

## PART II.

# METEOROLOGY

### LOCATION OF METEOROLOGICAL OBSERVATORY.

Latitude:  $38^{\circ} 38' 17''$  north.

Longitude:  $90^{\circ} 13' 58''.5$  west.

Elevation: 578 ft. above sea level.

Wind Vane: 94 ft. above ground.

Anemometer: 96 ft. above ground.

Top of Rain Gauge: 80 ft. above ground.

Floor of Thermometer Shelter: 10 ft. above roof and 86 ft. above ground.

Explanation to Meteorological Summaries.

Atmospheric Pressure in inches reduced to mean sea level.

Mean Temperature:  $\frac{\text{Maximum} + \text{Minimum}}{2}$

Mean Vapor Pressure and Mean Relative Humidity: The mean of the two daily readings of the various thermometers reduced according to the method used by the U. S. Weather Bureau.

### *Equipment.*

The present equipment of the observatory consists of the following instruments:

- 1.) Fortin Barometers.
- 2.) Barograph, Richard Bros. pattern.
- 3.) Thermograph, Richard Bros. pattern.
- 4.) Maximum and Minimum Thermometers.
- 5.) Whirling Psychrometer.
- 6.) Hygrograph.
- 7.) Thermograph.
- 8.) Tipping Bucket Rain Gauge.
- 9.) Snow Gauge.
- 10.) Electrical Sunshine Recorder.
- 11.) Jordan's Photographic Sunshine Recorder.
- 12.) Wind Vane.
- 13.) Anemometer (Robinson).
- 14.) Meteorograph (Quadruple Register).
- 15.) Ceraunograph (Lightning Recorder).
- 16.) Ceraunophone.
- 17.) Thermostatic and Temperature Alarm.
- 18.) Ground Thermometers.
- 19.) Several Standard Thermometers.
- 20.) Telethermoscope.
- 21.) A Complete Receiving and Transmitting Set for Wireless Telegraphy.

## THE WEATHER OF 1913.

The year 1913 was remarkable in St. Louis and its vicinity for the prevailing high temperatures and unusually dry weather. The summer months of June, July and August were among the warmest and driest recorded during 76 years. Fifty-five of the 92 days showed a maximum temperature of 90 degrees or above, and on eight of these, the thermometer registered 100 degrees or above. Beginning with June 12 till September 13 the temperature never went below 60 degrees. The average maximum for the season was 91 degrees, and the average minimum 70 degrees.

The rainfall of the three months was distributed over only 17 days with a total of 9.42 in., which is two inches less than the usual amount, and the most of this fell during very short periods. June showed 13 consecutive days without rain; another dry period lasted from July 28th till August 12; the longest period of drought extended from August 22 to September 7th.

A comparison of ground temperatures for the winters of 1912 and 1913 is significant of the mildness of the latter season. The lowest ground temperature of 1913 was 49° as compared with 38° in 1912, the temperature being taken 5 ft. below the surface. The difference of 11 degrees in ground temperatures and the fact that the average of the present winter was 6 degrees above the normal illustrates the mildness of the season.

## JANUARY.

The year opened with temperature reading above the normal; the mean for the first week being 32.5 and for the entire month of January 34°, four degrees above the normal for this month. The lowest temperature, 7°, occurred on the 12th, and the highest, 63°, was registered on the 19th. The precipitation, 4.89 in. was well above the normal of 2.27 in. The precipitation of snow, however, 1.1 in., was unusually slight, compared both with the normal and the amount, 19 in., for the corresponding period in 1912. Sleet occurred on four days; heavy fog on seven days, and an unseasonable thunderstorm on the 7th of the month. The average daily sunshine recorded was 37 per cent.

## FEBRUARY.

February opened with a temperature of 4°, the lowest mark reached during the year, and for seven successive days the mercury remained below the freezing point. This cold wave was followed by moderate high temperature until the 18th, which recorded a daily range of 27°, the greatest of the month, and a maximum temperature of 68°, the highest for this day since 1836. The mean temperature of the month was 30.3°.

The precipitation for the month, including melted snow, totalled 1.40 in. less than half the normal; 7 inches of snow were registered as against 34 inches in February 1912.

Sleet occurred on three days, dense fog on three days, and a thunderstorm on the 21st of the month. The average daily sunshine recorded was 50 per cent, with 12 clear, 12 cloudy and 4 partly cloudy days.

## MARCH.

March opened with a cold wave reaching a minimum of 4° on the 2nd, the equal of the lowest temperature of the year already recorded on February 1st. This cold wave was of short duration and the mean temperature of the month shows 22 days above freezing point. The highest temperature, 75°, was recorded on the 30th. The mean temperature for the month, 42°, was two degrees below the normal.

The month was remarkable for the amount of recorded precipitation, 8.83 in. This not only exceeded the normal, 3.43, but surpassed by more than 3 in. the record of any month in the year. The total amount of unmelted snow 10.8 in. was in excess of that recorded for this month in 75 years, the previous high figure being 8.61 in. for 1865. On the 24th of the month 3.75 in. of rain fell within the space of 24 hours.

There were 5 thunderstorms, two hail storms and dense fog occurred on two days. The average daily sunshine was 50 per cent, with 12 clear, 13 cloudy and 6 partly cloudy days.

## APRIL.

The month of April was mild and pleasant with no extreme temperatures, no killing frosts and no other remarkable phenomena. The mean temperature, 56° was exactly normal, and the precipitation 3.75 in. practically so. The lowest temperature was 38° and the highest 84°, the greatest daily range of 30° occurring on the 17th. The sunshine record of 64 per cent was remarkably high;—the number of clear, cloudy and partly cloudy days being 18, 10 and 2 respectively. A genuine "Spring Month."

## MAY.

The mean temperature for this month was 67.3°; the lowest point 42° was recorded on the 10th, the highest 94° on the 30th and the greatest range of 30° on the 28th.

Indications of the drought, which was to make this year disastrous to the farming interest of the middle West, began to show themselves in May. The total precipitation of 1.42 in. fell far below 4.59 in., the normal for 75 years. The first 25 days showed a precipitation of but 0.75 in., the lowest recorded for this period during the present year.

The average daily sunshine was 66 per cent, with 16 clear and 9 partly cloudy days.

## JUNE.

Unfavorable weather conditions continued during the present month, with temperature above and precipitation below the normal. On 16 days of the month the thermometer registered 90° or above, and on 10 of these days the mercury reached 95° or more. The maximum 99° was reached twice during the month, on the 18th and the 29th. The mean temperature of 78° was 3 degrees above the normal. For the last sixteen days of this period the average maximum temperature reading stood at 94.6°.

The total precipitation distributed over but 4 days amounted to 3.23 in. as against the normal for the month of 4.81 in.

The average daily sunshine was 75 per cent, with 19 clear, 4 cloudy and 7 partly cloudy days. A hail storm occurred on the 22nd.

## JULY.

Assisted by prevailing North winds and consequent excessive rains, July opened with a decided fall from the prevailing high temperatures of the last week of June. But this welcome relief was of short duration. Fifteen days of the month reached 90° or above and 100° was reached on 3 days, the 17th, 18th, and 29th.

The excessive rainfall of July 1st, 2.78 in., of which almost 2 in. fell within 20 minutes, constituted over one-half the precipitation for the month. During the remaining days of July the precipitation was but 1.76 in.

The normal for the month during the past 77 years was 3.81 in.

The sunshine record showed 72 per cent, with 17 clear, 3 cloudy and 11 partly cloudy days.

11 thunderstorms and 1 hail storm were observed during this time.

## AUGUST.

This month with an average daily maximum of 93.6° and a mean of 82.8° was the hottest August since 1900, and one of the warmest ever recorded in the vicinity of St. Louis. The highest mark of the month and of the year, 102° was reached on the 6th. On 23 days a maximum temperature of 90° or higher was recorded, and on 5 of these days 100° or more were registered.

The precipitation was 1.65 just one half of the normal for 76 years. This slight rainfall was distributed over but four days. The combination of slight precipitation and excessive temperature proved disastrous not only in the vicinity of St. Louis but throughout the entire Middle West. All late crops were destroyed, cattle perished and this entire section of the country was a blazing furnace without periods of even temporary relief.

The average daily sunshine was 73 per cent, with 18 clear, 3 cloudy and 10 partly cloudy days.

## SEPTEMBER.

The crest of the intolerable hot wave was reached during the first four days of September which recorded an average maximum of 99.8°. During the succeeding week the heat wave gradually receded, and on the 12th of the month a maximum of 67° marked the termination of the intolerable temperature of the Summer of 1913. During the latter half of the month temperatures were well below the normal and the average for the 30 days was 70°. A minimum of 40° was recorded on the 22nd.

