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Periodicities in European Weather

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VI. *Periodicities in European Weather.*

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Communicated by Dr. G. C. Simpson, *F.R.S.*

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1. The present investigation was undertaken with a view to determining to what extent the variations of meteorological factors might be ascribed to periodicities, and to what extent it might be possible to forecast the general nature of the weather for long distances ahead. It was considered also that any evidence of the existence of periodicities of the same length and phase, in observations made at stations situated at wide distances apart, would afford some clue to the nature of the large scale movements of the atmosphere.

2. *The Observations Used.*

A search was made for all the series of observations which extended over a minimum of 100 years. It was found that a number of records of temperature, rainfall and pressure were started about 1764, and eventually 12 sets of observations were selected. Monthly means or totals for 100 years were used in the investigation of periods up to 10 years, and for periods greater than 10 years all the annual values which were readily available were used. The data employed are given in the Tables in the Appendix. These tables give all the data used, and only those data. The sources from which the data were taken are shown below.

I. Milan Rainfall—'Annali dell' Ufficio Centrale di Meteorologia Italiana,' vol. 3, Part I, p. 20.

Monthly totals	1764–1863
Annual totals	1764–1900

II. Padua Rainfall—'Sitzungsberichte der k.k. Akad. Wiss. Wien.,' vol. 111, Part II, A, p. 78.

Monthly totals	1764–1863
Annual totals	1725–1900

III. London Rainfall—'Records of Rain measured at Camden Square from 1858 onwards.' Earlier figures taken from G. Dines's diagrams.

Monthly totals	1813–1912
Annual totals	1782–1922

These data were supplied to me by the late Mr. Carle Salter.

IV. Edinburgh Rainfall—'Transactions Royal Society Edinburgh,' vol. 39, p. 143.

Monthly totals	1785–1884
Annual totals	1785–1896

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V. Edinburgh Pressure—'Transactions Royal Society Edinburgh,' vol. 39, p. 109.

Monthly means 1770–1869
Annual means 1770–1896

VI. Paris Pressure—'Annales du Bureau Central Météorologique,' Part I, 1880, p. 87.

Monthly means 1764–1863
Annual means 1757–1878

The annual means are taken for the year beginning December 1, and all the annual figures given in Appendix Table VI are made up in this way.

VII. Edinburgh Temperature—'Transactions Royal Society Edinburgh,' vol. 39, p. 116.

Monthly and annual means 1764–1863

VIII. Stockholm Temperature—'Kungl. Svenska Vetenskapsakademiens Handlingar,' vol. 12, No. 1.

Monthly means 1764–1863
Annual means 1756–1905

IX. London Temperature—Greenwich Means of Hourly Values, 1841 onwards. Earlier records from 1763 onwards, reduced to Greenwich Hourly Means, were supplied by Mr. C. E. P. Brooks.

Monthly means 1764–1863
Annual means 1763–1918

X. Berlin Temperature—'Veröffentlichungen K. Preuss. Met. Inst.,' vol. 3.

Monthly means 1764–1863
Annual means 1756–1907

XI. Paris Temperature—'Annales Bureau Central Météorologique,' 1887, Part I, p. B. 210.

Monthly means 1764–1863
Annual means 1757–1886

The annual means are taken for the year beginning December 1.

XII. Vienna Temperature—'Sitzungsber. der Wiener Akad.,' vol. 54, p. 704, and vol. 76, p. 714.

Monthly and annual means 1775–1874

The first step in the treatment of the observations was to form 5-yearly totals of rainfall and 5-yearly means of temperature and pressure, with a view to forming a general idea of the nature of the variation during the intervals considered. These figures are represented graphically in Appendix figs. Ia–XIIa. The most striking feature of these diagrams is the variability which they display. Figs. Ia and IIa, representing

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rainfall at Milan and Padua respectively, show little resemblance to one another. Figs. IIIA and IVA, representing rainfall at Edinburgh and London, show some similarity in their main outlines. Fig. VIA shows a remarkable decrease in mean pressure at Paris from about 1760 onwards for 50 years. Temperatures at London, Paris and Berlin show a striking decrease of temperature at the end of the 18th century, followed by a gradual recovery. The details of the other diagrams only bear slight resemblance to each other.

3. *Treatment of the Monthly Means.*

In the case of temperature measured in degrees Centigrade, a constant, 20°, was added to all the monthly figures, in order to get rid of all negative values. The 12 sets of data for each of 1,200 months, were punched on cards, each card representing a single month. The cards in question are ruled into 45 parallel columns, so that three columns could be given to each set of data. Two sets of cards were prepared and checked by superposition in order to see that the punch holes coincided in each case. The cards were then used for the evaluation of the totals to be analysed harmonically for different trial periods. For example, in order to evaluate the amplitude of a trial period of 42 months, the cards were dealt out into 42 packs, in which the first pack contained the cards for the 1st, 43rd, 85th, etc., months. The packs were separated by blank cards, and the 42 packs put into the Hollerith adding machine. This machine will add up any column, or combination of columns, and in three or four complete operations it gave the totals of each set of data in each pack of cards. This gave the numbers to be analysed harmonically for the trial period of 42 months. The operation was repeated for each of the trial periods representing integral numbers of months, shown in the Tables I to XII.

The next step was to graph the figures obtained from the Hollerith machine. The harmonic analysis was carried out by means of a Mader harmonic analyser combined with an Amsler planimeter. The first, second and third harmonics were obtained for all the trial periods, and in addition the fourth harmonic was obtained for periods up to 40 months.

The procedure was, up to this point, relatively simple, except for the errors introduced by the wearing of a commutator bearing in the Hollerith machine, leading to a very considerable waste of time.

4. *Checking the Results derived from the Harmonic Analyser.*

It was found that the harmonic analyser was capable of giving very accurate results for the shorter periods. But for periods up to 120 months, which gave 120 points in the diagram, the cumulative effect of slight inaccuracy in tracing out the complex curve led in some cases to quite considerable errors. It was therefore necessary to check the general nature of the results, and also to check the amplitudes and phases of the peaks in the periodogram. In certain cases a period was evaluated independently from two or three different sets of figures, *e.g.*, 22 months were evaluated as a first harmonic, as the second harmonic of 44, and as the third harmonic of 66, and thus could readily be checked. A further useful check was yielded by drawing difference-periodograms

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for one year, two years, and four years, by the method of C. E. P. Brooks, described in the 'Proceedings Royal Society,' A, vol. 105, pp. 346–359.

Usually the difference periodogram gave indications of periods at peaks in the periodogram representing the results derived from the Mader analyser, but when these indicated periods at other points, the results were checked by arithmetical analysis. In addition to this, the phase and amplitude for each trial period which gave a peak in the diagram, were checked arithmetically, on account of the importance of obtaining accurate estimates of the epoch of maximum of each true periodicity. A further check was sometimes used for longer periods, by using Schuster's method of Secondary Analysis for such periods as 8, 9, 10 years, etc. A very considerable amount of arithmetic was involved, but the results, shown in Tables I to XII, may be regarded as complete, in that no important trial period has been missed. The amplitudes of Tables I to XII are shown graphically in figs. I to XII.

5. *The Treatment of the Annual Means.*

For each separate series of data, all the annual means available were analysed for trial periods varying from 11 years up to 35 years. This analysis was carried out arithmetically and checked at each stage of the computation. The results obtained are shown in Tables I to XII, and in figs. I to XII.

6. *The Results Derived.*

All the figures derived are shown in the Tables I to XII. The amplitude R is measured in the same unit as the original observations. The phase of maximum ϕ is measured from the middle of the first month covered by the monthly observations, except for periods greater than 10 years, for which ϕ is measured from the middle of the first year for which the annual mean or total was used. Unfortunately all 12 series of observations do not commence at the same year 1764, so that ϕ is not measured from the same zero for all 12 series. This disadvantage is, however, of little importance.

In Tables I to XII, the columns headed C and S give, in the same units as R, the cosine and sine components, so that $C = R \cos \phi$, and $S = R \sin \phi$.

The amplitudes R given in Tables I to XII are shown graphically in figs. I to XII. The horizontal scale represents frequency, or the reciprocal of the period. A few points are marked on the horizontal scale, but for facility of reference the length of the period in months is shown at each peak in the diagram. It is thus relatively easy to interpolate the length of period corresponding to any other point in the diagram. The longer periods appear crowded in the diagram only because it is readily possible to evaluate trial periods differing by one year in length whose difference of frequency is slight.

In the course of the work the amplitudes of a number of periods shorter than 12 months were evaluated, but these were omitted from the tables and diagrams, as they are separated by wide intervals of frequency.

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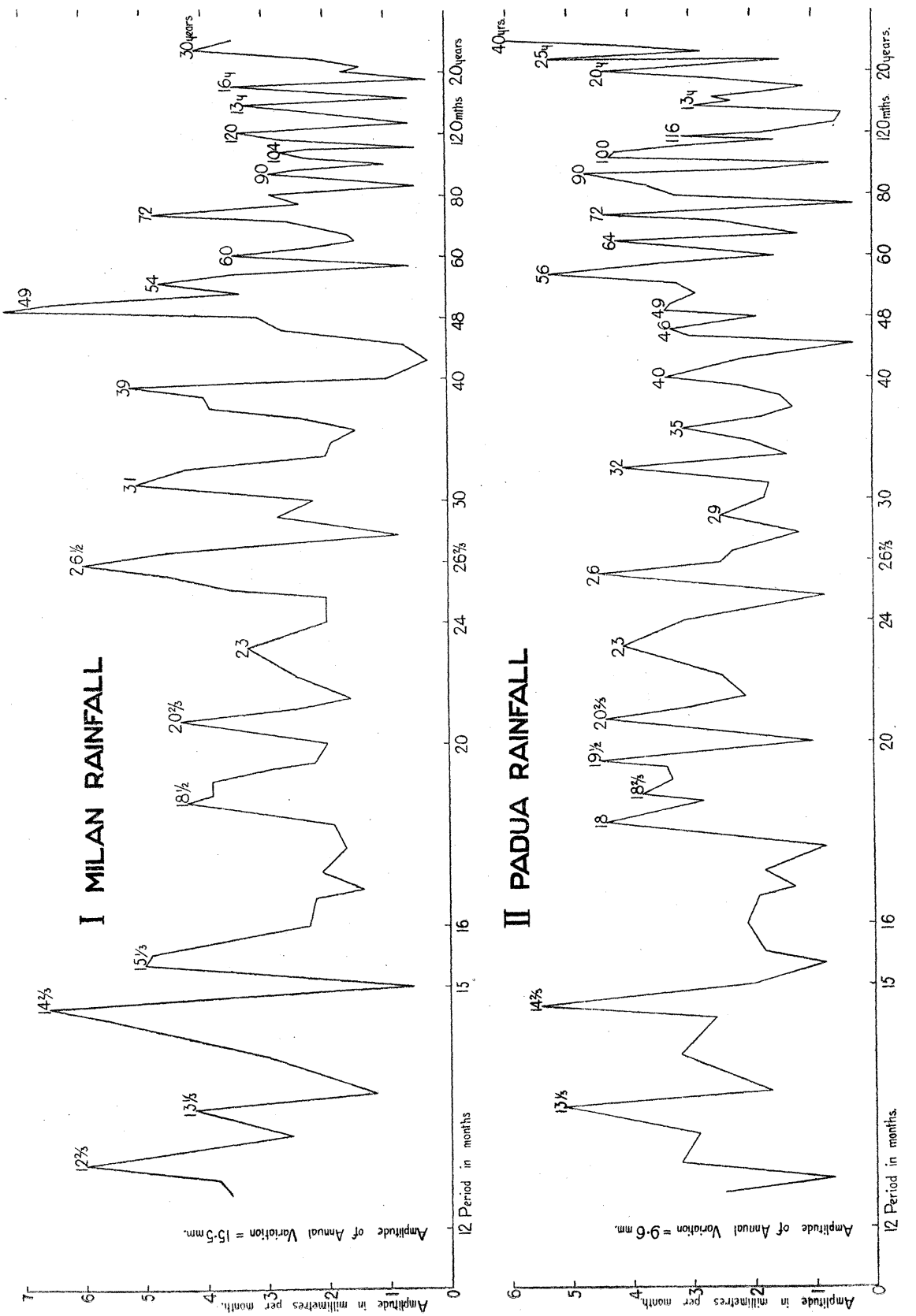

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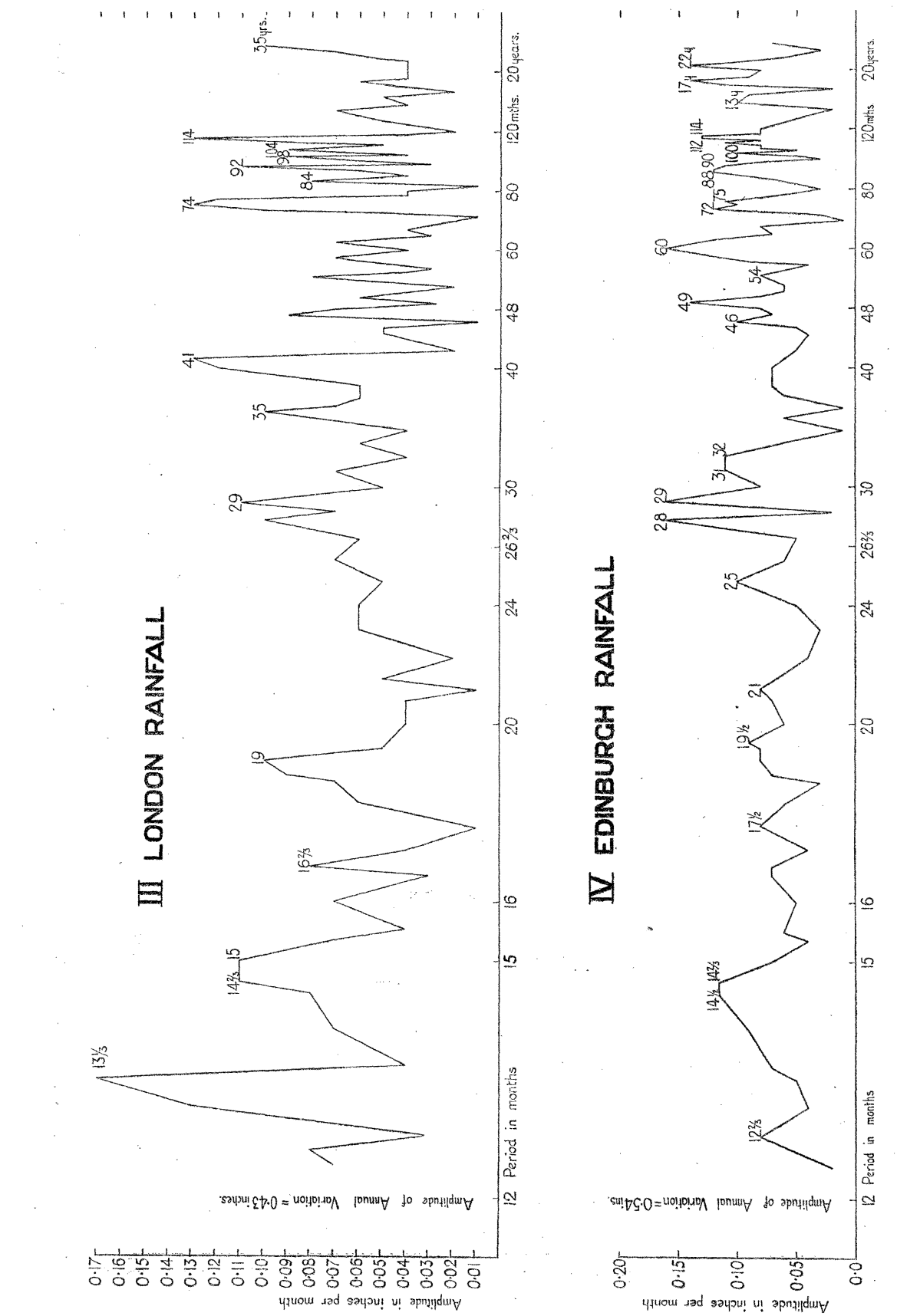

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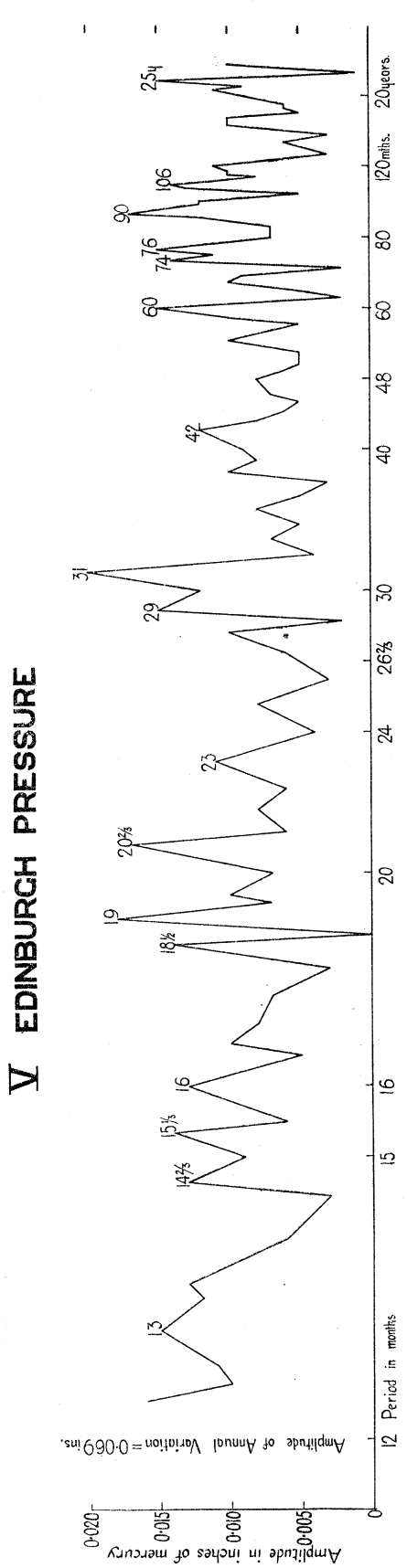

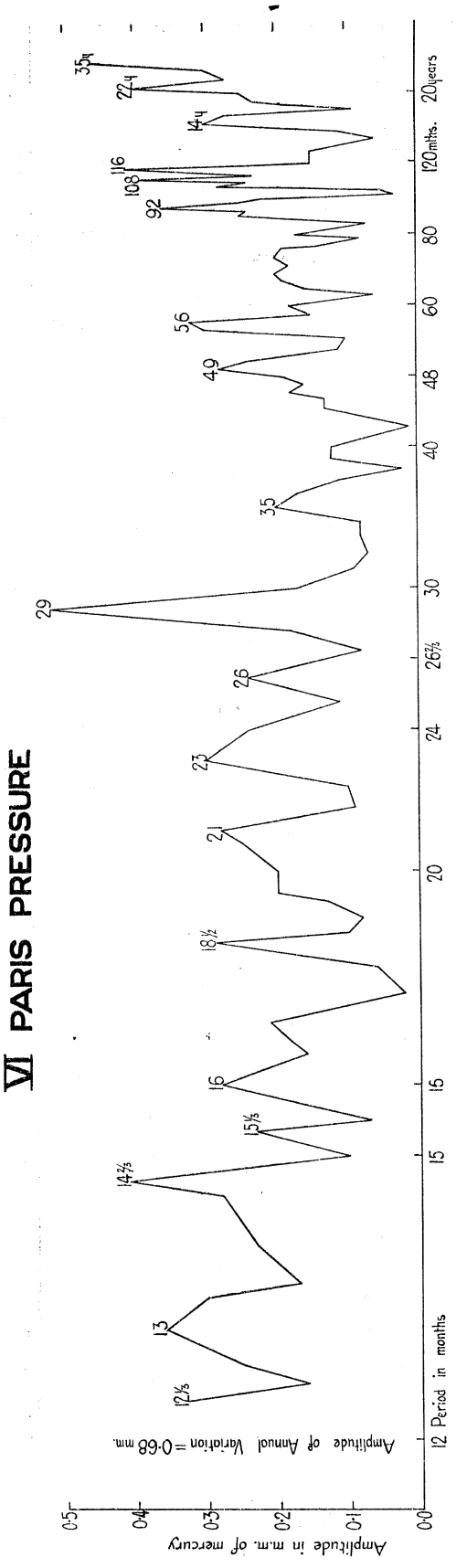

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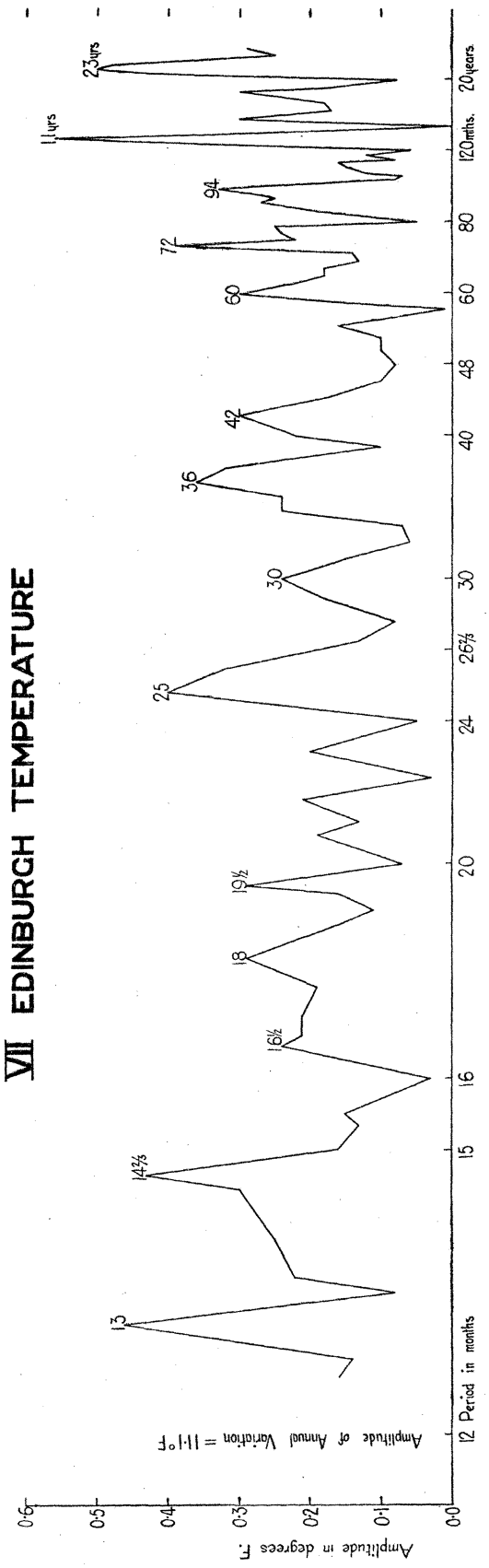

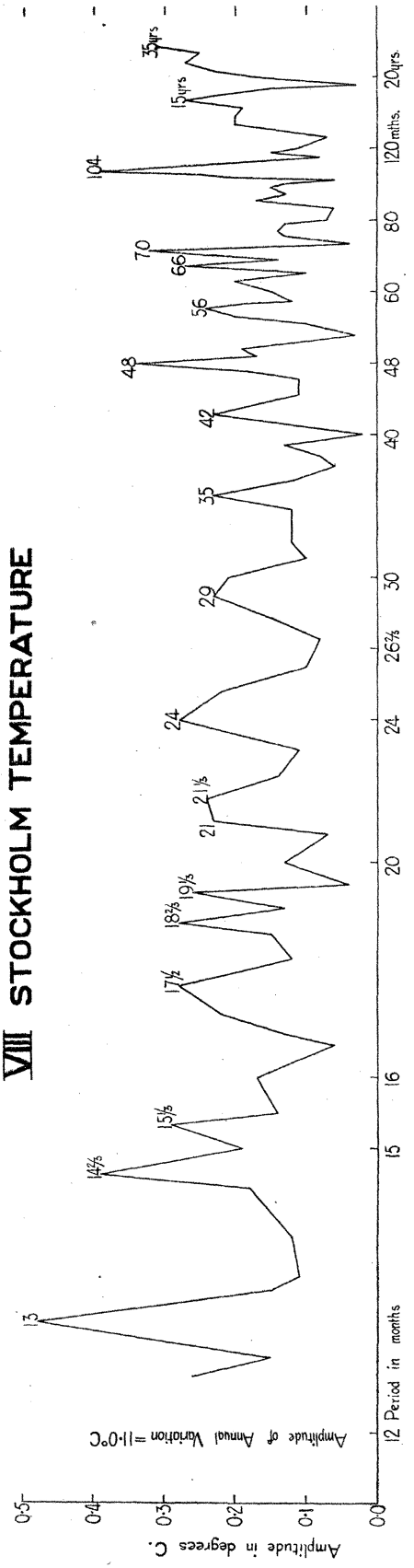

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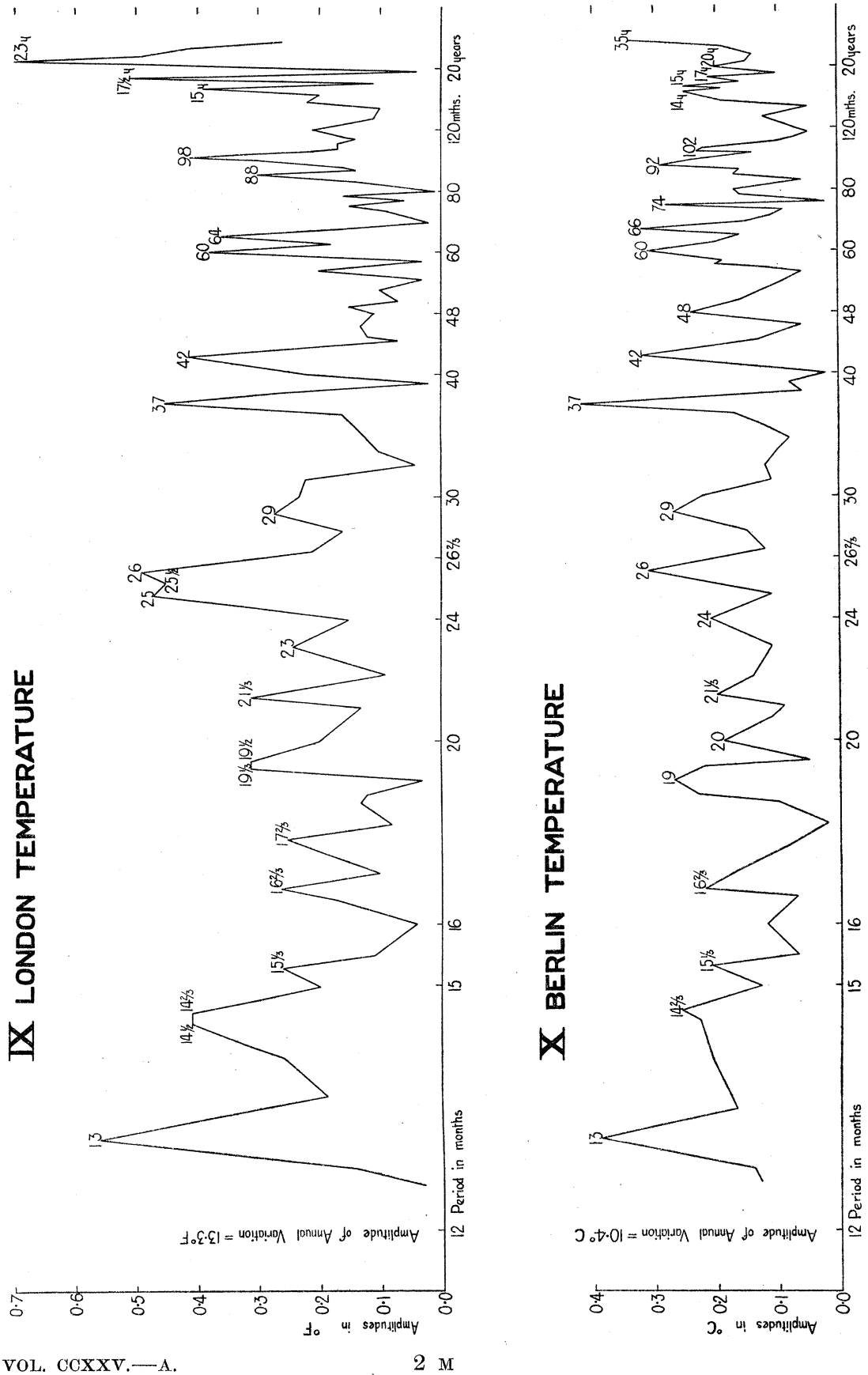

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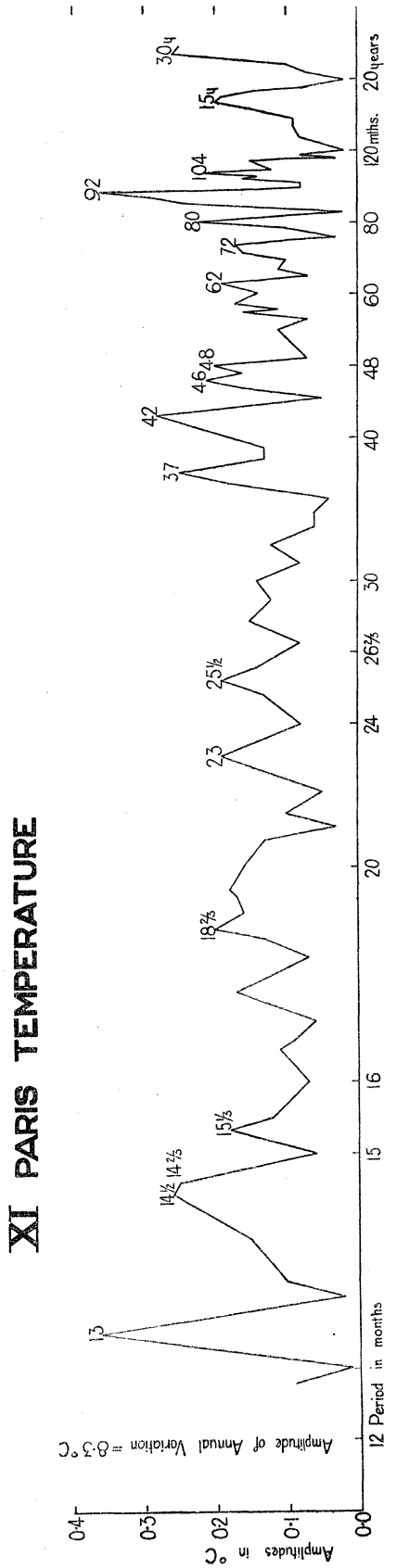

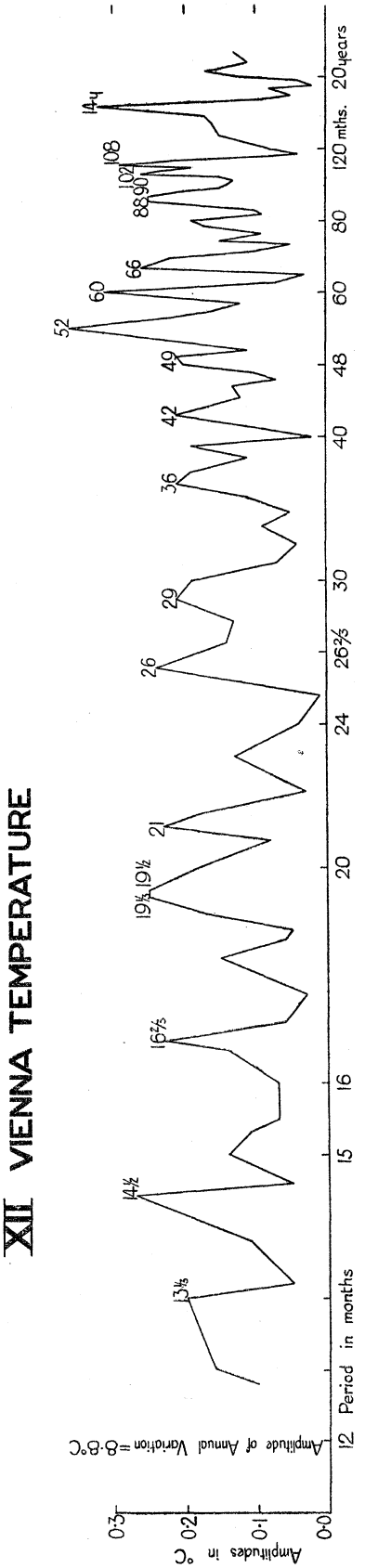

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7. *Brief Discussion of the Results.*

(*a*) *Periods longer than* 10 *years.*

Only a brief discussion of the results will be entered into at this stage, as it is desired to restrict the present communication to entirely non-speculative matter.

