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A CENTURY OF LONDON WEATHER

By W. A. L. MARSHALL



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A Century of London Weather

§ 1—INTRODUCTION

Many of the thousands of inquiries received by the Meteorological Office each month from the Press and general public are for comparisons of current weather with that experienced in past years. Detailed summaries, statistical and descriptive, are prepared monthly and yearly. These are invaluable to specialist users but they do not lend themselves readily to providing the answers to the questions "Is today's temperature a record", "When did we last have a really sunny June", and so on. The purpose of this book is to assemble in one cover the main facts of London's weather over the past 109 years in a form suitable for quick reference.

§ 2 consists of monthly, seasonal and yearly summaries of temperature, rainfall, sunshine, etc., with special reference to extreme cases. The information refers to London in the broad sense and has been prepared entirely from printed reports or manuscript documents in the possession of the Meteorological Office. For recent years observations have been available for an area extending from Hampstead to Croydon and from Richmond to East Ham. Temperatures quoted are shade-temperature readings unless otherwise stated. Place names are given when values are outstanding.

References to fog were frequently met with in the weather records consulted, but there was often some doubt as to whether observers used comparable fog descriptions, especially in the earlier part of the period. Visibility observations made regularly throughout the 24 hours from the Air Ministry roof in Kingsway are now available for the six years 1941 to 1946. These are discussed in § 3 in relation to visibility conditions in about the same part of London 50 years ago. They are also compared with simultaneous visibility observations at Greenwich, Kew Observatory and Croydon airport.

There is still a tendency in some quarters to apply Buchan's warm and cold periods to London. It has been necessary in the preparation of this book to plot daily values of maximum temperature for comparison with the seasonal average. Opportunity has been taken to examine these curves to see whether in fact there have been any periods of the year in London subject to warm or cold weather with any appreciable degree of regularity. The results of this examination are given in § 4.

§ 5 is composed of more orthodox weather summaries: for Kew Observatory back to 1871 and for Greenwich Observatory for the period 1841 to 1870. Information for Kew Observatory prior to 1871 is not at present available in a form suitable for presentation in this manner. Greenwich Observatory readings have been extracted from the "Reduction of Greenwich Meteorological Observations" issued by the Astronomer Royal in 1895.

Coloured monthly, seasonal and yearly diagrams at the end of the book enable the reader to see all the Januaries, all the springs, etc., at one opening,

compared with the average and with each other. Mean temperature for each month, season or year is given by the top of the red column or the bottom of the green column. Similarly the top of the black and yellow columns or the bottoms of the hatched and brown columns show the total rainfall and total sunshine respectively.

I am indebted to Mr. A. J. Drummond for checking that the values of mean temperature, rainfall and sunshine are in agreement with the official Kew Observatory values, and to the staff of the London Forecasting Section of the Meteorological Office for their assistance in manipulating the data and in the preparation of the diagrams.

W. A. L. MARSHALL

§ 2—YEARLY, MONTHLY AND SEASONAL WEATHER SUMMARIES

YEAR 1841-1949

Temperature.—The large variations of monthly mean temperatures shown in Plates II to XXV are smoothed out in the seasonal diagrams of Plates XXVI to XXIX, but it is still clear from the yearly mean temperatures given in Plate I that it has been appreciably warmer since 1910 than in any other similar period since at least 1841. There were some warm years up to 1872, indeed 1868 was comparable with the warmest years of the present century, but the 20-year cold spell 1873 to 1892 is outstanding, especially 1879. Each of the years 1885 to 1892 was colder than any experienced since then.

The two warmest years by far at Kew Observatory were 1921 and 1949. 1921 was notable not only for the exceptionally high temperatures in January, July and October but also for the fact that mean temperature was above average in all months except November. In 1949 March and May were both rather cold on the whole and November was the only month with a record-breaking mean temperature. The main feature of 1949 was its consistent warmth throughout the summer and autumn combined with an absence of really hot spells. During the four months June to September temperature at Kew Observatory reached 70°F. or more on 90 days compared with 75 days in 1921.

1945 and 1911 were both warm years. The very cold January and average summer of 1945 were offset by very warm weather in spring and autumn. In 1911 cold spells up to the end of June were more than compensated by the hot weather which began in the first few days of July and continued until towards the middle of September.

The coldest year was that of 1879, due more to the persistence of very cold weather in all months rather than to exceptional severity, though May 1879 remains the coldest on record up to 1949. In the period 1841 to 1892 there were sixteen colder years than the coldest of the present century.

HOTTEST MONTHS		COLDEST MONTHS	
July	1859	February	1855
July	1868	December	1890
August	1911	February	1895
July	1921	February	1947

Hottest day : 100°F., Greenwich, August 9, 1911
 Coldest night : 1°F., Kew Observatory, January 5, 1867
 Coldest day : 17°F., Greenwich, January 8, 1841
 Warmest nights : 74°F., Westminster, July 29, 1948
 71°F., Westminster, September 5, 1949

PERIOD OF OCCURRENCE OF THE WARMEST DAY AND COLDEST NIGHT OF EACH MONTH
 1841-1949

	Warmest day						Coldest night					
	Period						Period					
	1-5	6-10	11-15	16-20	21-25	26-(31)	1-5	6-10	11-15	16-20	21-25	26-(31)
	<i>Number of occasions</i>											
Jan.	25	18	13	15	15	27	20	19	15	21	15	20
Feb.	20	14	12	24	16	27	20	17	27	17	21	9
Mar.	13	7	5	21	28	36	25	22	19	13	20	14
Apr.	10	7	19	29	23	25	34	21	20	17	13	9
May	2	12	15	13	26	42	40	25	18	15	7	6
June	15	13	16	20	22	27	44	25	21	15	5	3
July	23	15	23	23	14	17	31	18	19	12	10	24
Aug.	29	21	19	21	8	18	14	7	15	12	20	43
Sept.	35	26	20	14	8	12	8	5	11	18	31	36
Oct.	57	23	14	13	1	5	5	4	14	13	20	54
Nov.	48	16	18	10	12	7	12	11	14	20	28	28
Dec.	26	26	16	14	11	19	8	22	14	12	24	33

YEAR 1841-1949

PERIOD OF OCCURRENCE OF THE WARMEST DAY AND COLDEST NIGHT OF EACH YEAR
1841-1949

	Warmest day							Coldest night					
	Period							Period					
	1-5	6-10	11-15	16-20	21-25	26-(31)		1-5	6-10	11-15	16-20	21-25	26-(31)
	<i>Number of occasions</i>							<i>Number of occasions</i>					
May	—	1	—	—	3	4	Nov.	—	1	1	2	4	3
June	1	4	1	8	4	6	Dec.	—	4	7	4	8	12
July	8	7	17	8	6	5	Jan.	10	8	5	8	4	9
Aug.	9	6	8	3	1	3	Feb.	5	4	8	6	1	1
Sept.	2	1	1	—	1	—	Mar.	3	1	—	—	3	2

Extremes occurring on more than one date are entered in all appropriate periods.

Rainfall.—The main features of the rainfall diagram in Plate I are :—

- (i) the exceptionally wet 1903 following eight relatively dry years
- (ii) the wet groups 1875-82 and 1914-20
- (iii) the outstandingly dry 1921.

The two wettest years, 1903 and 1852, were alike in having wet summers and wet autumns, but whereas 1903 was consistently wet from March to October, especially in June, the spring of 1852 was dry and the greater part of the yearly rainfall total fell in the four months August to November. Five of the ten wettest years have occurred in the present century ; 1915 was made up of individually very wet months, while in both 1927 and 1924 rainfall was in excess of the average in all except two months of the year.

The wettest day was June 16, 1917, when a severe thunderstorm gave a total of 118 mm. (4.65 in.) at Kensington in less than 2½ hr.

The driest year by far on record was 1921. Rainfall was below average consistently from February onwards, the year's total being 100 mm. (4 in.) lower than the next driest year in 1864, and less than a third of the 1903 total. The extreme dryness of the late summer and autumn of 1947 was counteracted by the heavy rains of March and June.

Droughts.—Absolute droughts, i.e. periods of at least 15 consecutive days to none of which is credited 0.4 mm. (0.01 in.) of rain or more, have occurred more frequently in recent years during the spring than in other seasons. Absolute droughts of 4 weeks' duration in London since 1929 are given below :—

Year	Duration	Locality	Period
	days		
1929	33	Westminster	Feb. 27-Mar. 31
1929	36	Kew Observatory	Aug. 24-Sept. 28
1940	46	Regents Park	July 28-Sept. 11
1941	29	Camden Square	June 13-July 11
1941	29	Camden Square	Aug. 30-Sept. 27
1942	30	Camden Square	Apr. 10-May 9

There were three absolute droughts at Kew Observatory during the summer of 1911 : June 1-15, July 1-25 and August 2-18. In 1921 the periods of absolute drought at Kew were June 4-19 (16 days) and September 20-October 13 (24 days).

YEAR 1841-1949

Partial drought conditions, *i.e.* a period of at least 29 consecutive days the mean daily rainfall of which does not exceed 0.4 mm. (0.01 in.) were maintained in 1921 over the 95 days, May 10 to August 12.

WETTEST MONTHS AT KEW		DRIEST MONTHS
183 mm. (7.20 in.), June	1903	Completely rainless, April 1912 at Tottenham
172 mm. (6.77 in.), November	1940	Completely rainless, March 1929 in some districts
165 mm. (6.50 in.), August	1878	0.1 mm. (0.004 in.), August 1940 at Regents Park
162 mm. (6.38 in.), December	1914	1 mm. (0.04 in.), June 1925 at Kew and November 1945 at Regents Park

Rainfall totals of 5 mm. (0.2 in.) or less have occurred at least once in each of the months February to September.

Sunshine.—Plate I shows the large year-to-year sunshine differences, especially the contrast between 1932 and 1933. Sunshine was much more plentiful from 1892 to 1911 than in any other 20-year period.

The sunniest years were those of 1949, 1899 and 1933 in that order, despite a rather dull spring month in each year. A very dull May in 1906 interrupted an otherwise continuous sunny spell from January to October. The large excess of sunshine in 1911 was due entirely to the exceptional months of July, August and September. Sunshine was below average over the remainder of that year.

SUNNIEST MONTHS AT KEW	SUNLESS MONTHS AT KEW
334 hr., July 1911	0.3 hr., December 1890
315 hr., May 1909	16 hr., January 1885
291 hr., May 1922	17 hr., February 1947
291 hr., July 1900	18 hr., December 1903
290 hr., July 1928	19 hr., December 1933

SUNNIEST DAYS AT KEW

15.8 hr., June 13, 1887
15.5 hr., July 3, 1949
15.4 hr., June 12, 1897
15.4 hr., July 13, 1911

JANUARY 1841-1949

Temperature.—Monthly mean temperatures over the past 109 years are given in Plate III and examples of extremely mild and cold months in the present century are detailed in Plate II. The very low values in the three consecutive years 1940, 1941 and 1942 are outstanding in recent times.

Day maximum temperature.—The average day maximum temperature is 45°F., a degree lower than in December. The mildest January day was January 9, 1922 with 60°F. The coldest day was January 8, 1841 when temperature reached only 17°F. Other extremely low maxima were 21°F. on January 4, 1867 and 22°F. on January 4, 1893 and January 5, 1894. It is not unusual for temperature to remain at freezing point or below on at least one day in January. In January 1917 it was freezing continuously at Hampstead from the 20th to the 30th.

MILDEST JANUARY DAY

60°F. in 1 year
55-59°F. in 54 years
50-54°F. in 51 years
48°F. in 1 year
47°F. in 2 years

CONTINUOUS FROST BY DAY AND NIGHT

11 days in 1917
9 days in 1881 (234 hr.)
8 days in 1947
6 days in 1850, 1879, 1891, 1893
5 days in 1867*, 1894
4 days in 1855, 1862, 1880, 1895, 1945

It is rare for day-time temperature to remain below 50°F. or to reach 60°F. throughout the whole of January.

Night minimum temperature.—The average night minimum temperature is 36°F., slightly lower than in December. The coldest night on record was that of January 4-5, 1867, when air temperature fell to 1°F. at Kew Observatory. In January 1880 night minima below 20°F. occurred on seven nights, but in January 1916, 1930 and 1938 there were no general night frosts in the London area. The mildest night was that of January 2-3, 1932 when temperature did not fall below 54°F. at Greenwich. On January 29, 1947 a grass minimum temperature of -9°F. was recorded at Northolt and of -7°F. at Croydon.

COLDEST JANUARY NIGHT

1°F. in 1 year
4°F. in 1 year
5°F. in 1 year
9°F. in 3 years
10-14°F. in 6 years
15-19°F. in 25 years
20-24°F. in 41 years
25-29°F. in 26 years
31°F. in 1 year
32°F. in 1 year

No general frost in 3 years

SEVERE AIR FROSTS

Minimum 1°F. in 1867
Minimum 4°F. in 1841
Minimum 5°F. in 1947
Minimum 9°F. in 1881,
1940, 1942

FROSTY MONTHS

27 nights in 1879
26 nights in 1842 (nightly 1st-26th)
25 nights in 1850
24 nights in 1848
23 nights in 1880, 1891,† 1917‡

Average and extreme temperatures at Kew Observatory.—

Period	Maximum			Minimum				
	Average	Highest	Lowest	Average	Lowest	Highest		
1st-10th ..	°F. 45	°F. 57	Year 1922	°F. 36	°F. 1	Year 1867	°F. 53	Year 1948
11th-20th ..	45	57	1920	36	9	1881	52	1948
21st-31st ..	45	55	1899	36	15	1947	51	1889

* On 12 days in all. † Nightly 1st-23rd. ‡ Nightly 9th-31st.

JANUARY 1841-1949

Monthly and diurnal ranges.—Temperature has ranged through more than 45 degrees in the month of January while a diurnal range of 30 degrees is possible. In January 1841 the mildest day at Greenwich was 53°F. and the coldest night 4°F., while as recently as 1947 temperature at Croydon ranged from 54°F. by day on the 14th and 16th to 5°F. at night on the 29th.

On January 30, 1880 the maximum temperature at Greenwich was 51°F. and the minimum 21°F. On January 6, 1908 the temperature at Kew rose from 21°F. at 3 a.m. to 48°F. at 4 p.m. On New Year's Day 1932, it rose 19 degrees in the 6 hours 7 a.m. to 1 p.m.

These quick thaws caused by the onset of mild air from the Atlantic are often preceded by rain which freezes as it reaches the ground, covering all objects with a coating of transparent ice. Dangerously glazed roads were caused in this manner in January 1908, 1912 and 1932. In January 1912, the weight of ice collected on trees and telegraph wires was sufficient to cause much damage. This phenomenon is generally termed "glazed frost".

Day-to-day temperature changes of 10 degrees or more occur in most Januaries. In 1918 there were five such fluctuations. There have been several occasions of one day being 18 degrees milder than its predecessor. In January 1867 the day maximum on the 7th (54°F.) was 33 degrees milder than on the 4th, but after a short mild spell, day temperature was 29 degrees colder again on the 14th. Large temperature falls are usually spread over a few days but January 11, 1914, was 18 degrees colder than the 10th. Temperature can, however, be remarkably steady. In January 1916 the daily maximum temperatures varied by only 11 degrees and were all above the monthly average.

Precipitation. — Rainfall.—Monthly rainfall totals compared with the average given in Plate III show the spell of eight wet or snowy Januaries, 1936 to 1943, after a comparatively dry run. In January 1943, there were 154 mm. (6.06 in.) of rain at Croydon compared with 109 mm. (4.29 in.) at Enfield. Summer rainfall often varies greatly within short distances but this is not usually so pronounced in winter.

There were few years with 100 mm. (4 in.) of precipitation in January; 25 mm. (1 in.) of rain or melted snow in a day has been recorded infrequently over the past 75 years though it occurred in January 1939, 1940, 1942 and 1943.

WET MONTHS

Rain or snow on 26 days in 1877
 Rain or snow on 24 days in 1919
 Rain or snow on 23 days in 1887
 Rain or snow on 22 days in 1900, 1943
 Rain or snow on 21 days in 1883, 1899, 1904, 1927, 1931

There were several months with a large number of wet days but with precipitation totals nevertheless below average.

Snow.—General snow has fallen in London in seven Januaries out of ten on the average. A January without at least local snow is rare, but no snow or sleet fell in January 1944.

SNOWY MONTHS

Snow on 20 days in 1942 Snow on 12 days in 1886, 1895
 Snow on 19 days in 1917 Snow on 11 days in 1940, 1947
 Snow on 16 days in 1945 Snow on 10 days in 1887, 1891, 1893, 1918
 Snow on 15 days in 1879, 1941
 Snow was lying on the ground for 17 days in 1942.

Sunshine.—The sunniest January on record was in 1891, when 74 hr. were recorded at Kew Observatory. In 1912, when the sun shone for only 20 hr., there was one completely sunless fortnight.

FEBRUARY 1841–1949

Temperature.—Monthly mean temperatures over the past 109 years are given in Plate V and details of outstanding months during the present century in Plate IV. The Februaries of 1855, 1895 and 1947 were even colder than those of 1929 and 1942. The three mildest Februaries occurred in 1872, 1926 and 1945.

The average day maximum temperature is 45°F. over the greater part of the month. The mildest day was February 10, 1899, when temperature rose to 66°F. Noteworthy values of 64°F. occurred in 1920 and 63°F. in 1945. The coldest February day was in 1895 when temperature reached only 23°F. on the 9th. Other extremely low maxima were 25°F. in 1841 and 1947 and 26°F. in 1929. Continuous frosts by day and by night have occurred on at least one day in three Februaries out of ten on the average, compared with five Januaries out of ten. There have been several occasions when frost continued throughout the day on the last day of the month. In 1947 the mildest day was only 43°F.

MILDEST FEBRUARY DAY

66°F. in 1 year
60–64°F. in 13 years
55–59°F. in 62 years
50–54°F. in 25 years
45–49°F. in 7 years
43°F. in 1 year

FROST BY DAY AND NIGHT

20 days in 1947*
12 days in 1895
9 days in 1841†, 1855
6 days in 1870, 1929
3 days in 1865, 1888, 1912, 1940, 1942

The average night minimum temperature is 36°F. a fraction of a degree lower than in January and the lowest of the year. The coldest February night on record was 7°F. on February 8, 1895. On February 15, 1929, temperature on the grass fell to –2°F. at Hampstead. A grass minimum temperature of –1°F. was recorded at Croydon on February 24, 1947. In February 1855 night minima below 20°F. occurred on ten nights. There were no general February air frosts in 1867, 1872, 1925 or 1945, while only one night frost occurred in four other Februaries.

COLDEST FEBRUARY NIGHT

7–9°F. in 5 years
10–14°F. in 5 years
15–19°F. in 18 years
20–24°F. in 35 years
25–29°F. in 34 years
30°F. in 2 years
31°F. in 3 years
32°F. in 3 years
No general air frost in 4 years

SEVERE AIR FROSTS

Minimum 7°F. in 1895, 1947
Minimum 8°F. in 1845
Minimum 9°F. in 1929, 1942

FROSTY MONTHS

27 nights in 1947‡
24 nights in 1855, 1895§
22 nights in 1858, 1929
21 nights in 1845, 1853, 1875, 1909

Average and extreme temperatures at Kew Observatory.—

Period	Maximum			Minimum		
	Average	Highest	Lowest	Average	Lowest	Highest
1st–10th ..	°F. 45	°F. 62	°F. 23	°F. 36	F°. 11	°F. 52
11th–20th ..	°F. 45	°F. 61	°F. 26	°F. 36	F°. 10	°F. 52
21st–28th|| ..	°F. 47	°F. 59	°F. 30	°F. 36	F°. 15	°F. 50
	Year 1899	Year 1945	Year 1895	Year 1895	Year 1855	Year 1914
	Year 1921	Year 1888	Year 1888	Year 1947	Year 1912	Year 1912

* 14 consecutive days 11th–24th. † 9 consecutive days. ‡ 25 consecutive nights. § 20 consecutive nights.
|| 29th in leap years.

FEBRUARY 1841-1949

Monthly and diurnal ranges.—Air temperature has ranged through more than 40 degrees in a month while the diurnal range has amounted to as much as 33 degrees. In February 1847 the mildest day at Greenwich was 55°F. and the coldest night 11°F. At Croydon the extreme values in 1948 were 62°F. and 14°F. A very large diurnal range occurred at Greenwich on February 28, 1891, when the maximum and minimum readings were 61°F. and 28°F. respectively.

Day-to-day temperature changes of 10 degrees or more are much less frequent than in January. They occur at least once in five Februaries out of ten on the average, rises being more frequent than falls. The maximum temperature at Greenwich on February 19, 1896, was 55°F. compared with 37°F. on the previous day. In 1920 the 20th was 15 degrees colder than the 19th. Exceptionally consistent temperatures have been experienced in some Februaries. In 1863 the coldest day was 45°F. and the mildest day 56°F.

Precipitation.—Rainfall.—Monthly rainfall totals compared with the average are given in Plate V. February is normally the second driest month of the year. There have been more Februaries with less than an inch of rain than there have been with two inches. On 12 occasions the month's rainfall has been less than half an inch.

An inch of rain in a day is very rare. The only recorded instance at Kew Observatory since 1871 was on February 13, 1925.

WET MONTHS

Rain or snow on 25 days in 1879
 Rain or snow on 24 days in 1910 and 1923
 Rain or snow on 23 days in 1893
 Rain or snow on 22 days in 1916

Snow, at least locally, has occurred in eight years out of ten on the average and in every February over the 24 years 1915 to 1938.

SNOWY MONTHS

Snow on 19 days in 1879 (daily from 10th onwards), 1947
 Snow on 18 days in 1888, 1942
 Snow on 16 days in 1889
 Snow on 14 days in 1944
 Snow on 11 days in 1941
 Snow on 10 days in 1881, 1916, 1924, 1933, 1940

Sunshine.—February sunshine in the City is double that of January on the average, about 50 per cent. higher at Greenwich, Regents Park and Westminster, and 61 hr. compared with 44 hr. at Kew Observatory.

Plate V shows the variability of February sunshine in general, and in particular the great difference between that of 1939 (105 hr.) and 1940 (25 hr.). In February 1947 it was completely sunless at Kew Observatory for 21 consecutive days and 23 days in all. The sunniest February was in 1949.

MARCH 1841-1949

Temperature.—Monthly mean temperatures over the past 109 years are given in Plate VII and details of outstanding months since 1900 in Plate VI. March 1938 was very much milder than any other March on record. The cold months between 1883 and 1892 are well marked. Three of these were worse than the coldest March of the present century.

It will be seen that March 1878, 1890 and 1929 were the only months with mean temperature of exactly the average value. These months were made up of alternating cold and mild periods. In 1890 air temperature ranged through 56°F. over the month while in 1929 there was a temperature range of 40 degrees in 24 hr. Mean values obviously convey only an incomplete picture of monthly temperature.

The average day maximum temperature rises from 48°F. in the early part of the month to 51°F. at the end. The highest March temperatures on record are 75°F. on March 9, 1948, 73°F. on each of the three days March 28-30, 1929 and 72°F. on March 26, 1944. The coldest day was March 13, 1845 when temperature did not rise above 25°F. Frost throughout the whole day has occurred in one March out of ten on the average, mostly in the first half of the month, but in March 1845 the maximum temperature on the 16th was 28°F. In March 1869 the mildest day was only 54°F.

MILDEST MARCH DAY

75°F. in 1 year
70-73°F. in 7 years
65-69°F. in 27 years
60-64°F. in 41 years
55-59°F. in 32 years
54°F. in 1 year

FROST BY DAY AND NIGHT

4 days in 1947†
3 days in 1845*
2 days in 1890*, 1892*, 1917*
1 day in 1909, 1928, 1931, 1942

The average night minimum temperature is 36° to 37°F. The lowest March readings on record were 13°F. on March 14, 1845, and March 4, 1890. There were no general air frosts in 1896, 1912, 1923, 1927, 1938 or 1945.

COLDEST MARCH NIGHT

13-14°F. in 2 years 25-29°F. in 49 years
15-19°F. in 5 years 30°F. in 4 years
20-24°F. in 41 years 31°F. in 2 years
No general air frost in 6 years

HARD AIR FROSTS

Minimum 13°F. in 1845, 1890
Minimum 14°F. in 1909

FROSTY MONTHS

24 nights in 1883
20 nights in 1888, 1924‡
19 nights in 1865
18 nights in 1845, 1853, 1855, 1886, 1887, 1892

Average and extreme temperatures at Kew Observatory.—

Period	Maximum			Minimum		
	Average	Highest	Lowest	Average	Lowest	Highest
1st-10th ..	°F. 48	°F. Year 71 1948	°F. Year 31 1931	°F. 36	°F. Year 17 1909	°F. Year 51 1896
11th-20th ..	49	66 1931	33 1928	37	22 1886	51 1940
21st-31st ..	51	69 1945	34 1879	37	23 1899	52 1912

† On three consecutive days. * On two consecutive days. ‡ Nightly 1st to 20th.

MARCH 1841-1949

Monthly and diurnal ranges.—A very large temperature range over the month occurred at Greenwich in 1890 when the coldest night was 13°F. on the 4th and the warmest day 69°F. on the 28th ; a range of 56°F. A diurnal range of 40 degrees was recorded at Croydon on March 20, 1929, when a night minimum of 27°F. was followed by a day maximum of 67°F.

Day-to-day temperature changes.—Large day-to-day temperature changes are frequent, falls of 10 degrees or more being rather more common than temperature rises of that magnitude. In 1870 the day maximum on the 4th was 39°F. compared with 60°F. on the 3rd, a fall of 21 degrees. March 16, 1947, was 24 degrees warmer than the previous day.

Precipitation.—Rainfall.—Monthly rainfall totals compared with the average are given in Plate VII. The large number of wet months between 1901 and 1919 and the frequent dry months from 1920 onwards, except for 1940, 1941 and the exceptionally wet March of 1947 are the main features.

25 mm. (1 in.) of rain in one March day is rare, though there were two such days in 1940. March 1929 was completely dry in many parts of London.

WET MONTHS

Rain or snow on 28 days in 1914
Rain or snow on 27 days in 1909
Rain or snow on 26 days in 1947
Rain or snow on 24 days in 1905
Rain or snow on 23 days in 1916
Rain or snow on 22 days in 1896, 1903

Snow.—Sleet has occurred in March, at least locally, in eight years out of ten on the average. There have been no two consecutive years without some snow or sleet in March since 1873. Snow was lying 7½ in. deep on March 3, 1909.

SNOWY MONTHS

Snow or sleet on 14 days in 1916
Snow or sleet on 13 days in 1883, 1917, 1937
Snow or sleet on 12 days in 1888
Snow or sleet on 11 days in 1909, 1915
Snow or sleet on 10 days in 1876, 1947

Sunshine.—March sunshine is extremely variable. In 1907 three times the amount of sunshine was recorded as in 1916 and 1947. March was dull in each of the years 1911 to 1917 but sunny months have preponderated from 1920 onwards.

APRIL 1841-1949

Temperature.—Monthly mean temperatures over the past 109 years are given in Plate IX and details of outstanding months during the present century in Plate VIII. The eight successive warm Aprils of 1942 to 1949, the first such spell since the 1860's, and the large number of months close to the average temperature, despite large monthly ranges, are the main features.

The average day maximum temperature rises from 53°F. to 57°F. during the month. The warmest day was April 16, 1949 when temperature rose to 85°F. at Camden Square. Temperature reached 82°F. on April 20, 1893 and 81°F. in 1865 and 1945. In April 1865 temperature was 70°F. or above daily from the 21st to 28th and on 15 days in all. On April 5, 1911, however, it was freezing all day at Hampstead, the only record of such an occurrence in London in April. There have been several years in which temperature remained below 35°F. all day. In 1903, 1917 and 1941 the mildest day was only 61°F.

WARMEST APRIL DAY

85°F. in 1 year	70-74°F. in 27 years
80-84°F. in 5 years	65-69°F. in 38 years
75-79°F. in 25 years	61-64°F. in 13 years

The average night minimum temperature is 38°F. at first rising to 42°F. towards the end of the month. Air frost on at least one night has occurred in eight Aprils out of ten, though in the consistently mild April of 1914 there was not even a ground frost at Westminster. The coolest nights were in April 1903 when temperature was 21°F. on the 19th and 20th. Temperature on the grass fell to 12°F. in 1927.

COOLEST APRIL NIGHT

20-24°F. in 3 years
25-29°F. in 55 years
30-32°F. in 27 years

No general air frost in 24 years

KEEN AIR FROSTS

Minimum 21°F. in 1903
Minimum 22°F. in 1922
Minimum 23°F. in 1847

FROSTY MONTHS

15 nights in 1903
11 nights in 1888
10 nights in 1852

Average and extreme temperatures at Kew Observatory.—

Period	Maximum			Minimum			Highest	
	Average	Highest	Lowest	Average	Lowest	Highest	Year	Year
1st-10th ..	53	75	35	38	26	54	1922	1937
11th-20th ..	55	80	39	40	27	55	1887	1945
21st-30th ..	57	76	42	42	28	53	1884	1874 1948

Monthly and diurnal ranges.—There have been several years in which air temperature has ranged over more than 50 degrees. In 1949 the warmest day at Wealdstone was 84°F. on the 16th and the coolest night 28°F. on the 10th. A range of 53°F. occurred at Greenwich during one week in April 1946 when the day temperature was 80°F. on the 4th and night temperature 27°F. on the 11th.

APRIL 1841-1949

Exceptionally, temperature ranges of 40 degrees can occur in 24 hr. ; ranges of this magnitude were recorded at Greenwich in the Aprils of 1852 and 1869.

Day-to-day temperature changes of more than ten degrees occur in most Aprils, often more than once in a month. It is fairly common for one day to be 15 degrees colder than its predecessor, and there are several instances of falls of 20 degrees or more. In April 1866 the maximum temperature at Greenwich on the 29th was 27 degrees colder than on the 28th, while April 5, 1946 was 26 degrees colder than the previous day. Sudden temperature rises of 15 degrees are less frequent but are nevertheless not rare. April 10, 1869 was 20 degrees warmer than the 9th.

Precipitation.—Rainfall.—Monthly rainfall totals for what is normally the driest month are given in Plate IX. Most Aprils were dry in the period 1891 to 1916 and wet from 1917 to 1941.

April 1912 was completely dry at Tottenham while there was only one wet day at Westminster in April 1938. 25 mm. (1 in.) of rain in one day is unusual but 56 mm. (2¼ in.) fell on April 10, 1878.

WET MONTHS

Rain or snow on 22 days in 1920, 1935

Rain or snow on 21 days in 1879

Rain or snow on 20 days in 1889, 1899

Snow or sleet has occurred at least locally in April in six years out of ten on the average. Snow was lying 4 in. deep for a time on April 27, 1919, although temperature had risen to 70°F. earlier in the month. In 1921 it snowed on the 15th and 17th after a temperature of 73°F. on the 13th.

SNOWY MONTHS

Snow or sleet on 13 days in 1917

Snow or sleet on 7 days in 1936

Snow or sleet on 6 days in 1888, 1908

Snow or sleet on 5 days in 1911, 1918

Snow or sleet on 4 days in 1879, 1935

Sunshine.—The large number of dull months from 1918 to 1944 and the extremely sunny Aprils in the early part of the present century are among the features of Plate IX. The Aprils of 1893 and 1909 had three times as much sunshine as the April of 1920.

MAY 1841-1949

Temperature.—Monthly mean temperatures over the past 109 years are given in Plate XI and details of outstanding months during the present century in Plate X. The cold Mays in the 60-year period 1850 to 1910 (especially 1879), the warm spell 1910 to 1925 and the very cold May of 1941 are noteworthy features. Mean temperatures show few really warm months. Warm days are often offset by cold nights while cold spells, of at least short duration, have occurred yearly from 1849 onwards.

The average day maximum temperature rises from 61°F. at the beginning of the month to 65°F. at the end. The warmest days on record were May 22 and 24, 1922 and May 29, 1944 when temperature rose to 91°F. These were the hottest days of their respective years. In May 1848 temperature was above 70°F. on 23 days and 75°F. or above on 12 consecutive days. Cold snaps however, to which May is liable, result in the temperature remaining below 50°F. all day in five months out of ten on the average. On May 1, 1866, and May 18, 1891, the maximum temperature was only 43°F.

WARMEST MAY DAY

91°F. in 2 years
 90°F. in 1 year
 85-89°F. in 13 years
 80-84°F. in 38 years
 75-79°F. in 33 years
 70-74°F. in 17 years
 65-69°F. in 5 years

COOLEST MAY DAY

43°F. in 1866, 1891
 44°F. in 1856
 45°F. in 1877, 1879, 1930, 1947

The average night minimum temperature is 44°F. at first rising to 47°F. at the end of the month. The coldest nights on record were May 10, 1874, May 4 and 11, 1941, and May 8, 1944, with minima of 27°F. Air frost has occurred in one year out of two on the average; in 1874 there were ten night frosts and in 1941 seven at Croydon. Air frosts were experienced up to the 23rd in 1905 and on the 24th in 1867.

AIR FROSTS

Minimum 27°F. in 3 years
 Minimum 28°F. in 4 years
 Minimum 29°F. in 6 years
 Minimum 30°F. in 4 years
 Minimum 31°F. in 8 years
 Minimum 32°F. in 24 years

OCCURRENCE OF LATEST AIR FROSTS

1st to 7th in 20 years
 8th to 14th in 16 years
 15th to 21st in 11 years
 22nd to 24th in 2 years

On the night of May 8-9, 1945, temperature at Westminster did not fall below 63°F.

Ground frosts have been recorded in all but seven of the past 75 years. In 1874 there was ground frost on 13 mornings in the first three weeks, and it is not unusual for them to occur in the last week. Temperature on the grass fell to 14°F. on May 17, 1935.

Average and extreme temperatures at Kew Observatory.—

Period	Maximum			Minimum		
	Average	Highest	Lowest	Average	Lowest	Highest
1st-10th ..	°F. 61	°F. Year 78 1923	°F. Year 46 1892	°F. 44	°F. Year 30 1877	°F. Year 61 1945
11th-20th ..	63	83 1945	43 1891	46	30 1935	58 { 1891 1907
21st-31st ..	65	87 1922	47 1891	47	34 1894	63 1944

MAY 1841-1949

Monthly and diurnal ranges.—Very large temperature ranges are experienced in May. In 1944 at Enfield the coldest night was 27°F. on the 8th and the hottest day 87°F. on the 29th, a difference of 60 degrees. There have been several instances of 55-degree ranges over the month.

It is not unusual for the night minimum temperature in May to be 35 degrees lower than the day maximum temperature. On May 26, 1880, the diurnal range amounted to 39 degrees, with a day temperature of 87°F. and a night minimum temperature of 48°F.

Day-to-day temperature changes.—Large temperature changes are much more frequent in May than in any other month. May 1861 was an outstanding example. Day maxima at Greenwich over one fortnight in that year were :—

11th 50°F.	16th 78°F.	21st 79°F.
12th 65°F.	17th 61°F.	22nd 69°F.
13th 53°F.	18th 61°F.	23rd 80°F.
14th 65°F.	19th 60°F.	24th 65°F.
15th 71°F.	20th 74°F.	

May 4, 1862, was 24 degrees warmer than the previous day ; 76°F. compared with 52°F. Sudden temperature falls are twice as frequent as the rises. In 1884 the day maximum temperature at Greenwich dropped from 81°F. on the 24th to 57°F. on the 25th.

Precipitation.—Rainfall.—Monthly rainfall totals compared with the average are given in Plate XI. In only three of the past 60 years has May rainfall been double the average.

With the increasing liability to thunderstorms, May is the first month of the year with a fair chance of 25 mm. (1 in.) of rain falling in one day. This has occurred in one year out of four or five on the average. In 1878, 1879 and 1915 there were two days each with 25 mm. of rain. During a thunderstorm on May 26, 1920, 65 mm. (2.56 in.) of rain fell in 70 min. at Barnes.

WET MONTHS

Rain on 25 days in 1932
Rain on 23 days in 1878, 1898, 1902
Rain on 21 days in 1885, 1887
Rain on 20 days in 1910, 1924

There were only three days with rain in 1896 and 1936.

Thunderstorms occurred on eight days in 1924, compared with a long-period average of two thundery days in each May.

Snow.—General snow or sleet has been recorded in about one May out of ten on the average, the latest date of occurrence being the 16th in 1891, 1923 and 1935. Each of these months opened with very warm weather. There was snow on two days in May 1879, 1891 and 1935.

Sunshine.—The large number of sunny months in the period 1895 to 1922 and the ten successive dull months from 1930 to 1939 are the main features of the sunshine diagram in Plate XI. The sunshine total of May 1909 was almost three times that of the same month in 1932.

The sunniest day of the year has occurred in May on six occasions in the present century. There were 15 hr. bright sunshine on May 24, 1915.

JUNE 1841-1949

Temperature.—Monthly mean temperatures over the past 109 years are given in Plate XIII, and details of outstanding months in the present century in Plate XII.

The two outstandingly hot Junes were those of 1846 and 1858 but the only spell of six successive warm Junes occurred in recent times : 1933 to 1938. There were only two relatively cool Junes over the 14 years 1930 to 1943. The sharp difference between 1916 and 1917 is noteworthy.

The average day maximum temperature rises during the month from 66° to 69°F. The hottest June days on record were 95°F. on June 16, 1858, 94°F. on June 22, 1941, and June 3, 1947. The hottest day of the year has occurred in June in one year out of five. In only about one June out of 20 does temperature fail to reach 75°F. on at least one day. The extremely cold June of 1916, however, failed to produce a day above 70°F.; on the 12th of that month the maximum temperature was only 50°F., the average value for mid November.

WARMEST JUNE DAY	COOLEST JUNE DAY
95°F. in 1 year	49°F. in 1 year
90–94°F. in 12 years	50°F. in 2 years
85–89°F. in 41 years	51°F. in 4 years
80–84°F. in 37 years	
75–79°F. in 12 years	
70–74°F. in 6 years	

The average night minimum temperature is 49°F. at first rising to 53°F. towards the end of the month. There is no record of an air frost in June but temperature fell to 34°F. on the night of June 2–3, 1923. The warmest night was that of June 26–27, 1947 when temperature did not fall below 70°F. at Hampstead.

June ground frosts have occurred on at least one morning in one year out of five on the average over the past 75 years. In 1915 there were ground frosts on the four successive mornings 18th to 21st. Grass minimum temperature fell to 24°F. on June 27, 1919, the latest June ground frost on record.

DATES OF LATEST GROUND FROSTS

1st to 7th	in 4 years
8th to 14th	in 6 years
15th to 21st	in 6 years
27th	in 1 year

Average and extreme temperatures at Kew Observatory.—

Period	Maximum			Minimum		
	Average	Highest	Lowest	Average	Lowest	Highest
	°F.	°F. Year	°F. Year	°F.	°F. Year	°F. Year
1st–10th ..	66	91 1947	51 1909	49	37 { 1880 1923	64 1947
11th–20th ..	68	88 1917	50 1903	51	38 1892	64 1936
21st–30th ..	69	87 1941	54 1925	53	41 1874	67 1947

Monthly and diurnal ranges.—Temperature ranges are not so large or as noticeable as in May, but in 1857 there was a difference of 54 degrees between the warmest day and the coolest night at Greenwich, 93°F. compared with 39°F. There was a monthly range of 49°F. at Enfield and Hampstead in June 1941. An outstanding diurnal range of 42 degrees occurred at Greenwich on June 21, 1865 when the maximum and minimum temperatures were 85°F. and 43°F. respectively.

JUNE 1841-1949

Day-to-day temperature changes.—Sudden really hot bursts are infrequent. It is very rare for a June day to be 20 degrees warmer than its predecessor though the maximum temperature at Kew Observatory rose from 60°F. on June 26, 1887, to 81°F. on the following day. There are several recorded instances of temperature falls of more than 20 degrees from day to day.

Year	Date	Maximum temperature	Date	Maximum temperature	Difference
		°F.		°F.	°F.
1844	24th	88	25th	61	-27
1893	19th	91	20th	67	-24

In June 1947 the maximum temperature at Kensington fell from 94°F. on the 3rd to 64°F. on the 5th.

Precipitation.—Rainfall.—Monthly rainfall totals compared with the average are given in Plate XIII. The rainfall at Kew Observatory in 1903 was the largest total recorded there for any month of the year back to at least 1871. The frequent wet Junes in the period 1902 to 1928 and the unprecedented succession of nine dry months from 1937 to 1945 are obvious features of the diagram.

25 mm. (1 in.) of rain on at least one day has occurred in June in one year out of three on the average over the past 75 years. In 1903 there were four days in one week each with 25 mm. At Campden Hill 114 mm. (4½ in.) fell on June 16, 1917 and at Richmond Park 94 mm. (3.70 in.) in 2¾ hr. on June 14, 1914. It rained continuously for 35 hr. in June 1903. In contrast there were eight years in the period 1913 to 1938 when the total for the whole of the month at Kew Observatory was less than 25 mm., while over the whole period since 1841 six Junes out of ten have been fairly dry.

WET MONTHS

Rain on 22 days in 1879, 1946
 Rain on 21 days in 1880
 Rain on 20 days in 1935

There was only one day with rain in June 1925.

Thundery rain.—In 1878, 61 mm. (2.42 in.) of rain fell in 40 min. at Camden Square on the 23rd and 83 mm. (3.28 in.) in 1½ hr.

Thunderstorms occurred on eight days in 1878 and on seven days in 1933, 1946 and 1947 compared with a long-period average frequency of about two days a month.

Sunshine.—June sunshine totals compared with the average are given in Plate XIII. Year-to-year variations are well marked especially 1908 to 1909 and 1923 to 1925. Six successive sunny Junes 1937 to 1942 were followed by four dull ones, but sunny months have outnumbered dull ones over the 70 years.

The total sunshine over the first six days of June 1909 amounted to less than ¼ hr. The six days June 2 to 7, 1940, totalled 82 hr.

The sunniest day of the year occurred in June in six years out of seven in the present century. There have been six years with at least one June day on which 15 hr. bright sunshine were enjoyed, 15.3 hr. at Kew Observatory on June 4, 1939. Only three Junes failed to produce a day with 13½ hr. sunshine, but the largest daily sunshine total in June 1946, amounted to only 10.3 hr.

JULY 1841-1949

Temperature.—Monthly mean temperatures over the past 109 years are given in Plate XV and details of outstanding months in the present century in Plate XIV. The hot July of 1921 was the more notable because of its occurrence between two very cool ones.

The average day maximum temperature in July is the highest of any month of the year; 70° to 71°F. in the suburbs and 73° to 74°F. in central London. The two hottest July days on record were 97°F. on July 22, 1868, and July 15, 1881. Temperature reached 96°F. in 1911 and 1923 and was 90°F. or above on five days in July 1868, 1876 and 1911. In only about one July out of 35 does temperature fail to reach 75°F. on at least one day. In July 1888 and 1920 the warmest day was only 73°F., while in both these cool months there was one day when temperature remained below 55°F. all day. The hottest day of the year occurs more frequently in July than in any other month of the year.

WARMEST JULY DAY	COOLEST JULY DAY
95-97°F. in 5 years	54°F. in 2 years
90-94°F. in 28 years	55°F. in 1 year
85-89°F. in 34 years	56°F. in 1 year
80-84°F. in 23 years	57°F. in 6 years
75-79°F. in 16 years	58°F. in 3 years
73-74°F. in 3 years	59°F. in 5 years

The average night minimum temperature is higher in July than in any other month varying with locality between 53° and 56°F. No official ground frosts have been recorded though the grass minimum temperature fell to 32°F. in 1916 and 1919. The warmest July night was on July 29, 1948, when temperature at Westminster did not fall below 74°F. The coolest night was 39°F. at Greenwich on July 19, 1863.

Average and extreme temperatures at Kew Observatory.—

Period	Maximum			Minimum		
	Average	Highest	Lowest	Average	Lowest	Highest
1st-10th ..	70	90 1881	54 1920	54	43 1882	64 1939
11th-20th ..	71	90 1923	54 1888	55	44 { 1888 1907	68 1923
21st-31st ..	71	93 1948	57 1917	55	43 1884	70 1948

Monthly and diurnal ranges.—Temperature ranges over the month of more than 45 degrees occur occasionally. There were differences of 49 degrees between the hottest day and coldest night in July 1868, at Enfield and Greenwich in July 1921 and at London Airport in July 1948.

An exceptional diurnal range of 40°F. was recorded at Greenwich on July 8, 1870, when the maximum temperature was 90°F. and the minimum 50°F.

Day-to-day temperature changes.—Very large day-to-day temperature changes are less marked than in June though it is by no means unusual for one day to be 15 to 20 degrees different from the previous day. The maximum temperature at Greenwich on July 29, 1868, was 65°F. compared with 90°F. on the 28th, a fall of 25 degrees. July 9, 1919, was 19 degrees warmer than the 8th: 74°F. compared with 55°F.

JULY 1841-1949

Precipitation.—Rainfall.—Monthly rainfall totals compared with the average are given in Plate XV. The July of 1921 was not only the driest July on record but was both preceded and followed by four extremely wet Julies.

25 mm. (1 in.) of rain on at least one July day has been recorded in about four years out of ten on the average. In four years there were two days each with an inch of rain; on two successive days in 1875 it rained continuously for 44 hr. Since 1903 falls of 25 mm. in a day have been recorded in one July out of two. This increased incidence may be due to the greater number of observing stations. Thundery rain amounts often vary considerably within short distances, and some heavy falls would have been missed with the more scanty observing stations in earlier years.

WET MONTHS

Rain on 23 days in 1880, 1888, 1922

Rain on 21 days in 1894

Rain on 20 days in 1879, 1920

Thundery rain.—A monthly total of 193 mm. (7.60 in.) occurred at Hampstead in 1924, 86 mm. (3.39 in.) on the 11th at Kensington of which 25 mm. fell in 12 minutes in 1927, and 50 mm. (1.97 in.) in 35 minutes at Kew Observatory in 1946.

Thunderstorms.—There were ten days with thunder in July 1880, 1888 and 1918 compared with a long-period average of three days a month. Exceptionally frequent and vivid lightning accompanied an all-night storm on July 9-10, 1923. This was rivalled for intensity and duration by the great storm of July 14-15, 1945. Hailstones were reported to have weighed 8 ounces during a storm on July 22, 1925 at Woolwich and Plumstead. On the other hand July is sometimes practically free from thunderstorms for several years on end, as in 1920, 1921 and 1922.

Sunshine.—Average sunshine for July shows a slight falling off compared with May and June. Actual values are given in Plate XV.

July 1911 was outstandingly sunny, especially in view of its occurrence in an otherwise ten-year dull spell. The total of 334 hr. at Kew was not only the highest ever recorded there in any month but was almost $3\frac{1}{2}$ times that of July 1944.

AUGUST 1841-1949

Temperature.—Monthly mean temperatures over the past 109 years are given in Plate XVII and details of outstanding months in the present century in Plate XVI. The frequent warm Augusts of 1932 to 1944, the exceptionally hot August of 1911, followed by the cold August of 1912 and the cold Augusts between 1881 and 1892 are noteworthy. In 1947 the days were a trifle less warm than in 1911 but the nights were slightly warmer. Mean temperature was a fraction of a degree higher than in August 1911.

The average day maximum temperature in outer London falls slowly during the month from 71°F. to 69°F. values in central London being about two degrees higher. The reading of 100·0°F. at Greenwich on August 9, 1911, is the all-time record for London and the highest August temperature recorded anywhere in the British Isles. On the same day 99°F. was reached at Isleworth and also on August 19, 1932 at Greenwich. Temperature exceeded 90°F. in one August out of six on the average and on three days in each of the years 1876, 1893, 1911 and 1930. In only one year—1912—did temperature fail to exceed 70°F. The warmest day in August 1860 was only 71°F. The lowest day maximum was 55°F. on August 7, 1898. The hottest day of the year has occurred in August in 30 of the past 109 years.

WARMEST AUGUST DAY

100°F. in 1 year
95–99°F. in 5 years
90–94°F. in 17 years
85–89°F. in 28 years
80–84°F. in 37 years
75–79°F. in 17 years
70–74°F. in 4 years

COOLEST AUGUST DAY

55°F. in 1 year
56°F. in 1 year
57°F. in 5 years
58°F. in 1 year
59°F. in 3 years

The average night minimum temperature is 54°F. for the greater part of the month falling off slightly later. The warmest August night on record in the London area was on August 18–19, 1932, when temperature did not fall below 70°F. at Croydon. The lowest night reading was 38°F. at Greenwich on August 27, 1864.

The grass minimum temperature fell to 27°F. at Greenwich and 28°F. at Kew on August 24, 1940.

Average and extreme temperatures at Kew Observatory.—

Period	Maximum			Minimum		
	Average	Highest	Lowest	Average	Lowest	Highest
	°F.	°F. Year	°F. Year	°F.	°F. Year	°F. Year
1st–10th ..	71	94 1911	55 1898	54	44 { 1886 1888	67 1933
11th–20th ..	70	92 1876	56 1879	54	41 1887	67 1911
21st–31st ..	69	91 1906	56 1876	53	41 1890	64 1930

Monthly and diurnal ranges.—Temperature ranges, over the month, of 45°F. have occurred fairly frequently; there are three instances of ranges of more than 50°F. at Greenwich.

Year	Warmest day		Coolest night		Range
	Maximum	Date	Minimum	Date	
	°F.		°F.		°F.
1876	94	14th	41	26th	53
1911	100	9th	48	31st	52
1864	89	5th	38	27th	51

A diurnal range of 37°F. was recorded at Greenwich on August 8, 1887, when the day maximum was 88°F. and the night minimum 51°F.

AUGUST 1841-1949

Day-to-day changes.—It is unusual for an August day to be 15 degrees warmer than its predecessor though August 7, 1888, was 19 degrees warmer than the 6th. Falls of 15 to 20 degrees from one day to the next have been fairly frequent ; maximum temperature at Greenwich on August 29, 1869, was 65°F. compared with 89°F. on the 28th—a sudden drop of 24 degrees.

Precipitation.—Rainfall.—The large year-to-year variation of August rainfall is shown in Plate XVII. The driest August on record, in 1940, was followed by the exceptionally wet August of 1941. The three consecutive wet Augusts in 1877 to 1879 and in 1915 to 1917 are noteworthy.

The frequency of occurrence of 25 mm. (1 in.) of rain in a day has been slightly less than in July, in one year out of three on the average. There have been six Augusts since 1878 each with two days with 25 mm. (1 in.) of rain. 30 mm. (1.18 in.) fell in 40 min. at Hornsey on August 4, 1937 and 84 mm. (3.32 in.) in 90 min. at Sudbury on August 23, 1947.

Although the average rainfall total for August is little different from that of July the number of months with a large number of wet days is larger.

WET MONTHS

Rain on 28 days in 1912
Rain on 24 days in 1917, 1941
Rain on 23 days in 1878, 1924, 1927
Rain on 22 days in 1891
Rain on 21 days in 1910
Rain on 20 days in 1879, 1928, 1946

Thunderstorms.—There were nine days with thunderstorms in August 1915, eight days in August 1878 and seven days in August 1897, 1912 and 1924 compared with a long-period average of three days a month.

Sunshine.—A feature of the sunshine diagram in Plate XVII is the large number of sunny Augusts in the 20-year period, 1892 to 1911. Since then, there has been a marked preponderance of dull months, especially the 6-year spell 1912 to 1917, though the August of 1947 was the second sunniest on record, only one hour less at Kew than in 1899.

SEPTEMBER 1841-1949

Temperature.—Monthly mean temperatures over the past 109 years compared with the average are given in Plate XIX and outstanding months in the present century are detailed in Plate XVIII. The exceptionally warm Septembers of 1865, 1929 and 1949 and the large number of warm Septembers from 1929 onwards are among the features of the diagram. September 1906 is an example of a mean temperature above the average masking a mainly cool month, a consistently cool fortnight failing to offset a hot opening week.

The average day maximum temperature falls steadily from 67°F. at the beginning of the month to 63°F. at the end. The highest September temperature on record is 96°F. on September 1, 1906. A temperature of 87°F. was recorded as late as September 24 in 1895, while there have been three years in which temperature has risen to 80°F. in the last week. In 1912, however, temperature kept below 65°F. throughout the whole month in some parts of London. The coolest day was September 29, 1918, with a maximum temperature of only 48°F. The hottest day of the year occurred in September in 1880, 1898, 1906, 1907 (on the 25th) and in 1949. September 13, 1891 equalled July 17 as being the warmest day of the year.

WARMEST SEPTEMBER DAY	NOTABLE TEMPERATURES
96°F. in 1 year	96°F. on September 1, 1906*
90-94°F. in 4 years	94°F. on September 8, 1911
85-89°F. in 12 years	92°F. on September 7, 1868
80-84°F. in 32 years	92°F. on September 8, 1898*
75-79°F. in 32 years	90°F. on September 19, 1926
70-74°F. in 26 years	
65-69°F. in 2 years	

The average night minimum temperature falls during the month from 51°F. to 48°F. Air frosts are unusual. They have been recorded in one September out of 25 on the average. The lowest reading was 29°F. on September 23, 1872. On September 5, 1949, the night minimum temperature at Westminster was 71°F.

EARLIEST AIR FROSTS

1948 on 22nd
 1872 on 22nd and 23rd
 1885 on 27th
 1919 on 29th and 30th

Average and extreme temperatures at Kew Observatory.—

Period	Maximum			Minimum		
	Average	Highest	Lowest	Average	Lowest	Highest
1st-10th ..	°F. 67	°F. 92	°F. 54	°F. 51	°F. 37	°F. 69
11th-20th ..	Year 1906	Year 1909	Year 1909	Year 1890	Year 1892	Year 1949
21st-30th ..	Year 1898	Year 1912	Year 1918	Year 1919	Year 1932	Year 1934

Ground frosts have occurred on about one September out of two, mostly in the second half of the month, but several in the first few days. Grass minimum temperature fell to 19°F. on September 29, 1919.

* Warmest day of the year.

SEPTEMBER 1841-1949

Monthly and diurnal ranges.—Monthly temperature ranges of 45 degrees are fairly common. They have occurred in one September out of seven on the average, while there are several recorded instances of 50-degree ranges at Kew Observatory.