The high precipitation of 5.37 in. distributed over 13 days was for the most part too late to be of advantage to the farming interests of the section.

The average daily sunshine was 57 per cent, with 13 clear, 10 cloudy and 7 partly cloudy days.

## OCTOBER.

October presents no unusual weather conditions beyond an excessive rainfall of 5.02 in. and a Killing Frost, the first of the season, on the 28th. The mean temperature of the month was 55° with a maximum of 82° on the 6th and minimum of 27° on the 29th.

The average daily sunshine was 53 per cent, with 12 clear, 13 cloudy and 6 partly cloudy days.

## NOVEMBER.

The month of November was unusually warm, having a mean temperature of 52°, 9 degrees above the normal for 77 years. The maximum was reached on the 21st with a temperature of 76°; while the minimum of 26° was reached on the 11th.

The precipitation 3.23 in., distributed over 10 days, was somewhat in excess of the normal for the month of 2.95 in.

The average daily sunshine, 36 per cent, was unusually low, with 6 clear, 16 cloudy and 8 partly cloudy days.

## DECEMBER.

The mean temperature for this month was 39.7° with a maximum of 60° on the 2nd and the 6th, and a minimum of 22° recorded on the 8th.

The precipitation, including melted snow, aggregated 2.29 in. slightly below the normal of 2.51 in.

The month was remarkable only for its excessive cloudiness, the sun was invisible for the last 10 consecutive days. The average daily sunshine was but 31 per cent, or 93 hours out of the possible 297. There were 7 clear, 3 partly cloudy and 21 cloudy days. Fog was recorded on four days.

JANUARY 1918											
Pressure.	Temperature.		Moisture.		Wind.		Precip- itation.		Clouds.		Miscellaneous Phenomena.
	7.A.M.	7.P.M.	7.A.M.	7.P.M.	7.A.M.	7.P.M.	7.A.M.	7.P.M.	7.A.M.	7.P.M.	
Dates.	7.A.M.	7.P.M.	7.A.M.	7.P.M.	7.A.M.	7.P.M.	7.A.M.	7.P.M.	7.A.M.	7.P.M.	Amount.
			Kndd.								Kndd.
80.11	80.01	80.01	49.°	54.°	32.°	64.°	11.00	0.00	10 S. Un.	10 S. Un.	80.
82.29	82.29	82.29	36.3	44.4	26.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	81.
84.29	84.29	84.29	35.8	42.8	25.8	58.1	11.00	0.00	10 S. Un.	10 S. Un.	82.
86.30	86.30	86.30	35.3	42.3	25.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	83.
88.30	88.30	88.30	35.8	42.8	25.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	84.
90.30	90.30	90.30	36.3	43.3	26.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	85.
92.30	92.30	92.30	36.8	43.8	26.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	86.
94.30	94.30	94.30	37.3	44.3	27.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	87.
96.30	96.30	96.30	37.8	44.8	27.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	88.
98.30	98.30	98.30	38.3	45.3	27.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	89.
100.30	100.30	100.30	38.8	45.8	27.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	90.
102.30	102.30	102.30	39.3	46.3	28.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	91.
104.30	104.30	104.30	39.8	46.8	28.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	92.
106.30	106.30	106.30	40.3	47.3	29.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	93.
108.30	108.30	108.30	40.8	47.8	29.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	94.
110.30	110.30	110.30	41.3	48.3	30.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	95.
112.30	112.30	112.30	41.8	48.8	30.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	96.
114.30	114.30	114.30	42.3	49.3	31.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	97.
116.30	116.30	116.30	42.8	49.8	31.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	98.
118.30	118.30	118.30	43.3	50.3	32.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	99.
120.30	120.30	120.30	43.8	50.8	32.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	100.
122.30	122.30	122.30	44.3	51.3	33.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	101.
124.30	124.30	124.30	44.8	51.8	33.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	102.
126.30	126.30	126.30	45.3	52.3	34.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	103.
128.30	128.30	128.30	45.8	52.8	34.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	104.
130.30	130.30	130.30	46.3	53.3	35.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	105.
132.30	132.30	132.30	46.8	53.8	35.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	106.
134.30	134.30	134.30	47.3	54.3	36.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	107.
136.30	136.30	136.30	47.8	54.8	36.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	108.
138.30	138.30	138.30	48.3	55.3	37.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	109.
140.30	140.30	140.30	48.8	55.8	37.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	110.
142.30	142.30	142.30	49.3	56.3	38.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	111.
144.30	144.30	144.30	49.8	56.8	38.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	112.
146.30	146.30	146.30	50.3	57.3	39.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	113.
148.30	148.30	148.30	50.8	57.8	39.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	114.
150.30	150.30	150.30	51.3	58.3	40.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	115.
152.30	152.30	152.30	51.8	58.8	40.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	116.
154.30	154.30	154.30	52.3	59.3	41.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	117.
156.30	156.30	156.30	52.8	59.8	41.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	118.
158.30	158.30	158.30	53.3	60.3	42.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	119.
160.30	160.30	160.30	53.8	60.8	42.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	120.
162.30	162.30	162.30	54.3	61.3	43.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	121.
164.30	164.30	164.30	54.8	61.8	43.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	122.
166.30	166.30	166.30	55.3	62.3	44.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	123.
168.30	168.30	168.30	55.8	62.8	44.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	124.
170.30	170.30	170.30	56.3	63.3	45.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	125.
172.30	172.30	172.30	56.8	63.8	45.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	126.
174.30	174.30	174.30	57.3	64.3	46.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	127.
176.30	176.30	176.30	57.8	64.8	46.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	128.
178.30	178.30	178.30	58.3	65.3	47.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	129.
180.30	180.30	180.30	58.8	65.8	47.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	130.
182.30	182.30	182.30	59.3	66.3	48.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	131.
184.30	184.30	184.30	59.8	66.8	48.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	132.
186.30	186.30	186.30	60.3	67.3	49.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	133.
188.30	188.30	188.30	60.8	67.8	49.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	134.
190.30	190.30	190.30	61.3	68.3	50.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	135.
192.30	192.30	192.30	61.8	68.8	50.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	136.
194.30	194.30	194.30	62.3	69.3	51.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	137.
196.30	196.30	196.30	62.8	69.8	51.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	138.
198.30	198.30	198.30	63.3	70.3	52.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	139.
200.30	200.30	200.30	63.8	70.8	52.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	140.
202.30	202.30	202.30	64.3	71.3	53.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	141.
204.30	204.30	204.30	64.8	71.8	53.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	142.
206.30	206.30	206.30	65.3	72.3	54.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	143.
208.30	208.30	208.30	65.8	72.8	54.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	144.
210.30	210.30	210.30	66.3	73.3	55.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	145.
212.30	212.30	212.30	66.8	73.8	55.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	146.
214.30	214.30	214.30	67.3	74.3	56.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	147.
216.30	216.30	216.30	67.8	74.8	56.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	148.
218.30	218.30	218.30	68.3	75.3	57.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	149.
220.30	220.30	220.30	68.8	75.8	57.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	150.
222.30	222.30	222.30	69.3	76.3	58.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	151.
224.30	224.30	224.30	69.8	76.8	58.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	152.
226.30	226.30	226.30	70.3	77.3	59.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	153.
228.30	228.30	228.30	70.8	77.8	59.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	154.
230.30	230.30	230.30	71.3	78.3	60.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	155.
232.30	232.30	232.30	71.8	78.8	60.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	156.
234.30	234.30	234.30	72.3	79.3	61.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	157.
236.30	236.30	236.30	72.8	79.8	61.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	158.
238.30	238.30	238.30	73.3	80.3	62.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	159.
240.30	240.30	240.30	73.8	80.8	62.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	160.
242.30	242.30	242.30	74.3	81.3	63.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	161.
244.30	244.30	244.30	74.8	81.8	63.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	162.
246.30	246.30	246.30	75.3	82.3	64.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	163.
248.30	248.30	248.30	75.8	82.8	64.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	164.
250.30	250.30	250.30	76.3	83.3	65.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	165.
252.30	252.30	252.30	76.8	83.8	65.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	166.
254.30	254.30	254.30	77.3	84.3	66.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	167.
256.30	256.30	256.30	77.8	84.8	66.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	168.
258.30	258.30	258.30	78.3	85.3	67.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	169.
260.30	260.30	260.30	78.8	85.8	67.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	170.
262.30	262.30	262.30	79.3	86.3	68.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	171.
264.30	264.30	264.30	79.8	86.8	68.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	172.
266.30	266.30	266.30	80.3	87.3	69.3	58.3	11.00	0.00	10 S. Un.	10 S. Un.	173.
268.30	268.30	268.30	80.8	87.8	69.8	58.3	11.00	0.00	10 S. Un.	10 S. Un.	174.
270.30	270.30	270.30	81.3	88.3	70.3	58.3</td					