It is perhaps easier to commence with the periods longer than 10 years. The peaks in the periodograms occur at the following periods :—

I.	Milan rainfall	13 (1801·0), 16 (1812·5), 30 (1818·0).
II.	Padua rainfall	13 (1810·0), 20 (1810·1), 25 (1801·2), 35 (1804·8).
III.	London rainfall	12 (1806·5), 35 (1809·7).
IV.	Edinburgh rainfall . .	13 (1800·4), 17 (1810·3), 22 (1812·1).
V.	Edinburgh pressure . .	$14\frac{1}{2}$ (1810·9), 22 (1806·5), 25 (1811·1).
VI.	Paris pressure	$14\frac{1}{2}$ (1807·5), 22 (1807·0), 35 (1832·8).
VII.	Edinburgh temperature .	11 (1801·0), 13 (1805·3), 17 (1812·1), 23 (1803·3).
VIII.	Stockholm temperature .	15 (1804·0), 25 (1810·0), 35 (1830·6).
IX.	London temperature . .	15 (1810·0), $17\frac{1}{2}$ (1811·5), 23 (1803·2).
X.	Berlin temperature . .	14 (1807·0), 15 (1809·6), 35 (1831·8).
XI.	Paris temperature . . .	15 (1806·5), 30 (1800·7), 35 (1811·7).
XII.	Vienna temperature . .	14 (1808·3).

In this list the first figure gives the period in years, and the figures in brackets give the date of the first maximum after 1800.

In the case of the rainfall data, there is no striking resemblance between the results derived for four sets of data, except for a period of 13 years which occurs in Milan, Padua and Edinburgh, having the same date of maximum at Milan and Edinburgh, the maximum at Padua occurring some four years earlier than at the other two stations.

The pressures at Edinburgh and Paris show very close coincidence of epoch of maximum for the period of 22 years, but a difference of roughly a quarter of the period in the incidence of maximum of the $14\frac{1}{2}$-year period.

The temperature records, series VII to XII, show curious divergencies. In series VII, Edinburgh temperature, the maximum amplitude discovered throughout the whole range from one year to 35 years occurs at 11 years, suggesting an effect due to sun-spots, but no one of the other series yields an appreciable amplitude for 11 years. The Edinburgh temperatures also yield a peak in the periodogram at 13 years, whose minimum coincides approximately with the maximum of the 13-year period in rainfall at Edinburgh. A period of 14 years is shown by Berlin and Vienna with fairly close agreement of the epoch of maximum; while the 15-year period, which occurs in four series of temperatures—Stockholm, London, Paris and Berlin—only give coincidence of dates

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of maxima for London and Berlin. The period of 23 years, shown by Edinburgh and London, gives remarkably close agreement of the dates of maxima, and the amplitudes of this period for these two stations are both very high. In the case of the other series, the secondary analysis of the 22-year period, or the difference-periodogram, did not indicate a period at 23 years, and the amplitude of the trial period of 23 years was consequently not evaluated. In any case it is not possible to fix accurately a period of about 23 years with observations of a little more than a century.

A period of about 35 years, probably the Brückner cycle, is shown by temperature at Stockholm, Berlin and Paris, with agreement of phase for the first two of these stations, and approximately a reversal of phase at the third.

(*b*) *Periods shorter than* 10 *years*.

1. *Rainfall*.—On account of the complexity of the periodograms, it is not possible to discuss all twelve together. A comparison of figs. I and II shows a remarkably large number of peaks at corresponding points in the two diagrams. The peaks at $12\frac{2}{3}$, $14\frac{1}{2}$ or $14\frac{2}{3}$, 18 or $18\frac{1}{2}$, 23, 26 or $26\frac{1}{2}$, 31 or 32, and 54 or 56 months, show differences of phase of only 10° to 24°, while the peaks at $13\frac{1}{3}$, $20\frac{2}{3}$, 49 and 72 months correspond to differences of phase varying from 40° to 75°. In view of the striking differences between figs. Ia and IIa, it is remarkable that the periodograms of figs. I and II should show such a considerable degree of resemblance.

The periodograms for London and Edinburgh rainfall bear little resemblance to one another, the only peak common to both being at $14\frac{2}{3}$ months, unless we include the peak which appears at 19 months in London and $19\frac{1}{2}$ months at Edinburgh, which may be due to the same cause as the peaks which appear in the Milan diagram at $18\frac{1}{2}$ months, and in the Padua diagram at $19\frac{1}{2}$ months. Edinburgh rainfall also shows peaks at $12\frac{2}{3}$, 49, and 72 months, which are common to Milan and Padua.

2. *Pressures*.—Pressures at Edinburgh and Paris show corresponding peaks at 13, $14\frac{2}{3}$, $15\frac{1}{3}$, 16, $18\frac{1}{2}$, 29, 35 months, all of which, except $18\frac{1}{2}$ months, show close agreement of the phase of maximum. Each of these two also shows a number of peaks not occurring in the other. In the case of Edinburgh, peaks occur at 13, $14\frac{2}{3}$, 19, 29, 60 and 72 months in the periodograms of both rainfall and pressure, and the differences of phase (ϕ converted to the same zero) were 100, 184, 181, 193, 180 and 135 respectively, showing a strongly marked tendency for maximum rainfall at minimum pressure, similar to that already noted for the period of 13 years.

3. *Temperatures*.—Except for Vienna, the temperature records used in the first analysis of 100 years all commenced in 1764, so that the zero of ϕ is the same for five temperature records. The periodograms in figs VII to XII show several very striking features, peaks occurring in all six cases at 13 months ($13\frac{1}{3}$ for Vienna), $14\frac{2}{3}$ (possibly $14\frac{1}{2}$ for London, Paris and Vienna), about 19 months, about 25 or 26 months, and 42 months. In the table below are shown for each of the periods giving peaks in three or more of these six periodograms, the deviation of the phase from the mean value of the

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phase for all the series for which that particular period gives a peak in the periodogram. When the figure is bracketed, it indicates that for the series concerned, that particular period is not at the peak, though near it. When no value is given in a particular compartment it conveys the information that in the series of observations to which it refers, that particular period is not at or near a peak :—

Period in months.	Edinburgh.	Stockholm.	London.	Berlin.	Paris.	Vienna.
13	26	—51	7	— 3	—11	31
14⅔	— 8	—15	— 8	—16	2	36
15⅓	—	—24	—31	31	24	(211)
16⅔	(1)	(—35)	1	— 1	(2)	1
19⅓	—14	37	11	(22)	—11	—23
19½	—30	—	— 5	—	—30	27
25	5	(—11)	— 5	(—13)	(6)	—
26	(1)	—	5	2	(—10)	— 6
29	8	—14	16	—19	(34)	11
37	(—25)	—	— 4	— 8	0	11
42	13	5	22	—18	25	—46
60	—11	(24)	14	— 1	— 1	— 1
92	(4)	(22)	(42)	—21	26	— 4

8. *General Conclusions.*

No attempt will be made in this paper to discuss the reality of periods on the basis of the theory of probability. Nor will any comparison with the results of other workers be attempted.* The results are put forward in the present form in the belief that physical results of consequence can be derived by the comparison of periodograms based on observations at widely separated stations.

Considering each periodogram separately, we find so great a number of peaks in each diagram that it can safely be concluded that these results cannot be profitably utilised for forecasting the general nature of next year's weather. Each meteorological element considered is highly variable, the variations being partly periodic and partly casual in their incidence. On account of the casual variations, it is never possible to fix with certainty the length, amplitude or phase of the periodic variations, and so it is not possible to calculate with any degree of confidence the value of the periodic variations for any future epoch.

A number of probably real periodic variations represented by peaks in the periodograms are found to be common to all six-temperature records, with approximately the same phase of maximum, and hence we conclude that some physical cause of variation of temperature is common to all six phases. It is admittedly possible that casual

* The reader may, however, be referred to a paper by Prof. H. H. Turner in the 'Quarterly Journal of the Royal Meteorological Society,' p. 315 (1915), which takes up the problem of weather periodicities from a somewhat different standpoint.

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variations extending over a wide area might simulate a periodic variation, but the area which will include Edinburgh, London, Paris, Berlin, Vienna and Stockholm is so great that it is, to say the least, improbable that casual variations should give the remarkable coincidence of periods and phases noted. The resemblances found for the shorter periods make it appear all the more curious that the long-period variations should differ so widely.

The discussion of the details of the results described above is reserved for a future occasion.

Finally, I have to acknowledge my indebtedness to the Director of the Meteorological Office for placing at my disposal the facilities for obtaining the data and carrying out the work involved in this investigation, which was done partly as official duty and partly as a private investigation. I am also much indebted to Mr. C. E. Britton, Meteorological Office, Shoeburyness, under whose supervision a considerable portion of the computations was carried out.

In the Tables I to XII, which follow, there are given for a number of trial periods shown the amplitude R, the phase of maximum ϕ, and the sine and cosine components of each harmonic term are given. Thus $C = R \cos \phi$, $S = R \sin \phi_0$.

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TABLE I.—Milan Rainfall.

Period in months.	C.	S.	R.	ϕ	Period in months.	C.	S.	R.	ϕ
3	1·4	5·7	5·9	76	37	—2·1	3·3	3·9	122
4	1·1	3·9	4·0	75	38	3·6	—2·0	4·0	331
6	—16·2	—9·7	20·5	218	39	—1·3	5·0	5·2	104
12	—7·8	—13·8	15·5	240	40	1·0	0·0	1·0	360
$12\frac{1}{3}$	—0·4	3·6	3·6	97	42	—0·1	—0·3	0·3	255
$12\frac{1}{2}$	—3·4	1·6	3·8	158	44	—0·7	—0·1	0·7	185
$12\frac{2}{3}$	2·0	—5·7	6·0	290	46	—1·2	2·4	2·7	117
13	2·0	1·2	2·6	31	48	—0·1	—3·1	3·1	269
$13\frac{1}{3}$	4·2	—0·2	4·2	357	49	5·7	—4·5	7·3	128
$13\frac{1}{2}$	0·4	1·1	1·2	70	50	5·6	3·2	6·5	32
14	2·6	1·6	3·0	31	52	1·5	3·0	3·4	63
$14\frac{1}{2}$	—0·8	5·5	5·6	98	54	1·2	4·5	4·7	75
$14\frac{2}{3}$	2·8	6·0	6·6	295	36	—1·1	—3·3	3·5	250
15	0·3	0·5	0·6	56	58	0·5	—0·3	0·6	330
$15\frac{1}{3}$	0·0	5·0	5·0	90	60	—1·4	—3·2	3·5	240
$15\frac{1}{2}$	2·2	—4·5	4·9	296	62	1·2	1·6	1·9	49
16	0·3	—2·3	2·3	278	64	—1·5	—0·2	1·5	188
$16\frac{1}{2}$	2·2	—0·2	2·2	354	66	—1·0	1·2	1·6	142
$16\frac{2}{3}$	—1·4	0·2	1·4	172	70	—0·5	—2·5	2·5	260
17	—1·8	—1·1	2·1	213	72	—3·6	3·2	4·8	138
$17\frac{1}{2}$	—1·4	—1·0	1·7	218	74	2·3	1·9	3·0	40
18	—0·5	1·8	1·9	105	76	2·4	0·4	2·4	10
$18\frac{1}{2}$	—3·0	3·0	4·3	135	80	—1·3	2·6	2·9	116
$18\frac{2}{3}$	2·3	3·1	3·9	54	84	0·3	0·2	0·5	35
19	2·7	2·8	3·9	46	88	2·2	0·1	2·2	3
$19\frac{1}{3}$	—0·6	2·8	2·9	101	90	2·0	—1·8	2·9	312
$19\frac{1}{2}$	2·2	0·2	2·2	6	92	—0·2	2·5	2·5	95
20	—2·0	0·2	2·0	175	96	1·0	—0·2	1·0	355
$20\frac{2}{3}$	4·4	0·1	4·4	1	100	1·5	—1·7	2·3	312
21	2·5	—0·2	2·5	355	104	—1·3	—2·3	2·7	240
$21\frac{1}{3}$	1·3	—1·0	1·6	217	106	1·1	1·9	2·2	60
22	—0·5	2·5	2·5	97	108	0·1	0·5	0·5	10
23	—1·3	3·0	3·3	113	114	—1·0	2·5	2·7	112
24	—2·0	0·1	2·0	178	120	3·2	1·0	3·4	17
25	—1·8	—0·7	2·0	200					
$25\frac{1}{3}$	3·0	2·0	3·6	33	years.				
26	1·0	4·5	4·6	78	11	—0·2	—0·2	0·3	221
$26\frac{1}{2}$	—6·0	0·2	6·0	179	12	1·6	1·4	2·2	40
27	2·1	—4·2	4·6	296	13	—1·9	—2·7	3·3	234
28	—0·8	—0·2	0·8	194	14	—0·2	0·6	0·6	107
29	—0·2	—2·8	2·8	266	15	0·3	2·1	2·2	81
30	—1·7	1·4	2·2	140	16	—0·1	3·5	3·5	358
31	—5·1	0·1	5·1	179	18	—0·1	—0·3	0·3	247
32	—3·5	2·5	4·3	145	20	1·0	—1·4	1·7	305
33	0·0	—2·0	2·0	270	22	—1·4	0·0	1·4	180
34	—1·8	—0·6	1·9	199	25	2·1	0·4	2·1	11
35	0·3	—1·5	1·5	280	30	0·8	—4·0	4·1	282
36	—2·4	0·6	2·4	166	35	3·2	1·3	3·5	23

The unit of R is 1 mm. of rainfall per month. For periods up to 10 years ϕ is measured from mid-January, 1764, and for periods longer than 10 years from the middle of the year 1764.

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Table II.—Padua Rainfall.

Period in months.	C.	S.	R.	ϕ	Period in months.	C.	S.	R.	ϕ
3	1·2	—1·4	1·9	319	42	0·2	2·1	2·1	86
4	2·3	5·5	6·0	67	44	0·2	0·2	0·3	56
6	—11·9	—9·9	15·5	220	45	—2·3	1·8	3·0	142
12	—7·9	—5·5	9·6	215	46	1·1	3·1	3·3	69
$12\frac{1}{3}$	0·2	2·5	2·5	86	48	1·8	—0·6	1·9	341
$12\frac{1}{2}$	0·2	0·7	0·7	76	49	—3·3	0·6	3·4	170
$12\frac{2}{3}$	2·3	—2·3	3·2	314	50	0·6	3·3	3·3	80
13	1·3	2·6	2·9	63	52	2·8	0·5	2·9	11
$13\frac{1}{3}$	1·6	4·8	5·1	72	54	2·8	1·6	3·2	71
$13\frac{1}{2}$	1·6	—0·7	1·7	335	56	—3·2	—4·2	5·3	232
14	2·4	2·0	3·2	40	58	1·6	3·2	3·6	63
$14\frac{1}{2}$	—1·0	2·4	2·6	113	60	1·6	—0·3	1·6	189
$14\frac{2}{3}$	1·2	—5·4	5·5	283	62	—1·0	—1·9	2·1	241
15	0·1	2·0	2·0	85	64	—3·4	2·5	4·2	144
$15\frac{1}{3}$	0·8	—0·2	0·8	344	66	—1·2	—0·2	1·2	190
$15\frac{1}{2}$	0·6	—1·7	1·8	291	68	1·1	2·3	2·5	116
16	1·7	—1·2	2·1	325	70	—1·4	—2·5	2·9	240
$16\frac{1}{2}$	—1·6	—0·9	1·9	210	72	1·2	4·3	4·4	74
$16\frac{2}{3}$	1·2	0·6	1·3	27	74	2·9	1·1	3·1	20
17	—1·8	—0·2	1·8	186	76	0·2	0·2	0·3	42
$17\frac{1}{2}$	—0·7	0·3	0·8	158	80	0·9	3·1	3·2	74
18	—2·4	3·7	4·4	123	84	3·4	1·2	3·7	19
$18\frac{1}{2}$	—1·2	2·4	2·8	120	88	2·0	3·1	3·7	58
$18\frac{2}{3}$	2·1	3·2	3·8	56	90	1·7	4·4	4·7	69
19	0·5	3·3	3·3	81	92	1·6	1·0	1·9	31
$19\frac{1}{3}$	1·1	3·3	3·4	71	96	0·3	—0·6	0·7	301
$19\frac{1}{2}$	4·5	—0·7	4·5	351	100	—0·4	—4·2	4·3	264
20	—0·9	0·3	1·0	160	102	—3·5	—2·3	4·2	214
$20\frac{2}{3}$	3·4	—2·4	4·4	316	104	—4·2	0·2	4·2	177
21	1·1	—2·8	3·0	292	108	2·1	—0·8	2·2	340
$21\frac{1}{3}$	—2·1	0·3	2·1	173	114	0·0	1·6	1·6	90
22	—2·4	0·3	2·5	173	116	—0·3	3·1	3·1	93
23	—0·9	4·0	4·1	103	120	1·4	1·2	1·8	41
24	—0·4	3·0	3·1	262					
25	—0·8	—0·1	0·8	184	years.				
26	—0·3	4·5	4·5	93	11	0·5	0·3	0·6	32
$26\frac{1}{2}$	—2·5	—0·2	2·5	185	12	0·4	—0·3	0·5	320
27	1·2	—2·1	2·3	300	13	—2·9	—0·4	2·9	187
28	0·0	—1·2	1·2	270	$13\frac{1}{2}$	—0·4	2·3	2·3	102
29	1·4	—2·1	2·5	303	14	—1·5	2·0	2·6	127
30	—1·3	1·3	1·8	135	15	0·7	1·6	1·7	66
31	—1·6	0·5	1·7	160	16	0·9	0·7	1·1	39
32	—2·2	3·3	4·1	123	17	—1·2	—0·2	1·3	191
33	0·2	—1·4	1·4	283	18	—1·4	2·2	2·6	122
34	—1·7	1·1	2·0	147	20	0·5	4·4	4·4	83
35	0·4	—3·1	3·1	278	22	0·8	1·2	1·5	56
36	1·7	0·6	1·8	19	25	4·8	2·1	5·3	24
37	—0·2	1·2	1·3	98	27	—3·2	—0·7	3·3	192
38	1·5	0·2	1·5	8	30	—0·8	—2·7	2·8	254
39	1·3	1·7	2·2	53	35	—0·5	4·3	4·3	97
40	—1·2	3·2	3·4	250	40	6·0	0·0	6·0	360

The unit of R is 1 mm. of rainfall per month. For periods up to 10 years ϕ is measured from mid-January, 1764, and for periods longer than 10 years from the middle of the year 1725.

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Table III.—London Rainfall.

Period in months.	C.	S.	R.	ϕ
3	0·11	0·02	0·11	10
4	—0·05	0·07	0·07	125
6	—0·02	—0·10	0·10	258
12	—0·23	0·37	0·43	120
12⅓	0·00	0·07	0·07	90
12½	—0·02	—0·08	0·08	257
12⅔	0·00	0·03	0·03	90
13	—0·13	0·03	0·13	168
13⅓	—0·08	0·15	0·17	242
13½	0·03	—0·03	0·04	307
14	0·06	—0·04	0·07	327
14½	—0·08	0·01	0·08	175
14⅔	—0·05	0·10	0·11	115
15	0·09	0·07	0·11	38
15⅓	0·05	—0·05	0·07	317
15½	—0·01	—0·04	0·04	259
16	0·04	—0·06	0·07	302
16½	—0·03	0·01	0·03	153
16⅔	—0·06	0·06	0·08	136
17	0·03	0·03	0·04	41
17½	0·01	—0·01	0·01	335
18	—0·01	0·06	0·06	99
18½	—0·02	—0·07	0·07	253
18⅔	—0·07	0·04	0·09	150
19	0·01	0·10	0·10	84
19⅓	0·05	0·00	0·05	5
19½	—0·08	0·00	0·08	180
20	0·03	0·03	0·04	43
20⅔	—0·02	—0·04	0·04	239
21	0·00	—0·01	0·01	270
21⅓	0·05	0·02	0·05	27
22	—0·02	—0·02	0·02	232
23	—0·05	0·03	0·06	152
24	0·04	0·04	0·06	41
25	—0·05	—0·01	0·05	197
26	—0·04	—0·05	0·07	229
27	0·05	0·01	0·06	6
28	0·09	0·05	0·10	30
28½	0·07	—0·03	0·07	339
29	—0·08	—0·08	0·11	226
30	0·01	0·05	0·05	77
31	—0·02	0·07	0·07	110
32	—0·04	—0·02	0·04	201
33	—0·06	—0·01	0·06	192
34	0·03	—0·02	0·04	316
35	0·10	0·03	0·10	18
36	0·07	—0·01	0·07	354
37	—0·05	0·04	0·06	142
38	—0·02	—0·06	0·06	249
39	—0·02	0·08	0·09	106
40	0·11	—0·06	0·12	332
41	—0·11	—0·06	0·13	210
42	0·00	0·02	0·02	90
44	—0·02	—0·04	0·05	302
46	—0·01	0·00	0·01	180
47	0·07	0·05	0·09	38
48	0·05	—0·05	0·07	315
49	0·00	—0·03	0·03	270
50	—0·03	—0·05	0·06	237
52	0·01	0·02	0·02	60
54	0·05	0·06	0·08	47
56	—0·02	—0·02	0·03	225
57	—0·01	0·05	0·05	103
58	0·05	0·04	0·07	42
60	0·03	—0·02	0·04	324
62	—0·07	0·01	0·07	172
64	—0·01	0·03	0·03	111
66	—0·03	—0·02	0·04	209
68	0·01	0·00	0·01	11
70	0·05	0·01	0·05	16
72	0·10	—0·01	0·10	356
74	—0·07	—0·11	0·13	235
75	—0·09	—0·05	0·10	211
76	—0·11	0·04	0·12	158
78	—0·01	0·04	0·04	100
80	0·02	—0·04	0·04	296
82	0·01	0·00	0·01	20
84	0·02	—0·08	0·08	281
86	—0·07	0·02	0·07	167
88	0·01	0·07	0·07	79
90	0·06	0·02	0·06	18
92	0·10	—0·04	0·11	341
94	—0·03	0·01	0·03	161
96	0·04	0·05	0·06	53
98	0·03	0·09	0·09	72
100	0·03	—0·02	0·04	330
102	—0·04	—0·05	0·07	231
104	—0·09	0·00	0·09	177
106	—0·06	0·05	0·08	141
168	0·04	0·03	0·05	39
110	0·04	0·03	0·05	43
112	0·05	0·04	0·07	40
114	0·13	0·01	0·13	5
116	0·04	—0·02	0·04	329
120	0·02	—0·01	0·02	344
years.				
11	0·04	—0·03	0·05	327
12	0·07	0·01	0·07	3
13	—0·04	0·01	0·04	167
14	0·01	—0·05	0·05	278
15	0·00	—0·02	0·02	260
16	0·03	—0·03	0·04	320
17	—0·01	—0·06	0·06	265
18	—0·04	0·01	0·04	171
20	0·01	—0·04	0·04	284
22	—0·03	—0·02	0·03	212
25	—0·05	—0·01	0·05	188
30	0·03	0·06	0·07	68
35	0·03	—0·09	0·10	290

The unit of R is 1 inch of rainfall per month. For periods up to 10 years ϕ is measured from mid-January, 1813, and for periods longer than 10 years from the middle of the year 1782.

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TABLE IV.—Edinburgh Rainfall.

Period in months.	C.	S.	R.	ϕ	Period in months.	C.	S.	R.	ϕ
3	0·03	0·05	0·06	59	47	—0·07	0·01	0·07	174
4	—0·08	0·00	0·08	180	48	0·05	—0·06	0·08	311
6	0·22	—0·03	0·22	352	49	—0·13	—0·06	0·14	204
12	—0·32	—0·43	0·54	233	50	—0·04	0·06	0·08	126
12⅓	0·01	0·02	0·02	63	51	—0·06	—0·01	0·06	185
12½	—0·01	—0·05	0·05	254	52	—0·01	0·06	0·06	102
12⅔	0·00	—0·08	0·08	270	54	—0·06	0·06	0·08	136
13	0·04	0·00	0·04	360	56	—0·02	—0·03	0·04	241
13⅓	0·05	—0·01	0·05	350	57	—0·01	0·09	0·09	95
13½	—0·01	—0·07	0·07	261	58	0·12	0·02	0·12	11
14	0·09	—0·01	0·09	354	60	—0·13	0·09	0·16	147
14½	0·08	0·08	0·11	42	62	0·11	—0·04	0·12	338
14⅔	—0·09	0·05	0·11	152	64	—0·04	0·06	0·07	144
15	0·05	—0·05	0·07	315	66	0·08	—0·01	0·08	354
15⅓	—0·04	0·00	0·04	180	68	0·00	—0·01	0·01	265
15½	—0·03	—0·06	0·06	247	70	0·03	0·02	0·03	35
16	—0·04	—0·02	0·05	207	72	—0·11	0·04	0·12	162
16½	0·05	—0·05	0·07	313	74	0·04	0·09	0·10	68
16⅔	—0·05	—0·05	0·07	225	75	0·09	0·06	0·11	31
17	0·02	0·04	0·04	67	76	0·01	0·04	0·05	81
17½	—0·04	0·07	0·08	119	78	0·04	0·02	0·05	334
18	0·04	—0·04	0·06	315	80	0·02	0·02	0·03	315
18½	0·03	0·02	0·03	30	84	—0·06	—0·04	0·07	211
18⅔	—0·04	0·06	0·07	126	88	0·01	0·12	0·12	87
19	0·04	—0·07	0·08	297	90	0·10	0·07	0·12	33
19⅓	0·03	0·07	0·08	67	92	0·11	—0·03	0·11	344
19½	0·04	—0·08	0·09	300	94	0·04	—0·07	0·08	297
20	—0·06	—0·01	0·06	191	96	—0·02	—0·03	0·03	239
20⅔	—0·06	—0·03	0·07	208	98	—0·03	0·04	0·05	126
21	0·03	0·08	0·08	74	100	0·04	0·08	0·10	58
22	0·02	0·03	0·04	61	102	0·00	0·05	0·05	90
23	—0·01	—0·03	0·03	249	104	0·08	0·01	0·08	7
24	0·02	0·05	0·05	73	106	0·07	—0·04	0·08	334
25	—0·03	0·09	0·10	108	108	0·06	—0·09	0·11	303
26	—0·05	0·03	0·06	145	110	0·05	—0·07	0·08	305
27	—0·03	0·03	0·05	133	112	0·04	—0·12	0·13	251
28	—0·02	0·16	0·16	98	114	—0·07	0·01	0·08	170
28½	—0·02	0·00	0·02	180	120	—0·08	0·03	0·08	160
29	0·09	0·13	0·16	54					
30	0·08	0·02	0·08	13	years.				
31	—0·05	—0·10	0·11	248	11	0·05	—0·01	0·05	352
32	0·11	—0·06	0·11	327	12	0·01	0·02	0·02	52
33	—0·01	—0·06	0·06	263	13	0·08	—0·05	0·10	329
34	—0·01	0·01	0·01	142	14	—0·07	—0·07	0·09	225
35	—0·06	0·00	0·06	180	15	—0·02	0·01	0·02	144
36	—0·01	0·00	0·01	180	16	—0·05	—0·10	0·11	243
37	—0·04	—0·05	0·06	230	17	—0·13	0·03	0·14	165
38	—0·03	0·07	0·07	114	18	—0·04	0·09	0·09	112
39	0·05	0·05	0·07	43	20	—0·07	0·05	0·08	142
40	0·02	0·06	0·07	70	22	0·04	0·13	0·14	75
42	0·04	0·02	0·05	29	23	0·02	0·10	0·10	78
44	0·03	0·03	0·04	41	25	0·04	0·05	0·06	55
45	0·03	0·04	0·05	49	30	0·03	0·01	0·03	18
46	0·05	—0·08	0·10	299	35	—0·01	0·07	0·07	100

The unit of R is 1 inch of rainfall per month. For periods up to 10 years ϕ is measured from mid-January, 1785, and for periods longer than 10 years from the middle of the year 1785.

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TABLE V.—Edinburgh Pressure.

