	0	....	0	0	0	0	1
March *f*	.....	SE.	....	.....	....	1	5	2	9	7	1	2	1	0	12	10	6	6	6	0	0	....	0	0	0	0	0
April	.....	SE.	....	.....	....	0	3	2	14	8	0	2	0	1	9	19	2	5	5	0	0	....	0	4	0	4	0
May	.....	SE.	....	.....	....	0	3	1	15	7	2	2	0	1	7	20	4	5	5	0	0	....	0	10	0	5	0
June *g*	.....	S.	....	.....	....	0	2	4	7	10	1	2	0	3	0	9	20	19	16	0	0	....	0	10	0	7	0
July *h*	.....	SE.	....	.....	....	1	0	1	4	3	2	0	0	1	4	18	0	4	4	0	0	....	0	19	0	6	0
August	.....	SE.	....	.....	....	0	2	1	12	2	4	5	1	3	3	19	8	10	9	0	0	....	0	25	0	12	0
September *i*	.....	.....	....	.....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
October *k*	.....	E.	....	.....	....	0	3	10	1	3	0	1	0	1	3	6	10	11	10	0	0	....	0	0	0	2	0
November *f*	.....	N.	....	.....	....	7	2	4	6	3	0	2	1	3	13	13	2	5	4	0	0	....	0	0	0	0	0
December *l*	.....	N.	....	.....	....	4	1	2	3	0	2	3	0	1	6	7	3	.....	.....	.....	.....	....	.....	.....	.....	.....	0
Year	.....	.....	....	.....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....

MILES CITY, MONT.

[H = 2,374 feet; h_t = 40 feet; h_r = 34 feet; h_a = 53 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	4.8	S.	24	NW.	0	7	2	1	5	19	10	12	3	3	13	7	11	6	4	5	0	....	19	0	31	0	1
February	4.8	N.	29	W.	0	13	3	0	8	8	6	4	5	11	8	6	15	9	3	9	0	....	14	0	29	0	3
March	6.7	NW.	49	NW.	1	2	8	4	13	6	1	8	13	7	9	6	16	8	4	6	1	....	8	0	25	0	1
April	8.0	NW.	34	NW.	0	13	2	5	11	2	2	4	14	7	4	12	14	12	9	3	1	....	0	0	15	0	1
May	7.8	NE.	46	SE.	1	4	16	7	7	5	2	6	12	3	3	15	13	15	9	5	0	....	0	0	5	0	0
June	7.2	SE.	29	NW.	0	8	8	5	10	5	1	5	10	8	10	10	10	10	10	0	0	....	0	1	0	2	1
July	6.2	NW.	36	NW.	0	2	3	0	13	6	3	8	15	12	23	5	3	7	5	0	0	....	0	12	0	2	6
August	5.4	NW.	36	NW.	0	5	4	5	9	3	2	3	11	20	18	8	5	4	3	0	0	....	0	14	0	1	0
September	4.9	NW.	30	NW.	0	7	6	4	7	2	6	2	13	13	14	7	9	5	4	0	0	....	0	3	0	0	0
October	5.3	S.	27	W.	0	2	5	7	7	12	6	5	11	7	17	7	7	6	5	1	2	....	0	0	11	1	2
November	6.9	S.	42	NW.	2	5	3	5	9	9	9	7	6	7	6	9	15	4	3	3	0	....	6	0	24	0	0
December	6.2	SW.	24	W.	0	5	8	1	4	13	13	11	6	1	8	10	13	12	6	12	0	....	20	0	31	0	0
Year	6.2	NW.	40	NW.	4	73	68	44	103	90	61	75	119	99	133	102	131	98	65	44	4	....	67	30	171	6	15

MILWAUKEE, WIS.

[H = 673 feet; h_t = 106 feet; h_r = 100 feet; h_a = 149 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	12.8	NW.	52	NW.	2	6	1	0	7	2	4	17	25	0	6	16	9	13	6	12	0	....	23	0	29	0	0
February	11.1	SE.	34	N.	0	8	7	3	18	1	3	5	13	0	2	10	17	11	9	10	0	....	9	0	23	0	1
March	11.2	NW.	43	W.	2	6	12	3	9	2	4	6	20	0	12	9	10	15	9	12	0	....	11	0	25	0	1
April	13.4	NE.	48	SW.	2	4	12	9	6	5	3	12	9	0	9	8	13	11	8	1	0	....	0	0	6	3	0
May	10.5	SE.	39	NW.	0	13	7	3	19	0	5	8	7	0	6	11	14	19	13	0	0	....	0	0	0	5	2
June	8.3	SE.	35	NW.	0	6	16	3	10	1	6	9	6	3	11	7	12	19	10	0	0	....	0	0	0	11	0
July	7.7	SE.	27	NW.	0	6	7	6	19	4	10	8	1	1	14	16	1	4	4	0	0	....	0	5	0	6	7
August	8.2	SE.	33	W.	0	14	7	4	17	3	6	3	5	3	10	15	6	9	6	0	0	....	0	3	0	2	1
September	9.3	SE.	27	W.	0	4	1	0	12	9	15	9	8	2	17	8	5	5	4	0	0	....	0	0	0	2	0
October	10.3	NW.	50	NW.	1	5	3	1	9	7	7	14	16	0	12	14	5	5	5	0	0	....	0	0	1	2	0
November	11.6	NW.	39	SE.	0	1	6	0	4	12	6	11	19	1	2	11	17	11	10	4	0	....	6	0	22	0	0
December	10.1	W.	33	NW.	0	4	3	1	3	5	9	19	18	0	7	15	9	11	6	8	0	....	18	0	28	0	0
Year	10.4	SE.	52	NW.	7	77	82	33	133	51	78	121	147	10	108	140	118	133	96	47	0	....	67	8	134	31	12

a By eye observation at 8 a. m. and 8 p. m., when there is no self-register at station. *c* For 24 days.
d For 25 days. *f* For 28 days. *g* For 29 days. *h* For 30 days. *i* No record. *k* For 19 days. *l* For 16 days.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

MOBILE, ALA.

[Lat. 30° 41′ N.; long. 88° 2′ W.; gravity corr., —.04.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	30.10	30.39	29.50	40.7	48.1	55.5	38.5	47.0	70	24	36	39	83	74	.211	.237	9.97	3.64	5.5	4.3	5.9
February	30.05	30.37	29.74	50.2	58.2	65.1	48.6	56.8	74	37	48	50	92	76	.334	.360	2.09	1.64	4.0	4.3	5.4
March	30.02	30.37	29.53	49.6	57.0	64.7	46.3	55.5	77	27	45	48	86	74	.298	.334	8.52	3.55	3.7	4.1	4.8
April	30.03	30.18	29.80	62.8	66.5	72.8	59.5	66.2	82	44	58	61	84	83	.481	.536	3.10	1.33	6.5	6.3	6.7
May	29.97	30.19	29.77	70.3	73.8	80.0	64.8	72.4	85	50	76	65	82	74	.595	.616	1.49	0.61	5.0	4.9	5.4
June	29.93	30.08	29.76	76.8	79.1	86.8	70.7	78.8	95	65	14	70	82	75	.757	.732	4.09	1.66	5.2	6.9	6.5
July	30.04	30.19	29.95	77.1	78.2	85.6	72.4	79.0	93	69	73	73	88	84	.810	.810	14.43	3.20	6.8	7.8	7.2
August	29.96	30.12	29.82	76.8	78.8	87.4	72.3	79.8	92	68	74	74	89	85	.838	.838	13.47	2.74	6.8	8.4	6.2
September	29.98	30.12	29.65	70.4	76.2	83.9	66.6	75.2	90	58	65	68	83	77	.616	.684	4.93	3.35	4.0	5.3	4.9
October	30.00	30.25	29.80	63.4	69.4	78.3	59.9	69.1	89	40	58	60	82	73	.481	.517	3.03	2.55	3.3	3.1	4.1
November	30.09	30.32	29.85	52.8	59.0	67.8	49.1	58.4	80	36	48	53	86	80	.334	.402	1.93	1.01	4.4	3.6	4.5
December	30.05	30.38	29.57	48.1	52.8	59.1	44.8	52.0	77	20	46	50	90	88	.310	.360	7.06	2.58	6.9	5.5	7.5
Year	30.02	30.39	29.50	61.6	66.4	73.9	57.8	65.8	95	20	57	59	86	79	.505	.536	74.11	3.64	5.2	5.4	5.8

MONTGOMERY, ALA.

[Lat. 32° 23′ N.; long. 86° 18′ W.; gravity corr., —.03.]

January	29.90	30.18	29.22	36.8	45.7	53.4	33.8	43.6	69	24	31	34	81	67	.172	.195	17.78	9.98	6.0	4.2	6.4
February	29.86	30.25	29.52	46.8	57.4	64.0	45.1	54.6	75	33	42	45	82	67	.266	.298	3.04	1.55	5.8	3.2	5.1
March	29.81	30.12	29.28	47.5	57.5	64.6	44.6	54.6	81	24	41	42	78	60	.256	.266	11.89	4.07	5.7	3.5	4.7
April	29.84	30.03	29.55	60.9	69.6	76.6	57.2	66.9	87	42	51	50	71	52	.373	.360	1.14	0.43	6.7	6.1	5.9
May	29.77	30.01	29.56	67.4	76.2	84.1	61.8	73.0	93	47	58	56	74	52	.481	.448	2.55	0.93	5.6	4.9	5.8
June	29.75	29.90	29.54	74.6	80.2	89.9	69.5	79.7	96	62	67	66	79	64	.660	.638	3.83	1.54	5.9	5.6	6.2
July	29.84	29.99	29.73	75.1	78.7	87.9	70.9	79.4	95	66	72	72	88	81	.783	.783	9.56	3.69	8.1	7.8	7.9
August	29.76	29.91	29.62	74.9	78.9	88.7	71.1	79.9	94	68	72	74	91	86	.783	.838	7.82	1.73	5.5	8.0	6.1
September	29.81	29.97	29.43	67.1	75.4	83.7	63.0	73.4	90	55	62	64	84	69	.555	.595	2.68	1.69	2.7	2.6	3.5
October	29.81	30.08	29.64	58.3	68.9	77.5	55.7	66.6	86	37	53	54	82	60	.462	.417	0.45	0.38	2.5	2.6	3.5
November	29.88	30.09	29.58	46.9	57.1	66.4	43.7	55.0	79	30	41	43	81	61	.256	.277	4.40	1.36	4.9	3.1	5.0
December	29.85	30.17	29.33	43.5	51.0	57.5	40.5	49.0	76	20	40	42	86	73	.246	.266	4.71	2.46	6.5	5.9	7.0
Year	29.82	30.25	29.22	58.3	66.4	74.5	54.7	64.6	96	20	52	54	81	66	.436	.448	69.85	9.98	5.5	4.8	5.6

MONTROSE, COLO.

[Lat. 38° 30′ N.; long. 107° 56′ W.; gravity corr., —.02.]

January	24.35	24.70	24.02	14.1	18.2	29.9	8.9	19.4	47	—11	10	12	84	76	.063	.070	0.98	0.28	5.5	4.6	4.7
February	24.26	24.55	23.88	25.5	34.5	43.3	23.1	33.2	54	11	18	23	74	63	.093	.119	0.94	0.31	5.4	4.0	4.2
March	24.18	24.48	23.80	30.9	44.1	49.7	29.4	39.6	64	17	24	25	77	54	.125	.130	1.61	0.54	4.6	6.0	5.7
April	24.19	24.51	23.71	36.9	52.7	58.2	34.8	46.5	75	18	24	18	66	33	.125	.093	1.06	0.32	5.1	5.8	5.7
May	24.22	24.52	23.90	45.8	61.6	66.6	41.7	54.2	79	30	25	19	48	26	.130	.098	1.40	0.84	4.1	4.5	4.7
June	24.26	24.46	23.93	54.4	78.5	81.5	50.6	66.0	94	38	28	19	37	12	.150	.098	0.02	0.01	1.4	3.4	2.6
July	24.38	24.54	24.20	59.7	79.1	85.2	57.1	71.2	92	47	42	38	53	28	.266	.228	1.21	0.39	3.7	5.0	5.3
August	24.37	24.53	24.13	55.5	79.0	85.3	54.0	69.6	94	40	37	32	51	20	.219	.180	0.37	0.20	2.5	4.3	4.4
September	24.38	24.56	24.18	50.7	76.5	81.8	49.2	65.5	87	40	29	21	44	13	.157	.108	T	T	1.9	2.2	2.3
October	24.32	24.62	24.02	37.5	54.0	62.0	35.6	48.8	83	21	27	30	66	44	.143	.164	0.52	0.38	4.6	5.0	4.6
November	24.35	24.64	23.92	27.6	38.2	48.0	24.3	36.2	59	11	21	15	76	39	.108	.081	0.20	0.17	4.0	3.8	4.1
December	24.28	24.54	24.01	18.9	25.6	35.5	14.6	25.0	59	— 8	12	13	74	60	.070	.074	0.66	0.21	4.0	4.7	5.3
Year	24.30	24.70	23.71	38.1	53.5	60.6	35.3	47.9	94	—11	25	22	62	39	.137	.120	9.03	0.84	3.9	4.4	4.5

MOORHEAD, MINN.

[Lat. 46° 52′; long. 96° 44′; gravity corr., 0.]

January	29.07	29.62	28.54	—1.2	6.3	12.6	—6.2	3.2	43	—37	—5	2	82	82	.029	.043	0.42	0.24	2.6	2.2	3.6
February	29.09	29.46	28.46	9.4	14.4	20.1	4.8	12.4	44	—25	6	11	85	86	.052	.067	0.91	0.35	7.5	5.7	6.8
March	29.08	29.70	28.23	19.1	28.9	33.6	18.0	25.8	56	— 6	15	24	84	82	.081	.125	1.17	0.61	5.0	5.0	6.1
April	29.00	29.43	28.08	33.6	41.8	47.3	30.9	39.1	63	16	30	34	86	77	.164	.195	3.69	1.11	6.3	6.7	6.7
May	28.96	29.43	28.31	42.3	51.8	54.8	39.5	47.2	76	28	39	41	89	70	.237	.256	5.06	2.11	7.4	7.5	7.8
June	28.92	29.27	28.42	56.9	67.9	72.0	52.9	62.4	86	43	54	56	90	68	.417	.448	2.51	0.58	7.0	5.8	5.7
July	28.99	29.24	28.59	62.5	74.6	79.5	58.6	69.0	91	44	60	64	91	70	.517	.595	5.14	1.79	4.1	4.0	4.1
August	28.98	29.22	28.74	58.7	72.3	78.1	56.4	67.2	91	39	57	63	94	73	.465	.575	3.99	1.62	5.5	3.7	4.1
September	28.97	29.24	28.58	50.1	64.3	72.2	48.8	60.5	89	34	48	54	92	70	.334	.417	0.33	0.14	4.8	4.8	4.4
October	28.99	29.41	28.36	37.6	51.7	59.6	35.6	47.6	80	16	34	39	88	62	.195	.237	0.30	0.22	3.4	3.9	3.9
November	28.99	29.66	28.28	16.2	24.0	30.0	12.1	21.0	52	—12	14	18	88	78	.077	.093	0.95	0.24	6.2	6.4	6.3
December	29.08	29.60	28.64	2.8	7.8	13.8	—1.4	6.2	37	—28	—1	2	84	73	.036	.043	0.47	0.15	5.9	3.3	5.5
Year	29.01	29.70	28.08	32.3	42.2	47.8	29.2	38.5	91	—37	29	34	88	74	.217	.258	24.94	2.11	5.5	4.9	5.4

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

MOBILE, ALA.

[H = 57 feet; h_t = 87 feet; h_r = 78 feet; h_a = 96 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Number of days. Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	8.7	N.	30	SW.	0	18	7	4	0	7	10	2	12	2	11	7	13	11	9	2	0	....	1	0	6	3	0
February	7.5	N.	34	N.	0	18	6	1	12	10	2	2	6	1	7	12	10	5	4	0	0	....	0	0	0	0	0
March	8.4	N.	36	NW.	0	15	2	1	10	14	4	6	8	2	14	9	8	8	7	0	0	....	0	0	2	3	0
April	9.7	S.	28	SE.	0	10	5	4	15	17	3	0	6	0	5	9	16	14	11	0	0	....	0	0	0	2	0
May	9.1	S.	30	NW.	0	4	0	2	14	25	6	1	10	0	6	19	6	7	4	0	0	....	0	0	0	5	0
June	6.9	S.	24	S.	0	3	7	8	5	16	5	6	6	4	2	14	14	16	13	0	0	....	0	3	0	13	0
July	6.4	S.	36	NE.	0	8	4	6	3	18	11	8	2	2	0	14	17	23	19	0	0	....	0	5	0	16	0
August	5.2	S.	36	SE.	0	12	2	6	1	19	11	1	7	3	0	21	10	27	22	0	0	....	0	5	0	21	0
September	6.6	N.	25	NE.	0	28	7	9	3	2	1	2	6	2	9	16	5	15	11	0	0	....	0	0	0	6	0
October	6.7	N.	42	W.	1	22	4	5	6	8	8	2	7	0	8	21	2	5	4	0	0	....	0	0	0	1	0
November	7.5	N.	32	N.	0	18	0	7	6	9	2	8	9	1	11	13	6	10	7	0	0	....	0	0	0	3	0
December	8.1	N.	42	SE.	1	19	4	2	7	7	6	3	13	1	2	11	18	15	13	0	0	....	0	0	5	4	0
Year	7.6	N.	42	W. SE.	2	175	48	55	82	152	69	41	92	18	75	166	125	156	124	2	0	....	1	13	13	77	0

MONTGOMERY, ALA.

[H = 257 feet; h_t = 99 feet; h_r = 92 feet; h_a = 110 feet.]

January	6.8	W.	24	SW.	0	6	9	9	4	0	11	13	7	3	10	7	14	12	9	0	0	....	0	0	11	0	0
February	5.7	NE.	24	NW.	0	6	12	11	9	1	5	3	9	2	8	12	9	9	7	0	0	....	0	0	0	0	0
March	6.0	SW.	27	NW.	0	3	7	4	4	4	17	7	15	1	14	9	8	8	8	0	0	....	0	0	3	2	0
April	7.0	SE.	25	NW.	0	5	5	5	11	10	10	0	7	7	8	11	11	9	6	0	0	....	0	0	0	0	0
May	4.5	SW.	23	S.	0	2	3	4	6	5	17	9	9	7	8	13	10	8	7	0	0	....	0	7	0	3	0
June	4.6	S.	25	N.	0	5	2	13	4	14	6	7	7	2	8	8	14	13	10	0	0	....	0	14	0	5	0
July	4.5	SW.	22	NW.	0	1	4	6	9	5	15	15	3	4	3	5	23	18	15	0	0	....	0	13	0	11	0
August	4.5	E.	30	NW.	0	5	7	14	8	6	6	7	6	3	9	6	16	17	15	0	0	....	0	12	0	9	0
September	6.0	NE.	24	E.	0	9	20	18	3	0	0	2	7	1	17	7	6	6	4	0	0	....	0	0	0	0	0
October	5.4	NE.	22	NW.	0	6	16	13	2	1	4	7	8	5	19	7	5	2	2	0	0	....	0	0	0	0	0
November	5.8	W.	26	W.	0	9	2	8	9	2	7	9	9	5	11	8	11	9	7	0	0	....	0	0	2	2	0
December	6.1	NW.	28	E.	0	8	4	8	6	6	5	9	13	3	8	5	18	13	8	1	0	....	0	0	7	2	0
Year	5.6	E.	30	NW.	0	65	91	113	75	54	103	88	100	43	123	98	145	124	98	1	0	....	0	46	23	34	0

MONTROSE, COLO.

[H = 5,795 feet; h_t = 43 feet; h_r = 34 feet; h_a = 46 feet.]

January	3.7	S.	26	E.	0	0	2	4	27	27	0	1	1	0	17	3	11	10	7	8	0	....	20	0	31	0	0
February	4.1	S.	23	NW.	0	3	2	4	18	21	3	2	3	2	11	11	7	7	6	7	0	....	1	0	27	0	0
March	5.8	SE.	36	W.	0	5	4	7	18	14	4	5	4	1	10	6	15	13	7	7	0	....	0	0	19	0	0
April	6.8	S.	38	W.	0	7	3	2	12	17	7	4	7	1	7	14	9	9	5	5	1	....	0	0	13	0	0
May	7.1	S.	38	SW.	0	4	1	7	14	15	9	3	8	1	12	12	7	8	5	0	1	....	0	0	2	2	0
June	7.3	SE.	36	SW.	0	6	1	4	23	6	7	0	9	0	21	6	3	2	0	0	1	....	0	7	0	1	0
July	5.9	SE.	28	SE.	0	8	1	6	19	16	8	4	4	0	10	11	10	11	7	0	0	....	0	5	0	12	0
August	6.3	S.	33	E.	0	8	1	3	17	22	4	2	5	0	16	8	7	6	2	0	0	....	0	8	0	6	0
September	5.8	SE.	24	N.	0	8	1	1	20	7	5	5	9	4	24	6	0	0	0	0	0	....	0	0	0	0	0
October	5.5	SE.	45	NW.	1	6	2	4	24	12	0	4	6	4	15	8	8	4	4	2	0	....	0	0	13	0	0
November	5.0	SE.	32	SW.	0	3	2	9	25	6	4	3	5	3	19	3	8	3	2	3	0	....	0	0	25	0	0
December	4.6	SE.	32	NW.	0	1	5	9	30	9	2	0	4	2	13	5	13	6	5	6	0	....	13	0	28	0	0
Year	5.7	SE.	45	NW.	1	59	25	60	247	172	53	33	65	18	175	93	98	79	50	38	3	....	34	20	158	21	0

MOORHEAD, MINN.

[H = 935 feet; h_t = 54 feet; h_r = 44 feet; h_a = 60 feet.]

January	11.3	NW.	44	SE.	1	4	1	3	6	5	1	15	26	1	19	6	6	15	4	15	0	....	24	0	31	0	0
February	12.1	N.	38	SE.	0	18	0	7	7	8	1	3	13	1	6	8	15	5	8	5	0	....	21	0	29	0	2
March	12.2	S.	60	NW.	2	16	1	2	15	20	0	1	5	2	9	8	14	10	5	5	0	....	13	0	24	0	0
April	13.2	N.	43	NW.	3	16	9	9	9	4	2	3	7	1	5	10	15	13	8	4	0	....	2	0	14	2	0
May	11.5	N.	46	W.	3	29	4	6	2	5	1	5	10	0	3	9	19	12	9	1	0	....	0	0	3	2	1
June	10.2	N.	37	SE.	0	19	2	7	10	9	1	6	5	1	6	13	11	14	10	0	0	....	0	0	0	3	0
July	9.9	S.	43	NW.	1	13	4	1	6	26	1	5	6	0	16	13	2	10	8	0	0	....	0	1	0	5	1
August	9.4	S.	50	E.	2	19	0	6	10	19	2	0	5	1	18	6	7	13	7	0	1	....	0	1	0	4	0
September	11.2	N.	36	SE.	0	19	1	2	10	17	1	3	6	1	16	6	8	5	3	0	0	....	0	0	0	0	0
October	10.6	N.	42	SE.	2	20	0	3	10	9	5	8	6	1	14	11	6	5	2	0	0	....	0	0	14	0	1
November	11.5	S.	40	N.	1	7	1	8	8	17	1	4	14	0	10	5	15	8	7	5	0	....	16	0	30	0	0
December	7.7	N.	30	SE.	0	17	0	1	6	14	1	7	12	4	11	8	12	11	4	11	0	....	29	0	31	0	0
Year	10.9	N.	60	NW.	15	197	23	55	99	153	17	60	115	13	133	103	130	121	75	46	1	....	105	2	176	16	5

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

NANTUCKET, MASS.

[Lat. 41° 17′ N.; long. 70° 6′ W.; gravity corr., —.01.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	30.00	30.64	29.28	33.5	34.7	38.5	27.7	33.1	55	5	26	27	74	75	.137	.143	2.23	.86	6.6	5.6	6.8
February	30.09	30.61	28.99	31.5	33.1	35.7	27.0	31.4	47	9	25	27	78	80	.130	.143	1.46	.56	5.6	4.4	5.7
March	29.91	30.49	29.29	32.9	35.2	38.7	29.2	34.0	50	16	22	28	66	74	.113	.150	5.88	2.23	4.6	3.4	4.8
April	30.03	30.57	29.53	44.7	45.3	51.6	40.8	46.2	62	33	33	37	66	73	.187	.219	2.76	.86	4.6	4.4	4.9
May	29.99	30.45	29.42	53.2	51.6	56.4	47.2	51.8	67	41	44	46	73	81	.287	.310	2.57	.72	4.9	5.7	6.0
June	30.00	30.41	29.59	64.0	61.3	67.2	56.5	61.8	81	50	58	56	80	83	.481	.448	1.81	.58	4.7	4.7	5.7
July	30.04	30.50	29.74	69.0	66.8	74.9	62.9	68.9	87	58	62	61	78	82	.555	.536	.91	.23	4.3	5.0	4.5
August	30.00	30.24	29.81	69.8	67.5	73.9	63.5	68.7	89	57	64	62	82	85	.595	.555	1.79	.75	4.9	4.6	5.8
September	30.16	30.44	29.64	63.9	61.4	67.6	57.5	62.6	75	51	56	57	78	85	.448	.465	2.01	.90	4.1	2.3	4.6
October	29.93	30.43	29.44	53.3	53.6	57.6	48.5	53.0	68	42	47	47	80	80	.322	.322	1.66	.57	5.6	4.1	6.0
November	30.02	30.44	29.47	43.6	43.6	47.6	38.6	43.1	60	24	39	38	86	81	.237	.228	7.63	1.89	7.6	5.5	7.4
December	29.97	30.51	29.43	31.7	33.5	36.3	28.2	32.2	54	6	26	27	77	76	.137	.143	1.67	.53	6.0	5.5	6.5
Year	30.01	30.64	28.99	49.3	49.0	53.8	44.0	48.9	89	5	42	43	76	80	.302	.305	32.38	2.23	5.3	4.6	5.7

NARRAGANSETT PIER, R. I. *b*

[Lat. 41° 19′ N.; long. 71° 17′ W.; gravity corr., —.]

January						40.9	21.9	31.4	58	—1							6.60	1.40			
February						39.3	23.4	31.4	51	7							1.38	.87			
March						43.2	24.4	33.8	53	11							4.99	1.25			
April						57.6	35.1	46.4	72	19							2.88	1.00			
May						64.7	45.7	55.2	80	38							4.63	1.00			
June						77.0	58.7	67.8	88	42							2.44	.45			
July						79.4	61.1	70.2	93	42							1.66	.37			
August						78.3	63.7	71.0	88	55							5.00	1.99			
September						71.1	53.2	62.2	77	43							3.58	1.05			
October						61.4	42.3	51.8	76	30							1.61	.60			
November						49.4	33.6	41.5	63	16							7.44	1.95			
December						36.0	21.7	28.8	53	2							1.74	.37			
Year						58.2	40.4	49.3	93	—1							43.95	1.99			

NASHVILLE, TENN.

[Lat. 36° 10′ N.; long. 86° 47′ W.; gravity corr., —.02.]

January	29.57	29.92	28.90	28.9	35.6	39.8	26.3	33.0	64	10	21	24	74	67	.108	.125	2.81	0.84	6.2	5.1	6.0
February	29.53	29.96	29.00	41.0	48.2	54.5	38.2	46.4	67	25	35	36	79	64	.203	.211	2.73	0.84	7.3	6.5	7.5
March	29.48	29.80	28.98	38.5	47.0	52.7	35.8	44.2	80	14	32	35	79	67	.130	.203	4.10	1.62	6.4	6.0	6.7
April	29.48	29.73	29.16	54.4	61.0	67.6	50.2	58.9	80	31	46	48	75	64	.310	.334	7.45	1.74	7.0	7.4	6.7
May	29.41	29.63	29.14	62.9	69.3	76.6	58.0	67.3	87	44	54	54	75	61	.417	.417	4.03	1.60	5.4	6.9	6.4
June	29.41	29.56	29.25	72.9	79.8	86.3	68.1	77.2	97	58	66	66	79	65	.638	.638	5.01	1.66	4.2	5.8	5.5
July	29.51	29.73	29.38	72.5	79.1	85.8	68.7	77.2	96	62	68	68	84	70	.684	.684	5.13	1.75	6.5	6.7	7.3
August	29.45	29.59	29.35	70.7	78.8	85.3	67.4	76.4	90	57	66	68	86	70	.638	.684	3.39	1.18	4.4	5.1	6.1
September	29.54	29.74	29.07	62.1	72.8	80.6	59.3	70.0	88	47	57	61	85	67	.465	.536	4.78	2.02	3.4	3.3	4.0
October	29.52	29.81	29.25	52.3	64.7	72.4	50.0	61.2	85	31	45	47	77	53	.298	.322	0.25	0.15	4.5	3.4	4.4
November	29.55	29.88	29.10	41.3	48.8	54.8	38.2	46.5	74	20	36	36	82	62	.211	.211	3.91	0.94	6.0	4.1	4.6
December	29.55	30.03	29.01	34.1	39.8	43.8	32.4	38.1	71	10	30	34	85	82	.164	.195	6.43	2.03	8.1	6.4	7.8
Year	29.50	30.03	28.90	52.6	60.4	66.7	49.4	58.0	97	10	46	48	80	66	.360	.380	50.62	2.03	5.8	5.6	6.1

NEAH BAY, WASH.

[Lat. 48° 23′ N.; long. 124° 36′ W.; gravity corr., —.]

January						49.7	36.8	43.2	59	31							13.51	4.00			
February						49.7	36.0	42.8	60	29							6.79	1.40			
March						53.1	39.9	46.5	62	31							11.57	1.85			
April						55.7	37.8	46.8	66	28							11.00	1.28			
May						61.0	43.4	52.2	72	35							7.64	2.00			
June						64.6	47.0	55.8	74	40							2.75	.90			
July						67.9	49.5	58.7	72	43							2.76	.75			
August						66.6	49.8	58.2	72	45							2.48	.92			
September *c*						64.1	48.0	56.0	69	40							10.91	3.05			
October						57.6	44.8	51.2	65	34							7.62	1.91			
November *d*						51.8	40.7	46.2	60	33							20.62	2.30			
December						47.1	36.3	41.7	54	21							12.62	2.24			
Year						57.4	42.5	49.9	74	21							109.67	4.00			

b Takes one 8 p. m. observation daily. *c* For 28 days. *d* For 29 days.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

NANTUCKET, MASS.

[H=14 feet; h_t=43 feet; h_r=38 feet; h_a=54 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing directions.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a.m. and 8 p.m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		Mi.																								
January	14.5	NW.	47	NE.	2	10	5	6	4	7	5	11	13	1	4	13	14	13	11	1	0	....	8	0	3	0	1
February	14.7	NW.	49	SE.	1	12	8	11	4	0	1	4	17	1	10	10	9	9	8	1	0	....	6	0	20	1	1
March	16.8	W.	52	NE.	4	9	9	2	4	3	9	17	9	0	17	5	9	11	10	4	0	....	5	0	18	0	1
April	12.0	SW.	44	NE.	1	8	5	2	2	2	17	14	9	1	12	11	7	9	8	1	0	....	0	0	0	0	0
May	12.5	SW.	40	SE.	1	5	7	1	10	9	16	9	5	0	10	9	12	13	9	0	0	....	0	0	6	1	1
June	11.0	SW.	35	E.	0	2	5	1	5	10	21	10	6	0	8	11	11	10	10	0	0	....	0	0	0	3	0
July	9.1	SW.	28	SW.	0	3	3	4	2	4	23	16	6	1	13	13	5	8	8	0	0	....	0	0	0	2	2
August	9.6	SW.	38	E.	0	4	11	5	2	9	15	12	3	1	12	6	13	6	5	0	0	....	0	0	0	0	0
September	10.0	SW.	36	NE.	0	5	7	4	8	6	15	10	5	0	15	8	7	7	6	0	0	....	0	0	0	0	0
October	11.7	NW.	36	NE.	0	9	11	1	1	5	7	13	15	0	13	6	12	7	6	0	0	....	0	0	0	1	0
November	14.1	NW.	48	E.	2	13	8	4	6	6	8	4	11	0	9	1	20	16	14	0	0	....	0	0	4	0	0
December	12.9	NW.	48	NW.	3	25	10	1	1	0	2	3	20	0	10	6	15	10	8	3	0	....	6	0	18	0	0
Year	12.4	SW.	52	NE.	14	105	89	42	49	61	139	123	119	5	133	99	134	119	103	10	0	....	25	0	83	8	6

NARRAGANSETT PIER, R. I.

[H=— feet; h_t=9 feet; h_r=2½ feet; h_a=46 feet.]

Month.	Average hourly velocity.	Prevailing directions.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	.....	SW.	....	.....	....	4	2	0	2	3	8	5	6	1	11	5	15	11	10	4	0	....	3	0	26	0	0
February	.....	NE.	....	.....	....	1	12	1	0	1	5	3	6	0	12	3	14	5	5	2	0	....	4	0	19	0	1
March	.....	SW.	....	.....	....	3	4	0	1	4	10	3	6	0	17	2	12	8	8	4	0	....	2	0	28	0	1
April	.....	SW.	....	.....	....	0	3	0	1	3	14	1	8	0	16	6	8	6	6	0	0	....	0	0	8	0	0
May	.....	SW.	....	.....	....	1	4	0	4	5	13	1	3	0	3	14	14	14	13	0	0	....	0	0	0	0	0
June	.....	SW.	....	.....	....	1	3	0	6	7	12	1	0	0	10	7	13	12	10	0	0	....	0	0	0	4	0
July	.....	SW.	....	.....	....	0	4	0	2	5	18	1	1	0	12	4	15	13	9	0	0	....	0	1	0	3	1
August	.....	SW.	....	.....	....	1	6	1	1	6	12	4	0	0	14	7	10	8	7	0	0	....	0	0	0	2	0
September	.....	SW.	....	.....	....	0	1	1	3	5	16	3	1	0	23	2	5	6	5	0	0	....	0	0	0	1	0
October	.....	SW.	....	.....	....	1	0	1	1	1	15	5	7	0	17	10	4	7	6	0	0	....	0	0	1	0	0
November	.....	NW.	....	.....	....	2	7	1	0	1	8	2	9	0	14	4	12	14	12	2	0	....	0	0	17	0	0
December	.....	NW.	....	.....	....	1	4	1	0	0	10	3	12	0	12	8	11	11	6	5	0	....	8	0	28	0	0
Year	.....	SW.	....	.....	....	15	50	6	21	41	141	32	59	1	161	72	133	115	97	17	0	....	17	1	127	10	3

NASHVILLE, TENN.

[H=553 feet; h_t=98 feet; h_r=85 feet; h_a=107 feet.]

Month.	Average hourly velocity.	Prevailing directions.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.3	NW.	37	SE.	0	4	13	1	11	0	10	2	17	4	10	6	15	11	7	3	0	....	9	0	23	0	0
February	6.9	NW.	29	SE.	0	5	13	4	12	1	4	0	15	4	4	6	19	6	5	0	0	....	6	0	9	0	1
March	6.9	NW.	32	SW.	0	4	11	5	12	2	8	1	17	2	9	1	21	13	8	3	1	....	3	0	11	0	0
April	7.7	SE.	30	SE.	0	4	6	4	16	12	2	2	10	4	7	7	16	15	15	0	1	....	0	0	2	9	0
May	6.9	SW.	29	SW.	0	3	6	6	8	10	11	9	8	1	8	7	16	12	10	0	0	....	0	0	0	7	0
June	4.0	SW.	30	NE.	0	1	4	4	11	10	10	5	13	2	11	9	10	12	12	0	0	....	0	8	0	5	0
July	3.8	SW.	22	NW.	0	0	11	3	13	4	13	6	4	8	4	12	15	11	10	0	0	....	0	9	0	3	0
August	3.6	SE.	26	SW.	0	4	9	6	8	6	7	3	9	10	6	13	12	14	10	0	0	....	0	1	0	2	0
September	3.0	Calm. SE.	17	NW.	0	5	9	3	10	7	4	2	4	16	16	7	7	7	6	0	0	....	0	0	0	1	0
October	4.0	Calm. NW.	21	NW.	0	6	9	4	13	5	4	2	12	7	14	9	8	4	2	0	0	....	0	0	2	0	0
November	5.1	Calm. NW.	28	W.	0	4	7	5	10	2	5	1	13	13	14	4	12	13	7	0	0	....	0	0	9	0	0
December	4.5	N.	30	SW.	0	11	7	5	8	6	4	3	7	11	4	8	19	12	9	2	0	....	6	0	15	0	0
Year	5.2	NW.	37	SE.	0	51	105	50	132	65	82	36	129	82	107	89	170	130	101	8	2	....	18	18	71	27	1

NEAH BAY, WASH.

[H=.. feet; h_t=8 feet; h_r=6 inches; h_a=.. feet.]

Month.	Average hourly velocity.	Prevailing directions.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	.....	SE.	....	.....	....	0	0	8	12	0	9	2	0	0	4	7	20	18	18	0	0	....	0	0	2	0	0
February	.....	E.	....	.....	....	0	0	10	10	0	8	1	0	0	7	4	18	14	14	0	0	....	0	0	5	0	0
March	.....	SW.	....	.....	....	0	0	7	9	0	10	5	0	0	4	9	18	19	19	1	1	....	0	0	1	0	0
April	.....	SW.	....	.....	....	0	0	4	7	1	12	6	0	0	1	15	14	22	22	0	0	....	0	0	1	0	0
May	.....	W.	....	.....	....	0	0	5	2	2	7	15	0	0	8	8	15	13	13	0	0	....	0	0	0	0	1
June	.....	W.	....	.....	....	0	0	1	2	2	8	17	0	0	7	12	11	9	9	0	1	....	0	0	0	0	0
July	.....	SW.	....	.....	....	0	0	1	1	1	14	14	0	0	3	13	15	7	7	0	0	....	0	0	0	0	0
August	.....	SW.	....	.....	....	0	0	1	5	1	17	7	0	0	17	2	12	9	9	0	0	....	0	0	0	0	0
September b	.....	S.	....	.....	....	0	0	4	6	8	9	1	0	0	6	5	17	11	11	0	0	....	0	0	0	0	0
October	.....	SE.	....	.....	....	0	0	10	11	0	7	3	0	0	3	16	12	12	12	0	0	....	0	0	0	0	0
November c	.....	SW.	....	.....	....	0	0	4	8	4	9	4	0	0	1	3	25	24	24	0	0	....	0	0	0	0	0
December	.....	E.	....	.....	....	0	0	15	5	1	4	6	0	0	3	5	23	20	20	1	0	....	0	0	4	0	0
Year	.....	SW.	....	.....	....	0	0	70	78	20	114	81	0	0	64	99	200	178	178	2	2	....	0	0	13	0	1

a By eye observations at 8 a.m. and 8 p.m., when there is no self-register at station. b For 28 days. c For 29 days.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

NEW BRUNSWICK, N. J.

[Lat. 40° 30′ N.; long. 74° 27° W.; gravity corr., —]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January						36.8	19.4	28.1	62	—1							5.57	2.00			
February						39.9	26.6	33.2	52	12							1.81	1.01			
March						42.0	26.0	34.0	58	12							4.65	1.22			
April						59.0	38.6	48.8	81	27							2.58	.68			
May						70.9	49.1	60.0	82	36							4.58	1.17			
June						81.6	63.2	72.4	92	50							3.12	1.58			
July						86.4	62.8	74.6	99	52							3.10	1.19			
August						83.2	63.7	73.4	94	58							3.38	1.47			
September						74.1	53.2	63.6	85	39							1.75	1.13			
October						64.0	42.4	53.2	77	28							.55	.43			
November						48.5	33.4	41.0	66	20							6.59	3.15			
December						36.2	23.4	29.8	64	5							1.67	.73			
Year						60.2	41.8	51.0	99	—1							39.35	3.15			

NEW HAVEN, CONN.

[Lat. 41°18′ N.; long. 72°56′ W.; gravity corr., —.01.]

January	29.90	30.54	29.12	25.0	28.9	34.2	20.0	27.1	57	0	18	21	73	74	.093	.108	5.39	1.48	6.4	4.6	5.8
February	30.01	30.55	29.06	27.9	31.5	37.6	24.7	31.2	50	8	21	23	75	72	.108	.119	1.56	.45	6.4	5.7	5.9
March	29.82	30.37	29.16	30.1	34.6	40.0	25.6	32.8	52	15	19	23	66	64	.098	.119	3.07	1.10	4.8	3.6	5.0
April	29.92	30.42	29.47	45.3	47.1	56.3	37.7	47.0	77	27	36	37	73	69	.211	.219	1.31	.49	4.7	4.2	4.9
May	29.86	30.29	29.40	54.0	56.1	64.5	47.7	56.1	79	39	49	50	84	81	.347	.360	5.11	1.08	6.5	6.1	6.5
June	29.86	30.27	29.51	68.8	68.5	77.4	60.4	68.9	93	47	63	63	83	82	.575	.575	2.36	.66	6.2	5.5	5.4
July	29.92	30.40	29.57	71.5	71.5	81.3	61.9	71.6	96	50	65	66	80	82	.616	.638	4.33	.76	3.2	5.5	4.1
August	29.88	30.13	29.64	69.5	70.7	79.0	62.3	70.6	89	55	64	65	83	83	.595	.616	4.99	2.07	5.3	4.6	5.3
September	30.03	30.30	29.45	61.4	62.6	71.7	51.7	61.7	79	43	55	57	80	83	.432	.465	1.54	.80	3.9	2.4	3.6
October	29.84	30.34	29.42	50.0	52.4	61.5	43.2	52.4	79	32	42	44	76	74	.266	.287	.94	.43	5.2	2.8	4.6
November	29.92	30.31	29.48	38.4	40.4	46.6	33.9	40.2	63	19	34	34	83	78	.195	.195	5.46	1.61	6.1	4.4	5.9
December	29.90	30.43	29.34	26.0	29.7	34.5	22.2	28.4	46	5	20	23	75	76	.103	.119	1.72	.56	5.6	3.9	5.9
Year	29.90	30.55	29.06	47.3	49.5	57.0	40.9	49.0	96	0	40	42	78	76	.303	.318	37.78	2.07	5.4	4.4	5.2

NEW LONDON, CONN.

[Lat. 41° 21′ N.; long. 72° 05′ W.; gravity corr., —.01.]

January	29.96	30.62	29.19	27.2	30.6	35.9	21.6	28.8	58	—2	20	23	76	75	.103	.119	4.82	1.20	6.8	5.4	6.3
February	30.08	30.61	29.09	28.4	31.4	37.7	24.7	31.2	49	7	21	22	74	70	.108	.113	1.71	.51	6.1	6.0	6.1
March	29.89	30.43	29.26	30.3	34.7	40.2	25.9	33.0	52	15	19	23	64	64	.098	.119	4.33	1.02	4.3	4.4	5.0
April	29.98	30.50	29.53	44.7	45.4	54.3	37.7	46.0	75	28	34	34	67	67	.195	.195	1.86	.57	5.0	4.5	5.5
May	29.93	30.37	29.41	53.5	53.6	61.9	47.2	54.6	81	40	46	47	78	80	.310	.322	4.07	.82	6.5	6.3	6.8
June	29.93	30.34	29.59	67.0	64.9	73.8	59.4	66.6	90	46	62	60	84	84	.555	.517	2.46	.90	6.2	5.8	6.3
July	29.98	30.44	29.65	70.4	69.8	78.8	62.8	70.8	92	52	64	64	82	81	.595	.595	2.57	.98	5.1	5.9	5.0
August	29.94	30.19	29.71	69.0	69.1	76.2	63.7	70.0	84	55	63	64	82	85	.575	.595	3.45	1.20	6.1	4.7	4.9
September	30.10	30.36	29.52	60.5	61.8	69.5	53.7	61.6	75	43	54	55	76	79	.417	.432	2.04	1.63	3.6	2.3	3.2
October	29.90	30.40	29.44	50.2	51.7	60.5	44.0	52.2	78	33	42	42	74	72	.266	.266	.98	.49	5.3	2.5	4.0
November	29.99	30.37	29.54	39.5	40.8	47.1	35.4	41.2	64	20	33	34	78	76	.187	.195	4.79	1.57	6.7	4.8	6.1
December	29.95	30.48	29.42	26.6	29.9	35.0	23.2	29.1	52	5	21	22	77	73	.108	.113	1.67	.38	6.6	4.2	6.3
Year	29.97	30.62	29.09	47.3	48.6	55.9	41.6	48.8	92	—2	40	41	76	76	.293	.298	34.75	1.63	5.7	4.7	5.5

NEW ORLEANS, LA.

[Lat. 29° 58′ N.; long. 90° 4′ W.; gravity corr., —.04.]

January	30.13	30.43	29.51	44.4	50.5	58.0	40.6	49.3	77	26	39	40	82	69	.237	.246	5.87	2.80	5.5	4.2	4.9
February	30.06	30.35	29.79	55.1	62.5	68.2	53.1	60.6	80	43	51	52	86	70	.373	.387	.04	.04	5.2	4.6	5.5
March	30.04	30.41	29.57	53.2	60.4	66.9	50.2	58.6	78	31	48	48	83	66	.334	.334	2.82	1.13	5.8	5.1	4.8
April	30.02	30.21	29.82	65.5	69.8	75.7	62.3	69.0	84	51	61	60	85	74	.536	.517	10.44	7.49	6.0	6.2	6.1
May	29.98	30.15	29.79	71.3	75.1	81.4	66.5	74.0	88	55	65	63	81	67	.616	.575	2.62	1.35	3.4	3.8	4.8
June	29.95	30.08	29.79	76.5	79.2	86.1	71.7	78.9	92	64	71	70	83	75	.757	.732	5.46	1.18	5.3	5.8	5.6
July	30.06	30.22	29.95	78.2	79.3	86.5	73.7	80.1	93	67	73	72	85	80	.810	.783	7.46	1.91	6.2	7.2	5.5
August	29.97	30.12	29.84	78.1	80.6	88.3	75.1	81.7	92	70	72	73	83	77	.783	.810	6.96	3.85	4.9	7.9	6.2
September	29.98	30.12	29.66	72.5	78.3	83.1	70.1	76.6	89	64	66	66	81	68	.638	.638	6.33	1.23	6.2	3.4	3.2
October	30.00	30.24	29.73	66.6	71.1	77.6	64.3	71.0	87	48	61	61	83	71	.536	.536	2.14	1.80	3.3	1.5	2.9
November	30.10	30.34	29.84	57.1	62.4	69.7	54.5	62.1	83	41	52	53	84	73	.387	.402	3.55	1.26	3.5	3.2	3.8
December	30.05	30.39	29.61	51.3	56.1	63.5	48.2	55.8	79	23	48	49	88	79	.334	.347	3.22	.95	6.4	5.2	6.3
Year	30.03	30.43	29.51	64.2	68.8	75.4	60.9	68.1	93	23	59.0	59.0	84.0	72.0	.528	.526	56.91	7.49	4.8	4.8	5.0

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

NEW BRUNSWICK, N. J.

[H = —feet; h_t = —feet; h_r = 2 feet; h_a = —feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		Mi.																								
January	.....	NW.	....	.....	....	3	5	0	0	0	2	8	11	2	4	9	18	11	10	5	0	....	9	0	28	0	0
February	.....	NW.	....	.....	....	0	7	5	1	1	2	4	9	0	3	12	14	10	6	0	0	....	2	0	17	0	1
March	.....	NW.	....	.....	....	2	4	0	3	1	1	6	12	2	4	17	10	9	7	3	0	....	6	0	25	0	0
April	.....	NW.	....	.....	....	2	1	5	0	1	10	1	10	0	0	24	6	9	8	0	1	....	0	0	8	0	0
May	.....	SW.	....	.....	....	0	1	6	6	2	9	2	5	0	0	22	9	15	15	0	0	....	0	0	0	6	0
June	.....	SW.	....	.....	....	0	1	3	3	4	15	2	2	0	3	19	8	13	11	0	0	....	0	2	0	7	0
July	.....	SW.	....	.....	....	3	3	0	3	5	9	2	3	3	3	25	3	10	9	0	0	....	0	9	0	6	1
August	.....	SE.	....	.....	....	0	1	3	8	5	2	3	6	3	3	22	6	11	8	0	0	....	0	3	0	5	0
September	.....	SE.	....	.....	....	1	1	4	12	2	1	3	6	0	11	13	6	8	5	0	0	....	0	0	0	2	0
October	.....	NW.	....	.....	....	1	2	1	2	0	8	4	13	0	10	16	5	4	3	0	0	....	0	0	2	1	0
November	.....	NW.	....	.....	....	4	4	2	1	2	2	5	9	1	5	13	12	13	12	1	0	....	0	0	17	0	0
December	.....	NW.	....	.....	....	5	5	2	1	0	4	5	9	0	3	15	13	7	6	3	0	....	11	0	26	1	0
Year	.....	NW.	....	.....	....	21	35	31	40	23	65	45	95	11	49	207	110	120	100	12	1	....	28	14	123	28	2

NEW HAVEN, CONN.

[H = 107 feet; h_t = 118 feet; h_r = 110 feet; h_a = 123 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	9.8	NE.	39	NW.	0	9	14	0	2	3	7	13	13	1	9	9	13	10	9	5	0	....	14	0	28	0	1
February	9.5	NE.	29	NW.	0	7	19	1	5	1	2	8	14	1	7	9	13	11	8	4	0	....	6	0	19	0	1
March	11.7	W.	42	NE.	1	12	8	0	2	4	5	18	13	0	12	9	10	10	8	6	0	....	4	0	25	1	2
April	8.8	W.	34	NW.	0	11	4	1	2	11	10	12	9	0	11	12	7	10	8	1	0	....	0	0	7	0	4
May	8.2	SE.	28	E.	0	7	8	3	16	11	9	5	3	0	8	6	17	16	14	0	0	....	0	0	0	3	1
June	7.8	SW.	27	SW.	0	2	4	1	11	10	17	9	4	2	12	6	12	13	9	0	0	....	0	2	0	6	0
July	6.6	SW.	36	SW.	0	9	6	1	1	12	19	5	7	2	15	12	4	13	13	0	0	....	0	4	0	10	1
August	6.6	N.	36	NW.	0	15	9	2	2	9	7	6	11	1	11	10	10	10	8	0	0	....	0	0	0	9	0
September	7.1	N.	36	SE.	0	15	7	0	4	3	11	11	7	2	16	10	4	6	5	0	0	....	0	0	0	1	1
October	7.5	NW.	29	W.	0	6	4	1	1	6	10	15	16	3	13	10	8	6	4	0	0	....	0	0	0	1	0
November	8.6	NW.	36	SW.	0	10	14	0	4	1	5	8	15	3	9	7	14	14	11	3	0	....	1	0	16	0	0
December	7.8	W.	28	NW.	0	14	6	0	0	1	8	19	14	0	10	7	14	10	7	5	0	....	11	0	27	0	0
Year	8.3	W.	42	NE.	1	117	103	10	50	72	110	129	126	15	133	107	126	129	104	24	0	....	36	6	122	31	11

NEW LONDON, CONN.

[H = 47 feet; h_t = 50 feet; h_r = 42 feet; h_a = 54 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	9.1	NW.	46	S.	1	12	3	2	1	5	7	15	17	0	8	10	13	13	11	6	0	....	10	0	28	0	0
February	8.4	NW.	30	NW.	0	13	10	3	1	1	2	9	18	1	8	7	14	9	8	3	0	....	7	0	20	0	1
March	10.4	W.	38	SW.	0	13	3	0	1	3	10	17	15	0	12	11	8	12	10	5	0	....	2	0	25	0	0
April	7.9	NW.	26	SW.	0	6	4	2	4	6	11	10	16	1	8	15	7	8	6	1	1	....	0	0	7	0	0
May	8.2	SE.	32	E.	0	7	6	3	18	4	8	6	9	1	5	10	16	17	12	0	0	....	0	0	0	2	1
June	7.2	SW.	32	SW.	0	3	6	2	14	6	18	9	1	1	8	6	16	13	8	0	0	....	0	1	0	4	0
July	5.9	SW.	30	SW.	0	4	4	2	5	9	17	13	8	0	9	15	7	13	9	0	0	....	0	2	0	7	0
August	5.7	SW.	23	SW.	0	11	6	5	1	10	14	6	9	0	11	12	8	11	8	0	0	....	0	0	0	4	0
September	6.9	NW.	41	S.	1	6	3	3	5	11	8	8	15	1	20	6	4	7	4	0	0	....	0	0	0	2	0
October	6.9	W.	28	S.	0	4	1	3	0	7	7	20	20	0	15	11	5	6	5	0	0	....	0	0	0	2	0
November	8.8	NW.	42	SE.	1	7	4	5	2	4	7	8	23	0	9	6	15	15	13	2	0	....	0	0	14	1	0
December	7.0	NW.	40	NW.	1	7	0	0	1	0	6	18	39	0	6	12	13	9	8	5	1	....	8	0	25	0	0
Year	7.7	NW.	46	S.	4	93	50	30	53	66	115	139	181	5	119	121	126	133	102	22	2	....	27	3	19	22	2

NEW ORLEANS, LA.

[H = 54 feet; h_t = 112 feet; h_r = 111 feet; h_a = 120 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	8.5	NW.	32	SW.	0	9	9	8	3	1	7	3	12	10	16	2	13	9	7	0	0	....	0	0	5	2	0
February	8.6	NE.	29	SE.	0	11	10	7	5	11	3	0	6	5	8	11	10	2	0	0	0	....	0	0	0	0	0
March	9.5	E.	40	SE.	1	9	5	17	5	10	1	8	4	3	13	7	11	8	6	0	0	....	0	0	1	3	0
April	12.0	E.	40	E.	1	7	9	20	10	12	1	0	0	1	8	10	12	8	7	0	0	....	0	0	0	3	0
May	9.7	SE.	45	N.	1	2	1	2	27	8	12	4	5	1	6	25	0	9	7	0	0	....	0	0	0	2	0
June	7.3	SW.	39	SE.	0	6	7	0	13	5	16	9	1	3	5	19	6	17	14	0	0	....	0	3	0	3	0
July	6.4	SW.	24	NW.	0	1	5	7	11	9	16	2	8	3	9	12	10	18	15	0	0	....	0	6	0	1	0
August	6.0	SW.	27	NE.	0	1	9	3	6	4	18	8	12	1	3	18	10	12	11	0	0	....	0	7	0	5	0
September	9.1	NE.	30	NE.	0	7	22	7	4	0	1	1	17	1	17	9	4	12	12	0	0	....	0	0	0	1	0
October	9.6	NE.	50	NE.	1	6	41	5	0	2	0	3	5	0	22	4	5	6	4	0	0	....	0	0	0	1	0
November	8.9	N.	36	N.	0	25	7	10	2	13	0	1	2	0	16	8	6	7	6	0	0		0	0	0	1	0
December	10.0	N.	40	E.	1	28	0	6	2	16	2	2	5	1	8	7	16	8	8	0	0	....	0	0	4	1	0
Year	8.8	NE.	50	NE.	5	112	125	92	88	91	77	41	77	29	131	132	103	116	97	0	0	....	0	16	10	23	0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

NEW YORK CITY.

[Lat. 40° 43′ N.; long. 74° 0′ W.; gravity corr., —.01.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.84	30.45	29.08	27.7	31.9	36.6	24.0	30.3	62	8	21	25	77	75	.108	.130	5.61	1.74	5.6	4.7	6.4
February	29.94	30.46	29.05	30.5	34.4	38.7	27.4	33.6	51	12	24	26	76	72	.125	.137	1.27	.58	6.3	5.8	6.6
March	29.78	30.30	29.10	31.4	36.0	41.4	27.9	34.6	56	16	22	26	70	69	.113	.137	4.62	1.37	5.3	3.9	5.6
April	29.86	30.32	29.37	46.9	50.8	58.0	41.8	49.9	79	31	34	37	64	62	.195	.219	2.36	1.00	4.6	4.9	5.6
May	29.78	30.18	29.36	56.0	59.6	68.1	50.8	59.4	81	42	47	50	74	73	.322	.360	4.30	.85	5.3	7.3	5.9
June	29.79	30.16	29.46	69.5	72.1	79.8	64.3	72.0	91	56	62	64	78	77	.555	.595	2.97	.63	6.2	5.7	5.5
July	29.87	30.32	29.52	71.6	75.5	83.6	66.0	74.8	96	56	61	64	71	69	.536	.595	2.45	1.02	3.4	6.6	5.1
August	29.82	30.05	29.57	70.8	75.1	81.2	66.6	73.9	93	59	62	65	76	72	.555	.616	3.90	1.39	4.9	4.2	5.3
September	29.98	30.24	29.42	62.3	67.1	73.4	58.5	66.0	83	51	53	54	73	65	.402	.417	.87	.63	2.9	1.7	3.7
October	29.81	30.26	29.37	50.9	55.8	62.9	48.0	55.4	79	39	42	41	73	59	.266	.256	.63	.29	4.0	2.0	4.5
November	29.87	30.24	29.41	40.9	43.1	48.1	37.0	42.6	66	24	34	34	76	72	.195	.195	8.28	3.62	6.3	5.1	6.0
December	29.86	30.38	29.34	29.1	32.9	36.6	26.0	31.3	58	9	22	24	73	70	.113	.125	1.64	.61	5.3	5.5	6.0
Year	29.85	30.46	29.05	49.0	52.9	59.0	44.9	51.9	96	8	40	42	73	70	.290	.315	38.90	3.62	5.0	4.8	5.5

NORFORK, VA.

[Lat. 36° 51′ N.; long. 76° 17′ W.; gravity corr., — .02.]

January	30.02	30.53	29.24	37.2	41.4	47.8	33.4	40.6	72	19	31	29	80	64	.172	.157	4.99	1.28	5.5	4.7	5.7
February	30.06	30.60	29.38	39.8	41.7	48.6	35.5	42.0	65	19	33	32	78	71	.187	.180	5.22	1.68	5.6	5.1	5.8
March	29.98	30.45	29.27	40.2	43.3	51.3	36.0	43.6	72	24	32	34	75	72	.180	.195	3.61	1.46	6.7	5.1	5.6
April	30.06	30.39	29.50	53.5	55.6	64.2	47.9	56.0	83	33	48	46	81	72	.334	.310	6.86	2.46	5.3	3.2	4.7
May	29.96	30.35	29.59	64.9	67.3	76.6	57.4	67.9	93	46	58	56	78	69	.481	.448	3.76	1.88	3.3	3.5	3.5
June	29.98	30.28	29.68	74.3	74.4	84.7	68.0	76.4	94	58	70	69	87	84	.732	.707	4.83	1.11	4.8	4.9	4.0
July	30.04	30.39	29.84	74.0	75.0	84.5	68.2	76.4	99	57	69	70	84	85	.707	.732	8.27	1.78	5.5	4.8	4.5
August	29.97	30.13	29.77	76.2	77.5	87.2	71.2	79.2	94	66	70	71	82	80	.732	.757	3.56	2.16	3.9	3.4	3.6
September	30.11	30.33	29.75	69.2	69.2	77.2	64.2	70.7	84	53	63	63	80	80	.575	.575	1.33	.76	4.5	1.6	3.5
October	30.02	30.35	29.65	54.9	58.4	67.8	50.5	59.2	84	37	49	49	80	72	.347	.347	.52	.22	3.3	1.0	2.8
November	30.07	30.37	29.62	45.2	48.3	56.9	41.4	49.2	77	25	40	42	81	80	.246	.266	2.38	.61	5.1	3.9	4.7
December	30.06	30.57	29.57	36.3	40.2	46.5	33.6	40.0	72	19	32	32	84	73	.180	.180	3.91	1.77	5.4	3.3	5.4
Year	30.03	30.60	29.24	55.5	57.7	66.1	50.6	58.4	99	19	50.0	49.0	81.0	75.0	.406	.404	49.24	2.46	4.9	3.7	4.5

NORTHFIELD, VT.

[Lat. 44° 10′ N.; long. 72° 41′ W.; gravity corr., 0.]

January	29.03	29.69	28.37	13.7	19.8	25.4	7.6	16.5	49	—16	7	13	75	76	.054	.074	3.21	.80	7.3	6.8	7.2
February	29.18	29.79	28.15	15.0	21.1	28.1	9.1	18.6	44	—19	7	14	71	76	.054	.077	1.73	.62	6.2	7.2	6.4
March	28.97	29.46	28.19	20.4	25.7	31.0	15.5	23.2	46	— 4	13	17	73	72	.074	.089	1.13	.46	5.7	5.3	5.9
April	29.05	29.54	28.55	38.4	41.7	50.2	28.7	39.4	71	14	28	30	68	63	.150	.164	.44	.16	5.1	4.4	5.5
May	29.04	29.38	28.54	49.6	52.8	58.9	40.4	49.6	80	24	41	43	74	70	.256	.277	3.30	1.02	7.3	7.1	7.5
June	29.02	29.46	28.60	65.4	66.4	75.4	54.4	64.9	92	35	57	58	76	75	.465	.481	5.66	1.48	6.3	6.6	6.4
July	29.10	29.63	28.72	66.9	67.2	78.5	53.4	66.0	90	38	59	59	75	76	.499	.499	2.88	1.07	4.3	5.1	5.1
August	29.09	29.37	28.89	63.5	64.5	74.8	54.8	64.8	89	43	59	60	85	86	.499	.517	6.50	1.60	6.4	5.4	6.3
September	29.19	29.51	28.51	53.7	56.0	68.0	43.9	56.0	78	30	48	50	81	81	.334	.360	1.74	.81	4.5	3.6	5.0
October	28.99	29.49	28.60	43.4	44.4	53.3	35.3	44.3	72	21	39	39	84	82	.237	.237	1.52	.33	7.2	6.0	6.8
November	29.09	29.50	28.48	32.0	34.0	38.5	27.0	32.8	63	11	29	30	87	85	.157	.164	3.43	.90	8.8	8.6	8.4
December	29.02	29.47	28.43	15.9	19.7	24.4	11.3	17.8	40	—11	10	14	76	79	.063	.077	1.13	.51	7.4	6.1	7.3
Year	29.06	29.79	28.15	39.8	42.8	50.5	31.8	41.2	92	—19	33.0	36.0	77.0	77.0	.237	.251	32.67	1.60	6.4	6.0	6.5

NORTH PLATTE, NEBR.

[Lat. 41° 8′ N.; long. 100° 45′ W.; gravity corr., — .01.]

January	27.16	27.46	26.76	10.1	19.7	28.8	6.0	17.4	56	—26	5	11	79	71	.049	.067	1.04	.36	3.5	3.9	4.5
February	27.10	27.38	26.60	18.9	18.6	36.4	15.7	26.0	51	— 5	14	21	81	74	.077	.108	.97	.74	4.0	5.0	5.3
March	27.08	27.47	26.40	23.4	37.8	44.6	21.7	33.2	74	— 2	18	28	79	68	.093	.150	.61	.24	5.6	6.0	6.1
April	26.99	27.49	26.14	38.0	50.0	56.5	35.0	45.8	86	24	33	38	84	68	.187	.228	4.30	1.31	6.2	6.2	6.2
May	27.04	27.34	26.69	45.2	55.6	62.0	42.2	52.1	89	34	40	42	83	64	.246	.266	3.70	.79	6.9	6.2	6.4
June	27.01	27.35	26.59	57.4	72.9	78.6	52.7	65.6	97	36	51	55	80	56	.373	.432	.60	.46	4.3	4.5	4.8
July	27.13	27.37	26.77	63.6	78.5	86.0	59.5	72.8	102	47	58	61	82	57	.481	.536	3.59	3.13	4.8	5.6	5.3
August	27.11	27.38	26.90	61.2	77.7	85.8	57.7	71.8	100	42	58	60	88	57	.481	.517	3.01	1.50	3.9	4.2	4.4
September	27.13	27.36	26.81	51.3	71.0	80.2	49.1	64.6	92	38	47	52	85	54	.322	.387	.56	.36	3.1	3.2	3.7
October	27.12	27.41	26.62	39.5	56.7	66.8	37.6	52.2	88	23	34	38	80	52	.195	.228	1.49	1.20	3.0	3.6	3.7
November	27.08	27.42	26.63	26.3	39.1	51.5	24.0	37.8	79	12	19	24	72	54	.098	.125	.08	.04	3.7	3.3	4.1
December	27.10	27.42	26.84	16.4	25.7	33.5	13.6	23.6	60	—10	12	18	81	72	.070	.093	.42	.16	5.2	5.3	5.8
Year	27.09	27.49	26.14	37.6	50.3	59.2	34.6	46.9	102	—26	32	37	81	62	.223	.261	20.37	3.13	4.5	4.8	5.0

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

NEW YORK CITY.

[H = 185 feet; h_t = 183 feet; h_r = 155 feet; h_a = 200 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	12.9	SW.	49	NW.	3	11	3	0	0	9	18	5	16	0	8	8	15	12	10	7	0	....	12	0	26	0	0
February	13.8	NE.	36	NW.	0	5	22	0	1	3	7	3	17	0	5	7	17	9	4	1	0	....	6	0	16	0	1
March	14.6	NW.	40	SW.	1	4	6	1	5	0	17	10	19	0	12	9	10	9	8	5	0	....	6	0	20	0	1
April	11.3	NW.	39	SW.	0	2	6	2	7	11	9	3	20	0	9	13	8	7	7	2	0	....	0	0	2	0	0
May	10.6	SE.	35	NW.	0	4	8	9	10	5	14	2	10	0	7	14	10	16	16	0	0	....	0	0	0	3	0
June	9.7	SW.	30	NW.	0	0	8	5	15	8	18	1	5	0	7	16	7	17	13	0	0	....	0	2	0	10	0
July	7.3	SW.	40	SW.	1	2	5	0	16	13	12	3	11	0	9	15	7	9	8	0	0	....	0	7	0	8	1
August	6.9	NW.	28	NE.	0	5	9	4	11	6	11	4	11	1	9	15	17	12	8	0	0	....	0	2	0	5	0
September	8.8	SE.	36	SE.	0	3	8	3	15	6	14	2	9	0	16	11	3	4	4	0	0	....	0	0	0	0	0
October	10.5	SW.	34	SW.	0	0	1	3	2	6	19	6	24	1	10	18	3	7	4	0	0	....	0	0	0	0	0
November	12.5	NW.	40	NW.	1	2	9	3	5	4	15	1	21	0	10	5	15	13	12	4	0	....	0	0	8	0	0
December	11.1	NW.	38	NW.	0	1	2	3	0	2	19	11	24	0	9	11	11	9	5	4	0	....	10	0	21	1	0
Year	10.8	NW.	49	NW.	6	39	87	33	87	73	173	51	187	2	111	142	113	124	90	23	0	....	34	11	93	27	3

NORFORK, VA.

[H = 57 feet; h_t = 88 feet; h_r = 80 feet; h_a = 93.3 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	10.0	N.	30	NW.	0	16	5	2	3	11	8	9	6	2	10	9	12	13	10	2	0	....	2	0	14	0	0
February	11.0	N.	42	NW.	1	15	12	2	3	6	10	3	5	2	10	7	12	12	12	1	0	....	0	0	8	0	1
March	10.4	NE.	38	NW.	0	13	15	6	2	3	3	9	10	1	10	9	12	14	13	3	0	....	0	0	11	1	0
April	10.3	NE.	44	NW.	1	8	12	2	5	11	10	5	7	0	13	7	10	12	11	0	0	....	0	0	0	5	0
May	9.9	S.	52	NW.	1	5	5	4	8	20	11	3	6	0	17	11	3	8	8	0	0	....	0	2	0	8	0
June	9.4	S.	34	NW.	0	2	4	2	8	22	20	0	2	0	14	12	4	14	11	0	0	....	0	3	0	8	0
July	7.3	S.	37	SW.	0	1	11	3	2	22	14	7	1	1	10	15	6	14	14	0	0	....	0	7	0	7	0
August	6.0	SW.	26	NW.	0	5	6	5	14	8	13	5	5	1	18	8	5	10	10	0	0	....	0	6	0	7	0
September	7.4	NE.	36	SE.	0	4	21	11	14	4	2	2	2	0	16	9	5	5	4	0	0	....	0	0	0	1	0
October	8.0	N.	32	NW.	0	16	11	2	5	5	8	5	10	0	21	6	4	3	3	0	0	....	0	0	0	1	0
November	10.4	NW.	42	NW.	2	12	6	0	4	11	10	2	14	1	12	8	10	11	7	2	0	....	0	0	3	2	0
December	8.0	N.	29	NW.	0	27	9	5	1	6	5	4	4	1	11	9	11	8	8	2	0	....	2	0	13	0	0
Year	9.0	SW.	52	NW.	5	124	117	44	69	129	114	54	72	9	162	110	94	124	111	10	0	....	4	18	49	40	1

NORTHFIELD, VT.

[H = 872 feet; h_t = 15 feet; h_a = 2 feet; h_a = 59 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	8.3	S.	40	N.	1	19	0	0	0	36	3	2	0	2	4	10	17	14	10	11	0	....	20	0	30	0	1
February	7.4	S.	32	S.	0	19	2	0	1	27	2	3	0	4	6	9	14	10	6	10	0	....	15	0	26	0	3
March	9.9	N.	40	W.	1	22	5	0	0	20	2	7	0	6	6	13	12	11	8	9	0	....	15	0	31	0	0
April	11.1	N.	48	SW.	1	24	7	0	0	20	1	6	2	0	8	11	11	6	5	1	0	....	0	0	21	1	4
May	9.6	S.	40	W.	1	12	5	1	0	24	10	6	2	2	3	11	17	18	13	3	0	....	0	0	3	1	1
June	8.6	S.	36	W.	0	3	14	1	0	30	6	4	0	2	6	10	14	17	12	0	0	....	0	1	0	6	0
July	7.4	SW.	45	W.	3	8	5	0	0	13	18	5	4	9	6	21	4	12	9	0	0	....	0	1	0	9	1
August	6.4	S.	48	W.	1	14	8	2	0	18	11	4	2	3	8	10	13	15	13	0	0	....	0	0	0	3	1
September	8.0	S.	33	W.	0	7	4	1	1	30	7	7	1	2	11	9	10	8	7	0	0	....	0	0	2	2	0
October	8.2	S.	42	N	1	18	3	2	1	23	7	4	3	1	3	12	16	18	10	0	0	....	0	0	8	1	2
November	9.1	N.	52	S.	2	21	5	0	1	21	6	3	1	2	2	4	24	17	10	7	0	....	9	0	22	0	0
December	8.1	N.	42	N.	1	22	7	0	0	22	5	3	1	2	3	13	15	13	5	11	0	....	21	0	30	0	0
Year	8.5	S.	52	S.	12	189	65	7	4	284	78	54	16	35	66	133	167	159	108	52	0	....	80	2	173	23	13

NORTH PLATTE, NEBR.

[H = 2,841 feet; h_t = 45 feet; h_a = 34 feet h_a = 52 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	7.1	W.	26	NW.	0	5	1	4	5	4	9	27	5	1	15	9	7	8	6	7	0	....	13	0	31	0	0
February	5.7	W.	27	NW.	0	3	3	4	6	6	4	20	11	1	8	12	9	5	3	4	0	....	8	0	28	0	0
March	10.6	NW.	49	SE.	3	5	7	9	8	5	2	12	13	1	8	11	12	7	6	5	0	....	8	0	26	0	0
April	12.8	NW.	50	NW.	4	4	6	9	14	2	3	6	16	0	6	14	10	14	11	7	0	....	0	0	12	3	0
May	12.5	NW.	51	NW.	2	11	8	6	7	2	3	7	17	1	4	16	11	15	13	1	1	....	0	0	0	4	0
June	10.5	SE.	60	S.	2	6	2	4	19	7	5	6	11	0	13	10	7	8	3	0	1	....	0	2	0	4	0
July	9.5	SE.	40	NW.	1	5	4	6	25	9	4	8	1	0	5	21	5	12	7	0	0	....	0	11	0	9	0
August	8.7	SE.	34	W.	0	3	3	11	25	7	4	2	5	2	11	16	4	8	6	0	0	....	0	12	0	4	0
September	7.5	SE.	32	SE.	0	5	2	6	15	8	5	11	7	1	16	13	1	5	3	0	1	....	0	3	0	2	0
October	8.6	W.	38	S.	0	6	3	4	11	6	7	17	8	0	16	9	6	5	3	0	0	....	0	0	9	1	0
November	10.3	W.	44	NW.	4	2	1	4	10	5	6	20	12	0	15	10	5	3	1	1	0	....	1	0	23	0	0
December	8.1	W.	36	NW.	0	8	1	2	8	8	8	17	10	0	8	12	11	5	4	5	0	....	16	0	31	0	0
Year	9.5	W.	60	S.	16	63	41	69	153	69	60	153	116	7	125	153	88	95	66	30	3	....	46	28	160	27	0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

OKLAHOMA CITY, OKLA.

[Lat. 35° 26′ N.; long. 97° 33′ W.; gravity corr., —.02.]

Month.	Pressure.			Temperature.									Moisture.								
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	28.88	29.15	28.38	25.5	43.0	43.5	22.4	33.0	69	—11	20	21	80	56	.103	.108	.93	.63	4.1	3.0	3.9
February	28.79	29.17	28.15	37.0	47.0	54.4	34.1	44.2	74	22	33	34	85	63	.187	.195	2.22	1.38	6.0	3.4	5.2
March	28.75	29.21	28.10	36.9	49.3	54.9	34.2	44.6	82	9	30	32	78	59	.164	.180	3.17	1.32	4.2	3.7	4.6
April	28.67	29.13	28.03	51.3	63.4	70.1	48.2	59.2	92	31	44	42	77	51	.287	.266	1.33	.41	5.0	3.6	5.0
May	28.60	28.93	28.28	60.7	69.8	75.4	57.1	66.2	91	41	56	58	86	69	.448	.481	11.90	3.77	6.5	4.8	6.0
June	28.67	28.88	28.48	69.2	80.1	85.2	65.0	75.1	93	49	64	65	84	60	.595	.616	2.48	.86	2.2	3.2	3.4
July	28.76	28.95	28.50	71.5	83.1	89.5	68.4	79.0	98	58	66	66	83	58	.638	.638	3.66	1.33	3.1	2.5	3.2
August	28.74	28.94	28.56	69.1	80.9	87.1	66.9	77.0	97	54	66	65	88	61	.638	.616	4.27	3.00	2.9	3.5	3.3
September	28.78	28.98	28.56	62.3	75.4	83.6	61.3	72.4	94	49	57	60	82	60	.465	.517	1.29	1.02	2.0	1.9	1.6
October	28.77	29.07	28.43	53.1	64.1	72.4	51.6	62.0	88	34	48	52	83	60	.334	.387	4.68	1.41	4.2	3.9	4.1
November	28.79	29.20	28.19	40.7	49.9	57.8	38.2	48.0	68	26	35	40	80	71	.203	.246	1.01	.37	4.4	3.1	3.9
December	28.80	29.20	28.36	31.1	35.3	43.3	27.9	35.6	71	2	29	31	91	84	.157	.172	5.35	2.78	6.0	4.5	5.5
Year	28.75	29.21	28.03	50.7	61.8	68.1	47.9	58.0	98	—11	46	47	83	63	.352	.368	42.29	3.77	4.2	3.4	4.1

OLYMPIA, WASH.

[Lat. 47° 03′ N.; long. 122° 53′ W.; gravity corr., .0.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	30.07	30.40	29.42	37.0	41.7	44.5	34.2	39.4	56	27	35	38	95	87	.203	.228	4.26	1.25	6.8	7.4	8.0
February	30.00	30.28	29.69	37.7	45.9	48.7	35.3	42.0	57	26	36	39	96	78	.211	.237	1.98	.65	6.2	6.2	7.6
March	29.94	30.31	29.46	42.1	53.0	55.7	40.1	47.9	74	31	40	42	94	67	.246	.266	2.53	.78	7.0	6.5	7.8
April	29.96	30.41	29.43	40.4	51.5	56.0	38.2	47.1	71	27	38	39	93	65	.228	.237	5.45	.85	7.4	7.6	7.7
May	29.96	30.44	29.59	46.1	63.1	66.6	44.2	55.4	91	33	43	44	90	55	.277	.287	2.22	.60	6.3	6.9	6.1
June	29.97	30.21	29.73	50.2	68.6	71.9	47.8	59.8	92	39	47	48	88	50	.322	.334	1.17	.32	6.2	4.6	5.8
July	30.02	30.40	29.80	51.0	71.4	73.9	48.8	61.4	86	41	48	50	89	48	.334	.360	.88	.36	6.2	4.0	5.8
August	29.99	30.31	29.74	50.2	74.5	77.3	49.0	63.2	87	43	48	54	94	51	.334	.417	.68	.62	4.6	3.7	4.5
September	29.93	30.23	29.32	51.4	67.5	70.4	49.1	59.8	82	40	49	53	92	62	.347	.402	3.49	2.08	4.0	5.4	5.3
October	29.99	30.33	29.62	48.3	54.7	58.3	44.8	51.6	77	34	46	48	92	79	.310	.334	3.25	1.14	6.3	5.9	6.6
November	29.88	30.43	29.00	43.6	47.6	51.6	40.3	46.0	68	32	41	43	91	84	.256	.277	12.74	3.20	6.0	8.5	7.5
December	30.06	30.50	29.18	37.5	40.1	42.5	34.5	38.5	52	24	36	36	94	88	.211	211	10.76	3.68	7.2	7.1	7.2
Year	29.98	30.50	29.00	44.6	56.6	59.8	42.2	51.0	92	24	42	44	92	68	.273	.299	49.41	3.68	6.2	6.2	6.7

OMAHA, NEBR.

[Lat. 41° 16′ N.; long. 95° 56′ W.; gravity corr., —.01.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	29.00	29.37	28.48	13.5	20.9	26.5	9.9	18.2	57	—26	8	14	79	74	.057	.077	.42	.17	4.6	2.0	3.8
February	28.93	29.24	28.26	25.1	31.5	36.3	22.9	29.6	54	3	21	27	84	83	.108	.143	.54	.24	6.7	6.9	7.3
March	28.89	29.38	28.25	28.1	38.1	42.1	26.4	34.2	73	7	22	30	78	75	.113	.164	2.74	1.07	6.2	5.8	6.4
April	28.79	29.22	27.91	42.2	52.2	56.3	39.9	48.1	81	26	35	40	76	67	.203	.246	4.82	1.38	6.9	6.5	6.4
May	28.74	29.16	28.19	50.8	57.5	61.6	46.9	54.2	78	37	44	48	80	72	.237	.334	8.43	2.80	7.1	7.0	6.7
June	28.75	29.10	28.46	65.0	76.5	81.6	61.1	71.4	97	46	57	60	77	58	.465	.517	1.51	.85	5.3	3.4	4.0
July	28.87	29.21	28.52	69.9	89.2	85.8	66.1	76.0	100	54	62	62	76	56	.555	.555	3.64	1.26	4.8	3.7	4.0
August	28.86	29.11	28.55	66.7	77.8	82.7	64.0	73.4	100	49	60	63	81	62	.517	.575	2.50	.83	4.0	3.4	5.1
September	28.88	29.14	28.53	59.2	72.5	78.9	57.5	68.2	96	42	52	56	78	58	.387	.448	1.63	.76	2.9	3.8	3.2
October	28.89	29.23	28.54	48.7	60.2	67.9	46.9	57.4	87	28	40	43	72	56	.246	.277	1.28	.66	3.9	2.0	3.0
November	28.88	29.30	28.44	31.2	40.3	46.6	29.4	38.0	68	15	24	24	72	53	.125	.125	.14	.06	5.3	2.1	4.0
December	28.94	29.37	28.48	18.1	23.7	28.6	14.6	21.6	59	—14	13	18	77	78	.074	.093	1.79	1.30	5.5	5.3	5.7
Year	28.87	29.38	27.91	43.2	52.6	57.9	40.5	49.2	100	—26	36	40	78	66	.261	.296	29.44	2.80	5.3	4.3	5.0

OSWEGO, N. Y.

[Lat. 43° 29′ N.; long. 76° 35′ W.; gravity corr., .0.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	29.64	30.25	28.93	20.0	23.5	27.8	15.4	21.6	50	— 3	16	18	85	82	.085	.093	2.10	.73	9.2	9.4	8.7
February	29.76	30.33	28.89	23.1	25.9	30.6	19.8	25.2	42	1	19	22	86	86	.098	.113	2.29	.56	7.6	7.3	7.8
March	29.63	30.09	28.98	25.6	28.4	31.6	22.0	26.8	48	9	20	21	80	76	.103	.108	1.74	.70	7.0	5.7	6.3
April	29.68	30.20	29.29	40.2	43.3	47.6	35.9	41.8	76	24	30	31	67	65	.164	.172	.88	.28	5.3	5.3	5.1
May	29.59	29.99	29.21	50.2	51.5	57.9	43.9	50.9	86	38	44	43	80	74	.237	.277	4.12	.63	7.0	7.8	6.9
June	29.58	29.83	29.17	64.7	65.4	72.4	58.0	65.2	87	50	58	57	79	75	.481	.465	6.95	2.56	5.8	6.5	5.6
July	29.67	30.20	29.26	67.7	69.5	75.8	60.8	68.3	91	51	59	58	73	68	.499	.481	4.00	1.40	3.8	6.3	4.2
August	29.63	29.85	29.36	67.1	68.9	75.5	61.4	68.4	91	52	60	60	79	74	.517	.517	4.38	1.18	6.1	6.1	5.0
September	29.74	30.05	29.26	59.1	61.9	69.1	53.5	61.3	82	44	51	52	74	71	.373	.387	1.52	.42	4.3	4.2	3.8
October	29.61	30.04	29.00	47.8	50.4	54.8	44.1	49.4	71	36	40	40	76	68	.246	.246	2.00	.75	7.5	6.8	6.6
November	29.67	30.06	29.19	35.5	36.6	40.7	31.5	36.1	60	19	30	30	80	77	.164	.164	3.30	.87	9.0	8.3	9.1
December	29.67	30.12	29.20	23.9	26.5	29.6	20.7	25.2	45	— 6	20	19	83	73	.103	.098	1.53	.44	9.1	8.5	9.0
Year	29.66	30.33	28.89	43.7	46.0	51.1	38.9	45.0	91	— 6	37	38	78	74	.260	.260	34.81	2.56	6.8	6.8	6.5

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

OKLAHOMA CITY, OKLA.

[H = 1,239 feet; h_t = 54 feet; h_r = 45 feet; h_a = 53 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	9.5	N.	34	N.	0	17	7	0	8	14	8	2	5	1	16	8	7	2	2	2	0	....	7	0	25	0	0
February	8.4	N.	30	NW.	0	17	9	1	11	7	3	4	4	2	10	9	10	10	4	1	0	....	0	0	14	1	0
March	10.7	S.	42	S.	1	11	12	1	8	12	6	4	6	2	15	5	11	11	9	2	1	....	3	0	13	2	0
April	11.5	SE.	36	N.	0	9	8	2	18	10	6	1	5	1	12	8	10	12	7	0	1	....	0	1	1	4	0
May	11.2	SE.	36	NE.	0	5	6	3	22	10	5	1	9	1	7	12	12	14	9	0	0	....	0	1	0	6	0
June	8.4	S.	30	NW.	0	4	4	4	18	23	4	0	2	1	17	11	2	6	5	0	1	....	0	4	0	5	0
July	7.9	S.	24	S	0	4	5	6	22	22	1	1	1	0	17	12	2	9	6	0	0	....	0	18	0	4	0
August	6.2	S.	54	NE.	1	3	6	8	17	18	2	0	2	6	17	12	2	9	8	0	0	....	0	9	0	0	0
September	8.9	SE.	26	NW.	0	7	2	3	29	13	2	1	1	2	25	5	0	3	2	0	0	....	0	3	0	1	0
October	8.3	SE.	32	N.	0	14	8	3	21	3	4	2	5	2	17	5	9	13	11	0	0	....	0	0	0	0	0
November	8.9	N.	36	NW.	0	14	2	4	12	9	6	2	10	1	16	8	6	7	6	1	0	....	0	0	4	0	0
December	8.9	N.	36	N.	0	23	4	4	9	7	6	0	9	0	10	8	13	14	7	5	0	....	4	0	22	1	0
Year	9.1	SE.	54	NE.	2	128	73	39	195	148	53	18	59	19	179	103	84	110	76	11	3	....	14	36	79	24	0

OLYMPIA, WASH.

[H = 52 feet; h_t = 56; h_r = 51 feet; h_a = 67 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	3.0	S.	20	S.	0	8	1	0	0	23	10	4	0	16	3	6	22	16	12	0	0	....	0	0	8	0	1
February	2.7	S.	20	W.	0	10	5	1	3	19	9	2	1	8	2	9	18	14	8	0	0	....	0	0	10	0	0
March	3.4	S.	25	W.	0	10	0	5	0	19	9	15	2	2	1	13	17	16	12	0	0	....	0	0	4	0	0
April	4.2	S.	26	SE.	0	5	2	1	2	17	10	13	3	7	1	9	20	23	23	0	0	....	0	0	3	0	0
May	2.9	Calm, S.	16	SW.	0	5	7	0	0	12	11	3	6	18	8	10	13	13	10	0	0	....	0	1	0	0	0
June	3.0	Calm, SW.	21	SW.	0	1	2	1	1	8	16	6	9	16	8	7	15	10	7	0	1	....	0	3	0	0	0
July	2.8	Calm, SW.	18	SW.	0	6	1	1	0	5	13	5	9	22	9	10	12	6	5	0	0	....	0	0	0	0	0
August	2.1	Calm, NW.	15	SW.	0	4	2	0	0	4	10	3	15	24	12	15	4	4	3	0	0	....	0	0	0	0	0
September	2.3	Calm, S.	18	SW.	0	3	1	0	1	14	5	4	7	25	13	8	9	8	6	0	....	....	0	0	0	1	0
October	2.4	Calm, S.	15	SW.	0	9	7	1	1	18	5	3	3	15	5	11	15	11	10	0	0	....	0	0	0	0	0
November	5.2	S.	29	SE.	0	3	0	0	5	31	10	1	3	7	1	14	15	23	20	0	1	....	0	0	0	0	0
December	3.8	S.	26	SW.	0	7	1	4	4	25	4	3	3	11	2	15	14	22	18	3	0	....	2	0	8	0	0
Year	3.2	S.	29	SW.	0	71	29	14	17	195	112	62	61	171	65	127	174	166	134	3	2	....	2	4	33	1	1

OMAHA, NEBR.

[H = 1,113 feet; h_t = 88 feet; h_r = 76 feet; h_a = 90 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	7.7	NW.	32	NW.	0	11	3	1	3	7	12	4	20	1	16	10	5	5	4	5	0	....	15	0	29	0	0
February	8.0	N.	28	NW.	0	18	5	2	11	7	1	2	10	2	4	9	16	8	5	5	0	....	10	0	23	0	0
March	10.2	NE.	42	NW.	2	14	13	4	5	10	1	6	9	0	7	8	16	11	7	6	0	....	11	0	18	0	0
April	10.7	N.	42	S.	1	13	4	9	11	10	1	6	6	0	8	8	14	18	13	4	0	....	0	0	5	4	0
May	10.5	N.	38	N.	0	24	7	5	4	6	1	3	10	2	7	9	15	18	16	0	0	....	0	0	0	3	0
June	8.4	N.	28	N.	0	17	9	3	9	10	7	2	2	1	14	14	2	7	5	0	0	....	0	5	0	4	0
July	6.6	SE.	42	NW.	1	10	6	6	21	12	5	0	2	0	13	15	3	10	7	0	0	....	0	11	0	5	1
August	5.8	S.	30	NE.	0	12	2	11	10	21	3	3	0	0	8	17	6	7	6	0	0	....	0	5	0	4	0
September	6.8	S.	24	S.	0	7	1	2	7	25	3	4	10	1	19	9	2	7	4	0	0	....	0	2	0	5	0
October	6.3	S.	30	NW.	0	13	2	1	6	21	6	4	6	3	19	8	4	5	5	0	0	....	0	0	4	0	0
November	8.8	NW.	33	NW.	0	5	2	5	7	13	4	4	20	0	14	11	5	3	2	0	0	....	3	0	20	0	0
December	6.0	NW.	32	NW.	0	15	0	0	9	10	10	4	12	2	11	8	12	10	5	9	0	....	18	0	27	0	0
Year	8.0	N.	42	NW.	4	159	54	49	103	152	54	42	107	12	140	126	100	109	79	29	0	....	57	23	126	25	1

OSWEGO, N. Y.

[H = 335 feet; h_t = 76 feet; h_r = 83 feet; h_a = 87 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	12.8	S.	37	NW.	0	8	2	1	11	17	12	5	6	0	1	4	26	18	8	15	0	....	21	0	30	0	2
February	12.2	SE.	36	NW.	0	5	6	3	24	2	6	2	10	0	3	6	20	18	13	14	1	....	12	0	26	1	4
March	14.2	NW.	50	NW.	2	9	5	3	7	4	4	13	17	0	8	6	17	11	8	8	0	....	14	0	27	0	5
April	12.8	W.	33	W.	0	5	2	0	7	12	2	21	11	0	11	9	10	9	6	1	0	....	1	0	10	2	5
May	10.4	SE.	36	SE.	0	7	2	2	16	6	7	15	7	0	6	7	18	21	18	0	1	....	0	0	0	1	3
June	9.0	S.	26	SE.	0	6	5	1	8	15	8	14	3	0	7	14	9	18	15	0	1	....	0	0	0	8	4
July	7.7	W.	36	NW.	0	4	1	0	6	10	14	20	6	1	15	11	5	7	7	0	0	....	0	1	0	5	10
August	8.0	S.	26	N.	0	10	6	1	9	19	5	9	3	0	10	11	10	13	11	0	0	....	0	1	0	4	0
September	10.5	SE.	51	NW.	1	1	3	3	18	14	9	7	5	0	15	9	6	12	10	0	0	....	0	0	0	3	5
October	10.9	S.	34	N.	0	8	2	0	1	20	9	7	15	0	8	5	18	10	7	0	0	....	0	0	0	1	0
November	13.4	S.	40	W.	1	9	4	2	13	14	3	5	10	0	0	3	27	18	11	9	0	....	6	0	16	0	0
December	12.5	NW.	40	NW.	1	4	2	1	13	7	10	9	16	0	0	2	29	16	8	12	1	....	13	0	28	1	1
Year	11.2	S.	....	.....	5	76	40	17	133	140	89	127	109	1	84	87	195	171	122	59	4	....	67	2	137	26	39

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

PALESTINE, TEX.

[Lat. 31° 45′ N.; long. 95° 40 W.; gravity corr., —.03.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.63	29.94	29.06	36.4	47.8	55.4	34.0	44.7	74	14	31	32	82	55	.172	.180	3.93	1.40	4.2	2.8	4.5
February	29.55	29.88	29.14	50.5	60.5	67.1	48.9	58.0	80	34	46	43	86	55	.310	.277	5.05	3.17	4.5	4.9	4.8
March	29.53	29.95	29.15	46.6	57.9	63.9	44.5	54.2	84	22	42	43	85	60	.266	.277	4.70	1.70	5.9	4.5	5.0
April	29.43	29.76	29.04	60.0	72.0	77.2	58.1	67.6	86	44	55	51	85	52	.432	.373	4.80	1.58	5.4	3.7	5.4
May	29.41	29.62	29.21	66.6	73.8	81.0	63.6	72.3	91	43	62	54	86	51	.555	.417	4.18	2.21	6.3	4.1	5.3
June	29.42	29.57	29.26	71.7	81.6	87.9	68.3	78.1	95	52	67	56	87	45	.660	.448	9.77	4.66	5.5	3.7	4.5
July	29.52	29.66	29.36	75.0	84.5	92.1	72.2	82.2	97	67	70	57	84	41	.732	.465	1.60	1.26	4.1	3.9	5.9
August	29.48	29.57	29.36	72.6	83.1	90.3	70.7	80.5	94	65	69	64	89	53	.707	.595	3.41	2.02	5.1	5.9	5.9
September	29.52	29.69	29.36	65.3	79.7	86.5	63.8	75.2	92	57	60	59	85	51	.517	.499	.98	.98	1.1	1.3	3.4
October	29.50	29.74	29.30	61.1	73.1	79.1	59.4	69.2	89	40	56	55	86	55	.448	.432	5.74	3.82	4.7	4.6	5.8
November	29.56	29.94	29.19	51.9	61.9	69.0	50.5	59.8	82	34	48	47	88	59	.334	.322	5.99	2.77	5.7	4.2	6.0
December	29.56	29.95	29.21	44.1	50.1	55.5	41.5	48.5	80	15	42	41	90	74	.266	.256	11.04	3.24	7.6	6.0	6.9
Year	29.51	29.95	29.04	58.5	68.8	75.4	56.3	65.9	97	14	54	50	86	54	.456	.378	61.19	4.66	5.0	4.1	5.3

PARKERSBURG, W. VA.

[Lat. 39° 16′ N.; long. 81° 36′ W.; gravity corr., —.01.]

January	29.43	29.89	28.78	25.2	29.9	34.2	20.7	27.4	60	2	19	22	77	72	.098	.113	4.91	1.40	6.7	5.6	6.5
February	29.44	30.02	28.80	33.0	40.4	46.6	29.1	37.8	64	6	27	32	80	71	.143	.180	3.17	.71	6.4	5.4	5.7
March	29.39	29.83	28.73	33.2	40.1	45.9	28.8	37.4	66	16	28	32	81	73	.150	.180	2.80	.70	7.4	5.2	6.6
April	29.42	29.74	29.06	47.1	54.6	61.5	41.2	51.4	81	22	41	47	81	76	.256	.322	3.72	1.23	5.5	5.7	6.0
May	29.32	29.65	28.94	60.0	64.5	72.7	52.1	62.4	90	36	53	57	78	77	.402	.465	4.91	1.82	4.7	6.1	6.0
June	29.34	29.50	29.03	72.0	75.3	85.6	64.7	75.2	96	57	64	64	78	70	.595	.595	4.55	1.02	4.7	4.8	4.8
July	29.45	29.82	29.19	70.4	75.6	84.5	62.7	73.6	97	49	62	64	76	69	.555	.535	3.29	1.68	4.1	4.6	4.8
August	29.38	29.52	29.19	68.1	74.8	84.6	62.0	73.3	92	52	62	64	81	71	.555	.595	2.13	.95	4.8	3.9	4.3
September	29.48	29.68	28.84	58.8	67.6	78.1	54.3	66.2	87	40	55	58	80	71	.432	.481	2.85	.90	2.7	1.7	3.3
October	29.44	29.75	29.02	45.2	54.9	64.3	41.6	53.0	82	28	40	46	84	72	.246	.310	.74	.34	3.7	4.0	4.1
November	29.44	29.78	28.81	37.2	41.6	47.6	33.4	40.5	74	17	32	35	80	76	.189	.203	2.55	.82	6.5	6.0	6.2
December	29.47	29.95	28.91	26.8	32.7	38.0	23.4	30.7	71	0	20	25	75	73	.103	.130	2.53	.87	9.1	5.5	7.0
Year	29.42	30.02	28.73	48.1	54.3	62.0	42.8	52.4	97	0	42	46	80	73	.310	.347	38.15	1.82	5.5	4.9	5.4

PENSACOLA, FLA.

[Lat. 30° 25′ N.; long. 87° 13′ W.; gravity corr., —.04.]

January	30.11	30.35	29.54	43.9	49.6	56.9	40.5	48.7	70	26	39	42	84	77	.237	.266	8.72	2.52	3.8	3.6	4.4
February	30.06	30.39	29.76	53.6	59.9	65.9	51.9	58.9	75	40	49	53	87	79	.347	.402	.53	.49	3.9	3.8	4.7
March	30.04	30.36	29.56	52.4	57.6	64.6	49.0	56.8	74	27	47	50	84	78	.322	.360	2.47	1.14	3.5	3.0	3.8
April	30.05	30.19	29.83	64.9	67.3	72.6	61.5	67.0	80	46	59	61	83	81	.499	.536	.42	.40	5.2	3.7	5.0
May	29.99	30.21	29.77	72.4	74.2	79.6	67.1	73.4	85	52	66	67	80	78	.638	.660	.19	.12	3.6	2.1	3.0
June	29.95	30.08	29.77	78.4	80.0	85.9	72.6	79.2	94	68	71	72	80	77	.757	.783	3.55	1.17	3.4	4.8	4.3
July	30.05	30.21	29.96	79.2	79.4	85.0	73.8	79.4	92	67	74	73	85	82	.838	.810	11.48	4.67	5.0	5.2	6.0
August	29.96	30.10	29.84	78.3	80.1	86.5	73.8	80.2	91	68	74	74	88	82	.838	.838	8.74	2.93	5.9	5.8	5.8
September	29.98	30.12	29.56	73.3	77.8	84.1	69.4	76.8	92	60	66	68	79	72	.638	.684	1.72	1.30	3.1	3.2	3.5
October	30.00	30.26	29.80	65.3	70.8	77.1	62.2	69.6	84	42	59	61	81	73	.499	.536	1.28	1.17	2.3	2.6	3.1
November	30.10	30.30	29.85	55.8	60.8	68.8	51.8	60.3	79	37	50	53	83	76	.360	.402	2.94	1.63	3.3	1.9	3.8
December	30.06	30.36	29.60	51.3	55.4	61.1	46.4	53.8	75	23	48	51	90	86	.334	.373	1.98	.78	6.5	4.9	6.2
Year	30.03	30.39	29.54	64.1	67.7	74.0	60.0	67.0	94	23	58	60	84	78	.526	.554	44.02	4.67	4.1	3.7	4.5

PHILADELPHIA, PA.

[Lat. 39° 57′ N.; long. 75° 9′ W.; gravity corr., —.01.]

January	29.95	30.52	29.18	28.6	32.2	38.1	24.8	31.4	62	11	22	22	77	68	.113	.113	4.48	1.44	6.0	4.7	6.2
February	30.03	30.58	29.24	32.2	35.8	41.1	29.3	35.2	54	14	25	25	75	67	.130	.130	.98	.20	6.7	4.9	6.2
March	29.90	30.38	29.21	32.5	37.2	42.5	29.1	35.8	59	19	21	25	66	64	.108	.130	4.32	1.05	5.7	3.8	5.4
April	29.97	30.41	29.52	48.2	52.1	58.8	43.0	50.9	80	32	36	36	65	58	.211	.211	2.03	.50	5.1	5.0	5.9
May	29.88	30.23	29.48	57.9	62.3	71.1	52.7	61.9	84	44	48	52	71	71	.334	.387	5.12	1.09	6.2	6.2	6.3
June	29.88	30.19	29.59	71.9	74.4	83.1	65.9	74.5	92	56	64	64	76	70	.595	.595	1.98	.63	5.9	5.4	5.6
July	29.95	30.39	29.63	73.5	76.1	85.6	67.6	76.6	101	59	62	64	68	68	.555	.595	2.97	1.38	4.5	5.6	5.0
August	29.90	30.10	29.64	72.3	75.8	83.8	67.5	75.6	96	61	64	64	77	69	.595	.595	2.74	1.28	4.7	4.1	5.1
September	30.06	30.30	29.59	62.4	66.6	75.5	58.0	66.8	86	51	55	57	77	72	.432	.465	2.06	1.09	4.0	2.6	3.7
October	29.91	30.33	29.47	51.9	55.7	65.0	47.0	56.4	79	36	43	42	72	69	.277	.266	.30	.22	4.1	2.2	3.6
November	29.96	30.34	29.34	41.4	43.5	50.0	37.3	43.6	68	24	35	34	76	69	.203	.195	5.71	2.41	5.6	5.0	5.9
December	29.96	30.49	29.45	29.9	33.4	38.0	27.5	32.8	64	19	23	25	76	71	.119	.130	2.09	1.10	6.3	5.3	6.1
Year	29.95	30.58	29.18	50.2	53.8	61.0	45.9	53.5	101	10	42	42	73	67	.306	.318	34.78	2.41	5.4	4.6	5.4

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

PALESTINE, TEX.

[H=511 feet; h_t = 42 feet; h_r = 43 feet; h_a = 51 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	6.9	N.	28	NW.	0	19	9	5	7	3	3	11	4	1	15	7	9	9	9	3	0	....	2	0	12	1	0
February	6.5	NE.	29	SW.	0	14	15	2	2	9	3	5	8	0	12	8	9	9	8	0	0	....	0	0	0	4	0
March	8.1	S.	27	NW.	0	12	13	0	1	15	6	6	9	0	11	9	11	7	7	1	0	....	0	0	4	2	0
April	8.5	S.	29	S.	0	3	13	8	7	16	3	4	6	0	9	10	11	10	9	0	0	....	0	0	0	7	0
May	8.3	S.	25	SE.	0	6	3	1	8	31	4	3	6	0	8	15	8	9	9	0	0	....	0	1	0	3	0
June	5.1	W.	18	W.	0	3	2	3	12	12	7	13	8	0	13	10	7	7	7	0	0	....	0	12	0	3	0
July	5.3	S.	18	S.	0	1	6	3	3	19	14	15	1	0	2	22	7	5	4	0	0	....	0	24	0	2	0
August	4.3	S.	22	NE.	0	4	10	2	2	20	11	9	3	1	6	13	12	6	6	0	0	....	0	19	0	5	0
September	4.7	NE.	18	N.	0	10	25	7	10	6	0	2	0	0	17	10	3	2	2	0	0	....	0	5	0	1	0
October	5.6	N.	25	N.	0	14	10	4	12	10	5	4	3	0	8	11	12	9	9	0	0	....	0	0	0	2	0
November	6.8	S.	27	NW.	0	9	13	2	2	14	8	6	6	0	9	8	13	8	8	0	0	....	0	0	0	3	0
December	6.6	N.	25	N.	0	16	7	7	4	7	3	7	10	1	8	6	17	14	10	0	0	....	1	0	7	3	0
Year	6.4	S.	29	NW.	0	111	126	44	70	162	67	85	64	3	118	129	119	95	88	4	0	....	3	61	23	36	0

PARKERSBURG, W. VA.

[H=638 feet; h_a = 77 feet; h_r = 69 feet; h_a = 84 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	7.0	SW.	28	W.	0	12	1	0	6	8	13	8	13	1	7	8	16	14	14	12	0	....	11	0	28	0	0
February	6.9	N.	36	NW.	0	11	8	1	10	10	5	4	9	0	10	8	11	14	11	4	0	....	1	0	14	0	1
March	7.4	NW.	38	W.	0	6	13	0	7	4	7	7	18	0	4	14	13	17	12	7	0	....	5	0	23	1	0
April	7.3	NW.	35	NW.	0	4	9	4	11	9	2	6	15	0	8	11	11	13	12	1	0	....	0	0	6	2	0
May	6.6	S.	26	NW.	0	7	3	3	6	17	8	8	10	0	8	11	12	16	12	0	2	....	0	0	0	6	0
June	4.7	SE.	32	NW.	0	4	7	1	13	8	10	10	3	4	11	13	6	16	12	0	0	....	0	6	0	14	0
July	4.1	SE.	34	NW.	0	3	7	6	17	7	5	4	9	4	10	19	2	11	7	0	0	....	0	9	0	9	0
August	4.1	SE.	34	NW.	0	7	4	4	13	7	9	7	11	0	12	18	1	11	8	0	0	....	0	5	0	5	0
September	3.9	SE.	25	NW.	0	6	9	0	30	2	3	3	4	3	18	9	3	8	8	0	0	....	0	0	0	1	0
October	4.8	SE.	34	NW.	0	6	1	1	15	8	2	1	14	14	14	10	7	8	5	0	0	....	0	0	5	1	0
November	6.4	SE.	30	NW.	0	4	1	2	15	4	9	10	11	4	8	10	12	17	15	5	0	....	3	0	14	0	0
December	4.7	Calm W.	25	SW.	0	3	3	2	3	11	6	13	6	15	2	15	14	16	11	9	1	....	11	0	19	2	0
Year	5.7	SE.	38	W.	0	73	66	24	146	95	79	81	123	45	112	146	108	161	127	38	3	....	31	20	109	41	1

PENSACOLA, FLA.

[H=56 feet; h_t = 78 feet; h_r = 79 feet; h_a = 90 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	11.3	NW.	44	SW.	2	12	11	5	3	2	6	8	15	0	17	4	10	10	9	1	0	....	0	0	6	4	0
February	9.5	NE.	30	NW.	0	9	15	6	5	6	4	5	7	1	13	7	9	3	1	0	0	....	0	0	0	0	0
March	10.2	NW.	37	NW.	0	8	1	6	12	6	6	7	14	2	18	3	10	8	6	0	0	....	0	0	1	2	0
April	12.2	SE.	41	S.	1	3	6	7	23	11	4	2	4	0	8	15	7	3	1	0	0	....	0	0	0	1	0
May	9.8	S.	48	SW.	1	2	4	3	15	18	12	3	5	0	18	11	2	3	2	0	0	....	0	0	0	3	0
June	8.8	SW.	40	S.	1	6	3	3	8	15	15	5	5	0	11	15	4	12	9	0	0	....	0	4	0	10	0
July	7.9	SW.	32	SE.	0	1	2	4	8	10	17	8	10	2	7	18	6	17	13	0	0	....	0	3	0	11	0
August	7.0	SW.	52	S.	1	9	6	2	9	6	10	8	8	4	7	15	9	14	12	0	0	....	0	1	0	13	0
September	9.4	E.	45	S.	1	13	9	16	6	3	4	2	7	0	18	8	4	6	4	0	0	....	0	1	0	0	0
October	9.2	E.	45	E.	1	5	11	15	7	5	2	5	10	2	19	10	2	5	2	0	0	....	0	0	0	1	0
November	8.6	N.	32	S.	0	15	4	8	6	6	4	4	13	0	13	12	5	9	8	0	0	....	0	0	0	2	0
December	10.0	N.	50	SW.	3	17	5	6	4	9	7	4	9	1	7	11	13	15	10	0	0	....	0	0	5	1	0
Year	9.5	NW.	52	S.	11	100	77	81	106	97	91	61	107	12	156	129	81	105	77	1	0	....	0	9	12	48	0

PHILADELPHIA, PA.

[H=117 feet; h_t = 168 feet; h_r = 166 feet; h_a = 184 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	11.3	NW.	45	NW.	3	4	10	3	4	5	10	5	21	0	10	5	16	13	10	7	0	....	9	0	23	0	0
February	12.9	NE.	44	NW.	1	3	22	4	1	1	4	6	17	0	8	9	12	9	6	0	0	....	5	0	13	0	1
March	13.2	NW.	36	NE.	0	5	9	5	3	1	4	1	34	0	11	8	12	15	11	12	0	....	5	0	17	0	0
April	10.4	NW.	31	NW.	0	5	11	2	1	6	14	3	17	1	9	8	13	12	7	1	0	....	0	0	1	0	0
May	8.9	NW.	38	SW.	0	3	5	5	6	11	11	5	15	1	6	12	13	14	14	0	0	....	0	0	0	6	0
June	9.6	SW.	32	NW.	0	0	8	6	7	6	19	8	6	0	10	9	11	10	9	0	0	....	0	2	0	7	0
July	8.6	NW.	36	SW.	0	2	7	2	6	8	14	6	17	0	12	10	9	9	7	0	0	....	0	8	0	9	2
August	8.0	NW.	24	NE.	0	1	12	4	9	6	13	4	13	0	11	11	9	9	8	0	0	....	0	3	0	5	1
September	8.8	SE.	41	N.	1	0	8	11	14	1	8	6	12	0	16	9	5	6	5	0	0	....	0	0	0	2	0
October	9.7	NW.	31	N.	0	2	6	1	2	5	15	7	24	0	16	14	1	3	3	0	0	....	0	0	0	0	0
November	10.7	NW.	37	NW.	0	3	9	1	5	6	6	7	20	3	9	8	13	11	9	1	0	....	0	0	6	1	0
December	9.9	NW.	36	NW.	0	2	5	0	0	2	11	9	32	1	6	12	13	10	6	5	0	....	9	0	19	0	0
Year	10.2	NW.	45	NW.	5	30	112	44	58	58	129	67	228	6	124	115	127	121	95	26	0	....	28	13	79	30	4

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

PIKES PEAK, COLO.

[Lat. 38° 50′ N.; long. 105° 2′ W.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
June	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
August	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
September *a*	18.04	18.16	17.80	30.9	36.2	43.2	29.5	36.4	49	19	14	19	48	48	.077	.098	.01	.01	1.0	3.5	3.1
October	17.82	18.12	17.30	18.9	21.4	26.2	13.5	19.8	47	—16	7	13	60	71	.054	.074	? 6.05	3.22	3.0	4.1	4.9
November	17.65	17.94	17.21	8.7	11.1	16.0	4.6	10.3	28	—20	—4	0	62	64	.031	.038	? 5.10	2.98	4.8	3.6	4.8
December	17.50	17.76	17.22	1.2	1.2	5.9	—3.6	1.2	21	—19	—9	—5	65	79	.023	.029	?20.51	7.39	2.6	3.6	5.1
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

PIERRE, S. DAK.

[Lat. 44° 24′ N.; long. 100° 17′ W.; gravity corr., 0.]

January	28.55	29.07	28.10	10.6	19.9	27.8	6.8	17.3	54	—30	6	12	81	74	.052	.070	0.10	0.03	3.2	4.2	4.5
February	28.51	28.84	27.89	13.3	20.8	28.2	8.3	18.2	54	—13	10	17	88	86	.062	.089	1.15	0.57	6.2	5.9	6.4
March	28.48	29.07	27.85	23.2	35.5	40.9	20.8	30.8	74	— 5	20	26	87	72	.103	.137	0.68	0.22	7.1	6.9	6.5
April	28.38	28.93	27.63	38.3	47.9	51.5	34.8	43.2	69	22	34	36	85	68	.195	.211	3.86	0.84	7.1	7.2	6.8
May	28.42	28.82	27.81	44.9	54.8	58.4	40.3	49.4	87	32	39	42	83	65	.237	.266	4.65	2.15	6.5	6.5	6.9
June	28.34	28.78	27.76	58.8	71.6	75.1	54.4	64.8	90	40	53	55	81	58	.402	.432	3.79	1.14	5.4	5.6	4.9
July	28.41	28.69	27.94	67.2	80.7	85.5	63.1	74.3	97	52	60	62	77	54	.517	.555	1.43	0.46	4.8	4.2	3.6
August	28.39	28.70	28.08	64.9	81.0	86.3	61.6	74.0	106	42	58	56	80	46	.481	.486	0.63	0.30	4.9	3.5	4.1
September	28.41	28.74	28.02	54.3	72.3	80.4	51.3	65.8	97	39	47	49	79	47	.322	.347	1.32	0.91	3.9	3.6	3.6
October	28.44	28.82	27.88	42.8	58.1	67.8	40.4	54.1	98	21	36	40	79	54	.211	.246	0.56	0.34	2.8	2.6	2.9
November	28.41	28.88	27.83	24.4	33.3	42.7	20.8	31.8	78	— 4	18	22	76	65	.093	.113	0.25	0.16	5.0	4.2	4.2
December	28.50	29.03	28.15	11.5	19.0	26.5	8.0	17.2	51	—13	9	15	89	84	.060	.081	0.39	0.20	6.4	4.6	5.5
Year	28.44	29.07	27.63	37.8	49.6	55.9	34.2	45.1	106	—30	32	36	82	64	.228	.253	18.81	2.15	5.3	4.9	5.0

PITTSBURG, PA.

[Lat. 40° 32′ N.; long. 80° 2′ W.; gravity corr., —.01.]

January	29.18	29.67	28.45	26.4	29.2	34.1	22.0	28.0	60	2	20	20	78	70	.103	.103	3.29	1.32	7.4	6.3	7.4
February	29.23	29.80	28.49	33.3	38.6	43.3	29.0	36.2	62	12	26	28	78	67	.137	.150	1.85	0.48	7.0	6.4	7.0
March	29.16	29.63	28.46	31.7	36.7	42.7	27.1	34.9	61	13	25	25	76	64	.130	.130	2.29	0.46	7.1	5.3	6.6
April	29.20	29.55	28.82	46.3	53.1	59.2	41.2	50.2	79	27	34	36	63	54	.195	.211	2.93	1.18	6.2	5.2	6.1
May	29.10	29.44	28.73	58.6	63.4	69.7	52.5	61.1	88	36	48	49	68	60	.334	.347	3.77	0.70	6.7	6.4	6.6
June	29.12	29.29	28.75	71.3	76.2	83.3	65.8	74.6	92	56	62	65	74	70	.555	.616	4.15	1.05	5.7	6.0	5.6
July	29.23	29.62	28.91	69.8	77.0	83.3	63.4	73.4	96	53	62	64	77	64	.555	.595	5.88	2.16	3.5	5.9	4.4
August	29.17	29.34	28.95	67.6	77.5	83.5	63.5	73.5	93	56	60	61	78	57	.517	.536	2.22	0.68	4.3	3.2	5.5
September	29.29	29.48	28.63	60.5	69.6	76.7	56.3	66.5	86	46	52	55	74	61	.387	.432	2.04	0.60	3.9	3.1	4.9
October	29.20	29.55	28.80	48.2	57.1	63.5	44.6	54.0	78	33	40	40	74	54	.246	.246	0.51	0.19	5.5	3.4	5.6
November	29.21	29.54	28.66	39.7	42.9	47.8	35.3	41.6	72	18	32	33	76	69	.180	.187	1.81	0.46	7.8	7.7	7.4
December	29.23	29.71	28.69	29.3	33.2	37.7	24.9	31.3	70	3	24	26	78	73	.125	.137	1.92	0.90	8.4	4.9	7.5
Year	29.19	29.80	28.45	48.6	54.5	60.4	43.8	52.1	96	2	40	42	74	64	.289	.308	32.66	2.16	6.1	5.3	6.2

POINT REYES LIGHT, CAL.*b*

[Lat. 38° 11′ N.; long. 122° 51′ W.; gravity corr., ——.]

January	.....	.....	.....	.....	.....	55.8	44.6	50.2	64	34	.....	.....	.....	.....	.....	.....	4.68	1.74	.....	.....	.....
February	.....	.....	.....	.....	.....	56.6	45.4	51.0	65	39	.....	.....	.....	.....	.....	.....	4.37	1.41	.....	.....	.....
March	.....	.....	.....	.....	.....	58.6	47.4	53.0	70	30	.....	.....	.....	.....	.....	.....	3.36	1.19	.....	.....	.....
April	.....	.....	.....	.....	.....	53.2	45.9	49.6	60	41	.....	.....	.....	.....	.....	.....	2.26	.44	.....	.....	.....
May	.....	.....	.....	.....	.....	59.5	43.7	51.6	80	40	.....	.....	.....	.....	.....	.....	2.97	1.35	.....	.....	.....
June	.....	.....	.....	.....	.....	58.5	42.7	50.6	71	38	.....	.....	.....	.....	.....	.....	.36	.06	.....	.....	.....
July	.....	.....	.....	.....	.....	58.3	42.4	50.4	67	40	.....	.....	.....	.....	.....	.....	.27	.05	.....	.....	.....
August	.....	.....	.....	.....	.....	58.9	47.5	53.2	76	41	.....	.....	.....	.....	.....	.....	.45	.06	.....	.....	.....
September	.....	.....	.....	.....	.....	59.8	51.3	55.6	74	48	.....	.....	.....	.....	.....	.....	.68	.17	.....	.....	.....
October	.....	.....	.....	.....	.....	57.5	48.7	53.1	68	41	.....	.....	.....	.....	.....	.....	1.54	.58	.....	.....	.....
November	.....	.....	.....	.....	.....	58.7	47.2	53.0	76	40	.....	.....	.....	.....	.....	.....	3.22	.98	.....	.....	.....
December	.....	.....	.....	.....	.....	53.5	45.2	49.4	58	38	.....	.....	.....	.....	.....	.....	4.72	.93	.....	.....	.....
Year	.....	.....	.....	.....	.....	57.4	46.0	51.7	80	30	.....	.....	.....	.....	.....	.....	28.88	1.74	.....	.....	.....

a For 23 days beginning with 8th.

b Takes one observation daily at 8 p. m.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

PIKES PEAK, COLO.

[H = 14,134 feet; h_t = 8 feet 6 inches; h_r = 28 inches high; h_a = 25 feet 2 inches.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		Mi.																								
January	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
June	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
August	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
September	17.4	SW.	66	W.	7	1	6	4	2	2	14	13	4	0	13	7	3	1	0	1	0	....	1	0	15	1	0
October	b21.3	SW.	88	SW.	14	8	8	6	2	1	19	11	7	0	12	10	9	8	7	8	0	....	22	0	30	0	0
November	37.2	W.	99	W.	25	6	9	3	0	0	7	20	15	0	7	18	5	15	8	15	0	....	30	0	30	0	0
December	33.4	W.	94	W.	24	8	10	0	2	1	8	24	9	0	12	7	12	15	13	15	0	...	31	0	31	0	0
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

PIERRE, S. DAK.

[H = 1,470 feet; h_t = 50 feet; h_r = 47 feet; h_a = 54 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.9	NW.	46	W.	1	5	6	4	10	4	4	3	17	9	12	10	9	4	0	4	0	....	17	0	28	0	1
February	6.7	SE.	36	W.	0	11	6	3	15	1	3	0	8	11	4	13	12	9	2	9	0	....	19	0	28	0	1
March	9.6	SE.	48	NW.	2	3	6	4	25	0	7	4	11	2	9	5	17	9	6	5	0	....	10	0	25	0	3
April	12 9	E.	46	NE.	2	7	9	24	7	1	1	0	10	1	5	11	14	14	11	4	2	....	0	0	10	2	0
May	9.5	NW.	38	NW.	0	11	7	12	5	0	2	8	15	2	5	10	16	17	14	2	0	....	0	0	1	3	0
June	10.7	E.	54	S.	3	9	4	15	13	4	1	4	6	4	10	13	7	12	10	0	2	....	0	0	0	10	0
July	9.5	E.	42	N.	2	8	1	23	17	2	2	1	5	3	19	7	5	8	7	0	0	....	0	11	0	6	0
August	8.2	E.	36	E.	0	2	8	24	17	1	0	1	7	2	13	13	5	7	5	0	0	....	0	13	0	2	0
September	7.2	SE.	46	NE.	1	8	3	6	16	5	9	1	10	2	18	8	4	4	4	0	0	....	0	6	0	2	0
October	7.4	E.	34	NW.	0	8	1	16	6	4	4	2	9	12	21	7	3	3	2	0	0	....	0	1	7	1	0
November	9.2	NW.	40	NW.	1	3	3	14	7	1	4	7	20	1	14	11	5	3	2	2	0	....	9	0	22	0	0
December	5.8	NW.	26	W.	0	5	2	16	2	1	3	13	17	3	12	9	10	6	3	6	0	....	18	0	31	0	1
Year	8.6	E.	54	S.	12	80	56	161	140	24	40	44	135	52	142	117	107	96	66	32	4	....	73	31	152	26	6

PITTSBURG, PA.

[H = 820 feet; h_t = 115 feet; h_r = 107 feet; h_a = 123 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.7	NW.	26	NW.	0	6	2	3	7	6	10	9	19	0	6	3	22	13	9	11	0	....	14	0	25	0	0
February	7.0	NW.	36	NW.	0	4	1	10	11	5	8	6	13	0	4	8	17	15	11	6	0	....	3	0	16	1	0
March	6.6	NW.	28	NW.	0	12	5	6	7	3	4	3	19	3	8	8	15	15	11	7	0	....	5	0	22	1	0
April	6.6	NW.	30	NW.	0	9	6	6	7	6	6	7	12	1	5	14	11	15	12	2	0	....	0	0	5	2	0
May	6.2	NW.	24	SW.	0	6	2	8	1	8	9	13	14	1	5	11	15	21	19	0	1	....	0	0	0	9	0
June	6.6	SW.	33	SW.	0	3	5	6	4	16	13	6	4	3	5	18	7	16	14	0	0	....	0	2	0	9	0
July	4.6	SE.	38	W.	0	5	4	12	12	11	9	2	4	3	11	18	2	14	13	0	1	....	0	8	0	8	1
August	5.5	N.	24	S.	0	17	4	7	2	6	4	10	12	0	11	6	14	7	7	0	0	....	0	3	0	3	0
September	6.1	W.	38	NW.	0	7	4	10	9	6	5	12	5	2	11	10	9	9	8	0	0	....	0	0	0	3	1
October	6.4	NW.	36	NW.	0	3	2	2	7	5	5	13	24	1	9	10	12	7	4	0	0	....	0	0	0	2	0
November	8.4	NW.	30	S.	0	4	2	2	9	4	7	14	18	0	3	5	22	19	15	6	0	....	3	0	14	0	0
December	6.8	NW.	24	NW.	0	4	6	1	4	2	6	19	20	0	3	7	21	17	9	10	1	....	11	0	20	1	0
Year	6.5	NW.	38	{NW. W.}	0	80	43	73	80	78	86	114	164	14	81	118	167	168	132	42	3	....	36	13	102	39	2

POINT REYES LIGHT, CAL. d

[H = ... feet; h_t = 12 feet; h_r = 1 foot; h_a = 60 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	.....	SE.	....	.....	....	4	2	1	14	0	0	1	9	0	10	15	6	5	5	0	0	....	....	....	....	0	0
February	.....	NW.	....	.....	....	5	0	0	9	4	0	0	11	0	8	6	15	7	7	0	0	....	....	....	....	0	0
March	.....	NW.	....	.....	....	8	0	0	6	3	2	1	11	0	10	10	11	8	8	0	0	....	....	....	....	0	0
April	.....	NW.	....	.....	....	0	0	0	4	0	2	3	21	0	11	13	6	13	10	0	0	....	....	....	....	0	0
May	.....	NW.	....	.....	....	2	0	0	4	1	6	1	17	0	12	8	11	c11	c6	0	0	....	....	....	....	0	0
June	.....	NW.	....	.....	....	0	0	0	5	0	3	0	22	0	9	10	11	c14	c2	0	0	....	....	....	....	0	0
July	.....	NW.	....	.....	....	0	0	0	4	0	1	1	25	0	7	16	8	c10	c3	0	0	....	....	....	....	0	0
August	.....	NW.	....	.....	....	2	0	0	8	5	0	0	16	0	6	8	17	c19	c2	0	0	....	....	....	....	0	0
September	.....	NW.	....	.....	....	0	0	0	3	6	0	0	21	0	1	14	15	c16	c5	0	0	....	....	....	....	0	0
October	.....	NW.	....	.....	....	5	2	0	2	1	3	0	18	0	5	12	14	c15	c8	0	0	....	....	....	....	0	0
November	.....	NW.	....	.....	....	4	2	0	2	5	1	0	16	0	6	12	12	c12	c7	0	0	....	....	....	....	0	0
December	.....	NW.	....	.....	....	4	1	0	8	2	2	0	14	0	5	14	12	c11	c11	0	0	....	....	....	....	0	0
Year	.....	NW.	....	.....	....	34	7	1	69	27	20	7	201	0	90	138	138	141	74	0	0	....	....	....	....	0	0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

b For 741 hours.

c Deposits from fog included in precipitation.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

PORT ANGELES, WASH.

[Lat. 48° 7′ N.; long. 123° 6′ W.; gravity corr., + .01.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	30.05	30.40	29.33	35.1	40.2	44.7	33.0	38.8	60	28	32	36	92	84	.180	.211	4.64	2.46	6.6	7.1	6.6
February	29.99	30.27	29.64	36.5	43.6	46.0	33.9	40.0	52	28	34	37	92	80	.195	.219	.81	.28	7.0	6.4	5.8
March	29.93	30.27	29.41	40.3	47.4	49.7	38.5	44.1	57	30	37	41	90	80	.219	.256	1.62	.39	6.6	7.4	7.2
April	29.94	30.42	29.33	39.1	49.1	51.8	37.3	44.6	61	31	36	41	89	74	.211	.256	1.26	.23	6.8	6.2	6.6
May	29.97	30.42	29.58	46.0	54.6	57.7	42.9	50.3	70	36	42	45	85	72	.266	.298	1.87	.58	7.0	7.0	7.2
June	29.97	30.20	29.80	50.7	58.9	61.6	47.5	54.6	79	40	46	49	83	70	.310	.322	.66	.30	6.0	4.4	4.8
July	30.05	30.40	29.86	51.8	55.1	60.6	49.1	54.8	76	43	48	50	87	74	.334	.360	.33	.12	6.3	4.8	5.5
August	30.03	30.35	29.77	51.6	61.3	64.9	49.9	57.4	82	43	47	51	86	71	.322	.373	.40	.19	4.3	3.4	3.6
September	29.93	30.26	29.22	49.5	58.5	61.2	47.3	54.2	73	38	47	51	91	78	.322	.373	1.45	.50	5.4	5.4	5.6
October	29.99	30.37	29.59	45.4	51.2	53.7	42.7	48.2	64	33	43	46	93	84	.277	.310	1.33	.56	6.7	5.7	7.5
November	29.86	30.43	28.98	41.1	44.4	48.3	38.3	43.3	56	31	38	40	90	87	.228	.246	8.18	2.43	7.5	8.2	7.6
December	30.06	30.53	29.20	37.2	40.2	43.1	33.6	38.4	49	18	33	36	85	85	.187	.211	5.15	.66	7.5	8.8	7.9
Year	29.98	30.53	28.98	43.7	50.4	53.6	41.2	47.4	82	18	40	44	89	78	.254	.286	27.70	2.46	6.5	6.2	6.3

PORT CRESCENT, WASH. *a*

[Lat. —— ; long. —— .]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
June	.....	.....	.....	.....	.....	*b* 64.8	*b* 51.9	*b* 58.4	*b* 82	*b* 42	.....	.....	.....	.....	.....	.....	0.93	0.27	.....	.....	.....
July	.....	.....	.....	.....	.....	*c* 60.7	*c* 50.8	*c* 55.8	*c* 69	*c* 40	.....	.....	.....	.....	.....	.....	.51	.26	.....	.....	.....
August	.....	.....	.....	.....	.....	*d* 63.7	*d* 52.4	*d* 58.0	*d* 74	*d* 44	.....	.....	.....	.....	.....	.....	.69	.30	.....	.....	.....
September	.....	.....	.....	.....	.....	*e* 65.7	*e* 47.8	*e* 56.8	*e* 76	*e* 37	.....	.....	.....	.....	.....	.....	5.06	2.37	.....	.....	.....
October	.....	.....	.....	.....	.....	*d* 57.4	*d* 41.8	*d* 49.6	*d* 73	*d* 30	.....	.....	.....	.....	.....	.....	2.19	.49	.....	.....	.....
November	.....	.....	.....	.....	.....	*b* 48.8	*b* 37.0	*b* 42.9	*b* 59	*b* 30	.....	.....	.....	.....	.....	.....	11.41	2.53	.....	.....	.....
December	.....	.....	.....	.....	.....	*d* 40.4	*d* 33.2	*d* 36.8	*d* 46	*d* 18	.....	.....	.....	.....	.....	.....	5.34	*f* 1.13	.....	.....	.....
Year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

PORT HURON, MICH.

[Lat. 43° 0′ N.; long. 82° 26′ W.; gravity corr., 0.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	29.35	29.83	28.72	17.8	21.6	27.5	13.3	20.4	52	— 4	12	16	78	79	.070	.085	1.80	.46	6.4	5.9	5.9
February	29.43	29.97	28.69	24.4	27.6	32.2	21.2	26.7	45	— 4	19	23	82	83	.098	.119	2.71	.88	6.4	6.9	6.8
March	29.38	29.85	28.70	25.0	29.4	35.1	21.9	28.5	55	8	18	20	74	71	.093	.103	1.28	.37	5.2	5.5	6.1
April	29.40	29.88	28.89	39.3	43.5	50.4	34.6	42.5	71	22	29	31	68	63	.157	.172	1.99	.58	3.9	5.1	5.4
May	29.27	29.74	28.75	50.5	53.9	60.0	45.1	52.6	81	34	43	44	77	72	.277	.287	4.56	.97	7.3	6.6	6.4
June	29.28	29.49	28.82	64.0	64.4	75.4	56.5	66.0	90	45	59	58	83	81	.499	.481	5.76	1.94	5.4	5.5	5.5
July	29.41	29.88	29.06	67.1	71.3	80.0	59.6	69.8	95	46	60	60	77	68	.517	.517	1.68	1.03	2.4	4.4	4.1
August	29.37	29.54	29.06	65.3	68.8	76.1	59.6	67.8	95	51	59	59	80	72	.499	.499	2.58	.82	4.3	3.5	4.3
September	29.44	29.70	28.73	56.8	62.5	71.4	52.7	62.0	86	41	52	54	84	76	.387	.417	5.47	2.92	3.5	3.0	3.6
October	29.37	29.75	28.69	44.5	50.1	58.3	41.0	49.6	76	29	39	40	81	70	.237	.246	1.26	.60	4.5	5.1	5.6
November	29.37	29.77	28.63	33.7	35.1	40.3	30.4	35.4	64	16	29	29	82	78	.157	.157	3.44	1.08	8.1	8.1	7.5
December	29.39	29.86	28.75	24.4	26.1	30.5	21.1	25.8	50	— 3	20	21	83	79	.103	.108	1.42	.29	8.9	6.5	7.3
Year	29.37	29.97	28.63	42.7	46.2	53.1	38.1	45.6	95	— 4	37	38	79	74	.258	.266	33.95	2.92	5.5	5.5	5.7

PORTLAND, ME.

[Lat. 43° 39′ N.; long. 70° 15′ W.; gravity corr., 0.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	29.88	30.59	29.18	21.5	25.6	30.5	16.8	23.6	50	2	17	19	83	78	.089	.098	4.22	1.08	7.0	5.5	6.4
February	30.01	30.71	28.88	21.8	26.8	31.1	18.0	24.6	44	0	16	18	78	71	.085	.093	2.18	.99	5.0	5.6	5.2
March	29.76	30.33	28.95	27.7	30.5	36.6	22.4	29.5	51	9	16	18	63	61	.085	.093	2.27	.59	4.9	3.6	4.7
April	29.85	30.38	29.28	43.4	43.6	52.3	35.0	43.6	72	24	29	30	59	61	.157	.164	1.04	.33	4.8	3.4	4.8
May	29.85	30.30	29.39	50.2	51.4	58.5	44.4	51.4	77	32	40	41	71	72	.246	.256	4.41	1.35	5.8	6.3	7.1
June	29.83	30.30	29.39	62.9	64.0	71.9	55.2	63.6	95	45	54	55	76	74	.417	.432	4.60	1.16	6.1	5.2	5.8
July	29.88	30.38	29.47	69.7	67.6	77.1	60.6	68.8	90	49	58	57	68	71	.481	.465	2.68	1.30	3.8	3.3	4.0
August	29.89	30.19	29.69	65.0	65.5	72.9	59.6	66.2	84	46	59	60	83	83	.499	.517	8.14	2.47	6.4	4.8	6.0
September	30.00	30.33	29.32	57.4	58.9	67.7	50.7	59.2	76	42	50	52	78	78	.360	.387	2.89	1.57	3.6	2.4	3.9
October	29.78	30.33	29.36	45.7	48.2	55.0	41.0	48.0	72	33	38	38	75	70	.228	.228	1.64	.46	5.2	3.3	5.1
November	29.92	30.35	29.30	36.0	37.9	43.2	31.2	37.2	63	13	31	31	82	75	.172	.172	3.76	1.16	7.5	5.5	6.6
December	29.82	30.31	29.20	22.5	26.2	31.5	18.5	25.0	46	— 5	18	17	80	67	.093	.089	1.32	.73	5.0	2.4	4.3
Year	29.87	30.71	28.88	43.6	45.5	52.4	37.8	45.1	95	— 5	36	36	75	72	.243	.250	39.15	2.47	5.4	4.3	5.3

a Takes one observation daily at 8 p. m. *b* For 29 days. *c* For 30 days. *d* For 27 days. *e* For 28 days. *f* 21 days.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

PORT ANGELES, WASH.

[H = 29 feet; h_t = 47 feet; h_r = 35 feet; h_a = 59 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	4.5	S.	27	SW.	0	0	5	4	6	32	10	3	0	3	4	15	12	15	9	0	0	....	0	0	12	0	0
February	4.9	S.	45	SW.	1	0	5	11	4	27	7	4	0	0	7	13	9	9	5	0	0	....	0	0	14	0	0
March	4.9	S.	30	W.	0	2	4	6	3	16	10	15	4	2	5	10	16	14	10	0	0	....	0	0	4	0	0
April	5.9	S.	36	NE.	0	1	2	6	2	24	8	14	3	0	5	15	10	17	12	0	0	....	0	0	2	0	0
May	6.3	W.	30	W.	0	5	1	7	0	9	14	14	10	2	5	8	18	15	9	0	0	....	0	0	0	0	0
June	7.1	W.	35	W.	0	1	1	4	2	4	7	33	6	2	10	15	5	5	4	0	0	....	0	0	0	0	0
July	6.7	W.	29	W.	0	0	0	1	3	13	6	34	3	2	9	11	11	8	3	0	0	....	0	0	0	0	0
August	6.2	W.	24	W.	0	1	0	2	2	18	5	25	9	0	17	8	6	5	5	0	0	....	0	0	0	0	0
September	4.1	W.	30	SW.	0	3	1	8	4	11	7	13	4	9	11	6	13	12	8	0	0	....	0	0	0	0	0
October	4.2	S.	24	W.	0	0	0	10	7	14	12	9	6	4	3	9	19	10	8	0	0	....	0	0	0	0	0
November	5.5	SW.	34	W.	0	2	1	2	8	14	17	11	4	1	2	12	16	22	20	0	0	....	0	0	1	0	0
December	5.6	S.	35	NE.	0	1	8	7	5	30	7	3	1	0	1	11	19	25	22	3	0	....	2	0	5	0	0
Year	5.5	S.	45	SW.	1	16	28	68	46	212	110	178	50	24	79	133	154	157	115	3	0	....	2	0	38	0	0

PORT CRESCENT, WASH.[b]

[H = —— feet; h_t = —— feet; h_r = 2½ feet; h_a = —— feet.]

January	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	0	....	....
February	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	0	....	....
March	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	0	....	....
April	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	0	....	....
May	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	0	....	....
June	....	b W.	....	....	....	b0	b0	b3	b1	b0	b8	b17	b0	b0	b1	b12	b16	b8	b4	....	....	....	....	....	0	b0	b0
July	....	c W.	....	....	....	c0	c0	d2	c0	c0	c7	c20	c0	c0	c0	c19	c11	c7	c4	....	....	....	....	....	0	d0	d0
August	....	c W.	....	....	....	c0	c0	d3	c0	c0	c7	c20	c0	c0	c0	c21	c9	c4	c4	....	....	....	....	....	0	0	0
September	....	SW.	....	....	....	0	1	7	1	0	11	8	1	1	0	10	20	10	10	....	....	....	....	....	0	0	0
October	....	SW.	....	....	....	0	3	5	4	0	12	7	0	0	1	12	18	d11	d11	....	....	....	....	....	2	0	0
November	....	SW.	....	....	....	0	0	3	5	0	17	5	0	0	0	17	23	23	23	....	....	....	....	....	4	0	0
December	....	E.	....	....	....	0	3	10	3	1	9	5	0	0	0	9	22	e21	e19	e3	....	....	3	....	5	e0	0
Year	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

PORT HURON, MICH.

[H = 639 feet; h_t = 70 feet; h_r = 63 feet; h_a = 108 feet.]

January	12.5	S.	41	NW.	1	3	4	3	3	16	15	8	10	0	7	14	10	13	9	12	0	....	19	0	30	0	0
February	10.9	N.	36	W.	0	13	4	6	10	4	7	7	7	0	2	14	13	15	11	9	0	....	12	0	26	0	1
March	11.0	N.	36	NW.	0	15	13	1	5	4	5	7	12	0	8	10	13	9	8	7	0	....	13	0	26	0	1
April	13.5	NE.	60	SW.	4	8	14	3	8	7	7	4	9	0	10	10	10	8	8	2	0	....	2	0	13	4	0
May	11.1	N.	36	SW.	0	19	8	2	10	7	10	3	1	2	3	15	13	18	16	0	0	....	0	0	0	2	0
June	9.3	S.	40	W.	1	11	10	3	6	12	10	3	5	0	5	18	7	16	14	0	0	....	0	1	0	4	0
July	8.7	SW.	40	NW.	1	10	12	3	1	12	15	2	6	1	14	15	2	11	7	0	0	....	0	5	0	4	3
August	9.6	N.	38	N.	0	15	9	4	5	11	6	7	3	2	17	6	8	10	8	0	0	....	0	1	0	3	0
September	9.3	S.	38	NW.	0	3	4	3	8	16	10	10	6	0	16	10	4	13	7	0	0	....	0	0	0	4	0
October	12.0	NW.	50	NW.	1	6	2	1	4	10	17	4	18	0	9	12	10	9	6	0	0	....	0	0	3	0	0
November	12.7	NW.	48	SW.	4	7	5	1	5	5	12	10	15	0	1	10	19	19	11	7	0	....	4	0	19	0	0
December	11.0	W.	36	SW.	0	3	0	1	3	8	17	17	13	0	2	13	16	13	8	6	0	....	14	0	28	0	0
Year	11.0	SW.	60	SW.	12	113	85	31	68	112	131	82	105	5	94	147	125	154	113	43	0	....	64	7	145	21	5

PORTLAND, ME.

[H = 103 feet; h_t = 81 feet; h_r = 71 feet; h_a = 87 feet.]

January	9.0	N.	44	SE.	2	17	5	0	2	5	9	10	14	0	7	9	15	14	12	8	0	....	18	0	29	0	1
February	7.9	NW.	45	NE.	1	15	11	1	1	3	2	4	19	2	14	4	11	11	6	7	0	....	15	0	27	0	1
March	10.9	NW.	38	N.	0	10	6	0	1	3	8	16	18	3	14	7	10	9	8	5	0	....	10	0	28	1	1
April	8.7	NW.	30	NW.	0	8	2	1	0	7	10	12	19	1	14	7	9	5	4	0	0	....	0	0	10	0	0
May	9.6	S.	29	N.	0	7	7	8	5	13	6	9	6	1	5	10	16	15	12	0	0	....	0	0	1	0	0
June	8.2	S.	28	SW.	0	4	5	6	5	17	13	9	1	0	8	11	11	15	13	0	0	....	0	3	0	2	0
July	7.6	S.	30	NW.	0	3	1	5	3	15	15	7	9	4	17	8	6	9	6	0	0	....	0	1	0	3	2
August	7.2	S.	26	NE.	0	7	9	6	0	15	4	7	11	2	10	8	13	14	10	0	0	....	0	0	0	2	0
September	8.0	SW.	30	S.	0	8	1	0	2	10	20	10	8	0	16	8	6	7	5	0	0	....	0	0	0	1	0
October	7.8	SW.	28	NW.	0	7	4	0	0	5	16	12	15	3	11	13	7	9	7	0	0	....	0	0	0	0	0
November	9.1	NW.	44	S.	1	12	5	3	2	5	8	11	13	1	7	7	16	12	9	3	0	....	1	0	18	0	0
December	7.3	W.	21	NW.	0	12	4	0	0	0	7	18	18	3	14	11	6	8	6	5	0	....	14	0	29	0	0
Year	8.4	NW.	45	NE.	4	110	60	30	23	98	118	125	149	19	137	103	126	128	98	25	0	....	58	4	142	9	5

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

b For 29 days. c For 30 days. d For 27 days. e For 21 days.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

PORTLAND, OREGON.

[Lat. 45° 32′ N.; long. 122° 43′ W.; gravity corr., .0.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.99	30.28	29.40	37.5	42.3	44.7	35.1	39.9	58	26	33	36	87	81	.187	.211	4.79	1.54	6.3	8.2	6.6
February	29.90	30.19	29.60	38.9	48.2	50.0	36.9	43.4	60	27	36	40	89	75	.211	.246	2.48	.74	4.5	5.7	6.2
March	29.84	30.24	29.40	43.9	55.1	57.4	42.4	49.9	76	36	42	43	93	65	.266	.277	2.82	.87	7.5	6.8	5.9
April	29.88	30.26	29.39	42.5	53.2	56.8	41.3	49.0	76	33	39	40	89	63	.237	.246	4.82	1.21	7.5	7.8	6.7
May	29.83	30.34	29.47	49.6	66.6	69.2	48.9	59.0	93	39	45	44	85	48	.298	.287	1.57	.80	5.6	6.1	4.9
June	29.85	30.11	29.56	53.0	70.1	72.4	51.9	62.2	94	42	47	46	82	46	.322	.310	1.41	.56	5.4	4.6	5.1
July	29.91	30.22	29.67	55.1	73.1	75.0	54.4	64.7	88	47	50	49	84	44	.360	.347	.70	.50	6.1	3.6	4.9
August	29.86	30.14	29.61	56.7	76.8	78.5	55.2	66.8	90	47	52	52	85	43	.387	.387	.17	.12	4.0	2.9	4.0
September	29.83	30.09	29.40	54.7	70.4	72.7	53.1	62.9	90	42	52	54	89	59	.387	.417	1.63	.88	3.4	3.7	4.4
October	29.89	30.20	29.48	47.0	59.1	61.2	45.1	53.2	82	38	46	52	95	79	.310	.387	2.16	.61	5.1	4.1	5.4
November	29.84	30.36	28.89	43.2	47.3	50.5	40.9	45.7	62	33	42	44	94	88	.266	.287	4.34	.75	6.0	7.9	8.0
December	29.99	30.41	29.20	35.8	39.7	42.7	33.9	38.3	55	20	35	36	96	88	.203	.211	6.69	1.70	5.8	7.2	8.1
Year	29.88	30.41	28.89	46.5	58.5	60.9	44.9	52.9	94	20	43	45	89	65	.286	.301	33.58	1.70	5.6	5.7	5.8

PUEBLO, COLO.

[Lat. 38° 18′ N.; long. 104° 36′ W.; gravity corr., —.02.]

January	25.27	25.65	24.89	20.3	32.0	40.3	15.3	27.8	71	— 8	9	16	66	54	.060	.085	.19	.07	3.3	3.6	4.0
February	25.21	25.58	24.76	25.6	41.8	49.6	21.9	35.8	64	3	14	18	67	42	.077	.093	.06	.06	3.6	4.1	4.2
March	25.19	25.56	24.55	27.8	43.2	49.3	25.6	37.4	78	— 9	17	17	68	45	.069	.089	1.53	.56	5.2	6.5	5.9
April	25.14	25.60	24.54	36.4	59.8	63.7	34.3	49.0	84	24	20	17	56	24	.103	.089	.93	.82	4.2	5.8	5.0
May	25.19	25.58	24.88	49.2	64.1	69.8	45.2	57.5	88	35	33	28	59	34	.187	.150	1.77	.56	5.5	5.9	5.4
June	25.22	25.51	24.87	58.6	78.0	83.2	52.7	68.0	100	38	41	37	57	28	.256	.219	1.50	.81	2.5	3.2	2.9
July	25.34	25.58	25.02	64.3	80.7	89.8	60.3	75.0	100	53	51	46	64	34	.373	.310	3.22	.88	3.6	7.4	5.5
August	25.23	25.58	25.06	60.0	80.4	89.5	57.2	73.4	101	45	45	40	62	28	.298	.246	1.57	1.00	2.7	5.2	4.1
September	25.34	25.52	25.05	54.3	78.2	86.1	51.6	68.8	94	39	32	31	45	19	.180	.172	T	T	2.8	4.4	3.7
October	25.30	25.63	24.58	40.7	58.9	65.8	38.2	52.0	83	28	29	30	65	38	.157	.164	1.98	1.41	3.2	4.3	4.0
November	25.26	25.58	24.70	31.9	46.3	55.9	28.7	42.3	74	18	19	18	59	35	.098	.093	1.01	.98	4.3	2.6	3.4
December	25.23	25.47	24.95	20.9	30.4	38.4	15.8	27.1	69	—18	11	14	66	54	.067	.077	1.02	.44	3.5	3.6	4.0
Year	25.25	25.65	24.54	40.3	57.8	65.1	37.2	51.2	101	—18	27	26	61	36	.162	.149	14.78	1.41	3.7	4.7	4.3

PYSHT, WASH. *a*

[Lat. ——; long. ——; gravity corr., —.]

January																					
February																					
March																					
April																					
May																					
June																					
July																					
August																					
September																					
October																					
November						b47.0	b40.1														
December						c42.5	c35.6														
Year																					

RALEIGH, N. C.

[Lat. 35° 45′ N.; long. 78° 37′ W.; gravity corr., —.02.]

January	29.69	30.16	29.01	34.1	41.5	46.9	30.3	38.6	68	16	28	30	81	66	.150	.164	6.87	1.89	5.6	5.1	6.3
February	29.72	30.22	29.10	38.9	45.0	52.6	34.9	42.8	68	17	34	34	83	69	.195	.195	3.59	1.05	6.2	5.4	6.1
March	29.63	30.05	28.96	42.4	49.0	55.7	37.5	46.6	74	23	34	36	75	63	.195	.211	3.29	.98	6.1	4.6	6.2
April	29.72	30.06	29.17	54.2	59.4	67.0	47.3	57.2	82	30	45	46	73	65	.298	.310	5.57	2.29	5.7	4.6	6.0
May	29.63	30.00	29.31	65.2	71.1	77.5	57.7	67.6	91	45	56	56	74	60	.448	.448	3.10	1.22	4.5	4.3	3.9
June	29.64	29.90	29.40	74.2	76.7	84.7	66.8	75.8	96	52	69	68	83	77	.707	.684	4.84	2.18	6.4	6.6	6.4
July	29.70	30.02	29.51	74.9	77.6	85.7	67.8	76.8	98	54	69	69	82	76	.707	.707	4.13	1.26	5.9	5.9	5.9
August	29.62	29.78	29.47	75.5	79.0	88.7	68.7	78.7	94	63	70	68	82	72	.732	.684	4.42	2.30	5.1	6.2	5.5
September	29.75	29.96	29.34	66.3	71.4	79.5	60.2	69.8	87	48	60	61	82	72	.517	.536	1.98	1.13	4.7	3.8	4.6
October	29.69	29.97	29.38	54.8	60.4	69.6	48.5	59.0	85	33	46	46	73	62	.310	.310	.53	.33	3.1	2.8	4.1
November	29.72	30.00	29.29	43.8	49.8	57.1	38.7	47.9	79	20	38	40	80	69	.228	.245	2.92	1.05	4.4	3.4	4.7
December	29.71	30.18	29.21	36.2	43.3	48.7	31.4	40.0	68	11	32	36	85	75	.180	.211	3.72	1.42	5.1	4.3	5.4
Year	29.68	30.22	28.96	55.0	60.4	67.8	49.2	58.5	98	11	48	49	79	69	.289	.292	45.01	2.30	5.2	4.8	5.4

a Takes one observation daily at 8 p. m. *b* For 22 days. *c* For 17 days.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

PORTLAND, OREGON.

[H = 157 feet; h_t = 200 feet; h_r = 196 feet; h_a = 209 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		Mi.																								
January	4.6	NE.	26	S.	0	3	14	7	5	15	9	1	2	6	6	11	14	17	14	1	0	....	0	0	10	0	1
February	4.6	S.	30	S.	0	12	17	1	3	15	1	1	2	6	11	4	14	11	8	0	0	....	0	0	6	0	0
March	4.8	S.	27	SE.	0	3	0	0	4	29	7	3	11	5	6	16	9	14	12	0	1	....	0	0	0	0	0
April	6.6	S.	40	SE.	1	6	6	0	9	22	5	2	7	3	2	16	12	21	16	0	4	....	0	0	0	0	0
May	5.7	N.	23	SW.	0	12	8	3	6	9	6	1	9	8	12	12	7	9	5	0	0	....	0	1	0	0	0
June	5.7	N.	26	SW.	0	14	10	1	8	7	4	2	11	3	10	11	9	12	9	0	1	....	0	3	0	1	0
July	6.3	N.	23	SW.	0	28	5	0	1	12	6	0	9	1	6	22	3	6	3	0	0	....	0	0	0	0	0
August	6.0	NW.	20	NW.	0	23	0	0	2	5	2	1	25	4	15	10	6	2	2	0	0	....	0	1	0	0	0
September	5.1	N.	34	S.	0	21	2	3	3	17	4	0	10	0	12	12	6	4	4	0	1	....	0	0	0	0	0
October	6.8	NW.	37	S.	0	10	2	1	7	11	11	2	15	1	13	8	10	12	9	0	1	....	0	0	0	0	0
November	9.2	SW.	41	SW.	1	7	1	0	11	9	13	3	16	0	1	11	18	19	17	0	0	....	0	0	0	0	0
December	7.1	SE.	37	SW.	0	10	3	3	11	15	3	6	10	1	1	11	19	19	15	4	0	....	2	0	11	0	0
Year	6.0	S.	41	SW.	2	149	68	19	70	166	71	22	127	38	95	144	127	146	114	5	8	....	2	5	27	1	1

PUEBLO, COLO.

[H = 4,734 feet; h_t = 74 feet; h_r = 65 feet; h_a = 81 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.0	NW.	42	W.	1	4	9	6	5	4	4	8	17	5	15	13	3	5	3	5	0	....	10	0	28	0	0
February	7.4	NW.	44	N.	1	8	2	10	8	1	2	7	19	1	10	15	4	1	1	1	0	....	2	0	27	0	0
March	8.5	NW.	49	W.	3	7	5	12	13	0	2	7	15	1	9	11	11	8	6	7	0	....	7	0	20	0	1
April	9.7	W.	48	NW.	2	13	1	6	6	1	8	14	10	1	9	17	4	6	3	2	1	....	0	0	10	1	0
May	10.0	NW.	44	SW.	3	10	3	13	8	2	3	5	18	0	7	16	8	9	8	0	0	....	0	0	0	2	0
June	8.7	SE.	42	N.	3	2	1	13	13	2	7	7	13	2	18	10	2	6	4	0	3	....	0	6	0	6	0
July	7.3	NW.	44	SE.	2	8	4	8	6	4	1	11	13	7	6	20	5	13	10	0	0	....	0	19	0	9	0
August	6.8	NW.	44	NW.	2	6	3	9	9	0	3	12	19	1	12	18	1	6	5	0	0	....	0	15	0	5	0
September	6.3	NW.	34	W.	0	2	3	13	10	0	3	7	21	1	14	15	1	0	0	0	0	....	0	7	0	1	0
October	6.6	NW.	64	NW.	1	8	2	13	3	3	3	8	18	4	15	8	8	6	3	0	0	....	0	0	7	0	0
November	7.0	W.	48	W.	1	4	5	1	7	3	1	18	15	6	16	11	3	3	2	3	0	....	0	0	21	0	0
December	6.6	W.	38	W.	0	12	6	4	6	3	2	15	13	1	13	15	3	6	4	6	0	....	13	0	27	0	0
Year	7.6	NW.	64	NW.	19	84	44	108	94	23	39	119	191	30	144	169	53	69	49	24	4	....	32	47	140	24	1

PYSHT, WASH.

[H = —— feet; h_t = 4½ feet; h_r = 3½ feet; h_a = —— feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	.....	.....	...	.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
February	.....	.....	...	.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
March	.....	.....	...	.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
April	.....	.....	...	.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
May	.....	.....	...	.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
June	.....	.....	...	.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
July	.....	.....	...	.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
August	.....	bW.	...	.....	...	b0	b1	b5	b1	b1	b1	b8	b2	b1	b13	b1	b6	b2	b2	b0	b0	....	...	...	...	b0	b0
September	.....	.....	...	.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
October	.....	.....	...	.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
November	.....	cE.	...	.....	c2	c0	c3	c7	c1	c1	c4	c4	c2	c0	c1	c1	c20	d1	d18	c1	c0	....	c0	c0	c1	c0	c0
December	.....	cE.	...	.....	c3	c0	c1	c10	c1	c0	c3	c2	c0	c0	c3	c0	c14	c2	c6	c1	c0	....	c1	c0	c1	c0	c0
Year	.....	.....	...	.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

RALEIGH, N. C.

[H = 388 feet; h_t = 70 feet; h_r = 2 feet; h_a = 80 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	7.6	N.	28	SW.	0	15	6	1	2	4	14	8	10	2	9	8	14	12	12	2	0	....	1	0	18	0	0
February	9.0	N.	29	NW.	0	19	5	0	4	5	14	3	8	0	7	10	12	12	11	0	0	....	0	0	8	0	1
March	7.8	N.	30	SW.	0	13	13	3	2	5	13	4	9	0	10	7	14	13	11	0	0	....	0	0	10	4	0
April	7.4	SW.	30	W.	0	11	7	4	3	11	15	2	5	2	9	10	11	11	11	0	1	....	0	0	2	2	0
May	6.2	SW.	24	NW.	0	4	4	3	1	17	19	7	7	0	15	8	8	10	10	0	0	....	0	1	0	2	0
June	4.9	S.	20	NW.	0	7	1	2	5	20	15	4	3	3	7	9	14	16	14	0	0	....	0	4	0	7	0
July	4.7	S.	22	W.	0	4	7	4	3	15	12	9	4	4	11	7	13	13	12	0	0	....	0	11	0	5	0
August	3.8	S.	20	NE.	0	5	0	4	6	15	14	7	6	5	10	13	8	9	7	0	0	....	0	9	0	6	0
September	4.7	N.	18	NW.	0	13	12	8	4	5	4	1	6	7	13	8	9	8	7	0	0	....	0	0	0	0	0
October	5.5	N.	19	NW.	0	17	4	1	2	4	10	7	14	3	17	7	7	5	3	0	0	....	0	0	0	1	0
November	6.4	NW.	31	NW.	0	5	4	2	4	8	12	3	20	2	13	8	9	10	8	0	0	....	0	0	9	2	0
December	5.7	N.	30	NW.	0	16	9	3	4	4	9	4	8	5	12	5	14	9	7	2	0	....	1	0	15	0	0
Year	6.1	SW.	31	NW.	0	129	72	35	40	113	151	59	100	33	133	100	133	128	113	4	1	...	2	25	62	29	1

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.
b For 20 days. c For 22 days. d For 23 days. e For 17 days.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued

RAPID CITY, S. DAK.

[Lat. 44° 4′ N.; long. 103° 12′ W; gravity corr., 0.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a.m.	8 p.m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a.m.	8 p.m.	8 a.m.	8 p.m.	8 a.m.	8 p.m.	Total.	Maximum in 24 hours.	8 a.m.	8 p.m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	26.64	26.93	26.30	18.2	22.1	32.6	10.8	21.7	69	—25	6	10	64	65	.052	.063	.63	.43	4.0	4.2	4.2
February	26.59	26.91	26.10	19.1	26.2	34.9	13.5	24.2	60	— 5	11	15	72	66	.067	.081	.24	.17	5.9	4.4	5.0
March	26.59	27.01	26.02	25.5	35.6	41.7	21.8	31.8	71	—12	15	20	68	60	.081	.103	1.18	.57	5.5	6.5	6.1
April	26.55	27.04	26.06	35.4	44.4	49.6	31.3	40.4	68	19	27	32	73	65	.143	.180	4.04	1.12	5.8	7.3	6.7
May	26.62	26.97	26.16	42.7	51.1	55.1	39.4	47.2	81	28	34	35	74	61	.195	.203	4.49	1.03	7.1	7.1	7.1
June	26.57	26.92	26.12	56.0	67.7	71.9	51.3	61.6	92	38	46	48	73	54	.310	.334	3.80	1.69	5.1	6.7	6.0
July	26.64	26.91	26.36	64.1	79.1	84.2	58.8	71.5	101	49	51	54	65	44	.373	.417	.67	.29	4.6	5.7	5.1
August	26.64	26.98	26.43	62.7	78.4	83.4	58.6	71.0	102	46	49	51	66	41	.347	.373	2.00	.61	4.7	4.1	4.7
September	26.66	26.92	26.29	53.8	69.2	78.5	50.2	64.4	96	38	41	44	64	44	.256	.287	.13	.06	3.5	3.9	4.2
October	26.66	26.97	26.19	42.6	53.7	63.4	40.0	51.7	96	24	31	36	66	56	.172	.211	2.29	1.34	3.2	2.5	2.8
November	26.56	26.91	26.11	30.5	35.9	48.2	24.3	36.2	74	1	18	21	61	56	.093	.108	.08	.05	4.5	4.0	4.8
December	26.61	26.97	26.24	19.9	22.7	31.2	13.6	22.4	65	—11	12	14	71	68	.070	.077	.48	.24	6.2	5.3	6.2
Year	26.61	27.04	26.02	39.2	48.8	56.2	34.5	45.3	102	—25	28	32	68	57	.180	.203	20.03	1.69	5.0	5.1	5.2

RED BLUFF, CAL.

[Lat. 40° 10′ N.; long. 122° 15′ W.; gravity corr., —.01.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a.m.	8 p.m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a.m.	8 p.m.	8 a.m.	8 p.m.	8 a.m.	8 p.m.	Total.	Maximum in 24 hours.	8 a.m.	8 p.m.	Daylight.
January	29.79	30.01	29.43	41.0	53.5	56.2	37.8	47.0	69	32	36	39	83	64	.211	.237	4.30	1.44	3.6	4.1	4.4
February	29.68	29.96	29.36	46.0	59.6	62.6	43.2	52.9	77	34	42	45	88	63	.266	.298	3.11	1.36	5.0	4.8	4.9
March	29.64	29.93	29.33	48.1	64.5	67.5	45.5	56.5	86	34	42	45	83	55	.266	.298	2.69	0.91	4.0	3.9	4.2
April	29.72	29.98	29.46	45.5	61.7	64.1	44.1	54.1	74	35	42	43	84	55	.266	.277	2.92	1.12	3.8	5.7	4.8
May	29.60	29.90	29.27	55.0	75.3	78.1	53.2	65.6	102	38	48	47	82	44	.334	.322	3.02	1.56	3.7	4.0	3.6
June	29.56	29.78	29.20	60.1	83.5	85.6	57.9	71.8	105	46	46	44	64	28	.310	.287	0.27	0.22	1.8	2.3	1.9
July	29.57	29.78	29.36	65.2	93.2	94.1	63.7	78.9	105	56	49	45	57	20	.347	.298	T.	T.	0.3	0.7	0.4
August	29.52	29.68	29.36	66.6	95.3	96.2	64.5	80.4	108	55	49	47	56	20	.347	.322	T.	T.	1.0	1.1	0.8
September	29.60	29.78	29.40	60.8	84.5	85.9	58.1	72.0	103	53	50	48	68	32	.360	.334	0.29	0.29	2.2	1.4	1.6
October	29.66	29.85	29.42	54.5	72.8	75.5	51.5	63.5	97	41	45	44	72	41	.298	.287	1.42	.72	2.5	3.4	2.7
November	29.68	29.96	29.00	49.2	62.3	66.3	45.9	56.1	84	30	39	39	71	48	.237	.237	7.25	2.30	3.6	3.8	3.7
December	29.78	30.08	29.18	43.8	51.8	55.2	39.9	47.6	67	28	38	40	83	67	.228	.246	8.21	1.79	3.3	4.2	4.3
Year	29.65	30.08	29.00	53.1	71.5	73.9	50.4	62.2	108	28	44	44	74	45	.289	.287	33.48	2.30	2.9	3.3	3.1

RED WING, MINN.

[Lat. 44° 34′ N.; long. 92° 38′ W.; gravity corr., 0.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a.m.	8 p.m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a.m.	8 p.m.	8 a.m.	8 p.m.	8 a.m.	8 p.m.	Total.	Maximum in 24 hours.	8 a.m.	8 p.m.	Daylight.
January	29.28	29.73	28.78	7.1	15.2	20.0	3.6	11.8	47	—28	0	6	71	67	.038	.052	.17	.07	3.7	2.5	3.8
February	29.29	29.77	28.62	20.2	24.5	28.1	16.6	22.4	46	—16	14	16	78	72	.077	.085	1.79	.56	7.6	5.9	6.7
March	29.26	29.83	28.33	23.5	32.9	36.8	20.0	28.4	56	1	16	21	74	62	.085	.108	.88	.40	5.1	5.1	4.9
April	29.19	29.56	28.34	38.1	47.7	51.6	34.6	43.1	66	19	26	27	63	46	.137	.143	1.09	.48	6.9	5.8	6.0
May	29.08	29.61	28.55	48.5	55.1	59.3	44.2	51.8	74	32	41	43	76	66	.256	.277	6.06	2.31	8.0	6.9	7.2
June	29.10	29.44	28.85	62.1	69.1	73.4	58.0	65.7	90	46	56	59	82	72	.448	.499	7.74	3.19	7.1	6.1	6.1
July	29.22	29.65	28.88	66.0	76.5	80.5	61.8	71.2	90	51	61	65	79	69	.536	.616	7.17	2.70	4.6	3.2	4.3
August	29.20	29.47	28.92	65.2	72.8	79.2	60.0	69.6	88	45	59	63	81	72	.499	.575	1.80	.60	5.3	3.1	4.3
September	29.21	29.45	28.95	57.2	65.0	72.1	53.8	63.0	87	40	51	57	80	75	.373	.465	3.38	2.44	4.5	3.7	4.4
October	29.21	29.57	28.75	44.7	53.6	61.2	41.2	51.2	84	23	38	41	77	63	.228	.256	1.18	1.03	3.2	1.7	3.2
November	29.22	29.74	28.62	26.6	31.1	35.3	22.4	28.8	52	4	20	24	76	74	.103	.125	.40	.24	7.2	6.2	7.3
December	29.28	29.71	28.80	13.2	17.7	22.0	9.0	15.5	44	—16	8	12	76	76	.057	.070	.66	.18	6.0	5.5	6.2
Year	29.21	29.83	28.33	39.5	46.8	51.6	35.4	43.5	90	—28	32	36	76	68	.236	.273	32.32	3.19	5.8	4.6	5.4

ROCHESTER, N. Y.

[Lat. 43° 8′ N.; long. 77° 42′ W.; gravity corr. 0.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a.m.	8 p.m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a.m.	8 p.m.	8 a.m.	8 p.m.	8 a.m.	8 p.m.	Total.	Maximum in 24 hours.	8 a.m.	8 p.m.	Daylight.
January	29.43	30.00	28.73	21.9	24.4	29.5	16.9	23.2	52	— 3	16	17	78	75	.085	.089	2.73	.74	8.2	6.6	7.7
February	29.55	30.13	28.71	26.5	28.8	34.2	22.2	28.2	46	6	21	23	79	79	.108	.119	2.77	.59	7.5	5.9	7.3
March	29.45	29.89	28.76	26.8	28.5	34.3	23.5	28.9	52	19	21	22	79	79	.108	.113	2.44	.68	6.9	5.2	5.8
April	29.49	29.98	29.11	42.0	44.8	52.2	35.8	44.0	81	22	32	33	67	66	.180	.187	1.12	.34	4.9	5.0	4.8
May	29.41	29.84	29.09	53.8	54.8	63.5	46.4	55.0	91	37	45	46	75	76	.298	.310	4.84	1.34	6.8	7.1	6.4
June	29.40	29.66	28.96	66.8	68.8	76.7	60.2	68.4	92	50	59	60	78	74	.499	.517	6.68	2.00	6.5	5.8	6.6
July	29.50	30.01	29.15	68.7	72.0	81.5	60.3	70.9	94	48	59	60	72	68	.499	.517	3.21	2.10	3.6	4.2	4.1
August	29.46	29.65	29.13	67.2	69.8	78.9	61.0	70.0	92	52	60	61	78	74	.517	.536	3.52	1.32	4.9	4.7	5.8
September	29.56	29.86	28.99	59.2	62.8	72.8	53.4	63.1	86	44	51	53	75	76	.373	.402	1.55	.38	4.0	3.1	4.3
October	29.44	29.86	28.78	46.9	49.9	57.7	42.9	50.3	74	33	39	42	76	74	.237	.266	.78	.34	5.7	5.4	5.9
November	29.46	29.84	28.99	35.4	36.1	41.6	31.6	36.6	60	19	30	30	80	76	.164	.164	3.61	.90	9.0	7.0	8.3
December	29.48	29.94	28.99	25.4	26.9	31.1	21.5	26.3	54	0	20	21	77	77	.103	.108	1.77	.32	9.3	7.0	8.3
Year	29.47	30.13	28.71	45.0	47.3	54.5	39.6	47.1	94	— 3	38	39	76	74	.264	.277	35.02	2.10	6.4	5.6	6.3

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

RAPID CITY, S. DAK.

[H = 3,280 feet; h_t = 53 feet; h_r = 46 feet; h_a = 61 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	8.1	W.	42	SW.	1	6	0	4	7	3	10	18	11	3	15	11	5	7	3	7	0	....	13	0	28	0	0
February	6.7	W.	36	NW.	0	5	1	7	6	1	8	14	9	7	10	11	8	6	1	6	0	....	12	0	28	0	1
March	9.1	NW.	48	NW.	1	5	4	4	14	4	8	6	14	3	8	12	11	13	4	9	0	....	10	0	20	1	0
April	9.3	NW.	48	NW.	2	11	4	5	7	4	5	7	13	4	5	13	12	17	12	10	1	....	1	0	17	3	2
May	9.2	N.	48	NW.	2	19	4	1	8	2	6	3	15	4	5	10	16	20	15	10	0	....	0	0	9	2	1
June	11.1	SE.	44	SW.	1	8	3	6	15	5	7	2	14	0	7	12	11	13	7	0	3	....	0	1	0	9	0
July	9.4	NW.	47	SW.	3	7	1	3	13	5	9	8	15	1	10	17	4	7	3	0	0	....	0	7	0	4	3
August	8.3	SE.	36	NW.	0	9	1	6	15	3	6	10	12	0	13	12	6	11	7	0	0	....	0	12	0	5	2
September	8.8	SW.	36	W.	0	5	1	1	3	6	16	16	12	0	13	15	2	5	2	0	0	....	0	3	0	1	3
October	9.3	W.	35	NW.	0	4	1	4	9	1	7	25	11	0	22	6	3	6	4	0	0	....	0	1	7	1	1
November	10.1	NW.	60	NW.	5	3	0	2	6	6	10	15	16	2	8	17	5	3	1	2	0	....	3	0	24	0	0
December	7.5	W.	36	NW.	0	15	4	0	1	2	6	17	15	2	7	10	14	9	4	8	0	....	10	0	31	0	0
Year	8.9	W. NW.	60	NW.	15	97	24	43	104	42	98	141	157	26	123	146	97	117	63	52	4	....	40	24	164	26	13

RED BLUFF, CAL.

[H = 342 feet; h_t = 54 feet; h_r = 44 feet; h_a = 58 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.1	NW.	36	NW.	0	11	1	2	5	2	0	0	31	10	15	11	5	9	8	1	0	....	0	0	1	0	0
February	6.1	NW.	30	SE.	0	3	0	0	7	12	3	1	27	5	10	13	6	9	8	0	0	....	0	0	0	0	0
March	7.0	NW.	40	SE.	1	2	1	1	15	10	2	0	24	7	15	10	6	12	8	0	1	....	0	0	0	1	0
April	6.4	NW.	32	SE.	0	4	0	2	12	11	2	2	19	8	9	16	5	15	12	0	3	....	0	0	0	1	0
May	7.1	NW.	33	NW.	0	5	0	1	15	8	1	3	19	10	16	10	5	11	9	0	2	....	0	8	0	0	0
June	6.7	SE.	36	N.	0	2	0	3	17	9	2	2	18	12	25	5	0	4	2	0	0	....	0	11	0	2	0
July	5.3	SE.	30	NW.	0	0	0	5	26	3	1	2	14	11	31	0	0	0	0	0	0	....	0	21	0	1	0
August	5.1	SE.	24	NW.	0	1	1	0	30	8	0	2	17	3	29	0	2	0	0	0	0	....	0	24	0	0	0
September	4.4	SE.	18	NW.	0	4	2	1	27	5	4	3	11	3	24	5	1	2	1	0	0	....	0	8	0	0	0
October	6.3	NW.	28	NW.	0	4	0	0	10	8	0	2	31	7	19	8	4	7	5	0	0	....	0	4	0	0	0
November	7.9	NW.	42	SE.	3	5	0	1	11	3	0	3	28	9	19	5	6	9	8	0	0	....	0	0	1	1	0
December	9.0	NW.	48	SE.	3	4	1	0	15	4	2	2	27	7	18	5	8	11	9	0	0	....	0	0	3	1	0
Year	6.4	NW.	48	NW.	7	45	6	16	190	83	17	22	261	92	230	88	48	89	70	1	6	....	0	76	5	7	0

RED WING, MINN.

[H = 758 feet; h_t = 63 feet; h_r = 55 feet; h_a = 71 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	9.7	W.	42	W.	1	1	0	8	3	6	3	31	10	0	17	9	5	8	2	6	0	....	22	0	29	0	2
February	8.0	E.	27	W.	0	2	3	20	9	2	2	13	7	0	4	9	16	12	9	10	0	....	16	0	25	0	4
March	9.5	NW.	57	W.	1	1	3	18	7	6	2	5	20	0	13	9	9	7	6	4	0	....	12	0	23	0	2
April	13.1	E.	54	W.	5	1	2	27	3	3	1	10	12	1	7	11	12	9	6	1	0	....	1	0	8	1	0
May	9.4	E.	40	NW.	1	6	5	20	3	2	2	7	14	3	2	14	15	19	16	1	0	....	0	0	0	2	0
June	8.3	E.	38	S.	0	2	2	17	10	3	6	7	13	0	3	19	8	15	12	0	1	....	0	1	0	10	0
July	6.6	SE.	36	NW.	0	4	1	11	15	10	2	11	8	0	12	17	2	14	13	0	0	....	0	2	0	7	1
August	6.1	W.	34	SW.	0	1	2	14	13	6	3	17	6	0	14	12	5	9	6	0	0	....	0	0	0	3	0
September	8.3	E.	42	S.	1	2	0	18	13	8	6	9	4	0	13	11	6	8	6	0	0	....	0	0	0	3	0
October	7.7	E.	48	NW.	1	1	2	14	6	12	6	11	4	6	19	10	2	4	4	0	0	....	0	0	7	1	0
November	10.4	SE.	43	W.	1	2	4	11	11	9	4	9	10	0	3	10	17	4	4	2	0	....	8	0	24	0	0
December	7.1	W.	29	SW.	0	3	3	14	4	7	5	15	10	1	11	6	14	9	8	7	0	....	24	0	30	0	0
Year	8.7	E.	57	W.	11	26	27	192	97	74	42	145	118	11	118	137	111	118	92	31	1	....	83	3	146	27	9

ROCHESTER, N. Y.

[H = 523 feet; h_t = 81 feet; h_r = 81 feet; h_a = 90 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	8.5	SW.	30	NW.	0	4	4	1	4	4	25	12	4	4	3	7	21	21	12	20	0	....	17	0	29	0	0
February	8.4	NW.	37	SW.	0	12	3	3	5	7	9	6	11	2	4	9	16	17	11	12	0	....	8	0	23	1	1
March	10.4	NW.	42	NW.	1	12	3	4	7	2	7	15	10	2	8	12	11	17	12	12	0	....	12	0	22	0	1
April	10.2	SW.	36	SW.	0	2	6	1	4	7	18	9	12	1	14	4	12	10	6	2	0	....	0	0	15	1	5
May	7.9	SW.	30	SW.	0	2	10	4	10	5	18	8	5	0	7	7	17	24	16	0	0	....	0	1	0	2	2
June	7.9	SW.	32	SW.	0	1	10	3	8	4	25	8	6	0	6	9	15	17	13	0	0	....	0	2	0	7	0
July	7.1	SW.	35	SW.	0	3	13	1	0	1	23	12	8	1	18	10	3	8	6	0	0	....	0	5	0	9	1
August	6.4	SW.	24	SW.	0	3	13	2	6	3	18	8	8	1	12	5	14	11	9	0	0	....	0	4	0	2	0
September	7.8	SW.	32	SW.	0	0	3	4	7	8	24	11	2	1	14	8	8	10	9	0	0	....	0	0	0	4	0
October	8.3	SW.	28	SW.	0	2	4	1	5	3	30	9	8	0	9	8	14	12	7	0	0	....	0	0	0	1	0
November	8.6	SW.	34	SW.	0	1	4	7	7	4	22	10	5	0	1	8	21	18	12	11	0	....	5	0	17	0	0
December	9.5	SW.	34	SW.	0	0	1	0	6	1	25	17	12	0	1	9	21	18	11	13	0	....	12	0	25	0	0
Year	8.4	SW.	42	NW.	1	42	74	31	64	49	244	125	91	12	97	96	173	183	124	70	0	....	54	12	131	27	10

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

ROSEBURG, OREGON.

[Lat. 43° 13′ N.; long. 123° 20′ W.; gravity corr., 0.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.61	29.85	29.06	38.6	45.7	46.8	37.2	42.0	63	28	37	39	93	80	.219	.237	4.42	1.23	7.7	8.2	7.9
February	29.51	29.86	29.15	39.8	51.1	51.6	38.8	45.2	62	28	38	42	93	71	.228	.266	1.58	.53	6.6	6.1	6.4
March	29.47	29.86	29.05	42.8	55.8	57.5	41.7	49.6	77	34	41	45	92	67	.256	.298	2.82	.69	7.9	6.5	7.2
April	29.52	29.80	29.10	42.5	57.3	56.3	41.2	48.8	72	32	40	40	91	63	.246	.246	3.68	.91	7.9	7.5	7.6
May	29.45	29.88	29.09	48.1	67.3	68.8	47.4	58.1	90	38	45	44	88	47	.298	.287	2.18	.65	6.3	6.0	6.2
June	29.48	29.75	29.17	49.7	70.2	71.7	48.7	60.2	96	38	46	47	89	46	.310	.322	.64	.45	6.2	4.2	5.1
July	29.52	29.79	29.32	53.3	75.7	76.9	52.7	64.8	89	44	49	49	86	39	.347	.347	.43	.43	5.3	1.7	3.4
August	29.46	29.68	29.22	53.6	79.2	80.3	52.5	66.4	90	46	50	48	86	36	.360	.334	.00	None.	3.9	1.9	2.9
September	29.43	29.65	29.16	51.9	75.4	74.4	50.5	62.4	91	41	49	50	90	46	.347	.360	.99	.34	3.6	3.7	3.6
October	29.50	29.81	29.15	46.4	61.8	63.8	45.1	54.4	83	37	44	49	93	64	.287	.347	1.89	.50	4.9	4.7	4.8
November	29.48	29.82	28.53	42.2	51.3	54.5	39.9	47.2	68	30	39	43	89	76	.237	.277	5.71	1.16	6.2	7.0	6.6
December	29.59	30.03	28.67	38.2	42.1	45.1	35.9	40.5	64	28	35	37	90	82	.203	.219	4.53	1.16	8.6	7.2	7.9
Year	29.50	30.03	28.53	45.6	60.9	62.3	44.3	53.3	96	28	43	44	90	60	.278	.295	28.88	1.23	6.3	5.4	5.8

SACRAMENTO, CAL.

[Lat. 38° 35′ N.; long. 121° 30′ W.; gravity corr., — .02.]

January	30.05	30.28	29.70	42.4	53.1	57.1	39.7	48.4	64	33	38	42	85	68	.228	.266	1.78	1.00	2.8	4.8	4.5
February	29.95	30.21	29.63	45.4	57.6	61.3	43.2	52.2	70	32	42	44	88	61	.266	.287	2.84	1.10	4.4	3.7	4.4
March	29.92	30.22	29.68	46.9	62.6	65.9	45.9	55.9	78	37	43	46	88	57	.277	.310	3.02	.94	3.7	3.6	3.7
April	30.01	30.27	29.75	45.9	63.2	66.4	44.4	55.4	76	36	42	44	88	52	.266	.287	1.20	.54	4.1	3.9	4.5
May	29.87	30.16	29.64	52.8	72.0	74.9	51.4	63.2	94	42	49	50	87	48	.347	.360	2.38	1.16	4.3	3.1	4.0
June	29.84	30.02	29.49	54.1	77.3	82.3	53.6	68.0	98	46	48	51	82	41	.334	.373	T.	T.	1.9	2.3	2.6
July	29.84	30.04	29.68	56.7	84.2	88.0	55.9	72.0	102	50	51	55	80	38	.373	.432	0	0	.6	.2	.5
August	29.80	29.94	29.67	58.3	84.1	88.8	57.2	73.0	106	52	53	58	84	43	.402	.481	0	0	1.3	.9	.9
September	29.87	30.02	29.69	55.2	78.8	83.3	54.2	68.8	96	48	52	55	89	46	.387	.432	.18	.14	1.0	1.3	1.4
October	29.92	30.13	29.73	51.7	69.6	75.0	49.0	62.0	93	40	46	48	82	48	.310	.334	.70	.32	2.3	3.1	2.7
November	29.96	30.23	29.48	46.6	62.1	67.5	43.1	55.3	78	32	42	41	84	49	.260	.256	6.60	3.26	2.3	3.0	3.2
December	30.07	30.32	29.61	44.0	50.9	55.3	41.2	48.2	64	26	40	42	87	73	.246	.265	4.90	1.86	3.7	3.8	4.2
Year	29.92	30.32	29.48	50.0	68.0	72.2	48.2	60.2	106	26	46	48	85	52	.308	.340	23.60	3.26	2.7	2.8	3.0

ST. LOUIS, MO.

[Lat. 38° 38′ N.; long. 90° 12′ W.; gravity corr., — .02.]

January	29.56	29.93	28.87	21.8	28.1	33.3	18.5	25.9	60	— 1	15	18	76	67	.081	.093	1.52	.76	4.7	3.3	4.4
February	29.49	29.97	28.78	37.2	42.1	46.7	33.4	40.0	68	20	32	35	82	77	.180	.203	4.89	1.36	7.0	5.4	6.0
March	29.46	29.89	28.83	36.0	43.4	47.6	33.3	40.4	78	14	28	32	75	66	.150	.180	1.92	.51	5.9	5.3	6.1
April	29.41	29.73	28.87	49.3	57.4	61.4	46.6	54.0	85	30	40	44	73	62	.246	.287	7.60	2.52	6.6	6.0	5.9
May	29.30	29.64	28.86	58.8	65.8	70.4	55.3	62.8	87	40	51	54	76	66	.373	.417	7.87	1.76	7.4	7.6	7.4
June	29.33	29.53	29.14	72.2	79.2	84.4	68.8	76.6	94	56	64	67	77	66	.595	.660	2.73	1.40	4.5	3.5	3.6
July	29.46	29.75	29.14	73.3	79.8	84.6	69.6	77.1	96	58	66	70	79	74	.638	.732	4.64	1.45	5.0	4.6	4.9
August	29.41	29.57	29.26	71.9	80.9	86.3	69.2	77.8	97	58	63	65	76	59	.575	.616	1.75	.95	4.1	3.4	2.9
September	29.49	29.70	29.17	62.8	73.4	79.9	60.7	70.3	90	48	56	56	79	57	.448	.448	1.59	.86	3.4	2.4	2.4
October	29.48	29.75	29.19	52.5	63.2	69.3	51.0	60.2	87	32	45	46	76	55	.298	.310	1.66	.41	3.9	1.9	3.1
November	29.49	29.88	28.67	37.4	43.5	47.8	35.2	41.5	67	22	31	33	77	67	.172	.187	3.46	1.41	5.3	4.8	4.9
December	29.50	30.00	28.82	30.5	34.6	38.7	27.2	33.0	63	— 2	25	26	79	72	.130	.137	1.99	1.27	6.8	6.1	6.5
Year	29.45	30.00	28.67	50.3	57.6	62.5	47.4	55.0	97	— 2	43	46	77	66	.324	.356	41.62	2.52	5.4	4.5	4.8

ST. PAUL, MINN.

[Lat. 44° 58′ N.; long. 93° 3′ W.; gravity corr., 0.]

January	29.19	29.66	28.70	5.3	14.1	17.8	2.2	10.0	44	—25	0	7	80	74	.038	.054	.02	.02	3.7	2.2	3.5
February	29.20	29.64	28.56	19.4	23.6	26.1	15.5	20.8	42	—18	17	20	91	87	.069	.103	1.44	.42	6.8	5.9	6.8
March	29.17	29.74	28.21	22.5	32.2	36.2	19.6	27.9	56	— 2	18	27	84	82	.093	.143	.75	.42	4.6	5.1	5.1
April	29.10	29.50	28.22	36.6	46.4	50.8	33.6	42.2	65	17	27	30	69	58	.143	.164	.97	.47	6.9	5.9	6.7
May	29.01	29.52	28.46	47.1	54.3	58.2	43.5	50.8	72	30	39	40	74	61	.237	.246	5.17	1.39	7.8	7.2	7.7
June	29.02	29.35	28.71	60.3	68.7	73.0	57.3	65.2	90	43	54	54	80	62	.417	.417	7.50	2.20	7.6	6.3	6.6
July	29.14	29.55	28.83	66.2	76.0	80.3	62.3	71.3	90	51	60	60	80	59	.517	.517	9.04	5.67	5.2	3.8	4.9
August	29.12	29.39	28.83	63.2	73.5	79.1	59.6	69.4	87	44	58	59	83	61	.481	.499	3.66	1.38	5.5	3.5	4.9
September	29.13	29.38	28.84	55.1	65.3	72.1	53.0	62.6	86	42	50	53	82	66	.360	.402	1.72	1.12	4.4	3.4	4.3
October	29.13	29.50	28.67	43.5	54.0	61.6	40.9	51.2	83	24	37	39	80	57	.219	.237	1.39	1.09	3.9	2.5	4.0
November	29.14	29.72	28.52	25.2	30.0	34.1	21.0	27.6	52	1	18	21	74	68	.093	.106	.36	.22	7.6	5.6	6.8
December	29.18	29.64	28.72	13.2	17.5	21.1	8.6	14.8	41	—17	8	10	76	69	.057	.063	.53	.16	6.3	4.6	6.1
Year	29.13	29.74	28.21	38.1	46.3	50.9	34.8	42.8	90	—25	32	35	79	67	.229	.246	32.55	5.67	5.9	4.7	5.6

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

ROSEBURG, OREGON.

[H=523 feet; h_t=57 feet; h_r=47 feet; h_a=67 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		Mi.																								
January	2.7	Calm. E.	24	E.	0	5	2	11	1	8	4	7	9	15	2	9	20	18	14	0	0	....	0	0	4	0	0
February	2.5	W.	28	SW.	0	6	8	3	3	4	6	12	4	12	5	10	14	12	11	0	0	....	0	0	6	0	0
March	3.1	Calm. S.	26	S.	0	8	7	5	3	9	6	5	7	12	6	7	18	17	13	0	1	....	0	0	0	2	0
April	4.6	Calm. SW.	30	SW.	0	5	4	0	2	6	12	11	6	14	3	8	19	23	15	0	0	....	0	0	0	0	0
May	4.0	N.	30	SW.	0	14	0	5	2	6	7	3	11	14	9	8	14	11	10	0	0	....	0	0	0	0	0
June	4.2	NW.	20	SW.	0	6	9	6	0	0	5	2	17	15	9	13	8	7	3	0	0	....	0	2	0	0	0
July	4.9	N.	21	N.	0	17	8	5	0	1	0	3	14	14	16	13	2	1	1	0	0	....	0	0	0	0	0
August	4.3	N.	19	N.	0	22	13	4	0	2	1	4	7	9	19	9	3	0	0	0	0	....	0	1	0	0	0
September	3.0	Calm. N.	19	SW.	0	13	6	3	1	3	4	4	11	15	18	5	7	7	6	0	0	....	0	1	0	0	0
October	2.5	Calm. NW.	22	SE.	0	4	3	4	7	3	5	9	11	16	15	5	11	11	10	0	0	....	0	0	0	0	0
November	3.2	S.	30	SE.	0	4	0	5	5	14	7	8	8	9	5	11	14	14	14	0	1	....	0	0	2	0	0
December	3.1	SE.	44	SW.	1	5	2	4	4	6	12	6	16	7	3	8	20	16	13	1	0	....	0	0	7	0	0
Year	3.5	NW.	44	SW.	1	109	62	55	28	62	69	74	121	152	110	106	150	137	110	1	2	....	0	4	19	2	0

SACRAMENTO, CAL.

[H=64 feet; h_t=61 feet; h_r=57 feet; h_a=70 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.0	SE.	36	NW.	0	15	4	2	17	4	3	0	17	0	13	10	8	5	5	0	0	....	0	0	0	0	0
February	6.2	SW.	22	S.	0	11	2	0	11	10	13	0	10	1	11	13	5	7	7	0	0	....	0	0	0	0	0
March	7.2	SE.	48	SE.	1	5	0	5	21	8	10	1	8	4	17	8	6	9	8	0	0	....	0	0	0	0	0
April	7.8	SW.	33	SW.	0	3	0	1	15	8	19	2	9	3	11	16	3	7	7	0	0	....	0	0	0	0	0
May	7.4	SE.	30	SW.	0	4	2	1	15	13	14	0	10	3	13	13	5	7	6	0	0	....	0	3	0	0	0
June	8.4	SE.	33	NW.	0	1	0	0	19	16	19	1	4	0	18	11	1	0	0	0	0	....	0	9	0	0	0
July	7.9	SW.	30	NW.	0	1	0	0	15	18	23	1	3	1	29	2	0	0	0	0	0	....	0	12	0	0	0
August	7.2	S.	24	SW.	0	2	0	1	12	31	16	0	0	0	27	4	0	0	0	0	0	....	0	13	0	0	0
September	6.4	S.	24	SW.	0	3	2	0	14	25	15	1	0	0	26	3	1	2	2	0	0	....	0	5	0	0	0
October	5.7	S.	30	N.	0	12	1	1	9	13	11	0	10	5	21	8	2	4	3	0	0	....	0	2	0	0	0
November	7.2	SE.	48	S.	2	5	6	5	16	11	0	1	12	3	20	4	6	7	7	0	0	....	0	0	0	0	0
December	8.2	SE.	48	S.	2	12	2	1	18	17	1	1	8	2	15	7	9	9	8	0	0	....	0	0	1	0	0
Year	7.1	SE.	48	S.	5	74	19	17	182	174	144	8	91	22	221	99	46	57	53	0	0	....	0	44	1	0	0

ST. LOUIS, MO.

[H=571 feet; h_t=110 feet; h_r=100 feet; h_a=210 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	13.4	NW.	43	NW.	2	8	8	1	6	3	10	9	17	0	14	9	8	8	6	8	0	....	15	0	26	0	0
February	12.4	N.	42	W.	2	9	7	7	12	4	6	4	9	0	9	7	13	14	12	1	0	....	1	0	10	0	0
March	12.8	NW.	46	NW.	2	2	15	6	10	2	8	7	12	0	7	13	11	12	10	3	0	....	5	0	11	0	0
April	12.4	SE.	42	S.	1	2	6	5	11	12	4	8	10	2	7	14	9	12	11	0	1	....	0	0	1	6	0
May	12.4	SW.	47	W.	3	3	8	6	9	8	13	8	7	0	4	8	19	15	14	0	0	....	0	0	0	2	0
June	10.1	SW.	36	S.	0	5	5	0	10	1	24	7	3	0	18	9	3	9	6	0	0	....	0	9	0	5	0
July	9.7	SW.	48	NW.	1	6	9	5	5	7	23	3	4	0	13	10	8	13	11	0	0	....	0	8	0	3	0
August	8.1	NE.	32	SW.	0	6	19	6	7	4	7	7	2	4	22	6	3	7	7	0	0	....	0	6	0	5	0
September	8.3	SW.	25	NW.	0	6	9	4	7	7	12	3	9	3	22	4	4	6	4	0	0	....	0	0	0	0	0
October	9.5	SW.	30	W.	0	8	8	3	4	10	10	8	10	1	21	5	5	5	5	0	0	....	0	0	0	0	0
November	11.9	SE.	43	SW.	1	3	6	2	13	8	6	5	16	1	12	7	11	9	8	1	0	....	1	0	10	1	0
December	10.6	SE.	42	SW.	1	8	5	4	15	3	9	4	12	2	8	5	18	10	7	3	0	....	8	0	19	1	0
Year	11.0	SW.	48	NW.	13	66	105	49	109	74	132	73	111	13	157	97	112	120	101	16	1	....	30	23	77	23	0

ST. PAUL, MINN.

[H=850 feet; h_t=114 feet; h_r=108 feet; h_a=120 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.7	SW.	28	NW.	0	0	0	1	8	4	13	20	5	11	14	12	5	1	0	1	0	....	22	0	30	0	0
February	7.7	SE.	24	S.	0	5	5	6	17	1	5	12	6	1	7	6	16	10	6	5	0	....	16	0	28	0	2
March	6.1	NW.	48	W.	1	1	4	7	16	3	1	5	18	7	13	7	11	8	4	4	0	....	13	0	24	0	5
April	10.3	NE.	40	SW.	1	1	12	7	9	4	9	9	7	2	4	13	13	7	4	0	0	....	1	0	13	2	0
May	8.8	NW.	36	NW.	0	7	13	5	9	2	5	6	15	0	0	14	17	21	15	1	0	....	0	0	1	2	0
June	6.9	SE.	30	NW.	0	3	7	8	11	4	9	8	9	1	3	16	11	15	13	0	1	....	0	0	0	8	0
July	5.9	SE.	25	SE.	0	2	4	4	26	5	4	5	11	1	7	20	4	11	10	0	0	....	0	2	0	8	3
August	5.6	SE.	42	NW.	1	2	5	2	24	2	3	8	10	6	10	12	9	8	6	0	0	....	0	0	0	7	0
September	7.1	SE.	24	NW.	0	2	5	4	23	6	3	11	3	3	13	10	7	5	3	0	0	....	0	0	0	3	3
October	6.7	SE.	44	NW.	1	1	3	7	14	2	11	9	11	4	15	12	4	6	3	0	1	....	0	0	6	1	1
November	8.6	SE.	35	W.	0	1	6	2	21	1	6	14	9	0	4	13	13	6	2	4	0	....	11	0	26	0	0
December	6.7	NW.	24	NW.	0	0	2	4	16	5	5	13	17	0	6	14	11	8	4	6	0	....	24	0	31	0	0
Year	7.3	SE.	48	W.	4	25	66	57	194	39	74	120	121	36	96	149	121	106	70	21	2	....	87	2	159	31	14

a By eye observations at 8 a. m. and 8 p. m. when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

ST. VINCENT, MINN.

[Lat. 48° 56′ N; long. 97° 14′ W.; gravity corr., + .01.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.17	29.77	28.63	—7.8	—2.2	7.7	—13.5	—2.9	43	—42	—15	—8	70	74	.017	.025	.36	.20	2.2	.8	1.8
February	29.25	29.61	28.63	1.0	6.7	15.1	— 4.7	5.2	37	—33	— 9	0	63	72	.023	.038	.44	.14	4.6	4.2	4.9
March	29.23	29.91	28.51	14.3	22.3	29.8	11.0	20.4	53	—17	8	18	77	83	.057	.093	.80	.48	6.6	4.9	6.2
April	29.18	29.56	28.41	30.1	37.6	44.7	25.0	34.8	67	— 2	26	32	86	83	.137	.180	1.66	.78	5.6	5.8	5.7
May	29.12	29.64	28.33	41.9	50.0	56.6	35.9	46.2	79	25	37	39	84	67	.219	.237	2.22	1.18	6.2	6.6	6.8
June	29.05	29.40	28.50	55.9	65.0	72.5	48.5	60.5	86	35	51	52	83	64	.373	.387	2.28	.66	5.1	4.0	5.1
July	29.10	29.38	28.66	60.9	72.1	79.8	53.6	66.7	88	41	56	61	85	70	.448	.536	1.70	.96	3.3	3.6	3.5
August	29.10	29.30	28.76	57.1	68.6	78.3	52.3	65.3	94	32	55	62	93	79	.432	.555	4.14	.88	4.4	4.5	4.8
September	29.09	29.43	28.68	48.1	59.3	70.6	44.8	57.7	85	31	45	52	91	77	.298	.387	1.30	.58	5.1	4.7	4.7
October	29.12	29.59	28.32	36.8	46.2	58.7	33.2	46.0	95	15	34	39	90	77	.195	.237	.28	.24	4.9	4.2	4.3
November	29.15	29.89	28.65	12.7	18.0	29.3	8.1	18.7	51	—22	10	16	88	89	.063	.085	.16	.06	7.4	5.6	6.3
December	29.21	29.71	28.79	—2.4	0.3	12.1	—9.2	1.4	34	—34	— 7	—5	83	82	.026	.029	T	T	5.9	2.7	3.9
Year	29.15	29.91	28.32	29.0	37.0	46.3	23.8	35.0	94	—42	24	35	83	76	.191	.232	15.34	1.18	5.1	4.3	4.8

SALT LAKE CITY, UTAH.

[Lat. 40° 46′ N.; long. 111° 54′ W.; gravity corr., —.01.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	25.75	26.13	25.34	22.2	28.2	32.5	19.0	25.8	45	2	17	22	82	78	.089	.113	1.61	.45	5.5	6.8	6.9
February	25.65	25.93	25.23	29.4	36.6	40.9	26.3	33.6	60	12	26	29	86	76	.137	.157	.68	.21	4.8	6.6	6.3
March	25.56	25.89	25.13	38.4	47.7	52.4	34.4	43.4	68	26	29	34	70	62	.157	.195	2.21	.60	4.5	5.4	5.8
April	25.57	25.86	25.20	41.7	53.4	55.8	38.9	47.4	73	26	32	37	69	56	.180	.219	1.90	.46	6.8	6.6	7.0
May	25.59	25.93	25.23	49.4	62.4	65.2	45.5	55.4	85	36	37	40	65	48	.219	.246	1.65	.34	4.6	5.1	4.9
June	25.57	25.76	25.20	57.6	75.4	78.0	53.6	65.8	98	38	41	42	56	35	.256	.266	1.21	.43	2.5	3.8	3.4
July	25.65	25.82	25.50	67.2	85.0	88.3	63.7	76.0	96	55	45	39	45	22	.298	.237	T	T	2.0	2.1	2.1
August	25.65	25.80	25.47	65.4	85.0	89.1	61.6	75.4	106	45	41	40	42	22	.256	.246	.03	.03	2.5	3.1	3.0
September	25.67	25.88	25.39	59.8	76.6	82.9	56.3	69.6	90	48	34	36	39	25	.195	.211	.12	.05	2.3	2.1	2.5
October	25.70	25.98	25.30	45.6	55.4	61.8	41.7	51.8	80	30	32	34	60	47	.180	.195	1.58	.44	3.4	3.9	3.9
November	25.70	26.05	24.98	38.0	45.1	51.3	33.2	42.2	66	18	26	26	64	48	.137	.137	.72	.68	3.6	2.5	4.9
December	25.71	26.04	25.40	26.1	29.3	34.4	20.7	27.6	55	—1	19	22	77	74	.098	.113	2.35	.70	6.4	5.2	6.1
Year	25.65	26.13	24.98	45.1	56.7	61.0	41.2	51.2	100	—1	32	33	63	49	.184	.195	14.08	.70	4.1	4.6	4.7

SAN ANTONIO, TEX.

[Lat. 29° 27′ N.; long. 98° 28′ W.; gravity corr., —.04.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	29.52	29.85	29.02	38.8	50.8	57.2	37.0	47.1	78	19	27	31	66	51	.143	.172	1.51	.60	4.3	4.1	4.4
February	29.40	29.72	28.97	55.1	65.4	70.7	53.8	62.2	82	43	45	46	70	53	.298	.310	.71	.16	6.7	5.4	6.6
March	29.37	29.86	28.95	51.3	63.4	69.0	48.8	58.9	87	23	38	41	64	48	.228	.256	1.75	.61	6.0	4.8	4.8
April	29.26	29.60	28.79	64.5	78.7	85.1	62.2	73.6	96	43	51	52	64	43	.373	.387	.16	.12	7.1	2.8	4.5
May	29.22	29.52	28.95	70.8	81.9	88.9	67.6	78.2	96	50	62	60	74	49	.555	.517	.89	.72	6.6	4.4	4.7
June	29.26	29.46	29.07	74.4	86.7	92.9	71.0	82.0	98	54	65	63	73	47	.616	.575	3.83	2.96	6.6	3.3	3.7
July	29.35	29.52	29.13	76.2	89.0	94.9	73.5	84.2	97	66	68	62	76	42	.684	.555	.05	.04	6.1	3.8	4.0
August	29.32	29.46	29.18	74.5	82.4	89.8	71.9	80.8	95	68	68	67	82	61	.684	.660	9.09	3.20	7.0	6.2	6.2
September	29.36	29.52	29.22	69.1	82.3	89.3	66.5	77.9	95	55	62	59	77	48	.555	.499	1.09	.82	3.6	3.3	3.4
October	29.34	29.70	29.10	63.9	74.1	82.2	61.6	71.9	90	41	56	56	76	54	.448	.448	1.48	.54	4.7	3.3	4.6
November	29.43	29.92	29.04	54.4	64.9	72.0	51.7	61.8	86	32	44	46	70	52	.287	.310	1.09	.46	5.3	3.2	4.4
December	29.41	29.75	29.11	46.5	55.6	62.3	44.1	53.2	80	22	38	40	74	57	.228	.246	4.16	1.44	5.8	4.4	4.9
Year	29.35	29.92	28.79	61.6	72.9	79.5	59.1	69.3	98	19	52	52	72	50	.425	.411	25.81	3.20	5.8	4.1	4.7

SAN DIEGO, CAL.

[Lat. 32° 43′ N.; long. 117° 10′ W.; gravity corr., —.03.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	29.95	30.25	29.65	50.1	59.0	64.2	46.0	55.1	75	38	38	45	67	64	.228	.288	1.58	1.25	2.9	4.3	4.0
February	29.92	30.10	29.58	51.8	57.3	61.2	48.9	55.0	68	42	47	49	85	75	.322	.347	2.96	1.25	6.4	5.5	5.9
March	29.91	30.11	29.75	52.2	59.7	62.8	49.3	56.0	75	44	48	50	84	72	.334	.360	.96	.34	5.8	4.2	4.5
April	29.93	30.19	29.78	52.8	62.2	66.2	49.3	57.8	80	41	47	50	82	66	.322	.360	.41	.41	4.8	2.7	2.9
May	29.89	30.05	29.73	57.2	64.3	67.2	54.0	61.0	87	47	53	54	85	70	.402	.417	1.15	.95	7.8	6.2	5.6
June	29.85	29.90	29.66	58.2	65.3	68.4	55.7	62.0	75	51	54	55	84	70	.417	.432	.13	.13	6.5	3.4	4.3
July	29.87	30.00	29.76	61.2	67.8	70.3	59.5	64.9	75	57	58	58	88	72	.481	.481	.00	.00	8.3	2.3	3.3
August	29.83	29.92	29.74	65.0	69.8	73.0	62.5	67.8	80	57	60	60	84	72	.517	.517	.05	.04	8.1	3.5	4.5
September	29.86	29.96	29.75	62.3	68.3	71.7	59.1	65.4	80	54	58	60	88	75	.481	.517	T	T	7.0	1.7	3.0
October	29.87	30.02	29.72	58.3	65.4	70.6	54.8	62.7	82	46	50	57	76	75	.360	.465	.22	.10	4.9	4.8	4.9
November	29.93	30.02	29.78	55.3	65.5	69.9	51.9	60.9	84	40	43	50	68	60	.277	.360	.94	.82	2.5	2.6	3.0
December	30.00	30.18	29.76	48.9	57.5	63.0	45.5	54.2	71	36	40	47	73	70	.246	.322	.99	.43	2.2	3.4	3.4
Year	29.90	30.25	29.58	56.1	63.3	67.4	53.1	60.2	87	36	50	53	80	71	.386	.406	9.09	1.25	3.6	3.7	4.1

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

ST. VINCENT, MINN.

[H = 805 feet; h_t = 8 feet; h_r = 6 feet; h_a = 24 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Wind. Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	11.0	W.	36	S.	0	11	0	2	6	10	1	19	13	0	23	4	4	7	2	6	0	....	24	0	31	0	2
February	11.4	N.	40	S.	1	15	0	7	8	8	2	5	9	4	13	1	15	12	3	12	0	....	24	0	29	0	4
March	11.8	E.	43	N.	2	12	1	14	9	9	0	4	11	2	12	1	18	6	5	3	0	....	12	0	27	0	2
April	12.9	E.	65	NW.	3	13	6	20	4	1	0	1	12	3	12	1	17	11	10	6	0	....	4	0	26	0	1
May	11.1	N.	40	N.	2	18	10	7	4	3	0	8	11	1	9	1	21	14	10	4	0	....	0	0	9	0	0
June	9.7	N.	37	SE.	0	19	0	9	7	7	0	7	9	2	12	5	13	11	10	0	0	....	0	0	0	1	1
July	9.4	NW.	40	SW.	1	4	1	2	11	11	3	11	17	2	18	6	7	7	6	0	0	....	0	0	0	0	4
August	8.4	N.	36	S.	0	13	2	7	11	9	1	4	12	3	12	13	6	14	13	0	0	....	0	2	0	0	0
September	9.2	N.	34	S.	0	14	0	7	9	8	2	8	10	2	13	8	9	8	6	0	0	....	0	0	1	0	0
October	10.0	N.	50	S.	2	11	2	10	7	8	0	11	10	3	16	7	8	3	1	0	0	....	0	0	14	0	0
November	11.9	N.	46	NE.	1	14	4	9	5	14	1	4	9	0	10	3	17	5	2	4	0	....	16	0	30	0	0
December	8.3	N.	30	N.	0	12	1	2	3	11	1	12	8	2	18	8	5	0	0	0	0	....	30	0	31	0	0
Year	10.4	N.	65	NW.	12	156	27	96	84	99	21	94	131	24	168	58	140	98	68	35	0	....	110	2	198	1	14

SALT LAKE CITY, UTAH.

[H = 4,345 feet; h_t = 83 feet; h_r = 75 feet; h_a = 90 feet.]

Month.	Average hourly velocity.	Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	3.3	E.	24	NW.	0	5	2	21	1	1	0	11	10	11	4	10	17	15	8	12	0	....	13	0	31	0	0
February	3.2	NW.	16	NW.	0	3	1	2	7	3	2	9	17	14	5	10	14	12	4	6	0	....	6	0	20	0	0
March	6.6	NW.	36	SW.	0	10	2	2	11	9	3	2	18	5	9	8	14	13	10	7	3	....	0	0	10	0	0
April	5.5	NW.	26	NW.	0	8	7	2	5	3	6	2	11	16	4	9	17	16	10	5	3	....	0	0	4	1	0
May	5.3	NW.	34	SW.	0	0	1	3	13	3	7	2	16	17	12	9	10	13	10	0	0	....	0	0	0	3	0
June	6.3	SE.	34	SW.	0	10	1	4	16	7	7	2	10	3	17	7	6	10	7	0	1	....	0	4	0	3	0
July	6.8	SE.	34	S.	0	6	1	8	15	9	3	1	18	1	23	8	0	0	0	0	0	....	0	13	0	2	0
August	5.9	SE.	28	SW.	0	2	0	6	21	9	2	1	21	0	16	14	1	2	0	0	0	....	0	14	0	1	0
September	6.0	SE.	36	SW.	0	5	2	2	22	4	2	1	21	1	20	10	0	4	2	0	0	....	0	1	0	2	0
October	5.1	NW.	37	NW.	0	8	3	5	13	3	5	2	21	2	17	5	9	10	7	0	0	....	0	0	4	2	0
November	7.5	SE.	36	S.	0	6	3	6	17	7	3	6	9	3	11	13	6	2	2	2	0	....	0	0	13	0	0
December	4.9	SE.	35	NW.	0	4	1	3	30	8	4	2	6	4	11	6	14	18	12	13	1	....	18	0	23	0	0
Year	5.5	SE.	37	NW.	0	67	24	64	171	66	44	41	178	77	149	109	108	115	72	45	8	....	37	32	105	14	0

SAN ANTONIO, TEX.

[H = 679 feet; h_t = 66 feet; h_r = 60 feet; h_a = 75 feet.]

Month.	Average hourly velocity.	Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	7.2	N.	32	N.	0	12	11	12	6	2	5	2	6	6	14	7	10	11	9	0	0	....	0	0	9	0	0
February	7.0	N.	28	N.	0	15	9	11	13	2	3	2	1	2	4	14	11	11	7	0	0	....	0	0	0	1	0
March	9.4	SE.	30	W.	0	9	14	4	20	1	3	5	4	2	11	11	9	9	8	0	0	....	0	0	3	0	0
April	9.2	SE.	26	NW.	0	5	12	9	27	3	2	1	1	0	9	16	[illegible]	3	1	0	0	....	0	8	0	2	0
May	10.4	SE.	36	E.	0	6	4	8	38	1	1	1	2	1	8	20	3	6	3	0	0	....	0	0	0	4	0
June	7.5	SE.	25	E.	0	3	1	8	32	5	3	1	1	6	11	18	1	6	4	0	0	....	0	25	0	5	0
July	7.5	SE.	27	N.	0	1	2	2	37	7	2	0	0	11	12	18	1	3	0	0	0	....	0	28	0	3	0
August	4.6	SE.	23	E.	0	0	13	10	16	6	4	0	1	12	2	19	10	14	11	0	0	....	0	18	0	5	0
September	4.9	NE.	25	NE.	0	3	19	18	7	3	0	0	0	10	17	10	3	5	3	0	0	....	0	14	0	1	0
October	6.6	SE.	31	NE.	0	10	8	14	17	2	1	3	2	5	13	12	6	9	7	0	0	....	0	1	0	6	0
November	6.4	SE.	30	NW.	0	9	11	5	12	5	6	1	2	9	13	11	6	10	6	0	0	....	0	0	1	3	0
December	7.3	N.	34	N.	0	12	6	11	6	4	8	6	2	7	13	10	8	10	9	0	0	....	0	0	5	3	0
Year	7.3	SE.	36	E.	0	85	110	112	231	41	38	22	22	71	127	166	73	97	68	0	0	....	0	108	18	33	0

SAN DIEGO, CAL.

[H = 93 feet; h_t = 73 feet; h_r = 66 feet; h_a = 85 feet.]

Month.	Average hourly velocity.	Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	3.7	N.	17	SW.	0	9	12	1	0	4	3	7	14	12	14	12	5	5	3	0	0	....	0	0	0	0	0
February	4.7	W.	24	S.	0	7	5	2	2	7	7	13	4	11	9	7	13	10	7	0	0	....	0	0	0	0	0
March	4.8	W.	26	S.	0	3	4	3	1	1	5	22	8	15	12	12	7	10	6	0	0	....	0	0	0	0	0
April	5.5	W.	26	S.	0	4	4	1	1	2	4	35	9	2	22	4	4	2	2	0	0	....	0	0	0	0	0
May	5.7	W.	24	SW.	0	1	4	0	3	9	7	22	8	8	9	10	12	6	4	0	0	....	0	0	0	0	0
June	5.6	W.	20	W.	0	6	2	0	1	2	12	24	8	5	15	10	5	1	1	0	0	....	0	0	0	0	0
July	5.0	W.	17	NW.	0	3	1	0	0	6	16	22	8	6	18	13	0	0	0	0	0	....	0	0	0	0	0
August	4.9	SW.	14	SW.	0	3	0	0	1	3	22	17	7	9	14	10	7	2	1	0	0	....	0	0	0	0	0
September	4.8	NW.	18	NW.	0	3	2	1	1	0	4	19	25	5	20	8	2	0	0	0	0	....	0	0	0	0	0
October	4.2	W.	18	NW.	0	8	4	1	2	4	10	16	6	11	12	11	8	5	2	0	0	....	0	0	0	1	0
November	3.7	NW.	18	NW.	0	6	5	2	3	5	5	5	11	18	18	6	6	3	3	0	0	....	0	0	0	0	0
December	4.3	NE.	17	N.	0	4	15	4	1	6	3	6	14	9	20	3	8	5	3	0	0	....	0	0	0	0	0
Year	4.7	W.	26	S.	0	57	58	15	16	49	98	206	122	111	183	106	77	49	32	0	0	....	0	0	0	1	0

a By eye observations at 8 a. m and 8 p. m. when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

SANDUSKY, OHIO.

[Lat. 41° 25′ N.; long. 82° 49′ W.; gravity corr., —.01.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a.m.	8 p.m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a.m.	8 p.m.	8 a.m.	8 p.m.	8 a.m.	8 p.m.	Total.	Maximum in 24 hours.	8 a.m.	8 p.m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.38	29.83	28.83	20.3	24.2	30.0	15.8	22.9	56	— 3	15	18	79	76	.081	.093	1.99	.42	6.7	6.3	7.1
February	29.42	29.97	28.75	29.9	31.5	38.0	25.1	31.6	55	9	25	26	81	80	.130	.137	2.58	.60	8.0	5.4	8.3
March	29.38	29.83	28.78	29.6	31.7	38.3	25.3	31.8	56	13	23	25	76	77	.119	.130	4.97	2.14	5.9	5.5	7.7
April	29.39	29.80	29.05	44.1	48.2	54.4	39.3	46.8	79	25	34	35	69	61	.195	.203	2.56	.73	6.2	6.0	7.5
May	29.27	29.68	28.78	55.5	57.9	65.5	49.4	57.4	88	40	46	49	72	73	.310	.347	6.91	1.16	7.5	8.0	8.7
June	29.28	29.44	28.92	70.2	70.8	80.1	63.2	71.6	94	53	62	63	75	76	.555	.575	6.41	1.41	6.2	5.7	6.2
July	29.41	29.82	29.07	71.0	73.4	83.1	63.7	73.4	97	52	61	62	71	68	.536	.555	4.81	1.99	4.1	4.5	5.0
August	29.36	29.52	29.13	69.5	72.8	80.0	64.7	72.4	93	53	61	61	75	68	.536	.536	5.53	3.54	5.2	3.9	4.6
September	29.45	29.67	28.86	60.7	66.0	73.0	57.3	65.2	88	45	53	57	76	74	.402	.465	2.69	2.03	4.0	2.2	4.5
October	29.40	29.72	28.76	48.2	54.0	61.7	45.6	53.6	81	32	38	41	70	63	.228	.256	.93	.61	5.2	4.5	5.2
November	29.40	29.74	28.66	35.3	38.2	42.4	33.0	37.7	68	20	30	32	79	77	.164	.180	2.85	1.05	7.7	8.2	8.9
December	29.43	29.91	28.81	26.1	29.1	33.5	23.3	28.4	66	1	21	24	79	78	.108	.125	1.05	.30	8.7	6.7	8.7
Year	29.38	29.97	28.66	46.7	49.8	56.7	42.1	49.4	97	— 3	39	41	75	73	.280	.300	43.28	3.54	6.3	5.6	6.9

SAN FRANCISCO, CAL.

[Lat. 37° 48′ N.; long. 122° 26′ W.; gravity corr., —.02.]

January	29.96	30.16	29.61	47.9	53.3	57.5	45.9	51.7	66	40	44	44	86	74	.287	.287	2.42	1.06	4.0	3.8	4.7
February	29.88	30.11	29.55	48.8	54.0	57.4	47.3	52.4	66	42	45	46	88	76	.298	.310	2.90	1.03	5.7	4.6	5.9
March	29.87	30.16	29.63	50.6	55.7	60.1	48.4	54.2	80	42	46	46	85	74	.310	.310	2.85	.90	5.5	5.5	5.8
April	29.96	30.19	29.69	47.9	54.8	59.6	46.7	53.1	68	44	45	48	90	78	.298	.334	1.39	.38	4.5	3.7	3.7
May	29.83	30.09	29.56	52.5	59.3	64.8	51.2	58.0	90	47	49	50	88	72	.347	.360	1.86	1.15	5.7	3.1	4.5
June	29.83	30.01	29.50	51.8	58.1	62.9	50.8	56.8	73	47	48	49	89	73	.334	.347	T.	T.	3.3	2.7	3.7
July	29.84	29.99	29.63	53.0	59.2	64.2	52.0	58.1	90	50	50	51	90	74	.360	.373	0.00	0.00	4.8	2.8	3.0
August	29.79	29.91	29.66	54.3	60.0	65.5	53.3	59.4	92	50	52	52	92	75	.387	.487	0.00	0.00	4.6	2.3	5.1
September	29.84	29.99	29.66	55.7	60.4	66.1	54.2	60.2	88	51	52	54	89	79	.387	.417	.02	.02	4.7	2.4	4.4
October	29.86	30.04	29.72	54.1	58.7	66.7	52.5	59.6	79	47	48	50	83	73	.334	.360	1.65	.91	4.2	3.7	3.7
November	29.88	30.12	29.41	53.0	58.4	63.7	50.1	56.9	73	42	47	46	81	66	.322	.310	3.91	1.46	2.5	3.5	4.5
December	29.97	30.23	29.46	49.0	54.0	56.4	45.8	51.1	64	38	42	42	80	66	.266	.266	5.08	2.34	3.8	3.7	5.3
Year	29.88	30.23	29.41	51.6	57.2	62.1	49.8	56.0	92	38	47	48	87	73	.328	.338	22.08	2.34	4.4	3.5	4.6

SANTA FE, N. MEX.

[Lat. 35° 41′ N.; long. 105° 57′ W.; gravity corr., —.02.]

January	23.24	23.57	23.01	22.3	30.6	37.4	20.7	29.0	57	1	13	15	67	54	.074	.081	1.34	1.22	3.6	2.9	2.9
February	23.20	23.43	22.82	27.9	38.7	42.8	26.9	34.8	54	12	17	23	66	55	.089	.119	1.22	.55	3.9	3.0	3.1
March	23.14	23.44	22.79	30.9	43.3	48.6	29.9	39.2	60	15	16	19	56	41	.085	.098	1.51	.58	4.5	3.9	3.8
April	23.18	23.47	22.70	36.6	[illegible]	57.3	36.1	46.7	72	20	18	16	48	31	.093	.085	.69	.49	2.9	4.7	3.6
May	23.21	23.46	22.99	45.7	61.9	66.4	43.5	55.0	76	32	23	16	44	22	.119	.085	.50	.21	2.4	4.6	5.8
June	23.28	23.53	23.07	58.3	75.5	78.0	53.9	66.0	90	37	28	6	33	11	.150	.052	1.05	1.02	1.4	2.1	1.7
July	23.40	23.54	23.24	61.4	74.8	80.4	59.1	69.8	86	53	42	34	51	29	.266	.195	2.12	.76	3.1	5.3	3.4
August	23.39	23.51	23.20	58.6	74.3	78.9	57.5	68.2	86	40	36	35	45	26	.211	.203	.81	.25	2.1	5.6	4.0
September	23.41	23.54	23.25	54.0	72.4	76.6	53.0	64.8	81	44	31	20	42	18	.172	.103	T.	T.	1.6	2.3	1.7
October	23.31	23.54	22.89	40.8	53.1	59.0	38.7	48.8	77	24	26	27	58	41	.137	.143	1.32	.37	3.1	4.3	3.7
November	23.28	23.53	22.91	31.4	39.8	48.7	28.3	38.5	57	17	14	11	49	39	.077	.067	.36	.19	3.2	2.5	2.6
December	23.19	23.39	23.00	22.5	29.3	37.6	20.3	28.6	55	6	13	12	67	47	.074	.070	.79	.30	3.2	1.9	2.7
Year	23.27	23.57	22.70	40.9	53.9	59.3	39.0	49.1	90	1	23	20	52	34	.129	.108	11.02	1.22	2.9	3.6	3.2

SAULT DE STE. MARIE, MICH.

[Lat. 46° 28′ N.; long. 84° 22′ W.; gravity corr., 0.]

January	29.25	29.75	28.75	8.6	14.5	20.4	3.6	12.0	42	—22	6	11	91	86	.052	.067	2.41	.66	7.6	6.0	7.7
February	29.41	30.03	28.73	13.5	18.9	24.2	9.6	16.9	39	—22	11	13	91	81	.067	.074	1.43	.30	7.8	5.2	7.4
March	29.36	29.81	28.59	15.4	24.2	30.2	11.9	21.0	47	— 9	12	16	88	75	.070	.085	1.52	.58	5.0	4.2	6.5
April	29.34	29.85	28.60	33.2	34.3	42.2	26.9	34.6	56	13	25	25	72	70	.130	.130	2.32	.78	5.4	5.9	7.0
May	29.23	29.82	28.74	46.6	50.6	57.0	40.3	48.6	74	31	35	35	67	59	.203	.203	3.12	.68	7.2	6.8	8.2
June	29.23	29.58	28.82	56.4	59.7	69.4	48.9	59.2	90	39	50	50	81	71	.360	.360	3.50	1.13	7.3	6.1	7.9
July	29.33	29.84	28.99	61.3	66.6	76.3	52.5	64.4	85	42	55	55	80	67	.432	.432	2.33	.64	4.8	5.0	6.3
August	29.31	29.58	28.92	60.5	63.9	74.4	54.0	64.2	87	45	55	55	83	74	.432	.432	2.05	.89	4.6	4.7	5.9
September	29.33	29.70	28.88	52.8	56.2	65.4	47.3	56.4	88	36	50	48	90	75	.360	.334	1.79	.40	5.5	3.9	6.8
October	29.29	29.79	28.58	40.1	44.9	51.8	37.1	44.4	70	30	37	39	89	89	.219	.237	2.96	.79	6.4	4.5	7.3
November	29.29	29.79	28.34	27.3	30.5	33.7	24.3	29.0	47	5	24	26	88	84	.125	.137	3.23	.80	9.0	8.7	9.2
December	29.28	29.60	28.53	16.9	20.6	24.1	13.9	19.0	36	—10	15	18	92	88	.081	.093	3.41	.60	8.7	7.9	9.0
Year	29.30	30.03	28.34	36.0	40.4	47.4	30.9	39.1	90	—22	31	33	84	76	.211	.215	30.09	1.13	6.6	5.7	7.4

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

SANDUSKY, OHIO.

[H=629 feet; h_t=62 feet; h_r=55 feet; h_a=74.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	10.2	SW.	36	NW.	0	6	4	1	4	1	18	12	16	0	7	5	19	14	10	12	0	....	18	0	29	0	0
February	9.6	NW.	36	NW.	0	4	6	11	8	5	7	6	11	0	2	6	21	16	11	5	0	....	6	0	24	1	1
March	9.9	NE.	33	NW.	0	6	12	11	7	1	5	9	11	0	2	11	18	14	11	8	0	....	10	0	24	1	0
April	12.5	E.	40	NW.	1	3	4	18	6	3	7	9	10	0	1	15	14	12	10	2	0	....	0	0	7	2	1
May	9.4	SW.	30	SW.	0	6	3	12	3	4	15	11	8	0	0	6	25	21	19	0	1	....	0	0	0	10	0
June	7.6	SW.	40	W.	1	5	3	13	5	2	17	10	5	0	6	12	12	18	13	0	1	....	0	3	0	13	0
July	6.5	SW.	57	NW.	1	2	7	14	7	3	14	10	5	0	5	22	4	11	9	0	0	....	0	8	0	6	2
August	7.7	NE.	36	NW.	0	3	13	10	7	6	10	8	4	1	15	12	4	8	6	0	0	....	0	3	0	6	0
September	7.8	SW.	36	W.	0	1	6	6	5	9	18	10	5	0	11	14	5	7	4	0	0	....	0	0	0	2	0
October	9.4	SW.	44	NW.	1	11	2	2	3	5	21	13	5	0	9	11	11	5	4	0	0	....	0	0	0	3	0
November	10.0	W.	30	N.	0	12	0	2	2	9	12	13	9	1	0	7	23	17	13	5	0	....	3	0	15	0	0
December	8.1	W.	28	W.	0	8	3	2	5	4	13	19	8	0	0	8	23	9	7	4	0	....	12	0	26	1	0
Year	9.2	SW.	57	NW.	4	67	63	102	62	52	157	130	97	2	58	129	179	152	117	36	2	....	49	14	125	45	4

SAN FRANCISCO, CAL.

[H=153 feet; h_t=161 feet; h_r=154 feet; h_a=167 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	4.5	N.	34	SE.	0	15	8	2	6	5	6	9	5	6	13	9	9	8	6	0	0	....	0	0	0	0	0
February	5.7	W.	24	W.	0	3	2	3	3	7	15	18	4	3	9	8	12	9	7	0	0	....	0	0	0	0	0
March	7.3	W.	36	S.	0	3	0	0	3	4	13	31	4	4	9	9	13	11	9	0	0	....	0	0	0	0	0
April	9.2	W.	36	W.	0	1	0	0	3	6	12	33	1	4	17	10	3	9	8	0	0	....	0	0	0	0	0
May	9.0	SW.	32	W.	0	1	0	0	2	7	19	25	5	3	13	11	7	8	5	0	0	....	0	0	0	0	0
June	11.7	W.	36	W.	0	0	0	0	1	0	21	38	0	0	17	10	3	0	0	0	0	....	0	0	0	0	0
July	12.0	W.	36	W.	0	0	0	0	0	4	20	38	0	0	18	8	5	0	0	0	0	....	0	1	0	0	0
August	10.4	W.	28	W.	0	0	0	0	0	10	20	29	1	2	10	13	8	0	0	0	0	....	0	1	0	0	0
September	9.2	W.	30	W.	0	1	0	0	0	5	22	29	0	3	11	16	3	1	0	0	0	....	0	0	0	1	0
October	6.7	W.	36	W.	0	4	0	0	1	2	12	37	0	6	18	5	8	6	5	0	0	....	0	0	0	1	0
November	9.1	SW.	56	SE.	4	2	0	4	5	8	12	14	11	4	16	5	9	7	7	0	0	....	0	0	0	0	0
December	9.2	SE.	60	SE.	2	4	6	5	15	4	3	11	9	0	14	6	11	10	9	0	0	....	0	0	0	0	0
Year	8.7	W.	60	SE.	6	34	16	14	39	62	180	312	40	35	165	110	91	69	56	0	0	....	0	2	0	2	0

SANTA FE, N. MEX.

[H=7,059 feet; h_t=59 feet; h_r=52 feet; h_a=60 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.4	NE.	32	S.	0	8	32	3	5	3	4	2	2	3	23	6	2	5	4	4	0	....	7	0	27	2	0
February	6.8	NE.	33	SE.	0	10	13	8	7	2	7	6	4	1	22	3	4	6	6	6	0	....	3	0	23	0	0
March	9.2	SW.	48	SW.	2	9	6	11	5	8	9	5	8	1	17	8	6	10	7	7	1	....	0	0	19	1	0
April	8.9	SW.	33	SW.	0	6	10	4	13	1	14	5	7	0	19	8	3	5	3	5	0	....	0	0	10	0	0
May	9.2	SW.	38	SW.	0	2	13	4	12	1	18	3	9	0	24	7	0	5	4	1	0	....	0	0	0	2	0
June	8.8	SE.	38	S.	0	3	6	12	9	3	12	8	6	1	28	2	0	3	1	0	0	....	0	0	0	1	0
July	7.4	SE.	37	SE.	0	8	9	7	19	8	4	3	2	2	16	14	1	16	10	0	0	....	0	0	0	3	0
August	7.1	SE.	31	NE.	0	6	15	12	23	0	3	2	1	0	11	18	2	8	6	0	0	....	0	0	0	4	0
September	6.5	SE.	31	SE.	0	1	3	17	14	1	13	5	6	0	28	1	1	0	0	0	0	....	0	0	0	0	0
October	7.7	SE.	45	SW.	1	4	12	11	11	6	10	3	4	1	19	6	6	9	9	1	0	....	0	0	7	0	0
November	7.3	NE.	35	NW.	0	3	25	5	15	3	6	2	1	0	20	7	3	3	3	2	0	....	0	0	25	0	0
December	6.8	NE.	25	NE.	0	6	26	5	13	3	6	1	1	1	21	9	1	7	3	7	0	....	12	0	26	0	0
Year	7.7	SE.	48	SW.	3	66	170	99	146	39	106	45	51	10	248	89	29	77	56	33	1	....	22	0	137	13	0

SAULT DE STE. MARIE, MICH.

[H=642 feet; h_t=56 feet; h_r=48 feet; h_a=65 feet.]

Month.	Average hourly velocity.	Prevailing direction.	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	7.8	SE.	36	NW.	0	6	7	7	15	0	6	4	16	1	1	12	18	18	14	18	0	....	26	0	30	0	0
February	8.0	SE.	35	SE.	0	1	7	7	24	2	0	4	13	0	2	9	18	15	10	14	0	....	21	0	29	0	4
March	8.3	NW.	38	NW.	0	3	3	1	21	1	5	3	24	1	4	11	16	11	8	11	0	....	16	0	31	0	5
April	11.9	NW.	48	SW.	2	2	7	3	11	1	3	3	36	0	5	8	17	11	7	4	1	....	4	0	22	2	2
May	9.5	SE.	50	SE.	1	1	12	1	27	0	2	8	10	1	3	4	24	15	10	1	1	....	0	0	1	2	1
June	7.2	SE.	24	SE.	0	1	5	5	18	0	3	13	13	2	0	8	22	14	10	0	0	....	0	0	0	0	2
July	6.0	NW.	34	NW.	0	1	3	1	16	3	8	7	20	3	5	12	14	11	9	0	0	....	0	0	0	8	3
August	6.3	NW.	32	SW.	0	3	1	4	18	0	3	8	24	1	8	10	13	12	8	0	0	....	0	0	0	1	5
September	8.4	NW.	35	SE.	0	1	3	6	17	2	6	3	19	3	5	9	16	10	9	0	0	....	0	0	0	5	3
October	8.0	NW.	40	NW.	1	0	9	2	15	1	7	2	24	2	2	9	20	14	12	0	1	....	0	0	5	2	1
November	9.0	SE.	34	NW.	0	6	9	2	25	1	5	1	10	1	0	2	28	18	12	14	0	....	11	0	26	0	0
December	7.5	SE.	28	NW.	0	1	6	6	20	6	10	5	8	0	0	4	27	28	20	28	0	....	25	0	31	0	0
Year	8.2	SE. NW.	50	SE.	4	26	72	45	227	17	58	61	211	15	35	98	233	177	129	99	3	....	103	0	175	20	26

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

SAVANNAH, GA.

[Lat. 32° 5′ N.; long. 81° 5′ W.; gravity corr., —.03.]

Month.	Pressure.			Temperature							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	30.05	30.35	29.46	42.8	48.8	55.7	39.4	47.6	72	28	36	36	79	64	.211	.211	2.49	.69	5.1	5.0	5.4
February	30.04	30.44	29.60	47.9	54.6	63.1	45.8	54.4	75	32	42	44	81	70	.266	.287	1.31	1.10	6.5	4.0	5.9
March	29.99	30.28	29.38	50.1	56.2	65.6	46.8	56.2	83	27	42	44	77	67	.266	.287	4.12	3.06	3.8	3.4	4.4
April	30.06	30.29	29.64	61.2	64.2	74.2	56.8	65.5	85	42	54	55	78	74	.417	.432	0.16	.11	5.5	3.6	5.2
May	29.98	30.28	29.64	70.5	71.3	81.8	63.9	72.8	91	51	61	61	73	72	.536	.536	2.17	1.51	3.1	2.8	4.5
June	29.97	30.15	29.74	75.8	75.7	84.6	70.5	77.6	96	65	70	70	83	83	.732	.732	6.00	1.39	7.4	6.4	6.0
July	30.05	30.24	29.90	77.5	77.3	88.6	72.0	80.3	97	65	72	72	82	85	.783	.783	6.37	2.08	6.3	5.6	5.8
August	29.96	30.09	29.83	77.9	78.4	89.8	72.7	81.2	96	70	72	72	82	81	.783	.783	3.36	.89	4.7	5.7	6.0
September	30.00	30.16	29.73	71.9	73.4	81.8	68.1	75.0	90	59	68	68	87	83	.684	.684	10.95	3.18	6.9	4.2	6.7
October	30.00	30.26	29.74	61.0	65.5	75.2	57.0	66.1	85	40	56	58	86	78	.448	.481	1.12	.61	4.5	2.5	3.9
November	30.07	30.30	29.78	50.0	57.0	67.2	46.9	57.0	82	30	44	47	80	70	.287	.322	1.90	.69	2.8	1.9	3.2
December	30.03	30.36	29.63	47.3	53.5	62.2	44.4	53.3	77	25	44	47	88	80	.287	.322	3.17	1.01	4.4	3.2	5.3
Year	30.02	30.44	29.38	61.2	64.7	74.2	57.0	65.6	97	25	55	56	81	76	.475	.488	42.52	3.18	5.1	4.0	5.2

SHREVEPORT, LA.

[Lat. 32° 30′ N.; long. 93° 40′ W.; gravity corr., —.03.]

January	29.94	30.39	29.27	35.1	44.7	49.9	32.1	41.0	71	17	31	34	85	69	.172	.195	3.83	1.54	4.3	3.5	4.3
February	29.83	30.22	29.36	49.3	59.5	64.9	47.2	56.0	73	33	45	47	86	66	.298	.322	3.63	1.42	6.2	3.9	5.2
March	29.81	30.25	29.42	46.0	57.4	61.9	43.5	52.7	83	22	41	43	83	61	.256	.277	2.57	.76	5.6	5.3	5.1
April	29.73	30.07	29.35	60.6	69.5	74.1	56.6	65.4	88	45	56	60	86	72	.448	.517	9.07	2.98	7.3	6.4	6.6
May	29.68	29.98	29.45	66.7	75.1	81.0	62.5	71.8	92	46	62	63	83	68	.555	.575	2.85	.88	5.6	6.2	5.3
June	29.70	29.84	29.53	74.1	82.6	88.9	69.6	79.2	96	57	69	70	83	67	.707	.732	4.05	1.87	3.3	5.3	4.0
July	29.80	29.94	29.63	75.3	82.4	89.9	71.9	80.9	97	67	72	73	90	75	.783	.810	2.16	1.18	6.3	8.3	6.2
August	29.74	29.86	29.65	73.9	80.8	89.4	70.5	80.0	95	66	71	73	91	78	.757	.810	2.63	.65	5.3	7.4	6.1
September	29.81	29.97	29.59	66.2	77.3	84.8	62.1	73.4	92	55	61	64	84	65	.536	.595	1.56	1.24	2.1	2.4	2.8
October	29.79	30.01	29.63	60.2	70.5	77.7	57.5	67.6	90	39	56	58	87	67	.448	.481	1.54	1.04	3.8	3.1	4.2
November	29.86	30.23	29.46	50.6	59.2	65.3	48.2	56.8	80	33	45	48	83	68	.298	.334	5.79	1.77	5.2	3.3	5.0
December	29.83	30.23	29.44	44.0	49.3	53.6	41.5	47.6	77	18	40	41	84	74	.246	.256	7.45	1.81	6.8	6.9	7.3
Year	29.79	30.39	29.27	58.5	67.4	73.4	55.3	64.4	97	17	54	56	85	69	.459	.492	46.63	2.98	5.2	5.2	5.2

SIOUX CITY, IOWA.

[Lat. 42° 29′ N.; long. 96° 24′ W.; gravity corr., 0.]

January	28.90	29.32	28.35	10.3	16.9	23.8	5.6	14.7	48	—28	3	10	73	74	.045	.063	.41	.19	3.3	2.1	3.7
February	28.83	29.16	28.14	20.4	26.8	32.5	16.9	24.7	49	— 8	16	22	84	83	.085	.113	.97	.46	5.6	6.9	7.8
March	28.81	29.30	28.15	25.3	35.7	41.1	22.6	31.8	69	0	21	26	84	69	.108	.137	1.16	.44	4.7	5.1	6.0
April	28.70	29.12	27.85	40.1	49.5	55.6	37.4	46.5	88	24	34	36	82	64	.195	.211	4.76	1.46	7.4	6.1	6.6
May	28.67	29.07	28.12	47.5	55.9	60.3	44.6	52.4	78	34	43	44	84	69	.217	.287	6.56	3.74	7.3	6.9	7.3
June	28.65	29.02	28.32	62.9	72.1	79.8	58.3	69.0	94	43	56	56	79	58	.448	.448	1.50	.52	5.1	4.0	5.3
July	28.78	29.12	28.40	68.6	79.2	86.8	63.9	75.4	100	52	60	61	75	56	.517	.596	2.63	1.81	3.7	3.3	4.1
August	28.77	29.04	28.47	64.5	75.2	81.6	62.0	71.8	95	46	59	63	81	66	.499	.575	4.14	1.45	4.4	3.3	4.6
September	28.78	29.05	28.51	55.9	69.0	78.1	53.9	66.0	91	36	51	55	85	61	.373	.432	.57	.26	3.0	2.7	3.4
October	28.79	29.17	28.44	44.9	58.1	68.8	41.9	55.4	90	18	38	38	76	48	.228	.228	1.32	1.18	3.6	2.2	2.9
November	28.78	29.23	28.29	28.2	36.0	44.5	25.0	34.8	68	9	23	22	79	57	.119	.113	.16	.10	4.5	2.2	5.3
December	28.84	29.27	28.52	17.5	21.3	29.3	12.4	20.8	57	—16	14	16	85	80	.077	.085	.20	.09	6.7	4.3	6.4
Year	28.78	29.32	27.85	40.5	49.6	56.8	37.0	46.9	100	—28	35	37	81	65	.243	.269	26.38	3.74	4.9	4.1	5.3

SOUTHPORT, N. C.

[Lat. 33° 55′ N.; long. 78° 1′ W.; gravity corr., —.03.]

January	30.09	30.48	29.56	41.6	45.4	51.4	36.8	44.1	64	22	37	39	86	81	.219	.237	6.44	2.40	4.5	4.5	5.2
February	30.08	30.56	29.50	44.5	48.9	53.1	40.9	47.0	64	22	41	45	89	87	.256	.297	2.96	.83	5.0	5.7	6.2
March	30.03	30.41	29.41	47.9	53.4	55.2	42.5	48.8	64	28	44	46	87	86	.287	.310	3.72	1.52	4.6	4.0	4.8
April	30.12	30.40	29.67	57.9	59.3	63.8	51.9	57.8	72	32	54	55	87	86	.417	.432	.80	.23	3.7	3.2	4.[illegible]
May	30.04	30.39	29.63	68.4	68.5	73.6	62.6	68.1	81	52	63	64	84	86	.575	.595	3.39	2.22	2.4	2.7	3.2
June	30.04	30.28	29.79	76.6	76.2	79.5	71.2	75.4	88	63	72	73	86	89	.763	.810	4.52	1.80	5.9	5.6	5.6
July	30.10	30.32	29.92	77.1	77.4	82.1	72.1	77.1	87	61	71	73	83	86	.757	.810	6.31	4.05	4.4	5.3	4.3
August	30.01	30.13	29.86	79.4	78.9	84.0	72.5	78.2	87	60	72	72	79	82	.783	.783	1.91	.61	4.1	4.5	4.1
September	30.09	30.27	29.79	71.6	73.2	79.3	65.9	72.6	83	55	65	66	81	80	.616	.638	4.68	1.12	5.3	5.0	4.9
October	30.05	30.35	29.76	60.3	62.9	70.4	54.0	62.2	82	36	53	56	78	79	.402	.448	.98	.48	3.0	2.5	3.3
November	30.11	30.35	29.66	50.5	53.1	61.5	43.8	52.6	75	22	43	46	76	78	.277	.310	1.56	.71	2.2	2.1	2.8
December	30.06	30.44	29.57	44.0	48.1	55.9	38.9	47.4	71	22	40	43	85	84	.236	.277	2.24	.66	4.3	3.4	4.4
Year	30.07	30.56	29.41	60.0	61.9	67.5	54.4	60.9	88	22	55	56	83	84	.468	.496	39.51	4.05	4.2	4.0	4.5

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

SAVANNAH, GA.

[H=98 feet; h_t=63 feet; h_r=55 feet; h_a=86 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	* Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	8.6	NW.	32	W.	0	5	12	2	1	2	12	10	18	0	10	8	13	11	9	0	0	....	0	0	4	0	0
February	8.6	NE.	30	NW.	0	12	9	2	6	6	9	7	7	0	7	12	10	9	4	0	0	....	0	0	0	1	0
March	8.4	NW.	27	NW.	0	1	6	5	4	11	11	9	15	0	12	11	8	7	5	0	0	....	0	0	1	1	0
April	9.0	S.	26	SW.	0	1	7	8	8	17	11	3	5	0	8	13	9	6	1	0	0	....	0	0	0	1	0
May	8.9	S.	27	E.	0	0	0	7	6	26	8	6	9	0	10	17	4	6	4	0	0	....	0	1	0	3	0
June	7.5	S.	25	S.	0	1	5	2	19	15	13	5	0	0	1	21	8	15	14	0	0	....	0	6	0	1	0
July	6.9	S.	24	W.	0	2	4	1	2	27	19	6	1	0	4	21	6	17	13	0	0	....	0	12	0	0	0
August	6.2	SW.	28	E.	0	0	4	6	8	20	20	2	2	0	0	25	6	19	15	0	0	....	0	16	0	14	0
September	8.0	NE.	28	E.	0	4	26	7	10	6	4	2	1	0	1	22	7	15	14	0	0	....	0	0	0	6	0
October	7.3	NE.	26	NE.	0	9	19	3	11	6	5	2	7	0	13	14	4	4	4	0	0	....	0	0	0	0	0
November	7.1	NW.	28	NW.	0	4	7	5	5	8	9	6	15	1	14	15	1	7	6	0	0	....	0	0	1	0	0
December	6.9	NW.	29	S.	0	6	12	0	4	9	7	9	15	0	8	14	9	9	6	0	0	....	1	0	5	0	0
Year	7.8	S.	32	W.	0	45	111	48	84	153	128	67	95	1	88	193	85	125	95	0	0	....	1	35	11	36	0

SHREVEPORT, LA.

[H=249 feet; h_t=77 feet; h_r=76 feet; h_a=84 feet.]

Month.	Average hourly velocity.	* Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	7.5	SE.	38	W.	0	5	11	3	12	9	2	5	10	5	17	5	9	10	8	2	0	....	2	0	15	0	0
February	7.1	S.	29	SW.	0	9	10	5	8	15	2	0	8	1	10	11	8	9	8	0	0	....	0	0	0	3	0
March	8.8	S.	38	NW.	0	5	5	5	12	15	0	6	14	0	14	5	12	8	8	1	0	....	0	0	6	1	0
April	9.0	SE.	36	S.	0	5	8	6	19	16	0	2	4	0	7	7	16	13	13	0	3	....	0	0	0	7	0
May	8.9	S.	38	NW.	0	0	5	1	18	26	0	3	8	1	8	17	6	9	7	0	0	....	0	1	0	5	0
June	5.3	S.	38	NW.	0	5	3	3	11	17	2	9	3	7	11	15	4	8	7	0	0	....	0	16	0	2	0
July	4.4	S.	26	S.	0	0	3	5	11	19	2	11	6	5	2	17	12	8	5	0	0	....	0	17	0	3	0
August	4.2	S.	29	NE.	0	6	3	5	10	12	2	7	7	10	6	13	12	12	7	0	0	....	0	14	0	6	0
September	4.4	SE.	20	E.	0	3	10	13	14	3	0	2	2	13	22	5	3	4	2	0	0	....	0	3	0	0	0
October	6.3	SE.	24	SE.	0	6	5	11	20	8	0	2	3	7	13	12	6	4	2	0	0	....	0	0	0	1	0
November	7.9	S.	44	NW.	1	4	6	3	15	18	3	3	8	0	10	10	10	11	8	0	0	....	0	0	0	1	0
December	7.6	SE.	31	NW.	0	5	9	9	12	11	2	6	8	0	4	11	16	10	8	0	0	....	2	0	4	3	0
Year	6.8	S.	44	NW.	1	53	78	69	162	169	15	56	81	49	124	128	114	106	83	3	3	....	4	51	25	32	0

SIOUX CITY, IOWA.

[H=1,165 feet; h_t=96 feet; h_r=92 feet; h_a=109 feet.]

Month.	Average hourly velocity.	* Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	8.9	NW.	36	S.	0	6	5	2	6	12	1	3	24	3	16	9	6	8	3	7	0	....	16	0	30	0	0
February	10.4	NW.	34	NW.	0	4	8	3	14	5	3	2	18	1	2	9	18	8	5	5	0	....	9	0	26	0	1
March	11.9	E.	54	NW.	2	8	10	12	10	8	3	1	9	1	11	5	15	10	9	3	0	....	11	0	22	1	0
April	13.9	NW.	60	S.	4	3	6	9	14	9	0	4	15	0	8	9	13	12	11	3	0	....	0	0	7	2	0
May	12.1	NW.	46	N.	2	14	7	9	6	5	1	2	18	0	6	4	21	17	15	1	0	....	0	0	0	5	0
June	9.9	S.	44	S.	2	11	9	4	12	12	1	2	9	0	8	16	6	9	7	0	0	....	0	6	0	9	0
July	9.8	S.	40	S.	1	6	2	4	9	31	0	1	6	3	16	12	3	8	5	0	0	....	0	12	0	11	0
August	9.2	S.	52	N.	1	7	10	7	10	21	1	1	1	4	13	11	7	9	5	0	0	....	0	4	0	9	0
September	9.6	S.	49	W.	1	10	8	4	13	16	1	0	6	2	18	8	4	6	4	0	0	....	0	1	0	3	0
October	9.1	NW.	37	SE.	0	7	5	4	12	10	3	1	13	7	20	6	5	4	3	0	0	....	0	0	7	2	0
November	12.1	NW.	48	NW.	5	4	7	8	8	12	1	5	14	1	9	11	10	3	2	0	0	....	4	0	21	0	0
December	9.2	S.	42	N.	1	13	6	2	9	14	1	4	13	0	9	5	17	9	1	8	0	....	18	0	28	0	0
Year	10.5	S.	60	S.	19	93	83	68	123	155	16	26	146	22	136	105	125	103	70	27	0	....	58	23	141	42	1

SOUTHPORT, N. C.

[H=34 feet; h_t=11 feet; h_r=3 feet; h_a=46 feet.]

Month.	Average hourly velocity.	* Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	10.0	N.	38	SW.	0	18	5	1	0	5	8	17	7	1	12	8	11	12	11	0	0	....	0	0	0	0	0
February	10.3	N.	33	NW.	0	18	9	1	2	1	10	10	6	1	9	7	13	15	7	0	0	....	0	0	4	0	1
March	9.4	NE.	37	SW.	0	6	17	4	1	1	13	10	7	3	15	5	11	12	11	0	0	....	0	0	3	1	0
April	9.3	SW.	38	SW.	0	5	16	3	0	4	23	1	5	3	10	12	8	11	7	0	0	....	0	0	0	0	0
May	9.7	SW.	37	SW.	0	3	4	4	4	7	27	6	5	2	22	5	4	6	4	0	0	....	0	0	0	1	0
June	11.9	SW.	50	SW.	2	0	6	7	2	10	30	4	1	0	5	17	8	13	9	0	0	....	0	0	0	3	0
July	9.4	SW.	35	S.	0	1	11	1	1	5	28	10	3	2	13	11	7	11	9	0	0	....	0	0	0	7	0
August	7.7	SW.	30	SW.	0	1	10	6	2	3	24	9	2	5	13	13	5	10	7	0	0	....	0	0	0	3	0
September	8.8	NE.	35	SE.	0	4	32	8	3	4	4	0	2	3	10	9	11	13	12	0	0	....	0	0	0	3	0
October	8.1	NE.	34	W.	0	17	20	6	2	3	4	5	5	0	17	9	5	7	5	0	0	....	0	0	0	0	0
November	8.3	N	36	NW.	0	18	6	5	1	3	7	11	9	0	18	7	5	7	4	0	0	....	0	0	4	1	0
December	7.4	NE	48	W.	1	14	22	0	1	0	10	9	6	0	14	9	8	11	7	2	0	....	0	0	10	0	0
Year	9.2	SW.	50	SW.	3	105	158	46	19	46	188	92	58	20	158	112	96	128	93	2	0	....	0	0	30	19	1

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

SPOKANE, WASH.

[Lat. 47° 40′ N.; long. 117° 25′ W.; gravity corr., + .01.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	28.10	28.43	27.77	22.6	29.6	32.6	19.8	26.2	48	— 5	19	23	88	77	.098	.119	1.37	.65	5.9	6.2	6.8
February	27.98	28.33	27.60	28.6	39.5	42.2	26.6	34.4	51	12	25	29	87	66	.130	.157	.70	.22	5.5	6.6	6.6
March	27.92	28.26	27.51	37.0	50.1	53.2	35.6	44.4	66	25	31	30	79	50	.172	.164	1.21	.34	7.0	5.8	6.6
April	27.94	28.32	27.54	36.2	49.8	53.5	34.8	44.2	68	27	30	29	79	49	.164	.157	2.30	.67	6.2	7.7	7.6
May	27.93	28.33	27.66	46.0	62.3	64.9	44.6	54.8	85	32	37	32	72	37	.210	.180	2.40	.54	6.1	5.9	6.6
June	27.90	28.14	27.71	52.2	72.9	75.2	49.9	62.6	96	36	40	32	65	25	.246	.180	.72	.25	4.5	5.6	5.8
July	27.98	28.36	27.72	54.7	77.2	78.7	53.2	66.0	96	44	39	32	58	22	.237	.180	1.22	1.08	2.6	3.5	3.7
August	27.97	28.25	27.68	55.8	79.9	82.0	54.8	68.4	93	45	40	36	58	23	.246	.211	.21	.16	2.5	2.8	3.1
September	27.97	28.25	27.55	48.5	71.6	73.9	47.0	60.4	86	36	38	35	68	30	.228	.203	.35	.23	2.7	3.3	3.3
October	28.04	28.45	27.65	40.0	59.6	63.7	38.3	51.0	86	28	35	36	82	43	.203	.211	.69	.26	2.9	3.1	3.8
November	27.92	28.42	27.34	36.7	42.4	46.7	33.9	40.3	60	25	30	32	78	68	.164	.180	2.53	1.05	6.3	7.5	7.6
December	28.09	28.43	27.36	26.0	29.1	32.0	23.1	27.6	46	5	24	24	89	82	.125	.125	3.08	.79	6.4	8.2	9.0
Year	27.98	28.45	27.34	40.4	55.3	58.2	38.5	48.4	96	— 5	32	31	75	48	.185	.172	16.78	1.08	4.9	5.5	5.9

SPRINGFIELD, ILL.

[Lat. 39° 48′ N.; long. 89° 39′ W.; gravity corr., —.01.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	29.46	29.84	28.76	17.0	22.3	28.8	12.8	20.8	57	— 7	12	15	80	73	.070	.081	1.14	.42	4.8	5.1	4.7
February	29.40	29.90	28.78	31.3	36.4	41.2	28.5	34.8	62	7	28	30	87	78	.150	.164	3.41	.95	6.4	6.6	7.2
March	29.37	29.85	28.70	31.6	39.3	44.2	29.4	36.8	73	8	26	31	80	73	.137	.172	2.69	1.06	7.4	5.8	6.7
April	29.34	29.68	28.76	44.8	53.0	57.7	41.9	49.8	79	26	38	43	77	71	.228	.277	7.19	2.71	6.5	5.9	6.0
May	29.23	29.56	28.76	55.3	60.8	66.7	51.3	59.0	83	38	49	53	80	76	.347	.402	7.51	1.84	7.5	8.5	7.7
June	29.26	29.49	29.06	69.2	75.2	81.9	64.2	73.0	92	54	63	64	80	70	.575	.595	2.51	1.25	4.7	4.3	4.7
July	29.39	29.73	29.03	70.3	77.0	83.1	65.3	74.2	94	52	64	65	80	68	.595	.616	5.63	3.20	5.2	4.8	5.0
August	29.34	29.50	29.17	67.8	76.9	84.6	64.1	74.4	95	52	61	63	80	63	.536	.575	1.89	1.48	3.5	4.1	3.9
September	29.42	29.61	29.09	58.7	69.0	77.1	55.8	66.4	88	46	53	56	82	64	.402	.448	3.48	2.49	3.5	2.5	3.3
October	29.40	29.67	29.06	48.2	59.6	67.7	46.1	56.9	85	27	42	43	78	56	.266	.277	1.05	.71	4.8	3.1	3.9
November	29.41	29.80	28.49	32.8	37.8	43.9	30.6	37.2	63	13	27	32	77	80	.143	.180	4.19	1.49	6.7	4.8	6.1
December	29.42	29.90	28.74	25.8	29.9	35.2	21.7	28.4	59	— 7	20	23	78	74	.103	.119	1.78	a1.11	7.6	5.3	6.5
Year	29.37	29.90	28.49	46.1	53.1	59.3	42.6	51.0	95	— 7	40	43	80	70	.296	.326	42.47	3.20	5.7	5.1	5.5

SPRINGFIELD, MO.

[Lat. 37° 12′ N.; long. 93° 18′ W.; gravity corr., — .02.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	28.71	28.98	28.12	21.2	29.8	36.4	16.9	27.6	59	—10	16	20	82	70	.085	.103	3.23	1.84	4.2	2.2	4.0
February	28.63	29.05	28.06	35.5	43.4	48.4	33.5	41.0	66	22	30	34	82	72	.164	.195	3.71	.85	5.9	5.1	6.1
March	28.61	28.96	28.18	34.0	43.7	49.2	32.1	40.6	79	8	28	31	80	65	.150	.172	3.34	.99	5.8	5.1	5.6
April	28.56	28.95	28.02	48.6	57.9	64.2	45.5	54.8	85	29	40	40	75	55	.246	.246	4.56	1.02	6.1	5.1	5.6
May	28.49	28.71	28.22	57.1	64.9	71.4	53.8	62.6	83	36	57	54	86	69	.465	.417	9.90	1.93	7.4	6.9	7.0
June	28.55	28.75	28.29	68.9	75.3	83.0	63.6	73.3	91	50	63	63	82	67	.575	.575	4.97	1.40	3.2	3.7	4.2
July	28.66	28.88	28.40	69.7	77.4	84.8	65.7	75.2	96	54	64	67	83	71	.595	.660	5.13	1.43	5.4	5.4	5.1
August	28.62	28.79	28.45	69.2	76.8	86.0	65.6	75.8	95	50	64	64	83	66	.595	.595	3.38	1.02	3.6	4.0	3.5
September	28.68	28.87	28.48	60.5	70.4	79.9	57.6	68.8	90	44	55	56	82	61	.432	.448	.96	.54	2.4	2.4	2.9
October	28.65	28.87	28.39	50.6	61.2	68.8	48.6	58.7	85	30	45	48	82	61	.298	.310	3.68	1.21	3.9	2.6	3.7
November	28.65	28.98	28.06	36.3	45.2	51.6	34.3	43.0	67	24	31	34	80	67	.172	.195	1.84	.86	4.7	4.3	5.1
December	28.64	29.06	28.04	29.2	34.3	39.3	26.6	33.0	72	—10	26	29	88	80	.137	.157	3.10	1.76	6.1	6.8	6.9
Year	28.62	29.06	28.02	48.4	56.7	63.6	45.5	54.5	96	—10	43	45	82	67	.326	.339	47.80	1.93	4.9	4.5	5.0

FORT STANTON, N. MEX.

[Lat. 33° 30′ N.; long. 105° 26′ W.; gravity corr., — .03.]

Month.	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
January	23.95	24.26	23.70	27.8	38.8	48.3	22.8	35.6	67	5	12	16	54	44	.070	.085	.56	.44	3.9	3.1	4.8
February	23.93	24.19	23.56	30.0	44.4	52.1	26.7	39.4	62	13	21	20	68	41	.108	.103	.36	.13	3.7	4.8	5.1
March	23.86	24.18	23.53	33.6	47.0	53.8	27.6	40.7	68	8	24	10	68	33	.125	.063	1.15	.43	4.3	4.6	5.0
April	23.89	24.22	23.46	45.2	59.2	64.2	35.3	49.8	77	23	16	—3	37	14	.085	.033	.27	.25	2.5	5.4	4.8
May	23.91	24.16	23.70	50.7	67.6	72.4	d46.8	d59.6	82	b 36	15	1	28	10	.081	.040	.11	.11	2.0	3.5	4.1
June	23.96	24.18	23.76	59.2	78.9	84.0	49.2	66.6	94	34	27	7	35	12	.143	.054	.45	.22	1.7	4.0	4.3
July	24.08	24.22	23.90	62.3	75.1	82.1	56.1	69.1	91	46	48	42	61	36	.334	.266	2.87	1.07	4.5	6.9	6.6
August	24.06	24.21	23.89	59.2	72.9	78.9	53.6	66.2	85	45	45	40	61	35	.238	.246	1.41	.37	3.0	5.4	5.4
September	24.09	24.22	23.94	51.4	72.1	78.7	46.9	62.8	85	38	32	28	51	23	.180	.150	.32	.17	2.4	3.4	3.4
October	24.01	24.25	23.62	41.0	55.9	63.4	37.5	50.4	77	27	26	28	59	43	.137	.150	1.76	.86	3.5	4.0	5.1
November	23.99	24.27	23.65	34.7	46.9	54.9	30.9	42.9	64	23	20	25	57	44	.103	.130	.65	.60	4.0	3.0	4.0
December	23.90	24.15	23.68	26.5	36.4	43.9	24.0	34.0	62	7	18	22	70	55	.093	.113	1.43	.68	5.0	3.8	5.3
Year	23.97	24.27	23.46	43.5	57.9	64.7	38.1	51.4	94	5	25	20	54	32	.146	.119	11.34	1.07	3.4	4.3	4.8

a Estimated.

b For 16 days.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

SPOKANE, WASH.

[$H = 1,930$ feet; $h_t = 99$ feet; $h_r = 90$ feet; $h_a = 107$ feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	3.5	S.	24	SW.	0	3	3	6	6	21	7	7	1	8	7	8	16	12	8	10	0	....	10	0	26	0	0
February	4.1	S.	36	SW.	0	0	5	6	4	12	19	4	4	4	5	11	13	6	5	2	0	....	2	0	19	0	0
March	6.2	S.	36	SW.	0	5	9	2	5	16	14	3	3	5	3	15	13	12	10	0	0	....	0	0	6	0	0
April	6.4	Calm. S.	30	SW.	0	1	6	7	6	15	16	4	3	2	1	10	19	15	12	0	1	....	0	0	7	0	0
May	7.6	SW.	36	SW.	0	7	12	7	3	13	15	3	1	1	6	10	15	14	10	0	0	....	0	0	0	0	0
June	6.3	SW.	32	SW.	0	5	9	2	10	7	16	5	1	5	8	12	10	9	7	0	0	....	0	4	0	1	0
July	6.5	SW.	36	SW.	0	2	6	5	2	15	25	5	1	1	18	10	3	4	3	0	0	....	0	3	0	0	1
August	5.2	S.	28	SE.	0	3	6	1	7	15	18	1	3	8	19	10	2	2	2	0	0	....	0	3	0	1	0
September	5.0	S.	30	S.	0	2	4	1	7	16	7	4	2	17	17	11	2	5	4	0	0	....	0	0	0	0	0
October	4.2	NE.	24	SE.	0	0	10	2	6	15	7	1	4	17	19	6	6	6	4	0	0	....	0	0	10	0	0
November	6.5	S.	36	SW.	0	2	1	4	11	21	6	3	5	7	0	16	14	17	12	5	0	....	0	0	11	0	0
December	4.5	S.	30	SW.	0	8	6	4	5	21	3	8	0	7	1	5	25	17	12	14	0	....	16	0	24	0	0
Year	5.5	S.	36	SW.	0	38	77	47	72	187	153	48	28	82	104	124	138	119	89	31	1	....	28	10	103	2	1

SPRINGFIELD, ILL.

[$H = 644$ feet; $h_t = 82$; $h_r = 60$ feet; $h_a = 85$ feet.]

Month.	Average hourly velocity.	Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	10.5	NW.	42	S.	1	12	4	1	2	12	5	11	15	0	13	7	11	8	6	8	0	....	21	0	29	0	0
February	9.7	NW.	36	SW.	0	5	7	9	6	10	2	4	15	0	4	9	16	13	11	3	0	....	4	0	16	0	1
March	11.0	N.	36	NW.	0	10	9	5	5	9	5	10	8	1	6	10	15	12	11	3	1	....	6	0	16	1	0
April	8.8	NW.	44	S.	1	1	9	5	7	11	4	11	11	1	8	10	12	13	13	1	0	....	0	0	4	9	0
May	5.6	S.	36	NW.	0	5	6	4	9	14	6	8	10	0	2	10	19	24	19	0	2	....	0	0	0	15	0
June	4.6	S.	32	SW.	0	5	5	1	5	16	15	5	8	0	10	15	5	12	9	0	0	....	0	3	0	6	0
July	3.1	SW.	34	S.	0	6	2	9	6	7	17	6	2	7	10	14	7	13	9	0	0	....	0	6	0	6	0
August	3.4	Calm. NE.	26	SW.	0	5	10	8	7	2	8	3	4	16	16	11	4	7	7	0	0	....	0	6	0	8	0
September	6.7	S.	24	NW.	0	5	3	5	8	13	10	1	10	5	18	7	5	6	5	0	0	....	0	0	0	3	0
October	7.7	S.	30	NW.	0	12	4	1	6	15	6	6	12	0	16	8	7	4	3	0	0	....	0	0	4	0	0
November	9.5	NW.	36	W.	0	5	7	2	8	8	4	8	16	2	8	10	12	11	9	1	0	....	2	0	19	1	0
December	8.5	NW.	34	SW.	0	5	7	2	6	11	8	10	13	0	7	11	13	7	4	4	0	....	12	0	26	1	0
Year	7.4	S.	44	S.	2	76	73	52	75	128	90	82	124	32	118	122	126	130	106	20	3	....	45	15	114	50	1

SPRINGFIELD, MO.

[$H = 1,356$ feet; $h_t = 77$ feet; $h_r = 74$ feet; $h_a = 90$ feet.]

Month.	Average hourly velocity.	Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	10.8	SE.	38	SW.	0	8	9	6	11	6	8	4	9	1	16	8	7	7	4	7	0	....	12	0	26	1	0
February	10.6	SE.	36	S.	0	3	7	7	14	5	6	2	14	0	9	5	15	17	11	1	2	....	1	0	11	3	0
March	12.6	SE.	48	NW.	3	7	7	8	12	5	7	5	11	0	7	12	12	14	9	5	0	....	6	0	13	0	0
April	12.7	SE.	44	SE.	3	5	4	5	21	6	5	5	7	2	7	13	10	11	10	0	1	....	0	0	1	7	0
May	11.5	S.	44	NW.	2	3	2	8	14	14	3	5	13	0	1	18	12	17	16	0	1	....	0	0	0	9	0
June	6.7	S.	36	N.	0	4	2	0	12	18	10	3	5	6	10	17	3	12	10	0	2	....	0	2	0	8	0
July	6.5	S.	27	NW.	0	1	5	6	15	20	6	0	4	5	8	18	5	12	9	0	1	....	0	9	0	5	0
August	6.7	E.	45	SW.	1	5	8	16	10	14	6	1	1	1	14	15	2	11	9	0	0	....	0	8	0	8	0
September	8.4	SE.	26	E.	0	3	5	3	29	12	4	2	1	1	21	5	4	5	4	0	0	....	0	0	0	2	0
October	9.1	SE.	39	SE.	0	8	8	8	21	8	6	0	2	1	14	11	6	8	7	0	0	....	0	0	2	1	0
November	10.4	SE.	42	SW.	1	7	7	3	18	7	4	6	7	1	8	10	12	8	6	1	1	....	0	0	13	2	0
December	8.8	SE.	38	W.	0	8	4	9	12	6	7	5	6	5	5	8	18	13	10	3	0	....	5	0	23	1	0
Year	9.6	SE.	48	NW.	10	62	68	79	189	121	72	38	80	23	120	140	106	135	105	17	8	....	24	19	89	47	0

FORT STANTON, N. MEX.

[$H = 6,150$ feet; $h_t = 17$ feet; $h_r = 2$ feet; $h_a = 27$ feet.]

Month.	Average hourly velocity.	Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	4.7	W.	34	SW.	0	2	5	15	1	4	6	22	2	5	11	13	7	5	3	3	0	....	4	0	26	1	0
February	7.0	W.	38	W.	0	3	4	5	0	3	12	21	6	4	9	14	6	9	5	5	0	....	0	0	20	0	0
March	9.1	W.	60	SW.	3	5	3	11	2	4	10	23	2	2	10	13	8	9	8	6	1	....	2	0	24	3	0
April	10.5	W.	60	SW.	4	1	4	5	1	3	12	29	4	1	8	18	4	3	1	2	0	....	0	0	12	0	0
May	9.2	W.	48	W.	3	5	2	5	2	3	16	21	7	1	14	13	4	1	1	0	0	....	0	0	0	0	0
June	7.6	W.	42	SW.	1	3	5	7	3	4	8	20	5	5	13	10	7	4	3	0	1	....	0	3	0	7	0
July	4.9	W.	36	SW.	0	2	0	6	7	2	9	20	5	11	1	20	10	11	10	0	1	....	0	1	0	11	0
August	4.9	W.	28	SW.	0	2	5	5	12	4	7	15	1	11	9	12	10	11	10	0	1	....	0	0	0	10	0
September	4.1	W.	24	S.	0	1	0	2	12	6	8	15	2	14	16	11	3	5	3	0	1	....	0	0	0	1	0
October	4.7	Calm. SE.	42	SW.	1	2	2	1	12	1	11	12	2	19	10	10	11	5	6	1	1	....	0	0	7	2	0
November	5.6	W.	44	W.	2	1	2	3	8	4	8	16	9	9	15	7	8	2	2	1	1	....	0	0	19	0	0
December	5.5	W.	37	W.	0	3	1	1	2	2	9	23	11	10	9	15	7	8	6	7	0	....	5	0	24	0	0
Year	6.5	W.	60	SW.	14	30	33	66	62	40	116	237	56	92	125	156	85	75	58	25	7	....	11	4	132	35	0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

TAMPA, FLA.

[Lat. 27° 57′ N.; long. 82° 27′ W.; gravity corr., —.04.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	30.13	30.34	29.70	53.2	57.5	67.6	49.3	58.4	81	34	50	52	88	83	.360	.387	3.25	2.75	4.1	2.9	4.7
February	30.10	30.32	29.79	57.2	62.7	71.7	54.4	63.0	79	38	53	55	87	77	.402	.432	1.13	.59	5.3	3.5	5.6
March	30.08	30.33	29.64	57.4	62.4	72.7	51.4	62.0	81	33	50	52	79	70	.360	.387	1.58	.72	4.1	2.1	4.5
April	30.11	30.25	29.92	67.7	71.8	82.5	61.1	71.8	88	46	60	61	77	70	.517	.536	.31	.14	2.7	3.1	4.7
May	30.05	30.27	29.79	73.2	74.8	85.6	65.2	75.4	91	58	65	66	76	74	.616	.638	3.03	1.18	3.0	3.7	5.3
June	30.03	30.20	29.78	76.3	76.2	87.7	70.4	78.9	92	64	72	72	86	87	.783	.783	12.41	1.91	6.7	7.5	7.5
July	30.13	30.25	30.01	79.9	80.1	90.7	73.4	82.0	94	70	74	74	82	83	.838	.838	3.94	1.00	3.4	6.1	5.6
August	30.03	30.16	29.92	79.3	78.1	89.5	73.3	81.4	94	70	74	75	85	89	.838	.866	8.60	2.12	3.5	7.0	6.2
September	30.00	30.12	29.85	76.4	76.8	87.9	71.8	79.8	93	68	73	73	88	88	.810	.810	6.67	1.00	4.8	5.4	6.5
October	30.01	30.27	29.76	69.8	72.9	80.8	64.2	72.5	88	45	64	65	82	76	.595	.616	1.34	.44	3.9	3.9	4.8
November	30.12	30.31	29.96	59.2	63.9	74.9	53.8	64.4	87	40	54	56	82	75	.417	.448	1.28	.53	2.9	2.1	4.1
December	30.10	30.34	29.62	56.7	61.5	70.9	53.6	62.2	82	34	54	57	89	85	.417	.465	3.12	1.63	3.8	3.3	5.2
Year	30.07	30.34	29.62	67.2	69.9	80.2	61.8	71.0	94	33	62	63	83	80	.579	.600	46.66	2.75	4.0	4.2	5.4

TATOOSH ISLAND, WASH.

[Lat. 48° 23′ N.; long. 124° 44′ W.; gravity corr., +.01.]

January	29.98	30.34	29.30	42.5	43.1	45.3	39.1	42.2	57	34	40	41	92	92	.246	.256	9.90	3.75	6.2	8.2	7.5
February	29.92	30.22	29.55	42.9	44.5	46.0	40.3	43.2	52	36	42	43	95	94	.266	.277	4.60	.90	6.9	7.6	7.1
March	29.87	30.22	29.31	44.5	46.5	46.7	42.3	45.5	58	34	43	45	94	92	.277	.298	10.79	1.98	7.4	7.6	7.8
April	29.89	30.37	29.20	43.9	47.0	49.1	41.4	45.2	60	37	42	44	92	89	.266	.287	8.57	1.43	8.1	7.4	7.3
May	29.93	30.39	29.47	49.0	51.8	54.2	46.4	50.3	65	38	47	50	93	92	.322	.360	5.31	1.89	7.4	6.3	6.3
June	29.95	30.18	29.76	50.6	54.4	56.9	48.3	52.6	69	43	49	53	96	94	.347	.402	2.80	1.13	6.7	5.6	6.0
July	30.01	30.37	29.80	52.6	56.0	58.1	51.2	54.6	63	48	51	54	96	94	.373	.417	2.30	.65	8.1	5.5	7.5
August	29.98	30.28	29.70	53.7	57.7	59.8	51.8	55.8	67	48	53	56	98	92	.402	.448	3.23	1.59	5.6	4.4	6.1
September	29.87	30.23	29.10	53.0	55.7	59.0	49.6	54.3	71	45	51	53	94	91	.373	.402	10.19	3.05	5.1	6.3	6.8
October	29.91	30.24	29.44	50.5	51.7	54.4	48.1	51.2	62	44	49	49	94	91	.347	.347	7.39	1.95	6.4	5.9	6.5
November	29.78	30.37	28.86	46.0	46.3	49.0	42.6	45.8	55	34	44	44	91	92	.287	.287	16.50	2.32	8.5	9.1	9.0
December	29.97	30.44	28.97	41.9	42.5	44.8	39.0	41.9	51	22	40	40	92	92	.246	.246	9.80	1.57	7.1	8.5	8.2
Year	29.92	30.44	28.86	47.6	49.8	52.1	45.0	48.6	71	22	46	48	94	92	.313	.336	91.38	3.75	7.0	6.9	7.2

TITUSVILLE, FLA

[Lat. 28° 34′ N.; long. 80° 51′ W.; gravity corr., —.04.]

January	30.12	30.34	29.70	54.1	57.7	66.9	51.1	59.0	80	35	48	50	80	78	.334	.360	1.07	.38	3.9	2.8	3.7
February	30.09	30.34	29.73	58.4	61.2	69.1	55.5	62.3	83	42	53	56	84	84	.402	.448	2.09	.68	4.2	4.1	4.6
March	30.07	30.33	29.62	58.4	63.3	70.9	54.0	62.4	87	36	52	55	78	75	.387	.492	1.30	.94	3.3	1.6	2.5
April	30.12	30.27	29.89	68.4	70.9	78.1	63.4	70.8	86	48	63	64	82	80	.575	.595	1.08	.90	1.9	1.8	2.7
May	30.06	30.27	29.73	74.1	74.5	82.6	67.0	74.8	90	56	66	66	76	75	.638	.638	2.80	2.10	1.6	2.3	2.3
June	30.04	30.20	29.80	76.6	76.1	82.8	72.0	77.4	88	67	72	71	85	86	.783	.757	8.76	2.78	6.0	6.8	7.3
July	30.13	30.26	30.01	80.4	79.5	87.5	73.3	80.4	93	68	74	73	80	80	.838	.810	.97	.30	2.6	3.5	3.6
August	30.03	30.14	29.92	79.9	78.7	88.3	72.2	80.2	90	68	74	73	84	84	.838	.810	2.24	1.38	2.3	3.2	4.2
September	30.00	30.10	29.86	78.8	76.8	84.5	72.0	78.2	90	69	73	73	83	87	.810	.810	16.67	3.20	3.6	5.2	6.4
October	30.01	30.26	29.75	70.4	71.3	78.0	65.8	71.9	84	44	65	65	82	80	.616	.616	6.75	2.81	3.3	3.1	3.7
November	30.12	30.30	29.92	60.5	63.0	71.5	54.4	63.0	84	40	54	56	81	78	.417	.448	.56	.26	2.4	1.2	1.9
December	30.10	30.34	29.68	57.3	61.7	70.1	53.2	61.6	82	33	54	56	88	83	.417	.448	2.41	1.33	4.5	3.1	4.4
Year	30.07	30.34	29.62	68.1	69.6	77.5	62.8	70.2	93	33	62	63	82	81	.588	.598	47.70	3.20	3.3	3.2	3.9

TOLEDO, OHIO.

[Lat. 41° 40′ N.; long. 83° 34′ W.; gravity corr., —.01.]

January	29.35	29.79	28.79	18.5	23.4	28.0	14.9	21.4	56	—6	14	16	83	74	.077	.085	.90	.24	6.0	5.1	5.7
February	29.40	29.92	28.75	29.2	30.8	37.0	25.4	31.2	55	9	24	25	83	80	.125	.130	2.12	.47	8.0	6.8	6.1
March	29.36	29.80	28.78	28.6	33.1	38.6	25.1	31.8	55	8	22	25	79	74	.113	.130	3.37	1.36	6.0	5.8	7.0
April	29.38	29.80	28.99	42.5	48.5	53.4	38.1	45.8	76	24	36	39	79	71	.211	.237	2.47	1.18	5.7	6.2	5.8
May	29.25	29.67	28.71	53.8	58.0	63.6	49.3	56.4	83	37	48	51	83	79	.334	.373	7.42	1.47	7.3	7.6	7.6
June	29.26	29.45	28.89	68.3	71.0	78.3	63.2	70.8	90	55	63	63	83	76	.575	.575	6.58	1.52	5.8	5.7	5.6
July	29.40	29.81	29.06	69.9	75.4	82.1	63.4	72.8	96	49	62	62	77	64	.555	.555	3.78	1.55	2.7	4.0	4.1
August	29.35	29.50	29.14	67.6	72.4	80.7	63.1	71.9	91	53	62	62	81	72	.555	.555	2.40	1.32	4.6	3.5	4.5
September	29.43	29.66	28.90	59.0	64.8	73.6	55.6	64.6	86	43	54	56	85	76	.417	.448	3.88	1.51	3.9	2.8	3.9
October	29.35	29.67	28.68	46.1	53.3	61.2	43.4	52.3	81	30	41	45	84	75	.256	.298	.32	.13	3.5	3.2	4.7
November	29.35	29.71	28.62	33.6	36.8	42.0	31.0	36.5	65	17	30	31	85	78	.164	.172	2.27	.88	7.7	8.0	8.1
December	29.38	29.85	28.71	24.6	28.1	33.0	22.0	27.5	62	1	22	22	88	78	.113	.119	1.19	.39	8.2	6.2	7.3
Year	29.36	29.92	28.62	45.1	49.6	56.0	41.2	48.6	96	—6	40	42	82	75	.291	.306	35.70	1.55	5.8	5.4	6.0

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

TAMPA, FLA.

[H=36 feet; h_t=60 feet; h_r=52 feet; h_a=68 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	5.2	NW.	24	S.	0	8	10	6	2	6	3	10	12	5	13	14	4	7	6	0	0	....	0	0	0	0	0
February	4.4	NE.	22	NW.	0	4	13	2	5	3	8	7	4	12	8	13	8	8	7	0	0	....	0	0	0	0	0
March	4.0	Calm. W.	24	W.	0	1	6	5	6	2	10	12	5	15	13	14	4	6	6	0	0	....	0	0	0	0	0
April	6.5	SE.	24	W.	0	0	10	7	12	3	11	10	5	2	7	22	1	3	3	0	0	....	0	0	0	0	0
May	6.5	W.	28	NE.	0	2	6	8	12	4	5	19	6	0	7	19	5	7	7	0	0	....	0	3	0	7	0
June	6.2	SE.	30	E.	0	3	7	17	16	7	5	3	2	0	0	12	18	24	21	0	0	....	0	4	0	11	0
July	4.7	SE.	36	SW.	0	3	2	8	20	5	4	11	7	2	4	22	5	13	11	0	0	....	0	18	0	10	0
August	3.9	E.	33	E.	0	1	5	19	15	2	7	7	1	5	1	21	9	21	18	0	0	....	0	15	0	15	0
September	5.8	NE.	27	SW.	0	1	25	7	8	3	8	6	1	1	0	21	9	25	23	0	0	....	0	5	0	7	0
October	6.6	E.	19	NW.	0	6	18	22	2	2	2	7	3	0	10	16	5	9	7	0	0	....	0	0	0	0	0
November	5.0	E.	24	NW.	0	11	9	10	2	3	4	9	8	4	16	14	0	4	4	0	0	....	0	0	0	0	0
December	6.5	N.	32	SW.	0	14	10	5	3	4	6	11	7	2	10	12	9	10	9	0	0	....	0	0	0	1	0
Year	5.4	NE.	36	SW.	0	54	121	116	103	44	73	112	61	48	89	200	77	137	122	0	0	....	0	45	0	51	0

TATOOSH ISLAND, WASH.

[H=86 feet; h_t=12 feet; h_r=1 foot; h_a=33 feet.]

Month.	Average hourly velocity.	Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	18.4	E.	66	E.	10	0	0	30	4	11	2	9	6	0	4	7	20	22	20	0	0	....	0	0	0	0	0
February	15.1	E.	60	E.	3	0	2	22	7	9	5	11	1	1	5	8	16	18	14	0	0	....	0	0	0	0	0
March	15.3	E.	56	SW.	5	0	0	18	3	17	9	7	8	0	5	5	21	25	23	1	1	....	0	0	0	0	0
April	14.9	E.	54	S.	7	1	0	18	3	8	14	13	4	0	2	13	15	25	22	0	0	....	0	0	0	0	0
May	11.8	W.	48	E.	5	0	1	12	2	6	14	15	11	1	8	7	16	14	13	0	0	....	0	0	0	0	1
June	8.0	SW.	36	SW.	0	0	1	8	3	4	16	16	11	1	10	7	13	14	10	0	0	....	0	0	0	0	1
July	7.7	SW.	35	S.	0	0	0	7	0	12	25	15	3	0	2	10	19	16	10	0	0	....	0	0	0	0	0
August	7.9	SW.	24	S.	0	3	2	2	4	15	24	6	4	2	9	8	14	11	7	0	0	....	0	0	0	0	0
September	11.4	S.	48	E.	5	0	0	15	6	22	8	5	3	1	8	7	15	16	12	0	0	....	0	0	0	0	0
October	18.4	E.	62	E.	10	1	2	30	7	4	6	8	4	0	8	8	15	17	15	0	0	....	0	0	0	0	0
November	17.9	E.	61	E.	14	0	2	21	10	4	8	13	2	0	2	2	26	28	27	1	0	....	0	0	0	0	0
December	20.0	E.	84	E.	13	0	1	36	3	7	4	5	4	2	2	6	23	22	21	0	0	....	2	0	3	2	0
Year	14.0	E.	84	E.	72	5	11	219	52	119	135	122	61	8	65	88	213	228	194	2	1	....	2	0	3	2	2

TITUSVILLE, FLA.

[H=44 feet; h_t=15 feet; h_r=1 foot; h_a=72 feet.]

Month.	Average hourly velocity.	Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	10.4	NW.	45	SE.	1	7	4	0	10	4	2	13	22	0	15	10	6	10	8	0	0	....	0	0	0	0	0
February	10.5	N.	36	N.	0	14	3	3	9	5	8	5	11	0	11	12	6	10	8	0	0	....	0	0	0	0	0
March	11.8	NW.	38	W.	0	7	3	3	14	5	7	8	15	0	20	8	3	7	5	0	0	....	0	0	0	0	0
April	13.3	SE.	35	SE.	0	2	7	8	19	9	8	1	6	0	21	9	0	2	2	0	0	....	0	0	0	0	0
May	12.7	SE.	38	SE.	0	2	1	11	27	10	3	4	4	0	20	11	0	3	3	0	0	....	0	1	0	3	0
June	12.0	SE.	40	E.	1	5	4	9	17	11	11	2	1	0	2	14	14	18	15	0	0	....	0	0	0	2	0
July	10.6	SE.	36	SE.	0	0	1	7	30	4	12	5	3	0	15	15	1	7	6	0	0	....	0	3	0	2	0
August	8.2	SE.	44	SW.	2	5	3	3	23	5	14	0	3	0	10	19	2	11	8	0	0	....	0	3	0	5	0
September	10.8	NE.	42	NE.	1	0	18	12	10	8	5	2	4	1	8	17	10	25	22	0	0	....	0	1	0	6	0
October	11.8	NE.	48	NE.	1	8	23	9	3	2	4	3	10	0	17	8	6	14	12	0	0	....	0	0	0	1	0
November	10.0	NW.	30	N.	0	8	0	11	10	2	3	6	19	1	23	7	0	6	5	0	0	....	0	0	0	0	0
December	10.6	NW.	36	W.	0	5	3	3	6	9	7	9	20	0	14	8	9	7	6	0	0	....	0	0	0	0	0
Year	11.1	SE.	48	NE.	6	63	79	79	178	74	84	64	118	2	171	138	57	120	100	0	0	....	0	8	0	19	0

TOLEDO, OHIO.

[H=674 feet; h_t=122 feet; h_r=113 feet; h_a=127 feet.]

Month.	Average hourly velocity.	Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.01 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	11.1	W.	44	SW.	2	4	4	2	1	2	15	17	15	2	9	12	10	11	8	9	0	....	20	0	29	0	0
February	10.7	NW.	36	SW.	0	3	4	13	9	3	6	3	17	0	3	6	20	14	8	8	0	....	7	0	22	0	1
March	10.2	NW.	35	NW.	0	11	11	6	10	2	2	6	14	0	5	10	16	15	11	10	0	....	11	0	23	1	0
April	13.3	NW.	60	W.	3	6	3	6	14	3	8	6	15	0	8	11	11	11	9	2	0	....	1	0	7	1	0
May	11.3	W.	36	SW.	0	7	4	2	12	9	10	11	7	0	0	13	18	22	19	0	0	....	0	0	0	9	0
June	9.1	W.	35	NW.	0	7	1	3	9	7	8	13	12	0	5	16	9	18	17	0	1	....	0	1	0	9	0
July	7.5	W.	49	NW.	1	5	5	7	7	6	7	20	5	0	15	12	4	9	7	0	0	....	0	6	0	5	1
August	8.1	W.	29	W.	0	4	10	3	14	6	6	11	8	0	14	11	6	9	8	0	1	....	0	3	0	3	0
September	8.3	W.	31	NW.	0	1	6	3	10	6	13	11	10	0	17	8	5	9	7	0	0	....	0	0	0	3	0
October	9.5	W.	42	NW.	1	5	4	2	4	4	10	19	13	1	13	12	6	7	4	0	1	....	0	0	2	2	0
November	10.5	NW.	48	SW.	2	9	3	3	4	5	11	7	18	0	1	8	21	14	11	8	0	....	3	0	18	0	0
December	9.3	NW.	39	W.	0	9	3	0	5	5	13	9	18	0	3	10	18	11	4	5	0	....	13	0	28	1	0
Year	9.9	NW.	60	W.	9	71	58	50	99	58	108	133	152	3	93	129	144	150	113	42	3	....	55	10	129	34	2

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

TOPEKA, KANS. *a*

[Lat. 39° 3′ N.; long. 95° 41′ W.; gravity corr., —.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January						36.2	11.8	24.0	60	—23							1.21	.97			
February						46.8	27.7	37.2	62	12							3.33	1.09			
March						49.1	27.9	38.5	77	10							4.53	1.19			
April						63.4	41.6	52.5	83	23							2.17	.79			
May						69.0	50.1	59.6	82	37							14.10	3.88			
June	28.86	29.18	28.63	68.3	80.3	85.1	64.4	74.8	97	46	60	62	76	55			.73	.32	3.2	2.3	3.6
July	28.98	29.28	28.66	70.2	81.5	87.0	66.5	76.8	100	54	64	65	82	59			6.37	2.21	3.0	2.0	4.2
August						86.6	65.4	76.0	98	51							4.14	1.79			
September						81.8	59.2	70.5	92	44							.90	.46			
October						70.3	48.3	59.3	86	30							1.46	.85			
November						51.6	31.8	41.7	67	19							.60	.40			
December						34.5	18.3	26.4	66	—10							1.92	.72			
Year						63.4	42.8	53.1	100	—23							41.46	3.88			

TUCSON, ARIZ.

[Lat. 32° 14′ N.; long. 110° 53′ W.; gravity corr., —03.]

January	27.52	27.82	27.26	37.7	57.2	64.2	34.3	49.2	75	17	25	27	64	37	.130	.143	1.52	1.03	2.3	3.6	3.4
February	27.48	27.65	27.18	42.9	60.0	64.9	40.7	52.8	78	30	39	39	87	49	.237	.237	2.63	.71	2.9	3.7	4.1
March	27.43	27.64	27.26	46.2	65.2	70.4	43.6	57.0	83	32	36	33	70	36	.211	.187	.98	.44	3.1	4.8	3.9
April	27.44	27.76	27.24	46.5	74.5	79.0	44.7	61.8	91	32	30	27	56	20	.164	.143	.18	.18	1.6	2.4	2.4
May	27.40	27.57	27.20	56.1	83.1	86.2	52.9	69.6	100	38	30	28	39	15	.164	.150	.17	.14	1.8	2.3	2.6
June	27.36	27.51	27.11	65.3	94.0	97.2	61.1	79.2	107	39	32	30	29	11	.180	.164	.10	.10	2.2	1.2	1.4
July	27.43	27.61	27.31	78.3	93.4	99.0	76.1	87.6	106	67	54	50	46	26	.417	.360	1.00	.46	5.4	6.8	6.0
August	27.42	27.55	27.28	74.1	93.6	97.8	72.3	85.0	107	65	53	47	52	24	.402	.322	2.14	1.89	3.0	4.3	3.6
September	27.45	27.58	27.31	68.1	90.8	96.0	66.2	81.1	102	60	46	44	47	22	.310	.287	.37	.30	1.9	2.3	2.3
October	27.44	27.61	27.21	54.4	75.1	81.6	52.2	66.9	94	35	33	34	46	25	.187	.195	.27	.27	1.6	3.3	2.4
November	27.51	27.69	27.32	46.1	65.7	74.3	42.8	58.6	83	33	27	30	49	27	.143	.164	T.	T.	2.8	2.7	2.5
December	27.53	27.72	27.23	34.1	53.2	61.0	31.6	46.3	76	16	25	28	69	39	.130	.150	.25	.16	2.8	2.8	3.1
Year	27.45	27.82	27.11	54.2	75.5	81.0	51.5	66.3	107	16	36	35	54	28	.223	.208	.61	1.89	2.6	3.4	3.1

UNIVERSITY, MISS.

[Lat. 34° 20′ N.; long. 89° 27′ W.; gravity corr., —.0.]

January	29.67	30.00	29.13		36.0	45.9	26.7	36.3	66	7		30		79			4.61	1.53			
February	29.61	29.99	29.20		51.4	60.8	41.4	51.1	70	29		46		80			4.82	1.87			
March	29.58	29.83	29.18		50.2	58.9	39.1	49.0	81	12		43		79			3.80	1.04			
April	29.66	29.75	29.25		61.7	70.7	53.6	62.1	88	38		53		75			10.67	4.36			
May	29.52	29.72	29.33		68.4	78.7	59.3	69.0	88	46		60		77			4.35	1.49			
June	29.55	29.66	29.30		74.4	86.0	66.1	76.4	94	56		68		82			5.02	1.67			
July	29.65	29.77	29.56		75.5	86.4	68.9	77.6	94	63		71		87			14.14	3.00			
August	29.59	29.68	29.53		75.9	87.2	68.5	77.8	92	62		72		86			5.97	1.06			
September	29.64	29.77	29.41		69.9	82.4	59.1	70.8	91	49		62		76			.91	.27			
October	29.60	29.73	29.42		62.0	77.7	52.8	65.2	88	30		51		62			.07	.07			
November	29.64	29.93	29.34		50.3	61.9	40.6	51.2	81	24		39		67			5.23	1.54			
December	29.60	29.92	29.02		41.8	48.7	34.8	41.8	76	10		36		81			8.45	2.23			
Year	29.60	30.00	29.02		59.8	70.5	50.9	60.7	94	7		53		78			68.04	4.36			

VALENTINE, NEBR.

[Lat. 42° 50′ N.; long. 100° 32′ W.; gravity corr., —.01.]

January	27.35	27.70	26.94	12.8	21.7	30.8	8.4	19.6	68	—24	6	14	75	72	.052	.077	.57	.34	3.3	3.5	4.9
February	27.30	27.58	26.76	18.1	29.1	38.1	14.2	26.2	66	— 4	13	21	80	73	.074	.108	.47	.22	3.9	4.1	4.2
March	27.29	27.72	26.67	22.6	34.6	41.0	20.0	30.5	74	—20	17	24	80	69	.069	.125	1.90	.56	5.5	5.1	6.8
April	27.21	27.69	26.40	36.6	45.6	50.7	33.7	42.2	76	18	32	36	83	72	.180	.211	7.03	1.76	6.9	6.5	7.4
May	27.26	27.61	26.79	42.8	52.0	57.4	39.5	48.4	85	31	37	39	82	66	.219	.237	4.66	1.27	6.9	6.4	7.3
June	27.22	27.61	26.74	57.4	70.0	75.1	53.2	64.2	96	36	49	50	76	53	.347	.360	4.32	2.72	4.0	4.7	5.4
July	27.32	27.57	26.92	64.9	78.2	85.3	61.4	73.4	104	51	56	56	74	50	.448	.448	1.67	1.02	4.0	5.0	5.6
August	27.31	27.60	27.04	63.1	76.6	84.7	60.2	72.4	102	39	57	56	83	53	.465	.448	4.82	2.26	4.0	3.3	4.2
September	27.32	27.58	26.98	52.9	70.5	79.2	50.0	64.6	93	36	46	49	79	51	.310	.347	.86	.52	3.3	3.2	4.0
October	27.32	27.63	26.80	40.0	56.4	66.2	37.6	51.9	90	20	34	40	82	56	.195	.246	.90	.80	2.6	2.5	4.1
November	27.26	27.62	26.79	26.6	38.5	48.4	22.9	35.6	76	— 2	21	26	77	62	.108	.137	.27	.12	3.8	3.1	5.3
December	27.29	27.69	26.99	14.9	22.1	32.1	11.3	21.7	63	—12	10	16	80	75	.063	.085	.45	.12	3.7	3.6	5.9
Year	27.29	27.72	26.40	37.7	49.6	57.4	34.4	45.9	104	—24	32	36	79	63	.212	.236	27.92	2.72	4.5	4.2	5.6

a Takes one observation daily at 8 p. m.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

TOPEKA, KANS. b

[H = 998 feet; h_t = 81 feet; h_r = 73 feet; h_a = 89 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	.....	N.	....	.....	....	6	3	0	3	3	3	2	5	6	13	14	4	6	4	6	0	....	12	0	30	1	1
February	.....	NW.	....	.....	....	4	4	3	3	3	2	3	4	3	6	10	13	10	8	0	0	....	1	0	20	2	2
March	.....	NE.	....	.....	....	4	6	2	3	5	2	1	5	3	6	13	12	11	10	3	0	....	4	0	22	2	0
April	.....	S.	....	.....	....	5	4	2	3	6	3	1	4	2	2	17	11	14	10	0	0	....	0	0	4	3	0
May	.....	NW.	....	.....	....	7	3	2	3	6	2	0	8	0	4	13	14	19	16	0	1	....	0	0	0	3	0
June	.....	S.	30	SE.	0	6	5	5	4	14	9	5	12	0	15	13	2	4	4	0	0	....	0	14	0	2	0
July	.....	S.	36	NW.	0	4	5	16	9	23	1	1	3	0	11	16	4	8	6	0	0	....	0	15	0	6	1
August	.....	E.	....	.....	....	4	5	9	3	8	1	1	0	0	13	14	4	8	8	0	0	....	0	8	0	6	0
September	.....	SE.	....	.....	....	2	2	3	13	6	1	0	3	0	20	9	1	4	4	0	0	....	0	3	0	2	0
October	.....	N.	....	.....	....	10	0	1	8	8	1	2	1	0	16	8	7	7	6	0	0	....	0	0	2	0	0
November	.....	NW.	....	.....	....	1	2	3	5	7	4	0	8	0	11	13	6	4	3	1	0	....	0	0	18	0	0
December	.....	W.	....	.....	....	4	3	4	2	3	5	6	4	0	10	8	13	9	8	5	0	....	16	0	26	0	0
Year	.....	S.	....	.....	....	57	42	50	59	92	34	22	57	14	127	148	91	104	87	15	1	....	33	40	122	27	4

TUCSON, ARIZ.

[H = 2,432 feet; h_t = 15 feet; h_r = 4 feet; h_a = 45 feet.]