Date	Pressure	Temperature	Moisture	Wind	Precipitation			Clouds.			KIND.	Amount	KIND.	7.A.M.	7.P.M.	Miscellaneous Phenomena.	
					7.A.M.	7.P.M.	7.A.M.	7.P.M.	7.A.M.	7.P.M.							
1	30.14	29.99	61.77	S.E.	58.6%	58.6%	34.6%	34.6%	SE	18.0 mi	Str.	0.00	0.00	0.00	0.00	2 Str.	Str.
2	30.06	29.93	66.77	S.E.	58.6%	58.6%	35.6%	35.6%	SE	19.0 mi	Str.	0.00	0.00	0.00	0.00	2 Str.	Str.
3	30.06	29.92	69.75	S.E.	58.6%	58.6%	36.6%	36.6%	SE	20.0 mi	Str.	0.00	0.00	0.00	0.00	2 Str.	Str.
4	30.05	30.07	64.72	S.E.	58.6%	58.6%	37.6%	37.6%	SE	21.0 mi	Str.	0.00	0.00	0.00	0.00	2 Str.	Str.
5	30.11	30.05	65.74	S.E.	58.6%	58.6%	38.6%	38.6%	SE	22.0 mi	Str.	0.00	0.00	0.00	0.00	2 Str.	Str.
6	30.06	30.24	53.62	S.E.	68.6%	68.6%	49.6%	49.6%	SE	12.0 mi	12.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
7	30.04	30.12	52.65	S.E.	69.6%	69.6%	54.6%	54.6%	SE	13.0 mi	13.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
8	30.02	30.00	56.73	S.E.	66.6%	66.6%	50.6%	50.6%	SE	14.0 mi	14.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
9	30.02	30.00	60.77	S.E.	56.6%	56.6%	52.6%	52.6%	SE	15.0 mi	15.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
10	30.00	30.00	48.57	S.E.	56.6%	56.6%	53.6%	53.6%	SE	16.0 mi	16.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
11	30.04	30.06	46.60	S.E.	65.6%	65.6%	45.6%	45.6%	SE	17.0 mi	17.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
12	29.94	29.73	52.81	S.E.	70.6%	70.6%	52.6%	52.6%	SE	18.0 mi	18.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
13	29.88	29.79	52.81	S.E.	67.6%	67.6%	55.6%	55.6%	SE	19.0 mi	19.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
14	29.80	29.86	72.78	S.E.	61.6%	61.6%	67.6%	67.6%	SE	20.0 mi	20.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
15	29.78	29.86	61.70	S.E.	67.6%	67.6%	65.6%	65.6%	SE	21.0 mi	21.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
16	29.94	30.87	57.67	S.E.	70.6%	70.6%	55.6%	55.6%	SE	22.0 mi	22.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
17	29.93	30.97	56.71	S.E.	70.6%	70.6%	56.6%	56.6%	SE	23.0 mi	23.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
18	30.03	30.05	60.71	S.E.	70.6%	70.6%	57.6%	57.6%	SE	24.0 mi	24.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
19	30.10	30.90	60.74	S.E.	68.6%	68.6%	55.6%	55.6%	SE	25.0 mi	25.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
20	29.99	29.75	64.74	S.E.	66.6%	66.6%	57.6%	57.6%	SE	26.0 mi	26.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
21	29.78	29.94	73.80	S.E.	77.6%	77.6%	66.6%	66.6%	SE	27.0 mi	27.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
22	30.05	30.04	54.56	S.E.	60.6%	60.6%	54.6%	54.6%	SE	28.0 mi	28.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
23	30.03	30.07	52.59	S.E.	60.6%	60.6%	48.6%	48.6%	SE	29.0 mi	29.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
24	30.12	30.03	52.71	S.E.	76.6%	76.6%	58.6%	58.6%	SE	30.0 mi	30.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
25	30.12	30.95	61.71	S.E.	60.6%	60.6%	54.6%	54.6%	SE	31.0 mi	31.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
26	29.82	29.89	61.63	S.E.	76.6%	76.6%	58.6%	58.6%	SE	32.0 mi	32.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
27	30.03	29.97	53.74	S.E.	68.6%	68.6%	56.6%	56.6%	SE	33.0 mi	33.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
28	30.02	29.97	53.85	S.E.	69.6%	69.6%	57.6%	57.6%	SE	34.0 mi	34.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
29	29.92	29.85	72.77	S.E.	68.6%	68.6%	60.6%	60.6%	SE	35.0 mi	35.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
30	29.92	29.84	53.76	S.E.	76.6%	76.6%	57.6%	57.6%	SE	36.0 mi	36.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
31	29.97	29.87	77.78	S.E.	68.6%	68.6%	67.6%	67.6%	SE	37.0 mi	37.0 mi	0.00	0.00	0.00	0.00	0.00	0.00
	30.04	29.93	61.72	S.E.	77.7%	77.7%	58.6%	58.6%	SE	38.0 mi	38.0 mi	0.00	0.00	0.00	0.00	0.00	0.00

Pressure	Temperature.	July 1913			Precipitation.			Clouds.			Miscellaneous Phenomena.									
		7.A.M.	7.P.M.	7.A.M.	7.P.M.	7.A.M.	7.P.M.	7.A.M.	7.P.M.	7.A.M.	7.P.M.	7.A.M.	7.P.M.							
30.01	29.94	74	87	90	71	68	72	71	50	SW	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.92	75	87	91	72	70	83	87	62	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.90	76	87	92	73	71	84	87	63	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.89	77	87	93	74	72	85	87	64	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.88	78	87	94	75	73	86	87	65	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.87	79	87	95	76	74	87	87	66	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.86	80	87	96	77	75	88	87	67	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.85	81	87	97	78	76	89	87	68	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.84	82	87	98	79	77	90	87	69	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.83	83	87	99	80	78	91	87	70	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.82	84	87	100	81	79	92	87	71	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.81	85	87	101	82	80	93	87	72	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.80	86	87	102	83	81	94	87	73	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.79	87	87	103	84	82	95	87	74	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.78	88	87	104	85	83	96	87	75	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.77	89	87	105	86	84	97	87	76	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.76	90	87	106	87	85	98	87	77	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.75	91	87	107	88	86	99	87	78	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.74	92	87	108	89	87	100	87	79	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.73	93	87	109	90	88	101	87	80	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.72	94	87	110	91	89	102	87	81	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.71	95	87	111	92	90	103	87	82	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.70	96	87	112	93	91	104	87	83	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.69	97	87	113	94	92	105	87	84	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.68	98	87	114	95	93	106	87	85	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.67	99	87	115	96	94	107	87	86	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.66	100	87	116	97	95	108	87	87	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.65	101	87	117	98	96	109	87	88	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.64	102	87	118	99	97	110	87	89	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.63	103	87	119	100	98	111	87	90	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.62	104	87	120	101	99	112	87	91	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.61	105	87	121	102	100	113	87	92	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.60	106	87	122	103	101	114	87	93	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.59	107	87	123	104	102	115	87	94	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.58	108	87	124	105	103	116	87	95	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.57	109	87	125	106	104	117	87	96	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.56	110	87	126	107	105	118	87	97	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.55	111	87	127	108	106	119	87	98	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.54	112	87	128	109	107	120	87	99	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.53	113	87	129	110	108	121	87	100	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.52	114	87	130	111	109	122	87	101	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.51	115	87	131	112	110	123	87	102	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.50	116	87	132	113	111	124	87	103	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.49	117	87	133	114	112	125	87	104	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.48	118	87	134	115	113	126	87	105	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.47	119	87	135	116	114	127	87	106	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.46	120	87	136	117	115	128	87	107	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.45	121	87	137	118	116	129	87	108	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.44	122	87	138	119	117	130	87	109	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.43	123	87	139	120	118	131	87	110	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.42	124	87	140	121	119	132	87	111	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.41	125	87	141	122	120	133	87	112	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.40	126	87	142	123	121	134	87	113	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.39	127	87	143	124	122	135	87	114	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.38	128	87	144	125	123	136	87	115	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.37	129	87	145	126	124	137	87	116	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.36	130	87	146	127	125	138	87	117	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.35	131	87	147	128	126	139	87	118	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.34	132	87	148	129	127	140	87	119	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.33	133	87	149	130	128	141	87	120	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.32	134	87	150	131	129	142	87	121	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.31	135	87	151	132	130	143	87	122	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.30	136	87	152	133	131	144	87	123	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.29	137	87	153	134	132	145	87	124	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.28	138	87	154	135	133	146	87	125	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.27	139	87	155	136	134	147	87	126	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.26	140	87	156	137	135	148	87	127	SE	6°	8°	7	0.98	3.61	4	0.1	5	St. Cu.	Mean.
30.00	29.25	141	87	157	138	136	149	87	128	SE	6°	8°	7	0.98	3.61	4	0			