Period in months.	C.	S.	R.	ϕ.
3	−0·008	−0·009	0·012	228
4	0·010	0·005	0·011	27
6	−0·008	−0·010	0·013	231
12	−0·057	−0·038	0·069	146
$12\frac{1}{3}$	−0·012	0·011	0·016	136
$12\frac{1}{2}$	−0·002	0·005	0·005	111
$12\frac{2}{3}$	−0·005	0·011	0·011	103
13	0·015	0·004	0·015	14
$13\frac{1}{3}$	0·012	0·002	0·012	10
$13\frac{1}{2}$	0·009	0·009	0·013	47
14	0·005	0·003	0·006	32
$14\frac{1}{2}$	0·002	−0·002	0·003	311
$14\frac{2}{3}$	0·004	0·013	0·013	73
15	0·008	0·003	0·009	296
$15\frac{1}{3}$	0·008	−0·012	0·014	306
$15\frac{1}{2}$	−0·005	−0·003	0·006	209
16	0·000	0·013	0·013	90
$16\frac{1}{2}$	0·003	0·004	0·005	57
$16\frac{2}{3}$	0·008	−0·005	0·010	327
17	0·006	0·005	0·008	43
$17\frac{1}{2}$	−0·005	0·005	0·007	132
18	0·002	0·002	0·003	48
$18\frac{1}{2}$	0·014	−0·001	0·014	356
$18\frac{2}{3}$	0·000	0·000	0·000	—
19	0·008	−0·016	0·018	296
$19\frac{1}{3}$	0·002	−0·007	0·007	287
$19\frac{1}{2}$	−0·010	0·002	0·010	167
20	0·007	0·000	0·007	360
$20\frac{2}{3}$	−0·006	−0·016	0·017	248
21	0·006	0·001	0·006	77
$21\frac{1}{3}$	−0·003	0·007	0·008	111
22	0·006	−0·002	0·006	340
23	−0·002	−0·011	0·011	259
$23\frac{1}{3}$	−0·001	−0·002	0·002	229
24	−0·004	0·000	0·004	180
25	0·005	0·005	0·008	44
$25\frac{1}{3}$	0·001	−0·004	0·005	286
26	−0·003	0·000	0·003	180
27	0·000	0·006	0·006	90
28	0·010	0·003	0·010	14
$28\frac{1}{2}$	−0·002	0·000	0·002	180
29	0·008	−0·012	0·015	304
30	0·011	−0·002	0·012	348
31	0·019	−0·007	0·020	338
32	−0·002	0·003	0·004	133
33	0·000	−0·007	0·007	270
34	0·004	0·003	0·005	32
35	−0·002	0·008	0·008	103
36	0·000	−0·005	0·005	270
37	0·000	−0·003	0·003	270
38	−0·005	−0·008	0·010	236
39	0·005	0·006	0·008	47
40	−0·008	0·004	0·009	152
42	0·010	0·007	0·012	34
43	−0·007	−0·004	0·008	211
44	0·005	0·004	0·006	37
45	−0·002	0·004	0·005	118
46	0·005	0·005	0·007	45
48	0·007	−0·004	0·008	329
49	0·001	−0·006	0·006	288
50	−0·005	−0·002	0·005	204
52	0·001	0·005	0·005	83
54	−0·005	0·008	0·010	122
56	−0·005	0·001	0·005	170
58	0·002	0·010	0·010	81
60	0·013	−0·008	0·015	327
62	−0·002	0·001	0·002	139
64	0·000	−0·005	0·005	270
66	0·010	0·001	0·010	5
68	0·001	−0·009	0·009	278
70	0·001	0·001	0·002	50
72	−0·012	−0·006	0·014	207
74	0·007	0·008	0·011	49
76	0·007	−0·013	0·015	296
78	−0·005	0·008	0·010	122
80	0·007	0·000	0·007	360
84	−0·007	−0·001	0·007	184
88	0·006	−0·010	0·012	302
90	−0·017	0·002	0·017	174
92	−0·013	0·006	0·015	153
94	−0·006	0·011	0·012	118
96	0·010	0·006	0·012	32
98	0·009	−0·002	0·009	347
100	0·004	0·002	0·005	27
102	0·006	0·007	0·009	49
104	0·011	−0·007	0·013	328
106	0·006	−0·013	0·014	294
108	0·002	−0·006	0·006	285
110	0·002	−0·001	0·002	330
112	−0·003	−0·007	0·008	244
114	−0·001	−0·010	0·010	262
116	0·003	−0·009	0·010	287
120	−0·009	−0·007	0·011	219
years.				
11	0·002	−0·003	0·003	307
12	0·005	0·004	0·006	38
13	0·003	0·000	0·003	360
14	0·004	−0·009	0·010	295
15	−0·004	−0·009	0·010	245
16	−0·001	−0·005	0·005	254
17	−0·002	−0·006	0·006	253
18	−0·004	−0·005	0·006	232
20	−0·002	−0·009	0·009	255
22	−0·007	−0·008	0·011	230
23	−0·006	−0·006	0·009	225
25	−0·013	−0·008	0·015	212
30	−0·001	0·000	0·001	153
35	−0·009	−0·003	0·010	200

The unit of R is 1 inch of mercury. For periods up to 10 years ϕ is measured from mid-January, 1770, and for periods longer than 10 years from the middle of the year 1770.

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TABLE VI.—Paris Pressure.

Period in months.	C.	S.	R.	ϕ	Period in months.	C.	S.	R.	ϕ
3	—0·18	—0·12	0·22	214	47	—0·12	—0·11	0·16	223
4	0·09	0·25	0·27	90	48	—0·18	0·06	0·19	162
6	0·71	0·35	0·79	26	49	0·24	0·14	0·28	29
12	—0·65	—0·20	0·68	197	50	0·10	—0·22	0·24	295
$12\frac{1}{3}$	—0·22	0·25	0·33	131	52	—0·04	—0·10	0·11	249
$12\frac{1}{2}$	0·14	0·07	0·16	26	54	—0·07	—0·03	0·10	245
$12\frac{2}{3}$	—0·09	0·24	0·25	111	55	—0·30	—0·03	0·30	186
13	—0·36	—0·03	0·36	184	56	—0·20	0·25	0·32	130
$13\frac{1}{3}$	—0·26	0·14	0·30	153	57	0·15	0·21	0·26	55
$13\frac{1}{2}$	—0·12	0·12	0·17	134	58	0·14	0·07	0·15	28
14	—0·08	0·22	0·23	111	60	0·16	0·08	0·18	26
$14\frac{1}{2}$	—0·28	—0·03	0·28	186	62	0·06	0·01	0·06	355
$14\frac{2}{3}$	0·08	0·40	0·41	79	64	—0·15	0·06	0·16	159
15	0·10	—0·03	0·10	342	66	0·11	0·16	0·19	56
$15\frac{1}{3}$	—0·15	—0·18	0·23	230	68	—0·17	—0·10	0·20	210
$15\frac{1}{2}$	0·01	0·07	0·07	81	70	—0·07	0·17	0·18	113
16	—0·25	—0·23	0·28	207	72	—0·19	—0·05	0·20	167
$16\frac{1}{2}$	0·12	—0·11	0·16	317	75	0·17	0·07	0·19	23
$16\frac{2}{3}$	0·16	0·08	0·18	27	76	0·14	0·00	0·14	360
17	0·07	0·20	0·21	71	78	—0·02	—0·08	0·08	258
$17\frac{1}{2}$	—0·02	—0·02	0·02	232	80	—0·04	—0·17	0·17	258
18	0·05	—0·03	0·06	329	84	—0·06	0·03	0·07	152
$18\frac{1}{2}$	—0·07	—0·28	0·29	257	88	—0·23	0·09	0·25	201
$18\frac{2}{3}$	—0·04	0·09	0·10	116	90	—0·21	0·12	0·24	149
19	—0·08	0·01	0·08	170	92	0·00	0·36	0·36	90
$19\frac{1}{3}$	—0·13	0·02	0·13	173	94	0·12	0·22	0·25	61
$19\frac{1}{2}$	—0·05	0·20	0·20	103	96	0·22	0·04	0·22	349
20	0·12	—0·17	0·20	306	98	0·02	0·02	0·03	50
$20\frac{2}{3}$	—0·17	0·19	0·25	132	100	0·03	0·03	0·05	48
21	0·03	0·27	0·28	84	102	0·14	0·04	0·15	17
$21\frac{1}{3}$	0·03	—0·09	0·09	286	104	0·26	—0·10	0·28	340
22	0·05	0·09	0·10	62	106	0·18	—0·17	0·24	317
23	0·21	—0·21	0·30	316	108	—0·18	—0·34	0·39	242
24	0·23	0·05	0·24	13	110	—0·22	—0·04	0·23	191
25	—0·09	—0·05	0·11	212	112	—0·28	0·09	0·29	163
26	—0·06	—0·23	0·24	256	114	—0·22	—0·23	0·32	226
27	0·05	—0·07	0·08	305	116	—0·23	0·33	0·41	125
28	—0·05	—0·17	0·18	253	120	0·04	0·14	0·15	107
29	—0·09	0·51	0·52	99					
30	0·00	0·17	0·17	90	years.				
31	—0·07	0·06	0·09	136	11	0·12	0·09	0·15	38
32	0·07	0·01	0·07	5	12	0·05	—0·04	0·06	322
33	—0·08	0·02	0·08	165	13	—0·03	—0·11	0·11	256
34	—0·01	0·08	0·08	96	14	—0·29	—0·08	0·30	196
35	0·19	0·05	0·20	13	15	—0·14	0·23	0·27	122
36	0·11	0·11	0·16	45	16	—0·03	0·08	0·09	110
37	—0·01	—0·11	0·11	263	17	—0·15	0·12	0·19	141
38	0·00	0·02	0·02	90	18	—0·13	0·19	0·23	123
39	0·11	—0·06	0·12	332	19	—0·08	0·18	0·20	115
40	0·09	0·08	0·12	41	20	—0·11	0·22	0·25	117
42	—0·01	0·00	0·01	180	22	0·00	0·40	0·40	90
44	0·08	—0·11	0·13	306	25	0·25	0·09	0·27	19
45	0·08	0·10	0·13	51	30	—0·15	0·26	0·30	119
46	0·07	—0·16	0·18	295	35	0·27	0·37	0·46	54

The unit of R is 1 mm. of mercury. For periods up to 10 years ϕ is measured from mid-January, 1764, and for periods longer than 10 years from the middle of the year 1757.

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Table VII.—Edinburgh Temperature.

Period in months.	C.	S.	R.	ϕ	Period in months.	C.	S.	R.	ϕ
3	0·00	0·10	0·10	270	45	0·17	0·06	0·18	20
4	0·00	0·10	0·10	90	46	—0·03	—0·10	0·10	256
6	0·90	0·70	1·15	38	48	0·07	—0·01	0·08	188
12	—11·0	—1·2	11·1	186	50	0·09	0·02	0·10	12
12½	0·09	—0·13	0·16	305	52	—0·08	—0·05	0·10	236
12⅔	—0·13	0·05	0·14	158	54	—0·12	—0·12	0·16	225
13	—0·35	0·30	0·46	140	56	—0·01	0·01	0·01	133
13⅓	0·00	0·08	0·08	90	58	0·07	0·14	0·15	63
13½	—0·22	0·00	0·22	180	60	—0·14	—0·25	0·30	242
14	—0·19	0·16	0·25	140	62	0·18	0·13	0·22	36
14½	0·09	0·05	0·10	30	64	—0·18	0·03	0·18	21
14⅔	—0·07	0·42	0·43	100	66	0·17	0·06	0·18	21
15	0·11	0·12	0·16	47	68	0·09	—0·09	0·13	315
15⅓	0·12	0·04	0·13	18	70	0·11	—0·09	0·14	321
15½	0·09	—0·12	0·15	306	72	—0·16	—0·35	0·39	245
16	0·00	—0·03	0·03	270	74	—0·01	0·22	0·22	93
16½	0·19	0·16	0·24	40	76	0·22	0·11	0·24	28
16⅔	0·15	—0·15	0·21	315	78	0·00	—0·25	0·25	270
17	—0·10	0·19	0·21	117	80	—0·03	—0·03	0·05	225
17½	0·15	—0·10	0·19	214	84	0·19	0·03	0·19	8
18	0·11	0·26	0·29	66	88	—0·26	0·03	0·27	174
18½	0·11	—0·18	0·20	301	90	—0·08	0·24	0·25	108
18⅔	—0·16	0·00	0·16	180	92	0·15	0·23	0·27	57
19	0·06	—0·09	0·11	304	94	0·33	—0·02	0·33	357
19⅓	0·16	—0·04	0·16	346	96	0·18	—0·21	0·28	310
19½	—0·29	—0·03	0·29	185	100	—0·03	0·07	0·08	296
20	—0·01	0·07	0·07	99	102	0·01	—0·07	0·07	277
20⅔	—0·19	—0·02	0·19	185	104	—0·02	—0·12	0·12	259
21	—0·09	0·10	0·13	129	108	0·01	—0·15	0·15	272
21⅓	0·21	—0·03	0·21	188	110	—0·02	—0·17	0·17	265
22	0·02	0·02	0·03	55	112	—0·14	—0·07	0·16	208
23	0·06	—0·19	0·20	289	114	—0·08	0·00	0·08	180
24	0·05	0·00	0·05	360	116	—0·04	0·11	0·12	110
25	—0·40	0·09	0·40	168	120	0·01	—0·06	0·06	277
26	0·23	—0·21	0·32	317					
27	—0·12	—0·04	0·13	198					
28	—0·05	—0·05	0·08	226	years.				
29	0·13	0·10	0·18	38	11	—0·23	0·50	0·55	115
30	0·22	—0·09	0·24	336	12	0·00	0·00	0·00	—
31	—0·08	0·12	0·15	124	13	0·20	0·23	0·30	49
32	0·06	0·02	0·06	18	14	0·16	—0·06	0·17	340
33	—0·06	0·03	0·07	153	15	0·10	—0·15	0·18	304
34	0·18	0·17	0·24	43	16	0·10	—0·22	0·23	294
35	0·24	0·03	0·24	7	17	0·10	—0·30	0·30	288
36	0·10	0·34	0·36	73	18	—0·12	—0·12	0·18	225
37	—0·01	0·32	0·32	273	20	0·08	0·01	0·08	7
38	—0·10	—0·18	0·21	118	22	0·17	—0·39	0·43	293
39	—0·02	—0·10	0·10	261	23	—0·45	—0·19	0·50	247
40	—0·04	0·21	0·22	102	25	—0·48	0·00	0·48	180
42	—0·28	—0·13	0·30	204	30	0·25	—0·03	0·25	354
44	—0·14	0·10	0·17	143	35	—0·05	—0·28	0·29	261

The unit of R is 1° F. for periods up to 10 years. ϕ is measured from mid-January, 1764, and for periods longer than 10 years from the middle of the year 1764.

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TABLE VIII.—Stockholm Temperature.

Period in months.	C.	S.	R.	ϕ.	Period in months.	C.	S.	R.	ϕ.
3	0·10	0·14	0·17	55	46	—0·11	—0·03	0·11	193
4	—0·03	0·05	0·06	121	47	0·18	0·03	0·18	10
6	0·87	—0·13	0·88	352	48	—0·16	—0·30	0·34	242
12	—10·8	—1·8	11·0	189	49	—0·07	0·15	0·17	116
$12\frac{1}{3}$	0·33	—1·20	1·24	75	50	0·12	0·15	0·19	51
$12\frac{1}{2}$	0·24	—0·09	0·26	339	52	—0·01	0·03	0·03	114
$12\frac{2}{3}$	—0·09	0·13	0·15	124	54	0·04	0·10	0·10	70
13	—0·36	0·32	0·48	139	55	0·11	0·16	0·20	57
$13\frac{1}{3}$	0·07	0·13	0·15	63	56	—0·14	0·19	0·24	127
$13\frac{1}{2}$	—0·01	0·11	0·11	95	58	0·11	0·06	0·12	27
14	—0·04	0·11	0·12	112	60	0·02	—0·15	0·15	276
$14\frac{1}{2}$	—0·10	0·16	0·18	120	62	0·02	0·20	0·20	85
$14\frac{2}{3}$	—0·02	0·39	0·39	93	64	—0·06	—0·08	0·10	230
15	—0·13	0·15	0·19	132	66	—0·07	—0·26	0·27	256
$15\frac{1}{3}$	0·29	0·06	0·29	12	70	0·10	—0·30	0·32	289
$15\frac{1}{2}$	0·11	—0·09	0·14	323	72	0·00	—0·04	0·04	270
16	—0·05	—0·17	0·17	253	75	—0·04	0·12	0·13	108
$16\frac{1}{2}$	—0·05	0·03	0·06	148	76	0·12	0·07	0·14	28
$16\frac{2}{3}$	0·02	—0·13	0·13	279	78	—0·09	—0·10	0·13	228
17	—0·15	0·17	0·22	131	80	—0·06	0·04	0·07	148
$17\frac{1}{2}$	—0·21	—0·20	0·28	223	84	0·05	0·04	0·06	40
18	0·11	0·04	0·12	20	88	—0·17	—0·02	0·17	187
$18\frac{1}{2}$	—0·10	—0·11	0·15	228	90	—0·11	0·08	0·14	144
$18\frac{2}{3}$	—0·27	0·05	0·28	169	92	0·03	0·13	0·13	75
19	0·10	0·08	0·13	38	94	0·15	0·00	0·15	360
$19\frac{1}{3}$	0·21	0·16	0·26	37	96	—0·04	—0·12	0·13	251
$19\frac{1}{2}$	0·03	—0·03	0·04	320	98	—0·06	—0·02	0·06	203
20	—0·12	0·05	0·13	159	100	—0·02	0·20	0·21	97
$20\frac{2}{3}$	—0·02	0·07	0·07	104	102	0·13	0·21	0·25	58
21	—0·03	0·23	0·23	97	104	0·30	0·25	0·39	40
$21\frac{1}{3}$	0·07	—0·23	0·24	287	106	0·22	—0·12	0·25	331
22	0·12	—0·07	0·14	329	108	—0·11	0·09	0·14	139
23	0·10	—0·05	0·11	331	110	0·04	0·01	0·04	11
24	0·25	0·12	0·28	25	112	—0·07	0·12	0·14	120
25	—0·20	0·10	0·22	152	114	0·06	0·05	0·08	39
26	0·07	—0·08	0·10	313	116	0·14	0·06	0·15	24
27	—0·07	—0·05	0·08	218	120	0·10	—0·04	0·11	336
28	0·13	—0·04	0·14	344					
29	0·22	0·07	0·23	16	years.				
30	0·20	—0·07	0·21	340	11	0·06	0·03	0·07	22
31	—0·09	0·03	0·10	160	12	0·14	0·14	0·20	44
32	—0·10	—0·06	0·12	212	13	0·13	0·15	0·20	48
33	—0·08	—0·09	0·12	132	14	0·15	0·12	0·19	38
34	—0·05	0·11	0·12	116	15	0·13	0·24	0·27	62
35	0·23	—0·02	0·23	355	16	0·05	0·22	0·23	78
36	—0·02	0·12	0·12	101	17	0·13	0·08	0·15	32
37	—0·01	—0·06	0·06	263	18	0·03	0·00	0·03	8
38	—0·01	—0·08	0·08	263	20	0·16	0·05	0·17	18
39	0·13	0·03	0·13	12	22	0·17	0·16	0·23	44
40	0·01	—0·01	0·02	328	25	0·16	0·22	0·27	54
42	—0·23	—0·06	0·23	196	30	0·03	0·25	0·25	83
44	—0·01	0·11	0·11	96	35	0·23	0·21	0·31	42

The unit of R is 1° C. For periods up to 10 years ϕ is measured from mid-January, 1764, and for periods longer than 10 years ϕ is measured from the middle of the year 1756.

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Table IX.—London Temperature.

Period in months.	C.	S.	R.	ϕ	Period in months.	C.	S.	R.	ϕ
3	−0·4	0·1	0·4	166	44	−0·02	−0·07	0·07	103
4	0·2	0·1	0·2	26	45	0·24	0·02	0·24	11
6	0·5	0·8	0·9	58	46	−0·12	0·03	0·13	165
12	−13·2	−1·6	13·3	187	48	−0·10	0·06	0·12	146
12⅓	0·49	1·13	1·23	67	49	−0·10	0·09	0·15	140
12½	0·03	0·00	0·03	360	50	0·06	0·04	0·07	30
12⅔	−0·14	−0·03	0·14	193	52	−0·05	−0·09	0·10	243
13	−0·28	0·48	0·56	121	54	0·00	0·03	0·03	90
13⅓	−0·18	0·12	0·22	146	56	0·19	0·07	0·20	21
13½	−0·08	0·18	0·19	113	58	−0·02	−0·02	0·03	219
14	−0·15	0·22	0·26	124	60	−0·02	−0·38	0·38	267
14⅓	0·28	0·29	0·41	46	62	0·13	0·13	0·18	45
14⅔	−0·07	0·40	0·41	100	64	0·00	−0·36	0·36	270
15	0·09	0·18	0·20	64	66	−0·05	−0·15	0·16	250
15⅓	0·26	0·02	0·26	5	68	0·00	−0·02	0·02	270
15½	0·08	−0·08	0·11	315	72	0·09	0·02	0·09	13
16	−0·03	0·03	0·04	133	74	−0·07	0·13	0·15	120
16⅓	0·16	0·03	0·17	9	76	−0·05	−0·03	0·06	209
16⅔	0·18	−0·19	0·26	315	78	−0·15	0·06	0·16	158
17	−0·04	0·09	0·10	112	80	0·00	0·01	0·01	90
17½	0·16	−0·14	0·21	320	84	0·13	0·05	0·14	20
17⅔	−0·20	−0·16	0·25	219	88	−0·29	0·07	0·30	166
18	−0·05	−0·06	0·08	233	90	0·13	−0·05	0·14	337
18½	−0·11	−0·07	0·13	213	92	−0·01	0·16	0·16	95
18⅔	−0·09	0·09	0·12	135	96	0·30	−0·05	0·30	350
19	0·03	0·01	0·03	19	98	−0·32	−0·25	0·41	218
19⅓	0·30	0·06	0·31	11	100	−0·27	0·18	0·32	146
19½	−0·27	−0·15	0·31	210	102	−0·05	0·20	0·21	104
20	0·02	0·20	0·20	85	104	0·00	0·17	0·17	90
21	−0·05	0·12	0·13	116	108	−0·13	0·11	0·17	141
21⅓	−0·24	−0·20	0·31	220	112	0·13	−0·05	0·14	339
22	−0·09	−0·03	0·09	196	114	0·06	−0·15	0·16	292
23	0·04	−0·24	0·24	279	120	0·26	0·11	0·21	30
24	0·15	−0·02	0·15	354					
25	−0·40	0·16	0·47	158					
25½	0·22	0·39	0·45	61	years.				
26	0·38	−0·31	0·49	321	11	−0·07	−0·09	0·11	231
27	−0·13	−0·16	0·21	230	12	−0·10	−0·01	0·10	186
28	−0·14	0·08	0·16	150	13	−0·11	0·19	0·22	120
29	0·19	0·20	0·27	46	14	0·18	0·09	0·20	27
30	0·20	−0·12	0·23	329	15	0·32	0·22	0·39	35
31	0·20	−0·10	0·22	153	16	0·00	−0·11	0·11	270
32	0·02	0·03	0·04	54	17	0·31	−0·19	0·37	301
33	−0·04	−0·10	0·10	247	17½	−0·02	−0·51	0·51	268
34	0·09	0·08	0·12	42	18	−0·19	−0·27	0·33	235
35	0·09	−0·10	0·14	311	19	0·03	−0·03	0·04	320
36	−0·10	0·13	0·16	126	20	0·11	−0·18	0·21	301
37	0·18	−0·41	0·45	294	22	0·17	−0·44	0·47	291
38	−0·03	0·25	0·25	97	23	−0·11	−0·69	0·70	261
39	−0·02	−0·01	0·03	211	25	−0·42	−0·24	0·49	210
40	−0·04	0·22	0·22	100	30	−0·39	−0·12	0·41	197
42	−0·35	−0·23	0·41	213	35	−0·07	−0·25	0·26	254

The unit of R is 1° F. For periods up to 10 years ϕ is measured from mid-January, 1764, and for periods longer than 10 years from the middle of the year 1763.

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Table X.—Berlin Temperature.

Period in months.	C.	S.	R.	ϕ
3	—0·15	0·15	0·21	135
4	0·18	—0·03	0·18	351
6	—0·02	0·17	0·17	96
12	—10·4	—0·4	10·4	182
12½	0·10	—0·9	0·13	320
12⅔	—0·13	—0·06	0·14	195
13	—0·14	0·37	0·39	111
13⅓	0·15	0·08	0·17	27
13½	0·06	0·17	0·18	70
14	—0·15	0·12	0·21	141
14½	0·05	0·23	0·23	77
14⅔	—0·01	0·26	0·26	92
15	0·07	0·11	0·13	32
15⅓	0·20	0·08	0·21	67
15½	0·07	—0·02	0·07	345
16	0·12	0·00	0·12	90
16½	0·07	0·02	0·07	345
16⅔	0·15	—0·16	0·22	313
17	0·04	0·17	0·17	77
17½	0·00	—0·09	0·09	270
18	—0·02	—0·01	0·02	207
18½	—0·08	0·06	0·10	143
18⅔	—0·15	0·18	0·23	129
19	0·25	0·10	0·27	21
19⅓	0·20	0·09	0·22	22
19½	—0·03	0·04	0·05	125
20	0·08	0·18	0·19	67
20⅔	—0·09	—0·07	0·11	218
21	—0·01	0·08	0·09	93
21⅓	0·00	—0·20	0·20	270
22	—0·10	0·10	0·14	135
23	—0·09	—0·07	0·11	322
24	0·18	—0·09	0·21	331
25	—0·10	0·05	0·11	150
26	0·23	—0·21	0·31	318
27	—0·11	—0·04	0·12	160
28	0·11	0·11	0·15	45
29	0·27	0·05	0·27	11
30	0·22	—0·06	0·22	344
31	—0·01	0·11	0·11	94
32	0·06	—0·11	0·12	298
33	—0·04	—0·06	0·10	236
34	0·05	0·06	0·08	53
35	0·12	—0·01	0·12	355
36	0·02	0·17	0·17	83
37	0·14	—0·40	0·42	290
38	0·06	0·01	0·06	9
39	—0·08	0·01	0·08	175
40	0·02	0·01	0·02	14
42	—0·32	0·04	0·32	173
44	—0·03	0·12	0·13	104
46	0·05	0·02	0·06	24
48	—0·11	—0·21	0·24	242
50	0·09	0·13	0·16	56
52	0·04	0·08	0·09	64
54	—0·02	0·06	0·06	111
56	0·12	0·01	0·12	3
57	0·20	0·02	0·20	4
58	0·19	—0·01	0·19	357
60	—0·10	—0·29	0·31	252
62	0·00	0·20	0·20	90
64	0·12	—0·11	0·16	317
66	0·02	—0·32	0·32	272
68	0·14	—0·04	0·15	196
70	—0·04	0·10	0·11	113
72	—0·07	0·03	0·08	157
74	—0·05	0·28	0·28	100
75	—0·02	0·01	0·02	121
78	0·04	—0·16	0·16	286
80	—0·14	—0·10	0·17	214
84	0·01	—0·06	0·06	274
87	—0·16	—0·05	0·17	197
90	0·00	0·16	0·16	90
92	0·25	0·15	0·29	32
96	0·22	—0·10	0·24	335
100	—0·08	0·12	0·14	124
102	0·10	0·19	0·23	53
104	0·17	0·14	0·22	39
108	0·10	—0·02	0·10	347
112	0·06	0·04	0·07	33
116	0·03	—0·03	0·05	321
120	0·02	—0·07	0·07	286
years.				
11	0·06	0·11	0·12	59
12	0·01	0·05	0·05	77
13	0·18	—0·03	0·19	80
14	—0·20	—0·15	0·25	217
14½	—0·19	0·00	0·19	360
15	—0·21	0·14	0·25	146
16	0·00	0·16	0·16	90
17	0·11	0·17	0·21	57
18	0·09	0·03	0·10	18
20	0·14	0·14	0·20	45
22	0·15	0·01	0·15	2
25	—0·07	—0·12	0·14	240
30	—0·03	0·19	0·19	99
35	0·20	0·28	0·34	55

The unit of R is 1° C. For periods up to 10 years, ϕ is measured from mid-January, 1764, and for periods longer than 10 years, from the middle of the year 1756.

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TABLE XI.—Paris Temperature.

Period in months.	C.	S.	R.	ϕ.	Period in months.	C.	S.	R.	ϕ.
3	−0·2	0·6	0·6	108	47	0·14	0·08	0·16	31
4	0·1	0·1	0·2	315	48	0·14	0·14	0·20	315
6	0·0	0·1	0·1	90	49	−0·06	0·04	0·07	145
12	−8·3	−0·5	8·3	182	50	0·08	−0·01	0·08	351
12⅓	0·28	0·71	0·80	70	52	−0·11	0·00	0·11	180
12½	0·03	0·08	0·09	72	54	−0·05	0·04	0·07	139
12⅔	−0·01	0·01	0·01	141	55	−0·04	0·15	0·16	104
13	−0·08	0·35	0·36	103	56	−0·04	0·16	0·16	105
13⅓	0·02	0·00	0·02	360	57	0·07	0·08	0·11	48
13½	0·08	0·07	0·10	42	58	0·16	0·05	0·17	19
14	−0·08	0·13	0·15	123	60	−0·04	−0·13	0·14	252
14½	0·21	0·15	0·26	35	62	−0·08	0·17	0·19	116
14⅔	−0·09	0·24	0·25	110	64	0·04	0·06	0·07	53
15	0·04	0·04	0·06	45	66	0·11	0·02	0·11	9
15⅓	0·09	0·16	0·18	60	68	−0·10	−0·07	0·10	190
15½	0·08	−0·09	0·12	312	70	0·09	0·13	0·16	54
16	0·02	−0·07	0·07	289	72	0·02	−0·17	0·17	278
16½	0·11	0·04	0·11	20	74	0·03	0·09	0·10	71
16⅔	0·07	−0·06	0·09	316	75	−0·01	0·03	0·03	110
17	−0·05	0·04	0·06	137	76	0·00	0·03	0·03	90
17½	0·02	−0·17	0·17	278	78	−0·09	−0·04	0·10	205
18	0·07	−0·02	0·07	347	80	−0·22	−0·03	0·22	187
18½	−0·11	0·06	0·13	149	82	−0·06	0·09	0·11	122
18⅔	0·02	0·20	0·20	86	84	−0·01	0·02	0·02	116
19	0·13	−0·09	0·16	326	88	−0·21	0·11	0·24	152
19⅓	0·16	−0·03	0·17	349	90	−0·17	0·23	0·29	127
19½	−0·18	−0·01	0·18	185	92	0·07	0·35	0·36	79
20	0·04	0·15	0·16	76	94	0·10	0·13	0·16	38
20⅔	−0·13	0·03	0·13	168	96	0·07	−0·03	0·08	335
21	−0·03	0·01	0·03	162	98	−0·04	0·07	0·08	118
21⅓	0·03	−0·09	0·10	287	100	−0·09	0·13	0·16	126
22	0·05	−0·01	0·05	355	102	0·07	0·12	0·14	61
23	0·18	−0·03	0·19	352	104	0·20	0·06	0·21	18
24	−0·01	0·08	0·08	97	106	0·12	−0·03	0·12	346
25	−0·12	0·05	0·13	157	108	−0·05	0·03	0·06	155
25½	0·17	0·09	0·19	27	110	0·01	0·11	0·11	86
26	0·08	−0·11	0·14	305	112	0·13	0·08	0·15	32
27	−0·04	0·07	0·08	238	114	0·03	−0·01	0·03	340
28	−0·04	0·14	0·15	104	116	0·04	0·07	0·08	58
29	0·05	0·11	0·12	64	120	0·00	−0·02	0·02	270
30	0·13	0·06	0·14	23					
31	−0·07	−0·05	0·08	214	years.				
32	0·11	0·04	0·12	18	11	0·08	0·01	0·08	8
33	0·03	−0·05	0·06	303	12	−0·08	0·03	0·09	158
34	−0·05	−0·03	0·06	213	13	0·09	0·03	0·09	17
35	0·00	0·04	0·04	84	14	−0·14	0·05	0·15	160
36	0·16	0·09	0·18	29	15	−0·02	0·20	0·20	97
37	0·12	−0·22	0·25	298	16	0·10	0·16	0·19	59
38	−0·07	0·10	0·13	125	17	0·13	0·06	0·14	25
39	−0·12	0·05	0·13	158	18	0·07	−0·03	0·08	338
40	−0·08	0·17	0·18	116	20	−0·01	0·02	0·02	115
42	−0·23	−0·17	0·28	216	22	0·07	0·00	0·07	360
44	−0·04	0·02	0·05	159	25	−0·06	−0·08	0·10	236
45	−0·04	0·15	0·16	77	30	−0·24	0·09	0·26	159
46	−0·13	0·15	0·21	128	35	−0·02	0·25	0·25	95

The unit of R is 1° C. For periods up to 10 years, ϕ is measured from mid-January, 1764, and for periods longer than 10 years, from the end of May, 1757.

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TABLE XII.—Vienna Temperature.