Year	Warmest day		Coldest night		Range
	Maximum	Date	Minimum	Date	
	°F.		°F.		°F.
1906	92	1st	37	29th	55
1898	88	8th	35	29th	53
1919	83	11th	31	30th	52

There have been several instances of 35-degree ranges in 24 hr. On September 12, 1854, the maximum temperature at Greenwich was 81°F. and the minimum temperature 40°F., a range of 41 degrees. On September 8, 1911 temperature at Kew Observatory fell 20 degrees between 6 p.m. and midnight.

Day-to-day changes.—Large day-to-day temperature changes are less common in September than in the spring and summer months, though September 4, 1841, was 24 degrees colder at Greenwich than the previous day. The frequent fluctuations at Kew Observatory in early September 1911 are noteworthy.

Date	Maximum	Difference
	°F.	°F.
8th	88	-21
9th	67	+8
10th	75	+7
11th	82	+2
12th	84	-18
13th	66	

Precipitation.—Rainfall.—The main features of the rainfall diagram in Plate XIX are the frequent wet Septembers before 1886, and the outstandingly wet months of 1896 and 1918. There were only five Septembers in the 46 years 1900 to 1946 with rainfall 50 per cent. above average compared with 14 in the 46 year-period 1841 to 1886.

25 mm. (1 in.) of rain in a day has occurred in about one September out of six on the average. In 1912 there were 25 mm. on each of the last two days after an otherwise rainless month in some districts.

WET MONTHS

Rain on 25 days in 1918
 Rain on 22 days in 1932
 Rain on 21 days in 1876, 1885, 1896, 1909
 Rain on 20 days in 1924, 1925, 1935, 1946

DRY MONTHS

Rain on 2 days in 1929, 1941
 Rain on 3 days in 1910, 1912, 1928

Thunderstorms.—Over a long period, there is an average of only one day with thunder at Kew in September, compared with three days in July and in August. Violent thunderstorms were experienced during the nights of September 11-12, 1921 and September 29-30, 1897.

Sunshine.—Plate XIX shows the great difference in September sunshine from year to year. The sunshine total in September 1911 was four times that of the same month in 1945. The six consecutive dull Septembers, 1941 to 1946 were the worst since the 1880 to 1889 spell.

OCTOBER 1841-1949

Temperature.—Monthly mean temperatures over the past 109 years are given in Plate XXI, and examples of warm, cold and changeable months in the present century are shown in Plate XX. Mild months have been much more frequent since the turn of the century. There is a striking difference between the October of 1919 and 1921.

The average day maximum temperature during October falls from about 61°F. in the first ten days to around 55°F. at the end of the month. The highest October temperature in London was 84°F. on October 5 and 6, 1921. Temperature exceeded 80°F. also on October 4, 1859, but three weeks later the day maximum temperature was only 39°F. The coldest October day was October 30, 1873, when temperature reached only 37°F. In October 1892 temperature kept below 60°F. throughout the month.

MILDEST OCTOBER DAY

84°F. in 1 year	70-74°F. in 30 years
81°F. in 1 year	65-69°F. in 47 years
80°F. in 1 year	60-64°F. in 18 years
75-79°F. in 10 years	59°F. in 1 year

The average night minimum temperature falls over the month from 47°F. to 42°F. Air frost on at least one night was recorded in seven out of ten Octobers over the 109 years though in October 1910, 1943 and 1945 there was not even a ground frost in some parts of London. Air temperature fell to 21°F. on October 17, 1881. Temperature on the grass is not available for the full period, but an outstanding grass minimum temperature of 16°F. was recorded on October 19, 1926 and on October 30, 1947.

KEEN AIR FROSTS

Minimum 21°F. in 1881
Minimum 24°F. in 1873, 1890, 1931
Minimum 25°F. in 1877, 1895

FROSTY MONTHS

Air frost on 12 nights in 1888
Air frost on 11 nights in 1872
Air frost on 9 nights in 1919

Average and extreme temperatures at Kew Observatory.—

Period	Maximum			Minimum		
	Average	Highest	Lowest	Average	Lowest	Highest
1st-10th ..	°F. 61	°F. Year 82 1921	°F. Year 43 1888	°F. 47	°F. Year 28 1888	°F. Year 62 1921
11th-20th ..	57	74 1921	40 1880	45	25 1881	62 1949
21st-31st ..	55	67 1888	37 1873	42	25 1895	59 1898

Monthly and diurnal ranges.—Temperature in October may range through more than 50 degrees while the diurnal range may amount to more than 30 degrees. In 1859 the mildest October day at Greenwich was 81°F. and the coldest night 27°F. On October 2, 1854, the maximum temperature was 73°F. and the minimum temperature 34 degrees lower.

In October 1889 day maxima at Kew Observatory varied by only ten degrees throughout the whole month.

Day-to-day changes.—It is not unusual for an October day to be ten degrees colder or milder than its predecessor. Such variations occur in about one October out of two on the average, falls of this magnitude being more frequent than rises. Day-to-day

OCTOBER 1841-1949

temperature changes of 15 degrees are rare. The first week of October 1880 was exceptionally changeable. Daily maximum temperatures at Kew Observatory from the 2nd to the 7th were 63°F., 51°F., 46°F., 63°F., 52°F., and 64°F. respectively; four changes of more than ten degrees including one rise of 17 degrees.

Precipitation.—Rainfall.—October is normally the wettest month of the year. Monthly totals compared with the average are given in Plate XXI. Rainfall totals of 125 mm. (5 in.) or more occurred in about one October out of ten. In ten years the totals were less than 25 mm. (1 in.). 25 mm. of rain have fallen on at least one day in 15 of the past 75 Octobers. There were two days each with 25 mm. of rain in October 1928 and 1949 and almost 50 mm. (2 in.) of rain fell on October 9, 1880.

WET MONTHS

29 days in 1923
28 days in 1907
26 days in 1903
25 days in 1882
24 days in 1909
23 days in 1872, 1939

Snow in October is rare but has occurred in London in six of the past 75 years, namely 1878, 1880, 1881, 1895, 1922 and 1933. The earliest recorded snowfall was on the 19th in 1880.

Sunshine.—The average October sunshine varies from 73 hr. in the City (Bunhill Row) to more than 100 hr. in the suburbs. The year-to-year variations are shown in Plate XXI. At Kew Observatory there was bright sunshine every day in October 1921, with 8 hr. or more on 6 days and a total of 153 hr. In October 1915, when the total was only 52 hr. there was less than one hour of bright sunshine on 13 days and nine days were completely sunless.

NOVEMBER 1841-1949

Temperature.—Monthly mean temperatures over the past 109 years are given in Plate XXIII, and examples of very mild, very cold and changeable months in the present century are detailed in Plate XXII. The mild Novembers since 1924 are very striking, especially those of 1938 and 1939.

The average day maximum temperature during November falls from about 52°F. in the first ten days to around 47°F. at the end of the month. The mildest November day in London was during the exceptionally mild November of 1938 when temperature reached 70°F. at Tottenham on the 5th. The previous high record was 67°F. at Greenwich on November 8, 1847. In about one November out of ten temperature kept below freezing point on at least one day; in 1923 it was freezing for two consecutive days. On November 28, 1890, the maximum temperature at Kew Observatory was only 25°F.

MILDEST NOVEMBER DAY

70°F. in 1 year	55-59°F. in 47 years
67°F. in 2 years	54°F. in 2 years
65°F. in 1 year	53°F. in 2 years
60-64°F. in 53 years	50°F. in 1 year

The average night minimum temperature falls during the month from 40°F. to 38°F. There were air frosts on 17 nights in November 1851 and 1871, but there have been 10 Novembers without any general air frost. The lowest reading was 16°F. on November 22, 1905. A grass minimum temperature of 11°F. was recorded on November 27, 1925, but there was not even one ground frost at Croydon in the November of 1946.

COLDEST NOVEMBER NIGHT

16°F. in 1 year	25-29°F. in 54 years
18°F. in 1 year	30°F. in 5 years
19°F. in 4 years	31°F. in 4 years
20-24°F. in 27 years	32°F. in 3 years

No general frost in ten years

HARD AIR FROSTS

Minimum 16°F. in 1905
 Minimum 18°F. in 1890
 Minimum 19°F. in 1856, 1858, 1859, 1902

FROSTY MONTHS

Frost on 17 nights in 1851, 1871
 Frost on 15 nights in 1858
 Frost on 14 nights in 1910

FIRST FROSTS OF THE SEASON

On 22nd in 1886
 On 18th in 1847
 On 16th in 1907

Average and extreme temperatures at Kew Observatory.—

Period	Maximum			Minimum		
	Average	Highest	Lowest	Average	Lowest	Highest
1st-10th ..	°F. 52	°F. 66	°F. 35	°F. 40	°F. 23	°F. 57
11th-20th ..	°F. 49	°F. 63	°F. 31	°F. 39	°F. 20	°F. 57
21st-30th ..	°F. 47	°F. 61	°F. 25	°F. 38	°F. 21	°F. 57
		Year 1938	Year 1901		Year 1923	Year 1931
		Year 1876	Year 1887		Year 1871	Year 1938
		Year 1947	Year 1890		Year 1890	Year 1947

NOVEMBER 1841–1949

Monthly and diurnal ranges.—Temperature in November may range through more than 40 degrees while the diurnal range may amount to 25 degrees. In 1847 the mildest day at Greenwich was 67°F. and the coldest night 25°F., a range of 42 degrees. On November 4, 1946, the maximum temperature was 66°F. and the minimum temperature 38°F.

In the Novembers of 1865, 1896 and 1913 day maxima varied by only eleven degrees throughout the whole month.

Day-to-day temperature changes of ten degrees or more are fairly common while changes of 15 degrees occur in one November out of ten on the average. November 20, 1947, was 18 degrees milder at Croydon than the previous day. Very large temperature changes can occur in a few days. In November 1858 the maximum temperature at Greenwich was 31°F. on the 24th, 49°F. on the 25th, and 58°F. on the 26th—a 27-degree rise in two days. In November 1890 day temperature at Kew Observatory fell 33 degrees in five days, the maximum temperature being 58°F. on the 23rd compared with 25°F. on the 28th. This exceptionally sudden onset of cold weather was followed by the coldest December on record. Severe cold continued until after the middle of January 1891.

Precipitation.—Rainfall.—Monthly totals compared with the average are given in Plate XXIII. The frequent wet Novembers since 1926 are outstanding, especially that of 1940.

There have been four Novembers with rainfall totals of more than 125 mm. (5 in.). November 1940 was the second wettest month on record, the total of 172 mm. (6¾ in.) at Kew Observatory having been exceeded only by the fall of 183 mm. (7¼ in.) in June 1903. There were four days in November 1940 each with 25 mm. (1 in.) of rain in the London area. In 12 years the November totals were less than 25 mm. Rain fell on only two days at Regents Park in November 1945, totalling 1 mm. (0.05 in.).

WET NOVEMBERS

Rain or snow on 26 days in 1926
 Rain or snow on 24 days in 1882, 1939
 Rain or snow on 22 days in 1928, 1940, 1944
 Rain or snow on 21 days in 1877, 1911

Snow.—General snow fell in 28 of the 56 years 1871 to 1926, but November snow has been unusual in recent years. There have been several occasions of snow or sleet at Hampstead when precipitation over most of London has been in the form of rain. Snow occurred on eight days in November 1919, on six days in 1879, and on five days in 1890.

Sunshine.—The suburbs of London enjoy twice the amount of sunshine recorded in the City.

AVERAGE SUNSHINE, 1901–30

	hr.
City (Bunhill Row)	25
Westminster	34
Regents Park	38
Greenwich	50
Kew Observatory	53

There were 20 completely sunless days at Kew Observatory in November 1885 and 15 sunless days in November 1945.

DECEMBER 1841-1949

Temperature.—Monthly mean temperatures over the past 109 years are given in Plate XXV, and examples of extreme months in the present century are detailed in Plate XXIV. The extremely cold December of 1890 and the contrast between the Decembers of 1933 and 1934 are among the interesting features of the diagrams.

The average day maximum temperature is 46°F. The mildest December day in London was in 1848 when temperature reached 62°F. at Greenwich on the 10th. Temperature reached 60°F. in the Decembers of 1856, 1918 and 1931. Freezing conditions both by day and by night occurred on at least one day in five Decembers out of ten on the average over the period 1841 to 1908, but in only six of the 38 years 1909 to 1946. The coldest day was December 14, 1890, when the maximum temperature was 21°F.

MILDEST DECEMBER DAY

62°F. in 1 year
60°F. in 2 years
55-59°F. in 75 years
50-54°F. in 27 years
49°F. in 2 years
45°F. in 1 year
44°F. in 1 year

CONTINUOUS FROST BY DAY AND NIGHT

10 days in 1890*
6 days in 1844 and 1859
5 days in 1891
4 days in 1855, 1879†, 1938

The average night minimum temperature is 37°F. The coldest December night in London was 8°F. on Christmas Day 1860. Temperatures fell to 9°F. later in that month and to 10°F. in the Decembers of 1870 and 1920. There were five nights in 1870 and six nights in 1879 with minima below 20°F., but in the Decembers of 1862 and 1934 there was no general air frost. In 1934 there was not even a ground frost in some parts of London.

COLDEST DECEMBER NIGHT

8°F. in 1 year
10-14°F. in 8 years
15-19°F. in 20 years
20-24°F. in 31 years
25-29°F. in 39 years
30°F. in 3 years
31°F. in 4 years
32°F. in 1 year

No general frost in 2 years

SEVERE AIR FROSTS

Minimum 8°F. in 1860
Minimum 10°F. in 1870
Minimum 10°F. in 1920

FROSTY MONTHS

27 nights in 1890‡
24 nights in 1846
23 nights in 1853
21 nights in 1844 and 1878
20 nights in 1933

Average and extreme temperatures at Kew Observatory.—

Period	Maximum			Minimum		
	Average	Highest	Lowest	Average	Lowest	Highest
1st-10th ..	°F. 46	°F. 60	°F. 27	°F. 37	°F. 13	°F. 54
11th-20th ..	46	58	21	37	15	52
21st-31st ..	46	57	25	37	9	51
		Year	Year		Year	Year
		1856	1873		1879	1905
		1918	1890		1890	1929
		1882	1874		1860	1912
		1921				

* On 17 days in all.

† On nine days in all.

‡ Nightly 7th-31st.

DECEMBER 1841-1949

Monthly and diurnal ranges.—Temperature in December may range through 45 degrees or more while the diurnal range may amount to 25 degrees. In 1870 the mildest day at Greenwich was 57°F. and the coldest night 10°F., a range of 47 degrees. On December 22, 1886, the maximum temperature was 43°F. and the minimum 17°F.

Day-to-day changes.—Sudden temperature changes are frequent, especially with the onset of mild weather. Day-to-day changes of ten degrees occur in most Decembers, sometimes as often as four times in one month. The day maximum at Kew Observatory on December 28, 1916, was 52°F., compared with 29°F. on the 27th; December 23, 1885 was also 23 degrees milder than the previous day. These are the conditions often associated with a glazed frost, as on December 21, 1927, when temperature rose from 30°F. at midnight to 45°F. at midday. Very large temperature falls are usually spread over a day or two. The day maximum temperature on December 22, 1904, was 25 degrees colder than it was on the 18th and 29th.

Temperature in December 1911 was unusually steady. Day maxima at Kew Observatory varied by only 10 degrees throughout the month.

Precipitation.—Rainfall.—Monthly totals compared with the average are given in Plate XXV. The two consecutive wet Decembers of 1914 and 1915 are outstanding.

There were only three years with more than 125 mm. (5 in.) of rain. Falls of 25 mm. (1 in.) in a day have been rare though a rainfall equivalent of 45 mm. (1¾ in.) made up of snow and rain, occurred on Boxing Day 1886. There has been less than 25 mm. (1 in.) of rain in two Decembers out of ten on the average. Thunderstorms in December are infrequent but a storm occurred on Christmas Day in 1947.

WET DECEMBERS

Rain or snow on 27 days in 1919, 1929
 Rain or snow on 26 days in 1911, 1918, 1934
 Rain or snow on 25 days in 1910, 1915
 Rain or snow on 24 days in 1909, 1914
 Rain or snow on 23 days in 1876, 1942
 Rain or snow on 22 days in 1872
 Rain or snow on 21 days in 1896, 1912, 1928

The rainfall total in December 1918 was slightly below average despite the large number of wet days.

Snow.—General snow fell in London in three Decembers out of four on the average. It occurred in all but two years in the period 1873 to 1896, but there was general snow in only 16 of the 39 Decembers 1897 to 1935. From 1936 onwards there has been snow, at least locally, each December except in 1948.

SNOWY DECEMBERS

Snow on 12 days in 1890
 Snow on 11 days in 1878
 Snow on 10 days in 1937, 1938
 Snow on 8 days in 1879
 Snow on 7 days in 1874, 1880, 1917

Sunshine.—December 1890 was completely sunless at Westminster. In the same month the total was only 0.3 hr. at Kew Observatory and 0.1 hr. in the City (Bunhill Row). Less than half an hour was recorded in the City in December 1884.

SPRING (March to May) 1841-1949

Temperature.—Mean spring temperatures for each of the past 109 years compared with the average are given in Plate XXVI. The frequent mild springs from 1910 onwards culminating in the exceptionally warm spring of 1945 and the two uninterrupted ten-year cold spells 1849 to 1858 and 1883 to 1892 are noteworthy features.

FROSTY SPRINGS—NIGHTS WITH AIR FROST

	March	April	May	Total
1883	24	5	2	31
1888	20	11	—	31
1855	18	9	3	30
1887	18	7	1	26
1879	13	6	4	23
1845	18	4	—	22
1941	11	4	7	22

There was no general air frost in the London area in the spring months of 1896 and 1912.

Precipitation.—The wettest springs since 1841 were those of 1862 and 1878. In the present century dry and wet springs have been about equal in number though the eight successive wet springs 1913 to 1920 are among the features of the rainfall diagram in Plate XXVI.

SNOWY SPRINGS—DAYS WITH SNOW OR SLEET

	March	April	May	Total
1879	8	4	2	14
1883	13	1	—	14
1888	12	6	—	18
1917	13	13	—	26

Sunshine.—The sunshine diagram in Plate XXVI shows the outstandingly sunny springs of 1882, 1909, 1893 and 1948, and the many springs with sunshine considerably below the average between 1923 and 1941. The latter was the dullest spring for more than 50 years.

Comparison with the following summer.—Temperature and rainfall for each spring from 1842 to 1949 are compared with the preceding winter and following summer values in Table I.

Really cold springs have been followed by cool or very cool summers more frequently than by warm summers, though the very warm summer of 1899 followed a cold spring in which ground frosts occurred up to the end of May.

Mild springs have been followed by about equal numbers of warm and cool summers.

The majority of dry springs have been followed by summers with rainfall totals below average. The dry spring of 1852, however, was followed by a very wet summer, especially June and August, while the dry spring of 1895 which continued into June was followed by wet weather in July and August.

Similarly, wet springs have tended to be followed by wet summers, but there are several examples of dry summers following wet springs, notably in 1932.

SPRING (March to May) 1841-1949

TABLE 1—SPRING, 1842-1949

Broad temperature classification and comparison with the preceding and following seasons

PREVIOUS WINTER					SPRING		FOLLOWING SUMMER								
Very mild	Mild	Rather mild	About average	Rather cold	Cold	Very cold	Classification	No. of years	Very warm	Warm	Rather warm	About average	Rather cool	Cool	Very cool
Number of years															
-	3	-	-	-	1	1	Very mild	5	-	1	-	2	1	1	-
-	2	-	1	3	1	1	Mild	7	1	1	1	-	-	3	-
-	2	3	4	1	-	2	Rather mild	12	-	3	3	3	1	-	2
2	6	6	5	4	3	6	About average	32	4	1	10	10	10	4	2
-	1	2	5	4	3	9	Rather cold	24	1	5	3	3	8	4	3
1	2	2	2	2	2	4	Cold	15	-	6	-	-	4	3	1
1	-	3	1	1	-	7	Very cold	13	-	1	1	4	1	4	3

Broad rainfall* classification and comparison with the preceding and following seasons

PREVIOUS WINTER					SPRING		FOLLOWING SUMMER								
Very wet	Wet	Rather wet	About average	Rather dry	Dry	Very dry	Classification	No. of years	Very wet	Wet	Rather wet	About average	Rather dry	Dry	Very dry
Number of years															
1	1	-	3	2	2	1	Very wet	10	3	2	-	1	1	1	2
2	3	5	3	9	2	-	Wet	24	4	5	5	5	1	1	3
2	1	2	2	3	4	1	Rather wet	15	-	3	1	4	3	2	2
-	5	4	5	9	2	1	About average	26	-	5	3	1	8	5	4
1	2	4	1	1	3	1	Rather dry	13	1	5	1	3	1	1	1
-	4	-	2	3	3	-	Dry	12	1	-	2	2	2	4	1
-	-	1	-	4	2	1	Very dry	8	1	-	-	2	3	2	-

* includes melted snow.

SUMMER (June to August) 1841–1949

Temperature.—Mean summer temperatures since 1841 compared with the average are given in Plate XXVII. The long spell of warm summers from 1932 onwards ending with the cold summer of 1946 and the very much colder summers in the past are obvious. The ten warmest summers were all made up of consistently warm months. Many Londoners will remember the exceptional warmth of June 1940. Mean temperature for that month was the highest for 80 years, but it was largely offset by a cool July and the resulting mean temperature for the summer differed little from the seasonal average.

Dry heat and humid heat.—As a general rule the relative humidity in London on days with temperatures above 85°F. ranges between 35 per cent. and 45 per cent. at the warmest part of the day. The dry heat of July 1921, when relative humidity during the hottest days was mostly below 30 per cent., was much more bearable than the high temperatures of July 1900, August 1930 and August 1932 when relative humidity was high. On August 27 and 28, 1930, the relative humidity at Kew Observatory was 59 per cent. with dry-bulb temperatures of 86°F. and 85°F. respectively*.

Relative humidity often rises quickly during summer thunderstorms ; the storm of July 22, 1925, was an outstanding example. Dry-bulb and wet-bulb readings at 2 p.m. on that day were 86.5°F. and 71.4°F. respectively—a relative humidity of 45 per cent. With the onset of rain at 5 p.m. the dry-bulb temperature fell rapidly and relative humidity rose quickly to 90 per cent. before 6 p.m. By 6.45 p.m. it practically reached the saturation point and remained in that state with temperature about 66°F. throughout the night. This accounted for the exceptional mugginess of that night.

Rainfall.—The year-to-year variations of summer rainfall are shown clearly in Plate XXVII. The summer of 1903 was even wetter than that of 1879, but the greatest rainfall in 1903 occurred in June, while the greatest rainfall in 1879 occurred in August. From the point of view of the farmer, 1879 could be regarded as the worst summer on record.

St. Swithin's Day.—The weather maxim relating to St. Swithin's Day (July 15) dies hard.

“ If St. Swithin's greets, the proverb says
The weather will be foul for forty days.”

Reliance on the weather of one particular day as foretelling weather to come is the more surprising when it is borne in mind that other widely separated days are held to be the critical ones on the continent : St. Medard (June 8) in France, St. Godelieve (July 27) in Belgium and Seven Sleepers (June 27) in Germany.

Measurable rain fell at Kew Observatory on St. Swithin's Day in 12 of the 25 years 1910–34, chosen at random. Of the 40 days following these “ wet St. Swithin's ” 19 were wet and 21 were dry on the average. Wet days outnumbered dry days in six years, dry days were more numerous than wet days in five years, while in 1918 dry and wet days were equal in number. In 1913, when it rained almost hourly from 4 a.m. to 7 p.m. on St. Swithin's Day, only nine of the ensuing 40 days had measurable rain.

Following the 13 dry St. Swithin's Days, over the same 25-year period, there was an average of 20 dry days and 20 wet days. Dry days outnumbered wet days in seven years while wet days were more frequent than dry days in six years. In 1924, when 13.7 hr. of sunshine were recorded at Kew Observatory on St. Swithin's Day, it rained on three out of four of the ensuing 40 days.

* See DIGHT, F.H. ; An analysis of warm spells in London from 1900–33 with special reference to the prevailing conditions of humidity. *Met. Mag.*, London, 69, 1934, p. 109.

SUMMER (June to August) 1841–1949

Irrespective of St. Swithin, there were 19 days with rain compared with 21 days without rain in the period July 16 to August 24, averaged over the 25 years 1910–1934.

Sunshine.—The very large difference between the summers of 1887 and 1888 and the exceptionally sunny summer of 1911 sandwiched between some very dull ones are noteworthy features of the sunshine diagram in Plate XXVII.

The four consecutive dull summers 1888 to 1891 were followed by a spell of 20 summers in which sunshine was frequently much above the average. Dull summers preponderated between 1912 and 1927. Several instances of three consecutive sunny summers occurred between 1928 and 1941 but the ensuing 1942–46 spell was the first recorded instance of five dull summers in succession.

Comparison with the following autumn.—Temperature and rainfall for each summer from 1841 to 1949 are compared with the preceding spring and following autumn values in Table II.

The 14 warmest summers have mostly been followed by autumns without mean-temperature extremes in either direction, but the very warm summers of 1947 and 1949 were both followed by mild or very mild autumns.

Cool summers, on the other hand, have shown a noticeable tendency to be followed by cold autumns. The 31 coolest summers were followed by ten really cold autumns, but no markedly mild ones. Of these 31 cases, subsequent autumn temperatures were below average on 20 occasions compared with only three instances of autumn temperatures above average. This tendency for the cool type of summer weather to persist into autumn is further shown by the fact that the 56 summers classified as having been at least rather cool were followed by 32 autumns with mean temperatures below average compared with only nine autumns above average temperature.

Summer-rainfall totals seem to have little relation to autumn falls of the same year. The 31 wettest summers, often due to heavy thundery rain, were followed by eight wet or very wet autumns and six dry or very dry ones. The autumns following the 29 driest summers were wet or very wet in four cases and dry or very dry in four cases.

SUMMER (June to August) 1841-1949

TABLE II—SUMMER, 1841-1949

Broad temperature classification and comparison with the preceding and following seasons

PREVIOUS SPRING						SUMMER		FOLLOWING AUTUMN							
Very mild	Mild	Rather mild	About average	Rather cold	Cold	Very cold	Classification	No. of years	Very mild	Mild	Rather mild	About average	Rather cold	Cold	Very cold
Number of years															
-	2	3	1	-	1	-	Very warm..	7	1	1	3	-	2	-	-
1	1	-	4	1	-	-	Warm ..	7	-	1	4	1	1	-	-
-	1	3	1	5	6	1	Rather warm	17	1	1	3	4	4	2	2
2	-	3	10	3	-	4	About average	22	-	3	3	7	2	5	2
1	-	1	10	8	4	1	Rather cool	25	2	3	1	7	9	2	1
1	3	-	4	4	3	4	Cool ..	19	-	-	1	7	6	3	2
-	-	3	2	3	1	3	Very cool ..	12	-	-	2	1	4	4	1

Broad rainfall classification and comparison with the preceding and following seasons

PREVIOUS SPRING						SUMMER		FOLLOWING AUTUMN							
Very wet	Wet	Rather wet	About average	Rather dry	Dry	Very dry	Classification	No. of years	Very wet	Wet	Rather wet	About average	Rather dry	Dry	Very dry
Number of years															
3	4	-	-	1	1	1	Very wet ..	10	2	-	3	1	2	1	1
2	5	4	5	5	-	-	Wet ..	21	1	5	5	2	4	2	2
-	5	1	3	1	2	-	Rather wet..	12	1	4	2	3	2	-	-
1	5	4	1	3	2	2	About average	18	1	1	4	3	3	2	4
1	1	3	8	1	2	3	Rather dry	19	2	3	4	1	3	4	2
1	1	2	5	1	4	2	Dry ..	16	1	2	3	4	4	1	1
2	3	2	4	1	1	-	Very dry ..	13	1	-	7	2	1	1	1

AUTUMN (September to November) 1841-1949

TABLE III—AUTUMN, 1841-1949
Broad temperature classification and comparison with the preceding and following seasons

PREVIOUS SUMMER						AUTUMN		FOLLOWING WINTER						
Very warm	Warm	Rather warm	About average	Rather cool	Cool	Very cool	Classification	No. of years	Mild	Rather mild	About average	Rather cold	Cold	Very cold
Number of years						Number of years								
1	1	1	3	2	1	1	Very mild	4	2	2	1	1	1	1
1	1	1	3	3	1	1	Mild	9	2	2	2	4	1	3
3	4	3	3	1	1	2	Rather mild	17	2	1	2	4	1	6
-	1	4	7	7	7	1	About average	27	6	1	6	5	3	5
2	1	4	2	9	6	4	Rather cold	28	1	6	7	3	2	7
-	-	2	5	2	3	4	Cold	16	2	3	1	1	2	7
-	-	2	2	1	2	1	Very cold	8	2	1	2	1	-	2

Broad rainfall classification and comparison with the preceding and following seasons

PREVIOUS SUMMER						AUTUMN		FOLLOWING WINTER							
Very wet	Wet	Rather wet	About average	Rather dry	Dry	Very dry	Classification	No. of years	Very wet	Wet	Rather wet	About average	Rather dry	Dry	Very dry
Number of years						Number of years									
2	1	1	1	2	1	1	Very wet	9	-	1	2	3	3	-	-
-	5	4	1	3	2	1	Wet	15	-	4	-	1	6	4	-
3	5	2	4	4	3	7	Rather wet	28	2	6	1	5	8	5	1
1	2	3	3	1	4	2	About average	16	2	2	2	3	4	2	1
2	4	2	3	3	4	1	Rather dry	19	1	1	6	3	4	3	1
1	2	-	2	4	1	1	Dry	11	1	-	3	1	2	3	1
1	2	-	4	2	1	1	Very dry	11	-	2	2	1	4	1	1

AUTUMN (September to November) 1841–1949

Temperature.—Mean autumn temperatures compared with the average are given in Plate XXVIII. The outstanding features are the very large number of mild autumns from 1898 onwards and the exceptionally mild autumn of 1949. The seven mildest autumns were all made up of three individually mild months. The warm September of 1929 was partly offset by an October of only average temperature, while the warm Septembers of 1895 and 1933 were followed by cold weather later in the season. There was no general air frost in the London area throughout the whole of the autumns of 1913 and 1946.

Rainfall.—The rainfall diagrams in Plate XXVIII show the many dry autumns from 1897 to 1922 and the frequent wet autumns between 1923 and 1940. The autumns of 1903, 1939 and 1940 were unusually wet despite the occurrence of at least one relatively dry month. There are several striking year-to-year rainfall differences. Rainfall totals in the autumns of 1851 and 1852 were 85 mm. (3.35 in.) and 344 mm. (13.54 in.) respectively. The autumn of 1940 was almost three times as wet as the autumn of 1941.

Sunshine.—The main features of the sunshine diagram in Plate XXVIII are the two dull spells 1880–1889 and 1941–1946 and the occasional very sunny autumns in the period 1911–1929, especially the two successive sunny autumns of 1928 and 1929.

St. Luke's Summer, a period of fine weather, is stated to occur about the time of St. Luke's Day, October 18. In 1933 there was an average of 6½ hr. sunshine at Kew Observatory each day from October 16 to 20. In 1934, however, the daily average amounted to only 1½ hr. A comparison of the sunshine recorded at Kew in the five days centred at St. Luke's Day with the amounts in the preceding and following five days over the random 25-year period 1910 to 1934 shows no substantial difference from the gradually decreasing sunshine to be expected at that time of year. They were :—

	hr./day
October 11–15	3.2
October 16–20	2.9
October 21–25	2.8

The periods October 11–15 and October 21–25 both had more sunshine than the *St. Luke's* period in 12 of the 25 years examined.

St. Martin's Summer is supposed to occur around the time of St. Martin's Day, November 11. In 1927 there were 7 hr. sunshine at Kew Observatory on St. Martin's Day and an average of more than 4 hr. daily from the 9th to 13th. In 1932 the same period was completely sunless. Over the 25 years 1910 to 1934 sunshine at Kew averaged 2.2 hr./day in the *St. Martin's* period, November 9–13, compared with 2.4 hr./day in the preceding five-day period and 1.7 hr./day in the following five-day period. The five days November 4–8 had more sunshine than the *St. Martin's* period in 15 of the 25 years, while the *St. Martin's* period was sunnier than the following five days in 16 of the 25 years.

Comparison with the following winter.—Temperature and rainfall for each autumn from 1841 to 1949 are compared with the preceding summer and following winter values in Table III.

Really mild autumns seem to give little indication of the following winter temperature. The 13 mildest autumns were followed by mild and cold winters in about equal numbers. The mild autumns of 1939 and 1946 were followed by extremely cold winters.

AUTUMN (September to November) 1841-1949

There have been no very mild winters after really cold autumns. Of the 24 coldest autumns, 11 have been followed by cold or very cold winters compared with four mild or very mild ones. This tendency for a cold autumn to be followed by a cold winter is similar to the persistence of low temperature from season to season noted in the summer-autumn comparison.

Wet or very wet autumns seem to give no indication of winter precipitation. It has been rather unusual for a wet winter to follow a dry autumn though the dry autumn of 1868 was followed by a very wet winter and the very dry autumns of 1934 and 1947 were followed by wet winters. After the 22 driest autumns in the period 1841 to 1949 dry winters have outnumbered wet ones by two to one.

WINTER (December to February) 1841-42—1948-49

Temperature.—Mean temperatures for each of the past 108 winters compared with the average are given in Plate XXIX. The twelve successive cold winters 1885-86 to 1896-97 are outstanding. Although mean temperatures were lower and frosts more frequent in the winter of 1890-91 than in 1878-79, the latter winter had much more snow. Most winters have been mild since 1909 but those of 1939-40, 1940-41, 1941-42 were the coldest three successive winters since 1878-79, 1879-80, 1880-81. The exceptionally cold winter of 1946-47 was accompanied by one of the longest, if not actually the longest, spell of easterly winds ever recorded in London; it lasted without a break from January 22 to February 23.

Precipitation.—The frequent wet winters in the present century, especially since 1910, and the wet spell 1865 to 1884 are the main features of the rainfall diagram in Plate XXIX.

SNOWY WINTERS ; DAYS WITH SNOW

Winter	December	January	February	Total
1878-79	11	15	19	45
1941-42	1	20	18	39
1946-47	3	11	19	33
1887-88	6	5	18	29
1916-17	1	19	6	26
1880-81	7	6	10	23
1890-91	12	10	1	23

There was no general snowfall in London during the winter of 1922-23 and only one day with general snow in the winter of 1881-82. In 1947 weather was snowy and extremely cold until mid March.

Sunshine.—The spell of sunniest winters occurred in the first decade of the present century. Sunshine recorded in the three winter months of 1916-17 (71 hr.) was little more than a third of that of the winter 1948-49.

LONG COMPLETELY SUNLESS PERIODS AT KEW OBSERVATORY
days

February	2-22, 1947	21
December	8-24, 1890	17
December	11-25, 1931	15
January	10-23, 1912	14

Comparison with the following spring.—Temperature and rainfall for each winter 1841-42 to 1948-49 are compared with the preceding autumn and following spring values in Table IV.

The 39 coldest winters have been followed by cold springs much more frequently than by mild springs. The two outstanding exceptions were the very mild springs of 1893 and 1945. These both followed winters in which December and January were very cold but with mild Februaries. The 20 mildest winters were followed by rather more mild springs than cold springs.

Wet or very wet winters have tended to be followed by wet springs, but dry winters have been followed by about equal numbers of wet and dry springs.

WINTER (December to February) 1841-42—1948-49

TABLE IV—WINTER, 1841-42—1948-49
Broad temperature classification and comparison with the preceding and following seasons

PREVIOUS AUTUMN					WINTER		FOLLOWING SPRING								
Very mild	Mild	Rather mild	About average	Rather cold	Cold	Very cold	Classification	No. of years	Very mild	Mild	Rather mild	About average	Rather cold	Cold	Very cold
Number of years															
-	1	1	1	2	-	-	Very mild ..	4	-	-	-	2	-	1	1
1	2	2	6	1	2	2	Mild ..	16	3	2	2	6	1	2	-
2	2	1	1	6	3	1	Rather mild ..	16	-	-	3	6	2	2	3
-	-	2	6	7	1	2	About average ..	18	-	1	4	5	5	2	1
-	1	4	5	3	1	1	Rather cold ..	15	-	3	1	4	4	2	1
-	1	1	3	2	2	-	Cold ..	9	1	-	-	3	3	2	-
-	3	6	5	7	7	2	Very cold ..	30	1	1	2	6	9	4	7

Broad rainfall* classification and comparison with the preceding and following seasons

PREVIOUS AUTUMN					WINTER		FOLLOWING SPRING								
Very wet	Wet	Rather wet	About average	Rather dry	Dry	Very dry	Classification	No. of years	Very wet	Wet	Rather wet	About average	Rather dry	Dry	Very dry
Number of years															
-	2	2	2	1	1	-	Very wet ..	6	1	2	2	-	1	-	-
1	4	6	2	1	-	2	Wet ..	16	1	3	1	5	2	4	-
2	-	1	2	6	3	2	Rather wet ..	16	-	5	2	4	4	-	1
3	1	4	3	3	1	1	About average ..	16	3	3	2	5	1	2	-
3	6	8	4	4	2	4	Rather dry ..	31	2	9	3	9	1	3	4
-	4	5	2	3	3	1	Dry ..	18	2	2	4	2	3	3	2
-	-	1	1	1	1	1	Very dry ..	5	1	-	1	1	1	-	1

* includes melted snow.

§ 3—VISIBILITY

The occurrence of fog and mist was noted frequently in the printed reports and manuscript records consulted in the preparation of this book. It was not until the days of aviation that the description of fog and mist was standardized. Before then one observer's mist might well have been another observer's fog, and for that reason little mention of fog has been made in § 1 and § 2.

The report on the London fog inquiry published in 1903* stated that between 2 p.m. and 3 p.m. in the period December 20, 1901, to March 17, 1902, the average visibility from the summit of St. Paul's Cathedral or of Westminster Tower was half a mile and the best visibility $1\frac{1}{2}$ miles. St. Paul's was not even dimly visible from Westminster throughout the period December 20 to March 3. Regular observations, made eight times daily from the roof of the Air Ministry, Kingsway, are now available for six years. The place of observation is 118 ft. above street level, less than a mile from St. Paul's and $1\frac{1}{2}$ miles from the Houses of Parliament. The Kingsway observations are therefore suitable for comparison with the 1901-02 report.

The most direct manner of specifying visibility is to give the extreme distance at which objects are visible to an observer with normal eyesight. Objects are selected at distances as near as possible to the standards laid down internationally, each object being allotted a letter for convenient reference. The observer notes in the register the letter representing the most distant of the objects visible at the time of observation. At night the observer makes the best estimate possible of what the appropriate letter for the degree of atmospheric obscurity would be in daylight making use of any aids available, such as lights at known distances. Estimates by experienced observers are reasonably correct. During the war only half-a-dozen observations were missed owing to enemy action directly overhead.

The visibility objects used for the Kingsway observations are given below :—

Letter	Actual objects	Approx. direction	Actual distance	Standard distance	Description
X	—	—	yd. <30	yd. —	Dense fog
A	Opposite side of Kingsway	West	30	27	
B	Nearest trees Lincoln's Inn Fields	East	55	55	Thick fog
C	Watermans Corner	South-south-west	110	110	
D	Flagstaff Adastral House	South	220	220	Fog
E	St. Clement Danes	South-east	550	550	Moderate fog
F	Nelson's Column	South-west	1,150	1,100	Mist or haze
G	Victoria Tower, Houses of Parliament	South-south-west	miles $1\frac{1}{4}$	miles $1\frac{1}{4}$	Poor visibility
H	Battersea Power Station	South-south-west	$2\frac{1}{2}$	$2\frac{1}{2}$	Moderate visibility
I	Hampstead Church	North-west	$4\frac{1}{2}$	$4\frac{1}{3}$	
J	Site of old Crystal Palace	South-south-east	$6\frac{1}{2}$	$6\frac{1}{4}$	Good visibility
K	Epping Forest (High Beach)	North-east	$12\frac{1}{2}$	$12\frac{1}{2}$	Very good visibility
L	Redhill	South-south-west	20	$18\frac{2}{3}$	
M	Langdon Hill	East	28	31	Excellent visibility

Midday and afternoon visibility observed from the roof of the Air Ministry in Kingsway over recent winters is summarized in Table V. It is obvious that it is much better in London nowadays than it was in the winter of 1901-02. Visibility in each of the six winters now examined has frequently been $2\frac{1}{2}$ miles or more compared with the maximum of $1\frac{1}{2}$ miles in about the same area 50 years ago. Hampstead Church, $4\frac{1}{2}$ miles distant, has been visible fairly frequently, while the site of the old Crystal Palace, $6\frac{1}{2}$ miles away, could be seen occasionally.

* CARPENTER, A. : London fog inquiry 1901-02. Report to the Meteorological Council, London, 1903.

TABLE V—VISIBILITY FROM THE ROOF OF THE AIR MINISTRY, KINGSWAY, DURING THE WINTERS 1940-41 TO 1945-46

Distance	1941*			1941-42*			1942-43*			1943-44*			1944-45†			1945-46†			Visibility description	
	Jan.	Feb.	Mar.	Dec.	Jan.	Feb.	Mar.	Dec.	Jan.	Feb.	Mar.	Dec.	Jan.	Feb.	Mar.	Dec.	Jan.	Feb.		Mar.
yd.	<i>days</i>																			
<30	Midday																			
30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	} Dense fog
55	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	} Thick fog
110	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	} Fog
220	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	} Moderate fog
550	14	2	3	7	6	3	2	5	3	2	2	7	4	2	..	..	..	..	..	} Mist
1,150	9	3	7	2	13	12	10	2	5	5	5	10	5	7	5	4	9	11	8	
miles	3	10	8	10	8	12	10	15	14	8	8	6	10	9	14	9	7	5	9	} Poor
1½	4	8	7	7	3	1	6	8	7	10	9	5	8	9	5	4	5	5	5	} Moderate
2½	..	3	1	1	..	..	..	..	1	1	2	..	2	2	6	2	..	5	5	} Good
4½	..	2	3	3	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	} Very good
6½	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	} Excellent
12½	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
yd.	Afternoon																			
<30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	} Dense fog
30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	} Thick fog
55	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	} Fog
110	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	} Moderate fog
220	2	..	2	4	1	..	1	1	3	6	2	1	10	2	1	..	3	5	..	} Mist
550	9	..	4	6	7	2	2	3	6	2	1	10	6	4	1	10	12	8	2	
1,150	13	6	4	5	7	12	6	8	9	2	1	10	6	4	1	10	12	8	2	
miles	5	12	9	11	14	12	14	18	13	10	15	7	13	15	11	4	8	8	11	} Poor
1½	2	8	4	5	2	2	7	1	2	12	9	1	6	8	12	5	2	8	7	} Moderate
2½	..	1	6	..	..	..	..	..	1	1	5	..	2	1	5	2	1	3	10	} Good
4½	..	1	..	2	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	} Very good
6½	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	} Excellent
12½	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

* Midday observations at 1 p.m., afternoon observations at 4 p.m. † Midday observations at 12 noon, afternoon observations at 3 p.m.

TABLE VI—AVERAGE NUMBER OF DAYS PER MONTH 1941-46 ON WHICH VISIBILITY FROM THE ROOF OF THE AIR MINISTRY, KINGSWAY, WAS OF THE CATEGORIES SHOWN

Visibility description	Midnight (1 a.m.)												3 a.m. (4 a.m.)											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Dense	0.7	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3
Thick fog	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3
Fog	0.8	0.5	0.7	0.7	0.7	0.7	0.7	0.8	1.7	0.5	2.2	2.2	0.7	0.2	0.7	0.7	0.2	0.2	0.2	0.2	0.8	1.0	1.0	1.3
Moderate fog	3.8	2.2	3.3	0.7	0.2	0.8	0.2	1.5	2.7	4.3	4.3	4.3	1.5	2.7	4.2	0.7	0.3	0.5	0.2	0.2	1.3	2.8	2.8	2.7
Mist	9.2	7.2	9.2	2.5	1.7	0.5	0.3	0.7	2.5	5.3	5.0	5.0	8.3	6.0	6.5	3.8	1.7	1.3	1.5	1.7	4.0	4.2	5.0	5.5
Poor	9.0	9.8	12.5	8.7	7.2	3.7	3.0	3.3	6.2	7.7	11.3	9.8	8.7	10.2	12.8	8.8	7.8	4.7	5.2	5.3	4.7	8.7	10.3	9.0
Moderate	6.7	7.7	4.8	14.5	16.0	12.5	13.7	12.8	11.7	10.5	6.5	7.7	9.2	7.8	6.3	13.0	13.7	12.0	12.5	13.8	11.2	10.7	8.2	10.3
Good	0.5	0.5	0.3	3.3	5.5	10.8	10.5	11.3	6.3	2.2	1.3	0.8	1.5	1.2	0.2	3.3	6.5	9.0	7.5	7.7	7.2	2.3	1.7	1.2
Very good	0.2	0.2	0.2	0.3	0.5	1.7	3.5	2.8	1.0	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.8	2.2	4.2	2.5	0.7	0.2	0.2	0.2
Excellent	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

Visibility description	6 a.m. (7 a.m.)												9 a.m. (10 a.m.)											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Dense fog	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Thick fog	1.0	1.7	0.8	0.5	0.2	0.2	0.2	0.2	1.0	1.7	1.5	1.8	1.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	1.0	1.2
Fog	1.3	1.2	0.8	0.5	0.2	0.2	0.2	0.2	1.0	1.7	1.5	1.8	1.3	1.2	1.8	1.8	1.8	1.8	1.8	1.8	1.2	1.7	3.0	3.0
Moderate fog	4.3	4.3	4.7	2.0	1.5	1.0	0.5	1.0	2.2	3.8	4.7	2.3	7.7	5.2	6.2	1.7	0.5	0.2	0.2	0.2	1.2	5.2	5.7	8.7
Mist	7.8	8.3	7.8	6.7	4.5	1.8	1.5	2.2	2.8	4.7	6.0	6.8	9.3	8.5	10.2	3.8	2.0	0.8	0.5	1.3	4.0	5.7	10.0	8.2
Poor	9.0	8.2	10.0	9.2	9.7	6.0	6.7	5.0	8.7	8.5	8.8	10.0	8.8	8.7	8.3	7.7	5.5	4.5	3.8	4.5	5.5	7.8	8.7	7.0
Moderate	5.8	4.8	5.2	10.8	11.7	12.0	13.2	13.0	10.8	9.0	6.3	7.5	2.0	4.2	4.2	13.7	14.7	10.0	10.8	10.2	13.5	9.3	2.7	2.8
Good	1.3	0.7	0.5	0.8	3.3	7.3	6.7	7.8	3.0	2.0	1.2	1.3	0.2	0.2	0.2	3.0	6.7	9.8	10.5	9.5	5.0	1.3	0.2	0.2
Very good	0.3	0.7	0.2	0.2	0.2	1.7	2.3	2.0	1.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	1.7	4.7	5.0	5.3	0.8	0.2	0.2	0.2
Excellent	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

Observations at 1 a.m., 4 a.m., 7 a.m. and 10 a.m. G.M.T. until July 31, 1944. Observations at midnight, 3 a.m., 6 a.m. and 9 a.m. G.M.T. from August 1, 1944.

TABLE VI—continued

Visibility description	12 noon (1 p.m.)												3 p.m. (4 p.m.)											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Dense fog	0.3	..	..	..	..	..	..	..	..	..	0.2	0.5	..	..	..	..	..	..	..	..	..	0.2	0.2
Thick fog	0.5	0.3	..	..	..	..	..	..	..	1.2	1.0	0.2	0.3	..	..	..	..	..	..	..	..	0.3	0.7
Fog	0.8	..	0.5	..	..	..	..	..	..	0.5	1.0	0.8	..	0.5	..	..	..	..	..	..	..	0.2	0.5
Moderate fog	6.0	2.2	1.5	0.2	0.2	..	0.2	..	..	1.2	2.8	5.2	1.3	1.7	0.2	..	..	..	..	0.2	1.5	3.7	5.5
Mist	8.2	7.0	6.8	1.3	1.0	0.3	..	0.2	1.3	4.5	8.0	9.0	5.3	3.0	0.8	0.8	0.5	..	0.3	1.0	3.7	7.2	8.2	
Poor	9.7	9.0	11.3	5.5	2.8	1.7	1.5	0.8	3.3	6.0	10.2	12.2	11.8	12.5	4.0	2.8	1.2	1.3	0.8	2.8	7.7	11.8	10.8	
Moderate	5.5	9.3	9.5	13.8	11.8	8.2	9.0	7.8	10.7	14.3	6.5	3.2	8.8	12.3	16.3	12.5	8.5	6.5	6.3	11.3	14.2	6.0	3.2	
Good	..	0.3	1.0	7.7	10.8	10.2	9.3	9.2	9.0	4.2	0.3	..	0.5	1.0	6.3	8.7	7.5	7.2	8.0	9.0	3.5	..	0.2	
Very good	..	..	0.3	1.5	4.0	9.3	10.5	12.3	5.5	0.3	..	..	..	..	2.2	5.7	11.8	14.7	15.0	5.7	..	..	..
Excellent	..	..	..	..	0.3	0.3	0.7	0.5	0.2	..	..	..	..	..	0.2	0.5	0.5	1.3	0.5	..	..	..	..

Visibility description	6 p.m.												9 p.m. (10 p.m.)											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Dense fog	0.3	0.2	0.5	0.3	0.2	
Thick fog	0.5	0.5	0.3	0.5	0.7	0.2	0.2	0.3	1.0	
Fog	1.5	0.3	0.3	0.2	..	..	..	..	..	1.0	1.0	1.3	0.8	0.8	..	..	..	..	..	0.3	1.8	0.5
Moderate fog	4.8	2.7	3.3	0.2	0.2	0.2	..	..	0.8	3.5	5.5	4.8	1.8	3.2	0.8	0.2	0.5	..	..	1.3	5.3	5.2
Mist	11.2	8.5	6.5	1.3	0.3	1.0	0.2	0.5	1.2	5.8	8.0	9.7	10.2	8.7	2.5	1.8	0.8	0.3	0.8	3.3	5.0	7.7		
Poor	10.7	12.5	15.3	7.0	4.5	1.7	1.0	1.0	6.0	11.3	12.0	9.5	8.8	12.7	9.8	6.5	2.5	2.5	1.5	6.7	9.0	10.8		
Moderate	2.0	3.5	5.3	16.8	13.5	7.2	6.8	7.5	13.2	8.3	2.7	4.2	6.2	5.5	12.8	14.2	11.0	8.7	10.2	11.0	8.7	4.2		
Good	..	0.2	0.2	3.7	7.2	8.3	7.2	7.7	6.8	0.7	0.2	0.3	0.2	..	3.3	7.0	10.5	14.2	13.3	6.2	0.5	0.5		
Very good	..	..	..	0.8	5.0	11.3	15.0	13.3	2.0	..	..	..	..	..	0.7	1.2	4.7	5.3	5.2	1.2	..	..
Excellent	..	..	..	..	0.3	0.3	0.8	1.0	..	..	..	..	..	..	..	0.2	..	..	..	..	..	..

Observations at 1 p.m., 4 p.m., 6 p.m. and 10 p.m. G.M.T. until July 31, 1944. Observations at 12 noon, 3 p.m., 6 p.m. and 9 p.m. G.M.T. from August 1, 1944.

TABLE VI—continued

Visibility description	All hours											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Dense fog	0.4	..	0.1	..	..	..	..	..	..	0.2	0.2	0.2
Thick fog	0.6	0.2	0.3	..	..	..	..	..	0.1	0.3	0.8	1.1
Fog	1.1	0.5	0.7	0.1	0.1	0.1	..	..	0.4	1.1	1.0	2.3
Moderate fog	4.8	2.8	3.5	0.8	0.4	0.4	0.1	0.2	1.1	3.2	4.3	4.9
Mist	9.1	7.6	7.3	2.8	1.7	0.9	0.5	1.0	2.5	4.9	7.1	6.9
Poor	9.7	9.9	11.9	7.6	5.9	3.2	3.1	2.8	5.5	8.4	10.5	9.4
Moderate	4.8	6.5	6.6	14.0	13.5	10.2	10.1	10.2	11.7	10.6	5.4	5.8
Good	0.5	0.5	0.4	3.9	7.0	9.2	9.1	9.3	6.6	2.1	0.7	0.5
Very good	0.1	0.1	0.1	0.7	2.4	5.9	7.6	7.3	2.3	0.1	0.1	..
Excellent	..	..	..	..	0.2	0.2	0.4	0.3	..	..	..	..

Visibility from the Air Ministry roof, Kingsway, at all hours of observation over the six years 1941 to 1946 is summarized in Table VI. The 6 a.m. and 6 p.m. observations in the months January to March and October to December were made before sunrise or after sunset and are therefore less accurate than those made by daylight. The numbers shown are the number of days a month when visibility was of the category shown in the first column of the table, for example, July visibility at 6 o'clock in the evening was very good on 15 days and poor on one day on the average, while at midday in December there was an average of slightly over nine days with fog, including one day with thick fog.

Six years is a comparatively short period on which to base general deductions but there is no other previous set of visibility observations available for central London covering the 24 hr.

An analysis of the observations shows :—

(a) *Fog was most frequent in December, January and November, in that order—*

TABLE VII—FOG OCCURRENCE, 1941-46

All hours of observation

Intensity	December	January	November	October	March	February
	Number of occasions					
Dense fog	10	19	9	13	3	1
Thick fog	50	30	36	18	14	11
Fog	110	52	46	54	37	25
Moderate fog	236	229	208	156	168	134
Total	406	330	299	241	222	171
No. of obs.	1,488	1,488	1,440	1,488	1,488	1,352

February was much less foggy than January and less foggy than March over this period. Nearly one observation in three in December was at least moderately foggy.

(b) *Prolonged periods of fog were confined to the first three months and last three months of the year, especially in December and January.*—The two longest spells of continuous fog* were from 10 p.m. on December 18 to 1 a.m. on December 22, 1941, and from 9 a.m. on Christmas Day until midnight December 28, 1944. In the 1944 spell the fog was thick throughout the whole of Christmas Day and also from midday on Boxing Day until 6 a.m. on December 27.