Date.	7.A.M.	7.P.M.	7.A.M.	7.P.M.	7.A.M.	7.P.M.	7.A.M.	7.P.M.	Clouds		Precipita-	7.A.M.	7.P.M.						
									Moisture	Temperature	Wind.	Wind.	Precipi-	7.A.M.	7.P.M.				
SEPTEMBER 1918.																			
1	30.07	30.02	63	72	78 <sup>4</sup>	60 <sup>8</sup>	58	77	62	58	SE	7	3.87	1.41	6	St. Ch.	4	St. Ch.	Mean.
2	30.08	30.03	49	57 <sup>4</sup>	63 <sup>2</sup>	47 <sup>4</sup>	64	50 <sup>6</sup>	63	63	SE	7	2.16	2.86	5	St. Ch.	4 <sup>5</sup>	St. Ch.	Mean.
MISCELLANEOUS PHENOMENA																			
3	29.99	28.94	71	88	100	77	69	60	67	63	SE	6	0.00	0.00	0	0.00	0.00	0.00	0
4	29.99	28.94	71	88	98	80	70	60	67	61	SE	3	0.00	0.00	0	0.00	0.00	0.00	0
5	29.99	28.94	71	88	98	80	70	60	67	61	SE	3	0.00	0.00	0	0.00	0.00	0.00	0
6	30.04	30.01	74	85	90	75	68	74	70	71	SE	5	0.00	0.00	0	0.00	0.00	0.00	0
7	30.14	30.10	76	84	88	75	69	70	71	70	SE	6	0.00	0.00	0	0.00	0.00	0.00	0
8	30.15	30.13	77	84	91	74	71	72	70	70	SE	6	0.00	0.00	0	0.00	0.00	0.00	0
9	30.20	30.18	68	83	65	64	63	64	65	64	SE	10	0.00	0.00	0	0.00	0.00	0.00	0
10	30.22	30.10	64	84	88	63	63	64	64	64	SE	32	0.00	0.00	0	0.00	0.00	0.00	0
11	30.12	30.08	70	70	88	67	66 <sup>5</sup>	83	68	69	SE	2	0.00	0.00	0	0.00	0.00	0.00	0
12	30.06	30.15	65	65	65	64	63	64	64	63	SE	1	0.00	0.00	0	0.00	0.00	0.00	0
13	30.23	30.15	64	65	65	64	63	64	64	63	SE	1	0.00	0.00	0	0.00	0.00	0.00	0
14	30.15	30.07	64	65	65	64	63	64	64	63	SE	1	0.00	0.00	0	0.00	0.00	0.00	0
15	30.10	29.99	66	66	66	66	65	66	66	65	SE	1	0.00	0.00	0	0.00	0.00	0.00	0
16	29.89	30.05	67	70	72	64	64	65	64	62	SE	6	0.00	0.00	0	0.00	0.00	0.00	0
17	29.86	30.01	68	68	68	67	67	68	67	67	SE	1	0.00	0.00	0	0.00	0.00	0.00	0
18	29.84	29.70	64	64	64	64	64	64	64	64	SE	1	0.00	0.00	0	0.00	0.00	0.00	0
19	29.75	29.81	66	66	66	66	65	66	66	65	SE	1	0.00	0.00	0	0.00	0.00	0.00	0
20	29.75	29.81	66	66	66	66	65	66	66	65	SE	1	0.00	0.00	0	0.00	0.00	0.00	0
21	29.91	29.93	45	54	57	44	40	44	43	43	SE	37	0.00	0.00	0	0.00	0.00	0.00	0
22	30.04	30.03	42	42	50	52	56	50	52	52	SE	12	0.00	0.00	0	0.00	0.00	0.00	0
23	30.04	30.05	50	50	59	59	58	59	58	58	SE	15	0.00	0.00	0	0.00	0.00	0.00	0
24	30.07	30.12	59	61	61	59	58	61	60	59	SE	1	0.00	0.00	0	0.00	0.00	0.00	0
25	30.09	30.12	59	61	61	59	58	61	60	59	SE	1	0.00	0.00	0	0.00	0.00	0.00	0
26	30.09	30.12	59	61	61	59	58	61	60	59	SE	1	0.00	0.00	0	0.00	0.00	0.00	0
27	30.09	30.16	59	61	61	59	58	61	60	59	SE	1	0.00	0.00	0	0.00	0.00	0.00	0
28	30.07	30.16	59	61	61	59	58	61	60	59	SE	1	0.00	0.00	0	0.00	0.00	0.00	0
29	30.09	30.16	59	61	61	59	58	61	60	59	SE	1	0.00	0.00	0	0.00	0.00	0.00	0
30	30.09	30.16	59	61	61	59	58	61	60	59	SE	1	0.00	0.00	0	0.00	0.00	0.00	0
31	30.07	30.16	59	61	61	59	58	61	60	59	SE	1	0.00	0.00	0	0.00	0.00	0.00	0

Date	7.A.M.	7.P.M.	7.A.M.	7.P.M.	7.A.M.	7.P.M.	7.A.M.	7.P.M.	Clouds		Precipita-	7.A.M.	7.P.M.						
									Moisture	Temperature	Wind.	Wind.	Precipi-	7.A.M.	7.P.M.				
OCTOBER 1918.																			
1	29.97	29.93	63	72	78 <sup>4</sup>	60 <sup>8</sup>	58	77	62	58	SE	7	3.87	1.41	6	St. Ch.	4	St. Ch.	Mean.
2	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	2.16	2.86	5	St. Ch.	4 <sup>5</sup>	St. Ch.	Mean.
MISCELLANEOUS PHENOMENA																			
3	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
4	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
5	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
6	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
7	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
8	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
9	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
10	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
11	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
12	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
13	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
14	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
15	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
16	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
17	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
18	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
19	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
20	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
21	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
22	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
23	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
24	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
25	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
26	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
27	29.93	29.89	63	72	77 <sup>3</sup>	60 <sup>7</sup>	60	77	62	58	SE	7	0.00	0.00	0	0.00	0.00	0.00	0
28	29.93	29.89	63	72	77 <sup>3</sup> </td														