Period in months.	C.	S.	R.	ϕ	Period in months.	C.	S.	R.	ϕ
3	−0·1	0·2	0·2	120	47	0·01	0·10	0·10	85
4	0·1	−0·1	0·1	315	48	0·20	−0·05	0·20	345
6	−0·2	0·3	0·4	124	49	0·01	−0·21	0·21	274
12	−8·8	−0·1	8·8	180	50	−0·10	−0·05	0·11	208
12⅓	0·58	0·74	0·94	52	52	0·35	0·09	0·36	15
12½	0·04	0·09	0·10	63	54	0·19	−0·11	0·22	330
12⅔	0·11	0·12	0·16	47	56	0·00	−0·16	0·16	270
13	−0·02	0·18	0·18	96	58	−0·09	−0·08	0·12	220
13⅓	0·20	0·03	0·20	351	60	−0·31	0·00	0·31	180
13½	−0·04	−0·03	0·05	217	62	0·05	0·05	0·07	45
14	0·01	−0·11	0·11	277	64	0·03	0·01	0·03	22
14½	0·24	0·11	0·27	24	66	0·17	−0·20	0·26	310
14⅔	−0·04	0·03	0·05	144	68	−0·16	−0·15	0·22	223
15	0·10	−0·10	0·14	315	70	−0·10	0·02	0·10	171
15⅓	0·09	0·05	0·11	31	72	−0·04	−0·03	0·05	218
15½	0·00	0·07	0·07	90	75	−0·01	0·01	0·01	121
16	0·07	0·01	0·07	7	76	−0·02	0·09	0·09	104
16½	0·13	0·03	0·14	346	78	−0·12	0·12	0·17	135
16⅔	0·16	−0·16	0·23	315	80	0·18	−0·07	0·19	339
17	−0·04	0·04	0·06	135	82	−0·06	−0·06	0·09	225
17½	−0·01	−0·03	0·03	253	84	0·01	0·10	0·10	83
18	0·14	0·06	0·15	25	88	0·24	−0·09	0·25	340
18½	0·05	0·02	0·06	18	90	0·11	−0·23	0·25	295
18⅔	−0·05	0·02	0·05	157	92	0·02	−0·20	0·20	265
19	0·16	−0·02	0·17	352	94	−0·12	−0·09	0·15	217
19⅓	0·18	0·17	0·25	42	96	−0·12	−0·06	0·14	207
19½	0·20	−0·16	0·25	322	98	0·03	0·13	0·13	77
20	−0·09	−0·15	0·18	240	100	0·11	0·10	0·15	44
20⅔	−0·04	0·07	0·08	122	102	0·26	0·01	0·26	2
21	0·09	−0·20	0·23	295	104	0·11	−0·22	0·24	296
21⅓	−0·17	−0·06	0·18	260	106	−0·01	−0·19	0·19	266
22	−0·02	0·02	0·03	135	108	−0·11	−0·27	0·29	248
23	0·13	−0·01	0·13	355	110	−0·19	0·09	0·21	205
24	−0·04	−0·01	0·04	197	112	−0·21	−0·04	0·21	186
25	0·00	0·01	0·01	79	114	−0·06	0·07	0·09	129
26	0·05	−0·23	0·24	282	116	−0·01	0·04	0·04	102
27	−0·08	−0·12	0·14	236	120	0·01	−0·08	0·08	275
28	−0·13	−0·02	0·13	186					
29	−0·20	−0·08	0·21	201					
30	−0·17	−0·07	0·19	201	years.				
31	−0·06	0·05	0·07	139	11	−0·13	−0·08	0·15	213
32	0·02	−0·04	0·04	294	12	0·09	−0·13	0·16	303
33	−0·08	0·02	0·09	166	13	−0·08	−0·15	0·17	241
34	0·04	−0·02	0·05	335	14	−0·18	0·27	0·32	124
35	−0·06	0·10	0·11	122	15	0·04	0·08	0·09	66
36	−0·20	−0·03	0·21	190	16	−0·04	0·04	0·05	135
37	−0·05	0·19	0·19	104	17	−0·01	0·08	0·08	97
38	−0·08	−0·07	0·11	223	18	0·02	0·00	0·02	80
39	0·18	0·04	0·19	13	19	−0·03	−0·02	0·04	146
40	0·02	0·00	0·02	360	20	−0·05	0·11	0·12	114
42	−0·02	0·20	0·21	95	22	0·13	0·10	0·17	38
44	0·02	0·12	0·12	82	23	0·15	0·00	0·15	360
45	0·12	0·05	0·13	22	25	0·03	0·10	0·11	72
46	−0·02	−0·07	0·07	251	30	−0·09	0·09	0·13	135

The unit of R is 1° C. For period, up to 10 years, ϕ is measured from mid-January, 1775, and for periods longer than 10 years, from the middle of the year 1775.

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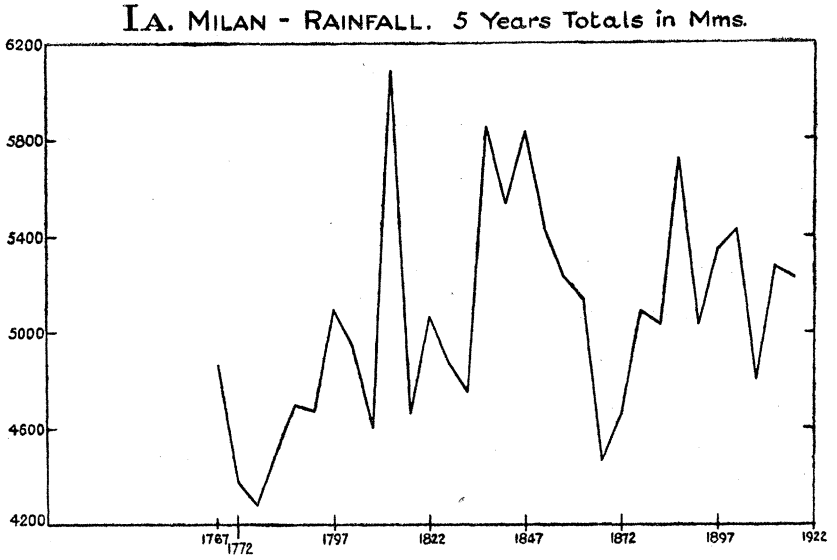

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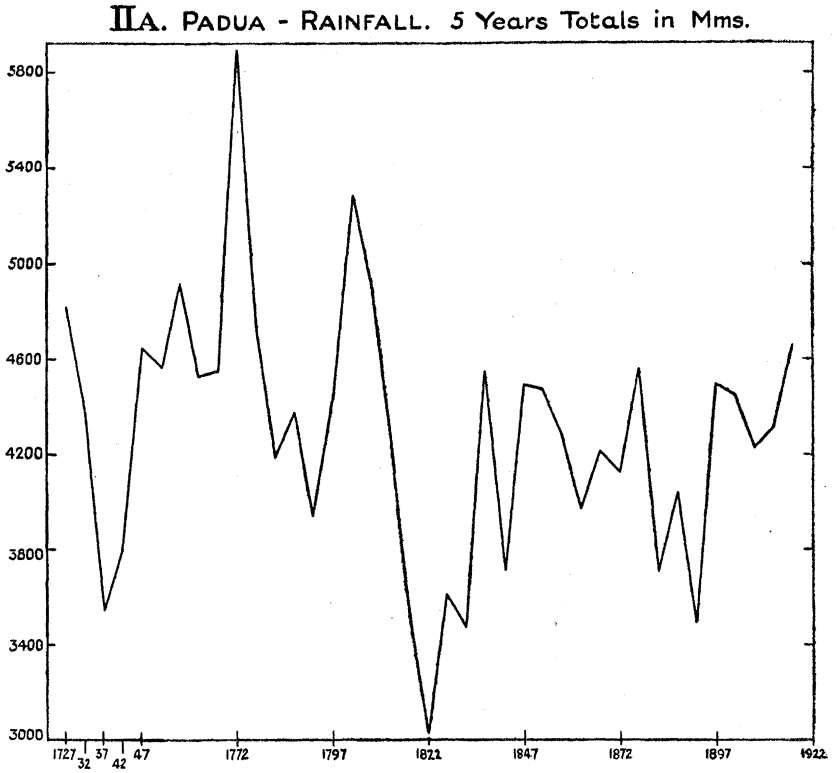

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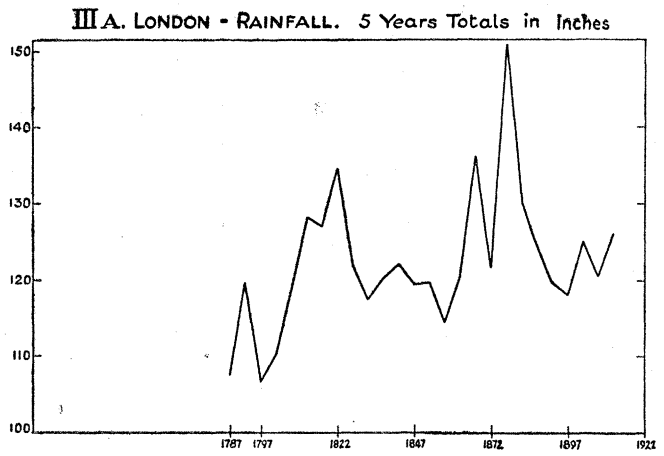

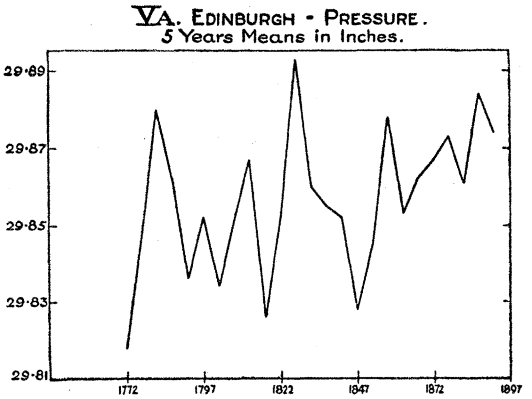

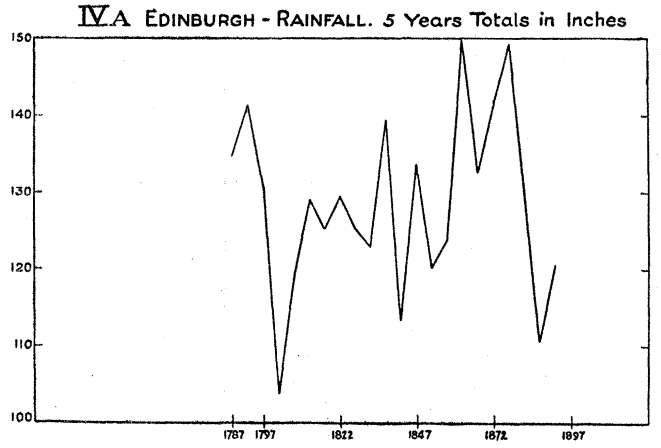

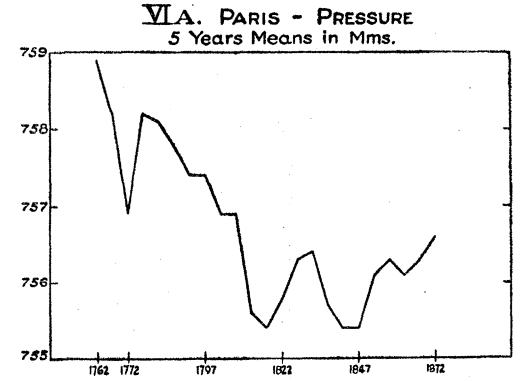

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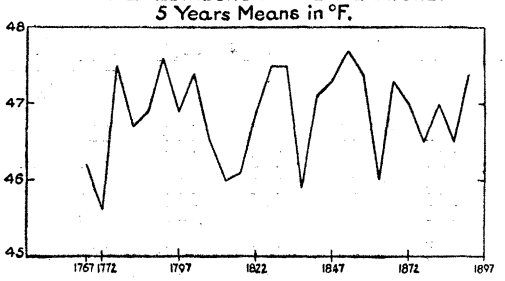
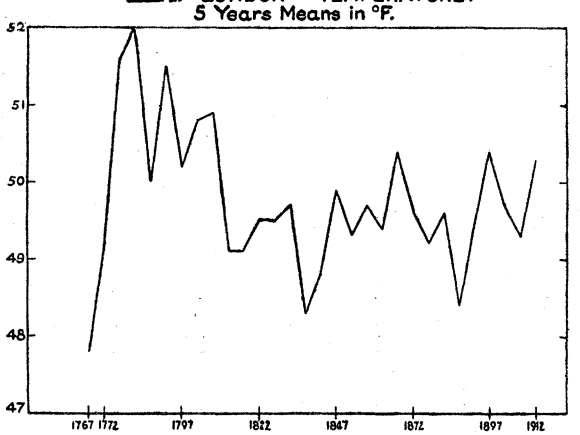
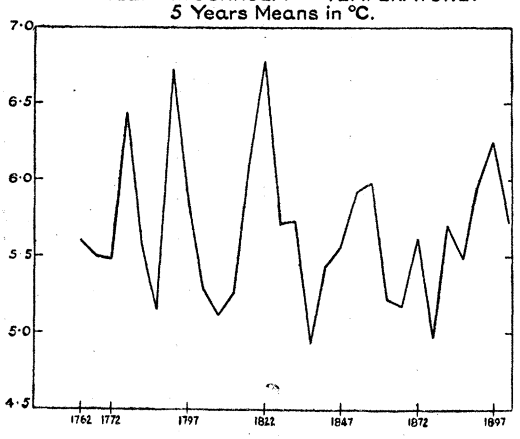
VII A. EDINBURGH - TEMPERATURE.
5 Years Means in °F.



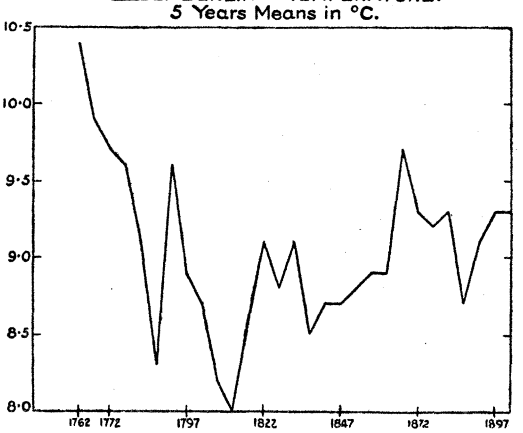
IX A. LONDON - TEMPERATURE.
5 Years Means in °F.



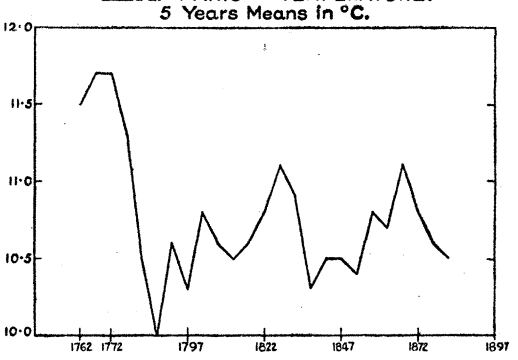
VIII A. STOCKHOLM - TEMPERATURE.
5 Years Means in °C.



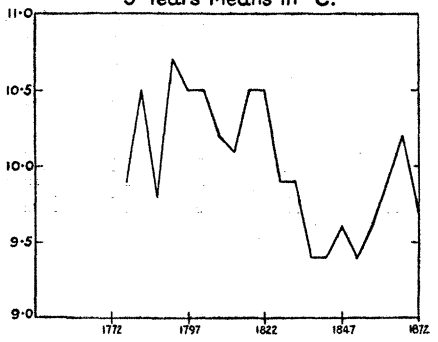
X A. BERLIN - TEMPERATURE.
5 Years Means in °C.



XI A. PARIS - TEMPERATURE.
5 Years Means in °C.



XII A. VIENNA - TEMPERATURE.
5 Years Means in °C.



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APPENDIX

Tables I–XII of data used.

TABLE I.—Milan Rainfall in millimetres, 1764–1863.

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Total.
1764	56	31	97	62	139	25	72	62	22	85	165	120	937
1765	88	75	139	68	96	102	206	128	4	165	186	30	1286
1766	0	71	93	91	94	29	59	89	28	171	116	32	871
1767	0	61	4	57	78	146	20	181	136	73	120	44	919
1768	81	3	4	90	116	108	20	44	101	182	42	106	899
1769	112	98	30	84	47	66	159	35	20	81	120	47	900
1770	14	52	96	25	105	98	55	85	33	93	100	77	833
1771	75	51	89	87	64	61	20	4	62	55	14	121	703
1772	127	100	96	143	97	33	66	2	196	43	146	48	1096
1773	36	71	19	93	116	68	76	110	28	25	122	198	961
1774	52	105	39	41	170	82	16	13	203	16	33	19	788
1775	28	58	29	4	112	123	98	101	6	74	60	34	726
1776	76	98	61	55	65	40	37	74	139	87	110	58	900
1777	37	111	47	63	116	143	78	18	5	249	37	140	1044
1778	120	42	85	60	3	113	37	15	117	32	101	20	824
1779	—	2	6	10	65	118	50	104	39	176	91	127	787
1780	65	20	9	38	41	47	120	254	104	59	66	53	877
1781	35	53	33	194	97	69	21	108	153	104	38	26	930
1782	58	33	33	138	117	9	51	34	37	92	104	53	758
1783	84	57	114	1	112	96	60	108	155	137	27	79	1030
1784	17	12	134	125	30	21	15	114	108	177	38	120	910
1785	38	133	37	61	78	21	43	38	16	41	206	204	915
1786	94	26	168	133	50	83	120	41	78*	26	223	32	1075
1787	53	15	120	142	105	27	44	42	42	66	134	70	859
1788	141	176	51	7	40	117	110	117	169	20	41	111	1099
1789	15	17	67	39	30	54	24	114	86	143	135	30	754
1790	10	21	0	71	80	153	42	45	75	40	192	34	763
1791	82	47	3	171	81	42	155	48	32	80	158	185	1082
1792	92	9	22	26	226	78	12	43	62	126	80	35	812
1793	61	9	127	105	165	24	65	47	80	139	118	142	1082
1794	50	1	28	49	118	129	111	32	99	86	179	33	915
1795	30	67	43	98	51	203	111	121	61	175	104	33	1098
1796	161	41	54	12	117	80	49	65	107	181	93	80	1041
1797	50	25	123	171	117	152	4	22	115	182	65	38	1063
1798	56	35	67	24	35	155	86	85	232	23	116	58	972
1799	25	80	37	158	114	150	57	47	43	140	22	58	931
1800	181	9	15	62	65	70	44	47	96	27	168	104	889
1801	9	62	68	39	121	60	92	17	133	215	337	45	1197
1802	55	69	106	12	98	22	6	—	14	203	200	78	862
1803	131	67	86	35	77	5	29	47	40	48	160	82	805
1804	156	61	88	71	101	14	124	17	66	153	107	172	1129
1805	181	63	7	79	55	113	80	93	10	75	6	75	837
1806	63	92	38	108	75	83	139	184	128	7	112	101	1130
1807	2	57	77	58	15	148	52	65	69	166	259	16	984
1808	44	32	2	23	117	131	81	13	64	63	120	43	733
1809	59	72	76	191	89	67	51	17	44	57	123	169	1017
1810	84	120	73	96	218	121	64	87	104	117	205	56	1345

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TABLE I (continued).

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Total.
1811	52	40	9	110	79	184	13	122	149	100	7	40	903
1812	68	28	158	57	87	51	84	78	39	274	87	55	1067
1813	110	45	8	62	47	92	121	62	235	167	120	119	1188
1814	185	—	124	110	121	74	74	338	12	184	234	119	1574
1815	100	35	0	76	113	85	181	116	10	171	76	25	987
1816	111	46	56	84	76	109	74	79	54	61	128	16	893
1817	72	2	21	6	77	48	105	84	54	105	45	50	669
1818	37	19	52	52	148	24	145	128	121	121	71	50	968
1819	69	86	26	57	84	125	62	187	4	221	143	25	1090
1820	50	119	36	99	120	58	79	54	73	128	101	42	959
1821	140	—	71	25	90	166	143	138	50	162	11	148	1145
1822	15	12	5	54	80	35	60	114	138	151	64	152	878
1823	137	139	40	142	54	88	116	22	80	228	8	23	1078
1824	2	188	53	52	61	113	8	37	68	250	92	57	983
1825	19	—	51	14	96	49	69	24	29	26	137	311	825
1826	83	85	95	20	102	44	98	115	74	224	223	125	1287
1827	112	62	54	153	212	48	130	130	117	49	9	38	1114
1828	12	68	51	72	93	46	15	38	103	58	95	44	695
1829	114	15	115	115	46	63	56	32	180	96	68	56	957
1830	47	32	17	55	48	149	18	80	131	47	116	143	884
1831	92	22	63	178	101	83	78	85	97	47	8	56	909
1832	105	124	143	70	41	71	—	107	99	56	209	7	1032
1833	10	56	145	108	14	132	204	37	217	35	63	10	1030
1834	84	38	16	65	68	91	115	132	17	96	84	0	804
1835	47	41	22	95	184	73	23	211	124	92	25	4	941
1836	9	261	77	105	87	29	52	71	140	128	77	59	1096
1837	61	42	144	164	169	59	70	194	21	77	44	114	1160
1838	80	129	113	114	109	180	19	9	241	76	143	84	1297
1839	22	71	75	54	148	19	17	175	59	184	349	176	1348
1840	29	47	8	61	154	19	133	98	99	74	141	36	899
1841	47	198	29	51	29	94	9	25	57	222	50	157	969
1842	56	27	28	111	228	69	167	14	343	93	195	28	1359
1843	15	241	56	100	182	149	78	191	13	63	92	—	1180
1844	21	114	59	0	149	46	55	55	119	257	130	143	1148
1845	208	66	124	34	131	147	89	158	71	72	225	31	1355
1846	27	2	56	125	132	73	65	196	174	306	90	90	1338
1847	120	9	—	102	40	64	116	159	40	96	36	137	917
1848	56	86	151	149	48	94	80	74	131	265	126	9	1269
1849	8	16	89	227	89	28	20	172	17	121	40	158	984
1850	41	1	5	199	173	47	142	185	21	200	205	55	1273
1851	34	84	67	92	231	3	185	44	216	219	189	—	1362
1852	19	56	19	16	24	76	233	132	201	59	152	106	1094
1853	71	86	98	53	101	74	22	68	119	178	89	62	1022
1854	51	1	0	53	90	45	41	68	0	102	152	149	753
1855	20	156	135	128	80	128	29	15	244	213	71	8	1226
1856	116	63	24	120	123	51	168	41	112	142	34	72	1067
1857	24	10	67	63	97	73	48	77	85	165	47	7	762
1858	18	0	78	98	148	67	183	58	42	142	112	70	1016
1859	33	65	49	51	288	142	59	98	30	209	49	85	1158
1860	11	28	23	221	99	110	76	77	136	40	204	137	1162
1861	7	117	81	15	16	117	60	36	113	63	46	0	672
1862	41	40	189	55	145	85	22	111	266	117	182	61	1315
1863	161	0	187	42	118	76	15	8	100	283	90	35	1114

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Table I (continued).

Annual Values, 1864–1900.

	0	1	2	3	4	5	6	7	8	9
1860	—	—	—	—	880	809	861	985	973	835
1870	721	639	1570	1053	681	1044	1170	884	982	1008
1880	1004	1098	1268	868	799	1168	1219	995	1158	1179
1890	1031	1108	1193	862	838	863	1310	935	1361	881
1900	1122	—	—	—	—	—	—	—	—	—

Table II.—Padua Rainfall in millimetres, 1764–1863.

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Total.
1764	40	86	82	42	97	98	62	23	79	85	191	184	1069
1765	85	60	54	112	121	59	146	59	43	109	123	11	982
1766	9	32	59	87	83	79	122	52	74	96	117	31	841
1767	73	32	63	91	127	107	61	91	86	89	64	18	902
1768	99	0	2	61	105	54	45	44	105	82	79	87	763
1769	127	124	154	120	103	83	50	43	5	64	136	52	1061
1770	137	123	123	141	118	55	67	102	54	286	136	30	1372
1771	102	76	116	61	32	136	129	30	117	34	2	227	1062
1772	307	150	103	218	231	49	26	72	69	32	173	133	1563
1773	68	84	26	93	111	121	102	70	128	20	230	76	1129
1774	55	71	43	73	165	66	60	40	99	37	31	20	760
1775	32	19	56	10	153	72	142	81	50	67	212	22	916
1776	90	109	47	105	104	69	31	38	151	112	73	14	943
1777	122	97	56	49	72	233	115	6	66	196	26	146	1184
1778	65	32	74	82	44	129	9	59	109	77	146	40	866
1779	0	0	1	22	55	150	64	126	55	151	129	75	826
1780	58	54	10	77	20	85	41	140	120	111	75	21	812
1781	47	35	52	95	93	186	42	78	96	89	111	16	940
1782	53	50	41	154	39	79	25	8	18	192	128	34	821
1783	56	58	112	14	140	65	57	58	124	86	2	53	825
1784	87	55	117	74	37	81	15	37	48	99	36	105	791
1785	54	115	40	34	61	107	129	33	23	93	58	171	918
1786	121	5	106	39	87	114	80	36	112	46	199	92	1037
1787	46	22	143	86	90	46	53	60	74	57	77	98	852
1788	126	80	88	27	34	67	59	54	75	22	87	105	824
1789	57	31	140	4	43	47	43	46	53	129	95	60	748
1790	13	2	14	79	65	65	46	41	20	162	57	33	597
1791	102	50	23	39	70	36	45	42	35	73	81	83	679
1792	111	11	34	26	45	94	43	45	66	84	71	40	670
1793	83	35	170	115	119	13	81	27	125	39	42	98	947
1794	78	0	17	29	51	228	72	125	181	121	91	48	1041
1795	29	101	27	37	40	78	186	67	98	154	66	14	897
1796	40	48	44	19	138	43	35	23	160	128	70	97	845
1797	52	10	75	89	55	71	17	16	162	115	35	25	722
1798	16	13	103	50	28	139	40	74	123	48	112	122	868
1799	5	57	105	144	194	190	60	55	66	138	43	64	1121
1800	197	81	38	9	40	171	38	52	38	46	173	120	1003

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TABLE II (continued).

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Total.
1801	34	81	27	35	22	58	70	25	196	132	125	98	903
1802	76	174	72	34	121	36	23	10	19	126	280	139	1110
1803	135	78	75	11	110	45	203	85	54	75	121	150	1142
1804	133	39	121	96	79	106	65	112	8	146	72	153	1130
1805	112	33	11	59	156	100	80	114	83	96	2	47	893
1806	51	83	96	102	66	83	66	153	103	53	105	30	991
1807	32	37	86	143	86	128	98	94	104	151	181	44	1184
1808	89	28	11	23	23	115	86	72	88	108	62	33	738
1809	78	19	19	181	74	61	93	56	150	124	140	94	1089
1810	116	83	68	41	46	99	86	74	61	99	154	46	973
1811	63	5	22	104	70	117	95	35	59	62	14	15	661
1812	28	63	132	64	47	86	187	83	76	143	48	72	1029
1813	94	15	12	40	15	81	45	59	96	78	80	114	729
1814	103	0	59	100	40	150	47	79	14	127	24	96	839
1815	43	22	18	42	49	111	110	99	72	64	62	26	718
1816	33	24	11	35	94	44	20	55	32	120	84	1	553
1817	8	1	19	17	93	72	50	53	33	139	26	64	575
1818	30	34	81	52	120	64	57	121	60	58	67	83	827
1819	41	48	70	28	30	125	66	219	21	141	56	17	863
1820	57	64	48	38	23	23	27	4	64	64	56	47	515
1821	40	0	55	29	85	103	88	90	19	86	5	71	671
1822	24	0	15	40	50	46	40	30	26	135	28	46	480
1823	72	81	51	58	92	117	15	19	71	107	45	51	779
1824	21	36	82	62	31	127	38	60	84	163	28	31	763
1825	22	8	53	5	44	54	74	71	51	42	80	156	660
1826	22	48	12	47	92	119	117	37	126	155	200	15	990
1827	4	60	26	70	119	161	42	135	104	55	38	27	841
1828	31	48	49	55	86	51	26	27	44	42	141	17	617
1829	71	9	135	93	42	33	33	82	104	89	48	61	800
1830	29	5	23	26	55	106	10	40	155	26	39	83	597
1831	72	12	11	126	81	137	93	100	107	21	20	10	790
1832	30	55	77	60	86	126	18	39	53	37	88	4	673
1833	3	16	101	147	34	86	209	80	146	32	92	3	949
1834	68	40	3	31	52	54	35	138	8	20	52	0	501
1835	24	43	60	103	72	59	2	273	130	88	53	5	912
1836	11	161	49	162	186	59	73	16	120	80	33	8	958
1837	42	31	82	141	223	47	161	7	34	41	87	55	952
1838	50	143	54	108	133	46	33	31	87	36	74	26	821
1839	17	16	78	69	62	45	28	63	71	96	162	102	809
1840	11	30	4	58	117	17	66	71	83	74	57	26	614
1841	54	62	35	46	39	121	9	53	65	103	26	100	713
1842	30	49	14	62	133	92	51	8	157	58	41	4	699
1843	79	140	41	97	120	71	52	55	21	34	42	0	752
1844	37	100	33	2	132	91	102	24	83	133	123	73	933
1845	133	70	130	106	180	86	67	177	99	54	111	52	1265
1846	16	0	37	78	76	43	47	140	98	266	54	102	957
1847	49	20	0	48	38	106	76	87	79	62	71	112	748
1848	24	85	99	62	95	61	75	12	99	145	86	0	843
1849	7	1	69	121	62	75	28	27	74	78	63	75	680
1850	41	10	19	229	67	65	89	53	34	263	35	43	948

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TABLE II (continued).

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Total.
1851	17	27	52	108	140	4	70	94	242	96	180	0	1030
1852	8	29	26	18	49	77	91	39	150	142	65	53	747
1853	85	76	180	104	80	84	12	57	58	154	63	81	1034
1854	59	21	8	100	103	76	34	29	27	81	68	112	718
1855	80	149	110	101	129	107	35	53	136	80	144	15	1139
1856	114	62	55	63	181	61	85	22	151	94	49	78	1015
1857	54	16	87	107	61	19	55	41	49	104	51	9	653
1858	0	45	75	111	60	15	59	87	32	179	84	59	806
1859	0	28	11	59	102	108	27	42	110	144	75	103	809
1860	42	39	10	118	58	117	131	33	55	19	117	145	884
1861	22	73	42	57	66	45	41	19	46	28	69	25	533
1862	86	42	160	47	59	103	10	123	128	72	254	44	1128
1863	97	2	121	24	85	47	21	24	62	132	146	28	789

YEARLY MEANS, 1725–1763.

	0	1	2	3	4	5	6	7	8	9
1720	—	—	—	—	—	759	629	1162	1348	924
1730	871	866	814	879	961	775	792	606	713	645
1740	570	614	991	717	906	963	1056	649	1052	918
1750	821	1073	961	1000	705	1101	994	798	1111	919
1760	887	1126	572	947	—	—	—	—	—	—

YEARLY MEANS, 1864–1900.