* In 1948 fog was continuous in Kingsway for 114 hours from 9 p.m. November 26 to 3 p.m. December 1.

TABLE VIII—FOGGY SPELLS, 1941-46

Duration	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
hr.	Number of occasions of continuous fog											
3	22	13	20	4	7	1	..	1	5	23	17	22
6	10	5	11	1	..	..	..	..	6	8	10	8
7-12	8	9	14	1	..	1	..	..	5	9	9	11
13-24	12	3	8	..	..	..	..	..	..	8	10	10
25-36	6	3	..	..	..	..	..	..	..	4	5	5
37-48	..	..	..	..	..	..	..	..	..	..	1	2
days												
2-3	2	..	..	..	..	..	..	..	..	..	1	3
3-4	..	..	..	..	..	..	..	..	..	..	..	2

(c) Fog was most frequent soon after sunrise in all seasons.—Fig. 1 gives the average number of occasions at each of the hours of observation in March, June, September and December over the six years 1941 to 1946 when visibility from the roof of the Air Ministry was less than 1,100 yd. The fog peak soon after sunrise, the rapid falling off in fog frequency during the morning especially in spring, and the increasing liability to fog during the evening are clearly shown.

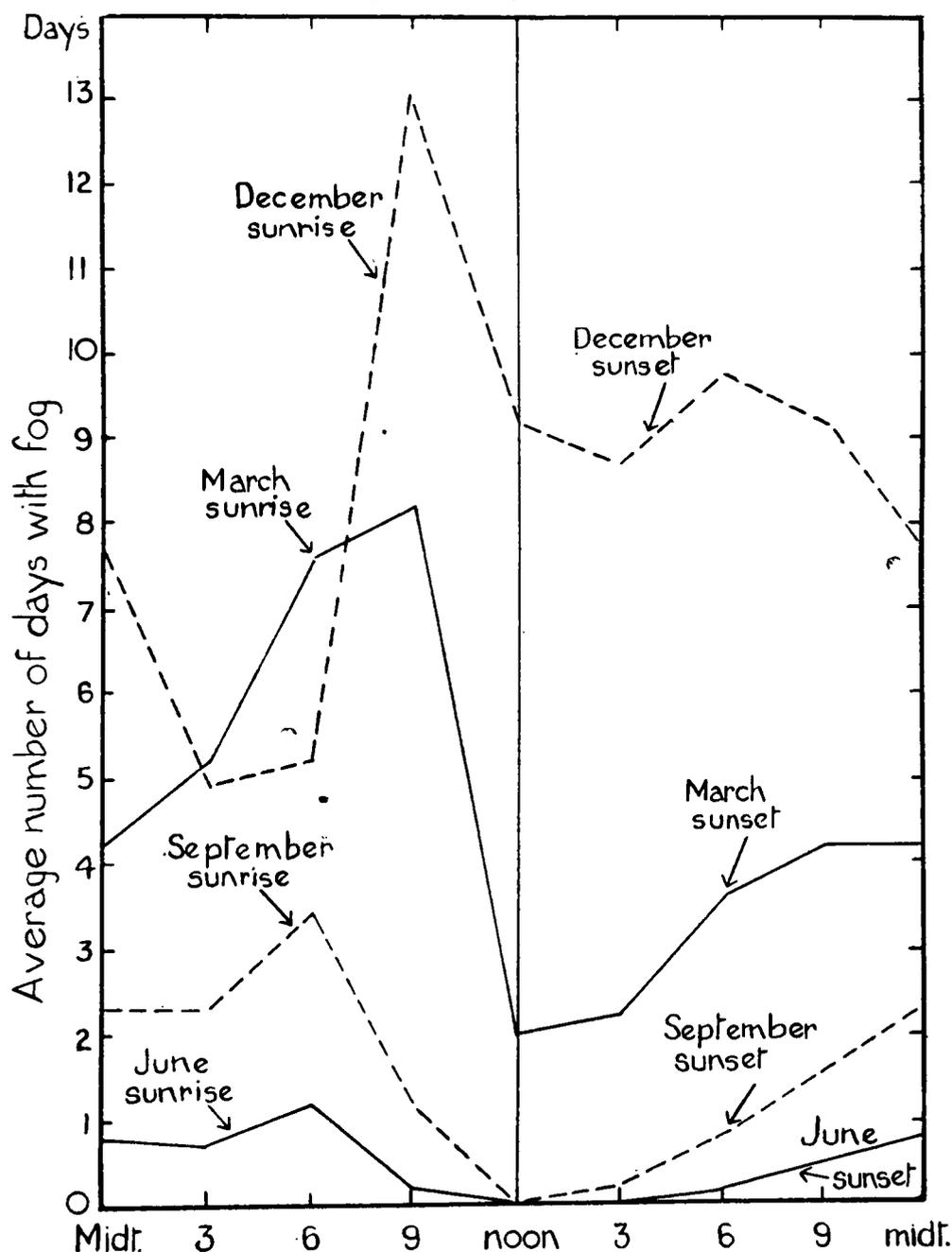


FIG. 1—DIURNAL AND SEASONAL FOG VARIATION, KINGSWAY, LONDON, 1941 TO 1946

(d) *High frequency of visibility $1\frac{1}{4}$ miles.*—The number of occasions on which the most distant of the standard objects visible from the roof of the Air Ministry was the Houses of Parliament, $1\frac{1}{4}$ miles away, is given below. The figures are given as a percentage of the total observations irrespective of time of day.

TABLE IX—PERCENTAGE FREQUENCY OF VISIBILITY $1\frac{1}{4}$ MILES

All hours of observation	
	Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.
Percentage of observations	31 35 39 25 12 11 10 9 11 27 35 30

When the number of occasions with visibility of less than $1\frac{1}{4}$ miles is added we have a large percentage of occasions of poor or bad visibility.

TABLE X—PERCENTAGE FREQUENCY OF VISIBILITY $1\frac{1}{4}$ MILES OR LESS

All hours of observation	
	Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.
Percentage of observations	83 75 77 38 26 15 12 13 32 59 80 80

In other words, although visibility is much better than it was 50 years ago it is still $1\frac{1}{4}$ miles or less for 8 tenths of the time over the three winter months November to January.

(e) *Pronounced improvement of visibility in the summer months.*—Fig. 2 shows the average number of occasions at each of the hours of observations in March, June, September and December over the period 1941 to 1946 when visibility was $6\frac{1}{2}$ miles or more.

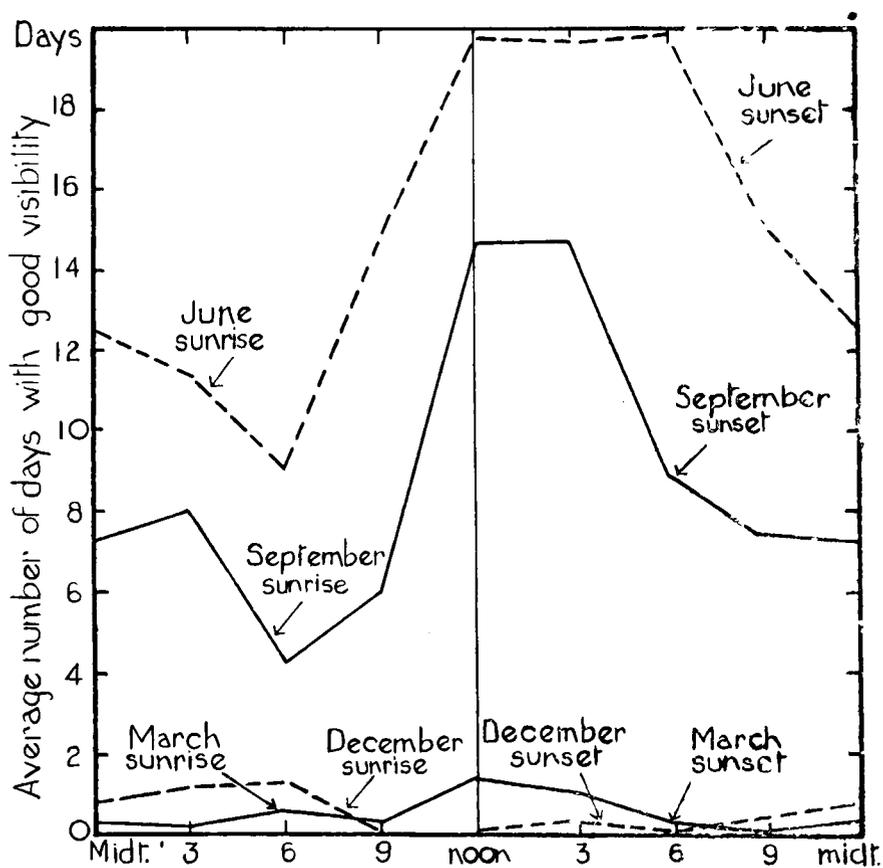


FIG. 2—DIURNAL AND SEASONAL VARIATION OF GOOD VISIBILITY, KINGSWAY, LONDON, 1941 TO 1946

The curve for June showing the temporary deterioration of visibility after sunrise, the marked improvement by midday and the falling off again towards evening is typical of central London in summer. The morning improvement is slower in autumn when a deterioration commences earlier in the afternoon.

(f) *Long spells of good visibility occur chiefly in the summer months.*—

TABLE XI—SPELLS OF GOOD VISIBILITY, 1941–46

Number of occasions of visibility continuously $6\frac{1}{2}$ miles or more

Duration	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
hr.												
12	2	12	12	22	23	3	..	..	..
13–24	6	16	29	26	24	19	..	..	..
25–36	5	5	17	13	2	..	..	..
37–48	1	..	5	4	5	..	..	..	..
days												
2–3	7	2	4	..	..	..	..
3–4

Kingsway compared with Greenwich.—9 a.m. visibility observations at Greenwich and Kingsway are available for comparison over the period August 1944 to December 1946. The two places are similarly situated with regard to the Thames, Victory House being 660 yd. to the north and Greenwich 860 yd. to the south of the river's nearest point. Kingsway is surrounded by offices on all sides except for Lincolns Inn Fields, about 200 yd. square, to the immediate east. Hyde Park is about $1\frac{1}{2}$ miles away to the west. Greenwich Observatory about 5 miles east-south-east of Kingsway is located in a large park with a thickly populated area to the west and north and a more open residential area to the east and south.

Fig. 3 shows the similarity of visibility at the two places throughout the year, Greenwich being slightly better than Kingsway on the average, especially in summer. The patchiness of London fog is instanced by the fact that, although dense or thick fogs were observed on about the same number of occasions during the period (on 15 days in Kingsway and 14 days at Greenwich), they rarely occurred simultaneously at the two places.

Comparison with outer London.—Early morning, midday and evening visibility observations made at Kew Observatory and Croydon airport, representing conditions in the southern and south-western parts of outer London, are available for comparison with the observations made at the same time at Kingsway, within three quarters of a mile of Charing Cross.

Kew Observatory lies about $8\frac{1}{4}$ miles to the west-south-west of Charing Cross, and is situated in the level Old Deer Park, Richmond. Its surroundings are parkland or residential. The River Thames runs 300 yd. to west and north. Kew Observatory stands on ground little above river level, the water level in the soil being only a few feet below the surface.

Croydon airport is $10\frac{1}{2}$ miles to the south of Charing Cross, with a fairly thickly populated area to the north and east and residential districts to the south and west. It is eight miles away from the nearest part of the Thames. It is on the northern slope of a hill which rises to about 140 ft. above the station. Ground to the west and north is fairly flat.

Fig. 4 gives the average number of days with fog within the official definition, i.e. days with visibility less than 1,100 yd., at the three places.

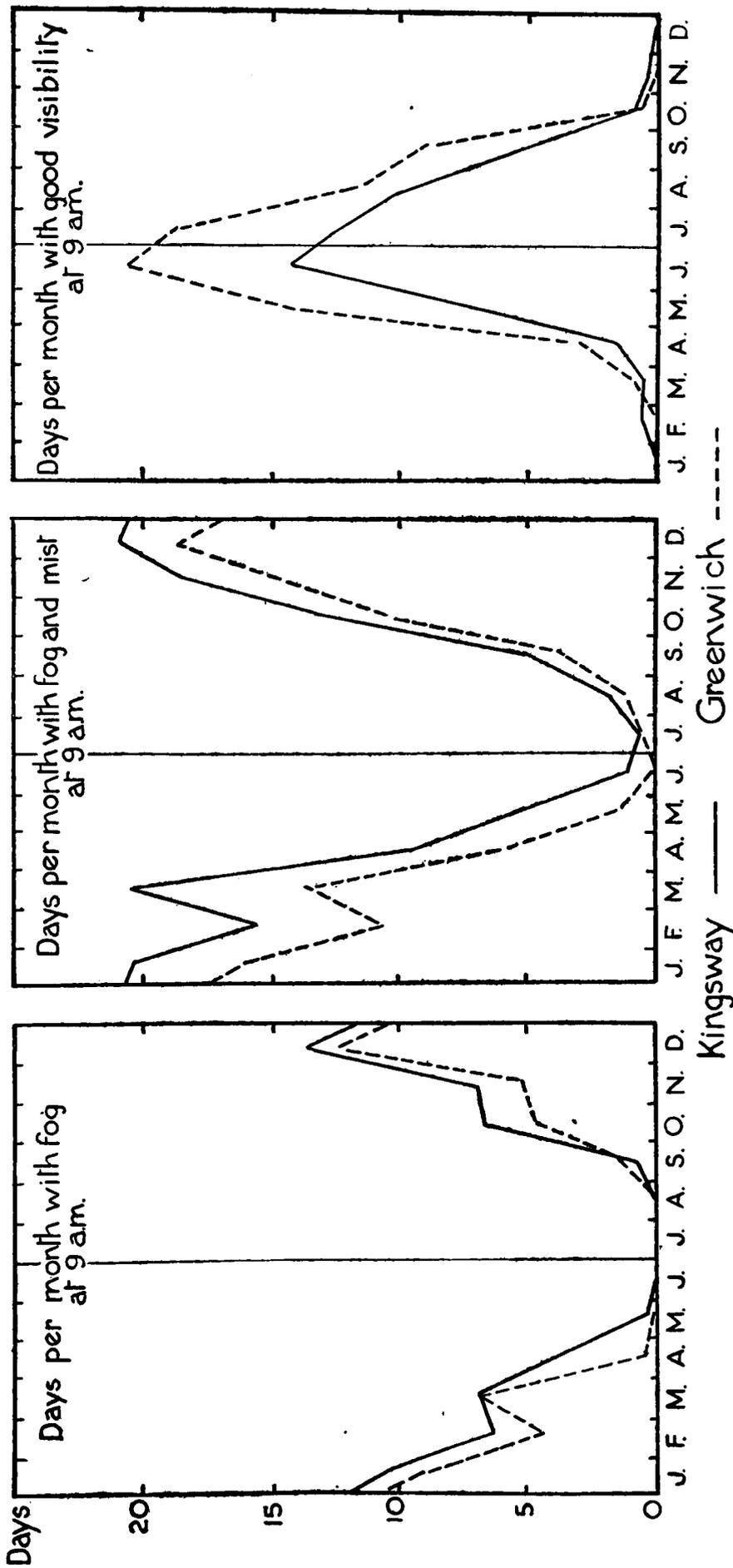


FIG. 3—AVERAGE NUMBER OF DAYS PER MONTH WITH FOG, MIST AND GOOD VISIBILITY AT 9 A.M., AUGUST 1944 TO DECEMBER 1946

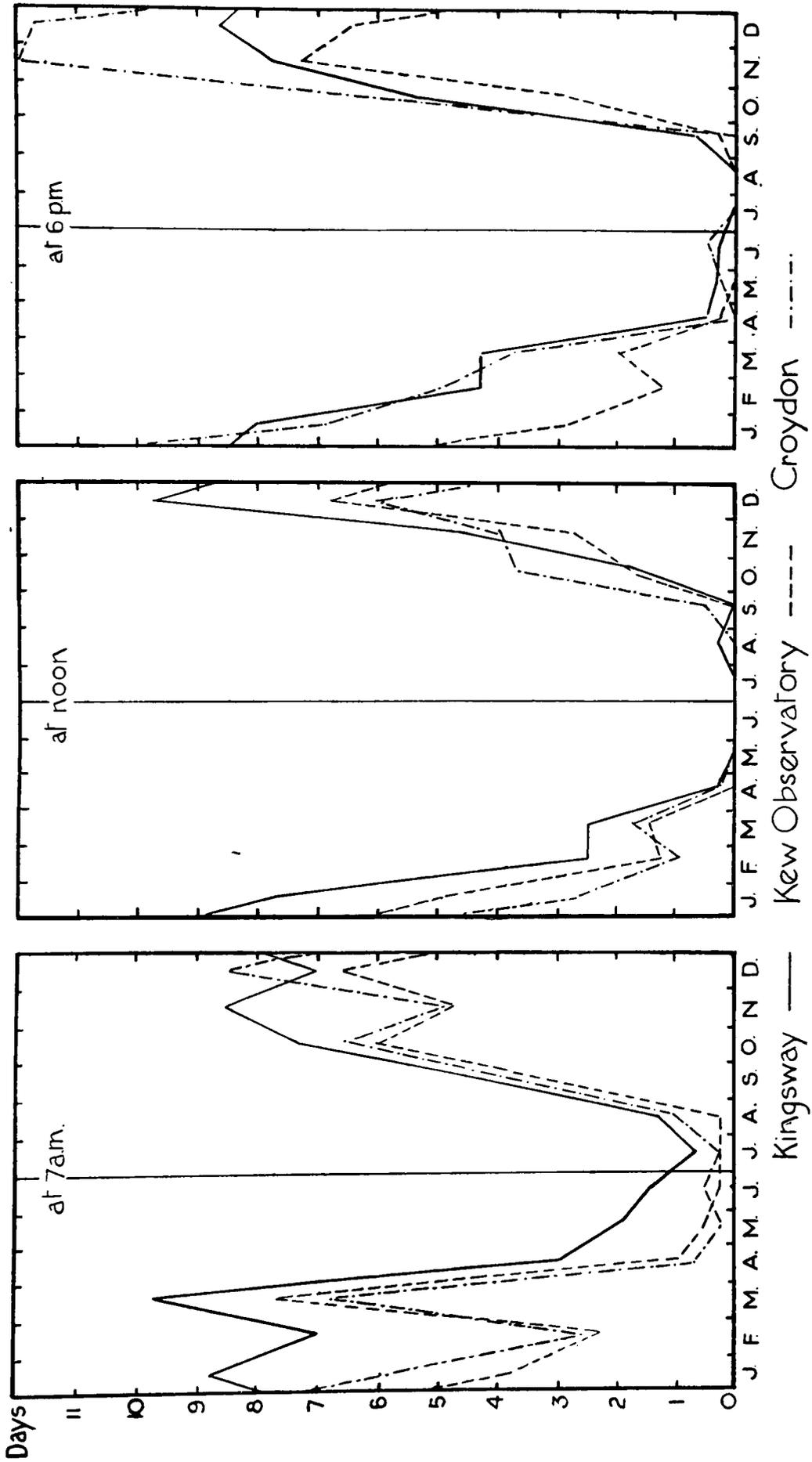


FIG. 4—AVERAGE NUMBER OF DAYS WITH FOG, 1941 TO 1944

Early morning fog.—The left-hand diagram of Fig. 4 shows that early morning fogs were much more frequent in central London than in the outer suburbs. The broad monthly fog distribution was very similar at all three places.

The main points are :—

- (i) Relative freedom from fog in February compared with January and, more especially, March.
- (ii) Sharp falling off in fog frequency from March to April.
- (iii) Infrequent suburban fogs in May, June and July, and to a lesser extent in August.
- (iv) Autumnal fogs.
- (v) Failure of November to live up to its popular notoriety, except in central London.
- (vi) Peak month at Croydon was December.

Although central London was worse than outer London over the whole range of fog the number of dense or thick fogs was much more frequent in the suburbs. At 6 a.m. in the four years under discussion there were thick or dense fogs on 61 mornings at Kew Observatory and on 51 mornings at Croydon compared with 32 mornings at Kingsway. This confirms the general impression held by city workers that fog is often thinner in town than at home.

Fog at midday.—The middle diagram of Fig. 4 gives the average number of midday fogs each month. Midday fog is of fairly common occurrence in central London in January, November and December, and is not infrequent in February, March and October. Outer London is less subject to persistent fog on the whole, but it will be seen that Croydon had twice as many October fogs at midday as either Kingsway or Kew Observatory. Thick fogs were similar in number at all three places : 13 each at Kew and Kingsway and 16 at Croydon.

Evening fog.—The right-hand diagram of Fig. 4 shows the extent to which evening fog may vary in the London area. Kew, although near the river, was relatively free from fog at 6 p.m. up to November in the years 1941 to 1944. Croydon, on the other hand, was as bad as central London on the whole and by far the worst on November and December evenings. This is supported by the fact that whereas thick and dense fogs at 6 p.m. totalled only 11 at Kingsway and 12 at Kew the number at Croydon amounted to 34.

In 1945 and 1946 however the 9 p.m. fog frequency at Croydon was intermediate between Kingsway and Kew Observatory, while dense or thick fog was three times more frequent at Kew than at Croydon.

TABLE XII.—AVERAGE NUMBER OF DAYS WITH FOG AT 9 P.M. 1945–46

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Kew	4.0	1.0	1.0	0.5	0.5	..	..	..	0.5	4.5	3.5	6.0	21.5
Croydon ..	6.0	3.5	1.5	0.5	..	..	..	..	..	4.5	5.0	5.0	26.0
Kingsway ..	6.5	1.5	3.0	..	..	..	..	..	1.0	9.5	5.5	11.0	38.0

Good visibility.—The average number of days with visibility more than 6 miles in the period 1941 to 1944 is given in Fig. 5.

Good visibility in central London is rare at any time of the day in the first three and last three months of the year. In the four years 1941 to 1944 good visibility was not noted at Kingsway at 7 a.m. on any occasion between November 7 and April 26.

The middle diagram of Fig. 5 shows the generally increased frequency of good visibility after the end of March. In August the air in central London is almost as clear at midday as in the outer suburbs. The onset of autumn evening mists is the most striking feature of the diagram for 6 p.m.

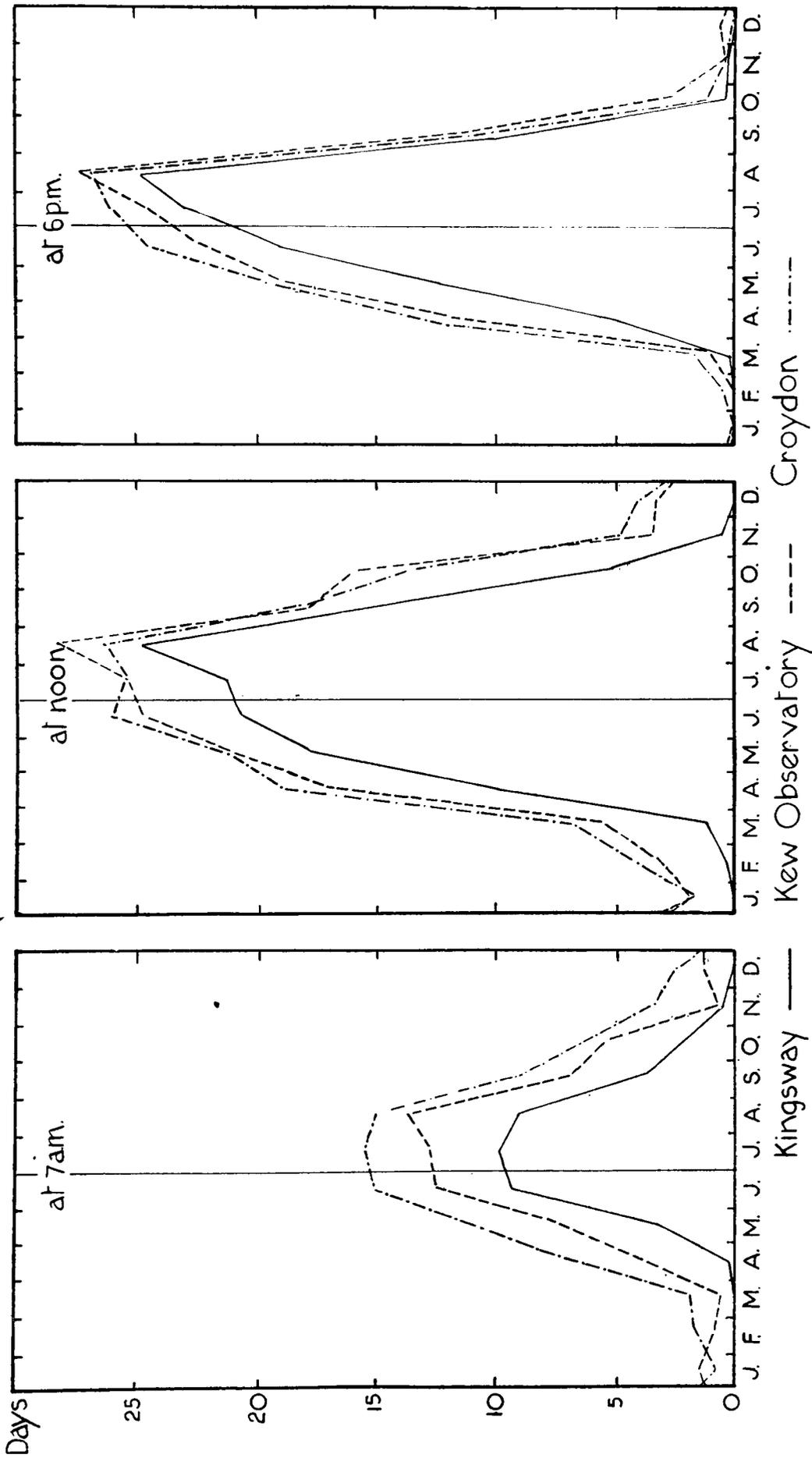


FIG. 5—AVERAGE NUMBER OF DAYS WITH GOOD VISIBILITY, 1941 TO 1944

§ 4—RECURRENCE OF WARM AND COLD SPELLS

Previous investigations.—Buchan's cold and warm spells have become so established a part of British weather lore and are so often quoted as applying to London that it is desirable first to mention their origin.

About 80 years ago Dr. Alexander Buchan was led to inquire whether there was any evidence in support of Scottish folk-lore regarding certain cold and warm periods at different times of the year. He found that the ancient sayings had some foundation for parts of Scotland and published in the *Journal of the Scottish Meteorological Society* of 1869 the periods given below.

COLD PERIODS	WARM PERIODS
1. February 7–14	1. July 12–15
2. April 11–14	2. August 12–15
3. May 9–14	3. December 3–14
4. June 29–July 4	
5. August 6–11	
6. November 6–13	

These cold and warm periods are indicated on Figs. 6 and 7 as B1, B2, etc.

Dr. C. E. P. Brooks and Mr. S. T. A. Mirrlees examined the question of the applicability of Buchan's periods to London. They used the mean of the 24-hourly readings as being the day's temperature and dealt in detail with the two periods 1871–1900 and 1901–29. Their opinion was summarized in the *Quarterly Journal of the Royal Meteorological Society* in 1930 in the following words:—

“On the whole it seems improbable that there exists in our climate an abiding tendency for any part of the year to be either abnormally warm or abnormally cold for the season While Buchan's cold and warm spells were probably true for Scotland in the 1860s, they are certainly not true for London in the twentieth century.”

Nevertheless many people are reluctant to discard the application of Buchan's spells to London. The occasional chance successes are remembered and the failures forgotten.

Temperature information now used.—Five successive days with afternoon temperatures averaging five to ten degrees above the seasonal level can fairly be described as a warm spell or mild spell according to the time of year. Spells of temperature correspondingly below average would be considered cold in winter and cool in summer. As the maximum temperature usually occurs in the afternoon its difference from the seasonal average is probably as good an indication of the day's warmth or coldness as is the mean of the 24-hourly thermometer readings. It was necessary to plot daily values of maximum temperature in relation to the average in order to obtain the broad monthly picture for § 1 of this book. Opportunity has been taken to examine these curves for possible recurrences of cold and mild periods in London. The periods 1st–5th, 6th–10th, 11th–15th, etc., of each month were taken separately and the difference of each 5-day mean maximum temperature from the average was estimated to the nearest degree by means of a suitably devised scale. Greenwich Observatory values were used for the years 1841 to 1873 and those for Kew Observatory for the period 1874–1940.

The average maximum temperature for each 5-day period was taken to be the values obtained from a smooth curve joining the average monthly values for the 30 years 1906 to 1935 when these were plotted to the 15th of the month.

The following definitions have been adopted for the discussion of the values so obtained, irrespective of time of year.

Description	Difference of 5-day mean maximum temperature from the average
Rather warm spell	+ 2° to + 4°F.
Rather cold spell	– 2° to – 4°F.
Warm spell	+ 5°F. or more
Cold spell	– 5°F. or more

The number of occasions on which warm spells and cold spells in London have extended over each of the 5-day periods 1st-5th, 6th-10th, etc., of the month throughout the 100 years 1841 to 1940 are shown by the black portion of Fig. 6.

For a warm spell to have occurred in any of these 5-day periods with a regularity greater than chance the black area relating to that period in Fig. 6 should rise above the upper line marked 50. Similarly a cold spell with a regularity of 1 year in 2 necessitates the black portion of the diagram falling to the lower 50 line.

The grey fringe should be treated in the same manner with regard to rather warm or rather cold spells, i.e. these occasions when temperature was appreciably above or below average but not sufficiently so to bring them within the warm-spell or cold-spell definitions.

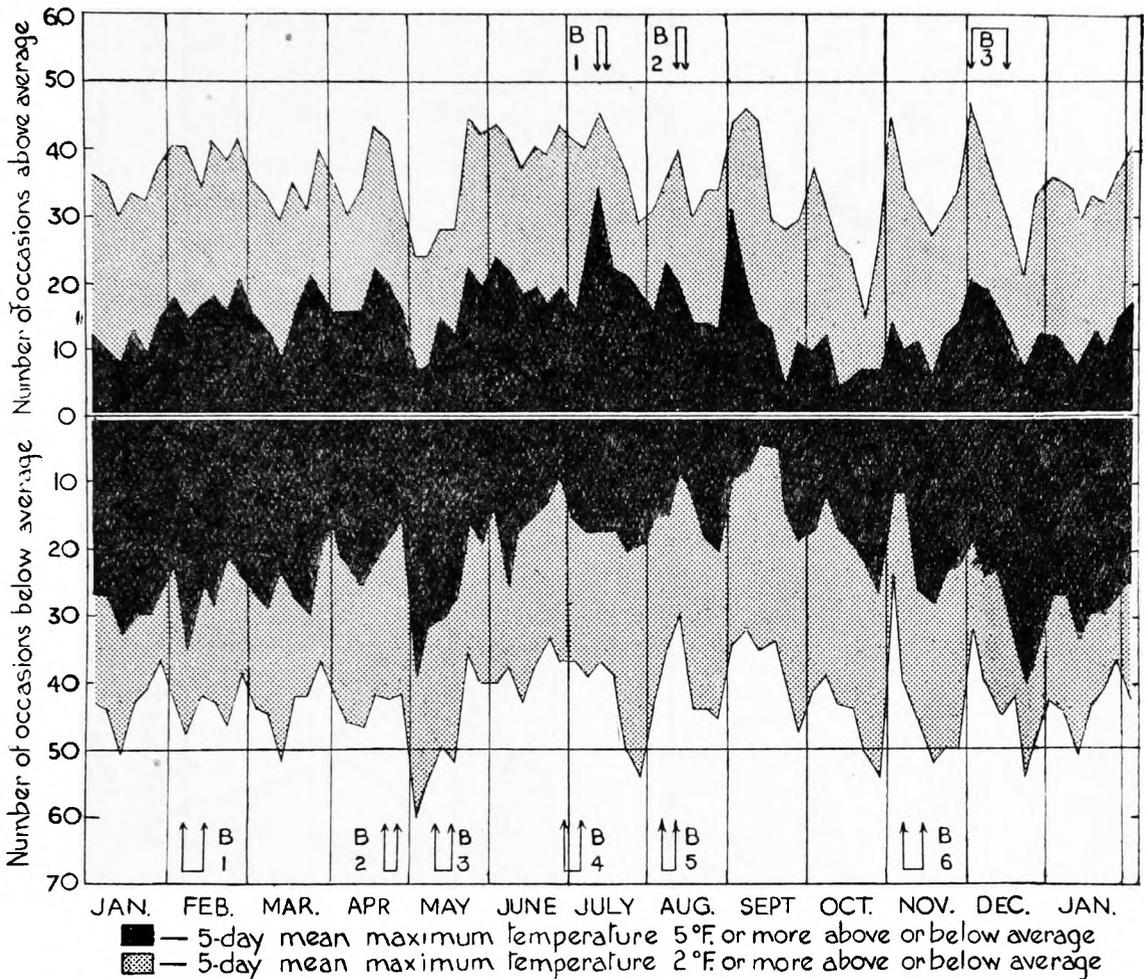


FIG. 6—FREQUENCY OF WARM AND COLD SPELLS IN LONDON, 1841 TO 1940 over the 5-day periods 1st-5th, 6th-10th, 11th-15th, etc., of each month

B—Buchan period

The 5-day mean could be five degrees above or below average even if temperature on one day did not differ by that amount. Exceptionally, owing for instance to a sudden change of temperature regime, there could be a 5-day period classified as warm for this purpose in which the beginning or end of the period was below the seasonal average. In such a case the remainder of the period would obviously have to be very warm.

Buchan's warm and cold periods originally formulated for Scotland are indicated by arrows at the top and bottom respectively of the London diagrams (Figs. 6 and 7).

Cold spells and warm spells experienced in London.—It must be emphasized that the peaks and troughs of Fig. 6 apply to the particular period covered by the observations. It is not in general safe to assume that they will persist if the observations are extended into the future. To obtain a fuller appreciation of the temperature trends over the past 100 years it is necessary also to examine the details for each of the five 20-year periods given in Fig. 7.

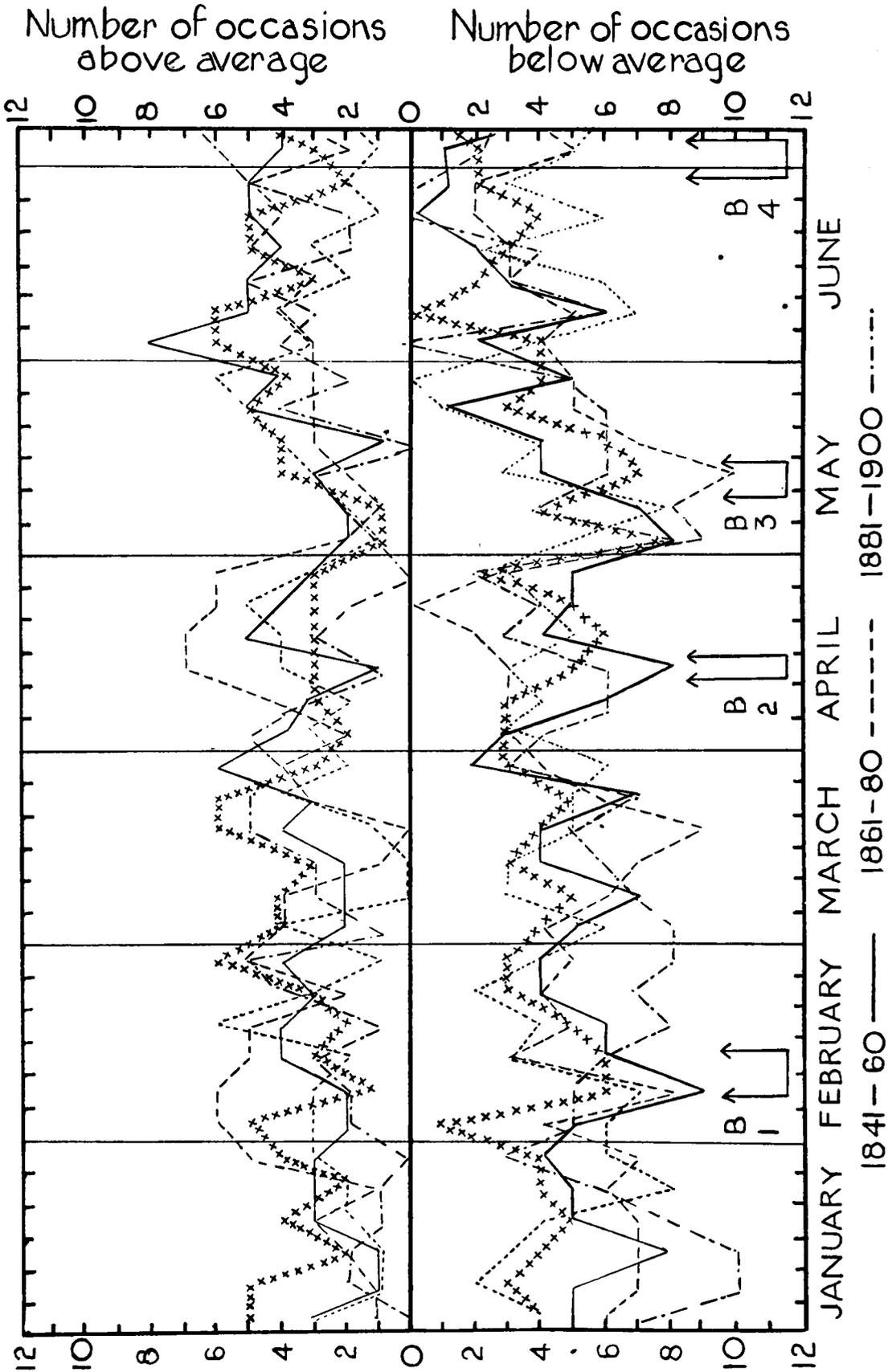


FIG. 7.—LONDON MAXIMUM TEMPERATURE
 Number of occasions of 5-day mean 5°F. or more different from average over the 20-year periods between 1841 and 1940
 B—Buchan period

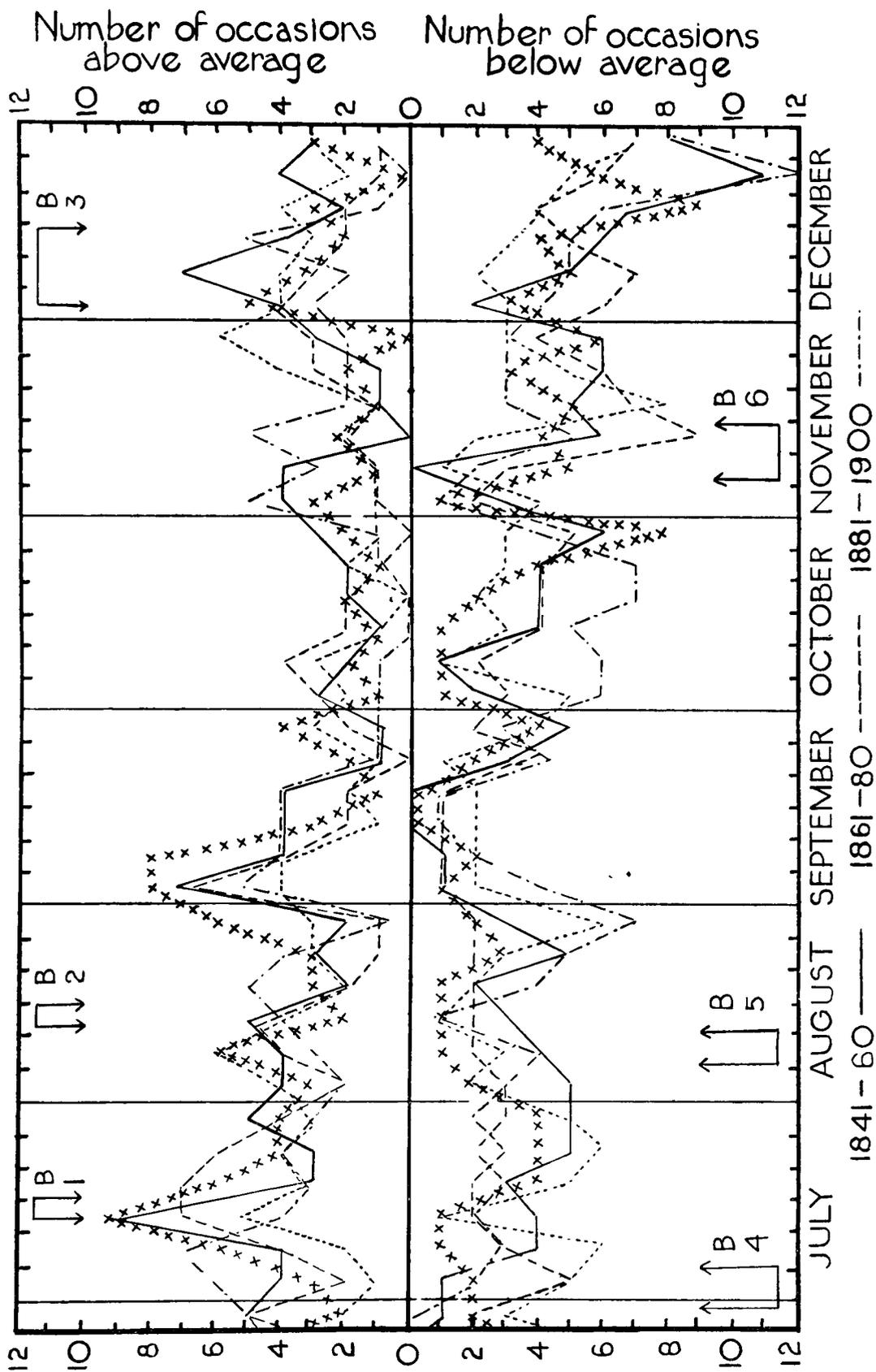


FIG. 7.—LONDON MAXIMUM TEMPERATURE—continued

Number of occasions of 5-day means 5°F. or more different from average over the 20-year periods between 1841 and 1940
 B—Buchan period

It is at once clear from Fig. 6 that in London none of the 5-day periods over the 100 years, 1841 to 1940, were accompanied by warm spells or cold spells with anything approaching 50 per cent. regularity. The graph, indeed, shows a well defined annual variation. Cold spells were most frequent in winter with a minimum about September. The warm spells, similarly, had a maximum frequency in summer and a minimum about October.

Fig. 7 shows that the cold spell in June which came in the earlier years did not come in the last 20 years. The warm spell towards mid July was much more pronounced at the beginning and at the end of the period than during the 60 years 1861 to 1920

Some features, however, merit further comment.

(1) The cold spells of early May, the associated absence of warm spells and the secondary cold snaps later in the month have been fairly consistent in each of the 20-year periods between 1841 and 1940. These may indicate a genuine liability to a cold spell, not at a well defined date, but anywhere between late April and mid May.

(2) The frequent warm spells at the beginning of September and the infrequent cold spells in the first half of that month are significant.

(3) Late October and mid November have often been subject to rather cold spells with an interlude unusually free from cold weather.

(4) The cold spells of late December have been very pronounced over the past 100 years as a whole, but their frequency and period of occurrence have varied considerably.

Less consistent but nevertheless noteworthy features of London's temperature over the past 100 years have been :—

(1) The cold spells of early February.

(2) The changeable temperatures in the second half of March.

(3) The mild spells at the end of November or beginning of December.

§ 5—SUMMARIES OF TEMPERATURE, RAINFALL AND SUNSHINE

FOR EACH MONTH AND YEAR 1841 TO 1949

Greenwich observatory 1841 to 1870

Kew observatory 1871 to 1949

Temperature.—The temperatures given on pp. 61–97 for Greenwich are mostly based on the means of the hourly readings from thermometers exposed in a Glaisher screen, while those for Kew are based on the daily maximum and minimum values from midnight to midnight in a north-wall screen. These temperatures are compared with the average over the 30 years 1906 to 1935, published in “Averages of temperature for the British Isles for periods ending 1935” * and given below. Averages based on thermometers exposed in a Stevenson screen, or on readings made in the morning or evening, are not comparable with the mean values quoted.

AVERAGE TEMPERATURE 1906 TO 1935

	Greenwich			Kew		
	Max.	Min.	Mean	Max.	Min.	Mean
	<i>degrees Fahrenheit</i>					
January	44·8	35·4	40·1	44·9	36·0	40·5
February	46·0	34·8	40·4	45·7	35·6	40·7
March	50·6	35·8	43·2	49·5	36·7	43·1
April	56·3	38·7	47·5	54·5	39·8	47·1
May	65·1	44·5	54·8	63·1	46·4	54·7
June	70·0	49·4	59·7	67·8	51·1	59·5
July	73·7	53·4	63·5	71·1	54·9	63·0
August	72·9	53·1	63·0	70·1	54·3	62·2
September	67·3	48·9	58·1	65·2	49·9	57·5
October	58·8	43·7	51·3	57·5	44·5	51·0
November	49·2	37·8	43·5	48·9	38·7	43·8
December	45·5	36·6	41·1	45·7	37·2	41·5
Year	58·3	42·7	50·5	57·0	43·8	50·4

Rainfall.—The totals given are values from midnight to midnight and these are compared with the average over the 35 years 1881 to 1915 published in section I of the “Book of Normals” and given below.

AVERAGE RAINFALL 1881 TO 1915

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
	<i>millimetres</i>												
Greenwich	43	40	44	37	44	51	57	56	45	64	58	57	596
Kew	45	39	43	37	44	55	55	57	48	69	56	58	606
	<i>inches</i>												
Greenwich	1·69	1·57	1·73	1·47	1·73	2·02	2·24	2·19	1·79	2·53	2·28	2·26	23·50
Kew	1·76	1·54	1·69	1·45	1·72	2·15	2·17	2·24	1·87	2·70	2·22	2·29	23·80

* In the 1948 reprint of “Averages of temperature for the British Isles for periods ending 1935” the temperatures given for Greenwich are weighted averages based on readings from thermometers exposed in a Stevenson screen, in place of the averages based on readings from thermometers exposed in a Glaisher screen given in the original publication.

Sunshine.—The totals given only start in 1880. These are compared with the average over the 30 years 1901 to 1930 published in "Averages of bright sunshine for the British Isles for periods ending 1930", given below.

AVERAGE SUNSHINE 1901 TO 1930

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Kew													
Total	44	61	103	149	203	199	195	183	145	93	53	37	1,465
Daily mean	1.43	2.14	3.31	4.98	6.54	6.65	6.29	5.90	4.83	3.02	1.78	1.29	4.01

RAINFALL CONVERSION TABLE
millimetres to inches

millimetres	0	1	2	3	4	5	6	7	8	9
	<i>inches</i>									
0	0.00	0.04	0.08	0.12	0.16	0.20	0.24	0.28	0.31	0.35
1	0.39	0.43	0.47	0.51	0.55	0.59	0.63	0.67	0.71	0.75
2	0.79	0.83	0.87	0.91	0.95	0.98	1.02	1.06	1.10	1.14
3	1.18	1.22	1.26	1.30	1.34	1.38	1.42	1.46	1.50	1.54
4	1.57	1.61	1.65	1.69	1.73	1.77	1.81	1.85	1.89	1.93
5	1.97	2.01	2.05	2.09	2.13	2.17	2.20	2.24	2.28	2.32
6	2.36	2.40	2.44	2.48	2.52	2.56	2.60	2.64	2.68	2.72
7	2.76	2.80	2.83	2.87	2.91	2.95	2.99	3.03	3.07	3.11
8	3.15	3.19	3.23	3.27	3.31	3.35	3.39	3.43	3.46	3.50
9	3.54	3.58	3.62	3.66	3.70	3.74	3.78	3.82	3.86	3.90

1841

	Temperature						Rainfall	
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		°F.	mm.	mm.
Jan.	34.0	-6.1	27th	53	9th	4	54	+11
Feb.	35.6	-4.8	20th	55	4th	12	33	-7
Mar.	46.2	+3.0	26th	67	2nd	29	34	-10
Apr.	46.7	-0.8	27th	77	11th	32	49	+12
May	56.9	+2.1	27th	83	14th	41	52	+8
June	56.1	-3.6	18th	79	16th	40	69	+18
July	57.7	-5.8	3rd	77	13th	44	91	+34
Aug.	60.3	-2.7	27th	80	13th	45	56	0
Sept.	58.0	-0.1	12th	80	6th	37	100	+55
Oct.	49.0	-2.3	1st	65	22nd	32	151	+87
Nov.	42.9	-0.6	29th	58	17th	23	94	+36
Dec.	40.2	-0.9	10th	54	19th	24	61	+4
Year	48.6	-1.9	May 27	83	Jan. 9	4	845*	+249

1842

	Temperature						Rainfall	
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		°F.	mm.	mm.
Jan.	32.8	-7.3	31st	47	24th	23	26	-17
Feb.	40.3	-0.1	15th	53	19th	26	27	-13
Mar.	44.5	+1.3	28th	61	24th	30	48	+4
Apr.	44.9	-2.6	24th	74	6th	28	11	-26
May	53.4	-1.4	29th	75	10th	36	53	+9
June	63.0	+3.3	12th	87	3rd	45	24	-27
July	60.1	-3.4	18th	79	7th	45	75	+18
Aug.	65.4	+2.4	10th	91	31st	47	45	-11
Sept.	56.3	-1.8	2nd	76	22nd	41	101	+56
Oct.	45.4	-5.9	8th	61	21st	28	36	-28
Nov.	42.9	-0.6	12th	56	6th	31	108	+50
Dec.	44.7	+3.6	13th	58	28th	31	19	-38
Year	49.5	-1.0	Aug. 10	91	Jan. 24	23	573	-23

1843

	Temperature						Rainfall	
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		°F.	mm.	mm.
Jan.	39.8	-0.3	28th	57	3rd	24	34	-9
Feb.	35.8	-4.6	21st	52	15th	20	61	+21
Mar.	42.7	-0.5	18th	64	5th	27	13	-31
Apr.	47.5	0	20th	71	12th	27	44	+7
May	52.2	-2.6	12th	69	7th	35	95	+51
June	56.3	-3.4	27th	77	5th	43	33	-18
July	60.8	-2.7	5th	90	24th	45	61	+4
Aug.	62.0	-1.0	19th	83	11th	47	92	+36
Sept.	60.1	+2.0	17th	80	29th	34	12	-33
Oct.	48.4	-2.9	1st	70	19th	29	108	+44
Nov.	43.8	+0.3	7th	57	13th	27	58	0
Dec.	44.4	+3.3	23rd	55	13th	26	10	-47
Year	49.5	-1.0	July 5	90	Feb. 15	20	621	+25

* See note (1) on p. 97.

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1844

	Temperature				Rainfall			
	Mean	Diff. from Average	Warmest day		Coldest night			
			Date	Max.	Date	Min.		
	°F.	°F.	°F.		°F.			
Jan.	39.3	-0.8	5th	54	3rd	19	mm.	mm.
Feb.	35.5	-4.9	23rd	50	14th	20	61	+18
Mar.	41.5	-1.7	29th	60	6th	24	59	+19
Apr.	51.5	+4.0	26th	75	8th	33	58	+14
May	52.9	-1.9	14th	77	18th	34	9	-28
June	60.7	+1.0	24th	88	3rd	43	8	-36
July	61.7	-1.8	25th	87	17th	47	40	-11
Aug.	57.7	-5.3	20th	75	28th	43	55	-2
Sept.	57.2	-0.9	1st	78	30th	35	43	-13
Oct.	49.7	-1.6	3rd	67	23rd	31	30	-15
Nov.	43.9	+0.4	16th	58	27th	27	102	+38
Dec.	33.4	-7.7	29th	49	7th	21	114	+56
Year	48.7	-1.8	June 24	88	Jan. 3	19	9	-48
							589*	-7

1845

	Temperature				Rainfall			
	Mean	Diff. from Average	Warmest day		Coldest night			
			Date	Max.	Date	Min.		
	°F.	°F.	°F.		°F.			
Jan.	38.9	-1.2	6th	51	30th	25	mm.	mm.
Feb.	32.7	-7.7	26th	49	12th	8	61	+18
Mar.	35.6	-7.6	27th	59	14th	13	24	-16
Apr.	46.4	-1.1	24th	70	7th	29	38	-6
May	49.1	-5.7	2, 31	68	11th	34	14	-23
June	60.5	+0.8	13th	86	29th	44	56	+12
July	59.9	-3.6	7th	83	30th	45	48	-3
Aug.	57.4	-5.6	31st	78	22nd	44	47	-10
Sept.	53.9	-4.2	9th	73	24th	33	79	+23
Oct.	49.7	-1.6	3rd	68	26th	31	54	+9
Nov.	45.6	+2.1	6th	60	4th	27	35	-29
Dec.	41.5	+0.4	30th	55	13th	28	61	+3
Year	47.6	-2.9	June 13	86	Feb. 12	8	51	-6
							567*	-29

1846

	Temperature				Rainfall			
	Mean	Diff. from Average	Warmest day		Coldest night			
			Date	Max.	Date	Min.		
	°F.	°F.	°F.		°F.			
Jan.	43.5	+3.4	25th	55	5th	29	mm.	mm.
Feb.	43.9	+3.5	28th	62	11th	27	72	+29
Mar.	43.6	+0.4	31st	58	21st	27	37	-3
Apr.	47.3	-0.2	12th	63	21st	33	22	-22
May	55.3	+0.5	31st	84	16th	38	77	+40
June	65.5	+5.8	20th	91	2nd	49	38	-6
July	64.7	+1.2	5th	93	26th	49	13	-38
Aug.	63.1	+0.1	1st	92	14th	47	38	-6
Sept.	60.4	+2.3	6th	86	30th	39	102	+46
Oct.	50.6	-0.7	4th	68	29th	35	45	0
Nov.	45.3	+1.8	4th	61	30th	23	130	+66
Dec.	33.0	-8.1	21st	50	15, 31	19	39	-19
Year	51.3	+0.8	July 5	93	Dec. 15, 31	19	29	-28
							642	+46

* See note (1) on p. 97.