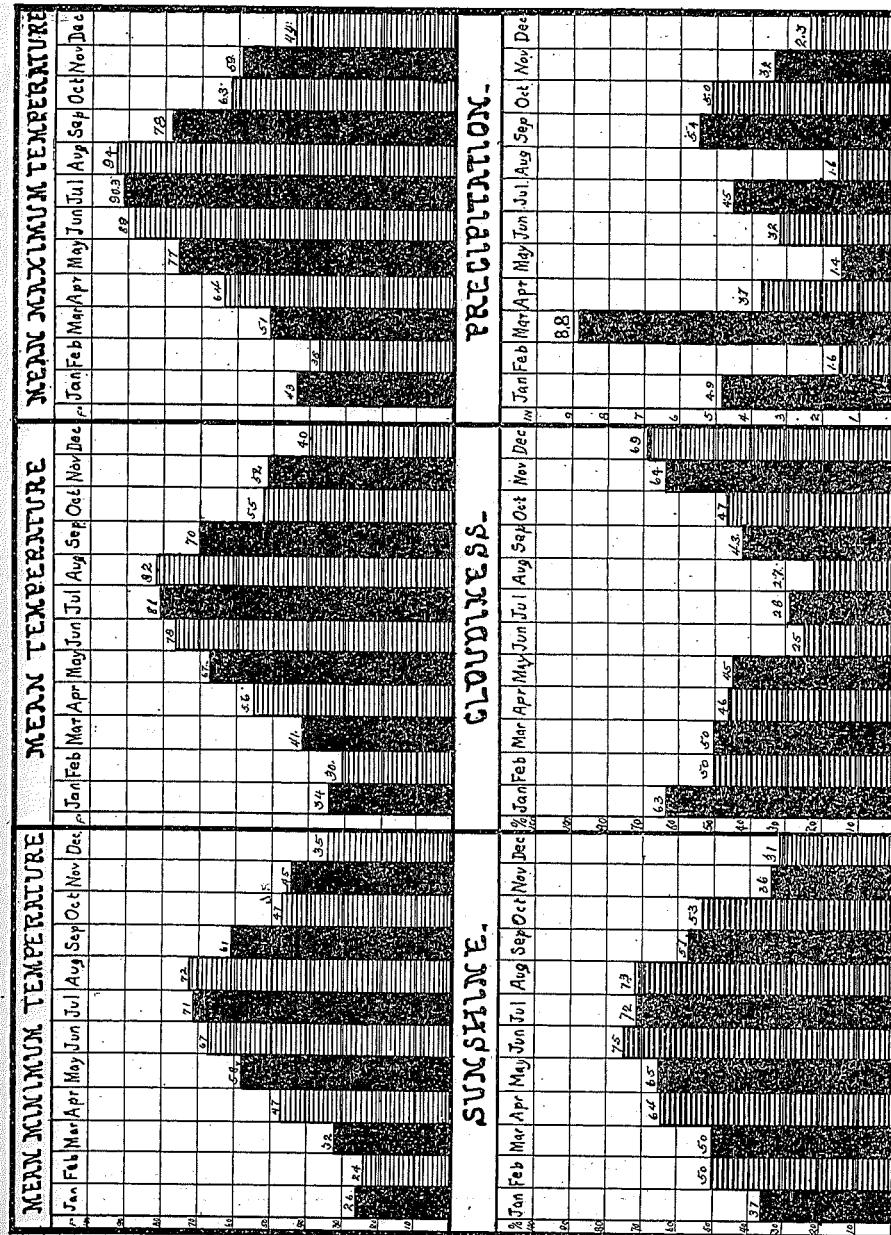


MEAN MONTHLY AND ANNUAL SUMMARIES 1918.

Date	7.A.M.	7.P.M.	7.A.M.	7.P.M.	7.A.M.	7.P.M.	7.A.M.	7.P.M.	MEAN MONTHLY AND ANNUAL SUMMARIES 1918.		MEAN ANNUAL--.					
									Temperature		Moisture					
									Pressure	in.	°	%				
Jan 30.11	30.11	31	36	42 <sup>7</sup>	25 <sup>7</sup>	29	78	32	73	SE 10	SE 12	3.14	1.75	5 <sup>6</sup>	St. Cu.	Pressure: 30.06
Feb 30.17	30.12	26 <sup>7</sup>	33 <sup>9</sup>	38	28 <sup>5</sup>	28 <sup>4</sup>	70	59 <sup>6</sup>	59 <sup>6</sup>	SE 9	SE 8 <sup>8</sup>	0.54	1.01	5	Fr. Cu.	
Mar. 30.11	30.07	35	44	51	32	31 <sup>6</sup>	70	38	58	SE 11 <sup>7</sup>	SE 13	4.32	4.66	5	Nb.	Relative Humidity 65%
Apr 30.08	30.04	49	59	64	47 <sup>4</sup>	45	69	49	51	SE 9 <sup>4</sup>	SE 9 <sup>6</sup>	1.07	2.68	5	St. Cu.	Direction SE
May 30.04	28.98	61	72	77	58	58	68	59	47	SE 8 <sup>7</sup>	SE 9	1.00	0.42	6	St. Cu.	Velocity 8.2 mi
June 30.06	28.98	71	82	89	87	63	64	66	43	W 5 <sup>3</sup>	SE 7	1.42	1.81	5 <sup>6</sup>	Ci. St.	Clouds.
Jul 30.01	26.94	74	87	90	71	68	72	71	50	SW 6 <sup>5</sup>	S 7	0.98	3.61	4	Ci.	Amount 47%
Aug 30.02	28.95	75	86	93 <sup>6</sup>	72 <sup>2</sup>	67	64	69	48	SE 5	SE 7	0.03	1.82	3	Ci.	Kind?
Sep 30.07	30.03	63	72	78	60 <sup>3</sup>	68	77	62	58	SE 6	SE 7	3.97	1.41	6	St. Cu.	Total Precipita-
Oct 30.05	30.03	49	57 <sup>4</sup>	63 <sup>2</sup>	47 <sup>4</sup>	48 <sup>7</sup>	84	50 <sup>6</sup>	63	SE 7	SE 8	2.16	2.88	5	St. Cu.	tion 45.86 in
Nov 30.15	30.11	47	53 <sup>6</sup>	59	44 <sup>7</sup>	43 <sup>9</sup>	77	47 <sup>8</sup>	64	SE 8 <sup>6</sup>	SE 9 <sup>3</sup>	1.90	1.27	6 <sup>7</sup>	St. Cu.	
Dec 30.20	30.18	37	41	44 <sup>6</sup>	35	35	83	37	71	SE 7	NW 6	1.14	1.15	6 <sup>7</sup>	St. Cu.	
	30.08	30.04	51 <sup>6</sup>	60 <sup>8</sup>	65 <sup>8</sup>	48 <sup>7</sup>	73	50 <sup>8</sup>	56 <sup>7</sup>	SE 7 <sup>8</sup>	SE 8 <sup>6</sup>	21.62	24 <sup>7</sup>	5	St. Cu.	Annual..

## METEOROLOGY

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DAILY MAXIMUM TEMPERATURE 1913.														
Date,	January	February	March	April	May	June	July	August	September	October	November	December	Mean.	Remarks.
1	54	16	32	67	82	94	85	90	99	76	46	59		
2	44	26	30	83	83	89	87	95	99	77	59	60		
3	40	30	52	70	81	86	88	98	101	78	64	58		
4	36	29	45	53	74	85	88	94	100	79	57	52		
5	31	15	46	61	79	88	96	91	93	76	55	53		
6	28	25	29	60	68	93	85	102	90	82	68	60		
7	30	27	41	49	69	76	87	101	88	74	67	50		
8	24	35	66	46	75	70	91	99	91	75	47	34		
9	27	36	62	64	75	70	95	95	83	78	42	44		
10	38	38	45	57	58	74	84	89	88	82	36	48		
11	40	36	49	45	65	78	87	90	88	63	46	51		
12	20	21	62	43	76	83	87	99	67	75	73	57		
13	37	30	59	50	87	84	93	88	70	79	69	56		
14	40	49	63	65	88	90	93	97	72	76	54	54		
15	52	54	34	64	81	95	85	100	67	76	50	44		
16	58	55	39	70	70	96	98	100	72	73	48	48		
17	59	56	59	84	76	98	100	97	80	63	54	49		
18	56	68	65	81	74	99	101	91	70	55	70	44		
19	63	68	66	67	76	98	86	88	76	52	73	44		
20	57	49	58	61	86	93	85	93	66	40	73	49		
21	32	56	45	75	77	97	82	95	57	42	76	38		
22	33	40	41	83	60	86	85	83	60	46	73	36		
23	46	25	72	78	60	86	94	83	78	50	53	35		
24	41	27	72	75	76	87	85	85	79	61	54	36		
25	58	37	42	54	75	90	84	85	75	65	51	33		
26	56	53	33	61	76	93	91	95	57	57	59	30		
27	38	34	30	53	76	98	90	97	66	36	64	30		
28	41	27	47	64	89	93	95	101	68	50	61	34		
29	56	60	70	92	99	100	88	77	37	63	32			
30	57	75	77	94	98	97	93	76	44	66	51			
31	32		61	93	97	98		42			31			
	43	38	51	64	77	89	90 <sup>a</sup>	93 <sup>c</sup>	78 <sup>b</sup>	63 <sup>d</sup>	59	44 <sup>e</sup>		Mean Monthly.

DAILY MINIMUM TEMPERATURE 1913.														
Date.	January	February	March	April	May	June	July	August	September	October	November	December	Mean.	Remarks.
1	34	4	13	48	58	70	68	73	74	56	30	50		
2	31	15	4	54	62	67	72	69	77	57	39	53		
3	25	20	30	55	67	70	74	69	78	52	48	53		Lowest of the year +4° on February 1st and on March 2nd.
4	24	14	31	41	62	63	74	73	77	57	42	48		
5	23	8	25	38	61	68	77	68	69	63	39	45		
6	19	7	16	47	53	70	72	77	73	65	40	51		On 86 days the minimum was 32° or below.
7	19	12	23	40	48	52	70	75	75	67	48	23		
8	15	17	39	40	54	49	71	80	71	65	34	22		The minimum on June 9th this year and in 1977 the lowest for the day since 1836.
9	21	25	43	47	52	48	70	78	67	62	28	25		
10	24	32	36	43	42	49	67	75	63	64	28	32		
11	14	21	36	39	45	53	67	72	67	47	26	33		
12	7	12	39	38	49	57	67	78	60	50	43	36		
13	18	10	50	38	58	60	70	74	53	54	57	39		
14	17	25	35	41	69	62	75	75	53	58	45	41		
15	33	36	24	40	67	69	76	77	56	58	42	39		September 22 the lowest minimum on record for that day
16	49	32	23	49	55	71	76	77	64	59	41	34		
17	54	41	27	54	56	73	78	77	62	46	38	40		
18	34	41	43	61	59	74	78	75	61	43	51	32		
19	34	50	43	53	55	74	65	70	62	41	61	32		
20	20	38	38	47	60	74	68	71	49	32	61	36		
21	13	38	26	45	56	74	64	74	44	30	60	29		
22	25	26	22	60	54	67	64	69	40	36	51	28		
23	32	20	40	62	52	69	69	61	48	35	43	32		
24	29	12	44	55	48	70	67	64	58	42	39	33		
25	30	21	34	46	59	75	64	65	51	45	45	29		
26	35	34	25	44	58	73	71	68	50	36	46	28		
27	23	25	24	46	52	78	69	71	47	32	54	28		
28	27	22	24	42	59	79	74	77	57	32	55	29		
29	27		37	46	67	79	77	66	60	27	56	29		
30	32		49	55	76	78	77	68	60	30	52	29		
31	8		49		74		74	71		28		29		
	26	24	32	47	58	67	71 <sup>1</sup>	72 <sup>2</sup>	60 <sup>3</sup>	47 <sup>4</sup>	44 <sup>5</sup>	35		Mean Monthly