	0	1	2	3	4	5	6	7	8	9
1860	—	—	—	—	790	619	731	862	913	1083
1870	698	712	1088	919	720	821	1032	971	886	852
1880	747	684	813	701	768	892	835	908	648	963
1890	689	671	991	580	563	956	1186	785	983	589
1900	993	—	—	—	—	—	—	—	—	—

TABLE III.—London Rainfall in inches, 1813–1912.

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Total.
1813	0·85	2·42	0·68	1·97	2·80	2·66	3·31	0·74	1·07	4·82	1·35	0·89	23·56
1814	3·71	0·36	2·02	1·35	2·62	2·32	1·07	2·37	1·37	2·46	2·72	3·70	26·07
1815	0·98	1·24	2·27	2·40	1·70	1·88	1·60	2·03	1·30	2·63	1·52	2·31	21·86
1816	2·12	1·85	2·08	2·01	2·11	3·24	3·65	2·70	2·25	3·01	2·80	3·42	31·24
1817	2·77	1·19	1·54	0·59	2·92	2·05	2·65	2·38	0·49	1·60	1·85	3·62	23·65
1818	2·24	2·19	3·73	3·30	2·59	0·60	0·65	0·19	3·26	1·62	2·33	1·18	23·88
1819	2·24	2·81	1·34	2·53	2·97	2·09	1·87	0·83	2·78	2·06	2·25	2·64	26·41
1820	1·78	0·94	0·33	1·51	3·21	2·08	3·03	1·85	2·48	2·40	1·67	1·39	22·67
1821	2·55	0·18	3·06	1·85	2·01	2·07	2·81	2·37	2·84	2·65	4·42	4·88	31·69
1822	0·64	0·98	1·29	2·67	1·63	1·18	3·24	1·60	1·28	3·96	3·64	1·75	23·86
1823	1·64	3·15	1·18	1·83	0·86	1·67	2·66	2·18	1·13	3·76	1·70	2·35	24·11
1824	1·00	2·21	1·76	1·94	3·92	3·76	1·93	2·45	3·70	2·48	3·77	3·51	32·43
1825	1·00	0·84	1·10	1·63	3·14	1·08	0·22	2·76	2·58	2·74	3·31	2·86	23·26
1826	0·26	1·73	1·72	0·88	2·52	0·76	2·45	1·97	3·70	2·03	2·92	1·63	22·57
1827	0·89	0·59	2·52	0·99	2·13	0·77	1·27	1·59	3·38	4·07	1·17	3·63	23·00
1828	3·94	1·15	0·73	2·50	1·61	2·29	5·26	3·27	2·68	1·26	1·18	2·01	27·88

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TABLE III (continued).

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Total.
1829	0·48	1·12	0·61	4·46	0·57	2·03	4·46	4·40	3·63	1·73	1·61	0·22	25·32
1830	1·68	1·60	0·30	2·84	2·48	2·89	1·64	3·25	3·10	0·80	3·13	1·37	25·08
1831	1·19	2·59	2·01	2·10	1·84	1·49	2·66	2·00	3·77	4·05	1·63	2·43	27·76
1832	1·23	0·31	1·35	0·82	1·93	3·01	0·82	3·12	0·78	3·02	1·75	1·68	19·82
1833	0·69	3·96	1·17	2·10	0·58	2·24	1·53	1·59	2·33	1·93	2·48	4·18	24·78
1834	3·17	0·43	0·69	0·65	1·16	1·64	5·46	3·10	0·96	0·40	1·57	0·89	20·12
1835	0·81	2·65	2·40	1·13	2·78	2·27	0·35	0·83	4·27	4·45	2·09	0·31	24·34
1836	1·93	1·80	2·96	2·79	0·94	1·34	1·92	1·89	3·14	3·83	2·98	1·90	27·42
1837	2·34	2·13	0·52	1·08	1·04	1·18	1·48	3·58	1·03	2·12	1·57	1·37	19·44
1838	0·37	1·95	1·07	0·70	0·89	3·71	2·17	1·10	2·44	2·05	3·44	1·74	21·63
1839	1·46	1·61	1·67	1·41	1·28	2·25	3·04	1·91	4·01	1·91	4·36	2·58	27·49
1840	2·64	1·48	0·32	0·14	2·09	1·49	1·70	1·52	2·64	0·52	3·41	0·48	19·43
1841	2·46	1·03	1·25	1·75	2·18	2·42	2·86	2·54	3·83	5·09	3·45	2·27	31·13
1842	0·95	1·26	1·87	0·29	1·91	1·35	2·06	2·85	3·71	1·58	4·54	0·72	23·09
1843	1·48	2·27	0·60	1·71	5·02	1·53	2·07	3·36	0·73	4·08	2·57	0·43	25·85
1844	2·63	2·26	2·58	0·35	0·36	1·40	1·97	2·01	1·23	4·13	3·37	0·36	22·65
1845	2·73	0·97	1·28	0·79	2·72	1·61	2·06	2·82	1·85	1·45	2·40	2·07	22·75
1846	2·87	1·42	1·05	2·94	1·72	0·76	1·82	3·80	1·88	5·46	1·45	1·19	26·36
1847	1·35	1·37	0·61	1·12	1·55	1·37	0·99	1·51	1·59	2·06	2·03	2·15	17·70
1848	1·26	2·81	3·18	3·49	0·26	3·26	2·19	4·15	2·29	3·31	1·14	2·47	29·81
1849	1·59	2·00	0·74	2·52	3·40	0·31	3·13	0·93	2·74	2·45	1·27	1·85	22·93
1850	1·16	1·18	0·21	2·27	2·15	1·16	2·99	1·48	1·70	1·46	2·18	1·28	19·22
1851	2·89	0·96	3·85	2·00	0·77	1·24	3·67	1·83	0·35	1·86	0·61	0·60	20·63
1852	3·46	1·04	0·26	0·56	1·94	4·96	2·16	4·28	3·61	4·40	6·41	2·26	35·34
1853	2·31	0·80	1·32	2·71	1·67	2·35	5·08	1·98	2·20	3·88	1·15	0·44	25·89
1854	1·79	0·89	0·33	0·40	3·67	1·18	2·20	2·09	0·66	2·10	1·94	1·40	18·65
1855	0·51	1·17	1·66	0·20	1·84	1·08	5·89	1·21	1·12	5·54	1·55	1·29	23·06
1856	2·06	0·91	0·97	2·11	3·69	1·15	1·24	3·10	2·26	2·01	1·07	1·64	22·21
1857	2·49	0·18	0·78	1·55	0·70	2·43	1·32	2·94	3·43	4·34	1·59	0·43	22·18
1858	0·88	1·80	0·69	2·90	2·76	0·92	3·01	1·10	0·85	1·58	0·53	1·75	18·77
1859	0·72	1·23	1·33	2·61	2·13	2·90	2·93	2·65	4·04	2·53	2·90	2·24	28·21
1860	1·97	1·25	1·87	1·45	3·57	5·47	2·26	4·48	2·92	1·77	2·72	2·51	32·24
1861	0·43	1·93	2·43	1·30	1·39	2·13	2·42	0·94	2·15	1·05	4·65	1·45	22·27
1862	1·92	0·31	3·69	2·30	3·06	2·43	2·61	2·73	2·19	3·50	1·13	1·70	27·57
1863	2·80	0·67	0·85	0·52	1·27	4·86	0·92	1·44	3·49	1·62	1·84	1·31	21·59
1864	1·02	0·85	2·62	0·82	1·86	1·28	0·62	1·33	2·55	1·13	2·49	0·36	16·93
1865	3·90	0·21	1·12	0·33	3·40	2·21	2·33	4·10	0·55	6·22	1·96	1·35	29·48
1866	3·90	3·72	1·69	1·76	2·03	3·98	1·19	2·76	3·89	2·32	1·73	2·63	31·60
1867	2·80	1·44	2·48	2·35	2·45	1·21	4·29	2·63	2·23	1·92	0·86	1·59	26·25
1868	3·89	1·21	1·28	1·50	1·58	0·78	0·45	2·28	1·74	2·54	1·03	5·12	23·40
1869	2·76	2·48	1·97	1·28	3·27	1·03	1·62	1·26	3·56	1·87	2·38	2·94	25·42
1870	1·38	1·21	2·31	0·47	0·70	0·83	1·22	2·69	2·00	3·68	1·76	3·07	21·32
1871	1·99	1·27	1·19	2·84	0·92	3·49	4·12	0·85	5·28	1·34	0·60	1·13	25·02
1872	3·46	0·96	2·66	1·39	3·05	2·55	2·57	2·05	1·64	5·20	3·98	4·35	33·86
1873	2·44	1·96	1·46	0·55	1·56	2·24	1·81	2·87	2·46	2·97	1·87	0·48	22·67
1874	1·18	0·91	0·39	1·26	1·14	2·05	0·82	1·32	2·62	3·34	2·21	1·58	18·82
1875	3·22	1·06	0·69	1·53	1·61	2·40	4·63	1·79	2·86	4·35	3·36	0·94	28·44
1876	0·94	1·97	2·96	1·90	0·94	1·27	0·81	1·79	2·86	1·40	3·07	6·25	26·16
1877	4·74	1·78	2·38	2·59	1·91	0·42	3·94	2·23	0·82	1·97	3·88	1·51	28·17
1878	1·31	1·49	1·12	4·97	3·89	6·71	0·64	6·72	0·83	1·99	2·95	1·46	34·08
1879	2·87	3·77	0·91	2·72	3·46	4·76	4·17	5·11	3·67	0·80	0·72	0·86	33·82
1880	0·31	2·33	0·79	2·15	0·26	4·04	7·11	0·45	4·04	5·78	1·85	3·17	30·28

PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY A MATHEMATICAL, PHYSICAL & ENGINEERING SCIENCES
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Table III (continued).

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Total.
1881	1·85	3·09	2·30	0·46	1·52	1·72	1·85	4·89	2·03	2·99	2·75	2·47	27·92
1882	1·30	1·30	1·35	2·83	1·20	2·30	2·95	1·48	2·39	4·96	2·57	2·51	27·14
1883	2·08	3·62	0·86	1·56	1·97	1·35	2·92	0·93	3·83	1·75	2·78	0·75	24·40
1884	2·30	1·40	1·41	1·02	0·78	2·84	2·46	0·89	1·77	0·99	1·92	2·57	20·35
1885	1·43	2·86	1·65	2·32	2·63	1·99	0·52	0·85	4·30	3·73	3·31	1·05	26·64
1886	4·02	0·63	1·38	1·22	4·79	0·63	2·37	0·76	1·73	2·43	2·71	4·34	27·01
1887	1·26	0·48	1·65	1·41	1·45	0·91	1·07	3·15	1·81	1·24	3·40	1·38	19·21
1888	0·90	0·78	3·34	2·37	1·18	2·31	4·91	3·61	1·43	1·24	4·38	1·29	27·74
1889	0·81	2·28	1·37	2·06	3·22	2·03	2·64	1·80	1·77	3·75	0·89	1·23	23·85
1890	2·46	1·04	1·76	2·02	1·25	2·82	4·19	1·55	0·64	1·20	1·62	0·68	21·23
1891	1·80	0·01	2·01	1·13	2·72	0·86	3·82	4·75	1·03	4·80	1·98	3·24	28·15
1892	0·50	1·62	1·04	0·99	1·51	2·46	1·63	3·06	2·12	3·78	2·53	1·37	22·61
1893	1·44	2·87	0·32	0·24	0·80	0·73	2·46	1·61	1·07	3·87	2·16	2·23	19·80
1894	2·87	1·74	1·18	1·74	1·85	1·84	3·25	2·85	1·04	4·45	2·85	2·28	27·94
1895	1·96	0·12	1·42	1·34	0·34	0·30	3·42	3·09	1·28	2·84	3·17	2·19	21·47
1896	0·78	0·29	3·20	0·55	0·14	2·27	1·03	1·92	5·51	3·05	1·17	3·61	23·52
1897	2·05	2·75	3·42	1·57	1·08	1·87	0·64	2·92	2·75	0·56	1·05	2·20	22·86
1898	0·73	1·08	1·46	1·01	2·26	1·11	1·09	1·18	0·33	2·96	1·94	2·54	17·69
1899	2·52	2·00	0·50	2·64	1·38	1·49	1·45	0·70	2·65	2·03	4·13	1·05	22·54
1900	2·92	3·99	0·79	0·98	0·93	2·26	1·50	2·81	0·79	1·86	1·90	2·55	23·28
1901	0·55	1·21	2·14	2·15	0·84	1·25	5·04	1·79	1·62	1·92	0·59	3·07	22·17
1902	0·76	1·13	1·87	0·49	2·60	3·13	1·40	3·69	1·00	1·46	1·80	1·51	20·84
1903	2·15	0·83	2·30	2·14	2·99	6·43	5·20	4·24	2·64	6·03	1·85	1·30	38·10
1904	2·32	2·58	1·72	1·01	1·96	0·84	2·41	1·59	1·17	1·56	1·70	1·79	20·65
1905	1·34	0·79	3·00	1·75	1·19	4·39	0·96	2·24	2·09	1·40	3·08	0·74	22·97
1906	4·02	1·89	1·08	0·51	1·09	2·89	0·61	0·87	1·75	3·15	4·19	2·21	24·26
1907	0·90	1·17	0·97	3·22	1·74	2·03	1·96	1·94	0·62	2·51	2·16	3·79	23·01
1908	1·93	1·68	2·37	2·38	1·95	1·26	3·36	2·94	1·27	1·95	0·69	1·89	23·67
1909	0·71	0·50	2·85	1·90	1·80	3·79	3·49	1·46	2·56	4·16	0·74	2·79	26·75
1910	1·57	2·96	0·97	2·24	2·22	2·17	2·53	1·64	0·58	2·00	3·19	3·29	25·36
1911	1·38	1·48	1·72	1·80	1·80	2·69	1·17	0·48	1·31	3·12	3·62	4·22	24·79
1912	4·08	1·71	2·84	0·04	1·08	3·23	1·44	4·89	2·14	2·04	1·59	2·80	27·88

Annual Values, 1782–1812.

	0	1	2	3	4	5	6	7	8	9
1780	—	—	28·65	23·25	27·21	19·62	22·43	20·40	17·28	27·78
1790	22·31	20·46	28·40	23·40	25·20	20·89	16·20	24·91	21·25	23·50
1800	23·00	22·50	16·22	22·50	26·00	25·33	27·84	18·20	22·98	24·95
1810	26·70	24·64	27·24	—	—	—	—	—	—	—

Annual Values, 1913–1922.

1910	—	—	—	22·41	25·72	32·18	34·01	30·04	29·69	26·21
1920	23·59	14·60	25·60	—	—	—	—	—	—	—

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TABLE IV.—Edinburgh Rainfall in inches, 1785–1884.

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Total.
1785	1·50	2·31	0·52	0·35	0·94	1·11	2·72	2·00	10·69	2·82	4·42	1·27	30·65
1786	2·54	1·19	0·63	0·30	2·40	0·22	5·50	1·71	1·24	3·85	2·30	1·53	23·41
1787	0·14	1·25	2·12	1·36	4·73	3·22	5·00	1·82	0·60	2·46	0·83	8·42	31·95
1788	1·03	2·20	1·73	1·78	0·86	2·13	2·63	1·17	3·28	0·40	1·07	1·15	19·43
1789	4·77	1·02	1·24	1·02	1·15	1·14	2·69	1·53	2·04	3·46	5·21	3·93	29·20
1790	1·96	1·75	0·85	2·60	2·42	2·90	2·02	3·13	2·65	2·18	2·49	2·57	27·52
1791	2·36	2·15	0·69	2·97	1·82	2·53	1·38	3·40	1·28	3·96	3·49	1·39	27·42
1792	1·40	1·67	2·88	1·37	3·21	5·13	4·09	3·40	3·00	4·30	2·50	4·05	37·00
1793	1·53	2·25	3·14	1·13	1·06	1·48	1·14	2·50	0·51	1·52	2·14	2·30	20·70
1794	1·40	2·19	1·00	2·12	1·88	1·07	2·16	1·80	3·14	3·58	4·46	3·92	28·72
1795	2·81	3·87	1·37	3·01	1·20	3·92	2·42	3·62	1·12	4·87	4·58	3·81	36·60
1796	3·28	1·40	0·43	1·09	1·43	1·03	2·77	0·45	2·21	1·19	1·31	1·06	17·65
1797	1·32	0·67	1·20	1·47	1·96	2·18	5·19	4·50	2·99	3·24	1·20	1·26	27·18
1798	1·80	0·55	1·52	1·56	1·62	2·53	2·10	2·99	2·28	2·15	2·07	1·41	22·58
1799	0·89	1·57	0·47	2·15	3·27	0·87	2·60	5·66	4·02	1·99	1·79	1·23	26·51
1800	3·26	0·49	1·34	2·05	2·50	0·53	0·40	1·26	2·53	3·33	0·98	2·91	21·58
1801	1·75	1·44	0·82	0·60	1·99	0·20	5·25	0·88	2·66	1·59	1·06	2·17	20·41
1802	0·71	1·87	0·69	0·73	0·86	2·21	4·19	2·13	2·37	2·43	2·09	1·02	21·30
1803	0·80	1·56	0·74	1·16	1·13	1·35	0·86	2·00	1·82	1·00	2·26	1·13	15·81
1804	3·72	0·57	2·58	2·04	1·58	1·32	1·86	3·91	0·74	2·37	1·92	1·96	24·57
1805	0·65	1·58	0·67	0·64	1·01	1·38	1·48	2·83	2·66	1·33	0·38	1·57	16·18
1806	2·66	1·18	0·48	0·74	2·23	0·20	2·74	2·65	0·98	1·92	4·47	1·71	21·96
1807	0·69	0·51	1·26	2·06	1·71	0·60	1·29	2·59	4·39	3·68	2·21	1·31	22·30
1808	0·72	2·16	0·72	2·93	1·92	2·61	5·17	4·83	2·46	2·03	0·72	2·80	29·07
1809	2·76	3·16	0·21	2·01	2·14	2·98	2·39	5·56	2·94	1·19	1·32	3·24	29·90
1810	1·47	1·34	3·16	1·46	1·84	1·92	3·82	3·14	0·22	1·22	4·50	2·82	26·91
1811	1·61	3·30	1·37	1·72	3·35	3·68	2·77	2·12	1·70	3·43	3·90	3·69	32·64
1812	1·47	3·59	3·10	1·10	2·10	2·24	1·34	3·40	1·08	2·82	3·97	0·89	27·10
1813	0·83	2·26	0·25	2·03	3·21	1·44	2·58	0·86	1·23	2·94	1·45	1·07	20·15
1814	0·86	0·63	1·65	2·90	0·49	1·41	2·59	2·23	1·30	1·43	3·70	3·10	22·29
1815	1·50	1·46	2·22	0·89	3·01	2·29	2·18	1·37	1·90	2·84	0·56	1·61	21·83
1816	2·04	1·01	1·07	1·27	2·18	1·91	5·22	2·26	2·96	1·94	0·95	2·43	25·24
1817	1·79	1·53	0·87	0·19	2·44	4·80	3·85	5·25	0·85	1·55	2·70	3·66	29·48
1818	2·49	0·81	1·76	0·60	1·80	2·00	3·40	0·70	1·80	1·10	2·60	2·52	21·58
1819	3·50	1·79	0·84	3·10	2·32	1·64	1·48	1·93	1·43	3·75	2·35	2·93	27·06
1820	0·51	1·22	1·10	0·52	4·20	3·40	1·30	2·70	1·21	2·66	1·44	2·41	22·67
1821	2·50	0·54	2·46	2·60	1·85	0·61	1·51	1·47	1·58	1·43	4·22	2·94	23·71
1822	1·23	2·50	3·57	1·41	1·80	1·36	4·53	2·36	1·27	2·39	2·12	1·60	26·14
1823	2·23	3·85	0·66	1·68	2·35	1·00	4·25	3·87	1·82	3·10	1·07	4·38	30·26
1824	0·87	1·70	1·34	0·57	0·63	2·01	1·58	1·50	1·62	4·73	4·38	3·88	24·81
1825	1·31	0·69	0·43	1·41	3·25	2·05	0·15	1·89	2·85	2·19	3·91	1·99	22·12
1826	0·55	1·77	1·33	1·52	1·25	0·30	2·31	1·83	1·01	1·38	0·76	1·26	15·27
1827	3·33	1·58	4·84	2·74	1·28	1·62	2·27	4·89	1·15	4·97	1·02	2·90	32·59
1828	1·70	0·98	1·18	1·42	1·85	0·81	4·57	3·43	2·31	0·86	3·94	2·18	25·23
1829	2·49	1·61	0·32	3·35	0·77	2·03	4·48	6·80	1·77	2·53	2·48	1·33	29·96
1830	0·95	1·21	1·78	2·28	1·96	2·54	6·57	6·69	3·63	0·16	3·13	2·35	33·25
1831	0·66	3·88	1·97	1·54	0·69	1·41	2·44	4·03	1·55	2·15	2·95	1·26	24·53
1832	0·61	1·42	1·29	1·21	1·35	2·89	1·14	3·64	0·92	5·53	0·95	2·28	23·23
1833	0·57	2·53	1·43	1·34	0·79	3·48	1·53	1·16	2·37	1·13	0·71	3·84	20·88
1834	3·28	0·86	1·65	0·44	0·51	1·45	3·20	1·18	4·50	1·23	1·22	1·52	21·04
1835	1·08	2·48	2·28	0·79	2·04	1·02	1·37	1·99	5·43	2·09	2·76	1·89	25·22

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TABLE IV (continued).

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Total.
1836	4·06	1·62	3·79	1·54	0·56	2·50	6·53	2·45	2·81	1·66	3·05	2·46	33·03
1837	1·23	2·14	1·28	1·61	1·53	2·86	4·54	4·13	1·73	2·02	2·03	1·67	26·77
1838	2·47	1·21	2·76	1·78	2·90	5·16	2·45	2·97	4·00	1·55	3·06	0·73	31·04
1839	1·76	1·45	1·47	0·33	0·47	3·91	3·51	1·77	3·09	2·38	1·65	1·66	23·45
1840	3·72	1·58	0·43	0·19	3·97	2·75	3·46	1·99	2·39	2·01	2·33	0·68	25·50
1841	1·23	1·64	0·60	1·14	1·14	1·56	3·87	3·64	2·63	4·53	2·28	1·96	26·22
1842	1·01	1·11	3·44	0·15	1·45	0·97	1·53	1·36	1·45	0·98	1·63	1·79	16·87
1843	1·69	1·38	0·99	1·87	2·99	2·26	3·59	1·40	0·89	4·20	2·20	0·34	23·80
1844	1·23	1·72	2·42	0·40	0·15	2·71	2·39	2·11	2·70	0·82	3·92	0·37	20·94
1845	1·77	0·61	1·67	0·40	2·24	3·08	1·72	3·48	1·77	6·14	1·70	2·04	26·62
1846	2·64	1·60	0·97	2·88	1·27	3·59	4·17	5·01	3·35	3·60	1·74	0·72	31·54
1847	0·51	0·79	0·13	1·25	4·77	1·79	1·37	0·91	1·25	3·48	1·64	4·88	22·77
1848	1·26	5·21	2·80	1·06	0·60	6·04	1·36	2·00	1·45	4·56	2·42	1·84	30·60
1849	2·84	0·97	1·05	1·64	1·66	2·45	2·58	2·31	2·02	1·74	1·50	1·45	22·21
1850	1·62	2·84	0·14	0·88	3·14	1·18	1·63	2·20	1·83	1·16	2·61	1·21	20·44
1851	2·89	0·59	3·30	2·06	0·53	2·17	3·00	4·25	1·40	1·02	0·91	0·66	22·78
1852	3·27	2·01	0·63	0·43	1·92	2·80	1·90	4·30	2·20	2·18	3·42	6·45	31·51
1853	1·78	1·58	0·42	0·57	1·10	6·90	2·50	3·32	1·82	3·26	0·76	1·62	25·63
1854	3·02	0·61	1·01	0·34	2·45	3·15	1·85	1·34	0·87	1·44	3·04	1·77	20·89
1855	0·78	1·24	1·05	0·55	1·89	2·48	3·89	2·84	0·44	2·60	1·43	1·20	20·34
1856	2·45	2·27	0·24	1·93	3·12	2·97	2·00	3·54	5·15	0·71	1·42	2·68	28·48
1857	1·53	0·45	2·04	1·85	1·69	3·92	1·34	2·26	4·65	1·20	2·35	1·64	24·92
1858	1·47	1·02	1·57	0·70	1·63	2·69	3·94	2·20	2·00	4·07	1·60	1·46	24·35
1859	2·34	1·44	2·96	2·77	0·21	2·06	3·21	0·77	1·72	3·44	2·70	2·35	25·97
1860	3·97	1·60	1·74	0·56	1·80	3·58	1·21	2·45	3·16	2·85	2·88	7·65	33·45
1861	0·75	1·47	2·31	1·46	0·73	2·70	3·47	3·65	4·75	2·31	4·00	1·02	28·62
1862	3·83	0·90	4·64	1·32	3·71	2·80	2·70	3·70	2·10	3·42	2·00	2·80	33·92
1863	3·44	1·22	0·74	2·03	1·61	3·50	0·65	3·47	2·65	2·19	1·91	2·22	25·63
1864	1·25	2·14	3·10	1·16	2·13	1·20	2·15	0·80	3·40	6·90	1·79	2·07	28·09
1865	2·29	1·70	0·99	0·30	3·65	0·41	3·20	3·41	0·55	3·96	1·60	1·59	23·65
1866	2·49	3·50	1·85	1·37	1·50	1·27	3·34	2·73	2·95	1·23	2·71	2·29	27·23
1867	5·62	1·68	1·17	2·71	3·71	2·80	5·68	2·64	1·53	1·50	0·74	1·26	31·04
1868	3·61	2·08	1·95	3·28	1·81	0·48	0·34	4·30	3·27	2·13	1·45	3·87	28·57
1869	2·84	2·67	0·79	1·01	2·64	1·74	0·73	0·76	4·33	1·48	1·42	1·82	22·23
1870	1·68	5·70	1·11	0·43	1·31	2·25	1·65	1·29	1·84	1·76	0·69	2·40	22·11
1871	1·25	2·41	1·07	4·55	0·83	1·90	2·80	2·56	2·55	2·45	2·87	1·63	26·87
1872	3·63	2·02	3·30	1·70	3·46	3·13	3·58	3·28	5·80	3·38	3·60	2·08	38·96
1873	2·32	1·38	1·60	0·21	2·70	1·21	2·80	4·53	4·46	3·07	2·47	1·44	28·19
1874	1·74	0·70	1·73	0·90	1·50	1·60	3·34	4·87	1·75	2·42	3·11	2·10	25·76
1875	2·74	1·17	0·90	0·67	0·75	2·00	3·26	1·13	2·67	2·34	4·92	1·80	24·35
1876	0·80	3·42	3·08	3·41	1·01	2·60	1·22	3·40	4·02	2·32	3·64	6·73	35·65
1877	5·17	1·85	1·67	2·98	2·21	1·89	4·57	8·33	1·25	2·50	2·01	1·37	35·80
1878	2·56	0·50	0·58	1·43	2·71	2·41	0·76	4·02	2·80	1·79	2·92	2·22	24·90
1879	1·29	1·78	2·30	2·22	1·74	5·16	5·78	2·44	1·65	0·92	1·85	1·39	28·52
1880	0·47	1·50	1·54	3·17	0·76	1·55	3·40	0·40	2·77	3·20	3·35	2·75	24·86
1881	1·00	2·80	1·50	1·07	1·65	1·75	3·20	5·65	3·45	1·95	2·40	1·80	28·22
1882	1·20	1·50	2·28	2·50	2·65	2·78	3·73	1·44	1·77	2·65	2·83	4·90	30·23
1883	2·24	1·02	1·07	1·42	0·72	1·80	4·25	3·20	2·25	2·03	1·33	1·00	22·33
1884	3·78	1·07	1·60	0·80	2·70	0·57	4·41	2·30	2·23	1·10	1·30	2·80	24·66

YEARLY TOTALS, 1885–1896.

	0	1	2	3	4	5	6	7	8	9
1880	—	—	—	—	—	17·58	26·05	19·80	24·86	22·31
1890	26·77	24·23	22·41	20·93	28·25	26·72	23·35	—	—	—

PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY A MATHEMATICAL, PHYSICAL & ENGINEERING SCIENCES
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TABLE V.—Edinburgh Pressures, 1770-1869.