GREENWICH

1847

	Temperature						Rainfall	
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		°F.	mm.	mm.
Jan.	35.5	-4.6	24th	53	1st	20	35	-8
Feb.	35.6	-4.8	17, 18	55	12th	11	35	-5
Mar.	41.9	-1.3	17th	64	11th	17	20	-24
Apr.	44.6	-2.9	12th	64	17th	23	25	-12
May	56.7	+1.9	28th	86	1st	35	36	-8
June	57.9	-1.8	2nd	80	9th	41	38	-13
July	65.3	+1.8	12th	89	5th	47	17	-40
Aug.	62.3	-0.7	1st	88	4th	42	49	-7
Sept.	54.3	-3.8	11th	73	28th	33	40	-5
Oct.	53.0	+1.7	12th	74	26th	33	51	-13
Nov.	46.9	+3.4	8th	67	20th	25	51	-7
Dec.	42.5	+1.4	9th	57	29th	26	51	-6
Year	49.7	-0.8	July 12	89	Feb. 12	11	447*	-149

1848

	Temperature						Rainfall	
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		°F.	mm.	mm.
Jan.	34.9	-5.2	3rd	50	28th	17	31	-12
Feb.	43.9	+3.5	24th	55	18th	30	66	+26
Mar.	43.5	+0.3	31st	71	4th	28	79	+35
Apr.	47.4	-0.1	3rd	75	27th	30	87	+50
May	59.7	+4.9	15th	83	1st	35	10	-34
June	58.5	-1.2	15th	79	3rd	40	89	+38
July	62.3	-1.2	14th	85	1st	43	50	-7
Aug.	58.4	-4.6	3rd	75	9th	43	108	+52
Sept.	56.6	-1.5	22nd	81	13th	33	61	+16
Oct.	51.3	0	6th	74	31st	33	89	+25
Nov.	43.8	+0.3	21st	57	5th	26	31	-27
Dec.	44.0	+2.9	10th	62	23rd	22	65	+8
Year	50.4	-0.1	July 14	85	Jan. 28	17	765*	+169

1849

	Temperature						Rainfall	
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		°F.	mm.	mm.
Jan.	40.8	+0.7	14th	56	3rd	20	38	-5
Feb.	43.1	+2.7	22nd	58	13th	23	58	+18
Mar.	42.9	-0.3	17th	61	25th	28	15	-29
Apr.	44.5	-3.0	30th	64	18th	27	50	+13
May	54.8	0	5th	75	12th	36	94	+50
June	59.4	-0.3	5th	81	14th	39	8	-43
July	62.2	-1.3	8th	84	1st	39	74	+17
Aug.	62.7	-0.3	9th	83	5th	42	11	-45
Sept.	58.5	+0.4	6th	79	18th	43	83	+38
Oct.	51.3	0	19th	70	10th	31	69	+5
Nov.	44.1	+0.6	11th	62	28th	23	38	-20
Dec.	39.2	-1.9	15th	56	29th	19	61	+4
Year	50.3	-0.2	July 8	84	Dec. 29	19	599	+3

* See note (1) on p. 97.

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1850

	Temperature				Rainfall			
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		°F.	mm.	mm.
Jan.	34.1	-6.0	25th	53	8th	22	31	-12
Feb.	44.5	+4.1	15th	58	14th	30	36	-4
Mar.	39.9	-3.3	31st	58	26th	20	10	-34
Apr.	49.3	+1.8	7th	67	29th	34	57	+20
May	51.6	-3.2	31st	77	3rd	32	58	+14
June	61.2	+1.5	23rd	85	16th	36	25	-26
July	62.2	-1.3	16th	87	10th	43	72	+15
Aug.	60.8	-2.2	5th	81	22nd	40	43	-13
Sept.	56.2	-1.9	2nd	71	7th	39	34	-11
Oct.	46.7	-4.6	7th	65	27th	31	40	-24
Nov.	46.4	+2.9	2nd	61	15th	28	55	-3
Dec.	40.4	-0.7	15th	57	21st	24	34	-23
Year	49.4	-1.1	July 16	87	Mar. 26	20	496*	-100

1851

	Temperature				Rainfall			
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		°F.	mm.	mm.
Jan.	43.0	+2.9	1st	57	24th	27	69	+26
Feb.	40.0	-0.4	18th	57	17th	24	32	-8
Mar.	42.7	-0.5	20th	58	9th	30	103	+59
Apr.	45.5	-2.0	17th	64	6th	29	58	+21
May	51.7	-3.1	29th	74	5th	33	20	-24
June	59.7	0	27th	87	1st	39	45	-6
July	60.3	-3.2	2nd	84	5th	39	107	+50
Aug.	62.6	-0.4	12th	82	31st	42	66	+10
Sept.	56.2	-1.9	1st	77	17th	38	13	-32
Oct.	52.5	+1.2	10th	70	17th	35	55	-9
Nov.	37.7	-5.8	1st	53	19th	24	17	-41
Dec.	40.6	-0.5	10th	55	27th	25	14	-43
Year	49.4	-1.1	June 27	87	Feb. 17 Nov. 19	24	598*	+2

1852

	Temperature				Rainfall			
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		°F.	mm.	mm.
Jan.	41.9	+1.8	16th	55	5th	28	91	+48
Feb.	40.7	+0.3	2nd	57	21st	25	23	-17
Mar.	40.6	-2.6	23rd	68	5th	21	4	-40
Apr.	45.4	-2.1	14th	75	10th	27	12	-25
May	52.1	-2.7	16th	73	3rd	29	48	+4
June	56.9	-2.8	25th	73	1st	41	117	+66
July	67.0	+3.5	5th	90	23rd	49	57	0
Aug.	62.3	-0.7	1st	81	4th	50	111	+55
Sept.	56.8	-1.3	4th	77	17th	38	97	+52
Oct.	47.8	-3.5	2nd	64	17th	31	95	+31
Nov.	49.0	+5.5	5th	64	25th	33	152	+94
Dec.	47.6	+6.5	11th	57	1st	32	56	-1
Year	50.7	+0.2	July 5	90	Mar. 5	21	864*	+268

* See note (1) on p. 97.

1853

	Temperature						Rainfall	
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		°F.	mm.	mm.
Jan.	42.6	+2.5	20th	55	19th	31	54	+11
Feb.	33.2	-7.2	28th	45	19th	21	38	-2
Mar.	38.2	-5.0	13th	61	25th	21	38	-6
Apr.	46.0	-1.5	4th	62	25th	32	81	+44
May	52.5	-2.3	27th	79	11th	33	38	-6
June	59.0	-0.7	11th	81	4th	40	70	+19
July	61.0	-2.5	7th	82	1st	48	139	+82
Aug.	60.1	-2.9	19th	77	18th	46	70	+14
Sept.	55.4	-2.7	17th	73	27th	37	57	+12
Oct.	51.3	0	26th	67	3rd	32	107	+43
Nov.	42.2	-1.3	1st	61	23rd	26	49	-9
Dec.	34.0	-7.1	1st	51	29th	18	20	-37
Year	48.0	-2.5	July 7	82	Dec. 29	18	762*	+166

1854

	Temperature						Rainfall	
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		°F.	mm.	mm.
Jan.	39.3	-0.8	30th	55	3rd	13	36	-7
Feb.	39.4	-1.0	6th	57	14th	23	31	-9
Mar.	43.6	+0.4	13th	64	3rd	25	8	-36
Apr.	48.6	+1.1	20th	77	25th	28	15	-22
May	51.2	-3.6	17th	71	19th	35	89	+45
June	56.5	-3.2	25th	80	1st	41	23	-28
July	61.0	-2.5	25th	89	29th	44	45	-12
Aug.	61.1	-1.9	28th	85	18th	43	66	+10
Sept.	57.9	-0.2	4th	81	29th	38	25	-20
Oct.	49.5	-1.8	2, 5	73	27th	31	61	-3
Nov.	40.6	-2.9	1st	62	27th	26	48	-10
Dec.	41.2	+0.1	14, 25	55	11th	27	36	-21
Year	49.2	-1.3	July 25	89	Jan. 3	13	483	-113

1855

	Temperature						Rainfall	
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		°F.	mm.	mm.
Jan.	34.9	-5.2	2nd	52	19th	16	37	-6
Feb.	29.2	-11.2	25th	48	19th	11	25	-15
Mar.	37.8	-5.4	20th	58	10, 11	25	50	+6
Apr.	45.9	-1.6	16th	73	2nd	26	2	-35
May	49.3	-5.5	26th	81	5th	28	46	+2
June	57.7	-2.0	6th	83	3rd	39	22	-29
July	62.6	-0.9	10th	79	5th	44	133	+76
Aug.	62.4	-0.6	28th	79	14, 30	47	36	-20
Sept.	57.3	-0.8	23rd	78	27th	34	49	+4
Oct.	51.5	+0.2	1st	67	28th	35	132	+68
Nov.	41.6	-1.9	6th	58	16th	26	38	-20
Dec.	36.2	-4.9	28th	52	22nd	17	28	-29
Year	47.2	-3.3	June 6	83	Feb. 19	11	599*	+3

* See note (1) on p. 97.

GREENWICH

1856

	Temperature						Rainfall	
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		°F.	mm.	mm.
Jan.	39.2	-0.9	24th	54	15th	24	67	+24
Feb.	42.1	+1.7	9th	58	1st	27	28	-12
Mar.	39.1	-4.1	31st	58	30, 31	25	28	-16
Apr.	47.5	0	25th	73	21st	31	58	+21
May	49.9	-4.9	11th	72	5th	30	88	+44
June	59.7	0	27th	83	6th	41	41	-10
July	61.6	-1.9	31st	87	3, 10	44	23	-34
Aug.	63.7	+0.7	2nd	90	23rd	45	61	+5
Sept.	55.2	-2.9	10th	73	20, 21	40	71	+26
Oct.	52.0	+0.7	22nd	66	29th	31	49	-15
Nov.	41.0	-2.5	23rd	58	30th	19	32	-26
Dec.	40.2	-0.9	7th	59	28th	19	47	-10
Year	49.3	-1.2	Aug. 2	90	Nov. 30 Dec. 28	19	591*	-5

1857

	Temperature						Rainfall	
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		°F.	mm.	mm.
Jan.	36.8	-3.3	2nd	53	30th	20	66	+23
Feb.	38.9	-1.5	28th	57	1st	20	5	-35
Mar.	41.9	-1.3	18th	66	22nd	28	21	-23
Apr.	46.3	-1.2	19th	69	24th	28	36	-1
May	54.3	-0.5	16th	80	4th	31	8	-36
June	62.5	+2.8	28th	93	14th	39	69	+18
July	65.1	+1.6	15th	90	8th	46	28	-29
Aug.	65.7	+2.7	3rd	88	28th	49	63	+7
Sept.	59.9	+1.8	17th	81	21st	41	86	+41
Oct.	53.2	+1.9	1st	69	31st	38	107	+43
Nov.	46.0	+2.5	3rd	64	12th	30	34	-24
Dec.	45.1	+4.0	17th	57	31st	31	14	-43
Year	51.3	+0.8	June 28	93	Jan. 30 Feb. 1	20	537	-59

1858

	Temperature						Rainfall	
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		°F.	mm.	mm.
Jan.	37.6	-2.5	9th	52	6th	21	19	-24
Feb.	34.9	-5.5	5th	53	26th	23	43	+3
Mar.	41.5	-1.7	24th	69	11th	24	20	-24
Apr.	46.8	-0.7	16th	76	2nd	27	57	+20
May	52.2	-2.6	31st	81	7th	32	51	+7
June	65.7	+6.0	16th	95	19th	49	31	-20
July	61.4	-2.1	15th	88	30th	44	76	+19
Aug.	62.3	-0.7	12th	87	29th	43	38	-18
Sept.	60.4	+2.3	12th	84	25th	41	22	-23
Oct.	51.2	-0.1	3rd	69	30th	33	37	-27
Nov.	39.5	-4.0	26th	58	24th	21	13	-45
Dec.	41.1	0	21st	53	7th	30	43	-14
Year	49.5	-1.0	June 16	95	Jan. 6 Nov. 24	21	450	-146

* See note (1) on p. 97.

1859

	Temperature						Rainfall	
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		°F.	mm.	mm.
Jan.	40.5	+0.4	18th	53	9th	29	20	-23
Feb.	43.4	+3.0	16th	59	5th	31	22	-18
Mar.	46.8	+3.6	5th	63	31st	29	34	-10
Apr.	47.5	0	6th	79	1st	25	55	+18
May	53.5	-1.3	30th	77	6th	33	60	+16
June	62.3	+2.6	26th	81	25th	43	36	-15
July	68.9	+5.4	18th	93	25th	47	84	+27
Aug.	63.9	+0.9	25th	91	31st	47	29	-27
Sept.	57.0	-1.1	24th	76	12, 20	41	97	+52
Oct.	51.4	+0.1	4th	81	24th	27	91	+27
Nov.	42.1	-1.4	6th	60	14th	25	74	+16
Dec.	36.7	-4.4	31st	57	19th	14	55	-2
Year	51.2	+0.7	July 18	93	Dec. 19	14	656*	+60

1860

	Temperature						Rainfall	
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		°F.	mm.	mm.
Jan.	40.0	-0.1	3rd	55	28th	27	46	+3
Feb.	35.7	-4.7	28th	53	11th	23	28	-12
Mar.	41.5	-1.7	28th	59	10th	23	47	+3
Apr.	43.3	-4.2	30th	65	11th	28	25	-12
May	54.6	-0.2	23rd	77	7th	33	99	+55
June	55.7	-4.0	24th	74	6th	43	147	+96
July	58.3	-5.2	17th	75	5th	42	71	+14
Aug.	58.2	-4.8	4, 16	71	7th	45	93	+37
Sept.	53.7	-4.4	7, 8	70	12th	36	79	+34
Oct.	51.2	-0.1	28th	69	12th	32	41	-23
Nov.	41.0	-2.5	1st	55	3rd	29	63	+5
Dec.	36.4	-4.7	6th	54	25th	8	70	+13
Year	47.5	-3.0	May 23	77	Dec. 25	8	810*	+214

1861

	Temperature						Rainfall	
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		°F.	mm.	mm.
Jan.	34.0	-6.1	27, 29	55	8th	16	14	-29
Feb.	42.2	+1.8	17th	56	12th	24	46	+6
Mar.	44.1	+0.9	24th	62	14th	29	55	+11
Apr.	44.9	-2.6	12th	63	21st	27	21	-16
May	52.7	-2.1	23rd	80	9th	33	45	+1
June	59.9	+0.2	19th	82	9th	43	48	-3
July	61.5	-2.0	1, 8	76	11th	48	56	-1
Aug.	63.5	+0.5	12th	89	31st	46	15	-41
Sept.	57.3	-0.8	1st	81	11th	39	37	-8
Oct.	55.2	+3.9	8th	76	29th	40	22	-42
Nov.	41.0	-2.5	26th	58	19th	23	129	+71
Dec.	41.0	-0.1	9th	54	27, 30	23	32	-25
Year	49.8	-0.7	Aug. 12	89	Jan. 8	16	519*	-76

* See note (1) on p. 97.

GREENWICH

1862

	Temperature						Rainfall	
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		°F.	mm.	mm.
Jan.	39.3	-0.8	31st	55	19th	20	45	+2
Feb.	41.3	+0.9	20th	56	8th	24	12	-28
Mar.	43.3	+0.1	24th	64	4th	23	90	+46
Apr.	49.2	+1.7	25th	75	13th	27	72	+35
May	55.9	+1.1	6th	81	3rd	38	72	+28
June	57.1	-2.6	2nd	73	10th	43	49	-2
July	59.6	-3.9	26th	79	22nd	45	42	-15
Aug.	59.6	-3.4	1st	80	24th	45	77	+21
Sept.	57.7	-0.4	15th	74	23rd	39	41	-4
Oct.	52.5	+1.2	3rd	72	30th	29	103	+39
Nov.	39.8	-3.7	3, 4	57	23rd	25	25	-33
Dec.	43.7	+2.6	7th	57	22nd	33	40	-17
Year	49.9	-0.6	May 6	81	Jan. 19	20	669*	+73

1863

	Temperature						Rainfall	
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		°F.	mm.	mm.
Jan.	42.2	+2.1	29th	55	12th	28	69	+26
Feb.	42.2	+1.8	28th	56	18th	27	13	-27
Mar.	43.9	+0.7	23rd	64	18th	28	18	-26
Apr.	49.6	+2.1	20th	69	1st	28	11	-26
May	52.5	-2.3	29th	80	1st	31	32	-12
June	58.8	-0.9	3rd	84	1st	42	99	+48
July	61.4	-2.1	15th	86	19th	39	22	-35
Aug.	62.3	-0.7	9th	85	21st	46	46	-10
Sept.	53.9	-4.2	19th	72	29th	39	75	+30
Oct.	51.9	+0.6	4th	67	24th	34	46	-18
Nov.	45.9	+2.4	4th	61	10th	28	40	-18
Dec.	43.6	+2.5	3rd	54	23rd	27	27	-30
Year	50.7	+0.2	July 15	86	Feb. 18 Dec. 23	27	499*	-97

1864

	Temperature						Rainfall	
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		°F.	mm.	mm.
Jan.	36.6	-3.5	27th	54	7th	14	22	-21
Feb.	36.0	-4.4	13th	54	10th	20	19	-21
Mar.	41.5	-1.7	4th	58	24th	27	64	+20
Apr.	48.8	+1.3	20th	74	13th	33	21	-16
May	54.6	-0.2	18th	81	30th	33	51	+7
June	58.3	-1.4	7th	78	2nd	42	23	-28
July	62.3	-1.2	20th	86	8, 15	46	7	-50
Aug.	60.2	-2.8	5th	89	27th	38	33	-23
Sept.	57.1	-1.0	8th	75	12th	41	70	+25
Oct.	50.9	-0.4	19th	67	6th	37	27	-37
Nov.	42.3	-1.2	28th	54	10th	26	65	+7
Dec.	38.6	-2.5	5th	54	18th	17	13	-44
Year	48.9	-1.6	Aug. 5	89	Jan. 7	14	416*	-180

* See note (1) on p. 97.

GREENWICH

1865

	Temperature				Rainfall			
	Mean	Diff. from Average	Warmest day		Coldest night			
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		mm.	mm.	
Jan.	36.5	-3.6	10th	50	22nd	20	84	+41
Feb.	37.0	-3.4	28th	53	15th	15	45	+5
Mar.	36.7	-6.5	31st	59	21st	24	22	-22
Apr.	52.9	+5.4	27th	81	2nd	32	10	-27
May	56.9	+2.1	21st	79	1st	31	111	+67
June	61.7	+2.0	23rd	88	12th	41	62	+11
July	64.6	+1.1	15, 27	85	12th	47	58	+1
Aug.	60.4	-2.6	27th	78	3rd	43	101	+45
Sept.	63.8	+5.7	8th	86	23rd	40	4	-41
Oct.	51.3	0	2nd	72	20th	33	150	+86
Nov.	45.2	+1.7	24th	56	5th	31	61	+3
Dec.	42.9	+1.8	7th	53	24th	29	22	-35
Year	50.8	+0.3	June 23	88	Feb. 15	15	729*	+133

1866

	Temperature				Rainfall			
	Mean	Diff. from Average	Warmest day		Coldest night			
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		mm.	mm.	
Jan.	43.1	+3.0	22nd	54	13th	24	93	+50
Feb.	40.9	+0.5	1st	57	18th	24	102	+62
Mar.	40.8	-2.4	30th	64	1st	23	41	-3
Apr.	48.6	+1.1	27th	79	5, 30	34	62	+25
May	50.8	-4.0	28th	73	4th	33	49	+5
June	61.8	+2.1	27th	87	17th	42	93	+42
July	61.9	-1.6	13th	87	31st	46	41	-16
Aug.	59.7	-3.3	26th	79	19th	45	61	+5
Sept.	56.6	-1.5	28th	71	25th	41	99	+54
Oct.	51.6	+0.3	3rd	68	27th	31	53	-11
Nov.	44.7	+1.2	5th	60	21st	27	38	-20
Dec.	43.1	+2.0	6th	56	31st	28	47	-10
Year	50.3	-0.2	June 27 July 13	87	Mar. 1	23	780*	+184

1867

	Temperature				Rainfall			
	Mean	Diff. from Average	Warmest day		Coldest night			
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		mm.	mm.	
Jan.	34.6	-5.5	27th	55	5th	7†	71	+28
Feb.	45.1	+4.7	16th	57	3rd	33	31	-9
Mar.	38.0	-5.2	24th	59	16th	25	58	+14
Apr.	49.9	+2.4	19, 23	65	1st	31	53	+16
May	54.0	-0.8	7th	84	24th	32	56	+12
June	59.2	-0.5	12th	82	29th	41	38	-13
July	60.1	-3.4	1st	81	30th	43	135	+78
Aug.	62.5	-0.5	14th	89	3rd	41	63	+7
Sept.	57.8	-0.3	1st	80	25th	35	66	+21
Oct.	49.1	-2.2	14th	65	5th	31	49	-15
Nov.	41.5	-2.0	1st	64	28th	27	11	-47
Dec.	37.7	-3.4	1st	55	9th	21	43	-14
Year	49.1	-1.4	Aug. 14	89	Jan. 5	7	675*	+79

* See note (1) on p. 97. † Minimum temperature 1°F. at Kew Observatory on January 5.

GREENWICH

1868

	Temperature				Rainfall			
	Mean	Diff. from Average	Warmest day		Coldest night			
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		mm.	mm.	
Jan.	37.6	-2.5	14, 17	52	3rd	23	94	+51
Feb.	43.5	+3.1	25th	62	9th	27	31	-9
Mar.	44.5	+1.3	27th	59	30th	28	25	-19
Apr.	48.7	+1.2	30th	69	12th	29	45	+8
May	58.0	+3.2	19th	87	7th	34	34	-10
June	63.2	+3.5	20, 27	88	1st	45	8	-43
July	68.1	+4.6	22nd	97	5th	48	18	-39
Aug.	63.9	+0.9	5th	91	26th	48	59	+3
Sept.	60.4	+2.3	7th	92	11th	44	35	-10
Oct.	48.2	-3.1	12th	67	20th	29	60	-4
Nov.	41.8	-1.7	1st	57	6th	26	27	-31
Dec.	46.1	+5.0	6th	58	31st	31	119	+62
Year	52.0	+1.5	July 22	97	Jan. 3	23	553*	-42

1869

	Temperature				Rainfall			
	Mean	Diff. from Average	Warmest day		Coldest night			
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		mm.	mm.	
Jan.	41.4	+1.3	31st	56	24th	26	74	+31
Feb.	45.6	+5.2	5th	62	13th	32	59	+19
Mar.	37.9	-5.3	5th	54	8th	27	36	-8
Apr.	50.9	+3.4	14th	79	2nd	29	26	-11
May	51.1	-3.7	26th	71	2nd	33	87	+43
June	56.2	-3.5	7th	87	1st	36	29	-22
July	64.8	+1.3	22nd	91	5th	49	14	-43
Aug.	60.9	-2.1	28th	89	31st	42	31	-25
Sept.	59.1	+1.0	5th	80	1st	41	78	+33
Oct.	49.3	-2.0	9th	74	28th	28	45	-19
Nov.	43.4	-0.1	15th	59	21st	27	61	+3
Dec.	37.9	-3.2	16, 18	56	28th	21	70	+13
Year	49.9	-0.6	July 22	91	Dec. 28	21	610	+14

1870

	Temperature				Rainfall			
	Mean	Diff. from Average	Warmest day		Coldest night			
			Date	Max.	Date	Min.		
	°F.	°F.		°F.		mm.	mm.	
Jan.	38.5	-1.6	8, 14	51	28th	20	38	-5
Feb.	36.3	-4.1	28th	56	11th	19	14	-26
Mar.	40.1	-3.1	2nd	61	14th	23	52	+8
Apr.	49.2	+1.7	20th	79	4th	26	7	-30
May	54.1	-0.7	21st	85	9th	30	12	-32
June	62.2	+2.5	22nd	90	6th	41	10	-41
July	66.0	+2.5	8th	90	2nd	45	51	-6
Aug.	61.3	-1.7	1, 6	81	31st	41	51	-5
Sept.	56.0	-2.1	1st	73	25th	37	41	-4
Oct.	50.4	-0.9	3rd	69	11th	32	85	+21
Nov.	41.8	-1.7	24th	59	19th	24	31	-27
Dec.	33.7	-7.4	14th	57	25th	10	79	+22
Year	49.1	-1.4	June 22 July 8	90	Dec. 25	10	471	-125

* See note (1) on p. 97.

1871

	Temperature						Rainfall			
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day	
			Date	Max.	Date	Min.			Date	Amount
	°F.	°F.	°F.	°F.	°F.	°F.	mm.	mm.		mm.
Jan.	34.0	-6.5	6th	45	1st	19	45	0	17th	12
Feb.	43.9	+3.2	27th	56	10th	26	25	-14	10th	4
Mar.	46.1	+3.0	24th	67	2nd	31	25	-18	10th	6
Apr.	49.6	+2.5	12th	63	10th	30	68	+31	18th	16
May	52.7	-2.0	24th	78	11th	34	20	-24	27th	7
June	56.3	-3.2	16th	73	3rd	39	76	+21	14th	25
July	62.5	-0.5	17th	79	30th	47	83	+28	10th	23
Aug.	64.9	+2.7	12th	85	27th	46	24	-33	17th	13
Sept.	58.1	+0.6	1st	79	22nd	37	100	+52	25th	18
Oct.	49.8	-1.2	18th	65	12th	31	32	-37	21st	6
Nov.	38.7	-5.1	15th	53	18th	20	14	-42	14th	5
Dec.	38.7	-2.8	19th	49	7th	22	29	-29	25th	11
Year	49.7	-0.7	Aug. 12	85	Jan. 1	19	541	-65	June 14	25

1872

	Temperature						Rainfall			
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day	
			Date	Max.	Date	Min.			Date	Amount
	°F.	°F.	°F.	°F.	°F.	°F.	mm.	mm.		mm.
Jan.	42.2	+1.7	4th	53	14th	26	87	+42	23rd	12
Feb.	45.9	+5.2	10th	56	21st	32	21	-18	22nd	5
Mar.	45.5	+2.4	7th	60	25th	27	43	0	17th	6
Apr.	49.1	+2.0	27th	67	19th	30	36	-1	20th	9
May	51.5	-3.2	27th	70	19th	33	74	+30	13th	16
June	60.3	+0.8	18th	83	6th	43	33	-22	1st	6
July	66.3	+3.3	25th	89	30th	47	50	-5	27th	9
Aug.	61.7	-0.5	17th	81	27th	46	37	-20	26th	11
Sept.	58.5	+1.0	3rd	81	22nd	33	33	-15	25th	9
Oct.	48.3	-2.7	2nd	63	13th	30	110	+41	25th	17
Nov.	46.1	+2.3	4th	60	17th	33	72	+16	18th	8
Dec.	43.5	+2.0	22nd	53	11th	29	95	+37	16th	18
Year	51.6	+1.2	July 25	89	Jan. 14	26	691	+85	Dec. 16	18

1873

	Temperature						Rainfall			
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day	
			Date	Max.	Date	Min.			Date	Amount
	°F.	°F.	°F.	°F.	°F.	°F.	mm.	mm.		mm.
Jan.	42.6	+2.1	10th	53	25th	26	55	+10	18th	10
Feb.	35.9	-4.8	26th	50	2nd	25	40	+1	2nd	11
Mar.	43.5	+0.4	29, 30	63	14th	28	34	-9	9th	6
Apr.	47.5	+0.4	16th	73	26th	30	10	-27	26th	2
May	52.0	-2.7	26th	70	20th	34	32	-12	7th	10
June	60.1	+0.6	29th	78	7th	43	72	+17	4th	26
July	63.9	+0.9	22nd	87	19th	48	50	-5	13th	27
Aug.	63.3	+1.1	8th	83	29th	49	52	-5	24th	16
Sept.	55.2	-2.3	27th	70	24th	39	60	+12	14th	22
Oct.	48.5	-2.5	3rd	72	30th	26	72	+3	12th	27
Nov.	44.5	+0.7	23rd	58	13th	27	51	-5	5th	13
Dec.	40.5	-1.0	16th	56	10th	21	10	-48	26th	5
Year	49.8	-0.6	July 22	87	Dec. 10	21	538	-68	July 13	27

KEW

1874

	Temperature						Rainfall			
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day	
			Date	Max.	Date	Min.			Date	Amount
	°F.	°F.		°F.		°F.	mm.	mm.		mm.
Jan.	41.7	+1.2	20th	54	6th	30	25	-20	19th	5
Feb.	39.2	-1.5	28th	53	11th	23	30	-9	26th	17
Mar.	44.5	+1.4	23rd	64	11th	23	11	-32	9th	2
Apr.	50.9	+3.8	23rd	76	30th	34	33	-4	9th	10
May	50.8	-3.9	31st	71	10th	32	16	-28	25th	6
June	58.1	-1.4	9th	78	13th	39	62	+7	23rd	18
July	64.8	+1.8	9th	87	25th	47	30	-25	27th	11
Aug.	60.7	-1.5	20th	78	23rd	45	34	-23	10th	8
Sept.	57.9	+0.4	27th	75	19th	42	71	+23	30th	20
Oct.	52.1	+1.1	1st	67	16th	35	95	+26	1st	20
Nov.	42.0	-1.8	6th	59	24th	27	57	+1	28th	20
Dec.	33.5	-8.0	6th	53	31st	17	39	-19	8th	10
Year	49.7	-0.7	July 9	87	Dec. 31	17	503	-103	Sept. 30 Oct. 1 Nov. 28	20

1875

	Temperature						Rainfall			
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day	
			Date	Max.	Date	Min.			Date	Amount
	°F.	°F.		°F.		°F.	mm.	mm.		mm.
Jan.	44.0	+3.5	20th	53	1st	20	87	+42	24th	15
Feb.	35.9	-4.8	14th	50	6th	25	24	-15	24th	8
Mar.	41.5	-1.6	8th	56	5th	29	16	-27	5th	6
Apr.	46.9	-0.2	20th	71	25th	30	41	+4	8th	19
May	55.3	+0.6	15th	78	31st	40	37	-7	6th	9
June	59.7	+0.2	3rd	81	22nd	44	59	+4	10th	13
July	59.5	-3.5	18th	76	13th	44	130	+75	14th	27
Aug.	63.2	+1.0	16th	82	2nd	46	17	-40	28th	6
Sept.	60.3	+2.8	18th	79	1st	45	51	+3	21st	15
Oct.	48.7	-2.3	5th	68	13th	32	97	+28	20th	13
Nov.	42.7	-1.1	18th	58	27th	27	75	+19	10th	15
Dec.	38.7	-2.8	22nd	54	4th	21	24	-34	2nd	6
Year	49.7	-0.7	Aug. 16	82	Jan. 1	20	658	+52	July 14	27

1876

	Temperature						Rainfall			
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day	
			Date	Max.	Date	Min.			Date	Amount
	°F.	°F.		°F.		°F.	mm.	mm.		mm.
Jan.	36.7	-3.8	3rd	54	12th	22	21	-24	21st	6
Feb.	41.5	+0.8	29th	58	12th	21	45	+6	20th	10
Mar.	41.9	-1.2	31st	61	21st	28	70	+27	1st	11
Apr.	48.1	+1.0	8th	70	13, 14	32	53	+16	10th	6
May	49.7	-5.0	30th	69	5th	33	20	-24	24th	13
June	59.3	-0.2	21st	84	11th	40	37	-18	15th	13
July	66.1	+3.1	15th	89	12th	47	23	-32	8th	8
Aug.	63.6	+1.4	13th	92	26th	44	49	-8	4th	12
Sept.	56.5	-1.0	22nd	71	21st	42	62	+14	30th	13
Oct.	53.1	+2.1	17th	69	31st	35	38	-31	12th	8
Nov.	44.0	+0.2	14th	63	10th	25	67	+11	12th	10
Dec.	44.3	+2.8	2nd	56	23rd	28	146	+88	—	—
Year	50.4	0	Aug. 13	92	Feb. 12	21	631	+25	—	—

TEMPERATURE AND RAINFALL SUMMARIES

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KEW

1877

	Temperature						Rainfall			
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day	
			Date	Max.	Date	Min.			Date	Amount
	°F.	°F.		°F.		°F.	mm.	mm.		mm.
Jan.	42.9	+2.4	19th	55	21st	27	127	+82	10th	22
Feb.	44.4	+3.7	7th	58	28th	27	44	+5	13th	10
Mar.	41.5	-1.6	29th	57	23rd	23	56	+13	28th	11
Apr.	46.9	-0.2	4th	63	20th	33	69	+32	9th	14
May	49.7	-5.0	8th	64	5th	30	44	0	16th	6
June	61.7	+2.2	11th	81	7th	45	41	-14	21st	24
July	61.1	-1.9	31st	83	8th	45	80	+25	23rd	14
Aug.	61.9	-0.3	20th	79	24th	42	72	+15	25th	21
Sept.	52.9	-4.6	11th	70	25th	35	18	-30	3rd	11
Oct.	48.6	-2.4	14th	65	18th	29	51	-18	24th	7
Nov.	45.1	+1.3	16th	58	4th	29	87	+31	11th	25
Dec.	40.8	-0.7	6th	53	28th	28	33	-25	28th	12
Year	49.8	-0.6	July 31	83	Mar. 23	23	722	+116	Nov. 11	25

1878

	Temperature						Rainfall			
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day	
			Date	Max.	Date	Min.			Date	Amount
	°F.	°F.		°F.		°F.	mm.	mm.		mm.
Jan.	40.7	+0.2	21st	55	11th	26	30	-15	3rd	5
Feb.	42.3	+1.6	17th	57	8th	26	29	-10	13th	7
Mar.	43.1	0	7th	57	26th	27	29	-14	28th	14
Apr.	48.9	+1.8	30th	65	1st	29	101	+64	10th	28
May	55.5	+0.8	10th	71	21st	39	104	+60	28th	28
June	60.5	+1.0	26th	86	2nd	44	70	+15	18th	20
July	63.3	+0.3	19th	82	4th	47	60	+5	24th	29
Aug.	62.9	+0.7	5th	77	26th	52	165	+108	13th	32
Sept.	56.3	-1.2	7th	72	24th	37	25	-23	17th	6
Oct.	51.3	+0.3	5th	71	31st	31	54	-15	9th	11
Nov.	40.1	-3.7	25th	52	29th	29	64	+8	27th	10
Dec.	33.6	-7.9	30th	54	24th	15	34	-24	31st	5
Year	49.9	-0.5	June 26	86	Dec. 24	15	765	+159	Aug. 13	32

1879

	Temperature						Rainfall			
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day	
			Date	Max.	Date	Min.			Date	Amount
	°F.	°F.		°F.		°F.	mm.	mm.		mm.
Jan.	32.1	-8.4	1st	51	12th	21	69	+24	1st	26
Feb.	38.8	-1.9	9th	53	24th	21	105	+66	10th	18
Mar.	41.6	-1.5	19th	63	2nd	26	24	-19	30th	9
Apr.	44.3	-2.8	26th	60	12th	29	77	+40	6th	10
May	48.9	-5.8	21st	66	10th	31	100	+56	28th	45
June	57.5	-2.0	14th	70	4, 5	43	96	+41	24th	15
July	59.1	-3.9	29th	77	11th	48	114	+59	19th	32
Aug.	60.4	-1.8	15th	75	31st	45	125	+68	19th	22
Sept.	56.2	-1.3	3rd	68	26th	40	67	+19	23rd	29
Oct.	49.1	-1.9	4th	64	26th	33	24	-45	24th	5
Nov.	38.8	-5.0	18th	55	16th	22	19	-37	21st	5
Dec.	32.5	-9.0	31st	54	7th	13	19	-39	30th	8
Year	46.6	-3.8	July 29	77	Dec. 7	13	839	+233	May 28	45

KEW

1880

	Temperature					Rainfall				Sunshine				
	Mean Diff. from Average		Warmest day		Coldest night		Total Diff. from Average		Wettest day		Total Diff. from Average		Sunniest day	
	°F.	°F.	Date	Max.	Date	Min.	mm.	mm.	Date	Amount	hr.	hr.	Date	Amount
Jan.	33.5	-7.0	1st	55	27, 28	19	11	-34	16th	7	47	+3	31st	6.1
Feb.	42.2	+1.5	20th	53	2nd	25	56	+17	7th	10	67	+6	13th	8.6
Mar.	45.1	+2.0	25th	61	29th	28	17	-26	31st	7	142	+39	21st	9.8
Apr.	47.5	+0.4	19th	65	8th	35	51	+14	14th	11	127	-22	1st	11.3
May	52.1	-2.6	26th	81	2nd	32	7	-37	31st	6	193	-10	16th	14.4
June	58.3	-1.2	29th	76	5th	37	56	+1	15th	11	153	-46	18th	13.2
July	62.1	-0.9	15th	77	31st	49	124	+69	29th	13	191	-4	9th	12.8
Aug.	63.4	+1.2	28th	78	3rd	50	17	-40	7th	5	138	-45	10th	13.0
Sept.	60.0	+2.5	4th	84	20th	44	112	+64	11th	37	141	-4	3rd	11.3
Oct.	46.5	-4.5	7th	64	24th	31	151	+82	9th	27	68	-25	24th	7.8
Nov.	42.3	-1.5	13th	57	22nd	25	45	-11	18th	14	67	+14	4, 8	7.4
Dec.	42.9	+1.4	10th	55	22nd	26	84	+26	29th	17	32	-5	25th	6.5
Year	49.7	-0.7	Sept. 4	84	Jan. 27, 28	19	730	+124	Sept. 11	37	1,367	-98	May 16	14.4

1881

	Temperature					Rainfall				Sunshine				
	Mean Diff. from Average		Warmest day		Coldest night		Total Diff. from Average		Wettest day		Total Diff. from Average		Sunniest day	
	°F.	°F.	Date	Max.	Date	Min.	mm.	mm.	Date	Amount	hr.	hr.	Date	Amount
Jan.	31.7	-8.8	31st	49	17th	9	30	-15	18th	13	33	-11	31st	6.2
Feb.	38.2	-2.5	3rd	52	7th	26	65	+26	20th	16	27	-34	6th	7.3
Mar.	42.9	-0.2	18th	59	1st	25	50	+7	4th	14	111	+8	29th	8.7
Apr.	46.3	-0.8	13th	67	21st	30	19	-18	12th	7	133	-16	18th	11.5
May	53.7	-1.0	31st	76	4th	31	28	-16	28th	7	224	+21	22nd	14.6
June	59.1	-0.4	4th	78	9th	39	41	-14	5th	13	214	+15	4th	14.3
July	64.9	+1.9	5th	90	28th	44	49	-6	16th	15	251	+56	18th	14.9
Aug.	59.1	-3.1	5th	81	28th	43	121	+64	12th	35	160	-23	5, 28	11.6
Sept.	55.9	-1.6	18th	71	30th	39	57	+9	21st	10	95	-50	6th	9.7
Oct.	45.5	-5.5	11th	62	17th	25	61	-8	22nd	22	110	+17	19th	8.8
Nov.	48.3	+4.5	5th	61	29th	29	60	+4	26th	11	63	+10	17th	6.2
Dec.	39.3	-2.2	18th	53	23rd	24	67	+9	17th	16	43	+6	18th	6.4
Year	48.7	-1.7	July 5	90	Jan. 17	9	648	+42	Aug. 12	35	1,464	-1	July 18	14.9

1882

	Temperature					Rainfall				Sunshine				
	Mean Diff. from Average		Warmest day		Coldest night		Total Diff. from Average		Wettest day		Total Diff. from Average		Sunniest day	
	°F.	°F.	Date	Max.	Date	Min.	mm.	mm.	Date	Amount	hr.	hr.	Date	Amount
Jan.	40.2	-0.3	6th	53	25th	23	33	-12	9th	10	32	-12	7th	6.3
Feb.	42.5	+1.8	26th	55	2nd	23	33	-6	15th	10	43	-18	19th	8.3
Mar.	46.1	+3.0	18th	62	23rd	31	31	-12	25th	8	155	+52	16th	9.7
Apr.	48.5	+1.4	20, 21	63	16th	34	66	+29	25th	18	166	+17	8th	11.3
May	54.7	0.0	22nd	72	17th	37	33	-11	25th	8	259	+56	14th	13.9
June	56.7	-2.8	27th	72	17th	41	52	-3	9th	8	142	-57	27th	13.7
July	61.1	-1.9	3rd	75	1st	43	56	+1	5th	10	203	+8	20th	12.0
Aug.	60.3	-1.9	12th	80	31st	45	29	-28	31st	7	147	-36	4th	13.0
Sept.	54.5	-3.0	3rd	68	15th	35	60	+12	29th	20	125	-20	8th	10.9
Oct.	50.6	-0.4	1st	69	26th	30	147	+78	16th	28	79	-14	2nd	8.6
Nov.	43.7	-0.1	5th	60	18th	25	59	+3	16th	10	75	+22	11th	6.2
Dec.	40.1	-1.4	27th	57	11th	22	51	-7	30th	11	24	-13	4th	5.1
Year	49.9	-0.5	Aug. 12	80	Dec. 11	22	650	+44	Oct. 16	28	1,450	-15	May 14	13.9

1883

	Temperature						Rainfall				Sunshine			
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	
Jan.	41.8	+1.3	1st	55	31st	29	59	+14	15th	11	46	+2	26th	5.6
Feb.	43.2	+2.5	22nd	55	17th	29	85	+46	10th	15	72	+11	23rd	8.9
Mar.	36.0	-7.1	5th	54	24th	23	26	-17	19th	6	142	+39	25th	10.7
Apr.	47.3	+0.2	5th	65	1st	30	41	+4	19th	15	156	+7	17th	10.8
May	52.7	-2.0	24th	76	4th	32	46	+2	8th	10	206	+3	24th	14.8
June	58.7	-0.8	29th	83	1st	41	30	-25	26th	8	186	-13	3rd	14.8
July	60.0	-3.0	2nd	82	16th	44	52	-3	14th	14	168	-27	1st	12.6
Aug.	62.1	-0.1	21st	79	12th	46	24	-33	31st	13	180	-3	9th	12.2
Sept.	57.5	0.0	19th	74	9th	40	83	+35	30th	13	129	-16	9th	9.9
Oct.	50.6	-0.4	14th	63	21st	38	44	-25	16th	14	86	-7	2nd	9.6
Nov.	43.3	-0.5	6th	56	13, 15	29	65	+9	24th	9	81	+28	10th	6.0
Dec.	40.4	-1.1	3, 13	54	6th	29	17	-41	10th	6	32	-5	4, 7	4.8
Year	49.5	-0.9	June 29	83	Mar. 24	23	572	-34	Feb. 10, Apr. 19	15	1,484	+19	May 24, June 3	14.8

1884

	Temperature						Rainfall				Sunshine			
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	
Jan.	43.7	+3.2	23rd	54	1st	32	54	+9	26th	21	29	-15	28th	6.6
Feb.	42.3	+1.6	13th	55	3rd	29	40	+1	1st	12	54	-7	18th	6.8
Mar.	44.2	+1.1	15th	65	1st	27	32	-11	11th	12	108	+5	16th	9.1
Apr.	44.7	-2.4	2nd	65	23rd	28	32	-5	7th	12	99	-50	9th	8.5
May	53.7	-1.0	24th	77	1st	35	16	-28	5th	6	208	+5	11th	13.4
June	58.4	-1.1	27th	80	1st	41	56	+1	6th	26	157	-42	12th	13.4
July	63.1	+0.1	4th	84	26th	43	57	+2	6th	23	153	-42	2nd	13.1
Aug.	64.5	+2.3	11th	89	26th	47	18	-39	28th	8	227	+44	4th	12.4
Sept.	59.3	+1.8	17th	80	30th	41	49	+1	4th	22	129	-16	5th	11.0
Oct.	48.5	-2.5	16th	62	29th	34	28	-41	9th	13	87	-6	13th	8.7
Nov.	42.2	-1.6	2nd	59	25th	26	42	-14	6th	10	43	-10	3rd	6.7
Dec.	41.4	-0.1	3rd	55	31st	27	57	-1	6th	9	24	-13	19th	3.7
Year	50.5	+0.1	Aug. 11	89	Nov. 25	26	481	-125	June 6	26	1,318	-147	May 11, June 12	13.4

1885

	Temperature						Rainfall				Sunshine			
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	
Jan.	36.9	-3.6	29th	52	22nd	25	35	-10	10th	12	16	-28	7th	4.2
Feb.	44.1	+3.4	12th	56	21st	28	76	+37	16th	19	54	-7	18, 24	7.7
Mar.	40.5	-2.6	20th	59	8th	25	37	-6	22nd	19	107	+4	28th	9.7
Apr.	47.5	+0.4	20th	70	5th	30	45	+8	16th	9	162	+13	21st	13.0
May	49.7	-5.0	28th	70	8th	33	74	+30	22nd	14	200	-3	24th	12.0
June	58.5	-1.0	4th	79	11th	42	47	-8	8th	22	232	+33	4, 27	14.5
July	63.3	+0.3	26th	85	2nd	48	12	-43	12th	7	244	+49	6th	14.2
Aug.	58.5	-3.7	17th	76	14th	42	28	-29	27th	8	160	-23	13th	12.6
Sept.	55.1	-2.4	15th	73	27th	34	110	+62	10th	24	125	-20	15th	9.4
Oct.	46.3	-4.7	2nd	59	30th	33	98	+29	23, 31	18	93	0	7th	9.6
Nov.	43.5	-0.3	30th	58	16th	31	75	+19	24th	19	39	-14	1st	7.1
Dec.	38.4	-3.1	3rd	50	11th	23	29	-29	5th	9	49	+12	10th	5.9
Year	48.5	-1.9	July 26	85	Dec. 11	23	666	+60	Sept. 10	24	1,481	+16	June 4, 27	14.5

KEW

1886

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.		
Jan.	35.9	-4.6	2nd 51	7th 16	89	+44	6th 21	47	+3	16th 6.3				
Feb.	34.0	-6.7	13th 47	10th 22	17	-22	3rd 10	38	-23	1st 6.8				
Mar.	40.4	-2.7	24th 64	17th 22	36	-7	1st 8	73	-30	9th 9.2				
Apr.	46.9	-0.2	24th 65	11th 34	38	+1	8, 29 7	151	+2	25th 11.5				
May	52.6	-2.1	7, 8 72	1st 31	99	+55	13th 28	169	-34	4, 6 12.9				
June	57.3	-2.2	29th 75	5th 40	26	-29	10th 13	223	+24	4th 13.9				
July	62.1	-0.9	4th 83	28th 47	61	+6	12th 11	211	+16	1, 5 14.9				
Aug.	62.4	+0.2	30th 84	3rd 44	17	-40	1st 4	189	+6	3rd 11.9				
Sept.	58.5	+1.0	1st 81	18th 41	45	-3	10th 10	134	-11	7th 11.2				
Oct.	53.3	+2.3	4th 77	22nd 37	53	-16	12th 13	78	-15	2nd 8.5				
Nov.	43.3	-0.5	1st 59	24th 28	78	+22	11th 18	46	-7	8th 5.8				
Dec.	36.5	-5.0	6th 53	20th 18	88	+30	26th †	72	+35	10, 18 5.8				
Year	48.6	-1.8	Aug. 30 84	Jan. 7 16	647	+41	May 13 28	1,431	-34	July 1, 5 14.9				

1887

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.		
Jan.	35.5	-5.0	19th 51	2nd 15	37	-8	4th 10	37	-7	26th 6.9				
Feb.	39.1	-1.6	5th 54	17th 21	14	-25	18th 6	68	+7	26th 7.8				
Mar.	38.5	-4.6	27th 56	19th 24	39	-4	14 or 15 §	98	-5	13th 9.6				
Apr.	44.4	-2.7	19th 65	17th 27	38	+1	1st 6	171	+22	20th 12.6				
May	50.2	-4.5	8th 68	1st 35	41	-3	3rd 8	138	-65	15th 13.9				
June	60.3	+0.8	15th 81	27th 44	31	-24	3rd 14	245	+46	13th 15.8				
July	65.3	+2.3	3rd 85	18th 45	21	-34	25th 7	281	+86	3rd 14.3				
Aug.	61.9	-0.3	6th 85	15th 41	68	+11	17th 43	241	+58	9th 12.9				
Sept.	54.0	-3.5	5th 68	29th 33	55	+7	17th 15	119	-26	8th 11.3				
Oct.	45.2	-5.8	8th 60	26th 26	37	-32	30th 10	108	+15	12th 9.1				
Nov.	40.7	-3.1	4th 54	16th 23	77	+21	3rd 16	44	-9	4th 6.1				
Dec.	38.1	-3.4	9th 55	27th 25	35	-23	8th 7	43	+6	5th 5.3				
Year	47.7	-2.7	July 3 85 Aug. 6	Jan. 2 15	493	-113	Aug. 17 43	1,593	+128	June 13 15.8				

1888

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.		
Jan.	37.9	-2.6	8th 51	30th 24	22	-23	21st 8	41	-3	30th 5.2				
Feb.	35.7	-5.0	6th 51	2nd 22	23	-16	13th †	32	-29	1st 4.6				
Mar.	38.9	-4.2	10th 55	2nd 25	78	+35	14th 14	59	-44	21st 9.1				
Apr.	44.1	-3.0	15th 65	6th 28	56	+19	18th 13	106	-43	30th 11.5				
May	52.4	-2.3	19th 74	12th 34	29	-15	17th 12	225	+22	23rd 14.8				
June	58.0	-1.5	25th 82	17th 44	60	+5	27th 12	132	-67	13th 13.9				
July	58.3	-4.7	22nd 71	11th 44	113	+58	2nd 14	104	-91	26th 11.1				
Aug.	58.7	-3.5	10th 80	19th 43	76	+19	28th 19	159	-24	14th 13.2				
Sept.	55.7	-1.8	15th 71	30th 39	37	-11	25th 11	126	-19	11th 10.1				
Oct.	45.5	-5.5	27th 67	3rd 28	34	-35	29th 13	112	+19	1st 9.6				
Nov.	47.3	+3.5	16th 59	28th 35	99	+43	2nd 13	26	-27	20th 6.2				
Dec.	40.3	-1.2	5th 57	31st 26	35	-23	28th 9	35	-2	7th 6.0				
Year	47.7	-2.7	June 25 82	Feb. 2 22	660*	+54	Aug. 28 19	1,157	-308	May 23 14.8				

* See note (1) on p. 97. † 2-day total of 34 mm. § 2-day total of 15 mm. ¶ 2-day total of 13 mm.

1889

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	
Jan.	36.5	-4.0	31st 53	6th 20	23	-22	9th 7	24	-20	19th	5.6			
Feb.	37.4	-3.3	1st 56	13th 15	53	+14	14th 9	53	-8	15th	7.5			
Mar.	40.7	-2.4	24th 58	4th 21	35	-8	7th 10	84	-19	9th	8.7			
Apr.	46.2	-0.9	18, 19 62	16th 34	57	+20	10th 14	92	-57	29th	13.2			
May	56.5	+1.8	24th 78	1st 42	77	+33	27th 37	148	-55	24th	13.4			
June	61.1	+1.6	6th 79	1st 46	33	-22	10, 15 10	200	+1	1st	13.8			
July	60.9	-2.1	6th 77	19th 47	77	+22	12th 18	147	-48	6th	12.8			
Aug.	59.9	-2.3	1st 80	25th 45	55	-2	21st 8	169	-14	7th	12.0			
Sept.	55.8	-1.7	11th 76	17th 35	40	-8	24th 25	133	-12	17th	10.4			
Oct.	48.3	-2.7	16th 59	13th 32	99	+30	27th 16	84	-9	12th	7.6			
Nov.	44.2	+0.4	15th 57	30th 29	20	-36	3rd 6	42	-11	2nd	7.5			
Dec.	37.2	-4.3	17th 52	29th 23	31	-27	22nd 9	31	-6	25th	5.1			
Year	48.7	-1.7	Aug. 1 80	Feb. 13 15	599*	-7	May 27 37	1,207	-258	Apr. 29	13.2			

1890

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	
Jan.	43.5	+3.0	25th 54	1st 22	55	+10	28th 12	56	+12	12, 29	6.5			
Feb.	38.2	-2.5	17th 50	11th 27	23	-16	15th 21	58	-3	3rd	6.6			
Mar.	43.1	0.0	28th 64	4th 18	39	-4	20th 10	109	+6	30th	11.2			
Apr.	45.9	-1.2	30th 63	5th 31	44	+7	25th 14	145	-4	29th	12.9			
May	53.7	-1.0	24th 73	3rd 38	36	-8	9th 13	224	+21	21, 23, 24	13.8			
June	58.3	-1.2	25th 76	1st 38	84	+29	28th 25	141	-58	7th	12.3			
July	59.7	-3.3	23rd 74	12th 44	115	+60	17th 44	140	-55	16th	12.3			
Aug.	59.4	-2.8	5th 77	31st 41	49	-8	20th 14	183	0	17th	11.7			
Sept.	59.3	+1.8	16th 73	1st 37	15	-33	17th 4	170	+25	16th	10.5			
Oct.	49.3	-1.7	4th 66	28th 25	26	-43	25th 9	122	+29	3rd	10.2			
Nov.	42.8	-1.0	23rd 58	28, 30 21	39	-17	6th 9	58	+5	9th	6.3			
Dec.	29.3	-12.2	4th 44	22nd 11	14	-44	19th 6	0.3	-37	7th	0.2			
Year	48.5	-1.9	Aug. 5 77	Dec. 22 11	539	-67	July 17 44	1,406	-59	May 21, 23, 24	13.8			

1891

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	
Jan.	34.0	-6.5	31st 51	11th 13	41	-4	31st 13	74	+30	19, 21	6.3			
Feb.	38.2	-2.5	28th 57	26th 25	2	-37	Various 0.25	61	0	15th	7.1			
Mar.	40.7	-2.4	2nd 56	12th 24	34	-9	8th 7	98	-5	3rd	7.7			
Apr.	44.4	-2.7	28th 62	1st 27	25	-12	4th 13	117	-32	24th	11.8			
May	50.3	-4.4	13th 76	17th 32	64	+20	18th 14	162	-41	31st	13.5			
June	59.9	+0.4	18th 76	10th 42	40	-15	22nd 10	194	-5	1st	13.3			
July	59.7	-3.3	17th 79	28th 46	75	+20	19th 21	175	-20	2nd	14.0			
Aug.	58.7	-3.5	14th 74	30th 43	102	+45	27th 20	139	-44	29th	10.9			
Sept.	58.1	+0.6	13th 79	24th 42	26	-22	19th 6	152	+7	8th	10.6			
Oct.	50.6	-0.4	9th 64	31st 31	151	+82	22nd 26	111	+18	2nd	9.2			
Nov.	42.7	-1.1	19th 56	28th 28	49	-7	11th 17	42	-11	26, 27	5.5			
Dec.	40.5	-1.0	5th 56	22nd 19	74	+16	2nd 14	42	+5	19th	5.8			
Year	48.1	-2.3	July 17 79 Sept. 13	Jan. 11 13	683	+77	Oct. 22 26	1,367	-98	July 2	14.0			

* See note (1) on p. 97.