## DAILY MEAN TEMPERATURE 1918:

Date.	January	February	March	April	May	June	July	August	September	October	November	December	Mean	Remarks.
1	44	10	22	58	70	82	76	82	86	66	38	54		
2	36	20	18	68	72	78	80	82	88	67	49	56		
3	32	25	43	62	74	78	81	84	90	65	56	56		
4	30	22	37	47	68	74	81	84	88	68	50	50		
5	27	12	33	50	70	78	86	80	81	70	47	49		
6	24	16	23	54	60	82	78	90	82	74	54	56		
7	25	20	33	44	53	64	78	88	82	70	58	36		
8	20	26	53	43	64	60	81	90	81	70	41	28		
9	24	30	53	56	64	59	82	86	75	70	35	34		
10	31	35	41	50	50	62	76	82	76	73	32	40		
11	27	28	42	42	55	66	77	81	78	55	36	42		
12	14	16	50	40	62	70	77	88	64	62	58	46		
13	28	20	55	44	72	72	82	81	62	66	63	48		
14	28	37	51	53	78	76	84	86	62	67	50	48		
15	42	45	27	52	74	82	80	88	62	67	46	42		
16	54	44	31	59	62	84	87	88	68	66	44	41		
17	56	48	43	69	66	86	89	87	71	54	46	44		
18	46	54	53	71	66	86	90	83	66	49	60	38		
19	48	59	56	60	66	86	76	79	69	46	67	38		
20	38	43	46	54	73	84	76	82	57	36	67	42		
21	22	47	31	60	67	86	73	84	50	36	68	34		
22	29	33	32	72	57	76	74	76	50	41	62	32		
23	39	23	58	70	56	78	82	72	63	42	48	34		
24	35	20	51	65	62	78	76	74	68	52	46	34		
25	44	29	38	50	67	82	74	75	63	55	48	31		
26	46	44	29	52	67	83	81	82	53	46	52	29		
27	30	30	28	50	64	88	80	84	56	34	59	29		
28	34	24	37	53	74	88	84	89	62	41	58	32		
29	42		51	58	80	89	88	77	68	32	60	30		
30	44		70	66	85	88	87	80	68	37	59	30		
31	20		56	84		86	84		35		30			
	34	30 <sup>a</sup>	41 <sup>b</sup>	55 <sup>c</sup>	67 <sup>d</sup>	78	80 <sup>e</sup>	82 <sup>f</sup>	69 <sup>g</sup>	55 <sup>h</sup>	51 <sup>i</sup>	41 <sup>j</sup>		
													Mean Monthly	

## DAILY SUNSHINE 1918.

Date.	January	February	March	April	May	June	July	August	September	October	November	December	Mean	Remarks.
1	55	50	59	100	106	76	9	100	94	94	85	30		
2	00	00	100	86	94	91	35	100	95	100	54	13		
3	93	16	00	10	47	70	74	100	80	100	14	00		
4	45	60	11	6	36	85	71	77	100	62	94	00		
5	00	15	40	90	37	54	96	58	98	20	77	00		
6	00	67	100	100	67	83	85	80	87	45	95	64		
7	00	100	6	15	100	47	50	63	57	37	13	61		
8	8	100	100	00	100	17	50	98	17	26	23	100		
9	00	00	54	7	43	100	78	100	58	42	92	100		
10	00	00	00	61	9	100	100	66	100	58	80	96		
11	00	75	50	00	82	100	75	39	52	100	68	70		
12	90	100	29	6	68	100	97	50	00	100	52	98		
13	90	100	00	20	100	100	77	14	66	100	14	60		
14	84	100	80	100	100	100	63	86	67	76	00	19		
15	15	96	00	100	50	80	03	75	00	70	00	00		
16	00	60	97	100	46	100	100	68	8	16	07	17		
17	00	87	98	100	50	100	100	60	16	00	42	00		
18	87	100	100	90	76	80	89	39	00	45	43	100		
19	35	75	62	99	70	96	66	9	52	00	08	97		
20	00	00	17	95	89	48	85	62	11	04	07	14		
21	74	00	60	100	22	60	100	68	86	100	76	31		
22	14	85	61	90	6	30	96	100	93	00	15	00		
23	6	00	18	80	00	30	60	84	89	31	40	00		
24	50	100	5	41	100	37	64	97	86	77	46	00		
25	98	1	00	23	21	49	76	97	27	100	00	00		
26	53	00	1	32	68	100	61	100	39	35	00	00		
27	82	00	70	72	100	82	59	74	73	00	15	00		
28	00	00	100	100	100	91	79	62	00	31	00	00		
29	90		60	100	85	55	92	100	75	00	00	00		
30	27		84	100	81	99	57	80	90	96	07	00		
31	70		91		95		88	76	100		00			
	37	50	50	64	65	75	72	73	57	53	36	31		
													Mean Monthly	

Percentage of the possible sunshine.

Date.	DAILY PRECIPITATION 1913.												Mean	Remarks.
	January	February	March	April	May	June	July	August	September	October	November	December		
1 .00	.00	.01	.00	.00	T 27 <sup>s</sup>	.00	.00	.00	.00	.00	.00	.00		
2 00	15 00	00 00	25 00	00 00	00 00	00 00	00 00	00 00	00 00	00 00	00 00	00 00		
3 00	40 00	00 00	34 00	05 00	00 00	00 00	00 00	00 00	00 00	00 00	00 00	00 00		
4 00	00 00	T 01	34 00	05 00	00 00	00 00	00 00	00 00	00 00	00 00	00 00	00 00		
5 01	00 14	00 T	1 <sup>0s</sup> 00	1 <sup>0s</sup> 00	00 00	00 00	00 00	00 00	12 00	00 .14				
6 51	00 00	00 00	09 00	00 00	T 00	00 00	T 00	00 00	00 00	00 .03				
7 62	00 00	T 25	00 00	T 00	T 00	00 00	32 01	T 00						
8 T	00 00	00 2 <sup>6s</sup>	00 00	T 00	00 08	40 03	00 00	00 00	00 00	00 00	00 00	00 00		
9 T	00 00	00 04	00 00	00 00	00 00	00 00	00 00	00 00	00 00	00 00	00 00	00 00		
10 82	00 11	02 T	00 00	00 00	00 00	00 00	00 00	00 25	00 00	00 00	00 00	00 00		
11 22	02 00	T 00	00 00	40 00	00 00	98 00	00 00	00 00	00 00	00 00	00 00	00 00		
12 01	00 00	08 00	00 00	00 00	00 05	1 <sup>1s</sup> 00	00 00	00 00	00 00	00 00	00 00	00 00		
13 00	00 39	02 00	00 00	00 00	11 00	00 00	00 00	00 00	1 <sup>6s</sup> 00	00 00	00 00	00 00		
14 00	00 00	00 00	00 00	00 09	00 00	00 00	78 00	00 28	T 00					
15 04	00 01	00 T	00 00	00 00	00 00	00 00	00 78	00 28	T 00					
16 44	05 00	00 00	07 00	00 00	00 00	64 08	00 00	00 00	00 00	00 00	00 00	00 00		
17 00	00 00	00 00	23 00	00 00	00 00	47 64	T 00	.12						
18 00	00 00	00 00	02 00	00 00	00 00	11 00	00 00	00 00	00 00	00 00	00 00	00 00		
19 T	00 00	00 00	T 00	00 30	1 <sup>4s</sup> 00	44 04	00 00	00 00	00 00	00 00	00 00	00 00		
20 1 <sup>2s</sup>	00 1 <sup>2s</sup>	00 00	T 00	00 00	00 08	12 00	00 00	00 00	00 00	00 .17				
21 00	29 17	00 00	00 01	00 00	03 00	00 00	00 00	00 00	00 00	00 .03				
22 56	00 00	00 00	00 1 <sup>5s</sup>	00 00	00 00	00 00	1 <sup>6s</sup> 21	00 00	00 00	00 .03				
23 28	15 1 <sup>5s</sup>	01 00	52 01	00 00	00 12	00 00	00 00	00 00	00 00	00 .24				
24 00	00 37 <sup>s</sup>	19 00	T 00	14 00	00 00	00 00	00 00	00 00	00 00	00 T				
25 00	05 42	24 T	09 00	00 00	33 00	00 00	07 1 <sup>4s</sup>	00 00	00 00	00 .10				
26 00	26 1 <sup>0s</sup>	T 67	00 00	00 00	06 17	00 00	07 07	00 00	00 00	00 .10				
27 00	03 00	00 00	06 00	00 00	T 21	00 00	25 T	00 00	00 00	00 00	00 00	00 00		
28 01	26 00	00 00	06 T	00 00	02 02	30 00	00 00	00 00	00 00	00 00	00 00	00 00		
29 00	00 00	06 00	00 00	T 00	00 00	00 00	00 00	00 00	00 00	00 00	00 00	00 00		
30 05	00 00	00 00	00 00	T 00	00 00	00 00	00 00	00 00	00 00	00 00	00 00	00 00		
31 00	00 00	00 00	00 00	T 00	00 00	00 00	00 00	00 00	00 00	00 00	00 00	00 00		
	48 <sup>s</sup>	16 <sup>s</sup>	88 <sup>s</sup>	37 <sup>s</sup>	1 <sup>4s</sup>	32 <sup>s</sup>	45 <sup>s</sup>	16 <sup>s</sup>	55 <sup>s</sup>	50 <sup>s</sup>	32 <sup>s</sup>	22 <sup>s</sup>		
	Totals.													