Month.	Average hourly velocity.	Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	6.6	SE.	39	W.	0	5	4	5	38	9	1	3	17	0	18	7	6	5	5	0	1	....	0	0	14	1	0
February	6.7	SE.	34	SW.	0	4	6	5	18	5	6	3	10	1	14	6	9	11	9	0	2	....	0	0	2	0	0
March	7.7	SE.	38	SW.	0	14	2	1	19	6	7	0	12	1	16	7	8	8	7	0	1	....	0	0	1	2	0
April	7.9	SE.	33	SW.	0	7	2	1	14	10	5	11	10	0	21	5	4	2	1	0	0	....	0	2	1	0	0
May	8.2	SE.	42	E.	1	9	1	5	14	8	9	7	9	0	21	8	2	4	2	0	0	....	0	8	0	1	0
June	7.9	NW.	39	SW.	0	9	2	5	10	10	8	2	13	1	25	2	3	1	1	0	0	....	0	25	0	1	0
July	7.8	SE.	54	E.	3	9	3	3	20	9	4	5	8	1	7	12	12	5	4	0	1	....	0	30	0	5	0
August	7.4	SE.	47	NE.	2	10	5	5	19	10	4	3	5	1	17	9	5	5	2	0	0	....	0	28	0	4	0
September	7.1	SE.	35	S.	0	11	1	2	16	13	4	5	8	0	23	5	2	5	2	0	0	....	0	28	0	1	0
October	8.8	S.	40	SE.	1	7	1	9	10	17	1	5	12	0	23	5	3	1	1	0	0	....	0	9	0	0	0
November	7.8	S.	34	SE.	0	14	0	5	11	16	2	4	8	0	22	4	4	0	0	0	0	....	0	0	0	0	0
December	6.0	N.	36	N.	0	18	2	3	9	16	1	1	12	0	22	2	7	3	2	0	0	....	0	0	15	0	0
Year	7.5	SE.	54	E.	7	117	29	49	178	129	52	49	124	5	229	72	65	50	36	0	5	....	0	130	33	15	0

UNIVERSITY, MISS.

[H = 463 feet; h_t = 6 feet; h_r = 6 feet; h_a = — feet.]

Month.	Average hourly velocity.	Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	.....	N.	....	.....	....	11	3	1	2	3	5	1	4	0	10	13	8	10	7	2	0	....	3	0	20	0	0
February	.....	SE.	....	.....	....	5	4	0	7	4	1	2	6	0	5	18	6	11	6	0	0	....	0	0	2	1	0
March	.....	N.	....	.....	....	10	1	0	3	6	2	3	6	0	11	11	9	14	11	1	0	....	1	0	8	0	0
April	.....	S.	....	.....	....	8	4	1	6	9	0	0	2	0	8	12	10	17	12	0	0	....	0	0	0	7	0
May	.....	S.	....	.....	....	3	3	1	5	12	3	2	2	0	8	16	7	17	11	0	0	....	0	0	0	8	0
June	.....	S.	....	.....	....	2	2	2	8	8	3	2	3	0	11	15	4	17	14	0	3	....	0	8	0	8	0
July	.....	SW.	....	.....	....	4	4	4	4	4	8	1	2	0	9	16	6	21	17	0	0	....	0	6	0	16	0
August	.....	SE.	....	.....	....	7	6	1	11	2	2	0	2	0	13	11	7	15	11	0	0	....	0	4	0	11	0
September	.....	SE.	....	.....	....	5	5	6	7	2	1	0	4	0	21	5	4	6	5	0	0	....	0	1	0	1	0
October	.....	SE.	....	.....	....	9	3	3	9	2	2	0	3	0	23	6	2	1	1	0	0	....	0	0	1	0	0
November	.....	N.	....	.....	....	10	1	2	6	6	1	2	2	0	10	10	10	11	10	0	0	....	0	0	5	3	0
December	.....	N.	....	.....	....	12	5	1	6	1	3	2	1	0	7	8	16	15	10	2	0	....	2	0	13	3	0
Year	.....	N.	....	.....	....	86	41	22	75	59	31	15	37	0	136	141	89	155	115	5	3	....	6	19	49	58	0

VALENTINE, NEBR.

[H = 2,613 feet; h_t = 37 feet; h_r = 26 feet; h_a = 48 feet.]

Month.	Average hourly velocity.	Prevailing direction. (a)	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	9.1	W.	36	NW.	0	5	4	1	3	5	9	18	13	4	16	6	9	6	3	6	0	....	14	0	31	0	0
February	9.1	NW.	43	NW.	1	8	11	0	3	4	5	9	11	7	10	12	7	6	4	5	0	....	9	0	28	0	0
March	10.6	NW.	52	NW.	4	7	11	4	8	3	4	10	12	3	9	6	16	12	9	9	0	....	10	0	25	0	0
April	14.1	N.	56	NW.	6	12	6	6	8	5	4	10	7	2	2	11	16	20	16	10	0	....	1	0	15	2	0
May	11.9	NW.	52	NW.	3	13	15	3	7	2	0	5	17	0	6	6	19	24	18	6	0	....	0	0	5	0	0
June	10.2	NE.	40	NE.	1	8	10	2	9	9	6	7	7	2	12	9	9	11	9	0	0	....	0	1	0	5	0
July	10.6	S.	44	N.	1	8	7	3	11	14	10	3	6	0	9	19	3	10	7	0	0	....	0	10	0	5	0
August	9.5	S.	48	SE.	1	9	9	5	9	16	4	5	4	1	13	14	4	16	13	0	0	....	0	12	0	9	0
September	8.7	S.	48	W.	1	4	8	2	2	12	7	10	10	5	16	9	3	3	3	0	0	....	0	4	0	3	0
October	8.8	W.	40	NW.	1	8	7	0	4	7	5	17	11	3	18	9	4	3	3	0	0	....	0	0	11	1	0
November	11.8	NW.	48	NW.	5	5	1	4	5	7	5	13	19	1	8	15	7	5	3	5	0	....	3	0	26	0	0
December	8.3	NW.	36	NW.	0	10	4	5	0	5	8	11	16	3	4	14	13	13	5	13	0	....	16	0	29	0	0
Year	10.3	NW.	56	NW.	24	97	93	35	69	89	67	118	133	31	126	130	110	129	93	54	0	....	53	27	170	25	0

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

VICKSBURG, MISS.

[Lat. 32° 22′ N.; long. 90° 53′ W.; gravity corr., — .03.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew Point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	29.90	30.26	29.27	35.5	44.2	49.2	33.6	41.4	70	16	30	37	82	77	.164	.219	4.88	1.43	4.3	3.5	4.3
February	29.82	30.19	29.42	49.5	59.6	65.1	47.6	56.4	76	36	43	49	80	71	.277	.347	3.52	2.70	5.5	3.6	4.8
March	29.80	30.20	29.42	46.1	56.6	61.4	44.1	52.8	80	24	40	49	81	77	.246	.347	6.97	1.68	4.3	4.3	4.4
April	29.76	30.02	29.46	61.0	69.1	74.1	58.5	66.3	87	43	58	66	91	91	.481	.638	6.76	1.26	6.4	6.4	6.0
May	29.71	29.97	29.52	67.1	75.1	80.8	63.0	71.9	90	47	64	67	90	78	.595	.660	.49	.17	5.0	3.8	4.5
June	29.71	29.84	29.56	73.6	79.2	86.3	68.9	77.6	95	58	69	70	87	73	.707	.732	3.71	1.48	4.4	4.0	4.3
July	29.80	29.96	29.69	75.1	78.7	86.9	70.6	78.8	95	66	72	73	92	83	.783	.810	9.34	3.79	5.0	5.9	6.1
August	29.74	29.87	29.63	74.3	78.5	87.6	71.2	79.4	92	67	72	72	91	82	.783	.783	5.41	1.37	3.4	5.8	5.1
September	29.80	29.96	29.51	67.4	75.4	83.1	64.0	73.6	89	56	62	65	83	71	.555	.616	1.48	.88	1.8	1.8	2.7
October	29.79	30.01	29.63	60.1	69.4	78.1	58.1	68.1	86	36	54	58	80	68	.417	.481	.18	.15	2.4	2.8	3.7
November	29.86	30.16	29.49	50.6	58.2	65.2	48.0	56.6	76	31	45	45	83	64	.298	.298	4.48	1.70	4.7	4.2	5.5
December	29.83	30.22	29.22	44.5	49.6	55.1	41.5	48.3	77	16	40	40	86	72	.246	.246	5.42	1.83	6.2	5.4	6.5
Year	29.79	30.26	29.22	58.7	66.1	72.7	55.8	64.3	95	16	54	58	86	76	.463	.515	52.64	3.79	4.4	4.3	4.8

VINEYARD HAVEN, MASS. a

[Lat. 41° 26′ N.; long. 70° 43′ W.; gravity corr., —.]

January						44.4	25.8	35.1	60	4							3.24	.68			
February						40.9	30.0	35.4	54	10							1.63	.66			
March						45.8	28.1	37.0	60	16							4.20	.98			
April						57.8	38.2	48.0	70	27							2.57	.72			
May						63.5	47.3	55.4	78	36							3.65	1.00			
June						76.0	58.5	67.2	88	44							2.04	.50			
July						82.5	63.5	73.0	96	52							1.45	.54			
August						81.9	64.0	73.0	91	56							1.81	.92			
September						75.6	54.6	65.1	81	43							2.12	1.13			
October						62.1	45.8	54.0	75	34							1.97	.87			
November						51.2	37.5	44.4	65	23							6.65	1.96			
December						39.0	26.6	33.2	55	4							1.93	1.03			
Year						60.1	43.3	51.7	96	4							33.26	1.96			

WALLA WALLA, WASH.

[Lat. 46° 2′ N.; long. 118° 20′ W.; gravity corr., 0.]

January	29.11	29.40	28.71	31.8	34.4	38.2	27.3	32.8	64	2	27	29	85	82	.143	.157	3.84	1.11	5.8	5.7	6.4
February	28.98	29.28	28.67	37.7	46.7	49.6	34.4	42.0	62	22	33	38	86	73	.187	.228	.80	.30	5.7	6.0	5.3
March	28.90	29.24	28.48	43.8	56.1	58.9	40.9	49.9	74	32	36	38	75	55	.211	.228	1.73	.65	5.9	5.6	5.4
April	28.94	29.34	28.49	42.3	54.6	57.1	40.1	48.6	72	32	34	34	76	49	.195	.195	2.06	.39	6.5	6.3	6.0
May	28.90	29.38	28.57	50.6	68.0	70.4	47.9	59.2	93	35	41	39	72	39	.256	.237	1.25	.53	5.8	5.0	5.1
June	28.86	29.08	28.64	57.8	77.2	79.7	53.7	66.7	103	40	48	48	73	40	.334	.334	1.04	.98	4.0	5.3	4.6
July	28.82	29.33	28.67	60.8	83.1	85.7	57.8	71.8	105	48	47	46	62	29	.322	.310	.39	.16	2.0	2.5	2.5
August	28.81	29.27	28.60	61.9	85.6	87.5	59.6	73.6	100	52	46	48	57	28	.310	.334	.21	.20	2.8	2.3	2.5
September	28.90	29.19	28.53	56.9	75.3	78.6	54.6	66.6	91	45	45	51	65	47	.298	.373	.71	.34	3.7	4.7	4.6
October	28.98	29.38	28.55	46.4	61.8	66.0	44.2	55.1	86	33	42	50	84	67	.266	.360	.92	.28	3.6	3.7	4.1
November	28.90	29.34	28.15	44.1	48.4	54.1	39.4	46.8	70	31	37	41	78	78	.219	.256	1.73	.64	6.1	7.0	6.6
December	29.09	29.46	28.26	31.5	33.4	38.7	27.5	33.1	58	11	30	31	94	92	.164	.172	2.26	.64	7.2	6.9	7.3
Year	28.95	29.46	28.15	47.1	60.4	63.7	44.0	53.8	105	2	39	41	76	57	.242	.265	16.94	1.11	4.9	5.1	5.0

WASHINGTON, D. C.

[Lat. 38° 54′ N.; long. 77° 03′ W.; gravity corr., — .02.]

January	29.97	30.54	29.22	28.7	32.5	38.7	24.5	31.6	62	4	22	22	79	69	.113	.113	5.64	1.22	6.4	4.4	6.0
February	30.04	30.60	29.31	32.7	38.2	44.3	29.7	37.0	61	6	26	28	78	68	.137	.150	3.64	1.61	6.9	4.8	6.1
March	29.93	30.41	29.25	34.2	38.5	45.3	30.1	37.7	66	17	25	28	71	70	.130	.150	5.70	1.06	6.1	4.4	5.5
April	29.99	30.38	29.50	48.9	53.8	59.7	43.2	51.4	81	31	37	41	66	63	.219	.256	4.52	.90	5.1	4.9	5.4
May	29.89	30.22	29.46	60.4	65.0	73.8	53.9	63.8	89	44	50	54	70	69	.360	.417	4.07	2.04	5.4	4.3	4.9
June	29.89	30.15	29.55	73.9	76.1	85.2	67.3	76.2	94	53	66	66	77	73	.638	.638	2.59	.95	4.8	5.0	4.6
July	29.97	30.40	29.71	73.0	76.0	85.4	66.3	75.8	99	54	65	68	77	76	.616	.684	5.04	1.46	5.0	5.8	4.4
August	29.91	30.07	29.66	73.3	76.4	85.7	66.8	76.2	95	60	66	65	77	69	.638	.616	.85	.64	4.4	3.1	3.5
September	30.06	30.31	29.60	62.5	66.7	76.2	56.0	66.1	88	48	55	57	77	72	.432	.465	3.55	1.53	3.8	2.7	4.0
October	29.95	30.34	29.54	50.0	54.4	66.3	44.5	55.4	84	30	42	41	74	63	.266	.256	.34	.33	3.8	2.1	3.0
November	29.99	30.33	29.45	40.9	44.0	50.9	36.5	43.7	71	22	33	33	73	66	.187	.187	3.38	1.29	5.7	5.1	5.7
December	30.00	30.51	29.46	29.7	33.3	40.2	26.1	33.2	67	13	23	25	77	72	.119	.130	2.82	1.76	5.7	3.9	5.0
Year	29.97	30.60	29.22	50.7	54.6	62.6	45.4	54.0	99	4	42	44	75	69	.321	.338	42.34	2.04	5.3	4.2	4.8

a Takes one observation daily, at 8 p. m.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

VICKSBURG, MISS.

[H=254 feet; h_t=65 feet; h_r=58 feet; h_a=73 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		Mi.																								
January	8.6	NW.	36	SW.	0	5	12	6	3	3	7	7	19	0	15	6	10	10	8	1	1	....	3	0	10	2	0
February	7.9	NE.	28	NW.	0	8	14	9	10	4	5	0	7	1	7	15	7	5	5	0	0	....	0	0	0	3	0
March	8.6	SE.	36	W.	0	8	11	4	14	3	11	5	6	0	13	7	11	11	8	1	1	....	0	0	3	2	0
April	9.2	SE.	35	SE.	0	6	5	12	14	8	5	2	8	0	9	3	18	14	13	0	0	....	0	0	0	4	0
May	8.2	SE.	28	NW.	0	3	2	3	28	12	8	1	5	0	10	17	4	8	5	0	0	....	0	0	0	0	0
June	5.4	SE.	32	W.	0	2	5	6	17	4	9	7	7	3	13	11	6	10	7	0	0	....	0	7	0	2	0
July	5.6	SW.	37	E.	0	0	2	8	13	13	19	3	1	3	3	16	12	20	13	0	0	....	0	7	0	4	0
August	4.9	NE.	37	SW.	0	4	17	3	13	3	12	3	6	1	9	18	4	19	14	0	0	....	0	4	0	1	0
September	5.9	NE.	21	NE.	0	7	25	15	5	3	1	0	4	0	23	4	3	5	5	0	0	....	0	0	0	0	0
October	6.7	SE.	22	N. W.	0	9	10	19	11	4	2	1	5	1	18	8	5	3	1	0	0	....	0	0	0	0	0
November	8.0	SE.	42	SW.	1	10	5	3	20	7	2	5	7	1	11	10	9	11	10	0	0	....	0	0	0	0	0
December	7.9	SE.	31	SW.	0	9	12	7	12	3	8	2	9	0	9	5	17	11	10	0	0	....	1	0	4	0	0
Year	7.2	SE.	42	SW.	1	71	120	95	160	67	89	36	84	10	140	120	106	127	99	2	2	....	4	18	17	18	0

VINEYARD HAVEN, MASS.

[H=— feet; h_t=30 feet; h_r=47 feet; h_a=55 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	11.9	NW.	....	.....	1	3	3	0	2	3	3	4	13	0	11	5	15	12	10	3	0	....	1	0	23	0	1
February	11.5	NW.	....	.....	2	0	10	2	2	1	0	2	12	0	10	1	18	12	8	1	0	....	2	0	17	0	1
March	13.2	SW.	....	.....	3	5	2	2	4	2	6	5	5	0	16	7	8	12	8	5	0	....	1	0	22	1	0
April	10.3	SW.	....	.....	0	1	1	0	2	3	10	7	6	0	14	9	7	8	8	1	0	....	0	0	2	0	0
May	10.7	SW.	....	.....	0	1	2	1	5	2	16	0	4	0	9	5	17	16	12	0	0	....	0	0	0	2	0
June	10.0	SW.	....	.....	0	1	0	0	4	6	19	0	0	0	10	2	18	10	8	0	0	....	0	0	0	4	0
July	8.0	SW.	....	.....	0	2	3	0	1	6	14	3	2	0	14	4	13	13	7	0	0	....	0	3	0	3	1
August	8.0	SW.	....	.....	1	5	2	1	2	3	13	3	2	0	10	6	15	7	5	0	0	....	0	4	0	3	0
September	8.1	SW.	....	.....	0	2	1	2	6	4	8	2	5	0	14	8	8	8	7	0	0	....	0	0	0	1	1
October	8.8	SW.	....	.....	0	7	1	0	1	3	8	5	6	0	10	8	13	7	6	0	1	....	0	0	0	3	0
November	11.4	NW.	....	.....	2	4	4	2	1	3	5	5	6	0	7	2	21	16	12	2	0	....	0	0	8	0	0
December	9.8	NW.	....	.....	0	5	3	0	0	0	5	6	10	2	12	5	14	9	7	4	0	....	6	0	22	0	0
Year	10.1	SW.	....	.....	9	36	32	10	30	36	107	42	71	2	137	62	167	130	98	16	1	....	10	7	94	17	4

WALLA WALLA, WASH.

[H=1,018 feet; h_t=65 feet; h_r=56 feet; h_a=73 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	4.9	S.	28	S.	0	0	1	3	8	27	13	4	5	1	6	10	15	15	13	5	0	....	12	0	19	0	0
February	5.0	SW.	32	S.	0	3	3	4	7	16	17	6	2	0	8	14	7	7	6	0	0	....	2	0	9	0	0
March	6.7	S.	32	W.	0	3	3	3	5	24	13	10	1	0	6	19	6	10	6	1	0	....	0	0	0	0	0
April	7.2	S.	37	SW.	0	0	4	4	9	23	15	3	1	1	4	18	8	16	9	0	0	....	0	0	0	0	0
May	6.2	S.	36	SW.	0	5	7	3	8	18	17	4	0	0	10	15	6	8	6	0	0	....	0	1	0	0	0
June	6.2	S.	32	SW.	0	8	3	5	4	20	14	5	1	0	11	14	5	7	2	0	0	....	0	6	0	1	0
July	6.6	S.	26	SW.	0	6	1	3	0	23	21	5	2	1	28	2	1	3	3	0	0	....	0	9	0	1	0
August	5.3	S.	22	SW.	0	9	3	0	0	24	18	6	2	0	28	1	2	2	1	0	0	....	0	13	0	0	0
September	5.0	S.	38	S.	0	11	0	0	5	26	16	2	0	0	17	6	7	7	6	0	0	....	0	2	0	0	0
October	4.3	S.	19	SW.	0	1	3	1	2	25	19	9	2	0	17	10	4	8	5	0	1	....	0	0	0	0	0
November	7.9	S.	36	SE.	0	4	0	3	4	27	17	4	0	1	4	10	16	14	10	1	0	....	0	0	3	0	0
December	4.6	SW.	34	SE.	0	4	2	1	6	19	22	3	5	0	3	10	18	17	12	8	0	....	7	0	22	0	0
Year	5.8	S.	38	S.	0	54	30	30	58	272	202	61	21	4	142	129	95	114	79	15	1	....	21	31	53	2	0

WASHINGTON, D. C.

[H=112 feet; h_t=59 feet; h_r=42 feet; h_a=67 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	7.9	NW.	36	NW.	0	7	9	3	3	4	12	6	18	0	11	5	15	12	12	5	0	....	8	0	24	0	0
February	8.6	NE.	39	NW.	0	6	20	3	0	5	7	2	12	3	7	9	13	12	8	2	0	....	2	0	15	0	1
March	9.3	NW.	44	NW.	2	11	9	1	1	5	4	7	21	3	12	7	12	16	14	7	0	....	3	0	17	1	0
April	7.9	NW.	35	NW.	0	5	11	3	5	11	4	3	17	1	12	7	11	14	10	0	0	....	0	0	1	2	0
May	7.1	S.	42	NW.	1	5	4	5	3	21	5	4	14	1	12	11	8	13	10	0	0	....	0	0	0	6	0
June	6.3	S.	36	W.	0	3	5	2	4	28	12	3	3	0	8	10	3	11	8	0	0	....	0	4	0	8	0
July	4.7	S.	36	NW.	0	7	5	4	9	16	8	5	7	1	16	9	6	11	10	0	0	....	0	8	0	9	1
August	4.9	NW.	18	NW.	0	9	9	12	4	6	4	2	8	8	16	10	3	5	3	0	0	....	0	3	0	3	0
September	5.4	E.	36	NW.	0	3	12	11	7	8	4	2	10	3	15	7	8	8	6	0	0	....	0	0	0	2	0
October	6.1	NW.	34	W.	0	7	2	1	2	9	5	4	18	14	17	12	2	3	1	0	0	....	0	0	1	1	0
November	8.0	NW.	38	NW.	0	3	2	5	2	10	3	7	24	4	9	9	12	12	9	2	0	....	0	0	11	1	1
December	6.2	NW.	35	NW.	0	13	2	2	0	5	2	4	18	14	13	7	11	8	6	2	0	....	8	0	20	0	0
Year	6.9	NW.	44	NW.	3	79	90	52	40	129	71	49	170	52	150	112	104	125	97	18	0	....	21	15	89	33	3

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

WICHITA, KANS.

[Lat. 37° 41′ N.; long. 97° 20′ W.; gravity corr., —.02.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	28.72	28.98	28.25	20.3	31.7	39.7	18.5	29.1	64	—14	15	19	79	63	.081	.098	.31	.22	3.4	2.0	3.0
February	28.63	28.98	27.99	31.8	42.4	47.2	29.8	38.5	66	19	28	33	85	71	.150	.187	2.62	1.04	6.7	4.6	5.6
March	28.59	29.02	27.88	32.3	43.6	48.8	30.5	39.6	76	3	26	31	81	67	.137	.172	4.03	1.67	5.3	5.4	4.9
April	28.50	28.96	27.74	47.4	58.1	65.2	44.1	54.6	85	29	40	40	76	55	.246	.246	2.05	.97	5.9	5.3	5.3
May	28.44	28.74	28.04	56.1	65.3	71.1	52.3	61.7	88	38	50	53	81	68	.360	.402	5.83	2.11	6.8	6.3	5.7
June	28.49	28.77	28.25	68.1	80.2	85.7	64.1	74.9	95	46	60	62	76	55	.517	.555	1.70	1.15	3.5	2.3	2.2
July	28.59	28.83	28.29	70.4	82.4	88.1	66.6	77.4	98	53	64	64	80	55	.595	.595	2.75	.90	5.0	2.9	3.5
August	28.57	28.77	28.35	68.9	80.5	89.4	65.6	77.5	100	53	62	62	80	56	.555	.555	4.06	1.47	3.2	3.1	3.1
September	28.01	28.79	28.34	62.3	74.8	83.4	59.7	71.6	95	47	55	56	79	54	.432	.448	2.12	1.59	2.4	1.9	1.8
October	28.62	28.90	28.27	51.2	62.2	70.1	49.1	59.6	89	33	44	43	77	53	.287	.277	2.52	1.38	4.5	4.1	4.4
November	28.63	29.02	28.17	36.4	46.9	53.7	34.4	44.0	68	23	30	31	78	55	.164	.172	.24	.24	4.9	3.8	4.5
December	28.65	29.03	28.24	24.2	28.9	34.7	20.6	27.6	67	— 6	22	24	89	81	.113	.125	1.71	.86	6.1	5.7	6.0
Year	28.59	29.03	27.74	47.4	58.1	64.8	44.6	54.7	100	—14	41	43	80	61	.303	.319	29.94	2.11	4.8	4.0	4.2

WILMINGTON, N. C.

[Lat. 34° 14′ N.; long. 77° 57′ W.; gravity corr., —.03.]

January	30.04	30.46	29.39	40.7	46.1	53.1	36.6	44.8	71	23	34	38	78	74	.195	.228	4.91	1.56	5.3	4.7	6.3
February	30.04	30.52	29.45	43.8	48.9	56.0	40.3	48.2	69	22	39	42	83	78	.237	.266	3.65	.74	6.0	5.3	6.7
March	29.98	30.37	29.36	46.0	50.4	58.4	41.8	50.1	74	27	37	42	74	74	.219	.266	2.69	1.02	5.3	4.5	5.5
April	30.07	30.37	29.60	57.7	60.1	68.2	52.2	60.2	80	35	48	51	73	75	.334	.219	1.13	.35	5.3	4.1	6.2
May	30.00	30.36	29.61	67.8	68.3	77.7	61.7	69.7	86	49	59	60	74	75	.499	.517	1.64	.86	4.6	2.9	5.0
June	29.99	30.24	29.76	76.0	74.8	82.0	70.2	76.1	92	61	70	70	82	85	.732	.732	6.13	2.62	6.8	5.2	6.3
July	30.05	30.30	29.87	76.2	76.0	85.0	71.2	78.1	96	60	71	72	84	86	.757	.783	10.26	3.25	5.0	5.0	5.6
August	29.97	30.10	29.81	77.4	77.2	87.1	71.9	79.5	93	66	72	72	83	83	.783	.783	4.38	2.07	4.8	4.9	5.3
September	30.05	30.24	29.74	69.3	71.8	80.1	65.0	72.6	87	55	64	64	84	78	.595	.595	5.90	4.23	5.2	4.1	5.1
October	30.01	30.32	29.71	57.7	61.9	71.4	53.8	62.6	83	38	52	54	82	75	.387	.417	.57	.21	3.7	2.1	3.2
November	30.06	30.32	29.60	48.0	53.0	62.2	43.0	52.9	81	25	42	44	80	73	.266	.287	.59	.39	3.2	2.6	3.4
December	30.04	30.51	29.53	41.7	47.3	56.2	38.5	47.4	77	22	37	41	82	80	.219	.256	1.03	.33	4.1	3.5	4.3
Year	30.02	30.52	29.36	58.5	61.3	69.8	53.9	61.8	96	22	52	54	80	78	.435	.446	42.88	4.23	4.9	4.1	5.2

WINNEMUCCA, NEV.

[Lat. 40° 58′ N.; long. 117° 43′ W.; gravity corr., —.01.]

January	25.76	26.06	25.35	19.7	31.0	34.4	16.8	25.6	45	4	16	20	86	68	.085	.103	0.78	.26	5.5	5.8	5.8
February	25.65	25.89	25.31	24.7	39.6	42.2	21.8	32.0	58	5	20	21	48	51	.103	.108	0.66	.52	4.4	5.7	5.6
March	25.60	25.97	25.19	33.3	49.3	51.3	30.8	41.0	69	25	27	22	79	40	.143	.113	1.64	.36	5.5	7.1	6.5
April	25.61	25.90	25.30	36.3	50.2	52.7	34.2	43.4	67	22	24	16	65	32	.125	.085	1.08	.40	7.1	7.5	7.0
May	25.61	25.98	25.13	42.5	62.7	65.2	40.8	53.0	85	22	33	24	71	28	.187	.125	1.21	.47	4.8	6.4	5.8
June	25.60	25.81	25.31	48.0	72.0	74.7	46.2	60.4	93	34	34	23	59	20	.195	.119	0.88	.47	2.9	5.3	4.3
July	25.67	25.87	25.50	55.9	84.0	86.2	54.1	70.2	96	43	28	18	36	10	.150	.093	0.08	.04	1.1	2.5	1.5
August	25.66	25.65	25.41	56.5	85.3	87.5	53.2	70.4	94	39	25	18	31	8	.139	.093	T.	T.	1.8	2.5	1.0
September	25.67	25.86	25.45	48.9	76.6	80.1	45.5	62.8	91	34	24	19	39	15	.125	.098	0.13	.13	2.1	3.5	3.0
October	25.71	25.97	25.32	36.1	58.8	63.0	32.0	47.5	82	15	20	18	52	23	.103	.093	0.30	.16	2.7	4.5	3.9
November	25.69	26.04	25.22	30.6	46.7	53.8	24.4	39.1	69	7	17	18	59	35	.089	.093	0.32	.12	3.8	6.3	5.4
December	25.72	26.06	25.40	25.7	34.6	39.0	20.9	30.0	57	3	20	22	76	59	.103	.113	0.77	.21	5.5	5.4	5.4
Year	25.66	26.06	25.13	38.2	57.6	60.8	35.1	48.0	96	3	24	20	58	32	.128	.103	7.85	.52	3.9	5.2	4.7

WOODS HOLL, MASS.

[Lat. 41° 33′ N.; long. 70° 40′ W.; gravity corr., —.01.]

January	.....	30.58	29.24	.....	32.8	39.6	25.2	32.4	58	4	....	27	....	80	.....	.143	3.58	.94	.....	4.6	6.3
February	.....	30.66	28.98	.....	30.7	37.0	25.0	31.0	48	10	....	27	....	89	.....	.143	1.95	.60	.....	5.1	6.9
March	.....	30.46	29.29	.....	34.3	39.9	27.0	33.4	49	12	....	28	....	81	.....	.150	5.11	1.37	.....	2.8	5.2
April	.....	30.51	29.52	.....	43.4	50.5	36.9	43.7	60	30	....	38	....	82	.....	.228	2.61	.80	.....	4.8	5.1
May	.....	30.35	29.56	.....	50.6	57.5	46.1	51.8	68	37	....	46	....	87	.....	.310	5.43	1.80	.....	5.4	6.5
June	.....	30.40	29.91	.....	62.1	68.8	56.6	62.7	79	45	....	58	....	88	.....	.481	1.80	.45	.....	4.9	6.1
July	.....	30.45	29.71	.....	67.7	74.5	62.8	68.6	87	56	....	61	....	81	.....	.596	1.64	.55	.....	4.7	4.9
August	.....	30.22	29.76	.....	68.5	73.9	63.5	68.7	82	56	....	65	....	88	.....	.616	2.45	1.30	.....	4.8	6.5
September	.....	30.40	29.64	.....	62.4	68.4	57.4	62.9	73	50	....	56	....	89	.....	.448	2.85	1.39	.....	3.2	4.2
October	.....	30.43	29.52	.....	52.9	58.9	46.5	52.7	69	40	....	45	....	75	.....	.228	2.08	.85	.....	2.8	5.4
November	.....	30.42	29.62	.....	42.9	47.7	37.0	42.4	63	22	....	37	....	82	.....	.219	8.46	2.69	.....	5.3	6.4
December	.....	30.41	29.42	.....	32.1	36.6	25.7	31.2	54	5	....	27	....	80	.....	.143	1.72	.52	.....	4.8	6.2
Year	.....	30.66	28.98	.....	48.4	54.4	42.5	48.5	87	4	....	49	....	83	.....	.310	39.68	2.69	.....	4.4	5.8

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

WICHITA, KANS.

[H=1,366 feet; h_t=78 feet; h_r=71 feet; h_a=85 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.																										
January	9.0	N.	40	N.	1	19	8	4	5	18	0	0	8	0	18	9	4	4	2	4	0	....	9	0	28	0	0
February	8.5	N.	30	S.	0	15	6	1	7	12	1	1	14	1	7	11	11	10	7	1	0	....	2	0	18	3	1
March	11.8	N.	43	W.	1	12	12	3	9	9	2	2	12	1	11	11	9	11	9	4	1	....	7	0	15	3	0
April	13.0	S.	50	W.	2	5	7	3	12	17	1	0	12	3	8	15	7	7	5	0	0	....	0	0	1	4	0
May	10.1	NW.	42	S.	1	8	10	3	7	11	6	1	16	0	9	10	12	17	14	0	1	....	0	0	0	13	0
June	9.8	S.	44	W.	1	6	7	0	7	22	11	0	6	1	23	5	2	7	5	0	0	....	0	8	0	6	0
July	7.6	S.	30	N.	0	4	10	4	14	26	1	1	0	2	13	16	2	7	6	0	0	....	0	13	0	4	0
August	6.5	S.	34	NE.	0	6	6	9	14	22	1	2	1	1	17	9	5	8	7	0	0	....	0	17	0	9	0
September	8.4	S.	25	S.	0	9	5	3	15	27	0	0	0	1	25	4	1	4	4	0	0	....	0	3	0	2	0
October	7.8	S.	46	N.	1	15	9	3	10	19	4	0	0	2	16	6	9	7	6	0	0	....	0	0	0	2	0
November	9.0	S.	41	NW.	1	10	6	3	10	13	3	4	10	1	13	10	7	1	1	1	0	....	0	0	11	0	0
December	7.0	N.	36	N.	0	19	7	6	9	7	6	1	7	0	10	10	11	12	6	8	0	....	15	0	26	0	0
Year	9.0	S.	50	W.	8	128	93	42	119	203	36	12	86	13	170	116	80	95	72	18	2	....	33	41	99	40	1

WILMINGTON, N. C.

[H=78 feet; h_t=82 feet; h_r=76 feet; h_a=88 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	9.7	NW.	46	SW.	2	8	8	3	0	6	10	13	12	2	9	7	15	12	10	0	0	....	0	0	10	0	0
February	10.5	N.	42	NW.	1	12	13	4	0	3	9	8	8	1	5	10	14	13	9	0	0	....	0	0	5	0	1
March	9.9	NW.	38	SW.	0	3	16	6	1	1	10	12	12	1	12	7	12	11	9	0	0	....	0	0	4	2	0
April	10.3	SW.	38	SW.	0	6	13	4	1	4	21	4	6	1	6	13	11	11	7	0	0	....	0	0	0	4	0
May	9.7	SW.	36	SW.	0	3	6	3	3	13	20	8	4	2	9	19	3	6	4	0	0	....	0	0	0	3	0
June	8.4	SW.	40	SW.	1	1	6	6	4	12	27	3	0	1	2	19	9	16	13	0	0	....	0	1	0	4	0
July	6.3	SW.	26	SW.	0	0	7	1	2	3	26	8	2	13	5	20	6	14	12	0	0	....	0	7	0	6	0
August	6.6	SW.	22	SW.	0	0	10	3	6	8	27	4	3	1	8	17	6	12	9	0	0	....	0	4	0	8	0
September	7.6	NE.	25	E.	0	4	33	7	6	2	5	0	0	3	10	12	8	10	8	0	0	....	0	0	0	3	0
October	6.8	NE.	26	W.	0	5	24	4	4	2	8	4	7	4	21	4	6	5	4	0	0	....	0	0	0	1	0
November	7.5	NW.	40	NW.	1	11	7	5	3	6	12	3	11	2	16	8	6	5	3	0	0	....	0	0	4	1	0
December	7.2	NE.	44	NW.	1	11	16	4	0	4	10	1	14	2	15	9	7	9	7	1	0	....	1	0	10	0	0
Year	8.4	SW	46	SW.	6	64	159	50	30	64	185	68	79	33	118	145	103	124	95	1	0	....	1	12	33	32	1

WINNEMUCCA, NEV.

[H=4,340 feet; h_t=62 feet; h_r=54 feet; h_a=69 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	8.5	NE.	45	S.	1	4	21	15	0	1	12	4	1	4	7	15	9	10	6	8	0	....	10	0	31	0	0
February	10.5	E.	32	SW.	0	11	13	16	1	3	9	2	1	2	9	7	13	3	3	2	0	....	3	0	24	0	0
March	9.5	SW.	53	SW.	2	4	11	4	4	3	13	8	11	4	6	13	12	15	12	8	0	....	0	0	18	0	0
April	11.8	SW.	62	SW.	2	4	3	3	3	7	19	12	7	2	2	15	13	10	6	4	0	....	0	0	15	0	0
May	10.4	SW.	45	SW.	3	7	11	4	0	8	22	6	1	3	8	12	11	12	7	3	0	....	0	0	5	0	0
June	10.7	SW.	44	W.	2	2	7	9	1	6	16	9	8	2	12	9	9	10	4	0	0	....	0	3	0	5	0
July	10.1	SW.	60	NE.	2	3	10	7	0	7	22	10	2	1	26	4	1	3	1	0	0	....	0	5	0	4	0
August	9.2	W.	45	SW.	1	3	9	9	0	2	17	19	2	1	25	4	2	0	0	0	0	....	0	10	0	0	0
September	9.7	SW.	46	SW.	1	2	10	9	1	1	28	8	0	1	17	11	2	2	1	0	0	....	0	2	0	1	0
October	9.2	SW.	42	NW.	2	4	15	12	2	3	16	7	3	0	13	14	4	6	3	0	0	....	0	0	17	1	0
November	11.2	SW.	62	S.	5	4	11	9	0	10	12	8	2	4	6	17	7	6	3	2	0	....	0	0	23	0	0
December	8.7	SW.	60	S.	2	2	11	6	0	7	20	12	1	3	7	13	11	10	6	4	0	....	1	0	26	0	0
Year	10.0	SW.	62	S.	23	50	132	103	12	58	206	105	39	27	138	134	94	87	52	31	0	....	14	20	159	11	0

WOODS HOLL, MASS.

[H=22 feet; h_t=51 feet; h_r=39 feet; h_a=57 feet.]

Month.	Average hourly velocity.	Prevailing direction. a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Clear.	Partly cloudy.	Cloudy.	.01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Below 32°.	Above 90°.	Minimum temperature below 32°.	Thunderstorms.	Auroras.
January	19.0	N.	56	NW.	8	8	3	1	2	2	4	6	4	1	5	13	13	11	9	5	0	....	6	0	25	0	1
February	15.6	NE.	48	NW.	3	5	11	2	2	0	2	0	7	0	8	6	15	9	6	7	0	....	7	0	26	0	1
March	20.3	NW.	67	SW.	10	1	5	0	6	1	8	1	9	0	13	9	9	11	9	6	0	....	4	0	25	1	1
April	16.1	SW.	48	NW.	5	3	0	0	6	1	12	2	6	0	14	8	8	10	7	1	0	....	0	0	4	0	1
May	14.7	SW.	43	W.	3	1	2	5	3	6	12	1	1	0	8	8	15	19	13	0	0	....	0	0	0	2	2
June	15.0	SW.	51	SW.	2	0	1	2	4	6	13	3	1	0	8	11	11	13	8	0	0	....	0	0	0	5	0
July	13.0	SW.	48	SW.	2	0	3	2	2	5	12	5	1	1	12	14	5	12	9	0	0	....	0	0	0	2	1
August	11.9	SW.	37	N.	0	3	3	3	1	5	11	3	1	1	9	8	14	9	4	0	0	....	0	0	0	2	0
September	14.0	SW.	52	SW.	3	1	0	1	5	2	12	4	5	0	18	6	6	8	7	0	0	....	0	0	0	1	0
October	17.1	W.	47	NW.	3	2	5	0	1	1	4	10	8	0	9	12	10	6	6	0	0	....	0	0	0	2	0
November	18.0	NW.	52	NW.	6	3	6	4	0	2	3	5	7	0	7	9	14	14	13	1	0	....	0	0	9	0	0
December	18.4	NW.	59	NW.	8	4	1	0	1	1	1	1	20	2	8	12	11	9	8	3	0	....	7	0	26	0	1
Year	16.1	SW.	67	SW.	53	31	40	20	33	32	94	41	70	5	119	116	131	131	99	23	0	....	24	0	115	15	8

a By eye observations at 8 a. m. and 8 p. m., when there is no self-register at station.

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

YANKTON, S. DAK.

[Lat. 42° 54′ N; long. 97° 28′ W; gravity corr., 0.]

Month.	Pressure.			Temperature.							Moisture.										
		Extremes.		Mean.					Extremes.		Dew point.		Relative humidity.		Vapor pressure.		Precipitation.		Cloudiness.		
	Monthly mean.	Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
	In.	In.	In.	°	°	°	°	°	°	°	°	°	%	%	In.	In.	In.	In.			
January	28.83	29.28	28.30	10.0	15.9	23.3	5.1	14.2	50	−32	5	10	80	78	.049	.063	.40	.16	4.7	3.4	3.9
February	28.77	29.09	28.10	18.4	25.2	31.1	15.6	23.4	50	− 6	14	21	85	84	.077	.108	.60	.24	6.7	6.6	7.6
March	28.75	29.28	28.06	24.4	35.8	42.1	22.4	32.2	73	2	19	24	82	65	.098	.125	.90	.34	5.2	5.6	6.8
April	28.65	29.10	27.57	39.4	48.3	54.5	36.2	45.4	82	20	33	36	80	65	.187	.211	5.63	2.17	7.2	7.2	7.2
May	28.64	29.03	28.06	46.6	55.5	59.3	43.4	51.4	80	32	41	41	82	64	.256	.256	6.13	2.08	7.5	7.0	7.8
June	28.60	29.00	28.21	61.4	71.8	77.2	57.4	67.3	92	46	55	55	80	57	.432	.432	2.95	1.95	5.3	4.1	5.0
July	28.70	29.02	28.37	67.6	78.7	85.0	63.6	74.3	101	49	59	62	76	58	.499	.555	1.60	1.50	4.2	4.3	5.0
August	28.70	29.08	28.41	64.5	76.5	82.9	61.7	72.3	98	47	59	61	85	61	.499	.536	4.24	1.48	5.7	3.1	5.0
September	28.71	29.01	28.41	55.4	69.7	78.8	54.0	66.4	93	38	50	53	82	56	.360	.402	.36	.30	2.9	3.1	3.6
October	28.73	29.12	28.34	43.5	58.0	69.0	41.4	55.2	89	20	36	36	76	46	.211	.211	.62	.44	3.5	3.2	3.2
November	28.71	29.16	28.25	27.3	35.7	45.8	23.6	34.7	70	6	21	22	75	63	.108	.125	.50	.28	5.0	3.3	4.8
December	28.78	29.22	28.46	17.5	21.5	29.0	12.4	20.7	62	−15	13	16	81	79	.074	.085	.18	.05	6.3	4.9	6.9
Year	28.71	29.28	27.57	39.7	49.4	56.5	36.4	46.5	101	−32	34	37	80	65	.238	.259	24.11	2.17	5.4	4.6	5.6

YUMA, ARIZ.

[Lat. 32° 45′ N.; long. 114° 36′ W.; gravity corr., —.03]

January	29.91	30.26	29.62	48.6	63.1	68.2	45.2	56.7	77	32	25	24	44	28	.130	.125	1.85	.96	2.0	2.6	2.4
February	29.84	30.04	29.53	50.3	67.3	70.6	48.2	59.4	84	38	41	40	74	40	.256	.246	.87	.31	2.0	2.5	2.4
March	29.77	30.01	29.54	53.1	74.6	78.5	51.2	64.8	92	40	41	35	66	26	.256	.203	.52	.44	2.1	1.6	1.6
April	29.76	30.09	29.61	55.7	82.6	86.0	53.9	70.0	98	41	37	20	53	16	.219	.157	T	T	1.4	1.4	1.4
May	29.70	29.93	29.47	62.2	88.6	92.6	60.8	76.7	110	47	45	37	57	19	.298	.219	.05	.05	0.7	1.6	1.2
June	29.63	29.87	29.33	69.1	96.9	100.4	67.3	83.8	116	52	48	42	50	17	.334	.288	.00	.00	1.2	0.8	1.0
July	29.68	29.88	29.53	77.0	102.2	105.9	74.9	90.4	112	66	60	50	58	20	.517	.360	.00	.00	1.6	1.2	1.5
August	29.65	29.79	29.46	77.6	102.4	105.7	75.9	90.8	114	66	63	57	63	24	.575	.465	.02	.02	1.4	0.8	1.2
September	29.68	29.82	29.51	73.1	98.8	103.6	70.7	87.2	111	60	58	52	61	24	.481	.387	.04	.04	1.1	1.4	1.2
October	29.76	29.91	29.51	60.6	82.5	86.7	57.7	72.2	100	42	44	39	58	25	.287	.237	.00	.00	1.0	2.0	1.5
November	29.85	30.06	29.60	52.4	73.0	78.1	48.1	63.1	85	38	30	28	45	21	.164	.150	.00	.00	0.4	1.9	1.2
December	29.94	30.19	29.62	44.5	63.0	66.1	39.8	53.0	79	28	26	30	50	41	.137	.164	T	T	0.6	1.5	1.0
Year	29.76	30.26	29.33	60.4	82.9	86.9	57.8	72.3	116	28	43	39	57	24	.304	.248	3.35	0.96	1.3	1.6	1.5

ANNUAL METEOROLOGICAL SUMMARY FOR THE YEAR ENDING DECEMBER 31, 1892—Continued.

YANKTON, S. DAK.

[H = 1,232 feet; h_t = 51 feet; h_r = 43 feet; h_a = 57 feet.]

Month.	Wind. By self-registers. Average hourly velocity.	Prevailing direction.a	Maximum velocity.	Direction at time of maximum velocity.	Number of days with gales.	Number of winds, 8 a. m. and 8 p. m. North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calm.	Number of days. Clear.	Partly cloudy.	Cloudy.	Precipitation. .01 inch and over.	.04 inch and over.	Snow.	Hail.	Fog.	Maximum temp. Below 32°.	Above 90°.	Minimum temperature below 32°.	Electricity. Thunderstorms.	Auroras.
	Miles.		*Mi.*																								
January	8.7	NW.	38	SW.	0	2	5	2	4	0	17	7	23	2	17	5	9	7	4	6	0	....	18	0	30	0	0
February	9.8	NW.	36	S.	0	0	8	3	8	6	3	7	23	0	2	8	19	6	4	4	0	....	12	0	28	0	0
March	11.1	NW.	48	NW.	3	4	13	4	14	2	6	1	18	0	7	11	13	9	5	3	0	....	11	0	29	1	0
April	13.7	SE.	38	S.	0	1	10	9	15	1	2	7	14	1	4	10	16	12	9	4	0	....	0	0	9	0	0
May	12.7	NW.	48	NW.	1	6	12	4	3	5	4	4	24	0	2	12	17	19	15	2	0	....	0	0	1	3	1
June	9.2	SE.	36	SE.	0	2	10	6	15	1	4	3	14	5	8	17	5	10	9	0	0	....	0	2	0	6	0
July	8.6	SE.	42	SW.	2	4	7	9	16	8	8	4	5	1	8	20	3	4	3	0	0	....	0	9	0	3	2
August	8.0	SE.	35	S.	0	2	11	10	20	5	1	2	6	5	8	18	5	8	8	0	0	....	0	8	0	2	0
September	8.0	NW.	36	S.	0	2	7	7	11	9	6	2	15	1	17	9	4	3	2	0	0	....	0	2	0	0	0
October	7.8	NW.	40	S.	2	2	6	2	6	5	12	5	14	10	18	8	5	4	3	0	0	....	0	0	7	0	0
November	11.0	NW.	44	NW.	2	2	8	7	8	4	7	5	18	1	10	14	6	3	2	2	0	....	4	0	21	0	0
December	8.1	NW.	38	NW.	0	5	5	2	7	3	11	3	23	3	5	10	16	8	1	7	0	....	20	0	30	0	0
Year	9.7	NW.	48	NW.	10	32	102	65	127	49	81	50	197	29	106	142	118	93	65	28	0	....	65	21	146	15	3

YUMA, ARIZ.

[H = 141 feet; h_t = 16 feet; h_r = 2 feet; h_a = 50 feet.]

January	7.3	N.	29	NW.	0	27	12	8	3	4	2	1	5	0	22	5	4	4	4	0	0	....	0	0	1	0	0
February	5.3	N.	24	W.	0	12	6	6	8	10	2	3	11	0	18	10	1	6	5	0	0	....	0	0	0	0	0
March	8.1	W.	43	NW.	1	3	6	5	2	11	5	22	7	1	23	8	0	2	2	0	0	....	0	2	0	0	0
April	8.6	W.	34	W.	0	4	1	5	0	2	7	24	15	2	26	3	1	0	0	0	0	....	0	13	0	0	0
May	8.2	W.	32	NW.	0	3	2	1	0	9	16	16	14	1	28	3	0	2	0	0	0	....	0	21	0	0	0
June	7.0	W.	42	NW.	1	2	4	0	2	9	15	18	8	2	24	6	0	0	0	0	0	....	0	26	0	0	0
July	6.3	SW.	30	SW.	0	0	3	4	7	9	20	9	5	5	28	3	0	0	0	0	0	....	0	31	0	0	0
August	6.8	S.	38	SE.	0	0	3	3	7	14	15	14	2	4	29	2	0	1	0	0	0	....	0	31	0	6	0
September	4.6	W.	42	SW.	1	6	6	6	5	4	10	9	7	7	25	5	0	1	1	0	0	....	0	30	0	2	0
October	5.8	N.	32	N.	0	11	7	9	3	4	11	12	2	3	24	7	0	0	0	0	0	....	0	11	0	0	0
November	5.4	N.	24	N.	0	25	13	11	0	2	6	2	0	1	27	3	0	0	0	0	0	....	0	0	0	0	0
December	6.5	N.	43	N.	1	33	11	3	2	3	1	4	3	2	28	3	0	0	0	0	0	....	0	0	5	0	0
Year	6.7	W.	43	N.	4	126	74	61	39	81	110	134	79	28	302	58	6	16	12	0	0	....	0	165	6	8	0

a By eye observations at 8 a. m. and 8 p. m. when there is no self-register at station.

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REPORT OF THE CHIEF OF THE WEATHER BUREAU.

PART IV.

MONTHLY AND ANNUAL MEAN TEMPERATURE AND ANNUAL EXTREMES OF TEMPERATURE, TOGETHER WITH THE DATES OF FIRST AND LAST KILLING FROST, 1891–'92.

The monthly and annual averages given in the following tables are taken largely from the records of voluntary (unpaid) observers. The paid stations of the Weather Bureau are indicated by an asterisk (*). The records of voluntary observers are given as made; no attemp has been made to reduce them to a homogeneous system. About half of the voluntary observers have standard instruments, but very few have what may be called standard shelters. The hours of observation at the regular stations of the Weather Bureau have already been described; the observing hours at voluntary stations vary greatly. The letters "*a*," "*b*," etc., following the name of a station have the following significance:

a = mean temperature computed by the formula $\frac{1}{4}$ (7+2+9+9).
b = mean temperature computed by the formula $\frac{1}{2}$ (8+8).
c = mean temperature computed by the formula $\frac{1}{2}$ (7+7).
d = mean temperature computed by the formula $\frac{1}{2}$ (6+6).
e = mean temperature computed by the formula $\frac{1}{2}$ (7+2).
f = from various hours reduced to true mean by special table.
g = mean temperature computed by the formula $\frac{1}{3}$ (7+2+9). (Southern Pacific Railway.)

The absence of a letter indicates that the mean has been made as follows: $\frac{\text{Mean max.} + \text{mean min.}}{2}$

The small Roman letters in the body of the tables indicate the number of days missing from the records, thus "c" indicates 3 days missing, etc.

The last date of killing frost in spring and the first occurrence of a killing frost in autumn are given at the right of the table. Many observers, however, do not report dates of frost, and still others do not distinguish between light and killing frost. The date of the first and the last occurrence of a minimum temperature of 32° has been used in all cases where no frost reports were made. Data for stations so entered have been distinguished from regular frost reports by a dagger (†).

Bracketted values have been supplied by interpolation.

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MONTHLY AND ANNUAL MEAN TEMPERATURE, ANNUAL EXTREMES OF TEMPERATURE AND DATES OF LAST KILLING FROST IN SPRING AND FIRST KILLING FROST IN AUTUMN, 1891.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.			Killing frost.	
													Mean.	Extremes.		Last in spring.	First in autumn.
														Max.	Min.		
Alabama.																	
*Auburn	46.2	56.0	52.8	63.4	69.6	79.5	77.6	78.0	72.7	58.2	49.2	46.0	62.4	95	12	Apr. 6	Nov. 3
Bermuda (e)	47.8	58.6	49.2	63.0	68.6	75.9	79.1	79.4	74.3	60.7	54.0	51.4	63.5	97	21	Apr. 6	Oct. 29
Bessemer	41.9	53.6	53.9	61.4	68.0	77.6	77.5	78.0	74.3	61.0	52.5	47.0	62.2	98	19	.....	.....
Brewton	49.1	56.5	57.7	63.8	70.4	81.6	81.0	81.4	76.0	62.3	62.6	51.6	66.2	103	23	.....	.....
Carrollton (a)	.....	.....	.....	.....	.....	.....	.....	77.4	72.4	.....	52.5	40.4	.....	.....	.....	.....	.....
Chepultepec	(42.0)	49.6	45.0	56.7	60.3	74.1	75.9	78.2	67.5	(62.0)	41.3	40.0	(57.7)	.....	.....	.....	.....
Citronelle	51.0	61.8	[c]61.3	67.6	74.0	82.2	80.4	80.8	77.0	65.5	58.2	54.6	67.9	100	24	Apr. 6	Nov. 18
Columbiana	44.0	55.2	52.8	63.8	69.6	80.6	76.5	77.1	.....	.....	.....	.....	.....	.....	.....	Apr. 6	.....
Daphne	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	61.7	60.3	.....	.....	.....	.....	.....
*Decatur [1]	.....	.....	.....	.....	67.2	78.3	74.2	74.0	70.4	57.4	48.5	.....	.....	.....	.....	.....	Oct. 16
Double Springs (a)	46.0	52.0	51.3	63.2	68.6	(78.0)	(75.0)	76.2	70.6	61.1	50.8	[m]39.3	(61.0)	.....	.....	Apr. 6	Nov. 18
*Eufaula [1]	.....	.....	.....	.....	74.4	78.8	77.8	78.8	.....	.....	.....	.....	.....	.....	.....	.....	.....
Eufaula [2]	.....	.....	.....	.....	.....	.....	80.0	78.3	74.3	62.2	53.4	.....	.....	.....	.....	.....	.....
*Evergreen	.....	.....	.....	.....	72.3	80.6	79.6	80.0	75.0	60.6	56.3	.....	.....	.....	.....	.....	Oct. 20
Fayette	.....	.....	.....	.....	71.3	79.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Florence [3]	.....	.....	.....	.....	.....	.....	.....	.....	.....	58.2	51.4	48.5	.....	.....	.....	.....	.....
*Fort Deposit	.....	.....	.....	.....	71.2	82.2	80.2	80.8	75.1	62.8	54.3	.....	.....	.....	.....	.....	Nov. 18
Goodwater	.....	.....	51.7	.....	68.3	79.1	79.4	79.1	[b]73.5	.....	.....	.....	.....	.....	.....	.....	.....
Greensboro (a)	44.8	57.0	53.7	66.5	71.8	82.8	80.9	80.6	77.0	65.3	55.1	52.0	65.6	97	24	.....	.....
Guntersville	.....	.....	.....	61.3	.....	70.8	75.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jasper	40.8	50.9	49.8	59.5	[b]59.5	76.8	74.8	74.8	69.9	56.3	48.2	45.6	58.9	94	16	.....	.....
Jemison	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	53.3	.....	.....	.....	.....	.....
Livingston (a) [4]	43.8	54.9	53.6	63.1	68.0	77.8	77.8	78.7	73.0	59.0	51.4	50.4	62.6	98	21	Apr. 6	Oct. 23
*Livingston [1]	.....	.....	.....	.....	69.2	79.8	78.1	78.6	74.2	59.8	52.8	.....	.....	.....	.....	.....	.....
*Marion	.....	.....	.....	.....	69.4	79.2	78.2	78.5	.....	.....	51.4	.....	.....	.....	.....	.....	Nov. 18
Maysville	.....	.....	.....	.....	.....	.....	.....	.....	.....	57.3	51.7	51.9	.....	.....	.....	.....	.....
*Mobile	49.2	59.0	58.8	65.7	72.2	80.5	80.0	80.1	76.6	64.7	57.2	53.4	66.4	96	28	Apr. 6	Nov. 18
*Montgomery	47.1	58.5	55.2	66.0	71.4	81.6	79.6	81.0	76.0	63.4	54.4	51.8	65.5	99	23	Apr. 6	Oct. 21
Mountain Home (a)	39.1	48.8	48.0	60.0	64.8	75.7	75.2	73.6	(70.5)	57.5	(49.0)	[m]45.8	(59.0)	.....	.....	.....	Oct. 15
Mount Vernon Barracks	46.7	57.2	56.8	65.0	72.2	80.9	79.4	80.8	76.4	63.6	57.1	55.2	65.9	100	21	Apr. 6	.....
Mount Willing	.....	.....	51.4	.....	70.2	.....	79.8	81.5	.....	63.9	56.5	51.8	.....	.....	.....	.....	.....
Newburg	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49.2	.....	.....	.....	.....	.....
*Opelika	.....	.....	.....	.....	70.2	85.6	75.8	76.0	70.3	61.1	51.7	.....	.....	.....	.....	.....	Oct. 31
Orrville	.....	.....	.....	.....	.....	.....	78.7	[b]77.1	75.0	61.8	53.0	50.3	.....	.....	.....	.....	.....
Oxanna (a)	.....	.....	.....	.....	.....	.....	.....	.....	72.3	60.0	50.3	48.9	.....	.....	.....	.....	.....
*Pine Apple	.....	.....	.....	.....	76.6	81.2	78.8	80.4	73.2	63.8	60.0	.....	.....	.....	.....	.....	.....
Pittsboro	.....	.....	.....	.....	.....	.....	.....	.....	.....	61.6	.....	58.0	.....	.....	.....	.....	.....
Pushmataha	.....	.....	.....	.....	.....	80.9	79.1	79.9	75.7	61.6	54.7	52.9	.....	.....	.....	.....	.....
Selma [1]	.....	.....	.....	.....	71.6	82.6	80.6	81.2	76.8	63.8	.....	.....	.....	.....	.....	.....	Oct. 23
Scottsboro	.....	.....	.....	.....	.....	.....	.....	.....	.....	54.4	48.3	44.0	.....	.....	.....	.....	.....
*Thomasville	.....	.....	.....	.....	.....	.....	.....	.....	72.6	59.5	52.4	.....	.....	.....	.....	[d].....	Oct. 20
Tuscaloosa	.....	.....	.....	.....	.....	.....	.....	80.3	74.8	60.9	.....	.....	.....	.....	.....	.....	.....
Tuscumbia (a) [5]	40.9	50.2	46.5	60.9	66.1	77.5	75.8	74.8	71.5	57.6	48.4	47.8	59.8	95	19	.....	Oct. 20
*Tuscumbia [1]	.....	.....	.....	.....	67.4	78.0	76.1	74.8	72.0	59.4	49.9	.....	.....	.....	.....	.....	.....
*Union Springs	.....	.....	.....	65.0	64.8	79.8	76.5	77.6	72.8	60.3	52.1	48.2	.....	.....	.....	.....	.....
Uniontown	51.2	55.6	54.0	64.5	72.4	(81.5)	79.2	79.5	[b]75.2	[b]63.9	53.3	52.9	(65.3)	.....	.....	.....	.....
Valley Head (a)	38.9	47.9	45.8	59.0	63.7	75.3	74.0	72.7	68.4	55.5	46.1	44.6	57.7	95	13	.....	Oct. 9
Wiggins	.....	.....	58.0	[r]72.0	*72.4	82.6	81.8	83.0	.....	.....	.....	52.7	.....	.....	.....	.....	.....
Alaska.																	
Anvik	—3.4	5.7	[m]18.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Coal Harbor	.....	.....	.....	.....	.....	.....	.....	56.7	.....	.....	.....	.....	.....	.....	.....	.....	.....
Juneau City	35.1	27.4	34.9	42.2	47.5	55.2	60.4	57.2	50.1	43.0	33.2	27.8	42.4	88	1	.....	.....
Killisnoo (a)	35.9	21.9	36.0	39.3	41.9	50.1	53.8	53.4	45.0	40.2	32.0	31.3	40.1	84	2	.....	.....
Metlakahtla	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41.8	37.8	.....	.....	.....	.....	.....
Arizona.																	
Arizona Canal Co.'s Dam (Phœnix)	48.6	52.7	58.8	66.9	74.4	82.8	94.1	92.5	84.9	75.7	62.2	48.8	68.5	118	19	.....	Dec. 6
Benson (g)	42.8	56.2	56.3	75.4	(73.5)	(73.0)	93.1	87.3	78.0	62.7	52.5	42.7	(66.1)	.....	.....	.....	.....
Bisbee (a)	40.5	46.6	50.2	59.1	65.2	73.0	79.8	73.9	71.2	63.9	55.7	40.9	60.0	98	15	.....	Dec. 3
Calabasas (a)	.....	.....	.....	.....	.....	.....	[b]82.2	77.8	72.6	64.2	56.8	40.5	.....	.....	.....	.....	Dec. 6
Casa Grande (g)	55.9	54.7	45.7	66.6	77.8	87.2	98.1	93.4	86.8	78.5	63.3	46.2	71.2	116	20	.....	.....
Chino (Bangharts)	35.4	37.8	49.9	58.0	68.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chloride	39.8	42.0	50.6	[m]56.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cooley's Spring	26.4	[f]31.5	36.5	46.8	54.1	58.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 30	.....
Dragoon Summit (e)	42.6	45.0	53.1	66.3	73.1	(75.0)	87.5	81.8	77.4	67.2	56.8	41.1	(63.9)	.....	.....	.....	.....
Dudleyville (a)	.....	.....	.....	.....	.....	.....	[b]84.4	82.3	78.7	70.9	61.4	44.6	.....	.....	.....	Mar. 31	Nov. 16
Eagle Pass	28.8	36.2	41.9	50.6	61.5	72.2	80.7	76.4	68.0	53.9	(56.5)	(37.0)	(55.3)	.....	.....	Apr. 3	.....
Farley's Camp	46.2	47.2	57.0	63.8	73.8	84.4	88.6	86.1	81.4	75.7	58.6	37.7	66.7	.....	.....	.....	Dec. 3
Flagstaff	.....	.....	.....	.....	.....	.....	.....	.....	.....	55.8	.....	28.8	.....	.....	.....	.....	.....
Florence	45.4	50.4	55.5	64.8	73.8	80.6	91.9	89.0	81.5	73.1	59.6	44.5	67.5	118	17	May 1	Nov. 16

[1] Special cotton region station. [2] James Milton. [3] Nathan Parker. [4] Prof. J. W. A. Wright. [5] L. B. Thornton.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Arizona—Continued.																	
Fort Apache[1]	34.4	39.1	41.8	48.1	59.2	65.7	78.8	72.4	64.8	56.0	46.6	27.6	52.9	97	—14	.....	.....
*Fort Apache[2]	33.4	39.5	45.7	52.8	59.8	66.2	74.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Bowie[1]	41.8	46.4	51.3	5[illegible].4	66.7	75.0	81.9	79.0	73.8	64.6	56.4	40.9	61.4	103	15	.....	.....
*Fort Bowie[2]	37.8	44.4	49.9	60.0	67.0	75.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mar. 11	.....
*Fort Grant[3]	39.6	44.5	49.8	59.0	65.3	73.0	81.0	79.2	74.2	66.0	57.4	40.6	60.8	100	15	Mar. 9	.....
Fort Huachuca	33.8	41.3	48.0	45.9	64.1	72.0	79.4	74.7	69.8	62.2	52.8	38.2	56.8	100	7	Mar. 18	.....
Fort Lowell	47.7	51.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Mohave	(46.0)	(47.5)	60.4	62.2	76.2	84.1	[f]94.5	93.2	84.0	73.3	61.3	[j]47.6	(69.2)	.....	.....	.....	Dec. 5
Fort Thomas	39.0	46.3	53.4	61.9	70.1	78.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 2	.....
Gila Bend (*a*)[4]	51.8	55.4	63.0	71.5	79.6	86.8	97.8	95.0	87.2	78.3	63.5	50.0	73.3	110	30	.....	.....
Gila Bend (*g*)[5]	49.3	53.3	63.8	72.0	83.7	92.5	99.8	97.0	90.8	80.6	64.2	53.1	75.0	118	28	.....	.....
Holbrook[6]	30.6	38.4	43.0	51.9	60.4	65.0	75.0	73.2	66.0	52.2	42.5	28.3	52.2	101	—7	Apr. 26	Oct. 2
*Holbrook[2]	32.8	39.4	44.4	52.9	61.6	67.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maricopa (*g*)[5]	50.3	53.0	59.2	70.8	80.9	90.3	99.0	97.8	87.2	72.6	65.3	56.0	73.5	120	32	.....	.....
Mount Huachuca	(38.0)	(46.0)	49.6	59.0	66.0	73.6	80.3	75.2	71.4	63.7	54.3	39.7	(59.9)	.....	.....	Mar. 31	Nov. 20
New River	46.0	(42.0)	57.8	64.0	70.2	75.8	86.2	85.6	80.2	73.6	62.6	47.2	(65.8)	.....	.....	.....	Dec. 3
Oracle (*a*)	.....	.....	.....	.....	.....	.....	[d]84.6	79.6	75.2	66.8	55.9	39.8	.....	.....	.....	.....	Dec. 2
Pantano (*a*)	44.2	49.5	57.1	66.6	74.2	81.1	89.2	83.3	79.1	69.3	59.1	42.6	64.6	106	25	.....	.....
Peoria	46.5	52.4	57.0	63.8	73.2	80.5	91.8	89.4	81.4	71.6	58.4	44.4	67.5	112	15	.....	Dec. 5
Phœnix[7]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59.9	49.6	.....	.....	.....	.....	Nov. 17
Phœnix[8]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47.0	.....	.....	.....	.....	.....
Red Rock	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	51.8	.....	.....	.....	.....	.....
Reymert	.....	.....	.....	.....	.....	.....	.....	90.3	.....	72.7	64.0	49.1	.....	.....	.....	.....	Dec. 6
San Carlos[1]	43.5	48.7	56.1	63.6	71.5	78.1	89.7	87.2	78.3	66.8	55.6	39.1	64.8	117	11	.....	.....
*San Carlos[2]	40.3	47.0	53.5	62.4	71.0	78.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 3	.....
San Simon (*g*)	41.2	49.0	57.5	61.7	70.8	83.3	91.1	86.7	88.3	68.3	58.9	43.7	66.7	112	16	.....	.....
Signal	46.3	48.4	57.4	64.8	73.1	80.6	91.5	90.2	81.4	70.6	58.8	44.3	67.3	113	18	Mar. 8	Nov. 16
Tempe	(47.0)	(49.0)	57.0	65.1	72.5	79.8	90.0	(93.5)	79.0	70.6	59.9	48.4	(67.6)	.....	.....	.....	Nov. 16
Texas Hill (*g*)	46.7	51.0	62.3	72.1	78.7	87.9	96.0	98.1	87.4	76.0	58.3	48.2	71.9	123	22	.....	.....
Tiptop	43.8	48.3	56.8	67.8	74.2	82.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tombstone	.....	.....	.....	.....	.....	.....	.....	.....	.....	67.3	59.0	44.2	.....	.....	.....	.....	Dec. 3
Tucson[9]	44.9	50.6	57.0	66.2	75.5	81.6	91.2	85.3	81.2	70.6	59.4	44.8	67.4	109	15	Mar. 9	Dec. 7
Tucson (*g*)[5]	262.9	52.5	59.8	71.5	78.0	84.5	90.7	86.8	81.2	73.7	62.2	47.2	70.9	109	22	.....	Oct. 3
*Tucson[2]	.....	.....	.....	.....	.....	.....	.....	.....	.....	70.8	58.9	44.4	.....	.....	.....	.....	.....
Whipple Barracks	34.0	36.2	43.1	51.4	57.8	6[illegible].0	70.4	67.8	64.8	56.4	47.1	31.4	52.0	98	—2	May 30	.....
Willcox[6]	37.4	46.9	57.0	64.6	72.2	78.8	88.9	84.1	79.2	70.5	61.9	43.7	65.3	108	9	.....	.....
*Willcox[2]	37.7	44.4	49.7	56.6	64.2	72.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 19	Dec. 2
Yuma (*g*)[5]	49.6	55.6	66.4	72.2	77.3	83.5	95.5	94.5	87.1	75.4	63.9	[k]52.8	72.8	118	28	.....	.....
*Yuma[2]	53.4	55.2	63.4	69.7	74.2	81.8	92.6	91.5	83.4	76.5	64.7	51.3	71.4	116	25	Feb. 11	Dec. 12
Arkansas.																	
Black Rock (*a*)	.....	.....	.....	.....	.....	.....	.....	78.7	75.9	60.9	47.8	46.4	.....	.....	.....	.....	.....
*Brinkley	47.7	44.5	44.6	62.6	66.0	79.4	76.2	75.8	72.1	58.8	48.6	50.1	60.5	99	20	.....	Oct. 20
Camden (*a*)	42.7	51.6	50.6	63.2	66.8	78.2	77.0	76.4	73.6	60.7	51.8	50.1	61.9	96	21	Apr. 6	Nov. 17
Conway (*a*)	41.2	46.2	46.6	62.2	65.9	76.2	75.6	75.0	71.6	57.4	47.0	46.9	59.3	93	19	Apr. 4	Oct. 20
Corner Stone (*a*)	.....	.....	.....	.....	.....	.....	.....	.....	73.8	[e]60.3	48.5	[d]47.8	.....	.....	.....	.....	.....
Dallas (*a*)	40.4	45.6	45.6	61.9	65.1	75.4	75.6	74.7	70.8	59.7	48.9	46.9	59.2	98	15	Apr. 5	Nov. 12
Devall's Bluff	41.2	48.0	47.7	64.6	67.8	79.0	76.8	[e]77.6	72.2	58.6	49.1	[j]47.0	60.8	98	14	Apr. 6	Oct. 19
El Dorado	.....	.....	.....	66.4	64.2	75.2	73.5	72.7	71.8	58.8	50.2	47.8	.....	.....	.....	.....	Nov. 17
Fayetteville (*a*)	37.6	39.5	41.4	59.7	62.6	73.0	72.7	72.2	70.1	58.1	44.2	43.6	56.2	96	6	Apr. 5	Oct. 7
*Forrest City	47.2	53.5	54.4	66.6	68.3	79.6	77.8	77.4	74.7	62.8	52.0	50.8	63.8	96	19	Mar. 15	Oct. 23
*Fort Smith	40.4	43.4	45.1	62.7	66.6	77.0	76.2	76.5	73.5	61.4	47.6	46.0	59.7	97	14	Apr. 6	Oct. 7
Harrisburg (*a*)	39.1	44.4	45.2	61.9	(68.0)	76.6	74.5	76.4	77.6	62.1	52.0	(47.0)	(60.4)	.....	.....	Apr. 5	Oct. 6
Harrison	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43.1	.....	.....	.....	.....	.....
*Helena[10]	41.0	47.2	49.7	64.6	69.6	81.0	78.2	77.8	74.4	60.7	50.6	47.8	61.9	100	19	Mar. 14	Nov. 13
Hope (*a*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	61.1	51.1	49.1	.....	.....	.....	.....	.....
Hot Springs	40.4	47.4	49.7	60.3	65.4	76.9	76.6	76.0	75.0	61.9	49.0	46.0	60.3	100	16	Apr. 6	.....
Lead Hill (*a*)	38.3	41.4	45.0	61.4	64.6	77.6	77.7	77.7	75.6	58.3	44.4	44.4	58.9	108	12	Apr. 6	.....
*Little Rock	42.0	46.6	47.0	63.8	67.6	78.8	76.6	76.5	74.5	61.2	49.0	47.6	60.9	96	20	Apr. 4	Oct. 23
Lonoke (*a*)	45.0	50.0	50.8	66.3	70.6	81.6	78.6	79.2	75.6	62.3	52.1	50.9	63.6	100	19	Apr. 5	.....
Luna Landing	44.2	53.0	51.5	64.4	68.1	79.8	77.9	77.8	74.5	61.1	52.9	51.6	63.0	.....	.....	.....	.....
Madding (*e*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	52.3	.....	.....	.....	.....	.....	.....
*Malvern	45.8	53.0	(47.5)	(64.0)	68.2	79.6	79.3	[e]78.2	75.1	62.4	[e]52.3	(47.5)	(62.7)	.....	.....	.....	Nov. 13
Monticello	.....	.....	.....	.....	69.4	81.2	80.2	[e]80.4	74.8	[e]64.8	[e]55.8	.....	.....	.....	.....	.....	Oct. 23
Mount Nebo	39.8	43.5	43.0	60.3	65.6	74.0	73.3	73.7	71.8	61.0	47.5	42.7	58.0	89	12	Apr. 5	Nov. 12
*Newport[10]	37.8	(45.0)	42.8	63.6	69.2	79.2	77.6	78.0	74.6	61.9	48.7	46.6	(60.4)	.....	.....	Mar. 21	Oct. 23
Osceola (*a*)	40.4	47.0	46.0	60.8	66.9	77.8	74.6	74.7	71.6	57.9	47.2	46.3	59.3	95	17	Apr. 4	Oct. 23
Ozark	.....	.....	.....	.....	.....	.....	.....	.....	.....	60.0	[m]55.9	[j]47.3	.....	.....	.....	.....	Nov. 11
Ozone (*a*)	37.8	41.7	42.2	59.8	63.8	72.6	72.0	72.2	70.9	58.4	44.0	42.8	56.5	90	10	Apr. 5	.....
Paragould	.....	.....	44.8	61.2	66.4	79.0	.....	.....	.....	57.0	45.1	.....	.....	.....	.....	.....	Nov. 12
*Pine Bluff	41.8	49.4	48.8	63.4	69.7	81.2	79.2	78.8	74.2	61.7	52.2	46.6	62.2	98	19	Apr. 5	Oct. 23
*Prescott	.....	.....	.....	.....	69.8	79.6	78.3	77.4	75.0	62.0	52.2	.....	.....	.....	.....	.....	Nov. 17
Rogers	(37.0)	40.2	42.7	59.9	63.6	73.4	72.9	73.5	70.3	57.1	(43.5)	42.4	(56.4)	.....	.....	.....	.....
*Russellville	41.2	.....	.....	.....	67.4	.....	.....	77.1	.....	.....	.....	.....	.....	.....	.....	.....	Oct. 6
Stuttgart	42.2	48.4	48.6	63.8	67.2	78.7	76.5	75.8	72.0	58.8	49.3	47.8	60.8	97	16	Apr. 5	Oct. 20
*Texarkana	45.3	44.1	53.0	64.6	67.3	80.6	80.6	79.2	75.4	62.6	55.6	(49.0)	(63.1)	.....	.....	Mar. 17	Oct. 22
Washington (*a*)	.....	.....	.....	.....	.....	78.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Winslow (*e*)	35.8	39.2	41.2	59.4	64.6	72.2	73.0	72.6	71.6	60.3	49.1	46.1	57.1	82	6	Mar. 19	.....
California.																	
Agnew (*a*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45.9	.....	.....	.....	.....	.....
Alcalde (*g*)	47.0	49.6	58.7	61.0	72.5	79.1	85.9	90.1	76.1	65.0	58.4	47.9	65.9	115	25	.....	.....
Alcatraz Island	50.0	49.1	52.4	52.8	55.0	58.8	55.9	56.7	58.6	56.5	56.7	48.8	54.3	95	35	Dec. 27	.....

[1] Post hospital.
[2] Weather Bureau.
[3] Record after July is that of post surgeon.
[4] D. Murphy.
[5] Southern Pacific R. R.
[6] David Rope.
[7] Maj. T. W. Hine.
[8] Dr. Henry F. Adams.
[9] E. L. Wetmore.
[10] Special Cotton Region Station.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
California—Continued.																	
Almaden (g)	50.0	50.2	55.1	56.2	60.8	66.0	71.3	71.0	65.9	61.4	55.7	48.0	59.3	108	30		
Alvarado											60.5	51.5					Dec. 7
Anaheim (g)	54.1	53.3	58.1	62.7	66.6	71.6	76.1	77.4	75.5	67.5	59.7	52.8	64.6	106	36		
Anderson (a)	50.0	46.0	58.2	61.4	72.3	77.6										Feb. 25	
Angel Island	51.0	49.5	53.4	54.2	56.4	60.0	63.2	63.2	63.0	59.7	58.8	48.8	56.5	91	32	(1)	
Antioch (g)	47.8	52.7	56.5	63.0	66.7	70.4	79.1	76.1	71.5	66.4	57.8	46.8	62.9	106	28		
Aptos (g)	49.1	49.7	53.9	55.5	57.9	63.5	62.8	62.6	62.4	57.8	55.2	47.8	56.5	70	22		
Athlone (g)	47.8	50.7	54.3	60.7	68.4	71.9	85.7	84.6	77.3	67.7	55.7	45.5	64.4	115	25		
Auburn (g)	48.0	46.4	52.2	55.0	61.2	67.8	79.3	79.6	70.1	66.4	57.8	44.6	60.7	108	28		
Bakersfield (g)[2]	47.3	52.3	58.0	64.5	73.6	79.7	91.9	89.2	77.1	69.3	56.4	47.9	67.3	114	29		
Bakersfield[3]											51.2	41.8					Oct. 31
Barstow	(47.0)	47.9	55.9	59.4	66.4	73.9	84.7	85.6	73.8	65.4	56.3	43.6	(63.3)			Feb. 14	Nov. 15
Beaumont (g)	49.8	47.3	53.3	61.9	62.9	70.1	80.5	78.3	73.3	67.8	61.2	47.5	62.8	110	24		
Belmont (g)	49.0	51.6	55.0	58.6	62.8	70.2	72.1	72.1	68.6	62.4	55.2	48.6	60.6	106	25		
Benicia Barracks	48.2	48.2	54.6	56.2	59.0	67.2	71.2	72.5	67.9	61.6	(55.5)	44.5	(58.9)	109	29	Feb. 8	
Berendo (g)	44.7	49.5	55.7	58.8	60.9	75.8	85.5	83.9	73.5	68.8	53.7	44.7	63.0	118	28		
Berkeley (g)	49.9	49.4	51.9	52.3	55.6	61.5	62.1	62.9	61.3	58.4	56.6	47.2	55.8	101	32	Dec. 11	Dec. 25
Bishop Creek (g)	38.2	41.7	50.1	61.8	67.2	76.0	85.6	84.1	72.3	63.9	52.6	33.7	52.3	100	6		
Boca (g)	25.0	28.0	34.3	41.4	(50.0)	(56.5)	(66.5)	63.7	54.2	48.1	40.2	20.6	(44.0)				
Borden (g)	44.6	47.3	53.0	62.0	69.7	72.8	86.1	85.3	75.1	64.8	54.2	43.7	63.1	114	26		
Boulder Creek (g)	45.1	49.0	52.3	53.8	59.5	62.6	63.2	61.9	59.2	56.5	53.1	43.3	55.0	115	20		
Brentwood (g)	47.8	48.6	54.1	58.1	63.8	73.1	77.5	80.7	70.3	65.0	56.5	44.6	61.7	109	25		
Brighton (g)	47.5	49.0	57.9	57.8	66.8	77.1	85.3	84.8	74.0	67.8	58.5	45.5	64.3	113	27		
Byron (g)	50.0	50.2	58.2	62.2	69.0	76.2	86.0	83.0	74.9	66.6	58.6	48.0	65.2	110	26		
Caliente (g)	45.5	48.3	52.6	59.6	67.1	72.2	87.7	87.0	72.7	66.1	55.5	44.5	63.2	113	27		
Calistoga (g)	47.7	48.2	52.0	54.7	60.8	68.2		72.8	68.5	61.7	55.4	48.3	(59.2)				
Campo			50.2	51.9	55.8	66.2	83.0	94.8									
Castroville (g)	52.5	52.9	57.2	59.1	61.8	67.7	66.0	64.7	63.6	59.1	57.0	51.4	59.4	88	27		
Centerville (g)	52.5	53.5	57.9	59.9	64.1	69.3	72.8	71.1	67.6	62.9	59.6	50.2	61.8				
Chico (g)	50.0	48.5	55.1	60.9	67.9	77.5	87.5	85.6	75.4	71.1	57.8	43.9	65.1	117	20		
Cisco (g)	29.5	27.0	31.9	36.4	43.6	50.2	60.5	60.2	51.3	50.4	41.3	28.8	42.6	90	8		
Claremont					64.6	69.0		*77.2	*76.9		61.8	48.8					
Colfax (g)	53.5	44.1	51.1	48.2	62.9	68.2	76.1	82.7	66.8	63.1	53.8	40.2	59.2	105	21		
Colton (g)	52.1	45.8	55.9	57.7	63.3	74.3	80.4	79.9	73.8	65.5	58.4	51.3	63.2	112	25		
Corning (g)	49.5	48.5	55.0	59.0	68.4	74.3	87.9	84.4	73.0	64.6	58.3	45.4	64.0	112	28		
Davisville (g)	49.1	50.6	59.5	63.7	72.0	76.7	81.8	81.1	70.9	64.8	55.4	45.7	64.3	110	29		
Delano (g)	47.6	49.1	58.0	62.4	69.8	77.6	87.8	87.4	76.9	69.1	56.5	45.3	65.6	114	29		
Delta (g)	48.2	42.2	52.6	57.8	67.9	70.9	80.5	81.5	69.1	63.5	57.5	39.2	60.9	109	23		
Downey (g)	50.4	53.4	55.2	64.3	66.6	72.0	76.1	79.0	76.0	68.0	61.6	54.1	64.7	102	26		
Drytown												*43.4					
Dunnigan (g)	45.5	45.7	53.0	57.0	66.1	74.2	85.6	84.3	74.7	68.7	59.2	52.7	63.9	104	27		
Dunsmuir (g)		38.3	45.2	51.3	60.8	62.5	73.7	73.9	61.5	56.9	49.0	38.9	(53.8)				
Edgwood (g)	33.1	33.6	40.8	46.0		57.5	70.5	70.3	58.0	51.8	42.7	32.0	(49.4)				
El Casco (g)									72.5	69.6	59.2	45.3					
El Dorado (g)	45.1	44.7	51.5	55.2	63.3	70.2	81.0	80.6	70.5	65.2	54.9	44.2	60.5	110	25		
Elmira (g)	46.9	50.3	57.2	60.5	67.4	70.5	78.3	79.1	73.1	66.5	56.5	46.5	62.8	112	28		
El Verano (g)	48.8	48.6	55.2	57.7	62.0	69.7	73.1	73.1	67.4	61.5	54.0	46.5	59.8	108	27		
Emigrant Gap (g)	33.6	31.7	33.4	42.3	51.1	56.8	67.5	69.2	56.2	52.3	44.3	29.2	47.3	92	10		
Esparto (g)	50.2	49.3	56.1	61.7	71.5	74.3	84.0	80.6	74.5	68.5	60.5	47.2	64.9	110	28		
*Eureka	48.0	45.4	49.0	50.9	53.2	56.4	56.0	59.4	56.7	54.1	52.4	45.4	52.2	79	30	Mar. 29	Dec. 5
Farmington (g)	47.8	49.2	54.8	60.0	67.1	75.9	81.6	81.4	72.9	65.5	54.4	42.0	62.7	114	22		
Felton (g)	47.7	48.6	54.6	57.7	59.5	65.6	68.7	70.5	64.2	58.2	50.9	45.8	57.7	110	20		
Fernando (g)	52.4	50.2	59.9	66.1	63.4	70.5	79.3	77.2	73.5	69.5	60.8	50.6	64.4	114	30		
Florence (g)	54.8	54.6	58.6	61.0	64.1	66.9	72.8	74.7	72.0	63.6	59.2	51.9	62.8	98	27		
Folsom (g)	47.1	50.3	57.3	60.9	68.8	75.6	84.5	83.1	74.6	68.0	57.1	45.9	64.4	116	28		
Forestville											49.3	*39.0					Nov. 15
Fort Bidwell	(27.5)	28.6	37.4	47.0	53.2	55.4	68.4	69.4	58.2	52.0	41.8	26.6	(47.1)			May 31	
Fort Gaston	42.4	41.8	50.0	52.6	60.0	61.8	71.4	72.4	63.4	54.7	49.0	39.8	54.9	109	23	Mar. 24	
Fort Mason	50.0	49.4	52.6	52.6	55.7	59.3	58.4	60.4	63.4	60.0	57.8	49.0	57.4	94	34	(1)	
Fresno (g)[2]	47.3	50.1	52.3	62.4	71.6	77.7	89.3	88.8	79.1	77.5	(56.2)	56.4	(67.4)				
*Fresno	45.4	48.5	54.4	59.0	67.1	73.0	83.6	83.6	74.6	67.0	56.2	43.9	63.0	114	26	Mar. 29	Dec. 3
Fruto (g)	48.7	44.8	55.1	60.3	70.3	76.1	87.1	85.6	73.7	65.8	56.9	45.3	64.2	110	30		
Galt (g)	47.0	50.9	56.3	63.1	70.5	71.7	82.5	84.7	75.0	66.8	58.9	45.2	64.4	111	27		
Georgetown	*45.8	40.2	48.0	5[illegible]	58.4	62.4	74.8	76.4	66.8	62.2	53.8	39.0	56.6	100	20	Apr. 7	Dec. 2
Gilroy (g)	46.9	49.3	53.7	58.[illegible]	60.1	68.1	67.7	71.6	67.5	60.6	54.1	47.6	58.8	108	26		
Girard (g)	39.5	39.8	46.0	51.9	61.1	66.6	80.5	82.0	64.1	62.4	51.3	39.1	57.0	107	20		
Glen Ellen (g)	47.1	47.1	52.3	54.5	57.6	68.2	75.6	74.9	65.1	61.5	54.3	47.7	58.9	108	24		
Goshen (g)	42.6	47.8	53.6	59.2	68.0	74.7	85.0	80.1	74.0	67.3	52.8	44.2	62.4	112	25		
Grass Valley[4]												36.8					
Haywards (g)	47.1	47.6	52.4	56.1	59.9	66.9	69.2	67.1	63.6	58.2	53.2	45.1	57.2	98	31		
Hollister (g)	50.6	52.3	56.5	60.7	62.2	70.9	76.7	69.9	71.2	61.9	59.8	47.6	61.7	111	24		
Hornbrook (g)	34.9	37.8	45.6	56.8	64.1	65.2	75.1	77.8	64.8	55.8	47.0	33.9	54.9	104	7		
Huron (g)										69.5	56.5	44.5					
Hydesville	45.1	43.8	50.6	52.2	55.2	58.0	59.6	61.5	57.0	56.3	51.1	44.4	52.9	87	24	Mar. 29	Nov. 15
Indio (g)	59.6	57.6	68.3	71.9	76.9	88.9	93.7	95.0	88.2	78.1	67.4	54.6	75.0	119	22		
Ione (g)	45.0	46.4	54.9	58.7	65.7	73.0	80.6	80.2	71.9	61.6	54.1	43.9	61.3	109	20		
Iowa Hill (Strawberry Flat) (a)	46.6	41.5	48.6	52.6	61.4	65.9	76.3	77.5	67.4	64.0	55.2	40.5	58.1	102	22	Apr. 7	
Jackson											46.2	42.0					
Julian (a)	44.8	42.2	46.5	52.3	54.6	66.2	75.0	74.7	*66.5	63.1	54.9	39.6	56.7	102	18	May 9	Nov. 20
*Keeler	41.3	42.0	50.3	57.4	64.2	72.0	81.6	81.8	71.0	64.0	54.2	38.8	59.9	101	17	Apr. 8	
Keeler (g)[2]	40.7	41.0	57.0	67.9	74.5	80.1	86.3	84.2	72.0	64.9	53.6	38.5	63.4	112	18		
Keene (g)	41.3	43.7	48.6	53.4	61.9	67.8	79.2	75.7	67.5	61.1	50.5	39.7	57.5	104	22		
King City (g)	46.3	48.8	48.3	51.2	55.3	64.7	70.1	71.7	67.4	61.3	53.0	43.6	56.8	112	22		
Kingsburg (g)	45.8	51.0	55.0	60.0	70.1	74.1	87.3	83.1	74.9	69.4	55.9	46.8	64.4	115	25		
Knights Landing (g)	46.7	48.8	56.6	55.8	66.8	72.0	78.4	79.1	74.7	72.2	59.1	46.7	63.1	110	27		
La Grange (c)											56.4	45.1					

[1] No frost during season. [2] Southern Pacific R. R. [3] W. A. Webster. [4] W. J. Loutzenheiser.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
California—Continued.																	
Lathrop (*g*)	47.5	51.7	54.7	61.2	69.3	74.1	83.7	80.9	70.5	62.1	56.4	44.6	63.1	110	28		
Laurel (*g*)	46.4	43.8	52.7	56.4	59.2	66.2	68.8	69.4	65.6	62.4	55.0	47.0	57.7	108	25		
Lemoore (*g*)	44.7	51.0	56.5	62.5	71.5	75.9	86.8	83.2	74.9	62.6	53.8	44.0	64.0	118	24		
Livermore (*g*)	50.5	49.1	57.2	55.5	58.8	(70.0)	74.3	72.3	66.6	61.6	54.6	47.5	(59.8)				
Livingston (*g*)	47.1	49.0	55.4	60.3	69.1	77.6	90.2	87.5	76.7	66.4	56.7	46.7	65.2	114	23		
Lodi										63.4	54.5	45.6					
Long Beach (*g*)	52.8	51.3	57.5	59.8	61.2	66.3	69.6	73.3	69.1	63.9	56.5	49.5	60.9	98	26		
*Los Angeles[1]	55.8	52.9	58.4	59.4	61.6	66.4	73.7	74.8	73.0	66.0	61.2	52.8	63.0	109	33	(2)	Dec. 25
Los Angeles (*g*)[3]	53.9	52.1	58.4	61.6	66.1	70.5	76.5	76.4	73.6	66.4	59.4	44.6	63.3	102	30		
Los Banos (*g*)	45.8	49.4	58.6	61.8	67.3	76.4	85.0	84.3	76.7	67.3	53.7	45.0	64.3	108	25		
Los Gatos (*g*)[3]	51.3	51.1	55.0	58.2	61.5	66.0	69.0	69.2	64.7	59.9	55.3	46.8	59.0	105	26		
Los Gatos[4]	48.0	48.0	52.3	53.4	59.0	63.9	69.5	69.2	64.2	59.2	54.5	44.4	57.1	102	30	Feb. 10	Dec. 7
Mammoth Tank (*g*)	54.9	53.2	65.3	77.1	81.2	92.3	101.7	99.1	92.6	81.7	64.0	48.0	75.9	121	25		
Martinez (*g*)	46.4	45.1	53.2	53.1	58.6	71.9	68.4	66.5	66.3	58.3	50.8	45.0	57.0	94	26		
Marysville (*g*)[3]	51.4	50.2	62.3	64.3	69.8	79.9	88.3	87.5	75.0	67.4	63.2	47.4	67.2	100	25		
Menlo Park (*g*)	48.7	51.4	55.4	56.1	61.1	67.3	67.6	68.2	64.8	60.9	56.1	48.3	58.8	106	29		
Merced (*g*)	52.6	47.5	50.9	51.5	59.4	66.2	85.4	84.0	79.8	70.8	56.3	46.6	62.6	114	25		
Milton (near) (*a*)	48.0	49.2	54.7	59.0	[6]66.0	76.9	80.8	80.2	70.0	63.6	57.9	43.2	62.5	111	26		Dec. 6
Modesto (*g*)	49.4	51.6	60.9	65.3	71.4	76.5	81.8	81.5	77.2	72.6	62.7	49.4	65.8	114	28		
Mojave (*g*)	44.1	45.0	52.3	60.5	72.3	74.4	87.5	89.4	74.7	67.6	57.4	46.0	64.3	112	18		
Monson (*g*)	44.0	48.4	55.2	60.7	72.4	78.5	88.5	87.2	76.0	67.6	54.1	44.7	64.8	111	27		
Montague (*g*)	34.0	36.0	48.5	51.2	62.5	64.8	77.5	80.9	70.5	65.2	49.1	34.3	56.2	105	20		
Monterey (*g*)[3]	46.0	49.5	51.7	54.3	56.4	62.1	56.5	62.2	62.6	57.1	54.3	51.7	55.4	96	26		
Monterey (Hotel Del Monte).	51.5	52.3	56.3	65.0	60.1	65.5	61.4	63.4	65.2	59.4	54.5	(50.0)	(58.7)				
Mount Hamilton (Lick Obsy.).	41.6	35.0	41.0	44.3	51.4	55.5											
Mullans	46.0	47.0	53.6														
Napa (*g*)[3]	48.6	50.8	55.3	54.1	60.8	70.7	72.8	68.9	64.8	63.4	53.7	45.4	59.1	106	25		
Napa (*a*)[5]									62.7	[8]57.8	50.9	42.8					Nov. 15
National City (*a*)	54.0	52.9	(56.9)	59.5	60.6	65.0	71.4	74.0	72.2	65.9	60.8	52.6	(62.2)			Jan. 12	Dec. 26
Needles							97.4	95.2	85.6	72.6	61.5	49.9					Dec. 8
Newark (*g*)	50.2	51.7	59.1	56.8	60.5	66.5	69.1	68.7	68.2	62.5	57.4	49.6	60.0	101	30		
New Castle									71.6	66.9	56.4	43.0					
Newhall (*g*)	50.2	49.7	54.4	59.2	61.1	72.8	80.0	80.2	74.0	65.2	56.6	44.2	62.3	116	16		
Newman (*g*)	48.2	52.3	61.3	66.5	74.9	82.2	92.3	90.3	79.4	72.5	67.6	51.8	69.9				
Niles (*g*)	53.7	57.8	56.9	60.3	65.8	72.4	75.2	72.0	63.6	59.3	57.1	45.7	61.6	106	29		
Nordhoff							75.2	73.6	69.4	63.2	56.6	47.5					Nov. 8
Norwalk (*g*)	54.1	55.1	57.1	62.6	65.5	73.5	79.1	75.8	70.7	66.3	61.0	50.3	64.3	112	30		Dec. 5
Oakland[6]	51.2	49.4	53.5	53.6	55.3	60.4	61.2	63.0	62.2	58.7	56.9	48.7	56.2	99	30	Feb. 25	Dec. 7
Oakland (*g*)[3]	50.8	58.0	54.8	56.5	58.0	63.5	61.9	62.6	61.7	58.4	56.7	49.4	57.7	86	32		
Ogilby (*g*)	55.7	55.5	66.5	78.4	81.6	93.0	102.1	99.6	91.3	83.7	68.7	51.7	77.3	126	30		
Oleta									69.3	64.8	52.8	41.0					Dec. 4
Ontario (*g*)	53.1	(51.0)	53.5	62.3	67.3	76.6	84.5	81.5	77.2	73.5	63.4	52.6	(66.4)				
Orangevale (*g*)							[8]80.9	79.9	70.4	64.4	54.4	42.5					Nov. 15
Orland (*g*)	51.7	47.8	55.1	62.2	71.1	76.8	89.6	89.4	76.8	69.6	58.1	46.2	66.2	116	31		
Oroville (*g*)	49.8	47.8	55.6	58.5	65.7	73.4	86.2	79.0	68.2	72.7	62.0	47.9	63.9	110	30		
Pajaro (*g*)	49.3	49.5	51.6	53.8	58.3	62.2	63.6	63.8	62.7	60.0	56.8	49.7	56.8	92	26		
Palermo	(50.0)	47.2	54.2	59.1	66.3	73.9	81.2	81.0	72.8	64.2	53.9	42.6	(62.2)				Nov. 14
Paso Robles (*g*)	44.0	46.3	52.0	63.3	59.6	69.4	76.1	76.5	68.2	59.6	50.7	41.6	58.9	110	15		
Petaluma (*g*)	49.0	49.3	55.4	56.3	61.2	66.8	67.8	68.4	65.9	60.7	55.2	47.3	58.6	104	26		
Placerville (*g*)[3]	42.7	48.1	51.0	55.4	64.1	70.2	78.9	77.6	69.3	62.3	51.9	41.5	59.4	106	22		
Placerville (*c*)[7]	40.9	40.6	47.4	50.4	57.4	63.4	72.4	72.2	63.4	58.0	47.8	(41.5)	(54.6)			Apr. 8	Oct. 1
Pleasanton (*g*)	45.5	51.8	55.3	57.7	62.6	65.2	76.8	79.2	67.3	63.1	54.6	43.9	60.2	108	25		
*Point Reyes Light	50.6	49.6	50.6	49.8	51.4	55.0	56.2	56.0	57.4	52.8	56.5	48.0	52.8	88	34	(2)	
Pomona (*g*)	53.9	52.9	57.9	62.9	64.6	70.3	79.2	77.8	75.4	68.5	60.7	49.5	64.5	110	22		Dec. 6
Portersville (*g*)	46.9	50.5	56.3	62.6	72.6	80.8	86.9	86.9	75.1	67.0	55.6	46.4	65.6	115	29		
Presidio of San Francisco	52.2	50.0	53.2	52.4	55.4	58.2	57.4	59.6	60.4	57.9	56.8	48.2	55.2	97	31		
Puente (*g*)	52.3	53.3	59.4	62.5	63.9	71.2	77.7	76.7	77.4	65.6	59.5	52.7	64.4	110	27		
Ravenna (*g*)	50.8	46.2	51.8	58.1	58.6	70.3	83.6	81.0	71.8	63.1	58.8	43.9	61.5	110	26		
*Red Bluff[1]	48.4	44.4	55.0	57.8	66.3	72.2	82.5	83.1	73.0	66.0	57.0	42.6	62.4	114	26	Feb. 25	Dec. 5
Red Bluff (*g*)[3]	49.5	48.1	56.0	56.2	66.0	71.1	84.7	84.9	71.8	68.5	60.7	41.7	63.3	111	27		
Redding (*g*)[3]	50.3	45.0	53.9	61.3	71.9	75.2	83.9	[8]81.5	71.4	64.6	56.3	42.1	63.1	116	27		
Redding[9]										66.0	56.6	41.6					
Riverside[9]	49.3	48.0	53.8	57.8	60.3	67.6	78.2	77.8	70.0	66.6	58.4	48.3	61.3	112	21	Feb. 12	Dec. 13
Riverside[10]	(49.3)	(48.0)	(53.8)	60.1	60.5	68.6	78.0	78.8	73.3	67.0	59.8	49.3	(62.2)				Dec. 9
Rocklin (*g*)	48.1	50.0	57.4	61.8	70.1	77.4	83.7	83.3	74.1	67.2	57.4	49.1	65.0	112	29		
Rumsey (*g*)	49.9	49.9	57.0	61.7	70.7	78.8	86.1	90.2	75.6	67.7	57.2	46.8	66.0	111	30		
*Sacramento[1]	46.9	48.2	56.0	58.0	62.7	69.0	76.4	76.1	69.8	64.5	55.9	44.2	60.6	106	26	Feb. 10	Dec. 6
Sacramento (*a*)[11]	41.0	43.6	51.7	54.4	59.6	65.7	70.6	69.0	62.5	55.4	46.9	38.7	54.9	98	20		Oct. 30
Sacramento (*g*)[3]	48.5	48.6	55.0	60.2	66.0	71.6	75.8	75.4	70.4	64.3	55.7	45.6	61.4	98	29		
Sacramento (*g*)[3]	(46.9)	49.1	(56.0)	59.6	65.8	71.7	78.6	76.1	63.3	62.6	54.3	45.7	(60.8)				
St. Helena (*a*)										[8]64.7	60.5	49.7					
Salinas (*a*)[12]	46.8	48.4	51.5	52.4	[6]56.6	[6]58.7	[6]59.2	[6]60.4	[6]60.5	[6]55.9	(51.7)	[6]45.4	(54.0)			Feb. 11	
Salinas (*g*)[3]	47.6	47.1	52.7	53.1	57.9	64.5	63.1	67.1	57.9	52.9	51.7	44.6	55.0	90	25		
Salton (*g*)	53.5	53.3	66.9	73.0	78.7	86.9	97.1	96.1	86.7	77.3	62.4	53.2	73.8	118	18		
San Ardo (*g*)[3]	41.2	47.3	53.1	57.7	63.8	70.3	74.2	73.9	68.0	63.4	55.1	45.8	59.5	114	20		Nov. 15
San Ardo[13]											56.4	44.8					
San Bernardino									70.8	64.0	57.5	47.8					Nov. 15
*San Diego	54.6	53.3	56.9	58.2	60.8	63.6	69.0	72.4	70.2	63.8	59.4	52.2	61.2	89	32	(3)	Dec. 26
San Diego Barracks	54.4	54.3	58.1	59.0	62.3	65.9	70.6	73.8	71.4	[8]65.2	(59.4)	51.6	(62.2)	91	26		
*San Francisco	52.2	51.2	55.0	53.4	55.7	60.2	59.4	61.8	61.8	59.7	58.6	49.6	56.6	100	37	(3)	
San Gabriel (*g*)	52.2	51.2	59.5	63.6	63.4	70.8	77.7	77.7	74.4	65.3	58.1	51.3	63.8	116	26		
Sanger Junction (*g*)	47.3	54.1	57.5	64.0	75.4	81.3	91.6	85.7	73.4	65.3	55.3	45.7	66.4	119	27		
San Jose (*g*)	49.0	51.3	54.4	55.4	60.0	65.2	69.4	69.4	65.4	61.9	56.5	48.2	58.8	104	30		

[1] Weather Bureau.
[2] No frost during season.
[3] Southern Pacific R. R.
[4] F. H. McCullagh.
[5] Wm. H. Martin.
[6] Director Chabot Observatory.
[7] R. Rowland.
[8] L. F. Bassett.
[9] W. E. Keith.
[10] Chas. L. Fox.
[11] S. H. Gerrish.
[12] Dr. E. K. Abbott.
[13] Michael Gorman.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
California—Continued.																	
San Mateo (*g*)	47.5	50.8	52.7	55.4	59.2	65.7	67.8	68.4	66.1	58.5	56.4	47.2	57.9	99	30	.....	.....
San Miguel (*g*)	44.8	46.8	51.8	56.4	61.8	66.3	74.6	74.7	63.4	64.3	55.2	44.3	58.7	107	20	.....	.....
San Pedro (*g*)	56.2	54.0	59.4	62.1	68.5	70.1	75.2	76.8	74.2	67.1	61.9	53.4	64.9	100	38	.....	.....
Santa Ana (*g*)	51.3	52.0	62.0	61.9	65.3	75.3	78.5	78.4	76.6	66.9	60.9	45.8	64.6	108	29	.....	.....
Santa Barbara [1]	54.4	52.6	56.6	56.3	59.0	62.4	67.2	69.1	69.3	63.3	58.8	51.9	60.1	96	33	.....	.....
Santa Barbara (*g*) [2]	50.2	53.4	58.0	58.5	63.1	65.4	70.3	69.9	70.4	63.2	58.5	50.2	60.9	95	32	.....	.....
Santa Clara (*f*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59.3	54.6	.....	.....	.....	.....	.....
Santa Cruz (*g*) [2]	51.0	54.5	55.2	55.0	57.8	63.5	67.1	72.0	64.5	60.8	59.2	50.4	59.2	99	31	Feb. 10	.....
Santa Cruz [3]	49.2	50.6	53.4	54.7	57.8	63.5	63.8	66.2	61.8	58.9	54.7	(50.4)	(57.1)	.....	.....	.....	.....
Santa Maria	47.2	48.7	.....	.....	57.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mar. 24	.....
Santa Margarita (*g*)	38.8	40.7	46.2	50.4	54.5	65.0	69.2	69.0	64.3	55.1	47.2	38.1	53.2	104	16	.....	.....
Santa Monica (*g*)	53.1	53.4	58.1	62.6	66.2	67.4	70.5	72.1	69.6	64.1	57.3	52.7	62.3	88	30	.....	.....
Santa Paula (*g*)	55.8	53.0	58.1	65.0	66.5	66.8	70.7	70.4	67.0	62.7	61.3	51.6	62.4	108	28	.....	.....
Santa Rosa (*g*)	49.2	47.0	55.5	54.3	60.8	66.0	65.6	68.1	64.8	59.9	54.4	49.5	57.9	103	27	.....	.....
Saticoy	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49.8	.....	.....	.....	.....	.....
Selma (*g*)	44.5	48.2	51.9	57.9	65.7	72.7	85.3	82.9	78.5	65.6	54.1	43.5	62.6	111	27	.....	.....
Seven Palms (*g*)	56.6	53.6	67.3	76.3	79.3	83.0	98.9	92.1	85.3	81.6	72.2	53.9	75.0	123	30	.....	.....
Shasta Springs	.....	.....	.....	.....	.....	.....	.....	.....	.....	55.4	45.3	32.5	.....	.....	.....	.....	.....
Shingle Springs (*g*)	41.1	45.2	49.9	59.7	64.3	76.2	87.9	81.2	75.6	64.2	55.2	47.0	62.3	107	25	.....	.....
Sims (*g*)	42.1	38.5	46.3	52.7	62.6	61.9	69.1	73.2	57.0	56.5	46.5	33.6	53.3	104	12	.....	.....
Sisson (*g*)	34.3	32.8	40.5	45.7	58.1	(59.0)	(76.0)	70.3	57.2	52.5	43.8	30.7	(50.1)	.....	.....	.....	.....
Soledad (*g*)	46.7	50.0	54.3	56.3	59.0	66.2	67.2	66.7	65.2	59.5	54.7	45.5	57.8	106	22	.....	.....
Sonoma (*g*)	50.0	[4]49.2	55.6	56.1	57.6	54.9	66.8	70.0	66.7	61.8	[4]55.6	[4]48.2	58.4	104	27	Feb. 20	.....
Soquel (*g*)	52.8	54.4	57.4	58.3	62.9	71.4	68.2	66.9	65.3	59.2	53.8	48.7	59.9	92	28	.....	.....
South Vallejo (*g*)	48.8	48.2	53.2	56.0	58.5	65.5	69.7	65.4	64.8	62.4	56.5	51.3	57.9	89	30	.....	.....
Spadra (*g*)	50.2	53.3	55.9	60.1	62.0	69.6	76.2	76.9	72.6	66.0	59.5	50.4	62.7	114	27	.....	.....
Steeles	52.0	50.3	55.3	55.6	58.0	63.6	66.6	67.6	[c]67.2	62.3	60.6	49.2	59.0	102	30	Jan. 11	Dec. 7
Stockton [4]	.....	.....	.....	.....	.....	.....	.....	.....	.....	[d]64.5	54.7	43.9	.....	.....	.....	.....	Dec. 10
Stockton (*g*) [2]	47.1	47.4	55.3	62.1	65.4	71.5	79.6	77.0	71.6	65.5	56.1	47.4	62.2	108	26	.....	.....
Summit (*g*)	26.8	25.6	31.6	34.9	45.0	51.7	68.5	69.8	53.0	48.7	40.7	24.6	43.4	84	2	.....	.....
Suisun City (*g*)	48.7	51.6	57.6	58.4	61.7	69.3	72.3	71.9	69.5	64.6	55.5	47.9	60.8	110	28	.....	.....
Susanville (*g*)	31.6	30.8	38.9	48.5	56.4	60.0	70.5	71.0	58.5	51.7	42.7	28.1	49.1	94	—1	Apr. 8	Sept. 30
Tehachapi (*g*)	37.3	36.7	43.1	49.4	60.3	(70.5)	72.6	75.7	64.0	59.7	50.6	31.8	(54.3)	.....	.....	.....	.....
Tehama (*g*)	46.9	47.7	(55.0)	63.1	72.8	76.2	85.6	84.5	75.2	67.5	58.2	46.4	(64.9)	.....	.....	.....	.....
Templeton (*g*)	45.6	47.6	54.2	57.8	59.9	71.5	76.5	74.4	68.9	61.4	53.1	43.1	59.5	112	18	.....	.....
Towles (*g*)	41.3	36.9	45.0	51.3	59.6	63.4	72.5	74.7	63.3	58.7	50.1	36.8	54.5	95	14	.....	.....
Tracy (*g*)	47.8	52.8	53.0	64.9	70.5	77.1	83.4	80.0	72.6	64.8	61.1	57.1	65.4	106	28	.....	.....
Traver (*g*)	46.7	49.7	57.5	64.4	68.8	72.3	82.5	80.8	71.6	63.9	58.4	42.9	63.3	110	28	.....	.....
Tropico (*g*)	52.3	51.4	58.0	61.5	(62.0)	(67.0)	[m]73.3	75.1	72.6	66.1	60.9	52.1	(62.7)	.....	.....	.....	.....
Truckee (*g*) [2]	25.4	27.8	33.9	40.8	49.6	56.5	66.0	66.4	53.1	45.9	38.4	23.7	44.0	92	—14	.....	.....
Truckee [5]	.....	23.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tulare (*g*)	48.3	50.0	59.7	63.7	71.7	78.4	89.4	87.2	76.7	66.3	58.0	45.1	66.2	116	28	.....	.....
Turlock (*g*) [4]	46.4	50.4	56.1	62.0	68.5	75.0	81.4	82.6	72.6	63.8	56.2	47.7	63.6	111	28	.....	.....
Turlock (*a*) [6]	.....	.....	.....	.....	.....	.....	.....	.....	.....	[e]66.6	54.0	46.4	.....	.....	.....	.....	.....
Upper Lake	.....	.....	.....	.....	.....	.....	.....	74.0	64.1	60.6	52.7	41.0	.....	.....	.....	.....	Nov. 14
Upper Mattole (*g*)	50.4	47.8	55.9	55.9	58.1	61.3	68.0	69.2	64.6	58.3	54.6	45.2	57.4	108	28	Feb. 9	.....
Vacaville (*a*) [7]	46.9	48.6	56.0	57.8	63.7	71.2	78.3	79.4	68.2	66.0	57.6	46.5	61.7	112	31	Jan. 13	Oct. 29
Vacaville (*g*) [2]	49.0	51.1	57.0	60.5	68.0	73.3	79.3	76.5	62.8	62.8	59.0	46.8	62.2	115	30	.....	.....
Valley Springs (*g*)	45.3	47.9	54.2	58.3	60.4	72.1	83.6	80.4	71.6	65.0	57.8	45.8	61.9	105	30	.....	.....
Vina (*g*)	48.3	46.4	56.0	60.3	69.3	74.8	85.6	83.7	72.9	66.8	57.4	44.3	63.8	112	26	.....	.....
Volcano Springs (*g*)	52.9	57.4	66.8	76.6	80.5	88.7	103.3	99.4	88.0	78.5	69.4	53.2	76.2	129	23	.....	.....
Volta (Los Banos) (*a*)	46.6	49.8	57.3	61.4	65.6	75.5	83.9	84.8	75.1	67.5	56.0	45.5	64.1	114	24	.....	.....
Walla Walla Creek (*e*)	34.5	34.6	41.8	47.8	56.6	57.9	69.2	70.4	59.0	54.2	41.7	31.3	49.9	96	10	May 8	.....
Walnut Creek	43.4	49.6	56.9	58.1	61.4	69.0	75.0	75.2	71.0	62.7	56.0	47.0	60.4	113	26	Jan. 13	.....
West Butte	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46.0	.....	.....	.....	.....	.....
Westley (*g*)	48.8	54.1	61.0	64.5	75.0	85.8	90.8	85.6	80.4	71.0	59.1	50.0	68.8	109	26	.....	.....
Wheatland	45.8	46.8	54.3	57.1	63.8	70.8	78.8	79.2	71.2	64.6	54.9	43.6	60.9	112	23	Feb. 25	Dec. 5
Whittier (*g*)	56.4	53.4	61.1	65.6	67.2	72.2	78.3	79.2	77.3	68.5	62.2	53.7	66.3	112	38	.....	.....
Williams (*g*)	45.2	46.3	54.2	59.5	68.4	71.2	86.2	85.7	70.7	72.6	59.8	45.3	63.8	112	28	.....	.....
Willow [8]	47.0	45.6	53.2	64.2	65.0	71.2	80.2	79.0	69.1	63.1	52.1	42.8	61.0	108	26	Feb. 25	Dec. 5
Willow (*g*) [2]	44.9	43.0	49.6	54.5	60.8	69.7	85.5	86.4	74.3	64.7	52.1	43.1	60.7	112	30	.....	.....
Winchester	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	61.9	53.8	.....	.....	.....	.....	.....
Winters (*g*)	50.5	49.4	59.9	64.4	72.0	80.5	89.3	83.7	78.0	70.3	60.4	48.8	67.3	114	28	.....	.....
Woodland (*g*)	42.2	44.0	48.8	57.1	67.5	69.7	82.2	77.0	68.2	62.0	54.4	42.3	59.6	104	26	.....	.....
Yreka	(34.0)	35.7	43.6	51.0	56.8	60.3	65.8	65.6	55.8	51.2	(46.5)	31.6	(49.8)	.....	.....	.....	.....
Colorado.																	
Agate (*a*)	28.5	30.2	30.0	52.9	59.2	64.6	67.6	68.1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Akron	.....	[a]23.9	26.2	47.8	58.5	64.5	69.8	68.1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Alma	11.2	15.7	16.2	27.5	[a]38.3	47.1	52.4	51.2	[b]45.4	[m]34.8	(21.5)	14.3	(31.3)	.....	.....	.....	.....
Antonito	(13.5)	[4]47.4	(30.0)	44.0	55.0	63.0	70.4	68.8	59.4	48.5	36.6	16.2	(46.1)	.....	.....	.....	Oct. 2
Apishapa (*b*)	(20.0)	27.2	30.9	44.8	54.2	62.8	70.8	73.4	63.9	52.1	38.5	28.0	.....	.....	.....	.....	.....
Aspen	(13.0)	(17.5)	(24.5)	[a]45.8	52.5	57.7	64.5	[a]61.1	57.0	42.4	31.2	[b]18.4	(40.5)	.....	.....	.....	.....
Bennet (*g*)	33.4	29.3	28.8	48.2	50.4	54.2	67.8	68.1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Breckenridge	10.2	9.9	12.9	24.2	35.8	41.0	45.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Burlington	18.8	[4]21.6	[b]25.4	[a]35.3	[b]47.3	[b]54.4	[b]61.7	(77.0)	[b]67.4	53.6	35.0	(27.0)	(43.5)	.....	.....	.....	.....
Byers (*a*)	20.1	17.3	28.1	42.4	56.2	65.6	71.0	71.1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Canyon City	31.3	36.2	36.8	53.2	62.2	71.3	75.2	76.1	67.6	(45.0)	(31.0)	(20.0)	(50.5)	.....	.....	.....	.....
Carson (*s*)	.....	.....	.....	[a]35.7	43.0	50.8	.....	.....	.....	[a]30.8	23.7	7.6	.....	.....	.....	.....	.....
Castle Rock	21.0	26.4	32.2	44.4	56.4	64.3	69.8	66.9	61.2	48.6	[f]38.2	(31.0)	(46.7)	.....	.....	.....	.....
Cheyenne Wells (*a*)	(26.5)	(26.0)	37.1	49.4	58.7	66.9	73.5	75.1	67.1	54.2	37.3	27.6	(48.3)	.....	.....	.....	.....
Chromo	7.4	.....	34.6	49.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Climax (*a*)	7.7	9.8	14.0	24.4	35.6	43.6	50.7	49.8	44.1	33.2	21.3	11.3	28.8	68	—26	.....	.....
Colorado Springs	.....	.....	.....	.....	.....	.....	.....	[b]65.6	[a]61.7	.....	.....	.....	.....	.....	.....	.....	.....
Como (near)	12.0	13.1	15.5	27.5	36.6	47.9	55.0	53.2	48.4	39.3	29.1	16.4	32.8	76	—18	.....	.....

[1] Hugh D. Vail.
[2] Southern Pacific R. R.
[3] W. R. Springer.
[4] T. G. Brown.
[5] C. F. Sonne.
[6] P. R. McCabe.
[7] G. O. Coburn.
[8] A. W. Schorn.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Colorado—Continued.																	
Cope												26.8					
Crook	(23.0)	17.9	28.2	(48.5)	58.0	64.6	70.5	72.4	65.6	52.1	36.8	27.3	(47.1)				
Cumbres	[d]13.4	19.4	20.2	29.0	41.0	47.1	53.4	53.0	[e]47.0	37.3	29.4	14.0	33.7	79	—26		
Deer Trail	23.1	21.1	32.4	45.9	50.7	64.1	71.0										
Del Norte					52.6		61.0	64.2	58.1	48.0	40.0	18.7					
Delta	22.4	27.0	36.9	48.7	59.2	64.8	73.0	71.0	(62.5)	[b]51.0	40.0	22.0	(48.2)				
*Denver	25.4	26.8	32.2	48.0	56.2	63.4	68.9	69.2	64.2	52.2	37.8	31.3	48.0	97	— 7	May 21	Oct. 4
First View	27.6	28.6	33.3	51.0	58.4	65.4	69.9	70.6									
Fort Collins	22.2	19.8	30.5	46.6	54.8	61.0	67.0	66.3	61.1	48.7	35.2	28.6	45.2	93	—16	May 2	Oct. 3
Fort Lewis	17.6	20.6	27.0	38.6	50.4	55.2	63.8	62.9								May 17	
Fort Logan	[a]25.8	26.8	32.2	47.5	(56.0)	[c]61.9	68.0	67.8	63.4	53.0	38.8	29.3	(47.5)	94	— 9	Apr. 16	
Fruita	24.6	27.4	(26.5)	[b]55.3	62.4	68.6	75.6	73.1	64.4	45.5	[d]40.0	23.9	(49.8)				
Georgetown	(15.0)	(17.5)	30.3	39.2	49.0	56.1	62.9	62.4	56.7	46.0	[e]34.1	24.3	(41.1)				
Glen Eyrie								[b]63.6	59.0	49.4	36.8	31.1					
Grand Junction											[b]33.8						
Greenhorn	24.4	28.9	32.6	47.8	55.8	61.8	(72.5)	(73.0)	58.1	48.8	37.8	27.5	(47.4)				
Grover							68.5	68.4	61.2	47.2	31.8	28.3					
Hugo (*a*)	27.8	26.8	32.8	45.0	54.7	64.9	70.8	70.0	(67.0)	49.2	35.5	26.2	(47.6)				
Husted	22.3	29.6	32.2	41.5	53.9	61.4	67.2	66.2	60.6	48.2	35.5	27.9	45.8	96	—21		
Idaho Springs	24.4	27.8	28.4	39.8	48.6	54.8	60.2	61.3	56.3	46.0	35.6	25.8	42.8	89	— 9		
Jefferson (*a*)	(26.0)	(17.5)	(29.0)	26.0	37.8	43.2	45.4	42.4	42.4	37.7	27.9	19.1	31.3				
Julesburg		14.6	25.0	48.0					66.2	50.9	34.6	29.9					
Kit Carson	27.5	28.8	32.2	50.4	60.0	67.2	74.0	76.6	(67.0)	48.8	(38.0)	(30.5)	(50.1)				
Lamar	25.2	28.8	32.6	48.2	62.3	70.3	75.3	74.8	67.6	53.6	40.0	31.2	50.8	101	— 4		
Las Animas	22.3	30.0	33.2	53.2	60.9	68.2	73.0	73.2	66.3	53.0	38.1	30.3	50.1	98	— 6		
Leadville	14.1	17.8	19.6	31.4	39.4												
Leroy (*b*)	22.6	19.2	[a]24.5	47.6	55.8	62.5	66.8	68.3	[c]63.5	49.4	35.1	26.0	45.1	93	—11		
Livermore (*a*)	26.0	23.9	30.4	(36.5)	50.4	57.5	63.6	63.2	[b]55.1	[c]44.1	30.8	[c]24.9	(42.2)				
Longmont	21.9	23.0	32.6	(40.0)	(49.5)	[c]62.4	67.2	66.0	61.0	[c]50.0	[b]36.0	[c]28.3	(44.8)				
Magnolia (*f*)	19.4	20.9	28.1	54.5	58.8	[b]64.6	75.6	67.2									
Meeker	(17.5)	20.5	29.4	46.4	55.4	[c]60.1	70.8	68.6	58.8	42.4	33.0	18.8	(43.5)				
Monte Vista[1]	19.5	15.7	29.5	41.2	50.8	59.6	63.3	62.3	55.5	41.8	32.6	11.5	39.5	86	—22		
*Montrose	18.9	25.4	36.0	46.0	56.8	64.4	70.3	69.4	62.0	49.6	40.6	22.1	46.8	92	—17	Apr. 26	Oct. 2
Moraine	21.7	22.0	25.0	37.6	46.2	52.6	58.6	59.2	53.2	43.8	33.9	23.6	39.8	82	—15		
Pagoda (near)	17.1	21.6	28.7	42.0	52.4	57.2	65.2	65.1	56.8	44.0	33.0	21.0	42.0	95	—27		
Palmer	24.0	27.6	29.0														
Pagosa Springs	11.8			38.6	49.4	57.2	56.6	60.4									
Parachute						[a]68.2	73.8	73.6	64.6	50.0	38.2	24.6					
Platoro			24.7	32.4	42.4		53.8	52.8	[b]43.7	34.7	28.3	9.8					
*Pueblo	23.8	31.4	35.8	50.6	59.0	66.5	72.4	72.8	66.0	52.8	39.7	32.0	50.2	98	—13	Apr. 16	Oct. 4
Rico	10.8	16.5															
Rifle Falls	20.8	23.6	29.8														
River Bend (*g*)	25.0	26.3	32.0	50.1	59.0	64.8	71.2	72.7									
Robb								[c]70.4	66.0	52.4	37.0	28.6					
Rocky Ford	23.3	30.6	38.2	51.1	61.2	68.4	73.4	73.6	67.6	53.2	38.1	30.5	50.8	100	— 8	May 19	Oct. 3
San Luis	17.2	22.8	32.6	43.6	52.5	61.8	68.2	64.3	57.4	46.9	36.3	18.4	43.5	92	—26	May 5	Sept. 30
Sheridan Lake (*a*)	(26.0)	28.0	31.6	(48.5)	61.0	68.8	72.5	72.4	67.0	52.0	36.8	29.8	(49.5)				
Smoky Hill Mine	(24.0)	[a]24.8	27.4	41.0	49.0	56.3	61.8	63.3	58.8	50.0	38.0	28.4	(43.6)	89	—10		Sept. 24
Steamboat Springs									58.2	46.5	29.6	18.6					
Surface Creek									60.7	47.2	40.6	25.8					
Table Rock									63.9	45.4	[a]34.0	[b]22.0					
Thon	25.2	28.7	33.2	47.3	54.8	61.4	68.6	69.9	63.6	51.9	38.6	27.6	47.6	101	—11		
T. S. Ranch	24.4	28.6	35.6	49.1	59.6	[a]64.9	73.6	[b]65.7	61.8	50.5	47.4	25.8	48.4	98	— 5		
Villa Grove						[c]61.8			[b]60.4								
Watkins	12.2	15.4			54.2	60.2	67.1	67.2									
Westcliffe	20.8	26.1	27.0														
Connecticut.																	
Canton	27.8	29.6	31.9	47.2	56.2	67.2	67.9	71.0	66.2	50.4	39.0	37.0	49.3	97	— 5		
Colchester	30.7	31.0	38.8	48.5	55.5	65.8	66.6	70.3	65.8	50.3	40.5	39.3	50.3	93	4		
Fort Trumbull	35.0	33.9	37.4	49.9	56.8	67.6	69.6	73.3	68.6	53.2	43.4	40.8	52.3	97	8	May 6	
Hartford	28.9	29.5	33.6	49.6	57.0	66.2	69.5									May 6	
Mansfield (*a*)	28.8	29.3	31.9	46.1	54.1	63.9	65.2	68.4	63.7	48.3	38.2	37.0	47.9	92	0		
Middletown (*a*)	29.0	31.5	34.3	48.9	56.4	66.0	67.0	70.0	64.8	49.3	39.5	37.9	49.6	96	5		
New Hartford (*a*)[2]	22.3	24.3	28.0	41.8	54.2	63.2	63.0	66.9	62.0	45.1	34.0	31.2	44.7	94	— 6	May 6	
*New Haven	30.8	32.3	35.1	48.6	56.0	66.2	67.6	70.6	66.4	50.8	40.8	39.2	50.4	93	3	May 7	Oct. 12
*New London	31.8	32.4	35.6	47.6	54.7	64.4	66.6	70.6	66.4	51.4	41.2	39.6	50.2	92	7	May 6	Oct. 19
North Grosvenor Dale (*a*)	29.6	30.7	33.0	48.2	55.8	68.7	72.8	73.4	68.3	53.7	42.8	39.6	51.4	99	5		
Norwalk[3]		32.7	[a]35.4	[a]40.4	[b]50.8					[d]50.2	41.4	[a]43.8					Oct. 23
Shelton	30.0	29.3	34.8														
Southington (*a*)	28.3	30.6	32.8	48.6	56.2	66.8	66.8	70.2	64.5	48.8	38.5	37.2	49.1	93	2	May 6	Oct. 17
Thompson (*a*)	(28.5)	(31.0)	31.0	45.4	53.4	61.8	65.2	68.2	64.6	47.6	37.9	36.6	(47.6)				
Voluntown (*a*)	31.4	32.6	34.4	47.5	55.6	65.7	67.0	69.7	64.3	[a]49.6	39.8	39.2	49.7	94	4	May 6	Oct. 17
Waterbury	27.2	31.0	33.2	(47.5)	56.5	67.3	67.8	71.2	66.0	49.1	37.0	35.0	(49.1)	98	0		
Delaware.																	
Dover (*a*)	36.4	41.4	38.3	57.3	60.5	70.9	70.6	73.1	68.6	54.4	43.5	43.0	54.8	94	15	Apr. 9	Oct. 29
Kirkwood (*b*)	(36.0)	40.1	38.3	54.9	62.4	76.8	75.0	74.8	70.2	51.6	40.8	[b]40.5	(55.1)				
District of Columbia.																	
Distributing Reservoir (*e*)							71.8	74.2	69.8	53.2	43.7	41.8					
Kendall Green (*a*)			38.3	[a]56.8	61.4											Apr. 9	
Receiving Reservoir (*e*)							71.9	74.2	69.8	53.4	43.2	41.2					
Washington Barracks	37.8	43.4	40.0	56.5	63.7	73.3	74.2	76.4	71.6	56.4	45.8	43.6	56.9	94	15		
*Washington City	37.4	41.4	38.6	55.4	61.4	71.6	72.0	74.5	70.3	54.4	44.0	43.2	55.4	95	13	Apr. 9	Oct. 29
West Washington (*a*)								76.0	72.6	55.5	45.1	43.8					

[1] C. S. Aldrich. [2] Rev. Wm. Goodwin. [3] Willis Earle.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.			Killing frost.	
													Mean.	Extremes.		Last in spring.	First in autumn.
														Max.	Min.		
Florida.																	
Alva (*a*)	59.1	69.1	66.8	68.5	73.8	79.3	80.0	80.2	.....	.....	.....	.....	.....	.....	.....	Apr. 7	.....
Amelia	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59.4	58.4	.....	.....	.....	.....	.....
Archer	54.0	(66.0)	62.8	68.6	(74.0)	81.4	81.5	(81.5)	79.1	67.9	61.2	61.3	(69.9)	.....	.....	Apr. 7	Nov. 30
De Land[1]	56.3	67.6	64.2	66.2	75.6	79.8	82.0	82.8	78.2	68.0	61.5	(63.6)	(70.5)	.....	.....	.....	.....
De Land[2]	.....	.....	.....	.....	71.3	78.9	80.7	81.2	77.4	66.8	60.5	63.6	.....	.....	.....	.....	.....
Duke	50.6	64.0	60.6	64.8	69.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 7	.....
Enstis	56.0	67.9	65.0	68.5	74.0	80.2	(82.0)	81.7	76.5	67.9	62.2	63.4	(70.4)	.....	.....	Dec. 29	.....
Fort Barrancas	(50.5)	64.0	61.8	68.3	74.6	83.5	83.8	82.8	[m]79.6	68.7	59.8	54.4	(69.3)	.....	.....	Apr. 6	.....
Fort Meade	56.6	69.0	(67.5)	59.5	[m]73.4	79.0	78.9	(82.0)	78.2	69.2	64.8	66.1	(70.4)	.....	.....	Apr. 6	.....
*Gainesville	.....	.....	.....	.....	74.4	82.2	78.4	80.9	70.6	66.4	61.0	.....	.....	.....	.....	.....	Nov. 30
Homeland (*a*)	58.7	70.5	67.8	70.1	75.0	82.9	81.9	82.0	79.4	71.6	66.3	68.3	72.9	95	29	Apr. 7	.....
Hypoluxo (*c*)	63.0	71.2	71.6	73.7	77.6	82.8	82.8	82.6	79.7	75.8	73.1	72.3	75.5	97	42	.....	.....
*Jacksonville	54.2	65.6	61.6	67.4	72.8	81.1	81.2	82.3	77.6	66.9	60.0	59.6	69.2	100	30	Apr. 6	Nov. 18
*Jupiter	62.6	71.6	69.6	70.8	74.4	79.0	80.3	80.6	79.0	73.6	70.7	70.6	73.6	92	38	Apr. 7	.....
*Key West	66.4	73.2	72.8	73.2	77.0	81.8	83.9	82.2	81.0	76.0	73.0	72.6	76.1	92	53	(3)	.....
Lake City	.....	66.4	62.2	68.8	74.5	82.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Manatee	.....	.....	.....	.....	.....	.....	.....	.....	79.9	70.1	64.7	65.2	.....	.....	.....	.....	.....
Merritts Island	59.5	68.8	68.4	70.3	75.4	75.5	82.8	83.4	80.0	72.9	68.0	68.0	72.8	94	38	.....	.....
Miami	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71.4	.....	.....	.....	.....	.....	.....
*Micco	58.2	[k]69.6	[k]67.8	[k]70.2	[k]75.4	[k]79.8	[k]83.6	[m]83.5	[k]79.0	73.7	67.8	67.2	72.7	[k]103	[k]33	.....	.....
Myers	.....	.....	.....	.....	.....	.....	.....	.....	.....	71.1	66.3	66.7	.....	.....	.....	.....	.....
Ocala	[b]54.6	64.7	[b]63.4	[b]67.5	[b]72.5	[b]78.2	(82.0)	(82.0)	(77.0)	66.0	58.9	60.6	(69.0)	.....	.....	Jan. 29	.....
Orange City (*a*)	54.3	68.4	[d]63.1	67.9	[d]73.2	80.0	81.4	81.4	78.8	69.2	63.8	64.2	70.5	94	26	Apr. 7	.....
Pasadena	.....	.....	.....	67.9	73.4	80.2	81.4	82.2	77.4	68.1	62.8	63.5	(70.6)	.....	.....	.....	.....
*Pensacola	50.7	60.6	59.4	66.2	72.0	80.4	79.8	80.6	77.0	66.8	58.8	55.0	67.3	95	30	Apr. 6	Nov. 18
St. Francis Barracks	54.4	66.2	61.6	66.4	72.2	78.6	80.1	81.2	77.8	68.4	61.6	61.6	69.2	97	30	.....	.....
St. Petersburg	.....	.....	.....	.....	74.9	82.1	82.5	82.1	78.7	69.5	64.6	64.8	.....	.....	.....	.....	.....
San Antonio	57.0	69.0	65.1	69.3	75.8	82.4	83.6	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 7	.....
Tallahassee	[c]47.7	[b]64.2	61.1	[b]65.0	[b]62.7	77.8	77.6	78.6	76.1	65.0	57.6	55.2	66.6	94	24	Apr. 6	Nov. 18
*Tampa	57.5	69.0	66.2	68.6	73.8	80.5	82.0	81.2	79.6	70.0	65.1	65.8	71.6	95	33	Dec. 29	.....
Tarpon Springs	56.4	[e]70.8	66.2	69.2	73.7	79.6	81.1	81.6	79.0	67.9	62.7	63.2	71.0	.....	.....	.....	.....
*Titusville	56.9	68.6	65.4	67.3	73.6	79.3	81.2	81.8	78.0	70.8	65.9	66.2	71.2	96	34	Apr. 7	.....
Georgia.																	
*Albany	.....	.....	.....	.....	76.3	82.8	82.0	81.5	76.5	64.6	57.2	54.1	.....	.....	.....	.....	Oct. 23
*Alapaha	.....	.....	.....	.....	71.7	80.5	80.2	80.3	75.6	62.6	56.3	54.3	.....	.....	.....	.....	Nov. 18
*Americus	.....	.....	.....	.....	73.4	85.0	83.0	82.4	76.5	63.2	55.8	51.0	.....	.....	.....	.....	Oct. 20
Athens (*a*)*	43.2	50.8	47.3	63.2	67.3	78.0	76.3	76.3	72.9	58.9	49.2	47.2	60.9	94	22	Apr. 6	Nov. 18
*Athens[5]	42.2	49.2	46.3	(63.2)	67.2	78.5	77.0	77.1	72.3	58.7	49.0	47.0	(60.6)	.....	.....	.....	.....
*Atlanta	42.4	50.4	47.0	62.8	67.4	77.8	75.4	76.6	72.3	59.4	49.2	47.0	60.6	94	18	Apr. 6	Nov. 18
*Augusta	46.8	56.6	52.0	65.6	69.0	80.4	78.0	79.1	75.0	60.8	52.4	50.4	63.8	98	22	Apr. 6	Oct. 21
*Bainbridge	.....	.....	.....	.....	72.6	81.6	80.4	81.2	77.0	65.0	.....	.....	.....	.....	.....	.....	.....
Blakely (*a*)	50.8	(59.0)	[b]59.9	67.1	71.6	82.6	81.4	81.2	78.3	67.6	57.4	53.4	(67.5)	.....	.....	Apr. 6	Nov. 18
Butler	.....	52.6	49.0	.....	76.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Camak	.....	.....	.....	.....	69.6	80.2	78.9	78.4	73.4	60.4	52.6	.....	.....	.....	.....	.....	Nov. 18
Cartersville	.....	.....	.....	.....	68.2	79.2	77.0	78.4	72.4	59.5	49.9	.....	.....	.....	.....	.....	Oct. 23
*Columbus	.....	.....	.....	.....	69.8	78.8	77.3	77.2	73.6	60.4	50.9	48.2	.....	.....	.....	.....	Nov. 18
*Cordele	.....	.....	.....	.....	72.2	82.9	81.2	80.8	75.9	62.2	56.7	49.6	.....	.....	.....	.....	Oct. 20
Diamond	39.3	49.4	45.3	57.7	.....	.....	.....	.....	.....	.....	.....	43.2	.....	.....	.....	Apr. 5	Nov. 18
*Eastman	.....	.....	.....	.....	73.0	82.3	80.6	80.0	74.4	61.1	54.2	.....	.....	.....	.....	.....	Oct. 21
Elberton	.....	.....	.....	63.1	70.6	80.2	77.5	77.4	72.1	59.8	50.8	49.6	.....	.....	.....	.....	Dec. 8
Forsyth (*a*)	48.8	56.9	53.7	66.5	72.0	81.0	79.3	78.7	77.2	64.4	55.0	52.2	65.5	100	24	Apr. 6	Nov. 18
*Fort Gaines	.....	.....	.....	.....	66.8	75.9	74.4	74.8	70.6	59.6	51.4	48.0	.....	.....	.....	.....	Oct. 20
Fort McPherson	41.2	47.2	47.0	62.8	67.4	77.7	76.1	77.1	72.8	59.0	49.6	46.6	60.4	95	15	Apr. 6	.....
*Gainesville	.....	.....	.....	.....	64.3	76.6	74.8	75.8	70.6	57.3	48.9	.....	.....	.....	.....	.....	Oct. 28
Gillsville (*a*)	44.4	50.9	47.6	63.5	69.0	78.0	78.1	77.0	74.2	61.0	51.6	47.9	61.9	93	24	Apr. 5	Nov. 18
*Griffin	.....	.....	.....	.....	70.9	81.6	79.2	78.4	73.2	60.8	51.0	.....	.....	.....	.....	.....	Oct. 19
Hephzibah (*a*)	(47.0)	58.2	54.1	67.8	72.4	81.4	78.5	76.8	73.8	63.7	55.6	53.4	(65.2)	.....	.....	Mar. 15	Nov. 18
Lithia Springs	45.4	53.0	.....	.....	.....	.....	.....	.....	.....	.....	55.0	50.0	.....	.....	.....	.....	Nov. 17
Louisville	47.6	56.9	53.0	66.3	71.7	.....	.....	.....	.....	.....	53.0	51.0	.....	.....	.....	.....	Nov. 18
*Macon	.....	.....	.....	.....	70.5	80.6	79.7	78.0	72.5	64.4	[b]51.8	.....	.....	.....	.....	.....	Oct. 20
Marietta (*a*)	40.3	49.0	46.1	60.3	65.5	75.7	73.6	[c]73.6	69.5	57.5	48.3	45.4	58.7	94	17	Apr. 6	Oct. 28
Milledgeville	46.3	56.3	51.8	63.9	69.4	79.6	78.8	78.4	74.4	60.8	52.6	49.8	63.5	96	24	Apr. 6	Oct. 29
*Millen	.....	.....	.....	.....	70.2	80.6	78.8	80.4	75.4	61.0	52.8	50.2	.....	.....	.....	.....	Oct. 21
Monticello (*b*)	(47.0)	(56.0)	48.2	62.6	67.2	78.2	76.9	76.7	73.2	59.0	48.8	46.6	(60.9)	.....	.....	Apr. 5	.....
*Newnan	.....	.....	.....	.....	66.8	78.0	76.2	76.4	71.7	59.4	51.0	.....	.....	.....	.....	.....	Nov. 18
Point Peter (*d*)	40.5	49.8	44.4	59.8	64.2	75.6	73.6	76.4	68.4	52.7	48.2	45.2	58.2	.....	.....	Apr. 6	.....
Poulan (*a*)	46.6	59.2	56.4	65.4	72.4	80.0	78.8	78.4	74.5	60.7	53.9	52.1	64.9	103	22	Apr. 6	Oct. 23
Quitman[6]	50.4	62.7	60.3	67.1	73.0	.....	.....	.....	.....	[c]62.4	57.4	55.1	.....	.....	.....	Apr. 6	Nov. 30
*Quitman[7]	.....	.....	.....	.....	73.2	82.1	78.8	81.8	77.0	65.8	58.4	59.4	.....	.....	.....	.....	.....
*Savannah	50.4	60.6	56.1	63.2	70.6	79.9	79.5	80.3	75.8	63.4	55.6	55.4	66.1	97	27	Apr. 5	Nov. 18
*Thomasville[7]	.....	.....	.....	.....	72.6	82.0	80.5	81.2	77.6	65.4	57.6	54.8	.....	.....	.....	.....	Oct. 29
*Tocoa	.....	.....	.....	.....	67.6	78.4	75.4	77.4	71.0	58.4	48.4	46.3	.....	.....	.....	.....	Oct. 21
*Union Point	.....	.....	.....	.....	69.4	80.4	78.0	78.2	74.0	61.5	51.6	45.7	.....	.....	.....	.....	Oct. 28
*Washington	.....	.....	.....	.....	69.9	79.2	79.1	78.8	73.4	60.6	51.2	.....	.....	.....	.....	.....	Oct. 23
*Way Cross	.....	.....	.....	.....	74.1	79.9	79.6	80.0	75.3	63.6	64.0	.....	.....	.....	.....	.....	Oct. 28
*Waynesborough	.....	.....	.....	.....	71.4	81.3	79.1	80.2	74.9	62.0	53.8	.....	.....	.....	.....	.....	Oct. 29
*West Point	.....	.....	.....	.....	72.4	82.4	81.1	81.8	76.2	63.6	54.5	.....	.....	.....	.....	.....	Oct. 16
Idaho.																	
American Falls	19.8	21.6	31.8	44.9	54.4	58.0	68.9	69.2	56.4	44.9	36.8	19.3	43.8	98	—22	May 20	Sept. 17
Boise Barracks	26.1	28.2	37.4	51.6	60.1	60.0	73.5	73.2	62.7	54.0	39.2	28.4	49.5	109	0	May 8	.....
Bonanza	.....	.....	22.6	35.4	46.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 31	.....
Era	16.6	19.5	25.0	37.4	52.2	52.2	62.8	65.4	54.6	44.8	33.1	16.8	40.0	92	—17	May 20	Aug. 7
Fort Sherman	34.4	26.3	33.4	48.4	57.9	58.9	67.2	68.0	58.6	50.6	39.6	36.1	48.3	98	—12	May 9	.....

[1] Julian N. Banta. [2] No frost recorded. [3] W. P. Briggs and special cotton region station. [7] Special cotton region station.
[4] F. G. Brill. [5] Prof. L. H. Charbonnier. [6] J. L. Cutler.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Idaho—Continued.																	
Garden Valley (*a*)	.....	.....	23.6	.....	.....	.....	.....	.....	.....	.....	36.5	22.3	.....	.....	.....	.....	.....
Henrys Lake	14.0	12.6	19.6	37.5	(50.0)	50.2	58.5	58.8	48.8	38.4	23.9	10.8	(35.2)	88	—34	June 30	Aug. 7
Kootenai	31.2	21.4	31.4	46.6	57.0	58.6	66.8	65.9	54.7	45.1	*35.0	30.6	45.4	96	—12	May 1	Sept. 23
Lewiston	37.0	31.7	39.5	54.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mullan	30.2	23.2	27.8	41.1	52.0	51.9	59.9	60.9	53.8	(46.0)	(37.0)	(32.0)	(47.2)	.....	.....	May 9	Sept. 27
Payette	32.4	28.2	39.8	53.9	64.4	65.3	75.0	74.0	(63.0)	(54.0)	40.2	26.4	(51.4)	.....	.....	May 9	Nov. 2
Placerville	.....	26.7	.....	.....	51.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 13	.....
Ruthburg (*a*)	24.1	25.5	37.3	51.9	(55.0)	63.3	79.6	78.3	66.4	55.4	38.1	27.7	(50.2)	.....	.....	.....	.....
Illinois.																	
Atwood	.....	28.1	30.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Aurora [1]	26.6	26.2	28.6	47.8	53.2	66.8	64.8	67.6	66.4	49.5	31.4	32.4	46.8	99	—10	May 17	Oct. 10
Aurora (*a*) [2]	28.3	27.5	30.5	49.6	56.6	69.8	(66.7)	(69.5)	67.8	50.3	32.2	34.9	(48.6)	.....	.....	.....	.....
Beason (*f*)	30.2	31.1	33.0	52.4	58.0	70.5	68.0	69.1	67.1	51.3	35.5	36.8	50.2	95	— 4	.....	.....
Belvidere	26.6	26.1	29.1	48.1	55.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Cairo	38.5	41.7	42.8	60.4	64.4	77.2	74.8	74.4	72.8	58.0	44.4	45.6	57.9	93	14	Apr. 4	Oct. 20
Carlinville	(34.0)	31.2	37.2	53.6	60.0	72.9	71.2	74.7	71.4	54.9	37.2	36.8	(52.9)	.....	.....	.....	.....
Centralia (*a*)	33.0	34.0	35.0	58.0	59.0	77.0	76.0	73.0	71.0	54.0	40.0	(40.5)	(54.2)	.....	.....	.....	.....
Charleston (*a*)	31.9	32.9	35.0	55.5	.....	.....	.....	.....	69.7	52.0	37.7	37.9	.....	.....	.....	.....	Oct. 16
*Chicago	30.2	28.6	30.6	47.0	53.4	65.7	67.0	69.0	69.0	52.6	33.8	35.4	48.5	96	— 8	Apr. 8	Oct. 22
Cockrell (*a*)	24.8	25.2	28.6	50.0	58.0	.....	69.6	71.0	.....	.....	.....	.....	.....	.....	.....	Apr. 8	.....
Collinsville	34.2	35.4	38.0	57.1	61.9	74.8	73.1	73.0	71.5	(54.0)	(40.0)	40.1	(54.4)	.....	.....	Apr. 7	.....
East Peoria (*a*)	32.6	32.0	34.6	55.4	60.6	74.0	73.0	72.9	69.6	54.8	39.0	38.6	53.1	100	— 2	.....	.....
Flora	34.5	36.0	39.0	58.0	63.0	75.5	72.0	72.5	69.5	(53.0)	40.0	40.5	(54.4)	97	0	.....	.....
Fort Sheridan	31.2	28.2	29.6	46.8	54.4	65.6	66.0	68.2	66.8	49.7	32.5	32.7	47.6	102	5	May 16	.....
Golconda (*a*)	36.8	40.4	40.7	59.5	63.4	76.5	74.5	74.4	73.2	58.3	43.6	43.9	57.1	92	12	.....	.....
Greenville (*a*)	33.0	33.9	36.0	55.7	60.6	73.1	71.9	71.6	70.7	53.4	39.2	39.8	53.2	100	— 2	.....	.....
Griggsville (*a*)	32.4	32.2	32.5	54.5	60.2	69.5	70.8	70.0	72.8	54.6	36.9	38.4	52.1	100	0	.....	Oct. 15
Hennepin	27.2	28.2	29.2	51.2	56.2	70.4	69.0	70.1	67.6	49.7	28.8	31.7	48.3	101	— 9	May 18	Oct. 5
Jerseyville	.....	.....	.....	.....	.....	.....	.....	[3]75.3	.....	.....	40.4	39.6	.....	.....	.....	.....	.....
Jordan's Grove (*a*)	33.4	35.5	37.7	57.4	62.1	74.3	73.1	72.7	71.8	55.0	40.6	41.2	54.6	96	5	.....	.....
Lacon (*a*)	29.4	28.8	31.3	52.9	58.3	69.9	71.0	70.8	69.0	(53.0)	(34.0)	(36.0)	(50.4)	.....	.....	Apr. 7	.....
Lanark (*d*)	23.8	23.0	28.5	48.4	55.9	67.8	67.1	71.7	66.0	49.8	29.3	30.5	46.8	94	—13	.....	.....
Louisville (*c*)	32.5	34.3	36.1	55.6	60.9	74.4	73.3	71.5	71.1	51.1	38.7	38.3	52.7	96	3	.....	.....
Martinsville (*a*)	33.9	35.1	38.6	56.4	58.7	(73.0)	(71.0)	74.9	72.0	53.8	39.9	40.1	(54.0)	94	6	.....	.....
Mascoutah	34.9	34.4	37.3	56.6	58.6	75.4	73.0	74.4	73.2	55.4	42.6	40.7	54.8	99	3	.....	.....
Mattoon (*a*)	36.7	39.1?	38.9	60.2	(59.5)	74.6	72.9	72.1	72.6	56.5	41.4	40.9	(55.4)	98	7	.....	.....
McLeansborough (*a*)	(37.0)	(40.0)	39.1	(59.0)	61.2	76.3	73.8	74.3	69.9	55.7	42.1	42.5	(55.9)	.....	.....	.....	.....
Muddy Valley (*c*)	31.2	37.4	40.7	64.2	66.2	79.5	78.2	78.1	71.5	58.9	45.0	49.7	58.4	.....	.....	.....	.....
Olney (*a*) [3]	35.3	37.5	39.6	57.6	62.9	76.7	75.4	73.9	71.8	55.4	41.5	42.1	55.8	100	2	Apr. 5	Oct. 14
Olney (*a*) [4]	33.4	35.6	37.8	55.7	60.7	74.5	73.3	71.7	68.6	52.1	39.7	40.3	53.6	98	3	.....	.....
Oswego (*a*)	27.2	26.8	29.6	48.3	54.6	68.2	66.4	67.9	65.4	49.0	30.8	33.3	47.3	96	—11	May 17?	Oct. 16
Ottawa (*a*)	28.9	28.8	33.0	52.3	57.8	70.2	69.0	69.2	65.7	51.7	33.9	36.3	49.7	98	— 8	Apr. 13	Oct. 5
Palestine (*a*)	32.7	35.2	37.0	56.2	59.3	(77.0)	70.6	69.6	67.2	51.6	39.0	40.0	(53.0)	.....	.....	May 6	Oct. 15
Pana (*a*)	35.6	36.7	38.9	58.9	[1]64.3	74.4	(71.5)	73.1	71.8	55.5	40.5	41.0	(55.5)	.....	.....	.....	.....
Peoria (*a*) [5]	32.2	31.8	34.3	56.1	62.0	73.6	72.7	72.2	70.4	54.3	37.7	38.5	53.0	99	— 4	Apr. 7	Oct. 20
Philo (*a*)	31.6	31.9	33.9	53.7	59.7	74.4	72.1	71.5	70.2	52.6	36.4	37.5	52.1	97	—10	May 17	Oct. 5
Pontiac	30.1	31.9	31.9	52.5	57.4	70.2	71.2	73.0	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rantoul (*a*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	34.0	34.9	.....	.....	.....	.....	.....
Riley	25.8	25.1	28.0	47.8	55.3	66.4	65.4	67.8	68.4	49.4	30.1	31.4	46.7	95	—10	May 6	Oct. 16
Rockford (*a*)	26.1	25.4	27.7	48.8	56.6	68.2	67.8	68.4	67.8	49.4	31.4	31.2	47.4	99	—10	May 6	Oct. 16
Rock Island Arsenal	27.9	27.4	29.8	52.1	57.8	(70.5)	(69.0)	(70.0)	68.9	52.8	32.0	31.2	(49.1)	.....	.....	May 4	.....
Rushville	31.2	28.8	32.4	53.4	60.2	72.0	72.0	70.1	67.0	51.0	35.0	35.5	50.7	98	— 2	.....	.....
St. Johns (*c*)	38.7	33.6	35.2	48.6	61.4	74.0	75.3	75.6	76.0	60.6	47.0	45.7	56.0	.....	.....	.....	.....
Sandwich	30.6	29.0	30.9	50.4	54.5	69.4	67.4	69.0	67.6	51.4	31.8	34.6	48.9	95	— 8	May 17	Oct. 10
*Springfield	32.4	31.4	33.8	54.9	60.6	73.2	71.0	71.5	70.8	54.4	37.1	38.2	52.4	95	— 5	Apr. 8	Oct. 5
Sycamore (*a*)	26.5	26.1	29.1	48.1	54.6	67.4	66.6	68.3	66.3	49.6	31.8	33.9	47.4	96	— 8	May 27	Oct. 16
White Hall (*d*)	34.2	34.6	35.2	57.2	63.8	74.3	74.1	73.3	71.4	55.4	37.7	38.5	54.0	92	0	.....	.....
Winnebago (*a*)	25.9	25.3	28.2	49.3	56.7	68.2	67.0	68.8	67.9	49.2	30.5	32.3	47.4	95	—10	.....	.....
Indiana.																	
Angola (*a*)	29.9	29.0	33.2	50.4	58.5	72.4	71.3	71.7	66.4	50.3	35.9	36.2	50.4	97	— 5	.....	.....
Butlerville (*c*)	33.4	36.3	35.9	54.6	61.7	75.0	72.6	71.7	68.2	51.2	40.2	39.9	53.4	.....	.....	.....	.....
Cannelton	.....	37.9	.....	58.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Columbia City (*f*)	29.9	31.2	31.7	50.6	58.5	71.7	69.5	71.6	67.9	50.3	35.5	36.4	50.4	95	— 6	.....	.....
Columbus (*a*)	33.6	36.6	34.3	54.3	58.6	71.4	70.5	70.8	66.8	50.6	40.2	39.9	52.3	94	2	.....	.....
Connersville	35.5	37.2	35.3	52.7	56.9	71.4	68.7	70.2	66.7	52.5	40.6	40.3	52.3	93	1	.....	.....
Crandall	.....	37.5	39.0	58.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
DeGonia Springs (*a*)	37.1	40.2	41.3	58.0	61.8	75.7	72.9	72.2	69.8	54.7	44.9	44.6	56.1	91	9	.....	.....
Delphi	29.7	30.8	30.8	50.2	57.3	72.4	66.2	67.5	66.6	48.9	35.3	37.6	49.4	93	—8	.....	.....
Farmland (*a*)	33.1	37.2	35.0	53.6	59.0	76.5	70.5	71.5	68.1	52.2	39.9	40.1	53.1	96	—2	.....	.....
Franklin (*a*)	33.4	35.3	36.5	54.9	59.0	(74.0)	(71.5)	(72.0)	67.4	52.6	38.9	39.7	(52.9)	.....	.....	.....	.....
Huntingburg (*a*)	37.1	39.0	43.0	61.3	62.0	77.4	76.0	(72.0)	74.9	(55.0)	40.7	39.4	(56.5)	.....	.....	.....	.....
*Indianapolis	34.2	34.6	35.5	55.4	59.6	74.0	71.9	72.1	70.6	54.6	39.4	40.6	53.5	94	—3	May 7	Nov. 14
Jefferson ville (*a*)	37.0	41.2	40.9	58.2	62.7	77.0	73.9	72.5	68.8	54.6	43.4	42.4	56.0	94	8	May 7	Oct. 16
La Fayette	32.0	33.9	33.3	52.3	58.9	72.9	70.3	69.0	69.7	53.6	37.1	39.2	51.8	97	—12	May 17	Oct. 16
Logansport [6]	32.2	34.2	33.7	52.6	58.0	71.2	69.7	70.8	68.8	49.1	38.6	39.4	51.5	95	—5	.....	.....
Marengo	38.7	42.6	42.1	59.4	63.3	75.6	73.7	73.3	(72.0)	55.7	44.5	(44.5)	(57.9)	.....	.....	.....	.....
Marion	(35.0)	(34.0)	*38.5	53.0	56.9	70.0	67.8	69.0	65.2	50.1	38.2	38.6	(51.2)	.....	.....	.....	Oct. 6
Mauzy	30.1	32.4	31.6	[4]50.4	57.0	72.4	69.9	71.0	67.8	51.1	38.8	39.2	51.0	99	—3	May 7	.....
Michigan City	(31.0)	(30.0)	33.1	49.3	56.2	71.7	70.3	*68.6	69.7	54.5	34.8	37.3	(50.5)	.....	.....	.....	.....
Mount Vernon (*a*) [7]	35.0	35.6	.....	.....	62.7	77.4	74.0	73.2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Muncie	35.1	37.0	37.7	55.1	64.4	79.9	77.2	73.1	71.6	54.2	(39.5)	41.0	(55.5)	.....	.....	.....	.....
Point Isabel	26.0	32.8	(31.5)	47.2	58.0	71.9	68.4	71.2	70.4	52.7	36.9	42.5	(50.8)	.....	.....	May 7	.....
Princeton (*a*)	34.8	37.6	39.6	56.6	62.0	77.1	74.2	72.5	69.7	54.2	42.0	41.4	55.1	98	4	.....	.....

[1] W. Holden. [2] Dr. M. M. Robbins. [3] V. E. Phillips. [4] C. H. Fahs. [5] Dr. F. Brendel. [6] D. E. Prior. [7] J. M. Lockwood.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Indiana—Continued.																	
Richmond	.....	35.1	31.5	.....	57.1	73.0	72.1	71.2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rockville	34.7	35.8	36.3	56.4	61.8	72.7	71.5	72.1	70.3	54.0	38.5	39.0	53.6	98	—5	.....	.....
Seymour	35.6	36.5	39.0	56.5	62.0	(75.0)	72.5	72.3	70.7	54.9	42.5	(40.0)	(54.8)	.....	.....	.....	Oct. 16
Shelbyville (*f*)	35.0	34.5	37.8	56.6	62.3	77.3	76.9	[g]75.6	71.3	54.2	39.7	40.2	55.1	95	0	.....	.....
*Terre Haute	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40.7	40.2	.....	.....	.....	.....	.....
Valparaiso	30.8	29.2	30.4	46.6	53.4	65.6	67.4	(69.0)	69.4	52.6	33.9	35.2	(48.6)	.....	.....	May 6	Nov. 1
Vevay (*a*)	36.4	40.5	40.1	56.9	61.4	74.6	72.2	72.2	68.6	54.2	43.2	41.7	55.2	94	3	Apr. 12	.....
Worthington	33.0	35.5	37.8	55.4	60.3	75.1	72.7	70.4	68.1	52.1	38.8	40.4	53.3	92	0	.....	.....
Indian Territory.																	
Fort Supply	32.4	37.1	41.1	58.4	64.5	72.6	76.4	76.2	71.1	57.6	44.8	41.8	56.2	98	3	Apr 5	.....
Healdton	42.6	46.8	49.9	64.4	68.8	78.0	79.4	79.9	74.4	62.4	53.7	49.8	62.5	102	22	Mar 12	Oct. 7
Purcell	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	[a]46.4	.....	.....	.....	.....	.....
South McAlester	.....	.....	.....	.....	.....	81.4	.....	82.5	.....	66.5	62.6	58.6	.....	.....	.....	.....	Oct. 1
Wynnewood	.....	[1]40.2	42.6	58.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Iowa.																	
Alta (*a*)[1]	24.4	13.2	24.2	48.8	57.3	69.1	67.6	67.6	66.0	47.6	27.0	28.6	45.1	94	—18	May 6	Oct. 6
Alta[2]	25.3	14.4	24.8	47.1	60.8	68.0	65.4	64.9	67.8	48.6	(27.0)	29.3	(45.3)	.....	.....	.....	.....
Amana	25.2	22.8	26.9	50.8	57.0	69.2	67.8	68.4	66.1	49.7	30.8	32.2	47.2	94	—13	May 6	Oct. 10
Ames (*a*)[3]	25.1	19.0	27.7	50.7	58.6	69.4	69.5	69.4	67.7	(47.5)	29.7	31.7	(47.2)	96	—12	May 6	.....
Ames[4]	.....	.....	.....	.....	.....	[d]67.7	68.1	[e]72.1	.....	[d]47.2	29.2	[b]30.2	.....	.....	.....	.....	Oct. 5
Atlantic (*a*)	(25.0)	21.3	27.4	50.8	57.2	67.6	68.9	68.1	65.9	47.2	30.0	32.0	(46.8)	.....	.....	May 18	Oct. 4
Bancroft (*a*)	20.6	10.2	23.2	47.7	58.1	66.4	67.0	68.1	65.8	46.7	26.9	28.6	44.1	93	—27	May 17	Oct. 5
Belle Plaine (*a*)	25.1	22.0	28.0	50.6	57.9	68.6	68.3	68.7	68.5	49.5	30.4	31.7	47.4	94	—13	Apr. 9	Oct. 5
Blakeville (*a*)	(25.0)	(17.5)	(27.0)	50.4	58.5	69.5	69.5	70.7	69.3	52.2	31.0	32.3	(47.3)	.....	.....	May 4	.....
Blockton	.....	.....	.....	.....	.....	.....	.....	.....	.....	50.5	32.2	34.2	.....	.....	.....	.....	Oct. 5
Bonaparte (*a*)	(31.5)	(29.0)	(31.0)	[k]64.7	64.1	74.8	74.9	75.1	73.9	56.8	36.7	38.2	54.2	.....	.....	.....	.....
Carroll	25.4	15.6	24.8	50.0	56.3	67.4	67.8	69.3	65.9	48.6	31.3	32.6	46.2	93	—17	May 17	Oct. 7
Carson	27.1	19.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cedar Falls (*c*)	24.8	15.8	25.6	49.4	54.7	67.6	67.3	68.6	66.0	50.1	29.0	30.6	45.8	91	—22	May 18	Oct. 5
Cedar Rapids (*a*)	26.0	23.6	28.2	51.8	57.7	69.9	70.1	69.8	67.6	49.1	31.6	32.8	48.2	95	—12	May 6	Oct. 9
Charles City	(20.0)	14.0	27.4	(47.0)	53.0	67.0	66.5	66.9	66.5	51.5	26.9	27.9	(46.6)	.....	.....	.....	.....
Clarinda (*a*)	27.0	22.4	29.4	54.1	59.2	70.0	70.6	71.4	69.2	52.6	34.4	34.8	49.6	93	—10	Apr. 7	Oct. 7
Clinton (*a*)	26.0	25.2	28.1	51.4	58.7	70.4	68.8	68.8	66.3	49.7	31.2	32.7	48.1	96	—18	May 17	Oct. 16
College Springs (*a*)	.....	.....	.....	.....	.....	68.2	72.0	70.5	68.4	57.4	[i]40.5	37.6	.....	.....	.....	.....	.....
Corning[5]	.....	.....	.....	.....	.....	.....	.....	69.8	67.5	50.5	32.0	34.2	.....	.....	.....	.....	Oct. 10
Corydon	.....	.....	.....	.....	.....	68.2	67.8	69.1	67.7	.....	32.6	34.4	.....	.....	.....	.....	.....
Cresco (*a*)	22.4	12.6	23.3	46.7	56.1	65.4	65.1	65.8	64.6	46.2	26.5	28.3	43.6	95	—31	May 6	Oct. 5
Dallas Center (*c*)	[m]25.6	16.5	25.1	50.0	58.1	72.0	.....	.....	.....	.....	27.4	.....	.....	.....	.....	.....	.....
*Davenport	27.8	26.4	28.8	51.8	58.3	70.6	69.2	70.0	69.7	53.1	32.4	34.8	49.4	94	—10	May 5	Oct. 9
Delaware (*c*)	.....	.....	.....	.....	55.1	66.4	63.8	65.7	64.0	46.0	29.0	28.8	.....	.....	.....	.....	Oct. 19
Denison (*a*)	.....	.....	.....	53.6	60.4	69.3	71.4	70.8	68.7	50.8	31.8	.....	.....	.....	.....	.....	Oct. 5
*Des Moines	28.3	23.2	28.8	52.0	57.8	69.2	68.6	69.8	68.2	52.2	32.0	34.6	48.7	93	—10	May 11	Oct. 5
Des Moines (near)	[m]29.0	22.0	28.7	52.8	59.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Dubuque	26.8	23.1	27.7	50.8	58.2	69.8	68.8	70.2	69.3	51.0	31.0	33.0	48.3	96	—13	May 6	Oct. 10
Eagle Grove (*c*)	20.1	9.4	22.4	48.9	58.5	69.0	69.8	70.2	65.5	(48.0)	24.4	28.6	(44.6)	.....	.....	May 5	.....
Elkader	.....	.....	.....	.....	.....	.....	.....	.....	65.8	48.4	29.7	30.5	.....	.....	.....	.....	Oct. 5
Fairfield (*a*)	.....	.....	.....	51.6	59.6	69.9	[f]69.5	70.4	68.4	.....	33.8	34.5	.....	.....	.....	.....	.....
Fayette	23.3	17.8	25.3	47.4	55.1	66.0	65.1	65.0	65.8	47.9	28.3	30.5	44.8	94	—20	May 27	Oct. 5
Fort Madison (*a*)	30.6	29.6	34.4	55.9	63.2	73.6	73.6	74.6	73.9	56.2	36.9	39.1	53.5	100	—4	Apr. 5	.....
Galva	.....	.....	.....	.....	.....	.....	.....	.....	64.2	51.9	31.4	33.9	.....	.....	.....	.....	Oct. 5
Glenwood[6]	26.2	21.2	29.8	55.4	62.7	72.5	72.8	75.4	72.8	56.4	36.8	38.0	51.7	106	—14	Apr. 7	Oct. 7
Grand Meadow (*a*)	(24.5)	(13.0)	(25.0)	[d]48.5	56.0	65.9	65.5	65.9	65.4	48.3	29.2	31.0	(44.9)	.....	.....	.....	.....
Greenfield (*a*)	25.8	20.6	27.3	51.2	58.1	68.0	67.8	68.6	67.5	50.0	30.5	32.0	47.3	91	—14	May 6	Oct. 4
Greenville	.....	.....	.....	.....	.....	.....	.....	.....	[k]66.9	45.2	.....	.....	.....	.....	.....	.....	.....
Grinnell	24.8	22.0	26.0	50.6	57.9	68.0	67.8	68.4	65.0	51.9	31.4	[b]33.0	47.2	93	—12	Apr. 8	Oct. 19
Grundy Center (*a*)	(25.0)	(18.0)	(28.0)	52.6	57.6	68.1	68.5	68.3	66.8	49.0	29.7	31.7	(46.9)	.....	.....	.....	.....
Hampton (*a*)	21.8	13.0	22.9	47.2	55.7	66.0	66.0	65.9	64.6	47.0	26.9	28.4	43.8	93	—18	May 6	Oct. 7
Havelock	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	29.8	.....	.....	.....	.....	.....
Hopeville (*a*)	(29.0)	23.4	29.0	52.2	58.5	68.7	68.7	68.9	67.0	50.5	30.9	32.7	48.3	.....	.....	.....	Oct. 7
Hopkinton (*a*)	.....	.....	.....	51.0	58.0	69.0	70.0	70.0	67.9	48.0	.....	.....	.....	.....	.....	.....	.....
Humboldt	23.4	13.4	24.8	49.5	56.7	68.2	66.9	.....	.....	.....	.....	.....	.....	.....	.....	May 6	.....
Independence (*a*)	25.6	20.4	27.2	50.2	58.0	68.1	68.4	67.9	66.1	49.0	29.5	31.7	46.8	90	—15	Apr. 8	.....
Indianola	.....	23.2	28.4	50.6	55.2	67.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 26	.....
Iowa City (*a*)	28.6	26.7	28.3	51.7	58.6	71.6	69.2	68.4	66.3	50.4	31.8	32.9	48.7	95	—10	Apr. 8	Oct. 5
*Keokuk	31.6	29.2	31.1	54.0	60.5	71.5	70.6	71.1	70.8	54.5	35.6	37.9	51.5	95	—6	Apr. 8	Oct. 20
Keosauqua	.....	.....	.....	.....	.....	.....	71.9	71.4	70.0	[c]54.5	34.7	35.6	.....	.....	.....	.....	Oct 20
Larrabee (*a*)	[m]24.3	9.8	23.8	48.3	57.0	65.9	67.1	66.8	65.3	45.4	26.1	27.0	43.9	98	—24	May 4	.....
Leon	.....	.....	.....	.....	59.9	74.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Logan (*a*)	30.2	18.7	29.9	55.2	61.2	70.2	71.7	72.1	69.8	54.0	34.7	34.0	50.2	95	—15	May 17	Oct. 7
Ludlow	.....	.....	.....	.....	.....	68.1	69.6	70.4	65.4	.....	.....	.....	.....	.....	.....	.....	.....
Manson	20.0	12.2	24.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maquoketa (*a*)	25.3	24.3	27.9	48.4	56.4	69.5	68.0	69.3	66.5	49.2	32.0	33.2	47.5	96	—12	Apr. 7	.....
Marshalltown	(25.0)	20.5	26.9	50.2	56.9	69.6	68.0	68.5	66.4	49.5	[g]24.0	30.5	(46.3)	.....	.....	.....	Oct. 5
Mason City	.....	.....	.....	.....	56.9	70.5	.....	.....	62.8	46.9	28.6	27.3	.....	.....	.....	May 6	Sept. 2
Maxon (*a*)	(31.0)	(25.0)	[n]35.5	52.5	61.0	69.1	68.9	71.2	69.3	49.0	32.9	32.0	(49.8)	.....	.....	.....	.....
McCausland (*a*)	27.0	27.0	(28.0)	50.0	55.5	67.2	65.6	66.1	64.7	49.5	31.3	32.3	(47.0)	.....	.....	May 27(?)	Oct. 16
Monticello (*a*)	25.6	21.6	27.0	50.0	58.0	69.8	68.4	68.1	65.5	48.8	29.9	31.3	47.0	95	—16	May 11	Oct. 5
Moore (*a*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	52.2	34.0	35.3	.....	.....	.....	.....	Oct. 4
Mount Pleasant (*b*)[7]	28.6	26.5	30.2	54.6	61.0	72.8	71.0	69.6	68.4	49.6	33.3	35.9	50.1	.....	.....	Apr. 5	.....
Mount Vernon (*a*)	27.3	22.6	29.5	52.6	60.0	72.2	.....	.....	.....	.....	31.8	33.2	.....	.....	.....	.....	.....
Murray	.....	.....	.....	.....	58.2	68.6	68.3	69.6	67.8	50.6	31.1	33.8	.....	.....	.....	.....	Oct. 7
Muscatine (*a*)[8]	24.5	25.9	29.0	(52.0)	58.6	72.4	67.8	69.2	66.0	51.6	(33.0)	33.8	48.6	.....	.....	.....	.....

[1] David E. Hadden. [2] H. H. Peterson. [3] Dr. J. Rush Lincoln. [4] Iowa Agricultural College. [5] J. W. Bixby. [6] Seth Dean. [7] Dr. Max E. Witte. [8] J. P. Walton.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Iowa—Continued.																	
Osage (c)	21.4	11.5	23.2	46.3	54.7	65.4	64.5	64.8	61.4	44.1	24.8	27.2	42.4			May 5	
Oskaloosa (a)	30.2	24.0	29.9	52.5	60.3	70.1	69.6	70.0	68.0	51.8	33.6	35.8	49.6	93	—14	May 7	Oct. 10
Panama	28.1	19.4	27.6	51.6	56.5	67.9	68.9	69.4	67.2	46.3	31.0	31.8	47.1	93	—11	May 6	Oct. 4
Richland (c)	(30.0)	(26.0)	(29.5)	50.6	58.4	68.6	67.6	67.4	65.4	48.0	29.5	30.5	(47.6)				
Sac City (a)	23.0	11.2	24.8	49.2	54.8	66.9	65.1	65.4	62.9	48.8	29.4	31.6	44.4	93	—22	May 6	Oct. 6
Sanborn					61.0	67.5	66.0	67.8	65.6	48.4	26.8						
*Sioux City	27.5	13.4	25.0	52.6	59.0	67.8	69.2	70.2	68.0	50.4	30.2	30.9	47.0	98	—17	Apr. 7	Oct. 6
Stilson	(20.5)	12.6	22.8	48.4	57.0	69.5	69.0	70.0	66.3	48.4	(28.5)	(28.5)	(45.1)			May 7	Oct. 4
Storm Lake	24.3	13.1	23.9	(50.0)	57.6	67.1	68.2	68.8	67.5	(48.5)	28.4	28.4	(45.5)	92	—20	May 4	Oct. 4
Tipton	28.7	25.1	29.8	51.5	(57.5)	73.7	72.8	66.4	68.3	50.6	32.2	33.1	(49.1)	94	—13		Oct. 16
Vinton (a)	24.2	20.1	26.2	49.3	56.7	67.5	67.5	67.1	65.2	49.0	29.9	32.0	46.2	92	—14	May 6	
Washington	30.0	26.9	32.2	54.6	60.9	74.1	72.1	72.9	72.4	53.5	34.4	35.8	51.6	98	—9	May 11	Oct. 22
Webster City (a)	22.6	15.3	25.1	49.1	56.8	68.1	(68.5)	67.8	66.2	46.7	27.7	29.1	(45.2)			May 6	
West Bend (a)		10.5	23.3	48.1	57.3		66.0				27.2					May 6	
Williams (a)	(22.0)	(13.5)	22.0	47.0	56.9	67.4	66.7	66.3	63.0	43.9	23.5	26.0	(43.2)				
Winterset					61.0	69.6	68.9	70.2	68.0	51.8	31.7	33.7					Oct. 7
Kansas.																	
Abilene	33.3	28.9	33.8	57.2	(61.8)	71.9	75.3	75.4	71.0	56.4	42.2	40.5	(54.0)	100	0		Oct. 6
Allison (b)	23.8	22.3	29.0	56.4	60.6	68.1	72.3	71.4	64.9	48.1	32.4	27.8	47.6	94	— 3	Apr. 5	
Alton	29.2	28.2	32.6	55.4													
Altoona (f)	(36.0)	(38.5)	(39.0)	59.8	64.6	71.3	74.6	75.9	71.0	55.6	41.0	39.9	(55.6)			May 7	
Atchison										56.2	39.4	39.2					Oct. 7
Cawker City (a)	30.9	24.7	33.8	57.8	62.3	69.4	76.5	74.4	69.8	53.0	37.1	37.2	52.2	100	0		
Coldwater								[1]74.8	71.2	57.9	42.3	38.0					Oct. 4
Collyer	30.2										39.0			110	— 2		
Columbus								75.6	75.3	61.7	45.4	[2]43.3				Apr. 5	Oct. 7
Concordia [2]	28.4	24.8	31.4	53.6	59.4	68.8	71.8	71.8	68.0	53.0	37.8	35.4	50.4	97	— 8		
*Concordia [3]	31.6	27.6	33.1	56.8	60.8	70.0	72.8	74.4	70.6	54.6	39.2	37.7	52.4	100	— 3	May 11	Oct. 7
Cunningham (a)	29.4	28.5	35.1	57.0	62.0	71.1	74.6	75.1	69.2	53.2	39.6	37.3	52.7	100	0	May 11	Nov. 9
*Dodge City	28.8	32.0	33.8	55.4	61.6	69.6	73.8	74.0	68.4	55.2	40.9	37.4	52.6	99	0	May 11	Oct. 7
Elco (a)	33.9	31.6	36.9	57.5	62.1	72.0	73.8	75.2	71.4	56.7	41.3	39.5	54.3	100	0		
Elk Falls	37.6	35.8	41.0	[3]52.2	66.2	72.4	76.4	79.8	75.4	(58.0)	53.4	*44.4	(57.7)	101	5	Apr 3	
Ellis	30.6	30.0	33.3	56.1					74.8								
Emporia (a)	32.8	31.4	36.0	57.5	61.4	71.4	74.6	74.6	69.7	56.2	41.6	39.3	53.9	94	2	Apr. 5	Oct. 8
Englewood (a)	31.4	35.4	37.6	62.1	67.1	73.4	76.9	76.1	69.9	55.3	42.4	40.2	55.6	101	2	Apr. 5	
Eureka Ranch	30.3	29.2	34.1	55.4	64.0	70.9	76.3	74.2	69.8	53.4	40.5	33.4	52.6	106	— 4		
Fort Leavenworth [4]	32.8	30.0	35.3	56.6	60.7	71.5	72.6	73.3	70.5	55.8	39.6	39.4	53.2	96	— 3	Apr. 5	
Fort Leavenworth [5]	31.4	27.5	32.9	55.9	59.9	70.4	72.6	73.8	70.4	55.2	38.6	38.6	52.3	98	1		
Fort Riley	29.4	26.8	31.0	54.8	62.1	70.9	72.8	73.4	72.3	55.0	43.1	37.6	52.4	98	— 2	Apr. 5	
Fremont	28.2	27.6	31.2	53.4	63.6	68.0	73.2	73.0	70.1	(52.5)	(38.0)	(31.0)	(50.8)			Apr. 14	
Gibson												33.7					
Globe (b)	29.1	26.2	31.8	54.4	59.4	70.2	72.2	71.6	67.2	51.4	35.7	34.2	50.3			Apr. 5	Oct. 7
Gove City (a)	27.9	27.0	32.2	52.2	60.9	68.0	73.4	76.2	68.9	51.6	37.5	32.1	50.7	104	0	Apr. 14	
Grainfield			33.0	52.2										98	0		
Grenola (a)	34.3	31.6	39.0	59.4	64.1	76.1	78.2	77.1	72.8	59.6	44.8	40.9	56.5	104	3		
Grinnell	30.3	29.4	35.3	57.4										100	0		
Halstead	31.3	30.3	35.2	56.1	60.8	70.8	74.0	73.6	69.3	(57.0)	39.0	39.9	(53.1)	94	2		
Havensville (a)	22.4	(27.5)	(33.0)	(56.5)	58.4	69.3	71.8	71.9	70.0	52.9	37.7	36.2	(50.6)			May 11	Oct. 4
Horton	31.1	27.7	34.4	56.4	60.9	70.6	72.2	73.0	69.8	55.6	38.9	36.0	52.2	97	— 4	Apr 5	Oct. 7
Hoxie (b)		27.2	30.1														
Hutchinson								76.7	71.3	57.3	42.8	41.6					Oct. 6
Independence	35.8	35.2	40.4	61.0	64.8	72.8	74.7	75.4	74.2	59.2	42.6	41.8	56.5	105	4	Apr. 11	Oct. 7
Kansas City (a)	32.5	29.6	34.2	56.7	61.0	71.8	73.4	73.4	69.8	54.9	38.4	38.4	52.8	98	— 3	Apr. 5	Oct. 10
Kellogg (b)				59.3	64.0	74.0	72.1	77.0	73.4	57.8	42.2						
La Crosse	28.7	31.2	33.8	57.0	62.8	72.4	77.0	77.7	71.6	55.8	42.6	37.4	54.0	98	0	Apr. 5	Oct. 5
La Harpe	31.5	30.5	36.0	57.4	62.6	72.4	73.8	73.5	69.6	[6]55.4	38.5	(40.0)	(53.4)			Apr. 7	
Lakin	24.6	29.8	32.7	52.4	61.4	68.4	72.4	(76.0)	(67.5)	51.5	37.4	33.4	(50.6)			May 11	Oct. 3
Larned						[7]78.6	75.4	70.6	65.6	61.0							Oct. 7
Lawrence (a)	32.4	29.4	35.1	57.0	61.2	70.7	72.0	72.5	69.0	54.1	39.5	38.3	52.6	94	1		
*Leavenworth	33.2	29.8	34.2	57.0	60.7	71.7	72.6	73.6	70.8	55.9	38.7	39.3	53.1	96	— 2	Apr. 5	Oct. 7
Lebo	32.6	33.4	35.7	56.7	60.8	71.6	73.0	74.0	71.0	55.5	40.2	38.8	53.4	101	0	May 11	Sept. 29
Leoti	26.3	27.9	33.4	54.3	61.8	69.1	72.8	74.8	65.8	52.3	36.1	31.2	50.5	100	— 6		Oct. 4
Macksville (a)			36.0	57.7	62.1	69.3	74.4	75.7	69.6							May 11	
Manhattan (a) [8]	30.0	27.6	33.4	56.2	60.9	70.0	72.0	73.6	70.0	53.2	38.7	38.0	52.0	102	— 4	May 11	Sept. 29
Manhattan (a)?	29.2	27.4	33.4	56.0	62.2	72.4	73.3	75.1	70.6	53.7	37.9	*34.5	52.1	104	0		
Mankato (a)	27.9	25.2	31.8	(55.5)	58.6	67.0	70.0	72.7	67.0	50.6	36.8	(35.0)	(49.8)				
Marmaton	33.8	33.8	38.0	59.0													
McAllaster			33.8	57.5					70.5	54.8	39.4	30.8		104	—10		
McPherson											41.6	37.9					
Minneapolis (a)	29.5	27.2	32.9	55.9	61.3	70.7	73.6	74.4	69.1	51.7	38.4	37.3	51.8	94	— 2		
Monument	26.9	26.4	31.0	53.7		69.2								104	— 7		
Morse	33.2	29.2	32.0	55.6	59.8	69.8	72.8	71.6	69.4	53.8	37.2	36.2	51.7	94	— 4	Apr. 4	Oct. 7
Morton (a)						70.0	77.2	77.9	75.6	59.4	40.4	34.8					
New England Ranch							73.5	74.7	69.3	53.2	40.0	34.2					Oct. 5
Norton	27.9	24.8	32.0	52.6	61.4	65.3	(73.0)	72.0	67.1	52.4	37.8	32.6	(49.9)				Oct. 6
Oakley (a)	30.2									59.9				102	— 4		
Oswego (a)	37.8	36.6	41.7	60.8	64.2	74.9	77.1	78.6	74.4	58.3	44.5	42.3	57.6	104	5	Apr. 5	Oct. 7
Page City	24.9	24.7	31.2	49.5	59.8					50.6				100	— 2		
Pauline	34.4	30.0	35.6	56.9	61.4	72.6	(72.0)	75.0	71.6	56.0	38.9	38.6	(53.6)	99	0		
Phillipsburg									68.0	54.6	40.9	33.2					Oct. 12
Plainville (f)	29.4	30.1															
Pleasant Dale (a)	27.2	28.6	34.1	52.2	59.0	66.2	70.5	69.7	64.7	51.0	37.0	35.9	49.7	97	— 2		
Quinter (a)	26.6	27.4															

[1] Joseph Boyd. [2] Weather Bureau. [3] Military prison. [4] C. P. Blachly.
[5] H. A. Williams. [6] Post hospital. [7] C. M. Breese and E. R. Nichols. [8]

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Kansas—Continued.																	
Rome (*a*)	34.7	33.9	39.5	57.8	62.7	72.8	75.4	76.4	72.1	57.1	43.7	40.5	55.6	102	6	.....	.....
Salina (*a*)	31.5	28.4	34.3	57.3	62.2	71.2	76.2	76.3	70.8	55.4	39.6	37.7	53.4	95	4	May 10	Oct. 7
Scott City	.....	35.4	37.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sedan (*a*)	34.9	33.9	39.2	59.5	63.7	73.0	74.9	77.7	73.6	58.6	43.3	41.1	56.1	101	3	Apr. 5	Oct. 7
Seneca (*a*)	28.2	23.9	30.5	55.0	59.1	69.0	70.9	70.8	68.1	51.0	36.4	34.8	49.8	.....	.....	Apr. 7	Sept. 29
Sharon Springs (*a*)	26.4	26.7	.....	.....	.....	.....	.....	.....	.....	.....	37.9	.....	.....	.....	.....	.....	.....
Shields	34.0	37.4	37.5	(52.5)	63.2	(68.5)	(73.0)	78.7	72.1	55.6	42.4	44.3	(54.9)	.....	.....	May 11	Oct. 9
Spearville	28.6	29.6	33.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Springvale (*a*)	.....	33.2	38.8	57.8	64.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stafford (*a*)	.....	40.0	44.6	.....	63.4	69.8	75.8	72.8	66.5	.....	.....	.....	.....	.....	.....	.....	.....
Sterling	(31.0)	(32.0)	(36.5)	[n]63.8	62.0	70.7	74.0	76.0	72.2	52.0	38.1	39.8	(54.0)	.....	.....	.....	Oct. 4
*Topeka	31.4	29.8	35.0	56.8	60.7	71.2	72.0	73.0	70.7	55.8	39.5	38.8	52.9	97	— 1	Apr. 11	Oct. 7
Tribune	24.8	28.4	32.6	51.6	59.6	67.6	[r]71.2	[r]71.6	63.0	52.4	35.9	[r]32.6	49.3	99	— 2	Apr. 14	Oct. 4
Wakefield (*a*)	31.8	29.3	34.9	58.0	62.6	72.6	75.8	75.2	72.2	55.1	41.0	38.7	53.9	104	0	Apr. 5	Oct. 7
Wakeeney (*a*)	30.9	27.2	32.4	55.5	63.8	70.7	.....	.....	.....	.....	.....	31.3	.....	.....	.....	.....	.....
Wallace (*g*)[1]	.....	27.8	34.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	103	0	.....	.....
Wellington	36.1	34.7	38.2	60.8	66.9	74.1	75.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Weskan[1]	29.4	26.5	32.3	55.0	(61.0)	67.4	74.6	78.1	68.5	49.9	36.6	(31.2)	(50.9)	103	— 3	.....	.....
Weskan[2]	.....	.....	.....	.....	.....	.....	71.8	72.2	66.2	51.9	37.8	31.2	.....	.....	.....	.....	Oct. 4
*Wichita	33.6	33.0	37.8	58.5	62.4	72.0	74.6	76.0	71.4	57.8	42.6	40.9	55.0	98	4	Apr. 5	Oct. 4
Yates Centre	.....	.....	.....	.....	.....	.....	75.0	75.5	72.0	56.8	40.8	39.7	.....	.....	.....	.....	Oct. 5
Kentucky.																	
*Bowling Green (*a*)	(39.0)	(44.0)	44.2	61.6	65.5	80.1	76.7	[d]76.9	73.1	58.7	46.7	46.0	(59.4)	.....	.....	.....	.....
Caddo (*a*)	36.2	40.7	37.0	(56.0)	61.7	73.1	71.3	70.9	70.9	48.2	39.6	(42.0)	(54.0)	.....	.....	May 7	.....
Canton (*a*)	38.8	43.9	44.4	59.5	63.5	76.5	73.7	73.4	69.3	56.2	45.2	45.0	57.4	97	15	Apr. 5	Oct. 20
Central City	.....	46.0	.....	.....	.....	.....	.....	73.4	.....	.....	[s]41.6	.....	.....	.....	.....	May 6	.....
Earlington	41.9	45.0	45.2	62.6	66.0	80.1	76.2	76.1	72.3	59.3	46.7	47.6	59.9	97	18	Mar. 15	Nov. 16
Edmonton	[b]34.4	43.3	42.6	57.6	61.8	75.7	69.5	70.9	67.8	53.8	43.9	[b]42.1	55.3	92	14	Apr. 5	Oct. 15
Fort Thomas	(36.0)	(40.5)	36.3	54.9	59.8	75.1	70.4	71.1	69.1	52.6	38.0	39.4	(55.6)	.....	.....	.....	.....
Frankfort (*a*)[3]	36.2	41.2	40.8	56.6	60.4	74.9	72.0	71.4	67.2	(56.5)	(42.0)	(43.0)	(55.9)	.....	.....	May 6	.....
Franklin (*a*)	39.4	44.5	44.6	60.3	64.8	77.5	75.3	74.4	72.0	58.1	45.5	45.4	58.5	97	12	Apr. 5	.....
Georgetown	.....	.....	.....	.....	[t]60.8	77.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Harrodsburg (*a*)	36.3	41.6	40.6	56.3	61.4	70.2	73.6	71.8	67.5	53.0	42.2	41.5	54.7	97	10	May 7	Oct. 15
*Lexington	37.1	41.1	40.4	57.4	61.4	75.8	72.8	72.8	71.7	55.4	43.2	42.9	56.0	92	8	May 7	Nov. 2
*Louisville	39.2	41.8	41.7	59.5	63.4	77.7	74.0	74.0	71.8	57.7	44.4	44.6	57.5	95	7	Apr. 5	Oct. 23
Middlesboro (*a*)	(37.0)	45.6	43.7	56.7	60.0	72.5	70.4	72.5	65.6	51.3	43.3	41.2	(55.0)	.....	.....	.....	Oct. 21
Mount Sterling (*a*)	36.4	41.2	39.8	54.7	59.6	72.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 7	.....
Newport Barracks	34.9	40.5	37.3	55.9	59.2	73.6	69.6	71.4	68.8	52.8	41.0	40.1	53.8	94	5	May 7	.....
Pellville	36.5	39.0	39.5	57.3	60.9	76.2	72.3	71.7	[d]67.8	55.0	42.7	42.2	55.1	95	9	May 7	Oct. 16
Princeton	37.0	41.4	41.2	58.8	63.1	77.3	73.7	74.0	70.4	[b]56.0	43.0	(46.0)	(56.7)	.....	.....	May 6	.....
Richmond (*a*)	36.9	42.2	41.2	58.2	62.3	77.1	75.8	(73.0)	73.2	56.4	45.6	38.3	(57.5)	.....	.....	May 7	Nov. 1
Shelbyville (*a*)	36.0	40.4	39.5	56.1	60.0	74.0	71.8	71.5	67.8	53.4	42.3	41.1	54.5	98	8	May 7	Oct. 16
South Fork (*b*)	(37.0)	(41.5)	(42.5)	55.6	59.7	73.4	70.4	71.1	65.4	49.7	[m]39.3	36.2	(53.5)	.....	.....	.....	Oct. 26
Springfield (*a*)	.....	.....	.....	.....	.....	.....	.....	71.2	69.6	.....	.....	.....	.....	.....	.....	.....	.....
Louisiana.																	
Abbeville	52.3	61.6	59.6	68.8	73.2	81.6	81.4	80.0	78.2	67.4	60.0	56.0	68.3	95	26	.....	.....
*Alexandria	(48.0)	(61.0)	(57.0)	65.9	70.4	80.7	80.6	78.6	78.2	63.0	56.8	51.8	(65.2)	.....	.....	.....	Oct. 19
*Amite City	49.0	(62.0)	59.8	66.6	71.2	80.5	80.1	79.1	75.2	61.7	57.6	(54.5)	(66.4)	.....	.....	.....	Oct. 19
Baton Rouge	50.0	61.5	59.3	66.8	73.8	81.2	80.6	79.5	77.3	62.4	55.6	54.0	66.8	97	25	Mar. 19	Nov. 17
Cameron	51.0	61.3	61.2	67.6	(74.0)	81.4	80.9	78.6	78.0	66.2	60.4	59.9	(68.0)	99	17	.....	Nov. 18
*Cheneyville	49.0	61.9	56.6	65.6	72.4	80.8	80.6	78.9	75.8	63.2	58.5	54.0	66.4	96	24	.....	Oct. 20
Clinton	[d]44.6	[d]61.2	.....	.....	.....	[d]82.0	82.6	[d]81.4	[d]80.2	.....	.....	.....	.....	.....	.....	.....	.....
*Coushatta (*b*)[4]	.....	.....	.....	.....	71.5	81.5	81.2	80.0	76.4	62.8	56.1	51.0	.....	.....	.....	.....	Oct. 19
Crowley	51.4	60.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Davis	43.2	54.5	54.2	63.2	68.8	77.0	79.3	78.0	72.6	63.5	[d]56.4	50.6	(63.4)	98	18	.....	.....
Donaldsonville	.....	.....	.....	.....	.....	.....	.....	.....	.....	65.2	.....	56.2	.....	.....	.....	.....	.....
Edgard	53.0	63.4	60.2	67.3	73.4	81.8	80.2	80.2	77.2	66.3	59.6	55.7	68.2	93	31	.....	.....
Emilie	51.1	62.0	59.6	66.9	72.6	80.4	80.1	78.8	75.4	64.4	57.9	54.2	67.0	96	27	.....	Nov. 18
Farmerville	44.4	51.7	.....	66.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Grand Cane	46.6	53.5	55.1	66.1	.....	.....	.....	.....	.....	[m]61.8	54.4	[s]48.1	.....	.....	.....	.....	.....
Grand Coteau (*a*)	50.2	61.8	59.6	68.0	70.4	82.0	(81.0)	(79.5)	[s]77.4	63.4	58.8	54.7	(67.2)	.....	.....	.....	.....
Homer	43.8	53.6	52.2	64.8	69.4	80.8	79.2	77.7	75.4	63.3	[t]56.2	(51.0)	(64.0)	.....	.....	.....	Nov. 16
Houma	50.8	60.0	57.1	65.0	(74.0)	77.8	77.6	79.6	76.6	64.8	58.0	53.6	(66.2)	96	20	.....	Nov. 17
Jackson Barracks	51.4	63.5	61.4	68.0	71.0	76.8	80.4	79.9	76.0	64.4	58.0	54.4	67.1	97	27	Jan. 26	.....
Jeanerette	53.5	61.5	59.4	67.8	(73.5)	[d]82.9	81.1	80.4	78.2	65.2	(60.0)	56.0	(68.3)	.....	.....	.....	.....
*Lafayette	[b]50.8	61.7	60.0	66.8	72.1	82.0	80.6	79.6	77.0	65.4	59.2	54.7	67.5	99	26	.....	Oct. 20
Lake Charles	45.6	56.2	56.1	66.6	69.2	79.1	78.4	76.2	73.4	62.4	55.7	51.0	64.2	101	20	.....	.....
Lawrence	(53.3)	(63.0)	(60.0)	68.1	[r]74.6	81.4	[d]82.8	[d]81.8	[d]78.0	[d]68.6	[d]58.8	[b]54.6	(68.8)	.....	.....	.....	Nov. 20
Liberty Hill	45.0	54.6	54.7	65.0	70.0	81.6	80.0	79.2	76.6	63.6	55.2	50.9	64.7	103	20	Apr. 6	Oct. 20
Luling	51.0	[r]60.1	58.0	67.9	75.2	81.0	78.9	74.4	76.0	63.7	55.3	54.5	66.3	97	25	.....	Nov. 24
Mandeville	(53.0)	60.6	58.6	67.9	74.0	83.0	(80.5)	(80.5)	[r]71.2	[r]69.0	[r]59.3	54.2	(67.7)	.....	.....	.....	.....
Marksville	48.6	55.8	54.9	68.4	69.6	75.5	79.4	78.6	71.2	63.3	57.4	55.6	65.3	98	22	Apr. 6	Nov. 18
Maurepas	51.6	61.5	58.6	65.0	70.6	79.0	78.2	77.2	74.2	62.0	58.2	54.4	65.9	94	25	.....	.....
*Melville	47.4	60.4	50.9	66.8	73.1	81.3	81.0	80.0	76.2	64.0	57.5	54.2	66.7	96	23	.....	.....
*Minden	45.0	(54.0)	(53.0)	(65.5)	70.4	81.8	80.6	79.2	76.6	63.2	55.2	51.3	64.6	.....	.....	.....	Oct. 29
*Monroe	45.6	55.4	54.4	64.7	70.3	81.5	80.2	80.2	76.0	62.6	55.2	[r]50.6	64.7	99	22	.....	Nov. 17
*Natchitoches	.....	.....	.....	.....	70.3	80.8	80.7	[b]78.0	.....	[b]59.4	55.6	.....	.....	.....	.....	.....	Oct. 20
New Iberia	[m]54.6	[b]61.9	61.1	67.8	72.6	81.4	82.6	80.5	76.4	65.4	59.8	55.6	68.3	96	25	.....	.....
*New Orleans	53.2	62.6	60.6	68.0	73.8	80.8	81.2	81.2	77.9	67.8	59.9	55.9	68.6	94	30	Jan. 14	Nov. 30
North La. Exp. Sta.	50.0	.....	.....	.....	.....	.....	.....	[d]77.7	73.7	61.3	[r]52.6	49.2	.....	.....	.....	.....	.....
Paincourtville	52.7	62.6	60.0	67.0	72.7	80.1	79.3	(80.0)	[d]76.0	64.2	58.4	55.5	(67.4)	.....	.....	.....	.....
Plaquemine	47.5	58.4	.....	63.4	73.6	.....	79.5	.....	76.2	.....	56.7	51.0	.....	.....	.....	.....	.....
Port Eads	53.4	63.6	60.7	69.4	73.8	80.3	81.7	.....	.....	.....	64.6	60.2	.....	.....	.....	Jan. 19	.....

[1] Union Pacific R. R. [2] S. D. Yoxall. [3] E. C. Went. [4] Special cotton region station.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Louisiana—Continued.																	
Shell Beach	(51.0)	59.8	58.2	66.8	73.0	82.2	81.6	80.2	76.6	64.6	57.8	54.9	(67.2)				
*Shreveport	45.3	53.7	53.8	66.0	70.2	81.2	80.5	78.9	75.6	63.2	54.4	51.0	64.5	97	25	Mar. 13	Nov. 17
Sugar Exp. Station	50.4	61.2	59.0	66.2	71.8	81.4	81.3	80.8	76.8	67.3	57.3	56.0	67.5	98	29		Nov. 17
Winnsboro					70.0	80.1	79.7	78.0	74.2	59.9	53.4	50.3					
Maine.																	
Bar Harbor	25.6	25.8	30.2	43.3	49.7	59.4	64.2	64.6	62.0	47.6	38.6	(33.0)	(45.3)				
Belfast (*f*)	22.6	21.7	29.6	42.7	50.5	59.0	63.2	63.8	60.7	45.9	37.0	32.2	44.1	87	— 8		
Calais	22.6	20.7	29.7	42.0	50.6	60.3	(63.5)	65.6	60.2	46.2	37.9	32.5	(44.3)				
Cornish	24.4	23.0	29.0	44.2	54.6	65.4	66.2	69.4	63.4	46.1	35.4	33.0	46.2	92	—10	Apr. 20	Oct. 12
East Machias							61.7	63.0	58.7	44.1	36.9	32.3					
*Eastport	24.2	22.8	29.0	39.6	47.6	55.1	57.8	61.0	58.4	46.2	38.4	33.0	42.8	79	— 8	Apr. 30	Oct. 12
Fairfield	20.5	21.5	28.2	43.0	51.6	63.3	65.9	66.3	60.3	44.3	35.5	29.9	44.2	93	—25		
Farmington	18.6	18.5	29.4	44.6	50.1	65.0	67.4	67.4	62.4	45.3	33.9	29.0	44.3			May 23	
Fort Preble	24.8	28.4	31.9	44.3	50.2	61.4	65.0	66.1	62.4	49.1	40.6	38.1	46.9	95	— 8	May 6	
Kennebec Arsenal	17.6	16.0	20.8	37.0	50.8	62.0	61.1	63.8	60.4	43.4	35.3	32.2	41.7	89	—19	May 10	
Acents Hill	21.1	21.8	27.0	41.6	51.0					44.6	34.8	32.0				May 7	
Lewiston (*a*)	21.7	22.7	28.3	41.7	50.9	63.7	66.8	67.4	62.1	46.0	35.6	31.7	44.9	93	—19		
Mayfield (*a*)	(17.5)	(18.0)	22.0	38.4	49.0	61.6	64.4	63.9	58.4	41.6	30.8		(42.1)				
Orono (*a*)	21.0	22.2	28.9	41.3	51.2	62.5	65.3	66.2	60.8	45.4	37.0	31.6	44.4	93	—17	May 6	Oct. 12
Petit Menan (*a*)	28.6	25.6	30.3	39.7	45.3	53.2	58.8	60.9	57.8	43.7	38.9	33.3	43.0	74	— 5		
*Portland	23.9	25.3	30.4	43.6	49.8	61.3	65.0	66.0	62.8	47.4	38.0	35.6	45.8	95	— 4	May 5	
West Jonesport (*a*)	25.9	27.0	31.0	39.7	46.5	55.4	57.5	59.6	56.3	45.2	38.6	34.0	43.1	82	— 3		
Maryland.																	
[1]Baltimore	37.6	41.4	38.6	56.0	62.2	71.5	71.6	74.3	70.6	54.8	44.2	43.7	55.5	94	16	Apr. 6	Oct. 29
Barron Creek Springs (*a*)	38.4	43.1	39.2	54.2	[6]61.1	70.5	70.8	73.7	69.0	55.4	43.9	42.9	55.2	91	11		Oct. 17
Boettcherville (*a*)											37.7	42.9					
Cumberland[1]	33.2	38.0	35.9	54.2	60.9	70.1	68.7	70.5	67.1	51.5	40.9	39.6	52.6	90	12	Apr. 9	
Cumberland (*a*)[2]	37.0	42.0	40.0	57.7	64.2	74.8	72.8	74.8	70.7	56.1	45.6	44.3	56.7	96	14		
Darlington (*b*)										50.5	41.6	42.7					
Easton											44.3	43.0					
Fallston (*a*)	34.1	38.3	36.2	52.4						52.0		40.8				Apr. 7	
Fort McHenry	37.0	40.6	37.8	54.4	60.4	69.8	70.8	72.8	69.5	54.4	43.8	42.5	54.5	93	14	Apr. 7	
Frederick	35.5	42.0	38.2	57.1	62.0	71.5	71.8	74.4	70.6	54.7	43.6	43.0	55.4	93	14	Apr. 9	Oct. 29
Gaithersburg (*b*)	31.1	35.8	33.9	50.6	57.6	68.4	70.5	74.9	71.1	(54.5)	(44.4)	(43.3)	(60.0)			Apr. 8	
Great Falls (*e*)							71.8	74.6	69.6	53.2	42.2	40.4					
Hagerstown												41.7					
Jewell (*b*)	38.2	(43.0)	(39.0)	57.2	63.6	74.8	74.7	76.1	71.8	54.6	44.0	42.4	(56.6)				
Leonardtown				54.2	60.0	71.2	70.2		71.2		41.9						Nov. 14
McDonogh (*a*)	37.2	39.2	35.8	53.6	61.4	69.7	69.9	(74.0)	67.2	51.7	42.5	43.5	(53.8)			Apr. 7	
Mt. St. Mary's (*a*)	31.9	39.1	37.4	54.5	61.3	(72.0)	72.0	68.1	69.8	52.3	40.4	41.2	(53.3)			Apr. 8	
New Market (*a*)									66.6	50.9	40.5	40.3					
Woodstock (*a*)	37.7	38.7	37.0	53.9	60.6	[9]70.2	[8]69.0	72.2	67.3	51.3	40.6	41.1	53.3	93	10	Apr. 9	Oct. 17
Massachusetts.																	
Adams							65.0	67.8	64.8	49.7	39.1	38.1					
Amherst (*a*)[3]	27.4	29.4	35.9	48.0	55.8	65.2	66.5	68.5	63.6	48.6	38.4	37.2	48.7	91	— 5	May 19	Oct. 12
Amherst (*a*)[4]	26.3	27.5	32.1	46.9	55.2	65.0	66.2	68.3	63.6	47.6	37.0	35.9	47.6	93	— 6		
Amherst[5]	27.6	29.7	33.7	49.4	55.6	66.6	68.2	70.2	65.3	49.9	39.7	38.3	49.5	94	— 6		
Andover (*a*)	26.8	28.5	31.0	47.8	53.6	63.4	66.3	(69.0)	62.8	47.8	37.3	34.9	(47.4)				
Blue Hill (summit)	28.3	29.9	31.7	44.3	54.2	62.8	65.9	68.0	64.3	48.8	38.5	37.7	47.9	94	— 1		Oct. 25
Blue Hill (base)	29.7	31.2	33.6	48.1	55.5	63.5	66.7	69.0	64.8	50.0	39.4	39.2	49.2	93	1		
Blue Hill (valley)	29.3	30.7	33.2	47.5	54.6	63.5	66.9	69.0	64.9	49.0	38.8	38.4	48.8	94	1	May 6	
*Boston	31.1	32.0	33.6	48.0	55.8	65.0	69.0	70.0	66.7	51.6	41.4	40.4	50.4	96	2	May 6	Oct. 25
Cambridge[6]	28.0	29.2	32.2	47.2	54.6	64.2	67.3	69.2	64.6	48.8	40.0	37.0	48.5	93	1	May 6	Oct. 29
Cambridge[7]	29.2	30.2	32.8	48.0	55.8	65.5	(67.3)	70.9	66.2	49.6	38.8	38.0	(49.4)				
Chestnut Hill	29.3	31.4	33.8	49.5	57.2	65.8	68.5	70.2	67.2	51.0	41.4	39.2	50.4	96	0	May 6	Oct. 25
Concord	27.4	27.2	31.4	47.5	55.3	64.0	67.1	69.2	64.2	48.0	36.6	36.2	47.8	96	1	May 18	Oct. 11
Cotuit	31.1	32.4	33.6	43.4	52.6	62.2	66.8	70.8	65.0	50.2	40.9	38.9	49.0	93	6		
Deerfield (*a*)	25.7	27.5	32.2	48.3	57.3	68.1	68.0	70.2	65.2	48.0	36.2	35.0	48.5	97	— 7		
Dudley	28.0	28.9	31.0	46.1	56.0	65.8	67.4	70.4	65.1	48.6	37.0	35.8	48.3	94	— 3	May 7	Oct. 23
Egg Rock (Nahant)							65.0	66.5	63.6	49.9	40.2	38.1					
Fall River (*a*)[8]	32.4	33.4	34.6	46.4	53.7	62.6	65.8	70.6	66.0	50.3	40.7	39.9	49.7	92	6	May 6	Oct. 24
Fitchburg (*a*)[9]	26.6	27.5	30.2	46.1	55.6	65.3	67.6	68.6	63.6	47.4	36.7	35.6	47.6	93	— 4		
Fitchburg[10]	26.7	27.1	31.0	46.9	55.7	65.2	66.6	69.1	65.0	48.7	37.8	36.6	48.0	96	— 4		
Florida[11]	23.4	22.6	26.1	42.4	50.6	59.4	61.1	62.8	59.8	43.7	(32.3)	31.4	(43.0)				Sept. 9
Florida[12]						61.2	62.1	64.4	61.2	49.1	32.3	30.8					
Fort Warren	31.7	32.8	33.6	47.1	54.6	64.0	65.9	67.8	65.6	51.3	39.2	32.2	48.8	89	0	Apr. 9	
Framingham	28.3	31.1	33.0	49.0	57.3	65.4	67.4	69.4	65.5	48.6	39.0	37.8	49.3	96	— 1		
Gilbertville	25.8	28.4	32.2	46.6	52.5	65.6	66.5	69.3	66.3	46.3	35.4	34.2	47.4	98	— 2		
Groton[13]	28.2	29.0	32.8	47.8	56.4	65.4	67.9	69.6	65.0	49.6	39.4	37.0	49.0	94	— 3		
Groton[14]		27.2	31.6														
Heath (*f*)	24.1	24.8	28.1	45.9	56.6	68.4	68.0	67.7	64.3	47.9	35.4	31.4	46.9	93	—12	May 19	
Hoosac Tunnel						65.0	65.4	69.0	67.2	49.7							
Kendall Green	28.8	30.8	33.8	49.0	56.4	66.9	70.5	70.6	65.4	50.0	40.0	38.2	50.1	96	0		
Lake Cochituate	28.0	30.2	32.7	50.8	57.4	(65.0)	68.0	70.8	(64.0)	49.8	39.7	38.2	(50.0)	97	— 5		
Lawrence	26.8	28.5	32.7	48.4	57.0	67.0	70.8	71.6	66.4	49.6	39.8	37.0	49.6	100	— 2		
Leicester	26.6	27.0	30.2	45.2	54.0	61.5	61.9	66.7	64.1	49.1	37.4	35.7	46.6	90	— 4		
Long Plain	30.9	32.0	33.9	46.4	56.3	66.0	68.5	71.4	66.4	51.2	40.2	39.4	50.2	96	3		
Lowell[15]	26.3	28.6	32.2	47.0	55.5	65.5	68.5	70.3	66.2	49.5	38.9	36.6	48.8	92	— 2		
Lowell[16]	26.2	28.6	31.6	46.6	54.4	63.8	67.0	68.9	64.3	48.4	(38.0)	36.6	(47.9)	95	— 4		

[1] E. T. Shriver.
[2] Howard Shriver.
[3] Miss S. C. Snell.
[4] Agricultural experiment station.
[5] Hatch experiment station.
[6] Harvard College.
[7] E. C. Brooks, C. E.
[8] C. V. S. Remington.
[9] Dr. J. Fisher.
[10] Dr. A. P. Mason
[11] Nelson Dupuy.
[12] E. Baker.
[13] C. Woolley.
[14] J. S. Francis.
[15] Prop. locks and canals.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Massachusetts—Cont'd.																	
Lowell[1]	28.0	29.4	32.8	48.3	55.2	66.5	68.6	71.1	66.6	49.3	39.4	36.4	49.3	98	— 3		
Ludlow[2]	25.0	26.8	30.2	45.2	53.4	63.0	64.3	67.3	63.3	46.6	36.3	34.8	46.4	94	— 7	May 20	
Ludlow[3]	27.8	30.4	35.4	48.2	56.0	66.9	66.7										
Lynn	27.4	28.8	32.2	46.0	53.3	63.0	65.4	(69.0)	61.3	47.0	35.3	35.8	(47.0)				
Mansfield	28.9	31.2	32.8	46.6	56.0	65.6	67.6	70.1	63.7	49.4	38.7	37.8	49.0	97	0		
Middleboro	29.2	32.5	33.7	47.0	54.0	60.7	65.7	68.3	64.0	49.4	35.4	37.8	48.1				
Milton	31.4	32.5	33.5	47.0	53.3	62.5	65.1	67.0	62.8	49.0	40.4	38.8	48.6	94	3	May 6	Oct. 17
Monson	26.8	28.0	31.4	47.8	55.1	64.0	66.3	69.0	64.4	48.6	37.6	36.9	48.0	95	— 8		
Nahant	30.6	31.7	(33.0)	(48.0)	51.7	62.8	65.2	65.7	62.6	50.2	c41.8	(37.6	46.7			May 6	Oct. 25
*Nantucket	33.9	33.8	34.9	44.2	51.4	59.8	64.6	68.8	65.4	52.4	43.7	41.4	49.5	84	10	May 28	Nov. 19
New Bedford (a)[4]	30.8	32.6	33.2	45.1	52.2	61.6	64.5	68.6	64.0	49.1	40.9	38.8	48.4	90	4	May 6	Oct. 23
New Bedford[5]	32.2	33.9	35.0	46.8	54.1	63.8	66.3	70.2	65.4	50.2	41.4	41.8	50.1	94	4		
Newburyport[6]	29.0	30.8	32.9	47.5	54.8	64.3	67.1	68.3	64.1	49.2	39.7	37.9	48.8	96	0		
Northampton	28.7	28.5	33.2	48.0	57.0	68.6	70.4	72.6	68.3	50.4	38.0	37.0	50.1	98	0		
North Billerica	28.6	30.9	34.8	48.3	56.2	65.8	69.9	71.3	66.4	49.2	39.4	38.6	50.0	98	0	May 6	Nov. 1
Plymouth (a)	33.6	35.2	35.2	48.6	56.4	65.4	68.7	71.5	(66.0)	51.8	42.4	41.3	(51.3)	94	6		
Princeton							65.0	67.3	63.6	47.8	37.2	35.8					
Provincetown	32.9	33.1	34.7	45.4	53.6	67.6	67.7	70.1	65.9	51.8	42.8	40.4	50.5	92	8		Nov. 15
Royalston (a)	29.4	30.2	32.7	48.2			67.0	69.0	64.1		39.4					Apr. 9	Oct. 24
Savoy							60.0		58.3	41.8	30.6						
Somerset (a)	32.7	34.7	35.8	49.4	58.7	68.6	71.1	74.7	68.7	52.6	42.3	40.7	52.5	99	4	May 6	Oct. 24
Springfield Armory	29.3	29.4	33.1	48.9	57.6	67.1	68.4	70.7	66.8	49.8	39.0	37.4	49.8	95	0	May 6	
Swampscott (a)[7]							65.4										
Swampscott (a)[8]						62.8	64.4	66.7	63.7								
Taunton[9]	31.6	33.4	35.0	47.3	55.7	63.8	66.4	69.8	65.3	(49.6)	40.5	40.0	(49.9)	97	5	May 6	
Taunton (a)[10]	31.5	33.0	35.5	49.1	56.0	65.9	68.5	70.6	65.0	(49.6)	40.2	39.6	(50.4)	98	5		
Taunton[11]	31.0	32.6	35.1	47.6	55.0	63.9	66.6	70.0	65.0	49.6	39.8	41.4	49.8	96	4		
Taunton (a)[12]	29.3	30.8	33.7	47.0	56.1	64.0	66.5	70.3	64.8	50.8	39.1	38.3	49.2	99	2		
*Vineyard Haven	34.8	35.1	35.4	47.9	56.2	65.4	68.1	72.0	67.9	53.0	45.7	43.8	52.1	90	10	Apr. 6	Oct. 24
Wakefield	27.8	29.7	33.4	48.4	55.7	64.5	70.4	72.3	68.2	49.5	39.2	38.6	49.8	96	— 2		
Wellesley	29.4	31.1			55.9	65.6	65.1	68.4			39.0	38.2					
Westboro	30.4	30.8	34.1	49.6	58.7	68.4	70.6	72.8	67.6	51.3	39.8	38.2	51.0	99	— 2	May 19	Oct. 12
Williamstown (a)							66.3	67.6	64.0	45.9	35.7	35.0					Oct. 12
*Woods Holl	32.2	33.2	34.4	44.8	52.4	61.0	65.4	69.3	65.8	52.0	42.9	40.8	49.5	83	9	Apr. 8	Oct. 29
Worcester (a)[13]	27.4	28.6															
Worcester (a)[14]		31.5	30.5	45.8	55.4												
Michigan.																	
Adrian	27.6	30.5	30.6	49.9	55.6	69.1	66.3	69.4	66.8	48.8	34.6	34.6	49.4	99	— 5		
Albion (a)	29.8	31.4	31.3	49.4	56.6	69.6	67.5	69.1	65.9	49.9	36.4	36.0	49.4	94	1	May 26	Oct. 8
Allegan	28.0	30.8	(30.5)	47.7	55.2	68.8	67.4	69.6	67.7	51.2	34.9	36.2	(49.0)				
Alma	24.6	27.3	27.9	46.1	54.3	65.2	64.2	66.4	64.0	47.5	33.6	32.7	46.2	95	— 9		
*Alpena	22.9	22.4	25.4	41.0	48.6	60.3	62.0	63.4	61.8	47.1	33.6	33.5	43.5	91	— 8	May 17	Oct. 6
Ann Arbor (a)	27.4	29.4	30.1	48.3	56.3	68.7	67.9	68.6	65.6	48.5	34.6	33.4	48.2	94	0		
Atlantic	17.2	13.4	17.2	35.4	43.3	55.8	54.5	56.4	55.3	40.4	24.0	26.9	36.6	77	—10		
Ball Mountain	26.3	27.7	27.9	46.5	53.2	66.0	64.2	66.2	63.4	47.4	34.0	32.8	46.3	95	0		
Bangor	29.8	31.5	33.2	48.8	57.3	?75.8	69.5	69.8	67.1	(53.0)	(35.0)	(37.5)	(50.7)				
Bear Lake	22.7	23.8	26.8	42.8	49.6	63.6	62.2	66.3	62.3	48.1	32.7	32.1	44.4	93	— 6		
Bellaire	23.6	22.8	21.2	44.8	50.2	65.3	62.5	64.7	62.8	47.1	30.0	30.2	43.8	95	—16		
Bell Branch (b)	29.5	30.9	29.8	45.3	54.2	69.4	(68.0)	(69.5)	66.6	44.6	(35.0)	32.5	(47.9)				
Benton Harbor	32.4	33.6	33.9	(49.5)	58.2	73.1	71.1	71.1	69.1	54.0	38.4	38.2	(51.9)	100	0		
Benzonia	(24.0)	(24.0)	(27.0)	44.5	50.1	64.8	65.5	65.4	62.3	47.8	32.5	33.6	(45.1)				
Berlin (a)	27.0	28.8	28.3	46.5	(53.0)	68.9	66.5	69.3	66.2	48.8	34.9	33.4	(47.6)	99	— 2		
Berrien Springs[15]	31.0	31.3	33.8	50.8	56.4	71.7	68.2	70.0	67.2	51.7	36.9	36.8	(50.5)	102	6		
Birch Run								66.8	63.6	48.4	34.1	34.3					
Birmingham (a)	29.3	30.6	30.8	48.1	55.6	68.2	66.2	68.4	64.8	49.0	36.1	c34.3	48.4	96	0	May 16	Oct. 11
Bronson	26.0	28.3	27.4	45.0	52.2	67.9	65.7	65.3	61.1	43.8	31.6	32.6	45.6	96	— 2		
Buchanan	28.8	30.8	30.3	48.9	55.3												
Caldwell	21.6	22.6	23.8	43.0	51.0	64.0	62.8	55.2	62.2	47.0	30.8	29.6	43.6	101	—14		Oct. 6
Calumet	19.1	14.4	20.0	39.3	48.7	59.8	58.7	61.6	60.9	43.2	26.7	28.0	40.0	92	— 8		
Cassopolis	30.1	30.9	32.0														
Charlevoix	24.5	20.3	25.0	43.5	52.7	65.2	65.3	67.4	65.2	49.1	34.5	34.3	45.6	93	— 4		
Cheboygan	18.6	16.8	21.6	39.8	48.6	61.5	61.1	62.7	60.1	45.1	30.9	30.7	41.5				
Chelsea	27.1	29.0	30.0														
Clinton	27.5	30.0	30.6	48.3	55.0	66.7	(66.0)	68.9	65.0	47.4	(35.0)	31.8	(47.7)				
Colon (b)	25.9	27.3	27.9	45.8	52.7	66.3	62.8	66.1	63.2	47.5	32.4	32.7	45.9	90	2		
Concord	27.3	29.5	29.3	47.8	54.2	68.3	65.8	67.8	65.4	48.3	34.3	34.3	47.7	98	— 2		
Crystal Falls	20.2	14.9	17.0	40.3	48.5	60.8	60.1	62.4	61.7	43.6	27.6	25.1	40.2	91	—23		
Deerfield	27.0	30.7	29.7	50.7	55.5	70.1	66.4	71.9	68.7	49.0	(35.5)	(35.0)	(49.2)				
*Detroit	28.8	30.6	30.8	48.2	55.7	68.3	67.2	69.6	67.8	50.8	36.5	35.6	49.2	96	2	May 17	Oct. 14
Eden	26.7	29.4	30.2	48.6	56.8	70.0	(66.5)	(67.5)	66.3	50.6	35.2	35.0	(48.6)				
*Escanaba	21.5	17.7	22.6	39.4	48.2	63.3	63.2	65.4	62.4	46.4	31.3	29.7	42.6	91	—22	May 26	
Evart (b)	20.4	21.2	25.3	45.4	44.3	62.8	(63.0)	68.7	57.7	46.9	32.4	32.2	(43.4)				
Fairview	(23.0)	29.7	30.3	45.9	54.4	67.8	66.6	68.7	66.0	50.9	34.7	32.2	(47.5)				
Fitchburg	26.5	28.5	29.0	46.1	54.0	66.9	65.1	67.3	63.7	47.7	34.4	33.3	46.9	99	0		
Flint	26.9	28.5	28.1	46.6	54.0	65.1	64.1	66.6	64.3	47.4	34.1	33.7	46.6	98	— 4		
Fort Brady	16.6	14.1	21.4	37.6	47.7	61.7	59.0	62.2	59.9	44.5	30.4	30.4	40.5	90	—31	May 26	
Fort Mackinac	21.2	18.1	19.6	36.0	43.0	59.7	60.2	61.4	59.8	44.5	33.2	31.9	40.7	83	—11	May 17	
Fort Wayne	27.8	31.0	30.7	48.1	55.0	69.3	67.4	70.0	66.0	49.5	36.0	35.6	48.9	100	1	May 27	
Fremont	25.1	25.2	28.9	46.0	54.1	68.0	65.7	66.3	64.3	47.6	32.3	34.1	46.5	95	— 1		
Gaylord	19.6	19.8	22.2	41.4	50.8	62.5	59.8	61.4	59.1	41.8	(33.5)	(34.0)	(42.2)				
Gladwin	22.7	23.1		47.0	50.5												
*Grand Haven	28.2	28.6	29.8	44.4	51.5	65.8	64.1	66.2	64.3	50.0	35.0	36.2	47.0	88	4	May 17	Oct 9

[1] F. E. Saunders.
[2] W. W. Graves.
[3] J. Haviland.
[4] T. R. Rodman.
[5] New Bedford water-works.
[6] F. V. Pike.
[7] H. Richardson.
[8] W. K. Lewis.
[9] Dr. E. U. Jones.
[10] A. F. Sprague.
[11] Taunton water-works.
[12] C. H. Wilmarth.
[13] J. B. Hall.
[14] Worcester Academy.
[15] F. A. Zerby.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Michigan—Continued.																	
Grand Rapids (*a*)	.....	28.1	.....	.....	.....	.....	.....	.....	.....	.....	36.0	37.4	.....	.....	.....	.....	.....
Grape	30.2	32.9	32.1	49.7	56.4	68.9	66.2	69.0	67.8	51.3	37.8	37.3	50.0	96	3	.....	.....
Grayling	21.2	21.4	22.8	44.3	51.0	64.9	62.5	64.8	58.8	45.6	32.5	31.6	43.4	97	—26	.....	.....
Gulliver Lake	20.1	17.0	.....	.....	46.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hanover	29.8	31.6	30.4	47.9	55.3	67.8	66.3	69.3	65.8	50.2	36.7	35.9	48.9	96	2	.....	.....
Harbor Springs	22.6	20.7	25.0	40.2	49.3	(63.0)	62.7	64.2	60.9	48.3	32.7	33.6	(43.6)	.....	.....	.....	.....
Harrison	22.3	23.6	.....	44.1	.....	.....	.....	.....	.....	.....	.....	31.3	.....	.....	.....	.....	.....
Harrisville	22.8	.....	.....	41.7	.....	.....	.....	63.2	61.2	46.8	32.9	32.6	.....	.....	.....	.....	.....
Hart	28.7	30.1	32.4	50.8	58.4	71.1	67.4	67.6	63.6	51.4	36.3	36.0	49.5	95	2	.....	.....
Hastings	23.1	.....	30.0	47.6	54.8	.....	66.9	68.1	.....	48.4	.....	.....	.....	.....	.....	.....	.....
Hayes	26.5	(26.0)	29.5	49.4	53.3	64.4	66.0	66.4	63.6	46.8	(34.5)	35.5	(46.8)	.....	.....	.....	.....
Highland Station	25.8	28.3	27.6	47.0	55.4	66.8	64.7	67.7	65.2	48.1	34.2	33.6	47.0	97	— 2	.....	.....
Hillman	21.5	17.2	26.3	43.1	51.7	.....	61.0	60.2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hillsdale (*a*)	26.7	28.6	29.5	47.7	57.0	69.5	67.4	70.6	66.9	49.2	34.5	33.8	48.4	97	— 2	.....	.....
Howell	26.0	28.3	28.4	47.1	54.3	67.5	64.7	67.9	64.7	48.4	32.8	33.5	47.0	99	— 8	.....	.....
Hudson	(28.0)	(31.0)	28.7	47.8	52.0	64.3	62.0	63.2	59.6	45.9	33.2	33.6	(45.8)	.....	.....	May 26	Sept. 8
Ionia	25.6	.....	28.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ivan	22.4	22.4	25.3	43.3	52.1	65.9	63.4	65.6	61.9	46.0	30.7	30.9	44.2	103	—15	.....	.....
Jackson	29.2	33.0	33.0	45.3	54.7	68.2	63.6	66.2	62.6	45.9	36.1	(35.5)	(47.8)	.....	.....	May 16	Oct. 11
Jeddo	27.8	26.5	28.1	44.9	53.3	66.9	65.5	66.8	63.7	47.9	34.8	32.6	46.6	96	2	.....	.....
Kalamazoo	29.2	31.2	31.6	49.8	57.0	69.8	67.2	70.0	67.8	51.9	35.7	36.0	49.8	97	— 2	May 6	Oct. 28
*Lansing[1]	26.8	28.7	29.4	48.2	55.7	67.8	65.8	.....	.....	.....	.....	.....	.....	.....	.....	May 27	.....
Lansing (*a*)[2]	27.6	29.0	29.7	47.9	55.8	67.7	66.4	67.6	65.4	48.9	34.7	35.0	48.0	96	— 3	.....	Oct. 1
Lathrop (*a*)	19.8	15.7	(22.0)	39.5	51.4	64.1	62.8	63.9	62.0	44.0	28.7	28.4	(41.9)	.....	.....	.....	.....
McMillan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25.0	.....	.....	.....	.....	.....
Madison	27.4	30.5	31.0	49.4	55.8	68.7	66.5	68.3	65.8	48.8	34.6	33.8	48.4	94	1	.....	.....
*Manistee	26.4	25.0	28.2	43.4	50.1	64.1	62.6	65.2	63.4	48.8	33.2	34.6	45.4	91	2	May 17	Oct. 5
*Marquette	22.0	16.9	21.8	39.6	49.0	59.1	59.7	61.8	63.2	46.0	29.3	30.0	41.5	94	—12	May 26	Oct. 11
Marshall (*a*)	28.0	29.3	30.0	48.3	55.7	69.0	66.8	69.2	65.1	48.1	34.2	34.6	48.2	100	— 3	May 27	Oct. 8
May	25.7	26.9	27.2	47.0	54.6	67.7	65.2	68.1	65.4	48.9	34.3	33.3	47.0	97	0	.....	.....
Mio	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	31.5	.....	.....	.....	.....	.....
Montague	25.7	26.6	28.6	44.2	52.3	65.7	63.4	65.6	63.3	47.6	33.4	34.7	45.9	88	2	.....	.....
Mottville	28.2	30.6	30.4	49.5	55.4	69.8	66.8	70.0	68.3	50.5	35.0	35.2	49.1	101	— 5	May 7	Oct. 8
Noble (*b*)	28.9	29.6	29.2	48.0	57.2	70.2	(70.5)	69.4	64.2	45.9	33.5	32.4	(48.2)	.....	.....	.....	.....
North Marshall	24.4	25.5	26.8	45.7	52.4	65.1	62.4	(68.5)	64.6	47.5	31.8	33.6	(45.7)	.....	.....	.....	.....
Northport	25.5	22.2	25.6	42.2	50.2	62.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Olivet	26.5	28.3	28.1	45.8	53.1	64.8	63.2	65.3	63.6	47.8	32.0	31.9	45.9	95	— 3	.....	.....
Otsego	26.3	29.1	29.7	50.0	55.7	70.6	67.2	69.1	66.1	49.9	(35.0)	(36.0)	(48.7)	.....	.....	.....	.....
Ovid	25.8	27.8	28.2	47.0	55.0	66.8	64.7	67.4	63.3	47.8	33.4	33.0	46.7	97	1	.....	.....
Paw Paw	28.5	30.6	30.6	48.5	54.3	69.4	66.5	68.8	66.7	50.4	34.2	35.4	48.7	100	—10	.....	.....
Pontiac	29.7	30.4	30.4	47.7	55.5	67.0	66.3	68.1	65.2	49.4	37.2	37.0	48.7	92	4	.....	.....
*Port Huron	27.5	28.9	28.3	44.4	51.1	64.5	64.6	67.6	65.0	49.4	36.0	34.7	46.8	99	2	May 17	Oct. 12
Pulaski	27.5	28.8	29.2	45.7	53.5	68.1	(66.0)	66.2	62.8	48.1	34.7	33.3	(47.0)	.....	.....	.....	.....
Rawsonville	28.4	31.0	30.2	50.0	56.3	67.2	(65.0)	70.2	67.9	49.8	37.0	35.7	(49.2)	.....	.....	.....	.....
Rockland (*a*)	20.2	15.9	22.5	42.8	52.7	62.4	61.6	63.4	63.3	[3]42.9	[3]27.8	[3]28.4	42.0	94	—18	.....	.....
Romeo	26.3	29.1	.....	47.5	55.9	69.2	.....	.....	.....	.....	.....	33.6	.....	.....	.....	.....	.....
Roscommon	20.8	21.5	23.5	43.8	51.1	62.5	61.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saint Ignace	19.8	16.4	22.3	37.8	47.6	60.3	60.4	62.6	59.4	44.7	31.6	31.6	41.2	87	—18	.....	.....
Saint Johns	26.7	28.9	29.1	46.0	56.0	68.6	66.9	(67.0)	66.2	49.5	36.0	35.2	(48.0)	.....	.....	.....	.....
Sand Beach	26.8	26.5	26.0	41.8	48.8	60.5	62.7	64.7	61.6	45.6	32.4	29.3	43.9	92	— 1	.....	.....
*Sault de Ste. Marie	16.4	14.6	21.6	37.9	47.4	61.0	58.0	62.2	59.2	44.0	29.8	29.8	40.2	89	—25	May 26	Sept. 5
Standish	22.5	24.9	26.4	50.7	.....	.....	.....	.....	.....	.....	.....	36.9	.....	.....	.....	.....	.....
Stanton	21.0	25.6	26.3	41.6	51.5	63.2	65.0	67.0	.....	.....	.....	.....	.....	.....	.....	.....	.....
Thornville (*a*)	28.4	29.8	30.0	48.3	56.1	68.7	67.4	68.8	65.3	49.7	36.6	35.4	48.7	98	— 1	May 17	Oct. 12
Vandalia	29.1	31.1	31.0	47.8	55.6	68.8	66.7	69.3	67.3	50.6	35.3	35.4	49.0	96	0	.....	.....
Washington	28.2	29.8	30.8	47.2	54.5	66.9	(64.5)	67.4	65.4	46.9	35.0	32.7	(47.4)	.....	.....	.....	.....
Weldon Creek	24.0	24.5	27.3	46.6	52.1	62.7	60.0	64.4	62.3	48.1	33.1	34.2	44.9	95	—9	.....	.....
West Branch	23.0	23.4	25.5	44.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
White Pigeon (*b*)	26.4	27.6	29.0	46.4	53.6	66.9	(70.5)	68.6	66.4	48.6	31.6	32.4	(47.3)	.....	.....	.....	.....
Williamston	30.5	32.0	33.2	52.9	59.1	69.0	68.9	69.6	68.3	50.4	36.8	37.7	50.7	95	2	.....	.....
Ypsilanti	25.6	27.4	27.3	45.2	51.4	64.4	62.5	64.2	61.6	44.5	32.0	31.2	44.9	91	— 2	May 27	Oct. 6
Minnesota.																	
Alma City (*a*)	20.4	9.7	21.9	47.7	57.3	65.0	65.4	66.2	65.3	46.2	25.6	27.6	43.2	92	—30	.....	.....
Crookston (*a*)	12.8	3.2	15.1	47.4	54.4	63.4	64.6	65.3	59.9	42.3	20.3	16.1	38.7	98	—31	.....	.....
*Duluth	20.5	12.2	19.5	39.3	48.6	53.8	61.3	62.3	61.6	46.4	25.2	26.9	39.8	90	—22	May 5	.....
Faribault	21.6	12.1	21.8	48.0	57.8	66.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 17	.....
Farmington (*a*)	21.4	10.6	24.6	48.2	57.9	66.4	66.2	67.7	67.1	48.0	26.8	28.1	44.4	96	—25	.....	.....
Fort Snelling	19.6	8.7	21.4	47.5	57.6	65.4	64.5	66.2	66.4	46.0	23.8	29.4	43.0	98	—25	May 6	.....
Grand Meadow (*a*)	20.2	14.8	24.3	47.3	52.8	64.7	66.0	66.2	62.8	44.8	23.8	(27.0)	(42.9)	.....	.....	.....	.....
Granite Falls	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21.8	25.6	.....	.....	.....	.....	.....
Kinbrae (*a*)	(21.0)	8.5	18.4	46.2	58.0	65.0	67.3	67.6	65.8	46.6	24.1	25.3	(42.8)	.....	.....	.....	.....
Lake Winnibigoshish (*a*)	13.3	5.6	18.9	43.6	53.0	60.6	61.7	62.0	60.5	42.9	(20.5)	21.2	(38.6)	.....	.....	.....	.....
Leech Lake (*a*)	12.4	5.9	18.4	43.4	53.2	61.3	61.0	61.7	60.6	42.7	20.9	21.7	38.6	89	—35	.....	.....
Le Sueur	[3]20.6	9.6	[3]23.2	[3]48.4	[3]61.4	[3]67.1	[3]68.7	69.0	[3]67.5	[3]47.0	(27.5)	(28.0)	(44.8)	.....	.....	May 6	.....
Mankato (*a*)	22.4	12.4	24.9	49.5	58.8	(66.0)	(66.5)	(67.5)	66.6	47.6	28.1	30.7	(45.1)	.....	.....	.....	.....
*Minneapolis[1]	24.2	13.4	25.0	49.5	58.6	66.1	66.4	68.3	67.6	50.0	28.6	30.0	45.6	95	—22	May 5	.....
Minneapolis (*a*)[3]	20.7	10.8	23.4	47.8	58.8	65.2	66.1	67.4	65.8	46.7	25.5	27.2	43.8	98	—21	.....	.....
Montevideo	21.0	8.0	20.6	48.6	57.5	65.4	66.8	67.3	68.4	49.2	24.7	27.2	43.7	101	—27	May 10	.....
*Moorhead	14.1	2.1	13.7	46.9	54.2	62.2	63.4	64.9	62.0	45.0	20.4	18.2	38.9	96	—35	May 25	.....
Morris (*a*)	18.2	6.4	17.8	47.0	57.8	64.5	65.7	66.8	64.7	45.4	21.8	22.9	41.6	96	—28	May 5	.....
Northfield (*a*)	21.6	11.6	23.0	48.2	57.4	64.7	63.9	66.8	65.7	46.9	26.0	28.4	43.7	95	—27	.....	.....
Pine River (*a*)	11.7	3.0	16.6	43.8	54.5	62.7	64.6	64.3	62.8	43.6	20.2	21.1	39.1	87	—44	.....	.....
Pokegama Falls	13.4	5.5	23.1	.....	50.8	60.5	61.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Red Wing[1]	21.6	11.8	23.4	48.2	58.2	66.0	65.9	67.6	67.0	48.3	27.2	29.0	44.5	96	—28	May 6	.....
Red Wing[4]	(22.0)	(8.0)	24.8	49.5	58.4	66.2	65.4	67.2	66.3	43.6	27.8	29.5	(44.1)	.....	.....	.....	.....

[1] Weather Bureau. [2] Dr. H. B. Baker. [3] Wm. Cheney. [4] Prof. O. Whitman.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Minnesota—Continued.																	
Rolling Green (*a*)	18.5	6.7	20.2	47.3	[k]56.3	(65.5)	66.9	68.1	(66.0)	(47.0)	25.2	25.5	(42.8)				
Saint Charles (*a*)	24.0	14.9	24.4	48.5	59.0	65.9	65.9	64.3	61.6	43.0	25.6	28.1	43.8	95	—24	May 5	
*Saint Paul	21.2	11.2	23.5	48.2	57.7	65.5	65.7	67.5	65.6	48.2	25.8	27.3	44.0	95	—25	May 5	
*Saint Vincent	11.0	—2.6	11.6	44.1	51.4	61.4	61.0	62.2	58.2	43.0	18.7	13.2	36.1	92	—34	May 26	
Sheldon (*b*)	20.6	12.2	24.8	47.9	57.8	68.5	67.6		63.0							May 5	
Mississippi.																	
*Aberdeen					66.2	76.4	75.5	74.8	70.1	57.2	50.9						Oct. 15
Agricultural College	45.3	53.1	53.2	65.2	70.3	79.9	78.5	78.9	76.1	63.1	52.2	50.8	63.9	97	19	Apr. 5	Nov. 13
*Batesville	43.6	49.6	50.6	64.9	68.2	83.7	77.7	76.9	73.0	59.8	53.0	49.4	62.5	100	16		Oct. 23
Bay St. Louis	52.2	62.6	[e]61.2	68.8	73.8	82.7	(80.0)	(79.5)	78.6	65.9	58.8	53.2	(68.1)				
Booneville	[f]42.6	50.4	[g]49.0	64.6	70.2	[h]81.0	(78.0)	[e]78.0	74.5	60.0	51.0	[h]46.9	(62.2)			Apr. 5	Nov. 16
*Brookhaven	46.8	58.8	57.2	63.2	68.6	78.8	76.5	78.4	76.4	62.8	56.2	52.0	64.6	100	19		Oct. 20
Canton	45.4	56.4	55.0	64.3	69.5	80.2	79.1	78.3	75.5	61.2	53.8	51.3	64.2	96	23	Apr. 5	Nov. 18
*Columbus[i]					72.4	83.3	81.0	81.4	76.4	61.2	53.4						Oct. 20
*Corinth					70.2	78.5	77.2	76.0	72.0	59.7	50.2						Oct. 23
Edwards	46.8	57.6	56.0	65.2	71.3	82.8	81.6	79.6	76.9	62.0	54.8	52.4	65.6	100	23		Nov. 17
Enterprise	46.9	55.7	55.1	64.9	70.4	82.0	78.6	78.4	73.8	58.2	[l]55.2	[m]52.6	64.3	106	21	Apr. 5	Oct. 18
Fayette	48.3	58.7	58.4	65.8	71.6	81.2	79.8	78.9	76.5	64.2	56.8	54.0	66.2	97	23		Nov. 18
Greenville	45.4	53.4	53.8	66.8	71.4	82.0	79.2	78.3	75.0	61.8	52.6	50.3	64.2	96	22	Mar. 15	Nov. 17
Hattiesburg	52.1	63.2	61.7	67.4	73.6	82.2	78.2	83.0	77.8	65.1	58.8	57.3	68.4	100	26		Nov. 18
*Hazlehurst					70.6	80.0	78.8	78.6	76.1	61.1	55.6						Oct. 20
*Hernando					69.3	79.8	78.6	77.8	74.8	61.9	51.0						Oct. 29
Holly Springs[2]	41.0	49.1	49.0	63.2	69.8	81.1	79.4	77.2	74.6	59.8	(51.0)	(49.0)	(62.0)				
*Holly Springs[1]					68.1	79.2	77.3	75.6	73.2	59.7	49.2						Nov. 13
*Jackson					70.5	82.4	80.8	79.8	76.5	61.4	57.2						Oct. 23
Kosciusko	44.6	54.9	52.2	63.4	68.4	79.2	76.4	76.8	74.2	60.6	52.8	50.4	62.8	95	19	Apr. 6	Oct. 23
*Lake					[h]68.0	79.8	79.3	77.3	73.2	58.8							Oct. 18
Logtown	51.4	63.0	60.4	66.7	72.2	80.0	80.2	79.6	76.0	64.0	58.9	54.6	67.2	93	27	Feb. 27	
Louisville	44.6	56.6	54.4	64.4	69.0	79.8	77.9	77.8	75.5	62.0	54.0	51.3	63.9	104	19	Apr. 6	Oct. 16
*Macon					70.0	78.9	78.2	79.6	75.1	63.6	53.7						Nov. 19
Mayersville						81.6	81.4	79.6				55.5					
*Meridian	45.8	59.3	54.5	63.8	68.8	79.4	77.6	78.0	73.6	59.6	52.1	50.4	63.3	98	20	Apr. 6	Oct. 16
Moss Point	50.6	61.8	60.2	68.0	74.2	81.8										Apr. 4	
*Natchez					71.8	81.3	81.4	81.2	76.9	63.8	56.5						Nov. 18
*Okolona					70.0	81.3	78.7	78.3	73.8	60.7	52.0	47.8					Oct. 17
Palo Alto	46.6	51.9	(54.0)	(65.0)	(70.0)	79.0	76.9	77.0	73.6	60.1	50.8	48.1	(62.8)				Nov. 17
Pontotoc	42.8	50.4	50.1	62.9	61.8	76.4	74.5	73.4	71.2	57.2	49.4	(49.0)	(59.9)				Oct. 20
*Port Gibson					70.0	80.2	79.2	77.9	75.2	60.7	55.4	52.5					Nov. 18
Rienzi (*a*)							77.8	77.8	74.6	60.8	49.7	[k]47.8					
Ship Island	54.0	[e]62.8	61.8	69.6	76.6	83.4	83.6	83.4	78.5	68.8	61.0	55.6	69.9	96	29		Nov. 18
Summit	[d]45.6	58.8	[e]57.9							[e]64.0	[d]56.3	[e]54.2					Nov. 18
*University	42.5	50.4	49.6	62.8	67.0	78.4	76.5	75.8	74.7	60.7	50.6	48.8	61.5	97	16	Apr. 5	Oct. 28
Vaiden (*a*)	*42.8*	*53.6*	*53.4*	*63.5*	*69.8*	*80.4*	*79.0*	*78.7*	*73.2*	*57.1*	*51.8*	*48.8*	*62.7*	*104*	*17*	*Apr. 6*	*Oct. 16*
*Vicksburg	47.2	56.6	55.4	66.0	71.2	81.4	79.3	78.4	76.6	63.4	54.6	53.1	65.3	98	22	Apr. 6	Oct. 19
Washington	46.5	57.6	56.9	[d]66.3	70.6	[m]79.5	(80.5)	(79.0)	[e]77.0	61.9	55.0	[e]53.5	(65.4)			Apr. 5	Nov. 17
Water Valley (*a*)	43.0	51.9	51.5	64.0	69.5	79.6	75.2	75.3	72.9	58.9	50.0	50.0	61.8	105	16	Apr. 4	
Way esboro (*a*)[3]	46.8	54.4	53.2	63.3	69.0	81.3	77.9	77.6	74.0	60.2	52.0	49.9	63.3	99	21	Apr. 6	Oct. 20
*Waynesboro[1]					71.1	82.2	80.2	80.8	75.4	[h]62.4	55.1						Oct. 21
West Point (*a*)	44.6	55.8	52.6	65.2	71.6		79.4	79.2								Apr. 5	
Missouri.																	
Adrian	31.0	28.4	32.6	51.5	57.2	67.4	68.4	68.6	65.6	50.8	35.2	34.4	49.2	98	—10	May 26	
Appleton City	35.6	34.5	34.7	57.6	63.2	(73.5)	74.1	73.6	70.0	55.8	41.1	[e]40.4	(54.7)			Apr. 5	
Austin (*a*)	34.9	32.8	36.8	58.0	62.1	74.4	73.6	74.2	73.6	57.3	41.0	40.8	55.0	98	2	Apr. 5	
Bethany	29.2	26.9															
Brunswick (*a*)	33.2	31.0	35.0	56.4	61.6	72.8	72.0	73.0	70.7	55.6	36.7	39.3	53.3	96	— 8	Apr. 7	
California		35.0	40.5	53.6	63.1	80.5	75.1										
Carrollton	32.3	30.9	33.2	55.2	60.8	71.3	71.7	72.3	70.3	54.2	37.4	37.6	52.3	94	— 3	Apr. 6	
Carthage (*a*)	35.9	35.5	39.9	56.9	62.6	73.5	72.6	74.8	70.0	56.4	41.6	41.6	55.1	96	5		
Cassville	35.6	37.3	[d]40.2														
Chillicothe[4]						[n]76.1	73.6	74.0	72.8	[e]66.2	46.0	38.0					
Chillicothe[5]							72.3	[e]61.0	[e]60.2	59.6	40.5	41.2					
*Columbia	35.8	34.6	37.0	57.3	61.5	74.3	72.4	73.1	71.6	56.1	41.1	41.6	54.7	96	— 2	May 6	Oct. 15
Conception (*a*)	28.8	26.0	31.0	54.3	59.4	69.4	70.2	70.6	69.7	53.0	36.5	[e]37.8	50.6	89	—12		
Dadeville			45.6					79.8	74.0								Nov. 16
Darksville	38.2	38.3	38.4	58.6	62.8	72.4	71.6									May 6	
East Lynne (*a*)					62.6	75.3	73.9	74.2	73.0	54.8	39.6	[e]39.6					
Eight Mile (*a*)				57.2	60.8	72.3	72.3	72.4	69.4	[d]54.6	39.7	39.8					
Eldon (*a*)	36.6	35.7	37.0	58.0	63.1	74.4	75.2	76.2	73.2	57.4	41.3	42.5	55.9	102	2	May 6	
Excelsior Springs (*a*)	29.7	27.5	32.2	53.0	58.6	70.5	69.4	70.1	68.2	48.9	33.6	35.1	49.7	95	—11	May 11	
Fayette	34.2	31.6	34.9	56.1	61.2	72.4	71.5	73.2	71.2	57.1	39.4	40.0	53.6	98	— 4	May 16	Oct. 15
Fox Creek (*a*)	36.3	35.5	38.3	60.2	64.3	76.3	75.1	72.0	71.0	54.2	39.0	42.0	55.4	92	2		
Glasgow (*a*)	31.4	31.2	34.7	55.8	60.8	71.0	[e]70.8	72.2	70.1	54.9	38.3	39.2	52.8	95	2		Oct. 15
Gordonville (*a*)	37.0	41.5	42.8	59.4	63.0	75.5	72.7	73.4	70.8	56.6	44.5	44.8	56.8	92	10		
Grand Pass (*a*)	30.6	27.0	31.3	53.3	57.4											Apr. 7	
Harris							73.6	74.4	[d]66.1	[e]53.0	[e]36.8	[e]37.1					
Harrisonville	32.5	23.1	34.4	55.5	61.7	73.6	72.1	68.0	63.8	68.6	36.0	(40.5)	(50.8)			Apr. 5	Oct. 5
Hermann (*a*)	36.2	35.3	40.0	60.8	(63.0)	77.0	76.8	75.0	70.8	55.7	39.8	41.2	(54.3)			Apr. 4	
Jefferson Barracks	37.0	37.4	37.8	57.8	62.4	74.8	73.2	73.8	71.3	57.0	42.7	42.5	55.6	99	5		
Jefferson City[6]	39.8		38.7														
Jefferson City[7]					63.8	75.0	73.4	74.8	71.2	54.6	39.3	40.6					Oct. 14
*Kansas City[8]	34.0	30.2	33.9	56.9	60.8	71.4	72.4	73.5	71.6	56.7	39.0	39.6	53.3	95	— 4	Apr. 5	Oct. 7
Kansas City[9]	33.6	30.4	34.9	57.5	62.3	74.7	73.4	74.2	71.2	55.2	(39.0)	(39.6)	(53.8)				

[1] Special cotton region station. [2] Dr. F. B. Shuford. [3] W. S. Davis. [4] N. J. Swetland & Co. [5] W. C. Wood. [6] A. E. Woodward and J. C. Halligan. [7] C. B. Lane. [8] Weather Bureau. [9] S. J. Spurgeon.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual Mean.	Annual Extremes. Max.	Annual Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Missouri—Continued.																	
Kidder[1]							[c]71.1	72.8	[s]73.8								
Lamonte (*a*)[2]	33.7	29.6	35.4														
Lebanon	38.0	40.4	41.3	58.2	64.2	74.4	72.8	75.2	72.9	58.7	42.6	44.0	56.9	94	6	Apr. 5	
Liberty	32.4	28.2	33.1	55.6	61.3	73.0	(73.5)	73.4	69.8	54.0	37.4	37.1	(52.4)			Apr. 13	
Marble Hill									73.0	52.8	42.6	42.2					
Marshall[3]	33.8	31.0	34.2	(57.0)	(61.5)	(73.5)	72.8	[c]72.8	70.6	54.0	42.0	[b]29.0	(52.7)			Apr. 7	
Mine La Motte	(37.5)	38.0	40.2	57.2	59.6	71.4	70.2	73.4	70.0	55.8	44.3	45.8	(55.3)				
New Haven	34.7	34.8	37.9	58.0	63.2	75.6	75.6	75.1	71.8	53.6	39.0	39.7	54.9	102	— 6	Apr. 5	
Oak Ridge (*d*)	41.1	43.7	44.5	63.5	68.5	79.7	78.5	79.2	69.9	[c]58.2	44.8	46.2	59.8	104	16	Apr. 4	
Oregon (*a*)[4]	29.6	26.4	32.1	55.5	60.2	69.9	71.4	72.0	70.3	54.5	36.8	37.2	51.3	94	— 8	May 6	
Oregon (*a*)[5]	(29.6)	26.6	32.7	55.9	60.2	70.2	70.7	70.8	69.4	54.2	36.2	36.8	(51.1)				
Pickering (*a*)	21.8	19.7	25.6	46.9	51.6	62.8	63.8	64.3	61.2	48.1	31.3	31.4	44.1			May 16	
Platte River (*c*)	31.1	28.7	33.6	56.1	60.9	72.3	72.5	73.1	70.7	53.6	36.6	33.2	51.9	94	— 6	May 1	
Princeton (*a*)	30.3	27.7	32.5	54.2	60.6	72.0	71.9	71.8	70.8	55.1	36.2	37.3	51.7	97	— 8	May 6	
St. Charles (*a*)[6]	35.0	34.4	36.9	55.1	58.9	(76.0)	(75.0)	73.6	71.8	56.4	39.0	42.5	(54.6)				
*St. Louis[7]	36.6	35.9	39.0	58.7	63.6	75.7	74.9	74.8	74.0	57.6	41.2	42.8	56.2	96	4	Apr. 7	Oct. 15
St. Louis[8]	35.0	34.2	37.6	56.2	60.4	73.3	71.4	72.1	69.6	54.7	40.6	41.9	53.9	95	4		
Sarcoxie	33.9	37.0	39.8	58.1	61.6	73.6	72.6	73.4	70.0	56.8	(43.0)	(42.5)	(55.2)			Apr. 5	
Sedalia	34.5	32.7	36.1	57.3	62.3	71.6	71.2	72.6	69.6	55.1	38.5	39.1	53.4	96	— 5	Apr. 5	
*Springfield	36.2	35.7	39.5	57.7	62.4	73.0	72.2	73.2	71.4	57.4	41.2	42.1	55.2	94	6	Apr. 5	Oct. 5
Steelville (*a*)	38.9	36.0	39.2														
Stellada	35.8	34.8	37.8	60.6	63.0	72.7	71.9	[c]64.2	70.9	57.5	41.4	41.1	54.3	96	2	Apr. 5	
Warrensburg (*a*)	34.1	32.2	35.8	56.6	60.9	[c]72.6	71.9	72.9	71.0	56.2	[d]40.3	39.7	53.7	96	— 2		
Warrenton	[c]33.6	[c]30.8	36.2	56.7	[c]61.6	[b]73.0	72.9	[s]73.7	(77.5)	54.0	38.9	[b]38.6	(53.5)			May 6	
Withers Mills	35.6	33.4	36.2	57.1													
Montana.																	
Blackfeet Agency	30.6	5.0	24.4														
Boulder Valley								[d]65.0	52.7	42.8	31.3	22.4					Sep. 24
Camp Poplar River	22.0	2.8	20.1	49.2	55.0	60.0	66.9	66.8	60.4	46.7	22.4	17.7	40.8	99	—36	May 4	
Castle						48.2	57.9										
Choteau	32.8	6.2	24.0	46.0	53.0	55.7	63.8	61.9	55.8	47.2	31.4	29.7	42.3	90	—26	May 23	Sep. 24
Deer Lodge												25.0					
*Fort Assiniboine[7]	26.6	—0.2	20.2	47.9	52.5	58.0	66.4	64.4	57.6	47.2	28.9	27.6	41.4	92	—34	May 20	Sep. 28
Fort Assiniboine[9]	27.0	8.5	22.0	49.8	54.9	59.8	67.8	64.8	58.4	47.7	29.6	29.2	43.3	92	—33		
*Fort Custer[7]	28.6	6.7	25.0	48.6	56.4	60.8	66.4									May 4	
Fort Custer[9]	28.6	7.5	25.0	48.4	56.5	60.8	(66.4)	73.8	63.2	55.0	35.4	29.4	(45.8)				
Fort Keogh	25.0	5.0	15.8	48.4	56.7	63.2	69.9	71.2	63.4	45.4	26.8	24.4	43.0	103	—37	May 20	
Fort Missoula	29.4	15.9	27.2	45.8	55.4	55.3	64.6	64.8	55.4	45.8	33.8	24.8	43.2	96	—22	June 10	
Fort Shaw	33.8	7.8	28.0	49.7	53.4	57.0	[k]64.2									May 21	
Glendive	26.4	9.0	23.0	51.9	60.2	64.1	71.0	72.2	64.2	47.4	28.4	26.0	45.3	108	—34	May 3	Oct. 2
Great Falls												38.4					
*Helena	27.5	6.4	23.2	47.4	54.9	55.2	65.8	66.5	57.6	47.8	34.2	28.5	42.9	89	—24	May 3	Sep. 30
Martinsdale (*a*)	27.7	11.0	24.7	45.9	53.3	55.2	65.2	65.2	54.9	(45.5)	31.6	26.0	(42.2)	95	—34	May 20	Sep. 2
*Miles City										48.4	29.9	28.9					
Powder River	25.5	6.6	23.2	47.7	55.1						33.5	24.2				May 21	
Virginia City	23.0	16.1	23.3	41.6	51.8	52.4	59.9	66.6	53.4	45.2	32.0	[b]22.0	40.6	87	—23	June 23	Sep. 24
Nebraska.																	
Agee (*b*)											27.1	28.0					
Alliance	25.0	12.4	23.6	45.9	52.6	64.3	66.1	67.9	(64.5)	47.0	33.0	29.3	(44.3)			May 10	
Ansley (*a*)	27.6	20.9	28.3	52.6	60.1	65.7	71.5	71.3	66.0	49.4	33.7	31.8	48.3	105	—23	May 26	
Arborville (*a*)			[c]31.0	52.0	59.2												
Ashland (*a*)			29.9		60.9	70.2	70.3	70.7	68.8								
Auburn (*a*)[10]	29.8	26.4	33.2	56.7	61.5	71.2	74.0	74.9	73.7	57.0	37.7	36.7	52.7				
Auburn (*a*)[11]			32.8	55.7													
Bassett (*a*)	25.0	14.5	21.5	51.5	59.2	65.8	69.4	68.8	65.1	50.5	32.2	29.6	46.1	100	—20		
Beatrice	(31.0)	(25.0)	(31.0)	54.1	59.3	69.4	71.5	71.2	68.9	50.5	36.6	34.6	(50.3)				
Beaver City (*f*)	[c]28.3	25.2	32.8	52.7	59.7	67.4	74.2	75.8	71.1	55.6	(37.0)	(29.0)	(50.7)			Apr. 5	
Burwell (*a*)	25.4	13.2	25.1	51.6	60.4	65.4	70.4	69.9	64.2	47.8	34.2	31.3	46.6	96	—14		
Creighton (*a*)	26.1	11.2	23.1	48.5	56.8	64.1	66.7	66.8	64.1	45.3	29.0	29.2	42.6	95	—22	Apr. 15	
*Crete[7]	29.4	21.6	30.0	54.5	59.7	69.2	71.1	71.4	69.5	52.2	36.8	34.4	50.0	94	—12	Apr. 11	Oct. 7
Crete (*a*)[12]	28.0	19.9	28.6	53.3	58.5	67.6	70.3	69.8	68.4	50.6	35.4	33.3	48.6	94	—12		
Culbertson (*d*)[13]					[k]65.3		77.3	[s]78.1	[m]66.8								
David City (*c*)	27.8	12.8	22.8	48.5	55.5	64.9	68.0	67.4	64.0	45.7	30.3	28.8	44.7	90	—17		
De Soto (*a*)	28.7	17.3	28.4	53.3	59.5	68.8	69.9	70.0	68.5	49.8	32.8	32.0	48.2	96	—11	Apr. 7	
Dunning (*a*)	29.1	17.8	(25.0)	50.4	60.1	65.2	67.9	[d]69.4	67.9	53.5	34.9	[c]29.8	(47.6)				
Ericson (*a*)	27.6	14.0	25.1	51.6	60.3	66.6	71.5	72.0	67.8	49.0	31.7	30.1	47.3	102	—12		
Ewing (*a*)									67.8	48.5	31.0	29.2					
Fairfield (*a*)	29.1	(29.5)	30.2	52.8	56.0	(67.5)	71.7	71.4	67.7	49.3	35.4	36.5	(49.6)				
Fort Niobrara	24.8	17.9	20.7	46.4	54.8	61.8	65.6	66.9	63.0	46.0	30.3	27.4	44.0	101	—38	May 26	
Fort Omaha	(29.5)	(19.5)	31.3	54.0	61.2	70.4	72.3	73.5	70.4	52.8	35.5	32.6	(50.2)			Apr. 7	
Fort Robinson	28.7	15.9	24.8	47.8	56.6	62.5	66.9	70.0	67.6	48.8	33.5	(28.0)	(45.9)	96	—15	May 4	
Fort Sidney	24.3	19.0	26.4	48.0	57.1	63.5	68.8	69.0	64.6	53.8	(29.5)	29.2	(46.1)	96	—11	Apr. 29	
Franklin	28.0	23.4	31.4	53.1	60.8	67.5	71.1	71.8	66.8	51.2	35.0	34.9	49.6	100	— 8		
Fremont (*a*)	29.6	16.7	29.0	53.8	59.8	69.0	70.8	71.2	68.5	50.8	34.5	33.0	48.9	93	—14	Apr. 5	
Genoa (*a*)	27.5	13.2	24.6	51.8	59.0	66.7	69.8	69.8	67.0	49.6	32.8	30.0	46.8	93	—16	Apr. 14	
Gering (*a*)	28.0	19.7	26.6	47.8	56.3	62.3	68.8	70.3	65.5	51.6	35.1	31.3	46.9	97	—16	May 3	
Grand Island	22.8	11.7	22.9	47.1	58.0	(65.5)	70.2	66.0	[m]71.3	54.1	36.0	33.2	(46.6)				
Hartington								69.5	66.0	49.1	27.8	28.8					Sep. 29
Harvard (*a*)	27.0	16.7	27.2	50.7	57.7	[c]63.6	68.8	68.0	(68.5)	48.8	33.8	30.3	(46.3)	91	—13	Apr. 7	
Hay Springs (*a*)	25.2	11.4	21.6	45.7	55.4	[c]60.2	66.5	68.1	61.4	45.8	30.7	26.7	43.2	97	—21	May 11	
Hebron	30.7	23.5	31.0	54.4	60.9	(68.0)	72.0	72.3	68.4	(53.0)	37.3	34.6	(50.5)				

[1] Mrs. J. E. Emerson.
[2] J. S. Slavin.
[3] W. H. Black.
[4] Wm. Kaucher.
[5] Sam M. Ruley.
[6] L. C. Saeger.
[7] Weather Bureau.
[8] Fred W. Duenckel.
[9] Post Hospital.
[10] G. D. Carrington.
[11] C. A. Wood.
[12] C. E. Chadsey and Claud Rutter.
[13] Mrs. L. A. Wibley.
[14] Too low.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Nebraska—Continued.																	
Holdrege (b)	24.0	17.8	32.6	51.0	58.6	66.7	(72.0)	71.0	65.8	46.8	30.7	28.2	(47.1)				
Imperial (a)	23.7	21.1	33.0	51.6	60.8	66.0	67.9	72.5	66.7	51.9	34.5	28.0	48.2	98	—10		
Kennedy (a)	27.5	15.1	26.2							47.3	34.7	31.0					
Kimball	26.6	22.3	28.6	47.6	57.0	63.3	68.4	69.0	63.6	41.4	29.3	30.0	45.6	97	—14	May 27	Oct. 2
Lexington	29.4	21.8	30.2	52.6	59.7	(68.0)	69.0	69.4	65.4	54.6	36.1	28.0	48.7	100	— 8	May 11	
Lincoln (a)	29.4	22.3	28.9	54.4	59.8	65.3	71.0	71.0	69.7	51.8	35.9	34.7	49.5	95	—12	Apr. 7	Oct. 7
Long Pine (a)	30.0	14.0	22.4	51.8	60.4	63.2	67.5	70.5	68.0	(50.0)	35.0	30.6	(48.6)	110	—20		
Minden (a)	27.4	18.7	28.6	51.5	(61.0)	65.6	69.7	70.2	65.9	48.8	34.0	30.2	(47.6)				
Nebraska City (a)	29.9	20.4	(29.0)	(54.0)	55.4	68.5	71.8	70.5	66.2	51.2	34.2	33.8	(48.7)				
Norfolk (a)	(27.0)	(13.0)	24.7	50.0	56.6	65.7	68.8	69.0	65.3	49.8	31.0	29.6	(45.9)				Oct. 4
North Loup (a)	28.2	13.9	25.6	50.9	60.5	65.7	70.0	70.0	66.4	51.0	34.8	28.9	47.2	93	—22	May 10	Sep. 28
*North Platte	27.5	19.0	27.5	50.8	59.0	64.3	69.7	70.0	65.8	51.3	35.9	30.8	47.6	97	—14	Apr. 14	Oct. 4
Oakdale	26.3	10.5	22.6	50.1	58.5	66.0	68.2	69.0	65.8	48.9	30.3	28.7	45.4				
*Omaha	29.6	19.7	28.6	54.1	59.4	69.4	71.2	72.2	70.0	53.2	34.2	34.8	49.7	97	— 9	Apr. 7	Oct. 7
O'Neil (a)	28.2	14.4	24.5	50.0	59.0	65.2	69.4	69.4	66.4	49.9	31.4	28.6	46.4	94	—20		
Palmer (a)	26.5	10.1	22.7	48.4	57.4	63.7	69.5										
Precept (a)	(26.0)	(24.0)	(33.0)	54.2	64.3	70.1	76.1	74.9	66.2	52.2	36.2	31.6	(50.7)				
Purple Cane	30.0	23.2	30.3	54.3	65.7	70.9	73.7	70.8	73.9	54.6	35.9	34.0	51.4				
Ravenna	28.2	16.2	27.8	51.5	58.6	64.6	68.5	69.5	66.2	50.5	33.2	29.9	47.1	95	—16		
Schuyler (a)						69.2	70.8	69.9		[4]49.2							Oct. 4
Seward (a)	26.7	18.0	32.4	57.9	61.6	71.0	73.2	76.4	[k]70.4	49.1	38.6	36.1	51.0	96	—10		
Springview								69.5	67.3	51.6	32.6	31.2					Oct. 6
Superior	29.0	26.2	33.4	55.8	63.1	71.2	78.5	78.8	72.7	56.1	44.8	40.6	54.2	106	—10		
Syracuse (a)	29.3	22.9	29.8	54.8	60.6	70.3	71.9	72.1	69.9	52.0	35.8	34.2	50.3	95	—10	Apr. 4	Oct. 15
Tecumseh	30.6	23.9	31.1	52.0	61.8	70.7	71.4	72.1	69.6	[4]53.8	37.1	[5]35.7	50.8	96	—14	May 17	Sept. 29
Tekamah	29.8	18.4	29.5	54.1	61.8	71.7	76.2	74.0	69.4	(51.0)	(32.0)	(32.0)	(50.0)				
*Valentine	28.0	12.6	21.6	48.2	56.6	63.7	67.8	68.6	65.1	50.6	32.8	30.6	45.5	99	—26	May 4	Oct. 6
Wallace	27.0	20.7	27.9	51.0	61.2	64.9	72.3	70.0	65.1	48.6	34.5	27.6	47.6	94	— 8		
Weeping Water (a)	28.4	21.2	29.3	52.2	58.0	68.3	67.8	68.7	67.0	48.8	35.0	33.5	48.2	98	—12	Apr. 11	
West Hill	22.4	12.2	23.3	52.6	57.8	(65.5)	69.1	69.5	65.7	49.8	32.3	29.1	(45.8)				
Whitman	25.1	12.9	22.6	48.7	61.9	64.8	72.7	71.2	68.7	56.0	31.3	(30.0)	(47.2)				
Nevada.																	
Austin	25.0	26.6	33.1	44.3	50.8	54.8	67.6	68.1	57.4	50.0	41.5	25.0	45.4	89	— 7		
Battle Mountain (g)	25.9	32.9	40.7	54.2	61.9	65.6	78.4	79.5	65.4	53.0	44.5	28.7	52.6	99	—10		
Belleville								74.0	60.3	53.0	40.1	24.4					
Belmont	26.6	26.1	32.3	42.6	49.7	55.8	66.6	67.2	53.9	51.0	40.6	21.8	44.5	89	—11		
Beowawe (g)	24.5	28.2	37.7	49.9	58.1	61.6	78.6	77.4	64.8	55.4	39.6	22.3	49.8	99	—30		
Browns (g)	34.7	38.8	46.2	57.3	66.5	71.9	84.6	83.8	68.8	58.0	46.7	34.4	57.6	104	— 3		
Candelaria	30.9	31.6	39.4	48.0	53.8	60.6	72.5	73.0	62.2	53.6	45.8	(33.0)	(50.4)				
Carlin	15.8	22.7	32.7	45.4	55.0	59.8	72.3	71.9	57.1	41.1	30.2	19.9	43.7	102	—30		
*Carson City [1]	33.2	34.6	41.2	47.8	53.9	58.8	67.4	67.8	58.2	51.2	44.4	32.2	49.2	92	0	May 10	Sept. 30
Carson City (a) [2]	31.6	33.7	40.8	48.2	53.9	60.6	69.4	68.7	58.4	50.3	41.6	29.1	48.9	96	— 4		Sept. 24
Downeyville	32.3	36.2	42.6	51.4	59.4	63.2	74.0	77.2	63.9	55.4	43.4	32.8	52.7	98	2		
Elko (g) [3]	22.3	27.9	36.9	48.1	56.0	62.3	73.9	72.4	63.9	55.1	41.9	19.6	48.4	102	—24		
Elko [4]	20.7					54.2			55.0	40.2	36.0	25.8					
Ely	18.3	19.5	29.0	40.5	48.4	52.0	65.8	63.5	50.2	38.8	24.0	24.4	39.5	96	—19		
Eureka	(24.0)	(27.0)	34.4	47.1	52.8	57.4	(68.0)	74.2	64.9	53.3	44.1	25.8	(47.8)				
Fenelon (g)	24.1	29.3	35.2	52.7	67.2	72.5	89.5	83.8	64.3	50.4	46.2	32.4	54.0	109	— 2		
Genoa	30.9	32.4	40.8	48.8	53.2	58.3	66.2	67.9	57.9	52.2	44.0	28.3	48.4	89	0		
Golconda (g)	26.0	31.6	39.7	53.0	61.2	68.4	78.0	77.7	63.7	51.4	40.4	26.7	51.5	104	— 6		
Halleck (g)	18.7	22.5	32.3	45.2	54.8	57.8	71.9	71.6	58.6	44.9	36.8	14.9	44.2				
Hawthorne (g) [3]	33.7	37.4	44.0	54.1	59.2	66.4	78.5	79.6	66.4	58.1	47.6	32.9	54.8	95	5		
Hawthorne [5]	32.4	37.4	43.8	52.0	58.4	64.8	74.1	75.3	64.4	55.7	46.4	32.5	53.1	98	0		
Hot Springs (g)	23.3	27.0	44.2	55.2	61.0	73.7	80.0	78.1	60.0	49.5	38.3	20.2	51.3	100	—10		
Humboldt (g)	25.4	30.4	41.1	52.6	60.8	62.6	71.1	71.5	61.5	53.9	41.7	28.6	50.1	95	0		
Lewers Ranch	32.1	32.9	39.7	48.2	53.6	60.6	68.8	69.6	60.0	55.1	46.6	30.4	49.8	94	0		
Lovelock (g)											41.5	34.7					
Mill City (a)	29.8	33.2	44.4	50.7	58.8	62.6	73.8	76.8	64.2	54.4	43.0	26.6	51.5	100	— 6		
Monitor's Ranch					51.4	56.8	64.2	64.4	55.7	44.0	38.2	20.8					
Palisade (g)	23.7	28.8	34.3	48.7	56.1	60.6	69.0	72.0	64.7	50.8	41.5	24.3	47.9	98	—11		
Palmetto	28.4	29.2	36.8	43.2	50.0	55.9	66.9	65.8	57.4	53.4	41.7	20.5	45.8	92	—12		
Pioche	26.9	25.6	36.2	45.2	53.2	59.7	73.1	74.0	(60.0)	54.0	46.3	27.1	(48.4)	100	— 6		
Reno (g) [3]	30.9	34.9	42.0	51.8	55.0	65.0	75.8	75.7	61.5	51.1	41.7	28.3	51.1	102	2		
Reno [6]	32.8	33.3	39.8	48.2	53.6	60.0	68.4	71.2	59.1	51.6	43.0	30.0	49.2				
Saint Clair											41.1	30.2					
Sodaville				53.8	59.4	65.4	77.4	76.8									
Stofiel										34.9	18.8	11.7					
Sunnyside						57.8	64.9	63.0	55.6	47.0	[c]38.6	23.6					
Tecoma (g)	18.6	22.2	33.7	46.9	59.9	61.1	77.1	73.9	61.8	45.5	34.4	20.7	46.3	102	—10		
Toano (g)	22.3	24.6	34.6	49.0	58.1	61.8	74.5	74.1	61.8	49.0	39.4	21.1	47.5	98	—12		
Tybo											[c]46.3	24.6					
Verdi (g)											45.2	27.5					
Virginia City	26.7	(34.0)	37.3	46.8	52.8	58.3	(68.0)	78.0	60.4	54.2	47.7	29.5	(49.5)				
Wabuska (b)									62.5	52.8	42.7	24.8					
Wadsworth (g)	31.5	35.7	42.2	53.4	59.1	66.1	76.8	80.2	(60.0)	54.5	41.7	25.3	(52.4)	102	— 3		
Wells (g)	23.3	22.2	38.5	50.5	59.2	61.6	74.1	75.1	64.7	51.8	42.3	20.8	48.8	98	—22		
*Winnemucca [1]	26.6	31.7	38.4	47.0	54.9	58.0	71.0	70.2	60.4	50.2	41.0	26.4	48.0	98	— 8	Apr. 25	Sept. 24
Winnemucca (g) [3]	24.6	35.2	47.9	53.2	64.2	65.5	74.4	72.1	60.2	48.4	39.2	29.0	51.2	98	— 7		
Yount's Ranch	41.6	44.3	53.4	60.0	68.6	72.5	83.2	81.0	80.9	63.4	54.4	42.3	62.1	101	15		
New Hampshire.																	
Berlin Falls	16.5	17.2	23.2	38.5	48.2	59.4	62.3	63.0	(58.5)	(42.0)	30.9	27.4	(40.6)			June 9	
Berlin Mills	17.3	18.8	24.0	40.0	49.4	60.0	62.8	63.1	58.6	42.1	32.2	28.0	41.4	90	—27		Oct. 2

[1] Weather Bureau. [2] Prof. C. W. Friend. [3] Southern Pacific R. R. [4] C. H. Sproule. [5] C. P. Mengel. [6] Wm. E. Barney.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
New Hampshire—Cont'd.																	
Concord[1]	24.3	26.0	30.0	46.2	55.2	63.3	66.4	67.6	63.5	47.2	36.6	34.7	46.8	96	—9	May 6	Oct. 12
Concord[2]	24.4	26.4	30.4	48.0	58.9	66.2	67.5	70.9	65.8	45.8	35.9	34.7	47.9	93	—13	.....	.....
East Canterbury	23.6	22.6	28.4	42.6	56.7	66.4	68.4	66.8	63.4	45.8	28.2	27.2	45.0	95	—5	Apr. 24	Oct. 11
Grafton	21.2	23.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Groveton (*a*)	18.8	19.7	25.9	40.9	51.6	62.4	64.2	63.8	59.3	43.0	33.2	29.7	42.7	91	—22	.....	.....
Hanover (*a*)[3]	21.2	23.7	28.6	45.5	53.0	63.5	66.7	64.6	61.0	46.4	32.9	29.5	44.7	.....	.....	.....	.....
Hanover[4]	20.7	23.7	28.2	45.2	52.8	63.4	66.1	66.0	62.6	45.2	36.9	31.6	45.2	96	—19	June 6	Oct. 1
Littleton (*a*)	19.2	21.3	27.0	41.2	49.5	60.5	62.2	63.6	58.9	42.4	32.2	29.0	42.7	89	—17	.....	.....
*Manchester[5]	25.6	27.0	31.2	46.4	55.2	64.2	67.0	69.1	64.5	48.4	38.0	36.0	47.7	96	— 7	May 19	Oct. 10
Manchester (*a*)[6]	25.9	27.8	30.8	47.3	54.9	65.2	68.5	68.7	63.9	48.9	39.0	34.2	47.9	95	—10	.....	.....
Nashua	25.8	28.2	31.9	47.7	55.8	64.8	67.7	69.2	64.7	48.7	38.2	36.4	48.3	98	— 5	May 19	.....
Newton	24.9	27.7	30.7	44.4	53.8	59.4	67.0	67.8	63.6	47.6	37.6	36.4	46.7	97	— 7	.....	.....
North Conway	21.6	21.4	27.8	43.1	52.4	63.3	64.6	66.1	61.4	45.2	33.4	30.9	44.2	95	—16	.....	.....
Plymouth (*a*)	21.0	20.4	27.8	41.9	50.6	60.3	62.1	64.7	58.9	42.0	31.0	30.1	42.6	96	—13	.....	.....
Stratford	20.8	23.8	28.8	42.0	53.6	65.9	68.0	67.0	64.7	46.5	34.8	31.2	45.6	94	—22	.....	.....
Walpole	20.2	23.6	28.1	45.1	52.6	64.3	65.4	66.8	62.4	44.8	34.6	32.2	45.0	92	—12	.....	.....
West Milan	17.8	19.6	25.1	39.2	50.1	60.8	62.2	62.4	60.0	42.6	32.2	28.8	41.7	90	—30	.....	.....
New Jersey.																	
Allaire	34.0	37.0	36.1	50.3	58.3	67.2	67.2	70.4	(69.0)	51.2	42.5	40.6	(52.0)	95	8	.....	.....
Asbury Park	34.4	37.9	37.8	52.2	58.8	70.2	70.1	72.2	68.7	53.5	42.4	41.2	(53.3)	92	12	.....	.....
*Atlantic City	35.3	38.8	37.0	49.0	56.0	66.0	68.8	72.0	69.0	54.6	43.6	41.5	52.7	91	14	Apr. 9	Oct. 25
Bayonne	.....	.....	.....	.....	.....	.....	.....	73.5	69.7	53.9	42.6	41.3	.....	.....	.....	.....	.....
Belvidere	.....	.....	.....	.....	.....	.....	.....	.....	67.1	51.4	38.2	37.4	.....	.....	.....	.....	.....
Beverly (*a*)	33.6	37.4	36.8	52.2	59.3	70.3	69.5	71.7	67.2	51.6	41.1	39.4	52.5	97	10	May 6	Oct. 25
Billingsport	34.3	38.5	37.0	53.4	60.6	73.2	73.1	75.1	70.8	(55.0)	(44.0)	(43.0)	(54.8)	.....	.....	.....	.....
Blairstown	.....	.....	.....	.....	57.0	.....	67.8	71.0	66.0	49.8	39.5	36.9	.....	.....	.....	.....	.....
Bridgeton[7]	37.8	42.5	40.2	54.7	62.3	72.3	72.6	74.8	70.6	55.2	45.0	43.4	56.0	95	17	.....	Oct. 16
Bridgeton[8]	.....	.....	.....	.....	.....	.....	.....	.....	72.1	56.6	45.4	[d]45.1	.....	.....	.....	.....	.....
Camden	(36.0)	40.6	38.6	54.2	61.2	71.8	71.7	73.8	70.8	54.4	43.2	41.2	(54.8)	.....	.....	.....	.....
Cape May C. H	35.8	40.7	38.8	53.2	59.1	67.9	70.9	73.0	69.0	55.7	44.2	43.8	54.3	90	11	.....	.....
Deckertown (*a*)	(30.0)	(35.0)	(33.2	48.6	56.6	67.6	67.3	70.4	66.3	49.8	38.6	38.4	(50.1)	.....	.....	.....	.....
Dover	(32.0)	33.6	35.5	50.1	57.2	67.7	67.2	70.7	66.5	50.7	39.2	38.8	(50.8)	.....	.....	.....	.....
Egg Harbor City (*a*)	35.2	39.4	37.8	51.4	58.1	68.3	68.3	72.1	67.0	51.7	41.4	[a]40.6	52.6	95	11	May 6	Oct. 25
Elizabeth	.....	.....	.....	.....	.....	.....	.....	.....	.....	53.6	41.8	39.0	.....	.....	.....	.....	.....
Franklinville	34.4	39.2	37.3	53.2	59.6	69.0	68.4	71.8	66.0	51.8	40.2	40.4	52.6	93	10	.....	.....
Freehold	30.0	37.4	38.1	50.7	58.7	68.7	69.3	72.0	67.1	51.2	42.2	41.4	52.2	96	7	.....	.....
Gillette (*a*)	31.3	34.0	35.4	50.2	58.2	66.2	69.2	70.4	64.3	50.5	38.4	38.8	50.6	98	8	.....	.....
Hanover	.....	.....	.....	49.3	.....	.....	.....	70.4	64.9	47.8	37.6	37.2	.....	.....	.....	.....	.....
Highland Park	32.4	36.9	36.3	51.0	58.8	70.0	69.9	73.0	68.2	53.2	41.3	40.3	52.6	98	8	.....	.....
Hightstown	.....	.....	.....	.....	62.7	68.7	68.9	70.5	.....	51.1	41.3	.....	.....	.....	.....	.....	.....
Imlaystown	34.2	38.6	37.0	52.0	60.7	71.6	71.4	73.6	68.8	52.8	42.7	41.9	53.8	98	12	.....	.....
Lambertville	33.9	37.8	36.4	52.5	58.6	69.6	70.0	72.3	68.3	52.2	41.7	38.8	52.7	94	12	.....	.....
Locktown	31.9	35.6	35.3	50.9	59.1	70.3	69.7	72.3	(70.0)	52.2	(39.0)	40.0	(52.2)	.....	.....	.....	.....
Madison	31.4	34.4	34.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Moorestown (*a*)	33.9	38.0	36.6	51.9	59.3	69.8	69.6	71.9	67.9	52.7	42.0	40.7	52.9	96	12	.....	Oct. 25
Mount Holly	(36.0)	40.6	38.6	53.8	60.6	70.7	70.8	73.0	68.8	53.6	44.0	42.9	(54.4)	.....	.....	.....	.....
Newark (1)	33.3	35.9	36.3	51.1	59.1	69.1	69.9	72.4	68.9	53.4	43.4	41.3	52.8	.....	.....	.....	.....
*New Brunswick[5]	32.7	36.9	36.3	51.0	58.8	70.0	69.9	73.0	68.4	53.2	41.3	40.3	52.6	98	8	May 6	Oct. 25
New Brunswick (*a*)[9]	32.6	35.8	36.4	52.6	61.3	71.6	71.6	74.2	71.0	54.4	43.0	41.6	54.6	100	6	.....	.....
New Brunswick (*a*)[10]	33.3	36.8	36.4	51.3	58.6	68.8	68.8	71.9	67.4	52.5	41.8	40.4	52.3	95	10	.....	.....
New Brunswick[11]	33.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Newton	(32.0)	(35.0)	34.5	51.3	59.1	70.0	69.0	71.2	66.9	50.6	38.0	37.5	(51.1)	.....	.....	.....	.....
Ocean City (*a*)	35.2	40.3	37.8	49.2	58.4	67.6	71.0	(73.0)	(69.0)	(55.5)	47.4	40.3	(53.7)	.....	.....	.....	.....
Oceanic	35.6	39.4	[b]37.2	(51.0)	61.0	71.6	72.4	75.0	74.3	55.2	45.5	43.0	(55.1)	95	13	.....	.....
Paterson	(33.0)	(36.0)	39.6	53.6	57.3	68.8	70.4	72.9	69.6	54.2	41.7	42.0	(53.3)	.....	.....	.....	.....
Plainfield	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41.6	41.5	.....	.....	.....	.....	.....
Rancocas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42.5	.....	.....	.....	.....	.....
Readington (*a*)	36.5	37.7	40.0	.....	[c]62.7	70.6	.....	.....	[f]70.3	57.4	45.3	.....	.....	.....	.....	.....	.....
Salem	(36.0)	38.9	38.0	53.7	59.0	69.6	(71.0)	(73.0)	[h]67.6	53.4	42.3	40.8	(53.6)	.....	.....	.....	.....
Somerville	.....	.....	.....	.....	58.0	70.0	70.8	73.0	68.4	52.6	43.4	41.8	.....	.....	.....	.....	.....
South Orange (*a*)	31.9	35.1	35.4	50.9	57.8	68.4	68.2	70.8	65.6	50.7	40.4	39.6	51.2	94	8	.....	Oct. 25
Tenafly	30.8	34.6	35.6	51.7	57.3	70.8	68.8	73.7	67.6	52.8	41.2	41.3	52.2	102	1	.....	.....
Trenton (*a*)	37.0	41.0	40.0	55.0	62.0	74.0	76.0	79.0	73.0	57.0	45.0	41.0	56.7	97	10	.....	.....
Vineland	(35.5)	40.5	39.0	53.6	59.8	70.2	70.9	73.7	69.3	55.0	43.4	41.5	(54.4)	.....	.....	.....	.....
Whiting	(36.0)	(39.0)	(38.0)	53.1	60.2	69.9	70.0	74.3	69.1	54.2	44.0	43.6	(54.3)	.....	.....	Apr. 9	.....
Woodbury	36.6	40.8	39.0	54.5	62.0	71.8	72.0	75.7	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Mexico.																	
Albert	33.6	40.7	42.7	56.4	63.2	71.3	77.8	77.5	69.8	59.6	46.5	35.1	56.2	100	3	May 15	Nov. 9
Albuquerque	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35.9	.....	.....	.....	.....	.....
Antelope Spring	18.0	29.4	46.3	48.6	58.0	65.4	72.6	68.5	62.7	48.5	40.3	25.0	48.1	98	—19	.....	Oct. 4
Bloomfield	.....	.....	.....	.....	.....	.....	.....	76.5	70.0	53.0	43.6	23.0	.....	.....	.....	.....	Oct. 3
*Carthage	32.5	42.4	48.0	57.4	65.8	75.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 3	.....
Chama	20.8	23.2	29.4	39.0	51.4	58.0	65.0	(60.0)	58.9	49.9	39.8	24.8	(43.4)	.....	.....	June 16	Sept. 13
Coolidge	31.6	(30.0)	(35.5)	(45.0)	46.4	48.7	54.2	53.2	61.4	44.6	29.7	15.0	(41.3)	.....	.....	June 14	.....
Deming (*a*)	39.0	47.0	51.5	62.2	71.9	91.9	89.0	80.9	73.5	64.9	53.8	38.4	63.7	105	0	.....	.....
Dulce	(12.5)	(22.0)	(29.0)	42.6	54.6	59.5	66.9	65.3	56.5	42.5	32.0	17.2	(41.7)	.....	.....	.....	Sept. 12
Eddy	.....	.....	.....	.....	.....	.....	.....	.....	78.9	67.5	.....	37.9	.....	.....	.....	.....	.....
Estalina Springs	22.0	32.6	38.3	47.2	54.6	63.0	69.9	[e]67.5	(68.0)	[h]49.8	[m]41.6	[n]23.6	(48.2)	95	—12	June 2	Oct. 7
Folsom	.....	.....	.....	.....	.....	.....	.....	.....	[g]61.6	54.8	46.5	29.6	.....	.....	.....	.....	Oct. 5
Fort Bayard	34.8	38.3	44.2	52.0	58.7	64.7	72.6	71.0	66.5	56.0	49.2	34.8	53.7	98	— 3	May 27	.....
Fort Marcy	20.0	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Hon. W. L. Foster.
[2] M. K. Gordon.
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[10] Mrs. G. H. Cook.
[11] Prof. A. Scott.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
New Mexico—Continued.																	
*Fort Stanton[1]	28.1	38.0	41.5	49.2	55.7	64.1	69.8	67.2	63.0	51.4	43.6	31.7	50.3	92	— 6	Apr. 25	Oct. 4
Fort Stanton[2]	26.4	37.0	(41.5)	46.7	54.7	63.1	69.4	67.6	62.8	50.1	41.2	31.2	49.3				
Fort Union	24.2	29.9															
Fort Wingate	26.9	31.6	37.0	45.4	55.6	63.6	71.2	69.4	62.6	52.7	44.4	27.2	48.0	96	— 7	May 31	
Gallinas Springs	33.8	41.0	45.1	56.2	62.8	72.0	77.0	76.0	(65.0)	56.0	[4]45.4	29.6	(55.0)	94	2	Apr. 5	Oct. 16
Halls Peak											39.9	27.0					
Hillsboro	34.0	42.7	48.6	50.4	62.5	71.6	78.2	75.6	69.6	58.3	49.5	35.6	56.4	101	3	Apr. 5	Nov.
La Luz	36.2	43.8						76.1	66.3	54.9	49.0	43.4					Oct. 3
Lordsburg (*a*)	37.4	43.9	49.9	60.3	72.1	80.5	87.7	82.2	76.5	61.0	50.2	38.5	61.7	108	10		
Los Lunas	27.8	36.5	46.2	55.9	64.9	70.5	79.4	77.0	67.8	47.8	40.4	26.9	53.4	103	— 8	June 1	Oct. 3
Monero	12.6	22.2	28.8	39.6	50.6	55.6	60.8	59.9	54.8	43.9	34.0	21.3	40.3	90	—22		Sept. 13
Olio				48.8	62.8	66.7	74.0	72.5	64.8	51.7	42.2	25.2					Oct. 3
Red Cañon	30.0	39.2	44.8	53.0	59.6	69.6	75.4	72.8	68.7	57.0	46.6	34.1	54.2	98	0		Oct. 7
*Santa Fé	22.7	29.5	36.4	46 4	52.9	62.6	69.2	68.3	61.8	51.2	40.8	25.6	47.3	87	— 6	May 5	Oct. 4
Socorro										57.0	50.9	38.9					
Springer												38.7					
Taos											36.6	[6]22.6					
Wallace									67.8	54.5	43.3	32.8				May 6	Oct. 14
New York.																	
Adelphi Academy (Brooklyn) (*a*)		36.0	37.8	51.5													
Addison (*a*)	27.9	30.9	32.5	47.6	54.6	65.7	65.0	[4]65.8	62.9	46.5	37.8	36.2	47.8	95	0		
Alabama (*a*)	25.6	27.3	27.6	42.5		64.7	62.8										
*Albany	24.8	28.2	32.3	48 6	57.2	68.4	69.1	71.2	67.4	50.2	38.8	37.0	49.4	95	— 5	Apr. 9	Oct. 12
Albion (*a*)						63.7	64.5	66.4									
Alfred Centre (*a*)	23.8	(31.0)	28.8	44.9	[5]52.4	63.4	61.9	63.3	60.6	45.8	35.2	(36.0)	(45.6)				
Angelica (*a*)								63.4	59.1	44.0	35.3	33.1					
Arcade (*a*)[3]	23.8	26.2	27.3	43.1	50.9	64.0	62.6	63.6	60.7	44.5	34.1	32.2	44.4	86	— 9		
Arkwright	[5]26.6	30.3	29.8	44.1	51.8					47.4		35.0					
Baldwinsville (*a*)	26.3	29.9	30.2	45.6	53.4	64.0	66.2	68.3	64.8	49.2	38.9	36.6	47.8	96	0		
Binghamton (*a*)	25.9	25.8	31.9	46.7	54.1	65.7	65.4	67.1	64.1	48.0	36.8	35.9	47.6	93	— 4		
Boyd's Corners (*a*)	29.1	33.2	35.3	50.7	59.5	69.8	70.3	73.4	68.2	51.1	40.1	39.6	51.7				
Brentwood	(32.0)	(35.0)	38.4	50.1	57.2	66.9	68.2	71.8	66.0	52.2	43.0	(41.0)	(51.8)				
Brockport	[5]22.5				[5]51.1				64.2	50.9		36.3					
Brookfield (*a*)	23.5	25.6	29.4	42.1	51.4	63.0	62.3	65.0	60.5	44.4	34.9	33.2	44.6	91	—15		
*Buffalo	27.8	30.5	31.0	43.6	51.4	65.5	65.3	67.8	65.2	50.2	39.4	36.6	47.9	90	4	May 23	Oct. 12
Canton (*a*)	17.6	22.2	27.6	43.6	52.8	64.9	[5]64.2	[5]65.9	61.7	45.6	35.0	32.6	44.5	94	—15	May 27	
Carmel	29.0	31.5	34.3	50.0	58.2	67.8	67.1	71.4	66.5	49.5	39.0	38.4	50.2	97	1		
Central Park, New York City	33.8	36.5	35.8	49.7	57.8	71.4	72.4	75.4	71.6	54.7	44.3	42.3	53.8	98	9		
Constableville (*a*)	19.4	21.2	24.8	40.6	49.1	59.8	60.7	61.7	59.3	43.1	30.9	30.4	41.8	89	—18		
Cooperstown (*a*)	23.4	25.9	28.8	44.0	51.9	63.6	63.3	66.0	61.6	45.1	34.9	33.0	45.2	87	—12		
Davids Island	31.3	33.0	36.6	52.4	58.2	67.7	69.3	72.4	67.6	52.7	40.8	39.8	51.3	96	8	May 7	
Dunkirk[4]	28.8	32.6	32.4		53.4	67.3				[5]50.3		37.1					
Eden Center								67.3	62.9	47.9	38.4	36.9					
Elmira (*a*)	29.3	31.7	33.7	49.7	57.1	68.1	68.6	70.5	66.6	(46.0)	(36.5)	(36.0)	(49.5)				
Factoryville (Waverly) (*a*)	26.8	30.7	32.1	47.1	54.8	66.0	65.8	67.6	64.3	46.7	37.8	35.8	48.0	96	—2		
Fleming (*a*)	25.6	27.3	29.2	45.2	53.7	66.4	66.3	68.5	65.1	48.9	37.8	35.6	47.5	94	0		
Fort Columbus	33.4	35.1	36.3	51.1	59.4	69.9	71.4	73.8	70.0	55.0	42.0	40.4	53.2	97	10		
Fort Hamilton	33.8	36.4	38.0	51.7	59.2	68.3	69.6	72.4	68.6	53.9	43.2	39.4	52.9	93	10	Apr. 5	
Fort Niagara	28.8	31.8	30.8	46.1	(51.0)	(65.0)	(63.5)	69.0	67.1	52.6	41.8	38.0	(48.8)	93	7	May 6	
Fort Porter	(28.0)	30.0	29.2	42.0	51.4	65.9	66.2	67.0	65.0	48.9	37.2	33.8	(47.1)			May 6	
Fort Schuyler	30.7	33.4	33.4	48.6	57.4	67.8	69.8	72.2	68.4	53.2	42.6	40.0	51.5	92	5	Apr. 9	
Fort Wadsworth	33.2	37.2	38.0	58.3	59.8	70.3	71.2	73.6	70.0	53.9	43.1	41.6	54.2	99	10	May 6	
Geneva (*a*)	28.1	30.2	32.0	47.8	54.2	66.5	66.5	67.8	64.9	49.5	39.2	37.3	48.7	98	2	May 27	
Glens Falls (*a*)												32.8					
Hammondsport	28.5	31.0	32.2	48.2	[5]56.0	64.6	64.8	65.6	62.2	47.9	39.0	36.1	48.0	90	1		
Hess Road Station (*a*)	26.8	29.7	30.0	45.9	52.4	64.6	65.0	66.4	62.8	48.2	39.2	35.2	47.2	90	2		
Honeymeadbrook (*a*)	26.4	29.3	32.0	47.2	55.4	65.9	66.2	68.6	64.1	47.7	36.5	35.5	47.9	92	0		
Humphrey (*a*)	27.2	30.0	30.0	46.0	53.2	66.1	63.4	65.2	63.5	47.5	35.9	35.1	46.9	92	— 1		
Hyndsville (*a*)				44.1	52.2	64.7	65.1	66.3									
Italy Hill	[5]25.9		27.5	42.5	51.5	64.6				44.4	34.5						
Ithaca (*a*)	30.1	32.0	32.5	47.8	55.1	67.2	67.0	68.8	65.4	49.8	39.4	39.1	49.5	92	— 2	Apr. 26	Oct. 6
Jamestown (*a*)	27.0	31.3	31.0	46.5	53.8					47.3	36.8	36.3					
Keene Valley (*a*)	17.6	20.7	22.2	35.0	45.8	59.4	62.6	62.8	58.5								
Le Roy (*a*)	26.9	28.6	30.5	45.8	53.3	66.4	65.0	67.5	64.6	45.2	37.4	34.1	47.1	93	— 1		
Lockport	(27.0)	(30.0)	(31.0)	43.7	50.5	64.0	63.9	65.4	61.5	49.2	38.6	36.5	(46.8)				
Lowville	19.7	22.3	25.2	42.4	50.8	62.4	62.0	63.3	60.2	41.9	30.7	30.5	42.6			May 6	Oct. 12
Lyons	27.5	30.0	(29.5)	46.9	54.0	66.4	66.6	68.4	64.4	49.0	(39.0)	(36.0)	(48.1)				
Lyon Mountain [5]	18.0	19.2	23.4	37.1	47.4	58.6				46.4		28.6					
Madison Barracks	21.2	26.9	29.0	44.7	52.8	65.9	66 2	68.0	64.6	48.9	38.6	36.0	46.9	92	—11	May 4	
Malone (*a*)	17.5	21.1	26.5	41.9	51.8	63.6	63.4	64.4	59.1	44.0	33.4	31.0	43.1	89	—11		
Marshland (Apalachin)	27.9	30.7	32.2	46.0	52.0	57.8	59.5	62.8	59.9	(47.0)	(36.0)	(36.0)	(45.6)			May 27	
Middleburg	24.2	29.2	31.5	47.7	54.8	66.4	65.3	(67.0)	63.6	48.4	(35.0)	(34.0)	(47.2)				
Middletown	28.9	30.3	31.0	49.6	55.4	67.0	68.9	68.3	66.6	49.3	38.0	37.3	49.2	94	4		
Minnewaska (*a*)	24.5	25.9	27.4	40.5	52.8	64.2	63.6	65.4	61.9	46.5	34.6	33.7	45.1	95	— 2		
Mount Morris	28.5	31.5	33.5	49.6	53.9	67.0	66.2	67.3	63.8	47.3	39.9	36.1	48.7	98	1		
New Lisbon (*a*)	22.4	25.4	28.2	41.0	48.7	59.9	59.8	62.7	59.0	43.1	32.9	33.2	43.0	89	—15		
*New York City	34.7	37.5	37.8	52.0	59.9	69.6	70.8	73.6	70.1	54.2	43.8	41.8	53.8	94	9	May 27	Oct. 28
North Hammond	20.4	26.1	28.9	44.7	53.7	66.0	65.1	66.2	62.8	45.6	37.8	34.2	46.0				
Number Four	17.8	20.2	26.1	40.3	49.8	61.3	60.3	61.9	58.5	42.3	31.6	29.9	41.7	86	—19	Apr. 7	
Ogdensburg[6]	14.0	19.0	24.5	42.0	52.5	65.6	64.2	64.9									
Ogdensburg (*a*)[7]	[5]18.8	22.6	29.6	43.2	54.3	66.2	64.3	[5]68.3	64.7	(45.0)	(34.0)	(29.0)	(45.0)				

[1] Weather Bureau. [2] Post hospital. [3] J. D. Tate. [4] D. C. Moon. [5] Edward Hall, C. E. [6] N. Nelson. [7] Dr. P. M. Wise.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
New York—Continued.																	
*Oswego	24.9	27.8	29.3	44.0	51.0	63.0	64.6	67.3	64.4	49.2	38.6	35.7	46.6	90	1	May 27	Oct. 9
Oxford	23.4	26.3	30.2	44.2	54.5	62.0	63.1	64.8	61.6	45.7	34.5	33.1	45.3	90	— 8		
Palermo (a)	24.9	27.4	31.2	45.3	53.3	64.8	65.0	67.3	62.7	46.8	36.5	33.8	46.6	96	— 6	June 5	Oct. 9
Palmyra (a)	27.6	29.3	31.9	43.1	55.9	68.2	68.3	69.3	[b]63.8	(50.0)	(39.0)	(36.0)	(48.5)				
Peekskill	27.3	30.4	32.7	48.5	[a]58.1					[d]48.7	38.3						
Pendleton Center (Lockport) (a)	24.9	27.9															
Perry City (a)	24.9	27.2	28.9	44.2	52.4	63.0	63.1	65.2	61.9	46.0	36.1	33.8	45.6	93	— 9		
Plattsburg (a)	20.2	23.2	28.7	43.6	52.9	64.0	(65.0)	66.4	62.2	45.9	34.8	33.4	(45.0)				
Plattsburg Barracks	17.9	22.5	29.0	41.2	50.5	64.1	65.2	66.0	62.4	45.3	36.2	33.8	44.5	94	—13	May 19	
Port Jervis	25.8	28.8	31.5	48.0	54.7	65.5	65.3	68.6	65.1	49.0	37.8	36.4	48.0	94	1		
Potsdam	16.4	21.3	26.0	42.5	53.0	65.5	(64.0)	66.6	(59.0)	(46.0)	34.6	31.3	(43.6)				
Poughkeepsie	25.1	29.5	33.4	49.0	55.4	67.3	67.3	70.8	65.8	49.0	38.7	38.2	49.1	99	— 7		
Quaker Street	19.8	23.2	26.3	42.9	51.5	62.2	62.4	64.5	61.4	46.2	34.4	34.1	44.1	90	— 6		
Queensbury (a)	19.8	20.9															
*Rochester	27.1	30.2	31.0	47.4	53.8	66.4	67.1	68.8	66.0	50.4	39.8	36.2	48.7	93	6	May 27	Oct. 12
Rome	23.4	25.8	30.6							47.2	37.4	33.2					
Romulus	25.2	27.1							61.1	49.3	39.2	36.2					
Rondout (Kingston)	[a]23.8	28.7	32.9	49.3	57.2	68.6	66.8	67.2	63.6	49.7	37.6	36.0	48.4	94	0		Oct. 17
Saratoga	21.5		31.3	47.2	55.7	66.2		69.0		48.8		36.4					
Setauket (a)	23.5	35.1	35.0	49.0	56.0	65.9	68.1	70.8	66.9	52.9	43.0	40.8	51.4	93	12		
Sherman (a)	24.8	29.2	29.4	43.9	50.4	63.6	61.1	62.7	60.4	46.2	35.7	33.8	45.1				
South Canisteo (a)	25.2	28.0	28.8	45.2	51.9	63.2	62.0	63.7	59.7	44.6	35.3	34.5	45.2	92	—10		
South Kortright	23.6	25.5	29.5	42.8	51.2	59.9	62.0	63.5	59.2	44.2	34.4	34.1	44.2	92	—14		
Syracuse	[a]26.6	30.0	(30.0)	[a]31.3	[a]54.9	66.9	66.1	(68.0)	64.8	[a]47.6	39.4	(36.0)	(47.6)				
Turin	19.0	19.5	23.9	40.4	49.8	61.4	(64.0)	62.3	58.9	42.4	33.6	30.8	(42.2)				
Utica	24.1	28.8	28.6	46.7	53.2	65.2	64.7	67.5	64.4	48.5	36.8	34.6	46.9	92	— 3		
Victor								66.2	63.8	48.6							
Watertown	22.2	25.4	29.2				63.8		59.4								
Watkins	31.8	32.0	35.1	49.8	53.3	66.3	66.4	67.9	66.6	[d]47.4	41.5	37.0	49.6	93	3		
Watervliet Arsenal								[c]70.2	65.2	49.3	38.2	[c]37.7				May 6	
Wedgwood (a)	24.5	26.6	28.0	44.6	52.0	65.1	64.5	65.3	63.2	46.5	34.2	33.7	45.8	96	— 3		
West Point	21.3	25.6	29.2	40.7	48.1	57.8	[b]56.9	(67.0)	(63.0)	48.4	39.4	37.3	(44.6)			May 6	
White Plains (a)	33.1	35.0	36.8	50.3	57.5	68.0	68.3	71.3	66.8	52.4	41.6	40.3	51.8	90	7	April 9	Oct. 16
Willets Point	33.5	36.0	36.4	50.6	58.2	67.6	69.8	72.4	68.3	53.0	42.2	41.3	52.4	95	9		
North Carolina.																	
Asheville (a)	37.6	45.2	42.2	56.1	61.2	71.8	68.8	70.0	66.0	51.8	44.3	43.7	54.9	89	13	May 6	Oct. 16
Bakersville				51.6	56.0	67.6		69.8	65.9	50.6	40.9	39.9					Oct. 9
Chapel Hill	41.5	49.0	[a]44.7	60.7	65.2	77.8	76.8	77.8	73.4	56.4	47.0	46.8	59.8	99	13	May 6	
*Charlotte	43.1	49.0	45.8	61.2	65.4	76.6	74.7	76.5	72.3	56.8	47.8	46.7	59.7	95	19	April 6	Oct. 20
Concord				60.8	67.5	76.8	75.4	77.0	71.9	56.8		[f]46.0					
Douglas	38.6	45.0	43.8	57.7	63.2	76.5	75.0	76.0	69.0	(53.0)	42.6	41.5	(56.8)	98	13		
Franklin	34.6	40.3	40.2	54.4	60.0	70.2	66.2	69.0	61.7								
*Goldsboro					69.0	76.5	77.0	79.7	73.2	58.0	50.5						Oct. 28
*Hatteras	47.2	53.2	49.2	59.4	66.3	75.2	76.2	78.7	74.5	62.2	53.5	52.8	62.4	87	30	Mar. 15	Nov. 30
Hendersonville (a)	37.9	45.2	42.5	56.5	61.9	71.7	69.8	[c]73.0	65.1	51.7	43.2	42.4	55.1	86	14	May 6	
Highlands (a)	32.3	40.7		[a]54.9	54.9	66.5										May 6	
*Kitty Hawk	[1]46.8	52.3	46.7	57.5	62.2	73.2	75.1	78.8	73.5	60.3	51.2	49.4	60.6	92	26	Mar. 15	Nov. 18
Lenoir	38.0	45.2	43.0	57.6	62.6	73.2	71.3	72.6	67.9	52.6	[d]42.7	41.7	55.7	90	15	May 7	
Lexington	(39.0)	(45.0)	(42.5)	58.5	64.4	75.2	73.8	76.3	71.5	55.4	47.1	45.2	(57.8)				Oct. 23
Linville										46.1	37.9	35.6					Oct. 9
Littleton	(41.0)	(47.0)	43.6	57.2	61.8	73.4	73.6	74.9	70.9	54.7	46.4	47.4	(57.6)				Oct. 22
Louisburg (a)	(41.5)	(47.5)	[1]47.5	61.4	64.8	77.0	73.5	75.1	69.7	54.7	44.2	45.1	(58.5)				Oct. 29
*Lumberton					68.0	78.6	77.3	79.3	73.1	58.8	51.0						Oct. 24
Marshallberg (a)		[1]55.6	52.0	61.0													
Morganton (a)	39.2	45.4	42.5	59.5	63.0	73.2	73.0	73.9	69.0	53.7	45.9	43.3	56.7	97	12	May 6	
Mount Airy	37.6	43.4	41.1	55.9	61.4	72.5	73.0	72.6	68.3	52.6	[1]42.4	42.2	55.3	98	10	May 8	Oct. 16
Mount Pleasant	40.4	48.5	44.7	59.3	63.4	74.4	73.4	75.4	70.6	54.3	46.0	45.4	58.0	93	16	May 6	Oct. 17
*Newbern					62.4	75.4	71.2	76.3	71.4	59.8	49.5	47.5					Oct. 24
Oak Ridge	38.0	45.8	42.3	58.2	63.2	74.8	70.8	74.8	66.5	54.7	45.7	44.2	56.6	94	16	May 7	
Pittsboro	(41.0)	47.2	42.3	57.6	63.2	73.4	72.4	75.0	71.1	54.8	45.8	44.8	(57.4)				
Raleigh [1]	(42.5)	51.0	47.0	61.0	66.0	76.0	(74.0)	77.0	(72.0)	57.0	49.0	47.0	(60.0)				
*Raleigh [2]	42.5	48.9	45.2	59.6	64.5	75.7	74.0	76.0	72.0	56.4	47.7	47.8	59.2	95	17	May 7	Nov. 7
Salisbury (a)	43.2	(45.5)	45.2	62.0	67.1	78.2	77.3	78.0	73.3	58.0	48.6	48.5	(60.4)				
Saxon									69.6	54.0	44.6	44.0				Apr. 15	Oct. 17
Smithfield	42.6	50.8	46.2	60.4	64.8	75.6	77.6	76.0	71.3	56.1	48.6	47.6	59.8	95	17		
Soapstone Mount	36.4	37.0	40.9	55.6	60.3	72.8	72.4	74.8	69.0	52.2	42.5	(45.0)	(54.9)			May 6	
Southern Pines	(42.0)	(48.5)	49.8	62.6	65.7	77.8	75.7	77.8	71.8	56.8	49.7	47.6	(60.5)				Oct. 28
*Southport	46.6	53.8	52.1	62.0	67.4	77.0	77.6	79.4	73.3	60.4	52.3	51.5	62.8	92	22	Apr. 5	Nov. 7
Wadesboro					65.3	76.0	75.2	75.7	72.4	56.0	47.7						Oct. 24
Wadeville	(42.0)	(48.5)	(46.0)	[a]65.1	64.7	75.1	74.2	76.2	71.0	58.0	47.2	46.3	(59.4)				Oct. 23
Washington (a)	45.6	52.7	48.4	61.0	66.2	77.6	76.1	80.1	75.2	61.0	51.9	(50.0)	(62.1)			May 6	Oct. 24
*Weldon	41.2	49.2	44.4	58.8	64.2	75.2	74.2	75.6	71.0	55.9	48.1	[1]45.6	58.5	96	13	May 6	Oct. 24
Willeyton	40.3	49.6	44.7	58.5	63.6	73.6	74.0	76.0	70.4	56.2	47.8	46.4	58.4	96	12		
*Wilmington	47.6	55.8	52.2	62.1	67.6	77.2	76.6	79.0	74.0	60.6	52.8	53.1	63.2	95	23	Mar. 15	Oct. 29
North Dakota.																	
Bathgate										43.4	20.4	15.0					
*Bismarck	23.3	6.4	15.6	47.2	54.1	60.4	64.8	66.0	61.8	45.3	23.0	19.6	40.7	94	—33	May 5	Sep. 25
Carrington								[c]62.8	61.0		21.8	16.4					Aug. 23
Churchs Ferry						[c]62.3	61.6	61.4									
Davenport					58.4	64.2	66.3	65.8									
Dickinson											23.2	24.9					
Ellendale	23.4	7.8	18.4	51.4	61.0	66.7	69.9	69.3	69.0	47.4	24.7	20.7	44.1	100	—31		Aug. 23
Fargo						61.9	[c]62.7	65.2	61.5	45.3	20.2	[c]20.5					Aug. 23

[1] T. C. Harris. [2] Weather Bureau.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
North Dakota—Cont'd.																	
Fort A. Lincoln	24.8	7.9	16.8	[i]42.5		60.0	[m]64.2										
*Fort Buford[1]	21.2	2.0	18.4	48.0	53.4	57.6	64.6	64.4	58.6	42.4	23.4	21.1	39.6	97	—34	May 15	
Fort Buford[2]	21.5	10.4	19.0	48.4	54.7	59.7	67.2	65.0	59.4	41.4	23.2	19.6	40.8	94	—37		
Fort Pembina	8.2	—3.0	9.7	46.0	51.4	62.0	62.8	64.5	58.4	41.7	17.0	12.5	35.9	93	—29		
*Fort Yates[1]	26.0	9.7	20.6	50.2	57.9	63.4										May 25	
Fort Yates[2]	25.6	9.4	19.2	48.8	56.6	63.7	68.0	69.6	65.2	48.0	26.2	21.2	43.5	103	—30		
Grafton	[e]11.0	—2.2	(12.0)	(44.5)	[f]51.6	59.2	61.5	62.9	58.3	42.4	[e]17.8	13.2	(36.0)				Aug. 23
Grand Forks (*a*)	13.8	1.5				63.8		64.7	[n]61.6		19.2	12.4					Aug. 23
Grand Rapids							[e]67.5	68.6	63.6	43.5	19.9	16.2					
Hope						60.8	62.5	62.8	58.8	43.8	[o]22.0						Aug. 23
Kelso	14.7	3.2	12.9	46.0	53.8	61.3	63.9	65.2	61.0	44.8	19.8	18.3	38.7	94	—37		Aug. 23
Lakota						60.6	60.2	62.1		43.8	18.0	12.6					Aug. 22
Minot											[l]17.2	20.4					
Napoleon (*a*)	20.1	4.3	13.5	44.5	53.8	60.1	64.2	64.8	60.6	43.0	20.1	15.0	38.7	96	—26	May 25	Aug. 23
New England City	24.5	6.0	20.4														
Power (*a*)						66.8	67.6	[e]67.7	64.3	46.5	21.5	18.8					Aug. 23
Saint Johns									[b]57.8	41.0	17.6	14.2					
Saint Thomas							61.6	62.5	57.4	41.9	17.8	13.9					Aug. 23
Steele	19.0	5.0	15.6	46.8	52.6	61.2	65.6	66.4	62.7	45.7	(22.0)	(19.5)	40.2				Aug. 23
Valley City									59.5	43.2	20.6	16.5					
Wahpeton	18.3	7.6	18.2	50.5	54.3	67.2	63.9	66.2	66.8	48.8	22.2	21.0	42.1	94	—39	May 25	Aug. 23
Wild Rice (*b*)	12.3	0.6	11.7	45.2	55.8	63.3	64.9	63.4	59.2	40.7	18.1	16.8	37.7			May 3	
Willow City									56.7	41.7	16.6	10.8					Aug. 23
Woodbridge										42.6	15.4	8.4					
Ohio.																	
Akron (*a*)	31.0	34.0	33.0	50.0	56.0	69.0	68.0	68.9	67.2	50.6	38.9	38.1	50.4	93	5		
Ashland	31.0	35.0	33.0	52.0	57.0	71.0	69.0	70.0	67.0	50.0	39.0	37.5	51.0	95	— 2		
Athens (*a*)	35.0	39.0	39.0	53.0	58.0	71.0	69.5	70.7	66.0	(52.5)	40.9	40.0	(52.9)	94	7		
Bangorville (*a*)	30.0	33.0	32.0	50.0	55.0	68.0	68.1	69.1	67.9	49.6	37.6	37.6	49.8	101	1		
Bellevue (*a*)	28.4	32.0	30.4	47.8	53.5	(69.5)	(68.0)	68.4	65.0	49.0	36.5	35.6	(48.7)				Oct. 13
Bement (*a*)	27.9	32.9	30.8	46.2	52.6	67.8	67.0	68.3	63.6	47.8	36.4	34.1	48.0	98	3	May 17	Oct. 12
Canton (*a*)	32.0	(34.0)	34.0	50.0	56.0	70.0	68.2	68.8	66.4	50.8	39.2	38.2	(50.6)				
Celina (*a*)	34.0	37.0	36.0	54.0	59.0	71.0	69.0	71.1	65.0	53.0	40.5	41.6	52.6	94	1		
*Cincinnati	36.2	40.0	37.9	56.0	59.6	74.2	71.4	72.3	70.0	54.6	42.6	42.0	54.7	92	4	Apr. 8	Oct. 12
Clarksville	33.0	37.0	36.0	54.0	58.0	71.0	69.2	70.2	66.8	51.6	40.0	39.9	52.2	93	4		
*Cleveland[1]	31.3	34.2	32.4	48.5	53.9	68.3	68.0	69.4	67.5	52.4	39.6	39.0	50.4	96	7	May 17	Oct. 12
Cleveland (*a*)[3]	31.8	34.3	33.5	49.3	54.9	68.2	68.0	68.7	66.1	51.6	40.3	39.0	50.5	92	7		
*Columbus	33.0	36.8	34.8	52.9	57.6	72.4	70.0	71.0	69.4	52.8	40.3	40.0	52.6	94	5	May 6	Oct. 12
Columbus Barracks	33.4	38.7	36.2	53.2	58.4	71.7	69.2	71.1	68.4	52.0	40.4	39.4	52.7	94	1		
Dayton (*a*)	34.0	38.0	37.0	55.0	60.0	73.0	73.6	72.5	69.1	52.6	41.4	40.7	53.9	95	1		
Demos (*a*)	32.2	36.4	34.3	51.6	56.7	70.5	68.8	69.2	67.7	50.8	39.6	39.4	51.4	91	4	May 17	Oct. 12
Elyria		34.0	33.0		56.0		69.0		68.4	53.0	39.0	39.0					
Findlay (*a*)	30.0	33.0	33.0	51.0	56.0	70.0	68.0	69.9	66.4	50.9	37.7	37.5	50.3	94	— 1		
Fosteria (*a*)										51.3	38.2	38.4					
Garrettsville (*a*)	28.4	31.7	31.1	46.5	51.4	65.6	63.9	65.0	62.0	46.8	36.4	36.0	47.1	92	— 8	May 17	Oct. 12
Georgetown (*a*)	35.0	39.0	39.0	56.0	61.0	74.0	70.8	71.4	68.6	*53.5	41.9	42.1	54.4	97	5		
Granville (*a*)	31.0	35.0	33.0	53.0	[b]57.0	71.0	67.7	68.2	64.2	48.0	37.9	37.8	50.3	92	— 2		
Gratiot	33.2	37.4	35.3	52.3	57.2	71.2	68.6	69.7	67.0	51.1	40.2	39.4	51.9	90	— 2	Apr. 17	Oct. 10
Greenfield							69.0	69.0	64.5	48.8	40.5	38.0					
Greenville (*a*)	31.0	34.0	34.0	52.0	57.0	70.0	68.5	68.2	65.5	50.0	38.2	38.3	50.6	90	— 1		
Hanging Rock (*a*)	36.0	41.0	39.0	53.0	57.0	71.0	67.9	71.6	66.2	50.6	41.4	38.8	52.8	95	11		
Harbor (*a*)											40.6	38.2					
Hassan (*c*)	31.3	35.0	33.9	54.5	59.3	75.5	71.4	74.1	67.3	52.0	39.4	(38.0)	(52.6)				
Hiram (*a*)	29.0	32.0	31.0	48.0	54.0	67.0	66.1	67.8	66.0	49.2	37.3	37.3	48.7	91	2		
Jacksonboro	33.7	35.2	35.9	55.6	59.2	71.0	71.2	73.0	72.2	55.7	40.8	39.4	53.6	98	2	May 6	Oct. 23
Kenton	30.4	36.0	32.8	53.5	56.8	70.8	69.0	70.8	69.0	49.8	37.8	37.0	51.1	99	— 1	May 17	Oct. 12
Logan (*a*)	35.0	38.0	37.0	53.0	58.0	71.0	68.8	69.4	66.4	51.5	40.3	39.3	52.3	98	1		
Lordstown (*a*)	30.0	33.2	32.0	49.0	54.0	66.0	66.0	66.4	63.1	48.0	38.0	37.0	48.6	93	— 5		
Manchester							74.0	71.0	69.5	53.2							
Marietta (*a*)[4]	37.0	41.0	40.0	55.0	60.0	73.0	70.3	71.4	67.5	52.7	43.3	40.7	54.3	92	10		
Marion										48.0	38.3	37.6					
McConnellsville (*a*)	34.0	39.0	37.0	54.0	60.0	71.0	69.2	70.4	67.4	50.9	40.2	37.8	52.6	91	5		
Montpelier (*a*)	(29.0)	(31.0)	30.0	50.0	56.0	69.0	67.5	69.1	65.8	50.4	34.0	34.8	(48.9)				
Napoleon (*a*)	[e]32.2	34.0	34.8	52.2	58.8	(70.0)	[e]72.2	[f]75.8	69.4	51.8	38.3	39.4	(54.1)			May 17	Oct. 23
New Alexandria (*a*)	32.0	38.0	35.0	53.0	58.0	70.0	68.1	70.4	68.9	52.3	39.9	40.1	52.2	92	2		
New Comerstown (*a*)	32.0	37.0	35.0	50.0	56.0	69.0	66.7	67.2	64.7	48.8	38.9	37.6	50.2	94	0		
New Holland						74.0	69.0	70.0	66.0	50.8	40.5	38.4					
North Lewisburg (*a*)	31.1	35.3	33.5	53.0	58.8	72.3	71.7	71.9	69.0	52.2	39.4	39.0	52.3	96	— 1	May 17	Oct. 12
Oberlin (*a*)	30.0	33.0	32.0	48.0	54.0	68.0	67.0	67.9	65.9	50.6	38.5	37.4	49.4	96	5		
Ohio State University (*a*)	32.0	36.0	35.0	52.0	57.0	71.0	68.9	69.7	66.2	50.1	39.6	39.0	51.4	94	— 2		
Orangeville	28.8	33.8	32.3	47.6	54.4	68.0	66.1	67.2	63.8	48.6	37.7	35.8	48.7	93	— 6	May 27	Oct. 9
Piqua (*a*)										51.6	39.0	38.3					
Pomeroy (*a*)	36.0	41.0	41.0	58.0	64.0	75.0	73.5	73.1	67.7	52.8	42.7	39.5	55.4	93	9		
Portsmouth (*a*)[5]	38.0	42.1	40.7	56.0	60.2	73.2	70.6	71.8	67.3	52.2	43.2	41.5	54.7	95	10	May 17	Oct. 17
Salineville		34.6	34.6	47.4										98	6		Oct. 13
*Sandusky	30.6	34.4	32.3	49.4	56.4	69.6	69.2	71.8	70.1	53.0	39.9	39.0	51.3	98	6	May 17	Oct. 13
Shiloh	32.3	34.7															
Tiffin (*a*)	31.0	34.2	32.9	50.8	56.3	70.4	69.4	69.3	67.8	50.3	39.6	38.4	50.9	95	1	May 17	Oct. 12
*Toledo	30.4	32.5	32.0	50.0	56.4	69.4	68.0	70.2	69.0	51.2	37.2	37.6	50.3	96	4	May 27	Oct. 6
Upper Sandusky (*a*)	32.0	35.0	34.0	52.0	56.0	70.0	69.9	69.8	68.2	50.9	39.6	39.1	51.4	93	2		
Van Wert							[e]70.0	70.0	67.0	50.0	36.0	36.0					
Wapakoneta (*a*)	31.0	(37.0)	33.0	(53.0)	57.0	(71.0)	70.6	70.0	68.2	50.0	38.1	38.0	(51.4)				
Wauseon (*a*)	27.9	31.0	30.8	49.6	56.5	69.3	68.4	69.9	67.6	49.0	35.4	35.5	49.2	100	— 4	May 27	Oct. 13
Waverly (*a*)	36.0	39.0	38.0	55.0	60.0	74.0	70.5	71.1	67.3	51.4	41.8	39.7	53.6	99	7		
Waynesville (*a*)	33.0					[d]68.0	66.0	68.5		58.1							

[1] Weather Bureau. [2] Post hospital. [3] G. A. Hyde. [4] Prof. T. D. Biscoe. [5] Dr. D. B. Cotton.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.			Killing Frost.	
													Mean.	Extreme.		Last in spring.	First in autumn.
Ohio—Continued.														*Max.*	*Min.*		
Westerville (*a*)	33.1	36.1	35.2	51.7	56.0	69.2	67.5	71.0	64.9	49.7	40.0	38.9	51.1	91	— 2	May 17	Oct. 10
West Milton (*f*)	33.8	38.5	37.2	57.2	59.8	73.6	72.7	73.0	(67.0)	52.0	44.3	40.3	(54.1)	98	1	.....	.....
Weymouth	28.0	33.0	32.0	50.0	54.0	70.0	67.0	69.0	66.0	52.1	38.0	36.5	49.6	98	3	.....	.....
Wheeler (*e*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38.8	37.1	.....	.....	.....	.....	.....
Wooster (*a*)	30.0	34.0	32.0	49.0	55.0	68.0	67.5	(70.0)	67.9	48.8	37.6	37.3	(49.8)	.....	.....	.....	.....
Youngstown (*a*)	32.0	36.0	35.0	51.0	57.0	70.0	68.1	69.4	66.9	51.4	40.3	39.0	51.3	93	5	.....	.....
Oklahoma Territory.																	
*Fort Reno	37.8	40.3	44.2	59.8	65.0	74.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 5	.....
Fort Reno[1]	37.8	41.2	45.5	61.4	65.2	74.2	76.2	76.4	72.3	62.2	48.6	44.8	58.8	100	10	.....	.....
*Fort Sill	38.8	42.6	45.4	60.8	65.9	75.8	78.6	78.2	74.2	62.2	.....	.....	.....	.....	.....	Apr. 5	.....
Fort Sill[1]	39.1	42.6	45.6	60.9	66.0	75.8	78.7	78.4	74.2	62.4	50.6	45.4	60.0	101	12	.....	.....
Guthrie (*a*)	40.5	42.4	47.2	63.1	66.6	78.9	80.9	80.1	76.6	63.0	50.6	47.5	61.5	100	10	Apr. 5	Oct. 7
*Oklahoma City	37.8	39.2	43.6	60.8	64.4	74.3	76.2	76.8	72.4	60.8	47.0	44.4	58.1	99	10	Apr. 5	Nov. 10
Oregon.																	
Albany (*a*)[2]	40.9	37.2	42.8	50.8	57.4	59.0	65.6	67.2	58.1	54.0	48.0	41.0	47.1	103	22	Apr. 3	Nov. 17
Albany (*g*)[3]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43.3	43.2	.....	.....	.....	.....	.....
Arlington	(39.0)	(33.0)	(39.0)	54.7	65.8	65.7	75.4	75.6	63.9	55.4	45.9	38.0	(54.3)	.....	.....	.....	Nov. 12
Ashland (*g*)[3]	37.6	36.3	43.4	49.2	59.0	60.5	71.7	71.5	59.1	53.8	44.7	35.1	51.8	97	16	.....	.....
Ashland[4]	39.6	37.4	45.0	59.2	(58.0)	58.4	72.6	71.4	59.3	53.7	45.8	36.2	(52.3)	102	18	.....	.....
*Astoria	45.1	39.4	44.4	50.2	54.9	57.4	62.2	65.4	59.0	56.7	49.5	43.6	52.3	88	27	Mar. 11	Dec. 24
Aurora (*g*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47.7	41.8	.....	.....	.....	.....	.....
*Baker City	24.4	22.6	31.6	46.0	56.0	55.5	65.8	67.0	56.8	49.4	37.0	24.4	44.7	98	—11	May 9	Sept. 24
Bandon (*d*)	48.8	45.0	48.7	51.9	55.8	59.8	58.6	61.1	55.7	54.4	52.0	45.4	53.1	78	27	Mar. 9	.....
Beulah	22.8	23.8	(35.0)	47.0	55.2	56.6	68.0	67.8	58.0	46.6	38.0	23.6	(45.2)	.....	.....	May 8	Sept. 29
Brownsville (*g*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50.8	45.9	.....	.....	.....	.....	.....
Burns	.....	.....	.....	.....	.....	.....	.....	.....	48.8	46.3	36.8	21.2	.....	.....	.....	.....	.....
Canyon City	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41.6	33.8	.....	.....	.....	.....	.....
Cascade Locks	(41.0)	(35.0)	45.2	55.0	60.6	60.8	69.0	69.7	60.8	57.5	50.2	41.5	(53.9)	.....	.....	.....	.....
Comstock (*g*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	48.6	40.1	.....	.....	.....	.....	.....
Corvallis[6]	40.4	36.2	42.4	49.3	56.1	57.2	65.0	57.3	58.2	54.4	47.6	41.3	51.3	103	13	.....	.....
Corvallis (*g*)[2]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46.6	40.0	.....	.....	.....	.....	.....
Eola	49.8	35.7	41.8	48.4	55.2	55.8	64.1	66.4	57.4	54.2	47.2	40.2	50.6	98	18	Apr. 3	Nov. 16
Eugene	41.2	38.4	44.2	51.2	56.8	58.5	(68.0)	(65.0)	(59.0)	56.2	50.2	41.8	(52.5)	.....	.....	.....	.....
Forest Grove	41.6	38.4	43.8	50.0	56.4	58.0	66.7	68.2	58.4	54.2	47.1	40.0	51.9	102	20	.....	.....
Gardiner	46.0	42.0	(45.0)	50.2	54.5	57.8	61.2	64.2	58.0	56.2	51.3	45.2	(52.6)	.....	.....	.....	.....
Gold Beach	.....	47.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Grants Pass[6]	(42.0)	38.4	47.2	51.9	57.6	60.0	68.6	72.0	61.7	55.4	46.7	38.3	(53.4)	.....	.....	May 8	.....
Grants Pass (*g*)[3]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37.5	.....	.....	.....	.....	.....
Grass Valley	.....	.....	.....	.....	.....	.....	.....	65.2	.....	49.2	38.8	.....	.....	.....	.....	.....	.....
Happy Valley	27.4	26.7	35.6	46.4	54.4	54.8	65.4	64.8	56.6	(54.0)	41.0	27.9	(49.8)	97	— 8	May 21	Sept. 23
Hardman (*a*)	31.1	25.4	33.0	44.8	55.6	56.4	(69.5)	69.0	(60.0)	47.0	43.3	32.0	(47.2)	.....	.....	.....	.....
Heppner	38.8	29.4	36.6	49.8	58.2	58.4	67.3	69.1	58.5	52.6	(43.0)	(32.5)	(49.5)	.....	.....	May 21	Sept. 28
Hood River[7]	40.0	30.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hood River (near) (*a*)[8]	38.7	(33.0)	(40.0)	51.7	60.7	58.8	68.7	69.0	59.0	53.6	45.1	36.0	(51.2)	.....	.....	.....	.....
Hubbard	39.4	37.0	40.6	50.3	57.0	58.0	64.0	65.3	56.4	54.2	47.8	40.6	50.9	100	19	.....	.....
Jacksonville	38.2	37.8	47.1	50.8	58.6	58.8	68.8	70.4	60.2	50.4	46.0	37.2	52.3	98	17	.....	.....
John Day Junction	.....	.....	.....	.....	.....	59.2	70.0	70.4	60.8	55.8	45.4	35.5	.....	.....	.....	.....	.....
Jordan Valley	.....	.....	.....	.....	.....	54.9	64.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Joseph	21.4	19.6	26.9	43.4	53.1	52.2	62.3	63.0	53.6	47.2	34.4	23.4	41.7	93	—10	May 10	Sept. 20
Junction City (*g*)[3]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43.0	.....	.....	.....	.....	.....
La Fayette (*g*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43.8	38.1	.....	.....	.....	.....	.....
La Grande	30.9	27.4	34.2	49.4	58.4	57.7	71.5	68.4	60.8	52.5	41.9	29.6	48.6	96	1	.....	.....
Lakeview	30.6	28.1	36.0	46.9	54.2	55.2	66.9	68.6	57.0	52.1	40.6	24.7	46.7	102	—11	May 30	Sept. 14
Langlois	.....	.....	.....	.....	.....	.....	.....	.....	.....	54.0	48.9	43.9	.....	.....	.....	.....	.....
Leland (*g*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41.0	38.3	.....	.....	.....	.....	.....
Lone Rock	34.4	25.5	33.4	45.6	53.5	52.9	(70.0)	64.8	(60.0)	51.0	42.7	34.5	(47.4)	.....	.....	.....	.....
McMinnville[9]	40.6	35.5	42.0	50.2	58.6	57.8	64.8	67.9	58.6	54.6	47.8	39.8	51.5	102	22	May 8	Oct. 13
McMinnville (*g*)[3]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43.5	38.4	.....	.....	.....	.....	.....
Monmouth (*g*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42.6	41.2	.....	.....	.....	.....	.....
Mount Angel	41.0	36.6	43.9	50.9	59.4	59.3	73.2	70.0	59.8	55.7	48.4	41.4	53.3	101	20	Apr. 3	Nov. 16
New Bridge	.....	.....	.....	.....	.....	.....	.....	71.3	61.2	48.2	45.0	28.6	.....	.....	.....	.....	.....
Newburg	.....	.....	.....	.....	.....	.....	67.5	69.8	60.6	56.6	47.6	40.4	.....	.....	.....	.....	.....
Newport	.....	.....	.....	.....	.....	.....	.....	.....	.....	51.6	46.2	.....	.....	.....	.....	.....	.....
Pendleton	38.6	29.8	37.6	52.6	60.3	62.2	70.0	70.4	59.6	54.2	44.8	37.8	51.5	107	— 7	.....	.....
*Portland	43.2	37.0	44.0	52.3	59.9	60.2	68.8	70.0	60.8	57.6	49.0	41.8	53.7	102	23	Mar. 31	Nov. 16
Portland (*g*)[3]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45.8	40.6	.....	.....	.....	.....	.....
Riddles (*g*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45.5	37.3	.....	.....	.....	.....	.....
*Roseburg	42.4	39.8	47.0	52.2	57.6	59.5	67.7	70.4	62.2	58.1	50.8	42.0	54.1	102	24	Mar. 31	Nov. 16
Roseburg (*g*)[3]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49.8	44.5	.....	.....	.....	.....	.....
Salem (*g*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47.1	41.6	.....	.....	.....	.....	.....
Sheridan (*g*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49.9	38.5	.....	.....	.....	.....	.....
Silver Lake	29.0	27.0	35.6	47.4	56.4	54.9	67.1	(70.0)	(59.0)	(53.0)	38.6	25.5	(46.9)	.....	.....	.....	.....
Silverton (*g*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	44.4	39.9	.....	.....	.....	.....	.....
Siskiyou (*g*)	36.2	34.5	41.1	46.2	55.4	57.8	67.1	68.1	57.5	55.1	45.5	29.8	49.5	.....	.....	.....	.....
Sparta	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	32.8	24.1	.....	.....	.....	.....	.....
Springfield (*g*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46.0	39.3	.....	.....	.....	.....	.....
The Dalles	37.5	32.6	39.4	53.4	61.8	61.2	70.8	71.2	61.1	54.3	46.4	36.6	52.2	100	— 1	.....	.....
Toledo	46.4	39.7	(49.0)	51.6	57.2	(60.0)	65.1	66.5	59.8	(55.0)	52.6	45.6	(54.0)	101	15	.....	.....
Vale	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24.5	.....	.....	.....	.....	.....
Vernonia (*a*)	40.6	34.7	40.6	48.7	(56.0)	57.1	62.0	64.5	56.2	53.8	47.4	39.5	50.1	.....	.....	.....	.....
Weston	(39.0)	(30.0)	36.4	51.1	60.4	60.0	70.0	70.5	58.8	53.2	49.3	36.3	(50.7)	.....	.....	.....	.....
West Fork (*g*)	38.5	37.2	.....	.....	.....	.....	.....	.....	.....	.....	47.3	41.2	.....	.....	.....	.....	.....