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Mean.
1770	29·977	29·851	29·778	29·734	29·900	29·697	29·943	29·994	29·703	29·616	29·577	29·602	29·781
1771	29·691	29·938	29·945	30·021	29·842	30·055	29·881	29·758	29·952	29·632	30·003	29·513	29·853
1772	29·771	29·551	29·637	29·900	30·129	30·006	29·894	29·795	29·784	29·364	29·492	29·880	29·767
1773	29·679	29·842	30·144	29·792	29·911	29·905	30·013	29·944	29·565	29·644	29·706	29·734	29·823
1774	29·642	29·640	29·925	29·773	30·022	29·817	29·842	29·845	29·766	30·060	29·944	30·141	29·868
1775	29·758	29·552	29·716	30·040	30·109	29·974	29·794	29·737	29·733	29·757	29·915	29·952	29·836
1776	29·909	29·202	29·854	30·060	30·070	29·798	29·815	29·796	29·855	29·988	29·807	29·865	29·835
1777	29·859	29·719	29·766	30·065	29·784	29·824	29·868	29·886	30·009	29·754	29·836	29·869	29·853
1778	29·710	29·720	29·797	29·779	29·799	29·925	29·837	30·026	30·014	29·704	29·616	29·759	29·807
1779	30·111	29·889	30·021	29·716	29·698	30·076	29·959	30·124	29·859	29·980	29·726	29·746	29·909
1780	29·999	29·702	29·714	29·660	29·827	29·907	29·791	30·107	29·704	29·990	29·936	30·266	29·883
1781	28·977	29·622	30·155	28·861	30·086	29·893	29·950	29·777	29·864	30·121	29·758	29·736	28·900
1782	29·628	29·973	29·627	29·858	29·702	29·942	29·923	29·988	29·878	30·059	29·950	29·985	29·876
1783	29·410	29·659	29·768	30·201	30·009	29·844	29·949	29·888	29·696	29·827	29·932	29·999	29·848
1784	29·941	29·835	29·874	29·695	29·991	29·796	29·841	29·894	29·899	30·202	29·768	29·963	29·892
1785	29·812	30·014	30·252	30·167	29·971	30·087	29·780	29·784	29·747	29·877	29·662	29·977	29·928
1786	29·589	29·878	30·023	30·050	29·862	30·053	30·023	29·826	29·641	30·065	30·039	29·521	29·889
1787	30·123	29·697	29·676	30·007	29·946	29·828	29·771	29·900	29·863	29·696	29·770	29·794	29·839
1788	29·977	29·714	29·734	30·055	30·094	30·058	29·926	29·901	29·830	30·128	29·938	29·994	29·946
1789	29·636	29·420	29·788	29·644	29·839	29·770	29·794	29·918	29·764	29·644	29·673	29·583	29·706
1790	29·949	29·959	30·217	29·934	29·941	29·980	29·660	29·717	29·849	29·816	29·774	29·667	29·872
1791	29·186	29·789	29·990	29·810	29·903	29·877	29·716	29·978	30·063	29·692	29·626	29·542	29·764
1792	29·742	29·920	29·582	29·849	29·893	29·911	29·766	29·898	29·652	29·794	29·865	29·642	29·793
1793	29·916	29·666	29·869	29·967	30·150	29·884	29·970	29·878	29·960	29·811	29·923	29·710	29·892
1794	29·909	29·614	29·871	29·818	29·973	30·075	29·950	29·909	29·874	29·740	29·662	29·937	29·861
1795	30·163	29·756	29·827	29·739	30·135	29·953	30·003	29·866	30·054	29·500	29·818	29·803	29·885
1796	29·434	29·802	30·133	30·092	29·803	29·871	29·645	30·015	29·942	29·769	29·867	29·937	29·859
1797	30·020	30·189	29·881	29·836	29·795	29·909	29·839	29·716	29·702	29·809	29·920	29·603	29·852
1798	29·798	29·938	29·995	29·895	30·074	30·046	29·633	29·985	29·666	29·761	29·550	29·968	29·859
1799	29·904	29·657	29·901	29·716	29·851	30·027	29·745	29·625	29·741	29·695	29·693	30·094	29·804
1800	29·505	29·970	29·926	29·578	29·834	29·974	30·047	30·011	29·720	29·700	29·551	29·586	29·775
1801	29·713	29·718	29·726	29·986	29·891	30·047	29·840	30·115	29·930	29·741	29·673	29·490	29·822
1802	29·878	29·665	29·957	29·865	30·077	29·762	29·754	29·923	29·991	29·684	29·821	29·701	29·840
1803	29·889	29·709	30·042	29·829	29·814	29·970	30·075	29·962	30·082	30·048	29·528	29·601	29·879
1804	29·568	30·088	29·697	29·775	29·808	30·005	29·832	29·854	30·053	29·643	29·961	29·958	29·854
1805	29·654	29·721	29·869	29·910	29·949	29·978	29·901	29·883	29·934	29·994	30·234	29·633	29·888
1806	29·434	29·751	29·845	30·149	30·018	30·081	29·806	29·772	29·972	29·884	29·601	29·364	29·806
1807	29·972	29·621	30·093	29·912	29·888	30·001	29·883	29·863	29·764	29·809	29·533	29·819	29·846
1808	29·684	30·067	30·209	29·847	29·886	29·993	29·990	29·874	29·859	29·654	29·839	29·817	29·893
1809	29·612	29·624	30·098	29·896	29·920	29·915	29·942	29·708	29·729	30·064	29·940	29·399	29·821
1810	30·102	29·796	29·703	29·878	30·017	30·065	29·767	29·830	30·027	29·929	29·541	29·664	29·860
1811	29·901	29·461	30·125	29·764	29·815	29·916	30·056	29·873	30·098	29·613	29·904	29·662	29·849
1812	29·835	29·514	29·817	29·972	29·912	29·951	29·986	30·042	29·960	29·436	29·873	30·071	29·864
1813	30·031	29·556	30·017	29·970	29·789	30·046	29·832	30·036	29·996	29·766	29·668	29·861	29·881
1814	29·736	30·026	29·850	29·840	30·086	30·059	29·941	29·862	30·054	29·760	29·688	29·641	29·879
1815	29·920	29·664	29·576	29·971	29·879	29·889	30·037	29·816	29·886	29·802	29·977	29·747	29·847
1816	29·613	29·840	29·798	29·814	29·870	29·889	29·692	29·912	29·841	29·850	29·754	29·634	29·767
1817	29·629	29·708	29·670	30·298	29·774	29·806	29·737	29·676	29·962	30·058	29·837	29·582	29·814
1818	29·605	29·615	29·471	29·910	30·002	29·967	30·030	30·083	29·757	29·844	29·829	30·070	29·849
1819	29·679	29·627	29·900	29·830	29·978	29·833	29·967	30·025	29·941	29·883	29·808	29·772	29·854
1820	29·955	30·071	29·920	29·947	29·779	29·966	29·972	29·776	29·947	29·648	29·921	30·018	29·910

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TABLE V (continued).

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Mean.
1821	29·966	30·278	29·487	29·635	29·926	30·219	29·918	29·931	29·796	29·817	29·631	29·318	29·827
1822	30·102	29·867	29·788	29·984	30·092	30·103	29·790	29·825	29·980	29·627	29·518	30·078	29·896
1823	29·874	29·386	29·768	29·903	29·853	29·888	29·762	29·795	29·881	29·699	30·058	29·567	29·786
1824	29·962	29·854	29·861	29·922	30·052	29·994	29·951	29·889	29·880	29·654	29·498	29·600	29·843
1825	30·124	30·055	30·134	29·997	30·014	29·921	30·153	29·857	29·836	29·853	29·637	29·556	29·920
1826	30·081	29·688	30·052	29·899	30·166	30·257	29·903	29·874	29·920	29·782	29·898	29·846	29·947
1827	29·795	30·078	29·543	29·967	29·733	29·831	29·974	30·054	29·938	29·775	29·971	29·628	29·857
1828	29·906	29·703	29·853	29·755	29·902	29·921	29·667	29·784	29·904	29·982	29·800	29·788	29·830
1829	29·926	29·980	30·112	29·529	30·057	30·003	29·701	29·813	29·664	29·928	30·056	30·190	29·913
1830	30·076	29·689	29·992	29·650	29·865	29·772	29·811	29·774	29·630	30·135	29·741	29·706	29·820
1831	29·838	29·652	29·854	29·787	30·019	29·885	29·951	29·909	29·841	29·616	29·735	29·628	29·810
1832	29·929	29·984	29·795	30·048	29·952	29·849	30·068	29·812	30·010	29·891	29·782	29·777	29·908
1833	30·270	29·382	29·978	29·719	30·047	29·725	29·987	29·911	29·876	29·730	29·736	29·437	29·816
1834	29·514	29·950	30·051	30·219	29·991	29·873	29·989	29·824	30·012	29·880	29·911	30·185	29·950
1835	30·028	29·616	29·896	30·127	29·879	30·044	29·942	29·948	29·585	29·736	29·903	30·164	29·906
1836	29·795	29·842	29·401	29·863	30·312	29·764	29·831	29·976	29·839	29·730	29·534	29·762	29·804
1837	30·004	29·816	30·046	29·876	29·948	29·916	29·889	29·932	29·856	29·889	29·644	29·834	29·888
1838	30·104	29·789	29·692	29·698	29·968	29·822	29·910	29·768	29·977	29·911	29·612	29·950	29·850
1839	29·759	29·746	29·762	30·034	30·016	29·923	29·830	29·904	29·525	30·070	29·694	29·637	29·825
1840	29·529	29·914	30·361	30·043	29·896	29·835	29·752	29·843	29·664	29·985	29·543	30·192	29·880
1841	29·785	29·866	29·741	29·817	29·804	29·916	29·773	29·778	29·722	29·570	29·701	29·570	29·754
1842	29·987	29·835	29·706	30·187	29·854	29·989	29·896	29·968	29·888	29·943	29·709	29·871	29·903
1843	29·564	29·765	29·922	29·734	29·843	29·881	29·879	29·885	30·173	29·627	29·721	30·172	29·847
1844	29·927	29·573	29·754	30·030	30·237	29·869	29·859	29·723	30·042	29·620	29·795	30·113	29·878
1845	29·728	29·927	29·996	29·867	29·925	29·820	29·859	29·795	29·868	29·840	29·589	29·626	29·820
1846	29·625	29·833	29·650	29·752	29·873	29·952	29·778	29·912	29·953	29·541	29·905	29·847	29·802
1847	29·828	29·882	29·999	29·683	29·819	29·902	30·032	29·935	29·794	29·875	29·843	29·707	29·858
1848	29·939	29·412	29·579	29·766	29·989	29·708	29·837	29·740	29·930	29·763	29·829	29·771	29·772
1849	29·718	30·042	30·038	29·693	29·932	29·963	29·833	29·873	30·004	29·827	29·741	29·993	29·888
1850	29·966	29·675	30·171	29·646	29·837	29·912	29·900	29·810	30·053	29·763	29·689	29·866	29·857
1851	29·561	29·931	29·701	29·877	30·018	29·894	29·787	29·969	30·179	29·832	29·940	30·169	29·905
1852	29·427	29·899	30·206	30·140	29·875	29·628	29·969	29·725	29·930	29·813	29·505	29·434	29·796
1853	29·527	29·758	29·919	29·751	30·008	29·825	29·707	29·877	29·884	29·587	29·956	30·012	29·818
1854	29·592	30·018	30·068	30·035	29·702	29·822	29·887	29·917	30·022	29·736	29·782	29·624	29·850
1855	30·150	29·840	29·615	29·951	29·873	29·935	29·852	29·850	30·018	29·538	30·058	29·790	29·872
1856	29·437	29·803	30·094	29·764	29·857	29·913	29·866	29·869	29·770	30·111	30·037	29·629	29·846
1857	29·734	29·910	29·806	29·938	29·962	30·016	29·862	30·041	29·871	29·813	30·134	30·028	29·926
1858	30·149	30·022	29·865	29·800	29·810	30·032	29·891	29·946	29·908	29·901	29·954	29·733	29·918
1859	29·930	29·750	29·734	29·742	30·018	29·950	30·064	29·850	29·725	29·662	29·854	29·642	29·827
1860	29·513	29·924	29·640	29·960	29·837	29·643	29·986	29·571	29·884	29·801	29·935	29·700	29·783
1861	30·058	29·702	29·551	30·191	30·076	29·960	29·611	29·785	29·720	29·953	29·531	30·034	29·848
1862	29·691	30·058	29·738	29·893	29·805	29·765	29·709	29·862	30·020	29·689	29·919	29·816	29·830
1863	29·568	30·078	29·786	29·874	29·990	29·810	30·123	29·792	29·639	29·688	29·884	29·898	29·844
1864	30·080	29·930	29·669	30·066	30·032	29·910	30·012	30·138	29·868	30·022	29·816	29·996	29·962
1865	29·566	29·894	29·942	30·168	29·918	30·213	29·896	29·844	30·122	29·644	29·826	30·042	29·923
1866	29·640	29·596	29·758	29·976	30·032	29·915	29·944	29·752	29·619	30·122	29·851	29·753	29·830
1867	29·692	29·906	29·932	29·658	29·989	30·027	29·815	29·823	29·902	29·746	30·196	29·908	29·883
1868	29·736	29·816	29·756	29·834	29·868	30·004	30·024	29·782	29·868	29·772	29·949	29·318	29·811
1869	29·785	29·697	29·885	29·916	29·881	30·020	29·950	30·058	29·578	29·989	29·818	29·772	29·862

YEARLY MEANS, 1870–1896.

	0	1	2	3	4	5	6	7	8	9
1870	29·938	29·919	29·737	29·882	29·861	29·950	29·838	29·794	29·876	29·905
1880	29·928	29·887	29·835	29·868	29·888	29·842	29·829	29·946	29·912	29·889
1890	29·872	29·860	29·864	29·902	29·872	29·870	29·942	—	—	—

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TABLE VI.—Paris Pressures in millimetres.

1764–1863.

(700 +)

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Mean.
1764	54·37	58·81	60·57	54·34	61·40	60·71	60·00	59·26	60·21	59·44	56·78	52·82	58·16
1765	53·84	56·00	50·40	58·76	58·61	60·30	61·24	59·04	63·46	55·91	60·32	59·15	57·56
1766	68·24	60·71	55·75	56·30	56·52	59·54	58·91	62·78	62·61	58·85	60·57	59·21	60·00
1767	54·14	54·84	56·62	59·61	57·03	59·89	57·37	58·74	60·48	59·58	60·41	57·20	58·16
1768	52·92	59·44	63·46	57·60	57·80	57·14	58·00	58·28	55·45	53·58	54·40	59·93	57·11
1769	57·20	52·97	59·94	55·30	57·87	59·16	61·22	58·94	58·26	59·94	57·47	61·52	58·18
1770	61·87	61·73	52·74	53·44	55·30	55·68	61·04	61·00	58·07	54·75	52·92	57·20	57·50
1771	53·26	59·62	52·68	58·29	58·47	59·67	61·38	59·13	59·01	58·56	63·67	52·78	58·41
1772	49·86	48·68	49·17	54·75	57·71	61·05	59·23	58·20	55·47	59·00	54·55	58·92	55·04
1773	56·58	57·86	60·90	56·94	55·15	58·23	60·21	59·17	57·81	56·04	52·59	52·45	57·53
1774	50·61	57·12	54·53	54·31	55·26	57·52	60·43	58·78	56·04	61·94	53·86	61·49	56·07
1775	58·35	57·05	57·03	60·52	61·65	57·43	58·05	58·14	55·61	58·68	55·09	61·51	58·26
1776	50·75	50·17	58·27	58·68	58·94	57·24	59·54	58·83	57·19	60·62	58·29	57·14	57·50
1777	55·20	51·60	53·79	58·81	54·84	59·35	58·32	62·02	61·56	56·32	61·51	53·82	57·54
1778	53·30	55·04	53·82	54·05	59·02	61·39	59·80	63·75	59·86	52·19	56·62	59·41	56·89
1779	66·02	69·08	64·66	61·86	58·81	58·10	58·47	61·16	60·39	61·29	52·24	54·39	60·96
1780	53·75	58·96	61·51	53·15	60·50	59·53	62·10	59·82	57·75	55·62	57·10	66·19	57·85
1781	58·32	57·00	63·09	56·65	58·09	55·92	62·15	59·10	58·13	62·35	54·57	56·39	59·30
1782	57·34	58·07	54·34	49·27	53·32	62·98	61·47	56·62	60·35	58·60	58·54	64·09	57·27
1783	54·82	60·09	53·73	62·53	55·02	58·23	59·96	60·10	57·66	59·03	58·25	56·96	58·63
1784	54·50	55·39	50·75	54·20	63·20	59·70	60·30	59·22	59·33	58·23	57·28	50·35	57·42
1785	54·57	52·68	57·55	62·15	59·01	61·89	57·58	55·93	56·09	58·38	55·47	53·84	56·80
1786	54·30	58·70	51·97	54·64	58·55	58·72	61·11	58·73	57·70	60·24	52·25	52·53	56·73
1787	63·28	59·08	56·12	56·14	56·93	57·85	58·53	61·66	58·84	55·97	56·63	54·78	57·80
1788	60·90	50·90	51·99	63·46	62·08	58·29	64·16	62·49	58·38	65·48	65·19	56·80	59·84
1789	56·72	57·09	53·10	56·82	59·78	59·49	60·08	62·34	60·63	55·23	54·97	57·70	57·75
1790	60·75	65·23	62·32	51·93	55·52	60·42	56·40	59·99	59·83	55·92	53·85	51·60	58·32
1791	51·03	57·79	63·25	53·87	58·90	57·26	58·56	60·64	60·05	52·75	52·54	51·60	56·52
1792	51·41	58·18	55·22	57·48	58·85	57·55	57·29	57·85	56·08	54·75	59·64	56·60	56·33
1793	59·69	56·01	54·25	55·42	59·80	59·91	60·60	59·88	59·69	60·64	51·85	53·53	57·86
1794	59·69	58·42	60·02	59·41	58·40	57·27	59·39	58·18	56·50	56·32	54·64	57·60	57·65
1795	57·36	48·93	54·90	55·04	63·36	56·50	59·15	59·64	60·97	54·25	57·34	60·94	57·09
1796	61·56	59·10	57·76	58·40	53·84	59·37	59·39	60·14	58·74	57·68	54·41	54·32	58·45
1797	62·96	66·21	55·42	52·27	56·72	55·90	59·65	58·68	54·44	55·53	58·08	57·80	57·52
1798	58·64	63·50	56·27	57·95	59·26	60·71	54·85	61·73	56·22	58·64	51·71	55·47	58·11
1799	59·42	53·18	53·09	49·19	55·45	59·04	56·51	57·32	56·47	56·02	56·69	54·08	55·65
1800	47·76	53·98	53·31	53·10	55·04	58·38	63·00	61·03	57·47	60·24	52·88	50·76	55·86
1801	56·95	53·03	58·11	57·62	55·29	60·95	55·29	60·90	58·14	56·77	52·90	49·53	56 9
1802	59·02	52·38	60·12	61·88	58·94	57·34	58·73	61·89	61·13	56·24	49·69	53·00	57·24
1803	48·30	56·97	59·90	58·55	59·53	62·13	62·70	59·84	63·30	61·08	49·94	52·88	57·94
1804	53·14	60·60	51·26	52·94	59·68	63·96	56·11	59·72	64·00	54·34	56·60	53·14	57·10
1805	49·64	55·51	58·04	55·33	57·46	59·85	59·35	60·13	61·55	56·11	65·68	54·65	57·65
1806	52·10	56·81	52·66	58·17	57·00	63·15	57·03	58·06	61·10	57·30	56·47	53·43	57·04
1807	60·66	55·13	56·30	57·03	56·08	60·90	58·86	59·17	57·00	58·55	50·09	59·54	56·35
1808	57·45	62·15	59·81	58·70	58·56	60·75	59·87	56·27	55·59	55·43	55·50	53·65	58·30
1809	48·42	56·09	58·41	52·53	56·24	56·92	55·32	54·80	53·38	61·45	56·54	51·67	55·31
1810	62·31	57·26	51·33	53·33	53·30	59·19	54·72	56·70	57·82	56·28	47·27	54·88	55·10
1811	57·13	50·45	61·47	52·00	53·94	55·72	57·70	57·03	55·95	54·38	58·87	53·28	55·79

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TABLE VI (continued).

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Mean.
1812	55·82	52·75	51·67	55·21	53·55	57·37	57·41	56·55	59·37	48·30	54·18	56·66	54·62
1813	61·12	59·47	63·05	55·86	54·00	56·89	54·85	59·45	57·77	50·94	54·67	54·12	57·06
1814	47·30	60·73	51·84	55·13	55·42	57·56	57·02	57·90	58·97	53·81	53·65	53·35	55·29
1815	54·41	57·47	56·74	54·01	56·57	54·46	58·32	57·13	57·76	55·00	58·39	56·10	56·13
1816	52·19	56·61	53·79	49·64	53·40	54·94	51·05	56·29	56·11	54·15	53·64	55·46	53·99
1817	57·48	60·03	56·52	61·73	51·37	55·57	55·25	53·76	55·91	55·71	60·71	49·86	56·62
1818	58·14	54·14	53·16	50·26	52·84	58·49	58·34	57·55	54·12	56·27	55·79	60·64	54·91
1819	56·89	52·66	56·23	53·06	54·37	56·36	56·32	56·36	57·43	53·92	51·69	52·96	55·49
1820	56·88	57·71	55·44	55·88	55·08	57·07	56·03	55·71	58·19	50·38	54·31	57·52	55·47
1821	56·48	64·77	51·59	50·48	55·47	57·37	56·71	56·11	56·30	57·49	57·25	49·89	56·46
1822	61·58	63·37	61·45	55·59	54·78	57·74	53·41	55·56	55·71	51·77	55·77	59·31	56·38
1823	50·61	47·65	54·58	53·94	56·95	54·75	55·41	57·09	57·89	51·65	61·54	55·32	55·11
1824	60·84	54·45	53·99	54·82	55·78	54·16	58·05	56·44	55·90	51·01	53·50	57·53	55·36
1825	64·76	63·15	59·94	57·85	56·49	57·03	58·20	55·96	55·34	58·52	53·27	49·04	58·17
1826	58·68	60·78	57·23	57·96	55·36	60·85	56·30	56·56	55·19	56·48	53·31	56·17	56·48
1827	55·54	57·53	53·54	56·44	52·07	55·94	59·62	56·50	56·90	52·23	58·17	57·69	55·89
1828	58·90	53·62	55·91	53·30	53·55	57·55	51·62	54·85	56·18	59·95	56·55	60·75	55·81
1829	51·15	59·66	51·98	47·75	56·36	56·82	53·89	55·52	52·84	58·34	57·34	59·88	55·20
1830	56·56	56·58	61·28	53·25	53·90	53·32	56·86	55·33	53·28	63·36	55·88	48·53	56·62
1831	53·96	56·48	55·65	49·20	53·30	56·42	56·50	55·16	55·60	57·12	57·47	55·06	54·62
1832	58·05	59·63	56·46	56·07	55·85	54·55	58·84	55·59	60·66	60·75	54·93	59·19	57·20
1833	62·80	50·19	52·69	52·24	58·91	54·44	56·96	55·85	54·26	53·36	58·37	55·38	55·77
1834	55·38	63·39	63·80	59·44	56·63	57·39	55·31	53·99	58·76	58·93	55·84	65·29	57·85
1835	60·93	57·21	56·81	59·55	54·42	57·57	57·52	55·42	51·93	52·18	57·00	62·01	57·15
1836	59·51	53·72	49·87	53·92	57·79	56·25	57·88	56·72	54·72	54·43	51·25	54·27	55·67
1837	57·25	59·25	55·44	51·56	55·01	56·54	55·91	56·12	54·01	61·59	55·87	58·13	56·07
1838	55·04	47·72	53·82	51·81	53·01	54·86	57·55	56·43	56·20	56·13	46·84	60·58	53·96
1839	57·11	59·29	53·60	57·74	54·17	55·09	56·52	57·37	51·24	56·53	50·37	52·23	55·80
1840	56·42	58·76	61·17	56·29	54·29	57·32	55·74	55·27	53·73	56·36	50·95	59·66	55·71
1841	53·77	51·50	57·36	53·26	54·58	56·02	54·37	56·24	53·13	48·86	54·37	52·20	54·43
1842	58·39	59·46	56·73	54·80	55·40	57·16	56·10	56·83	53·06	57·02	51·97	62·88	55·76
1843	54·66	46·42	54·41	53·94	52·39	53·03	57·07	56·80	60·05	53·39	55·29	68·07	55·03
1844	58·30	49·70	53·81	59·72	55·67	56·16	55·39	54·19	56·33	51·62	53·41	56·20	56·03
1845	54·57	55·70	56·25	51·93	52·81	55·58	55·75	54·84	55·24	58·67	52·58	55·62	55·01
1846	55·69	58·47	54·57	50·55	55·06	56·62	56·23	54·87	55·31	50·70	57·23	52·81	55·08
1847	54·85	56·18	57·25	52·03	55·37	55·95	57·37	56·22	57·48	56·52	58·87	55·06	55·91
1848	55·25	52·28	49·02	50·35	57·41	53·65	57·76	55·68	56·47	53·43	56·83	58·15	54·43
1849	57·20	66·00	58·77	48·80	54·75	56·24	56·26	57·31	54·71	54·93	55·59	56·00	56·56
1850	57·22	60·04	61·02	51·79	53·34	57·72	56·13	56·23	59·05	53·44	56·78	60·68	56·56
1851	56·00	58·43	53·31	53·16	57·22	59·53	54·27	58·06	59·93	55·84	54·50	65·08	56·74
1852	55·41	58·21	59·22	57·28	55·03	52·06	55·92	53·45	55·07	54·45	49·72	54·60	55·91
1853	52·29	47·38	54·99	54·45	52·48	54·22	56·62	55·87	56·78	51·70	59·24	53·84	54·22
1854	53·91	63·09	65·49	58·83	53·39	54·68	56·00	58·51	61·44	54·98	52·68	57·53	57·24
1855	60·76	49·05	49·71	58·01	51·97	57·45	55·42	58·33	58·56	50·82	56·56	55·73	55·35
1856	48·20	59·18	58·61	50·88	51·85	58·35	57·80	54·74	53·52	60·81	58·35	54·37	55·67
1857	52·28	60·89	54·90	52·06	54·18	57·15	58·32	56·28	56·52	54·62	59·00	67·48	55·88
1858	66·69	55·83	55·25	54·97	55·85	58·14	55·73	56·35	58·50	57·22	53·37	56·94	57·95
1859	64·49	59·15	58·84	52·11	53·03	54·66	59·14	56·67	55·32	50·45	57·63	53·56	56·54
1860	51·65	57·10	54·72	54·36	55·03	52·85	56·79	52·71	55·04	59·60	52·49	48·13	54·66
1861	61·92	54·84	54·03	58·92	57·51	55·03	53·55	59·13	55·85	57·04	52·72	60·24	55·72
1862	55·65	58·54	49·26	58·05	55·05	55·42	57·18	55·80	56·03	57·06	54·50	59·65	56·06
1863	54·37	65·58	54·62	56·91	56·12	55·52	59·36	55·77	55·09	53·63	59·87	61·73	57·27

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TABLE VI (continued).

YEARLY MEANS, 1757–1763.

	0	1	2	3	4	5	6	7	8	9
1750	—	—	—	—	—	—	—	56·92	56·11	59·51
1760	56·90	59·11	57·68	58·58	—	—	—	—	—	—

YEARLY MEANS, 1864–1878.

	0	1	2	3	4	5	6	7	8	9
1860	—	—	—	—	56·63	55·58	55·75	56·72	57·33	56·28
1870	56·21	55·77	54·55	54·94	58·36	56·08	56·16	54·44	56·18	—

TABLE VII.—Edinburgh Temperatures in degrees F., 1764–1863.

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Mean
1764	36·3	38·0	38·7	44·0	52·2	55·6	59·9	57·6	51·0	46·5	38·4	36·1	46·2
1765	39·8	32·9	40·0	44·5	51·9	53·7	58·5	56·8	51·7	47·2	37·1	35·6	45·8
1766	34·7	34·5	38·1	45·8	45·8	54·0	58·9	59·5	51·6	46·6	43·0	37·6	45·8
1767	31·7	41·1	38·9	44·8	48·7	53·1	56·4	59·8	54·6	45·7	43·0	39·3	46·4
1768	33·2	38·2	40·2	46·5	52·5	54·5	58·3	58·7	51·0	47·0	40·1	39·1	46·5
1769	35·3	36·6	40·6	45·5	50·4	54·4	60·1	56·3	53·9	45·7	40·1	40·4	46·7
1770	39·9	41·1	35·8	41·5	47·9	53·3	57·1	58·2	55·1	44·4	38·3	37·6	45·8
1771	33·8	38·2	36·5	41·7	49·5	54·3	57·4	56·3	51·0	47·2	42·1	41·7	45·8
1772	32·6	32·6	37·8	42·7	48·6	56·1	58·0	57·4	51·0	49·0	42·4	39·6	45·6
1773	38·5	36·2	43·0	45·4	47·9	54·0	56·2	58·3	51·3	46·1	39·2	36·5	46·0
1774	30·1	36·7	38·2	43·6	45·5	54·0	56·8	56·7	52·1	48·7	39·0	37·7	44·9
1775	38·3	39·9	40·2	47·2	53·0	55·1	59·7	57·5	53·4	45·9	38·5	39·1	47·3
1776	29·2	36·7	42·1	46·5	49·4	54·3	59·6	56·7	51·5	47·8	41·0	38·1	46·1
1777	35·4	35·2	40·1	42·6	51·2	53·7	57·5	59·2	55·8	48·8	42·9	38·8	46·9
1778	37·8	39·5	40·1	44·0	53·1	59·1	61·2	58·7	51·3	42·6	40·8	43·4	47·6
1779	37·6	47·2	46·5	47·1	51·0	58·1	65·2	63·7	56·0	48·8	40·9	33·1	49·6
1780	28·4	35·1	44·7	42·0	53·2	57·0	60·7	63·2	57·4	45·9	38·8	39·5	47·2
1781	36·3	40·3	44·5	47·5	51·9	59·8	60·4	58·6	52·7	48·5	43·4	41·1	48·8
1782	39·4	34·7	37·8	40·7	47·2	57·2	60·1	56·1	51·4	44·0	35·6	35·9	45·0
1783	37·1	38·9	37·5	48·5	49·9	54·2	63·2	58·4	53·6	47·2	41·2	37·1	47·2
1784	32·2	34·8	35·0	41·1	55·4	53·5	58·5	56·4	54·7	46·4	39·7	34·0	45·2
1785	38·2	32·8	34·2	49·2	50·6	60·7	58·3	54·1	54·3	45·7	43·2	36·1	46·4
1786	36·0	37·0	35·4	45·1	49·7	57·6	56·4	58·7	51·1	44·0	39·0	36·3	45·5
1787	40·0	43·8	44·4	43·9	49·7	53·8	60·0	60·0	53·6	48·0	38·0	36·8	47·7
1788	38·8	37·2	37·4	49·2	50·2	57·2	60·3	58·8	54·4	47·8	42·4	32·2	47·2
1789	34·6	40·2	34·6	43·8	53·2	56·9	60·9	61·6	55·0	47·6	41·0	43·9	47·8
1790	39·4	44·7	43·2	42·6	52·8	58·8	59·0	57·8	52·8	48·8	39·9	37·9	48·1
1791	38·8	39·3	43·9	47·5	52·0	56·9	58·6	58·4	54·7	46·7	41·2	32·7	47·6
1792	34·8	39·8	40·9	49·8	48·6	53·7	58·4	60·3	51·0	46·2	44·5	37·6	47·1
1793	37·4	40·1	37·6	40·4	49·5	53·9	60·0	57·8	52·9	51·7	41·0	40·6	46·9
1794	38·2	43·0	43·2	46·8	50·6	58·4	60·7	56·4	52·2	47·0	40·8	40·2	48·1
1795	29·9	31·6	37·5	45·2	49·4	52·9	57·6	59·3	57·0	50·8	37·9	42·9	46·0
1796	43·8	40·5	39·0	48·9	49·0	55·8	57·6	59·5	55·1	44·8	39 2	31·8	47·1
1797	40·7	43·8	39·5	44·6	52·0	54·4	60·9	58·0	53·8	44·7	38·5	40·0	47·6
1798	38·4	38·9	40·6	49·8	53·3	60·8	60·6	59·4	54·9	48·2	39·0	35·8	48·3
1799	37·2	36·2	38·0	41·1	48·5	55·4	58·0	55·9	54·6	45·1	40·3	35·1	45·4

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TABLE VII (continued).