Date.	DAILY PREVAILING WIND DIRECTION 1913.												Mean	Remarks.
	January	February	March	April	May	June	July	August	September	October	November	December		
1 SE	NW	NW	SE	SE	W	N	N	SE	W	SE	SE	S		
2 NW	SE	SE	SE	SE	N	NE	W	SW	S	S	SE	S		
3 NW	NW	SE	SE	SE	N	SE	W	SW	S	S	SE	NE		
4 N	N	N	NW	W	E	S	S	N	SE	N	NE	NE		
5 E	W	S	NW	SE	SE	W	SE	SE	SE	SE	SE	SE		
6 NW	W	NW	E	N	S	N	N	SE	SE	SE	SE	SE		
7 W	W	W	SE	E	N	S	S	SE	SE	SE	SE	W		
8 W	W	W	SW	SE	SE	N	S	SE	SE	SE	SE	NW		
9 SE	W	N	SE	N	NE	NW	SE	E	SE	NW	W	W		
10 SE	SE	N	W	NE	E	E	SE	SE	SE	NW	W			
11 NW	NW	SE	W	SE	E	SE	SE	S	NW	SE	SE	SE		
12 NW	N	SE	N	SE	E	W	SE	N	W	SE	SE	SE		
13 SE	SE	SE	SE	N	SE	SW	S	SE	E	S	S	SE		
14 SE	W	W	N	N	S	S	S	S	E	S	NE	S		
15 S	S	W	W	N	W	SW	SE	S	E	W	NW	W		
16 SE	S	W	SE	SE	SE	SW	S	SE	SE	SE	NW	SE		
17 S	SE	SE	SE	N	W	W	W	S	SW	NW	SE	NW		
18 W	SE	SE	N	N	W	W	W	SE	N	N	SE	N		
19 SE	SE	SE	N	SE	W	W	NW	SE	N	SE	SE	SE		
20 NW	N	W	E	SE	W	N	N	NW	W	NW	S	SE		
21 SE	SE	W	SE	NW	W	N	SE	NW	SE	SE	S	NW		
22 SE	W	SE	SE	NW	SE	E	N	N	N	N	S	E		
23 NW	W	SE	SE	NW	S	W	N	SE	N	N	N	W		
24 N	N	NW	N	SE	N	SE	N	N	SE	NW	W	SE		
25 SW	SE	N	NW	SE	S	SE	SE	SE	SE	SE	SE	N		
26 S	SE	N	W	SE	S	SE	SE	SE	N	NW	SE	NW		
27 NW	N	NW	N	SE	W	W	SE	W	NE	NW	SE	SE		
28 NW	N	SE	N	W	W	S	W	SE	SE	SE	SE	SE		
29 SE	SE	E	SW	W	W	W	NW	SE	W	SE	SE	NW		
30 S	S	S	SE	W	W	SW	SE	W	W	W	SE	SE		
31 NW	NW	SE	SE	SE	W	W	SE	W	W	N	SE	NW		
	SE	SE	SE	SE	SE	W	S	SE	SE	SE	SE	SE		
	Mean Monthly.													

DAILY TOTAL WIND MOVEMENT 1913.																		
Date.	January	February	March	April	May	June	July	August	September	October	November	December	Mean	Remarks.				
1	256	225	297	183	235	201	107	186	210	196	115	87						
2	306	198	322	365	253	131	72	103	134	231	172	54						
3	340	179	220	319	309	141	204	104	76	118	140	56						
4	219	124	201	358	312	132	163	129	88	258	119	69						
5	154	205	271	125	267	230	236	124	134	205	118	163						
6	213	211	298	229	252	132	169	226	221	191	209	186						
7	217	248	196	289	115	230	94	176	166	83	285	454						
8	228	200	187	389	136	183	152	263	108	98	454	176						
9	287	121	219	255	163	173	205	230	170	180	398	94						
10	195	167	109	328	121	155	132	201	145	317	337	226						
11	232	300	158	266	198	104	260	91	114	200	204	102						
12	219	245	268	235	157	96	216	127	154	157	253	104						
13	254	173	328	198	237	143	227	165	147	144	181	80						
14	214	153	483	203	265	161	215	116	171	213	140	90						
15	299	235	407	113	246	155	158	83	223	105	147	120						
16	510	123	280	82	163	140	157	119	237	127	130	66						
17	231	189	346	136	173	101	206	96	104	268	183	81						
18	259	265	376	156	130	104	193	62	85	152	223	94						
19	516	275	400	148	262	144	184	78	149	143	267	155						
20	547	209	218	204	305	142	172	94	316	402	227	171						
21	144	267	480	311	272	182	94	122	274	223	330	169						
22	244	452	282	319	244	150	85	245	142	196	267	118						
23	177	200	360	431	179	156	201	86	338	179	165	182						
24	121	174	232	297	106	210	124	78	238	144	113	116						
25	145	289	245	91	170	250	186	129	204	142	214	346						
26	261	232	338	136	329	173	179	156	144	266	102	153						
27	249	297	289	221	186	89	130	103	95	327	107	186						
28	228	198	236	238	160	82	86	220	181	192	183	106						
29	270	250	103	203	72	138	185	105	340	224	140							
30	332	210	216	161	125	112	113	167	228	242	113							
31	418	329		136		122	261		113		103							
	10	9	11 <sup>b</sup>	9 <sup>c</sup>	8 <sup>c</sup>	6 <sup>d</sup>	6 <sup>d</sup>	6	7	3	8 <sup>e</sup>	5 <sup>e</sup>						
	Mean hourly																	