[1] Post hospital.
[2] John Briggs.
[3] Southern Pacific R. R.
[4] F. H. Carter.
[5] State Agricultural College.
[6] J. B. Paddock.
[7] Dr. E. J. Thomas.
[8] Dr. P. J. Barrett.
[9] Capt. W. Harris.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Pennsylvania.																	
Alleghany Arsenal	[a]35.2	38.9	36.6	52.2	58.2	72.4	70.0	71.2	68.6	52.4	40.8	40.6	53.1	95	5	.....	.....
Altoona	35.5	40.2	39.9	53.8	62.2	72.5	70.7	72.8	69.2	53.5	44.9	44.0	54.9	95	6	.....	Nov. 7
Aqueduct (a)	32.8	37.2	35.9	53.1	60.7	71.4	69.6	71.6	67.9	51.0	39.9	38.8	52.5	98	8	Apr. 9	Oct. 9
Blooming Grove	28.6	30.8	33.0	48.8	56.6	69.7	67.4	69.0	64.5	48.5	36.2	37.6	49.2	98	— 3	May 6	Oct. 23
Blue Knob	26.0	29.7	28.3	47.6	57.0	68.4	65.8	66.5	63.1	45.3	34.2	31.7	47.0	.....	.....	May 6	Sept. 9
Carlisle (a)	30.7	35.6	33.8	51.4	59.9	69.4	[b]67.6	70.8	68.4	50.6	38.4	33.6	51.3	97	9	.....	.....
Chambersburg (b)	30.1	33.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Charlesville (a)	28.9	34.7	32.8	48.8	.....	68.0	66.3	67.5	63.1	.....	.....	.....	.....	.....	.....	.....	.....
Coatesville (a)	31.9	35.9	34.6	51.5	58.0	68.9	71.5	71.2	67.4	(53.5)	40.3	38.9	(52.0)	97	6	.....	.....
Coopersburg (a)	32.1	35.5	35.0	51.7	58.5	69.3	68.1	69.9	66.5	50.6	39.7	39.8	51.4	95	8	.....	.....
Corry (a)	26.5	30.4	31.3	44.6	51.2	64.0	61.4	63.4	60.3	47.0	36.2	34.2	45.9	94	—14	May 27	Sept. 30
Drifton	.....	31.6	.....	.....	.....	.....	.....	.....	.....	.....	[c]34.9	[d]35.6	.....	.....	.....	.....	.....
Dyberry (a)	24.9	27.1	30.2	44.3	52.0	63.7	63.0	65.0	60.6	44.1	34.3	34.6	45.3	94	—14	May 19	Oct. 12
Eagles Mere (a)	23.8	26.8	29.1	44.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Easton (a)	30.7	34.2	34.6	50.3	58.4	69.6	69.4	71.4	66.8	50.0	39.0	38.2	51.0	95	6	.....	Oct. 24
Edenboro (a)	26.2	29.5	29.2	45.8	53.4	65.8	64.6	65.8	65.4	49.0	35.1	34.2	47.0	88	3	May 7	Oct. 12
Emporium (a)	30.2	33.8	35.7	47.9	69.6	67.9	68.5	67.6	66.5	48.2	38.8	36.7	51.0	92	— 4	.....	.....
*Erie	30.7	33.0	32.6	46.8	52.8	66.1	66.2	68.5	65.8	51.6	40.0	37.8	49.3	89	0	May 5	Oct. 12
Forks of Neshaminy (a)	34.0	37.8	36.3	51.6	58.1	(71.0)	70.7	72.5	(70.0)	51.0	42.8	[b]42.2	(53.2)	.....	.....	.....	.....
Frankfort Arsenal	35.8	39.4	[c]38.8	52.8	59.8	70.7	71.2	73.6	70.6	54.4	42.6	41.6	54.3	97	10	.....	.....
Girardville (a)	30.4	33.9	33.1	49.9	57.3	67.2	66.3	67.9	64.4	48.0	37.2	37.6	49.4	92	7	.....	.....
Grampian (a)	27.0	30.5	30.1	46.6	56.1	67.9	65.4	67.5	64.4	46.1	35.2	34.8	47.6	91	— 2	May 27	Oct. 10
Greenville	30.0	34.6	33.0	47.7	54.1	67.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hamburg	(32.0)	(36.0)	(35.0)	51.2	59.0	70.4	69.0	71.3	66.7	52.0	39.8	[c]38.2	(51.7)	.....	.....	.....	.....
*Harrisburg	32.2	36.6	35.0	52.8	60.0	69.9	69.6	72.2	69.4	52.4	41.1	39.8	52.6	93	10	Apr. 9	Oct. 25
Hollidaysburg (a)	31.0	35.5	33.9	50.4	58.3	68.7	[e]67.8	68.5	64.5	49.0	38.6	38.7	50.4	98	2	.....	.....
Honesdale (a)	26.4	29.4	32.4	46.9	54.9	65.0	64.4	67.5	63.4	47.4	36.3	35.1	47.4	90	— 7	.....	.....
Hulmeville	.....	.....	.....	.....	.....	.....	.....	.....	66.5	51.5	41.6	40.4	.....	.....	.....	.....	.....
Huntingdon	29.3	33.5	32.5	50.2	58.2	68.6	68.1	70.8	67.5	50.2	39.1	38.7	50.6	97	3	.....	.....
Indiana	31.0	34.5	34.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Johnstown	31.3	37.4	35.2	50.8	58.3	(68.0)	(66.0)	70.5	67.4	50.9	40.3	38.8	(51.2)	94	6	.....	.....
Kane	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	33.6	.....	.....	.....	.....	.....
Kennett Square (b)	31.7	36.6	34.5	49.7	57.6	68.0	(71.0)	70.4	(70.0)	50.6	40.1	37.5	(51.5)	.....	.....	.....	.....
Kilmer (a)	33.7	38.6	37.8	54.6	63.0	72.9	71.8	73.2	68.9	55.5	39.5	36.8	53.9	103	12	Apr. 6	.....
Lancaster	[c]33.9	37.2	35.5	52.9	59.0	(70.0)	(70.0)	(73.0)	67.3	52.0	41.8	[c]41.8	(52.9)	.....	.....	.....	.....
Lebanon (a)	(32.5)	[c]37.7	35.2	52.1	59.2	68.3	68.1	70.4	66.9	50.7	39.5	38.7	(51.6)	.....	.....	.....	.....
Le Roy	26.2	29.2	30.0	47.2	55.8	67.8	67.4	68.7	65.4	47.4	36.4	35.8	48.1	98	— 2	May 17	Oct. 12
Lewisburg	29.9	34.9	35.0	52.0	60.4	71.0	70.1	71.2	(67.0)	51.2	(39.5)	(37.0)	(51.6)	.....	.....	.....	.....
Ligonier (a)	30.9	38.2	36.3	[c]53.2	60.0	70.9	69.2	68.9	66.7	50.5	41.0	39.6	52.1	93	4	.....	.....
Lock Haven (a)	29.4	34.2	34.5	(49.0)	58.3	68.5	67.9	(69.0)	66.0	50.0	39.4	37.4	50.3	.....	.....	.....	.....
Mauch Chunk	[d]29.7	35.3	34.9	[a]47.5	58.6	67.7	66.9	67.9	(66.5)	47.1	(38.0)	(37.0)	(49.8)	.....	.....	.....	.....
McConnellsburg (a)	31.6	38.2	34.4	51.7	59.3	68.5	68.1	70.3	66.0	50.6	[c]41.8	39.8	51.7	95	5	.....	.....
Meadville	28.2	32.9	31.4	47.2	(54.0)	65.3	64.1	66.7	(65.0)	47.2	38.8	39.6	(49.2)	.....	.....	.....	.....
New Castle	33.3	38.3	36.4	52.7	57.5	72.8	67.9	72.2	69.8	54.0	41.0	40.3	53.0	95	— 2	.....	.....
Nisbet	29.0	34.2	35.0	49.4	57.8	68.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 5	.....
*Philadelphia	36.4	39.6	38.0	54.3	61.0	71.8	71.9	74.3	71.6	54.9	44.2	42.8	55.1	97	12	Apr. 6	Oct. 12
Philadelphia[1]	36.2	40.5	38.4	54.4	61.7	72.4	72.4	74.5	71.6	55.2	44.7	43.3	55.4	99	13	.....	.....
Phœnixville	34.5	37.8	36.8	52.4	58.8	69.8	70.3	72.8	68.4	53.0	41.4	40.9	53.1	94	10	May 6	Oct. 17
*Pittsburg	35.0	39.2	37.6	53.4	58.8	72.3	70.0	71.7	69.4	53.4	42.3	42.1	53.8	94	9	May 17	Oct. 17
Pleasant Mount (b)	(25.5)	21.3	24.8	43.1	(54.0)	64.3	63.4	63.9	61.8	43.4	32.9	38.2	44.7	.....	.....	May 6	.....
Pottstown (a)	33.9	37.7	36.9	53.3	60.5	72.0	71.1	74.1	70.1	53.8	42.5	40.7	53.9	99	10	.....	.....
Quakertown (a)	33.6	34.7	34.4	50.3	56.9	68.1	63.0	71.2	68.1	49.9	38.6	[c]38.4	50.6	.....	.....	May 28	Oct. 17
Reading (b)	.....	.....	38.6	53.3	.....	.....	72.2	.....	65.8	.....	40.1	39.3	.....	.....	.....	.....	.....
Rimersburg	28.0	33.1	31.7	48.2	56.0	69.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saegerstown (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35.8	.....	.....	.....	.....	.....
Salem Corners (a)	30.2	32.1	33.1	49.3	58.2	71.0	68.1	67.0	64.6	50.8	39.1	32.9	49.7	.....	.....	May 6	.....
Selin's Grove (a)	(29.0)	34.1	34.2	(50.0)	59.7	69.6	68.5	69.0	66.5	50.2	39.6	39.6	(50.8)	91	— 2	.....	Oct. 1
Smethport (a)	27.2	34.3	31.9	46.4	53.7	66.6	64.6	65.8	60.8	(47.5)	(36.0)	(36.0)	(47.6)	.....	.....	.....	.....
Somerset (a)	29.9	33.5	30.1	46.4	53.4	66.7	64.4	66.4	62.2	47.8	38.2	35.0	47.8	94	— 3	.....	.....
South Eaton	28.9	32.6	33.8	48.3	55.2	66.2	65.6	67.7	63.3	48.6	36.2	37.6	48.7	92	0	.....	.....
State College (a)	28.9	33.1	31.5	49.6	57.0	66.8	65.4	68.3	65.4	48.6	37.5	37.7	49.2	92	0	May 6	Oct. 12
Swarthmore	34.1	38.3	36.8	52.2	59.4	69.4	69.4	72.6	69.7	52.1	41.0	41.2	53.0	95	11	.....	.....
Troy (a)	29.0	32.1	33.2	48.4	55.2	65.9	65.2	66.3	64.6	48.5	(35.5)	(36.0)	(48.3)	.....	.....	May 5	.....
Uniontown (a)	36.2	39.9	38.0	53.1	59.8	71.6	68.7	71.0	68.6	52.9	42.5	41.3	53.6	.....	.....	.....	.....
Wellsboro (a)	25.7	29.8	31.2	45.4	50.4	61.5	60.4	62.0	59.0	44.4	34.6	34.6	44.9	92	— 8	May 27	Sept. 9
West Chester	33.6	37.7	35.6	52.1	59.2	69.8	69.6	72.2	69.2	53.4	41.8	41.5	53.0	93	10	May 6	Oct. 25
Westtown (a)	[c]35.0	38.4	37.2	.....	58.7	69.5	.....	.....	.....	.....	42.4	[a]41.8	.....	.....	.....	Apr. 7	.....
Wilkesbarre	31.8	34.7	36.1	51.3	58.7	70.0	68.1	(70.0)	68.3	52.2	40.4	(37.5)	(51.6)	.....	.....	.....	.....
Wysox (a)	28.3	31.6	32.6	47.5	55.3	66.2	66.1	67.0	64.1	47.2	37.3	36.6	48.3	98	2	.....	.....
York (a)	32.0	37.0	34.9	52.5	59.8	69.8	70.0	71.3	69.0	50.1	39.4	40.0	52.2	.....	.....	.....	.....
Rhode Island.																	
*Block Island	34.4	34.9	35.2	44.9	51.9	61.0	65.0	69.2	65.8	53.1	43.4	41.7	50.0	85	9	Apr. 7	Oct. 29
Bristol (a)	32.4	32.2	36.3	45.9	54.1	63.3	67.1	71.0	66.4	50.6	41.5	40.0	50.1	88	5	.....	.....
Fort Adams	28.8	32.0	34.0	43.9	50.4	60.3	63.6	69.6	66.0	51.4	43.4	42.6	48.8	95	5	May 7	.....
Kingston[2]	30.6	32.1	34.0	46.9	54.2	64.5	66.4	70.5	65.4	49.8	40.2	38.7	49.4	94	5	.....	Oct. 23
Kingston[3]	31.4	32.6	32.8	45.5	53.3	63.3	65.8	69.4	64.4	49.5	40.4	39.4	49.0	92	1	.....	.....
*Narragansett Pier	32.4	34.5	35.4	46.6	54.8	64.4	68.2	71.0	67.3	52.2	42.6	40.9	50.8	94	4	Apr. 7	Oct. 24
Newport	35.4	35.6	38.4	48.6	55.0	64.8	.....	.....	.....	.....	43.3	42.4	.....	.....	.....	.....	.....
Olneyville	33.1	35.2	36.9	50.6	58.4	67.6	69.4	73.1	68.0	53.0	43.6	42.8	52.6	94	6	.....	.....
Providence[4]	32.0	33.6	34.6	50.1	57.4	67.5	70.4	72.1	66.1	51.3	41.6	40.8	51.5	98	6	.....	.....
Providence[5]	30.4	32.0	34.8	49.2	56.8	66.4	69.0	71.4	66.5	50.8	40.3	39.9	50.6	98	2	.....	.....
Providence[6]	32.2	32.3	34.7	49.0	56.2	66.2	68.0	70.6	65.8	50.7	39.0	39.0	52.2	96	4	.....	.....
South Carolina.																	
Aiken (a)	46.1	55.7	50.4	64.3	68.4	79.6	77.1	76.9	70.7	58.0	51.5	49.2	62.3	98	22	.....	Nov. 18
*Allendale	.....	.....	.....	.....	70.6	81.0	79.4	80.0	75.4	62.4	54.4	.....	.....	.....	.....	.....	.....
*Batesburg	.....	.....	.....	.....	70.2	80.4	78.3	78.7	74.6	61.0	52.5	.....	.....	.....	.....	.....	.....

[1] John Comly. [2] N. Helme. [3] Agricultural Experimental Station. [4] City engineer. [5] D. W. Hoyt. [6] Ladd Observatory.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
South Carolina—Cont'd.																	
Belmont (a)	44.0	52.2	47.1	63.2	67.7	77.8	75.7	76.4	72.2	58.4	49.6	48.0	61.0	97	20		Oct. 21
*Blackville					70.7	82.0	79.1	80.2	74.8	61.4	53.6						
Branchville					69.0	79.0	77.2	78.8	73.8	60.2	53.0						Oct. 23
Brewer Mine	(44.0)	(51.0)	48.0	62.1	68.1	79.0	77.8	78.2	73.3	(58.0)	48.6	48.2	(61.4)				
*Charleston	50.5	58.4	55.1	64.8	70.2	80.2	79.7	81.5	76.3	63.8	56.2	55.2	66.0	95	29	Feb. 27	Nov. 30
*Cheraw[1]	44.3	54.9	49.8	62.2	68.0	79.0	77.2	78.6	72.2	56.6	46.4	46.8	61.3	100	17	Apr. 6	Oct. 24
Chester						78.2	77.2	78.8	73.0	59.0	48.2						
*Columbia	45.0	54.4	47.6	61.4	70.2	79.6	77.2	78.8	74.0	59.7	52.1	50.2	62.5	100	19	Apr. 7	Nov. 7
Conway			54.2	62.1	67.4	77.6	79.1			60.2	52.4	50.8					
Evergreen			46.4		65.2			77.0		57.6	50.0	46.8					
*Florence					71.0	82.1	78.8	80.6	74.8	59.0	52.4						Oct. 29
*Greenville					65.3	75.7	72.2	74.1	70.6	58.6	49.0						Oct. 28
*Greenwood					68.6	80.2	77.4	79.0	74.0	59.4	50.0						Oct. 28
*Hardeeville	59.1				70.5	80.0	79.0	80.5	75.6	63.2	55.9						Oct. 22
*Jacksonboro	46.8	59.7	(56.0)	(65.0)	69.4	79.6	78.5	79.6	74.3	60.2	53.2	(55.0)	(64.8)				Oct. 28
*Kingstree					70.0	80.2	78.2	[c]79.6	74.8	60.3	51.2						Oct. 24
Kirkwood (c)	41.1	51.6	47.0	59.7	64.8											Apr. 6	
Kitchings Mills							78.5	78.4	76.8	58.8							
Port Royal (a)	50.2	58.8	55.9	65.0	70.8	80.0	79.4	80.6	76.4	63.5	55.8	54.6	65.9	95	30		Dec. 1
*St. Georges					69.8	79.4	78.2	79.0	74.6	60.7	53.6						Oct. 29
*St. Matthews					70.2	80.2	78.2	79.3	74.4	62.2	54.6						Nov. 18
Simpsonville (a)	41.3	48.0	44.1	60.9	[d]66.0	75.4	(72.0)	76.4	72.0	53.6	46.7	45.4	(58.5)			Apr. 6	Nov. 18
Society Hill						[c]79.8	75.5	76.8	72.9	56.7	53.0	48.8					
Spartanburg (a)[2]	42.2	47.7															
*Spartanburg[1]					67.6	78.5	75.5	77.8	73.2	59.0	50.0						Nov. 16
Statesburg (a)	46.1	54.4	50.4	63.0	68.1	77.0	74.6	75.3	72.0	58.7	51.2	50.6	61.8	95	23	Apr. 5	Nov. 18
Trial	43.6	(46.0)	50.8	(63.0)	66.9	77.1	77.9	75.3	75.6	61.3	53.8	52.2	(62.0)				
Walhalla	41.4	48.8	46.2	(61.0)	66.5	(75.0)	75.1	76.4	(70.0)	57.4	48.6	44.8	(59.3)				
Winnsboro (a)	(43.0)	53.6	51.4	67.0	71.9	81.2	79.4	81.4	75.6	64.1	51.8	49.8	(64.2)				
Yorkville	44.0	52.0	48.0	62.3	67.0	76.7	75.0	77.0	73.4	58.9	49.8	49.2	61.1	93	20		
South Dakota.																	
Aberdeen	21.2	8.8	15.2	46.0	56.0	62.8	66.0	[c]7.4	[b]59.2	45.8	22.1	19.0	40.4	103	—26	May 25	
Alexandria	23.8	8.4	20.6	50.2	56.8	65.0	68.8	67.8	68.5	(49.0)	(27.0)	[a]22.0	(43.7)			May 13	Aug. 23
Britton (a)									63.2	45.8	21.8	19.4					
Brookings (a)	21.0	6.6	17.9	44.1	55.7	63.7	65.1	66.3	65.1	45.4	23.7	24.7	41.6	100	—29	May 17	Aug. 23
Canton (a)	25.0	10.2	22.6	49.4	[c]57.6	66.6										Apr. 14	
Castlewood								65.6	63.5	44.4	20.4	22.4					
Clark	22.4	5.8	20.0	48.3	57.4	64.2	68.6	69.6	66.7	48.0	22.5	23.8	43.1	102	—23	May 16	Aug. 23
Cross (a)					[c]52.6	[b]59.4	[c]63.6	63.3	62.1	48.0	32.7	36.0					
De Smet (b)	21.6	6.2	19.6	47.2	58.8	63.3	66.8	67.2	64.3	43.4	21.7	22.4	41.6				
Egeland (a)					59.8	64.1											
Elkton (a)	17.3	7.9	20.4	(48.5)	(56.0)	62.9	65.3	65.3	64.2	44.6	23.2	23.2	(41.6)	98	—28		July 24
Flandreau	21.4	8.8	20.4	47.5	56.5	64.0	65.8	67.6	65.7	47.0	24.2	25.8	42.9	100	—29	May 6	Aug. 23
Forestburg					57.0	63.8	66.8	67.9	65.4	48.0	26.9	26.8					Aug. 23
Forest City							[c]78.6	75.8	70.3	51.2	31.6						Oct. 6
Fort Bennett	27.5	13.0	22.7	50.1	58.4	66.6	71.8	73.0	69.0	49.9	(28.0)	(27.0)	(46.4)			May 10	
Fort Meade	31.1	12.7	25.0	47.6	56.0	61.8	68.2	70.0	64.5	51.1	35.6	32.7	46.4	100	—33	May 10	
Fort Randall	28.2	12.4	24.6	50.5	58.8	66.3	69.3	67.8	68.4	52.9	31.9	30.2	46.8	95	—20	May 8	
Fort Sully[3]	30.3	7.9	23.0	49.9	59.2	65.3	72.4	72.8	68.3	49.4	27.8	26.9	46.1	109	—24		
*Fort Sully	27.9	8.6	22.0	49.4	56.7	65.2										May 5	
Frankfort									64.2	48.4	23.3	22.6					
Garry								62.1	66.7	47.8	23.8	24.4					Oct. 4
Highmore (a)	25.0	9.9	18.8	45.4													
Howard	22.5	8.6	20.9	(50.0)	61.1	63.7	66.8	67.7	65.5	48.0	24.4	26.6	(45.2)			May 4	Aug. 23
*Huron	24.1	6.9	19.3	48.6	56.0	64.1	67.2	67.8	66.0	48.0	24.2	24.5	43.1	97	—24	May 16	Sept. 3
Kimball	22.5	5.6	18.0	46.3	57.3	65.2	68.6	67.1	66.4	49.8	28.2	27.5	43.5	103	—18		
Millbank (a)	27.0	13.6	26.2	56.1	64.7	69.3	71.6	73.0	63.1	49.6	24.4	23.7	46.9	102	—20	May 4	
Mitchell (a)							68.2	67.6	66.9	49.0	29.8	28.0					Oct. 5
Onida (a)	23.0	5.7	18.7	44.6	54.4	62.6	63.9	65.7	62.5	43.8	21.9	19.0	40.5	102	—20	May 21	
Oelrichs	24.6	10.2	22.8	48.0	58.0	63.0	69.4	70.9	63.8	46.3	31.1	27.3	44.6	104	—28	May 9	Sept. 27
Parker							68.5	69.0	67.1		29.4	27.6					Sept. 3
Parkston (a)	28.0	13.2	24.0	48.1	56.6	63.7	68.2	68.7	66.8	49.0	30.2	27.9	45.4	98	—16		Sept. 29
*Pierre							70.8	71.5	68.4	50.1	29.7	27.8					Oct. 4
Plankinton (a)						65.0	69.2	68.8									
*Rapid City	31.8	12.4	25.1	47.0	55.0	62.6	68.4	69.2	64.4	50.1	34.6	32.3	46.1	100	—22	May 10	Oct. 3
St. Lawrence (a)	25.6	8.6	21.1	50.8	59.0	65.9	70.7	69.7	(66.0)	(47.5)	28.0	29.6	(45.2)			May 4	
Scranton (a)	25.1	8.1	20.2	47.4													
Sioux Falls	23.1	9.4	22.4	46.9	(56.5)	(63.0)	66.4	66.8	66.0	48.9	24.8	26.5	(43.6)				Aug. 23
Spearfish (a)	31.5	13.3	25.1	46.8	56.0	61.5	68.0	69.5	63.4	49.0	34.7	31.8	45.9	96	—28	May 10	Oct. 2
Tyndall								70.4	68.4	50.5	30.5	29.2					Aug. 6
Vermillion	24.0	11.6															
Watertown												24.4					
Webster (a)	25.2	13.2	21.8	49.8	(56.0)	(65.0)	64.1	68.7	70.0	50.5	27.0	28.3	(45.0)				Aug. 23
Wentworth (a)											23.7	24.6					
Wessington Springs							68.3	69.0	67.6	51.4	27.3	28.0					Oct. 5
Wolsey (a)	23.0	6.3	20.1	48.0	58.2	66.3	71.1	70.4	66.6	47.0	24.2	22.3	43.6	102	—25	May 3	Aug. 23
*Yankton	27.1	11.5	23.0	51.1	58.2	66.2	69.6		[c]68.3	51.8	30.4	31.2					Oct. 15
Tennessee.																	
Andersonville (a)	37.3	44.5	42.4	61.5	62.5	75.6	70.8	76.2	75.2	56.2	45.8	42.0	57.5	95	16		
*Arlington					65.6	77.0	74.5	75.0	71.8	56.4	45.7						Oct. 8
Ashwood (a)	40.4	47.5	46.2	60.0	65.6	77.4	74.0	73.7	70.2	57.4	47.2	46.1	58.8	95	18	Apr. 5	Oct. 9
Austin (a)	40.5	46.5	47.6	61.6	65.4	79.2	76.3	76.4	71.5	57.2	47.8	46.9	59.7	96	15		Oct. 16
Bethel Springs (a)					66.4	76.0	75.0	71.8	68.4	58.6	49.2	50.0					

[1] Special Cotton Region Station. [2] John F. Bayerly. [3] Post hospital.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Tennessee—Continued.																	
*Bolivar[1]					72.2	79.1	76.5	75.6	72.8	60.6	51.6						Oct. 20
*Brownsville					67.8	79.8	77.8	76.4	73.2	60.0	50.1						Oct. 20
*Chattanooga	42.4	49.6	47.6	62.2	67.5	78.6	75.4	76.6	72.2	59.3	48.8	45.6	60.5	96	18	Apr. 6	Oct. 16
Clarksville (*a*)	39.0	44.1	44.7	60.1	65.0	77.5	75.0	74.6	71.3	57.0	46.2	45.0	58.3	95	14		
Covington[2]	40.8	45.5	46.3	61.6	66.3	76.5	77.9	74.4	72.0	59.2	47.1	47.3	59.7	93	18	Apr. 6	
*Covington[1]					65.8	78.8	78.5	77.2	73.6	61.3	51.0						Oct. 23
Dunlap (*a*)			48.1	61.8	63.8		72.1	73.0									
*Dyersburg					67.7	80.6	77.4	75.8	72.7	59.0	48.2	48.2					Oct. 23
Fayetteville (*a*)	39.8	48.7	47.5	60.4	65.8	77.6	75.2	75.2	71.0	57.2	47.8	46.2	59.4	96	20		
Florence Station (*a*)	39.8	47.2	46.4	60.8	65.4	77.7	74.9	75.6	71.8	58.2	46.4	[b]45.6	59.2	93	19		
Franklin (*a*)	39.1	45.6	45.3	60.1	64.4	76.7	73.3	73.8	69.2	57.6	46.4	44.9	58.0	95	15		
Grand Junction					66.0	77.2	75.5	74.3	72.4	59.1	49.5						Oct. 19
Greeneville (*a*)	37.4	45.9	43.6	56.2	60.7	72.0	69.6	70.7	75.7	51.8	43.6	42.1	55.8	86	16		
Harriman				59.2	65.5	77.8	76.4	78.4	72.4	58.4	45.0						Oct. 16
Hohenwald (*a*)	40.8	46.4	45.0	60.4	64.4	77.0	75.0		70.4								
Jacksonboro (*a*)	38.5	46.0	44.8	59.1	63.3	74.2	71.7	72.2	68.0	53.7	44.9	39.0	56.3	90	15		
Jackson				[b]62.3	62.3	72.6	72.2										
Johnson City (*a*)		46.0	44.5	58.5	62.7	76.1											
Kingston Springs (*a*)	40.2		48.0		65.0	78.2		74.9	70.0	56.8	42.6						
*Knoxville	39.8	47.2	45.6	59.9	63.8	76.6	73.4	74.8	71.1	56.0	46.7	43.6	58.2	93	18	Apr. 6	Oct. 16
Lewisburg (*a*)	39.5	47.2	46.2	59.5	65.2		73.0	72.8	73.8								
Livingston (*a*)						76.9	75.0	76.8									
Lynnville (*a*)	40.7	46.1	45.3	58.9	63.7	76.4	73.3	71.0	70.5	58.8	46.2	45.1	58.0	98	14		
McKenzie (*a*)		44.0		58.2	63.4	73.0	78.5			61.2	49.4	48.3					
McMinnville (*a*)	(41.0)	(47.0)	47.9	59.5	64.5	74.2	73.4	73.9	70.2	55.5	46.4	47.8	(58.6)				
*Memphis	42.2	47.7	48.0	64.2	68.2	79.5	77.0	76.7	74.9	61.0	49.2	49.2	61.5	97	20	Apr. 4	Oct. 23
*Milan					67.3	80.2	77.0	76.0	72.4	58.6	48.2						Oct. 16
Missionary Ridge (*c*)	39.3	47.2	45.5	60.0	64.6	75.1	72.7	73.6	69.6	56.8	46.6	43.4	57.9				
*Nashville	40.5	46.2	46.1	60.7	65.4	78.1	75.0	75.4	72.1	58.7	47.0	46.0	59.3	97	17	Apr. 5	Oct. 16
Newport (*a*)				58.6	64.6	76.0	75.6	74.7	70.8			42.2					
Northville (*a*)			43.9	58.4	62.2	73.1	70.9	70.2	67.6	52.4							
Nunnelly (*a*)	40.3	46.5	46.7	60.8	65.5	77.4	73.3	73.6	70.0	57.2	46.9	46.1	58.7	92	13		
Parksville (*a*)	41.0	49.8	46.7	60.1	64.2	75.4	73.1	74.1	(70.0)	56.2	47.7	44.7	(58.6)	95	18		
Riddleton	40.1	47.0	45.6	59.6	64.5	76.5	73.7	78.8	70.0	53.7	44.8	41.8	58.0	96	12	Apr. 6	
Rogersville (*a*)	36.9	44.6	43.5	56.6	61.9	74.5	71.0	72.4	67.8	52.2	43.1	38.2	55.2	91	16		
Rugby (*a*)	36.0	43.6	42.7	57.1	61.5	74.4	70.1	70.6	66.6	51.4	43.2	41.0	54.8	91	12		
Savannah (*a*)	41.0					79.5	77.3	76.3	72.5	57.3	49.7	48.7					
Sharp (*a*)	40.3	48.6	49.0	61.3	66.0	77.3	74.2	73.8	71.3	57.8	47.9	46.4	59.5	98	14		
Sparta (*a*)				61.5	65.9												
Springdale (*a*)	39.2	47.9	44.5	(55.5)	65.0	74.2	72.1	76.2	71.4	55.2	(43.0)	41.9	(57.2)				
Trenton	38.4	44.6	45.0	58.8	63.4	75.6	72.9	72.0	68.6								
Union City (*a*)	39.1	(44.0)	44.7	60.7	68.0	80.0	79.5	79.4	73.2	56.6	41.9	46.1	(59.4)				
Waynesboro (*a*)	36.9	45.1	45.2	59.1	62.4	74.1	70.7	70.6	68.1	(60.5)	45.5	43.6	(56.8)	94	13		
Texas.																	
*Abilene	42.1	48.0	49.6	62.0	68.8	78.8	82.4	80.1	75.7	64.9	54.3	48.4	63.0	104	15	Mar.26	Nov. 12
Austin[3]	49.6	57.0	58.1	68.1	(74.0)	84.8	86.4	85.5	80.8	72.0	62.2	54.8	(69.4)	101	26		
Austin (*e*)[4]	49.8	57.4	57.4	70.2	72.1	82.2	83.6	82.6	77.4	66.8	59.0	53.6	67.7	99	24		Nov. 17
Austin[5]				69.0						65.6	57.3	52.4					
*Belton					78.4	85.5	88.5										
Berlin	45.3	51.0	52.3	65.8	71.2	81.2	83.5	[b]81.8	79.6	[c]67.4	(55.0)	(50.0)	(65.3)			Apr. 5	
Brady (*a*)	42.8	49.9	52.0	63.6	68.9	78.1	81.4	78.4	75.1	64.8	[c]54.2	48.7	63.2	102	18	Apr. 5	Nov. 17
Brazoria (*a*)	51.7	59.0	58.9	67.4	71.4	80.0	80.4	78.2	76.1	65.8	60.1	57.0	67.2	95	26		Nov. 18
*Brenham	54.0	59.0	59.2	69.4	74.6	84.0	84.5	83.2	78.6	68.8	61.8	55.8	69.4	101	26		Nov. 17
Brownsville	62.9	66.6	65.8	72.3	76.2	83.8	83.8	82.1	79.0	72.4	66.9	63.2	72.9	96	36	(6)	(6)
Brownwood (*a*)	43.0	49.3	51.8	62.9	68.4	77.7	77.7	76.3	76.4	63.7	53.8	48.2	62.4	105	16	Apr. 5	Nov. 10
Burnett (*b*)	45.8	52.0	52.6	64.9	70.0	78.8	81.8	80.2	76.2	64.0	56.2	49.0	64.3				
Camp del Rio	50.1	57.8	58.8	69.8												Mar. 9	
Camp Eagle Pass	51.8	59.6	59.9	67.8	76.4	85.1	88.9	84.1	80.2	68.3	59.2	50.4	69.3	111	18	Mar. 8	
Camp Pena Colorado	37.6	48.1	52.2	60.7	67.8	75.6	79.6	75.7	71.8	59.4	50.4	37.9	59.7	104	1	Apr. 7	
Childress (*a*)	34.4	41.7	44.6	60.1	66.4	77.9	(80.0)	(78.0)	(74.0)	61.4	47.8	43.9	(59.2)			Apr. 4	Nov. 10
Coldwater	[a]28.9	[m]30.8	55.8		[b]62.8				[m]69.0								
College Station	52.8	58.4	57.5	69.8	73.8	82.0	82.8	82.4	79.2	70.3	60.8	55.0	68.7	100	25	Mar.13	Nov. 17
Colorado[7]	42.0	51.4	52.8	[a]64.6													
*Columbia	52.8	60.4	60.2	68.8	73.0	82.4	81.8	80.3	76.8	66.6	61.3	56.0	68.4	97	26		Nov. 18
*Corpus Christi	55.6	61.0	60.0	68.2	74.2	80.2	82.2	80.5	78.6	70.9	64.2	58.8	69.5	95	33	(6)	(6)
Corsicana[8]	43.4	48.0	51.2	[c]64.8	69.9	81.0	82.2	(80.0)	[a]78.2	67.1	[d]54.8	[c]50.2	(64.2)			Apr. 5	Nov. 1
*Corsicana[1]	44.8	50.4	49.1	64.4	70.2	81.1	81.7	80.2	76.2	63.8	53.7	48.2	63.6	100	19		Nov. 17
*Cuero[1]					[a]73.8	83.2	85.4	84.4	82.3	68.3	63.6						Nov. 30
Cuero[9]										68.8	[f]60.3	56.1					
*Dallas (*a*)[1]					73.2	84.3	[a]86.2	83.6	79.2	66.2	59.8						
Dallas[10]										71.3		54.4					Oct. 8
Duval (*a*)	49.3	56.9	57.2	68.7	73.5	83.9	86.3	83.6	81.5	69.6	59.1	51.4	68.4	104	26		
*El Paso	39.9	49.6	54.5	63.0	70.2	78.6	84.4	81.0	77.2	64.3	54.8	41.6	63.3	104	8	Mar.15	Nov. 9
Epworth	37.2	45.2	47.6			74.2	80.0										
Forestburg	[a]40.8	48.2	50.6	64.6	68.3	79.2											
Fort Bliss	38.3	46.3	53.8	62.6	70.6	80.5	85.8	82.8	77.9	64.2	53.2	39.4	62.9	107	9	Mar.11	
Fort Brown	(63.0)	64.3	64.2	71.5	74.5	81.6	83.7	82.1	75.7	71.6	65.2	62.0	(71.6)	97	34		
Fort Clark	48.6	57.2	61.4	68.7	72.1	82.9	85.7	83.2	80.0	68.8	60.2	49.8	68.2	104	21	Mar. 9	
Fort Davis	38.7	50.8	52.8	59.5	64.8	76.8										Apr. 2	
Fort Hancock	35.5	45.4	50.0	59.4	66.6	76.3	83.1	79.5	72.0	60.0	50.0	37.7	59.6	109	−6	Apr.22	
Fort McIntosh	53.3	63.1	64.2	69.0	76.0	86.2	87.5	84.0	80.4	70.4	63.4	57.4	71.2	106	27	Feb. 4	
Fort Ringgold	59.6	65.2	64.5	72.3	77.0	85.5	87.5	85.8								Feb. 12	

[1] Special Cotton Region Station.
[2] J. I. Hall.
[3] Oscar Samostz and Ernst Kruger.
[4] Dr. Q. C. Smith.
[5] Geo. F. Townsend.
[6] No frost during season.
[7] F. R. Blount.
[8] W. H. Hamilton.
[9] J. N. Reuss.
[10] G. A. Eisenlohr.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Texas—Continued.																	
Fort Worth	.....	52.6	55.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fredericksburg (*a*)	45.5	53.7	53.3	64.2	68.3	77.5	81.9	79.0	74.7	63.7	57.1	50.6	64.1	101	14	.....	Nov. 17
Gainesville	(44.0)	[b]47.8	49.8	62.9	[d]68.4	[d]79.2	80.6	[e]81.8	76.0	[f]63.8	[e]52.4	[g]48.3	(62.9)	.....	.....	.....	Nov. 10
Gallinas (*a*)	49.1	56.3	56.7	66.9	72.1	81.2	83.9	81.9	76.7	64.7	58.9	53.4	66.8	105	18	Mar. 9	.....
*Galveston	52.6	59.5	59.5	68.2	73.8	81.3	82.6	82.0	78.3	71.0	62.6	57.2	69.0	92	34	(1)	(1)
Graham	40.1	45.5	48.9	(65.5)	[e]72.2	82.0	83.6	81.9	76.6	63.1	54.2	50.1	(63.6)	109	14	Apr. 5	Oct. 10
Grapevine	44.2	46.7	49.2	63.6	69.3	81.4	81.2	81.1	76.4	65.1	54.8	49.0	63.5	104	16	Apr. 5	Nov. 13
Hallettsville (*a*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	70.0	62.5	56.9	.....	.....	.....	.....	.....
Hansford (*a*)	.....	35.6	41.4	.....	.....	.....	.....	76.6	67.4	.....	40.8	.....	.....	.....	.....	.....	.....
Hartley	.....	.....	.....	.....	64.4	74.4	75.7	74.0	68.3	55.1	43.1	36.8	.....	.....	.....	.....	Nov. 9
Haskell	40.7	45.8	49.4	66.2	73.5	83.6	88.0	85.0	(77.0)	66.2	53.3	47.5	(64.7)	106	15	.....	.....
*Hearne	.....	.....	.....	.....	71.2	81.0	81.3	80.2	76.4	65.2	56.8	.....	.....	.....	.....	.....	Nov. 11
Highland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	51.2	.....	.....	.....	.....	.....
*Houston	50.6	58.6	59.0	67.6	71.2	80.7	80.0	79.5	76.7	66.0	59.4	53.8	66.9	99	25	Mar. 13	Nov. 18
*Huntsville	48.1	55.4	56.1	66.2	72.0	82.4	82.3	81.0	77.0	65.0	56.8	53.9	66.4	98	25	.....	Nov. 17
La Grange (*c*)	50.4	57.2	57.4	67.8	72.2	81.0	82.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Liberty	.....	.....	.....	.....	.....	.....	.....	.....	.....	68.2	61.6	.....	.....	.....	.....	.....	.....
Llano	.....	.....	.....	.....	.....	.....	.....	84.4	80.0	68.0	60.4	56.2	.....	.....	.....	.....	Nov. 18
*Longview	46.8	55.1	54.8	66.6	71.6	82.6	82.6	80.8	76.8	63.8	56.4	(49.0)	(65.6)	.....	.....	Mar. 9	Nov. 17
*Luling	50.4	58.1	57.4	70.0	75.0	84.5	85.8	84.1	79.2	68.8	55.4	(55.0)	(67.0)	.....	.....	.....	Nov. 8
Menardville (*a*)	42.8	50.7	51.5	63.2	67.3	77.2	81.2	78.6	74.5	61.5	54.2	48.4	62.6	107	17	Mar. 13	.....
Merkel (*b*)	36.9	39.2	.....	.....	64.0	.....	81.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mesquite	44.3	51.2	51.2	64.8	71.4	82.6	83.0	82.0	76.8	65.2	55.3	50.5	64.9	103	19	Apr. 5	Nov. 17
Mountain Spring	43.9	48.3	48.6	64.4	68.5	79.7	80.4	80.8	75.6	63.4	53.7	46.6	62.8	105	15	.....	Nov. 10
New Braunfels	49.8	56.8	57.3	67.3	[e]70.4	80.6	82.2	80.7	77.8	67.6	60.6	52.9	67.0	100	20	Apr. 13	Nov. 18
New Ulm (*a*)	50.7	57.5	57.3	68.6	73.0	81.1	82.4	81.8	77.6	69.0	59.3	55.4	67.8	98	27	.....	Nov. 17
Odessa	.....	.....	.....	.....	.....	.....	.....	.....	[d]81.5	70.1	.....	.....	.....	.....	.....	.....	.....
*Orange	.....	.....	.....	.....	69.8	78.8	78.6	.....	74.0	63.4	[e]62.2	.....	.....	.....	.....	.....	Oct. 9
*Palestine	46.1	53.6	52.6	65.8	69.8	79.9	80.2	79.1	75.6	66.0	56.2	52.2	64.8	96	21	Mar. 27	Nov. 17
Panhandle	[b]29.6	[d]37.6	[d]38.5	[b]54.3	[b]54.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 5	.....
Panter (*a*)	44.7	51.1	51.1	65.6	69.2	78.0	79.4	79.0	(76.0)	63.2	50.6	47.9	(63.0)	106	19	Apr. 4	Nov. 17
*Paris	.....	.....	.....	.....	71.0	80.2	81.4	80.3	78.1	62.9	51.0	.....	.....	.....	.....	.....	Nov. 10
Quanah	.....	.....	.....	.....	.....	.....	.....	.....	76.0	62.8	50.4	43.5	.....	.....	.....	.....	Nov. 11
*Rio Grande City	59.4	65.8	65.6	72.4	78.6	86.8	87.6	85.3	81.4	71.6	66.2	61.0	73.5	104	25	Jan. 24	Dec. 18
Roby	(40.0)	(47.0)	[f]51.2	62.0	68.6	82.2	85.4	81.8	76.6	63.8	52.4	46.0	(63.1)	.....	.....	.....	.....
Round Rock	49.4	54.8	55.3	68.1	71.2	81.2	84.0	83.6	78.8	67.6	59.1	54.4	67.3	101	20	Apr. 5	Nov. 17
San Angelo	45.8	[d]52.0	.....	65.8	[f]69.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*San Antonio[2]	50.9	57.4	57.3	67.4	71.8	81.6	84.4	82.8	78.6	68.9	61.1	65.1	68.1	104	25	Mar. 9	Nov. 18
San Antonio[3]	50.9	57.4	57.3	67.4	71.8	81.6	84.4	83.1	78.6	68.8	61.1	54.8	68.1	104	25	Mar. 9	.....
San Antonio (*a*)[4]	.....	.....	.....	.....	.....	.....	.....	.....	.....	70.0	61.2	55.1	.....	.....	.....	.....	Nov. 17
Sierra Blanca[5]	[d]60.1	(45.0)	56.0	70.5	[d]69.0	78.1	81.8	80.7	74.8	[d]69.6	(50.0)	(40.0)	(64.6)	.....	.....	Apr. 5	.....
Silver Falls (*a*)	37.6	47.3	47.7	60.3	[d]66.0	76.2	81.9	79.1	74.8	62.0	50.8	45.0	60.7	103	11	.....	Nov. 9
Snyder	36.0	34.2	40.3	59.6	67.4	77.7	78.4	78.4	.....	.....	.....	.....	.....	.....	.....	.....	Nov. 18
Sugar Land	.....	.....	.....	.....	.....	.....	.....	.....	.....	[d]64.6	59.2	53.2	.....	.....	.....	.....	.....
Temple	43.9	51.9	53.0	(69.0)	72.0	80.3	82.0	80.4	77.2	66.0	55.6	49.5	(65.1)	101	21	.....	Nov. 16
*Tyler	.....	.....	.....	.....	70.4	80.6	80.8	79.5	73.8	63.6	52.8	.....	.....	.....	.....	.....	Nov. 17
Venus	41.1	51.0	52.6	65.0	70.4	80.6	81.3	81.4	77.6	67.0	54.8	47.8	64.2	102	13	Apr. 5	Nov. 12
Victoria (*a*)	.....	.....	[e]59.8	[e]70.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Waco[7]	46.4	54.6	53.4	66.4	73.5	83.4	83.8	82.0	77.3	66.0	58.2	50.8	66.3	100	21	.....	Nov. 13
*Weatherford	42.5	52.8	50.6	(65.0)	68.2	81.4	82.4	81.4	76.4	67.0	57.8	(49.5)	(64.6)	.....	.....	.....	Nov. 13
Wichita Falls (*a*)	40.0	43.9	47.6	61.0	67.8	78.9	79.6	(82.0)	(76.0)	(62.5)	53.3	[j]49.7	(61.9)	.....	.....	.....	.....
Utah.																	
Alta	17.6	19.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Beaver	27.2	31.0	38.2	46.6	56.1	58.9	66.8	67.5	60.9	53.0	42.6	25.6	47.9	94	—12	May 11	Sept. 17
Blue Creek (*g*)	25.3	26.6	34.4	53.8	66.5	69.6	82.0	77.4	64.1	48.0	42.9	24.6	51.3	105	—6	.....	.....
Castle Gate (*a*)	.....	.....	.....	.....	.....	.....	70.3	68.2	58.3	46.0	39.1	.....	.....	.....	.....	.....	Oct. 1
Cisco	.....	.....	.....	.....	.....	.....	.....	.....	[e]66.8	52.6	41.8	25.5	.....	.....	.....	.....	.....
Corinne (*g*)	26.3	26.9	37.9	51.6	64.6	66.8	75.9	78.6	65.3	48.6	41.0	25.0	50.7	101	—12	.....	.....
Deseret (*a*)	.....	.....	.....	.....	.....	.....	.....	[b]72.4	61.1	46.7	37.6	25.4	.....	.....	.....	.....	Sept. 24
Fort Douglas	28.2	30.6	38.9	48.9	60.0	62.0	72.9	74.2	66.4	53.5	43.8	30.4	50.8	98	2	.....	.....
*Fort Du Chesne[2]	16.9	20.4	35.4	46.2	57.2	62.8	70.6	69.4	66.0	.....	.....	.....	.....	.....	.....	Apr. 22	.....
Fort Du Chesne[3]	16.2	19.1	(35.5)	(46.0)	(57.0)	[d]60.6	69.7	68.8	60.8	45.4	36.0	20.2	(43.8)	.....	.....	.....	.....
Green River	.....	.....	.....	.....	.....	.....	.....	.....	70.6	51.8	41.8	30.4	.....	.....	.....	.....	Oct. 6
Kelton (*g*)	25.6	27.9	40.6	52.6	62.7	66.5	77.0	77.6	65.4	43.7	38.0	24.8	50.2	103	—15	.....	.....
Lake Park	27.0	28.6	37.5	48.3	58.5	59.8	71.1	71.8	63.2	48.6	40.2	27.2	48.5	95	—7	.....	Oct. 1
Levan	16.2	19.8	32.8	45.1	56.8	60.8	71.7	70.4	58.8	45.2	37.1	21.5	44.7	.....	.....	.....	Oct. 2
Logan	[e]22.3	24.8	34.8	[d]49.6	58.8	62.2	71.1	(70.5)	63.6	52.4	40.9	(20.0)	(47.6)	.....	.....	.....	.....
Loose (*a*)	21.1	24.9	33.5	43.5	54.8	61.0	69.8	68.6	57.9	45.7	43.3	23.0	45.6	99	—7	June 1	Sept. 18
Moab (*a*)	27.9	35.9	43.5	55.8	67.7	73.3	77.1	72.8	65.5	50.4	40.5	28.0	53.2	108	2	Apr. 26	Oct. 3
Mt. Carmel (*a*)	23.4	24.4	31.1	(50.0)	55.0	60.4	70.0	69.0	60.7	51.0	40.0	27.0	(46.8)	.....	.....	Apr. 27	Sept. 17
Mt. Pleasant	13.2	16.3	25.0	30.0	45.1	48.2	57.9	.....	.....	.....	.....	.....	.....	.....	.....	June 27	.....
Nephi	20.2	23.9	36.7	46.5	56.8	59.7	69.0	70.1	60.6	47.4	38.8	22.6	46.0	98	—19	May 12	Sept. 10
Ogden (*g*)[8]	28.2	27.7	37.5	52.0	62.8	65.4	75.7	75.0	64.9	50.3	41.7	26.7	50.7	98	—4	Mar. 31	.....
Ogden (*b*)[9]	29.0	29.8	39.4	53.8	64.1	67.2	77.6	76.0	(65.0)	54.7	42.8	28.4	(52.3)	.....	.....	.....	.....
Park City (*b*)	17.0	21.4	25.3	40.8	52.1	56.8	[d]62.4	64.0	53.6	43.0	[e]35.7	18.3	40.9	.....	.....	Apr. 25	.....
Parowan	22.8	26.9	36.4	47.0	56.7	62.4	[e]71.0	72.8	60.4	51.5	43.8	25.4	48.1	99	—10	Apr. 26	Oct. 1
Promontory (*g*)	27.6	26.9	33.7	48.1	59.9	61.4	73.0	72.5	61.7	48.3	39.9	25.0	48.2	103	—5	.....	.....
Provo City (*b*)	24.8	26.6	34.6	46.7	60.8	[d]57.2	73.2	[d]69.6	58.7	49.6	[e]45.0	[e]28.8	48.0	.....	.....	.....	.....
Richfield	22.0	29.8	.....	.....	.....	.....	71.4	79.8	66.5	49.4	39.6	23.0	.....	.....	.....	.....	Oct. 2
St. George (*a*)	37.4	38.8	46.9	54.3	(55.0)	71.6	82.0	(69.0)	74.1	61.7	50.6	36.0	(56.4)	.....	.....	Apr. 20	Nov. 8
*Salt Lake City	28.8	30.6	38.0	49.6	60.0	62.0	73.3	74.4	65.0	53.2	44.2	28.6	50.6	98	0	Apr. 9	Oct. 3
Scofield (*a*)	.....	.....	.....	.....	.....	.....	61.8	58.6	44.6	37.8	.....	.....	.....	.....	.....	.....	.....

[1] No frost during season.
[2] Weather Bureau.
[3] Post hospital.
[4] Gus A. Duerler.
[5] G. H. Hutchins.
[6] Not reliable.
[7] Special cotton region station.
[8] Southern Pacific Railroad.
[9] W. W. Crossman.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Utah—Continued.																	
Snowville	35.0	34.9	43.4	57.0	66.2	64.4	73.4	70.8	61.5	54.2	43.5	26.0	52.5	93	4	.....	Sept. 28
Stockton (*b*)	20.4	24.2	33.5	43.2	53.4	57.2	68.1	71.6	60.3	43.8	37.4	23.6	44.7	.....	.....	.....	.....
*Taylors Ranch	18.1	22.3	33.7	43.8	53.6	59.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 11	.....
Terrace (*g*)	26.8	31.7	40.0	49.3	62.0	66.9	80.4	80.2	62.7	52.0	42.8	26.7	51.8	100	0	.....	.....
Uintah	24.3	25.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vermont.																	
Brattleboro[1]	24.0	26.5	32.0	48.0	57.0	66.4	68.2	67.9	63.2	46.9	37.2	35.3	47.7	96	—8	May 19	.....
Brattleboro (*a*)[2]	24.1	27.1	31.6	47.3	55.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Burlington	22.0	25.6	31.1	46.7	56.8	67.4	68.1	68.2	63.8	49.2	39.2	34.8	47.7	94	— 4	.....	.....
Chelsea (*a*)	20.4	19.0	23.7	39.2	48.3	56.8	59.0	60.5	56.8	41.2	29.6	28.1	40.2	81	—17	.....	.....
East Berkshire (*a*)	15.0	19.5	26.0	.....	50.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Enosburg Falls	.....	.....	.....	.....	.....	62.6	64.2	65.0	62.6	45.0	35.2	31.8	.....	.....	.....	.....	Oct. 1
Hartland	22.2	24.5	28.9	45.4	(53.0)	(64.0)	63.3	63.6	60.6	43.7	33.0	31.2	(44.4)	.....	.....	.....	Oct. 1
Jacksonville	22.8	22.7	26.8	41.8	52.2	61.9	62.3	63.8	59.4	42.4	31.3	31.6	43.2	90	—18	.....	.....
Lunenburg (*a*)	22.2	23.1	28.8	43.0	54.3	65.8	67.0	67.1	63.6	46.6	36.4	31.0	45.7	95	—15	Apr. 29	Oct. 12
*Northfield	17.6	20.9	24.8	41.3	50.7	61.4	63.0	64.5	60.6	43.7	32.6	30.6	42.6	91	—17	May 24	Oct. 1
Saxtons River (*a*)	.....	24.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	33.3	.....	.....	.....	.....	.....
Strafford (*a*)	22.2	22.4	27.5	44.5	53.8	64.6	65.7	67.0	63.1	46.6	34.4	31.2	45.2	88	—14	May 19	Oct. 12
Vernon (*f*)	23.7	26.2	27.3	45.2	55.3	65.3	65.1	69.2	65.1	46.3	38.4	34.6	46.8	95	—10	.....	.....
Weatherfield Center	21.6	22.2	27.5	43.5	52.2	63.6	64.3	67.5	63.1	44.4	33.5	31.2	44.6	88	—12	.....	.....
Virginia.																	
Avon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43.7	.....	.....	.....	.....	.....
Ashland (*c*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	39.9	.....	.....	.....	.....	.....
Bedford City	35.8	41.2	38.4	55.2	59.6	71.3	70.2	70.7	69.7	55.2	44.6	42.8	54.6	.....	.....	Apr. 8	Nov. 3
Big Stone Gap (*a*)	(34.0)	(43.0)	43.1	54.1	58.7	70.8	67.0	71.5	66.6	48.2	40.2	37.8	(52.9)	.....	.....	.....	Oct. 15
Birdsnest (*a*)	41.2	47.1	42.3	56.6	63.0	73.6	74.6	77.6	71.9	58.0	47.7	46.8	58.4	93	19	Mar. 8	Oct. 29
Bolar (*a*)	27.2	33.4	31.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Blacksburg (*a*)	.....	.....	.....	54.9	59.8	71.4	70.1	.....	.....	.....	.....	41.5	.....	.....	.....	.....	.....
Cape Charles (*a*)	.....	.....	.....	.....	.....	70.0	73.5	76.9	72.2	58.5	47.6	47.3	.....	.....	.....	.....	Oct. 29
*Cape Henry	42.2	48.9	43.2	56.4	62.1	72.8	75.0	78.0	73.1	58.6	49.9	48.4	59.0	96	22	Mar. 16	Nov. 18
Casanova	38.1	42.9	39.8	58.4	63.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 8	.....
Charlottesville	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43.9	.....	.....	.....	.....	.....
Christiansburg	.....	42.6	37.8	.....	59.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 7	.....
Dale Enterprise	31.6	42.3	36.8	57.2	62.7	70.7	75.5	71.5	67.6	54.6	41.7	41.5	54.5	93	5	May 7	Oct. 16
Fort Monroe	41.4	(49.0)	(43.5)	(58.0)	62.4	73.4	74.7	77.5	72.4	57.0	46.5	45.6	(60.1)	.....	.....	.....	.....
Fort Myer	36.0	41.5	38.2	55.0	61.6	70.9	71.7	74.0	69.7	53.9	43.1	42.8	54.9	96	11	Apr. 9	.....
Lexington	33.4	41.4	38.6	54.8	60.6	71.8	70.1	71.8	68.2	52.3	41.6	40.0	54.6	94	3	May 8	Oct. 16
*Lynchburg	38.5	43.6	40.6	58.2	62.2	73.8	73.2	74.1	71.6	54.8	44.6	44.3	56.6	94	16	May 7	Oct. 28
Marion	[6]35.0	42.2	40.0	53.4	59.2	[6]72.0	[6]70.6	[6]70.8	65.6	49.8	41.5	38.9	53.2	90	11	May 8	Oct. 16
Mossing Ford (*b*)	35.8	44.7	40.2	57.9	61.0	(76.0)	72.4	73.1	70.0	53.0	43.7	(45.0)	(56.1)	.....	.....	.....	.....
Nottaway C. H.	39.5	44.4	39.8	57.8	63.2	75.0	74.0	75.9	71.8	55.3	(45.0)	(45.0)	(57.2)	.....	.....	May 7	Oct. 28
*Norfolk	43.0	49.0	43.6	58.1	63.9	74.6	75.0	77.4	73.3	58.6	49.8	48.5	59.6	97	22	Mar. 18	Nov. 18
Petersburg	39.9	45.3	40.8	57.7	63.7	74.8	74.4	76.0	71.6	55.5	46.6	43.8	57.5	95	11	May 5	Oct. 23
Richmond	44.9	49.3	44.3	63.4	64.8	77.2	75.6	78.5	75.3	59.8	49.2	47.2	60.8	103	7	May 6	Oct. 23
Salem	38.3	43.1	49.8	56.9	62.6	.....	.....	.....	.....	53.3	45.6	45.5	.....	.....	.....	Apr. 9	Oct. 20
Spottsville (*a*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	55.0	45.2	44.4	.....	.....	.....	.....	Oct. 24
Stanardsville	39.6	44.0	41.6	61.9	65.6	76.6	75.0	75.9	75.4	(53.0)	48.2	45.2	(59.4)	94	14	.....	Oct. 20
Staunton	34.5	41.7	37.2	54.6	59.2	70.0	69.3	72.4	69.7	51.7	40.6	42.3	53.6	94	4	May 6	Oct. 14
Summit	34.1	.....	.....	53.0	58.0	67.5	68.7	70.6	.....	.....	.....	.....	.....	.....	.....	May 8	.....
Wytheville	34.2	41.6	38.8	.....	.....	70.6	68.9	70.8	65.8	51.6	41.5	.....	.....	.....	.....	.....	Oct. 27
Yanceys Mills	36.0	41.8	39.0	55.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 13	.....
Washington.																	
Aberdeen (*a*)	(43.0)	(37.5)	(44.0)	50.9	57.3	56.9	61.6	62.9	56.8	55.2	49.0	42.2	(51.4)	.....	.....	.....	Dec. 3
Chehalis	41.8	35.8	42.4	50.0	57.4	59.0	65.4	66.0	57.4	54.3	47.6	39.8	51.4	101	20	Apr. 3	Sept. 27
Chelan	.....	.....	.....	.....	.....	[6]64.0	74.6	74.4	62.7	53.6	39.6	30.4	.....	.....	.....	.....	Nov. 10
Conlee City	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36.6	29.8	.....	.....	.....	.....	.....
Dayton	.....	.....	.....	.....	.....	.....	71.2	71.8	60.7	[6]53.4	43.8	37.8	.....	.....	.....	.....	.....
Doe Bay (*a*)	42.0	34.4	42.0	48.3	52.6	57.1	60.6	60.8	55.8	52.9	46.9	42.3	49.6	85	13	Mar. 31	Nov. 16
East Sound	42.8	33.4	41.3	50.0	54.4	59.1	69.2	63.0	57.2	53.2	47.0	41.4	51.0	91	20	Mar. 12	Nov. 15
*Fort Canby[3]	45.6	38.9	43.8	48.6	52.4	55.8	59.3	62.6	56.4	55.5	49.2	43.8	51.0	87	30	Mar. 4	Dec. 24
Fort Canby[4]	46.7	39.6	45.0	50.0	53.3	56.2	60.0	63.4	57.5	56.2	50.3	(44.0)	(51.8)	.....	.....	.....	.....
Fort Simcoe	38.8	31.3	41.3	56.9	67.4	66.0	77.1	78.0	65.9	58.5	46.4	35.7	55.3	103	8	.....	.....
Fort Spokane	30.6	23.6	34.3	51.6	62.0	63.0	71.9	71.6	60.8	52.1	35.5	31.2	49.0	104	— 9	Apr. 25	.....
Fort Townsend	42.3	33.7	41.8	48.3	54.4	56.0	59.7	61.2	55.3	51.4	45.4	38.4	49.0	89	20	Apr. 3	.....
Fort Walla Walla	37.6	30.4	37.8	53.6	63.5	63.4	73.3	74.8	63.8	55.8	44.4	39.4	53.2	109	— 2	Apr. 8	.....
Lapush[5]	31.7	23.2	27.3	32.4	38.8	38.6	.....	.....	.....	46.1	43.9	42.4	.....	.....	.....	.....	Sept. 26
Madrone	42.4	35.8	43.6	50.6	56.6	58.6	63.8	65.6	57.4	52.8	48.3	40.6	51.3	90	21	.....	Nov. 13
Moxee Valley	.....	.....	.....	.....	.....	.....	.....	.....	[6]58.5	53.9	42.0	.....	.....	.....	.....	.....	.....
*Neah Bay	45.0	36.5	42.5	48.0	53.2	55.4	59.6	59.2	54.0	52.4	48.2	43.4	49.8	74	22	Apr. 3	.....
*Olympia	42.4	35.4	42.6	49.4	56.5	57.7	63.2	64.0	56.8	53.0	47.2	40.2	50.7	96	21	May 9	Oct. 31
Pomeroy	.....	.....	.....	.....	.....	.....	.....	.....	.....	55.4	43.7	35.8	.....	.....	.....	.....	Nov. 11
*Port Angeles	.....	.....	.....	44.7	50.6	53.2	57.3	59.3	53.6	50.0	44.9	39.7	.....	.....	.....	Apr. 23	Nov. 14
Seattle	42.7	35.1	43.7	46.4	57.4	60.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Spokane	34.9	25.2	33.4	50.0	59.6	60.2	69.8	69.9	60.2	52.1	39.8	33.0	49.0	97	—10	May 9	Oct. 1
Tacoma (*a*)	43.0	37.0	45.0	51.8	58.6	60.0	66.2	66.8	58.4	53.6	47.4	40.6	52.4	99	23	.....	Nov. 12
*Tatoosh Island	44.8	36.8	42.4	46.7	59.5	53.2	56.0	56.4	53.5	51.9	47.8	42.9	48.5	78	27	Mar. 27	Dec. 6
Vancouver Barracks	41.2	36.0	43.8	51.6	58.9	59.9	68.6	69.8	60.4	56.1	48.0	40.9	52.9	103	19	Apr. 20	.....
Vashon	.....	.....	[6]46.0	51.2	58.8	56.2	.....	67.9	56.6	53.4	.....	.....	.....	.....	.....	.....	.....
*Walla Walla	39.4	30.3	39.3	55.3	64.6	64.2	74.4	76.0	64.4	57.5	45.6	39.8	54.2	108	2	Apr. 1	Oct. 31
Waterville	29.0	17.6	30.9	46.8	57.1	57.8	68.5	68.4	57.6	45.6	35.4	24.6	44.9	102	— 7	May 9	Sept. 19

[1] W. H. Childs.
[2] H. B. Chamberlain.
[3] Weather Bureau.
[4] Post Hospital.
[5] This record from January to June, inclusive, is not trustworthy.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
West Virginia.																	
Alderson			[d]38.4	50.8	55.8												Nov. 3
Beverly												40.9					
Bluefield										62.4	57.4						Oct. 17
Buckhannon[1]										[e]46.0	41.1	38.8					Oct. 17
Elizabeth												[f]48.4					
Ella (*a*)	33.8	37.7	36.6	52.3	57.2	70.4	67.5	68.7	66.4	50.5	40.4	39.6	51.8	88	6	Apr. 7	
Glenville									68.6	51.2	40.4	40.6					Oct. 23
Grafton											[h]39.4	39.2					
Kingwood	26.9	33.2	31.6	47.6	50.9	68.5	64.8	67.9	63.7	50.4	41.2	40.0	48.8	91	8		Oct. 17
Martinsburg (*a*)											44.4	42.3					Oct. 17
Mont Alto	29.0	32.4	29.6														
Moorefield												[e]35.0					
Morgantown (*a*)										52.6	42.3	40.6					Oct. 27
Nuttallburg										55.4	46.8						Oct. 23
*Parkersburg[2]	35.5	39.6	38.8	54.6	58.9	72.8	70.0	71.4	69.0	52.6	42.2	40.6	53.8	94	8	Apr. 9	Oct. 16
Parkersburg (*a*)[3]											42.9	40.8					
Piedmont (*a*)										50.5	40.3	38.5					Oct. 17
Pleasant Hill (*c*)	31.3	36.9	33.9	51.6	57.8	70.3	68.8	65.6	61.6	47.3	36.8	39.4	50.1	90	— 9	May 17	Oct. 9
Point Pleasant												[a]44.2					
Romney (*a*)											41.2	[f]42.4					
Tannery (*a*)	33.0	39.3	35.6	52.3	57.5	69.4	68.4	69.6	66.4	50.6	40.5	41.5	52.0	94	— 2	Apr. 26	
Tylers' Creek	32.4	47.6		54.7	56.4	70.0	67.4			45.8						May 7	
Wheeling					[a]63.2	77.3	74.3	75.2	72.0	54.0	43.2	41.8					Oct. 27
Wisconsin.																	
Amherst	20.6	17.0	22.8	43.8	56.4	65.0	64.5	67.6	63.2	45.2	30.8	29.3	43.8	98	—21		
Appleton	(23.0)	19.0	25.3	44.6	56.9	64.6	[i]63.8	(67.0)	66.0	47.8	29.8	30.4	(44.8)				Oct. 16
Baraboo							[i]65.2	65.8	65.8	48.1	28.9	32.5					Oct. 9
Barron						62.2	58.1	59.2	59.5	44.4	25.2	24.1					Aug. 23
Bayfield	(18.0)	(12.5)	20.4	(44.0)	52.2	60.4	64.0	63.3	64.7	49.2	28.4	25.7	(41.9)	91	—15		
Beaver Dam	(25.5)	(22.5)	26.2	45.8	55.1	60.5	67.4	64.7	66.2	49.3	29.2	29.4	(45.2)	97	—14		
Beloit	25.1	24.0	28.8	47.2	56.0	67.5	68.1	69.1	67.3	48.3	30.8	31.6	47.0	95	—11		Oct. 15
Berlin						67.0	70.6	70.4	67.0	[d]48.8	30.2	31.8					
Black River Falls				45.5	53.8	65.0	65.3	[b]69.8		45.9	27.1	27.2					
Butternut	16.3	10.4	18.2	42.0	54.1	(62.0)	66.7	61.9	60.8	44.3	(25.0)	(25.0)	(40.6)			May 4	Aug. 24
Cadiz (*b*)	24.2	24.7	25.6	45.8	54.7	[f]66.8	65.6	66.6	64.3	46.4	28.8	28.1	45.1			May 16	Sept. 4
Centralia	(21.0)	(17.0)	22.8	(45.5)	56.7	64.4	63.6	65.6	64.0	44.9	25.9	25.5	(43.1)	96	—29		
Columbus	25.4	22.6	26.1	47.8	54.7	68.9	65.7	67.2	61.2	48.7	29.6	30.3	45.7	100	—14		
Crandon					[j]54.0	63.4	58.8	60.4	63.0			[e]22.3					Aug. 4
Cumberland						[i]69.0	66.2	65.9		47.6							
Delavan		23.6	28.6	47.2	57.7												
Delavan (near) (*c*)										[k]44.9	31.4	29.8					
De Pere	23.9	21.0	26.7	46.3	57.3	66.3	66.9	67.0	(66.0)	48.9	29.8	31.4	(46.0)	96	—17		
Dodgeville						65.8	64.8	70.2	71.4	52.0	27.0	28.4					
Eau Claire[4]	(23.0)	16.5	26.5	45.4	56.8	63.5	64.0	68.6	65.0	47.4	26.3	28.2	(44.3				
Ellsworth					57.4	65.0	64.5	64.1	69.4								
Elroy	[e]24.0	[e]18.5	28.2	45.1	56.4	68.1	64.5	70.2									
Embarrass (*a*)	20.7	16.7	24.4	46.8	59.0	66.3	65.5	66.7	65.6	46.9	28.6	28.9	44.7	95	—26	May 23	Oct. 6
Florence						62.2	60.5	61.2	60.0	43.2	26.4	26.8					Aug. 24
Fond du Lac (*a*)	22.8	21.3	26.2	46.2	55.4	65.8	65.4	66.1	65.0	47.3	29.8	31.6	45.3	98	—23	June 7	Oct. 19
Glasgow	[k]30.0	18.7	32.4	[b]51.8	[b]59.6												
*Green Bay	22.6	18.0	24.0	45.2	55.7	65.6	65.5	67.0	66.0	48.5	30.2	31.2	45.0	98	—21	May 17	Oct. 6
Greenwood	20.6	12.8	23.3	44.6													
Hammond	(22.5)	(12.0)	23.8	46.2	58.0	65.0	64.2	66.0	65.2	48.2	28.0	(29.0)	(44.2)				
Harvey					55.4	66.4	66.2	68.3	67.6	49.4	31.0	31.4					Oct. 12
Hayward	18.8	11.0	20.0	44.5	53.8	63.1	61.2	61.6	60.4	41.6	19.9	22.8	39.9	94	—37	June 5	Aug. 28
Hillsboro	21.5	17.6	24.7	45.9	53.5	65.1	63.7	65.0	64.2	46.8	32.4	30.0	44.2	96	—22		
Honey Creek (*a*)	26.3	24.6	28.4	47.5	55.8	65.9	70.0	68.3	66.0	49.7	30.3	32.0	47.1	96	—12	May 16	Oct. 16
Ithaca	23.6	19.3	24.8	47.8	54.6	[f]63.5										May 6	
Janesville	(25.0)	(24.0)	30.4	(47.5)	55.2	66.9	65.5	71.3	68.0	50.2	31.8	33.6	(47.5)	99	— 9		
Juneau										47.8	29.7	30.9					
Kenosha	29.3	28.4	30.0	45.2	51.4	62.9	64.6	67.4	67.2	(51.0)	36.4	36.0	(47.5)	95	— 6		
Koepenick (*a*)	14.6					71.8	68.0	65.0	63.8	45.1	28.8	26.7				May 15	
*La Crosse	24.6	17.2	26.9	49.0	58.4	68.0	66.8	68.0	67.4	50.2	30.2	32.0	46.6	97	—24	May 5	Oct. 9
Lancaster	(26.5)	18.8	25.4	48.7	57.3	67.6	65.8	67.4	(68.5)	46.8	28.0	28.4	(45.8)				
Lincoln (*b*)	25.8	21.4	27.2	44.7	54.8	(66.0)	68.2	(66.0)	65.2	48.2	31.2	*33.4	(46.0)				
Madison	25.2	21.9	26.2	46.4	56.0	67.2	66.6	68.4	67.0	45.4	30.0	31.1	46.0	92	—14	May 5	Oct. 5
Manitoba (*a*)	27.6	24.4	30.9	45.3	54.6	63.7	62.9	67.4	64.9	49.4	33.4	34.4	46.6	99	—20	May 26	Oct. 6
Mawston	[k]24.9				49.5			62.5		46.8	[e]26.0						
Meadow Valley	(24.0)	(16.5)	24.8	47.6	56.6	65.6	64.8	63.6	64.4	48.4	29.2	29.0	(44.5)				Aug. 24
Medford[5]	19.6	13.8	23.0	44.4	52.3	63.6	61.7	63.0	62.0	44.6	25.9	25.4	41.6	97	—32		Aug. 24
Menomonie	21.7	13.2	23.6	47.2	56.7	66.4	65.2	66.2	65.2	46.9	25.8	27.2	43.8	100	—25		
*Milwaukee	27.8	25.1	28.8	45.2	52.5	62.6	65.5	68.2	67.2	50.8	32.8	34.2	46.7	96	—12	May 5	Oct. 16
Neillsville	22.6	15.8	24.6	45.0	(57.0)	63.2	60.7	63.8	62.2	45.4	26.5	27.6	(42.9)	95	—33		Aug. 24
New Holstein					53.4	64.5	63.6	63.1				30.2					
Oconomowoc					54.8	66.2	66.4	68.5	67.8	50.2	31.7	31.6					Oct. 29
Oconto	23.3	19.6	26.9	44.2	54.2	63.5	64.9	66.5	64.8	48.6				97	—17		
Osceola Mills (*a*)	(22.0)	(12.0)	(24.0)	47.3	53.1	64.8	63.1	65.7	65.1	47.2	24.9	27.3	(43.0)				Aug. 28
Oshkosh	23.1	20.7	25.7	46.0	55.4	66.0	66.2	68.1	67.2	50.2	31.0	30.6	45.9	98	—18	May 16	Oct. 19
Pepin					53.9	66.6		66.8	66.2			27.3					
Peshtigo	21.0	17.0	23.6	42.1	52.1	62.9	63.1	64.2	62.2	46.2	29.8	30.0	43.0	94	—28	June 5	Sept. 14
Phillips			22.8	43.6			60.2	61.0	61.2								Aug. 24
Plover (*a*)	20.9	17.2	23.0	43.6	52.7	62.0	62.7	65.4	61.2	44.4	24.4	26.7	42.1	99	—34	May 26	Sept. 4
Portage[6]	23.9	25.5	25.2	47.7	58.4												
Prairie du Chien	26.7	23.6	28.5	52.0	60.0	70.0	69.0	70.1	69.2	52.2	30.9	33.4	48.8	98	—15		

[1] Dr. D. T. E. Casteel. [2] T. G. Field. [3] Dr. F. Robert Zeit. [4] Weather Bureau. [5] W. N. Sloane. [6] Miss Ida Sutter.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Wisconsin—Continued.																	
Rhinelander	17.8	8.8	19.4	41.7	52.5	63.4	62.0	62.4	61.5	44.2	24.8	25.2	40.3	95	—40	.....	.....
Shawano	.....	.....	.....	.....	52.6	62.2	62.8	65.6	62.6	45.7	29.8	30.1	.....	.....	.....	.....	.....
Shell Lake	.....	.....	.....	.....	57.1	63.0	63.2	64.1	63.9	43.6	23.2	25.6	.....	.....	.....	.....	.....
Sparta[1]	.....	.....	.....	.....	.....	[b]67.8	.....	.....	64.8	47.2	28.6	29.4	.....	.....	.....	.....	Oct. 4
Sparta[2]	.....	.....	.....	.....	.....	.....	.....	.....	.....	50.0	30.2	29.6	.....	.....	.....	.....	.....
Viroqua	.....	.....	.....	.....	[1]58.9	65.8	64.8	66.4	66.4	48.8	28.2	30.0	.....	.....	.....	.....	Oct. 16
Watertown	.....	.....	.....	.....	.....	67.3	66.8	67.5	66.0	48.0	30.4	30.1	.....	.....	.....	.....	.....
Wauzeka	24.6	16.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Westfield	.....	.....	.....	.....	55.8	65.8	65.8	69.2	67.3	47.4	29.1	29.3	.....	.....	.....	.....	Oct. 9
Weston	19.4	(14.0)	(24.0)	[b]53.4	55.8	66.7	66.0	64.4	60.4	43.0	23.9	27.2	(43.2)	.....	.....	.....	Aug. 28
Whitehall	(24.0)	(18.0)	[c]25.7	47.0	55.2	66.6	64.8	67.3	65.7	48.8	28.1	29.4	(45.1)	.....	.....	.....	Sept. 4
Wyoming.																	
Camp Pilot Butte	20.6	22.2	26.2	41.9	53.9	58.0	65.8	65.2	55.8	40.6	31.7	17.8	41.6	96	—20	June 10	.....
Camp Sheridan	20.4	14.2	22.2	40.8	59.8	51.4	60.3	62.2	52.2	41.3	27.4	18.5	39.2	89	—24	.....	.....
Casper	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	39.8	31.3	.....	.....	.....	.....	.....
*Cheyenne	25.6	23.4	27.7	43.8	51.4	58.2	65.0	65.4	59.0	47.0	34.3	28.3	44.1	89	— 7	May 22	Sept. 3
Evanston	.....	.....	.....	.....	.....	52.6	65.4	65.1	54.9	46.6	34.9	19.0	.....	.....	.....	.....	Sept. 24
Fort D. A. Russell	23.7	21.6	28.6	44.1	49.0	53.4	60.9	61.6	54.5	41.8	31.0	26.9	41.4	90	—16	June 21	.....
Fort Fetterman	25.0	20.1	27.2	45.4	52.7	65.0	71.2	72.2	64.2	47.4	32.4	26.7	45.8	105	—25	May 26	Oct. 1
Fort Laramie	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	34.6	31.5	.....	.....	.....	.....	.....
*Fort McKinney[3]	30.8	16.0	26.7	45.7	51.4	56.6	65.2	67.3	60.0	48.3	32.2	28.0	44.0	89	—25	.....	.....
Fort McKinney[4]	30.7	17.8	28.6	45.6	54.8	57.4	66.6	69.4	63.2	46.8	34.2	28.7	45.3	91	—23	May 11	Sept. 28
*Fort Washakie[3]	20.4	17.0	24.4	41.8	51.1	56.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 23	.....
Fort Washakie[4]	20.9	18.1	26.8	43.3	52.8	58.8	65.4	71.0	(56.5)	43.9	31.9	22.8	(42.6)	99	—29	.....	.....
Grandview	.....	.....	.....	.....	.....	.....	.....	65.4	58.8	47.1	.....	25.0	.....	.....	.....	.....	Sept. 28
Lander	.....	.....	.....	.....	.....	.....	[c]63.7	68.6	58.6	47.0	34.4	27.0	.....	.....	.....	.....	Sept. 3
Laramie (*a*)[5]	19.8	22.8	24.9	39.6	49.2	57.3	63.0	61.0	54.0	41.4	(29.0)	(20.0)	(40.2)	.....	.....	.....	Sept. 4
Laramie[6]	.....	.....	.....	.....	.....	.....	61.2	61.0	55.2	43.2	28.8	19.6	.....	.....	.....	.....	Aug. 22
Lusk	24.4	17.4	24.9	42.8	53.2	60.2	66.4	66.0	58.8	[a]43.8	32.0	25.2	42.9	94	—19	May 16	Sept. 23
Saratoga	16.3	20.6	25.2	39.5	52.1	59.0	68.9	(64.0)	56.6	41.5	29.3	19.8	(41.1)	.....	.....	.....	.....
Sheridan	.....	.....	.....	.....	.....	.....	.....	.....	53.0	42.1	24.9	.....	.....	.....	.....	.....	.....
Sundance (*b*)	.....	.....	.....	.....	.....	.....	.....	64.4	59.7	45.8	29.2	23.3	.....	.....	.....	.....	Sept. 27
Wheatland	21.5	15.8	20.3	45.5	56.1	60.6	65.2	65.7	55.1	[a]45.6	31.8	27.5	42.6	96	—20	.....	Sept. 24

[1] J. W. Livingston. [2] E. W. Crane. [3] Weather Bureau. [4] Post hospital. [5] Dr. L. S. Barnes. [6] Prof. B. C. Buffum.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ANNUAL EXTREMES OF TEMPERATURE AND DATES OF LAST KILLING FROST IN SPRING AND FIRST IN AUTUMN, 1892.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Alabama.																	
Alco									72.7	66.4	56.9	52.0					
*Auburn	37.8	47.6	48.2	64.6	71.2	77.5	77.2	77.2	71.6	64.8	53.0	47.3	61.5	94	10	Mar. 21	Nov. 11
Bermuda (e)	42.8	46.2	54.5	66.8	71.0	77.5	78.2	79.0	72.5	64.8	55.2	49.6	63.2	94	17	Mar. 20	Oct. 28
Bessemer	37.0	46.2	45.4	62.2	71.1	78.5	78.6	79.4	71.1					94			
Brewton	43.7	57.3	56.9	68.3	69.1	78.2	78.7	81.4	76.5	72.2	56.0			100			
Carrollton (a)	39.0	51.6	50.6	65.1	70.7	76.4	75.5	78.2	71.0	63.8				91			
Chepultepec	34.6		43.0	53.4		70.4		77.5									
Citronelle	46.8	57.6		68.6	74.2	79.8	79.0	79.2	74.6	68.4	58.8	52.4		93	17	Mar. 19	Dec. 26
Daphne	49.0	61.2	60.1		75.1	79.7	79.8	80.9	77.0	70.0	58.4	52.4		105	17		
*Decatur [1]				64.4	68.5	76.3	75.8	74.5	66.8	59.6	47.2			95			Oct. 26
Double Springs (a)		46.6	47.5	65.2	67.6	75.6	75.6									Mar. 18	
*Eufaula [1]				69.2	74.2	80.6	79.4	79.6	74.3	67.0	55.4			99			Oct. 27
Eufaula [2]	40.2	52.2		68.6	71.5	79.9											
*Evergreen				67.5	72.4	79.0	79.6	79.0	73.3	66.2	56.6			93			Oct. 26
Fayette C. H			53.9	60.5	69.6	77.7		78.4	69.4								
Florence [3]	36.9	49.4		62.6	68.8	76.0	76.9	76.3	68.2	62.6	51.7	42.3		94			
*Fort Deposit				68.3	73.2	79.1	79.5	79.9	72.0	67.4	54.2			98			Oct. 27
Geneva	47.6	57.3	57.7	67.1	75.6	81.7	82.1	81.6	75.0	67.1	57.3			100			
Greensboro (a)	42.1	55.7	51.2	64.6	70.9	77.6	78.0	77.2	71.5	65.0	65.0	52.3		93			
Healing Springs	45.4	57.6	52.4	67.2	69.0	79.2	78.6	79.5	75.2	63.6	55.6	46.3	64.1	97	15		
Highland Home					72.4	78.0	77.6	77.7		66.9	55.3	46.5		92			
Jasper	36.3	47.8	48.0	62.1	66.4	75.0	76.4	76.9	67.6		49.7	44.8		98	12		
Jemison	43.0	54.2	52.7		73.2												
Livingston (a) [4]	39.3	52.0	51.0	64.4	69.3	75.4	76.4	76.8	71.3	63.5	52.7	46.1	61.5	93	16	Mar. 19	Oct. 28
*Livingston [1]				67.9	70.7	78.2	78.9	79.4	71.5	64.4	54.2			97			Oct. 26†
*Marion				68.1	70.8	78.2	79.4	79.3	72.4	66.0	54.4			95			Oct. 27
Maysville	39.3	47.3	48.1		66.0	78.5	77.5	77.3	69.5	64.7	56.3	49.9		93	17		
*Mobile	47.0	56.8	55.5	66.2	72.4	78.8	79.0	79.8	75.2	69.1	58.4	52.0	65.8	95	20	Mar. 20	Dec. 23
*Montgomery	43.6	54.6	54.6	66.9	73.0	79.7	79.4	79.9	73.4	66.6	55.0	49.0	64.6	96	20	Mar. 18	Oct. 28
Mountain Home (a)	33.2			62.8	67.2											Apr. 15	
Mt. Vernon Barracks	45.7	57.4															
Mount Willing	42.9	55.1	55.0	66.8	72.0	78.3	77.4	80.3	73.9	66.4	58.1			93			
Newburg	38.2	51.0	48.4	62.5	68.3	71.3	76.2	76.7	68.2	63.1	51.3	42.3	59.8	94	10		
Newton	42.0	57.0	56.0	64.9	71.5	78.2		80.1									
*Opelika				63.9	70.0	76.6	81.4	80.0	73.6	66.5	54.4			99			Nov. 11
Oxanna (a)	40.5	50.4	49.8	62.6	68.3	74.7	76.5	75.5	69.0		50.2	45.0		93	14		
*Pine Apple				68.2	73.1	79.1	81.2	79.8	71.7	64.8	54.2			98			Oct 28
Pittsboro	49.2	57.8	58.7	69.8	74.8	82.5	78.5	81.5	76.7	66.5				95			
Pushmataha	43.5	54.0	53.0	65.7	69.7	76.3	77.2	77.7	70.2	63.3	54.0			90			
Scottsboro	35.4	46.6	47.3	61.0	67.8	76.9			68.3	61.0	49.3	42.8			13		
Thomasville				67.3	72.0	78.8	81.0	79.8	73.4	69.7	53.1			96			Oct. 27
Tuscaloosa	38.2	49.8	50.4	65.3		79.8	79.3	79.3	71.4	62.7	51.6			96			
Tuscumbia (a) [5]	36.6	48.4	47.6	62.1	69.3	79.3	77.1	76.1	68.2	61.7	48.3	41.2	59.7	96	10		
*Tuscumbia [1]				65.5	70.1	78.2	78.8	78.2	68.2	62.1	50.3	50.2		98			Oct. 28†
Union Springs [6]	40.9	50.7	51.5	65.3	72.2	78.4	79.7	79.2	72.8	64.3	53.3			97			
*Union Springs [1]					74.0	79.7	80.0	80.5	72.2	62.2	50.3			98			Oct. 26
Uniontown		54.0	51.7				79.0	77.7	74.0	66.6	54.0	48.2					
Valley Head (a)	34.5	44.4	45.1	58.8	66.0	73.4	74.4	73.3	66.7	57.6	45.7	39.5	56.6	91	8	Apr. 16	Oct. 26
Walker Springs		42.4	58.4	69.9	77.3	82.9											
Wiggins	45.3	56.4		69.4	74.4	81.4											
Alaska.																	
Coal Harbor	26.2	24.2	23.0	34.8	44.3	51.9	55.2	54.9	47.4	39.7	35.9	33.4	39.2	79	−6		
Killisnoo (a)	31.0	29.9	30.2	35.0	44.8	46.7	52.1	51.6	44.7	42.0	30.8	29.6	39.0	75	10		
Metlakahtla	36.6	36.9	40.8	42.5	50.4	56.8	58.2	57.8	52.8	49.4	36.0	36.0	46.2	75	9		
Arizona.																	
Arizona Canal Co.'s Dam	53.7	57.2	60.9	65.6	74.6	84.4	91.7	90.4	86.4	71.2	61.6	49.8	70.6	114	23	Jan. 16	Dec. 6†
Benson (g)	48.6	49.1	55.4	61.7	73.0	86.7	94.0	85.7	81.9	66.8	56.1			108			
Bisbee (a)	44.7	45.4	50.8	58.8	66.6	76.4	77.4	74.0	72.7	60.4	52.2	43.4	60.2	99	20	Apr. 1	Dec. 6†
Calabasas (a)	45.2	49.9	54.7	60.8	66.0	75.0	80.0	77.4	73.6	61.6	53.4	42.2	61.7	101	15	May 5	Oct. 21
Casa Grande (g)	48.9	54.8	65.6	69.1	77.9	88.1	94.9	92.7	89.5	72.2	62.4	53.0	72.4	118	22		
Crittenden (e)				60.0	67.3	74.5	80.5		75.7								
Dos Cabezos (a)					67.2	76.4	79.8	78.0	76.4	60.9	50.6						
Dragoon Summit (e)	46.8	48.1	54.8	64.1	75.2	84.3	88.0	82.3	79.6	67.4	52.2	45.1	65.7	100	22		
Dudleyville	46.9	52.2	52.4	62.1	71.0	79.9	87.6	85.4	80.7	66.1	54.4	43.9	65.2	110	21	Apr. 2	Oct. 19
Eagle Pass (c)					58.4	73.0	76.8		73.2	58.8	46.0	37.6					Oct. 16
Farley's Camp (b)	47.4	50.3	54.8	61.0	74.8	84.0	90.2	89.5	85.2	67.6	53.9	45.8	67.0			Feb. 9	Dec. 16
Flagstaff (a)	30.1		41.5	47.1	50.7							28.3					
Florence	50.6	55.0	59.2	64.6	73.0	81.4	89.6	88.6	84.1	69.2	58.9	46.2	68.4	114	19	Apr. 5	Oct. 16
Fort Apache	34.2	40.9	45.8	50.1	56.8	66.5	74.8	70.6	66.2	53.6	45.6	34.6	53.3	103	5	June 12†	Oct. 9†
Fort Bowie	44.6	46.8	52.4	59.8	67.2	79.7	81.0	77.3	75.2	61.9	51.4	40.8	61.5	104	18	Apr. 5†	Nov. 11†
Fort Grant	45.8	47.6	52.2	57.8	66.0	77.2	81.5	79.4	76.6	62.8	54.1	45.1	62.2	105	19	Apr. 19†	Dec. 6†
Fort Huachuca	41.0	46.3	50.7	57.4	65.2	75.3	77.9	76.1	73.8	62.4	53.6	43.0	60.2	100	9	Apr. 6†	Dec. 6†
Fort Mohave	50.0	57.7	64.6	69.8	77.7	86.4	93.1	94.2	88.0	71.3	59.8	49.4	71.8	122	24	Feb. 8	Nov. 26†
Gila Bend (a) [7]	53.6	58.6	63.6	69.8	79.5	88.4	96.0	93.4	90.1	75.1	61.6	50.9	73.4	110	22	Jan. 14	Dec. 6†
Gila Bend (g) [8]	57.0	60.4	65.9	73.7	83.6	92.9	100.3	96.7	93.5	76.0	65.8	53.2	76.6	120	26		
Holbrook	31.4	39.0	45.4	50.2	57.0	65.7	73.5	79.2	69.0			33.8		102	4	June 13	Oct. 14
Lochiel		49.2	51.6	57.1	67.7	75.2				60.4		39.6					Oct. 29
Maricopa (g)	58.7	64.3	63.8	70.8	82.5	89.6	96.3	93.9	87.4	69.5	65.7	52.9	74.6	115	30		
Mount Huachuca	43.6	44.8	51.1	58.6	66.6	76.5	79.5	75.5	73.5	60.8	53.0	41.7	60.4	100	13	Apr. 5	Dec. 6†
New River	53.2	53.5	57.2	61.8	70.2	79.4	85.6	86.2	83.1	69.0	61.4	50.4	67.6	108	28	Mar. 29	Dec. 12
Nogales (e)			50.2	64.6		73.6	80.6		76.2	64.5	58.2	44.8				Mar. 31	Oct. 13

[1] Special cotton region.
[2] James Milton.
[3] N. Parker and R. Smith.
[4] Prof. J. W. A. Wright.
[5] L. B. Thornton.
[6] P. L. Cowan.
[7] D. Murphy.
[8] Southern Pacific R. R.

† 32°. See explanatory note at beginning of table.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Arizona—Continued.																	
Oracle (*a*)	44.5	45.7	51.3	59.0	66.9	77.8	81.9	79.9	77.2	61.3	52.6	40.6	61.6	103	20	Apr. 4	Dec. 14
Pantano (*g*)	46.3	53.3	56.5	65.9	72.3	84.6	86.8	86.3	82.7	71.3	64.8	43.7	67.9	108	25	.....	.....
Payson (*a*)	35.6	39.5	45.1	52.9	61.8	71.4	77.2	76.6	69.6	53.3	42.0	33.6	54.9	105	2	Apr. 7	Oct. 17
Peoria	51.1	55.6	58.6	64.4	75.0	83.3	.....	.....	.....	.....	59.9	48.3	.....	.....	24	Jan. 16	Nov. 25
Phœnix [1]	53.6	57.8	62.0	65.8	75.3	83.2	90.8	92.2	85.5	70.5	62.2	53.6	71.0	113	20	Feb. 11	Oct. 17
Phœnix [2]	50.7	55.4	60.2	64.3	.....	.....	85.4	86.0	.....	.....	.....	.....	.....	.....	.....	Feb. 11	.....
Red Rock (*e*)	53.0	61.3	67.8	75.2	83.8	93.5	99.2	96.6	92.6	.....	61.4	49.7	.....	118	24	Jan. 21	Dec. 20
Reymert	50.8	51.8	55.6	.....	.....	83.0	86.0	84.2	81.8	65.8	.....	46.2	.....	114	24	Feb. 7	Dec. 16†
San Carlos	44.9	51.2	56.7	61.3	69.6	78.6	86.7	83.2	78.9	63.8	51.8	44.4	64.3	112	16	Apr. 20†	Oct. 18†
San Simon (*g*)	51.9	54.5	60.6	69.6	78.1	88.7	85.1	86.9	82.4	66.5	58.3	46.7	69.1	110	22	.....	.....
Signal	49.6	53.4	59.1	64.2	73.4	81.4	90.0	89.6	83.2	68.4	56.5	45.6	67.9	116	20	Jan. 22	Nov. 25†
Tempe	52.3	55.8	58.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Texas Hill (*g*)	53.5	56.9	56.9	66.2	76.2	87.7	98.4	95.1	91.1	70.7	61.9	49.0	72.0	120	27	.....	.....
*Tucson	49.2	52.8	57.0	61.8	69.6	79.2	87.6	85.0	81.1	66.9	58.6	46.3	66.3	107	16	Apr. 6	Nov. 25
Tucson [3]	49.8	53.0	58.4	65.6	73.8	83.4	89.6	87.4	82.7	68.1	58.8	46.6	68.1	110	21	Feb. 9	Dec. 6†
Tucson (*g*) [4]	49.8	49.8	53.3	54.6	57.3	74.6	86.8	84.7	83.8	71.3	61.0	46.3	64.4	107	24	.....	Dec. 16†
Walnut Ranch (*a*)	41.8	44.0	49.0	54.2	63.3	73.5	77.2	74.4	72.4	59.2	48.7	38.9	58.1	100	14	May 5	Oct. 21†
Whipple Barracks	34.7	36.6	44.8	50.0	54.3	66.6	73.9	73.4	67.8	54.0	45.6	33.4	59.9	101	0	May 19†	Oct. 13†
Willcox (*g*)	47.6	54.7	64.4	69.2	77.2	84.7	84.6	80.4	76.7	69.2	58.7	49.2	68.1	108	26	Apr. 29	.....
Winslow (*e*)	.....	42.1	50.4	59.6	71.4	81.2	83.8	80.7	74.7	56.0	44.6	.....	.....	106	.....	Apr. 6	Oct. 17
*Yuma	56.7	59.4	64.8	70.0	76.7	83.8	90.4	90.8	87.2	72.2	63.1	53.0	72.3	116	28	No frost.	No frost
Yuma [4] (*g*)	57.6	61.9	66.8	77.2	76.6	86.2	94.7	93.1	86.3	75.8	72.2	55.9	75.4	116	32	.....	.....
Arkansas.																	
Bee Branch	.....	.....	.....	.....	.....	.....	.....	77.5	70.2	62.5	48.6	40.6	.....	.....	.....	.....	Oct. 26
Black Rock (*a*)	30.9	46.6	47.1	61.2	68.1	79.4	80.4	80.3	.....	.....	48.4	39.2	.....	104	—4	Apr. 15	Oct. 29
*Brinkley	36.2	51.7	49.0	61.9	67.8	76.3	79.3	77.5	69.8	62.6	49.8	44.8	60.6	98	8	Mar. 20†	Oct. 25
Camden [5] (*a*)	37.9	52.0	50.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13	Mar. 28	.....
Camden [6] (*a*)	.....	.....	.....	62.4	68.8	76.8	78.3	77.7	72.3	65.1	53.4	43.6	.....	94	.....	.....	Nov. 10†
Conway (*a*)	32.9	49.0	47.6	61.6	67.0	75.9	77.8	76.4	68.2	61.2	49.1	41.1	59.0	92	0	Mar. 19	Oct. 25
Corner Stone (*a*)	33.0	50.3	49.2	63.4	72.4	78.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mar. 20†	.....
Corning	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42.8	37.3	.....	.....	.....	.....	Nov. 20
Dallas (*a*)	34.5	48.1	48.0	61.0	66.5	76.6	79.4	75.5	70.4	63.4	50.3	40.7	59.2	98	3	Apr. 5	Nov. 9†
El Dorado	38.0	52.0	48.0	59.4	66.0	75.0	76.9	75.5	72.8	68.6	55.8	47.2	61.3	95	10	Mar. 20	Nov. 10†
Fayetteville (*a*)	30.8	43.1	44.8	58.2	63.1	73.4	75.2	74.3	67.6	59.3	46.0	34.7	55.9	97	—12	Apr. 9	Oct. 25
*Forrest City	39.1	53.7	51.4	63.6	69.4	78.1	80.1	79.5	73.0	65.8	53.6	43.1	62.5	96	10	Mar. 19†	Oct. 26
*Fort Smith	33.8	46.9	48.0	61.4	66.7	76.6	80.4	78.9	71.5	63.6	49.1	39.1	59.7	100	— 2	Mar. 19	Oct. 25
Harrisburg (*a*)	32.6	44.8	44.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Harrison	31.5	45.2	44.2	.....	64.8	76.0	76.7	76.0	67.1	56.5	45.5	.....	.....	.....	.....	Mar. 28	Oct. 26
*Helena [7]	36.4	52.6	47.8	63.0	70.4	78.6	80.6	79.1	72.0	64.6	51.6	42.4	61.6	99	.....	Mar. 20†	Oct. 26
Hope (*a*)	37.1	51.8	51.6	64.4	70.4	79.6	79.9	78.3	72.4	65.3	51.7	43.8	62.2	100	.....	Mar. 19	Nov. 10
Hot Springs	35.9	50.2	48.5	61.0	65.7	76.0	78.5	76.0	70.1	62.9	49.6	37.6	59.3	99	.....	Apr. 15†	Oct. 26†
Keesee's Ferry (*a*) (‡)	30.2	42.4	45.4	60.4	67.3	78.7	80.4	77.7	70.2	60.9	45.8	36.2	58.0	106	—13	Apr. 15	Oct. 25
Kirby	.....	.....	.....	.....	.....	.....	.....	77.6	69.4	63.9	50.9	.....	.....	.....	.....	.....	Nov. 9
*Little Rock	35.8	50.7	48.6	61.8	67.4	77.0	79.0	78.4	71.4	64.2	50.0	40.4	60.4	96	10	Mar. 19	Oct. 8
Lonoke (*a*)	37.9	53.0	51.2	64.2	70.6	79.6	81.3	80.6	73.1	66.0	53.5	43.5	62.9	100	9	Mar. 20	Oct. 26
Luna Landing	37.3	53.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Madding (*b*)	34.5	51.6	48.5	63.4	68.2	77.0	79.2	79.0	69.8	61.8	49.7	41.8	60.4	.....	.....	Mar. 19	Oct. 26
*Malvern	.....	49.9	48.7	64.5	70.4	.....	79.8	80.2	.....	60.0	48.8	.....	.....	.....	.....	Apr. 15†	Oct. 25†
Marshall	32.9	46.6	47.0	59.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 15†	.....
Melbourne	.....	.....	.....	.....	.....	.....	.....	.....	68.5	59.5	45.9	36.4	.....	.....	.....	.....	Oct. 26†
Mount Nebo	33.0	45.2	44.4	57.0	64.4	74.0	76.7	77.0	68.6	66.0	45.5	37.9	57.5	90	1	Mar. 19	Nov. 8†
New Gascony (*a*)	33.0	50.3	49.2	63.4	.....	78.7	80.4	79.4	73.3	64.8	51.9	42.6	.....	96	9	.....	Oct. 25
*Newport (?)	33.9	48.0	.....	65.2	68.9	78.6	79.9	79.2	73.4	63.3	49.4	41.7	.....	100	8	.....	Oct. 27†
Osceola (*a*)	33.2	46.3	46.7	60.2	67.0	76.1	77.8	77.2	70.0	61.6	48.3	40.9	58.8	93	4	Mar. 20†	Oct. 25
Ozark	34.9	50.3	47.6	62.0	67.0	78.0	82.4	.....	.....	64.3	50.0	41.0	.....	.....	— 3	Mar. 23	Nov. 8†
Ozone (*a*)	32.2	43.8	43.8	57.3	62.5	74.0	75.0	.....	.....	.....	.....	.....	.....	.....	.....	Mar. 23	.....
Paragould	31.6	48.4	45.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Pine Bluff	37.3	53.2	50.6	63.2	71.2	79.6	81.6	80.6	72.6	66.5	53.4	44.0	62.8	98	10	Mar. 31	Nov. 9
*Prescott	36.7	.....	.....	66.1	70.4	77.3	80.4	79.0	72.2	66.1	52.6	.....	.....	94	.....	.....	Nov. 10
Rogers	30.2	42.2	44.5	58.3	63.6	73.4	76.2	.....	.....	.....	43.2	32.3	.....	.....	—14	Apr. 15†	Oct. 9
*Russellville	.....	.....	.....	65.2	68.5	78.4	81.0	79.6	70.5	63.0	49.7	41.6	.....	97	.....	Apr. 15	Nov. 8
Searcy (*a*)	.....	.....	.....	.....	.....	.....	.....	.....	68.0	60.8	47.8	39.3	.....	.....	.....	.....	Nov. 7
Stuttgart	35.8	51.6	49.0	62.8	69.6	78.3	79.8	78.6	69.7	63.5	51.2	41.8	61.0	96	11	Mar. 20	Oct. 26
*Texarkana	.....	54.2	52.1	64.4	71.2	79.2	82.2	80.6	73.9	68.3	54.6	47.5	.....	99	11	Mar. 19	.....
*Washington [8] (*a*)	38.0	53.0	50.6	64.5	70.3	77.4	79.4	77.3	.....	.....	.....	.....	.....	.....	.....	Mar. 19†	.....
Washington [9] (*a*)	37.1	52.8	50.2	63.5	69.0	77.1	78.6	77.4	71.4	65.3	51.6	43.4	61.4	93	8	.....	Nov. 10
Winslow (*a*)	31.8	40.8	41.3	55.1	63.0	72.9	.....	74.6	68.5	61.7	43.5	34.1	.....	.....	— 7	Apr. 13	Oct. 25
California.																	
Agnew (*a*)	48.3	50.6	53.3	52.8	59.4	61.0	63.9	66.0	63.3	58.7	53.2	49.8	56.7	100	30	Feb. 9	Nov. 25
Alcalde (*g*)	48.7	53.5	56.7	61.3	71.1	78.8	85.9	86.5	82.4	66.2	57.7	44.0	66.1	114	30	.....	.....
Alcatraz Island	50.0	51.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Almaden (*g*)	51.4	52.7	54.7	55.3	61.1	63.5	67.2	68.1	65.4	61.0	.....	.....	.....	99	.....	.....	.....
Alvarado (*a*)	55.2	54.8	55.9	.....	62.4	62.9	63.8	66.9	61.6	57.3	56.7	50.8	.....	97	31	Jan. 29	Nov. 16
Anaheim (*g*)	55.7	55.1	57.9	61.6	69.3	65.5	72.6	74.7	69.4	65.0	61.3	55.7	63.6	103	34	.....	.....
Anderson (*a*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47.7	.....	.....	.....	.....	.....
Angel Island	48.6	52.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Antioch (*g*)	49.5	51.3	54.9	56.3	65.6	69.1	77.6	74.8	68.7	62.8	56.8	51.8	61.6	104	35	.....	.....
Aptos (*g*)	50.9	52.8	53.8	55.4	61.3	63.2	69.2	63.4	60.7	58.3	53.0	50.2	57.7	90	28	.....	.....
Arcata	.....	.....	.....	50.3	53.8	54.8	.....	.....	.....	.....	.....	49.4	.....	.....	.....	.....	Nov. 13
Arlington Heights	.....	.....	.....	.....	.....	.....	.....	75.4	73.8	65.8	62.8	53.8	.....	.....	.....	.....	Dec. 16†

[1] T. W. Hine. [2] Dr. H. F. Adams and B. Perley. [3] E. L. Wetmore. [4] Southern Pacific R. R. [5] R. B. Smith. [6] A. L. Morgan. [7] Special cotton region station. [8] A. H. Carrigan. [9] Judge A. B. Williams.

‡ Formerly known as Lead Hill.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
California—Continued.																	
Athlone (g)	48.9	53.8	56.1	58.3	67.6	74.3	80.6	84.7	75.3	69.0	52.1	45.0	63.8	116	30	.....	.....
Auburn (g)	50.2	52.2	55.2	56.7	64.4	68.7	75.6	76.6	71.6	64.5	58.0	51.5	62.1	105	34	.....	.....
Bakersfield [1] (g)	52.2	53.8	60.4	61.1	69.8	77.9	86.5	86.6	78.9	64.8	58.0	50.5	66.7	110	28	.....	.....
Bakersfield [2]	45.8	53.9	56.0	58.0	67.6	71.4	77.4	78.0	71.2	60.8	53.2	44.6	61.5	110	13	Apr. 15	Nov. 15
Barstow	45.2	51.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Beaumont (g)	49.3	48.4	53.7	56.1	63.2	74.0	77.4	77.7	73.0	62.4	63.4	55.5	62.8	107	29	.....	.....
Belmont (g)	50.9	53.0	60.5	58.2	64.3	69.7	73.3	70.5	65.8	63.4	58.5	52.5	61.7	99	32	.....	.....
Benicia Barracks	47.2	50.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Berendo (g)	48.6	53.4	58.4	60.5	72.3	80.8	85.0	85.8	78.8	64.2	56.2	49.6	66.1	111	30	.....	.....
Berkeley (g)	49.9	50.9	52.8	51.2	56.8	57.9	59.3	59.9	61.4	59.3	55.4	49.8	55.4	92	35	(3)	(3)
Bishop Creek (g)	34.5	46.4	53.8	60.6	71.4	76.4	84.5	81.9	76.5	59.8	51.1	39.5	61.4	104	10	.....	.....
Boca (g)	20.5	22.2	33.1	37.1	45.3	57.1	58.9	61.1	51.3	41.0	29.7	22.0	39.9	92	—20	.....	.....
Borden (g)	44.6	52.1	51.9	58.1	67.0	71.9	79.6	82.0	74.7	63.5	55.7	47.0	62.3	113	27	.....	.....
Boulder Creek	49.2	50.8	55.0	53.9	69.5	61.2	62.6	64.9	61.2	60.6	52.1	47.8	57.4	110	24	.....	.....
Brentwood (g)	46.8	51.9	54.3	58.0	65.2	71.7	79.1	75.7	68.9	62.0	55.3	48.6	61.5	105	31	.....	.....
Brighton (g)	46.9	52.0	57.3	57.1	64.9	74.9	70.5	78.1	72.4	65.1	58.5	.....	.....	111	.....	.....	.....
Byron (g)	49.3	51.0	56.0	59.0	68.6	71.7	78.0	76.3	69.7	61.7	55.6	48.5	62.1	108	28	.....	.....
Caliente (g)	51.0	52.8	55.9	56.5	70.0	76.6	85.1	80.8	70.0	66.4	55.5	47.6	64.0	105	30	.....	.....
Calistoga (g)	52.9	56.0	58.4	57.5	65.1	66.8	72.3	70.1	66.7	60.4	57.0	50.9	61.2	104	27	.....	.....
Capitola (g)	.....	.....	.....	.....	61.4	62.9	65.1	65.2	63.3	60.2	55.4	50.2	.....	94	.....	.....	.....
Castroville (g)	52.7	55.1	56.5	56.2	61.2	62.1	63.5	63.2	61.8	58.5	56.2	52.6	58.3	88	31	.....	.....
Centerville (g)	53.6	55.8	57.4	57.0	63.7	64.8	67.3	.....	66.7	62.0	57.4	53.2	.....	.....	.....	(3)	(3)
Chico (g)	47.1	49.6	53.2	56.2	64.6	70.9	77.1	76.7	72.8	65.8	58.5	52.5	62.1	110	32	.....	.....
Cisco (g)	31.0	32.1	32.5	31.2	41.8	51.8	60.8	61.7	54.2	43.9	37.6	27.1	42.1	83	10	.....	.....
Citrus	39.6	47.8	55.7	61.4	70.2	78.4	89.8	87.4	79.2	62.2	52.9	42.8	64.0	110	18	.....	.....
Claremont	54.4	56.6	55.6	58.0	60.6	64.4	70.8	72.4	70.6	64.0	.....	.....	.....	100	.....	.....	.....
Colfax (g)	43.9	46.0	45.0	48.3	59.7	71.1	72.2	75.3	66.8	57.4	49.7	42.7	56.5	105	28	.....	.....
Colton (g)	55.5	54.9	55.0	58.1	64.1	66.6	70.5	73.7	69.8	62.8	60.5	50.8	61.9	108	30	.....	.....
Corning (g)	45.6	52.2	56.7	56.3	65.1	76.8	78.4	81.7	73.4	64.3	55.3	47.3	62.8	107	26	.....	.....
Crofton (g)	.....	.....	.....	.....	65.5	69.8	76.3	76.0	72.7	57.1	60.8	52.8	.....	104	.....	.....	.....
Davisville [1] (g)	48.9	53.0	56.3	59.8	67.3	73.4	77.0	76.9	71.3	64.0	56.0	48.9	62.7	106	29	.....	(1)
Davisville [4]	.....	58.5	61.3	59.6	65.2	69.2	69.8	74.8	69.9	65.5	58.4	55.0	.....	105	.....	.....	Nov. 24†
Delano (g)	48.1	54.5	57.5	60.7	70.4	76.3	82.7	83.2	73.8	64.3	57.8	50.0	64.9	110	28	.....	.....
Delta (g)	44.0	50.1	54.4	53.9	64.6	71.2	78.4	79.8	71.0	59.6	52.3	40.9	60.0	108	28	.....	.....
Downey (g)	58.8	60.0	61.2	63.7	67.8	68.6	71.4	74.9	71.8	66.2	61.4	55.8	65.1	102	32	.....	.....
Drytown	47.0	50.3	51.7	52.8	60.8	65.4	72.8	74.6	68.0	61.0	54.2	44.8	58.6	105	27	Jan. 28†	Nov. 24†
Duarte	.....	.....	54.5	61.6	64.2	65.3	66.7	70.3	67.0	63.0	61.2	56.0	.....	102	.....	.....	Dec. 15†
Dunngan (g)	50.8	48.7	53.7	59.6	70.0	78.4	83.4	81.3	74.3	69.1	57.0	43.4	64.1	104	24	.....	.....
Dunsmuir (g)	37.6	43.2	50.0	49.1	59.7	63.6	69.5	69.0	60.6	49.2	45.7	37.2	52.9	102	23	.....	.....
Edgwood (g)	33.7	39.5	43.1	44.4	55.3	62.4	68.8	68.6	60.4	47.0	38.4	33.8	49.6	92	16	.....	.....
El Casco (g)	47.5	46.0	54.1	60.0	65.9	73.0	80.8	80.2	.....	62.7	58.6	44.9	.....	116	22	.....	.....
El Dorado (g)	48.1	53.5	53.6	52.1	63.8	69.7	77.7	77.7	70.8	61.0	49.4	46.4	60.3	107	29	.....	.....
Elk Grove	48.4	.....	54.6	55.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elmira (g)	48.2	51.8	58.5	59.7	65.4	68.1	73.1	73.6	70.8	58.5	53.6	49.1	60.8	106	30	.....	.....
El Verano (g)	48.7	51.6	55.5	56.1	66.2	65.8	69.5	69.2	65.7	60.4	55.0	49.7	59.4	102	32	.....	.....
Emigrant Gap (g)	37.5	37.3	38.2	37.1	48.9	50.5	62.7	69.7	60.2	50.7	41.3	34.1	47.4	87	13	.....	.....
Esparto (g)	50.3	54.2	55.2	57.1	66.4	70.5	73.9	76.0	72.6	62.9	59.9	49.2	62.4	105	30	.....	.....
*Eureka	48.0	47.8	48.6	49.0	52.8	53.6	55.4	56.2	56.2	53.6	49.6	46.6	51.4	69	31	Apr. 4	Nov. 17
Exeter (g)	.....	.....	56.2	60.8	69.6	76.0	81.0	84.5	81.0	64.8	57.5	48.5	.....	107	.....	.....	.....
Fall Brook (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60.5	57.2	49.5	.....	.....	.....	Dec. 12
Farmington (g)	51.6	54.3	56.3	54.9	65.9	70.4	76.4	78.7	74.8	64.0	58.0	49.5	62.9	112	32	.....	.....
Felton (g)	39.6	51.2	59.1	57.2	64.9	66.3	69.3	68.0	64.5	61.8	53.6	53.3	59.1	108	24	.....	.....
Fernando (g)	54.0	49.5	55.5	60.9	65.1	68.6	71.7	75.4	70.2	63.1	59.1	50.1	61.9	106	30	.....	.....
Florence (g)	50.3	53.9	59.0	60.5	68.4	68.6	72.3	72.0	75.4	65.9	62.5	56.2	63.8	98	35	.....	.....
Florin (d)	44.3	52.6	56.6	57.9	62.2	64.0	70.4	71.6	65.8	59.4	54.9	47.8	58.9	107	28	May 4	Oct. 18†
Folsom City [1] (g)	50.4	53.5	56.0	58.8	65.9	73.1	80.4	81.5	73.3	63.6	57.2	49.1	63.6	110	32	.....	.....
Forestville	43.0	46.0	50.5	49.6	55.1	57.6	.....	67.4	.....	59.8	53.2	.....	.....	103	.....	May 12	Oct. 15
Fort Bidwell	30.8	35.2	41.6	40.8	52.8	59.1	66.9	68.8	61.9	48.6	40.1	30.1	48.1	95	7	June 9†	Oct. 12†
Fort Gaston	42.0	47.6	51.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Feb. 10	.....
Fort Mason	50.6	52.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Fresno	48.5	53.2	55.6	57.6	67.2	72.8	79.4	81.4	73.6	63.9	56.4	47.4	63.1	112	27	Mar. 28	Nov. 18
Fresno (g)	50.7	55.8	58.1	61.5	71.4	78.0	86.4	87.4	76.0	69.2	56.6	47.3	66.5	117	27	.....	.....
Fruto (g)	47.9	53.6	56.9	57.0	66.3	73.1	80.7	80.8	68.2	64.1	57.8	49.7	63.0	106	31	.....	.....
Galt (g)	47.1	49.6	54.3	63.7	72.8	79.3	84.6	84.6	71.3	62.6	56.0	49.6	64.6	107	31	.....	.....
Georgetown	46.2	46.7	49.0	48.6	57.6	63.8	72.0	75.6	67.7	58.7	52.4	42.7	56.7	98	26	Feb. 10†	Oct. 17
Gilroy (g)	49.1	51.4	54.9	53.1	61.3	66.4	68.4	69.1	66.6	61.1	54.7	48.9	58.8	108	28	.....	.....
Girard (g)	44.8	45.4	46.6	49.4	61.4	66.5	77.0	74.8	68.2	56.5	48.5	40.9	56.7	99	23	.....	.....
Glen Ellen (g)	47.9	50.6	52.4	54.3	62.3	65.1	69.4	68.6	65.4	59.7	55.1	48.1	58.2	104	27	.....	.....
Goshen (g)	45.3	48.9	52.6	54.6	67.3	73.4	79.5	81.7	75.5	66.4	55.1	46.1	62.2	108	24	.....	.....
Grass Valley [5]	41.2	44.3	46.8	46.9	.....	60.6	65.6	66.5	60.7	53.2	46.0	39.2	.....	89	23	Apr. 27†	Oct. 17†
Haywards (g)	47.0	50.7	53.8	52.4	60.1	67.4	67.4	64.2	61.1	56.8	51.8	47.7	56.7	96	33	.....	.....
Hollister (g)	51.1	54.0	56.3	55.4	61.3	63.3	65.6	65.8	63.0	58.5	51.5	47.9	57.8	109	26	.....	.....
Hornbrook (g)	37.0	42.6	46.6	45.2	61.6	65.9	72.7	74.6	65.6	51.5	42.3	36.6	53.5	100	18	.....	.....
Huron (g)	46.3	55.4	61.5	64.5	73.6	77.4	85.0	83.6	79.1	67.7	60.4	49.0	67.0	115	30	.....	.....
Hydesville	48.8	51.0	.....	48.8	53.4	54.8	.....	.....	.....	52.4	49.6	45.7	.....	.....	29	Apr. 23	Nov. 24
Independence	.....	.....	.....	56.6	64.2	71.1	77.4	72.6	72.0	57.8	51.2	40.8	.....	102	.....	.....	Oct. 16
Indio (g)	56.2	59.5	65.9	72.3	78.8	86.1	91.6	90.5	87.2	73.8	64.7	58.2	73.7	112	30	.....	.....
Ione (g)	45.6	50.3	55.0	54.4	61.1	71.1	75.5	76.1	68.6	57.3	54.5	48.6	59.8	105	26	.....	.....
Iowa Hill (a)	47.8	48.2	49.6	49.7	60.1	66.5	74.3	77.2	69.6	60.0	53.3	44.6	58.4	101	30	Mar. 31	Oct. 15
Jackson	45.3	.....	51.8	53.0	58.2	61.6	66.6	.....	69.0	.....	52.0	47.8	.....	.....	20	Apr. 27†	Dec. 5†
Julian (a)	43.2	44.1	46.5	52.5	56.1	63.4	72.4	73.6	69.4	56.4	54.4	41.2	56.1	99	24	May 4	Nov. 24†
*Keeler	40.2	46.6	53.5	57.9	65.4	73.3	80.6	82.0	75.7	59.8	51.8	41.7	60.7	103	23	Mar. 21	Oct. 16
Keeler (g)	39.6	45.5	53.0	58.8	67.6	76.1	83.8	84.2	77.4	60.7	52.2	41.9	61.7	101	24	.....	.....
Keene (g)	45.3	47.9	48.8	53.1	63.9	68.8	77.5	72.5	67.3	58.3	50.9	41.7	58.0	102	22	.....	.....
Kennedy Gold Mine (a)	45.9	47.8	49.5	52.4	62.2	65.4	73.2	74.9	68.2	59.1	51.9	43.3	57.8	104	28	Mar. 30†	Oct. 15
King City (g)	49.2	48.7	57.9	57.1	59.8	65.2	65.3	70.5	65.7	65.2	62.2	61.0	60.6	110	28	.....	.....

[1] Southern Pacific R. R. [2] W. A. Webster. [3] None. [4] A. C. Hillman. [5] W. Loutzenheiser.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
California—Continued.																	
Kingsburg (*g*)	50.2	54.4	56.7	57.8	69.0	78.4	80.2	80.2	76.5	65.6	55.0	48.7	64.4	110	27	.....	.....
Knights Landing (*g*)	48.5	52.0	56.8	59.0	63.4	71.9	76.0	76.1	66.6	61.3	58.1	52.3	61.8	110	32	.....	.....
La Grange (*e*)	50.8	.....	57.8	.....	65.8	72.4	79.8	81.9	74.1	65.3	57.6	47.5	.....	116	30	.....	Dec. 11†
Lathrop (*g*)	51.1	53.8	57.4	56.9	66.6	70.3	74.2	76.5	70.1	61.4	53.0	48.2	61.6	106	30	.....	.....
Laurel (*g*)	48.3	48.8	53.5	54.4	60.1	65.8	69.1	69.8	65.4	61.8	58.0	49.3	58.7	105	30	.....	.....
Lemoore (*g*)	47.2	56.4	56.6	60.8	71.5	76.8	81.9	81.0	73.6	64.0	54.5	48.4	64.4	112	25	.....	.....
Livermore (*g*)	49.2	52.8	54.8	55.0	62.8	64.0	67.0	69.9	65.6	59.5	55.2	48.9	58.7	104	30	.....	.....
Livingston (*g*)	49.1	54.1	56.4	58.6	68.9	73.5	80.8	81.9	73.5	66.9	59.0	51.0	64.5	108	32	.....	.....
Lodi	48.8	53.4	54.6	55.8	63.2	67.6	71.6	73.4	67.8	61.4	54.4	47.6	60.0	106	21	Feb. 9	Nov. 17
Long Beach	51.3	57.8	56.0	56.8	63.9	63.1	63.3	71.2	64.3	59.4	57.8	52.7	59.8	91	32	.....	.....
*Los Angeles	56.6	54.4	56.0	58.6	62.5	63.8	68.0	71.6	67.8	64.0	61.7	54.4	61.6	99	35	(1)	(1)
Los Angeles (*g*)	53.4	54.5	56.0	62.2	67.4	69.9	70.6	73.4	71.7	63.8	59.0	50.8	62.7	101	32	.....	.....
Los Banos (*g*)	45.7	50.6	56.4	62.4	72.9	83.1	81.9	76.2	71.9	64.4	52.9	51.7	64.2	106	28	.....	.....
Los Gatos (*g*)[2]	51.1	51.3	55.0	54.6	64.6	65.4	68.6	67.8	63.7	58.9	53.1	48.0	58.5	101	29	.....	.....
Los Gatos[3]	48.0	49.4	52.0	53.7	61.8	62.4	67.4	68.8	66.1	58.0	53.0	46.4	57.2	104	33	(1)	(1)
Mammoth Tank (*g*)	52.1	57.3	64.3	74.8	84.6	85.8	93.0	90.2	86.4	70.8	64.4	52.5	73.0	120	26	.....	.....
Martinez (*g*)	47.7	50.0	55.6	59.0	63.9	61.6	67.1	66.3	64.6	59.9	53.9	47.7	58.1	94	32	.....	.....
Marysville (*g*)	51.0	55.4	56.5	57.1	65.5	72.9	71.9	79.8	73.5	64.1	56.9	47.9	62.7	103	30	.....	.....
Menlo Park (*g*)	50.3	52.9	55.6	55.3	64.8	66.5	67.9	68.0	65.4	59.6	54.6	51.4	59.4	102	32	.....	.....
Merced (*g*)	49.7	53.6	55.0	56.6	67.1	72.6	79.3	75.5	70.7	63.8	56.5	48.5	62.4	111	30	.....	.....
Milton (near) (*d*)	49.4	50.5	55.7	53.8	62.8	68.1	80.8	75.6	68.1	60.5	54.6	45.4	60.4	108	32	(1)	Nov. 30
Modesto (*g*)[2]	53.1	55.0	60.0	61.5	70.1	76.2	80.0	79.9	73.3	67.2	58.6	47.9	65.3	107	32	.....	.....
Mohave (*g*)	45.9	48.8	54.2	58.0	69.0	76.9	84.8	88.1	79.5	63.7	54.7	43.7	63.9	115	25	.....	.....
Monson (*g*)	48.8	54.2	56.8	61.0	71.5	76.8	84.3	85.2	75.3	64.5	54.5	46.9	65.0	110	27	.....	.....
Montague (*g*)	39.1	47.2	50.7	51.0	59.7	69.9	75.1	73.5	63.6	52.7	45.5	37.9	55.5	98	18	.....	.....
Montery (*g*)	52.3	53.5	54.0	57.9	58.8	63.2	64.3	62.4	61.4	57.2	56.2	53.2	57.9	86	30	.....	.....
Monterey (Hotel Del Monte) (*g*)	49.6	53.7	55.8	59.2	58.9	60.2	61.8	61.6	61.2	58.3	57.2	51.8	57.4	87	30	.....	.....
Lick Observatory (*a*)	.....	.....	.....	.....	.....	.....	66.9	70.8	62.1	53.2	49.7	39.8	.....	.....	.....	.....	.....
Napa City (*g*)[2]	47.0	50.4	52.5	54.3	58.3	67.3	66.8	67.8	62.2	56.2	52.0	47.8	56.9	105	29	.....	.....
Napa City (*a*)[4]	45.6	47.7	54.0	55.1	61.1	62.7	65.4	65.4	62.9	59.0	54.6	49.2	56.9	98	31	Mar. 31	Dec. 21
National City (*a*)	55.7	54.6	56.0	59.0	61.6	62.9	65.6	68.0	66.9	64.2	61.6	54.0	60.8	94	33	(1)	(1)
Needles[5]	53.5	57.2	65.8	69.7	79.5	87.7	94.0	93.8	87.3	73.1	.....	52.6	.....	117	30	Jan. 15	( )
Needles (*b*)[6]	.....	.....	.....	.....	.....	.....	91.0	91.2	83.6	69.8	.....	47.9	.....	109	.....	.....	Dec. 13†
Nevada City (*a*)	.....	.....	.....	47.3	56.7	62.1	68.2	68.6	62.7	55.0	46.1	38.8	.....	96	.....	.....	Nov. 1†
New Almaden (*g*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	55.3	50.5	.....	.....	.....	.....	.....
Newark (*g*)	52.7	53.7	56.9	56.2	63.1	65.1	65.9	66.5	65.3	61.5	55.4	52.7	59.6	98	35	.....	.....
New Castle	47.8	50.0	53.0	52.4	61.6	67.4	75.2	77.2	69.7	61.6	55.1	45.2	59.7	105	30	Mar. 27	Nov. 24†
Newhall (*g*)	48.5	51.8	55.1	60.7	64.9	70.0	75.1	77.0	71.3	63.1	57.8	49.3	62.0	114	24	.....	.....
Newman (*g*)	52.2	56.6	60.0	60.1	72.5	79.3	78.9	80.0	74.5	64.2	63.3	57.6	66.6	111	35	.....	.....
Niles (*g*)	51.3	52.7	56.0	58.2	64.9	69.1	71.7	67.8	67.0	58.7	55.4	47.7	60.0	101	30	.....	.....
Nordhoff	52.2	52.6	54.0	55.8	61.6	64.2	68.6	70.2	.....	.....	.....	49.7	.....	110	25	Apr. 27	.....
Norwalk (*g*)	52.5	55.6	59.7	63.4	64.2	68.0	72.2	71.4	68.2	62.6	59.1	54.5	62.6	102	31	.....	.....
Oakdale (*d*)	.....	.....	.....	.....	.....	.....	74.8	76.6	67.9	57.6	46.9	43.0	.....	108	.....	.....	Nov. 17
Oakland[7]	52.2	50.0	53.3	53.4	58.4	62.2	63.8	64.1	63.0	58.2	53.5	49.4	56.8	89	34	(1)	(1)
Oakland (*g*)[2]	51.3	52.6	55.7	55.7	60.6	60.9	62.2	62.4	62.5	62.4	55.6	52.8	57.9	82	36	.....	.....
Ogilby (*g*)	58.1	62.5	67.7	73.9	84.5	94.5	98.4	101.3	96.5	81.3	68.7	56.6	78.7	122	38	.....	.....
Oleta	46.1	47.9	51.4	52.6	61.8	66.9	73.2	74.8	.....	.....	51.3	43.6	.....	102	27	Apr. 4	Nov. 24
Ontario (*g*)	53.1	53.3	54.3	60.2	66.3	72.9	74.9	77.4	73.1	65.4	60.8	51.4	63.6	105	32	.....	.....
Orangevale	46.0	51.1	54.1	54.6	62.6	70.4	.....	75.9	69.2	61.5	55.2	47.2	.....	.....	29	Apr. 18	Oct. 17†
Orland (*g*)	48.0	52.0	55.6	59.1	69.9	76.8	84.1	83.1	73.1	65.3	57.8	48.8	64.5	111	33	.....	.....
Oroville (*g*)	49.5	49.9	51.2	55.5	65.9	73.6	81.0	79.8	73.3	67.8	58.5	51.0	63.1	109	35	.....	.....
Pajaro (*g*)	52.9	54.0	55.8	55.9	60.4	62.1	63.1	63.4	63.5	60.8	54.4	52.1	53.2	95	30	.....	.....
Palermo	46.3	51.8	54.4	54.6	62.8	70.2	73.2	73.6	69.2	61.2	53.8	46.8	59.8	101	26	Mar. 31	Dec. 5†
Palm Springs (*g*)	57.5	59.0	70.0	75.5	86.3	93.0	94.9	92.0	90.7	78.6	71.1	56.1	77.1	120	32	.....	.....
Pasadena	.....	.....	.....	.....	.....	.....	65.7	66.7	64.6	60.2	57.6	52.6	.....	.....	.....	.....	(1)
Paso Robles (*g*)	45.6	49.5	53.6	57.4	63.1	69.5	73.1	72.4	67.0	59.6	52.4	44.9	59.0	107	21	.....	.....
Petaluma (*g*)	50.2	52.2	55.7	53.2	61.8	62.3	65.6	66.2	64.8	58.9	54.5	50.0	58.0	100	23	.....	.....
Placerville (*g*)[2]	46.3	48.7	52.1	51.1	63.2	69.1	75.5	75.7	66.5	59.2	51.6	44.0	58.6	102	28	.....	.....
Placerville (*g*)[8]	.....	.....	47.7	47.7	58.2	65.0	66.5	69.4	62.4	54.2	48.8	40.6	.....	100	.....	Apr. 27	Oct. 17†
Pleasanton (*g*)[4]	51.1	52.8	54.1	59.6	65.0	60.6	69.6	70.1	63.8	60.3	55.6	49.8	59.4	107	28	.....	.....
Pleasanton[9]	.....	.....	.....	.....	.....	.....	65.6	67.2	62.2	56.6	52.0	47.6	.....	.....	.....	.....	Nov. 14
Pomona (*g*)	53.0	52.9	57.5	58.1	60.3	66.1	72.1	72.5	68.8	60.5	58.0	48.8	60.7	102	28	Mar. 28	.....
Portersville (*g*)	50.6	55.3	58.0	62.3	72.7	81.4	86.0	85.7	77.2	65.3	57.4	48.9	66.8	112	30	.....	.....
Presidio S. F.	50.2	48.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Puente (*g*)	55.0	57.2	57.9	61.0	66.8	67.2	70.9	74.2	69.0	63.8	59.1	53.1	62.9	101	34	.....	.....
Ravenna (*g*)	50.9	51.8	54.2	60.0	66.3	73.2	78.3	77.2	71.8	62.8	58.3	47.4	62.7	109	26	.....	.....
*Red Bluff	47.0	52.9	*56.5	54.1	65.6	71.8	78.9	80.4	72.0	63.5	56.1	47.6	62.2	108	28	Jan. 4	Nov. 24
Red Bluff (*g*)	46.6	53.0	61.8	58.1	67.3	77.5	84.5	88.9	74.2	65.6	57.9	47.0	65.2	113	30	.....	.....
Redding (*g*)[2]	44.1	50.6	54.9	52.9	67.7	74.5	82.8	83.1	72.3	62.3	53.2	46.7	62.1	112	28	.....	.....
Redding[10]	46.1	52.0	55.2	52.9	64.8	71.0	78.8	79.3	71.2	63.4	54.5	47.6	61.4	103	28	Feb. 5	Nov. 24
Redlands (*a*)[2]	.....	.....	.....	.....	70.8	75.7	81.0	81.4	77.6	67.8	63.4	50.3	.....	103	.....	.....	.....
Rialto (*a*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	62.8	52.2	.....	.....	.....	.....	Dec. 16†
Riverside[11]	53.4	53.8	56.6	59.8	64.9	68.2	73.1	74.3	70.4	62.0	59.5	51.0	62.2	105	26	Mar. 31	Nov. 25†
Riverside[12]	54.6	57.0	57.5	60.7	63.8	66.6	74.8	75.2	70.0	63.6	61.5	54.0	63.2	105	28	.....	.....
Rocklin (*g*)	46.6	52.1	54.4	56.0	64.8	70.7	75.9	75.9	70.2	64.8	58.1	51.0	61.7	108	32	.....	.....
Rumsey (*g*)	49.6	52.8	57.2	61.6	70.5	75.9	83.8	83.8	75.3	66.5	57.8	50.3	65.4	108	32	.....	.....
*Sacramento	48.4	52.2	55.9	65.4	63.2	68.0	72.0	73.0	68.8	62.0	55.3	48.2	60.2	106	26	Feb. 7	Nov. 24
Sacramento (*a*)[13]	41.8	47.2	50.6	51.9	59.8	63.7	69.0	65.9	60.6	53.4	46.8	41.9	54.4	96	22	Apr. 27	Nov. 17
Sacramento (*g*)[14]	48.8	54.9	57.8	60.0	65.4	66.9	70.5	71.7	68.1	60.6	56.1	51.1	61.0	97	28	.....	.....
Sacramento (*g*)[15]	47.2	53.2	56.8	55.7	64.1	68.8	72.4	72.7	67.4	61.1	54.4	48.2	60.2	91	35	.....	.....
St. Helena (*a*)	53.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Salinas[16]	49.0	53.3	51.1	50.8	61.0	57.6	62.0	62.0	60.2	.....	54.4	49.8	.....	98	30	Jan. 12†	Nov. 18†

[1] No frost.
[2] Southern Pacific R. R.
[3] F. H. McCullagh and W. H. B. Trantham.
[4] W. H. Martin.
[5] John Denair and H. P. Aldrich.
[6] L. D. Palmer.
[7] Chabot Observatory.
[8] G. W. Barlow.
[9] A. G. Platt.
[10] L. F. Bassett.
[11] W. E. Keith and Riverside Press.
[12] C. L. Fox.
[13] S. C. Gerrish.
[14] Division superintendent Pacific R. R.
[15] Company's shops.
[16] Dr. E. K. Abbott.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
California—Continued.																	
Salinas (g)[1]	47.5	50.5	53.4	57.3	64.4	62.1	63.4	62.6	59.8	53.0	49.5	47.5	55.9	95	30	.....	.....
Salton (g)	53.2	59.3	66.9	73.5	82.8	88.8	94.6	96.5	92.8	81.0	70.3	57.8	76.5	121	28	.....	.....
Sanger Junction (g)	50.8	53.3	55.9	61.2	73.6	79.1	84.3	85.0	75.4	64.8	56.1	47.4	65.6	114	30	.....	.....
*Point Reyes Light	50.2	51.0	53.0	49.6	51.6	50.6	50.4	53.2	55.6	53.1	53.0	49.4	51.7	80	30	Mar. 28	(2)
San Ardo (g)[1]	48.7	51.0	52.9	57.7	62.4	63.2	65.3	70.6	64.8	61.8	55.1	48.9	58.5	110	28	.....	.....
San Ardo[3]	49.8	53.8	53.1	54.0	61.8	64.3	68.1	71.4	66.1	60.1	56.4	47.7	58.9	112	26	Apr. 27	Oct. 18
San Bernardino	52.9	53.4	56.5	59.0	64.4	67.7	73.5	75.0	70.6	61.4	57.8	50.4	61.9	105	26	Mar. 29	Nov. 25
*San Diego	55.1	55.0	56.0	57.8	61.0	62.0	64.9	67.8	65.4	62.7	60.9	54.2	60.2	87	36	(2)	(2)
San Diego Barracks	53.8	53.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Gabriel (g)	51.8	55.0	56.3	60.3	66.3	68.2	71.8	74.2	71.0	64.1	59.8	52.3	62.6	99	33	.....	.....
*San Francisco	51.7	52.4	54.2	53.1	58.0	56.8	58.1	59.4	60.2	59.6	56.9	51.1	56.0	92	38	(2)	(2)
San Jacinto	.....	.....	.....	.....	.....	.....	72.2	.....	.....	61.2	57.7	48.6	.....	.....	.....	.....	Nov. 18
San Jose (g)[1]	50.7	52.5	54.9	54.5	61.4	62.7	66.0	66.8	64.2	60.0	55.8	50.3	58.3	100	34	.....	.....
San Jose[4]	.....	.....	.....	.....	60.2	.....	64.0	65.2	62.2	.....	52.1	47.6	.....	96	.....	.....	Nov. 15†
San Mateo (g)	47.7	49.5	53.2	53.1	60.2	60.3	64.0	64.5	62.4	56.5	53.8	51.3	56.4	92	35	.....	.....
San Miguel (g)	51.1	49.9	53.0	57.1	68.4	72.1	74.9	73.8	71.0	62.8	55.6	47.6	61.4	112	24	.....	.....
San Pedro (g)	56.4	56.7	58.7	60.4	65.8	67.4	71.8	73.5	69.6	69.9	62.0	55.6	64.1	98	40	.....	.....
Santa Ana (g)	54.8	58.8	55.9	63.5	69.9	71.4	73.2	75.0	71.6	65.4	63.3	55.5	64.8	96	35	.....	.....
Santa Barbara[5]	54.5	53.7	55.3	57.8	60.3	61.0	63.5	66.3	64.2	62.0	60.3	54.4	59.4	98	38	(2)	(2)
Santa Barbara (g)[1]	53.0	56.0	57.0	62.9	65.6	63.7	66.3	66.6	64.7	66.1	56.2	52.8	60.9	96	31	.....	.....
Santa Clara (f)	.....	.....	.....	.....	59.3	60.7	63.7	64.2	63.0	59.0	54.2	49.7	.....	95	.....	.....	(2)
Santa Cruz (g)[1]	52.7	52.6	54.0	55.1	60.4	61.1	63.3	62.8	62.4	60.8	57.3	53.7	58.0	95	35	.....	.....
Santa Cruz[6]	50.5	52.4	53.9	55.4	58.0	60.1	61.8	61.6	61.1	58.0	53.7	49.7	56.4	98	28	.....	Nov. 16
Santa Margarita (g)	42.6	44.8	47.7	56.0	60.6	61.9	65.1	69.2	68.7	59.2	56.4	44.4	56.4	100	20	.....	.....
Santa Maria (e)	.....	.....	.....	.....	60.6	59.6	61.6	64.1	62.0	62.0	57.2	51.5	.....	99	.....	.....	Nov. 2
Santa Monica (g)	53.0	53.8	54.6	56.8	63.4	63.7	65.8	68.7	64.5	61.6	60.4	56.6	60.2	90	33	.....	.....
Santa Paula (g)	54.5	53.1	53.8	59.7	64.0	63.8	67.9	68.4	63.0	.....	58.2	52.2	.....	98	32	.....	.....
Santa Rosa (g)	49.5	51.5	54.9	55.3	61.8	63.7	66.9	65.3	65.5	60.5	54.3	51.1	58.4	97	30	.....	.....
Selma (g)	48.5	54.8	56.0	60.4	70.8	77.6	86.0	82.5	79.0	66.3	58.6	47.0	65.6	110	28	.....	.....
Shasta Springs	35.6	42.8	44.8	44.8	55.4	61.6	66.2	66.8	61.2	52.2	44.7	35.9	51.0	96	19	Feb. 15†	Oct. 14†
Shingle Springs (g)	51.9	52.5	54.0	57.1	66.5	72.2	71.0	72.9	68.8	59.0	49.3	45.6	60.1	98	28	.....	.....
Sims (g)	35.5	44.4	49.1	49.8	59.5	64.2	71.0	72.6	65.6	54.0	45.2	39.9	54.2	104	20	.....	.....
Sisson (g)	35.3	40.1	42.8	42.9	53.0	60.7	62.6	66.9	60.3	53.0	41.5	35.6	49.6	95	15	.....	.....
Soledad (g)	49.3	50.7	56.4	54.4	61.5	63.1	64.1	65.4	63.7	58.5	54.9	49.1	57.6	102	28	.....	.....
Sonoma (f)	52.2	49.6	51.6	51.2	61.2	.....	.....	.....	.....	.....	55.2	53.0	51.0	.....	30	.....	.....
Sonora (a)	.....	.....	48.4	.....	62.9	.....	.....	.....	.....	.....	.....	42.9	.....	.....	.....	.....	Dec. 7†
Soquel (g)	50.8	53.7	55.1	56.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
South Vallejo (g)	51.7	51.2	56.9	54.9	59.6	61.9	63.5	63.7	62.2	60.2	55.2	50.6	57.6	93	35	.....	.....
Spadra (g)	54.7	56.3	57.5	61.9	64.9	67.2	71.6	74.6	69.8	61.5	60.1	51.0	62.6	102	32	.....	.....
Steeles	52.3	52.6	54.2	54.3	58.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	(2)	.....
Stockton[7]	47.0	52.1	54.4	55.7	63.9	66.8	71.1	72.4	67.4	60.6	53.8	47.4	59.4	104	28	Feb. 9	Nov. 16†
Stockton (g)[1]	49.1	54.4	58.4	59.3	69.6	74.0	79.4	78.4	71.6	60.7	51.2	47.1	62.8	105	30	.....	.....
Summit (g)	49.4	30.0	32.2	32.7	42.9	58.2	65.2	63.5	56.7	42.5	38.2	27.2	44.9	95	8	.....	.....
Suisun City (g)	49.3	53.7	58.6	57.6	63.1	65.9	67.8	70.1	67.6	62.4	56.7	51.2	60.3	105	32	.....	.....
Susanville (a)	32.1	36.9	41.7	43.2	55.0	61.9	69.9	70.6	.....	47.9	39.6	29.3	.....	94	10	May 11	Oct. 11
Sutter Creek (e)	.....	42.8	47.8	48.8	56.0	60.6	65.2	66.6	61.2	53.8	48.6	40.2	.....	96	.....	.....	Nov. 24†
Tehachapi (g)[1]	41.8	42.9	48.0	49.4	61.6	67.5	74.8	80.5	69.3	54.3	46.9	38.1	56.2	99	19	.....	.....
Tehachapi[8]	.....	.....	.....	.....	.....	.....	.....	.....	64.8	53.7	46.0	39.4	.....	.....	.....	.....	Dec. 2†
Tehama (g)	51.0	55.1	56.1	54.9	65.5	77.5	82.8	80.5	75.5	66.0	60.4	56.3	65.1	106	32	.....	.....
Templeton (g)	47.8	51.8	54.3	57.8	61.1	66.5	72.1	70.5	65.0	58.6	52.3	46.4	58.7	108	23	.....	.....
Towles (g)	44.1	44.1	45.7	46.4	57.1	63.8	70.6	72.1	64.7	55.3	48.4	40.4	54.4	92	22	.....	.....
Tracy (g)	51.5	52.1	55.0	58.9	71.1	76.3	80.4	80.9	70.7	63.6	55.6	49.9	63.8	105	30	.....	.....
Traver (g)	44.2	49.2	55.2	59.2	70.7	78.9	79.5	80.7	73.5	62.0	51.3	41.8	62.4	112	26	.....	.....
Tropico (g)	54.8	53.2	56.9	59.2	63.8	64.5	69.5	71.9	67.5	64.0	61.1	54.3	61.7	94	36	.....	.....
Truckee (g)	26.6	32.1	33.4	37.2	48.2	53.8	60.3	66.0	61.2	43.2	38.3	23.7	43.7	94	—9	.....	.....
Tulare (g)[1]	50.3	54.0	58.1	59.7	66.2	79.0	83.8	83.3	76.6	66.4	52.5	46.4	64.7	107	28	.....	.....
Tulare[9]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49.9	.....	.....	.....	.....	Dec. 6
Turlock (e)[1]	47.3	53.4	54.9	57.6	70.8	76.6	82.5	82.2	77.2	64.4	54.2	47.0	64.1	106	30	.....	.....
Turlock (a)[10]	49.7	50.6	51.2	.....	.....	70.8	77.0	78.0	70.5	61.5	53.9	46.0	.....	108	24	.....	Nov. 17
Ukiah (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43.9	.....	.....	.....	.....	Dec. 5†
Upper Mattole (a)	46.1	49.2	.....	49.0	58.5	62.6	61.8	73.4	66.9	59.4	.....	.....	.....	103	.....	.....	.....
Vacaville (a)[11]	47.9	54.7	55.6	56.4	64.2	69.3	74.5	75.2	70.1	63.2	56.9	49.6	61.5	110	33	May 12	Dec. 12
Vacaville (g)[1]	51.6	54.1	57.0	56.3	66.8	70.3	73.0	79.1	73.9	67.1	58.0	48.9	63.0	115	33	.....	.....
Valley Springs (g)	48.1	53.2	55.8	58.5	66.0	69.7	78.8	79.0	70.9	61.3	55.6	53.1	62.5	103	30	.....	.....
Ventura	.....	.....	56.5	57.0	.....	.....	.....	66.1	64.2	60.0	59.3	54.0	.....	.....	.....	.....	(2)
Vina (g)	47.2	53.2	56.8	57.5	67.0	75.7	81.3	76.5	72.2	64.3	58.3	49.3	63.2	108	34	.....	.....
Volcano Springs (g)	57.1	60.1	69.2	77.7	86.6	93.8	101.8	99.2	94.5	77.7	67.0	53.8	78.2	124	29	.....	.....
Volta (a)	48.7	55.0	59.4	60.1	66.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jan. 12†	.....
Wallawalla Creek (e)	35.5	39.6	44.3	38.2	55.0	60.2	66.6	69.6	62.8	.....	.....	.....	.....	.....	.....	May 11†	.....
Walnut Creek	49.2	52.8	56.8	55.2	61.6	65.3	68.0	70.1	67.2	63.4	55.8	47.2	59.4	107	30	(2)	Dec. 8†
Westley (g)	51.2	55.7	58.9	61.8	71.9	77.8	82.8	81.1	74.2	65.8	56.1	51.0	65.7	107	31	.....	.....
Wheatland	47.3	51.9	54.6	55.2	63.6	69.2	75.0	76.3	70.4	63.2	54.9	47.6	60.8	109	31	Apr. 17	Nov. 24
Whittier (g)	54.1	57.7	62.4	65.0	68.9	69.6	79.3	78.6	74.8	63.9	65.6	57.0	66.5	106	38	.....	.....
Williams (g)	47.5	53.0	56.7	57.8	68.2	75.8	81.5	81.1	73.2	64.0	58.7	51.3	64.1	108	30	.....	.....
Willows[12]	46.0	51.0	53.8	52.4	64.0	69.4	74.7	78.8	71.6	62.0	54.3	45.4	60.3	106	27	Apr. 26	Nov. 24
Willows (g)[1]	46.9	50.3	54.9	54.5	65.7	74.8	81.0	80.9	73.9	64.2	58.3	48.9	62.8	105	32	.....	.....
Winchester	56.5	54.7	.....	58.6	63.7	70.4	75.8	77.4	73.8	62.6	58.1	49.8	.....	110	24	.....	Oct. 17†
Winters (g)	52.1	55.8	60.3	62.9	72.1	77.3	83.7	81.9	77.9	67.1	59.0	50.3	66.7	108	30	.....	.....
Woodland (g)	44.4	49.3	54.0	56.0	62.6	70.3	76.9	73.9	69.9	62.9	49.3	48.5	59.8	104	26	.....	.....
Yreka	33.5	41.8	47.0	.....	.....	58.3	66.2	71.8	64.6	50.2	43.4	34.2	.....	96	18	Apr. 30†	Oct. 12†
Yuba City (e)	50.5	53.8	59.0	58.8	68.0	73.3	84.3	79.2	75.6	64.6	58.8	48.6	64.5	102	32	(2)	Dec. 21†
Colorado.																	
Agate (a)	30.3	32.6	39.0	46.4	.....	.....	.....	.....	.....	.....	.....	27.0	.....	.....	—22	.....	.....
Alma	17.8	19.3	21.4	28.5	37.6	47.0	52.2	50.4	47.7	35.3	24.1	15.6	33.1	78	—21	.....	.....

[1] Southern Pacific R. R. [2] None. [3] M. Gorman. [4] Dr. A. C. Simonton. [5] H. D. Vail. [6] W. R. Springer. [7] T. G. Brown. [8] Austin Young. [9] John Tuohy. [10] P. R. McCabe. [11] G. O. Coburn. [12] A. W. Schorn.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Colorado—Continued.																	
Antonito	13.6	24.2															
Apishapa (b)	27.0	35.0	33.9	48.7													
Breckenridge			24.2	28.8	37.7	49.8	52.3	54.7	48.8			12.7		88			
Byers (a)	21.8	28.0	33.6									25.2			—22		
Carson (c)	7.4	11.7	20.4	32.2	40.4	52.7	54.2	51.4	52.5	37.7				82			
Castle Rock	20.0	33.3	36.3	44.7	52.8		68.0	65.8	61.5	45.0	38.4	23.2			—24		
Cheyenne Wells (a)	24.3	28.6	31.0	43.2	47.2	68.3	71.6	68.6	62.9	47.2	35.0	27.8	46.4	104	—11		
Climax (a)	11.8	16.5	16.6	25.0	29.0	43.5	48.4	47.2	46.8	27.6	16.8	9.2	28.2	72	—30		
Colorado Springs	28.2	32.7	31.6	43.8	51.5	62.2	66.9	66.4	63.8	48.0				94			
Como (near)	19.2	22.2	24.8	31.5	39.2	50.8	55.2	54.1	52.6	37.8	25.0	15.5	35.7	80	—11		
Cope	20.8	30.9	34.6	48.0	52.9	66.8	75.6	75.5	69.6	53.6	43.8	25.4	49.8	99	—19		
Crook	21.6	27.4	36.4	46.2	53.0	68.1				55.1	40.9	30.6			—29		
Cumbres	16.6	19.8	22.4	28.5	37.3	46.8	54.0	52.0	49.1	35.4	24.1	13.0	33.3	81	—25		
Del Norte		23.9			49.9	59.4	63.7	61.4	56.0	41.5	29.3	20.4		90			
Delta	18.8	34.4	39.6	42.0	51.6	65.6	74.4	71.4	63.4	47.3	35.4	24.4	47.4	104	—17		
*Denver	26.0	33.5	36.4	45.8	51.5	64.8	71.9	71.4	66.0	50.2	42.9	26.8	48.9	98	—17	May 9	Oct. 12
Downing	18.2	31.0	32.2	43.8	52.5	62.8	69.1	67.1	61.2	47.4	36.0	26.7	45.7	100	—19		
Fort Collins	21.1	27.8	33.7	44.0	50.0	61.7	68.2	67.3	62.4	47.6	37.4	23.0	45.4	99	—28		Sept. 11
Fort Logan	28.0	34.0															
Fruita	16.2	38.4	44.2	59.2	57.8	69.0	76.5		65.0	50.7	36.3	26.0			—16		
Georgetown	26.8	29.7	30.6	37.0	45.4	58.5	63.0	62.7	59.0	44.4	33.6	24.2	42.9	88	— 5		
Glen Eyrie	27.2	34.4	34.7	45.0	50.3	62.5	65.8	66.4	63.8	48.2	39.0	28.1	47.1	91	— 9		
Grand Junction			39.9	51.6	60.0	72.2	78.8	77.3	69.8	53.6	38.8	29.2		99			
Greeley						65.5	72.8	67.6	63.2	51.1	43.1	24.5		100			
Greenhorn	26.0	32.8	35.8	42.8	51.8	62.8	66.6	66.2	62.4	49.2	37.8	26.2	46.7	95	—11		
Grover	23.0	24.7	32.0	43.2	48.9	61.8	69.1	68.8	62.3	47.8	35.2	24.6	45.1	97	—20		
Hugo (a)	21.3	33.2	36.4	48.8	53.6	66.0	72.8				35.8	22.5			—22		
Husted	25.6	33.3	34.4	43.4	51.0	62.8	67.8	66.2	64.2	46.6	38.0	24.8		99	—20		
Idaho Springs	28.1	30.4	31.2	37.9	45.3	60.1		61.0	57.8	42.4	36.2	25.4			—14		
Jefferson (a)	18.6	22.2	27.4	31.8	38.6	44.8	54.1	48.8									
Julesburg	21.8	24.8	33.7	44.7	51.0	64.7	71.9	72.0	61.0	51.0	38.6	25.3	46.7	103	—32		
Kit Carson (a)		31.0	30.7									25.2					
La Jara					50.8	60.9	65.0	64.4	61.0	46.0	34.4	22.2		92			
Lamar	30.0	36.4	36.6	53.4	58.7	70.9	77.8	76.8	70.7	55.4	41.1	29.2	53.1	108	—14		
Las Animas	25.8	34.2	34.8	49.1	54.1	69.0	76.0	73.2	67.6	50.0	42.6	28.5	50.4	102	—12		
Lavender											36.6	24.8					
Lay				42.1	48.8	62.9	74.0	65.6			32.2	20.6		100			
LeRoy (b)	18.8	29.3	33.8	43.8	49.2	63.8	73.5	70.6	64.7	50.2	36.8	25.2	46.6	100	—18		
Livermore	24.1	33.0	33.8	42.9	49.1	60.1	66.8	66.0	61.8	46.0	36.9			90			
Longmont	20.6	30.2	35.0	44.8	53.0	62.8	68.2	66.9				20.5		98	—22		
Meeker	18.0	29.0						64.7	59.4	44.8	32.1	23.8			—27		
Minneapolis									67.2	52.0	41.5	29.8					
Monte Vista (a)	9.0	17.8	32.2	41.0	49.8	58.9	63.3	60.6	55.7	41.8	28.9			89			
*Montrose	19.4	33.2	39.6	46.5	54.2	66.0	71.2	69.6	65.5	48.8	36.2	25.0	47.9	94	—11	May 21	Oct. 14
Moraine	24.0	29.0	30.0	35.6	42.7	54.6	60.0	59.7	55.6	41.8	34.3	23.8	40.9	85	—17		
Orchard						68.0	75.2		65.0	51.9	45.6	39.4					
Pagoda (near)	16.7	25.6	33.1	39.3	48.4	56.4	64.6	62.9	56.2	41.6	30.4	19.0	41.2	95	—27		
Parachute	18.7	33.7	40.2	46.2	54.8	63.6	73.4	70.5	63.8	51.8	34.6	25.6	48.3	98	—14		
Platoro	10.6	15.4	23.7	35.2													
*Pike's Peak									36.4	19.8	10.3	1.2					
*Pueblo	27.8	35.8	37.4	49.0	57.5	68.0	75.0	73.4	68.8	52.0	42.3	27.1	51.2	101	—18	Apr. 22	Oct. 18
Robb	24.7	31.4	37.0	48.0	53.5	69.4	75.2	72.9	66.2	52.4	40.0	27.4	49.8	106	—19		
Rocky Ford	26.4	34.8	37.0	50.7	57.4	68.3	75.1	74.0	68.8	52.8	40.1	26.0	51.0	104	— 8	May 24	Oct. 18
San Luis	14.8	23.0	31.5	39.6	48.4	58.6	65.8	61.1	56.0	41.0	30.8	29.5	40.8	91	—24	June 16	Aug. 30†
Sheridan Lake (a)	25.4	32.2	33.3	47.6		70.6	74.8										
Smoky Hill Mine	28.6	32.6	31.3	38.6	44.0	58.0	63.0	63.6	61.8	47.6		27.7		94	—19	June 3	Sept. 11*
Steamboat Spring	13.9	20.0	28.0	37.4	48.0	57.8	67.0	61.4	53.8	42.8	31.1	18.0	39.9	98	—29		
Surface Creek	24.0	33.5	39.6	45.8	54.4	66.1	71.6	68.8	62.7	47.8	36.3	25.3	48.0	98	— 9		
Table Rock	22.2	28.2	30.4	38.4	45.6	58.6	63.8	63.3	59.2	40.7	34.0	21.2	42.1	90	—21		
T. S. Ranch	21.9	35.8	40.7	46.1	49.0	66.9	73.6	71.9	59.2	50.3	36.7	27.4	48.3	99	— 6		
Thon	25.8	33.1	36.6	42.6	51.0	65.1	70.4	71.4	66.4	47.7	38.7	25.4	47.9	104	—19		
Connecticut.																	
Canton	26.2	28.4	31.0	46.9	56.6	70.9	71.0	70.1	59.7	49.4	37.4	25.4	47.8	97	— 4		
Colchester	27.5	29.8	31.7	45.0	54.3	67.7	69.8	69.6	60.5	50.6	43.9	27.5	48.2	96	— 1		
Fort Trumbull	33.6																
Mansfield (a)	25.5	26.9	29.9	44.9	53.6	67.0											
Middletown						71.4	73.6	73.0	62.4	52.5	40.4	27.6		98			
New Hartford (a)[1]	19.5	23.3	25.6	40.8	52.2	66.8	66.6	64.8	53.8	41.9	32.0	20.1	42.3	96	— 9	Apr. 27	Sept. 30
*New Haven	27.1	31.2	32.8	47.0	56.1	68.9	71.6	70.6	61.7	52.4	40.2	28.4	49.0	96	0	Apr. 25	Oct. 27
*New London	28.8	31.2	33.0	46.0	54.6	66.6	70.8	70.0	61.6	52.2	41.2	29.1	48.8	92	— 2	Apr. 25	Oct. 25
N. Grosvenor Dale	27.5	27.3	30.9	46.5	54.1	68.1	71.0	67.4	57.6	46.9	36.2	25.3	46.6	98	0		
Norwalk[2]	28.6	32.9	31.2	48.0	59.3											Apr. 29	
Norwalk[3]	25.2	29.7	30.3	44.6	55.4	69.3	70.8	69.7	59.8	49.8	36.9	26.9	47.5	94	— 2		
Southington (a)	25.9	28.9	31.7	47.1	56.2	70.1	71.2	69.3	60.3	49.3	38.3	26.3	47.9	94	1	May 10	Oct. 2
Storrs (a)							69.2	67.4	59.1	48.5	37.6	25.5					
Thompson (a)	25.2	29.3		44.9	54.6	66.6	68.8	67.2	58.6	48.6	37.4	22.2		89	— 3		
Voluntown (a)	28.7	29.9	32.6	46.2	55.2	67.2	70.4	68.7	58.5	48.8	40.0	27.8	47.8	93	0	May 10	Sept. 30
Waterbury	24.2	27.4	29.0	43.7	56.6	69.9	71.4	70.1	61.3	51.3	40.1	28.2	47.8	93	— 7		
Delaware.																	
Dover (a)	33.2	36.2	36.6	51.9	61.9	75.4	75.5	75.0	66.3	55.4	44.6	32.9	53.7	100	8		
Kirkwood (b)	29.0	33.0	36.2	48.0	60.6	76.1	78.9	79.7	69.5	54.5	41.6	29.4	53.0	102			
Seaford	34.4	36.4	37.4	53.0	63.3	71.2	75.8	76.0	66.8	55.0	44.6	33.4	53.9	100	7		

[1] Rev. Wm. Goodwin. [2] Prof. Willis Earle. [3] G. C. Comstock.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
District of Columbia.																	
Distributing Reservoir(c)	31.7	36.2	37.4	52.0	64.6	77.6	76.5	77.2	65.6	54.8	43.4	32.6	54.1	97	4	Mar. 12†	Oct. 27†
Kendall Green (a)	.....	36.1	38.3	52.7	64.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mar. 12	.....
Receiving Reservoir(c)	31.7	35.9	36.7	51.6	64.4	77.2	76.2	76.4	66.0	54.4	43.2	32.4	53.8	94	5	Mar. 12†	Oct. 27
*Washington	31.6	37.0	37.7	51.4	63.8	76.2	75.8	76.2	66.1	55.4	43.7	33.2	54.0	99	4	Apr. 16	Oct. 6
Washington Barracks	34.0	39.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
West Washington (a)	33.2	38.3	39.6	54.8	67.4	78.7	77.7	78.2	68.2	56.0	44.7	34.0	55.9	102	4	Mar. 12†	Oct. 27
Florida.																	
Amelia (a)	51.7	56.2	57.4	67.7	72.6	76.8	79.2	80.0	76.7	69.4	58.4	56.4	66.9	91	30	Mar. 19	Dec. 29
Archer	53.5	58.2	59.6	69.2	74.2	77.7	80.0	80.3	.....	.....	.....	57.5	.....	97	22	Mar. 20	Dec. 21
Avon Park	.....	.....	.....	.....	74.2	75.2	78.6	77.2	75.2	71.1	64.4	63.8	.....	96	.....	.....	(1)
Bristol	.....	.....	.....	.....	76.6	81.2	79.9	78.4	78.1	75.0	65.9	61.4	.....	100	.....	.....	Dec. 31
Brooksville	57.2	61.3	60.6	67.4	74.6	80.0	80.2	79.2	77.6	69.7	60.5	59.0	68.9	93	30	Mar. 19	Dec. 28
Clermont (a)	.....	.....	.....	.....	.....	.....	.....	84.1	80.6	72.7	65.6	63.4	.....	.....	.....	.....	Dec. 28
De Land[2]	56.4	59.8	.....	69.2	73.4	.....	.....	.....	.....	.....	.....	60.1	.....	.....	22	Mar. 20	Dec. 29
Eustis (a)	57.0	60.2	61.0	71.3	76.6	77.0	81.0	79.1	76.5	69.9	61.2	59.8	69.2	98	30	Mar. 19*	Dec. 28
Federal Point	56.0	58.8	.....	.....	73.7	77.1	79.8	79.4	76.4	68.9	60.8	57.7	.....	94	30	.....	Dec. 29
Fort Barrancas	50.9	59.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Fort Meade (a)	57.4	60.4	61.2	69.1	74.5	77.4	81.1	82.9	78.0	71.2	61.4	61.8	69.7	98	22	Mar. 20	Nov. 16
*Gainesville	.....	.....	.....	71.4	76.8	.....	82.8	.....	78.4	70.0	60.2	.....	.....	.....	.....	.....	.....
Grasmere	.....	61.6	62.0	71.8	75.2	78.0	81.1	80.4	78.2	71.0	62.6	61.2	.....	93	.....	.....	Dec. 29†
Green Cove Springs	53.7	58.3	57.2	68.4	73.8	77.6	81.0	81.4	78.3	69.6	59.8	57.7	68.1	95	25	Mar. 20	Dec. 28
Homeland (a)	60.7	64.7	64.2	74.0	75.1	75.3	78.4	77.2	76.1	69.5	60.4	60.2	69.6	95	26	Jan. 4	Dec. 29
Hypoluxo (c)	66.0	66.0	65.0	72.5	77.4	77.8	83.4	81.8	78.4	74.4	69.2	66.4	73.2	97	42	(1)	(1)
*Jacksonville	53.0	58.0	60.0	69.4	75.2	77.8	81.7	81.4	76.8	69.2	59.9	57.6	68.3	96	29	Mar. 20	Nov. 12
*Jupiter	63.4	66.0	65.2	72.8	75.8	77.4	80.4	80.7	79.4	74.8	69.1	66.8	72.6	93	34	Jan. 4	(1)
*Key West	67.4	69.9	69.5	76.0	78.2	79.8	82.0	83.4	81.8	77.5	72.0	71.2	75.7	90	53	No frost.	
Madison	50.4	[3]59.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Manatee (a)	59.4	64.5	62.2	71.5	76.1	78.0	79.6	79.6	78.0	72.3	63.1	.....	.....	98	34	Mar. 19	Dec. 29
Merritts Island	60.6	63.9	65.0	73.7	78.3	73.6	81.3	77.9	80.0	73.8	66.5	64.9	71.6	90	36	(1)	(1)
*Micco	56.6	*62.1	*63.0	73.3	76.8	*80.1	*84.0	*82.8	.....	*73.8	*65.2	.....	.....	.....	.....	Jan. 8	Dec. 29
Mullet Key (a)	.....	.....	72.8	79.6	78.4	80.6	84.3	83.2	79.6	72.2	65.6	60.7	.....	100	.....	.....	(1)
Myers (a)	60.2	63.4	63.2	71.0	74.4	76.2	79.4	79.2	77.5	73.2	65.1	64.0	70.6	90	37	(1)	(1)
New Smyrna	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	61.4	59.6	.....	.....	.....	.....	Dec. 29
Ocala (a)	54.2	60.5	60.4	70.6	75.4	77.0	80.3	79.2	76.3	69.3	63.0	58.3	68.7	93	26	Mar. 19	Dec. 29
Orange City	57.0	61.4	62.7	71.8	75.0	78.1	.....	80.9	79.6	71.0	61.8	60.9	.....	.....	25	Feb. 13	Nov. 16
Orlando	58.8	63.8	64.4	73.9	78.2	80.4	84.4	83.8	80.2	72.6	.....	.....	.....	99	.....	Mar. 19	Dec. 29
Oxford (a)	.....	.....	63.6	71.6	76.5	77.3	80.4	78.9	.....	.....	60.7	58.9	.....	93	.....	Mar. 19	Dec. 28
Pasadena	56.9	62.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Feb. 13	.....
*Pensacola	48.7	58.9	56.8	67.0	73.4	79.2	79.4	80.2	76.8	69.6	60.3	53.8	67.0	94	23	Mar. 20	Dec. 23
Plant City	.....	.....	.....	.....	.....	.....	.....	80.3	79.4	72.2	62.0	62.2	.....	.....	.....	.....	Dec. 29
St. Andrews Bay	49.6	58.8	57.7	70.2	77.2	82.9	82.7	.....	.....	.....	58.3	54.6	.....	.....	.....	Mar. 19	Dec. 10
St. Francis Barracks	55.6	59.3	59.8	68.6	72.8	77.2	79.9	79.4	77.2	70.6	61.7	55.7	68.2	94	29	Mar. 19†	Dec. 29†
St. Petersburg (a)	59.2	62.3	62.3	71.9	75.8	79.6	82.4	80.8	79.0	72.6	64.0	61.8	71.0	95	35	(1)	(1)
Tallahassee (a)	48.0	58.3	57.0	66.4	72.8	77.0	76.5	76.4	74.0	67.0	.....	54.3	.....	93	25	Mar. 19	Dec. 23†
*Tampa	58.4	63.0	62.0	71.8	75.4	78.9	82.0	81.4	79.8	72.5	64.4	62.2	71.0	94	33	Mar. 19	Dec. 29
Tarpon Springs	57.2	61.2	61.8	72.4	74.2	78.3	81.5	80.1	79.0	71.6	61.8	60.7	70.0	92	33	(1)	Dec. 29
*Titusville	59.0	62.3	62.4	70.8	74.8	77.4	80.4	80.2	78.2	71.9	63.0	61.6	70.2	93	33	Mar. 20	Dec. 29
Westville (c)	.....	.....	56.4	63.6	76.8	82.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mar. 19†	.....
Georgia.																	
Adairsville	.....	48.7	49.5	61.8	68.8	72.0	78.0	77.5	70.4	61.0	48.9	49.6	.....	98	.....	Apr. 16	Oct. 26
*Alapaha	47.4	55.1	56.7	67.8	74.4	79.6	79.9	.....	75.2	65.8	55.0	52.0	.....	.....	22	Mar. 21	Nov. 11
*Albany	47.0	.....	.....	70.2	75.4	81.1	80.7	81.4	76.0	67.4	55.6	53.8	.....	96	.....	.....	Nov. 11†
*Americus	44.3	54.6	55.5	68.0	75.6	82.3	81.4	81.0	74.0	65.6	55.0	51.6	65.7	100	18	Mar. 20	Oct. 28
Athens (a)[3]	41.1	48.3	50.0	59.5	70.1	76.6	77.1	77.8	70.3	62.2	.....	43.7	.....	94	18	Mar. 29	Oct. 28
*Athens[4]	39.3	47.4	49.2	60.2	69.7	77.8	78.2	78.4	70.2	61.4	50.0	44.0	60.5	97	15	Apr. 11†	Oct. 26†
*Atlanta	38.3	47.8	48.0	59.0	68.8	76.2	76.4	76.2	70.0	62.6	49.8	42.4	59.6	94	13	Mar. 20	Oct. 26
*Augusta	43.0	51.0	52.4	62.6	71.6	78.2	79.2	80.1	72.9	63.9	53.0	48.2	63.0	97	23	Apr. 16	Oct. 31
*Bainbridge	.....	.....	.....	.....	.....	82.2	81.4	80.8	75.9	67.6	56.2	.....	.....	100	.....	.....	Nov. 10
Blackshear	.....	.....	.....	68.4	74.4	77.5	80.2	80.0	.....	.....	.....	.....	.....	96	.....	.....	.....
Blakely	45.9	56.4	.....	.....	74.3	79.8	79.1	80.0	75.8	67.0	55.8	52.2	.....	96	22	Mar. 19	Oct. 28
*Camak	.....	.....	.....	64.3	72.4	78.0	78.6	79.6	71.4	62.8	52.6	.....	.....	97	.....	.....	Oct. 26
*Columbus	39.8	.....	53.7	67.3	73.2	79.0	78.7	79.6	74.3	64.2	.....	.....	.....	93	.....	Mar. 21	.....
*Cordele	47.4	.....	.....	68.6	75.0	80.6	81.4	81.7	73.9	65.0	54.3	48.5	.....	102	16	Apr. 16†	Oct. 26†
Dahlonega	.....	46.0	48.0	59.0	67.4	74.8	74.0	75.0	67.8	59.2	48.6	43.8	.....	99	.....	Apr. 12	Oct. 29
Darien	.....	57.6	59.6	67.8	75.2	78.5	82.4	82.8	78.4	69.2	60.0	56.7	.....	99	.....	Mar. 20	Nov. 24
Diamond	34.2	43.4	44.3	57.0	63.4	73.6	73.8	73.6	66.0	54.2	44.7	39.7	55.7	94	9	Apr. 16	Oct. 26
Dublin	.....	.....	52.8	.....	.....	79.4	80.6	80.4	73.4	65.4	51.4	49.0	.....	98	.....	Mar. 21	Oct. 26
*Eastman	.....	.....	.....	65.8	74.3	78.1	78.1	82.8	77.6	72.0	60.7	.....	.....	98	.....	.....	.....
Elberton	39.4	49.2	49.8	.....	72.9	.....	.....	.....	.....	62.5	51.9	45.8	.....	.....	16	Mar. 20	Oct. 25
Fleming	.....	.....	55.2	64.9	82.1	84.4	.....	83.7	.....	.....	.....	.....	.....	101	.....	Apr. 16	.....
Folkston	.....	.....	.....	.....	77.9	79.8	82.3	82.8	.....	.....	.....	.....	.....	96	.....	.....	.....
Forsyth (a)	44.2	54.9	56.7	66.0	73.4	78.5	79.2	79.7	75.2	68.0	57.6	51.4	65.3	96	24	Mar. 20	Oct. 26
*Fort Gaines	43.7	54.7	56.6	67.8	73.8	79.1	79.0	79.2	74.1	66.1	55.6	52.8	65.2	95	30	Mar. 21	Oct. 28
Fort McPherson	35.8	39.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Gainesville	.....	.....	.....	59.8	66.0	76.2	77.2	76.6	70.4	60.9	50.0	.....	.....	94	.....	Apr. 16†	Oct. 26
Gillsville (a)	41.2	48.9	50.6	60.4	70.1	76.2	76.8	76.6	71.0	62.9	52.2	46.3	61.1	92	23	Mar. 19	Nov. 19
*Griffin	.....	.....	.....	.....	72.2	79.0	78.8	78.8	70.8	61.6	52.7	.....	.....	98	.....	.....	Nov. 11†
Hawkinsville	.....	.....	55.6	66.0	73.6	77.4	75.2	75.1	69.9	62.5	52.6	48.4	.....	99	.....	Apr. 16	Oct. 25
Hephzibah (c)	45.2	52.2	53.0	63.8	71.4	76.8	77.9	78.2	72.1	64.4	54.9	50.4	63.4	92	28	Apr. 14	Oct. 25
Homerville	.....	.....	.....	.....	.....	78.0	79.2	80.2	76.4	66.8	57.8	54.0	.....	95	.....	.....	Nov. 18
La Fayette	.....	.....	48.0	60.0	67.4	76.4	77.6	77.0	68.8	.....	48.6	40.4	.....	97	.....	Apr. 10†	Oct. 25
La Grange	.....	50.3	51.5	62.5	70.3	77.4	77.6	76.7	71.9	65.4	52.0	45.2	.....	93	.....	Mar. 20	Oct. 23†
Lincolnton	.....	.....	51.0	61.2	72.4	77.8	78.0	.....	.....	.....	.....	.....	.....	96	.....	Apr. 16	.....

[1] None. [2] F. G. Brill. [3] L. H. Charbonnier. [4] Special cotton region.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Georgia—Continued.																	
Lithia Springs	43.8			58.3	67.4	74.2	76.0									Apr. 26	
Louisville	43.8	52.6	53.3	65.8	72.2	78.1	79.2	80.8	74.2	65.8	52.8	48.0	63.9	101	20	Mar. 21	Oct. 28
Lumpkin			57.0	67.7	72.9	80.7	79.4	79.5	74.0	66.5				98		Mar. 20	Oct. 28
McArthur				62.8	71.7	78.0	79.2	79.6				51.9		94			
*Macon				62.8	70.6	77.5	78.3	79.4	71.4	67.4	59.4			98			
Marietta (a)	36.9	46.6	47.0	58.6	66.8	77.3	74.8	74.5	67.2	59.6	48.0	41.4	58.2	92	13	Mar. 29	Oct. 28
Marshallville			54.2	62.7	72.7	79.6	79.6	80.6	69.9	63.3				95		Mar. 19	Oct. 26
Milledgeville	42.0	51.3	52.2	63.3	70.6	78.3	77.8	78.8	71.8	63.4	52.8	47.4	62.5	94	19	Apr. 16	Oct. 28
*Millen	43.2	51.3	53.6	64.6	72.2	79.0	80.0	80.8	73.8	64.2	54.2	49.6	63.9	100	17	Apr. 16	Oct. 28†
Monticello (b)	38.9	49.5								64.0	51.9						Oct. 28
Morgan (a)								80.9	76.4			53.3		93			Oct. 29
*Newnan				62.6	70.2	77.2	77.5	77.7	69.6	62.2	50.4			97			Oct. 28†
Piscola (a)	48.8	57.7	58.6	68.4	75.6					76.4	68.2	57.5	54.8		26		Nov. 11
Point Peter (a)	40.0	47.1	47.9	59.4	70.8	76.9	78.1	78.3	71.2	60.8	49.4	45.0	60.4	96	18	Mar. 20	Oct. 28†
Poulan (a)	45.1	53.8	55.2	66.5	73.3	78.0	77.8	77.6	74.7	64.4	53.6	51.3	64.3	97	20	Apr. 16	Oct. 28†
*Quitman	52.5	58.0	60.6	68.8	72.4	79.6	80.6	80.7	76.4	66.4	59.9	58.0	67.9	100	24	Mar. 20	Nov. 28†
Rome			49.0	60.1	67.8	76.2	78.3	77.4	69.2	60.6	48.8	41.8		95		Mar. 20	Oct. 26
*Savannah	47.6	54.4	56.2	65.5	72.8	77.6	80.3	81.2	75.0	66.1	57.0	53.3	65.6	97	25	Mar. 20	Nov. 12
Statesboro					76.6	79.2	81.2			62.4	54.1	51.3					Oct. 26
*Thomasville	47.5	57.3	58.0	67.4	74.7	79.4	79.8	80.2	76.8	68.0	56.8	54.4	65.9	98	24	Mar. 20	Nov. 11†
*Toccoa	40.5	47.2	49.0	59.0	68.0	76.2	77.0	77.2	69.0	60.8	49.4	43.2	59.7	96	17	Mar. 20	Oct. 31†
*Union Point	41.3	48.0	51.0	61.8	71.2	76.9	78.0	77.8	70.2	62.8	51.8			94		Apr. 11	Oct. 28†
*Washington				63.8	73.0	79.6	79.0	79.8	71.4	63.4	53.3			96			Oct. 28†
*Way Cross				68.7	74.9	78.2	80.6	79.9	75.7	68.0	58.4			94			Nov. 25†
*Waynesboro	43.4	53.0	53.4	65.5	73.4	78.2	79.8	80.8	72.2	64.3	54.0			102		Mar. 20	Nov. 11†
*West Point				67.7	73.9	81.0	80.6	81.4	74.6	67.3	54.8			94			Oct. 27
Idaho.																	
American Falls	14.8	24.7	36.2	42.4	50.8	60.3	67.8	67.4	60.1	44.1	35.4	23.8	44.0	99	—21	June 4	Aug. 29†
Boise Barracks	22.2	29.9	43.4	46.1	55.6	65.2	70.4	69.4	63.0	51.2	42.0	33.4	49.3	109	1	May 12†	Aug. 25†
Bonanza			30.0		41.8	51.2											
Elk City		21.7		37.0	47.6												
Era	18.6	21.8	31.5	36.2													
Fort Sherman				45.0	53.4	60.4	65.3	66.4	58.6	49.8	38.8	22.6		96	—16	June 22†	Sept. 5†
Garden Valley (a)	20.4	27.8	40.5	45.2	56.4	60.4	65.4	66.4	60.1	49.4	37.3	27.4	46.4	98	— 6	June 4†	Oct. 12†
Henry Lake	12.2	19.5	25.1	30.8	41.0	50.6	57.4	56.4	51.6	42.8	27.2	16.8	36.0	90	—25	July 14	Aug. 29
*Idaho Falls						58.8	67.0	67.2	61.7	47.1	35.3	19.8		95	—22		Oct. 12
Kootenai (a)	21.8	29.8	39.8	42.4	51.5		65.9	64.3	55.2	43.9	36.2	26.1			—10	May 16†	Sept. 8†
Martin					45.8		62.2	63.2		43.9	28.0						Oct. 10†
Moscow (a)		36.3	40.9	40.6	51.1	60.8	64.9	61.8		48.0	38.2	27.6		95		Apr. 19†	Oct. 15†
Payette		22.2						68.9	64.4	51.0	36.6	32.2					Oct. 20
Ruthburg (a)	24.3	30.5	41.4	42.3	49.6	66.3	65.2	69.5		40.8	36.2			101	6	May 14†	Nov. 4†
Illinois.																	
Aurora [1]	17.2	29.6	31.8	44.7	54.2	67.4	71.4	70.0	61.4	49.6	30.4	18.5	45.5	94	—16	Apr. 29	Oct. 6†
Aurora (a) [2]	18.0	30.5	32.1	46.0	55.5	68.4			62.9	52.4	33.0	21.6			—14		
Beason (f)	18.8	33.8	35.5	48.3	58.7	70.2											
Bloomington (a)		32.6	33.8	46.4	58.8	67.3	71.9		66.4	57.5	36.2	27.0				May 23†	Oct. 23†
Bushnell									67.2	56.0	35.0	26.4				Oct. 23	Nov. 5
Carlinville	21.2	38.4	37.9	50.9	60.2	73.6	74.4	75.7	67.3	57.4	38.0	30.0	52.1	99	—17	Apr. 15	Oct. 9
*Cairo	29.3	44.6	44.0	58.2	66.0	76.7	76.7	76.2	70.0	60.0	44.2	36.0	56.8	94	0	Mar. 23	Oct. 25
Charleston (a)	20.3	38.0	36.6	50.5	60.7	73.7	75.4	73.5						98		May 23	
*Chicago	19.5	30.2	31.0	44.0	52.4	64.4	71.6	70.9	63.9	53.6	34.7	23.4	46.6	94	—10	Apr. 24	Oct. 8
Cockrell (a)			30.6	45.0	54.1	66.1										Apr. 9	
Collinsville	23.8	39.0	40.2	52.4		75.0	75.0	75.2	67.6	57.5	40.6	30.7		94	—11	Apr. 10†	Oct. 25†
Decatur (a)				49.6	58.4		75.2	73.6	65.3	54.6	34.4	26.5				Apr. 15†	Oct. 23†
Dixon (a)	16.4	30.7	32.4	45.6	55.0	68.6	72.5	71.8	61.5	50.7	31.1	18.6	46.2	97	—16	Apr. 24†	Oct. 9†
East Peoria (a)	20.8	35.4	37.6	51.4	59.6	72.1	74.2	72.0	63.2	54.9	37.4	27.4	50.5	98	—12	May 23	Sept. 26
Effingham									64.4	56.4	34.7	30.0					Oct. 24
Ellsworth	20.9	32.6	35.8	48.4	56.5	72.6	77.0	75.3	65.2	54.6	36.1	27.8	50.2	97	—16	Apr. 18†	Oct. 23
Fairmount	20.0	34.8	37.8	49.6	59.6	74.6	76.6	75.6	66.4	56.4	37.2	29.7	51.5	100	—14	Apr. 15†	Oct. 30†
Flora (a)	23.5	39.0	39.0	52.0													
Fort Sheridan	18.2	29.7	30.6	43.8	52.2	63.1	69.5	69.1	60.2		31.4	22.4		94	— 8	Apr. 24†	Oct. 23†
Galva											31.8	22.0					Oct. 23†
Golconda	27.1	42.0	42.0	56.8	63.8	75.9	76.2	75.7[e]		59.7	40.6[e]	37.6		92	— 2		Nov. 6
Greenville (a)	21.1	37.1	37.7	51.0	60.6	73.8	75.6	75.1	67.5	56.3	37.6	30.8	52.0	100	—13		
Griggsville	21.4	35.0		50.6	59.9	75.2	74.6	74.2	66.0	56.2	36.6	26.4		97	— 9	May 21	Oct. 25
Havana	22.3	36.5	38.2	51.0	60.1	73.1	75.0		67.0	58.0	38.8	29.9			— 6	Apr. 11†	Oct. 25
Hennepin	13.9	28.6				69.3	73.8	72.8	63.2	52.6	33.2	21.6		100	—14	Apr. 30	Oct. 9†
Jordans Grove	23.7	40.4	41.2	55.7	63.8	74.9	75.9	75.8	69.0	58.4	42.6	34.1	54.6	96	— 8	Apr. 12	Oct. 26
Kankakee					57.8	69.4	71.4	70.6	62.2	52.2	34.2			94			Oct. 24†
La Grange		29.2	32.4	46.6	55.8	66.8			62.5	53.0	34.4	22.7				Apr. 24†	Oct. 6
Lanark (d)	12.2	27.4	29.0	43.4	52.2	66.4											
Louisville (c)	20.9	37.3	37.4	52.0	61.6	74.3	75.4	73.4	64.7	53.8	37.0	32.4	51.7	98	—12	Apr. 15	Oct. 9
McLeansboro (a)	24.9	40.8	40.9	54.3	64.2	73.6	77.7	76.0		58.5	40.6	33.6		107	—10		Nov. 15
Manchester (c)			33.2	48.6	58.4	71.5	71.9	71.0	62.6								
Martinsville	23.1	38.2		50.1	61.3	72.0	74.4	73.2	66.7	56.2	37.9	30.7		96	—16		Oct. 25
Mascoutah		40.1												99	—15		
Mattoon	26.3	37.8	38.8	52.8	63.0	75.6	74.2	74.3	68.4	58.8	40.2	32.0	53.5	100			
Muddy Valley (c)	23.5	43.5	54.6	58.8				80.2	66.8	56.2		34.1			—12		Oct. 27†
Olney (a) [3]	25.3	40.2	40.6	54.6	64.2	76.0	78.2	76.4	69.2	58.5	40.6	33.6	55.0	99	— 7	Apr. 9	Oct. 27
Olney (a) [4]	23.6	38.4	37.5	50.4	60.6	73.7	75.1	72.5	64.6	52.8	35.1	28.2	51.0	103	—11		
Oswego (a)	16.4	29.2	30.7	43.7	54.4	67.5	71.4	69.0	60.9	50.6	31.8	19.9	45.5	96	—16	Apr. 15	Oct. 23
Ottawa (a)	20.3	33.3	35.5	48.4	57.7	70.9	74.2	72.0	63.3	55.2	34.5	23.7	49.1	98	—15	May 8	Oct. 23
Palestine (a)	22.9	37.9	38.8	52.8	60.8	73.2	74.0	72.7	65.4	54.5	38.8	31.0	51.9	97	—14	Apr. 15	Oct. 26
Pana (a)	24.6	38.4	39.7	53.1	61.7	75.1	77.1	76.9	68.2	57.6	37.0	28.0	53.1	100	— 6		

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MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Illinois—Continued.																	
Paris	.....	37.7	33.3	48.0	61.1	77.2	77.0	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 11†	.....
Peoria (a) [1]	21.4	35.0	37.4	51.0	60.3	74.2	76.9	75.9	65.9	56.5	37.5	28.3	51.7	98	— 6	Apr. 15	Oct. 24
Philo (a)	18.7	33.9	35.8	49.5	58.8	72.4	74.2	72.2	64.6	54.9	35.9	27.5	49.9	97	—25	Apr. 15	Sept. 27
Rantoul (a)	18.2	31.9	34.0	48.1	58.0	73.6	75.9	75.2	64.3	53.0	33.7	25.2	49.3	104	—15	.....	.....
Riley	14.6	27.8	29.3	44.2	53.2	65.2	71.0	69.4	61.7	51.7	31.0	17.9	44.8	91	—13	Apr. 25	Oct. 23
Rockford (a)	16.0	28.6	30.6	44.8	54.4	66.8	72.0	70.3	61.7	51.5	31.7	19.6	45.7	94	—17	Apr. 15	Oct. 23†
Rock Island	14.4	29.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rushville	18.7	36.8	38.4	51.0	60.2	74.9	73.1	77.2	67.6	57.2	36.4	27.6	51.6	98	— 8	.....	Oct. 23
Saint John (c)	24.8	40.0	40.3	55.0	65.8	76.8	77.6	.....	70.5	60.0	39.2	32.6	.....	.....	— 6	Mar. 24†	Oct. 27†
Sandwich	18.2	31.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Springfield	20.8	34.8	36.8	49.8	59.0	73.0	74.2	74.4	66.4	56.9	37.2	28.4	51.0	95	— 7	Apr. 15	Oct. 25
Sycamore (a)	16.7	29.4	31.0	44.4	54.5	66.8	71.9	69.1	60.8	50.8	32.0	20.6	45.7	93	—12	Apr. 24	Oct. 23
Walnut	17.8	32.2	34.8	49.2	57.6	72.1	75.3	.....	66.7	55.8	33.4	22.4	.....	99	—13	Apr. 15	Oct. 9
Watseka (b)	.....	.....	33.9	47.4	56.9	70.8	73.1	70.6	62.1	51.8	34.0	24.2	.....	.....	.....	Apr. 10†	Oct. 5
White Hall (d)	18.4	35.4	38.4	52.4	59.0	73.0	73.4	73.0	62.4	52.6	35.4	28.0	50.1	92	— 5	Apr. 9	Oct. 9
Winnebago (a)	15.2	28.9	31.0	43.8	54.3	67.2	71.3	69.8	60.6	50.6	30.8	16.7	45.0	93	—14	Apr. 24†	Oct. 6
Indiana.																	
Angola (a)	22.7	31.0	31.8	43.4	59.9	73.7	74.1	72.2	64.8	52.2	35.3	27.6	49.1	100	— 7	.....	.....
Ashboro (d)	.....	.....	36.1	48.8	57.7	72.2	70.6	71.3	66.9	58.2	38.8	31.2	.....	.....	.....	.....	.....
Butlerville (c)	23.0	36.6	36.7	52.5	62.3	76.2	77.0	73.6	65.1	54.8	38.4	30.7	52.2	.....	— 8	.....	.....
Cambridge City	.....	.....	.....	.....	60.8	72.2	75.5	71.9	63.7	52.3	38.3	29.2	.....	94	.....	.....	.....
Columbia City (f)	19.0	32.3	33.4	48.2	58.3	71.2	72.9	75.4	63.7	52.0	35.2	26.4	49.0	94	—16	.....	.....
Columbus (a)	23.5	37.8	35.8	50.2	62.0	73.6	74.7	73.3	65.6	57.0	38.9	32.6	52.1	97	—14	.....	.....
Connersville	22.4	37.3	37.6	48.7	59.7	73.2	76.2	71.6	64.6	53.2	38.6	30.6	51.1	95	—15	.....	.....
Degonia Springs (f)	27.5	43.1	42.1	56.0	65.1	76.3	76.9	75.6	67.7	56.7	41.7	34.8	55.3	96	— 5	.....	.....
Delphi	21.8	36.6	37.0	48.4	56.5	70.2	73.5	70.6	63.1	52.8	36.3	29.1	49.7	95	—15	.....	.....
Farmland (a)	24.1	36.1	36.4	49.6	59.9	72.8	74.1	72.2	64.8	50.0	37.0	29.8	50.6	98	—14	.....	.....
Franklin (a)	23.4	38.3	37.0	50.9	61.3	.....	.....	.....	.....	58.4	.....	29.4	.....	.....	—14	.....	.....
Hammond	19.8	31.1	30.8	43.6	52.0	66.8	72.8	69.4	64.8	54.6	.....	.....	.....	.....	—12	.....	.....
Hawpatch (a)	.....	.....	33.0	48.6	57.8	68.7	73.0	71.2	63.4	51.9	36.0	26.4	.....	94	.....	.....	.....
Huntingburg (a)	27.0	41.5	38.9	54.7	65.3	79.9	74.1	.....	70.5	.....	.....	.....	.....	.....	.....	.....	.....
*Indianapolis	23.8	36.4	37.4	50.6	60.0	74.0	75.6	74.2	67.4	56.4	38.2	30.0	52.0	97	— 5	Apr. 12	Oct. 24
Irvington (c)	.....	.....	34.3	48.4	57.7	71.6	73.2	72.4	63.0	51.6	36.5	29.5	.....	96	.....	.....	.....
Jeffersonville (a)	27.7	41.8	41.0	55.5	65.1	76.5	77.0	75.6	67.4	56.6	41.4	34.4	55.0	97	— 2	Apr. 11	Oct. 27
Kokomo (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	53.4	36.2	30.7	.....	.....	.....	.....	.....
La Fayette	19.6	35.0	36.2	50.0	58.8	72.4	73.9	72.5	65.4	56.6	36.6	27.2	50.3	96	—20	Apr. 10	Oct. 27
Logansport [2]	23.8	36.5	36.4	51.6	61.6	73.0	73.2	71.9	64.6	52.5	37.4	29.1	51.0	95	—12	.....	.....
Marengo (a)	29.4	44.5	43.8	57.2	62.8	76.6	76.8	74.8	68.7	58.6	43.2	36.4	55.6	99	— 7	.....	.....
Marion	21.4	33.4	34.3	48.9	60.4	71.8	72.8	72.2	63.9	52.2	34.4	29.5	49.6	101	—22	May 28	Oct. 10
Mauzy	22.4	33.7	34.9	49.5	56.9	73.5	73.1	71.3	64.6	50.6	36.3	28.2	49.6	95	—13	Apr. 11	Oct. 10
Michigan City (a)	22.8	33.3	33.6	48.5	57.3	70.6	.....	.....	65.0	54.3	37.5	29.6	.....	.....	— 5	.....	.....
Mount Vernon (a) [3]	26.4	41.4	40.7	54.6	64.3	76.6	.....	.....	66.1	56.0	.....	35.0	.....	.....	— 2	.....	.....
Muncie (a)	.....	33.1	38.2	52.1	60.4	.....	74.8	.....	.....	.....	34.9	.....	.....	.....	.....	.....	.....
New Albany (a)	.....	.....	40.7	55.8	65.1	77.2	78.8	.....	71.9	57.8	41.2	34.3	.....	94	.....	.....	.....
Point Isabel	23.5	34.8	37.1	48.3	56.6	71.4	74.7	72.8	67.1	52.9	36.5	29.6	50.4	99	—18	.....	.....
Princeton (a)	24.9	39.9	40.1	53.3	64.9	76.1	76.2	75.4	66.9	56.3	41.2	32.0	53.9	99	— 8	.....	.....
Rockville	21.0	36.6	37.6	50.6	59.9	73.7	74.5	72.6	68.2	55.6	37.3	27.4	51.3	96	—12	.....	.....
Seymour	28.2	41.5	39.5	53.8	62.8	74.6	74.8	74.5	67.4	55.6	38.3	31.2	53.5	98	— 8	.....	.....
Shelbyville (f)	22.4	38.0	38.3	54.3	60.2	74.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Terre Haute	25.3	42.8	47.6	52.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Valparaiso	.....	27.4	31.6	44.5	53.2	64.4	71.6	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 21	.....
Vevay (a)	26.8	40.3	40.0	54.3	64.3	75.6	75.7	75.2	66.9	56.4	41.0	32.7	54.1	100	— 4	Apr. 16†	Oct. 27
Worthington	23.7	39.7	39.6	52.0	61.2	74.2	76.2	73.5	64.2	52.0	38.8	30.8	52.2	94	—14	.....	.....
Indian Territory.																	
Fort Supply	32.8	38.8	41.6	56.6	63.8	75.6	79.6	77.6	71.2	58.6	45.0	29.9	55.9	104	—13	Apr. 21	Oct. 8†
Healdton	39.5	48.8	51.4	64.7	69.0	78.9	84.8	78.8	71.6	.....	45.9	.....	.....	100	.....	Mar. 19	Nov. 9
Lehigh	.....	.....	47.8	63.9	68.0	79.2	83.7	.....	74.2	64.5	52.2	40.0	.....	112	.....	Mar. 22†	Nov. 18
Pauls Valley	.....	.....	.....	64.0	70.2	82.2	84.8	86.8	73.0	62.1	.....	.....	.....	110	.....	Mar. 23†	Oct. 24
Purcell	37.3	48.0	48.8	62.3	68.8	77.8	82.6	81.2	76.0	65.4	52.8	39.2	61.7	108	— 8	Mar. 23†	Oct. 24
Sapulpa	.....	.....	55.8	69.2	72.5	80.0	81.6	87.0	.....	.....	.....	.....	.....	103	.....	Mar. 21†	.....
South McAlester	?50.6	?50.0	?50.2	?62.7	67.8	79.7	81.4	80.8	74.4	68.6	55.9	44.2	63.9	100	1	Apr. 9	Nov. 9
Iowa.																	
Algona (a)	.....	22.5	29.2	41.8	51.3	65.7	73.1	70.0	63.8	52.2	30.2	17.6	.....	94	.....	Apr. 14	Oct. 19
Alta (a) [4]	13.2	22.8	29.3	40.6	48.8	66.4	71.7	68.4	62.8	52.6	30.8	16.6	43.7	95	—28	May 20	Oct. 8
Amana	14.3	29.3	32.3	45.8	55.1	69.1	73.1	70.9	63.2	52.8	31.9	17.0	46.2	93	—21	Apr. 29	Oct. 9
Ames [5]	12.6	24.6	.....	42.3	52.0	69.0	74.3	71.8	65.2	53.6	32.8	15.2	.....	95	—34	May 20	Oct. 8
Atlantic (a)	16.1	27.6	32.0	45.4	53.3	69.3	73.4	69.6	64.6	50.2	33.2	17.8	46.0	103	—38	Apr. 29	Sept. 14
Bancroft (a)	11.0	22.7	29.9	42.1	50.8	66.1	71.8	68.8	63.4	50.1	.....	.....	.....	92	.....	May 21	Oct. 8
Belle Plaine (a)	14.1	27.6	31.9	45.5	54.6	67.9	73.0	71.3	63.6	49.2	32.1	17.4	45.7	96	—25	Apr. 19†	Oct. 9
Blakeville (a)	15.0	27.1	32.7	45.5	55.1	69.1	74.3	73.5	.....	.....	32.5	17.2	.....	95	—26	Apr. 29	.....
Blockton	17.8	31.3	33.8	47.5	56.6	70.8	74.3	70.9	66.0	53.1	35.2	20.4	48.1	98	—30	Apr. 29	Oct. 8
Bonaparte (a)	19.4	33.0	39.4	49.7	.....	75.9	74.1	.....	66.7	56.6	35.7	24.9	.....	.....	—18	Apr. 15†	Oct. 23
Carroll	16.2	24.6	29.9	42.8	.....	72.7	75.7	73.5	64.8	.....	.....	.....	.....	95	—27	May 4	.....
Cedar Falls	11.9	24.0	31.3	44.3	52.5	.....	72.0	71.5	63.8	52.2	30.8	16.2	.....	94	—32	May 19	Oct. 9
Cedar Rapids	16.2	30.3	32.5	46.6	55.3	71.3	73.7	75.4	67.4	55.6	33.6	19.7	48.1	96	—26	May 21	Oct. 23
Centerville	.....	.....	.....	.....	.....	70.0	71.3	69.3	63.1	52.1	33.4	20.2	.....	.....	.....	.....	.....
Charles City	11.6	23.4	28.6	41.5	51.0	65.0	72.0	68.7	62.8	51.4	29.0	16.1	43.4	92	—26	Apr. 29	Oct. 8
Clarinda (a)	18.8	30.5	34.6	49.0	56.3	72.5	76.9	74.2	68.9	57.0	37.3	21.2	49.8	100	—26	Apr. 15	Oct. 23
Clinton (a)	15.9	29.9	32.7	46.7	55.6	68.8	73.2	73.7	62.0	51.3	32.6	18.2	46.7	96	—17	Apr. 29	Oct. 9
College Springs	.....	33.3	35.2	44.5	47.5	69.7	74.4	74.8	68.8	59.4	39.0	21.5	.....	99	.....	May 21†	Oct. 9
Corning	17.8	30.0	34.5	47.6	55.0	69.6	73.3	71.5	66.2	54.8	35.7	19.0	47.9	95	—31	Apr. 29	Oct. 8
Corydon	16.8	30.4	.....	.....	.....	70.0	72.9	72.0	.....	.....	.....	.....	.....	93	—26	.....	.....

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MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Iowa—Continued.																	
Cresco (*a*)	19.7	23.3	27.8	41.9	52.4	63.5	69.6	68.3	60.8	49.2	28.1	13.6	42.4	90	—26	May 20	Oct. 9
*Davenport	16.6	31.0	33.6	47.2	56.0	69.6	74.0	73.4	65.6	55.6	33.0	20.4	48.0	94	—12	Apr. 15	Oct. 21
Decorah						67.7	71.8	70.0	62.1			16.6		96			
Delaware (*c*)	9.5	24.8	27.2	42.2	53.6	66.4	71.7	69.3	60.0	49.3	28.3	14.2	43.0	94	—22	Apr. 15	
Denison (*a*)							73.2	70.6	65.2	53.1	38.6	18.4					Oct. 9
*Des Moines	17.8	29.1	33.6	47.0	54.8	69.0	73.8	72.2	65.8	55.2	34.9	19.6	47.7	95	—26	Apr. 29	Oct. 19
*Dubuque	14.6	28.6	31.4	45.7	55.2	68.4	74.2	72.6	64.2	54.6	31.4	17.0	46.6	95	—18	Apr. 15	Oct. 9
Eagle Grove (*c*)	9.5	22.0	27.2		51.6	68.4	73.2	70.0	62.3	49.6	28.8	12.8			—35	May 20†	Oct. 9†
Eldora										53.0	29.8	13.1					Oct. 9
Elkader (*a*)	13.0	26.5	30.4				73.4										
Fairfield (*a*)	18.8		32.2			69.7	76.9	71.2	64.6	54.4				94			Oct. 23
Fayette	13.1	26.3	30.1	41.4	52.3	66.3	72.0	70.2	62.6	51.9	30.6	17.2	44.5	95	—26	May 20	Oct. 9
Fort Madison (*a*)	23.0	35.9	38.8	51.5	59.9	75.0	77.2	77.2	69.0	58.8	38.5	28.0	52.7	96	—15	Apr. 10†	Oct. 23
Galva	16.2	23.5	31.0	45.6							32.3	18.1			—32	Apr. 29†	
Glenwood	23.0	32.5	36.4	49.6	57.1	73.8	79.0	74.8		58.4	39.7	24.8		104	—32	Apr. 15	Oct. 9
Grand Meadow (*a*)	13.6	26.2	29.4	43.0	52.5	64.2	70.0	68.1	61.5	51.1	30.8	17.1	44.0	91	—22	May 20	Oct. 23
Greenfield (*a*)	15.6	27.2	31.2	45.1	52.8	68.0	72.7	69.8	65.0	52.8	32.3	18.5	45.9	95	—27	Apr. 9	Oct. 8
Grinnell	16.9	28.4	32.2	46.1	54.9	69.0	74.0	72.8	64.2	50.6	32.2	18.2	46.6	92	—24	Apr. 19	Oct. 8
Grundy Center (*a*)	14.5	26.1	30.8	44.8	53.8	67.7	72.2	69.5	62.2	50.6	30.6	16.7	45.0	92	—24	May 21	Oct. 7
Hampton (*a*)	12.3	23.0	28.8	42.1	50.6	65.6	69.9	66.8	61.8	50.2	29.2	14.8	42.9	93	—27	May 20	Oct. 23
Havelock	13.6	24.5		41.2	50.1										—30	May 21	
Hopeville	16.7	28.9	33.1	46.2	54.8	68.8	72.5	70.7	66.4	55.1	34.7	19.8	47.3	93	—28	Apr. 29	Oct. 23
Hopkinton	16.0		32.0											92	—18		
Independence	14.5	25.8	29.5	43.7	52.9	66.7	73.1	70.5	62.5	50.6	29.8	16.4	44.7	94	—20	May 20	Oct. 19
Indianola	18.4	30.6	34.7	48.7	55.6	68.0	73.4	69.3	66.3	55.0	36.1	19.6	48.0	94	—28	Apr. 29	Oct. 20
Iowa City	15.7	29.6	33.5	46.9	55.7	68.8	73.0	72.5	64.2	54.4	33.6	19.5	47.3	96	—22	Apr. 15	Oct. 23
Iowa Falls (*a*)			29.0	42.8	52.3	65.7	71.5	68.1	62.4	50.6	30.8	14.7		92		Apr. 15†	Oct. 8
*Keokuk	19.6	33.5	36.2	49.2	58.1	73.0	74.6	74.9	67.4	57.2	36.4	25.9	50.5	95	—16	Apr. 15	Oct. 23
Keosauqua	20.0	33.1	36.5	49.2	58.0	72.8	74.6	74.4	67.7	56.5	36.4	24.2	50.3	97	—18	Apr. 15	Oct. 23
Larrabee (*a*)	11.5	21.7	29.8	43.7	51.2	67.5	72.8	69.8	63.5	52.7	30.8	17.6	44.4	99	—32	May 20	Oct. 8
Logan (*a*)	18.7	31.6	36.2	49.3	55.8	71.2	76.3	73.6	69.3	57.6	38.7	22.2	50.0	100	—29	Apr. 29	Oct. 8
McCausland (*a*)	16.3	29.3	32.3	44.7	54.0											Apr. 13	
Maquoketa (*a*)	11.0	29.1	31.9	45.3	55.4	68.5	73.4	70.4	61.6	51.3	31.8	18.7	46.0	96	—20	Apr. 12†	†Oct. 22
Marshall			30.7	44.7	53.2	67.2	72.1	70.8	63.4	54.1	33.4	17.9		90		Apr. 15	
Mason City	12.6	22.7					71.4	73.2	65.0	55.0	33.6			95	—29		Oct. 23
Maxon (*a*)	16.0	28.7	32.5	52.1	56.6	74.6	76.8	73.1	66.1	54.0	32.8	18.5	48.6	102	—30	May 4	†Oct. 25
Mechanicsville	16.2	29.0	31.4	45.1	53.9	67.8	71.4	70.6	62.0	53.0	31.0	18.4	45.8	92	—22	May 21	Oct. 23
Monticello (*a*)	13.8	28.2	30.6	44.6	54.5	67.8	72.6	70.2	61.5	50.4	29.7	16.9	45.1	95	—21	May 21	Oct. 9
Mooar (*a*)	19.1	31.7	36.1	47.8					68.0							Apr. 28	
Mount Ayr						68.2	74.7	73.9	67.7	56.3	37.0	23.4		94			Oct. 23
Mount Pleasant (*b*)[1]	16.4	30.2	34.2	46.1	56.0	69.0	72.2	70.3	62.0	52.1	33.8	22.2	47.0	91		Apr. 10†	Oct. 23
Mount Vernon (*a*)	15.2	29.8	32.7	46.6	56.4	69.6				55.4	33.0	19.0			—23	May 21†	†Oct. 23
Murray	16.7	29.9	32.9	46.8	55.2	69.4	73.8	71.6	66.7	55.2	34.8	19.9	47.7	94	—26	Apr. 15	Oct. 23
Muscatine (*a*)	15.9	31.0	34.4	47.9	55.7	69.6	73.6	73.3	67.4	53.4	33.3	20.5	48.0	96	—15		
Osage (*c*)	9.5	22.5	26.6	41.6	51.3			65.6		45.4	27.4	13.8			—28	Apr. 29	Oct. 8
Oskaloosa (*a*)	18.4	30.6		46.7	55.2	69.5	73.5	71.8	64.8	53.0	33.8	19.8		94	—24	Apr. 29	Oct. 9
Panama	15.6	27.2	32.1	45.9	52.9	68.4	73.8	70.8	65.3	55.2	35.4	18.9	46.8	98	—29	May 20	Oct. 8
Richland (*c*)	12.6	27.5	29.5	43.7	53.8	69.6	72.3	72.0	61.8	49.3	30.6	17.3	45.0		—26	Apr. 14	†Oct. 24
Sac City (*a*)	13.2	20.2	28.6	44.5	52.2	67.7	76.1	72.6	62.2	53.4	30.8			96		Mar. 28†	†Oct. 8
Seymour					57.6	71.9	73.4	72.0						92			
Sidney										56.3	39.8	22.1					Oct. 22
*Sioux City	14.7	24.7	31.8	46.5	52.4	69.0	75.4	71.8	66.0	55.4	34.8	20.8	46.9	100	—28	May 7	Oct. 8
Spirit Lake				42.5	49.2	63.8	73.2	72.3	62.3					93		May 26†	
Storm Lake	14.1	23.6	29.8	44.1	52.4	68.2	74.3	71.2	65.3	56.0	33.0	18.4	45.9	98	—28	Apr. 19	Oct. 23
Tipton	16.4	30.7	28.4	46.8	55.3		74.1		63.8	54.3	31.9	19.5			—18	Apr. 29	Oct. 23
Vinton (*a*)	14.4	27.0	31.3	45.1	54.0	66.7	72.4	69.7	62.6	51.7	31.4	17.0	45.3	91	—24	Apr. 15†	Oct. 9
Washington (*f*)	18.4	33.1	35.4	49.8	59.2	76.1	75.4	75.5	66.6	56.1	35.8	23.0	50.4	101	—19	Apr. 12	Oct. 23
Webster City (*a*)	13.4	25.2	30.0	42.9	52.0	67.4	72.5	70.9	64.0	52.6	32.6	16.4	45.0	96	—28	Apr. 28†	Oct. 9
West Bend (*a*)	12.4			42.1	50.7	66.3										May 20	
Williams (*a*)	9.1	21.4	27.5		51.0	65.3	71.2	68.0	60.7	47.5	27.6	12.4		96	—32	May 21	Oct. 23
Winterset	17.4	28.7	32.5	45.8	54.6	69.3	74.1	72.2	66.1	55.4	34.7	19.8	47.6	100	—24	Apr. 29	Oct. 23
Kansas.																	
Abilene	27.2	38.0	42.2	54.9	60.2	75.0	77.5	76.6	71.2	58.6	43.1	24.7	54.1	101	—19	Apr. 29	Oct. 9
Allison (*b*)	18.9	28.8	33.3	48.4	54.0	70.4	75.6	74.2	64.6	48.6	34.4	21.7	47.7	100	—18		Oct. 8
Altoona (*f*)	22.8	34.6	36.5	53.7	63.7	74.1	78.8	73.6	64.0	53.8	39.0	29.2	52.0	100	—13		Oct. 25
Antelope	24.4	36.4	39.5	52.7	60.5												
Atchison	22.7	36.2	37.2	51.9	58.4	74.3	76.6	76.1	70.4	58.8	41.7	26.0	52.5	100	—23	Apr. 15	Oct. 24
Belleville	35.0†		41.8	54.2	55.4	75.5					46.3						
Buffalo Park (*e*)						69.6						31.8			—11		
Burr Oak														101	—21		
Cawker City (*a*)	22.8	33.3	36.3	50.7	55.1	74.0	78.4	75.6	69.5	55.6	39.6	27.7	51.6	102	—20		
Colby									65.7	52.6	38.4	23.7					†Oct. 8
Coldwater	29.6	36.4	38.8	54.6	63.6	74.4	79.2	77.4	72.0	59.8	42.0	26.6	54.5	107	—13	May 21	†Oct. 25
Collyer (*a*)					53.6	70.0	76.6	74.4	67.7	54.4		28.2		106	—10		
Columbus	32.2	40.2	40.0	54.7	64.2	74.8	76.9	77.4	70.1	59.4	42.5	31.0	55.3	100	—16	Mar. 28	Oct. 25
*Concordia	24.4	34.0	37.8	51.3	55.8	73.2	76.8	75.7	70.1	57.7	41.3	24.9	51.9	104	—24	Apr. 14	Oct. 19
Concordia	21.2	32.2	35.1														
Cunningham (*a*)	26.4	34.7	37.5	52.9	59.4	73.8	77.6	75.6	69.0	54.7	39.6	24.2	52.1	107	—15	Apr. 29	Oct. 9
*Dodge City	28.9	34.7	36.5	51.8	57.8	71.2	77.0	76.0	69.8	56.2	42.4	25.8	52.4	103	—11	Apr. 22	Oct. 25
Elco (*a*)	27.0	38.2	39.3	53.7	61.2	74.8	77.4	75.9	70.4	58.6	42.2	28.0	53.9	100	—22		
Elk Falls	32.2	39.2	39.0	53.8	65.1	76.0		82.9									Oct. 8
Ellis (*e*)	28.5				53.8			77.2	76.0	59.4	50.8						
Emporia (*a*)	27.2	38.5	40.0	53.5	61.1	75.0	77.4	75.2	69.8	59.3	43.0	28.4	54.1	99	—13	Apr. 9	Oct. 21
Englewood (*a*)	31.6	38.4	46.9	55.6	62.0	77.3	81.9	77.8	72.0	56.8	42.8	25.8	55.2	105	—12	Apr. 22	Oct. 9
Eureka Ranch	25.6	35.6	35.5	49.8	55.0	70.8	76.6	75.6	67.4	56.0	40.6	25.0	51.1	107	—19		Oct. 9

[1] Dr. Max E. Witte.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Kansas—Continued.																	
Fort Leavenworth[1]	23.3	37.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Leavenworth[2]	24.0	36.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Riley	23.9	38.6	41.8	53.2	57.4	73.4	77.9	76.6	68.6	61.7	41.9	24.9	53.3	104	—25	Apr. 8†	†Oct. 9
Gibson (a)	26.7	34.4	36.2	50.0	55.8	71.9	77.4	76.1	67.4	54.2	38.2	25.2	50.7	108	—18	.....	.....
Gove City (a)	26.4	30.7	35.4	50.4	56.3	69.0	76.0	75.6	67.9	55.4	39.4	25.0	50.6	108	—11	Apr. 21†	†Oct. 18
Grainfield (a)	.....	.....	36.4	49.8	52.8	67.8	72.9	75.4	65.8	53.5	39.6	26.4	.....	104	—12	.....	.....
Greensburg	.....	.....	31.6	52.2	59.6	74.1	79.8	81.8	76.4	.....	.....	27.4	.....	103	.....	Apr. 22	.....
Grenola (a)	28.4	40.4	40.4	55.8	61.8	76.8	80.0	79.4	72.4	60.8	44.2	31.7	56.0	104	—15	.....	.....
Grinnell (a)	.....	.....	.....	53.6	54.6	.....	81.3	.....	74.5	.....	44.1	28.8	.....	107	—12	.....	.....
Halstead	25.7	35.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Havensville (a)	23.2	34.2	37.3	50.4	57.1	73.8	75.4	74.0	68.5	55.7	37.0	23.0	50.8	99	—24	Apr. 9	Oct. 9
Hays City	.....	.....	.....	.....	.....	63.8	.....	70.0	70.2	60.8	41.6	28.4	.....	105	.....	.....	†Oct. 18
Hesston	.....	.....	37.7	50.2	57.2	71.4	74.6	.....	68.4	57.0	.....	23.8?	.....	.....	.....	.....	.....
Horton	22.3	33.4	38.2	51.2	57.1	73.7	76.2	75.2	69.1	58.4	39.8	25.2	51.6	100	—33	Apr. 15†	Oct. 29
Hutchinson	31.0	39.7	41.6	54.6	61.5	74.5	76.7	77.2	71.8	60.4	44.8	28.4	55.2	102	—13	Apr. 9	Oct. 9
Independence	28.3	41.1	41.9	56.6	65.0	77.0	79.8	80.0	72.4	60.8	44.5	32.3	56.6	106	—16	Apr. 9	Oct. 25
Kansas City (a)	24.3	36.6	38.2	52.5	60.6	75.0	76.9	75.7	68.3	56.6	39.7	26.5	52.6	102	—19	Apr. 29	Oct. 9
Kellogg	28.4	.....	.....	58.0	65.0	75.5	79.2	80.1	72.5	59.0	42.8	30.4	.....	107	—20	.....	.....
Kiowa	32.4	40.0	51.5	57.4	64.4	75.0	80.2	81.6	74.0	59.0	44.6	28.5	56.6	105	—11	Apr. 29	Oct. 24
La Crosse	28.3	34.4	37.9	52.9	58.0	75.1	80.4	79.7	71.2	.....	.....	26.4	.....	104	—12	Apr. 2	.....
Lakin	27.3	33.1	39.5	52.4	58.2	72.4	78.0	76.6	69.3	56.6	41.7	30.0	52.9	111	—16	May 22	Oct. 8
Lawrence (a)	24.0	36.6	37.7	53.0	60.0	74.2	75.6	75.8	68.0	56.9	40.4	26.2	52.4	98	—19	Apr. 9	.....
*Leavenworth	23.9	36.4	37.6	51.8	59.0	74.2	76.2	76.2	69.6	58.4	40.7	26.0	52.5	98	—20	Apr. 15	Oct. 8
Lebo	25.6	37.8	38.6	51.0	60.0	74.6	76.0	75.6	68.4	57.0	40.6	27.4	52.7	101	—20	Apr. 29	Oct. 8
Leoti	26.3	32.1	37.8	50.5	55.8	69.7	76.2	75.2	66.0	54.5	39.6	26.4	50.8	107	—14	May 10	Oct. 8
Liberal	.....	37.2	38.0	55.0	59.7	73.8	79.1	75.8	70.6	56.3	42.3	26.8	42.3	104	.....	Apr. 22	Oct. 18
McAllaster (a)	.....	.....	36.8	49.9	54.5	70.6	73.6	.....	.....	.....	41.7	.....	.....	.....	—14	.....	.....
Macksville (a)	30.8	.....	.....	.....	.....	74.8	78.9	78.7	78.7	.....	.....	.....	.....	104	.....	.....	.....
McPherson	25.8	36.6	39.8	55.3	58.1	73.6	76.4	76.2	70.8	57.7	42.0	26.0	53.2	104	—18	Apr. 22†	Oct. 9
Manhattan (a)[3]	22.2	34.6	38.5	51.7	57.8	74.3	77.3	74.6	69.7	55.7	39.8	24.0	51.7	106	—26	Apr. 29	Oct. 8
Manhattan (a)[4]	20.6	31.7	35.4	.....	55.4	73.2	76.0	73.8	68.3	53.7	37.6	23.8	.....	108	—23	Apr. 9	Oct. 8
Mankato (a)	21.1	30.7	36.2	49.4	54.0	70.8	74.5	75.5	.....	.....	.....	.....	.....	.....	.....	Apr. 21	.....
Marion (a)	.....	.....	.....	.....	.....	.....	.....	.....	68.2	57.0	41.8	25.2	.....	.....	.....	.....	Oct. 9
Minneapolis (a)	22.6	33.6	37.9	51.4	56.8	74.1	78.6	76.3	69.8	56.4	39.4	24.6	51.8	100	—20	.....	.....
Monument (a)	.....	25.5	34.4	49.1	51.5	70.3	79.2	75.4	70.8	55.5	40.6	20.7	.....	106	—24	Apr. 21†	.....
Morland	.....	32.0	35.9	49.1	54.9	70.5	75.8	74.2	67.9	55.0	40.4	25.6	.....	106	.....	Apr. 23	Oct. 8
Morse	22.5	35.4	36.8	50.8	57.8	72.5	74.2	75.2	68.3	58.2	39.0	24.0	51.2	98	—21	Apr. 20	Oct. 25
Morton	28.8	35.1	34.8	54.6	62.1	75.1	78.7	78.0	71.6	59.6	46.4	30.8	54.6	104	—12	.....	.....
New England Ranch	27.0	.....	.....	50.4	54.4	.....	.....	75.6	66.0	.....	39.6	25.9	.....	.....	.....	May 9	.....
Norton	24.8	30.8	35.6	49.2	54.6	70.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 22	.....
Oakley (a)	29.6	34.5	39.5	57.2	57.6	.....	82.8	.....	76.2	64.0	42.7	28.2	.....	.....	—12	Apr. 20†	.....
Ogallah (a)	.....	.....	.....	53.4	.....	77.2	80.8	.....	.....	.....	.....	.....	.....	104	.....	.....	.....
Oswego (a)	32.5	41.6	41.2	56.6	64.7	75.6	78.2	78.7	.....	56.6	44.9	31.8	.....	108	—18	Apr. 15†	Oct. 25
Page City (a)	.....	30.6	34.1	47.4	53.8	70.3	80.8	75.3	63.4	55.6	37.7	28.6	.....	105	—12	.....	.....
Pauline (a)	.....	37.0	38.7	52.7	60.1	.....	79.0	77.8	69.4	.....	41.1	29.6	.....	104	.....	.....	.....
Phillipsburg	27.5	31.6	34.4	49.3	56.2	66.3	77.0	75.6	70.0	59.6	43.5	24.8	51.3	106	—18	May 22	Oct. 22
Pleasant Dale (a)	24.4	33.2	35.4	50.0	54.6	71.0	75.8	75.6	68.8	55.0	40.0	26.0	50.8	105	—16	.....	.....
Quinter (a)	.....	.....	.....	54.3	.....	.....	81.0	.....	71.6	.....	43.4	.....	.....	.....	.....	.....	.....
Rome (a)	28.4	39.2	41.2	55.1	62.9	73.6	77.3	77.0	70.7	59.2	44.9	31.2	55.0	103	—14	.....	Oct. 9
Salina (a)	24.5	34.9	38.2	52.2	58.4	74.4	79.0	76.6	70.7	56.6	41.8	26.9	52.8	98	—15	Apr. 8	Oct. 25
Sedan (a)	28.8	40.0	41.4	55.5	63.5	76.0	78.8	78.7	71.6	60.2	44.5	30.5	55.8	102	—16	Apr. 15	†Oct. 29
Seneca (a)	19.5	32.0	35.9	47.1	.....	76.7	.....	.....	71.7	.....	.....	.....	.....	.....	.....	Apr. 29	.....
Sharon Springs (a)	.....	.....	38.2	51.8	54.3	70.6	75.0	74.4	77.0	55.6	.....	.....	.....	.....	.....	.....	.....
Shields	33.2	38.2	40.6	51.0	56.2	70.2	74.4	70.0	63.8	55.0	43.7	37.0	52.8	103	—10	May 10	Oct. 8
Sterling	.....	.....	.....	55.4	61.9	74.2	75.2	76.6	71.8	60.6	44.6	29.6	.....	98	.....	Apr. 23	Oct. 9
*Topeka	24.0	37.2	38.5	52.5	59.6	74.8	76.8	76.0	70.5	59.3	41.7	26.4	53.1	100	—23	Apr. 15	Oct. 9
Topeka	.....	.....	.....	.....	.....	72.4	75.8	74.9	68.2	57.3	40.0	24.4	.....	100	.....	.....	.....
Tribune	27.0	33.5	35.0	50.8	54.6	69.4	75.5	74.6	68.4	52.8	40.8	28.2	50.9	107	—10	May 10	Oct. 8
Ulysses	30.6	41.8	38.0	55.1	62.0	73.6	78.8	83.3	71.4	60.2	44.6	30.5	55.8	109	— 5	Apr. 22	†Oct. 25
Wa Keeney (a)	27.4	.....	.....	.....	56.3	.....	80.9	74.6	68.4	53.6	40.8	26.8	.....	102	—10	.....	.....
Wakefield	25.5	35.7	40.2	53.6	59.4	76.0	80.4	77.8	72.0	59.0	41.8	27.5	54.1	108	—20	Apr. 15	Oct. 8
Wallace (g)[5]	.....	.....	35.0	50.3	55.6	69.0	77.4	78.4	68.4	52.1	41.3	27.4	.....	106	—11	.....	.....
Weskan[6]	25.6	33.2	34.4	44.8	55.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 10	.....
*Wichita	29.1	38.5	39.6	54.6	61.7	74.9	77.4	77.5	71.6	59.6	44.0	27.6	54.7	100	—14	Apr. 29	Oct. 19
Yates Center	25.6	38.0	38.6	54.2	62.4	73.9	75.8	76.8	69.0	.....	.....	.....	.....	.....	.....	Apr. 29	Oct. 9
Kentucky.																	
Bowling Green (a)	32.2	46.6	43.4	58.5	68.0	77.9	.....	.....	.....	62.0	44.6	39.6	.....	.....	7	Apr. 11†	Nov. 10
Burkesville (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	56.2	43.3	34.7	.....	.....	.....	.....	.....
Caddo (a)	23.7	36.9	38.3	53.4	.....	74.6	.....	75.8	71.2	57.3	44.1	34.2	.....	.....	4	Apr. 8†	†Oct. 30
Canton (a)	30.5	45.1	44.1	58.1	66.6	75.5	75.6	74.9	67.4	58.8	44.6	36.6	56.5	98	5	Mar. 20	Oct. 26
Carrollton (a)	.....	.....	39.2	52.5	62.5	76.0	76.3	74.9	65.4	53.7	38.8	31.2	.....	98	.....	Apr. 12	Oct. 27
Catlettsburg (a)	.....	.....	.....	.....	.....	67.9	79.4	.....	71.6	56.9	45.0	34.6	.....	.....	.....	.....	Oct. 25
Central City (a)	.....	.....	39.0	53.6	62.3	73.7	75.4	.....	65.0	.....	.....	.....	.....	.....	.....	Apr. 14	.....
Earlington (a)	31.5	46.5	44.7	59.6	68.4	78.6	78.5	76.3	70.2	60.9	46.2	38.5	58.2	98	— 3	Apr. 10	Oct. 29
Edmonton	30.2	43.1	41.0	56.4	64.6	74.4	75.4	.....	.....	53.3	42.9	34.4	.....	.....	6	Apr. 15	Oct. 27
Fort Thomas	22.2	37.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Franklin (a)	31.5	44.2	43.2	57.8	65.2	76.0	76.4	76.1	69.8	60.0	46.5	37.5	57.0	97	6	Apr. 10	Oct. 27
Grand Rivers	.....	45.2	42.1	56.8	66.0	75.8	76.1	75.0	68.2	57.7	.....	.....	.....	96	.....	Apr. 11	Oct. 25
Greensburg	.....	.....	.....	60.0	66.2	76.6	77.5	73.9	67.3	57.5	44.3	.....	.....	99	.....	Apr. 9	Oct. 26
Harrodsburg (a)	28.6	40.9	39.5	54.7	64.1	75.1	75.0	73.3	65.6	54.9	40.9	32.2	53.7	99	— 1	Apr. 15	Oct. 6
La Grange	.....	39.9	.....	51.6	62.8	76.7	76.4	.....	67.6	.....	.....	.....	.....	.....	.....	Apr. 9	.....
*Lexington	27.6	41.2	38.8	53.8	62.8	75.8	75.0	74.8	68.4	57.1	41.4	32.9	54.1	97	6	Apr. 15	Oct. 28
Louisa	.....	.....	.....	53.4	64.8	76.0	76.3	74.5	.....	.....	.....	33.6	.....	100	.....	Apr. 15	.....
*Louisville	29.2	42.8	42.0	55.5	64.7	76.6	76.7	76.6	69.4	58.8	42.8	35.0	55.8	98	4	Apr. 11	Oct. 28
Matlock (a)	.....	.....	.....	.....	.....	.....	.....	.....	68.7	60.1	40.8	36.5	.....	.....	.....	.....	Oct. 27
Middlesboro (a)	32.9	42.8	42.1	56.2	64.8	74.2	73.8	72.2	64.6	54.3	43.6	35.0	54.7	94	8	Apr. 16	Oct. 6

[1] Post hospital. [2] Military prison. [3] Prof. E. R. Nichols. [4] C. P. Blachly. [5] Agent Union Pacific R. R. [6] S. D. Yoxall.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Kentucky—continued.																	
Mount Sterling (*a*)	.....	.....	38.3	52.7	61.8	72.9	72.8	71.6	63.8	52.2	39.2	31.0	.....	96	.....	Apr. 15	Oct. 27
Munfordville (*b*)	.....	.....	.....	57.3	64.9	77.4	76.9	75.3	65.2	.....	.....	.....	.....	.....	.....	Apr. 9	.....
Newport Barracks	25.2	38.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Paducah (*a*)[1]	.....	.....	.....	.....	.....	.....	77.8	77.6	71.3	60.9	44.5	37.3	.....	.....	.....	.....	Oct. 27
Pellville	26.9	41.4	40.5	54.9	64.0	75.2	76.2	75.2	68.6	60.0	44.2	35.9	55.3	98	— 6	Apr. 15	Oct. 28
Princeton	.....	.....	.....	.....	.....	75.0	76.8	76.2	68.6	56.9	41.6	34.9	.....	99	.....	.....	†Oct. 25
Richmond (*a*)	29.2	41.6	38.9	63.4	.....	.....	76.4	74.4	73.3	61.6	43.6	.....	.....	98	.....	Mar. 24	Nov. 9
Russellville (*a*)	.....	.....	.....	56.9	65.2	75.0	75.0	74.1	66.6	58.1	43.6	36.4	.....	92	.....	Apr. 9†	Oct. 10
Shelbyville (*a*)	26.6	39.6	39.6	53.8	63.3	75.7	75.1	74.5	66.8	55.4	40.0	32.0	53.5	99	2	Apr. 16	Oct. 27
South Fork (*b*)	30.1	40.6	37.9	55.2	63.1	73.4	73.4	71.5	62.6	50.0	39.9	32.0	52.5	.....	.....	Mar. 20	Oct. 5
Springfield	29.7	41.4	40.1	53.7	62.8	73.1	73.0	.....	66.2	55.5	40.0	30.8	.....	.....	3	Apr. 15	Oct. 5†
Wickliffe (*a*)	.....	.....	.....	57.8	66.5	77.0	77.8	76.1	68.3	.....	43.7	36.6	.....	95	.....	Apr. 9†	.....
Williamsburg[2] (*b*)	.....	.....	.....	.....	.....	.....	77.1	75.4	67.4	54.8	41.8	35.7	.....	.....	.....	.....	Oct. 5
Louisiana.																	
Abbeville	48.9	62.2	58.4	70.0	74.9	79.1	81.0	82.8	76.2	71.4	62.8	56.2	68.7	98	20	.....	Nov. 11
*Alexandria	.....	53.8	50.2	65.4	70.2	77.4	80.8	80.0	71.0	64.6	55.2	51.4	.....	98	.....	.....	Nov. 11
*Amité	44.0	55.0	.....	72.0	74.6	80.0	80.4	81.1	74.6	67.8	59.6	54.2	.....	98	18	.....	Nov. 9
Baton Rouge (*a*)	44.2	56.7	55.0	68.0	73.6	78.4	79.3	79.6	74.3	68.6	59.8	52.1	65.8	93	19	Mar. 19†	Nov. 19
Cameron	43.0	61.5	55.9	67.0	74.2	77.2	78.4	80.0	75.9	70.4	60.7	52.5	66.4	99	13	Mar. 20	Nov. 28
*Cheneyville	45.2	61.2	57.0	70.4	74.0	79.1	81.0	82.2	74.2	69.5	59.6	54.0	67.2	96	22	.....	Oct. 26
Clinton	45.6	62.8	60.1	73.8	77.8	81.8	81.7	81.5	82.8	76.6	68.2	59.2	71.0	101	20	.....	.....
*Coushatta[3] (*b*)	40.8	55.8	53.6	68.2	73.2	80.2	81.2	80.5	72.6	68.1	59.9	49.9	65.3	99	13	.....	Nov. 10
*Covington	.....	.....	.....	.....	.....	.....	.....	81.4	75.6	68.2	58.5	.....	.....	.....	.....	.....	Nov. 5
Davis	34.5	.....	52.4	.....	71.8	77.6	79.3	78.7	70.4	64.0	53.2	46.6	.....	97	11	.....	.....
*Donaldsonville	48.0	60.6	58.6	69.7	73.2	74.8	78.8	80.0	77.0	70.4	61.2	56.4	67.4	96	20	.....	Nov. 11
Edgard	47.8	60.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Emilie	46.8	59.1	57.0	69.0	72.5	80.4	80.2	81.4	76.5	69.7	59.6	54.4	67.2	95	20	Mar. 20	Dec. 26
Farmerville	42.4	55.2	46.2	.....	.....	.....	.....	79.4	70.8	60.2	52.8	46.6	.....	.....	14	.....	.....
*Franklin	.....	.....	.....	.....	73.0	80.6	80.7	84.2	76.4	69.9	59.2	57.2	.....	99	.....	.....	Oct. 26
Grand Cane	40.6	56.1	51.6	66.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Grand Coteau	47.2	60.6	57.6	69.8	73.8	78.0	79.0	79.9	75.2	69.4	60.6	55.4	67.2	94	22	Mar. 19	Nov. 10
Homer	.....	.....	.....	.....	70.7	77.9	79.2	78.6	70.7	66.0	55.0	46.0	.....	95	.....	Mar. 18	Nov. 10
Houma	46.5	60.4	58.6	70.6	74.8	79.0	79.3	80.0	75.2	68.6	59.8	54.9	67.3	96	20	Mar. 18	Nov. 19
Jackson Barracks	47.8	59.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Jeanerette	47.8	60.4	58.2	70.0	73.6	80.3	80.1	81.8	.....	.....	.....	.....	.....	.....	.....	.....	.....
*La Fayette	46.2	56.7	55.4	67.8	73.6	78.8	79.1	80.7	74.8	69.4	62.5	55.6	66.9	100	20	.....	Oct. 26
Lake Charles (*a*)	43.6	57.0	58.2	64.4	74.0	76.1	75.5	75.8	72.8	67.1	57.4	54.7	64.7	97	10	.....	Dec. 27
Lawrence	49.9	61.9	57.8	69.4	73.6	79.2	81.1	82.6	76.6	70.3	.....	.....	.....	92	.....	Mar. 18	.....
Liberty Hill	40.6	56.0	52.0	66.2	72.2	79.4	80.5	80.0	73.6	68.0	57.0	48.0	64.5	102	11	Mar. 19	Oct. 26
Luling	46.8	59.8	57.2	69.2	74.2	79.0	79.1	.....	.....	67.6	.....	.....	.....	.....	.....	Mar. 20	.....
Marksville (*a*)	43.4	58.8	54.4	68.6	73.4	78.2	79.8	79.4	73.4	67.6	57.5	50.8	65.4	98	18	Mar. 19	Nov. 1
Maurepas	47.1	58.7	56.1	65.2	70.6	77.4	78.4	79.2	73.6	67.3	59.2	54.4	65.6	94	22	.....	Nov. 11
Melville	44.7	.....	57.8	68.4	74.7	79.8	82.4	83.8	77.4	71.0	61.7	55.2	.....	98	20	.....	Nov. 11
*Minden	40.3	53.6	52.0	65.8	72.6	78.0	81.2	81.0	73.6	68.7	56.7	.....	.....	99	.....	.....	Nov. 10
*Monroe	39.4	56.9	52.8	67.4	73.0	79.0	80.8	79.9	73.5	66.5	56.5	49.6	64.7	96	16	.....	Nov. 10
*Natchitoches	.....	.....	.....	.....	71.6	77.8	79.2	78.3	71.3	65.2	57.6	49.2	.....	96	.....	.....	Nov. 19
New Iberia	46.7	.....	.....	69.4	72.8	78.7	.....	81.0	75.0	69.4	60.7	54.8	.....	.....	20	.....	.....
*New Orleans	49.3	60.6	58.6	69.0	74.0	78.9	80.1	81.7	76.6	71.0	62.1	55.8	68.1	93	23	Mar. 19	Dec. 27
N. La. Exp. Sta	38.4	54.3	50.6	64.1	70.6	78.5	79.7	78.8	72.0	.....	53.6	46.4	.....	97	12	.....	.....
*Opelousas	.....	.....	.....	.....	74.4	79.3	80.8	78.9	74.6	69.6	.....	.....	.....	97	.....	.....	.....
Paincourtville	46.8	59.6	58.4	69.3	72.6	79.2	79.8	80.8	75.7	69.3	60.2	54.5	67.2	95	20	.....	Nov. 11
Plain Dealing	.....	.....	.....	.....	.....	77.5	80.4	78.2	70.7	64.6	55.8	46.4	.....	97	.....	.....	.....
Plaquemine	44.5	55.8	52.8	68.2	72.6	77.2	81.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Port Eads	47.6	59.6	58.0	66.9	75.2	79.6	81.4	82.4	78.4	73.6	64.6	.....	.....	90	26	Jan. 31	Dec. 25
*Rayne	.....	.....	.....	.....	74.4	79.6	80.6	81.4	74.8	69.7	60.7	55.0	.....	98	.....	.....	Nov. 18
Roseland	44.6	57.0	55.9	68.9	73.2	78.8	79.6	.....	.....	.....	.....	.....	53.8	.....	.....	.....	.....
*Schriever	.....	.....	.....	.....	76.6	81.2	81.2	81.8	75.4	68.6	60.6	55.6	.....	101	.....	.....	Nov. 19
Shell Beach	45.2	59.4	56.0	69.6	74.6	79.8	80.6	81.1	75.4	70.0	.....	52.6	.....	97	18	.....	.....
*Shreveport	41.0	56.0	52.7	65.4	71.8	79.2	80.9	80.0	73.4	67.6	56.8	47.6	64.4	97	17	Mar. 19	Oct. 26
Sugar Exp. Station	48.8	60.4	58.2	69.3	75.0	80.6	82.2	82.2	76.4	71.1	61.2	54.2	68.3	99	21	Mar. 18	Dec. 27
Wallace	.....	.....	57.6	67.6	73.9	79.8	81.2	81.9	76.0	69.7	61.2	55.6	.....	100	.....	.....	.....
Winnsboro	39.6	54.1	51.6	64.4	71.0	76.6	79.2	78.0	69.0	68.8	58.0	52.4	63.6	98	9	.....	Nov. 10
Maine.																	
Belfast (*f*)	22.8	24.2	28.8	45.1	51.4	62.4	69.9	65.5	58.5	46.5	36.3	22.7	44.5	89	— 6	.....	.....
Bethel	18.2	.....	.....	.....	49.8	63.6	65.4	63.4	.....	.....	.....	.....	.....	93	.....	.....	.....
Calais	24.0	22.8	28.8	42.4	49.8	61.2	67.4	64.6	57.8	49.6	37.6	22.8	44.1	89	— 6	.....	.....
Cornish (*a*)	21.5	23.6	27.6	43.1	51.9	66.7	69.6	66.6	57.8	45.7	34.6	22.4	44.3	94	— 7	Apr. 25	Oct. 10
East Machias	23.6	22.9	27.6	41.7	48.9	58.9	64.7	63.8	55.6	44.2	36.6	21.7	42.5	89	— 7	.....	.....
*Eastport	25.0	24.4	28.4	42.0	47.0	56.3	62.2	61.9	57.2	46.0	38.7	23.8	42.7	88	— 7	May 1	Oct. 13
Fairfield	18.1	19.2	26.1	42.0	52.0	65.1	69.6	66.8	58.8	44.9	35.9	20.2	43.2	93	—15	.....	.....
Farmington	17.8	23.6	27.0	43.0	50.8	65.0	69.4	67.0	57.6	46.2	35.0	21.0	43.6	98	—17	June 11†	Sept. 8†
Fort Preble	27.4	27.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Houlton	.....	15.8	24.2	39.5	49.9	59.0	66.8	64.8	56.1	40.8	32.2	16.6	.....	91	.....	.....	.....
Indian Stream	.....	18.0	21.9	.....	.....	.....	.....	.....	.....	.....	.....	14.9	.....	.....	.....	.....	.....
Kennebec Arsenal	20.4	21.5	29.4	44.2	52.6	64.8	70.0	66.7	55.1	48.8	33.9	16.5	43.7	93	—13	May 6†	Sept. 21†
Kents Hill	18.4	21.8	25.2	45.7	51.2	64.2	68.0	.....	58.4	45.2	34.8	20.4	.....	.....	—12	.....	.....
Lewiston (*a*)	20.8	22.3	27.7	42.7	51.2	66.0	69.9	67.3	58.7	45.7	35.2	21.2	44.1	92	— 9	.....	.....
Mayfield (*a*)	.....	.....	.....	.....	.....	62.4	68.0	64.6	53.7	42.1	30.8	.....	.....	90	.....	.....	.....
Orono (*a*)	22.2	22.9	28.1	42.8	51.7	63.3	68.6	66.4	57.7	45.3	37.0	21.3	43.9	91	— 8	May 1†	Oct. 3
Petit Menan (*a*)	27.7	24.6	28.0	39.9	48.0	57.3	61.3	61.3	55.7	42.8	38.2	26.0	42.6	75	— 3	.....	.....
*Portland	23.6	24.6	29.5	43.6	51.4	63.6	68.8	66.2	59.2	48.0	37.2	25.0	45.1	95	— 5	May 1	Nov. 2†
West Jonesport (*a*)	26.8	.....	30.1	40.8	45.4	53.2	67.7	61.4	56.0	49.6	38.6	23.5	.....	90	— 7	.....	.....