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Mean.
1800	35·3	36·3	38·5	46·9	51·1	55·5	61·6	59·7	55·1	47·7	40·1	36·2	47·0
1801	39·1	39·9	42·5	46·3	52·0	57·4	58·9	60·4	56·2	49·4	40·0	34·0	48·0
1802	36·9	37·8	42·0	46·6	49·0	55·5	56·3	60·1	55·1	49·6	41·5	37·9	47·4
1803	35·6	37·7	41·9	46·5	50·1	55·6	62·8	59·1	52·5	47·2	39·0	38·5	47·2
1804	40·2	36·4	38·7	43·0	54·1	59·6	59·1	58·6	51·1	49·4	41·6	36·2	47·3
1805	37·2	38·9	42·5	46·3	47·9	53·8	59·3	59·4	56·4	46·3	42·1	36·7	47·2
1806	35·1	36·7	39·3	41·5	50·0	56·6	57·5	58·8	55·5	49·5	42·9	39·9	46·9
1807	36·3	35·7	39·3	44·7	47·8	55·1	61·0	59·8	48·2	50·6	34·0	35·1	45·6
1808	35·2	35·5	37·3	41·6	54·3	56·3	62·5	60·4	54·1	43·6	40·1	35·4	46·1
1809	36·3	38·7	42·5	40·4	52·0	55·1	57·3	57·4	52·8	51·0	39·8	36·6	46·7
1810	36·8	36·2	36·6	44·5	45·1	55·8	57·2	58·0	55·8	48·4	39·1	35·7	45·8
1811	33·6	37·7	43·5	43·6	52·2	54·8	59·3	56·7	54·8	51·5	43·8	35·9	47·3
1812	36·3	39·4	36·8	40·7	49·0	55·3	57·0	57·2	53·3	47·3	39·8	34·9	45·6
1813	35·6	39·7	43·3	44·8	49·3	55·9	59·3	57·5	53·4	44·3	37·7	37·3	46·5
1814	26·5	35·1	37·7	48·2	47·7	52·9	59·4	57·2	54·4	45·4	38·9	36·6	45·0
1815	33·5	41·6	41·5	45·3	52·0	55·9	58·2	57·8	53·6	47·7	37·6	33·8	46·5
1816	35·4	35·8	36·4	40·9	48·2	53·2	55·7	55·6	50·9	46·3	38·5	35·2	44·3
1817	38·7	40·3	39·6	44·5	45·4	54·7	57·2	54·1	53·8	42·0	44·7	35·6	45·9
1818	37·2	35·5	37·1	40·8	50·3	58·8	60·0	56·5	52·9	52·4	46·7	38·9	47·3
1819	37·7	36·4	42·2	45·0	50·6	54·8	59·5	62·7	53·7	46·4	37·5	33·3	46·7
1820	30·4	40·0	40·9	46·9	50·4	55·0	59·0	56·3	52·2	43·9	41·6	39·1	46·3
1821	39·1	40·2	42·8	48·9	47·6	52·9	57·5	58·7	57·4	50·6	43·0	41·1	48·3
1822	39·0	40·6	43·7	45·5	52·4	59·2	58·0	57·0	50·3	47·8	44·0	36·1	47·8
1823	31·1	34·4	40·5	42·4	51·3	53·3	56·4	55·6	51·9	44·8	44·6	37·3	45·3
1824	39·8	39·0	39·6	45·2	50·1	56·6	59·9	57·2	54·6	45·8	40·8	38·4	47·2
1825	39·1	39·0	41·2	46·6	50·7	56·7	61·4	60·0	56·9	50·1	38·5	39·0	48·3
1826	31·6	41·8	41·8	46·8	51·8	61·4	62·0	61·3	54·6	50·0	38·8	41·0	48·6
1827	35·4	34·0	40·1	45·0	50·8	56·1	58·4	55·2	55·0	50·1	42·8	42·2	47·1
1828	39·4	40·1	42·8	45·2	51·2	56·9	57·6	57·0	54·6	48·4	44·8	43·4	48·4
1829	32·1	38·8	39·6	41·9	51·6	56·3	56·5	54·0	50·3	46·0	39·6	36·0	45·2
1830	34·3	36·0	44·2	46·6	49·8	52·0	57·7	52·6	52·2	48·5	42·6	35·4	46·0
1831	34·7	38·6	42·3	45·0	48·8	58·0	59·4	60·1	55·3	52·7	40·2	41·8	48·1
1832	39·1	40·6	41·8	45·8	48·7	55·9	57·7	57·4	54·0	49·7	41·4	40·6	47·7
1833	34·7	39·5	38·9	44·4	55·8	55·6	58·9	54·6	53·0	48·9	41·8	40·3	47·2
1834	41·4	40·5	43·0	45·0	52·3	56·9	59·3	58·4	54·0	48·8	43·2	42·2	48·7
1835	37·9	39·6	40·6	44·6	49·0	54·3	57·6	59·1	52·2	45·6	42·4	38·8	46·8
1836	38·1	37·2	39·6	42·8	50·9	55·9	56·0	54·9	50·0	45·1	40·0	38·9	45·7
1837	35·0	38·9	34·8	38·9	48·0	56·0	59·6	55·6	51·7	49·2	40·1	41·0	45·7
1838	30·6	29·8	39·1	41·1	46·0	54·5	59·2	56·9	53·5	47·4	37·9	40·5	44·7
1839	35·5	37·8	38·2	43·5	49·1	55·8	58·6	56·6	53·4	47·4	42·3	38·1	46·4
1840	39·2	37·5	40·8	48·4	48·2	55·2	59·9	59·1	51·4	46·3	41·6	36·6	46·7
1841	33·4	37·9	46·5	45·0	52·0	53·5	56·2	57·3	54·6	44·6	39·0	38·9	46·6
1842	35·0	40·0	42·4	46·0	51·7	57·1	56·5	60·7	55·1	45·6	40·9	45·6	48·0
1843	39·4	34·3	42·3	45·6	47·1	52·2	58·9	57·9	57·1	44·9	44·1	47·8	47·6
1844	41·2	36·2	41·4	49·5	48·8	55·0	56·9	55·7	53·1	47·1	43·1	33·0	46·8
1845	36·6	35·4	36·6	45·2	48·1	56·8	54·8	55·7	54·1	49·4	43·6	38·7	46·2
1846	42·1	44·9	43·0	44·7	53·2	61·9	59·3	59·9	59·5	48·1	44·7	34·4	49·6
1847	36·2	35·7	42·0	43·2	50·6	56·0	61·6	57·6	51·5	49·1	45·6	39·6	47·4
1848	33·6	40·4	41·6	43·8	55·5	55·0	59·2	54·1	53·8	46·7	40·2	40·5	47·0
1849	36·8	42·1	42·6	42·9	51·0	52·8	56·8	57·1	52·6	45·0	41·6	36·8	46·5
1850	31·5	41·8	42·4	46·4	48·3	58·4	59·1	56·8	52·4	45·3	42·9	39·7	47·1
1851	40·6	40·8	41·0	43·7	50·4	55·4	56·1	56·6	52·5	50·2	37·3	40·7	47·1

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PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY A MATHEMATICAL, PHYSICAL & ENGINEERING SCIENCES

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TABLE VII (continued).

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Mean.
1852	39·0	40·2	40·1	48·6	51·0	54·8	64·0	60·0	54·0	46·3	42·8	42·2	48·6
1853	38·8	33·8	37·8	45·6	49·3	58·2	59·2	57·8	53·7	48·4	43·2	37·0	46·9
1854	36·9	39·9	45·3	46·4	50·9	56·5	59·6	60·5	57·0	47·9	42·0	39·9	48·6
1855	37·5	30·6	37·5	45·2	46·3	57·2	61·6	59·7	54·1	47·5	41·2	37·3	46·3
1856	36·8	41·4	41·1	45·8	48·1	58·8	59·4	58·6	52·7	51·4	42·8	40·4	48·1
1857	37·9	41·1	40·9	44·9	51·2	55·8	60·9	60·7	56·9	51·3	45·6	46·5	49·5
1858	40·6	36·2	40·8	42·9	50·9	58·5	55·5	56·9	54·8	44·7	39·5	39·6	46·8
1859	39·9	39·8	43·3	40·6	49·9	53·6	58·6	57·0	52·8	45·6	38·8	33·3	46·1
1860	34·5	33·6	38·4	40·7	50·6	51·5	57·5	55·0	51·2	46·4	38·5	33·4	44·3
1861	36·3	39·0	41·6	43·8	49·8	54·9	56·6	58·4	53·5	49·5	38·0	37·0	46·5
1862	38·1	40·3	37·4	45·0	50·6	53·4	54·5	56·4	52·6	47·2	36·8	42·4	46·2
1863	38·7	41·2	43·0	44·6	49·4	55·6	58·0	56·0	50·0	46·8	44·1	41·4	47·4

TABLE VIII.—Stockholm Temperatures in degrees C.
1764–1863.

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Mean.
1764	−2·4	0·6	0·4	4·2	10·0	13·3	20·6	15·2	10·4	5·7	−0·2	−3·2	6·22
1765	−3·6	−3·9	0·0	4·3	7·8	14·5	15·9	16·1	10·2	6·2	3·4	−2·6	5·69
1766	−5·4	−5·0	0·5	6·8	9·9	16·2	18·7	16·2	12·3	6·6	4·4	−4·0	6·45
1767	−11·2	−6·5	−1·2	1·5	8·4	13·8	15·7	18·1	14·1	6·7	4·2	−3·0	5·05
1768	−5·1	−4·2	−4·6	3·2	7·7	13·9	16·7	15·6	9·7	5·0	1·5	1·5	5·08
1769	−1·5	−2·8	−0·7	3·7	8·5	15·0	16·3	14·7	11·1	2·7	−0·7	−3·4	5·24
1770	−4·9	−2·3	−8·5	2·8	8·9	14·3	16·8	17·3	13·6	9·8	0·0	−1·8	5·50
1771	−7·5	−8·3	−7·0	1·7	9·9	16·4	16·8	14·3	11·3	7·1	0·9	0·1	4·64
1772	−4·1	−13·2	−6·1	1·8	6·3	14·2	17·5	15·9	11·3	9·6	5·4	0·6	4·93
1773	−2·9	−2·5	−0·2	5·6	11·4	14·3	18·8	18·1	13·3	8·5	4·3	−1·7	7·25
1774	−11·7	−3·7	−1·6	3·9	11·3	17·8	18·7	16·7	11·9	6·8	−5·0	−3·7	5·12
1775	−4·5	−1·7	0·5	4·0	10·4	17·0	19·8	19·1	15·6	9·8	0·6	0·1	7·56
1776	−8·9	−1·5	−1·1	2·9	7·5	16·7	19·5	16·9	11·9	7·5	+3·0	−0·6	6·15
1777	−5·5	−5·9	−3·4	2·5	10·7	14·4	15·5	15·9	11·0	5·8	2·8	−1·1	5·23
1778	−5·1	−3·3	−2·2	4·8	9·8	14·7	18·4	16·0	11·4	1·6	1·3	−0·7	5·56
1779	−2·0	2·0	3·6	6·2	10·4	13·9	17·0	19·7	13·5	10·1	2·1	−4·5	7·67
1780	−6·0	−4·2	2·0	−0·5	8·6	13·8	18·7	17·4	11·7	8·2	−0·9	−2·5	5·53
1781	−5·6	−4·3	0·6	4·7	8·0	15·8	17·6	19·8	15·4	6·5	3·3	−4·5	6·44
1782	−2·1	−5·1	−4·6	1·5	7·6	13·9	15·7	15·1	12·5	4·8	−0·2	−2·2	4·74
1783	−6·6	−2·4	−2·8	5·8	10·9	17·1	21·1	17·2	14·6	9·9	0·3	−3·4	6·81
1784	−7·4	−4·6	−8·6	3·0	8·8	13·4	16·4	15·4	11·0	5·9	3·3	−4·5	4·34
1785	−4·6	−6·2	−6·3	3·0	7·0	14·5	17·3	15·5	10·2	5·2	1·9	−4·1	4·45
1786	−6·2	−5·2	−6·4	3·0	7·7	14·7	16·8	16·2	11·3	5·5	−3·3	−2·5	4·30
1787	−2·8	−1·3	0·5	3·1	9·2	14·4	15·8	14·2	10·7	8·8	−0·6	−4·7	5·57
1788	−3·9	−7·8	−6·3	3·9	9·0	16·0	19·7	15·4	13·6	4·1	1·2	−10·4	4·54
1789	−8·2	−4·5	−8·8	2·3	11·1	17·7	20·0	19·9	15·0	10·4	3·4	3·4	6·88
1790	0·0	1·5	2·2	0·2	10·1	13·5	14·5	15·2	11·3	6·0	1·4	−1·0	6·24
1791	1·9	0·3	2·5	6·4	8·4	14·4	18·8	17·6	11·3	6·3	3·1	−1·3	7·48
1792	−5·0	−5·1	−3·0	5·0	8·8	14·9	19·4	15·4	12·1	5·4	3·2	−1·3	5·82
1793	−2·4	−0·9	−0·6	3·5	10·3	14·3	18·6	16·7	11·1	8·1	1·1	−3·6	6·35
1794	−0·1	−1·8	3·1	6·9	11·2	16·5	18·7	15·7	11·1	8·6	2·7	−0·8	7·65
1795	−7·3	−7·9	−5·6	4·9	7·8	14·4	16·7	15·8	13·2	7·8	1·1	−3·8	4·76
1796	2·4	−2·0	−2·0	4·6	9·0	15·4	17·2	16·9	11·7	7·5	0·7	−5·5	6·33

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TABLE VIII (continued).

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Mean.
1797	—2·4	2·4	0·8	3·4	9·1	14·8	18·0	16·7	14·1	6·8	0·8	—0·7	6·98
1798	—4·1	—2·3	—1·8	5·0	13·2	16·9	19·4	18·2	11·8	8·9	1·9	—2·3	7·07
1799	—2·5	—12·7	—4·2	2·2	6·3	14·3	16·4	14·5	10·3	6·8	4·4	—5·4	4·20
1800	—6·0	—7·1	—6·1	5·4	9·5	11·8	15·4	16·0	11·0	7·5	3·6	0·4	5·11
1801	—4·2	—4·4	0·0	5·6	12·3	14·0	18·4	13·6	11·2	6·9	2·4	—3·7	6·01
1802	—7·6	—2·2	2·3	5·9	7·5	13·2	15·0	16·8	10·8	8·8	0·2	—2·6	5·66
1803	—9·8	—6·8	—1·1	7·8	9·9	14·1	18·0	17·4	10·5	5·0	—0·5	—6·5	4·83
1804	—4·5	—8·1	—5·0	2·4	10·0	14·8	19·5	16·5	13·7	7·8	—1·2	—7·6	4·86
1805	—5·9	—8·3	—2·4	1·9	6·7	12·0	17·7	16·4	12·6	2·3	0·0	—3·4	4·13
1806	—2·6	—4·1	—3·8	1·1	9·3	11·6	15·4	16·9	14·2	6·2	1·6	0·4	5·52
1807	—4·2	—2·3	—2·2	0·9	8·3	14·2	18·6	19·3	10·3	4·9	1·4	—1·4	5·65
1808	—2·1	—7·0	—4·0	0·3	10·6	15·4	17·8	17·4	13·3	8·5	1·0	—5·8	5·45
1809	—12·1	—8·1	—4·3	—0·2	11·3	14·4	17·6	18·3	13·0	6·2	—0·3	1·9	4·79
1810	—2·1	—3·9	—4·7	0·3	7·3	14·0	18·1	17·1	13·1	5·3	0·6	—2·9	5·18
1811	—4·1	—3·6	2·2	2·4	12·7	17·6	19·9	16·3	11·8	5·2	1·7	—1·0	6·76
1812	—4·2	—2·5	—5·0	—1·2	6·5	13·9	14·5	16·6	9·1	8·5	0·1	—6·5	4·07
1813	—3·8	—0·9	+0·3	4·2	7·8	12·6	17·1	15·9	12·8	3·6	2·8	—1·8	5·88
1814	—14·3	—8·6	—2·7	5·3	7·1	12·2	19·2	16·7	10·6	5·8	3·2	—1·4	4·43
1815	—3·5	—2·4	—0·1	5·5	8·9	12·2	15·7	16·6	11·3	7·5	2·4	—2·7	5·95
1816	—3·3	—7·7	—3·3	2·7	6·0	15·1	18·5	14·7	11·8	5·3	0·4	—1·1	4·93
1817	0·7	—0·4	—2·5	2·5	10·7	14·2	17·3	15·2	12·6	4·6	1·5	—7·9	5·71
1818	—3·0	—2·5	0·4	0·9	8·1	15·2	20·8	14·4	12·1	8·1	3·6	2·0	6·68
1819	1·2	—1·4	—0·1	3·8	10·2	16·9	20·2	20·5	14·7	6·1	—0·7	—4·1	7·28
1820	—8·6	—2·8	—1·9	4·9	10·3	14·7	16·7	16·1	12·3	7·3	1·0	—4·4	5·47
1821	—4·1	—3·1	—3·0	5·6	9·3	11·6	14·9	15·0	13·1	10·5	3·3	2·0	6·26
1822	—1·5	2·7	4·6	6·5	12·2	15·2	17·0	16·8	11·9	8·7	5·3	0·5	8·33
1823	—5·7	—4·9	0·3	2·3	8·9	16·4	16·8	17·3	12·0	9·2	3·4	1·3	6·44
1824	1·6	0·2	—0·2	5·7	9·4	15·0	17·3	16·8	15·4	5·9	2·2	—0·8	7·38
1825	—0·3	—2·8	—0·6	3·3	8·5	14·5	16·1	15·7	11·4	7·7	2·1	0·1	6·31
1826	—5·6	0·1	0·8	2·8	10·2	17·6	21·1	18·4	12·2	8·2	1·8	—0·1	7·29
1827	—5·2	—7·1	—1·8	4·9	10·8	17·5	15·8	14·6	13·2	6·7	0·5	2·0	5·99
1828	—4·7	—5·3	—2·0	2·6	8·9	16·1	18·5	16·2	10·5	6·6	1·7	—3·8	5·44
1829	—5·0	—10·2	—4·9	—1·2	9·1	15·8	17·4	14·0	11·2	4·3	—3·0	—5·5	3·50
1830	—5·6	—7·3	0·1	3·1	7·5	13·3	17·8	14·8	10·2	6·2	3·0	—3·0	5·01
1831	—8·4	—4·0	—4·2	4·1	8·4	14·9	18·6	16·2	10·4	8·7	0·8	—0·3	5·43
1832	—2·1	—1·0	0·4	4·5	6·1	12·6	12·9	14·8	9·5	7·7	1·5	0·1	5·58
1833	—2·6	—1·9	—2·6	1·1	11·5	14·7	15·9	12·2	12·1	8·6	2·6	—1·9	5·81
1834	—3·7	0·1	0·8	3·9	9·5	14·3	19·8	19·4	11·2	6·4	0·7	—1·2	6·77
1835	—1·8	—0·3	—0·5	3·4	6·0	15·6	16·1	13·4	12·8	7·0	—0·6	—4·1	5·58
1836	—4·1	—2·9	1·6	3·8	7·0	13·7	15·1	13·7	8·8	6·5	0·1	—2·9	5·03
1837	—5·2	—1·4	—4·1	0·7	7·5	12·8	14·5	15·8	10·1	6·6	2·3	—1·7	4·83
1838	—7·8	—11·8	—4·4	—0·3	8·0	14·9	16·4	14·3	13·1	4·8	0·3	—1·0	3·88
1839	—4·1	—3·5	—6·2	0·2	11·1	14·8	18·0	15·5	12·3	7·5	1·3	—3·2	5·31
1840	—3·6	—3·1	—1·9	5·3	6·6	14·7	15·2	15·5	12·4	4·5	1·7	—3·8	5·29
1841	—6·4	—6·4	—0·1	4·3	11·9	14·2	14·5	15·6	11·4	6·0	0·9	1·9	5·65
1842	—2·2	0·4	0·1	3·3	11·1	14·1	14·8	18·7	10·5	5·2	—1·0	2·3	6·44
1843	—0·5	—3·3	—2·3	1·1	6·4	12·8	17·1	18·7	11·8	4·0	1·9	1·4	5·76
1844	—5·0	—10·9	—4·7	4·7	9·6	12·6	14·0	14·6	11·7	6·2	0·1	—3·9	4·08
1845	—0·4	—9·0	—6·0	3·0	7·1	14·9	17·6	16·2	11·1	4·6	3·1	—1·7	5·04
1846	—3·5	—4·6	1·5	3·1	7·3	14·5	18·2	20·9	12·8	10·7	2·9	—5·9	6·49
1847	—4·0	—5·8	—1·3	0·2	7·1	14·4	15·9	17·7	11·6	5·0	5·9	0·2	5·50
1848	—6·6	—2·6	—0·3	4·1	11·1	15·3	16·9	14·4	11·3	6·6	—0·8	—1·4	5·67
1849	—5·9	—1·9	—1·8	2·0	9·8	12·9	15·8	15·7	11·4	5·1	1·1	—2·9	5·11

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TABLE VIII (continued).

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Mean.
1850	—8·6	—1·8	—3·9	2·7	10·7	16·3	17·8	17·4	10·6	4·6	—0·6	0·1	5·44
1851	—1·8	—2·2	—3·5	4·0	7·6	14·3	16·6	15·2	11·5	8·3	2·1	0·4	6·04
1852	—1·6	—4·6	—1·4	0·7	10·9	16·0	19·8	17·9	12·8	3·0	—0·5	—0·3	6·06
1853	—0·3	—7·2	—7·5	0·3	10·0	16·9	18·9	15·3	12·5	7·0	2·7	—1·9	5·56
1854	—4·4	—3·6	1·0	4·7	11·1	15·0	19·6	18·6	11·7	7·0	—0·3	—2·3	6·51
1855	—5·6	—11·0	—3·5	2·7	8·1	15·5	21·4	15·6	11·1	8·0	1·5	—5·4	4·87
1856	—4·1	—5·7	—2·3	4·2	7·0	14·2	16·4	13·0	11·1	7·9	—2·8	—2·4	4·71
1857	—5·9	—1·0	—0·8	2·1	8·7	13·9	16·9	19·4	13·1	9·2	2·6	2·7	6·74
1858	—1·5	—3·1	—0·1	3·8	9·6	16·6	19·9	19·2	15·1	7·1	—1·5	—0·8	7·03
1859	0·1	0·1	0·6	2·2	9·6	15·6	17·0	16·9	11·8	5·7	2·1	—3·2	6·54
1860	—1·8	—6·3	—2·7	3·4	7·4	14·2	16·4	15·2	11·5	5·4	1·1	—5·2	4·88
1861	—8·6	—1·3	—0·1	2·0	5·8	15·6	18·1	15·3	10·0	8·1	0·5	0·1	5·46
1862	—7·3	—6·8	—4·4	2·9	10·1	12·9	14·0	13·7	11·0	7·4	2·9	—1·9	4·54
1863	0·8	0·9	—0·2	3·7	8·0	14·4	14·3	15·0	11·9	8·5	3·5	—0·6	6·68

YEARLY MEANS, 1756–1763 AND 1864–1905.

	0	1	2	3	4	5	6	7	8	9
1750	—	—	—	—	—	—	5·38	5·74	4·52	6·08
1760	5·03	6·23	5·64	4·80	—	—	—	—	—	—
1860	—	—	—	—	4·53	5·36	5·32	3·23	6·36	5·58
1870	5·03	3·69	6·91	6·43	5·98	4·29	4·90	4·70	6·20	4·78
1880	5·73	4·12	6·67	6·02	5·94	5·18	6·12	6·13*	4·07	5·93
1890	6·45	6·21	5·15	4·98	7·03	5·72	6·85	6·44	6·48	5·74
1900	5·66	6·48	4·21	6·42	5·33	6·49	—	—	—	—

TABLE IX.—London Temperatures in degrees F., 1764–1863.

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Mean.
1764	40·5	38·7	38·7	43·3	54·3	56·6	61·1	60·8	53·8	45·4	40·8	36·6	47·5
1765	41·0	32·2	41·2	44·8	50·8	58·1	60·1	61·8	57·8	47·9	39·3	33·1	47·3
1766	31·5	35·2	39·7	45·3	49·3	57·1	60·6	63·8	59·3	48·9	46·3	38·1	47·9
1767	32·0	41·7	41·2	42·3	48·8	55·1	58·1	62·3	58·8	48·9	45·3	37·1	47·7
1768	34·0	42·2	39·2	45·3	52·8	58·1	61·1	62·8	53·8	47·9	42·3	41·1	48·5
1769	37·5	36·7	40·2	44·3	51·3	54·6	62·6	61·3	55·3	44·4	42·8	41·6	47·8
1770	38·0	39·2	36·7	40·3	48·8	55·1	61·1	62·8	57·3	46·9	41·8	40·1	47·3
1771	34·5	36·2	36·2	41·3	54·3	58·1	61·7	59·3	54·5	49·0	42·0	43·2	47·5
1772	35·0	38·5	40·8	43·3	50·3	65·1	66·0	66·0	59·6	55·8	46·7	40·9	50·6
1773	39·7	37·0	43·1	47·0	51·7	60·3	62·9	67·1	59·0	53·6	41·5	39·2	50·1
1774	33·3	42·3	46·6	50·6	53·2	61·8	62·3	64·7	56·3	52·0	42·4	38·5	50·3
1775	41·7	43·8	42·3	47·8	53·4	61·4	62·0	62·1	64·2	53·0	43·2	42·1	51·3
1776	28·5	41·0	44·8	48·2	51·2	59·0	63·2	62·7	56·7	54·2	45·2	44·1	49·8
1777	37·8	37·5	45·3	49·1	53·7	62·7	63·4	66·3	62·9	54·9	49·6	42·2	52·1
1778	39·5	38·1	42·7	49·4	57·7	62·4	66·0	63·6	56·2	51·3	49·5	47·2	51·9
1779	39·3	50·1	48·7	49·0	54·1	59·1	64·0	64·6	62·0	53·8	46·6	44·0	52·9
1780	32·1	37·1	49·4	44·2	56·9	60·2	63·7	66·6	61·3	53·6	42·2	40·3	50·6
1781	38·3	44·3	46·4	51·1	57·0	64·8	67·2	66·6	60·9	53·1	47·1	46·3	53·5
1782	44·8	38·2	43·3	42·0	47·0	67·3	67·1	63·9	63·0	49·8	41·0	42·8	50·9
1783	43·9	46·4	43·3	55·6	56·2	67·4	73·7	69·9	62·3	55·1	50·0	40·0	55·2

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TABLE IX (continued).

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Mean.
1784	36·1	37·9	41·1	48·0	62·7	63·1	67·2	64·0	65·2	49·3	46·9	32·8	50·0
1785	39·3	31·7	34·1	46·9	56·9	65·1	67·8	64·1	63·2	52·5	46·6	39·8	50·6
1786	42·7	39·7	35·6	46·4	53·4	61·6	60·4	60·5	55·1	47·9	39·5	38·6	48·3
1787	38·1	44·4	46·8	45·9	55·0	62·3	63·6	63·3	58·8	52·8	40·7	41·8	51·0
1788	40·6	41·2	40·6	52·4	59·9	61·6	65·5	63·6	59·6	51·1	41·2	29·9	50·5
1789	35·9	42·7	35·5	46·6	57·9	58·6	63·1	64·7	57·4	49·4	41·1	44·5	49·7
1790	40·5	44·0	45·9	43·8	56·7	62·8	62·5	63·9	56·9	51·6	44·8	40·6	51·1
1791	42·3	41·5	44·6	51·7	53·0	60·5	63·5	66·9	60·0	49·3	43·7	35·8	51·0
1792	38·7	39·7	45·5	52·7	53·7	60·5	63·5	66·6	56·3	50·9	45·6	42·2	51·2
1793	37·8	42·2	42·6	45·9	54·3	61·1	69·7	65·7	56·7	55·4	45·0	43·0	51·5
1794	35·8	48·0	47·9	53·5	55·7	63·3	70·9	64·2	56·2	51·7	46·0	38·5	52·5
1795	26·3	36·9	42·2	48·9	55·7	57·4	60·3	65·5	64·1	56·2	42·4	46·9	50·1
1796	48·1	41·9	42·9	52·5	52·9	59·8	62·3	64·1	62·2	49·2	42·0	33·3	50·9
1797	40·0	38·7	42·0	47·9	56·0	57·1	66·2	63·9	57·4	50·0	44·4	43·8	50·6
1798	42·9	40·7	43·3	52·4	55·5	63·8	63·1	65·5	59·7	52·3	42·1	36·8	51·4
1799	36·3	39·3	38·7	43·2	51·6	58·7	63·2	61·1	57·4	50·5	45·1	35·2	48·2
1800	39·7	36·9	40·8	51·4	57·3	56·7	66·2	65·5	60·1	49·5	44·3	40·9	50·7
1801	42·9	40·7	47·5	47·7	55·4	61·3	63·8	66·8	61·5	53·1	42·2	37·4	51·6
1802	35·8	40·9	43·9	51·3	53·3	59·8	58·3	66·9	61·2	52·2	43·3	40·4	50·5
1803	36·1	38·2	44·6	50·5	52·3	58·9	65·5	63·9	53·7	50·3	43·8	42·5	49·9
1804	44·7	38·1	43·4	44·7	60·3	65·1	63·5	63·5	61·6	52·6	45·4	35·9	51·5
1805	36·3	40·1	44·3	47·3	52·2	57·9	62·4	64·7	61·8	48·8	41·2	40·4	51·7
1806	41·3	42·9	42·4	43·9	57·8	62·8	64·2	65·1	58·6	51·9	48·3	48·1	52·2
1807	37·7	41·3	37·9	46·9	56·4	60·2	67·1	66·9	55·0	55·0	38·7	38·7	50·0
1808	38·3	37·8	38·7	44·4	60·6	61·0	68·7	65·1	56·7	47·4	45·7	36·9	50·0
1809	37·3	46·3	44·3	42·3	59·2	60·5	61·7	62·5	57·6	51·6	41·0	41·5	50·4
1810	37·5	41·3	44·1	48·9	52·1	61·8	61·5	63·3	60·5	51·9	44·5	41·2	50·6
1811	34·9	43·6	47·3	51·7	59·2	61·0	64·6	61·9	58·0	55·5	45·1	37·4	51·7
1812	36·1	42·0	39·4	43·1	54·2	56·7	59·3	58·7	55·6	50·2	40·4	34·2	47·5
1813	34·4	42·8	44·1	47·5	55·8	58·1	60·0	60·1	56·2	48·1	40·4	36·6	48·7
1814	27·0	32·3	37·4	50·4	50·1	55·2	64·0	60·8	56·2	47·8	41·5	41·7	47·0
1815	33·0	44·6	46·3	47·1	56·8	60·5	61·0	61·9	58·0	50·9	38·8	37·0	49·6
1816	37·0	35·3	40·1	44·5	50·1	56·2	58·0	57·4	54·6	50·8	39·2	37·9	46·7
1817	40·2	43·9	41·6	43·1	48·5	60·5	58·7	57·4	57·5	44·2	48·9	37·1	48·4
1818	40·8	36·5	41·5	46·4	52·8	64·8	68·1	63·3	58·4	53·6	49·0	37·4	51·0
1819	40·5	40·5	44·2	48·6	55·6	57·6	62·7	65·3	58·3	49·6	41·0	36·2	49·9
1820	32·0	36·6	40·3	49·1	53·6	57·5	61·0	60·9	54·7	47·9	41·9	40·4	48·0
1821	38·5	35·6	43·6	51·2	50·6	54·9	59·1	63·5	60·9	50·9	48·9	44·8	50·2
1822	39·8	44·0	47·5	47·7	56·6	64·6	63·0	62·3	56·9	53·6	47·6	34·1	51·5
1823	31·3	38·9	40·8	45·2	55·7	56·5	58·4	60·8	56·0	48·4	44·2	41·0	48·1
1824	38·5	40·2	41·5	45·6	51·1	56·8	63·8	61·5	59·2	50·7	47·0	42·6	49·9
1825	39·3	38·9	39·4	49·4	53·8	58·6	65·0	62·8	61·0	51·7	42·0	41·0	50·2
1826	31·2	42·9	42·2	49·1	51·0	63·5	66·0	66·2	58·3	53·0	40·6	42·7	50·5
1827	34·4	32·2	43·6	48·5	54·2	58·2	63·7	59·1	57·9	52·5	43·0	44·8	49·3
1828	40·6	40·8	43·5	47·9	54·7	60·8	62·3	60·3	58·6	49·7	45·0	44·8	50·7
1829	32·1	38·7	39·3	44·5	54·4	59·7	60·3	59·1	53·4	47·8	39·5	32·8	46·8
1830	31·5	35·5	45·9	48·8	54·9	56·2	63·3	58·4	54·4	50·7	44·6	35·1	48·3
1831	35·0	41·5	44·6	49·1	52·2	59·4	63·8	63·6	57·5	55·4	42·8	41·9	50·5
1832	36·2	37·4	41·0	46·9	52·1	59·6	61·4	61·4	56·7	51·5	44·3	42·1	49·2
1833	34·5	42·9	38·2	46·1	59·0	59·9	60·9	57·6	53·8	50·8	43·6	44·8	49·3
1834	44·8	39·8	44·7	45·9	56·2	60·8	64·6	62·4	58·7	50·1	44·2	40·6	51·0
1835	38·3	41·9	41·8	47·1	53·1	60·4	64·3	63·1	57·3	48·4	43·7	34·9	49·5
1836	38·1	37·4	44·5	44·6	51·0	60·9	63·0	60·7	53·8	47·5	42·1	39·8	48·6

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TABLE IX (continued).