MEAN HOURLY TEMPERATURE °F. 1913.																			
	1	2	3	4	5	6	7	8	9	10	11	M	1	2	3	4	5	P.M.	
Jan.	33	32	31	31	31	31	31	31	31	31	31	31	34	36	37	37	38	34	33
Feb.	28	27	26	26	25	25	27	29	30	32	34	35	36	35	34	33	32	30	
Mar.	39	38	37	36	35	35	37	38	40	42	44	45	46	47	47	44	43	41	
Apr.	53	52	51	51	50	49	50	51	54	56	58	60	61	62	63	62	61	54	
May.	64	63	62	61	59	59	61	62	64	67	69	71	73	74	75	74	72	68	
Jun.	73	72	71	69	71	73	77	80	82	84	86	87	87	85	84	82	79	78	
Jul.	76	75	73	72	73	74	77	79	81	84	85	86	87	88	89	88	87	86	
Aug.	77	76	75	73	74	75	77	80	83	86	88	90	91	92	91	90	89	88	
Sep.	66	65	64	63	62	63	64	66	67	71	73	75	76	77	76	75	74	73	
Oct.	53	52	51	50	49	49	50	52	54	56	58	59	61	62	60	59	57	55	
Nov.	40	48	48	48	47	47	47	48	50	52	55	56	57	58	57	56	55	54	
Dec.	38	38	38	37	37	37	37	38	39	40	41	42	43	44	42	41	40	39	
	54	53 <sup>a</sup>	52 <sup>a</sup>	51 <sup>a</sup>	50 <sup>a</sup>	49 <sup>a</sup>	48 <sup>a</sup>	47 <sup>a</sup>	46 <sup>a</sup>	45 <sup>a</sup>	44 <sup>a</sup>	43 <sup>a</sup>	42 <sup>a</sup>	41 <sup>a</sup>	40 <sup>a</sup>	39 <sup>a</sup>	38 <sup>a</sup>	37 <sup>a</sup>	
	Mean hourly																		
	1	2	3	4	5	6	7	8	9	10	11	M	1	2	3	4	5	P.M.	
Jan.	9	8 <sup>b</sup>	8	8 <sup>c</sup>	8 <sup>c</sup>	8 <sup>d</sup>	8 <sup>d</sup>	8 <sup>e</sup>	8 <sup>e</sup>	8 <sup>f</sup>	8 <sup>f</sup>	8 <sup>g</sup>							
Feb.	8 <sup>b</sup>	8 <sup>c</sup>	8 <sup>c</sup>	8 <sup>d</sup>	8 <sup>d</sup>	8 <sup>e</sup>	8 <sup>e</sup>	8 <sup>f</sup>	8 <sup>f</sup>	8 <sup>g</sup>									
Mar.	11	11	10	9 <sup>b</sup>	9 <sup>b</sup>	10 <sup>c</sup>	10 <sup>c</sup>	11 <sup>d</sup>	12 <sup>d</sup>	12 <sup>e</sup>	13 <sup>e</sup>	13 <sup>f</sup>							
Apr.	8	8 <sup>b</sup>	8 <sup>c</sup>	8 <sup>c</sup>	8 <sup>d</sup>	8 <sup>d</sup>	8 <sup>e</sup>	8 <sup>e</sup>	8 <sup>f</sup>	8 <sup>f</sup>	8 <sup>g</sup>								
May.	6 <sup>b</sup>	7	6 <sup>c</sup>	6 <sup>c</sup>	6 <sup>d</sup>	6 <sup>d</sup>	6 <sup>e</sup>	6 <sup>e</sup>	6 <sup>f</sup>	6 <sup>f</sup>	6 <sup>g</sup>								
Jun.	5 <sup>b</sup>	4 <sup>c</sup>	4 <sup>c</sup>	4 <sup>d</sup>	4 <sup>d</sup>	4 <sup>e</sup>	4 <sup>e</sup>	5 <sup>f</sup>	5 <sup>f</sup>	6 <sup>g</sup>									
Jul.	5 <sup>b</sup>	5	4 <sup>c</sup>	5 <sup>c</sup>	5 <sup>d</sup>	5 <sup>d</sup>	5 <sup>e</sup>	5 <sup>e</sup>	7 <sup>f</sup>	7 <sup>f</sup>	7 <sup>g</sup>								
Aug.	4 <sup>b</sup>	4 <sup>c</sup>	4 <sup>c</sup>	4 <sup>d</sup>	4 <sup>d</sup>	4 <sup>e</sup>	4 <sup>e</sup>	5 <sup>f</sup>	5 <sup>f</sup>	7 <sup>g</sup>	7 <sup>g</sup>	8	8	7 <sup>g</sup>					
Sep.	6 <sup>b</sup>	6	5 <sup>c</sup>	5 <sup>c</sup>	5 <sup>d</sup>	6 <sup>d</sup>	6 <sup>e</sup>	6 <sup>e</sup>	7 <sup>f</sup>	7 <sup>f</sup>	8	8	8 <sup>g</sup>	9 <sup>g</sup>	8 <sup>g</sup>	8 <sup>g</sup>	8 <sup>g</sup>	8 <sup>g</sup>	
Oct.	7	7 <sup>b</sup>	7	7 <sup>c</sup>	7 <sup>c</sup>	8	8 <sup>d</sup>	8 <sup>d</sup>	9	9 <sup>e</sup>	9 <sup>e</sup>	9 <sup>f</sup>							
Nov.	8 <sup>b</sup>	8 <sup>c</sup>	8 <sup>c</sup>	8 <sup>d</sup>	8 <sup>d</sup>	8 <sup>e</sup>	8 <sup>e</sup>	8 <sup>f</sup>	8 <sup>f</sup>	9 <sup>g</sup>									
Dec.	5 <sup>b</sup>	5	5 <sup>c</sup>	5 <sup>c</sup>	5 <sup>d</sup>	6 <sup>d</sup>	6 <sup>e</sup>	6 <sup>e</sup>	6 <sup>f</sup>	6 <sup>f</sup>	7	7	6 <sup>g</sup>	6 <sup>g</sup>	5 <sup>g</sup>	5 <sup>g</sup>	5 <sup>g</sup>	5 <sup>g</sup>	
	86 <sup>b</sup>	84	85 <sup>c</sup>	82 <sup>c</sup>	81 <sup>c</sup>	84 <sup>c</sup>	87 <sup>c</sup>	93 <sup>c</sup>	10 <sup>d</sup>	10 <sup>d</sup>	11 <sup>d</sup>								
	72	7	7 <sup>b</sup>	6 <sup>b</sup>	6 <sup>b</sup>	7	7 <sup>c</sup>	7 <sup>c</sup>	8 <sup>d</sup>	8 <sup>d</sup>	9 <sup>e</sup>								

	WIND DIRECTION, NUMBER OF TIMES OBSERVED, 1913.												
	N	NE	E	SE	S	SW	W	NW	Calm	Prev.	Dir.	Total	Mean Hourly Velocity.
January	6	0	2	19	8	3	9	16	0	SE	9	7685	10.3
February	13	3	1	16	1	2	11	9	0	SE	3	6154	9
March	8	2	1	23	4	4	9	10	0	SE	17	8835	11.8
April	13	4	7	18	4	1	6	5	0	SE	9	6944	9.6
May	10	3	3	25	6	4	5	6	0	SE	4	6445	8.6
June	8	3	9	14	6	4	15	1	0	W	3	4487	6.2
July	6	6	5	12	9	11	8	4	1	S	4	4986	6.7
August	12	3	7	18	10	2	3	5	2	SE	4	4471	6.
September	9	5	12	20	3	1	3	6	1	SE	3	5040	7.
October	13	1	0	21	2	1	11	12	1	SE	2	6138	8.
November	8	1	0	28	9	0	7	6	1	SE	4	6254	8.7
December	6	2	10	11	6	2	11	11	3	SE	1	4360	5.9
Total	111	38	57	225	68	35	100	91	9	SE	63	71799	8.1

TABLE OF ABBREVIATIONS AND SIGNS USED IN METEOROLOGY.

○	Clear Days.	▲	Lunar Corona
⊕	Partly Cloudy Days	△	Hail
●	Cloudy Days	△	Sleet.
⊕	Solar Halo	○	Haze
⊖	Lunar Halo	⊖	Dew
☈	Thunderstorm	□	Frost
☈	Rainbow.	≡	Fog
Ѱ	Maximum Wind Velocity per hour, 30 miles or more.	*	Days with snow.
St.	Stratus	Nb.	Nimbus
Ci.	Cirrus	A.+St.	Alto-Stratus
Cu.	Cumulus	A.-Gu.	Alto-Cumulus
Fr.	Nb. Fracto-nimbus.	Fr.-Cu.	Fracto-Cumulus
		Fr.-Gu.	Fracto-Stratus.

MISCELLANEOUS PHENOMENA. 1913.

	O	⊕	●	⊖	⊕	⊖	☈	Ѱ	△	≡	○	⊖	*	Remarks.
January	9	5	17	1	2	1	0	4	4	7	0	0	2	
February	12	4	12	0	2	1	0	3	4	4	0	0	6	
March	12	6	13	1	0	5	2	0	1	3	0	0	6	
April,	18	2	10	0	1	4	0	0	1	3	0	1	0	
May	16	9	6	2	1	4	0	0	0	2	0	3	0	
June	19	7	4	0	0	8	1	0	0	1	0	0	0	
July	17	11	3	0	1	9	1	0	0	2	1	0	0	
August	18	10	3	0	0	8	0	0	0	3	0	1	3	
September	13	7	10	0	1	4	0	0	0	3	0	1	0	
October	12	6	13	0	2	3	2	1	1	3	0	1	3	
November	6	8	16	0	0	4	0	1	1	6	0	0	0	
December	7	3	21	0	2	0	0	0	4	4	0	2	1	
Total	159	78	128	4	12	51	6	9	16	37	2	10	18	

## Acknowledgments.

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