[1] Wm. Bornemann. [2] F. A. Gurney. [3] Special cotton region station.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Maryland.																	
*Baltimore	31.8	36.8	37.4	51.6	63.4	75.9	76.4	76.2	66.2	55.8	43.8	33.4	54.1	99	12	Apr. 10	Oct. 6
Barron Creek Springs (a)	35.1	36.8	37.6	52.0	63.7	74.8	75.2	75.2	65.8	53.6	43.9	33.4	53.9	97	9	Apr. 13	Oct. 3
Boettcherville (a)	30.8	37.4	38.7	48.8	59.7	73.8	74.6	75.0	64.0	52.9	40.0	31.5	52.3	100	— 8		
Charlotte Hall	31.0	37.7															
Cumberland [1]	30.0	34.5	35.7	49.3	62.3	73.3	72.9	75.2	64.0	52.6	41.0	31.6	51.9	97	2		Oct. 6
Cumberland [2]	34.8	37.8	40.1	52.8	66.2	78.7	75.6	78.2	66.6	53.4	43.0	33.6	55.1	101	3		
Darlington	27.9	28.0	34.6	49.4	61.3	72.8	74.2	74.0	64.2	54.3	41.0	30.4	51.0	98	7		
Denton (a)			35.4								44.1	33.1					
Easton	34.4	37.5	39.1	54.0	64.8	76.1	76.6	76.2	65.7	56.4	42.8	30.1	54.5	100	10		
Edgemont								78.6	69.2		44.5	34.5					
Fallston (a)	29.7	34.3	34.2	48.8	60.2	72.5	73.2	72.1	63.7	53.0	41.5	30.7	51.2	98	10		
Fort McHenry	32.8	36.2															
Frederick (a)	31.6	36.2	36.4	50.4	63.6	76.4	77.2	76.0	65.0	52.9	42.3	32.4	53.4	99	— 1	Apr. 12	Oct. 31†
Great Falls (c)	31.1	35.7	36.6	51.8	64.6	77.1	76.2	76.0	65.3	54.1	43.0	32.2	53.6	96	4	Mar. 30†	Oct. 31†
Hagerstown	31.2	35.6	36.5														
Jewell (b)	28.4	32.8	35.8		63.7	76.7	76.0	77.2	67.8	53.2	40.8	31.4		95			
Leonardtown		37.1	37.4	51.7			78.0	76.6	66.2	59.2	46.8	34.6		99		Apr. 11	Oct. 5
McDonogh	29.5	34.3	35.1	49.4	62.3	74.8	74.6	74.1	64.4	53.6	43.8	34.4	52.5	95	8		
Mt. St. Marys	29.6	32.5	34.5	49.0	61.8	72.6	76.6	72.9	67.2	54.4	41.2	31.2	52.0		8		
New Market (a)	29.2	34.9	34.8	50.0	61.9	74.7	73.7	73.3	63.2	48.7	41.4	30.4	51.4	98	7		
Solomons (a)	31.8	37.2	37.6	51.0	64.5	76.2	77.1	78.0	68.8	57.0	45.9	35.5	55.0	98	10	Apr. 10†	Nov. 11†
Woodstock (a)	30.0	35.0	35.9	50.6	62.3	75.1	[illegible]	73.4	63.3	51.6	41.8	30.9			— 3	Apr. 15	Oct. 6†
Massachusetts.																	
Adams [3]	27.0	29.5	30.6	45.9	55.6	67.2	68.2	67.8	58.2	49.7	37.6	26.6	47.0	91	— 5		
Amherst (a)	25.2	27.3	31.7	46.4	56.8	68.6	69.8	68.0	59.2	48.4	38.5	27.3	47.3	92	— 8	May 1†	Oct. 10
Amherst (a) [4]	23.6	25.7	30.9	45.5	55.0	68.8	69.5	67.8	59.4	50.0	37.5	26.4	46.7	94	—10		
Amherst [5]	25.3	26.1	31.4	45.2	54.4	69.3	69.3	68.9	59.3	48.6	37.8	26.3	46.8	95	—10	May 1	Oct. 2†
Andover (a)	23.8	24.1	28.3	45.1	53.1	66.6	70.5		57.7	48.4	39.1	27.4		94	— 2		
Blue Hill (summit)	26.0	25.7	30.1	45.7	53.5	66.9	70.3	67.6	60.4	49.5	38.1	26.4	46.7	92	— 3	Apr. 25	Oct. 3
Blue Hill (valley)	27.0	26.8	31.4	45.5	54.6	68.4	70.1	69.0	59.4	48.7	38.4	27.1	47.2	95	0		
*Boston	28.3	28.4	32.9	48.4	55.9	69.6	73.0	70.2	62.5	52.7	41.2	29.9	49.4	96	0	Apr. 25	Oct. 27
Cambridge [6]	28.2	28.4	32.9	48.4	55.6	70.0	72.6	71.0	61.8	51.4	40.6	27.7	49.0	96	— 4	May 1†	Oct. 3†
Cambridge [7]	26.7	26.8	31.4	47.7	56.1	69.7	72.8	69.6	61.4	50.6	39.4	28.2	48.4	94	0		
Chestnut Hill	28.0	27.6	32.2	48.2	55.8	69.8	72.0	70.1	62.3	50.8	40.0	27.2	48.7	95	0	May 1†	Oct. 25†
Concord [8]	25.3	25.6	30.6	45.8	54.3	69.0	70.5	68.4	59.8	48.4	38.0	26.0	46.8	95	— 6	May 1†	Oct. 3
Concord [9]								67.6	58.6	48.8	39.0						
Cotuit	29.8	30.0	31.6	44.4	52.2	64.7	69.8	68.8	60.5					92			
Deerfield (a)	23.4	25.8	30.0	46.0													
Dudley (a)	25.0	26.0	29.8	45.9	54.3	67.6	72.1	68.8	60.1	48.4	36.4	25.0	46.6	95	— 4	Apr. 30	Oct. 2†
Egg Rock, Nahant	29.0	27.5	29.1	44.2	52.8	65.2	68.3	67.2	60.0	50.4	40.0	29.0	46.9	89	0		
Fall River (a)	30.9	30.8	34.8	48.1	55.0	68.0	72.4	70.2	63.2	52.0	41.0	29.2	49.6	93	3	Apr. 25	Oct. 2
Fitchburg (a) [10]	24.1	25.2	28.9	45.2	58.3	68.9	71.0	67.4	58.5	47.6	36.3	25.4	46.4	92	— 2		
Fitchburg [11]	23.9	25.1	30.2	45.9	53.7	69.1	71.0	68.5	59.9	48.7	37.2	25.7	46.6	95	— 4		
Florida [12]	15.9	19.1	20.9														
Florida [13]	17.2	20.8	23.9	39.3	48.9	65.3	66.3	64.3	55.2	45.6				87			
Fort Warren	24.2	23.6															
Framingham	25.7	27.6	31.3	46.2	54.8	69.8	71.0	68.6	60.4	49.6	38.8	26.6	47.5	96	— 3		
Gilbertville	23.8	26.8	30.0	44.8	54.0	68.6	69.7	68.0	57.8	47.6	36.3	24.3	46.0	94	— 8		
Groton [14]	25.8	27.6	31.5	47.4	56.0	70.0	72.0	69.4	60.4	48.8	36.4	25.5	47.6	94	— 4		
Heath (f)	22.8	25.5	26.6	41.8	54.0	70.5	72.1	68.3	58.2	48.8				94		May 20†	Oct. 1†
Hyannis (a)	33.9	32.6	35.5	48.2	57.7	68.8	74.5	74.1	65.4	54.2	44.9	33.3	51.9	98	2		
Kendall Green	27.2	27.6	31.0	47.4	57.0	71.6	72.5	71.0	60.2	48.7	40.3	27.6	48.5	93	0		
Lake Cochituate	25.3	27.8	32.2	47.0	55.5	69.8	71.5	69.0	60.0	49.2	38.6	26.0	47.7	97	— 8		
Lawrence	25.2	26.0	31.3	48.0	57.4	71.2	74.6	69.7	61.6	50.2	38.6	26.1	48.3	102	— 2		
Leicester	23.0	23.2	26.1	43.0	51.6	66.4	70.4	67.2	59.1	48.2	35.8	24.4	44.9	92	— 6	May 8†	Oct. 25
Leominster (f)										49.5	37.4	26.8					
Long Plain	28.8	28.9	31.8	46.9	56.0	70.4	72.4	70.3	61.9	50.5	40.2	27.9	48.8	92	— 4		
Lowell [15]	26.5	25.7	30.8	46.4	54.7	70.0	72.1	70.0	60.6	49.7	38.3	26.3	47.6	94	— 4		
Lowell [15]	24.0	24.8	31.4	48.1	55.4	69.5	71.4	68.4	60.3	49.5	38.2	26.2	47.3	95	— 6		
Lowell [16]	25.0	26.8	31.0	46.5	55.4	70.2	72.0	69.4	61.5	49.4	38.2	26.6	47.7	97	— 2		
Ludlow	22.1	24.8	28.1	42.6	52.0	66.2	67.2	66.3	57.1	46.3	35.0	22.7	44.2	91	—10		
Lynn [17]	27.3	28.6	31.8	47.1	56.6	70.2	72.9	69.4	60.4	49.2	39.2	27.9	48.4	94	1		
Lynn [18]									60.0	52.8	43.3	30.8					
Mansfield (a)	27.3	28.2	31.2	42.6	55.7	69.6	72.0	69.4	58.7	49.1	39.3	26.3		99	0		
Middleboro	29.4	29.2	31.5	45.7		66.7	69.3	65.6	60.0	49.2	39.8	28.4		93	0		
Milton (a)	29.6	28.7	31.8	45.4	53.7	66.4	69.1	66.4	57.4	48.9	40.5	28.6	47.2	95	2	May 1†	Oct. 25†
Monroe	21.8	25.2	27.0	40.3	50.7	65.7	65.7	65.1	55.3	45.1	33.0	22.0	43.1	92	— 9		
Monson	24.8	27.6	30.4	46.0	56.1	70.0	70.4	69.0	59.1	50.0	38.4	25.8	47.3	94	— 9		
Nahant	29.0	28.2	32.2	45.4		67.8	68.4	66.6						91			
Nantucket	33.1	31.4	34.0	46.2	51.8	61.8	68.9	68.7	62.6	53.0	43.1	32.2	48.9	87	5	Mar. 23	Nov. 23
New Bedford (a) [19]	29.6	29.4	32.3	44.1	52.2	64.7	69.0	67.6	60.4	49.7	40.3	28.5	47.4	90	— 5	Apr. 15	Oct. 25
New Bedford [20]	31.0	30.8	33.2	45.9	53.6	66.8	70.5	69.0	60.4	51.2	41.6	29.6	48.6	92	0		
Newburyport [21]	27.5	28.7	32.2	47.1											— 2		
Northampton	29.8	27.5	33.0	47.6	58.4	73.0	73.4	72.4	62.6					97			
North Billerica	27.1	27.8	32.7	48.2	56.6	71.6	74.1	70.6	61.8	51.7	40.8	29.0	49.3	100	0	May 1†	Oct. 12†
Plymouth (a)	31.8	31.2	34.9	47.9	57.2	70.7	72.2	69.4		54.4	42.4	31.2		94	4		
Princeton				44.9	52.8	66.6	69.2	66.5	58.6					92			
Provincetown	32.4	31.4	32.6	45.7	53.1	66.2	71.5	70.2	62.7	51.8	43.2	31.6	49.4	95	2	Apr. 17	Oct. 18
Roxbury	29.0	29.2	33.1	48.2	55.6	68.5	70.3	69.0	60.7	51.5	41.1	29.8	48.8	93	1		

[1] E. T. Shriver.
[2] H. Shriver.
[3] T. W. Green.
[4] Agricultural experiment station.
[5] Hatch experiment station.
[6] Harvard College Observatory.
[7] E. E. Brooke, C. E.
[8] F. A. Tower.
[9] M. H. Houghton.
[10] Dr. J. Fisher.
[11] Dr. A. P. Mason.
[12] Nelson Dupuy.
[13] J. E. Baker.
[14] C. Woolley.
[15] Proprietor locks and canals.
[16] I. E. Saunders.
[17] J. C. Haskell.
[18] J. W. Darcey.
[19] T. R. Rodman.
[20] Waterworks.
[21] F. V. Pike.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Massachusetts—Cont'd.																	
Royalston (a)				48.4	55.2	68.9	71.1	67.9	59.2	49.5	39.4	28.9		91		Apr. 28	Oct. 6
Savoy		19.0	24.0	38.5	55.1	67.0				42.2		26.3					
Somerset (a)	30.9	30.6	34.2	49.0	58.2	71.3	75.0	73.4	64.1	52.2	43.0	29.3	50.9	102	0	Apr. 26	Oct. 3
Springfield Armory	24.8	27.7	31.8	47.4	57.3	71.8	73.2	71.0	61.7	50.6	38.6	26.6	48.5	95	— 2	Apr. 26†	Oct. 25†
Taunton (a) [1]	29.6	29.8	33.4	46.8	55.4	67.7	71.2	69.0	60.6	50.3	41.0	28.8	48.6	99	1	May 1†	Oct. 2
Taunton [2]	29.2	31.0	33.2	47.8	55.6	68.5	70.5	69.6	60.5	50.3		28.6		97	1		
Taunton [3]	29.0	31.3	32.8	46.0	54.4	67.9	69.6	69.0	59.7	49.8	40.4	29.0	48.2	96	— 1		
Taunton (a) [4]	28.2	29.7	32.2	46.0	55.1	67.9	71.1	69.6	59.9	50.3	40.1	28.2	48.2	102	0		
Turners Falls	23.9	26.5	31.8	46.4	54.8	69.7	70.6	68.9	59.5	49.4	38.1	27.6	47.3	94	— 5		
*Vineyard Haven	35.1	35.4	37.0	48.0	55.4	67.2	73.0	73.0	65.1	54.0	44.4	33.2	51.7	96	4	Apr. 13	Oct. 29
Wakefield	26.2	26.5	31.6	47.4	55.2	70.2	71.9	69.3	60.3	49.7	39.1	27.3	47.9	95	— 1		
Wellesley	25.0	25.6	29.8	44.9	52.4	66.2	69.7	68.5		49.4	38.7	26.4		94	— 2		
Westboro	26.5	28.1	32.4	48.0	55.9	70.6	72.2	69.6	61.0	50.4	40.0	27.4	48.5	97	— 4	May 1†	Oct. 3
Williamstown (a)	23.2	25.2	28.0	43.4	53.8	67.7	68.8	66.9	58.4	48.3	36.6	23.4	45.3	92	— 8	May 1	Oct. 29
*Woods Holl	32.4	31.0	33.4	43.7	51.8	62.7	68.6	68.7	62.9	52.7	42.4	31.2	48.5	87	4	Apr. 15	Nov. 5
Worcester [5]					55.8	70.4	72.5	69.8	60.2	48.4	37.7	25.2		95			
Worcester [6]									62.0	51.2	39.4	27.3					
Michigan.																	
Adrian	17.4	29.4	31.5	45.1	56.2	70.3	71.9	70.8	63.0	49.7	34.4	25.2	47.1	99	—26		
Albion (a)	22.3	31.4	32.7	46.6	56.9	69.9	72.6	71.5	62.6	51.4		27.4		94	—14	Apr. 25	Oct. 23†
Allegan	20.9	29.9	31.6	45.2	54.7	67.6	71.1	70.8	62.7	50.9	35.4	25.2	47.2	96	— 9		
Alma	17.4	25.6	29.8	42.5	52.4	66.9	69.6	67.8	59.4	48.8	33.3	23.8	44.8	95	—16		
*Alpena	17.9	21.9	24.2	38.2	49.4	60.8	66.5	65.4	58.4	46.8	32.6	23.8	42.2	94	— 8	Apr. 6	Sept. 2
Ann Arbor	18.6	27.5	30.1	43.8	56.3	69.4	70.6	70.2	62.0	49.6	33.6	24.0	46.3	94	— 8		
Arbela (b)		26.1	26.6	41.3	53.9	68.5	70.3	66.8	58.1	44.6	34.0	23.4					
Atlantic	10.2	18.0	18.9														
Ball Mountain	17.8	26.4	28.0	42.6	53.5	67.4	69.3	67.9	60.2	48.3	33.4	24.6	45.0	94	—11		
Bear Lake	19.2	24.0	26.0	40.8	51.6	63.1	68.4	64.6	58.5	47.6	32.3	23.4	43.3	92	—10		
Bellaire	15.0	19.8	23.0	36.2	54.7		65.6	62.8	56.0	44.2	30.0			98	—18		
Benton Harbor	25.2	32.4	33.0	46.7	55.4	68.3	71.0	70.0	63.2	53.5	37.3	28.3	48.7	95	— 5		
Benzonia	18.2	23.1	25.3	38.9	51.5	63.0	66.5	64.9						96			
Berlin (a)	18.3	26.2	26.5	41.8	54.2	70.1	67.9	71.2	63.0	49.2	34.8	24.8	45.7	101	—13		
Berrien Springs [7] (a)	27.5	33.1	38.4	47.8	58.0	70.2	74.2	71.4	63.1	52.3	38.0	27.9	49.7	98	2	Apr. 11	Oct. 6
Birch Run	17.8	27.3	29.7	43.5	55.0	69.1	69.8	67.6	60.4	49.5	34.1	25.4	45.8	94	—22		
Birmingham (a)	20.7	27.9	30.3	43.4	55.9	69.1	71.0	69.1	59.2	49.5	35.7	26.3	46.5	96	—20	Apr. 29	Oct. 4
Boon (a)									57.4	42.9	29.4	20.7					
Bronson	17.6	29.9	31.5	44.0	55.4	70.4	71.8	70.9	63.1	49.0	34.9	24.5	46.9	96	—22		
Brown City			32.3	41.6	53.6	68.4	70.7	68.4		49.1	33.3	24.0		95			
Caldwell	16.4	23.0	23.2	38.4	50.4	64.0	68.4	65.7	59.1			21.6		94	—14		
Calumet	11.9	17.6	22.9	32.8	45.3	57.8	67.1	64.7	57.1	45.1	26.8	17.4	38.9	92	—14		
Charlevoix	*20.3	20.5		37.4	49.4	62.2	69.4	67.5		50.0	33.3	24.4		94	— 7		
*Cheboygan	13.3	17.9	21.8		49.0	59.5	66.8	64.6	58.0	45.8	30.9	22.2	49.6	92	— 3		Oct. 2
Clinton	16.2	28.2	29.5	43.9	56.0	70.0	71.8	70.6	63.0	50.0	34.3	25.4	46.6	97	—25		
Concord	18.9	29.3	29.8	43.8	54.5	69.3	70.8	69.7						95			
Crystal Falls	8.4	17.0	20.4	33.1	46.3	61.0	66.4	63.6	57.2	44.7	24.0	13.2	37.9	95	—25		
*Detroit	20.7	29.1	30.8	44.8	55.6	69.6	72.1	70.9	63.4	51.5	35.6	26.6	47.6	96	— 3	Apr. 26	Oct. 5
Eden	19.7	29.2															
*Escanaba	13.5	20.3	23.8	37.9	50.4	62.2	69.7	66.2	58.2	47.6	31.2	18.0	41.6	90	—15	Apr. 30	Sept. 1
Evart			25.3		49.9	63.8	67.4	65.9	58.3		32.8	22.8		97			
Fairview	20.4	23.2	27.6	43.4	54.4	68.0	68.2	69.8	61.3	49.7	33.2	22.8	45.2	95	— 3		
Fitchburg	17.8	25.8	28.0	43.1	54.6		70.1	68.0	61.0	48.8	34.2	23.6		96	—23		
Flint	16.6	26.4	27.5	42.2	53.3	67.5	69.6	67.9	61.0	49.5	33.6	24.0	44.9	97	—24		
Fort Brady	12.2	17.0															
Fort Mackinac	16.0	19.2	22.6														
Fort Wayne	20.8	29.7															
Fremont	17.5	25.5	29.4	44.0	52.8	66.8	70.9	66.3	60.6	48.6	31.8			94			
Gaylord				37.8	48.1	62.8	67.1	64.2	57.6	46.4	29.4	20.4		97			
Gladwin	17.9	23.1		41.9	55.9	66.2	69.8					25.3			—15		
Glenwood							71.6	69.0	60.0	48.9	34.8	26.6		94			
*Grand Haven	22.1	28.6	30.7	42.2	51.8	63.8	69.0	68.0	61.6	51.7	35.2	26.5	45.9	90	— 1	Apr. 26	Oct. 5
Grand Rapids (a)	23.3	30.3	32.9			68.2	72.8	69.9	63.0	51.0	37.1			95			Oct. 6†
Grape	20.6	31.0	32.3	46.1	56.9	70.1	72.6	70.1	64.0	51.9	37.1	27.5	48.4	95	—18		
Grayling	13.9	19.7	23.0	38.2	50.8	64.3	67.7	64.5	56.6	45.4				98			
Hanover	21.9	30.7	30.2	45.0	55.1	69.4	70.8	70.5	62.3	50.3	37.4	27.6	47.6	94	—16		
Harbor Springs	17.0	21.8	25.4	37.8	50.1	61.8	67.2	65.6	58.2	47.2	32.4	23.6	42.3	94	—14		
Harrison	15.6	21.0	26.4	40.7		63.9	67.4		60.2	45.8	29.9						
Harrisville	16.0	19.9	22.4	37.1	47.7	59.7	65.6	63.4	58.1	46.2	32.0	22.6	40.9	91	—18		
Hart	21.0	25.9	28.8	45.4	50.5	66.6	63.5	67.1	60.2	47.5	34.6	26.0	44.8	90	2		
Hastings			31.0	44.0	54.4	68.3											
Hayes	19.2		29.2		52.0	66.5		66.7		49.0	35.3	25.9			—15		
Highland Station	17.0	26.8	28.2	43.2	53.4	67.9	70.2	69.4			33.2	23.2		97	—19		
Hillsdale (a)	19.6	30.1	29.4	44.2	55.3	68.4	73.0	71.4	63.0	49.7	32.4	23.6	46.7	95	—16		
Howell	17.5	26.7	29.1	43.6	53.8	68.1	69.3	68.8	61.3	49.1	33.4	23.8	45.4	96	—23		
Hudson	17.0	28.2	30.2														
Ivan	16.6	22.8	25.6	38.3	50.7	63.1	69.3	66.4	59.2	46.6	30.7	22.2	42.6	98	—11		
Jeddo	18.1	25.0	27.2	41.2	52.2	64.5	68.2	66.5	61.8	49.4	34.0	24.2	44.4	94	— 9		
Kalamazoo	21.8	30.2	32.6	46.7	57.2	69.9	72.6	71.7	63.0	51.9	35.6	25.0	48.2	94	— 1	Apr. 25	Oct. 30
Lake City (c)							71.6	68.0	60.2		30.8						
Lansing (a)	19.8	27.7	30.2	44.4	54.5	67.8	71.0	68.0	61.0	48.7	34.1	25.2	46.0	95	—12	May 7	Oct. 5
Lathrop (a)	10.8		24.0	34.5	50.7			66.6	58.4	45.2	29.3	15.4			—20		
McMillan		22.2	25.2	34.2	52.5	61.3	64.1	60.6	55.6	45.4		19.9		87			
Madison	18.1	29.0	30.7	45.2	56.2	70.2	71.1	69.1	61.6	49.9	34.6	25.1	46.7	96	—24		
*Manistee	20.4	25.3	27.8	40.2	50.5	61.4	66.9	65.2	60.6	49.0	33.0	24.8	43.8	90	— 3	May 8	Oct. 6
*Marquette	14.9	20.2	23.0	33.6	45.9	57.5	68.2	65.2	59.4	48.3	29.6	18.9	40.6	94	—10	May 9	Oct. 20
Marshall (a)	19.6	28.8	30.2	45.1	55.1	67.6	71.4	70.5	61.2	48.9	34.4	24.8	46.5	97	—13	May 8	Oct. 5†

[1] Dr. E. U. Jones. [2] A. F. Sprague. [3] Waterworks. [4] C. H. Wilmarth. [5] G. W. Swan. [6] Worcester Academy. [7] F. A. Zerby.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Michigan—Continued.																	
Mayville	17.2	25.6	28.7	43.1	53.2	66.7	71.1	69.2	61.5	49.3	33.7	23.4	45.2	94	— 6		
Mio	14.3	19.8	24.5	36.0	51.5												
Montague	20.2	26.2	29.2	41.8	51.1	61.5	66.7			48.4							
Mottville	19.6	31.0	30.1	45.6	57.0	69.6	71.8	71.4	63.8	51.4	35.2	24.8	47.6	97	—22	Apr. 19	Oct. 5
Noble (b)	17.8	28.7	28.9	45.0	56.3	70.7	73.6	70.9	61.1	48.4	35.2	26.4	46.9	86	— 0		
North Marshall	16.9	25.4	27.8		57.6		67.8	67.5	59.6	47.2	31.2	22.0		93	—13		
Olivet	17.6	27.1	28.2							48.8	32.0	22.2			— 8		
Ovid	17.9	26.7	29.4	42.4	53.7	68.1	70.9	68.1	60.3	48.7	33.8	24.0	45.3	95	—13		
Paris									58.7	45.8	31.6	20.8					
*Port Huron	20.4	26.7	28.5	42.5	52.6	66.0	69.8	67.8	62.0	49.6	35.4	25.8	45.6	95	— 4	Apr. 26	Oct. 6
Rawsonville	19.6	29.6	31.3	46.4	57.3	69.6	72.3	71.4	63.4	51.5	35.6	26.0	47.8	96	—14		
Rockland (a)	10.6	18.4	23.9	34.8	46.0	62.0	69.8	65.5	58.9	46.6	26.3	16.7	40.0	98	—20	May 8†	Sept. 5†
Romeo	19.3	26.0				68.6				49.8	34.0						
St. Ignace	15.0	18.9	22.1	35.6	47.0	57.8	65.4	64.0	56.3	45.0	30.5	21.1	39.9	87	- 16		
Sand Beach	15.6	21.8	23.7		48.4	63.5	65.7	64.3	61.2	49.6	35.8	24.8		96	— 7		
*Sault de Ste. Marie	12.0	16.9	21.0	34.6	48.6	59.2	64.4	64.2	56.4	44.4	29.0	19.0	39.1	90	--22	May 28	Oct. 2
Standish	17.2	25.6	29.2	39.0		67.7	68.8	67.6						97			
Stanton		25.0	27.5	41.3	52.4												
Thornville (a)	20.0	28.5	29.7	44.4	56.2	69.4	72.4	69.6	62.6	50.2	36.2	26.0	47.1	96	—20	Apr. 26	Oct. 4
Vandalia	20.9	30.7	32.1	45.5	55.8	69.9	71.0	70.5	62.7	51.0	35.7	25.4	47.6	93	— 9		
Washington	19.4	31.2	30.2	43.3	55.2	68.4	70.4	69.2	61.4	50.2		25.8		98	—20		
Weldon Creek	17.8	23.6	26.9	41.2	51.3	64.2		65.5	59.8	48.5	33.3	23.8			—20		
White Pigeon (b)	18.8	28.9	29.8	42.8	53.8	66.8	69.1	68.8	60.6	47.4	31.8	23.0	45.1	93	—22		
Williamston (a)			35.0	46.5		68.2	71.5	69.3	63.2	51.4	35.1	26.6		94			
Ypsilanti	27.0	29.2		46.4	58.0	69.6	70.6	69.4	61.6	48.8	35.2	25.9		97	— 8	Apr. 30	Oct. 5
Minnesota.																	
Albert Lea (a)	10.2	21.6	27.7	41.6			69.6	67.8	61.2	47.6	28.1	14.9			—31		
Alma City (a)	10.6	21.4	28.3	41.8	50.3	64.4	69.4	67.4	60.9	49.3	27.8	15.4	42.2	89	—31		
Ash Creek					52.3	66.4	70.6	68.2	62.2	48.6	30.4	15.8		95			Sept. 14
Bingham Lake				41.4	49.3	66.2	70.2				28.0	13.8		95			
Bird Island			25.4	39.4	50.0	62.5	68.6	66.9	60.9	50.1	27.9	13.8		90			
Caledonia		22.4	27.6	42.0	50.8	64.2	69.6										
Cambridge						64.6	69.6	66.6	59.2	46.4	24.4	12.4		94			
Camden (a)					50.3	64.7	70.5	68.6	61.6	51.1	29.6	15.6		95			
Canton						64.6	70.2	69.4	62.0					90			
Clear Lake (a)					49.4	62.3	70.6	67.7	60.0	47.9	25.2	12.0		87			
Crookston (a)	0.0	11.3	24.5	37.2	48.0	64.1	70.8	69.0	60.2	49.4	20.5	3.5	38.2	95	—44		
*Duluth	8.1	17.6	23.5	34.8	44.4	56.2	69.6	66.8	59.4	49.0	26.4	13.9	39.1	93	—29	May 12	Oct. 19
Eagle Bend				37.4	46.6	61.4						9.4					
Easton (a)				41.2	50.9	65.7	71.9	69.9	63.4		29.5	16.9		98			
Farmington (a)	11.2	22.8	28.4	42.8	51.0	65.3	70.7	69.6	61.7	50.0	27.8	14.4	43.0	96	—30		
Fergus Falls (a)				40.7	50.5	64.3	71.2	68.8	60.8	48.8	26.4	10.7		91			Sept. 14
Fort Snelling	10.8	23.0															
Grand Meadow (a)					50.4	65.3	70.6	65.5	58.5	47.5		13.6		96			
Granite Falls	9.8	18.3	28.3	41.8	48.8	65.4	72.2	69.6	63.2	51.3	28.8	14.5	42.7	99	—32		
Holland (a)										48.4	26.7	12.9					
Kinbrae (a)	7.9	19.7	27.4	40.0	48.6	63.9	71.7	65.8	61.7			10.5		102	—35		
Lake Winnibigoshish (a)	1.0	13.0	22.4	35.0	46.5	61.5	67.0	65.5	57.8	45.3	21.2	6.8	36.9	88	—42		
Leech Lake (a)	1.3	13.4	21.6	35.9	46.8	61.5	68.2	64.2	56.9	44.4	20.9	6.0	36.8	91	—42		
Long Prairie (a)		12.6	22.5			59.0	63.8	61.0	56.2	43.3	21.6	8.2					
Mankato (a)	12.1	22.5	29.4														
Maple Plain (a)		21.7	25.2	40.0	50.1	63.4	70.8	68.0	59.8	47.3	27.2	15.2		92			
Minneapolis (a)	9.5	20.8	27.1	41.9	51.0	64.5	70.8	68.5	61.1	49.3	27.3	14.6	42.2	93	—29	May 20	Oct. 8
*Minneapolis																	
Montevideo	9.0	17.0	29.3	41.6	49.6	63.2	69.9	67.8	62.0	52.0	28.5	14.5	42.0	97	—35		Sept. 14
*Moorhead	3.2	12.4	25.8	39.1	47.2	62.4	69.0	67.2	60.5	47.6	21.0	6.2	38.5	91	—37	May 20†	Sept. 14
Morris (a)	6.2	15.6	26.6	39.8	48.9	63.8	72.0	70.2	62.2	48.7	25.6	10.9	40.9	93	—35	May 20	Oct. 8
Northfield (a)	11.1	21.4	28.2	41.8	49.6	65.1	70.2	68.4	61.4	49.0	27.7	14.9	42.4	89	—29		
Pine River (a)	—2.8	11.6	19.2	34.5	45.7	62.4	70.1	66.7	59.2	47.2	21.0	6.5	36.8	87	—42		
Pokegama Falls (a)			20.5	35.5	44.6	61.7		66.4	57.4	43.8	21.0	5.2					
Princeton			26.8	41.6	51.2	64.1	70.4		62.3								
*Red Wing	11.8	22.4	28.4	43.1	51.8	65.7	71.2	69.6	63.0	51.2	28.8	15.5	43.5	90	—28	May 20	Oct. 23
Red Wing	12.8	24.2	30.1														
Rolling Green (a)	9.6	19.7	26.6	39.4	49.2	63.7	69.9	67.4	60.8	49.6	28.8	14.7	41.6	90	—30		
St. Charles	8.2	21.3	27.9	41.8	50.5	63.5	68.8	66.4	60.2	48.6	28.4	14.3	41.6	92	—30	May 27	Oct. 8†
St. Cloff (a)					48.5	63.6	70.1	67.6	59.5	47.3	24.1	7.6		92			
*St. Paul	10.0	20.8	27.9	42.2	50.8	65.2	71.3	69.4	62.6	51.2	27.6	14.8	42.8	90	—25	May 20	Oct. 8
*St. Vincent	—2.9	5.2	20.4	34.8	46.2	60.5	66.7	65.3	57.7	46.0	18.7	1.4	35.0	94	—42	May 31	Aug. 30
Sandy Lake Dam (a)								65.6	57.7	45.2	21.6	7.4					Sept. 25
Sheldon (b)	9.5	23.6	27.8	42.6	52.9	66.4	72.5	68.6	59.5	46.2	28.0	11.6	42.4				
Wabasha (f)						67.7	71.7	70.0	62.8	51.0		18.2					
Mississippi.																	
*Aberdeen				65.8	72.6	78.5	78.2	77.0	68.5	61.0	50.6			96			Oct. 25†
Agricultural College (a)	39.0	52.0	51.9	64.3	71.6	78.1	79.3	78.9	72.4	66.2	53.2	42.8	62.5	96	13	Mar. 20	Nov. 11
*Batesville	47.6	50.0	50.4	63.4	70.2	77.3	78.7	77.8	69.4	63.0	51.4	41.8	61.8	96	8		Oct. 25
Bay St. Louis	48.6	60.4		69.6													
Booneville	36.4	50.4					82.0										
*Brookhaven	41.6	54.8	53.3	66.8	72.4	77.3	79.2	79.6	73.3	66.3	56.4	48.8	64.2	99	10		Oct. 26
Canton	40.2	54.6	51.6	65.6	71.7	77.7	79.0	77.8	71.6	65.6	55.1	48.0	63.2	92	17	Mar. 19	Nov. 11
*Columbus [1]				68.4	72.9	81.9	81.5	81.8	73.0	65.0	52.8	45.6		103			Oct. 26†
*Corinth					68.9	77.6	78.2	77.6	69.8	62.3	49.6			96			Oct. 30†
Crystal Springs				67.4		79.4	80.3	80.6	73.4	70.6	56.8	48.4		97			Nov. 10
Duck Hill	37.0		48.6				80.0	78.2	70.0								
Edwards	40.8	55.8	52.2	66.8	73.4	79.6	81.8	81.1	73.7	67.7	57.4	48.3	64.9	98	14	Mar. 20†	Nov. 11

[1] Special cotton region station.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Mississippi—Continued.																	
Enterprise	40.9	52.6	52.2	66.4	71.0	77.3	78.6	79.0	71.7	64.4	54.9	46.8	63.0	93	14	Mar. 19	Oct. 24†
Fayette	43.8	57.5	53.8	67.2	72.8	78.4	79.8	79.4	72.8	68.4	58.4	50.4	65.2	95	16	Mar. 19	Nov. 11
Greenville[1]	37.6	53.2	50.8	64.4	72.4	78.8	80.4	79.8	72.4	65.8	53.6	45.0	62.8	94	14	Mar. 19	Nov. 11
Hattiesburg (*a*)	44.0	55.6	.....	.....	72.2	82.4	81.2	82.2	77.8	70.6	60.5	54.5	.....	98	16	.....	Nov. 11
*Hazlehurst	.....	.....	.....	66.3	71.8	77.4	77.6	78.4	71.8	65.6	53.5	.....	.....	97	.....	.....	Oct. 26†
*Hernando	.....	.....	.....	.....	70.6	78.8	79.9	79.2	72.2	65.8	52.2	.....	.....	98	.....	.....	Oct. 25†
*Holly Springs	.....	.....	.....	.....	69.4	78.0	77.9	77.2	70.3	63.8	48.2	.....	.....	96	.....	.....	Oct. 25
*Jackson	.....	.....	.....	74.9	73.6	84.8	79.8	79.2	71.6	67.2	53.9	.....	.....	100	.....	.....	Oct. 26
Kosciusko	39.5	53.4	50.6	64.6	70.8	76.7	77.4	77.2	70.4	65.0	53.4	44.3	61.9	93	.....	Mar. 20	Oct. 26
*Lake	.....	.....	.....	70.6	72.0	78.6	79.7	80.8	69.2	64.4	54.7	44.2	.....	104	.....	.....	Oct. 26
Logtown	47.8	58.8	56.6	68.2	72.8	78.9	.....	.....	75.9	68.6	60.4	53.6	.....	.....	20	.....	.....
Louisville	40.5	54.2	52.0	62.0	70.7	73.6	73.0	76.8	70.3	65.6	54.8	46.6	61.7	98	9	Mar. 20	Oct. 26
*Macon	.....	.....	.....	68.8	73.5	80.4	81.5	80.9	73.0	68.8	57.3	.....	.....	98	.....	.....	.....
*Meridian	40.4	52.8	50.8	65.4	70.8	77.3	78.2	78.8	70.8	64.3	54.2	46.1	62.5	95	15	Mar. 13	Oct. 26
Moss Point	.....	.....	57.2	66.6	73.4	80.2	80.6	81.3	76.1	67.4	59.2	53.6	.....	96	.....	Mar. 20†	Nov. 10
*Natchez	42.8	58.1	53.9	68.2	73.6	78.4	80.9	80.8	75.0	68.9	58.2	50.8	65.8	96	17	.....	Nov. 12†
*Okolona	39.8	51.6	51.0	66.6	70.4	78.6	79.4	79.4	70.0	63.0	51.2	.....	.....	100	.....	Mar. 20†	Oct. 26
Palo Alto (*a*)	39.6	52.6	50.5	.....	.....	.....	78.2	77.7	71.2	65.4	51.9	43.9	.....	.....	12	Mar. 20	Oct. 25
Pontotoc (*a*)	35.6	51.1	49.3	63.0	68.3	76.6	77.7	77.4	70.0	63.9	51.2	42.1	60.5	95	8	Mar. 20	Oct. 26
*Port Gibson	39.2	54.3	51.5	67.5	72.7	76.4	80.0	80.1	73.0	66.2	56.1	48.8	63.8	98	14	Mar. 20	Oct. 26
Ship Island	49.0	59.8	58.0	68.4	76.2	80.6	83.5	84.8	79.6	72.8	63.5	56.9	69.4	96	22	Mar. 19	Dec. 27†
*University	36.3	51.1	49.0	62.1	69.0	76.4	77.6	77.8	70.8	65.2	51.2	41.8	60.7	94	7	Mar. 12	Oct. 26
Vaiden (*a*)	37.8	52.8	50.0	65.2	72.9	79.6	80.8	80.3	71.5	63.6	51.4	44.2	62.5	103	10	Mar. 20	Oct. 26
*Vicksburg	41.4	56.4	52.8	66.3	71.9	77.6	78.8	79.4	73.6	68.1	56.6	48.3	64.3	95	16	Mar. 2	Nov. 11
Washington	41.4	56.7	54.2	67.8	73.0	77.4	.....	.....	.....	.....	57.1	50.0	.....	.....	16	Mar. 19	Oct. 26
Water Valley (*a*)	36.5	51.2	49.3	62.4	71.2	77.4	79.7	78.6	70.4	63.9	51.0	43.2	61.2	102	10	Mar. 19†	Oct. 25
Waynesboro[2]	39.0	52.0	50.8	65.0	70.4	76.4	77.4	.....	.....	.....	.....	.....	.....	.....	.....	Mar. 20	.....
*Waynesboro[3]	.....	.....	.....	68.2	70.8	77.0	80.8	80.6	74.6	66.2	56.3	.....	.....	102	.....	.....	Nov. 12†
Missouri.																	
Adrian	22.4	34.9	35.0	48.6	55.9	69.6	70.4	71.8	65.0	53.9	.....	.....	.....	100	.....	May 21†	Oct. 7
Appleton City	.....	39.6	39.6	55.6	62.8	75.2	76.8	76.4	70.2	57.6	41.6	31.2	.....	97	.....	Apr. 15†	Oct. 25
Bethany	.....	.....	.....	.....	59.0	71.4	76.8	74.6	68.9	55.4	39.4	21.2	.....	97	.....	.....	Oct. 8
Brunswick	23.8	37.5	38.8	51.6	59.1	74.5	75.2	75.0	68.8	57.8	39.5	29.0	52.6	94	—21	Apr. 15†	Oct. 25
Carrollton	24.0	36.6	36.4	50.9	60.0	74.4	75.9	75.2	68.8	56.4	38.3	28.5	52.2	95	—15	Apr. 15	Oct. 24
Carthage (*a*)	27.9	40.7	.....	54.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Oct. 25
Chillicothe[4]	24.0	38.7	38.9	52.4	60.8	76.2	77.6	78.1	72.7	58.9	39.0	.....	.....	100	.....	Apr. 15	Oct. 24
Clinton (*a*)	.....	.....	39.6	53.4	60.9	72.8	73.9	74.8	68.4	56.2	40.8	29.8	.....	94	.....	Apr. 15	Oct. 25
*Columbia	24.9	39.6	39.8	53.4	61.2	74.1	75.0	74.7	66.7	57.5	40.0	30.2	53.1	97	—13	Apr. 15	Oct. 25
Conception (*a*)	23.1	32.6	39.7	49.9	57.0	73.2	77.0	74.5	69.2	58.4	38.6	25.2	51.5	98	—25	Apr. 20†	Oct. 23
Darksville	.....	39.3	43.1	54.8	61.0	75.0	75.6	76.2	68.2	58.8	43.1	.....	.....	98	—20	Apr. 10†	Oct. 24
East Lynne (*a*)	24.9	36.6	38.3	52.5	61.4	75.4	76.8	77.4	69.1	57.5	40.5	29.4	53.3	98	—15	Apr. 15	Oct. 25
Edge Hill	.....	.....	.....	.....	.....	77.2	78.6	73.4	.....	55.5	.....	.....	.....	98	.....	.....	Oct. 25
Eldon (*a*)	26.6	40.1	37.6	52.9	59.6	71.6	73.8	74.4	67.2	58.5	40.7	32.0	52.9	98	—11	Apr. 15	Oct. 25
Excelsior Springs (*a*)	20.4	33.6	35.6	51.7	58.1	72.7	73.7	71.9	65.8	55.1	.....	.....	.....	95	.....	Apr. 29	Oct. 14
Fayette	23.8	38.6	40.4	54.5	62.2	75.8	76.6	77.0	69.1	58.4	40.2	30.0	53.9	100	—15	Apr. 15	Oct. 25
Fox Creek (*a*)	25.8	38.8	39.3	54.5	62.6	75.6	75.2	75.5	68.1	58.8	40.0	32.6	53.9	94	— 2	Mar. 23	Oct. 25
Gainesville	.....	.....	.....	.....	.....	.....	.....	.....	67.0	59.4	44.4	33.4	.....	.....	.....	.....	Oct. 25
Gallatin (*a*)	.....	.....	.....	.....	.....	.....	.....	75.6	71.1	58.9	39.0	25.9	.....	.....	.....	.....	Oct. 25
Glasgow (*a*)	21.0	37.2	37.3	52.2	60.7	73.8	74.6	74.9	68.4	56.6	38.9	29.2	52.1	96	—20	.....	Oct. 24
Gordonville (*a*)	28.6	44.7	43.6	57.7	65.9	75.8	76.0	75.2	67.9	59.2	44.2	36.3	56.3	92	—12	Apr. 10†	Oct. 26
Grove Dale	.....	.....	.....	.....	.....	.....	.....	76.9	68.8	60.2	45.0	37.6	.....	.....	.....	.....	Oct. 25
*Hannibal	.....	.....	.....	.....	59.3	73.8	74.4	75.3	66.9	57.3	37.8	28.6	.....	.....	.....	.....	Oct. 25
Harris (*c*)	16.7	29.7	35.5	50.1	61.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 15†	.....
Harrisonville	.....	33.7	34.6	49.2	58.3	72.7	75.0	75.1	67.6	57.5	38.9	27.2	.....	96	.....	Apr. 15†	Oct. 25
Hermann (*c*)	25.0	39.9	40.6	54.6	62.9	76.3	76.8	75.2	65.2	55.6	38.6	.....	.....	94	.....	.....	Oct. 25†
Houston	.....	.....	.....	.....	.....	.....	78.6	77.4	68.2	58.2	43.7	35.2	.....	99	.....	.....	Oct. 31
Jefferson Barracks	24.4	38.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jefferson City	24.4	40.0	40.7	55.8	63.0	76.6	77.7	77.6	68.7	58.4	42.5	30.0	54.6	98	—10	Apr. 10	Oct. 23
*Kansas City	25.6	36.8	37.6	52.5	59.8	74.0	75.9	76.6	70.1	59.0	40.4	27.2	53.0	96	—17	Apr. 5	Oct. 25
Kidder	.....	.....	.....	50.2	59.4	.....	.....	.....	67.8	55.1	37.5	23.8	.....	.....	.....	Apr. 18†	Oct. 10
Lamar	.....	41.0	41.3	56.8	62.9	76.6	77.0	76.3	69.4	58.6	42.9	32.8	.....	95	.....	Apr. 9	Oct. 25
Langdon	.....	.....	.....	48.6	56.8	73.7	75.6	73.3	67.2	54.3	36.1	19.3	.....	101	.....	Apr. 14	Oct. 8
Lebanon	28.8	40.2	39.4	55.4	61.8	72.2	72.8	74.3	67.6	57.8	42.4	33.8	53.9	95	—10	Apr. 15	Oct. 8
Lexington	.....	.....	.....	.....	.....	.....	75.0	74.6	69.5	58.2	40.6	29.6	.....	96	.....	.....	Oct. 25
Liberty	22.9	35.1	38.5	54.4	63.0	76.2	76.5	76.2	68.1	56.9	39.6	27.0	52.9	100	—18	Apr. 15	Oct. 25
Linneus	.....	.....	.....	.....	.....	76.6	77.4	78.6	.....	60.3	.....	.....	.....	.....	.....	.....	.....
McCune (*a*)	.....	.....	.....	.....	.....	.....	78.8	76.0	68.9	54.5	37.7	29.1	.....	.....	.....	.....	.....
Marble Hill	26.8	42.3	43.0	56.9	64.6	75.4	76.8	75.8	68.4	58.4	41.2	32.6	55.2	90	—10	Apr. 12†	Oct. 25
Marshall	.....	37.8	39.3	53.2	63.0	74.1	75.9	76.2	69.0	.....	38.7	28.4	.....	100	.....	Apr. 15†	.....
Mexico	21.6	37.0	39.3	54.4	62.0	75.8	75.3	75.6	67.0	56.3	37.8	28.8	52.6	98	—11	May 21†	Oct. 25
Mine La Motte	28.4	43.7	42.6	56.2	64.4	74.5	75.4	75.9	67.6	58.5	43.6	35.2	55.5	92	—18	Apr. 10	Oct. 25
Neosho	.....	.....	42.7	57.8	64.8	75.2	77.2	77.4	68.6	58.2	44.2	33.2	.....	99	.....	May 22	Oct. 9
New Boston	.....	.....	.....	.....	.....	.....	71.0	71.2	64.9	54.0	35.2	22.1	.....	94	.....	.....	Oct. 7
New Haven (*a*)	23.8	38.6	39.0	53.8	63.3	77.3	76.6	76.0	66.6	55.8	38.8	32.1	53.5	100	— 8	Apr. 15	.....
Oakfield	.....	.....	.....	.....	.....	76.2	75.4	76.6	67.2	58.0	40.7	31.6	.....	96	.....	.....	Oct. 25
Oak Ridge (*d*)	27.4	45.0	44.0	58.5	66.2	76.4	74.2	.....	65.1	54.3	41.9	32.9	.....	.....	—10	Apr. 10	Oct. 25
Olden	.....	.....	.....	.....	.....	76.4	75.2	76.5	69.2	59.8	46.0	36.2	.....	97	.....	.....	Oct. 26
Oregon[5]	21.4	32.9	36.3	50.3	57.8	73.6	76.4	75.6	69.8	58.0	39.9	23.3	51.3	97	—26	Apr. 29	Oct. 25
Oregon (*a*)[6]	21.1	33.3	36.2	49.3	56.8	72.8	75.6	73.0	69.2	56.4	38.4	23.7	50.5	98	—25	Apr. 15	Oct. 25
Phillipsburg (*a*)	.....	.....	.....	.....	.....	72.6	73.5	78.4	66.8	57.6	40.6	32.3	.....	95	.....	.....	Oct. 26†
Pickering (*c*)	14.9	29.1	31.0	44.2	52.6	.....	76.3	75.8	69.7	61.2	40.1	19.0	.....	101	—31	Apr. 29	Oct. 23
Platte River (*c*)	18.0	31.4	32.4	48.3	57.6	72.8	74.6	71.1	63.6	51.7	36.0	23.4	48.4	99	—22	Apr. 29	Oct. 9
Poplar Bluff	.....	.....	.....	.....	.....	.....	76.0	76.6	.....	58.8	43.6	35.9	.....	.....	.....	.....	Oct. 26
Princeton (*a*)	21.4	34.0	36.6	50.2	58.7	73.2	76.0	74.5	67.8	55.7	36.5	23.4	50.7	100	—25	Apr. 29	Oct. 9
Rea (*a*)	.....	.....	.....	49.0	57.7	72.1	75.5	74.3	66.6	54.3	35.9	21.0	.....	99	.....	May 9†	Oct. 9

[1] R. Somerville. [2] W. S. Davis. [3] Special cotton region station. [4] N. J. Swetland & Co. [5] Wm. Kaucher. [6] S. M. Ruley.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Missouri—Continued.																	
Rolla	24.9	40.3	39.2	55.6												Apr. 15†	
St. Charles (b)	22.3	38.3	38.0	52.1					66.7	58.5	41.4	33.4			—11	Apr. 10	Oct. 25
*St. Louis	25.9	40.0	40.4	54.0	62.8	76.6	77.1	77.8	70.3	60.2	41.5	33.0	55.0	97	— 2	Apr. 9	Oct. 25
St. Louis [1]	23.1	39.0	39.2	52.6	61.8	74.2	74.7	74.6	66.9	57.1	39.9	31.4	52.9	96	—21		Oct. 25
St. Louis [2]							75.3	76.2	68.0	58.5		29.2		99			Oct. 24
Sedalia	22.8	37.4	38.3	53.4	62.2	75.2	76.5	77.4		58.8	39.8	29.1		98	—19	Apr. 15	Oct. 25
*Springfield	27.6	41.0	40.6	54.8	62.6	73.3	75.2	75.8	68.8	58.7	43.0	33.0	54.5	96	—10	Apr. 15	Oct. 9
Strawberry (c)							77.8	73.2	65.5	52.4	35.3	21.3				Apr. 9†	Oct. 19
Steelville (a)	26.3								61.5	52.1	40.4	33.9			—20		Oct. 25
Stellada	27.1	39.9	40.4	54.0	62.0	73.8	75.0	77.2	70.1	59.2	42.3	30.4	54.3	98	—16	Apr. 29	Oct. 25
Vermont (a)						74.8	74.3	74.5	67.0	55.8	38.8	29.9		94			Oct. 24
Warrensburg (a)	25.2	37.7	38.6	53.6	62.0	72.2	75.7	76.0	69.3	58.3	40.7	30.0	53.3	96	—13	Apr. 9	Oct. 25
Warrenton	24.6	38.5	38.1	52.6	62.0	75.4	75.8	77.4	68.1	57.4	39.8	30.8	53.4	99	— 6	Apr. 15†	Oct. 25
Whiteside							70.8	76.4	69.3	59.7	40.8	30.0		95			Oct. 23
Montana.																	
Boulder (a)	19.2	28.2	32.3	36.4	44.4	53.9	61.8	61.3			33.8	21.6		92	—27	June 3	Oct. 13
Bozeman				40.2	49.5	58.6	67.4		58.0	44.4	35.3	20.0				July 23	Sept. 24
Camp Poplar River	4.6	9.4	26.6	40.0	46.0	59.7	68.5	67.4	59.4	48.8	26.2	10.8	39.0	104	—42	June 26†	Sept. 5
Choteau	23.2	25.4	33.4	37.4	45.6	57.1	63.6									June 4	
Cokedale (d)		30.7			51.1							21.2					
Dearborn Canyon		27.2		34.8	42.5	51.4	60.1	60.4	59.3	47.6	32.0	20.2		87		June 23	
Deer Lodge City	19.9	32.5	38.2	38.8	47.8	57.6	65.4	64.7	60.8	46.6	36.2			95		July 7†	Sept. 6
Elk Park							55.2				26.2	15.4				July 8†	July 13
Fort Assiniboine	15.9	24.0														May 30	
Fort Custer	20.6								64.8	52.0	36.6						Oct. 12
Fort Keogh	9.3	19.0	34.6	44.2	49.0	61.0	74.5	72.0	62.3	49.4	29.6	12.6	43.2	108	—28	May 8†	Oct. 13
Fort Logan		26.7	33.8	35.7	41.0	50.6		58.2	52.4	41.0	30.6	19.7				June 5†	Sept. 4
Fort Missoula	19.5	28.2	38.4	40.5	49.7	57.2	63.2	64.6	51.8	45.2	35.8	21.2	42.9	100	—15	May 19†	Sept. 3
Glendive	12.6	20.5	34.0	43.8	51.4	65.6	75.1	73.2	64.2	51.9	28.8	13.6	44.6	113	—43	May 14	Oct. 13
Great Falls	32.6	36.2	41.2	45.8	53.7	62.8	68.2	66.4	59.8	49.3	36.0	24.2	48.0	106	—27	May 19	Oct. 14
*Havre	16.2	21.8	33.8	38.0	48.0	59.4	66.1	65.4	58.4	47.8	26.4	11.0	41.0	98	—31	May 30	July 28
*Helena	21.2	32.4	36.2	40.6	47.7	57.6	65.0	66.0	60.8	47.2	36.9	24.4	44.6	94	—22	May 11	Oct. 13
Horr				40.5	46.8	56.8	66.6	64.8	58.9	45.0				95		June 12†	Sept. 24
Livingston (b)	23.6	30.5	32.2	37.8													
Martinsdale (a)	22.8	27.4	31.9	38.0	47.8	58.6	70.0	65.7	58.0	46.0	33.8	22.5	43.6	95	—26	June 6	Oct. 6
*Miles City	13.3	20.2	34.5	42.0	49.5	61.9	73.7	71.7	63.8	51.1	30.7	15.0	44.0	105	—45	May 7†	Oct. 13
Powder River	13.8	20.6	33.2	46.5	48.6	61.4	73.2									May 30	
Virginia City	23.8	28.0	33.8	34.6	39.6	49.6	62.6	64.7	58.0	44.5	34.2	21.0	41.2	92	—18	June 23†	Sept. 24
Nebraska.																	
Agee (b)	16.0	26.4	32.6	47.5	50.9	70.3	75.8	73.5	66.7	53.6	35.6	22.6	47.6		—22		Oct. 9
Albion				47.2	50.8	67.2	75.3	70.8	61.0					100		Apr. 28†	
Alliance	17.4	28.9	32.9	41.2	48.1	62.2										May 14†	
Ansley (a)	19.0	25.3	34.4	46.8	51.7	67.1	74.3	73.7	65.3	48.1		23.4		105	—42	May 21†	Sept. 11†
Arborville (a)				46.1	51.6	70.7	73.8	72.3	65.3	52.3	36.6	23.1		105			
Ashland (a)						74.4	77.4	73.5	68.1	55.1	36.5	20.9		101			
Ashton (e)										54.4	36.0	23.2					
Auburn (a)	18.6	31.4	36.0	49.0	56.4	73.4	77.8	74.4	70.0					102		Apr. 15	
Bassett (a)	18.2	25.6	31.7	43.8	49.2	66.8	74.4	74.9	66.3	51.9	31.6	20.0	46.2	100	—30		
Beatrice	20.4	30.8	34.8	47.4	53.2	71.0	75.0	73.1	66.8	51.4	37.4	22.5	48.6	101	—28	Apr. 21†	Sept. 14
Belvidere	24.5	31.6	38.2														
Burwell (a)	17.0	25.3	33.8	44.2	52.8	71.7	80.1				30.2	18.2			—30	Apr. 22†	
Callaway									64.5	51.8	36.5	22.8					Sept. 14
Creighton (a)	14.3	23.2	30.4	42.2	49.1	63.4	72.6	68.9	62.7	49.7	31.7	18.8	43.9	103	—32	May 22†	Sept. 14
*Crete	20.2	30.9	35.0	48.6	53.8	71.0	75.6	73.6	68.2	56.3	38.8	22.4	49.5	102	—32	Apr. 22	Sept. 14
Crete (a)	18.8	29.2	33.6	47.9	53.2	70.5	74.6	72.5	67.8	56.0	38.0	22.6	48.7	102	—32	Apr. 22†	Sept. 14
David City (c)	13.8	26.0	30.2	48.5	51.5	67.0	71.2	72.2	67.4	54.0	35.0	18.3	46.3	98	—30		
De Soto (a)	16.9	28.8	30.2	49.6	55.1	71.8	76.1	71.6	66.9	55.4	37.1	21.3	48.4	101	—33		
Dunning (a)	21.3	30.6	31.4	43.9	52.4	66.1	74.4	74.9	67.3	54.9	34.8	24.4	48.0	99	—16	Apr. 28†	Sept. 13†
Ericson (a)	16.8	26.1	32.6	44.4	51.2	67.8	74.0	72.8	66.1	53.4	33.4	22.4	46.8	101	—25	Apr. 22†	Oct. 21
Ewing	15.9	25.7	31.6	42.4	50.4	67.4		71.8	63.5	52.6						Apr. 23†	
Fairfield (a)			35.4	48.4	53.6	70.8	75.3	73.6	67.2			25.4		105			
Falls City		32.2	36.4	51.8	59.8	79.6								101			
Fort Niobrara	17.4	23.9															
Fort Omaha	19.1	28.8															
Fort Robinson		27.2	31.3	41.8	48.9	62.6	71.7	70.2	63.7	50.6	38.3	25.2		98	—28	May 14†	Sept. 11†
Fort Sidney	21.4	29.2	35.8	44.5	50.2	62.2	71.5	71.0	62.6	48.4	36.2	25.7	46.6	103	—29	May 22†	Sept. 11†
Franklin	22.2	29.5	34.6	49.5		70.8	75.7	75.0	67.3	54.9	39.0	25.0		103	—22		Oct. 8†
Fremont (a)	17.2	28.5	34.2	47.6	54.0	70.8	74.8	72.1	66.7	55.1	36.4	21.8	48.3	100	—31	Apr. 9	Oct. 6
Genoa (a)	17.1	26.0	32.3	46.0	52.2	68.9	74.0	72.0	65.2	54.1	35.4	22.0	47.1	99	—35	May 6	Oct. 8
Gering (a)	23.4	31.1	33.9	41.1	48.3	62.3	72.7	71.9		49.8	38.6	26.2		101	—24	May 10	Sept. 11
Grand Island (a)	20.5	28.6	35.4	51.6	56.3	75.5											
Haigler (a)		30.5	34.4	47.7	52.3	70.7	77.2	77.8	64.6	50.8	39.1	21.7		104		May 9	Oct. 13
Hartington	12.6	21.6	29.7	44.0	51.4	66.8	74.2	71.6	64.0	53.8	33.2	19.8	45.2	101	—26	May 21	Sept. 14†
Harvard (a)	18.4		32.8	46.9	52.9	76.3	76.4	73.6	67.0	52.8		22.2		104	—26	Apr. 14	
Hastings (a)		30.0	35.9	49.8	54.1	73.2		74.2	68.0	58.4	42.6	26.4			—25		
Hayes Center (a)		30.3	35.5	44.5	53.4	66.6	73.5	73.1	66.5	54.0	39.9			104		Apr. 21†	Nov. 4†
Hay Springs (a)	16.0	25.2															
Hebron (a)	21.3	32.0	35.8	50.0	54.6	71.3	74.4	74.0	67.0	54.9	37.9	24.7	49.8	98	—28		
Holdrege (b)	16.0	28.2	30.5	47.9	53.8	72.8	78.7	76.4	67.1	50.5	34.6	21.6	48.2		—21		
Imperial (a)	24.4	29.2	34.5	46.2	53.4	70.5	74.0	73.6	66.2	53.6	37.2	25.8	49.0	105	—25		
*Kearney				46.6	51.3	67.8	73.2	73.0	66.7	54.6	38.2	24.0				Apr. 23†	Oct. 13
Kennedy (a)	21.2	27.7	31.2	42.1	49.0	63.8	72.7	71.4	63.2	50.5	30.7	22.5	45.5	95	—22	Apr. 28†	Oct. 22†
Kimball	23.1	30.4	35.0	43.9	50.0	63.0	71.8	67.4	64.6	48.2	38.3	26.3	46.8	104	—27	June 5	Sept. 11

[1] F. W. Duenckel. [2] J. C. Duffy.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Nebraska—Continued.																	
Lexington	19.0	29.4	34.5	47.4	51.7	64.9	72.2	73.8	66.7	55.4	38.5	28.8	48.5	113	—33	June 4†	Oct. 8†
Lincoln (a)	20.0	30.2	34.5	48.4	54.0	71.5	76.1	73.4	68.7	56.4	37.9	22.8	49.5	102	—29	Apr. 15	Oct. 19
Minden (a)	18.0	27.5	33.1	46.3	51.6	68.7	74.6	73.1	65.5	53.2	36.2	23.5	47.6	103	—24	.....	.....
Mullen (a)	.....	.....	.....	.....	48.9	64.2	76.8	78.7	62.6	.....	.....	.....	.....	112	.....	May 9†	Sept. 13†
Nebraska City (a)	18.2	.....	36.3	50.4	.....	.....	79.4	76.1	72.1	.....	.....	21.8	.....	102	.....	Apr. 9†	.....
Norfolk (a)	15.1	25.1	32.0	44.9	50.4	67.4	74.6	71.4	65.0	53.5	34.0	20.9	46.2	98	—30	May 21	Oct. 18
North Loup (a)	16.7	27.2	31.0	45.2	50.9	68.8	75.6	73.1	66.6	54.8	37.1	23.3	47.6	103	—39	Apr. 27	Sept. 13
*North Platte	17.4	26.0	33.2	45.8	52.1	65.6	72.8	71.8	64.6	52.2	37.8	23.6	46.9	102	—26	Apr. 28	Oct. 8
Oakdale (a)	13.9	24.5	32.4	43.5	50.2	67.3	73.2	70.9	63.7	50.8	33.6	18.9	45.2	102	—40	.....	Sept. 14
*Omaha	18.2	29.6	34.2	48.1	54.2	71.4	76.0	73.4	68.2	57.4	38.0	21.6	49.2	100	—26	Apr. 15	Oct. 9
O'Neill (a)	16.3	24.1	31.5	44.3	51.1	67.2	72.9	72.2	65.4	52.4	34.4	20.0	46.2	102	—22	.....	.....
Orleans (a)	.....	.....	.....	.....	55.5	73.0	77.3	75.5	67.0	.....	.....	.....	.....	97	.....	.....	.....
Palmer (a)	13.9	25.9	30.8	43.7	48.9	68.1	77.4	71.7	60.7	51.1	36.3	21.4	45.8	104	—28	.....	Aug. 30
Precept (a)	20.3	29.2	34.8	48.8	52.9	70.3	75.2	73.7	65.2	.....	.....	.....	.....	102	.....	.....	.....
Ravenna	16.2	33.0	38.5	47.2	57.0	70.2	73.1	79.3	.....	53.0	36.5	22.0	.....	101	—38	.....	.....
Santee Agency	.....	.....	.....	.....	.....	.....	.....	.....	.....	55.5	35.5	21.7	.....	.....	.....	.....	.....
Schuyler	.....	.....	.....	.....	57.5	70.0	74.9	72.1	66.6	.....	.....	.....	.....	106	.....	.....	Sept. 15
Seward (c)	19.4	29.6	36.2	49.4	55.4	74.6	.....	74.3	69.2	64.1	36.1	28.1	.....	.....	—25	Apr. 9†	.....
Springview	19.3	24.6	31.5	43.6	48.9	65.2	74.6	73.0	65.4	54.5	35.7	20.8	46.4	107	—20	May 21	Sept. 14†
Stanton	.....	.....	.....	.....	.....	.....	.....	.....	.....	54.8	35.8	20.3	.....	.....	.....	.....	.....
Superior (a)	.....	.....	32.2	45.9	51.4	70.6	77.5	72.8	68.2	56.3	37.9	27.9	.....	105	— 6	Apr. 28†	Oct. 9†
Syracuse (a)	19.6	30.9	35.3	49.1	56.0	73.8	77.8	74.1	68.9	56.2	37.8	21.8	50.1	102	—26	Apr. 15	Oct. 9
Table Rock (a)	.....	.....	.....	.....	.....	.....	.....	.....	.....	57.5	39.9	21.4	.....	.....	.....	.....	Oct. 9
Tecumseh (a)	20.7	31.5	34.7	49.5	57.5	74.4	79.4	.....	.....	.....	38.3	18.1	.....	.....	—30	.....	.....
Tekamah	12.4	29.3	33.7	49.3	52.8	69.2	74.6	71.6	65.9	54.7	35.3	21.0	47.5	102	—36	Apr. 29	Oct. 8
Thedford (a)	.....	34.4	.....	.....	54.6	80.2	81.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Turlington (a)	.....	.....	.....	.....	58.3	76.3	80.4	76.9	71.9	59.6	39.7	23.9	.....	106	.....	.....	.....
*Valentine	19.6	26.2	30.5	42.2	48.4	64.2	73.4	72.4	64.6	51.9	35.6	21.7	45.9	104	—24	May 22	Oct. 8
Wallace (a)	21.7	27.0	33.7	.....	52.5	69.9	74.1	73.6	.....	.....	.....	.....	.....	100	.....	.....	.....
Weeping Water (a)	18.4	29.7	34.2	47.6	54.5	69.5	73.6	70.1	63.5	52.3	33.4	17.8	47.0	105	—30	Apr. 29	.....
West Hill (a)	.....	.....	30.9	44.8	53.4	68.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
West Point	.....	26.4	32.2	46.4	51.7	68.5	74.3	71.1	64.6	54.2	33.1	20.1	.....	102	—34	May 4†	Oct. 8†
Whitman (a)	.....	25.8	31.7	40.1	50.2	.....	74.2	73.0	66.8	51.9	.....	24.6	.....	103	.....	May 21†	Oct. 17†
Wilcox (a) [1]	17.6	29.1	36.6	49.0	54.7	68.3	.....	75.5	.....	.....	.....	27.3	.....	.....	—31	.....	.....
York (a)	.....	28.9	34.0	.....	55.3	74.6	78.3	77.5	70.6	54.3	37.8	24.5	.....	104	.....	.....	Oct. 23†
Nevada.																	
Austin	27.4	29.8	36.7	39.5	48.6	58.6	67.6	69.3	63.1	46.9	39.2	27.0	46.1	90	3	.....	.....
Battle Mountain (g)	25.3	28.9	42.6	47.6	57.0	69.4	74.0	75.2	70.3	51.7	45.3	33.2	51.7	99	3	.....	.....
Belleville (a)	27.3	.....	41.1	47.7	56.7	63.1	69.0	73.8	.....	44.3	37.7	26.6	.....	115	10	.....	.....
Belmont	28.2	30.4	35.8	40.2	47.1	58.5	67.2	68.6	61.2	45.1	37.4	23.2	45.2	90	— 1	.....	.....
Beowawe (g)	19.2	26.4	42.7	43.8	56.6	66.3	78.1	77.4	68.8	47.1	38.1	27.1	49.3	99	— 8	.....	.....
Browns (g)	30.4	39.8	48.9	54.0	66.2	74.0	84.1	84.3	72.2	53.0	43.4	34.8	57.1	104	10	.....	.....
Candelaria	.....	.....	.....	.....	.....	.....	72.4	72.2	66.1	50.0	42.6	30.6	.....	.....	.....	.....	.....
Carlin (g)	14.7	19.6	34.6	39.0	50.1	58.9	69.1	70.6	61.9	45.8	36.4	29.0	44.1	100	— 9	.....	.....
*Carson City	34.6	38.0	44.4	48.2	54.2	60.0	66.5	68.2	62.8	48.4	43.0	32.7	50.1	90	2	June 11	Oct. 2
Carson City (a)	31.4	34.2	41.6	45.5	54.6	61.3	68.9	69.3	62.5	47.6	40.3	30.2	49.0	94	— 3	May 14	.....
Downeyville	32.0	37.4	44.8	50.6	55.0	70.5	78.0	.....	.....	.....	48.2	35.0	.....	106	6	.....	.....
Elko (g)	17.3	24.0	37.3	43.4	56.2	64.2	65.5	70.0	62.7	44.8	34.1	25.8	45.4	98	—14	.....	.....
Elko (near)	14.1	.....	38.8	.....	53.0	.....	68.4	69.2	.....	.....	37.0	25.2	.....	.....	—24	.....	.....
Ely	22.2	33.8	39.2	.....	41.4	56.4	62.1	60.4	54.2	38.0	28.3	34.2	.....	94	—22	.....	.....
Empire Ranch	.....	23.9	31.4	50.2	58.6	73.4	83.5	86.7	75.4	52.4	45.0	29.1	.....	109	.....	.....	.....
Eureka	28.8	31.2	38.8	46.4	.....	.....	.....	67.9	72.8	.....	.....	.....	.....	109	.....	.....	.....
Fenelon (g)	25.2	39.9	47.5	46.7	55.3	63.3	73.7	73.6	65.5	48.3	37.3	24.0	49.3	108	—1	.....	.....
Genoa (a)	29.2	34.6	42.8	46.2	46.8	.....	.....	71.1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Golconda (g)	25.4	30.0	42.8	45.7	58.1	64.9	76.5	75.7	67.7	49.9	37.8	29.7	50.4	100	2	.....	.....
Halleck (g)	12.5	20.3	48.7	38.3	51.5	62.1	66.2	70.2	58.9	43.3	32.3	22.3	42.8	102	—18	.....	.....
Hawthorne (g) [2]	30.4	39.1	47.1	52.1	61.3	69.5	79.6	80.6	72.7	54.1	46.0	35.4	55.7	97	17	.....	.....
Hawthorne [3]	31.4	38.3	45.6	49.0	57.2	65.1	72.7	75.5	68.9	51.9	44.5	35.5	53.0	98	11	.....	.....
Hot Springs (g)	25.7	32.7	40.3	46.3	60.7	70.9	80.2	82.1	72.0	51.4	37.9	34.3	52.9	100	0	.....	.....
Humboldt (g)	27.4	35.0	43.0	46.5	57.9	61.5	74.3	74.5	67.1	51.7	39.7	38.3	51.4	95	6	.....	.....
Lewers Ranch	38.6	36.4	41.4	43.4	53.6	56.9	65.4	68.4	63.2	50.8	45.4	31.5	49.6	92	10	.....	.....
Lovelocks (g)	31.2	36.7	45.1	47.9	62.1	70.9	78.9	79.2	.....	52.4	43.0	34.7	.....	100	10	.....	.....
McDermitt (a)	.....	.....	.....	54.6	61.3	70.1	.....	.....	59.0	44.4	35.3	28.3	.....	103	.....	.....	.....
Mill City (a)	29.0	35.3	42.1	46.3	56.2	71.4	77.0	78.5	64.5	49.0	40.3	31.4	51.8	103	4	.....	.....
Monitor's Ranch	27.0	32.6	31.4	41.6	49.2	68.4	65.8	64.0	58.2	42.4	37.2	22.2	45.0	97	—16	.....	Aug. 29
Palisade (a)	21.7	26.0	39.4	45.0	54.9	63.9	74.1	72.4	64.5	49.0	40.3	31.6	48.6	98	—9	.....	.....
Palmetto (g)	28.8	33.8	39.2	43.3	50.3	57.6	64.7	67.0	61.2	45.8	39.0	39.6	47.5	94	—1	.....	.....
Pioche	23.6	35.0	42.6	48.2	56.0	63.1	71.1	74.8	64.8	53.0	27.0	30.0	49.1	104	—25	.....	.....
Reno (g)	38.5	38.7	45.1	51.7	59.2	70.1	75.3	73.2	63.8	52.2	40.6	34.8	53.6	95	11	.....	.....
Reno (State University) (a)	34.0	40.4	41.4	44.8	58.3	62.1	71.0	72.8	62.8	47.8	41.7	32.4	50.8	93	6	.....	.....
St. Clair	24.9	35.3	46.2	48.6	58.7	66.0	72.6	72.6	63.8	48.9	41.0	31.7	50.9	94	6	.....	.....
South Camp	32.0	31.4	40.0	43.2	51.7	56.0	66.4	69.4	61.4	45.5	40.2	26.6	47.0	91	6	.....	.....
Stofiel	20.5	20.3	30.3	.....	46.7	52.9	61.6	57.6	54.1	39.6	31.0	21.2	.....	100	—25	.....	.....
Sunnyside	28.9	35.2	42.4	45.7	52.2	62.7	64.5	65.6	57.2	46.8	35.6	26.6	47.0	105	—15	.....	.....
Tecoma (g)	19.7	28.3	38.8	44.2	57.3	64.6	75.8	74.1	65.1	43.0	30.3	22.2	47.0	98	—4	.....	.....
Toano (g)	21.7	28.9	39.3	43.8	53.5	66.7	75.2	77.2	67.9	47.2	35.5	22.2	48.3	98	—10	.....	.....
Tuscarora	30.0	32.2	40.4	40.9	51.7	59.0	68.9	72.2	65.2	.....	.....	.....	.....	104	.....	.....	.....
Tybo	23.2	33.0	40.2	45.1	53.4	61.8	68.8	69.2	63.3	50.6	43.8	30.0	49.4	96	—1	.....	.....
Verdi (g)	32.6	34.2	40.0	42.0	52.3	58.1	65.6	67.2	63.5	47.0	40.9	31.4	47.9	96	0	.....	.....
Virginia City	35.4	32.2	42.1	42.8	53.2	61.3	70.1	.....	.....	.....	43.2	32.1	.....	.....	14	.....	.....
Wabuska (b)	28.7	37.6	48.4	50.4	62.4	69.8	79.3	81.1	70.0	53.0	40.2	44.9	55.5	100	0	.....	.....
Wadsworth (g)	23.0	29.8	42.4	42.6	62.4	64.2	76.0	75.0	65.8	44.9	34.2	31.5	49.3	100	1	.....	.....
Wells (g)	20.3	26.7	37.6	43.7	51.5	60.3	71.2	70.4	57.5	41.8	33.3	22.7	44.8	96	—10	.....	.....
*Winnemucca	25.6	32.0	41.0	43.4	53.0	60.4	70.2	70.4	62.8	47.5	39.1	30.0	48.0	96	3	May 13	Oct. 12
Winnemucca (g)	28.5	34.4	43.3	44.1	54.5	63.0	73.1	73.6	67.6	51.5	40.3	30.9	50.4	94	8	.....	.....

[1] G. D. Coutant. [2] Southern Pacific R. R. [3] C. P. Mengel.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
New Hampshire.																	
Berlin	14.8	17.4	22.8	38.6	.....	.....	.....	.....	.....	42.2	31.2	16.2	.....	.....	—24	.....	.....
Berlin Mills	16.6	19.0	22.8	39.4	49.6	64.3	65.0	63.6	54.7	42.8	32.0	16.5	40.5	94	—24	May 22	Sept. 29
Concord [1]	22.4	25.4	29.7	45.7	53.8	68.2	69.5	67.4	58.8	47.8	35.4	21.0	45.4	93	—8	May 1†	Oct. 3
Concord [2]	22.3	23.9	29.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Durham	.....	.....	.....	45.4	54.6	68.4	71.2	66.4	60.1	48.6	37.6	26.6	.....	96	.....	May 1†	Oct. 3
East Canterbury	19.0	23.3	26.1	43.2	53.2	70.0	72.4	67.1	56.8	45.6	34.8	21.2	44.4	92	—10	May 22	Oct. 12
Grafton (a)	.....	.....	.....	.....	.....	66.5	69.0	67.0	58.0	46.4	35.4	20.4	.....	94	.....	.....	.....
Groveton (a)	17.6	18.8	23.7	38.8	50.9	63.4	65.0	64.3	54.8	43.5	32.4	17.8	40.9	90	—18	May 1†	Oct. 18
Hanover (a) [3]	21.5	23.0	28.2	42.3	52.7	67.9	67.4	66.0	56.7	46.4	35.1	20.2	44.0	89	—11	.....	.....
Hanover [4]	20.6	22.8	27.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Littleton (a)	17.5	19.9	23.5	39.4	.....	.....	64.6	63.2	54.3	42.8	34.0	18.2	.....	89	—16	.....	.....
*Manchester	23.3	25.6	30.3	45.8	54.0	69.0	70.8	68.2	59.8	48.8	37.4	25.4	46.5	95	—3	.....	.....
Manchester (a)	24.1	25.8	30.5	46.1	55.3	68.8	70.1	68.6	59.9	48.9	37.0	24.7	46.6	98	—6	May 1	Sept. 30
*Mount Washington	.....	.....	.....	.....	.....	.....	47.4	48.0	40.0	.....	.....	.....	.....	.....	.....	.....	.....
Nashua	24.6	25.9	31.0	46.5	55.6	70.2	71.9	69.0	60.5	48.8	37.6	26.5	47.3	96	— 7	May 1	.....
Newton	24.2	25.2	29.6	45.2	54.4	67.8	69.8	67.7	58.6	48.0	37.7	24.9	46.1	94	— 6	.....	.....
North Conway	19.3	22.2	27.6	42.2	51.4	65.2	67.6	66.0	57.1	45.2	33.8	21.4	43.2	98	—13	.....	.....
Peterboro	18.7	22.8	27.3	42.0	51.6	67.7	68.0	67.2	57.5	45.9	34.4	23.8	43.9	94	—17	.....	.....
Plymouth (a)	18.6	22.4	26.4	40.1	51.0	65.0	66.5	64.8	54.6	43.5	32.6	19.8	42.1	98	—12	.....	.....
Sanbornton	.....	.....	.....	.....	.....	.....	67.4	65.6	56.7	46.2	33.8	21.0	.....	89	.....	.....	.....
Stratford	19.2	23.4	26.1	42.2	52.0	66.2	69.6	68.4	59.2	47.4	34.6	21.0	44.1	98	—20	.....	.....
Walpole	19.4	22.3	28.1	43.2	53.4	68.5	68.5	67.8	57.7	46.1	35.1	23.0	44.4	94	—22	.....	.....
West Milan	.....	18.1	22.2	38.9	50.0	63.8	64.4	63.0	54.5	42.7	28.4	13.9	.....	94	.....	.....	.....
New Jersey.																	
Allaire	30.8	33.6	34.2	47.9	59.2	71.0	71.4	70.8	61.9	51.5	41.4	30.0	50.3	96	1	.....	.....
Asbury Park	31.1	33.7	35.2	49.6	59.6	72.4	73.1	72.9	64.6	52.9	42.6	30.4	51.5	96	5	.....	.....
*Atlantic City	32.6	34.9	35.0	46.5	57.4	68.4	70.4	73.6	65.6	55.0	44.0	32.0	51.3	90	9	Apr. 13	Nov. 5
Bayonne	30.0	33.1	34.8	49.8	59.6	72.5	75.0	74.6	65.4	55.1	41.6	30.4	51.8	101	8	.....	Oct. 6
Belvidere	25.8	31.3	32.1	46.9	58.6	71.4	72.0	72.3	62.8	50.3	38.0	27.8	49.1	100	3	.....	.....
Beverly (a)	29.3	32.8	34.2	49.8	60.8	73.1	74.2	71.7	62.5	51.0	40.8	29.7	50.8	100	4	Apr. 20	Oct. 22
Blairstown	25.2	30.4	31.6	45.4	58.8	72.0	74.0	.....	.....	46.4	37.7	26.2	.....	.....	— 3	.....	.....
Bridgeton (a) [5]	34.3	37.1	37.0	51.6	63.3	76.9	77.0	76.2	66.2	55.3	43.8	33.4	54.3	100	13	.....	.....
Bridgeton (a) [6]	34.4	37.8	36.7	52.5	63.8	76.2	77.0	76.4	67.6	60.2	.....	.....	.....	104	.....	Apr. 20	Oct. 3
Camden	30.0	34.8	35.7	51.3	62.8	74.9	77.2	75.6	66.8	54.6	42.8	30.9	53.1	105	9	.....	.....
Cape May C. H.	36.6	36.6	36.9	50.0	61.0	72.9	72.3	73.7	65.8	56.0	44.4	33.1	53.3	93	9	.....	Oct. 27
Deckertown (a)	25.6	28.7	30.9	47.4	57.7	70.8	72.8	.....	61.6	50.9	38.5	26.2	.....	.....	0	.....	.....
Dover	25.4	30.8	31.9	46.8	57.8	69.4	71.0	70.2	60.4	50.4	38.3	27.0	48.3	97	— 6	.....	.....
Egg Harbor City (a)	31.5	34.6	35.0	48.8	60.0	72.4	72.6	71.4	62.1	52.3	42.2	30.6	51.1	100	4	Apr. 19	Oct. 3
Elizabeth	26.6	31.1	32.5	48.8	59.1	72.6	74.6	73.5	64.0	53.4	40.2	28.8	50.4	97	1	.....	.....
Franklinville	31.3	34.8	34.9	49.4	60.7	73.4	73.8	72.4	62.0	51.8	41.6	29.9	51.3	100	4	.....	Oct. 3
Freehold	30.6	33.8	34.2	49.4	59.9	71.9	73.5	72.2	63.4	54.0	42.7	31.0	51.4	95	4	.....	.....
Gillette (a)	27.3	31.8	32.4	49.9	59.1	72.8	73.5	72.2	62.4	51.4	40.2	28.6	50.1	100	2	.....	.....
Hanover	26.0	.....	31.7	46.8	59.0	70.4	71.9	71.1	61.0	51.4	40.3	28.7	.....	96	— 6	.....	.....
Highland Park	28.1	33.2	34.0	48.8	60.0	72.4	74.6	73.4	63.6	53.2	41.0	29.8	51.0	99	— 1	.....	Oct. 28
Hightstown	.....	.....	.....	.....	.....	.....	.....	73.3	63.0	52.9	41.6	29.2	.....	.....	.....	.....	Oct. 28
Imlaystown	30.6	34.0	34.8	50.6	61.9	73.0	75.8	74.4	64.8	54.0	42.6	31.0	52.4	100	5	.....	Oct. 25
Lambertville	28.2	33.0	34.0	49.6	60.5	73.6	74.6	72.8	62.5	53.8	41.6	29.9	51.2	99	0	.....	.....
Locktown	27.6	32.0	32.8	48.4	59.1	72.9	74.2	73.0	63.2	53.2	40.0	29.0	50.4	99	2	.....	.....
Moorestown (a)	29.4	34.0	33.8	49.4	60.3	72.3	74.1	72.4	62.8	52.2	41.0	30.1	51.0	101	7	Apr. 20	Oct. 25
Mount Holly (c)	32.4	35.4	36.4	51.4	61.0	74.0	75.0	74.6	64.2	54.1	.....	31.3	.....	98	9	.....	.....
Newark [7]	30.1	33.7	34.4	48.9	58.9	71.8	73.8	72.9	64.4	53.9	41.0	30.0	51.2	98	6	.....	Oct. 25
Newark [8]	.....	.....	35.0	50.5	60.3	72.6	75.6	73.5	64.6	54.4	41.5	30.6	.....	99	.....	.....	.....
*New Brunswick	28.1	33.2	34.0	48.8	60.0	72.4	74.6	73.4	63.6	53.2	41.0	29.8	51.0	99	— 1	Apr. 20	Oct. 26
New Brunswick (a) [9]	29.6	34.0	35.6	50.9	61.8	74.4	76.5	75.2	65.6	55.0	42.4	29.9	52.6	105	1	.....	.....
New Brunswick (a) [10]	28.3	33.0	34.1	48.2	58.8	72.5	74.0	72.6	63.0	53.2	41.6	30.2	50.8	97	1	.....	.....
Newton	25.6	29.3	30.6	46.8	58.2	70.8	72.9	71.0	60.0	49.4	37.0	25.2	48.0	97	— 2	.....	Oct. 25
Ocean City (a)	34.3	35.2	36.3	48.4	62.8	72.0	71.2	74.2	66.0	55.5	43.3	33.2	52.7	95	9	.....	.....
Oceanic	32.6	35.5	37.5	52.3	61.6	69.8	76.8	73.6	68.2	55.1	41.0	32.7	53.1	96	9	.....	Oct. 31
Paterson	30.6	34.3	36.0	51.4	61.6	73.0	74.6	73.4	65.4	55.7	42.2	31.0	52.5	98	7	.....	.....
Plainfield	29.4	33.4	34.6	.....	.....	73.4	75.8	75.2	65.3	53.4	41.0	30.0	.....	105	4	.....	Oct. 6
Rancocas (a)	.....	.....	.....	47.0	58.5	71.0	72.6	.....	61.5	51.5	41.0	29.0	.....	101	7	.....	.....
Readington (f)	31.0	34.2	34.1	50.4	60.9	75.3	77.5	75.2	68.5	57.2	45.4	34.2	53.7	96	6	Apr. 1†	.....
River Vale	.....	.....	.....	.....	.....	73.0	75.4	72.4	64.5	55.6	45.0	32.0	.....	98	.....	.....	.....
Salem	31.0	35.0	.....	.....	60.3	.....	73.1	.....	.....	55.1	42.8	33.4	.....	97	10	.....	.....
Somerville	31.6	33.2	32.6	49.8	60.5	.....	76.2	75.4	66.0	56.0	41.6	29.7	.....	104	— 9	.....	Oct. 22
South Orange (a)	27.7	31.8	33.1	49.3	58.8	70.4	72.5	71.3	61.6	51.6	39.3	29.2	49.8	98	5	.....	Oct. 25
Tenafly (a)	27.8	32.9	32.8	49.0	58.8	70.5	70.6	70.8	62.0	52.6	41.5	28.6	49.8	97	0	.....	Oct. 6
Tom's River	.....	.....	.....	.....	.....	.....	78.1	77.0	.....	53.9	42.0	29.4	.....	98	.....	.....	.....
Trenton (a)	33.0	35.0	37.0	52.0	64.0	75.0	80.0	78.0	67.0	58.4	45.0	34.0	54.9	99	8	.....	Oct. 16
Vineland	32.6	36.1	36.6	50.4	61.6	74.2	75.1	73.8	64.7	54.5	.....	36.5	.....	99	9	.....	.....
Whiting	32.8	35.0	36.6	50.4	60.8	72.4	74.4	72.8	63.7	54.6	42.3	30.8	52.2	102	1	.....	.....
Woodbine	.....	.....	.....	.....	.....	.....	.....	72.6	63.5	56.0	40.8	30.2	.....	.....	.....	.....	.....
New Mexico.																	
Albert	34.0	44.4	44.4	56.7	.....	74.8	78.9	77.2	73.4	58.4	47.0	37.6	.....	103	2	Apr. 22	Nov. 1
Albuquerque	40.8	47.1	.....	57.2	63.6	.....	78.3	76.4	69.9	54.0	45.2	36.3	.....	97	15	.....	Oct. 13
Antelope Springs	30.2	36.1	40.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bloomfield	24.1	36.5	42.6	47.0	57.6	66.6	76.8	74.2	66.2	.....	37.7	27.8	.....	102	— 6	June 14	.....
Chama	25.2	31.4	37.1	41.0	.....	60.5	66.6	68.4	61.9	48.2	36.8	26.0	.....	99	—16	June 12†	Sept. 23†
Coolidge	19.8	37.6	44.6	48.9	47.0	54.3	67.4	62.1	60.5	45.7	33.4	20.0	45.1	105	— 9	Frost every month	
Deming (a)	42.1	50.4	53.4	68.0	76.1	88.2	90.6	85.0	77.7	60.5	61.2	50.1	66.9	108	0	.....	.....
Dulce	15.4	29.2	38.8	41.3	49.5	59.1	66.4	64.7	.....	.....	.....	.....	.....	.....	.....	June 17	.....

[1] Hon. W. L. Foster.
[2] M. K. Gordan.
[3] Dartmouth College Observatory.
[4] Agricultural experiment station.
[5] H. A. Jordan.
[6] W. T. Wilson.
[7] F. W. Ricord.
[8] W. E. Case and G. C. Sonn.
[9] C. V. Meyers.
[10] Mrs. G. H. Cook.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
New Mexico—Continued.																	
East Las Vegas	30.4	39.4	40.6	50.1	56.5	65.5	69.7	66.8	63.2	48.7	41.1	.....	.....	97	.....	June 5†	Sept. 13†
Embudo	29.7	38.7	46.0	52.3	61.8	72.6	78.3	76.4	68.8	.....	40.9	29.0	.....	106	— 2	Apr. 22†	.....
Estalina Springs	29.4	34.2	39.0	47.9	55.4	67.3	69.2	66.8	61.4	47.4	38.2	29.0	48.8	101	0	June 15	Oct. 9
Folsom	28.8	40.2	39.2	51.0	53.0	64.6	70.0	.....	.....	.....	39.6	27.8	.....	.....	—11	June 6	.....
Fort Bayard	38.8	42.4	45.7	51.0	59.8	70.6	76.1	71.8	68.1	55.0	45.4	37.5	55.2	102	8	Apr. 22†	Oct. 22†
Fort Marcy	28.9	34.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Stanton	34.2	37.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Fort Stanton	35.6	39.4	40.7	49.8	59.6	66.6	69.1	66.2	62.8	50.4	42.9	34.0	51.4	94	5	Apr. 23	Sept. 12
Fort Wingate	31.9	36.0	41.2	45.6	54.2	65.7	70.4	71.3	64.5	50.9	43.4	31.2	50.5	99	— 2	May 15†	Oct. 12†
Gallinas Spring	33.5	42.4	45.2	56.4	63.5	72.3	74.9	74.4	70.0	53.6	44.6	35.8	55.6	104	— 3	May 6	Oct. 25
Hall's Peak	26.2	34.0	33.9	42.7	50.0	58.8	62.6	59.1	58.2	44.4	38.6	26.9	44.6	93	—26	June 16†	Sept. 12
Hillsboro	38.7	44.5	49.4	57.0	64.4	76.2	77.4	74.4	70.1	57.0	48.1	38.8	58.0	105	8	Apr. 6	Nov. 17
Hill's Ranch (*a*)	37.4	42.6	44.6	53.2	60.4	74.2	74.6	71.4	67.7	53.3	41.4	.....	.....	104	.....	May 10†	Oct. 12†
La Luz	46.8	52.0	53.1	61.0	66.4	76.4	78.8	75.2	72.0	60.6	52.2	44.3	61.6	94	15	Mar. 17	Oct. 24
Las Cruces	39.4	46.1	.....	.....	.....	.....	.....	.....	70.5	.....	47.2	.....	.....	.....	.....	.....	.....
Lordsburg (*a*)	39.4	48.7	55.4	67.7	76.3	86.9	88.0	84.2	77.1	62.0	49.6	40.9	64.7	108	13	.....	.....
Los Lunas	33.0	42.3	43.7	53.6	59.8	69.9	78.3	67.0	.....	54.0	38.6	32.3	.....	105	2	June 5	Oct. 16†
Monero	22.5	28.5	34.5	40.4	49.0	59.1	65.8	62.9	56.8	45.6	32.0	21.0	43.2	94	—17	June 11	Sept. 10†
Olio	25.0	36.8	43.4	47.0	55.4	65.7	75.7	73.6	65.7	49.0	37.8	28.4	50.3	101	— 4	June 5†	Oct. 13
*Santa Fe	29.0	34.8	39.2	46.7	55.0	66.0	69.8	68.2	64.8	48.8	38.5	28.6	49.1	90	1	Apr. 21	Oct. 12
Socorro	41.2	48.4	51.0	61.1	66.6	76.4	80.5	78.5	72.6	57.6	45.7	35.5	59.6	104	11	Apr. 6	Oct. 11
Springer	37.6	.....	.....	49.4	58.2	65.6	71.6	68.7	65.8	49.4	39.0	27.4	.....	99	— 5	June 11†	Oct. 10†
Taos	21.2	30.4	38.9	46.2	59.5	65.5	70.2	69.0	63.8	48.2	34.9	21.8	47.5	101	—14	June 11†	Oct. 6†
Wallace	33.6	40.3	44.8	53.8	74.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 6†	.....
New York.																	
Addison (*a*)	22.5	28.1	27.2	43.8	54.9	68.8	68.3	67.5	58.2	47.3	36.4	25.7	45.7	94	—14	.....	.....
*Albany	23.5	26.0	29.8	46.1	56.7	71.2	73.0	71.5	62.4	51.0	38.4	26.2	48.0	96	— 5	Apr. 26	Oct. 31
Alfred Center	19.5	25.6	24.2	39.8	52.4	64.9	67.2	66.1	58.5	44.6	33.4	20.7	43.1	92	— 9	.....	.....
Angelica (*a*)	19.0	26.1	23.7	41.1	53.0	66.5	64.8	64.9	56.1	44.2	33.9	22.6	43.0	.....	—22	.....	.....
Arcade (*a*)	18.4	24.7	22.1	39.5	52.0	65.6	67.2	65.4	57.5	45.4	32.7	21.7	42.7	89	—18	.....	.....
Arkwright	21.6	29.0	25.7	40.9	51.5	64.0	67.2	66.2	60.2	48.4	35.4	25.3	44.6	.....	— 3	.....	.....
Baldwinsville (*a*)	22.4	26.1	27.2	43.7	54.9	66.4	70.5	69.1	60.9	49.0	37.0	25.1	46.0	99	—17	.....	.....
Binghamton (*a*)	22.3	27.7	27.0	43.1	54.3	68.7	68.5	68.1	59.4	47.0	36.5	24.5	45.6	94	—17	.....	.....
Boyd's Corners (*a*)	27.5	31.0	32.2	49.1	60.6	73.8	74.2	72.3	63.0	52.1	40.4	28.7	50.4	94	3	.....	.....
Brentwood	29.3	30.5	33.6	46.9	56.3	68.5	71.7	71.4	61.6	51.3	39.5	28.4	49.1	94	— 4	.....	.....
Brockport	21.9	27.7	28.4	43.9	53.3	.....	.....	.....	.....	.....	35.6	26.1	.....	.....	— 6	.....	.....
Brookfield (*a*)	19.1	24.2	24.2	40.0	52.1	65.6	66.7	68.2	59.1	45.0	33.7	21.6	43.3	95	—28	.....	.....
*Buffalo	23.0	28.2	28.3	41.3	52.4	66.4	69.8	69.8	62.2	50.3	36.6	27.0	46.3	88	— 2	Apr. 30	Oct. 2
Canaseraga (*a*)	.....	.....	.....	42.4	53.4	66.4	66.2	65.5	56.7	46.1	35.3	23.6	.....	91	.....	.....	.....
Canton (*a*)	17.0	18.1	21.9	41.3	53.1	65.8	67.5	65.9	58.0	46.0	32.8	19.4	42.2	92	—30	May 8†	Oct. 2†
Carmel	25.4	28.0	30.3	46.4	57.9	71.7	72.0	69.4	61.2	49.0	37.4	26.1	47.9	93	0	.....	.....
Central Park, New York City (*a*)	31.5	33.4	34.1	48.8	59.2	73.5	74.9	74.3	64.6	53.0	43.4	32.2	51.9	97	9	.....	.....
Constableville (*a*)	15.9	19.9	20.0	37.6	49.6	.....	64.0	63.3	55.2	43.7	31.1	21.4	.....	.....	—24	.....	.....
Cooperstown (*a*)	20.3	23.2	25.0	41.2	52.4	66.4	66.6	65.4	56.6	45.9	34.6	21.7	43.3	90	—18	Apr. 30†	Oct. 2†
Cortland	.....	.....	.....	.....	53.6	65.9	66.7	67.0	58.2	47.7	35.6	25.8	.....	89	.....	.....	.....
Davids Island	29.2	29.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dunkirk[1]	.....	29.1	28.1	43.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dunkirk[2]	.....	.....	.....	.....	.....	.....	.....	68.4	61.8	50.6	38.8	27.5	.....	.....	.....	.....	.....
Eden Centre	22.0	28.9	27.7	42.9	54.8	68.7	71.8	70.2	63.0	50.5	38.4	26.6	47.1	98	—16	.....	.....
Elmira (*a*)	23.5	30.0	28.2	46.3	57.3	71.2	75.5	71.7	62.5	51.1	.....	.....	.....	93	.....	.....	.....
Factoryville (*a*)	22.0	28.1	26.6	43.8	55.5	69.7	71.1	69.4	58.8	47.9	35.7	25.6	46.2	97	—19	.....	.....
Fleming (*a*)	21.9	25.8	25.7	42.9	54.0	67.6	69.6	68.0	61.2	48.7	35.4	25.2	45.5	96	— 5	.....	.....
Fort Columbus	30.6	32.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Hamilton	28.6	32.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Niagara	24.2	28.8	30.6	44.5	53.9	67.4	72.6	71.8	65.2	53.0	39.4	29.4	48.4	94	— 2	Apr. 26†	Nov. 5†
Fort Schuyler	29.8	31.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 9	.....
Fort Wadsworth	30.2	34.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Geneva (*a*)	23.2	28.0	27.7	43.6	54.6	68.4	70.3	69.1	60.9	49.3	36.7	26.8	46.6	97	— 8	Apr. 30†	Nov. 5†
Glens Falls	20.3	21.6	26.8	44.6	55.9	70.0	.....	.....	58.5	47.0	36.2	22.1	.....	.....	— 8	.....	.....
Gloversville (*a*)	.....	.....	.....	.....	50.5	66.4	67.9	65.9	56.6	45.8	33.6	21.3	.....	93	.....	.....	.....
Hammondsport	.....	29.0	28.4	45.4	57.2	70.2	72.3	68.1	.....	.....	.....	.....	.....	98	.....	.....	.....
Hess Road Station (*a*)	22.7	27.1	28.3	43.0	53.5	67.4	69.1	68.1	60.5	48.9	36.4	26.1	45.9	92	0	.....	.....
Honeymead Brook (*a*)	23.5	26.4	28.1	45.4	56.2	68.5	69.7	67.9	58.8	47.9	37.0	24.9	46.2	92	— 4	.....	.....
Humphrey (*a*)	21.4	27.7	26.8	42.2	53.2	67.2	68.1	66.5	59.3	48.3	34.3	24.2	44.9	90	— 8	.....	.....
Ithaca (*a*)	25.6	30.3	29.2	44.9	55.4	69.6	71.2	69.4	61.1	50.0	37.7	27.4	47.6	95	— 6	Apr. 26	Oct. 2
Jamestown (*a*)	22.8	29.8	28.5	44.2	56.4	71.0	70.8	68.9	61.2	49.0	38.1	27.2	47.3	91	—16	Apr. 26†	Nov. 5†
Lebanon Springs	.....	.....	.....	42.7	53.7	68.3	68.0	67.6	57.4	46.8	35.6	22.7	.....	93	.....	.....	.....
LeRoy (*a*)	19.7	24.7	25.4	41.4	55.7	69.3	70.2	66.9	60.8	47.9	35.0	24.0	45.1	91	— 4	.....	.....
Lockport	23.0	27.2	28.0	43.5	53.9	68.0	69.8	69.7	62.4	49.4	35.7	26.4	46.4	92	— 3	.....	.....
Lowville	15.2	19.0	20.2	37.8	50.2	63.9	65.0	62.6	54.0	42.4	29.5	19.0	39.9	.....	.....	Apr. 30	Oct. 10
Lyons (*a*)	23.2	27.2	28.0	43.7	54.8	68.0	70.2	69.2	61.2	49.5	38.2	27.7	46.7	92	0	.....	.....
Lyon Mountain[3]	18.1	19.3	19.1	35.8	47.0	60.4	63.8	61.5	55.8	42.5	30.0	17.7	39.2	.....	—19	.....	.....
Madison Barracks	19.7	22.2	23.6	41.6	51.4	65.2	.....	67.4	61.5	50.0	35.9	23.0	.....	.....	—31	May 10†	Nov. 2†
Malone (*a*)	15.5	18.0	20.2	38.3	52.2	64.9	67.5	65.6	57.7	44.6	31.1	17.5	41.1	87	—20	.....	.....
Marshland	.....	.....	24.5	.....	50.8	66.0	64.7	62.9	53.1	43.2	.....	.....	.....	95	.....	.....	.....
Middletown	23.6	27.6	30.9	47.8	59.0	70.3	73.1	71.1	61.9	49.7	37.2	25.6	48.2	97	0	.....	.....
Minnewaska	21.5	23.1	24.7	41.4	52.0	66.7	68.0	65.6	57.7	46.5	32.8	22.0	43.5	93	—11	.....	.....
Mount Morris	23.6	28.9	27.2	43.4	54.2	67.3	67.7	67.7	59.4	48.4	37.8	27.9	46.1	95	—11	.....	.....
New Lisbon (*a*)	19.7	24.3	24.7	39.6	51.1	64.7	64.1	64.2	55.3	44.2	34.1	21.1	42.3	90	—21	.....	.....
*New York	30.3	33.0	34.6	49.9	59.4	72.0	74.8	73.9	66.0	55.4	42.6	31.3	51.9	96	8	Apr. 25	Nov. 6
North Hammond (*a*)	17.6	17.6	22.5	40.3	53.4	65.6	67.5	66.7	60.2	48.3	33.2	21.1	42.8	94	—22	.....	.....
Number Four	14.8	20.4	20.0	37.5	49.7	62.7	68.1	63.1	54.2	42.5	30.8	16.5	40.0	88	—23	.....	.....
Ogdensburg (*a*)	.....	.....	.....	.....	.....	.....	.....	68.1	59.9	48.3	33.5	20.1	.....	.....	.....	.....	.....

[1] Rainfall observer. [2] D. C. Moon and W. Bolling. [3] E. Hall and P. J. Mullin.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
New York—Continued.																	
*Oswego	21.6	25.2	26.8	41.8	50.9	65.2	68.3	68.4	61.3	49.4	36.1	25.2	45.0	91	— 6	Apr. 26	Oct. 10
Oxford	19.7	24.4	24.2	41.1	52.6	66.4	66.1	65.4	56.7	45.3	33.5	22.4	43.2	88	—24	.....	.....
Palermo (a)	19.8	23.8	24.4	41.6	52.1	66.9	68.9	67.3	58.8	47.6	35.6	23.1	44.2	95	—18	May. 10	Oct. 2†
Perry City (a)	20.1	25.3	24.1	39.6	53.3	66.5	66.2	66.1	57.4	45.9	33.9	23.4	43.5	94	—15	.....	.....
Plattsburg Barracks	19.2	19.2	23.2	40.9	51.8	64.7	68.8	66.6	58.3	46.0	34.1	19.6	42.7	98	—14	May 1†	Oct. 10†
Port Jervis	24.7	29.1	30.7	47.3	58.9	70.8	70.7	70.3	60.0	48.6	37.2	26.0	47.9	94	— 4	.....	.....
Potsdam (a)	15.8	17.1	20.1	40.3	52.7	65.9	.....	66.8	58.5	45.3	31.9	18.2	.....	.....	—23	.....	.....
Poughkeepsie	24.2	27.5	30.1	46.1	55.5	70.5	71.5	68.2	60.2	50.0	38.1	25.9	47.3	98	—12	.....	.....
Quaker street	20.1	22.0	24.6	41.5	53.0	66.4	66.8	66.5	57.2	45.8	33.6	21.1	43.2	93	—12	.....	.....
*Rochester	23.2	28.2	28.9	44.0	55.0	68.4	70.9	70.0	63.1	50.3	36.6	26.3	47.1	94	— 3	Apr. 30	Nov. 5
Rome	19.5	24.4	26.0	43.1	55.7	71.4	70.3	69.4	59.0	.....	34.3	.....	.....	98	—22	.....	.....
Romulus	19.7	27.1	27.7	41.4	55.4	68.7	71.0	69.8	59.5	49.9	36.4	28.6	46.3	95	— 5	.....	.....
Rondout	24.0	28.4	30.4	46.3	55.6	68.3	68.0	72.0	62.0	52.3	40.9	26.9	47.9	95	— 2	Apr. 26	Oct. 25
Setauket (a)	30.7	31.6	33.5	47.4	56.1	68.9	71.4	71.2	62.8	53.5	42.0	31.4	50.0	94	6	.....	.....
Sherman (a)	20.5	27.0	25.6	41.2	.....	66.1	66.2	65.4	.....	.....	.....	.....	.....	.....	.....	.....	.....
South Canisteo (a)	20.1	25.5	24.6	40.5	53.2	66.2	65.8	64.9	56.8	45.3	34.4	23.9	43.4	93	—14	.....	.....
South Kortright	20.8	24.9	25.5	40.9	52.5	65.2	66.5	65.8	56.1	44.9	34.2	21.0	43.2	94	—12	.....	.....
Turin	16.6	20.5	21.8	38.7	50.1	63.7	64.9	64.0	56.2	.....	29.4	20.7	.....	86	—17	.....	.....
Utica	19.6	24.7	27.5	44.4	53.8	68.3	70.0	68.1	58.8	48.0	35.4	22.5	45.1	93	—26	.....	.....
Victor	22.4	27.3	27.6	44.1	54.3	68.0	70.2	69.2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Watertown	.....	22.7	.....	.....	.....	.....	.....	67.7	59.3	47.6	34.9	21.9	.....	.....	.....	.....	.....
Watkins	24.4	.....	28.5	41.7	57.3	68.6	70.3	69.7	62.4	50.9	37.1	24.6	.....	.....	—12	.....	.....
Wedgwood (a)	19.5	24.8	24.1	40.4	52.0	66.3	67.8	66.8	58.5	46.2	33.3	22.6	43.5	96	— 6	.....	.....
West Point	22.6	24.0	27.6	48.0	56.2	69.4	72.8	70.7	.....	.....	.....	29.7	.....	99	— 2	May 24	.....
White Plains (a)	28.0	31.2	.....	46.0	57.4	69.9	67.9	.....	61.0	52.5	38.0	.....	.....	.....	.....	Apr. 25	Oct. 25†
Willets Point	29.2	33.4	35.2	48.8	58.3	70.8	73.0	73.1	64.6	54.8	42.2	30.6	51.2	98	5	Apr. 17†	Nov. 6†
North Carolina.																	
Asheville	34.0	45.1	43.8	53.8	64.8	68.4	69.0	.....	.....	.....	.....	37.2	.....	.....	4	Apr. 13	.....
Bakersville	31.8	38.8	40.7	51.6	59.6	70.2	71.3	71.2	61.9	52.8	40.5	.....	.....	92	.....	May 24	Oct. 7
Chapel Hill	35.9	42.6	45.4	57.0	69.2	78.0	78.9	82.0	71.2	59.8	47.1	39.1	58.8	105	6	.....	Oct. 29
*Charlotte	38.2	45.6	47.6	56.7	68.2	76.3	76.8	77.9	69.6	60.2	48.8	42.1	59.0	97	18	Apr. 10	Oct. 26
Columbus	.....	.....	43.2	52.8	62.2	67.4	67.4	67.2	62.0	54.6	42.2	39.2	.....	84	.....	.....	Oct. 26
Concord	38.2	45.4	47.6	57.8	68.4	76.2	76.5	77.6	.....	.....	.....	.....	.....	.....	.....	.....	.....
Douglas	36.5	40.4	44.6	54.9	66.2	77.0	77.4	77.0	65.2	55.2	42.8	37.2	56.2	101	1	.....	Oct. 26
*Goldsboro	.....	.....	.....	58.2	69.5	77.1	77.9	80.1	71.6	61.2	49.7	.....	.....	98	.....	.....	Oct. 31
*Greensboro	.....	.....	.....	57.2	69.6	75.5	76.0	77.8	68.2	58.4	48.1	.....	.....	92	.....	.....	Oct. 26
*Hatteras	45.8	45.1	47.5	56.8	66.6	76.0	76.2	79.0	73.5	62.9	52.5	45.2	60.6	89	24	Mar. 19	Nov. 24
Hendersonville (a)	34.1	41.0	43.9	54.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 11	.....
Highlands (a)	.....	36.7	37.2	.....	.....	.....	.....	.....	.....	.....	.....	35.6	.....	.....	.....	.....	.....
Horse Cove (a)	.....	.....	42.9	52.4	62.0	69.4	70.2	70.4	63.1	55.6	43.9	39.6	.....	88	.....	.....	Oct. 26
*Kitty Hawk	42.6	42.7	44.5	55.6	66.2	75.2	75.4	79.6	71.1	60.6	50.1	42.4	58.9	95	19	Mar. 19	Nov. 24
Lenoir (a)	35.8	41.8	45.2	54.1	64.6	72.5	72.9	73.1	65.4	54.9	43.4	37.7	55.1	90	10	Apr. 11	Oct. 26
Lexington	36.7	43.9	46.4	56.8	67.0	75.8	76.3	77.3	.....	.....	.....	.....	.....	98	.....	Apr. 11	.....
Linville	32.4	38.3	41.9	47.1	61.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 7	.....
Littleton	39.3	40.9	44.4	.....	64.2	76.4	76.5	76.6	67.0	56.0	46.8	38.1	.....	100	7	Apr. 17	Oct. 25
Louisburg (a)	35.6	41.6	44.9	54.3	68.0	75.3	76.7	78.4	68.6	56.4	46.4	37.5	57.0	94	2	Apr. 12	Oct. 28
*Lumberton	.....	.....	.....	62.2	71.0	77.9	.....	80.0	71.1	59.6	51.0	.....	.....	.....	.....	Apr. 16	Oct. 26
Marion	.....	42.4	45.5	55.6	64.1	74.4	74.0	74.6	.....	56.8	45.5	39.6	.....	94	.....	.....	Oct. 29
Morganton (a)	36.5	43.1	47.0	55.8	67.4	74.3	74.9	75.8	66.3	56.5	45.8	.....	.....	94	.....	.....	Oct. 26
Mount Airy	34.8	41.0	43.6	53.2	63.4	73.9	75.3	74.0	64.0	54.3	43.4	37.5	54.9	94	10	Apr. 16	Oct. 26
Mount Pleasant (a)	37.2	44.1	46.8	56.6	67.2	74.4	75.6	75.9	67.6	57.1	46.2	39.9	57.4	96	6	Apr. 16	Oct. 26
*New Berne	41.2	45.4	44.0	56.2	64.9	76.6	77.2	77.8	72.0	60.5	47.9	39.1	58.6	96	14	Apr. 11†	Oct. 28†
Oak Ridge	36.6	42.8	44.8	54.8	66.6	74.9	75.1	76.8	66.5	57.4	46.1	38.8	56.8	96	12	.....	Oct. 26
Pittsboro	35.4	41.8	43.8	55.0	66.7	75.5	76.1	77.2	69.0	56.4	44.6	37.4	56.6	95	— 4	.....	Oct. 26
*Raleigh	38.6	43.8	46.6	57.2	67.6	75.8	76.8	78.7	69.8	59.0	47.9	40.0	58.5	98	11	Apr. 11	Oct. 26
Rockingham	.....	.....	.....	.....	.....	.....	.....	.....	.....	62.8	50.6	44.4	.....	.....	.....	.....	Oct. 26
Roxboro	.....	.....	.....	.....	.....	.....	.....	.....	.....	54.0	46.7	39.1	.....	.....	.....	.....	Oct. 26
Salisbury (a)	38.4	45.5	48.1	58.5	70.9	79.3	79.0	80.5	70.4	60.2	49.0	42.2	60.2	96	18	.....	Oct. 31
Saxon	36.0	43.3	44.7	55.4	65.8	76.0	75.8	76.4	64.5	53.3	42.9	37.4	56.0	99	5	Apr. 15	Oct. 24
Smithfield	.....	44.7	47.4	59.0	68.5	75.3	76.6	78.9	69.2	58.8	47.2	40.0	.....	98	.....	.....	Oct. 26
Soapstone Mount	.....	.....	.....	52.2	65.9	75.3	75.7	76.8	67.9	56.6	46.4	39.0	.....	97	.....	Apr. 16	Oct. 26
Southern Pines	39.6	45.4	47.4	58.8	69.1	77.1	77.2	78.6	68.4	58.6	46.1	39.2	58.8	103	7	Apr. 16	Oct. 26
*Southport	44.1	47.0	48.8	57.8	68.1	75.4	77.1	78.2	72.6	62.2	52.6	47.4	60.9	88	22	Apr. 10	Nov. 12
Tarboro	.....	.....	47.4	58.6	69.4	78.1	78.2	80.6	71.2	58.9	48.6	40.5	.....	102	.....	.....	Oct. 27
Wadeville (a)	38.2	45.0	47.6	55.0	67.2	75.8	74.8	76.3	70.2	.....	.....	.....	.....	94	.....	Apr. 16	.....
Washington	.....	.....	.....	.....	.....	76.4	79.8	76.6	69.1	59.4	49.1	39.9	.....	101	.....	.....	Oct. 3
*Weldon	39.2	42.4	45.2	55.5	68.4	76.0	76.2	78.2	69.8	57.9	47.5	38.4	57.9	98	2	Apr. 13	Oct. 26
Willeyton	39.6	41.6	44.3	55.5	66.5	75.6	75.3	77.2	68.4	57.0	47.4	37.0	57.1	97	3	.....	Oct. 26
*Wilmington	44.8	48.2	50.1	60.2	69.7	76.1	78.1	79.5	72.6	62.6	52.9	47.4	61.8	96	22	Apr. 16	Oct. 31
North Dakota.																	
Ashley	6.9	6.8	23.2	36.3	45.1	59.4	66.6	66.0	59.2	46.3	24.4	9.4	37.6	95	—38	May 31†	Sept. 13
Bathgate	.....	7.2	21.4	35.4	46.2	61.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 31†	.....
*Bismarck	7.4	11.4	26.4	38.3	46.3	59.2	68.6	68.5	60.2	49.2	25.7	10.4	39.3	98	—34	May 4	Sept. 5
Bottineau	.....	5.0	22.1	35.8	46.4	59.8	67.4	66.0	.....	.....	.....	—2.3	.....	95	.....	May 30†	.....
Carrington	2.7	5.9	.....	.....	45.1	60.2	.....	.....	.....	48.2	.....	10.3	.....	.....	—41	.....	.....
Church's Ferry	.....	7.0	19.1	37.5	45.5	59.2	66.6	65.8	57.2	45.0	19.8	2.5	.....	98	.....	May 26†	Aug. 30
Dickinson	7.5	16.4	29.6	.....	45.4	57.8	66.6	.....	63.6	46.6	28.1	13.6	.....	.....	—40	May 31†	Oct. 7†
Ellendale	10.8	13.6	24.4	37.6	49.0	66.2	74.6	72.4	.....	47.4	22.8	9.0	.....	96	—36	May 20	Oct. 8
Fargo	2.7	10.1	21.0	38.1	46.0	62.8	68.9	67.4	59.7	47.1	20.0	5.4	37.4	88	—35	May 21	Sept. 14†
Forman	.....	.....	.....	42.5	48.5	.....	.....	67.7	62.6	46.8	26.2	15.2	.....	98	.....	May 31	Sept. 14
*Fort Buford	8.2	13.2	28.2	38.8	47.2	59.4	69.7	67.8	59.9	48.7	25.4	7.6	39.5	100	—40	May 26	Aug. 30
Fort Buford	6.9	12.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Pembina	—0.6	6.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Stevenson	.....	.....	24.9	38.2	46.8	58.2	69.2	68.6	59.0	46.9	23.4	9.8	.....	98	.....	May 25	Sept. 12

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
North Dakota—Cont'd.																	
Fort Yates	11.8	15.4	29.8	41.0	49.2	61.8	69.8	70.8	61.1	51.1	27.9	15.6	42.1	102	—31	May 21†	Sept.13†
Gallatin (d)	.....	.....	.....	.....	.....	57.8	64.8	62.9	54.2	42.1	15.8	1.0	.....	98	—48	May 31	Aug. 30
Grafton	—0.2	7.9	22.0	34.0	45.4	60.4	66.9	65.4	57.4	45.4	17.2	1.2	35.2	94	—38	May 31	Sept. 14
Grand Forks (a)	1.2	10.7	23.5	35.7	48.4	69.2	.....	65.8	59.2	45.2	20.3	3.2	.....	.....	—38	.....	Oct. 7
Grand Rapids (a)	2.9	9.6	24.9	36.8	45.7	60.0	68.0	68.1	58.0	45.7	22.4	9.3	37.6	99	—39	May 31	Oct. 8
Hope	—0.6	9.6	22.6	36.0	45.8	60.0	66.8	67.6	57.4	.....	.....	.....	.....	96	.....	June 3	Sept.13†
Jamestown	14.4	10.2	25.0	37.6	47.1	61.0	.....	.....	.....	50.6	.....	.....	.....	.....	.....	May 31	.....
Kelso	4.8	11.3	25.2	38.3	.....	.....	68.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lakota	—5.5	10.1	22.2	34.1	43.2	60.5	67.2	68.8	58.1	45.8	18.9	2.3	35.5	91	—45	May 31	Sept.13†
Medora	.....	26.2	34.4	43.0	48.6	62.3	73.6	.....	.....	51.2	32.5	18.0	.....	.....	.....	May 31†	.....
Milton	.....	6.9	20.8	.....	.....	.....	68.2	66.7	60.0	47.5	14.9	0.6	.....	95	.....	May 31†	Aug. 30
Minot	.....	10.0	25.7	38.4	43.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minto	.....	.....	25.6	35.8	47.2	61.5	68.0	66.5	58.4	47.4	.....	.....	.....	95	.....	May 31†	Oct. 8
Napoleon (a)	.....	7.2	21.4	34.8	44.6	58.5	68.1	67.8	58.0	46.7	22.3	8.4	.....	99	.....	May 20	Sept. 15
Power (a)	.....	13.9	26.0	38.6	47.6	62.9	70.0	67.4	61.5	50.2	21.5	5.7	.....	95	.....	May 20	Sept. 16
St. Johns	.....	4.4	19.4	32.4	43.5	57.6	66.0	64.8	56.8	45.2	16.0	.....	.....	89	.....	May 29	Oct. 17†
Valley City	—0.7	11.4	26.4	37.9	48.4	62.7	68.8	67.5	60.0	.....	.....	.....	.....	95	.....	May 31†	Sept.25†
Wahpeton	4.3	14.0	26.8	41.0	50.0	61.2	69.6	68.0	61.3	48.1	25.2	9.5	39.9	93	—36	May 30	Sept.14†
White Earth	.....	.....	19.6	33.6	42.3	55.2	66.5	66.0	57.4	45.2	21.5	.....	.....	98	—15	June 30	Sept. 5†
Wild Rice (b)	1.4	11.2	23.8	37.4	47.6	63.2	70.4	65.5	.....	43.7	19.1	4.2	.....	.....	.....	May 20†	Sept. 14
Willow City	—5.9	0.4	17.8	36.8	46.1	58.8	66.5	66.2	57.6	45.5	.....	1.0	.....	100	—52	May 31	Sept.13†
Woodbridge	—2.8	2.6	16.8	35.4	46.5	60.6	68.0	67.8	59.5	47.5	16.6	—2.0	.....	105	—47	(1)	(1)
Yule	.....	.....	.....	.....	.....	60.2	69.9	69.2	59.9	47.6	29.1	14.0	.....	104	.....	.....	Sept. 5
Ohio.																	
Akron (a)	23.6	32.4	31.9	47.3	57.2	71.4	71.4	70.4	63.2	51.8	37.9	28.5	48.8	95	— 8	.....	Oct. 2
Ashland	21.0	31.0	31.2	46.0	57.4	71.5	72.0	70.8	65.0	51.3	36.9	27.3	48.4	94	—15	.....	Oct. 2
Athens (a)	26.8	37.0	36.8	51.0	61.7	71.0	72.7	71.0	64.6	50.3	38.8	32.0	51.1	98	— 9	.....	Oct. 6
Bangorville (a)	21.1	32.2	31.6	46.4	55.0	71.3	70.6	69.5	63.2	51.7	35.5	26.8	47.9	95	— 6	.....	Oct. 6
Bellevue (a)	20.6	30.1	29.4	44.7	55.3	70.3	70.5	.....	.....	49.7	34.8	.....	.....	.....	—12	.....	.....
Bement (a)	22.6	30.2	30.2	46.0	58.4	70.0	.....	69.8	62.7	49.4	36.0	.....	.....	.....	.....	May 8	.....
Canton (a)	23.1	32.8	32.1	47.4	58.0	72.8	72.1	71.1	62.9	50.2	38.0	28.1	49.0	96	—18	.....	Oct. 6
Carrollton	21.0	32.5	32.0	46.0	58.0	71.4	70.7	66.6	62.4	50.4	35.0	.....	.....	96	.....	.....	.....
Celina (a)	25.9	36.8	38.4	50.6	60.3	72.3	74.1	71.9	66.5	55.4	40.3	32.2	52.1	95	—11	.....	Oct. 7
*Cincinnati	26.0	38.8	38.2	52.6	62.4	75.4	75.9	75.2	67.8	55.8	40.1	31.6	53.3	98	2	Apr. 15	Oct. 6
Clarksville (a)	23.8	36.2	36.1	50.2	60.3	72.7	74.1	72.6	65.8	52.7	37.2	30.0	51.0	96	—13	.....	Oct. 6
*Cleveland	23.6	31.6	31.0	45.8	55.8	70.8	70.9	70.8	64.0	52.5	38.8	28.6	48.7	95	— 7	Apr. 25	Nov. 5
Cleveland (a)	24.6	32.4	32.1	46.7	57.2	70.3	70.3	70.2	62.6	52.2	39.2	29.3	48.9	94	— 9	Apr. 26	Oct. 10
*Columbus	24.0	35.7	36.0	49.4	61.0	74.2	74.0	73.0	66.4	53.6	38.2	30.0	51.3	97	— 5	Apr. 13	Oct. 6
Columbus Bxs	21.2	36.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dayton (a)	25.6	37.2	37.6	51.5	62.0	76.3	77.1	75.4	65.7	54.0	38.5	31.3	52.7	100	—15	.....	Oct. 6
Demos (a)	24.8	34.6	33.5	49.0	.....	.....	72.7	71.8	65.2	52.4	37.9	28.6	.....	.....	— 2	Apr. 26	Oct. 6
Elyria	23.0	33.0	.....	46.0	58.0	72.5	74.0	71.5	64.8	52.8	38.5	28.5	.....	99	—12	.....	Oct. 6
Findlay (a)	21.7	31.9	32.3	47.1	37.3	71.6	73.1	72.2	64.1	51.2	36.5	27.7	48.9	97	—19	.....	Oct. 6
Fostoria (a)	23.2	31.5	33.0	47.6	58.0	72.7	73.7	72.1	65.4	52.7	36.5	28.4	49.6	93	—11	.....	Sep. 27
Garrettsville (a)	20.4	28.9	29.0	45.4	55.2	69.8	69.5	67.4	59.3	47.8	37.0	26.0	46.3	95	—26	May 8	Oct 2
Georgetown (a)	26.6	39.1	38.6	53.1	62.1	74.8	76.1	74.4	66.3	56.0	39.9	31.8	53.2	100	— 6	.....	Oct. 6
Granville (a)	22.8	33.9	33.9	49.5	59.0	.....	.....	.....	.....	.....	36.5	27.8	.....	.....	—18	.....	.....
Gratiot (a)	24.6	35.8	36.0	50.2	60.0	72.7	72.3	71.8	64.7	52.8	39.2	29.0	50.8	93	—14	May 13	Oct 6
Greenfield	25.0	38.0	38.9	51.0	58.5	73.0	71.6	71.5	63.6	49.6	39.4	30.8	50.9	96	—10	.....	Oct. 5
Greenville (a)	22.8	34.4	35.0	48.8	58.3	71.0	72.6	70.3	63.5	52.2	36.2	28.3	49.4	91	—17	.....	Oct. 6
Hanging Rock (a)	28.4	39.1	38.5	52.2	61.3	71.4	72.0	70.5	64.0	52.7	39.5	30.6	51.7	99	— 1	.....	Oct. 27
Harbor (a)	25.1	30.9	30.0	46.6	55.3	69.0	71.5	71.2	63.7	51.8	39.4	29.5	48.7	91	—12	.....	.....
Hiram (a)	22.0	29.5	29.2	44.4	53.3	69.0	69.8	68.9	62.0	50.3	36.1	25.9	46.9	93	— 6	.....	Oct. 6
Jacksonboro (a)	24.0	35.6	36.0	49.0	58.8	72.1	73.3	72.7	.....	57.4	36.7	29.0	.....	100	— 2	.....	Oct. 6
Kenton	22.4	32.6	34.4	48.4	58.0	73.9	72.9	73.0	64.6	52.6	36.4	27.2	49.7	100	—15	May 8	Oct. 5
Leipsic	.....	33.0	33.6	46.0	58.6	71.6	76.0	76.0	70.0	.....	.....	.....	.....	102	.....	.....	Oct. 6
Logan (a)	26.4	36.5	37.9	51.8	62.5	71.7	72.0	71.5	63.4	51.0	38.6	30.0	51.1	100	— 9	.....	Oct. 6
Lordstown (a)	22.4	30.8	30.3	45.8	57.0	70.3	69.5	68.2	61.0	48.5	36.8	26.5	47.3	93	—22	.....	Sept. 28
McArthur	25.3	35.8	35.8	50.3	63.2	71.7	71.2	70.4	.....	.....	.....	.....	.....	97	.....	.....	.....
McConnelsville (a)	26.0	35.5	36.9	50.3	62.0	72.8	73.1	71.9	65.3	51.9	39.2	29.0	51.2	96	— 9	.....	Oct. 6
Marietta (a) [2]	29.7	38.9	38.9	52.0	63.3	74.4	73.5	72.8	65.2	52.0	40.5	29.2	52.5	93	1	.....	Oct. 6
Marion (a)	21.5	.....	.....	47.7	57.7	72.0	71.0	69.0	63.2	50.3	35.8	27.9	.....	99	—16	.....	Oct. 6
Montpelier (a)	19.2	30.0	31.3	45.8	56.0	70.0	72.2	70.8	62.1	50.0	35.0	25.5	47.3	96	—25	.....	Oct. 6
Napoleon (a)	25.2	33.6	31.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Alexandria (a)	25.0	35.0	34.0	48.9	59.0	74.3	71.3	71.3	65.7	53.4	39.0	29.0	50.5	92	— 5	.....	Oct. 6
New Comerstown (a)	23.2	33.8	33.5	42.2	59.0	71.9	70.6	69.8	62.0	49.5	38.0	27.7	48.4	98	—21	.....	Oct. 6
New Holland	23.0	34.0	38.0	49.0	59.0	73.0	73.1	71.8	64.0	.....	37.3	27.5	.....	99	—13	.....	Oct. 6
North Lewisburg (a)	23.4	35.1	35.6	50.4	60.4	75.2	75.4	74.4	67.7	53.6	36.9	29.1	51.4	99	—13	Apr. 25	Oct. 6
Oberlin (a)	21.7	31.0	30.9	45.7	56.4	70.9	71.1	69.5	63.1	50.6	36.8	27.4	47.9	98	—16	.....	Oct. 6
Ohio State University (a)	23.0	34.6	34.8	50.0	60.3	73.0	73.3	71.3	63.4	51.5	37.3	28.9	50.1	95	—18	.....	Sept. 27
Orangeville	20.8	30.1	30.7	45.0	57.2	71.4	70.0	69.6	61.6	49.0	38.2	27.2	47.6	96	—27	May 28	Oct. 2
Pataskala	.....	.....	.....	.....	.....	.....	.....	73.0	.....	53.1	.....	28.6	.....	.....	.....	.....	.....
Piqua (a)	21.0	34.2	49.7	.....	61.1	71.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pomeroy (a)	29.6	39.6	40.7	54.5	64.5	76.3	74.9	73.0	65.0	53.5	41.4	31.4	53.7	97	1	.....	Oct. 6
Portsmouth (a) [3]	29.6	40.1	39.7	54.4	63.5	74.3	73.6	71.9	64.4	53.2	40.6	32.2	53.1	101	4	Apr. 13	Oct. 6
*Sandusky	22.9	31.6	31.8	46.8	57.4	71.6	73.4	72.4	65.2	53.6	37.7	28.4	49.4	97	— 3	Apr. 24	Oct. 30
Tiffin (a)	23.2	32.2	32.2	47.8	58.0	72.2	73.5	72.3	64.3	51.6	37.3	27.9	49.4	97	—14	Apr. 26	Oct. 6
*Toledo	21.4	31.2	31.8	45.8	56.4	70.8	72.8	71.9	64.6	52.3	36.5	27.5	48.6	96	— 6	May 8	Oct. 6
Upper Sandusky (a)	24.0	33.7	35.3	48.4	58.6	71.5	72.5	71.4	64.5	52.9	37.3	29.1	49.9	96	—16	.....	Oct. 6
Van Wert	20.0	32.0	33.0	47.0	57.8	72.2	72.9	70.7	63.1	51.0	35.8	26.9	48.5	100	—24	.....	Oct. 5
Wapakoneta (a)	21.7	.....	34.2	.....	.....	72.7	74.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Warren (c)	.....	31.6	31.3	44.0	55.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 8	.....
Wauseon (a)	19.2	29.9	31.6	45.8	56.4	70.2	72.7	70.8	62.6	49.8	34.9	25.5	47.4	99	—23	Apr. 26	.....
Waverly (a)	26.9	38.2	37.9	53.0	62.9	74.7	74.3	72.8	65.7	52.9	39.2	30.7	52.4	103	— 5	.....	Oct. 6

[1] Every month during the year. [2] Prof. T. D. Biscoe. [3] Dr. D. B. Cotton.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Ohio—continued.																	
Westerville (*a*)	24.0	35.3	35.3	49.3	59.1	72.0	.....	69.3	62.8	51.2	36.2	33.7	.....	.....	—20	Apr. 16	Oct. 6
West Milton (*f*)	26.0	37.5	38.7	52.1	62.1	76.3	77.4	76.3	.....	.....	.....	.....	.....	103	— 7	Apr. 16†	.....
Weymouth	21.0	32.0	33.0	45.0	57.0	72.0	70.0	70.5	62.5	52.0	37.0	27.1	48.3	98	—26	.....	Oct. 2
Wooster (*a*)[1]	21.5	.....	33.2	47.1	57.3	70.5	69.6	68.7	60.9	48.9	37.5	28.0	.....	98	—20	.....	Oct. 6
Wooster[2]	.....	.....	.....	.....	.....	.....	.....	.....	63.6	50.0	37.4	27.7	.....	.....	.....	.....	.....
Youngstown (*a*)	25.2	33.8	32.5	48.5	58.9	73.0	71.6	71.3	65.3	51.9	37.7	27.4	49.8	96	—16	.....	Oct. 2
Oklahoma.																	
Anadarko	.....	.....	.....	60.2	69.5	77.6	83.6	79.1	78.6	62.6	49.2	37.0	.....	108	.....	.....	Oct. 9
Buffalo	.....	.....	.....	51.5	64.0	71.8	85.4	83.6	73.0	.....	.....	.....	.....	102	.....	Apr. 21†	Oct. 14
Burnett (*a*)	34.2	44.6	46.6	59.7	66.4	75.6	78.7	75.0	70.6	60.0	48.5	36.7	58.1	100	— 5	Mar. 23†	Oct. 10
Fort Reno	30.9	.....	.....	.....	.....	78.3	79.8	.....	.....	56.9	47.1	35.8	.....	.....	—10	Apr. 9†	Nov. 6†
Fort Sill	35.8	47.8	47.3	62.4	68.8	75.3	80.0	75.0	71.3	61.1	48.3	37.7	59.2	104	— 6	Apr. 9†	Oct. 25
Gate City (*a*)	29.6	40.1	38.6	54.4	60.4	74.4	79.3	75.4	69.6	56.6	42.6	26.6	54.0	109	—14	Apr. 22	Oct. 8
Guthrie	32.8	43.0	47.0	60.9	67.6	77.4	82.1	80.5	74.0	63.4	50.8	38.2	59.8	103	— 9	Apr. 9†	Oct. 25
Keokuk Falls	.....	48.8	49.2	.....	66.2	75.4	81.0	78.0	72.0	60.7	.....	.....	.....	101	.....	May 23†	Oct. 25
Kingfisher	.....	.....	47.4	.....	.....	85.0	83.0	80.0	74.5	.....	.....	.....	.....	104	.....	.....	Oct. 24
Maugum	.....	39.9	48.7	60.7	67.8	76.9	82.4	78.1	72.6	64.0	49.4	38.6	.....	105	.....	Apr. 9	Nov. 10
*Oklahoma City	33.0	44.2	44.6	59.2	66.2	75.1	79.0	77.0	72.4	62.0	48.0	35.6	58.0	98	—11	Apr. 9	Oct. 25
Ponca	.....	.....	43.0	58.0	65.8	76.6	79.0	79.9	72.7	.....	49.6	33.9	.....	103	.....	Apr. 9†	Nov. 17†
Sac and Fox Agency	.....	.....	.....	63.2	66.6	76.0	80.2	78.6	72.2	61.4	49.4	36.4	.....	102	.....	Apr. 22†	Oct. 8†
Oregon.																	
Albany (*a*)[3]	38.3	41.5	46.6	47.0	57.0	60.5	63.0	65.6	59.6	49.8	44.9	37.5	50.9	97	24	Apr. 14	Nov. 20
Albany (*g*)[4]	40.1	43.2	49.7	51.5	61.5	64.4	69.0	70.2	64.5	53.8	46.9	38.1	54.4	94	26	.....	.....
Arlington	32.6	41.8	49.8	50.3	61.6	68.8	71.6	66.4	66.4	53.3	44.8	32.6	53.3	106	6	.....	.....
Ashland (*g*)[4]	37.2	43.0	46.4	46.5	58.4	62.5	68.1	70.4	63.2	51.9	41.5	34.6	52.0	91	17	.....	.....
Ashland[5]	38.2	42.6	47.0	45.5	55.6	60.3	65.8	68.6	62.0	53.5	.....	.....	.....	99	.....	.....	.....
*Astoria	42.4	44.0	48.4	47.4	54.6	57.8	60.0	62.1	58.8	54.6	47.6	41.2	51.6	81	27	Feb. 6	Dec. 8
Aurora (*g*)	40.5	44.7	49.8	49.0	60.3	64.6	66.5	69.2	62.5	51.0	47.1	40.8	53.8	102	27	.....	.....
Aurora (near)	.....	.....	.....	.....	56.8	60.6	61.8	64.8	59.6	.....	.....	.....	.....	.....	.....	.....	.....
Bake Oven (*a*)	.....	.....	.....	.....	.....	.....	.....	.....	65.0	.....	48.0	27.0	.....	.....	.....	.....	.....
*Baker City	20.4	26.1	38.4	49.5	51.2	58.6	64.0	65.3	58.9	47.9	36.8	38.8	44.7	100	—12	June 2	Sept. 22
Bandon	44.9	44.3	46.6	46.6	51.8	54.8	57.0	57.0	54.4	52.8	50.2	45.1	50.5	82	30	Apr. 19	Dec. 20†
Beulah	17.6	23.8	38.1	39.4	50.0	57.2	64.4	64.2	57.8	47.0	35.2	30.8	43.8	102	—11	May 13	.....
Brownsville (*g*)	42.1	42.3	48.9	49.8	60.9	62.4	66.4	70.2	64.5	50.0	47.3	39.1	53.9	100	17	.....	.....
Burns	20.7	24.8	38.0	37.8	46.8	56.6	62.6	.....	65.9	.....	34.6	26.8	.....	.....	—10	.....	.....
Canyon City	33.4	37.2	45.6	45.0	55.7	63.0	67.0	64.1	.....	.....	44.9	37.0	.....	105	1	.....	.....
Cascade Locks	37.1	42.6	50.7	51.0	60.4	61.2	.....	67.8	.....	.....	.....	.....	.....	.....	.....	.....	.....
Comstock (*g*)	39.0	42.6	48.1	48.1	57.8	61.6	64.1	65.2	59.3	51.3	43.4	38.3	51.6	100	20	.....	.....
Corvallis[6]	38.6	41.5	46.8	46.2	55.0	59.0	62.4	63.3	61.6	51.2	44.8	36.4	50.6	96	23	.....	.....
Corvallis (*g*)[4]	38.0	41.3	49.4	48.5	57.2	61.0	67.5	70.6	62.9	52.9	43.3	36.9	52.5	92	24	.....	Oct. 26
Corvallis (near)	.....	.....	.....	.....	.....	.....	.....	63.3	59.4	51.2	45.6	38.0	.....	.....	.....	.....	.....
Crook	23.7	31.4	38.9	38.1	48.9	49.6	61.2	60.0	57.4	.....	36.2	30.2	.....	98	— 6	.....	Sept. 22
Eola	37.6	41.6	49.9	51.1	59.6	61.2	60.7	65.4	59.6	.....	.....	.....	.....	94	.....	Mar. 3	.....
Eugene	40.2	43.0	48.4	48.0	57.0	59.5	.....	.....	.....	.....	47.6	40.0	.....	.....	23	.....	.....
Fife	.....	.....	38.4	37.6	47.6	53.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Forest Grove	38.2	41.4	47.8	45.9	56.0	59.1	62.5	65.7	60.8	53.0	43.4	36.6	50.9	98	20	.....	.....
Gardiner	44.4	45.6	48.8	47.6	55.2	56.8	58.6	.....	.....	.....	.....	43.9	.....	.....	26	.....	.....
Glenora	.....	41.4	48.6	44.9	54.2	58.4	59.5	63.2	57.9	52.8	43.0	36.4	.....	101	.....	.....	.....
Grants Pass[7]	40.0	42.6	47.8	46.8	57.5	61.2	66.0	68.0	62.8	53.0	44.0	37.2	52.2	102	22	.....	Oct. 26
Grants Pass[4]	39.8	49.1	50.9	52.6	61.6	74.1	69.8	67.8	67.1	58.7	56.1	45.1	57.7	104	29	.....	.....
Happy Valley	29.9	32.2	40.4	40.8	50.6	57.8	63.6	62.6	62.8	39.0	41.0	31.1	46.0	97	1	June 23	.....
Hardman	32.5	35.7	41.4	41.2	53.6	50.9	63.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Heppner	.....	41.4	46.9	44.2	56.2	61.2	.....	67.0	59.2	51.8	45.3	33.5	.....	99	4	Apr. 19	Oct. 17
Hood River (near) (*a*)	34.2	40.0	46.0	47.0	55.6	60.4	63.8	65.3	62.2	50.8	44.4	32.1	50.2	92	8	.....	.....
Hubbard	38.8	41.3	47.8	47.6	55.8	59.6	59.8	63.8	58.4	.....	43.1	40.4	.....	93	22	.....	.....
Jacksonville	38.8	42.8	48.2	46.8	57.2	61.2	66.4	68.6	62.6	51.8	42.8	36.0	51.9	95	19	.....	.....
John Day Junction	32.5	38.3	44.9	44.5	55.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Joseph	19.4	24.2	35.4	37.4	47.6	58.0	61.0	61.3	56.4	45.6	.....	24.9	.....	94	— 8	May 12	Sept. 22
Junction City (*g*)	37.2	39.4	49.6	49.2	59.7	65.7	70.5	68.7	61.2	54.4	45.4	41.3	53.5	105	26	.....	.....
Lafayette (*g*)	35.8	39.3	44.8	45.2	57.3	62.3	64.2	67.0	59.9	54.6	42.4	38.8	51.0	98	18	.....	.....
La Grande	26.9	31.6	43.4	.....	53.0	60.3	65.0	67.7	60.9	51.4	.....	27.6	.....	99	1	.....	Oct. 19
Lakeview	28.0	30.2	40.6	39.7	52.9	59.0	66.6	.....	.....	.....	39.4	30.2	.....	100	— 2	May 12	.....
Langlois	46.4	45.4	49.4	48.1	55.2	59.4	60.6	64.2	66.0	50.7	51.8	47.4	54.5	90	28	.....	.....
Leland (*g*)	38.8	41.4	47.4	47.1	59.0	61.2	69.9	66.8	62.3	50.2	43.3	35.9	51.9	102	22	.....	.....
Lone Rock	.....	.....	42.1	.....	49.5	56.3	59.8	62.5	56.8	45.4	40.1	29.3	.....	96	.....	.....	.....
McMinnville[8]	38.2	42.6	44.7	45.6	56.8	60.8	63.0	65.2	59.3	53.2	44.8	37.3	50.9	101	22	Apr. 26	.....
McMinnville[4] (*g*)	39.4	42.6	47.8	46.1	58.2	62.4	66.1	66.9	61.0	52.0	44.2	35.9	51.9	99	27	.....	.....
Monmouth (*g*)	36.8	38.4	42.3	44.0	54.8	61.0	63.2	65.5	56.3	.....	46.7	36.2	.....	95	26	.....	.....
Mount Angel	39.2	42.4	48.6	47.4	59.9	61.0	63.8	65.9	61.0	52.3	46.2	38.8	52.2	98	22	Apr. 13	.....
Newberg	38.9	43.4	48.4	46.4	57.8	61.3	64.4	68.0	62.7	54.8	46.0	38.5	52.6	98	22	.....	.....
New Bridge	25.6	30.4	46.2	47.4	57.0	64.8	70.9	72.7	65.4	52.3	48.0	35.2	51.3	105	— 4	.....	Sept. 22
Newport	45.1	46.4	49.0	48.0	54.0	.....	.....	.....	.....	.....	51.2	47.0	.....	.....	25	.....	.....
Paisley	.....	36.1	41.0	40.4	50.9	56.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pendleton	32.4	41.0	47.9	47.4	56.5	62.8	66.6	67.4	60.7	57.0	49.0	31.6	51.7	104	— 8	.....	Sept. 21
*Portland[9]	39.9	43.4	49.9	49.0	59.0	62.2	64.7	66.8	62.9	53.2	45.7	38.3	52.9	94	20	Apr. 7	Nov. 26
Portland[4] (*g*)	38.2	40.8	46.9	45.9	57.3	61.6	66.5	67.0	61.2	48.3	46.3	37.3	51.4	92	22	.....	.....
Riddles (*g*)	42.1	41.0	47.0	56.7	52.8	57.2	61.6	64.3	62.2	52.7	43.0	39.2	51.6	98	24	.....	.....
*Roseburg[9]	42.0	45.2	49.6	48.8	58.1	60.2	64.6	66.4	62.4	54.4	47.2	40.5	53.3	96	28	Apr. 19	Nov. 17
Roseburg[4] (*g*)	43.2	45.9	50.7	47.3	60.2	63.6	64.3	66.2	63.9	56.3	49.0	41.6	54.4	102	23	.....	.....
Salem[4] (*g*)	40.7	42.6	53.3	45.5	55.3	54.5	55.0	57.1	52.1	42.4	42.0	39.5	48.3	96	24	.....	.....
Salem[10]	.....	41.0	.....	47.7	57.3	61.6	63.8	.....	.....	.....	44.8	37.7	.....	.....	.....	.....	.....

[1] Dr. O. N. Stoddard and Agricultural Experiment Station.
[2] Rainfall observer.
[3] John Briggs.
[4] Southern Pacific R. R.
[5] F. H. Carter.
[6] State Agricultural College
[7] J. B. Paddock.
[8] Capt. W. Harris.
[9] Weather Bureau.
[10] C. T. Roberts.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Oregon—Continued.																	
Sheridan (g)	35.0	41.0	45.9	49.4	60.8	63.7	67.0	68.7	62.6	53.1	48.1	39.3	52.9	96	20	.....	.....
Silver Lake	28.8	33.1	38.4	41.8	50.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Silverton (g)	37.8	41.4	48.3	48.1	59.5	62.6	65.2	66.3	60.4	51.8	45.1	37.2	52.0	92	18	.....	.....
Siskiyou (g)	35.5	38.7	42.4	40.8	53.1	57.0	65.5	65.9	62.0	50.1	43.2	34.4	49.0	95	20	.....	.....
Sparta	22.2	28.5	37.5	38.9	58.3	57.0	65.0	65.6	61.4	49.0	36.8	25.6	45.5	98	1	.....	.....
Springfield (g)	38.0	41.2	46.9	47.8	59.6	63.7	67.0	68.8	61.5	51.2	45.4	38.2	52.4	99	21	.....	.....
The Dalles	34.1	41.0	50.1	49.8	60.4	66.0	68.7	72.0	63.8	53.2	45.5	34.2	53.2	102	2	.....	.....
Toledo	43.8	46.6	50.2	46.8	56.6	59.6	61.2	63.9	59.5	57.2	47.8	42.7	53.0	93	23	.....	.....
Vale	18.1	26.2	41.8	44.6	54.8	63.8	68.7	68.0	60.6	47.4	37.2	29.8	46.8	101	5	.....	.....
Vernonia (a)	34.7	42.4	46.7	45.1	54.3	57.6	59.9	61.3	58.1	51.2	45.1	37.6	49.5	98	24	.....	Oct. 25
Wagner	.....	.....	.....	.....	.....	.....	.....	66.3	.....	49.9	41.7	34.1	.....	.....	.....	.....	.....
West Fork (g)	41.5	43.7	48.5	48.5	58.9	61.1	66.3	68.0	.....	53.2	47.6	38.5	.....	112	27	.....	.....
Weston	30.8	42.4	44.8	43.8	54.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Williams	.....	.....	.....	.....	.....	60.0	64.7	.....	61.0	51.1	43.2	37.6	.....	.....	.....	.....	Oct. 25
Pennsylvania.																	
Allegheny	26.3	35.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Altoona	35.4	38.9	38.0	52.1	62.4	76.0	75.6	74.4	65.5	55.6	44.4	.....	.....	98	.....	Apr. 25	.....
Aqueduct (a)	28.4	31.9	34.0	49.5	62.5	74.6	75.4	73.9	63.3	52.7	41.0	30.2	51.4	104	5	Apr. 9	Oct. 25
Blooming Grove (a)	25.4	27.9	28.6	45.8	57.6	70.9	71.4	69.4	59.2	47.3	36.0	25.2	47.1	99	— 6	Apr. 25	Oct. 27
Blue Knob (a)	20.5	26.5	25.8	41.9	57.1	70.8	70.3	68.6	60.6	47.0	32.4	24.1	45.5	95	—12	May 8	Oct. 2
Carlisle (a)	27.9	32.8	33.5	46.7	59.5	71.4	71.8	73.9	64.0	49.9	39.1	28.4	49.0	102	3	.....	.....
Coatesville (a)	27.4	32.8	33.2	48.4	60.1	72.1	73.7	72.6	62.5	49.8	39.8	29.0	50.1	101	— 1	.....	.....
Coopersburg (a)	27.0	32.5	32.7	48.2	59.3	70.8	73.0	71.3	62.4	51.5	39.8	.....	.....	97	.....	.....	.....
Corry (a)	20.4	28.6	26.6	41.5	53.5	67.3	66.4	65.0	57.8	48.0	36.7	24.8	44.7	94	—28	May 28	Oct. 2
Drifton (e)	25.0	27.2	27.0	44.8	55.3	68.1	69.0	68.3	58.7	48.7	38.5	28.6	46.6	96	— 1	.....	.....
Dyberry (a)	21.4	25.6	26.3	42.4	51.6	66.3	66.6	65.9	55.9	44.4	34.4	22.6	43.6	94	— 8	May 10	Oct. 2
East Mauch Chunk	.....	31.7	31.4	47.5	58.4	70.3	71.0	71.3	62.3	50.5	38.9	27.5	.....	100	.....	.....	.....
Easton (a)	26.2	31.5	32.0	47.8	59.0	71.4	73.7	72.1	62.2	50.6	39.3	28.8	49.6	99	— 2	Apr. 16	Oct. 22
Edinboro (a)	20.3	26.7	26.6	42.2	53.4	68.8	69.6	67.7	60.6	48.2	35.5	25.2	46.2	90	—11	May 8	Oct. 10
Emporium (a)	24.9	31.3	31.2	48.0	57.9	71.4	70.8	69.0	61.5	50.6	38.3	24.8	48.3	97	—14	.....	.....
*Erie	23.9	29.3	29.6	44.4	53.9	68.6	70.3	70.0	63.0	52.2	39.4	28.4	47.8	90	2	Apr. 26	Nov. 5
Forks of Neshaminy (a)	30.6	34.9	35.0	50.8	57.6	73.5	74.1	73.8	61.9	52.8	41.7	30.8	51.5	.....	.....	.....	.....
Frankford Arsenal	30.0	32.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Girardville (a)	26.2	30.3	30.2	46.3	57.4	70.6	72.0	71.2	61.2	49.0	39.1	29.4	48.6	97	2	.....	.....
Grampian (a)	21.9	28.5	27.6	44.3	56.5	71.7	70.3	.....	60.5	47.4	35.3	24.6	.....	.....	—10	Apr. 26	Oct. 2
Hamburg	27.3	32.8	33.4	48.7	59.3	72.0	74.0	73.2	63.2	52.3	39.8	29.8	50.5	103	2	.....	.....
Harrisburg	27.8	32.6	33.0	48.5	60.0	72.5	74.2	74.2	64.4	53.7	40.6	30.8	51.0	98	8	Apr. 26	Nov. 14
Hollidaysburg (a)	26.6	32.6	31.6	46.8	59.2	71.5	72.0	70.1	61.7	49.9	38.6	28.9	49.1	98	— 8	.....	.....
Honesdale (a)	23.5	27.6	28.7	43.7	55.9	69.3	69.0	68.1	58.3	47.4	35.7	24.7	46.0	92	— 3	.....	.....
Huntingdon	27.2	33.1	31.6	48.1	59.4	71.4	72.7	72.3	62.1	50.2	39.6	29.2	49.8	100	— 2	.....	.....
Indiana (a)	.....	.....	.....	.....	57.4	73.0	.....	70.6	61.9	49.2	.....	.....	.....	.....	.....	.....	.....
Johnstown	.....	.....	34.5	48.5	60.1	73.4	72.5	72.4	64.4	51.3	.....	28.6	.....	98	.....	.....	.....
Kane	21.8	27.6	26.5	41.2	53.2	68.0	67.2	65.5	57.9	48.2	34.1	22.1	44.4	91	— 9	.....	.....
Kennett Square (b)	28.2	32.0	32.7	47.7	58.6	72.4	72.4	71.9	61.9	49.3	39.6	28.0	49.6	.....	.....	.....	.....
Kilmer (a)	31.5	29.5	38.5	54.5	62.5	76.6	82.0	.....	63.8	57.5	44.0	32.5	.....	103	4	.....	.....
Lancaster	27.5	33.3	32.3	47.8	60.5	74.1	74.4	.....	63.4	52.4	40.5	.....	.....	.....	.....	.....	.....
Lebanon (a)	27.6	33.0	33.4	48.9	59.9	72.9	73.8	72.9	63.1	52.1	40.6	29.9	50.7	102	.....	.....	.....
Le Roy	21.9	26.8	26.3	42.7	55.0	69.4	70.2	69.2	61.2	49.0	35.5	24.1	45.9	96	— 5	May 8	Oct. 2
Lewisburg	.....	.....	31.1	47.4	57.3	72.6	72.7	72.3	59.9	50.6	39.8	28.4	.....	102	.....	.....	.....
Ligonier (a)	27.8	33.2	33.6	.....	58.3	71.9	70.6	70.0	63.1	50.2	.....	27.3	.....	97	—13	.....	.....
Lock Haven (a)	26.9	31.5	32.5	46.9	59.5	71.4	.....	.....	62.0	49.6	38.8	27.2	.....	.....	— 5	.....	.....
McConnellsburg (a)	28.7	34.0	34.5	47.9	60.6	71.9	71.7	72.4	63.9	51.5	40.1	30.6	50.6	101	2	.....	.....
Meadville	23.8	30.3	32.2	.....	58.0	.....	71.0	.....	.....	50.2	37.5	.....	.....	.....	.....	.....	.....
New Castle (a)	25.2	34.9	34.0	50.4	61.1	75.1	75.0	69.7	64.8	52.3	38.9	29.2	50.9	97	—20	.....	.....
*Philadelphia	31.4	35.2	35.8	50.9	61.9	74.5	76.6	75.6	66.8	56.4	43.6	32.8	53.5	101	10	Apr. 12	Nov. 6
Philadelphia[1]	32.3	36.0	37.3	52.4	63.0	75.9	77.2	76.1	67.1	57.3	44.6	33.2	54.4	103	10	.....	.....
Philadelphia[2]	29.6	34.0	35.2	51.2	62.3	74.6	75.7	75.3	66.3	55.3	43.5	32.0	52.9	100	10	.....	.....
Phoenixville	28.4	32.8	34.1	49.2	60.6	73.2	74.3	73.7	64.4	53.8	42.1	30.4	51.4	101	— 1	Apr. 27	Oct. 10
*Pittsburg	28.1	36.2	34.9	50.2	61.1	74.6	73.4	73.5	66.5	54.0	41.6	31.3	52.1	96	2	May 8	Oct. 24
Pottstown (a)	28.7	34.2	34.8	50.5	61.5	75.2	75.0	74.0	64.4	53.4	42.3	30.8	52.1	100	3	.....	.....
Port Carbon	.....	.....	.....	.....	60.8	72.4	72.0	72.4	62.3	.....	.....	.....	.....	.....	.....	.....	.....
Quakertown (a)	.....	31.9	31.4	47.5	58.5	69.6	72.2	70.4	61.4	49.1	38.9	27.9	.....	103	.....	Apr. 27	Oct. 2
Reading (b)	.....	.....	34.0	47.8	59.1	.....	74.8	73.7	63.0	49.0	40.3	30.4	.....	.....	.....	.....	.....
Saegerstown (a)	23.5	29.0	29.3	43.8	54.0	69.9	68.4	67.8	59.7	47.1	36.6	24.3	46.1	95	—27	.....	.....
Salem Corners (a)	20.9	24.5	25.2	41.2	55.5	69.4	69.2	67.4	57.6	46.0	33.7	23.1	44.5	92	—11	Apr. 27	Oct. 2
Selin's Grove (a)	26.4	30.8	32.5	46.1	59.6	72.3	73.8	72.5	63.2	50.3	39.5	28.0	49.6	101	0	Apr. 27	.....
Smethport (a)	20.4	.....	.....	42.5	54.6	68.6	67.0	.....	.....	.....	23.9	20.8	.....	.....	—22	.....	.....
Somerset (a)	24.3	30.1	29.2	44.8	55.2	69.6	67.2	67.4	61.8	45.8	35.9	25.8	46.4	95	—15	.....	.....
South Eaton	25.4	30.1	29.0	45.7	56.4	69.6	69.6	69.7	60.9	49.8	38.5	26.2	47.6	97	— 3	.....	.....
State College (a)	24.8	30.1	29.0	45.5	57.4	69.1	70.7	69.6	61.6	49.6	37.1	26.6	47.6	95	— 4	Apr. 30	Oct. 6
Swarthmore College	29.8	35.4	34.6	50.0	60.8	73.7	74.2	74.0	65.4	54.3	42.8	28.4	52.0	99	6	.....	.....
Uniontown (a)	30.0	36.9	36.7	49.4	63.2	74.9	73.1	72.7	64.9	53.0	42.4	31.3	52.4	93	— 9	.....	.....
Wellsboro (a)	22.0	26.9	25.2	41.0	50.6	64.8	64.5	64.0	54.8	43.3	34.1	24.0	42.9	96	—14	May 28	Oct. 2
West Chester	29.2	33.6	33.7	49.4	60.5	73.6	74.6	73.8	64.7	54.0	41.6	29.6	51.5	99	6	Apr. 10	Oct. 6
Westtown	30.7	33.4	34.2	.....	.....	73.2	.....	.....	63.0	52.1	40.7	29.4	.....	.....	6	.....	Oct. 27†
Wilkes Barre	27.5	33.3	32.4	48.7	59.9	73.4	73.2	72.2	61.7	50.5	39.9	28.6	50.1	100	2	.....	.....
Wysox (a)	24.8	29.1	27.1	44.8	56.0	69.1	69.2	68.8	59.3	46.7	37.6	26.0	46.5	97	— 8	.....	.....
York	26.8	30.6	.....	.....	60.7	74.2	74.0	73.5	64.0	52.3	40.9	28.8	.....	99	— 6	.....	.....
Rhode Island.																	
*Block Island	32.4	32.1	33.3	44.2	51.8	62.3	68.6	69.1	62.6	53.5	43.2	32.4	48.8	88	3	Apr. 25	Nov. 5
Bristol (a)	30.2	30.3	33.1	45.1	53.5	64.4	70.7	68.2	62.8	52.0	51.3	30.5	49.3	90	3	.....	.....
Fort Adams	32.4	33.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kingston[3]	28.7	29.6	32.0	45.8	53.8	66.4	70.2	69.0	60.8	49.9	39.3	27.6	47.8	92	— 1	Apr. 26	Oct. 24

[1] John Comly. [2] J. C. Trautwine. [3] N. Helme. [4] Exposure not good.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Rhode Island—Cont'd.																	
Kingston (a)[1]	29.0	29.3	32.1	44.8	53.7	65.7	70.1	68.3	60.5	50.4	40.3	28.8	47.8	91	— 3		
*Narragansett Pier	31.4	31.4	33.8	46.4	55.2	67.8	70.2	71.0	62.2	51.8	41.5	28.8	49.3	93	— 1	Apr. 26	Oct. 24
Newport	32.4	33.4	34.0	47.6	55.6	65.4				53.6	43.0	32.0			2		
Olneyville	31.6	32.0	35.4	49.6	55.3	71.0	73.9	71.8	64.6	54.6	44.7	31.4	51.3	94	2		
Pawtucket			34.6	49.8	58.2	70.4	73.5	71.2	62.0	52.2	41.6	31.3		95			
Providence[2]	29.5	30.6	33.2	49.1	57.9	72.4	74.8	72.5	63.3	52.0	41.8	30.0	50.6	96	2		
Providence[3]	28.0	29.0	33.1	47.4	55.8	70.2			61.5	51.2	40.0	28.1					
Providence[4]	27.7	28.0	31.8	46.6	54.4	68.2	71.6	69.6	61.0	50.5	39.2	28.0	48.0	94	0		
South Carolina.																	
Aiken (a)	41.1	48.0	50.0							61.8	51.3	46.6			22	Mar. 19	Nov. 11
*Allendale				66.0	73.0	78.3	80.2	80.9	73.5	65.0	54.8			99			Oct. 26
*Batesburg				63.0	71.4	78.8	78.4	79.8	71.4	64.1	52.4			98			Oct. 26
*Blackville				66.2	73.8	79.4	80.6	81.0	72.8	65.0	54.7			99			Oct. 26
*Charleston	47.8	53.0	54.8	63.9	72.0	77.6	80.2	81.5	74.6	66.3	57.0	52.3	65.1	95	25	Mar. 20	Nov. 12
*Cheraw (a)[5]	39.8	47.7		60.4	71.2	79.2	78.4	79.6	70.9	60.6	49.8	43.6		99	6	Apr. 6†	Oct. 26
*Columbia	43.0	49.7	51.8	62.6	71.4	78.8	82.4	80.4	74.8	65.7	53.4	48.3	63.5	101	19	Mar. 11	Oct. 26
Conway	45.8	48.2															
Evergreen	41.8	45.7						76.0									
*Florence				63.8	73.4	79.8	80.2	82.3	73.2	63.2	52.8			101			Oct. 26
*Green Pond				64.5	70.8	76.6	79.6	80.6	73.2	64.8	54.6			95			Nov. 12†
*Greenville					64.8	72.2	73.8	74.4	67.2	60.4	49.2			92			Oct. 26
*Greenwood				58.4	69.5	77.2	77.4	78.0	69.0	62.8	49.8			96		Apr. 16	Nov. 11
*Hardeeville				66.0	71.8	76.7	79.7	80.1	74.4	65.7	55.6			93			Oct. 26
*Kingstree				64.5	71.8	78.0	78.6	79.3	73.3	63.6	53.4			96			Nov. 12†
Kitchings Mills	43.2	49.0	51.2	61.8		76.6			73.8	63.8	51.6	47.8			17		
Longshore	41.4	47.8	49.8	59.5	70.0	75.9	77.6	78.4	71.6	62.5	50.2	44.6	60.8	96	20		Oct. 26
Port Royal (a)	47.1	53.0	55.2	64.5	72.8	78.0	80.2	81.8	74.4	66.3	57.3	53.0	65.3	96	27	Mar. 19	Nov. 24
*St. Georges				64.6	71.0	77.0	79.2	80.0	72.8	64.2	53.6			98			Oct. 31
*St. Matthews				64.8	72.2	78.2	79.2	80.0	72.1	65.0	54.6			98			Nov. 20†
Simpsonville (a)	36.7	45.2	47.0	55.3	68.7	76.9	77.2	77.3	69.4	60.5	49.7	43.3	58.9	99	15	Apr. 12	Oct. 28
Society Hill	41.4				69.8	76.1	76.7	78.2	70.2	61.2	50.6	45.0		94	14		
*Spartanburg					75.2			79.0	72.4	65.8	49.4						Oct. 26
Statesburg (a)	42.2	48.8	50.8	60.6	70.2	75.4	76.4	77.8	71.1	62.3	52.0	46.4	61.2	94	19	Apr. 6	Oct. 26
Trial	45.5	51.6		62.1	70.4	76.6	75.2	76.5	73.0	64.6	54.0	44.5		98	16		
Walhalla	40.8	46.9															
Winnsboro (a)	41.4	48.0	50.7	60.3	69.0	77.4	78.8	79.1		61.0	50.4	44.1		100	14		
Yorkville	39.0			57.8	69.0	76.6	80.4	78.6	71.8		50.5	46.0		95	19		
South Dakota.																	
Aberdeen	7.2	17.2	29.1	43.7	49.0	64.2	72.2	70.4	63.4	56.1	25.4			100	—34	May 22†	Oct. 8†
Alexandria	12.4	22.7	30.2	43.8	49.8	63.1	73.0	71.6	62.2	53.4	31.9	16.6	45.9	104	—35	May 20	Sept. 14
Ashcroft							72.8	71.9	63.2	46.3	30.4	18.0					Sept. 4
Bowdle (a)						64.1	71.6	68.5	60.4	50.7	25.3	14.0		96			Oct. 18†
Britton	6.7	13.6	24.3	37.4	46.0	61.8	68.8	66.9	58.0			8.7		95	—35	May 20	
Brookings (a)	8.7	18.0	27.2	39.7	47.9	62.8	69.3	67.2	60.7	49.2	29.7	20.1	41.7	97	—34	May 20	Sept. 13
Castlewood	6.0	14.8	28.4	39.6	47.0	63.2	68.0		61.7	47.5	24.5	13.6			—36	June 30	Oct. 7†
Clark	8.8	17.9	29.6	41.4	48.0	63.8	70.8	68.9				24.5		99		May 21	
Cross	22.4	23.9	26.6	58.2	43.6	58.4	66.0	64.2	58.8	47.1	33.8	22.2	42.1	95	—28	May 20	Sept. 5
De Smet	7.8	18.2	28.4	40.1	47.0	64.5	69.4	68.0	60.9	50.8		14.4		98	—36	May 20	Oct. 8†
Elkton (a)	6.1	16.5	24.4	37.6	44.9	61.8	66.6	63.8	57.7	44.4	24.1	11.6	38.3	99	—34	May 20	Oct. 8†
Faulkton	8.2	13.5	28.7	39.3	47.9	62.7	70.2	68.2	60.6	45.6	30.6	13.1	40.7	97	—32	May 20	Oct. 8†
Flandreau	7.1	19.2	28.8	42.1	44.6	63.0	69.4	68.8	62.2	51.0	26.9	15.2	41.5	98	—36	May 20	Sept. 14
Forestburg	11.9	20.0	30.1	43.1	49.4	64.0	70.8	70.2	64.4	52.7	30.0	17.8	43.7	99	—35	May 20	Sept. 14
Forest City		22.4	33.8	46.1	54.1	72.3			70.6			17.2		107		Apr. 13†	Oct. 28†
Fort Meade	22.8	25.2	33.2	41.5	47.9	62.2	72.5	68.8	60.8	48.9	34.0	22.6	45.0	102	—29	May 9†	Sept. 13†
Fort Randall	16.2	25.6	33.4	45.4	51.0	67.2	75.2	74.1	66.4	55.0				108		May 22†	Sept. 14†
Fort Sully	17.0	18.0	30.8	43.8	50.6	65.8	75.4	75.2	67.8	54.8	31.4	16.4	45.6	107	—30	May 6†	Oct. 8†
Frankfort	9.5	16.2	34.1	42.4	48.2	63.8	71.1	68.4	62.7	51.1	27.0	13.5	42.3	101	—38	May 20	Oct. 7
Gary	8.8	15.2	28.0	40.4	47.2	63.8	71.6	68.7	61.1	51.2	26.8	13.8	41.4	96	—30	May 21	Oct. 8
Highmore (a)							72.7	71.7	64.8	52.4	31.1	12.1					Oct. 8
Hotch City					49.8	64.2	73.2	73.5	64.4	52.2	30.6	14.6		110			Oct. 8
Howard	9.2	19.9					70.3	69.9									
*Huron	10.4	17.4	28.8	42.2	48.4	63.2	69.6	69.8	62.7	51.6	28.2	15.1	42.3	99	—34	May 2	Sept. 14
Kimball	13.6	20.0	32.2	44.0	50.4	63.7	74.0	72.7	65.3	54.0	31.0	16.6	44.8	107	—32	May 20†	Oct. 8
Mellette (a)					49.5	64.4	72.7	70.8	63.2	50.5	27.9	17.9		96			Oct. 8†
Millbank (a)	8.3	12.9	25.6	39.6	49.6	64.0	71.0	69.0	62.6	49.6	26.6	14.2	41.1	100	—30		Oct. 7
Mitchell (a)	11.4	20.9	30.2	43.3	49.0	65.4	71.9	70.7	62.8	51.8	29.5	18.0	43.7	98	—30	May 22	Oct. 8
Oelrichs	17.4	23.3	33.5	41.6	48.1	62.0	70.0	70.4	62.0	48.8	35.4	21.3	44.5	102	—28	May 13	Sept. 12
Onida (a)	9.2	13.3	26.0	39.6	45.5	61.0	70.2	69.2	61.5	49.4	27.3	18.1	40.4	106	—36	May 20†	Sept. 13
Parker	9.9	21.1	31.7	44.6	50.6	66.6	72.8	69.6	63.6	52.2	31.3	16.6	44.2	102	—37	May 17	Oct. 8†
Parkston	15.4	23.7	31.6	43.0	50.0	63.4	67.9	65.0	62.1	53.0	33.7	17.3	43.7	100	—22		Sept. 12
*Pierre	17.3	18.2	30.8	43.2	49.4	64.8	74.3	74.0	65.8	54.1	31.8	17.2	45.1	106	—30	May 1	Oct. 8
Plankinton (f)	12.2					65.6	72.5	71.5	63.9	53.9		15.6		102			Sept. 14
*Rapid City	21.7	24.2	31.8	40.4	47.2	61.6	71.5	71.0	64.4	51.7	36.2	22.4	45.3	102	—25	May 9	Oct. 8
Rosebud				43.9	50.0	64.4	73.8	72.5	62.0	52.2	35.4	20.2		104		May 20†	Oct. 8
St. Lawrence (a)	14.8	20.0	29.6	42.3	51.0			70.5									
Salem			31.7	41.8	48.0	63.0	71.0	70.4		55.6	32.6			99		May 21†	Oct. 8†
Sioux Falls	8.6	20.4	29.1	43.1	49.4	65.4	71.6	69.3	62.0	51.6	30.3	17.0	43.2	98	—40	May 20	Sept. 14
Spearfish (a)	24.2	27.1	32.9	40.6	46.7	61.2	73.2	70.6	63.8	50.6	36.7	23.2	45.9	102	—24	May 9	Oct. 18
Travare					53.2	61.6	67.6	67.4	60.5	51.6	29.9	13.0		98			
Tyndall	13.3	23.8	32.4	45.3	50.8	68.0	74.8		67.4	56.9	34.1	21.2			—33	May 22	Sept. 14
Vermillion		23.0	31.4	45.0	51.4											May 20†	
Watertown	9.3	19.0	29.6	41.3	48.3	62.0		70.3								May 20†	
Webster (a)	11.0	18.9	29.8	41.5	48.7	64.6	70.8	69.3	64.4	52.8	28.6	14.6	43.0	99	—38	May 20	Oct. 8

[1] C. O. Flagg. [2] City Engineer's Office. [3] D. W. Hoyt. [4] Ladd Observatory. [5] Special Cotton Region Station.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
South Dakota—Cont'd.																	
Wentworth (a)	8.8	12.6	24.6	43.1	48.0	62.7	70.4	68.4	59.2	48.6	26.4	12.8	40.5	99	—34	May 20†	Sept. 14
Wessington Springs	13.5	19.9	31.6	43.2	49.2	64.3	71.7	72.2	65.8	54.3	31.0	15.8	44.4	105	—29	May 22	Oct. 8
Wolsey (a)	9.2	16.2	27.6	40.5	48.3	63.7	71.3	68.6	62.1	50.3	26.1	14.2	41.5	95	—36	May 9	Oct. 8
*Yankton	14.2	23.4	32.2	45.4	51.4	67.3	74.3	72.3	66.4	55.2	34.7	20.7	46.5	101	—32	May 20	Sept. 14
Tennessee.																	
Andersonville (a)	32.3	43.4	47.4	52.8	69.1	74.4	74.9	74.0	68.2	59.8	41.9	35.9	56.2	94	8		
[1]Arlington				63.8	67.8	77.2	77.6	76.8	69.6	60.4	46.7			98			Oct. 26†
Ashwood (a)	33.8	46.5	45.5	59.0	66.9	75.9	76.2	75.0	67.8	60.0	46.0	39.4	57.7	93	10	Apr. 10	Oct. 26
Austin (a)	32.5	45.0	44.0	59.2	69.1	78.7	78.1	74.6	68.1	58.9	43.8	36.4	57.4	98	— 2	Apr. 10	Oct. 28
Bethel Springs (a)	30.0	44.8	44.4	59.6	66.4	77.4	76.6	76.4	69.7	66.3	50.8	42.8	58.8	90	5		
[1]Bolivar				63.9	66.2	75.8	76.8	76.6	68.1	62.3	51.3			92			Nov. 9†
[1]Brownsville				64.9	70.2	79.4	79.2	78.8	72.1	63.5	50.0			98			Oct. 25
[1]Chattanooga	37.0	47.6	47.8	60.1	68.2	77.2	77.9	76.1	69.6	61.4	48.0	40.4	59.3	95	12	Apr. 12	Oct. 26
Clarksville (a)	31.0	45.1	43.5	59.0	66.2	76.8	76.7	77.0	69.0	60.6	45.2	37.0	57.3	94	5		
Covington[2] (a)	32.5	48.0	46.1	60.7	67.4	75.8	76.6	74.4		62.6	48.2			91			
[1]Covington				66.7	71.9	79.9	81.4	79.2	70.8	63.8	50.3	39.2		101			Oct. 26
Dunlap (a)	32.0	48.1	48.0														
*Dyersburg	33.3	48.5	46.0	59.3	69.0	78.8	78.8	77.7	70.0	60.6	47.6			99		Apr. 3†	Oct. 26†
Fayetteville	34.5	47.5	46.1	59.8	68.3	76.2	76.9	75.7	68.3	63.4	47.4			96	10		
Florence Station (a)	33.0	45.3	45.8	58.7	67.4	77.1	76.1	75.6	65.4	59.0	44.8	36.8	57.1	94	11		
Franklin (a)	32.7	45.5	43.6	59.2	68.4	75.5	75.5		68.0	57.8	45.1	37.8		95	3		
Greeneville (a)	33.5	41.2	42.8	55.4	63.1	71.5	72.6	71.5	64.3	54.9	42.7	36.3	54.5	90	9		
Hohenwald			45.9			76.4	78.0		68.8	61.6				98	6		
Jacksboro (a)	34.1	40.2			63.2	71.6	71.7	70.5	62.0	51.8	41.2	34.0		93	8		
Jackson (a)					67.8	77.2	77.7	77.4	68.4	59.3	47.0	38.8		95	2		
Johnson City (a)	33.2	38.7	42.6	55.7	65.2	73.6		73.3	66.1		40.5						
*Knoxville	34.8	45.4	45.7	58.3	66.2	75.6	76.6	75.4	69.2	59.2	44.9	38.2	57.4	95	9	Apr. 10	Oct. 28
Lookout Mountain									65.5	57.6	43.0	35.8					
Lynnville (a)	34.6	44.9	44.1	60.0	66.2	75.2	75.2	74.3	68.5	61.4	46.4	37.9	57.4	97	0		
McMinnville (a)	36.8	47.8	49.2	60.4	66.8	74.5	75.8	74.6						92			
*Memphis	36.0	50.0	48.5	61.7	68.6	77.7	78.6	78.7	72.0	64.4	49.6	40.8	60.6	97	12	Mar. 20	Oct. 26
*Milan				63.2	69.2	78.8	78.7	78.1	70.2	61.2	47.7			99			Oct. 26
Missionary Ridge (c)	35.0	45.2	45.8	58.4	66.2	74.0	74.4	73.2	67.4	58.6	45.6	37.4	56.8		12	Mar. 19†	Nov. 24†
*Nashville	33.0	46.4	44.2	58.9	67.3	77.2	77.2	76.4	70.0	61.2	46.5	38.1	58.0	97	10	Apr. 10	Oct. 28
Newport (a)	34.5	43.2	45.3	55.5	63.1	75.0	76.0	73.3	65.1	53.4	40.8	34.1	55.0	97	8		
Nunnelly (a)	32.8	47.0	46.7	59.8	67.2	76.0	75.8	75.3	68.4	60.5	47.0	38.5	57.9	93	5		
Parksville (a)	36.2	45.4	46.5	59.3	66.9	73.6			68.1	60.0	47.0	39.8			11		
Riddleton	32.0	44.4	44.6	58.7	65.2	75.4	76.6	77.4	68.8	59.3	47.8	36.2	57.2	96	— 4	Apr. 13	
Rogersville (a)	33.4	41.3	42.6	55.6	63.7	73.4	73.6	73.4	66.1	55.8	41.9			93	10		
Rugby (a)	30.1	40.3	39.7	55.0	64.0	73.5	74.6	71.8	64.0	53.0	42.7	34.3	53.6	91	5		Oct. 6
Savannah (a)	33.5	48.4	48.6	56.4	69.9	77.7	77.3	75.6	65.1	56.8	44.4	38.4	57.7	96	9		
Sharp (a)	35.0	48.6	47.3	60.1	66.7	75.6	77.2	75.9	67.3	59.6	47.6	39.4	58.4	96	6		
Springdale (a)	32.8		46.0	59.0	66.5	78.7	75.4	75.1	68.0	59.4	43.0	37.4		96	6		
Waynesboro (a)	31.4	44.0	43.5	56.8	65.5	72.9	74.0	74.0	64.5	56.2	44.8	37.2	55.4	93	1		
Texas.																	
*Abilene	40.6	50.8	51.0	66.6	72.7	79.8	82.6	78.7	74.3	65.0	55.2	43.0	63.4	100	2	Mar. 18	Oct. 25
Albany (a)					73.8	79.7	83.0	79.9	75.4	66.3	55.4	46.3		99			Nov. 10
*Amarillo	32.8	41.9	41.8	56.4	63.1	73.8	76.9	74.4	72.2	56.2	45.9	32.3	55.6	100	— 4	Apr. 9†	Oct. 24
Arlington	39.7	51.6	51.6	66.8		78.0	82.1	81.1	76.8	68.2	57.6	46.0		100	— 6	Mar. 19†	Nov. 19
Aurora (a)								82.7	78.1	68.9	56.8	45.2					Nov. 10
Austin[3]	40.0	57.1	55.4	69.6	75.0	80.3	84.5	81.7	79.3	68.8	58.9	49.8	66.7	100	10	Mar. 18	Nov. 18
Austin (c)[4]	44.5	59.5	57.6	70.4	75.4	80.9	84.5	81.0	78.4	70.4	60.3	51.3	67.8	97	17	Mar. 19	Nov. 18
*Belton					77.0	82.3	84.2	78.1	72.6	66.1	55.9			103			Oct. 26
Boerne (c)							80.2	75.9	72.8	65.4	54.1	45.2					Dec. 26
Brady (a)	40.3	53.9	52.2	67.1	72.5	78.9	82.6	77.6	73.0	66.4		45.6		99	5	Mar. 27	Oct. 25
Brazoria (a)	47.2	62.1	58.0	69.9	74.3	77.8	79.4	79.0	74.4	70.0	62.9	55.7	67.6	94	20	Mar. 19	Nov. 18
*Brenham	47.2	61.9	58.4	73.0	76.6	81.2	84.6	82.6	77.6	74.6	62.8	54.8	69.6	101	16	Mar. 19	Dec. 26
Brownwood	39.5	53.5	51.6	64.7	72.8	79.0	82.4	80.8	75.6	68.4	56.5	46.6	64.3	102	7	Mar. 19	Nov. 17
Burnet (a)	44.1	54.0	55.3	68.5	73.9	80.0	84.7	79.2	73.9	64.6	55.0	49.6	65.2	93		Mar. 19	Dec. 10
Camp Eagle Pass	46.3	61.8	58.4	75.8	82.8	86.1	87.8	81.4	78.0	74.6	58.0	51.9	70.2	107	11	Mar. 19†	Nov. 19
Camp Pena, Colorado	37.6	51.2	51.1	63.4	71.5	77.8	79.3	73.8	68.5	62.2	51.3	45.1	61.1	101	1	Apr. 22†	Nov. 4
Childress (a)	34.6	45.2	45.7	62.1	69.0	79.0	85.6	80.1	75.2	62.4	48.2	35.8	60.2	106	— 8	Apr. 15	Oct. 25
College Station	47.3	62.4	58.6	71.7	75.4	80.4	83.5	82.0	79.5	74.0	62.2	53.2	69.2	105	15	Mar. 19	Dec. 20
*Columbia	46.8	63.6	59.0	72.3	76.2	80.3	81.6	81.8	76.2	72.6	64.2	56.0	69.2	96	20	Mar. 19	Nov. 11
*Corpus Christi	49.4	64.0	60.1	72.4	76.7	79.8	81.1	80.8	78.4	74.7	66.0	57.8	70.1	94	25	Mar. 19	Dec. 27
Corsicana[5]		54.4	53.2	67.6	74.6	76.9	80.5		75.0	67.4				102		Mar. 19	
*Corsicana[1]	39.4	53.5	50.9	66.7	72.4	78.3	82.2	79.1	73.2	66.4	56.1	46.4	63.7	99	10	Mar. 19	Nov. 10
*Cuero	47.2	63.6	59.5	74.3	78.1	83.7	86.2	83.1	78.2	75.0	65.0	59.2	71.1	101	20	Mar. 23	Nov. 18
*Dallas[1]					73.1	80.0	84.0	81.8	76.0	66.2	55.5			100			Nov. 9
Dallas (a)[6]	45.6	59.1	57.6	70.9	74.3	83.1	86.8	84.0	82.8	73.2				100		Mar. 18	Nov. 10
Devine		62.2	57.4	73.7	78.6	82.4	84.1	80.5	76.0	70.5	60.0	51.7		100		Mar. 19	Nov. 18
Duval (a)	44.0	59.6	57.1	71.7	76.8	82.7	85.4	83.8	80.1	72.2	61.4	51.6	68.9	103	17	Mar. 19	Nov. 18
Eastland (a)					73.0	79.3	83.1	79.9	75.5	66.3	54.8	43.2		100			Nov. 10
Elmendorf (a)	45.2	60.6	56.6	71.3	76.5	80.8	82.9	78.7						100		Mar. 19	
*El Paso	43.1	50.4	54.7	63.6	70.9	80.7	83.0	78.8	74.6	62.6	52.0	43.8	63.2	105	13	Mar. 18	Dec. 7
Epworth (a)							78.8	75.6	71.6	56.9							
Flower Bluff							82.5	81.8	78.0	76.3	70.2	62.2					Dec. 27
Floydada				58.0	66.6	75.6	77.6	75.6	69.2					97		Apr. 22†	Oct. 24
Forestburg	38.6	55.2	43.0	66.7	69.4	76.8	81.8	80.0	77.0	67.6	55.8	42.6	62.9	102		Mar. 19†	Nov. 10
Fort Bliss	42.4	49.8															
Fort Brown	56.0	68.8							82.2		69.4	63.3					Dec. 27
Fort Clark	45.3	59.8	57.2	73.6	78.8	83.6	84.8	79.6	77.1	71.0	58.8	51.6	68.4	103	11	Mar. 19†	Nov. 18

[1] Special cotton region station. [2] J. I. Hood. [3] Ernst Kruger. [4] Dr. Q. C. Smith. [5] W. H. Hamilton. [6] G. A. Eisenlohr.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—*Continued.*

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Texas—Continued.																	
Fort Hancock	39.8	47.8	53.0	58.3	67.7	76.8	82.0	76.4	70.6	59.8	48.0	38.2	58.9	111	— 1	May 9†	Oct. 14
Fort McIntosh	51.4	66.9	63.3	79.2	82.6	85.2	85.5	80.8	76.7	72.4	63.4	56.4	72.0	105	21	Mar. 19†	Nov. 19
Fort Ringgold	52.7	69.2	66.3	79.0	84.0	85.4	86.9	82.2	80.2	74.9	64.6	58.6	73.7	109	16	Mar. 19†	Nov. 11
Fort Worth	.....	52.4	.....	.....	72.0	77.8	82.2	82.0	.....	67.2	57.8	.....	.....	98	.....	.....	Nov. 18†
Fredericksburg (a)	42.1	56.2	54.0	68.4	72.7	77.7	80.9	75.4	77.6	66.4	56.9	47.4	64.6	98	12	Mar. 18	Nov. 11†
Gainesville	38.4	49.8	49.4	62.3	69.0	76.5	80.8	78.3	74.2	66.2	54.0	44.2	61.9	98	— 1	Mar. 27	Nov. 10
*Galveston	48.2	60.5	58.4	69.2	75.6	79.6	82.1	82.9	78.6	74.2	65.4	56.2	69.2	92	25	Mar. 18	Dec. 27
Graham	39.0	51.1	49.4	.....	.....	.....	85.0	81.8	76.2	67.2	55.1	44.0	.....	103	— 2	Mar. 19	Nov. 10
Grape Vine	40.2	52.2	51.6	65.8	72.6	80.7	84.8	82.9	79.6	69.7	58.3	44.8	65.3	100	9	Mar. 20	Nov. 9
Hallettsville	48.5	64.1	59.6	73.8	77.6	81.4	83.3	82.5	78.8	72.2	60.0	51.5	69.4	101	17	Mar. 19	Nov. 10
Hartley	31.6	42.6	42.8	55.6	62.9	73.7	77.7	75.4	72.2	55.4	46.2	30.0	55.5	102	— 1	Apr. 22	Oct. 24
Haskell	40.6	49.6	48.5	66.0	.....	.....	87.6	85.3	78.2	.....	.....	.....	.....	.....	.....	Mar. 19†	.....
*Hearne	.....	.....	.....	.....	73.4	78.4	82.6	80.3	78.6	71.3	59.9	.....	.....	93	.....	.....	Nov. 18
Highland	43.1	57.0	54.7	70.0	.....	.....	.....	81.5	76.0	68.8	54.7	.....	.....	.....	.....	Mar. 18	Nov. 10
*Houston	45.3	61.8	57.6	70.8	74.7	78.8	86.5	81.0	75.4	70.4	62.6	53.4	68.2	98	19	Mar. 19†	Oct. 25
*Huntsville	43.0	58.2	57.2	70.2	74.4	79.8	83.0	81.0	75.8	70.8	61.5	54.9	67.5	96	17	Mar. 18†	Nov. 10
Llano	47.4	57.8	56.0	71.1	75.8	.....	.....	.....	.....	.....	.....	51.9	.....	.....	12	Mar. 19	.....
*Longview	.....	56.6	53.0	68.3	74.2	80.8	83.3	81.6	74.5	70.2	58.3	.....	.....	101	.....	Mar. 19†	Nov. 10
*Luling	45.0	62.0	.....	73.5	77.6	79.0	82.8	76.2	76.2	70.2	61.6	54.4	.....	102	17	.....	Nov. 11
McGregor	.....	.....	.....	.....	.....	.....	.....	.....	70.8	.....	48.3	40.2	.....	.....	.....	.....	Nov. 11
Menardville (a)	39.8	52.8	51.4	67.3	71.5	78.7	82.0	75.9	71.5	65.6	53.2	44.6	62.9	97	7	Mar. 18	Nov. 10
Mesquite	40.1	53.7	52.5	66.3	71.0	77.6	82.0	78.0	73.3	66.8	56.4	45.3	63.6	100	5	Mar. 19	Nov. 10
Mountain Spring	37.9	50.6	49.8	64.4	70.6	77.8	82.0	79.8	74.6	67.3	56.4	44.6	63.0	100	1	Mar. 19	Nov. 10
Nacogdoches	47.2	63.4	55.6	69.4	74.2	.....	.....	.....	74.6	70.2	60.6	.....	.....	.....	.....	Mar. 19	Nov. 11
New Braunfels	47.8	60.2	58.8	71.9	76.3	80.2	83.7	79.7	76.3	70.5	60.4	51.4	68.1	98	18	Mar. 19	Dec. 20
New Ulm (a)	45.4	61.2	57.3	71.5	75.2	79.7	83.4	80.9	78.3	71.8	62.2	.....	.....	102	.....	Mar. 18	.....
Odessa	40.4	52.8	52.8	.....	81.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mar. 19†	.....
*Orange	.....	.....	.....	74.0	78.6	84.0	83.8	84.0	81.2	76.1	62.6	53.0	.....	96	.....	.....	Nov. 10
*Palestine	44.7	58.0	54.2	67.6	72.3	78.1	82.2	80.5	75.2	69.2	59.8	48.5	65.9	97	14	Mar. 11	Dec. 10
Panter (a)	41.7	54.5	54.6	65.9	72.4	77.2	84.4	.....	.....	64.2	58.8	.....	.....	.....	.....	Mar. 19	Nov. 18
*Paris	.....	.....	.....	70.0	71.1	79.6	82.5	81.0	74.0	67.6	55.0	46.6	.....	102	.....	.....	Nov. 11
Quanah	37.0	47.6	45.8	64.6	69.2	79.1	84.4	81.0	75.1	63.4	50.2	36.7	61.2	106	— 6	Apr. 8	Nov. 10
Roby	38.0	48.2	48.4	65.8	71.3	79.0	83.4	79.8	74.2	63.6	53.0	42.2	62.2	105	0	Mar. 20†	Nov. 10
Round Rock	44.6	59.6	57.0	72.4	75.8	81.5	85.4	82.4	79.0	70.6	62.4	51.6	68.5	100	16	Mar. 19	Nov. 11
*San Antonio	47.1	62.2	58.9	73.6	78.2	82.0	84.2	80.8	77.9	71.9	61.8	53.2	69.3	98	19	Mar. 19	Nov. 18
San Antonio [1]	47.0	62.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Antonio (a) [2]	47.4	62.1	59.2	74.7	79.4	82.6	84.8	80.7	78.1	72.1	61.7	53.2	69.7	100	18	Mar. 19	Nov. 18
Sierra Blanca [3]	.....	50.0	56.0	60.1	69.2	79.0	81.4	74.3	71.0	61.8	51.5	42.9	.....	103	5	Apr. 7†	Nov. 10†
Silver Falls (a)	36.2	47.8	48.3	63.1	70.0	78.6	81.6	77.4	74.5	61.1	52.1	37.6	60.7	104	—10	Apr. 9	Nov. 9
Sulphur Springs (a)	.....	.....	.....	67.0	73.8	78.6	.....	.....	.....	67.4	55.6	45.6	.....	.....	.....	.....	Nov. 7
Temple	40.2	53.3	53.0	66.9	72.5	77.6	81.3	79.3	75.9	.....	60.3	46.5	.....	95	10	Mar. 19	Dec. 10
*Tyler	.....	.....	.....	69.8	73.1	79.6	80.8	77.1	74.6	66.6	56.0	.....	.....	97	.....	.....	.....
Victoria (a)	.....	.....	.....	.....	.....	83.3	86.2	83.6	81.7	75.5	64.3	54.9	.....	97	.....	.....	Dec. 27
*Waco	42.0	56.4	53.9	70.2	75.8	81.6	83.9	82.2	77.7	70.4	60.0	50.0	67.0	99	7	Mar. 19†	Nov. 18
*Weatherford	.....	.....	.....	.....	71.1	78.6	82.4	80.2	75.5	67.6	57.8	.....	.....	100	.....	.....	Nov. 10
Wichita Falls (a)	36.9	49.2	47.4	63.1	69.5	80.6	84.5	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 22†	.....
Utah.																	
Beaver	30.4	.....	42.0	45.1	.....	58.7	67.8	.....	.....	.....	.....	.....	.....	.....	.....	June 13	.....
Blue Creek (g)	21.5	29.7	42.5	49.9	57.4	70.5	.....	83.1	64.4	51.3	38.2	26.4	.....	.....	— 2	.....	.....
Cisco	18.7	41.9	46.2	52.6	60.1	71.2	78.8	76.8	68.3	52.8	38.4	29.4	52.9	107	—10	May 8†	Oct. 12
Corinne (g)	21.9	27.4	41.9	48.5	58.4	68.2	76.9	75.9	69.2	52.7	38.0	28.2	50.6	101	—12	.....	.....
Deseret (a)	25.5	35.3	40.2	47.2	55.9	65.9	74.2	72.7	64.4	46.8	35.4	22.5	48.8	102	—11	May 14	Oct. 12
Fillmore	.....	.....	.....	49.9	58.1	70.2	78.6	76.7	71.8	54.4	43.5	28.3	.....	108	.....	May 4†	Oct. 12†
Fort DuChesne	14.0	30.4	39.4	46.4	53.8	64.0	70.8	68.9	63.8	52.4	34.7	.....	.....	100	—17	June 11†	.....
Green River	24.9	39.0	.....	56.7	65.6	75.7	.....	.....	.....	.....	35.8	.....	.....	.....	.....	Apr. 6	.....
Kelton (g)	19.4	34.3	41.6	47.6	50.6	69.3	80.1	72.9	66.5	48.6	36.9	28.1	50.4	106	—14	.....	.....
Lake Park	23.3	31.1	40.7	46.4	54.6	64.3	73.8	72.2	66.2	49.7	40.2	26.8	49.1	99	— 1	Apr. 28	Oct. 13†
Levan (b)	21.2	30.0	37.4	43.8	53.7	65.9	73.6	69.9	63.6	.....	38.2	21.0	.....	.....	.....	Apr. 28	Oct. 13
Loa	25.4	29.8	32.2	40.8	50.2	60.3	67.6	64.6	58.4	42.4	33.2	22.2	43.9	95	—19	June 12†	Sept. 10
Logan	.....	.....	.....	42.8	52.2	61.6	70.3	70.4	66.0	50.5	37.0	24.6	.....	96	.....	June 10†	.....
Losee (a)	24.6	31.0	39.0	44.4	52.8	62.4	70.6	68.0	61.9	46.7	33.4	25.4	46.7	100	—1	June 12	Oct. 11†
Manti (c)	.....	.....	.....	.....	52.8	68.0	70.6	68.0	63.2	.....	.....	18.6	.....	105	.....	May 17†	.....
Moab (a)	25.7	40.1	47.0	54.3	62.6	71.5	76.4	72.6	64.2	51.2	38.2	31.1	52.9	103	3	Apr. 28	Oct. 13
Mount Carmel (a)	30.0	35.9	41.4	46.5	55.5	61.3	70.1	70.3	63.8	50.6	34.6	31.3	49.3	99	2	May 4	Oct. 14†
Nephi	20.8	28.3	39.6	44.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ogden (g) [4]	24.1	27.3	41.7	48.1	56.7	66.0	78.9	80.6	73.2	56.4	43.3	31.1	52.3	100	2	.....	.....
Ogden (b) [5]	25.5	32.4	44.3	53.1	62.9	71.9	78.7	72.9	69.9	53.5	42.2	30.6	53.2	.....	.....	Feb. 24	Nov. 7†
Park City (b)	15.7	21.9	24.9	37.9	46.3	56.2	74.9	.....	.....	.....	.....	.....	.....	.....	.....	May 11†	.....
Parowan	30.9	35.8	42.7	46.6	56.7	66.6	72.8	72.0	.....	.....	40.2	.....	.....	102	— 5	June 12	.....
Promontory (g)	17.6	27.5	38.2	45.8	56.0	65.2	77.7	76.3	67.7	48.8	36.9	27.4	48.8	102	—16	.....	.....
Provo City (b)	20.6	30.7	41.4	.....	60.4	68.8	74.9	69.0	61.8	45.8	32.8	22.2	.....	.....	.....	.....	Oct. 13†
Richfield (a)	26.4	37.4	41.8	46.4	58.6	68.6	71.8	70.3	62.2	46.0	34.7	24.1	49.0	100	—12	June 12	Oct. 12†
Saint George (a)	37.8	.....	51.5	59.1	67.1	76.1	83.2	83.9	77.4	.....	.....	.....	.....	116	.....	Apr. 4	.....
*Salt Lake City	25.8	33.6	43.4	47.4	55.4	65.8	76.0	75.4	69.6	51.8	42.2	27.6	51.2	100	— 1	Apr. 28	Oct. 13
Scofield (a)	.....	27.2	38.4	40.7	45.4	53.0	60.3	59.0	53.8	38.6	28.6	.....	.....	88	.....	Frost every month	
Snowville	23.0	32.3	43.2	48.7	62.2	69.1	.....	.....	62.2	48.0	35.4	22.8	.....	.....	1	Mar. 26	Oct. 12
Soldiers Summit	.....	.....	.....	39.3	44.5	55.4	63.0	61.0	.....	.....	.....	.....	.....	95	.....	Frost every month	
Stockton (b)	21.1	28.7	38.0	45.2	53.7	63.4	71.5	68.3	61.9	42.8	35.3	23.4	46.1	.....	.....	Apr. 5†	Oct. 12†
Terrace (g)	20.3	33.6	45.7	50.6	62.8	72.2	83.5	81.3	.....	56.0	39.5	28.3	.....	99	.....	.....	.....
Thistle	24.8	34.6	41.7	47.4	51.2	61.7	67.8	.....	.....	46.2	.....	.....	.....	.....	—10	May 29†	.....
Vermont.																	
Brattleboro (a)	22.7	25.4	30.8	45.6	54.2	70.8	71.1	69.6	59.6	48.4	36.8	26.2	46.8	96	—12	May 1†	Sept. 21†
Burlington	20.3	22.3	26.4	44.4	55.0	68.4	71.2	69.0	62.0	49.4	38.2	23.2	45.8	92	—10	May 1†	Oct. 12

[1] Post hospital. [2] G. A. Duerler, jr. [3] G. H. Hutchins. [4] Southern Pacific R. R. [5] W. W. Crossman.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Vermont—Continued.																	
Chelsea (a)	15.7	18.8	21.8	37.2	47.1	60.1	62.2	61.1	53.0	41.5	29.7	16.5	38.7	86	—16	.....	.....
Enosburg Falls	15.6	17.9	22.4	40.8	52.1	65.6	68.0	66.2	57.8	44.8	34.1	17.6	41.9	93	—30	May 10	Sept. 20
Hartland	19.2	21.4	26.4	40.9	51.2	63.4	65.8	65.0	55.2	44.0	33.8	19.3	42.1	90	—17	May 21	Sept. 30
Jacksonville	19.8	23.8	27.2	41.0	50.6	.....	.....	.....	.....	.....	.....	23.6	.....	.....	—16	.....	.....
Lunenburg (a)	18.4	22.6	25.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Northfield	16.5	18.6	23.2	39.4	49.6	64.9	66.0	64.8	56.0	44.3	32.8	17.8	41.2	92	—19	May 22	Sept. 20
Saxtons River (a)	20.9	22.7	.....	42.2	53.5	68.0	67.9	66.5	57.6	44.3	33.4	.....	.....	96	—17	.....	.....
Simonsville	.....	.....	.....	.....	51.7	65.9	66.4	64.8	54.9	42.8	30.4	18.4	.....	91	.....	.....	.....
Strafford (a)	19.1	21.1	24.1	41.0	48.2	64.5	68.4	65.4	57.7	45.3	32.3	19.5	42.2	88	—13	May 17	Oct. 10
Vernon (f)	21.9	24.3	28.7	46.5	54.6	71.5	72.8	71.4	60.2	47.8	34.2	23.6	46.5	96	—12	.....	.....
Wells	19.2	19.8	23.1	.....	51.1	65.6	67.1	65.2	56.1	44.4	33.3	19.4	.....	90	—14	.....	.....
Woodstock	.....	.....	.....	.....	.....	67.2	68.3	66.9	56.7	44.6	33.4	18.9	.....	96	.....	.....	.....
Virginia.																	
Ashland (a)	32.3	40.1	41.5	54.1	66.8	75.5	75.3	76.8	67.1	55.0	45.0	36.3	55.5	99	4	Apr. 11	Oct. 3
Avon	34.7	39.4	41.4	53.4	64.6	75.3	75.2	75.4	65.6	55.6	43.7	35.6	55.0	102	3	Apr. 16	Oct. 28
Bedford City	34.7	41.1	42.1	53.2	64.2	75.1	74.7	76.1	66.6	55.2	43.2	37.7	55.3	95	13	Apr. 11	Oct. 6
Big Stone Gap (a)	31.7	38.8	39.4	52.8	58.9	67.4	69.4	68.6	60.6	50.6	39.4	32.3	50.8	93	2	Apr. 23	Oct. 5
Birdsnest (a)	38.9	40.9	40.8	54.0	66.7	77.0	76.9	79.1	70.3	58.0	47.5	37.9	57.3	95	14	Apr. 12	Oct. 27
Blacksburg (a)	30.8	38.5	38.8	49.7	63.0	73.2	73.3	72.1	.....	.....	39.1	33.9	.....	95	7	Apr. 15†	.....
Cape Charles (a)	39.6	40.7	41.8	54.5	66.0	76.6	76.7	77.1	.....	.....	.....	.....	.....	96	.....	Mar. 22	.....
*Cape Henry	41.2	42.3	43.2	54.6	66.1	75.4	75.4	77.7	70.2	60.0	49.4	40.0	58.0	98	19	Mar. 22	Nov. 23
Charlottesville	34.1	40.0	41.6	54.8	65.6	76.6	.....	77.3	66.4	56.1	45.0	38.4	.....	.....	4	Apr. 12	Oct. 31
Dale Enterprise (a)	35.9	52.6	36.2	51.7	64.1	74.9	75.3	75.7	66.9	53.8	41.4	30.8	53.3	97	— 8	Apr. 13	Oct. 6
Fort Monroe	38.8	40.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Myer	31.8	35.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Healing Springs	.....	.....	.....	.....	.....	66.2	72.5	70.0	.....	.....	.....	.....	.....	92	.....	.....	.....
Hot Springs	.....	.....	36.5	48.3	63.4	.....	67.7	68.8	60.9	50.2	37.2	.....	.....	87	.....	Apr. 30†	Oct. 6
Lexington	31.6	38.3	40.9	.....	62.9	73.3	74.0	73.4	63.4	53.0	41.2	33.9	.....	98	— 2	Apr. 16	Oct. 6
*Lynchburg	35.1	40.6	42.7	53.8	66.2	76.5	76.8	77.5	67.2	56.9	44.7	38.0	56.3	100	10	Apr. 11	Oct. 28
Marion	31.9	39.1	38.6	53.2	61.5	72.2	72.4	71.2	62.8	53.4	40.4	34.4	52.6	93	2	Apr. 16	Oct. 6
Mossing Ford (b)	.....	.....	40.9	53.8	.....	74.6	75.7	75.9	67.2	54.8	43.8	.....	.....	95	.....	Mar. 21†	Oct. 28
*Norfolk	40.6	42.0	43.6	56.0	67.0	76.4	76.4	79.2	70.7	59.2	49.2	40.0	58.4	99	19	Mar. 22	Nov. 6
Nottoway	34.0	39.5	42.0	53.5	65.8	77.0	78.2	80.0	68.9	56.1	44.4	36.3	56.3	106	5	Apr. 16	Oct. 6
Petersburg	35.0	39.1	41.3	55.2	.....	77.6	76.6	78.5	69.4	56.8	46.0	36.0	.....	100	8	Apr. 13	Oct. 3
Richmond	39.2	43.9	44.9	57.7	69.9	78.4	78.4	80.0	69.7	59.0	47.1	38.9	58.9	102	9	Apr. 11	Oct. 26
Salem	35.4	41.7	44.3	53.4	66.2	76.0	75.8	.....	66.8	58.4	45.0	38.6	.....	.....	13	Apr. 11	Oct. 20
Spottsville (a)	37.5	40.2	42.3	54.2	66.8	75.9	75.4	77.0	67.0	54.1	44.8	35.5	55.9	98	0	Apr. 16	Oct. 26
Stanardsville	33.6	38.9	41.0	52.8	64.9	74.6	75.4	75.6	66.1	56.0	43.3	35.7	54.8	101	11	Apr. 13	Oct. 26
Staunton (a)	32.4	37.1	38.4	50.8	62.6	72.2	73.3	73.8	63.1	52.9	41.6	33.2	52.6	98	0	May 9	Oct. 6
Warm Springs	.....	.....	30.8	42.6	53.6	64.3	63.3	67.5	.....	.....	.....	.....	.....	.....	.....	May 31†	.....
Wytheville	.....	.....	.....	.....	.....	.....	.....	70.6	60.9	52.0	40.5	34.2	.....	.....	.....	.....	Oct. 5
Washington.																	
Aberdeen (a)	41.0	42.0	46.4	46.0	53.1	54.9	57.8	58.3	56.4	51.0	45.1	40.4	49.4	84	25	Apr. 6	Oct. 15†
Centerville	40.7	41.7	47.4	47.2	57.3	61.8	66.3	69.4	64.7	.....	.....	.....	.....	99	.....	May 4†	.....
Chehalis	39.4	41.8	48.2	46.8	55.8	59.4	61.6	63.4	59.7	51.4	44.7	37.9	50.8	96	24	May 3	Nov. 13†
Chelan	.....	29.4	44.4	48.4	58.4	68.6	70.9	72.8	59.7	51.2	39.0	25.6	.....	98	.....	Apr. 11	Oct. 16
Colfax	29.3	38.2	.....	44.5	54.1	59.3	62.7	66.2	58.2	50.4	41.5	26.4	.....	98	—19	May 4†	Oct. 16
Coulee City	21.1	31.0	45.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dayton	33.4	39.0	47.4	46.6	56.0	62.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 2†	.....
East Sound	40.0	42.3	47.6	46.8	54.2	60.0	61.0	63.2	58.5	50.6	44.9	39.2	50.7	81	16	Apr. 7	Nov. 17
Ellensburg	32.9	35.2	44.2	44.2	53.8	60.8	65.7	65.2	57.4	47.8	37.6	.....	.....	94	.....	May 6†	Sept. 22†
*Fort Canby	42.7	44.0	47.6	47.2	52.6	55.5	58.0	58.8	56.6	54.2	47.7	42.6	50.6	78	29	None	Dec. 17
Fort Canby	40.7	40.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Simcoe	32.7	41.3	50.4	49.8	61.1	69.7	72.2	73.8	65.8	53.6	41.8	29.8	53.5	102	8	Feb. 18†	Oct. 16†
Fort Spokane	22.4	34.0	45.4	46.0	57.0	65.0	66.8	68.5	59.1	48.2	36.7	25.8	47.9	104	— 6	May 3†	Oct. 12†
Fort Townsend	38.5	39.9	45.6	45.8	52.4	57.2	58.4	60.6	57.1	50.0	44.1	38.0	49.0	85	18	Apr. 19†	Oct. 16
Fort Wallawalla	32.6	40.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lapush	41.4	35.0	38.6	36.1	44.0	46.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 20	.....
Madrone	40.0	42.0	48.4	48.2	55.8	59.5	61.6	62.6	59.0	51.6	45.4	39.8	51.2	89	25	Apr. 11	Oct. 16
Moxee Valley	.....	.....	48.0	51.0	63.5	69.3	72.7	70.8	62.1	49.8	39.8	27.4	.....	102	.....	Apr. 23	Oct. 11
*Neah Bay	43.2	42.8	46.5	46.8	52.2	55.8	58.7	58.2	56.0	51.2	46.2	41.7	49.9	74	21	Apr. 7	Nov. 26
Olga (a)	40.8	41.7	47.5	45.9	53.6	57.7	57.9	57.2	56.8	51.2	44.6	39.5	49.5	83	22	May 7	Nov. 16
*Olympia	39.4	42.0	47.9	47.1	55.4	59.8	61.4	63.2	59.8	51.6	46.0	38.5	51.0	92	24	Apr. 19	Nov. 20
Pine Hill (a)	.....	.....	.....	.....	.....	.....	68.8	69.7	61.3	49.4	43.1	33.1	.....	.....	.....	.....	Oct. 28
Pomeroy	33.2	40.0	47.2	46.0	58.0	65.6	71.0	72.2	67.6	57.8	45.4	33.4	53.1	96	0	Apr. 12	Nov. 20
*Port Angeles	38.8	40.0	44.1	44.6	50.3	54.6	54.8	57.4	54.2	48.2	43.3	38.4	47.4	82	18	Apr. 18	Oct. 27
*Pysht	.....	.....	.....	.....	.....	.....	.....	57.8k	.....	43.5h	.....	39.1n	.....	.....	.....	.....	Nov. 16
Rosalia (a)	.....	33.4	41.2	40.7	52.0	59.5	62.9	64.7	58.2	48.0	38.3	26.8	.....	96	.....	May 3†	Oct. 12
Seattle	41.5	44.2	50.2	51.4	57.8	62.2	63.4	66.7	62.0	54.1	49.7	42.0	53.8	94	26	Apr. 7	Nov. 16
Sehome (a)	38.8	40.5	48.5	47.0	53.8	58.7	57.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Spokane	26.2	34.4	44.4	44.2	54.8	62.6	66.0	68.4	60.4	51.0	40.3	27.6	48.4	96	— 5	May 3	Oct. 13
Tacoma (a)	40.4	42.2	48.2	48.1	55.1	60.6	61.8	64.3	60.8	50.4	45.2	38.8	51.3	92	22	Apr. 7	Oct. 16†
*Tatoosh Island	42.2	43.2	45.5	45.2	50.3	52.6	54.6	55.8	54.3	51.2	45.8	41.9	48.6	71	22	Feb. 8	Nov. 26
Vancouver Barracks	39.4	43.2	49.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vashon (b)	39.7	40.9	48.6	48.5	55.6	58.6	62.8	64.0	61.2	.....	49.4	44.8	.....	90	.....	May 25†	Nov. 16
Waterville	19.8	29.9	41.4	39.3	52.0	60.9	63.4	66.2	58.8	.....	33.4	21.4	.....	99	.....	May 6	.....
*Wallawalla	32.8	42.0	49.9	48.6	59.2	66.7	71.8	73.6	66.6	55.1	46.8	33.1	53.8	105	2	Apr. 8	Oct. 15
Wilbur (a)	.....	.....	44.4	42.0	49.7	58.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 18†	.....
West Virginia.																	
Alderson	30.7	39.4	37.4	51.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Beverly	30.3	36.0	35.0	51.0	59.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 30†	.....

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
West Virginia—Contin'ed.																	
Bluefield (a)								72.7	62.2	51.7	42.2	34.0					Oct. 5
Buckhannon [1]	28.8	37.1	37.5	49.0	61.6	72.2	70.7	70.8	61.7	50.0	40.0	28.4	50.6	95	—10	Apr. 30	Oct. 6
Central Station (c)						80.1	78.9	77.4	68.8	53.1	45.0	31.9		96			Oct. 6
Charleston (a) [2]				56.1	65.2	76.1	76.2									Apr. 13	
Danville (c)						73.4	73.8	71.2	68.7	54.0	42.4	33.8		94			Nov. 11†
Davis						67.3	67.2	65.6	58.6	49.2				92			Oct. 13†
Elizabeth	36.0	43.7		44.0												Apr. 15†	
Elkhorn	33.8	41.2	40.0	52.6	62.2	71.8	71.7	70.8	63.0	53.8	41.4			93		Apr. 24†	Oct. 6†
Ella (a)	25.6	34.8	33.4	48.5	59.5	72.1	71.7	71.2	64.4	52.2	38.6	28.6	50.0	91	— 2	Apr. 16†	Oct. 24
Glenville	28.6	38.2	37.9	51.3	61.7	72.9	72.6	71.9	64.0	53.8	40.2	29.4	51.8	93	— 6	Apr. 16	Oct. 6
Grafton	26.2	35.8	35.9	50.2	62.1	75.2	73.7	72.2	64.4	51.8	40.1	30.0	51.5	99	— 5	Apr. 16	Oct. 6
Harrisville			40.8	53.2	63.8			71.7	63.9					98		Apr. 30†	
Huntington	29.0	41.8	40.0		63.1	76.2	75.6	74.0	64.0	56.6		31.5		95			Oct. 28†
Kingwood (a)	29.8	35.9	34.7	48.8	58.8	71.3	68.9	67.4	62.7	48.8		26.4		93	— 5	Apr. 16	Oct. 6†
Martinsburg (a)	30.7	35.2	36.6	50.9	65.2	77.6		77.6	67.9	57.6	46.8	35.2			— 4	Apr. 12	Oct. 7
Moorefield	31.1	35.0	38.0	48.4	62.0	75.2	75.1									Apr. 30†	
Morgantown [3] (a)	28.4	37.0	36.2	47.7			76.6	73.4	65.4	51.6	41.8	30.8			— 8	Apr. 13	Oct. 6†
New Martinsville (a)							76.8	71.7	64.5	52.5	41.2	29.0					Oct. 6†
Nuttallburg	33.0	37.8	40.4	53.8	65.8	74.8	75.0	74.8	67.5	55.0	43.2	34.4	54.6	98	3	Apr. 16	Oct. 29†
*Parkersburg	27.4	37.8	37.4	51.4	62.4	75.2	73.6	73.3	66.2	53.0	40.5	30.7	52.4	97	0	Apr. 15	Oct. 6
Parkersburg (a)	28.4	37.3		51.6	62.1	73.2	72.2	71.6	65.0	52.8	41.5	31.8		97	3	Apr. 20	
Piedmont (a)	28.6	33.6	34.6	48.1	60.6	70.8	71.4	72.3						95	— 2	Apr. 13	
Pleasant Hill (c)	23.8	30.6	31.4	44.8	55.6	70.9	66.9	66.4	57.2	46.2	36.1	27.8	46.5	90	— 6	Apr. 16	Oct. 6
Point Pleasant (a)	30.0		40.2	53.8			74.3		65.4	55.4						Apr. 15†	Oct. 30†
Romney (a)	30.5	34.7	34.6	49.4		73.0			64.3		40.7						
Spencer		39.6	37.8	54.7	69.7	80.8	76.8	74.0	65.3		49.6	37.2		98		Apr. 13	
Tannery (a)	25.2	34.4	33.7	49.2	60.3	72.1	71.2	71.6	62.7	49.4	38.7	27.4	49.7	97	— 8	Apr. 16†	Oct. 6
Wheeling [4]	30.0	38.9	38.5	54.0	64.2	78.0	76.3	75.6	67.4	55.8	43.4	33.1	54.6	97	2	Apr. 13	Nov. 6†
Wisconsin.																	
Amherst	10.8	20.0	26.3	40.3	49.9	63.4	72.2	65.4	59.8	50.2	26.6	14.3	41.6	94	—26		
Appleton	12.8	24.2	28.0	41.1	51.6				64.8	52.2	30.1	16.2			—14	May 9	Oct. 23†
Baraboo	13.4	24.2	27.2	41.7	50.3	64.2	70.2	68.0	60.0	50.0	28.8	17.6	43.0	93	—20	May 20	Oct. 5†
Barron	5.6	18.8	24.2	39.9	48.9	63.6	66.8	64.9	56.8	46.0	24.6	11.5	39.3	91	—39	May 27	Sept. 5
Bayfield	13.0	21.4	26.3	35.1	43.9	53.2	66.4	64.1	58.6	49.1	28.4	15.8	39.6	96	—17		
Beaver Dam	13.2	24.1	28.0	40.4	51.5	62.2	70.4	70.2	65.0	54.0	30.6	17.1	43.9	98	—14		
Beloit	14.8	27.4		44.9	53.4												
Berlin	15.6	30.1	29.8	44.1													
Black River Falls	10.6	23.5	27.9	41.8	51.3	65.2	69.6	68.5	60.0	48.7	27.2	12.9	42.3	98	—26	May 20†	Sept. 26
Butternut	11.4	18.2	23.2	39.0	48.4							8.4			—36		
Cadiz (c)	12.8	27.2	29.2	41.4	51.8	64.6	70.4	68.5	59.0	47.4	29.5	16.4	43.2			Apr. 24	Oct. 9†
Centralia	9.4	20.0	24.4	39.1	50.2	64.5	72.8	68.7	60.2	49.4	28.2	15.2	41.8	100	—25		
Columbus	13.1	25.6	29.6	44.1	52.6	65.4			60.7	48.4		16.2			—18		
Crandon	7.6	16.4	23.2	36.9	48.4	60.8		64.1	56.6	44.9	24.6	13.4			—30	May 27	Sept. 1
Delavan	15.2	28.4	29.7			65.6											
Delavan (near) (c)	11.8	24.8	25.4	39.9	50.5	63.2	69.1	65.8	56.8	46.6	30.0	18.0	41.8		—19		
De Pere	12.7	23.0	27.5	42.8	52.1	63.7	70.0	67.4	60.8	49.8	30.6	16.2	43.1	93	—19		
Dodgeville	10.6	22.9	27.8	42.4	51.2											May 19†	
Eau Claire	10.2	22.8	27.6	42.0	52.2	65.1			61.0	50.0	27.6	14.0			—34		Oct. 23†
Embarrass (a)	9.9	21.4	25.9	41.1	53.0	64.8	70.4	67.0	60.0	49.7	28.2	14.0	42.1	90	—26	Apr. 25	Oct. 5
Florence	9.4	17.4	23.4	35.3	49.2	61.0	66.8				26.3	14.3		95	—29	May 22	Oct. 5
Fond du Lac (a)	12.0	24.0	27.6	42.4	52.3	64.6	70.5	67.7	59.8	48.4	27.5	14.4	42.6	92	—26	May 21	Oct. 9
*Green Bay	12.4	22.0	27.1	41.2	51.3	63.6	70.6	67.9	60.6	50.2	29.8	16.7	42.8	94	—17	Apr. 29	Oct. 9
Hammond	13.6	22.7	26.8	41.8	50.2	63.8			61.3	50.8	27.0	16.0			—24		Oct. 8
Harvey	14.2	26.1	29.0	43.0	52.5	66.0	71.2	68.8	60.8	50.6	30.1	16.6	44.1	96	—13	May 8	Oct. 5†
Hayward	2.2	15.9	21.0	36.7													
Hillsboro	11.4	23.6	27.0	41.0	50.2	64.0	68.6	67.2	58.7	48.6	26.6	12.8	41.6	94	—25		
Hudson				45.5	53.2	66.2	71.2	66.6	63.6	49.2	29.7	16.8		96			
Janesville	17.7	28.4	31.0	43.8	53.4	66.2	72.9	70.7	61.6	53.2	30.6	18.1	45.6	94	—13		
Juneau	10.6	23.6	27.4	42.6	50.8	64.5		68.9	60.2	50.2	29.4	15.4			—18	May 8†	Oct. 5
Kœpenick (a)	9.8	22.0	27.0	43.0	55.6	68.2	72.0	67.0	59.3	49.8	27.8	15.8	43.1	98	—24	May 7	Oct. 5
*La Crosse	14.3	25.9	30.5	44.0	53.0	66.4	72.2	70.7	62.6	52.2	31.4	16.9	45.0	93	—20	May 20	Oct. 19
Lancaster	11.3	25.2	29.0	42.9	52.2	65.9	71.4	69.9	60.6	51.0				95		May 20	Oct. 23
Lincoln (b)	15.6	24.8	28.6	40.7		64.0	73.6	67.3	60.6	51.6	34.6	20.7				Apr. 12†	
Madison (a)	13.9	24.8	27.4	43.1	52.4	65.3	71.6	70.2	61.5	52.1	32.0	18.3	44.4	90	—11	Apr. 25	Oct. 24†
Manitowoc (a)	16.8	27.4	30.0	41.6	51.0	61.3	70.1	67.0	61.1	50.1	32.8	20.5	44.1	95	—18	May 21	Oct. 23†
Meadow Valley	13.4	24.0	28.0	41.8	51.2	65.2	70.9	68.6	59.6	49.8	27.6	14.0	42.8	96	—22	May 21	Oct. 10
Medford [5]	10.6	21.6	23.8	39.0	49.2	62.0	68.1	65.8	58.4	46.8	25.8	13.2	40.4	93	—28	May 27	Sept. 7
Menomonie	9.5	21.1	26.2	41.3	52.1	60.0	70.6	68.8	61.5	49.2	27.2	13.2	41.7	98	—30		
*Milwaukee	16.4	28.2	29.4	42.2	50.5	61.2	70.2	68.7	62.4	52.2	33.2	20.6	44.6	95	—10	Apr. 25	Oct. 5
Mineral Point				45.5	52.6					53.1	30.2	20.1					
Neillsville	10.2	23.5	25.8	40.7	50.6	63.7	68.6	66.5	58.2	47.8	27.3	14.5	41.5	92	—27	May 27	Sept. 6
New Holstein	11.4	24.8	24.0	40.7	50.9		71.5				27.6	15.0			—17	May 21	
Oconomowoc	13.6	25.6	28.4	43.9	52.4	65.4	71.2	69.3	62.1	51.0	30.8	16.4	44.3	93	—21	Apr. 29	Oct. 5
Oconto	14.0	23.6	28.0	40.4	51.3	63.4	69.4	66.1	59.8	49.4	30.8	17.8	42.8	93	—13	May 8†	
Osceola Mills (a)	9.4	20.8	26.9	40.2	50.1	62.8	71.1	68.6	61.6	50.4	27.7	12.4	41.8	94	—37	May 20	Sept. 26
Oshkosh	13.2	24.4	28.2	42.3	52.4	65.2	72.0	69.6	61.7	51.5	30.0	17.4	44.0	92	—16	Apr. 29	Oct. 23
Pepin	10.8	20.5	27.0	40.6						49.8	28.6	10.1			—29		
Peshtigo	12.2	21.5	25.8	39.0	50.8											May 8	
Phillips		18.0	24.0	33.5	46.2	60.8										May 27	
Plover (a)	9.0	19.8	23.4	39.7	49.2	62.8	70.9									May 21†	
Port Washington									63.4	51.8	34.2	20.8					
Prairie du Chien	17.3	28.6	33.1	45.2	55.6	68.6	72.8	72.6	64.2	53.8	30.9	18.1	46.7	98	—20		
Raymond								67.6	61.0	49.4	31.7	18.6					
Richland Centre	12.0	26.2	28.4	45.3	53.4	66.5	72.7	69.0	59.6	49.6	30.0			96		Apr. 29†	Oct. 5†
Rhinelander	8.0						67.4	65.3		45.0	24.1	13.9			—30		

1 Dr. E. T. Casteel. 2 G. W. Craig. 3 University of West Virginia. 4 C. Schnepf. 5 Dr. F. R. Zeit.

MONTHLY AND ANNUAL MEAN TEMPERATURE, ETC., 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual. Mean.	Annual. Extremes. Max.	Annual. Extremes. Min.	Killing frost. Last in spring.	Killing frost. First in autumn.
Wisconsin—Continued.																	
Sharon (*a*)	.....	.....	.....	.....	.....	.....	.....	.....	61.0	49.6	30.9	19.0	.....	.....	.....	.....	Oct. 4
Shawano	15.4	24.2	27.2	39.8	50.6	62.8	68.2	65.6	57.4	47.1	28.8	17.4	42.0	92	—20	.....	.....
Shell Lake	0.6	20.5	23.9	38.4	49.4	63.2	70.3	69.0	60.0	48.6	25.4	11.6	40.1	91	—33	.....	.....
Sparta (*a*)	11.9	23.6	30.6	44.5	53.0	65.0	70.2	67.8	60.8	49.3	29.4	14.3	43.4	95	—27	May 19	Oct. 5
Valley Junction	.....	.....	.....	41.2	51.4	65.0	68.3	66.2	59.1	48.7	26.4	12.2	.....	93	.....	May 20	Sept. 16
Viroqua	12.0	24.2	27.3	41.6	51.1	63.6	69.9	69.0	59.8	51.6	28.0	14.6	42.7	90	—20	May 20	Oct. 23
Watertown	.....	27.1	29.4	43.0	52.6	65.4	71.5	67.4	59.2	48.4	29.2	15.0	.....	90	.....	Apr. 29†	.....
Westfield	12.1	23.7	27.4	41.8	51.8	65.3	70.8	68.2	59.9	49.4	28.4	15.9	42.9	94	—23	Apr. 24	Oct. 23
Weston (*c*)	10.1	21.2	26.2	40.3	50.2	65.6	70.2	68.2	56.4	43.7	27.0	14.6	41.1	95	—24	Apr. 24	Oct. 8†
Whitehall	12.6	24.2	29.8	44.0	52.4	66.6	70.3	69.4	63.6	52.8	.....	18.6	.....	97	—32	May 20	Oct. 5
Wittenberg (*a*)	.....	22.1	25.4	38.9	50.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 27	.....
Wyoming.																	
Bitter Creek	25.0	30.7	34.6	34.1	52.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 2†	.....
Camp Pilot Butte	20.0	25.8	32.9	36.9	48.0	57.8	65.6	63.8	57.2	42.7	31.3	16.0	41.5	95	—27	June 4†	Aug.29†
Caspar	24.2	38.4	43.3	45.4	53.4	65.4	78.4	66.8	.....	52.4	.....	18.6	.....	112	—34	June 1†	Oct. 9†
*Cheyenne	24.4	30.4	32.2	39.9	46.0	59.2	67.2	66.0	61.2	45.2	37.2	25.2	44.5	93	—29	May 20	Aug.29†
Evanston	20.8	23.0	30.8	34.9	.....	55.5	62.9	62.8	58.6	42.2	31.1	15.4	.....	93	—24	June 13	Sept. 8
Fort D. A. Russell	23.1	29.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Fetterman	21.0	35.9	39.4	.....	52.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 8†	.....
Fort Laramie	21.8	29.0	36.8	44.4	49.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 15†	.....
Fort McKinney	23.6	28.6	34.3	38.8	45.6	59.2	67.7	68.6	63.2	50.8	38.6	25.1	45.3	99	—24	May 14†	Oct. 17†
Fort Washakie	18.6	26.9	36.0	39.0	47.6	58.5	67.7	65.3	59.4	46.1	34.4	16.4	43.0	94	—30	June 4†	Oct. 11†
Fort Yellowstone	16.4	24.7	27.7	32.2	42.1	51.6	62.2	60.8	54.9	41.6	29.3	16.2	38.3	91	—22	June 12†	Aug.26†
La Barge	1.1	22.8	33.6	40.4	50.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 31†	.....
*Lander[1]	16.8	25.8	34.4	37.4	46.8	57.4	66.3	64.6	59.0	44.2	33.6	15.8	41.8	93	—29	June 4	Sept. 11
Lander[2]	21.0	29.2	35.4	.....	48.0	58.0	68.4	67.2	62.6	48.6	34.0	21.5	.....	92	—26	June 13†	Oct. 17
Laramie	20.2	25.0	30.5	35.6	44.4	.....	62.8	61.3	.....	39.2	33.2	20.6	.....	.....	—29	May 22†	.....
Lusk	18.6	26.0	32.0	39.4	46.2	59.1	67.8	66.5	60.8	45.2	33.3	22.7	43.1	100	—25	June 4	Sept. 10
Saratoga	23.1	26.8	32.5	38.4	48.1	57.1	65.3	62.2	56.4	40.8	.....	17.6	.....	92	—26	June 12†	Aug. 29
Sundance (*b*)	12.0	22.2	29.8	38.1	43.0	56.8	68.2	66.6	60.2	.....	31.4	18.5	.....	97	—26	May 14	Sept. 17
Wheatland	23.6	34.2	36.2	44.0	50.8	66.2	70.6	71.6	64.6	56.3	40.3	35.8	49.5	109	—20	May 9	Sept.11†

[1] Weather Bureau. [2] J. S. Meyer.

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REPORT OF THE CHIEF OF THE WEATHER BUREAU.

PART V.

MONTHLY AND ANNUAL PRECIPITATION.

ALL STATIONS.—1891-'92.

The precipitation values given in the following tables have been taken largely from the records of voluntary (unpaid) observers. The paid stations of the Weather Bureau have been indicated by an asterisk (*). Probably two-thirds of the voluntary observers have standard rain gauges, the remainder having gauges similar in pattern to the standard, or, in a few cases, improvised gauges of their own construction.

The bracketed values have been obtained by a comparison of the data for adjacent stations and are to be considered only as an approximation to the true amount.

When two or more observers reside in the same city the reports of all are given. Foot-notes distinguish between the respective observers. The discrepancies between the amounts recorded by the separate observers are often considerable; in general they are due to differences in exposure, although at times one observer may make the last measurement of the month at 6 o'clock p. m., whereas another observer may defer it to 9 p. m., thus causing a difference in the amounts recorded on the last day of the month.

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MONTHLY AND ANNUAL PRECIPITATION (IN INCHES AND HUNDREDTHS) FOR 1891, COMPILED FROM THE REPORTS OF OBSERVERS OF ALL CLASSES, 1891.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Alabama.													
*Auburn	4.98	11.20	6.96	2.03	4.07	2.27	3.42	3.61	3.16	0.04	3.55	4.07	49.36
Bermuda	1.41	8.97	5.81	1.07	1.30	8.62	2.62	3.21	4.07	T.	3.25	2.31	39.64
Bessemer	7.52	10.10	8.56	0.83	0.73	4.85	7.68	2.43	1.21	0.04	6.91	4.05	54.91
Brewton	5.50	5.61	5.75	1.65	2.75	6.70	4.25	1.72	2.00	0.00	9.30	5.25	50.48
Camden						6.53	9.02						
Carrollton								0.74	1.25		7.21	9.03	
Chepultepec		7.78	9.45		0.00		3.76	1.23	0.23		3.00	4.80	
*Childersburg	4.87	11.69	9.07	1.42	1.42	7.40	4.35	4.30	2.43	0.00	3.07	4.93	54.95
Citronelle	2.96	8.20	5.96	0.92	3.70	4.43	4.52	1.92	2.23	0.18	5.48	5.19	45.69
*Claiborne Landing	2.00	5.44	7.46	2.77	4.67	6.50	3.26	1.90	[3.00]	[0.05]	3.85	3.45	[44.35]
Columbiana	6.77	8.31	8.09	2.32	2.38	5.14	6.30	3.93	3.11	[0.20]	[4.50]	[5.00]	[56.05]
*Cordova	4.73	8.20	10.46	1.31	0.57	5.49	7.35	2.93	3.00	0.75	6.23	6.71	57.73
Daphne											4.50	5.92	
*Decatur[1]	7.02	9.36	9.43	4.44	1.23	5.24	5.38	2.33	0.87	0.39	7.23	6.00	58.98
*Decatur[2]					1.13	5.00	5.83	2.07	1.20	0.36	6.66		
Double Springs	6.18	10.36	9.23	3.64	4.09	[7.00]	[6.00]	1.40	2.85	0.02	5.18	3.38	[59.38]
*Eufaula[2]					2.17	5.81	4.98	6.89					
Eufaula[3]							5.77	8.63	0.77	0.06	4.07		
*Evergreen					3.53	4.33	7.36	4.02	3.81	0.00	6.12		
Fayette					0.80	4.70							
*Florence[1]	3.00	10.59	11.80	4.43	1.45	4.76	6.56	1.29	0.57	0.18	5.98	4.50	55.11
Florence[4]										0.00	5.75	3.16	
*Fort Deposit					3.13	3.05	1.89	2.37	6.90	0.00	4.28		
*Gadsden	6.40	9.64	6.69	1.90	1.61	[7.50]	5.24	3.26	3.59	0.30	4.01	4.64	[54.78]
Goodwater			4.60		1.40	3.75	3.25		4.80				
Greensboro	6.75	8.15	8.86	1.75	2.02	3.61	4.82	0.31	1.70	0.23	5.17	5.03	48.40
Guntersville				1.05		2.56	6.45			0.60			
Jasper	8.11	8.72	11.62	1.91	1.57	4.98	8.51	3.08	2.73	0.31	8.03	6.12	65.69
Jemison												3.61	
Livingston[5]	7.46	6.68	9.90	1.94	2.24	2.50	6.75	0.96	0.87	T.	5.48	5.46	50.24
*Livingston[2]					3.57	4.76	6.99	0.95	1.01	0.02	5.37		
*Lynn					0.58	5.02	7.40	3.46	1.32	0.05	7.35	7.64	
*Marion					1.77	2.02	3.84	1.95			5.43		
Mayeville										0.48	5.45	6.54	
*Mobile	6.50	4.54	6.96	1.65	0.67	7.09	7.50	3.50	4.05	0.20	7.60	6.81	57.07
*Montgomery	3.57	8.43	9.73	1.96	3.46	6.44	4.36	3.01	2.15	0.01	3.32	4.01	51.05
Mountain Home	10.06	10.15	8.44	3.94	1.74	7.97	5.16	2.42	[0.85]	1.52	[5.50]	6.77	[64.52]
Mount Vernon Barracks	4.25	13.73	6.76	2.01	3.12	4.57	3.17	2.24	3.85	0.00	6.55	6.15	56.40
Mount Willing			6.90		3.56		4.14	2.15		0.15	5.03	4.60	
Newburg												4.34	
*Opelika					3.23	4.76	4.27	5.04	0.94	T.	3.38		
Orrville							4.54	1.71	1.98	0.00	3.24		
Oxanna									2.31	0.20	2.48	3.78	
*Pine Apple					1.68	2.80	5.46	1.08	3.25	0.00	3.52		
Pittsboro												3.00	
Pushmataha						3.27	7.15	0.88	0.82	0.00	3.76	4.25	
*Selma[1]	1.39		5.89				2.15	3.13	1.93	0.36	5.60	5.62	
Selma[2]					2.78	2.67	4.27	2.84	1.90	0.88			
Scottsboro												2.84	
*Sturdevant	[5.50]	[9.50]	9.64	1.55	2.31	7.43	5.36	2.91	3.19	0.00	1.36	3.33	[52.08]
*Talladega	5.58	10.13	9.07	0.93	2.17	4.37	3.31	7.11	1.57	0.04	2.74	4.94	51.96
*Tallassee Falls	[4.00]	10.38	9.45	1.87	1.90	4.83	2.79	3.44	2.29	0.06	2.15	5.48	[48.64]
Thomasville									1.60	0.00	5.11		
*Tuscaloosa	8.48	10.23	9.38	1.70	1.72	6.35	5.78	2.67	1.46	T.	5.93	4.88	58.58
Tuscumbia[6]	5.14	9.30	10.03	2.19	1.49	4.41	6.70	3.14	0.75	0.19	5.69	4.13	53.16
*Tuscumbi[2]					1.97	3.03	7.01	2.14	0.70	1.83	5.43		
*Union Springs	[3.00]	[8.50]	[8.30]	1.96	2.52	4.57	4.58	2.09	3.59	0.23	2.71	4.78	[46.83]
Uniontown	6.81	9.91	8.04	1.78	2.61	[4.50]	5.22	1.32	2.02	0.03	8.28	4.61	[55.13]
Valley Head	7.34	9.58	8.18	2.52	0.61	8.65	10.05	0.84	2.70	0.00	4.70	5.77	60.94
*Warrior		6.49	7.95	1.59	2.06	4.64	5.15	1.49	3.62				
Wiggins			7.96	2.92	2.57	3.55	4.28	1.75			4.53	6.65	
Alaska.													
Juneau City	20.51	2.68	5.68	6.32	4.01	2.22	2.37	13.01	10.30	11.19	10.44	7.03	95.76
Killisnoo	8.35	2.70	7.05	5.95	4.40	0.40	3.35	6.65	8.25	7.95	3.24	5.20	63.49
Metlakahtla											14.30	18.00	

[1] Special river observer.
[2] Special cotton region station.
[3] James Milton.
[4] Prof. C. W. Ashcroft and Nathan Parker.
[5] Prof. J. W. A. Wright.
[6] L. B. Thornton.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Arizona.													
Antelope Valley	0.00	9.29	.....	.....	0.00	.....	0.32	5.34	0.54	.....	T.	.....	.....
Arizona Canal Co.'s Dam (Phœnix)	0.01	4.81	0.37	0.00	0.12	0.00	0.77	0.72	0.18	0.00	0.00	0.23	7.16
Ash Canyon	0.38	5.11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Benson	0.38	1.31	0.15	0.00	[0.00]	[0.25]	1.19	1.81	0.34	0.00	0.00	0.38	[5.81]
Bisbee	0.55	1.69	0.75	0.00	0.72	0.31	[0.62]	8.55	0.67	0.00	0.00	0.48	[14.34]
Buckeye	0.00	0.47	T.	T.	0.10	0.00	0.06	T.	T.	0.00	0.00	0.00	0.63
Calabasas	0.35	1.58	0.30	0.00	0.54	2.55	1.68	d2.27	0.35	0.00	0.00	0.03	9.65
Casa Grande	0.65	1.90	0.00	0.00	0.00	0.00	0.90	0.00	0.00	0.00	0.00	0.17	3.62
Chino (Bangharts)	0.00	2.30	4.02	0.02	1.00	.....	.....	.....	.....	.....	.....	.....	.....
Chiricahua Mountains	1.50	1.33	0.00	[0.00]	0.50	0.70	1.19	8.93	8.24	[0.00]	0.00	3.15	[25.54]
Chloride	T.	4.77	0.78	0.94	3.72	.....	.....	.....	.....	.....	.....	.....	.....
Cooleys Spring	1.58	d9.45	2.21	0.12	1.91	0.24	.....	.....	.....	.....	.....	.....	.....
Cottonwood	2.10	6.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Crittenden	.....	.....	.....	.....	.....	.....	1.24	4.96	0.31	0.00	0.95	.....	.....
Dos Cabezos	0.40	2.16	0.54	0.00	1.15	0.34	0.43	2.05	0.79	0.00	T.	0.76	8.62
Dragoon	0.36	2.18	0.38	0.00	0.83	0.00	0.95	0.40	.....	.....	.....	.....	.....
Dragoon Summit	0.33	1.99	0.38	0.00	1.06	[0.25]	0.96	0.00	0.14	0.00	0.11	T.	[5.22]
Dudleyville	0.58	3.65	0.47	0.01	0.99	0.15	0.56	1.38	0.22	0.00	0.00	0.58	8.59
Eagle Pass	0.62	3.85	0.58	0.00	0.75	0.25	0.64	2.97	0.19	0.00	0.00	0.75	10.60
Farleys Camp	0.00	11.15	0.45	0.10	0.35	0.00	1.48	5.00	0.70	0.00	0.00	0.45	19.68
Flagstaff	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.70	.....	3.00	.....
Florence	1.17	4.99	0.11	T.	0.97	T.	0.21	0.23	0.24	0.00	0.00	0.32	8.24
*Fort Apache[1]	1.73	5.18	1.08	T.	1.17	0.24	[3]0.98	.....	.....	.....	.....	.....	.....
Fort Apache[2]	1.65	4.10	0.85	T.	0.36	T.	2.72	1.22	1.81	0.00	0.00	0.65	13.36
*Fort Bowie[1]	0.79	1.67	0.64	0.00	0.81	0.07	.....	.....	.....	.....	.....	.....	.....
Fort Bowie[2]	0.69	2.18	0.65	0.00	1.38	T.	0.28	1.00	0.61	0.00	0.00	1.26	8.05
*Fort Grant	0.82	3.78	0.28	0.00	1.40	0.10	1.19	[4]2.25	1.21	0.00	0.00	1.18	12.21
Fort Huachuca	0.15	1.80	0.74	0.00	1.24	0.18	1.34	4.25	1.12	0.00	T.	0.02	10.84
Fort Lowell	0.38	3.05	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Mohave	[0.00]	[4.20]	0.10	0.26	0.20	0.00	0.24	0.17	0.00	0.00	0.00	T.	[5.17]
*Fort Thomas	0.72	2.98	0.40	0.00	1.61	0.18	.....	.....	.....	.....	.....	.....	.....
Gila Bend[5]	0.00	2.60	.....	.....	.....	.....	T.	T.	0.00	0.00	0.00	0.25	.....
Gila Bend[6]	0.00	2.23	0.11	0.03	0.04	0.00	0.12	0.00	0.08	0.00	0.00	0.07	2.68
Grand Central Mill	0.15	0.73	0.35	0.00	1.16	1.21	0.97	3.20	0.27	0.00	0.00	T.	8.04
Holbrook[7]	0.20	1.78	1.24	0.00	0.52	0.00	0.36	0.99	0.78	0.00	0.00	0.89	6.76
*Holbrook[1]	0.05	1.67	1.13	0.00	0.22	0.01	.....	.....	.....	.....	.....	.....	.....
Lochiel	0.40	2.30	1.37	[0.00]	1.58	0.22	2.72	5.65	0.83	[0.00]	[0.00]	[0.03]	[15.10]
Maricopa[6]	0.02	2.33	0.00	0.01	0.00	0.00	0.13	0.39	0.13	0.00	0.00	0.00	3.01
Mount Huachuca	[0.25]	[1.70]	2.00	T.	0.93	1.69	1.21	2.99	0.87	T.	0.00	0.40	[12.04]
Natural Bridge	0.30	4.35	1.81	0.60	1.08	0.00	0.45	2.12	0.93	0.00	0.08	1.97	13.69
Navajo Springs	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.00	.....
New River	6.15	[13.00]	[c]0.43	[c]0.13	0.78	T.	1.16	0.84	0.27	0.00	0.00	0.32	[23.08]
Oracle	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.00	0.00	T.	.....
Oro	1.10	3.50	0.30	0.00	1.60	0.00	0.55	1.40	1.15	[0.00]	0.00	1.30	[10.90]
Pantano	0.40	1.88	0.85	0.00	0.43	0.00	2.22	3.29	0.50	0.00	0.00	0.30	9.87
Payson	0.41	7.85	1.00	0.00	0.49	0.25	0.54	2.17	0.99	0.00	0.00	1.81	15.51
Peoria	0.00	3.90	0.29	T.	T.	0.00	0.45	0.07	0.12	0.00	0.00	0.29	5.12
Phœnix[8]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.00	0.13	.....
Phœnix[9]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.14	.....
Red Rock	[0.40]	2.00	0.00	0.00	0.35	0.25	1.59	3.50	0.00	0.00	0.00	0.23	[8.23]
Reymert	.....	.....	.....	.....	.....	.....	.....	T.	.....	0.00	0.00	0.03	.....
St. Johns	.....	.....	.....	.....	0.23	0.06	0.80	.....	1.06	0.00	0.00	0.42	.....
San Carlos[2]	0.75	5.25	0.47	0.00	0.77	0.00	0.57	1.00	0.75	0.00	0.00	1.44	11.00
*San Carlos[1]	0.86	5.55	0.51	0.00	1.04	0.06	.....	.....	.....	.....	.....	.....	.....
San Simon	0.05	0.47	0.30	0.00	0.20	0.54	0.48	0.00	1.18	0.00	0.00	0.52	4.04
Show Low	1.50	3.00	1.10	0.20	1.00	0.50	1.75	1.05	1.28	0.32	[0.00]	[0.60]	[14.30]
Signal	0.00	4.87	T.	0.12	0.25	0.00	T.	0.77	0.48	0.00	0.00	0.66	7.15
Simmons	T.	.....	T.	T.	2.10	0.00	.....	.....	.....	.....	.....	.....	.....
Springerville	0.25	0.90	0.40	.....	1.05	.....	.....	0.75	.....	.....	.....	.....	.....
Strawberry	0.33	7.63	1.59	[0.60]	1.00	0.31	0.80	3.15	1.22	0.00	0.00	1.22	[17.85]
Tempe	0.00	3.60	T.	T.	0.28	0.00	0.45	[0.50]	0.15	0.00	0.00	0.19	[5.17]
Teviston	0.02	5.25	1.25	0.00	2.50	0.00	1.75	0.90	0.70	0.00	0.00	0.05	12.42
Texas Hill	0.00	2.50	0.00	0.00	0.00	0.00	0.11	0.65	0.20	0.00	0.00	[0.05]	[3.51]
Tip Top	0.00	13.30	0.67	0.18	0.97	0.00	.....	.....	.....	.....	.....	.....	.....
Tombstone	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.00	0.00	0.11	.....
Tucson[10]	0.16	3.28	0.16	0.00	0.22	0.27	0.38	2.07	0.48	0.00	0.00	0.28	7.30
Tucson[6]	0.12	2.08	0.17	0.00	0.18	0.22	0.70	2.26	0.65	0.00	0.00	0.23	6.61
*Tucson[1]	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.00	T.	0.25	.....
Walnut Grove	0.00	1.13	0.60	0.00	1.10	0.00	0.70	0.55	0.44	0.00	0.00	0.70	5.22
Walnut Ranch	0.87	[1.70]	0.51	[0.00]	0.92	0.29	0.30	3.85	0.88	0.00	0.00	0.86	[10.18]
Whipple Barracks	0.00	5.96	0.86	T.	0.27	0.00	1.86	3.04	1.48	0.00	0.00	1.19	14.66
Willcox[6]	0.54	2.45	0.26	0.00	0.87	0.07	T.	2.10	0.22	0.00	0.00	0.85	7.36
*Willcox[1]	0.47	2.37	0.46	0.00	0.82	0.14	.....	.....	.....	.....	.....	.....	.....
Wilgus	0.90	1.70	0.40	0.00	0.85	0.30	2.90	2.43	1.03	0.00	0.05	0.45	11.01
Wood Canyon	0.30	3.50	2.90	.....	.....	1.00	2.90	1.50	.....	.....	.....	.....	.....
Woodruff	0.50	2.00	2.63	0.00	0.30	0.00	0.10	0.70	1.30	0.00	[0.00]	0.50	[8.03]
Yuma[6]	0.00	2.53	0.00	0.00	0.00	0.00	0.04	0.00	0.03	0.00	0.00	[0.05]	[2.65]
*Yuma[1]	0.00	2.53	T.	0.00	T.	0.00	0.04	0.05	T.	0.00	0.00	0.05	2.67
Arkansas.													
*Arkadelphia	[7.10]	[5.50]	[4.00]	[5.40]	3.54	5.82	9.12	2.87	2.38	0.69	3.84	7.41	[57.67]
*Arkansas City	3.29	7.87	8.56	1.38	2.17	2.89	6.89	3.02	0.27	0.49	4.45	6.98	48.26
Black Rock	.....	.....	.....	.....	.....	.....	.....	3.79	0.38	0.54	8.25	2.96	.....
Brinkley	6.94	1.96	5.63	1.00	1.31	4.69	8.31	4.49	0.40	T.	8.19	5.67	48.08
*Camden	6.22	4.00	6.57	2.69	3.36	2.26	5.14	2.23	1.45	0.30	3.62	6.36	44.82
Conway	5.37	3.79	5.64	2.66	2.01	6.71	8.47	1.63	0.67	2.50	5.16	4.26	48.87

[1] Weather Bureau.
[2] Post surgeon.
[3] Record after July is that of post surgeon.
[4] Incomplete.
[5] D. Murphy.
[6] Pacific Railway system.
[7] David Rope.
[8] T. W. Hine.
[9] H. F. Adams.
[10] E. L. Westmore.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Arkansas—Continued.													
Corner Stone									0.20	1.08	4.37	4.47	
Dallas	7.36	1.94	4.09	2.84	3.63	2.87	8.55	5.80	2.33	0.33	2.39	4.69	46.82
*Dardanelle	5.90	1.82	3.62	2.85	3.41	4.20	7.05	1.80	1.00	0.20	5.28	3.44	40.57
Devalls Bluff	6.04	2.77	7.15	0.41	0.55	3.38	4.66	2.10	0.45	0.01	5.97	3.31	36.80
Eldorado	[5.80]	[5.10]	[5.80]	1.15	1.69	1.25	4.32	4.75	0.36	0.01	4.77	6.08	[41.08]
Fayetteville	1.29	1.12	1.98	2.70	3.17	5.07	5.43	1.18	1.55	0.58	8.40	2.11	34.58
*Forrest City	6.84	2.60	6.70	2.49	1.59	4.13	5.44	3.69	0.53	0.07	8.43	6.56	49.07
*Fort Smith	3.69	0.75	4.32	3.66	2.68	4.69	9.88	1.80	0.87	0.39	5.35	2.41	40.49
*Fulton	5.63	1.54	1.97	2.37	3.01	1.39	4.02	0.34	2.14	0.12	3.06	3.92	29.51
Gaines Landing								1.76	0.00	1.12	5.51	6.36	
Harrisburg	5.08	3.30	7.57	3.86	[2.00]	2.98	3.83	4.05	0.00	0.33	9.10	[3.20]	[45.30]
Harrison											2.88	2.92	
*Helena[1]	5.75	4.49	8.80	2.44	3.02	4.42	7.68	4.52	0.38	1.21	4.21	7.46	54.38
*Helena[2]	9.03	4.57	7.91	2.29	2.94	4.06	9.32	3.10	0.31	1.19	3.94	6.66	55.32
Hope										0.52	4.04	6.35	
Hot Springs	7.00	4.29	7.91	3.32	5.37	5.16	12.86	3.09	0.82	0.50	6.02	6.75	63.00
Lead Hill	2.25	1.60	3.00	3.71	1.97	6.62	2.10	2.37	0.33	0.93	8.85	1.48	35.21
*Little Rock	7.68	3.99	5.48	3.29	2.38	2.81	9.23	2.66	0.87	1.30	5.32	6.40	51.41
Lonoke	6.94	1.90	6.94	1.12	1.31	3.50	11.75	2.69	0.12	0.25	5.87	7.50	49.89
Luna Landing	5.10	7.37	6.06	2.90	5.61	3.00	10.92	1.50	1.00	1.68	5.47	3.57	54.18
Madding								3.37	0.37		6.00		
*Malvern	5.05	1.30?	4.13	3.70	2.85	2.68	7.20	e3.90	2.09	0.26	6.00	[6.70]	[45.86]
Monticello					3.70	3.61	8.66	4.44	1.00	0.40	5.21	4.02	
Mount Nebo	5.54	1.69	2.54	2.66	3.74	2.87	8.73	1.59	0.53	0.00	4.00	3.20	37.09
New Gascony						k3.35	9.02	3.28	0.60				
*Newport[1]	5.61	4.10	5.39	1.56	1.79	7.05	4.66	2.05	0.65	0.55	9.01	4.91	57.93
*Newport[3]	5.19	3.08	5.28	2.76	1.62	6.13	4.17	2.68	0.54	0.49	8.96	3.23	44.13
Osceola	6.33	3.14	8.82	2.87	2.46	3.91	3.99	2.50	0.78	1.00	10.03	5.58	51.41
Ozark										0.42	4.95	4.47	
Ozone	3.47	1.50	3.79	4.90	4.82	4.95	7.72	0.95	0.92	0.65	9.92	4.98	48.57
Paragould	[5.50]	2.07	5.32	2.00	2.70	4.85	[1.50]	3.00	0.50	0.40	0.95	[2.80]	[31.59]
*Pine Bluff	4.19	1.04	6.87	1.67	3.88	2.09	9.92	0.25	0.28	2.54	5.12	4.86	43.61
*Prescott					2.44	0.62	4.50	3.98	3.12	0.25	4.14		
Rogers	[1.30]	2.20	1.51	4.03	4.34	3.91	3.83	3.04	1.01	1.02	[7.60]	1.99	35.78
*Russellville	5.62				3.80			0.73	0.70				
Stuttgart	6.98	2.62	5.92	1.80	1.55	4.54	12.11	3.10	0.63	0.43	5.57	5.08	50.33
*Texarkana	2.08	6.47	3.14	4.42	2.29	3.17	4.42	3.73	5.80	0.00	3.27	[3.90]	[42.69]
Winslow	4.17	1.59	2.28	3.04	3.44	5.39	8.89	1.96	0.61	0.86	6.82	3.39	42.44
California.													
Antioch	0.41	0.55	2.01	1.14	0.00	0.36	0.00	0.00	0.75	0.75	0.73	4.43	15.15
Aptos	1.08	13.16	3.01	2.84	0.20	0.00	0.00	0.00	1.00	0.07	0.27	7.64	29.27
Arcata	3.62	10.07	7.13	6.86	0.75	[1.55]	[0.30]	[0.30]	[1.10]	1.82	3.33	11.38	[48.11]
Athlone	0.34	2.46	1.10	1.39	0.00	0.00	0.00	0.00	0.18	1.13	0.05	4.19	10.84
Auburn	0.88	6.80	5.40	2.23	0.88	0.69	0.00	0.00	0.00	1.33	0.95	7.36	26.52
Bakersfield[4]	0.20	1.20	0.25	0.27	0.22	0.02	0.00	0.00	0.12	0.00	0.20	0.18	2.66
Bakersfield[5]											0.10	1.08	
Ballast Point Light-House	[0.50]	4.90	0.70	1.10	0.60	0.00	0.00	0.00	0.00	0.00	0.09	0.70	[8.59]
Barstow	[0.00]	2.47	T.	0.05	T.	0.00	T.	0.06	0.08	0.00	T.	0.25	[2.91]
Beaumont	0.00	8.70	1.07	1.72	2.43	0.00	0.00	1.87	0.48	0.00	0.23	2.43	18.93
Belmont	0.00	[8.00]	0.00	0.00	0.00	0.00	0.00	0.00	[0.50]	[0.05]	0.00	0.00	[8.55]
Benicia Barracks	0.65	7.81	1.04	2.17	0.67	0.07	0.00	0.00	0.98	0.03	0.26	4.12	17.80
Berendo	0.62	2.44	1.17	1.26	0.00	0.00	0.00	0.00	0.30	0.22	0.10	3.47	9.58
Berkeley	1.13	10.68	3.17	3.42	1.61	0.38	0.44	0.00	0.74	0.18	1.01	6.22	28.98
Bishop Creek	0.00	3.70	0.28	0.00	2.90	0.00	0.00	0.03	0.19	0.00	0.00	3.52	10.62
Boca	1.25	11.80	2.50	1.70	[1.40]	[0.25]	[0.05]	0.00	0.60	0.00	0.25	8.30	[28.10]
Borden	0.40	2.48	0.77	0.69	0.00	0.00	0.00	0.00	0.04	0.00	0.21	2.97	7.56
Boulder Creek	2.46	34.03	5.57	6.81	2.40	0.00	0.08	0.00	1.17	0.03	1.06	11.97	65.58
Brentwood	0.42	4.03	3.80	1.55	0.15	0.03	0.00	0.00	0.30	0.00	0.22	3.34	13.84
Brighton	0.47	4.64	2.22	1.69	0.53	0.10	0.00	0.00	0.00	0.15	0.14	3.41	13.35
Byron	0.25	4.73	1.99	1.04	0.38	0.06	0.00	0.00	0.27	0.05	T.	3.73	12.50
Caliente	0.19	2.83	0.40	1.60	0.00	0.00	0.00	0.00	0.53	0.00	0.32	3.55	9.42
Calistoga	1.65	13.84	1.45	3.20	1.70	0.00	[0.00]	0.00	0.47	0.30	0.75	8.56	[31.92]
Campo	0.00	13.30	0.50	1.20	0.75	0.00	0.00	6 16.10	0.00	0.00	0.25	[3.21]	[35.31]
Cape Mendocino Light-House	[3.30]	9.07	5.52	8.92	4.99	2.45	0.00	0.00	3.22	10.00	3.34	[14.00]	[64.81]
Castroville	0.48	5.89	1.35	3.14	0.28	0.07	0.00	0.00	0.21	0.12	0.33	4.44	16.31
Centerville	0.65	4.72	2.57	2.23	1.10	0.06	0.00	0.00	0.21	0.06	0.37	6.45	18.42
Chico	1.36	8.76	1.23	1.78	0.20	0.56	0.15	0.00	0.16	0.34	0.46	4.39	19.79
Cisco	2.20	11.88	6.45	3.70	2.25	3.75	0.20	0.00	0.21	1.00	1.76	*2.83	36.23
Claremont					0.65	T.		0.00	0.00		0.00	1.66	
Colegrove (Cahuenga Valley)	0.23	10.14	0.64										
Colfax	1.95	14.60	9.60	2.45	1.70	2.60	0.90	0.00	0.00	0.40	1.06	11.04	46.30
Colton	0.00	6.48	0.25	0.80	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.87	9.30
Corning	0.70	11.80	1.52	2.13	1.15	0.45	0.00	0.00	0.00	0.50	0.10	2.91	21.26
Crescent City	5.23	20.55	8.14	9.38	5.47	4.20	0.71	0.24	2.96	4.12	6.80	12.56	80.36
Crescent City Light-House	[5.20]	17.23	8.58	9.07	4.86	4.91	0.00	0.42	2.97	3.33	6.13	11.86	[74.58]
Davisville	1.10	10.55	1.45	1.68	0.70	0.00	0.00	0.00	0.00	0.00	0.47	2.51	18.46
Delano	0.18	1.99	0.57	0.27	0.05	0.19	0.00	0.00	0.38	0.00	0.16	1.69	5.39
Delta	3.72	13.70	2.06	8.95	4.76	1.98	0.75	0.00	1.31	2.24	1.99	7.21?	[49.67]†
Downey	0.35	9.39	0.00	0.82	0.14	0.00	0.00	0.00	0.00	0.00	0.00	1.97	12.67
Drytown												6.28	
Dunnigan	0.59	9.60	0.66	2.09	1.75	0.00	0.00	0.00	0.45	0.00	0.48	3.18	18.80
Dunsmuir	[0.55]	2.59	2.70	4.95	3.07	2.88	0.67	0.07	1.52	2.13	2.32	9.65	[33.10]
East Brother Light-House	0.25	5.48	0.76	1.58	1.01	0.03	0.00	0.00	0.55	0.11	0.42	2.40	12.59
Edgewood	0.55	2.45	0.18	1.96	[2.40]	1.45	0.67	0.05	0.84	0.43	0.20	2.80	[13.98]

[1] Special river observer.
[2] A. J. Gaschew.
[3] R. C. McMann.
[4] Pacific Railway system.
[5] W. A. Webster.
[6] Cloudburst; rain-gauge washed away; record incomplete.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
California—Continued.													
El Casco	.....	.....	.....	.....	.....	.....	.....	.....	0.00	0.00	0.00	0.00	.....
El Dorado	1.07	6.93	6.71	3.52	0.93	0.95	0.00	0.00	0.09	0.85	1.08	9.09	31.22
Elmira	0.75	8.87	1.65	1.72	0.50	0.00	0.00	0.00	0.35	0.00	0.27	4.92	19.03
El Verano	1.42	9.56	1.91	2.86	1.28	0.30	0.59	0.00	0.40	0.28	0.57	7.67	26.84
Emigrant Gap	1.70	[11.80]	4.55	3.15	2.70	2.40	0.00	0.00	0.00	0.20	2.40	12.90	[41.80]
Esparto	0.58	11.09	0.63	2.14	0.54	0.27	0.00	0.00	1.11	0.00	0.30	2.84	19.50
*Eureka	3.33	9.81	5.83	6.37	1.55	1.53	0.29	0.31	1.45	1.64	2.72	10.97	45.80
Evergreen	0.58	4.57	2.18	1.98	0.55	0.07	0.00	0.00	0.35	0.20	0.25	4.98	15.71
Farmington	0.43	6.35	4.04	1.65	0.40	0.00	0.00	0.00	0.00	0.08	0.24	4.01	17.20
Farralton Light-House	1.17	5.80	0.24	2.60	0.73	0.30	0.00	0.00	0.50	1.30	0.88	5.18	18.70
Felton	1.26	21.69	6.43	4.07	1.24	0.00	0.00	0.00	1.46	0.42	1.20	14.08	51.65
Fernando	0.30	6.32	1.23	0.96	0.98	0.00	0.00	0.00	0.12	0.00	0.00	1.03	10.04
Florence	0.00	8.00	0.19	0.96	0.17	0.00	0.00	0.00	0.00	0.00	0.00	1.95	11.27
Folsom City[1]	0.60	4.56	5.29	2.22	1.58	0.46	0.10	0.00	0.00	0.20	0.78	4.98	20.77
Folsom City[2]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.54	.....
Fort Bidwell	[0.50]	3.98	3.83	1.39	1.57	2.73	1.55	0.19	0.13	0.19	1.57	2.76	[20.39]
Fort Gaston	4.38	14.26	5.83	6.19	3.10	1.62	0.70	0.00	1.01	3.47	5.56	18.21	64.33
Fort Mason	0.79	9.42	1.55	2.91	1.27	0.10	0.11	0.00	0.77	0.04	0.55	5.28	22.79
Fresno[1]	0.72	2.03	0.81	0.55	0.03	0.02	0.00	0.00	0.39	0.00	[0.21]	3.08	[7.84]
*Fresno	0.88	2.24	0.81	0.49	0.03	0.02	0.00	0.00	0.27	0.00	0.21	3.98	8.94
Forestville	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.18	2.31	.....
Fruto	0.43	9.35	0.52	3.42	1.22	0.63	0.00	0.00	0.15	0.00	0.22	4.00	19.94
Galt	4.31	4.36	2.78	1.43	0.49	0.00	0.00	0.00	0.00	0.07	0.32	4.32	18.08
Georgetown	0.06	10.39	10.00	3.79	2.71	2.23	0.42	0.00	0.17	1.80	1.59	3.74	36.89
Gilroy	0.75	6.76	0.97	2.18	0.04	0.00	0.00	0.00	0.03	0.07	0.11	5.80	16.71
Girard	0.00	7.00	0.00	1.10	0.91	0.00	0.00	0.00	0.42	0.00	0.08	3.56	13.07
Glen Ellen	1.45	15.51	1.17	3.01	1.40	1.40	0.38	0.00	0.42	0.36	2.07	9.94	36.11
Goshen	0.30	1.71	0.82	0.32	0.00	0.00	0.00	0.00	0.05	0.00	0.65	2.15	6.00
Grass Valley[3]	1.54	13.70	6.22	2.98	2.06	1.27	[0.90]	0.00	0.21	1.00	1.76	10.26	[41.90]
Grass Valley[4]	.....	.....	.....	.....	.....	.....	.....	.....	0.22	1.00	1.61	9.37	.....
Haywards	0.77	8.28	1.95	2.21	0.55	0.16	0.00	0.00	0.14	0.23	0.34	6.09	20.72
Hollister	0.46	3.22	1.35	2.01	0.05	0.00	0.00	0.00	0.00	0.00	0.37	4.09	11.55
Hornbrook	0.35	2.99	0.67	0.90	2.40	1.60	0.35	0.00	0.55	0.65	0.70	4.55	15.71
Humboldt Light-House	2.83	8.29	5.82	5.94	1.51	1.55	0.22	0.09	1.24	0.96	2.96	9.22	42.63
Huron	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.00	0.00	1.09	.....
Hydesville	3.32	9.91	5.26	5.01	2.19	1.45	0.21	0.00	5.77	1.74	1.89	11.17	42.92
Indio	[0.00]	1.90	0.00	0.00	0.00	0.00	0.00	1.16	0.00	0.00	0.00	0.25	[3.31]
Ione	0.40	2.30	4.15	2.11	0.20	0.30	0.00	0.00	0.27	0.45	0.52	4.63	15.33
Iowa Hill (Strawberry Flat)	1.96	10.52	8.28	3.55	2.03	2.13	0.85	0.00	0.30	0.98	1.51	11.64	43.73
Jackson	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.08	8.03	.....
Jolon	0.55	8.75	0.99	0.94	0.02	T.	[0.00]	[0.00]	T.	[0.14]	0.03	2.99	[14.41]
Julian	0.07	19.32	2.09	2.66	3.00	0.00	0.00	0.89	0.81	0.00	2.25	8.61	39.70
*Keeler	0.00	0.98	0.16	0.10	0.37	0.30	0.06	0.02	0.19	0.04	0.00	0.31	2.53
Keeler[1]	[0.00]	[1.00]	2.01	0.00	0.37	0.30	0.06	0.02	0.19	0.04	0.00	0.31	[4.30]
Keene	0.23	6.59	1.30	1.30	1.35	0.05	0.00	0.00	0.22	0.00	0.08	6.37	17.49
Kingsburg	0.58	1.49	0.90	0.39	0.00	0.03	0.00	0.00	0.00	0.00	0.45	3.66	7.50
King City	0.40	4.77	0.52	0.76	0.00	0.00	0.00	0.00	0.00	0.00	0.02	2.40	8.87
Knights Landing	0.53	9.40	0.00	2.16	0.00	0.00	0.00	0.00	0.00	0.00	0.35	2.64	15.08
La Grange	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.13	4.96	.....
Laguna	.....	.....	.....	.....	0.60	0.00	1.15	2.83	.....	.....	.....	.....	.....
Lathrop	0.25	2.80	1.36	1.67	0.10	0.05	0.00	0.00	0.10	0.00	0.13	3.47	9.93
Laurel	1.22	28.95	7.94	2.85	0.95	0.00	0.00	0.00	0.70	0.55	0.99	8.44	52.59
Lemoore	0.15	1.36	0.64	0.84	0.00	0.00	0.00	0.00	0.02	0.00	0.13	1.93	5.07
Lime Point Light-House	[1.00]	7.00	2.50	2.34	1.75	0.16	0.29	0.00	2.08	0.22	0.91	6.38	[24.63]
Livermore	0.54	4.18	2.50	1.88	0.40	[0.10]	0.00	0.00	1.32	0.05	0.38	4.42	[15.77]
Livingston	0.37	3.16	1.74	1.80	0.00	0.03	0.00	0.00	0.50	0.11	1.27	3.74	12.72
Lodi	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.18	0.49	4.69	.....
Long Beach	0.20	.....	0.00	.....	0.00	0.00	0.00	0.09	.....	.....	0.00	.....	.....
*Los Angeles[5]	0.25	8.56	0.41	1.26	0.31	0.00	T.	0.00	0.06	0.00	0.00	1.99	12.84
Los Angeles[1]	0.20	9.24	0.51	1.32	0.27	0.00	0.00	0.00	0.10	0.00	0.00	1.30	12.94
Los Banos	0.07	2.17	0.39	1.64	0.00	0.00	0.00	0.00	0.20	0.12	0.12	3.05	7.76
Los Gatos[1]	0.92	16.65	4.41	3.20	0.30	0.18	0.00	0.00	0.47	0.00	0.44	6.97	33.54
Los Gatos[4]	1.10	17.50	4.65	3.13	0.52	0.11	0.00	0.00	0.48	0.03	0.64	7.29	35.45
Mammoth Tank	[0.00]	2.73	0.00	0.02	0.00	0.00	0.00	1.65	0.00	0.00	0.00	T.	[4.40]
Mare Island Light-House	[0.75]	6.02	1.87	2.79	1.07	0.08	0.00	0.00	0.68	0.13	0.56	4.03	[17.98]
Martinez	0.79	6.58	1.76	1.92	0.54	0.00	0.00	0.00	0.89	0.00	0.04	4.63	17.15
Marysville[1]	0.54	8.68	0.86	1.52	0.67	0.10	0.00	0.00	0.00	0.00	0.70	3.77	16.94
Menlo Park	0.69	7.02	2.17	1.83	0.38	0.03	0.00	0.00	0.28	0.00	0.46	5.26	18.12
Merced	0.33	2.23	1.29	1.05	0.05	0.24	0.00	0.00	0.00	0.20	0.18	2.99	8.56
Milton (near)	0.39	2.71	3.55	2.70	0.37	0.22	0.00	0.00	0.23	0.02	0.25	4.85	15.29
Modesto	0.16	1.91	0.74	1.05	0.24	0.00	0.00	0.00	0.23	0.12	0.10	3.26	7.77
Mohave	0.00	2.33	0.19	0.36	0.00	0.00	T.	0.00	0.33	0.03	0.00	0.76	4.00
Monson	0.39	1.80	1.01	0.91	0.16	0.00	0.00	0.00	0.34	0.00	0.38	4.13	9.12
Montague	0.70	2.33	0.75	0.45	1.74	1.25	0.45	0.00	0.15	0.20	0.35	1.83	10.20
Monterey[1]	1.06	3.68	0.95	2.36	0.09	0.08	0.00	0.00	0.11	0.02	0.19	4.72	13.26
Mount Hamilton (Lick Observatory)	1.38	7.12	4.10	3.08	1.01	0.57	.....	.....	.....	.....	.....	.....	.....
Mullans	0.48	7.27	0.85	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Napa[3]	1.17	8.77	2.83	3.54	1.37	0.32	0.16	0.00	0.58	0.30	0.53	7.11	26.18
Napa[7]	.....	.....	.....	.....	.....	.....	.....	.....	0.85	0.24	0.60	4.96	.....
National City	0.62	5.33	[0.25]	1.27	0.83	0.09	0.00	0.03	0.04	0.02	0.13	1.75	[10.36]
Needles	.....	.....	.....	.....	.....	.....	0.50	0.62	0.80	0.00	0.00	T.	.....
Newark	0.85	5.02	2.40	2.11	0.18	0.07	0.00	0.00	0.20	0.17	0.55	5.53	17.08
Newcastle	.....	.....	.....	.....	.....	.....	.....	.....	T.	0.65	1.16	5.82	.....
Newhall	0.31	9.99	0.88	1.26	0.66	0.00	T.	0.00	0.13	0.00	0.00	2.12	15.35
Newman	0.28	3.27	1.82	1.55	0.10	0.18	[0.00]	0.00	0.49	0.05	0.00	3.69	[11.43]
Niles	0.64	5.11	2.65	2.34	0.70	0.08	0.00	0.00	0.20	0.00	1.03	4.09	18.84
Nordhoff	.....	.....	.....	.....	.....	.....	0.00	0.00	0.25	0.00	T.	2.58	.....

[1] Pacific Railway System.
[2] J. W. Sturges.
[3] B. F. Berriman.
[4] W. Loutzenheiser.
[5] F. H. McCullagh.
[7] W. H. Martin.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
California—Continued.													
Norwalk	0.20	8.09	0.57	1.19	0.26	0.00	0.00	0.00	0.00	0.00	0.00	1.49	11.80
Oakland[1]	0.95	11.37	3.10	2.77	1.60	0.11	0.15	0.00	0.87	0.20	0.55	6.64	28.31
Oakland[2]	0.87	9.60	2.52	2.62	1.42	0.00	0.02	0.00	0.43	0.01	0.36	5.92	23.77
Ogilby	0.00	1.30	0.00	0.00	0.00	0.00	0.00	0.46	0.02	0.00	0.00	0.00	1.78
Oleta	.....	.....	.....	.....	.....	.....	.....	.....	0.12	0.31	0.92	9.29	.....
Ontario	0.23	[8.50]	0.45	1.78	0.35	0.00	0.00	0.00	0.00	0.00	0.00	1.66	[12.97]
Orangevale	.....	.....	.....	.....	.....	.....	Te.	0.00	T.	0.29	0.58	4.42	.....
Orland	0.55	7.88	0.33	1.38	1.12	1.40	0.00	0.00	0.09	0.63	0.36	2.21	15.95
Oroville	2.50	9.04	0.69	1.73	1.30	0.00	0.00	0.00	0.03	0.34	1.56	4.97	22.16
Pajaro	1.16	7.46	2.53	2.44	0.27	0.00	0.00	0.00	0.20	0.00	0.40	6.62	21.08
Palermo	[1.40]	10.63	1.83	1.41	1.25	0.16	0.19	0.00	0.16	0.32	1.00	4.83	[23.18]
Paso Robles	0.52	7.27	2.51	1.72	0.06	0.05	0.00	0.00	0.41	0.00	0.00	4.09	16.63
Petaluma	0.97	8.20	1.57	2.30	1.25	0.15	0.08	0.08	0.20	0.07	0.00	5.77	20.64
Piedras Blancas Light-House	[0.50]	7.40	1.59	1.45	0.07	0.00	0.00	0.00	0.00	0.00	0.35	4.24	[15.60]
Pigeon Point Light-House	[0.40]	6.37	1.07	2.23	0.79	0.16	0.00	0.00	0.67	0.18	0.49	5.21	[17.57]
Placerville[2]	1.40	9.13	7.82	3.62	1.23	0.85	0.05	0.00	0.45	0.50	1.48	12.57	39.10
Placerville[3]	[1.40]	9.29	8.18	4.29	1.91	1.20	0.00	0.00	0.37	0.32	1.97	[12.57]	[41.50]
Pleasanton	0.40	3.53	1.85	0.00	0.04	0.05	0.00	0.00	0.00	0.00	0.20	3.99	10.06
Point Año Nuevo	0.85	11.45	1.20	2.20	0.65	0.10	0.00	0.00	0.08	0.20	0.70	8.40	25.83
Point Arena Light-House	1.47	6.81	2.26	4.73	1.68	0.58	0.00	0.00	3.12	0.11	3.37	13.52	37.65
Point Barbara Light-House	.....	.....	.....	.....	0.31	0.00	0.00	.....	.....	.....	.....	1.86	.....
Point Bonita Light-House	1.31	8.45	2.82	3.00	2.26	0.49	0.48	0.00	2.75	0.54	1.04	7.07	30.21
Point Conception Light-House	0.70	9.22	1.09	0.46	0.12	0.00	0.00	0.00	0.00	0.00	0.05	2.04	13.68
Point Fermin Light-House	(?)	5.31	0.35	0.50	0.00	0.00	0.00	0.00	0.40	0.00	0.25	0.41	[7.22]
Point Hueneme Light-House	[0.40]	8.22	1.63	0.94	0.55	T.	T.	0.00	1.00	0.00	0.15	1.55	[14.44]
Point Montara Light-House	1.15	12.53	1.90	1.90	1.45	0.00	0.00	0.00	0.90	0.25	0.88	6.42	27.38
Point Pinos Light-House	0.61	5.25	0.95	2.81	0.36	0.00	0.00	0.00	0.00	0.22	0.22	5.27	15.69
*Point Reyes Light	1.76	8.48	2.38	2.93	0.75	0.57	0.48	0.00	0.53	0.82	1.19	6.80	26.69
Point Sur Light-House	[1.60]	8.43	1.62	2.56	0.38	0.07	0.00	0.00	0.44	0.20	0.35	3.77	[19.42]
Pomona	0.00	9.76	0.80	1.42	0.65	0.00	0.00	0.00	0.00	0.00	0.00	1.64	14.27
Portersville	0.36	2.43	0.71	1.14	0.20	0.00	0.00	0.00	0.01	0.00	0.36	3.38	8.68
Presidio	1.02	9.50	0.50	3.00	1.26	0.15	T.	0.20	0.80	0.25	0.88	5.88	23.44
Puente	0.00	12.05	0.11	0.45	0.55	0.00	0.00	0.00	0.00	0.01	0.00	1.50	14.67
Ravenna	0.00	7.20	0.90	0.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(?)	8.96
*Red Bluff[4]	1.36	10.68	1.42	2.27	1.50	0.55	0.17	0.00	0.19	0.64	0.46	3.80	23.04
Red Bluff[2]	1.23	9.35	1.02	2.00	1.23	0.00	0.30	0.00	0.00	0.49	0.42	3.76	19.80
Redding[2]	1.68	9.95	3.05	2.31	3.17	1.91	0.75	0.00	0.13	0.02	0.08	8.36	31.41
Redding[5]	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.50	0.68	10.38	.....
Redlands	.....	.....	.....	.....	.....	.....	.....	.....	0.97	0.00	0.00	1.51	.....
Riverside[6]	0.00	5.92	0.28	1.04	0.53	0.00	T.	0.05	0.13	0.00	0.00	1.29	9.24
Riverside[7]	.....	.....	.....	0.98	0.30	.....	.....	0.00	.....	0.00	0.00	0.68	.....
Roe Island Light-House	[0.50]	[4.70]	1.72	1.74	0.35	0.10	0.02	0.00	0.52	0.02	0.35	3.05	[13.07]
Rocklin	0.50	6.43	3.27	1.65	0.55	0.31	0.24	0.00	0.00	0.00	0.73	4.19	17.87
Rumsey	0.87	13.60	1.16	1.92	1.28	0.00	0.00	0.00	0.85	0.00	0.35	4.98	25.01
*Sacramento[4]	0.53	6.61	1.78	2.04	0.66	0.05	T.	0.00	0.10	0.10	0.48	3.28	15.63
Sacramento[8]	0.58	7.62	1.87	1.75	0.66	0.08	T.	0.00	0.07	0.16	0.46	3.55	16.80
Sacramento[2]	0.43	4.61	1.45	1.62	0.34	0.06	0.00	0.00	0.00	0.03	0.47	2.22	11.23
Sacramento[2]	[0.43]	4.62	[1.45]	1.62	0.48	0.06	0.00	0.00	0.00	0.03	0.37	2.09	[11.15]
St. Helena	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.64	0.73	8.72	.....
Salinas[9]	0.59	4.40	0.43	2.55	0.33	0.00	0.00	[0.00]	0.12	0.17	0.30	4.66	[13.55]
Salinas[2]	0.75	4.28	1.05	2.93	0.40	0.00	0.00	0.00	0.12	0.30	0.20	5.40	15.43
Salton	0.00	1.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.87
Sanger Junction	0.55	2.41	0.45	0.30	0.00	0.00	0.00	0.00	0.10	0.00	0.40	3.26	7.47
San Ardo[2]	0.43	3.99	0.76	1.04	0.03	0.00	0.00	0.00	0.14	0.00	0.00	1.57	7.96
San Ardo[10]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T.	3.04	.....
San Bernardino	.....	.....	.....	.....	.....	.....	.....	.....	0.00	T.	T.	1.67	.....
San Buenaventura	[0.50]	[8.00]	[1.60]	0.95	0.41	0.00	0.00	0.00	0.98	0.00	0.00	1.75	[14.19]
*San Diego	1.21	4.84	0.27	0.76	0.35	0.05	T.	0.00	0.08	0.04	0.10	1.29	8.99
San Diego Barracks	1.33	5.04	0.25	0.68	0.35	0.08	0.00	0.00	0.11	0.00	0.25	1.36	9.45
*San Francisco	0.98	7.26	1.96	2.44	1.25	0.11	0.10	0.02	0.77	0.04	0.56	5.62	21.11
San Gabriel	0.07	11.26	0.12	0.47	0.88	0.00	0.00	0.00	0.00	0.00	0.00	1.67	14.47
San José	0.55	5.27	2.46	1.79	0.26	0.05	0.00	0.00	0.37	0.08	0.46	5.84	17.13
San Luis Light-House	[0.40]	5.28	2.08	1.50	0.08	0.00	0.00	0.00	0.15	0.00	0.08	3.21	[12.78]
San Mateo	0.90	9.06	2.57	1.95	0.35	0.00	0.00	0.00	0.65	0.02	0.65	7.86	24.01
San Miguel	0.42	5.20	2.07	0.69	0.00	0.00	0.00	0.00	0.35	0.00	0.00	2.21	11.54
San Pedro	0.20	6.81	0.25	0.67	0.00	0.00	0.00	0.00	0.00	0.13	0.00	1.22	9.28
Santa Ana	0.20	8.70	0.09	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.66	11.62
Santa Barbara[11]	0.45	7.92	1.56	1.57	0.30	0.00	0.00	0.00	0.15	0.00	0.00	2.43	14.38
Santa Barbara[2]	0.50	8.82	1.65	1.90	0.00	0.00	0.00	0.00	0.18	0.00	0.00	2.26	15.31
Santa Barbara Light-House	[0.45]	7.70	1.07	0.66	0.31	0.00	0.00	0.00	0.23	0.00	0.00	1.86	[12.28]
Santa Clara	0.46	6.55	2.16	2.43	0.17	0.05	[0.00]	0.00	0.25	[0.00]	0.43	5.39	[17.89]
Santa Cruz[2]	1.05	9.58	1.98	2.88	0.83	0.00	0.00	0.00	0.85	0.30	0.64	8.14	26.25
Santa Cruz[12]	0.77	10.68	1.35	2.57	0.60	0.10	0.00	0.00	0.70	0.45	0.58	[8.10]	[16.90]
Santa Cruz Light-House	[0.80]	9.22	1.90	2.24	0.70	0.00	0.00	0.00	0.00	0.20	0.48	8.30	[23.84]
Santa Margarita	0.97	10.96	3.18	1.80	0.33	0.00	0.00	0.00	0.71	0.00	0.06	8.21	26.22
Santa Maria	0.63	3.57	0.71	1.58	0.20	0.00	0.00	0.00	0.03	0.00	0.35	2.77	9.82
Santa Monica	0.40	11.61	0.62	0.90	0.43	0.00	0.00	0.00	0.00	0.00	0.00	1.52	15.68
Santa Paula	0.48	8.73	2.40	0.82	0.13	0.00	0.00	0.00	0.19	0.00	0.00	1.54	14.29
Santa Rosa	1.25	10.49	1.22	2.39	1.23	0.00	0.75	0.00	0.20	0.20	1.50	8.64	27.87
Saticoy	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.83	.....
Selma	0.48	2.20	0.47	0.47	0.00	0.00	0.00	0.00	0.07	0.00	0.45	2.63	6.77
Seven Palms	0.00	7.44	0.00	0.00	0.00	0.00	0.03	1.02	0.10	0.00	0.00	0.23	8.82
Shasta Springs	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.84	1.75	11.49	.....
Shingle Springs	1.40	7.65	7.97	3.80	1.60	0.70	0.00	0.00	0.04	0.70	1.10	7.58	32.54
Sims	4.01	18.20	2.85	6.03	4.36	2.17	0.40	0.00	1.50	4.08	3.51	7.36	54.47
Sisson	0.40	7.17	0.61	3.64	2.65	[0.70]	[0.60]	0.00	0.32	0.30	0.35	11.20	[27.94]

[1] Chabot Observatory.
[2] Pacific Railway system.
[3] R. Rowland.
[4] Weather Bureau.
[5] L. F. Bassett.
[6] W. E. Keith.
[7] Chas. L. Fox.
[8] S. H. Gerrish.
[9] Dr. E. K. Abbott.
[10] Michael Gorman.
[11] Hugh D. Vail.
[12] W. R. Springer.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
California—Continued.													
Soledad	0.31	2.43	0.42	1.40	0.08	0.00	0.00	0.00	0.01	0.20	0.00	3.10	7.95
Sonoma	1.40	10.03	2.43	2.71	1.42	0.18	0.26	0.00	0.45	0.20	0.90	8.01	27.99
South Vallejo	0.68	6.73	1.58	2.52	1.08	0.04	0.00	0.00	0.65	0.00	0.16	3.87	17.31
Spadra	0.06	8.76	0.34	1.23	0.84	0.00	0.00	0.00	0.10	0.00	0.00	[1.29]	[12.44]
Steeles	0.81	7.14	3.26	1.71	0.15	0.15	0.00	0.00	0.36	[0.00]	0.39	5.95	[19.92]
Stockton[1]									0.14	0.24	0.29	4.19	
Stockton[2]	0.00	3.19	1.14	1.58	0.30	0.05	0.00	0.00	0.20	0.05	0.07	4.58	11.16
Summit	1.50	1.38	5.10	4.60	1.10	0.00	0.00	0.00	[0.10]	0.05	0.30	11.90	[26.03]
Suisun City	0.76	8.99	1.00	2.85	0.94	0.00	0.00	0.00	1.06	0.00	0.27	6.69	22.56
Susanville	1.00	7.84	2.49	0.80	2.41	1.65	0.55	T.	0.65	0.45	1.10	4.91	23.85
Tehachapi	0.03	3.45	0.80	0.90	0.70	[0.00]	0.00	0.00	1.17	0.00	0.00	3.10	[10.15]
Tehama	1.08	9.00	[1.50]	2.26	1.96	0.39	1.00	0.00	0.06	0.50	0.50	4.79	[23.04]
Templeton	0.51	7.70	2.72	1.67	0.12	0.07	0.00	0.00	0.70	0.00	0.04	4.91	18.44
Towles	1.81	14.65	10.52	2.59	2.86	2.52	1.40	0.00	1.08	1.72	2.23	11.18	52.56
Tracy	0.35	1.75	1.70	1.54	0.57	0.15	0.00	0.00	0.27	0.00	0.10	3.57	10.00
Traver	0.51	2.10	0.78	0.67	0.00	0.00	0.00	0.00	0.17	0.16	0.51	2.22	7.12
Trinidad Light-House	[4.00]	9.74	6.62	8.03	2.48	2.41	0.90	0.12	3.33	2.01	3.02	10.88	[53.54]
Tropico	0.00	7.84	0.45	1.98	[0.30]	[0.00]	m0.00	0.00	0.00	0.00	0.00	0.81	[11.38]
Truckee	1.22	8.36	3.92	2.17	2.90	0.46	0.00	0.00	0.98	0.05	0.45	6.34	26.85
Tulare	0.35	1.75	0.48	0.69	0.00	0.00	0.00	0.00	0.77	0.00	0.25	2.05	6.34
Turlock[2]	0.18	2.13	1.95	1.18	0.06	0.00	0.00	0.00	0.25	0.41	0.04	3.04	9.24
Turlock[3]										0.29	0.00	3.67	
Upper Lake								0.00	0.95	0.62	0.71	7.35	
Upper Mattole	5.66	17.18	7.85	11.22	6.95	2.00	0.29	T.	2.30	4.94	4.55	17.31	80.25
Vacaville[4]	0.79	12.93	0.57	2.13	0.67	0.17	0.00	T.	0.50	0.18	0.41	6.91	25.26
Vacaville[2]	0.71	9.28	1.02	1.83	0.31	0.12	0.00	0.00	0.35	0.00	0.00	6.71	20.38
Valley Springs	0.58	3.15	7.45	2.60	0.70	0.74	0.00	0.00	0.23	0.12	0.25	5.75	21.57
Vina	0.92	9.29	0.50	2.06	0.60	0.50	0.08	0.00	0.00	0.40	0.25	3.53	18.33
Volcano Springs	0.00	2.62	0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00	[0.10]	[3.05]
Volta	0.15	2.17	0.76	1.41	0.01	T.	0.00	0.00	0.08	0.05	0.05	3.02	7.71
Walla Walla Creek	1.70	6.13	2.03	1.11	3.28	0.99	0.22	0.40	1.18	0.39	1.10	12.40	30.93
Walnut Creek	0.57	8.59	3.15	2.24	0.29	0.09	0.00	0.00	1.38	T.	0.03	4.71	21.05
West Butte												2.47	
Westley	0.12	2.27	1.46	1.21	0.18	0.10	0.00	0.00	0.21	0.11	0.07	3.25	8.98
Wheatland	0.52	5.72	1.41	1.72	2.10	0.16	0.08	0.00	0.02	0.14	0.75	3.14	15.76
Whittier	0.00	8.37	0.40	0.85	0.30	0.00	0.00	0.00	0.00	0.00	0.00	1.50	11.42
Williams	0.24	9.62	0.35	1.44	0.30	0.12	0.00	0.00	0.00	0.00	0.15	2.05	14.27
Willow[5]	0.71	7.87	0.62	1.27	2.70	0.25	0.02	0.00	0.07	0.15	0.51	2.54	16.71
Willow[2]	0.67	9.03	0.96	1.88	1.99	0.05	0.00	0.00	0.04	0.24	0.51	3.59	18.96
Winchester											0.00	0.96	
Winters	0.00	13.52	1.10	2.05	0.75	0.30	0.00	0.00	0.50	0.00	0.34	3.57	22.17
Woodland	0.82	8.08	0.35	1.17	0.43	0.00	0.00	0.00	0.00	0.00	0.40	3.10	14.35
Yerba Buena Light-House	0.67	7.35	0.37	2.51	0.09	0.02	0.00	0.00	0.09	[0.00]	0.17	6.01	[17.28]
Yreka	[0.45]	3.59	1.15	0.93	1.48	1.36	0.41	0.00	0.82	0.43	[2.50]	3.92	[17.04]
Colorado.													
Abbott	1.56	0.30	1.80	1.22	4.76	5.87	1.79	1.04	1.07	0.00	0.24	1.10	20.75
Agate	[1.00]	0.58	1.72	0.87	3.00	1.75	2.12	[2.05]	0.25	0.00	0.45	1.02	[14.76]
Akron		[1.12	2.00	2.08	5.93	6.55	3.85	1.82					
Alamosa									1.48	0.18	0.05	0.62	
Alford	2.95	0.94	1.49										
Alma	0.60	0.00	1.70	0.50	2.78	0.15	1.99	1.68	1.30	0.32	[6.50]	0.68	[18.20]
Amherst	1.40	0.30	1.70	2.10	3.40	5.10	2.80	2.50	[1.00]	0.00	0.00	0.00	[20.30]
Antonito	[2.50]	1.58	0.50	0.30	5.13	0.30	1.84	1.83	2.63	0.20	0.01	1.50	[18.32]
Apishapa	1.80	0.40	1.85	0.30	2.49	1.60	1.31	0.10	[2.20]	0.15	1.10	3.00	[16.15]
Arboles	[2.00]	2.18	2.35	0.20	2.81	0.63	1.20	0.04	0.31	0.00	0.00	2.72	[15.14]
Aroya	0.70	0.00	0.70	T.	3.30	0.80	3.50	2.05	0.45	0.10	0.05	1.19	12.84
Aspen	[1.00]	[2.40]	[3.00]	m0.80	1.62	0.74	2.19	0.42	2.00	1.25	0.90	4.20	[20.52]
Avoca									0.50	0.00	0.20	1.33	
Beaver Creek	1.46	0.25	1.22	0.93	2.16	1.09	2.86	0.31	0.33	[0.80]	[0.05]	[1.50]	[12.96]
Bennet	1.60	0.60	1.40	1.17	3.45	3.20	2.75	2.45	0.80	0.50	0.90	1.70	20.52
Box Elder	2.50	0.40	2.52	1.85	5.15	1.83	1.55	1.85	1.00	0.80	0.80	0.20	20.45
Brandon	0.90	[0.05]	1.20	1.09	2.98	0.97	8.26	1.11	1.55	[0.20]	T.	[3.00]	[21.31]
Breckenridge	2.20	6.65	4.15	1.70	2.52	0.10	2.99	[1.60]	[2.10]	0.60	3.72	4.75	[33.08]
Brush	1.10	0.35	2.15	0.49	8.67	4.23	2.34	2.13	0.84	0.03	0.30	0.79	23.42
Burlington	1.40	1.00	3.00	2.05	[3.50]	1.27	4.62	1.03	1.09	0.04	0.24	1.74	[20.98]
Byers	1.10	[0.45]	1.48	1.02	[3.50]	3.62	1.88	1.67	0.12	0.12	0.20	1.20	[16.36]
Canyon	1.12	0.32	1.53	0.74	1.58	0.78	2.31	0.82	0.44	[0.80]	[0.05]	[1.59]	[11.99]
Cayson				[1.33		0.21				0.00	0.73	3.28	
Castle Rock	2.00	0.20	1.29	1.73	3.06	4.36	1.31	1.29	0.73	1.34	0.23	2.30	19.84
Cheyenne Wells	[0.90]	[0.05]	1.00	2.00	3.10	2.32	4.97	2.35	1.92	T.	T.	2.25	[20.86]
Chivington							6.76	1.02	1.35	T.			
Chromo	2.20			0.45	3.20								
Climax	2.95	4.30	3.95	1.95	2.50	0.85	4.10	2.60	2.65	0.65	6.70	3.80	37.00
Como (near)	0.53	1.08	2.12	0.89	3.46	0.36	2.27	1.59	1.05	0.49	0.51	1.37	15.72
Cope								2.20	0.99	T.		2.21	
Crook	[1.50]	1.24	1.89	1.50	4.76	3.90	4.42	2.52	2.10	0.00	0.20	0.20	[24.23]
Cumbres	[5.70	11.40	6.40	0.90	3.96	1.35	3.33	2.93	7.32	1.23	0.52	9.70	54.79
Deer Trail	1.00	0.45	1.00	1.60			2.75			0.00	0.12	1.58	
Del Norte				0.74	0.72		2.80	0.53	2.27	T.	0.00	1.25	
Delta	0.46	1.21	2.00	0.31	1.39	0.25	1.42	0.39	[2.00]	0.00	0.15	0.76	[10.37]
*Denver	1.60	0.27	3.10	2.49	4.15	2.93	0.59	2.84	0.73	0.48	0.69	1.56	21.43
Dillon	0.92	6.58	3.14	1.00	2.23	0.92	1.48	[1.60]	[2.10]	[0.40]	3.53	3.86	[27.76]
Downing						0.39	3.27	0.47	1.39	0.90	0.80	3.83	
Dumont	[1.10]	[0.40]	[2.00]	1.50	3.23	1.51	2.53	2.20	1.16	0.38	1.14	1.45	[18.60]
East Dale	[1.00]	[1.20]	1.60	0.20	0.50	1.60	2.00	1.20	2.20	0.00	0.00	2.15	[13.65]
Eagle Farm	3.20	T.											
Elkhorn	2.15	1.32	3.05	1.05									

[1] F. G. Brown. [2] Pacific Railway system. [3] P. R. McCabe. [4] G. O. Coburn. [5] A. W. Schorn.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Colorado—Continued.													
First View	0.45	0.10	0.80	1.60	4.99	2.19	3.82	1.97	1.68	[0.05]	T.	1.95	[19.60]
Fort Collins	2.32	0.17	1.34	2.30	4.07	1.31	1.65	2.06	1.02	0.20	0.60	0.46	17.50
Fort Collins (near)	.....	.....	.....	.....	.....	.....	.....	0.91	1.29	0.14	0.69	0.51	.....
Fort Lewis	4.40	9.16	2.40	3.30	2.80	0.24	1.65	1.00	.....	.....	.....	.....	.....
Fort Logan	1.42	0.20	2.50	2.70	3.68	3.04	0.45	1.61	1.24	0.60	0.30	0.35	17.99
Fruita	0.25	1.48	[2.70]	0.10	1.51	0.07	0.77	1.33	2.68	0.01	0.02	1.26	[12.18]
Garnett	.....	.....	.....	.....	0.49	0.66	1.82	0.59	2.21	0.31	0.23	.....	.....
Gaynor	[2.20]	[0.10]	[2.00]	1.99	3.85	1.81	0.32	1.96	1.07	0.24	0.48	0.47	[16.49]
Georgetown	[2.00]	[0.40]	[1.60]	2.25	2.70	0.74	1.27	1.67	0.95	0.57	1.07	1.20	[16.42]
Gold Hill	.....	.....	.....	.....	.....	2.85	1.70	4.45	1.41	0.95	1.15	.....	.....
Granada	.....	.....	.....	.....	4.15	2.51	2.38	1.75	4.56	0.00	.....	.....	.....
Grand Junction	.....	.....	.....	.....	.....	.....	0.95	.....	.....	.....	T.	.....	.....
Greenhorn	2.19	0.66	2.14	0.58	2.66	2.50	[2.60]	[0.10]	1.34	0.80	0.50	3.75	[19.82]
Grover	.....	.....	.....	.....	.....	2.96	0.28	2.22	1.17	0.05	0.25	0.27	.....
Glen Eyrie	.....	.....	.....	.....	.....	.....	.....	.....	0.51	0.62	0.70	0.88	.....
Haxtum	.....	.....	.....	[1.53]	3.52	6.11	.....	.....	.....	.....	.....	.....	.....
Hugo	1.25	.....	.....	.....	.....	2.00	.....	.....	.....	0.00	0.25	1.00	.....
Husted	0.57	0.03	1.87	2.98	3.61	1.64	3.47	1.91	0.50	0.82	0.07	0.69	17.26
Idaho Springs	[1.07]	0.36	2.13	1.56	3.16	2.58	1.97	1.73	0.72	0.45	0.34	1.65	17.72
Jefferson	[1.10]	[0.25]	[1.50]	0.64	3.11	0.73	3.86	5.77	1.60	0.15	0.82	1.31	[20.84]
Julesburg	.....	0.50	1.65	2.27	.....	.....	.....	.....	0.32	0.21	0.22	0.32	.....
Kirk	1.50	0.25	0.95	1.80	7.95	2.70	3.81	3.29	0.85	0.00	0.30	2.00	25.40
Kit Carson	0.85	0.11	1.30	0.19	[3.00]	1.31	3.94	0.81	0.74	0.00	T.	0.35	[12.59]
Laird	1.80	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lamar	0.90	0.00	4.61	1.16	4.55	2.29	4.51	1.34	2.31	0.16	0.57	2.11	24.51
La Porte	2.19	0.07	[1.30]	1.98	3.53	1.60	0.43	1.19	1.43	0.19	0.29	0.53	[14.73]
Las Animas	0.85	0.00	2.43	0.33	3.11	1.10	0.67	1.75	1.21	0.20	0.00	0.30	11.95
Lavender	.....	.....	.....	.....	0.79	0.24	3.92	1.49	3.68	0.10	0.13	5.03	.....
Lay	0.55	1.15	1.05	0.51	0.69	.....	.....	.....	.....	0.00	0.36	1.14	.....
Leadville	0.50	4.75	4.65	1.92	.....	.....	.....	.....	.....	.....	.....	.....	.....
Le Roy	1.70	1.00	1.99	1.35	5.02	4.84	4.60	2.89	0.67	0.14	0.37	0.95	25.52
Leslie	.....	.....	.....	4.81	5.78	7.33	.....	1.54	0.77	0.00	0.25	1.53	.....
Livermore	2.07	0.09	1.26	[2.00]	5.19	[1.76	2.04	1.56	1.38	0.97	0.82	0.33	[18.29]
Longmont	1.90	0.03	1.44	[1.80]	[4.00]	[5.04	0.54	2.06	1.12	0.26	0.45	0.90	[19.54]
Loveland	.....	.....	.....	.....	.....	.....	.....	.....	1.37	0.45	0.16	0.60	.....
Magnolia	1.10	0.55	2.90	0.50	2.77	[1.90	[2.00]	[2.40]	T.	0.12	0.72	0.75	[25.71]
Manhattan	.....	.....	.....	.....	.....	.....	.....	1.19	1.94	T.	0.39	0.50	.....
Meeker	[0.55]	1.21	1.73	1.22	1.90	0.20	2.27	1.66	2.04	0.11	1.23	2.10	[16.22]
Middle Box Elder	.....	.....	.....	.....	.....	.....	.....	1.10	1.25	0.21	0.34	0.48	.....
Minneapolis	0.78	0.02	1.64	0.75	2.56	4.42	4.06	0.97	4.17	0.63	0.85	2.31	23.16
Monte Vista [1]	0.59	0.41	1.11	0.35	0.69	0.73	1.62	0.41	2.19	0.03	0.05	0.99	9.17
Montrose	0.94	0.93	1.14	0.64	1.25	0.08	1.65	1.08	1.73	0.12	0.01	1.81	11.38
Montrose (near)	.....	0.06	0.73	0.07	1.81	0.00	1.88	0.73	1.18	.....	.....	.....	.....
Moraine	2.38	3.00	3.52	1.80	3.26	1.10	1.12	0.99	1.45	0.31	0.94	0.02	20.79
Pagoda	0.06	0.19	[1.10]	1.07	1.80	0.20	1.15	1.30	2.46	0.14	1.47	2.40	[13.34]
Palmer Lake	2.68	0.10	2.36	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pagosa Springs	1.40	.....	.....	0.39	4.21	0.47	1.53	0.95	.....	.....	.....	.....	.....
Parachute	0.44	0.87	2.31	0.94	1.31	[0.16	0.89	0.64	2.50	0.01	[0.03]	1.95	[12.05]
Paradox	.....	.....	.....	0.36	1.24	0.36	2.56	0.74	2.73	0.00	0.01	1.61	.....
Platoro	.....	.....	.....	.....	.....	.....	.....	3.45	5.98	3.27	0.35	6.90	.....
Pueblo	1.30	0.07	1.37	0.48	2.92	1.26	2.70	0.21	0.54	0.96	0.18	1.10	13.09
Red Cliff	1.02	3.77	2.80	0.84	1.74	0.37	1.92	1.55	2.07	0.50	2.25	4.00	22.83
Rico	1.38	12.00	2.10	1.80	4.15	0.64	3.06	2.19	4.28	0.63	0.40	3.70	36.33
Rifle Falls	0.95	2.68	3.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Robb	.....	.....	.....	.....	.....	.....	2.38	0.60	1.59	0.07	0.25	1.33	.....
Rocky Ford	1.50	[0.05]	1.70	0.43	3.52	2.05	0.74	0.78	1.72	0.21	0.35	1.57	[14.62]
St. Cloud	3.20	0.70	3.20	1.62	6.55	1.40	1.60	1.55	1.50	0.22	0.65	0.70	22.89
San Acacia	.....	.....	.....	.....	.....	.....	1.22	0.39	1.70	0.00	0.00	1.60	.....
Sanborn	0.80	0.00	0.57	1.07	5.26	2.77	2.01	2.52	1.13	0.13	0.00	0.89	17.15
San Luis	0.36	1.28	2.57	0.64	2.14	1.25	4.31	0.48	2.65	0.44	0.15	2.58	18.85
Sedgwick	1.10	0.10	0.30	1.94	2.84	4.53	3.13	2.91	0.69	0.05	0.05	0.09	17.73
Sheridan Lake	0.90	0.05	1.60	1.70	1.78	1.30	5.33	3.06	1.91	0.25	0.03	1.58	19.49
Smoky Hill Mine	3.30	1.70	5.60	1.98	5.49	2.54	2.11	2.43	1.20	0.71	3.90	2.00	32.96
Springfield	0.80	0.25	1.82	0.55	3.13	5.13	0.51	2.58	2.69	0.64	2.17	3.99	24.26
Stamford	3.70	1.90	3.80	1.15	0.68	0.96	0.68	0.53	0.61	0.50	2.00	7.35	23.89
Steamboat Springs	.....	.....	.....	.....	.....	.....	.....	.....	1.88	0.46	1.90	3.46	.....
Stoner	1.65	4.40	2.80	0.76	2.61	.....	3.56	.....	.....	.....	.....	.....	.....
Surface Creek	.....	.....	.....	.....	.....	.....	.....	.....	1.67	T.	T.	2.97	.....
Table Rock	[1.00]	[0.03]	[0.60]	1.99	4.72	2.72	3.87	2.70	0.66	0.88	0.53	1.94	[21.70]
T. S. Ranch	2.20	0.85	1.95	[0.25	1.38	[0.04	1.27	[0.74	2.89	0.00	0.04	0.90	12.51
Thon	0.31	T.	0.19	1.27	3.88	3.03	4.70	2.13	0.57	0.49	0.24	0.44	17.51
Twin Lakes	.....	.....	.....	.....	.....	0.50	1.57	1.24	1.61	0.80	1.21	3.30	.....
Vilas	[0.80]	0.00	1.30	0.88	2.60	3.41	1.77	1.27	3.01	0.71	0.95	3.18	[19.94]
Villa Grove	0.26	1.60	1.42	0.10	5.00?	0.73	[2.80]	1.32	2.50	[0.50]	[0.01]	1.80	[18.13]
Ward District	[2.40]	[1.00]	[2.00]	1.77	4.46	2.40	1.18	2.17	0.92	0.00	1.13	0.99	[20.42]
Watervale	2.80	0.20	1.65	T.	2.08	3.90	3.34	1.80	3.02	1.80	1.20	4.15	25.94
Watkins	1.00	0.22	.....	.....	.....	0.50	3.37	0.62	0.22	.....	0.25	1.05	.....
Westcliffe	1.11	0.53	1.25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Windsor	.....	.....	.....	.....	.....	.....	.....	2.44	0.77	0.17	.....	.....	.....
Wray	1.80	0.50	1.90	4.68	2.02	4.55	2.52	0.45	1.24	0.00	0.20	0.83	20.69
Yuma	2.35	0.50	3.63	2.90	4.21	5.23	2.98	0.75	0.64	0.95	0.13	1.25	24.62
Connecticut.													
Canton	9.29	4.46	5.10	3.91	2.03	3.11	5.21	4.86	1.46	2.65	3.81	5.04	50.93
Colchester	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.96	3.64	5.13	.....
Falls Village	7.44	3.71	2.17	3.75	1.73	3.62	1.26	3.37	0.94	1.60	3.11	4.88	37.58
Fort Trumbull	5.30	6.42	4.36	4.02	1.48	2.32	2.46	5.14	2.69	7.49	3.22	3.71	49.21
Hartford [2]	8.93	4.12	5.44	2.86	2.43	2.13	4.13	.....	.....	.....	.....	.....	.....