KEW

1892

	Temperature				Rainfall				Sunshine					
	Mean Diff. from Average		Warmest day		Coldest night		Total Diff. from Average		Wettest day		Total Diff. from Average		Sunniest day	
	°F.	°F.	Date	Max.	Date	Min.	mm.	mm.	Date	Amount	hr.	hr.	Date	Amount
Jan.	36.9	-3.6	29th	52	16th	24	11	-34	31st	2	34	-10	25th	5.7
Feb.	39.1	-1.6	7th	53	17th	19	35	-4	24th	7	49	-12	18th	6.2
Mar.	37.7	-5.4	18th	59	9th	22	27	-16	15th	5	94	-9	30th	11.0
Apr.	46.7	-0.4	5th	69	15th	28	27	-10	27th	8	220	+71	23rd	12.9
May	54.5	-0.2	31st	81	7th	31	37	-7	26th	21	208	+5	11th	13.5
June	57.7	-1.8	10th	81	15th	38	71	+16	29th	26	232	+33	9th	13.9
July	59.9	-3.1	3rd	77	21st	47	53	-2	5th	12	191	-4	29th	13.2
Aug.	61.4	-0.8	17th	79	11th	44	83	+26	28th	34	192	+9	12th	12.7
Sept.	55.9	-1.6	19th	71	18th	34	77	+29	21st	25	135	-10	8th	11.3
Oct.	45.6	-5.4	29th	59	26th	28	96	+27	31st	15	90	-3	23rd	8.7
Nov.	44.7	+0.9	14th	60	2nd	30	69	+13	16th	21	40	-13	30th	6.3
Dec.	36.5	-5.0	15th	54	27th	18	30	-28	1st	8	34	-3	4th	5.3
Year	48.1	-2.3	May 31 June 10	81	Dec. 27	18	616	+10	Aug. 28	34	1,519	+54	June 9	13.9

1893

	Temperature				Rainfall				Sunshine					
	Mean Diff. from Average		Warmest day		Coldest night		Total Diff. from Average		Wettest day		Total Diff. from Average		Sunniest day	
	°F.	°F.	Date	Max.	Date	Min.	mm.	mm.	Date	Amount	hr.	hr.	Date	Amount
Jan.	35.7	-4.8	31st	52	5th	13	33	-12	9th	7	22	-22	15th	5.0
Feb.	41.7	+1.0	19th	56	6th	23	66	+27	26th	13	63	+2	28th	7.1
Mar.	45.7	+2.6	29th	65	19th	27	11	-32	1st	5	157	+54	31st	10.6
Apr.	51.7	+4.6	20th	80	14th	31	3	-34	20th	1	244	+95	26th	12.4
May	57.0	+2.3	15th	76	31st	40	36	-8	17th	21	205	+2	10th	13.7
June	61.1	+1.6	19th	86	1st	39	22	-33	27th	7	207	+8	18th	14.2
July	63.7	+0.7	7th	86	15th	48	46	-9	23rd	9	175	-20	7th	13.5
Aug.	65.3	+3.1	17th	89	29th	44	40	-17	4th	22	225	+42	16th	12.7
Sept.	57.1	-0.4	6th	77	24th	39	28	-20	20th	4	152	+7	12, 24	9.6
Oct.	51.3	+0.3	16th	65	31st	30	104	+35	9th	23	134	+41	3rd	9.5
Nov.	42.0	-1.8	3rd	60	1st	29	46	-10	14th	13	43	-10	7th	6.2
Dec.	39.5	-2.0	13th	56	3rd	21	59	+1	12, 20	9	54	+17	2nd	6.1
Year	51.1	+0.7	Aug. 17	89	Jan. 5	13	495*	-111	Oct. 9	23	1,681	+216	June 18	14.2

1894

	Temperature				Rainfall				Sunshine					
	Mean Diff. from Average		Warmest day		Coldest night		Total Diff. from Average		Wettest day		Total Diff. from Average		Sunniest day	
	°F.	°F.	Date	Max.	Date	Min.	mm.	mm.	Date	Amount	hr.	hr.	Date	Amount
Jan.	38.5	-2.0	11th	51	5th	14	74	+29	9th	10	53	+9	26th	7.0
Feb.	41.9	+1.2	7th	55	21st	23	40	+1	17th	13	73	+12	12th	8.0
Mar.	44.5	+1.4	31st	63	19th	29	31	-12	15th	5	161	+58	26, 31	10.0
Apr.	50.9	+3.8	8th	70	22nd	33	37	0	25th	10	146	-3	10th	11.3
May	50.1	-4.6	16th	66	21st	34	40	-4	10th	10	171	-32	24th	14.4
June	58.6	-0.9	30th	79	12th	45	56	+1	4th	14	166	-33	30th	15.0
July	62.3	-0.7	6th	83	14th	49	111	+56	29th	34	174	-21	1st	14.3
Aug.	60.3	-1.9	14th	76	21st	45	64	+7	23rd	16	143	-40	20th	9.9
Sept.	54.5	-3.0	1st	68	28th	36	35	-13	25th	10	97	-48	11th	10.0
Oct.	50.1	-0.9	11th	62	17th	33	99	+30	30th	32	50	-43	29th	5.8
Nov.	46.2	+2.4	1st	62	22nd	30	76	+20	12th	17	73	+20	18th	6.8
Dec.	41.7	+0.2	14th	52	31st	29	51	-7	14th	23	44	+7	15th	6.1
Year	50.0	-0.4	July 6	83	Jan. 5	14	713*	+107	July 29	34	1,351	-114	June 30	15.0

* See note (1) on p. 97.

TEMPERATURE, RAINFALL AND SUNSHINE SUMMARIES

79

KEW

1895

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	hr.
Jan.	33.7	-6.8	20th	52	29th	21	36	-9	19th	10	51	+7	18th	5.6
Feb.	29.1	-11.6	28th	45	7th	11	3	-36	2nd	1	40	-21	16th	5.3
Mar.	43.3	+0.2	22nd	62	3rd	26	31	-12	27th	12	116	+13	22nd	10.7
Apr.	48.7	+1.6	20th	64	1st	30	41	+4	25th	12	127	-22	11th	11.9
May	55.3	+0.6	30th	84	2nd	37	8	-36	23rd	2	245	+42	11th	13.8
June	60.6	+1.1	26th	81	13th	42	8	-47	19th	4	236	+37	25th	14.3
July	62.5	-0.5	17th	80	7th	49	115	+60	21st	28	183	-12	8th	14.3
Aug.	61.9	-0.3	22nd	78	25th	46	73	+16	22nd	31	223	+40	21st	13.1
Sept.	61.3	+3.8	24th	80	22nd	39	39	-9	7th	35	214	+69	1, 2	11.7
Oct.	45.7	-5.3	1st	71	28th	25	76	+7	6th	34	79	-14	17, 25	7.4
Nov.	47.0	+3.2	16th	62	18th	30	87	+31	28th	18	46	-7	13th	6.5
Dec.	40.1	-1.4	5th	56	11th	26	50	-8	12th	9	32	-5	7th	5.5
Year	49.1	-1.3	May 30	84	Feb. 7	11	568*	-38	Sept. 7	35	1,592	+127	June 25 July 8	14.3

1896

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	hr.
Jan.	40.6	+0.1	15th	52	20th	27	15	-30	25th	6	29	-15	29th	5.7
Feb.	40.3	-0.4	12th	55	26th	23	7	-32	20th	2	60	-1	12th	7.8
Mar.	46.3	+3.2	24th	67	15th	33	73	+30	18th	23	87	-16	31st	9.1
Apr.	48.7	+1.6	27th	65	24th	33	15	-22	14th	4	144	-5	28th	11.3
May	54.0	-0.7	12th	75	2nd	35	5	-39	22nd	4	233	+30	10th	13.8
June	62.7	+3.2	15th	83	1st	38	41	-14	10th	15	228	+29	1st	14.8
July	64.3	+1.3	14th	84	29th	45	33	-22	26th	11	226	+31	5, 6	14.8
Aug.	59.5	-2.7	12th	74	27th	46	40	-17	9th	8	141	-42	20th	11.3
Sept.	57.1	-0.4	8, 9	68	21st	40	136	+88	13th	26	94	-51	19th	10.0
Oct.	46.2	-4.8	8th	62	28th	27	61	-8	6th	14	97	+4	5th	8.6
Nov.	40.1	-3.7	12th	50	7th	26	28	-28	14th	10	68	+15	19th	6.6
Dec.	39.5	-2.0	27th	52	24th	26	79	+21	2nd	11	29	-8	25th	5.7
Year	49.9	-0.5	July 14	84	Feb. 26	23	533	-73	Sept. 13	26	1,436	-29	June 1 July 5, 6	14.8

1897

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	hr.
Jan.	35.9	-4.6	1st	48	18th	24	44	-1	8th	17	37	-7	26th	5.4
Feb.	43.6	+2.9	26th	56	18th	28	60	+21	5th	19	42	-19	18th	8.0
Mar.	45.2	+2.1	23rd	61	9th	30	91	+48	2nd	11	124	+21	19th	10.4
Apr.	46.3	-0.8	27th	67	11th	28	35	-2	7th	8	144	-5	15th	12.5
May	51.7	-3.0	18th	72	13th	34	24	-20	30th	8	260	+57	22nd	14.9
June	61.1	+1.6	24th	84	10th	45	69	+14	9th	18	190	-9	12th	15.4
July	63.8	+0.8	24th	80	8th	44	24	-31	19th	16	262	+67	15th	14.8
Aug.	63.1	+0.9	4th	88	13th	48	67	+10	31st	22	221	+38	4th	12.9
Sept.	55.1	-2.4	29th	68	19th	39	50	+2	1st	10	124	-21	3rd	10.4
Oct.	50.5	-0.5	17th	65	7th	30	14	-55	26th	4	99	+6	3rd	8.2
Nov.	44.9	+1.1	13th	59	26th	29	23	-33	27th	7	27	-26	29th	5.3
Dec.	40.3	-1.2	16th	55	25th	22	54	-4	12th	10	45	+8	11th	5.6
Year	50.1	-0.3	Aug. 4	88	Dec. 25	22	555	-51	Aug. 31	22	1,575	+110	June 12	15.4

* See note (1) on p. 97.

KEW

1898

	Temperature						Rainfall				Sunshine									
	Mean		Diff. from Average		Warmest day		Coldest night		Total		Diff. from Average		Wettest day		Total		Diff. from Average		Sunniest day	
	Date	Max.	Date	Min.	Date	Amount	Date	Amount	Date	Amount	Date	Amount	Date	Amount	Date	Amount	Date	Amount		
Jan.	43.0	+2.5	31st	55	8th	28	22	-23	5th	11	27	-17	7th	5.8						
Feb.	41.3	+0.6	1st	56	21st	26	34	-5	18th	8	69	+8	26th	8.5						
Mar.	40.3	-2.8	18th	57	30th	26	30	-13	3rd	6	93	-10	15th	9.0						
Apr.	47.7	+0.6	8th	64	6th	29	26	-11	28th	7	144	-5	16th	12.5						
May	52.2	-2.5	23rd	72	13th	36	62	+18	19th	9	147	-56	7th	13.2						
June	57.9	-1.6	21st	75	1st	41	35	-20	26th	9	166	-33	11th	14.6						
July	61.7	-1.3	15th	80	11th	44	17	-38	28th	5	212	+17	24th	14.8						
Aug.	64.1	+1.9	22nd	84	8th	47	28	-29	7th	17	206	+23	12th	12.2						
Sept.	61.0	+3.5	8th	88	29th	35	11	-37	30th	3	210	+65	4th	10.8						
Oct.	53.5	+2.5	3rd	67	13th	38	85	+16	18th	19	68	-25	1st	8.6						
Nov.	45.3	+1.5	3rd	60	22nd	28	52	-4	21st	11	60	+7	1st	6.4						
Dec.	45.2	+3.7	4th	56	31st	27	61	+3	7th	29	51	+14	23rd	6.2						
Year	51.1	+0.7	Sept. 8	88	Feb. 21 Mar. 30	26	463	-143	Dec. 7	29	1,453	-12	July 24	14.8						

1899

	Temperature						Rainfall				Sunshine									
	Mean		Diff. from Average		Warmest day		Coldest night		Total		Diff. from Average		Wettest day		Total		Diff. from Average		Sunniest day	
	Date	Max.	Date	Min.	Date	Amount	Date	Amount	Date	Amount	Date	Amount	Date	Amount	Date	Amount	Date	Amount		
Jan.	42.6	+2.1	21st	55	6th	29	61	+16	13th	11	71	+27	9th	6.3						
Feb.	41.9	+1.2	10th	62	28th	22	51	+12	6th	12	81	+20	22nd	7.8						
Mar.	40.2	-2.9	31st	60	21st	23	14	-29	31st	3	119	+16	22nd	9.4						
Apr.	47.7	+0.6	1st	64	18th	32	60	+23	21st	11	131	-18	19th	12.4						
May	51.6	-3.1	31st	71	4th	35	37	-7	15th	8	219	+16	31st	14.9						
June	60.9	+1.4	5th	81	14, 15	43	34	-21	28th	13	253	+54	15th	15.1						
July	66.2	+3.2	21st	86	5th	50	22	-33	1st	8	265	+70	30th	14.5						
Aug.	66.1	+3.9	15th	87	22nd	48	11	-46	29th	5	262	+79	21st	13.2						
Sept.	57.9	+0.4	5th	84	29th	35	54	+6	29th	23	167	+22	4th	12.3						
Oct.	49.1	-1.9	1st	62	14th	31	52	-17	27th	17	104	+11	13th	9.7						
Nov.	46.9	+3.1	4th	61	30th	28	101	+45	5th	20	52	-1	1st	8.3						
Dec.	36.7	-4.8	6th	54	14th	21	32	-26	1st	7	41	+4	31st	6.6						
Year	50.7	+0.3	Aug. 15	87	Dec. 14	21	529	-77	Sept. 29	23	1,765	+300	June 15	15.1						

1900

	Temperature						Rainfall				Sunshine									
	Mean		Diff. from Average		Warmest day		Coldest night		Total		Diff. from Average		Wettest day		Total		Diff. from Average		Sunniest day	
	Date	Max.	Date	Min.	Date	Amount	Date	Amount	Date	Amount	Date	Amount	Date	Amount	Date	Amount	Date	Amount		
Jan.	40.1	-0.4	24th	53	14th	28	74	+29	7th	14	46	+2	18th	6.2						
Feb.	38.3	-2.4	26th	57	9th	19	81	+42	15th	12	54	-7	21st	8.4						
Mar.	39.9	-3.2	12th	56	18th	25	24	-19	18th	7	81	-22	20th	9.3						
Apr.	47.5	+0.4	21st	73	2nd	28	24	-13	3rd	8	173	+24	18th	12.1						
May	51.9	-2.8	6th	69	16, 20	37	25	-19	22nd	7	175	-28	15th	11.6						
June	60.2	+0.7	11th	87	5th	46	53	-2	25th	12	182	-17	10th	15.0						
July	67.2	+4.2	16, 19, 20	89	8th	45	32	-23	27th	13	291	+96	11th	15.3						
Aug.	61.4	-0.8	18th	81	31st	46	67	+10	23rd	13	186	+3	13th	13.4						
Sept.	58.3	+0.8	16th	79	4th	42	26	-22	1st	10	178	+33	11th	11.0						
Oct.	50.5	-0.5	8th	70	16th	37	41	-28	30th	14	134	+41	8th	9.6						
Nov.	46.2	+2.4	1st	60	11th	27	43	-13	7, 25	7	47	-6	10th	7.2						
Dec.	45.3	+3.8	5th	56	24th	31	65	+7	5th	15	37	0	21st	6.4						
Year	50.5	+0.1	July 16, 19, 20	89	Feb. 9	19	555	-51	Dec. 5	15	1,584	+119	July 11	15.3						

1901

	Temperature					Rainfall				Sunshine				
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	
Jan.	39.1	-1.4	27th	55	9th	19	22	-23	8th	7	42	-2	10th	5.4
Feb.	36.3	-4.4	28th	51	14th	21	23	-16	27th	7	46	-15	12th	6.7
Mar.	40.0	-3.1	5th	55	28th	26	51	+8	20th	9	70	-33	27th	7.9
Apr.	48.3	+1.2	23rd	73	2nd	31	54	+17	3rd	10	216	+67	26th	13.5
May	53.5	-1.2	29th	80	1st	36	12	-32	9th	7	251	+48	23rd	14.5
June	59.3	-0.2	9th	79	19th	40	33	-22	30th	20	240	+41	10th	13.7
July	65.8	+2.8	19th	88	8th	48	53	-2	25th	22	237	+42	16, 18	13.6
Aug.	62.8	+0.6	25th	82	28th	46	47	-10	27th	13	234	+51	11th	13.9
Sept.	58.1	+0.6	8th	75	16th	41	39	-9	16th	10	115	-30	4th	11.0
Oct.	50.3	-0.7	1st	72	27th	31	48	-21	4th	13	86	-7	7th	8.2
Nov.	40.3	-3.5	11th	54	17th	21	12	-44	14th	4	39	-14	1st	5.3
Dec.	39.1	-2.4	7th	55	17th	23	82	+24	12th	21	50	+13	18th	5.6
Year	49.7	-0.7	July 19	88	Jan. 9	19	475*	-131	July 25	22	1,626	+161	May 23,	14.5

1902

	Temperature					Rainfall				Sunshine				
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	
Jan.	41.3	+0.8	10th	53	15th	24	19	-26	1st	5	48	+4	29th	7.5
Feb.	35.9	-4.8	28th	53	16th	18	22	-17	24th	5	49	-12	9th	7.5
Mar.	45.1	+2.0	31st	60	7th	30	44	+1	14th	8	97	-6	16th	10.4
Apr.	47.3	+0.2	19th	66	7th	32	13	-24	22nd	3	138	-11	28th	12.9
May	49.6	-5.1	31st	70	14th	32	62	+18	17th	10	175	-28	26th	13.1
June	58.6	-0.9	30th	81	10th	40	94	+39	13th	26	184	-15	27th	14.9
July	61.1	-1.9	14th	83	12th	46	29	-26	1st	10	206	+11	7th	14.6
Aug.	60.2	-2.0	16th	77	11th	44	88	+31	6th	21	128	-55	22nd	11.0
Sept.	56.5	-1.0	22nd	74	19th	37	64	+16	10th	35	162	+17	4th	11.6
Oct.	49.8	-1.2	10th	64	19th	35	35	-34	15th	8	62	-31	21st	8.9
Nov.	44.9	+1.1	7th	58	20, 21	30	40	-16	30th	9	41	-12	9th	6.2
Dec.	41.5	0.0	17th	57	6, 7	26	35	-23	17th	11	34	-3	29th	4.7
Year	49.4	-1.0	July 14	83	Feb. 16	18	545	-61	Sept. 10	35	1,323	-142	June 27	14.9

1903

	Temperature					Rainfall				Sunshine				
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	
Jan.	40.7	+0.2	5th	54	16th	25	56	+11	5th	11	53	+9	23rd	5.9
Feb.	44.9	+4.2	20th	57	18th	25	25	-14	28th	7	76	+15	25th	7.9
Mar.	45.8	+2.7	25th	65	11th	28	60	+17	2nd	9	127	+24	8th	8.7
Apr.	44.7	-2.4	29th	60	19, 20	30	45	+8	26th	18	136	-13	17th	10.3
May	53.9	-0.8	30th	76	13th	35	85	+41	30th	24	166	-37	25th	14.0
June	55.7	-3.8	27th	81	13th	40	183	+128	13th	45	184	-15	29th	14.1
July	61.6	-1.4	11th	83	8th	46	108	+53	18th	33	190	-5	10th	13.0
Aug.	59.9	-2.3	8th	76	23rd	45	100	+43	24th	28	194	+11	7th	13.3
Sept.	57.3	-0.2	1st	79	17th	37	82	+34	4th	38	161	+16	1st	11.3
Oct.	52.7	+1.7	1st	65	24th	38	139	+70	11th	26	84	-9	13th	6.8
Nov.	44.5	+0.7	1st	55	20th	29	45	-11	27th	15	47	-6	25th	6.1
Dec.	39.0	-2.5	9th	52	5th	26	41	-17	10th	15	18	-19	2nd	5.2
Year	50.1	-0.3	July 11	83	Jan. 16 Feb. 18	25	969	+363	June 13 Sept. 4	38	1,436	-29	June 29	14.1

* See note (1) on p. 97.

KEW

1904

	Temperature					Rainfall				Sunshine				
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	
Jan.	39.5	-1.0	13th	55	1st	26	60	+15	31st	13	28	-16	29th	5.1
Feb.	39.9	-0.8	21st	53	29th	29	57	+18	9th	10	57	-4	19th	5.8
Mar.	40.8	-2.3	9th	58	18th	27	33	-10	29th	10	79	-24	10th	7.2
Apr.	49.1	+2.0	14th	67	18th	36	24	-13	15th	4	169	+20	11, 25	11.8
May	53.7	-1.0	26th	74	9th	36	68	+24	27th	21	149	-54	19th	14.4
June	58.3	-1.2	30th	78	4th	45	28	-27	1st	13	205	+6	5th	14.2
July	65.7	+2.7	17th	84	4th	51	52	-3	25th	15	265	+70	17th	14.4
Aug.	61.9	-0.3	4th	86	25th	44	42	-15	31st	19	239	+56	3rd	14.1
Sept.	55.3	-2.2	5th	72	26th	38	43	-5	1st	8	159	+14	5th	12.1
Oct.	50.7	-0.3	18th	66	15th	32	41	-28	7th	7	69	-24	25th	7.9
Nov.	42.1	-1.7	9th	60	26th	24	44	-12	7th	18	53	0	12th	7.8
Dec.	40.4	-1.1	17th	55	22nd	27	47	-11	6th	23	30	-7	31st	5.8
Year	49.8	-0.6	Aug. 4	86	Nov. 26	24	538*	-68	Dec. 6	23	1,501	+36	May 19 July 17	14.4

1905

	Temperature					Rainfall				Sunshine				
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	
Jan.	38.5	-2.0	6th	55	19th	23	27	-18	17th	14	74	+30	29th	6.6
Feb.	42.7	+2.0	5th	53	20th	32	17	-22	26th	7	76	+15	22nd	6.9
Mar.	45.2	+2.1	22nd	61	4th	29	81	+38	15th	18	108	+5	26th	10.0
Apr.	47.5	+0.4	13th	63	9th	33	39	+2	10th	11	103	-46	15th	11.8
May	53.1	-1.6	29th	79	23rd	35	19	-25	2nd	5	253	+50	17th	14.3
June	60.4	+0.9	27th	77	7th	46	103	+48	5th	29	155	-44	23rd	14.2
July	66.3	+3.3	8th	81	7th	50	43	-12	1st	24	241	+46	7th	14.6
Aug.	60.9	-1.3	14th	74	24th	45	71	+14	29th	20	167	-16	19th	11.6
Sept.	56.3	-1.2	3rd	72	15th	41	44	-4	9th	10	112	-33	8th	10.7
Oct.	45.3	-5.7	9th	59	26th	28	31	-38	30th	15	117	+24	16th	9.4
Nov.	41.3	-2.5	26th	55	22nd	22	79	+23	11th	14	57	+4	27th	6.8
Dec.	40.7	-0.8	7th	57	10th	28	19	-39	8th	7	21	-16	19th	4.9
Year	49.9	-0.5	July 8	81	Nov. 22	22	573	-33	June 5	29	1,485	+20	July 7	14.6

1906

	Temperature					Rainfall				Sunshine				
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	
Jan.	42.6	+2.1	26th	53	23rd	27	85	+40	16th	10	65	+21	10th	6.4
Feb.	39.1	-1.6	16th	50	22nd	26	44	+5	17th	15	89	+28	20, 21	7.9
Mar.	42.1	-1.0	17th	61	23rd	28	27	-16	10th	7	110	+7	17th	10.4
Apr.	46.3	-0.8	12th	71	20th	31	11	-26	28th	6	219	+70	27th	12.6
May	53.3	-1.4	8th	73	18th	33	46	+2	8th	20	152	-51	29th	13.5
June	59.3	-0.2	23rd	82	5th	41	72	+17	29th	58	247	+48	26th	14.5
July	63.9	+0.9	18th	81	1, 13	47	26	-29	27th	20	249	+54	5th	13.6
Aug.	65.2	+3.0	31st	91	29th	46	20	-37	25th	5	238	+55	22nd	13.0
Sept.	59.1	+1.6	1st	92	29th	37	44	-4	5th	14	167	+22	1st	12.2
Oct.	53.9	+2.9	11th	69	26th	35	81	+12	30th	21	101	+8	14th	9.6
Nov.	45.9	+2.1	22nd	59	12th	29	99	+43	8th	26	39	-14	5th	7.3
Dec.	37.9	-3.6	3rd	55	26th	23	47	-11	16th	12	47	+10	1st	6.3
Year	50.7	+0.3	Sept. 1	92	Dec. 26	23	601*	-5	June 29	58	1,723	+258	June 26	14.5

* See note (1) on p. 97

1907

	Temperature					Rainfall				Sunshine				
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	°F.	mm.	mm.		mm.	hr.	hr.		hr.	
Jan.	39.0	-1.5	1st	51	27th	23	17	-28	1st	9	57	+13	26th	6.6
Feb.	38.2	-2.5	20th	51	23rd	24	29	-10	10th	10	81	+20	20th	7.8
Mar.	44.0	+0.9	31st	66	12th	27	23	-20	12th	6	183	+80	14th	10.5
Apr.	47.2	+0.1	24th	70	18th	33	80	+43	6th	18	136	-13	22, 24	11.1
May	53.3	-1.4	12th	76	20th	36	43	-1	7th	8	150	-53	4th	13.0
June	57.3	-2.2	9th	73	17th	44	71	+16	1st	24	155	-44	16th	14.5
July	59.5	-3.5	19th	76	11th	44	46	-9	22nd	10	193	-2	15th	14.0
Aug.	60.5	-1.7	4th	75	2nd	45	45	-12	14th	11	180	-3	25th	12.2
Sept.	58.3	+0.8	25th	78	23rd	37	13	-35	2nd	5	150	+5	22nd	9.8
Oct.	50.7	-0.3	1st	65	26th	36	93	+24	14th	20	92	-1	10th	7.8
Nov.	45.3	+1.5	9th	60	21st	31	53	-3	18th	11	40	-13	24th	6.5
Dec.	42.3	+0.8	8th	57	16th	30	92	+34	11th	20	47	+10	6th	5.8
Year	49.7	-0.7	Sept. 25	78	Jan. 27	23	606*	0	June 1	24	1,464	-1	June 16	14.5

1908

	Temperature					Rainfall				Sunshine				
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	°F.	mm.	mm.		mm.	hr.	hr.		hr.	
Jan.	36.9	-3.6	27th	54	5th	19	47	+2	7th	41	33	-11	29th	5.9
Feb.	42.5	+1.8	17th	54	2nd	31	30	-9	16th	9	78	+17	12th	7.4
Mar.	41.1	-2.0	24th	57	15th	27	61	+18	25th	20	104	+1	24th	8.1
Apr.	44.5	-2.6	29th	62	9th	28	59	+22	28th	15	151	+2	17th	12.6
May	56.5	+1.8	31st	76	23rd	42	34	-10	29th	8	191	-12	27th	13.0
June	60.2	+0.7	4th	79	7th	41	50	-5	1st	18	259	+60	26th	13.7
July	63.1	+0.1	3rd	81	20th	50	62	+7	16th	18	187	-8	29th	13.7
Aug.	60.4	-1.8	3rd	80	12th	46	62	+5	23rd	17	205	+22	2nd	13.6
Sept.	56.1	-1.4	30th	76	13th	37	36	-12	3rd	22	144	-1	7th	11.1
Oct.	54.4	+3.4	2nd	76	25th	34	55	-14	18th	17	108	+15	6th	8.6
Nov.	46.6	+2.8	1st	58	10th	26	17	-39	21st	6	60	+7	8th	6.8
Dec.	40.2	-1.3	10th	53	30th	15	53	-5	14th	13	23	-14	11th	4.6
Year	50.2	-0.2	July 3	81	Dec. 30	15	565*	-41	Jan. 7	41	1,543	+78	June 26 July 29	13.7

1909

	Temperature					Rainfall				Sunshine				
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	°F.	mm.	mm.		mm.	hr.	hr.		hr.	
Jan.	38.5	-2.0	15th	51	29th	24	19	-26	10th	5	46	+2	15th	6.6
Feb.	37.6	-3.1	4th	55	20th	21	8	-31	28th	3	83	+22	21st	9.2
Mar.	40.0	-3.1	29th	58	5th	17	69	+26	6th	13	67	-36	8th	9.8
Apr.	49.3	+2.2	9th	68	2nd	30	45	+8	19th	11	240	+91	25th	13.3
May	53.2	-1.5	21st	81	2nd	35	41	-3	24th	19	315	+112	19th	14.0
June	55.1	-4.4	21st	72	11th	41	87	+32	1st	12	105	-94	8th	12.6
July	61.1	-1.9	18th	75	1st	45	68	+13	27th	24	182	-13	19th	14.3
Aug.	62.3	+0.1	12th	83	3rd	47	33	-24	24th	9	223	+40	8th	13.0
Sept.	55.3	-2.2	6th	69	2nd	40	64	+16	28th	10	113	-32	5th	12.0
Oct.	52.6	+1.6	1st	65	30th	31	92	+23	28th	22	88	-5	6th	9.8
Nov.	41.9	-1.9	3rd	55	9th	29	18	-38	29th	8	77	+24	8th	6.6
Dec.	40.7	-0.8	28th	54	21st	23	59	+1	2nd	10	50	+13	20th	6.0
Year	49.0	-1.4	Aug. 12	83	Mar. 5	17	603	-3	July 27	24	1,589	+124	July 19	14.3

* See note (1) on p. 97.

KEW

1910

	Temperature					Rainfall				Sunshine				
	Mean Diff. from Average		Warmest day		Coldest night		Total Diff. from Average		Wettest day		Total Diff. from Average		Sunniest day	
	°F.	°F.	Date	Max.	Date	Min.	mm.	mm.	Date	Amount	hr.	hr.	Date	Amount
Jan.	40.3	-0.2	2nd	56	27th	21	43	-2	23rd	12	63	+19	30th	7.2
Feb.	42.4	+1.7	17th	54	5th	29	71	+32	14th	10	74	+13	26th	7.0
Mar.	43.4	+0.3	5th	57	25th	30	24	-19	9th	13	143	+40	3rd	9.7
Apr.	47.1	0.0	21st	64	3rd	29	27	-10	28th	6	117	-32	27th	12.0
May	54.2	-0.5	22nd	75	10th	33	47	+3	18th	11	217	+14	23rd	14.3
June	61.3	+1.8	20th	81	15th	47	68	+13	25th	19	164	-35	3rd	14.7
July	59.5	-3.5	28th	74	4th	48	63	+8	5th	16	111	-84	14th	10.1
Aug.	61.2	-1.0	14th	75	7th	49	71	+14	5th	30	163	-20	10th	12.1
Sept.	56.4	-1.1	28th	74	21st	38	11	-37	13th	10	136	-9	3, 13	11.3
Oct.	53.8	+2.8	2nd	70	21st	39	55	-14	31st	16	62	-31	3rd	7.8
Nov.	39.2	-4.6	1st	56	23rd	24	79	+23	30th	15	73	+20	16th	7.5
Dec.	44.8	+3.3	16th	54	28th	29	90	+32	1st	12	27	-10	25th	4.6
Year	50.3	-0.1	June 20	81	Jan. 27	21	649	+43	Aug. 5	30	1,350	-115	June 3	14.7

1911

	Temperature					Rainfall				Sunshine				
	Mean Diff. from Average		Warmest day		Coldest night		Total Diff. from Average		Wettest day		Total Diff. from Average		Sunniest day	
	°F.	°F.	Date	Max.	Date	Min.	mm.	mm.	Date	Amount	hr.	hr.	Date	Amount
Jan.	38.8	-1.7	26th	50	16th	23	30	-15	11th	8	48	+4	28th	6.4
Feb.	41.4	+0.7	18th	55	1, 2	23	33	-6	27th	10	67	+6	22nd	7.9
Mar.	42.6	-0.5	22nd	59	17th	31	33	-10	12th	11	71	-32	1st	8.7
Apr.	46.7	-0.4	15th	63	5th	27	47	+10	1st	20	148	-1	24th	11.2
May	56.7	+2.0	31st	76	22nd	35	39	-5	12th	12	192	-11	29th	14.5
June	60.5	+1.0	5th	81	14th	42	50	-5	23rd	16	211	+12	8th	14.2
July	67.4	+4.4	22nd	88	3rd	49	21	-34	25th	14	334	+139	13th	15.4
Aug.	68.0	+5.8	9th	94	31st	48	21	-36	21st	6	244	+61	14th	13.3
Sept.	59.7	+2.2	8th	88	22nd	40	35	-13	13th	13	224	+79	1st	12.4
Oct.	50.8	-0.2	12th	64	29th	31	76	+7	24th	29	83	-10	1st	8.1
Nov.	44.1	+0.3	5th	59	22nd	30	86	+30	11th	15	55	+2	1st	8.1
Dec.	44.5	+3.0	17th	54	8th	29	113	+55	20th	13	43	+6	9th	5.3
Year	51.8	+1.4	Aug. 9	94†	Jan. 16 Feb. 1, 2	23	586*	-20	Oct. 24	29	1,720	+255	July 13	15.4

1912

	Temperature					Rainfall				Sunshine				
	Mean Diff. from Average		Warmest day		Coldest night		Total Diff. from Average		Wettest day		Total Diff. from Average		Sunniest day	
	°F.	°F.	Date	Max.	Date	Min.	mm.	mm.	Date	Amount	hr.	hr.	Date	Amount
Jan.	40.8	+0.3	6th	52	29th	18	88	+43	17th	13	20	-24	9th	5.0
Feb.	44.1	+3.4	28th	58	3rd	20	35	-4	23rd	9	39	-22	3rd	6.7
Mar.	46.7	+3.6	25th	61	21st	32	69	+26	4th	11	92	-11	29th	11.0
Apr.	49.1	+2.0	20th	69	12th	31	4	-33	1st	3	235	+86	23rd	13.5
May	56.5	+1.8	11th	75	26th	39	33	-11	30th	12	169	-34	25th	12.0
June	59.0	-0.5	19th	79	3rd	43	81	+26	7th	19	191	-8	22nd	14.9
July	63.8	+0.8	12th	87	19th	48	44	-11	1, 2	8	151	-44	15th	13.5
Aug.	57.7	-4.5	4th	70	28th	45	135	+78	25th	15	108	-74	1st	9.3
Sept.	53.7	-3.8	8th	66	27th	42	54	+6	29th	25	112	-33	22nd	9.4
Oct.	47.5	-3.5	10th	62	6th	30	58	-11	20th	9	113	+20	4th	9.3
Nov.	43.8	0.0	7th	55	3rd	29	42	-14	28th	9	31	-22	1st	6.8
Dec.	45.8	+4.3	14th	56	1st	26	69	+11	25th	14	30	-7	2nd	5.2
Year	50.7	+0.3	July 12	87	Jan. 29	18	711*	+105	Sept. 29	25	1,292	-173	June 22	14.9

* See note (1) on p. 97. † Maximum temperature 100°F. at Greenwich and 99° F. at Isleworth on August 9,

1913

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	hr.
Jan.	41.5	+1.0	23rd	52	13th	25	65	+20	22nd	10	41	-3	31st	6.8
Feb.	41.4	+0.7	4, 7	53	23rd	27	20	-19	1st	5	37	-24	11th	5.4
Mar.	45.0	+1.9	29th	57	25th	29	53	+10	16th	9	88	-15	15th	8.6
Apr.	47.2	+0.1	24th	66	13th	30	65	+28	29th	13	120	-29	20, 23	10.9
May	55.3	+0.6	26th	80	7th	38	45	+1	29th	17	211	+8	18th	13.2
June	60.0	+0.5	16th	83	1st	44	11	-44	20th	4	199	0	15th	14.5
July	60.0	-3.0	28, 31	74	8th	46	49	-6	14th	23	105	-90	20th	13.5
Aug.	61.4	-0.8	28th	79	26th	46	31	-26	31st	17	140	-43	25th	12.1
Sept.	58.9	+1.4	26th	75	19th	45	48	0	16th	9	125	-20	8th	10.9
Oct.	53.6	+2.6	2nd	66	24th	37	86	+17	26th	18	97	+4	31st	7.0
Nov.	48.0	+4.2	17th	58	23rd	31	57	+1	21st	20	72	+9	15th	5.9
Dec.	42.1	+0.6	9th	54	31st	29	25	-33	23rd	9	40	+3	13th	5.9
Year	51.2	+0.8	June 16	83	Jan. 13	25	556*	-50	July 14	23	1,275	-190	June 15	14.5

1914

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	hr.
Jan.	38.4	-2.1	9th	55	24th	19	14	-31	9th	5	26	-18	7th	5.1
Feb.	44.7	+4.0	14th	57	28th	28	63	+24	21st	14	82	+21	5th	8.0
Mar.	44.2	+1.1	31st	62	22, 28	29	100	+57	8th	20	87	-16	31st	10.6
Apr.	50.4	+3.3	21st	73	26th	35	22	-15	9th	6	218	+69	28th	12.4
May	53.6	-1.1	22nd	79	26th	37	45	+1	7th	22	202	-1	18th	14.0
June	60.4	+0.9	30th	84	8th	40	58	+3	14th	33	255	+56	15, 30	14.9
July	63.5	+0.5	1st	89	29th	49	49	-6	5th	7	159	-36	4th	14.3
Aug.	63.4	+1.2	24th	80	18th	47	45	-12	5th	22	173	-10	11th	13.5
Sept.	57.7	+0.2	7th	80	23rd	36	25	-23	10th	7	199	+54	2nd	10.6
Oct.	52.0	+1.0	1st	65	12th	33	30	-39	25th	6	72	-21	1st	8.8
Nov.	45.6	+1.8	5th	61	19th	29	76	+20	30th	16	65	+12	5th	6.4
Dec.	42.4	+0.9	2nd	55	25th	29	162	+104	9th	36	40	+3	3rd	5.9
Year	51.3	+0.9	July 1	89	Jan. 24	19	688*	+82	Dec. 9	36	1,578	+113	June 15, 30	14.9

1915

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	hr.
Jan.	40.6	+0.1	13th	53	23rd	28	106	+61	22nd	27	38	-6	17th	5.9
Feb.	40.7	0.0	3rd	51	12, 26	26	84	+45	8th	12	71	+10	23rd	7.1
Mar.	42.2	-0.9	24th	59	30th	27	20	-23	2nd	7	82	-21	21st	9.8
Apr.	46.6	-0.5	30th	70	1st	30	32	-5	12th	8	166	+17	29th	13.5
May	54.1	-0.6	26th	75	14th	37	80	+36	13th	33	226	+23	24th	15.0
June	60.0	+0.5	8th	83	1st	39	15	-40	27th	5	211	+12	15th	14.0
July	61.3	-1.7	4th	84	13th	47	108	+53	6th	27	184	-11	28th	11.6
Aug.	61.8	-0.4	10th	75	30th	45	83	+26	13th	27	157	-26	1st	10.5
Sept.	57.4	-0.1	17th	75	30th	36	59	+11	28th	35	175	+30	4th	11.2
Oct.	49.6	-1.4	12th	64	29th	34	49	-20	31st	21	52	-41	1st	8.5
Nov.	39.2	-4.6	12th	56	28th	22	6	+4	11th	17	62	+9	14th	6.4
Dec.	43.9	+2.4	10th	56	9th	29	137	+79	9th	16	35	-2	8th	5.6
Year	49.8	-0.6	July 4	84	Nov. 28	22	834†	+228	Sept. 28	35	1,459	-6	May 24	15.0

* See note (1) on p. 97.

† See notes (1) and (2) on p. 97.

KEW

1916

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	
Jan.	45.8	+5.3	1st 56	23rd 27	31	-14	2nd 10	45	+1	3rd 5.7				
Feb.	40.2	-0.5	16th 53	25th 27	80	+41	25th 11	75	+14	17th 8.3				
Mar.	40.0	-3.1	19th 56	9th 28	100	+57	27th 24	59	-44	29th 9.9				
Apr.	48.4	+1.3	27th 73	1st 32	26	-11	18th 6	187	+38	29th 12.8				
May	55.4	+0.7	21st 78	9th 37	42	-2	1st 11	186	-17	20th 14.0				
June	54.8	-4.7	25th 69	17th 41	55	0	10th 9	142	-57	17th 13.6				
July	60.9	-2.1	30th 80	4th 46	35	-20	6th 11	160	-35	29, 30 13.7				
Aug.	63.6	+1.4	1st 82	31st 45	100	+43	29th 29	162	-21	21st 12.4				
Sept.	56.2	-1.3	1, 26 69	22nd 37	40	-8	3rd 9	101	-44	14th 9.9				
Oct.	53.1	+2.1	4, 5, 13 66	21st 30	93	+24	17th 14	91	-2	15th 7.6				
Nov.	43.9	+0.1	11th 58	28th 26	99	+43	18th 17	70	+17	9th 7.4				
Dec.	37.0	-4.5	29th 54	17th 24	57	-1	20th 10	20	-17	4th 4.3				
Year	50.0	-0.4	Aug. 1 82	Dec. 17 24	760*	+154	Aug. 29 29	1,298	-167	May 20 14.0				

1917

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	
Jan.	35.9	-4.6	1st 54	30th 24	29	-16	5th 8	24	-20	10th 5.8				
Feb.	35.9	-4.8	21, 27 49	8th 14	20	-19	16, 20 4	27	-34	26th 6.1				
Mar.	38.7	-4.4	17th 56	9th 21	44	+1	11th 11	72	-31	30th 9.6				
Apr.	42.8	-4.3	30th 61	1, 2 29	54	+17	2nd 10	154	+5	20th 11.4				
May	57.4	+2.7	27th 78	7th 37	52	+8	20th 21	212	+9	28th 13.5				
June	63.2	+3.7	17th 88	4th 46	94	+39	16th 43	206	+7	4th 15.0				
July	63.0	0.0	27, 28 78	2nd 47	114	+59	30th 44	210	+15	10th 13.5				
Aug.	61.7	-0.5	7th 76	20th 51	109	+52	1st 26	168	-15	19th 12.3				
Sept.	59.3	+1.8	5th 73	30th 42	52	+4	17th 10	158	+13	4th 10.2				
Oct.	46.9	-4.1	1, 2 68	28th 30	86	+17	12th 12	140	+47	15th 8.4				
Nov.	47.0	+3.2	21st 59	17th 32	33	-23	26th 10	45	-8	7th 6.2				
Dec.	36.2	-5.3	1st 52	20th 22	30	-28	16th 11	57	+20	2nd 6.4				
Year	49.0	-1.4	June 17 88	Feb. 8 14	719*	+113	July 30 44	1,473	+8	June 4 15.0				

1918

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	
Jan.	39.4	-1.1	24th 55	9th 20	75	+30	15th 20	58	+14	27th 6.5				
Feb.	43.8	+3.1	22nd 57	19th 24	21	-18	24th 7	64	+3	16th 8.4				
Mar.	43.9	+0.8	24th 68	16th 31	23	-20	30th 9	126	+23	23rd 9.8				
Apr.	45.1	-2.0	25th 64	3rd 30	80	+43	21st 26	85	-64	22nd 8.3				
May	56.9	+2.2	21st 81	11th 42	46	+2	7th 12	222	+19	{ 20, 21 } 13.3				
June	57.6	-1.9	2nd 77	17th 41	30	-25	14th 8	232	+33	23rd 14.2				
July	62.0	-1.0	1st 78	4th 47	121	+66	11th 27	182	-13	4th 13.0				
Aug.	62.5	+0.3	22nd 84	25th 47	36	-21	3rd 10	183	0	13th 12.6				
Sept.	55.9	-1.6	7th 72	29th 38	145	+97	18th 34	149	+4	1st 11.5				
Oct.	49.4	-1.6	6th 62	14th 33	29	-40	11th 5	75	-18	1st 9.0				
Nov.	42.9	-0.9	1st 58	14th 27	53	-3	3rd 17	54	+1	9th 6.9				
Dec.	46.3	+4.8	3rd 58	26th 29	54	-4	10th 9	29	-8	17th 5.8				
Year	50.5	+0.1	Aug. 22 84	Jan. 9 20	712*	+106	Sept. 18 34	1,459	-6	June 23 14.2				

* See note (2) on p. 97.

1919

	Temperature				Rainfall				Sunshine							
	Mean		Diff. from Average		Warmest day		Coldest night		Total		Diff. from Average		Wettest day		Sunniest day	
	Date	Max.	Date	Min.	Date	Amount	Date	Amount	Date	Amount	Date	Amount	Date	Amount		
Jan.	38.2	-2.3	15th	53	27th	27	90	+45	3rd	14	31	-13	17th	5.2		
Feb.	36.9	-3.8	22nd	53	19th	21	56	+17	16th	14	30	-31	8th	7.4		
Mar.	40.8	-2.3	3rd	55	23rd	27	78	+35	4th	14	91	-12	30th	8.6		
Apr.	46.0	-1.1	19th	67	1st	30	60	+23	27th	26	106	-43	21st	9.2		
May	57.5	+2.8	23rd	77	28th	41	9	-35	1st	6	239	+36	19th	14.1		
June	59.7	+0.2	11th	82	4th	41	30	-25	20th	26	220	+21	16th	14.7		
July	58.3	-4.7	18th	77	9th	44	67	+12	20th	15	119	-76	16th	12.6		
Aug.	63.7	+1.5	9th	84	28th	45	55	-2	28th	27	227	+44	9th	13.4		
Sept.	57.2	-0.3	11th	83	30th	31	37	-11	14th	17	153	+8	9, 12	11.4		
Oct.	45.3	-5.7	1st	65	23rd	28	15	-54	24th	4	122	+29	3rd	9.6		
Nov.	39.3	-4.5	23rd	57	27th	26	27	-29	29th	7	45	-8	20, 21	5.7		
Dec.	42.8	+1.3	23rd	54	9th	23	95	+37	1st	17	25	-12	2, 7	3.8		
Year	48.8	-1.6	Aug. 9	84	Feb. 19	21	617*	+11	Aug. 28	27	1,408	-57	June 16	14.7		

1920

	Temperature				Rainfall				Sunshine							
	Mean		Diff. from Average		Warmest day		Coldest night		Total		Diff. from Average		Wettest day		Sunniest day	
	Date	Max.	Date	Min.	Date	Amount	Date	Amount	Date	Amount	Date	Amount	Date	Amount		
Jan.	42.7	+2.2	13th	57	7th	23	55	+10	10th	11	48	+4	30th	6.7		
Feb.	43.4	+2.7	18th	58	5th	28	10	-29	4th	2	66	+5	22nd	8.0		
Mar.	46.6	+3.5	30th	66	9th	29	30	-13	14th	7	128	+25	31st	11.5		
Apr.	49.3	+2.2	24th	63	30th	35	68	+31	16th	9	79	-70	30th	8.7		
May	55.6	+0.9	25th	79	5th	36	38	-6	26th	5	212	+9	24th	13.9		
June	60.3	+0.8	16th	75	6, 7	40	78	+23	12th	36	195	-4	9th	14.6		
July	60.1	-2.9	19th	73	25, 28	46	112	+57	4th	17	133	-62	16th	12.3		
Aug.	57.7	-4.5	8th	73	21st	43	38	-19	2nd	18	140	-43	8th	12.0		
Sept.	57.1	-0.4	12th	72	13th	40	62	+14	16th	17	104	-41	19th	10.5		
Oct.	52.0	+1.0	5th	71	28th	32	43	-26	1st	19	113	+20	20th	8.2		
Nov.	43.3	-0.5	15th	58	23rd	24	34	-22	27th	8	49	-4	17th	6.7		
Dec.	41.0	-0.5	31st	56	13th	21	49	-9	23rd	11	28	-9	1st	5.0		
Year	50.7	+0.3	May 25	79	Dec. 13	21	617	+11	June 12	36	1,294*	-171	June 9	14.6		

1921

	Temperature				Rainfall				Sunshine							
	Mean		Diff. from Average		Warmest day		Coldest night		Total		Diff. from Average		Wettest day		Sunniest day	
	Date	Max.	Date	Min.	Date	Amount	Date	Amount	Date	Amount	Date	Amount	Date	Amount		
Jan.	46.0	+5.5	9th	56	16th	26	52	+7	7th	12	29	-15	14th	4.1		
Feb.	41.6	+0.9	23, 24	59	3rd	28	5	-34	25th	4	53	-8	26th	8.4		
Mar.	46.5	+3.4	24th	63	3rd	29	34	-9	6, 28	7	124	+21	18th	9.8		
Apr.	48.3	+1.2	28th	70	20th	32	27	-10	23rd	12	195	+46	29th	13.6		
May	55.1	+0.4	24th	75	5th	36	25	-19	4th	4	229	+26	23rd	14.2		
June	60.2	+0.7	25th	85	19th	42	5	-50	3rd	4	223	+24	2, 28	14.8		
July	68.3	+5.3	10th	89	1st	46	4	-51	14th	1	257	+62	10, 11	14.4		
Aug.	62.8	+0.6	19th	81	31st	41	25	-32	13th	10	167	-16	6th	12.7		
Sept.	59.8	+2.3	8th	82	29th	39	45	-3	11th	35	165	+20	4th	10.8		
Oct.	56.2	+5.2	5th	82	25th	35	11	-58	22nd	6	153	+60	6th	9.5		
Nov.	40.5	-3.3	1st	58	11th	23	43	-13	4th	10	37	-16	8th	7.6		
Dec.	44.8	+3.3	28th	57	6th	30	33	-25	1st	6	36	-1	17th	4.7		
Year	52.5	+2.1	July 10	89	Nov. 11	23	309	-297	Sept. 11	35	1,667*	+202	June 2, 28	14.8		

* See note (2) on p. 97.

KEW

1922

	Temperature					Rainfall				Sunshine				
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	
Jan.	40.4	-0.1	2nd	57	18th	26	57	+12	19th	16	49	+5	4th	5.7
Feb.	41.7	+1.0	25th	58	7th	27	48	+9	21st	11	91	+30	25th	9.2
Mar.	41.8	-1.3	3rd	56	26th	28	43	0	8th	10	90	-13	9th	9.2
Apr.	43.8	-3.3	14th	68	2nd	26	66	+29	3rd	15	141	-8	19th	10.2
May	57.6	+2.9	24th	87	13th	35	26	-18	25th	10	291	+88	28th	14.7
June	59.7	+0.2	1st	84	16th	45	25	-30	28th	9	226	+27	7th	14.6
July	59.1	-3.9	21st	76	4th	46	84	+29	7th	15	151	-44	19th	12.7
Aug.	58.5	-3.7	21st	73	26th	43	53	-4	6th	16	131	-52	26th	12.7
Sept.	54.7	-2.8	21st	71	30th	39	40	-8	19th	14	107	-38	18th	11.1
Oct.	48.2	-2.8	1st	65	26th	28	19	-50	4th	8	117	+24	13th	9.2
Nov.	42.5	-1.3	6th	55	25th	29	36	-20	1st	11	40	-13	4th	7.4
Dec.	43.5	+2.0	13th	52	9th	29	72	+14	31st	12	44	+7	28th	4.7
Year	49.3	-1.1	May 24	87	Jan. 18	26	568*	-38	Aug. 6	16	1,477*	+12	May 28	14.7

1923

	Temperature					Rainfall				Sunshine				
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	
Jan.	41.4	+0.9	30th	54	17th	25	33	-12	7th	8	48	+4	23rd	6.7
Feb.	43.5	+2.8	2nd	55	5th	27	71	+32	8th	14	51	-10	4th	6.3
Mar.	44.9	+1.8	27th	68	12th	31	53	+10	13th	20	73	-30	24th	8.5
Apr.	47.9	+0.8	12th	64	10th	32	40	+3	26th	8	119	-30	24th	12.1
May	51.7	-3.0	5th	78	12th	35	52	+8	23rd	13	165	-38	4th	12.2
June	55.9	-3.6	29th	75	3rd	37	6	-49	15th	3	118	-81	23rd	14.3
July	66.7	+3.7	12th	90	27th	49	83	+28	10th	30	232	+37	11th	14.1
Aug.	62.1	-0.1	9th	85	31st	43	40	-17	29th	9	247	+64	1st	13.7
Sept.	56.3	-1.2	30th	73	9th	41	35	-13	21st	6	173	+28	17th	11.0
Oct.	51.1	+0.1	9th	65	15th	33	135	+66	3rd	23	93	0	15th	9.3
Nov.	38.7	-5.1	3rd	58	8th	23	37	-19	8th	7	73	+20	4th	8.0
Dec.	39.1	-2.4	22nd	51	10th	25	52	-6	25th	10	35	-2	23rd	5.7
Year	49.9	-0.5	July 12	90	Nov. 8	23	638*	+32	July 10	30	1,427	-38	June 23	14.3

1924

	Temperature					Rainfall				Sunshine				
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	
Jan.	41.3	+0.8	12th	52	4th	26	64	+19	21st	14	54	+10	25th	6.3
Feb.	37.9	-2.8	6th	51	15th	24	11	-28	27th	2	37	-24	1st	7.7
Mar.	41.2	-1.9	24th	58	5th	26	21	-22	6th	5	154	+51	9th	9.8
Apr.	46.8	-0.3	21st	71	10th	29	86	+49	30th	18	123	-26	21st	11.9
May	55.9	+1.2	19th	75	5, 6	38	61	+17	10th	8	184	-19	5th	11.9
June	60.3	+0.8	26th	79	14th	44	87	+32	1st	25	198	-1	26th	14.5
July	62.1	-0.9	12th	86	1st	45	95	+40	17th	27	229	+34	14th	14.4
Aug.	59.5	-2.7	11th	75	20th	46	64	+7	30th	9	147	-36	9th	10.2
Sept.	57.8	+0.3	6th	72	28th	41	75	+27	30th	19	117	-28	8th	10.9
Oct.	52.1	+1.1	13th	68	24th	33	92	+23	21st	16	61	-32	24th	5.4
Nov.	46.3	+2.5	1st	60	18th	27	58	+2	12th	17	41	-12	4th	6.9
Dec.	43.9	+2.4	5th	55	10, 11	31	72	+14	27th	19	46	+9	14th	5.6
Year	50.5	+0.1	July 12	86	Feb. 15	24	787*	+181	July 17	27	1,391	-74	June 26	14.5

* See note (2) on p. 97.