[1] C. S. Aldrich. [2] W. R. Matson.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Connecticut—Continued.													
Hartford [1]	9.26	5.10	5.46	4.15	1.39	2.08	4.41	3.92	4.46	3.57	2.64	5.35	52.39
Lake Konomoc	8.81	7.30	6.11	3.86	1.36	2.71	2.69	[4.00]	2.83	6.50	3.22	3.58	[52.97]
Lebanon	9.03	5.66	4.78	3.81	2.62	2.29	3.22	4.11	5.36	4.85	3.46	4.69	5[illegible].88
Mansfield	8.52	5.64	4.42	3.51	2.50	1.84	4.96	3.95	4.08	4.14	3.09	4.96	51.61
Middletown	9.24	6.09	5.96	3.90	1.62	2.70	4.98	3.52	3.46	4.24	3.00	5.08	53.79
New Hartford [2]	9.22	4.41	4.52	3.27	2.34	4.25	4.94	5.44	1.35	2.21	3.18	4.67	49.80
New Hartford [3]	8.62	4.13	5.50	5.05	2.29	3.62	4.91	5.44	[1.35]	2.41	3.56	5.43	[52.31]
*New Haven	6.77	5.88	3.68	2.35	1.92	1.90	4.52	3.14	3.96	4.62	2.21	3.74	44.69
*New London	6.36	6.46	3.99	3.12	1.42	2.81	3.37	4.99	2.60	6.50	3.37	3.74	48.73
Newington	[9.50]	[4.30]	[4.00]	2.00	1.79	2.25	4.15	4.01	4.64	3.89	3.14	4.79	[48.46]
North Grosvenor Dale	8.67	5.45	5.35	3.58	1.91	3.10	3.91	4.03	2.22	3.33	3.25	3.89	48.69
North Woodstock	.....	.....	.....	2.80	2.50	2.50	5.35	5.05	3.06	3.60	3.00	.....	.....
Norwalk	.....	5.69	0.97	0.00	2.08	.....	.....	.....	.....	3.50	2.72	1.33	.....
Shelton	7.36	5.28	4.56	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Southington	10.81	5.35	5.95	3.16	1.34	1.10	3.65	2.93	3.70	2.95	2.65	5.30	48.89
South Manchester	7.14	5.15	3.61	3.13	1.36	2.08	4.77	4.80	5.47	3.81	2.66	4.99	48.97
Stevenson	10.16	5.87	4.16	2.86	1.13	3.03	2.88	2.73	1.68	3.84	4.06	6.18	48.58
Uncasville	7.42	7.25	5.72	4.48	.....	.....	.....	.....	.....	.....	.....	.....	.....
Voluntown	8.20	7.29	4.85	5.31	2.03	1.94	2.56	5.08	4.10	6.82	3.57	3.36	55.21
Wallingford	9.15	6.73	5.05	3.87	2.34	1.39	5.43	3.01	3.84	4.22	2.87	4.97	52.87
Waterbury	10.06	5.65	5.08	3.86	1.84	1.14	4.17	3.04	1.68	3.04	3.33	5.71	48.60
West Simsbury	7.94	3.96	3.42	2.73	1.84	2.84	5.11	4.92	1.46	2.45	3.26	4.89	44.82
Delaware.													
Dover	6.14	6.36	9.92	3.34	2.49	2.78	8.59	4.03	1.00	3.17	1.67	3.58	53.07
District of Columbia.													
Distributing Reservoir	.....	.....	.....	.....	.....	.....	9.87	5.23	4.70	2.14	2.29	4.15	.....
Kendall Green	.....	.....	8.38	2.62	4.07	.....	.....	.....	.....	.....	.....	.....	.....
*Long Bridge	.....	.....	.....	.....	.....	2.99	8.98	4.77	2.66	2.17	1.95	2.59	.....
Receiving Reservoir	.....	.....	.....	.....	.....	.....	8.00	3.67	6.08	1.85	2.05	4.61	.....
*Washington	6.14	4.49	8.84	2.94	3.72	4.61	8.40	4.18	3.12	2.24	1.47	2.80	52.95
Washington Barracks	6.76	4.56	9.29	2.15	4.01	3.14	9.66	4.72	1.45	2.36	1.73	2.72	52.46
West Washington	.....	.....	.....	.....	.....	.....	.....	5.35	4.26	2.45	2.20	3.84	.....
Florida.													
Alva	2.85	0.88	0.50	3.14	1.19	6.26	8.34	9.90	.....	.....	.....	.....	.....
Amelia	.....	.....	.....	.....	.....	.....	.....	6.38	6.46	9.41	2.20	4.10	.....
Archer	1.42	[2.50]	4.85	1.62	[4.00]	4.62	4.86	[9.00]	5.62	0.47	0.70	2.24	[41.90]
De Land [4]	.....	.....	.....	.....	2.85	9.30	14.33	6.30	8.51	4.41	1.47	.....	.....
Duke	0.71	1.52	1.97	3.47	6.26	.....	.....	.....	.....	.....	.....	.....	.....
Eustis	1.69	1.20	5.76	3.46	2.25	5.55	5.67	4.28	8.22	3.49	1.73	3.14	46.44
Fort Barrancas	5.91	2.80	10.19	4.00	2.23	5.97	5.37	0.82	2.97	0.44	4.39	4.02	49.22
Fort Meade	1.17	1.00	3.24	3.29	1.03	7.12	6.73	[6.00]	16.00	9.58	1.33	0.65	[57.14]
*Gainesville	.....	.....	.....	.....	3.09	8.89	4.23	9.27	3.91	0.44	0.62	.....	.....
Homeland	0.70	0.80	3.60	2.25	1.65	3.60	7.00	5.95	17.10	6.35	0.50	0.30	49.80
Hypoluxo	1.73	2.51	1.70	4.10	3.62	4.57	8.87	6.88	8.72	8.84	2.01	1.07	54.62
*Jacksonville	1.19	0.32	4.02	1.72	2.78	3.31	4.08	3.67	10.83	4.43	1.53	3.46	41.34
*Jupiter	2.78	2.47	1.19	2.95	6.30	4.17	9.80	4.20	11.77	8.38	2.16	1.45	57.62
*Key West	2.22	0.74	1.93	0.81	0.24	2.76	0.88	10.13	10.39	6.42	2.02	1.21	39.75
Lake City	.....	1.22	4.25	1.56	1.57	4.92	.....	.....	.....	.....	.....	.....	.....
Manatee	.....	.....	.....	.....	.....	.....	.....	.....	5.40	4.03	1.77	0.49	.....
Merritts Island	1.79	1.25	3.42	7.50	1.03	5.45	3.15	3.65	10.70	5.39	1.67	2.57	48.17
Miami	.....	.....	.....	.....	.....	.....	.....	8.19	8.86	.....	2.51	.....	.....
*Micco	2.90	1.13	0.43	2.14	3.04	7.10	6.10	1.22	13.70	6.96	1.26	2.47	48.39
Myers	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.44	2.00	0.50	.....
Ocala	1.24	2.72	2.79	0.39	6.67	7.35	.....	.....	.....	.....	.....	.....	.....
Orange City	1.69	1.03	3.44	7.05	2.92	7.88	12.01	4.87	8.55	7.19	2.07	4.30	63.00
Pasadena	[0.70]	[0.80]	[3.10]	3.99	3.56	6.84	8.38	6.04	7.73	1.76	2.32	2.11	[47.33]
*Pensacola	4.18	3.39	6.94	1.65	2.25	2.57	5.59	0.72	1.50	0.04	3.88	2.87	35.58
St. Francis Barracks	1.20	0.90	3.00	3.37	5.37	4.85	4.60	3.65	10.68	4.63	1.69	5.25	49.19
St. Petersburg	.....	.....	.....	.....	0.05	4.39	7.58	13.32	6.18	3.93	2.42	0.81	.....
San Antonio	0.68	0.40	3.07	4.46	1.42	8.20	7.46	.....	.....	.....	.....	.....	.....
Tallahassee	2.20	2.43	6.12	2.25	0.90	10.47	5.35	7.28	0.95	1.00	2.90	3.00	44.85
*Tampa	1.95	0.98	3.24	2.77	0.69	7.12	4.52	9.48	7.96	2.61	1.99	1.15	44.46
Tarpon Springs	2.30	0.30	2.76	3.53	0.18	5.92	5.19	6.89	3.66	1.51	1.98	1.49	35.71
*Titusville	0.96	1.85	4.43	4.45	2.46	10.65	5.75	3.48	11.75	8.38	2.12	3.90	60.18
Georgia.													
*Albany	.....	.....	.....	.....	1.00	6.94	7.23	4.00	[illegible].44	0.41	3.09	2.51	.....
*Allapaha	.....	.....	.....	.....	1.87	4.15	5.40	7.43	0.84	1.07	1.45	2.60	.....
*Americus	.....	.....	.....	.....	1.00	6.00	5.43	6.83	0.38	0.59	3.16	3.47	.....
Athens [5]	9.54	6.23	11.53	2.08	2.84	4.85	6.46	3.64	0.94	0.16	4.20	2.57	55.04
*Athens [6]	7.25	11.11	12.28	[2.10]	2.89	4.60	6.74	4.42	1.06	0.15	4.56	3.24	[60.40]
*Atlanta	6.73	8.50	10.16	1.58	2.17	4.71	5.38	2.59	1.19	0.02	3.26	3.68	49.97
*Augusta	3.29	3.71	8.44	0.71	4.57	4.47	6.41	8.10	2.15	0.59	2.56	2.76	47.76
*Bainbridge	.....	.....	.....	.....	2.41	6.88	5.78	3.86	1.87	T.	.....	.....	.....
Blakely	3.48	5.97	8.59	1.91	0.96	5.70	7.78	7.05	0.67	0.94	2.33	5.28	50.65
Butler	.....	4.40	8.70	1.22	1.20	.....	.....	.....	.....	.....	.....	.....	.....
*Camak	.....	.....	.....	.....	4.05	2.50	1.70	8.41	1.46	0.41	2.88	.....	.....
*Canton	.....	.....	.....	.....	.....	.....	.....	.....	2.08	T.	4.34	5.43	.....
Cartersville	.....	.....	.....	.....	1.21	4.51	8.76	1.72	3.27	0.00	2.79	.....	.....
*Columbus	.....	.....	.....	.....	2.61	3.44	8.20	6.19	1.11	0.00	4.29	4.94	.....
*Cordele	.....	.....	.....	.....	3.13	4.34	7.35	8.72	1.09	0.71	2.61	3.11	.....
Diamond	6.24	18.27	14.85	5.25	.....	.....	.....	.....	.....	T.	5.22	6.65	.....
*Eastman	.....	.....	.....	.....	0.09	3.82	6.21	3.59	0.98	0.95	2.69	.....	.....

[1] Rev. S. Hart.
[2] Rev. Wm. Goodwin.
[3] R. R. Smith.
[4] F. G. Brill.
[5] Prof. L. H. Charbonnier.
[6] Special cotton region station.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Georgia—Continued.													
*Elberton	[7.50]	2.86	9.79	2.10	2.54	1.07	8.27	5.64	1.82	0.32	3.37	3.33	[48.61]
Forsyth	7.88	8.11	12.49	1.45	2.29	7.18	5.44	8.05	1.35	T.	3.56	3.60	61.40
*Fort Gaines	.....	.....	.....	.....	3.15	5.70	10.38	8.76	0.57	0.27	3.54	4.75	.....
Fort McPherson	5.27	9.29	10.16	1.58	2.17	4.71	5.38	3.90	1.99	0.03	3.31	3.63	50.82
*Gainesville	.....	.....	.....	.....	1.48	4.65	6.68	5.08	1.16	0.00	4.23	.....	.....
Gillsville	7.56	6.19	10.55	1.26	2.86	4.31	7.11	3.11	1.12	T.	4.56	3.70	52.33
*Griffin	.....	.....	.....	.....	4.40	2.40	3.17	3.40	0.71	0.00	1.79	.....	.....
Hephzibah	[3.20]	0.24	8.21	T.	2.40	4.31	4.03	2.71	1.50	0.45	0.62	0.83	[28.50]
Lithia Springs	2.04	6.44	.....	.....	.....	.....	.....	.....	.....	.....	0.67	3.76	.....
Louisville	2.45	4.61	4.70	0.25	1.01	.....	.....	.....	.....	.....	2.50	3.23	.....
*Macon	.....	.....	.....	.....	3.25	9.08	5.75	10.10	1.24	0.26	2.76	.....	.....
Marietta	7.09	9.93	10.32	1.35	1.46	3.81	5.54	1.94	2.52	0.20	3.05	4.01	51.22
Milledgeville	4.30	5.76	12.68	0.40	3.02	4.61	4.03	9.46	0.97	0.31	3.02	3.41	51.97
*Millen	.....	.....	.....	.....	3.62	5.68	6.17	7.89	0.98	1.48	1.77	2.64	.....
Monticello	[7.50]	[8.10]	13.64	1.60	1.82	4.38	4.57	7.57	0.84	0.00	3.45	2.27	[55.74]
*Newnan	.....	.....	.....	.....	2.84	3.32	4.01	2.68	2.12	0.00	2.16	.....	.....
Point Peter	7.40	8.15	11.30	1.65	2.95	1.40	4.66	6.20	1.10	0.10	3.10	[3.50]	[51.51]
Poulan	2.07	3.26	4.89	2.21	1.09	7.04	5.37	5.73	1.13	0.60	2.76	3.05	39.20
Quitman[1]	2.40	2.00	5.65	1.85	0.60	5.00	6.30	5.40	2.40	1.65	2.55	2.25	38.05
*Quitman[2]	.....	.....	.....	.....	0.45	4.99	7.18	8.19	2.01	2.25	1.95	1.90	.....
*Resaca	.....	.....	.....	.....	.....	.....	.....	.....	2.84	0.12	4.77	*2.84	.....
*Rome	6.36	7.09	8.01	2.53	*0.78	5.13	8.47	4.80	3.80	0.28	3.63	4.62	55.44
*Savannah	1.00	2.23	5.08	2.91	1.87	1.98	9.70	11.54	2.69	2.46	2.05	1.26	44.77
*Thomasville	.....	.....	.....	.....	1.72	4.93	4.90	4.04	2.47	1.09	2.78	3.82	.....
*Toccoa	.....	.....	.....	.....	2.90	6.21	9.58	4.58	3.24	0.15	4.99	3.68	.....
*Union Point	.....	.....	.....	.....	1.89	6.31	6.01	11.81	0.95	0.16	4.11	2.67	.....
*Washington	.....	.....	.....	.....	3.85	3.96	3.48	12.64	0.38	0.00	4.73	.....	.....
*Way Cross	.....	.....	.....	.....	0.38	2.63	3.80	5.45	0.82	1.98	0.42	.....	.....
*Waynesboro	.....	.....	.....	.....	3.62	6.64	6.42	11.35	2.21	0.86	2.99	.....	.....
*West Point	.....	.....	.....	.....	2.27	5.08	3.95	4.07	1.61	0.00	3.30	.....	.....
Idaho.													
American Falls	1.94	2.54	1.00	1.25	1.40	1.73	0.77	0.00	0.44	0.35	0.57	2.09	14.08
Boise Barracks	1.75	2.96	1.83	0.44	1.06a	1.86	0.48	0.00	0.05	0.02	0.96	1.90	13.31
Bonanza	.....	.....	0.80	0.29	3.10	.....	.....	.....	.....	.....	.....	.....	.....
Elk City	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6.34	.....
Era	0.17	3.97	0.54	0.33	0.88	2.37	0.86	0.00	0.70	0.07	0.38	3.37	13.64
Fort Sherman	1.92	4.32	2.90	2.50	1.36	1.94	0.88	0.83	0.71	1.29	2.61	4.83	26.09
Garden Valley	.....	.....	2.63	.....	.....	.....	.....	.....	.....	.....	4.28	4.58	.....
Henrys Lake	0.91	4.29	1.40	0.07	[1.40]	1.91	1.71	0.42	1.55	0.55	2.55	3.00	[19.76]
Kootenai	0.75	4.40	0.12	0.15	1.26	2.17	1.75	0.15	1.26	1.11	2.67	2.11	17.90
Lewiston	1.13	1.30	1.21	0.47	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mullan	3.29	.....	1.90	1.99	1.41	3.82	3.50	1.57	.....	.....	.....	.....	.....
Payette	0.90	1.03	1.55	0.00	1.10	0.95	0.66	0.00	[0.10]	[0.05]	0.68	1.21	[8.23]
Placerville	.....	6.32	.....	.....	1.20	.....	.....	.....	.....	.....	.....	.....	.....
Ruthburg	2.08	3.74	1.06	0.23	[1.10]	3.22	1.44	0.00	0.21	0.45	1.68	2.10	[17.31]
Illinois.													
*Alton	0.68	2.09	2.49	2.22	3.78	4.70	1.65	4.40	0.87	0.61	4.99	1.44	29.92
Atwood	.....	1.47	4.10	.....	1.46	.....	.....	.....	.....	.....	.....	.....	.....
Aurora[3]	2.35	2.28	2.57	3.94	2.14	3.24	2.35	5.01	0.66	0.68	4.21	1.66	31.09
Aurora[4]	2.86	2.82	3.81	4.92	2.28	4.16	2.76	5.16	0.76	0.92	5.16	2.48	38.09
*Beardstown	0.85	3.35	5.19	3.97	3.85	2.35	3.11	4.44	1.51	2.13	4.94	0.87	36.56
Beason	1.69	4.51	3.20	3.46	1.05	3.36	3.25	6.06	0.15	0.73	4.52	1.43	33.41
Belvidere	2.28	1.61	2.49	3.73	2.64	.....	.....	.....	.....	.....	.....	.....	.....
*Cairo	3.95	3.20	5.86	1.55	2.48	3.97	2.21	4.77	0.29	0.49	7.30	3.49	39.56
Carlinville	[0.70]	1.93	2.39	2.68	2.56	3.48	1.27	5.34	0.62	0.94	5.25	1.08	[27.64]
Centralia	1.21	3.40	2.24	1.88	3.09	5.32	0.57	7.56	1.00	2.59	4.38	[1.80]	[35.04]
Charleston	0.91	2.82	3.97	2.51	.....	.....	.....	.....	1.43	1.47	5.59	1.90	.....
*Chester	.....	.....	.....	.....	.....	4.07	2.67	4.16	0.76	1.01	6.26	.....	.....
*Chicago	1.99	1.95	2.13	3.14	2.09	2.42	2.47	4.52	0.32	0.36	3.83	1.32	26.54
Cockrell	2.22	.....	3.04	2.67	2.82	.....	2.93	2.70	.....	.....	.....	.....	.....
Collinsville	1.36	2.78	2.24	2.17	2.26	4.15	2.19	2.87	1.71	[0.60]	[5.40]	1.29	[29.02]
East Peoria	2.16	2.25	3.60	3.80	1.93	5.72	4.46	8.47	1.32	0.71	4.32	2.96	41.70
Flora	2.06	5.24	3.75	1.49	3.55	5.09	0.54	3.18	1.50	[2.30]	6.77	2.35	[37.82]
Fort Sheridan	1.73	2.25	2.56	4.33	2.25	5.69	1.94	3.75	0.48	1.55	4.09	0.90	31.52
Golconda	4.58	3.50	6.62	1.64	3.05	4.84	1.85	6.33	0.38	0.75	7.94	3.84	45.32
Greenville	1.50	3.04	3.16	2.24	2.63	5.91	0.93	4.37	0.41	1.57	6.29	1.52	33.57
Griggsville	0.87	3.52	2.25	3.61	2.42	1.76	0.98	1.75	1.53	2.11	4.15	0.87	25.82
Hennepin	2.36	1.35	3.13	3.50	2.68	6.79	1.99	4.45	0.98	1.43	4.66	2.28	35.60
Irishtown	1.45	3.75	2.57	2.62	3.18	5.30	0.73	2.37	0.87	1.69	6.05	1.05	31.64
Jerseyville	.....	.....	.....	.....	.....	.....	.....	[1] 2.75	.....	.....	6.55	0.87	.....
Jordans Grove	1.88	5.22	2.00	2.74	2.87	4.27	0.65	3.43	0.66	1.93	6.23	1.83	33.71
Lacon	2.45	2.31	3.34	3.94	1.55	6.83	1.45	6.09	.39	[1.40]	[4.50]	[2.00]	[37.25]
Lanark	1.59	1.48	2.86	3.20	3.22	3.18	4.39	2.63	1.84	1.58	3.71	2.06	31.74
Louisville	1.50	5.15	3.25	1.87	2.00	5.00	0.20	6.10	1.40	1.80	6.60	2.20	37.07
Martinsville	2.23	4.67	3.93	1.35	0.72	1.55	0.79	6.55	1.12	1.09	3.61	0.99	28.60
Mascoutah	1.65	3.18	3.07	2.50	2.60	5.30	0.70	7.40	1.90	1.30	6.40	1.40	37.40
Mattoon	1.10	2.97	4.70	2.30	0.60	4.25	1.88	4.95	1.25	1.40	4.40	1.90	31.70
McLeansboro	[3.30]	[4.50]	2.08	[2.50]	1.92	3.59	1.29	8.51	0.78	0.55	5.20	2.35	[36.57]
*Mount Carmel	2.83	6.04	4.70	2.05	3.19	3.53	1.57	2.11	1.22	0.48	5.48	3.25	36.45
Muddy Valley	1.79	3.45	2.21	0.51	1.55	1.07	[0.90]	4.39	0.53	[1.00]	4.14	2.27	[23.81]
New Haven	.....	.....	.....	.....	.....	3.08	2.67	7.42	0.94	0.10	6.14	5.52	.....
Olney[5]	2.06	5.48	4.28	2.74	1.30	3.54	0.56	4.41	1.33	1.45	6.71	2.37	36.18
Olney[6]	1.71	5.24	4.33	2.74	1.56	2.83	0.78	3.96	1.53	1.57	10.92	3.22	40.39
Oswego	2.71	2.32	2.33	3.97	1.97	2.93	3.07	4.36	1.20	0.64	4.42	1.93	31.85
*Ottawa	2.86	2.28	2.56	3.96	1.84	3.99	4.45	5.11	1.27	0.56	4.75	1.74	35.37
Palestine	2.00	5.68	4.15	1.64	0.76	[6.00]	0.86	6.36	1.33	1.38	5.65	2.13	[38.08]

[1] J. L. Cutler. [2] Special cotton region station. [3] W. Holden. [4] Dr. M. M. Robbins. [5] V. E. Phillips. [6] C. H. Fahs.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Illinois—Continued.													
Pana	0.56	2.64	4.32	4.16	0.66	6.25	[2.10]	6.50	1.00	2.26	10.09	1.79	[42.33]
*Peoria[1]	1.85	2.44	3.05	3.54	2.03	3.77	2.84	5.92	1.92	0.77	4.51	2.33	34.97
Peoria[2]	1.68	1.90	2.68	3.64	1.97	3.31	2.82	5.71	2.00	0.71	4.08	2.39	32.89
Philo	0.89	2.10	4.32	2.46	1.14	3.15	1.52	4.21	0.59	0.82	6.14	1.55	28.89
Pontiac	0.95	2.45	2.88	3.45	0.47	6.07	2.65	3.95	0.20	[1.40]	[4.70]	[2.40]	[31.57]
Rantoul	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.01	1.19	.....
Riley	2.22	1.65	1.64	4.05	4.38	5.06	2.40	1.95	0.87	1.16	3.75	2.16	31.29
Rockford	2.72	1.65	3.21	4.83	2.75	4.87	2.27	1.44	0.75	1.53	3.67	1.30	30.99
Rock Island Arsenal	2.84	1.01	2.53	3.46	2.71	3.65	3.09	5.74	1.48	1.47	3.47	1.30	32.75
Rushville	1.05	2.09	3.49	4.49	4.74	2.57	4.78	7.94	0.61	2.34	4.93	2.13	41.16
St. Johns	0.46	4.25	2.22	4.16	1.10	2.09	1.54	4.19	0.69	1.00	4.78	1.25	27.73
Sandwich	2.52	4.13	3.80	4.70	1.57	3.34	3.18	3.87	1.62	0.39	4.75	2.31	36.18
South Evanston	2.52	2.93	1.71	4.40	3.12	3.98	.....	.....	.....	.....	.....	.....	.....
*Springfield	1.16	2.59	3.21	2.81	1.96	2.11	4.44	4.65	1.38	1.88	5.49	1.59	33.27
Sycamore	1.91	1.60	1.95	4.50	2.79	3.55	2.00	2.22	0.37	0.89	4.21	2.37	28.36
*Warsaw	3.00	1.40	2.73	5.16	2.50	3.90	1.86	2.76	0.01	0.08	0.25	0.06	23.71
White Hall	1.21	2.72	1.88	1.89	1.83	6.49	0.92	2.54	2.02	1.39	4.69	0.93	28.51
Winnebago	2.30	1.55	4.25	4.17	2.50	3.45	2.13	1.24	0.99	1.49	3.71	2.26	30.04
Indiana.													
Angola	2.10	5.11	3.34	2.08	1.72	3.64	3.36	3.80	2.99	1.09	6.41	2.03	37.67
Butlerville	3.72	6.85	6.03	3.34	1.52	6.64	2.90	5.58	2.77	0.35	5.12	3.73	48.55
Cannelton	.....	4.25	.....	2.53	.....	.....	.....	.....	.....	.....	.....	.....	.....
Columbia City	1.25	3.38	3.07	2.62	1.26	3.27	3.14	3.01	1.95	1.22	6.12	1.78	32.07
Columbus	2.70	5.00	6.21	2.15	0.97	4.67	1.61	8.66	2.14	1.00	5.22	3.10	43.43
Connersville	3.60	5.41	4.56	3.30	2.20	4.90	2.77	2.79	1.66	0.67	6.03	3.17	41.06
Crandall	.....	6.00	.....	3.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
De Gonia Springs	5.20	4.07	7.08	2.84	1.16	2.45	4.11	5.23	1.55	0.66	5.30	4.57	44.22
Delphi	1.65	2.67	3.88	3.46	1.38	4.47	3.12	3.47	1.39	1.06	6.35	1.65	34.55
*Evansville	1.80	1.64	[6.00]	3.10	0.83	6.71	4.52	8.26	1.23	0.25	8.44	3.20	[46.01]
Farmland	2.80	4.55	4.60	2.97	2.47	5.55	2.35	3.26	2.45	1.91	5.90	2.25	41.06
Franklin	3.35	5.07	6.63	2.71	0.87	[4.00]	[1.80]	[7.00]	0.73	1.32	5.90	3.55	[42.93]
Hammond	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.17	.....
Huntingburg	3.40	9.55	6.65	5.25	6.30	5.35	5.70	[7.50]	5.65	[0.50]	6.10	1.50	[63.45]
Huntington	1.36	2.72	1.92	3.08	1.43	3.14	2.80	3.58	3.38	1.43	5.17	2.29	32.30
*Indianapolis	2.00	5.97	5.77	2.30	1.61	2.90	1.93	5.79	0.74	1.18	5.08	2.96	38.23
Jeffersonville	4.78	3.75	6.63	2.77	1.73	1.93	4.03	4.55	1.67	0.51	6.01	3.81	42.17
*La Fayette	1.25	2.48	4.22	3.84	1.98	4.65	2.35	4.80	1.70	1.17	6.31	1.84	36.65
Logansport[3]	1.67	3.61	3.94	3.20	2.67	5.42	1.60	3.18	1.61	1.29	7.69	2.07	37.95
Logansport[4]	0.85	2.65	3.51	2.77	1.12	3.74	1.19	2.85	1.31	1.09	6.42	1.55	29.05
Marengo	4.20	5.21	8.50	3.70	1.50	4.00	3.80	8.33	[2.40]	0.31	6.61	[3.40]	[51.96]
Marion	.....	.....	.....	.....	0.65	5.01	2.24	4.92	1.18	1.33	4.85	2.19	.....
Mauzy	3.45	5.88	5.85	3.68	2.41	4.41	1.25	3.15	1.85	0.77	5.84	3.00	41.54
Michigan City	.....	.....	.....	.....	.....	.....	.....	.....	1.13	1.73	5.05	1.65	.....
*Mount Vernon[1]	3.78	4.89	5.51	1.54	1.22	6.44	[2.10]	5.09	1.48	0.54	7.05	3.96	[42.60]
Mount Vernon[5]	4.47	3.28	5.51	1.70	1.04	6.44	2.10	5.09	1.51	2.15	6.66	3.96	43.91
Muncie	1.18	4.39	3.22	1.93	2.10	4.46	1.93	5.38	3.49	1.00	[5.40]	1.35	[35.92]
Point Isabel	1.85	4.95	[3.60]	3.35	1.40	4.72	2.56	5.01	3.11	1.90	8.20	3.62	[44.27]
Princeton	3.32	4.50	4.92	1.15	2.10	4.12	1.45	2.70	1.85	0.95	6.35	3.35	36.76
Richmond	.....	4.83	4.30	.....	0.88	4.23	2.15	2.47	.....	.....	.....	.....	.....
Rockville	1.14	3.49	4.74	3.88	0.99	1.53	0.68	4.18	1.71	2.17	5.98	2.59	33.08
*Rushville	2.53	6.82	5.45	3.01	1.42	5.51	1.10	3.21	2.13	1.25	5.78	2.89	41.10
Seymour	3.99	5.50	6.50	2.47	1.71	[5.00]	2.00	6.73	2.79	1.11	6.15	[3.40]	[47.35]
Shelbyville	1.75	6.33	4.39	3.58	0.65	7.99	1.75	[3.63	1.92	1.75	5.46	3.21	42.41
*Terre Haute	.....	.....	.....	.....	.....	0.69	0.48	6.69	1.46	0.90	4.83	2.41	.....
Valparaiso	2.09	1.95	1.97	2.78	2.00	2.42	2.47	[4.50]	0.34	0.39	4.14	2.41	[27.46]
Vevay	4.21	3.89	7.71	2.25	2.59	8.66	2.99	6.52	1.64	0.28	5.77	2.42	48.93
*Vincennes	2.38	6.74	4.87	2.23	1.16	6.26	1.36	6.77	1.51	1.05	7.21	3.45	44.99
Worthington	1.52	5.65	5.52	2.33	0.46	3.78	1.98	11.45	1.32	1.11	5.71	3.29	44.12
Indian Territory.													
*Eufaula	1.73	1.20	1.40	2.40	4.50	3.67	5.16	1.80	0.25	0.25	[1.20]	[3.10]	[26.66]
Fort Supply	2.67	0.00	2.89	0.28	3.75	4.85	8.12	0.90	1.52	2.33	1.21	1.31	30.43
Healdton	3.01	0.11	3.18	5.58	5.85	2.04	2.55	0.62	0.60	0.87	0.97	3.68	29.66
Purcell	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.69	.....
South McAlester	.....	.....	.....	3.47	5.09	3.41	2.83	1.00	0.50	.....	2.65	4.00	.....
*Tulsa	1.00	1.05	2.05	5.15	5.00	3.20	3.15	0.70	0.65	0.55	1.30	1.00	24.80
Woodward	0.97	0.87	3.66	0.27	1.02	4.39	4.72	0.03	0.07	1.00	1.04	[1.30]	[19.34]
Wynne Wood	.....	[0.30	2.45	2.80	.....	.....	.....	.....	.....	.....	.....	.....	.....
Iowa.													
Alta[6]	1.78	1.37	1.77	2.12	2.92	16.02	6.21	5.64	2.04	5.78	0.91	2.49	49.05
Alta[7]	1.36	1.37	1.76	2.12	2.92	16.02	6.18	5.64	2.04	5.78	[0.91]	2.49	[48.59]
Amana	1.94	1.26	3.25	1.51	4.83	4.80	2.66	5.20	2.20	2.01	2.86	1.58	34.10
Ames[8]	2.25	1.20	2.55	1.85	2.25	4.72	3.87	3.35	1.05	[2.80]	1.95	2.40	[39.24]
Ames[9]	.....	.....	.....	.....	.....	4.68	3.21	3.33	.....	2.78	0.85	1.69	.....
Atlantic	[1.50]	1.66	1.61	2.16	6.68	8.78	6.16	1.72	1.94	3.35	0.77	1.88	[38.21]
Audubon	.....	.....	.....	2.06	4.52	4.97	4.28	3.60	.....	.....	.....	.....	.....
Bancroft	1.20	2.00	1.66	1.02	1.46	4.83	1.67	3.48	2.26	4.38	0.57	1.65	26.18
Bedford	.....	.....	[1.15	3.18	3.36	4.67	6.10	4.73	.....	.....	.....	.....	.....
Belle Plaine	2.52	0.89	3.95	2.62	4.21	4.26	2.69	2.31	1.28	3.28	2.07	1.93	32.91
Blackville	[1.60]	[1.50]	[2.30	2.54	4.04	4.72	4.89	6.54	1.60	2.50	2.29	4.50	[30.11]
Blockton	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.57	0.92	2.71	.....
Bonaparte	[0.90]	[1.20]	[3.20]	[2.30	2.78	3.55	4.64	5.13	0.90	1.76	3.62	2.08	[32.06]
Corroll	0.96	1.09	4.11	2.92	5.44	6.51	4.10	5.17	1.93	5.60	.....	.....	.....
Carson	1.43	1.48	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cedar Falls	1.19	1.17	3.01	1.32	2.66	2.55	3.94	3.63	2.39	2.77	1.68	2.74	29.05

[1] Special river observer.
[2] Dr. F. Brendel.
[3] Special rainfall observer.
[4] D. E. Prior.
[5] J. M. Lockwood.
[6] David E. Hadden.
[7] H. H. Peterson.
[8] Dr. J. Rush Lincoln.
[9] J. C. Haines.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Iowa—Continued.													
*Cedar Rapids	1.89	1.13	3.64	1.63	4.11	3.21	3.20	5.44	1.81	2.44	2.98	1.77	[illegible]
Charles City	[1.50]	1.38	1.86	1.75	1.87	4.13	3.18	4.36	1.10	2.00	1.40	3.59	[illegible]
Clarinda	2.26	1.16	1.89	4.17	3.19	6.18	3.50	4.67	0.20	2.78	1.20	[illegible]	[illegible]
Clinton	3.84	1.42	2.99	2.83	3.57	3.11	4.14	3.89	0.68	1.46	2.81	[illegible]	[illegible]
College Springs					3.30	8.72	5.98	5.74	0.41	2.76	1.09	2.78	
Concord	1.08	1.07											
Cordova				3.01	4.86	4.27	2.32	4.72	1.06				
Corning [1]					2.60	8.20	4.62	8.66	0.31	1.89	1.31	[illegible]	
Corning [2]								7.18	0.40	2.24	1.20	[illegible]	
Corydon						4.29	4.30	6.23	0.15		[illegible]	2.[illegible]	
Cresco	1.80	1.49	1.68	2.38	1.58	5.09	4.15	2.63	0.99	1.95	1.01	[illegible]	[illegible]
Dallas Center	1.75	0.60	2.90	1.85	3.51	5.86					0.40		
*Davenport	2.38	0.69	1.68	3.30	2.74	3.56	3.29	5.54	1.50	1.37	2.56	[illegible]	31.45
Delaware					2.86	3.12	3.64	5.66	1.01	2.83	[illegible]	[illegible]	
Denison	[1.70]	[1.20]	3.74	2.64	4.84	3.80	5.95	4.74	1.34	5.36	0.99	[illegible]	[39.05]
*Des Moines	1.82	1.13	2.25	2.12	3.29	5.60	2.78	4.22	1.64	2.41	1.34	[illegible]	30.14
Des Moines (near)		0.45	3.25	2.42	3.82								
*Dubuque	1.27	0.98	2.69	1.63	2.54	2.34	4.57	3.31	0.68	2.20	3.24	2.08	27.55
Eagle Grove	2.75	1.38	1.90	2.80	2.40	8.65	5.60	3.35	3.60	[4.10]	0.80	3.93	[41.26]
Elkader									0.34	2.34	1.23	3.26	
Fairfield	[1.00]	[0.90]	4.58	2.18	2.52	3.87	3.01	8.36	0.51	1.76	3.54	1.87	[35.00]
Fayette	1.68	1.39	3.38	2.22	1.99	4.86	3.45	4.22	1.35	2.27	2.61	3.18	32.60
Fontanelle				2.71	3.37	8.77	3.59	2.37	1.13	2.45	0.38		
Fort Madison	0.86	1.35	2.25	2.59	1.86	5.72	3.25	5.20	1.19	1.76	2.36	1.73	30.12
Galva									1.41	5.75	0.93	2.31	
Glenwood	2.35	0.57	1.44	3.21	4.84	6.07	5.26	2.56	1.65	4.81	0.06	1.21	34.05
Grand Meadow	[1.60]	[1.50]	[2.50]	[1.63]	1.50	5.38	3.67	2.52	1.42	2.02	1.44	4.01	[29.19]
Greenfield	2.22	1.65	2.83	2.28	2.98	9.61	5.60	1.66	0.92	2.27	1.38	2.75	36.15
Grinnell	0.88	0.60	2.29	1.65	3.44	7.15	2.55	5.04	1.28	2.34	1.18	1.52	29.92
Grundy Center	[1.00]	[1.10]	[3.50]	0.93	2.29	2.73	4.09	4.34	1.32	2.75	1.30	2.33	[28.88]
Hampton	0.20	1.62	3.76	1.67	2.06	4.41	6.55	3.06	3.34	2.89	1.19	2.88	36.65
Hawkeye					1.55	4.35		2.12	1.22	1.68	1.29	2.91	
Havelock												3.50	
Hopeville	[1.00]	0.07	2.50	2.72	3.93	6.14	4.53	3.75	0.13	2.14	1.05	1.49	[30.85]
Hopkinton				2.45	2.70	1.66	3.41	5.39	0.90	2.55			
Humboldt		1.26	2.04	1.20	3.05	5.26	5.26	3.80					
Independence	1.54	0.79	2.30	2.17	3.32	2.06	3.64	4.35	1.23	2.78	1.37	2.38	28.13
Indianola		0.31	[illegible]	2.90	5.42	3.54							
Iowa City	1.49	1.30	1.11	1.11	4.46	2.00	1.07	3.45	2.33	1.63	2.93	2.72	31.64
*Keokuk	2.50	1.82	2.27	5.06	2.56	3.66	2.77	6.10	0.49	1.49	3.60	1.93	33.24
Keosauqua								5.90	0.35		2.90	1.26	
Larrabee	1.31	1.67	1.54	1.23	2.75	2.88	6.30	3.85	1.82	3.38	0.67	2.23	48.61
*Le Claire	2.29	1.50	2.30	3.52	2.92	4.34	2.09	2.76	1.27	1.16	3.00	1.28	26.93
Leon				2.02	4.31	3.00							
Logan	1.79	1.60	2.33	2.10	3.93	2.47	6.16	4.31	1.74	5.04	0.09	2.72	35.39
Ludlow					1.80	3.78	5.31	2.42	1.33				
Manson	1.40	2.41	2.44										
Mason City					1.43	2.07	3.34	1.23	2.51	3.05	0.36	2.30	
Maxon	[1.00]	[1.10]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12.00	0.51	1.02	3.30	2.91	[39.38]
Maquoketa	1.60	1.11	2.67	[illegible]	[illegible]	4.00	3.72	4.05	1.11	1.90	3.64	4.00	34.85
Marshalltown	[0.00]	1.09	3.35	[illegible]	[illegible]	[illegible]	[illegible]	3.61	0.06	2.09	1.39	2.50	[30.02]
McCausland	2.90	1.29	[3.00]	3.27	3.30	3.72	3.10	4.08	1.47	0.85	2.97	1.83	[32.32]
Monticello	1.25	0.80	2.55	3.00	2.70	1.93	4.55	4.11	0.64	2.16	2.55	2.09	27.38
Mooar										1.75	3.08	1.86	
Mount Pleasant [3]	2.75	1.20	1.32	2.64	2.60	3.62	1.93	6.16	0.53	1.63	3.32	2.73	30.52
Mount Pleasant [4]						4.21	2.50	6.42	0.80	1.08	2.00		
Mount Vernon				1.41	7.10	4.64					1.03		
Murray	[2.00]	[1.40]	[2.00]	2.58	3.77	6.31	7.12	2.56	0.26	2.01	0.88	1.66	[32.55]
*Muscatine	1.75	2.19	3.56	[3.10]	2.51	4.87	3.29	5.20	1.35	1.49	[3.50]	2.51	[35.26]
Osage	1.90	1.37	1.47	2.06	1.75	3.16	2.58	2.05	1.68	3.09	0.54	3.15	24.79
Oskaloosa	1.07	0.28	1.84	2.50	3.02	2.60	2.95	3.60	0.24	2.03	2.40	2.96	26.29
Panama	1.34	0.47	1.46	2.25	2.57	4.90	4.97	3.90	2.81	6.53	0.59	2.79	36.58
Richland	[1.00]	[1.00]	[3.10]	2.19	2.11	3.72	3.30	5.67	0.49	1.65	3.54	1.25	[28.72]
Sac City	1.24	1.00	1.10	1.00	3.25	4.70	2.70	3.50	2.25	5.85	1.00	1.30	28.90
Sanborn				[0.88	2.04	12.23	4.02	3.58	1.55	0.91	0.25		
*Sioux City	1.00	1.36	2.01	2.22	2.41	7.62	3.77	3.54	0.91	3.04	0.37	2.48	33.29
Stilson	[1.30]	0.55	1.40	1.80	2.00	7.92	3.85	2.25	2.60	3.41	[0.60]	[3.00]	[31.16]
Storm Lake	[1.61]	1.02	1.33	[2.80]	2.88	14.70	5.23	3.16	1.70	4.36	0.72	2.28	[41.79]
Tipton	1.86	1.05	4.15	2.80	[4.30]	3.67	4.40	5.98	1.28	1.38	3.43	3.14	[37.02]
Vinton	0.94	0.67	1.90	0.84	3.48	4.51	2.75	3.24	2.00	2.99	1.35	2.58	28.61
Washington	2.32	0.26	2.45	0.89	1.65	5.91	4.49	2.87	0.40	1.19	3.07	1.33	28.30
Webster City	1.87	0.78	1.30	0.59	2.62	4.32	[4.00]	4.37	1.74	3.02	2.68	2.57	[34.04]
West Bend	1.55	1.78	2.00	1.37	2.63		3.05				0.74		
Williams	1.05	0.70	2.46	0.46	2.47	2.00	4.01	3.16	2.14	2.98	0.95	2.22	26.83
Winterset					3.61	7.37	3.28	2.15	0.66	2.18	0.88	2.55	
[illegible]													
Abilene	1.32	1.05	[illegible]	1.00	[6.30]	4.90	8.08	0.63	2.47	3.34	T.	1.18	[36.45]
Alma	1.36	0.08	[illegible]	[illegible]	6.20	6.34	5.86	1.66	3.55	1.29	0.28	1.95	36.79
Alma	1.31	0.95	[illegible]	[illegible]									
Alma	1.00	2.50	[illegible]	2.71	2.79	12.14	1.97	0.92	0.87	0.42	1.03	1.51	29.61
[illegible]										1.54	1.09	2.90	
[illegible]	1.20	0.50	[illegible]	[illegible]	7.90	6.50	6.70	0.95	5.45	4.50	0.10	0.70	38.70
[illegible]	1.08	0.35	[illegible]	[illegible]	5.50	5.25	4.25	1.50	3.75	1.00	T.	1.40	29.80
[illegible]	2.37	0.68	[illegible]	[illegible]	2.75	4.95	6.37	2.50	5.38	7.50	[0.10]	0.85	[37.90]
[illegible]	1.30	1.00	[illegible]	[illegible]	3.40	3.90	3.70	0.50	5.40	5.10	0.10	0.50	30.50
[illegible]			[illegible]					[1.27	1.90	2.77	0.60	0.90	

[1] Jerome Smith. [2] J. W. [illegible] [3] Dr. Max E. Witte. [4] G. S. Helphrey.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Kansas—Continued.													
Collyer	0.82	0.08	3.35	1.27	4.00	5.80	3.90	1.40	3.20	0.70	[0.05]	1.75	[26.32]
Columbus	1.10	1.90	1.70	4.43	4.05	4.25	[1.50]	2.19	0.41	1.47	2.96	2.01	27.97
Concordia[1]	1.75	0.69	3.80	1.96	4.00	3.91	3.92	0.62	3.53	6.14	0.20	1.39	31.91
*Concordia[2]	2.15	0.59	3.72	3.02	4.12	6.94	3.46	0.69	3.14	5.24	0.20	1.20	34.47
Cunningham	1.58	0.68	3.57	0.60	4.45	3.60	7.15	1.22	1.99	3.60	0.39	1.27	30.10
*Dodge City	0.98	0.27	3.32	2.76	3.36	6.27	5.16	1.36	4.56	3.33	0.12	0.85	32.34
Downs	2.61	0.77	5.12	2.64	4.54	6.00	5.98	2.27	5.87	6.12	0.50	1.44	43.86
Dwight	.....	.....	3.50	2.45	4.80	8.45	2.40	1.30	1.70	1.95	.....	.....	.....
Elco	1.15	2.02	3.35	3.55	5.85	11.17	3.19	1.35	0.70	1.52	T.	3.49	37.34
Elk Falls	0.82	1.44	2.10	2.58	4.34	10.36	1.92	0.76	0.79	[1.50]	0.88	0.82	[28.31]
Ellis	0.63	0.04	1.79	1.87	4.25	2.93	4.62	3.00	9.00	[1.60]	[0.10]	[1.50]	[31.33]
Emporia	1.07	1.87	2.51	2.24	6.20	10.28	2.62	4.47	0.86	1.30	0.35	1.15	34.92
Englewood	0.57	0.26	2.76	0.29	5.33	7.59	6.17	1.48	3.72	4.19	0.29	0.94	33.50
Eureka Ranch	1.05	0.35	1.65	0.92	2.05	4.84	4.09	1.29	4.73	1.59	0.13	1.52	24.21
Fort Leavenworth[3]	2.81	1.95	1.99	3.62	7.40	6.59	3.23	7.06	1.07	1.38	0.91	2.91	40.92
Fort Leavenworth[4]	2.70	2.10	2.50	3.30	6.50	6.40	2.90	6.50	0.88	1.27	0.98	2.08	38.11
Fort Riley	1.88	0.00	2.50	1.10	5.15	6.20	2.30	0.60	2.30	2.99	0.06	0.85	25.93
Tremont	1.45	0.18	3.23	3.87	4.36	11.66	6.75	1.14	5.49	[1.30]	[0.05]	[1.40]	[40.88]
Garden City	0.64	0.18	0.28	0.21	1.78	7.89	7.91	2.08	4.45	0.79	0.00	1.00	27.21
Gibson	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.41	.....
Globe	1.34	2.11	3.40	5.36	6.81	7.79	7.85	1.70	1.64	1.37	0.98	2.61	42.96
Gove City	1.29	0.31	1.85	2.54	3.46	4.21	2.34	0.39	2.95	0.72	0.00	0.50	20.56
Grainfield	1.79	1.75	3.92	2.54	6.08	6.02	3.90	1.50	4.20	0.50	0.00	0.34	32.54
Grenola	1.20	1.70	2.20	3.20	3.00	5.60	1.95	T.	1.40	0.40	0.20	1.35	22.20
Grinnell	1.30	0.05	1.80	2.05	5.50	3.45	4.90	0.30	3.12	[0.50]	0.00	1.94	[24.91]
Halstead	1.65	1.24	3.76	1.19	5.09	7.40	5.73	0.56	0.98	[3.00]	0.22	1.28	[32.10]
Havensville	2.00	0.50	5.10	5.75	5.25	5.04	2.85	0.80	1.77	2.18	0.48	0.87	32.59
Horton	2.96	0.97	1.63	4.10	4.57	8.18	3.06	2.72	0.97	1.46	0.79	2.22	33.63
Hoxie	1.50	0.19	1.90	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hutchinson	2.00	1.24	3.57	1.04	[8.20]	[3.00]	3.96	1.47	2.86	2.48	0.32	*0.96	[31.10]
Independence	1.75	2.25	1.52	3.25	3.36	10.84	1.50	0.33	1.32	0.94	1.14	2.41	30.60
Kansas City	2.08	1.46	3.53	3.74	6.42	5.48	2.61	6.50	0.36	1.04	1.19	2.02	36.43
Kellogg	0.91	[1.80]	2.85	2.61	10.25	6.42	11.93	0.58	1.76	1.12	1.04	[1.30]	[42.57]
Kingman	4.35	1.50	4.37	0.45	3.79	4.88	7.45	.....	.....	.....	.....	.....	.....
Kiowa	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.47	1.75	.....
Kirwin	0.50	0.20	2.95	2.65	4.25	5.95	5.82	1.15	2.60	2.70	0.04	1.20	29.99
La Crosse	0.96	0.77	3.04	1.94	3.28	3.47	5.69	1.35	2.12	6.40	0.08	0.33	29.43
La Harpe	1.21	2.30	2.57	3.16	3.31	11.59	4.63	1.68	0.15	0.51	0.77	[1.40]	[33.28]
Lakin	0.80	0.10	.90	0.70	3.15	5.02	2.50	[1.50]	4.00	0.30	0.10	1.20	[21.27]
Larned	.....	.....	.....	.....	.....	4.37	4.87	0.62	1.15	3.10	.....	.....	.....
Lawrence	1.43	1.98	3.04	5.79	6.55	10.15	6.40	1.18	2.23	1.35	0.81	2.41	[43.32]
*Leavenworth	2.66	1.39	3.16	3.95	7.32	6.12	2.19	6.45	0.57	1.39	0.80	1.71	37.71
Lebo	2.18	2.11	3.63	3.24	7.06	8.77	7.49	1.07	1.21	1.08	0.94	1.73	40.51
Leoti	0.98	0.08	2.00	1.36	2.00	6.52	3.50	1.00	2.13	0.00	T.	1.24	21.01
Macksville	0.98	0.50	2.20	0.25	3.92	3.50	7.12	2.37	2.00	[4.00]	0.03	[1.30]	[27.87]
*Manhattan[5]	2.23	1.02	3.45	2.27	5.79	8.00	5.25	2.27	1.40	1.96	0.33	1.05	35.06
Manhattan[6]	1.25	0.84	2.24	0.52	4.79	5.96	5.51	0.98	1.46	2.45	0.26	1.09	27.73
Manhattan[7]	*2.21	1.11	3.10	1.89	6.09	7.85	4.97	0.97	1.40	2.40	0.28	0.96	33.23
Mankato	3.30	0.60	1.20	[3.50]	3.00	6.15	5.20	1.40	3.62	3.75	0.25	[1.30]	[33.27]
Marmaton	1.17	2.72	3.10	6.75	4.50	[illegible]	4.50	3.35	1.50	0.97	1.07	1.22	[45.55]
McAllaster	1.70	.....	3.40	1.46	3.75	4.60	4.95	.....	2.10	.....	.....	1.90	.....
McPherson	0.79	1.17	3.57	1.23	7.56	[5.30]	4.57	0.59	2.56	3.14	0.16	0.01	[30.67]
Medicine Lodge	.....	.....	.....	.....	.....	3.98	6.48	.....	1.77	3.90	0.57	2.00	.....
Minneapolis	1.15	0.72	3.42	1.60	4.60	4.25	8.00	0.30	4.65	5.20	0.05	1.47	.....
Monument	0.92	0.22	2.84	2.85	3.90	5.60	4.25	0.50	1.75	0.20	[0.02]	[1.50]	[24.55]
Morse	2.60	1.50	3.42	4.82	6.15	6.56	2.92	4.73	1.23	0.65	1.67	2.16	38.41
Morton	.....	.....	.....	.....	5.23	6.20	2.25	1.80	8.60	2.55	0.50	1.95	.....
New England Ranch	.....	.....	.....	.....	.....	.....	4.87	1.34	2.60	0.41	0.00	0.74	.....
Norton	1.25	0.50	4.03	3.41	6.05	10.84	[6.00]	1.33	2.75	1.12	0.37	1.14	[38.79]
Oakley	.....	0.08	.....	.....	4.50	.....	.....	.....	.....	.....	.....	.....	.....
Oberlin	0.62	0.05	7.28	7.58	6.70	6.56	5.34	2.46	1.40	1.03	0.10	2.15	41.27
Ogallah	0.72	0.05	1.28	1.10	3.17	6.50	5.50	0.50	6.00	0.70	[0.10]	[1.40]	[28.02]
Oswego	2.07	2.07	1.93	4.60	2.83	7.65	1.54	0.95	0.87	1.95	1.57	1.74	29.74
Page City	0.30	[0.05]	1.00	2.10	1.50	[5.10]	1.25	1.00	2.25	T.	T.	1.08	[15.63]
Painter	.....	.....	.....	0.88	4.62	.....	4.75	.....	.....	.....	.....	.....	.....
Pauline	1.05	1.20	2.20	3.83	7.31	9.77	4.01	1.74	0.50	1.20	0.20	2.50	35.51
Phillipsburg	.....	.....	.....	.....	.....	.....	.....	.....	3.49	0.78	0.00	1.22	.....
Plainville	1.06	0.05	.....	.....	8.38	.....	6.00	.....	.....	2.65	.....	1.19	.....
Pleasant Dale	0.90	1.00	3.87	2.45	2.70	6.50	4.50	2.20	2.20	5.13	0.03	1.30	32.84
Quinter	0.87	0.05	1.40	0.75	3.50	3.75	2.25	.....	.....	.....	.....	.....	.....
Rome	1.03	2.06	3.01	3.66	6.42	5.33	4.40	0.52	1.06	1.28	0.79	2.82	32.38
Salina	1.38	T.	2.31	0.88	6.63	3.90	6.50	0.71	3.75	1.19	0.11	0.82	28.18
Scott City	.....	0.15	1.25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sedan	1.60	1.60	1.78	2.33	2.54	6.17	1.88	0.39	0.97	0.[illegible]	0.46	2.98	23.20
Seneca	1.97	1.11	3.12	4.75	5.92	5.19	4.74	2.67	0.59	3.0[illegible]	.....	1.61	35.17
Sharon Springs	1.30	0.20	2.25	1.60	3.50	.....	.....	.....	.....	.....	0.10	.....	.....
Shields	1.10	0.11	3.36	[1.30]	3.70	[4.90]	[4.00]	0.83	3.14	0.78	.....	0.59	[23.39]
Spearville	1.32	0.45	1.50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Springvale	2.90	0.75	6.00	0.35	8.00	.....	.....	.....	.....	.....	.....	.....	.....
Stafford	.....	0.58	3.67	0.70	5.52	4.50	[illegible]	2.95	4.80	.....	.....	.....	.....
Sterling	[0.90]	[1.20]	[3.60]	*0.79	3.08	4.83	6.00	0.75	2.39	1.60	0.02	1.38	[26.54]
*Topeka	2.58	1.91	2.49	3.72	6.86	10.50	8.96	2.31	1.00	1.58	0.64	[illegible]	48.28
Tribune	1.30	T.	2.57	2.83	2.94	5.57	3.83	1.19	2.31	0.16	T.	1.31	24.01
Ulysses	.....	.....	.....	.....	.....	4.32	6.65	1.23	3.98	0.55	0.45	1.14	.....
Wa Keeney	2.00	0.22	1.91	1.06	2.40	4.69	2.43	0.56	4.00	0.80	[0.05]	1.26	[21.34]
Wakefield	2.03	0.44	4.75	1.95	5.51	4.62	3.60	0.62	3.72	3.73	0.28	1.40	32.65
*Wallace[8]	0.24	0.25	1.06	1.97	2.00	2.68	4.27	0.48	1.80	0.06	0.01	1.50	16.32
Wallace[9]	0.90	0.35	1.90	1.20	2.51	5.25	.....	.....	.....	.....	T.	.....	.....

[1] H. A. Williams.
[2] Weather Bureau.
[3] Post hospital.
[4] Military prison.
[5] Special river observer
[6] C. M. Breese.
[7] C. P. Blachly.
[8] Agent Union Pacific R. R.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Kansas—Continued.													
Wellington	1.95	2.05	3.86	2.40	8.90	5.45	10.06	.....	.....	.....	.....	.....	.....
Weskan [1]	0.90	0.10	1.20	0.50	2.27	2.32	4.85	0.80	1.40	T.	T.	2.30	16.64
Weskan [2]	.....	.....	.....	.....	.....	1.95	6.03	2.72	1.11	T.	T.	1.68	.....
*Wichita	2.66	1.95	3.36	1.26	9.15	4.90	5.59	0.40	0.72	2.95	0.47	1.12	34.53
Yates Center	1.74	2.07	2.84	3.60	4.66	9.34	1.15	0.25	0.69	0.66	0.65	1.21	28.86
Kentucky.													
*Bowling Green	6.80	7.61	8.24	2.42	0.76	3.02	1.08	6.76	2.41	0.96	6.56	4.37	50.99
*Burnside	4.97	9.15	9.49	2.95	1.51	4.68	3.73	4.80	1.34	1.27	5.46	5.60	55.03
Burkesville	3.23	4.41	9.11	1.58	1.79	3.82	2.15	5.72	1.00	0.10	5.00	[4.80]	[41.91]
Caddo	4.20	3.79	8.15	[1.90]	0.80	8.40	4.00	3.00	3.00	1.60	3.75	[2.50]	[46.09]
*Cattletsburg	6.54	7.54	5.90	2.77	1.15	4.10	2.98	3.73	1.23	1.66	6.72	5.02	49.39
Canton	6.38	4.78	9.10	3.70	2.52	4.48	1.79	5.29	3.30	0.60	8.41	5.60	55.95
Central City	7.83	4.23	7.54	.....	1.38	5.66	.....	19.76	1.23	.....	10.01	.....	.....
Earlington	4.79	2.96	6.89	1.96	1.68	4.84	2.40	9.23	1.44	0.20	5.60	5.44	47.43
Edmonton	5.77	6.84	9.46	2.61	0.97	6.71	2.15	6.27	1.41	0.94	6.22	3.38	52.73
*Falmouth	4.31	3.67	5.60	1.84	1.75	5.46	8.10	3.51	2.34	1.78	6.95	2.52	47.83
Fort Thomas	[2.80]	[3.40]	5.33	1.69	1.18	6.32	5.04	4.04	1.74	1.44	5.76	2.41	[41.15]
Frankfort [3]	5.41	3.80	7.57	1.96	3.10	2.63	3.17	7.97	2.12	1.07	3.56	3.45	45.81
Franklin	5.34	6.89	9.75	3.59	1.90	4.56	1.35	6.23	2.54	1.17	7.30	5.23	55.76
Georgetown	.....	.....	.....	.....	1.59	3.33	.....	.....	.....	.....	.....	.....	.....
*Greensburg	4.96	6.80	8.83	2.05	0.65	4.07	2.38	4.84	2.30	1.31	5.22	3.15	46.56
Harrodsburg	5.85	5.55	8.45	2.90	1.27	2.33	2.29	7.25	1.45	1.60	5.21	3.25	47.40
*Lexington	4.70	4.36	7.63	1.85	1.17	5.33	3.23	6.48	1.26	1.33	5.35	2.82	45.51
*Louisa	4.11	6.53	6.27	2.00	4.39	8.14	3.85	3.73	1.67	2.51	3.47	3.25	49.92
*Louisville	5.21	3.94	6.57	2.42	1.56	2.00	4.08	5.42	1.99	0.35	6.23	3.65	43.42
Middlesboro	[3.90]	8.99	8.55	2.52	3.96	7.90	3.09	3.02	1.52	1.42	3.86	5.40	[54.13]
Mount Sterling	4.35	4.17	7.07	1.66	1.01	5.52	.....	.....	.....	.....	.....	.....	.....
Newport Barracks	2.82	3.42	5.58	1.62	1.15	5.57	5.63	3.25	2.71	1.18	4.13	2.14	39.20
*Paducah	4.08	6.59	8.10	1.91	1.88	3.63	3.59	6.07	0.49	0.31	6.42	5.00	48.07
Pelleville	5.02	3.41	8.02	2.71	1.40	3.63	2.42	5.64	3.03	0.16	5.78	4.82	47.04
Princeton	5.30	3.50	7.65	2.82	1.60	4.15	2.25	6.90	1.65	0.27	6.78	[5.00]	[47.87]
Richmond	.....	4.45	8.75	2.07	1.13	.....	1.75	.....	0.43	.....	4.40	3.26	.....
Shelbyville	5.55	3.83	7.11	2.59	3.41	6.24	3.83	2.72	2.96	1.35	5.87	3.38	48.84
South Fork	.....	.....	.....	.....	2.00	.....	5.80	.....	.....	.....	.....	3.75	.....
Springfield	.....	.....	.....	.....	.....	.....	.....	3.62	1.95	.....	.....	.....	.....
*Williamsburg	3.90	4.97	6.74	1.80	1.50	8.70	2.30	[5.00]	0.80	1.40	2.60	3.60	[44.31]
Louisiana.													
Abbeville	11.45	7.45	2.14	0.66	1.45	3.80	10.50	2.30	0.76	1.05	5.31	6.48	53.35
*Alexandria	10.03	11.58	2.73	3.88	0.16	3.69	9.05	2.63	0.74	0.80	4.76	3.86	53.91
*Amite City	9.68	10.40	4.34	2.43	3.21	5.00	8.51	5.16	3.58	0.00	5.30	[4.90]	.....
*Baton Rouge	9.35	7.50	3.23	0.66	0.85	4.96	11.44	3.08	0.65	2.36	7.17	4.97	56.22
Cameron	8.65	5.34	2.63	0.58	[7.60]	1.77	7.05	1.73	2.85	1.59	6.04	4.91	[50.74]
*Cheneyville	13.60	5.92	4.17	1.73	1.47	6.06	13.11	2.43	0.68	2.02	11.14	5.72	68.05
Clinton	[1]10.37	[1]7.76	.....	.....	.....	[1]2.45	14.40	[1]1.43	0.92	1.21	.....	.....	.....
*Coushatta [2]	6.94	8.32	3.51	2.93	2.27	4.50	6.08	1.38	3.12	0.20	6.25	5.45	50.95
*Coushatta [4]	.....	.....	.....	.....	2.02	4.56	5.90	1.38	3.03	0.50	6.62	6.26	.....
Crowley	12.18	8.79	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Davis	6.09	5.54	5.26	5.09	0.24	5.24	5.61	1.92	1.09	[0.40]	7.04	4.01	[47.44]
*Delhi	5.31	[1]1.43	3.83	3.90	0.19	0.31	3.88	0.20	1.00	1.00	[6.20]	1.41	[28.66]
*Donaldsonville	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.92	.....	3.44	.....
Edgard	6.07	14.06	3.63	0.41	0.40	4.71	13.31	1.86	5.60	0.17	6.05	4.72	60.99
Emilie	6.34	15.15	3.52	0.44	0.73	5.80	10.60	2.52	6.40	0.23	6.46	3.69	63.88
Farmerville	7.71	6.97	.....	2.76	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Girard	[1]0.06	2.60	0.32	3.10	0.24	3.94	6.00	0.92	0.17	2.18	6.13	4.22	29.88
Grand Cane	5.90	4.15	3.70	3.80	.....	.....	.....	.....	.....	0.70	5.70	7.20	.....
Grand Coteau	10.43	8.42	0.80	0.87	1.20	8.23	[11.50]	[2.50]	0.75	1.38	4.85	4.86	[55.79]
Homer	5.80	3.51	4.59	3.24	0.86	2.63	7.23	2.91	2.14	0.00	3.58	[6.80]	[43.49]
Houma	7.53	10.87	4.54	0.00	[0.50]	5.13	10.58	4.64	3.26	0.24	4.08	5.70	[57.07]
Jackson Barracks	3.26	9.78	4.31	0.61	0.24	6.83	6.49	3.10	3.01	3.07	3.68	4.07	48.44
Jeanerette	9.68	8.26	4.35	1.37	[0.60]	*3.13	11.91	2.75	2.23	0.90	[5.30]	5.10	[55.58]
*Lafayette	[1]8.78	9.22	2.06	1.05	0.52	2.00	12.03	0.29	1.27	0.53	5.53	4.55	47.83
*Lake Charles	13.20	8.10	2.65	0.40	0.10	5.70	5.20	3.40	5.40	0.20	4.70	5.70	54.75
Lawrence	[7.50]	[10.00]	[1]4.71	0.66	0.55	4.95	6.95	3.83	4.10	1.02	4.12	5.05	[53.44]
Liberty Hill	6.29	5.33	5.57	4.09	1.63	3.84	9.33	2.59	1.33	0.00	6.33	6.56	[52.89]
Luling	7.20	15.03	4.69	0.26	1.17	3.87	11.25	3.81	11.17	0.58	3.29	5.99	66.31
Mandeville	[8.00]	10.45	4.38	1.22	1.01	4.47	[9.50]	[1.70]	[1]1.65	*0.32	*3.56	4.90	[51.16]
Marksville	11.94	5.30	2.59	4.60	T	3.25	14.77	2.55	2.30	T	9.00	1.85	57.55
Maurepas	7.28	10.39	3.76	1.07	0.60	3.93	7.64	1.73	2.19	0.15	5.16	4.23	48.14
*Melville	12.30	7.57	1.89	2.30	0.13	3.83	10.38	3.55	0.59	1.48	4.22	5.21	53.51
*Minden	5.47	[3.50]	[3.40]	[3.00]	0.73	2.11	9.68	2.54	0.15	T	4.61	8.27	[43.46]
*Monroe	5.17	8.29	3.64	3.58	1.15	1.62	4.98	4.33	2.75	0.75	6.39	3.28	45.93
*Natchitoches	.....	.....	.....	.....	2.06	3.33	4.68	2.42	.....	.....	7.14	.....	.....
New Iberia	[3]6.69	[3]6.67	2.30	0.52	1.60	1.69	10.01	1.25	2.44	0.53	6.20	5.64	45.54
Northern Louisiana Experiment Station	9.35	.....	.....	.....	.....	.....	.....	[4]4.67	4.20	0.48	6.67	3.80	.....
*New Orleans	3.75	7.42	2.67	0.26	0.76	4.45	4.57	1.69	3.43	2.38	3.31	3.93	38.62
Paincourtville	7.33	9.67	3.68	0.45	0.74	8.46	10.42	[2.50	2.55	0.90	4.93	3.35	[54.98]
Plaquemine	11.73	9.97	.....	1.59	0.53	.....	13.50	.....	2.63	.....	5.42	4.93	.....
*Port Eads	7.94	9.00	3.22	0.50	0.10	5.83	8.05	.....	.....	.....	4.97	4.07	.....
Shell Beach	11.02	8.73	1.85	1.10	1.12	2.04	8.80	2.87	2.85	0.00	[5.10	4.65	[50.13]
*Shreveport	5.10	2.73	3.11	2.95	0.68	1.34	2.57	2.14	4.35	0.22	3.76	6.85	36.00
Sugar Experiment Station	5.43	11.25	3.27	0.80	2.37	5.84	5.60	2.05	9.79	1.35	4.35	4.42	56.52
Thibodeaux	6.13	[8.50]	3.19	0.35	0.08	[4.50]	7.54	[3.00]	1.96	1.06	4.43	5.26	[46.00]
West End	5.25	.....	4.50	.....	.....	4.04	4.48	.....	2.20	2.80	4.98	5.00	.....
Winnsboro	7.74	4.73	8.15	3.10	0.70	4.70	8.60	0.33	T	0.00	5.37	3.00	46.42

[1] Agent Union Pacific R. R. [2] S. D. Yoxall. [3] Special river observer. [4] Cotton belt.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
Maine.													
Bar Harbor	7.21	4.68	5.18	2.87	1.57	3.73	4.36	2.45	2.15	4.76	3.12	[4.40]	[46.48]
Belfast	.....	.....	.....	.....	.....	3.33	4.16	3.32	1.55	2.97	3.02	5.10	.....
Bethel	.....	.....	.....	.....	.....	.....	3.71	5.33	1.16	.....	2.12	.....	.....
Calais	9.52	3.91	4.39	2.95	2.82	3.72	[3.50]	3.45	3.53	5.78	3.88	3.74	[51.19]
Cornish	4.93	3.78	6.79	2.58	2.87	2.95	5.54	3.70	2.42	4.58	2.77	4.87	47.78
East Machias	.....	.....	.....	.....	.....	.....	4.29	4.90	2.63	6.45	4.58	3.81	.....
*Eastport	5.50	3.13	2.75	1.37	1.64	3.00	2.61	4.06	2.65	4.43	2.31	2.99	36.44
Fairfield	6.12	2.23	4.75	1.97	2.26	2.03	4.63	4.00	2.06	1.38	2.14	4.56	38.13
Farmington	6.54	2.13	8.28	1.97	1.94	3.93	3.42	4.03	1.45	1.68	2.69	5.64	43.70
Fort Preble	4.15	2.30	4.60	1.80	3.00	3.10	5.40	1.30	2.45	3.25	1.75	2.90	36.00
Kennebec Arsenal	3.73	0.15	4.94	1.77	1.20	1.28	1.80	0.94	0.38	1.76	2.75	5.22	25.92
Kents Hill	6.28	3.41	5.37	1.85	1.98	3.05	[4.50]	[4.00]	[1.50]	2.12	1.79	5.57	[41.42]
Lewiston	8.10	3.89	7.03	2.89	2.60	3.64	5.27	2.97	1.00	2.40	2.66	5.27	47.72
Mayfield	.....	.....	.....	3.75	2.37	3.34	5.11	4.78	1.58	1.56	2.91	.....	.....
Orono	7.66	2.93	5.20	3.26	2.83	3.20	3.56	4.67	3.68	2.85	2.78	4.76	47.38
†Portland	7.72	4.31	5.48	1.89	3.47	2.77	4.78	1.15	1.94	3.22	2.38	4.17	43.28
Maryland.													
*Baltimore	4.89	5.52	7.94	2.48	3.11	5.45	7.79	4.24	5.46	2.76	1.33	3.24	54.21
Barren Creek Springs	4.81	6.59	7.54	1.76	2.91	1.85	12.38	6.17	0.53	4.83	2.26	2.99	54.62
Boettcherville	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.30	3.70	.....
*Cumberland[1]	2.93	3.99	7.47	2.02	2.57	7.69	5.17	3.44	2.46	2.21	2.92	3.42	46.29
Cumberland[2]	2.65	2.86	7.10	2.21	2.51	6.04	6.29	3.71	2.55	2.39	2.70	3.28	44.29
Darlington	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.02	.....
Denton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.99	.....
Easton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.19	2.93	.....
Fallston	6.27	5.81	7.47	2.71	.....	.....	.....	.....	.....	4.06	.....	3.92	.....
Fort McHenry	2.36	4.81	6.64	2.46	2.63	6.09	7.61	3.71	4.68	2.56	1.60	3.33	48.48
Frederick	4.51	3.95	6.31	2.16	2.50	7.19	6.15	3.53	2.17	1.79	1.85	3.49	45.60
Great Falls	.....	.....	.....	.....	.....	.....	7.50	3.32	6.07	1.14	1.98	2.77	.....
Hagerstown	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.68	.....
Jewell	3.63	[5.05]	[8.30]	2.00	5.50	5.40	12.15	6.88	0.88	4.00	2.71	2.77	[59.12]
Leonardtown	.....	.....	.....	2.46	6.17	2.64	10.32	.....	0.74	.....	2.63	.....	.....
McDonogh	4.96	3.63	6.66	0.76	4.73	6.16	8.58	[3.70]	2.92	2.20	1.47	3.67	[49.44]
Mount St. Mary's College	4.84	5.33	4.56	4.18	2.45	[5.50]	8.45	4.97	1.85	2.68	2.54	3.91	[51.26]
New Market	.....	.....	.....	.....	.....	.....	.....	.....	2.36	2.12	2.68	3.50	.....
Taneytown	4.48	4.43	6.29	3.74	2.69	4.96	10.20	4.25	1.91	2.73	2.09	3.60	51.63
Woodstock	4.66	4.60	7.65	2.56	4.56	5.95	[8.10]	4.87	3.45	2.90	1.82	3.31	[44.43]
Massachusetts.													
Amherst[3]	8.17	4.07	3.14	3.57	1.81	4.82	4.79	4.70	2.25	2.81	2.71	4.68	47.72
Amherst Agricultural Experiment Station[4]	6.61	3.84	2.89	2.74	1.82	4.61	5.09	3.67	2.22	2.56	2.13	4.55	42.73
Amherst Hatch Experiment Station[5]	6.75	4.23	2.99	2.66	1.97	4.75	5.28	4.18	2.66	2.94	2.99	5.40	46.80
Andover	4.25	3.91	7.87	2.53	2.37	4.66	3.41	2.99	1.86	3.35	2.79	3.16	43.15
Ashland	7.12	5.35	6.32	4.05	1.85	4.17	3.72	4.20	2.44	3.06	3.14	3.61	49.93
Blue Hill (summit)	6.71	5.01	4.88	2.75	2.39	4.30	2.80	4.72	3.82	5.90	2.92	4.07	50.27
Blue Hill (valley)	6.91	4.97	4.85	2.91	2.12	3.84	3.36	4.70	3.14	6.06	2.56	4.04	49.46
Blue Hill (base)	7.35	5.39	5.06	2.77	2.27	3.93	2.68	4.66	3.55	6.23	2.91	3.98	50.78
Boston[6]	6.11	5.27	5.35	2.53	2.69	2.86	3.18	3.74	1.58	5.50	2.65	3.66	45.12
*Boston[7]	4.39	3.66	3.94	1.71	1.56	3.06	3.73	3.87	2.29	5.56	2.35	3.58	39.70
Cambridge[8]	6.09	4.56	4.90	2.44	2.10	3.57	2.83	3.21	2.48	4.82	2.22	3.29	42.51
Cambridge[9]	6.68	4.61	5.74	2.72	2.44	4.01	[2.80]	3.68	2.73	5.10	3.08	6.78	[50.37]
Chestnut Hill	6.98	5.29	5.63	2.98	2.05	4.04	3.44	4.02	3.07	5.70	2.70	3.73	49.63
Chicopee	[7.80]	3.72	4.60	3.10	1.82	3.10	7.64	3.96	1.19	3.73	2.56	5.94	[48.56]
Clinton	6.12	4.28	5.20	2.90	2.08	3.25	3.10	2.80	2.10	2.85	2.72	3.62	40.02
Concord	5.45	4.78	5.70	2.63	1.63	3.43	2.97	2.85	1.69	3.16	5.65	3.07	40.01
Cotuit	7.50	5.75	3.66	2.65	2.62	1.65	2.19	4.13	5.57	10.14	1.72	3.77	51.35
Dudley	7.57	4.39	5.32	1.91	1.24	1.94	2.09	2.58	2.45	2.96	1.35	2.40	36.20
Fall River	8.98	6.22	5.75	4.32	2.70	1.39	2.92	2.70	2.38	5.63	2.90	4.00	49.89
Fiskdale	6.31	3.41	2.86	2.14	2.23	3.07	4.20	4.47	2.83	3.66	2.67	4.62	42.47
Fitchburg[10]	7.06	4.56	5.17	4.26	1.79	3.47	3.95	2.48	1.87	3.73	2.97	4.26	45.56
Fitchburg[11]	6.95	4.19	5.15	4.17	1.76	3.44	3.52	2.46	1.88	3.97	2.68	4.62	43.59
Florida[12]	4.26	4.82	0.98	3.18	2.20	4.18	8.82	3.90	2.46	3.45	[3.00]	4.80	[46.05]
Florida[13]	.....	.....	.....	.....	.....	3.99	7.59	3.56	1.69	3.11	3.00	5.34	.....
Fort Warren	5.00	4.48	4.21	1.75	2.71	4.96	4.12	4.61	2.78	3.22	2.78	3.66	43.66
Framingham	7.02	5.12	6.63	3.76	2.17	3.37	3.07	5.22	2.35	3.70	3.04	3.76	49.21
Gilbertville	6.53	3.36	3.70	2.93	2.68	4.93	5.22	3.65	1.31	3.82	2.31	5.44	45.82
Groton[14]	6.61	4.08	5.31	3.29	2.36	3.14	3.47	1.95	2.05	2.72	2.15	3.89	41.02
Hoosac Tunnel	.....	.....	.....	.....	.....	3.81	6.34	2.47	0.95	2.10	.....	.....	.....
Kendall Green	6.91	5.18	6.26	3.64	1.32	4.51	2.51	4.23	1.80	4.18	2.59	3.27	46.40
Lake Cochituate	6.67	5.02	5.49	3.62	1.67	3.78	2.99	4.91	2.12	4.14	2.86	3.33	46.60
Lawrence	6.11	4.55	5.10	3.28	2.48	3.30	3.20	2.01	1.47	2.96	2.29	3.23	39.98
Leicester	7.19	4.24	5.09	2.48	1.55	2.53	3.56	3.26	2.27	1.87	2.55	4.06	40.65
Leominster	6.97	3.69	5.57	3.34	2.34	4.56	4.30	1.95	2.08	3.41	2.64	3.27	44.14
Long Plain	10.08	7.16	7.34	3.80	2.04	1.80	2.63	2.32	2.10	8.73	4.07	5.02	57.09
Lowell[15]	7.05	4.83	6.00	3.56	2.29	3.66	3.17	2.14	1.78	2.92	1.91	3.21	42.52
Ludlow[16]	7.87	4.70	2.99	2.87	1.55	3.83	5.84	3.32	1.77	3.73	3.00	4.85	46.32
Ludlow[17]	7.74	4.30	3.65	2.75	2.60	3.60	5.87	.....	.....	.....	.....	.....	.....
Lynn	6.42	5.12	4.51	2.45	2.29	3.83	3.38	[3.60]	2.43	5.95	2.31	3.41	[45.70]
Mansfield	8.20	6.61	5.63	3.07	1.63	3.66	3.86	3.52	3.20	5.84	3.08	4.82	52.32

[1] E. T. Shriver.
[2] Howard Shriver.
[3] Miss S. C. Snell.
[4] Agricultural Experiment Station.
[5] Hatch Experiment Station.
[6] Boston Water Works.
[7] Weather Bureau.
[8] Harvard College Observatory.
[9] E. C. Brooks.
[10] Dr. J. Fisher.
[11] D. A. P. Mason.
[12] Nelson Dupuey.
[13] L. E. Baker.
[14] C. Woolley.
[15] Proprietor locks and canals.
[16] M. W. Graves.
[17] J. Haviland.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Massachusetts—Continued.													
Medford	6.32	4.44	5.35	2.37	2.46	4.20	3.14	3.45	3.06	3.40	2.33	2.43	42.95
Middleboro	7.90	5.69	4.93	3.69	2.19	1.85	2.19	3.22	1.97	5.70	3.04	3.45	45.79
Milton	6.52	5.34	4.58	2.91	2.03	3.74	3.39	4.31	3.14	6.30	2.28	4.00	48.54
Monson	7.33	5.38	3.01	3.07	1.86	2.84	4.83	3.27	3.40	4.18	2.36	4.20	45.78
Mount Nonotuck	7.39	5.63	2.66	3.13	1.97	3.49	5.98	5.65	2.33	2.69	2.50	4.01	47.43
Mystic Lake	6.26	4.98	6.19	3.50	2.55	4.53	3.16	4.10	2.31	4.94	2.78	3.62	48.92
Mystic Station	5.99	4.85	5.68	2.85	2.31	4.09	3.29	3.72	2.67	5.05	2.50	3.45	46.45
Nahant	.....	.....	.....	.....	.....	.....	3.15	3.58	.....	.....	.....	.....	.....
*Nantucket	4.51	3.30	1.86	1.47	2.05	2.83	3.16	3.41	3.12	4.96	1.02	3.14	34.83
New Bedford [1]	8.28	7.01	5.68	2.83	2.42	1.55	2.02	2.08	2.32	7.02	3.17	3.38	47.76
New Bedford [2]	9.17	5.78	5.61	2.89	1.22	1.63	2.17	2.17	1.97	6.41	3.07	3.71	46.80
Newburyport [3]	6.86	4.83	4.51	2.10	2.39	3.79	3.67	2.04	1.66	4.32	2.34	3.27	41.78
Newburyport [4]	[6.86]	[4.80]	5.05	1.64	2.25	3.64	3.42	2.27	1.59	3.14	2.42	[3.30]	[40.38]
Northampton	[7.80]	4.47	3.83	4.85	2.32	6.04	5.52	3.81	2.82	2.76	2.80	4.72	[51.74]
North Billerica	4.80	3.15	5.40	2.60	2.53	2.42	4.00	1.90	2.10	2.35	3.60	3.27	38.12
Plymouth	8.36	5.32	5.04	4.02	1.99	2.23	2.55	3.18	2.23	5.72	1.79	3.77	46.20
Princeton	[7.40]	[4.40]	[4.60]	1.75	2.10	4.99	3.68	1.99	2.43	3.31	2.70	2.16	[41.51]
Provincetown	6.71	4.54	3.69	3.28	1.69	2.14	2.71	3.93	2.77	5.82	1.52	3.15	41.95
Randolph	7.30	6.14	5.50	2.67	1.50	3.20	2.59	5.45	2.40	5.60	2.86	3.72	48.93
Roberts Dam	6.14	4.47	6.18	2.89	1.70	4.30	3.21	5.60	2.93	3.86	2.57	3.48	47.42
Royalston	[7.00]	8.24	5.09	4.44	4.25	5.88	5.75	2.88	2.25	2.50	5.38	[4.10]	[57.76]
Salem	6.21	4.90	4.92	2.18	1.67	4.00	3.00	2.75	2.31	5.45	1.93	3.58	42.90
Savoy	.....	.....	.....	.....	.....	4.07	3.45	3.38	0.96	2.00	6.07	7.60	.....
Somerset	8.94	7.09	5.53	4.01	2.09	1.76	4.24	2.12	2.66	4.37	2.95	3.15	48.91
South Hingham	7.58	5.98	5.78	3.12	1.90	4.37	3.21	4.73	2.27	6.22	2.94	3.59	51.69
Springfield Armory	7.86	4.34	3.60	2.55	2.18	3.50	6.37	4.01	1.41	3.39	3.00	4.80	47.01
Taunton [5]	8.34	5.67	5.56	3.97	2.56	2.03	2.46	3.99	2.40	[5.20]	3.02	3.62	[48.82]
Taunton [6]	8.38	5.85	5.19	3.31	2.60	1.88	2.36	3.97	2.27	[5.20]	3.16	3.53	[47.70]
Taunton [7]	8.51	5.82	5.93	4.05	2.56	2.13	2.85	3.89	2.51	5.15	3.40	4.27	51.07
Taunton [8]	8.40	5.37	4.99	4.09	2.62	1.91	2.17	4.79	2.39	5.80	2.99	3.21	48.73
*Vineyard Haven	5.20	3.79	3.63	1.86	1.58	2.38	2.58	3.71	4.87	7.57	1.28	3.32	41.77
Wakefield	6.23	4.60	6.46	3.04	2.35	4.09	2.95	2.51	1.66	4.66	2.52	3.55	44.62
Waltham	5.71	4.83	5.96	[2.80]	1.93	4.02	2.83	5.32	2.53	4.34	2.67	3.90	[46.84]
Wellesley	4.98	6.45	.....	.....	1.63	2.56	3.54	5.38	.....	.....	2.72	2.59	.....
Westboro	6.05	4.21	5.89	2.63	1.85	3.14	2.87	3.02	2.62	2.95	2.89	3.25	41.28
Williamstown	.....	.....	.....	.....	.....	.....	5.43	4.48	0.74	1.80	1.80	3.59	.....
Winchester	6.20	5.17	5.95	2.80	2.37	4.33	3.20	3.66	2.01	4.53	2.43	3.20	45.85
*Woods Holl	6.95	6.26	4.15	2.84	1.94	1.16	2.18	3.57	3.72	7.09	1.65	3.68	45.19
Worcester [9]	9.03	4.60	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Worcester [10]	5.41	4.36	4.59	2.02	.....	.....	.....	.....	.....	.....	.....	.....	.....
Michigan.													
Adrian	1.53	6.51	2.74	2.63	1.94	3.74	4.65	4.31	1.70	2.27	5.91	2.27	40.20
Albion	1.57	3.66	2.78	2.63	2.02	2.27	1.83	5.93	1.66	1.02	6.02	2.49	33.88
Allegan	1.73	3.69	[2.50]	2.34	2.05	4.24	2.98	3.35	1.47	1.20	5.86	2.02	[33.43]
Alma	2.42	2.42	3.69	1.51	1.32	2.33	3.32	4.47	2.92	0.66	5.76	3.95	34.75
*Alpena	2.26	2.46	3.47	1.21	0.10	2.29	2.05	7.80	1.79	1.43	3.79	2.96	31.61
Ann Arbor	2.07	3.61	2.57	1.82	2.00	2.70	2.54	2.54	1.60	1.88	4.96	2.95	31.24
Arbela	0.96	[2.50]	2.09	1.60	0.58	[2.20]	3.26	5.11	0.94	1.30	4.95	3.13	[28.62]
Atlantic	3.20	4.70	3.20	0.90	0.05	2.40	0.52	0.90	2.23	1.95	3.78	3.40	27.23
Ball Mountain	1.11	2.77	2.26	2.99	1.48	2.51	2.14	3.61	2.37	1.95	5.42	1.97	30.58
Bangor	2.12	2.70	2.86	1.97	1.87	4.25	3.38	2.72	1.17	[0.45]	[6.40]	[2.00]	[31.89]
Bear Lake	3.22	4.39	3.23	0.78	0.35	1.99	0.46	4.06	0.99	2.56	6.19	3.85	32.07
Bellaire	3.68	3.06	5.81	1.58	0.30	2.71	1.71	2.78	0.96	2.77	7.33	1.07	33.76
Bell Branch	1.39	3.31	2.65	1.62	1.27	2.23	[2.70]	[2.70]	0.92	1.41	[5.30]	1.50	[27.09]
Benton Harbor	2.24	2.80	2.81	[3.00]	2.59	3.64	2.43	3.03	1.13	1.09	5.11	2.08	[31.95]
Benzonia	[3.20]	[2.50]	[3.00]	0.78	0.49	2.43	0.52	4.32	2.58	3.78	5.70	3.98	[33.28]
Berlin	1.04	2.96	1.64	1.49	2.20	4.10	2.80	6.29	2.67	2.39	5.80	2.40	35.72
Berrien Springs [11]	2.17	4.15	3.08	2.55	2.30	4.30	2.05	4.54	1.40	0.73	6.77	2.30	36.34
Berrien Springs [12]	1.30	3.85	4.71	[2.50]	2.98	3.00	1.94	4.47	1.75	0.45	5.96	1.90	[35.21]
Birch Run	1.38	2.62	2.45	1.66	0.82	1.30	3.91	5.88	1.13	1.06	4.36	1.97	28.54
Birmingham	1.01	2.71	2.93	2.56	1.17	3.87	3.19	4.17	2.78	1.61	5.51	2.26	33.77
Brenson	1.19	4.35	2.40	2.34	1.54	3.41	2.44	2.44	2.27	1.16	4.73	1.30	29.57
Buchanan	2.21	4.97	3.14	3.34	1.71	.....	.....	.....	.....	.....	.....	.....	.....
Caldwell	4.30	2.86	3.80	1.35	0.28	2.86	1.26	3.50	2.35	2.26	5.48	3.55	33.85
Calumet	1.33	2.23	1.77	0.92	0.42	1.15	1.05	2.98	2.91	3.78	3.30	2.90	24.74
Cassopolis	2.71	4.31	3.06	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Charlevoix	3.09	2.17	2.25	1.20	0.25	2.09	1.67	3.52	3.00	4.28	3.74	3.43	30.69
Cheboygan	2.30	3.36	4.36	2.30	0.20	1.21	2.16	5.28	1.27	2.51	4.96	2.49	32.40
Chelsea	0.68	3.09	1.81	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clinton	1.15	3.84	2.10	2.25	2.50	2.90	[2.40]	2.54	1.42	1.25	[5.60]	1.02	[28.07]
Colon	1.46	4.59	3.23	3.09	2.36	5.49	2.92	3.15	1.39	0.76	5.56	0.99	34.99
Concord	1.00	3.77	2.03	2.58	1.44	3.07	1.47	4.94	1.97	1.08	5.14	1.44	29.93
Corunna	.....	.....	.....	.....	.....	.....	.....	6.03	1.51	.....	.....	.....	.....
Crystal Falls	1.15	1.65	2.27	0.35	0.65	1.91	1.28	3.32	1.42	0.90	4.00	2.01	20.91
Deerfield	.....	.....	1.01	1.73	1.77	1.70	2.81	1.86	1.35	2.44	.....	.....	.....
*Detroit	0.92	3.07	2.23	2.72	1.68	2.28	2.90	2.86	1.33	1.93	5.30	1.61	28.83
Eden	1.57	2.84	2.67	2.45	1.87	1.56	[1.90]	[6.00]	1.91	0.84	4.77	2.35	[30.73]
*Escanaba	1.43	2.02	2.83	1.85	0.19	0.94	2.59	4.81	1.15	1.32	2.34	3.36	24.83
Evart	2.27	1.96	2.39	1.46	1.13	1.60	[1.00]	3.72	1.06	1.64	5.52	0.89	[24.64]
Fairview	[3.50]	4.70	2.86	2.07	2.25	1.79	2.11	3.72	1.55	1.43	3.34	0.89	[30.21]
Fitchburg	1.64	3.44	2.74	2.98	2.29	1.77	1.90	5.69	1.96	2.06	5.13	1.69	33.28
Flint	1.02	1.77	1.60	1.22	2.30	1.95	3.87	3.83	1.39	1.06	3.37	1.65	25.03
Fort Brady	1.60	2.27	1.56	0.66	0.40	0.93	1.98	3.09	0.89	2.62	5.03	3.10	24.19
Fort Mackinac	1.99	2.97	2.44	3.24	0.80	1.90	1.65	5.16	0.73	2.51	3.87	1.54	28.90
Fort Wayne	1.06	4.27	2.39	2.53	1.48	1.70	2.51	2.43	1.27	1.65	5.11	1.76	28.16
Fremont	2.44	3.10	1.70	1.17	1.38	2.59	2.06	2.66	0.96	1.04	6.00	4.63	29.73

[1] T. R. Rodman.
[2] New Bedford Water Works.
[3] F. V. Pike.
[4] Newburyport Water Company.
[5] Dr. E. U. Jones.
[6] A. F. Sprague.
[7] Waterworks.
[8] C. H. Willmarth.
[9] J. B. Hall.
[10] Worcester Academy.
[11] F. A. Zerby.
[12] W. J. Jones.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Station.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Michigan—Continued.													
Gaylord	2.30	2.70	2.00	.....	0.05	1.14	.....	3.63	0.50	0.50	.....	.....	.....
Gladwin	1.50	1.80	.....	1.15	0.25	.....	.....	.....	.....	.....	.....	.....	.....
*Grand Haven	2.13	2.45	2.48	1.76	1.31	3.32	1.81	1.47	0.89	1.38	5.41	1.85	26.26
Grand Rapids	.....	1.49	.....	.....	.....	.....	.....	.....	.....	.....	6.33	3.27	.....
Grape	0.83	2.93	3.44	1.77	1.77	2.95	2.27	1.59	0.73	2.00	4.23	1.24	25.75
Grayling	2.19	3.50	4.50	0.95	0.25	3.07	0.47	3.92	3.20	1.79	4.10	0.80	28.74
Gulliver Lake	3.34	3.49	.....	.....	0.02	.....	.....	.....	.....	.....	.....	.....	.....
Hanover	1.35	3.79	1.71	2.47	2.15	3.37	1.87	4.79	2.36	1.96	5.61	1.63	33.06
Harbor Springs	1.95	2.74	2.44	1.84	T.	0.72	0.99	3.84	1.34	2.45	6.96	3.30	28.57
Harrison	1.57	2.30	.....	0.91	.....	.....	.....	.....	.....	.....	.....	0.65	.....
Harrisonville	2.52	.....	.....	3.17	.....	.....	.....	9.24	2.17	1.04	5.03	4.56	.....
Hart	2.50	2.50	2.20	1.80	1.35	2.60	2.90	3.70	1.55	3.35	5.65	2.15	32.25
Hastings	1.32	.....	2.71	1.76	2.07	.....	3.24	3.17	.....	1.07	.....	.....	.....
Hayes	.....	3.50	1.70	.....	0.84	.....	1.49	9.47	2.91	2.17	.....	0.60	.....
Highland Station	1.41	2.94	2.38	2.39	1.79	3.36	2.64	1.36	3.12	1.22	*5.13	2.15	29.89
Hillman	1.83	1.50	2.32	0.95	T.	.....	1.82	4.44	.....	.....	.....	.....	.....
Hillsdale	1.34	2.57	2.28	1.93	2.37	3.32	1.85	3.64	1.47	1.44	5.39	1.76	29.36
Holt	1.24	2.72	1.36	2.15	2.14	1.76	3.94	3.92	[1.40]	1.43	[4.40]	[1.90]	[28.36]
Howell	1.07	3.23	2.70	1.97	2.06	2.17	3.31	6.98	2.02	1.28	4.56	1.02	32.37
Hudson	[1.40]	[4.50]	2.99	2.47	1.83	3.10	2.54	3.93	1.69	1.75	5.92	1.80	[33.92]
Ionia	1.57	.....	0.60	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ivan	3.27	2.88	2.88	1.23	0.74	2.56	0.91	5.98	2.63	2.23	6.50	3.33	35.14
Jeddo	0.90	1.85	1.02	2.26	0.97	0.80	3.97	3.07	3.01	2.52	4.61	1.44	26.42
Kalamazoo	1.56	3.35	2.10	2.65	3.06	5.84	3.81	3.24	1.40	0.97	4.96	1.47	34.41
*Lansing [1]	1.33	2.49	2.69	2.35	1.95	2.46	2.77	.....	.....	.....	.....	.....	.....
Lansing [2]	1.07	2.35	2.48	2.45	1.84	2.26	2.91	5.27	1.37	0.77	4.39	1.89	29.05
Lathrop	1.74	2.12	[1.40]	1.00	0.09	2.28	1.61	5.42	1.33	2.38	2.40	3.56	[25.33]
McMillan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.60	.....
Madison	1.43	4.41	2.80	2.14	1.66	5.46	3.79	2.44	1.60	1.65	6.21	2.00	35.59
*Manistee	2.32	2.25	2.92	0.91	0.12	2.43	1.80	3.16	2.40	1.95	5.03	3.44	28.79
*Marquette	4.08	3.42	4.45	2.18	0.21	2.32	2.74	4.71	1.21	2.56	3.32	2.58	33.78
Marshall	1.51	3.66	3.08	2.26	2.31	2.73	2.21	6.13	1.67	1.12	4.77	1.46	32.91
May	2.15	2.12	2.82	1.69	1.21	3.21	4.84	6.89	1.67	1.85	4.78	2.40	35.63
Montague	1.70	1.80	1.05	0.85	1.19	0.91	0.85	3.01	0.44	1.28	3.73	1.46	18.27
Mottville	1.39	4.30	2.03	2.49	1.45	5.30	1.35	1.36	1.42	0.72	6.70	1.22	29.73
Noble	0.92	4.44	3.11	2.26	1.68	4.43	[1.60]	3.24	3.10	1.98	4.86	1.25	[32.87]
North Aurelius	.....	.....	2.49	2.33	2.15	1.80	2.54	4.24	.....	.....	.....	1.68	.....
North Marshall	1.23	2.93	4.19	2.34	2.31	3.10	2.65	.....	1.60	1.20	5.28	1.20	.....
Northport	2.48	2.65	3.39	0.95	0.04	1.22	[6.00]	.....	.....	.....	.....	.....	.....
Olivet	1.01	2.61	2.02	2.01	1.90	2.42	3.39	3.44	0.55	0.40	4.70	3.57	28.02
Otsego	1.86	4.33	2.56	3.00	2.05	2.79	3.24	2.67	2.92	1.22	[6.70]	[2.10]	[35.44]
Ovid	1.35	2.55	2.76	1.73	1.75	1.32	3.01	5.45	1.22	0.69	4.45	2.41	28.69
Parkville	1.42	4.85	2.89	3.29	2.50	2.34	2.61	3.87	1.50	0.86	6.30	1.79	34.22
Paw Paw	1.08	3.53	1.74	1.97	1.92	5.52	2.97	3.00	2.13	1.10	5.40	1.52	31.88
Pontiac	1.36	3.57	3.66	3.15	2.17	1.78	1.89	2.62	2.83	1.69	5.30	2.04	32.06
*Port Huron	1.81	2.33	2.18	2.60	2.17	2.13	3.93	4.28	3.28	1.86	5.26	1.98	33.81
Pulaski	1.08	3.94	1.89	2.33	2.26	4.53	[1.80]	[4.36]	1.82	1.60	4.94	1.52	[32.07]
Rawsonville	1.70	3.45	1.70	2.70	1.37	3.95	[3.10]	1.80	1.80	2.40	5.05	1.75	[30.77]
Rochester	.....	7.75	.....	4.49	1.59	.....	.....	.....	.....	.....	.....	.....	.....
Rockland	2.72	2.75	2.15	[0.40]	0.26	2.44	1.31	1.85	[2.90]	2.51	3.48	3.10	[25.87]
Romeo	.....	1.99	.....	2.13	1.66	3.44	.....	.....	.....	.....	.....	.....	.....
Roscommon	4.76	6.32	5.41	2.11	0.31	2.11	1.95	.....	.....	.....	.....	.....	.....
St. Ignace	2.80	2.73	3.03	3.55	0.37	1.38	1.34	4.54	0.76	2.24	4.38	1.97	29.09
St. Johns	1.51	2.35	7.38	1.60	1.40	2.25	3.10	[6.10]	0.90	0.75	4.73	1.33	[28.40]
Sand Beach	2.40	1.80	2.02	1.45	0.52	0.66	2.96	4.85	1.92	2.08	6.03	2.01	28.70
*Sault de Ste. Marie	2.06	3.16	2.49	2.11	0.50	0.95	2.22	3.44	0.98	2.76	5.85	3.05	29.57
Standish	2.33	1.33	1.82	0.78	.....	.....	.....	.....	.....	.....	.....	0.75	.....
Stanton	2.15	2.61	4.38	1.79	1.16	2.51	1.83	3.49	.....	.....	.....	.....	.....
Stockbridge	1.08	2.84	1.72	2.00	1.80	1.75	2.04	4.96	.....	.....	.....	.....	.....
Thornville	1.14	3.94	2.40	2.13	1.10	2.44	4.26	3.07	3.96	3.26	5.32	2.92	35.94
Vandalia	1.37	4.13	3.84	3.08	2.19	2.85	3.06	2.63	1.05	1.73	5.23	2.25	33.41
Vienna	2.58	2.52	3.50	1.20	0.29	5.76	1.55	4.09	1.55	1.92	5.12	3.22	32.30
Washington	1.34	2.39	2.15	2.30	1.97	3.04	[3.20]	5.00	2.41	1.94	4.82	1.27	[31.85]
Weldon Creek	3.62	3.21	[2.70]	0.71	0.29	0.55	1.76	2.22	2.49	2.54	6.98	2.27	[29.34]
West Branch	2.90	3.19	.....	2.40	.....	.....	.....	.....	.....	.....	.....	.....	.....
White Pigeon	2.00	3.75	1.73	2.32	2.06	5.81	[3.20]	1.50	1.76	0.51	4.27	1.38	[30.38]
Williamston	1.75	3.16	3.10	2.74	1.75	2.35	3.01	5.45	2.25	0.35	5.00	2.00	32.91
Ypsilanti	1.32	4.30	2.61	2.41	2.04	3.77	2.38	2.60	2.34	1.96	4.82	2.00	32.55
Minnesota.													
*Alexandria	0.22	1.10	1.11	1.27	2.90	3.39	3.45	3.70	2.47	0.78	0.57	1.16	22.12
Alma City	1.45	1.08	1.05	1.64	0.86	8.44	2.68	1.74	1.13	2.14	0.52	2.95	25.68
Crookston	0.22	1.63	0.49	1.39	2.90	3.64	5.39	5.23	4.09	2.81	1.02	0.14	28.85
*Duluth	0.67	2.07	3.13	1.71	2.28	2.67	3.82	3.11	3.31	1.83	1.11	3.76	29.47
Faribault	1.91	1.25	1.86	1.67	1.50	5.96	.....	.....	.....	.....	.....	.....	.....
Farmington	1.00	1.75	3.50	1.70	2.00	4.13	2.28	2.11	0.81	1.50	1.05	4.73	26.56
*Fergus Falls	*0.33	0.43	1.40	1.95	2.54	3.96	2.01	2.04	2.79	1.01	0.64	1.05	20.15
*Fort Ripley	0.29	1.20	0.92	1.84	1.17	4.86	2.24	2.61	3.92	0.94	0.35	2.01	22.35
Fort Snelling	0.79	1.12	2.19	2.09	1.30	5.08	2.72	2.39	0.60	0.88	0.95	2.86	22.97
Grand Meadow	1.50	1.91	1.49	1.59	1.33	5.43	3.32	2.14	1.84	4.13	0.58	[3.70]	[28.96]
Kinbras	.....	.....	.....	.....	1.75	6.39	0.74	2.51	1.51	1.70	0.58	2.48	.....
Lake Winnibigoshish	0.57	1.15	1.10	1.32	1.49	3.81	5.47	2.46	4.34	1.25	[0.60]	1.70	[25.26]
Leech Lake	0.42	1.35	1.41	0.94	1.13	3.57	5.23	3.07	3.43	0.84	0.60	2.09	24.08
Le Sueur	0.80	2.10	1.37	2.09	1.19	3.13	2.56	2.89	1.26	2.07	[0.50]	[4.00]	[23.96]
Mankato	1.43	1.52	2.10	2.32	1.28	[6.00]	[2.70]	[2.80]	0.91	1.14	0.40	2.40	[25.00]
Minneapolis [1]	0.97	1.67	1.42	2.42	1.27	3.44	2.99	3.18	1.75	1.57	0.87	3.01	25.26
Minneapolis [3]	0.86	2.11	1.62	2.02	1.54	4.01	2.80	3.78	1.92	1.84	0.82	3.46	26.78
*Montevideo	0.06	1.96	1.16	1.50	1.98	3.78	1.15	0.69	0.79	0.93	0.43	2.36	16.79

[1] Weather Bureau. [2] Dr. H. B. Baker. [3] Wm. Cheney.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Minnesota—Continued.													
Morris	0.15	1.30	1.55	1.90	1.84	4.15	4.74	1.64	3.07	1.03	0.60	1.45	23.42
Northfield	0.95	1.98	1.22	1.90	1.60	6.10	3.75	1.88	1.41	2.54	0.53	3.92	27.78
*Ortonville	T	2.20	1.50	1.47	1.83	4.61	2.14	2.69	1.34	0.89	0.68	0.89	20.24
Pine River	0.55	1.26	1.49	1.85	0.89	3.25	2.00	3.15	2.85	0.64	0.64	1.26	19.83
Pokegama Falls	0.84	1.63	1.37	.....	0.59	4.53	5.24	.....	.....	.....	.....	.....	.....
*Red Wing [1]	2.06	1.66	2.27	2.40	1.16	5.98	2.50	2.88	1.13	1.87	0.67	4.35	28.93
Red Wing [2]	[2.10]	[1.60]	2.04	2.25	1.46	6.36	2.77	3.13	1.23	0.64	0.86	4.60	[29.04]
*Redwood Falls	0.79	1.41	1.63	2.16	2.97	5.03	2.14	3.42	0.41	1.10	2.05	3.49	26.60
Rolling Green	1.90	2.26	1.70	1.62	2.70	[6.20]	1.27	2.77	[1.60]	[1.10]	0.70	2.65	[26.47]
St. Charles	2.50	2.35	1.65	3.45	1.67	7.64	1.90	2.30	1.38	4.09	0.46	4.10	33.49
*St. Paul	1.01	1.18	0.94	1.71	1.33	4.08	2.07	3.42	0.58	1.57	1.03	2.87	21.79
*St. Vincent	0.78	2.04	1.23	1.68	1.29	8.17	2.56	3.12	2.43	2.38	0.88	1.79	28.35
Sheldon	1.25	0.80	1.50	2.52	1.06	6.42	2.10	.....	.....	.....	.....	1.20	.....
Tracy	0.20	2.10	1.70	[j]1.02	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mississippi.													
*Aberdeen	.....	.....	.....	.....	2.17	8.81	9.50	1.46	0.68	0.00	7.54	.....	.....
Agricultural College	7.64	8.50	9.84	3.88	1.78	5.69	8.68	1.30	0.70	T	7.74	5.42	61.17
*Batesville	5.27	5.60	7.43	4.44	3.29	6.50	10.22	3.65	1.44	0.78	4.60	4.30	57.52
Bay St. Louis	11.10	3.05	6.27	2.25	2.50	10.60	[6.00]	[5.50]	7.90	2.50	6.50	8.00	[72.17]
Booneville	4.40	11.58	[d]11.62	[c]2.61	0.58	4.59	[7.00]	1.05	1.98	0.82	9.16	5.37	[60.76]
*Brookhaven	10.16	7.88	3.64	5.44	7.16	4.20	8.24	2.68	0.29	0.99	9.49	5.00	65.17
Canton	10.06	5.87	9.69	3.82	1.51	2.36	7.93	1.30	0.22	1.28	7.22	4.45	55.71
*Columbus [2]	[b]5.89	9.60	12.57	3.42	2.14	5.42	13.42	2.24	1.50	0.07	5.32	4.15	65.74
*Columbus [4]	.....	.....	.....	.....	2.29	6.64	14.71	2.74	0.77	0.00	8.21	.....	.....
*Corinth	.....	.....	.....	.....	2.35	3.34	5.24	2.74	1.26	1.95	4.88	.....	.....
Edwards	10.38	4.46	8.05	5.18	2.04	3.20	5.65	2.29	1.33	0.25	6.72	3.51	53.06
Enterprise	9.30	4.94	7.41	2.39	0.77	7.84	10.69	3.43	0.99	0.08	5.03	5.64	58.51
Fayette	12.55	5.98	3.03	5.55	0.75	2.91	8.19	1.04	0.25	1.88	9.76	4.64	56.53
*Greenville	3.79	8.38	4.43	2.24	3.42	3.02	12.32	2.44	1.54	0.86	5.40	3.40	51.24
Hattiesburg	4.60	6.79	0.35	1.75	4.14	2.06	8.25	4.85	1.60	0.00	4.91	4.35	43.65
*Hazlehurst	.....	.....	.....	.....	5.55	3.30	5.63	0.45	0.85	0.32	8.36	.....	.....
*Hernando	.....	.....	.....	.....	0.93	4.86	5.80	1.55	0.81	0.40	4.85	.....	.....
Holly Springs [5]	6.21	5.66	10.44	5.62	1.30	4.75	5.53	2.50	1.00	1.40	[5.20]	[6.50]	[58.11]
*Holly Springs [4]	.....	.....	.....	.....	1.20	5.35	6.29	2.89	0.89	1.44	5.17	.....	.....
*Jackson	.....	.....	.....	.....	1.21	2.83	6.63	0.73	T.	0.04	3.29	.....	.....
Kosciusko	[f]1.00	12.10	15.50	5.20	T	6.90	7.20	1.70	0.00	0.00	8.20	5.90	73.70
*Lake	.....	.....	.....	.....	[h]0.60	[f]0.18	0.97	0.14	0.00	0.00	.....	.....	.....
Logtown	5.80	10.95	6.32	4.10	0.21	8.15	4.75	6.23	3.80	3.40	3.40	5.00	62.11
Louisville	7.28	8.10	9.32	4.10	2.49	4.66	6.59	1.91	0.53	0.22	7.98	5.10	58.28
*Macon	.....	.....	.....	.....	3.22	7.29	6.12	1.21	0.37	0.05	5.28	.....	.....
Mayersville	.....	.....	.....	.....	.....	3.64	8.30	2.70	.....	.....	.....	8.55	.....
*Meridian	9.18	8.15	10.59	1.95	1.36	6.65	10.13	0.86	0.36	0.07	6.80	7.47	63.57
Moss Point	7.75	4.20	6.20	2.02	1.58	6.70	.....	.....	.....	.....	.....	.....	.....
*Natchez	.....	.....	.....	.....	0.90	4.10	6.71	1.43	0.65	2.08	10.30	.....	.....
*Okolona	.....	.....	.....	.....	2.23	5.04	6.25	1.16	0.00	0.01	6.57	3.64	.....
Palo Alto	7.78	9.59	[11.00]	[3.90]	[2.00]	5.53	15.58	0.72	0.46	0.10	6.14	4.62	[67.42]
Pontotoc	7.06	10.99	9.96	1.18	1.03	4.23	6.14	1.07	0.15	0.61	8.36	[4.70]	[55.48]
*Port Gibson	.....	.....	.....	.....	1.10	2.40	7.36	0.56	0.39	1.86	7.95	4.21	.....
Rienzi	.....	.....	.....	.....	.....	.....	8.49	1.84	3.27	1.71	6.75	6.00	.....
Ship Island	6.93	3.44	5.56	2.30	0.07	9.46	5.70	1.37	2.18	0.62	3.59	4.76	45.98
Summit	[d]11.66	6.88	1.46	.....	.....	.....	.....	.....	.....	1.02	8.57	[e]4.28	.....
*University	6.53	8.20	11.10	3.34	1.58	6.76	4.11	4.03	0.85	2.02	5.03	3.89	57.44
Vaiden	8.18	12.43	11.94	3.90	2.53	4.13	10.08	1.94	0.32	0.54	7.21	4.11	67.31
*Vicksburg	8.79	4.22	10.51	3.09	1.00	4.55	4.54	0.91	0.35	0.75	8.06	3.17	50.54
Washington	10.64	7.07	3.18	3.45	0.43	[m]2.69	[8.20]	[2.60]	0.31	1.81	9.66	5.69	[55.73]
Water Valley	5.44	8.15	0.20	5.96	0.29	4.90	4.36	2.23	1.72	1.25	5.80	1.71	42.01
Waynesboro [5]	4.34	6.90	5.00	1.95	0.50	5.60	7.20	3.93	0.50	0.00	2.42	2.83	41.17
*Waynesboro [4]	.....	.....	.....	.....	0.66	6.42	5.91	3.75	0.73	0.15	3.72	.....	.....
West Point	5.67	8.05	[n]6.70	5.04	3.75	.....	6.88	1.12	.....	.....	.....	.....	.....
*Yazoo City	7.35	6.60	9.66	3.78	1.65	2.95	6.40	2.77	0.35	1.97	6.82	3.62	53.92
Missouri.													
Adrian	0.97	2.05	3.18	5.14	5.11	6.89	5.10	3.44	1.02	1.40	1.86	3.53	39.69
Appleton City	1.30	2.74	3.28	4.23	4.79	[6.90]	6.32	3.73	1.85	1.98	2.64	1.12	[40.88]
Austin	0.85	1.20	3.25	9.50	3.50	8.90	4.55	3.25	0.25	0.75	0.25	2.05	38.30
Bethany	2.80	1.20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Boonville	0.65	1.91	4.46	4.12	2.93	12.05	3.07	8.71	1.18	1.90	[2.80]	1.71	[34.49]
Brunswick	0.85	1.70	4.35	2.80	5.60	4.10	3.15	7.90	0.10	1.50	2.25	2.67	36.97
California	0.20	1.23	5.00	4.10	5.00	23.90	4.45	.....	.....	.....	.....	.....	.....
*Cape Girardeau	[3.30]	2.61	3.65	0.90	3.95	4.20	0.10	2.95	0.00	1.25	7.34	1.90	[32.15]
Carrollton	0.60	1.48	4.89	5.48	7.25	4.55	5.48	11.47	0.55	1.52	1.65	2.59	47.51
Carthage	1.10	2.27	1.89	3.23	3.42	5.24	3.62	2.31	0.82	1.52	3.36	2.25	31.63
Cassville	1.37	2.36	1.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Centerville	2.55	4.40	2.38	2.48	3.11	7.35	0.91	4.93	[i]1.10	0.56	6.13	[2.20]	[38.10]
Chillicothe [7]	.....	.....	.....	.....	.....	[o]2.38	5.44	8.09	[j]0.83	0.83	1.15	1.93	.....
Chillicothe [8]	.....	.....	.....	.....	.....	.....	4.75	10.50	0.61	1.20	1.25	1.50	.....
*Columbia	0.97	2.63	3.43	4.97	4.29	4.69	3.74	5.52	0.46	1.51	3.90	1.04	37.15
Conception	1.35	2.60	3.64	4.80	5.28	7.70	6.51	7.17	0.42	0.90	1.15	4.50	46.02
Concordia	0.25	2.30	1.50	3.25	1.42	5.12	4.35	3.78	0.49	0.85	1.89	[2.60]	[28.40]
Dadeville	0.90	2.33	3.03	3.39	2.89	5.91	5.33	4.89	0.93	1.05	3.32	[1.40]	[35.37]
Darksville	1.53	1.82	2.44	4.31	6.65	3.57	4.17	.....	.....	.....	.....	.....	.....
Dunnegan	.....	.....	.....	.....	2.90	7.58	.....	2.70	1.75	0.76	.....	.....	.....
East Lynn	.....	.....	.....	.....	5.17	10.37	4.04	4.34	0.52	1.05	1.51	1.33	.....
Eight Mile	.....	.....	.....	.....	4.41	9.40	3.40	4.26	0.60	1.09	1.22	1.73	.....

[1] Weather Bureau. [2] Special river observer. [3] Dr. F. B. Shuford. [7] N. J. Swetland & Co.
[4] Prof. O. Whitman. [4] Cotton belt. [6] W. S. Davis. [8] W. C. Wood.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Missouri—Continued.													
Eldon	0.82	2.96	3.21	3.85	3.60	13.54	4.05	8.00	0.67	1.08	4.13	1.25	47.22
Excelsior Springs	1.74	2.25	4.40	3.92	5.40	8.14	4.31	6.33	0.05	0.91	0.79	2.30	40.54
Fayette	1.05	2.41	2.66	4.20	5.31	4.66	4.68	5.83	0.42	1.28	2.85	1.11	36.46
Fox Creek	0.40	3.45	1.88	2.28	3.88	4.10	1.40	5.40	0.60	0.95	5.35	1.18	30.87
Glasgow	0.77	2.45	2.81	3.43	4.11	3.29	[c] 3.22	8.22	0.39	1.18	2.66	0.93	33.46
Gordonville	6.10	2.52	3.10	3.49	4.65	5.91	1.54	4.47	0.64	0.65	6.16	2.90	42.13
Grand Pass	0.76	1.85	2.64	4.27	6.96	.....	.....	.....	.....	.....	.....	.....	.....
Harris	.....	.....	.....	.....	.....	.....	[f] 2.44	5.78	0.57	0.84	0.86	0.72	.....
Harrisonville	0.83	2.52	3.09	5.36	5.70	6.34	3.08	4.14	0.86	0.48	1.23	[1.70]	[35.33]
*Hermann	0.84	3.37	1.98	2.94	4.44	6.23	4.05	7.70	0.36	1.23	6.00	0.20	39.34
Independence	.....	.....	.....	.....	.....	9.12	.....	.....	.....	.....	.....	.....	.....
Jefferson Barracks	1.56	2.72	3.13	2.46	3.10	6.27	1.93	4.47	0.45	1.02	5.30	1.30	33.71
Jefferson City [1]	.....	.....	.....	.....	3.17	9.13	3.72	7.56	0.96	1.03	4.71	0.88	.....
*Jerome (Arlington)	0.40	2.25	1.85	2.84	4.06	6.86	2.56	4.48	0.54	0.94	6.39	1.07	34.24
*Kansas City [2]	2.20	2.08	3.82	3.62	6.85	6.19	2.34	6.25	0.36	0.85	0.95	1.54	37.05
Kansas City [3]	2.78	2.32	3.86	4.36	5.17	7.67	2.81	5.61	0.33	0.73	[2.95]	[1.54]	[40.13]
Kidder [4]	.....	.....	.....	.....	.....	6.50	6.01	6.40	0.08	.....	.....	.....	.....
Lamonte [5]	0.30	2.42	3.72	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lamonte [6]	[0.30]	2.04	2.28	5.62	3.51	9.75	7.30	8.19	0.54	0.57	2.79	1.47	[44.36]
Langdon	.....	.....	1.41	4.75	4.19	7.20	.....	5.75	.....	.....	.....	.....	.....
Lebanon	1.20	2.50	1.63	3.66	3.13	11.67	3.51	3.32	0.55	1.05	6.12	1.37	39.71
Liberty	0.90	2.00	3.34	2.88	6.00	5.93	0.91	8.00	0.40	0.75	0.80	3.51	35.42
*Louisiana Bridge	0.54	2.28	1.76	2.61	1.87	4.40	4.94	2.67	1.15	1.44	2.54	0.64	26.84
Marble Hill	.....	.....	.....	.....	.....	.....	.....	.....	0.06	.....	6.19	2.55	.....
Marshall	1.03	0.42	[3.10]	2.98	3.09	[8.00]	5.95	13.10	0.30	1.29	2.60	1.32	[43.18]
Mine La Motte	[2.60]	4.26	2.09	3.38	2.62	9.76	0.83	3.06	0.65	1.07	5.61	2.42	[38.35]
New Haven	0.10	2.80	1.10	1.10	4.10	3.85	2.25	3.60	1.10	0.30	6.05	1.75	28.10
Oak Ridge	0.58	2.63	4.30	2.60	2.80	7.40	0.20	5.40	0.20	0.40	9.75	3.10	39.36
Oregon [7]	2.95	1.52	2.99	4.21	7.68	6.81	3.19	3.74	0.67	1.54	1.42	3.18	39.90
Oregon [8]	[2.90]	1.13	2.95	3.87	6.06	6.45	3.02	3.62	0.61	1.53	1.36	3.22	[36.72]
Pickering	3.25	1.64	2.80	5.27	3.79	6.41	6.83	4.62	0.83	1.64	1.31	2.98	41.37
Platte River	2.26	3.25	3.02	3.73	7.53	7.31	5.05	3.61	0.34	1.76	1.15	3.02	42.63
Princeton	2.65	1.84	5.88	3.63	5.21	7.21	6.56	8.12	T.	0.87	1.80	3.94	47.71
Rolla	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.48	.....	1.24	.....
St. Charles [9]	1.00	1.50	2.40	2.30	.....	6.25	3.90	.....	.....	.....	.....	.....	.....
St. Charles [10]	0.29	2.74	2.74	2.47	2.60	[6.20]	[3.90]	2.76	1.04	0.83	5.25	1.37	[32.19]
*St. Joseph	1.76	1.59	2.93	4.33	6.30	7.36	2.66	4.40	0.50	1.69	1.63	1.46	36.61
*St. Louis [2]	1.35	2.95	2.29	2.29	2.73	5.97	1.50	2.75	1.43	0.65	5.30	1.32	30.53
St. Louis [11]	0.41	1.95	2.39	2.90	4.41	8.26	1.87	2.54	1.25	0.94	5.92	1.46	34.30
Sarcoxie	1.08	2.11	1.05	3.96	5.19	5.89	1.51	3.67	0.80	0.74	[1.60]	[1.50]	[29.10]
Sedalia	0.86	2.42	3.70	5.00	3.05	9.24	3.22	4.26	0.68	1.19	2.64	1.04	37.30
Shelbina	0.30	1.60	2.10	4.90	4.70	4.20	3.25	3.60	0.60	1.80	3.20	0.16	30.41
*Springfield	2.10	2.30	1.47	4.32	3.78	6.90	5.21	4.23	1.29	0.77	5.39	1.35	39.11
Steelville	2.72	2.16	1.28	1.15	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stellada	0.78	2.84	1.73	5.24	3.94	8.52	6.25	5.11	1.06	1.35	2.27	1.42	40.51
Warrensburg	0.54	2.55	2.97	4.23	4.29	9.39	3.35	5.14	0.64	0.99	1.62	1.35	37.06
Warrenton	0.98	3.14	2.10	3.31	3.84	6.77	2.62	2.50	0.60	0.75	6.89	1.50	35.00
Withers Mills	0.65	2.00	2.90	3.80	4.20	3.95	2.85	6.55	1.00	1.75	5.05	1.65	36.35
Zeitonia	.....	.....	.....	.....	2.62	5.70	0.99	4.87	0.71	1.21	8.67	3.30	.....
Montana.													
Blackfeet Agency	0.20	1.50	0.56	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Boulder Valley	.....	.....	.....	.....	.....	.....	.....	.....	0.56	0.07	0.27	0.13	.....
Camp Poplar River	0.47	0.45	0.44	0.92	1.55	5.03	1.49	0.82	0.35	2.01	0.94	0.10	14.57
Castle	.....	.....	.....	.....	.....	4.91	4.18	.....	.....	.....	.....	.....	.....
Choteau	0.50	2.05	1.00	T.	2.30	3.07	4.98	1.10	0.15	0.16	0.70	0.70	16.71
Custer	0.25	1.70	0.83	1.21	1.45	2.99	1.44	.....	.....	.....	.....	.....	.....
Deerlodge	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.10	.....
Fort Assinaboine	0.06	1.72	0.70	1.01	3.69	3.80	5.23	1.55	0.87	0.55	0.12	0.11	19.41
*Fort Custer [2]	0.20	0.35	0.60	0.68	1.39	5.06	0.60	.....	.....	.....	.....	.....	.....
Fort Custer [12]	0.20	0.35	0.60	0.68	1.39	5.02	[1.40]	0.52	1.30	4.60	1.68	0.45	[18.19]
Fort Keogh	0.12	1.03	0.35	1.16	1.59	5.45	1.15	0.10	0.76	1.58	0.13	0.82	14.18
Fort Missoula	0.47	3.09	3.72	0.65	1.97	3.40	2.60	0.10	1.39	0.90	2.32	1.82	22.43
Fort Shaw	0.35	1.83	0.30	0.90	3.40	6.50	[k] 3.40	.....	.....	.....	.....	.....	.....
Glendive	0.45	0.50	0.90	2.45	2.25	5.60	1.92	0.15	0.67	2.83	0.30	0.35	18.37
Great Falls	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.23	.....
*Helena	0.31	1.68	1.37	0.76	2.51	4.67	2.73	1.02	0.72	2.40	0.82	0.40	19.39
Livingston	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T.	.....
Martinsdale	0.62	2.55	1.63	0.53	1.90	4.21	2.82	0.75	1.85	[2.00]	1.28	1.75	[21.89]
*Miles City	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.26	0.46	0.10	.....
Powder River	0.19	0.60	1.60	0.98	1.61	.....	.....	.....	.....	.....	.....	.....	.....
Virginia City	0.34	0.78	0.63	1.00	1.37	5.04	3.15	0.39	1.37	0.29	0.12	0.65	15.13
Nebraska.													
Alliance	1.55	1.10	1.36	2.27	3.78	3.47	2.76	3.70	[1.70]	0.15	0.47	0.39	[22.70]
Ansley	[0.70]	[0.90]	1.87	6.30	1.90	8.19	4.57	1.22	0.80	1.14	0.00	1.25	[28.84]
Arborville	.....	.....	[o] 1.77	3.60	2.65	.....	.....	.....	2.06	.....	.....	.....	.....
Ashland	1.13	0.69	1.61	2.90	3.79	7.50	8.95	3.08	1.32	5.86	0.16	[1.60]	[38.59]
Auburn [13]	[1.60]	1.46	2.32	3.64	4.67	7.33	10.41	5.66	0.96	2.44	0.55	1.22	[42.26]
Auburn [14]	.....	.....	2.16	3.64	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bassett	0.35	1.40	1.40	2.19	2.01	5.31	4.98	4.27	0.85	0.27	0.60	1.12	24.75
Beatrice	.....	.....	.....	.....	2.02	4.99	4.54	2.88	1.31	6.11	0.02	1.28	.....
Beaver City	[o] 0.20	[0.20]	2.00	2.68	4.90	7.61	6.40	3.26	2.32	1.08	[0.03]	[1.70]	[32.38]
Brandon	.....	.....	.....	.....	.....	.....	2.80	2.65	0.95	0.40	0.20	.....	.....
Burwell	0.50	0.75	0.71	4.44	0.42	7.54	5.01	2.48	1.43	0.51	0.30	1.11	25.20
Creighton	0.20	1.95	[1.40]	5.50	3.05	8.50	7.34	4.69	0.00	0.65	0.25	1.74	[35.27]

[1] C. B. Lane.
[2] Weather Bureau.
[3] S. J. Spurgeon.
[4] S. S. Stahl.
[5] J. S. Slavin.
[6] W. D. Wade.
[7] William Kaucher.
[8] Samuel M. Ruley.
[9] Dr. J. R. Mudd.
[10] L. C. Saeger.
[11] F. W. Duenckel.
[12] Post hospital.
[13] G. D. Carrington.
[14] C. A. Wood.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Nebraska—Continued.													
*Crete	1.96	0.89	2.37	3.87	3.57	7.33	6.36	2.64	1.83	5.59	0.25	1.78	38.44
Crete[1]	1.96	0.89	2.37	3.87	3.57	7.33	6.36	2.64	1.83	5.59	0.25	1.78	38.44
*Culbertson	0.83	0.21	2.59	2.23	5.04	7.60	4.38	2.23	1.36	0.68	0.03	2.03	29.21
Culbertson[2]	.....	.....	.....	.....	5.64	.....	4.41	3.54	1.34	.....	.....	.....	.....
David City	1.80	1.15	1.80	3.70	2.45	9.05	9.85	3.00	2.00	5.55	T.	1.85	42.20
De Soto	1.47	0.97	1.53	2.36	4.30	4.96	5.28	0.96	1.33	5.02	0.55	1.72	30.45
Dunning	0.32	1.30	[1.50]	1.98	2.20	9.12	6.90	3.60	1.30	2.10	[0.40]	0.30	[31.02]
Ericson	0.91	2.00	1.30	4.47	0.61	5.39	6.55	2.11	0.60	1.28	0.15	0.84	26.21
Ewing	.....	.....	.....	.....	.....	.....	.....	.....	0.21	1.10	0.25	1.11	.....
Fairbury	1.63	0.51	2.66	2.81	4.46	5.87	6.55	2.80	1.36	6.20	0.02	1.05	35.92
Fairfield	2.31	[0.90]	2.07	4.01	4.13	[12.00]	5.92	2.46	1.18	3.67	0.12	1.04	[39.81]
Fort Niobrara	0.50	1.24	1.44	2.90	0.80	4.55	5.97	3.97	0.49	1.10	0.55	0.19	23.70
Fort Omaha	[2.10]	0.91	1.42	1.66	5.09	6.53	4.22	1.68	1.24	6.40	0.49	0.91	[32.65]
Fort Robinson	0.95	0.89	1.75	1.57	2.05	3.29	3.24	1.94	1.52	0.45	0.57	0.52	18.74
Fort Sidney	5.62	1.30	1.17	2.69	3.94	3.91	3.51	1.90	0.56	1.30	0.30	0.05	26.25
Franklin	0.56	0.31	1.06	4.13	4.04	7.97	7.22	3.71	3.33	2.22	[0.05]	1.37	[35.97]
Fremont	1.88	0.75	1.08	2.55	2.61	9.09	4.60	1.27	1.37	4.74	0.95	0.77	31.66
Geneva	1.70	[0.90]	[2.50]	[3.40]	4.30	6.10	6.90	2.90	1.70	5.80	0.00	1.10	[37.30]
Genoa	2.68	2.55	1.82	4.84	3.15	8.48	5.49	1.91	1.13	3.48	0.20	1.73	37.46
Gering	1.80	0.74	1.47	1.30	2.95	3.89	2.45	2.25	2.01	0.13	1.12	1.03	21.14
Grand Island	1.70	0.34	2.03	3.49	2.39	[11.00]	4.18	1.56	0.46	2.35	0.30	2.10	[31.90]
Grant	1.50	0.60	3.15	2.90	2.80	6.63	3.06	5.31	1.00	0.51	[0.20]	1.33	[28.99]
Hartington	.....	.....	.....	.....	.....	.....	.....	5.04	0.65	1.15	0.47	1.79	.....
Harvard	1.32	0.99	1.97	5.57	4.60	6.94	7.40	3.09	[2.10]	4.69	T.	1.24	[39.91]
Hastings	0.80	3.00	[2.00]	[3.70]	5.12	6.75	6.88	3.38	2.30	3.75	T.	1.50	[39.18]
Hay Springs	1.49	1.38	2.76	2.07	2.33	2.70	4.90	1.12	1.90	0.75	1.21	0.65	23.26
Hebron	2.40	0.90	3.20	2.50	5.52	[8.00]	6.61	3.23	2.25	[1.10]	0.02	1.45	[37.18]
Holdrege	0.70	.....	.....	3.10	3.26	7.20	.....	1.80	4.95	1.20	.....	1.10	.....
Imperial	1.80	[0.20]	2.00	2.75	4.00	8.00	4.75	3.00	0.75	0.75	[0.02]	1.50	[29.52]
Kennedy	0.65	2.40	2.90	.....	.....	.....	.....	.....	.....	1.39	0.46	0.40	.....
Kimball	1.68	0.65	0.88	0.74	3.47	3.54	4.09	1.75	1.30	0.09	0.10	0.15	18.44
Lexington	1.10	0.65	2.35	2.71	3.44	7.27	4.75	1.43	0.81	0.80	0.05	1.84	27.20
Lincoln	1.58	1.90	2.91	2.99	3.77	7.78	8.79	2.42	2.07	4.46	0.16	1.25	40.08
Long Pine	0.50	1.90	[1.40]	2.80	1.33	9.65	5.10	4.08	0.75	0.25	1.00	1.00	[29.76]
Marquette	1.51	1.90	1.96	3.76	3.70	10.04	6.13	4.78	1.22	3.28	0.16	1.61	40.05
Minden	2.34	0.93	3.56	3.70	[4.70]	11.05	6.26	2.33	4.33	2.95	0.25	1.38	[43.78]
Nebraska City	1.65	0.81	[3.60]	[3.90]	1.83	6.60	7.62	5.12	1.73	4.09	0.47	1.55	[38.97]
Norfolk	[1.80]	[1.30]	[1.40]	1.67	0.70	8.11	6.14	3.27	0.79	1.79	0.27	2.10	[29.34]
North Loup	2.51	0.67	1.45	5.47	1.52	7.82	5.14	3.38	0.89	1.09	0.22	0.80	30.96
*North Platte	0.65	0.49	2.19	2.58	1.69	7.19	3.91	2.45	0.87	0.57	0.08	0.69	23.36
Oakdale	0.85	2.13	1.37	6.08	1.32	10.24	8.06	2.06	0.77	1.05	0.31	1.39	35.63
*Omaha	2.11	1.02	2.26	2.80	4.94	6.66	3.54	2.02	1.76	5.37	0.37	2.07	34.92
O'Neill	0.11	0.75	2.10	5.35	1.99	9.66	3.64	2.92	0.30	1.24	0.35	1.40	29.81
Ough[3]	.....	.....	1.20	.....	.....	.....	4.30	.....	.....	.....	.....	.....	.....
Ough[4]	[1.60]	[0.40]	[1.20]	3.84	4.35	9.37	3.92	3.19	0.80	0.79	T.	1.15	[30.61]
Palmer	2.00	0.90	1.95	5.00	1.25	8.75	8.75	.....	.....	.....	.....	.....	.....
Pawlet	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.42	.....
Paxton	.....	.....	3.30	.....	1.90	6.50	5.10	.....	.....	.....	.....	.....	.....
*Plattsmouth	3.20	2.70	4.46	5.63	4.10	9.62	9.41	5.31	2.30	5.42	1.50	2.55	56.20
Precept	[0.70]	[0.20]	[2.30]	3.28	5.37	8.31	4.34	3.00	1.93	1.24	T.	1.56	[32.23]
Purple Cane	.....	.....	.....	.....	1.40	11.38	8.95	1.58	2.03	4.90	0.25	0.31	.....
Ravenna	2.21	1.21	2.29	5.16	2.86	9.09	5.10	3.40	1.54	1.03	0.08	1.98	35.95
Sargent	0.75	1.18	2.67	1.90	0.41	7.40	3.28	6.18	0.87	0.28	[0.20]	1.10	[26.28]
Schuyler	.....	.....	.....	.....	.....	11.54	4.95	2.22	0.39	.....	.....	.....	.....
Seward	2.70	0.81	0.80	3.49	4.08	7.17	7.30	1.80	1.68	3.54	0.55	1.00	35.61
Springview	.....	.....	.....	.....	.....	.....	.....	3.18	0.09	0.56	0.87	0.77	.....
Stockville	.....	.....	.....	.....	.....	.....	.....	.....	0.93	0.60	.....	.....	.....
Superior	2.33	0.60	0.95	3.12	4.42	7.70	8.36	1.82	4.24	0.75	0.00	[1.50]	[36.09]
Syracuse	1.61	0.84	0.91	2.16	4.85	4.80	5.75	3.34	1.18	4.64	0.17	1.09	31.34
Tecumseh	1.57	0.80	3.62	3.43	5.21	7.82	7.46	4.82	1.16	4.00	0.32	1.82	42.03
Tekamah	1.90	1.25	0.90	2.04	3.02	5.44	6.06	3.21	1.45	[5.50]	[0.40]	[2.40]	[33.57]
Thedford	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.40	1.25	.....
*Valentine	0.61	1.55	2.58	3.12	1.33	6.36	4.29	4.68	0.40	1.65	0.78	0.42	27.77
Wallace	1.06	[0.50]	0.47	5.17	2.65	8.48	5.36	3.14	0.20	0.66	0.05	0.51	[28.05]
Weeping Water	2.08	0.99	2.24	2.35	3.99	7.86	7.84	3.48	1.49	5.74	0.12	1.65	39.83
West Hill	1.11	2.65	1.82	5.27	1.25	[10.00]	3.76	2.75	1.05	2.60	0.16	1.33	[33.95]
West Point	2.20	1.00	0.75	1.10	1.34	15.40	8.45	2.20	[0.70]	[5.50]	[0.30]	1.50	[49.44]
Whitman	0.35	0.40	0.80	2.29	2.48	4.86	7.21	2.06	0.90	2.32	0.40	[0.40]	[24.47]
Wilcox[5]	0.75	0.31	1.08	3.41	5.31	8.32	9.34	3.75	4.20	2.49	T.	1.39	40.35
Wilcox[6]	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.00	.....	.....	.....
York	1.40	[0.70]	0.73	3.52	3.75	13.03	7.00	1.81	0.67	3.18	[0.10]	0.27	[36.16]
Nevada.													
Austin	0.45	1.77	2.01	2.31	3.81	2.64	1.26	1.09	0.85	0.34	0.23	4.31	21.07
Battle Mountain	0.10	0.75	0.50	1.60	1.93	1.87	0.17	0.00	0.00	0.10	0.25	3.52	10.79
Belleville	.....	.....	.....	.....	.....	.....	.....	0.02	1.59	0.00	0.00	2.50	.....
Belmont	0.12	2.06	0.92	0.95	2.78	1.19	1.11	1.29	1.06	T	T.	1.26	12.74
Beowawe	0.20	1.65	2.49	1.75	2.05	2.77	0.15	0.10	0.63	0.06	0.32	2.75	14.92
Browns	0.50	0.40	0.32	0.41	0.08	0.43	0.00	0.00	0.87	0.00	0.00	0.65	4.26
Candelaria	0.01	0.80	0.09	1.28	2.33	0.15	1.52	0.35	1.05	0.00	T.	[2.50]	[10.08]
Carlin	0.32	2.02	2.10	0.35	1.70	2.45	0.15	0.00	0.30	0.00	0.30	4.42	14.11
*Carson City[7]	0.10	4.02	2.50	1.72	2.64	0.32	0.28	T.	0.88	T.	T.	5.62	18.08
Carson City[8]	0.10	4.18	2.55	1.85	2.80	0.29	0.21	T.	0.89	T.	T.	5.43	18.30
Crane's Ranch	0.60	1.47	2.07	2.53	1.97	1.45	0.34	0.00	0.45	0.00	0.13	3.79	14.80
Downeyville	0.10	0.83	0.59	1.07	2.34	0.54	0.22	0.48	0.61	T.	0.00	0.20	6.98
Elko[9]	0.35	0.20	2.43	0.47	1.63	3.40	0.05	0.00	0.40	0.00	0.00	5.70	14.63

[1] Prof. G. D. Swezey. [2] Mrs. L. A. Wibley. [3] E. H. Talbot. [4] F. M. Larison. [5] Mrs. C. W. Le Bar. [6] Geo. D. Coutant. [7] Weather Bureau. [8] Prof. C. W. Friend. [9] Pacific Railway System.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Nevada—Continued.													
Elko[1]	0.15	.....	.....	.....	.....	2.21	.....	.....	.....	0.00	0.00	5.46	.....
Ely	0.65	1.34	1.30	2.47	3.96	2.07	0.74	0.75	2.03	0.10	0.30	2.30	18.01
Eureka	0.60	[1.50]	2.73	2.32	2.48	2.47	[0.70]	1.02	1.08	0.20	0.00	1.70	[16.80]
Fenelon	0.52	2.48	1.10	0.30	0.00	0.00	0.00	0.00	0.00	1.25	0.02	7.00	12.67
Genoa	0.00	4.64	2.95	1.13	3.63	[0.30]	1.00	0.00	0.80	T.	0.00	8.46	[22.91]
Golconda	0.40	1.75	0.85	0.25	1.65	1.27	0.48	0.00	1.05	0.05	0.05	2.25	10.02
Halleck	0.28	1.00	1.00	2.06	1.75	2.70	0.10	0.00	0.80	0.00	0.12	5.10	14.91
Hawthorne[2]	0.21	1.09	0.16	1.19	2.04	0.15	0.08	0.95	0.87	T.	0.00	1.61	8.35
Hawthorne[3]	0.21	1.02	0.25	1.19	1.09	0.15	0.08	0.95	0.89	T.	0.00	1.53	7.36
Hot Springs	0.00	0.65	1.00	0.60	0.35	0.00	0.00	0.00	0.00	0.00	0.00	1.80	4.40
Humboldt	0.20	1.40	1.15	1.25	1.70	0.60	0.00	0.00	0.70	0.00	0.00	0.62	7.62
Lewer's Ranch	0.31	9.30	4.65	1.72	3.04	0.19	0.11	0.47	0.96	0.07	0.72	7.46	29.00
Lovelock	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.00	0.45	.....
Mill City	T.	0.99	T.	1.81	.....	.....	0.00	.....	.....	.....	0.05	.....	.....
Monitor's Ranch	.....	.....	.....	.....	1.97	2.24	0.05	0.48	1.34	T.	0.00	1.63	.....
Palisade	0.30	1.90	3.00	1.20	1.50	1.90	0.00	0.00	0.30	0.06	0.00	4.65	14.81
Palmetto	0.00	3.66	1.83	2.73	2.03	1.82	0.91	3.31	1.09	0.01	0.00	3.00	20.39
Pioche	0.05	3.83	0.31	0.51	2.25	0.13	1.43	0.47	[1.50]	T.	0.00	1.40	[11.88]
Reno	0.00	2.20	2.20	0.72	1.70	0.70	0.00	0.00	0.50	0.00	0.00	2.25	10.27
R. S. University	0.06	2.69	2.28	0.56	2.72	0.41	T.	T.	0.54	T.	0.05	1.14	10.45
Saint Clair	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T.	1.54	.....
Sodaville	.....	.....	.....	1.60	2.70	0.05	1.00	0.19	.....	.....	.....	.....	.....
Stofiel	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.09	0.61	3.04	.....
Sunnyside	.....	.....	.....	.....	.....	1.28	1.14	0.46	1.51	0.00	0.00	0.53	.....
Tecoma	0.00	0.30	0.83	1.08	2.50	2.15	0.28	0.32	1.70	0.01	0.13	3.68	12.98
Toano	0.40	3.00	2.20	2.33	0.00	2.42	0.35	0.52	1.13	0.09	0.08	7.86	20.38
Tybo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.00	1.46	.....
Verdi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.00	5.41	.....
Virginia City	0.31	[4.20]	2.31	1.27	3.60	0.82	[0.20]	T.	1.68	T.	0.05	5.07	[20.41]
Wabuska	.....	.....	.....	.....	.....	.....	.....	.....	1.48	0.00	T.	0.48	.....
Wadsworth	0.00	1.32	1.37	0.00	2.21	0.00	0.00	0.00	[0.80]	0.00	0.00	0.52	[6.22]
Wells	0.50	0.80	0.35	0.45	0.25	0.43	0.00	0.00	0.43	0.00	0.23	4.33	7.77
*Winnemucca[4]	0.23	1.20	0.90	0.86	2.32	1.11	0.28	0.06	0.81	0.03	0.14	1.74	9.68
Winnemucca[2]	0.32	0.89	0.85	0.65	2.70	0.50	0.00	0.00	0.00	0.03	0.40	1.09	7.43
Yount's Ranch	0.00	2.31	0.66	0.90	0.55	0.12	0.47	0.20	0.20	0.00	0.00	0.40	5.81
New Hampshire.													
Antrim	3.33	2.35	2.88	3.13	1.92	3.27	4.83	3.00	2.00	2.73	2.86	4.44	36.74
Belmont	6.09	4.13	4.27	2.55	2.71	2.16	5.22	4.59	2.53	2.44	2.29	4.27	43.25
Berlin Mills	5.21	1.94	4.91	3.01	3.87	2.15	2.99	5.84	1.85	1.89	2.46	4.56	40.68
Concord[5]	5.71	3.54	4.19	2.41	2.34	3.32	3.34	2.95	2.09	2.63	1.73	4.11	38.36
Concord[6]	6.77	3.56	4.21	3.48	2.35	4.47	3.45	3.85	1.85	3.07	1.60	5.18	43.84
East Canterbury	5.83	3.30	4.56	2.69	3.23	2.53	4.50	3.94	1.53	2.75	1.76	3.60	40.22
Groveton	[5.00]	2.20	[3.20]	1.68	3.21	1.74	6.24	2.96	3.47	1.35	2.66	2.86	[36.57]
Hanover[7]	4.52	2.40	2.32	2.21	1.90	3.55	4.34	3.21	1.54	1.50	2.00	2.89	32.38
Hanover[8]	4.41	2.56	2.02	2.39	1.97	3.66	4.64	3.34	0.82	1.49	2.08	3.32	32.70
Lake Village	6.71	3.98	4.36	2.14	2.84	2.42	5.65	3.16	1.58	2.43	2.43	4.32	42.02
Littleton	4.11	2.15	2.30	2.21	3.36	2.91	5.72	5.30	2.62	1.73	2.17	3.71	38.29
*Manchester[4]	6.10	3.26	3.94	1.63	1.90	3.58	3.14	2.01	1.61	2.16	1.74	3.27	34.34
Manchester[9]	7.06	3.19	4.30	2.08	2.56	3.77	3.42	2.38	1.76	2.68	1.85	3.64	38.70
Mine Falls	6.36	4.23	5.26	2.75	2.24	3.42	2.94	1.68	1.74	2.50	2.19	3.58	38.89
Nashua	6.61	4.25	5.43	2.95	2.13	3.33	3.28	1.60	1.58	2.33	2.18	3.50	39.17
Newton	6.39	[3.70]	3.96	2.44	2.54	4.28	2.70	2.23	1.05	3.55	1.91	3.16	[37.91]
North Conway	6.31	4.02	6.22	3.16	1.93	2.29	5.39	5.09	0.86	2.44	1.56	6.60	45.87
Pennichuck Station	6.34	4.11	4.78	2.55	2.14	3.62	3.11	1.44	1.35	2.24	2.11	3.27	37.05
Plymouth	6.09	3.35	3.85	2.31	2.28	2.86	5.58	5.29	1.23	1.66	3.26	5.45	43.21
Stratford	4.65	2.18	2.04	1.84	2.68	1.79	4.88	2.75	1.43	0.92	2.62	3.46	31.24
Walpole	5.68	2.95	3.14	3.12	2.31	3.21	4.93	5.28	1.75	2.24	2.62	3.60	40.83
West Milan	4.86	3.64	3.70	2.92	2.17	2.33	4.79	2.64	1.71	1.64	2.67	4.30	37.37
Wier's Bridge	6.74	3.94	4.45	1.46	2.66	3.49	5.23	4.07	0.96	2.29	2.20	4.34	41.83
Wolfboro	6.44	4.22	4.16	2.59	2.21	1.87	5.85	3.76	1.18	3.67	1.56	5.11	42.62
New Jersey.													
*Atlantic City	4.41	5.89	3.32	2.28	3.93	1.67	7.05	2.87	0.90	5.39	2.24	3.19	43.14
Asbury Park	5.33	4.73	3.75	1.93	5.70	4.21	4.21	6.68	4.45	5.31	2.35	2.99	51.64
Bayonne	.....	.....	.....	.....	.....	.....	.....	6.53	2.38	2.57	1.97	3.65	.....
Belleville	8.80	4.62	5.90	2.35	2.89	2.70	5.01	5.12	3.16	3.65	2.87	4.37	51.44
Belvidere	.....	.....	.....	.....	.....	.....	4.52	5.11	2.24	4.18	1.63	4.09	.....
Beverly	6.23	5.10	5.87	2.12	2.30	5.81	4.89	5.71	2.62	2.69	2.40	4.50	50.24
Billingsport	.....	.....	6.26	1.81	2.18	3.43	8.92	3.92	2.43	.....	.....	.....	.....
Blairstown	.....	.....	.....	.....	2.30	.....	4.40	6.02	2.35	2.75	2.49	4.89	.....
Bridgeton[10]	4.60	6.70	8.02	2.28	3.05	4.68	9.41	5.12	1.74	3.63	1.67	4.26	55.25
Bridgeton[11]	.....	.....	.....	.....	.....	.....	.....	.....	1.09	3.28	1.40	3.99	.....
Camden	[3.60]	5.60	6.22	2.42	2.02	4.46	5.35	3.95	2.20	3.18	2.21	4.35	[45.56]
Cape May, C. H	6.16	6.34	6.39	2.50	3.54	1.24	7.33	4.02	1.83	5.57	2.51	2.25	49.66
Deckerton	[8.50]	[4.60]	4.35	2.67	2.74	1.36	5.13	4.91	1.54	1.96	3.07	4.46	[45.29]
Dover	[9.00]	4.04	4.04	2.53	2.24	2.17	4.90	8.59	1.91	2.23	3.47	5.32	[50.44]
Egg Harbor City	6.54	7.20	7.62	2.44	3.68	3.14	8.97	5.97	2.19	4.89	2.59	3.25	58.48
Elizabeth	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.77	1.54	3.93	.....
Franklinville	6.98	6.57	6.26	1.94	3.34	3.00	8.91	5.16	1.88	3.80	2.31	4.82	54.97
Freehold	6.72	6.03	4.63	2.20	3.82	5.33	5.24	3.36	3.85	3.32	2.24	4.16	50.90
Gillette	6.46	4.39	4.61	1.90	3.27	[2.00]	3.88	4.41	3.01	3.26	2.85	5.07	[45.11]
Hanover	.....	.....	.....	1.88	.....	.....	.....	4.51	3.42	2.35	2.26	4.97	.....
Highland Park	6.03	4.67	4.89	1.65	2.91	1.95	3.25	6.88	2.20	3.05	2.07	4.22	43.77
Hightstown	.....	.....	.....	.....	2.41	3.79	3.12	3.02	2.69	3.72	2.45	.....	.....

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MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
New Jersey—Continued.													
Imlaystown	5.34	5.35	4.33	1.83	2.70	6.71	5.63	6.23	3.37	3.66	2.95	4.02	52.12
Junction City	7.43	3.70	3.57	1.94	1.95	1.75	5.89	7.46	1.17	2.87	2.19	4.92	44.84
Lambertville	7.01	3.74	3.60	1.39	2.91	3.14	4.51	6.42	2.44	3.81	2.21	5.29	46.56
Locktown	6.06	4.08	4.51	1.81	2.71	2.72	5.97	8.89	[2.40]	4.76	[2.20]	4.92	[51.03]
Madison	7.40	4.93	3.71	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Moorestown	5.07	5.28	4.80	2.32	2.33	3.56	4.61	4.52	3.33	2.80	2.30	4.60	45.52
Mount Holly	.....	.....	4.96	2.00	1.78	3.18	4.88	.....	.....	3.64	3.02	.....	.....
Newark [1]	7.11	4.67	4.61	2.11	2.95	2.02	6.73	4.61	2.53	2.54	2.44	4.08	46.40
Newark [2]	8.71	4.83	5.94	2.29	.....	.....	.....	.....	.....	.....	.....	.....	.....
*New Brunswick	6.03	4.67	4.89	1.65	2.91	1.95	3.25	6.88	2.20	3.05	2.07	4.22	43.77
New Brunswick [3]	7.70	4.86	5.83	1.75	3.20	1.62	3.34	6.58	1.76	3.29	2.18	4.55	46.66
New Brunswick [4]	6.06	4.68	4.78	1.77	2.87	1.61	3.24	6.55	1.47	3.16	2.27	4.42	42.88
Newton	.....	.....	.....	.....	2.23	1.39	3.68	4.48	1.57	1.88	2.87	4.30	.....
Ocean City	6.60	5.30	7.70	.....	4.60	3.00	5.90	.....	.....	.....	2.70	3.50	.....
Oceanic	5.85	5.36	4.92	[2.20]	5.39	1.45	5.89	4.61	5.91	5.03	2.35	3.65	[52.61]
Paterson	[8.00]	4.21	2.05	3.10	3.76	[2.10]	[5.00]	3.38	2.30	2.14	3.04	5.18	[44.26]
Plainfield	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.62	4.34	.....
Rancocas	5.71	5.00	4.10	1.30	1.87	3.79	4.88	4.76	2.18	2.74	2.27	4.55	43.15
Salem	[6.10]	6.59	7.30	2.47	2.43	4.43	[8.50]	[4.00]	0.72	3.48	1.76	4.33	[52.11]
Somerville	.....	.....	.....	.....	2.92	1.88	4.01	5.70	2.22	2.95	2.26	4.76	.....
South Orange	10.55	4.88	4.81	3.80	3.54	1.78	6.00	5.51	2.76	2.95	2.86	4.70	54.14
Tenafly	7.38	4.54	3.69	2.28	2.90	2.19	3.03	3.04	2.40	2.40	2.88	4.90	41.63
Trenton	6.73	4.41	4.22	1.99	3.12	3.59	5.92	5.89	2.82	3.83	2.87	3.52	48.91
Vineland	[6.10]	5.85	7.05	2.54	2.79	3.62	8.91	7.18	1.08	3.23	1.79	4.51	[54.65]
Whiting	[4.00]	[4.70]	[7.50]	1.66	2.90	4.42	5.99	2.58	4.84	4.11	2.28	4.10	[49.08]
Woodbury	5.92	5.97	6.77	1.86	2.34	3.41	7.13	1.09	.....	.....	.....	.....	.....
New Mexico.													
Albert	0.46	0.17	1.22	0.11	2.60	4.07	3.62	0.98	2.66	0.16	T.	2.98	19.03
Albuquerque	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.02	.....
Antelope Spring	0.74	0.81	1.42	0.00	2.24	0.60	1.42	0.86	1.73	0.00	0.15	1.15	11.12
Bernalillo	1.00	0.70	1.60	0.00	2.00	0.00	0.20	0.10	2.80	0.00	0.00	0.50	8.90
Bloomfield	.....	.....	.....	.....	.....	.....	.....	0.52	1.58	0.00	0.00	1.09	.....
*Carthage	0.39	0.21	0.40	0.07	1.96	0.21	.....	.....	.....	.....	.....	.....	.....
Chama	2.40	7.10	3.43	0.40	2.93	0.76	3.24	[1.50]	5.25	0.75	0.10	4.97	[32.83]
Coolidge	.....	.....	.....	.....	1.62	0.11	1.90	1.82	1.05	0.64	0.00	.....	.....
Cuba	1.80	2.60	2.05	0.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Deming	0.40	0.53	0.64	0.00	0.48	0.14	0.18	1.20	0.80	0.00	0.00	0.18	4.55
Dulce	[1.50]	[6.10]	[2.40]	0.47	3.28	0.82	2.07	1.48	3.94	0.17	0.02	1.12	[23.37]
Eddy	.....	.....	.....	.....	.....	.....	.....	.....	0.14	0.00	.....	0.38	.....
El Rito	.....	.....	.....	.....	.....	2.50	.....	.....	1.98	.....	.....	.....	.....
Embudo	1.80	1.92	1.65	0.20	3.00	0.04	0.18	0.17	[3.40]	T.	T.	1.11	[13.47]
Estalina Springs	0.63	1.04	0.90	0.48	2.15	1.59	0.86	0.72	2.16	T.	0.01	2.24	12.78
Folsom	.....	.....	.....	.....	.....	.....	.....	.....	3.88	0.49	0.42	2.37	.....
Fort Bayard	0.87	1.03	0.36	0.00	1.55	0.35	1.00	1.82	1.49	0.07	0.06	1.70	10.30
Fort Marcy	1.61	1.99	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Fort Stanton [5]	1.00	1.66	0.98	0.02	2.83	2.37	1.30	1.65	1.33	0.12	0.19	1.23	14.68
Fort Stanton [6]	0.03	0.12	[0.98]	0.00	2.04	2.20	1.09	1.36	1.13	0.00	0.00	1.17	[10.12]
Fort Union	0.33	0.32	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Wingate	0.81	2.07	2.40	0.10	0.95	0.60	1.86	1.23	3.40	0.00	0.00	0.85	14.27
Gallinas Spring	0.58	0.54	1.18	0.07	3.34	1.85	2.00	0.71	[2.10]	0.33	0.02	4.01	[16.70]
Halls Peak	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.05	2.60	.....
Hillsboro	0.90	1.53	0.31	T.	0.97	0.30	0.32	1.87	1.56	0.00	0.00	0.59	8.35
La Luz	1.00	1.12	.....	.....	.....	.....	.....	0.89	0.91	0.00	T.	0.78	.....
Lordsburg	0.10	1.52	0.65	0.00	1.01	0.00	0.00	1.10	0.88	0.00	0.00	0.40	5.66
Los Lunas	1.30	0.85	3.00	2.40	5.32	0.00	1.25	0.00	0.90	0.00	0.00	1.35	16.37
Monero	1.51	6.08	2.45	0.65	2.27	0.52	2.20	1.33	4.33	0.51	0.06	3.20	25.11
Nogal	3.60	.....	0.78	.....	2.34	2.63	2.09	1.99	2.15	.....	0.17	.....	.....
Olio	[1.30]	[6.00]	[2.40]	T.	0.83	0.15	0.64	0.14	2.26	0.00	0.00	1.57	[15.29]
Pojuaque	1.48	1.90	0.79	0.40	1.79	5.17	0.62	0.48	3.16	0.12	T.	0.69	16.60
Red Cañon	0.50	0.52	0.65	0.29	2.52	1.20	0.49	1.16	0.98	0.00	0.00	0.60	8.91
Santa Fe	1.32	1.91	0.50	0.17	3.21	1.26	0.84	1.02	4.69	0.12	0.13	1.53	16.79
Socorro	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.00	0.00	1.05	.....
*Springer	0.25	0.00	0.45	0.00	2.62	2.02	8.29	0.22	2.73	2.55	0.00	2.79	21.92
Taos	0.39	1.34	1.01	0.00	2.85	1.34	1.17	0.40	3.55	0.00	0.00	2.26	14.31
Wallace	.....	.....	.....	.....	.....	.....	.....	.....	2.55	0.00	T.	0.30	.....
New York.													
Adams Center	1.94	1.28	1.37	[1.40]	0.83	1.32	5.59	[2.10]	[1.80]	2.24	3.78	3.63	[27.28]
Addison	1.84	2.89	2.12	1.44	0.32	2.05	2.91	4.24	0.49	2.94	1.64	2.96	25.84
Afton	5.05	3.38	2.44	1.86	1.13	4.89	3.64	[6.40]	[2.50]	4.03	3.31	5.07	[43.75]
Akron	1.86	3.79	2.19	1.42	1.60	0.79	5.06	4.19	[1.90]	1.02	3.27	4.61	[31.70]
Alabama	2.15	4.63	2.13	1.74	.....	2.12	4.79	.....	.....	.....	.....	.....	.....
*Albany	6.12	4.14	3.12	2.27	1.69	2.65	6.11	5.88	1.94	2.13	2.40	3.23	41.68
Albion	.....	.....	.....	.....	.....	1.56	3.13	3.31	.....	1.56	.....	3.12	.....
Alfred Center	2.22	[3.30]	2.54	2.21	0.60	2.46	5.30	5.01	1.22	2.61	1.73	3.60	[32.80]
Angelica	.....	.....	.....	.....	.....	.....	.....	5.39	1.37	2.61	2.33	3.84	.....
Apulia	.....	3.25	3.55	.....	0.60	.....	2.14	3.11	.....	.....	3.03	4.39	.....
Arcade	1.82	4.04	1.87	1.32	1.87	4.69	5.11	5.00	2.36	2.16	3.10	4.09	37.43
Attica	.....	.....	.....	.....	1.81	4.66	.....	.....	.....	.....	.....	.....	.....
Au Sable Forks	4.36	2.00	1.19	[2.50]	[2.20]	1.40	4.14	5.24	[1.40]	2.30	2.27	2.93	[31.93]
Avon	1.99	2.88	1.76	1.13	1.63	3.67	3.94	3.03	1.42	2.46	1.50	3.96	29.37
Baldwinsville	3.07	3.95	5.91	1.62	0.86	0.66	3.68	2.10	1.04	2.77	2.50	4.10	32.26
Batavia	.....	.....	.....	.....	.....	2.51	7.25	4.08	2.15	.....	1.84	.....	.....
Bedford	[8.50]	[4.20]	[2.80]	3.47	2.00	1.51	4.91	4.08	1.65	2.79	4.45	5.90	[46.26]
Bethlehem Center	[6.20]	3.15	2.03	2.54	1.87	3.84	6.30	7.28	2.07	2.19	3.04	[3.40]	[44.81]
Binghamton	3.30	3.27	4.46	2.16	1.16	3.55	3.30	6.59	1.54	4.24	2.65	3.24	39.46
Bloods Depot	2.09	2.72	3.16	2.44	1.88	4.13	3.63	[3.70]	0.93	2.61	1.80	3.76	[32.85]

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MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
New York—Continued.													
Bolivar	.....	.....	2.27	.....	.....	2.44	.....	.....	1.89	2.65	2.69	3.44	.....
Boyds Corners	9.76	6.00	3.36	3.77	1.36	1.81	3.03	5.61	1.87	2.21	3.86	5.65	48.29
Brentwood	[6.40]	[6.30]	4.40	4.05	3.15	1.25	7.15	5.07	3.10	7.55	2.00	[3.40]	[53.82]
Brockport	2.57	.....	.....	.....	1.05	.....	.....	.....	1.30	1.99	.....	4.04	.....
Brookfield	6.22	5.06	3.58	1.76	1.96	2.34	3.78	5.60	1.86	3.70	2.92	5.60	44.38
*Buffalo	2.25	4.14	2.14	1.28	1.36	1.64	4.27	3.15	1.79	1.35	3.13	4.24	30.74
Canton	2.57	1.86	2.61	2.43	1.44	1.46	6.25	6.06	1.33	3.12	3.06	3.31	35.50
Carmel	9.71	5.91	3.39	3.14	1.30	1.83	3.65	4.80	1.67	2.23	3.57	5.14	46.34
Central Park, N. Y. City	6.12	4.12	3.61	2.38	2.45	1.48	3.94	4.51	2.49	9.60	2.30	3.55	39.55
Chenango Forks	2.10	1.68	1.75	.....	1.03	4.55	.....	7.59	2.47	.....	.....	3.17	.....
Cherry Creek	3.68	6.90	3.25	1.97	1.91	9.21	3.42	4.36	2.13	2.78	6.84	5.82	52.27
Constableville	5.84	8.24	5.12	2.95	1.63	3.23	5.76	4.34	1.75	3.12	6.47	5.39	53.84
Cooperstown	5.54	4.76	2.60	2.22	2.16	1.98	5.02	4.26	1.41	3.01	3.15	4.96	41.07
Davids Island	7.17	4.15	2.57	1.50	1.80	2.05	3.55	4.50	1.05	0.28	3.20	3.10	34.92
De Kalb Junction	2.99	3.30	4.40	2.05	1.47	2.00	5.73	6.26	2.65	3.14	4.76	3.31	42.06
Demster	2.57	3.79	3.35	1.88	1.40	1.97	[4.20]	3.74	[1.50]	3.88	4.22	6.34	[38.84]
Deposit	3.73	2.63	2.69	2.35	1.68	2.00	4.13	4.58	1.66	3.87	3.20	3.58	36.10
Dunkirk[1]	2.40	3.10	1.49	0.66	1.14	[1.30]	[3.80]	3.09	3.20	2.37	3.04	3.40	[28.99]
Easton	4.65	4.18	2.12	2.30	[2.40]	2.65	3.40	3.11	1.07	2.49	3.14	4.82	[36.33]
Eden Center	.....	.....	.....	.....	.....	.....	.....	3.70	2.15	2.14	5.08	4.91	.....
Elmira	2.33	2.19	1.98	1.73	0.50	4.57	2.13	3.72	3.25	[4.30]	[1.80]	[3.80]	[32.30]
Factoryville (Waverly)	3.23	2.88	2.84	1.83	0.59	4.07	2.36	6.31	2.36	4.32	2.07	3.54	36.40
Fleming	0.85	[3.10]	2.50	1.01	0.50	2.33	1.51	3.27	2.05	4.36	2.23	4.33	[28.04]
Fort Columbus	6.03	3.86	3.83	2.28	3.22	1.45	4.20	6.23	2.37	2.87	2.24	3.74	42.32
Fort Hamilton	5.34	4.80	3.20	1.50	3.15	1.27	5.42	5.05	3.64	3.56	1.84	4.86	43.63
Fort Niagara	1.26	2.42	2.13	1.98	1.00	1.19	2.47	4.11	2.59	1.38	1.75	2.90	25.18
Fort Porter	[2.20]	4.20	0.91	0.35	0.99	1.07	3.02	3.40	1.50	1.50	1.50	2.30	[23.54]
Fort Schuyler	7.11	4.12	2.66	2.66	2.37	1.24	2.73	3.86	3.23	3.47	2.41	3.90	39.76
Fort Wadsworth	6.90	5.71	4.49	2.51	4.03	1.83	5.65	4.70	2.96	3.40	2.33	3.77	48.28
Galway	4.65	5.61	4.10	.....	2.37	2.64	.....	.....	.....	.....	2.19	4.48	.....
Geneva	2.43	3.04	4.35	1.95	0.50	3.76	3.78	3.93	0.72	3.95	1.68	3.67	33.76
Glens Falls	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.34	.....
Hammondsport	[1.90]	3.78	3.10	[2.40]	0.67	4.73	5.92	4.87	0.67	2.75	1.20	3.17	[35.16]
Hess Road Station	2.42	3.65	3.22	2.00	1.45	2.17	3.12	5.91	1.69	1.65	2.80	4.54	34.62
Honeymead Brook	6.91	3.90	2.30	3.58	1.41	3.90	5.54	2.64	1.22	1.70	2.10	3.74	38.94
Humphrey	1.82	4.55	2.36	2.17	1.45	5.95	7.22	6.63	2.04	2.42	4.09	4.38	45.08
Hyndsville	.....	.....	.....	1.46	2.72	2.72	4.41	4.08	.....	.....	.....	.....	.....
Ithaca	2.99	3.17	3.30	2.45	0.61	4.56	4.25	3.24	2.13	5.25	2.25	3.85	38.05
Keene Valley	4.23	2.71	3.26	2.55	2.82	2.71	2.97	2.55	1.75	[2.80]	[3.40]	[3.00]	[34.75]
Kings Station	.....	.....	.....	1.90	2.57	1.47	4.04	.....	1.68	2.60	2.98	4.96	.....
Le Roy	4.12	7.10	7.40	2.22	1.95	4.96	6.10	5.33	1.71	1.44	3.40	3.84	49.57
Liberty	3.14	2.95	3.65	2.00	2.46	3.41	5.29	3.70	[2.10]	1.70	3.79	3.91	[45.10]
Little Valley	.....	.....	.....	.....	.....	.....	.....	.....	1.87	3.01	.....	.....	.....
Lockport	[2.10]	[4.10]	[2.20]	1.63	1.35	1.45	3.41	4.87	2.86	1.57	3.19	3.96	[32.69]
Lowville	3.38	4.12	3.60	1.30	1.34	4.10	7.46	2.30	1.74	3.03	5.23	4.75	42.35
Lyndonville	1.31	2.83	2.54	1.55	1.90	[2.10]	[5.70]	4.53	[2.20]	0.99	1.57	3.74	[30.96]
Lyons	1.09	1.52	[4.30]	2.08	1.33	1.19	2.42	3.58	1.16	3.58	[2.60]	[4.00]	[28.85]
Lyon Mountain[2]	5.57	3.11	1.50	3.02	1.67	4.03	4.79	5.83	2.25	2.87	2.69	3.10	40.43
McLean	.....	.....	.....	.....	1.19	6.35	2.67	3.44	1.91	5.39	2.86	4.02	.....
Madison Barracks	2.61	2.05	2.89	0.85	1.03	1.94	3.21	2.00	1.86	3.43	3.78	3.47	29.12
Malone	3.74	4.38	3.31	4.37	1.92	4.45	4.80	4.86	1.78	3.50	2.69	3.18	42.98
Marshland (Apalachin)	.....	.....	.....	.....	.....	4.09	4.38	7.89	1.36	.....	3.56	3.64	.....
Middleburg	3.50	5.00	3.61	1.40	3.00	2.50	2.80	[6.20]	0.70	3.00	[2.80]	[3.70]	[38.21]
Middletown	8.00	4.79	3.37	1.97	1.91	1.53	4.98	4.32	1.63	1.93	3.66	3.86	41.95
Minnewaska	9.63	4.40	4.73	3.39	2.68	4.00	9.15	4.65	4.35	1.90	5.19	3.25	57.32
Mount Morris	[2.00]	[3.40]	1.90	1.41	1.01	2.04	2.95	3.66	0.74	1.83	2.23	2.92	[26.09]
Newark Valley	3.43	2.75	4.37	2.47	0.57	6.11	4.18	6.48	1.47	4.75	3.44	4.12	44.14
New Lisbon	4.11	3.56	2.09	1.89	2.50	3.72	4.63	5.59	1.39	3.26	2.25	4.78	39.77
*New York City	5.73	4.69	4.22	2.37	3.10	1.18	4.11	5.87	2.12	2.69	2.06	3.30	41.44
North Hammond	3.20	3.04	5.08	1.80	1.04	1.82	5.36	5.18	1.48	3.08	2.33	3.25	36.66
Number Four	4.05	3.67	3.52	2.36	1.57	3.23	8.46	4.12	2.21	3.52	4.84	4.57	46.12
Ogdensburg[3]	.....	1.85	.....	.....	.....	.....	.....	6.32	.....	.....	.....	.....	.....
*Oswego	3.01	2.81	4.15	1.68	1.08	1.58	4.10	2.11	1.28	2.89	2.66	4.09	31.44
Oxford	4.83	4.15	2.78	2.44	1.39	5.44	4.27	6.02	2.72	4.42	2.65	5.38	46.49
Palermo	2.44	3.45	3.80	1.73	0.44?	1.03	4.83	2.05	1.66	3.51	2.88	4.05	31.87
Palmyra	2.51	3.14	5.20	2.32	1.16	1.63	4.71	3.19	.....	.....	.....	.....	.....
Pawling	8.41	5.20	2.72	3.13	2.00	2.66	6.59	5.33	1.86	2.47	2.50	3.86	46.73
Peekskill	7.99	4.60	4.65	4.15	2.88	.....	.....	.....	.....	8.35	3.48	.....	.....
Pendleton Center (Lockport)	2.14	3.44	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Perry City	3.34	4.23	3.45	2.16	0.74	4.13	3.54	3.90	0.98	5.46	2.19	4.48	38.60
Plattsburg	1.89	[1.60]	1.90	2.47	1.74	1.83	[3.80]	3.24	1.05	2.00	1.79	2.58	[25.89]
Plattsburg Barracks	1.19	1.60	2.65	2.28	1.97	1.49	3.77	3.55	0.93	2.07	1.67	2.88	26.05
Port Jervis	7.02	4.03	3.11	2.94	2.64	1.39	7.42	6.00	1.82	2.05	3.37	4.02	45.81
Potsdam	3.18	3.62	3.78	3.13	0.79	2.01	[5.90]	6.77	[2.00]	[3.10]	2.92	2.28	[39.48]
Poughkeepsie	6.65	4.45	2.91	2.16	1.66	2.14	5.24	4.12	1.13	1.79	2.11	3.59	37.95
Quaker Street	4.44	5.00	3.23	1.67	3.52	2.34	4.00	4.12	1.00	3.44	2.29	3.87	38.92
Queensbury	5.81	3.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Rochester	3.75	4.17	4.44	1.89	1.12	1.56	3.62	3.01	1.41	2.36	2.46	3.85	33.64
Rome	5.18	5.99	3.74	.....	.....	.....	.....	.....	.....	3.34	5.54	5.77	.....
Romulus	2.74	2.12	.....	.....	.....	.....	.....	.....	.....	4.07	1.25	3.48	.....
Rondout (Kingston)	11.38	4.11	5.18	2.40	1.68	[4.00]	6.43	4.17	1.77	3.63	3.05	3.43	[51.23]
Sand Bank	3.49	2.76	.....	.....	.....	1.88	.....	.....	.....	.....	.....	.....	.....
Scottsville	.....	.....	.....	.....	1.60	2.10	.....	.....	.....	.....	.....	.....	.....
Setauket	6.39	6.26	3.84	3.22	1.24	1.84	5.71	3.43	3.18	6.00	3.24	3.40	47.35
Sherman	2.96	6.04	3.56	1.32	1.40	1.88	5.39	2.06	3.33	1.52	4.60	4.52	39.18
Schodack Depot	5.69	3.83	2.64	3.35	2.43	4.41	4.87	10.52	2.55	[2.00]	2.78	3.59	[48.66]
South Canisteo	2.53	4.72	3.43	2.22	1.41	2.68	4.62	5.80	1.20	3.48	2.74	3.30	38.13
S. E. Reservoir	8.88	6.00	3.42	2.76	1.49	2.30	4.67	5.31	2.00	2.47	3.36	5.51	48.17

[1] Wm. Bolling. [2] Edward Hall. [3] N. Nelson.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
New York—Continued.													
South Kortright	4.67	3.31	2.37	1.65	3.57	3.04	3.67	4.21	1.45	[2.70]	2.63	4.57	[37.84]
Syracuse	3.83	3.97	.....	.....	0.45	1.46	2.84	.....	.....	3.06	2.53	.....	.....
Turin	5.86	7.60	4.18	2.58	1.81	3.25	[6.70]	4.92	2.05	3.60	7.03	7.00	[56.58]
Utica	4.18	5.35	3.77	1.53	1.53	2.60	3.79	3.32	1.46	3.64	3.50	6.77	41.24
Victor	.....	.....	.....	.....	.....	.....	5.21	4.04	1.28	3.58	.....	.....	.....
Wappinger's Falls	7.75	4.69	3.13	4.49	1.86	2.19	3.91	3.82	1.60	2.19	2.14	4.34	42.11
Warwick	.....	.....	.....	.....	1.95	2.33	3.93	.....	.....	.....	.....	.....	.....
Watertown	3.44	3.75	4.55	.....	.....	.....	7.91	.....	3.59	.....	.....	.....	.....
Watervliet Arsenal	4.40	3.00	2.15	2.00	2.05	3.30	6.35	4.50	2.35	2.40	2.35	1.45	36.30
Watkins	.....	.....	.....	.....	.....	.....	.....	.....	0.82	3.91	1.55	3.23	.....
Wedgwood	2.48	3.88	3.11	2.46	0.89	2.43	2.45	4.58	0.66	4.19	1.77	3.85	22.75
West Chazy	.....	.....	.....	.....	.....	1.56	4.83	3.24	1.05	2.13	1.61	2.50	.....
West Point	8.70	4.68	2.83	2.70	1.90	2.46	4.16	4.88	1.66	0.93	2.83	5.03	42.76
White Plains	7.86	3.71	1.68	2.65	1.50	0.20	2.82	1.91	0.76	2.10	3.22	6.76	35.17
Willets Point	7.25	4.25	3.48	2.80	2.35	1.20	5.00	4.90	3.03	3.77	2.52	3.70	44.25
North Carolina.													
*Asheville	4.45	8.13	6.54	1.86	5.09	2.75	5.67	7.86	3.25	0.78	3.60	3.25	53.23
Bakersville	.....	.....	.....	2.14	4.85	2.66	.....	4.23	2.76	2.20	2.63	3.37	.....
*Bryson City	6.51	9.42	8.67	2.09	1.94	6.24	5.03	4.27	2.76	0.60	2.71	3.93	54.17
*Chapel Hill	4.59	5.70	7.75	2.13	8.75	4.61	5.40	11.71	1.38	1.58	3.12	1.47	58.19
*Charlotte	3.92	6.95	11.13	2.79	7.58	3.77	3.79	6.82	0.76	0.68	3.05	1.26	52.50
Concord	.....	.....	.....	2.20	4.75	3.36	5.20	9.00	0.55	1.20	.....	2.30	.....
*Currituck Inlet	3.64	3.94	7.75	1.64	3.33	[2.20]	9.23	9.49	0.83	7.76	[2.20]	[1.40]	[53.11]
Douglas	8.90	4.80	6.70	1.95	8.10	4.00	9.49	8.20	1.40	[1.40]	2.40	2.70	[60.04]
*Fayetteville	[4.50]	[3.80]	7.84	2.74	4.56	3.15	6.05	9.57	1.84	4.51	2.52	2.04	[53.12]
Franklin	5.20	9.10	3.80[1]	1.10	(?)	1.40	5.50	2.80	4.00	.....	.....	.....	.....
*Goldsboro	.....	.....	.....	.....	4.93	1.77	5.84	10.73	2.35	3.43	1.51	.....	.....
*Hatteras	6.05	3.43	5.07	0.91	5.98	1.59	9.12	8.62	4.64	7.74	3.14	3.21	59.50
Hendersonville	7.80	10.73	11.67	1.35	3.58	3.50	6.86	[4.30]	4.97	0.10	8.00	4.09	[66.95]
Highlands	8.98	20.20	.....	1.82	3.53	5.02	.....	.....	.....	.....	.....	.....	.....
*Kitty Hawk	3.50	3.92	5.33	1.40	2.97	3.23	6.56	7.63	2.05	2.79	2.23	1.03	42.64
Lenoir	5.60	6.60	8.30	3.20	5.10	3.20	7.30	5.90	3.10	0.80	4.50	4.00	57.60
Lexington	[3.80]	[6.40]	[8.00]	2.01	7.88	2.57	6.51	8.09	1.18	1.17	2.90	2.21	[52.72]
*Lillington	.....	.....	7.59	3.35	5.19	5.99	.....	.....	1.13	2.76	3.49	1.27	.....
Linville	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.10	10.79	7.37	.....
Littleton	[3.20]	[5.20]	7.84	4.80	8.07	3.57	6.37	10.29	1.60	2.89	2.59	0.53	[56.95]
Louisburg	[4.10]	[5.40]	45.38	1.71	6.41	1.94	7.87	8.49	0.99	2.67	1.93	2.17	[49.06]
*Lumberton	.....	.....	.....	.....	3.53	4.82	5.43	10.64	1.59	1.16	2.35	.....	.....
Marion	6.43	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marshallberg	.....	2.35	6.18	1.25	.....	.....	.....	.....	.....	.....	.....	.....	.....
Morganton	6.28	6.63	8.59	2.42	4.59	2.41	4.61	6.04	3.52	0.56	4.75	3.93	54.33
Mount Airy	5.56	5.31	6.51	4.20	6.48	2.66	5.47	7.23	1.12	1.04	2.43	4.88	52.89
*Mount Holly	3.76	7.02	10.41	2.77	5.56	6.66	5.84	5.74	1.29	0.32	2.79	0.79	52.95
Mount Pleasant	3.60	6.65	10.13	1.55	7.26	4.18	6.18	6.05	0.95	0.62	3.84	1.70	52.71
*Murphy	6.60	12.87	10.41	2.09	1.87	6.79	7.88	6.71	2.61	0.52	4.18	4.98	67.51
*Newbern	.....	.....	.....	.....	4.94	1.60	6.51	11.57	4.40	3.87	0.77	1.74	.....
*Oak Ridge	4.09	5.92	7.06	4.46	8.26	2.35	10.99	7.26	1.46	1.35	3.33	2.96	59.49
Pittsboro	[4.30]	3.80	7.00	1.70	7.00	3.60	7.10	8.80	0.80	1.50	2.55	1.00	[49.15]
Raleigh[1]	[4.00]	4.40	6.36	2.50	9.30	3.40	[11.00]	9.70	[1.80]	2.10	2.65	1.30	[58.51]
*Raleigh[2]	3.96	5.10	7.25	2.98	9.24	4.12	10.99	10.42	1.76	2.64	3.71	1.24	63.41
Salisbury	3.49	[6.60]	9.21	2.47	6.05	5.20	5.52	7.19	0.86	1.14	3.41	1.58	[52.72]
Saxon	.....	.....	.....	.....	.....	.....	.....	.....	1.41	1.14	2.85	2.84	.....
Smithfield	3.20	3.50	7.80	2.30	7.35	3.80	8.85	16.30	3.20	3.45	3.50	2.00	65.25
Soapstone Mount	9.62	[5.80]	10.50	[2.70]	7.50	3.25	8.00	6.88	2.00	0.50	3.50	[2.30]	[62.55]
*Southport	5.38	1.87	4.89	1.73	2.24	4.35	7.05	7.46	5.04	6.40	2.08	1.15	49.58
Southern Pines	[3.70]	[5.70]	7.18	1.26	11.08	3.70	7.32	10.58	0.68	2.11	2.86	1.26	[57.43]
Wadesboro	.....	.....	.....	.....	6.47	1.80	5.03	9.12	1.37	0.76	3.15	.....	.....
Wadeville	[3.80]	[7.10]	[10.00]	0.08	4.48	4.54	5.99	9.43	1.38	1.21	4.31	2.05	[54.37]
Washington	3.12	2.44	6.91	1.34	6.14	4.01	8.23	11.93	3.43	4.59	2.38	[1.80]	[56.32]
*Weldon	3.80	4.86	8.30	3.34	9.34	4.13	5.78	8.79	1.37	6.10	2.07	1.70	59.58
Willeyton	3.20	4.95	8.10	2.50	5.20	3.00	10.60	9.15	2.70	5.70	2.40	1.50	59.00
*Wilmington	4.46	1.54	5.15	1.15	1.03	3.47	6.21	11.96	4.61	6.01	1.46	0.95	48.00
North Dakota.													
Bathgate	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.72	0.40	0.70	.....
*Bismarck	0.05	0.57	1.24	2.40	2.92	4.19	4.20	1.43	0.87	0.99	1.20	0.44	20.50
Carrington	.....	.....	.....	.....	.....	3.64	4.32	0.30	1.19	1.77	0.67	.....	.....
Church's Ferry	.....	.....	.....	.....	.....	*5.15	2.66	0.88	.....	.....	.....	.....	.....
Davenport	.....	.....	.....	.....	0.89	5.19	6.52	1.51	.....	.....	.....	.....	.....
Dickinson	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.50	.....	.....
Ellendale	[0.10]	[0.70]	2.48	2.94	2.06	3.87	5.12	0.41	0.78	1.29	0.24	0.70	[20.79]
Fargo	.....	.....	.....	.....	.....	3.83	3.64	2.96	2.69	1.32	0.46	0.43	.....
Fort A. Lincoln	0.05	0.43	0.67	.....	2.85	4.85	*4.42	.....	.....	.....	.....	.....	.....
*Fort Buford[2]	0.19	0.14	0.27	1.84	1.49	7.08	2.99	0.78	0.66	1.96	1.44	0.14	18.98
Fort Buford[3]	0.19	0.14	0.27	1.84	1.49	7.92	3.06	0.07	0.53	1.80	1.27	0.35	18.93
Fort Pembina	0.88	1.06	1.09	1.56	2.38	6.32	2.69	3.10	2.38	1.93	0.80	1.74	25.93
*Fort Yates[2]	0.07	0.84	1.37	3.08	1.34	4.70	.....	.....	.....	.....	.....	.....	.....
Fort Yates[3]	0.05	0.37	0.82	3.16	1.73	4.78	2.63	0.42	1.66	1.25	0.95	0.67	18.49
Gallatin	0.21	0.42	0.28	1.69	2.21	3.03	4.43	0.88	1.61	2.71	0.66	0.57	18.79
Grafton	0.34	1.58	[0.60]	[1.70]	2.32	7.13	4.65	2.09	2.23	2.44	0.10	[3.50]	[28.68]
Grand Forks	0.27	0.95	.....	.....	.....	2.31	.....	1.37	0.71	.....	0.71	1.29	.....
Grand Rapids	.....	.....	.....	.....	.....	.....	*3.98	0.16	0.94	1.70	1.03	3.32	.....
Hope	.....	.....	.....	.....	.....	3.35	5.06	0.81	1.34	2.27	0.30	.....	.....
Jamestown	.....	.....	.....	.....	.....	.....	6.29	.....	.....	.....	.....	1.42	.....
Kelso	0.42	0.95	2.17	2.21	1.45	4.85	2.45	0.99	2.01	2.60	0.40	1.09	21.59
Lakota	.....	.....	.....	.....	.....	4.55	2.74	2.00	1.97	2.17	.....	.....	.....
Milton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.00	.....

[1] T. C. Harris. [2] Weather Bureau. [3] Post hospital.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
North Dakota—Continued.													
Napoleon	0.12	0.98	1.11	2.39	2.02	7.87	4.93	1.24	2.17	2.18	1.13	1.76	27.90
New England City	T	0.40	1.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Power	.....	.....	.....	.....	.....	3.85	4.96	0.14	2.80	1.07	0.60	0.99	.....
St. Johns	.....	.....	.....	.....	.....	.....	.....	.....	1.11	1.12	1.44	3.11	.....
St. Thomas	.....	.....	.....	.....	.....	.....	5.33	2.24	3.01	2.34	0.10	5.50	.....
Steele	.....	.....	1.52	1.38	3.39	7.40	4.08	0.56	2.05	1.83	.....	.....	.....
Valley City	.....	.....	.....	.....	.....	.....	.....	.....	1.20	3.56	0.95	.....	.....
Wahpeton	0.05	1.54	1.19	1.73	1.82	5.36	4.49	0.77	2.32	0.93	1.00	1.30	22.50
Wild Rice	0.35	1.65	1.25	1.68	*0.95	3.78	7.66	1.26	2.58	1.26	0.67	0.78	23.87
Willow City	.....	.....	.....	.....	.....	2.41	3.17	1.02	1.55	3.03	1.25	1.10	.....
Woodbridge	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.83	0.55	0.44	.....
Ohio.													
Akron	2.04	3.26	3.47	2.18	2.15	7.02	3.22	2.67	0.95	1.45	5.06	2.53	36.00
Ashland	2.67	3.91	3.87	2.33	1.69	4.10	2.39	3.15	1.07	1.73	6.14	3.23	36.28
Athens	3.13	4.09	4.03	1.21	2.25	4.28	4.92	5.17	2.33	[1.60]	3.45	2.09	[38.55]
Bangorville	2.53	6.14	4.15	2.53	2.17	3.42	3.92	2.86	0.81	2.39	6.79	3.07	40.78
Bellevue	1.00	3.85	3.01	2.06	0.90	[4.50]	[2.50]	0.60	2.60	2.50	5.70	2.09	[31.31]
Bement	2.03	5.44	3.59	2.18	3.58	5.59	3.36	1.14	2.09	1.14	5.36	2.60	38.08
*Caledonia	2.55	5.56	3.56	2.25	[1.60]	6.23	2.32	3.65	0.50	3.15	6.50	3.59	[41.46]
*Canton	2.19	4.26	2.96	1.65	2.53	10.83	5.31	2.19	1.07	1.13	3.93	2.37	40.42
Celina	2.28	4.13	4.52	1.67	1.46	3.00	2.84	4.05	1.00	0.90	5.18	1.97	33.00
*Cincinnati	3.31	3.87	4.86	1.55	1.08	4.83	5.13	2.83	2.65	1.16	5.03	2.14	38.44
*Circleville	2.15	5.36	4.94	2.20	1.68	7.18	4.19	4.10	2.40	1.78	3.19	1.33	40.50
Clarksville	3.61	5.81	5.21	2.17	1.53	6.27	3.42	3.78	1.80	1.58	5.25	2.22	42.65
*Cleveland[1]	2.19	5.15	2.93	1.52	2.59	4.07	1.48	2.89	2.01	1.72	5.41	2.22	34.18
Cleveland[2]	2.56	4.95	3.27	1.68	2.91	4.03	1.66	3.23	1.71	2.01	4.63	2.23	34.87
*Columbus	2.84	5.42	4.64	2.26	2.73	4.98	4.69	2.64	1.05	2.94	5.44	2.42	42.05
Columbus Barracks	3.20	5.45	5.65	1.98	2.74	5.22	4.50	3.18	1.22	2.79	6.36	2.29	44.58
Dayton	3.17	4.41	4.90	2.89	0.99	5.16	2.43	3.20	1.75	2.36	5.29	2.30	38.85
Demos	2.93	7.61	4.27	2.14	3.08	5.15	7.53	2.11	1.29	0.54	2.24	2.83	41.72
Ellsworth	1.71	5.46	3.00	1.69	2.35	3.54	3.70	2.22	1.41	1.08	3.52	2.08	31.76
Elyria	.....	5.43	3.27	.....	3.69	.....	2.28	.....	3.01	1.96	7.38	1.78	.....
Findlay	2.43	4.19	4.05	2.73	1.84	4.66	5.30	1.90	0.42	2.72	5.53	2.15	37.92
Fostoria	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.98	5.18	1.97	.....
Garrettsville	2.51	5.65	3.58	1.57	2.56	5.06	4.14	2.43	1.65	1.55	4.67	2.57	37.94
Georgetown	4.76	3.67	6.25	1.70	1.47	6.31	4.14	5.62	2.19	2.02	5.64	3.08	46.85
Granville	3.05	6.16	3.59	2.14	2.57	4.31	6.89	1.92	0.70	2.30	6.60	2.58	42.81
Gratiot	2.88	6.03	4.53	1.84	3.27	3.55	5.97	4.05	0.82	1.32	4.36	2.08	40.70
Greenfield	.....	.....	.....	.....	.....	.....	6.66	3.84	1.43	1.87	4.84	2.47	.....
Greenville	3.18	4.26	5.61	3.88	0.92	3.97	1.90	3.25	2.10	1.09	5.88	2.81	38.85
Hanging Rock	3.59	5.20	5.75	2.03	1.25	6.89	3.85	4.18	2.75	1.14	3.44	2.30	42.37
Harbor	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.10	1.71	.....
Hassan	2.42	5.58	6.30	3.78	1.25	1.99	2.07	2.36	0.42	2.12	5.10	[2.00]	[35.39]
Hiram	2.44	5.26	3.27	1.50	2.33	4.56	3.45	2.54	1.40	1.37	4.31	2.41	34.84
Hudson	1.70	5.85	4.10	1.22	1.85	4.31	4.94	3.30	1.33	1.49	5.07	[2.40]	[37.56]
Jacksonboro	3.25	4.15	5.60	2.45	1.75	2.95	2.45	2.50	1.95	0.95	6.30	2.65	35.95
*Kenton	2.43	4.07	4.65	2.54	3.02	5.63	2.11	3.26	0.48	2.38	6.10	2.83	39.50
Leipsic	1.90	.....	4.12	.....	2.45	.....	.....	.....	.....	.....	.....	.....	.....
Logan	3.97	6.59	5.09	1.82	3.05	3.44	3.82	4.80	1.60	1.47	4.63	1.50	41.78
Lordstown	2.17	4.03	3.14	1.74	2.51	4.77	2.79	1.69	2.46	1.10	2.89	2.40	31.69
*Mansfield	2.56	6.44	3.69	2.68	2.03	6.09	2.28	2.15	1.19	2.27	7.10	3.68	42.16
*Marietta[3]	3.06	5.43	4.68	2.01	2.24	3.52	5.21	3.22	2.33	1.97	3.56	2.78	40.01
Marietta[4]	3.84	4.97	4.73	2.08	2.29	4.02	5.31	3.21	2.40	1.69	3.36	2.86	40.76
Marion	[2.70]	3.90	[4.20]	[2.20]	1.96	5.88	2.15	4.53	0.31	3.72	5.72	3.36	40.63
McConnellsville	5.68	6.92	3.56	1.94	3.76	7.38	6.99	3.44	2.04	1.50	3.01	1.69	47.91
Montpelier	[2.50]	[4.80]	3.63	2.71	1.91	2.28	1.60	3.91	0.65	0.92	5.73	1.93	[32.47]
Napoleon	1.04	3.35	3.31	3.10	1.00	6.70	3.30	4.13	1.58	1.94	4.74	1.23	35.42
New Alexandria	3.86	7.04	3.77	2.07	4.46	3.52	4.98	2.85	1.36	1.06	2.63	3.05	40.70
New Comerstown	3.09	5.79	2.60	1.46	2.92	4.69	4.79	3.22	1.36	1.10	4.29	2.66	37.97
New Holland	.....	.....	.....	.....	.....	4.56	4.11	2.69	1.91	2.09	4.68	2.07	.....
North Lewisburg	3.50	5.25	5.35	3.75	3.50	5.35	4.05	1.70	0.70	2.15	7.20	1.75	44.25
Oberlin	1.88	4.35	2.70	1.46	2.55	5.98	2.87	1.25	2.98	1.53	5.34	2.06	34.95
O. S. University	3.13	4.80	4.39	2.02	2.52	3.32	4.41	1.80	1.16	2.79	5.74	2.42	38.50
Orangeville	2.05	5.15	3.35	1.50	1.95	3.00	2.55	1.15	2.05	1.20	3.45	2.50	29.90
Piqua	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.50	.....	1.90	.....
Pomeroy	2.84	4.22	2.69	1.16	2.65	4.84	3.43	2.50	2.67	1.59	1.54	1.51	31.64
*Portsmouth[3]	3.96	[5.00]	5.54	2.27	1.55	7.39	3.52	5.08	2.80	1.00	4.20	2.00	[44.31]
Portsmouth[5]	3.30	5.00	5.70	2.34	1.55	7.34	3.52	4.18	2.80	0.91	4.20	2.00	42.84
Quaker City	2.60	4.67	2.91	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Salineville	.....	4.94	3.90	1.31	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Sandusky	2.00	4.05	2.27	2.14	1.48	4.38	2.05	1.53	1.19	2.64	5.45	1.60	30.69
Shiloh	2.80	4.21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Sidney	2.94	4.72	5.18	3.27	3.07	6.29	3.82	4.33	0.80	1.69	5.86	3.27	45.24
Springboro	2.60	6.58	5.16	2.28	1.74	5.17	3.66	3.23	0.90	1.70	6.12	2.25	41.39
Tiffin	1.93	4.19	3.18	2.20	1.57	5.86	3.54	1.60	1.71	2.40	6.15	2.15	36.18
*Toledo	1.08	3.08	2.27	1.89	0.79	3.39	3.44	1.91	0.84	2.47	4.47	1.49	27.12
Upper Sandusky	1.68	3.13	3.05	2.07	1.32	3.50	2.81	2.43	0.45	3.26	5.54	2.40	31.73
Van Wert	.....	.....	.....	.....	.....	.....	3.50	3.35	1.61	1.27	6.13	2.09	.....
Wapakoneta	3.02	[4.10]	3.36	[2.50]	0.95	[1.70]	1.54	2.22	0.57	2.32	2.55	1.93	[25.86]
Wauseon	2.56	4.58	4.45	4.39	1.49	4.21	2.36	3.43	0.86	1.85	5.02	1.91	37.11
Waverly	3.97	3.59	5.52	1.15	1.71	4.80	4.78	3.95	2.08	1.56	4.25	1.74	39.10
Waynesville	3.29	5.87	6.01	2.35	1.62	6.71	2.99	3.19	1.63	2.10	6.75	2.77	45.22
Westerville	3.11	5.05	4.56	2.76	2.44	3.68	5.06	1.49	0.76	2.06	6.12	2.17	39.86
West Milton	3.43	4.95	5.99	6.73	2.87	6.43	3.23	5.96	[2.20]	2.45	6.45	3.40	[52.09]
Weymouth	1.95	5.04	2.47	0.48	2.30	4.79	4.09	2.44	1.25	1.31	5.03	2.35	33.50
Wheeler	1.90	3.52	2.35	1.57	2.03	4.21	1.47	2.28	3.53	1.48	5.02	1.84	31.20
*Wooster	2.97	4.00	3.71	1.66	2.24	7.13	3.24	[1.80]	0.93	1.33	5.73	2.92	[37.66]

[1] Weather Bureau. [2] G. A. Hyde. [3] Special river observer. [4] Prof. T. D. Briscoe. [5] Dr. D. B. Cotton.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Ohio—Continued.													
Youngstown	2.41	4.00	3.84	1.25	3.06	3.70	3.49	1.72	1.22	0.99	3.16	1.51	30.25
*Zanesville	2.81	5.99	3.43	1.45	3.13	3.15	8.84	1.72	0.93	1.00	3.05	1.66	37.16
Oklahoma.													
Buffalo	1.45	.....	2.05	0.20	0.60	14.40	.....	.....	6.60	.....	.....	.....	.....
*Fort Reno[1]	1.90	0.14	2.52	2.16	2.96	4.03	.....	.....	.....	.....	.....	.....	.....
Fort Reno[2]	2.02	0.13	2.47	2.10	3.02	5.02	6.97	1.02	1.17	0.30	0.85	1.70	26.77
*Fort Sill[1]	2.72	0.12	2.66	4.99	3.72	4.96	6.27	1.32	1.01	0.36	.....	.....	.....
Fort Sill[2]	3.80	0.12	2.66	4.99	3.65	4.96	6.25	1.10	1.05	0.36	1.10	2.72	32.76
Guthrie	1.48	0.22	2.86	3.77	4.27	7.66	4.80	1.21	1.46	0.51	1.26	2.67	32.27
*Oklahoma City	2.48	0.44	3.04	4.30	5.92	4.73	6.17	0.79	5.43	0.31	1.17	2.65	37.43
Oregon.													
Albany[3]	4.65	7.73	3.41	3.37	2.49	2.03	0.21	1.15	2.19	5.41	7.32	13.19	49.15
Albany[3]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11.11	.....
Arlington	[1.10]	[2.70]	[1.80]	0.04	0.44	1.02	0.46	0.27	0.10	1.44	0.49	1.83	[11.63]
Ashland[4]	1.38	4.50	1.88	0.88	1.00	2.15	0.70	0.00	0.77	0.41	1.47	5.54	20.68
*Ashland[4]	1.25	4.43	2.54	1.08	[1.00]	2.96	0.75	0.10	1.10	0.81	1.30	5.30	[22.62]
*Astoria	6.01	8.01	5.40	5.11	1.80	4.72	1.06	1.46	6.14	7.06	15.18	15.79	77.74
Athena	.....	.....	.....	.....	1.20	3.10	2.30	.....	.....	.....	.....	.....	.....
Aurora	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.41	10.52	.....
*Baker City	2.04	2.59	1.40	0.37	1.37	2.59	1.83	0.43	0.14	0.16	1.31	4.00	18.23
Bandon	6.41	14.08	5.78	11.35	4.87	4.16	0.24	1.87	2.81	5.78	6.89	14.87	79.11
Beulah	0.17	3.09	[1.70]	0.07	0.60	1.42	0.59	0.14	0.30	0.13	0.45	2.19	[10.85]
Brownsville	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.87	.....
Burns	0.16	.....	.....	.....	.....	.....	.....	.....	0.10	T.	3.77	1.69	.....
Canyon City	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.38	3.03	.....
Cascade Locks	9.00	9.69	6.52	5.60	1.94	4.45	1.22	1.84	3.92	8.31	13.25	21.50	87.35
Comstock	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.64	16.25	.....
Corvallis[5]	3.75	7.82	2.48	2.40	1.70	2.11	T.	0.55	1.80	4.10	7.35	11.93	45.99
Corvallis[4]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11.40	.....
Deer Island	.....	5.21	2.40	.....	.....	3.60	0.25	1.05	.....	.....	9.18	.....	.....
East Portland	1.64	3.56	0.36	2.92	1.27	3.82	0.03	0.18	[2.20]	5.18	4.51	14.07	[39.74]
Eola	4.99	7.09	2.13	3.71	2.29	2.19	0.19	0.54	2.51	5.19	6.93	11.88	49.64
*Eugene	4.65	9.97	2.78	2.31	3.00	2.06	[0.70]	[0.65]	1.56	3.35	4.31	10.40	[45.74]
Forest Grove	4.77	5.04	2.85	1.99	0.37	2.70	0.33	0.70	2.82	4.44	7.12	14.11	47.24
Gardiner	10.84	12.88	[5.10]	8.59	4.25	5.17	0.62	0.64	2.98	6.28	10.29	17.60	[85.24]
Gooseberry	.....	.....	.....	.....	1.34	3.74	1.12	0.03	.....	.....	.....	.....	.....
Grants Pass[7]	[2.50]	7.55	2.43	1.37	2.79	1.39	0.30	0.71	0.85	1.96	2.16	8.72	[32.73]
Grants Pass[4]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7.20	.....
Grass Valley	.....	.....	.....	.....	.....	.....	.....	0.07	.....	0.35	0.66	.....	.....
Happy Valley	0.65	2.70	2.35	1.57	3.14	2.55	2.12	0.24	0.74	[5.20]	0.99	1.94	[24.19]
Hardman	1.00	3.38	1.74	0.84	1.73	3.23	[2.10]	0.00	[0.60]	0.36	0.89	0.98	[16.85]
Heppner	1.14	2.90	2.06	0.41	1.32	2.74	1.98	0.12	0.59	0.33	[0.80]	[1.90]	[16.29]
Hood River[8]	2.38	6.70	2.80	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hood River (near)[9]	2.45	[6.70]	[2.80]	1.10	1.00	1.20	0.35	0.05	1.18	2.45	4.55	12.85	[36.68]
Hubbard	3.36	6.18	2.47	4.63	2.28	3.60	0.45	1.43	1.86	[5.20]	6.74	10.54	[48.74]
Jacksonville	1.61	6.11	2.13	1.32	2.91	1.44	0.65	0.10	1.27	1.02	1.67	7.69	27.92
John Day Junction	.....	.....	.....	.....	.....	0.48	2.22	T.	0.39	0.16	0.72	3.07	.....
Jordan Valley	.....	.....	.....	.....	2.70	1.83	0.48	.....	.....	.....	.....	.....	.....
Joseph	1.72	3.12	2.15	0.57	3.53	5.58	2.70	0.77	0.79	0.63	3.09	2.03	26.68
Junction City	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6.44	.....
La Fayette	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.88	13.25	.....
La Grande	2.96	3.34	1.71	0.25	0.57	2.77	2.24	0.45	0.65	1.05	2.75	2.80	21.54
Lakeview	0.49	4.95	2.06	1.09	3.69	2.97	0.90	0.15	0.38	0.42	1.07	6.38	24.55
Langlois	.....	.....	.....	.....	.....	.....	.....	.....	.....	7.02	14.53	18.67	.....
Leland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13.50	.....
Lone Rock	1.32	3.01	1.91	0.55	1.52	2.94	2.07	0.06	[0.60]	0.20	0.97	1.05	[16.20]
McMinnville[10]	5.13	6.58	2.54	3.36	2.18	2.71	0.34	0.36	2.51	5.00	6.75	14.00	51.46
McMinnville[4]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12.02	.....
Monmouth	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12.04	.....
Mount Angel	4.08	5.76	3.28	4.20	2.21	4.21	0.75	1.45	3.00	6.61	7.41	10.41	53.32
New Bridge	.....	.....	.....	.....	.....	.....	.....	0.00	0.00	1.18	1.49	4.50	.....
Newburg	[5.00]	[6.00]	[2.70]	3.22	2.54	2.80	0.47	0.98	2.50	5.36	6.27	11.75	[49.59]
Newport	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10.51	13.86	.....
Pendleton	0.87	2.16	1.84	0.46	0.33	2.22	2.98	0.00	0.05	0.08	1.50	2.09	14.58
Piedmont	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10.11	.....
*Portland[1]	3.62	6.26	2.06	4.00	1.83	4.07	0.24	0.93	2.17	5.04	5.74	11.45	47.41
Portland[4]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.82	10.73	.....
Riddles	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.31	9.71	.....
*Roseburg[1]	3.59	11.50	4.13	1.47	3.97	1.87	0.84	0.40	0.95	3.03	3.13	12.02	46.90
Roseburg[4]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.14	10.77	.....
Salem	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.13	7.40	.....
Sheridan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.25	11.37	.....
Silver Lake	0.62	3.08	0.77	1.46	2.65	2.24	1.63	[0.10]	[0.40]	[0.20]	1.50	1.46	[16.11]
Silverton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.43	9.91	.....
Siskiyou	0.28	0.70	2.78	0.90	3.09	2.70	1.26	0.00	0.45	0.70	1.70	15.65	30.21
Sparta	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.25	4.39	.....
Springfield	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.65	10.55	.....
Telocaset	2.28	2.83	1.50	.....	0.70	2.28	1.95	0.58	.....	.....	.....	.....	.....
*The Dalles	1.13	2.47	0.53	0.01	0.32	0.51	0.24	0.11	0.13	1.14	1.39	4.14	12.12
Tillamook Light-House	.....	.....	6.15	4.55	1.83	4.87	0.39	1.85	6.96	5.62	.....	.....	.....
Toledo	6.66	11.06	[4.50]	7.25	3.27	[5.20]	0.15	0.70	3.33	[6.00]	10.81	12.17	[71.10]
Vale	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.70	.....
Vernonia	5.15	7.29	3.29	3.96	[2.00]	3.76	0.42	1.24	3.95	5.70	8.90	17.44	[63.10]
Weston	[1.00]	[2.70]	2.24	0.77	1.89	3.24	2.98	0.44	0.42	0.77	2.71	3.11	[22.27]
West Fork	4.00	13.78	.....	.....	.....	.....	.....	.....	.....	.....	1.14	10.98	.....

[1] Weather Bureau. [2] Post hospital. [3] John Briggs. [4] Pacific Railway System. [5] F. N. Carter. [6] State Agricultural College. [7] J. B. Paddock. [8] Dr. E. J. Thomas. [9] Dr. P. G. Barrett. [10] Capt. W. Harris.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Pennsylvania.													
Allegheny Arsenal	2.55	5.60	3.59	1.41	3.40	3.84	7.30	1.92	2.39	1.67	2.60	3.05	39.32
Altoona	2.35	4.59	2.64	1.39	1.97	7.73	3.99	3.13	2.71	2.54	1.89	2.96	37.86
Aqueduct	3.39	2.66	5.07	2.35	1.65	3.15	9.67	6.40	1.00	3.15	2.96	4.55	46.00
Blooming Grove	5.40	6.20	5.10	3.30	1.90	2.80	6.20	5.90	1.60	2.30	5.00	5.60	51.30
Blue Knob	3.45	2.36	5.61	1.80	0.31	6.30	0.67	5.60	3.10	3.30	2.29	2.00	36.79
*Brookville	2.86	4.94	4.13	2.47	1.59	4.52	6.05	3.43	1.33	1.39	4.55	3.98	41.24
Brower's Lock	5.94	4.50	6.65	2.07	2.15	2.67	[8.80]	7.09	2.51	3.08	1.36	3.55	[50.37]
Carlisle	4.07	4.22	6.52	1.18	2.17	3.46	6.03	5.53	1.05	3.51	1.70	3.66	43.10
Chambersburg	2.27	2.54	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Charlesville	2.63	4.10	7.89	1.55	.....	4.42	6.61	5.51	4.55	.....	.....	.....	.....
*Clarion	2.93	7.02	4.04	2.84	1.35	6.93	8.98	4.16	2.51	2.47	4.31	4.66	52.20
Coatesville	6.59	5.31	7.61	2.25	3.64	3.60	11.61	4.08	3.38	[4.20]	1.78	3.85	[57.90]
*Confluence	4.51	8.00	4.36	3.12	3.73	6.83	6.57	5.92	3.62	3.31	3.45	4.06	57.48
Coopersburg	7.29	4.57	6.54	2.50	2.25	2.33	6.07	7.16	2.04	2.74	2.27	4.83	50.59
Corry	2.57	6.67	2.72	1.80	1.58	3.33	5.34	3.79	2.46	1.95	5.70	4.56	42.47
*Davis Island Dam	2.33	6.59	3.11	1.94	3.67	4.83	6.28	2.37	1.53	1.76	2.82	3.02	40.25
Doylestown	2.29	4.89	5.55	1.92	3.43	3.66	6.30	8.68	1.98	4.22	1.87	4.29	49.08
Drifton	.....	2.90	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*DuBois	3.02	5.98	3.08	2.68	1.71	6.90	5.75	4.61	1.95	3.68	4.07	4.88	48.29
Dyberry	5.30	4.97	4.19	2.42	2.27	1.85	3.88	4.75	2.37	3.41	1.85	4.17	41.43
Eagles Mere	5.50	5.46	5.88	3.15	.....	.....	.....	.....	.....	.....	.....	.....	.....
Easton	6.42	3.74	5.02	2.41	2.78	3.22	4.48	5.13	1.85	3.42	1.77	4.77	45.01
*Erie	2.32	4.95	2.44	1.34	1.49	1.22	2.66	1.96	2.82	1.78	3.99	3.27	30.24
Emporium	3.47	4.56	5.12	2.33	1.06	4.45	8.46	5.40	1.17	3.48	4.01	4.96	48.47
Forks of Neshaminy	6.11	4.50	4.61	1.65	2.66	2.64	4.44	4.90	3.08	3.68	2.04	4.88	45.19
Frankford Arsenal	4.01	4.89	4.65	2.60	1.65	4.25	5.87	5.75	1.50	2.30	1.60	3.75	42.82
Frederick	5.60	4.50	6.09	1.85	1.60	3.83	7.71	7.95	2.01	3.22	1.63	4.62	50.61
*Freeport	3.09	7.70	4.26	2.99	1.19	4.19	4.32	3.08	2.54	2.29	3.29	3.45	42.39
Girardville	8.74	4.36	3.80	3.54	1.80	3.70	9.64	9.47	1.99	3.77	5.12	6.23	62.16
Grampian	3.62	7.01	3.97	2.34	1.29	8.71	7.03	4.08	2.38	3.17	3.27	5.15	52.02
*Greensboro	3.19	6.18	3.97	2.11	4.86	6.86	6.10	3.29	2.82	2.95	3.24	3.57	49.14
Greenville	1.22	2.50	3.33	1.75	3.31	6.72	.....	.....	.....	.....	.....	.....	.....
*Hamburg	5.27	3.94	5.48	2.26	2.24	2.23	[9.30]	6.30	1.77	2.69	1.48	4.06	[47.02]
*Harrisburg	4.73	3.31	4.25	1.70	1.77	3.76	8.40	5.20	1.75	2.87	1.95	3.71	43.40
Hollidaysburg	3.74	5.92	5.60	1.60	1.95	4.91	4.98	4.26	2.16	2.76	2.76	3.89	44.53
Honesdale	4.21	3.45	4.32	2.68	1.92	1.45	4.71	4.21	2.53	3.74	1.82	3.53	38.57
Hulmeville	.....	.....	.....	.....	.....	.....	.....	.....	2.71	2.91	2.02	4.04	.....
*Huntingdon	3.58	3.84	4.48	1.92	1.84	4.24	4.49	3.80	2.07	3.13	2.39	4.18	39.96
Indiana	4.40	5.99	3.50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Johnstown	3.47	7.83	4.99	2.73	3.34	9.32	6.81	3.59	2.11	2.80	2.54	3.85	53.38
Kane	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.66	.....
Kennet Square	6.08	5.84	8.04	2.32	1.93	2.98	10.21	8.74	5.00	3.16	2.29	4.09	60.68
Kilmer	4.90	4.31	4.72	2.52	2.40	4.85	7.40	7.28	2.48	3.70	2.86	4.63	52.05
Lancaster	[c]3.09	3.01	6.30	1.69	2.48	.....	.....	.....	0.28	3.05	1.09	.....	.....
Lansdale	6.03	4.43	4.67	2.12	2.66	2.90	6.37	6.62	2.57	3.09	1.73	3.41	46.59
Lebanon	[5.30]	[c]3.33	5.30	2.19	3.00	3.40	8.70	5.08	1.07	3.14	2.44	4.34	[47.27]
Le Roy	4.63	3.13	3.15	2.01	1.18	4.75	3.05	4.33	2.00	4.25	3.24	4.34	40.06
Lewisburg	3.33	3.75	6.40	2.39	0.67	5.21	5.09	9.42	2.90	3.75	[2.40]	[4.40]	[49.71]
Ligonier	3.39	8.29	4.50	[d]2.23	4.41	8.27	5.95	2.81	2.17	0.88	2.93	4.41	50.24
*Lockhaven	4.21	4.21	4.06	1.48	1.85	5.14	6.95	4.40	3.41	2.81	2.82	4.44	45.78
*Lock No. 4	3.21	7.23	4.04	1.77	4.29	4.56	7.00	2.93	2.02	2.12	2.70	3.53	45.40
*Mahoning	2.82	7.20	3.10	2.86	1.81	5.23	3.81	2.89	1.01	1.61	4.01	3.65	40.00
Mauch Chunk	[d]6.90	3.92	5.69	.....	1.24	4.36	[d]7.68	5.89	.....	2.89	.....	.....	.....
McConnellsburg	4.53	4.60	7.45	2.58	1.71	6.23	6.32	4.82	2.65	3.39	3.03	5.62	52.93
Meadville	4.12	6.65	3.37	1.53	.....	3.86	2.77	.....	.....	.....	.....	.....	.....
Meshoppen	.....	2.97	4.25	.....	.....	1.60	1.08	2.21	1.06	.....	4.15	2.50	.....
*New Castle	2.88	4.54	3.32	2.36	2.46	3.02	4.88	4.51	3.34	0.84	3.65	2.62	35.42
Nisbet	4.00	5.20	5.20	2.00	1.20	5.00	4.70	6.50	2.40	2.60	3.00	4.80	46.50
*Oil City	2.16	5.24	3.23	1.91	1.98	5.13	8.63	2.59	1.50	1.70	2.85	2.18	38.20
Ottsville	6.76	4.02	4.54	1.70	3.01	2.81	8.28	7.85	1.34	3.65	1.92	5.37	51.20
*Parker's Landing	2.49	6.04	3.73	2.20	1.62	7.07	7.38	3.76	2.20	1.64	3.15	3.87	45.24
*Philadelphia[1]	3.65	4.71	4.42	2.34	1.74	2.51	4.65	4.22	1.90	2.57	1.70	3.78	38.19
Philadelphia[2]	5.18	5.32	5.76	2.82	2.01	3.45	5.89	5.30	1.88	3.19	2.36	4.26	47.42
Philadelphia[3]	4.43	5.12	6.27	2.47	1.86	2.79	5.45	4.67	1.19	2.96	1.73	3.87	42.81
Phœnixville	5.08	4.20	7.42	2.87	2.75	3.19	8.36	8.37	2.67	3.32	1.69	3.82	53.74
*Pittsburg	2.43	6.09	3.11	1.18	3.23	3.90	7.65	1.60	1.90	1.53	2.61	3.05	38.28
Pleasant Mount	[4.80]	4.60	5.42	3.47	2.45	2.10	4.30	4.30	2.55	3.45	3.11	4.85	[45.40]
Point Pleasant	6.53	4.67	5.08	1.70	2.94	3.51	6.94	9.56	1.31	4.32	1.95	4.86	53.37
Pottstown	7.00	4.05	6.60	1.80	2.28	4.20	8.91	7.01	2.63	3.95	1.58	4.08	54.09
Quakerstown	6.26	5.13	5.59	2.74	2.56	4.71	7.29	8.02	1.17	2.96	2.31	4.47	53.21
Reading	5.15	3.51	5.35	1.71	2.21	2.37	7.35	11.77	1.57	2.99	1.38	3.61	48.97
*Ridgway	2.80	5.17	2.70	1.80	1.95	4.75	9.01	3.52	1.31	3.29	3.90	4.51	44.71
Rush Valley	.....	.....	.....	.....	.....	.....	.....	4.90	3.09	.....	.....	.....	.....
Saegerstown	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.09	.....
Salem Corners	6.25	5.29	5.63	3.58	2.16	2.36	6.26	6.06	2.45	3.46	2.62	4.22	50.34
*Salteburg	3.63	7.20	3.63	2.24	4.01	2.77	6.02	2.55	1.71	2.26	2.83	4.68	43.53
Seisholtzville	7.00	3.17	6.05	2.11	2.37	3.39	7.75	7.18	3.25	3.83	2.35	4.85	53.30
*Selin's Grove	[4.70]	3.09	8.39	1.82	1.36	4.74	6.09	7.18	4.12	4.46	3.85	3.97	[54.37]
Smethport	.....	.....	.....	.....	.....	5.66	8.14	5.15	2.15	.....	.....	.....	.....
Smiths Corners	5.58	4.51	3.95	1.75	2.81	2.48	7.45	10.18	1.29	4.37	1.72	4.71	50.80
Somerset	5.51	5.50	5.37	1.13	4.10	5.20	4.68	5.02	4.12	2.45	2.45	4.60	50.13
South Eaton	5.47	3.48	4.54	2.85	1.06	2.17	4.88	4.15	1.35	3.71	2.84	3.88	40.38
State College	4.11	5.29	4.07	1.47	1.94	4.24	5.65	5.40	2.20	4.38	2.98	4.08	45.81
*Stoyestown	2.65	5.97	4.41	2.45	3.27	5.34	5.32	3.51	2.39	3.24	2.15	3.02	43.72
Swarthmore	4.84	4.46	5.78	1.53	2.12	9.30	[5.70]	7.54	2.89	3.75	1.62	3.36	[52.89]
Troy	1.90	1.80	2.09	1.56	1.11	3.27	2.64	3.90	2.47	3.31	[2.70]	[4.20]	[30.95]
Uniontown	3.41	6.64	4.22	2.18	3.35	8.63	5.75	3.85	2.23	2.99	3.65	4.22	51.12
*Warren	2.27	5.88	2.54	1.70	1.97	3.58	12.54	4.74	2.66	3.10	5.79	4.60	51.37
Wellsboro	6.53	3.46	2.72	1.07	1.30	4.07	3.43	3.57	2.30	2.44	4.11	4.01	39.01

[1] Weather Bureau. [2] John Comly. [3] John E. Codman.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mch.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Pennsylvania—Continued.													
West Chester	6.56	5.92	8.33	2.32	3.75	4.17	10.11	8.85	4.30	3.40	2.29	4.00	64.00
*West Newton	[a]1.22	6.45	3.49	1.86	4.16	4.41	5.12	1.98	1.35	2.11	1.79	3.59	37.53
Westtown	5.64	4.14	5.38	.....	3.04	4.52	.....	.....	.....	.....	0.92	3.24	.....
*Wilkes Barre	4.59	4.00	3.67	2.28	1.53	2.88	4.48	3.46	1.80	1.63	2.54	4.38	37.24
Wysox	3.72	2.71	3.12	1.79	0.49	3.48	2.63	2.49	1.79	4.43	2.73	2.83	32.21
York	3.65	3.37	6.07	2.01	2.39	3.98	10.77	3.29	1.88	3.20	2.13	4.20	46.94
Rhode Island.													
*Block Island	4.25	3.97	2.42	2.81	2.14	1.83	3.38	3.51	1.69	7.33	2.89	2.81	39.03
Bristol	8.06	6.29	5.12	3.87	1.93	1.25	2.29	2.26	1.82	3.68	2.52	3.19	42.28
Fort Adams	5.86	5.18	2.62	2.37	1.13	1.35	2.23	1.45	1.49	2.38	1.92	2.54	30.52
Kingston[1]	8.45	7.20	6.96	4.20	2.43	1.12	2.29	2.25	2.11	6.12	2.83	3.99	49.95
Kingston[2]	7.31	7.26	7.97	4.70	1.76	0.70	2.11	3.29	2.20	6.22	2.99	3.73	50.24
Lonsdale	7.61	6.08	5.78	3.76	2.09	4.10	4.26	5.91	2.49	4.64	2.64	4.57	53.93
*Narragansett Pier	8.57	6.78	6.12	3.22	2.20	1.26	1.38	2.00	1.22	5.24	2.49	3.98	44.46
Pawtucket	6.57	5.40	5.41	3.34	2.16	4.00	3.52	4.95	2.45	4.22	2.40	3.77	48.19
Providence[3]	[7.90]	6.00	5.55	3.58	2.29	3.50	3.31	6.26	2.77	4.70	2.84	4.25	[52.95]
Providence[4]	7.90	5.38	5.07	3.38	2.40	3.19	4.51	6.32	2.90	4.87	2.74	4.15	52.81
Providence[5]	7.86	6.07	6.36	3.78	2.40	3.55	3.87	6.54	3.13	4.94	2.95	4.53	55.98
South Carolina.													
Aiken	2.99	3.83	9.00	1.20	5.91	4.34	7.68	14.09	2.00	3.10	2.79	3.49	60.42
*Allendale	.....	.....	.....	.....	4.02	4.22	8.08	10.11	0.83	1.85	2.37	.....	.....
*Batesburg	.....	.....	.....	.....	6.31	2.64	6.53	11.05	1.61	0.60	2.35	.....	.....
Belmont	5.20	7.30	14.18	2.01	4.48	2.60	6.83	6.91	2.81	0.75	4.56	2.20	59.83
*Blackville	.....	.....	.....	.....	2.55	2.70	5.51	9.00	2.40	0.85	2.18	.....	.....
Branchville	.....	.....	.....	.....	2.30	2.69	7.37	10.99	5.54	3.04	1.63	.....	.....
Brewer Mine	.....	.....	9.73	0.84	3.91	2.47	10.19	.....	1.72	.....	2.14	0.93	.....
*Camden	.....	.....	.....	.....	.....	.....	.....	.....	3.26	2.06	1.73	1.47	.....
*Charleston	2.33	0.99	5.47	2.07	3.85	1.20	8.98	6.96	6.06	4.20	1.77	1.62	45.50
*Cheraw[6]	4.42	3.15	6.42	1.73	4.07	3.32	5.41	8.85	1.21	1.81	2.27	1.15	43.81
*Cheraw[7]	[4.40]	[3.20]	[6.40]	2.08	5.32	4.41	6.19	10.55	1.31	1.99	2.56	1.33	[49.74]
Chester	.....	.....	.....	.....	2.50	3.97	6.04	4.30	2.05	0.22	4.05	.....	.....
*Columbia	3.21	3.70	6.99	1.20	2.92	.....	5.01	8.13	4.94	1.31	2.39	1.92	.....
Conway	.....	.....	6.37	1.11	2.64	2.31	6.64	.....	.....	1.52	0.43	0.75	.....
*Effingham	.....	.....	.....	.....	1.71	2.37	8.23	4.57	1.80	3.03	2.17	1.74	.....
Evergreen	7.12	9.53	11.60	2.63	3.65	[2.70]	[6.90]	6.66	[2.70]	0.59	3.35	2.82	[60.25]
*Florence	.....	.....	.....	.....	3.96	2.52	8.15	5.70	2.08	2.55	2.34	.....	.....
*Greenville	5.86	8.31	11.60	2.82	4.83	4.30	6.55	6.84	0.49	0.37	4.31	3.65	59.93
Greenwood	.....	.....	.....	.....	3.46	1.12	3.18	4.94	3.72	0.42	3.08	.....	.....
*Hardeeville	1.17	.....	.....	.....	2.49	5.87	9.91	14.79	3.53	2.68	1.98	.....	.....
Jacksonboro	2.98	1.69	[5.40]	[1.70]	5.09	2.48	6.95	14.59	1.33	2.43	1.84	[2.10]	[48.58]
*Kingstree	.....	.....	.....	.....	3.01	2.16	7.99	13.96	1.50	1.35	1.55	.....	.....
Kirkwood	3.19	3.89	6.95	1.24	2.80	.....	.....	.....	.....	.....	.....	.....	.....
Kitchings Mills	.....	.....	.....	.....	.....	.....	5.00	8.52	1.83	1.89	.....	.....	.....
*Nichols	.....	.....	.....	.....	.....	.....	7.87	7.98	1.91	1.74	2.16	0.91	.....
Port Royal	3.02	1.92	4.32	1.61	3.47	3.23	5.74	14.00	2.98	2.73	1.64	1.67	46.33
*St. Georges	.....	.....	.....	.....	3.17	2.62	15.32	10.61	4.28	2.60	2.20	.....	.....
*St. Matthews	.....	.....	.....	.....	2.14	4.76	4.53	7.61	1.77	1.43	1.84	.....	.....
Simpsonville	5.91	6.22	10.91	1.34	1.73	4.57	[6.80]	5.70	1.20	0.29	3.55	1.97	[49.79]
Spartanburg[8]	3.50	8.16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Spartanburg[9]	.....	.....	.....	.....	7.30	3.90	6.17	8.03	2.12	0.18	2.30	.....	.....
Society Hill	.....	.....	.....	.....	.....	[a]2.38	5.13	9.50	3.42	3.08	2.01	0.65	.....
Statesburg	2.90	3.07	7.62	1.21	1.85	3.90	7.25	8.76	3.06	1.47	2.01	1.82	44.84
*Tillers Ferry	.....	.....	.....	.....	.....	.....	8.55	6.09	4.22	1.91	2.45	1.61	.....
Trial	2.32	2.45	5.39	1.84	5.66	2.01	6.84	10.83	3.47	2.40	2.49	2.64	48.34
Walhalla	5.58	5.74	10.60	.....	2.75	.....	5.48	6.75	.....	.....	5.25	2.60	.....
*Wateree	.....	.....	.....	.....	5.00	2.41	6.95	11.89	3.31	0.93	2.30	2.56	.....
Winnsboro	[4.70]	3.85	8.90	2.20	3.18	2.43	2.81	4.85	1.84	0.50	4.07	2.49	[41.82]
Yorkville	4.35	7.49	12.47	1.89	4.93	7.96	8.28	7.98	1.68	0.44	4.43	2.00	63.90
South Dakota.													
Aberdeen	0.08	0.55	0.40	2.50	1.65	2.76	1.65	0.63	1.56	1.88	1.30	1.00	15.96
Alexandria	0.01	1.60	2.00	4.26	1.33	6.45	3.05	1.40	0.43	[0.80]	[0.45]	[a]1.72	[23.50]
Brookings	0.10	1.00	0.60	2.23	0.84	4.09	2.01	1.38	0.48	1.07	0.25	2.30	16.35
Britton	.....	.....	.....	.....	.....	.....	.....	.....	2.04	0.97	0.90	0.73	.....
Canton	0.80	1.20	1.20	3.45	2.13	5.82	.....	.....	.....	.....	.....	.....	.....
Castlewood	.....	.....	.....	.....	.....	.....	.....	1.92	1.28	0.83	0.55	1.49	.....
Clark	0.00	[1.20]	1.00	3.74	3.35	3.01	0.99	1.03	1.11	0.96	1.20	0.57	[18.16]
Cross	0.25	1.27	1.77	[2.70]	2.59	[a]4.53	[a]1.86	3.41	1.57	0.50	0.21	0.25	.....
De Smet	0.07	1.10	0.80	2.88	0.69	3.81	1.46	0.20	1.49	0.86	1.05	1.37	15.78
Egeland	.....	.....	.....	.....	3.17	4.32	.....	.....	.....	.....	.....	.....	.....
Elkton	0.72	1.35	1.68	2.94	2.11	3.19	1.19	1.50	0.50	1.33	0.22	2.05	18.78
Flandreau	0.12	0.67	1.20	2.82	0.81	4.83	3.05	2.33	0.35	1.48	0.46	2.60	20.72
Forestburg	.....	.....	.....	.....	0.38	6.31	1.45	2.18	1.02	0.87	0.48	1.07	.....
Forest City	.....	.....	.....	.....	.....	.....	7.53	0.57	1.66	1.49	0.75	.....	.....
Fort Bennett	0.04	0.40	0.38	2.27	1.08	1.76	1.70	2.29	1.26	1.63	[0.30]	[0.30]	[13.41]
Fort Meade	0.78	0.83	1.63	2.29	6.60	4.29	1.75	1.50	0.87	0.41	0.52	0.32	21.79
Fort Randall	0.42	1.34	1.40	4.39	0.62	6.34	3.23	2.84	0.36	0.79	0.42	0.80	22.95
Fort Sully[10]	0.10	0.72	0.65	2.80	2.22	2.13	0.78	1.41	1.37	0.53	0.33	0.30	13.34
*Fort Sully[11]	0.28	0.78	0.65	2.64	1.98	2.13	.....	.....	.....	.....	.....	.....	.....
Frankfort	.....	.....	.....	.....	.....	.....	.....	.....	0.67	0.69	1.19	1.30	.....
Gary	.....	.....	.....	.....	.....	.....	1.69	0.72	1.17	0.83	0.45	0.69	.....
Highmore	0.00	T.	0.83	1.94	.....	.....	0.72	0.80	.....	.....	.....	.....	.....
Howard	T.	1.12	2.03	[3.30]	1.87	6.37	0.76	1.81	0.50	1.10	0.64	1.55	[24.15
*Huron	0.07	1.32	1.64	3.45	0.44	8.08	1.01	1.43	0.47	0.78	0.94	0.54	20.17

[1] N. Helme.
[2] Agricultural Experiment Station.
[3] City Engineer's Office.
[4] D. W. Hoyt.
[5] Ladd Observatory.
[6] W. R. Godfrey.
[7] Special river observer.
[8] J. F. Bayerly.
[9] Cotton belt.
[10] Post hospital.
[11] Weather Bureau.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
South Dakota—Continued.													
Kimball	0.40	1.70	1.00	3.25	0.56	9.28	2.53	2.91	0.18	0.67	1.00	0.76	24.24
Millbank	0.00	0.25	[1.20]	1.86	1.90	3.04	1.44	0.55	0.78	0.67	0.40	0.56	[12.65]
Mitchell						8.50	3.01	1.86	1.95	1.09	0.31	1.95	
Oelrichs	1.35	2.80	4.20	0.40	1.75	2.00	2.90	1.66	2.32	0.90	0.58	1.19	22.05
Onida				1.70	1.56	1.08	0.77	0.33	1.26	1.06	0.42	0.51	
Parker							1.30	0.73	0.38		0.45		
Parkston	0.02	2.50	1.60	3.18	1.05	3.43	4.00	4.00	0.25	0.65	1.20	1.50	23.48
*Pierre							1.21	1.50	0.70	1.10	0.47	0.56	
Plankinton					1.14	6.67	2.10	2.41					
*Rapid City	0.27	0.87	1.96	2.74	1.72	3.25	2.09	1.97	1.32	0.34	0.17	0.05	16.75
St. Lawrence	0.27	1.45	0.42	2.78	1.11	6.94	0.52	2.53	[0.55]	[0.90]	0.28	0.45	[18.20]
Scranton	0.10	1.07	1.04	2.16									
Sioux Falls	0.35	1.01	1.32	2.69	[1.20]	[3.60]	0.68	[2.99]	T.	1.35	0.60	2.96	[18.75]
Spearfish	0.82	2.04	1.73	2.66	3.15	7.29	2.53	2.51	0.71	1.23	0.75	0.90	26.32
Tyndall							1.31	5.89	0.26	0.94	0.57	1.95	
Vermillion	0.50	1.30											
Watertown											0.52	1.07	
Webster	0.86	2.55	2.05	3.86	[1.80]	[2.90]	3.43	1.10	4.11	1.69	2.39	3.30	[30.04]
Wentworth											0.38	2.08	
Wessington Springs							2.70	2.14	0.23	0.55	0.57	1.95	
Wolsey	0.12	1.60	2.25	2.79	0.80	5.50	0.50	1.83	0.35	0.75	1.23	0.75	18.47
*Yankton	0.78	1.47	1.75	3.79	1.45	4.97	3.27		0.36	0.62	0.34	2.33	
Tennessee.													
Andersonville	5.51	8.20	7.96	1.95	1.98	6.48	2.75	3.31	0.90	0.95	3.44	3.60	47.03
*Arlington					1.48	4.97	5.58	1.12	0.87	0.53	5.02		
Ashwood	6.33	7.45	10.39	4.15	0.53	6.90	5.06	2.69	0.62	1.07	5.83	4.52	55.54
Austin	5.93	7.18	11.43	2.59	1.54	4.15	4.52	4.05	1.12	0.61	5.72	4.12	52.96
Bethel Springs					1.08	2.75	4.33	2.22	3.08	1.15	5.87	4.19	
*Bolivar [1]					0.89	1.17	2.39	0.09	1.24	0.05	6.11		
*Brownsville					1.57	5.36	2.61	2.92	2.92	0.42	6.52		
*Carthage	5.09	9.67	9.30	3.11	1.38	6.22	2.15	6.74	1.01	[0.80]	6.68	2.49	[54.64]
*Charleston	5.87	9.87	9.73	1.79	0.84	6.69	5.20	3.85	2.09	0.46	5.61	3.86	55.26
*Chattanooga	6.31	10.30	9.16	2.42	1.39	7.58	6.18	3.17	2.06	0.29	4.49	5.38	58.73
Clarksville	7.32	6.41	9.61	3.06	1.81	6.21	2.43	10.38	0.61	0.73	5.31	5.28	59.16
*Clinton	5.44	10.20	9.78	1.97	2.14	4.18	3.48	5.80	0.81	0.88	4.47	5.58	54.73
*Columbia	7.48	8.63	10.06	6.50	0.45	9.08	3.73	4.99	0.90	0.92	5.73	4.42	62.89
Covington [2]	6.73	5.40	8.36	2.46	1.31	5.98	6.03	1.86	0.66	1.35	6.62	7.32	54.08
*Covington [1]					1.28	6.82	5.53	5.05	0.32	0.58	8.08		
Cumberland Gap	3.03[a]												
Dunlap			8.64	2.59	1.96		6.50	5.73					
*Dyersburg					1.59	9.13	4.03	1.42	1.09	1.61	11.45	5.05	
Fayetteville	7.57	7.71	7.05	3.71	2.37	2.48	9.91	2.28	0.65	0.68	5.98	5.24	55.63
Florence Station	7.78	7.36	9.28	4.21	1.10	2.55	2.34	2.77	0.36	0.81	5.45	4.87	48.88
Franklin	7.33	6.78	10.03	3.32	0.82	4.91	3.42	2.35	2.22	0.90	6.45	4.05	52.58
Grand Junction					1.37	4.11	8.07	6.22	0.28	0.65	5.42		
Greeneville	3.50	7.44	5.88	2.09	2.76	3.06	4.36	10.04	1.03	1.12	2.42	3.66	47.36
Harriman				1.82	0.96	3.04	3.54	2.89	0.10	0.76	6.41		
Hohenwald	7.20	6.92	12.42	3.53	0.44	6.59	5.16	3.67	0.72	1.00	5.66	[4.60]	[58.91]
Jacksboro	6.08	6.53	8.31	1.25	3.76	7.47	2.80	6.97	0.25	1.07	4.28	4.40	53.17
Jackson				2.30[b]	0.50	5.54	4.79				6.50	6.60	
Johnson City		6.53	4.05	2.79	1.95	4.14							
*Johnsonville	9.08	7.39	9.05	6.14	0.70	4.46	1.53	1.57	1.71	0.39	5.04	2.89	49.95
*Kingston	5.45	9.38	10.42	2.89	1.96	5.72	4.38	4.14	0.76	0.58	4.40	4.85	54.93
Kingston Springs	6.25		10.40		0.35	3.75		3.30	0.40	0.60	5.60		
*Knoxville	4.36	10.15	7.87	2.06	1.91	3.33	4.66	2.92	1.59	0.50	3.01	4.25	46.61
Lewisburg	7.92	7.69	8.47	4.97	1.32		4.30	3.34	0.38				
Livingston						2.47	1.83	2.35					
*Loudon	5.05	9.18	9.63	1.20	1.75	4.20	4.85	3.79	1.30	0.65	4.30	4.97	50.87
Lynnville	7.58	7.98	8.78	4.38	0.59	6.17	8.81	0.80	0.90	0.71	7.27	4.92	58.89
McKenzie		3.33		4.37	0.55	4.31	1.90			1.25	6.54	6.29	
McMinnville	[7.20]	[8.40]	7.16	3.79	1.19	4.44	4.76	3.87	0.74	1.15	2.68	4.25	[49.63]
*Memphis	7.33	4.07	7.37	2.72	1.75	4.74	6.06	3.18	0.59	2.21	4.79	6.50	51.31
*Milan					0.83	7.33	2.74	1.76	0.27	1.14	7.37		
*Nashville	6.15	6.96	10.31	2.24	2.39	6.50	1.49	3.72	1.25	0.84	6.71	4.26	52.82
Newport				1.53	2.64	3.43	4.55	7.51	1.30			3.06	
Northville			5.68	3.41	1.88	5.62	3.21	4.21		1.32			
Nunnelly	7.40	5.59	10.80	2.97	1.30	4.37	3.75	4.58	0.61	1.04	5.40	5.28	53.09
Parksville	6.89	9.25	8.14	0.81	1.05	7.95	7.72	5.03	[2.60]	T.	3.48	2.74	[55.66]
Riddleton	6.32	7.75	7.37	2.97	1.24	2.98	4.83	10.03	0.97	0.80	8.16	4.41	57.83
*Rockwood	6.65	11.24	10.54	2.25	1.57	6.47	5.42	4.40	0.95	0.70	7.00	6.25	63.44
*Rogersville	3.62	9.61	7.16	2.72	2.03	1.69	5.04	8.42	1.02	1.21	2.54	4.27	49.33
Rugby	5.64	7.05	6.99	2.03	1.18	7.62	2.61	3.99	1.90	1.50	4.62	4.51	49.64
Savannah	4.46					4.61	4.30	3.56	1.39	0.92	3.84	5.15	
Sharp	7.37	9.25	11.75	3.68	0.58	6.65	5.66	4.45	0.68	1.44	6.56	5.77	63.84
Sparta				4.68	1.00								
Springdale	4.23	8.95	8.10	3.20	2.01	4.96	2.81	5.51	2.21	1.00	[3.70]	4.50	[51.18]
*Strawberry Plains	3.29	9.41	7.23	1.08	1.57	3.45	4.35	6.97	2.30	0.55	2.30	4.74	47.24
Trenton	7.77	5.40	7.70	4.36	1.24	8.06	6.74	2.44	1.39	[0.80]	[7.60]	[6.50]	[60.00]
Union City	5.24	[4.90]	7.90	3.14	0.95	5.91	0.95	1.95	0.54	0.95	7.63	3.53	43.59
Waynesboro	4.32	7.09	10.34	3.15	1.00	9.85	5.98	4.08	0.00	[1.60]	5.00	4.15	[56.56]
Texas.													
*Abilene	2.11	0.76	1.79	1.95	1.83	2.04	1.10	2.03	0.64	0.64	0.12	2.60	17.57
*Arthur City	[5.70]	[1.10]	[2.50]	4.71	1.50	7.53	0.36	1.89	2.65	0.07	2.00	3.48	[33.49]
Austin [3]	5.65	0.20	2.05	7.50	[0.70]	3.60	0.10	1.25	5.25	0.25	1.52	9.00	[37.07]
Austin [4]				6.85						0.30	2.57	10.31	
*Belton					0.10	1.20	1.25						

[1] Cotton belt. [2] J. I. Hall. [3] Ernst Kruger. [4] Geo. F. Townsend.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Texas—Continued.													
Berlin	2.67	0.50	1.80	1.75	2.35	1.37	4.50	2.40	1.30	0.02	[0.15]	[5.80]	[24.61]
Big Spring	[1.20]	[0.00]	0.00	0.12	2.70	0.50	1.35	1.20	3.50	1.10	0.00	1.00	[12.67]
Brady	3.14	0.19	2.02	3.79	4.56	4.64	0.15	2.10	2.37	0.27	0.31	4.43	27.97
Brazoria	10.88	3.75	2.44	3.14	2.08	1.25	11.57	3.91	11.49	0.95	2.16	3.31	56.93
*Brenham	9.72	2.96	1.14	5.02	0.65	3.26	0.43	1.88	3.27	0.08	3.59	7.26	39.26
Brownwood	2.54	0.70	2.13	2.35	4.79	1.20	0.38	2.90	1.21	0.09	0.25	5.29	23.83
*Brownsville	1.65	1.02	1.80	3.05	1.21	0.26	3.00	2.47	6.73	3.13	0.82	3.11	28.25
Burnet	4.22	1.17	0.45	3.68	3.65	4.17	0.97	1.74	2.55	0.43	1.73	7.86	32.62
Camp del Rio	2.46	0.00	1.53	2.20	.....	.....	.....	.....	.....	.....	.....	.....	.....
Camp Eagle Pass	0.90	0.10	1.46	1.99	3.65	1.58	0.00	6.50	1.03	0.00	0.42	1.34	18.97
Camp Pena Colorado	1.07	0.00	0.00	0.10	3.10	1.10	1.00	1.70	3.10	0.50	0.00	0.70	12.37
Childress	2.96	T.	0.95	3.64	4.23	0.91	2.81	0.71	T.	2.83	0.39	1.00	20.43
Coldwater	0.67	[m] 0.00	1.39	.....	2.11	.....	.....	.....	5.25	2.98	.....	.....	.....
College Station	8.67	2.05	0.88	7.01	1.99	1.60	1.36	0.09	4.93	0.00	4.46	9.24	42.28
Colorado[1]	0.91	0.05	0.12	1.26	.....	.....	.....	.....	.....	.....	.....	.....	.....
Colorado[2]	.....	.....	.....	0.10	0.12	1.10	0.10	0.25	0.30	.....	0.00	0.35	.....
*Columbia	7.82	2.75	1.32	1.32	4.62	2.21	8.96	1.64	4.62	0.40	1.46	5.30	42.42
*Corpus Christi	2.85	0.31	2.18	2.14	0.38	1.68	1.57	6.31	4.65	0.12	2.53	0.91	25.63
Corsicana[3]	8.35	0.31	1.92	7.48	1.89	0.81	0.60	1.38	1.32	0.00	1.00	5.33	30.39
*Corsicana[4]	6.12	0.29	1.86	9.20	1.20	2.19	0.59	0.42	1.95	0.05	1.41	4.32	29.60
*Cuero[5]	.....	.....	.....	.....	1.42	4.19	1.05	1.35	3.74	0.42	0.00	.....	.....
Cuero[6]	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.60	0.22	5.59	.....
*Dallas[5]	.....	.....	.....	.....	1.77	1.07	1.47	0.28	1.37	0.00	0.21	.....	.....
Dallas[7]	.....	.....	.....	.....	.....	.....	.....	.....	.....	T.	.....	2.48	.....
Durham	0.88	0.00	[0.20]	1.91	4.53	0.34	1.41	1.90	5.03	1.48	0.44	1.45	[19.57]
Duval	6.30	0.30	0.95	4.30	3.85	4.75	0.40	1.70	2.05	0.70	1.35	6.00	32.65
*Eagle Pass	.....	0.02	1.80	2.62	4.37	2.47	.....	.....	.....	.....	.....	.....	.....
Edinburg	0.20	T.	[i] 1.31	[j] 1.42	1.41	0.00	.....	.....	.....	.....	.....	.....	.....
*El Paso	0.27	0.09	0.16	0.00	0.38	0.40	0.06	0.13	0.23	T.	T.	0.50	2.22
Epworth	0.70	0.26	0.58	2.27	3.10	4.31	2.41	.....	.....	.....	.....	.....	.....
Forestburg	2.53	0.41	2.72	3.78	1.63	3.00	.....	.....	.....	.....	.....	.....	.....
Fort Bliss	0.38	0.21	0.62	0.00	0.50	0.27	0.27	0.21	0.32	0.00	T.	0.56	3.34
Fort Brown	1.63	0.78	1.70	2.36	0.29	0.00	3.18	1.17	5.63	2.94	0.83	3.11	23.68
Fort Clark	3.07	1.05	1.08	1.60	4.00	0.60	0.00	1.20	1.60	0.70	0.30	3.10	18.30
Fort Davis	0.47	0.00	0.06	T.	1.85	0.57	.....	.....	.....	.....	.....	.....	.....
Fort Hancock	0.60	0.00	0.21	[k] 0.00	1.26	0.0	0.45	0.00	0.37	0.00	0	0.44	3.33
Fort McIntosh	1.61	0.00	2.00	8.30	1.57	0.61	2.31	2.10	0.89	0.61	0.18	0.33	20.51
Fort Ringgold	2.49	0.05	0.59	2.43	3.16	0.92	0.86	0	.....	.....	.....	.....	.....
Fort Worth	.....	4.85	1.39	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fredericksburg	5.01	0.81	0.84	2.88	4.48	2.73	0.98	2.50	2.06	0.99	0.58	5.32	29.18
Gainesville	[3.50]	[l] 0.99	2.78	4.01	3.13	3.01	1.27	2.53	2.39	0.03	0.35	5.15	[29.14]
Gallinas	3.55	0.41	1.59	13.84	3.02	0.86	0.03	0.90	5.40	0.75	0.54	6.17	37.06
*Galveston	6.79	4.35	2.55	1.73	0.25	3.52	4.31	4.01	7.01	1.06	3.44	2.49	41.51
Graham	1.96	0.19	2.84	4.60	2.64	1.54	3.67	1.11	1.37	0.10	0.12	3.14	23.28
Grapevine	6.15	1.14	1.90	6.00	1.77	1.92	1.93	0.36	2.14	0.00	0.25	5.18	24.74
Hallettsville	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.10	2.23	8.71	.....
Hansford	.....	0.13	0.33	.....	.....	.....	.....	2.31	4.39	.....	T.	.....	.....
Hartley	.....	.....	.....	.....	1.38	5.20	2.60	0.35	4.46	3.33	0.07	1.10	.....
Haskell	1.76	0.00	1.87	4.80	0.88	2.71	2.74	1.11	[0.65]	0.32	0	2.96	[19.80]
Haymond	[1.10]	[0.00]	[0.00]	0.04	3.54	0.45	0.85	1.41	2.30	1.38	T.	0.05	[11.12]
*Hearne	.....	.....	.....	.....	0.50	1.91	1.70	1.09	1.35	0.25	2.75	.....	.....
Highland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6.72	.....
*Houston	13.11	3.44	2.26	2.64	1.44	0.81	4.85	1.44	5.81	0.74	4.61	5.29	46.44
*Huntsville	10.06	3.56	2.07	13.74	1.69	1.59	3.61	4.09	4.64	0.10	4.49	8.58	58.22
Kent	.....	.....	.....	.....	1.26	1.62	0.18	1.18	1.55	0.00	0.33	0.65	.....
La Grange	9.06	3.50	1.10	5.42	0.74	5.15	0.75	.....	.....	.....	.....	.....	.....
*Laredo	1.50	0.00	2.25	4.55	8.00	1.00	.....	.....	.....	.....	.....	.....	.....
Llano	.....	.....	.....	.....	.....	.....	.....	1.05	0.71	0.25	0.52	3.28	.....
*Longview	9.74	2.52	3.56	5.14	2.82	4.43	3.89	0.42	3.04	0.15	4.49	[4.60]	[44.80]
*Luling	5.70	1.90	0.41	0.43	0.08	0.89	2.24	1.65	3.10	1.68	0.00	[7.50]	[25.58]
Menardville	3.64	0.46	1.40	0.85	6.77	1.53	[0.30]	1.43	2.18	0.00	1.05	3.28	[22.88]
Merkel	1.25	0.00	.....	.....	1.02	.....	0.35	.....	.....	.....	.....	.....	.....
Mesquite	5.06	0.96	2.52	5.17	0.91	1.85	3.57	0.38	3.85	0.07	0.36	3.64	[28.34]
Midland	.....	.....	.....	0.22	2.52	.....	.....	3.00	6.20	.....	.....	.....	.....
Monahan's	.....	.....	.....	0.10	3.00	.....	.....	.....	.....	.....	.....	.....	.....
Mountain Springs	5.54	1.20	2.76	3.56	2.16	4.50	1.72	0.95	2.48	T.	0.40	5.36	30.63
New Braunfels	6.33	0.49	0.32	6.35	2.11	2.55	3.19	1.72	2.58	1.14	0.81	7.22	34.81
New Ulm	2.26	3.10	1.47	4.57	0.66	5.01	1.26	2.43	2.54	0.45	2.61	7.27	33.63
Ochiltree	.....	.....	.....	.....	2.00	3.50	2.50	0.50	3.13	3.50	0.18	0.86	.....
Odessa	.....	.....	.....	.....	.....	.....	.....	1.31	3.63	0.35	.....	1.00	.....
*Orange	.....	.....	.....	.....	0.22	2.79	8.14	.....	5.19	0.04	0.46	.....	.....
Painted Cave	.....	.....	.....	0.01	2.18	.....	.....	.....	.....	.....	.....	.....	.....
*Palestine	11.11	1.92	2.63	8.95	1.67	2.27	2.89	3.44	1.53	0.12	4.09	4.65	45.27
Panhandle	0.92	0.00	0.49	0.82	0.82	.....	.....	.....	.....	.....	.....	.....	.....
Panter	4.50	1.06	2.72	2.42	1.38	1.08	3.36	2.09	0.88	0.00	2.40	5.01	26.90
*Paris	.....	.....	.....	.....	2.55	5.70	1.07	1.25	1.90	0.20	2.15	.....	.....
Quanah	.....	.....	.....	.....	2.95	12.20	5.20	2.20	2.05	T.	0.20	1.50	.....
*Rio Grande City	2.69	0.05	0.99	2.72	3.23	1.72	0.22	0.02	3.77	1.29	0.08	0.25	17.03
Roby	[1.10]	[0.00]	[j] 1.02	1.90	4.89	1.53	2.91	1.06	0.67	1.85	0.50	4.54	[21.97]
Round Rock	7.69	0.47	0.79	5.62	4.34	4.96	0.43	0.49	2.97	0.24	3.23	7.33	38.54
San Angelo	1.55	0.09	.....	1.45	4.12	0.91	.....	.....	.....	.....	.....	.....	.....
*San Antonio[6]	5.63	1.38	1.18	4.57	2.26	2.16	0.85	1.06	3.60	0.60	0.92	5.73	30.04
San Antonio[9]	5.63	1.38	1.18	3.77	2.36	2.16	0.85	1.11	3.55	0.60	0.92	5.73	29.24
San Antonio[10]	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.68	0.77	5.55	.....
Sanderson	.....	.....	.....	0.41	3.29	0.00	0.00	0.00	0.90	.....	.....	.....	.....
Santa Maria	3.19	0.79	1.72	1.45	3.34	1.73	.....	.....	.....	.....	.....	.....	.....
Sierra Blanca[11]	0.30	.....	0.30	0.00	.....	0.66	0.73	1.57	1.79	.....	.....	0.36	.....
Sierra Blanca[12]	.....	.....	.....	0.00	1.68	0.62	0.77	1.57	2.17	.....	0.00	.....	.....

[1] F. R. Blount. [2] W. A. Crowder. [3] W. H. Hamilton. [4] E. L. Gibson. [5] Cotton belt. [6] J. N. Reuss. [7] G. Eisenlohr. [8] Weather Bureau. [9] Post hospital. [10] G. A. Duerler. [11] G. H. Hutchins. [12] R. McNutt.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct	Nov.	Dec.	Annual.
Texas—Continued.													
Silver Falls	1.28	T.	0.37	4.58	1.47	3.22	1.45	0.82	3.42	1.01	0.04	2.03	19.69
Snyder	0.50	T.	0.05	2.30	6.00	0.00	0.98	0.98	.....	.....	.....	.....	.....
Sugar Land	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.53	2.40	4.33	.....
Temple	5.20	0.30	1.77	[5.90]	1.71	2.50	2.70	1.60	1.81	0.15	2.00	6.75	32.39
*Tyler	.....	.....	.....	.....	0.85	2.40	2.01	1.77	3.10	.....	1.66	.....	.....
Van Horn	.....	.....	.....	0.00	1.00	1.20	.....	0.90	.....	0.90	0.00	0.00	.....
Venus	5.49	0.90	2.79	4.04	1.26	1.39	2.72	1.04	3.18	0.00	0.14	5.66	28.61
*Victoria	.....	.....	0	4.40	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Waco[1]	5.35	0.40	1.95	9.55	2.45	0.70	1.00	1.20	1.20	0.10	1.55	5.35	30.80
*Weatherford	3.89	0.60	2.26	4.27	2.07	3.63	2.61	3.40	1.69	0.00	0.10	[3.70]	[28.22]
Wichita Falls	4.30	0.03	1.70	6.40	2.69	5.80	3.30	[1.80]	[1.90]	[0.50]	0.50	2.50	[31.42]
Utah.													
Alta	5.80	10.40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Beaver	0.41	1.17	0.33	1.09	0.61	1.14	1.36	1.25	1.24	T.	0.00	1.50	10.10
Blue Creek	0.80	0.70	1.15	1.40	0.40	0.95	0	0	0.60	0.00	0.00	2.65	8.65
Castle Gate	.....	.....	.....	.....	.....	.....	1.14	1.18	2.28	0.00	T.	.....	.....
Cisco	.....	.....	.....	.....	.....	.....	.....	.....	2.42	0.03	T.	1.45	.....
Corinne	1.45	1.90	2.15	1.90	1.30	3.07	0.30	0.10	1.95	0.02	0.05	3.60	17.79
Deseret	.....	.....	.....	.....	.....	.....	.....	0.64	0.62	0.05	0.00	0.21	.....
Fort Douglas	0.85	0.76	3.48	1.67	0.72	1.08	0.51	0.46	1.27	1.27	1.45	1.74	15.26
*Fort DuChesne[2]	0.30	0.58	1.24	0.83	1.09	0.34	0.24	1.87	0.62	.....	.....	.....	.....
Fort DuChesne[3]	0.22	0.28	0.57	0.99	0.96	0.34	0.24	1.42	1.46	0.00	0.00	1.06	7.54
Green River	.....	.....	.....	.....	.....	.....	1.43	0.64	1.15	0.00	0.00	0.15	.....
Grouse Creek	0.90	2.42	1.26	1.89	1.73	2.01	1.43	0.15	0.71	[0.02]	0.31	2.90	[15.73]
Kelton	0.35	1.00	0.95	2.15	1.77	1.05	1.05	0.40	2.06	1.10	0.10	2.50	14.48
Lake Park	1.00	1.48	5.68	1.91	2.60	2.27	0.66	0.21	1.53	0.20	0.79	1.48	19.82
Levan	1.73	2.88	1.46	1.38	1.10	1.27	0.32	0.14	3.59	0.00	0.07	2.80	16.74
Logan	.....	.....	.....	.....	2.48	1.16	0.13	.....	1.44	0.20	0.57	.....	.....
Losee	T.	1.30	0.45	1.00	1.10	1.20	1.40	1.50	3.60	0.00	0.00	1.50	13.05
Moab	0.60	0.57	0.40	0.11	0.39	0.07	1.35	0.43	2.41	T.	0.00	0.82	7.15
Mount Carmel	0.09	4.66	1.01	0.88	2.31	0.15	2.29	1.32	2.44	0.00	0.00	1.07	16.22
Mount Pleasant	1.62	2.81	0.50	0.00	2.33	1.12	1.60	.....	.....	.....	.....	.....	.....
Nephi	0.79	2.06	1.87	3.04	1.18	1.26	0.60	1.40	2.81	T.	0.26	1.25	16.52
Ogden[4]	1.45	2.23	5.12	2.75	2.56	2.12	0.10	0.14	2.16	0.25	0.33	3.90	23.11
Ogden[5]	1.20	2.58	3.80	1.55	3.08	2.00	0.25	[0.14]	[2.16]	0.26	0.30	3.09	[20.41]
Park City	0.90	7.25	3.30	0.75	1.10	0.12	0.08	0.43	2.78	0.15	0.40	4.90	22.16
Parowan	1.46	2.07	2.57	1.57	1.14	0.20	1.24	0.76	2.10	0.00	0.00	1.13	14.24
Price	0.10	1.23	0.00	0.00	.....	0	0	.....	.....	.....	.....	.....	.....
Promontory	1.30	0.75	0.80	1.07	1.70	2.40	0.50	0	2.70	0.10	0	2.95	14.27
Provo City	1.15	1.65	0.56	[0.80]	[1.10]	[1.20]	0.50	0.31	0.76	0.43	T.	2.90	[11.36]
Richfield	0.60	1.60	.....	.....	.....	.....	0.89	0.44	0.81	T.	T.	1.75	.....
Stockton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.00	0.63	.....
St. George	0.00	2.15	0.10	00.0	[2.20]	0.00	1.15	[0.80]	1.60	0.00	0.00	0.40	[8.40]
*Salt Lake City	0.74	0.76	4.66	1.49	0.72	1.08	0.47	0.46	1.19	1.26	0.90	2.19	15.92
Scofield	.....	.....	.....	.....	.....	.....	0.50	0.10	1.85	0.00	.....	.....	.....
Snowville	1.68	0.98	1.52	1.37	1.94	1.56	0.62	0.28	2.64	0.06	0.38	2.08	15.11
Soldiers Summit	.....	.....	.....	.....	.....	.....	.....	0.92	1.97	0.03	0.86	.....	.....
*Taylors Ranch	0.42	1.33	2.15	0.68	2.61	0.40	.....	.....	.....	.....	.....	.....	.....
Terrace	0.50	0.40	0.00	0.40	1.20	0.26	0.60	0.20	0.70	0.02	0.20	1.85	6.33
Vermont.													
Brattleboro[6]	6.92	4.17	3.90	3.69	2.71	2.58	6.26	4.80	1.29	2.75	2.87	4.95	46.89
Burlington	2.85	1.01	1.70	2.77	2.16	1.48	3.48	3.25	2.44	3.02	2.73	2.23	29.12
Chelsea	4.38	2.86	3.21	2.85	2.91	2.71	4.20	4.00	2.14	2.43	2.46	3.31	37.46
Cornwall	3.60	2.25	1.91	1.94	[2.70]	3.60	3.98	4.36	2.25	[2.90]	2.33	1.95	[33.77]
East Berkshire	4.23	3.14	2.62	2.74	2.89	.....	.....	.....	.....	.....	.....	.....	.....
Enosburg Falls	.....	.....	.....	.....	.....	1.39	5.95	4.64	2.98	2.23	2.25	4.02	.....
Hartland	6.09	4.18	3.72	2.72	2.24	4.22	4.27	3.31	2.34	2.50	2.65	5.34	43.58
Jacksonville	6.85	5.25	4.23	3.73	2.67	3.84	7.45	4.74	1.47	2.79	4.10	6.56	53.68
Lunenburg	3.55	1.95	2.16	2.18	3.47	2.02	4.49	2.67	2.14	0.51	2.50	2.33	29.97
*Northfield	3.79	2.13	2.68	2.41	2.46	2.04	3.20	4.78	0.98	1.87	2.14	2.63	31.11
Saxtons River	.....	3.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.10	.....
Strafford	6.10	3.30	3.20	2.40	3.10	3.62	3.85	3.50	1.60	2.00	2.05	3.50	38.22
Vernon	7.52	2.76	2.59	3.37	1.75	3.47	4.84	3.30	0.83	2.02	2.80	3.89	39.14
Virginia.													
*Abingdon	2.34	8.18	6.30	3.32	4.21	6.25	2.34	5.19	1.16	1.52	2.26	3.81	46.88
Avon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.03	.....
Bedford City	[3.70]	4.55	7.52	2.84	6.36	2.61	5.63	7.06	1.54	0.24	3.39	4.04	[49.48]
Big Stone Gap	[3.90]	[7.00]	8.68	2.33	4.08	7.27	4.01	6.28	1.40	1.81	3.49	4.82	[55.07]
Birdsnest	6.00	5.10	9.10	2.95	4.75	2.75	7.05	7.15	2.05	11.55	2.10	1.90	62.45
Blacksburg	.....	.....	.....	2.99	6.09	3.97	2.90	.....	.....	.....	.....	2.87	.....
Bolar	2.20	3.18	7.73	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cape Charles	.....	.....	.....	.....	.....	2.96	5.68	2.77	2.40	6.23	1.56	1.19	.....
*Cape Henry	3.03	4.82	9.20	1.65	4.05	1.72	6.92	4.73	3.13	6.87	1.13	1.91	49.16
Casanova	4.49	3.76	8.05	1.80	2.97	.....	.....	.....	.....	.....	.....	.....	.....
Charlottesville	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.29	.....
*Christiansburg	3.40	4.14	5.76	4.49	4.31	3.18	5.30	11.86	1.34	0.97	1.86	3.91	50.52
*Clarksville	[4.50]	[5.00]	7.96	2.03	6.80	3.60	3.84	12.41	1.48	1.60	3.08	1.69	[55.99]
Dale Enterprise	4.68	3.45	5.88	2.50	4.07	3.96	4.46	4.33	2.02	0.89	1.82	2.43	40.49
*Danville	[7.00]	[4.60]	[7.00]	3.82	5.49	1.81	8.53	8.83	1.03	1.76	3.14	1.85	[54.86]
Fort Monroe	3.90	5.02	8.06	2.42	4.50	1.66	6.87	5.32	2.15	5.93	0.99	1.53	48.35
Fort Myer	7.18	4.74	8.37	2.85	3.99	3.87	9.13	4.29	3.20	1.99	1.90	2.85	54.36
Lexington	3.92	4.62	7.13	3.00	4.29	2.40	4.09	4.70	1.50	0.48	3.01	3.27	42.41
*Lynchburg	6.04	5.59	7.44	3.39	5.95	1.70	5.46	5.76	1.69	0.62	2.35	3.98	49.97
Marion	d0.90	4.39	5.69	3.52	3.72	4.91	2.49	4.51	2.13	2.09	1.15	3.65	39.15

[1] W. H. Godber. [2] Weather Bureau. [3] Post hospital. [4] Pacific Railway system. [5] W. W. Crossman. [6] W. H. Childs.

MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Virginia—Continued.													
Mossing Ford	3.71	5.40	7.95	2.26	7.07	[4.10]	6.22	5.09	1.25	2.81	3.22	[1.60]	[50.68]
*Norfolk	2.86	5.10	8.09	1.88	3.58	1.56	8.90	5.87	2.43	6.89	2.11	1.36	50.63
Nottaway C. H	5.33	5.78	9.32	1.41	7.74	3.89	3.41	6.02	1.59	1.73	[2.60]	[1.50]	[50.32]
Petersburg	3.25	5.60	8.82	2.23	5.74	5.03	3.08	5.12	2.73	2.61	1.95	1.26	47.42
Richmond	4.30	6.89	9.70	2.21	4.45	5.51	5.86	5.86	2.32	2.04	2.02	1.67	52.83
Salem	3.67	4.21	6.59	2.68	4.99	.....	.....	.....	.....	0.83	2.65	3.98	.....
Spottsville	.....	.....	.....	.....	.....	.....	.....	.....	.....	6.29	2.69	2.05	.....
Stanardsville	4.12	4.02	7.99	2.11	3.87	2.93	5.49	4.79	3.40	0.76	2.68	2.51	44.67
Staunton	3.66	3.91	6.71	3.56	5.04	2.39	4.82	4.62	1.77	0.84	2.20	2.72	42.24
*Woodstock	3.35	3.39	6.77	2.56	2.55	7.51	6.05	3.86	1.12	1.41	1.53	2.55	42.65
Wytheville	2.06	4.83	4.95	[3.40]	[4.20]	4.12	3.14	4.35	0.98	1.89	2.90	[3.70]	[40.52]
Yancey's Mills	5.01	3.18	6.79	2.76	.....	.....	.....	.....	.....	.....	.....	.....	.....
Washington.													
Aberdeen	[5.70]	[5.50]	[6.00]	9.23	2.75	4.92	1.21	2.02	8.52	6.69	19.96	19.34	[91.84]
Chehalis	2.96	3.15	2.19	3.33	1.41	2.55	0.44	1.07	3.09	4.44	8.53	11.32	44.48
Chelan	.....	.....	.....	.....	.....	1.42	0.17	0.09	0.23	0.32	1.52	2.29	.....
Dayton	.....	.....	.....	.....	.....	.....	1.42	0.05	0.75	0.66	1.84	1.99	.....
Doe Bay	3.53	1.70	2.81	2.94	0.99	1.62	0.38	3.26	4.24	1.13	5.32	9.37	37.29
East Sound	3.55	1.75	2.94	2.91	1.39	1.32	0.08	3.14	5.48	1.47	4.68	6.92	35.63
*Fort Canby [1]	6.55	5.99	5.98	7.80	2.68	3.26	0.99	1.38	4.77	6.01	14.10	12.50	72.01
Fort Canby [2]	7.47	7.20	5.58	7.94	2.56	5.05	0.21	2.30	4.86	5.75	14.25	14.29	77.46
Fort Simcoe	3.17	2.48	1.05	0.00	0.44	0.62	0.19	0.14	0.06	0.58	1.02	3.81	13.56
Fort Spokane	0.30	0.97	0.74	0.65	1.71	1.69	0.94	0.25	0.16	0.66	1.53	2.74	12.34
Fort Townsend	2.91	2.31	0.55	2.42	0.30	1.97	0.38	2.52	1.78	1.12	3.30	5.34	24.90
Fort Walla Walla	0.54	3.27	0.67	1.09	0.90	2.95	1.37	0.04	0.15	0.43	1.55	0.99	13.95
Lapush	7.68	[7.00]	4.74	7.79	1.45	4.20	0.96	2.14	8.03	4.62	14.50	15.11	[78.22]
Madrone	4.41	2.51	0.50	4.15	1.32	2.18	0.16	2.16	2.78	1.88	6.20	9.90	38.15
Moxee Valley	.....	.....	.....	.....	.....	.....	.....	.....	T	0.68	0.65	.....	.....
*Neah Bay	15.93	6.64	9.80	11.84	0.91	6.17	.....	2.11	10.78	10.06	23.06	23.91	.....
*Olympia	5.15	4.80	3.04	4.89	1.95	3.56	0.23	1.36	3.65	5.66	10.83	13.61	58.73
Pomeroy	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.54	1.23	2.23	.....
*Port Angeles	.....	.....	.....	3.03	0.92	0.83	0.22	1.46	3.65	1.34	6.24	8.95	.....
Seattle	4.33	2.36	1.64	4.05	1.42	1.76	.....	.....	.....	.....	.....	7.71	.....
*Spokane	1.04	2.40	1.03	0.81	0.60	3.28	1.12	0.66	0.66	0.59	1.46	3.04	16.69
Tacoma	5.42	2.68	2.76	4.91	1.92	2.93	0.05	2.76	4.15	5.17	7.62	10.55	50.92
*Tatoosh Island	11.91	5.15	8.67	9.62	1.90	7.74	1.08	3.10	11.06	7.48	17.68	20.08	105.47
Vancouver Barracks	3.53	4.37	1.84	4.46	1.70	3.42	0.38	1.30	2.68	4.52	6.50	9.70	44.40
Vashon	.....	.....	1.14	0.53	0.14	0.29	.....	0.18	0.39	0.71	.....	.....	.....
*Walla Walla	1.18	2.70	1.16	0.73	0.88	3.61	1.33	0.24	0.41	0.47	1.57	1.83	16.11
West Virginia.													
Alderson	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.13	2.73	.....
Beverly	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.75	.....
Bluefield	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.48	4.29	.....	.....
*Buckhannon [3]	4.29	5.87	5.46	3.37	4.10	5.92	7.95	7.10	2.25	2.62	3.80	4.55	57.29
*Charleston	4.40	6.11	5.32	3.03	4.45	7.70	3.31	6.48	1.27	1.98	3.78	2.90	50.73
Elizabeth	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.28	3.38	.....
Ella	4.33	6.12	4.11	1.60	3.17	4.67	8.82	4.79	1.48	1.65	3.36	3.25	47.35
*Glenville	4.72	5.67	4.51	3.46	2.01	7.01	6.87	6.14	1.63	2.39	4.35	3.88	52.64
Grafton	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.12	2.90	3.40	.....
*Harpers Ferry	2.01	2.09	5.52	1.64	2.38	3.40	5.08	3.48	0.38	1.55	1.97	2.33	31.83
*Hinton	2.36	6.38	6.18	2.39	5.01	3.15	2.47	4.62	0.48	1.53	2.09	2.51	39.17
Kingwood	.....	.....	.....	.....	.....	.....	.....	.....	.....	T.	1.11	5.02	.....
Martinsburg	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.91	2.24	2.22	.....
*Morgantown [4]	3.93	6.31	4.15	2.72	3.20	6.08	7.52	7.45	3.20	2.59	3.68	3.82	54.65
Morgantown [5]	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.20	2.68	3.64	.....
Moorefield	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.55	.....
Nuttallburg	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.02	.....	.....	.....
*Parkersburg [1]	4.10	4.61	4.66	2.20	1.53	3.93	5.67	5.38	1.72	2.07	3.46	2.51	41.84
Parkersburg [6]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.37	2.68	.....
Piedmont	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.68	.....	1.82	.....
Pleasant Hill	.....	.....	.....	.....	3.00	.....	.....	.....	.....	.....	.....	.....	.....
*Point Pleasant	3.59	5.72	5.29	2.09	1.96	5.92	4.82	3.41	1.32	1.73	3.44	2.79	42.08
Romney	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.22	2.09	.....
*Rowlesburg	2.52	5.62	4.08	4.20	4.25	3.79	4.70	5.49	1.62	2.69	4.16	5.93	49.05
Tyler Creek	4.86	3.52	.....	2.04	1.88	4.57	3.44	.....	.....	3.17	.....	.....	.....
*Weston	4.29	5.90	5.67	6.74	4.68	6.76	7.03	9.85	4.07	2.30	4.61	4.80	66.70
*Wheeling [4]	3.03	6.58	3.80	1.42	3.13	4.29	7.10	2.61	1.63	1.56	3.26	2.80	41.21
*Wheeling [7]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.73	3.51	.....
*White Sulphur Springs	2.60	4.97	5.06	2.50	3.00	3.10	3.40	4.40	0.30	2.00	2.00	[4.00]	[37.33]
Wisconsin.													
Amherst	1.80	2.48	3.00	2.55	0.52	2.58	2.61	2.26	1.37	1.62	1.54	3.35	25.68
Appleton	[1.70]	1.88	2.22	1.92	0.01	5.20	5.20	1.45	0.71	1.53	2.06	3.57	27.45
Baraboo	.....	.....	.....	.....	.....	.....	3.10	1.72	0.58	2.78	1.96	.....	.....
Barron	.....	.....	.....	.....	.....	2.68	1.86	1.42	1.46	1.90	0.70	4.52	.....
Bayfield	1.13	2.33	2.01	2.14	1.34	4.57	1.51	3.26	2.86	2.72	1.68	2.81	28.36
Beaver Dam	0.63	1.01	2.18	1.42	0.64	2.30	2.87	1.48	0.29	1.94	2.93	1.86	19.55
Beloit	2.47	1.20	2.64	3.81	4.16	5.31	3.01	0.85	0.03	2.10	3.08	2.12	30.78
Berlin	.....	.....	.....	.....	.....	2.40	2.23	2.60	1.05	[d]1.90	1.60	2.90	.....
Black River Falls	[2.00]	[2.40]	[2.60]	2.18	0.17	4.79	2.28	[h]1.78	1.73	1.86	0.59	3.68	[26.04]
Butternut	1.11	1.73	2.05	1.57	0.70	[6.30]	2.64	2.53	1.71	2.40	[0.60]	[2.70]	[26.04]
Cadiz	2.32	1.68	2.78	0.42	1.11	3.00	[3.10]	1.40	0.02	0.18	3.52	3.17	[22.70]
Centralia	1.16	1.77	1.81	1.58	0.37	3.46	2.85	3.48	2.28	1.52	0.86	2.65	23.79
*Chippewa Falls	1.37	2.63	1.60	2.06	1.59	6.23	1.36	1.79	1.55	3.22	0.56	3.38	27.34

[1] Weather Bureau.
[2] Post hospital.
[3] Special rain-fall station.
[4] Special river observer.
[5] E. T. Hartman.
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MONTHLY AND ANNUAL PRECIPITATION, 1891—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Wisconsin—Continued.													
Columbus	0.83	1.45	2.57	1.79	0.86	1.96	3.19	1.62	0.27	2.10	3.28	2.53	22.45
Crandon				1.61	0.36	1.03	2.11	6.86	3.31			0.57	
Cumberland						[2]2.35	0.84	1.08		2.12			
Delevan	1.29	0.69	1.19	3.05	2.35						3.15	2.24	
Delevan (near)											1.73	1.42	
De Pere	1.54	3.09	3.56	1.61	0.20	2.24	1.91	3.56	[0.60]	1.46	2.00	3.36	[25.13]
Dodgeville						4.76	2.40	1.63	0.66	1.92	2.91	3.25	
Eau Claire[1]	[2.00]	2.95	1.85	1.70	2.00	5.40	2.20	1.70	1.07	3.10	0.70	4.65	[29.32]
Ellsworth					1.48	5.44	3.26	3.50	0.68				
Elroy	[a]0.57	[a]1.80	2.27	1.92	0.67	4.53	3.94	1.93					
Embarrass	2.50	4.05	5.05	2.65	0.25	4.40	4.55	5.30	1.85	3.15	2.40	5.15	41.29
Florence						1.05	2.39	4.40	1.37	1.65	0.72	3.91	
Fond du Lac	1.11	1.17	1.90	1.44	0.44	2.73	2.94	2.17	0.58	1.63	2.88	2.41	21.40
Glasgow	1.93	2.20	1.70	3.44	0.52								
*Green Bay	2.30	1.96	3.33	1.93	0.12	1.73	1.80	4.02	0.60	2.24	2.32	3.68	26.03
Greenwood	1.87	2.84	3.12	2.70									
Hammond	[b]0.90	1.80	2.31	2.67	1.19	7.61	2.73	2.20	1.48	1.98	0.50	[3.40]	[28.77]
Harvey					1.58	4.49	2.64	1.54	0.21	2.21	3.03	2.56	
Hayward	0.85	2.28	2.42	1.46	2.15	1.91	3.33	1.81	1.93	2.16	0.80	3.35	24.45
Hillsboro	1.15	2.25	2.70	2.27	0.70	3.47	2.99	1.36	1.04	2.03	1.92	3.43	25.31
Honey Creek	2.16	1.13	2.09	3.55	1.83	5.97	4.38	1.33	0.91	2.00	3.41	1.58	30.34
Hudson			1.38	0.75				3.75	0.33				
Ithaca	1.45	1.24	2.89	2.33	1.34	3.63							
Janesville	1.85	1.40	2.25	1.30	0.21	5.19	3.22	[1.50]	0.18	2.35	2.70	2.00	[24.15]
Juneau										2.01	2.78	2.01	
Kenosha	1.27	1.14	1.89	2.92	1.52	4.27	3.67	1.62	0.72	[1.40]	4.51	1.72	[26.65]
Koepenick	1.95	1.60	2.40	1.00	0.20	1.60	2.50	5.70	1.60	2.30	0.50	2.60	23.95
Lancaster	1.20	1.67	3.20	1.34	1.50	3.30	2.60	2.05	[0.80]	3.66	2.78	2.62	26.72
*La Crosse	2.10	1.33	2.58	2.14	0.69	5.62	2.92	1.48	1.77	1.87	1.21	3.27	26.98
Lincoln	0.40	1.60	2.76	[2.10]	0.83	3.12	1.85	3.62	1.42	1.85	[2.30]	[b]5.75	[27.60]
Madison	1.19	1.38	3.64	1.55	1.42	3.68	2.64	1.41	0.38	1.49	3.31	2.24	24.33
Manitowoc	1.59	2.01	2.72	2.18	0.20	3.73	2.16	2.42	0.76	1.70	2.20	2.91	24.58
Mauston	[b]0.25					4.64						1.37	
Meadow Valley	[2.00]	[2.20]	2.05	2.42	0.25	4.89	1.61	2.02	1.82	1.52	1.17	2.91	[24.86]
*Medford[2]	2.13	2.33	2.23	2.72	0.70	3.99	1.75	2.63	2.78	3.65	0.48	5.06	30.45
Medford[3]	1.85	2.31	2.88	2.44	0.46	3.54	2.27	2.08	2.60	3.20	0.41	4.30	28.34
Menomonie	2.05	2.63	3.12	3.37	2.14	4.30	2.44	3.85	1.41	4.16	0.52	5.33	35.32
*Milwaukee	2.10	1.67	3.17	3.27	1.47	4.98	3.57	2.83	0.18	1.66	3.40	1.46	29.76
Neillsville	1.56	2.36	2.03	2.50	0.37	6.39	1.59	3.21	1.96	3.49	0.67	4.19	30.32
New Holstein					0.74	7.16	1.39	1.87				3.00	
Oconomowoc					1.21	4.02	2.23	2.04	0.27	2.57	2.36	1.99	
Oconto	1.70	2.56	2.91	2.01	0.21	3.02	2.06	2.70	1.29	1.15	1.88	4.09	25.58
Osceola Mills	[0.90]	[1.80]	[2.30]	2.05	1.95	4.52	2.38	1.02	1.52	1.66	1.22	3.93	[25.25]
Oshkosh	1.27	1.69	1.83	1.56	0.48	3.40	2.44	1.91	1.18	1.82	2.30	3.08	22.96
Pepin					1.69	5.48		2.06	0.75			4.41	
Peshtigo	2.03	2.65	2.91	2.47	0.20	2.97	4.63	5.25	1.31	1.38	2.41	4.00	32.21
Phillips	1.35	1.60	2.20	0.90	1.05	1.86	1.51	5.12	2.40	1.35	0.00	1.88	21.22
Plover	1.40	1.37	1.68	1.58	0.64	3.52	3.89	2.78	2.91	1.16	2.45	3.09	26.47
*Portage[4]	[1.40]	1.55	2.31	2.15	0.50	3.32	2.59	2.01	0.64	1.95	1.82	2.87	[23.11]
Portage[5]	1.37	1.55	2.10	1.75	0.56								
Prairie du Chien	1.81	1.05	2.44	1.11	1.65	2.95	1.76	2.32	1.73	1.82	0.96	2.82	22.42
Rhinelander	1.20	2.31	2.13	0.43	0.22	1.47	4.30	5.48	2.05	3.92	0.87	3.45	27.83
Shawano	[2.40]	[2.70]	[1.30]	1.83	0.11	2.95	1.70	2.79	1.13	1.23	1.55	4.08	[23.77]
Shell Lake	[0.90]	[2.10]	[1.80]	1.16	1.63	3.31	1.36	1.74	1.25	1.33	0.46	2.35	[19.39]
Sparta[6]						4.99			2.08	1.76	0.97	3.83	
Sparta[7]										1.63	1.24	3.45	
Viroqua					0.64	4.72	3.17	3.18	1.44	1.87	1.73	3.62	
Watertown					1.83		2.25	1.47	0.48	2.06	2.75	2.15	
Wausau					T.	5.67							
Waukesha									0.58	1.46	3.21	1.67	
Westfield					0.42	1.63	2.05	0.71	1.10	2.02	1.68	2.41	
Weston	1.75	[1.50]	[2.40]	2.70	1.87	6.35	3.68	2.65	1.37	3.84	0.83	5.00	[33.94]
Whitehall	[2.10]	[1.20]	1.92	1.61	0.45	4.88	2.36	2.20	1.00	4.29	0.37	3.74	[26.12]
Wyoming.													
Camp Pilot Butte	1.94	0.78	2.13	0.27	3.35	1.01	0.30	0.40	1.70	0.25	0.10	1.00	13.23
Camp Sheridan	0.48	2.79	2.41	0.18	2.12	3.05	3.15	1.22	1.74	1.43	2.00	2.77	23.34
Casper											0.80	1.00	
*Cheyenne	2.03	0.89	1.61	1.18	4.72	1.84	0.82	2.16	2.09	0.25	0.82	0.56	18.97
Evanston						1.66	1.11	1.06	2.49	T.	0.70	3.24	
Fort D. A. Russell	1.18	1.23	0.47	1.54	4.90	1.12	0.55	2.04	1.48	0.05	0.03	0.52	15.11
Fort Fetterman	1.00	0.20	0.20	0.00	T.	6.00	1.00	1.40	1.00	0.10	0.05	0.45	11.40
Fort Laramie											0.32	0.13	
*Fort McKinney[8]	1.31	0.05	1.06	1.13	2.08	4.14	1.19	0.78	0.68	0.59	0.77	0.41	14.19
Fort McKinney[9]	1.16	0.25	0.95	1.05	1.60	4.01	1.05	0.37	0.42	0.25	1.65	0.27	13.03
*Fort Washakie[8]	1.91	0.18	3.58	2.23	4.58	1.30							
Fort Washakie[9]	1.43	0.08	2.52	2.41	4.93	1.39	0.63	0.31	0.92	3.50	0.46	0.28	18.86
Grandview								2.62	1.03	0.91		1.00	
*Lander								1.00	0.77	1.50	0.76	0.56	
Lander[10]							0.47	0.54	0.90	1.25	0.39	0.66	
Laramie[11]	0.70	0.38	1.50	0.25	2.92	0.91	1.28	1.74	2.11	0.69	[1.10]	[1.10]	[14.66]
Laramie[12]							1.20	1.76	1.80	0.30	1.10	1.11	
Lusk	0.61	[0.80]	0.80	1.50	0.90	2.79	2.74	0.72	0.61	0.11	0.30	0.37	[12.25]
Saratoga	0.95	0.95	2.10	2.50	1.98	0.40	1.02	[0.70]	1.76	0.10	0.16	0.19	[12.81]
Sheridan									1.27	1.18	0.92		
Sundance								2.02	0.81	0.66	1.16	0.31	
Wheatland	1.30	0.70	1.60	1.40	0.30	1.30	0.50	0.50	2.32	[0.20]	0.60	[0.20]	[10.92]

[1] W. N. Sloane. [2] Special river observer. [3] Dr. F. R. Zeit. [4] Special rainfall station. [5] Miss Ida Sutter. [6] J. W. Livingston. [7] E. W. Crane. [8] Weather Bureau. [9] Post Hospital. [10] J. S. Meyer. [11] Dr. L. S. Barnes. [12] Prof. B. C. Buffum.

MONTHLY AND ANNUAL PRECIPITATION (IN INCHES AND HUNDREDTHS) FOR 1892, COMPILED FROM THE REPORTS OF OBSERVERS OF ALL CLASSES, 1892.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Alabama.													
*Auburn	8.13	3.72	7.49	3.01	2.23	4.84	5.05	5.13	2.67	0.52	3.20	3.10	49.09
Bermuda[1]	6.44	1.88	4.76	0.17	1.09	1.44	3.53	2.43	1.15	0.11	0.17	3.23	26.40
Bessemer	6.44	1.88	4.22	3.04	2.86	7.79	7.29	5.13	6.35	.....	.....	.....	.....
Brewton	12.45	4.40	2.56	1.60	3.80	7.80	12.26	13.55	3.00	1.00	1.65	.....	.....
Carrollton	7.55	1.91	5.32	5.40	3.20	6.88	12.40	2.19	1.84	0.10	.....	.....	.....
Chepultepec	.....	.....	.....	4.56	2.10	2.80	7.60	6.50	.....	.....	.....	.....	.....
Citronelle	6.33	1.82	.....	4.91	1.97	5.80	8.10	7.87	4.65	1.34	2.31	5.90	.....
*Claiborne Landing	9.45	2.15	2.71	8.05	3.90	3.55	6.32	1.80	1.25	0.75	1.00	3.85	44.78
*Cordova	7.49	2.50	4.63	8.70	2.72	5.72	6.96	7.26	4.63	0.11	5.74	4.80	61.26
Daphne	7.09	1.21	5.29	.....	1.15	9.48	12.14	11.77	6.58	1.78	2.55	5.30	.....
*Decatur[2]	5.56	5.31	4.17	11.14	2.71	2.84	7.50	6.39	5.01	0.29	5.60	5.47	61.99
*Decatur[3]	.....	.....	.....	.....	2.29	2.68	6.56	5.66	4.47	0.30	5.28	.....	.....
Double Springs	.....	5.04	4.84	9.70	3.36	5.45	5.25	.....	.....	.....	.....	.....	.....
*Eufaula[3]	.....	.....	.....	0.00	3.31	2.81	11.09	10.09	3.14	0.59	1.19	.....	.....
Eufaula[4]	4.16	6.20	.....	0.10	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Evergreen	.....	.....	.....	0.75	2.83	9.10	9.96	9.13	2.08	0.75	3.25	.....	.....
Fayette	.....	.....	2.13	5.42	3.68	3.32	.....	6.93	1.16	.....	.....	.....	.....
*Florence[2]	4.74	5.58	4.36	16.07	3.46	3.68	10.24	6.24	3.74	0.25	5.37	4.45	68.18
Florence[5]	3.61	2.90	.....	14.78	3.43	3.61	12.26	3.92	3.76	0.21	5.49	5.10	.....
*Fort Deposit	.....	.....	.....	0.50	1.62	6.20	10.61	3.08	1.55	0.60	2.02	.....	.....
*Gadsden	7.01	3.22	5.98	9.46	2.22	3.93	7.18	8.91	3.00	0.00	7.91	3.77	62.59
Geneva	7.43	1.97	3.77	1.09	1.08	6.43	5.18	8.03	2.54	1.10	2.79	2.70	44.11
Greensboro	7.56	2.86	5.64	1.96	3.88	4.58	10.37	5.53	2.17	0.23	3.06	4.56	52.40
Healing Springs	8.84	2.70	11.59	4.56	4.75	5.60	7.46	5.41	3.45	2.46	2.72	6.43	65.97
Highland Home	.....	.....	.....	.....	2.86	3.03	9.19	6.04	.....	0.86	2.20	3.74	.....
Jasper	7.43	2.55	4.86	3.04	3.29	4.86	9.82	8.20	5.20	.....	5.70	5.70	.....
Jemison	8.60	3.90	6.16	.....	3.65	.....	.....	.....	.....	.....	.....	.....	.....
Livingston[6]	7.34	2.43	6.10	2.41	4.92	5.20	10.45	4.74	0.67	0.18	2.69	5.01	52.14
*Livingston[3]	.....	.....	.....	1.22	5.03	5.53	10.93	4.95	0.73	0.16	3.25	4.13	.....
Lock No. 4	.....	.....	.....	.....	.....	4.81	8.68	4.71	2.38	.....	3.72	3.47	.....
*Lynn	6.81	4.44	4.80	7.07	3.90	5.63	10.13	6.09	6.08	0.27	4.82	5.03	65.07
*Marion	.....	.....	.....	0.44	1.99	3.74	7.34	4.14	3.35	0.35	2.73	.....	.....
Maysville	5.85	5.91	4.85	.....	5.93	5.22	5.97	6.89	7.51	0.59	5.73	5.38	.....
*Mobile	9.97	2.09	8.52	3.10	1.49	4.09	14.43	13.47	4.93	3.03	1.93	7.06	74.11
*Montgomery	17.78	3.04	11.89	1.14	2.55	3.83	9.56	7.82	2.68	0.45	4.40	4.71	69.85
Mountain Home	5.71	.....	.....	11.57	3.73	.....	.....	.....	.....	.....	.....	.....	.....
Mount Vernon Barracks	8.62	2.71	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mount Willing	12.55	1.63	9.06	1.18	3.95	.....	9.01	7.98	2.26	0.65	5.05	4.78	.....
Newburg	4.78	5.48	5.27	13.20	3.59	2.14	9.55	9.40	4.59	0.35	3.93	4.48	66.76
Newton	7.13	3.70	3.59	0.49	0.86	6.14	.....	7.35	.....	.....	.....	.....	.....
*Opelika	.....	.....	.....	0.27	2.72	6.01	6.31	4.94	2.72	0.19	3.37	.....	.....
Oxanna	10.11	2.45	6.54	6.99	4.10	4.87	4.72	4.47	2.54	.....	4.50	2.94	.....
*Pine Apple	.....	.....	.....	0.62	3.11	4.40	7.62	5.99	1.09	0.85	2.68	.....	.....
Pittsboro	.....	.....	8.00	0.00	1.50	3.55	4.50	4.45	3.40	0.40	.....	.....	.....
Pushmataha	7.94	4.20	8.41	2.58	8.94	3.54	10.46	4.09	1.25	0.57	2.91	.....	.....
Scottsboro	6.94	4.29	4.21	13.85	4.57	3.47	.....	.....	.....	0.30	7.83	5.96	.....
*Selma	10.25	5.02	11.70	1.69	3.23	2.38	8.36	5.51	1.81	0.00	4.05	4.56	58.56
*Sturdevant	9.89	4.75	9.24	1.93	3.57	2.46	8.75	8.10	3.22	0.21	4.95	2.33	59.40
*Talladega	10.88	3.85	7.77	5.02	3.00	1.87	12.41	6.15	1.29	0.13	4.94	3.50	60.81
*Tallassee Falls	12.77	4.14	9.05	1.29	2.52	3.48	11.21	5.40	2.52	1.30	5.44	5.00	64.12
*Thomasville	.....	.....	.....	1.71	6.17	3.52	6.79	7.95	2.43	0.55	0.00	.....	.....
*Tuscaloosa	6.88	2.50	5.40	3.16	2.92	4.27	10.03	6.53	2.57	0.41	3.86	4.42	52.95
Tuscumbia[7]	2.70	2.82	3.14	13.94	3.38	5.83	17.95	3.52	3.86	0.38	5.80	4.61	67.93
*Tuscumbia[3]	.....	.....	.....	.....	3.72	5.22	8.57	5.30	3.86	0.38	5.95	3.73	.....
Union Springs[8]	9.51	2.73	10.42	0.99	1.70	4.33	6.30	5.09	3.36	0.54	3.55	5.12	53.64
*Union Springs[3]	.....	.....	.....	.....	3.42	5.90	6.78	5.44	3.38	1.05	3.69	.....	.....
Uniontown	.....	3.94	7.55	.....	.....	.....	10.98	3.27	3.94	0.19	3.02	5.88	.....
Valley Head	8.00	2.62	4.02	11.31	4.39	5.60	5.62	5.53	6.09	0.45	2.48	4.68	66.79
Walker Springs	.....	1.40	7.40	1.26	5.39	7.79	.....	.....	.....	.....	.....	.....	.....
*Warrior	2.16	2.90	6.10	8.00	4.50	.....	.....	.....	.....	0.26	5.13	4.23	.....
Wetumpka	.....	.....	.....	.....	.....	1.10	10.10	8.14	3.09	.....	4.68	4.15	.....
Wiggins	10.75	2.41	7.80	0.74	1.56	3.64	7.61	.....	.....	.....	.....	.....	.....
*Wilsonville	9.83	2.65	6.75	3.12	3.23	6.59	7.47	8.16	2.77	0.10	4.68	3.49	58.84
Alaska.													
Killisnoo	8.40	7.30	9.30	2.00	3.25	4.60	5.95	6.75	8.55	12.45	9.80	13.25	91.60
Metlakahtla	15.52	6.44	9.79	6.52	5.90	4.27	4.72	9.36	8.38	18.75	9.70	12.79	112.14
Arizona.													
Antelope Valley	1.90	3.76	.....	1.24	.....	.....	.....	.....	0.00	.....	0.00	.....	.....
Arizona Canal Company's Dam	1.20	2.27	1.41	0.97	0.41	0.00	0.18	0.49	0.00	1.25	0.00	0.45	8.63
Benson	0.40	1.30	0.40	0.42	0.00	0.00	0.00	0.07	0.03	0.00	0.00	.....	.....
Bisbee	1.64	2.39	1.51	0.60	0.00	0.24	1.37	2.59	0.44	1.48	0.29	0.37	12.92
Calabasas	2.32	1.73	0.82	0.33	0.04	0.40	2.67	1.71	0.63	0.94	T.	0.24	11.83
Casa Grande	3.25	2.35	0.65	0.00	0.34	0.00	0.23	0.64	0.00	0.15	0.00	1.14	8.75

[1] The measurements at this station do not appear to have been correctly made. [2] River Observer. [3] Cotton belt. [4] James Milton. [5] N. Parker and R. Smith. [6] J. W. A. Wright. [7] L. B. Thornton. [8] P. L. Cowan.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Arizona—Continued.													
Chiri Cahua Mountains	0.75	.....	2.62	2.60	0.00	2.75	.....	.....	0.02	.....	1.87	1.18	.....
Crittenden	1.10	5.00	0.80	0.58	0.36	0.35	2.34	1.89	0.89	.....	.....	.....	.....
Dos Cabezos	0.66	2.27	.....	.....	T.	0.10	1.82	1.10	0.05	1.06	0.00	.....	.....
Dragoon	1.10	2.67	0.97	.....	.....	0.00	1.54	1.54	0.19	0.37	.....	.....	.....
Dragoon Summit	0.13	1.83	0.71	0.29	0.04	0.18	1.17	1.66	0.45	0.12	0.23	0.20	7.01
Dudleyville	1.84	2.69	1.17	0.92	0.38	0.20	0.50	1.41	0.01	0.65	0.16	0.36	10.29
Eagle Pass	0.60	.....	.....	.....	1.00	0.00	2.00	2.63	0.01	0.64	0.40	0.40	.....
Farley's Camp	2.30	5.34	1.70	1.30	0.25	0.00	0.10	0.20	0.00	1.45	0.00	0.60	13.24
Flagstaff	7.00	.....	3.80	3.33	7.55	.....	.....	.....	.....	.....	.....	1.10	.....
Florence	3.46	2.29	0.93	0.00	0.45	T.	0.37	0.52	T.	1.80	0.00	0.13	9.95
Fort Apache	0.65	2.29	2.22	1.36	0.36	0.15	1.33	1.30	1.23	0.55	0.57	0.69	12.70
Fort Bowie	0.81	3.36	1.62	0.41	0.00	0.50	1.12	2.65	0.00	1.80	0.30	0.60	13.17
Fort Grant	0.96	1.59	1.66	0.64	0.35	0.00	0.86	1.00	0.11	0.46	0.12	0.15	7.90
Fort Huachuca	1.44	1.59	0.89	1.12	0.00	0.14	2.88	2.64	0.24	0.16	T.	0.43	11.50
Fort Mohave	0.35	1.74	0.21	T.	0.38	0.00	0.00	0.00	0.00	0.00	0.00	.....	.....
Gila Bend [1]	2.77	2.30	1.11	0.33	0.20	0.00	0.40	0.60	0.65	0.00	0.00	0.00	8.36
Gila Bend [2]	2.30	2.46	0.63	0.31	0.23	0.00	0.05	0.27	0.36	0.00	0.00	0.34	6.95
Grand Central Mill	0.37	0.67	0.45	0.30	0.11	0.02	.....	.....	.....	.....	.....	.....	.....
Holbrook	1.10	0.90	0.69	0.19	0.17	T.	1.61	0.47	0.11	0.74	0.14	0.16	6.31
Lochiel	.....	2.90	1.29	0.55	0.19	0.33	.....	.....	.....	0.45	.....	.....	.....
Maricopa	1.55	2.44	0.50	0.40	0.14	0.00	0.62	0.25	0.15	0.00	0.00	0.00	6.05
Mount Huachuca	2.07	2.64	1.42	0.99	T.	0.62	0.79	2.10	0.24	0.96	0.02	0.39	12.24
Natural Bridge	3.15	4.19	2.93	1.75	0.50	0.05	1.14	0.69	T.	1.50	0.16	1.79	17.85
Navajo Springs	0.36	0.78	1.25	.....	0.00	0.00	1.92	0.06	0.00	0.77	0.52	.....	.....
New River	2.87	3.95	1.29	1.26	0.29	0.00	0.58	0.14	0.00	1.67	0.00	0.43	13.48
Nogales	.....	.....	0.35	0.34	.....	0.10	2.10	.....	0.03	0.55	0.00	0.45	.....
Oro	.....	1.16	1.06	0.00	.....	.....	0.82	2.10	0.23	1.18	T.	.....	.....
Pantano	0.85	2.75	1.63	0.90	0.62	0.00	0.85	2.76	0.33	T.	0.00	0.10	10.79
Payson	2.52	4.10	2.39	1.27	0.35	0.23	0.62	0.63	0.30	1.20	0.00	0.74	14.35
Peoria	1.77	2.77	1.19	0.70	0.18	0.00	.....	.....	.....	.....	0.00	0.21	.....
Phœnix [3]	1.85	2.20	0.60	0.70	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.50
Phœnix [4]	1.98	2.34	0.73	0.68	.....	.....	0.06	0.00	.....	.....	.....	.....	.....
Red Rock	1.90	2.76	0.44	0.72	0.49	0.00	0.00	2.75	0.09	.....	0.00	1.20	.....
Reymert	4.25	4.14	2.50	.....	.....	T.	T.	0.25	1.50	.....	0.40	.....	.....
Rye	.....	.....	.....	.....	.....	0.01	0.71	0.32	.....	.....	.....	0.38	.....
St. Johns	0.43	0.28	0.21	0.07	0.70	0.00	1.05	0.44	.....	.....	.....	.....	.....
San Carlos	1.80	3.51	1.22	1.03	0.08	0.00	1.30	1.90	0.00	0.65	0.34	0.22	12.05
San Simon	0.48	1.09	0.20	0.07	0.00	0.00	0.04	0.03	0.00	0.59	0.02	0.05	2.57
Show Low	.....	.....	1.16	.....	.....	.....	2.01	0.84	0.31	0.70	0.40	.....	.....
Signal	2.00	2.97	0.41	0.44	0.85	0.00	0.15	0.52	0.28	T.	T.	0.08	7.70
Strawberry	3.23	3.63	3.38	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tempe	1.97	1.88	0.52	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Teviston	0.30	0.50	0.50	0.00	0.00	.....	.....	T.	T.	0.07	T.	0.20	.....
Texas Hill	1.64	.....	.....	.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
*Tucson	1.52	2.63	0.98	0.18	0.17	0.10	1.00	2.14	0.37	0.27	T.	0.25	9.61
Tucson [5]	1.66	2.54	1.01	0.26	0.36	0.21	2.19	1.84	0.61	0.32	0.00	0.25	11.25
Tucson [2]	1.62	3.50	0.71	.....	0.18	0.25	1.83	1.23	0.58	0.00	0.00	0.40	.....
Walnut Grove	3.15	3.10	1.11	1.00	0.06	.....	0.02	0.07	.....	1.00	.....	.....	.....
Walnut Ranch	1.46	2.19	1.80	0.92	0.00	0.49	2.87	3.40	0.36	1.83	0.18	0.59	16.09
Whipple Barracks	1.98	1.64	1.91	0.58	0.85	0.00	1.74	2.04	0.14	1.41	0.00	0.61	12.90
Wilgus	1.00	1.75	1.47	0.65	T.	0.10	3.32	.....	0.25	1.65	0.25	0.40	.....
Willcox	0.05	1.45	0.84	0.25	1.02	2.00	0.97	0.94	0.32	0.00	0.00	0.17	8.01
Winslow	.....	1.20	0.75	T.	0.40	0.20	0.80	.....	T.	0.55	0.10	.....	.....
Wood Canyon	2.00	4.00	2.50	1.50	T.	.....	0.20	.....	0.00	.....	.....	.....	.....
Woodruff	1.00	1.30	0.80	0.00	0.40	.....	1.30	.....	.....	.....	.....	.....	.....
*Yuma	1.85	0.87	0.52	T.	0.05	0.00	0.00	0.02	0.04	0.00	0.00	T.	3.35
Yuma	0.19	0.87	0.16	.....	0.00	0.00	0.00	0.03	0.03	0.00	T.	0.00	.....
Arkansas.													
*Arkadelphia	2.53	3.95	3.66	6.92	12.95	4.22	5.71	6.50	3.68	1.93	8.57	10.30	70.92
*Arkansas City	4.06	5.14	3.52	10.22	3.71	5.66	3.10	2.68	0.82	0.91	3.16	7.26	50.24
Bee Branch	.....	.....	.....	.....	.....	.....	.....	3.90	2.22	3.54	2.88	8.55	.....
Black Rock	1.66	2.72	2.27	7.23	9.30	2.18	5.25	3.31	.....	0.43	4.45	5.41	.....
*Brinkley	2.50	2.90	3.30	7.09	10.06	3.65	1.76	4.80	0.02	1.48	8.46	13.44	59.46
*Camden [6]	5.09	4.79	5.82	9.74	5.83	5.79	4.34	4.54	3.18	2.31	9.23	13.73	72.39
Camden [7]	.....	.....	.....	8.21	5.77	6.90	2.76	5.03	2.68	2.05	8.61	12.51	.....
Conway	1.83	2.46	2.92	5.85	10.01	1.87	3.99	4.63	2.03	1.63	4.09	5.38	46.69
Corner Stone	2.06	4.75	3.53	6.39	6.68	4.12	.....	.....	.....	.....	.....	.....	.....
Dallas	2.84	4.33	2.92	8.74	15.80	6.09	2.21	8.54	3.80	9.07	4.77	7.47	76.58
*Dardanelle	1.93	2.25	5.15	5.46	9.33	3.01	2.70	4.91	2.09	4.88	3.16	8.70	53.57
Eldorado	2.57	4.59	4.05	8.65	6.53	6.61	5.30	3.68	3.81	4.41	5.31	8.23	63.74
Fayetteville	2.75	2.38	3.09	4.76	12.07	5.35	2.06	5.39	1.80	3.99	2.36	5.34	51.34
*Forrest City	2.66	4.51	2.59	6.69	7.55	2.45	4.95	5.27	T.	1.12	8.55	10.30	56.64
Fort Smith	1.98	2.51	2.71	4.91	10.59	5.60	2.06	3.36	1.84	5.73	1.94	6.12	49.35
*Fulton	1.46	3.65	3.63	7.54	5.57	2.80	1.96	3.75	0.30	4.54	7.84	8.89	51.93
Gaines Landing	3.18	4.12	3.94	11.06	3.92	4.06	5.54	2.72	1.29	1.32	4.35	9.01	54.51
Harrison	3.80	2.00	3.50	.....	7.52	3.35	4.11	0.78	2.05	3.17	2.26	3.30	.....
*Helena [8]	2.86	5.00	4.48	8.12	4.23	6.37	5.15	6.07	0.19	0.37	7.00	11.69	61.53
*Helena [9]	2.93	4.55	2.63	7.85	5.19	5.06	4.44	5.97	0.26	0.27	6.33	11.73	57.21
Hope	3.98	3.30	4.36	7.80	12.75	0.72	2.38	3.69	1.58	5.61	8.25	11.40	66.32
Hot Springs	3.06	3.65	4.12	7.54	12.45	3.04	3.70	5.96	1.63	5.80	7.75	7.84	66.54
Keesees Ferry	3.01	1.24	2.78	4.30	8.50	5.33	3.14	2.88	1.79	3.10	2.10	3.17	41.34
Kirby	.....	.....	.....	.....	.....	.....	.....	6.39	2.50	6.24	11.06	.....	.....
*Little Rock	3.92	3.44	2.55	7.53	9.62	2.48	3.10	6.63	3.54	2.82	8.02	8.48	62.13
Lonoke	3.13	2.68	3.37	8.31	10.37	2.12	2.50	4.75	6.12	1.81	8.82	9.50	63.48
Madding	3.03	6.50	8.23	8.61	7.91	3.65	1.09	3.51	3.00	4.57	7.32	16.44	68.86
*Malvern	3.06	3.31	1.58	1.32	7.47	.....	0.05	2.61	.....	2.05	7.92	.....	.....

[1] D. Murphy. [2] Pacific Railroad. [3] T. W. Hine. [4] Dr. H. F. Adams and B. Perley. [5] E. L. Wetmore. [6] R. B. Smith. [7] A. L. Morgan. [8] River Observer. [9] A. J. Gaschew.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Arkansas—Continued.													
Marshall	2.50	2.28	4.56	7.85	.....	.....	.....	.....	.....	.....	.....	.....	.....
Melbourne	.....	.....	.....	.....	.....	.....	.....	.....	1.66	2.24	4.68	5.21	.....
Mount Nebo	1.40	2.80	3.15	3.35	14.20	3.82	3.59	5.01	1.87	3.88	2.60	5.90	51.57
New Gascony	2.06	4.75	3.53	6.39	6.68	4.12	2.58	3.34	2.86	2.36	7.80	15.04	61.51
*Newport[1]	2.65	2.83	3.92	9.45	12.27	3.17	4.96	5.09	2.31	1.62	8.47	8.05	64.79
*Newport[2]	1.55	2.67	.....	4.21	12.25	2.99	4.95	5.90	2.96	2.15	7.60	7.76	.....
Osceola	1.43	4.46	3.13	6.98	9.03	1.89	7.38	2.53	0.28	1.30	6.00	10.76	55.17
Ozark	0.65	2.45	3.30	4.17	12.16	.....	2.43	.....	1.00	4.60	2.16	6.69	.....
Ozone	2.75	4.64	4.19	5.03	14.00	5.03	2.89	.....	.....	.....	.....	.....	.....
Paragould	1.10	2.38	1.20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Pine Bluff	2.98	5.32	3.56	6.45	12.14	4.57	3.63	4.23	3.67	2.88	9.83	13.35	72.61
*Prescott	3.14	.....	.....	1.46	11.01	5.29	3.08	5.48	1.38	2.56	9.88	.....	.....
Rogers	2.71	1.36	3.11	5.92	12.66	4.59	1.14	1.81	2.00	4.52	2.08	4.29	46.19
*Russellville	.....	.....	.....	1.90	11.26	4.35	2.39	3.59	2.34	4.41	3.73	7.64	.....
Searcy	.....	.....	.....	.....	.....	.....	.....	.....	2.92	1.86	11.74	13.03	.....
Stuttgart	2.56	5.06	4.60	6.94	10.95	2.52	4.10	6.15	1.04	3.25	7.23	13.32	67.72
*Texarkana	1.42	3.65	6.74	8.58	6.31	2.48	3.20	5.12	0.61	5.87	5.88	10.22	60.08
Warm Springs	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.10	2.35	3.77	.....
Washington[3]	3.98	3.80	4.36	7.80	12.27	1.66	7.51	5.17	1.61	5.61	8.25	11.40	73.42
Winslow	1.22	2.81	4.20	3.74	12.83	3.86	.....	4.29	2.40	5.55	1.78	5.48	.....
California.													
Agnew	0.77	0.89	3.30	0.50	1.29	0.09	0.00	0.00	T.	0.85	3.61	5.65	16.95
Alcalde	0.15	0.94	1.80	0.11	0.92	0.00	0.00	0.00	0.00	0.21	1.32	2.10	7.55
Alcatraz Island	2.18	2.81	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Almaden	1.13	1.75	3.30	1.27	2.80	0.00	0.00	0.00	0.09	0.90	.....	.....	.....
Alvarado	1.18	0.81	3.19	0.87	1.96	0.00	0.04	0.00	0.06	1.71	4.55	4.88	19.25
Anaheim	0.77	2.35	1.23	0.15	1.48	0.00	0.00	0.00	0.00	0.19	0.94	1.48	8.59
Angel Island	2.28	3.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Antioch	1.06	1.63	2.14	0.46	0.76	0.00	0.00	0.00	0.22	0.45	4.52	4.78	16.02
Aptos	0.92	4.90	2.67	1.95	2.47	0.00	0.00	0.00	0.65	1.36	3.66	8.72	27.30
Arcata	3.05	2.86	5.42	5.34	3.75	0.50	0.00	0.00	1.22	2.69	8.51	6.38	39.72
Arlington Heights	.....	.....	.....	.....	.....	.....	.....	0.00	.....	0.09	0.09	1.17	.....
Athlone	0.35	1.10	2.42	0.99	2.29	0.00	0.00	0.00	0.08	0.18	1.58	2.28	11.27
Auburn	4.00	4.91	5.96	3.11	4.55	0.00	0.00	0.00	0.15	1.76	6.13	8.99	39.56
Bakersfield[4]	1.61	0.45	1.25	T.	0.41	0.39	0.00	0.00	0.00	0.01	0.55	0.75	5.42
Bakersfield[5]	0.65	0.48	1.66	0.10	0.28	0.55	0.00	0.00	0.00	0.52	0.40	0.41	5.05
Ballast Point Light-house	1.60	2.25	0.85	0.26	.....	.....	.....	.....	.....	0.25	0.80	0.80	.....
Beaumont	0.96	3.53	3.18	0.37	1.87	0.00	0.00	0.00	0.00	0.00	1.65	1.95	13.51
Benicia Barracks	1.62	1.98	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Berendo	0.38	1.67	1.40	0.45	1.82	0.00	0.00	0.00	0.00	0.00	0.00	2.07	7.79
Berkeley	2.34	4.20	3.60	1.68	2.97	0.00	0.01	0.00	0.07	1.99	5.35	6.64	28.85
Biggs	.....	.....	.....	.....	.....	.....	.....	.....	0.05	0.60	8.37	7.19	.....
Bishop Creek	0.10	0.70	1.10	0.00	0.25	T.	0.00	0.00	0.00	0.20	1.42	2.27	6.04
Boca	0.70	3.35	1.70	2.70	3.10	0.70	0.00	0.00	0.00	1.50	8.35	6.95	29.05
Borden	0.18	1.12	1.34	0.24	1.96	0.35	0.00	0.00	0.08	0.10	0.33	1.30	7.00
Boulder Creek	4.60	9.51	11.29	1.99	6.03	0.00	0.00	0.00	0.39	2.20	12.79	21.11	69.91
Brentwood	0.45	1.12	2.47	0.50	0.72	0.00	0.00	0.00	0.35	1.05	2.83	5.20	14.69
Brighton	2.35	2.06	3.62	0.84	2.65	0.00	0.00	0.00	0.15	1.03	4.42	.....	.....
Byron	0.65	1.13	2.29	0.40	0.82	0.00	0.00	0.00	0.27	1.25	3.21	4.17	14.19
Caliente	0.75	1.00	4.25	0.30	1.00	0.50	0.00	0.00	0.00	0.00	0.00	2.80	10.60
Calistoga	5.78	5.52	5.03	3.10	0.00	0.56	0.00	0.00	0.00	1.93	8.01	10.79	40.72
Campo	0.75	4.55	3.30	1.25	2.75	.....	.....	.....	.....	.....	.....	.....	.....
Cape Mendocino Light-house	3.06	2.03	3.98	3.01	.....	.....	.....	.....	0.43	.....	3.80	.....	.....
Capitola	.....	.....	.....	.....	0.00	0.00	0.00	0.00	.....	0.00	.....	.....	.....
Castroville	0.80	2.00	2.83	1.11	1.54	0.00	0.00	0.00	0.23	0.94	2.71	4.28	16.44
Centerville	1.12	1.41	3.71	1.10	1.96	T.	0.03	.....	0.01	1.53	3.49	5.28	.....
Chico	5.02	3.28	4.58	3.81	3.24	0.00	0.00	0.00	0.00	0.92	6.31	9.08	36.24
Cisco	5.10	7.61	8.55	6.30	8.30	1.40	0.00	0.00	0.30	0.95	12.60	11.20	62.31
Citrus	0.10	T.	0.40	0.00	0.70	0.00	0.00	0.00	0.00	0.25	0.00	0.11	1.56
Claremont	1.28	2.02	2.96	0.27	3.51	0.84	0.00	0.00	0.00	0.09	2.92	.....	.....
Colfax	4.85	7.55	7.45	5.73	6.14	0.60	0.00	0.00	.....	2.20	1.55	16.95	.....
Colton	2.27	3.36	0.80	0.24	1.44	0.00	0.00	0.00	0.00	.....	0.90	1.45	.....
Corning	3.25	1.35	2.20	1.41	1.63	0.05	0.00	0.00	0.00	0.14	9.07	2.51	21.61
Crescent City	5.68	3.44	5.75	9.43	6.13	0.74	0.67	0.00	2.27	5.84	11.66	9.19	60.80
Crescent City Light-house	5.63	3.11	5.67	8.76	.....	0.83	0.66	.....	2.03	4.36	9.90	.....	.....
Crofton	.....	.....	.....	.....	1.81	0.00	0.00	0.00	0.00	T.	0.54	1.49	.....
Davisville[1]	1.72	2.05	2.67	0.92	2.08	0.00	0.00	0.00	0.00	0.51	2.78	6.77	19.50
Davisville[2]	.....	1.86	2.78	1.03	2.34	T.	0.00	0.00	0.08	0.63	4.12	6.24	.....
Delano	0.42	0.85	2.07	0.13	0.43	0.37	0.00	0.00	0.00	0.32	0.35	0.98	5.92
Delta	5.55	4.01	8.34	6.31	5.22	0.04	0.10	0.00	1.52	3.40	13.08	19.51	67.08
Downey	0.89	2.42	2.01	0.25	2.09	0.05	0.00	0.00	0.00	0.31	2.90	3.02	13.94
Drytown	2.30	3.75	5.63	2.14	3.75	0.29	0.00	0.00	0.26	1.47	8.17	6.14	33.90
Duarte	.....	.....	4.64	0.24	4.35	T.	0.00	0.00	0.00	0.33	2.91	4.21	.....
Dunnigan	2.66	2.25	2.78	0.87	2.18	0.00	0.00	0.00	0.00	1.12	6.92	9.17	27.95
Dunsmuir	2.41	3.31	5.30	5.48	3.96	1.22	0.35	0.00	0.05	2.68	7.47	14.03	46.26
East Brother Light-house	1.01	1.52	0.92	0.31	.....	.....	.....	.....	.....	0.47	1.58	3.05	.....
Edgewood	0.15	0.12	2.67	0.86	1.63	0.69	0.80	0.00	0.58	1.07	5.35	7.88	21.80
Edmanton	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.61	23.09	24.98	.....
El Casco	.....	.....	.....	.....	0.00	0.00	0.00	0.00	.....	0.00	0.00	0.00	.....
El Dorado	3.48	5.75	7.24	3.61	4.91	0.15	0.00	0.00	0.08	2.04	7.80	10.33	.....
Elk Grove	1.52	.....	2.56	1.38	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elmira	2.81	4.04	1.94	1.77	2.82	0.00	0.00	0.00	0.08	0.84	5.00	8.19	27.49
El Verano	6.60	4.61	2.99	3.26	2.35	T.	0.00	0.00	0.00	1.32	5.86	8.38	35.37
Emigrant Gap	5.42	7.46	5.70	3.00	5.60	0.70	0.00	0.00	0.10	1.70	15.02	19.97	64.67
Esparto	2.29	2.28	2.35	0.32	1.74	0.00	0.00	0.00	0.00	0.79	8.01	7.19	24.97
*Eureka	3.29	2.53	5.32	5.54	3.63	0.45	0.00	0.09	0.99	2.90	8.19	6.55	39.48
Evergreen	0.98	1.36	4.53	0.85	1.98	0.04	0.00	0.00	T.	0.89	3.98	6.78	21.39

[1] River observer. [2] Cotton region observer. [3] A. H. Carrigan. [4] Pacific Railroad. [5] W. A. Webster. [6] A. C. Hillman.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
California—Continued.													
Exeter	.....	.....	2.48	0.33	1.41	0.14	0.00	0.00	0.00	0.42	0.37	2.60	.....
Fall Brook	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.32	2.35	2.14	.....
Farmington	0.97	2.20	2.88	1.23	2.59	0.18	0.00	0.00	0.18	0.69	2.38	6.70	20.00
Felton	3.27	11.13	5.64	3.12	4.24	0.00	0.00	0.00	0.43	1.69	7.11	15.15	51.78
Fernando	0.57	2.53	2.65	0.21	1.68	0.00	0.00	0.00	0.00	0.40	1.48	4.40	13.92
Florence	0.93	2.47	2.58	0.14	1.34	0.00	0.00	0.00	0.00	0.00	2.99	5.14	15.59
Florin	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.20	4.61	3.79	.....
Folsom City[1]	2.83	3.15	4.08	2.04	4.15	0.65	0.00	0.00	0.25	1.30	5.41	6.98	30.24
Folsom City[2]	2.56	3.03	4.17	1.85	3.91	0.07	0.00	T.	0.14	1.31	6.82	5.11	28.97
Forestville	7.61	5.19	5.19	3.34	4.37	0.04	0.00	0.00	.....	2.24	7.74	.....	.....
Fort Bidwell	0.79	1.20	0.69	2.28	1.57	1.46	0.15	0.02	0.91	1.28	3.12	2.64	16.11
Fort Gaston	3.03	1.90	5.88	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Mason	1.37	2.51	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Fresno	0.48	1.00	1.69	0.79	1.44	0.06	0.00	0.00	T.	0.34	0.39	2.56	8.75
Fresno	0.37	0.68	1.31	0.22	1.30	0.00	0.00	0.00	0.00	0.32	0.51	2.02	6.73
Fruto	2.00	3.53	2.68	1.89	4.08	0.25	0.00	0.00	0.00	0.50	5.80	6.80	27.53
Galt	0.71	1.78	3.76	1.10	3.05	0.00	0.00	0.00	0.10	1.78	5.37	7.96	25.61
Georgetown	5.48	8.44	7.90	7.47	7.58	0.38	T.	0.00	0.57	3.11	13.31	15.76	70.00
Gilroy	.....	1.90	4.18	0.90	1.21	0.00	0.00	0.00	0.00	1.19	5.40	3.90	.....
Girard	1.06	0.30	3.30	1.00	1.16	0.82	0.00	0.00	0.00	0.33	0.34	0.19	8.50
Glen Ellen	9.26	6.27	4.78	3.22	4.33	0.00	0.00	0.00	0.00	1.67	9.79	14.96	54.28
Goshen	.....	1.70	2.30	0.50	1.20	0.05	0.00	0.00	0.00	0.05	0.65	0.00	.....
Grass Valley[3]	4.70	7.15	6.61	6.37	6.49	0.00	0.00	0.00	0.23	2.72	13.44	11.22	58.93
Grass Valley[4]	4.37	5.92	7.12	6.10	.....	0.05	.....	0.00	0.33	2.61	12.88	11.91	.....
Gridley	.....	.....	.....	.....	.....	.....	.....	.....	0.08	1.17	7.66	8.37	.....
Haywards	1.03	1.38	3.58	0.95	1.60	0.00	T.	0.00	0.05	2.98	3.00	5.82	20.39
Hollister	0.13	1.53	3.49	0.64	1.33	0.00	0.00	0.00	0.02	0.87	2.82	3.79	14.61
Hornbrook	0.70	0.35	1.40	1.50	0.50	0.60	0.00	0.00	0.45	0.68	2.65	3.98	12.81
Humboldt Light-house	3.74	2.34	5.07	4.65	.....	0.43	0.12	0.16	0.78	2.40	5.71	5.54	.....
Huron	0.21	1.30	1.64	0.17	0.52	0.00	0.00	0.00	0.00	0.10	0.60	0.85	5.39
Hyde Ranch	1.15	2.68	3.06	1.80	1.04	T.	0.00	0.00	.....	.....	5.42	6.95	.....
Hydesville	1.99	5.00	.....	5.22	2.42	0.30	.....	.....	.....	3.05	8.00	10.66	.....
Independence	.....	.....	0.62	.....	0.96	0.07	T.	T.	0.00	0.35	0.23	1.61	.....
Indio	2.00	0.43	0.22	.....	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
Ione	2.00	2.85	4.45	.....	2.89	0.07	0.00	0.00	0.11	0.18	4.03	6.53	.....
Iowa Hill	4.01	5.36	7.11	6.02	6.57	0.41	0.00	0.00	0.51	2.51	8.21	11.88	52.59
Jackson	3.21	3.03	4.89	2.70	3.85	0.46	0.00	.....	0.40	.....	7.48	5.52	.....
Jolon	0.84	1.78	2.31	0.32	2.25	T.	0.00	0.00	0.00	0.23	6.40	6.61	20.74
Julian	6.17	6.69	1.54	6.11	3.55	0.41	0.00	0.11	0.00	0.56	1.53	2.81	29.48
*Keeler	0.26	0.19	0.32	0.00	0.56	T.	0.00	T.	T.	0.81	0.11	0.54	2.79
Keene	1.65	2.22	4.10	1.86	0.60	1.07	0.00	0.00	0.00	0.16	0.65	1.98	14.29
Kennedy Gold Mine	2.25	4.61	6.60	3.63	4.94	0.73	0.00	0.00	0.38	1.76	7.38	6.90	39.27
King City	0.66	1.27	2.08	0.26	1.08	0.00	0.00	0.00	0.00	0.42	2.78	4.78	13.33
Kingsburg	0.15	1.27	1.56	0.33	1.11	0.10	0.00	0.00	0.00	0.37	0.33	1.72	6.94
Knight's Landing	1.75	2.38	2.57	0.91	2.44	0.00	0.00	0.00	0.00	0.59	5.38	5.70	21.72
Kono Tayee	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.84	6.53	5.57	.....
La Grange	0.50	5.25	1.19	.....	3.04	0.00	0.00	0.00	0.06	0.70	5.46	2.88	.....
Lathrop	0.56	1.76	2.29	1.27	1.31	0.30	0.00	0.00	0.00	1.14	1.66	3.86	14.15
Laurel	2.96	7.30	6.66	1.71	3.93	0.00	0.00	0.00	0.29	1.00	9.60	22.66	57.01
Lemoore	0.25	0.95	1.91	0.34	1.13	0.00	0.00	0.00	0.00	0.42	0.23	1.22	6.45
Lick Observatory	.....	.....	.....	.....	.....	.....	0.00	T.	0.24	1.38	10.30	5.56	.....
Lime Point Light-house	0.29	0.33	2.28	1.70	.....	0.05	0.03	.....	0.08	2.63	3.20	5.14	.....
Livermore	0.84	1.08	3.96	0.90	1.30	T.	0.00	0.00	0.45	1.65	4.97	7.27	22.42
Livingston	0.59	1.15	2.59	0.69	1.76	0.00	0.00	0.00	0.40	0.43	3.07	1.54	12.22
Lodi	1.04	1.81	4.04	1.78	2.47	0.25	0.00	0.00	0.25	1.83	5.47	5.42	24.36
Los Angeles	0.85	3.21	3.37	0.26	2.19	0.00	0.00	0.00	0.00	0.32	4.12	4.61	18.93
*Los Angeles	0.88	3.19	3.39	0.22	2.06	0.06	0.00	0.01	0.00	0.33	4.40	4.18	18.72
Los Banos	0.10	1.07	1.75	0.85	0.90	0.00	0.00	0.00	0.00	0.21	0.71	2.68	8.27
Los Gatos[1]	1.46	2.60	4.85	0.76	2.88	0.00	0.00	0.00	0.04	0.93	9.24	14.86	37.64
Los Gatos[5]	1.76	3.43	5.62	0.81	3.05	0.00	0.00	0.00	0.00	1.19	13.71	14.95	44.52
Mammoth Tank	0.28	0.42	0.50	0.00	0.00	0.00	0.00	0.10	0.10	0.10	0.00	0.00	1.50
Mare Island Light-house	1.66	2.43	2.09	1.60	.....	.....	.....	.....	.....	1.55	4.61	5.45	.....
Martinez	1.74	3.14	2.75	1.22	1.80	0.00	0.00	0.00	0.00	1.24	5.55	6.97	24.41
Marysville	2.32	3.77	3.63	1.86	2.94	0.00	0.00	0.00	0.20	1.20	6.90	3.66	26.48
Menlo Park	1.07	1.39	2.91	0.47	1.43	0.00	0.00	0.00	0.00	1.14	4.69	6.55	19.65
Merced	0.31	0.79	1.85	0.85	2.47	0.00	0.00	0.00	0.10	0.27	0.64	2.75	10.03
Middletown	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.05	15.64	14.77	.....
Milton (near)	1.34	1.71	3.62	1.63	3.02	0.33	.....	0.00	0.25	1.18	5.33	4.54	.....
Modesto[1]	0.70	1.91	2.43	0.46	1.14	0.00	0.00	0.00	0.00	0.68	2.69	2.44	12.45
Modesto[6]	.....	1.72	2.13	0.62	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mohave	1.00	0.47	1.61	.....	0.26	0.00	0.00	0.00	0.00	0.00	0.27	0.56	.....
Mokelumne Hill	.....	.....	.....	.....	.....	.....	.....	.....	0.62	1.04	8.03	6.04	.....
Mount Glenwood	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.62	14.63	14.72	.....
Monson	0.66	1.25	3.71	0.35	1.19	0.00	0.00	0.00	0.00	0.34	0.47	2.13	10.30
Montague	0.10	T.	0.75	0.40	1.40	0.00	0.35	0.00	0.00	0.00	1.25	2.21	6.46
Monterey	0.66	1.50	3.05	0.82	0.83	0.00	0.00	0.00	1.25	0.00	5.86	3.04	17.01
Mountain View	0.91	0.99	2.68	0.45	1.12	0.00	0.00	0.00	0.00	1.10	5.68	8.20	21.13
Napa City[1]	3.72	4.82	3.93	2.95	4.00	0.00	0.00	0.00	0.02	1.65	6.13	8.34	35.56
Napa City[7]	3.65	3.43	2.26	2.14	2.73	0.09	0.00	0.00	T.	1.58	5.30	7.56	28.74
National City	1.57	3.47	1.20	0.28	1.48	0.00	0.00	0.02	0.00	0.15	0.68	1.48	10.31
Needles[8]	0.83	1.31	0.25	0.13	0.45	T.	0.10	0.00	T.	0.00	.....	0.00	.....
Nevada City	.....	.....	7.27	7.17	5.80	0.20	0.00	T.	0.26	0.95	13.67	14.19	.....
Newark	1.25	1.31	4.84	0.88	1.24	0.00	0.00	0.00	0.00	1.07	2.26	4.82	17.67
New Castle[9]	3.98	3.71	5.14	2.48	4.23	0.03	0.00	0.00	0.06	1.57	8.66	6.39	36.25
Newhall	1.32	3.02	4.07	0.06	2.08	0.00	0.00	0.00	0.00	0.30	4.72	4.16	19.73
Newman	0.27	1.45	1.77	0.55	0.81	0.00	0.00	0.00	0.00	0.28	1.46	4.24	10.83
Niles	0.94	1.39	3.35	0.90	2.34	0.00	0.00	0.00	0.00	1.69	3.10	3.21	15.92
Nordhoff	0.67	2.75	3.68	0.47	1.39	0.00	0.00	0.00	0.00	1.08	.....	8.75	.....

[1] Pacific Railroad. [2] B. F. Berriman. [3] F. H. McCullagh and W. H. B. Trautham. [4] I. S. Lowenthal. [5] J. Denair and H. P. Aldrich. [6] J. H. Starges. [7] W. Loutzenheiser. [8] W. H. Martin. [9] C. H. Kellogg.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
California—Continued.													
Norwalk	0.92	2.43	1.49	0.00	1.50	0.00	0.00	0.00	0.00	0.21	2.30	2.30	11.15
Oakdale	.....	.....	.....	.....	.....	.....	0.00	0.00	0.21	0.78	4.35	2.85	.....
Oakland[1]	2.31	3.68	2.89	1.09	2.49	.....	T.	T.	0.04	2.51	5.04	6.47	.....
Oakland[2]	2.42	3.60	2.38	0.98	2.20	0.00	0.00	0.00	0.00	1.79	2.33	8.04	23.74
Ogilby	0.55	1.22	1.07	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.94
Oleta	3.44	4.52	7.59	3.04	4.54	0.25	0.00	0.00	0.00	1.50	10.70	7.51	43.09
Ontario	0.59	2.01	2.36	0.11	2.15	0.00	0.00	0.00	0.00	0.15	1.64	1.53	10.54
Orangevale	2.95	2.96	4.03	2.07	3.84	0.02	.....	0.00	0.16	1.44	4.94	6.05	.....
Orland	3.08	1.93	1.87	1.16	2.50	0.20	0.00	0.00	0.00	0.95	4.77	5.67	22.13
Oroville	4.60	3.81	4.82	3.53	3.24	0.00	0.00	0.00	0.00	1.22	6.99	3.52	31.73
Pajaro	1.29	2.47	2.43	1.34	3.22	0.00	0.00	0.00	0.13	1.13	3.82	9.81	25.04
Palermo	2.94	3.63	3.92	4.08	2.81	0.14	0.00	0.00	T.	1.19	6.44	6.29	31.44
Palm Springs	2.18	0.26	0.05	.....	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
Pasadena	.....	.....	.....	.....	.....	0.09	T.	0.06	T.	0.60	3.43	4.67	.....
Paso Robles	0.63	1.39	3.09	0.11	1.88	0.38	0.00	0.00	0.00	0.46	2.06	5.02	15.02
Petaluma	3.92	3.03	2.44	1.82	2.38	0.00	0.00	0.00	0.00	0.91	5.44	5.59	25.53
Piedras Blancas Light-house	1.03	4.29	2.76	1.35	.....	0.10	.....	.....	.....	0.49	2.08	4.06	.....
Pigeon Point Light-house	0.87	1.10	2.06	0.53	.....	.....	.....	.....	0.04	0.45	2.92	3.71	.....
Placerville[2]	4.43	6.83	8.26	4.33	5.35	0.00	0.00	0.00	0.20	2.23	12.14	15.48	59.25
Placerville[3]	.....	.....	8.86	5.39	5.87	0.40	0.00	T.	0.03	2.44	12.75	10.43	.....
Pleasanton[2]	0.88	0.99	3.50	0.91	1.30	T.	0.00	0.00	0.10	1.63	4.06	6.30	19.47
Pleasanton[4]	.....	.....	.....	.....	.....	.....	0.00	0.00	0.09	1.71	6.77	4.35	.....
Point Año Nuevo Light-house	2.10	3.10	4.30	2.20	.....	.....	.....	.....	0.10	.....	4.10	4.60	.....
Point Arena Light-house	6.78	6.55	8.20	7.95	.....	0.75	.....	.....	0.10	2.25	4.46	8.50	.....
Point Bonita Light-house	2.90	3.96	3.80	2.67	.....	.....	0.24	0.13	0.36	2.82	6.64	6.97	.....
Point Conception Light-house	0.75	2.82	4.88	0.60	.....	.....	.....	.....	.....	.....	2.44	7.45	.....
Point Fermin Light-house	0.41	2.88	1.15	1.10	.....	.....	.....	.....	.....	0.51	1.23	2.75	.....
Point Hueneme Light-house	0.48	4.50	1.61	0.50	.....	.....	.....	.....	.....	1.05	0.90	5.25	.....
Point Lobos	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.13	3.86	4.39	.....
Point Loma Light-house	.....	.....	.....	0.31	.....	.....	.....	.....	.....	0.23	0.75	0.25	.....
Point Montara Light-house	1.16	2.10	2.50	1.68	.....	.....	.....	.....	0.06	0.70	3.64	5.55	.....
Point Pinos Light-house	0.96	2.25	3.79	1.07	.....	0.03	.....	0.14	0.36	0.70	7.37	3.45	.....
*Point Reyes Light	4.68	4.37	3.36	2.26	2.90	0.45	0.27	0.68	1.54	3.22	4.72	.....	.....
Point Reyes Light-house	4.68	.....	.....	2.11	.....	0.36	.....	.....	0.08	1.17	3.18	4.60	.....
Point Sur Light-house	0.84	2.66	3.35	1.16	.....	.....	.....	.....	0.38	0.90	4.34	3.58	.....
Pomona	0.95	2.25	2.20	0.00	2.40	0.00	0.00	0.00	0.00	0.15	2.52	2.30	.....
Portersville	0.26	1.33	2.21	0.16	0.65	0.22	0.00	0.00	0.00	0.17	0.54	2.43	7.97
Presidio	2.24	2.97	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Puente	0.61	1.79	1.90	0.08	1.94	0.00	0.00	0.00	0.00	0.24	2.38	2.65	11.49
Ravenna	1.32	0.49	3.50	0.06	0.30	0.00	0.00	0.00	0.00	0.00	1.10	1.65	8.45
*Red Bluff	4.30	3.11	2.69	2.92	3.02	0.27	T.	T.	0.29	1.42	7.25	8.21	33.48
Red Bluff	2.73	3.00	1.40	2.19	0.00	0.00	T.	0.00	0.22	1.35	7.74	9.02	27.65
Redding[2]	1.19	1.32	1.41	2.31	3.23	0.20	0.00	0.00	0.00	2.46	8.96	14.27	35.35
Redding[5]	4.08	3.52	3.96	4.27	4.44	0.10	0.03	0.00	0.04	2.10	6.30	10.79	39.63
Redlands[6]	0.87	4.37	2.06	.....	.....	0.00	0.00	0.00	0.03	0.00	0.63	1.58	.....
Redlands[8]	.....	.....	.....	.....	.....	.....	.....	0.00	.....	0.00	0.46	1.14	.....
Riverside[7]	0.82	2.60	1.08	0.21	1.30	0.10	0.00	0.00	0.00	0.29	0.28	1.58	8.26
Riverside[8]	0.53	2.64	0.84	0.00	1.04	0.10	0.00	0.00	0.00	0.10	0.17	1.41	6.83
Roe Island Light-house	1.45	1.93	1.75	0.37	.....	.....	.....	.....	.....	0.95	5.25	.....	.....
Rocklin	2.49	2.80	5.23	1.88	4.88	0.00	0.00	0.00	0.00	1.36	5.92	6.96	31.52
Rumsey	3.49	2.84	3.02	1.21	2.78	0.00	0.00	0.00	0.00	1.03	10.57	11.37	36.31
*Sacramento	1.78	2.84	3.02	1.20	2.38	T.	0.00	0.00	0.18	0.70	6.60	4.90	23.60
Sacramento[9]	1.78	2.58	3.90	1.21	2.57	T.	0.00	T.	0.20	0.87	6.54	4.81	24.46
Sacramento[10]	1.32	1.99	2.76	0.76	1.89	0.00	0.00	0.00	0.15	0.69	2.52	4.12	16.20
Sacramento[11]	1.37	1.99	2.76	0.76	1.89	0.00	0.00	0.00	0.13	0.69	2.36	4.12	16.07
Salinas[12]	0.44	1.57	2.78	0.85	1.53	0.00	0.00	0.00	0.08	0.66	2.31	2.13	12.35
Salinas[2]	0.48	1.48	2.78	0.88	1.29	0.00	0.00	0.00	0.16	0.86	2.26	4.30	14.49
Salton	2.75	0.43	0.60	.....	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
Sanger	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.35	0.38	2.84	.....
Sanger Junction	0.74	0.85	2.57	0.46	1.30	0.00	0.00	0.00	0.00	0.00	0.93	1.23	8.08
San Ardo[2]	0.58	0.48	1.37	0.08	1.61	0.00	0.00	0.00	0.00	0.15	1.80	3.40	9.47
San Ardo[13]	0.64	1.83	2.28	0.10	1.93	T.	0.00	0.00	0.00	0.38	3.74	3.13	14.03
San Bernardino	3.24	3.30	1.75	0.37	2.10	0.08	0.00	T.	0.00	0.16	1.02	2.23	14.25
*San Diego	1.58	2.96	0.96	0.41	1.15	0.13	0.00	0.05	T.	0.22	0.94	0.69	9.09
San Diego Barracks	1.55	2.51	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*San Francisco	2.42	2.90	2.85	1.39	1.86	T.	0.00	0.00	0.02	1.65	3.91	5.08	22.08
San Gabriel	1.19	2.26	3.20	0.20	3.18	0.00	0.00	0.00	0.00	0.23	3.17	3.91	17.34
San Jacinto	.....	.....	.....	.....	.....	.....	T.	.....	.....	0.69	0.77	1.27	.....
San José[2]	1.11	1.60	4.75	0.65	1.60	0.05	0.00	0.00	0.00	1.00	4.00	7.77	22.53
San José[14]	.....	.....	.....	.....	1.05	.....	0.00	0.00	T.	.....	5.43	6.06	.....
San Luis Light-house	0.73	3.97	2.64	0.90	.....	.....	.....	.....	.....	0.60	2.40	3.55	.....
San Luis Obispo	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.21	2.79	6.54	.....
San Mateo	1.88	1.55	2.49	1.01	1.57	0.00	0.00	0.00	0.03	1.45	7.67	5.91	23.56
San Miguel	0.26	0.97	2.30	0.06	1.25	0.02	0.00	0.00	0.00	0.40	2.41	3.27	10.94
San Pedro	0.86	3.19	1.39	0.77	1.29	0.00	0.00	0.00	0.00	0.63	1.41	3.31	12.85
Santa Ana	1.23	2.26	0.86	0.25	1.92	0.00	0.00	0.00	0.00	0.16	1.14	1.46	9.28
Santa Barbara[15]	1.10	2.55	2.95	0.46	1.12	0.00	0.00	0.00	0.00	0.26	4.27	6.66	19.37
Santa Barbara[2]	1.04	2.48	3.36	0.34	0.62	0.00	0.00	0.00	0.00	0.42	3.70	7.31	19.27
Santa Barbara Light-house	0.92	3.38	2.89	0.45	.....	.....	.....	.....	.....	0.18	2.86	5.67	.....
Santa Clara	0.94	1.44	3.42	0.54	1.62	0.06	0.00	0.00	0.00	1.19	4.12	7.75	21.08
Santa Cruz[2]	1.33	4.79	2.74	1.80	3.63	0.00	0.00	0.00	0.35	0.92	3.86	8.48	27.90
Santa Cruz[16]	1.40	4.60	2.82	1.83	3.95	0.00	0.00	0.00	0.25	0.93	5.05	7.15	27.98
Santa Cruz Light-house	1.34	4.29	2.70	1.67	.....	.....	.....	.....	0.29	0.78	7.03	6.49	.....
Santa Margarita	1.54	2.19	4.49	0.67	2.65	0.00	0.00	0.00	0.00	0.30	7.40	8.15	27.39
Santa Maria	0.56	2.18	2.36	0.45	1.15	T.	0.00	0.00	0.00	0.35	1.95	2.52	11.52

[1] Chabot Observatory.
[2] Pacific Railroad.
[3] G. W. Barlow.
[4] A. G. Platt.
[5] L. F. Bassett.
[6] The Citrograph.
[7] W. E. Keith and Riverside Press.
[8] C. L. Fox.
[9] S. H. Gerrish.
[10] Division Superintendent Pacific Railroad.
[11] Company's shops.
[12] Dr. E. K. Abbott.
[13] M. Gorman.
[14] Dr. A. C. Simonton.
[15] H. D. Vail.
[16] W. R. Springer.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
California—Continued.													
Santa Monica	1.11	4.40	2.12	0.62	2.13	0.00	0.00	0.00	0.00	0.00	2.75	3.15	16.28
Santa Paula	0.70	3.99	3.24	0.54	1.80	0.00	0.00	0.00	0.00	.....	0.00	6.58	.....
Santa Rosa	3.43	5.07	4.14	2.65	3.78	0.00	0.00	0.00	0.00	1.44	3.37	6.55	30.43
Saticoy	.....	3.96	3.11	.....	.....	.....	.....	.....	.....	1.07	2.81	6.03	.....
Selma	0.31	1.27	1.57	0.80	0.38	0.00	0.00	0.00	0.00	0.45	0.80	1.17	6.75
Shasta	3.78	4.17	8.92	7.77	4.72	0.77	0.42	0.00	1.71	3.31	12.18	17.46	65.21
Shingle Springs	2.55	6.43	4.95	2.26	1.98	0.00	0.00	0.00	0.15	2.30	7.85	8.25	36.72
Sims	1.12	5.29	8.81	8.39	7.27	0.74	0.19	0.00	1.24	1.64	13.39	26.92	75.00
Sisson	2.34	0.66	4.19	5.38	3.74	0.39	0.00	0.00	1.71	1.03	8.75	9.57	37.76
Soledad	0.20	1.47	2.03	0.29	0.85	0.00	0.00	0.00	0.05	0.75	1.70	2.97	10.31
Sonoma	2.61	3.57	3.04	2.01	2.55	0.00	0.00	.....	T.	1.37	6.46	7.97	.....
S. E. Farallon Light-house	2.40	.....	2.15	1.57	.....	0.02	.....	.....	.....	0.96	4.04	2.53	.....
Sonora	.....	3.55	5.03	2.46	3.72	.....	.....	.....	.....	.....	.....	4.66	.....
South Vallejo	1.72	2.73	1.80	1.53	1.59	0.00	0.00	0.00	0.00	1.36	3.81	2.87	17.41
Spadra	.....	.....	.....	.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	.....
Steeles	0.83	2.98	3.46	1.03	2.49	.....	.....	.....	.....	.....	.....	.....	.....
Stockton [1]	0.95	1.25	2.50	0.81	1.44	0.36	0.00	T.	0.08	0.79	3.66	2.99	14.83
Stockton [2]	1.28	1.73	3.20	1.09	1.84	0.35	0.00	0.00	0.12	0.98	2.59	5.70	18.88
Summit	4.00	3.40	7.40	4.50	6.30	0.20	0.00	0.00	0.00	0.60	8.80	9.50	44.70
Suisun City	1.73	2.98	2.05	2.09	2.52	0.00	0.00	0.00	0.00	1.18	3.53	7.06	23.14
Susanville	1.77	2.96	2.80	2.80	1.35	0.98	0.00	0.00	.....	0.83	10.66	6.80	.....
Sutter Creek	.....	2.34	4.80	2.58	3.61	0.41	0.00	T.	0.29	1.27	7.29	6.36	.....
Tehachapi [3]	0.92	.....	2.72	0.61	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.40	.....
Tehachapi [2]	.....	.....	.....	.....	.....	.....	.....	.....	0.00	0.12	0.11	1.52	.....
Tehama	5.35	1.59	1.41	3.00	4.47	0.67	0.00	0.00	0.00	0.23	16.58	12.96	46.26
Templeton	0.86	2.12	3.46	0.33	2.17	0.00	0.00	0.00	0.00	0.47	4.11	3.94	17.46
Towles	4.95	7.16	9.32	7.88	8.10	0.75	0.00	0.00	0.93	2.74	12.54	17.33	71.70
Tracy	0.43	0.95	1.90	0.71	1.00	0.05	0.00	0.00	0.00	0.00	0.00	7.21	12.25
Traver	0.16	1.50	3.41	0.12	1.16	0.00	0.00	0.00	0.00	0.02	0.47	1.93	8.77
Trinidad Light-house	4.10	2.83	5.49	6.05	.....	0.23	.....	0.35	1.15	3.66	6.71	.....	.....
Tropico	0.37	2.89	2.05	0.25	1.59	0.00	0.00	0.00	0.00	0.27	2.79	5.36	15.57
Truckee	2.65	2.80	3.00	2.96	4.20	0.95	0.00	0.00	0.29	0.37	5.73	8.15	31.10
Tulare [3]	0.26	1.47	1.83	0.26	0.84	0.15	0.00	0.00	0.00	0.20	0.31	1.34	6.66
Turlock [3]	0.35	1.45	2.02	0.50	1.22	0.00	0.00	0.00	0.00	0.67	1.49	2.75	10.45
Turlock [4]	0.37	1.38	2.20	0.62	1.42	T.	0.00	0.00	0.13	0.68	2.58	2.50	11.88
Ukiah	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.80	7.17	8.93	.....
Upper Lake	3.93	2.50	.....	2.84	3.71	0.49	0.00	0.00	T.	1.17	.....	.....	.....
Upper Mattole	10.37	5.58	8.08	9.52	5.80	0.39	0.00	0.00	1.61	4.75	13.69	24.48	84.27
Vacaville [4]	2.36	3.45	2.44	2.31	3.16	0.08	0.00	0.00	0.07	1.45	6.75	7.11	29.18
Vacaville [3]	2.64	3.07	2.17	1.35	1.55	0.00	0.00	0.00	0.00	1.48	3.59	6.50	22.35
Valley Springs	1.90	1.75	4.15	1.80	2.93	0.15	0.00	0.00	0.12	1.16	3.40	7.66	25.02
Ventura	1.01	4.54	2.25	0.57	0.00	0.00	0.00	0.00	0.00	0.70	2.15	5.80	17.02
Vina	4.13	1.13	1.50	2.30	1.67	0.19	0.00	0.00	0.00	1.06	3.41	5.88	21.27
Volcano Springs	0.16	0.59	0.04	.....	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00	.....
Volta	0.27	1.36	2.12	1.12	0.66	.....	.....	.....	.....	.....	.....	.....	.....
Walla Walla Creek	2.38	0.47	2.39	2.94	1.29	0.76	0.35	0.00	0.82	.....	.....	.....	.....
Walnut Creek	1.17	1.91	2.81	0.89	1.58	0.00	0.00	0.00	0.25	1.78	7.13	5.30	22.82
West Butte	2.72	2.59	2.90	1.68	2.82	.....	0.00	0.00	.....	0.51	5.61	4.68	.....
Westley	0.44	1.32	1.91	0.82	0.85	0.00	0.00	0.00	0.46	1.74	1.77	4.11	13.42
Wheatland	3.12	2.55	4.16	2.29	2.96	T.	0.00	0.00	0.07	1.04	5.81	4.32	26.32
Whittier	0.90	2.15	2.25	0.21	1.69	0.00	0.00	0.00	0.00	0.11	1.40	2.87	11.58
Williams	2.33	1.34	1.54	1.10	1.74	0.00	0.00	0.00	0.00	0.00	0.00	2.44	10.49
Willows [4]	3.72	2.11	2.12	1.13	2.60	0.12	0.00	T.	T.	0.53	5.78	5.81	23.92
Willows [3]	3.45	3.20	2.93	1.71	2.95	0.20	0.00	0.00	0.00	0.55	5.75	6.45	27.19
Winchester	0.46	1.47	.....	0.16	0.61	0.04	0.00	0.00	0.00	0.00	0.57	1.00	.....
Winters	2.77	3.13	1.89	0.82	2.08	0.00	0.00	0.00	0.00	0.61	0.00	13.68	24.98
Woodland	2.05	2.73	2.14	1.28	2.22	0.00	0.00	0.00	0.00	0.57	5.47	5.10	22.56
Yerba Buena Light-house	2.21	2.90	2.35	1.01	.....	.....	.....	.....	.....	2.04	4.05	4.35	.....
Yountville	3.65	5.18	.....	1.22	3.55	T.	.....	.....	.....	.....	.....	.....	.....
Yreka	1.65	0.15	1.02	.....	.....	0.87	0.31	0.00	0.61	0.05	3.37	3.64	.....
Yuba City	3.28	3.48	3.54	1.91	3.03	T.	0.00	T.	0.20	1.17	6.75	5.52	28.88
Colorado.													
Abbott	0.40	0.70	0.60	2.55	.....	1.08	2.87	1.05	T.	1.66	0.05	0.37	.....
Alma	0.37	0.25	1.42	0.65	0.87	1.11	1.97	0.78	0.00	0.91	1.26	0.84	10.43
Amherst	.....	2.60	0.55	3.08	5.15	.....	.....	.....	.....	0.40	0.04	.....	.....
Apishapa	0.40	0.30	1.40	0.80	.....	.....	.....	.....	.....	.....	.....	.....	.....
Arboles	0.85	1.47	0.55	0.50	0.35	0.00	0.09	0.07	0.60	0.12	0.04	0.40	4.44
Avoca	0.22	1.80	1.25	2.80	7.22	0.51	4.74	5.29	1.09	0.65	0.04	.....	.....
Box Elder	1.00	0.60	1.10	0.90	5.30	2.35	0.11	1.15	0.00	0.65	0.00	0.21	13.37
Brandon	.....	.....	1.07	0.02	6.10	3.61	.....	.....	0.00	.....	.....	.....	.....
Breckenridge	.....	.....	6.10	5.95	3.09	1.60	7.19	0.40	0.00	.....	.....	4.64	.....
Brush	0.52	1.70	0.79	2.71	3.12	1.36	2.86	1.02	0.05	2.42	0.09	0.18	16.82
Byers	0.76	0.70	0.35	.....	.....	.....	.....	.....	.....	.....	.....	0.70	.....
Cañon City	.....	.....	.....	.....	1.51	0.15	2.28	.....	.....	.....	.....	.....	.....
Carson	0.98	0.85	3.75	1.50	0.80	T.	.....	.....	0.00	0.50	.....	.....	.....
Castle Rock	0.60	1.30	1.55	2.65	1.42	.....	4.25	1.11	1.12	2.97	0.71	1.90	.....
Cheyenne Wells	0.10	0.60	2.25	0.50	3.80	3.63	2.09	4.40	T.	0.45	0.20	0.96	18.98
Chivington	0.10	.....	1.95	.....	9.73	2.95	2.51	2.47	1.10	.....	.....	.....	.....
Climax	2.80	3.00	5.50	2.80	2.50	2.20	3.50	0.90	0.00	4.30	3.00	6.60	37.10
Collbran	.....	.....	.....	2.61	1.88	0.03	0.76	0.58	0.00	1.69	0.49	1.13	.....
Colorado Springs	0.30	0.11	1.32	0.38	2.01	1.62	2.96	0.68	0.08	1.54	.....	.....	.....
Como (near)	0.22	0.41	1.14	0.56	0.95	1.70	2.19	1.05	0.15	0.54	0.68	0.89	10.48
Cope	0.63	1.10	1.96	4.64	6.16	0.56	7.54	3.13	0.32	1.77	T.	0.55	28.36
Crook	1.27	1.00	0.73	2.74	5.73	0.15	.....	.....	.....	1.57	T.	0.51	.....
Cumbres	3.40	4.50	3.10	3.10	0.40	0.07	2.90	2.18	0.00	1.90	0.40	4.00	25.95
Deer Trail	0.35	0.85	0.70	.....	.....	.....	.....	.....	.....	.....	.....	0.80	.....

[1] T. G. Brown. [2] Pacific Railroad. [3] Austin Young. [4] P. R. McCabe. [5] G. O. Coburn. [6] A. W. Schorn.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Colorado—Continued.													
Del Norte	.....	0.10	.....	.....	0.29	0.05	1.62	0.22	0.00	0.94	0.55	0.38	.....
Delta	1.20	0.45	2.05	.....	0.27	0.05	0.92	0.15	0.00	0.10	0.50	0.15	.....
*Denver	0.40	0.75	1.20	1.75	2.14	1.33	1.19	0.58	T.	3.92	0.44	1.32	15.02
Dillon	1.20	1.38	4.10	3.53	3.74	2.03	4.18	1.97	0.21	2.74	1.79	3.08	29.95
Downing	0.67	0.44	2.22	2.40	2.12	1.18	0.72	0.90	0.03	1.63	1.09	0.95	14.35
Dumont	0.27	1.30	1.49	2.05	2.21	.....	2.69	1.67	0.00	1.42	0.85	1.10	.....
East Dale	0.00	.....	.....	.....	0.22	0.55	1.62	0.60	0.00	0.78	0.30	0.30	.....
First View	.....	0.20	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.10	.....
Fort Collins	0.60	1.29	1.52	1.60	4.83	2.42	1.32	0.22	0.14	0.93	0.23	0.35	15.45
Fort Collins (near)	0.52	0.70	1.33	0.96	4.18	1.20	1.95	0.05	0.20	0.49	0.06	0.24	11.88
Fort Logan	T.	0.77	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fruita	1.92	0.80	1.15	0.88	1.11	T.	0.27	.....	T.	1.14	0.66	0.09	.....
Garnett	.....	0.32	0.34	0.44	1.01	0.35	0.76	0.11	0.00	0.91	0.00	0.13	.....
Gaynor	0.76	1.38	1.25	1.60	5.22	2.02	1.04	0.19	0.09	1.54	0.22	0.32	15.63
Georgetown	0.18	0.80	2.16	2.18	2.96	0.23	1.98	1.45	0.00	1.40	0.96	0.84	15.14
Glen Eyrie	0.35	0.50	1.85	0.71	.....	0.94	2.57	0.50	0.04	0.89	0.73	0.64	.....
Gold Hill	0.95	1.45	2.15	3.17	3.90	3.70	2.78	0.65	0.18	2.42	1.40	1.80	24.55
Grand Junction	.....	.....	1.42	1.37	0.65	0.06	0.71	0.10	0.00	1.05	0.38	0.10	.....
Greeley	.....	.....	.....	.....	2.36	1.79	0.96	0.14	0.03	0.87	0.15	0.24	.....
Greenhorn	1.25	1.30	3.00	2.70	2.90	0.60	1.68	1.88	T.	2.25	0.90	3.65	22.11
Grover	0.79	0.78	0.37	1.24	2.27	0.72	0.86	0.62	0.00	2.46	0.00	0.10	10.21
Hugo	0.20	0.30	0.85	.....	5.35	1.50	.....	.....	.....	.....	0.16	0.29	.....
Husted	0.22	0.30	1.32	0.94	1.74	0.96	4.93	1.03	0.11	3.07	1.18	0.95	16.75
Idaho Springs	0.29	0.80	2.03	2.24	1.70	1.45	.....	0.84	T.	2.16	0.73	0.79	.....
Jefferson	2.60	1.75	1.87	0.50	4.06	1.59	3.33	2.88	.....	.....	.....	.....	.....
Julesburg	0.78	2.05	0.41	4.73	3.22	0.39	3.44	1.43	0.81	2.07	0.06	0.41	19.80
Kirk	0.30	0.40	.....	1.60	5.20	0.37	6.58	2.60	0.00	0.00	0.00	.....	.....
Kit Carson	0.05	0.40	5.10	.....	.....	.....	.....	.....	.....	.....	.....	0.36	.....
La Jara	.....	.....	.....	.....	0.76	0.63	1.47	0.38	0.19	1.19	0.25	0.36	.....
Lamar	T.	0.04	2.75	0.76	3.27	1.37	1.21	2.09	0.11	0.40	0.00	0.28	12.28
La Porte	0.55	1.34	1.42	0.92	4.30	2.21	2.04	0.32	0.00	1.13	0.16	0.47	14.86
Las Animas	0.40	0.53	2.30	0.05	1.13	1.06	1.09	0.12	0.04	0.08	0.02	0.50	7.32
Lavender	1.05	1.24	0.93	1.33	1.60	0.05	3.55	0.81	0.00	0.72	0.10	1.00	12.38
Lay	1.57	0.99	2.22	0.98	1.37	0.72	0.30	0.42	.....	.....	0.98	1.07	.....
Leroy	0.89	2.24	0.80	4.02	2.53	1.48	3.07	1.83	0.84	1.66	0.10	0.65	20.11
Leslie	0.98	0.74	T.	2.80	2.74	0.98	3.43	1.38	0.15	0.11	0.00	.....	.....
Livermore	0.70	1.10	0.71	1.05	3.65	2.50	0.76	0.36	0.60	0.97	0.37	.....	.....
Longmont	0.30	0.64	2.22	1.56	4.20	2.77	1.28	0.22	.....	2.81	0.43	0.78	.....
Loveland	0.77	0.55	1.28	1.91	3.93	2.54	1.29	0.09	0.13	1.84	0.25	0.50	15.08
Manhattan	0.43	0.69	0.43	1.80	2.33	0.90	1.40	.....	.....	1.60	0.25	0.30	.....
Meeker	3.08	1.30	.....	.....	.....	.....	.....	0.44	T.	1.22	1.97	1.30	.....
Middle Box Elder	0.47	1.12	1.16	1.29	4.05	2.22	1.47	0.20	0.28	0.96	0.18	0.23	13.63
Minneapolis	0.50	0.90	3.64	0.24	4.68	1.37	1.85	.....	0.18	0.53	0.31	0.65	.....
Monte Vista	0.59	0.49	0.39	1.18	1.37	0.05	2.73	0.30	0.00	0.87	0.37	.....	.....
*Montrose	0.98	0.94	1.61	1.06	1.40	0.02	1.21	0.37	T.	0.52	0.26	0.60	9.03
Moraine	0.50	1.30	1.34	1.69	3.21	0.84	2.17	0.62	0.06	0.55	0.60	0.60	13.48
Orchard	.....	.....	.....	.....	.....	0.45	1.06	.....	0.00	0.00	0.00	0.75	.....
Pagoda (near)	2.70	1.90	2.50	1.86	2.40	0.57	0.77	0.35	0.00	2.10	1.20	1.90	18.25
Paonia	.....	.....	.....	0.94	0.56	T.	1.01	0.52	0.00	1.77	0.29	0.53	.....
Parachute	0.72	0.82	0.35	0.19	2.60	0.25	0.46	0.30	0.00	1.13	0.00	0.19	7.01
Paradox	1.57	1.24	1.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Pike's Peak‡	.....	.....	.....	.....	.....	.....	.....	.....	0.01	6.05	5.10	20.51	.....
Platoro	1.60	2.10	3.25	1.75	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Pueblo	0.19	0.06	1.53	0.93	1.77	1.50	3.22	1.57	T.	1.98	1.01	1.02	14.78
Red Cliff	1.45	2.68	2.38	1.13	1.50	0.74	2.98	0.31	T.	3.40	2.20	.....	.....
Rico	1.70	2.85	1.70	0.45	2.10	0.00	1.83	0.00	0.71	2.00	0.42	1.21	14.97
Robb	0.58	1.80	1.99	3.36	4.31	0.37	4.75	2.40	0.74	0.69	T.	0.31	21.30
Rocky Ford	0.50	0.80	1.50	0.73	3.26	3.31	1.99	3.10	0.00	0.95	0.50	0.46	17.10
Saint Cloud	.....	0.52	1.33	3.75	4.31	1.68	0.00	0.00	0.00	1.30	0.50	.....	.....
Sanborn	0.00	0.60	0.81	1.82	2.71	1.92	2.38	3.20	0.00	1.54	0.00	.....	.....
San Luis	0.70	1.25	1.69	1.38	0.55	0.13	1.34	0.55	0.01	1.69	0.45	1.30	11.04
Scissors	.....	.....	.....	.....	.....	0.39	1.03	.....	0.00	0.71	1.10	3.00	.....
Sedgwick	0.29	1.11	0.04	1.75	3.10	0.62	3.08	1.80	.....	.....	.....	.....	.....
Seibert	.....	.....	0.30	0.11	1.95	1.04	.....	3.47	0.15	0.95	0.01	0.14	.....
Sheridan Lake	0.08	0.17	1.54	0.87	4.67	2.15	1.90	2.71	0.28	0.23	0.05	0.16	14.81
Smoky Hill Mine	1.30	1.50	2.53	1.07	3.24	0.88	2.83	1.10	0.17	2.94	.....	2.70	.....
Springfield	.....	0.89	2.55	.....	.....	1.55	2.11	.....	0.00	0.65	.....	.....	.....
Stamford	0.90	1.10	4.60	2.25	0.80	0.20	5.20	2.40	T.	1.25	1.20	.....	.....
Steamboat Spring	2.00	3.20	0.66	1.20	2.00	1.00	T.	0.00	0.00	1.60	0.50	1.70	13.86
Surface Creek	1.32	1.62	2.79	1.29	1.07	T.	1.24	0.52	T.	1.02	0.32	0.35	11.54
Table Rock	0.37	1.11	0.97	1.75	1.70	2.42	5.73	0.59	0.00	3.36	0.62	0.97	19.59
T. S. Ranch	1.32	1.14	2.65	1.61	1.16	0.01	0.64	0.63	0.00	1.79	0.49	0.35	11.79
Thon	0.11	1.28	0.35	0.84	2.70	1.30	2.52	0.58	0.80	0.76	0.30	1.20	12.74
Twin Lakes	0.36	0.64	1.45	0.88	0.52	0.63	2.20	0.14	0.00	.....	.....	.....	.....
Vilas	.....	0.87	2.96	0.05	2.63	1.52	1.96	2.73	T.	0.40	0.20	0.20	.....
Villa Grove	0.24	1.22	1.10	0.25	0.72	0.00	2.88	1.04	.....	2.59	0.95	1.64	.....
Wallet	.....	.....	.....	1.17	5.20	2.01	4.95	4.57	T.	0.52	T.	0.30	.....
Ward District	1.84	3.48	2.18	4.11	4.08	0.95	3.13	1.65	0.00	0.56	0.01	1.52	23.51
Watervale	0.60	0.50	1.90	.....	.....	2.96	0.98	1.90	.....	.....	.....	.....	.....
Wilde	.....	.....	.....	0.86	2.74	1.86	0.44	0.67	0.00	1.16	0.02	0.40	.....
Yuma	0.80	1.55	0.80	3.20	3.46	1.20	4.44	1.50	0.35	1.00	T.	0.62	18.92
Zuck	.....	0.23	2.42	0.39	3.94	1.43	0.92	2.45	0.90	0.31	0.11	0.16	.....
Connecticut.													
Canton	5.06	1.54	2.73	0.68	6.80	3.48	4.97	8.13	2.53	1.10	6.49	1.48	44.09
Colchester	4.76	1.22	3.50	1.21	5.05	.....	3.33	3.91	1.34	1.28	7.58	1.37	.....
Falls Village	5.71	1.36	2.76	0.70	6.43	5.74	6.09	6.13	3.45	1.22	3.76	1.24	44.59
Fort Trumbull	4.57	1.12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hartford	6.67	1.28	3.88	0.83	5.65	1.78	3.39	5.51	1.90	1.28	5.71	1.22	39.10
Lake Konomoc	7.01	1.72	.....	1.79	5.31	2.18	2.76	3.22	1.51	1.19	5.93	1.46	.....

‡The measurements at this station do not represent the actual precipitation.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Connecticut—Continued.													
Lebanon	5.67	1.31	3.64	1.13	5.93	1.59	2.82	3.53	2.27	1.78	4.72	1.28	35.67
Mansfield	4.91	1.60	3.00	0.70	5.60	2.77	.....	.....	.....	.....	.....	.....	.....
Middletown	.....	.....	.....	.....	.....	1.61	2.63	3.90	2.24	1.38	6.83	1.74	.....
New Hartford[1]	5.53	1.86	3.41	0.75	6.14	3.83	4.82	6.96	3.08	1.29	5.98	1.06	44.71
New Hartford[2]	5.15	3.30	1.64	0.74	5.96	4.50	3.86	5.50	2.56	1.28	6.79	1.90	43.18
*New Haven	5.39	1.56	3.07	1.31	5.11	2.36	4.33	4.99	1.54	0.94	5.46	1.72	37.78
*New London	4.82	1.71	4.33	1.86	4.07	2.46	2.57	3.45	2.04	0.98	4.79	1.67	34.75
N. Grosvenor Dale	5.38	1.70	3.16	0.59	6.00	3.79	4.54	5.00	1.80	1.52	5.61	1.29	40.38
North Woodstock	.....	.....	.....	.....	6.80	3.50	4.70	2.80	2.40	T.	.....	.....	.....
Norwalk[3]	3.52	0.91	1.82	1.00	3.05	.....	.....	.....	.....	.....	.....	.....	.....
Norwalk[4]	.....	1.26	2.48	1.34	5.13	1.48	4.75	5.50	2.30	0.68	8.86	1.54	.....
Southington	5.50	1.28	4.00	1.05	5.63	1.10	2.25	5.15	2.43	1.15	5.38	1.30	36.22
South Manchester	4.85	1.68	2.77	0.85	5.47	2.03	3.42	5.15	1.81	1.20	6.49	1.27	37.04
Stevenson	6.29	1.09	2.97	1.44	4.58	2.04	4.21	3.43	2.84	1.14	7.10	1.48	38.41
Storrs	.....	.....	.....	.....	.....	.....	3.25	2.20	1.40	1.09	5.41	1.35	.....
Voluntown	5.77	1.25	4.32	1.82	4.58	1.97	3.00	3.26	2.83	2.26	6.54	1.82	39.22
Wallingford	6.41	1.72	3.59	1.14	4.57	1.99	3.47	3.74	2.16	0.92	6.28	1.89	37.88
Waterbury	6.01	1.30	3.45	0.95	5.55	2.27	4.37	5.30	2.62	0.92	5.96	1.74	40.44
West Simsbury	5.18	1.19	5.17	0.66	6.17	3.17	4.47	5.38	2.01	0.90	5.62	1.28	41.20
Delaware.													
Dover	4.89	3.02	6.40	4.06	5.59	1.45	4.85	2.54	2.71	0.46	5.79	2.10	43.36
Seaford	4.78	2.02	6.73	5.58	3.15	2.34	2.90	1.39	1.81	0.84	6.60	2.51	40.65
District of Columbia.													
Distributing Reservoir	5.53	1.77	7.04	5.28	4.32	1.42	6.40	1.40	4.85	0.31	4.76	3.02	46.10
Kendall Green	.....	3.70	3.73	4.19	4.21	.....	.....	.....	.....	.....	.....	.....	.....
*Long Bridge	4.79	2.23	5.41	4.96	3.96	3.54	4.31	2.11	2.85	0.25	3.19	2.87	40.47
Receiving Reservoir	5.29	1.75	6.27	5.34	4.81	3.01	4.86	1.19	4.10	0.26	3.85	2.79	43.52
*Washington	5.84	3.64	5.70	4.52	4.07	2.59	5.04	0.85	3.55	0.34	3.38	2.82	42.34
Washington Barracks	4.99	3.08	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
West Washington	6.80	3.98	5.23	4.34	4.10	2.53	5.02	0.80	3.63	0.34	3.19	2.82	42.78
Florida.													
Amelia	3.20	2.60	1.50	0.10	3.90	9.00	3.95	6.75	10.35	2.22	0.21	4.04	47.82
Archer	2.57	0.32	1.38	0.19	1.83	20.19	4.85	11.15	.....	.....	.....	3.40	.....
Avon Park	.....	.....	.....	.....	1.17	8.70	6.34	6.40	10.01	4.97	0.23	0.70	.....
Bristol	.....	.....	.....	.....	2.63	8.68	9.85	12.34	4.00	0.00	2.51	4.35	.....
Brooksville	3.30	0.82	1.64	0.66	2.16	7.45	2.83	13.59	9.77	5.09	0.46	2.10	49.87
Clermont	.....	.....	.....	.....	.....	.....	.....	10.67	5.88	2.80	0.47	2.28	.....
Eustis	3.31	0.95	1.25	1.67	2.34	5.67	2.76	9.00	8.07	1.91	0.33	4.26	41.52
Federal Point	.....	0.26	.....	0.77	1.16	8.07	2.50	12.10	13.51	3.32	0.05	1.80	.....
Fort Barrancas	10.63	0.49	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Meade	1.25	1.87	0.80	0.82	2.65	9.96	3.41	12.96	7.12	4.11	T.	1.15	46.10
*Gainesville	.....	.....	.....	1.45	2.46	.....	2.36	.....	8.16	3.53	0.33	.....	.....
Green Cove Springs	3.44	0.30	0.90	0.30	1.71	7.64	5.72	9.09	15.83	6.11	0.15	1.40	52.79
Homeland	0.95	1.50	0.70	0.45	2.42	10.37	2.35	8.97	9.01	5.24	0.71	1.48	44.15
Hypoluxo	0.29	4.20	2.79	0.31	0.67	23.25	0.51	4.17	17.34	10.81	0.10	4.06	68.50
*Jacksonville	3.99	0.77	0.76	0.11	1.34	6.38	3.16	4.84	14.04	3.34	0.64	2.52	41.89
*Jupiter	2.56	2.70	3.76	0.53	2.30	14.76	0.08	2.80	14.43	14.00	0.89	4.44	63.25
*Key West	0.58	1.71	2.15	0.72	0.84	6.10	1.69	1.59	4.05	3.67	0.95	0.86	24.91
Kissimmee City	.....	.....	.....	0.41	2.34	.....	2.84	5.61	13.06	.....	.....	.....	.....
Manatee	3.21	1.50	1.68	0.27	3.16	9.93	9.58	9.72	8.51	2.68	1.28	.....	.....
Merritt's Island	0.42	2.77	0.56	1.04	3.13	5.83	5.03	2.37	8.04	3.59	0.40	1.66	34.84
*Micco	0.70	2.97	1.41	2.76	2.42	11.72	1.10	2.62	7.01	9.44	1.17	1.26	44.59
Mullett Key	.....	0.84	2.74	0.35	0.54	7.20	2.02	6.09	4.81	2.38	0.23	1.75	.....
Myers	0.40	0.75	2.30	4.44	5.32	12.23	7.57	6.62	13.66	4.64	1.45	1.73	61.11
Ocala	3.72	0.24	1.34	0.64	4.62	13.33	2.77	10.02	15.56	3.63	0.20	2.42	58.53
Orange City	1.86	0.48	0.87	0.92	4.78	4.00	.....	6.17	9.01	1.72	0.39	2.68	.....
Orlando	1.72	2.00	1.29	0.62	2.67	4.37	1.63	9.05	9.12	4.66	.....	2.03	.....
Oxford	.....	.....	0.21	1.24	3.72	8.66	5.09	13.74	.....	.....	0.39	2.83	.....
*Pensacola	8.72	0.53	2.47	0.42	0.19	3.55	11.48	8.74	1.72	1.28	2.94	1.98	44.02
Plant City	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.88	0.61	2.32	.....
St. Andrews Bay	5.81	1.40	2.34	0.66	0.51	9.68	17.40	.....	.....	.....	1.41	3.75	.....
St. Francis Barracks	4.25	0.85	1.00	0.80	1.45	3.27	1.13	7.36	14.50	3.40	0.15	1.77	39.93
St. Petersburg	3.70	1.13	1.99	0.19	0.97	8.75	4.50	10.87	8.36	2.65	1.21	2.47	46.79
Tallahassee	6.35	2.58	1.40	0.85	1.62	8.76	7.68	6.43	3.00	1.00	.....	3.89	.....
*Tampa	3.25	1.13	1.58	0.31	3.03	12.41	3.94	8.60	6.67	1.34	1.28	3.12	46.06
Tarpon Springs	3.57	1.69	1.99	0.34	1.53	7.85	5.94	13.56	8.15	2.35	0.58	2.25	49.80
*Titusville	1.07	2.09	1.30	1.08	3.80	8.76	0.97	2.24	16.67	6.75	0.56	2.41	47.70
Westville	.....	.....	3.19	1.97	0.26	5.95	.....	.....	.....	.....	.....	.....	.....
Georgia.													
Adairsville	.....	1.62	4.74	10.73	2.54	6.16	6.16	5.43	2.94	0.24	5.59	2.88	.....
*Aspaha	4.77	2.00	3.28	0.17	1.20	5.72	4.70	.....	4.79	0.90	2.56	4.69	.....
*Albany	3.61	.....	.....	T.	1.05	3.48	4.07	9.18	1.43	T.	2.85	0.70	.....
*Americus	6.78	3.70	6.95	0.27	4.38	5.47	6.56	9.00	2.85	0.25	3.36	2.73	52.30
Athens[5]	9.57	3.07	5.52	4.45	1.75	4.94	4.89	3.42	2.58	0.69	.....	3.55	.....
*Athens[6]	11.82	3.22	5.45	4.56	1.97	5.68	5.03	3.32	3.17	0.49	6.12	3.71	54.54
*Atlanta	8.93	3.44	5.71	4.75	1.37	4.65	3.77	6.66	2.70	0.59	4.41	2.89	49.87
*Augusta	7.75	2.96	4.55	1.34	2.95	4.83	4.13	2.46	5.49	0.27	1.82	1.22	39.27
*Bainbridge	.....	.....	.....	.....	.....	5.70	9.22	8.45	5.69	1.04	1.79	.....	.....
Blackshear	.....	.....	.....	0.60	1.69	5.48	4.66	8.19	.....	.....	.....	.....	.....

[1] Rev. Wm. Goodwin.
[2] R. R. Smith.
[3] Willis Earle.
[4] G. C. Comstock.
[5] Prof. L. H. Charbonnier.
[6] Cotton Belt Observer.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Georgia—Continued.													
Blakely	5.57	3.58	4.78	.....	1.40	8.12	7.33	8.19	3.25	2.11	4.14	3.47	.....
*Camak	.....	.....	.....	0.03	1.03	4.72	4.53	3.87	5.60	0.54	1.40	2.27	.....
*Canton	12.59	2.48	6.23	8.08	2.66	5.25	6.60	8.25	1.63	0.40	6.94	2.85	63.96
*Columbus	6.67	.....	11.36	0.51	2.42	1.33	2.10	4.54	1.14	0.40	2.86	.....	.....
*Cordele	5.72	.....	.....	T.	2.40	8.37	5.89	8.39	2.71	0.31	3.30	2.18	.....
Dahlonega	.....	3.31	5.66	6.25	2.12	9.84	8.21	5.51	3.64	0.47	6.47	3.90	.....
Darien	.....	0.20	1.32	0.15	1.78	6.36	4.57	5.00	20.05	1.88	1.23	2.62	.....
Diamond	11.87	4.16	4.28	10.82	2.97	5.31	5.99	3.45	2.08	0.43	7.92	3.35	62.63
Dublin	.....	.....	6.62	0.41	2.14	6.70	10.52	5.43	3.56	0.12	1.97	2.74	.....
*Eastman	.....	.....	.....	0.00	3.38	6.34	11.76	6.17	2.30	0.10	2.86	.....	.....
*Elberton	11.94	3.54	4.81	4.17	0.55	7.49	4.30	3.59	3.70	0.50	3.67	4.04	52.30
Fleming	.....	.....	4.01	0.11	0.43	8.79	5.14	12.31	12.46	.....	.....	.....	.....
Folkston	.....	.....	.....	.....	1.34	8.21	4.10	4.68	.....	.....	.....	.....	.....
Forsyth	9.59	4.93	10.68	0.55	2.76	5.55	7.52	7.72	3.36	0.50	3.29	4.44	60.89
*Fort Gaines	4.65	2.22	4.29	0.24	1.81	7.97	11.46	7.12	1.56	0.86	3.60	3.31	49.09
Fort McPherson	9.55	2.86	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Gainesville	.....	.....	.....	1.68	2.69	11.31	6.21	4.61	2.71	0.73	3.00	.....	.....
Gillsville	8.28	3.90	5.81	6.12	2.21	8.26	6.44	5.10	2.30	0.44	4.34	2.90	56.10
*Griffin	.....	.....	.....	.....	1.22	5.85	4.75	3.99	2.36	0.32	2.05	.....	.....
Hawkinsville	.....	.....	8.54	0.48	1.53	4.03	7.62	8.21	4.09	0.00	1.84	2.17	.....
Hephzibah	8.25	1.93	4.70	0.80	4.91	5.75	7.30	4.30	6.00	T.	1.30	2.86	48.10
Homerville	.....	.....	.....	.....	.....	6.72	8.28	6.70	6.91	1.37	1.14	3.70	.....
La Fayette	.....	.....	3.76	10.45	2.81	3.59	10.15	6.81	4.49	0.00	9.37	3.59	.....
La Grange	.....	5.98	6.16	1.59	2.39	4.42	5.45	4.17	2.77	0.43	2.64	4.68	.....
Lincolnton	.....	.....	5.96	2.34	1.75	7.79	4.00	1.73	.....	.....	.....	6.56	.....
Lithia Springs	6.38	.....	.....	5.39	1.86	3.05	4.17	.....	.....	.....	.....	.....	.....
Louisville	7.67	3.50	5.50	0.30	3.44	6.39	3.50	4.37	5.59	0.20	1.56	1.88	43.90
Lumpkin	.....	.....	6.68	0.17	3.01	3.71	4.91	7.94	4.47	0.17	.....	.....	.....
McArthur	.....	.....	.....	0.43	3.81	9.48	4.96	8.92	.....	.....	.....	5.13	.....
*Macon	.....	.....	.....	T.	2.13	5.48	4.87	3.20	1.57	0.42	1.81	.....	.....
Marietta	10.66	4.53	7.26	6.41	1.79	4.87	3.85	7.68	3.06	0.44	5.71	4.07	60.32
Marshallville	.....	.....	8.18	0.36	2.30	3.43	5.79	7.22	4.14	0.21	3.07	2.65	.....
Milledgeville	7.33	4.13	5.60	0.36	1.94	8.97	6.49	5.55	7.17	0.29	2.80	2.77	48.40
*Millen	5.66	2.15	4.70	0.59	2.96	11.25	4.93	6.00	9.56	0.59	3.19	2.54	54.12
Monticello	9.68	5.22	.....	.....	.....	.....	.....	.....	.....	0.46	3.03	.....	.....
Morgan	.....	.....	.....	0.21	2.27	8.12	6.68	5.16	2.01	1.29	3.37	3.38	.....
*Newnan	.....	.....	.....	0.01	1.35	4.34	4.64	6.56	5.22	0.36	4.23	.....	.....
Piscola	4.90	4.02	0.95	0.70	0.75	5.25	11.40	9.10	4.92	0.85	1.37	4.07	48.28
Point Peter	11.20	3.50	6.00	4.85	1.00	6.00	2.50	2.40	3.65	0.50	3.20	3.25	48.05
Poulan	4.88	3.10	3.11	0.12	1.20	8.39	5.39	12.33	2.29	0.87	3.29	2.36	47.33
*Quitman	6.00	3.15	0.75	0.36	0.67	7.44	8.47	9.75	3.61	0.39	1.04	2.79	44.42
*Resaca	10.64	3.15	4.58	8.80	2.45	5.01	9.23	6.05	3.52	0.20	7.20	3.07	63.90
*Rome	11.69	2.72	5.57	10.72	2.77	7.49	5.78	6.68	4.07	0.31	6.66	4.10	68.56
*Savannah	2.49	1.31	4.12	0.16	2.17	6.00	6.37	3.36	10.95	1.12	1.30	3.17	42.42
Statesboro	.....	.....	.....	.....	3.13	6.47	10.59	.....	.....	0.66	1.72	2.95	.....
*Thomasville	6.46	2.69	1.69	1.03	2.73	4.47	7.37	13.89	3.46	1.54	2.40	3.63	51.36
*Toccoa	8.95	4.18	5.69	6.48	2.78	13.93	8.22	5.87	4.01	0.50	4.18	2.62	67.41
*Union Point	5.15	2.05	2.12	2.23	0.54	3.56	3.80	2.50	2.53	0.80	2.06	1.14	28.48
*Washington	7.80	3.96	6.48	.....	1.46	3.97	4.98	4.67	1.20	0.45	0.00	.....	.....
*Way Cross	.....	.....	.....	0.00	0.90	5.27	3.31	9.98	7.51	0.32	0.00	.....	.....
*Waynesboro	7.40	2.99	5.23	0.63	4.26	6.27	5.87	5.39	4.41	0.30	1.31	1.61	45.67
*West Point	.....	.....	.....	0.00	2.87	3.45	8.14	4.61	3.65	0.15	3.08	.....	.....
Idaho.													
American Falls	0.91	0.39	1.59	0.89	2.55	1.40	0.39	0.36	0.00	0.85	0.08	1.97	11.38
Boise Barracks	1.53	0.25	1.44	1.25	3.51	1.22	0.00	0.00	0.18	0.77	0.66	0.94	11.75
Elk City	5.34	2.94	2.85	4.51	4.03	.....	.....	.....	.....	.....	.....	.....	.....
Era	0.73	0.03	2.05	1.05	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Sherman	2.51	0.32	2.14	2.60	2.15	0.55	1.11	1.51	1.26	1.06	7.00	4.80	27.01
Garden Valley	1.85	0.73	1.20	2.84	1.45	0.53	0.00	0.80	2.34	2.54	2.56	4.54	21.38
Henry Lake	2.00	1.00	1.90	1.10	2.26	1.10	T.	T.	0.65	0.81	2.50	2.70	16.02
[1]Idaho Falls	.....	.....	.....	.....	.....	2.05	0.48	0.20	0.43	1.77	0.74	2.10	.....
Kootenai	6.45	0.92	1.60	2.10	2.85	.....	0.41	1.12	5.10	1.26	6.03	5.85	.....
Martin	.....	.....	.....	.....	4.27	.....	T.	0.02	.....	1.42	2.10	.....	.....
Moscow	.....	0.97	0.87	2.62	6.16	0.51	0.19	0.55	.....	1.23	3.52	2.99	.....
Payette	.....	0.44	.....	.....	.....	.....	.....	T.	0.60	0.71	0.47	1.68	.....
Ruthburg	1.45	1.03	2.82	3.23	2.27	0.99	0.12	0.00	.....	0.24	2.52	.....	.....
Illinois.													
*Alton	2.09	4.38	2.09	6.38	7.87	3.57	5.35	1.65	2.50	1.40	3.05	2.17	42.50
Atwood	.....	.....	.....	8.97	.....	3.99	6.05	1.24	.....	.....	5.94	2.41	.....
Aurora[1]	1.53	1.18	2.28	3.59	8.29	12.83	4.48	2.74	2.36	1.28	1.63	2.26	44.45
Aurora[2]	2.30	1.51	2.83	4.00	8.03	13.09	4.90	2.93	2.53	1.23	2.07	2.54	47.96
*Beardstown	1.75	3.03	2.81	5.84	6.59	1.20	5.63	0.41	2.47	0.52	4.95	2.08	37.37
Beason	1.45	1.86	1.58	.....	.....	5.93	.....	.....	.....	.....	.....	.....	.....
Bloomington	.....	2.31	1.48	6.41	8.27	6.86	4.68	1.16	2.70	1.25	2.62	1.21	.....
Bushnell	.....	.....	.....	.....	.....	.....	.....	.....	2.11	1.19	2.55	1.63	.....
*Cairo	2.01	3.32	2.29	5.28	5.55	3.55	1.73	5.23	0.90	0.74	4.20	3.91	38.71
Carlinville	1.52	3.77	2.42	9.84	9.90	5.72	4.13	1.01	2.23	1.78	4.42	1.69	48.83
Centralia	.....	.....	1.86	11.96	7.02	3.08	.....	.....	.....	.....	.....	.....	.....
Charleston	1.13	5.65	1.29	10.11	10.90	3.81	3.35	2.72	.....	.....	.....	.....	.....
*Chester	1.85	3.98	1.22	7.37	6.77	2.91	3.53	2.34	1.75	2.14	6.05	1.64	43.55
*Chicago	1.99	1.57	2.21	2.17	6.77	10.58	2.23	1.85	1.34	1.54	2.68	1.63	36.56
Collinsville	1.53	4.83	1.95	10.27	.....	4.87	5.56	2.96	1.66	1.72	3.45	2.04	.....
Decatur	.....	.....	.....	4.20	5.24	.....	3.11	1.84	2.95	T.	5.46	T.	.....
Dixon	2.22	1.69	2.24	3.27	8.93	7.61	3.84	1.94	2.56	1.07	1.67	2.52	39.56
East Peoria	0.96	4.31	1.79	6.81	8.52	5.37	3.38	1.54	2.61	1.20	.....	1.08	.....
Effingham	.....	.....	.....	.....	.....	.....	.....	.....	0.49	0.76	2.98	1.20	.....
Ellsworth	0.70	2.75	2.33	7.50	7.60	6.80	3.20	4.30	3.00	0.80	2.40	1.30	42.68

[1] W. Holden. [2] Dr. M. M. Robbins.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Illinois—Continued.													
Fairmount	1.65	2.60	1.70	7.41	6.71	3.36	4.77	3.10	0.50	0.10	3.62	1.50	37.02
Flora	1.66	4.57	1.59	8.02	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Sheridan	0.48	1.81	0.95	3.57	6.51	10.91	2.54	0.86	1.67	0.00	1.78	2.60	33.68
Golconda	1.07	2.99	2.61	5.57	7.24	2.68	4.10	3.94	.....	2.05	3.88	1.58	.....
Greenville	2.62	4.41	2.37	7.91	7.79	5.37	3.10	2.64	2.08	1.53	4.26	2.28	46.46
Griggsville	2.05	3.73	2.67	6.97	8.93	1.85	5.94	0.85	3.46	1.52	3.20	0.92	42.09
Havana	1.65	1.98	1.54	4.84	7.69	3.02	2.29	.....	3.01	0.98	3.25	1.42	.....
Hennepin	1.20	0.60	2.63	3.33	12.57	10.01	4.22	0.32	1.25	0.70	2.65	2.30	41.78
Irishtown	2.44	3.03	1.24	8.33	6.81	4.60	4.21	.....	1.09	1.28	4.23	1.36	.....
Jordan's Grove	1.67	4.09	1.52	11.03	5.91	3.22	2.95	2.22	2.59	2.44	5.95	2.19	45.78
Kankakee	.....	.....	.....	.....	10.09	4.67	2.51	2.24	2.03	0.86	2.96	.....	.....
La Grange	.....	0.83	2.20	2.76	8.00	12.25	.....	.....	1.70	0.81	2.24	1.93	.....
Lanark	2.13	1.88	2.97	6.05	9.29	9.57	.....	.....	.....	.....	.....	.....	.....
Louisville	2.10	4.00	1.75	7.60	7.00	1.50	3.50	5.85	0.50	0.75	4.40	0.75	39.70
McLeansboro	1.43	3.44	0.93	7.50	6.92	2.30	1.85	3.97	.....	2.11	4.25	0.98	.....
Martinsville	1.60	1.80	.....	7.84	6.83	2.65	2.62	3.27	0.77	0.83	3.20	1.12	.....
Mascoutah	2.70	3.00	2.45	9.20	7.70	6.20	3.50	1.10	1.40	1.40	3.60	1.55	43.80
Mattoon	1.20	1.80	2.20	8.95	8.15	2.65	3.60	1.15	1.20	0.85	4.75	0.90	37.40
*Mount Carmel	2.40	4.58	2.41	6.40	4.94	3.85	2.93	4.11	1.80	1.28	4.26	1.25	40.21
Muddy Valley	0.34	3.43	1.78	3.84	.....	.....	.....	1.73	0.61	2.64	.....	1.31	.....
New Haven	1.42	.....	1.72	4.01	5.87	2.53	1.91	4.97	2.44	2.20	.....	3.06	.....
Olney [1]	1.35	4.15	1.56	7.85	5.11	2.07	4.14	3.26	0.76	0.82	3.39	1.03	35.49
Olney [2]	1.61	4.24	1.40	7.73	5.20	1.76	3.71	3.57	0.67	1.07	3.69	1.36	36.01
Oswego	1.74	1.17	2.32	3.45	8.05	10.51	4.71	1.71	2.32	0.96	2.11	1.97	41.02
*Ottawa	1.45	1.52	3.05	3.56	13.25	9.80	4.92	0.81	2.56	0.63	2.48	1.84	45.87
Palestine	1.15	4.97	1.88	9.18	6.60	3.53	2.47	3.02	1.60	1.08	4.43	2.00	41.91
Pana	2.11	5.61	3.32	11.99	8.57	2.76	6.49	6.07	3.25	1.57	7.25	4.33	63.32
Paris	.....	1.31	0.08	7.50	10.70	4.50	3.50	.....	.....	.....	.....	.....	.....
*Peoria [3]	2.00	2.16	2.94	4.85	6.84	7.79	3.54	0.70	2.37	0.86	3.46	1.94	39.45
Peoria [4]	1.25	1.84	2.45	4.54	7.70	6.05	3.08	0.73	2.35	1.20	2.72	1.75	35.66
Philo	1.69	3.71	2.21	7.79	7.43	2.81	3.10	4.29	1.16	0.50	4.92	1.80	41.41
*Quincy	.....	.....	.....	2.57	5.34	0.92	4.13	0.16	.....	0.30	3.75	1.51	.....
Rantoul	0.96	2.41	2.28	6.04	8.17	4.38	3.51	1.56	0.93	0.62	4.56	1.39	36.81
Riley	1.73	1.22	1.49	2.83	11.05	11.21	3.76	4.42	1.43	0.72	1.64	1.71	43.21
Rockford	3.72	1.95	1.61	4.71	9.18	14.16	4.32	7.26	1.61	0.78	2.53	2.96	54.79
Rock Island	1.31	1.39	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rushville	2.07	2.90	2.49	7.68	7.58	2.60	5.95	0.60	3.18	1.27	3.56	2.09	41.97
Saint John	1.50	2.56	2.16	5.98	7.76	2.14	2.08	.....	0.56	2.74	3.53	1.35	.....
*Shawneetown	1.11	1.67	2.45	5.10	3.80	1.82	2.30	2.96	2.30	2.02	4.22	1.36	31.11
*Springfield	1.14	3.41	2.69	7.19	7.51	2.51	5.63	1.80	3.48	1.05	4.19	1.78	42.47
Sycamore	1.73	1.21	2.01	4.81	11.77	11.23	2.56	3.56	1.62	0.95	2.13	2.06	45.84
Walnut	2.30	1.48	3.00	4.06	8.49	7.84	5.41	0.96	3.42	1.06	1.73	1.94	41.69
Watseka	.....	.....	2.27	7.33	9.47	3.98	1.35	2.42	2.51	0.52	1.95	1.44	.....
White Hall	1.75	40.9	2.30	6.29	9.20	2.59	6.16	0.87	1.99	1.44	2.79	1.94	41.41
Winnebago	2.60	1.76	1.95	4.40	8.33	10.29	3.85	5.15	1.74	0.50	2.12	2.38	45.07
Indiana.													
Angola	1.58	2.45	3.57	3.86	8.91	5.59	4.21	1.62	3.12	0.42	4.06	1.03	40.42
Ashboro	.....	.....	1.61	8.58	6.66	4.77	3.16	1.91	1.83	0.78	4.22	0.75	.....
Butlerville	1.61	4.05	2.20	7.87	5.89	4.81	2.38	5.27	3.67	0.90	3.65	1.25	43.55
Cambridge City	.....	.....	.....	.....	5.32	5.59	4.05	2.24	4.09	0.20	3.57	1.89	.....
Columbia City	1.39	2.33	3.50	4.47	11.12	4.17	1.89	1.82	4.27	0.80	4.00	1.31	41.07
Columbia	1.83	3.59	1.10	5.74	6.52	3.82	3.60	2.66	2.90	0.69	2.85	1.51	36.81
Connersville	1.13	3.77	2.34	6.51	5.84	6.13	2.79	1.77	2.27	0.38	3.38	1.49	37.80
De Gonia Springs	2.04	3.83	2.70	8.79	5.33	3.68	3.20	3.60	5.51	1.68	4.12	2.16	46.64
Delphi	1.27	2.52	2.81	5.79	10.16	5.66	3.82	2.10	1.37	0.24	3.86	0.56	40.16
*Evansville	2.09	3.79	2.47	6.57	4.34	2.26	3.11	3.40	1.85	1.91	4.68	1.82	38.29
Farmland	2.04	2.41	2.01	4.88	10.25	8.84	1.80	2.43	3.05	0.24	3.49	1.41	42.85
Franklin	1.78	3.80	1.39	3.69	6.81	.....	.....	.....	.....	0.56	.....	2.29	.....
Hammond	1.07	1.83	2.31	4.60	8.59	9.93	2.21	0.88	2.52	2.64	.....	.....	.....
Hawpatch	.....	.....	2.83	4.90	13.11	7.35	4.85	0.87	2.52	0.20	2.91	1.34	.....
Huntingburgh	1.00	9.25	4.50	12.60	11.75	5.95	2.00	.....	8.00	.....	.....	.....	.....
Huntington	0.65	2.58	4.08	3.81	11.48	5.52	3.00	2.96	4.87	0.55	3.92	1.23	44.65
*Indianapolis	1.55	3.53	1.93	6.33	8.83	3.84	2.93	1.39	3.42	0.28	4.90	1.84	39.77
Irvington	.....	.....	1.10	5.80	9.67	4.92	3.84	1.16	2.00	.....	2.50	2.59	.....
Jeffersonville	1.79	3.76	2.76	7.21	4.29	3.30	3.39	1.99	2.64	1.05	2.88	2.24	37.30
Kokomo	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.34	4.46	1.21	.....
*La Fayette	1.70	2.19	3.12	7.51	8.79	3.49	4.80	3.57	1.22	1.32	4.22	1.55	43.48
*Logansport [5]	1.30	3.10	3.93	5.81	11.05	3.87	4.16	2.88	1.92	0.44	4.61	1.08	44.15
Logansport [6]	0.84	2.39	2.66	4.82	10.21	4.47	2.34	2.30	1.32	0.51	3.88	1.10	36.84
*Madison	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.17	2.67	0.15	.....
Marengo	1.84	6.82	2.46	10.75	7.11	3.49	4.01	3.32	4.70	1.30	5.10	3.00	53.90
Marion	1.41	3.31	2.87	5.47	10.71	7.52	6.18	5.46	5.53	T.	4.82	1.60	54.88
Mauzy	1.14	4.16	1.93	5.40	6.82	6.66	2.89	2.15	1.31	0.45	3.74	1.51	38.16
Michigan City	1.65	1.64	3.74	4.30	10.51	9.44	.....	.....	3.36	3.00	3.59	2.12	.....
*Mount Vernon [3]	1.64	2.83	2.18	7.07	6.16	1.99	2.51	3.52	1.48	2.14	3.43	1.99	36.94
Mount Vernon [6]	1.64	2.83	2.18	7.07	6.16	1.99	.....	.....	1.48	2.14	.....	2.88	.....
New Albany	.....	.....	3.04	7.98	4.88	3.45	3.71	3.12	3.05	0.86	3.13	1.60	.....
Point Isabel	1.83	3.06	3.85	5.23	11.70	4.66	4.39	4.27	5.20	T.	3.75	2.10	50.04
Princeton	1.60	2.95	1.50	6.40	5.50	4.85	3.37	2.68	1.70	0.85	4.49	2.10	37.99
Rockville	1.77	3.87	1.92	7.47	8.05	4.90	4.24	3.41	1.70	0.29	3.44	1.47	42.63
*Rushville	1.41	3.57	1.67	6.12	6.10	5.63	3.75	2.34	1.98	0.49	3.91	1.07	38.04
Seymour	1.54	3.78	1.78	8.40	6.14	2.86	2.89	2.87	2.13	1.43	3.75	2.50	40.07
Shelbyville	0.89	3.73	1.79	3.98	8.08	2.27	.....	.....	.....	.....	.....	.....	.....
*Terre Haute	1.81	3.13	1.46	6.97	8.29	5.17	3.56	1.86	1.38	0.50	3.99	1.20	39.32
Valparaiso	.....	1.56	2.52	2.05	5.70	10.73	2.38	.....	.....	.....	.....	.....	.....
Vevay	2.43	3.79	1.05	7.98	6.04	4.02	1.52	3.05	2.42	1.15	2.52	1.24	37.21

[1] V. E. Phillips.
[2] C. H. Fahs.
[3] River observer.
[4] Dr. F. Brendel.
[5] D. E. Prior.
[6] J. M. Lockwood.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Indiana—Continued.													
*Vincennes	1.91	4.29	2.01	5.35	5.64	1.51	4.42	3.24	2.39	1.06	4.50	0.75	37.07
Wabash	.....	.....	.....	4.59	10.51	.....	6.09	4.96	.....	.....	.....	.....	.....
Worthington	1.30	4.18	1.62	8.39	5.34	5.95	3.14	2.03	1.77	0.73	4.52	1.37	40.34
Indian Territory.													
*Eufaula	0.62	1.89	3.51	3.85	14.42	4.69	3.79	4.53	1.34	6.42	1.17	4.08	50.31
Fort Supply	T.	2.02	3.02	0.55	4.48	0.65	1.55	4.52	1.15	1.85	0.40	1.80	21.99
Healdton	0.65	0.66	3.03	7.20	18.40	2.50	1.93	4.01	2.02	3.75	1.15	2.56	47.86
Lehigh	.....	.....	2.97	6.02	9.99	3.22	1.08	3.77	2.40	7.16	1.02	5.57	.....
Paul's Valley	.....	.....	.....	2.77	6.99	2.16	2.75	2.74	1.30	2.68	.....	.....	.....
Purcell	0.50	1.18	4.41	3.50	11.95	2.04	4.54	4.00	0.75	3.99	0.35	2.82	40.03
Sapulpa	.....	.....	2.56	2.81	12.50	4.65	2.54	5.38	.....	.....	.....	.....	.....
South McAlester	0.85	2.56	3.75	5.32	18.48	4.53	2.00	9.03	2.72	10.25	0.64	5.28	65.41
*Tulsa	0.50	0.75	4.45	3.10	12.10	6.26	2.00	4.80	1.30	5.90	1.00	4.00	46.16
Iowa.													
Algona	.....	0.84	1.08	3.82	5.29	4.64	3.44	2.71	0.35	1.41	0.20	0.40	.....
Alta[1]	0.34	0.94	2.74	4.54	10.39	2.95	2.76	4.63	0.70	1.16	0.21	0.64	32.00
Amana	2.29	1.37	2.64	4.43	7.38	9.67	5.34	2.99	1.88	1.15	1.37	1.90	42.41
Ames[1]	0.40	.....	.....	.....	8.11	3.65	7.13	1.94	0.18	1.82	0.61	1.51	.....
Ames[2]	1.00	0.30	.....	4.28	8.66	3.74	7.06	1.99	0.16	1.79	0.63	0.92	.....
Atlantic	0.45	0.66	2.01	3.88	8.08	1.07	5.52	2.38	0.79	1.27	0.12	1.70	27.93
Bancroft	0.10	1.00	1.59	4.82	6.47	3.67	3.48	2.95	2.44	0.00	.....	.....	.....
Belle Plaine	1.30	1.40	2.00	4.04	6.26	3.10	3.98	2.53	2.13	1.74	0.66	2.24	31.38
Blakeville	1.02	1.15	1.18	2.43	8.97	8.30	4.85	2.80	.....	.....	1.56	2.51	.....
Blockton	0.50	1.48	3.37	3.86	11.21	3.06	5.14	2.04	2.29	2.10	0.41	0.80	36.26
Bonaparte	1.85	1.66	3.97	7.00	.....	3.93	4.79	.....	3.40	0.76	2.71	1.89	.....
Carroll	0.45	0.86	2.03	4.73	6.99	3.24	1.71	1.55	0.70	.....	1.34	1.12	.....
Cedar Falls	0.47	0.73	1.34	2.82	11.00	.....	5.67	2.21	1.19	2.06	1.01	1.00	.....
*Cedar Rapids	2.82	2.18	2.36	4.15	10.12	7.48	4.45	2.09	2.33	1.03	1.60	2.02	42.63
Centerville	.....	.....	.....	.....	.....	4.48	11.69	1.95	1.07	2.08	1.21	2.12	.....
Charles City	0.59	0.73	1.47	3.10	5.36	8.12	2.77	1.59	1.48	1.27	1.42	1.25	29.15
Clarinda	0.44	1.19	2.54	5.14	11.55	0.97	4.87	2.85	0.63	1.98	0.29	2.16	34.61
Clinton	1.31	1.76	1.81	4.43	8.41	9.39	4.49	1.81	1.20	0.63	2.18	3.22	40.64
College Springs	.....	0.60	3.09	8.38	8.64	2.16	3.37	2.95	1.24	2.43	0.44	3.04	.....
Corning	1.35	0.68	2.01	3.85	11.62	1.99	5.47	1.95	2.86	1.74	0.33	1.73	35.58
Corydon	1.93	1.70	.....	.....	.....	5.70	12.86	1.27	.....	.....	.....	.....	.....
Cresco	0.57	1.02	1.75	5.68	6.15	10.84	3.10	2.65	1.22	1.51	0.62	1.22	36.33
*Davenport	1.60	1.38	3.06	5.41	8.84	10.79	4.16	1.53	2.09	0.55	2.01	2.73	44.15
Decorah	.....	.....	.....	.....	.....	11.06	2.63	2.91	1.85	.....	.....	0.13	.....
Delaware	1.63	1.13	2.00	4.02	5.99	9.51	4.99	3.09	4.15	1.30	1.21	1.98	41.00
Denison	.....	.....	.....	.....	.....	.....	3.51	2.43	1.56	1.16	0.27	1.20	.....
*Des Moines	1.60	1.35	2.47	3.36	8.77	3.41	8.64	2.45	1.12	2.54	0.76	1.95	38.42
*Dubuque	2.34	1.02	1.91	4.37	9.18	14.16	5.08	2.51	3.79	0.44	1.89	2.08	48.77
Eagle Grove	.....	0.40	2.25	.....	10.30	2.85	9.25	2.20	0.35	2.10	0.30	1.25	.....
Eldora	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.46	0.16	1.80	.....
Elkader	0.40	0.12	0.57	.....	.....	.....	3.36	.....	.....	.....	.....	.....	.....
Emmetsburg	.....	.....	.....	.....	.....	.....	.....	.....	2.22	.....	0.00	0.25	.....
Fairfield	3.13	.....	2.74	7.04	12.01	4.27	6.44	1.94	0.83	1.60	1.36	3.02	.....
Fayette	0.98	1.05	2.71	5.57	6.66	11.63	2.35	2.30	2.06	3.25	0.87	1.18	40.61
Fort Madison	2.17	1.30	2.75	4.90	8.90	5.12	4.01	1.57	3.26	0.85	2.69	2.11	39.53
Galva	0.28	0.70	1.08	4.04	.....	.....	.....	.....	.....	.....	.....	1.43	.....
Glenwood	0.54	0.53	2.58	4.26	8.89	0.67	3.92	2.96	.....	0.46	0.54	1.87	.....
Grand Meadow	1.07	1.19	2.17	5.18	8.33	11.91	4.73	4.11	1.28	2.56	1.21	1.95	45.69
Greenfield	0.73	1.33	3.16	5.35	7.98	2.08	7.18	1.69	0.82	1.50	0.48	2.04	34.34
Grinnell	1.04	1.32	2.60	2.98	8.68	2.79	4.44	2.15	1.86	1.50	1.09	2.81	35.26
Grundy Centre	0.44	0.88	1.68	4.59	9.30	5.32	5.17	1.64	0.89	2.34	0.95	1.87	35.07
Hampton	0.43	1.12	1.83	6.62	7.62	4.32	5.68	1.07	0.88	2.01	1.03	1.49	34.10
Havelock	0.30	1.50	.....	5.50	15.70	.....	.....	.....	.....	.....	.....	.....	.....
Hawk Eye	0.85	1.25	1.63	3.94	5.06	8.56	3.47	3.59	1.54	2.05	1.64	2.02	35.60
Hopeville	1.61	1.46	2.15	4.68	10.84	2.70	7.46	0.91	1.86	2.61	0.66	1.19	38.13
Hopkinton	1.74	.....	1.52	4.26	7.11	10.16	5.29	2.49	.....	1.50	2.05	2.25	.....
Independence	0.61	0.87	1.73	3.24	6.18	7.00	5.63	2.77	1.87	2.00	0.55	1.29	33.74
Indianola	1.21	1.24	1.31	3.96	10.47	4.14	2.50	1.92	1.43	2.34	0.79	1.57	32.88
Iowa City	1.46	1.23	3.15	4.30	9.23	8.29	6.20	2.50	1.18	1.02	1.38	2.84	42.78
Iowa Falls	.....	.....	1.30	5.49	6.91	5.09	7.41	1.05	0.21	2.04	0.79	0.80	.....
*Keokuk	1.96	1.61	2.91	6.15	6.34	2.65	6.18	1.07	3.21	0.71	3.16	1.50	37.45
Keosauqua	1.40	1.89	3.26	7.18	7.36	4.32	5.55	2.32	2.33	0.57	1.32	2.07	39.51
Larrabee	0.25	1.42	1.85	5.22	9.83	3.79	2.98	4.69	0.99	1.21	0.15	0.50	32.88
*Le Claire	1.49	1.38	3.01	4.01	9.65	5.68	6.29	0.71	2.49	0.77	0.82	2.42	38.72
Logan	0.90	1.14	4.58	4.91	7.13	3.16	4.55	3.37	2.00	1.81	0.08	1.62	35.25
McCausland	1.69	1.56	2.61	6.22	10.02	.....	.....	.....	.....	.....	.....	.....	.....
Maquoketa	0.67	1.71	2.54	5.93	9.33	9.62	6.48	2.27	1.08	0.96	1.78	2.28	44.66
Marshalltown	.....	.....	2.24	3.53	9.73	3.38	6.66	1.52	1.03	3.71	0.32	1.65	.....
Mason City	2.20	0.84	.....	.....	.....	.....	5.94	2.45	1.31	1.66	0.07	.....	.....
Maxon	0.69	2.16	1.90	5.08	11.38	4.71	5.10	0.65	1.95	2.58	0.68	2.58	39.46
Mechanicsville	1.98	1.32	3.06	4.08	8.97	9.81	4.64	2.93	0.96	0.72	1.72	2.50	42.69
Monticello	1.44	1.18	1.11	2.70	9.58	8.87	4.39	2.44	2.06	0.93	1.43	1.96	38.09
Moore	0.66	1.41	2.71	6.55	.....	.....	.....	.....	1.75	.....	.....	.....	.....
Mount Ayr	.....	.....	.....	.....	.....	4.00	8.17	1.05	2.84	2.58	0.75	1.45	.....
Mount Pleasant[3]	0.45	1.67	3.69	5.06	7.20	3.67	5.68	1.09	1.81	0.76	1.56	1.25	33.89
Murray	1.10	1.88	2.68	7.15	11.34	2.44	8.39	1.15	1.82	2.83	0.80	1.19	42.77
*Muscatine	1.35	1.98	3.90	4.91	10.32	8.83	3.85	1.70	0.47	0.82	2.21	2.56	42.30
Osage	0.43	0.88	1.94	4.16	4.87	.....	.....	2.69	.....	1.49	1.11	1.83	.....
Oskaloosa	0.75	1.54	.....	3.07	7.95	4.08	5.56	1.41	1.66	2.12	0.71	1.53	.....
Panama	0.17	0.37	2.72	3.87	6.84	2.43	4.80	2.48	2.23	1.42	0.40	0.49	28.22
Richland	1.39	1.83	3.12	5.65	10.22	6.91	6.82	2.02	0.76	1.85	1.84	2.36	44.17
Sac City	0.55	0.55	1.46	6.60	5.00	1.50	2.05	1.25	0.85	0.75	0.25	.....	.....

[1] River observer. [2] J. M. Lockwood. [3] Dr. Max E. Witte.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Iowa—Continued.													
Seymour					12.64	4.83	7.49	2.62					
Sidney										0.79	0.05	2.92	
*Sioux City	0.41	0.97	1.16	4.76	8.56	1.50	2.63	4.14	0.57	1.32	0.16	0.20	26.38
Spirit Lake				5.43	9.31	2.74	3.05	3.66	0.70				
Storm Lake	0.37	0.90	1.54	5.64	7.26	2.28	2.21	2.77	0.67	0.65	0.25	0.53	25.07
Tipton	0.57	0.97	2.73	5.57	9.18		6.53		1.80	0.54	1.81	2.13	
Vinton	0.85	1.82	1.70	4.61	7.54	4.12	3.86	1.77	2.62	1.51	0.73	2.00	32.13
Washington	1.15	1.45	3.40	3.79	9.12	5.51	3.10	1.27	1.59	1.28	1.85	1.85	35.36
Webster City	0.61	1.53	1.32	5.68	6.12	3.31	8.50	2.25	1.00	2.06	0.56	1.95	34.89
West Bend	0.35			3.45	8.22	2.82							
Williams	0.29	0.75	1.00	4.74	6.16	3.86	6.76	0.71	0.22	2.22	0.82	1.41	28.88
Winterset	0.95	0.65	2.97	4.03	10.70	3.06	5.01	2.91	1.74	2.41	0.91	1.85	37.19
Kansas.													
Abilene	0.60	3.17	4.83	1.37	6.04	0.69	3.06	2.75	1.97	2.93	0.61	2.79	30.81
Allison	0.16	1.88	1.32	1.52	5.88	0.68	4.00	4.15	0.05	1.54	0.51	0.74	22.43
Altoona	2.25	6.14	5.07	2.68	8.29	3.27	3.52	4.48	0.97	5.78	0.60	2.59	45.64
Antelope	0.47	3.10	3.07	0.84	7.06	1.61		3.33					
Atchison	0.74	2.68	4.62	2.95	5.86	2.81	5.02	3.22	1.23	1.65	1.26	1.75	33.79
Belleville	0.50	0.78	2.46	2.16	9.30	2.13	6.51	2.09	0.61	1.01			
Bucklin	0.10	1.40	2.45	0.45	7.45	0.90	0.70	2.10	0.25	2.55	0.40	1.10	19.85
Buffalo Park	0.30	1.10	1.20	0.21	5.22	1.29	3.87	3.79					
Burr Oak	0.35	3.00	2.35	1.38	7.12	0.93	5.38	3.12	0.00	1.62	0.00	0.85	26.11
Cawker City	0.20	6.00	2.55	1.40	5.70	0.60	3.00	1.30	0.00	0.20	0.20	0.50	21.65
Colby					3.98	2.03	2.65	4.13	0.02	0.36	0.18	0.68	
Coldwater	0.20	1.76	4.16	0.22	4.70	0.23	1.03	2.32	0.67	2.44	0.70	2.20	20.63
Collyer	0.15			1.25	3.80	2.50	6.40	5.20	T.	T.			
Columbus	1.98	5.26	5.30	5.30	10.63	4.57	2.53	2.88	0.69	5.80	0.92	4.06	49.92
*Concordia	0.53	2.32	3.81	1.56	9.51	1.23	3.30	3.04	0.65	0.83	0.44	1.19	28.41
Concordia	0.51	2.36	3.72										
Cunningham	0.08	2.21	4.59	0.27	4.27	1.40	1.24	3.56	1.54	3.05	0.32	0.85	23.38
*Dodge City	0.25	1.01	2.62	0.40	3.23	3.34	0.66	4.69	1.04	0.73	0.31	1.38	19.66
Downs	0.50	2.43	3.27	1.95	6.90	0.43	2.96	1.81	0.34	0.71	0.40	1.67	23.37
Elco	0.45	3.30	4.91	1.10	5.15	1.69	5.50	4.20	1.20	2.64	0.22	2.84	33.20
Eldorado										1.51	0.21	1.73	
Elk Falls	0.15	3.25	4.39	0.51	8.38	2.01	2.59	2.55	0.99	4.46	0.81	2.15	35.24
Ellis	0.40		1.80	0.38	4.50	1.75							
Emporia	0.25	4.15		2.60	6.70	1.35	5.30	4.78	1.75	2.75	0.10	2.95	
Englewood	0.04	1.83	2.80	0.28	5.97	0.23	1.60	1.76	0.85	2.10	0.46	1.10	19.06
Eureka Ranch	0.32	1.81	2.06	0.92	4.87	2.22	4.53	2.93	0.07	0.60	0.34	0.63	21.30
Fort Leavenworth[1]	1.44	3.82											
Fort Leavenworth[2]	1.14	3.67											
Fort Riley	0.40	2.83	4.45	1.98	8.00	0.92	3.48	4.79	1.61	1.64	1.20	2.34	33.64
Fort Scott[3]		6.88	4.08		8.75	3.69							
Gibson	0.20	0.63	2.07	1.74	5.14	1.34	3.53	6.96	1.03	0.12	0.30	0.40	23.46
Gove City	0.37	1.90	1.51	0.80	5.03	2.76	5.86	4.11	0.51	0.30	0.50	1.40	25.05
Grainfield	0.30	0.80	3.45	0.27	8.40	1.70	4.20	2.32		T.	0.00	0.40	
Greensburg		1.36	2.47	0.21	5.82	3.36	0.72	3.43	0.28	2.68	0.28	1.45	
Grinnell	0.47	0.75	1.30	0.62	5.00	0.83	2.90	1.75		T.	T.	0.38	
Havensville	0.68	0.75	5.64	2.59	8.18	1.23	5.23	3.60	1.70	1.45	1.20	2.62	34.87
Hays City						1.13	3.92	5.08	0.40	0.52	0.40	1.10	
Hesston			3.75	1.27	6.28	2.30	3.63	7.76	1.35	2.22	0.18	1.45	
Horton	0.90	0.92	5.33	4.42	6.87	1.73	4.14	3.11	0.80	0.90	1.13	2.01	32.26
Hoxie		0.85	1.65	0.20	6.08								
Hutchinson	0.39	3.56	2.32	1.15	4.78	3.26	3.86	1.51	0.70	3.43	0.49	2.11	27.56
Independence	1.46	4.88	5.54	4.71	10.64	2.70	3.55	4.22	0.82	4.22	0.59	3.00	46.33
Kansas City	2.02	4.10	5.90	3.84	7.22	2.59	3.61	2.05	3.40	4.72	1.90	1.53	42.88
Kellogg	0.65	4.05	5.00	3.20	12.30	4.42	2.88	4.10	3.99	4.36	0.62	2.35	47.92
Kiowa	0.13	2.78	3.05	0.35	5.94	1.42	3.13	2.31	1.45	2.26	0.35	2.47	25.64
Kirwin	0.43	1.56	1.41	1.35	5.30	1.26	4.30	3.15	0.00	1.80	0.55	0.38	21.49
La Crosse	0.30	1.51	3.06	0.58	4.68	2.11	2.66	3.71	0.61			1.00	
Lakin	0.10	0.40	2.00	0.20	4.40	0.60	1.13	0.15	0.03	0.02	T.	0.50	9.53
Lawrence	0.83	4.96	5.72	2.70	8.51	1.23	6.47	3.30	2.32	3.48	0.98	1.83	42.33
*Leavenworth	1.95	3.65	4.09	4.90	8.66	2.55	3.42	3.54	1.23	2.80	1.53	1.77	40.09
Lebo	1.25	4.54	4.49	2.69	7.34	2.00	4.03	5.59	1.91	2.96	0.55	2.54	39.89
Leoti	0.15	0.95	2.35	0.66	3.68	1.09	3.07	1.95	0.00	0.00	T.	0.60	14.50
Liberal		2.00	1.97	0.31	4.58	1.23	1.34	2.19	0.62	1.65	0.48	1.50	
McAllaster	0.25	1.72	1.80	0.70	5.80	0.93	4.40	3.50					
Mackaville	0.14					1.87	2.24	2.00	2.00				
McPherson	0.14	3.05	2.77	1.14	5.88	4.67	2.86	3.14	1.11	3.46	0.00	2.00	30.22
*Manhattan[4]	0.74	3.22	4.68	3.50	6.93	0.32	3.90	4.17	0.35	1.18	0.57	1.65	31.21
Manhattan[5]	0.78	2.95	4.60	2.91	6.62	0.32	3.88	4.32	0.36	1.32	0.65	1.75	30.46
Manhattan[6]	0.61	3.14	3.85		6.77	0.26	3.75	3.97	0.39	1.24	0.62	1.58	
Mankato	0.60			4.50	7.90	0.65	5.28	1.00					
Marion									2.69	2.24	0.18	2.51	
Marmaton	2.10	7.11	3.78	4.40	10.74	4.05	2.17	1.77	1.18	2.80	0.83	2.54	43.47
Medicine Lodge	0.02	2.67	3.31	0.49	4.65	2.85	0.76	2.42	0.84			2.65	
Minneapolis	0.40	2.05	4.30	1.65	4.90	1.00	2.45	2.15	0.40	0.75	0.41	1.21	21.67
Monument	0.30	1.00	0.93	1.60	5.75	1.30	3.15	2.90		0.33		0.81	
Morland		0.72	1.10	1.48	4.34	1.10	4.95	3.34	0.03	0.42	0.30	0.33	
Morse	3.05	4.79	4.27	3.36	7.30	2.80	5.88	2.23	2.35	3.32	1.51	2.55	43.41
Morton	0.25	0.50	2.30	0.60	2.30	1.39	3.59	1.71	0.12	0.63	0.46	0.40	14.25
New England Ranch				0.67	4.35			4.66	0.00		0.00		
Norton	0.30	1.28	1.74	1.93	5.38	0.70							
Oakley	0.25		2.70	1.25	3.11	1.25	2.60	3.92					
Oberlin	0.50	2.87	1.92	1.75	6.37	2.28	3.92	2.77	0.06	0.52	0.72	1.10	24.28
Ogallah		2.41	1.40	T.	4.60	0.64	1.50	2.25					
Oswego	0.45	5.48	5.42	4.78	9.72	3.55	1.74	2.42		4.69	0.43	1.15	

[1] Post hospital.
[2] Military prison.
[3] W. W. Dillard.
[4] River observer.
[5] Prof. E. R. Nichols.
[6] C. P. Blachly.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Kansas—Continued.													
Page City	0.08	0.90	0.93	0.90	6.00	1.25	2.50	.....	.....	.....	.....	0.25	.....
Pauline	0.40	4.45	3.72	2.20	9.50	.....	6.12	4.62	1.12	.....	.....	1.75	.....
Phillipsburg	0.20	2.08	0.00	1.57	3.99	2.21	2.43	2.61	0.00	1.34	0.62	0.12	17.17
Plainville	0.20	2.95	.....	2.00	7.25	2.05	2.80	3.70	.....	.....	.....	.....	.....
Pleasant Dale	0.50	2.09	3.86	1.20	3.99	0.90	3.00	8.11	0.83	0.90	0.19	0.93	21.50
Quinter	.....	1.60	1.30	0.25	7.60	2.90	5.50	6.50	.....	0.38	0.70	0.81	.....
Rome	.....	3.96	4.39	2.65	7.03	1.42	2.79	1.71	3.38	3.54	0.30	2.73	.....
Salina	0.18	2.01	3.28	1.29	5.75	0.92	2.87	4.49	0.83	2.22	0.32	2.52	26.68
Sedan	0.90	4.51	3.62	1.52	10.26	2.09	2.00	3.40	1.35	6.94	0.24	3.39	40.22
Seneca	0.66	2.03	5.39	4.31	7.53	2.42	.....	.....	0.00	.....	.....	.....	.....
Sharon Springs	0.45	.....	2.20	0.70	.....	.....	1.00	4.50	.....	.....	.....	.....	.....
Shields	0.02	1.14	1.43	0.48	7.29	1.30	3.75	4.12	1.25	0.17	0.31	0.15	21.41
Sterling	.....	.....	.....	0.10	3.78	3.89	6.32	0.65	1.72	1.44	0.26	1.20	.....
Syracuse	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.64	0.42	1.50	.....
*Topeka	1.21	3.33	4.53	2.17	14.10	0.73	6.37	4.14	0.90	1.46	0.60	1.92	41.46
Topeka	.....	.....	.....	.....	.....	0.80	5.82	5.14	0.90	0.95	0.54	1.66	.....
Tribune	0.15	0.46	2.86	0.77	4.31	1.55	0.65	2.96	0.03	0.40	0.04	T.	14.18
Ulysses	0.73	0.52	1.30	0.24	4.67	1.11	2.45	0.68	0.50	0.26	0.00	0.65	13.11
Wa Keeney	0.20	1.30	1.47	0.50	.....	1.10	3.10	4.20	1.50	.....	0.30	0.40	.....
Wakefield	0.12	3.17	5.93	1.33	5.41	0.69	3.54	5.65	0.69	2.55	0.76	2.75	32.59
Wallace[1]	0.13	0.41	1.32	1.07	4.71	2.10	2.68	4.74	0.00	0.39	0.04	0.06	17.65
Wallace[2]	.....	0.50	0.90	.....	6.00	.....	1.75	1.50	.....	.....	.....	0.10	.....
Weskan[2]	0.15	0.25	1.00	0.70	5.85	2.90	1.50	1.80	.....	0.25	0.10	0.20	.....
Weskan[3]	0.22	0.99	1.40	1.15	4.87	.....	.....	.....	.....	.....	.....	.....	.....
*Wichita	0.31	2.62	4.03	2.05	5.83	1.70	2.75	4.06	2.12	2.52	0.24	1.71	29.94
Winona	0.50	0.80	0.80	1.40	2.60	1.20	1.40	2.20	.....	.....	.....	.....	.....
Yates Centre	1.92	6.31	5.68	2.17	11.83	2.21	4.54	5.39	2.31	4.14	0.30	2.48	48.68
Kentucky.													
*Bowling Green	2.60	2.60	5.48	10.84	6.64	4.35	1.19	2.57	4.12	0.10	4.39	7.73	52.61
Burkesville	.....	.....	.....	.....	.....	4.47	3.31	.....	.....	0.15	5.13	4.56	.....
*Burnside	4.33	1.88	5.38	7.42	.....	.....	.....	4.41	.....	0.45	4.97	3.52	.....
Caddo	0.95	4.50	3.80	4.20	.....	5.80	.....	4.15	3.25	1.71	2.05	2.75	.....
Canton	1.11	2.97	3.94	8.21	6.68	2.53	3.94	1.23	2.10	2.21	4.62	6.13	45.67
Carrollton	.....	.....	.....	2.05	6.01	1.95	3.80	2.30	3.10	0.75	2.70	1.00	.....
*Catlettsburgh	6.62	3.81	4.70	2.35	4.95	4.78	3.82	1.60	2.56	0.45	3.75	3.12	42.51
Central City	.....	.....	3.70	7.27	5.36	4.07	2.69	.....	3.71	.....	.....	.....	.....
Cloverport	.....	.....	.....	.....	.....	3.76	3.50	2.25	1.48	.....	.....	.....	.....
Earlington	0.92	2.44	3.96	6.39	6.76	2.27	4.42	4.70	3.77	0.54	5.78	3.58	45.53
Edmonton	2.42	3.04	4.79	8.56	4.97	3.78	2.58	.....	.....	0.41	4.30	5.50	.....
*Falmouth	1.76	3.42	2.39	6.38	5.55	4.70	2.73	5.40	2.40	0.95	2.60	1.78	40.06
Fort Thomas	1.32	3.52	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Frankfort	1.50	2.35	2.47	4.45	10.05	4.00	0.85	1.00	2.70	0.25	0.90	1.60	32.12
Franklin	2.78	3.28	3.94	11.78	6.38	4.12	4.54	3.95	5.11	0.25	5.76	7.62	59.51
Grand Rivers	.....	1.16	3.56	7.88	5.62	3.64	4.60	3.17	3.03	1.07	.....	.....	.....
*Greensburg	2.04	2.62	3.52	8.15	4.92	2.67	4.02	5.29	3.20	0.10	3.80	4.53	44.86
Harrodsburgh	2.02	2.12	5.14	7.65	5.00	6.06	4.10	4.65	4.25	0.37	3.45	4.55	49.36
La Grange	.....	2.38	3.50	7.17	6.89	5.04	1.99	.....	1.63	0.85	.....	1.84	.....
*Lexington	2.35	3.10	4.01	6.57	5.32	3.81	6.22	3.28	4.10	0.45	3.72	3.03	45.96
*Louisa	3.23	1.97	3.63	4.82	3.91	4.70	2.53	1.44	1.97	0.29	4.27	3.58	36.34
*Louisville	1.46	3.61	3.23	7.50	4.44	3.89	3.93	1.84	2.43	0.86	2.87	2.97	38.13
Matlock	.....	.....	.....	.....	.....	.....	.....	.....	4.91	T.	3.06	7.72	.....
Middlesboro'[4]	6.46	3.41	4.84	7.75	5.97	6.86	1.48	4.45	1.44	0.29	5.58	3.04	51.57
Mount Sterling	.....	.....	4.96	2.75	3.64	5.71	4.81	1.96	5.18	0.49	5.04	3.75	.....
Manfordville	.....	.....	.....	6.57	5.96	5.12	2.13	1.30	3.05	.....	.....	.....	.....
Newport	0.93	3.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Paducah[4]	0.62	2.56	2.55	9.08	2.69	1.55	3.15	3.95	0.04	0.62	2.35	3.62	32.78
Paducah[5]	.....	.....	.....	.....	.....	.....	3.97	3.48	0.97	0.74	4.03	3.31	.....
Pellville	1.66	3.99	3.50	7.53	3.80	2.43	1.22	3.46	3.05	0.64	2.63	2.68	36.59
Princeton	.....	.....	.....	.....	.....	0.77	3.58	2.20	3.12	0.57	4.42	4.07	.....
Richmond	5.57	1.91	4.01	2.72	3.59	.....	3.60	0.80	2.45	T.	4.39	.....	.....
Robard	.....	.....	.....	.....	.....	2.65	2.40	0.92	0.11	.....	3.04	2.69	.....
Russellville	.....	.....	.....	9.69	7.06	4.42	3.96	1.78	2.93	0.26	3.19	6.61	.....
Shelby City	.....	.....	.....	.....	.....	1.14	1.44	2.18	4.58	.....	3.92	4.27	.....
Shelbyville	1.90	4.26	3.50	6.88	8.95	3.89	4.81	2.40	2.20	0.73	2.97	2.66	41.63
South Fork	6.05	.....	5.75	.....	3.65	8.45	2.09	2.19	2.05	0.37	4.02	5.21	.....
Springfield	3.32	2.60	4.22	6.75	5.65	3.30	2.95	2.34	2.65	0.31	3.60	4.75	42.44
Versailles	.....	.....	.....	.....	.....	3.84	1.33	3.38	.....	.....	3.46	3.54	.....
Wickliffe	.....	.....	.....	5.44	6.84	4.02	1.69	5.22	1.18	.....	5.50	5.08	.....
*Williamsburg[1]	5.71	2.00	5.35	6.85	8.65	5.35	3.18	8.10	2.30	0.20	6.40	2.25	56.34
Williamsburg[6]	.....	.....	.....	.....	.....	.....	2.18	8.45	1.65	0.18	6.11	3.93	.....
Louisiana.													
Abbeville	10.20	1.70	2.75	7.00	3.50	12.50	12.74	9.35	3.35	1.32	3.30	4.85	72.56
*Alexandria	6.58	2.28	9.15	7.56	2.76	4.01	13.40	2.64	0.30	4.00	3.45	6.03	62.16
*Amité City	7.95	1.27	.....	7.31	0.95	3.05	8.86	5.80	0.02	0.04	2.20	2.40	.....
*Baton Rouge	6.93	1.33	6.18	9.85	2.76	8.63	7.92	7.39	1.55	0.68	4.84	5.18	63.24
Cameron	1.25	1.17	3.88	3.43	0.98	17.83	14.80	4.46	1.95	5.39	7.46	4.07	66.67
*Cheneyville	7.03	3.08	10.71	5.84	2.41	7.49	11.53	3.98	1.40	0.62	3.41	5.24	62.74
Clinton	5.85	1.38	6.41	8.00	2.69	6.57	7.48	9.76	1.70	0.37	5.34	5.41	60.96
*Coushatta[4]	4.75	2.60	4.92	5.79	1.46	1.11	3.01	5.23	2.36	0.95	7.04	5.90	45.12
*Coushatta[7]	4.90	2.71	4.30	7.26	1.92	1.34	2.93	6.47	2.45	1.03	6.37	7.20	48.97
*Covington	.....	.....	.....	.....	.....	.....	.....	2.64	1.52	2.38	3.83	.....	.....
Davis	4.09	3.51	7.10	.....	1.42	4.71	5.73	3.65	1.83	2.01	3.55	6.62	.....
*Delhi	5.10	4.70	4.20	9.99	2.11	2.85	9.31	5.44	1.62	0.53	4.55	3.71	54.11
*Donaldsonville	6.60	0.10	2.69	8.24	3.35	8.73	4.27	4.84	2.50	3.87	3.77	6.04	56.00
Emilie	6.58	0.07	3.04	9.69	2.18	5.14	11.43	5.56	6.30	3.53	2.23	5.13	60.68

[1] Rainfall Observer.
[2] Union Pacific R. R.
[3] S. D. Yoxall.
[4] River Observer.
[5] William Bornemann.
[6] F. A. Gurney.
[7] Cotton Belt Observer.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Louisiana—Continued.													
Farmerville	5.00	3.90	4.55	10.00	.....	.....	.....	2.70	5.42	5.11	5.22	7.87	.....
*Franklin	.....	.....	.....	.....	4.37	13.87	13.88	5.00	1.00	2.04	2.20	4.20	.....
Girard	5.66	4.59	2.54	9.95	0.66	3.61	1.75	3.55	2.09	1.85	2.73	5.88	44.86
Grand Cane	2.40	4.95	3.05	9.10	.....	.....	.....	.....	.....	.....	.....	.....	.....
Grand Coteau	4.54	2.04	4.72	3.34	3.83	10.59	8.99	2.25	0.60	0.47	4.26	4.63	50.26
Hammond	.....	.....	.....	10.63	1.67	4.62	6.64	6.57	2.20	3.50	3.48	.....	.....
Homer	.....	.....	.....	.....	7.18	6.15	4.06	5.09	4.76	4.11	4.13	9.08	.....
Houma	7.20	0.05	3.65	6.95	1.25	6.55	19.71	9.20	3.06	2.67	3.80	3.87	67.96
Jackson Barracks	8.87	0.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jeanerette	7.47	0.87	3.44	8.98	4.20	14.36	23.08	4.80	.....	.....	.....	.....	.....
*La Fayette	6.29	1.83	3.46	5.51	5.34	13.97	13.12	3.05	1.33	1.88	4.30	4.95	65.03
*Lake Charles	8.00	1.60	3.50	0.58	1.34	13.50	14.20	4.80	0.70	4.00	4.30	2.70	53.22
Lawrence	4.62	0.30	2.05	4.77	1.25	9.93	12.33	9.30	7.85	7.70	.....	.....	.....
Liberty Hill	4.01	3.74	4.80	7.90	2.15	2.94	9.47	3.79	3.83	1.88	5.14	7.61	57.26
Luling	9.61	0.64	3.37	8.41	1.90	5.86	7.83	.....	.....	5.17	.....	.....	.....
Marksville	4.70	1.95	8.50	5.85	1.55	9.00	6.30	5.00	T.	3.50	2.30	6.95	55.60
Maurepas	7.08	0.60	3.10	9.47	3.23	4.81	11.68	5.42	6.68	3.54	2.63	4.28	62.52
*Melville	5.52	3.01	5.23	5.73	2.39	7.72	7.51	7.01	0.63	0.47	4.77	3.55	53.54
*Minden	2.15	3.24	4.69	10.44	2.67	7.27	6.47	3.09	2.02	0.74	6.07	.....	.....
*Monroe	5.79	6.75	5.08	10.63	1.79	4.31	8.41	3.91	3.95	1.52	4.82	9.77	66.73
*Natchitoches	.....	.....	.....	.....	1.54	2.16	8.03	4.31	2.20	1.72	4.20	6.51	.....
New Iberia	5.80	.....	.....	8.55	4.97	10.09	.....	7.02	1.21	3.17	2.08	4.42	.....
*New Orleans	5.87	0.04	2.82	10.44	2.62	5.46	7.46	6.96	6.33	2.14	3.55	3.22	56.91
North Louisiana Experiment Station	4.74	5.53	6.43	10.06	2.60	5.37	4.92	4.38	5.01	.....	5.73	9.23	.....
*Opelousas	.....	.....	.....	.....	4.60	11.41	13.14	7.62	0.57	1.56	.....	.....	.....
Paincourtville	7.27	0.60	2.99	9.72	4.95	9.62	6.57	7.13	2.60	4.55	2.03	5.34	63.37
Plain Dealing	.....	.....	.....	.....	.....	7.60	2.99	6.20	1.66	4.93	6.50	13.35	.....
Plaquemine	9.13	1.53	3.78	10.93	5.43	11.84	8.21	.....	.....	.....	.....	.....	.....
*Rayne	.....	.....	.....	.....	1.65	12.13	13.53	4.26	1.18	0.58	3.72	3.54	.....
Roseland	8.20	0.72	5.93	9.31	2.47	5.58	11.29	.....	.....	.....	.....	4.47	.....
*Schriever	.....	.....	.....	.....	4.12	11.30	15.37	7.52	2.56	5.96	3.44	4.45	.....
Shell Beach	5.29	2.40	3.24	3.54	1.31	8.78	14.14	6.66	0.95	1.65	.....	8.80	.....
*Shreveport	3.83	3.63	2.57	9.07	2.35	4.05	2.16	2.63	1.56	1.54	5.79	7.45	46.63
Sugar Experiment Station	7.15	0.00	4.42	11.75	4.13	6.37	10.02	8.66	5.95	1.48	5.39	4.10	69.42
Thibodeaux	7.76	0.17	2.75	6.13	3.35	8.76	8.92	5.73	.....	5.07	2.26	4.52	.....
Wallace	.....	.....	2.15	11.20	2.18	7.58	9.51	7.96	6.94	4.17	3.39	5.38	.....
West End	7.35	0.07	5.12	9.04	2.10	6.38	6.23	6.91	.....	4.10	2.79	3.19	.....
Winnsborough	.....	3.60	5.70	9.20	0.90	5.80	9.20	2.10	0.80	0.60	3.40	5.80	.....
Maine.													
Bar Harbor	.....	.....	.....	1.34	2.25	4.43	1.01	5.09	1.79	1.17	5.11	2.33	.....
Belfast	5.65	2.61	2.77	0.93	2.71	4.50	1.62	5.38	2.70	1.26	4.86	1.70	36.60
Bethel	4.50	.....	.....	.....	4.14	6.27	2.71	5.59	2.63	.....	.....	.....	.....
Calais	5.30	5.20	6.40	1.56	2.02	5.77	2.07	4.64	1.71	2.22	6.75	1.63	45.27
Cornish	5.09	1.95	1.85	1.14	5.40	5.58	2.64	11.12	2.76	2.14	6.18	1.38	47.23
East Machias	5.19	1.81	3.29	1.62	2.88	4.96	1.63	4.87	1.96	1.35	4.86	2.32	36.74
*Eastport	5.76	1.88	3.60	1.51	2.17	3.54	1.21	4.64	1.21	1.49	3.17	2.02	32.20
Farfield	3.38	2.28	1.82	6.80	2.67	5.79	1.78	5.58	3.27	1.37	3.16	1.10	33.00
Farmington	5.45	2.33	2.33	0.85	3.75	6.26	3.29	5.09	4.16	1.49	4.44	1.39	40.83
Fort Preble	3.15	1.80	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Houlton	.....	1.74	2.15	0.87	2.12	6.54	3.78	5.74	3.65	1.78	3.50	1.42	.....
Indian Stream	4.80	2.14	2.89	.....	.....	.....	.....	.....	.....	.....	.....	0.95	.....
Kennebec Arsenal	4.14	2.07	2.00	1.00	2.97	5.47	2.06	6.03	2.93	0.38	3.52	0.96	33.53
Kent's Hill	4.88	1.60	1.79	1.05	2.79	5.75	2.48	6.30	4.98	1.25	3.98	1.37	38.22
Lewiston	5.52	2.21	2.43	1.05	4.62	7.22	3.18	8.11	4.48	1.81	4.54	1.49	46.66
Mayfield	.....	.....	.....	.....	.....	8.36	2.73	9.19	5.63	1.60	5.14	.....	.....
Orono	4.80	1.96	2.52	1.12	1.94	5.96	1.99	6.41	3.91	1.75	4.47	2.26	39.09
*Portland	4.22	2.18	2.27	1.04	4.41	4.60	2.68	8.14	2.89	1.64	3.76	1.32	39.15
Maryland.													
*Baltimore	6.42	2.41	7.20	3.15	6.35	4.87	4.07	1.83	2.36	0.26	3.85	2.28	45.05
Barron Creek Springs	4.08	2.38	4.85	6.68	3.44	1.82	3.37	3.10	2.14	0.09	5.39	2.13	39.47
Boettcherville	4.70	1.95	2.50	3.50	4.70	6.60	1.10	1.00	2.90	0.20	4.60	2.10	35.85
*Cumberland[1]	3.18	1.72	2.62	3.21	3.31	10.08	1.15	1.90	2.36	0.24	3.16	1.73	34.66
Cumberland[2]	3.12	1.62	2.63	3.51	3.41	7.31	1.62	2.03	2.25	0.27	3.58	1.64	32.59
Darlington	3.50	1.82	3.63	2.05	3.94	4.02	4.53	3.30	2.77	0.38	4.51	2.23	36.68
Denton	.....	2.46	5.60	.....	.....	.....	.....	.....	.....	.....	6.58	1.93	.....
Easton	4.39	2.98	4.98	4.51	5.05	3.06	2.63	1.09	1.84	0.79	3.10	2.32	36.74
Fallston	6.54	2.54	5.86	2.89	6.10	3.35	5.96	4.10	3.28	0.45	5.36	2.21	48.64
Fort McHenry	3.71	2.19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Frederick	5.48	2.69	5.58	2.36	2.16	2.80	2.20	1.68	5.82	0.19	4.66	2.04	37.66
Great Falls	4.68	1.56	5.58	4.30	3.74	3.10	4.19	0.78	2.04	0.10	3.11	2.94	35.12
Hagerstown	4.06	1.57	4.80	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jewell	4.33	2.75	8.35	.....	4.75	5.68	4.62	2.47	3.08	0.50	5.17	2.25	.....
Leonardtown	.....	2.95	4.09	5.08	.....	.....	4.38	1.21	2.29	1.13	5.31	2.50	.....
McDonogh	4.93	2.01	5.87	2.03	3.92	2.90	2.89	2.39	3.32	0.34	3.12	1.37	35.09
Mount St. Marys	5.32	2.53	6.67	2.89	3.17	4.52	5.34	3.39	5.52	0.22	3.23	2.00	44.71
New Market	3.66	2.92	5.22	3.05	5.55	3.46	3.89	2.27	3.77	0.21	5.36	2.57	41.93
Solomons	5.09	4.48	4.69	5.23	2.99	4.00	2.49	2.89	1.57	0.67	3.90	2.44	40.44
Taneytown	6.07	2.50	5.93	2.96	5.37	3.03	4.54	0.58	2.44	0.00	5.57	1.97	40.96
Woodstock	4.58	2.45	3.25	3.25	4.78	2.90	.....	2.45	3.80	0.24	4.68	2.32	.....
Massachusetts.													
Adams[3]	.....	.....	.....	.....	6.70	.....	5.10	0.42	.....	0.95	3.95	0.95	.....
Amherst	5.41	1.81	2.31	0.67	5.96	2.82	3.42	7.14	1.62	0.46	4.68	0.70	37.20
Amherst[4]	5.05	1.59	2.45	0.65	5.49	3.04	3.74	7.50	1.53	0.64	4.28	1.02	36.28

[1] E. T. Shriver. [2] Howard Shriver. [3] F. R. Harrington. [4] Agricultural Experiment Station.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Massachusetts—Continued.													
Amherst[1]	5.85	1.90	2.40	0.76	6.28	3.46	4.41	6.48	2.16	0.66	4.98	1.01	40.35
Andover	2.40	1.38	3.16	0.58	5.81	2.44	1.90	.....	0.65	1.39	5.53	1.97	.....
Ashland	5.70	3.08	4.11	0.81	5.60	2.77	4.24	4.40	3.09	1.06	5.79	1.11	41.76
Blue Hill (summit)	4.64	1.93	3.40	0.92	5.33	3.68	3.39	5.68	2.31	2.20	5.02	1.23	39.73
Blue Hill (valley)	5.06	2.46	3.47	0.82	5.16	3.26	3.51	5.15	2.06	2.23	5.50	1.24	39.92
*Boston	4.62	2.15	3.91	0.93	5.15	3.05	2.56	4.87	1.90	2.31	4.45	1.12	37.02
Boston	4.58	2.49	3.73	0.65	4.63	2.98	2.33	4.60	1.81	2.33	4.12	1.20	35.45
Cambridge[2]	4.30	1.70	2.93	0.80	5.35	3.72	1.24	6.65	2.18	1.76	4.68	1.23	36.41
Cambridge[3]	4.32	2.46	3.56	0.77	6.06	4.23	2.53	6.11	1.84	2.15	4.04	1.23	39.30
Chestnut Hill	4.45	2.78	3.95	0.75	6.08	3.89	3.35	5.92	2.16	2.39	5.26	1.29	42.27
Chicopee	5.73	1.75	3.65	0.81	7.35	5.02	.....	8.01	.....	0.69	.....	.....	.....
Clinton	4.80	1.82	2.54	0.42	5.58	1.20	3.40	3.65	1.35	0.39	4.65	0.75	30.55
Concord[4]	5.16	2.27	3.00	0.71	5.12	4.08	3.47	4.20	2.43	1.71	5.54	0.99	38.68
Cotuit	3.94	1.94	4.78	2.38	4.86	1.95	1.18	3.56	2.22	.....	.....	.....	.....
Dudley	4.92	2.06	2.91	0.58	4.74	2.07	2.84	4.74	2.58	1.49	.....	1.64	.....
Fall River	5.35	1.90	4.55	2.40	5.87	2.51	2.75	5.36	3.44	1.80	6.66	2.07	44.66
Fiskdale	4.71	1.07	1.90	0.39	5.57	2.86	5.97	5.79	1.56	1.03	5.00	0.71	36.56
Fitchburg[5]	5.28	2.81	3.81	0.57	6.43	2.78	2.94	7.75	1.75	0.62	6.11	0.78	41.63
Fitchburg[6]	5.01	2.50	2.97	0.57	5.95	3.07	3.08	6.83	1.55	0.66	5.30	0.86	38.35
Florida[7]	5.04	2.59	2.95	0.59	6.48	1.70	3.93	7.18	2.16	1.09	.....	.....	.....
Fort Warren	3.00	0.55	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Framingham	6.00	3.20	4.01	0.85	5.57	2.75	4.22	4.48	2.59	1.28	5.81	1.14	41.90
Gilbertville	5.48	1.81	3.29	0.69	6.81	2.92	7.15	7.40	1.99	0.73	5.31	1.39	44.97
Groton[8]	4.64	2.62	2.54	0.65	6.19	3.58	2.64	5.73	1.60	1.10	5.69	0.87	37.85
Hingham	4.68	2.66	4.45	0.91	5.11	5.10	1.70	2.89	2.68	2.77	6.15	1.27	40.37
Hyannis	4.16	2.14	6.14	2.27	5.36	1.50	1.24	2.08	2.06	2.07	8.33	2.63	39.98
Kendal Green	5.42	3.48	3.86	0.77	5.51	4.13	3.92	3.76	2.60	1.49	6.69	1.29	42.92
Lake Cochituate	4.78	2.80	4.12	0.78	5.46	3.23	3.47	3.79	2.87	1.42	5.14	1.18	39.04
Lawrence	4.45	2.18	2.74	0.60	5.83	3.86	1.22	3.47	2.37	1.40	5.74	1.04	34.90
Leicester	2.99	1.89	2.98	0.38	5.33	2.51	4.62	6.65	1.28	0.55	4.26	0.95	34.39
Leominster	4.91	2.52	3.10	0.63	6.15	4.55	2.93	6.55	1.76	0.89	5.30	0.87	40.17
Long Plain	5.89	2.49	5.41	2.29	5.24	2.29	2.03	6.00	3.56	2.24	6.42	1.27	45.13
Lowell[9]	5.38	2.74	3.25	0.63	5.86	4.44	2.32	4.31	1.97	1.38	5.83	1.11	39.22
Ludlow	6.60	2.15	2.85	0.85	6.73	3.67	5.92	6.22	1.80	0.80	5.82	2.15	45.56
Lynn[10]	4.36	2.43	3.39	0.65	5.53	3.56	1.62	6.95	1.65	2.52	5.08	1.62	39.86
Mansfield	5.56	2.43	3.67	1.45	6.32	3.11	2.13	3.30	2.35	2.78	5.61	1.44	40.15
Medford	4.33	2.53	3.06	0.84	5.58	3.33	1.59	6.34	1.89	1.94	4.62	1.34	37.39
Middleboro	4.15	2.50	4.52	1.84	4.76	2.84	1.55	4.43	2.54	1.85	6.62	1.32	38.92
Milton	4.69	3.75	3.32	0.73	5.02	2.86	1.78	4.70	1.95	2.45	5.30	1.73	38.28
Monroe	5.76	3.13	4.07	1.37	8.37	2.96	6.14	6.43	2.66	1.57	6.04	1.75	50.25
Monson	5.15	1.57	2.55	0.44	5.87	3.56	5.26	5.69	2.58	1.08	5.22	1.32	40.29
Mount Nonotuck	4.69	2.76	2.20	0.75	4.57	2.85	3.80	6.63	1.67	0.56	5.19	1.24	36.91
Mystic Lake	4.54	3.00	4.25	0.89	5.85	4.10	2.54	5.05	2.13	2.11	5.16	1.21	40.83
Mystic Station	4.50	2.60	4.06	0.92	5.64	3.82	2.53	4.88	1.88	1.94	4.82	1.26	38.85
*Nantucket	2.23	1.46	5.88	2.76	2.57	1.81	0.91	1.79	2.01	1.66	7.63	1.67	32.38
New Bedford[11]	4.35	2.35	5.84	2.35	5.51	2.29	1.75	4.59	3.63	1.81	6.78	1.66	42.91
New Bedford[12]	4.33	2.22	5.36	2.29	5.15	3.29	3.08	3.82	3.54	1.85	6.52	1.86	43.31
Newburyport[13]	4.70	2.67	3.65	0.60	5.71	4.86	1.37	4.01	1.94	1.32	5.50	0.93	37.26
Newburyport[14]	1.54	2.46	3.53	.....	4.64	3.92	1.70	2.99	3.02	1.15	4.98	0.85	.....
Northampton	5.93	2.24	3.78	0.64	7.17	2.93	4.61	5.98	1.58	.....	.....	.....	.....
North Billerica	4.00	2.55	3.20	0.50	5.16	5.47	1.00	5.74	3.03	2.35	6.19	1.34	40.53
Plymouth	3.79	3.72	5.15	1.26	3.91	2.12	1.81	4.16	2.41	2.29	7.12	1.77	39.51
Princeton	.....	.....	.....	.....	5.08	3.04	4.20	7.33	1.63	.....	.....	.....	.....
Provincetown	3.42	1.88	4.48	1.37	3.64	2.07	1.30	3.70	2.21	2.36	5.77	1.68	33.88
Randolph	5.21	1.96	3.18	0.80	4.85	3.85	2.40	3.05	2.69	2.65	5.00	0.65	36.29
Roberts Dam	4.71	2.45	4.08	0.89	5.35	3.91	2.16	5.27	1.99	1.58	5.30	1.11	38.80
Roxbury	4.93	2.52	4.41	0.87	5.89	3.51	2.56	5.51	2.21	2.61	5.05	1.19	41.26
Royalston	.....	.....	.....	1.00	6.12	4.25	4.50	10.12	1.50	0.62	7.03	0.95	.....
Salem	4.61	2.58	3.76	0.63	6.11	3.59	3.03	6.81	1.61	2.78	5.52	1.30	42.33
Somerset	4.98	1.71	4.59	1.69	4.95	2.29	2.51	2.92	3.10	1.76	5.49	1.39	37.43
Springfield	4.99	2.09	2.29	0.64	6.96	4.43	7.17	6.58	1.89	0.97	6.14	1.14	45.29
Taunton[15]	5.24	2.46	4.81	1.86	5.48	3.60	1.61	2.76	2.75	1.74	5.84	1.77	39.92
Taunton[16]	4.39	2.33	4.15	1.47	5.55	3.32	1.69	2.79	2.60	1.49	5.40	1.88	37.06
Taunton[17]	4.93	3.41	6.66	1.46	5.93	3.81	1.72	2.98	2.76	1.56	6.55	1.71	43.48
Taunton[18]	5.77	2.40	4.78	1.06	5.21	3.09	1.38	2.87	2.87	1.56	5.52	1.00	37.51
Turners Falls	.....	1.67	2.16	0.55	5.68	3.17	4.58	7.02	2.60	0.52	5.17	1.00	.....
*Vineyard Haven	3.24	1.63	4.20	2.57	3.65	2.04	1.45	1.81	2.12	1.97	6.65	1.93	33.26
Wakefield	3.82	3.26	4.82	0.65	5.83	3.84	1.54	5.45	1.87	2.28	5.51	1.31	40.18
Waltham	5.12	2.71	3.59	.....	5.81	3.98	2.69	4.12	2.32	1.58	5.94	1.00	.....
Webster	.....	.....	.....	.....	.....	.....	2.52	6.18	2.32	1.29	5.92	1.31	.....
Wellesley	3.85	2.95	2.87	0.83	5.68	2.96	3.35	5.37	.....	1.71	5.18	1.11	.....
Westboro	5.04	2.46	3.46	0.70	5.59	2.31	2.64	6.40	1.96	0.90	6.15	1.16	38.77
Williamstown	2.68	1.13	1.75	0.40	5.43	2.07	4.22	4.58	1.68	1.57	2.99	5.46	33.96
Winchester	4.49	3.03	3.76	0.74	5.32	4.19	2.44	4.59	1.88	1.50	4.13	1.01	37.08
*Woods Holl	3.58	1.95	5.11	2.61	5.43	1.80	1.64	2.45	2.85	2.08	8.46	1.72	39.68
Worcester[19]	.....	.....	.....	.....	6.34	2.22	4.70	5.51	.....	0.36	2.73	0.90	.....
Worcester[20]	.....	.....	.....	.....	.....	.....	.....	.....	1.74	0.58	5.82	1.00	.....
Michigan.													
Adrian	1.23	2.60	3.00	3.02	9.18	8.71	4.86	4.32	6.13	0.46	5.98	2.40	51.89
Albion	1.91	7.30	2.08	3.16	7.91	5.41	2.41	1.98	2.42	0.47	.....	1.55	.....
Allegan	1.98	2.17	1.80	2.87	7.12	10.21	3.21	1.48	3.56	1.04	2.56	3.19	41.23
Alma	2.48	1.33	0.36	2.11	5.39	8.42	2.79	3.93	3.18	1.38	2.89	1.95	36.21
*Alpena	1.77	1.69	0.59	1.93	3.38	6.66	3.92	3.44	2.85	1.70	2.36	1.86	32.15
Ann Arbor	1.31	1.90	1.15	1.60	5.59	4.72	2.21	1.25	4.72	0.50	2.48	2.50	29.93
Arbela	1.60	2.93	2.16	2.64	5.65	3.79	2.80	2.26	4.03	2.01	2.43	1.05	33.35

[1] Hatch Experiment Station.
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[4] F. A. Tower.
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[6] Dr. A. P. Mason.
[7] I. E. Baker.
[8] C. Woolley.
[9] Propr. locks and canals.
[10] J. C. Haskell.
[11] T. R. Rodman.
[12] New Bedford Waterworks.
[13] F. V. Pike.
[14] Newburyport Waterworks.
[15] Dr. E. U. Jones.
[16] A. F. Sprague.
[17] Waterworks.
[18] C. H. Wilmarth.
[19] G. W. Swan.
[20] Worcester Academy.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Michigan—Continued.													
Atlantic	7.10	3.00	1.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ball Mountain	1.23	2.60	1.71	1.61	6.17	6.36	2.06	2.90	4.02	0.74	3.65	1.28	34.33
Bear Lake	4.13	1.56	1.25	1.55	3.20	5.30	2.90	3.04	3.65	2.26	2.68	3.27	34.79
Bellaire	2.01	0.90	0.33	0.41	2.30	.....	0.58	2.57	2.54	2.76	2.24	.....	.....
Benton Harbor	1.79	2.02	1.76	3.26	8.15	9.78	2.94	1.25	3.36	2.60	2.98	3.31	43.20
Benzonia	4.42	1.44	0.59	1.68	4.02	3.98	2.81	3.13	.....	.....	.....	.....	.....
Berlin	1.33	3.67	1.38	1.45	6.02	6.17	2.55	1.62	2.65	1.19	3.22	1.40	32.65
Berrien Springs [1]	4.70	5.36	2.48	3.95	9.14	6.85	2.31	3.91	3.19	1.76	5.00	5.27	53.92
Berrien Springs [2]	.....	2.15	2.43	3.47	8.91	.....	.....	2.72	.....	.....	.....	1.75	.....
Birch Run	1.83	2.22	0.88	2.55	4.23	3.28	3.49	1.89	3.45	1.57	3.13	1.47	30.04
Birmingham	0.86	2.02	2.10	4.85	5.04	7.08	0.16	0.94	6.20	0.62	3.81	1.63	35.31
Boon	.....	.....	.....	.....	.....	.....	.....	.....	2.07	2.55	5.55	2.95	.....
Bronson	1.12	2.19	1.86	2.58	8.80	4.09	3.76	1.20	2.29	0.40	2.74	1.15	32.18
Brown City	.....	.....	1.08	2.52	4.92	3.31	2.72	3.16	5.13	1.12	2.85	1.30	.....
Caldwell	2.70	1.50	0.30	1.52	4.24	7.03	1.96	4.52	4.00	.....	.....	1.95	.....
Calumet	3.09	1.09	1.10	1.25	3.19	1.55	1.96	3.30	1.87	4.36	2.71	2.52	27.89
Charlevoix	3.95	1.65	.....	.....	3.82	4.15	2.10	2.58	.....	1.75	0.60	2.55	.....
*Cheboygan	1.72	2.28	1.33	.....	[3]3.31	4.44	3.69	3.03	2.32	1.32	2.44	1.74	.....
Clinton	0.55	3.30	2.17	2.23	9.43	5.70	2.37	1.20	4.83	0.47	4.35	1.64	38.24
Concord	0.93	1.89	1.43	2.40	7.40	6.24	2.74	0.93	.....	.....	.....	.....	.....
Crystal Falls	0.70	2.20	1.72	1.66	3.36	2.02	4.09	.....	1.06	.....	2.37	.....	.....
*Detroit	1.45	2.57	2.03	1.78	7.84	8.31	2.39	2.21	3.66	0.30	3.10	1.47	37.11
*Escanaba	1.81	2.30	1.35	3.10	4.29	3.03	4.06	4.09	1.34	3.36	2.98	1.05	32.76
Evart	.....	.....	0.30	1.26	4.19	3.46	1.10	3.63	4.56	.....	1.94	1.16	.....
Fairview	1.15	1.59	2.69	1.76	7.13	4.71	2.46	1.74	3.29	0.43	2.57	1.26	30.78
Fitchburg	2.38	2.28	2.02	2.15	7.37	.....	2.64	1.51	2.74	0.42	3.72	2.33	.....
Flint	1.31	2.40	0.96	1.93	4.39	2.49	2.30	1.92	3.29	0.63	2.74	1.31	25.67
Fort Brady	2.30	1.21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Mackinac	2.63	1.53	0.65	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Wayne	1.42	2.62	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fremont	1.51	1.70	0.88	2.81	4.67	5.21	1.97	3.41	1.89	1.32	2.48	1.63	29.48
Gaylord	.....	.....	.....	1.99	3.44	6.38	1.38	4.28	2.44	1.78	3.87	3.29	.....
Gladwin	1.48	1.35	.....	0.60	2.72	5.80	1.60	.....	.....	.....	.....	0.56	.....
Glenwood	.....	.....	.....	.....	.....	.....	1.63	1.17	3.16	0.93	2.14	1.72	.....
*Grand Haven	3.85	2.30	1.06	3.46	4.06	5.95	1.19	1.79	1.72	1.14	2.11	3.15	31.77
Grand Rapids	2.77	1.47	1.21	.....	.....	13.22	2.89	2.28	1.78	1.26	3.20	.....	.....
Grape	0.78	1.94	2.38	1.47	9.07	6.43	2.88	3.16	4.05	0.27	3.20	1.19	36.82
Grayling	1.88	1.30	0.55	0.92	3.65	6.50	2.97	4.24	1.63	0.40	.....	.....	.....
Hanover	1.41	1.92	2.34	3.19	9.75	6.14	2.78	1.05	3.84	0.61	4.12	2.04	39.19
Harbor Springs	4.66	2.45	0.90	2.04	3.25	6.13	3.30	3.16	2.03	2.10	3.52	4.49	38.03
Harrison	1.07	1.28	0.46	0.70	.....	6.28	1.13	.....	3.94	1.46	2.55	.....	.....
Harrisville	2.66	2.65	2.32	1.71	3.50	6.17	2.51	8.71	2.56	1.61	3.39	1.34	39.13
Hart	3.60	2.20	0.70	1.65	7.25	5.45	1.80	3.70	3.15	2.90	2.35	3.80	38.55
Hastings	.....	.....	1.56	3.15	7.33	6.24	.....	.....	.....	.....	.....	.....	.....
Hayes	2.50	.....	0.30	.....	2.45	4.84	.....	3.32	.....	1.18	1.57	1.61	.....
Highland Station	1.66	2.45	1.81	1.75	6.43	4.67	2.28	1.20	3.92	0.59	3.72	1.52	32.00
Hillsdale	0.44	0.93	1.60	2.91	8.61	7.23	4.37	1.15	3.53	0.60	3.21	1.57	36.15
Howell	1.74	2.52	1.60	1.67	6.17	3.73	2.52	2.05	3.02	0.59	3.33	1.48	30.42
Hudson	1.65	3.10	3.11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ivan	2.15	2.22	1.11	2.00	3.76	7.30	1.82	4.28	3.00	2.59	3.73	2.34	36.30
Jeddo	1.36	2.88	1.00	2.40	4.00	3.95	2.26	2.98	5.52	0.84	2.21	0.86	30.26
Kalamazoo	1.20	2.26	1.25	2.59	7.04	6.90	1.80	2.51	2.42	0.31	3.08	1.97	33.33
Lake City	.....	.....	.....	.....	.....	.....	1.54	5.36	2.94	1.40	.....	.....	.....
Lansing	1.05	1.64	1.49	2.40	6.31	4.81	3.08	3.26	2.80	1.00	2.61	1.61	32.06
Lathrop	2.46	2.25	2.03	1.58	4.48	.....	3.95	2.45	1.03	4.27	3.48	0.95	.....
McMillan	2.45	2.10	1.41	2.05	1.00	2.61	2.28	1.99	1.12	2.79	2.87	1.55	24.22
Madison	1.37	2.19	2.87	2.12	8.76	5.29	4.70	3.75	6.07	0.25	4.03	1.47	42.87
*Manistee	4.45	1.94	0.86	1.73	3.58	5.11	2.37	4.50	3.62	2.07	2.86	1.97	35.15
*Marquette	2.88	2.77	3.15	1.66	2.99	1.58	1.50	0.45	1.18	5.97	3.74	1.41	27.28
Marshall	1.35	2.30	1.61	1.70	8.44	5.88	2.80	3.51	3.79	0.45	3.36	1.52	36.71
Mayville	2.02	2.44	1.00	3.28	5.01	4.17	2.42	2.21	3.42	1.21	2.54	1.67	31.39
Montague	.....	1.03	0.67	2.22	5.62	6.18	2.48	.....	.....	.....	.....	.....	.....
Mottville	0.64	2.31	2.16	2.52	8.37	5.85	4.44	0.62	2.45	0.55	2.60	1.54	34.05
Noble	1.45	2.75	2.47	3.22	7.87	5.93	5.17	1.33	3.24	0.57	2.75	1.41	38.16
North Marshall	0.93	1.75	1.64	.....	7.48	.....	2.15	3.57	2.86	0.11	2.63	1.69	.....
Olivet	.....	1.70	0.40	.....	.....	.....	.....	.....	.....	0.45	2.62	1.56	.....
Ovid	1.63	2.54	1.08	3.01	6.04	4.78	2.29	2.67	2.46	0.84	2.39	1.82	31.55
Paris	.....	.....	.....	.....	.....	.....	.....	.....	2.39	1.11	2.34	0.76	.....
Parkville	1.25	2.55	2.13	.....	9.94	5.97	2.36	0.99	3.45	0.63	2.79	2.42	.....
*Port Huron	1.86	2.71	1.28	1.99	4.56	5.76	1.68	2.58	5.47	1.26	3.44	1.42	33.95
Rawsonville	1.45	2.30	2.60	1.30	7.91	8.14	1.89	1.14	6.11	0.75	3.13	1.30	38.02
Rockland	.....	.....	1.17	.....	4.28	2.39	3.80	4.03	2.08	4.04	1.90	0.60	.....
St. Ignace	2.80	1.40	0.85	1.86	3.51	4.52	3.61	2.77	1.55	1.61	3.27	2.36	30.11
Sand Beach	6.27	1.85	1.20	1.08	2.61	3.55	1.72	2.86	4.77	3.46	2.95	2.02	34.34
*Sault de Ste. Marie	2.41	1.43	1.52	2.32	3.12	3.50	2.33	2.05	1.79	2.98	3.23	3.41	30.09
Standish	2.54	0.76	0.40	0.61	2.87	7.73	2.08	3.51	.....	.....	.....	.....	.....
Stanton	.....	1.25	0.45	2.60	5.51	.....	.....	.....	.....	.....	.....	.....	.....
Thornville	1.41	2.02	0.88	1.72	6.43	3.48	2.84	2.39	4.77	0.91	3.24	1.51	31.60
Vandalia	1.87	2.36	2.76	2.61	10.01	6.38	2.54	0.89	2.80	0.64	3.26	2.46	38.58
Vienna	1.40	1.99	0.62	1.98	4.59	5.34	3.25	6.23	2.46	1.72	3.07	.....	.....
Washington	1.00	2.56	0.98	1.12	6.36	7.79	2.29	2.23	4.71	0.47	.....	1.21	.....
Weldon Creek	4.43	2.24	0.85	1.80	4.94	5.20	1.97	4.20	3.51	1.46	2.92	4.11	37.63
White Pigeon	2.00	2.11	2.07	3.54	8.16	5.00	4.47	0.49	2.49	0.47	2.60	1.40	34.80
Williamston	.....	.....	0.75	2.97	.....	5.90	2.30	3.52	3.06	1.10	2.30	0.65	.....
Ypsilanti	1.68	2.58	2.79	1.53	8.92	7.86	2.06	1.34	5.97	0.73	4.81	1.58	41.85
Minnesota.													
Albert Lea	0.32	0.61	0.83	3.31	.....	.....	6.24	1.53	2.12	1.71	0.35	0.44	.....
*Alexandria	0.18	0.79	0.96	2.01	4.76	2.46	3.76	5.39	0.24	0.10	0.58	0.42	21.05

[1] F. A. Zerby. [2] W. J. Jones. [3] Weather Bureau Observer.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Minnesota—Continued.													
Alma City	0.11	1.21	1.09	2.07	5.25	9.65	3.49	2.82	1.70	0.48	0.52	0.33	28.72
Ash Creek					8.25	5.95	1.25	3.53	0.31	0.27	0.10	0.19	
Bingham Lake				3.92	8.33	6.36	4.20					0.09	
Bird Island			0.71	2.87	8.74	3.37	5.72	7.25	3.82	T.	0.12	0.70	
Caledonia		0.90	1.41	3.63	6.98	8.90	2.14						
Cambridge						4.65	3.97	2.98	0.31	0.24	0.35	0.38	
Camden					7.77	3.85	4.95	4.76	2.30	0.37	0.45	0.10	
Canton						8.44	2.55	2.82	1.14				
Crookston	0.40	0.44	1.15	1.95	3.51	1.70	2.92	2.39	0.29	0.11		0.01	
*Duluth	0.48	1.46	2.02	3.70	6.54	5.32	2.18	4.28	0.32	0.38	1.69	0.15	28.52
Eagle Bend				2.80	4.91	2.70	8.20		0.40		0.00		
Easton				2.00	5.04	4.53	3.13	1.65	2.52		0.15	0.40	
Farmington	0.18	2.60	1.23	1.09	5.46	6.87	9.21	3.42	2.93	0.25	0.83	0.69	34.76
*Fergus Falls	0.09	1.13	1.18	2.79	6.93	2.50	4.62	4.80	0.99	0.27	1.00	0.31	26.61
*Fort Ripley	0.08	0.97	1.08	1.89	5.29	2.85	4.61	3.65	1.02	0.44	0.80	0.25	22.93
Fort Snelling	0.12	1.67											
Grand Meadow					7.15	11.48	3.50	1.94	1.38	2.49			
Granite Falls		0.59	0.81	3.27	8.66	5.55	5.27	5.82	0.95	0.00	0.69	0.33	
Kinbrae	0.82	1.05	3.12	4.42	9.71	7.07	2.70	2.77	1.24			0.15	
Lake Winibigoshish	0.54	0.65	2.23	2.87	4.99	1.32	1.79	2.64	2.40	0.21	1.22	0.12	20.98
Leech Lake	0.35	0.69	1.65	2.62	6.10	2.07	3.26	3.78	0.80	0.18	1.49	0.21	23.20
Mankato	0.05	1.00	0.50										
Maple Plain		1.82	1.19	1.26	5.30	7.95	8.68	5.73	1.30	0.07	0.73	0.70	
*Minneapolis	0.05	1.37	0.97	1.27	6.66	6.74	11.87	4.71	1.45	0.45	0.43	0.75	36.72
Minneapolis	0.66	1.54	1.15	0.68	7.51	6.25	12.01	4.70	1.54	0.42	0.60	0.84	37.90
Montevideo	0.48	0.54	1.50	4.08	6.56	3.57	4.26	3.52	0.18	0.42	0.53	0.62	26.86
*Moorhead	0.42	0.91	1.17	3.69	5.06	2.51	5.14	3.99	0.33	0.30	0.95	0.47	24.94
Morris	0.20	1.35	1.23	3.87	8.28	1.71	3.51	3.80	0.28	0.18	0.85	0.36	25.62
Northfield	0.28	1.72	1.15	2.01	9.91	4.60	9.82	5.03	3.63	0.59	0.15	0.73	39.62
Ortonville	0.50	0.71	0.87	4.19	5.94	1.62	3.94	3.32	0.24	0.09	1.25	0.82	23.49
Pine River	0.22	0.78	0.53	2.51	5.64	2.25	3.42	4.95	0.57	0.33	1.38	0.27	22.85
Pokegama Falls			1.21	2.69	5.12	1.35		3.55	1.20	0.28	1.38	0.24	
Princeton				2.13	5.99	2.75	4.87		0.30				
*Red Wing	0.17	1.70	0.88	1.09	6.06	7.74	7.17	1.80	3.38	1.18	0.40	0.66	32.32
Red Wing	0.17	1.90	0.87										
*Redwood Falls	0.18	1.41	0.44	3.67	7.06	4.88	6.37	3.60	1.88	0.05	0.40	0.48	30.42
Rolling Green	0.33	2.07	1.64	6.23	7.37	3.74	3.99	2.23	1.22	0.29	0.35	0.55	30.01
St. Charles	0.87	0.73	1.30	3.76	6.81	7.14	3.60	2.44	2.41	1.40	0.86	0.98	32.30
St. Oloff					7.37		6.35	4.60	0.50	0.25	1.05	0.75	
St. Paul	0.02	1.44	0.75	0.97	5.17	7.50	9.04	3.66	1.72	1.39	0.36	0.53	32.55
*St. Vincent	0.36	0.44	0.80	1.66	2.22	2.28	1.70	4.14	1.30	0.28	0.16	T.	15.34
Sandy Lake Dam								2.70	0.70	0.30	2.13		
Sheldon	0.59	1.59	0.72	3.78	6.87	9.10	1.29	2.90	2.55	1.59	0.31	1.29	32.58
Wabasha							4.54	1.83	2.30	1.87	0.78	1.13	
Mississippi.													
*Aberdeen				3.25	2.57	5.97	7.81	6.09	4.30	0.00	4.60	7.43	
Agricultural College	6.65	1.57	5.49	9.75	2.06	5.07	13.39	5.88	1.94	T.	3.65	4.43	59.88
*Batesville	3.80	2.12	4.25	5.72	4.33	3.52	5.28	2.25	0.13	0.00	2.92	8.85	43.17
Booneville	4.38	5.79	5.50	14.99	4.46	3.15	14.03						
*Brookhaven	6.99	3.96	9.06	6.70	2.67	6.19	15.63	6.29	1.67	0.87	3.94	5.77	69.74
Canton	5.20	3.09	6.72	5.82	1.48	4.68	11.53	3.42	2.04	0.12	4.10	6.58	54.78
*Columbus[1]	5.50	2.12	6.62	7.83	3.45	3.80	14.49	6.38	2.15	0.00	3.40	5.05	60.79
*Columbus[2]				2.05	4.56	3.78	15.83	6.25	2.42	0.00	3.93	5.92	
*Corinth					5.64	2.78	8.62	3.66	6.33	0.00	6.85	5.63	
Crystal Springs				5.62		5.84	12.99	6.93	1.91	0.34	2.82	6.11	
Duck Hill	2.34		3.94				7.95	5.82	2.62				
Edwards	4.73	2.89	7.54	7.87	2.66	2.78	12.11	5.15	1.92	0.36	3.93	6.71	58.65
Enterprise	7.20	3.77	8.00	2.79	5.15	2.74	7.75	3.44	2.27	0.38	2.67	5.84	52.00
Fayette	6.11	3.84	9.77	7.93	2.52	3.58	8.44	5.34	1.19	0.38	2.59	5.25	56.94
*Greenville[3]	5.59	3.60	3.91	9.74	2.93	2.54	9.25	3.50	6.96	0.80	2.44	6.54	57.80
Hattiesburg	5.95	3.46			3.21	6.90	9.04	6.07	1.84	2.03	3.88	5.08	
*Hazlehurst				2.26	1.92	4.24	7.15	3.18	1.99	0.20	3.06		
*Hernando					4.46	5.02	8.16	5.52	1.06	0.07	7.87		
*Holly Springs					3.93	1.93	7.63	5.10	1.11	0.00	7.75		
*Jackson				1.31	1.90	2.43	6.65	1.51	0.05	0.03	0.43		
Kosciusko	6.50	2.00	5.90	12.60	1.10	2.80	7.50	5.40	0.20	0.00	0.40	6.10	50.50
*Lake				0.57	2.06	1.94	1.80	0.77	0.98	0.42	3.42	6.73	
Logtown	8.44	0.20	4.30	8.48	1.72	5.28			3.79	3.67	6.29	3.29	
Louisville	6.31	2.07	6.55	7.84	1.68	8.05	10.69	3.88	1.43	0.00	3.72	4.61	
*Macon				1.49	2.20	2.80	23.87	4.56	2.89	0.02	5.22		
*Meridian	8.20	2.77	6.50	2.03	8.42	5.20	11.41	3.37	0.57	0.46	3.11	6.57	58.61
Moss Point			6.50	4.86	1.10	7.20	17.81	8.50	4.05	4.20	0.50	2.80	
*Natchez	3.60	0.18	10.40	4.71	3.21	4.21	7.12	5.62	2.83	0.60	2.11	3.37	47.96
*Okolona	5.86	3.99	4.15	0.94	7.88	7.51	12.27	3.12	5.68	0.00	4.51	4.55	60.46
Palo Alto	7.35	3.71	5.15				9.38	4.05	4.33	0.06	3.04	4.45	
Pontotoc	3.50	3.41	4.48	10.13	6.25	5.00	9.30	3.09	9.10	T.	4.67	8.83	67.76
*Port Gibson	5.20	3.68	9.77	7.47		3.99	9.09	4.95	1.92	0.42	4.15	6.55	
Ship Island	7.79	0.25	3.76	8.63	1.21	6.22	11.49	9.66	5.59	3.75	1.90	6.11	66.36
*University	4.61	4.82	3.80	10.67	4.35	5.02	14.14	5.97	0.91	0.07	5.23	8.45	68.04
Vaiden	9.02	3.72	5.45	13.72	2.23	4.44	7.75	3.98	3.09	0.06	3.83	6.18	63.47
*Vicksburg	4.88	3.52	6.97	6.76	0.49	3.71	9.34	5.41	1.48	0.18	4.48	5.42	52.46
Washington	6.58	2.50	9.76	7.47	2.51	2.71					2.66	4.43	
Water Valley	7.78	3.10	3.83	9.50	3.89	4.23	5.45	5.32	1.01	0.06	4.63	8.28	57.08
Waynesboro[4]	7.00	5.81	8.10	3.84	2.41	6.29	7.62						
*Waynesboro[2]				3.60	2.35	5.38		5.48	3.33	1.20	1.04		
*Yazoo City	7.51	3.19	5.98	11.23	2.34	5.77	7.55	7.39	2.14	0.33	4.81	4.60	62.84

[1] River observer. [2] Cotton belt observer. [3] R. Somerville. [4] W. S. Davis.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Missouri.													
Adrian	1.08	6.54	4.06	7.35	9.53	1.50	4.80	2.30	2.25	2.30	.....	.....	.....
Appleton City	.....	8.83	4.54	5.48	9.72	3.37	4.52	4.78	2.04	2.81	1.77	3.14	.....
Arthur	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.60	1.17	3.01	.....
Bethany	.....	.....	.....	.....	10.30	1.70	5.30	3.00	3.55	2.56	1.87	2.48	.....
Big Piney	.....	.....	.....	.....	.....	.....	6.94	2.80	3.42	.....	3.84	2.62	.....
*Boonville	1.22	5.18	3.91	7.35	14.88	5.90	4.90	2.42	4.34	2.13	3.71	3.57	59.51
Brunswick	1.10	4.30	3.10	2.90	7.55	4.30	5.00	3.70	2.30	2.10	2.85	0.55	39.75
Canton	.....	.....	.....	.....	.....	.....	4.68	0.88	2.31	1.04	3.55	1.60	.....
*Cape Girardeau	1.50	2.97	3.50	4.00	3.89	1.50	2.10	3.95	0.35	2.80	3.32	2.00	31.88
Carrollton	1.50	4.58	4.53	6.35	10.03	2.55	5.71	1.59	3.09	2.30	1.85	0.67	44.75
Carthage	0.40	4.09	.....	.....	.....	.....	.....	.....	1.47	4.20	1.47	5.05	.....
Chillicothe [1]	2.55	3.59	4.14	5.83	8.59	4.57	7.49	0.80	1.47	3.64	1.67	.....	.....
Clinton	.....	.....	2.22	5.15	10.42	2.70	4.22	1.33	2.76	2.00	1.44	2.40	.....
*Columbia	2.27	6.80	3.50	5.60	10.58	3.60	7.62	3.56	4.50	1.87	2.44	2.28	54.62
Conception	2.07	1.00	2.16	2.50	11.21	0.59	2.78	4.55	2.05	2.17	1.17	1.70	33.95
Concordia	.....	.....	.....	5.45	6.70	4.57	4.53	0.97	4.52	1.50	1.25	2.42	.....
Dadeville	.....	6.63	3.96	.....	.....	7.63	.....	1.28	1.15	3.23	1.86	3.22	.....
Darksville	2.70	3.41	2.40	5.59	7.80	4.30	4.84	0.90	3.13	1.37	2.43	1.15	40.02
Dunnegan	.....	.....	3.30	5.02	11.81	4.58	5.05	.....	.....	.....	.....	.....	.....
East Lynne	2.18	5.71	4.74	5.23	8.50	2.82	5.99	3.37	3.63	2.63	1.74	2.41	48.95
Edge Hill	.....	.....	.....	.....	.....	4.69	6.99	4.10	.....	4.04	5.16	4.36	.....
Eldon Hill	0.70	7.34	1.93	7.19	9.91	3.31	5.92	2.36	4.07	2.56	2.09	2.48	49.86
Excelsior Springs	1.85	4.26	4.30	5.76	10.82	3.65	8.78	2.20	2.33	2.32	.....	.....	.....
Fayette	2.85	5.34	3.23	6.21	9.42	3.37	4.85	2.29	4.31	1.61	2.95	1.88	48.31
Fox Creek	2.35	4.30	1.57	6.50	9.78	1.23	4.17	1.00	2.65	2.05	4.16	1.59	41.35
Fulton	.....	.....	.....	.....	10.95	2.75	7.20	2.39	4.78	2.14	2.55	2.00	.....
Gainesville	.....	.....	.....	.....	.....	.....	5.94	5.17	0.96	4.22	5.64	3.22	.....
Gallatin	.....	.....	.....	.....	.....	.....	.....	7.00	1.35	5.10	2.45	1.90	.....
Galt	.....	.....	.....	.....	12.57	7.00	5.50	1.70	1.00	2.50	.....	1.80	.....
Gayoso	.....	.....	.....	.....	.....	.....	.....	3.83	0.45	0.21	6.21	6.73	.....
Glasgow	2.57	4.96	1.44	6.56	8.45	3.39	5.84	3.33	4.97	1.48	2.21	1.96	47.16
Glensted	.....	.....	.....	.....	.....	2.17	5.54	0.90	2.21	2.45	1.57	1.29	.....
Gordonville	1.25	3.24	2.53	8.68	5.56	1.26	3.47	5.58	0.53	2.36	5.21	2.94	42.61
Gorin	.....	.....	.....	.....	.....	4.32	7.36	1.65	3.25	0.87	2.30	1.64	.....
Grove Dale	.....	.....	.....	.....	.....	.....	.....	2.41	3.37	2.28	2.50	1.79	.....
*Hannibal	.....	.....	.....	.....	8.28	1.69	3.69	0.92	2.36	0.67	3.17	1.63	.....
Harris	1.30	1.28	1.08	3.41	10.10	.....	.....	.....	.....	.....	.....	.....	.....
Harrisonville	.....	2.79	3.18	5.07	7.27	3.48	4.48	2.51	2.91	2.42	1.56	2.23	.....
Harviell	.....	.....	.....	.....	.....	3.65	4.34	4.19	.....	1.34	.....	.....	.....
*Hermann	3.79	5.92	3.39	6.76	8.84	3.26	4.22	1.87	3.40	2.20	2.76	2.04	48.45
Houston	.....	.....	.....	.....	.....	.....	3.34	2.61	3.10	3.30	3.80	2.36	.....
Independence	.....	.....	.....	.....	.....	3.62	6.03	3.02	5.20	2.00	.....	.....	.....
Irena	.....	.....	.....	.....	.....	1.85	6.03	1.16	3.60	2.80	0.97	1.74	.....
Ironton	.....	.....	.....	.....	9.50	1.95	5.30	1.80	2.55	3.30	4.29	4.33	.....
Jefferson Barracks	2.34	4.89	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jefferson City	.....	6.20	2.39	6.58	11.03	4.06	5.40	1.38	3.40	2.35	2.34	1.81	.....
*Jerome	2.32	5.43	2.17	5.18	11.14	3.88	3.31	1.28	2.47	2.18	2.00	2.61	43.97
*Kansas City	2.56	4.27	4.15	4.32	8.28	2.73	4.76	1.55	4.05	3.48	1.62	1.70	43.47
Kidder	0.50	.....	.....	2.77	7.47	.....	.....	.....	2.05	5.15	0.75	0.90	.....
Lamar	.....	6.99	3.73	5.58	9.51	5.19	3.84	1.42	0.77	4.80	2.61	3.29	.....
Lamonte	2.26	6.43	3.10	4.62	10.13	4.75	6.07	1.57	2.86	1.52	1.15	2.36	46.82
Langdon	.....	.....	.....	4.67	10.81	1.42	2.78	3.66	1.11	2.00	0.18	2.28	.....
Lebanon	1.80	6.00	3.83	4.40	9.67	2.47	5.58	3.37	2.61	3.08	3.37	1.73	47.91
Lexington	.....	.....	.....	.....	.....	2.94	6.79	2.62	3.43	3.10	1.72	1.84	.....
Liberty	1.25	3.74	3.25	4.45	7.27	3.47	4.74	1.90	3.22	2.11	1.91	1.82	39.13
Linneus	.....	.....	.....	.....	10.55	4.28	7.41	0.36	.....	2.07	.....	.....	.....
*Louisiana Bridge	1.11	3.74	1.73	4.58	8.50	3.31	4.41	2.11	4.12	0.32	2.79	1.57	38.29
McCune Station	.....	.....	.....	.....	.....	.....	3.10	1.65	3.07	0.95	3.26	2.05	.....
Mansfield	.....	.....	.....	7.22	11.07	2.15	3.75	4.82	2.67	3.77	3.29	2.70	.....
Marble Hill	2.00	3.10	2.04	7.86	.....	2.63	5.42	2.33	1.10	2.70	4.45	3.88	.....
Marshall	.....	4.56	2.93	6.19	10.32	3.96	4.98	1.40	3.38	1.53	1.92	2.67	.....
Mexico	1.69	4.99	2.65	5.79	8.77	3.74	9.05	2.29	3.85	1.43	2.57	2.35	49.17
Mine La Motte	0.55	2.54	1.44	8.24	9.48	1.13	2.89	2.44	2.37	3.45	4.54	3.87	42.94
Mount Vernon	.....	.....	.....	.....	.....	2.62	5.60	2.17	2.12	3.62	2.31	3.72	.....
Neosho	.....	.....	5.65	3.88	12.72	3.84	4.74	4.92	2.28	4.80	2.67	5.08	.....
New Boston	.....	.....	.....	.....	.....	.....	5.45	1.68	0.79	1.36	1.62	1.30	.....
New Hartford	.....	.....	.....	.....	.....	.....	.....	.....	4.13	1.86	2.64	2.15	.....
New Haven	3.50	5.25	1.35	3.50	10.60	2.90	4.50	3.35	3.00	2.33	2.30	1.87	.....
New Palestine	.....	.....	.....	.....	.....	.....	5.51	2.00	4.51	1.76	2.15	1.21	.....
Oakfield	.....	.....	.....	.....	.....	1.23	3.87	1.18	2.82	2.14	3.31	1.49	.....
Oak Ridge	1.20	3.61	3.40	6.80	5.10	0.90	4.20	.....	0.30	2.60	4.80	1.62	.....
Olden	.....	.....	.....	.....	.....	3.31	6.53	2.57	3.08	4.08	3.62	3.29	.....
Oregon [2]	1.08	1.68	4.50	3.13	7.17	1.70	2.86	2.08	1.51	1.66	1.12	3.10	31.59
Oregon [3]	0.94	1.61	4.20	2.73	6.65	1.65	2.31	2.03	1.42	1.58	1.10	2.83	29.15
Oto	.....	.....	.....	.....	.....	.....	4.59	2.76	0.80	4.05	2.73	3.20	.....
Paris	.....	.....	.....	.....	.....	.....	.....	.....	2.93	0.58	3.22	0.51	.....
Phillipsburgh	1.88	5.09	2.38	3.85	10.32	3.31	5.25	4.04	1.84	4.33	2.58	2.89	47.75
Pickering	0.56	1.76	3.47	7.93	8.59	.....	2.06	3.12	1.70	2.77	0.92	1.86	.....
Platte River	1.00	2.78	3.74	3.93	8.11	3.44	3.86	3.80	0.66	2.60	1.71	1.15	36.78
Poplar Bluff	.....	.....	.....	.....	.....	.....	3.88	5.15	0.61	1.49	4.61	4.68	.....
Princeton	1.10	1.75	4.80	6.10	11.40	5.18	5.53	3.10	1.23	2.40	1.65	2.10	46.44
Rea	.....	.....	.....	3.62	6.23	2.68	3.52	3.33	1.08	1.50	0.73	1.44	.....
Rolla	2.29	5.06	2.20	8.51	10.75	4.36	3.34	4.47	0.62	2.62	2.80	3.33	50.25
St Charles	1.72	4.97	1.85	4.73	.....	.....	.....	.....	2.54	1.97	3.47	2.08	.....
*St. Joseph	2.58	2.84	4.79	4.01	5.41	2.35	4.67	2.18	0.75	1.79	0.91	1.29	33.57
*St. Louis	1.52	4.89	1.92	7.60	7.87	2.73	4.64	1.75	1.59	1.66	3.46	1.99	41.62
St. Louis [4]	1.52	4.29	1.81	7.03	7.27	1.91	3.34	1.35	2.00	1.78	3.86	2.33	38.49
St. Louis [5]	.....	.....	.....	.....	6.81	3.60	4.03	1.17	1.99	1.49	.....	1.83	.....
Sarcoxie	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.00	1.50	3.21	.....
Sedalia	3.09	6.42	3.53	5.18	10.47	5.50	8.23	0.29	4.01	2.04	1.99	2.80	53.55

[1] N. J. Swetland & Co. [2] William Kaucher. [3] Sam. M. Ruley. [4] F. W. Duenckel. [5] J. C. Duffy.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Missouri—Continued.													
Shelbina	1.50	3.14	2.70	5.90	9.20	3.00	4.60	1.30	2.10	1.20	2.70	1.80	39.74
*Springfield	3.23	3.71	3.34	4.56	9.90	4.97	5.13	3.38	0.96	3.68	1.84	3.10	47.80
Stanberry				3.68	8.96	2.55	3.84	3.41	3.40	1.94	1.14	1.55	
Steelville	2.38	3.38	0.80	6.00	9.30	1.75		1.50	3.45	2.38	4.17	2.81	
Stellada	2.30	4.80	3.06	5.68	10.13	5.96	4.58	0.89	4.74	1.80	1.52	2.21	47.67
Vancleve							6.25	3.30	2.55	2.78	2.69	1.84	
Vermont						4.77	6.87	0.71	3.23	1.92	2.02	2.35	
Warrensburg	2.17	5.87	3.56	4.35	10.00	4.17	5.22	2.63	3.84	1.64	2.18	2.58	48.21
Warrenton	2.53	5.16	3.34	5.24	9.38	4.15	5.75	1.30	2.42	2.29	2.66	2.37	46.59
Wellsville								2.20	4.55	1.27	2.36	1.85	
West Plain									2.40	3.30	2.80	1.00	
Wheatland						3.37	4.09	3.06	4.83	2.18	3.12		
Whiteside						2.39	4.75	1.68	2.26	2.40	1.74	1.70	
Withers Mills	1.70		2.40	4.80	8.95	2.45	4.20	1.35	2.55	0.80			
Zeitonia	1.27	3.42	2.55	9.14	6.99	0.45	8.02						
Montana.													
Boulder Valley	0.34	0.02	0.08	1.13	0.62	4.33	1.10	0.22			0.69	0.19	
Bozeman				0.64	1.45	4.40	1.41		0.89	1.81	0.57	0.97	
Camp Poplar River	0.10	0.60	1.40	2.32	1.12	1.30	3.09	0.20	0.26	T.	1.15	1.82	13.30
Choteau	2.25	0.74	0.80	1.53	1.66	4.53	0.83						
Cokedale	1.70	0.70	3.60	3.25	1.90			1.17	1.08	1.23	2.19	2.50	
Dearborn Canyon		0.81	0.80	1.57	2.69		0.57	1.15	0.05	0.19	1.20	1.20	
Deer Lodge City	1.26	0.35	0.06	1.23	0.69	5.46	1.30	1.80	0.23	0.02	0.50		
Elk Park							1.11				1.57	1.53	
Fort Assinaboine	0.45	0.70											
Fort Custer	1.31	0.60	0.20						0.34	1.53	0.64		
Fort Keogh	0.36	0.32	0.22	1.88	1.52	4.87	0.53	0.59	0.33	1.10	0.70	0.22	12.64
Fort Logan		0.20	1.00		0.38	4.44		2.59	0.37	0.51	0.51	0.99	
Fort Missoula	1.59	0.27	0.60	1.57	1.37	2.77	0.55	0.35	0.33	0.60	0.93	2.20	13.13
Glendive	0.02	0.80	0.50	2.27	3.25	4.10	3.08	0.70	0.95	0.20	0.58	1.30	17.75
Great Falls	0.68	0.41	0.60	1.89	0.29	6.93	3.02	0.76	0.08	0.03	1.45	1.20	17.34
*Havre	0.19	0.33	0.28	1.04	0.86	3.79	1.87	1.09	0.44	0.25	1.08	1.18	12.40
*Helena	1.02	0.17	0.31	0.72	1.54	5.63	2.27	0.48	0.26	0.26	2.05	0.56	15.27
Horr				0.80	1.40	1.78	0.19	0.42	1.04	0.67			
Livingston	1.70	0.50	0.55	T.									
Martinsdale	2.00	1.35	0.90	1.76	1.71	4.24	2.00	0.96	0.75	0.49	0.41	0.32	16.89
*Miles City	0.39	0.34	0.26	1.39	1.43	3.16	1.15	0.60	0.52	0.98	0.70	0.56	11.48
Powder River	0.64	0.48	0.19	2.16	1.94	3.28	1.44						
Virginia City	0.27	0.04	0.31	1.40	0.54	2.63	1.16	0.61	0.82	1.00	2.09	1.95	13.02
Nebraska.													
Agee			0.40	5.62	6.37	3.76	0.25	3.63	0.14	0.71	0.55	0.29	
Albion				2.98	4.91	0.90	1.36	2.76	0.20				
Alliance	1.81	0.21	1.05	4.27	3.19	6.02							
Ansley	2.20	1.30	1.42	3.03	6.90	1.66	3.03	3.43	0.18	1.82		0.20	
Arborville				3.66	6.72	2.70	3.64	2.67	0.50	1.38	0.14	0.42	
Arcadia										2.03	0.11	0.30	
Ashland						1.15	3.77	4.08	0.75	0.88	0.04	1.40	
Ashton								3.13	0.63	1.92	0.14	0.26	
Auburn	1.02	1.28	4.91	4.86	11.40	1.46	3.55	4.28	0.66				
Bassett	0.92	0.29	2.39	7.04	5.80	2.66	0.76	2.25	T.	1.10	0.65	0.60	24.46
Beatrice	0.30	0.46	2.16	4.82	9.09	1.72	3.40	2.55	0.28	0.58	0.21	1.20	26.77
Belvidere	0.80	0.69	3.50										
Bookwalter					9.83	1.09			0.00	0.50		1.60	
Brandon			1.00	4.80	4.00	0.32	3.75	2.40	0.50	1.40		T.	
Burwell	0.91	0.92	0.68	3.23	4.71	1.17	3.30				1.00	0.75	
Callaway									0.13	1.55	0.13	0.37	
Cornlea					5.19	1.28	2.50	5.50	0.11	1.31	0.01	0.36	
Creighton	0.40	0.80	1.60	4.25	4.83	1.37	0.26	4.09	0.28	0.99	0.13	0.15	19.15
*Crete[1]	0.78	1.25	2.43	3.49	12.13	0.95	4.60	2.36	0.18	1.13	0.47	1.01	30.78
Crete[2]	0.78	1.25	2.43	3.49	12.13	0.95	4.60	2.36	0.18	1.13	0.47	1.01	30.78
*Culbertson	0.58	1.43	1.44	2.96	3.99	2.73	4.06	3.83	0.28	0.91	0.18	0.61	23.00
David City	1.40	1.10	2.25	3.50	6.90	1.80	3.90	4.10	2.70	1.15	0.25	1.20	30.25
De Soto	0.40	0.76	2.25	4.72	8.49	0.80	3.24	3.36	1.31	1.71	0.25	1.72	29.01
Dunning						0.18	0.01	1.19	0.00	0.02	T.	0.20	
Ericson	0.95	0.42	1.50	3.31	4.12	1.85	2.74	2.43	0.10	2.17	0.30	0.20	20.09
Ewing	0.43	0.27	2.58	5.08	4.33	1.33		2.65	0.00	0.90	0.23	0.40	
Fairbury	1.08	0.84	2.20	2.49	9.79	1.58	4.92		0.64	0.63	0.45	1.04	
Fairfield			2.44	3.60	7.02	1.89	5.50	1.36	0.23			0.60	
Falls City		0.73	3.84	2.58	7.14	1.05	2.60	2.86	0.78	0.88	0.00	1.50	
Fort Niobrara	0.20	0.31											
Fort Omaha	0.33	0.49											
Fort Robinson	1.56	0.19	0.56	3.93	5.02	11.91	1.64	1.94	0.28	4.74	0.07	0.50	32.34
Fort Sidney	1.15	1.45	0.25	4.05	3.36	1.10	1.46	1.54	1.50	3.53	0.00	0.50	19.89
Franklin	0.35	0.96	1.50	1.51	6.28	1.00	4.07	3.66	0.14	1.72	0.10	0.30	21.59
Fremont	0.56	0.58	1.86	3.13	8.37	1.37	3.39	2.71	0.62	0.98	0.15	0.64	24.36
Geneva	0.60	1.70		2.50	8.50	1.30	2.80		0.20	0.90	0.30	0.85	
Genoa	0.30	1.64	1.46	4.05	6.01	1.50	2.44	5.81	0.81	1.36	0.57	0.76	26.71
Gering	1.31	0.40	0.96	3.71	3.82	5.13	1.22	1.16	0.25	1.75	0.05	0.75	20.51
Grand Island	0.90	1.40	2.30	2.49	5.61	1.14							
Haigler		0.96	0.68	2.05	4.76	0.26	4.92	3.91	0.16	T.	T.	0.39	
Hartington	0.55	0.91	0.81	4.76	7.48	1.59	0.78	3.99	0.66	0.74	0.26	0.64	23.17
Harvard	0.83	1.30	1.40	3.14	7.08	1.99	2.25	1.76	0.25	1.94		0.25	
Hastings	1.20	1.63	2.30	2.00	6.20	2.25		2.19	0.37	1.75	0.25	0.45	
Hayes Center	1.48	2.22	2.33	2.34	4.11	2.11	2.17	2.55	3.77	0.96	0.41		
Hay Springs	1.61	0.20							0.72	5.80	0.05	0.66	
Hebron	0.70	0.80	3.37	2.93	7.64	1.73	5.22	2.60	0.94	1.08	0.45	0.71	28.17

[1] Weather Bureau.

[2] C. Rutter and R. P. Horsey.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Nebraska—Continued.													
Holdrege	0.72	1.90	1.34	2.06	4.98	1.64	1.95	4.11	0.25	1.38	0.28	0.73	21.34
Imperial	0.35	1.63	0.90	3.75	4.25	0.01	3.00	4.00	0.50	2.00	.....	0.40	.....
Indianola	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.63	0.50	0.60	.....
*Kearney	.....	.....	.....	2.51	4.75	0.97	4.39	3.68	0.39	1.71	0.30	0.60	.....
Kennedy	0.41	0.48	0.41	5.42	5.60	4.24	1.96	3.68	0.72	3.83	0.17	0.60	27.52
Kimball	1.20	1.52	1.26	4.93	2.82	3.69	0.91	1.22	0.61	2.30	0.13	0.86	21.45
Lexington	1.40	2.10	0.90	3.08	6.55	1.11	3.61	3.56	0.79	1.96	0.05	0.80	25.91
Lincoln	0.78	0.90	1.67	3.80	9.75	1.18	5.38	3.76	0.17	0.78	0.28	1.46	29.91
Long Pine	1.00	0.70	.....	7.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marquette	0.85	1.30	1.52	3.69	6.11	1.69	3.50	3.27	0.15	2.07	0.17	0.50	24.82
Minden	1.60	3.51	2.29	2.07	6.98	1.88	3.43	4.55	0.23	2.16	1.12	0.60	30.42
Mullen	.....	.....	.....	.....	3.26	3.44	1.62	2.87	0.30	.....	.....	.....	.....
Nebraska City	0.21	.....	3.66	5.38	.....	.....	5.69	4.37	0.12	.....	.....	1.70	.....
Nesbit	.....	.....	.....	.....	4.21	0.95	1.65	3.88	0.10	2.05	0.20	0.50	.....
Norfolk	0.17	0.70	1.09	3.93	5.95	1.30	1.44	3.06	0.19	1.03	0.27	0.43	19.56
North Loup	0.80	1.39	1.88	3.59	5.64	1.21	2.48	3.37	0.20	1.61	0.19	0.20	22.56
*North Platte	1.04	0.97	0.61	4.30	3.70	0.60	3.59	3.01	0.56	1.49	0.05	0.42	20.37
Oakdale	0.43	0.49	1.20	3.51	4.35	1.36	2.38	2.76	0.10	0.98	0.21	0.39	18.16
*Omaha	0.42	0.54	2.74	4.82	8.43	1.51	3.64	2.50	1.63	1.28	0.14	1.79	29.44
O'Neill	0.70	0.40	1.43	3.83	6.05	1.54	0.52	4.28	0.63	0.90	T.	0.70	20.98
Orleans	.....	.....	1.39	1.29	5.18	0.80	5.75	3.58	0.00	.....	.....	.....	.....
Ough	0.38	1.65	1.07	3.01	3.66	0.87	3.76	1.78	0.32	1.79	0.03	0.20	18.52
Palmer	0.50	1.30	3.20	3.80	5.40	1.10	2.25	2.00	0.00	1.60	0.75	0.35	22.25
*Plattsmouth	1.10	2.10	4.75	8.25	14.72	1.29	4.41	2.22	0.78	1.13	0.35	1.79	42.89
Precept	0.60	1.70	1.96	1.56	6.61	0.68	3.82	3.78	0.15	.....	.....	.....	.....
Ravenna	1.69	1.93	2.79	2.78	4.77	2.28	1.64	4.17	0.88	1.83	0.49	0.35	25.60
Santee Agency	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.02	0.23	0.24	.....
Schuyler	.....	.....	.....	.....	6.62	1.08	2.50	3.36	0.28	.....	.....	.....	.....
Seward	0.40	0.60	3.50	3.52	7.85	1.03	.....	2.47	0.00	2.00	.....	0.50	.....
Springview	0.47	0.55	1.58	7.23	6.04	2.96	1.57	3.88	0.29	1.11	0.65	0.58	26.91
Stanton	.....	.....	.....	.....	6.11	1.99	2.59	4.14	0.35	0.97	0.01	0.60	.....
Superior	.....	.....	2.48	2.43	4.50	0.35	3.99	2.51	0.72	1.70	0.00	0.20	.....
Syracuse	0.40	0.71	3.23	4.07	8.73	0.99	3.90	2.71	0.22	0.90	0.20	0.54	27.20
Table Rock	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.77	0.45	1.96	.....
Tecumseh	1.00	1.44	4.25	6.65	8.15	1.46	3.48	.....	.....	.....	0.25	1.54	.....
Tekamah	0.55	0.40	1.45	5.18	12.10	1.50	4.90	4.07	0.65	1.33	1.50	0.57	34.20
Thedford	0.10	0.55	.....	.....	0.80	1.21	1.61	.....	.....	.....	.....	.....	.....
Tarlington	.....	.....	.....	.....	.....	1.37	4.62	4.05	0.12	0.86	0.20	1.91	.....
*Valentine	0.57	0.47	1.90	7.03	4.66	4.32	1.67	4.82	0.86	0.90	0.27	0.45	27.92
Wallace	1.12	0.65	0.70	.....	3.43	1.14	1.49	2.40	0.42	0.85	.....	.....	.....
Weeping Water	1.11	0.50	3.61	5.48	10.78	0.73	4.48	2.86	0.49	0.24	0.36	1.65	32.29
West Hill	.....	.....	1.62	3.46	4.86	1.18	.....	.....	.....	.....	.....	.....	.....
West Point	0.80	0.65	1.45	3.93	8.20	0.84	2.78	5.85	0.32	1.38	0.10	0.76	27.06
Whitman	.....	0.55	0.62	6.80	3.11	.....	.....	.....	.....	0.00	.....	0.75	.....
Wilcox[1]	0.70	1.72	2.10	2.10	5.51	1.09	4.50	6.69	0.23	2.00	0.70	0.40	27.74
Wilcox[2]	.....	.....	.....	.....	.....	.....	4.30	6.90	.....	.....	.....	0.30	.....
York	0.07	0.17	3.09	3.78	6.61	6.50	3.52	2.69	0.76	1.27	0.26	1.12	24.84
Nevada.													
Austin	0.63	0.56	1.72	1.34	1.90	1.47	0.07	T.	0.18	0.24	0.40	1.92	10.43
Battle Mountain	0.32	0.58	2.18	2.55	2.35	1.82	0.00	0.00	0.11	0.35	0.68	0.83	11.77
Belleville	0.10	0.80	1.28	0.02	0.17	0.50	0.00	T.	.....	0.60	0.10	0.25	.....
Belmont	0.30	1.64	1.35	0.19	1.11	0.18	0.20	T.	0.03	0.45	0.18	2.06	7.69
Beowawe	0.80	1.00	0.77	0.47	2.00	1.40	0.00	0.00	0.00	0.00	0.10	0.75	7.29
Browns	0.11	0.52	0.25	0.25	0.10	0.18	0.00	0.00	0.00	0.30	0.10	0.81	2.62
Candelaria	.....	.....	.....	.....	.....	.....	0.34	0.00	0.01	0.55	0.80	0.43	.....
Carlin	0.60	0.60	1.05	0.20	0.00	1.30	0.00	0.00	0.20	0.00	0.20	1.55	5.70
*Carson City[3]	0.20	1.61	1.25	0.55	0.50	1.44	0.00	0.02	0.31	0.25	5.97	2.75	14.85
Carson City[4]	0.35	1.39	1.71	0.48	0.54	1.46	T.	0.02	0.26	0.36	5.85	1.89	14.25
Cranes Ranch	0.86	0.76	1.65	1.18	3.25	2.58	0.08	0.00	0.61	0.30	0.39	0.92	12.58
Downeyville	0.24	0.75	1.64	0.08	1.57	0.30	T.	T.	0.01	0.11	0.01	0.56	5.27
Elko	0.80	3.00	1.65	0.00	0.00	1.71	0.00	0.00	0.00	0.30	0.40	1.40	9.26
Elko (near)	0.04	2.40	0.77	0.80	0.00	.....	0.00	0.00	0.00	1.08	0.60	1.08	.....
Ely	0.60	0.52	2.90	.....	1.10	0.68	0.13	0.03	0.00	0.06	0.54	0.13	.....
Empire Ranch	.....	1.37	0.47	0.05	1.25	0.47	0.05	0.01	0.18	0.21	0.60	1.60	.....
Eureka	.....	0.50	2.21	0.25	.....	0.60	0.02	0.03	0.04	.....	.....	.....	.....
Fenelon	0.35	0.20	1.30	0.30	0.85	0.10	0.00	0.00	0.00	0.00	0.20	0.70	4.90
Genoa	.....	0.31	2.45	1.35	0.30	.....	.....	T.	.....	.....	8.75	.....	.....
Golconda	0.40	0.30	1.70	0.95	1.30	0.80	0.00	0.00	0.40	0.00	0.80	0.70	7.35
Halleck	0.65	0.32	1.71	1.34	1.74	2.15	0.25	0.00	0.05	0.05	0.40	0.98	9.64
Hawthorne[5]	0.14	0.72	0.96	0.10	0.45	0.43	T.	0.00	0.18	0.52	0.44	1.02	4.96
Hawthorne[6]	0.14	0.31	1.04	0.10	0.40	0.43	T.	0.03	0.19	0.52	0.44	1.02	4.62
Hot Springs	0.10	2.10	1.25	0.35	0.08	1.25	T.	0.00	0.00	0.09	4.00	1.25	10.47
Humboldt	0.05	0.23	0.65	0.50	0.45	0.37	0.22	0.00	0.15	0.06	0.20	0.90	3.78
Lewers Ranch	0.60	1.92	2.16	2.04	1.69	1.53	0.03	T.	0.26	0.93	2.62	5.51	23.29
Lovelock	T.	.....	.....	.....	0.00	0.00	0.00	0.00	.....	0.00	0.00	0.00	.....
McDermitt	.....	.....	.....	2.17	1.22	0.94	0.12	0.00	0.00	0.28	1.29	0.95	.....
Mill City	0.30	0.15	0.32	0.69	.....	0.00	T.	0.00	T.	0.10	0.30	T.	.....
Monitors Ranch	0.50	0.23	1.75	0.40	0.95	1.82	0.67	0.10	0.00	0.35	0.29	0.60	7.66
Palisade	1.30	0.80	1.40	1.00	1.50	1.25	0.00	0.00	0.10	0.00	0.30	0.30	7.95
Palmetto	0.10	3.77	4.49	0.20	0.88	0.40	T.	T.	T.	0.54	1.62	1.75	13.75
Pioche	1.09	1.41	1.91	0.04	0.25	0.75	0.17	0.95	T.	0.13	0.22	0.18	7.10
Reno[6]	.....	0.70	0.70	0.10	0.00	0.85	0.00	0.00	0.10	0.10	4.30	1.65	.....
Reno[7]	0.58	1.40	0.76	0.09	0.22	1.27	T.	0.00	0.07	0.27	4.65	2.41	11.92
St. Clair	0.47	0.66	1.09	0.26	0.35	0.73	0.00	0.00	0.00	0.22	0.42	0.85	5.05
South Camp	0.49	0.56	3.91	0.39	1.00	1.41	T.	0.10	0.04	0.68	6.30	1.88	15.70
Stofiel	0.65	0.70	2.25	.....	4.04	2.99	0.00	0.00	0.07	0.56	0.88	1.98	.....
Sunnyside	0.63	1.24	2.89	0.09	1.39	0.40	0.05	0.17	0.00	T.	0.22	0.58	7.61
Tecoma	0.05	0.20	1.27	0.25	1.68	0.67	0.32	0.05	0.00	0.00	0.00	0.35	5.34

[1] Mrs. C. W. Le Bar. [2] G. D. Coutant. [3] Weather Bureau. [4] C. W. Friend. [5] Pacific Railway. [6] C. P. Mengel. [7] State University.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Nevada—Continued.													
Toano	0.20	1.65	2.09	0.52	1.30	0.70	0.00	0.15	0.00	0.10	0.45	0.30	7.46
Tuscarora	2.77	1.56	2.25	1.01	1.44	2.00	T.	T.	0.10	.....	.....	.....	.....
Tybo	0.11	2.30	1.17	T.	1.06	0.11	0.20	0.00	T.	0.17	0.24	1.31	6.67
Verdi	0.50	1.00	0.91	1.09	0.60	0.00	0.00	0.00	0.17	T.	7.65	6.41	18.33
Virginia	0.32	0.93	1.64	0.76	1.24	1.15	T.	.....	0.20	1.11	6.06	2.41	.....
Wabuska	0.02	1.35	1.11	0.05	0.48	1.71	T.	T.	0.01	0.25	1.38	1.48	7.84
Wadsworth	0.00	0.60	T.	.....	0.48	0.30	T.	0.00	0.00	0.00	2.18	0.67	.....
Wells	0.45	0.34	1.50	0.10	0.69	1.62	1.57	0.00	0.00	0.05	1.40	0.98	7.70
*Winnemucca	0.78	0.66	1.64	1.08	1.21	0.88	0.08	T.	0.13	0.30	0.32	0.77	7.85
Winnemucca [1]	0.40	.....	.....	.....	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.81	.....
New Hampshire.													
Antrim	4.48	.....	2.32	0.77	6.83	4.87	3.26	9.25	1.50	0.95	4.66	.....	.....
Belmont	4.65	1.84	1.89	0.94	4.64	5.30	3.48	9.81	3.14	1.67	4.68	1.03	43.07
Berlin Mills	5.19	1.33	2.34	0.70	3.93	7.93	3.49	5.70	2.14	2.07	5.14	2.00	41.96
Brookline	.....	.....	.....	.....	4.74	4.64	2.05	8.20	1.57	0.77	4.99	0.70	.....
Concord [2]	3.98	1.70	2.00	0.76	6.24	3.00	2.50	9.00	1.98	1.29	4.33	1.04	37.82
Concord [3]	3.88	1.70	1.91	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Durham	.....	.....	.....	0.21	.....	2.34	2.85	4.23	2.70	0.78	3.87	0.77	.....
East Canterbury	3.78	1.79	1.36	0.82	6.57	3.56	1.95	11.16	1.65	1.31	3.23	0.93	38.11
Grafton	.....	.....	.....	.....	6.12	4.98	1.88	11.23	2.81	1.72	3.40	0.89	.....
Groveton	2.53	.....	1.80	1.32	3.27	8.02	4.27	6.10	2.85	2.23	.....	.....	.....
Hanover [4]	3.37	1.41	1.40	0.93	6.26	7.42	1.93	6.25	1.72	1.54	2.53	0.96	35.72
Hanover [5]	2.45	1.42	0.78	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lakeport	4.17	1.84	2.20	0.86	6.26	5.14	2.70	8.66	2.81	1.66	4.70	0.99	41.99
Littleton	3.99	1.26	1.84	1.29	3.79	7.21	4.57	7.85	2.50	2.81	3.67	1.68	42.46
*Manchester	3.46	2.18	2.29	0.69	5.42	4.68	1.72	6.43	1.39	1.01	3.89	0.86	34.02
Manchester	3.29	2.71	2.56	0.76	5.94	5.04	1.78	6.53	1.83	1.19	4.02	1.04	36.69
Mine Falls	4.36	2.93	2.97	0.59	5.33	3.82	1.97	5.97	1.13	1.09	5.51	1.04	36.71
Nashua	4.54	2.71	3.11	0.51	5.39	3.78	2.29	5.28	1.49	1.09	5.25	0.96	36.40
Newton	4.35	1.86	.....	0.56	5.14	3.94	2.11	4.29	2.06	1.33	.....	1.08	.....
North Conway	5.72	1.94	2.37	0.44	5.16	5.62	1.54	4.27	3.83	1.79	4.33	0.65	37.66
Pennichuck Station	4.26	2.10	2.71	.....	5.55	5.13	2.16	5.45	1.38	.....	5.07	.....	.....
Peterboro	.....	.....	2.29	0.45	6.39	4.72	3.01	7.09	1.63	0.60	5.22	0.95	.....
Plymouth	5.01	1.93	1.67	1.04	5.53	6.76	1.66	10.85	1.10	1.90	4.29	0.95	42.69
Sanbornton	.....	.....	.....	.....	.....	.....	3.40	10.86	2.23	1.56	3.20	0.75	.....
Stratford	4.20	0.70	1.51	0.90	2.63	8.86	5.40	6.93	1.96	2.17	2.83	1.33	39.42
Walpole	4.55	2.04	1.74	0.60	6.24	4.02	1.95	5.85	2.15	1.10	3.21	1.00	34.45
West Milan	.....	2.05	2.26	0.69	3.19	8.74	3.66	8.38	2.74	1.88	4.91	1.55	.....
Weirs Bridge	3.80	1.48	1.38	0.90	6.04	6.27	2.16	9.31	2.45	1.40	4.17	0.93	40.29
Wolfboro	3.00	1.55	1.64	1.04	4.87	5.58	2.46	6.25	2.79	1.64	3.77	0.63	35.22
New Jersey.													
Asbury Park	4.45	1.50	6.73	2.78	3.26	4.49	3.67	3.63	1.22	0.28	8.67	1.61	42.29
*Atlantic City	3.02	1.43	3.69	3.05	5.51	4.44	4.23	3.26	1.08	0.30	5.14	2.12	37.27
Bayonne	5.16	1.27	5.13	2.36	4.94	4.52	3.39	3.69	1.11	0.64	7.62	1.44	41.27
Belleville	6.35	1.67	3.34	2.65	5.50	3.81	3.79	4.00	1.98	0.70	8.10	1.60	43.49
Belvidere	6.02	1.36	4.72	1.56	4.73	4.96	3.09	3.89	2.37	0.33	6.72	1.81	41.56
Beverly	5.45	1.87	5.33	2.40	5.55	4.07	4.27	3.62	1.95	0.35	7.28	1.96	44.10
Bivalve	.....	.....	.....	.....	6.04	3.87	4.90	1.68	1.64	0.17	5.93	1.70	.....
Blairstown	5.39	0.90	3.78	1.10	5.93	5.96	3.61	.....	.....	0.61	4.74	1.71	.....
Boonton	.....	.....	.....	.....	.....	.....	.....	.....	2.72	0.61	5.72	1.30	.....
Bridgeton [6]	4.05	2.72	5.82	3.58	4.04	1.85	3.48	2.81	1.58	0.55	6.86	2.47	.....
Bridgeton [7]	4.20	2.02	2.70	3.18	3.65	1.71	2.95	2.41	1.50	0.51	.....	.....	.....
Butler	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.98	6.11	1.64	.....
Camden	5.27	1.44	6.12	2.31	6.52	2.44	6.61	2.79	2.17	0.39	6.04	2.09	44.19
Cape May C. H	3.33	2.24	7.09	4.41	5.47	2.43	4.77	0.72	1.60	0.67	5.85	2.58	41.16
Deckertown	5.96	1.00	3.72	1.05	5.13	4.78	4.71	.....	1.62	0.88	7.17	.....	.....
Dover	5.96	0.85	3.57	1.24	4.97	4.52	2.90	4.53	2.46	0.48	6.46	1.44	39.38
Egg Harbor City	5.26	2.17	7.21	3.23	4.39	2.77	5.42	5.62	1.25	0.25	7.40	2.18	47.15
Elizabeth	4.24	2.13	3.11	2.34	5.02	5.10	2.43	4.57	1.52	0.57	8.01	1.57	40.61
Franklinville	4.62	1.07	7.08	3.37	5.17	2.33	7.96	2.64	1.34	0.46	7.81	2.13	45.98
Freehold	4.41	2.62	5.49	2.99	4.79	3.18	2.95	4.70	1.41	0.46	8.70	1.68	43.38
Friesburg	.....	.....	.....	.....	.....	.....	.....	.....	1.82	0.42	6.82	2.28	.....
Gillette	.....	2.14	4.12	2.17	4.31	5.47	2.50	4.39	2.68	0.65	7.89	1.43	.....
Hammonton	.....	.....	.....	.....	.....	.....	7.35	2.37	1.45	0.41	8.29	2.25	.....
Hanover	3.41	.....	.....	2.02	4.13	4.95	2.38	4.66	1.97	0.67	6.63	1.35	.....
Highland Park	5.57	1.81	4.65	2.58	4.58	3.12	3.10	3.38	1.75	0.55	6.59	1.67	39.35
Hightstown	.....	1.63	.....	.....	.....	.....	.....	2.25	1.89	0.45	8.59	1.36	.....
Imlaystown	4.50	1.75	4.57	2.47	4.60	5.01	4.10	4.09	2.20	0.64	8.33	3.04	45.30
Junction	6.54	0.67	3.25	1.43	4.56	4.83	3.75	3.55	2.71	0.38	6.49	1.73	39.89
Lambertville	5.75	1.02	3.63	2.22	6.06	3.91	3.20	3.18	3.86	0.38	8.01	1.54	42.76
Locktown	5.58	1.04	4.18	2.28	6.36	4.01	3.20	2.88	2.92	0.46	7.49	1.41	41.81
Moorestown	5.64	2.73	4.84	2.53	6.10	2.14	6.48	3.70	1.75	0.38	8.61	1.99	46.89
Newark [8]	5.63	1.62	3.54	3.53	4.56	4.82	3.41	3.87	1.94	0.64	7.27	1.69	42.52
Newark [9]	.....	.....	4.54	2.31	4.79	4.68	2.89	3.92	1.47	0.64	6.22	1.44	.....
*New Brunswick	5.57	1.81	4.65	2.58	4.58	3.12	3.10	3.38	1.75	0.55	6.59	1.67	39.35
New Brunswick [10]	6.09	1.65	4.71	2.56	4.71	2.90	3.13	3.48	1.77	0.54	7.75	1.79	41.08
New Brunswick [11]	5.42	1.77	4.03	2.50	4.78	3.21	3.23	3.56	1.76	0.59	7.81	1.68	40.34
Newton	2.50	0.86	4.07	1.18	4.16	6.12	3.21	4.40	1.88	0.63	5.86	1.77	36.64
Ocean City	5.80	.....	3.70	3.40	6.21	2.74	3.18	1.90	1.02	0.33	6.03	3.09	.....
Oceanic	5.11	2.32	5.09	3.09	3.36	4.48	4.00	4.51	1.28	0.50	8.69	1.94	44.37
Paterson	5.93	1.12	5.60	1.87	6.06	3.68	3.88	4.96	1.80	0.77	6.77	1.65	44.09
Pensauken	.....	.....	.....	.....	.....	.....	.....	1.91	1.96	0.35	6.71	1.30	.....
Plainfield	6.86	1.60	5.36	.....	.....	4.63	3.87	3.60	2.24	1.09	8.25	1.56	.....
Rancocas	6.18	1.62	4.61	2.27	6.12	2.36	4.33	3.26	1.68	0.43	7.67	2.13	42.66
River Vale	.....	.....	.....	.....	.....	3.61	4.98	4.10	1.52	0.89	5.53	2.04	.....

[1] Pacific Railway.
[2] Hon. W. L. Foster.
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[6] H. A. Jordan.
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MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
New Jersey—Continued.													
Salem	4.97	1.44	.....	.....	5.35	3.41	3.47	3.70	2.68	0.40	6.31	2.27	.....
Somerville	4.10	1.24	3.99	2.07	4.43	.....	5.44	3.81	3.78	0.04	6.74	1.51	.....
South Orange	6.70	1.58	4.15	2.73	4.89	5.92	2.73	4.53	3.24	0.77	7.62	1.63	46.49
Tenafly	5.36	1.55	3.84	1.55	4.46	2.86	3.82	4.68	1.52	0.93	6.43	2.37	39.37
Toms River	.....	.....	.....	.....	.....	3.85	5.33	2.71	1.93	0.25	9.41	2.64	.....
Trenton	5.20	1.71	5.45	2.77	6.23	2.12	7.11	3.25	1.92	0.42	7.86	1.49	45.53
Vineland	4.40	1.89	5.28	3.75	3.78	1.83	5.54	5.65	1.27	0.33	.....	.....	.....
Whiting	3.86	1.22	5.06	2.78	5.20	2.64	3.81	3.24	1.54	0.16	9.49	1.77	40.77
Woodbine	.....	.....	.....	.....	5.50	3.58	5.10	1.95	1.96	0.69	7.03	2.30	.....
New Mexico.													
Albert	0.28	0.15	2.50	0.77	1.35	0.18	0.85	0.96	0.32	1.95	0.24	0.89	10.44
Albuquerque	0.81	0.84	.....	0.20	0.12	0.08	1.45	0.21	T.	2.21	0.00	0.11	.....
Antelope Springs	1.15	0.13	0.81	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bloomfield	0.35	1.31	0.85	0.12	0.45	0.00	0.88	T.	T.	.....	T.	3.29	.....
Chama	1.84	3.95	2.01	1.76	.....	0.45	3.92	0.42	0.00	2.00	0.53	1.77	.....
Coolidge	1.50	1.29	1.70	1.06	0.19	0.00	0.20	0.14	0.02	0.17	0.04	1.00	7.31
Deming	0.45	0.86	1.34	0.10	0.00	0.90	0.20	0.39	0.08	1.21	1.80	0.60	7.93
Dulce	1.17	1.73	1.90	1.20	0.80	T.	1.94	0.06	.....	.....	.....	.....	.....
East Las Vegas	1.22	0.07	1.72	0.41	0.54	1.01	2.28	0.79	0.48	1.31	0.05	.....	.....
Embudo	1.55	1.18	0.93	0.69	0.67	0.31	0.84	0.17	0.10	.....	0.33	0.19	.....
Estalina Springs	1.37	0.32	1.37	0.21	0.07	0.26	2.43	0.76	0.40	1.51	0.27	0.60	9.57
Folsom	0.50	0.20	2.00	1.15	1.32	1.34	2.30	.....	.....	.....	0.62	0.60	.....
Fort Bayard	0.91	0.87	1.48	0.30	0.00	0.10	2.27	1.27	0.13	0.47	0.39	0.61	8.80
Fort Marcy	1.38	1.31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Fort Stanton	0.56	0.36	1.15	0.27	0.11	0.45	2.87	1.41	0.32	1.70	0.65	1.43	11.34
Fort Stanton	0.85	T.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Wingate	0.52	1.40	0.90	1.05	0.33	T.	2.09	0.30	0.04	1.39	0.00	0.70	8.72
Gallinas Spring	0.42	0.14	2.16	0.14	0.59	1.12	2.00	0.76	0.07	2.32	0.27	0.30	10.29
Halls Peak	0.55	0.40	1.55	0.30	0.03	0.11	2.78	1.37	0.79	1.37	1.25	1.13	11.63
Hillsboro	0.79	0.76	0.94	0.22	0.00	T.	1.62	1.22	0.28	0.64	0.86	0.52	7.85
Hills Ranch	0.87	0.71	0.82	T.	0.00	0.29	1.59	1.52	0.09	1.01	0.61	.....	.....
La Luz	0.79	0.55	0.61	T.	T.	0.09	1.23	0.51	0.11	1.65	0.21	1.21	6.96
Las Cruces	0.67	0.36	.....	.....	.....	0.03	1.33	.....	0.05	.....	1.47	.....	.....
Lordsburg	0.50	1.01	0.92	0.71	0.00	0.00	0.05	0.20	0.05	0.69	0.00	0.00	4.13
Los Lunas	1.75	0.25	0.25	0.00	0.35	0.10	0.30	0.00	.....	2.80	0.00	0.12	.....
Monero	1.23	2.21	2.95	0.83	0.74	0.17	2.67	0.37	0.00	0.83	0.14	1.25	13.39
Olio	1.20	1.86	0.15	0.37	0.53	0.00	0.84	0.14	0.00	0.87	0.00	T.	5.96
Pojuaque	0.61	1.45	1.16	0.47	0.63	.....	.....	.....	.....	0.58	0.00	0.81	.....
*Santa Fe	1.34	1.22	1.51	0.69	0.50	1.05	2.12	0.81	T.	1.32	0.36	0.70	11.62
Socorro	0.90	0.18	0.50	T.	T.	0.52	1.09	0.17	0.07	0.61	0.00	0.27	4.31
*Springer	0.30	0.10	2.10	0.80	2.33	1.10	2.95	1.26	0.11	1.73	0.92	0.23	13.93
Taos	0.96	1.35	1.69	0.57	0.75	0.84	1.60	T.	T.	0.85	0.27	0.65	9.53
Wallace	0.82	0.80	0.84	T.	0.00	0.25	.....	.....	.....	.....	.....	.....	.....
New York.													
Adams Center	5.44	2.21	2.69	0.98	5.32	5.81	5.18	9.31	5.37	2.10	6.16	3.61	54.18
Addison	2.97	1.58	3.68	0.94	5.85	3.18	4.94	3.62	0.91	1.50	3.46	0.48	33.11
Akron	3.53	2.77	1.60	0.93	5.20	5.42	3.37	4.45	1.63	2.10	3.76	1.55	36.31
*Albany	4.08	2.13	1.64	0.56	5.30	4.41	4.22	6.70	2.08	0.60	2.29	0.82	34.83
Alfred Center	4.06	2.76	3.18	0.55	5.80	5.48	2.14	3.72	2.04	1.44	4.31	0.62	36.10
Angelica	3.27	3.06	3.55	1.57	7.31	5.14	2.55	3.67	2.68	2.51	3.60	1.13	40.04
Arcade	2.52	3.35	1.77	1.34	7.16	9.33	4.59	4.78	2.59	3.63	3.33	1.51	45.90
Attica	.....	.....	.....	.....	5.30	7.68	3.77	3.75	1.54	.....	.....	.....	.....
Au Sable Forks	1.22	0.19	0.30	1.36	4.11	3.95	7.46	7.56	1.77	.....	.....	.....	.....
Avon	2.14	2.45	0.63	0.70	4.08	7.77	2.53	4.61	1.16	1.42	3.27	0.68	31.44
Baldwinsville	4.36	2.39	4.52	1.65	5.69	4.81	4.64	5.07	1.18	3.46	4.28	5.01	47.06
Bedford	6.46	1.05	3.06	1.39	5.15	2.85	3.63	4.53	2.14	0.70	8.49	1.41	40.86
Bethlehem Center	4.24	1.79	2.24	0.64	5.48	3.92	4.08	5.10	2.30	0.87	3.64	1.06	34.76
Binghamton	4.21	1.90	3.98	1.13	6.08	5.43	2.92	6.04	1.33	1.54	2.65	1.27	38.48
Bloods Depot	3.35	2.16	4.51	1.00	5.47	5.01	.....	4.18	1.21	2.66	.....	0.68	.....
Bolivar	2.87	3.16	2.84	0.08	11.02	10.01	4.14	2.42	2.35	2.21	3.17	1.21	46.38
Boyds Corners	5.95	1.22	3.92	1.08	5.74	3.84	5.05	6.13	2.65	0.92	7.85	1.15	45.50
Brentwood	5.13	2.75	3.68	3.70	4.95	2.75	4.35	4.85	2.35	1.10	9.40	1.65	46.61
Brockport	3.39	2.51	1.51	1.11	3.82	.....	.....	.....	.....	.....	4.50	2.47	.....
Brookfield	3.94	0.74	3.97	0.67	7.99	6.34	7.36	8.01	2.09	2.88	3.61	1.27	48.87
*Buffalo	4.47	3.66	1.74	1.16	7.35	9.52	2.98	4.43	2.27	2.10	3.95	2.24	45.87
Canaseraga	.....	.....	.....	0.88	5.03	4.90	3.61	3.36	1.37	1.90	3.35	0.84	.....
Canton	2.87	1.34	2.52	1.37	5.21	6.81	3.98	8.93	2.68	1.61	4.19	1.99	42.60
Carmel	6.12	1.12	3.81	0.95	5.41	3.22	6.46	7.41	2.33	1.10	7.37	0.79	46.09
Central Park, New York City	4.69	0.94	3.49	2.02	4.22	2.78	3.21	4.16	1.06	0.59	7.14	1.30	35.60
Chenango Forks	3.67	.....	.....	.....	7.83	4.88	5.81	6.07	1.60	1.68	0.95	0.40	.....
Cherry Creek	4.59	5.42	4.50	3.94	6.66	8.71	3.27	8.56	3.80	5.12	5.15	3.43	63.15
Constableville	6.89	3.48	4.37	2.18	6.64	.....	5.45	8.19	3.06	1.83	2.70	1.15	.....
Cooperstown	4.99	2.23	3.43	1.38	7.82	4.86	7.80	7.96	3.57	1.79	3.19	1.53	50.55
Corning	.....	.....	.....	.....	.....	5.97	2.65	4.27	4.18	0.92	.....	.....	.....
Cortland	.....	.....	.....	.....	7.96	4.28	6.44	4.77	1.58	2.31	3.28	1.08	.....
Davids Island	5.30	1.10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
De Kalb Junction	3.08	1.61	2.89	1.53	4.67	5.72	5.40	9.62	3.23	1.69	4.86	1.77	46.27
Demster	1.74	2.47	1.80	1.36	5.00	7.44	5.41	6.18	2.16	3.53	4.80	2.97	44.86
Deposit	2.95	0.90	1.59	0.71	6.89	3.68	3.87	4.65	2.17	1.60	3.31	0.25	32.57
Dunkirk[1]	1.45	2.65	0.86	1.08	6.14	7.07	3.20	4.92	2.74	1.77	2.34	1.05	35.27
Easton	3.81	2.02	1.79	0.82	6.85	5.57	4.34	5.32	2.32	1.71	2.50	0.74	37.79
Eden Center	6.16	4.00	5.07	2.08	8.56	3.14	4.13	6.64	2.71	3.73	3.41	6.28	55.91
Ellis	3.52	1.21	2.99	1.22	7.01	4.63	4.50	6.82	1.85	2.03	3.25	0.75	39.78
Elmira	3.01	.....	2.96	1.01	5.30	4.11	3.39	3.28	1.18	1.30	.....	.....	.....
Factoryville	3.99	1.53	2.98	0.87	5.95	4.20	3.60	4.11	2.27	1.35	2.71	0.70	34.26
Fleming	1.65	1.39	1.61	0.75	5.51	4.75	3.30	5.72	1.42	2.40	1.60	0.20	30.30

[1] D. C. Moon and W. Bolling.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
New York—Continued.													
Fort Columbus	4.42	1.37	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Hamilton	4.63	0.94	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Niagara	.....	.....	.....	0.51	2.94	5.48	2.10	3.39	2.57	0.69	0.97	1.01	.....
Fort Porter	4.12	0.96	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Schuyler	7.06	1.25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Wadsworth	6.23	1.31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Galway	3.06	3.05	2.85	.....	6.76	3.12	2.38	8.65	1.96	.....	2.30	0.80	.....
Geneva	3.32	2.69	2.80	1.28	5.03	5.47	2.27	5.67	1.30	1.50	4.02	1.31	36.66
Glens Falls	5.79	1.94	2.50	0.73	6.07	5.38	.....	.....	2.73	1.79	3.15	1.01	.....
Gloversville	.....	.....	.....	.....	7.90	4.91	3.27	9.23	3.00	1.55	3.29	1.34	.....
Hammondsport	.....	2.63	2.69	0.84	4.77	2.64	2.96	4.77	.....	.....	.....	.....	.....
Hess Road Station	3.23	3.36	1.24	1.02	4.27	8.15	8.44	6.67	3.69	1.84	3.37	1.52	46.80
Honeymead Brook	4.78	1.21	2.66	0.71	6.01	3.46	4.13	7.41	2.36	0.92	4.86	1.02	39.53
Humphrey	3.39	3.45	3.45	1.48	7.46	6.34	4.88	4.45	2.55	3.65	4.02	1.95	47.07
*Ithaca	3.78	1.33	2.88	1.25	6.46	5.20	4.93	6.91	1.88	1.52	3.50	0.85	40.49
Kings Station	5.41	2.30	2.25	0.84	6.21	4.49	4.31	6.66	2.39	1.30	3.12	1.45	40.73
Lebanon Springs	.....	.....	.....	0.84	7.47	3.22	4.98	4.29	2.79	1.43	3.75	0.78	.....
Leroy	6.80	5.33	4.52	1.47	4.91	4.91	3.40	3.95	1.17	1.60	4.33	3.26	45.65
Liberty	1.88	1.10	2.00	.....	8.11	9.58	1.98	.....	.....	.....	.....	.....	.....
Little Valley	.....	.....	.....	.....	9.42	8.42	3.18	6.12	2.72	5.79	.....	.....	.....
Lockport	2.65	2.13	0.98	1.06	4.30	4.52	5.36	3.59	3.86	2.31	3.54	1.17	35.47
Lowville	4.11	1.42	2.72	0.68	4.79	5.86	4.94	8.76	3.54	1.91	4.13	1.80	44.66
Lyndonville	1.62	1.89	0.90	0.73	4.09	3.50	3.07	4.66	2.21	1.83	3.25	1.24	28.99
Lyons	2.80	1.39	3.18	1.17	4.06	5.72	2.94	4.23	0.81	1.20	3.34	1.38	32.22
McLean	.....	.....	.....	1.08	7.71	3.44	6.89	4.24	1.78	2.53	.....	.....	.....
Madison Barracks	2.78	1.75	2.16	0.64	4.81	5.41	4.52	6.52	4.80	2.00	3.90	1.42	40.71
Malone	6.24	2.51	4.64	1.81	3.26	6.81	7.69	9.57	2.49	2.51	4.44	2.19	54.16
Marshland	.....	.....	2.50	.....	.....	4.83	5.41	4.09	0.83	.....	.....	.....	.....
Middletown	4.21	1.41	3.87	1.48	5.34	3.71	4.05	3.37	1.41	0.70	5.58	1.35	36.48
Minnewaska	6.09	2.00	3.53	0.55	6.90	5.55	6.24	9.32	2.46	0.85	5.76	1.35	51.10
Mount Morris	.....	.....	.....	0.64	4.90	4.77	2.05	5.34	1.18	1.33	.....	.....	.....
Newark Valley	4.11	1.16	4.60	1.01	6.96	4.38	4.24	6.06	1.64	1.84	2.88	0.77	39.65
New Lisbon	4.40	1.52	3.44	1.25	7.27	3.86	6.23	8.70	2.76	1.61	3.63	1.00	45.67
*New York	5.61	1.27	4.62	2.36	4.30	2.97	2.45	3.90	0.87	0.63	8.28	1.64	38.90
North Hammond	2.58	1.34	2.05	1.89	4.29	8.25	4.21	11.78	3.25	1.39	3.74	0.95	45.72
Number Four	6.58	3.37	3.24	1.77	5.83	5.34	5.91	9.00	4.06	3.47	6.06	3.28	57.91
Ogdensburg	.....	.....	.....	.....	.....	.....	.....	.....	2.39	0.97	4.07	1.83	.....
*Oswego	2.10	2.29	1.74	0.88	4.12	6.95	4.00	4.38	1.52	2.00	3.30	1.53	34.81
Oxford	6.47	1.66	4.87	1.74	9.37	4.12	5.62	7.90	2.50	1.62	3.44	1.27	50.58
Palermo	3.11	2.23	2.47	1.09	4.62	6.55	5.60	7.45	2.74	2.93	3.97	1.35	44.11
Pawling	6.31	1.24	3.76	1.11	.....	4.57	.....	.....	.....	.....	.....	.....	.....
Perry City	4.56	1.54	3.95	1.65	6.08	6.65	6.86	4.12	0.84	1.64	4.63	0.78	43.30
Phœnix	.....	.....	.....	.....	.....	5.82	.....	4.39	1.54	3.33	3.88	4.00	.....
Plattsburg Barracks	4.30	2.47	1.36	0.97	4.07	7.62	5.21	7.18	1.68	1.12	2.74	1.44	40.16
Port Jervis	5.66	1.12	3.24	1.27	6.13	6.01	7.08	6.23	3.34	0.61	5.07	1.42	47.18
Potsdam	5.90	2.96	3.22	1.02	5.01	.....	.....	6.93	3.11	1.78	4.07	1.26	.....
Poughkeepsie	5.35	1.44	2.82	0.60	6.05	3.05	4.19	.....	1.37	0.88	5.96	1.21	.....
Quaker Street	4.43	2.50	3.60	0.85	7.00	2.32	5.01	8.33	2.40	1.00	3.39	1.21	42.04
*Rochester	2.73	2.77	2.44	1.12	4.84	6.68	3.21	3.52	1.55	0.78	3.61	1.77	35.02
Rome	4.81	2.77	7.36	1.69	6.11	5.02	4.62	7.04	3.34	.....	3.70	.....	.....
Romulus	3.48	1.98	3.42	1.11	5.04	3.89	2.83	6.06	1.12	1.34	3.21	0.61	34.09
Rondout	5.27	1.66	3.58	0.72	5.39	4.66	3.80	8.34	2.06	0.89	5.57	1.07	43.01
Schodack Depot	3.95	1.37	1.78	0.65	5.65	4.76	5.92	5.77	2.46	1.16	2.81	0.92	37.20
Setauket	4.79	1.40	3.73	1.82	3.65	1.79	3.12	4.76	3.67	0.90	8.22	1.56	39.41
Sherman	3.85	4.01	2.45	1.19	.....	9.88	4.24	8.31	.....	.....	.....	.....	.....
South Canisteo	3.50	3.40	3.42	1.57	6.74	3.99	4.56	4.83	1.40	2.44	3.60	1.01	40.46
Southeast Reservoir	6.43	1.07	3.71	1.04	5.84	3.19	6.06	5.93	2.04	0.94	6.93	1.06	44.24
South Kortright	3.30	1.20	2.32	0.77	6.35	2.80	5.14	6.55	2.98	1.13	2.61	1.11	36.26
Turin	6.39	4.33	4.02	1.83	5.80	5.43	4.92	9.00	3.37	2.05	4.95	2.99	55.08
Utica	5.78	3.37	4.65	2.14	7.00	6.29	6.00	7.95	3.72	2.59	4.28	1.98	55.75
Victor	2.34	2.42	1.72	0.86	4.39	5.81	2.38	6.51	.....	.....	.....	.....	.....
Wappingers Falls	6.08	1.31	3.31	0.64	6.15	4.21	6.03	7.81	2.06	0.64	6.71	1.76	46.70
Watertown	.....	2.24	.....	.....	.....	.....	.....	9.91	4.13	2.28	5.77	2.65	.....
Watkins	.....	.....	3.79	0.24	3.16	4.32	3.44	2.01	0.57	1.22	1.73	1.15	.....
Wedgwood	3.50	2.50	3.81	1.08	5.17	4.35	7.24	4.02	0.75	2.20	3.25	0.71	38.58
West Chazy	3.29	1.62	1.93	1.16	3.82	10.42	7.63	8.98	2.13	1.54	2.89	1.38	46.79
West Point	6.93	1.07	4.15	1.09	4.84	3.61	5.97	3.57	3.53	T.	6.02	1.33	42.21
Willets Point	3.66	1.70	3.60	2.44	5.22	2.93	3.49	5.16	0.92	0.50	8.37	1.66	39.65
North Carolina.													
*Asheville	6.52	1.47	3.07	6.01	2.76	7.00	4.93	1.64	3.05	0.29	3.34	1.60	41.68
Bakersville	4.64	2.16	1.31	4.90	3.40	5.92	6.01	3.34	2.61	0.39	4.85	.....	.....
*Bryson City	8.33	4.08	3.75	7.89	3.74	4.53	5.83	3.12	1.28	0.26	7.94	3.32	54.07
*Chapel Hill	6.22	3.22	2.74	3.15	3.39	6.12	3.72	0.82	1.97	0.27	4.35	2.77	38.74
*Charlotte	7.66	3.36	4.05	3.50	2.28	5.51	5.89	2.31	2.27	0.23	2.99	2.68	42.73
Columbus	.....	.....	2.89	6.58	2.25	12.72	4.72	6.00	15.74	0.49	5.09	1.59	.....
Concord	11.50	4.21	5.90	4.35	5.00	10.20	7.05	2.43	.....	.....	.....	.....	.....
*Currituck Inlet	3.32	4.97	4.88	4.17	3.74	4.64	4.07	7.01	1.25	0.64	3.96	3.51	46.16
Douglas	9.80	2.90	2.27	2.52	1.80	8.55	2.40	2.00	3.20	0.51	3.60	3.21	42.76
*Fayetteville	7.57	2.99	3.04	1.99	4.79	3.75	10.32	4.64	2.44	0.34	2.12	3.57	47.56
*Goldsboro	.....	.....	.....	3.22	3.51	6.82	5.05	4.85	3.76	0.73	1.85	.....	.....
*Greensboro	.....	.....	.....	1.13	3.14	8.46	3.64	0.83	2.28	0.60	4.26	.....	.....
*Hatteras	4.82	7.12	5.32	4.24	4.69	2.70	6.45	2.48	4.49	2.74	4.43	3.40	52.88
Hendersonville	6.72	1.87	3.65	6.85	.....	.....	.....	.....	.....	.....	.....	.....	.....
Horse Cove	.....	.....	5.29	7.30	4.00	17.02	9.33	10.15	7.87	0.62	7.03	2.85	.....
Lenoir	5.[illegible]	2.10	2.90	5.10	4.40	8.20	4.90	2.40	5.90	T.	3.30	1.50	44.10
Lexington	3.[illegible]	2.09	3.00	3.43	3.10	7.83	4.49	4.18	.....	.....	.....	.....	.....
*Lillington	7.[illegible]	2.64	2.79	3.57	3.95	6.51	4.15	6.39	1.95	0.37	2.07	4.06	46.07
Linville	1.89	1.29	2.01	3.75	4.82	.....	.....	.....	.....	.....	.....	.....	.....
Littleton	2.92	3.22	3.23	3.00	3.21	4.49	6.45	5.42	3.32	0.76	2.38	3.43	41.83

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
North Carolina—Continued.													
Louisburg	6.22	3.09	2.43	4.86	3.02	8.36	2.62	4.88	1.44	0.36	4.08	3.52	44.83
*Lumberton				1.50	3.82	6.04		4.91	2.75	1.16	1.93		
*Kitty Hawk	2.63	3.66	2.88	1.94	3.44	6.58	6.46	2.43	2.13	0.78	3.93	1.53	38.39
Marion		1.50	5.00	2.80	5.60	4.77	5.52	3.56		0.49	2.39	0.76	
Morganton	6.71	2.84	3.45	4.05	4.22	8.63	5.12	2.02	7.52	0.20	3.77		
Mount Airy	5.09	1.30	1.86	2.65	3.50	4.45	4.67	6.01	4.20	0.28	4.89	1.52	40.42
*Mount Holly	7.11	4.18	3.77	3.46	3.09	6.16	6.57	4.43	2.35	0.02	3.30	2.83	47.27
Mount Pleasant	7.92	2.79	3.64	2.70	3.92	7.31	5.13	2.91	2.76	0.28	3.66	2.78	45.80
*Murphy	10.04	4.08	4.27	9.38	3.79	8.11	5.02	4.90	1.49	0.25	9.19	3.55	64.07
*New Berne	6.11	4.26	2.83	2.30	3.49	9.28	7.56	5.57	8.35	0.67	2.61	2.35	55.38
*Oak Ridge	6.07	3.70	3.10	3.08	3.29	6.84	4.94	2.49	3.71	0.78	4.78	1.98	44.76
Pittsboro	5.55	2.90	2.40	2.70	4.20	4.55	4.30	0.92	0.40	0.01	2.40	3.00	33.33
*Raleigh	6.87	3.59	3.29	5.57	3.10	4.84	4.18	4.42	1.98	0.53	2.92	3.72	45.01
Rockingham										0.37	2.56	3.17	
Roxboro										0.64	3.39	2.64	
Salisbury	6.63	2.87	3.31	4.01	2.72	4.67	4.72	1.61	2.81	0.53	4.00	2.08	39.96
Saxon	5.65	2.10	3.55	3.61	3.42	7.72	4.48	4.81	3.63	0.90	5.43	1.85	47.15
Smithfield		2.65	2.75	3.00	3.85	7.00	3.35	2.30	3.66	0.37	2.83	4.14	
Soapstone Mount				2.24	4.24	6.65	2.37	5.88	3.71	0.99	4.51	2.31	
Southern Pines	7.01	3.20	3.35	3.62	5.27	4.96	10.83	5.05	1.78	0.34	2.80	4.05	52.26
*Southport	6.44	2.96	3.72	0.80	3.39	4.52	6.31	1.91	4.68	0.98	1.56	2.24	39.51
Tarborough			3.12	4.86	4.97	8.62	4.66	4.32	3.27	0.90	2.30	4.16	
Wadeville	5.55	3.49	2.96	2.15	4.02	5.56	4.66	1.08	3.29				
Washington						11.75	3.69	5.62	5.75	1.33	2.97	3.27	
*Weldon	6.15	2.96	2.62	4.38	3.57	5.12	7.16	6.59	2.72	1.05	3.58	3.46	49.36
Willeyton	5.80	4.10	2.35	5.00	3.70	10.50	6.65	4.00	2.00	0.60	1.55	1.70	47.95
*Wilmington	4.91	3.65	2.69	1.13	1.64	6.13	10.26	4.38	5.90	0.57	0.59	1.03	42.88
North Dakota.													
Ashley			0.61	3.12	2.14	7.44	3.63	3.47	0.81	0.88	0.13	0.08	
Bathgate		0.60	0.60	1.30	0.85	2.09							
*Bismarck	0.29	0.55	0.95	3.23	1.79	3.49	3.13	2.40	0.66	0.86	0.66	0.16	18.17
Bottineau				1.05	0.35	2.28	3.64	2.15				T.	
Carrington	0.11	0.30	0.65		1.61	3.18				0.00	0.60	0.20	
Church's Ferry		0.93	0.40	2.17	1.87	3.49	4.87	2.86	1.15	0.53	1.45	0.37	
Dickinson		0.60	0.60	3.60	1.77	2.20	3.89		0.10	0.24	0.15	0.38	
Ellendale	0.24	0.30	0.50	4.50	2.07	4.13	2.16	1.61		0.58	0.72	0.36	
Fargo	0.04	0.27	1.07	2.42	3.88	1.93	5.02	4.03	1.39	0.25	0.50	0.12	20.92
Forman				2.85	4.00	4.86	4.50	2.63	0.44	0.36	0.91	0.70	
*Fort Buford	0.14	0.38	0.38	2.65	0.48	2.41	4.49	0.62	0.11	0.15	1.12	1.33	14.26
Fort Buford	0.10	0.35											
Fort Pembina	0.15	0.28											
Fort Stevenson			0.86	1.67	0.62	1.81	2.64	0.74	2.21	1.45	0.79	0.52	
Fort Yates	0.05	0.88	2.41	4.80	1.47	3.04	2.40	1.84	0.76	2.89	0.20	0.48	21.20
Gallatin	0.24	0.27	0.87	2.17	2.26	6.80	4.45	3.30	0.60	0.25	0.27	0.08	21.56
Grafton	0.40	0.25	1.04	2.36	2.85	2.75	1.69	3.23	0.38	0.13	1.39	T.	16.47
Grand Forks	0.35	0.44	0.95	2.90	2.42	2.65		1.42		0.66	1.27	0.26	
Grand Rapids	0.35	0.86	0.60	4.07	3.03	4.86	2.68	1.37	1.29	0.58	0.86	0.28	20.83
Hope	0.45	0.50	1.05	1.00	1.80	2.77	3.82	1.39	0.45				
Jamestown		0.86	0.86	4.24	3.01	7.34				0.14			
Kelso	0.42	0.98	1.23	3.96			4.32						
Lakota				0.88	1.71	4.80	5.21	3.05	0.55	0.00			
Medora		0.07	0.66	1.56	1.46	1.94	1.38			0.63	0.19	0.62	
Milton		0.84	0.49	1.85	2.25	1.94	2.29	2.65	0.79	0.06	0.90	0.20	
Minot		0.68	0.86	2.18	0.61		2.40						
Minto			0.96	1.35	1.98	1.62	3.13	2.99	0.65	0.06			
Napoleon		0.68	0.99	5.50	2.67	4.89	1.79	3.59	1.79	1.13	1.80	0.37	
Power		0.94	0.89	2.97	3.13	3.15	4.28	2.46	0.60	0.57	T.	0.41	
St. John		1.15	0.60	2.78	1.10	7.29	2.22	1.29	1.13	1.97	1.80		
Valley City		0.42	0.59	2.54	2.90	4.58	2.18	2.01	1.34				
Wahpeton		0.55	0.65	3.20	5.36	3.09	4.71	2.55	0.70	0.30	0.80	0.30	
White Earth			0.93	1.49	0.63	0.33	1.17	1.66	0.55	0.30	0.00		
Wild Rice	0.32	0.99	0.75	2.86	4.72	2.22	4.00	4.07		0.09	1.25	0.82	
Willow City				1.02	0.50	2.64	3.63	1.85	1.95	1.33		0.00	
Woodbridge	0.20	0.34	0.67	2.21	1.03	2.92	3.96	2.84	1.08	0.56	0.37	T.	16.18
Yule						2.79	2.73	0.36	0.74	0.65	0.35	0.85	
Ohio.													
Akron	2.35	3.45	3.70	1.47	7.71	8.38	7.08	4.82	2.03	0.82	1.62	1.50	44.93
Annapolis								1.62	1.32	0.66	1.13	1.50	
Ashland	5.07	2.54	3.16	2.66	7.86	5.53	3.46	3.30	1.11	0.97	2.28	1.55	39.49
Athens	2.69	3.26	2.42	3.66	5.35	4.67	3.36	2.11	2.28	0.77	1.99	1.47	34.03
Auburn								4.01	2.25	1.90	2.05	1.82	
Bangorville	1.75	3.49	2.91	2.39	7.10		4.45	2.96	1.59	0.46	2.36	2.26	
Bellevue	2.00	2.38	5.97	3.46	8.73	5.51	2.30			1.30	2.74		
Bement	1.68	1.60	4.32	2.99	7.57	9.40		4.40	2.56	1.60	2.40		
Benton Ridge								2.09	2.27		2.08	1.65	
Bethany									2.38	0.16	2.73	1.37	
Bissells								2.88	2.39	2.43	2.61	0.86	
Bloomingburg								4.65	1.56	0.71	2.05		
*Caledonia	1.99	3.36	3.36	2.70	8.63	5.35	3.39	3.34	1.97	0.91	2.71	1.58	39.29
Cambridge								3.12	1.68	0.65	0.83		
Campbellstown										0.24	3.85	1.86	
Camp Dennison								2.17	2.55	0.32	1.96	1.10	
*Canton	2.44	2.67	2.84	2.30	8.39	7.38	6.62	3.28	2.30	1.04	1.63	1.54	42.43
Cardington								2.46	1.91	0.58	1.44	1.61	
Carrollton	2.02	3.24	2.98	1.96	4.85	5.15	7.96	3.46	2.07	0.81	1.21	2.24	37.69
Celina	1.27	2.80	1.87	4.37	7.56	4.23	7.10	2.35	1.91	0.25	2.57	1.80	38.68
Cherry Fork										0.68	1.52	1.99	
Chicago Junction								2.86	2.50	1.18	3.09	1.69	

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Ohio—Continued..													
*Cincinnati	1.62	2.83	1.96	5.66	3.95	3.81	1.43	3.03	3.78	0.40	2.26	1.22	31.95
*Circleville	0.31	2.22	1.06	2.35	4.35	5.55	2.43	4.33	0.70	0.58	1.05	1.40	26.33
Clarksville	1.43	2.58	2.10	5.10	4.32	6.30	1.99	2.42	2.33	0.53	2.73	1.29	33.12
*Cleveland	2.52	3.10	3.17	2.02	6.81	5.51	3.44	2.96	2.53	1.08	2.29	1.08	36.51
Cleveland	2.32	2.96	3.18	2.26	8.72	6.05	4.78	4.26	2.95	1.52	2.77	1.54	43.31
Colebrook								3.43	2.05	1.97	2.29	1.18	
*Columbus	2.21	3.35	2.23	2.67	3.58	4.96	3.31	5.12	1.47	0.84	2.20	1.60	33.54
Columbus Barracks	1.91	3.42											
Dayton	1.20	3.09	1.86	3.76	4.54	6.58	1.36	1.92	3.28	0.37	1.92	1.57	31.45
Demos	1.47	2.42	2.15	1.49			2.25	0.96	1.73	0.54	1.99	1.11	
Ellsworth		2.60			7.80	7.58	5.43	3.88	2.15	0.89	1.61	1.14	
Elyria	2.04	2.54		3.30	10.42	6.17	3.93	3.66	3.11	0.93	2.46	1.09	
Findlay	1.44	3.18	4.04	4.18	6.62	8.31	3.91	2.31	2.76	0.79	3.32	1.88	42.74
Fostoria	1.73	2.24	3.33	4.12	7.83	5.93	3.14	2.84	3.35	0.87	3.13	2.17	40.69
Frankfort								2.55	2.63	0.35		1.25	
Garrettsville	2.50	3.42	3.48	2.17	7.50	6.49	3.20	3.26	2.96	1.50	2.46	1.62	40.56
Georgetown	2.81	4.04	2.76	4.67	5.90	3.53	4.78	1.90	2.02	0.96	2.79	2.51	38.67
Granville	1.92	3.62	2.21	2.48	5.57					0.38	2.56	1.65	
Gratiot	2.88	2.77	2.45	2.46	5.59	5.96	4.49	3.11	2.13	0.56	1.55	2.02	35.97
Greenfield	1.25	4.50	2.36	4.16	3.59	4.08	2.89	3.18	1.00	0.71	2.10	1.55	31.37
Green Hill								2.45	1.42	0.75	1.26	1.41	
Greenville	1.07	3.08	2.70	4.87	8.64	6.94	2.52	2.79	1.89	0.11	3.65	2.02	40.28
Hackney								0.76	1.90	0.16		2.48	
Hanging Rock	3.22	2.57	3.86	4.00	3.54	6.11	3.73	1.92	1.84	0.50	2.86	2.62	36.77
Harbor	2.89	3.10	2.55	1.26	9.51	6.64	1.88	3.26	4.56	2.31	4.64	2.71	45.31
Hedges								1.77	4.03	0.15	2.72	1.46	
Hillhouse								3.60	5.56	2.23	2.98	2.08	
Hillsboro										0.81	2.45	1.71	
Hiram	1.45	3.43	3.56	1.99	8.37	5.78	3.96	2.19	2.61	1.57	2.51	1.32	38.74
Jacksonboro	0.85	3.95	1.85	5.45	4.15	3.75	1.55	2.60	2.65	0.15	2.20	1.15	30.30
*Kenton	2.80	3.26	3.50	4.18	7.71	5.35	3.46	1.17	2.80	0.48	3.03	1.88	39.62
Killbuck										0.98	1.27	1.62	
Leipsic		2.54	3.65	4.22	10.16	5.03	3.88	2.56	2.46	0.72	2.82	1.28	
Levering								2.99	1.69	0.50	2.31	2.25	
Logan	2.62	3.38	2.36	2.02	4.03	4.86	4.86	2.70	2.27	0.27	1.87	2.11	33.35
Lordstown	2.15	2.87	2.89	1.58	7.31	6.80	4.18	2.79	1.74	0.79	1.93	1.21	36.24
McArthur	1.87	3.39	4.32	3.64	4.18	4.57	3.94	2.80					
McConnelsville	2.37	2.93	2.41	2.04	5.84	5.92	5.24	2.07	1.85	0.43	1.96	2.53	35.59
McLuney										0.20	1.70	2.26	
*Mansfield	2.54	3.72	4.05	2.79	8.70	7.19	3.42	2.85	1.89	0.98	3.04	1.60	42.77
*Marietta [1]	3.46	2.77	3.02	2.91	6.30	3.74	2.82	1.67	3.13	0.67	1.98	2.02	34.49
Marietta [2]	3.27	3.33	2.14	3.02	5.50	4.56	2.81	2.15	3.05	0.69	1.89	2.42	34.83
Marion	2.26			3.28	6.99	2.78	3.82	4.25	2.52	0.74	3.12	1.22	
Millport								2.24	2.36	0.77	1.61		
Montpelier	1.54		3.58	3.40	10.23	3.62	3.15	1.81	5.79	0.17	5.32	1.74	
Mountville										0.18	1.48	1.60	
Napoleon	1.20	2.35	1.77										
New Alexandria	4.77	2.54	3.18	3.22	5.40	4.43	6.17	0.98	1.80	0.90	1.97	2.55	37.91
New Berlin								0.55	2.44	0.79	1.33	0.94	
New Comerstown	2.11	2.25	2.78	2.77	5.29	4.53	3.41	3.63	2.15	0.95	1.40	1.69	32.96
New Holland		2.83	2.96	3.11	6.11	6.56	3.73	3.57	1.81		2.82	1.94	
North Lewisburg	1.00	4.10	3.50	4.45	6.05	6.15	4.00	3.00	2.90	0.40	3.20	1.70	40.45
North Royalston								4.31	1.54	1.19	2.26	1.27	
Oberlin	2.76	2.87	2.92	3.83	6.46	5.38	5.12	3.63	3.07	1.03	2.35	1.91	41.33
O. S. University	2.05	3.27	2.16	2.63	4.63	6.73	3.13	6.15	1.27	0.67	2.62	1.85	37.16
Orangeville	2.55	2.80	3.10	1.55	6.95	5.90	2.35	2.70	2.90	0.95	2.30	1.05	35.10
Pataskala								3.26	1.70	0.83	2.22	1.85	
Piqua	4.02	6.20	4.00		7.90	5.01							
Pomeroy	1.68	1.08	1.57	3.75	3.15	1.97	6.26	1.50	2.00	0.35	1.33	1.20	25.84
*Portsmouth [1]	2.71	3.44	3.62	4.62	6.03	6.28	4.04	3.66	3.82	0.59	3.00	2.51	44.32
Portsmouth [3]	2.73	3.39	3.62	4.56	6.03	6.24	4.02	3.69	3.82	0.59	3.00	2.38	44.09
Ridge										0.44	2.25	2.43	
Rittman								3.27	2.14	1.01	1.54	0.96	
*Sandusky	1.99	2.58	4.97	2.56	6.91	6.41	4.81	5.53	2.69	0.93	2.85	1.05	43.28
Sharon Center								3.78	1.55	0.78	1.63	0.67	
Shenandoah								4.43	1.81	1.06	1.96	1.47	
*Sidney	1.64	3.37	2.97	4.53	7.66	4.59	3.83	1.12	1.85	0.23	3.31	1.53	36.63
Springboro	1.34	2.53		5.68	5.73	4.75		1.76	4.06	0.90	3.14	1.02	
Strongsville										1.62	2.26	1.06	
Thurman										0.61	2.11	1.96	
Tiffin	1.39	2.66	5.28	3.63	8.27	5.10	3.39	2.88	2.56	1.20	2.77	1.43	40.56
*Toledo	0.90	2.12	3.37	2.47	7.42	6.58	3.78	2.40	3.88	0.32	2.27	1.19	36.70
Upper Sandusky	1.31	2.41	3.71	2.67	6.07	7.34	2.53	2.40	2.55	0.70	3.01	1.56	36.26
Van Wert	1.74	2.37	3.41	4.58	9.58	7.87	3.48	2.70	3.68	0.54	2.93	1.67	44.55
Walnut								4.58	0.97	0.64	2.14	1.91	
Wapakoneta	1.33		1.11			1.55	3.68						
Warren		3.18	3.47	1.37	8.39								
Wauseon	1.42	3.56	5.54	5.17	11.40	8.65	2.95	2.38	4.61	0.39	4.38	2.10	52.55
Waverly	1.92	3.51	2.63	4.47	3.79	4.28	3.16	5.54	2.56	0.68	2.32	2.15	37.01
Waynesville	2.05	3.57	2.02	5.30	4.88	5.01	1.74	2.79	3.18	0.77	3.09	1.56	35.96
Westerville	2.60	3.17	2.19	2.77	5.68	5.05		3.38	1.23	0.30	2.09	1.40	
West Milton	1.58	4.75	4.21	7.25	7.27	7.68	3.03	2.15	3.78	1.05	4.07	2.20	49.02
Weymouth	2.20	2.14	1.94	2.89	6.75	7.25	4.24	4.03	1.57	1.17	3.04	1.35	38.57
Wheeler	0.59	1.73	2.98	1.26	10.26	7.64	2.07	3.48	4.54	2.04	3.03	3.05	42.67
Wooster [4]	2.50		3.38	2.44	7.69	7.89	4.73	2.69	3.20	0.37	2.06	1.74	
*Wooster [5]			3.64	2.44	6.59	7.89	4.73	2.37	2.09	0.67	1.80	1.74	
Youngstown	1.78	2.22	2.66	1.20	7.27	3.15	2.29	4.45	2.09	0.79	0.89	1.32	30.11
*Zanesville	1.39	2.02	2.57	2.65	4.95	4.23	5.10	2.74	2.49	0.63	1.78	2.06	32.61

[1] River observer.
[2] Prof. T. D. Biscoe.
[3] Dr. D. B. Cotton.
[4] Dr. O. N. Stoddard and Agricultural Experiment Station.
[5] Rainfall observer.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Oklahoma.													
Anadarko				1.23	9.46	4.37	1.54	3.12	1.76	5.10	1.14	3.05	
Buffalo				0.13	5.56	3.59	2.53	2.05	0.82	1.95			
Burnett	0.36	1.35	5.24	3.18	12.64	5.08	1.93	5.54	0.65	5.41	0.63	3.83	45.84
Fort Reno	0.00	1.00	3.10	1.12	7.37	2.62	1.80	4.30	1.93	5.21	0.00	4.40	33.51
Fort Sill	0.51	1.23	2.05	2.56	7.20	2.60	1.52	4.06	3.57	5.69	0.35	2.98	34.32
Gate City	0.31	1.95	2.75	0.25	4.89	0.58	1.45	4.10	0.86	2.03	0.32	1.37	20.86
Guthrie	0.24	2.84	2.15	0.96	10.70	4.96	1.76	1.72	0.91	6.30	0.88	4.52	37.94
Keokuk Falls		5.14	6.88		9.87	5.50	2.81	4.62	3.76	6.84			
Kingfisher			0.37				4.45	4.20	1.20	3.30			
Mangum		0.24	1.58	0.17	7.69	3.61	1.15	2.80	3.44	4.49	0.24	1.79	
*Oklahoma City	0.93	2.22	3.17	1.33	11.90	2.48	3.66	4.27	1.29	4.68	1.01	5.35	42.29
Ponca			0.79	0.30	5.11	3.07	3.28	3.57	0.24		0.38	3.94	
Sac and Fox Agency				1.72	10.87	2.27	1.58	2.51	2.17	4.09	1.07	4.77	
Oregon.													
Albany [1]	5.27	1.91	3.56	4.66	1.41	0.76	0.62	0.13	1.94	2.60	6.00	9.09	37.95
Albany [2]	4.12	1.34	3.73	3.83	0.89	0.16	0.27	0.01	1.65	2.23	4.23	2.60	25.09
Arlington	0.74	0.49	0.56	0.84	0.75	0.37	0.13	0.04	0.12	0.38	0.84	2.88	8.14
Ashland [3]	1.46	0.33	0.97	0.89	0.90	0.83	0.00	0.00	0.34	1.46	3.04	4.36	14.58
Ashland [3]	1.27	0.46	1.26	1.66	1.53	0.83	T.	0.00	0.31	1.63			
*Astoria	5.46	6.69	3.47	10.27	3.84	1.42	2.00	1.29	4.24	4.30	16.78	10.25	70.01
Aurora	2.93	1.38	2.89	3.55	1.16	1.41	0.66	0.20	1.76	2.36	5.09	2.34	25.73
Aurora (near)					1.84	1.86	0.65	0.17	1.52				
*Baker City	0.39	0.78	1.77	1.82	2.84	1.24	0.03	T.	0.16	0.39	0.65	1.89	11.96
Bake Oven						0.44	0.64		0.32		1.08	1.70	
Bandon	7.12	2.11	5.44	6.11	6.13	0.70	0.93	0.15	1.30	5.32	15.23	17.17	67.71
Beulah	0.90	0.43	1.17	1.32	2.05	0.70	0.00	T.	0.22	0.10	2.75	0.88	10.52
Brownsville	4.55	1.58	3.43	4.82	0.96	0.70	0.72	0.16	1.86	2.95	2.64	7.30	31.67
Burns	1.05	T.	0.25	0.25	1.65	0.00	0.01	T.	0.90		T.	0.16	
Canyon City	1.22	0.92	0.84	5.03	2.43	0.82	0.13	0.14			1.76	1.10	
Cascade Locks	9.89	4.98	4.36	8.79	2.18	0.80		0.21					
Comstock	4.21	1.83	3.87	4.51	2.13	0.78	0.17	0.00	2.37	2.27	6.10	4.63	32.87
Corvallis [4]	5.55	1.77	3.20	4.65	0.45	0.61	0.45	T.	1.78	2.05	5.27	6.20	31.98
Corvallis [2]	3.69	2.05	2.24	4.52	0.76	0.59	0.54	0.00	1.55	1.79	4.84	3.72	26.29
Corvallis (near) [5]								T.	1.68	2.05	6.61	8.46	
Crook	1.40	0.60	1.66	1.64	1.68	0.94	0.21	0.25	0.72		1.21	1.90	
East Portland	4.35	2.18	2.23	3.01	1.79	0.68	0.20	0.06	1.89	2.53	4.31	2.65	
Eola	4.20	1.23	3.23	5.07	1.78	0.87	0.50	0.17	1.81				
Eugene	3.56	0.71	3.02	3.25	0.79	1.19	0.58	0.00	1.25	2.41	4.10	7.39	28.25
Fife			1.07	1.10	0.91	0.66							
Forest Grove	4.69	1.52	2.77	4.96	1.90	0.78	0.69	0.28	2.62	2.97	7.37	4.67	35.22
Gardiner	7.38	3.02	6.92	10.27	5.19	0.63	1.13					14.42	
Glenora	7.61	6.63	5.04	17.20	4.87	1.55	2.49	1.10	10.27	6.32	25.56	17.83	106.47
Grant's Pass [6]	2.58	0.53	1.76	2.82	1.23	0.34	0.00	0.00	1.04	2.16	6.65	4.84	23.95
Grant's Pass [2]	2.44	0.30	2.23	2.52	1.00	0.21	0.00	0.00	0.00	2.38	5.34	4.32	20.74
Happy Valley	0.57	0.57	1.62	2.12	1.76	0.83	0.39	T.	0.50	0.36	1.06	1.05	10.83
Hardman	0.65	0.45	1.05	2.07	2.08	0.75	0.18						
Heppner	3.56	1.71	1.94	2.82	1.85	0.61	0.01	0.28	1.29	1.14	1.23	1.76	18.20
Hood River (near)	4.45	1.50	1.80	4.02	0.75	0.54	0.27	0.12	0.48	2.12	5.83	10.94	32.82
Hubbard	4.71	1.78	2.13	5.42	1.82	1.41	0.71	0.39	0.90		5.81	6.56	
Jacksonville	2.02	0.67	1.44	1.23	1.32	0.33	T.	0.00	0.58	1.38	4.12	3.69	16.78
John Day Junction	1.47	0.43	1.82	1.84	2.23								
Joseph	2.32	0.79	1.90	3.10	2.18	1.44	0.20	0.12	0.73	1.73		2.20	
Junction City	2.69	0.95	3.43	3.58	0.08	0.04	0.06	0.00	0.16	0.46	3.54	3.43	18.42
La Fayette	4.40	1.46	2.16	4.94	1.36	0.69	0.28	0.05	1.66	1.92	5.06	6.42	30.40
La Grande	1.12	1.15	1.10		2.60	1.43	0.30	T.	0.72	0.75		0.90	
Lakeview	2.01	1.57	1.27	2.18	2.04	0.67	0.08	T.	1.51	1.99	3.78	2.47	19.57
Langlois	9.96	5.41	8.70	14.92	7.64	1.57	0.85	0.10	2.06	4.99	14.95	13.56	84.71
Leland	4.70	1.15	2.25	4.02	2.60	0.00	0.11	0.00	0.29	2.41	8.74	9.93	36.20
Lone Rock	0.91	0.41	1.96		1.77	0.59	0.16	0.33	0.56	1.28	1.69	1.53	
McMinnville [7]	4.55	1.83	2.39	5.77	0.84	0.90	0.62	0.18	2.14	2.72	6.02	6.61	34.57
McMinnville [2]	4.42	1.83	2.83	5.69	0.75	0.56	0.47	0.12	2.25	2.44	6.29	5.59	33.24
Monmouth	1.26	1.08	1.10	2.64	0.67	0.33	0.04	0.00	0.18	6.13	3.48	4.33	21.24
Mt. Angel	5.16	2.29	3.01	5.06	2.14	0.80	0.52	0.33	1.89	2.22	5.55	6.23	35.20
Newberg	4.71	2.16	3.07	4.62	1.66	1.19	0.73	0.03	2.00	2.59	5.21	5.50	33.47
New Bridge	1.04	2.80	0.96	1.04	2.83	0.12	T.	0.02	0.13	0.39	0.34	0.44	10.16
Newport	7.00	2.99	5.82	8.51	3.41						9.05	7.59	
Paisley		0.20	0.76	0.75	0.97	1.31							
Pendleton	2.25	0.55	1.43	2.26	1.57	0.82	0.03	0.13	0.35	1.22	0.72	1.10	12.43
Piedmont		1.73	2.53	4.22	1.24								
Portland [2]	4.72	2.10	2.68	4.84	1.60	1.18	0.71	0.08	1.43	2.14	4.87	6.90	33.25
*Portland [8]	4.79	2.48	2.82	4.82	1.57	1.41	0.70	0.17	1.63	2.16	4.34	6.69	33.58
Riddles	2.87	1.18	2.24	3.12	1.68	0.35	0.42	0.00	1.06	1.57	6.31	5.48	26.28
*Roseburgh [8]	4.43	1.58	2.82	3.68	2.18	0.64	0.43	0.00	0.99	1.89	5.71	4.53	28.88
Roseburgh [2]	3.58	1.36	2.89	2.73	1.93	0.57	0.40	0.00	0.94	1.59	6.40	3.75	26.14
Salem [2]	4.01	1.56	2.92	4.37	0.88	1.12	0.38	0.02	1.67	1.54	5.91	4.26	28.64
*Salem [9]		1.85		4.78	1.24	1.20	0.39				5.48	6.08	
Sheridan	3.16	0.76	2.02	4.38	1.29	0.13	0.07	0.02	1.45	2.35	5.37	5.91	26.91
Silver Lake	0.12	0.91	2.40	0.77	2.52								
Silverton	4.79	2.19	2.97	4.53	1.53	1.02	0.66	0.04	1.25	2.19	5.31	5.47	31.95
Siskiyou	3.70	3.05	5.50	3.69	1.80	1.34	0.00	0.00	0.80	1.33	2.52	5.32	29.05
Sparta	2.70	1.30	1.27	2.24	3.14	0.60	0.00	0.18	0.44	0.70	2.64	2.85	18.06
Springfield	3.86	1.80	3.07	3.90	1.23	0.89	0.00	0.00	1.61	2.72	4.61	6.60	30.29
*The Dalles	1.35	0.68	0.70	1.00	0.67	0.06	0.27	T.	0.14	0.90	1.16	5.04	11.97
Tillamook Rock, L. H.	4.72		3.02	7.86	3.96	2.02	2.15	1.17	3.20	3.56	9.72	6.11	47.49
Toledo	5.16	3.87	6.49	8.08	4.17	1.79	0.05	0.05	1.82	7.46	13.13	9.54	61.61
Vale	0.27	0.05	1.10	1.41	2.43	1.05	0.12	T.	0.37	0.21	0.25	0.95	8.21

[1] John Briggs. [2] F. H. Carter. [3] Miss E. Bicknell. [4] Capt. W. Harris. [5] C. T. Roberts.
[6] Pacific Railroad. [7] State Agricultural College. [8] J. B. Paddock. [9] Weather Bureau.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Oregon—Continued.													
Vernonia	5.10	2.58	2.83	7.50	1.24	1.04	1.12	0.29	3.07	3.15	9.32	9.63	46.87
Wagner	.....	.....	.....	.....	.....	.....	.....	0.17	.....	0.69	0.95	2.02	.....
West Fork	5.33	2.27	2.20	4.30	1.82	0.45	0.55	0.00	.....	2.38	12.98	7.66	.....
Weston	4.11	0.93	2.60	3.06	2.51	.....	.....	.....	.....	.....	.....	.....	.....
Williams	.....	.....	.....	.....	.....	0.07	0.00	.....	0.53	1.70	7.28	5.38	.....
Pennsylvania.													
Allegheny Arsenal	3.64	2.21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Altoona	2.08	1.57	2.37	1.66	5.35	5.33	2.50	2.96	1.94	0.10	2.69	.....	.....
Aqueduct	4.94	0.22	4.82	1.77	6.03	2.82	2.40	3.65	5.40	T.	4.30	1.23	37.58
Blooming Grove	6.50	0.80	2.80	1.90	6.50	13.00	4.10	6.90	3.60	0.40	4.40	.....	.....
Blue Knob	5.41	4.03	4.47	3.35	6.44	5.41	5.10	3.83	3.63	0.88	5.33	4.37	52.25
*Brookville	3.48	3.00	3.72	1.74	7.17	6.30	3.63	1.74	2.48	0.48	2.86	1.65	38.25
Brower's Lock	4.91	0.71	5.49	2.06	4.39	2.62	4.04	3.54	2.22	0.33	6.39	2.05	38.75
Carlisle	5.64	1.15	4.19	2.77	5.98	4.59	1.34	1.97	4.85	0.05	3.52	1.45	37.50
*Clarion	3.20	3.70	3.83	2.25	8.75	7.21	2.90	2.18	3.59	1.46	3.58	1.62	44.27
Coatesville	6.76	1.16	5.30	2.13	5.97	2.28	6.92	2.37	3.15	0.48	6.29	2.52	45.33
*Confluence	3.09	2.92	3.26	4.74	5.07	4.93	4.18	2.54	1.57	0.90	3.18	2.06	38.44
Coopersburgh	6.98	1.05	4.77	1.58	5.12	4.42	3.48	4.05	3.56	0.60	6.78	.....	.....
Corry	2.79	3.71	1.63	1.63	8.30	11.62	4.39	7.64	4.18	2.79	3.90	2.05	54.63
*Davis Island Dam	3.70	2.25	.....	2.07	5.14	3.38	3.81	1.32	1.90	0.54	2.37	2.34	.....
Doylestown	5.55	1.17	3.32	2.00	5.43	3.79	3.86	2.97	2.41	0.17	7.51	1.76	39.94
Drifton	4.93	0.56	2.14	1.64	3.78	8.61	3.79	4.79	2.29	1.38	3.84	1.20	38.95
*Du Bois	3.72	3.47	3.66	2.90	7.31	5.76	4.14	2.57	1.59	0.92	3.92	1.66	41.62
Dyberry	5.65	1.29	4.14	1.54	5.79	6.07	2.91	4.64	2.10	0.82	3.48	1.76	40.19
East Mauch Chunk	.....	1.14	5.17	1.44	5.12	8.33	3.60	3.90	2.62	0.82	6.09	1.26	.....
Easton	5.30	1.08	3.84	1.70	4.53	4.57	2.38	3.70	2.73	0.54	6.06	1.62	38.05
Emporium	3.29	3.77	3.87	1.64	7.38	6.13	2.67	3.02	2.78	1.35	3.24	0.94	40.08
*Erie	3.26	2.39	2.20	1.14	8.05	6.48	2.15	6.22	3.19	1.96	3.03	1.60	41.67
Forks of Neshaminy	4.60	1.27	4.18	2.46	6.33	2.67	4.11	.....	3.13	0.49	6.77	1.75	.....
Frankford Arsenal	4.85	0.85	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Frederick	5.16	0.83	4.66	1.95	5.53	4.53	6.57	2.46	1.30	0.32	6.55	1.71	41.57
*Freeport	4.17	3.17	2.90	1.83	4.81	3.40	3.19	1.87	3.15	0.58	3.52	2.48	35.07
Girardville	8.46	1.46	7.60	1.77	4.95	7.62	4.35	2.56	3.42	0.41	4.70	2.02	49.32
Grampian	3.49	3.17	3.61	2.34	7.13	4.97	2.41	.....	2.12	0.59	3.21	1.36	.....
*Greensboro	2.87	2.20	3.21	2.77	5.28	5.39	4.96	1.86	2.01	0.83	3.28	1.51	36.17
Hamburgh	5.25	0.44	3.81	1.44	4.53	4.82	2.41	3.78	2.39	0.37	4.85	1.33	35.42
*Harrisburg	5.14	1.02	4.81	2.15	3.95	4.93	6.48	2.39	3.31	0.15	4.15	1.17	39.65
Hollidaysburg	3.51	2.37	4.89	2.84	5.32	6.28	3.01	3.53	2.89	0.29	3.76	1.97	40.66
Honesdale	5.32	2.02	2.88	1.58	7.15	5.25	3.68	5.78	2.15	0.82	4.62	1.72	42.97
*Huntingdon	4.22	1.86	5.11	2.29	6.24	6.44	3.48	4.03	2.81	0.12	3.04	1.55	41.19
Indiana	.....	.....	.....	.....	6.20	4.98	.....	1.90	2.75	1.02	.....	.....	.....
*Johnstown	4.14	2.97	3.92	3.55	6.67	5.18	3.70	2.29	1.60	0.88	4.74	2.51	42.15
Kane	.....	2.59	3.87	1.71	9.39	8.75	3.98	5.94	2.86	2.32	2.37	0.61	.....
Kennett Square	5.82	1.24	5.90	3.31	7.35	2.97	5.08	3.13	3.17	0.43	5.24	2.59	46.23
Kilmer	4.81	1.96	4.35	1.75	6.63	5.94	2.37	4.73	3.45	0.24	4.26	1.39	41.88
Lancaster	4.39	1.12	6.61	1.86	4.25	5.61	1.85	.....	3.74	0.30	3.69	.....	.....
Lansdale	5.11	0.75	4.89	2.26	5.75	3.88	6.45	3.58	2.23	0.55	7.15	1.57	43.97
Lebanon	6.27	0.95	4.91	2.22	5.14	4.75	4.75	3.80	3.63	0.29	4.55	1.96	43.22
LeRoy	4.60	1.09	4.25	0.96	5.14	7.97	2.39	4.04	2.04	0.91	3.22	0.93	37.54
Lewisburgh	.....	.....	5.53	2.34	4.96	5.21	3.40	4.55	4.18	0.22	3.94	0.70	.....
Ligonier	3.11	2.59	2.97	.....	2.06	7.51	3.43	2.24	2.14	0.51	.....	2.12	.....
*Lock Haven	4.86	1.37	4.73	1.21	4.91	9.66	3.92	3.72	1.34	0.38	3.34	1.35	40.79
*Lock No. 4	3.90	2.44	2.24	2.61	4.72	5.14	3.90	1.07	1.83	0.58	3.16	2.16	33.75
Lycippus (near)	3.55	2.56	2.06	2.78	5.52	6.13	3.69	1.71	2.12	0.66	3.30	.....	.....
McConnellsburg	4.25	1.47	3.49	2.19	5.97	3.21	4.70	1.07	2.81	0.00	3.76	1.55	34.47
*Mahoning	1.69	3.33	3.72	1.92	6.67	3.87	2.87	1.89	3.53	0.75	2.95	1.40	34.59
Meadville	.....	.....	.....	.....	5.75	8.43	2.40	.....	.....	2.41	2.57	.....	.....
New Castle	2.75	2.56	2.26	1.95	6.31	7.08	2.50	3.31	2.53	0.57	1.61	1.02	34.45
*Oil City	1.32	2.07	1.32	0.78	7.56	4.07	3.83	3.45	2.74	1.14	2.84	0.95	32.07
Ottsville	5.06	1.11	3.83	1.83	5.44	2.90	4.50	2.40	2.67	0.48	6.88	1.79	38.89
*Parker's Landing	3.47	2.41	3.73	2.78	9.06	5.35	2.41	2.73	3.87	0.85	3.33	1.63	41.62
*Philadelphia	4.48	0.98	4.32	2.03	5.12	1.98	2.97	2.74	2.06	0.30	5.71	2.09	34.78
Philadelphia[1]	3.80	1.83	4.54	2.01	5.15	2.13	.....	2.97	2.21	0.32	5.95	.....	.....
Philadelphia[2]	5.06	1.10	5.35	2.49	5.38	2.01	3.25	3.03	2.47	0.44	6.94	2.21	39.73
Philadelphia[3]	.....	0.81	4.65	2.34	5.68	2.32	5.10	4.90	2.28	0.48	5.37	1.96	.....
Phœnixville	5.91	1.25	5.70	2.22	4.93	3.43	4.39	3.68	2.14	0.35	7.05	2.00	43.05
*Pittsburg	3.27	1.85	2.29	2.93	3.77	4.15	5.88	2.22	2.04	0.51	1.81	1.92	32.66
Pleasant Mount	6.74	2.15	5.20	1.85	7.30	.....	.....	.....	.....	.....	.....	.....	.....
Point Pleasant	6.31	1.29	3.83	2.13	5.88	3.06	3.96	3.50	2.80	1.00	6.85	1.87	42.48
Pottstown	6.46	2.22	3.73	1.80	7.59	3.29	3.66	3.49	2.33	0.32	6.60	1.94	43.43
Pottsville	.....	.....	.....	.....	5.42	3.71	2.24	5.07	6.27	.....	.....	.....	.....
Quakertown	5.41	1.35	5.30	1.86	5.08	3.60	4.50	5.77	2.97	0.63	7.08	1.95	45.50
Reading	5.94	0.54	4.93	1.32	4.00	2.07	3.37	4.57	2.54	0.20	5.41	1.46	36.35
*Ridgway	2.53	2.44	3.41	1.54	7.83	4.43	3.23	4.53	2.44	1.26	2.85	1.04	37.53
Saegerstown	5.00	4.24	2.27	1.73	8.95	7.73	3.50	4.76	3.44	2.93	3.97	2.90	51.42
Salem Corners	7.34	1.02	4.41	1.56	7.65	6.89	3.40	4.77	2.24	0.93	5.86	2.18	48.25
*Saltsburgh	4.04	2.83	2.92	2.49	4.01	4.86	4.66	2.72	1.13	0.57	2.59	2.49	35.31
Seisholtzville	5.97	1.46	5.33	1.61	5.13	1.83	3.80	2.93	2.38	0.61	6.73	2.35	40.13
*Selin's Grove	5.13	0.88	3.92	1.60	6.25	8.18	4.77	3.17	3.29	0.37	4.30	1.90	43.76
Smith's Corners	5.23	1.25	3.56	1.96	5.81	3.25	4.25	3.38	3.19	0.45	7.58	1.69	41.57
Somerset	3.05	2.95	3.85	4.43	5.28	4.40	3.97	2.09	1.42	0.32	6.17	3.32	41.25
South Eaton	5.38	0.91	4.53	1.20	5.49	4.50	3.14	2.85	2.97	0.77	2.88	0.86	35.48
State College	3.98	1.73	3.78	2.09	5.79	7.36	3.26	5.78	2.24	0.28	3.62	1.07	40.98
*Stoyestown	2.17	3.02	3.48	3.12	5.72	4.72	6.98	1.82	1.88	0.98	4.22	2.18	40.29
Swarthmore	4.20	0.43	4.84	1.78	5.00	4.24	3.83	3.31	1.78	0.30	6.12	1.21	37.05
Uniontown	4.34	2.62	2.49	3.23	6.48	7.70	7.11	2.40	2.21	1.05	3.50	1.55	44.68
*Warren	2.93	3.20	1.46	1.96	9.96	7.91	4.20	4.82	2.52	2.36	3.86	2.36	47.56
Wellsborough	3.67	2.21	4.56	0.61	6.69	8.84	2.15	4.73	1.18	0.33	2.55	0.40	37.92

[1] Bureau of Water. [2] John Comly. [3] J. C. Trautwine.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
Pennsylvania—Continued.													
West Chester	5.80	1.31	5.89	2.60	6.37	3.55	5.87	3.50	2.03	0.36	6.05	2.39	45.72
*West Newton	3.33	0.87	2.24	3.32	4.35	5.32	4.09	1.34	2.25	0.49	3.13	2.20	32.93
Westtown	5.32	1.66	4.08	.....	7.23	0.73	.....	.....	2.38	0.30	5.41	2.27	.....
*Wilkes Barre	7.02	1.11	6.41	1.55	5.89	10.55	4.71	5.56	2.51	0.72	4.37	1.53	51.93
Wysox	3.61	1.39	2.04	0.91	4.86	6.45	3.19	4.37	1.48	1.02	2.59	1.28	33.19
York	6.08	0.10	.....	1.70	4.10	3.81	8.59	2.81	2.66	0.14	4.44	2.13	.....
Rhode Island.													
*Block Island	4.19	1.35	4.93	2.79	4.27	1.43	2.45	5.71	3.77	2.12	8.31	1.74	43.06
Bristol	5.08	1.46	4.27	1.72	4.40	2.23	1.45	4.18	2.78	1.15	1.72	1.37	31.81
Fort Adams	2.92	0.70	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kingston[1]	5.58	1.87	5.22	3.35	5.39	2.23	2.78	3.18	2.58	1.51	7.01	1.93	42.63
Kingston[2]	5.39	1.72	4.90	3.30	6.09	1.61	3.43	2.96	2.48	1.64	6.20	2.02	41.74
Lonsdale	4.97	.....	4.06	1.38	6.12	3.22	2.16	5.01	1.83	1.49	5.62	1.31	.....
*Narragansett Pier	6.60	1.38	4.99	2.88	4.63	2.44	1.66	5.00	3.58	1.61	7.44	1.74	43.95
Pawtucket	4.43	1.74	3.98	1.28	5.72	3.48	2.16	3.86	1.80	1.64	4.96	1.21	36.26
Providence[3]	5.15	1.72	4.45	1.39	6.07	2.89	1.86	3.07	1.81	1.36	6.12	1.50	37.39
Providence[4]	5.09	1.55	3.61	1.50	5.63	2.59	.....	.....	1.82	1.49	5.79	1.53	.....
Providence[5]	4.76	1.84	4.33	1.41	5.93	2.96	1.67	2.91	1.92	1.45	6.17	1.43	36.78
South Carolina.													
Aiken	8.59	4.93	4.93	.....	.....	.....	.....	.....	.....	0.23	1.72	1.67	.....
*Allendale	.....	.....	.....	0.00	2.73	4.11	5.90	3.62	8.94	0.35	0.95	.....	.....
*Anderson	6.36	5.20	4.45	4.85	2.15	11.91	5.15	2.76	4.97	0.29	3.29	2.91	54.29
*Batesburg	.....	.....	.....	0.47	2.97	7.99	8.11	5.78	6.93	0.40	2.02	.....	.....
*Blackville	.....	.....	.....	0.36	6.51	6.03	4.60	5.84	4.11	0.87	1.89	.....	.....
*Camden	7.33	6.57	3.96	1.25	1.61	2.73	3.00	2.79	4.02	0.57	1.93	2.52	38.28
*Charleston	4.00	1.54	2.84	0.51	3.03	10.32	10.33	4.73	11.77	0.75	0.98	2.52	53.32
*Cheraw[5]	6.96	5.65	.....	2.34	2.96	5.21	13.47	6.54	4.89	0.69	2.00	3.53	.....
*Cheraw[7]	7.55	6.27	2.41	2.52	3.62	5.26	12.67	5.43	5.17	0.37	2.70	2.79	56.76
*Columbia	7.63	4.41	3.78	1.43	2.59	3.12	4.71	9.72	4.64	0.27	1.55	1.67	45.52
*Effingham	5.32	6.54	3.28	1.61	2.95	3.60	9.93	2.46	3.30	0.78	2.05	3.42	45.33
Evergreen	9.82	6.04	.....	.....	.....	.....	3.19	.....	.....	.....	.....	.....	.....
*Forence	.....	.....	.....	1.04	3.33	4.85	10.26	2.57	3.46	0.48	1.94	.....	.....
*Green Pond	.....	.....	.....	0.00	2.07	6.88	8.68	2.97	12.84	0.74	1.18	.....	.....
*Greenville	8.12	3.67	4.96	.....	3.42	9.27	7.16	6.21	4.76	0.27	3.81	2.70	.....
*Greenwood	.....	.....	.....	0.76	2.77	10.48	4.29	2.91	5.54	0.68	2.00	5.81	.....
*Hardeeville	.....	.....	.....	0.35	2.95	8.79	9.04	5.89	8.88	1.78	1.72	.....	.....
*Kingstree	.....	.....	.....	0.89	5.52	6.24	6.19	4.40	4.13	0.89	4.45	.....	.....
Kitchings Mills	7.46	3.97	3.87	1.50	.....	4.35	.....	.....	5.86	0.32	1.71	1.68	.....
Longshore	10.45	5.41	4.31	2.31	2.67	6.35	3.15	3.05	6.12	0.52	2.46	4.24	51.04
*Mount Carmel	6.50	3.68	5.22	3.20	1.12	9.87	5.13	1.43	4.74	0.31	2.63	3.06	46.89
*Nichols	6.79	6.19	2.99	2.15	3.70	6.81	9.19	6.47	4.81	0.64	3.06	2.05	54.85
Port Royal	2.94	1.08	3.05	0.43	2.40	4.27	4.56	2.27	14.95	0.73	1.08	2.05	39.81
*Saint Georges	.....	.....	.....	0.15	4.35	4.48	7.40	5.08	7.62	0.65	1.80	.....	.....
*Saint Matthews	.....	.....	.....	1.30	2.45	3.79	5.18	5.36	4.51	0.81	0.60	.....	.....
Saint Stephens	.....	.....	.....	1.47	4.68	6.22	3.99	5.65	6.06	0.87	1.27	1.72	.....
Simpsonville	4.97	3.54	3.72	6.75	1.44	5.56	3.91	3.75	5.11	0.34	2.26	3.54	.....
Society Hill	6.92	.....	.....	.....	2.67	5.38	11.28	3.30	3.57	0.33	2.42	3.76	.....
*Spartanburg	.....	.....	.....	.....	2.36	.....	.....	1.85	4.00	0.06	1.96	.....	.....
Statesburg	6.65	4.23	3.88	1.30	2.90	5.91	6.33	1.38	2.88	0.19	1.63	1.76	39.04
*Tillers Ferry	7.43	4.68	2.92	1.54	3.29	5.09	5.84	3.20	2.31	0.24	2.40	2.43	41.37
Trial	5.93	2.05	.....	1.72	8.67	6.87	7.32	3.57	5.24	0.75	2.77	1.60	.....
*Wateree	5.45	5.30	3.13	1.43	3.21	3.69	5.92	3.87	4.80	0.61	1.85	2.51	41.77
Winnsboro	7.06	5.09	3.17	1.65	3.30	3.16	4.70	3.42	.....	0.27	0.90	3.02	.....
Yorkville	9.00	.....	.....	4.53	3.30	7.03	7.27	3.01	2.71	.....	3.38	2.92	.....
South Dakota.													
Aberdeen	0.54	0.03	0.46	8.05	3.72	5.36	7.76	1.48	0.83	1.17	0.44	0.40	30.24
Alexandria	1.45	0.69	1.18	6.69	8.08	3.50	3.18	1.65	0.15	1.19	0.53	0.50	28.79
Ashcroft	.....	.....	.....	.....	.....	.....	1.13	1.29	0.16	0.65	0.56	0.70	.....
Bowdle	.....	.....	.....	.....	4.05	7.42	2.85	3.39	1.32	1.08	0.50	0.20	.....
Britton	0.32	0.81	0.35	2.41	3.62	3.41	2.64	1.53	0.91	.....	.....	0.32	.....
Brookings	0.35	0.36	0.84	3.15	7.32	3.52	3.69	3.03	1.49	0.53	0.22	0.32	24.82
Carthage	.....	.....	.....	.....	6.10	3.87	2.98	2.07	0.10	0.92	1.34	0.15	.....
Castlewood	0.10	0.57	0.84	3.20	4.44	3.23	1.58	2.61	0.21	0.54	0.75	0.30	18.36
Clark	.....	0.82	1.69	6.40	7.58	6.26	2.60	3.36	.....	.....	.....	.....	.....
Cross	1.00	0.25	1.06	6.29	6.09	4.99	3.14	3.88	0.18	3.00	0.10	0.25	30.24
De Smet	0.10	0.35	1.50	4.75	6.43	3.26	2.60	1.07	0.67	1.04	.....	0.20	.....
Elkton	0.70	1.61	1.43	5.46	9.69	3.00	2.62	3.00	1.62	0.06	1.02	0.21	30.42
Faulkton	.....	.....	0.84	5.57	3.19	6.04	4.48	2.12	1.17	0.82	0.04	0.38	.....
Flandreau	0.15	1.08	0.87	2.83	7.79	4.50	3.86	3.00	0.73	0.05	1.12	0.38	26.36
Forestburg	0.09	1.01	1.19	5.80	6.29	5.47	1.01	3.13	0.39	1.35	0.72	0.32	26.57
Forest City	.....	.....	.....	.....	.....	3.68	1.47	1.38	0.87	0.74	.....	.....	.....
Fort Meade	1.36	0.27	0.67	5.70	3.30	3.99	1.04	2.93	0.32	2.46	0.51	1.54	24.69
Fort Randall	1.01	0.37	1.85	5.47	4.25	1.62	0.69	1.32	0.18	1.28	.....	.....	.....
Fort Sully	0.30	0.50	1.00	4.82	2.65	3.62	1.03	1.48	0.53	0.74	0.31	0.72	17.70
Frankfort	0.30	1.17	0.78	5.53	4.65	3.41	1.77	1.74	0.38	1.64	0.67	0.35	22.39
Gary	.....	0.45	1.44	4.76	8.48	2.96	3.12	5.62	0.00	0.14	0.20	0.20	.....
Highmore	.....	.....	.....	.....	.....	.....	1.20	1.17	1.10	0.75	0.20	0.20	.....
Hitchcock	.....	.....	.....	.....	5.63	5.95	2.45	2.40	0.96	.....	.....	.....	.....
Hotch City	.....	.....	.....	.....	3.71	3.71	0.72	0.99	0.19	0.57	0.30	0.40	.....
Howard	0.15	0.79	1.86	.....	.....	.....	2.21	2.03	.....	.....	.....	.....	.....
*Huron	0.28	0.70	1.11	5.90	6.03	3.43	1.51	2.13	0.59	2.36	0.77	0.30	25.17
Kimball	0.30	0.91	1.43	6.64	4.22	3.58	0.38	2.74	0.72	1.10	0.85	0.30	23.17
Mellette	.....	.....	.....	.....	4.84	6.51	6.17	2.00	0.62	1.62	0.90	0.20	.....