1925

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	hr.	
Jan.	41.9	+1.4	2nd 55	10th 27	45	0	2nd 10	39	-5	5th 5.3				
Feb.	42.7	+2.0	5th 54	24th 29	81	+42	13th 29	60	-1	28th 7.6				
Mar.	41.5	-1.6	16th 53	13th 25	11	-32	24th 3	81	-22	10th 8.5				
Apr.	46.9	-0.2	8th 61	4th 30	50	+13	6th 10	131	-18	8th 9.2				
May	55.5	+0.8	16th 77	2nd 38	48	+4	23rd 7	199	-4	15, 28 12.4				
June	60.9	+1.4	11th 84	2nd 44	1	-54	24th 1	271	+72	4th 14.7				
July	64.5	+1.5	22nd 87	8th 49	100	+45	22nd 47	187	-8	13, 14 13.2				
Aug.	61.3	-0.9	17, 31 77	26th 47	65	+8	24th 18	142	-41	16th 12.9				
Sept.	53.5	-4.0	30th 68	25th 39	64	+16	20th 12	126	-19	12th 10.3				
Oct.	52.1	+1.1	1st 69	15th 33	78	+9	22nd 22	85	-8	25th 7.6				
Nov.	40.7	-3.1	3rd 60	27th 24	38	-18	7th 12	79	+26	9th 7.0				
Dec.	39.5	-2.0	29th 56	6th 23	68	+10	30th 19	52	+15	9th 6.3				
Year	50.1	-0.3	July 22 87	Dec. 6 23	649	+43	July 22 47	1,452	-13	June 4 14.7				

1926

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	hr.	
Jan.	40.6	+0.1	27th 53	16th 18	59	+14	7th 11	43	-1	20th 6.4				
Feb.	45.7	+5.0	26th 57	14th 27	58	+19	17th 16	46	-15	13, 22 6.9				
Mar.	44.6	+1.5	6th 60	31st 31	5	-38	27th 2	101	-2	5th 9.4				
Apr.	49.5	+2.4	2nd 71	1st 33	67	+30	25th 15	110	-39	12th 9.1				
May	52.3	-2.4	26th 75	9th 35	44	0	14th 21	147	-56	3rd 12.9				
June	58.0	-1.5	21st 75	25th 43	86	+31	2nd 28	188	-11	30th 13.5				
July	63.9	+0.9	14th 85	27th 51	44	-11	26th 9	167	-28	13th 13.2				
Aug.	63.5	+1.3	30th 82	5th 46	15	-42	17th 3	207	+24	4th 12.4				
Sept.	60.3	+2.8	19th 84	28th 39	37	-11	2nd 12	130	-15	13th 11.3				
Oct.	47.9	-3.1	6th 69	19th 28	52	-17	15th 13	88	-5	13th 8.5				
Nov.	45.1	+1.3	5, 11 56	1st 29	130	+74	8th 24	41	-12	7th 6.0				
Dec.	39.9	-1.6	31st 50	27th 29	6	-52	6th 3	53	+16	29th 5.7				
Year	50.9	+0.5	July 14 85	Jan. 16 18	604*	-2	June 2 28	1,320*	-145	June 30 13.5				

1927

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	hr.	
Jan.	40.9	+0.4	9th 53	20th 26	49	+4	21st 8	51	+7	13th 6.0				
Feb.	40.1	-0.6	28th 54	11th 25	86	+47	1st 14	34	-27	2nd 6.6				
Mar.	46.5	+3.4	21st 65	11th 31	56	+13	25th 16	118	+15	17, 28 9.1				
Apr.	48.2	+1.1	21st 70	27th 32	45	+8	7th 12	170	+21	30th 13.1				
May	55.0	+0.3	6th 75	1st 33	28	-16	27th 13	238	+35	7th 13.6				
June	57.2	-2.3	16th 80	13th 43	64	+9	27th 18	161	-38	22nd 13.6				
July	61.7	-1.3	10th 79	18th 45	76	+21	11th 28	127	-68	10th 12.4				
Aug.	61.9	-0.3	31st 76	26th 47	103	+46	18th 15	173	-10	3rd 12.4				
Sept.	55.9	-1.6	2nd 71	27th 35	114	+66	15th 20	102	-43	24th 10.1				
Oct.	51.0	0.0	30th 64	24th 34	32	-37	22nd 13	70	-23	3rd 9.9				
Nov.	43.7	-0.1	3rd 62	26th 28	68	+12	29th 34	43	-10	11th 7.0				
Dec.	36.7	-4.8	6th 54	19th 21	94	+36	25th 33	29	-8	6th 6.4				
Year	49.9	-0.5	June 16 80	Dec. 19 21	816*	+210	Nov. 29 34	1,317*	-148	May 7 13.6 June 22				

* See note (2) on p. 97.

KEW

1928

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.		
Jan.	41.7	+1.2	6th 55	18th 26	79	+34	2nd 16	58	+14	19th	7.3			
Feb.	43.9	+3.2	27th 56	22nd 28	36	-3	2nd 13	86	+25	27th	8.4			
Mar.	44.9	+1.8	4th 64	11th 27	44	+1	5th 11	93	-10	26th	8.5			
Apr.	48.0	+0.9	26th 74	18th 32	36	-1	16th 13	131	-18	24th	13.2			
May	52.9	-1.8	28th 76	9th 35	45	+1	18th 11	165	-38	6th	13.8			
June	57.5	-2.0	6, 13, 15 75	17th 42	57	+2	14th 23	211	+12	2nd	14.8			
July	65.3	+2.3	15th 87	29th 50	52	-3	3rd 16	290	+95	13, 14	15.2			
Aug.	61.7	-0.5	11th 79	5th 46	66	+9	4th 23	201	+18	5th	12.8			
Sept.	56.1	-1.4	8th 80	27th 35	26	-22	9th 15	200	+55	4th	12.4			
Oct.	51.3	+0.3	5th 66	14th 31	92	+23	22nd 28	112	+19	1st	9.8			
Nov.	47.2	+3.4	13th 59	10th 28	46	-10	16th 9	55	+2	9th	7.6			
Dec.	38.7	-2.8	26th 54	9, 15 25	60	+2	28th 12	47	+10	7th	6.7			
Year	50.7	+0.3	July 15 87	Dec. 9, 15 25	638*	+32	Oct. 22 28	1,649	+184	July 13, 14	15.2			

1929

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.		
Jan.	35.3	-5.2	31st 51	17th 24	19	-26	10th 7	32	-12	19th	6.6			
Feb.	32.8	-7.9	1st 52	15th 13	13	-26	1st 4	51	-10	3rd	7.5			
Mar.	43.1	0.0	29th 68	5th 22	0.7	-42	25th 0.4	146	+43	28, 30	10.5			
Apr.	44.6	-2.5	19th 69	6th 29	27	-10	11, 29 5	146	-3	22nd	12.5			
May	54.1	-0.6	23rd 81	1st 31	32	-12	5th 12	244	+41	19th	14.5			
June	58.3	-1.2	19th 79	5th 43	22	-33	13, 14 5	210	+11	19th	13.7			
July	64.1	+1.1	16th 87	8th 47	66	+11	20th 36	257	+62	17th	14.7			
Aug.	62.3	+0.1	31st 85	3rd 47	55	-2	16th 17	187	+4	25th	12.2			
Sept.	63.4	+5.9	4th 85	27th 40	4	-44	30th 3	196	+51	8th	11.2			
Oct.	49.9	-1.1	16th 64	27th 31	69	0	24th 21	109	+16	7th	7.8			
Nov.	45.1	+1.3	8th 59	15th 28	123	+67	16th 27	66	+13	9th	7.5			
Dec.	41.5	0.0	14th 57	19th 29	113	+55	5th 14	63	+26	19th	6.4			
Year	49.5	-0.9	July 16 87	Feb. 15 13	543*	-63	July 20 36	1,707	+242	July 17	14.7			

1930

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.		
Jan.	43.7	+3.2	19th 56	21st 28	69	+24	11th 13	42	-2	6th	6.2			
Feb.	38.9	-1.8	27th 51	25th 29	15	-24	15th 4	47	-14	9th	6.4			
Mar.	43.3	+0.2	3rd 58	20th 26	37	-6	15th 15	122	+19	24th	10.8			
Apr.	47.0	-0.1	25th 68	21st 31	47	+10	4th 17	104	-45	30th	13.5			
May	53.5	-1.2	29th 71	8th 39	88	+44	3rd 23	152	-51	28th	13.6			
June	61.9	+2.4	30th 81	9th 44	33	-22	18th 21	227	+28	5, 8, 29	14.8			
July	61.9	-1.1	5th 81	12th 48	47	-8	29th 9	173	-22	7th	14.5			
Aug.	62.8	+0.6	29th 89	17th 48	72	+15	29th 15	221	+38	16th	13.5			
Sept.	58.7	+1.2	5th 76	16th 45	64	+16	6th 13	117	-28	2nd	11.2			
Oct.	52.2	+1.2	17th 68	27th 31	27	-42	20th 12	115	+22	18th	8.1			
Nov.	44.8	+1.0	20th 57	17th 25	98	+42	20th 19	60	+7	4th	7.9			
Dec.	40.5	-1.0	27th 52	6th 28	46	-12	11th 11	22	-15	14th	5.0			
Year	50.8	+0.4	Aug. 29 89	Nov. 17 25	644*	+38	May 3 23	1,403*	-62	June 5, 8, 29	14.8			

* See note (2) on p. 97.

1931

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	
Jan.	38.9	-1.6	16, 17	53	7th	27	-18	23rd	7	54	+10	24th	6.6	
Feb.	39.6	-1.1	25th	54	22nd	28	-2	27th	9	60	-1	14th	7.4	
Mar.	41.0	-2.1	20th	66	10th	18	-35	9th	3	123	+20	31st	9.1	
Apr.	46.3	-0.8	11th	62	1st	33	+56	3rd	16	113	-36	13th	11.0	
May	54.5	-0.2	26th	74	3rd	48	+19	23rd	12	159	-44	25th	13.1	
June	60.9	+1.4	28th	77	25th	45	-13	5th	11	174	-25	27th	14.3	
July	62.3	-0.7	3rd	76	21st	50	+19	25th	24	151	-44	3rd	14.8	
Aug.	60.3	-1.9	4th	77	26th	44	+66	5th	28	136	-47	29th	11.5	
Sept.	54.3	-3.2	19th	68	8th	38	+5	4th	11	117	-28	6th	9.9	
Oct.	48.8	-2.2	2nd	65	28th	25	-53	7th	7	90	-3	3rd	8.4	
Nov.	46.2	+2.4	3rd	61	22nd	32	-2	7th	13	59	+6	1st	7.8	
Dec.	42.3	+0.8	4th	59	31st	24	-44	3rd	5	29	-8	7th	5.5	
Year	49.6	-0.8	June 28 Aug. 4	77	Mar. 10	18	605*	-1	Aug. 5	28	1,265	-200	July 3	14.8

1932

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	
Jan.	43.6	+3.1	3rd	56	1st	22	-4	6th	15	38	-6	15th	6.4	
Feb.	37.9	-2.8	2nd	47	7th	25	-35	24th	3	46	-15	3rd	7.0	
Mar.	41.0	-2.1	31st	55	13th	24	-10	22nd	7	121	+18	25th	9.8	
Apr.	46.0	-1.1	30th	65	13th	33	+20	14th	10	117	-32	22nd	10.1	
May	52.9	-1.8	20th	74	6th	35	+58	9th	25	114	-89	17th	11.7	
June	59.2	-0.3	27th	79	6th	42	-48	30th	2	211	+12	14th	14.6	
July	62.7	-0.3	10th	84	19th	46	+7	25th	20	140	-55	10th	12.7	
Aug.	66.5	+4.3	19th	92	14th	52	-28	1st	10	197	+14	11th	12.4	
Sept.	57.9	+0.4	2, 14	75	27th	42	+11	18th	23	103	-42	26th	10.2	
Oct.	49.2	-1.8	1st	64	29th	33	+58	23rd	31	97	+4	4th	9.6	
Nov.	44.8	+1.0	4th	58	9th	31	-30	22nd	7	26	-27	21st	6.7	
Dec.	42.7	+1.2	19th	55	5th	30	-46	23rd	3	49	+12	22nd	5.4	
Year	50.4	0.0	Aug. 19	92	Jan. 1	22	559	-47	Oct. 23	31	1,257*	-208	June 14	14.6

1933

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	
Jan.	37.3	-3.2	3rd	53	23rd	23	-11	5th	5	39	-5	9th	6.1	
Feb.	40.9	+0.2	5th	56	24th	25	+28	10th	22	76	+15	23rd	7.2	
Mar.	46.2	+3.1	28th	63	26th	28	+12	17th	11	178	+75	27th	10.7	
Apr.	49.3	+2.2	11th	70	19th	32	-20	25th	5	175	+26	8th	11.8	
May	55.9	+1.2	22nd	77	15th	39	+3	7th	11	173	-30	28th	13.0	
June	61.8	+2.3	5th	85	22nd	45	-6	15th	13	259	+60	7th	14.7	
July	67.0	+4.0	26th	88	1st	52	-11	15th	13	244	+49	3rd	14.5	
Aug.	66.5	+4.3	6th	89	24th	48	-44	15th	5	250	+67	9th	13.2	
Sept.	61.3	+3.8	4th	79	15th	42	+21	25th	14	190	+45	10th	11.6	
Oct.	51.9	+0.9	7th	68	28th	32	-32	27th	7	108	+15	4th	9.9	
Nov.	43.1	-0.7	7th	56	16th	31	-32	15th	10	48	-5	14th	6.2	
Dec.	35.3	-6.2	22nd	44	7th	25	-50	30th	4	19	-18	15th	5.3	
Year	51.4	+1.0	Aug. 6	89	Jan. 23	23	463*	-143	Feb. 10	22	1,758*	+293	June 7	14.7

* See note (2) on p. 97.

KEW

1934

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	
Jan.	39.5	-1.0	17th	56	22nd	22	30	-15	14th	5	45	+1	23rd	6.3
Feb.	37.9	-2.8	16th	53	14th	24	6	-33	28th	4	77	+16	27th	8.0
Mar.	42.3	-0.8	25th	57	2nd	28	54	+11	12th	12	110	+7	28th	9.3
Apr.	48.6	+1.5	15th	75	8th	28	37	0	24th	7	132	-17	20th	11.5
May	55.1	+0.4	12th	79	17th	37	11	-33	6th	4	201	-2	24th	14.0
June	61.4	+1.9	17, 18	84	13th	46	25	-30	27th	6	205	+6	30th	14.7
July	67.3	+4.3	8th	83	15th	53	81	+26	18th	33	281	+86	8th	15.2
Aug.	61.9	-0.3	18th	79	31st	43	45	-12	28th	15	192	+9	26th	12.3
Sept.	60.1	+2.6	15th	81	2nd	44	32	-16	3rd	14	186	+41	5th	10.6
Oct.	52.5	+1.5	1st	66	31st	29	22	-47	2nd	4	80	-13	23rd	7.5
Nov.	44.1	+0.3	27th	56	1st	30	45	-11	10th	14	38	-15	3rd	7.2
Dec.	47.5	+6.0	8th	57	21st	34	112	+54	6th	15	26	-11	31st	3.8
Year	51.5	+1.1	June 17, 18	84	Jan. 22	22	501*	-105	July 18	33	1,573	+108	July 8	15.2

1935

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	
Jan.	41.1	+0.6	2nd	54	9th	27	23	-22	25th	6	45	+1	28th	6.7
Feb.	43.8	+3.1	2nd	58	9th	30	59	+20	27th	12	53	-8	26th	8.9
Mar.	44.8	+1.7	20th	63	9th	30	9	-34	23rd	4	109	+6	21st	10.4
Apr.	47.6	+0.5	23, 29	61	5th	33	68	+31	7th	14	113	-36	6th	9.5
May	51.8	-2.9	6th	74	17th	30	35	-9	20th	15	190	-13	10th	13.8
June	61.9	+2.4	24th	84	9th	42	86	+31	25th	20	207	+8	24, 28	14.4
July	66.3	+3.3	14th	85	31st	49	41	-14	2nd	28	272	+77	8th	14.9
Aug.	63.9	+1.7	8th	84	28th	44	51	-6	30th	15	191	+8	10th	13.5
Sept.	58.5	+1.0	1, 12	71	26th	39	65	+17	29th	12	150	+5	6th	10.8
Oct.	50.7	-0.3	16th	62	21st	28	50	-19	10th	11	97	+4	11th	9.0
Nov.	45.5	+1.7	3rd	62	25th	29	111	+55	7th	26	51	-2	3rd	5.9
Dec.	39.4	-2.1	27th	51	23rd	25	55	-3	28th	8	34	-3	2nd	5.8
Year	51.3	+0.9	July 14	85	Dec. 23	25	652*	+46	July 2	28	1,511*	+46	July 8	14.9

1936

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	
Jan.	40.9	+0.4	9th	56	15th	22	99	+54	28th	18	30	-14	21st	6.1
Feb.	37.7	-3.0	18th	53	12th	23	41	+2	22nd	9	75	+14	20th	7.9
Mar.	46.1	+3.0	21st	62	4th	27	23	-20	26th	8	78	-25	24th	9.3
Apr.	44.6	-2.5	28th	63	23rd	31	43	+6	20th	11	132	-17	18th	12.0
May	54.4	-0.3	16th	77	22nd	37	13	-31	22nd	4	199	-4	19th	14.2
June	61.7	+2.2	20th	85	4th	44	90	+35	13th	15	190	-9	17th	14.4
July	61.9	-1.1	17th	76	27th	48	60	+5	9th	14	139	-56	24th	11.1
Aug.	62.9	+0.7	29th	80	23rd	47	12	-45	11th	5	185	+2	24th	12.9
Sept.	59.7	+2.2	2nd	74	29th	42	71	+23	20th	20	90	-55	11th	9.3
Oct.	49.5	-1.5	15th	65	29th	33	45	-24	31st	21	91	-2	3rd	9.8
Nov.	43.7	-0.1	17th	56	25th	32	71	+15	12th	14	41	-12	1st	7.4
Dec.	42.3	+0.8	2nd	55	7th	28	35	-23	14th	13	59	+22	13th	6.4
Year	50.5	+0.1	June 20	85	Jan. 15	22	603	-3	Oct. 31	21	1,307*	-158	June 17	14.4

* See note (2) on p. 97.

TEMPERATURE, RAINFALL AND SUNSHINE SUMMARIES

KEW

1937

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	hr.
Jan.	42.4	+1.9	6th 54	29th 29	95	+50	1st 15	48	+4	10th 6.8				
Feb.	43.5	+2.8	15th 55	12th 31	103	+64	22nd 17	63	+2	23rd 7.2				
Mar.	39.9	-3.2	20th 55	10th 26	70	+27	7th 15	113	+10	15th 9.7				
Apr.	49.9	+2.8	23rd 61	1st 31	50	+13	2nd 15	102	-47	25th 13.3				
May	56.1	+1.4	29th 80	6th 40	55	+11	21st 14	173	-30	28th 13.5				
June	60.6	+1.1	11th 81	3rd 47	46	-9	13th 13	209	+10	6th 14.3				
July	63.7	+0.7	3rd 82	5. 30 52	24	-31	19th 13	135	-60	16th 12.6				
Aug.	65.7	+3.5	6th 85	16th 50	76	+19	13th 54	210	+27	6, 7 12.2				
Sept.	57.4	-0.1	7th 76	21st 41	52	+4	17th 14	153	+8	4th 10.3				
Oct.	52.5	+1.5	2nd 67	18th 37	60	-9	27th 14	82	-11	4th 8.0				
Nov.	42.1	-1.7	4th 55	21st 25	35	-21	1st 14	46	-7	14th 6.2				
Dec.	38.7	-2.8	23rd 53	20th 26	87	+29	13th 25	25	-12	12th 5.9				
Year	51.0	+0.6	Aug. 6 85	Nov. 21 25	753	+147	Aug. 13 54	1,358*	-107	June 6 14.3				

1938

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	hr.
Jan.	43.6	+3.1	24th 55	11th 33	57	+12	13th 11	45	+1	19th 6.4				
Feb.	41.7	+1.0	25th 55	25th 28	8	-31	26th 3	70	+9	11th 6.8				
Mar.	49.3	+6.2	20th 65	8th 31	7	-36	25th 5	173	+70	14, 19 10.5				
Apr.	46.4	-0.7	1st 63	11th 30	2	-35	3rd 2	150	+1	13th 11.0				
May	52.5	-2.2	14th 75	8th 32	33	+11	28th 12	161	-42	21st 14.1				
June	61.3	+1.8	21st 77	3rd 45	9	-46	27th 4	207	+8	21st 14.8				
July	62.5	-0.5	31st 81	1st 48	26	-29	27th 7	147	-48	30th 13.6				
Aug.	63.9	+1.7	1st 84	30th 45	69	+12	11th 18	158	-25	23rd 11.1				
Sept.	58.7	+1.2	12th 76	1st 42	49	+1	27th 21	125	-20	15th 10.4				
Oct.	51.3	+0.3	9th 64	24th 33	52	-17	3rd 10	111	+18	21st 8.7				
Nov.	49.7	+5.9	5th 66	27th 32	66	+10	25th 22	62	+9	5th 7.3				
Dec.	39.8	-1.7	11, 12 55	20th 21	84	+26	16th 26	50	+13	27th 5.6				
Year	51.7	+1.3	Aug. 1 84	Dec. 20 21	461*	-145	Dec. 16 26	1,459	-6	June 21 14.8				

1939

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.	hr.	hr.
Jan.	41.9	+1.4	15th 54	6th 26	110	+65	25th 29	45	+1	24th 7.0				
Feb.	42.6	+1.9	10th 56	21st 28	20	-19	28th 6	105	+44	6, 20, 21 7.6				
Mar.	43.5	+0.4	3rd 57	11th 29	25	-18	22nd 5	93	-10	22nd 8.2				
Apr.	48.6	+1.5	11th 72	8th 32	56	+19	30th 12	174	+25	18, 20 12.0				
May	53.0	-1.7	24th 74	4th 37	35	-9	16th 12	194	-9	13th 14.2				
June	59.1	-0.4	7th 85	13th 44	29	-26	20th 9	220	+21	4th 15.3				
July	61.3	-1.7	4th 79	2nd 48	45	-10	20th 14	186	-9	25th 11.1				
Aug.	63.4	+1.2	20th 80	14, 15 50	87	+30	3rd 21	174	-9	15th 11.8				
Sept.	59.8	+2.3	8th 77	28th 44	23	-25	2nd 15	163	+18	7th 11.7				
Oct.	48.9	-2.1	5th 64	26th 33	125	+56	14th 29	90	-3	25th 8.3				
Nov.	48.7	+4.9	7th 58	22nd 31	112	+56	6th 19	36	-17	19th 5.7				
Dec.	37.9	-3.6	1st 55	30th 19	21	-37	8th 9	35	-2	2nd 6.0				
Year	50.7	+0.3	June 7 85	Dec. 30 19	690*	+84	Jan. 25 29 Oct. 14	1,516*	+51	June 4 15.3				

* See note (2) on p. 97.

KEW

1940

	Temperature					Rainfall				Sunshine				
	Mean Diff. from Average		Warmest day		Coldest night		Total Diff. from Average		Wettest day		Total Diff. from Average		Sunniest day	
	°F.	°F.	Date	Max.	Date	Min.	mm.	mm.	Date	Amount	hr.	hr.	Date	Amount
Jan.	31.4	-9.1	7th	50	20th	17	63	+18	27th	28	52	+8	17th	5.8
Feb.	37.9	-2.8	27th	54	12th	22	41	+2	19th	9	25	-36	24th	7.6
Mar.	43.9	+0.8	18th	59	7th	28	86	+43	26th	28	121	+18	20th	9.9
Apr.	49.0	+1.9	23rd	69	7th	30	41	+4	30th	9	128	-21	6th	11.0
May	56.4	+1.7	15th	74	12th	40	31	-13	22nd	19	247	+44	19th	14.5
June	63.4	+3.9	8th	86	19th	51	31	-24	9th	16	277	+78	18th	15.2
July	61.0	-2.0	2nd	78	25th	47	68	+13	21st	10	207	+12	1st	13.4
Aug.	62.5	+0.3	4th	80	24th	44	2	-55	10th	1	208	+25	12th	13.2
Sept.	57.1	-0.4	4th	79	27th	40	35	-13	19th	18	164	+19	4th	12.0
Oct.	50.3	-0.7	20th	63	29, 30	32	61	-8	16th	17	94	+1	7th	8.8
Nov.	45.1	+1.3	4th	59	30th	26	172	+116	3rd	35	77	+24	14th	6.6
Dec.	39.7	-1.8	30th	51	1st	26	29	-29	30th	7	37	0	6th	5.9
Year	49.8	-0.6	June 8	86	Jan. 20	17	659*	+53	Nov. 3	35	1,636*	+171	June 18	15.2

1941

	Temperature					Rainfall				Sunshine				
	Mean Diff. from Average		Warmest day		Coldest night		Total Diff. from Average		Wettest day		Total Diff. from Average		Sunniest day	
	°F.	°F.	Date	Max.	Date	Min.	mm.	mm.	Date	Amount	hr.	hr.	Date	Amount
Jan.	34.8	-5.7	22nd	47	16th	21	62	+17	20th	15	26	-18	2nd	5.5
Feb.	39.7	-1.0	8th	52	5th	23	49	+10	27th	6	53	-8	21st	6.6
Mar.	42.3	-0.8	21st	55	19th	26	81	+38	6th	22	96	-7	13th	9.5
Apr.	44.9	-2.2	21st	59	10th	31	44	+7	1st	11	96	-53	17th	10.6
May	49.3	-5.4	28th	66	16th	33	47	+3	26th	13	149	-54	4th	13.3
June	61.5	+2.0	22nd	87	12th	45	49	-6	9th	16	215	+16	17th	15.0
July	65.9	+2.9	11th	89	20th	52	103	+48	26th	31	244	+49	6th	15.3
Aug.	59.9	-2.3	3rd	74	7th	48	150	+93	17th	31	170	-13	31st	11.9
Sept.	59.5	+2.0	3rd	77	17th	40	9	-39	28th	6	113	-32	7th	10.5
Oct.	51.5	+0.5	6th	71	31st	34	19	-50	11th	4	104	+11	23rd	8.6
Nov.	44.7	+0.9	22nd	58	15th	27	64	+8	11th	16	39	-14	7th	6.4
Dec.	42.1	+0.6	14th	56	29th	25	40	-18	6th	11	36	-1	16th	5.3
Year	49.7	-0.7	July 11	89	Jan. 16	21	718*	+112	July 26	31	1,341	-124	July 6	15.3

1942

	Temperature					Rainfall				Sunshine				
	Mean Diff. from Average		Warmest day		Coldest night		Total Diff. from Average		Wettest day		Total Diff. from Average		Sunniest day	
	°F.	°F.	Date	Max.	Date	Min.	mm.	mm.	Date	Amount	hr.	hr.	Date	Amount
Jan.	33.9	-6.6	4th	51	15th	18	55	+10	23rd	16	32	-12	25th	4.8
Feb.	33.0	-7.7	12th	45	21, 22	24	22	-17	1st	9	35	-26	14th	6.9
Mar.	42.0	-1.1	14th	61	8th	25	42	-1	4th	14	69	-34	23rd	9.7
Apr.	49.9	+2.8	12th	65	11th	38	21	-16	9th	6	212	+63	16th	12.6
May	53.9	-0.8	7th	71	3rd	39	76	+32	10th	19	224	+21	4th	12.4
June	60.8	+1.3	6th	86	1, 11	44	36	-19	30th	31	244	+45	22nd	14.2
July	61.9	-1.1	21st	76	28th	48	44	-11	10th	15	159	-36	7th	11.6
Aug.	63.4	+1.2	28th	87	5th	48	56	-1	29th	12	147	-36	17th	12.5
Sept.	58.7	+1.2	11th	75	25th	44	27	-21	21st	10	118	-27	8th	11.6
Oct.	52.5	+1.5	4th	66	27th	36	87	+18	26th	22	83	-10	2nd	9.1
Nov.	42.3	-1.5	7th	55	23rd	29	50	-6	5th	21	53	0	6th	6.4
Dec.	44.3	+2.8	21, 22	53	25th	29	55	-3	5th	9	51	+14	12th	5.7
Year	49.7	-0.7	Aug. 28	87	Jan. 15	18	573*	-33	June 30	31	1,428*	-37	June 22	14.2

* See note (2) on p. 97.

TEMPERATURE, RAINFALL AND SUNSHINE SUMMARIES

KEW

1943

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.		
Jan.	42.0	+1.5	22nd 52	8th 28	120	+75	30th 19	42	-2	29th 5.6				
Feb.	42.5	+1.8	14th 55	8th 28	37	-2	1st 11	76	+15	26th 7.6				
Mar.	45.2	+2.1	30th 59	21st 28	9	-34	25th 7	109	+6	18th 8.3				
Apr.	52.9	+5.8	16th 74	19th 38	19	-18	23rd 8	153	+4	18th 12.3				
May	56.1	+1.4	14th 80	11th 39	48	+4	10th 17	226	+23	16th 14.2				
June	59.9	+0.4	11th 76	7th 46	33	-22	2nd 7	176	-23	24th 13.7				
July	63.9	+0.9	31st 91	9th 49	37	-18	21st 13	179	-16	17th 14.6				
Aug.	62.7	+0.5	17th 81	24th 47	36	-21	26th 12	174	-9	16th 12.6				
Sept.	57.4	-0.1	11th 74	23rd 38	57	+9	12th 19	130	-15	22, 24 10.3				
Oct.	52.5	+1.5	10th 63	3rd 38	64	-5	19th 20	70	-23	2nd 8.7				
Nov.	43.3	-0.5	2nd 59	26th 29	33	-23	13th 7	48	-5	7th 6.6				
Dec.	39.7	-1.8	18th 49	14th 28	35	-23	19th 17	33	-4	20th 5.7				
Year	51.5	+1.1	July 31 91	Various 28	526*	-80	Oct. 19 20	1,416	-49	July 17 14.6				

1944

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.		
Jan.	43.9	+3.4	27th 55	11th 30	39	-6	23rd 8	28	-16	14th 5.7				
Feb.	39.1	-1.6	2nd 56	6th 27	17	-22	16th 10	49	-12	24th 7.7				
Mar.	41.9	-1.2	26th 68	6th 27	2	-41	14, 30 0.5	93	-10	26th 10.7				
Apr.	51.8	+4.7	30th 71	1st 36	33	-4	3rd 16	129	-20	27th 12.8				
May	54.3	-0.4	29th 86	8th 33	17	-27	13th 8	219	+16	11th 12.9				
June	58.3	-1.2	24th 73	11th 44	38	-17	9th 20	175	-24	20th 15.0				
July	63.5	+0.5	17th 79	25th 50	42	-13	3rd 11	96	-99	6th 13.0				
Aug.	65.7	+3.5	16th 82	16th 53	50	-7	24th 18	192	+9	7th 13.2				
Sept.	56.0	-1.5	14th 70	11th 39	57	+9	2nd 17	137	-8	10th 10.2				
Oct.	49.7	-1.3	6th 60	29th 32	69	0	17th 13	76	-17	2nd 10.0				
Nov.	44.3	+0.5	5th 58	15th 30	87	+31	17th 22	47	-6	21st 5.9				
Dec.	38.5	-3.0	3rd 55	27th 23	30	-28	17th 12	39	+2	5th 5.9				
Year	50.6	+0.2	May 29 86	Dec. 27 23	483*	-123	Nov. 17 22	1,279*	-186	June 20 15.0				

1945

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.		
Jan.	33.8	-6.7	18th 47	26th 19	42	-3	30th 10	34	-10	19th 5.0				
Feb.	45.7	+5.0	18th 61	21st 31	35	-4	12th 6	59	-2	14th 8.1				
Mar.	47.2	+4.1	23rd 69	3rd 31	20	-23	26th 12	139	+36	23rd 9.7				
Apr.	51.7	+4.6	16th 76	30th 33	29	-8	26, 28 9	170	+21	18, 19 12.0				
May	56.5	+1.8	12th 83	1st 33	61	+17	3rd 16	167	-36	17th 12.8				
June	60.0	+0.5	19th 77	17th 47	45	-10	8, 28 5	186	-13	18th 15.0				
July	64.3	+1.3	15th 84	3rd 49	68	+13	14th 24	183	-12	23rd 14.1				
Aug.	62.1	-0.1	4th 82	7th 49	32	-25	9th 11	142	-41	2nd 13.7				
Sept.	59.3	+1.8	12th 75	29th 45	43	-5	13th 7	56	-89	23rd 7.3				
Oct.	53.8	+2.8	11th 70	31st 38	53	-16	23rd 12	103	+10	10th 7.5				
Nov.	46.5	+2.7	4th 60	28th 32	7	-49	22nd 4	30	-23	11th 6.6				
Dec.	41.8	+0.3	1st 54	10th 27	68	+10	27th 15	42	+5	3rd 4.5				
Year	51.9	+1.5	July 15 84	Jan. 26 19	504*	-102	July 14 24	1,310*	-155	June 18 15.0				

* See note (2) on p. 97.

KEW

1946

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.		
Jan.	38.5	-2.0	11th	55	20th	23	35	-10	9th	10	50	+6	12th	6.7
Feb.	44.0	+3.3	6, 7	56	28th	26	57	+18	26th	12	64	+3	27th	7.4
Mar.	41.7	-1.4	29th	65	10th	27	30	-13	22nd	10	82	-21	31st	9.8
Apr.	51.1	+4.0	3rd	75	11th	32	49	+12	29th	20	191	+42	20th	12.4
May	52.5	-2.2	23rd	67	17th	35	88	+44	8th	25	172	-31	10th	12.6
June	57.7	-1.8	23rd	74	7th	45	71	+16	11th	12	144	-55	21st	10.3
July	63.3	+0.3	12th	83	17th	45	79	+24	26th	53	213	+18	6th	13.2
Aug.	60.1	-2.1	5th	79	16th	44	95	+38	9th	15	135	-48	4th	13.3
Sept.	57.9	+0.4	28th	73	16th	44	88	+40	8th	46	97	-48	15th	11.3
Oct.	51.3	+0.3	1st	69	29th	33	13	-35	3rd	8	62	-31	6th	8.5
Nov.	47.5	+3.7	4th	62	2, 23	36	103	+47	14th	18	33	-20	4th	7.4
Dec.	37.2	-4.3	1st	52	21st	19	49	-9	8th	12	46	+9	4th	5.5
Year	50.3	-0.1	July 12	83	Dec. 21	19	777*	+171	July 26	53	1,288*	-177	Aug. 4	13.3

1947

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.		
Jan.	35.8	-4.7	16th	52	29th	15	34	-11	8th	5	48	+4	16th	5.9
Feb.	30.0	-10.7	4, 26	40	24th	15	30	-9	3rd	7	17	-44	26th	7.4
Mar.	40.9	-2.2	28th	58	7th	23	118	+75	29th	17	59	-44	1st	9.4
Apr.	49.0	+1.9	13, 16	65	10th	32	43	+6	2nd	8	159	+10	24th	11.5
May	57.3	+2.6	30th	86	5th	39	34	-10	4th	7	162	-41	28th	14.3
June	62.1	+2.6	3rd	91	10th	46	81	+26	15th	14	195	-4	1st	13.6
July	65.6	+2.6	27th	85	12th	51	36	-19	17th	10	144	-51	15th	12.4
Aug.	68.1	+5.9	16th	87	8th	49	10	-47	23rd	5	261	+78	13th	12.4
Sept.	60.7	+3.2	15th	77	25th	40	30	-18	18th	16	155	+10	5th	10.4
Oct.	51.5	+0.5	7th	70	21st	32	4	-65	23rd	2	92	-1	4th	8.7
Nov.	45.7	+1.9	22, 23	61	30th	23	27	-29	9th	6	57	+4	3rd	7.3
Dec.	42.1	+0.6	27th	55	1st	23	54	-4	5th	13	21	-16	29th	6.4
Year	50.7	+0.3	June 3	91	Jan. 29 Feb. 24	15	502*	-104	Mar. 29	17	1,370	-95	May 28	14.3

1948

	Temperature				Rainfall				Sunshine					
	Mean	Diff. from Average	Warmest day		Coldest night		Total	Diff. from Average	Wettest day		Total	Diff. from Average	Sunniest day	
			Date	Max.	Date	Min.			Date	Amount			Date	Amount
	°F.	°F.	°F.	°F.	mm.	mm.	mm.	mm.	hr.	hr.	hr.	hr.		
Jan.	43.7	+3.2	2nd	56	20th	31	91	+46	29th	11	40	-4	22nd	6.9
Feb.	41.3	+0.6	29th	58	20, 22	23	36	-3	21st	12	68	+7	26th	6.8
Mar.	47.9	+4.8	9th	71	24th	33	15	-28	31st	9	136	+33	26th	10.2
Apr.	50.3	+3.2	19th	69	10th	36	32	-5	4th	9	214	+65	26th	12.2
May	54.6	-0.1	18th	77	3rd	34	57	+13	29th	14	232	+29	17, 18	14.6
June	58.9	-0.6	14th	78	3rd	46	43	-12	19th	8	162	-37	26th	12.6
July	62.3	-0.7	28th	93	17th	47	30	-25	30th	9	179	-16	27th	13.1
Aug.	61.1	-1.1	1st	78	29th	46	73	+16	8th	27	136	-47	29th	11.3
Sept.	58.3	+0.8	9th	74	22nd	39	31	-17	12th	16	154	+9	9th	10.0
Oct.	50.3	-0.7	2nd	68	27th	27	47	-22	25th	8	89	-4	5th	8.8
Nov.	45.4	+1.6	3rd	61	26th	25	40	-16	7th	15	68	+15	20th	6.9
Dec.	43.8	+2.3	14th	56	26th	22	51	-7	30th	15	44	+7	29th	5.3
Year	51.5	+1.1	July 28	93	Dec. 26	22	545*	-61	Aug. 8	27	1,522	+57	May 17, 18	14.6

* See note (2) on p. 97.

1949

	Temperature				Rainfall				Sunshine						
	Mean		Diff. from Average		Warmest day		Coldest night		Total		Diff. from Average		Sunniest day		
	°F.	°F.	Date	Max.	Date	Min.	mm.	mm.	Date	Amount	mm.	mm.	hr.	hr.	Date	Amount
Jan.	42.3	+1.8	14th	53	29th	28	31	-14	1st	10	55	+11	27th	6.2	
Feb.	41.8	+1.1	21st	55	5th	23	22	-17	9th	8	106	+45	19th	8.2	
Mar.	42.1	-1.0	26th	63	3rd	29	23	-20	4th	9	101	-2	24th	9.6	
Apr.	51.8	+4.7	16th	78	10th	32	37	0	28th	9	211	+62	23rd	13.1	
May	53.4	-1.3	21, 22	69	10th	35	58	+14	24th	18	216	+13	10, 30	13.2	
June	61.4	+1.9	27th	84	2nd	43	13	-42	1st	7	235	+36	6th	14.8	
July	66.5	+3.5	12th	85	8th	50	28	-27	16th	17	253	+58	3rd	15.5	
Aug.	64.9	+2.7	15th	83	12th	47	38	-19	2nd	17	223	+40	4th	13.8	
Sept.	64.4	+6.9	4th	86	18th	48	9	-39	21st	3	158	+13	4th	10.2	
Oct.	54.6	+3.6	3rd	73	28th	30	133	+64	26th	30	115	+22	4th	8.7	
Nov.	43.9	+0.1	9th	57	2nd	27	55	-1	21st	13	65	+12	10th	7.2	
Dec.	43.6	+2.1	3rd	55	12th	30	37	-21	14th	13	51	+14	4th	6.6	
Year	52.5	+2.1	Sept. 4	86	Feb. 5	23	485*	-121	Oct. 26	30	1,791*	+326	July 3	15.5	

* See note (2) below.

NOTES ;—

(1) The difference between the yearly total and the sum of the monthly figures is due to the conversion to millimetres of the actual measurements which before May 1915 were made in inches.

(2) The difference between the yearly total and the sum of the monthly figures is due to the monthly figures being given to the nearest whole millimetre for rainfall and nearest whole hour for sunshine, whereas the yearly total is the rounded off sum of the actual measurements which were made to the nearest tenth of a millimetre for rainfall and the nearest tenth of an hour for sunshine.

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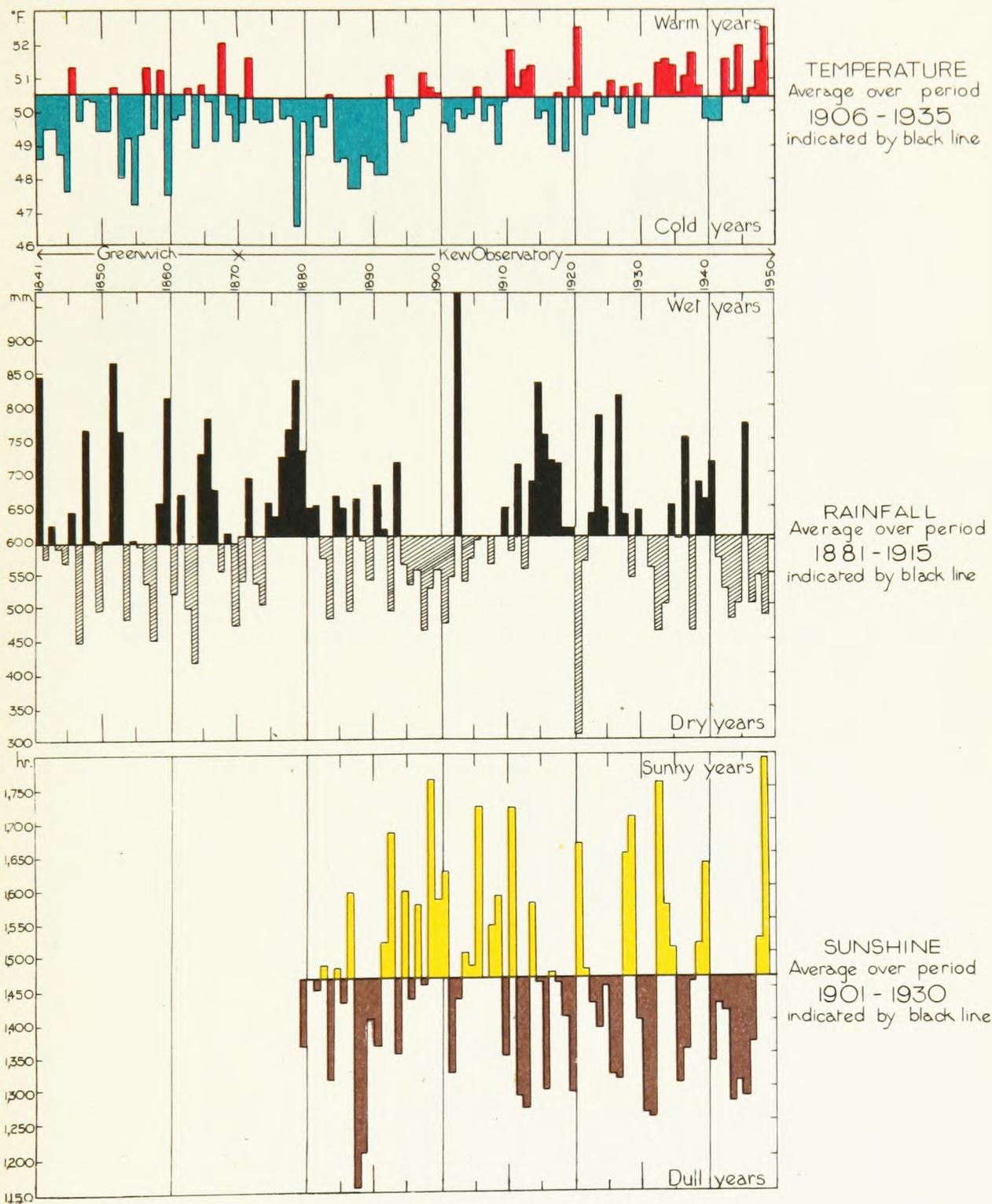
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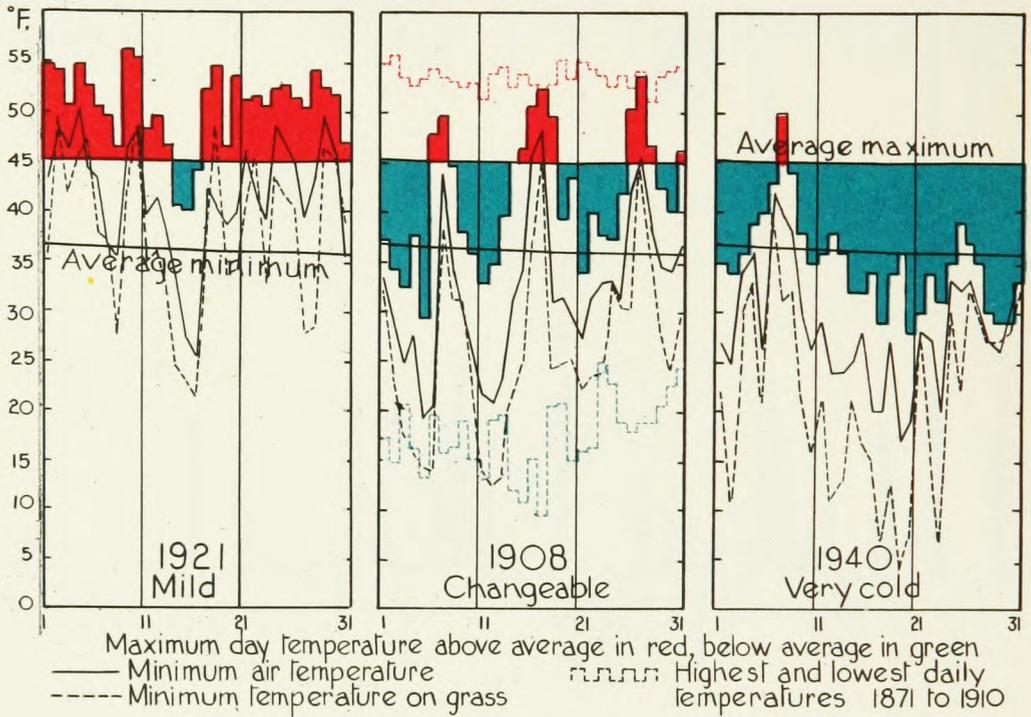
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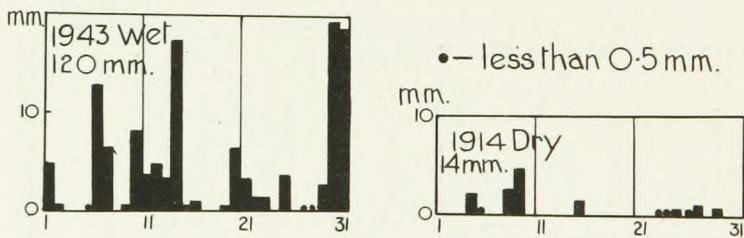
LONDON, EACH YEAR, 1841 TO 1949

Mean temperature, rainfall and sunshine compared with the average

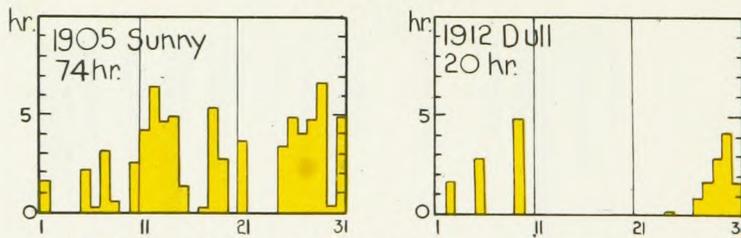
TEMPERATURE



RAINFALL

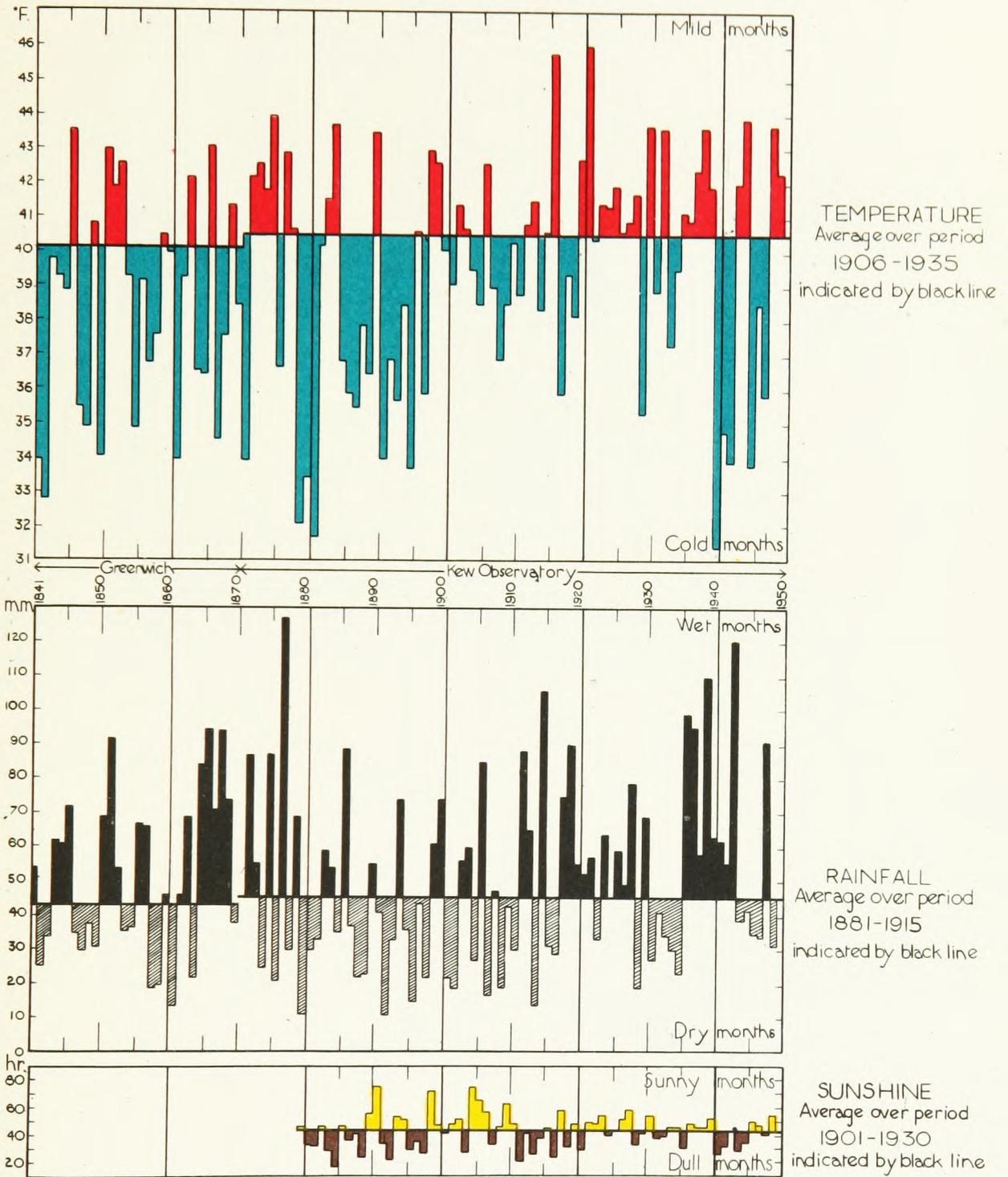


SUNSHINE



KEW OBSERVATORY, JANUARY

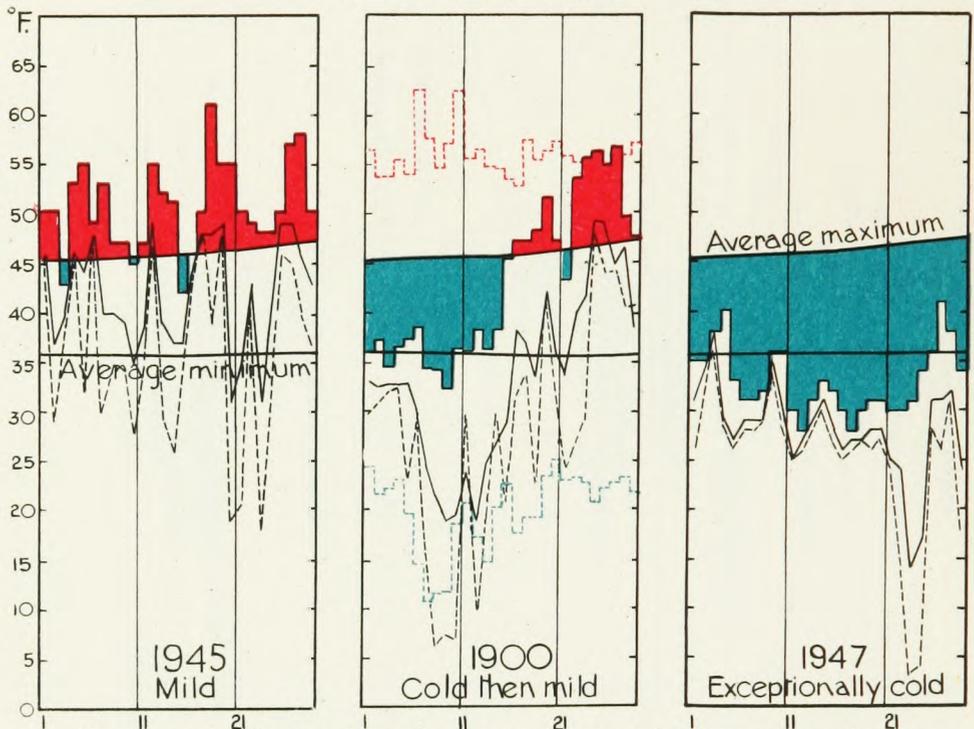
Outstanding months since 1900



LONDON, JANUARY, 1841 TO 1949

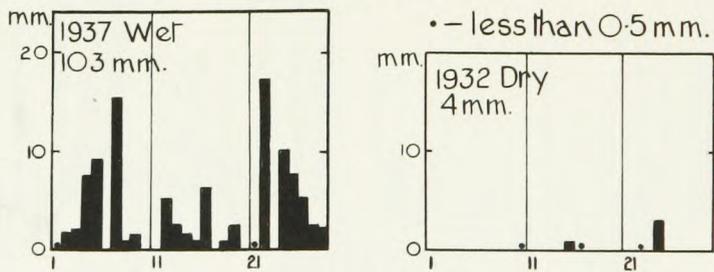
Mean temperature, rainfall and sunshine compared with the average

TEMPERATURE

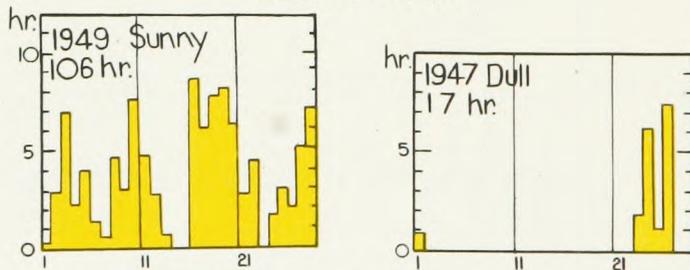


Maximum day temperature above average in red, below average in green
 — Minimum air temperature
 - - - Minimum temperature on grass
 Highest and lowest daily temperatures 1871 to 1910

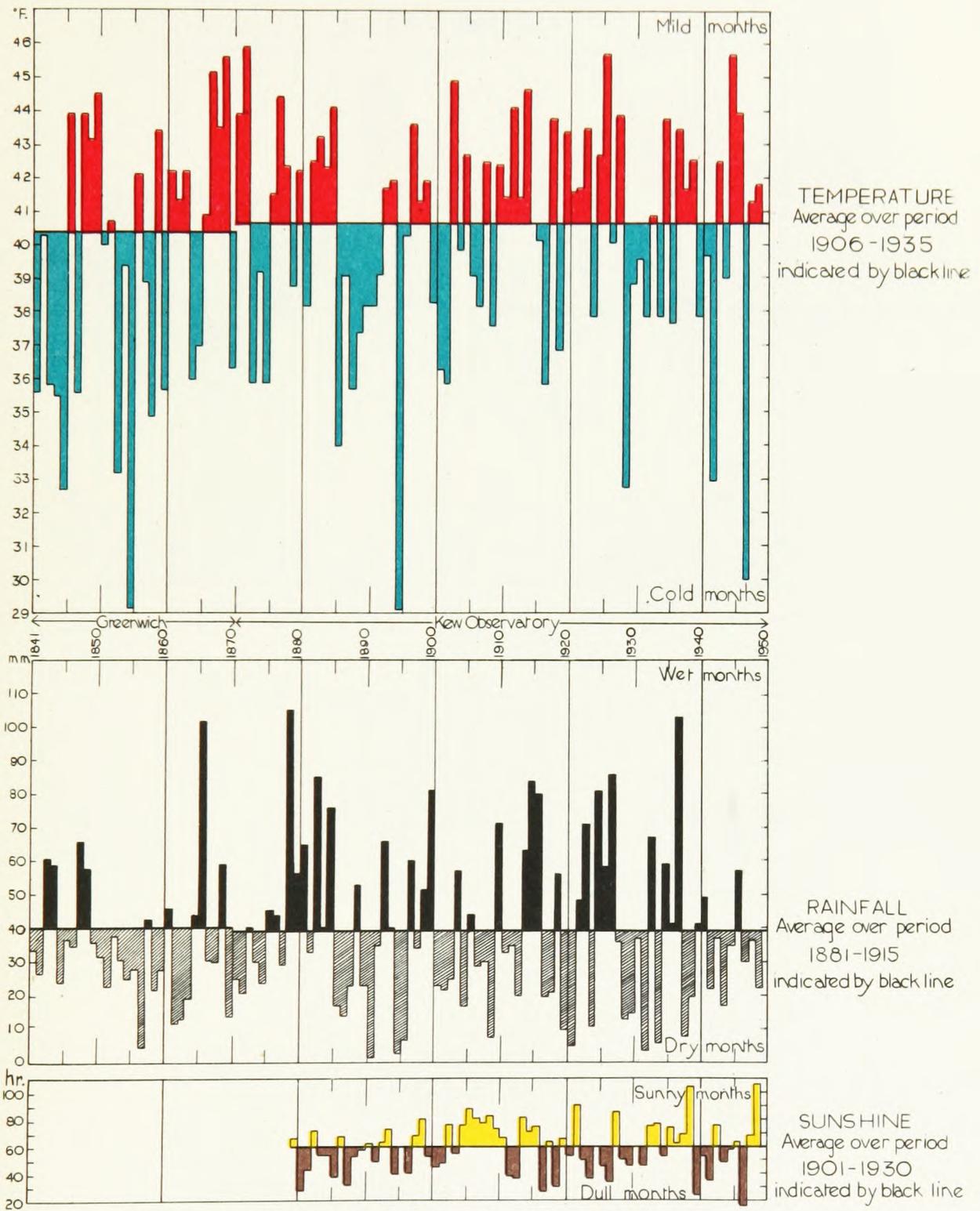
RAINFALL



SUNSHINE

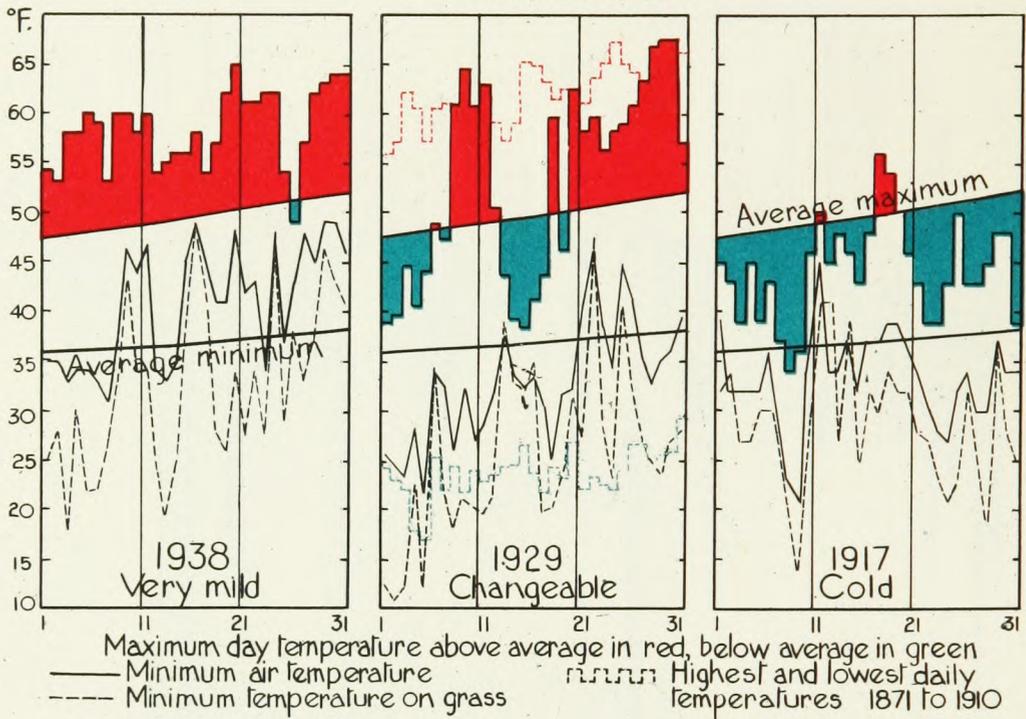


KEW OBSERVATORY, FEBRUARY
 Outstanding months since 1900

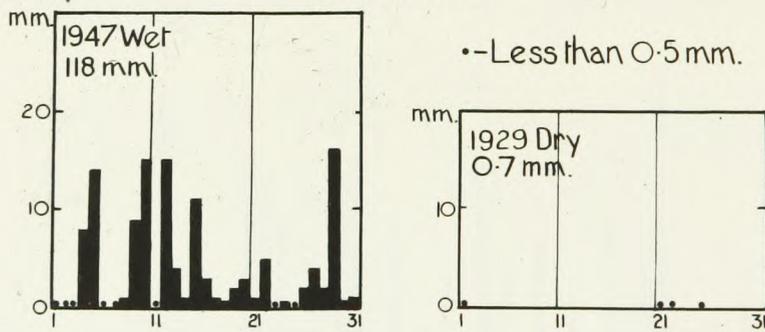


LONDON, FEBRUARY, 1841 TO 1949
Mean temperature, rainfall and sunshine compared with the average

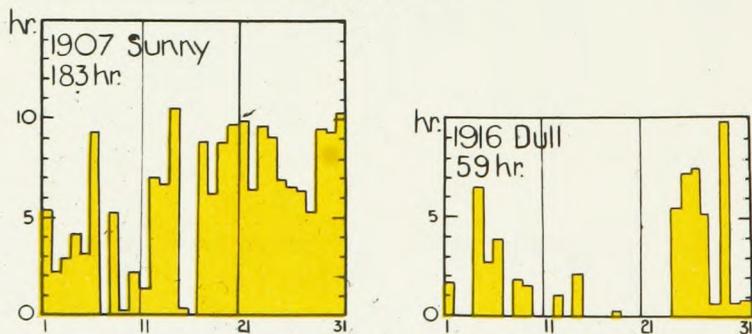
TEMPERATURE



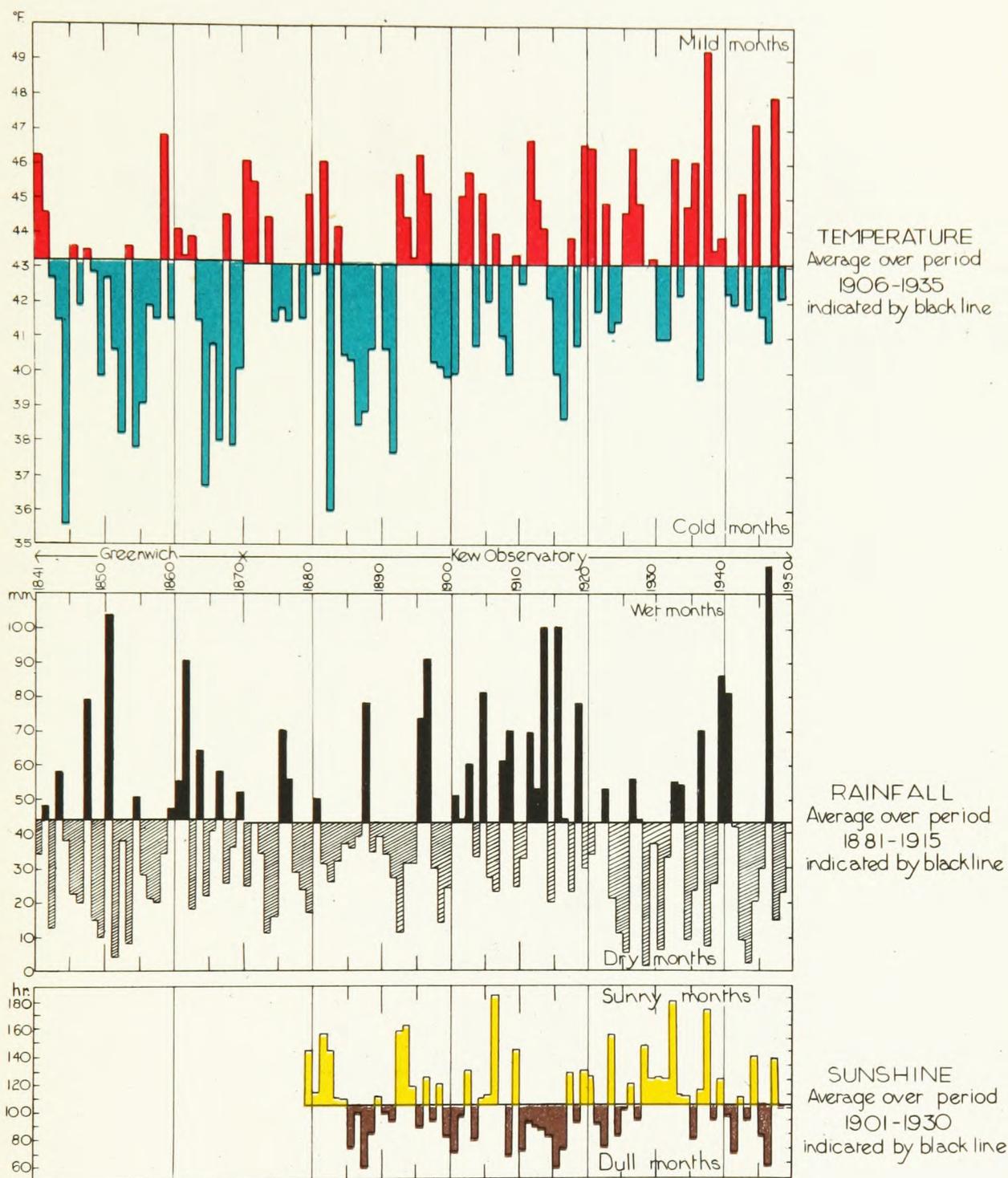
RAINFALL



SUNSHINE

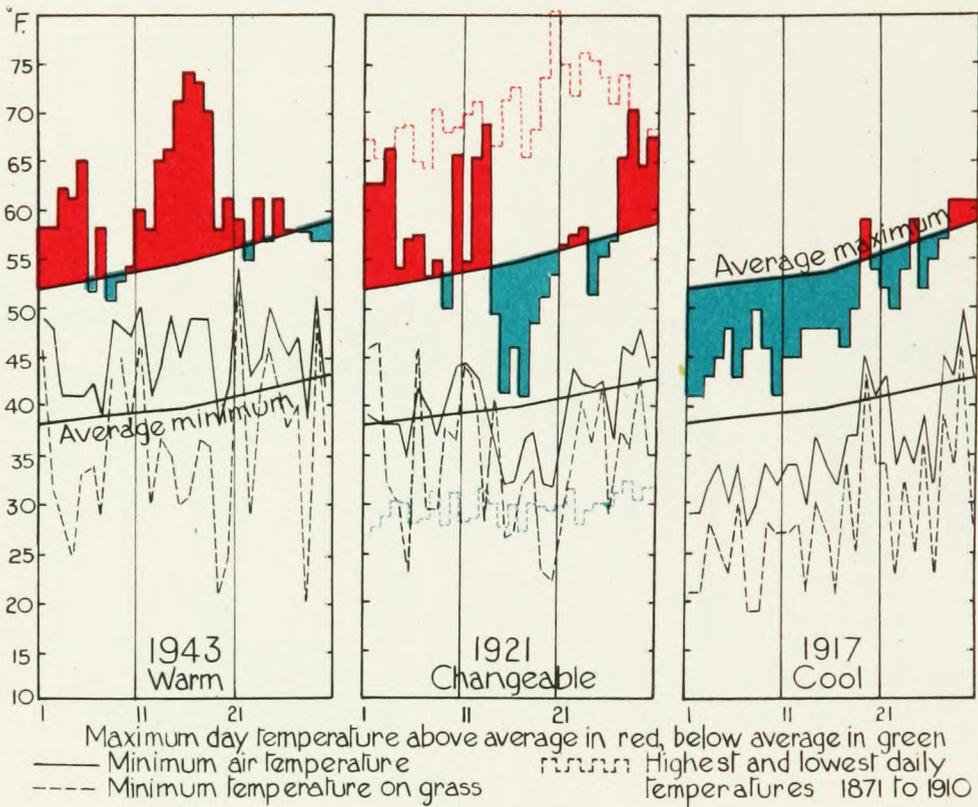


KEW OBSERVATORY, MARCH
 Outstanding months since 1900

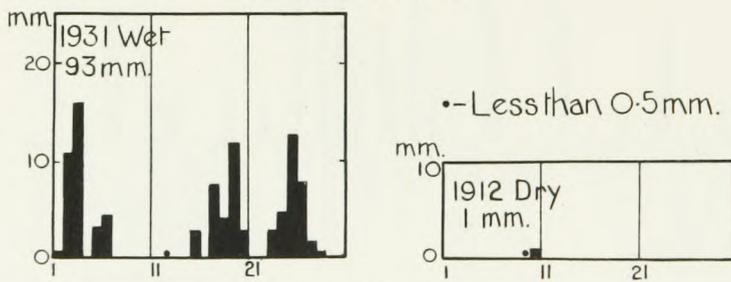


LONDON, MARCH, 1841 TO 1949
Mean temperature, rainfall and sunshine compared with the average

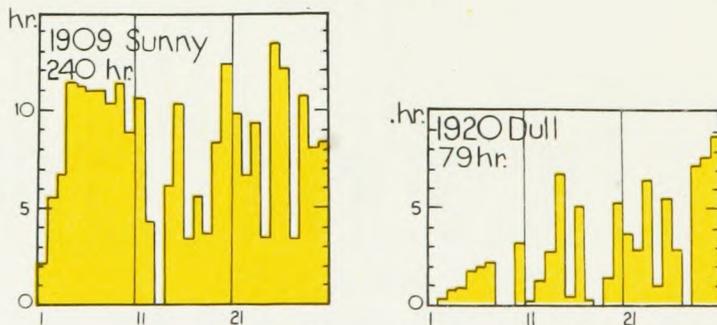
TEMPERATURE



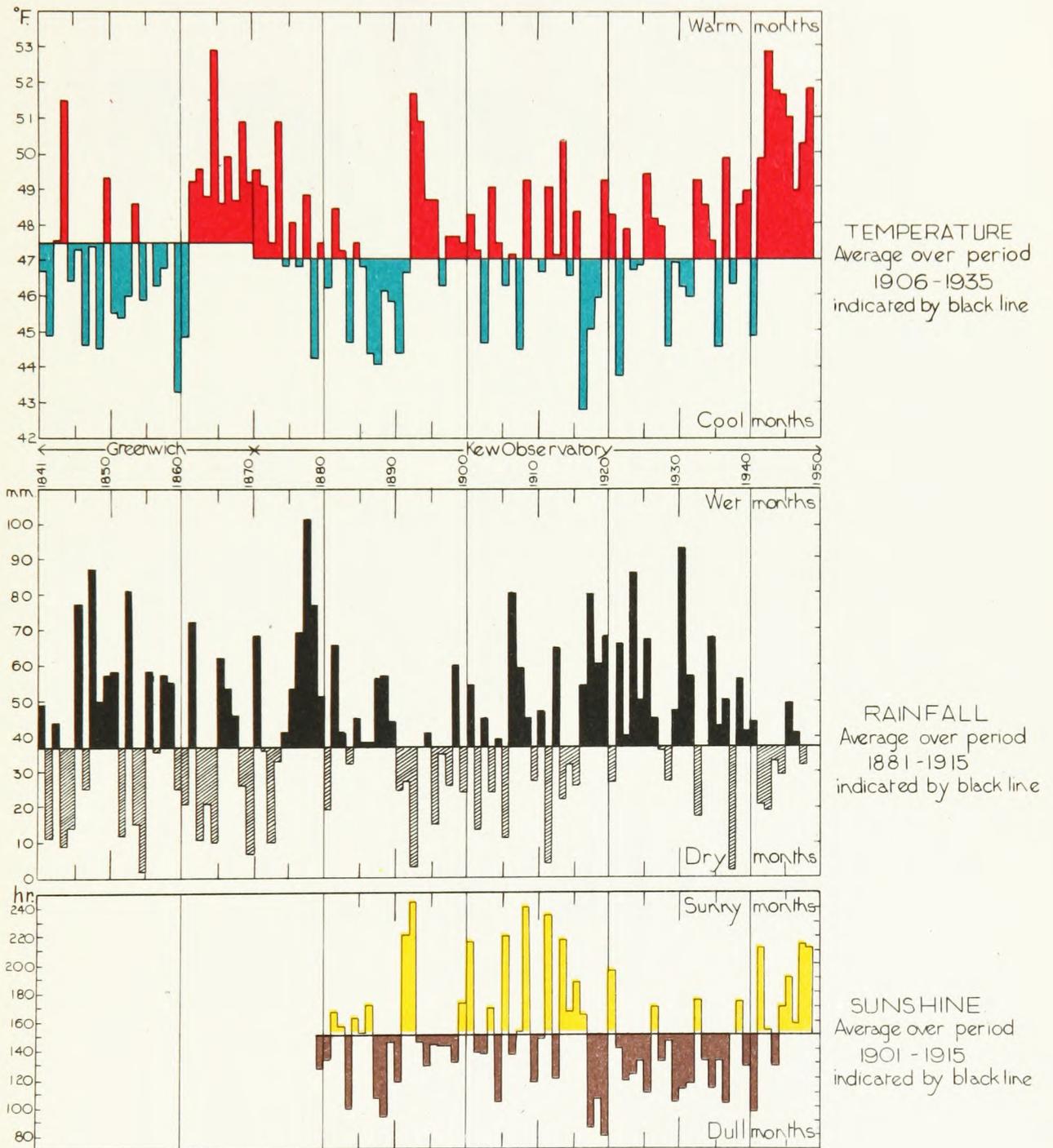
RAINFALL



SUNSHINE

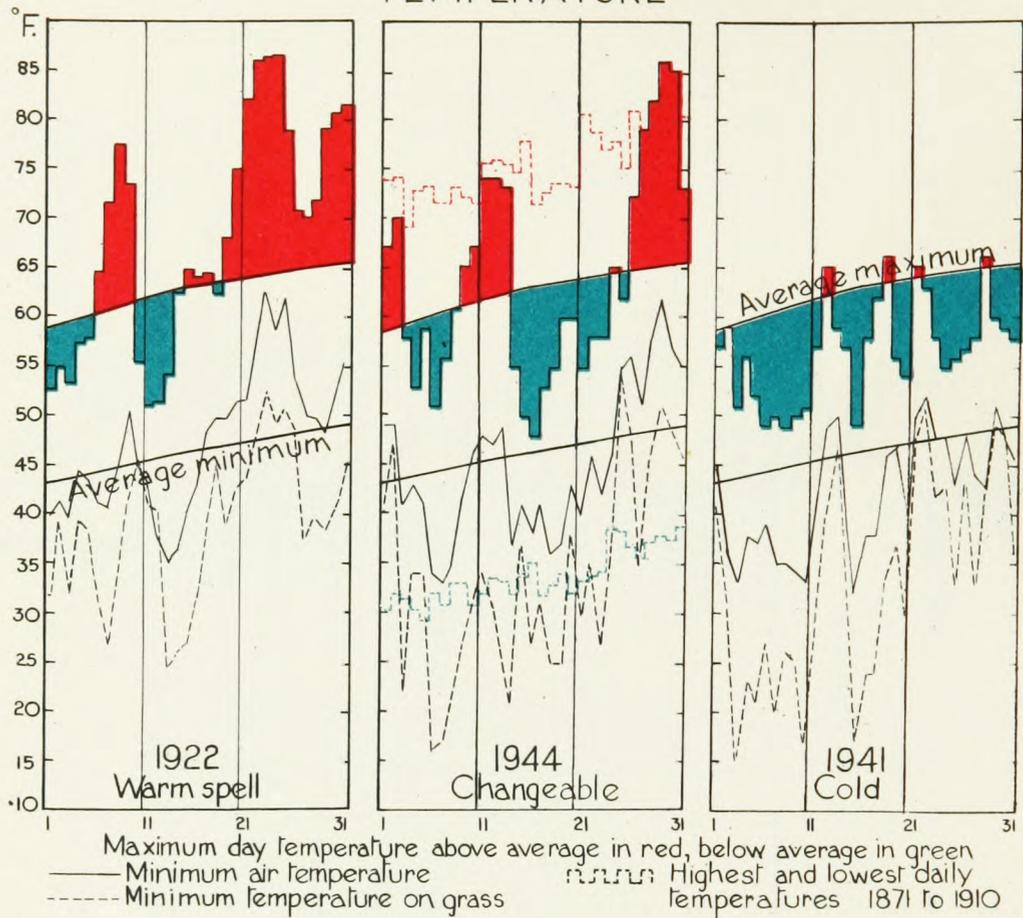


KEW OBSERVATORY, APRIL
 Outstanding months since 1900

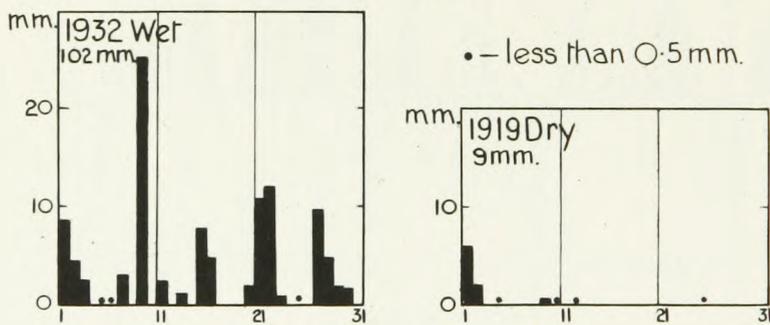


LONDON, APRIL, 1841 TO 1949
Mean temperature, rainfall and sunshine compared with the average

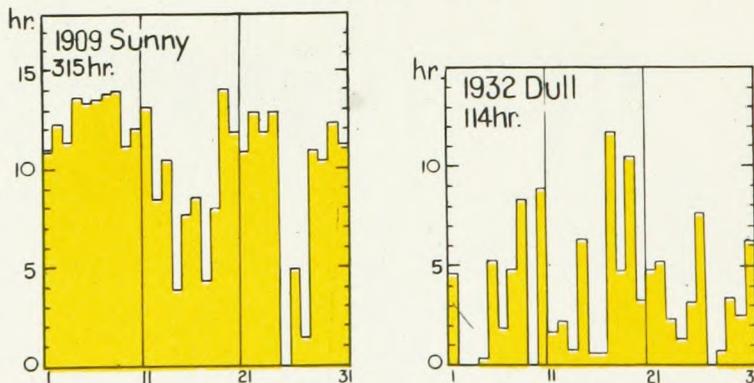
TEMPERATURE



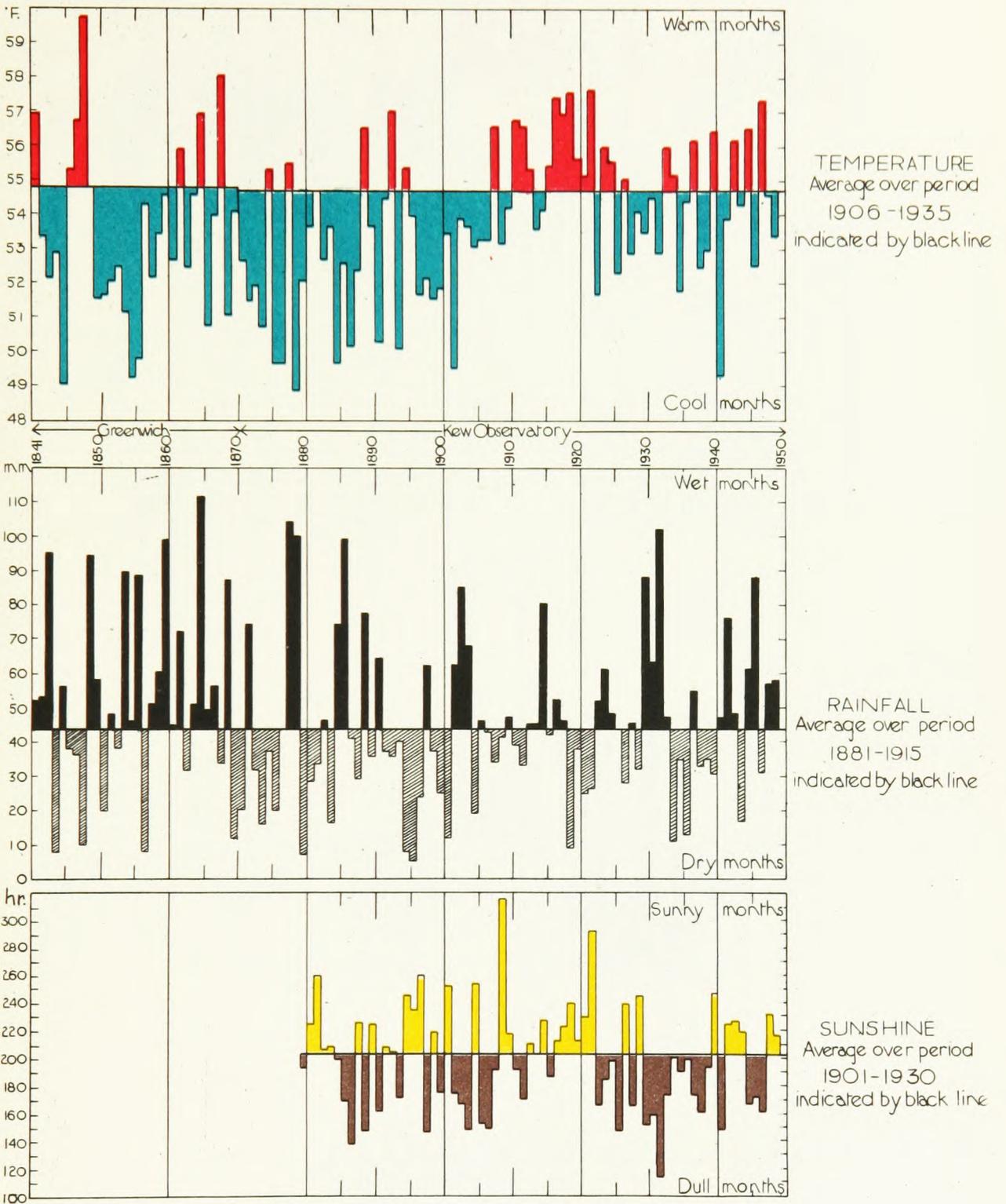
RAINFALL



SUNSHINE

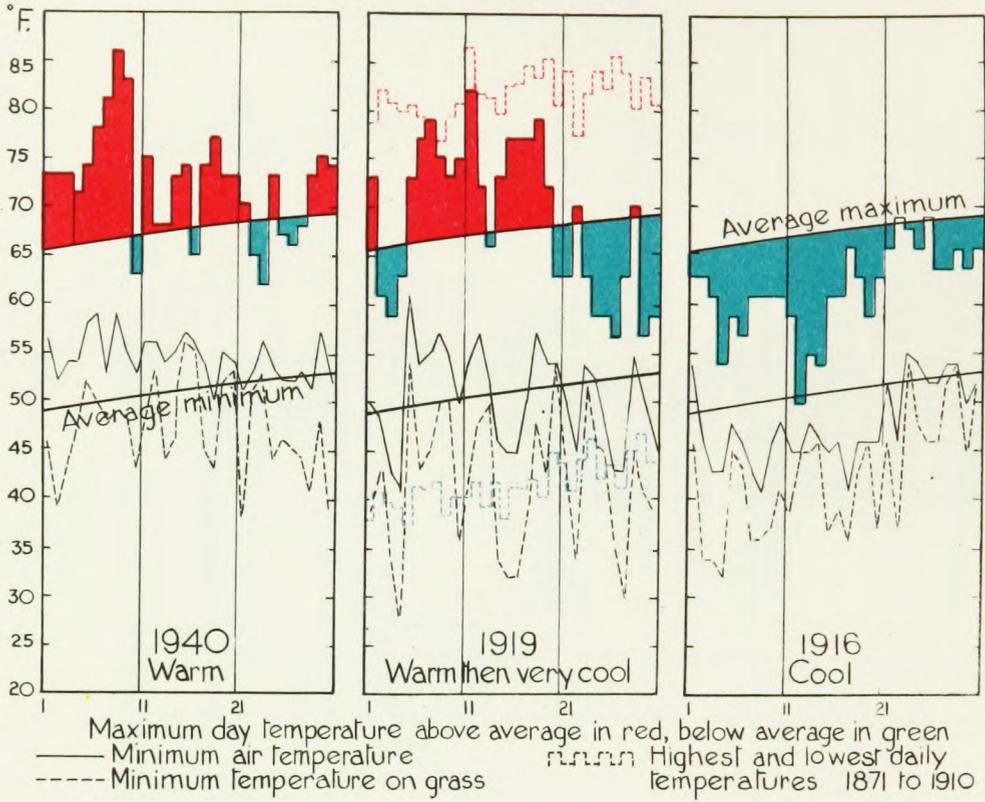


KEW OBSERVATORY, MAY
 Outstanding months since 1900

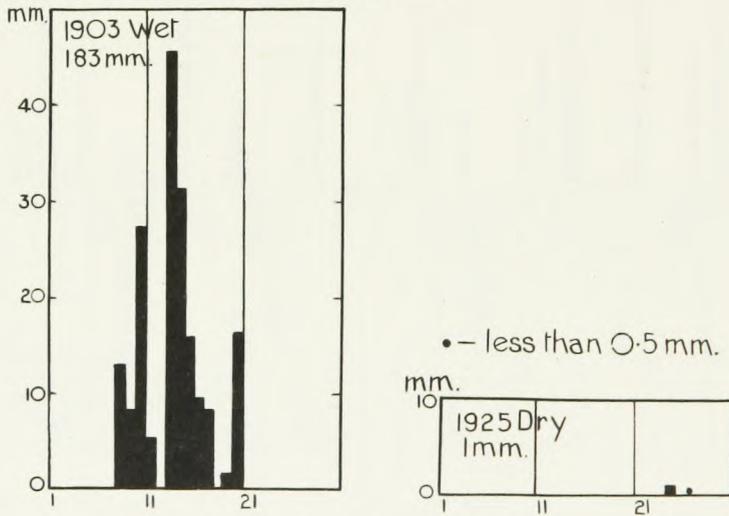


LONDON, MAY, 1841 TO 1949
Mean temperature, rainfall and sunshine compared with the average

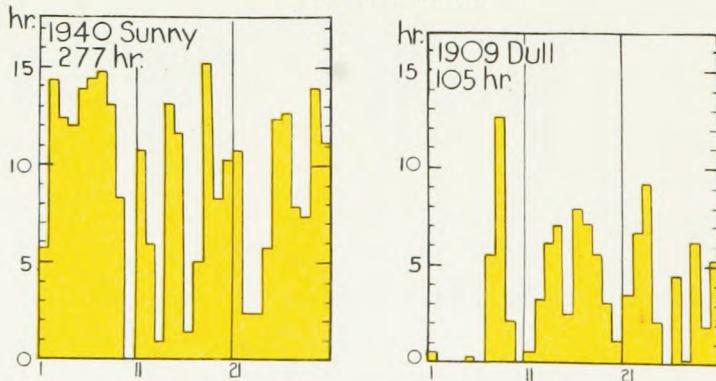
TEMPERATURE



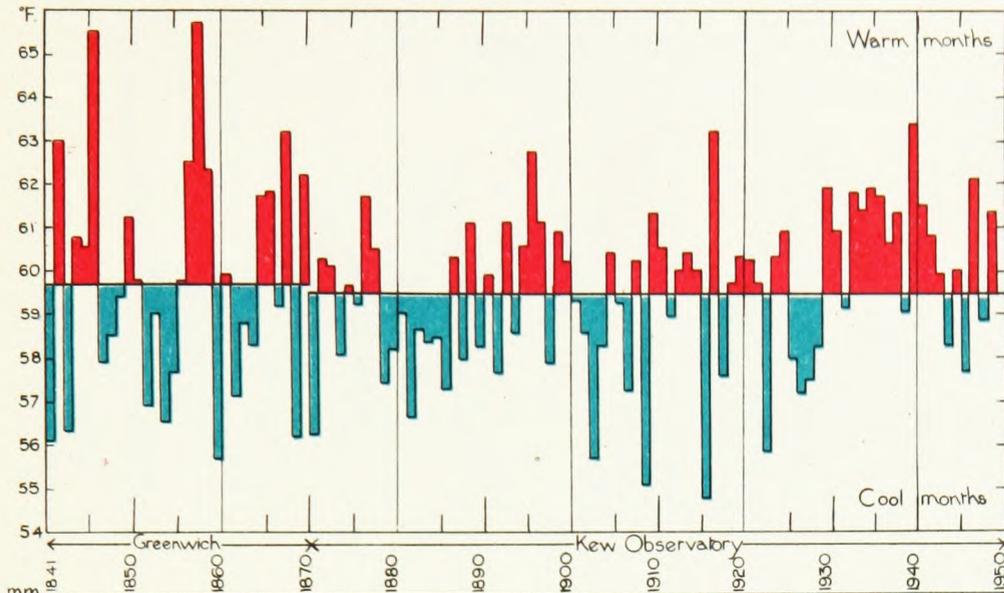
RAINFALL



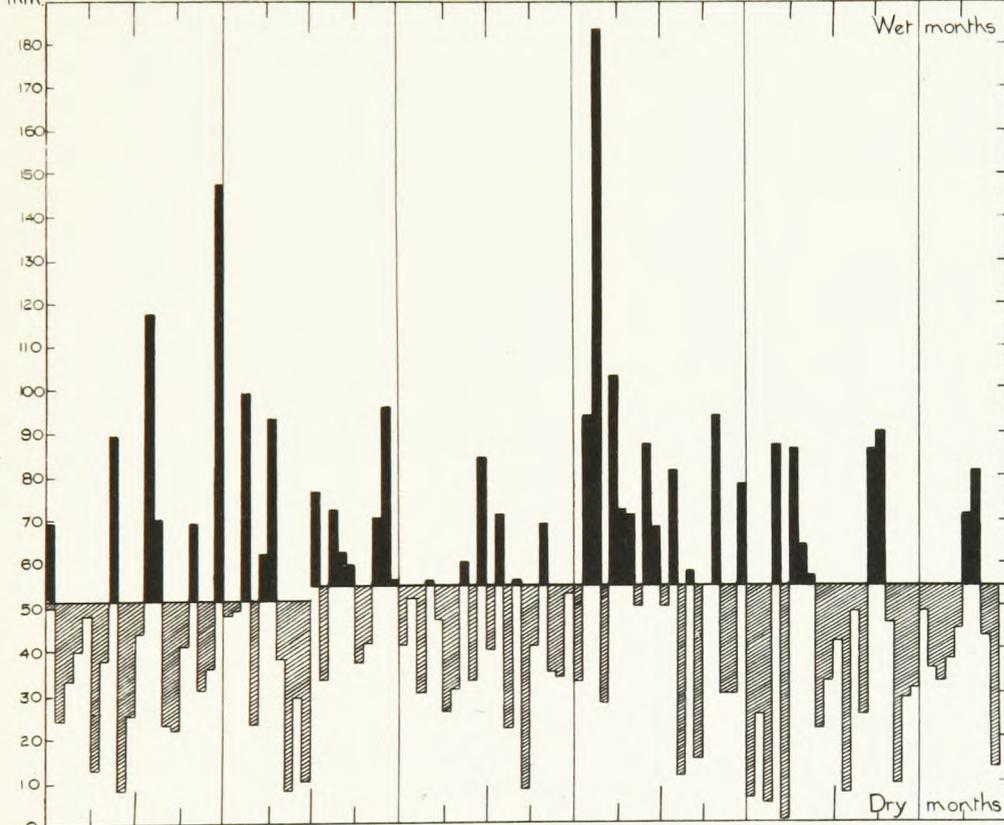
SUNSHINE



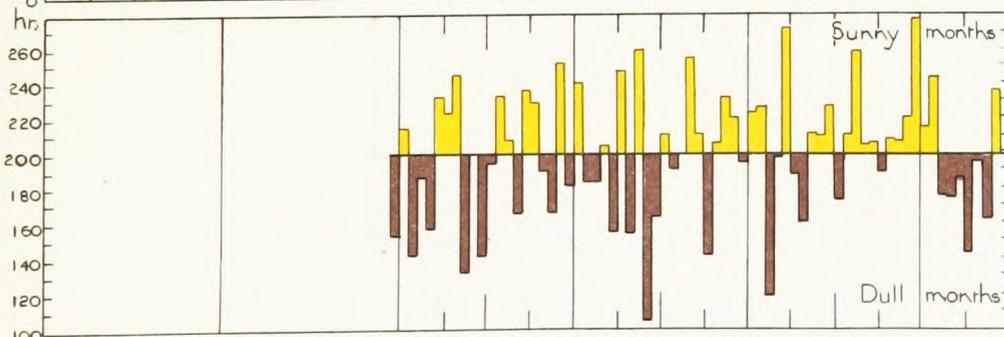
KEW OBSERVATORY, JUNE
 Outstanding months since 1900



TEMPERATURE
Average over period
1906 -1935
indicated by black line



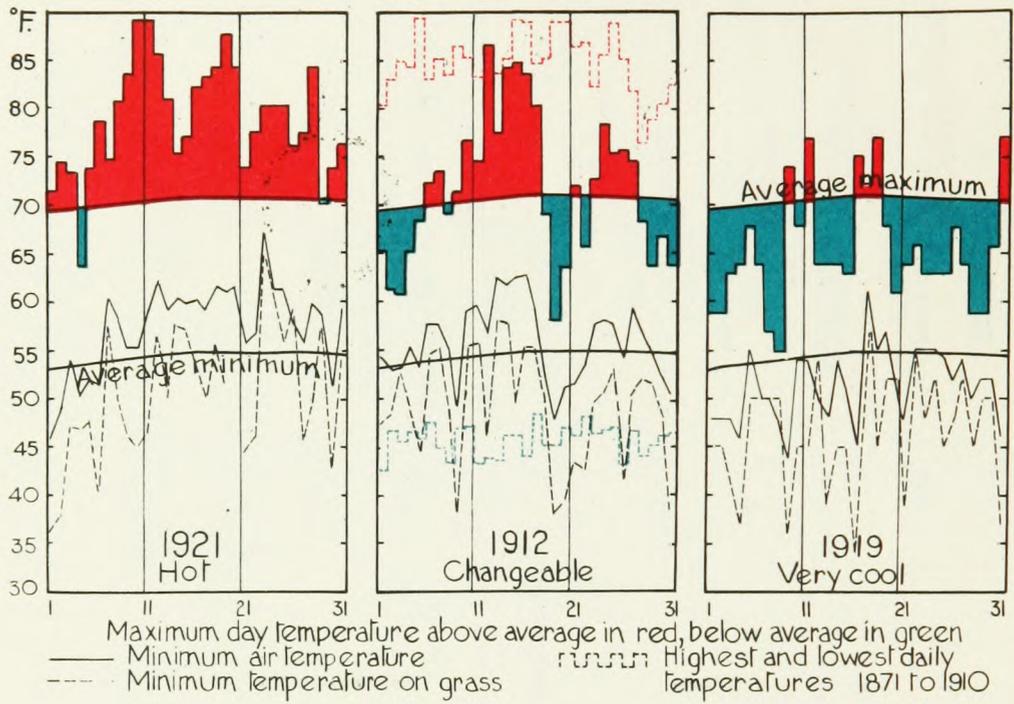
RAINFALL
Average over period,
1881-1915
indicated by black line



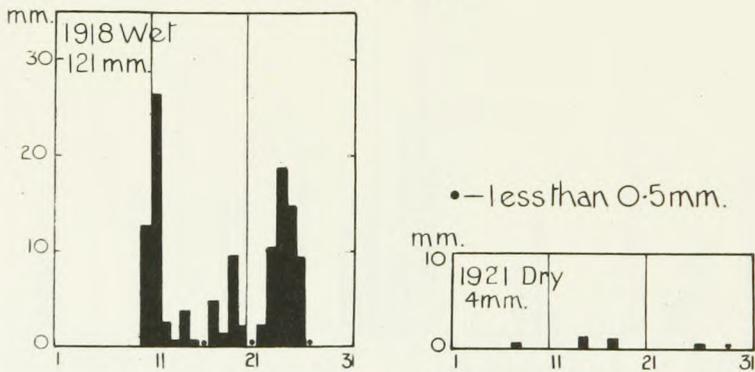
SUNSHINE
Average over period
1901 -1930
indicated by black line

LONDON, JUNE, 1841 TO 1949
Mean temperature, rainfall and sunshine compared with the average

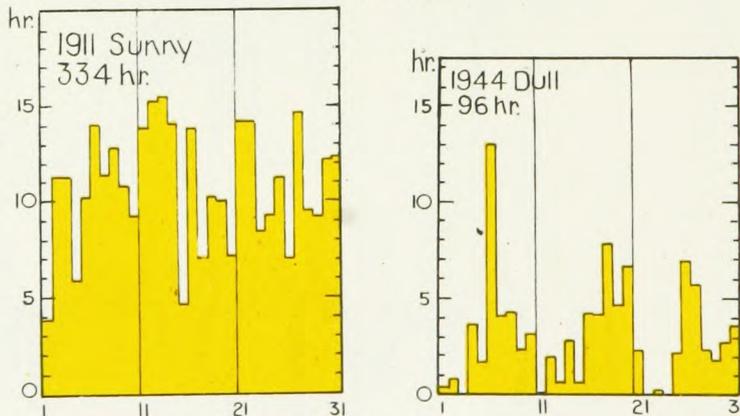
TEMPERATURE



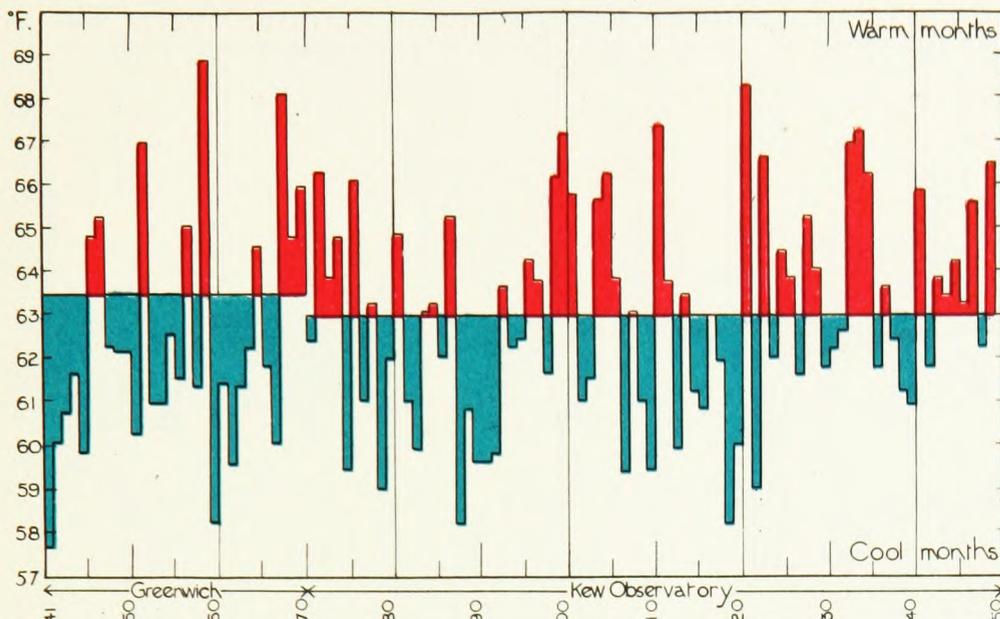
RAINFALL



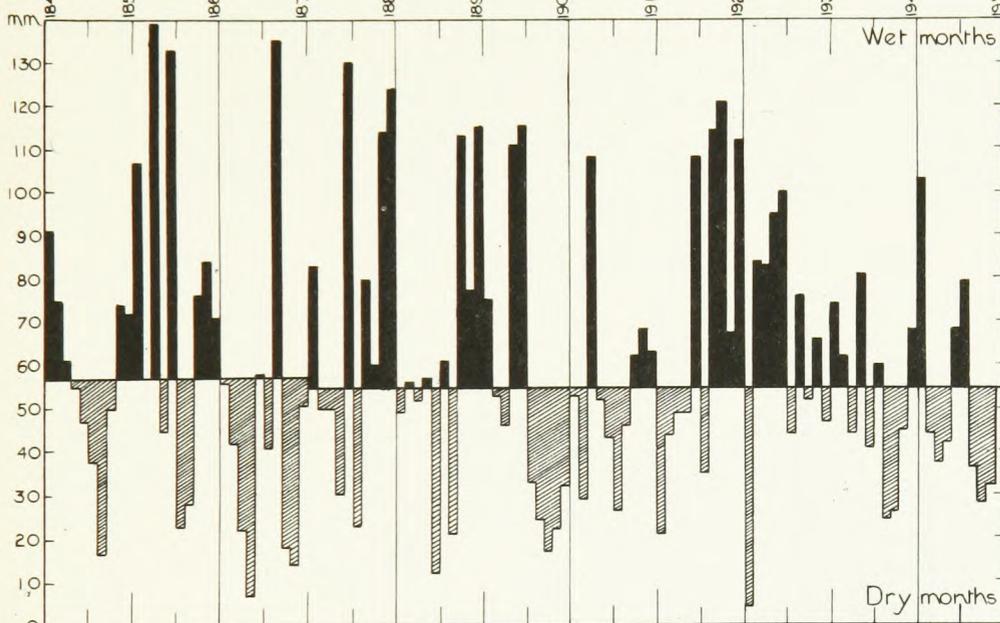
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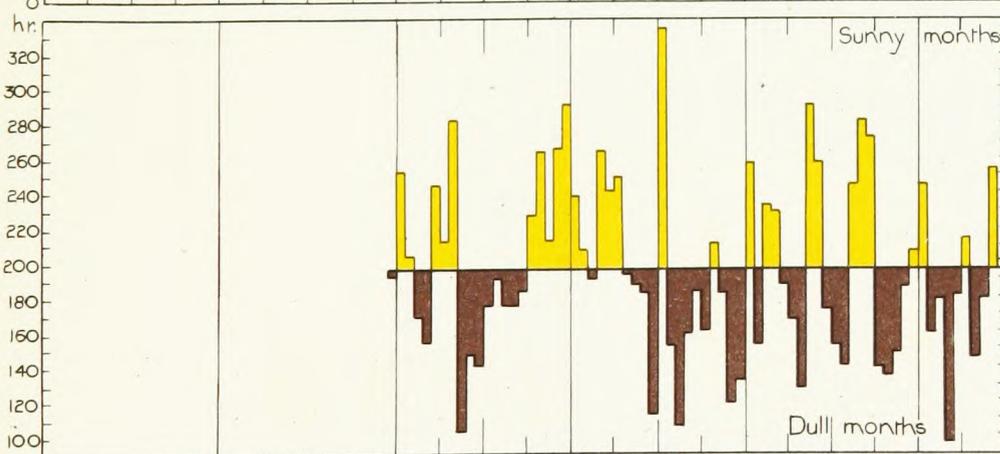
KEW OBSERVATORY, JULY
 Outstanding months since 1900