[1] N. Helme.
[2] C. O. Flagg.
[3] City engineer's office.
[4] D. W. Hoyt.
[5] Ladd Observatory.
[6] Cotton belt observer.
[7] River observer.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
South Dakota—Continued.													
Millbank	0.07	1.41	0.52	3.99	8.09	2.91	3.80	6.33	0.13	0.27	0.55	0.73	28.80
Mitchell	0.72	1.52	1.42	7.33	6.71	3.47	1.73	2.47	0.12	1.23	0.41	0.98	28.11
Oelrichs	2.55	1.15	1.60	7.83	2.67	8.71	1.77	2.25	0.60	3.10	0.20	1.15	35.58
Onida	T.	0.60	0.33	2.41	2.94	2.69	1.07	0.70	0.76	0.75	0.21	0.01	12.47
Parker	0.27	0.40	0.72	1.17	3.49	1.43	.....	3.30	0.17	0.36	.....	0.30	.....
Parkston	0.95	0.55	1.08	5.67	6.72	2.98	0.86	4.61	T.	1.93	0.50	0.50	26.35
Piedmont	.....	.....	.....	.....	.....	3.64	1.74	3.21	T.	2.58	T.	0.90	.....
*Pierre	0.10	1.15	0.68	3.86	4.65	3.79	1.43	0.63	1.32	0.56	0.25	0.39	18.81
Plankinton	0.41	.....	.....	.....	.....	4.42	1.31	1.97	0.16	2.02	.....	0.12	.....
*Rapid City	0.63	0.24	1.18	4.04	4.49	3.80	0.67	2.00	0.13	2.29	0.08	0.48	20.03
Rosebud	.....	.....	.....	4.18	5.10	4.48	1.38	4.19	0.19	3.24	0.40	0.80	.....
St. Lawrence	0.44	0.55	0.80	8.65	5.26	.....	.....	1.72	.....	.....	.....	.....	.....
Salem	.....	.....	1.12	3.16	5.69	2.84	1.62	1.11	.....	0.45	0.23	.....	.....
Sioux Falls	0.72	0.82	1.17	4.60	8.22	3.29	0.63	3.44	T.	0.39	0.30	0.30	23.88
Spearfish	0.36	0.74	1.55	4.61	2.18	8.32	0.73	3.09	0.23	2.81	0.63	1.57	26.82
Travare	.....	.....	.....	.....	4.70	7.26	2.85	1.58	.....	0.72	0.86	0.60	.....
Tyndall	0.35	0.25	0.72	6.38	5.41	3.32	0.69	.....	T.	1.03	1.00	0.20	.....
Vermillion	.....	0.54	0.84	2.34	6.85	.....	.....	.....	.....	.....	.....	.....	.....
Watertown	0.12	0.76	0.70	5.14	8.84	6.76	.....	6.07	.....	.....	.....	.....	.....
Webster	1.69	1.43	1.04	4.37	5.64	3.35	3.72	4.37	0.95	1.31	2.34	0.90	31.41
Wentworth	0.11	0.75	0.57	2.60	7.55	3.44	2.41	2.37	0.17	0.92	0.16	0.36	21.41
Wessington	.....	.....	.....	.....	4.10	4.15	0.87	1.50	0.40	.....	.....	.....	.....
Wessington Springs	0.20	0.66	1.56	5.65	4.64	5.09	0.94	1.30	0.19	1.32	1.40	0.72	23.67
Wolsey	0.35	0.62	0.89	7.53	6.11	5.01	2.34	2.70	0.26	1.65	1.05	0.37	28.88
*Yankton	0.40	0.60	0.90	5.63	6.13	2.95	1.60	4.24	0.36	0.62	0.50	0.18	24.11
Tennessee.													
Andersonville	4.70	1.51	2.14	6.77	3.83	6.46	4.16	2.77	2.31	0.40	5.57	5.60	46.22
*Arlington	.....	.....	.....	5.06	5.45	3.31	10.08	2.81	1.48	0.45	6.06	.....	.....
Ashwood	2.60	3.71	5.15	11.13	6.65	6.87	8.12	2.89	3.71	0.37	4.99	7.22	63.41
Austin	3.47	1.98	4.06	7.32	5.23	5.41	5.15	2.77	3.68	0.22	4.75	4.99	49.04
Bethel Springs	1.49	3.77	3.00	9.79	6.36	3.74	8.42	5.38	3.26	0.51	2.70	9.21	57.63
*Bolivar[1]	.....	.....	.....	1.62	4.89	4.56	7.00	3.12	2.50	0.06	5.32	.....	.....
*Brownsville	.....	.....	.....	5.53	5.87	3.57	7.70	5.44	1.69	0.37	5.59	.....	.....
Byrdstown	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.10	6.07	2.07	.....
*Carthage	3.69	3.47	4.67	7.12	5.41	3.25	3.35	2.38	1.82	0.21	4.34	4.15	43.86
*Charleston	7.94	2.94	3.87	9.93	4.55	7.17	6.82	2.81	5.51	0.44	7.10	4.04	63.12
*Chattanooga	7.39	3.61	3.35	8.28	3.29	8.32	6.40	5.61	5.42	0.20	6.32	4.49	62.68
Clarkesville	2.51	2.78	4.02	9.55	4.79	4.97	4.25	2.77	4.23	0.17	4.83	9.03	53.90
*Clinton	7.00	3.44	4.03	7.98	3.04	7.95	6.28	3.35	1.49	.....	.....	3.41	.....
*Columbia	2.82	3.50	4.29	10.50	8.02	8.57	9.67	4.48	2.85	0.28	4.91	7.25	67.14
Covington[2]	2.76	3.54	3.70	8.82	7.24	3.54	8.46	4.42	.....	1.13	7.55	.....	.....
*Covington[1]	.....	.....	.....	3.40	.....	3.13	6.38	4.13	0.62	0.59	6.32	12.96	.....
Dunlap	7.53	4.95	5.41	10.35	3.49	6.89	9.71	5.37	3.14	0.15	.....	6.89	.....
*Dyersburg	1.68	3.44	2.67	10.45	6.62	4.18	5.68	4.12	0.94	0.33	4.87	.....	.....
Fayetteville	4.06	4.62	4.10	11.44	5.36	2.19	4.54	3.06	3.09	0.53	4.42	3.78	51.14
Florence Station	3.31	3.28	4.03	8.62	4.15	3.06	4.38	2.32	2.27	0.26	4.77	4.89	45.39
Franklin	3.25	3.44	4.32	9.32	5.41	4.22	5.11	2.64	3.20	0.39	5.67	6.23	53.20
Greeneville	5.93	2.40	2.88	4.94	3.83	6.96	6.07	2.79	1.78	0.97	6.18	2.45	47.18
Hohenwald	3.38	.....	2.73	10.34	5.66	6.27	6.76	4.19	3.43	0.21	4.97	9.27	.....
Jacksboro	5.53	2.50	3.84	6.54	3.52	6.41	3.55	8.17	3.06	0.55	5.40	3.10	52.17
Jackson	.....	3.22	1.54	7.65	4.78	3.33	10.33	4.65	1.80	0.10	5.85	11.91	.....
Johnson City	6.40	1.81	2.32	5.81	4.22	6.48	.....	4.19	1.03	.....	4.89	.....	.....
*Johnsonville	1.92	3.50	3.82	12.29	4.33	3.22	10.12	7.57	3.95	0.15	10.15	9.79	70.81
*Kingston	7.27	3.17	4.86	7.10	3.67	5.71	4.90	4.50	1.51	0.53	4.80	3.56	51.58
*Knoxville	6.16	3.35	3.68	7.58	2.81	3.50	4.11	3.10	0.63	0.47	5.91	3.32	44.62
Lookout Mountain	.....	.....	.....	.....	.....	.....	.....	.....	5.08	0.15	7.26	4.31	.....
*Loudon	8.04	3.37	3.77	10.96	4.30	6.34	4.45	3.70	1.15	0.25	6.78	3.49	56.60
Lynnville	2.30	4.84	5.12	13.75	8.64	4.36	6.12	2.07	3.81	0.31	4.26	6.72	62.30
McMinnville	3.66	3.07	3.26	10.05	5.98	3.20	5.36	3.28	.....	.....	.....	.....	.....
*Memphis	3.06	3.15	4.05	8.26	7.46	4.60	7.55	3.52	0.98	0.62	6.20	11.95	61.46
*Milan	.....	.....	.....	5.90	6.00	6.27	6.17	7.49	3.71	0.26	6.45	.....	.....
*Nashville	2.81	2.73	4.10	7.45	4.03	5.01	5.13	3.39	4.78	0.25	3.91	6.43	50.02
Newport	5.27	2.07	2.64	5.75	3.13	3.24	3.16	2.50	1.16	0.61	6.00	1.46	36.99
Nunnelly	1.60	3.83	6.34	9.30	4.88	5.69	7.04	2.18	5.10	0.36	5.50	8.89	60.71
Parksville	8.72	2.86	3.69	6.68	3.44	3.91	.....	.....	0.82	0.00	6.83	3.67	.....
Riddleton	4.71	3.57	4.14	7.84	4.49	2.47	2.42	6.96	2.02	T.	6.54	5.03	50.19
*Rockwood	7.25	4.17	3.35	8.16	4.27	8.09	4.62	3.30	2.15	0.20	4.57	3.91	54.04
*Rogersville	5.95	3.17	3.03	5.90	3.37	4.27	5.90	2.55	1.14	0.66	5.69	3.44	45.07
Rugby	7.35	2.83	5.73	7.91	5.33	4.26	2.33	5.95	1.84	0.16	6.05	3.82	53.56
Savannah	2.78	4.74	3.20	12.37	6.24	4.30	8.12	3.57	1.22	0.12	4.55	9.24	60.45
Sharp	3.12	5.44	4.01	12.46	5.24	3.28	8.60	6.67	2.94	0.20	6.73	6.81	65.50
Springdale	5.46	.....	3.75	7.43	3.11	6.40	3.99	4.52	0.60	0.55	5.24	2.87	.....
*Strawberry Plains	0.27	2.38	3.45	7.36	3.38	4.86	2.98	1.30	0.05	0.22	6.01	2.90	41.16
Sweet Water	.....	.....	4.04	8.56	4.90	4.68	2.07	.....	.....	.....	3.29	3.13	.....
Waynesboro	0.98	4.90	5.85	10.95	3.41	4.66	7.10	5.98	4.77	0.08	4.80	7.22	60.70
Texas.													
*Abilene	0.30	1.04	2.59	1.08	6.12	1.34	1.41	3.58	1.85	6.03	0.45	2.09	28.48
Albany	.....	.....	.....	.....	3.95	5.00	0.99	5.18	1.61	5.52	0.60	2.87	.....
*Amarillo	0.42	0.57	2.10	0.21	2.70	1.49	1.85	1.93	0.24	2.85	0.16	1.08	15.60
Arlington	2.13	0.87	4.27	2.75	5.38	4.67	1.99	2.74	0.58	6.94	1.26	3.06	36.64
*Arthur City	1.92	2.22	3.37	6.38	15.69	6.62	3.85	6.55	2.39	4.44	2.79	4.81	61.03
Aurora	.....	.....	.....	.....	.....	.....	.....	0.40	0.50	5.85	1.07	3.04	.....
Austin[3]	3.17	2.44	1.92	0.10	2.95	4.37	1.60	6.45	.....	3.40	1.50	8.49	.....
*Belton	.....	.....	.....	1.29	2.02	4.38	2.84	7.04	0.48	1.96	1.74	.....	.....
Boerne	.....	.....	.....	.....	.....	2.13	0.43	4.44	0.17	4.23	2.16	4.86	.....
Big Spring	0.20	0.10	1.98	0.00	2.14	1.10	2.70	0.60	1.50	4.50	.....	.....	.....

[1] Cotton belt observer. [2] J. I. Hall. [3] Ernst Kruger.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Texas—Continued.													
Brady	0.43	0.34	2.22	1.56	2.51	1.85	0.58	5.39	1.24	6.03	.....	1.24	.....
Brazoria	1.94	2.72	1.50	2.32	0.54	4.02	4.05	6.06	2.81	6.18	3.46	3.36	38.96
*Brenham	2.73	2.44	2.42	0.64	1.98	5.66	1.60	2.73	1.21	2.99	5.08	9.29	38.77
Brownwood	0.32	0.53	2.52	2.44	3.70	2.78	1.13	6.53	1.50	5.22	0.28	1.55	28.50
Burnet	0.90	2.00	1.82	1.37	5.26	7.12	1.36	7.87	0.00	2.52	1.49	3.01	34.72
Camp Eagle Pass	0.25	0.00	0.96	0.00	2.60	0.20	0.78	9.10	1.67	5.30	1.30	0.81	22.97
Camp Peña Colorado	0.08	0.60	0.00	0.50	0.00	0.30	1.00	3.70	1.40	0.65	1.30	2.50	12.03
*Childress	0.40	T.	2.00	0.00	1.60	2.45	1.06	1.00	1.65	3.53	T.	0.93	14.62
Coldwater	.....	.....	.....	.....	.....	.....	1.89	1.79	0.07	3.76	0.51	0.80	.....
College Station	3.04	1.96	2.50	2.44	3.54	3.84	4.20	2.15	2.32	2.49	4.37	11.03	43.88
Colorado[1]	0.02	0.05	0.41	.....	0.65	0.15	0.30	0.22	0.28	0.74	.....	.....	.....
*Columbia	0.61	2.77	1.25	0.57	0.29	2.80	5.58	1.60	0.86	5.92	4.07	1.65	27.97
*Corpus Christi	1.14	1.09	1.10	0.26	1.95	0.62	1.15	2.78	2.04	1.23	5.55	1.70	20.61
Corsicana[2]	.....	1.03	3.02	0.97	5.57	7.03	1.21	2.64	0.47	6.80	.....	4.05	.....
*Corsicana[2]	2.65	1.28	2.81	1.27	4.55	4.52	3.40	1.78	0.38	6.03	2.51	5.66	36.84
*Cuero	1.06	1.09	1.50	0.16	4.55	3.95	1.63	2.60	2.04	5.34	4.65	3.38	31.95
*Dallas[4]	.....	.....	.....	.....	.....	3.55	0.16	1.26	0.20	3.83	2.47	.....	.....
Dallas[5]	4.21	0.81	4.46	2.99	4.59	6.53	1.30	1.96	0.88	7.02	.....	.....	.....
Devine	.....	0.18	0.90	0.04	1.08	0.92	9.46	3.67	1.09	5.79	0.70	2.19	.....
Durham	0.20	0.21	0.41	0.00	2.56	2.18	4.46	0.85	1.30	4.67	0.59	0.44	17.87
Duval	1.35	1.10	2.20	0.80	1.95	6.55	0.85	5.10	0.70	8.50	0.65	7.40	37.15
Eastland	.....	.....	.....	.....	1.01	4.10	1.70	1.85	0.85	4.24	1.12	2.74	.....
Elmendorf	1.07	0.44	1.33	0.19	1.98	2.30	3.75	4.71	.....	.....	.....	.....	.....
*El Paso	1.25	0.57	0.30	0.11	T.	T.	1.14	0.07	0.12	0.22	0.93	0.61	5.32
Epworth	.....	.....	.....	.....	.....	.....	1.05	2.52	0.74	3.93	0.60	.....	.....
Fay	.....	.....	.....	.....	.....	.....	.....	2.87	0.00	1.43	0.45	.....	.....
Flower Bluff	.....	.....	.....	.....	.....	.....	T.	1.78	3.32	0.58	0.86	1.69	.....
Floydada	.....	.....	.....	0.05	0.14	2.01	1.25	2.79	0.75	2.55	.....	.....	.....
Forestburg	0.49	.....	3.75	0.15	11.77	1.10	2.89	0.70	1.70	5.17	0.90	3.47	.....
Fort Bliss	1.11	0.75	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Brown	0.54	1.78	1.79	.....	.....	.....	.....	.....	0.46	1.58	3.21	1.19	.....
Fort Clark	0.40	0.46	0.80	T.	2.00	0.00	0.89	3.85	0.41	4.03	0.60	0.55	13.99
Fort Hancock	0.78	0.82	0.45	0.42	0.00	0.00	1.36	0.48	0.00	2.00	0.50	0.15	6.96
Fort McIntosh	0.71	1.41	0.74	0.00	1.65	0.00	3.11	7.48	2.10	1.25	1.30	1.30	21.05
Fort Ringgold	0.75	0.15	1.30	0.50	1.15	0.75	1.55	6.25	2.75	0.70	1.70	1.70	19.25
Fort Worth	.....	0.95	.....	.....	2.20	4.23	1.50	0.83	.....	6.30	2.45	.....	.....
Fredericksburg	1.34	0.53	2.74	0.64	3.30	1.26	0.76	8.01	0.57	2.51	0.66	3.53	25.85
Gainesville	0.65	1.17	4.09	4.41	14.32	3.63	2.06	2.05	1.95	8.55	1.43	5.74	50.05
*Galveston	1.99	1.52	1.45	1.14	0.33	4.26	1.50	5.29	0.58	1.69	2.80	2.23	24.78
Graham	0.21	0.50	3.32	1.35	6.25	2.72	1.28	4.72	2.11	4.73	1.10	2.24	30.53
Grape Vine	2.04	0.55	3.98	3.69	8.38	3.40	1.94	1.30	1.01	6.88	2.34	3.02	38.53
Hallettsville	0.79	0.91	0.97	0.08	7.50	1.06	1.78	2.85	2.28	2.28	4.96	3.21	28.67
Hartley	0.15	0.04	1.65	0.25	0.69	1.71	2.21	0.72	0.00	2.26	0.24	0.74	10.66
Haskell	0.15	0.49	1.92	0.31	.....	.....	3.99	1.86	2.29	.....	.....	.....	.....
Haymond	T.	0.48	T.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*Hearne	.....	0.85	.....	.....	1.90	2.33	0.18	2.01	0.60	2.00	3.90	.....	.....
Highland	0.42	0.30	2.10	2.25	.....	.....	.....	4.37	1.00	4.10	0.65	1.50	.....
*Houston	1.78	1.13	2.82	3.20	0.04	6.12	4.51	7.13	2.61	3.17	6.01	2.71	41.23
*Huntsville	5.25	2.00	2.49	2.91	2.97	10.82	2.70	7.35	0.33	2.19	7.22	5.96	52.19
Kent	1.05	0.63	0.00	0.35	T.	0.01	1.14	3.77	1.44	1.42	.....	0.77	.....
Llano	0.39	0.36	2.41	2.79	3.58	.....	.....	.....	.....	.....	.....	1.17	.....
*Longview	.....	3.12	4.06	3.74	3.97	6.77	2.27	5.03	1.97	3.30	6.15	.....	.....
*Luling	1.03	0.09	.....	0.00	2.48	0.95	0.25	4.77	3.72	3.07	1.56	3.10	.....
McGregor	.....	.....	.....	.....	.....	.....	.....	.....	2.00	.....	4.05	5.20	.....
Menardville	0.57	0.29	2.01	1.98	3.71	2.73	0.00	6.38	1.33	7.60	0.55	1.34	28.49
Mesquite	1.62	0.87	4.23	3.06	6.83	4.17	3.14	2.73	0.62	9.00	1.17	5.27	42.71
Mountain Spring	0.78	1.16	4.10	3.68	13.51	2.54	1.86	4.46	1.02	7.37	1.75	5.80	48.03
Nacogdoches	1.76	3.99	3.78	4.39	4.65	3.51	1.82	.....	1.18	1.70	7.10	.....	.....
New Braunfels	2.03	0.54	1.08	1.03	3.86	1.76	2.41	4.92	1.29	2.68	1.48	4.98	28.06
New Ulm	2.21	1.71	1.11	0.41	1.86	2.71	1.25	6.77	0.24	2.60	5.86	.....	.....
Ochiltree	0.50	0.91	1.46	0.08	2.55	2.15	2.13	4.64	1.30	1.55	0.30	1.10	18.6
Odessa	0.50	0.33	0.39	.....	0.73	.....	.....	.....	.....	.....	.....	.....	.....
*Orange	.....	.....	.....	2.27	1.07	18.01	8.40	8.71	1.71	4.96	7.12	2.95	.....
*Palestine	3.93	5.05	4.70	4.80	4.18	9.77	1.60	3.41	0.98	5.74	5.99	11.04	61.19
Panter	0.87	0.31	3.22	1.24	2.72	6.18	1.84	3.21	1.05	5.12	0.97	.....	.....
*Paris	.....	.....	.....	3.56	13.55	5.07	2.10	3.63	1.99	5.55	2.14	5.90	.....
Quanah	0.40	0.33	1.00	0.75	3.10	3.70	3.30	.....	4.10	5.00	0.30	2.00	.....
Red River City	1.30	.....	2.74	8.07	12.12	4.56	2.36	2.35	1.75	7.51	2.26	5.59	.....
*Rio Grande City	.....	.....	.....	.....	.....	.....	1.41	3.00	1.95	0.29	1.26	0.82	.....
Roby	0.25	0.90	2.85	0.30	3.42	1.28	7.11	1.34	3.71	7.35	0.19	1.35	30.05
Round Rock	1.45	1.52	3.09	0.64	3.06	5.39	1.30	5.38	0.08	4.36	1.29	4.64	32.20
San Angelo	0.22	0.44	.....	T.	.....	0.54	0.70	.....	.....	.....	.....	.....	.....
*San Antonio	1.51	0.71	1.75	0.16	0.89	3.83	0.05	9.09	1.09	1.48	1.09	4.16	25.81
San Antonio[6]	1.51	0.59	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Antonio[7]	1.23	0.48	1.14	0.15	0.82	3.47	0.04	8.35	0.93	1.46	0.93	3.51	22.51
Sierra Blanca[8]	.....	0.63	.....	0.00	.....	.....	0.37	0.80	0.00	1.65	0.35	.....	.....
Sierra Blanca[9]	0.00	0.62	.....	.....	0.00	0.00	.....	.....	0.00	.....	.....	.....	.....
Silver Falls	0.60	0.10	1.03	0.00	0.70	2.06	1.43	2.72	1.73	3.63	0.45	0.92	15.37
Sugar Land	2.30	0.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sulphur Springs	.....	.....	.....	3.45	2.85	1.46	.....	.....	.....	7.24	3.22	9.00	.....
Temple	2.20	1.45	2.14	2.60	4.50	4.30	0.80	3.20	0.60	.....	0.85	5.35	.....
*Tyler	.....	.....	.....	4.86	2.94	3.38	1.82	5.65	5.99	4.02	2.59	.....	.....
Victoria	.....	.....	.....	.....	.....	1.04	1.55	4.76	T.	8.00	2.64	2.91	.....
*Waco	0.50	1.45	2.80	0.95	3.30	4.70	1.10	3.60	T.	5.00	3.14	3.23	29.87
*Weatherford	.....	.....	.....	0.52	4.25	3.35	2.06	2.31	0.63	4.44	1.04	.....	.....
Wichita Falls	0.40	0.20	2.43	0.50	6.41	.....	3.00	.....	.....	.....	.....	.....	.....

[1] W. A. Crowder. [2] W. H. Hamilton. [3] E. L. Gibson. [4] Cotton belt observer. [5] G. A. Eisenlohr. [6] Post surgeon. [7] G. A. Duerler, jr. [8] G. H. Hutchins. [9] R. McNutt.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Utah.													
Beaver	0.81		1.17	1.12		0.10	1.20					1.75	
Blue Creek	1.60	1.15	0.70	0.15	1.70	1.90		0.20		0.20	0.10	1.20	
Cisco	1.45	0.65	0.83	0.41	0.82	0.04	0.20	0.03	T.	1.22	0.01	0.51	6.17
Corinne	0.93	1.25	1.65	0.45	2.25	2.35	1.35	0.05	0.20	0.82	1.05	2.30	14.62
Deseret	0.53	1.30	1.84	0.71	1.81	0.14	0.42	0.58	0.06	1.12	0.10	0.86	9.47
Fillmore				2.11	2.03	0.82	0.29	0.47	0.06	1.07	0.53	1.20	
Fort Douglas	2.04	0.68											
Fort Du Chesne	0.46	0.30	0.78	1.24	1.35	0.03	0.16	0.08	T.	0.46	0.14	0.46	5.46
Green River	0.60	0.35		0.10	0.80	0.00					0.00		
Grouse Creek	0.54	0.38	1.01	0.94	1.47	1.55	0.27	0.10	0.10	0.27	0.10	1.21	7.94
Kelton	0.15	0.25	1.00	0.05	2.39	0.00	1.00	0.00	0.60	0.50	0.00	0.05	5.99
Lake Park	1.70	0.81	2.14	1.70	2.42	1.52	0.09	0.00	0.04	1.34	0.56	2.63	14.95
Levan	1.29	0.55	2.90	1.68	1.85	0.47	0.20	0.02	T.		0.60	2.38	
Loa	0.35	0.28	0.25	0.15	0.76	0.05	0.32	0.12	0.00	0.37	0.15	0.25	3.05
Logan				0.99	3.00	1.36	0.34	0.00	0.30	0.32	0.50	1.70	
Loseé	1.70	1.45	1.40	0.10	2.20	T.	0.50	T.	T.	1.00	0.00	0.20	8.55
Manti					0.95		0.50	0.00	0.15			0.00	
Moab	1.20	0.71	1.41	0.60	0.93	T.	0.37	0.20	T.	0.41	0.37	0.41	6.61
Mount Carmel	1.09	1.16	1.40	1.15	2.28	T.	1.03	0.00	T.	1.51	T.	0.59	10.21
Nephi	1.51	0.38	1.85	1.28									
Ogden [1]	1.70	1.22	0.81	1.02	0.89	1.55	0.80	0.00	0.25	2.16	0.75	3.05	14.20
Ogden [2]	1.82	1.52	2.18	1.58	2.42	1.67	0.36	0.01	0.54	1.80	0.60	2.31	16.81
Park City	0.70	0.50	2.90	1.35	0.80	0.26	0.10						
Parowan	0.47	1.03	1.79	2.03	0.83	0.04	0.66	1.24	0.00	2.32	0.20	0.39	11.00
Promontory	1.00	0.45	1.10	0.40	2.65	2.05	0.70	0.00	1.80	0.35	0.50	0.40	11.40
Provo City	1.30	1.10	1.57			0.41	0.10	0.20	0.15	1.70	0.63	2.32	
Richfield	T.	0.50	0.60	1.09	0.57	0.16	0.11	0.28	0.00	0.72	0.09	0.52	4.64
St. George	1.28		0.82	0.15	0.20	0.00	0.11	0.12	0.00				
*Salt Lake City	1.61	0.68	2.21	1.90	1.65	1.21	T.	0.05	0.12	1.58	0.72	2.35	14.08
Scofield		0.85	0.25	0.00	1.80	0.33	0.67	0.58	0.11	1.51			
Snowville	0.35	0.34	1.40	1.25	2.50	1.64			0.49	0.81	0.10	1.59	
Soldiers' Summit	0.32	0.20	0.89	0.83	2.20	0.29	0.12	2.13					
Terrace	0.05		0.30	0.40	0.30	0.15	0.00	0.00		0.00	0.30	0.50	
Thistle	0.13	1.43	3.45	1.13	1.23	0.26	0.03			0.67	0.50	0.90	
Vermont.													
Brattleboro	5.06	2.22	3.16	0.45	4.81	3.02	2.35	6.21	1.91	0.66	2.83	0.93	33.61
Burlington	2.76	1.67	0.92	1.02	4.28	6.72	7.66	8.36	3.22	1.35	3.28	1.00	42.24
Chelsea	4.28	1.85	2.21	1.25	5.71	5.85	2.59	6.28	1.75	2.05	3.79	1.24	38.85
Cornwall	3.82	0.50	1.06	0.85	5.54	6.13	3.47	5.19	1.42	0.68	1.34	0.38	30.38
Enosburg Falls	3.54	2.00	2.74	2.10	4.49	11.23	5.78	7.63	1.43	2.56	4.09	2.40	49.99
Hartland	4.78	2.00	1.38	0.69	7.26	4.94	2.14	7.43	2.18	1.73	3.29	1.26	39.08
Jacksonville	5.90	2.55	3.63	0.87	8.73							1.18	
Lunenburg	4.16	1.15	1.45										
*Northfield	3.21	1.73	1.13	0.44	3.30	5.56	2.88	6.50	1.74	1.52	3.43	1.13	32.57
Norwich										1.74	2.36	0.56	
Saxtons River	2.64	1.92		0.47	7.18	3.84	2.12	6.11	2.15	0.85	3.49		
South Royalton								6.75	1.00	1.00	4.00	0.76	
Strafford	4.20	1.50	1.50	1.05	7.00	7.86	0.91	4.50	1.55	1.90	3.35	1.55	36.87
Vernon	5.19	2.23	1.93	0.58	5.69	2.90	3.88	7.26	3.04	0.99	4.73	1.07	39.49
Wells	4.92	1.84	1.91	0.73	6.15	7.44	4.64	6.45	2.07	1.76	3.84	1.07	42.82
Woodstock						4.08	1.25	5.41	1.44	0.91	2.57	1.39	
Virginia.													
*Abingdon	5.94	1.83	3.44	4.58	4.29	3.13	7.00	3.10	3.10	0.53	5.44	2.29	44.67
Ashland				6.04	2.59	3.48	5.37	2.36	3.09	0.60	4.93	0.64	
Avon	5.95	1.47	3.31	3.53	3.35	6.79	0.85	4.58	4.96	0.65	4.87	2.21	42.52
Bedford City	4.03	2.99	2.84	3.87	1.95	5.56	4.05	1.75	4.00	0.29	2.92	1.58	35.83
Big Stone Gap	5.79	3.84	3.68	9.07	5.10	7.55	4.27	2.81	1.59	0.38	6.15	2.85	52.88
Birdsneat	5.50	3.25	5.80	7.00	3.55	1.70	5.05	7.25	1.75	0.40	3.70	3.65	48.60
Blacksburg	2.99	1.32	1.54	3.00	3.35	1.60	1.77	4.79			3.87	0.51	
Cape Charles	5.12	3.34	3.96	6.82	3.60	1.20	3.00	3.53					
*Cape Henry	3.59	3.66	3.38	7.61	4.34	4.83	5.87	7.81	1.40	0.89	2.77	2.03	48.18
Charlottesville	5.08	2.32	4.71	3.43	1.62	3.43		3.32	3.16	0.55	3.10	2.19	
*Christiansburg	4.16	1.30	2.39	3.61	3.51	5.14	3.11	2.79	2.02	0.00	4.10	1.36	33.49
*Clarksville	5.70	4.53	2.50	2.75	3.25	4.58	2.01	0.77	4.15	0.40	3.01	2.61	36.26
Dale Enterprise	4.70	1.90	4.31	2.94	2.88	5.46	3.14	2.86	2.97	0.19	3.93	2.71	37.99
*Danville	6.04	2.83	3.04	2.00	3.08	3.82	7.14	3.32	2.01	0.46	4.07	1.79	39.60
Fort Monroe	4.89	3.41											
Fort Myer	4.10	3.70											
Hot Springs			0.90				2.33	1.87	2.82	0.22	3.00		
Lexington	4.66	3.42	3.48		3.20	1.60	1.62	2.78	2.97	0.20	4.27	1.76	
*Lynchburg	5.62	3.11	3.40	4.13	2.51	3.45	5.74	0.80	2.31	0.04	4.68	1.75	37.54
Marion	4.41	1.79	2.31	5.10	3.91	5.43	4.74	2.46	2.75	0.55	5.42	1.88	40.75
Mossing Ford			3.45	3.80		5.42	0.79	2.06	1.96	0.55	4.28		
*Norfolk	4.99	5.22	3.61	6.86	3.76	4.83	8.27	3.56	1.33	0.52	2.38	3.91	49.24
Nottoway Court-House	5.16	3.82	3.26	4.36	4.02	5.96	1.08	3.49	4.91	0.73	3.40	1.60	41.79
Petersburg	4.74	3.28	3.17	5.51	3.30	5.01	5.02	3.97	3.46	0.43	3.55	1.68	43.12
Richmond	4.13	2.71	3.63	7.07	2.22	3.12	4.18	1.24	3.09	0.46	4.36	1.42	37.63
Salem	4.59	2.94	2.65	4.04	3.72	3.21	1.63		4.75	0.24	4.09	1.34	
Spottsville	5.10	3.88	3.73	5.99	4.06	5.82	4.38	5.01	3.51	0.39	3.85	2.72	48.44
Stanardsville	5.59	2.40	4.05	2.93	2.20	4.10	1.22	8.84	4.40	0.42	3.54	2.27	41.96
Staunton	4.27	2.45	4.12	3.56	2.42	6.16	1.55	5.72	3.23	0.15	4.10	2.45	40.18
Stephen City									2.52	0.23	4.25	2.79	
*Woodstock	3.50	2.09	4.30	2.77	3.13	6.64	2.40	1.41	1.76	0.21	4.22	3.23	35.66
Wytheville							1.88	2.60	3.57	0.15	4.17	0.93	

[1] Pacific Railroad. [2] W. W. Crossman.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Washington.													
Aberdeen	5.75	4.95	5.24	10.84	5.04	1.33	1.70	0.51	4.85	2.86	20.46	8.57	72.10
Centerville	1.75	0.55	0.98	1.00	1.08	0.50	0.47	0.07	0.09	.....	.....	.....	.....
Chehalis	3.22	3.32	2.54	4.49	1.99	1.12	0.90	0.65	3.01	1.94	7.99	6.42	37.59
Chelan	.....	0.43	1.25	1.32	3.13	0.31	0.47	T.	3.01	0.59	2.40	2.39	.....
Clyde	.....	.....	.....	.....	1.15	.....	.....	.....	.....	.....	1.92	2.89	.....
Colfax	2.30	0.47	.....	2.74	2.01	0.45	0.17	0.48	0.40	0.67	2.34	3.95	.....
Coulee City	0.26	0.97	0.72	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dayton	3.89	1.62	1.70	2.73	1.00	1.60	.....	.....	.....	.....	.....	.....	.....
East Sound	2.79	1.15	1.91	1.73	2.49	0.99	1.70	0.41	3.69	2.18	8.64	3.29	39.97
Elbe	.....	.....	.....	.....	.....	.....	2.58	1.30	.....	4.64	9.53	.....	.....
Ellensburg	0.05	0.27	0.52	0.62	1.84	0.16	0.35	0.00	0.13	0.50	1.32	.....	.....
*Fort Canby	4.80	4.89	4.19	8.32	2.94	1.30	1.98	1.26	4.00	3.81	15.71	9.72	62.92
Fort Canby	4.17	5.27	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Simcoe	2.60	0.18	0.62	0.68	1.42	0.08	0.00	0.00	0.38	0.78	2.25	3.35	12.34
Fort Spokane	1.22	0.55	1.51	1.84	1.94	0.71	0.81	0.38	0.40	0.72	3.67	3.97	17.72
Fort Townsend	1.35	1.78	1.86	2.42	2.90	0.37	0.90	1.14	0.66	1.96	4.74	3.42	23.50
Fort Walla Walla	3.48	0.61	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lapush	7.22	2.50	4.47	7.71	5.00	2.10	.....	.....	.....	.....	.....	.....	.....
Madrone	2.44	1.96	2.65	4.22	1.38	1.47	1.47	0.98	3.23	3.00	7.43	7.56	37.79
Moxee Valley	.....	.....	0.86	0.39	1.74	0.30	0.20	T.	0.03	0.49	0.79	1.15	.....
*Neah Bay	13.51	6.79	11.57	11.00	7.64	2.75	2.76	2.48	10.91	7.62	20.62	12.02	109.67
Olga	3.11	1.55	1.65	1.69	2.86	1.01	1.76	0.68	2.52	2.60	8.74	2.84	31.01
*Olympia	4.26	1.98	2.53	5.45	2.22	1.17	0.88	0.68	3.49	3.25	12.74	10.76	49.41
Pine Hill	.....	.....	.....	.....	.....	.....	0.26	T.	0.36	1.14	2.43	6.11	.....
Pomeroy	2.25	1.04	0.81	1.31	1.10	0.59	0.07	0.20	0.22	0.52	2.02	3.23	13.36
*Port Angeles	4.64	0.81	1.62	1.26	1.87	0.66	0.33	0.40	1.45	1.33	8.18	5.15	27.70
Rosalia	.....	0.55	0.97	2.07	2.33	0.09	0.45	1.22	0.82	0.46	2.81	2.94	.....
Seattle	2.61	1.94	2.36	3.82	1.42	1.35	1.29	0.99	2.28	2.75	8.76	4.92	34.49
Sehome	3.11	1.72	2.09	1.87	3.28	1.00	1.07	.....	.....	.....	.....	.....	.....
*Spokane Falls	1.37	0.70	1.21	2.30	2.40	0.72	1.22	0.21	0.35	0.69	2.53	3.08	16.78
Tacoma	3.46	1.82	2.03	3.72	1.98	0.93	1.27	1.21	2.85	2.60	9.92	5.84	37.63
[1]Tatoosh Island	8.90	4.60	10.79	8.57	5.31	2.80	2.30	3.23	10.19	7.39	16.50	9.80	91.38
Vancouver Barracks	4.22	2.35	2.49	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vashon	1.06	0.11	0.16	0.57	0.24	0.09	0.11	T.	0.37	.....	11.85	3.40	.....
[1]Walla Walla	3.84	0.80	1.73	2.06	1.25	1.04	0.39	0.21	0.71	0.92	1.73	2.26	16.94
Waterville	0.50	0.70	1.32	1.74	3.36	0.56	0.62	.....	0.09	.....	.....	2.70	.....
Wilbur	.....	.....	1.97	1.83	1.58	1.40	.....	.....	.....	.....	.....	.....	.....
West Virginia.													
Alderson	1.12	2.40	4.80	4.57	.....	.....	.....	.....	.....	.....	.....	.....	.....
Beverly	2.84	2.40	3.32	.....	6.27	.....	.....	.....	.....	.....	.....	.....	.....
Bluefield	.....	.....	.....	.....	.....	.....	.....	5.53	2.37	0.42	1.58	2.00	.....
[1]Buckhannon	3.68	2.05	3.35	5.76	6.11	5.00	2.60	4.11	3.42	1.15	4.39	3.13	44.75
Central Station	.....	.....	.....	.....	.....	4.37	7.20	1.94	2.91	1.11	4.07	2.59	.....
*Charleston [2]	3.42	2.15	4.67	5.21	5.26	3.34	4.59	4.91	1.88	0.71	3.95	3.45	43.54
Charleston [3]	.....	.....	.....	5.18	5.10	3.16	4.15	.....	.....	.....	.....	.....	.....
Danville	.....	.....	.....	.....	.....	5.93	4.25	1.69	4.15	0.38	4.00	2.35	.....
Davis	.....	.....	.....	.....	.....	3.36	1.34	3.09	2.61	1.27	.....	.....	.....
Elkhorn	1.62	1.00	2.45	.....	7.07	1.95	2.79	1.52	2.50	0.61	4.16	.....	.....
Ella	3.51	2.77	2.53	2.54	6.00	5.80	6.66	1.73	2.60	0.66	2.01	1.89	38.70
[1]Fairmont	.....	2.31	2.78	3.56	4.90	3.62	4.39	2.79	2.81	1.02	3.56	2.20	.....
*Glenville	3.81	2.70	3.24	4.78	5.85	4.81	2.92	2.99	4.49	0.98	3.37	2.49	42.43
Grafton	4.69	2.87	2.57	4.56	5.37	2.67	3.32	1.87	3.39	1.45	3.91	3.00	39.67
[1]Harpers Ferry	3.90	1.30	5.15	2.65	3.06	5.56	1.89	2.01	3.31	0.00	3.50	1.60	33.93
Harrisville	.....	.....	1.33	3.99	4.63	3.46	5.06	2.23	2.69	.....	.....	.....	.....
[1]Hinton	3.02	2.23	3.71	5.77	3.36	2.64	3.17	2.74	1.32	0.21	3.95	2.32	34.44
Huntington	3.17	2.25	2.78	.....	3.39	1.62	6.41	1.41	3.44	0.42	.....	3.65	.....
Kingwood	2.73	1.72	3.23	5.35	5.87	2.59	3.60	1.88	1.70	1.50	.....	3.69	.....
Martinsburg	3.81	1.35	5.15	3.14	2.42	3.51	.....	1.40	1.43	0.21	2.06	2.49	.....
Moorefield	1.53	1.72	1.91	2.44	2.82	3.73	3.64	.....	.....	.....	.....	.....	.....
[1]Morgantown [2]	4.57	2.98	3.50	3.59	5.28	3.15	6.98	3.24	2.94	0.65	3.60	1.93	42.41
Morgantown [4]	3.64	2.05	4.68	3.02	.....	.....	6.97	1.81	1.42	1.30	2.89	2.38	.....
New Martinsville	.....	.....	.....	.....	.....	.....	4.40	2.04	2.60	0.61	.....	2.93	.....
Nuttallburg	3.99	0.81	5.07	6.53	3.85	3.25	4.16	3.25	2.79	0.55	3.10	2.99	40.34
*Parkersburg	4.91	3.17	2.80	3.72	4.91	4.55	3.29	2.13	2.85	0.74	2.55	2.53	38.15
Parkersburg [5]	3.13	4.27	.....	3.97	5.05	3.66	3.99	2.33	2.79	0.82	1.12	1.73	.....
Philippi	.....	.....	3.35	5.22	5.43	2.59	3.54	3.40	3.05	1.45	3.65	2.90	.....
Piedmont	2.07	.....	.....	3.37	5.24	4.73	1.21	1.41	.....	.....	.....	3.47	.....
Pleasant Hill	.....	.....	.....	5.39	5.94	4.29	6.03	4.29	2.26	1.36	.....	4.06	.....
[1]Point Pleasant	3.50	2.90	3.47	4.28	4.55	3.98	7.68	1.85	2.02	0.60	2.35	2.21	39.39
Romney	1.68	1.87	.....	3.84	.....	4.25	.....	.....	0.82	.....	1.30	.....	.....
*Rowlesburg	2.92	2.08	3.45	4.84	5.87	3.42	3.56	2.38	2.13	1.55	4.94	2.77	39.91
Spencer	.....	3.20	5.30	4.12	5.00	4.87	2.48	0.71	2.05	.....	2.08	3.22	.....
*Weston	2.56	3.50	4.87	5.88	6.06	2.30	4.85	6.95	3.10	1.03	4.06	3.60	48.76
*Wheeling [2]	3.63	1.74	3.82	3.30	6.77	6.25	5.48	1.87	2.52	0.84	2.15	1.13	39.50
Wheeling [6]	3.24	2.65	2.35	2.10	5.40	3.23	5.07	1.55	3.17	0.82	2.45	1.09	38.12
*White Sulphur Springs	2.40	2.00	2.30	5.70	4.40	6.80	0.90	1.00	1.60	0.90	3.00	1.60	32.00
Wisconsin.													
Amherst	1.15	0.85	0.90	1.97	7.15	7.35	3.30	2.33	1.74	2.43	2.27	0.85	32.29
Appleton	2.41	1.19	0.84	1.67	5.88	.....	.....	.....	0.65	1.65	1.86	1.28	.....
Baraboo	1.25	0.95	1.49	3.13	7.95	8.71	1.31	4.49	4.26	0.20	1.92	1.74	37.40
Barron	0.26	1.73	0.98	2.29	7.03	7.44	4.61	3.94	1.77	1.80	1.04	0.71	33.60
Bayfield	1.24	1.49	1.87	2.90	4.96	2.41	3.63	4.01	0.45	1.32	1.54	0.44	26.26
Beaver Dam	2.35	1.69	0.75	3.02	7.89	7.18	3.77	3.00	0.74	1.55	1.71	1.88	35.53
Beloit	3.22	1.49	.....	4.66	7.65	.....	.....	.....	.....	.....	.....	.....	.....
Black River Falls	0.36	1.71	1.05	2.59	7.61	9.55	5.62	1.78	2.51	1.29	0.65	1.19	35.91

[1] Rainfall observer. [2] G. W. Craig. [3] T. G. Field.
[4] River observer. [4] West Virginia University. [6] C. Schnepf.

MONTHLY AND ANNUAL PRECIPITATION, 1892—Continued.

Stations.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Wisconsin—Continued.													
Butternut	0.30	2.30	1.30	0.30	2.15	.....	.....	.....	.....	.....	.....	0.56	.....
Cadiz	2.21	2.41	1.41	3.46	7.86	4.80	1.70	1.12	1.27	0.05	0.62	1.36	28.27
Centralia	0.76	1.25	0.81	1.89	4.57	6.60	3.58	2.38	1.65	1.56	0.61	0.56	26.22
*Chippewa Falls	0.25	1.33	1.27	1.71	3.94	3.88	7.81	2.76	3.05	2.09	0.93	0.57	29.59
Columbus	1.80	2.08	1.87	3.50	4.29	8.89	.....	.....	3.55	1.05	.....	1.91	.....
Crandon	2.41	2.57	1.35	2.19	4.47	4.86	4.12	3.67	4.09	2.53	2.49	1.12	35.87
Delavan	1.79	0.75	0.39	.....	.....	4.83	.....	.....	.....	.....	.....	.....	.....
Delavan (near)	2.15	1.03	1.00	4.02	7.20	5.46	5.41	3.35	1.97	0.84	1.60	1.16	35.19
De Pere	2.16	1.80	1.41	1.39	5.48	5.90	2.49	3.58	3.73	1.41	2.24	1.72	33.31
Dodgeville	0.33	1.18	1.18	3.34	10.02	.....	.....	.....	.....	.....	.....	.....	.....
Eau Claire	0.30	1.60	1.00	2.40	6.15	9.10	.....	.....	2.90	1.70	0.75	1.00	.....
Embarrass	2.30	3.15	2.00	2.50	9.65	7.20	4.05	3.55	3.00	3.50	2.90	1.17	44.97
Florence	1.39	2.84	1.28	2.20	4.05	3.65	4.75	4.91	1.35	2.55	2.39	0.86	32.22
Fond du Lac	2.36	2.00	0.82	1.79	6.86	8.31	4.56	1.59	2.46	1.03	1.46	1.10	34.34
*Green Bay	1.80	1.84	0.86	1.67	5.10	5.84	2.76	3.87	3.40	1.62	2.93	1.33	33.02
Hammond	0.10	1.99	1.75	0.92	6.71	6.35	.....	.....	2.34	0.90	0.30	1.38	.....
Harvey	2.36	1.93	1.61	3.23	8.24	9.98	2.65	3.33	3.07	0.79	2.04	2.30	41.53
Hayward	0.54	1.71	1.43	3.10	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hillsboro	1.00	2.18	1.87	3.96	9.70	8.39	1.39	3.34	3.05	1.24	1.21	1.40	38.73
Hudson	.....	.....	.....	0.60	7.72	5.70	9.90	4.59	2.80	0.70	1.20	1.22	.....
Janesville	2.95	1.25	.....	2.60	10.70	6.20	2.90	2.11	2.00	0.16	0.89	1.10	.....
Juneau	2.03	1.53	1.51	2.86	5.19	8.06	.....	2.89	3.45	0.80	2.66	2.10	.....
Koepenick	1.25	1.80	1.80	2.60	5.70	7.20	3.50	3.40	2.70	2.80	1.70	0.75	35.20
*La Crosse	0.80	1.87	0.53	4.70	7.06	8.21	3.97	1.88	3.07	2.47	0.59	1.04	36.19
Lancaster	1.91	1.43	1.65	2.74	10.47	12.10	3.88	2.21	2.78	0.99	.....	.....	.....
Lincoln	0.80	0.57	1.24	1.06	.....	4.63	3.20	2.22	1.19	1.10	2.34	0.63	.....
Madison	2.42	1.94	1.37	3.94	6.98	7.60	2.31	3.43	3.29	0.36	1.24	2.19	37.07
Manitowoc	1.94	1.49	0.72	1.57	5.65	7.21	3.03	4.30	1.74	1.33	2.09	1.69	32.76
Meadow Valley	0.98	1.77	0.97	1.89	7.11	8.63	2.17	3.85	1.99	1.40	1.07	0.93	32.76
*Medford [1]	1.25	1.60	1.00	2.90	6.40	9.86	4.90	2.15	3.05	1.72	1.40	1.10	37.33
Medford [2]	1.35	1.56	1.10	2.03	6.60	9.50	4.85	2.03	2.91	2.38	1.25	0.50	36.06
Menomonie	0.47	1.90	2.09	2.13	7.46	5.83	8.31	2.91	2.90	2.60	0.76	1.09	38.45
*Milwaukee	2.29	1.76	1.76	2.78	8.12	6.33	1.20	3.47	2.21	1.66	1.84	1.61	35.03
Mineral Point	.....	.....	.....	1.54	11.75	.....	.....	.....	.....	0.70	1.88	.....	.....
Neillsville	0.79	2.24	1.08	2.78	7.29	13.24	4.65	1.76	2.33	2.27	1.01	0.85	40.29
New Holstein	3.38	1.14	0.45	1.50	5.25	.....	4.56	.....	.....	.....	1.65	0.65	.....
Oconomowoc	2.24	1.01	1.56	3.23	7.44	11.67	1.14	3.34	2.98	1.27	2.42	2.26	40.56
Oconto	1.91	2.02	1.18	1.75	5.87	4.00	2.84	2.36	1.73	1.94	2.45	1.17	29.22
Osceola	0.03	1.47	1.13	1.32	8.10	8.14	6.22	4.64	1.34	0.62	0.49	0.63	34.13
Oshkosh	2.41	2.33	1.21	2.20	7.26	8.17	7.00	1.90	1.61	1.22	2.25	1.44	39.00
Pepin	0.97	1.80	0.75	1.58	6.31	6.24	7.09	2.06	3.37	1.67	0.39	0.97	33.20
Peshtigo	2.51	1.91	1.32	2.05	5.20	.....	.....	.....	.....	.....	.....	.....	.....
*Phillips	0.93	1.50	0.97	2.41	5.53	6.77	.....	.....	.....	.....	.....	.....	.....
Plover	0.96	2.20	0.50	2.12	8.71	1.75	3.13	.....	.....	.....	.....	.....	.....
*Portage	1.23	2.39	2.30	2.96	7.13	9.98	1.79	3.17	3.90	1.29	2.86	2.05	41.05
Port Washington	.....	.....	.....	.....	.....	.....	.....	.....	1.93	2.60	1.70	0.63	.....
Prairie du Chien	1.86	1.21	1.13	4.03	8.26	13.53	2.82	3.37	1.96	1.26	1.00	1.47	41.90
Raymond	.....	.....	.....	.....	.....	.....	.....	6.21	2.40	0.86	1.90	2.76	.....
Richland Center	0.79	1.23	2.08	4.74	9.81	10.20	3.09	4.90	3.25	1.05	1.85	.....	.....
Rhinelander	0.64	.....	.....	.....	.....	.....	.....	2.18	.....	2.23	2.36	0.53	.....
Sharon	.....	.....	.....	.....	.....	.....	.....	.....	1.53	0.88	1.91	2.30	.....
Shawano	1.56	1.29	1.10	1.97	5.83	5.82	2.30	2.44	1.16	2.42	1.62	0.77	28.28
Shell Lake	0.14	1.01	1.10	1.73	6.29	6.56	4.67	3.44	0.96	0.79	0.37	0.67	27.73
Sparta	1.82	1.92	1.15	3.34	6.55	8.70	3.81	4.23	2.34	1.60	1.75	1.84	39.05
Valley Junction	.....	.....	.....	2.96	7.11	7.91	3.31	2.46	2.23	1.81	0.85	0.97	.....
Viroqua	1.12	1.92	1.77	5.29	8.17	8.28	3.11	3.83	2.70	1.10	1.12	1.39	39.80
Watertown	.....	.....	2.05	2.75	5.95	8.76	1.21	2.26	3.85	0.52	1.52	2.00	.....
Waukesha	2.00	1.45	1.97	2.23	7.49	8.53	1.60	3.07	2.45	0.78	1.49	1.60	34.66
Westfield	1.65	1.61	1.25	2.93	5.63	7.33	4.03	4.03	2.71	0.98	1.07	1.07	34.29
Weston	0.48	1.65	1.18	2.42	7.66	6.93	6.68	4.03	3.60	2.07	0.84	0.79	38.33
Whitehall	0.15	1.86	0.90	2.66	6.73	8.60	5.53	1.16	1.30	1.85	.....	0.80	.....
Wittenberg	.....	1.41	0.89	2.18	7.98	.....	.....	.....	.....	.....	.....	.....	.....
Wyoming.													
Bitter Creek	.....	T.	0.50	2.30	2.50	.....	.....	.....	.....	.....	.....	.....	.....
Camp Pilot Butte	0.10	.....	1.50	1.65	1.82	0.40	0.52	T.	0.50	0.55	0.65	1.40	.....
Casper	0.50	0.35	0.40	2.14	0.36	0.00	.....	0.00	.....	0.40	.....	0.80	.....
*Cheyenne	0.99	1.17	0.62	1.21	3.46	2.01	0.90	0.60	0.22	1.12	0.31	0.89	13.50
Evanston	0.40	0.80	0.45	1.25	.....	0.60	T.	T.	T.	0.16	0.10	1.83	.....
Fort D. A. Russell	0.94	1.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Fetterman	0.90	0.62	0.45	.....	0.70	.....	.....	.....	.....	.....	.....	.....	.....
Fort Laramie	0.83	0.22	0.37	2.31	4.32	.....	.....	.....	.....	.....	.....	.....	.....
Fort McKinney	1.02	1.35	1.70	3.23	2.18	1.43	T.	0.59	0.16	0.18	0.21	0.30	12.35
Fort Washakie	0.75	0.30	1.37	2.33	3.51	0.71	0.62	0.32	0.00	0.45	9.83	1.04	12.23
Fort Yellowstone	1.40	2.10	3.05	0.92	2.06	1.46	0.98	0.64	1.60	0.79	1.90	2.17	19.07
La Barge	0.31	0.45	0.05	0.62	1.50	.....	.....	.....	.....	.....	.....	.....	.....
Lander [3]	0.45	T.	1.33	.....	4.25	0.95	2.20	0.62	T.	1.11	1.15	1.36	.....
*Lander [4]	0.75	0.45	1.25	4.16	3.44	1.18	2.05	0.86	0.06	1.03	1.15	1.60	17.98
Laramie	0.08	0.36	0.48	0.27	1.16	.....	2.31	0.14	.....	3.90	T.	0.20	.....
Lusk	1.21	0.17	1.21	2.78	3.23	4.65	1.73	1.03	0.03	2.35	0.02	0.05	18.46
Saratoga	0.20	0.47	0.50	1.85	2.65	0.63	T.	0.10	0.00	1.60	.....	0.63	.....
Sundance	2.15	0.46	2.38	4.58	2.36	3.26	1.14	1.95	0.46	.....	0.40	1.40	.....
Wheatland	0.70	0.90	0.45	2.35	4.90	1.56	0.01	1.10	0.00	1.50	0.90	0.20	14.51

[1] Rainfall observer. [2] Dr. F. R. Zeit. [3] J. S. Meyer. [4] Weather Bureau.

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REPORT OF THE CHIEF OF THE WEATHER BUREAU.

PART VI.

MISCELLANEOUS METEOROLOGICAL TABLES AND REPORTS.

Normal Pressure, Temperature, and Precipitation (monthly); Snowfall, 1891–'92; Sunshine, 1891–'92; Rivers and Floods; Destructive Wind Storms; Casualties by Lightning; Movement of areas of high and low barometric pressure, 1891–'92; Balloon voyage; Relations of solar magnetism to terrestrial magnetism and meteorology; Condensation of atmospheric moisture.

1891–'92.

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MONTHLY NORMALS OF PRESSURE, TEMPERATURE, AND PRECIPITATION.

ATMOSPHERIC PRESSURE.

Two sets of values are given for each station, actual or local pressures and sea-level pressures. The first set or upper horizontal row was obtained by taking the arithmetical average of the mercurial barometer readings, corrected for temperature and instrumental error, from January 1, 1873, to December 31, 1892, after first reducing the readings at each station to the elevation given in the table which is that of December 31, 1892. At stations established subsequent to January 1, 1873 (Table I, p. 11), the number of years of record used is of course correspondingly shorter. In a few cases where a station has been moved from one town to another, not many miles distant, the records of the first station have been reduced to the elevation of the later station.

The second horizontal row contains the sea-level pressures. The reductions were made after the method described in Professional Paper No. VI of the Signal Service.

The elevations have been determined mostly from the precise levels of the U. S. Coast and Geodetic Survey, or from railroad levels that have been connected with some line of precise levels. At a very few stations the elevation has been determined by the barometer.

TEMPERATURE.

The normal temperature formerly used was made up from observations taken three times a day. Since July, 1888, however, the mean temperature has been calculated from the daily extremes. The latter method is not altogether satisfactory, but it is perhaps the best that can be adapted to the varied needs of the Bureau.

Examination has shown that mean temperatures, derived from daily extremes, may differ as much as 1.5°, and in extreme cases almost 2° from the true mean, but on the average the difference is about 0.5° F., being less in summer than in winter, although the reverse obtains in some localities.

The use of self-registering maximum and minimum thermometers did not become general until 1873, although a few stations began to use them in 1872. The number of years' record used in computing the normals is given at the right of the table. The period covered is from 1872–'73 to 1891, inclusive.

PRECIPITATION.

The values given are the simple arithmetical means of the monthly amounts of precipitation recorded at Weather Bureau stations from the beginning of observations—November 1, 1870—to December 31, 1891, inclusive, except at Jupiter, Fla., and Rapid City, S. Dak., where the year 1892 has been added.

Signal Service and Weather Bureau records of precipitation have been combined with reliable voluntary records wherever the number of years given at the right of the table exceeds 22.

The elevation of the rain gauge above ground, given in the table, is that of January 1, 1891. It is impracticable to give the several previous elevations of each gauge.

NORMAL AIR PRESSURE 1873 TO 1892.

[Sea-level pressures are given in the lower set of figures at each station.]

Station.	Lat.	Long.	Height.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Years.
	° ′	° ′	Feet.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In	
Abilene	32 23	99 40	1,748	28.30	28.25	28.20	28.19	28.14	28.13	28.20	28.20	28.24	28.26	28.29	28.28	28.22	7
				30.20	30.12	30.04	30.01	29.93	29.90	29.95	29.96	30.02	30.09	30.15	30.15	30.04	
Albany	42 39	73 45	85	30.01	30.00	29.91	29.89	29.89	29.87	29.87	29.91	29.99	29.96	29.99	29.99	29.94	20
				30.11	30.10	30.01	29.99	29.98	29.96	29.96	30.00	30.08	30.06	30.09	30.09	30.04	
Alpena	45 05	83 30	609	29.35	29.34	29.34	29.33	29.31	29.29	29.31	29.34	29.37	29.35	29.33	29.33	29.33	20
				30.05	30.04	30.04	30.01	29.97	29.94	29.96	29.96	30.02	30.02	30.02	30.03	30.01	
Apache (Fort)	33 48	109 57	5,020	25.03	25.02	25.04	24.98	24.99	25.02	25.08	25.08	25.07	25.06	25.06	25.05	25.04	7
				30.15	30.10	30.07	29.96	29.91	29.87	29.89	29.90	29.94	30.02	30.11	30.14	30.01	
Assiniboine	48 32	109 42	2,690	27.16	27.15	27.14	27.12	27.13	27.09	27.16	27.17	27.16	27.16	27.19	27.13	27.14	11
				30.20	30.17	30.07	29.96	29.93	29.84	29.88	29.90	29.95	30.00	30.11	30.10	30.00	
Atlanta	33 45	84 23	1,131	28.98	28.96	28.88	28.89	28.86	28.88	28.89	28.89	28.93	28.94	28.96	28.97	28.92	14
				30.21	30.18	30.10	30.08	30.03	30.04	30.05	30.05	30.10	30.13	30.18	30.20	30.11	
Atlantic City	39 22	74 25	53	30.08	30.06	29.96	29.94	29.96	29.94	29.95	29.97	30.04	30.02	30.05	30.06	30.00	20
				30.13	30.11	30.01	29.99	30.01	29.99	30.00	30.02	30.09	30.07	30.10	30.11	30.05	
Augusta	33 28	81 54	209	29.97	29.94	29.86	29.83	29.81	29.82	29.83	29.82	29.87	29.90	29.99	29.97	29.88	20
				30.20	30.18	30.10	30.03	30.04	30.04	30.05	30.04	30.09	30.13	30.22	30.21	30.11	
Baltimore	39 18	76 37	179	29.96	29.94	29.84	29.83	29.82	29.81	29.82	29.84	29.91	29.90	29.93	29.94	29.88	20
				30.17	30.15	30.04	30.02	30.02	30.00	30.01	30.03	30.11	30.10	30.13	30.15	30.08	
Bismarck	46 47	100 38	1,698	28.21	28.20	28.20	28.15	28.11	28.09	28.15	28.16	28.16	28.17	28.19	28.19	28.16	20
				30.18	30.15	30.14	29.98	29.90	29.86	29.90	29.92	29.95	30.00	30.09	30.12	30.00	
Block Island	41 10	71 36	27	30.05	30.07	29.92	29.97	29.97	29.96	29.96	29.99	30.06	30.02	30.05	30.03	30.00	12
				30.08	30.10	29.95	30.00	30.00	29.99	29.99	30.02	30.09	30.05	30.08	30.06	30.03	
Boise City	43 37	116 08	2,750	27.26	27.22	27.19	27.12	27.12	27.10	27.12	27.11	27.17	27.22	27.30	27.26	27.18	13
				30.25	30.18	30.09	29.98	29.94	29.89	29.88	29.87	29.99	30.09	30.23	30.23	30.05	
Boston	42 21	71 04	125	29.93	29.92	29.82	29.82	29.85	29.83	29.83	29.87	29.95	29.91	29.91	29.91	29.88	20
				30.07	30.06	29.96	29.96	29.99	29.96	29.96	30.00	30.08	30.05	30.05	30.05	30.02	
Brownsville	25 53	97 26	57	30.07	30.01	29.96	29.89	29.87	29.87	29.92	29.90	29.91	29.97	30.04	30.06	29.96	14
				30.13	30.07	30.02	29.95	29.93	29.93	29.98	29.96	29.97	30.03	30.10	30.12	30.01	
Buffalo	42 53	78 53	690	29.30	29.30	29.24	29.24	29.24	29.23	29.24	29.27	29.33	29.29	29.28	29.28	29.27	20
				30.09	30.09	30.02	30.00	29.99	29.96	29.96	29.99	30.07	30.04	30.04	30.06	30.03	
Buford (Fort)	48 00	103 56	1,899	27.98	27.98	27.97	27.93	27.91	27.86	27.93	27.94	27.94	27.95	27.98	27.97	27.94	14
				30.18	30.16	30.08	29.97	29.92	29.82	29.88	29.90	29.93	29.99	30.08	30.13	30.00	
Burlington, Vt	44 29	73 13	268	29.79	29.76	29.67	29.64	29.68	29.63	29.66	29.70	29.76	29.74	29.77	29.75	29.71	10
				30.09	30.06	29.96	29.93	29.96	29.91	29.93	29.97	30.03	30.02	30.05	30.04	30.00	
Cairo	37 00	89 10	359	29.79	29.74	29.68	29.62	29.61	29.61	29.64	29.65	29.70	29.72	29.75	29.77	29.69	20
				30.19	30.14	30.07	30.01	29.99	29.99	30.02	30.03	30.08	30.11	30.14	30.17	30.08	
Canby (Fort)	46 16	124 04	179	29.83	29.74	29.82	29.83	29.82	29.82	29.88	29.86	29.82	29.83	29.84	29.77	29.82	9
				30.02	29.94	30.02	30.03	30.01	30.01	30.07	30.05	30.01	30.03	30.04	29.97	30.02	
Cedar Keys	29 08	83 02	22	30.16	30.14	30.07	30.04	30.00	30.01	30.03	30.00	30.00	30.02	30.10	30.14	30.06	11
				30.18	30.16	30.09	30.06	30.02	30.03	30.05	30.02	30.02	30.04	30.12	30.16	30.08	
Charleston	32 47	79 56	52	30.13	30.07	30.01	30.00	29.98	29.99	30.00	29.98	30.01	30.04	30.09	30.12	30.04	20
				30.19	30.12	30.06	30.05	30.03	30.04	30.05	30.03	30.06	30.09	30.14	30.17	30.09	
Charlotte	35 13	80 51	773	29.33	29.32	29.22	29.24	29.21	29.22	29.24	29.24	29.30	29.29	29.32	29.33	29.27	14
				30.19	30.16	30.05	30.07	30.01	30.01	30.04	30.03	30.10	30.14	30.15	30.17	30.09	
Chattanooga	35 04	85 15	783	29.35	29.32	29.24	29.24	29.21	29.22	29.24	29.24	29.29	29.30	29.34	29.36	29.28	14
				30.21	30.17	30.09	30.07	30.02	30.01	30.04	30.04	30.10	30.13	30.19	30.22	30.11	
Cheyenne	41 08	104 48	6,105	23.90	23.89	23.92	23.94	23.97	24.03	24.12	24.13	24.10	24.05	24.00	23.93	24.00	20
				30.21	30.15	30.08	30.01	29.90	29.84	29.86	29.90	29.97	30.05	30.16	30.17	30.02	
Chicago	41 52	87 38	824	29.18	29.17	29.13	29.11	29.09	29.08	29.12	29.13	29.17	29.16	29.17	29.16	29.14	20
				30.11	30.09	30.05	30.01	29.97	29.94	29.98	29.99	30.04	30.04	30.08	30.08	30.03	
Cincinnati	39 06	84 30	628	29.46	29.44	29.37	29.34	29.33	29.33	29.36	29.37	29.42	29.42	29.44	29.46	29.39	20
				30.17	30.14	30.06	30.02	29.99	29.99	30.01	30.03	30.08	30.09	30.13	30.16	30.06	
Cleveland	41 30	81 42	740	29.28	29.27	29.21	29.21	29.20	29.20	29.22	29.24	29.29	29.26	29.26	29.27	29.24	20
				30.12	30.11	30.04	30.02	29.99	29.97	29.99	30.01	30.07	30.06	30.08	30.10	30.05	
Columbus	39 58	83 00	837	29.21	29.20	29.14	29.13	29.11	29.11	29.13	29.14	29.21	29.20	29.21	29.21	29.17	14
				30.15	30.14	30.07	30.04	30.00	29.99	30.00	30.02	30.09	30.10	30.14	30.15	30.08	
Concordia	39 35	97 41	1,410	28.64	28.60	28.57	28.52	29.47	28.47	28.52	28.54	28.57	28.59	28.61	28.60	28.56	7
				30.24	30.17	30.12	30.01	29.94	29.92	29.95	29.98	30.03	30.09	30.15	30.16	30.06	
Corpus Christi	27 49	97 25	20	30.15	30.06	30.02	30.00	29.93	29.92	29.99	29.96	29.98	30.03	30.11	30.12	30.02	6
				30.17	30.08	30.04	30.02	29.95	29.94	30.01	29.98	30.00	30.07	30.13	30.14	30.04	
Custer (Fort)	45 42	107 34	3,040	26.82	26.81	26.81	26.78	29.79	26.76	26.83	26.83	26.85	26.85	26.88	26.83	26.82	12
				30.19	30.14	30.06	29.95	29.92	29.84	29.88	29.88	29.95	30.02	30.14	30.11	30.01	
Davenport	41 30	90 38	613	29.46	29.42	29.38	29.33	29.31	29.30	29.35	29.36	29.39	29.40	29.42	29.44	29.38	20
				30.16	30.11	30.07	29.99	29.96	29.94	29.98	30.00	30.04	30.06	30.10	30.13	30.04	
Davis (Fort)	30 38	103 56	4,928	25.20	25.19	25.17	25.14	25.16	25.19	25.25	25.24	25.25	25.25	25.25	25.21	25.21	10
				30.18	30.13	30.06	29.98	29.94	29.91	29.96	29.97	30.03	30.08	30.18	30.17	30.05	
Deadwood	44 23	103 43	4,600	25.25	25.25	25.30	25.28	25.34	25.37	25.44	25.44	25.41	25.38	25.36	25.30	25.34	15
				30.18	30.13	30.08	29.98	29.93	29.87	29.90	29.91	29.95	30.03	30.14	30.17	30.02	
Denver	39 45	105 00	5,287	24.67	24.65	24.66	24.67	24.70	24.73	24.82	24.82	24.81	24.78	24.75	24.70	24.73	20
				30.19	30.12	30.04	29.98	29.91	29.84	29.87	29.89	29.97	30.05	30.16	30.17	30.02	
Des Moines	41 35	93 37	869	29.19	29.16	29.12	29.06	29.03	29.03	29.08	29.09	29.12	29.13	29.16	29.16	29.11	14
				30.19	30.15	30.09	30.00	29.95	29.94	29.98	29.99	30.04	30.06	30.13	30.15	30.05	
Detroit	42 29	83 03	724	29.28	29.27	29.23	29.22	29.21	29.20	29.23	29.25	29.30	29.27	29.26	29.27	29.25	20
				30.10	30.09	30.04	30.01	29.98	29.96	29.98	30.00	30.06	30.05	30.06	30.08	30.03	
Dodge	37 45	100 00	2,523	27.44	27.40	27.39	27.33	27.32	27.33	27.40	27.41	27.43	24.43	27.45	27.43	27.40	18
				30.20	30.12	30.07	29.95	29.90	29.87	29.92	29.94	30.00	30.05	30.14	30.16	30.03	
Dubuque	42 30	90 44	651	29.39	29.36	29.32	29.28	29.26	29.25	29.29	29.32	29.34	29.34	29.36	29.37	29.32	20
				30.14	30.10	30.05	29.99	29.95	29.93	29.97	30.00	30.03	30.05	30.08	30.11	30.03	

NORMAL AIR PRESSURE 1873 TO 1892—Continued.

[Sea-level pressures are given in the lower set of figures at each station.]

Station.	Lat.	Long.	Height.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Years.
	° ′	° ′	Feet.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
Duluth	46 48	92 06	656	29.34	29.33	29.31	29.29	29.24	29.21	29.23	29.26	29.26	29.28	29.30	29.30	29.28	20
				30.12	30.10	30.07	30.02	29.96	29.92	29.92	29.95	29.97	30.01	30.05	30.06	30.01	
Eastport	44 54	66 59	53	29.93	29.92	29.82	29.85	29.90	29.87	29.87	29.91	29.98	29.92	29.93	29.90	29.90	20
				29.99	29.98	29.88	29.91	29.96	29.93	29.93	29.97	30.04	29.98	29.99	29.96	29.96	
Elliott (Fort)	35 30	100 21	2,690	27.28	27.26	27.24	27.19	27.18	27.20	27.26	27.27	27.29	27.29	27.32	27.29	27.26	11
				30.18	30.13	30.06	29.97	29.93	29.90	29.94	29.96	30.01	30.06	30.16	30.16	30.04	
El Paso	31 47	106 30	3,796	26.25	26.21	26.18	26.16	26.14	26.14	26.21	26.21	26.23	26.24	26.28	26.26	26.21	14
				30.18	30.10	30.03	29.95	29.89	29.85	29.90	29.92	29.97	30.04	30.17	30.18	30.01	
Erie	42 07	80 05	714	29.30	29.29	29.23	29.23	29.22	29.22	29.24	29.26	29.31	29.29	29.28	29.28	29.26	20
				30.10	30.09	30.03	30.01	29.98	29.97	29.98	30.00	30.06	30.06	30.07	30.09	30.03	
Eureka	40 48	124 11	64	30.07	30.00	30.01	30.04	29.97	29.96	30.00	29.96	29.95	30.00	30.05	30.01	30.00	5
				30.13	30.06	30.07	30.10	30.03	30.02	30.06	30.02	30.01	30.06	30.11	30.07	30.06	
Fort Smith	35 22	94 24	492	29.64	29.58	29.52	29.45	29.44	29.45	29.49	29.48	29.52	29.56	29.60	29.61	29.53	20
				30.18	30.12	30.05	29.97	29.95	29.95	29.99	29.98	30.03	30.08	30.13	30.15	30.05	
Fresno	36 43	119 49	338	29.77	29.70	29.66	29.65	29.55	29.52	29.50	29.49	29.52	29.61	29.71	29.76	29.62	5
				30.14	30.07	30.03	30.01	29.91	29.88	29.85	29.84	29.88	29.97	30.08	30.13	29.98	
Galveston	29 18	94 50	42	30.13	30.07	30.01	29.97	29.94	29.95	29.99	29.96	29.97	30.03	30.09	30.11	30.02	20
				30.17	30.11	30.05	30.01	29.98	29.99	30.03	30.00	30.01	30.07	30.13	30.15	30.06	
Grand Haven	43 05	86 13	628	29.36	29.36	29.33	29.31	29.29	29.28	29.32	29.34	29.37	29.35	29.35	29.35	29.33	20
				30.08	30.07	30.04	30.00	29.97	29.95	29.98	30.00	30.04	30.03	30.05	30.06	30.02	
Grant, (Fort)	32 39	109 57	4,780	25.22	25.20	25.19	25.17	25.18	25.19	25.26	25.24	25.24	25.23	25.25	25.25	25.22	14
				30.16	30.10	30.05	29.98	29.92	29.96	29.90	29.91	29.94	30.00	30.12	30.16	30.02	
Green Bay	44 31	88 00	617	29.39	29.39	29.40	29.37	29.30	29.29	29.34	29.36	29.39	29.38	29.37	29.37	29.36	6
				30.11	30.11	30.11	30.05	29.97	29.94	29.99	30.01	30.05	30.06	30.07	30.08	30.04	
Harrisburg	40 16	76 52	377	29.70	29.73	29.63	29.66	29.60	29.60	29.64	29.65	29.69	29.65	29.71	29.72	29.66	4
				30.12	30.16	30.05	30.08	30.01	30.00	30.04	30.05	30.09	30.07	30.13	30.15	30.08	
Hatteras	35 15	75 40	11	30.15	30.12	30.03	30.01	30.02	30.03	30.03	30.02	30.07	30.07	30.11	30.13	30.07	20
				30.16	30.13	30.04	30.02	30.03	30.04	30.04	30.03	30.08	30.08	30.12	30.14	30.08	
Helena	46 34	112 04	4,113	25.76	25.72	25.74	25.72	25.75	25.75	25.83	25.83	25.81	25.81	25.82	25.78	25.78	12
				30.21	30.13	30.06	29.96	29.93	29.88	29.91	29.91	29.96	30.04	30.16	30.16	30.03	
Huron	44 21	98 14	1,310	28.69	28.66	28.65	28.57	28.55	28.52	28.57	28.59	28.59	28.62	28.65	28.64	28.61	11
				30.22	30.17	30.11	29.99	29.94	29.89	29.93	29.95	29.97	30.04	30.11	30.13	30.04	
Indianapolis	39 46	86 10	766	29.29	29.27	29.21	29.18	29.18	29.18	29.21	29.23	29.27	29.26	29.27	29.28	29.24	20
				30.16	30.13	30.06	30.01	29.99	29.98	30.00	30.03	30.08	30.09	30.12	30.14	30.07	
Indianola	28 32	96 31	26	30.14	30.09	30.02	29.95	29.94	29.95	29.99	29.97	29.97	30.04	30.09	30.11	30.02	15
				30.16	30.09	30.04	29.97	29.96	29.97	30.01	29.99	29.99	30.06	30.11	30.13	30.04	
Jacksonville	30 20	81 39	43	30.14	30.11	30.05	30.02	29.98	30.00	30.02	29.99	29.99	30.03	30.08	30.13	30.04	20
				30.19	30.16	30.10	30.07	30.03	30.05	30.07	30.04	30.04	30.08	30.13	30.18	30.09	
Jupiter	26 57	80 7	28	30.14	30.10	30.05	30.08	30.00	30.02	30.06	30.02	29.99	30.00	30.07	30.14	30.06	5
				30.17	30.13	30.08	30.11	30.03	30.05	30.09	30.05	30.02	30.03	30.10	30.17	30.09	
Kansas City	39 05	94 37	963	29.09	29.05	29.02	28.98	28.94	28.92	29.00	29.03	29.07	29.05	29.09	29.06	29.03	4
				30.18	30.13	30.08	30.01	29.95	29.91	29.98	30.02	30.08	30.08	30.15	30.13	30.06	
Keeler	36 35	117 50	3,632	26.35	26.30	26.29	26.24	26.21	26.19	26.26	26.25	26.28	26.33	26.37	26.38	26.29	8
				30.14	30.06	30.00	29.92	29.84	29.78	29.81	29.80	29.87	29.98	30.09	30.16	29.95	
Keokuk	40 22	91 26	613	29.47	29.43	29.38	29.32	29.30	29.30	29.35	29.36	29.40	29.41	29.43	29.45	29.38	20
				30.17	30.12	30.06	29.98	29.95	30.04	29.98	29.99	30.04	30.06	30.11	30.14	30.04	
Key West	24 34	81 49	22	30.13	30.10	30.08	30.04	30.00	30.02	30.05	30.00	29.97	29.98	30.05	30.11	30.04	20
				30.15	30.12	30.10	30.06	30.02	30.04	30.07	30.02	29.99	30.00	30.07	30.13	30.06	
Knoxville	35 56	83 58	980	29.13	29.10	29.03	29.01	29.01	29.03	29.05	29.05	29.09	29.10	29.12	29.14	29.07	20
				30.21	30.17	30.09	30.05	30.04	30.04	30.05	30.06	30.16	30.11	30.18	30.22	30.12	
La Crosse	43 49	91 15	720	29.31	29.28	29.25	29.20	29.17	29.16	29.20	29.23	29.25	29.25	29.27	29.28	29.24	20
				30.15	30.11	30.06	29.99	29.94	29.91	29.95	29.98	30.02	30.03	30.08	30.10	30.03	
Las Animas	38 04	103 12	3,899	26.02	26.00	26.00	25.94	25.99	26.02	26.06	26.08	26.06	26.05	26.06	26.02	26.03	6
				30.20	30.11	30.04	29.91	29.91	29.88	29.88	29.91	29.94	30.01	30.13	30.15	30.02	
Leavenworth	39 19	94 57	857	29.24	29.18	29.14	29.07	29.04	29.04	29.09	29.11	29.14	29.16	29.19	29.21	29.13	20
				30.22	30.15	30.09	29.99	29.94	29.93	29.97	30.00	30.04	30.08	30.14	30.17	30.05	
Little Rock	34 45	92 06	302	29.84	29.79	29.73	29.69	29.65	29.65	29.69	29.69	29.73	29.76	29.82	29.82	29.74	13
				30.18	30.12	30.06	30.01	29.97	29.96	30.00	30.00	30.05	30.08	30.15	30.15	30.06	
Los Angeles	34 3	118 15	330	29.73	29.70	29.68	29.65	29.62	29.57	29.58	29.55	29.56	29.62	29.69	29.72	29.64	15
				30.10	30.07	30.04	30.01	29.97	29.92	29.93	29.90	29.92	29.98	30.06	30.09	30.00	
Louisville	38 15	85 45	525	29.56	29.53	29.46	29.43	29.41	29.41	29.44	29.45	29.50	29.51	29.53	29.55	29.48	20
				30.18	30.14	30.06	30.03	29.99	29.99	30.01	30.02	30.08	30.10	30.13	30.16	30.07	
Lynchburg	37 25	79 09	685	29.42	29.40	29.31	29.30	29.30	29.31	29.32	29.33	29.39	29.38	29.41	29.42	29.36	20
				30.19	30.16	30.06	30.05	30.03	30.03	30.03	30.05	30.11	30.12	30.16	30.18	30.10	
Mackinaw City	45 47	84 39	605	29.33	29.38	29.34	29.34	29.28	29.32	29.28	29.34	29.38	29.37	29.32	29.34	29.33	5
				30.04	30.08	30.03	30.02	29.93	29.96	29.92	29.98	30.02	30.03	29.99	30.03	30.00	
Manchester	42 58	71 28	247	29.78	29.81	29.69	29.74	29.73	29.70	29.74	29.74	29.84	29.71	29.80	29.77	29.76	6
				30.06	30.08	29.96	30.01	29.99	29.95	29.99	29.99	30.09	29.97	30.06	30.04	30.02	
Maginnis, Fort	47 12	109 10	4,370	25.45	25.48	25.52	25.50	25.54	25.55	25.62	25.64	25.59	25.54	25.53	25.49	25.54	7
				30.15	30.14	30.08	29.99	29.96	29.92	29.94	29.97	29.99	30.01	30.09	30.11	30.08	
Manistee	44 13	86 16	615	29.35	29.36	29.37	29.37	29.30	29.29	29.35	29.36	29.40	29.36	29.37	29.34	29.35	4
				30.06	30.06	30.07	30.06	29.96	29.95	30.01	30.01	30.06	30.03	30.06	30.04	30.03	
Marquette	46 34	87 24	734	29.21	29.22	29.22	29.20	29.17	29.16	29.17	29.21	29.21	29.19	29.20	29.18	29.19	20
				30.06	30.07	30.05	30.01	29.96	29.94	29.94	29.98	29.99	29.99	30.02	30.01	30.00	
Memphis	35 09	90 03	330	29.83	29.78	29.71	29.66	29.64	29.65	29.68	29.68	29.72	29.76	29.78	29.81	29.72	20
				30.20	30.14	30.07	30.02	29.99	29.99	30.02	30.02	30.07	30.12	30.14	30.17	30.08	
Milwaukee	43 02	87 54	673	29.34	29.34	29.29	29.27	29.24	29.24	29.28	29.30	29.33	29.31	29.32	29.32	29.29	20
				30.11	30.11	30.05	30.01	29.96	29.95	29.98	30.00	30.04	30.04	30.07	30.08	30.03	

NORMAL AIR PRESSURE 1873 TO 1892—Continued.

[Sea-level pressures are given in the lower set of figures at each station.]

Station.	Lat.	Long.	Height.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Years.
	° ′	° ′	Feet.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
Mobile	30 41	88 02	57	30.13	30.09	30.04	30.00	29.96	29.97	29.99	29.96	29.98	30.03	30.08	30.12	30.03	20
				30.19	30.15	30.10	30.06	30.02	30.03	30.05	30.02	30.04	30.09	30.14	30.18	30.09	
Montgomery	32 23	86 18	257	29.92	29.87	29.81	29.78	29.75	29.76	29.77	29.76	29.78	29.83	29.88	29.91	29.82	20
				30.21	30.16	30.09	30.06	30.03	30.03	30.04	30.03	30.05	30.11	30.16	30.19	30.10	
Montrose	38 30	107 56	5,795	24.28	24.23	24.24	24.23	24.24	24.26	24.36	24.36	24.35	24.34	24.36	24.32	24.30	8
				30.21	30.18	30.02	29.93	29.89	29.85	29.91	29.92	29.96	30.04	30.17	30.17	30.01	
Moorhead	46 52	96 44	935	29.07	29.05	29.04	29.01	28.92	28.88	28.94	28.96	28.96	28.97	29.02	29.03	28.98	20
				30.19	30.16	30.12	30.05	29.93	29.87	29.92	29.95	29.96	30.00	30.09	30.13	30.02	
Mount Washington	44 16	71 18	6,279	23.39	23.39	23.39	23.54	23.74	23.82	23.87	23.90	23.87	23.74	23.54	23.43	23.64	
Nantucket	41 17	70 06	14	30.04	30.08	29.94	30.00	30.01	29.98	30.01	30.00	30.10	29.95	30.04	30.04	30.02	6
				30.05	30.09	29.95	30.01	30.02	29.99	30.02	30.01	30.11	29.96	30.05	30.05	30.03	
Nashville	36 10	86 47	553	29.57	29.54	29.47	29.43	29.42	29.42	29.45	29.45	29.50	29.52	29.54	29.57	29.49	20
				30.18	30.15	30.07	30.02	30.00	29.99	30.02	30.02	30.08	30.11	30.14	30.18	30.08	
New Haven	41 18	72 56	107	29.98	29.97	29.86	29.87	29.88	29.87	29.86	29.90	29.98	29.94	29.96	29.96	29.92	20
				30.10	30.09	29.98	29.98	30.00	29.98	29.97	30.01	30.09	30.05	30.08	30.08	30.04	
New London	41 21	72 05	47	30.04	30.03	29.93	29.93	29.95	29.93	29.93	29.96	30.03	30.00	30.01	30.02	29.98	20
				30.09	30.08	29.98	29.98	30.00	29.98	29.98	30.01	30.08	30.07	30.06	30.07	30.03	
New Orleans	29 58	90 04	54	30.11	30.06	30.02	29.98	29.95	29.95	29.98	29.96	29.96	30.01	30.07	30.10	30.01	20
				30.17	30.12	30.08	30.04	30.01	30.01	30.01	30.02	30.02	30.07	30.13	30.16	30.07	
New York	40 43	74 00	185	29.91	29.90	29.80	29.80	29.81	29.80	29.80	29.83	29.91	29.88	29.89	29.90	29.85	20
				30.12	30.11	30.01	30.00	30.02	30.00	29.99	30.03	30.11	30.08	30.09	30.11	30.05	
Norfolk	36 51	76 17	57	30.13	30.11	30.01	29.99	29.99	29.99	29.99	30.00	30.06	30.06	30.10	30.12	30.04	20
				30.20	30.18	30.07	30.06	30.05	30.05	30.05	30.06	30.12	30.13	30.16	30.19	30.11	
Northfield	44 10	72 41	872	29.07	29.10	29.01	29.05	29.05	29.03	29.06	29.07	29.16	29.03	29.09	29.07	29.06	6
				30.08	30.10	30.00	30.01	29.98	29.95	29.97	29.99	30.09	29.99	30.06	30.07	30.02	
North Platte	41 08	100 45	2,841	27.09	27.07	27.06	27.03	27.02	27.02	27.10	27.10	27.12	27.11	27.12	27.10	27.08	20
				30.22	30.16	30.10	30.00	29.93	29.89	29.94	29.95	30.02	30.07	30.16	30.18	30.05	
Olympia	47 03	122 53	52	29.99	29.97	29.96	29.95	29.96	29.96	29.99	29.96	29.97	29.99	30.03	29.95	29.97	15
				30.03	30.01	30.00	29.99	30.00	30.00	30.03	30.00	30.01	30.03	30.07	29.99	30.01	
Omaha	41 16	95 56	1,113	28.95	28.91	28.87	28.80	28.78	28.78	28.83	28.85	28.87	28.89	28.92	28.93	28.86	20
				30.22	30.17	30.10	30.00	29.95	29.93	29.96	29.99	30.03	30.09	30.14	30.18	30.06	
Oswego	43 29	76 35	335	29.70	29.70	29.63	29.62	29.62	29.60	29.61	29.64	29.70	29.67	29.67	29.68	29.65	20
				30.09	30.09	30.02	30.00	29.98	29.96	29.97	29.95	30.06	30.04	30.05	30.07	30.02	
Palestine	31 45	95 40	511	29.63	29.57	29.53	29.47	29.45	29.45	29.49	29.49	29.51	29.55	29.60	29.60	29.53	11
				30.19	30.13	30.08	30.01	29.99	29.98	30.02	30.02	30.04	30.10	30.15	30.16	30.08	
Parkersburg	39 16	81 36	638	29.48	29.46	29.41	29.42	29.37	29.36	29.41	29.40	29.47	29.42	29.49	29.50	29.45	4
				30.19	30.17	30.12	30.11	30.05	30.03	30.08	30.07	30.15	30.12	30.20	30.21	30.14	
Pensacola	30 25	87 13	56	30.11	30.09	30.02	30.01	29.95	29.95	29.98	29.96	29.97	30.01	30.08	30.11	30.02	13
				30.17	30.15	30.08	30.07	30.01	30.01	30.04	30.02	30.03	30.07	30.14	30.17	30.08	
Philadelphia	39 57	75 09	117	30.02	30.00	29.90	29.89	29.89	29.87	29.87	29.90	29.98	29.96	29.99	29.99	29.94	20
				30.15	30.13	30.03	30.01	30.02	29.99	29.99	30.02	30.10	30.08	30.12	30.12	30.06	
Pittsburg	40 32	80 02	820	29.22	29.20	29.14	29.13	29.13	29.13	29.15	29.17	29.23	29.21	29.21	29.22	29.18	20
				30.14	30.12	30.05	30.02	30.00	29.99	30.00	30.02	30.09	30.09	30.12	30.14	30.06	
Port Angeles	48 07	123 06	29	29.96	30.01	29.98	29.98	29.96	29.96	30.01	29.98	29.96	29.99	29.96	29.91	29.97	7
				29.99	30.04	30.01	30.01	29.99	29.99	30.04	30.01	29.99	30.02	29.99	29.94	30.00	
Port Huron	43 00	82 26	639	29.37	29.36	29.31	29.31	29.29	29.28	29.31	29.33	29.38	29.36	29.35	29.35	29.33	20
				30.11	30.09	30.03	30.02	29.98	29.96	29.98	30.00	30.06	30.06	30.06	30.07	30.03	
Portland, Me	43 39	70 15	103	29.93	29.91	29.82	29.83	29.86	29.83	29.82	29.87	29.95	29.91	29.91	29.90	29.88	20
				30.04	30.01	29.92	29.93	29.96	29.93	29.92	29.97	30.05	30.01	30.02	30.01	29.98	
Portland, Oregon	45 32	122 43	157	29.91	29.90	29.86	29.87	29.86	29.86	29.87	29.85	29.85	29.89	29.92	29.89	29.88	20
				30.16	30.10	30.04	29.95	29.94	29.91	29.87	29.87	29.93	30.00	30.11	30.13	30.01	
Prescott	34 33	112 28	5,389	24.72	24.71	24.70	24.67	24.73	24.77	24.79	24.78	24.77	24.75	24.75	24.73	24.74	13
				30.20	30.09	30.02	30.03	29.90	29.84	29.92	29.92	29.98	30.07	30.17	30.16	30.04	
Pueblo	38 18	104 30	4,734	25.25	25.18	25.19	25.24	25.22	25.23	25.33	25.34	25.34	25.31	25.32	25.24	25.27	4
				30.17	30.17	30.07	30.10	30.02	30.02	30.05	30.04	30.12	30.08	30.16	30.19	30.10	
Raleigh	35 45	78 37	338	29.74	29.74	29.64	29.68	29.61	29.62	29.65	29.64	29.71	29.66	29.73	29.76	29.68	6
				30.17	30.17	30.07	30.10	30.02	30.02	30.05	30.04	30.12	30.08	30.16	30.19	30.10	
Rapid City	44 04	103 12	3,280	26.62	26.57	26.59	26.60	26.59	26.54	26.64	26.65	26.65	26.65	26.64	26.57	26.61	5
				30.19	30.12	30.08	30.00	29.95	29.83	29.90	29.91	29.96	30.03	30.11	30.05	30.01	
Red Bluff	40 10	122 15	342	29.78	29.72	29.68	29.64	29.59	29.53	29.52	29.50	29.56	29.65	29.75	29.76	29.64	15
				30.15	30.09	30.04	30.00	29.95	29.89	29.87	29.85	29.92	30.01	30.12	30.13	30.00	
Rio Grande City	26 23	98 48	230	29.93	29.86	29.80	29.74	29.71	29.71	29.75	29.74	29.76	29.83	29.90	29.92	29.80	13
				30.18	30.11	30.04	29.98	29.95	29.94	29.98	29.97	30.00	30.07	30.14	30.17	30.04	
Rochester	43 08	77 42	523	29.48	29.49	29.43	29.43	29.43	29.41	29.43	29.46	29.51	29.48	29.48	29.47	29.46	20
				30.08	30.08	30.02	30.01	29.99	29.96	29.98	30.01	30.07	30.05	30.06	30.06	30.03	
Roseburg	43 13	123 20	523	29.56	29.53	29.51	29.49	29.48	29.48	29.49	29.46	29.48	29.53	29.58	29.53	29.51	15
				30.14	30.11	30.08	30.06	30.04	30.04	30.04	30.01	30.04	30.10	30.15	30.11	30.08	
Sacramento	38 35	121 30	64	30.07	30.02	29.98	29.94	29.89	29.83	29.82	29.79	29.84	29.93	30.02	30.05	29.93	15
				30.14	30.09	30.05	30.01	29.96	29.90	29.89	29.86	29.91	30.00	30.09	30.12	30.00	
St. Louis	38 38	90 12	571	29.54	29.50	29.44	29.39	29.37	29.37	29.41	29.42	29.47	29.48	29.50	29.52	29.45	20
				30.18	30.13	30.07	30.00	29.97	29.97	30.00	30.01	30.07	30.09	30.13	30.15	30.06	
St. Paul	44 58	93 3	850	29.16	29.14	29.12	29.06	29.04	29.02	29.07	29.09	29.10	29.10	29.13	29.13	29.10	20
				30.16	30.13	30.09	29.99	29.94	29.91	29.96	29.98	30.00	30.03	30.09	30.11	30.03	
St. Vincent	48 56	97 14	805	29.21	29.21	29.20	29.13	29.08	29.03	29.06	29.08	29.09	29.12	29.16	29.18	29.13	20
				30.18	30.17	30.13	30.01	29.94	29.91	29.96	29.93	29.95	30.00	30.08	30.13	30.02	
Salt Lake City	40 46	111 54	4,345	25.69	25.65	25.62	25.58	25.57	25.58	25.63	25.64	25.65	25.69	25.73	25.70	25.64	20
				30.27	30.18	30.09	29.99	29.93	29.88	29.86	29.88	29.96	30.09	30.21	30.24	30.05	

NORMAL AIR PRESSURE 1873 to 1892—Continued.

[Sea-level pressures are given in the lower set of figures at each station.]

Station.	Lat.		Long.		Height.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Years.
	°	′	°	′	Feet.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.		
San Antonio	29	27	98	28	679	29.43	29.37	29.32	29.26	29.24	29.24	29.30	29.28	29.32	29.36	29.43	29.43	29.33	15
						30.17	30.10	30.04	29.97	29.95	29.94	30.00	29.98	30.02	30.07	30.15	30.16	30.04	
San Diego	32	43	117	10	93	30.00	29.98	29.97	29.93	29.89	29.85	29.86	29.83	29.83	29.89	29.95	29.99	29.92	20
						30.10	30.08	30.07	30.03	29.99	29.95	29.96	29.93	29.93	29.99	30.05	30.09	30.02	
Sandusky	41	25	82	40	629	29.41	29.39	29.35	29.34	29.32	29.31	29.34	29.35	29.41	29.40	29.40	29.41	29.36	15
						30.13	30.10	30.06	30.03	29.99	29.97	30.00	30.01	30.07	30.07	30.09	30.12	30.04	
San Francisco	37	48	122	26	153	29.97	29.93	29.91	29.89	29.84	29.81	29.80	29.78	29.79	29.86	29.93	29.95	29.87	20
						30.09	30.05	30.03	30.01	29.96	29.93	29.92	29.90	29.91	29.98	30.05	30.07	29.99	
Santa Fe	35	41	105	57	7,059	23.29	23.18	23.17	23.19	23.23	23.29	23.38	23.38	23.36	23.30	23.27	23.23	23.26	20
						30.16	30.10	29.99	29.94	29.88	29.86	29.92	29.93	29.97	30.01	30.11	30.16	30.00	
Savannah	32	5	81	5	98	30.09	30.06	29.98	29.96	29.93	29.94	29.96	29.94	29.96	30.00	30.04	30.08	30.00	20
						30.20	30.17	30.09	30.07	30.04	30.05	30.07	30.05	30.07	29.98	30.15	30.19	30.11	
Shreveport	32	30	93	10	249	29.91	29.85	29.79	29.74	29.72	29.72	29.76	29.75	29.78	29.83	29.87	29.89	29.80	20
						30.18	30.12	30.08	30.01	29.98	29.98	30.01	30.01	30.04	30.10	30.14	30.16	30.07	
Sill, Fort	34	40	98	23	1,200	28.88	28.84	28.77	28.71	28.70	28.70	28.75	28.76	28.79	28.81	28.86	28.86	28.79	16
						30.15	30.10	30.01	29.94	29.92	29.92	29.96	29.97	30.01	30.04	30.11	30.09	30.02	
Spokane	47	40	117	25	1,930	28.03	27.98	27.97	27.93	27.92	27.90	27.95	27.94	27.96	27.99	28.05	27.99	27.97	
						30.18	30.11	30.05	29.98	29.94	29.90	29.93	29.92	29.98	30.04	30.15	30.11	30.02	
Springfield, Ill	39	48	89	39	644	29.44	29.41	29.36	29.33	29.29	29.29	29.33	29.35	29.39	29.41	29.42	29.43	29.37	13
						30.17	30.13	30.07	30.02	29.97	29.96	29.99	30.02	30.06	30.10	30.13	30.15	30.06	
Springfield, Mo	37	12	93	18	1,356	28.68	28.64	28.60	28.58	28.54	28.55	28.64	28.63	28.66	28.64	28.67	28.65	28.62	7
						30.14	30.10	30.04	29.98	29.93	29.93	30.01	30.01	30.05	30.05	30.11	30.10	30.04	
Stanton, Fort	33	30	105	26	6,152	23.93	23.91	23.90	23.93	23.94	23.97	24.07	24.07	24.07	24.04	24.00	23.96	23.99	7
						30.16	30.07	30.02	29.96	29.89	29.83	29.89	29.92	29.99	30.05	30.15	30.16	30.01	
Sully	44	39	100	39	1,600	28.36	28.34	28.31	28.26	28.27	28.25	28.26	28.28	28.30	28.31	28.30	28.30	28.30	19
						30.20	30.17	30.09	29.98	29.95	29.89	29.89	29.92	29.97	30.01	30.07	30.11	30.02	
Titusville	28	34	80	51	44	30.16	30.11	30.06	30.09	30.00	30.02	30.06	30.02	30.00	30.01	30.08	30.14	30.06	5
						30.20	30.15	30.10	30.13	30.04	30.06	30.10	30.06	30.04	30.05	30.12	30.18	30.10	
Toledo	41	40	83	34	674	29.36	29.35	29.30	29.29	29.27	29.26	29.29	29.31	29.36	29.34	29.34	29.36	29.32	20
						30.12	30.11	30.05	30.02	29.98	29.96	29.99	30.01	30.07	30.07	30.08	30.12	30.05	
Valentine	42	50	100	32	2,613	27.31	27.28	27.29	27.25	27.25	27.22	27.30	27.31	27.31	27.33	27.32	27.27	27.29	7
						30.21	30.16	30.12	29.99	29.96	29.88	29.93	29.95	30.00	30.06	30.13	30.11	30.04	
Vicksburg	32	22	90	53	254	29.92	29.86	29.81	29.76	29.74	29.75	29.78	29.76	29.79	29.84	29.88	29.90	29.82	20
						30.19	30.14	30.08	30.02	30.01	30.01	30.04	30.02	30.05	30.10	30.15	30.17	30.09	
Wallawalla	46	02	118	20	1,018	29.03	28.98	28.95	28.92	28.88	28.87	28.89	28.88	28.93	28.99	29.06	28.99	28.95	7
						30.17	30.11	30.06	30.01	29.95	29.94	29.94	29.93	30.00	30.08	30.18	30.11	30.04	
Washington	38	54	77	03	112	30.05	30.02	29.93	29.91	29.90	29.89	29.89	29.92	29.99	29.98	30.01	30.03	29.96	20
						30.17	30.14	30.05	30.03	30.02	30.00	30.01	30.03	30.00	30.10	30.13	30.15	30.08	
Wichita	37	41	97	20	1,366	28.66	28.62	28.57	28.54	28.50	28.49	28.56	28.57	28.62	28.61	28.66	28.63	28.59	4
						30.19	30.13	30.06	30.00	29.92	29.89	29.95	29.96	30.04	30.06	30.15	30.14	30.04	
Wilmington	34	14	77	57	78	30.09	30.06	29.97	29.96	29.94	29.95	29.96	29.95	30.00	30.01	30.05	30.08	30.00	20
						30.18	30.15	30.06	30.05	30.03	30.03	30.04	30.03	30.08	30.10	30.14	30.17	30.09	
Winnemucca	40	58	117	43	4,340	25.69	25.64	25.63	25.58	25.59	25.59	25.64	25.63	25.66	25.69	25.73	25.69	25.65	15
						30.25	30.13	30.06	29.96	29.93	29.87	29.87	29.87	29.96	30.07	30.19	30.19	30.03	
Woods Holl	41	33	70	40	22	30.05	30.01	29.91	29.92	29.98	29.95	29.95	29.98	30.04	30.00	30.02	30.02	29.98	13
						30.07	30.03	29.93	29.94	30.00	29.97	29.97	30.00	30.06	30.02	30.04	30.04	30.00	
Yankton	42	54	97	28	1,232	28.78	28.75	28.72	28.65	28.62	28.61	28.66	28.68	28.70	28.71	28.75	28.76	28.70	20
						30.20	30.15	30.09	29.95	29.92	29.88	29.93	29.95	30.00	30.03	30.12	30.16	30.03	
Yuma	32	45	114	36	141	29.93	29.88	29.81	29.75	29.68	29.62	29.64	29.64	29.66	29.75	29.87	29.91	29.76	17
						30.08	30.03	29.96	29.89	29.83	29.77	29.78	29.79	29.81	29.90	30.02	30.06	29.91	

NORMAL TEMPERATURE (IN DEGREES AND TENTHS, FAHRENHEIT).

$\left[\frac{\text{Max.} + \text{min.}}{2}\right]$

Station.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	No. years.
Abilene, Tex	42.6	49.0	54.4	64.3	72.2	78.2	83.0	81.4	73.6	64.5	52.6	48.8	63.7	6
Albany, N. Y	22.8	25.0	31.6	46.4	59.2	68.2	72.6	70.6	63.2	51.0	39.6	28.8	48.2	17
Alpena, Mich	17.8	18.0	23.2	37.4	49.4	59.8	65.9	63.6	57.2	45.5	33.3	24.7	41.3	18
Apache (Fort), Ariz	35.3	40.2	45.8	52.4	60.3	68.5	72.7	72.0	65.9	55.4	43.6	39.0	54.2	12
Assinaboine, Mont	8.4	12.6	29.4	44.9	53.1	62.4	67.6	65.3	55.4	44.0	30.2	20.4	41.1	11
Atlanta, Ga	43.4	48.2	51.8	61.6	69.0	75.8	78.4	76.4	71.5	62.0	51.9	45.4	61.3	13
Atlantic City, N. J	32.4	33.8	37.5	46.8	57.4	67.0	72.2	71.8	66.8	56.2	44.8	36.2	51.9	18
Augusta, Ga	47.9	51.8	55.8	64.2	72.5	79.2	82.2	80.2	75.4	64.8	55.0	48.8	64.8	18
Baltimore, Md	34.4	36.7	41.2	52.8	64.1	73.2	77.6	75.0	68.2	57.4	45.8	37.6	55.3	19
Bismarck, N. Dak	5.2	10.0	22.8	42.6	54.8	63.8	68.4	67.4	57.0	44.4	27.0	15.1	39.9	17
Block Island, R. I	31.2	31.7	34.6	44.0	52.5	62.2	68.3	68.2	63.7	53.8	45.2	36.7	49.3	11
Boise City, Idaho	27.8	35.0	44.2	51.2	58.4	65.9	72.9	72.0	61.4	50.4	39.2	32.2	50.9	13
Boston, Mass	26.9	28.3	34.1	44.4	56.8	66.4	71.9	69.9	63.1	52.1	41.1	31.5	48.9	20
Brownsville, Tex	58.6	63.4	67.8	74.2	78.5	82.7	83.9	83.3	79.8	75.0	65.9	61.6	72.9	16
Buffalo, N. Y	24.5	25.0	29.6	41.4	53.6	64.0	69.1	68.0	61.9	50.2	39.6	30.0	46.4	18
Buford (Fort), N. D	3.0	7.9	23.8	43.8	53.0	64.4	69.1	67.3	56.2	43.6	26.8	12.8	39.3	13
Burlington, Vt	18.2	21.2	28.5	42.0	56.4	63.8	70.6	68.7	61.8	50.6	36.0	25.4	45.3	6
Cairo, Ill	35.0	40.0	46.6	58.7	67.6	75.8	79.2	77.2	69.8	59.2	46.4	39.2	57.9	20
Canby (Fort), Wash	41.0	41.6	46.0	49.0	53.5	56.2	58.8	59.5	57.8	53.8	48.7	44.2	50.8	8
Cedar Keys, Fla	57.4	61.0	62.4	69.8	75.4	80.4	82.2	81.8	79.4	72.6	63.5	57.8	70.3	10
Charleston, S. C	50.8	53.6	57.2	64.4	72.4	79.4	82.1	80.6	76.1	67.0	59.6	52.2	66.3	18
Charlotte, N. C	42.0	46.2	49.9	59.9	68.8	75.8	78.6	76.4	71.0	60.7	50.6	43.8	60.3	13
Chattanooga, Tenn	42.1	46.4	50.7	61.2	68.6	75.7	78.6	76.7	71.2	61.6	50.5	43.9	60.6	13
Cheyenne, Wyo	23.8	27.4	33.6	41.4	51.6	61.6	68.1	66.0	56.9	45.6	33.9	28.6	44.9	19
Chicago, Ill	24.0	27.8	34.4	46.2	56.2	66.4	72.0	70.8	64.2	52.6	39.0	30.4	48.7	19
Cincinnati, Ohio	33.3	37.0	42.4	54.2	65.0	73.8	77.8	75.1	68.2	56.7	44.5	37.2	55.4	20
Cleveland, Ohio	26.5	28.6	33.2	45.4	57.6	67.2	71.3	69.4	63.8	52.4	40.0	31.4	48.9	19
Columbus, Ohio	29.2	33.0	38.0	51.3	62.4	70.9	75.0	71.9	65.7	54.5	41.8	33.6	52.3	13
Concordia, Kans	21.6	28.7	38.0	55.3	62.7	72.2	77.6	74.2	67.0	54.2	40.3	32.8	52.0	7
Custer (Fort), Mont	14.5	19.9	33.6	46.6	55.2	64.4	71.1	70.0	58.7	47.6	33.2	22.9	44.8	12
Davenport, Iowa	20.7	26.0	34.4	49.8	60.8	69.8	74.9	72.2	64.7	52.6	38.0	28.1	49.3	18
Davis (Fort), Tex	43.2	48.4	53.5	60.7	68.5	76.3	76.8	74.0	68.2	61.7	50.5	45.8	60.6	9
Deadwood, S. Dak	19.9	22.6	32.8	40.2	51.3	61.0	66.6	64.2	55.6	44.8	32.6	25.2	43.1	8
Denver, Colo	27.4	32.5	39.6	47.4	56.8	66.9	72.6	70.8	62.3	51.0	37.4	32.1	49.7	20
Des Moines, Iowa	17.7	23.5	34.5	51.0	61.5	70.6	75.4	72.9	64.4	52.6	37.4	26.4	49.0	13
Detroit, Mich	24.8	27.0	32.4	44.6	57.6	67.2	71.8	70.0	63.0	51.4	38.8	30.4	48.3	18
Dodge City, Kans	25.8	33.3	42.4	54.2	63.8	73.0	78.2	76.0	67.4	55.8	40.4	33.3	53.6	17
Dubuque, Iowa	17.7	23.1	32.6	49.2	60.6	69.2	74.2	71.5	63.2	51.0	35.7	26.0	47.8	18
Duluth, Minn	9.4	13.5	23.2	38.6	48.4	57.3	66.2	64.8	56.4	45.0	29.5	18.0	39.2	18
Eastport, Me	20.2	21.8	28.2	38.4	47.6	55.3	60.4	60.8	55.9	46.6	36.6	25.6	41.4	18
Elliott (Fort), Tex	32.4	38.2	47.0	57.1	64.8	73.9	78.3	76.2	69.7	58.1	43.5	37.6	56.4	11
El Paso, Tex	43.8	49.6	56.2	64.2	73.1	81.6	83.4	80.8	73.6	63.8	51.2	46.2	64.0	12
Erie, Pa	27.8	28.0	32.6	44.2	56.7	66.4	71.1	69.5	63.7	52.7	41.4	32.8	48.9	18
Fort Smith, Ark	36.2	42.8	50.4	62.9	69.1	77.2	81.4	79.0	73.4	62.8	50.6	43.2	60.8	10
Galveston, Tex	53.2	57.7	62.8	70.0	76.1	82.2	84.3	83.4	79.2	72.6	62.6	56.0	70.0	18
Grand Haven, Mich	24.8	25.4	30.8	43.6	54.1	63.6	68.2	66.5	60.2	49.8	38.1	30.6	46.3	19
Grant (Fort), Ariz	43.4	46.6	52.4	58.8	67.4	75.8	78.8	76.2	71.9	63.0	51.2	46.4	61.0	13
Hatteras, N. C	45.6	48.3	49.2	57.0	66.8	74.0	77.6	77.3	74.2	65.1	56.0	48.1	61.6	11
Helena, Mont	16.2	21.0	33.4	44.4	52.6	60.1	67.0	66.6	56.8	45.2	31.2	24.8	43.3	12
Huron, S. Dak	6.6	11.8	27.6	46.4	55.5	66.9	71.4	68.8	60.4	46.9	30.3	19.2	42.6	10
Indianapolis, Ind	28.6	32.7	39.0	52.8	63.3	71.7	75.8	72.9	65.8	54.6	41.6	33.7	52.7	18
Indianola, Tex	51.2	57.0	63.8	71.0	76.5	82.8	84.1	83.1	79.4	73.8	62.2	57.0	70.2	7
Jacksonville, Fla	56.2	59.5	62.5	69.9	74.8	80.8	82.8	81.7	78.3	70.5	62.6	56.9	69.7	18
Keeler, Cal	39.6	45.2	52.3	59.2	67.2	74.0	81.8	81.0	74.0	62.6	50.6	43.3	60.9	7
Keokuk, Iowa	23.6	29.2	37.4	52.1	62.6	72.0	77.0	76.4	68.2	56.0	40.4	30.4	52.1	20
Key West, Fla	70.6	72.2	73.0	76.4	79.6	83.0	84.4	84.1	82.8	78.9	74.7	70.5	77.5	19
Knoxville, Tenn	39.0	43.2	47.8	58.3	66.6	74.2	77.4	75.4	69.8	58.8	47.8	40.7	58.2	18
La Crosse, Wis	14.8	19.8	30.2	47.1	59.4	68.4	73.0	70.2	61.4	49.5	33.6	23.5	45.9	19
Leavenworth, Kans	25.4	31.6	40.8	54.4	64.6	73.4	78.0	76.2	67.4	56.0	41.5	32.6	53.5	19
Little Rock, Ark	41.3	46.7	52.6	63.5	70.2	77.8	81.2	79.0	73.1	63.6	51.3	45.7	62.2	12
Los Angeles, Cal	53.0	54.7	57.3	60.0	63.5	67.4	71.6	72.4	70.2	64.4	59.6	55.7	62.5	14
Louisville, Ky	35.1	39.0	45.2	56.6	66.4	74.9	78.7	76.6	69.4	58.4	46.0	38.8	57.1	19
Lynchburg, Va	37.4	41.0	45.5	56.0	65.8	74.0	77.8	75.4	69.0	58.1	47.2	40.0	57.3	18
Maginnis, Mont	15.5	19.6	31.6	42.2	49.7	58.8	65.4	64.7	54.4	43.8	32.6	25.2	42.0	8
Marquette, Mich	16.1	16.8	23.0	37.8	48.2	58.4	65.2	63.5	57.2	45.4	32.2	23.7	40.6	17

NORMAL TEMPERATURE (IN DEGREES AND TENTHS, FAHRENHEIT)—Continued.

$\left[\frac{\text{Max.} + \text{min.}}{2}\right]$

Station.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	No. years.
Memphis, Tenn	40.3	45.6	51.8	62.4	70.2	78.1	81.4	79.0	72.4	62.4	50.8	44.4	61.6	18
Milwaukee, Wis	19.2	23.1	30.2	43.3	53.2	62.6	69.2	68.1	61.4	49.8	36.0	26.4	45.2	18
Mobile, Ala	51.4	55.5	59.8	67.2	74.2	80.6	82.6	81.2	77.6	68.1	56.6	52.6	67.3	18
Montgomery, Ala	48.6	53.3	57.6	65.8	73.4	80.3	82.6	80.8	74.3	65.7	55.6	49.9	65.7	19
Montrose, Colo	23.2	31.8	39.6	48.8	57.8	66.1	72.4	69.2	61.8	49.6	36.4	28.6	48.8	7
Moorhead, Minn	—1.0	3.8	19.4	41.4	53.1	64.4	67.5	65.4	56.4	43.4	25.2	11.8	37.6	11
Mount Washington, N. H	5.5	6.7	8.6	21.1	35.4	44.2	47.4	46.1	40.9	30.2	18.1	10.4	26.2	8
Nashville, Tenn	38.8	43.0	48.6	59.6	67.8	75.9	79.6	77.2	70.6	60.3	48.8	42.1	59.4	18
New Haven, Conn	27.9	29.3	34.4	45.8	57.4	66.6	71.6	69.6	63.4	52.4	41.4	32.8	49.4	19
New London, Conn	29.3	30.5	35.3	45.8	56.3	65.2	70.6	69.4	63.6	53.2	42.9	33.7	49.6	18
New Orleans, La	54.4	58.5	62.6	69.0	74.9	80.6	82.4	81.8	78.4	70.4	61.2	56.0	69.2	18
New York, N. Y	30.8	32.0	36.6	48.3	59.8	69.2	74.2	72.8	66.5	55.4	44.1	34.6	52.0	20
Norfolk, Va	41.3	44.2	47.2	55.8	66.1	75.2	79.2	76.9	71.5	61.3	51.2	43.4	59.4	19
North Platte, Nebr	19.8	26.5	35.8	49.2	59.0	68.4	74.2	72.2	63.0	50.6	35.7	27.3	48.5	17
Olympia, Wash	38.0	39.2	44.7	49.1	54.9	59.1	62.2	62.4	56.8	50.4	44.4	40.8	50.2	14
Omaha, Nebr	18.9	25.3	35.4	51.2	62.2	71.4	76.4	73.8	64.7	53.3	37.4	27.3	49.8	19
Oswego, N. Y	24.3	24.9	30.2	42.4	54.6	63.8	69.8	68.4	62.0	49.6	38.8	29.1	46.5	19
Palestine, Tex	45.2	53.1	58.2	66.6	71.6	79.0	82.2	81.3	75.6	66.8	56.5	51.6	65.6	10
Pensacola, Fla	53.2	57.8	60.0	67.7	73.8	79.8	81.4	80.9	77.8	69.7	59.6	54.8	68.0	12
Philadelphia, Pa	32.6	34.8	39.0	50.6	62.3	71.6	76.1	73.8	67.9	56.4	45.2	36.0	53.9	18
Pittsburg, Pa	31.2	33.9	38.5	51.4	62.6	71.1	75.2	72.8	66.2	55.4	42.9	34.8	53.0	17
Port Angeles, Wash	34.7	36.8	41.6	45.6	50.6	54.0	56.8	56.9	52.8	47.8	42.4	38.0	46.5	7
Port Huron, Mich	21.8	23.1	28.6	41.7	53.1	63.3	68.5	67.2	61.2	49.4	35.8	27.8	45.1	17
Portland, Me	22.8	25.5	32.2	43.5	54.4	64.0	69.0	67.2	60.2	49.4	39.0	28.2	46.3	18
Portland, Oregon	38.2	41.4	47.8	52.5	58.2	62.5	67.0	66.0	61.6	54.4	45.9	42.0	53.1	17
Prescott, Ariz	33.8	38.6	45.8	51.0	58.8	66.6	73.9	71.6	65.0	53.7	42.4	38.2	53.3	13
Rapid City, S. Dak	18.6	21.6	31.4	45.8	52.8	63.6	71.1	70.6	61.0	49.2	35.2	32.0	46.1	6
Red Bluff, Cal	45.2	48.6	54.8	59.6	67.2	74.2	81.0	80.0	74.2	63.3	53.4	46.8	62.4	12
Rio Grande City, Tex	57.8	63.8	69.2	77.0	81.0	85.4	87.4	86.2	81.6	74.9	64.9	61.2	71.2	12
Rochester, N. Y	24.2	24.6	29.6	43.3	56.2	65.6	70.3	68.5	62.2	53.0	40.6	29.4	47.3	20
Roseburg, Oregon	40.8	42.5	48.4	52.0	57.2	61.5	66.5	66.4	61.2	53.4	45.8	42.7	53.2	14
Sacramento, Cal	45.6	49.8	55.4	59.0	64.2	69.7	73.6	73.8	70.8	61.8	53.0	47.0	60.3	14
St. Louis, Mo	31.4	36.1	43.2	56.3	65.7	74.8	79.3	76.9	69.6	57.9	44.3	37.8	56.1	19
St. Paul, Minn	10.4	16.2	27.1	45.7	58.0	67.4	72.2	69.8	59.8	47.2	30.3	18.6	43.6	19
St. Vincent, Minn	—6.0	1.0	15.1	37.6	51.9	61.2	65.8	63.2	53.4	40.3	21.1	6.4	34.2	11
Salt Lake City, Utah	27.6	33.6	42.0	50.1	58.4	66.4	76.2	74.8	64.5	52.3	39.5	33.2	51.6	18
San Antonio, Tex	51.0	56.6	62.2	69.6	75.0	81.1	83.7	82.9	77.6	69.9	58.8	54.9	68.6	13
San Diego, Cal	53.4	54.9	56.5	59.1	61.8	65.1	68.0	69.8	67.8	63.4	59.0	56.0	61.2	17
Sandusky, Ohio	27.0	29.6	34.6	47.2	59.4	68.8	73.4	71.6	65.4	54.0	41.0	32.3	50.4	14
San Francisco, Cal	50.2	52.3	54.6	55.6	57.6	59.7	59.4	59.7	61.2	60.2	56.6	51.9	56.6	18
Santa Fe, N. Mex	28.4	33.3	40.6	47.0	57.6	67.0	69.6	67.8	61.1	51.4	37.0	31.2	49.3	17
Savannah, Ga	52.2	55.3	59.0	66.0	73.2	79.6	82.4	80.5	76.0	66.9	58.6	53.1	66.9	18
Shreveport, La	46.4	52.1	58.6	67.4	74.0	81.0	83.8	82.4	76.0	66.4	55.9	50.2	66.2	18
Sill (Fort), Okla	37.0	42.8	51.5	62.4	69.6	76.0	81.6	80.1	72.8	61.8	48.0	42.0	60.5	15
Spokane, Wash	24.2	28.2	39.4	49.2	57.4	62.9	69.1	68.0	58.2	47.6	37.3	31.6	47.8	11
Springfield, Ill	26.8	31.8	39.2	53.8	62.8	71.7	76.4	73.4	66.3	55.6	42.1	33.6	52.8	12
Stanton (Fort), N. Mex	32.6	39.2	42.7	50.2	56.8	64.6	68.4	65.8	60.0	51.8	40.4	36.0	50.7	8
Sully (Fort), S. Dak	10.2	15.4	27.8	46.9	58.2	69.2	75.6	72.4	62.6	49.1	31.2	20.4	44.9	15
Tatoosh Island, Wash	40.8	40.5	44.4	47.2	50.6	53.6	56.4	56.6	54.2	51.0	47.4	43.7	48.9	8
Toledo, Ohio	26.7	29.0	34.5	47.0	59.0	68.6	72.9	70.2	62.8	52.2	40.2	31.8	49.6	19
Valentine, Nebr	16.5	21.6	31.4	48.0	56.8	66.8	72.4	69.2	61.4	49.0	35.3	27.9	46.4	6
Vicksburg, Miss	48.0	53.2	58.4	66.0	73.2	79.8	82.3	81.0	75.8	66.2	56.0	51.2	65.9	18
Washington, D. C	33.6	36.5	41.0	52.8	64.1	73.2	76.9	74.8	68.0	56.8	45.0	36.8	55.0	20
Winnemucca, Nev	26.9	33.8	41.0	47.6	53.6	62.9	71.4	69.6	60.2	47.8	36.8	31.9	48.6	13
Woods Holl, Mass	31.2	31.5	35.8	44.4	54.7	62.6	68.2	68.5	63.4	52.6	44.3	36.4	49.5	9
Yankton, S. Dak	14.2	19.3	30.4	47.6	59.5	69.0	74.1	72.3	62.6	50.0	33.3	22.5	46.3	19
Yuma, Ariz	53.4	58.3	64.6	70.2	77.4	84.8	92.0	91.4	85.0	72.9	61.8	56.4	72.4	14

NORMAL PRECIPITATION—(INCHES AND TENTHS).

	Gauge above ground.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	No. of years.
	Feet.	*Ins.*	*Ins.*	*Ins.*	*Ins.*	*Ins.*	*Ins.*	*Ins.*	*Ins.*	*Ins.*	*Ins.*	*Ins.*	*Ins.*	*Ins.*	
Abilene, Tex	53	1.0	1.6	1.1	3.6	2.6	3.1	1.6	1.9	2.6	2.1	1.6	1.5	25.3	7
Albany, N. Y	99	3.0	2.6	2.9	2.6	3.0	3.8	4.1	3.9	3.6	3.4	3.1	2.8	38.8	18
Alpena, Mich	54	2.6	2.2	2.1	2.1	3.4	3.6	3.2	3.7	4.0	4.0	3.0	2.5	36.4	19
Apache(Fort), Ariz	.....	1.6	1.9	1.6	0.8	0.5	0.8	3.7	4.5	1.7	1.5	1.3	2.1	22.0	13
Assinaboine, Mont	3	0.9	0.6	0.6	0.8	1.6	3.3	2.4	1.6	1.2	0.5	0.6	0.6	14.7	11
Atlanta, Ga	85	6.3	5.3	6.5	3.7	3.8	4.4	4.7	4.4	4.2	2.5	4.0	4.9	54.5	14
Atlantic City, N.J.	57	3.8	3.5	3.9	3.3	2.8	3.1	3.6	4.7	3.3	3.4	3.4	3.8	42.8	19
Augusta, Ga	54	4.5	3.8	5.4	3.6	3.4	4.2	5.2	4.8	3.7	2.7	3.2	3.6	48.1	22
Baltimore, Md	80	3.3	3.6	4.3	3.2	3.5	4.1	5.1	4.5	3.9	3.1	3.1	3.1	44.8	21
Bismarck, N. Dak.	52	0.6	0.7	1.0	2.3	2.6	3.6	2.5	2.2	1.1	1.1	0.7	0.7	19.0	17
Block Island, R. I.	33	4.4	4.7	3.9	3.0	3.6	3.0	3.2	3.2	3.1	4.6	3.9	3.7	44.4	12
Boise City, Idaho	.....	2.1	1.5	1.3	1.1	1.3	1.0	0.2	0.2	0.4	1.3	0.8	2.1	13.1	14
Boston, Mass	174	4.3	3.6	4.3	3.7	3.4	3.4	3.5	4.3	3.0	4.3	4.6	3.5	46.1	22
Brownsville, Tex	36	1.9	1.7	1.5	1.4	3.3	3.0	2.2	3.9	7.8	4.9	2.2	1.9	36.1	15
Buffalo, N. Y	93	3.0	2.7	2.8	2.4	3.0	3.6	3.4	3.1	3.4	3.8	3.6	3.4	38.2	22
Buford(Fort), N.D.	2	0.5	0.5	0.5	1.0	2.2	2.8	2.0	1.3	0.9	0.9	0.5	0.5	13.5	24
Burlington, Vt	.....	1.9	1.5	1.9	2.0	3.1	3.2	4.0	3.4	3.5	3.5	2.6	2.0	32.9	45
Cairo, Ill	78	4.1	4.1	3.9	3.8	3.8	4.5	3.6	2.9	2.5	2.8	4.4	3.4	43.7	20
Canby(Fort), Wash	2	9.1	7.2	7.1	4.4	3.6	2.4	1.5	1.4	3.2	5.8	8.2	9.8	62.8	16
Cedar Keys, Fla	.....	3.9	2.9	3.4	2.5	2.3	6.8	8.7	7.7	5.4	2.8	2.5	3.0	52.2	12
Charleston, S. C	55	4.0	3.3	4.1	4.0	4.1	5.1	7.5	7.3	6.1	4.4	3.2	3.4	56.3	21
Charlotte, N. C	56	5.2	4.6	5.2	3.7	4.7	4.7	5.9	5.5	3.2	3.6	3.2	4.4	53.6	14
Chattanooga, Tenn	60	7.0	5.9	6.6	4.5	4.1	4.6	3.9	4.2	4.2	3.1	4.3	4.5	57.0	13
Cheyenne, Wyo	50	0.4	0.4	0.7	1.5	2.2	1.5	1.7	1.5	1.0	0.7	0.3	0.2	12.1	22
Chicago, Ill	238	2.2	2.3	2.5	3.1	3.6	3.6	3.7	3.5	2.8	3.2	2.7	2.2	35.0	22
Cincinnati, Ohio	145	3.5	3.8	3.6	3.0	3.4	4.7	3.7	4.0	2.4	2.7	3.5	3.3	41.2	21
Cleveland, Ohio	89	2.8	2.9	2.9	2.4	3.2	4.0	4.0	3.1	3.8	3.0	3.0	2.6	37.7	22
Columbus, Ohio	76	3.4	3.7	3.3	2.9	4.6	3.7	3.6	3.3	2.7	2.9	3.4	3.0	40.4	14
Concordia, Kans	34	1.0	0.8	2.3	2.3	4.8	3.2	3.5	3.1	2.5	1.8	0.9	0.5	27.3	7
CorpusChristi, Tex	34	3.0	1.8	2.1	1.0	3.2	3.0	1.1	3.2	6.1	1.7	3.6	1.8	31.7	5
Custer(Fort), Mont	26	0.8	0.5	0.6	1.1	2.0	2.8	1.0	1.1	0.8	0.9	0.4	0.8	12.8	13
Davenport, Iawa	93	1.8	1.6	2.2	2.7	4.2	4.2	3.6	3.8	3.2	3.0	2.0	1.6	34.5	22
Davis (Fort), Tex.	.....	0.5	0.4	0.4	0.6	1.0	1.7	3.3	3.8	3.0	1.4	0.5	0.4	18.1	20
Deadwood, S. D	.....	1.2	1.2	2.0	5.2	4.6	3.7	2.5	2.2	1.0	1.6	1.3	1.5	26.9	9
Denver, Colo	107	0.7	0.5	1.0	2.1	2.7	1.4	1.5	1.5	0.9	0.8	0.8	0.7	14.5	22
Des Moines, Iowa.	75	1.4	1.3	1.4	2.6	4.9	5.8	3.4	3.5	3.4	3.5	1.9	1.4	35.0	14
Detroit, Mich	144	2.0	2.3	2.5	2.2	3.3	3.6	3.6	2.9	2.5	2.7	2.6	2.5	32.6	22
Dodge City, Kans.	37	0.5	0.5	0.9	1.8	3.6	3.4	3.2	3.0	1.4	1.4	0.5	0.6	21.0	17
Dubuque, Iowa	50	1.7	1.6	2.3	2.8	3.9	5.1	4.6	3.5	4.3	3.0	2.1	1.8	37.1	19
Duluth, Minn	56	1.1	1.1	1.5	2.2	3.6	4.8	4.0	3.6	4.1	2.7	1.7	1.4	32.0	21
Eastport, Me	43	4.1	4.1	4.9	3.3	4.1	3.7	4.3	3.4	3.5	4.5	4.5	4.1	48.4	18
Elliott (Fort), Tex.	.....	0.6	0.5	0.6	2.6	4.4	3.2	2.3	3.3	1.8	2.6	0.6	0.7	23.6	12
El Paso, Tex	62	0.4	0.5	0.3	0.1	0.2	0.5	1.6	2.0	1.7	0.8	0.5	0.4	9.1	28
Erie, Pa	82	3.5	3.5	2.9	2.6	3.4	4.0	2.9	3.3	4.1	4.2	4.4	3.3	41.7	19
Eureka, Cal	52	8.5	6.5	5.8	4.0	3.1	1.6	0.2	0.1	0.6	2.5	3.5	7.9	44.4	6
Fort Smith, Ark	65	2.5	3.9	3.0	5.0	4.1	4.2	4.0	3.6	3.6	2.8	4.0	2.8	44.7	11
Fresno, Cal	66	1.3	1.2	1.3	1.3	0.3	0.1	T	T	0.2	0.5	1.1	1.7	9.2	15
Galveston, Tex	88	4.1	3.0	3.1	3.0	4.1	4.9	3.0	5.4	7.1	4.8	4.7	4.4	51.0	20
GrandHaven, Mich	48	2.4	2.2	2.4	2.4	3.3	4.0	2.9	2.9	3.6	3.5	3.1	2.5	35.6	21
Grant (Fort), Ariz.	20	0.9	1.4	1.1	0.3	0.4	0.6	3.7	3.2	1.8	0.9	0.8	1.5	16.3	19
Green Bay, Wis	35	2.7	2.7	2.2	2.0	3.3	3.2	3.2	3.2	3.3	2.6	2.4	2.4	33.0	6
Harrisburg, Pa	87	2.7	2.3	2.6	3.1	4.5	4.6	4.2	3.8	3.6	3.4	2.7	3.0	39.6	17
Hatteras, N. C	2	6.1	4.4	6.3	4.8	4.4	4.8	6.3	6.5	6.6	6.5	5.0	5.8	68.4	18
Helena, Mont	75	1.3	0.7	0.7	1.1	1.5	2.4	1.1	0.7	1.1	1.0	0.5	1.0	13.3	10
Huron, S. Dak	56	0.4	0.6	0.7	2.6	3.1	4.1	3.6	3.0	1.5	1.3	0.5	0.7	21.6	10
Indianapolis, Ind.	12	3.1	3.4	3.8	3.4	3.9	4.9	4.5	3.6	2.7	3.0	3.7	3.2	43.2	22
Indianola, Tex	.....	2.3	1.9	2.6	1.8	3.3	2.6	2.3	3.9	7.0	3.7	3.1	3.1	38.7	15
Jacksonville, Fla.	56	3.1	2.9	3.6	2.9	4.2	6.1	6.2	6.7	8.1	5.7	2.7	3.0	55.3	22
Jupiter, Fla	1	3.8	2.9	2.1	2.2	6.9	7.4	4.9	5.6	10.0	6.9	2.9	2.4	58.0	5
Kansas City, Mo	81	1.3	1.7	2.1	3.2	4.4	5.1	3.9	4.2	4.1	3.8	2.3	1.5	37.9	15
Keeler, Cal	20	0.2	0.4	0.2	0.3	0.4	0.2	0.1	0.2	0.3	0.3	0.4	0.4	3.3	8
Keokuk, Iowa	56	1.7	1.7	2.1	2.9	4.0	4.9	4.2	3.1	3.5	3.1	2.0	1.9	35.9	20
Key West, Fla	46	2.1	1.7	1.2	1.3	3.3	4.1	4.2	5.1	7.5	5.3	2.5	1.7	40.1	21
Knoxville, Tenn	71	5.6	5.2	5.7	5.0	3.8	4.3	4.3	4.2	3.0	3.0	3.9	4.0	52.9	21
Lacrosse, Wis	61	1.3	1.1	1.7	2.0	3.1	4.5	4.4	3.6	4.5	2.4	1.7	1.4	31.8	20
Las Animas, Colo.	.....	0.3	0.3	0.6	1.5	2.2	1.8	1.7	1.7	0.6	0.5	0.2	0.5	13.1	11
Leavenworth, Ks.	50	1.4	1.5	2.2	3.4	5.4	5.2	4.2	4.4	3.5	3.5	2.2	1.5	38.4	22
Little Rock, Ark.	54	5.2	5.9	4.9	4.8	5.2	4.3	3.8	3.9	3.2	2.4	5.5	4.3	54.2	13
Los Angeles, Cal.	66	3.9	4.0	2.2	1.3	0.3	0.1	T	0.1	T	0.7	1.6	3.7	18.1	21
Louisville, Ky	103	4.1	4.4	4.3	4.2	3.7	4.3	3.8	3.8	2.9	3.0	4.2	3.9	46.9	21

NORMAL PRECIPITATION—(INCHES AND TENTHS)—Continued.

Stations.	Gauge above ground.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	No. of years.
	Feet.	*Ins.*	*Ins.*	*Ins.*	*Ins.*	*Ins.*	*Ins.*	*Ins.*	*Ins.*	*Ins.*	*Ins.*	*Ins.*	*Ins.*	*Ins.*	
Lynchburg, Va...	76	4.3	3.6	4.0	3.3	3.8	3.6	3.8	4.1	3.8	3.2	3.1	3.7	44.5	20
Mackinaw City...	.....	3.6	2.6	1.2	1.3	2.2	2.2	2.8	2.3	2.1	2.7	2.5	2.7	28.5	7
Manchester, N. H.	68	3.9	3.9	2.8	3.0	3.5	2.8	3.6	4.2	3.5	3.6	3.6	3.8	42.1	10
Maginnis (Fort)..	.....	1.8	1.3	1.6	1.2	1.5	2.9	0.9	1.4	1.4	1.1	0.8	0.7	16.7	9
Marquette, Mich..	58	1.8	1.7	1.6	2.0	2.6	3.7	3.1	3.1	4.2	3.3	2.5	2.3	32.5	21
Memphis, Tenn...	100	5.8	5.8	5.8	5.8	3.8	5.0	3.2	3.8	3.2	3.1	4.8	3.9	53.8	21
Milwaukee, Wis..	100	2.2	1.9	2.7	2.7	3.2	3.9	3.3	2.9	2.8	2.5	2.1	2.0	32.2	22
Mobile, Ala	81	5.0	4.7	7.4	5.0	4.5	6.1	6.5	6.6	5.1	3.1	4.4	4.5	62.7	21
Montgomery, Ala.	60	4.9	5.5	6.3	5.1	4.2	4.9	4.2	3.8	3.1	2.6	3.6	4.8	52.9	19
Montrose, Colo ...	34	0.6	0.4	0.5	1.3	0.6	0.2	0.9	1.4	0.9	0.9	0.7	0.8	9.5	7
Moorhead, Minn..	44	0.8	0.9	0.8	2.0	2.5	4.1	4.2	2.8	2.5	2.2	0.9	0.8	24.3	11
Nantucket, Mass.	38	4.0	3.2	3.5	3.9	3.9	3.1	2.7	2.7	3.2	3.4	3.6	4.7	42.0	16
Nashville, Tenn...	83	5.4	5.5	5.5	4.8	3.5	4.3	4.2	3.6	3.9	2.7	4.1	3.6	51.1	21
New Haven, Conn.	110	4.3	4.3	4.5	3.7	3.4	3.2	5.3	5.4	3.9	4.1	3.9	3.6	49.7	21
New London, Conn	58	4.4	4.1	4.9	3.8	3.5	3.3	4.3	5.0	3.6	4.6	4.1	3.5	49.1	21
New Orleans, La..	111	5.3	4.5	5.5	5.1	5.1	6.7	6.3	6.0	4.6	3.4	4.4	4.5	61.8	21
New York, N. Y...	.....	4.0	3.9	4.1	3.4	3.0	3.3	4.5	4.8	3.8	3.5	3.6	3.3	45.2	22
Norfolk, Va	80	3.8	3.8	4.7	4.3	4.0	4.4	5.6	6.5	4.9	4.0	3.0	3.7	52.7	22
North Platte, Nebr.	34	0.5	0.4	0.7	2.2	2.9	3.5	2.9	2.5	1.5	1.1	0.4	0.6	19.1	17
Olympia, Wash...	33	8.3	7.1	5.0	3.4	2.3	1.6	0.7	0.7	2.8	4.5	6.5	9.5	51.4	15
Omaha, Nebr	.....	0.7	0.7	1.5	3.0	4.4	5.7	5.0	3.2	3.2	2.8	1.2	1.0	32.6	22
Oswego, N. Y	83	3.1	2.5	2.8	2.1	2.5	3.3	3.4	2.5	2.8	3.4	3.3	3.4	35.0	22
Palestine, Tex....	.....	5.2	3.7	4.1	4.8	5.9	3.5	2.9	2.5	3.2	3.4	4.5	3.4	47.1	10
Parkersb'g, W. Va.	67	3.9	3.7	3.2	3.2	3.4	3.7	5.5	4.2	3.6	2.3	3.3	2.1	42.1	7
Pensacola, Fla....	80	4.8	3.9	5.6	3.6	3.4	5.9	6.7	8.1	5.2	3.5	4.4	4.4	59.9	13
Philadelphia, Pa.	166	3.4	3.3	3.5	2.9	3.0	3.3	4.5	4.9	3.3	3.0	3.1	2.7	40.9	22
Pittsburg, Pa	124	3.2	2.9	2.9	2.7	3.4	3.6	5.0	3.3	2.5	2.6	2.6	2.9	37.8	21
Port Angeles, Wash	.....	5.6	3.3	2.1	1.9	1.0	1.4	0.5	0.8	2.1	2.9	3.5	5.4	29.2	9
Port Huron, Mich.	63	2.1	2.5	2.9	2.1	3.2	3.4	2.6	2.7	2.4	2.9	2.8	2.3	32.2	17
Portland, Me	71	3.7	3.7	3.5	3.0	3.3	3.4	3.8	3.6	3.2	4.0	4.1	3.6	42.7	21
Portland, Oregon.	.....	7.2	6.5	5.9	3.3	2.6	1.9	0.6	0.6	1.7	4.0	6.0	8.0	48.3	22
Prescott, Ariz	.....	1.4	1.8	1.6	0.9	0.6	0.2	3.0	2.9	1.2	0.7	0.8	1.8	16.1	20
Raleigh, N. C	2	2.9	3.7	4.6	3.2	4.6	4.4	5.4	6.8	4.0	3.3	2.6	2.8	52.2	12–15
Rapid City, S. D.	46	0.4	0.9	1.0	2.3	4.4	3.9	1.9	1.6	0.6	0.8	0.3	0.3	18.3	6
Red Bluff, Cal	44	4.4	3.9	3.2	2.4	1.2	0.5	0.0	0.0	0.6	1.5	3.0	5.1	25.9	14
Rio Grande City..	.....	1.1	0.9	1.0	1.2	2.3	2.4	1.4	2.6	3.5	2.0	0.9	1.0	20.3	30
Rochester, N. Y...	.....	3.2	2.7	3.1	2.5	2.9	3.3	3.1	3.0	2.5	3.2	2.9	2.8	35.2	22
Roseburg, Oregon.	47	6.4	5.1	3.3	2.6	1.9	1.4	0.5	0.3	0.8	2.8	3.6	6.5	34.9	15
Sacramento, Cal ..	57	3.7	2.9	2.9	1.8	0.7	0.1	T	T	0.1	0.8	2.0	4.6	19.6	42
St. Louis, Mo	99	2.4	3.1	3.0	3.3	4.0	5.1	3.4	2.6	3.2	2.6	3.0	2.3	38.0	21
St. Paul, Minn....	108	1.0	0.9	1.4	2.3	3.3	4.3	3.3	3.7	3.1	1.9	1.2	1.3	27.6	22
St. Vincent, Minn.	.....	0.6	0.6	0.6	1.3	1.9	3.7	2.7	2.4	2.1	1.9	0.6	0.7	19.1	12
Salt Lake, Utah..	.....	1.6	1.8	2.1	2.0	2.0	1.2	0.9	1.4	1.0	1.8	1.5	2.1	18.9	24
San Antonio, Tex.	50	1.8	2.4	2.1	2.7	3.0	3.2	2.3	3.3	4.0	2.0	2.5	2.5	30.6	21
San Diego, Cal....	66	1.6	2.1	1.0	1.0	0.3	0.1	0.1	0.1	0.1	0.3	1.0	2.1	9.8	42
Sandusky, Ohio ..	55	2.2	3.2	2.6	2.4	3.4	4.2	3.1	3.3	3.0	2.9	3.1	2.5	35.5	15
San Francisco, Cal	101	5.0	3.7	3.2	1.9	0.7	0.1	T.	T.	0.2	0.9	2.8	5.3	23.6	42
Santa Fe, N. Mex.	29	0.6	0.9	0.7	0.8	0.8	1.2	2.7	2.7	1.6	1.0	0.9	0.8	14.6	33
Savannah, Ga	56	3.3	3.0	3.8	3.7	2.9	6.8	5.3	7.6	5.6	3.7	2.1	3.9	51.7	22
Shreveport, La ...	76	5.0	4.5	4.6	5.4	4.3	3.6	3.7	2.1	4.3	3.4	4.8	4.9	50.8	20
Sill (Fort), Ok. T.	3	1.1	1.3	1.5	2.8	4.5	4.2	3.1	3.2	2.9	2.7	1.5	1.9	30.8	22
Spokane, Wash ..	92	2.5	2.0	1.3	1.1	1.2	2.0	0.7	0.4	1.0	1.7	1.4	2.6	18.1	10
Springfield, Ill ...	64	2.3	3.6	2.6	3.0	5.0	5.1	2.5	2.5	3.3	3.3	3.1	2.5	39.1	13
Springfield, Mo...	74	2.6	4.2	3.2	3.6	6.4	4.6	4.3	4.8	3.1	3.6	4.1	2.1	47.5	6
Stanton, N. Mex...	2	0.7	0.8	1.1	0.7	1.0	1.9	3.1	4.0	2.3	1.5	0.8	1.1	19.0	17
Sully (Fort), S. Dak	2	0.4	0.4	1.1	1.9	2.0	3.2	2.8	2.0	1.0	0.6	0.4	0.5	17.0	28
Tatoosh, Wash...	1	13.1	8.1	7.9	5.3	4.0	4.1	2.1	2.8	5.7	8.9	11.9	14.4	89.0	9
Toledo, Ohio	113	2.3	2.1	2.2	2.2	3.2	3.6	3.4	2.8	2.4	2.6	2.9	2.4	31.7	21
Valentine, Nebr ..	.....	0.5	0.8	1.4	2.2	3.4	3.5	3.4	2.3	1.2	1.0	0.5	0.4	20.4	7
Vicksburg, Miss ..	58	5.6	4.8	6.6	6.3	5.0	4.3	4.1	3.5	3.9	2.9	5.1	4.9	57.2	20
Wallawalla, Wash	56	1.9	2.0	1.4	1.2	1.9	1.4	0.5	0.3	0.9	1.4	1.8	2.2	17.8	23
Washington, D. C.	42	3.5	3.3	4.4	3.2	3.9	4.3	4.8	4.3	3.9	3.3	2.8	3.0	44.6	22
Wilmington, N. C.	76	3.9	3.2	4.2	3.1	4.2	5.9	7.2	7.8	6.7	4.1	2.6	3.2	56.3	21
Winnemucca, Nev.	.....	1.1	1.0	0.9	0.9	0.9	0.8	0.1	0.1	0.3	0.5	0.6	1.4	8.9	20
Woods Holl, Mass.	39	3.7	3.7	4.9	4.2	3.0	2.7	3.3	4.1	3.4	4.1	4.8	3.3	44.9	13
Yankton, S. Dak ..	.....	0.6	0.8	1.2	3.1	4.2	4.3	3.7	3.1	2.7	1.4	0.6	0.9	26.8	19
Yuma, Ariz.....	.....	0.4	0.6	0.2	0.1	T.	T.	0.1	0.4	0.1	0.3	0.3	0.6	3.2	16

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SNOWFALL OF THE UNITED STATES.

In the early years of the Signal Service snow was melted and then measured in the same manner as rain; no measurements were made of the depth of unmelted snow, however, and but little attention appears to have been given to the subject until the early part of 1883, when its importance was recognized by the issuance of General Orders No. 25, as follows:

* * * To determine the amount of snowfall, take the cylinder of the rain gauge (or the overflow attachment), invert it, and plunge it vertically into the *level* snow until it reaches either the ground or the upper surface of the snow that fell before the last preceding telegraphic observation; dig away the surrounding snow, slip a sheet of tin under the lower end of the cylinder, lift it up, and put the cylinder, open end upward, in a warm place where the snow will quickly melt; then measure the depth of the water. The actual depth of water in the cylinder will be recorded and reported. * * *

Special instructions will be given for measuring snowfall at stations where it cannot be done in the regular way. * * *

The instructions in force prior to the above date are silent as to the means to be adopted in ascertaining the amount of precipitation from snowfall. It may be said that, as a rule, observers melted the snow caught in the collector of the rain gauge and measured the resulting water in the same manner as rainfall, note being made, however, of the fact of its being melted snow. They were also authorized, in cases where it was impracticable to melt the snow, to record one-tenth of its depth as the equivalent in water of the unmelted snow.

Snow gauges (galvanized iron cylinders, 2 feet high and 8 inches in diameter) were first put into use in the fall of 1884, and observers were directed to measure the catch of unmelted snow and afterwards the depth of melted snow. No provision was made until December, 1887, for rejecting the catch of the gauge when the snow drifted badly. On the latter date authority was given in all cases where there was reason to believe that the snow gauge had not caught the entire fall of snow, to take the average depth on the level as the official record, using the same ratio as in the past—viz, 1 to 10 in determining the amount of precipitation that should be recorded. No departure from this ratio for different kinds of snow or for snow at different seasons of the year has ever been made.

In addition to the foregoing, an entirely independent series of measurements of the depth of snowfall for each twenty-four hours was instituted in the spring of 1884. The number of inches and tenths of inches of snow which fell during the twenty-four hours was determined as accurately as possible by measurements made at points where the snow appeared to be of average depth. From these data the table which follows was prepared. The table presents for the first time in the history of the meteorological service of the United States a record of the average distribution of snowfall, and also a record of the seasonal fall of 1891–92. The normals have been calculated for the seven years ending with May, 1891. They can not be considered, however, as being other than approximate values on account of the shortness of the record.

The use of the word "normal" to express the conditions which obtain at stations in the extreme southern portions of the country where snowfall is an *abnormal* feature may be misleading. The record at Galveston, for example, shows the normal for the year to be 1.1 inches, while

as a matter of fact snow has fallen but twice in that city from 1884 to 1891, the aggregate of both falls being 7½ inches.

Another preliminary to be noted in any study of the snowfall data here given, is the fact that the meteorological stations are, for the most part, in large cities and towns, and therefore represent the snowfall of the valley or plain as distinguished from the snowfall of the mountain or plateau country. There are also small errors of uncertain sign in the records of individual stations due to the peculiar environments of the stations, but considering the difficulties in the way of securing accurate measurements in large cities, the records here given agree remarkably well.

The region of greatest snowfall, according to the figures in the table, will be found in northern Michigan. It resembles somewhat a circle of about 200 miles radius, having Marquette, Mich., as its center, with an average annual fall of 132 inches. In the western, southwestern, and southern quadrants of the circle the fall diminishes rapidly towards the circumference, where it is about 60 inches. In the southeastern quadrant, however, it is almost 100 inches (Alpena, Mich.), diminishing rapidly from that depth to 40 inches at Port Huron, Mich. The decrease from northern Michigan southward is very rapid, being about an inch in every 4 miles between Chicago, Ill., and Marquette, Mich., and 1 inch in every 12 miles from Chicago to Cairo, Ill. The snowfall at points on the southwestern borders of lakes Michigan, Huron, and Erie is markedly deficient as compared with stations less than 100 miles distant to the north or northeast. The difference between the snowfall at Port Huron and Alpena, Mich., has already been mentioned. The difference between Cleveland, Ohio, and Erie, Pa., is 28 inches; between Erie and Buffalo, N. Y., 10 inches; Buffalo and Rochester, N. Y., 6 inches, and Rochester and Oswego, N. Y., 9 inches. The snow-bearing winds for these points are uniformly from some point intermediate between west and southeast, or generally over land surfaces; but with increase of latitude they take on more of a northerly component.

The average annual fall at stations on the Mississippi River varies from 1.8 inches at Vicksburg, Miss., to 37.4 inches at St. Paul, Minn., the greatest increase with latitude being between St. Louis, Mo., and Keokuk, Iowa, where it is slightly over 12 inches, or an inch in about 11 miles.

The snowfall of the plains west of the Mississippi River is generally less than for points of the same latitude on the river, but it increases as we approach the foot-hills of the Rocky Mountains and similarly the fall at upper Missouri River stations, as Bismarck and Fort Buford, N. Dak., is less than stations much farther south on the Mississippi River. The average annual fall for the greater portion of the Rocky Mountain region can not be given, even approximately. In regard to the fall of the middle latitudes of the United States it may be said that the line of 20 inches which enters on the east about midway between Washington, D. C., and Lynchburg, Va., divides the country as far west as Dodge City, Kans., into two almost equal parts. Below this line the snowfall diminishes quite rapidly, but does not wholly disappear, except along the Atlantic coast south of Charleston, S. C., southern Alabama and Louisiana, and the extreme southern portion of Texas. The Pacific coast from San Francisco to San Diego, Cal., is practically free from snow, and southern California and southern Arizona, as a whole, are also generally free from snow, except in the mountain regions. Probably the greatest snowfall in the United States of which we have a record, occurs on the mountain summits of eastern California and western Nevada. The record kept at Summit, Cal., on the Central Pacific Railway, elevation 7,017 feet, for the ten years ending with 1887, gives an average annual fall of 378 inches.

In 1891–1892, there was a general deficiency of snowfall in the North Pacific coast region and also to the eastward as far as central Montana. There was also an extensive area of deficient snowfall in the Upper Mississippi Valley and Upper Ohio Valley and the lake region extending from Pittsburg and Erie, Pa., on the east, to Concordia, Kans., Yankton, S. Dak., and Moorhead, Minn., on the west. Another and smaller area covered northern New England.

Perhaps the most remarkable features of the season's snowfall were the unusual storms of March 16–17, in western and central Tennessee, and of April and May in eastern Wyoming, northwestern Nebraska, and the southern portion of South Dakota. Snow began falling at 2:30 p. m., March 16, at Memphis, and continued falling till the morning of the 17th, when there was 18

inches of snow on the level—an unprecedented depth for this locality. Business was generally suspended and all ordinary means of transportation were completely disorganized.

The maximum depth of snowfall in twenty-four hours is given in the column on the extreme right. Of these 29 or 26 per cent occurred in March; 24 or 21 per cent occurred in December, and the remaining 60 were distributed as follows: 22 each in January and February; 8 in November; 7 in April, and 1 in May. The data are for the period 1884–1892, except at stations established subsequent to the first-named year. Table I, page 11, gives the dates at which observations began at all stations.

SNOWFALL FOR THE WINTER OF 1891-'92

Number.	Station.	Normal snowfall October-May.	October.		November.		December.	
			Snowfall.	Departure from normal.	Snowfall.	Departure from normal.	Snowfall.	Departure from normal.
		Inches.	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*
1	Abilene, Tex	4.8	0	0	0	0	0.0	— 1.1
2	Albany, N. Y	58.6	T.	0	1.0	— 4.8	1.0	—10.6
3	Alpena, Mich	98.5	T.	+ 0.4	1.0	— 8.5	1.0	—18.1
4	Assiniboine, Mont	36.7	3.5	+ 2.2	0.9	— 2.4	0.5	— 5.3
5	Atlanta, Ga	3.0	0	0	0	0	0	— 1.0
6	Atlantic City, N. J	16.2	0	0	1.1	+ 0.9	0	— 2.7
7	Augusta, Ga	1.1	0	0	0	0	0	0
8	Amarillo, Tex							
9	Baker City, Oregon		0	0	5.9		39.2	
10	Baltimore, Md	24.7	0	0	T.	— 0.2	T.	— 4.6
11	Bismarck, N. Dak	34.5	0.3	+ 0.2	10.4	+ 5.5	4.8	— 2.3
12	Block Island, R. I	16.0	0	0	0	0	0	— 2.7
13	Boston, Mass	41.8	T.	0	0	— 1.3	0	— 5.6
14	Buffalo, N. Y	64.9	T.	0	6.9	— 0.6	1.1	—12.6
15	Buford, Fort, N. Dak	33.0	14.0	+10.2	12.7	+ 8.1	0.9	— 3.1
16	Cairo, Ill	9.1	0	0	0.5	0	0	— 0.9
17	Carson City, Nev	48.0				— 0.5	15.9	+ 1.3
18	Canby, Fort, Wash							
19	Charlotte, N. C	4.5						
20	Charleston, S. C	0.0					0	0
21	Chattanooga, Tenn	4.9			T.	— 0.1		— 2.2
22	Cheyenne, Wyo	41.1	T.	— 1.9	8.5	+ 4.0	5.7	+ 1.5
23	Chicago, Ill	34.1	0		6.8	+ 5.0	5.5	— 2.0
24	Cincinnati, Ohio	14.1			0.1	— 1.0	0	— 2.3
25	Cleveland, Ohio	63.1	T.	0	6.2	+ 3.4	0	— 6.5
26	Columbus, Ohio	25.0	0		1.0	— 1.0	T.	— 4.3
27	Concordia, Kans	23.3	0		0.5	— 0.6	3.0	+ 1.5
28	Corpus Christi, Tex							
29	Davenport, Iowa	30.1	0		4.6	+ 3.3	5.0	— 0.8
30	Denver, Colo	42.8	T.	— 2.4	8.5	+ 4.3	17.5	+11.4
31	Detroit, Mich	40.5	0		6.8	+ 4.8	5.4	— 2.7
32	Des Moines, Iowa	38.5	0	— 0.3	3.3	+ 0.4	8.3	— 0.2
33	Dodge City, Kans	14.9	0	— 0.1	T.	— 1.4	0.5	— 1.4
34	Dubuque, Iowa	44.0	0		2.5	+ 0.8	2.0	— 9.4
35	Duluth, Minn	57.9	T.	— 0.2	6.0	— 5.2	7.0	+ 0.3
36	Eastport, Me	56.8	T.	— 0.2	2.2	+ 0.3	1.8	— 5.0
37	El Paso, Tex	3.2	0		0	— 0.8	0	— 0.5
38	Erie, Pa	54.4	0	— 0.6	5.0	— 5.6	2.0	— 7.5
39	Fort Smith, Ark	3.0	0		0		0	— 0.4
40	Fresno, Cal							
41	Grand Haven, Mich	49.2	0	— 0.1	8.2	+ 3.9	4.5	— 5.6
42	Galveston, Tex	1.1						
43	Green Bay, Wis	87.0	0	— 2.0	3.8	— 6.8	0.7	—13.9
44	Harrisburg, Pa				1.0		T.	
45	Hatteras, N. C							
46	Helena, Mont	52.0	15.5	+11.3	5.3	+ 0.9	3.8	— 4.8
47	Huron, S. Dak	25.0	0		7.5	+ 4.9	2.4	— 4.0
48	Indianapolis, Ind	21.9	0		0.9	— 0.6	0.4	— 4.4
49	Jacksonville, Fla							
50	Jupiter, Fla							
51	Kansas City, Mo		T.	0	2.0		3.1	
52	Keeler, Cal	2.5						
53	Keokuk, Iowa	31.9	T.	0	1.5	— 0.2	4.6	— 2.0
54	Kitty Hawk, N. C	0.1						
55	Key West, Fla							
56	Knoxville, Tenn	9.2						— 4.3
57	La Crosse, Wis	38.2		— 0.3	1.3	— 2.6	0.9	— 6.9
58	Lander, Wyo		15.0		7.6		5.6	
59	Leavenworth, Kans	24.1	0		1.8	— 0.2	4.0	+ 0.2
60	Lexington, Ky							

AND DEPARTURES FROM THE NORMAL.

Number.	January.		February.		March.		April.		May.		Total.	Maximum fall in 24 hours.
	Snowfall.	Departure from normal.	Snowfall.	Departure from normal.	Snowfall.	Departure from normal.	Snowfall.	Departure from normal.	Snowfall.	Departure. from normal.		
	Inches.	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*
1	1.5	− 0.2	0	−1.7	1.1	+ 0.8	0	0	0	0	2.6	8.0
2	10.0	− 7.3	9.0	+1.0	5.2	− 9.0	T.	−1.7	0	− 0.8	25.2	23.0
3	11.3	−19.8	15.3	−5.5	5.5	− 5.7	0.1	−5.5	0	− 0.8	34.2	11.7
4	3.4	− 4.4	2.6	−7.3	3.2	− 3.1	7.5	+5.8	2.2	+ 1.6	23.8	14.0
5	1.0	+ 0.8	0	−1.8	0.3	+ 0.3	0	0	0	0	1.3	6.0
6	2.0	− 0.8	0.1	−5.0	1.6	− 3.2	0.6	0	0	0	5.4	9.4
7	0.5	+ 0.3	0	−0.8	0	− 0.1	0	0	0	0	0.5	6.0
8	4.5	.....	T.	.....	6.5	.....	0	0	0	0	.....	.....
9	2.0	.....	1.6	.....	9.5	.....	1.0	.....	0	0	59.2	17.0
10	14.5	+10.2	4.2	−3.3	25.6	+18.9	T.	−1.4	0	0	44.3	15.0
11	3.0	− 3.9	6.1	−0.3	2.6	− 3.9	10.8	+9.4	9.7	+ 8.5	47.4	9.5
12	2.0	− 0.5	0	−4.9	10.2	+ 6.3	0	−2.0	.....	.....	12.2	7.3
13	12.0	− 0.4	11.5	+3.4	20.0	+ 8.7	0	−3.1	.....	.....	43.5	16.0
14	46.6	+30.2	10.8	−2.9	14.1	+ 5.3	1.4	−3.3	0	− 0.1	80.9	16.5
15	0.9	− 6.0	3.7	−2.0	T.	− 3.8	0	−3.9	1.1	+ 0.8	33.3	10.3
16	16.5	+12.9	0	−2.5	11.7	+10.1	.....	.....	.....	.....	28.7	9.9
17	2.0	−13.8	2.0	−9.4	5.4	+ 3.6	0.5	−2.3	0.2	− 0.9	26.0	20.3
18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.9
19	2.0	+ 0.9	0	−1.3	0	− 1.6	.....	.....	.....	.....	2.0	7.2
20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.0	T.
21	10.8	+10.4	T.	−1.9	1.2	+ 0.9	.....	.....	.....	.....	12.0	12.0
22	9.8	+ 4.7	11.7	+5.3	5.8	− 3.4	11.6	+5.4	15.1	+11.6	68.2	13.0
23	15.3	+ 4.0	2.8	−4.2	3.1	− 2.2	T.	−1.2	.....	.....	33.5	11.1
24	9.8	+ 6.2	2.8	−1.7	3.0	+ 1.1	T.	−0.7	.....	.....	15.7	7.0
25	20.5	+12.5	8.0	+4.8	9.3	+ 5.7	0.5	−1.3	.....	.....	44.5	6.0
26	12.5	+ 6.1	3.5	−1.2	1.7	− 2.8	0.1	−3.0	.....	.....	18.8	7.7
27	6.5	− 1.6	5.0	+1.3	1.5	− 6.2	0	−0.9	.....	.....	16.5	12.0
28	T.	− 0.3	.....	.....	.....	.....	.....	.....	.....	.....	T.	.....
29	11.0	+ 1.6	0.1	−6.6	0.7	− 6.0	0	−0.2	.....	.....	21.4	8.6
30	4.5	− 1.5	8.7	+4.4	6.7	− 4.8	6.4	−1.8	0	− 0.1	52.3	23.0
31	17.2	+ 6.6	5.4	−0.8	4.6	− 3.3	T.	−5.7	T.	.....	38.6	24.5
32	10.4	− 2.1	6.4	+0.5	2.6	− 5.4	0.9	+0.5	T.	.....	31.9	17.0
33	2.5	− 1.9	4.0	+0.8	14.7	+10.9	0	−0.1	.....	.....	21.7	10.0
34	14.5	+ 3.0	3.0	−3.6	2.0	−10.6	5.5	+5.3	.....	.....	29.5	12.5
35	5.2	− 6.9	11.4	−0.6	19.0	+ 6.8	T.	−2.7	T.	− 0.8	48.6	12.0
36	15.2	− 0.8	17.3	+2.9	13.6	+ 1.8	0	−5.6	0	− 0.1	50.1	8.5
37	0	− 1.4	0	−0.2	0	− 0.3	.....	.....	.....	.....	0	6.0
38	27.0	+14.2	2.0	−7.8	6.5	− 1.7	1.0	−1.8	.....	.....	43.5	16.0
39	6.0	+ 5.2	0	−1.1	3.2	+ 2.5	0	.....	.....	.....	9.2	8.0
40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
41	24.2	+11.0	6.6	−7.2	4.6	− 1.7	0.1	−1.1	.....	.....	48.2	.....
42	.....	− 1.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
43	15.1	− 9.8	17.1	−5.0	8.5	− 3.0	0	−1.3	.....	.....	45.2	29.0
44	9.5	.....	0.7	.....	13.5	.....	T.	.....	.....	.....	24.7	10.0
45	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	0.3
46	11.0	+ 0.8	1.2	−9.4	3.0	− 7.8	1.1	−1.3	5.0	+ 4.5	[1]46.1	.....
47	2.8	− 2.3	5.5	−0.2	6.9	+ 1.8	1.1	+1.1	0	− 0.1	26.2	7.4
48	10.9	+ 4.8	2.7	−0.4	3.1	− 1.5	T.	−1.8	.....	.....	18.0	5.0
49	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
51	9.8	.....	T.	.....	5.7	.....	T.	.....	.....	.....	20.6	6.6
52	.....	− 0.3	.....	− 0.8	0.9	− 0.4	.....	− 0.1	.....	.....	0.9	1.6
53	7.7	− 2.8	1.6	− 4.4	3.7	− 2.6	0	− 0.8	.....	.....	19.1	7.5
54	.....	.....	.....	− 0.1	4.0	+ 4.0	.....	.....	.....	.....	4.0	4.0
55	0	0	0	0	0	0	0	0	0	0	0	.....
56	2.0	+ 0.5	0.4	− 1.5	3.0	+ 1.6	.....	.....	.....	.....	5.4	15.1
57	3.1	− 8.8	8.2	+ 1.8	3.8	− 3.2	3.8	+ 2.9	.....	.....	21.1	12.0
58	7.5	.....	4.5	.....	12.5	.....	3.9	.....	26.8	.....	83.4	.....
59	12.6	+ 5.3	0.3	− 4.9	2.3	− 3.3	T.	− 0.2	.....	.....	21.0	5.5
60	6.6	.....	0	.....	14.9	.....	.....	.....	.....	.....	21.5	5.6

[1] +0.2 inches in September not in the table.

SNOWFALL FOR THE WINTER OF 1891-'92, AND

Number.	Stations.	Normal snowfall, October-May.	October.		November.		December.	
			Snowfall.	Departure from normal.	Snowfall.	Departure from normal.	Snowfall.	Departure from normal.
		Inches.	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*
61	Little Rock, Ark	3.5			1.5	+ 1.3	0	− 0.2
62	Louisville, Ky	11.5			0.8	+ 0.2	T.	− 1.4
63	Lynchburg, Va	17.8			4.5	+ 3.9	0	− 4.2
64	Manchester, N. H	71.7		− 0.6	3.5	+ 1.2	1.5	− 9.8
65	Manistee, Mich		0		7.5		3.5	
66	Marquette, Mich	131.6	2.3	− 4.0	17.4	− 0.6	22.1	− 6.3
67	McKinney, Fort, Wyo		6.1		20.6		7.3	
68	Memphis, Tenn	4.7			0.5	+ 0.3		− 1.0
69	Meridian, Miss							
70	Miles City, Mont							
71	Milwaukee, Wis	50.1			2.4	+ 0.2	1.6	− 8.1
72	Mobile, Ala							
73	Mongomery, Ala	2.2	0					− 1.6
74	Montrose, Colo	21.5				− 2.4	18.0	+12.1
75	Moorhead, Minn	3.3	0.8	+ 0.3	5.2	− 0.2	5.0	− 0.9
76	Nashville, Tenn	7.4				− 0.1		− 0.5
77	Nantucket, Mass	17.6			0.5	+ 0.3		− 2.5
78	New Haven, Conn	30.5	T.		T.	− 0.5	0	− 5.1
79	New London, Conn	32.5	2.5	+ 2.1	T.	− 0.1	0	− 4.3
80	New Orleans, La							
81	New York, N. Y	34.0			T.	− 0.1	T.	− 8.3
82	Norfolk, Va	6.5			6.7	+ 5.7		− 1.4
83	Northfield, Vt	105.9	T.	− 0.1	3.0	− 4.3	2.8	−15.8
84	North Platte, Nebr	30.3		− 0.2	0.1	− 3.6	4.6	+ 0.5
85	Oklahoma City, Okla				T.			
86	Olympia, Wash	8.1			T.	0	1.8	+ 0.8
87	Omaha, Nebr	24.4			T.	− 2.7	3.8	− 0.8
88	Oswego, N. Y	80.2	T.	0	6.7	− 3.7	1.6	−15.2
89	Palestine, Tex	3.7				− 1.5		
90	Parkersburg, W. Va				3.7		T.	
91	Pensacola, Fla	0.3						− 0.1
92	Philadelphia, Pa	17.9			T.	− 0.1		− 3.6
93	Pierre, S. Dak		T.		3.6		3.6	
94	Pittsburg, Pa	30.1	T.	0	2.9	+ 1.4	0.4	− 7.7
95	Port Angeles, Wash	21.5			T.	0	5.2	− 0.1
96	Port Huron, Mich	41.3	0	− 0.2	5.4	+ 1.4	7	− 7
97	Portland, Me	67.6			T.	− 2.6	2.0	− 8.4
98	Portland Oregon	18.8				− 0.2	0.7	− 4.4
99	Pueblo, Cal	32.5	T.	− 2.5	T.	− 4.4	11.2	+ 5.7
100	Raleigh, N. C				2.0		0	− 0.1
101	Rapid City, S. Dak	37.8	0.3	+ 0.2	0.5	− 2.5	0.3	− 2.4
102	Red Bluff, Cal	1.3					2.5	+ 2.5
103	Rochester, N. Y	71.3	0.1	− 0.1	9.7	+ 2.8	4.7	− 9.2
104	Rosebury, Oregon	9.2				− 0.2		− 0.2
105	Red Wing				1.3		8.3	
106	Sacramento, Cal							
107	St. Louis, Mo	19.2				− 0.8		− 4.1
108	St. Paul, Minn	37.4		− 0.3	8.0	+ 2.0	5.0	− 2.5
109	St. Vincent, Minn	40.1	1.0	− 0.6	8.0	+ 1.9	18.0	+ 8.7
110	Salt Lake City, Utah	51.6	3.3	+ 2.7	T.	− 4.1	21.0	+10.2
111	San Antonio, Tex	0.3						
112	San Diego, Cal							
113	Sandusky, Ohio	30.1			1.5	− 0.4	0	− 8.9
114	San Francisco, Cal	0.5	0					
115	Santa Fé, N. Mex	29.6	0	− 0.1	2.5	− 1.9	15.0	+ 6.9
116	Sault de Ste. Marie, Mich		T.		14.0		16.8	
117	Savannah, Ga							
118	Shreveport, La	1.1						
119	Sioux City, Iowa		T.		4.8		3.3	
120	Southport, N. C							

DEPARTURES FROM THE NORMAL—Continued.

Number.	January.		February.		March.		April.		May.		Total.	Maximum fall in 24 hours.
	Snowfall.	Departure from normal.	Snowfall.	Departure from normal.	Snowfall.	Departure from normal.	Snowfall.	Departure from normal.	Snowfall.	Departure from normal.		
	Inches.	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*
61	4.0	+ 1.7	0	— 0.1	8.0	+ 7.3	.....	.....	.....	.....	13.5	8.0
62	8.0	+ 5.4	0.3	— 2.2	4.2	+ 0.1	.....	— 0.3	.....	.....	13.3	12.3
63	17.2	+13.1	2.4	— 2.9	5.5	+ 1.4	.....	— 0.5	.....	.....	29.6	12.0
64	12.2	— 8.6	24.6	+ 9.2	12.3	— 4.8	.....	— 4.2	.....	.....	54.1	15.5
65	24.9	.....	8.0	.....	6.5	.....	0.2	.....	.....	.....	50.6	7.8
66	27.4	+ 1.4	27.5	+ 6.0	28.9	+ 8.5	2.2	— 6.9	0.9	— 1.0	128.7	17.0
67	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
68	5.5	+ 4.0	0	— 1.7	18.5	+18.2	.....	.....	.....	.....	25.5	18.5
69	0	.....	0	.....	0	.....	.....	.....	.....	.....	.....	2.0
70	3.8	.....	4.5	.....	1.0	.....	1.9	.....	5.9	.....	.....	11.2
71	8.0	— 5.9	10.6	— 2.1	8.7	— 1.4	2.5	+ 1.0	.....	.....	33.8	10.9
72	0.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
73	.....	— 0.2	.....	— 0.4	.....	.....	.....	.....	.....	.....	0	11.0
74	9.0	+ 2.4	7.7	+ 4.7	13.0	+ 9.6	3.5	+ 3.3	.....	.....	51.2	5.5
75	4.0	— 3.4	5.0	— 1.8	3.0	— 2.9	8.0	+ 7.0	1.0	+ 0.7	32.0	14.0
76	0.3	— 2.6	0	— 3.0	21.5	+20.7	.....	.....	.....	.....	21.8	17.1
77	2.0	— 0.5	1.5	— 3.8	11.5	+ 5.8	T.	— 1.4	.....	.....	15.5	11.0
78	14.0	+ 6.1	2.5	— 2.9	13.1	+ 2.7	1.0	— 0.2	.....	.....	30.6	28.0
79	7.1	— 1.3	3.0	— 5.8	10.5	+ 1.4	0.2	— 0.2	.....	.....	23.3	18.0
80	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	T.
81	13.1	+ 4.5	0.5	— 6.9	19.9	+11.1	3.0	+ 2.2	.....	.....	36.5	16.5
82	.....	— 1.1	.....	— 1.2	.....	— 1.4	.....	— 0.4	.....	.....	6.7	17.5
83	16.2	—12.0	19.6	+ 1.6	9.5	—16.6	0	— 7.6	.....	.....	51.1	21.0
84	10.2	+ 5.6	8.7	+ 4.2	5.2	— 5.2	0.4	— 2.4	.....	.....	29.2	12.0
85	5.0	.....	T.	.....	4.5	.....	.....	.....	.....	.....	9.5	5.0
86	T.	.....	.....	— 2.5	.....	.....	.....	.....	.....	.....	1.8	26.0
87	4.5	— 3.2	2.2	— 2.0	9.0	+ 3.9	1.0	+ 0.9	.....	.....	20.5	9.0
88	31.7	+ 8.2	27.7	+10.4	27.9	+17.5	0.5	— 1.3	.....	.....	96.1	16.0
89	2.4	+ 1.5	.....	— 0.3	0.5	+ 0.5	.....	.....	.....	.....	2.9	9.2
90	21.2	.....	10.5	.....	12.0	.....	T.	.....	.....	.....	47.4	18.3
91	0.5	— 0.3	.....	.....	.....	.....	.....	.....	.....	.....	0.5	.....
92	11.2	+ 6.6	T.	— 5.0	8.4	+ 4.2	0.3	— 0.1	.....	.....	19.9	10.0
93	1.0	.....	5.5	.....	3.6	.....	3.0	.....	.....	.....	20.3	7.0
94	8.8	+ 0.9	3.6	— 1.6	12.0	+ 7.0	0.4	— 2.0	.....	.....	28.1	16.5
95	0	— 7.2	0	— 8.8	.....	— 0.2	.....	.....	.....	.....	5.2	17.4
96	13.5	+ 3.9	9.2	+ 0.6	2.3	— 4.8	4.4	+ 0.6	.....	.....	41.8	12.4
97	13.1	— 8.3	16.8	+ 3.8	8.1	— 8.3	0	— 3.8	.....	.....	40.0	21.0
98	0	— 8.3	0	— 4.4	.....	— 0.8	.....	.....	.....	.....	0.7	14.0
99	1.9	— 6.9	1.0	— 2.2	10.5	+ 5.2	4.2	+ 1.4	.....	.....	28.8	10.8
100	2.6	.....	T.	.....	T.	.....	.....	.....	.....	.....	4.6	10.0
101	8.3	+ 4.1	2.8	— 9.1	13.0	+ 3.1	12.0	+ 9.5	13.7	+10.2	50.9	10.0
102	.....	— 1.0	.....	.....	.....	.....	.....	.....	.....	.....	2.5	4.5
103	26.4	+ 8.3	10.3	— 6.4	25.1	+13.9	0.7	— 3.6	.....	.....	77.0	9.8
104	.....	— 3.6	.....	— 4.8	.....	— 0.4	.....	.....	.....	.....	0	10.5
105	1.6	.....	8.4	.....	6.5	.....	T.	.....	T.	.....	26.1	.....
106	.....	— 0.6	.....	.....	.....	.....	.....	.....	.....	.....	0	.....
107	14.0	+ 8.7	0	— 3.7	2.0	— 2.3	0	— 1.0	.....	.....	16.0	20.4
108	0.2	—10.3	7.7	+ 2.3	5.8	— 0.5	T.	— 1.0	1.8	+ 1.4	28.5	11.3
109	3.4	— 4.3	4.5	— 0.6	2.0	— 3.2	5.5	+ 1.8	0.5	— 0.5	42.9	.....
110	13.8	— 1.7	4.4	— 5.0	4.4	— 5.4	1.5	+ 0.5	.....	— 0.4	48.4	8.0
111	.....	— 0.3	.....	.....	.....	.....	.....	.....	.....	.....	0	0.1
112	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
113	15.8	+ 6.9	2.3	— 1.7	3.0	— 0.2	T.	— 3.2	.....	.....	22.6	16.0
114	.....	— 0.5	.....	.....	.....	.....	.....	.....	.....	.....	0	.....
115	1.3	— 3.6	6.7	+ 1.8	8.9	+ 4.3	2.0	— 0.6	.....	.....	36.4	5.7
116	27.0	.....	16.5	.....	13.9	.....	.....	.....	.....	.....	88.2	7.0
117	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	T.
118	3.0	+ 2.2	.....	— 0.3	2.0	+ 2.0	.....	.....	.....	.....	5.0	2.7
119	5.9	.....	6.1	.....	4.1	.....	3.0	.....	.....	.....	27.2	18.0
120	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	3.0

SNOWFALL FOR THE WINTER OF 1891–'92 AND

Number.	Station.	Normal snowfall, October–May.	October.		November.		December.	
			Snowfall.	Departure from normal.	Snowfall.	Departure from normal.	Snowfall.	Departure from normal.
		Inches.	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*
121	Spokane, Wash	40.5		— 0.1	0.1	— 1.6	22.2	+ 7.7
122	Springfield, Ill	20.1			0.2	— 1.3	T.	— 2.8
123	Springfield, Mo	12.2			T.	0	T.	— 2.6
124	Stanton, Fort, N. Mex	20.0			1.1	— 3.3	9.6	+ 6.2
125	Tampa, Fla							
126	Tatoosh Island, Wash	6.7					0.8	— 0.6
127	Titusville, Fla							
128	Toledo, Ohio	31.5			5.1	+ 3.5	0.4	— 7.3
129	Topeka, Kans				1.0		4.5	
130	Tucson, Ariz							
131	Valentine, Nebr	40.7	0.2	— 0.9	5.9	+ 1.8	4.2	— 0.2
132	Vicksburg, Miss	1.8						— 0.8
133	Walla Walla, Wash	33.7			1.0	+ 0.5	4.5	— 0.5
135	Washington, D. C	24.1			2.5	+ 1.9	T.	— 4.2
136	Wichita, Kans				T.		0.5	
137	Wilmington, N. C							
138	Winnemucca, Nev	31.2	T.	— 0.9	1.7	+ 0.5	16.7	+ 8.9
139	Woods Holl, Mass				T.			
140	Yankton, S. Dak	35.8			2.3	— 4.2	10.4	+ 1.7
141	Yuma, Ariz.[1]							

[1] No snow.

DEPARTURES FROM THE NORMAL—Continued.

Number.	January.		February.		March.		April.		May.		Total.	Maximum fall in 24 hours.
	Snowfall.	Departure from normal.	Snowfall.	Departure from normal.	Snowfall.	Departure from normal.	Snowfall.	Departure from normal.	Snowfall.	Departure from normal.		
	Inches.	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*
121	13.1	− 1.4	3.1	− 5.8	T.	− 0.8	.....	.....	.....	.....	38.5	.....
122	11.9	+ 4.7	2.0	− 3.1	5.9	+ 1.7	T.	− 0.3	.....	.....	20.0	6.3
123	14.0	+ 8.2	T.	− 3.8	5.0	+ 5.0	.....	.....	.....	.....	19.0	10.0
124	1.0	− 2.1	0.7	− 1.0	4.2	− 3.2	T.	.....	.....	.....	16.6	14.5
125	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
126	.....	− 1.8	.....	− 3.5	.....	.....	.....	.....	.....	.....	0.8	28.0
127	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
128	13.5	+ 3.9	4.0	− 1.6	5.3	+ 1.1	2.0	− 0.8	.....	.....	30.3	9.8
129	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
130	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	0.1
131	5.1	− 2.0	1.9	− 8.3	15.8	+ 2.9	24.4	+23.5	13.4	+13.4	70.9	9.2
132	5.0	+ 4.0	0	0	T.	.....	.....	.....	.....	.....	5.0	1.4
133	10.7	+ 4.2	.....	−10.3	.....	− 1.4	.....	.....	.....	.....	16.2	7.5
135	20.5	+16.5	7.5	+ 1.2	11.2	+ 2.8	T.	− 0.6	.....	.....	41.7	10.0
136	1.8	.....	0.5	.....	9.0	.....	.....	.....	.....	.....	11.8	8.9
137	.....	.....	.....	− 0.5	.....	.....	.....	.....	.....	.....	0	2.0
138	5.5	− 4.2	1.0	− 4.6	1.0	− 1.5	6.2	+ 4.3	1.5	− 0.1	33.6	7.0
139	4.3	.....	6.6	.....	13.9	.....	2.0	.....	.....	.....	24.8	9.7
140	3.4	− 3.2	1.9	− 3.1	3.6	− 4.9	11.5	+11.0	0.5	+ 0.5	33.6	9.6
141	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

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DAILY DURATION OF SUNSHINE AT TWENTY STATIONS DURING 1891-'92.

[A description of the instrument used will be found on page 30.]

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1891.

BUFFALO, N. Y.

1891.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	0	0	6.0	0	12.0	11.7	4.0	2.3	9.0	9.6	0	7.8
2	0	0	2.0	0	0.5	2.0	6.0	12.7	10.0	8.4	5.7	3.3
3	1.5	0	0	0	8.0	0	4.5	6.0	9.5	9.8	0	3.5
4	0	3.5	3.0	0	7.1	1.5	5.8	0	1.5	5.2	0	0
5	4.5	7.5	6.3	10.0	1.5	11.4	0	4.5	0.5	3.5	0.9	7.0
6	0	3.8	3.0	9.5	0	0.2	1.0	10.2	0.5	3.8	4.5	0.7
7	8.0	1.3	0	3.5	11.3	12.0	0	9.5	5.5	0	3.5	1.4
8	7.3	0	0	6.5	5.1	11.0	9.4	2.5	10.7	3.0	2.4	2.0
9	4.0	0	0	6.4	13.1	12.5	13.8	0	9.7	5.9	0	4.4
10	3.0	1.5	7.0	0.5	10.2	11.4	13.0	3.4	11.5	8.6	4.3	7.0
11	0	9.5	8.5	0	1.5	3.5	12.9	8.6	11.5	1.0	0	5.4
12	0	2.0	0	0	6.5	12.	13.0	9.2	10.3	9.6	0.3	7.0
13	0	3.2	0	8.0	10.5	12.5	12.8	10.3	7.6	9.6	0.6	7.0
14	0.2	0.8	5.6	0.8	0	12.3	1.5	4.3	5.8	4.5	0.6	0
15	2.2	8.1	5.5	0	8.0	13.0	8.2	6.0	2.6	1.6	0	0
16	6.0	2.4	3.7	0	3.8	9.4	13.0	6.0	7.3	6.7	1.5	3.5
17	3.0	0	1.9	9.6	12.9	2.5	12.2	4.3	11.0	5.2	1.4	0
18	2.8	3.0	5.0	0	1.0	0	0	2.9	10.1	0	7.5	1.8
19	0	5.7	5.5	4.5	4.7	0	12.5	10.5	9.0	0	5.0	2.2
20	2.5	0	4.7	9.0	2.5	5.1	7.3	9.5	11.0	0.5	0	4.2
21	0	0	1.2	10.8	1.5	0	11.0	0	10.0	0.5	0.3	7.3
22	0	4.0	3.5	7.9	0.5	6.2	9.1	9.6	9.0	7.6	0	0
23	2.2	1.2	0	0	13.0	13.0	3.0	0	8.9	5.8	0.5	0
24	0	0	0	11.2	13.3	13.4	3.2	1.0	10.0	5.8	0	0
25	0	0	9.5	10.5	8.0	12.0	2.5	11.5	10.0	0	0	0
26	0	2.2	10.2	9.0	4.0	4.7	5.0	0	9.5	0	3.0	0
27	2.3	5.0	1.6	9.5	12.9	12.5	11.2	0	10.0	4.2	1.4	0
28	0	0	8.5	7.5	4.8	12.1	2.5	0.7	9.7	5.8	0	2.5
29	0.3	.....	7.0	10.5	1.7	7.7	8.7	5.0	5.0	5.4	0	0
30	0	.....	9.6	9.0	0	7.5	0	2.5	10.5	0	2.5	1.2
31	0	.....	0	.....	11.3	.....	10.0	3.6	.....	0	.....	1.6
Means	1.6	2.3	3.8	5.1	6.2	7.8	7.0	5.1	8.2	4.2	1.5	2.6
Percentage of possible	17	22	32	38	42	51	47	36	66	37	16	29

CINCINNATI, OHIO.

1	0	Record incomplete.	.....	9.1	6.4	6.5	10.0	2.2	7.8	9.5	8.0	7.2
2	0		.....	0	6.8	5.4	10.4	6.8	10.5	6.5	0.7	0
3	0		.....	0	0	6.2	12.2	0.5	5.5	5.5	0	0
4	0		.....	0	7.8	6.6	12.5	2.4	0	4.6	0	1.5
5	6.7		.....	2.6	9.0	0	13.0	8.0	0	6.2	0	7.2
6	6.5		.....	0	4.0	0	11.3	5.2	9.0	3.7	5.0	0
7	3.0		.....	3.8	8.3	0	0.4	7.0	8.0	0.4	5.0	2.4
8	3.2		.....	6.0	8.5	4.0	8.0	9.5	5.0	4.8	2.0	6.8
9	0		.....	0	10.5	7.4	11.4	11.0	10.0	0.8	0	6.2
10	0		.....	6.6	10.6	6.4	11.5	10.0	10.7	5.4	0	4.5
11	0		.....	0	0	9.4	11.0	9.8	3.0	5.8	5.0	0
12	0		.....	9.8	7.3	10.4	11.3	6.0	5.5	8.5	0	0
13	3.3		.....	8.4	3.5	9.6	10.0	8.0	5.5	5.5	0	4.8
14	9.0		3.4	4.0	0	10.8	5.5	6.0	10.0	4.2	5.0	0
15	0		7.9	2.6	3.6	5.5	6.8	1.0	4.8	2.5	2.0	0

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1891—Continued.

CINCINNATI, OHIO—Continued.

1891.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
16	6.7	Record incomplete.	9.8	8.4	7.5	7.3	9.0	0	10.5	7.8	0	4.5
17	5.0		10.2	9.0	9.4	5.2	6.5	5.0	11.0	9.0	7.0	3.8
18	0		1.2	3.2	7.6	7.8	6.8	5.0	11.0	0	5.0	6.2
19	0		0	10.0	1.4	9.0	11.5	0	8.5	0	1.0	5.5
20	6.5		0	7.6	0	1.0	9.4	2.5	10.5	0	0	5.0
21	0		0	6.0	7.5	6.5	10.2	5.0	9.0	8.0	0	3.5
22	0		0	2.5	4.2	6.0	10.8	0	4.8	6.5	0.5	0
23	0		6.8	6.0	0	11.4	1.0	0	8.4	1.0	0	0
24	0		0	4.5	0	12.4	9.5	2.5	9.5	3.0	4.0	0
25	9.1		0	9.0	0	11.8	0.2	8.5	6.8	7.5	5.0	5.5
26	7.6		0	10.2	0	9.0	8.0	2.0	8.2	9.0	1.0	2.0
27	7.0		0	9.4	9.0	11.0	3.8	4.0	6.5	5.8	0	6.0
28	0		0	10.0	0	7.4	0	9.0	10.2	7.5	0	6.0
29	0		7.5	10.0	0	7.2	6.8	9.5	10.0	8.3	0	0
30	2.0		0	9.0	2.7	2.5	10.0	5.5	7.2	6.5	6.5	5.0
31	0		0	.....	7.0	.....	7.5	5.0	.....	0	.....	1.0
Means	2.4	.....	[1]2.6	5.6	4.6	6.8	8.3	5.1	7.6	5.0	2.1	3.1
Percentage of possible	25	.....	[1]22	39	32	46	56	37	61	44	21	32

CLEVELAND, OHIO.

1	0	0	3.5	0.4	11.0	9.0	7.5	5.2	11.1	9.4	0	5.2
2	0	2.7	0	0.7	1.0	2.5	12.0	11.1	11.0	9.9	0	0
3	0	0.3	0	0	8.0	3.4	7.5	8.0	7.0	2.5	0	2.5
4	0	0.8	2.0	0.4	1.2	0	10.4	11.5	1.4	0	2.5	1.0
5	0.7	6.8	10.4	9.7	8.5	0	12.5	12.1	2.2	5.8	0	1.0
6	0	7.3	0	7.5	4.7	13.0	11.8	12.1	5.0	2.0	6.2	0
7	0	0	0	8.5	12.4	2.5	0	9.6	8.0	0	6.1	0
8	6.2	0	1.1	11.0	11.2	12.7	10.5	11.6	10.0	7.5	0.5	6.8
9	0	0.2	0	2.5	12.4	12.8	13.1	11.6	10.2	6.2	4.0	6.2
10	0	0.4	10.5	4.0	12.0	9.3	13.0	11.6	10.1	8.8	0	6.5
11	0	8.3	10.2	0	2.8	3.0	12.0	5.5	7.7	1.0	6.8	2.5
12	0	0	0	2.9	5.0	13.3	13.0	6.3	7.0	10.3	0	6.8
13	2.5	0	0	11.4	6.0	12.2	13.2	3.9	8.0	9.8	1.0	7.6
14	0.2	7.1	0	0.4	1.0	13.3	1.5	2.5	3.6	3.0	0.7	0
15	7.1	7.4	6.5	0	8.0	13.3	5.0	11.7	7.0	3.0	0	0
16	0	0	6.0	0.2	0	7.3	12.5	11.0	10.0	2.3	0	1.0
17	0	0	8.0	10.7	12.0	6.7	11.8	9.0	11.0	8.5	0	0
18	0	0	7.0	3.8	7.5	6.8	0	11.1	8.0	0	2.1	3.3
19	0	2.2	0	11.1	8.7	1.0	10.8	8.5	11.3	1.2	6.7	6.0
20	0	0	0	11.1	4.0	6.8	5.2	7.0	10.4	1.0	0	2.5
21	0	0	0	10.9	3.0	7.0	11.7	5.0	10.0	0.8	0	7.0
22	1.4	2.3	0	5.0	0	8.4	8.0	5.2	9.0	2.3	0	0
23	4.5	1.8	1.2	7.5	5.0	13.4	5.0	0	10.5	6.6	0	0
24	0	0	4.0	4.3	12.5	13.4	12.3	5.8	10.0	3.5	0	0
25	6.0	0	9.3	11.3	7.5	14.0	7.9	10.0	9.0	8.5	4.0	2.0
26	0	2.6	5.6	11.0	7.0	12.5	12.6	6.0	7.2	0	1.0	1.0
27	7.4	2.0	0	9.4	12.2	13.7	11.0	9.0	4.2	0.5	0	6.0
28	0	0.2	6.0	9.8	1.5	12.4	12.4	8.0	8.8	1.7	0	5.0
29	0	.....	10.6	10.0	0	9.4	10.0	8.3	8.0	7.5	0	0
30	1.6	.....	1.5	7.5	6.6	1.5	5.5	3.0	9.2	6.1	4.5	3.5
31	0	.....	0	.....	12.4	.....	12.0	10.3	.....	1.3	.....	0
Means	1.2	1.9	3.3	6.1	6.6	8.5	9.4	8.1	8.2	4.2	1.5	2.7
Percentage of possible	13	18	28	45	46	56	63	59	66	38	15	29

[1] For 18 days.

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1891—Continued.

DENVER, COLO.

1891.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	No record.	No record.	No record.	7.7	10.7	5.2	10.6	7.8	6.8	7.5	8.0	8.9
2				11.4	9.0	14.2	14.0	9.5	2.6	0	7.8	0.2
3				11.2	7.4	7.0	10.2	10.6	11.9	10.9	8.8	9.2
4				11.7	11.0	4.8	9.3	10.0	4.8	11.1	9.5	4.7
5				12.0	10.4	2.6	9.1	9.9	12.2	6.2	9.5	0
6				8.2	11.5	13.4	9.2	11.4	10.7	11.2	8.1	8.6
7				9.0	6.7	13.6	4.2	10.2	9.3	11.2	7.4	8.8
8				11.2	7.2	11.8	11.4	3.5	9.0	11.4	8.2	2.1
9				12.1	4.6	11.0	9.1	9.2	10.5	11.4	5.9	8.3
10				12.2	2.0	13.6	14.0	12.2	6.6	8.7	8.4	6.3
11				11.0	7.8	7.9	14.4	12.6	11.0	7.2	7.6	8.1
12				3.5	12.7	7.4	14.4	9.2	11.3	9.1	0	3.8
13				8.0	8.4	14.0	13.5	10.8	12.5	11.1	0.5	4.4
14				8.6	3.6	8.3	7.2	6.2	7.0	11.1	7.2	0
15				10.7	3.1	5.7	9.5	8.8	11.0	10.2	9.1	9.0
16				11.3	0	0.2	12.8	7.7	11.9	10.6	9.0	7.4
17				3.3	8.0	12.2	11.6	7.3	8.0	10.8	6.2	7.8
18				3.2	7.5	10.5	13.6	7.0	4.7	10.8	0.8	8.4
19				3.0	8.4	13.4	3.5	12.0	12.0	10.8	8.0	6.2
20				1.3	0	12.2	9.4	13.0	10.3	9.6	8.3	5.4
21				11.7	0	13.6	13.0	3.0	7.2	10.2	0.4	6.6
22				11.3	0	13.5	12.6	12.7	2.3	10.2	7.2	8.4
23				11.7	6.7	13.1	9.4	13.2	7.2	9.4	8.6	7.5
24				11.0	6.0	5.4	10.5	11.5	0.4	10.9	8.2	0
25				11.6	0	9.0	8.0	10.2	0	10.8	0.2	9.1
26				11.5	5.8	9.3	9.0	1.6	5.2	10.8	6.3	6.2
27				10.6	8.9	13.6	7.0	1.4	11.2	10.0	1.7	6.4
28				10.2	12.8	13.1	5.0	9.5	11.6	9.0	8.1	5.2
29				3.6	8.1	7.2	3.2	12.2	11.6	7.4	9.2	5.6
30				9.0	12.0	13.0	3.8	12.4	10.2	10.1	5.0	7.2
31				.....	11.8	.....	11.0	12.0	.....	8.8	.....	0
Means	.....	.....	.....	9.1	6.8	10.0	9.8	9.3	8.4	9.6	6.4	5.8
Percentage of possible	.....	.....	.....	69	48	68	66	68	67	86	64	61

DETROIT, MICH.

1	No record.	0	8.3	0	5.0	3.5	5.3	No record.	5.6	7.5	0	8.0
2		0	0	0	0	4.7	9.2		7.9	10.0	8.8	1.9
3		3.8	0	0	8.4	2.2	2.7		1.8	5.2	5.9	4.6
4		6.9	7.3	4.1	5.7	0	8.7		6.7	0	2.3	0
5		7.8	8.6	8.6	4.6	6.8	10.4		0	8.0	0	8.0
6		4.9	0	8.2	4.0	3.7	7.5		6.8	10.5	6.0	0
7		0	0	10.1	8.0	6.3	0		3.0	0	4.6	4.3
8		0	0	5.2	8.7	12.0	7.3		8.1	10.3	0	4,7
9		0	0	9.4	8.5	11.4	10.6		9.0	10.0	0	6.7
10		5.1	8.6	4.2	5.4	8.0	10.8		8.0	10.0	0	7.4
11		8.0	9.3	0	5.3	4.0	9.6		8.1	7.1	4.0	7.0
12		6.5	8.1	0	6.1	7.4	10.2		1.1	10.1	0.4	8.0
13		0	0.2	8.9	0	10.9	3.0		9.0	9.6	0	7.8
14		0	9.2	0	0	11.1	1.8		7.5	2.5	5.6	0
15		6.3	4.6	0	7.3	9.2	0.9		7.4	3.7	0	0
16		0	8.7	1.6	3.8	11.9	9.8		10.7	5.0	0	3.0
17		1.5	3.5	0	9.9	3.6	9.6		11.4	7.8	1.9	0
18		0.8	0	1.2	4.8	0	0		11.1	0	3.3	7.2
19		5.9	1.5	5.4	9.5	0	10.0		11.2	0	6.8	7.1
20		0	0	9.5	6.7	3.3	6.5		11.2	3.9	0	3.4
21		0	0	9.2	7.0	4.5	3.6		10.9	5.6	0	8.5
22		2.2	0	7.1	0.7	8.9	8.4		10.6	7.1	0	2.1
23		0.3	0.8	8.6	8.0	11.5	2.5		9.1	3.1	0	0
24		1.0	0	2.8	11.1	10.1	3.3		9.9	6.8	0	0
25		2.5	10.5	10.4	9.0	10.1	8.2		9.3	3.7	2.7	0

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1891—Continued.

DETROIT, MICH.—Continued.

1891.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
26	No record.	1.8	5.5	10.5	11.7	4.2	3.3	No record.	9.6	3.1	4.0	0
27		3.0	0	9.2	0	8.7	5.7		7.6	4.9	0	4.2
28		5.2	5.6	9.0	5.8	6.5	5.9		9.2	4.2	4.3	6.2
29		.....	10.4	10.9	0	9.1	0		9.1	7.7	5.0	0
30		.....	0	9.0	5.1	6.3	2.4		10.7	4.6	8.0	5.2
31		.....	0	.....	9.8	.....	2.8		.....	3.8	.....	0
Means	.....	2.6	3.6	5.4	5.8	6.7	5.8	.....	8.1	5.7	2.5	3.7
Percentage of possible	.....	24	30	40	41	44	38	.....	65	51	25	41

DODGE CITY, KANS.

1	8.5	No record.	8.5	1.8	10.2	9.8	10.6	8.8	12.6	0	1.0	5.8
2	8.2		5.0	11.2	11.0	13.2	7.8	12.4	5.0	1.8	0	3.8
3	2.3		10.0	11.1	6.8	3.0	12.1	12.0	12.5	1.6	0.3	7.4
4	8.5		4.7	11.3	0.4	1.0	12.2	12.8	12.2	11.2	9.4	8.5
5	8.0		6.4	11.4	4.4	4.6	12.0	12.2	12.3	0.8	9.8	7.6
6	8.3		0	6.8	11.3	0	9.9	12.9	11.8	7.8	9.9	5.0
7	0		0	5.9	12.8	4.0	1.2	12.8	3.3	11.3	3.0	8.4
8	0		10.0	9.6	13.0	0	7.2	12.8	0.5	11.3	0	4.7
9	0.7		10.0	10.8	8.9	3.8	12.4	12.8	1.5	11.3	9.9	8.4
10	([1])		3.8	11.0	5.6	10.4	12.2	12.0	9.0	11.2	8.7	7.6
11	.....		9.8	8.8	10.4	3.2	13.0	9.0	9.7	11.0	1.4	0.1
12	.....		5.9	9.8	9.6	13.0	12.8	9.4	7.4	0.3	3.0	0
13	.....		10.4	3.7	13.0	5.6	8.0	9.6	6.6	10.8	9.3	0
14	.....		10.0	4.2	12.8	8.8	9.0	11.0	12.0	10.8	0.1	8.3
15	.....		10.2	0	5.5	0.2	5.6	10.6	12.0	10.7	4.0	8.3
16	.....		9.8	10.6	4.8	1.2	5.2	11.6	12.4	10.7	7.8	1.2
17	.....		4.5	9.6	4.6	1.2	10.6	11.6	12.4	10.7	9.4	8.5
18	.....		0	5.2	8.4	13.7	7.7	11.2	9.4	10.6	6.4	6.8
19	.....		10.5	0.2	1.2	3.0	9.4	12.4	9.5	10.6	9.4	8.0
20	.....		4.0	7.3	12.4	14.0	10.2	12.0	8.8	9.6	0.9	7.0
21	.....		10.0	11.7	0.8	12.0	11.6	7.5	12.0	10.2	5.0	8.3
22	.....		10.3	11.8	13.2	14.0	12.0	11.2	12.0	10.6	4.6	2.0
23	.....		0	11.7	11.2	14.0	10.3	12.0	12.0	10.5	9.4	8.6
24	.....		0	11.8	3.6	14.0	5.8	12.0	1.0	10.2	6.8	5.4
25	.....		0	11.9	0	14.0	6.9	12.0	0	10.4	0.1	8.8
26	.....		0	10.0	12.0	12.0	6.9	5.0	0	10.4	3.9	8.1
27	.....		3.7	12.0	12.6	7.2	10.2	1.3	9.8	10.4	7.9	7.8
28	.....		7.4	11.4	12.8	13.8	1.0	7.4	11.6	10.2	6.2	2.4
20	.....		4.8	11.4	11.6	9.3	9.4	8.4	11.6	8.2	9.1	7.8
30	.....		4.5	7.3	11.9	11.4	6.4	11.2	6.8	8.8	8.4	7.0
31	.....		7.6	.....	9.6	.....	7.4	11.2	.....	8.4	.....	2.8
Means	.....	.....	5.8	8.7	8.6	7.8	8.9	10.6	8.6	8.8	5.5	5.9
Percentage of possible	.....	.....	49	66	61	53	62	78	69	79	54	62

EASTPORT, ME.

1	6.3	0	0	11.4	12.5	0	12.0	10.2	9.2	10.8	2.5	1.0
2	0	5.2	9.7	1.8	13.0	0	13.4	10.6	0.5	10.8	8.4	1.8
3	0.5	0	9.0	0	4.0	6.5	4.0	13.0	12.0	10.4	10.1	7.2
4	5.8	7.7	0.3	0.3	9.3	8.2	0	11.4	9.2	6.2	8.8	5.5
5	0	7.0	0	4.4	4.8	6.0	0	12.8	10.0	0	8.5	2.4
6	0	0	8.8	11.5	4.4	13.4	2.2	12.2	0	8.2	7.5	8.0
7	0	2.3	9.2	2.0	3.2	12.4	4.8	6.5	0	2.3	0.4	0
8	7.3	1.2	10.0	5.0	2.0	11.5	1.3	10.3	7.0	0	2.0	7.6
9	6.2	3.7	3.0	9.2	9.6	4.0	1.0	13.0	10.8	4.5	9.0	1.5
10	3.2	2.5	1.0	12.0	0	3.6	13.5	2.2	12.0	6.0	0	1.5

[1] Sunshine recorder returned to central office.

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1891—Continued.

EASTPORT, ME.—Continued.

1891.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
11	4.0	8.8	10.2	5.3	2.7	4.6	12.4	12.0	11.7	0	0	3.0
12	0	4.2	3.6	0	1.0	4.2	11.5	5.2	11.0	9.5	4.2	5.4
13	5.4	7.0	0.2	4.4	0	12.6	12.5	11.0	5.5	6.4	3.2	5.5
14	0.6	8.8	8.1	3.4	7.0	0	12.4	12.0	3.0	0	4.8	0
15	5.8	8.6	10.0	0	8.7	9.2	0.5	4.6	10.7	0	8.5	3.2
16	6.6	0	0.8	0	0	3.0	9.6	0	11.5	4.6	1.0	0
17	1.0	0.2	7.8	10.6	0	0	11.4	12.5	9.7	4.2	0	6.4
18	0	2.0	4.2	0	2.5	8.0	11.0	5.0	0	2.7	5.6	6.2
19	0	4.2	7.0	2.2	14.0	12.8	0	12.5	9.4	0	8.2	7.3
20	0	4.3	6.3	0	8.0	9.4	6.6	11.2	10.0	0	5.0	6.8
21	2.8	3.2	0	12.5	5.3	13.5	3.0	1.0	1.0	1.7	5.7	0.5
22	0	0.3	0	0	0	0	10.4	0	4.4	7.6	0.7	0
23	5.0	9.2	1.4	0	10.0	0	12.0	0	9.0	0	0	0
24	7.2	0.4	0	10.0	13.0	0	0	1.0	0	3.0	6.8	4.0
25	0	0	6.0	0.2	13.0	1.0	5.6	0	8.0	9.8	7.7	0
26	5.2	0	10.5	1.0	7.2	0	12.2	2.4	10.0	0	7.4	0
27	0	2.2	10.3	7.2	10.2	0	6.0	0	8.8	0	2.7	1.0
28	3.5	8.3	0.5	8.0	6.6	0	12.0	0	6.2	0	0	5.2
29	0	.....	4.2	8.8	5.8	0	0.5	10.3	1.4	9.4	1.2	0.5
30	0	.....	1.0	11.2	0	6.3	1.0	0	7.2	8.0	5.4	0
31	7.0	.....	9.0	.....	6.0	.....	4.0	0.5	.....	5.7	.....	0
Means	2.7	3.6	4.9	4.7	5.9	5.0	6.7	6.6	7.0	4.3	4.5	3.0
Percentage of possible	29	35	41	35	40	32	44	46	56	38	47	33

GALVESTON, TEX.

1	8.9	7.4	9.3	0.5	9.7	8.2	8.5	12.6	11.4	10.6	5.5	0
2	9.0	0	9.4	3.5	8.0	6.9	12.0	8.7	9.8	10.8	9.0	0.5
3	5.2	0	5.0	9.0	7.7	9.1	3.4	4.5	9.6	10.4	9.0	5.5
4	8.7	8.8	0	10.3	11.2	6.0	0	4.1	11.9	4.0	9.0	9.0
5	9.4	3.5	1.0	9.5	7.4	4.4	2.8	11.8	12.4	0	9.0	8.5
6	2.5	0	1.0	8.5	7.7	5.0	8.0	11.7	12.1	1.1	9.0	1.0
7	0	2.1	0	7.7	11.0	7.8	5.3	11.8	11.8	10.5	3.0	3.5
8	0	0	4.5	9.0	10.7	11.0	6.7	2.9	11.5	10.8	5.0	8.0
9	0	0	4.5	4.5	7.8	11.1	10.0	6.7	11.3	10.5	2.5	9.0
10	0	8.7	2.5	5.2	9.5	11.5	9.0	10.1	11.5	10.5	9.5	0.5
11	9.3	0	0	7.4	6.2	9.7	12.0	9.6	10.8	10.5	9.3	0
12	5.2	0	0	0.8	3.5	10.8	8.3	11.3	11.3	10.5	7.0	0.5
13	8.3	0	0	0.3	7.2	9.2	8.4	6.4	10.8	10.4	7.0	6.0
14	0	0	0	4.5	9.6	11.3	7.3	9.4	10.9	5.6	8.0	0
15	0	0	0	6.0	9.6	9.9	9.5	11.7	11.2	10.5	9.0	4.5
16	4.9	8.6	0	9.0	9.6	11.2	6.3	8.2	0	9.2	0.5	0
17	8.9	7.0	6.4	6.2	4.7	5.0	4.6	10.5	9.2	9.8	9.0	0
18	9.0	2.3	6.2	7.0	10.7	10.4	6.7	12.4	10.0	9.8	8.0	9.0
19	5.2	0	8.7	0.7	9.8	10.3	2.0	11.5	11.1	9.5	0	9.0
20	0	0	6.8	0	10.2	9.6	9.4	12.3	10.7	9.6	0	2.5
21	4.7	8.2	7.0	1.0	2.4	9.1	8.5	12.4	5.3	8.2	2.0	0
22	9.6	7.7	0	3.0	0.3	7.0	3.5	4.3	5.0	9.5	8.5	1.0
23	0	7.5	2.5	7.0	4.2	8.2	2.0	8.9	0	9.5	9.0	3.0
24	8.6	7.0	0	2.0	5.4	5.0	2.3	11.5	0	9.7	7.0	4.0
25	9.3	5.0	6.8	3.7	9.7	9.6	4.4	10.2	6.7	3.8	7.0	0
26	2.1	7.5	10.0	6.0	10.9	0	5.5	10.3	5.2	9.8	9.2	8.5
27	0	4.0	10.4	5.0	8.0	4.2	6.2	9.9	10.0	9.6	7.0	8.0
28	0	0	9.8	4.5	.....	2.8	9.5	10.3	10.7	8.3	3.8	0
29	0	.....	1.5	4.0	.....	2.0	9.4	10.4	0.8	7.1	9.0	8.5
30	0	.....	1.5	3.5	.....	0.9	9.3	10.3	11.0	5.4	8.0	0
31	0	.....	7.2	.....	.....	.....	10.5	10.7	.....	1.3	.....	2.0
Means	4.2	3.4	3.9	5.0	[1]7.9	7.6	6.8	9.6	8.8	8.3	6.6	3.6
Percentage of possible	40	32	33	39	58	54	50	73	71	72	62	35

[1] For 27 days.

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1891—Continued.

KANSAS CITY, MO.

1891.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	0	4.5	8.0	0.5	2.5	4.2	12.3	8.8	12.0	0	6.5	4.0
2	5.5	0	0	1.5	0.1	1.1	9.7	4.2	1.5	4.7	8.4	0
3	2.3	7.5	7.8	1.4	7.0	4.8	12.8	10.8	12.0	0	3.5	0
4	2.5	7.8	7.6	6.5	12.0	0	3.0	12.0	5.8	10.0	8.8	5.6
5	2.3	8.3	2.8	11.6	9.6	0	7.5	5.4	11.5	5.5	8.8	4.0
6	1.9	4.0	1.6	11.2	12.0	0	11.5	6.3	11.0	0.8	1.5	0
7	0.8	4.0	0	10.1	12.4	0	0.2	12.8	10.2	9.7	0	7.2
8	0	1.3	3.4	1.3	12.7	0	12.7	12.8	0	1.2	3.0	4.8
9	0	2.5	8.2	3.8	10.0	11.8	13.0	11.6	2.0	9.8	0.2	8.0
10	0	8.3	5.6	1.0	0	2.5	2.5	11.8	11.6	10.0	4.0	7.0
11	2.0	5.8	3.8	10.8	11.7	13.6	7.3	3.6	11.5	10.0	8.3	0.4
12	0	1.0	0	0.2	8.6	10.8	11.4	11.8	7.4	8.8	1.2	6.5
13	3.7	8.0	2.7	1.1	3.0	12.0	1.0	10.8	10.1	0.8	2.7	1.9
14	3.2	8.3	9.1	0	10.2	6.4	13.0	12.3	11.1	9.8	0	0
15	0	5.8	7.0	10.0	10.0	13.0	7.5	4.2	9.0	9.8	0.2	0
16	0	0	10.0	3.7	4.8	5.0	8.4	8.2	11.0	7.1	3.5	7.6
17	3.0	0	9.0	5.0	0	6.0	11.8	3.0	11.0	9.7	8.0	7.8
18	3.1	0	0	7.8	1.5	1.2	9.2	9.0	11.0	10.0	8.2	7.8
19	2.8	0	0	4.2	4.4	0	12.0	8.5	11.1	9.5	8.7	7.3
20	1.0	0	3.4	2.5	9.2	4.0	0	4.0	9.2	9.6	0	7.5
21	5.5	8.0	0.4	4.4	0	6.0	7.0	4.7	10.5	2.5	8.0	1.0
22	0.5	0	0.6	12.0	0	13.6	7.2	9.8	11.2	8.0	0	1.6
23	2.5	5.0	5.0	11.2	0	12.2	13.0	13.0	10.6	9.6	6.0	7.0
24	7.0	4.4	0	11.6	8.2	10.0	8.5	12.3	4.8	8.1	0.3	8.0
25	8.0	7.5	0	12.0	0	0	3.0	9.3	5.8	9.3	1.0	2.5
26	7.8	7.0	0	11.0	10.0	13.4	9.5	0	6.5	8.8	6.7	7.7
27	5.7	4.0	0	12.0	12.0	13.0	9.0	11.2	0.1	9.6	2.5	7.0
28	2.0	8.5	1.0	12.0	12.7	10.8	0	11.8	5.4	8.0	7.6	8.0
29	4.0	.....	2.5	10.0	10.5	10.0	10.8	11.8	10.0	7.1	8.1	8.0
30	0.4	.....	3.0	10.0	8.1	13.0	5.0	11.8	4.5	5.4	8.2	7.4
31	0	.....	8.4	.....	4.5	.....	7.5	11.8	.....	9.0	.....	0
Means	2.5	4.3	3.9	6.7	6.7	6.5	8.0	9.0	8.3	7.2	4.5	4.7
Percentage of possible	25	41	33	50	47	44	54	66	67	64	44	49

MEMPHIS, TENN.

1	0	4.2	0	0	0	12.3	12.0	0	10.7	10.0	0	7.8
2	0	8.7	0	4.0	11.0	11.2	12.5	8.5	11.2	1.0	8.5	0
3	3.0	8.5	0	8.0	3.0	12.0	13.0	4.0	2.5	0.5	0.5	0
4	8.0	8.7	9.5	0	3.0	12.5	8.5	11.8	12.0	0	2.5	7.5
5	8.0	5.0	0	9.0	12.0	12.7	5.0	12.0	11.5	10.6	7.0	7.6
6	3.8	0	0	10.2	12.0	8.0	4.0	10.5	11.5	1.0	7.0	0
7	0	3.0	0	6.0	12.0	5.0	3.0	11.5	11.3	9.5	0	6.3
8	0	4.0	0	6.0	11.8	1.5	0	10.5	5.0	8.3	0	7.0
9	0	0	10.3	5.0	12.2	6.0	13.6	12.3	2.0	0	1.0	7.2
10	0	8.0	9.5	6.0	12.0	0	13.5	11.5	5.0	9.2	3.0	0
11	0	3.5	0	9.5	0	6.0	13.0	8.0	10.5	9.2	7.8	3.5
12	0	0	0	11.5	7.5	6.5	13.2	6.0	9.0	9.0	8.7	3.0
13	7.5	6.0	11.0	4.5	6.0	3.0	13.3	11.8	11.0	9.5	7.0	0
14	4.0	0	10.5	8.0	11.2	4.0	10.0	12.0	11.2	7.5	1.0	1.0
15	0	0	9.0	4.5	11.5	8.5	8.0	8.0	11.4	9.8	7.0	2.0
16	0	3.0	7.5	11.6	8.5	9.0	2.0	12.0	10.0	9.5	0	1.0
17	0	5.8	10.0	3.0	5.5	4.5	3.0	11.0	11.5	8.0	9.0	7.5
18	5.0	0	5.3	8.5	5.0	12.5	12.0	12.0	11.0	10.0	8.0	5.0
19	4.0	0	0	8.0	4.5	5.0	13.0	10.0	11.0	10.0	0	6.0
20	0	0	6.5	7.5	4.0	8.0	13.0	12.0	11.0	9.3	0	7.0
21	0	2.0	8.0	3.0	11.0	3.5	12.0	5.0	11.3	9.3	0	0
22	5.0	0	8.5	5.0	10.0	7.0	5.0	0	11.0	10.2	0	0
23	3.0	4.5	7.0	3.0	12.2	7.0	6.5	6.0	7.0	9.3	0.5	0
24	6.5	6.5	0	11.5	7.0	10.5	13.5	7.0	11.0	9.3	7.5	4.0
25	9.8	4.3	0	11.8	5.0	11.0	11.0	11.0	9.0	9.3	6.0	1.5

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1891—Continued.

MEMPHIS, TENN.—Continued.

1891.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
26	2.0	4.0	0	11.6	2.0	11.0	8.0	11.0	11.0	9.0	1.0	6.5
27	0	6.0	0	11.0	4.0	11.0	0	7.0	9.0	10.0	6.7	7.0
28	0	0	11.0	11.5	12.0	11.8	0	11.0	6.2	9.5	0	3.0
29	4.0	.....	4.5	11.0	.....	10.0	0	10.0	5.4	8.5	6.0	6.5
30	0	.....	0	11.5	.....	11.5	0	7.0	11.0	8.0	7.2	6.5
31	0	.....	11.2	.....	.....	.....	0	10.5	.....	8.0	.....	0
Means	2.4	3.4	4.5	7.4	[1]7.7	8.1	7.8	9.1	9.4	7.8	3.8	3.7
Percentage of possible	23	31	38	56	55	56	54	67	76	70	36	37

NEW ORLEANS, LA.

1	0	No record, owing to defective instrument.	4.0	1.9	9.8	11.4	0	No record, owing to defective instrument.	6.8	8.5	9.3	2.5
2	0		6.5	2.4	6.2	12.1	0		5.6	8.1	8.3	1.5
3	0		1.0	4.2	11.1	5.9	0		7.8	6.1	8.3	0.5
4	1.8		1.1	8.1	6.9	10.7	0		10.7	9.5	8.3	10.0
5	7.9		0	8.1	10.7	11.9	0		11.1	6.1	4.5	8.5
6	5.7		0	7.8	10.8	6.0	0		11.9	4.3	4.0	0
7	7.0		4.0	4.5	10.6	5.3	2.7		5.4	7.1	7.0	4.5
8	6.9		2.5	4.4	9.4	11.8	6.2		11.0	10.0	4.0	10.0
9	3.8		2.0	6.7	8.2	5.4	9.2		11.2	10.2	9.0	9.3
10	8.0		3.5	4.0	11.4	8.8	12.0		0.6	10.2	9.5	0
11	0		0	3.5	10.3	9.7	10.3		3.3	10.8	7.8	0
12	1.3		0	3.9	9.2	4.6	12.1		3.4	10.6	2.0	0
13	4.8		4.5	6.0	7.4	4.0	7.7		6.1	10.8	7.0	4.7
14	5.3		3.9	2.0	10.4	9.6	9.6		6.5	10.8	6.0	0
15	5.0		3.0	3.0	11.2	4.6	11.8		11.5	10.9	7.0	1.2
16	3.0		0	4.3	10.8	8.1	7.9		9.0	6.7	4.7	0
17	4.2		4.5	2.2	9.7	3.9	6.3		10.2	9.7	5.5	0
18	0		4.0	0.5	6.6	6.4	11.9		11.0	8.6	9.4	6.8
19	3.4		7.3	0	9.7	8.5	10.8		10.7	11.0	0	1.2
20	6.2		7.0	1.3	10.3	5.8	7.8		6.0	10.5	0	0
21	6.0		5.7	1.4	9.0	11.0	6.7		0.4	10.4	1.5	0.5
22	1.2		8.0	2.0	10.7	6.2	9.9		7.6	10.4	4.0	0
23	0		0.5	0	1.3	11.8	0		7.0	9.7	9.0	3.0
24	7.4		0	0	6.8	0	0.8		10.6	10.0	8.2	3.5
25	2.2		0	2.0	10.5	9.8	0.8		10.6	10.1	1.0	2.0
26	6.2		5.0	2.8	11.3	5.0	6.6		10.2	10.2	4.2	4.0
27	6.0		5.0	3.0	7.9	11.0	5.4		8.6	9.5	9.0	4.5
28	6.7		9.2	4.3	10.5	12.1	7.1		9.0	10.5	8.2	5.0
29	2.3		9.2	5.0	8.5	12.5	7.7		10.0	10.6	8.2	4.0
30	0		1.0	3.0	10.7	10.0	10.8		10.2	6.7	8.5	2.4
31	0		5.7	.....	10.2	.....	4.3		.....	9.9	.....	0
Means	3.6	.....	3.5	3.4	9.3	8.1	6.0	.....	8.1	9.3	6.1	2.9
Percentage of possible	34	.....	29	27	68	58	44	.....	66	81	57	28

PHILADELPHIA, PA.

1	0	1.0	7.8	0	9.0	9.0	1.5	6.8	2.2	4.4	2.8	8.0
2	1.2	8.5	6.0	0	8.0	10.0	0	5.0	9.0	2.3	8.9	8.2
3	8.0	0	0	0	1.5	9.0	1.0	8.0	4.6	10.0	6.3	4.0
4	6.0	8.5	4.2	0.5	11.3	7.0	12.5	0	9.5	10.5	8.6	1.2
5	0.7	8.5	6.5	11.2	6.0	2.5	10.0	0	0.6	7.5	0	8.5
6	7.6	1.0	3.7	5.0	2.0	0	9.5	3.0	1.4	1.4	9.5	6.5
7	6.5	0	0	7.5	7.0	0	6.0	8.0	9.2	0	9.5	0
8	8.0	1.5	0	11.8	5.8	11.0	0	8.0	0.2	9.6	9.5	8.5
9	3.0	0	0	10.0	11.0	12.5	8.0	2.0	11.8	10.2	6.6	8.5
10	5.5	5.0	10.0	0	11.5	12.5	13.0	11.5	11.8	0.8	1.5	8.5

[1] For 28 days.

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1891—Continued.

PHILADELPHIA, PA.—Continued.

1891.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
11	0	9.0	7.0	0	11.0	13.0	9.0	9.5	9.3	3.2	3.0	7.0
12	3.0	0	0	2.5	1.8	6.0	12.5	8.5	7.3	0	6.9	8.5
13	8.0	0	0	12.0	9.2	11.8	12.0	11.5	11.0	0.4	6.5	8.5
14	4.0	9.3	6.0	6.0	4.0	11.8	6.0	12.0	11.4	5.5	6.0	0
15	7.4	8.5	10.0	9.0	0	12.0	5.0	7.0	10.7	5.0	4.8	0
16	6.0	0	4.6	8.0	1.0	10.4	2.0	11.0	10.5	10.2	0	3.0
17	0	0	9.5	5.0	11.0	11.0	10.0	10.1	11.5	10.2	0	3.0
18	0.6	6.5	7.6	4.2	6.0	0	0	0	11.0	0	8.7	8.5
19	7.5	3.5	0	9.7	5.5	0	3.5	2.0	9.6	1.0	8.0	7.5
20	2.0	0	0	12.2	1.0	0	0.5	7.6	9.6	3.5	4.9	0
21	0.5	0	0	12.0	3.0	0	10.0	1.0	11.0	8.1	4.8	5.5
22	0.5	7.5	0	8.2	7.5	9.0	12.0	11.5	9.6	0	0	1.4
23	5.5	6.0	2.6	3.0	0	13.0	2.0	3.0	9.5	6.5	0	2.0
24	5.0	4.5	0	9.3	0	13.0	0	4.0	9.0	10.0	9.0	0
25	6.0	0.4	8.3	12.2	0	13.0	7.0	1.0	7.0	10.0	2.5	0
26	7.0	0	9.3	12.2	0	9.0	7.0	0	10.0	6.2	0	0
27	8.2	10.0	0	11.5	3.0	13.0	12.5	3.4	6.2	4.5	7.0	2.2
28	2.0	3.2	0	11.0	8.0	13.0	3.0	2.5	7.0	10.0	0	8.5
29	0	.....	2.0	12.0	0	13.0	5.0	0.2	1.8	10.6	0	2.4
30	7.0	.....	10.0	12.2	0	11.0	0	0	10.6	9.0	8.0	8.5
31	0	.....	0	.....	3.2	.....	12.3	0	.....	9.0	.....	7.0
Means	4.1	3.7	3.7	7.3	4.8	8.6	6.2	5.1	8.1	5.8	4.8	4.7
Percentage of possible	44	34	31	54	33	57	42	37	66	52	48	49

PORTLAND, OREGON.

1	0	2.2	2.5	1.0	11.3	0.0	13.0	12.0	5.9	6.3	1.5	0
2	0	4.0	8.3	5.5	10.2	7.5	13.0	11.5	7.5	1.3	0	0
3	0	4.8	6.0	3.0	0	10.2	7.2	2.2	3.9	5.8	0	0
4	0	0	0	0	0	2.2	3.0	0.6	7.1	10.6	0	0.7
5	0	0	6.1	2.6	0	2.8	9.8	3.5	7.6	10.5	1.2	3.0
6	0	6.0	0	0	7.0	0	12.2	0	2.3	10.1	3.2	0
7	0.3	3.7	5.0	0.5	8.3	2.7	8.4	0.9	4.6	10.3	2.5	0.7
8	4.8	0	0	0	6.9	6.0	4.2	10.8	6.3	9.1	0	1.8
9	7.7	0	0	0	12.3	5.3	9.9	12.3	5.4	0	0	1.2
10	5.3	0	7.2	9.0	6.3	0	5.3	11.5	2.0	4.6	0	0
11	7.1	0	9.9	3.0	9.6	2.0	0	2.5	0.4	2.3	0	0
12	6.0	6.2	0.3	2.0	0	0	12.5	8.7	0.1	6.8	2.7	0
13	6.7	0	0	7.9	7.2	0	10.8	8.3	1.7	9.1	0.1	0
14	2.4	4.0	0.4	2.7	6.5	0	13.0	2.2	6.4	0.2	0.1	0
15	0	0	0.3	10.0	5.5	0	6.0	9.5	7.4	4.0	4.8	0.5
16	0	5.4	0.7	4.4	8.5	2.6	8.8	11.2	1.6	0.8	4.8	0
17	0.3	2.0	0	0	6.3	1.2	12.2	5.8	0	9.3	5.2	1.2
18	1.4	0.5	1.0	0.5	11.8	0.5	6.0	0	0.6	8.0	0.	0
19	0	1.7	0.3	0	8.3	0	7.4	6.2	4.1	0	0	1.8
20	0	0	0.4	6.6	11.8	0.8	10.3	9.5	10.2	4.2	0	0
21	3.8	0	3.0	0	8.3	0.5	13.3	11.6	0.5	0	0	0
22	6.6	0	3.1	0	10.5	0	12.1	11.3	4.6	0	2.4	0
23	0	0.8	1.2	1.6	10.2	1.2	11.9	10.2	7.1	0	0	0.6
24	6.0	0	4.5	2.2	6.6	2.0	12.1	12.2	8.8	0	0	2.0
25	0	0	0	0.3	3.0	6.0	9.5	9.7	8.6	4.3	5.5	0
26	4.3	0	0.4	1.0	2.0	4.6	7.6	9.7	6.0	0	0	0
27	0.3	8.2	3.3	0	0.5	9.0	12.6	9.3	10.0	4.2	3.5	0.7
28	0	0	2.4	5.3	5.5	10.2	7.6	7.5	0.7	0.7	1.5	0
29	0	.....	4.0	10.3	0	13.6	12.4	8.3	0.4	0	0	0
30	1.5	.....	3.0	6.0	0.6	14.1	2.5	10.3	3.5	0	1.4	1.2
31	0	.....	10.4	.....	2.0	.....	10.8	10.0	.....	0	.....	0
Means	2.1	1.8	2.7	2.8	6.1	3.5	9.2	7.7	4.5	4.0	1.3	0.5
Percentage of possible	22	17	22	21	41	22	60	55	36	35	14	6

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1891—Continued.

ST. LOUIS, MO.

1891.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	0	0	0	0	6.0	10.0	11.5	0.7	11.0	11.0	8.7	3.5
2	5.0	0	0	0	0.7	6.5	9.0	1.4	8.8	8.9	6.4	1.0
3	6.5	6.0	0	2.0	2.4	6.0	13.0	7.3	0	0	0	0
4	8.0	8.5	4.8	1.5	8.2	1.7	6.0	3.1	8.9	1.8	2.9	5.5
5	7.0	8.0	0	9.8	5.5	0	8.0	9.0	4.5	4.1	8.2	6.5
6	8.0	8.3	0	8.0	9.7	3.5	6.5	7.5	11.1	4.5	6.2	0
7	2.0	4.5	0	9.0	7.2	0	9.0	10.5	0	0	0	6.4
8	0	1.5	3.0	0	10.6	1.0	9.5	11.9	10.7	0.8	0.7	6.0
9	0	0	0	0	11.1	2.0	11.5	8.7	0	2.3	0	7.5
10	0	8.0	8.8	4.7	5.5	0.4	9.5	10.7	10.3	8.0	0	6.0
11	0	8.0	0	10.0	8.7	4.3	10.0	5.2	9.3	0	2.2	6.0
12	0	6.5	0.6	8.4	6.4	8.0	12.0	11.7	3.7	5.5	0	5.6
13	7.5	8.3	4.5	0	4.0	5.6	8.0	10.0	11.5	4.8	2.9	3.5
14	5.0	8.2	6.0	0.7	8.1	5.1	11.0	9.0	10.3	8.6	0	0
15	0	1.8	7.8	8.2	7.8	5.3	4.1	0	8.7	5.0	3.6	3.0
16	0	3.3	8.0	0.6	5.7	0	9.0	10.3	11.1	8.7	0	6.3
17	0	0	9.1	0.3	7.8	4.7	4.0	3.0	11.2	6.5	7.7	6.0
18	7.5	0	9.1	5.8	6.1	1.2	12.0	7.0	6.0	6.0	6.6	8.5
19	7.9	0	2.0	1.1	3.5	3.0	12.0	1.0	11.1	7.7	0	7.0
20	8.0	0	4.8	5.7	0	6.0	1.7	3.7	10.7	7.5	0	7.5
21	2.5	0	0	4.7	1.4	6.0	9.0	1.6	1.1	4.1	7.6	6.0
22	2.5	6.1	7.9	6.2	8.3	10.0	6.7	7.7	8.4	8.1	0	1.5
23	3.7	5.3	4.4	11.3	0	9.9	11.0	3.0	10.8	6.8	0	3.5
24	7.9	2.5	0.6	11.7	0	9.0	4.5	4.3	9.6	3.9	6.8	4.5
25	8.3	9.0	0	11.3	5.7	4.0	1.7	7.0	5.8	9.2	6.6	6.0
26	7.6	8.9	0	11.4	0	6.9	9.5	7.1	5.0	7.9	2.7	4.5
27	7.4	0	0	11.1	11.0	0	2.5	8.0	6.2	7.0	0	6.5
28	0	7.7	0	11.7	11.7	0.9	0	6.2	6.1	7.2	4.6	7.2
29	1.6	.....	0	11.4	10.8	8.5	6.9	8.0	7.6	5.9	7.2	2.5
30	2.6	.....	0.9	6.7	10.3	8.3	10.5	10.0	6.4	1.7	7.4	7.5
31	0	.....	5.5	.....	10.1	.....	5.0	8.3	.....	8.4	.....	0
Means	3.8	4.3	2.8	5.8	6.3	4.6	7.9	6.5	7.5	5.5	3.3	4.7
Percentage of possible	38	44	24	43	44	31	54	48	61	50	33	49

SALT LAKE CITY, UTAH.

1	3.0	0	0	3.5	12.5	1.0	14.5	11.7	8.5	0.2	8.5	0
2	3.1	6.5	0	6.5	7.5	1.5	14.5	13.5	12.2	3.0	6.7	0
3	2.3	4.5	0	10.0	10.5	9.0	12.0	12.0	4.2	10.5	7.9	0
4	1.5	5.0	3.5	11.0	13.5	12.8	6.0	7.0	12.0	8.5	9.0	0.3
5	2.4	5.5	2.0	9.7	10.0	13.5	3.5	4.5	9.5	10.7	9.5	1.2
6	0	0	9.0	5.2	7.0	13.5	11.0	12.8	4.0	10.7	0	7.5
7	0.5	0	9.0	1.5	8.0	11.0	9.0	13.4	12.1	10.5	1.0	8.0
8	0	6.5	8.0	5.0	13.0	10.5	14.0	.....	12.0	10.6	6.6	0
9	0	7.7	2.0	11.6	13.5	14.0	6.8	13.7	8.3	10.5	0	0
10	5.4	3.0	3.0	8.0	13.0	6.0	7.0	13.4	0.8	10.0	1.0	8.5
11	6.9	6.5	6.5	4.0	13.5	6.5	5.0	5.0	11.0	5.5	0	8.8
12	4.4	7.7	9.5	1.5	13.7	2.5	13.0	12.8	11.5	10.3	1.7	9.0
13	6.4	8.0	9.5	9.5	1.0	3.0	14.3	3.2	4.0	10.5	3.9	9.0
14	6.9	0	9.5	0.3	5.5	7.0	14.3	2.8	11.2	10.5	4.5	8.5
15	1.0	0	9.0	4.0	2.0	5.0	14.3	1.5	2.7	0.4	7.5	8.5
16	0	2.9	3.0	2.5	6.2	10.0	12.0	2.0	4.0	4.0	9.0	8.5
17	7.5	6.9	7.0	4.0	8.8	12.0	14.0	0.6	11.0	10.2	9.0	0
18	2.0	4.6	9.0	0	6.8	4.0	8.0	8.0	4.5	10.2	.....	0
19	1.3	7.3	4.0	10.0	7.0	12.5	11.5	2.0	11.5	9.5	0	0
20	0	1.8	4.0	11.5	1.0	12.5	14.3	12.8	8.0	8.0	6.5	0
21	0	0.2	5.3	13.0	3.5	14.0	14.0	13.0	3.7	10.0	0.5	0
22	0	0	0	.....	4.0	9.2	13.5	12.8	0.8	8.5	0	6.2
23	2.5	1.8	0	.....	1.0	5.0	10.0	12.7	0.8	7.0	6.5	0
24	4.0	0.3	2.0	0	7.0	8.5	10.2	11.0	10.3	10.0	7.5	4.5
25	0	2.5	10.5	.....	6.5	8.5	8.5	12.5	0	10.0	0	8.0

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1891—Continued.

SALT LAKE CITY, UTAH—Continued.

1891.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
26	0	0.3	10.5	10.0	9.6	8.0	11.5	10.7	6.7	10.0	7.6	0
27	0	0	1.0	12.0	5.4	14.5	5.0	11.5	3.5	10.0	0.8	0
28	0	0	1.0	11.0	13.0	15.0	6.0	12.5	9.5	8.0	8.5	1.5
29	5.3	.....	0	10.0	9.0	14.5	3.0	12.5	8.3	0.5	7.5	0
30	3.4	.....	1.0	9.0	8.5	14.5	13.0	12.5	0.6	7.0	0	1.5
31	0	.....	3.0	.....	4.8	.....	7.0	12.5	.....	5.5	.....	3.5
Means	2.3	3.2	4.6	[1]6.8	7.9	9.3	10.3	[2]9.6	6.9	8.1	[3]4.5	3.3
Percentage of possible	23	31	38	[1]52	55	62	70	[2]69	55	73	[3]45	36

SAN DIEGO, CAL.

1	8.2	No record.	4.0	12.0	5.3	3.0	9.1	8.3	10.4	8.2	8.3	0
2	2.1		6.0	12.0	4.3	12.5	10.3	10.0	11.0	10.2	8.0	5.0
3	7.4		6.0	11.0	9.0	11.7	8.1	9.0	6.4	10.6	9.0	9.0
4	0		3.0	12.0	6.0	11.4	4.2	11.0	6.1	10.7	9.0	3.0
5	3.3		5.3	9.0	6.0	3.4	8.1	9.0	11.3	10.7	5.0	9.0
6	3.1		11.2	3.1	9.1	7.2	11.2	10.4	11.5	9.7	0	9.0
7	8.0		11.3	7.0	6.5	7.2	10.4	10.4	11.2	8.2	8.0	9.0
8	4.4		11.3	12.0	8.5	5.8	11.5	10.4	11.5	8.4	9.3	8.4
9	7.0		11.3	11.0	8.6	3.5	11.2	10.0	11.5	2.3	9.3	9.0
10	7.0		6.4	11.5	0	3.3	9.3	3.3	11.5	0	9.3	8.4
11	7.5		4.5	6.0	0	8.4	6.2	10.0	9.3	0	9.3	8.0
12	8.0		0	9.8	0	10.4	8.4	12.0	11.5	6.2	5.0	6.3
13	8.5		7.4	8.8	0.2	12.4	9.5	8.0	11.5	8.1	7.0	5.0
14	4.0		4.0	7.8	4.3	12.4	11.2	8.3	11.5	1.3	1.0	8.5
15	8.0		0	8.6	6.6	12.4	11.2	7.0	3.4	1.2	9.3	8.3
16	8.0		0	0.5	7.1	0	11.4	9.3	8.8	8.4	9.3	0.5
17	7.5		5.0	4.6	8.5	12.4	2.3	12.0	11.5	2.0	2.0	4.0
18	7.5		0	6.8	5.7	12.4	11.2	11.0	10.9	9.5	9.3	9.0
19	8.0		4.0	0	4.5	12.4	8.6	11.0	7.4	9.0	6.5	8.0
20	8.0		9.0	8.5	5.2	12.4	9.2	10.5	2.0	6.1	9.3	5.3
21	8.0		9.3	9.0	0	9.1	6.2	11.5	5.0	7.3	9.3	9.0
22	6.5		0	8.8	6.3	9.3	11.6	11.0	10.7	8.1	9.3	8.4
23	4.3		3.1	9.5	1.3	7.5	10.3	9.7	8.8	8.6	9.3	3.1
24	8.0		9.5	1.0	0	9.4	7.0	6.7	10.9	7.4	9.3	9.0
25	8.0		10.4	12.0	0	7.6	9.5	6.8	10.5	0	9.1	8.4
26	7.4		10.3	12.0	0	10.2	1.3	9.4	10.6	8.0	8.0	8.4
27	7.3		6.4	11.5	7.4	10.5	7.2	8.4	10.2	9.3	7.4	6.1
28	0		7.2	10.0	9.5	10.2	10.7	9.8	10.8	8.4	9.2	4.5
29	6.3		10.5	11.8	9.5	8.2	9.1	8.4	5.0	6.2	4.3	9.0
30	8.0		10.5	9.3	8.0	6.6	8.3	7.6	3.0	5.2	6.2	2.2
31	8.0		10.5	.....	7.0	.....	8.5	8.6	.....	7.3	.....	8.5
Means	6.4		6.4	8.6	5.0	8.8	8.8	9.3	9.2	6.7	7.5	6.8
Percentage of possible	62		53	66	35	61	62	70	74	58	71	68

SAN FRANCISCO, CAL.

1	0	4.7	0	9.8	9.9	9.0	13.0	9.2	9.5	9.4	Record lost.	2.8
2	2.7	6.5	0	7.6	3.0	12.2	11.7	7.7	6.0	10.7		9.0
3	5.5	8.0	0	11.0	6.5	7.5	7.1	8.8	5.2	10.3		0
4	0	2.0	9.0	8.0	8.4	12.1	12.4	11.8	7.7	10.0		6.9
5	6.0	5.8	5.0	6.8	8.3	9.5	12.1	11.8	1.3	10.0		7.7
6	9	2.6	9.6	0	0	12.0	10.3	11.5	11.2	10.3		8.2
7	6.2	9.5	7.8	3.0	9.8	11.5	11.8	10.7	11.2	8.9		0
8	6.5	9.7	9.0	5.8	11.4	11.8	0	11.4	9.0	6.5		0
9	5.5	9.0	3.4	2.2	12.0	12.4	4.0	10.0	1.0	4.5		7.5
10	6.0	6.0	0	0	9.1	8.0	2.0	4.9	11.5	6.0		7.7

[1] For 29 days. [2] For 27 days. [3] For 30 days.

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1891—Continued.

SAN FRANCISCO, CAL.—Continued.

1891.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
11	7.8	8.9	0	11.5	0	0	12.2	8.5	8.9	9.7	Record lost.	7.2
12	7.5	3.8	0	5.4	5.3	7.5	13.0	12.0	7.9	9.4		6.0
13	7.5	0	7.4	5.5	0	9.2	9.0	10.0	8.0	0.5		0
14	0	0	0	9.9	0	10.0	10.0	11.2	2.2	6.5		5.5
15	0	0	0	5.0	0	9.8	9.5	10.3	7.2	6.3		3.5
16	1.5	9.0	8.8	0	9.3	8.5	7.3	11.1	8.0	7.8		0
17	5.0	2.4	6.5	0	9.0	4.0	11.5	11.6	9.0	9.7		5.2
18	6.2	9.3	9.5	4.7	7.3	6.2	7.5	3.0	5.8	8.2		0
19	7.5	7.5	5.2	4.6	8.4	7.5	12.5	0	6.8	0		0
20	6.0	2.2	9.2	11.8	7.0	11.8	13.0	11.1	9.8	5.5		8.5
21	8.0	0	9.5	11.2	12.4	12.5	11.8	11.0	8.2	6.2		8.0
22	0.5	0	10.2	8.6	7.3	11.2	13.0	11.0	7.2	0.5		4.9
23	2.0	7.5	10.4	5.4	2.3	10.8	12.8	10.5	9.4	7.5		8.5
24	4.0	0	10.0	12.0	1.3	12.5	12.5	6.5	10.5	5.8		7.7
25	7.0	9.0	10.2	11.5	5.6	13.2	13.5	4.5	10.5	3.9		7.8
26	7.0	0	0	11.7	5.5	13.1	12.0	3.8	9.2	4.1		0
27	6.0	0	1.8	10.4	2.9	13.1	8.5	3.0	9.1	5.0		5.2
28	7.3	2.2	9.2	9.0	10.3	13.3	6.8	3.1	11.0	0.4		1.0
29	6.0	.....	10.0	10.0	1.5	12.8	5.4	3.0	10.5	9.1		0
30	6.0	.....	9.2	11.5	3.3	10.8	8.0	9.0	11.0	7.8		8.5
31	0	.....	7.0	.....	11.5	.....	13.0	6.0	.....	2.2		2.5
Means	4.6	4.5	5.7	7.1	6.1	10.1	9.9	8.3	8.1	6.5		4.5
Percentage of possible	46	42	47	54	43	69	68	61	66	58		47

SANTA FE, N. MEX.

1	8.4	8.5	2.6	4.5	No record.	No record.	10.0	9.5	10.0	5.8	6.5	4.5
2	8.0	3.3	7.6	9.5			8.0	10.0	7.0	6.0	9.0	0.0
3	8.3	8.5	7.8	6.4			7.5	10.0	10.0	10.2	9.5	7.5
4	8.2	8.8	5.0	4.3			7.0	9.0	9.5	10.0	9.0	5.0
5	1.5	4.0	2.5	8.1			5.0	5.5	9.0	10.0	9.0	3.0
6	8.3	4.0	1.6	0			8.0	9.0	8.0	10.2	8.5	4.5
7	0	2.2	4.5	8.4			10.0	8.0	7.5	10.0	4.5	4.0
8	0	0	9.7	4.2			9.0	9.5	10.5	10.2	3.0	4.0
9	3.0	8.8	9.7	9.4			11.0	3.5	7.0	10.2	9.0	4.0
10	7.5	8.8	5.0	8.3			11.5	8.5	11.0	9.2	9.0	4.0
11	8.0	8.5	9.0	7.3			12.0	6.5	10.5	9.7	9.0	0.0
12	8.4	8.4	9.8	4.3			9.0	5.5	11.0	3.8	8.5	0.0
13	8.3	8.0	9.0	7.8			10.0	8.5	10.5	10.0	9.0	0.0
14	6.9	6.9	6.0	8.0			5.0	12.0	9.0	10.0	6.0	1.0
15	0.6	7.9	9.7	0.5			7.0	12.0	12.0	10.0	8.0	7.5
16	6.5	0.5	4.5	6.0			11.0	12.0	12.0	10.0	8.5	4.5
17	1.5	0	2.3	8.0			10.0	10.5	9.0	10.0	9.0	8.0
18	8.1	0	7.8	3.5			8.0	9.5	8.5	10.0	6.0	8.0
19	8.2	1.3	5.8	6.3			8.0	9.5	11.5	10.0	8.5	8.5
20	8.4	8.8	8.3	7.0			9.0	11.5	9.5	10.0	8.0	3.0
21	8.6	4.8	9.7	8.0			7.5	12.0	3.5	10.0	3.0	0.0
22	5.5	0	5.0	11.0			9.0	7.0	1.0	10.0	5.0	4.0
23	7.6	0	0	.....			7.0	11.0	5.0	10.0	6.0	6.0
24	8.0	5.4	1.0	4.2			8.5	12.0	5.0	10.0	8.0	0.0
25	6.0	3.8	0	10.4			3.0	11.0	5.5	10.0	5.0	5.0
26	8.5	8.5	9.8	9.5			8.0	9.0	8.5	9.5	6.0	6.5
27	6.6	7.2	0	5.5			5.0	3.5	11.0	9.5	7.0	7.0
28	1.7	4.6	6.0	6.4			7.5	5.0	11.0	9.5	8.5	5.0
29	1.4	.....	8.8	7.8			11.0	4.0	10.0	4.5	9.0	5.0
30	0	.....	8.4	0			4.5	7.0	5.5	9.0	4.5	2.5
31	0.9	.....	4.0	.....			7.5	10.5	.....	5.5	.....	0.0
Means	5.6	5.0	5.8	[1]6.4			8.2	8.8	8.6	9.1	7.5	3.9
Percentage of possible	55	46	49	49			57	65	68	80	67	40

[1] For 29 days.

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1891—Continued.

SAVANNAH, GA.

1891.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	8.4	No record.	0	No record.	10.8	10.8	11.2	11.0	11.0	0	7.9	7.1
2	8.0		0		8.4	11.7	10.2	5.6	5.5	7.0	8.0	3.5
3	5.0		4.8		10.4	5.0	10.6	11.5	6.6	3.8	8.2	1.8
4	8.0		0		7.6	10.6	7.0	9.2	6.5	9.3	8.2	6.4
5	7.4		1.4		0	11.6	8.0	8.0	4.7	10.4	3.8	8.5
6	6.0		3.8		8.6	5.8	5.2	7.4	3.0	10.6	8.0	8.7
7	9.7		0		10.2	5.0	3.8	7.8	11.0	0	9.0	1.3
8	6.6		7.4		5.2	4.9	1.6	10.0	7.3	4.7	8.9	8.6
9	0.2		2.5		5.8	0	1.0	11.0	10.0	3.8	4.6	8.0
10	0		6.8		2.0	3.4	0.6	11.8	2.6	0	0.1	2.1
11	0		0		7.4	3.0	0	1.6	0	0	9.3	0.1
12	3.8		0		9.2	8.0	8.2	11.0	6.1	0	9.2	6.5
13	4.5		3.8		1.2	3.2	13.0	10.8	4.9	0	8.9	2.1
14	5.0		10.2		3.8	2.4	12.8	3.0	11.1	0.5	4.2	4.2
15	0		7.0		1.4	1.8	10.0	2.0	7.7	8.3	8.8	8.3
16	3.3		0		4.0	2.4	6.4	2.6	10.8	10.4	0	1.8
17	0.7		0		5.8	2.8	7.0	4.2	11.0	10.1	3.1	3.2
18	6.5		0		0	4.8	6.2	0	11.0	7.9	9.2	0
19	8.6		5.0		0	0.6	7.1	2.8	11.1	9.7	0.5	0
20	7.8		9.0		8.4	3.8	7.0	0	9.6	10.2	2.5	0
21	4.8		3.5		10.2	7.0	6.8	7.2	9.0	10.1	1.5	0
22	4.3		7.8		10.4	3.5	0	4.2	11.0	9.6	6.2	4.5
23	8.4		9.6		10.4	3.0	4.8	0	10.9	10.2	8.0	3.8
24	2.4		7.2		7.0	6.2	4.0	3.0	5.3	10.1	8.5	1.3
25	4.2		4.0		2.2	4.8	5.2	6.4	1.1	8.9	2.1	7.3
26	8.6		0		4.6	3.0	0	5.6	4.3	9.5	0	4.3
27	4.8		3.2		2.2	7.2	2.0	0.6	5.8	9.3	8.6	6.1
28	1.0		4.0		0	0	0	0	3.1	10.0	8.6	7.2
29	4.0		8.8		2.2	5.8	6.6	2.2	5.2	9.9	0	3.1
30	5.3		6.2		3.2	3.0	8.8	9.8	0	8.4	8.6	7.5
31	6.7		5.2		3.2	.....	3.2	0	.....	8.3	.....	8.5
Means	5.0		3.9		5.3	4.8	5.8	5.5	6.9	6.8	5.8	4.4
Percentage of possible	49		32		39	34	41	41	56	60	55	44

WASHINGTON, D. C.

1	0.0	0.0	8.5	0.0	6.5	5.8	0.0	2.0	7.0	1.3	2.0	7.5
2	1.0	9.0	0.0	0.0	1.0	12.3	3.0	8.0	6.0	1.4	4.5	4.0
3	4.0	0.0	0.0	3.0	5.0	10.0	7.0	0.0	11.3	8.6	6.5	3.0
4	0.0	9.0	9.0	3.0	10.0	4.5	12.5	1.8	3.0	9.3	7.0	0.0
5	7.0	0.0	10.0	5.0	5.0	0.0	14.0	0.0	0.0	5.0	0.0	8.5
6	1.0	0.0	0.0	2.0	3.0	0.0	12.8	4.0	7.5	0.0	8.0	3.0
7	8.5	0.0	0.0	10.0	9.0	0.0	8.0	10.0	11.0	0.0	8.0	0.0
8	8.5	7.5	0.0	10.0	9.5	12.5	0.0	8.0	3.5	9.3	8.0	8.0
9	7.5	0.0	0.0	9.0	10.0	8.0	9.0	8.0	11.8	9.0	7.0	8.0
10	8.5	5.0	8.0	0.0	10.0	12.8	12.0	10.0	11.5	0.0	1.5	8.0
11	1.5	8.5	4.0	0.0	9.5	10.0	13.0	9.0	11.0	1.0	6.0	8.0
12	4.0	0.0	0.0	10.0	11.0	6.0	13.0	7.0	10.0	0.0	4.0	8.0
13	7.0	0.0	0.0	9.0	4.0	12.0	12.0	8.0	11.5	0.0	8.0	8.0
14	7.0	8.0	7.0	9.0	0.0	12.0	9.0	11.0	11.5	5.0	7.0	0.0
15	8.5	5.5	8.0	6.0	0.0	13.0	8.0	10.0	7.8	7.5	3.5	0.0
16	6.3	2.0	4.0	4.0	1.0	11.3	0.0	10.0	11.0	10.0	0.0	5.0
17	0.0	2.2	10.0	3.0	12.0	12.3	5.0	10.0	11.0	9.8	0.0	5.0
18	2.4	6.5	4.0	6.0	8.0	0.0	0.0	5.0	10.8	8.5	8.8	8.0
19	8.2	0.0	0.0	6.0	9.0	0.0	9.0	11.0	9.0	0.6	6.5	6.0
20	7.6	0.0	0.0	0.0	4.0	1.0	3.0	10.0	10.0	5.0	6.5	2.0
21	0.0	0.0	0.0	3.0	2.0	3.0	6.0	0.0	10.6	8.0	0.0	2.0
22	3.2	9.0	0.0	0.0	5.0	7.0	3.0	12.0	10.6	0.0	0.0	0.0
23	8.7	3.0	0.0	0.0	0.0	12.0	8.0	11.0	10.0	9.7	3.5	0.0
24	1.6	0.0	0.0	3.0	0.0	12.0	5.0	3.0	8.0	7.5	7.5	2.0
25	8.3	0.0	3.0	5.0	0.0	13.0	5.0	0.0	10.5	9.2	2.0	0.0

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1891—Continued.

WASHINGTON, D. C.—Continued.

1891.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
26	2.8	0.0	0.0	5.0	0.0	9.0	8.0	0.0	10.0	7.3	0.0	0.0
27	8.5	4.0	0.0	3.0	0.0	11.8	10.0	5.0	10.0	8.0	7.5	7.0
28	0.0	0.0	0.0	5.0	0.0	13.0	2.0	8.0	10.0	9.8	0.0	7.5
29	0.0	.....	4.0	5.0	(*)	12.7	5.0	0.0	0.0	9.0	0.0	0.0
30	8.0	.....	3.0	0.0	(*)	9.0	2.0	0.0	10.5	9.0	7.5	7.5
31	0.0	.....	0.0	.....	(*)	.....	11.0	5.0	.....	8.5	.....	7.0
Means	4.5	2.8	2.7	3.8	4.8	8.2	6.9	9	8.9	5.7	4.4	4.3
Percentage of possible	46	26	22	29	34	55	47	43	72	51	43	44

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS). 1892.

BUFFALO, N. Y.

1892.												
1	3.5	0	0	9.6	0	12.5	13.6	11.4	8.0	8.0	0	4.9
2	0.8	0	0	8.2	0	5.5	5.5	4.2	11.5	10.1	0	0
3	0	0	9.4	7.4	5.0	0	0	12.7	12.0	4.4	0.1	1.2
4	0	5.0	1.6	1.1	8.3	0	10.5	3.3	11.8	2.6	0.1	0
5	1.0	7.2	0	7.0	0	7.0	6.5	9.2	0.5	1.0	4.0	0.1
6	0	8.1	4.7	4.2	0	8.6	12.6	11.2	8.8	7.0	6.8	0.1
7	2.9	0	9.0	9.0	5.0	11.5	13.2	12.3	2.6	3.0	0.2	0.1
8	0	0	0	4.5	5.8	4.4	12.4	8.8	8.0	2.2	0	0
9	0	3.5	1.4	0.8	12.0	1.2	13.0	9.0	10.2	2.7	0	2.5
10	5.4	4.4	0	0.8	3.0	8.7	13.1	10.5	4.2	8.8	0	2.0
11	0	0	3.8	3.2	5.2	13.5	11.5	1.8	9.8	3.0	1.5	3.0
12	0	6.6	0	9.0	0	13.5	12.7	0	8.5	8.7	0	3.1
13	0	5.0	9.3	11.6	11.0	13.8	6.6	0	2.0	8.8	4.8	3.0
14	0	0	8.0	0	0	7.7	12.2	11.3	3.3	8.7	7.0	0
15	5.4	3.3	9.0	9.5	2.5	12.4	10.5	12.3	7.8	2.0	4.1	3.5
16	6.5	4.6	2.5	11.8	9.0	12.5	10.4	12.0	8.4	2.2	0.1	1.0
17	6.0	8.7	1.9	10.5	12.5	10.2	13.8	12.0	11.0	0	5.2	0
18	0	3.0	0	11.4	10.2	7.2	13.0	11.8	10.6	9.0	0	0
19	1.4	0	3.4	11.5	0	2.0	7.7	6.9	0	9.9	0	0
20	5.0	0	9.3	8.7	8.0	5.5	13.4	6.3	10.8	3.3	1.8	6.1
21	6.5	0	10.6	0	0	8.0	12.2	8.2	7.7	7.2	2.0	1.4
22	0	0.8	0	4.2	0	11.6	6.4	7.1	2.4	8.2	2.1	4.5
23	1.5	9.2	0	10.6	0	0.8	12.7	9.2	3.6	7.5	4.3	0.5
24	0	9.2	10.2	11.0	6.4	8.0	8.2	2.5	7.2	6.6	0	6.1
25	3.3	1.0	8.5	12.0	3.0	7.0	12.0	4.2	6.9	1.0	0	0
26	4.2	0.8	10.5	11.2	6.0	11.0	11.8	0	7.7	0.8	5.1	2.5
27	2.0	5.5	0	2.5	1.3	1.7	11.5	4.0	10.0	6.6	0	3.5
28	0	8.8	9.6	0	11.3	5.2	12.6	11.1	9.0	1.4	0	2.3
29	7.4	0	9.4	4.0	0	4.5	8.0	11.3	10.0	1.8	0	3.0
30	0	.....	8.8	9.5	11.8	3.3	13.0	9.8	9.7	5.5	0	0
31	0	.....	0	.....	10.7	.....	7.7	0.4	.....	0	.....	0.1
Means	2.0	3.3	4.5	6.8	4.8	7.3	10.6	7.6	7.5	4.9	1.6	1.8
Percentage of possible	21	31	38	51	32	48	70	54	60	44	17	19

CINCINNATI, OHIO.

1	[illegible]	4.5	0	4.5	9.5	10.0	12.0	5.5	0	8.5	0	3.5
2	[illegible]	0	1.0	7.0	2.0	3.8	4.0	6.0	10.5	9.0	0	7.0
3	4.5	0	4.0	0	3.5	3.0	3.0	11.0	9.2	7.0	0	4.0
4	0	1.0	4.0	5.0	4.0	9.0	9.0	7.6	7.2	8.5	3.0	8.0
5	0	3.0	0	7.0	9.0	12.0	11.5	8.5	7.0	10.0	8.0	7.0
6	0	6.0	3.0	6.0	5.0	15.5	12.5	8.0	8.5	10.5	6.0	3.0
7	6.0	5.0	2.0	0	11.0	6.0	11.0	7.5	9.5	8.0	1.5	3.0
8	4.0	0	0	0	12.0	12.0	10.5	9.0	5.5	4.0	6.5	0
9	1.0	5.0	4.0	1.5	4.5	10.0	5.5	11.2	6.0	5.5	0	7.5
10	0	2.5	1.0	7.0	2.0	13.5	3.0	8.0	10.0	9.5	5.0	2.5

*No record.

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1892—Continued.

CINCINNATI, OHIO—Continued.

1892.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
11	0	1.5	5.0	6.0	0	13.5	2.5	8.5	10.0	9.0	5.5	0
12	0	3.5	8.0	5.5	0.4	13.0	10.5	7.0	3.5	8.5	6.5	0
13	0	7.5	2.0	3.0	3.5	12.5	10.5	12.2	0	7.5	8.5	0
14	2.2	0	8.0	3.5	1.0	11.0	8.0	9.5	0	9.0	0	0
15	2.0	7.0	1.0	10.0	1.0	12.5	6.5	11.5	7.0	1.0	0	0
16	5.0	4.5	7.0	6.2	6.5	11.5	13.0	11.0	10.2	3.5	8.0	0
17	7.0	7.5	0	4.5	8.3	11.5	13.0	10.0	8.2	8.5	0.5	0
18	0	0	0.5	0	1.0	10.5	13.0	8.5	10.2	8.0	5.0	5.5
19	2.0	0	3.5	3.5	0	0	9.5	2.4	9.5	9.0	4.5	0
20	2.6	0	3.0	0	1.5	10.0	7.0	7.0	6.0	0	8.5	1.5
21	5.5	0	0.5	6.2	3.0	8.0	6.0	7.5	4.0	7.5	7.5	2.0
22	0	0	0.3	0.5	3.0	11.0	8.0	11.5	9.0	0	0	7.0
23	4.0	8.0	1.0	7.5	6.5	10.0	7.5	8.5	8.0	8.5	4.5	0
24	8.5	6.5	7.0	8.5	12.5	3.5	12.0	9.5	9.0	3.5	4.0	0.8
25	7.5	0	5.0	3.2	0.5	12.0	9.0	6.0	10.3	1.0	1.0	0
26	7.2	0	3.0	8.5	2.5	6.5	8.0	1.5	9.5	0	1.0	0
27	6.5	3.0	0	4.0	13.5	7.0	11.0	8.0	8.0	1.0	0	0
28	2.5	0	9.0	4.0	9.0	4.0	10.0	5.5	10.0	8.5	0	0
29	3.5	0	8.0	10.5	6.0	4.5	6.5	4.0	9.5	9.0	0	4.8
30	2.0	.....	5.5	10.5	12.0	2.0	0	3.5	9.5	4.0	4.5	1.0
31	6.5	.....	10.0	.....	11.5	.....	4.5	11.0	.....	2.5	.....	0
Means	2.9	2.6	3.4	4.8	5.3	8.8	8.3	7.9	7.5	6.1	3.3	2.2
Percentage of possible	29	25	28	36	37	60	57	58	60	54	33	23

CLEVELAND, OHIO.

1	2.1	2.7	0	9.0	0	8.0	11.3	8.0	7.2	7.0	0	0
2	0	1.0	0	8.9	6.0	3.0	2.2	10.4	11.0	9.0	1.1	7.6
3	0	0.8	3.2	2.5	1.2	0	1.8	11.5	10.0	4.0	0	3.5
4	0	2.2	0	2.2	7.7	3.0	12.5	3.2	9.5	7.2	0	1.5
5	1.2	8.2	0.4	8.0	1.0	3.8	12.7	4.0	4.0	2.0	4.2	3.0
6	0	8.5	7.1	5.0	3.5	11.5	11.8	8.5	10.2	9.8	7.3	0
7	3.4	4.0	8.4	6.0	2.4	1.0	11.6	11.0	1.0	4.0	0	2.5
8	2.2	0	0	1.5	13.0	4.5	[1]13.0	8.0	3.0	1.0	1.6	0
9	6.8	1.0	4.5	0	10.0	6.3	[1]9.0	10.5	9.0	3.5	0	5.5
10	2.8	3.0	1.0	3.0	2.7	9.0	8.4	7.2	5.2	8.0	5.1	5.0
11	1.2	0	1.4	8.5	0	11.7	9.6	1.5	10.5	8.5	0	6.5
12	0	3.5	1.0	11.6	0	11.8	11.5	10.1	5.0	9.0	0	5.0
13	0	2.0	0	10.0	1.0	11.5	2.0	12.3	0	8.0	7.8	0
14	0	0	5.0	0	0	9.0	12.0	9.0	6.4	9.0	1.6	0
15	0.8	0	9.0	10.7	3.9	10.0	10.7	12.0	7.7	0.5	3.0	2.6
16	5.7	5.5	6.6	.....	8.5	11.8	11.5	11.0	10.2	9.0	8.3	1.0
17	2.8	8.5	0.6	.....	9.0	11.0	13.0	10.8	10.5	4.2	3.2	0
18	0.1	4.0	0	.....	0.7	8.0	11.0	10.5	11.0	8.3	0	2.5
19	2.0	0	3.4	.....	3.0	0	4.0	1.5	3.5	9.6	3.8	0
20	5.5	0	2.2	.....	7.2	8.0	10.0	8.7	10.0	3.0	6.3	0.7
21	7.2	0	8.8	.....	0.3	6.0	12.0	5.0	0	8.0	0.9	0
22	0.2	7.0	0	.....	0.5	5.0	10.5	7.0	2.0	7.0	0	0
23	0	8.0	0	.....	5.8	2.7	12.8	6.0	7.5	6.0	0	0
24	3.8	9.0	10.5	.....	3.8	3.0	10.0	7.2	5.0	4.5	0	0.3
25	7.7	0	9.5	.....	4.0	7.0	11.0	0	4.5	0	0	0
26	5.0	1.5	7.0	.....	3.0	10.5	10.8	2.0	9.5	0	0	0
27	7.5	3.5	0	.....	5.8	6.5	7.4	5.6	10.5	0.8	0	0
28	4.0	8.5	10.8	.....	11.0	7.5	12.5	8.5	10.5	2.5	0	0
29	3.0	0	8.5	.....	3.5	5.0	5.0	10.5	10.0	0	0	0
30	1.7	.....	0	.....	13.0	7.0	0	5.0	9.6	7.0	0	6
31	6.8	.....	0.6	.....	12.5	.....	12.4	1.2	.....	5.0	.....	0
Means	2.7	3.2	3.5	[2]5.8	4.6	6.8	9.5	7.3	7.1	5.3	1.8	1.7
Percentage of possible	28	30	29	[2]45	32	45	64	53	57	45	18	18

[1] Approximated, recorder not set on 8th, nor until 3 p. m. 9th. [2] Fifteen days.

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1892—Continued.

DENVER, COLO.

1892.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	8.7	3.8	8.0	10.0	10.0	12.3	11.3	12.4	11.6	10.3	0	8.5
2	8.2	6.8	5.0	8.6	1.8	13.0	13.1	10.2	9.2	9.4	5.2	8.0
3	5.0	5.2	9.4	7.6	5.5	9.2	11.2	9.0	7.6	9.9	9.7	8.0
4	8.5	0	0	8.6	8.6	0	14.9	13.5	12.4	8.8	9.7	5.6
5	0	0	0.1	12.2	12.2	10.5	14.9	8.0	12.0	10.0	9.6	1.2
6	7.2	0	0.1	9.9	8.2	14.2	12.3	9.6	12.0	7.0	5.4	0
7	3.3	8.2	10.2	9.0	0	14.2	5.0	7.6	10.2	10.3	9.6	6.8
8	4.9	9.1	9.6	4.9	0	12.3	0	8.2	1.4	6.8	3.0	2.8
9	1.2	9.0	2.6	8.2	3.2	14.2	7.1	5.7	12.0	8.5	8.8	7.3
10	2.7	4.5	11.2	8.0	4.0	14.2	11.2	9.6	6.3	4.5	9.3	1.0
11	8.0	9.0	11.3	11.2	0	9.4	6.0	11.2	12.2	2.2	9.3	9.6
12	8.8	9.5	11.2	2.0	1.6	11.6	7.9	12.3	12.2	0	2.8	8.0
13	8.6	0.6	2.2	12.6	0	14.8	8.4	12.5	12.0	4.3	9.2	7.3
14	4.7	6.8	0	10.2	0	12.6	11.0	12.2	11.4	9.0	9.3	4.8
15	4.6	8.8	2.0	9.2	3.8	9.6	3.8	8.2	9.2	9.4	8.8	7.0
16	2.1	3.6	0.2	8.2	1.4	6.4	10.2	9.0	8.6	6.8	3.4	3.3
17	0.5	7.6	11.8	5.0	12.3	10.0	10.8	8.2	7.6	6.0	7.8	9.5
18	8.6	5.3	7.2	2.7	13.7	13.2	11.5	10.4	8.4	9.5	8.4	4.5
19	4.7	8.5	0	0	6.2	13.2	13.0	11.0	7.0	8.5	4.0	6.6
20	4.4	5.1	0	1.8	10.8	13.2	7.0	10.0	7.4	9.2	8.2	0
21	7.3	9.2	7.6	10.4	7.8	14.2	7.0	4.8	11.0	7.2	2.8	9.4
22	9.1	8.8	11.0	11.1	13.9	12.0	7.8	3.0	8.2	2.7	5.3	9.4
23	9.3	0.7	10.6	9.2	12.9	2.0	7.4	9.8	10.2	0.6	3.2	8.8
24	9.8	9.7	11.6	11.7	4.8	5.0	7.6	10.6	9.9	9.3	4.8	4.7
25	9.4	8.8	6.0	12.8	8.4	12.0	10.0	11.2	11.3	9.2	8.3	8.8
26	6.7	5.0	11.2	10.6	9.4	13.2	4.4	10.0	5.3	9.1	8.2	7.2
27	5.2	4.2	11.2	13.3	8.2	14.2	0	9.2	10.6	9.1	7.6	4.8
28	8.2	9.0	8.2	11.5	11.3	14.2	3.0	0	10.3	7.9	7.0	7.7
29	7.0	6.3	10.0	12.0	5.7	10.0	7.9	11.2	10.1	4.7	6.4	7.0
30	6.1	.....	11.6	11.8	0	9.0	9.5	12.8	10.2	0	6.8	8.7
31	0	.....	4.1	.....	1.5	.....	14.5	10.3	.....	6.3	.....	6.6
Means	5.9	6.0	6.6	8.8	6.0	11.1	8.7	9.4	9.6	7.0	6.7	6.4
Percentage of possible	60	56	55	66	42	74	59	69	77	62	67	52

DETROIT, MICH.

1	3.0	6.4	5.6	9.4	0	4.1	14.2	7.2	10.3	7.1	0	0
2	0	0	9.5	11.5	2.3	2.0	2.7	11.1	12.3	8.4	0	0
3	8.1	0	8.0	2.5	0	0	3.5	10.7	11.4	6.8	9	6.3
4	0	5.4	0	0.7	12.2	4.9	13.6	10.3	9.1	9.8	0	0
5	0	8.7	0	10.2	0	2.4	13.9	1.7	9.9	6.7	5.9	5.9
6	0	8.8	10.2	7.2	5.7	9.1	13.8	10.9	12.0	10.5	7.5	3.1
7	5.3	1.4	8.6	10.5	0	3.0	13.5	12.7	0.4	1.9	1.0	0
8	3.0	0	0	1.7	6.9	5.0	11.5	11.8	3.0	0	0	0
9	7.6	7.1	6.7	0	9.8	7.2	10.6	8.9	10.8	4.8	0	0
10	4.5	2.9	4.0	1.5	0	11.1	10.0	7.0	4.0	9.9	6.1	0
11	7.0	0	5.7	9.1	0	12.2	11.7	6.4	10.2	9.8	4.1	3.4
12	0	7.1	4.6	12.0	0	13.8	11.6	12.9	5.9	9.9	0	6.8
13	0	1.7	2.8	10.8	9.5	10.0	4.4	12.8	0	5.9	5.3	0
14	2.0	0	10.2	0	0	13.8	13.6	12.5	7.0	8.7	0	0
15	8.0	3.3	10.0	10.9	0	12.9	12.7	11.8	11.6	3.5	0	6.2
16	7.6	3.5	4.7	9.9	8.0	13.3	13.6	12.0	11.1	7.6	8.3	4.0
17	1.4	7.6	3.4	0	12.5	8.6	13.5	12.0	11.4	4.6	0	1.3
18	0	0	4.5	10.6	2.1	8.1	12.6	12.0	11.3	5.6	0	2.9
19	7.1	0	1.6	12.2	0	0	6.0	0.4	4.0	9.2	0	0
20	2.7	0	10.8	8.5	4.6	5.7	12.3	12.6	10.8	4.5	4.5	6.8
21	8.0	0	10.4	2.8	2.5	6.9	12.2	9.9	8.9	8.9	0	0.8
22	1.3	1.7	0	5.6	0	3.0	9.7	4.2	5.3	8.7	0.3	3.2
23	0	2.4	0	11.9	4.8	5.4	12.9	12.4	9.8	7.9	7.5	4.0
24	8.8	4.6	11.0	12.0	2.2	2.9	10.6	11.7	10.3	9.2	0.6	8.0
25	8.5	0	10.7	7.1	7.4	11.7	11.2	6.9	5.6	0.2	0	1.0

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1892—Continued.

DETROIT, MICH.—Continued.

1892.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
26	8.9	9.2	9.7	11.7	3.3	6.3	12.4	0.2	10.6	0.4	0	1.4
27	6.3	9.6	4.9	0	7.4	7.2	6.7	0	10.9	0	0	0
28	3.5	5.2	10.8	0	11.6	7.6	10.8	10.1	9.8	1.4	0	4.9
29	5.5	0	10.2	10.4	8.1	5.6	4.1	12.2	10.6	1.8	0	0
30	6.5	.....	0	11.2	11.4	10.0	12.0	6.0	10.3	7.8	0	5.2
31	7.4	.....	1.8	.....	7.8	.....	12.0	1.3	.....	0	.....	0
Means	4.3	3.3	5.8	7.1	4.5	7.1	10.8	8.8	8.6	5.9	1.7	2.4
Percentage of possible	45	32	49	53	31	46	72	63	69	52	17	26

DODGE CITY, KANS.

1	8.6	5.0	7.0	7.7	12.0	10.0	9.6	13.2	12.5	10.0	0.0	3.3
2	8.5	9.5	10.8	7.4	3.0	13.6	13.6	12.6	12.5	10.0	0.1	8.4
3	7.4	8.5	1.8	5.4	6.4	13.6	4.0	13.2	5.2	9.8	9.6	8.0
4	5.0	0.0	0.0	3.8	0.0	6.0	7.8	13.0	4.2	9.8	10.5	6.0
5	1.5	0.0	0.0	12.2	10.6	13.6	13.6	10.8	12.4	9.8	10.0	1.2
6	8.8	0.0	0.0	12.4	11.6	13.6	8.0	9.3	12.4	9.4	3.2	0.0
7	8.8	9.0	10.8	10.8	0.0	13.1	11.6	12.0	10.2	1.8	10.4	1.2
8	1.2	2.5	9.0	9.2	0.0	13.7	10.8	12.0	7.8	9.8	1.0	9.0
9	0.0	5.8	1.2	11.5	0.0	13.7	2.4	7.0	12.2	9.8	4.0	9.2
10	0.0	9.2	11.0	4.8	13.0	13.7	10.8	7.0	8.8	9.6	10.3	8.0
11	4.2	8.0	11.0	11.2	0.0	10.0	6.4	11.2	12.2	7.5	10.3	0.4
12	8.2	9.2	11.0	0.0	7.4	11.9	10.0	12.6	12.2	5.0	10.3	0.0
13	9.2	0.8	7.1	12.0	0.0	13.7	10.0	12.5	12.2	10.0	9.6	9.2
14	9.3	9.8	0.0	12.0	2.4	12.8	13.5	12.7	10.4	10.0	10.2	6.2
15	6.0	9.8	2.0	8.8	13.6	7.0	12.0	12.4	10.8	10.4	8.6	1.4
16	9.3	10.2	1.2	10.2	4.0	11.9	2.2	12.6	4.0	7.0	0.1	1.0
17	0.0	9.4	10.5	12.2	8.5	2.4	8.0	12.6	11.7	7.0	10.0	9.0
18	3.4	0.0	11.0	0.0	13.3	13.7	8.5	13.0	10.2	10.4	10.0	8.0
19	9.1	0.0	1.2	0.0	10.5	8.6	11.9	12.8	11.5	5.3	9.8	0.0
20	0.4	1.6	0.0	5.4	4.8	14.0	13.2	12.8	8.4	0.0	1.0	0.0
21	6.8	3.4	0.0	4.4	2.8	14.0	13.2	6.0	11.2	0.0	10.0	2.2
22	8.8	0.0	11.6	12.6	8.8	13.1	12.2	8.0	11.2	0.8	7.6	0.0
23	9.4	0.0	11.6	4.5	13.6	14.0	13.1	4.2	4.8	0.0	0.0	9.0
24	9.4	10.8	0.8	6.0	11.5	0.0	12.1	9.9	11.0	8.2	3.0	0.0
25	9.4	10.8	6.0	0.2	12.2	5.0	13.1	11.0	11.0	8.5	9.5	0.0
26	6.5	2.0	11.7	10.2	12.2	13.1	12.6	12.5	11.0	9.8	4.0	8.6
27	9.5	0.9	12.2	11.3	2.4	12.8	10.0	12.2	11.0	10.0	8.0	6.4
28	6.6	10.6	8.0	8.5	12.0	10.0	0.0	12.6	10.9	10.0	2.2	6.8
29	9.2	9.8	8.4	12.4	13.8	8.6	1.8	3.8	10.9	1.2	7.6	7.4
30	8.6	.....	11.0	10.6	2.4	10.8	12.9	12.4	10.8	5.0	5.6	6.0
31	6.9	.....	6.6	.....	0.0	.....	11.4	12.4	.....	9.8	.....	7.0
Means	6.5	5.4	6.3	7.9	6.9	11.1	9.7	11.0	10.2	7.3	6.6	4.6
Percentage of possible	65	50	52	60	49	75	67	81	82	65	64	47

EASTPORT, ME.

1	3.7	7.2	0.5	11.0	10.2	7.8	0	6.0	7.0	8.2	0	0
2	0	8.8	0	5.8	5.5	8.6	9.5	0	12.0	3.2	0.5	0
3	0	0	0	6.8	3.2	10.0	0	1.0	11.7	8.4	0	3.0
4	0	0	0	10.8	0	13.6	6.8	12.8	11.5	0	0	0.2
5	7.3	6.7	0	0	11.3	1.2	12.7	1.0	0	0	0	1.0
6	2.0	9.3	1.0	3.8	13.0	6.0	13.5	3.2	3.8	3.0	9.2	8.4
7	0	8.4	6.4	11.6	5.7	14.0	13.7	12.8	11.6	5.3	1.0	3.0
8	3.7	0	7.5	11.6	2.0	12.6	1.4	12.2	11.5	9.0	3.3	0
9	3.0	0	0	0	4.5	5.5	7.8	3.8	11.4	0	5.7	2.0
10	5.6	6.4	8.8	0.4	14.0	9.5	4.7	6.2	10.8	8.8	0	5.0

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1892—Continued.

EASTPORT, ME.—Continued.

1892.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
11	0.5	0	3.6	10.5	3.6	6.2	10.5	2.4	11.2	3.0	2.7	3.4
12	0	3.0	6.0	9.0	0	7.7	12.4	0	9.2	10.5	0.4	8.2
13	0	9.2	10.5	1.4	13.0	9.8	6.6	0	8.0	2.6	7.2	8.0
14	0	9.7	5.2	9.3	11.7	7.8	3.2	1.2	6.3	4.0	0	0
15	0	0	10.5	0.6	11.3	10.5	11.5	6.6	5.0	10.0	0.2	0
16	7.4	9.5	10.6	9.2	2.7	13.8	5.0	13.4	10.4	0.5	0	6.2
17	7.0	9.5	9.8	0.5	11.0	4.2	13.5	12.3	10.2	7.7	8.0	8.3
18	0	0.3	0	7.4	3.5	10.0	13.3	12.0	11.0	9.2	0.6	7.6
19	0	7.2	0	5.2	6.4	0	8.5	4.4	3.0	0	0	0
20	4.2	7.0	2.0	12.2	0	0.4	9.2	0	11.0	6.0	4.2	0
21	2.9	3.0	10.7	11.3	6.6	0	14.0	7.5	11.0	10.0	8.6	4.6
22	7.8	1.4	10.7	0	0	0	7.0	10.2	11.0	10.0	3.7	8.3
23	2.5	9.4	0	0	0	0	5.6	12.7	3.5	3.0	5.8	8.4
24	8.0	4.0	0.5	13.0	8.6	6.3	9.0	9.3	5.4	0.5	3.0	6.3
25	1.4	0	7.0	13.2	2.6	0	9.3	0.6	0.6	2.0	1.7	1.0
26	0	0.2	9.6	13.2	9.8	0	10.2	2.3	0	0	1.0	8.0
27	5.0	10.0	9.8	13.3	0	0	13.0	0	5.8	0	4.0	7.5
28	4.4	5.4	8.6	2.0	0	0	14.0	0	10.0	3.5	3.0	7.5
29	3.4	0	10.5	2.5	12.6	7.8	9.0	0.2	7.5	4.2	0	7.5
30	0	.....	10.6	5.6	0	0	8.2	12.0	9.2	1.0	0	7.5
31	0	.....	10.2	.....	0	.....	9.2	2.4	.....	8.5	.....	5.4
Means	2.6	4.7	5.5	6.7	5.6	5.8	8.8	5.4	8.0	4.6	2.5	4.4
Percentage of possible	28	45	45	50	38	38	58	39	64	42	26	50

GALVESTON, TEX.

1	9.0	8.2	10.8	2.0	9.0	5.6	12.0	3.3	9.4	1.0	10.0	10.0
2	9.0	5.5	11.0	3.7	8.0	12.4	12.0	7.0	9.4	9.7	3.0	10.0
3	9.0	7.4	10.9	0	8.5	12.4	11.5	7.0	10.0	9.6	8.3	9.0
4	8.5	4.0	6.8	2.0	6.9	11.3	7.3	11.8	1.7	8.9	6.2	9.0
5	8.5	.....	1.5	0.8	8.5	11.7	6.3	12.4	9.1	7.6	9.0	10.0
6	9.0	0	2.4	0	9.6	7.9	1.0	12.4	6.0	7.6	4.0	5.5
7	9.0	3.3	0.3	11.9	9.2	9.4	5.0	7.3	8.2	9.6	6.0	5.2
8	5.0	4.6	6.7	12.0	4.0	12.5	10.8	3.7	9.8	9.8	0.5	0
9	0	5.0	11.0	11.5	1.6	12.5	11.2	0.2	3.2	9.6	6.5	2.5
10	0	6.0	10.4	5.5	11.2	12.6	2.3	8.9	9.5	9.9	10.0	8.3
11	0	5.8	10.0	10.2	8.0	12.5	8.3	9.5	7.5	9.9	8.3	0
12	0	8.7	4.7	7.9	6.2	12.2	12.2	11.8	1.5	9.8	6.0	0
13	0	2.5	4.2	8.6	8.2	12.6	12.4	12.3	10.6	5.0	4.5	0
14	7.5	8.5	10.2	4.0	6.2	11.8	12.2	9.9	10.6	2.0	9.5	7.0
15	9.0	9.5	1.0	7.3	8.2	11.5	12.0	1.9	10.4	9.5	9.5	5.0
16	2.5	9.0	0	6.5	7.5	12.5	2.6	6.0	10.4	9.6	5.0	0
17	2.0	7.0	0.5	6.5	11.2	11.8	0	8.0	10.6	6.2	[1]8.5	0
18	0	4.5	10.8	9.7	12.2	4.0	9.8	10.5	11.2	10.2	10.0	0
19	0	3.0	10.8	7.4	11.5	4.8	11.6	10.5	10.8	9.9	10.0	0
20	3.5	7.0	0	3.0	10.5	8.0	9.8	10.1	11.1	10.0	7.0	5.0
21	0	0	0.5	0	12.3	12.5	7.2	11.0	10.9	10.0	3.0	3.0
22	0.5	0	3.3	11.2	12.3	1.0	7.2	10.4	10.9	6.5	7.5	0
23	6.5	9.0	0	5.6	12.2	7.9	12.0	9.8	10.3	9.9	9.5	0
24	10.0	10.0	0.3	1.6	12.0	7.5	11.9	11.0	9.5	4.2	7.5	5.0
25	10.0	10.0	0	9.3	8.5	4.0	11.5	11.0	10.0	9.5	8.6	6.0
26	9.0	2.5	8.7	5.7	9.7	3.0	11.4	8.7	9.8	9.5	7.0	7.0
27	9.5	2.5	11.0	7.2	5.6	10.3	7.4	9.2	10.5	10.0	6.0	9.0
28	9.5	6.8	8.6	7.7	6.3	2.9	10.3	10.7	10.5	9.8	4.5	4.0
29	9.5	1.5	4.2	9.0	5.2	12.0	12.0	11.1	9.6	5.5	1.0	0
30	8.0	.....	4.8	9.3	3.2	7.5	12.2	6.5	4.2	8.0	7.0	0
31	9.5	.....	8.5	.....	1.6	.....	7.2	7.5	.....	2.0	.....	0
Means	5.6	5.4	5.6	6.2	8.2	9.3	9.1	8.8	8.9	8.1	6.8	3.9
Percentage of possible	53	48	47	48	61	66	66	67	72	70	63	38

[1] Sunshine estimated.

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1892—Continued.

KANSAS CITY, MO.

1892.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	0.3	0	0	9.5	1.3	0	8.1	11.6	11.2	10.1	0	0
2	7.0	0	7.0	10.5	2.0	0	3.4	11.9	10.8	10.1	0	6.5
3	7.0	8.0	10.0	3.3	1.8	0	1.8	12.8	8.0	10.0	1.8	8.0
4	0.8	0	0	10.2	0.8	11.6	13.3	12.9	0	8.9	0.9	3.4
5	0	0	0	4.0	3.0	5.2	13.5	11.5	11.2	8.9	9.0	2.2
6	8.0	0	0	10.8	12.4	11.8	13.2	12.5	7.2	8.6	0	0
7	8.0	0	1.9	10.3	11.4	11.5	13.1	10.7	11.1	8.1	8.8	0
8	1.4	3.3	6.5	9.1	0	9.5	3.9	12.6	7.7	8.9	7.4	7.9
9	1.0	6.0	10.0	9.8	1.3	13.1	3.4	8.9	8.7	9.1	3.0	1.2
10	0	7.8	10.2	0	0	10.8	6.6	2.7	0.2	8.8	8.8	7.4
11	0	7.7	10.4	0	8.2	13.3	12.8	6.3	6.5	8.9	8.3	7.5
12	7.8	8.2	10.0	0	0	13.3	10.1	12.0	9.8	8.6	9.2	0
13	3.7	7.0	7.8	0	2.0	11.9	1.9	7.9	11.6	0.7	2.7	0
14	4.0	6.9	0	2.6	2.6	12.9	9.2	11.8	10.9	2.2	8.2	7.9
15	5.2	8.8	1.8	9.6	7.9	12.3	4.3	8.7	10.8	1.6	8.9	5.9
16	8.2	8.6	4.8	6.1	10.1	10.3	4.4	12.6	9.8	1.8	0	0.4
17	0	7.2	8.0	4.5	1.2	6.0	3.1	12.0	9.6	3.9	0	5.9
18	0	0	10.7	0	5.5	5.9	2.4	12.3	8.0	8.6	7.9	8.3
19	4.0	0	9.2	0	9.5	13.8	13.5	12.4	10.0	8.5	6.6	8.0
20	0	0	0	0	4.0	13.4	13.5	7.8	10.0	0	7.7	5.2
21	5.1	0	0	1.3	1.8	13.7	13.5	11.0	8.1	0	7.3	5.4
22	8.0	0	10.5	3.8	9.5	13.7	8.3	6.8	10.0	6.0	7.1	6.6
23	8.5	0	9.8	10.6	12.1	9.6	12.7	7.6	7.7	0.1	4.7	0
24	8.5	0	2.9	2.2	8.1	4.6	12.7	5.9	5.0	8.5	0	0
25	8.5	9.3	0	10.6	12.5	9.2	12.7	12.1	9.2	8.6	5.0	0
26	8.5	7.0	0	1.2	10.5	1.6	12.7	10.0	11.1	3.9	3.8	8.0
27	9.0	0	7.3	0	12.6	9.3	8.2	6.8	11.1	6.9	7.1	1.3
28	9.0	0	11.0	2.6	4.3	12.3	1.9	8.9	3.2	8.9	0.5	0.4
29	6.4	0	1.3	12.0	4.5	11.5	4.6	1.2	6.2	7.0	8.2	0
30	1.5	.....	5.1	1.3	3.2	10.3	5.5	12.0	9.5	3.0	5.8	0.6
31	0	.....	10.7	.....	0.2	.....	10.8	12.0	.....	2.5	.....	0
Means	4.5	3.3	5.4	4.9	5.3	9.4	8.4	9.9	8.5	6.2	5.0	3.5
Percentage of possible	46	31	45	37	37	63	57	72	68	55	49	37

MEMPHIS, TENN.

1	3.3	8.5	0	0	9.5	0	7.5	0	12.2	10.8	6.0	0
2	6.8	4.0	3.7	8.0	6.0	0	9.2	9.3	8.4	10.7	8.2	0
3	6.4	8.5	9.2	0	4.0	2.6	2.5	11.6	12.0	10.6	0	0
4	3.0	0	9.1	0	9.0	13.0	0	11.4	5.5	10.1	8.8	0.5
5	3.2	0	0	4.0	11.0	11.5	3.2	11.0	4.0	10.0	4.2	7.0
6	0.5	5.0	0	5.0	7.5	7.7	5.0	11.2	12.0	10.3	0	1.0
7	7.0	7.0	4.0	0	0	13.2	0	12.0	11.6	10.2	7.0	3.5
8	1.3	0	2.4	11.0	5.5	11.0	0	12.3	11.8	8.3	3.7	6.3
9	0	6.0	3.3	12.0	0	12.8	3.5	7.0	11.5	10.4	0	6.0
10	0	9.5	4.8	5.0	6.0	13.0	5.0	4.5	11.2	10.5	8.8	6.3
11	0	6.0	8.9	0	13.5	8.5	3.0	6.2	11.6	10.3	9.0	3.0
12	0	8.0	9.7	2.0	13.3	13.2	4.0	7.3	0	9.4	9.2	0
13	0	3.0	7.0	0	2.5	12.0	7.2	12.0	9.5	6.6	9.4	2.0
14	7.5	7.0	0	9.0	4.0	11.2	3.6	10.4	11.4	6.5	6.4	0
15	6.2	9.0	0	11.6	3.0	7.3	9.2	8.0	11.3	4.6	9.3	2.7
16	6.5	8.5	0.7	2.7	7.0	10.8	12.3	9.6	11.0	9.1	3.4	0
17	0.	8.5	0	3.5	5.0	8.4	10.2	1.0	10.6	10.1	1.6	0
18	1.2	0.5	10.0	5.0	2.5	6.0	11.0	1.5	10.8	5.2	9.7	8.8
19	0.	0.5	10.1	8.0	6.5	0	12.0	6.2	0	6.0	8.0	0
20	7.0	0	7.7	0	0	12.0	[1]6.0	12.4	7.6	5.7	9.3	8.0
21	6.5	0	0	11.5	1.0	13.8	12.0	7.0	10.0	0	7.2	0
22	0	4.0	0.4	9.6	3.0	7.0	13.0	10.0	10.0	6.2	6.0	3.0
23	4.5	3.0	6.8	11.5	7.5	8.0	12.8	5.4	10.2	1.0	9.8	0
24	8.0	4.5	1.0	0	13.5	5.0	12.8	7.0	11.4	0	8.2	0
25	8.0	2.5	0	8.5	9.0	7.5	7.0	0.6	11.0	9.4	1.0	0

[1] Instrument not set, a. m. 20th; not used in computing means.

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1892—Continued.