TEMPERATURE
Average over period
1906-1935
indicated by black line



RAINFALL
Average over period
1881-1915
indicated by black line

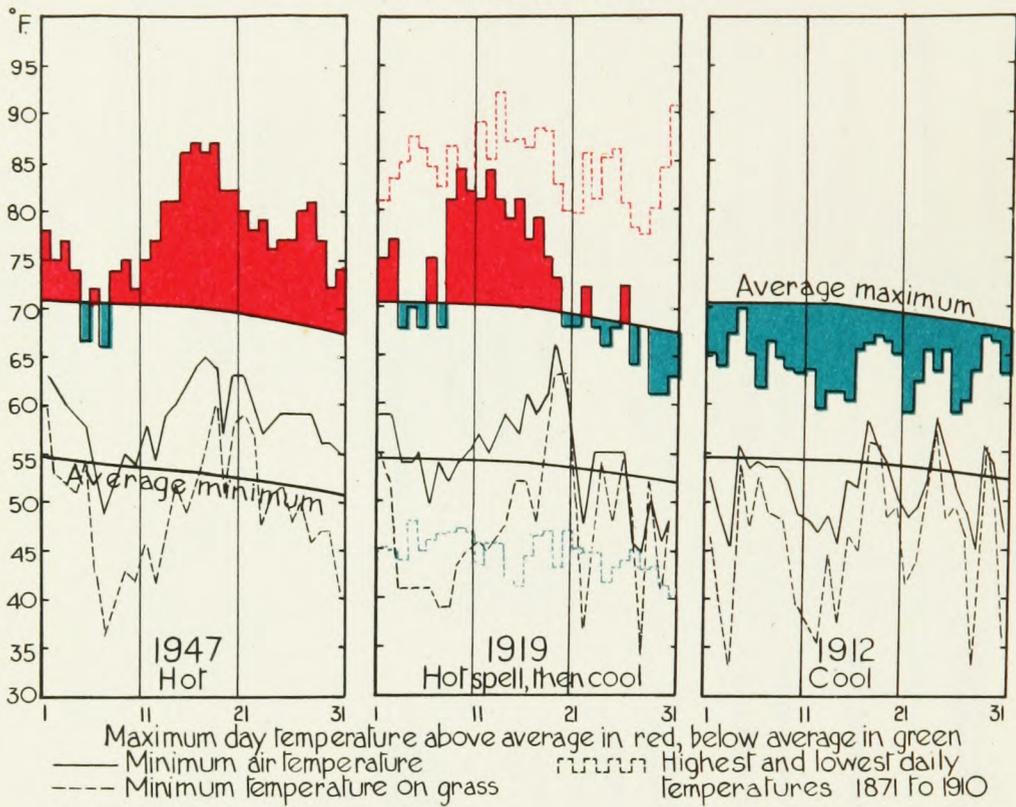


SUNSHINE
Average over period
1901-1930
indicated by black line

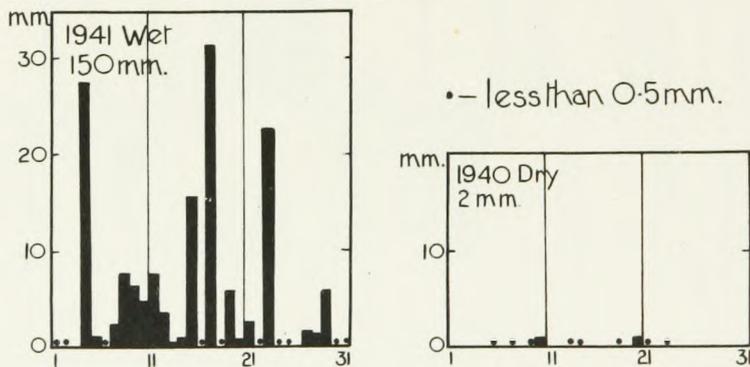
LONDON, JULY, 1841 TO 1949

Mean temperature, rainfall and sunshine compared with the average

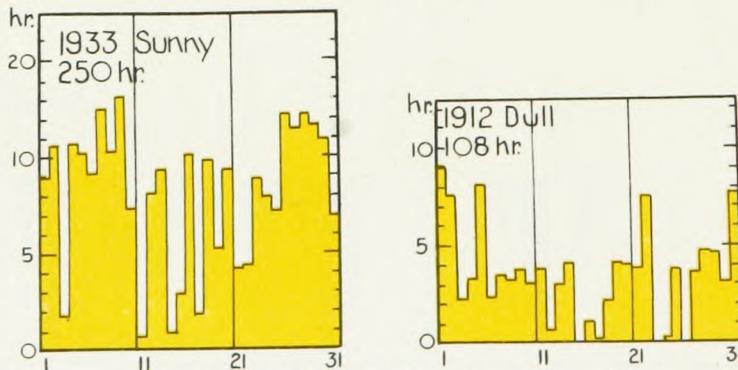
TEMPERATURE



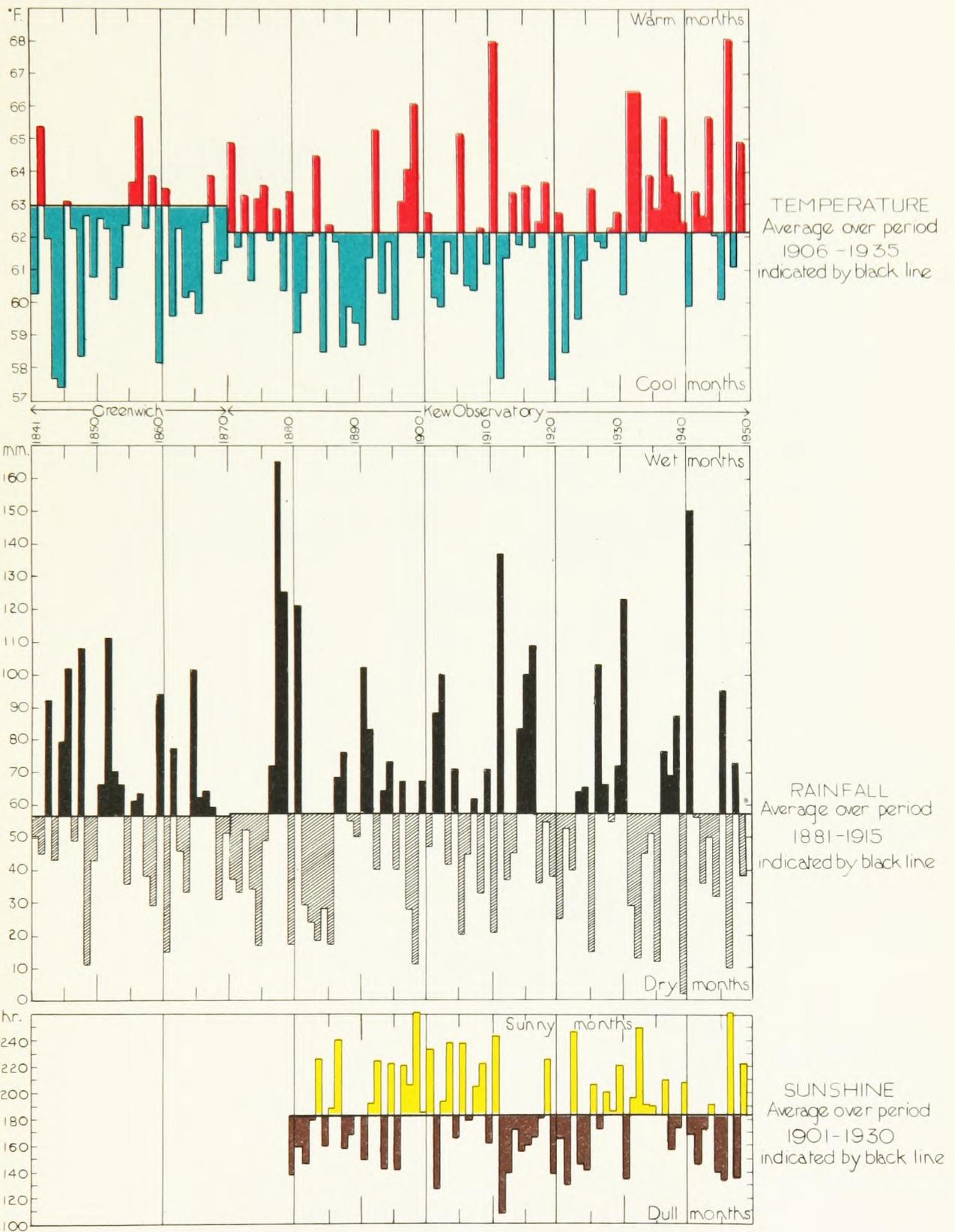
RAINFALL



SUNSHINE

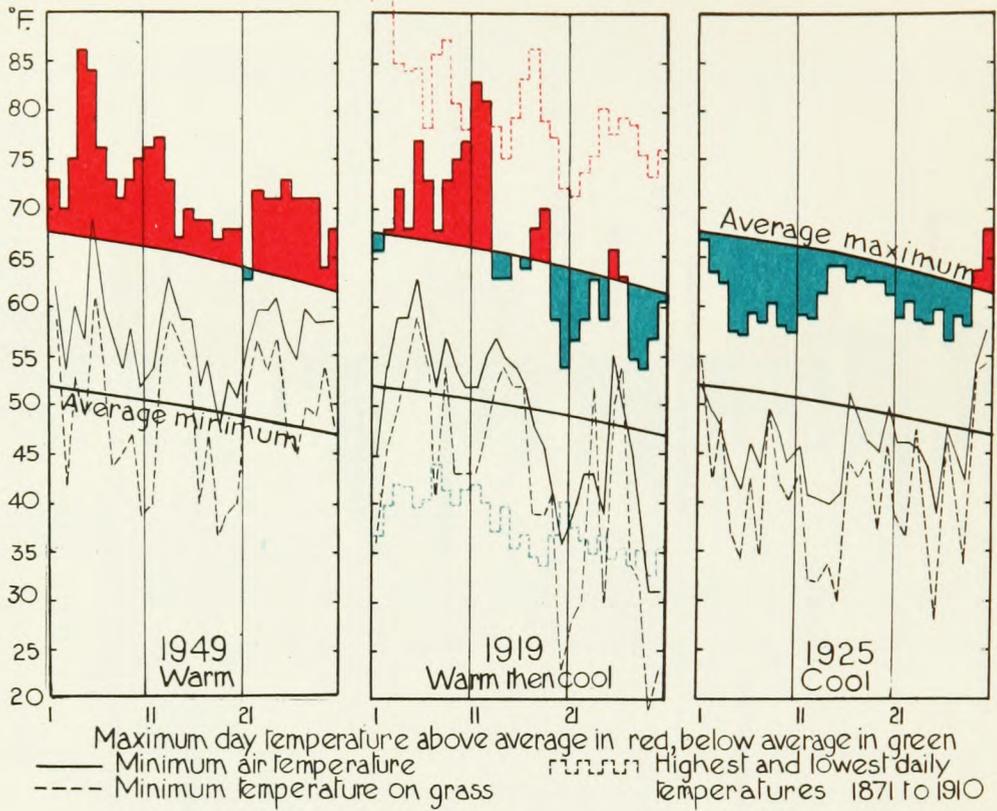


KEW OBSERVATORY, AUGUST
 Outstanding months since 1900

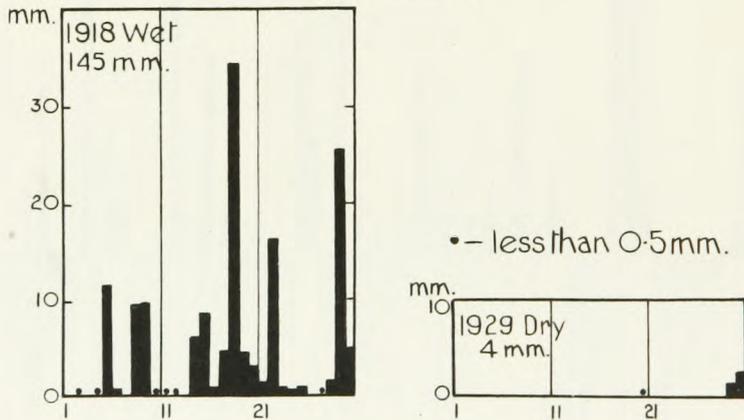


LONDON, AUGUST, 1841 TO 1949
Mean temperature, rainfall and sunshine compared with the average

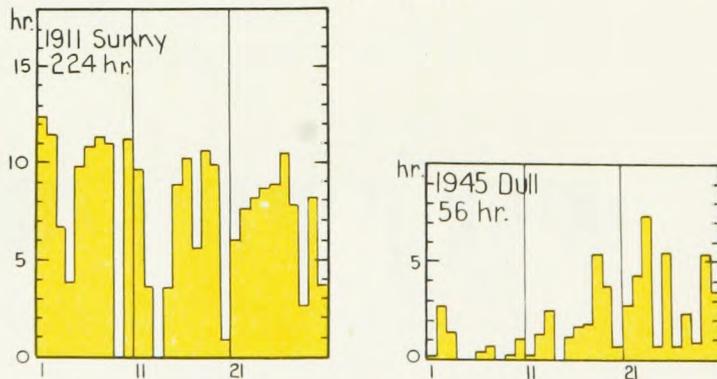
TEMPERATURE



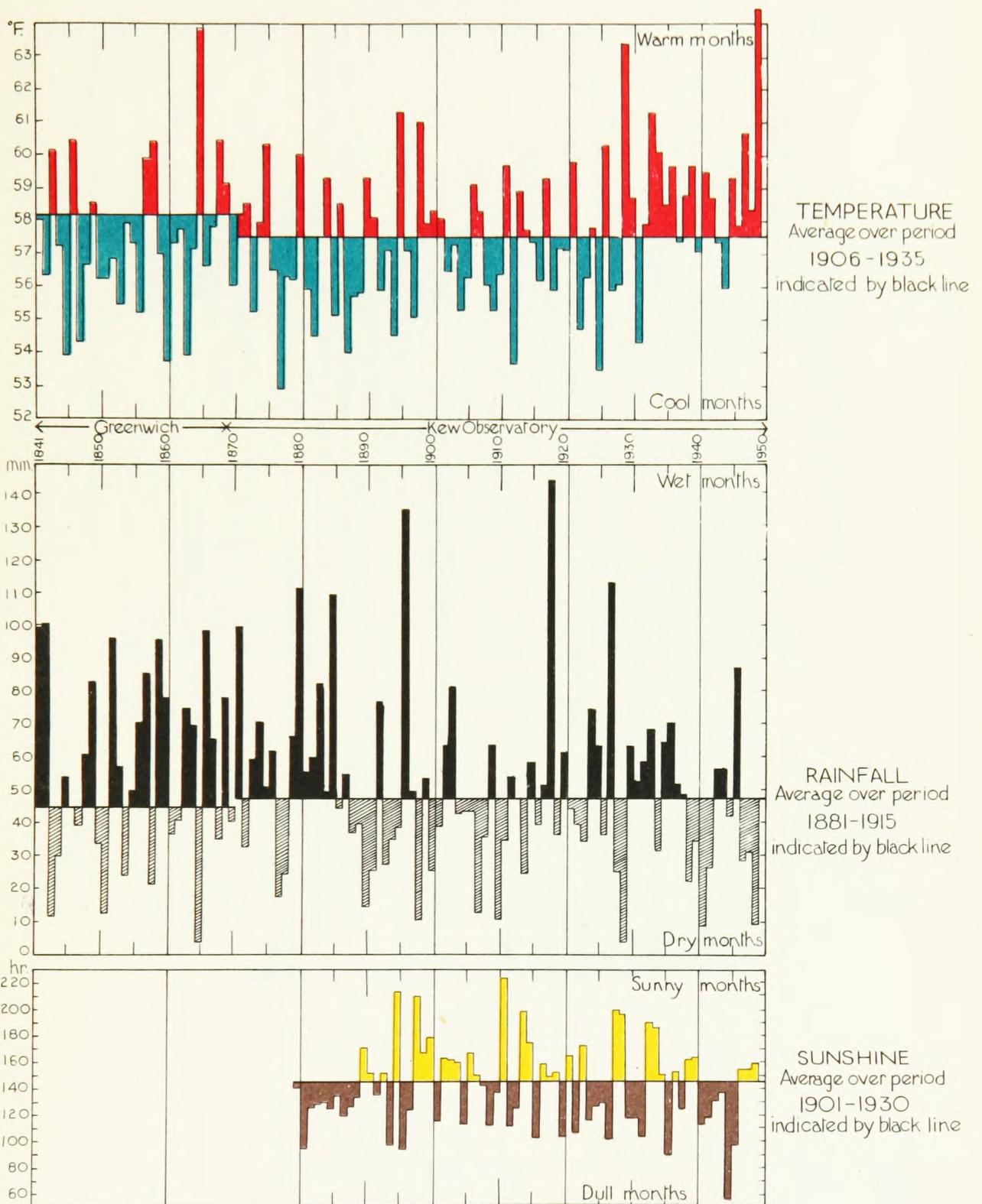
RAINFALL



SUNSHINE

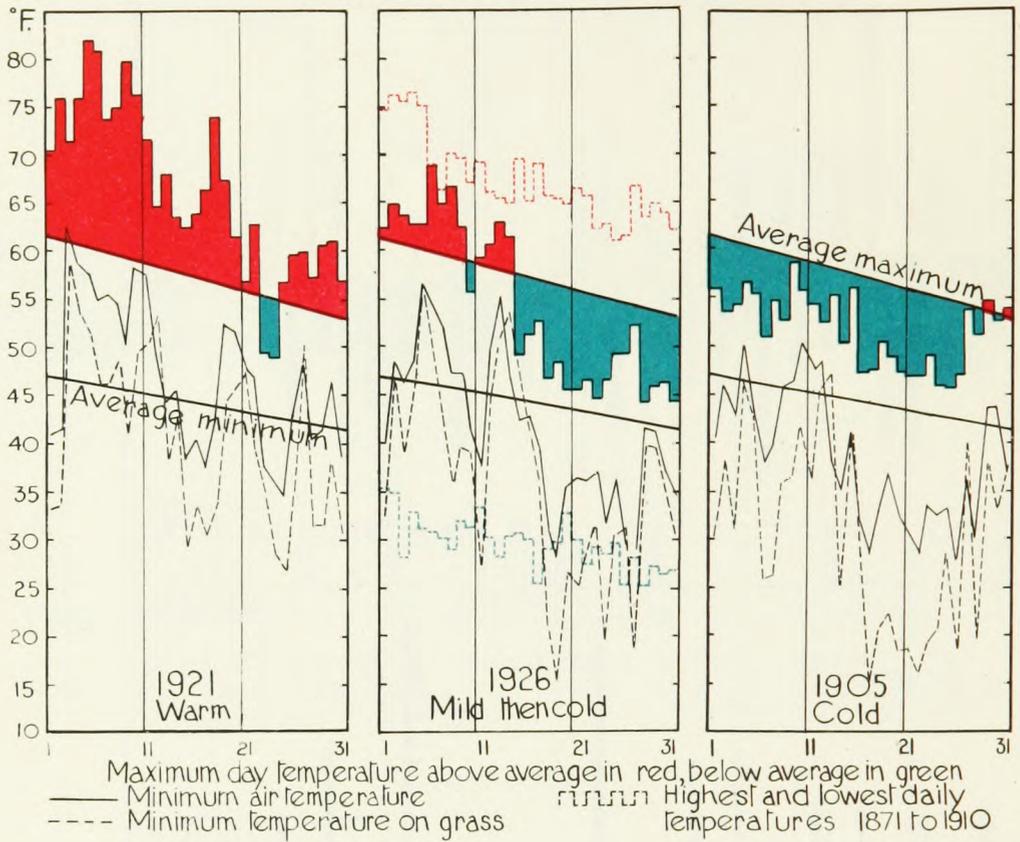


KEW OBSERVATORY, SEPTEMBER
 Outstanding months since 1900

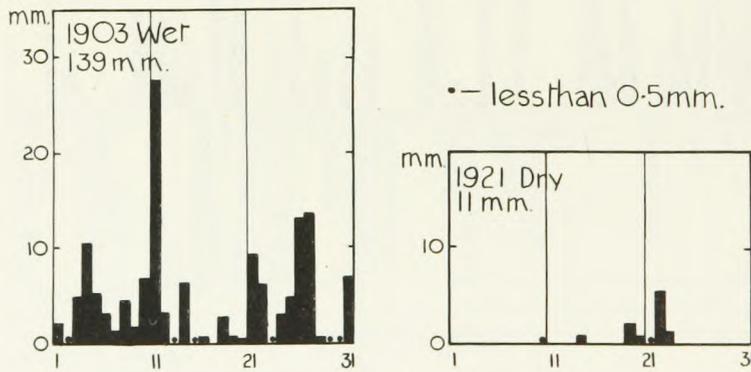


LONDON, SEPTEMBER, 1841 TO 1949
Mean temperature, rainfall and sunshine compared with the average

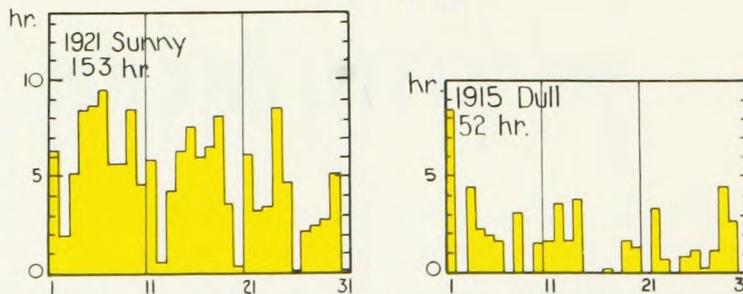
TEMPERATURE



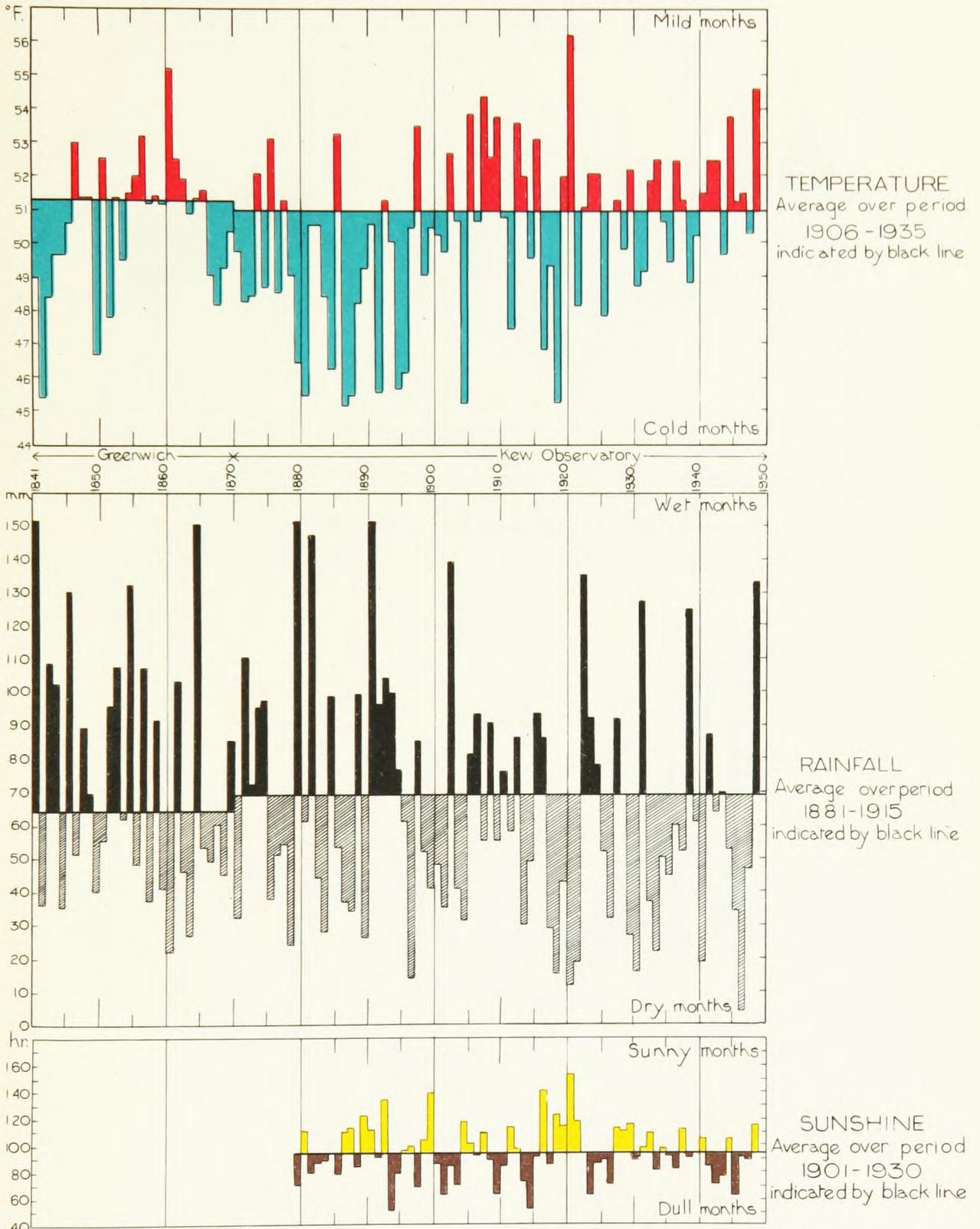
RAINFALL



SUNSHINE

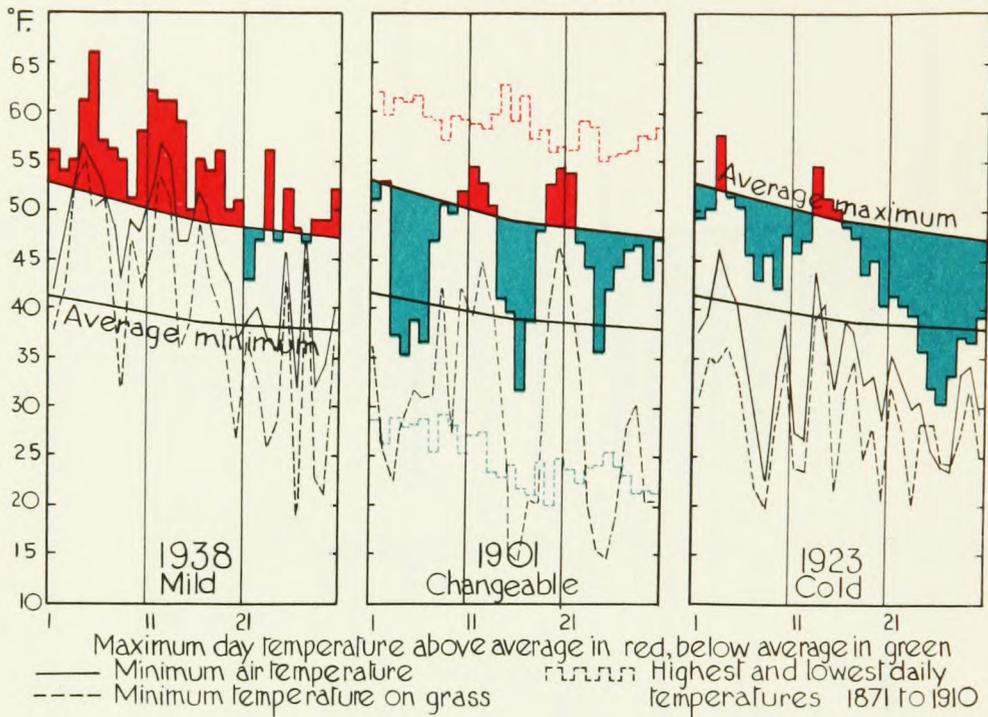


KEW OBSERVATORY, OCTOBER
 Outstanding months since 1900

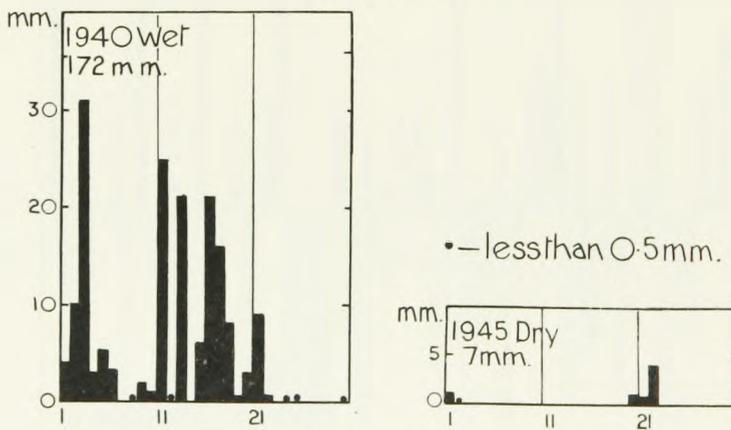


LONDON, OCTOBER, 1841 TO 1949
Mean temperature, rainfall and sunshine compared with the average

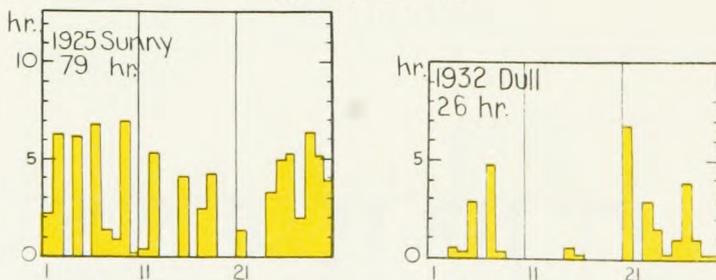
TEMPERATURE



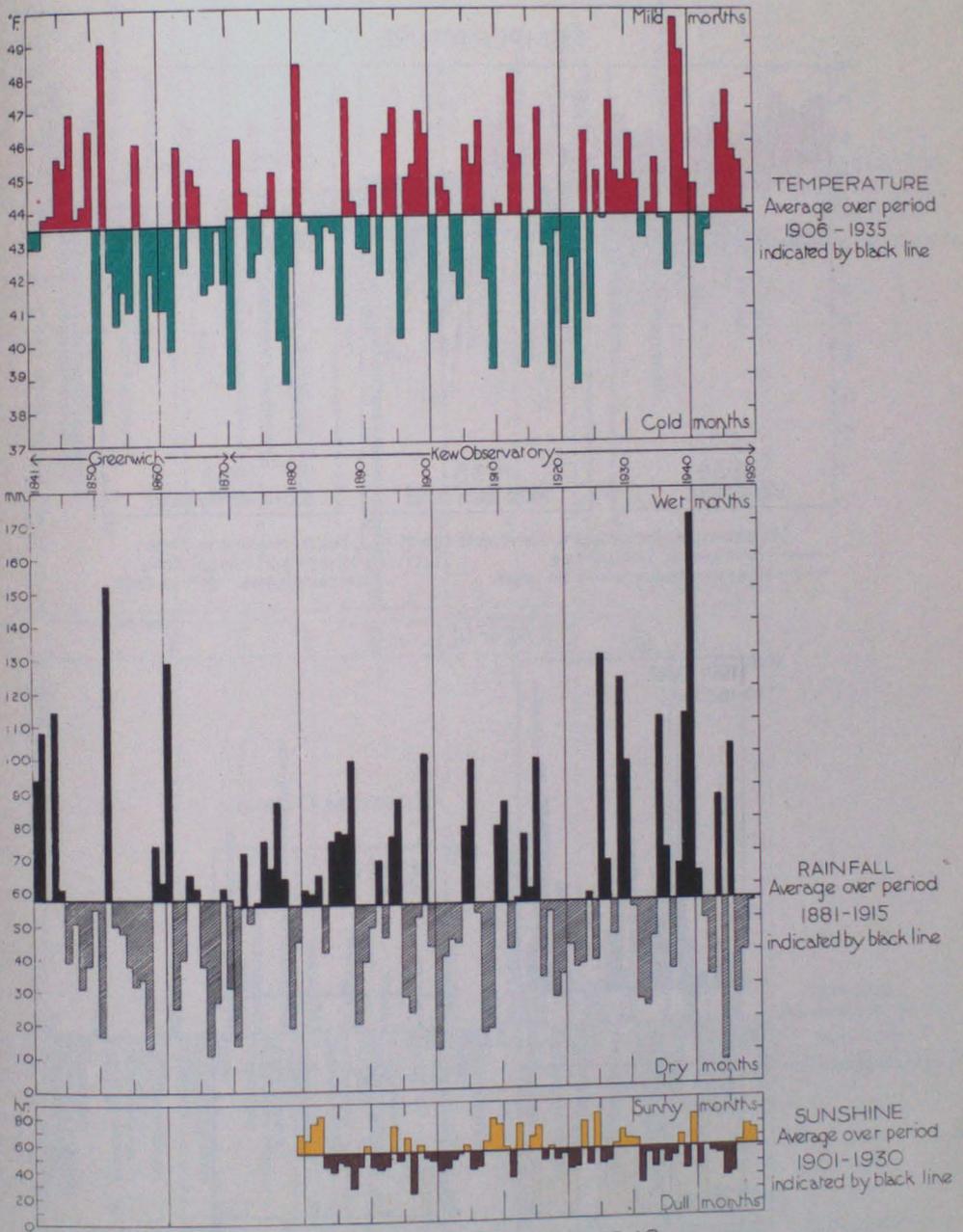
RAINFALL



SUNSHINE

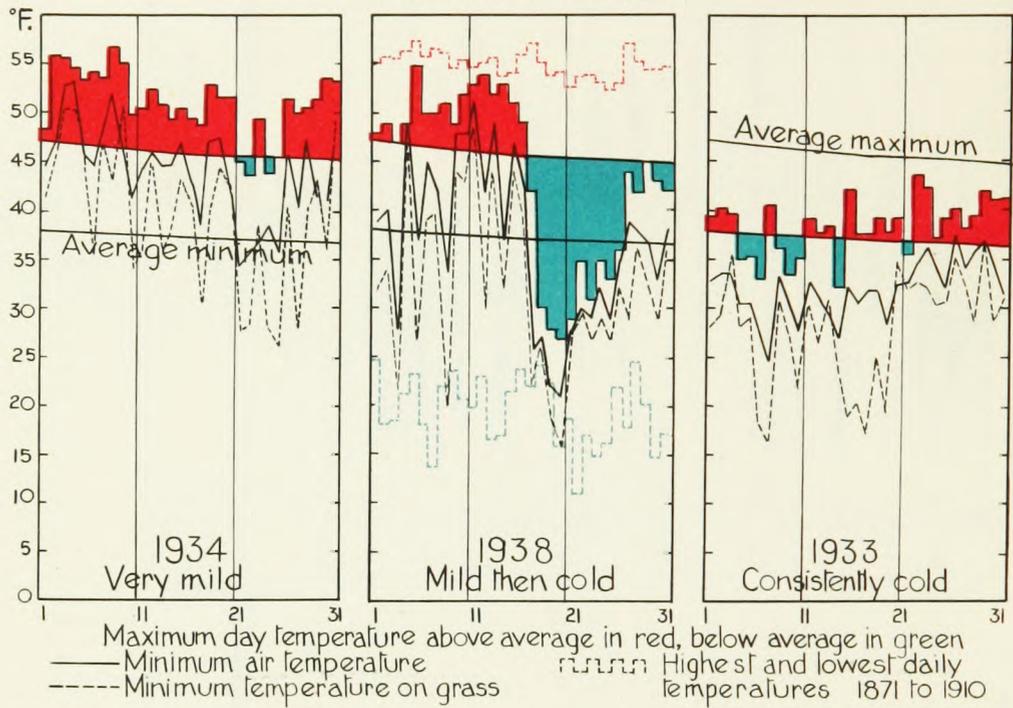


KEW OBSERVATORY, NOVEMBER
 Outstanding months since 1900

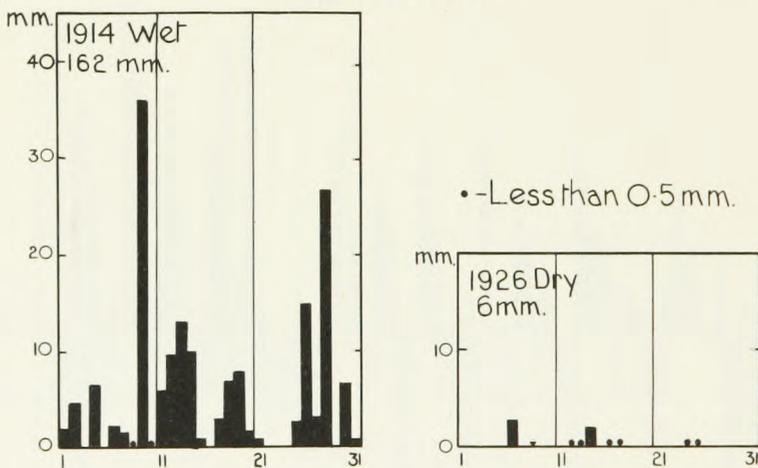


LONDON, NOVEMBER, 1841 TO 1949
Mean temperature, rainfall and sunshine compared with the average

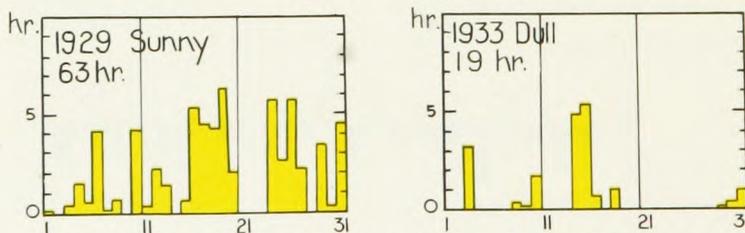
TEMPERATURE



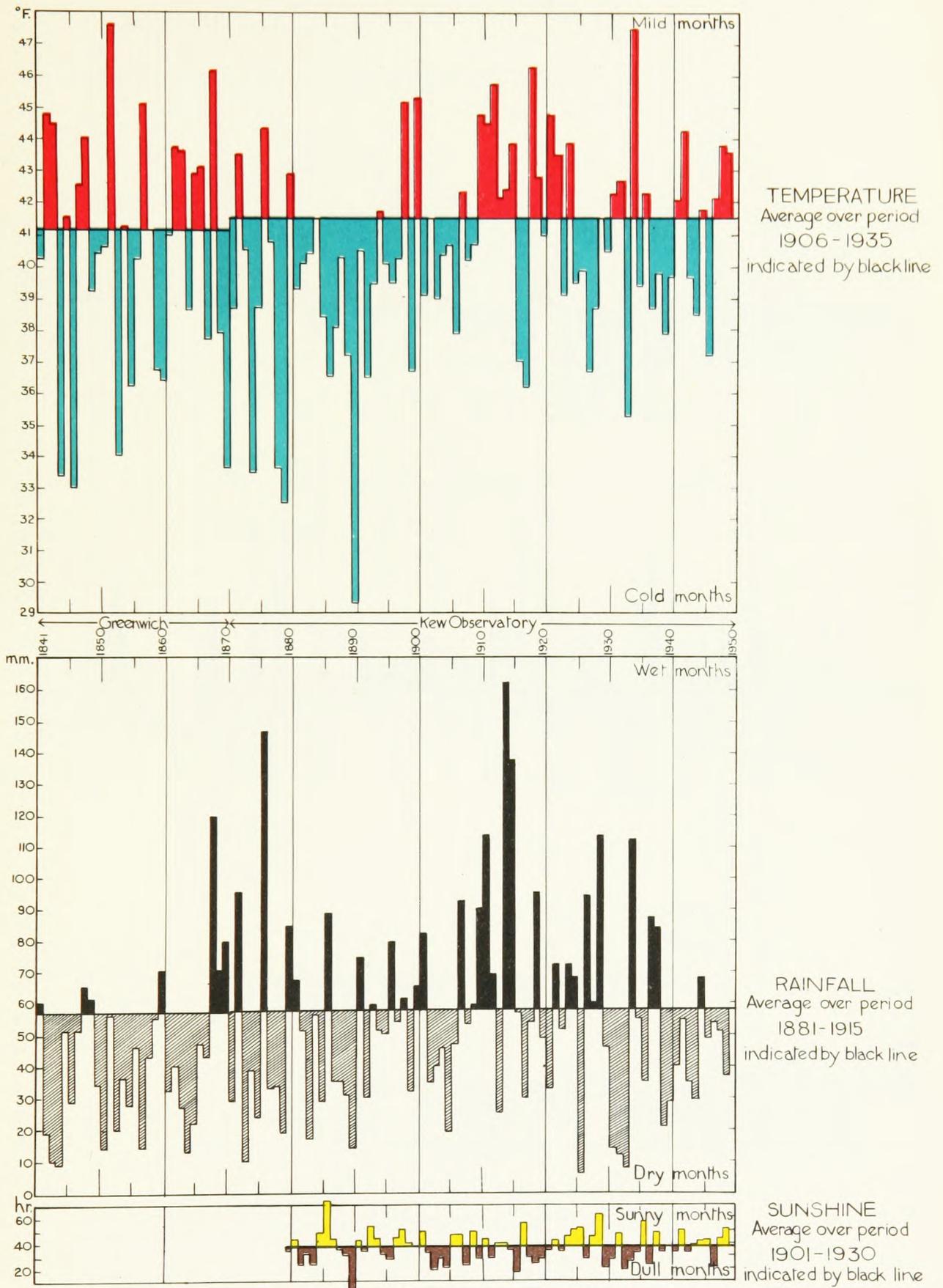
RAINFALL



SUNSHINE

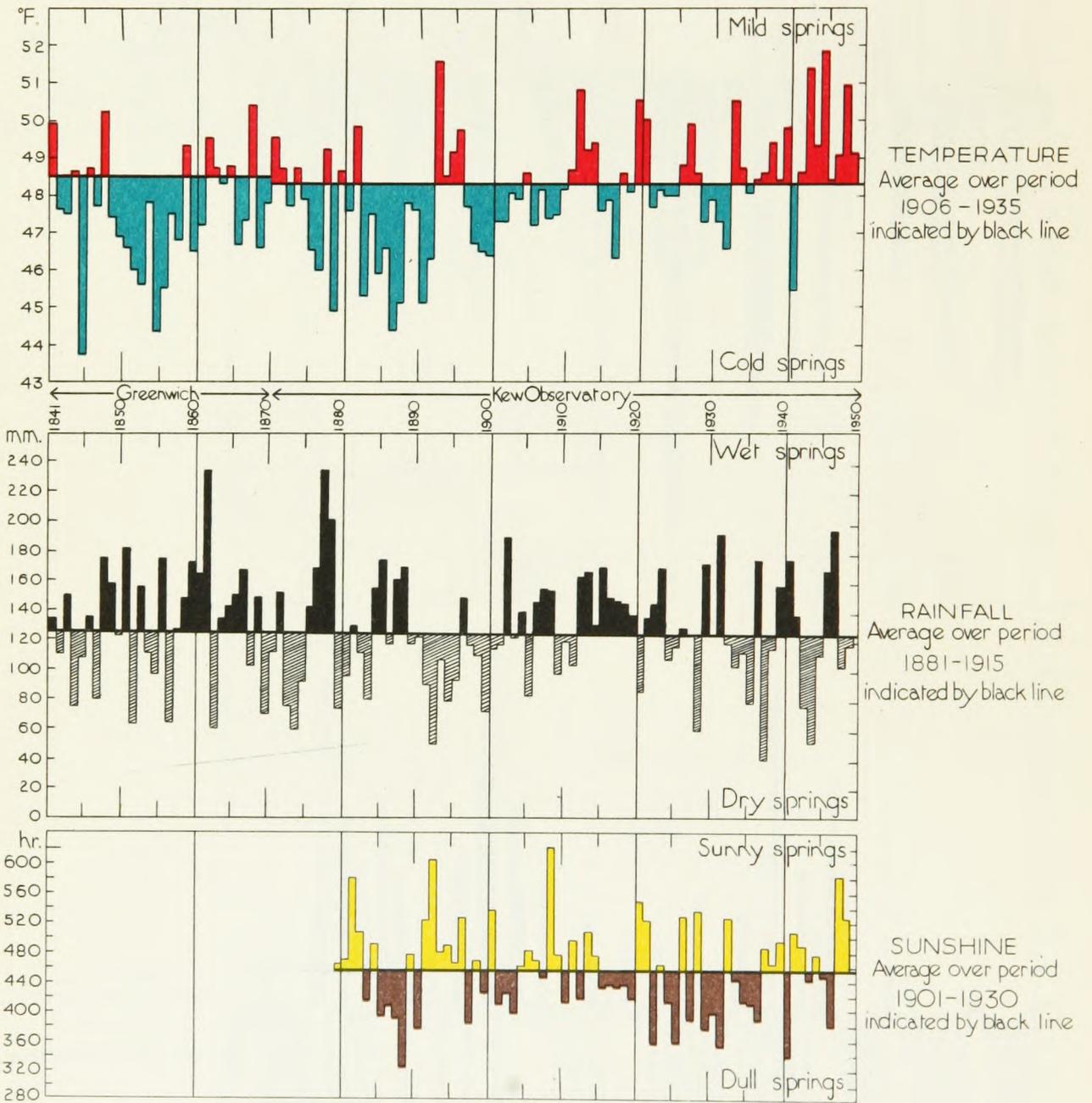


KEW OBSERVATORY, DECEMBER
 Outstanding months since 1900

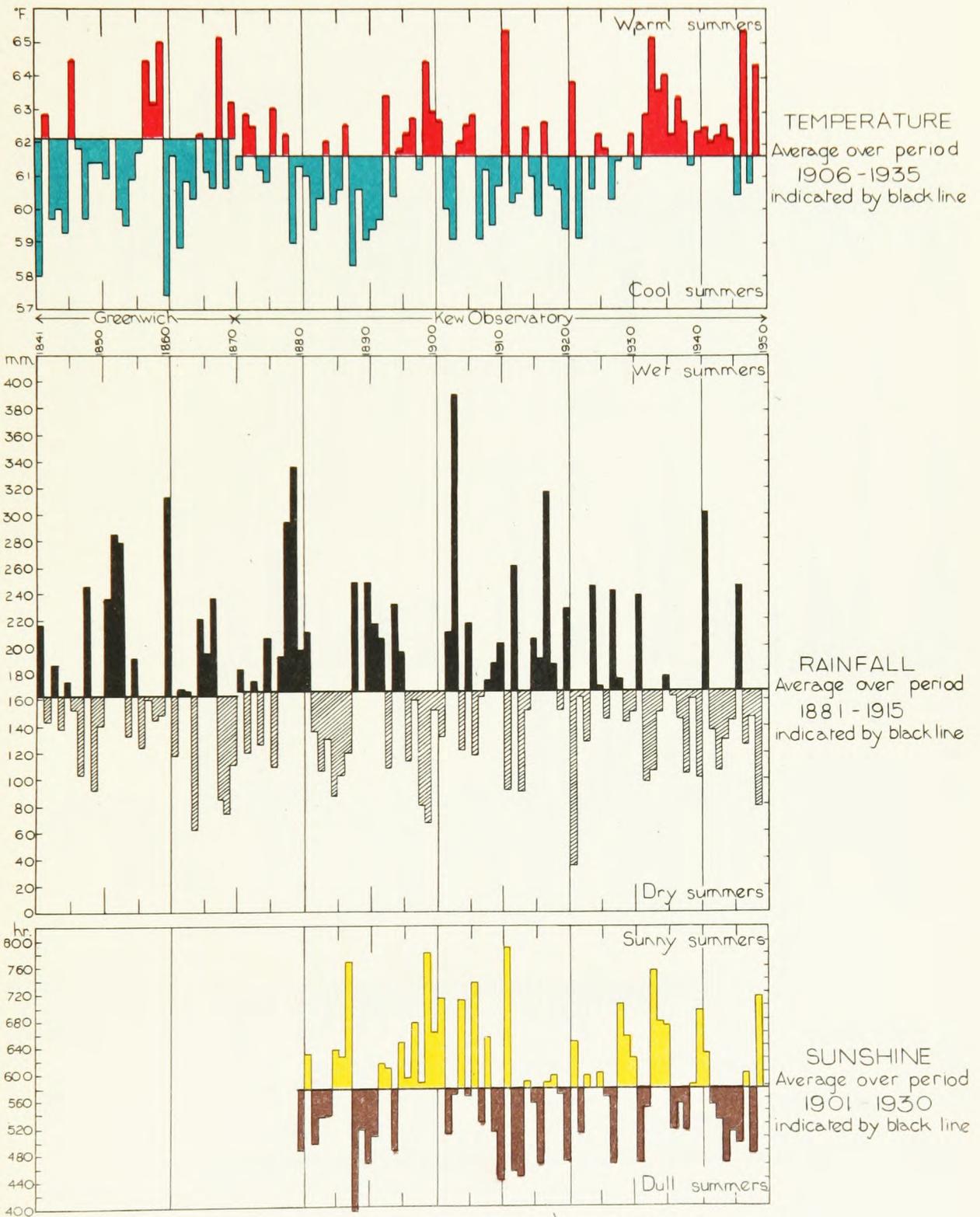


LONDON, DECEMBER, 1841 TO 1949

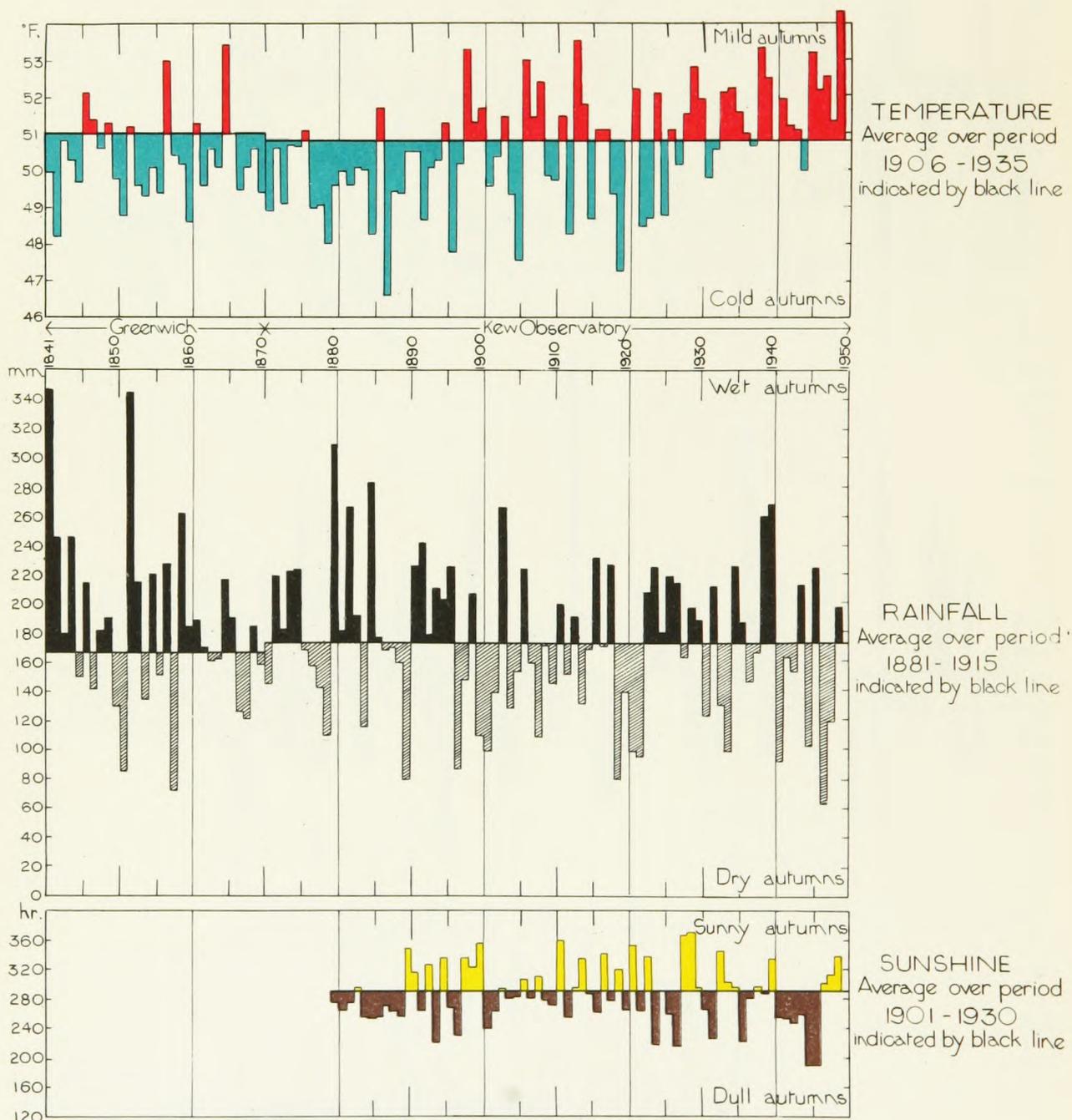
Mean temperature, rainfall and sunshine compared with the average



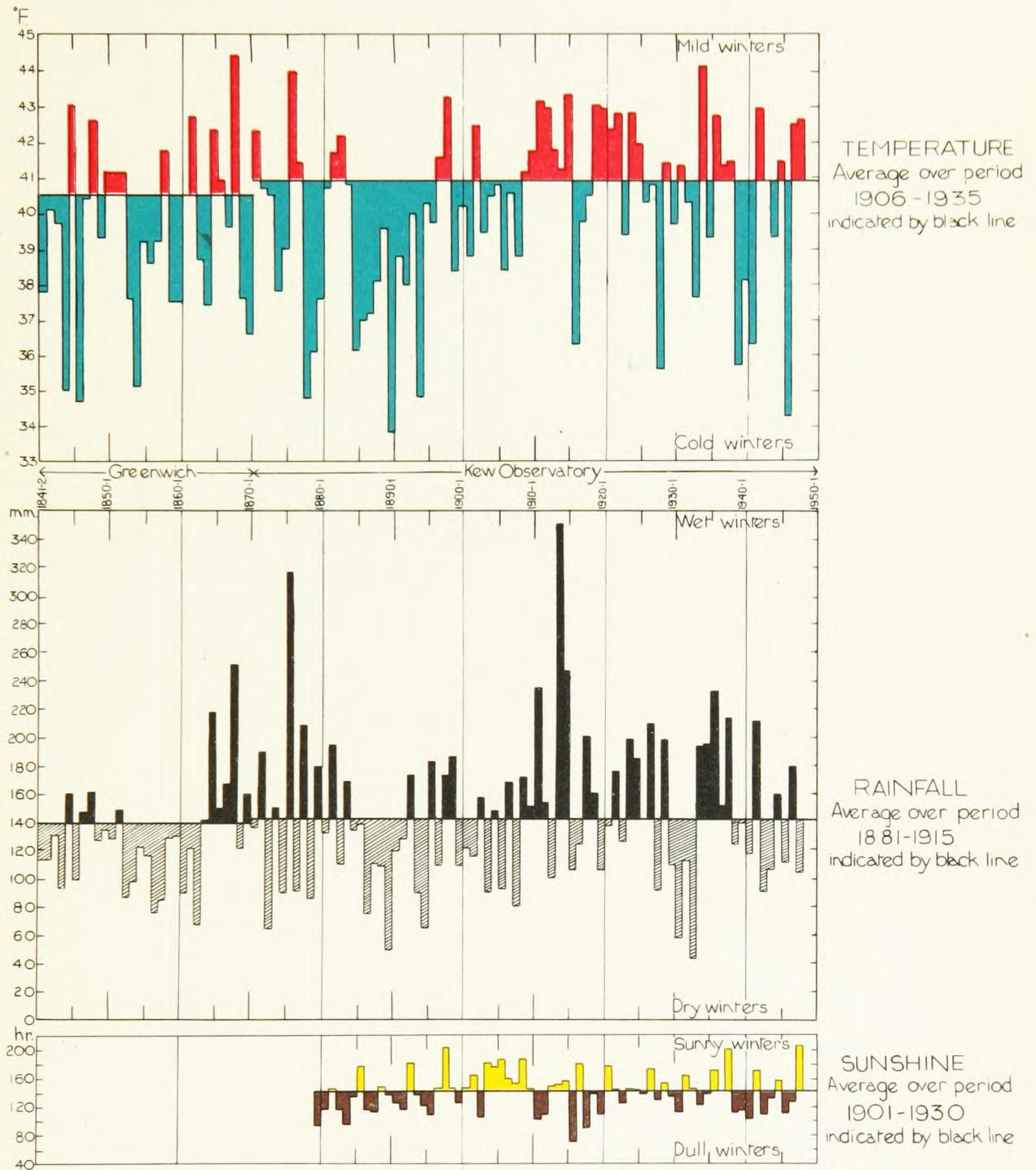
LONDON, SPRING (MARCH-MAY), 1841 TO 1949
Mean temperature, rainfall and sunshine compared with the average



LONDON, SUMMER (JUNE-AUGUST), 1841 TO 1949
Mean temperature, rainfall and sunshine compared with the average



LONDON, AUTUMN (SEPT.-NOV), 1841 TO 1949
 Mean temperature, rainfall and sunshine compared with the average



LONDON, WINTER (DEC.-FEB.), 1841-2 TO 1948-9
Mean temperature, rainfall and sunshine compared with the average