MEMPHIS, TENN.—Continued

1892	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
26	7.5	8.5	8.7	10.6	7.5	11.0	12.8	4.6	8.2	6.5	0	7.6
27	7.5	5.0	10.1	7.0	8.0	8.0	10.0	1.6	11.0	9.3	2.0	7.8
28	8.0	0	8.8	0	4.3	13.0	5.8	6.0	10.0	9.4	0	7.0
29	8.6	0	0.8	10.0	13.0	13.0	9.3	11.5	9.6	8.3	5.0	4.0
30	9.2	.....	10.3	12.2	4.0	2.0	6.6	5.0	11.0	8.6	0	0
31	8.8	.....	9.7	.....	0	.....	3.5	10.8	.....	3.0	.....	0
Means	4.4	4.4	4.7	5.6	6.0	8.8	[1]7.1	7.6	9.5	7.6	5.4	2.7
Percentage of possible	43	40	39	42	42	60	[1]53	56	77	67	52	27

NEW ORLEANS, LA.

1	5.2	7.5	9.0	2.0	7.5	9.5	8.0	4.0	10.5	9.5	2.0	6.5
2	9.2	8.0	11.0	2.0	7.5	4.5	12.0	7.5	11.0	10.0	3.0	7.0
3	8.8	8.5	11.0	1.0	9.5	3.5	9.5	8.0	10.5	11.0	5.0	9.0
4	8.5	8.8	10.5	0	10.0	12.5	8.0	8.5	9.0	9.5	10.5	4.0
5	0	4.0	2.0	4.0	10.0	9.5	6.0	4.5	4.5	6.5	0	4.5
6	9.2	4.5	6.0	4.0	10.5	12.5	3.0	3.5	7.0	10.0	0	5.2
7	0	0	2.0	8.0	9.5	9.0	3.0	6.5	11.5	10.5	0	2.0
8	0	5.5	0	10.0	6.5	12.5	0.5	8.0	5.0	11.0	0	6.0
9	0	9.0	11.0	7.5	10.5	11.5	1.5	8.0	8.5	11.0	0	3.0
10	0	5.0	9.0	6.0	3.5	13.0	1.5	9.5	0.5	11.0	0	3.0
11	2.0	10.0	9.5	6.0	11.0	13.0	3.0	8.5	5.5	10.5	0	4.0
12	0	10.0	9.0	0.5	12.0	5.5	4.0	3.5	6.0	2.5	0	0
13	0	0	6.0	0	13.0	10.5	5.5	4.0	9.0	1.0	0	2.0
14	0	2.0	9.0	0	13.0	8.0	3.5	3.0	6.0	0	0	3.0
15	8.5	8.0	7.0	0.5	13.0	6.5	0	3.0	7.0	6.5	0	1.5
16	4.6	6.5	7.5	0	8.5	4.0	0	6.5	5.5	9.5	4.0	2.0
17	0	9.5	0	10.5	9.0	0	7.0	0	5.5	10.0	2.5	0
18	0	4.0	11.5	6.0	10.0	0	8.5	9.0	11.5	10.0	4.5	1.0
19	0	7.0	11.5	5.5	13.0	0	12.0	7.0	11.5	0	9.5	0
20	4.5	6.5	5.0	6.0	12.0	0	5.5	7.5	11.5	8.5	6.5	0
21	9.0	1.5	7.0	7.0	9.0	0	11.5	4.0	11.5	10.0	5.5	6.7
22	8.6	0	2.5	11.0	11.0	0	12.5	5.0	11.0	0	7.5	8.7
23	0	5.5	3.0	12.0	13.0	1.0	10.5	7.0	6.0	0.5	9.0	5.0
24	9.7	10.5	1.0	10.5	8.0	7.5	6.5	6.0	10.0	10.5	8.5	0
25	9.7	10.0	0	5.5	8.0	9.0	1.5	7.5	10.5	10.5	4.5	4.5
26	10.0	2.5	10.0	7.0	11.5	9.5	4.0	11.0	10.0	10.5	4.0	0
27	10.3	3.0	11.5	8.0	6.0	5.0	2.0	11.0	9.0	10.5	8.5	6.2
28	10.0	3.5	10.0	7.0	12.0	7.5	6.0	5.5	5.0	10.5	4.0	8.7
29	10.0	9.0	8.0	0	7.0	11.5	10.0	4.5	0	8.0	4.5	7.0
30	10.0	.....	8.0	1.0	6.0	9.5	9.0	10.0	0	8.5	3.5	0
31	9.2	.....	9.0	.....	4.5	.....	10.0	10.5	.....	0	.....	0
Means	5.1	5.9	7.0	5.0	9.5	6.9	6.0	6.5	7.7	7.7	3.6	3.4
Percentage of possible	48	52	58	38	70	49	43	50	62	67	33	36

PHILADELPHIA, PA.

1	2.0	1.6	0	2.8	7.0	12.9	No record.	0	5.0	9.2	2.6	5.9
2	2.3	0	0	0.3	8.3	13.8		0	12.5	11.0	0.8	8.8
3	0.8	0.6	8.2	7.5	9.0	6.3		12.7	11.7	5.0	3.6	4.0
4	6.2	5.2	2.8	9.3	8.0	0		12.5	11.0	0.5	0.3	8.6
5	0	0	0	0.3	6.5	4.2		9.2	11.0	5.2	9.4	7.3
6	0	9.0	10.5	2.7	7.7	10.0		10.5	10.5	11.0	9.4	2.3
7	8.2	0	10.5	0.6	4.9	12.5		12.7	11.7	10.8	0	0.5
8	8.2	7.3	0	10.3	12.7	1.7		9.5	2.2	5.5	7.5	0.3
9	2.5	4.5	3.2	8.0	12.4	5.0		10.7	3.7	2.2	0.2	8.1
10	0	9.0	1.5	10.8	9.3	0.3		11.8	10.0	10.8	0	0.7

[1]30 days.

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1892—Continued.

PHILADELPHIA, PA.—Continued.

1892.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
11	0	2.2	7.4	7.2	1.8	13.2	No record.	10.0	7.4	9.5	9.6	8.3
12	0	4.0	9.5	10.8	4.5	13.9		9.2	8.0	10.0	0	8.5
13	0	8.6	0.2	12.1	3.4	13.2		8.0	1.0	3.0	9.7	0
14	0	1.8	11.6	0	0	13.8		12.5	8.0	10.0	7.5	0
15	0	9.2	10.5	2.5	6.7	11.7		11.7	10.4	8.0	0	0
16	8.7	9.6	4.8	9.8	11.5	4.4		12.5	11.3	7.3	4.0	2.0
17	8.7	9.8	0.5	1.5	12.2	8.4		12.5	11.3	7.4	9.0	0
18	0	9.0	0	0	2.3	2.0		12.5	11.3	1.5	0.3	3.0
19	0	1.8	10.7	8.4	0	7.9		12.5	7.5	4.0	6.6	1.5
20	7.6	0	11.3	9.3	5.1	11.2		7.8	11.3	9.5	9.0	5.0
21	8.3	0	11.3	0	0.2	12.0		6.4	10.0	7.4	2.5	8.2
22	5.6	2.3	2.5	0	0.7	11.0		12.0	0	8.6	7.0	7.6
23	6.0	2.0	0	7.4	2.5	6.7		8.8	2.5	6.8	6.0	1.3
24	0	0	10.0	10.0	11.6	6.5		2.3	3.8	10.3	6.0	8.6
25	7.8	0	10.7	0	12.3	10.2		6.0	8.0	6.0	1.4	0
26	8.7	0	0.5	11.5	10.0	8.3		0	10.5	0.5	0.2	7.0
27	9.0	3.5	0	12.3	4.3	0.7		1.3	10.5	7.9	7.2	3.2
28	1.8	0	10.0	5.8	12.3	8.0		4.0	10.5	6.2	0	2.5
29	0	0	11.5	0	8.0	10.0		1.0	10.5	8.5	0	3.0
30	0.5	.....	9.1	13.0	3.4	5.3		6.5	10.0	9.5	6.7	6.9
31	9.0	.....	0	.....	5.8	.....		6.5	.....	8.0	.....	0.1
Means	3.6	3.5	5.5	5.8	6.6	8.2		8.2	8.4	7.1	4.2	4.0
Percentage of possible	37	33	47	44	46	55		59	70	64	42	42

PORTLAND, OREGON.

1	0	7.0	3.5	0.8	5.8	6.3	0	Record 1st to 15th unreliable.	7.1	No record; instrument destroyed by fire October 3.	No record; instrument destroyed by fire October 3.	(1)
2	0	3.0	9.3	1.7	11.2	2.5	11.4		6.3			(1)
3	0	3.5	5.5	3.8	10.3	1.8	10.5		10.0			(1)
4	3.0	6.7	3.8	1.5	11.5	1.2	7.6		7.3			0
5	4.2	4.0	5.3	0	8.2	3.4	10.4		5.1			0
6	5.0	3.0	7.8	0.8	2.2	7.8	12.3		6.6			0
7	0.4	0	2.5	7.8	2.6	3.6	10.4		10.5			7.0
8	1.3	0	0.9	0.2	6.3	8.0	13.5		10.8			4.0
9	0	0	6.2	2.5	5.6	8.4	11.0		9.2			2.0
10	0	0	10.3	1.4	6.8	0	12.0		7.8			0.5
11	1.0	4.7	1.5	9.7	2.5	0	8.0		0			1.0
12	0.4	4.2	1.7	1.5	0.7	8.3	3.5		0			2.5
13	0	3.7	6.5	5.6	4.0	11.5	13.2		0			1.0
14	0	3.8	5.0	0.5	10.4	11.2	11.5		0			0.5
15	1.2	2.7	9.3	6.0	1.3	2.3	3.5		4.3			1.0
16	0	0	4.2	3.5	0.3	8.8	6.5	6.6	3.7			5.0
17	0	0	2.8	4.2	9.3	1.8	0.6	12.6	0.4			4.0
18	0	0	0.4	7.2	13.7	5.2	7.8	12.7	0.8			0
19	2.3	0	3.7	9.3	13.8	5.0	7.3	12.1	0.4			0
20	0.7	0	0	10.9	13.9	13.4	12.2	10.7	0.7			2.5
21	4.3	0.5	2.5	0.8	13.9	4.8	4.0	11.5	2.2			0
22	0	4.0	1.3	2.5	13.2	11.5	7.3	10.0	0			0
23	0	7.5	1.9	1.0	13.5	13.6	9.3	1.0	0			0
24	5.5	7.8	8.3	1.5	13.3	13.3	9.5	4.6	2.9			0
25	0	2.0	2.2	2.8	8.5	13.5	10.3	8.0	9.0			1.0
26	3.0	1.5	2.5	5.2	9.4	13.4	9.4	9.3	6.2			2.0
27	3.5	2.0	4.0	7.5	0.1	13.3	13.6	7.4	7.0			0
28	0	0	5.3	0.3	2.4	13.1	7.5	11.3	10.4			0.5
29	0.8	0	1.3	1.9	3.5	10.0	8.5	9.4	4.4			2.0
30	0.7	.....	3.2	3.5	0	0.9	0	2.3	8.7			0
31	5.0	.....	0.2	.....	8.5	.....	9.8	9.1	.....			3.0
Means	1.4	2.5	4.0	3.5	7.3	7.3	8.5	8.7	4.7			1.4
Percentage of possible	15	24	34	26	49	47	56	(2)63	38			16

(1) No record. (2) 16 days.

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1892—Continued.

ST. LOUIS, MO.

1892.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.3	7.3	0	4.2	10.3	8.0	11.5	11.6	12.3	9.5	0	5.2
2	7.3	0	0.2	10.8	5.2	0	10.0	11.7	11.9	9.2	0	0
3	1.7	7.7	8.7	2.5	4.9	6.5	0	11.8	12.1	10.0	0	4.0
4	0	0	0.7	4.8	0	10.8	12.8	10.7	3.9	10.0	6.8	2.3
5	0	6.0	0	11.0	9.2	0	11.0	12.0	11.9	10.0	0	0
6	1.3	0.5	0	6.0	8.0	10.0	12.0	9.8	10.3	9.5	0	0.7
7	2.4	6.6	0	6.2	12.2	12.2	7.0	12.3	9.3	7.3	5.8	0
8	0	4.0	9.2	5.6	0	12.0	0	12.3	8.7	4.0	0.5	4.2
9	0	6.0	7.2	11.7	3.0	11.0	2.5	7.0	11.2	9.0	0	3.4
10	0	4.5	4.0	6.3	0	12.0	3.2	3.4	8.9	10.5	0	6.2
11	0	5.0	8.9	0	1.2	13.0	2.5	1.7	0	10.3	2.5	7.8
12	1.2	0	9.4	8.5	5.0	12.5	6.9	6.5	0	9.0	5.0	0
13	0	6.0	0	0	2.0	12.4	2.0	9.0	10.8	8.5	7.0	0.1
14	3.0	0	0	0	1.0	11.0	4.0	7.0	11.4	[1]1.5	0	0
15	1.3	6.8	1.0	11.5	0	12.0	5.2	8.5	11.3	8.5	8.0	2.8
16	7.1	8.1	6.0	5.6	7.3	11.5	10.5	11.8	11.0	9.2	2.0	0.4
17	0	4.7	3.6	2.7	11.0	6.0	12.5	10.5	10.5	9.7	0.5	5.0
18	0	0	7.0	0	5.2	2.0	7.0	3.5	10.9	0	7.0	9.0
19	3.5	0	2.0	0	1.2	8.0	8.2	9.3	8.0	9.5	7.0	0.7
20	0.6	0	0	0	2.0	10.5	8.9	10.0	4.5	0	4.5	8.7
21	5.2	0	0	4.7	9.3	11.1	4.2	12.0	9.0	0	5.2	0
22	4.9	0.9	0	0	11.0	11.0	8.5	11.0	10.2	1.0	1.2	5.9
23	8.3	1.2	8.2	8.0	5.1	8.2	10.5	5.2	9.4	1.0	0	0
24	8.2	0	8.4	8.7	7.0	8.6	[1]12.5	5.7	5.7	3.1	0	0.1
25	7.9	0	8.3	10.5	12.5	12.0	[1]12.5	11.5	6.3	6.0	0	0
26	6.6	6.5	4.1	4.0	9.2	12.5	9.0	4.4	10.1	0	0	8.4
27	7.5	1.4	9.4	5.0	6.2	9.5	12.5	1.0	10.2	5.5	0	7.6
28	8.0	0	4.9	1.2	3.0	6.0	6.2	3.5	0	8.5	0	7.6
29	8.0	0	0	11.5	0	6.2	1.0	5.2	7.4	5.8	2.0	1.8
30	4.0	.....	0	9.5	0	[1]11.0	10.1	11.1	9.0	0	4.0	0
31	7.2	.....	10.0	.....	0	.....	11.0	13.0	.....	0	.....	0
Means	3.4	2.9	3.9	5.4	4.9	9.2	7.6	8.5	8.5	6.2	2.3	3.0
Percentage of possible	35	27	35	41	34	63	53	63	68	54	23	32

SALT LAKE CITY, UTAH.

1	3.0	0	0.2	9.7	2.5	13.0	14.5	13.8	7.5	11.5	6.0	0
2	5.0	5.3	1.0	0	1.5	12.0	14.5	13.6	6.5	11.5	8.6	4.0
3	0	0	8.5	2.5	0.7	5.5	14.5	13.5	12.0	9.0	9.0	4.0
4	0	2.7	7.0	0.3	1.7	12.0	14.5	9.5	12.5	10.0	10.0	0
5	8.0	3.3	3.5	11.0	3.0	14.0	8.0	8.5	12.5	9.5	7.2	0
6	1.0	7.8	10.5	3.0	11.0	14.3	5.5	7.3	12.5	10.0	10.2	0.5
7	0	0.7	10.0	0.3	6.5	14.5	8.9	8.0	12.5	7.5	7.8	8.5
8	0	8.6	9.0	1.0	11.5	14.0	7.2	7.8	12.5	3.0	2.5	6.5
9	0	1.0	11.0	2.2	3.0	4.6	14.0	13.1	12.2	2.0	9.8	4.0
10	0	0	11.0	11.0	3.5	2.0	14.5	5.7	12.2	5.5	9.6	0
11	2.0	3.2	11.0	0	5.0	2.8	14.5	10.3	12.2	1.0	9.2	7.5
12	8.0	9.6	11.0	0	2.3	2.2	14.5	13.5	12.1	10.5	0	7.5
13	0	2.5	0.8	11.0	0	13.0	14.5	13.2	12.1	10.5	8.6	0
14	2.0	2.0	2.5	0	12.0	8.2	14.5	13.2	11.8	10.5	0.8	6.0
15	0	9.0	3.0	6.3	6.3	4.5	14.0	9.5	11.0	6.0	0.7	0
16	0.5	7.2	11.2	6.0	8.0	13.2	12.8	9.3	11.5	2.0	0.5	6.0
17	5.5	1.0	11.0	2.0	14.0	14.0	14.5	12.0	5.5	3.0	7.2	8.0
18	5.0	0.5	1.0	4.5	14.0	12.0	14.3	12.6	12.0	10.0	9.8	8.0
19	0	0.2	0.5	0	14.0	14.5	7.0	12.9	12.3	7.5	8.7	0
20	4.0	0	5.0	2.5	14.0	14.5	14.0	12.8	12.2	10.5	9.2	0
21	8.0	6.0	3.0	7.5	14.0	14.5	12.0	11.8	11.5	10.5	8.5	6.0
22	7.0	0.6	4.5	4.3	14.0	14.5	11.0	12.0	12.0	10.5	2.7	0
23	8.5	9.2	6.5	6.4	11.1	10.2	14.0	12.3	11.5	10.2	0.2	0.5
24	8.0	9.0	4.0	5.2	12.0	14.5	14.0	5.2	12.0	10.2	0	0
25	5.0	0	4.0	12.4	13.5	14.5	13.3	12.2	12.0	10.2	2.5	8.0

[1] By observation.

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1892—Continued.

SALT LAKE CITY, UTAH—Continued.

1892.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
26	1.0	4.2	8.5	0	2.5	14.5	12.5	9.0	9.5	10.2	2.5	0
27	5.5	8.0	4.0	10.7	6.5	14.2	10.0	11.0	12.0	3.0	0	8.0
28	1.0	8.0	0	7.0	5.0	9.2	9.8	12.0	4.8	0	6.0	0
29	0	6.0	8.0	2.8	7.0	10.0	8.2	12.4	7.0	0	5.0	0
30	0	.....	0	6.0	12.5	10.0	14.0	12.3	7.0	0	3.5	7.0
31	0	.....	1.5	.....	14.5	.....	14.0	12.3	.....	0	.....	0
Mean	2.8	4.0	5.6	4.5	8.0	11.0	12.4	11.1	10.8	7.0	5.5	3.2
Percentage of possible	30	37	47	34	55	73	83	81	86	62	56	35

SAN DIEGO, CAL.

1	7.3	7.4	5.1	12.0	0	9.7	11.5	11.0	10.0	9.0	8.4	8.2
2	8.3	7.4	5.1	0	10.3	2.0	4.5	12.0	12.2	6.0	10.5	4.0
3	7.3	2.3	4.0	7.5	2.0	9.5	5.3	10.5	9.5	10.2	10.0	2.0
4	7.0	0	8.2	12.0	8.6	13.3	8.1	11.3	9.3	0.6	10.4	6.2
5	3.0	4.3	10.3	12.0	11.5	10.5	7.0	3.0	9.5	0	10.4	6.2
6	1.0	3.0	10.4	12.5	12.4	10.5	9.5	4.0	10.5	6.0	8.2	9.0
7	4.3	9.2	10.4	12.5	10.4	12.7	11.8	2.5	11.0	4.1	4.5	8.0
8	3.4	4.0	10.4	12.5	11.5	10.3	13.0	0	10.0	6.0	10.0	9.6
9	3.1	9.5	8.6	12.5	12.0	8.0	11.5	7.1	10.2	7.1	10.0	9.6
10	0	10.0	4.0	7.2	7.3	12.6	10.8	9.3	11.5	9.0	10.0	4.0
11	8.2	9.3	2.4	0.5	0	13.2	13.1	13.0	7.0	1.1	10.0	9.7
12	8.2	0	4.5	9.5	6.2	13.2	11.0	10.8	7.0	10.8	10.0	9.7
13	8.3	9.3	7.5	9.6	11.0	5.6	10.0	10.8	9.5	10.8	10.0	9.7
14	6.3	2.0	6.5	12.1	8.6	6.0	8.8	9.7	5.3	10.7	5.6	9.7
15	8.4	9.3	5.2	8.4	8.4	6.8	9.5	9.0	0	10.0	4.6	9.6
16	5.4	8.4	8.3	1.3	9.3	3.2	10.0	13.0	9.7	10.5	8.6	8.8
17	8.4	1.0	8.0	12.0	11.4	2.1	7.1	10.0	11.7	10.5	10.0	8.8
18	8.4	0	7.0	12.0	13.0	8.0	8.5	4.5	10.8	10.5	8.6	8.8
19	8.4	0	3.3	12.5	12.3	7.8	11.5	5.5	0.5	10.5	7.3	6.6
20	8.4	1.2	2.7	11.0	9.0	7.0	11.9	9.5	7.0	10.0	9.7	0
21	8.4	8.3	11.3	11.0	0	2.0	11.8	7.5	8.0	10.5	9.6	8.0
22	8.4	8.2	11.3	3.0	0	0	8.6	8.0	10.2	8.0	9.6	9.3
23	8.4	0	11.3	8.2	0	8.3	8.6	8.8	11.0	8.4	9.4	8.4
24	8.2	0	11.0	11.0	0	13.2	7.2	9.0	10.8	4.0	8.5	0
25	8.1	1.3	4.0	6.3	0	13.2	5.0	9.2	10.8	3.0	6.0	4.0
26	1.0	7.3	10.3	10.0	0	11.0	7.0	9.0	11.5	5.0	2.0	1.0
27	0	6.1	2.0	12.3	4.0	3.0	8.6	9.1	9.7	10.3	9.5	9.3
28	3.0	0.5	8.6	12.3	4.0	9.1	10.3	7.5	7.5	4.3	0	9.3
29	4.5	4.3	10.5	11.0	9.0	6.6	8.5	6.5	8.4	8.8	0	0
30	5.1	.....	0	1.3	5.0	9.0	9.8	8.4	10.5	8.5	5.3	9.3
31	5.3	.....	9.0	.....	10.0	.....	11.3	8.0	.....	6.5	.....	9.6
Means	5.9	4.6	7.1	9.2	6.4	8.2	9.4	8.3	9.0	7.4	7.6	7.0
Percentage of possible	58	42	60	71	46	58	66	62	69	66	75	70

SAN FRANCISCO, CAL.

1	0	6.2	0	0.2	8.0	12.3	11.0	7.6	6.0	9.5	7.0	6.5
2	6.5	8.3	0	5.0	10.5	11.0	12.5	7.7	6.0	10.4	8.0	0
3	2.5	1.8	8.5	11.0	0.5	13.0	10.0	11.5	7.0	5.2	8.0	0
4	0	9.3	4.5	11.0	7.0	12.5	3.0	12.5	6.0	8.4	4.0	5.0
5	6.0	5.3	8.5	11.0	4.0	13.3	11.5	12.5	11.0	3.3	5.0	7.5
6	4.0	3.6	10.0	9.5	11.0	10.5	12.0	4.8	9.0	2.0	2.0	7.0
7	0	7.4	9.0	9.4	13.0	13.0	12.5	0	9.0	8.0	5.0	7.5
8	0.5	7.3	9.0	9.5	10.0	9.0	10.5	6.0	4.5	4.5	9.0	7.0
9	4.0	8.3	6.3	7.0	9.0	12.0	10.0	6.2	6.0	8.1	6.0	6.0
10	8.2	9.5	4.0	9.5	13.5	11.1	5.5	5.0	7.2	9.0	7.5	6.0

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1892—Continued.

SAN FRANCISCO, CAL.—Continued.

1892.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
11	5.5	9.2	1.5	11.5	13.5	11.9	13.0	6.8	1.7	8.0	7.5	8.5
12	5.0	9.7	3.0	12.0	13.2	7.0	12.0	12.2	1.6	9.0	4.0	7.5
13	4.4	8.0	10.0	1.0	13.0	1.5	12.7	10.6	6.8	7.0	8.5	8.0
14	7.2	0	4.2	0.5	10.0	0	9.5	11.8	6.0	9.0	7.0	7.5
15	7.6	0	7.0	11.0	11.0	7.8	8.0	10.2	5.5	8.0	7.5	7.0
16	8.4	2.0	3.0	9.0	9.5	4.5	11.5	12.4	3.7	4.5	8.5	4.0
17	8.2	1.5	0.4	12.4	11.2	8.0	13.3	9.3	5.0	6.6	9.0	7.0
18	7.6	0	0	12.2	12.0	10.0	11.5	12.2	7.5	8.0	8.0	8.0
19	5.2	0	10.0	12.0	12.5	10.9	11.0	11.2	9.5	8.5	8.2	0.1
20	6.5	1.8	8.6	8.0	12.5	13.2	12.7	8.6	6.1	9.3	6.0	1.5
21	7.8	4.0	10.0	5.0	12.0	11.3	13.4	0.6	0	7.3	2.0	0
22	7.0	0	2.0	8.0	5.5	11.4	14.0	0.1	8.7	5.2	2.0	0
23	6.6	7.8	7.4	8.0	0	9.5	11.8	6.4	9.8	6.5	1.0	0
24	5.5	0	9.5	8.5	4.5	6.0	9.8	9.0	9.8	5.8	5.0	0
25	0	0	8.5	12.0	3.0	13.0	0.5	7.4	8.5	8.0	0	0
26	2.0	2.0	4.0	12.0	4.0	9.5	0	4.8	10.5	8.0	4.0	0
27	8.6	0	10.1	12.0	8.0	2.5	2.0	5.2	10.5	2.8	1.5	0
28	7.3	3.5	8.0	5.0	8.0	8.0	1.5	7.5	5.5	0.2	1.5	2.3
29	6.5	5.8	0.1	8.0	11.0	13.3	5.4	1.8	7.3	3.0	3.0	7.5
30	0	.....	3.0	7.0	13.0	13.3	10.2	1.0	4.7	0	0	6.7
31	2.5	.....	7.5	.....	13.0	.....	10.8	0	.....	8.5	.....	5.3
Means	4.9	4.2	5.7	8.6	9.3	9.7	9.5	7.2	6.7	6.5	5.2	4.3
Percentage of possible	49	39	48	66	65	65	65	52	54	58	51	45

SANTA FE, N. MEX.

1	.....	0	10.0	11.0	12.5	14.0	13.5	3.0	12.0	9.2	1.4	8.5
2	.....	9.5	4.0	5.0	12.0	14.0	14.0	12.0	10.7	6.5	0	7.5
3	.....	8.0	3.0	1.0	7.0	10.0	14.0	10.5	9.0	6.3	9.6	2.6
4	.....	3.0	2.5	2.0	10.5	14.0	13.0	10.5	10.0	9.6	9.6	8.0
5	.....	1.0	3.5	7.0	13.0	13.0	13.5	8.0	9.0	10.0	2.2	3.0
6	.....	1.5	0	11.5	13.0	14.0	12.0	11.0	10.0	9.8	7.3	5.5
7	.....	6.0	8.5	11.5	12.0	14.0	8.5	9.0	10.5	7.2	9.0	8.0
8	.....	7.5	9.0	11.5	7.5	14.0	8.5	10.0	8.0	6.1	4.2	8.5
9	.....	9.0	9.5	11.5	10.5	12.5	14.0	12.0	7.4	10.0	9.0	8.5
10	.....	8.0	8.5	11.5	12.5	14.0	12.0	10.0	11.8	7.2	9.5	7.0
11	.....	9.5	9.0	11.0	13.0	14.0	11.0	9.5	10.6	9.0	9.5	3.2
12	.....	6.0	10.0	9.0	12.5	14.0	11.0	12.0	11.8	8.1	9.5	0
13	.....	0	6.0	11.5	10.5	14.0	12.0	12.5	11.3	9.2	9.5	7.0
14	.....	7.5	8.0	12.0	11.5	11.0	13.0	10.0	11.5	10.0	9.5	5.5
15	.....	9.0	9.0	9.0	12.5	14.0	8.0	9.5	10.8	9.0	6.1	8.5
16	7.0	8.0	7.0	8.5	10.0	14.0	8.0	9.5	10.8	7.5	3.0	8.5
17	3.0	8.0	10.0	12.0	12.5	13.0	13.0	7.5	8.5	10.2	9.0	3.3
18	6.0	6.5	7.5	10.5	12.5	14.0	13.5	5.0	7.0	10.1	9.0	8.0
19	7.0	8.0	7.0	4.5	12.5	13.0	6.5	7.0	7.4	9.2	9.0	8.5
20	0	9.0	5.0	6.5	11.0	14.0	13.5	6.0	8.2	4.0	5.5	8.5
21	7.0	9.5	6.0	12.5	4.0	14.0	12.5	10.0	11.0	3.6	9.0	8.5
22	7.0	9.0	10.0	9.5	12.5	14.0	12.5	9.0	4.0	0.2	7.5	8.5
23	7.5	9.0	5.5	12.0	12.0	14.0	9.5	11.0	7.7	0.2	8.0	8.5
24	6.5	9.0	7.5	13.0	7.5	10.0	10.0	12.0	11.0	8.0	4.2	8.0
25	6.0	4.0	9.0	12.5	8.5	14.0	11.0	11.5	11.0	9.6	8.8	5.0
26	4.0	1.0	10.0	11.0	10.5	14.0	7.0	12.0	11.0	10.0	5.3	8.5
27	4.0	9.0	11.0	12.5	12.0	14.0	13.5	12.0	11.0	9.8	9.0	8.5
28	0	9.5	6.0	13.0	12.5	14.0	13.0	10.0	10.6	5.0	7.0	8.5
29	5.0	10.0	10.0	13.0	10.5	13.0	9.5	12.0	10.6	0	8.2	7.0
30	1.0	.....	11.0	8.5	9.0	10.0	11.0	12.0	10.5	1.3	8.5	6.0
31	0	.....	0.5	.....	9.0	.....	11.0	12.0	.....	0.7	.....	8.5
Means	[1]4.4	6.7	7.2	9.8	10.9	13.3	11.4	9.9	9.8	7.0	7.2	6.9
Percentage of possible	[1]44	62	61	76	78	92	79	73	79	61	70	70

[1] For 16 days.

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1892—Continued.

SAVANNAH, GA.

1892.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	0.1	9.0	8.2	9.2	12.3	4.5	0.2	4.3	5.5	7.1	6.2	9.0
2	8.6	8.0	6.1	8.0	11.5	2.3	11.9	9.8	2.7	9.1	7.7	6.7
3	8.7	8.2	9.4	10.0	8.5	3.7	7.2	4.0	11.3	10.5	7.5	7.5
4	8.7	8.1	8.5	6.3	10.9	9.5	8.5	9.7	8.5	8.7	8.5	8.5
5	0.2	1.0	7.0	9.0	12.5	3.5	8.0	10.1	7.0	10.6	10.0	7.7
6	6.8	0.9	1.3	4.5	12.3	6.2	0.7	7.0	3.3	2.7	9.3	6.5
7	7.0	3.5	0.8	2.7	8.2	0.9	1.2	1.3	2.0	2.5	6.1	6.3
8	7.8	0.5	0.2	5.1	0.5	6.0	11.0	3.1	8.5	8.7	1.5	0
9	0.2	8.3	7.1	10.9	2.1	7.3	0.7	6.1	10.7	8.5	5.8	0
10	0	0.2	8.0	10.9	0.7	11.5	1.4	8.1	9.5	8.7	4.0	4.3
11	0	8.1	10.0	0.7	8.0	3.7	7.1	10.1	3.3	2.8	8.1	7.5
12	0	8.5	8.1	7.5	10.0	12.0	10.1	5.7	1.2	5.2	9.0	3.0
13	4.0	8.4	8.7	7.5	12.2	11.5	9.7	9.5	6.2	8.2	9.5	3.7
14	0.1	0	8.0	2.0	12.5	8.7	10.7	11.3	4.5	3.3	3.8	5.9
15	0.0	4.0	4.3	5.1	12.2	11.0	6.5	0.8	10.8	8.5	9.5	1.0
16	3.5	0.3	0	12.0	11.9	10.7	11.3	0.6	6.0	9.5	9.7	6.3
17	0	9.2	1.0	9.1	10.6	8.1	6.2	3.5	0	9.3	9.6	1.5
18	0	9.7	6.3	10.9	9.5	11.3	3.1	4.0	0.2	7.8	6.8	3.0
19	1.2	3.5	10.3	3.7	13.1	11.5	4.5	11.7	6.5	9.7	9.0	1.0
20	0	0	10.3	0	12.5	9.5	1.7	11.5	0	10.2	9.1	8.8
21	8.1	2.5	7.1	2.3	11.3	1.5	2.7	11.5	7.1	9.5	8.2	2.2
22	0	4.3	5.3	0.7	2.1	1.5	7.5	10.5	2.0	9.5	8.5	8.0
23	0	6.0	3.3	6.3	10.8	8.5	10.3	3.5	0.2	1.3	8.2	7.7
24	8.0	3.3	0	11.0	13.1	9.0	7.8	11.0	6.5	0	8.5	8.2
25	8.2	3.2	0	1.9	13.5	9.5	12.2	11.2	2.5	2.3	8.2	0
26	8.0	8.5	2.1	4.5	12.5	1.1	11.5	6.8	9.5	4.5	7.9	0
27	8.2	0.7	9.2	12.0	10.5	1.7	11.2	7.8	0.9	3.5	5.2	0
28	8.0	0	9.2	11.7	13.7	0	11.3	7.7	8.2	9.2	1.3	0.2
29	3.4	3.5	9.1	4.3	8.7	5.3	11.3	8.5	7.0	9.3	8.5	8.2
30	8.0	.....	5.3	12.1	5.5	2.7	11.2	6.7	7.2	8.5	9.1	8.2
31	8.1	.....	9.3	.....	11.3	.....	10.1	6.5	.....	8.5	.....	3.8
Means	4.0	4.5	5.9	6.7	9.8	6.5	7.4	7.2	5.3	7.0	7.5	4.7
Percentage of possible	39	41	49	52	71	45	52	54	43	62	71	46

TUCSON, ARIZ.

1	.....	.....	.....	.....	.....	14.1	9.2	12.0	12.5	8.5	5.7	2.5
2	.....	.....	.....	.....	.....	14.1	14.2	13.7	12.8	8.9	7.4	8.3
3	.....	.....	.....	.....	.....	14.1	11.5	13.7	12.7	9.0	9.2	6.5
4	.....	.....	.....	.....	.....	14.1	11.0	11.9	8.0	9.7	10.0	3.2
5	.....	.....	.....	.....	.....	14.1	9.0	13.1	11.1	10.0	10.5	6.8
6	.....	.....	.....	.....	.....	14.2	5.9	12.0	12.3	9.8	10.6	10.0
7	.....	.....	.....	.....	.....	14.1	12.9	5.1	12.5	9.9	2.2	5.1
8	.....	.....	.....	.....	.....	14.2	9.6	3.3	10.3	11.2	10.7	9.3
9	.....	.....	.....	.....	.....	14.1	10.0	12.4	10.5	10.7	10.4	10.1
10	.....	.....	.....	.....	.....	14.2	8.2	11.9	12.5	11.6	10.2	10.1
11	.....	.....	.....	.....	.....	14.2	12.8	12.4	11.5	9.0	10.6	0
12	.....	.....	.....	.....	.....	14.2	8.3	12.0	12.2	11.4	10.6	10.1
13	.....	.....	.....	.....	.....	14.2	12.8	12.2	12.5	11.0	10.6	10.1
14	.....	.....	.....	.....	.....	14.2	5.1	8.3	12.4	11.5	10.6	10.1
15	.....	.....	.....	.....	.....	14.2	12.0	12.0	12.4	11.5	10.6	10.0
16	.....	.....	.....	.....	.....	14.2	8.7	12.9	12.0	11.4	10.6	8.6
17	.....	.....	.....	.....	.....	14.2	14.0	10.7	11.9	11.4	10.5	0
18	.....	.....	.....	.....	.....	14.2	4.7	7.1	11.8	11.4	10.3	1.0
19	.....	.....	.....	.....	.....	14.2	8.5	6.6	10.9	11.3	10.0	10.0
20	.....	.....	.....	.....	.....	14.2	10.6	12.0	10.9	11.3	9.2	10.0
21	.....	.....	.....	.....	.....	14.2	11.7	9.9	11.8	11.1	10.2	10.0
22	.....	.....	.....	.....	.....	14.2	9.8	3.1	0	10.4	10.0	10.1
23	.....	.....	.....	.....	.....	8.9	8.9	11.2	0.3	10.5	10.2	10.1
24	.....	.....	.....	.....	.....	14.2	4.3	12.0	12.0	10.0	5.1	10.1
25	.....	.....	.....	.....	.....	5.4	5.8	12.6	9.4	9.6	9.0	10.1

DURATION OF SUNSHINE (IN HOURS AND TENTHS, BY PHOTOGRAPHIC RECORDS), 1892—Continued.

TUCSON, ARIZ.—Continued.

1892.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
26	.....	.....	.....	.....	.....	14.2	13.8	12.8	10.2	7.8	9.7	10.1
27	.....	.....	.....	.....	.....	7.6	13.8	12.9	12.0	1.0	9.1	9.4
28	.....	.....	.....	.....	.....	12.6	13.8	2.4	10.3	0.3	3.2	10.1
29	.....	.....	.....	.....	.....	10.5	13.7	7.4	11.9	3.1	2.8	10.1
30	.....	.....	.....	.....	.....	6.3	11.4	10.5	8.0	10.0	1.7	10.1
31	.....	.....	.....	.....	.....	.....	10.2	9.0	.....	9.0	.....	10.1
Means	.....	.....	.....	.....	.....	13.0	10.2	10.3	10.7	9.5	8.7	8.1
Percentage of possible	.....	.....	.....	.....	.....	92	73	77	86	83	82	80

WASHINGTON, D. C.

1	3.5	4.0	0	0	11.0	13.0	5.0	3.0	12.5	8.0	7.0	8.7
2	0.5	2.0	0	0	10.0	12.0	8.0	7.0	12.5	11.0	1.0	8.7
3	2.5	0	10.2	7.0	10.0	12.0	10.0	12.5	12.5	8.0	2.0	6.0
4	2.0	2.0	4.5	7.0	9.5	6.0	10.0	10.5	12.0	6.0	4.0	9.0
5	0	0	0	0	10.0	9.0	2.0	12.0	11.0	10.4	10.0	7.0
6	0	9.5	10.0	0.6	9.5	11.0	12.0	4.0	11.5	10.3	9.0	0
7	6.0	0	9.0	0	11.0	12.0	9.0	12.0	11.5	10.3	0	8.0
8	8.3	9.7	0	10.5	13.0	4.0	12.5	12.0	1.5	7.0	5.0	0
9	6.0	7.0	5.5	9.0	13.0	4.5	7.0	12.0	1.5	5.0	0	6
10	1.5	6.0	1.5	8.0	3.0	1.0	10.5	11.0	9.0	10.4	2.5	5.0
11	0	5.0	8.5	12.0	4.0	13.5	0	12.0	10.0	10.0	6.5	8.5
12	0	7.0	10.5	11.7	4.0	13.0	7.5	12.5	5.0	10.0	1.0	8.0
13	0	5.0	0	11.7	12.0	13.0	11.7	12.0	0	0	9.0	0
14	0	0	10.5	0	0	12.0	6.0	10.0	11.0	8.0	6.5	3.0
15	0	9.0	2.0	3.5	7.0	13.0	7.0	12.5	11.0	8.0	0	0
16	8.3	9.0	2.7	11.0	11.0	8.5	13.5	12.0	11.5	10.0	8.8	0
17	7.5	9.5	0	3.0	12.5	12.0	9.0	12.0	11.0	9.0	8.7	0
18	0	8.0	0	0	4.0	11.0	12.0	10.0	11.0	2.0	1.0	0
19	0	0	10.5	11.0	4.0	10.0	0	11.5	9.0	6.0	6.0	6.0
20	8.0	0	10.5	0	5.5	7.0	10.0	10.0	4.0	7.5	8.0	5.0
21	8.0	0	10.5	0	0	13.5	12.5	10.0	0	7.0	3.0	8.0
22	1.0	6.5	1.0	0	0	11.0	7.0	11.5	0	5.0	7.0	6.0
23	6.8	7.0	3.0	12.0	7.0	10.0	12.4	3.0	2.0	3.0	0	4.0
24	5.0	0	8.0	12.0	12.5	8.0	12.0	1.5	3.5	8.0	7.5	6.0
25	8.5	0	9.0	0	12.8	11.0	12.0	5.0	7.0	1.0	7.5	2.0
26	8.5	0	0	10.5	8.0	10.0	12.0	11.0	9.0	7.0	0	3.0
27	8.5	0	0	11.5	6.5	3.9	12.0	3.0	10.5	7.0	0	6.0
28	4.0	0	11.0	7.5	12.5	7.0	10.0	7.0	10.5	9.0	0	6.0
29	0	0	11.5	3.0	2.0	11.5	11.0	9.0	10.5	7.0	0.5	6.0
30	0	.....	5.0	12.0	8.0	6.0	11.0	5.0	10.5	9.0	8.5	4.0
31	6.5	.....	0	.....	11.0	.....	3.5	8.5	.....	5.5	.....	0
Means	3.6	3.7	5.0	5.8	7.9	9.6	9.0	9.2	8.1	7.3	4.3	4.5
Percentage of possible	36	34	42	44	57	65	62	67	65	65	43	48

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RIVER STAGES.

By Prof. THOMAS RUSSELL.

The systematic daily observation of river heights by Weather Bureau observers was begun in 1873 at a number of the more important places on the large rivers throughout the country. Previous to that time observations were made by the municipal authorities at a few places, Pittsburg, Cincinnati, Cairo, and St. Louis. Observations were also made at some places by the Engineer Corps, U. S. Army.

The observation of a river's height consists in noting the point reached by the water surface on a gauge made to indicate vertical heights in feet above the plane of low water. This vertical height is called the river stage. A river gauge is made of planks fastened to a bridge pier and marked to feet and tenths. Sometimes a gauge consists of a length of a pier about a foot wide dressed down to a smooth surface to hold the numbers and marks. Where there is no bridge pier available the gauge is made of timbers or blocks of stone laid along the incline of the river bank with a strip of iron on top for the marking. The marks are suitably placed along the incline to indicate vertical heights above low water.

In marking a river gauge the zero of the graduation is placed as nearly at the level of low water at the place as can be ascertained. When a gauge is once set it is not customary to change it without a very good reason, even if a stage of water should occur lower than the zero. Stages below the zero are indicated by the minus sign (—). Abnormally low water which may be sometimes due to an ice gorge above a place is not considered as a low water in establishing the zero of a gauge.

Information in regard to river stages from day to day is important to boating interests, especially at low stages of water, as indicating the depth of water available for boats in shallow parts of a channel.

When sudden rises to high water occur, observations of stages are of value in estimating probable rises at points farther down the stream. Warnings based on the reports of stages are sent by telegraph to places interested.

River stages at numerous points are telegraphed daily to places interested in the information. At some of the larger cities on important rivers where there are regular Weather Bureau stations, daily river bulletins are issued and the reports of stages are published in the newspapers.

River stages are observed daily at one hundred and ninety-one places throughout the country at 8 o'clock a. m. At some of the places observations are made only at seasons when there is apt to be high water. The records of river stages are preserved at the Weather Bureau office in Washington, D. C., and are printed from time to time. Records of stages at other than Weather Bureau stations are printed annually by the Mississippi River Commission and at irregular intervals by the Missouri River Commission.

Table I gives the river discharge, or quantity of water passing a place in cubic feet per second, at high and low water at a few places for which it is known.

In Table II is given some of the principal information in regard to Weather Bureau river stations:

(1) River station and river on which situated.
(2) Year of beginning of observations.
(3) Number of years of observations.

(4) Drainage area above place in square miles.
(5) Height of zero of gauge in feet above sea level.
(6) Height of flood line above zero of gauge in feet.
(7) Average number of days annually above flood line.
(8) Greatest number of days above flood line in a year, and the year.
(9) Highest water, and date.
(10) Average of annual highest waters.
(11) Average number of days annually above average highest water.
(12) Average date of highest water.
(13) Lowest water.
(14) Average of annual lowest waters.
(15) Average number of days annually below average lowest water.
(16) Greatest number of days below average lowest water, and the year.
(17) Average date of lowest water.

Table III contains mean stages of rivers for months, years, and for five and ten year periods at places for which there is a considerable number of years' record. These means may serve to show, in the future, by comparison with similar means, any systematic changes in river levels that may be going on, due to the extension of cultivation, clearing of forests, or change in the amount of rainfall. The mean stages of rivers constitute a far better measure of rainfall over large areas than the means of any practicable number of rain-gauge observations. The places for which mean stages are given are: Confluence, Pa., Freeport, Pa., Morgantown, W. Va., Pittsburg, Pa., Marietta, Ohio, Cincinnati, Ohio, Louisville, Ky., Evansville, Ind., Nashville, Tenn., Chattanooga, Tenn., Johnsonville, Tenn., Paducah, Ky., Cairo, Ill., St. Paul, Minn., La Crosse, Wis., Davenport, Iowa., Keokuk, Iowa, Omaha, Nebr., Plattsmouth, Nebr., St. Joseph, Mo., Kansas City, Mo., St. Louis, Mo., Memphis, Tenn., Helena, Ark., Little Rock, Ark., Vicksburg, Miss., Shreveport, La., New Orleans, La., Portland, Oregon, and Augusta, Ga.

Plates I, II, and III give the curves of river stages, or composite hydrographs at a number of places for which there are long records. Distances horizontally on the diagrams correspond to days of the year and are for intervals five days apart; the vertical distances correspond to the mean stages of the river for a number of years on corresponding days of the year.

TABLE I.—RIVER DISCHARGE.

River.	Place.	Low water.		High water.	
		Stage	Cubic feet per second.	Stage	Cubic feet per second.
		Feet.		*Feet.*	
Alabama	*Montgomery, Ala.*	1	3,711		
Allegheny	Pittsburg, Pa.	0	1,333		
Arkansas	Fort Smith, Ark	0.9	2,972		
	Little Rock, Ark.	2.1	4,365	30.2	456,565
Big Sandy	Louisa, Ky	0	200	25	45,000
Black Warrior	Tuscaloosa, Ala	Low water	3,422	37	84,266
Colorado	Yuma, Ariz	0	3,000		
Connecticut	Hartford, Conn.	2	6,500	30	207,500
Cumberland	Nashville, Tenn	0	1,300	54	156,000
Des Moines	At mouth				55,000
Elk	Below Charleston, W. Va.			High water	33,000
Great Kanawha	Charleston, W. Va.	1.6	2,500	34.5	155,400
Green	Rockport, Ky		4,000		100,000
Illinois	At mouth		2,000		
Kansas	Wamego	0.4	2,500	15.7	
Kentucky	Frankfort Lock, No. 4.	0	3,000		
	Dam No. 2			45.3	101,930
Mississippi	St. Paul, Minn.	1.4	4,295	18	113,000
	Wabasha, Minn.	4.5	45,200		
	Burlington, Iowa		36,100		
	Keokuk, Iowa			21	265,000
	Quincy, Ill			21.5	466,700
	Hannibal, Mo	3.2	42,600		266,000
	St. Louis, Mo	4.4	47,800	36	1,146,500
	Belmont, Mo	0	176,000	48	1,558,000
	Point Pleasant, Mo.	4	165,600	26.5	842,000
	New Madrid, Mo	7	217,000	25.6	761,000
	Fulton, Tenn	7	169,000	36.7	1,282,000
Mississippi	*Memphis, Tenn.*	3.5	152,000	35.6	1,345,000
	Helena, Ark	8	160,000	48	1,700,000
	Arkansas City, Ark.	7.4	221,000	48.2	1,479,000
	Hays Landing, Ark.	6	220,000	38	960,000
	Red River Landing, La.	12	275,000	48	1,550,000
	Natchez, Miss			46.7	1,396,000
	Baton Rouge, La			35.3	1,331,000
	New Orleans, La	0.5	263,000	17.6	1,286,000
Missouri	Stubbs Ferry	0.5	3,770		
	Sioux City, Iowa	4	18,700	13.6	196,700
	Omaha, Nebr	6	14,600	12.1	135,300
	St. Joseph, Mo	5	39,900		
	Kansas City, Mo	5	38,400	23	370,000
	St. Charles, Mo	0	19,600	23.3	290,800
Monongahela		0	333		
Niagara			240,192		
Ohio	Pittsburg, Pa		1,661		
	Wheeling, W. Va	0	3,000		
	Parkersburg, W. Va.	0	5,000	55	540,000
	Cincinnati, Ohio	0	6,500	71.1	973,000
	Henderson, Ky	0	53,000	48	780,000
	Paducah, Ky	5	90,000	50	1,200,000
Ouachita	Camden, Ark		353		
	Monroe, La		800	37.8	56,182
Potomac	Washington, D. C.	0	2,600	12.3	470,000
Red	Alexandria, La	—2.2	2,500	38.2	183,770
	Red, Washita, and others, in 1851.				220,000
	Shreveport				200,000

TABLE I.—RIVER DISCHARGE—Continued.

River.	Place.	Low water.		High water.		River.	Place.	Low water.		High water.	
		Stage	Cubic feet per second.	Stage	Cubic feet per second.			Stage	Cubic feet per second.	Stage	Cubic feet per second.
		Feet.		*Feet.*				*Feet.*		*Feet.*	
Red River of the North.	Moorehead, N. Dak.	.....	.....	32.8	20,000	Tennessee	Chattanooga, Tenn.	0	15,000	58	550,000
	Quincy, N. Dak.	.....	.....	36.2	30,000		Johnsonville, Tenn.	0	30,000	48	450,000
Rock	At mouth	.....	2,400	.....	.....						
St. Clair	.....	.....	231,070	.....	.....	Wabash	Mount Carmel, Ill.	1.2	6,700	28.3	250,000
St. Lawrence	Ogdensburg, N. Y.	.....	323,435	.....	.....	White	Jacksonport	0	1,000	.....	.....
St. Maries	.....	.....	89,855	.....	.....	Yazoo	.....	.....	.....	At flood.	70,000
Savannah.....	Augusta, Ga....	5	1,000	38.7	300,000						

TABLE II.—WEATHER BUREAU

No.	(1) Station.	(1) River.	(2) Year of commencement of record.	(3) Number of years' record.	(4) Drainage area above place.	(5) Zero of gauge above sea level.	(6) Flood line above zero.	(7) Average number of days above flood line in a year.	(8) Greatest number of days above flood line. Year.	(8) Greatest number of days above flood line. Days.
					Sq. miles.	*Feet.*	*Feet.*			
1	Albany, Ga	Flint	1892	....	5,000	.....	.....	.....	.....	.....
2	Albany, Oregon	Willamette	1878	11	5,000	199.1	25	.....	.....	.....
3	Alexandria, La	Red	1872	21	63,300	43.2	33	.....	.....	.....
4	Alton, Ill	Mississippi	1890	3	171,400	394.8	.....	.....	.....	.....
5	Arkansas City, Ark	do	1879	14	1,125,000	95.2	42	60	1890	112
6	Arlington, Mo	Gasconade	1885	8	2,800	655.5	16	.....	.....	.....
7	Arthur City, Tex	Red	1891	2	40,200	361.5	27	.....	.....	.....
8	Augusta, Ga	Savannah	1875	18	7,500	129.9	32.6	.....	.....	.....
9	Bainbridge, Ga	Flint	1892	....	6,600	.....	.....	.....	.....	.....
10	Bayou Sara, La	Mississippi	1886	1	.....	2.7	28	.....	.....	.....
11	Beardstown, Ill	Illinois	1885	8	24,700	423.0	12	.....	.....	.....
12	Bismarck, N. Dak	Missouri	1891	2	194,000	1,616.8	.....	.....	.....	.....
13	Boonville, Mo	do	1873	20	507,500	566.4	20	3	1892	18
14	Brookville, Pa	Red Bank Creek	1884	9	650	1,173.0	9	.....	.....	.....
15	Brownsville, Pa	Monongahela	1873	13	.....	.....	25	1	1883	2
16	Brunswick, Mo	Missouri	1873	13	.....	.....	22	3	1873	40
17	Buchanan, Va	James	1892	....	2,300	.....	12	.....	.....	.....
18	Burkesville, Ky	Cumberland	1890	2	.....	.....	.....	.....	.....	.....
19	Burlington, Iowa	Mississippi	1869	6	.....	.....	.....	.....	.....	.....
20	Burnside, Ky	Cumberland	1884	9	4,400	589.0	50	.....	.....	.....
21	Cairo, Ill	Ohio	1871	22	201,000	269.6	40	36	1882	105
22	Camden, Ark	Ouachita	1885	8	5,700	69.8	39	.....	.....	.....
23	Camden, S. C	Wateree	1891	2	2,600	175.0	24	.....	.....	.....
24	Canton, Ga	Etowah	1892	....	249	881.0	20	.....	.....	.....
25	Cape Girardeau, Mo	Mississippi	1891	2	712,000	.....	30	.....	.....	.....
26	Carthage, Tenn	Cumberland	1885	8	9,800	443.0	30	.....	.....	.....
27	Catlettsburg, Ky	Ohio	1887	6	56,700	484.2	50	.....	.....	.....
28	Cedar Rapids, Iowa	Red Cedar	1892	....	6,100	725.0	.....	.....	.....	.....
29	Charleston, Tenn	Hiawassee	1884	9	2,200	684.0	.....	.....	.....	.....
30	Charleston, W. Va.[1]	Great Kanawha	1887	6	9,200	554.4	30	.....	.....	.....
31	Chattahoochee, Fla	Apalachicola	1892	....	15,300	.....	.....	.....	.....	.....
32	Chattanooga, Tenn	Tennessee	1874	19	21,000	630.6	33	4	1875	15
33	Cheraw, S. C	Pee Dee	1891	2	6,960	50.0	25	.....	.....	.....
34	Chester, Ill	Mississippi	1891	2	709,000	340.0	30	.....	.....	.....
35	Cincinnati, Ohio	Ohio	1858	35	71,300	425.0	45	10	1884	30
36	Circleville, Ohio	Scioto	1887	6	2,700	.....	13	.....	.....	.....
37	Claiborne Landing, Ala	Alabama	1890	3	19,900	.....	.....	.....	.....	.....
38	Clarion, Pa	Clarion	1884	9	865	1,052.0	10	.....	.....	.....
39	Clarksville, Va	Roanoke	1891	2	6,900	.....	12	.....	.....	.....
40	Clinton, Tenn	Clinch	1884	9	2,750	782.3	25	.....	.....	.....
41	Colbert, Ind. T	Red	1892	....	37,500	.....	14	.....	.....	.....
42	Columbia, S. C	Broad	1891	....	7,300	.....	.....	.....	.....	.....
43	Columbia, Tenn	Duck	1887	6	1,100	519.4	28	.....	.....	.....
44	Columbia, Va	James	1892	....	5,800	223.2	18	.....	.....	.....
45	Columbus, Ga	Chattahoochee	1892	....	4,900	.....	.....	.....	.....	.....
46	Columbus, Miss	Tombigbee	1891	....	4,300	.....	33	.....	.....	.....
47	Colusa, Cal	Sacramento	1879	9	14,900	.....	25	.....	.....	.....
48	Confluence, Pa	Youghiogheny	1873	20	782	1,324.0	10	1	1891	3
49	Cordova, Ala	Black Warrior	1891	2	237	.....	20	.....	.....	.....
50	Coronaca, S. C	Saluda	.....	....	1,300	.....	.....	.....	.....	.....
51	Coushatta, La	Red	1885	8	59,300	94.6	26	.....	.....	.....
52	Danville, Va	Dan	1891	2	1,900	.....	19	.....	.....	.....
53	Dardanelle, Ark	Arkansas	1886	7	157,000	300.0	22	.....	.....	.....
54	Davenport, Iowa	Mississippi	1860	33	93,000	533.8	15	4	1888	28
55	Davis Island Dam, Pa	Ohio	1890	3	17,000	690.3	25	.....	.....	.....
56	Dayton, Ohio	Miami	1893	....	2,200	727.0	18	.....	.....	.....
57	Decatur, Ala	Tennessee	1881	12	26,300	537.7	21	4	1886	14
58	Delhi, La	Bayou Macon	1885	8	.....	49.4	20	.....	.....	.....

[1] In the drainage basin of the Great Kanawha River 49 per cent of the area was covered with forest in 1890.

RIVER STATIONS.

No.	(9) Highest water and year.		(10) Average annual highest water.	(11) Average number of days above average high water.	(12) Average date of highest water.	(13) Lowest water.	(14) Average annual lowest water.	(15) Average number of days below average lowest water.	(16) Greatest number of days below average lowest water.		(17) Average date of lowest water.
									Year.	Days.	
	Feet.		*Feet.*			*Feet.*	*Feet.*				
1											
2	36.0	Dec. 8, 1861				0.2					
3	38.2	June 12, 1892				—3.7					
4	31.0	May 19, 1892				1.4					
5	49.9	June 1, 1892	45.8	22	Apr. 17	0.3	4.2	18	1887	63	Nov. 8
6	22.0	1876				—1.4					
7	37.0					2.5					
8	38.7	Sept. 11, 1888				2.5					
9											
10											
11	21.3	1882				0.0					
12	14.6	June 22, 1887									
13	33.6	June 1, 1844	17.8	5	June 5	0.6	2.3	12	1890	69	Dec. 30
14	14.0	June 1, 1889				—1.9					
15	36.0	Apr., 1852	22.3	1	Feb. 27	—2.8	—1.8	11	1879	49	Nov. 2
16	26.3	1844	15.6		June 24	—4.8	—2.3	22	1880	87	Dec. 28
17	33.0	Nov. 27, 1877									
18											
19											
20	74.0					—0.5					
21	52.2	Feb. 27, 1883	45.3	14	Apr. 6	—1.0	4.2	17	1887	61	Nov. 10
22	46.0	May 12, 1882				1.8					
23	31.5	1886									
24	23.0	Jan., 1892									
25	44.0	July 14, 1844				5.0					
26	47.0	1826				0.4					
27	72.0	Feb. 12, 1884				2.0					
28											
29	32.2	Mar. 31, 1886				0.4					
30	46.9	Sept. 13, 1861				3.0					
31											
32	58.0	Mar. 11, 1867	35.5	3	Feb. 16	0.0	1.1	14	1884	72	Oct. 12
33	37.3	Mar. 11, 1875				5.4					
34		1844				0.9					
35	71.1	Feb. 14, 1884	50.0	5	Mar. 1	1.9	3.9	18	1887	79	Sept. 21
36						0.8					
37	40.5	Jan. 25, 1892				0.1					
38						—0.8					
39	27.0	Nov. 27, 1877				1.0					
40	45.0	Mar. 31, 1886				0.3					
41	18.0										
42						1.4					
43	33.0	Mar. 8, 1891				—0.4					
44	40.0	Sept. 30, 1870				—1.5					
45											
46	42.0	Apr. 8, 1892				0.0					
47	28.5	Dec. 25, 1892				0.4					
48	17.0	Aug. 21, 1888	10.2	1	Feb. 23	—0.8	—0.3	18	1884	76	Sept. 12
49	57.0	Apr. 8, 1892				0.5					
50											
51	38.6	1890				—0.6					
52						—0.3					
53	27.9	May 18, 1892				—0.7					
54	19.4	June 27, 1892	13.0		May 9	—0.8	1.1	15	1891	125	Nov. 14
55	31.8	Feb. 7, 1884				5.0					
56	21.3	1866									
57	28.7	1867	20.4	5	Mar. 2	—0.8	0.7	19	1884	82	Sept. 21
58	37.5	1882				—0.9					

TABLE II.—WEATHER BUREAU

No.	(1) Station.	(1) River.	(2) Year of commencement of record.	(3) Number of years' record.	(4) Drainage area above place.	(5) Zero of gauge above sea level.	(6) Flood line above zero.	(7) Average number of days above flood line in a year.	(8) Greatest number of days above flood line. Year.	(8) Greatest number of days above flood line. Days.
					Sq. miles.	*Feet.*	*Feet.*			
59	Demopolis, Ala	Tombigbee	1892	....	15,800	.....	35	.....	.....	.....
60	Des Moines, Iowa	Des Moines	1893	....	6,070	783.0	19	.....	.....	.....
61	Dubuque, Iowa	Mississippi	1873	20	77,100	583.3	16	8	1888	46
62	Eagle Pass, Tex	Rio Grande	1892	....	176,600	.....	.....	.....	.....	.....
63	Eddyville, Ky	Cumberland	1887	6	18,600	.....	31	.....	.....	.....
64	Effingham, S. C	Lynches Creek	1891	2	1,200	.....	12	.....	.....	.....
65	Eufaula, Ala	Chattahoochee	1893	....	6,900	.....	.....	.....	.....	.....
66	Eugene City, Oregon	Willamette	1878	11	2,100	428.0	20	.....	.....	.....
67	Evansville, Ind	Ohio	1873	20	99,700	320.0	30	44	1882	104
68	Fairmont, W. Va	Monongahela	1892	....	2,320	840.0	25	.....	.....	.....
69	Falmouth, Ky	Licking	1887	6	2,900	.....	25	.....	.....	.....
70	Fayetteville, N. C	Cape Fear	1892	....	3,860	110.0	50	.....	.....	.....
71	Florence, Ala	Tennessee	1879	14	30,000	.....	30.2	0	.....	0
72	Folsom City, Cal	American	1878	10	1,645	112.0	35	.....	.....	.....
73	Fort Benton, Mont	Missouri	1873	4	.....	.....	.....	.....	.....	.....
74	Fort Buford, N. Dak	do	1891	....	168,400	1,851.9	18	.....	.....	.....
75	Fort Gibson, Ind. T	Arkansas	.....	....	.....	.....	.....	.....	.....	.....
76	Fort Smith, Ark	Arkansas	1879	13	152,100	374.2	22	2	1892	13
77	Fort Sully, S. Dak	Missouri	1973	5	.....	.....	.....	.....	.....	.....
78	Frankfort, Ky	Kentucky	1887	6	5,300	463.8	31	.....	.....	.....
79	Freeport, Pa	Allegheny	1873	20	9,220	741.0	20	1	1884	5
80	Fulton, Ark	Red	1885	8	46,900	223.5	28	17	1892	45
81	Gadsden, Ala	Coosa	1890	3	5,680	.....	18	.....	.....	.....
82	Gallipolis, Ohio	Ohio	1887	6	.....	508.0	.....	.....	.....	.....
83	Girard, La	Bayou Boeuf	1886	7	.....	52.2	25	.....	.....	.....
84	Grand Tower, Ill	Mississippi	1885	....	.....	323.4	25.5	.....	.....	.....
85	Great Falls, Md	Potomac	1889	4	.....	.....	.....	.....	.....	.....
86	Greensboro, Pa	Monongahela	1888	5	.....	768.0	24.6	.....	.....	.....
87	Greenville, Miss	Mississippi	1882	11	1,125,000	86.7	40	31	1890	92
88	Hannibal, Mo	do	1878	15	143,700	448.2	17	9	1881	42
89	Harpers Ferry, W. Va	Potomac	1889	4	10,620	210.8	16	.....	.....	.....
90	Harrisburg, Pa	Susquehanna	1890	3	25,240	320.0	17	.....	.....	.....
91	Helena, Ark	Mississippi	1871	22	935,700	140.7	37	65	1882	185
92	Hermann, Mo	Missouri	1873	20	527,500	483.8	21	1	1892	11
93	Hidalgo, Tex	Rio Grande	1893	....	225,380	.....	.....	.....	.....	.....
94	Hinton, W. Va	Great Kanawha	1887	6	6,020	1,103.5	14.5	.....	.....	.....
95	Huntingdon, Pa	Juniata	1891	....	1,320	650.0	4.8	.....	.....	.....
96	Iowa City, Iowa	Iowa	1893	....	3,100	.....	.....	.....	.....	.....
97	Jefferson City, Mo	Missouri	1873	13	.....	523.4	20	0	.....	0
98	Johnsonville, Tenn	Tennessee	1875	16	36,700	322.0	21	44	1884	91
99	Johnstown, Pa	Stony Creek	1885	8	710	1,147.8	7	.....	.....	.....
100	Kansas City, Mo	Missouri	1873	20	491,800	716.2	21	3	1881	14
101	Keokuk, Iowa	Mississippi	1868	24	126,200	476.7	14	12	1881	62
102	Kingston, Tenn	Clinch	1884	9	16,200	712.8	25	.....	.....	.....
103	Knoxville, Tenn	Holston	1883	10	8,300	806.6	29	.....	.....	.....
104	La Crosse, Wis	Mississippi	1873	20	61,340	624.1	10	8	1881	55
105	Lafayette, Ind	Wabash	1893	....	6,200	.....	.....	.....	.....	.....
106	Laredo, Tex	Rio Grande	1892	....	182,900	.....	.....	.....	.....	.....
107	Leadvale, Tenn	French Broad	1884	3	.....	.....	14	.....	.....	.....
108	Leavenworth, Kans	Missouri	1873	17	.....	740.9	20	1	1881	10
109	Le Claire, Iowa	Mississippi	1873	20	91,700	554.0	10	9	1888	48
110	Lexington, Mo	Missouri	1873	13	.....	666.4	18	2	1881	17
111	Little Rock, Ark. (engineer gauge).	Arkansas	1872	21	157,000	225.3	23	6	1892	22
112	Lock Haven, Pa	Susquehanna	1890	....	3,740	560.0	10	.....	.....	.....
113	Lock No. 4, Pa	Monongahela	1885	8	5,430	719.9	28	.....	.....	.....

RIVER STATIONS—Continued.

No.	(9) Highest water and year.		(10) Average annual highest water.	(11) Average number of days above average high water.	(12) Average date of highest water.	(13) Lowest water.	(14) Average annual lowest water.	(15) Average number of days below average lowest water.	(16) Greatest number of days below average lowest water.		(17) Average date of lowest water.
									Year.	Days.	
	Feet.		*Feet.*			*Feet.*	*Feet.*				
59	66.0	Apr., 1874									
60	20.4	May 20, 1892									
61	22.7	June, 1880	14.9	12	June 6	0.9	2.3	18	1891	117	Nov. 17
62											
63	60.4	1882				0.0					
64											
65											
66	22.0	1890				—2.0					
67	48.8	Feb. 19, 1884	40.2		Feb. 27	0.2	1.8	15	1887	59	Oct. 13
68	37.0	July 10, 1888									
69	38.0	1854				0.0					
70	75.0					1.0					
71	31.1	1867	22.0	5	Mar. 3	—0.8	0.3	22	1872	97	Oct. 4
72	42.0	Jan., 1861				0.2					
73											
74	18.1	June 26, 1892				5.2					
75	40.0	June, 1866									
76	30.9	May 19, 1892	20.5	4	Apr. 19	0.0	1.6	20	1886	69	Nov. 10
77											
78	44.0	Feb., 1878				0.4					
79	32.7	Feb. 18, 1891	21.6	1	Feb. 21	—4.8	—0.1	17	1874	193	Sept. 17
80	35.8	July 17, 1876	30.0	8	Mar. 30	0.6	3.5	17	1887	89	Oct. 12
81	36.7	Apr. 6, 1886				—0.7					
82						—1.2					
83	27.0	1882				0.2					
84											
85											
86	39.0	July10, 1888				5.2					
87	44.5	June 1, 1892	40.4		Apr. 15	1.8	5.2	21	1887	81	Oct. 27
88	22.0	June 7, 1851	15.4	15	May 28	—2.7	0.5	7	1889	34	Dec. 17
89	34.0	June 1, 1889				0.1					
90	27 0	June 2, 1889				1.7					
91	48.1	Apr. 30, 1886	43.3	21	Apr. 7	—0.2	4.4	19	1887	102	Nov. 21
92	32.6	June, 1844	16.8	5	June 4	—2.6	0.2	4	1874	20	Doc. 23
93											
94	23.0	Sept. 13, 1878				0.5					
95	5.5	June 6, 1892				—0.6					
96	20.0	1851									
97	28.5	1844	16.0	4	June 12	0.0	0.8	11	1875	56	Dec. 25
98	48.0	Jan. or Feb., 1882.	34.2	12	Feb. 23	—0.1	0.6	15	1884	108	Oct. 1
99	35.0	May 31, 1889				—2.0					
100	37.0	June 20, 1844	19.5	5	June 11	—0.1	2.3	6	1882	28	Dec. 27
101	21.5	June 6, 1851	14.0	12	May 13	—0.8	0.2	9	1891	75	Dec. 9
102	33.8	Mar. 31, 1886				—0.4					
103	39.0	1875				0.0					
		1876				0.0					
104	17.4	June 19, 1880	11.4	11	June 2	0.0	2.4	33	1877	151	Oct. 15
105	33.8	Feb. 17, 1883									
106											
107											
108	25.8	Apr. 29, 1881	17.7	6	June 12	1.0	3.2	7	1880	28	Dec. 28
109	14.5	June 25, 1880	9.6	11	June 3	—0.8	0.2	10	1891	67	Nov. 28
110	23.5		16.2	6	June 3	—0.4	0.9	6	1884	23	Jan. 2
111	31.0	1844	23.1	6	Apr. 15	—1.0	2.3	46	1879	200	Nov. 7
112	17.0	June 1, 1889				0.0					
113	42.0	July 11, 1888				3.2					

TABLE II.—WEATHER BUREAU

No.	(1) Station.	(1) River.	(2) Year of commencement of record.	(3) Number of years' record.	(4) Drainage area above place.	(5) Zero of gauge above sea level.	(6) Flood line above zero.	(7) Average number of days above flood line in a year.	(8) Greatest number of days above flood line. Year.	(8) Greatest number of days above flood line. Days.
					Sq. miles.	*Feet.*	*Feet.*			
114	Loudon, Tenn	Holston	1884	9	11,500	737.1	25			
115	Louisa, Ky[1]	Big Sandy	1887	6	3,630	513.4				
116	Louisiana, Mo	Mississippi	1885	8	146,700	436.2	12	20	1892	76
117	Louisville, Ky	Ohio	1871	22	84,600	404.3	24	7	1884	26
118	Lynchburg, Va	James	1892		3,700	499.4	18			
119	Macon, Ga	Ocmulgee	1893		2,100		20			
120	Madison, Ark	St. Francis	1887	3			38			
121	Madison, Ind	Ohio	1892		84,000	399.2	46			
122	Mahoning, Pa	Allegheny	1884	9	6,960	791.5	13			
123	Manhattan, Kans	Big Blue	1887	6	46,400	934.0	18			
124	Marietta, Ohio	Ohio	1873	20	32,400	569.0	25	12	1890	24
125	Marysville, Cal	Feather	1879	8	3,540	23.3	28.5			
126	Maysville, Ky	Ohio	1892		65,100		50			
127	Melville, La	Atchafalaya	1885	8		—1.1	31			
128	Memphis, Tenn	Mississippi	1871	22	925,000	182.7	33	21	1882	65
129	Moline Bridge, Ill	do	1887	6		533.8				
130	Monroe, La	Ouachita	1884	9	17,760	30.2	40	17	1890	64
131	Montgomery, Ala	Alabama	1890		13,500	103.7	48			
132	Morgantown, W. Va	Monongahela	1873	17	2,750	790.0	20	1	1888	2
133	Mount Carmel, Ill	Wabash	1884	9	26,300	376.6	15			
134	Mount Holly, N. C	Catawba	1885	8	1,900	570.0	20			
135	Mount Vernon, Ga	Oconee	1892		4,660		13			
136	Mount Vernon, Ind	Ohio	1888	5	126,600		35			
137	Muscatine, Iowa	Mississippi	1875	16	93,300	540.0	16	4	1881	21
138	Nashville, Tenn	Cumberland	1873	20	11,600	366.0	40	9	1882	30
139	New Geneva, Pa	Monongahela	1873	16			18	6	1884	20
140	New Orleans, La	Mississippi (engineer gauge).	1872	21		—2.1	13	42	1892	119
141	Newport, Ark	White	1885	8	17,600	198.1	21.5			
142	Nichols, S. C	Little Peedee	1891	2	730	55.0	9.5			
143	Oil City, Pa	Allegheny	1873	18	4,530	985.0	13	1	1891	3
144	Omaha, Nebr	Missouri	1875	18	323,100	958.7	18	1	1881	18
145	Oroville, Cal	Feather	1878	10	3,100	148.0	25			
146	Paducah, Ky	Ohio	1874	19	201,200	287.2	40	20	1882	64
147	Parker, Pa	Allegheny	1885	8	6,020	850.4	22			
148	Parkersburg, W. Va	Ohio	1888	5	34,600	562.7	38			
149	Peoria, Ill	Illinois	1882	11	15,700	433.4	14	23	1892	81
150	Philippi, W. Va	Tygarts Valley Creek	1892		620	1,320.0	10			
151	Pierre, S. Dak	Missouri	1891	2	243,600	1,418.6	13			
152	Pittsburg, Pa	Ohio	1872	21	17,000	697.0	22	1	1891	3
153	Plattsmouth, Nebr	Missouri	1873	20	416,000	941.2	16.6	0	1881	10
154	Point Pleasant, W. Va	Ohio	1889	4	48,900	439.3	36			
155	Portland, Oregon	Willamette	1879	14	12,200		15	43	1880	86
156	Portsmouth, Ohio	Ohio	1887	6	63,700	472.7				
157	Quincy, Ill	Mississippi	1868	7	141,700		13			
158	Red Bluff, Cal	Sacramento	1891	2	11,420	244.1	22			
159	Redding, Cal	do			8,860					
160	Resaca, Ga	Oostanaula	1892		700	617.3	25			
161	Reynolds, Ga	Flint	1893		2,000					
162	Rio Grande City, Tex	Rio Grande	1892		221,000					
163	Rock Island, Ill	Mississippi	1887	6						
164	Rockwood, Tenn	Tennessee	1884	9	16,200	699.7	20			
165	Rome, Ga	Coosa			3,720	575.8	30			
166	Rowlesburg, W. Va	Cheat	1884	9	890	1,375.3	10			
167	Sacramento, Cal	Sacramento	1891	2	26,140	5.0	25			
168	St. Charles, Mo	Missouri	1868	4						
169	St. Joseph, Mo	do	1873	20	426,900	797.9	10	97	1878	190
170	St. Louis, Mo	Mississippi	1861	32	699,000	379.0	30	3	1892	36

[1] In the drainage basin of the Big Sandy River 70 per cent of the area was covered with forest in 1890.

RIVER STATIONS—Continued.

No.	(9) Highest water and year.		(10) Average annual highest water.	(11) Average number of days above average high water.	(12) Average date of highest water.	(13) Lowest water.	(14) Average annual lowest water.	(15) Average number of days below average lowest water.	(16) Greatest number of days below average lowest water.		(17) Average date of lowest water.
									Year.	Days.	
	Feet.		*Feet.*			*Feet.*	*Feet.*				
114	47.0	Mar., 1867				0.0					
115	50.0	July, 1875				0.7					
116	21.9	June, 1851	13.2	14	May 6	—1.8	—0.2	8	1891	41	Dec. 20
117	46.6	Feb. 16, 1884	27.4	5	Mar. 2	1.7	2.8	19	1887	96	Oct. 9
118	29.0	Sept. 30, 1870				0.0					
119	26.9	Aug., 1887				1.0					
120	43.1	1882				—0.3					
121	61.8	1884				2.8					
122	24.0	Feb. 18, 1891				—0.8					
123	19.5	May 21, 1877				0.1					
124	52.0	Feb. 9, 1884	34.4	2	Mar. 4	1.6	2.5	14	1887	64	Sept. 29
125	28.5	Dec., 1892									
126	65.7	Feb. 14, 1884									
127	37.0	Mar. 31, 1882				—1.5					
128	35.6	Apr. 4,5, 1890	32.9	23	Apr. 8	—1.0	2.0	14	1872	77	Nov. 7
129											
130	49.1	1874	38.8	24	Apr. 14	0.1	1.0	19	1887	85	Oct. 12
131	59.7	Apr. 1, 1886				—0.3					
132	35.7	July 10, 1888	19.5	1	Feb. 14	—0.2	4.5	56	1874	178	Sept. 6
133	28.3	Aug. 7, 1875				0.4					
134	20.0	1876				0.0					
135	20.0	1840									
136	51.7	Feb. 22, 1884				1.2					
137	17.3	Oct. 29, 1880	13.2	14	June 1	—0.1	1.0	10	1891	80	Dec. 10
138	54.7	1847	42.3	6	Mar. 3	—0.3	0.4	14	1887	74	Sept. 30
139	40.0	1852	24.8	1	Mar. 13		1.4	47	1876	204	Oct. 11
140	17.6	June 11, 1892	13.7	27	Apr. 13	—0.2	0.2	8	1887	24	Nov. 17
141	33.4	Mar. 14, 1890				0.0					
142	11.0	1886				1.6					
143	21.0	Mar. 17, 1865	11.8	1	Mar. 19	—3.5	—0.1	22	1880	86	Sept. 19
144	23.8	Apr. 24, 1881	15.9	6	June 5	1.6	4.2	11	1876	76	Nov. 21
145	25.0	Feb., 1881									
146	54.2	Feb. 23, 1884	43.6	12	Mar. 7	0.2	1.6	19	1887	77	Oct. 12
147	28.0	Mar., 1865				—1.3					
148	55.0	Feb. 9, 1884				1.7					
149	21.9	May 8, 1892	15.6	9	Apr. 21	2.7	3.2	30	1887	122	Sept. 14
150	20.0	July, 1888									
151	21.0	Mar., 1881				0.2					
152	35.0	Feb. 10, 1832	20.8	1	Mar. 11	—1.3	0.7	12	1881	77	Sept. 19
153	19.2	Apr. 24, 1881	13.0	5	June 3	—1.9	1.3	10	1874	37	Dec. 10
154	60.0	Feb., 1884				1.2					
155	28.7	Feb. 6, 1890	20.5	10		—2.2	0.1	2	1890	11	Sept. 22
156	66.3	Feb., 1884				2.0					
157	21.5	June 5, 1851				1.0					
158	28.5	Feb. 3, 4, 1890				—0.1					
159	23.0	1881									
160	36.6	Apr. 1, 1886									
161											
162											
163											
164	40.0	1868				0.1					
165	40.3	Apr. 1, 1886				0.5					
166	22.0	July 10, 1888				—0.4					
167	27.0	Dec. 12, 1889				6.0					
168											
169	26.5	Apr. 29, 1881	16.8	20	June 6	—2.6	1.5	21	1891	136	Dec. 20
170	41.4	June 27, 1844	26.3	11	May 27	0.0	3.0	6	1864	33	Dec. 27

TABLE II.—WEATHER BUREAU

No.	(1) Station.	(1) River.	(2) Year of commencement of record.	(3) Number of years' record.	(4) Drainage area above place.	(5) Zero of gauge above sea level.	(6) Flood line above zero.	(7) Average number of days above flood line in a year.	(8) Greatest number of days above flood line. Year.	(8) Greatest number of days above flood line. Days.
					Sq. miles.	*Feet.*	*Feet.*			
171	St. Paul, Minn	Mississippi	1872	21	31,300	683.8	14	6	1867	45
172	St. Stephens, S. C	Santee	1892	....	13,600	42.0	20	.....	.....	.....
173	Salem, Oregon	Willamette	1892	....	7,940	165.0	20	.....	.....	.....
174	Saltsburg, Pa	Kiskiminitas	1884	9	1,400	828.3	6	.....	.....	.....
175	Selinsgrove, Pa	Susquehanna	1892	....	17,600	428.0	8	.....	.....	.....
176	Selma, Ala	Alabama	1890	3	15,400	.....	49	.....	.....	.....
177	Shawneetown, Ill	Ohio	1892	....	130,500	.....	.....	.....	.....	.....
178	Shreveport, La	Red	1873	20	56,900	139.8	39.2	10	1884	32
179	Sioux City, Iowa	Missouri	1888	5	314,900	1,076.5	18.7	.....	.....	.....
180	Strawberry Plains, Tenn	Holston	1885	8	3,400	859.8	26	.....	.....	.....
181	Sturdevant, Ala	Tallapoosa	1891	2	2,130	.....	15	.....	.....	.....
182	Tallassee Falls, Ala	do	1891	2	3,460	.....	28	.....	.....	.....
183	Tazewell, Tenn	Powell	1892	....	550	.....	18	.....	.....	.....
184	Terre Haute, Ind	Wabash	1891	2	11,200	447.7	16	.....	.....	.....
185	The Dalles, Oregon	Columbia	1892	....	240.000	50.0	25	.....	.....	.....
186	Tillers Ferry, S. C	Lynches Creek	1891	2	540	90.0	9.5	.....	.....	.....
187	Towanda, Pa	Susquehanna	1892	....	8,000	688.3	20	.....	.....	.....
188	Tuscaloosa, Ala	Black Warrior	1890	3	5,700	87.6	48	.....	.....	.....
189	Tuscumbia, Mo	Osage	1893	....	12,960	543.1	28	.....	.....	.....
190	Umatilla, Oregon	Columbia	1878	10	215,500	360.0	18	.....	.....	.....
191	Vicksburg, Miss	Mississippi	1871	22	1,136,700	44.8	41	56	1882	162
192	Vincennes, Ind	Wabash	1887	6	12,600	398.4	15	.....	.....	.....
193	Wabasha, Minn	Mississippi	1885	4	.....	662.8	6	.....	.....	.....
194	Warren, Pa	Allegheny	1885	8	3,060	1,137.0	7	.....	.....	.....
195	Warsaw, Ill	Mississippi	1873	20	126,700	474.0	12	40	1881	149
196	Washington, D. C	Potomac	1891	2	14,480	0.9	6	.....	.....	.....
197	Wateree, S. C	Congaree	1891	2	12,900	175.0	12	.....	.....	.....
198	Weldon, N. C	Roanoke	1891	2	8,180	50.0	27	.....	.....	.....
199	West Newton, Pa	Youghiogheny	1890	3	1,550	746.5	33	.....	.....	.....
200	Weston, W. Va	West Fork Monongahela.	1885	8	140	824.0	18	.....	.....	.....
201	Wheeling, W. Va	Ohio	1882	11	22,600	611.6	36	1	1884	5
202	Whitesburg, Ga	Chattahoochee	1892	....	2,000	.....	.....	.....	.....	.....
203	Wilkesbarre, Pa	Susquehanna	1890	3	11,600	539.1	14	.....	.....	.....
204	Wilsonville, Ala	Coosa	1891	2	7,960	420.3	15	.....	.....	.....
205	Wittsburg, Ark	St. Francis	1885	8	7,600	.....	.....	.....	.....	.....
206	Yankton, S. Dak	Missouri	1873	14	.....	1,176.0	24	1	1881	13
207	Yazoo City, Miss	Yazoo	1834	9	8,580	68.3	29.5	0	.....	.....
208	Yuma, Ariz	Colorado	1881	6	.....	117.0	.....	.....	.....	.....
209	Zanesville, Ohio	Muskingum	1887	6	6,230	665.9	20	.....	.....	.....

RIVER STATIONS—Continued.

No.	(9) Highest water and year.		(10) Average annual highest water.	(11) Average number of days above average high water.	(12) Average date of highest water.	(13) Lowest water	(14) Average annual lowest water.	(15) Average number of days below average lowest water.	(16) Greatest number of days below average lowest water.		(17) Average date of lowest water.
									Year.	Days.	
	Feet.		*Feet.*			*Feet.*	*Feet.*				
171	19.7	Apr. 29, 1881	11.4	15	May 19	0.1	1.8	20	1891	112	Oct. 20
172	20.2	Sept. 18, 1888									
173		Feb. 4, 5, 1890									
174	22.1	June 1, 1889				—0.9					
175	20.0	June 2, 1889				1.3					
176	57.0	Mar., 1886				—1.6					
177	56.0	Feb. 24, 1884									
178	35.7	May 28, 1892	28.1	14	Apr. 13	—1.7	1.5	27	1879	83	Oct. 7
179	20.8	1881				2.6					
180	52.0	Mar. 7, 1867				—0.4					
181	32.0	Mar., 1886				—1.2					
182	28.0	1886				—0.2					
183	25.0	1866									
184	27.7	Feb. 18, 1883				—0.4					
185		July 2, 1880									
186	13.0	May, 1856				0.3					
187	24.0					0.5					
188	87.6					—0.8					
189	39.5	1844				—0.7					
190	28.1	July 2, 1880				—1.0					
191	49.1	1890	43.7	27	Apr. 8	—3.9	2.3	18	1887	108	Nov. 24
192	25.0	Feb. 22, 1867				—0.1					
193	13.0	1880									
194	17.4	Mar., 1865				—1.7					
195	21.4	June 1, 1851	15.5	16	June 1	0.0	1.3	14	1891	116	Nov. 13
196	13.3	June 2, 1889									
197	26.0	Sept. 13, 1888				1.9					
198	46.8	Nov. 26, 1877				2.2					
199	18.0	Feb. 17, 1891				0.4					
200	20.0	July 5, 1883				—0.5					
201	54.0	Feb. 7, 1884	33.5	1	Mar. 24	0.9	1.5	11	1892	41	Sept. 17
202											
203	24.7	Mar. 17, 1865				—3.0					
204	24.0	1883				2.1					
205											
206	41.0		16.9	20	June 2	0.8	3.8	45	1883	159	Dec. 3
207	36.5		24.6	27	Apr. 3	—2.3	—1.4	16	1887	72	Oct. 30
208	33.2	Feb. 27, 1891									
209	32.6	Feb. 8, 1884				4.9					

TABLE III.—MEAN STAGES OF RIVERS.—VERTICAL HEIGHT IN FEET.

YOUGHIOGHENY RIVER, CONFLUENCE, PA.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly means.	5-year means.	10-year means.
1873	.....	.....	.....	.....	1.9	0.1	.....	.....	.....	−0.1	0.8	2.1	.....	.....	.....
1874	.....	.....	.....	3.8	1.3	−0.3	−0.2	0	−0.2	−0.1	0.1	2.0	0.71	.....	.....
1875	1.6	2.4	3.2	2.4	0.8	0.3	1.3	2.5	1.1	0.4	1.7	2.4	1.68	.....	.....
1876	1.9	2.4	2.0	2.2	1.7	0.4	0.2	0.3	0.2	0.2	0.8	0.7	1.08	.....	.....
1877	2.5	1.7	3.2	1.3	1.0	1.1	0.8	−0.1	−0.2	0.2	2.0	1.1	1.22	.....	.....
1878	2.1	2.2	2.1	1.1	1.2	0	−0.2	−0.3	−0.1	0.0	2.3	2.4	1.07	.....	.....
1879	.....	1.3	3.5	1.5	0	0	0.5	1.1	−0.2	−0.5	−0.1	1.9	0.82	.....	.....
1880	3.5	2.5	3.5	1.8	0.7	1.6	1.1	0.1	−0.1	−0.2	0.7	2.1	1.44	1.13	.....
1881	.....	4.1	2.8	2.2	1.2	1.9	0.1	−0.3	−0.7	−0.6	0.1	2.1	1.17	.....	.....
1882	4.0	4.2	3.4	1.9	2.5	1.8	1.1	0.2	1.6	0.6	0.8	1.5	1.97	.....	.....
1883	1.8	4.3	2.0	3.1	2.4	1.8	1.3	−0.1	−0.2	0.1	1.6	1.3	1.62	.....	.....
1884	2.1	4.2	3.1	1.6	1.3	0.8	0.6	0.1	−0.7	−0.6	0	1.8	1.19	.....	.....
1885	4.0	2.3	2.6	4.3	2.2	1.4	0.4	1.1	0.3	0.9	1.8	2.9	2.02	1.59	.....
1886	.....	.....	3.3	4.0	3.0	2.6	1.5	1.1	0.9	0.6	2.4	2.7	2.21	.....	.....
1887	2.5	4.2	2.9	2.5	2.8	.....	0.8	0.9	0.8	0.7	0.2	0.6	1.72	.....	.....
1888	3.4	3.1	3.5	2.8	2.5	1.4	.....	.....	.....	2.6	2.6	2.2	2.68	.....	.....
1889	2.8	2.6	3.3	3.2	3.0	3.4	1.8	1.8	0.8	0.7	4.3	2.6	2.52	.....	.....
1890	3.6	4.0	4.2	3.2	3.6	2.3	1.0	1.9	2.6	4.3	3.1	2.3	3.00	2.43	2.01
1891	4.0	6.5	3.8	4.0	1.7	2.9	2.5	2.5	2.1	0.9	1.8	3.2	2.99	.....	.....
1892	3.6	3.0	3.6	3.8	2.5	2.7	1.4	0.5	0	−0.1	1.0	2.7	2.06	.....	.....
Means	2.89	3.24	3.11	2.67	1.86	1.38	0.89	0.74	0.44	0.50	1.40	2.03	1.75	.....	.....

ALLEGHENY RIVER, FREEPORT, PA.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly means.	5-year means.	10-year means.
1873	.....	.....	.....	.....	1.1	−2.9	.....	.....	.....	−0.3	1.1	4.9	.....	.....	.....
1874	5.9	3.8	3.2	3.0	0.6	−1.5	−2.9	−1.8	−3.8	−3.2	−0.4	5.0	0.65	.....	.....
1875	4.6	4.3	9.6	9.0	4.4	2.3	2.4	3.2	1.1	1.7	5.4	8.2	4.68	.....	.....
1876	8.8	9.4	7.8	8.6	5.3	2.5	2.5	0.4	3.4	3.1	4.6	2.6	4.91	.....	.....
1877	5.2	6.0	10.4	7.3	2.7	3.0	2.3	0.6	0.4	1.7	5.2	5.0	4.15	.....	.....
1878	6.1	6.9	6.9	5.2	5.2	5.5	3.0	2.2	2.7	1.4	5.5	8.1	4.89	.....	.....
1879	5.8	6.0	10.5	7.9	2.9	1.5	2.0	1.9	0.3	−0.3	3.1	7.0	4.05	.....	.....
1880	8.7	7.6	5.8	5.1	2.6	3.1	2.1	1.5	0.8	1.0	3.4	3.9	3.80	4.36	.....
1881	2.1	7.7	8.1	8.4	4.0	7.6	1.5	0.3	−0.4	0.6	4.8	7.6	4.35	.....	.....
1882	8.8	9.5	8.2	5.0	7.9	6.2	3.7	2.8	2.2	1.5	2.0	3.0	5.06	.....	.....
1883	3.7	12.9	5.2	8.6	6.5	.....	.....	.....	.....	.....	4.8	4.6	6.19	.....	.....
1884	7.5	14.1	10.0	5.6	4.4	3.6	2.1	1.8	0.6	2.0	2.6	6.5	5.06	.....	.....
1885	8.5	.....	.....	10.7	5.6	5.9	2.6	6.0	4.0	3.9	5.4	7.0	6.49	5.43	.....
1886	7.6	8.4	6.7	9.1	3.3	1.8	1.4	1.0	0.3	1.1	5.8	6.1	4.38	.....	.....
1887	7.1	13.1	6.9	5.2	5.2	2.6	1.1	1.6	1.5	1.8	2.3	3.0	4.28	.....	.....
1888	6.6	6.7	6.7	8.0	4.0	2.8	.....	.....	.....	.....	6.5	6.2	5.49	.....	.....
1889	6.3	5.9	8.5	7.3	.....	.....	4.4	2.0	1.3	2.4	6.9	9.1	5.43	.....	.....
1890	9.7	9.3	9.6	8.5	11.0	4.2	1.5	2.2	6.8	8.5	8.0	4.0	6.94	5.30	5.36
1891	7.6	13.9	7.8	7.2	2.3	5.0	4.2	3.9	1.9	1.3	4.2	8.5	5.65	.....	.....
1892	6.1	8.2	7.6	7.1	10.0	8.4	3.4	2.3	1.8	1.0	3.8	4.2	5.32	.....	.....
Means	6.66	8.53	7.72	7.20	4.68	3.37	2.19	1.87	1.46	1.62	4.25	5.72	4.83	.....	.....

DICKERS CREEK, MORGANTOWN, W. VA.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly means.	5-year means.	10-year means.
1873	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	3.0	3.1	.....	.....	.....
1874	4.0	2.8	2.4	6.6	2.1	0.7	0.8	1.3	0.4	0.8	1.1	3.9	2.24	.....	.....
1875	3.3	3.7	4.8	3.2	1.8	1.2	4.2	4.8	0.8	1.4	3.7	4.3	3.10	.....	.....
1876	3.8	4.6	4.4	2.9	2.5	0.8	2.4	2.2	4.0	0.9	1.5	.....	2.62	.....	.....
1877	6.1	1.7	4.1	2.3	2.5	2.8	2.0	0.9	0.6	1.0	2.9	2.1	2.47	.....	.....
1878	4.0	2.8	3.5	2.9	2.9	1.8	1.5	1.7	1.2	0.8	4.6	4.5	2.69	.....	.....
1879	.....	3.6	4.8	2.1	1.0	0.4	0.9	1.1	1.2	5.1	5.2	7.1	3.00	.....	.....
1880	7.9	8.3	9.5	7.6	6.0	7.0	6.2	6.3	6.0	5.4	7.6	6.7	7.04	3.66	.....
1881	.....	8.4	4.5	4.7	2.6	3.2	2.3	7.6	0.2	0.4	2.0	.....	3.86	.....	.....
1882	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1883	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1884	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1885	6.7	.....	5.7	6.7	.....	3.3	2.7	3.0	2.7	2.8	4.1	4.5	4.45	.....	.....
1886	.....	5.8	5.3	7.1	5.8	4.7	2.8	3.5	3.2	3.0	4.5	6.9	4.87	.....	.....
1887	6.6	9.4	5.3	5.4	4.5	5.3	3.6	3.6	3.6	3.6	3.6	3.5	4.83	.....	.....
1888	7.1	6.5	6.4	5.2	5.2	3.8	6.2	4.5	5.4	6.4	6.0	5.2	5.66	.....	.....
1889	6.2	8.4	5.6	6.4	5.3	6.7	5.2	4.2	3.3	3.9	8.4	6.0	5.80	.....	.....
1890	7.2	8.6	8.6	7.0	7.4	5.5	4.3	5.1	5.6	8.2	6.2	5.3	6.58	5.55	.....
1891	8.1	9.0	7.3	6.7	4.5	5.5	5.1	5.3	4.7	4.4	5.2	6.4	6.02	.....	.....
1892	7.0	5.8	6.7	7.0	6.0	4.7	4.1	4.9	4.7	4.6	5.0	4.9	5.45	.....	.....
Means	5.99	5.98	5.56	5.24	4.07	3.59	3.39	3.75	2.98	3.19	4.39	4.58	4.39	.....	.....

TABLE III.—MEAN STAGES OF RIVERS—Continued.

OHIO RIVER, PITTSBURG, PA.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly means.	5-year means.	10-year means.
1865...	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.4	4.3	7.2	.....	.....	.....
1866...	5.4	7.1	8.0	8.2	3.7	4.4	3.1	2.6	5.9	4.7	6.0	8.0	5.59	.....	.....
1867...	3.9	11.8	9.4	8.3	8.6	3.9	1.7	2.0	1.5	1.1	1.8	6.1	5.01	.....	.....
1868...	5.4	4.8	12.0	7.0	8.0	4.5	1.6	2.2	6.3	2.1	6.8	5.6	5.53	.....	.....
1869...	8.7	8.2	7.8	8.3	6.3	5.9	7.6	2.4	4.1	3.0	2.9	9.2	6.20	.....	.....
1870...	10.0	7.1	8.2	9.7	5.9	3.9	4.4	4.0	2.0	3.3	4.5	5.4	5.70	5.61	.....
1871...	6.6	7.5	8.1	4.9	5.7	2.2	2.2	2.4	1.7	1.6	4.0	3.5	4.20	.....	.....
1872...	5.2	4.9	3.9	8.2	3.9	4.4	3.9	2.5	2.1	3.5	4.2	6.5	4.43	.....	.....
1873...	12.4	7.4	6.5	8.8	6.9	3.3	5.5	5.6	1.9	4.6	7.0	9.8	6.64	.....	.....
1874...	10.5	8.4	8.0	10.3	6.1	3.5	2.7	3.7	1.0	2.1	2.5	7.4	5.52	.....	.....
1875...	5.9	7.2	10.2	9.3	5.3	3.4	5.3	6.7	1.6	3.0	6.9	8.9	6.14	5.38	.....
1876...	9.1	9.6	8.8	8.3	6.5	2.8	3.8	2.2	6.1	3.5	5.1	3.2	5.75	.....	.....
1877...	10.2	6.1	10.3	6.9	4.2	4.3	3.7	0.9	0.8	2.1	6.0	5.3	5.07	.....	.....
1878...	6.7	7.1	7.4	5.7	5.8	5.1	2.6	2.6	2.6	1.0	7.4	9.2	5.27	.....	.....
1879...	7.2	7.0	11.3	7.4	3.1	1.7	2.5	2.7	0.2	—0.9	2.3	7.0	4.29	.....	.....
1880...	9.6	8.0	8.4	6.2	3.1	4.3	2.6	2.0	1.6	1.1	3.9	5.5	4.69	5.01	5.20
1881...	5.0	9.5	8.5	8.6	4.7	7.5	2.3	0.4	—0.9	0.0	4.2	8.1	4.83	.....	.....
1882...	11.3	11.1	9.4	5.7	8.3	6.4	4.6	2.7	4.0	1.8	2.2	4.0	5.96	.....	.....
1883...	5.3	14.1	6.0	9.8	6.8	7.5	5.6	2.1	0.7	2.6	5.4	5.5	5.95	.....	.....
1884...	5.9	15.4	10.3	6.2	4.8	3.2	1.9	1.4	2.7	1.6	1.8	5.6	5.03	.....	.....
1885...	8.6	4.2	4.5	10.8	5.0	4.3	2.0	5.0	3.1	4.1	5.2	6.7	5.29	5.41	.....
1886...	8.0	7.7	6.9	9.9	5.2	4.5	4.9	2.4	5.4	5.7	7.6	6.6	6.23	.....	.....
1887...	6.6	14.2	7.0	6.1	5.6	3.9	4.9	5.8	5.8	5.9	5.9	5.8	6.46	.....	.....
1888...	7.7	6.9	7.5	7.6	4.8	4.0	5.7	6.4	4.6	7.2	7.0	6.1	6.29	.....	.....
1889...	7.0	5.8	8.0	7.8	5.4	9.3	4.6	2.4	4.7	5.3	9.4	9.0	6.56	.....	.....
1890...	10.3	11.1	11.2	9.1	11.4	4.9	4.2	6.2	7.3	9.6	8.2	4.8	8.19	6.74	6.08
1891...	9.5	15.3	8.8	8.1	5.0	6.7	5.7	5.5	5.3	5.9	6.4	8.3	7.54	.....	.....
1892...	7.0	7.8	8.3	8.4	9.3	7.3	5.5	5.9	5.8	6.0	6.3	4.8	6.87	.....	.....
Means.	7.74	8.71	8.32	7.99	5.90	4.71	3.89	3.36	3.25	3.39	5.19	6.54	5.75	.....	.....

OHIO RIVER, MARIETTA, OHIO.

1873...	.....	.....	.....	.....	11.1	.....	.....	.....	.....	7.0	9.2	15.9	.....	.....	.....
1874...	17.8	14.7	12.8	14.5	9.5	4.6	3.8	4.9	2.8	3.4	3.7	8.5	8.42	.....	.....
1875...	7.8	8.5	17.0	13.3	6.8	4.5	5.4	12.0	4.0	4.7	9.1	14.3	8.95	.....	.....
1876...	15.6	16.9	14.8	12.6	10.0	4.9	6.3	4.8	9.6	5.8	7.4	5.6	9.53	.....	.....
1877...	12.8	10.5	18.2	10.8	6.9	6.9	6.3	3.7	3.9	4.0	5.7	8.2	8.16	.....	.....
1878...	10.7	12.7	12.0	8.3	9.0	7.1	4.8	4.8	7.3	3.8	10.0	15.7	8.85	.....	.....
1879...	13.7	12.5	19.8	11.7	5.4	4.2	4.5	5.1	3.2	1.9	4.2	10.1	8.03	.....	.....
1880...	16.8	13.7	13.4	11.2	6.6	6.9	5.3	4.6	3.9	3.2	6.1	9.0	8.39	8.59	.....
1881...	8.8	17.0	11.4	13 9	8.2	12.1	4.8	3.0	1.8	3.1	8.8	13.3	9.10	.....	.....
1882...	19.9	20.4	16.1	8.9	14.7	12.3	7.7	6.1	6.4	4.7	4.7	6.5	10.70	.....	.....
1883...	5.3	26.3	9.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1884...	12.1	24.5	17.7	10.3	7.2	5.4	3.8	4.7	2.3	3.1	3.8	8.1	8.92	.....	.....
1885...	14.1	9.3	8.2	16.3	7.7	8.0	4.2	8.4	5.4	6.3	8.3	10.3	8.87	9.40	.....
1886...	13.1	13.1	10.9	17.7	8.5	5.9	4.4	4.6	3.1	3.2	8.6	10.0	8.59	.....	.....
1887...	10.6	25.0	13.2	9.6	9.3	7.6	3.2	3.1	2.4	2.4	2.9	4.2	7.79	.....	.....
1888...	11.6	10.7	.....	11.7	6.9	4.8	8.4	7.5	6.7	.....	12.9	9.4	9.06	.....	.....
1889...	11.9	.....	11.6	11.1	7.9	12.4	7.6	4.9	3.3	4.3	12.7	13.7	9.22	.....	.....
1890...	17.8	19.2	20.4	14.9	18.9	10.0	5.7	5.8	12.7	14.9	13.7	8.8	13.57	9.65	9.54
1891...	16.6	26.8	15.3	13.7	5.4	9.3	7.6	6.5	4.7	2.9	6.2	11.9	10.57	.....	.....
1892...	11.3	13.6	13.3	12.7	14.5	13.0	6.4	4.4	3.7	2.7	4.9	6.2	8.89	.....	.....
Means	13.07	16.63	14.37	12.40	9.18	7.77	5.57	5.49	4.84	4.53	7.53	9.98	9.20	.....	.....

OHIO RIVER, CINCINNATI, OHIO.

1858...	.....	.....	.....	.....	.....	29.8	11.3	6.2	3.2	3.9	7.1	27.8	.....	.....	.....
1859...	21.7	32.8	32.1	31.8	19.0	10.1	7.9	6.5	8.1	7.5	10.6	23.3	17.62	.....	.....
1860...	23.9	17.9	19.9	26.2	16.8	11.6	8.2	8.7	8.7	9.4	21.2	21.4	16.16	.....	.....
1861...	23.9	26.4	22.3	30.2	23.9	12.7	6.0	12.2	9.5*	22.3	21.1	18.8	19.11	.....	.....
1862...	30.2	35.3	34.3	37.8	17.7	16.2	12.2	5.9	3.6	2.5	5.2	8.6	17.46	.....	.....
1863...	24.3	30.0	35.0	22.3	17.3	6.0	9.1	6.2	3.4	3.6	5.8	14.8	14.82	.....	.....
1864...	15.4	16.1	20.8	27.8	23.0	10.5	4.7	7.7	13.4	13.1	21.0	25.7	16.60	.....	.....
1865...	25.3	21.8	41.8	31.1	32.4	13.7	14.0	11.6	14.3	7.9	10.2	19.1	20.27	17.65	.....
1866...	23.7	21.7	20.3	25.8	15.4	13.8	11.5	8.3	18.9	17.2	20.0	25.8	19.28	.....	.....
1867...	15.2	39.9	43.2	26.4	23.0	16.7	7.8	6.0	4.7	3.5	5.9	12.1	17.03	.....	.....
1868...	24.2	15.8	33.6	29.1	29.3	15.7	7.4	9.1	19.1	11.3	14.3	18.1	18.92	.....	.....
1869...	28.3	25.0	25.9	30.5	23.0	19.9	20.6	8.8	10.8	9.1	7.9	26.3	19.67	.....	.....
1870...	36.5	24.8	28.0	36.3	16.4	14.5	10.2	12.2	7.2	6.7	8.7	13.0	17.87	18.55	18.10
1871...	14.6	23.0	25.3	16.5	21.8	8.2	7.1	5.1	5.4	3.1	4.5	7.3	11.83	.....	.....
1872...	14.0	14.0	13.3	26.8	11.8	10.9	11.9	8.4	5.1	4.2	10.0	10.5	11.74	.....	.....
1873...	22.6	29.4	21.4	29.2	25.6	9.2	13.3	10.0	6.6	7.3	15.7	28.6	18.24	.....	.....
1874...	29.7	27.9	25.7	31.6	20.7	7.8	6.1	9.0	4.2	5.4	4.6	13.5	15.52	.....	.....
1875...	18.3	16.7	34.4	23.9	14.7	11.8	25.0	26.7	5.1	7.4	15.9	24.3	18.68	15.20	.....

TABLE III.—MEAN STAGES OF RIVERS—Continued.

OHIO RIVER, CINCINNATI, OHIO—Continued.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly means.	5-year means.	10-year means.
1876	31.3	33.9	25.6	25.4	18.2	10.5	11.8	10.6	16.8	10.7	11.6	12.0	18.20	.....	.....
1877	28.1	18.4	28.0	23.0	17.8	12.5	11.3	5.5	6.2	5.1	11.9	15.1	15.24	.....	.....
1878	20.0	24.2	24.2	14.9	22.0	12.5	9.1	10.6	13.7	6.0	14.8	28.9	16.74	.....	.....
1879	23.2	26.6	32.7	22.9	11.5	7.8	5.6	9.9	6.9	3.2	5.4	19.0	14.56	.....	.....
1880	29.2	28.3	32.9	24.6	16.4	13.8	9.4	8.4	7.0	4.6	10.4	18.8	16.98	16.34	15.77
1881	20.8	33.1	27.3	30.7	16.0	16.5	7.8	4.9	3.6	4.4	14.9	24.9	17.07	.....	.....
1882	42.0	44.0	34.2	18.2	30.1	26.3	17.2	13.7	13.9	9.0	5.4	12.7	22.23	.....	.....
1883	18.1	48.6	20.3	35.9	19.1	22.4	13.0	8.7	4.4	7.8	16.0	20.3	19.60	.....	.....
1884	24.5	55.1	36.8	24.5	17.4	11.0	8.4	6.5	3.4	3.9	4.4	12.3	17.35	.....	.....
1885	25.6	14.3	17.1	26.5	14.9	14.6	6.8	12.5	11.1	8.5	15.5	18.1	15.46	18.34	.....
1886	24.7	26.0	20.3	37.2	22.1	15.5	13.5	9.9	5.4	5.1	12.4	19.6	17.64	.....	.....
1887	20.7	48.3	29.0	24.1	20.4	14.7	5.6	4.8	3.2	3.2	3.5	6.1	15.30	.....	.....
1888	20.1	20.3	23.1	23.6	13.7	10.3	14.7	12.3	16.2	18.2	27.1	16.2	17.98	.....	.....
1889	25.5	23.7	20.8	18.6	15.9	25.2	18.4	12.0	6.9	8.1	24.8	23.7	18.63	.....	.....
1890	33.0	38.2	44.6	31.6	32.7	19.5	10.8	9.8	20.7	21.4	24.1	17.4	25.32	18.97	18.65
1891	31.8	46.8	37.2	30.6	9.8	18.9	13.0	11.2	9.7	4.9	9.6	18.9	20.20	.....	.....
1892	23.8	24.5	25.4	31.5	25.2	23.1	11.6	7.7	5.7	4.3	6.4	11.1	16.69	.....	.....
Means	24.5	28.6	28.4	27.3	19.9	14.7	10.9	9.4	8.7	7.8	12.2	18.1	17.53	.....	.....

OHIO RIVER, LOUISVILLE, KY. (ENGINEER UPPER GAUGE).

1871	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.2	.....	.....	.....
1872	6.7	5.5	6.5	12.1	5.9	5.6	5.8	4.8	3.1	2.5	4.9	4.2	5.62	.....	.....
1873	8.9	11.6	8.6	11.0	10.0	5.1	6.2	4.9	3.7	3.5	7.1	11.6	7.68	.....	.....
1874	12.0	12.0	10.5	12.8	9.8	4.5	3.6	5.0	2.6	3.2	2.7	6.9	7.13	.....	.....
1875	7.3	7.9	13.4	9.6	7.4	6.4	11.0	13.5	3.9	4.6	7.1	10.3	8.53	.....	.....
1876	15.1	14.7	10.3	10.4	8.0	5.9	6.5	6.0	7.3	6.0	6.2	4.9	8.44	.....	.....
1877	12.6	8.1	10.6	9.6	8.1	6.6	6.2	3.7	3.2	3.2	6.0	7.5	7.12	.....	.....
1878	8.8	10.1	10.2	7.4	9.3	6.9	5.8	5.8	6.6	3.7	6.7	11.4	7.72	.....	.....
1879	9.3	10.4	11.7	9.6	5.9	4.9	3.5	5.6	4.9	2.4	3.9	8.9	6.75	.....	.....
1880	11.9	13.8	14.0	10.4	8.2	7.3	5.8	4.8	4.6	3.5	6.0	8.4	8.22	7.65	.....
1881	8.5	13.8	10.0	11.3	7.4	7.2	4.8	3.4	2.4	3.5	7.4	10.4	7.51	.....	.....
1882	19.0	22.5	14.3	8.5	12.2	11.0	8.4	7.4	7.3	5.8	5.7	6.9	10.75	.....	.....
1883	8.6	27.9	9.1	14.7	8.7	9.7	7.1	5.6	3.8	5.0	8.0	9.8	9.83	.....	.....
1884	10.5	32.9	16.3	9.6	8.1	6.0	4.8	3.8	2.8	3.1	3.2	5.9	8.92	.....	.....
1885	11.6	7.9	8.1	10.2	7.0	7.2	4.2	6.2	6.0	4.4	7.2	7.8	7.32	8.87	.....
1886	9.8	10.5	8.3	19.9	9.0	7.3	6.9	5.6	4.0	3.6	5.4	8.5	8.23	.....	.....
1887	9.0	25.0	14.2	11.3	8.8	6.9	3.8	3.2	2.5	2.5	2.5	4.2	7.82	.....	.....
1888	9.0	8.7	9.9	10.0	6.6	5.6	6.8	6.2	7.8	7.5	10.8	7.5	8.03	.....	.....
1889	10.3	9.9	8.9	8.2	7.4	9.9	8.1	6.2	4.4	4.9	10.1	10.0	8.19	.....	.....
1890	13.8	16.1	25.1	13.1	12.4	9.0	6.1	5.3	9.3	8.8	10.1	7.9	11.42	8.74	8.80
1891	13.0	22.2	16.3	12.7	5.6	8.5	6.6	6.2	5.4	2.9	4.9	8.8	9.42	.....	.....
1892	10.1	10.2	10.7	13.5	10.4	9.6	6.2	4.3	3.5	2.8	3.4	5.8	7.54	.....	.....
Means	10.75	14.37	11.76	11.23	8.39	7.20	6.10	5.58	4.72	4.16	6.16	7.81	8.20	.....	.....

OHIO RIVER, EVANSVILLE, IND.

1874	23.8	24.6	29.1	30.2	19.8	4.6	3.0	6.3	2.7	2.4	2.6	10.1	13.26	.....	.....
1875	14.1	13.9	32.4	19.8	13.8	10.0	24.1	26.1	4.2	4.8	10.5	20.3	16.16	.....	.....
1876	29.4	34.7	22.7	24.9	13.9	10.4	9.6	8.5	11.4	9.0	8.7	6.6	15.81	.....	.....
1877	22.4	15.4	21.6	21.8	15.4	9.6	8.8	3.8	2.4	2.1	5.6	12.5	11.78	.....	.....
1878	15.3	21.2	21.7	13.0	17.6	10.0	7.2	6.3	9.1	2.6	7.8	25.1	13.07	.....	.....
1879	12.8	21.2	26.2	22.0	8.7	6.8	3.4	7.1	8.0	1.1	2.8	17.4	11.45	.....	.....
1880	29.3	26.5	33.1	22.4	16.4	11.3	10.1	5.0	5.6	3.5	9.4	16.1	15.72	13.57	.....
1881	17.7	29.2	23.4	26.0	14.7	12.2	6.0	3.4	1.2	2.8	9.5	19.6	13.76	.....	.....
1882	36.5	39.2	35.3	18.4	25.8	24.2	15.3	11.2	9.2	6.8	5.7	8.6	19.68	.....	.....
1883	13.5	39.7	22.1	30.7	25.0	19.4	10.3	6.2	1.9	3.9	14.8	19.2	17.22	.....	.....
1884	23.7	44.5	33.8	22.1	16.2	9.7	7.1	4.8	2.4	2.5	2.2	8.5	14.79	.....	.....
1885	24.7	15.1	14.9	20.6	12.5	12.3	5.0	7.6	7.8	5.3	11.6	14.1	12.62	15.61	.....
1886	20.8	23.8	15.2	34.5	17.9	12.0	11.6	7.7	4.3	8.0	11.7	15.4	15.24	.....	.....
1887	16.7	40.8	29.9	19.0	19.2	11.0	3.9	2.8	1.3	1.2	1.0	3.6	12.53	.....	.....
1888	17.2	17.1	19.3	23.4	9.6	8.2	10.4	9.1	14.6	10.6	24.2	12.1	14.65	.....	.....
1889	19.9	20.6	16.5	13.9	11.2	20.6	14.9	9.9	5.0	4.9	19.3	20.3	14.75	.....	.....
1890	30.9	32.5	41.4	31.9	26.2	17.8	9.3	6.6	15.8	13.7	20.7	12.6	21.61	15.76	15.68
1891	28.1	37.8	36.9	29.4	8.4	13.2	10.1	8.0	7.7	2.6	5.4	15.2	16.90	.....	.....
1892	20.1	20.5	21.1	30.2	23.7	19.5	9.3	5.2	3.3	2.1	2.5	8.2	13.80	.....	.....
Means	21.94	27.28	26.14	23.91	16.63	12.78	9.44	7.66	6.21	4.71	9.26	13.97	14.99	.....	.....

TABLE III.—MEAN STAGES OF RIVERS—Continued.

CUMBERLAND RIVER, NASHVILLE, TENN.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly means.	5-year means.	10-year means.
1873	.....	.....	.....	.....	.....	.....	.....	.....	1.9	1.7	8.1	14.8	.....	.....	.....
1874	19.7	21.1	21.5	35.3	14.3	2.3	1.7	3.0	5.4	2.8	8.3	9.9	12.10	.....	.....
1875	17.2	20.8	30.3	16.4	13.3	4.6	18.0	8.9	4.4	5.0	10.0	15.3	13.68	.....	.....
1876	22.1	17.7	16.9	12.9	9.8	7.9	5.4	5.4	2.2	1.3	1.7	1.9	8.76	.....	.....
1877	18.6	6.5	12.9	24.2	9.5	5.9	3.8	1.8	2.0	1.1	7.0	6.2	8.29	.....	.....
1878	10.6	13.0	10.9	13.6	9.2	3.6	3.2	2.0	0.9	0.0	2.1	13.2	6.85	.....	.....
1879	22.6	17.9	13.3	12.6	4.6	2.1	0.9	1.0	2.6	0.7	3.6	21.8	8.64	.....	.....
1880	12.7	25.1	34.0	15.3	6.4	2.7	9.5	2.1	1.8	1.8	7.2	14.1	11.05	8.71	.....
1881	17.9	17.0	12.0	18.4	8.6	7.0	3.9	0.6	0.5	0.9	8.1	14.6	9.12	.....	.....
1882	40.6	33.2	26.5	14.4	13.3	11.5	7.1	6.2	4.4	1.9	2.0	5.4	13.87	.....	.....
1883	15.0	27.5	11.2	27.8	8.9	13.2	5.1	3.4	0.6	1.9	9.9	14.6	11.59	.....	.....
1884	21.2	35.3	33.6	14.9	8.3	5.8	4.6	3.0	1.4	2.8	0.8	5.7	11.45	.....	.....
1885	18.8	11.9	10.0	10.8	8.0	9.9	4.0	3.0	0.7	2.5	12.6	10.5	8.55	10.91	.....
1886	16.4	19.0	13.2	29.0	11.2	12.7	7.7	5.3	5.2	1.3	7.4	10.1	11.54	.....	.....
1887	13.9	30.3	22.8	9.8	9.4	4.8	1.4	0.8	0.2	0.4	0.1	2.4	8.02	.....	.....
1888	16.1	13.4	15.2	17.1	5.2	4.2	5.6	4.3	8.8	4.1	13.6	5.4	9.41	.....	.....
1889	16.0	17.1	12.3	10.2	4.8	12.9	7.7	6.7	7.1	3.3	15.3	10.1	10.29	.....	.....
1890	20.3	26.4	37.6	18.4	19.2	6.5	2.5	5.1	6.7	7.2	6.3	10.4	13.88	10.62	10.77
1891	19.7	32.6	30.4	16.5	4.4	5.6	3.1	4.1	2.2	0.2	3.2	8.9	10.90	.....	.....
1892	17.4	11.2	16.6	27.5	11.7	8.4	4.7	2.4	1.6	0.4	1.8	10.7	9.53	.....	.....
Means	18.77	20.89	20.06	18.16	9.47	6.92	5.25	3.63	3.03	2.06	6.45	10.30	10.39	.....	.....

TENNESSEE RIVER, CHATTANOOGA, TENN.

1874	.....	.....	.....	16.8	11.8	3.6	3.0	3.8	3.4	2.3	3.9	5.8	.....	.....	.....
1875	9.6	15.6	27.1	11.6	6.6	4.3	8.5	6.3	4.0	3.1	5.3	9.5	9.29	.....	.....
1876	11.3	12.1	10.8	8.9	10.6	9.4	5.4	3.9	2.4	1.7	1.9	2.2	6.71	.....	.....
1877	11.4	4.3	9.1	14.7	6.3	3.5	3.1	1.9	2.2	2.2	6.2	5.5	5.86	.....	.....
1878	7.7	10.2	6.9	6.3	5.6	3.0	2.0	2.6	2.8	2.2	4.1	9.1	5.20	.....	.....
1879	14.4	10.8	6.4	6.8	4.4	2.1	1.1	2.8	1.3	3.0	2.6	11.0	5.55	.....	.....
1880	6.5	9.2	19.6	10.8	7.0	3.6	3.6	3.3	2.5	1.5	3.1	10.1	6.73	6.01	.....
1881	9.7	12.1	9.2	10.0	5.3	3.5	2.1	1.0	2.1	1.2	6.2	10.4	6.06	.....	.....
1882	26.6	19.1	13.5	8.1	5.9	6.4	4.7	4.2	6.7	2.4	2.4	4.4	8.70	.....	.....
1883	14.7	10.7	6.8	18.4	5.9	4.5	2.7	1.7	0.8	1.8	3.7	5.1	6.40	.....	.....
1884	8.6	22.6	24.0	11.0	6.8	5.9	4.9	3.4	1.3	0.5	1.0	4.2	7.85	.....	.....
1885	11.2	7.1	6.7	6.2	5.4	6.0	3.7	2.7	1.5	4.5	10.6	8.7	6.19	7.04	.....
1886	12.2	8.1	9.9	20.9	8.3	10.3	8.2	5.0	2.7	1.6	4.9	8.1	8.35	.....	.....
1887	9.4	15.6	10.7	7.4	5.4	6.5	3.3	5.0	2.0	2.3	2.0	3.3	6.07	.....	.....
1888	11.4	7.9	8.8	10.0	5.6	5.0	3.4	3.0	7.7	6.6	10.8	4.9	7.09	.....	.....
1889	9.7	13.7	6.3	5.1	3.6	7.1	5.4	5.5	5.1	2.7	7.9	4.7	6.40	.....	.....
1890	6.8	11.9	18.1	10.6	8.3	4.3	3.8	4.7	4.1	6.0	3.7	5.5	7.31	7.04	7.04
1891	9.7	22.6	19.1	10.1	4.6	5.7	3.8	6.4	3.6	1.6	2.8	6.2	8.01	.....	.....
1892	14.7	7.6	7.4	15.1	16.3	6.9	7.1	3.5	2.5	1.4	3.9	4.9	7.60	.....	.....
Means	11.42	12.28	12.24	10.98	7.03	5.34	4.20	3.72	3.08	2.55	4.57	6.50	6.96	.....	.....

TENNESSEE RIVER, JOHNSONVILLE, TENN.

1875	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.4	5.9	10.3	.....	.....	.....
1876	18.9	17.5	14.7	14.9	14.0	11.5	5.4	4.2	1.3	0.7	0.4	0.8	8.69	.....	.....
1877	.....	6.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1878	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1879	.....	.....	9.9	8.4	5.9	2.0	0.9	2.4	2.6	6.6	3.6	20.6	6.25	.....	.....
1880	13.5	17.9	31.5	13.8	10.3	4.8	2.9	2.3	3.5	2.5	.....	.....	10.30	.....	.....
1881	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1882	32.0	33.8	24.1	12.6	11.7	7.3	5.7	3.7	11.2	8.3	3.3	3.1	13.07	.....	.....
1883	14.6	25.5	20.2	23.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1884	.....	40.4	40.1	38.1	12.0	3.4	4.4	0.4	0.0	0.0	0.5	.....	13.93	.....	.....
1885	16.9	7.5	9.4	7.8	6.8	7.9	2.5	2.4	2.0	3.3	12.1	9.9	7.37	.....	.....
1886	17.0	13.9	9.9	30.7	10.1	12.7	8.9	4.2	2.8	0.8	3.9	9.0	10.33	.....	.....
1887	11.4	24.1	21.4	7.4	9.9	7.8	2.5	3.0	1.4	1.8	1.5	3.3	7.96	.....	.....
1888	17.2	11.5	12.4	19.6	5.1	5.6	4.1	1.6	8.4	4.4	12.9	5.3	9.01	.....	.....
1889	13.0	17.0	10.9	7.5	3.7	7.2	7.1	6.7	7.1	3.1	10.0	6.3	8.30	.....	.....
1890	12.3	20.0	31.5	18.1	10.7	5.6	3.5	4.9	5.0	5.9	4.6	5.0	10.59	9.24	.....
1891	14.4	31.4	31.7	17.8	5.6	5.9	3.9	6.8	3.7	1.3	2.6	8.0	11.09	.....	.....
1892	18.3	12.4	10.7	28.8	10.2	8.2	10.9	4.3	3.8	1.8	3.7	10.2	10.27	.....	.....
Means	14.13	19.93	19.89	17.81	8.93	6.92	4.82	3.61	4.06	3.06	5.00	7.65	9.78	.....	.....

TABLE III.—MEAN STAGES OF RIVERS—Continued.

OHIO RIVER, PADUCAH, KY.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly means.	5-year means.	10-year means.
1874	.....	.....	.....	.....	.....	6.2	3.7	5.6	5.0	2.6	3.3	9.8	.....	.....	.....
1875	19.5	22.0	39.0	26.9	18.6	11.3	25.6	29.0	6.8	4.5	7.8	18.3	19.19	.....	.....
1876	31.8	39.4	27.0	33.0	24.0	18.3	18.1	8.3	8.4	6.6	5.0	3.4	18.61	.....	.....
1877	16.7	14.8	18.8	31.6	20.5	13.4	9.6	2.7	0.5	0.9	9.2	12.8	12.62	.....	.....
1878	17.5	23.7	23.7	17.3	20.3	13.5	9.9	5.3	5.9	3.7	5.1	24.0	14.16	.....	.....
1879	23.4	27.7	25.3	23.6	10.0	7.6	4.7	4.8	7.7	2.1	4.0	22.2	13.59	.....	.....
1880	32.2	28.3	39.9	26.6	18.8	12.7	13.6	3.6	4.2	2.9	8.2	18.4	17.45	15.29	.....
1881	17.2	30.1	27.6	30.9	21.2	12.1	7.4	2.2	1.1	5.4	14.9	21.3	15.95	.....	.....
1882	41.1	46.7	42.4	24.8	28.1	26.5	18.7	9.8	8.6	4.6	4.2	7.3	21.90	.....	.....
1883	15.2	40.4	26.8	35.0	20.2	23.5	14.4	5.8	1.8	3.2	14.2	17.1	18.13	.....	.....
1884	26.7	45.5	41.8	30.4	20.9	12.6	9.3	5.7	2.4	3.6	1.9	7.2	17.33	.....	.....
1885	28.4	17.4	17.4	20.6	14.4	16.9	7.6	6.2	6.7	5.0	13.9	14.4	14.08	17.48	.....
1886	22.6	25.9	17.6	41.5	21.2	15.7	12.6	6.5	4.4	2.8	5.6	14.3	15.89	.....	.....
1887	15.8	41.6	35.6	16.3	19.6	9.7	3.5	2.9	1.4	1.2	1.3	3.4	12.69	.....	.....
1888	19.0	17.4	20.6	29.6	12.8	13.7	12.2	6.4	13.1	7.2	22.1	10.2	15.36	.....	.....
1889	19.2	21.5	17.8	13.3	8.5	19.8	14.4	9.9	6.7	3.8	16.0	18.1	14.08	.....	.....
1890	31.0	33.8	45.8	35.4	25.0	16.7	7.7	5.7	11.7	10.3	15.9	10.2	20.77	15.76	16.62
1891	25.3	38.8	42.3	33.3	9.4	11.4	8.8	7.8	6.0	1.5	3.5	13.4	16.79	.....	.....
1892	21.3	20.8	21.0	37.5	31.1	26.0	17.2	5.1	3.3	1.5	2.6	10.0	16.45	.....	.....
Means	23.55	29.76	29.46	28.20	19.14	15.13	11.52	7.01	5.56	3.86	8.35	13.51	16.39	.....	.....

OHIO RIVER, CAIRO, ILL.

1858	28.0	20.4	29.8	35.4	37.5	46.5	28.4	22.4	.....	.....	.....	.....	.....	.....	.....
1859	.....	.....	.....	.....	38.9	.....	.....	13.8	9.2	9.0	7.4	23.4	.....	.....	.....
1860	28.0	.....	.....	.....	.....	.....	.....	8.6	5.4	6.7	16.1	15.7	.....	.....	.....
1861	22.6	28.6	28.5	37.7	35.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1862	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1863	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1864	.....	.....	.....	.....	28.1	14.4	.....	.....	.....	.....	.....	.....	.....	.....	.....
1865	24.1	18.3	45.1	45.8	35.2	20.4	21.3	23.8	15.3	10.7	9.6	13.2	23.56	.....	.....
1866	28.4	21.6	36.7	32.2	29.3	21.5	17.1	13.2	17.6	20.0	16.4	27.0	23.41	.....	.....
1867	14.8	35.8	49.7	36.8	32.3	32.2	24.8	15.2	8.0	4.5	4.2	5.6	22.00	.....	.....
1868	25.0	14.9	30.2	37.2	40.1	21.6	14.1	11.3	.....	.....	.....	.....	.....	.....	.....
1869	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1870	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1871	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.1	2.3	.....	.....	.....
1872	9.9	9.0	15.0	30.2	20.7	21.3	17.7	13.3	6.2	3.6	4.5	4.1	13.00	.....	.....
1873	16.6	28.6	27.2	35.7	32.4	26.9	24.1	11.5	5.6	3.0	9.4	26.0	20.58	.....	.....
1874	23.6	29.9	39.8	41.0	31.8	14.8	11.8	8.4	6.9	5.9	5.4	9.8	19.08	.....	.....
1875	14.7	19.2	40.2	33.6	28.5	21.9	36.0	35.5	15.1	9.6	11.3	19.4	23.75	.....	.....
1876	33.4	41.3	31.8	42.0	35.3	28.4	30.5	16.3	19.2	12.0	11.3	4.9	25.53	.....	.....
1877	18.8	20.4	23.0	37.7	32.1	27.0	23.6	11.1	6.6	5.6	13.3	18.2	19.78	.....	.....
1878	21.9	28.2	30.9	25.0	30.6	26.5	21.1	16.0	10.9	6.8	8.5	23.6	20.83	.....	.....
1879	21.8	28.6	27.4	29.4	14.4	17.1	16.8	13.5	11.5	4.1	8.1	24.8	18.12	.....	.....
1880	35.8	30.9	41.9	32.9	27.3	23.2	26.5	11.4	11.0	7.8	11.1	19.5	23.28	21.51	.....
1881	17.1	32.9	35.3	40.7	34.3	24.6	21.0	9.9	7.4	19.0	28.0	28.6	24.90	.....	.....
1882	42.3	47.4	46.2	34.4	37.7	38.2	32.0	19.1	14.4	9.1	10.9	11.0	28.55	.....	.....
1883	17.7	41.5	35.5	39.9	31.2	36.2	27.9	16.8	6.8	8.4	20.8	21.1	25.32	.....	.....
1884	28.2	45.1	44.0	40.4	31.6	24.0	20.6	13.6	9.1	17.4	11.7	13.1	24.90	.....	.....
1885	33.2	23.3	26.0	29.8	26.2	28.5	20.3	17.1	18.6	12.1	19.8	18.3	22.76	25.29	.....
1886	25.9	30.8	26.8	46.3	32.6	24.1	19.6	10.4	7.2	6.0	7.7	15.7	21.00	.....	.....
1887	17.1	43.3	41.1	24.9	28.1	18.5	13.0	6.8	5.4	3.9	2.7	4.9	17.48	.....	.....
1888	20.0	22.5	28.4	38.2	26.4	27.7	24.6	16.6	18.0	9.5	24.9	13.0	22.48	.....	.....
1889	23.4	24.3	25.1	20.7	16.2	28.6	22.1	16.1	10.1	4.9	19.1	21.6	19.35	.....	.....
1890	35.5	37.8	47.1	40.4	31.3	25.3	17.6	10.3	15.3	14.2	19.7	12.4	25.58	21.20	23.24
1891	27.3	39.5	44.5	40.6	19.5	21.9	19.5	16.1	9.4	3.0	5.3	15.7	21.86	.....	.....
1892	23.0	26.3	27.5	43.8	42.6	39.1	30.9	14.6	8.5	5.0	5.8	12.5	23.30	.....	.....
Means	24.22	29.26	34.25	36.02	30.60	25.94	22.42	14.74	10.72	8.53	12.16	15.76	22.10	.....	.....

MISSISSIPPI RIVER, ST. PAUL, MINN.

1866	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.6	3.0	.....	.....	.....	.....
1867	.....	.....	.....	10.0	9.5	13.7	14.3	9.4	4.9	3.7	3.3	.....	8.10	.....	.....
1868	.....	.....	.....	8.0	7.3	5.4	3.3	3.2	4.2	3.6	4.2	.....	4.90	.....	.....
1869	.....	.....	.....	13.5	9.3	5.5	3.6	4.3	11.3	12.1	6.4	.....	8.25	7.08	.....
1870	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1871	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1872	.....	.....	.....	5.5	6.3	5.5	5.1	3.9	2.6	2.2	3.4	.....	4.31	.....	.....
1873	.....	.....	.....	12.0	10.6	13.6	7.0	4.5	3.2	3.9	3.8	.....	7.32	.....	.....
1874	.....	.....	.....	8.2	7.3	7.4	7.6	4.3	5.1	4.0	4.0	.....	5.99	.....	.....
1875	.....	.....	.....	14.3	9.1	9.0	4.8	2.7	6.0	3.3	2.7	.....	6.49	6.03	.....
1876	.....	.....	.....	9.0	8.8	6.3	3.4	2.9	4.0	3.2	2.7	.....	5.04	.....	.....
1877	.....	.....	.....	6.0	5.9	5.2	5.5	2.3	1.9	2.2	2.3	.....	3.91	.....	.....
1878	.....	.....	4.1	4.6	4.7	4.3	2.8	2.5	1.0	1.5	1.3	.....	2.98	.....	.....
1879	.....	.....	2.4	1.8	3.5	4.6	7.1	3.0	1.8	2.0	1.8	.....	3.11	.....	.....
1880	.....	.....	.....	6.2	6.6	11.3	5.8	2.8	2.4	2.1	2.4	.....	4.95	4.00	4.90

TABLE III.—MEAN STAGES OF RIVERS—Continued.

MISSISSIPPI RIVER, ST. PAUL, MINN.—Continued.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly means.	5-year means.	10-year means.
1881	.....	.....	.....	8.5	11.9	9.3	6.5	4.1	8.4	12.2	11.3	.....	9.02	.....	.....
1882	.....	.....	.....	11.8	10.7	8.6	7.8	5.4	4.2	4.0	4.0	.....	7.06	.....	.....
1883	.....	.....	.....	9.6	8.1	7.4	4.4	2.6	1.9	2.1	2.2	.....	4.79	.....	.....
1884	.....	.....	.....	7.5	8.5	5.8	3.3	2.6	3.8	5.5	3.5	.....	5.06	.....	.....
1885	.....	.....	.....	5.4	5.3	5.9	5.1	3.4	3.5	3.2	2.5	.....	4.29	6.04	.....
1886	.....	.....	.....	5.8	6.3	4.8	3.4	2.1	2.4	2.4	2.6	.....	3.72	.....	.....
1887	.....	.....	.....	7.6	4.5	2.9	2.7	2.2	2.1	1.9	1.4	.....	3.16	.....	.....
1888	.....	.....	.....	11.2	11.9	8.6	6.5	4.4	3.1	3.3	3.1	.....	6.51	.....	.....
1889	.....	.....	.....	2.9	3.7	2.7	2.4	2.7	2.4	1.8	1.6	.....	2.52	.....	.....
1890	.....	.....	.....	3.8	3.1	5.6	4.2	1.8	2.0	2.1	1.8	.....	3.05	3.79	4.92
1891	.....	.....	.....	5.8	3.7	2.7	2.3	1.6	1.3	1.5	0.7	.....	2.45	.....	.....
1892	.....	.....	3.6	4.4	8.1	9.4	5.9	4.6	3.6	2.7	1.8	.....	4.91	.....	.....
Means	.....	.....	3.37	7.64	7.28	6.90	5.20	3.47	3.63	3.56	3.11	.....	5.08	.....	.....

MISSISSIPPI RIVER, LA CROSSE, WIS.

1873	.....	.....	.....	.....	.....	.....	6.8	2.4	1.6	2.3	2.5	.....	.....	.....	.....
1874	.....	.....	.....	7.1	7.4	9.3	6.7	.....	6.6	6.8	5.9	.....	7.11	.....	.....
1875	.....	.....	.....	9.3	8.9	7.3	3.8	1.3	5.8	2.4	2.2	.....	5.12	.....	.....
1876	.....	.....	.....	9.4	9.9	7.4	3.7	2.6	3.5	2.6	2.6	.....	5.21	.....	.....
1877	.....	.....	.....	4.0	4.8	5.0	4.8	0.8	0.7	1.4	1.9	.....	2.92	.....	.....
1878	.....	.....	3.9	4.5	5.2	4.9	4.5	3.4	2.0	3.7	3.4	.....	3.95	.....	.....
1879	.....	.....	.....	3.4	6.1	6.3	8.2	4.5	3.5	3.7	4.2	.....	4.99	.....	.....
1880	.....	.....	4.4	9.6	9.4	13.0	8.1	4.5	4.1	3.7	4.3	.....	6.79	4.77	.....
1881	.....	.....	.....	6.7	11.5	9.5	7.1	5.0	10.7	14.2	11.1	7.5	9.26	.....	.....
1882	.....	.....	6.9	11.0	10.8	9.[illegible]	9.2	6.3	5.4	5.9	6.2	.....	7.87	.....	.....
1883	.....	.....	.....	10.0	9.9	9.1	7.7	5.1	3.8	4.0	4.2	.....	6.72	.....	.....
1884	.....	.....	.....	9.2	9.2	8.0	5.1	3.8	8.2	9.3	6.4	.....	7.40	.....	.....
1885	.....	.....	.....	7.7	8.8	7.5	7.3	5.9	5.0	4.0	3.6	4.4	6.02	7.45	.....
1886	.....	.....	.....	9.0	8.6	5.7	4.3	3.0	4.4	4.7	3.7	.....	5.42	.....	.....
1887	.....	.....	5.3	9.4	7.9	4.8	3.7	2.9	4.3	3.2	2.7	.....	4.91	.....	.....
1888	.....	.....	.....	10.8	14.1	11.0	7.8	6.5	4.0	3.5	3.5	.....	7.65	.....	.....
1889	.....	.....	.....	4.2	5.6	4.5	3.3	2.8	3.0	2.1	1.8	.....	3.41	.....	.....
1890	.....	.....	.....	7.2	5.3	8.8	5.4	3.8	4.4	4.6	3.5	.....	5.38	5.35	6.40
1891	.....	.....	.....	9.7	6.3	4.2	3.6	2.1	1.7	1.0	1.1	.....	3.72	.....	.....
1892	.....	.....	.....	5.2	7.7	10.4	7.4	4.7	3.0	2.0	1.7	.....	5.26	.....	.....
Means	.....	.....	5.12	7.76	8.29	7.67	5.92	3.76	4.24	4.26	3.82	.....	5.74	.....	.....

MISSISSIPPI RIVER, DAVENPORT, IOWA.

1860	8.1	7.1	5.0	4.9	5.4	8.3	4.7	2.0	1.7	2.7	3.2	4.8	4.82	.....	.....
1861	9.4	7.7	7.7	9.3	12.1	9.5	4.7	2.5	3.1	5.2	3.5	4.4	6.59	.....	.....
1862	9.2	8.0	8.5	11.4	13.1	7.7	5.1	3.5	3.2	5.1	2.8	2.2	6.65	.....	.....
1863	3.0	5.2	5.2	6.9	6.9	3.4	1.2	2.2	2.8	1.5	2.8	2.9	3.66	.....	.....
1864	3.8	3.9	4.6	5.1	4.8	.....	.....	0.7	0.4	0.7	1.0	3.7	2.84	.....	.....
1865	2.8	4.2	7.3	8.9	7.6	3.9	6.2	5.0	4.6	4.0	4.4	4.1	5.25	4.99	.....
1866	4.7	3.9	9.4	8.6	11.2	4.8	3.7	4.6	3.3	2.4	3.3	4.9	5.40	.....	.....
1867	9.6	9.5	8.3	9.3	10.4	11.3	11.0	8.7	3.9	3.3	2.9	4.2	7.70	.....	.....
1868	7.4	7.5	.....	.....	8.1	5.8	3.3	2.2	2.4	2.9	4.6	5.1	5.40	.....	.....
1869	9.1	7.4	4.3	8.6	10.5	6.8	8.3	5.9	8.4	11.1	6.3	3.7	7.53	.....	.....
1870	9.0	11.2	12.7	13.6	10.9	7.4	4.4	4.0	7.8	5.7	4.6	4.2	7.95	6.79	5.89
1871	4.8	6.8	7.9	7.8	11.1	6.0	3.6	2.5	1.8	1.7	2.4	4.7	5.09	.....	.....
1872	4.4	4.0	4.7	5.6	7.5	6.9	4.7	3.6	2.8	2.5	2.2	6.1	4.58	.....	.....
1873	5.2	4.8	6.8	7.2	10.1	10.3	8.5	2.9	1.9	2.4	2.2	3.6	5.49	.....	.....
1874	8.4	6.7	8.2	5.1	7.5	5.5	6.2	2.3	3.0	4.4	3.6	2.2	5.25	.....	.....
1875	6.5	4.4	4.9	9.5	10.0	7.3	5.3	1.6	4.9	2.9	2.1	2.9	5.19	5.12	.....
1876	3.4	4.0	6.1	10.4	12.0	9.5	6.7	3.0	5.3	3.5	3.3	4.3	5.95	.....	.....
1877	4.5	4.4	3.6	6.6	5.4	5.4	5.1	1.7	1.0	2.0	2.6	3.1	3.78	.....	.....
1878	3.5	2.5	3.3	3.8	5.1	5.1	4.7	3.2	1.3	3.6	2.8	1.6	3.37	.....	.....
1879	1.4	1.7	3.0	2.9	3.4	5.4	6.0	3.1	1.7	1.7	3.0	3.0	3.04	.....	.....
1880	5.4	3.1	2.7	7.6	8.5	12.3	9.1	3.0	3.3	2.6	3.9	6.2	5.64	4.35	4.73
1881	7.0	7.8	9.3	12.5	10.7	8.2	6.5	3.2	6.8	15.2	12.0	6.5	8.80	.....	.....
1882	3.7	4.5	6.5	10.6	10.2	8.8	8.4	4.8	3.8	4.2	5.1	6.8	6.45	.....	.....
1883	3.7	8.2	7.1	7.5	10.9	8.1	7.4	5.2	2.4	2.9	3.3	2.7	6.20	.....	.....
1884	2.6	5.0	6.5	9.7	8.3	6.7	4.2	2.9	5.7	10.1	5.8	3.7	5.93	.....	.....
1885	4.3	4.9	5.4	7.8	8.4	6.5	5.6	6.7	5.0	3.4	3.2	5.0	5.51	6.57	.....
1886	6.7	7.8	8.8	9.2	9.9	4.3	3.0	1.3	2.5	3.6	2.7	4.2	5.33	.....	.....
1887	5.4	6.2	7.1	7.2	7.9	3.2	2.3	1.6	2.8	2.4	1.9	1.9	4.15	.....	.....
1888	2.0	3.2	6.1	10.4	16.1	10.7	7.0	4.7	2.5	1.9	2.3	1.4	5.69	.....	.....
1889	1.7	4.0	5.3	4.1	4.0	4.2	2.8	1.5	1.7	1.0	0.8	0.6	2.64	.....	.....
1890	0.9	1.9	2.8	5.9	5.2	9.0	5.4	2.4	2.9	3.6	2.9	1.4	3.69	4.30	5.43
1891	1.3	3.5	4.0	8.6	6.7	2.8	2.5	0.9	0.3	0.8	0.6	1.4	2.78	.....	.....
1892	2.8	6.1	3.0	5.8	9.0	14.8	10.6	4.7	2.8	1.8	1.4	2.0	5.40	.....	.....
Means.	5.17	5.49	6.12	7.88	8.75	7.18	5.56	3.27	3.26	3.72	3.31	3.62	5.26	.....	.....

TABLE III.—MEAN STAGES OF RIVERS—Continued.

MISSISSIPPI RIVER, KEOKUK, IOWA.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly means.	5-year means.	10-year means.
1868	.....	.....	9.0	8.2	10.7	6.1	3.5	1.8	1.9	2.3	3.3	3.7	5.71	.....	.....
1869	4.8	4.1	2.7	8.8	10.3	7.9	11.6	7.5	10.8	11.3	6.2	4.4	7.53	.....	.....
1870	3.6	2.5	4.3	14.9	11.4	7.1	3.3	3.1	6.6	5.1	4.2	2.9	5.75	.....	.....
1871	5.5	5.7	2.5	7.3	10.7	5.7	3.4	2.2	1.3	1.1	1.7	5.2	4.36	.....	.....
1872	4.3	4.0	4.4	6.7	7.9	8.2	4.4	3.2	2.9	2.2	1.2	6.4	4.65	.....	.....
1873	7.0	5.6	7.6	7.4	10.5	11.5	8.9	2.8	1.4	1.8	1.6	1.3	5.62	.....	.....
1874	2.3	2.1	7.3	5.4	7.0	5.5	5.7	2.2	2.9	4.0	3.2	1.3	4.08	.....	.....
1875	.....	.....	7.2	9.8	10.0	8.2	9.0	2.4	7.3	3.6	2.3	1.8	5.35	4.81	.....
1876	5.3	3.7	8.7	12.7	12.4	10.2	9.8	3.6	8.3	4.2	4.0	3.0	7.16	.....	.....
1877	.....	6.9	3.3	9.3	8.0	7.5	6.9	2.4	1.8	1.6	2.5	3.5	4.72	.....	.....
1878	2.4	2.4	4.4	4.5	5.8	7.6	4.8	4.3	2.0	4.3	3.5	.....	4.12	.....	.....
1879	.....	.....	4.2	3.6	3.1	6.6	6.2	3.8	1.7	1.6	3.3	2.7	3.65	.....	.....
1880	5.3	3.4	3.3	7.6	8.6	11.1	10.6	3.3	3.8	3.5	2.1	2.0	5.38	5.00	4.90
1881	.....	.....	.....	14.4	12.5	10.4	10.2	3.9	6.0	15.4	15.0	8.1	8.49	.....	.....
1882	3.6	4.3	7.5	12.3	13.3	12.7	10.8	5.7	4.2	4.3	5.3	6.3	7.52	.....	.....
1883	.....	.....	8.5	8.2	13.2	11.2	7.8	6.2	2.7	5.2	3.9	3.1	6.97	.....	.....
1884	.....	.....	.....	12.0	9.3	7.2	4.9	3.4	4.9	11.3	6.1	3.8	5.99	.....	.....
1885	.....	.....	8.4	9.2	9.3	8.9	6.3	8.2	7.4	4.7	4.4	3.8	6.81	7.16	.....
1886	6.6	.....	10.9	11.9	12.7	5.1	3.3	1.4	2.4	3.7	2.7	.....	6.12	.....	.....
1887	.....	9.2	7.6	6.8	8.3	3.1	2.2	1.3	2.5	2.1	1.2	0.7	4.24	.....	.....
1888	.....	.....	8.2	11.2	17.4	11.5	7.8	5.0	2.3	1.5	2.2	1.0	6.21	.....	.....
1889	1.3	3.3	4.8	4.8	4.4	5.2	3.3	1.2	1.3	0.3	0.1	0	2.50	.....	.....
1890	0.6	2.0	4.2	5.9	5.6	8.9	6.6	2.4	2.7	3.4	2.8	0.6	3.81	4.58	5.87
1891	0.4	1.9	5.6	10.2	7.5	3.4	2.7	1.3	—0.7	0.3	0.2	0.5	2.78	.....	.....
1892	.....	3.4	3.6	7.6	13.2	16.0	12.8	5.2	2.9	1.6	1.0	0.6	5.82	.....	.....
Means	3.88	4.43	5.73	8.83	9.88	8.27	6.67	3.51	3.65	3.94	3.36	2.97	5.43	.....	.....

MISSOURI RIVER, OMAHA, NEBR.

1875	.....	.....	.....	10.7	8.9	11.3	10.2	7.7	7.5	3.3	2.3	2.8	.....	.....	.....
1876	3.8	4.8	5.8	8.6	6.5	12.7	11.5	7.7	7.0	4.4	2.4	2.2	6.45	.....	.....
1877	4.7	5.8	5.6	10.2	8.6	12.2	13.0	8.5	6.1	6.0	5.8	5.4	7.82	.....	.....
1878	5.2	6.1	6.6	8.8	12.0	16.2	14.0	9.8	7.8	6.8	5.6	5.0	8.65	.....	.....
1879	5.5	6.0	6.5	11.4	10.0	14.0	13.6	8.8	6.0	5.3	5.2	2.4	7.86	.....	.....
1880	3.8	6.6	5.5	8.9	7.6	12.8	15.9	10.6	8.5	6.1	5.4	6.8	8.20	7.79	.....
1881	8.0	9.0	11.1	18.8	10.6	12.3	10.7	7.1	6.0	5.6	5.2	4.8	9.10	.....	.....
1882	4.4	5.0	5.3	7.6	8.5	11.0	11.5	7.6	5.6	5.5	4.8	3.0	6.65	.....	.....
1883	4.1	5.2	6.9	9.0	9.7	11.4	12.0	8.2	6.4	5.2	4.6	3.9	7.21	.....	.....
1884	6.1	7.1	8.7	10.5	7.8	12.3	10.5	7.7	7.4	7.3	6.2	4.6	8.01	.....	.....
1885	5.0	6.0	9.1	9.1	8.5	13.2	12.1	9.2	7.3	6.0	6.1	5.4	8.08	7.81	.....
1886	5.5	6.7	8.0	8.4	8.7	11.8	9.9	8.7	7.4	6.6	5.5	4.9	7.67	.....	.....
1887	6.2	7.6	11.4	9.4	8.4	12.3	12.2	8.9	8.6	6.2	5.1	3.5	8.31	.....	.....
1888	6.3	6.7	7.7	13.1	11.0	13.2	13.0	9.4	7.0	6.7	7.1	7.6	9.06	.....	.....
1889	8.0	8.3	7.5	7.3	6.8	8.3	8.8	7.1	5.5	5.6	5.9	6.2	7.10	.....	.....
1890	6.3	6.5	6.6	7.6	7.4	10.5	10.2	8.2	6.9	6.5	6.7	7.0	7.53	7.93	7.87
1891	7.2	7.5	8.0	8.9	8.2	11.5	12.1	9.4	7.1	6.4	6.9	7.3	8.37	.....	.....
1892	7.7	8.0	8.6	9.3	10.4	12.5	13.8	9.0	6.8	.....	.....	.....	.....	.....	.....
Means	5.75	6.64	7.58	9.86	8.86	12.30	11.92	8.53	6.93	5.85	5.34	4.87	7.88	.....	.....

MISSOURI RIVER, PLATTSMOUTH, NEBR.

1873	.....	.....	.....	.....	7.6	13.0	.....	.....	.....	2.2	1.0	0.4	.....	.....	.....
1874	2.9	2.9	4.4	3.1	4.0	9.3	6.7	4.2	3.0	2.1	1.4	0.7	3.72	.....	.....
1875	2.9	2.4	3.5	8.6	8.2	10.1	8.7	5.5	6.1	3.1	1.5	1.5	5.17	.....	.....
1876	1.6	1.1	2.7	6.5	5.3	10.6	9.0	5.4	5.7	3.6	2.4	2.9	4.73	.....	.....
1877	3.0	4.9	3.9	7.7	7.6	11.6	10.0	5.6	3.5	3.1	2.9	1.5	5.44	.....	.....
1878	1.7	2.3	3.6	6.1	8.5	12.7	10.4	6.3	4.4	3.4	3.5	2.9	5.48	.....	.....
1879	3.2	3.7	4.3	7.6	7.0	10.1	9.6	5.6	2.9	2.6	2.8	0.5	4.99	.....	.....
1880	2.1	3.5	2.2	5.6	4.5	8.9	11.2	7.0	5.0	3.2	2.1	1.9	4.76	5.08	.....
1881	3.0	4.9	7.7	14.8	9.8	11.2	8.9	5.6	4.8	4.7	4.5	3.4	6.92	.....	.....
1882	3.8	3.8	3.7	6.3	7.1	9.5	9.9	5.5	3.4	3.7	3.0	0.6	5.02	.....	.....
1883	.....	.....	6.2	8.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1884	3.3	3.7	7.3	8.9	7.7	11.6	10.4	5.8	4.5	4.1	3.3	2.7	6.10	.....	.....
1885	3.5	4.9	7.4	6.8	6.6	11.5	9.8	6.2	4.6	3.4	3.8	3.2	5.97	.....	.....
1886	1.7	5.5	8.6	6.7	6.0	9.2	6.4	4.6	3.0	2.7	2.3	2.3	4.90	.....	.....
1887	5.9	5.3	9.1	7.6	6.7	11.0	9.3	5.6	6.2	3.5	3.3	4.2	6.47	.....	.....
1888	5.0	6.4	7.8	10.1	8.5	10.6	9.5	6.1	4.0	3.7	3.2	2.9	6.48	.....	.....
1889	.....	.....	.....	4.2	3.3	5.5	6.0	4.1	.....	.....	.....	.....	.....	.....	.....
1890	.....	.....	3.9	4.2	3.9	8.2	7.0	.....	.....	.....	.....	.....	.....	.....	.....
1891	5.0	5.9	5.3	6.0	5.5	9.6	8.9	5.7	5.0	5.0	5.0	5.0	5.99	.....	.....
1892	5.0	5.0	5.2	6.7	8.0	9.1	8.9	.....	.....	.....	.....	.....	.....	.....	.....
Means	3.35	4.13	5.37	7.13	6.62	10.17	8.92	5.55	4.39	3.38	2.92	2.28	5.48	.....	.....

TABLE III.—MEAN STAGES OF RIVERS—Continued.

MISSOURI RIVER, ST. JOSEPH, MO.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly means.	5-year means.	10-year means.
1873	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.7	.....	.....	.....	.....
1874	.....	.....	.....	.....	.....	14.7	11.7	7.9	6.3	5.0	4.2	3.8	.....	.....	.....
1875	4.9	4.6	6.8	13.4	13.3	15.2	15.5	11.5	12.8	9.2	6.9	5.6	9.97	.....	.....
1876	6.4	5.8	7.7	12.9	11.0	16.2	15.7	11.6	12.0	9.0	7.6	5.8	10.14	.....	.....
1877	9.2	9.1	9.3	13.9	14.2	18.5	17.1	12.2	9.2	8.5	8.2	7.3	11.39	.....	.....
1878	6.6	7.7	9.0	11.3	14.6	19.5	19.1	14.0	11.0	9.5	9.0	7.2	11.54	.....	.....
1879	7.6	7.7	9.5	13.4	12.6	16.0	16.3	11.9	7.9	6.9	8.0	3.8	10.13	.....	.....
1880	4.8	5.7	6.9	11.0	9.6	14.4	17.0	12.5	10.8	8.3	6.5	5.1	9.38	10.51	.....
1881	6.4	9.2	12.6	21.1	16.9	17.6	15.0	9.7	8.1	8.4	8.6	7.2	11.73	.....	.....
1882	3.4	5.1	8.1	11.5	11.6	14.7	15.9	10.1	6.9	7.1	6.3	2.4	8.59	.....	.....
1883	4.1	4.6	9.4	12.1	13.6	18.6	17.2	12.6	8.7	7.5	6.7	5.4	10.04	.....	.....
1884	7.3	6.7	10.7	13.9	11.5	15.6	15.1	11.0	8.4	8.2	5.4	5.4	9.93	.....	.....
1885	5.5	6.8	7.8	8.1	7.7	12.7	12.2	9.7	7.1	4.4	4.0	2.5	7.37	9.53	.....
1886	2.5	3.2	7.3	6.2	5.7	8.7	7.4	5.1	3.5	1.9	0.4	—1.5	4.20	.....	.....
1887	2.2	4.1	7.1	8.7	8.0	11.0	9.8	6.1	6.3	4.1	2.1	—0.2	5.77	.....	.....
1888	1.3	1.7	4.6	8.3	8.0	9.3	9.4	5.7	1.8	2.1	2.6	1.4	4.68	.....	.....
1889	2.7	3.8	5.0	8.2	3.9	7.6	7.0	5.5	2.7	1.7	1.9	1.4	4.28	.....	.....
1890	—0.1	1.3	2.8	4.3	4.1	8.2	7.6	4.7	2.9	2.0	1.9	0.7	3.36	4.45	6.99
1891	0.1	0.8	3.4	4.9	3.8	8.2	9.0	6.0	2.5	1.7	0.2	—0.3	3.35	.....	.....
1892	1.7	2.9	4.2	7.1	9.8	11.0	11.0	5.8	3.3	2.0	1.5	—0.9	4.95	.....	.....
Means	4.25	5.04	7.77	10.57	9.99	13.56	13.10	9.13	6.95	5.65	4.83	3.26	7.82	.....	.....

MISSOURI RIVER—KANSAS CITY, MO.

1879	6.6	5.6	6.6	11.7	10.6	15.3	15.5	10.3	6.5	5.3	6.8	5.5	8.86	.....	.....
1880	5.4	5.0	5.5	9.0	7.7	12.4	15.6	10.9	9.4	7.1	4.6	3.4	8.00	.....	.....
1881	5.4	6.7	12.8	21.2	16.9	16.9	13.9	8.8	7.1	7.5	7.5	5.4	10.84	.....	.....
1882	3.7	4.0	6.8	10.3	10.8	14.5	15.7	9.3	5.3	5.1	4.7	2.2	7.70	.....	.....
1883	6.9	7.4	9.6	11.1	13.1	20.1	17.5	11.1	6.6	6.3	6.1	3.3	9.92	.....	.....
1884	4.4	5.6	8.9	14.9	12.4	16.7	15.3	10.5	8.8	8.4	6.2	3.8	9.66	.....	.....
1885	5.6	7.5	11.8	11.0	11.2	16.6	15.1	11.3	9.1	5.9	6.1	5.3	9.71	9.57	.....
1886	5.4	8.4	11.7	12.2	11.6	13.9	10.9	8.5	5.9	4.9	4.6	3.0	8.42	.....	.....
1887	7.2	4.8	12.2	13.3	11.0	16.5	15.1	10.4	10.6	8.2	7.0	4.4	10.06	.....	.....
1888	7.6	9.5	10.9	16.1	15.0	16.5	16.3	11.6	7.9	6.4	6.4	5.1	10.77	.....	.....
1889	4.6	6.5	8.3	8.6	8.7	10.4	11.9	10.1	5.8	5.3	5.1	4.0	7.44	.....	.....
1890	3.3	5.9	0.9	8.3	7.6	14.0	12.0	8.1	6.2	5.5	5.3	4.1	7.26	8.79	9.18
1891	3.7	4.9	7.3	12.2	10.1	17.4	17.7	11.9	7.3	7.2	5.5	5.2	9.20	.....	.....
1892	5.4	6.7	10.1	14.2	19.7	16.9	17.5	9.9	6.8	5.6	5.4	3.9	10.18	.....	.....
Mean	5.37	6.32	9.24	12.44	11.89	15.58	15.00	10.19	7.38	6.34	5.81	4.19	9.14	.....	.....

MISSISSIPPI RIVER, ST. LOUIS, MO.

1861	2.8	7.1	15.9	19.6	20.8	17.9	17.2	9.4	8.3	10.7	7.1	6.6	11.95	.....	.....
1862	6.9	7.7	12.4	26.9	24.5	19.6	19.3	13.5	10.6	11.4	8.5	7.6	14.08	.....	.....
1863	12.0	12.7	15.3	14.1	12.4	11.1	8.6	7.4	6.0	3.8	4.6	2.4	9.20	.....	.....
1864	5.5	7.7	9.2	12.8	14.9	10.8	10.4	5.7	3.3	2.9	3.9	5.1	7.68	.....	.....
1865	2.4	6.2	15.6	19.8	16.8	14.5	19.4	20.2	13.4	11.3	10.8	8.2	13.21	11.22	.....
1866	11.9	9.0	16.3	20.2	20.9	17.8	16.1	12.7	14.1	11.6	10.2	8.7	14.12	.....	.....
1867	6.0	15.9	16.6	21.6	23.0	24.2	24.6	16.2	9.6	7.0	5.6	3.4	14.48	.....	.....
1868	3.5	5.3	12.0	15.8	20.0	15.6	14.1	8.6	7.8	6.4	8.9	7.4	10.45	.....	.....
1869	10.6	11.8	10.0	17.0	17.9	20.7	26.9	18.2	18.6	16.9	11.6	10.7	15.90	.....	.....
1870	8.9	8.1	10.7	23.4	19.2	14.5	11.3	8.0	9.6	10.9	11.9	7.1	11.96	13.38	12.30
1871	6.9	11.5	18.8	14.1	15.7	14.0	11.8	7.5	4.8	3.5	5.2	5.4	9.93	.....	.....
1872	4.0	7.4	7.2	14.2	17.0	19.5	16.7	11.7	7.3	4.9	4.8	3.3	9.83	.....	.....
1873	7.9	8.7	13.7	18.6	19.4	22.9	21.0	10.7	6.7	6.0	5.2	8.4	12.43	.....	.....
1874	7.9	9.7	14.3	15.3	14.2	14.9	13.3	8.0	7.7	8.1	6.9	4.8	10.42	.....	.....
1875	5.5	5.4	9.0	18.0	19.6	20.2	25.5	17.6	15.8	10.3	7.8	5.5	13.35	11.19	.....
1876	11.8	9.9	15.6	26.0	25.8	23.2	25.0	13.9	18.3	11.1	11.4	10.8	16.90	.....	.....
1877	10.4	11.3	10.2	20.7	22.5	23.9	21.1	12.2	8.9	8.8	10.7	11.8	14.37	.....	.....
1878	11.6	13.6	17.1	16.5	20.8	23.7	20.1	16.2	9.9	10.1	9.6	7.9	14.75	.....	.....
1879	8.6	8.5	10.1	14.0	11.9	16.7	17.9	13.0	8.7	8.0	10.3	9.0	11.39	.....	.....
1880	11.7	10.0	10.4	15.3	16.0	19.0	22.6	12.8	12.1	10.1	7.3	5.3	12.72	14.03	12.61
1881	8.4	11.6	18.8	27.0	27.1	22.6	21.1	11.5	10.7	21.7	25.2	17.7	18.62	.....	.....
1882	12.2	14.5	18.1	21.0	23.9	26.7	25.8	14.3	9.6	8.6	10.6	6.8	16.01	.....	.....
1883	6.1	15.1	20.4	17.4	22.3	29.0	23.4	15.9	8.5	9.3	11.5	7.8	15.56	.....	.....
1884	9.8	13.6	14.6	24.8	20.7	20.0	18.0	12.2	11.5	19.2	12.8	9.2	15.48	.....	.....
1885	13.4	10.8	17.7	20.5	20.9	23.0	19.3	16.4	17.8	10.2	10.7	6.1	15.56	16.25	.....
1886	14.1	17.6	17.8	21.9	23.0	16.6	11.6	7.7	6.5	7.0	6.1	4.0	12.82	.....	.....
1887	8.8	13.2	17.1	16.7	16.3	14.9	14.0	8.1	8.6	6.9	5.2	4.2	11.17	.....	.....
1888	9.3	11.2	17.2	21.8	25.4	26.2	22.0	15.6	8.3	5.4	6.6	4.9	14.49	.....	.....
1889	7.6	4.9	12.7	12.4	12.6	17.2	13.0	9.7	6.5	4.1	6.9	5.2	9.40	.....	.....
1890	10.1	10.3	10.6	15.1	14.0	17.3	16.1	9.0	7.8	8.1	7.5	4.3	10.85	11.75	14.00
1891	4.0	5.7	10.7	20.6	16.8	19.7	18.2	13.9	6.5	5.1	4.7	4.0	10.82	.....	.....
1892	7.3	12.3	14.6	23.1	30.3	30.4	27.6	13.2	8.2	5.0	5.1	3.2	15.08	.....	.....
Means	8.37	10.24	14.08	18.94	19.58	19.64	18.53	12.22	9.75	8.84	8.60	6.78	12.97	.....	.....

TABLE III.—MEAN STAGES OF RIVERS—Continued.

MISSISSIPPI RIVER, MEMPHIS, TENN.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly means.	5-year means.	10-year means.
1872...	5.8	3.2	10.2	23.2	16.4	16.4	12.3	9.7	3.9	1.9	1.8	0.8	8.80	.....	.....
1873...	10.2	20.7	22.2	28.6	26.3	22.1	19.1	8.6	4.1	1.4	4.7	19.1	15.61	.....	.....
1874...	16.7	21.9	32.5	32.4	27.6	11.5	8.6	6.0	4.5	3.8	2.7	6.0	14.52	.....	.....
1875...	10.3	13.9	28.3	28.3	22.1	16.1	27.0	30.0	12.2	7.4	7.3	14.7	18.13	.....	.....
1876...	25.8	32.3	24.0	33.4	30.0	18.9	21.9	12.1	12.8	10.0	8.3	4.4	19.49	.....	.....
1877...	11.7	16.7	16.0	29.5	27.1	21.8	18.5	9.0	5.7	3.6	8.5	12.4	15.04	.....	.....
1878...	16.2	20.7	25.1	18.1	24.4	20.8	16.1	11.1	6.9	4.0	4.1	16.6	15.34	.....	.....
1879...	14.5	22.6	19.4	22.9	9.9	10.9	11.3	8.4	7.3	1.9	3.8	16.5	12.45	.....	.....
1880...	28.6	21.8	32.9	26.7	21.1	16.2	20.2	7.8	6.4	3.7	6.6	13.1	17.09	15.88	.....
1881...	10.1	23.6	27.0	30.3	28.6	18.1	15.5	6.5	3.2	11.9	20.0	20.5	17.94	.....	.....
1882...	30.9	34.1	34.3	28.1	29.1	29.9	25.7	13.5	9.2	5.2	6.2	5.8	21.00	.....	.....
1883...	10.5	28.2	28.6	29.0	24.7	27.3	22.4	11.8	3.9	3.6	12.9	14.0	18.07	.....	.....
1884...	21.2	30.6	32.4	31.5	25.3	17.2	14.7	9.0	5.4	10.8	6.6	6.8	17.62	.....	.....
1885...	24.4	17.5	17.7	20.1	19.7	20.2	14.4	10.4	12.0	6.3	12.4	10.7	15.48	18.04	.....
1886...	16.9	21.6	19.1	32.7	27.4	18.1	15.4	7.7	5.6	4.1	4.4	10.8	15.32	.....	.....
1887...	10.8	31.4	33.7	19.1	23.1	14.1	10.3	5.8	4.4	3.2	1.7	3.1	13.39	.....	.....
1888...	13.5	15.9	20.7	31.5	20.9	22.9	20.0	12.4	14.0	6.7	18.9	9.6	17.25	.....	.....
1889...	17.2	18.0	19.7	15.5	11.6	21.6	17.0	12.2	7.1	3.3	12.3	15.9	14.28	.....	.....
1890...	25.6	31.0	34.7	33.0	25.2	20.7	14.7	9.0	11.4	10.6	14.7	9.5	20.01	16.05	17.04
1891...	20.1	29.1	34.1	32.8	16.5	16.4	15.2	11.6	7.2	1.9	2.5	10.6	16.50	.....	.....
1892...	16.4	19.1	20.1	31.7	33.2	32.1	25.4	11.6	6.2	2.8	2.8	8.8	17.52	.....	.....
Means	17.02	22.57	25.37	27.54	23.34	19.68	17.41	10.68	7.31	5.15	7.77	10.94	16.23	.....	.....

MISSISSIPPI RIVER, HELENA, ARK.

1871...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.6	.....	.....	.....
1872...	10.0	6.2	15.9	29.5	24.5	23.9	19.3	17.4	8.8	5.0	4.8	2.8	14.00	.....	.....
1873...	15.7	26.7	31.1	36.8	35.5	30.8	26.9	14.4	7.6	4.4	8.6	25.9	22.03	.....	.....
1874...	23.8	29.8	41.4	42.0	40.7	18.9	14.2	10.4	8.9	7.0	5.3	9.6	20.92	.....	.....
1875...	15.9	20.2	36.1	39.8	32.0	23.5	35.5	40.1	19.9	12.4	11.1	20.8	25.60	20.64	.....
1876...	34.3	42.0	35.5	43.9	41.1	31.6	34.8	20.0	20.3	15.6	12.5	7.6	28.27	.....	.....
1877...	14.3	24.6	22.1	38.5	37.8	31.7	27.4	14.5	8.6	6.3	13.2	18.5	21.46	.....	.....
1878...	23.8	29.2	35.6	26.2	34.6	30.4	24.3	17.5	.....	.....	8.6	23.5	25.37	.....	.....
1879...	20.5	32.3	27.3	32.4	16.7	17.2	17.7	14.7	16.4	.....	8.4	23.6	20.65	.....	.....
1880...	38.9	31.3	43.1	38.9	30.8	23.8	29.2	14.0	12.8	9.7	12.8	20.4	25.48	24.25	22.64
1881...	16.2	32.6	38.1	40.6	40.7	27.0	23.7	12.6	7.3	18.2	28.0	25.9	25.91	.....	.....
1882...	40.7	45.6	45.9	40.2	38.9	40.4	36.6	21.9	16.1	11.0	11.8	11.2	30.02	.....	.....
1883...	16.8	35.8	42.7	39.5	36.3	37.8	33.9	19.8	9.6	8.7	19.4	22.0	26.86	.....	.....
1884...	30.8	38.9	43.7	43.7	37.4	26.8	23.4	16.0	10.2	17.3	11.8	11.4	25.95	.....	.....
1885...	35.1	28.4	26.7	29.8	30.5	29.6	23.6	17.6	18.7	11.5	19.3	17.0	23.98	23.54	.....
1886...	25.1	30.7	29.1	42.8	41.4	26.8	21.9	10.8	7.7	5.4	5.3	14.9	21.82	.....	.....
1887...	15.0	39.4	44.8	28.3	31.2	19.0	13.9	6.8	4.6	3.0	0.8	2.9	17.48	.....	.....
1888...	17.0	21.2	27.8	41.0	28.3	30.2	26.7	16.0	18.8	8.2	24.3	12.8	22.69	.....	.....
1889...	22.6	24.0	26.8	21.5	15.6	27.7	23.2	16.9	9.7	4.3	14.9	21.8	19.08	.....	.....
1890...	32.4	41.0	44.5	45.9	35.8	28.7	20.1	11.4	14.5	14.6	19.6	13.6	26.82	21.58	24.06
1891...	27.1	37.3	43.7	43.5	25.0	23.4	22.1	16.7	10.6	2.3	2.7	15.0	22.37	.....	.....
1892...	22.6	26.3	28.3	40.6	44.7	43.9	36.1	17.2	8.5	3.3	2.9	12.6	23.92	.....	.....
Means	23.73	30.64	34.77	37.40	33.31	28.20	25.45	16.51	11.94	8.85	11.72	15.34	23.37	.....	.....

ARKANSAS RIVER, LITTLE ROCK, ARK. (ENGINEER GAUGE).

1871...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1872...	5.1	3.6	3.8	7.7	14.9	14.4	10.6	5.7	2.4	1.6	1.7	1.0	6.04	.....	.....
1873...	4.4	6.5	4.1	9.9	10.7	10.1	4.4	1.9	1.2	3.3	1.5	10.0	5.66	.....	.....
1874...	5.8	10.6	13.3	16.4	9.9	5.1	2.6	0.6	1.9	3.3	1.2	3.1	6.15	.....	.....
1875...	4.3	4.2	7.0	9.7	12.9	8.5	5.4	10.0	3.9	2.1	0.8	1.6	5.86	.....	.....
1876...	9.1	7.6	10.8	12.8	11.3	8.9	16.5	5.7	3.1	1.8	2.5	1.7	7.65	.....	.....
1877...	1.7	3.7	3.5	11.3	15.3	19.6	8.9	6.0	3.6	5.4	9.4	10.9	8.28	.....	.....
1878...	14.5	11.2	10.5	11.1	12.3	13.6	9.2	.....	.....	.....	.....	.....	.....	.....	.....
1879...	4.5	9.2	4.2	3.5	6.3	1.7	2.3	2.1	0.2	—0.7	—0.1	2.9	3.08	.....	.....
1880...	4.3	6.1	10.7	6.1	2.6	3.0	4.5	3.1	2.5	1.3	1.8	2.5	4.04	.....	.....
1881...	2.5	11.7	9.8	5.8	10.0	6.7	5.4	3.0	2.4	8.3	9.0	7.3	6.82	.....	.....
1882...	9.4	16.7	14.5	7.2	12.8	13.3	5.8	5.1	3.8	7.7	8.0	6.1	9.20	.....	.....
1883...	8.9	16.9	11.6	11.3	10.7	17.3	9.3	8.8	5.8	8.8	9.4	10.5	10.78	.....	.....
1884...	6.6	19.6	11.7	12.4	16.4	11.9	9.5	7.5	6.3	7.7	6.8	12.4	10.66	.....	.....
1885...	16.1	12.5	13.6	16.0	18.5	14.2	16.5	8.6	11.0	5.7	5.1	4.6	11.86	9.86	.....
1886...	5.6	10.7	9.8	12.3	8.4	7.0	6.1	8.0	6.2	4.3	4.6	4.3	7.35	.....	.....
1887...	4.1	8.7	7.4	4.0	9.3	8.0	5.9	3.3	3.0	4.9	2.7	6.5	5.73	.....	.....
1888...	5.4	8.1	10.1	10.6	13.4	12.2	6.2	4.8	6.6	3.6	6.5	8.4	8.16	.....	.....
1889...	16.4	10.0	14.6	13.1	10.8	12.2	9.2	8.8	7.7	4.4	10.5	8.1	10.48	.....	.....
1890...	14.2	15.9	17.6	19.4	15.1	10.5	6.4	6.7	11.5	11.0	12.7	9.2	12.52	8.85	9.35
1891...	13.4	12.5	11.7	14.7	11.8	16.6	11.7	10.8	5.2	5.1	5.4	6.7	10.46	.....	.....
1892...	8.1	10.6	14.7	14.7	22.6	19.2	10.9	9.3	9.0	8.0	9.1	13.8	12.50	.....	.....
Means	7.83	10.35	10.24	10.95	12.19	11.10	8.06	6.04	4.91	4.88	5.43	6.58	8.16	.....	.....

TABLE III.—MEAN STAGES OF RIVERS—Continued.

MISSISSIPPI RIVER, VICKSBURG MISS.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly means.	5-year means.	10-year means.
1872...	8.2	5.2	16.0	29.9	32.4	31.1	21.1	17.9	8.2	4.6	3.3	1.3	14.93	.....	.....
1873...	12.9	24.3	35.9	36.5	39.7	37.2	29.7	15.6	7.1	3.8	7.0	25.1	22.90	.....	.....
1874...	27.3	33.0	41.0	44.3	44.8	29.5	16.0	10.7	7.6	7.2	4.3	8.7	22.96	.....	.....
1875...	17.3	22.1	33.9	42.6	40.0	28.9	34.2	40.0	26.4	15.6	10.5	22.0	27.79	.....	.....
1876...	34.6	41.2	40.9	43.2	44.6	40.6	39.3	26.1	21.2	18.5	13.1	9.0	31.02	.....	.....
1877...	10.8	29.1	21.7	38.0	41.3	39.3	34.3	18.0	.....	.....	15.7	22.3	25.20	.....	.....
1878...	29.5	33.1	39.8	33.3	39.6	37.4	30.7	22.6	.....	.....	.....	27.0	30.50	.....	.....
1879...	26.7	38.0	30.6	35.0	25.9	17.2	18.2	14.6	13.8	4.4	6.2	25.2	21.32	.....	.....
1880...	36.9	34.3	41.6	42.7	37.5	24.4	30.1	.....	.....	8.7	10.3	.....	27.21	27.05	.....
1881...	18.8	34.1	41.6	40.1	41.1	31.1	25.3	12.4	4.6	15.2	26.6	29.7	30.05	.....	.....
1882...	39.5	43.9	46.7	45.1	41.6	41.3	39.8	24.2	14.3	9.8	10.0	10.5	30.56	.....	.....
1883...	16.8	35.4	42.8	43.2	40.1	39.1	37.4	21.7	7.7	5.9	18.6	25.0	27.81	.....	.....
1884...	32.7	38.8	46.8	45.9	44.9	34.1	25.0	15.2	7.5	14.0	9.7	10.2	27.07	.....	.....
1885...	36.5	36.6	28.6	32.3	36.8	30.0	28.3	16.5	17.2	9.6	15.9	13.8	25.18	28.13	.....
1886...	23.1	29.1	32.9	38.8	43.1	31.9	23.7	10.6	6.2	3.2	1.2	12.8	21.38	.....	.....
1887...	12.9	34.9	43.8	34.5	33.5	19.5	13.5	4.3	0.9	0.3	—3.0	1.1	16.35	.....	.....
1888...	13.5	21.9	28.2	41.0	33.7	32.7	28.2	15.6	20.0	6.7	20.8	15.4	23.14	.....	.....
1889...	23.6	28.3	30.0	26.7	17.6	26.2	26.0	19.0	9.4	3.4	10.9	23.6	20.39	.....	.....
1890...	30.0	44.7	46.9	48.4	45.3	35.4	21.6	10.4	13.0	16.4	19.3	13.6	28.72	22.00	25.06
1891...	27.5	37.2	46.7	47.4	36.6	23.5	24.8	17.9	10.4	0.0	—1.0	11.9	23.58	.....	.....
1892...	21.9	27.2	31.0	41.2	48.1	47.8	42.4	26.2	7.8	1.6	0.8	12.6	25.72	.....	.....
Means	23.86	32.07	36.54	39.51	28.49	32.30	28.08	17.98	11.29	7.84	10.01	16.54	24.94	.....	.....

RED RIVER, SHREVEPORT, LA.

1873...	.....	.....	.....	.....	.....	24.8	16.7	9.0	3.0	4.5	6.3	15.7	.....	.....	.....
1874...	15.1	18.7	23.6	24.9	23.8	15.8	9.0	1.3	0.3	7.5	4.4	7.2	12.63	.....	.....
1875...	16.4	18.0	17.8	24.4	21.1	20.8	14.2	16.0	16.7	10.1	5.7	9.2	15.86	.....	.....
1876...	22.3	26.1	21.1	28.6	22.0	17.0	21.3	23.5	13.3	7.7	6.7	7.5	18.09	.....	.....
1877...	10.6	18.4	20.2	22.8	27.7	23.3	18.5	9.3	7.9	8.5	23.9	25.0	18.00	.....	.....
1878...	27.2	26.4	25.4	17.7	21.9	26.4	24.4	18.2	11.5	5.9	4.2	8.2	18.11	.....	.....
1879...	12.7	18.2	12.8	8.2	21.5	12.4	7.3	6.4	3.4	0.5	0.5	2.6	8.87	.....	.....
1880...	6.8	8.3	17.1	20.0	12.9	14.0	12.3	16.2	9.1	5.7	8.6	14.7	12.14	15.04	.....
1881...	11.7	20.2	23.7	13.4	14.6	19.1	7.8	0.2	—0.5	9.1	16.4	12.3	12.33	.....	.....
1882...	18.6	29.3	28.8	16.3	19.6	16.9	10.3	10.1	9.9	11.6	16.4	20.2	17.33	.....	.....
1883...	16.8	17.9	22.8	21.4	16.9	16.5	12.7	7.3	3.3	3.1	10.9	11.4	13.41	.....	.....
1884...	11.2	20.5	24.2	18.0	29.2	24.2	12.5	3.8	0.4	1.0	3.6	8.7	13.10	.....	.....
1885...	25.3	19.2	18.3	19.7	26.1	19.4	19.9	9.4	3.5	1.7	3.7	3.7	14.15	14.06	.....
1886...	10.1	13.2	15.3	16.2	12.0	3.1	1.2	1.1	—0.2	5.3	7.8	7.6	7.72	.....	.....
1887...	3.1	8.7	17.1	8.3	12.7	14.2	9.6	2.0	0.8	7.9	7.3	17.1	9.06	.....	.....
1888...	19.1	19.7	25.4	21.8	25.6	21.3	18.5	7.5	10.0	2.8	3.9	7.2	15.23	.....	.....
1889...	22.0	27.6	21.8	20.1	13.9	12.8	16.0	9.2	9.8	14.1	12.7	16.2	16.35	.....	.....
1890...	16.2	18.8	25.4	28.3	30.4	18.1	5.5	0.7	3.2	6.4	8.0	13.4	14.70	12.61	13.33
1891...	17.8	24.3	18.3	15.4	20.9	14.6	10.0	8.1	2.6	1.4	—1.3	1.1	11.10	.....	.....
1892...	6.1	7.7	10.8	19.0	26.3	29.7	13.2	3.4	3.2	0.3	11.7	18.9	12.52	.....	.....
Means	15.32	19.01	20.52	19.18	21.01	18.22	13.04	8.13	5.56	5.76	8.02	11.40	13.72	.....	.....

MISSISSIPPI RIVER, CARROLLTON, LA. (ENGINEER GAUGE).

[8 miles above New Orleans.]

1872...	0.8	0.5	2.7	7.9	10.8	10.1	5.2	3.3	1.1	0.6	0.2	—0.4	3.57	.....	.....
1873...	1.4	4.8	11.3	11.1	12.5	12.6	9.9	3.4	1.5	1.2	0.9	5.5	6.34	.....	.....
1874...	8.3	9.8	12.7	14.8	13.0	10.8	4.7	1.6	1.7	1.2	0.8	0.9	6.69	.....	.....
1875...	2.7	4.5	8.1	10.9	11.0	8.4	7.7	9.8	8.3	3.4	1.0	4.1	6.66	5.82	.....
1876...	8.3	10.6	11.4	11.6	12.2	11.2	9.9	7.4	3.9	3.3	1.2	0.2	7.60	.....	.....
1877...	0.4	6.7	4.0	9.2	10.7	10.7	9.7	3.4	1.0	1.1	2.4	4.9	5.35	.....	.....
1878...	7.4	9.1	10.7	10.0	10.8	10.5	9.0	3.8	1.8	1.7	0.8	4.0	6.63	.....	.....
1879...	5.3	10.4	8.9	9.5	6.5	2.7	2.1	1.6	2.0	1.4	0.5	3.3	4.52	.....	.....
1880...	9.9	10.6	12.6	13.9	12.9	7.9	8.1	3.7	2.4	1.6	1.8	5.7	7.59	6.34	6.11
1881...	3.6	10.2	12.2	12.2	12.2	11.0	6.9	2.0	1.0	2.5	5.7	8.4	7.32	.....	.....
1882...	11.4	13.2	14.6	14.0	12.9	12.6	12.2	8.4	3.0	2.0	1.7	2.7	9.06	.....	.....
1883...	4.1	9.5	13.2	14.8	14.0	13.0	12.2	6.7	1.8	1.3	3.8	6.7	8.42	.....	.....
1884...	10.0	11.7	14.9	14.0	13.6	11.9	8.0	3.4	1.8	2.9	1.8	1.6	7.97	.....	.....
1885...	11.1	12.7	10.2	11.0	12.1	10.0	8.7	3.4	3.6	2.1	3.0	2.6	7.54	8.06	.....
1886...	6.1	8.4	11.1	11.8	13.5	12.2	7.9	2.0	1.6	1.1	0.3	2.0	6.50	.....	.....
1887...	2.1	8.9	13.2	12.9	10.6	5.6	2.7	1.0	1.2	1.2	0.2	0.5	5.01	.....	.....
1888...	3.0	6.9	9.4	12.8	11.6	10.5	8.1	3.1	3.8	1.2	3.8	3.7	6.49	.....	.....
1889...	5.8	9.6	10.4	8.9	4.7	6.3	8.0	4.8	2.4	1.3	2.1	6.0	5.86	.....	.....
1890...	7.8	14.0	15.5	15.0	13.3	11.3	6.5	2.1	2.4	3.5	4.0	4.4	8.32	6.44	7.75
1891...	7.6	12.1	15.1	14.8	12.6	6.5	6.8	3.3	2.1	0.7	0.8	1.9	7.02	.....	.....
1892...	5.2	8.1	10.3	13.3	16.1	16.4	13.9	6.9	2.1	1.3	0.9	2.4	8.08	.....	.....
Means	5.82	9.16	11.07	12.11	11.79	10.10	8.01	4.05	2.40	1.74	1.80	3.39	6.79	.....	.....

TABLE III.—MEAN STAGES OF RIVERS—Continued.

WILLAMETTE RIVER, PORTLAND, OREGON.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly means.	5-year means.	10-year means.
1879...	.....	.....	.....	13.5	13.7	19.8	16.1	8.2	3.5	2.9	3.2	6.0	.....	.....	.....
1880...	9.6	4.0	3.3	6.4	14.6	22.1	24.5	12.6	5.0	2.5	2.4	5.3	9.36	.....	.....
1881...	9.5	12.7	9.7	13.1	14.0	17.4	13.7	7.2	3.6	3.3	6.3	4.8	9.61	.....	.....
1882...	5.1	3.9	6.2	9.4	12.0	23.6	15.7	8.0	3.6	3.8	3.3	9.1	8.64	.....	.....
1883...	5.7	6.2	6.1	8.6	13.4	16.9	12.9	5.7	2.8	1.9	3.3	4.2	7.31	.....	.....
1884...	4.6	4.8	4.6	7.3	13.0	19.2	11.9	6.5	3.8	3.2	3.5	3.9	7.19	.....	.....
1885...	6.7	10.2	6.2	7.1	11.0	13.5	10.0	4.9	3.4	2.4	4.2	5.2	7.07	7.96	.....
1886...	6.1	10.2	4.8	7.0	10.1	17.6	10.4	4.8	2.2	1.3	0.8	4.7	6.67	.....	.....
1887...	9.0	5.2	9.4	10.1	14.8	23.8	18.4	8.2	3.9	1.9	2.2	5.9	9.40	.....	.....
1888...	5.9	6.7	3.9	5.7	10.6	16.0	10.5	5.4	3.4	2.2	2.8	3.8	6.41	.....	.....
1889...	2.9	2.2	2.7	4.3	7.6	7.4	4.6	3.2	2.0	2.0	2.0	2.6	3.62	.....	.....
1890...	2.9	11.5	5.9	6.7	17.9	14.1	9.9	4.8	2.4	1.3	0.8	1.6	6.65	6.55	7.26
1891...	2.4	3.2	4.5	5.2	11.2	15.4	9.2	5.2	2.6	1.4	4.2	8.0	5.88	.....	.....
1892...	5.6	3.2	4.6	6.1	9.7	17.6	14.4	5.6	2.6	1.9	2.8	3.9	6.50	.....	.....
Means	5.85	6.46	5.53	7.89	12.40	17.31	13.01	6.45	3.20	2.28	2.98	4.93	7.25	.....	.....

SAVANNAH RIVER, AUGUSTA, GA.

1875...	.....	.....	.....	.....	.....	.....	.....	.....	5.3	4.9	6.2	8.0	.....	.....	.....
1876...	8.6	9.4	10.7	9.8	5.7	4.8	3.9	5.0	5.3	5.3	5.3	6.6	6.70	.....	.....
1877...	10.0	8.1	11.8	13.0	7.2	7.4	6.3	5.1	5.7	6.0	9.3	8.5	8.20	.....	.....
1878...	11.7	12.8	8.5	8.6	6.8	6.1	4.6	5.9	5.9	4.2	5.8	6.6	7.29	.....	.....
1879...	8.2	7.7	6.4	7.5	6.0	4.6	4.6	8.6	5.0	7.3	6.3	10.5	6.89	.....	.....
1880...	8.0	8.8	14.5	10.7	8.6	6.1	5.2	6.2	5.7	4.5	6.3	10.0	7.88	7.39	.....
1881...	12.5	13.0	12.9	9.9	6.9	6.2	5.0	4.7	6.0	4.6	7.7	9.2	8.22	.....	.....
1882...	10.9	15.2	12.2	8.8	6.9	6.5	6.0	7.6	9.9	6.0	6.6	8.7	8.78	.....	.....
1883...	16.1	9.4	9.0	13.0	8.1	7.5	5.1	5.0	4.5	4.8	5.7	6.1	7.86	.....	.....
1884...	9.3	10.6	17.4	12.5	7.9	11.2	8.6	6.6	5.0	4.6	5.2	9.1	9.00	.....	.....
1885...	13.8	12.0	8.9	7.5	8.0	7.7	6.2	6.1	7.8	10.0	10.2	10.1	9.02	8.58	.....
1886...	14.6	9.4	10.1	13.3	12.4	12.3	12.9	8.3	7.0	5.7	6.9	8.0	12.08	.....	.....
1887...	7.7	10.8	9.4	7.3	6.8	7.5	8.2	16.4	6.9	7.2	6.5	8.8	8.62	.....	.....
1888...	12.2	13.0	13.8	11.6	11.1	8.8	7.2	7.5	18.6	10.5	13.2	10.8	11.52	.....	.....
1889...	15.9	16.1	12.2	10.0	7.8	8.3	9.8	11.8	9.2	7.0	9.4	7.3	10.40	.....	.....
1890...	7.1	9.0	10.5	8.5	9.2	7.3	8.2	7.5	8.5	12.6	7.3	8.1	8.65	10.25	9.42
1891...	11.4	18.3	19.1	12.7	9.1	9.0	7.8	10.6	7.3	5.9	7.3	8.5	10.58	.....	.....
1892...	16.1	11.5	12.1	11.7	8.0	11.7	12.0	8.0	9.4	6.5	7.6	7.9	10.21	.....	.....
Means	11.42	11.48	11.73	10.38	8.03	7.82	7.15	7.70	7.39	6.53	7.38	8.49	8.94	.....	.....

LOCAL STORMS IN THE UNITED STATES DURING 1890, 1891, AND 1892.

WITH TABLES OF CASUALTIES BY THESE, AND A DESCRIPTIVE LIST OF THE SEVENTY MORE SEVERE STORMS.

By Prof. H. A. HAZEN.

At the beginning of 1890 a circular was prepared to be sent out to a voluntary observer or postmaster at any town where destruction was reported in the newspapers or elsewhere by local storms. This circular contained a series of questions on the time of occurrence and characteristics of these storms.

A careful watch has been kept on all storms reported by letter or by the newspapers, and a scale of 3 has been adopted to denote violence: (1) those storms showing a loss of about $3,000; (2) $20,000; (3) $100,000 and above. This scale, strictly speaking, refers to the violence of the storm and not to the property loss, but generally these are relatively the same. The scale has been widened by considering all storms that were reported which had a destruction of less than $100 as (0); then intermediate points are represented by (1−), (1+), (2−), (2+), etc.

In Table I is given a summary of all the local storms that have been reported in the newspapers and elsewhere during the three past years. These are arranged according to the scale already mentioned. Those of scale (0), 566, and scale (1—), 292, or 71 per cent of the total number, are very insignificant. We may dismiss all of these storms below a scale of (1+) as of little account, leaving a total of 70, or less than 6 per cent, of a really serious character as occurring during the three years in this country. In other words, all the local storms causing a damage of $10,000, or above, number only 70, or 6 per cent of all reported. The storms from (1) to (3+) by months are as follows: January, 14; February, 21; March, 64; April, 35; May, 35; June, 80; July, 52; August, 23; September, 1; October, 3; November, 13; December, 8; total, 349.

TABLE I.—LOCAL STORMS, BY MONTHS, AND VIOLENCE FOR THE YEARS 1890, 1891, AND 1892.

Month.	Scale.										Total.
	0.	1—.	1.	1+.	2—.	2.	2+.	3—.	3.	3+.	
January	10	6	11	1	.....	1	.....	.....	1	.....	30
February	.....	6	11	9	.....	.....	.....	1	.....	.....	27
March	31	17	35	19	2	3	3	.....	1	1	112
April	55	17	23	6	2	4	.....	.....	.....	.....	107
May	78	34	20	4	5	5	.....	.....	1	.....	147
June	174	91	43	20	2	10	2	1	2	.....	345
July	115	47	27	11	3	8	2	.....	1	.....	214
August	72	31	14	5	2	1	.....	.....	.....	1	126
September	3	9	1	.....	.....	.....	.....	.....	.....	.....	13
October	3	5	1	1	1	.....	.....	.....	.....	.....	11
November	13	20	6	3	.....	2	2	.....	.....	.....	46
December	12	9	7	1	.....	.....	.....	.....	.....	.....	29
Year	566	292	199	80	17	34	9	2	6	2	1,207

This gives the largest number in June. The very large number of storms in March is due to the severe and unprecedented storms of March 27, 1890, in Kentucky. It will be seen readily that very little can be gathered as to the distribution of these storms by months from records of three years.

In Table II is given a distribution of all local storms of scale 1− to 3+ by States. It seemed wise to include in this table all the storms showing any destruction, but it should be noted that of the 641 storms, 292, or nearly 46 per cent, are of scale 1− or of very slight intensity.

TABLE II.—STORMS BY STATES.

State.	Years.			Total.	State.	Years.			Total.
	1890.	1891.	1892.			1890.	1891.	1892.	
Alabama	3	3	1	7	Mississippi	5	6	.....	11
Arkansas	2	.....	10	12	Missouri	7	14	13	34
California	.....	.....	1	1	Nebraska	7	3	9	19
Colorado	1	.....	.....	1	New Jersey	5	2	3	10
District of Columbia	.....	1	.....	1	New York	4	14	10	28
Connecticut	.....	.....	1	1	North Carolina	5	4	1	10
Florida	.....	.....	3	3	North Dakota	7	.....	.....	7
Georgia	2	.....	3	5	Ohio	14	10	13	37
Idaho	1	.....	.....	1	Oklahoma	.....	.....	3	3
Illinois	35	10	20	65	Pennsylvania	23	17	20	60
Indiana	3	6	6	15	South Carolina	5	2	.....	7
Indian Territory	1	.....	.....	1	South Dakota	3	3	9	15
Iowa	21	10	27	58	Tennessee	10	.....	3	13
Kansas	4	6	37	47	Texas	14	14	11	39
Kentucky	21	7	5	33	Virginia	1	2	2	5
Louisiana	2	2	.....	4	Washington	.....	4	.....	4
Maine	1	.....	9	10	West Virginia	3	1	2	6
Maryland	3	11	2	16	Wisconsin	3	4	5	12
Massachusetts	1	1	.....	2					
Michigan	7	1	3	11	Total	231	159	251	641
Minnesota	7	1	19	27					

DEATHS BY VIOLENT WINDS.

In 1891 a form was prepared for about thirty stations of the Weather Service, calling for the names of all persons who were reported in the local papers at each station to have lost their lives through high wind or lightning. For 1890 an examination was made at Washington of several newspapers; for this reason it is probable that the reports for 1890 are not quite as satisfactory as for 1891 and 1892. Marine disasters due to high wind were not included.

In all cases where deaths are reported a circular is sent to the voluntary observer or postmaster, and in this way an accurate list of those killed has been gained a week or ten days after the local storm. There have been two very remarkable cases of a wholesale exaggeration during 1892. In Kansas, on March 31—April 1, the newspapers reported 99 persons killed and gave their names. A careful study revealed a great many *similar* names, though not exactly the same. Reports from observers gave the total as 37. Again, on May 27, in the same State, the newspapers all over the country gave a total of 69 killed, while a careful canvass made by persons on the ground made the total killed 18.

Table III shows the number of deaths by wind during each month of the three years, 1890–'92. The following is the total for each month: January, 2; February, 1; March, 190; April, 53; May, 95; June, 96; July, 90; August, 43; September, 1; October, 0; November, 0; December, 0; total, 571; per year, 190.

This summary is very interesting, and shows an uniform law of progression, except in the deaths by violent wind during March. This very large number is due to the occurrence of 141 deaths in Kentucky on March 27, 1890; 78 of these occurred in Louisville alone. A report on deaths by lightning will be found at page 510. It will be seen that deaths by wind are distributed much more uniformly through the months than those by lightning; the latter increase very rapidly from 2 in March to 216 in June and 212 in July. This shows that lightning strokes are more prevalent than violent winds during the hotter months. It will be seen that, contrary to the common

idea, deaths by lightning outnumber those by violent wind. If we omit the 141 deaths by the tornado of March 27, 1890, we shall find that only 40 per cent of the deaths from these two causes were produced by high wind. Seventy to eighty per cent of the deaths by lightning are due to persons standing under trees or unduly exposing themselves.

TABLE III.—DEATHS BY WIND, MONTHS AND YEARS.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
1890	.....	.....	160	6	26	27	29	25	.....	.....	.....	.....	273
1891	2	1	10	9	9	35	30	11	1	.....	.....	.....	108
1892	.....	.....	20	38	60	34	31	7	.....	.....	.....	.....	190
Total	2	1	190	53	95	96	90	43	1	.....	.....	.....	571

Table IV gives a distribution of deaths from wind by States.

TABLE IV.—DEATHS BY WIND.

State.	1890.	1891.	1892.	Total.	State.	1890.	1891.	1892.	Total.
Alabama	.....	.....	.....	.....	Montana	.....	1	1	2
Arkansas	.....	3	3	6	Nebraska	7	3	6	16
California	.....	.....	.....	.....	Nevada	.....	.....	.....	.....
Colorado	.....	2	.....	2	New Hampshire	.....	.....	.....	.....
Connecticut	.....	.....	.....	.....	New Jersey	.....	.....	2	2
Delaware	.....	.....	.....	.....	New Mexico	.....	.....	.....	.....
District of Columbia	.....	.....	.....	.....	New York	.....	4	2	6
Florida	.....	.....	.....	.....	North Carolina	.....	1	.....	1
Georgia	.....	.....	.....	.....	North Dakota	12	.....	.....	12
Illinois	27	8	17	52	Ohio	2	5	9	16
Indiana	1	3	6	10	Oklahoma	.....	.....	4	4
Indian Territory	.....	.....	.....	.....	Pennsylvania	28	8	2	38
Iowa	3	3	3	9	South Carolina	1	.....	.....	1
Kansas	3	1	65	69	South Dakota	1	3	7	11
Kentucky	141	11	1	153	Tennessee	5	.....	.....	5
Louisiana	.....	18	.....	18	Texas	17	5	17	39
Maryland	.....	.....	.....	.....	Virginia	4	1	2	7
Maine	1	1	2	4	Vermont	.....	.....	.....	.....
Massachusetts	8	.....	.....	8	West Virginia	.....	.....	2	2
Michigan	.....	1	.....	1	Wisconsin	.....	8	3	11
Minnesota	7	.....	27	34	Wyoming	.....	.....	.....	.....
Mississippi	.....	13	.....	13					
Missouri	5	5	9	19	Total	273	108	190	571

LIST CONTAINING A DESCRIPTION OF THE SEVENTY VIOLENT STORMS OF SCALE 2— TO 3+ DURING 1890, 1891, AND 1892.

The scale refers strictly to the violence of the storm, though the amount of loss to structures is relatively nearly the same. In many cases it has been found impossible to separate the loss to structures from that to crops. Oftentimes, also, the loss given is for a large region. Whenever possible this fact is stated. All destruction by wind has been reckoned, and in many cases these are the gales accompanying a very severe general storm, and not, strictly speaking, a local storm. This is especially the case in the winter months.

January 12, 1890.—Clinton, Ky.; 2;* great damage to buildings; 900 feet wide; 10 killed.

St. Louis, Mo.; 3; 4 p. m.; moved northeast; thunderstorm; all tall objects fell toward northeast; no whirl or funnel; débris carried northeast; 4 killed; loss, $250,000.

February 25, 1890.—Brownsville, Tenn.; 3; loss, $50,000.

March 27, 1890.—Grand Tower, Ill.; 2; 4 killed; loss, $45,000.

Metropolis, Ill.; 3; 1 killed; loss, $150,000.

Olney, Ill.; 2+; 32 houses destroyed; loss, nearly $50,000.

Bremen, Ky.; 2; 8 houses; loss, $20,000.

Kuttawa, Ky.; 2; 4 killed; loss, $15,000.

*NOTE.—The figure immediately after the name of the town indicates the scale or violence.

Louisville, Ky.; 3+; occurred at 7:57 p. m.; 78 persons killed; loss, $2,250,000. This is the most severe tornado that ever visited this whole country. A full description will be found in the Monthly Weather Review for March, 1890.

April 8, 1890.—Highland Park, Ill.; 2; loss, $40,000.

May 9, 1890.—Martinsville, Mo.; 2—; time, 5:30 p.m.; roar heard; moved due east; trees thrown to southeast; 3 killed; loss, $10,000.

May 10, 1890.—Memphis, Mo.; 2—; 9:30 p. m.; heavy thunderstorm; roar heard; moved to northeast; whirl with the sun (clock-wise); trees lying to northeast; loss, $10,000.

Akron, Ohio; 2; 4:54 p. m.; light thunderstorm; roar heard; moved north 60° east; trees blown to center from both sides; loss, $10,000 to $80,000.

May 12, 1890.—Jefferson City, Mo.; 2—; about 5 p. m.; no funnel; heavy thunderstorm; no roar; no whirl; moved east; loss, $10,000.

May 22, 1890.—New London, Iowa; 2—; 6 p. m.; funnel seen and roar heard; moved ENE.; whirl counter-clockwise; loss, $11,000.

May 23, 1890.—Hopkinsville, Ky.; 2; 7 p. m.; funnel; light hail; light thunderstorm; moved northeast; no whirl; trees carried and tipped in direction of storm; 6 killed; loss, $30,000 to $40,000.

June 3, 1890.—Bradshaw, Nebr.; 3; 8:30 p. m.; funnel; hail 1 to 2 inches diameter; roar; moved to northeast; whirl clockwise; 7 killed; loss, $110,000.

June 10, 1890.—Wapello, Ill.; 2; 11:30 a. m.; funnel; hail, in size from marbles to hen's eggs; thunderstorm; moved southeast; trees thrown toward center line of storm; loss, $15,000.

June 14, 1890.—Dayton, Ky.; 2—; funnel; no hail; heavy thunderstorm; moved east; no whirl; loss, $18,000.

June 16, 1890.—Lincoln, Nebr.; 2; 4 to 5 a. m.; funnel; small hail; roar; heavy thunderstorm; moved northwest (?); buildings scattered to northeast; loss, $25,000.

June 20, 1890.—Sublette, Ill.; 2—; 4 p. m.; funnel; heavy thunderstorm; roar; moved northeast; trees fell toward center of track; loss, $10,000 to $15,000.

West Brooklyn, Ill.; 3½ miles south; 3; funnel; heavy thunderstorm; roar; whirl counter-clockwise; trees fell toward center; 12 killed; loss, $100,000 to $200,000.

June 22, 1890.—Sweetwater, Nebr.; 2; 3:20 p. m.; funnel; thunder heard; roar; moved southeast and northeast; loss, $25,000 to $50,000.

July 7, 1890.—Fargo, S. Dak.; 3; about 2:30 a. m.; no funnel; roar; moved to southeast; trees fell to southeast; 7 killed; loss, $75,000 in Fargo; $25,000 in Moorhead, Minn.

July 8, 1890.—Cleveland, Ohio; 2+; 6:10 to 6:40 p. m.; no funnel; light thunderstorm; no roar; moved southeast; loss, $100,000, estimated.

July 13, 1890.—Lake City, Minn.; 2—; loss, $10,000, estimated.

Lake Gervais, Minn.; 2—; 5 p. m.; funnel; heavy thunderstorm; roar; moved southeast; whirl counter-clockwise; trees on north side thrown northeast; on south side, southeast; 6 killed; loss, $10,000.

July 17, 1890.—Allentown, Pa.; 2; about 4 p. m.; no funnel; moved southeast; no whirl; trees fell to south; 1 killed; loss, $20,000 to $30,000.

Ashland, Pa.; 2; 5:40 p. m.; no funnel; heavy thunder storm; roar; moved to southeast; trees blown over to southeast; loss, $30,000 to $50,000.

Hellertown, Pa.; 2; 4:30 p. m.; heavy thunderstorm; roar; moved southeast; trees blown over to southeast; 1 killed; loss, $30,000.

July 26, 1890.—South Lawrence, Mass.; 2+; 9:13 a. m.; funnel; no hail or thunderstorm; roar; moved north 60° east; most trees blown toward or in direction of path; 8 killed; loss, $50,000; a full account in Monthly Weather Review of July, 1890.

August 19, 1890.—Harveyville, Pa.; 2; 5 p. m.; funnel; no hail; heavy thunderstorm; moved east northeast; whirl to left; 3 killed; loss, $25,000.

Wilkes Barre, Pa.; 3+; 16 killed; loss, $400,000; full account in Monthly Weather Review of August, 1890.

August 21, 1890.—Beaver Creek, Md.; 2—; funnel; thunderstorm; loud roar; moved north-northeast; whirl to right, clockwise; loss, $13,000.

October 16, 1890.—Maxton, N. C.; 2—; 3:30 p. m.; funnel; heavy thunderstorm; roar; moved northeast; whirl clockwise; loss, $15,000.

April 15, 1891.—Hansford, Tex.; 2; 7 p. m.; funnel; heavy hail and thunderstorm; roar; moved northeast; trees toward northeast; balls of fire seen; 2 killed; loss, 25,000.

May 29, 1891.—Centralia, Mo.; 2; 3 to 3:30 p. m.; funnel; heavy thunderstorm; roar; moved northeast; whirl to right, clockwise; trees to east; 1 killed; loss, $25,000 to $50,000 in county.

Mexico, Mo.; 2; about 3:20 p. m.; funnel; heavy thunderstorm; loud roar; moved due east; whirl to left, counter clockwise; 3 killed; loss, $25,000.

August 13, 1891.—Ellsworth, Minn.; 2—; loss, $15,000.

November 23, 1891.—Washington, D. C.; 2+; wind rush; 1 killed; loss to structures, $100,000; full account in Am. Met. Jour., Feb., 1892, p. 460.

Frostburg, Md.; 2; roar; moved a little north of east; loss, $35,425.

Hanover, Pa.; 2; no hail; thunderstorm; roar; moved to southwest; trees blown with storm; 1 killed; loss, $20,000.

Pittsburg, Pa.; 2+; 10 to 11 a. m.; no funnel; light thunderstorm; no roar; moved northeast; no whirl; 1 killed; loss, $40,000, probably, in vicinity.

March 31, 1892.—Horton, Kans.; 2—; 1 killed; loss, $50,000.

Kiowa, Kans.; 2—; moved northeast; trees fallen mostly north and east; loss, $15,000

Saline, Kans.; 2; funnel; no thunderstorm; roar; moved north-northeast; whirl counter-clockwise; trees thrown out from track; two clouds met; loss $100,000 in vicinity.

Towanda, Kans.; 2; funnel; heavy thunderstorm; moved north; whirl counter-clockwise; trees fallen along and in track; 8 killed; loss, $15,000.

Nelson, Mo.; 2+; 6 p. m; funnel; light thunderstorm; roar; moved northeast; whirl counter-clockwise; loss, $90,000 in vicinity.

April 1, 1892.—St. Joseph, Mo.; 2—; 2 a. m; loss $20,000.

April 3, 1892.—Scottdale, Pa.; 2—; no funnel; heavy thunderstorm; roar; moved northeast; trees blown over in direction of storm; loss, $10,000.

Gainesville, Tex.; 2—; funnel; heavy thunderstorm; roar; moved northeast; loss, $8,000.

Pine Bluff, Ark.; 2; 11:55 a. m.; no hail; no thunderstorm; roar; moved northeast; trees blown over in direction of storm; loss, $15,000 to $20,000.

May 27, 1892.—Harper, Kans.; 3; 7:40 p. m.; funnel; no thunderstorm; terrible roar; moved east-southeast; no whirl; trees with storm; 4 killed; loss, $400,000.

Wellington, Kans.; 2; 9 p. m.; heavy thunderstorm; roar; moved east-northeast; trees blown over to east; 12 killed; loss, $50,000.

May 31, 1892.—Durango, Tex.; 2—; 6:30 p. m.; funnel; moved northeast; whirl to right, clockwise; 6 killed; loss $12,000.

June 5, 1892.—Cleburne, Tex.; 2; 8 p. m.; sharp thunderstorm; roar; moved southeast; whirl clockwise; trees blown over south and north; loss, $8,000.

June 13, 1892.—Galva, Ill.; 3; 7:45 p. m.; no funnel; severe thunderstorm; whirl clockwise; balls of fire seen; 1 killed; loss, $150,000 in vicinity.

June 15, 1892.—Dunbar (near), Minn.; 2—; loss, $10,000.

Easton, Minn.; 2; 4:30 p. m.; funnel; no thunderstorm; roar; moved east; whirl like left-hand screw; 4 killed in county; loss, $16,000.

Fairmont, Minn.; 2; funnel; roar; moved northeast; whirl counter-clockwise; 2 killed; loss, $20,000 in county.

Hartland (one-half mile north), Minn.; 2—; 5:30 p. m.; funnel; heavy thunderstorm; roar; 1 killed; loss, $35,000 in county.

Minnesota Lake, Minn.; 2; 5 p. m.; funnel; 12 inches rain; heavy thunderstorm; roar; moved east; 4 killed; loss, $16,000 in vicinity.

Wells (4 miles north), Minn.; 2; funnel; heavy thunderstorm; roar; moved east; loss, $20,000 in vicinity.

June 22, 1892.—Fredericksburg, Iowa; 2+; 5 p. m.; funnel; heavy thunderstorm; roar; moved southeast; 1 killed; loss, $50,000 in two counties.

Sumner, Iowa; 2+; 6 p. m; funnel; roar; moved east-southeast; whirl counter-clockwise; 1 killed; loss, $40,000.

July 1, 1892.—Mason, Nebr.; 2; no funnel; thunderstorm; roar; moved east-northeast; trees fallen in direction of storm; storm rolled along as a log; loss, $25,000 to $40,000.

July 2, 1892.—Carey, Ohio; 2—; 11:50 p. m; no hail; light thunderstorm; roar; moved southwest; loss, $15,000.

July 13, 1892.—Springfield, Ohio; 2; 11 a. m.; heavy thunderstorm; funnel; loss, $20,000.

July 15, 1892.—Saratoga Springs, N. Y.; 2; loss, $10,000.

July 24, 1892.—Barberton, Ohio; 2; 2 killed; loss, $25,000.

July 25, 1892.—Algona, Iowa; 2; no funnel; no roar; heavy thunderstorm; loss, $50,000 in county.

This list of the 70 more severe winds is given here to show the character of the storms reported. Out of the 1,207 cases reported by the newspapers, 1,137, or nearly 95 per cent, are scarcely noticeable for severity. It should be noted that no attempt can be made to determine the relative violence or frequency of these storms in the different States; it will require a careful compilation of all storms for fifteen or twenty years before this can be done.

CASUALTIES DUE TO LIGHTNING.

By A. McADIE.

Foreign countries, particularly Germany and France, nave recognized the importance of obtaining statistics concerning the loss of life through hail storms, lightning, high winds, etc. For Prussia, statistics are available even to the number of houses struck by lightning, the number of fires started, the character of the roofing, of the soil, of the protection, etc. In 1891 the Weather Bureau issued to its observers instructions to report from month to month the names (with corroborative dates and places) of all persons killed by violent windstorms, tornadoes, and lightning. During 1890 somewhat similar statistics had been collected, but the system put in operation in the following year was more thorough and complete. Mr. H. F. Kretzer, of St. Louis, Mo., has for years tabulated the number of deaths due to lightning, and has kindly placed some of his material at the disposal of the Weather Bureau. His sources of information were 192 newspapers—daily, weekly, and monthly. In preparing the Weather Bureau lists, observers were directed to examine all daily papers published in their respective cities, all local sources of information, and in brief to make full lists. To verify the names and dates thus obtained, circular letters were sent to postmasters and voluntary observers. In this way, and by close scrutiny, a great number of duplicates were weeded out, and exaggerated reports reduced to proper limits.

To get at something like a commercial estimate of the damage done to property by lightning, I have made use of the "Chronicle Fire Tables" for the six years, 1885–'90, and find that lightning, considered as an *indirect* cause of fire, led to 2,223 fires, or 1.3 per cent of the whole number of fires, and the loss $3,386,826, or 1.25 per cent of the whole amount lost through fire. From the standpoint of insurance, fires by lightning are considered to be of *regular* occurrence. I have also made a table based upon the information given in the "Chronicle Fire Tables," showing in detail the losses during 1890. The total number of fires, 625; the total loss, over a million and a half. For the period of seven years, the total is 1,550 barns, stables, granaries; 64 churches, 409 dwellings; 7 electric-light stations; 10 grain elevators; 35 oil tanks; 39 railroad depots; 14 telegraph and telephone offices; 9 schoolhouses, etc.

DEATHS CAUSED BY LIGHTNING DURING THREE YEARS, ACCORDING TO THE WEATHER BUREAU RECORDS.

	1890.	1891.	1892.		1890.	1891.	1892.
January				September		8	2
February				October			
March	2			November			
April	6	13	5	December			
May	8	23	26				
June	37	77	102	Year	120	236	292
July	55	62	95				
August	12	53	62	Total			648

The seasonal distribution is as follows: March, 2; April, 24; May, 57; June, 216; July, 212; August, 127; September, 10.

High and Low Areas of Barometric Pressure, 1891.

The following table shows, by months, the number, position, duration, and average rate of movement of areas of high and low barometric pressure over the United States and Canada during 1891:

[From the Monthly Weather Review.]

JANUARY.

	First observed.			Last observed.			
	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.	Duration.	Velocity per hour.
High areas.		°	°	°	°	*Days.*	*Miles.*
I	1	48	102	50	63	4.0	29
II	4	52	98	40	69	6.5	16
III	12	30	102	39	71	3.5	29
IV	14	54	114	46	59	3.0	36
V	16	39	110	31	78	4.0	21
VI	22	26	84	44	64	2.0	36
VII	23	28	101	32	75	4.0	16
VIII	25	50	92	47	59	2.0	32
IX	29	38	101	43	62	2.0	44
Mean						3.4	29
Low areas.							
I	1	40	91	46	59	2.0	36
II	4	33	79	45	63	3.0	17
III	6	30	107	47	58	7.5	20
IV	12	49	115	49	65	3.0	35
V	14	33	105	49	59	6.5	22
VI	15	49	126	44	78	4.5	24
VII	17	53	117	50	61	6.0	24
VIII	22	30	107	48	53	4.0	38
IX	23	52	116	42	69	4.0	25
X	25	53	119	49	87	2.5	30
XI	26	42	112	48	53	4.5	33
XII	29	53	110	43	85	2.5	24
Mean						4.2	27

FEBRUARY.

	First observed.			Last observed.			
	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.	Duration.	Velocity per hour.
High areas.							
I	1	54	112	38	73	4.0	32
II	7	54	118	40	68	5.0	41
III	12	54	117	31	73	4.0	30
IV	14	55	117	47	67	6.0	24
V	20	55	120	42	65	4.5	30
VI	24	53	116	41	90	4.0	20
Mean						4.6	30
Low areas.							
I	1	43	123	34	94	1.5	52
I*a*	2	44	86	48	57	1.5	44
II	5	32	104	38	71	2.5	36
III	5	53	115	26	95	3.5	31
III*a*	8	40	96	49	60	2.5	36
IV	11	55	127	46	108	1.0	40
V	12	48	130	38	106	4.0	18
V*a*	14	47	111	50	55	2.5	48
V*b*	16	38	96	50	59	2.5	38
VI	18	32	118	52	69	4.5	30
VII	21	44	130	34	100	6.0	15
VII*a*	24	43	93	59	65	2.0	33
VIII	25	32	85	44	66	1.5	41
IX	27	43	84	46	73	1.0	27
Mean						2.6	34

MARCH.

	First observed.			Last observed.			
	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.	Duration.	Velocity per hour.
High areas.		°	°	°	°	*Days.*	*Miles.*
I	*	50	109	48	64	5.5	25
II	1	55	113	46	57	9.5	16
III	6	51	119	49	54	7.5	30
IV	10	51	117	31	96	3.0	26
V	11	50	114	33	75	5.0	27
VI	15	54	108	44	60	3.5	38
VII	17	51	92	48	56	3.5	30
VIII	19	36	100	29	80	2.0	36
IX	19	42	124	40	84	4.0	35
X	22	53	109	49	71	5.5	18
Mean						4.9	28
Low areas.							
I	1	43	121	46	77	3.5	39
II	3	35	75	49	57	3.0	21
III	3	38	115	51	83	6.0	23
IV	8	28	94	49	64	2.5	39
V	8	50	115	50	82	3.5	23
VI	10	42	105	36	76	2.5	40
VII	12	32	88	50	67	2.0	36
VIII	13	48	126	48	60	4.0	32
IX	14	48	127	42	81	6.0	22
X	17	52	117	37	72	5.5	23
XI	20	53	117	47	63	4.5	26
XII	22	35	111	41	84	6.0	16
XIII	25	51	122	46	87	6.5	19
Mean						4.3	28

APRIL.

	First observed.			Last observed.			
	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.	Duration.	Velocity per hour.
High areas.							
I	1	52	109	27	80	6.0	23
II	6	50	85	43	67	5.0	19
III	10	38	109	33	75	5.0	19
IV	12	49	107	48	64	2.5	33
V	15	42	85	33	77	3.0	22
VI	17	51	110	33	78	5.5	27
VII	21	42	124	34	79	6.0	33
VIII	24	41	124	32	80	5.5	32
Mean						4.8	26
Low areas.							
I	1	38	99	48	61	4.0	26
II	6	47	125	49	64	7.0	23
III	10	52	116	43	64	5.0	35
IV	15	52	112	47	59	3.5	35
V	17	38	109	33	103	3.0	17
VI	18	52	115	48	60	6.0	22
VII	21	53	116	48	63	7.0	17
VIII	27	53	113	47	77	3.0	25
Mean						4.8	25

* February 26.

MAY.

	First observed.			Last observed.			
	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.	Duration.	Velocity per hour.
High areas.		°	°	°	°	*Days.*	*Miles.*
I	1	52	110	30	90	9.0	14
II	8	45	124	41	69	6.5	25
III	12	51	101	47	56	4.0	23
IV	12	43	126	43	64	8.0	22
V	18	47	127	40	70	6.5	23
VI	23	53	117	45	62	6.0	21
VII	28	55	114	46	62	3.0	35
Mean						6.1	23
Low areas.							
I	4	36	77	30	80	1.5	28
II	6	50	112	46	58	5.5	25
III	11	40	73	50	65	6.5	18
IV	13	54	107	47	77	2.0	33
V	16	53	112	45	57	6.5	21
VI	22	52	112	48	60	4.5	30
VII	26	54	111	42	97	5.0	15
VIII	26	32	82	30	87	2.0	9
Mean						4.2	22

JUNE.

	First observed.			Last observed.			
	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.	Duration.	Velocity per hour.
High areas.							
I	4	48	97	39	73	5.5	10
II	10	43	105	38	77	4.0	19
III	15	47	106	51	97	1.5	21
IV	23	42	88	37	83	3.0	12
V	25	50	97	48	82	2.0	15
VI	29	48	126	35	97	2.0	39
Mean						3.0	19
Low areas.							
I	1	38	109	42	90	2.5	21
II	1	48	77	51	62	1.0	31
III	5	35	100	37	91	1.5	17
IV	8	42	111	49	70	3.0	31
V	12	45	106	48	60	4.0	29
VI	16	38	100	41	86	3.5	11
VII	17	52	114	44	66	6.5	15
VIII	19	33	101	40	87	1.5	25
IX	22	45	103	52	97	1.0	25
X	26	45	104	48	83	3.5	18
Mean						2.8	22

JULY.

	First observed.			Last observed.			
	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.	Duration.	Velocity per hour.
High areas.							
I	1	48	126	34	76	5.0	23
II	5	47	126	40	70	5.0	26
III	11	45	126	35	74	5.0	26
IV	15	46	125	44	62	7.0	19
V	20	47	126	32	78	7.0	20
Mean						5.8	23
Low areas.							
I	1	47	100	49	64	6.0	15
II	3	46	119	43	65	6.0	27
III	4	25	96	34	93	2.5	12

JULY—Continued.

	First observed.			Last observed.			
	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.	Duration.	Velocity per hour.
Low areas—Continued.		°	°	°	°	*Days.*	*Miles.*
IV	7	42	83	47	60	1.5	35
V	10	40	108	50	65	5.5	18
VI	15	52	100	49	65	4.5	19
VII	21	52	101	50	65	3.5	21
VIII	28	51	93	46	58	2.5	35
Mean						3.8	23

AUGUST.

	First observed.			Last observed.			
	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.	Duration.	Velocity per hour.
High areas.							
I	3	49	85	44	72	2.0	25
II	6	43	83	34	76	2.5	17
III	11	50	108	34	75	3.5	26
IV	14	51	95	31	80	2.5	30
V	21	51	114	53	85	3.0	31
Va	23	34	101	43	71	3.0	24
VI	26	51	107	47	63	4.5	28
Mean						3.0	26
Low areas.							
I	1	40	90	38	76	3.0	14
II	3	51	114	49	70	6.5	18
III	9	52	104	49	65	2.5	32
IV	13	43	102	42	70	2.5	28
V	14	49	112	45	78	3.5	23
VI	17	53	118	48	72	3.5	26
VII	22	38	86	47	79	3.5	17
VIII	23	52	110	48	86	3.0	17
IX	27	44	78	48	69	1.0	25
XI	27	52	107	46	87	3.0	17
X	30	52	110	51	100	1.0	15
Mean						3.0	21

SEPTEMBER.

	First observed.			Last observed.			
	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.	Duration.	Velocity per hour.
High areas.							
I	1	52	114	46	64	4.5	28
II	5	52	109	40	72	5.5	21
III	12	50	103	36	75	5.0	20
IV	19	47	80	42	72	1.0	21
V	23	46	125	42	70	3.0	40
VI	27	47	125	45	74	3.0	40
Mean						3.7	28
Low areas.							
I	1	47	98	49	69	3.0	22
II	2	51	116	49	90	2.5	20
III	4	36	82	50	64	2.5	23
IV	9	51	115	50	67	3.5	30
V	13	45	119	43	77	2.5	35
VI	14	50	111	50	69	3.5	32
VIa	15	38	118	45	103	1.0	37
VII	17	52	128	47	82	3.5	25
VIII	22	52	112	49	87	2.0	24
IX	25	53	113	50	68	4.5	31
X	28	50	117	47	99	1.5	25
Xa	29	41	113	41	103	1.0	21
Mean						2.6	27

OCTOBER.

	First observed.			Last observed.		Duration.	Velocity per hour.
	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.		
High areas.		°	°	°	°	*Days.*	*Miles.*
I	1	44	71	35	85	3.0	16
II	2	44	125	35	98	5.0	22
III	5	50	86	46	63	2.0	25
IV	7	52	115	39	92	3.0	22
V	9	53	105	45	68	3.0	25
VI	11	43	124	44	62	7.0	26
VII	16	41	125	29	84	5.5	20
VIII	19	53	114	29	87	5.0	20
IX	23	40	125	35	77	5.5	26
X	28	37	126	51	105	3.0	24
Mean						4.2	23
Low areas.							
I	1	38	108	50	68	2.5	36
II	4	44	83	43	66	1.5	25
III	8	42	70	48	54	1.0	38
IV	10	52	116	47	65	6.0	18
V	14	51	114	49	64	7.0	23
VI	19	53	106	49	88	1.5	33
VII	22	48	126	45	68	4.5	30
VIII	22	38	77	47	61	2.0	23
IX	26	47	125	53	106	1.0	39
X	28	49	125	47	74	3.5	29
Mean						3.0	29

NOVEMBER.

	First observed.			Last observed.		Duration.	Velocity per hour.
	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.		
High areas.							
I	1	48	101	46	65	3.5	25
II	3	41	112	34	105	1.5	17
III	4	51	104	48	65	2.5	34
IV	7	44	123	38	112	1.5	19
V	9	43	126	43	69	6.0	24
VI	15	53	114	40	71	4.5	27
VII	21	53	115	45	101	1.5	25
VIII	27	47	101	37	81	3.0	22
Mean						3.0	24
Low areas.							
I*	1	50	69	50	62	0.5	13
II	2	50	128	48	85	2.5	33
III	4	52	128	51	94	2.5	25
IV	6	53	113	43	87	1.5	38
IV*a*	6	38	98	47	85	1.5	19
V	8	32	100	48	83	3.0	22

NOVEMBER—Continued.

	First observed.			Last observed.		Duration.	Velocity per hour.
	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.		
Low areas—Continued.		°	°	°	°	*Days.*	*Miles.*
VI	9	52	112	49	64	3.5	29
VII	15	49	98	50	63	3.0	25
VIII	17	52	117	49	87	2.0	29
IX	20	52	110	48	86	1.5	36
IX*a*	20	37	103	48	86	1.5	36
X	21	35	98	50	68	3.0	27
XI	24	53	113	45	68	2.5	38
XII	26	51	113	45	69	2.0	54
XIII	29	54	114	54	104	1.0	18
Mean						2.1	29

DECEMBER.

	First observed.			Last observed.		Duration.	Velocity per hour.
	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.		
High areas.							
I†	1	34	82	44	64	3.0	21
II	2	42	124	34	76	3.5	36
III	5	44	125	35	83	3.5	36
IV††	10	45	118	37	108	6.0	6
V	11	42	101	33	81	2.5	25
VI	14	50	85	44	68	1.0	33
VII	15	53	104	46	69	4.5	24
VIII	22	41	113	35	115	1.0	25
IX	24	51	114	35	107	3.0	20
X	27	28	92	45	63	2.0	49
XI	28	37	113	44	74	3.0	35
XII	29	52	97	44	74	2.0	27
Mean						2.9	28
Low areas.							
I‡	1	52	109	52	93	1.0	29
II	2	40	103	51	68	3.5	24
III	5	35	98	47	60	2.0	50
IV	7	53	128	51	63	2.5	46
V	9	54	110	50	67	1.5	53
VI	12	52	114	48	60	4.5	31
VII	12	55	106	50	61	1.5	56
VIII	16	52	128	53	108	1.0	35
IX	18	51	128	50	97	2.5	32
X	21	42	99	52	64	2.0	41
XI	22	26	99	38	85	1.5	33
XII	22	50	126	51	65	4.5	32
XIII	26	52	128	43	63	4.5	31
XIV	29	48	127	48	107	1.0	40
XIV*a*	30	42	117	37	98	1.5	31
Mean						2.3	38

* Continuation of Low Area X of October.
† Continuation of High Area VIII of November.
†† Remained nearly stationary 11th to 15th, inclusive.
‡ Continuation of Low Area XIII for November.

The following table shows, by months, the number, position, duration, and average rate of movement of areas of high and low barometric pressure over the United States and Canada during 1892:

JANUARY.

	First observed.			Last observed.		Duration.	Velocity per hour.
	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.		
High areas.		°	°	°	°	*Days.*	*Miles.*
I*	1	39	110	29	84	6.5	29
II	1	52	104	49	87	2.0	17
III	8	51	110	49	66	2.5	44
IV	11	40	100	40	110	2.0	21
V	12	51	122	43	68	4.5	26
VI	16	52	110	38	97	2.5	21
VII	19	29	98	36	79	2.0	29
VIII	19	47	125	41	116	1.0	25
IX	25	52	97	29	87	3.0	28
X	30	38	95	39	80	1.5	22
Mean						2.8	26
Low areas.							
I*	1	40	90	48	65	3.5	20
II	2	48	125	43	87	2.0	45
III	5	33	93	48	68	2.0	39
IV	6	52	103	48	83	2.0	23
V	7	33	102	28	92	1.5	17
VI	12	29	90	49	67	2.5	32
VII	15	49	125	50	68	2.5	46
VIII	18	53	115	47	77	2.5	29
IX	20	51	113	47	66	2.5	39
X	22	53	113	45	67	4.5	22
XI	26	47	125	42	65	5.0	28
XII	29	49	127	48	88	2.0	37
XIII	30	37	118	40	98	1.0	42
Mean						2.6	32

FEBRUARY.

	First observed.			Last observed.		Duration.	Velocity per hour.
	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.		
High areas.							
I*	2	38	100	36	83	2.0	22
II	2	46	118	38	78	4.0	28
III	6	53	104	52	93	1.0	19
IV	8	52	116	39	77	2.0	48
V	11	53	107	42	71	3.0	27
VI	11	37	103	30	80	2.0	35
VII	14	53	108	33	80	4.5	23
VIII	16	54	116	48	66	4.0	26
VX	22	48	125	48	61	6.0	26
IX and X *a*	27	53	107	51	87	2.5	15
Mean						3.0	27
Low areas.							
I	1	43	93	42	69	2.0	28
II	4	37	102	36	84	1.0	39
III	6	32	102	47	77	2.5	28
IV	9	54	115	49	68	3.5	36
V	12	52	113	46	71	3.0	38
VI	16	47	110	44	88	1.0	46
VII	20	52	89	34	75	1.5	24
VIII	21	48	126	52	96	1.5	38
IX	26	44	104	37	75	3.0	32
Mean						2.2	34

MARCH.

	First observed.			Last observed.		Duration.	Velocity per hour.
	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.		
High areas.		°	°	°	°	*Days.*	*Miles.*
I	1	49	83	50	63	1.5	25
II	9	52	108	32	84	3.0	35
III	12	54	105	52	97	1.5	13
III*a*	14	53	105	28	86	5.5	19
IV	18	53	108	44	61	5.0	24
V	22	38	101	38	78	2.5	22
VI	25	42	125	41	69	6.0	27
Mean						3.6	24
Low areas.							
I	1	39	75	47	58	6.0	14
II	3	33	112	49	63	6.5	25
III	6	53	112	47	87	1.5	33
IV	7	51	112	47	87	2.0	26
V	10	40	78	51	63	2.0	24
VI	10	52	112	45	82	1.5	43
VII	14	31	106	27	91	1.0	42
VIII	16	26	93	51	66	3.5	30
IX	19	50	125	50	110	2.5	17
X	21	34	105	47	66	3.0	35
XI	24	52	110	40	54	3.5	40
XII	27	46	125	41	85	4.0	25
XIII	29	52	117	38	100	2.0	26
Mean						3.0	29

APRIL.

	First observed.			Last observed.		Duration.	Velocity per hour.
	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.		
High areas.							
I	4	44	124	38	114	2.0	16
II	7	53	117	50	83	5.5	23
III	10	47	126	34	82	5.5	30
IV	17	42	126	38	87	6.5	20
V	23	52	97	35	70	5.0	17
VI	26	41	127	35	74	4.5	38
Mean						4.8	24
Low areas.							
I	1	42	100	50	66	2.0	38
II	2	51	117	47	57	4.0	36
III	5	54	105	52	93	1.0	22
IV	6	28	96	50	61	4.5	28
V	9	52	115	37	76	5.0	27
VI	14	47	126	51	63	9.5	25
VII	24	46	125	46	61	6.0	32
VIII	29	48	125	39	98	1.5	44
Mean						4.2	30

* Continuation of low area XIV*a* for December, 1891.

MAY.

	First observed.			Last observed.		Duration.	Velocity per hour.
	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.		
High areas.		°	°	°	°	*Days.*	*Miles.*
I	3	47	107	35	85	1.0	58
II	6	53	105	44	62	4.5	20
III	11	54	102	40	70	2.5	35
IV	14	42	104	32	79	2.0	35
V	17	45	125	28	93	2.0	44
VI	18	48	125	32	78	6.0	27
VII	26	47	97	35	77	1.5	41
VIII	30	50	108	49	96	1.5	18
Mean						2.7	35
Low areas.							
I	1	38	100	43	85	1.0	37
II	2	37	98	49	69	2.5	24
III	3	41	123	47	87	2.5	40
IV	6	45	118	43	66	5.5	28
V	14	36	99	49	64	2.5	37
VI	15	45	123	42	69	7.0	27
VII	19	32	101	28	98	0.5	30
VIII	21	52	112	50	66	3.5	27
IX	25	50	88	50	65	3.0	19
X	26	53	108	50	87	4.0	11
XI	30	33	103	29	99	1.0	30
Mean						3.0	28

JUNE.

	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.	Duration.	Velocity per hour.
High areas.							
I	1	50	94	36	67	4.5	28
II	1	36	100	34	80	4.5	12
III	3	45	125	35	74	10.0	21
IV	6	51	87	38	70	2.5	22
V	13	44	108	40	70	2.5	35
VI	15	50	105	41	67	3.0	31
VII	21	47	125	35	95	6.5	25
VIII	29	52	105	42	93	1.5	28
Mean						4.4	25
Low areas.							
I	1	47	80	48	60	1.0	40
II	1	37	93	41	86	1.5	14
III	1	52	115	40	76	8.5	15
IV	6	46	118	49	65	8.0	20
V	14	47	115	51	65	2.5	43
VI	15	38	105	48	88	4.0	19
VII	19	52	110	46	72	2.5	29
VIII	20	45	70	44	63	0.5	29
IX	22	42	99	42	74	1.5	38
X	26	42	91	49	74	2.0	21
XI	28	50	112	49	68	2.5	35
Mean						3.1	28

JULY.

	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.	Duration.	Velocity per hour.
High areas.							
I	2	47	125	49	61	4.0	39
Ia	5	43	82	28	82	5.5	15

JULY—Continued.

	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.	Duration.	Velocity per hour.
High areas—Continued.		°	°	°	°	*Days.*	*Miles.*
II	14	47	114	29	83	5.5	23
III	27	46	113	36	88	4.0	21
Mean						4.8	24
Low areas.							
I	1	50	109	48	63	3.0	36
II	5	51	110	52	101	2.0	19
III	9	51	111	53	102	1.5	15
IV	11	45	107	50	68	2.0	42
V	12	52	114	49	67	3.5	32
VI	17	58	114	50	70	2.5	33
VII	20	53	103	51	69	2.0	32
VIII	22	52	107	50	62	2.0	44
IX	23	54	106	51	63	3.0	26
X	25	47	107	35	104	2.0	27
XI	28	51	114	50	81	3.0	20
Mean						2.4	30

AUGUST.

	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.	Duration.	Velocity per hour.
High areas.							
I	1	43	95	37	83	2.0	21
II	3	48	97	39	82	2.0	24
III	11	48	93	38	79	6.0	19
IV	17	49	125	47	80	3.0	35
V	20	52	112	45	71	3.0	31
VI	25	42	95	41	66	5.0	17
VII	27	48	124	41	89	4.5	22
Mean						3.6	24
Low areas.							
I	1	54	113	51	65	3.5	26
II	3	52	113	50	64	3.0	33
III	5	51	113	47	67	4.0	26
IV	9	46	90	42	69	2.5	19
V	11	51	114	46	102	1.5	28
VI	14	52	107	51	69	5.0	19
VII	23	40	93	36	73	3.0	21
VIII	26	53	105	50	68	5.5	26
Mean						3.5	25

SEPTEMBER.

	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.	Duration.	Velocity per hour.
High areas.							
I	1	44	88	42	66	2.5	19
II	3	51	115	42	69	6.0	22
III	6	48	126	42	98	2.0	31
IV	10	49	113	43	100	3.0	18
IVa	12	51	110	35	90	2.5	25
IVb	14	34	96	41	80	3.0	22
V	14	50	105	40	73	3.0	28
VI	18	51	104	40	71	3.0	24
VII	24	41	125	45	77	4.5	32
VIII	27	51	111	40	71	3.0	32
Mean						3.2	25

SEPTEMBER—Continued.

	First observed.			Last observed.		Duration	Velocity per hour.
	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.		
Low areas.		°	°	°	°	*Days.*	*Miles.*
I	1	49	104	49	64	5.0	19
II	5	52	115	39	97	2.0	28
III	8	52	113	49	88	4.0	20
IV	12	30	90	51	65	3.5	24
V	12	53	120	52	100	1.5	25
VI	16	54	115	46	55	3.5	34
VII	19	54	113	53	98	2.0	14
VIII	22	53	121	50	66	5.0	23
IX	25	53	112	49	90	1.5	29
X	28	52	120	50	67	2.5	39
Mean						3.1	26

OCTOBER.

High areas.							
I	1	48	85	34	81	1.5	33
II	1	46	120	40	107	3.0	17
III	4	52	97	35	77	2.5	27
IV	6	51	110	36	83	4.0	25
V	11	48	77	33	80	4.0	17
VI	12	46	118	41	105	2.5	18
VII	14	53	113	34	82	4.5	28
VIII	17	39	125	52	100	7.5	17
IX	21	51	114	34	102	3.5	21
X	25	51	113	28	88	3.5	30
XI	27	53	115	36	75	3.5	31
Mean						3.7	24
Low areas.							
I	1	53	109	49	62	4.5	24
II	4	53	115	46	58	5.0	25
III	8	46	126	50	68	7.5	26
IV	10	50	125	50	98	2.0	26
V	15	40	113	47	63	4.5	27
VI	20	54	107	48	81	1.5	31
VII	23	28	90	28	79	1.5	20
VIII	26	53	98	51	66	1.5	42
IX	27	53	100	47	59	3.0	32
X	30	38	100	40	93	1.0	17
Mean						3.2	27

NOVEMBER.

High areas.							
I	1	50	85	48	65	1.0	39
II	1	45	121	40	107	3.0	14
III	3	53	100	36	75	2.5	30
IV	5	45	124	50	60	4.5	36
V	8	47	123	43	63	6.0	31
VI	12	46	125	35	72	4.5	41

NOVEMBER—Continued.

	First observed.			Last observed.		Duration.	Velocity per hour.
	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.		
High areas—Continued.		°	°	°	°	*Days.*	*Miles.*
VII	16	43	125	40	110	1.5	27
VIII	18	52	106	34	81	1.5	50
IX	20	51	114	34	80	5.2	17
X	26	53	112	42	83	4.5	24
Mean						3.4	31
Low areas.							
I	1	35	93	46	59	2.5	34
II	2	53	113	44	60	3.0	40
III	5	51	112	50	70	3.0	31
IV	9	30	88	45	66	1.5	44
V	9	53	117	47	82	2.0	35
VI	11	53	114	48	80	2.5	27
VII	14	54	113	53	102	1.0	19
VIII	15	36	76	49	68	2.0	23
IX	15	39	98	47	87	1.0	33
X	15	32	100	45	60	5.0	23
XI	15	54	110	40	91	1.5	42
XII	17	52	120	52	110	0.5	37
XIII	18	48	123	46	82	2.5	34
XIV	22	49	125	49	95	3.5	27
XV	26	34	100	42	79	1.5	36
XV*a*	28	35	74	42	66	2.0	13
XVI*							
Mean						2.2	31

DECEMBER.

High areas.							
I	1	42	85	40	81	1.0	10
II	1	52	113	36	75	4.5	22
III	8	45	115	38	76	4.5	23
IV	19	52	114	37	77	2.0	50
V	21	52	112	34	88	2.0	37
V*a*	22	51	104	33	81	3.0	26
VI	24	53	118	40	97	2.0	31
VI*a*	26	52	103	32	76	5.0	23
Mean						3.0	28
Low areas.							
I	1	45	109	45	77	2.0	35
I*a*	1	37	98	45	77	1.5	36
II	3	48	125	45	73	3.5	35
III	6	32	100	48	80	2.5	26
IV	10	32	115	44	81	3.5	30
V	12	53	114	52	100	1.5	18
VI	15	27	98	36	75	1.5	42
VII	17	54	105	49	68	2.5	32
VIII	19	30	95	36	74	1.0	54
IX	24	47	124	30	82	2.5	45
X	28	51	122	33	91	3.0	37
Mean						2.3	35

*Central off north Pacific coast from 24th to close of month.

A BALLOON ASCENSION.

By Prof. H. A. Hazen.

On October 27, 1892, during one of the driest times ever known at Washington City, it was decided by the Government experimenters on rain-making to make an ascension to determine the conditions of the atmosphere. The balloon used had a capacity of about 9,000 cubic feet, and when inflated with hydrogen was able to lift two observers and 60 pounds of ballast. It is doubtful if such a small balloon has ever made so high a voyage with such a load. The gas, after passing through iced water, was conveyed by a cloth tube some 40 feet long to the balloon, so that its temperature was that of the air. The start was at 15:33, and the ascent was 500 feet per minute for six minutes. In fourteen minutes we were at nearly 5,000 feet, and here the balloon, having lost some gas at the neck, poised for about six minutes and then fell rapidly nearly 1,000 feet, when a liberal use of ballast caused its ascension to the highest point attained, 9,400 feet at 16:26. At this high level we remained about four minutes and then returned quite rapidly. We landed at 16:59, 2 miles east of Suitland, Md., on the farm of E. D. Rude, having gone 9.4 miles in a nearly due-east direction.

The accompanying table contains the observations made as rapidly as possible. The computations are made from the observations as recorded, though it is evident that a little allowance must be made for the lagging of the aneroid, and for the interval between swinging the thermometers, reading them, the aneroid, and the watch. At the highest point I have added 50 feet for the aneroid. The apparent slight effect of the Potomac on the moisture of the air is to be noted. If anything, there was less cloudiness over it than on either side. The saturated stratum, at 8,500 feet, is interesting, as it was less than 500 feet thick, the relative humidity, at 9,400 feet, being 30 per cent less.

The great necessity now is to make more frequent ascensions, especially at the time of rain. We ought to learn the behavior of this saturated stratum as rain comes on. How it thickens and descends, etc. The whole voyage demonstrated the beautiful and safe character of such exploration.

Mr. Ellis, the aëronaut, also made humidity observations. The sling psychrometer proved itself a most excellent apparatus, responding promptly to all demands upon it and giving a very accurate record of the exact moisture conditions of the air.

OBSERVATIONS DURING A BALLOON ASCENSION, OCTOBER 27, 1892.

Time.	Wet.	Dry.	Pressure.	Dew-point.	Relative humidity.	Height.	Observation.	Remarks.
15:25	43.4	53.3	29.65	30.5	41	.....	.....	On ground.
15:33	.....	.....	.....	.....	.....	.....	.....	Started.
36	40.7	49.7	28.65	28.8	47	930	1	
38	35.0	41.0	27.15	26.3	57	2,400	2	
40	31.2	37.6	26.20	20.3	51	3,410	3	
43	28.0	33.0	25.43	19.2	57	4,250	4	
44	28.0	33.4	25.20	18.3	55	4,500	5	Over Potomac River.
46	26.0	31.0	25.00	16.6	55	4,730	6	
53	25.0	28.7	24.80	18.6	67	4,970	7	Water frozen on wet bulb, difficult to get down.
55	26.4	30.6	25.25	19.0	61	4,460	8	
56.5	28.8	33.0	25.65	22.0	64	4,020	9	
16:03	24.0	26.0	24.15	20.4	77	5,730	10	
5	21.4	24.2	23.50	15.7	71	6,500	11	
6	20.0	21.5	23.30	17.0	81	6,760	12	
11	17.4	18.2	22.55	15.4	89	7,710	13	
13	17.0	17.6	22.20	15.0	91	8,150	14	
15	15.7	15.6	21.90	15.6	100	8,550	15	Compression of ice causes wet higher than dry.
17	14.2	14.0	21.70	14.0	100	8,820	16	
19	13.9	14.7	21.55	11.0	85	9,010	17	
21	13.0	13.4	21.40	10.7	86	9,230	18	
23	13.0	15.2	21.35	8.0	70	9,280	19	
25	14.2	16.6	21.37	7.5	70	9,240	20	
26	13.4	15.8	21.30	7.5	69	9,380	21	
28	13.2	15.3	21.30	6.9	70	9,400	22	
30	13.0	13.6	21.40	10.7	90	9,230	23	
32	13.1	14.0	21.44	10.1	83	9,170	24	
34	13.4	14.0	21.55	11.4	88	9,010	25	
38	14.3	13.8	22.05	13.8	100	8,400	26	See observations 15 and 16.
40	15.7	16.0	22.40	13.4	88	7,930	27	
41	17.0	17.7	22.85	15.0	89	7,350	28	
42	19.0	20.7	23.35	14.9	82	6,730	29	
45	20.8	23.0	24.00	16.2	74	5,980	30	
48	25.3	28.4	25.15	19.4	69	4,610	31	
50	28.8	32.5	25.90	22.5	68	3,770	32	
52	31.4	36.0	26.60	22.3	58	3,020	33	
54	37.0	43.0	28.10	28.7	58	1,480	34	
56	39.0	47.4	28.70	27.0	45	900	35	
58	40.9	49.9	29.40	28.7	44	230	36	
17:05	.....	44.0	.....	.....	.....	.....	.....	On ground.

REPORT ON THE RELATIONS OF SOLAR MAGNETISM TO TERRESTRIAL MAGNETISM AND METEOROLOGY.

By FRANK H. BIGELOW, *Professor of Meteorology.*

METEOROLOGY AND TERRESTRIAL MAGNETISM.

In October, 1891, having received an appointment as professor of meteorology in the U. S. Weather Bureau, I was assigned to a study of the relations of the physical forces that are observed in meteorological and magnetical phenomena, respectively. This problem is a logical continuation of some researches that had been carried on in a private capacity, from which there arose a probability that some connection between these two branches of science does exist, although hitherto having eluded the efforts of scientists to discover what it is.

The nature and importance of the question involved in this investigation should be clearly understood. It has two aspects from which it may be viewed. On one side it is perceived from an inspection of the literature of these two subjects, in which is recorded the observations of meteorologists and magneticians in their special departments, as well as the efforts to elucidate their meaning by ascribing them to simple and fundamental laws, that there has been accumulating a vast amount of data, which is at present in a congested state, not being understood. The large volumes of observations, often extending over a series of years, constitute a set of records of great value intrinsically, and yet they are becoming oppressive by their very dimensions, for lack of a clear idea for their proper classification and significance. Throughout the accumulation of these painstaking observations there has run a vein of suspicion in many minds, amounting almost to certainty in some, that these two subjects, though apparently distinct in certain respects, yet in reality constitute one and the same body of phenomena, emanating from a single fundamental cause. This impression is very much strengthened by the inability of either meteorologists or magneticians to build a structure of cause and effect for their own departments that satisfies the best critics. So far as meteorology is concerned, its task being to give an account of the distribution of the atmosphere over the surface of the earth, the winds, storms, and other natural processes arising from its disturbed equilibrium, no one supposes that the problem is completely solved.

The best efforts have been made along the lines of thermodynamics as the moving cause and dynamical mechanics as the procession of effects, much talent, if not genius, having been expended on these mathematical and physical relations. Yet confessedly the mathematical solutions are restricted to such simple ideal cases, because of the analytical complexity of the equations, that they are inapplicable to nature; and in the physics of the subject there are immense gaps over which no bridges exist. The outcome of this state of things is that meteorology remains a purely empirical subject, its immense usefulness to mankind making even this imperfect development of extraordinary value. With regard to magnetism the case is even worse than with meteorology; for it may be said without exaggeration that neither in analytical treatment since the days of Gauss nor in theoretical physics since the researches of Faraday has any progress been made, and, except in some details of instrumental registration for continuous observations, the subject remains where it was forty years ago. Observations have accumulated in large and valuable proportions, but on

the whole the outlook has been discouraging, because there has been no clew to the law of causality underlying the complex and flickering variations of the magnetic forces.

If it were possible to discover the fundamental relations which go to the bottom of these subjects, and especially if the key to the connection between them could be found, the result would be so largely beneficial to the advancement of these branches of physics that considerable risk might justly be incurred in entering upon a line of investigation that offered a fair hope of moderate success. It was such a process of thought as the one just traversed that induced me to make the attempt whose progress forms the subject of this report. Nor was it an embarkation upon an untried voyage, without a rational ground for belief that there would be a reward at the end of it. The development of the past ten years in the physics of electricity and magnetism had gone so far as to show that Maxwell's view of the electro-magnetic nature of the radiations of the sun, received at the earth as heat and light, must be accepted as the basis of future research in this department of science. From certain studies on the nature of the solar corona, which though inconclusive on account of the imperfect data secured from the eclipses of the sun, yet pointed strongly to the magnetic polarization of the sun, I had conceived the belief that a direct application of these premises to the whole set of phenomena forming the physical connection between the sun and the earth, and exhibited chiefly in magnetical and meteorological conditions at the earth, ought to be seriously undertaken.

My idea was that the sun, being magnetic and electro-magnetic itself, should by the rotation on its axis present these forces to the earth in such variable strengths as ultimately to produce some of the fluctuations that are observed at this distance from it. The perplexity consisted at the outset in an entire ignorance of the exact end of the thread that was to be the clew through the labyrinth of observed facts, in the difficulty of reducing the mathematical considerations to so simple a process as not to overwhelm the trial with intricate computations, and finally in the almost unanimous consensus of opinion that such forces if they did emanate from the sun, would be too feeble to produce any periodic influence at the distance of the earth. Fortunately I had no difficulty in overlooking the last fact. As regards the second it seemed that a process of reduction which was already in operation to a limited extent offered the required simple analytical conditions; and with regard to the clew, confidence was felt that it would soon be detected with some certainty, if it existed, before an unreasonable amount of labor had been expended.

It will be necessary to pass almost without intermediary developments from this statement of the problem to the results of the investigation, so far as they have been secured, because the proof of the results will require a fuller exposition than is here possible, such as is to be prepared shortly, and since a brief summary of the most important conclusions may be acceptable, disentangled from the technical methods employed in obtaining them from the observations. The results naturally divide themselves into four parts, which are distinct and yet dependent upon each other. These are as follows:

I. The sun, a magnetic and electro-magnetic body.
II. The coronal field and its characteristics.
III. The radiant field and its characteristics.
IV. Their relations to meteorology and long range predictions of the weather.

THE PHYSICAL CONSTITUTION OF THE SUN.

The result of my study on the solar corona, depending upon measurements of the lines given in the photographs of the eclipses of July 29, 1878, January 1, and December 22, 1889, goes to show that the sun has two poles of magnetization, one in each hemisphere, situated about 4½ degrees from the axis of rotation, and separated from each other 102 degrees in longitude, the south coronal pole preceding. The visible streamers of the corona, which appear grouped about these poles in peculiar curves, do not spring up from the sun indifferently all over its surface, but their bases are confined to two narrow belts about 15 degrees wide, one in each hemisphere, whose central line is between 33 and 34 degrees from the coronal poles. These facts suggest many conclusions regarding the nature of the sun, but this paper will be limited to a recital of the facts produced by the investigation.

It next became a matter of importance to determine the period of the solar rotation, because if this indication of polarization of the body of the sun be true there must be a nucleus in which such permanent magnetization resides, and thence there should be definite time of rotation. The first attempt to discover this was from a discussion of the intervals between the three eclipses, an effort being made to adjust the positions of the coronal poles to a single period. Guided by the observations of the sun-spot motions and the current theories of the extension of their periods toward the solar poles, I supposed that there must have been twelve rotations between the eclipses of January 1 and December 22, 1889, and proceeding on this assumption concluded that the synodic period near the poles was 29.64 days. This turns out to be wrong because there should have been taken thirteen and a fraction revolutions between these two eclipses instead of twelve revolutions; my final period being 26.68 days.

It is impossible to reproduce fully the process of obtaining this period, because the work is extensive; but it is so important, being the key to my development of the subject, that I will briefly indicate the method. If the sun is a magnetic sphere, in which the magnetism is distributed with irregular intensity throughout the mass, in the same way that the permanent magnetism of the earth deviates from the simple law of the uniform spherical magnet, then in the field outside the sun, as far as its strength reaches into space, the lines of force being propagated through the ether, these variations of intensity will be found by an observer passing along it from point to point. If this field reaches to the earth the rotation of the sun on its axis sweeps the field past the earth, presenting all phases of it in the synodic period of rotation, so that if it is of finite or measureable dimensions it can be studied just as well as if the observer were on the sun. All that is needed is a delicate mechanism for such measures. This has been fortunately provided, partly by nature and partly by man's invention. For surrounding the earth itself is a system of magnetic lines of force which begin at the earth's south pole, sweep wide through space and return to the north magnetic pole, the subsidiary lines holding appropriate positions. These lines of force may be compared to a delicate system of springs, sensitive to every touch from similarly constructed magnetic springs. Now the magnetic springs from the sun do touch these terrestrial springs, bend them slightly but surely, so that their direction and force at any point on the surface of the earth is constantly changing in response to the solar pressure. What the modified or variable force and direction of the earth's field is at any time, can be measured with almost incredible accuracy in magnetic observatories, and in fact it is these very fluctuations that are recorded on their continuous photographic traces. When carefully classified these variations separate themselves into two distinct types, one due to the rotation of the earth on its axis, with the modification produced annually by the orbital motion about the sun, and the other due to the rotation of the sun on its axis in about twenty-seven days, carrying its magnetic field through the earth's field. The former, that is, the diurnal period, is in response to another magnetic field emanating from the sun, not yet described, which I call the *radiant* field, and which comes parallel to the ecliptic, while the twenty-seven-day period is due to the *coronal* field, which approaches the earth perpendicularly to the plane of the ecliptic.

My investigation has been to disentangle the operation of these two solar fields, which though acting simultaneously yet have such different actions as to render this process possible. In order to complete my statement regarding the nature of the sun, before passing on to describe these two fields it seems necessary to suppose that the radiant field, which is propagated in linear directions like rays of light and heat, all of which are forms of the radiant energy of the sun, originates in the electrical discharges from the atoms of ponderable matter composing the photosphere, whereby they act as condensers, and communicate rapidly alternating oscillations to the ether, which propagates the disturbance across the intervening space, according to Maxwell's theory. If we can dintinctly detect this field at the earth, it becomes an important line of evidence in confirmation of this view of the subject. Regarding the sun itself, it is our belief that the photosphere is a great electromagnetic shell of ponderable matter held off from the rigid nucleus, at some fixed distance due to solar physical conditions, as clouds condense at a certain average height above the surface of the earth. In this shell the radiant field has its seat, in the nucleus the coronal field has its base, each being controlled by separate sets of laws, which are yet related to one another. Furthermore, I find that the period of rotation of this coronal field, namely,

26.68 days, is precisely that of the sun spots at the sun's equator, which also argues that the sun rotates as a solid. The so-called acceleration of the sun's equatorial belts is therefore a fiction of astronomy, the truth being that the sun-spot belts up to 35° of latitude show a retardation or anti-rotational motion, and remind us of westward-blowing constant trade winds in similar localities on the earth. Having thus exposed our conception of the problem, our results confirming it in the coronal field, the radiant field, and in meteorological phenomena will be briefly reviewed.

THE CORONAL FIELD.

The variations, derived from the magnetic forces, as observed at Los Angeles, Toronto, Greenwich, Paris, Pola, Prague, Vienna, Pawlowsk, Tiflis, Zi-ka-wei, and Batavia for the year 1887, and for the European stations for years extending from 1878 to 1891, have been reduced to rectangular coördinates, dx, dy, dz, and then transformed to polar coördinates, σ, ς, α, β. These latter quantities signify, σ the horizontal component on the plane of the horizon at the station, ς the resultant force in space that produced the variation of the normal field, α the angle that this force makes with the plane of the horizon, and β the angle in azimuth that the component σ makes with the magnetic meridian, counted in the direction, N., W., S., E.

When the azimuth angles β are inspected, after tabulation for all the stations, it is seen that they are governed by a distinct law. Laying aside the irregularities arising from local conditions and instrumental errors, it is clear that these forces act generally northward or southward; that they move simultaneously in one of these directions or the other all over the hemisphere, showing that they are necessarily of cosmical origin; and they have certain dates of sudden reversals, when they all turn from north to south, or oppositely; also these dates of reversals occur periodically. The final period for the principal reversal is 26.68 days, with the epoch June 12.22, 1887; and this is the time when the sun's south coronal pole is directly in the plane between the center of the sun and the earth, the plane standing perpendicular to the ecliptic. This is the synodic rotation of the sun, and from it an ephemeris has been constructed covering the last quarter of the century, our epoch falling near the middle. The ephemeris gives the dates of the recurrence of the south pole of the sun in the situation described.

Further consideration of the secondary dates of reversal shows that this period is subdivided into unequal intervals. Following the beginning of each period, there is another reversal in eight days, so that the twenty-seven-day period is subdivided into eight and nineteen days, respectively, this peculiar sequence of reversals showing that the north coronal pole of the sun follows the south pole in eight days, or at an interval of 102°, and that then the south pole comes again in nineteen days. There are many variations which depend upon a set of forces bound up with the eleven-year period whose investigation is not yet completed, by reason of the extensive computations required in preparation for it. This period and epoch have been applied to the placing of the model of the sun's corona, prepared from investigations of the eclipses, with the result that the agreement of the projections of the model with the pictures of the corona, when reduced to the same scale and rigorously superposed, is satisfactory to a marked degree. From the coronal photographs this interval between the poles, and from the reversals of the terrestrial magnetic field, is found to be 102°, thus forming a basis for confidence in the foundation of the investigation.

The study of the altitude angle α shows that when the coronal field is acting south the value of α is $+41°$, and that when it is acting north the value of α is $-41°$, which in accordance with the adopted notation means that this field enters the northern hemisphere nearly parallel to the earth's axis of rotation, having been diverted from the direction perpendicular to the plane of the ecliptic by the rotation of the earth on its axis, the other component having been screened off or used up in connection with the earth's permanent magnetism, which may be the true origin of the force that gives it a slow secular variation.

The study of the forces σ and ς, when collected on our period, gives two curves similar to each other in all respects throughout their extent, thus proving that the angle α is constant, or that these forces come from a field having a fixed direction. The first two curves of the accompanying diagram [Plate IV] give the component σ and the resultant ς. The mean curve, dotted line, is a single periodic curve, with minimum on the ninth day and maximum on the twentieth day, with a small secondary variation on the twenty-fifth to the twenty-seventh days. Superposed upon this is

another curve, with four maxima, on the first, ninth, fifteenth, and twenty-first days, four minima, on the seventh, twelfth, eighteenth, and twenty-fourth days, with two small secondary inflexions on the fifth, sixth, and twenty-fifth to the twenty-sixth days. If the intensity of the magnetic field along the equator of greatest intensity of the earth be reduced to a curve of equal extent and amplitude, it is seen to agree closely with this mean curve in shape and inflexions. This terrestrial curve is related to the North American, the Siberian, the Australian, and possibly the South Pacific poles of intensity, and they can be located in longitude relatively to the curve just described. Now, if the magnetic curve ς be wrapped about a central pole A, corresponding to the base line of abscissas, it is found that the mean curve has a peculiar situation. It can be represented by an arc of a circle struck from a center B, while only two short arcs, from the fifteenth to the seventeenth days and the twenty-fifth to the second days, lie outside of it, and these can be covered by an arc from a center C and a center D, respectively. The position of the centers A, B, C, D, are as follows:

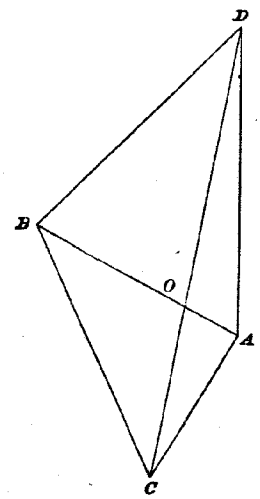


FIG. 23.—Diagram of centers of magnetic curves.

As stated these centers or poles were each found by trial from the curve that depends absolutely upon observations at the earth. Let it be noted that the angle $B\ A\ C = 90°$ and the angle $B\ O\ C = 102°$, precisely, the latter again agreeing with the coronal result, and the outcome of the β-reversals. If now A, B, C, D are taken as magnetic poles, it is found that the diagonals and sides of the quadrilateral are strictly related to the crests and hollows of the curves σ and ς, $A\ C$ extended meeting the maxima of the second and sixteenth days, and $A\ B$ the maxima of the ninth and twenty-first days, while the other lines all strike into the peculiar curvatures of the superposed or enwrapped curve. This seems to indicate that the sun has four poles of intensity arranged in the order of magnitude—A the strongest, B the next, C the next, and D the weakest, just as the earth has, and that C corresponds to the south pole, B to the north pole of the corona, my epoch being the time when the pole C is opposite the earth. When the field reverses between C and B, the impulse comes to the earth generally from north to the south, and by our conception of the normal field it repels an isolated positive magnetic pole southward, and hence the north coronal pole of the sun is probably positive, the south pole being negative, a conclusion also reached in other ways. Hence by similarities, the south coronal pole C is negative, and corresponds to the North American pole; the north coronal pole B is positive and corresponds to the Australian pole; the pole D is negative and is like the Siberian pole. Furthermore, if the lines of the quadrilateral are extended into space, and if through each pole sets of three perpendiculars are dropped upon the opposite sides and diagonal, respectively, and likewise extended to meet the first lines, and if the points of intersection be connected by a curve passing through them which may be regarded as a locus of intensity, the curve thus formed is similar to the curves σ and ς in all their variations, but smaller, so that at least they may be said to belong to the same family. This also becomes a

powerful argument in favor of our fundamental conception regarding the magnetic constitution of the sun.

Next the record of sun-spot areas as given in the Greenwich volumes were arranged on this period for 1886, 1887, the means of the twenty-seven periods taken and the variations from the general mean, plotted as a curve, after reducing to the same amplitude. This curve agrees throughout with the mean curve of the resultant ς, as displayed in the diagram. It shows that the maximum of sun spots occurs along the axis A B and opposite the negative pole A, the minimum occurring opposite the pole B, but chiefly it shows that the sun spots are distributed on the surface of the sun in localities, in conformity with and in dependence upon the magnetic system of the sun.

I will briefly sum up a long investigation on the magnetic storms or disturbances at the earth, by saying that they all come in along the coronal field perpendicular to the ecliptic and are therefore dependent upon sudden fluctuations in the magnetic system of the solar nucleus. It results from the values of the resultant ς that its mean at the earth is 0.000115 C. G. S., and that in severe magnetic storms it rises to 0.002500 C. G. S. This implies a normal intensity of magnetization of the sun of 269 C. G. S., which rises to 5850. C. G. S. in the case of great storms. Steel when magnetized to its maximum has an intensity of 1390 C. G. S., so that by comparison with steel the sun's forces of magnetism require no strain upon our judgment, as to their credibility. From these data the conditions of the field in the interior of the sun, and exterior to it throughout the planetary system, can be readily computed, so that the traces of our magnetic observatories give us the pulse beat of the magnetic circulation in every part of the the solar system, a fact of profound interest and importance to students of physical science.

THE RADIANT FIELD.

As already described, besides the coronal field perpendicular to the plane of the ecliptic near the earth, there is another field, in the plane of the ecliptic, called the radiant field, agreeing with the direction of the ether energy of light and heat emitted from the sun. It originates in the electric discharges between the atoms of the photosphere, is electro-magnetic, is propagated with the velocity of light, and in the atmosphere of the earth and in the earth itself undergoes a complex series of transformations of energy, by which the short rapid waves are lengthened or destroyed, the work thus used up appearing in transformations of physical phenomena. The proof for the existence of this field consists in tracing out the effect produced upon the normal terrestrial magnetic field, in the diurnal periodic variations. A similar treatment of the residulas, which arise by comparing the monthly mean with the hourly values, gives the vectors or the disturbing forces due to the radiant field. For this purpose such magnetic stations, thirty in number, distributed widely over the earth, from Kingua Fjord to Hobarton, as have hourly observations extending throughout at least one year, have been completely reduced and the results put into intelligible shape. The final deflecting forces have been collected month by month, summed by six months, those in which the sun is north of the equator forming one group, and those in which the sun is south forming the other group, and finally the mean for the year taken for σ, ς, α, β. Then these annual forces, which represent the mean condition of the field when the sun is on the equator, each individual result being the mean of 365 separate observations, is transferred to a 30-inch globe by means of wires set in at the proper angles α, , and of such length that 1 m m. represents 0.00001 C. G. S. As the earth revolves the stations are carried through the field and at each local hour, relatively to the field, the position of the deflecting force is recorded.

The finally constructed field surrounding the earth is exceedingly complex, and a description of it here is quite impossible, though some of the leading features of it may be mentioned. The fundamental law of the entry and departure of the forces from the earth conforms to the tangent law of magnetic refraction, the index being about 1.25. In the northern hemisphere the field points towards the sun, in the southern away from the sun, so that the earth is in a magnetic couple, the radiant field showing a potential fall from the sun outwards. The plane of symmetry of the field is not on the meridian of the sun, but it is thrown westward, by the rotation of the earth, through an angle of about 23° in the northern and 15° in the southern hemisphere. The field shows a series of five parts, gradually changing within their areas, but discontinuous as

to each other. These are the polar field, the north-mid-latitude field, the equatorial field, the south-mid-latitude field, and the south-polar field. The polar field is three or four times as strong as the others, in which the forces concentrate in two polar points and act along the meridians; the northern field points across the meridians, the discontinuity being along the belt of the auroral maximum of frequency; the equatorial field points north or south, and the southern field across the meridians, away from the sun. The strength of the radiant field is about 0.000135 C. G. S., being a little greater than the coronal field. A complete discussion of the numerous physical problems arising from these facts can not now be attempted, but great light is thrown upon many of the observed physical phenomena that have been perplexing to scientific research. It seems especially to confirm in a marked degree the theory of Maxwell regarding the electro-magnetic constitution of the radiant ether waves.

THE APPLICATION OF THESE TWO FIELDS TO THE PROBLEMS OF METEOROLOGY.

I can not here undertake to elaborate the whole of the bearing of these two great physical fields of force upon the phenomena of the atmosphere, as it opens up a vast region of study. Only the facts will now be stated. On applying the coronal period with its dates to the variations of atmospheric pressure, the temperature, the relative humidity, the atmospheric electric potential fall, and the recurrency of stormy or quiet weather conditions, for the years 1886, 1887, at the same stations for which the magnetic observations were discussed, there results a set of curves of similar form, as shown in the diagram, to those derived from the variations of the magnetic field and the mean sun-spot curve. There are the same number of maxima and minima, and they occur on the same days of the period throughout. The drawing appended to this report is intended merely to show that the maxima, the minima, and the nodes of the several curves fall on about the same days of the period. A complete exposition of the data is impossible in this connection, and therefore no values are assigned to the ordinates of the several curves. The conclusion is unavoidable that all these meteorological elements of the weather are direct functions of the solar magnetic field, and being dependent upon it for variations of intensity and for reversals in the impressed forces, they are subject to a periodic law of prediction. This has been verified in numberless ways, extending back and forth for fifteen years, so that this statement is made with confidence. Since these impressed forces are large relatively to the inertia of the atmosphere, it will be seen that the thermodynamic mechanics, though still playing an important part in the general distribution of the atmosphere, is yet supplemented by the impressed energy of the polar radiant field of force. It is evident that these conclusions have not been reached heretofore owing to the pernicious use of the calendar months for periods, by which the variations of the true period are totally obscured when summed together in a periodic recurrence. Hence the primary reform consists in adjusting the computations of meteorology to the coronal period.

I have not been able to carrry the investigations much beyond this point at the time of writing this report, but there seems to be very strong evidence for seeing in the semi-diurnal range of the barometer a close correspondence, if not dependence, upon the distribution of the radiant field. If this proves to be the case, then we shall look for the same function in the temperature, relative humidity, and atmospheric electricity, with a corresponding contribution to weather phenomena. Since the coronal magnetic field yields its part to weather changes, it is not unnatural to look for the same in the radiant field. Still the two fields have different fundamental properties, the former being a rotating or vortical field and the latter an alternating field, so that the resulting phenomena may be unlike. It seems to me that the grand problem of the meteorologist is that of atmospheric absorption, a complete account of the transformation of the ether-waves from the frequency and amplitude they have on entering the atmosphere to their final decay, disintegration, and distribution in other forms of energy. The only path for such a programme is through the study of electricity and magnetism, in correlation with the other forces, especially atomic and molecular, that are the peculiar province of the experimental physicist.

U. S. WEATHER BUREAU,
Washington, D. C., March 10, 1893.

REPORT ON CONDENSATION OF ATMOSPHERIC MOISTURE.

By CARL BARUS, *Professor of Meteorology.*

My appointment in the United States Weather Bureau began with the 7th of September, 1892. At the outset considerable work had to be done, with the object of getting the physical laboratory, which passed into our hands through the courtesy of the director of the Geological Survey, Maj. J. W. Powell, and of Mr. Clarence King, in readiness for meteorological work. Fortunately this could be done at the expense of a minimum of time and labor, for the old quarters of the laboratory in the National Museum were not immediately to be vacated. Our thanks are, therefore, due to the secretary of the Smithsonian Institution, Prof. S. P. Langley, and to Mr. G. Browne Goode, of the National Museum, as well as to Maj. Powell and Mr. King, for the material assistance which they have so kindly tendered us, for it was thus possible to launch the new work of the Bureau unobtrusively and almost without expense.

(1) In defining my duties I may say that the physical problems connected with the condensation of water from moist air was first considered. The agencies which lead to the formation of rain can not be said to be accurately and fully known, and to some extent the raindrop is as yet a physical mystery—remembering always that vague or loosely general inferences are of no professional value. The chief of the Weather Bureau has been pleased to leave me at liberty as regards methods of work and modes of attack, and I have therefore endeavored to look at phenomena involving a change of the physical state of aggregation from the broad points of view suggested by the epoch-making work of Van't Hoff, Arrhenius, Ostwald, and others. I have considered condensation in general, taking into account both the change of physical state from solid to liquid, as well as the more specific case from liquid to gas; and this no matter whether the active agent is heat (fusion, boiling, evaporation) or solution (liquid or gaseous). It is in keeping with the modern theories of solution just specified to group all these phenomena under a common head, a method which has already been applied with success by Blümcke.

With the physics of the solidification of a liquid by pressure at any given temperature, or by temperature at any given pressure, my earlier work on the Geological Survey had already made me familiar; and as the apparatus previously used was still available, I commenced my new work by investigating the conditions under which a solid is precipitated from solution. This research is finished, at least as far as I can now venture to enter into it. The chief feature of the results is the occurrence of a pronounced volume lag, in virtue of which solution at a given temperature takes place at a lower pressure than the corresponding precipitation. Similarly solution at a given pressure takes place at a higher temperature than the precipitation, though these effects are not always so easily observed. Moreover, when precipitation does occur from solution, it is partial. In this respect the present behavior differs in a measure from the corresponding case of freezing from fusion. In other words, the solution phenomenon contains a clear-cut case of chemical equilibrium, and its close relation to the meteorological problem is therefore already manifest. For in both

cases the tendency to supersaturation and the partial precipitation of the dissolved substance (water vapor in air in the latter case) are marked features.

(2) Returning from this digression to the subject chiefly at issue, it is clear that the method applicable to the study of the condensation from vapor to liquid must be so chosen as to trace the progress of the experiment at each moment throughout the whole course of the change of physical state and even beyond it. Only by producing *instantaneous* condensations can the conditions of a free atmosphere be simulated and the phenomenon be observed before the surface forces at the walls of the vessel have time to act. As a rule, when condensation takes place more or less gradually, in a closed receptacle within which temperatures and pressures are suitably varied, it is induced either by the solid nuclei contained within the space or at the solid surfaces which bound it. At least the evidence in favor of the rare case of non-nuclear condensation can not, as yet, be unreservedly admitted.

Hence it is necessary to obtain some means for discriminating instantly between dissolved vapor and a collection of indefinitely small water globules freely suspended in air. A suitable criterion for this purpose is given by the colors of cloudy condensation, a phenomenon perhaps first definitely reproduced by Forbes, but which has since received marked attention at the hands of Kiessling, R. v. Helmholtz, Aitken, Bidwell, and others. But the color effects obtained by these observers are unfortunately elusive, and their methods of work scarcely suitable for my purposes. Much of my time has therefore been devoted to the construction of forms of apparatus for producing the colors at will; to interpreting them as cases of optical inference in terms of the size of the active water globules; and, in general, to making these phenomena directly tributary to the condensation problem in question. The function of atmospheric dust in producing condensation in supersaturated air enters fundamentally into the subject, and I have considered it in detail, obtaining a method by which the dust contents of normal air may be uniformly increased. Finally the growth of the water globule, both at its inception and its continued growth when placed in stated conditions, were made the subjects of experiment, thus far, however, chiefly with a view to perfecting the method.

Surveying the results of this work as a whole, I believe that they show that a solution of the condensation problem may be regarded as hopeful for a certain class of water globules ranging in size from somewhat less than the sodium wave length of light to about one-tenth of this magnitude. The growth of the globule from the latter to the former of these dimensions can be controlled and studied. For particles smaller and particles larger than the limits given the method fails. Inasmuch, however, as the larger particles are just becoming microscopically measurable, the problem begins to deal with something decidedly more tangible.

(3) The best method of obtaining a continuous supply of identically small water globules by instantaneous condensation seems to be the steam jet. The supersaturated gas jet, though often very useful, is far less efficient. The steam jet has the additional property that, within a certain range of values, the common size of the condensed particles is variable at pleasure. In the present work, therefore, the steam jet is to be used as an instrument of research, as it were, and thus it is clearly necessary to make detailed measurements of the distribution of temperature throughout the length and breadth of the jet, for all temperatures of the air into which it is discharged and for all admissible values of the actuating steam pressures. I have also completed this investigation, so far as the effect of the actuating pressure on the longitudinal and radial thermal topography of the jet is concerned, and have succeeded in expressing these distributions quantitatively. The results, which are necessarily of a somewhat complex mathematical character, must be omitted here. The effect of the final variable, viz, the temperature of the medium into which the discharge takes place, I do not yet fully understand. This work will necessarily take some time, for the seasonal variations or atmospheric temperature must be taken advantage of. My results seem to show that work done in an (unequally) heated room is liable to lead to errors.

There is an allied question which has also been left for further investigation, namely, the effect on the jet of the state of saturation of the air. Inasmuch as the jet is a region within which condensation of water vapor takes place in the inner parts while evaporation continually goes on near and at the boundary, the humidity of the atmosphere can not be without influence on the phenomenon as a whole. The experiments which I have thus far brought to bear on the two effects

last mentioned were made by allowing the jet to discharge into tubes so circumstanced that the temperature of the inflowing air could be regulated within certain limits. The distribution thus found along the axis of the tube is (as one might expect) quite different from the distribution for the case of the free jet, and I am now engaged in finding the exact expression for the difference in the two cases, seeing that the free jet is a special case of the confined jet. A few words on the appearance of the jet near the nozzle may be added in conclusion. This is found to be strikingly like the Bunsen flame, inasmuch as a mantel of condensation or of combustion, respectively, surrounds a conoidal region of uncondensed vapor or of unburnt gas. Without, therefore, proceeding to details, I may merely point out that just as in the Bunsen flame, the contours are a locus indicating the speed of the chemical reaction, so, in the case of the steam jet, corresponding parts show the speed at which condensation takes place. Important indications as to changes in the supersaturation of the parts of the jet in question are thus available.

(4) Incidentally I have been able to find a scale for the dust contents of the air in terms of the actuating steam pressure necessary to produce a given condensation color at a given temperature, when the discharge takes place, into a suitable (color) tube. This pressure varies in marked degree (at 30° C., from about 40 cen. of mercury to zero) in proportion as the air becomes more and more dusty. To obviate the need of color discrimination, all adjustments are made with reference to the extinction of color, or with reference to the passage of the blue violet into the opaque field of the apparatus. In this way the attainable accuracy is much increased. The effect of temperature (which I have worked out in detail) is such that its influence will not be appreciable if the observations are made when the temperature of the inflowing air is maintained in the neighborhood of 30° C. I have been making observations with this apparatus for upwards of two months.

A bulletin containing a detailed account of all the subjects discussed in the foregoing paragraphs will be in the press before the present résumé is issued.

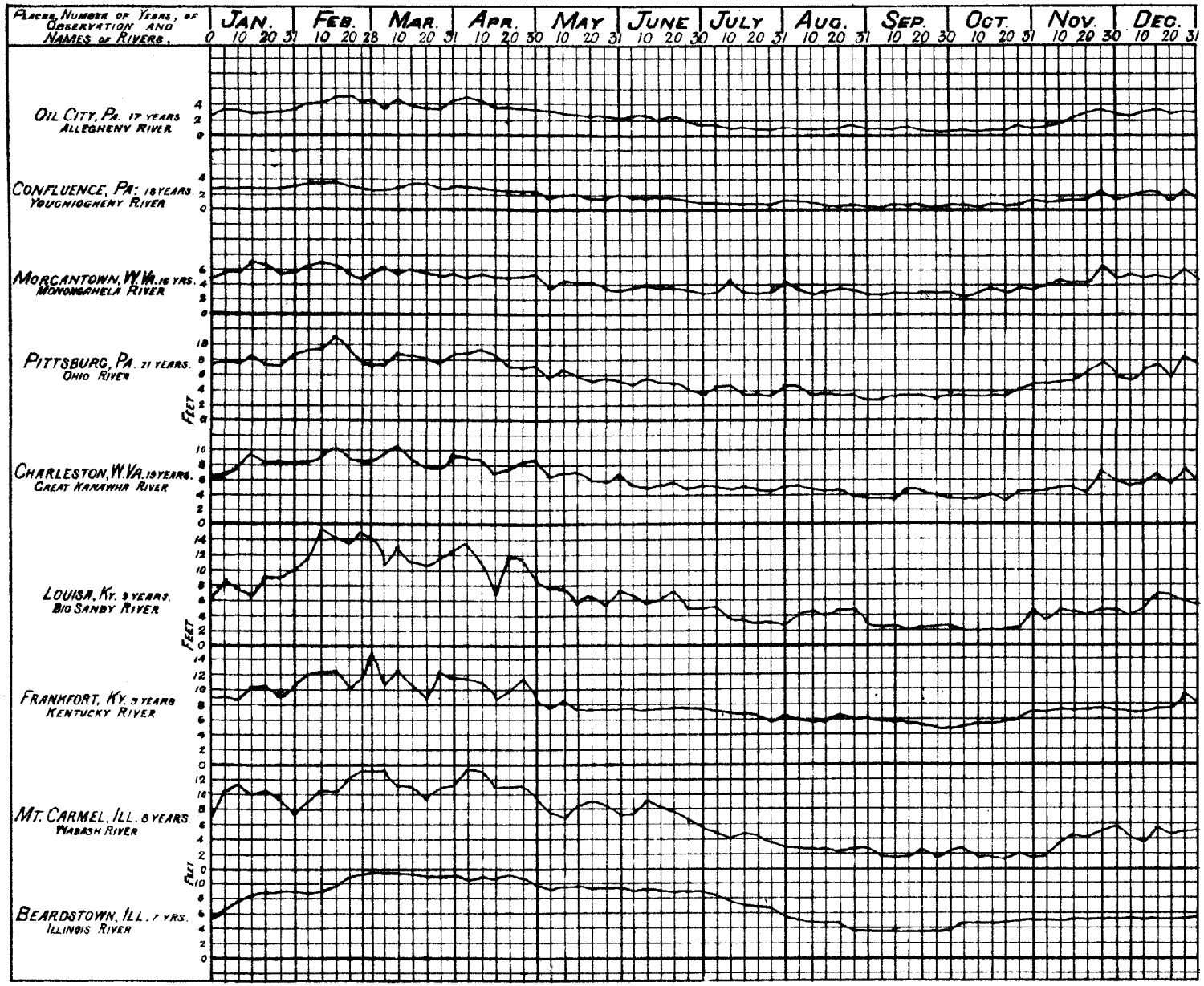
(5) As regards work planned out for the immediate future, the attempt to reach the meteorology of the upper strata of the atmosphere by means of captive balloons holds a prominent place. The laboratory problem involved here is the construction of some form of balloon which is both cheap and efficient, so that loss of or accident to the same may be of little consequence. Among other data it is hoped that some further knowledge may be obtained on the electric potential of the atmosphere—a line of research already cultivated with success by Mr. Alexander McAdie, of this Bureau. Exner's expression of the normal rate of electric variation as a simple hyperbolic function of the humidity, and Elster and Geitel's allied value of the same rate in terms of the intensity of the ultraviolet solar radiation seem to have given some basis to the v. Bezold-Arrhenius theory of atmospheric electricity. In relation to my own work, the question is thus left open whether in the case of cloudy condensation the nuclei are really dust or some more or less disintegrable chemical constituent of the atmosphere.

U. S. WEATHER BUREAU,

Washington, D. C., April 15, 1893.

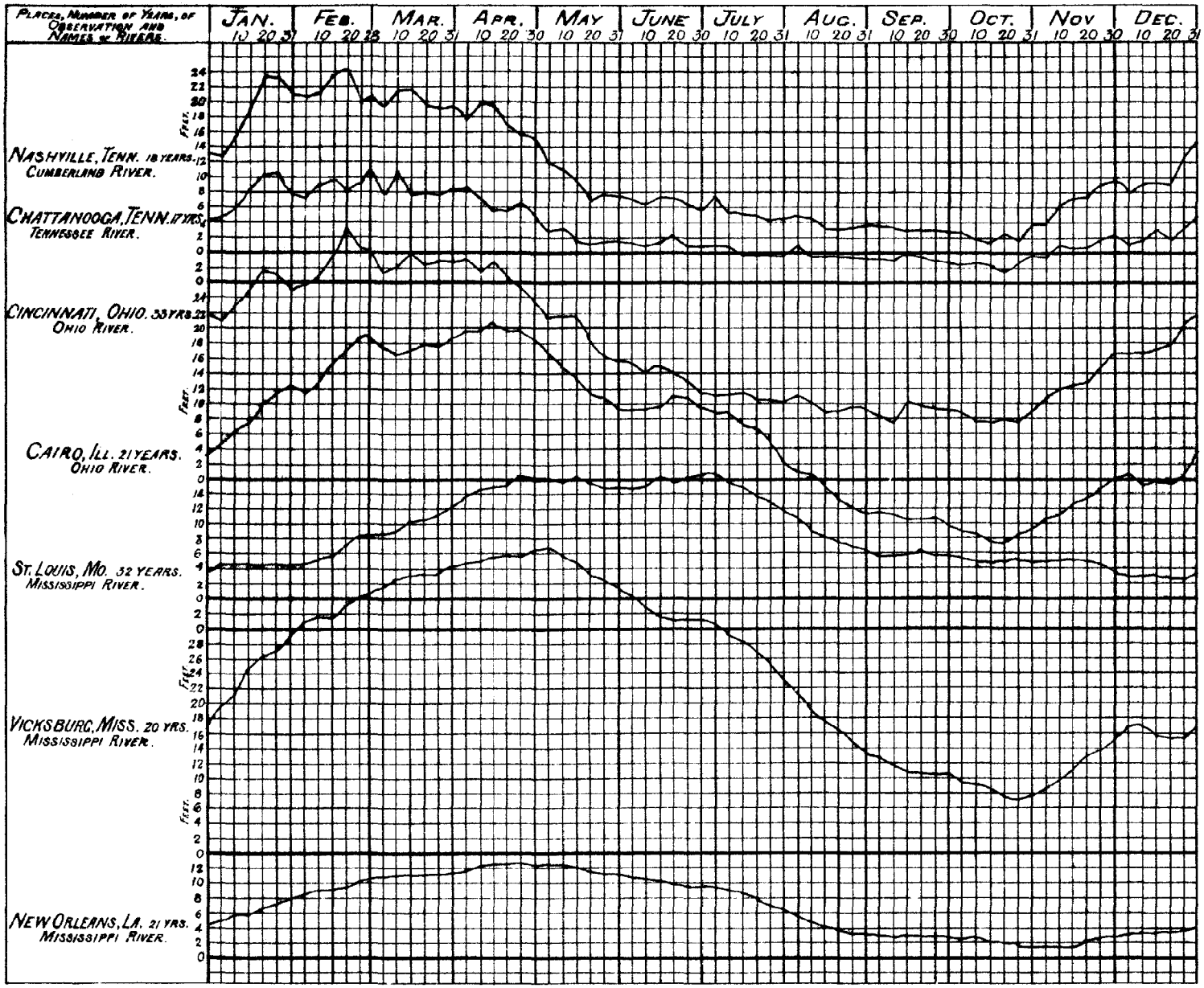
COMPOSITE HYDROGRAPHS.

Plate I



COMPOSITE HYDROGRAPHS.

Plate II



COMPOSITE HYDROGRAPHS.

Plate III

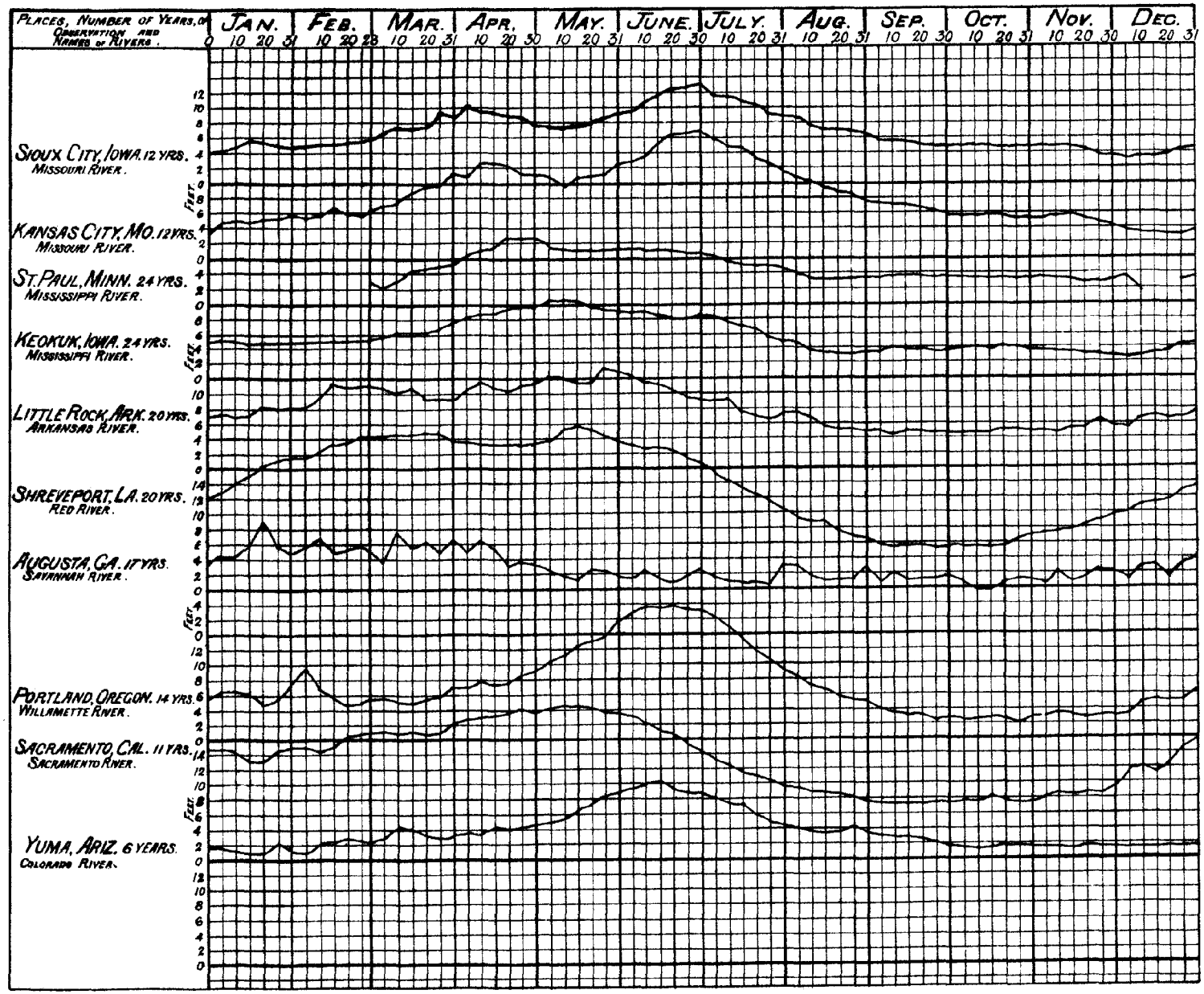
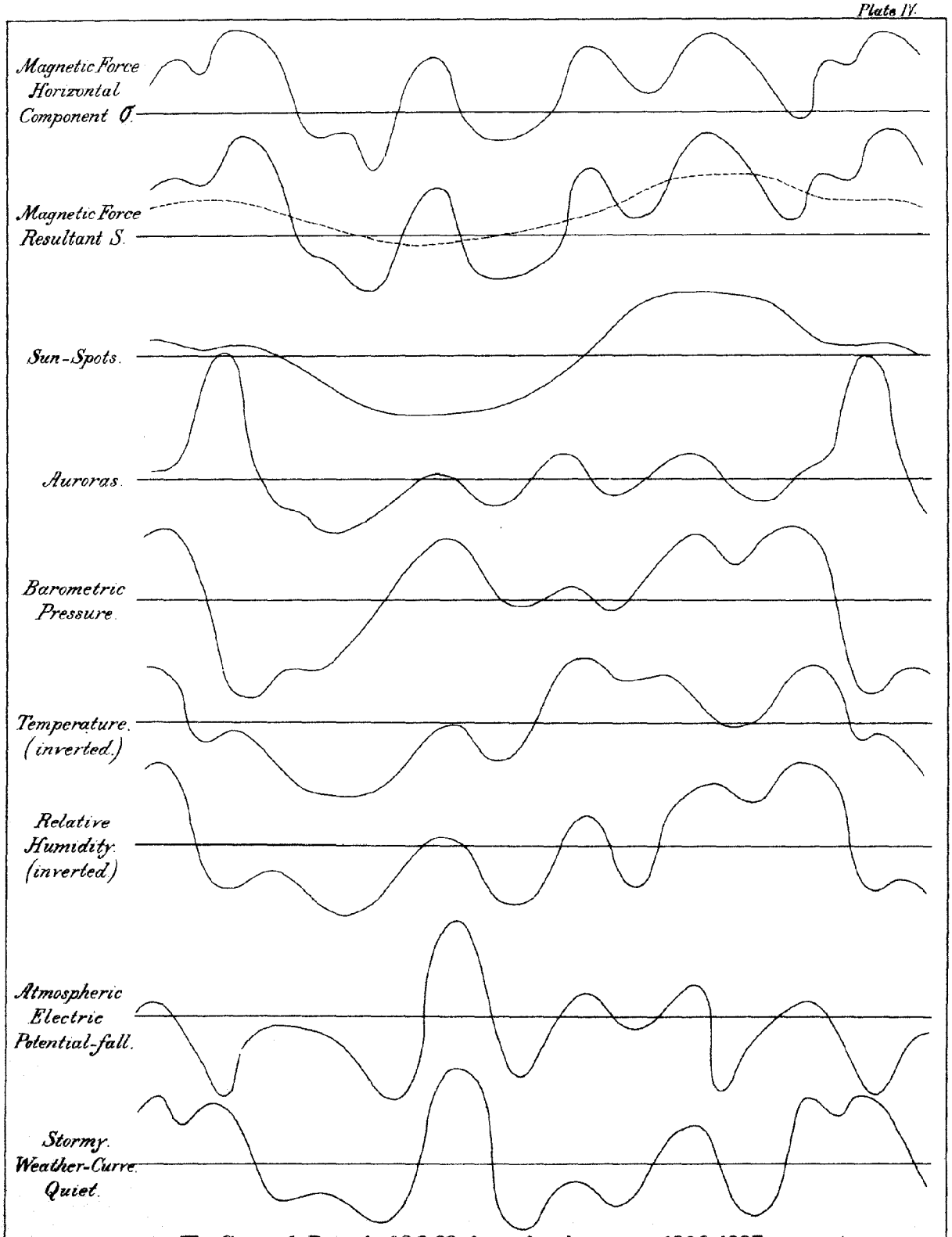


Plate IV.



The Coronal Period of 26.68 days, for the years, 1886, 1887.

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