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Mean.
1837	37·8	40·3	36·5	40·3	48·8	59·8	62·4	61·5	55·4	50·6	40·9	41·3	47·9
1838	28·6	33·7	41·8	43·1	51·6	58·6	60·8	60·5	54·9	50·1	41·2	38·5	46·9
1839	37·3	39·9	40·1	43·0	50·4	59·5	61·1	59·3	55·8	49·3	46·0	39·7	48·4
1840	38·7	37·8	38·1	48·7	54·7	59·6	59·2	62·8	53·4	45·7	43·3	32·0	47·8
1841	34·0	35·6	46·2	46·7	56·9	56·1	57·7	60·3	58·0	49·0	42·9	40·2	48·6
1842	32·8	40·3	44·5	44·9	53·4	63·0	60·1	65·4	56·3	45·4	42·9	44·7	49·5
1843	39·8	35·8	42·7	47·5	52·2	56·3	60·8	62·0	60·1	48·4	43·8	44·4	49·5
1844	39·3	35·5	41·5	51·5	52·9	60·7	61·7	57·7	57·2	49·7	43·9	33·4	48·8
1845	38·9	32·7	35·6	46·4	49·1	60·5	59·9	57·4	53·9	49·7	45·6	41·5	47·6
1846	43·5	43·9	43·6	47·3	55·3	65·5	64·7	63·1	60·4	50·6	45·3	33·0	51·4
1847	35·5	35·6	41·9	44·6	56·7	57·9	65·3	62·3	54·3	53·0	46·9	42·5	49·7
1848	34·9	43·9	43·5	47·4	59·7	58·5	62·3	58·4	56·6	51·3	43·8	44·0	50·4
1849	40·8	43·1	42·9	44·5	54·8	59·4	62·2	62·7	58·5	51·3	44·1	39·2	50·3
1850	34·1	44·5	39·9	49·3	51·6	61·2	62·2	60·8	56·2	46·7	46·4	40·4	49·4
1851	43·0	40·0	42·7	45·5	51·7	59·7	60·3	62·6	56·2	52·5	37·7	40·6	49·4
1852	41·9	40·7	40·6	45·4	52·1	56·9	67·0	62·3	56·8	47·8	49·0	47·6	50·7
1853	42·6	33·2	38·2	46·0	52·5	59·0	61·0	60·1	55·4	51·3	42·2	34·0	48·0
1854	39·3	39·4	43·6	48·6	51·2	56·5	61·0	61·1	57·9	49·5	40·6	41·2	49·2
1855	34·9	29·2	37·8	45·9	49·3	57·7	62·6	62·4	57·3	51·5	41·6	36·2	47·2
1856	39·2	42·1	39·1	47·5	49·9	59·7	61·6	63·7	55·2	52·0	41·0	40·2	49·3
1857	36·8	38·9	41·9	46·3	54·3	62·5	65·1	65·7	59·9	53·2	46·0	45·1	51·3
1858	37·6	34·9	41·5	46·8	52·2	65·7	61·4	62·3	60·4	51·2	39·5	41·1	49·6
1859	40·5	43·4	46·8	47·5	53·5	62·3	68·9	63·9	57·0	51·4	42·1	36·7	51·2
1860	40·0	35·7	41·5	43·3	54·6	55·7	58·3	58·2	53·7	51·2	41·0	36·4	47·5
1861	34·0	42·2	44·1	44·9	52·7	59·9	61·5	53·5	57·3	55·2	41·0	41·0	49·8
1862	39·3	41·3	43·3	49·2	55·9	57·1	59·6	59·6	57·7	52·5	39·8	43·7	49·9
1863	42·2	42·2	43·9	49·6	52·5	58·8	61·4	62·3	53·9	51·9	45·9	43·6	50·7

YEARLY MEANS, 1763, 1864–1918.

	0	1	2	3	4	5	6	7	8	9
1760	—	—	—	47·2	—	—	—	—	—	—
1860	—	—	—	—	48·93	50·83	50·30	49·12	52·00	49·88
1870	49·13	48·92	51·01	49·28	49·74	49·79	50·59	49·92	49·66	46·28
1880	49·46	48·78	49·81	49·45	50·73	48·70	48·85	47·94	47·78	48·82
1890	48·72	48·41	48·11	51·03	50·04	49·32	50·23	50·42	51·45	50·69
1900	50·47	49·29	49·07	50·15	49·76	49·66	50·2	49·1	49·3	48·3
1910	49·5	51·2	50·2	50·5	50·0	49·2	49·5	48·4	50·1	—

TABLE X.—Berlin Temperatures in degrees C., 1764–1863.

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Mean.
1764	3·5	5·6	4·7	9·3	17·1	16·6	22·0	18·4	13·0	8·9	3·8	0·4	10·3
1765	1·9	—1·6	7·0	10·6	11·8	17·9	17·8	20·6	13·7	11·2	5·7	2·4	9·9
1766	—0·3	1·9	6·1	12·2	16·4	19·4	19·8	18·9	16·1	9·1	6·1	2·0	10·6
1767	—7·1	4·2	4·8	7·7	13·6	17·0	19·9	20·3	15·7	10·8	8·0	0·1	9·6
1768	—4·6	0·8	3·2	9·5	14·1	19·0	20·6	19·1	13·9	9·1	6·2	2·9	9·5
1769	1·4	1·1	5·8	9·8	13·7	17·8	19·3	17·8	15·9	6·8	5·8	3·4	9·9
1770	—0·4	1·8	0·9	8·3	14·8	17·5	19·8	19·1	15·9	10·7	5·7	4·7	9·9

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TABLE X (continued).

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Mean.
1771	—1·7	—2·0	0·6	5·6	17·5	18·8	19·2	16·5	14·6	10·6	3·6	3·5	8·9
1772	0·6	3·6	5·9	8·6	11·8	18·9	18·5	18·7	15·9	11·7	7·8	4·0	10·5
1773	3·0	0·8	4·1	10·2	16·6	17·5	19·2	19·2	15·9	12·0	4·3	5·1	10·7
1774	—0·1	3·2	5·7	10·6	14·1	18·0	17·0	16·4	12·8	9·8	—1·4	—1·3	8·7
1775	—0·8	4·4	6·0	7·8	13·3	21·2	21·3	20·8	17·3	10·5	2·2	2·3	10·5
1776	—8·9	3·4	5·5	8·4	11·6	18·6	20·5	19·2	14·9	8·4	4·1	0·3	8·8
1777	—1·9	—1·7	3·7	7·2	14·8	17·2	18·2	18·7	12·6	9·2	6·0	0·5	8·7
1778	—2·7	—1·8	4·2	11·1	15·0	17·5	20·2	19·6	14·0	6·8	5·1	4·4	9·4
1779	—1·6	5·2	6·6	11·6	15·0	16·8	19·9	20·9	16·8	11·4	4·4	2·4	10·8
1780	—3·3	—2·2	7·1	7·0	15·1	17·5	19·5	20·0	14·8	10·8	2·8	—1·3	9·0
1781	—2·5	1·0	5·4	10·9	15·7	19·6	21·5	22·0	16·8	8·5	4·3	—0·4	10·2
1782	2·0	—3·2	2·4	7·5	14·6	19·4	20·8	19·0	17·0	8·6	1·8	0·6	9·2
1783	2·0	5·0	2·1	9·7	15·9	20·6	20·8	19·6	15·2	9·4	3·9	—2·3	10·2
1784	—7·0	—4·0	0·8	5·7	14·9	17·4	18·0	17·1	14·8	6·2	4·9	—1·6	7·3
1785	—1·4	—3·7	—4·3	5·4	12·4	16·1	18·1	17·4	15·5	8·5	4·6	—2·2	7·2
1786	0·3	—0·8	0·0	10·6	12·6	17·8	16·8	17·2	12·2	6·5	—1·3	—0·6	7·6
1787	—2·4	2·1	5·4	7·0	13·2	18·4	18·1	18·0	14·6	10·6	4·1	2·2	9·3
1788	1·1	—1·2	1·0	8·7	14·8	19·2	21·0	17·2	16·3	8·5	2·3	—11·2	8·1
1789	—4·4	2·2	—2·7	8·6	16·5	17·3	19·1	19·2	17·1	9·8	4·4	4·0	9·3
1790	1·8	3·9	5·6	6·5	16·3	17·9	17·5	18·1	14·2	8·4	2·9	2·0	9·6
1791	2·9	2·3	4·7	10·8	12·8	17·4	19·9	20·1	13·8	9·2	2·2	1·3	9·8
1792	—1·3	—2·0	3·8	10·4	13·2	18·2	20·9	19·3	13·6	8·6	3·2	1·0	9·1
1793	—2·9	3·0	3·6	7·8	13·5	15·5	21·0	19·0	13·8	11·4	4·5	2·2	9·4
1794	—0·5	3·6	7·4	12·5	14·4	19·4	22·4	18·0	12·8	9·3	5·2	—3·1	10·1
1795	—8·5	—0·1	1·8	12·2	12·0	19·8	17·8	18·3	16·4	13·2	3·4	3·5	9·2
1796	6·2	1·2	0·7	8·2	13·6	17·6	19·6	20·4	16·0	9·6	2·5	—2·7	9·4
1797	0·0	2·7	3·7	10·0	16·0	16·9	20·9	20·3	17·3	9·0	2·3	1·9	10·1
1798	0·2	2·3	2·8	10·2	15·2	18·7	19·4	19·9	16·3	8·7	2·7	—4·8	9·3
1799	—5·7	—5·2	0·8	6·0	11·4	15·2	17·6	18·4	14·0	8·1	3·9	—5·9	6·6
1800	—3·4	—4·1	—2·3	14·2	17·1	13·3	16·5	19·0	15·6	8·4	5·1	—0·4	8·2
1801	0·4	—0·9	5·2	8·7	18·0	15·4	18·2	17·9	16·0	10·7	4·4	0·6	9·6
1802	—3·2	1·0	4·9	9·2	11·1	15·9	17·0	20·7	14·7	12·8	4·2	1·9	9·2
1803	—8·6	2·9	2·6	12·2	12·5	15·3	21·5	21·0	12·5	8·4	4·1	—0·9	8·6
1804	—0·1	—1·5	—1·0	7·3	15·5	16·5	19·1	17·8	16·2	8·9	0·3	—5·3	7·8
1805	—6·9	—2·0	2·2	6·6	15·9	15·2	17·5	16·5	15·5	4·5	0·0	1·2	7·2
1806	1·8	1·6	3·1	5·1	15·4	14·3	17·3	17·5	15·3	8·8	5·1	4·8	9·2
1807	0·0	0·6	0·4	6·8	13·7	15·3	19·5	23·4	12·1	9·0	4·6	1·5	8·9
1808	—1·0	—1·0	—1·4	5·1	15·2	16·6	20·4	19·6	14·1	7·0	1·9	—5·9	7·6
1809	—6·1	2·4	1·5	4·4	15·4	16·0	18·4	19·2	15·2	7·7	3·3	2·4	8·3
1810	—3·2	—1·7	3·4	6·8	11·8	14·8	18·9	18·2	16·2	7·3	3·4	1·1	8·1
1811	—5·6	—0·5	5·4	8·4	18·0	20·5	20·1	18·0	13·9	11·7	3·7	1·5	9·6
1812	—3·4	0·0	1·5	3·6	12·7	16·3	16·0	17·8	12·5	10·4	1·3	—7·3	6·8
1813	—3·5	3·4	3·2	9·9	13·3	15·6	17·4	16·2	12·5	7·3	3·3	0·9	8·3
1814	—4·6	—6·5	—0·6	9·9	10·6	14·7	20·2	17·1	12·0	7·4	4·0	1·2	7·1
1815	—5·5	1·8	4·8	8·0	14·0	17·9	15·2	16·8	12·4	9·5	2·4	—2·1	7·9
1816	—0·8	—2·5	2·0	8·4	10·8	15·2	17·3	15·5	12·7	7·4	0·8	—0·9	7·2
1817	1·2	2·6	2·6	3·8	13·6	18·5	17·0	18·1	16·6	5·7	6·2	—0·6	8·8
1818	1·2	0·6	4·8	9·3	14·5	18·4	19·8	17·0	15·0	8·2	2·5	—1·5	9·2
1819	1·2	2·3	4·8	9·7	15·4	20·0	20·7	20·8	15·8	8·4	2·4	—3·7	9·8
1820	—5·8	0·8	2·8	10·5	15·3	14·2	16·4	20·3	13·8	10·2	1·3	—2·8	8·1
1821	—0·1	—0·9	3·0	12·7	13·6	14·4	17·1	17·8	15·9	10·6	7·4	3·9	9·6
1822	1·8	4·1	7·2	10·7	14·7	18·2	19·7	17·6	12·9	11·3	5·7	—2·6	10·1

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TABLE X (continued).

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Mean.
1823	—11·9	—0·8	3·7	7·2	13·6	16·4	16·5	19·1	14·0	10·4	5·0	2·7	8·0
1824	2·1	2·6	3·6	8·2	12·7	16·5	18·0	17·1	16·1	10·2	6·2	4·7	9·8
1825	2·4	0·7	0·4	9·9	13·7	16·0	18·1	17·9	15·2	9·4	5·4	3·9	9·4
1826	—6·8	2·0	4·7	8·6	13·7	18·9	22·5	21·6	14·9	10·4	3·3	2·0	9·6
1827	—2·1	—6·6	4·8	11·6	16·4	19·1	19·7	17·8	15·8	10·6	1·0	2·8	9·2
1828	—2·8	—1·2	4·0	10·3	14·3	17·8	20·2	17·0	14·3	9·2	4·0	1·9	9·1
1829	—6·1	—3·8	1·7	9·3	13·6	17·8	19·2	16·8	14·0	7·6	0·6	—8·7	6·8
1830	—7·4	—3·8	4·5	10·3	14·1	17·4	19·1	17·3	13·6	9·5	6·0	—0·7	8·3
1831	—5·0	0·7	3·4	11·7	13·0	16·0	19·3	18·3	12·8	11·4	2·8	1·7	8·8
1832	—1·4	0·9	4·5	9·4	12·0	17·5	15·7	18·2	13·3	9·7	3·2	1·3	8·7
1833	—3·5	3·5	2·0	6·8	17·3	18·8	17·5	14·0	13·7	8·2	3·7	4·6	8·9
1834	3·5	0·9	4·3	8·1	16·4	19·1	23·6	21·0	15·2	9·3	4·1	1·7	10·6
1835	0·8	2·5	3·8	7·7	12·7	17·9	19·3	17·8	15·9	8·2	0·3	—1·1	8·8
1836	—1·1	0·8	7·5	8·4	11·1	17·6	17·6	16·1	13·6	10·9	2·6	1·7	8·9
1837	0·0	0·5	0·4	6·7	11·8	17·0	17·6	19·6	13·4	9·8	4·6	0·4	8·5
1838	—10·2	—5·2	3·5	6·8	13·6	16·8	18·2	15·7	16·1	8·4	2·2	1·0	7·2
1839	—0·4	1·3	0·8	5·6	14·4	18·0	19·7	17·2	16·1	10·0	5·3	—0·5	9·0
1840	—1·3	0·9	1·0	10·9	12·8	17·1	17·2	16·6	15·0	7·6	6·4	—4·1	8·3
1841	—2·2	—4·4	4·8	9·8	17·0	16·1	17·3	17·8	15·2	11·1	5·0	3·7	9·3
1842	—3·7	0·5	4·7	6·7	14·6	16·8	17·5	19·0	14·5	7·7	0·4	2·9	8·5
1843	1·0	2·9	2·3	9·1	11·1	16·0	18·3	19·2	13·4	8·9	5·6	4·3	9·3
1844	—0·8	—1·3	1·6	9·1	14·3	16·0	15·9	15·6	14·7	9·3	4·6	—4·4	7·9
1845	0·0	—5·8	—4·3	9·0	11·8	18·1	19·9	16·4	13·2	9·3	5·6	2·2	8·0
1846	0·3	3·2	7·0	9·1	12·3	18·5	20·2	20·9	14·8	11·4	3·5	—3·6	9·8
1847	—3·3	—1·3	3·6	6·0	15·6	16·7	19·7	20·1	12·6	8·1	4·8	—0·6	8·5
1848	—9·5	3·0	5·3	10·3	13·6	18·2	18·0	16·5	13·0	10·4	3·9	1·7	8·7
1849	—1·9	3·6	3·1	7·9	14·8	16·4	16·8	16·5	13·7	8·6	3·3	—2·6	8·4
1850	—6·6	4·3	1·5	8·8	13·3	18·0	18·4	17·7	12·7	7·7	5·1	1·6	8·5
1851	1·1	1·4	3·5	10·0	10·1	15·7	17·6	18·1	12·9	11·5	1·6	2·1	8·8
1852	3·3	1·7	1·7	5·3	14·5	17·5	20·8	19·1	14·4	8·7	5·9	5·3	9·8
1853	3·1	—2·0	—1·9	5·5	12·4	18·2	19·3	17·0	14·0	9·5	2·8	—3·2	7·9
1854	—0·2	0·6	4·2	8·0	14·3	16·3	19·9	17·7	14·0	9·7	2·1	2·5	9·1
1855	—1·9	—7·5	1·4	6·8	11·7	17·6	18·3	18·1	13·7	11·6	2·6	—4·3	7·3
1856	0·3	1·8	1·6	9·9	12·2	17·4	16·8	17·4	13·5	11·0	1·6	2·1	8·8
1857	—1·5	0·6	3·7	8·3	13·5	18·1	19·5	21·1	16·3	12·0	2·8	4·0	9·9
1858	—1·4	—3·8	1·7	7·9	12·1	20·3	18·6	19·0	16·0	10·0	—0·2	0·9	8·4
1859	1·9	3·4	6·8	7·5	14·0	18·1	21·3	20·4	14·3	9·7	3·8	—1·4	10·0
1860	2·0	—0·5	2·2	8·0	14·4	17·7	17·6	17·1	14·4	8·5	2·1	—2·1	8·4
1861	—5·6	3·9	6·1	6·5	11·5	19·7	19·9	18·7	14·0	10·4	5·0	1·8	9·3
1862	—1·9	—0·2	5·9	9·9	16·4	16·5	17·3	18·2	15·1	11·4	3·2	0·8	9·4
1863	3·0	3·7	5·3	9·0	13·6	17·4	16·9	19·5	14·0	12·2	4·6	3·5	10·2

YEARLY MEANS, 1756–1763.

	0	1	2	3	4	5	6	7	8	9
1750	—	—	—	—	—	—	11·7	10·9	9·8	10·4
1760	10·4	11·0	10·0	10·5	—	—	—	—	—	—

YEARLY MEANS, 1864–1907.

	0	1	2	3	4	5	6	7	8	9
1860	—	—	—	—	7·3	9·4	9·8	8·8	10·8	9·5
1870	8·2	7·6	10·6	10·0	10·0	8·8	9·3	9·7	10·2	8·2
1880	9·8	8·4	9·7	8·9	9·6	8·8	8·8	8·5	8·2	9·1
1890	9·1	9·1	8·8	9·0	9·4	8·9	9·1	9·1	9·9	9·5
1900	9·7	9·3	8·1	9·8	9·7	9·4	9·9	9·0	—	—

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TABLE XI.—Paris Temperatures in degrees C., 1764–1863.

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Mean.
1764	6·7	5·9	5·0	10·0	12·9	19·4	21·3	18·6	15·1	9·6	6·1	3·4	11·4
1765	6·3	0·8	8·4	11·3	14·9	19·4	20·5	22·4	18·6	13·0	6·4	1·4	12·1
1766	—1·6	2·7	8·2	12·3	16·6	18·8	20·8	20·7	17·9	13·5	7·8	2·1	11·6
1767	—1·1	9·5	7·7	9·6	13·5	17·1	19·9	20·5	17·0	13·2	9·0	0·3	11·5
1768	2·0	7·5	5·8	12·3	16·2	18·0	20·9	20·1	16·4	12·7	7·7	4·2	11·7
1769	3·9	4·6	6·3	11·9	15·8	17·3	20·5	19·3	17·0	8·8	7·2	5·3	11·4
1770	3·5	3·4	4·8	8·4	15·4	17·6	19·0	20·8	19·1	11·3	7·9	6·3	11·4
1771	1·6	3·6	4·5	7·8	17·5	17·7	20·6	19·2	16·6	12·1	5·8	6·5	11·1
1772	1·2	6·1	7·6	9·8	13·2	20·9	20·1	20·2	18·0	14·4	8·3	4·3	12·2
1773	5·2	3·6	7·3	10·3	14·7	18·4	19·4	20·9	17·7	13·3	7·3	5·2	11·9
1774	3·5	5·3	9·7	11·6	14·6	19·6	20·3	20·6	16·5	12·1	5·1	4·2	12·0
1775	5·3	7·8	7·9	11·7	14·4	21·4	21·5	20·9	19·4	12·1	5·7	4·0	12·7
1776	—3·9	6·7	9·2	11·5	12·5	18·3	21·5	19·9	15·4	13·3	8·0	3·4	11·4
1777	0·7	2·2	8·2	8·3	12·6	15·6	17·8	19·7	16·5	11·5	7·1	0·6	10·3
1778	1·7	1·8	5·8	9·8	14·6	17·1	20·2	20·1	14·2	9·9	8·3	6·0	10·3
1779	—1·0	7·2	8·8	10·7	15·6	15·9	19·8	21·0	17·9	14·0	7·2	6·1	11·9
1780	—0·4	1·6	9·3	8·0	15·5	18·2	19·6	22·7	17·3	12·3	5·9	0·4	11·3
1781	2·6	5·6	8·7	13·0	17·0	18·6	20·2	20·5	16·7	10·8	6·4	5·8	11·7
1782	4·8	0·3	5·7	7·9	10·8	18·2	18·4	15·8	15·2	8·5	2·3	2·3	9·5
1783	5·5	5·5	4·7	11·6	13·4	16·6	21·4	18·3	15·0	11·0	6·8	—0·7	11·0
1784	—1·4	0·4	4·2	7·1	16·4	16·8	17·7	16·2	17·1	7·4	6·5	—0·1	9·0
1785	3·8	0·2	1·2	8·4	13·9	17·1	17·7	16·0	16·3	10·4	5·3	2·3	9·2
1786	4·4	3·2	2·6	10·5	13·6	18·3	16·5	17·2	13·8	8·2	3·2	3·3	9·5
1787	1·3	5·5	8·1	9·1	12·1	18·4	19·1	19·8	16·8	12·9	6·0	5·7	11·0
1788	4·1	5·7	6·6	11·6	16·1	17·7	18·8	18·1	16·4	10·4	2·8	—6·8	11·2
1789	1·5	5·6	1·8	9·1	16·2	15·3	17·8	19·2	14·7	9·9	4·7	4·8	9·1
1790	3·5	5·9	8·0	8·5	14·3	17·7	17·0	18·2	13·9	12·2	6·4	4·9	10·9
1791	5·5	4·1	6·1	12·7	12·3	17·0	18·0	19·7	15·6	9·9	4·9	3·4	10·9
1792	4·0	3·0	7·4	12·3	13·0	15·9	18·7	18·4	12·9	10·7	4·6	3·6	10·4
1793	0·6	4·7	5·7	7·5	11·2	14·5	20·0	17·9	13·0	11·2	6·0	3·8	9·7
1794	0·6	6·8	8·7	12·5	12·9	18·0	22·6	16·4	14·0	10·2	7·4	0·7	11·2
1795	—6·3	3·2	5·4	10·8	13·2	15·9	15·5	18·4	18·5	14·4	5·8	7·4	9·6
1796	7·8	4·0	4·4	10·8	13·1	15·5	17·4	18·3	17·4	10·1	5·5	1·1	10·9
1797	3·7	3·8	5·8	10·8	14·7	13·8	20·0	18·8	15·1	10·3	7·4	6·4	10·4
1798	3·7	4·8	6·0	11·6	14·2	18·5	18·7	19·4	16·0	12·3	6·4	0·1	11·5
1799	—2·1	5·0	4·6	7·0	11·9	15·2	18·1	18·3	15·6	10·5	6·5	—1·4	9·2
1800	5·0	3·3	4·3	12·7	15·4	14·5	18·5	20·1	16·5	10·6	7·0	4·8	10·5
1801	4·7	3·8	9·0	10·3	13·3	16·1	17·5	18·5	16·9	12·1	6·5	4·3	11·1
1802	—1·4	4·4	6·3	10·5	14·1	16·7	16·5	21·9	16·9	12·2	6·4	4·4	10·7
1803	0·9	0·7	6·2	11·3	11·6	16·3	20·3	19·6	14·0	10·6	7·2	5·9	10·3
1804	6·6	2·3	6·3	9·5	16·4	18·7	18·4	18·5	18·2	11·7	7·3	1·2	11·6
1805	1·7	4·4	6·7	9·0	12·3	15·1	17·4	18·0	16·5	9·6	3·6	2·5	9·6
1806	6·0	6·0	7·0	8·0	17·1	18·0	19·3	18·0	16·2	10·9	8·9	8·6	11·5
1807	2·3	5·9	3·7	9·2	16·2	16·6	21·8	21·4	12·9	12·8	5·8	1·5	11·4
1808	2·5	2·6	3·9	8·0	17·5	16·3	21·6	19·3	14·6	9·0	7·5	1·3	10·4
1809	5·0	7·9	7·2	6·5	15·2	15·4	17·3	17·9	15·0	9·7	5·0	5·3	10·3
1810	—1·5	2·9	8·1	9·4	13·7	17·0	17·7	17·6	17·6	11·5	7·8	5·3	10·6
1811	—0·3	6·9	9·0	11·9	17·1	17·4	19·2	17·7	16·8	14·6	8·6	4·5	12·0
1812	1·5	6·2	5·7	7·4	15·6	16·1	17·7	18·0	15·4	11·9	4·4	—1·0	10·4

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TABLE XI (continued).

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Mean.
1813	0·3	6·0	6·4	10·6	15·2	15·6	17·1	16·8	13·9	11·6	6·1	3·1	9·9
1814	—0·2	0·1	3·8	11·5	12·3	15·6	19·3	17·4	15·3	9·7	6·1	6·2	9·5
1815	—0·6	7·3	9·6	10·3	14·8	16·0	17·6	17·9	15·5	12·2	3·4	1·8	10·8
1816	2·6	2·0	5·6	9·9	12·7	14·8	15·6	15·5	14·1	11·6	4·1	3·7	9·2
1817	5·0	6·9	6·3	7·3	12·4	17·8	17·1	16·4	16·9	7·3	9·6	2·6	10·6
1818	4·3	3·9	6·5	11·4	13·7	19·2	20·1	18·2	15·7	11·7	9·1	2·1	11·4
1819	4·9	5·5	6·9	11·6	14·6	16·0	19·1	19·2	16·4	11·1	4·8	3·3	11·0
1820	—0·7	2·9	4·0	11·6	14·1	15·6	18·3	18·7	14·2	10·1	5·1	3·3	9·8
1821	3·1	1·0	7·3	11·6	12·1	14·5	17·0	20·1	16·7	11·1	10·2	7·5	10·7
1822	4·4	6·1	9·9	11·1	16·7	21·2	18·9	18·9	15·9	13·2	9·0	—0·5	12·7
1823	—0·3	5·3	6·5	9·2	15·2	15·0	17·1	19·1	15·7	10·6	5·7	5·6	9·9
1824	2·7	5·1	5·8	9·0	12·6	16·5	18·7	18·4	16·5	11·9	9·6	7·1	11·0
1825	3·5	4·3	5·6	11·9	14·2	17·0	20·3	19·4	17·9	12·2	7·3	6·4	11·7
1826	—1·7	6·4	7·4	10·2	12·6	18·8	20·7	21·2	17·1	13·4	5·4	5·8	11·5
1827	—0·2	—0·9	8·0	11·4	14·6	17·0	19·8	18·2	16·2	13·1	5·8	6·9	10·7
1828	5·9	5·2	7·0	10·8	15·1	17·5	19·1	17·6	16·6	10·8	7·4	4·5	11·7
1829	—2·1	2·7	5·7	9·8	14·9	17·2	18·6	17·0	13·7	10·0	4·7	—3·5	9·7
1830	—2·5	1·2	8·9	12·0	14·6	16·1	18·9	17·0	13·8	10·6	7·9	2·6	9·6
1831	1·9	6·0	9·1	11·5	14·2	16·9	19·7	18·7	15·4	14·7	6·6	5·5	11·4
1832	1·5	3·4	5·6	10·7	13·2	17·3	19·5	20·8	15·5	11·3	6·7	4·3	10·9
1833	—0·3	7·1	4·2	9·6	17·7	18·4	18·3	16·5	13·7	12·3	6·0	7·9	10·6
1834	7·1	3·8	7·5	8·7	16·2	18·7	20·4	19·5	17·6	11·9	7·1	4·0	12·2
1835	3·6	6·3	6·5	9·4	13·8	17·3	21·1	19·3	16·1	10·1	5·4	0·1	11·1
1836	2·6	2·9	8·8	8·6	12·4	18·4	19·4	18·9	14·1	11·2	7·6	4·1	10·4
1837	2·4	5·4	2·6	5·7	11·0	18·5	18·3	20·1	14·6	11·3	6·0	4·4	10·0
1838	—4·6	2·1	7·0	6·7	14·2	16·2	18·3	18·0	15·5	11·2	7·7	1·8	9·7
1839	2·8	5·1	5·9	7·7	13·6	19·1	18·6	17·4	15·7	10·6	8·2	5·7	10·5
1840	3·4	3·6	3·4	12·7	15·1	18·3	17·3	19·8	14·8	9·5	8·0	—2·7	11·0
1841	2·1	2·1	8·7	10·0	16·9	15·0	16·1	17·4	18·1	11·0	6·4	5·1	10·1
1842	—1·8	4·2	7·9	9·8	14·2	19·9	18·8	22·0	15·1	8·1	5·0	3·7	10·7
1843	4·1	3·3	7·6	10·1	13·6	15·4	17·6	18·9	17·4	11·0	7·0	4·0	10·8
1844	2·5	2·2	6·5	12·3	12·4	17·2	16·8	15·1	15·6	10·4	6·7	—1·0	10·1
1845	2·0	0·2	1·1	10·8	10·6	17·3	16·6	15·5	14·8	10·1	7·8	5·2	8·8
1846	4·8	6·2	7·3	9·7	13·5	20·5	20·3	19·6	17·3	11·4	5·7	—0·8	11·8
1847	2·1	2·7	5·3	7·8	15·3	15·3	20·1	18·4	13·8	11·9	8·0	3·6	10·0
1848	—1·4	6·5	7·4	11·1	15·8	17·5	19·0	17·8	14·8	11·3	6·2	5·4	10·8
1849	4·9	6·1	5·8	8·3	15·1	17·9	17·8	17·9	15·7	11·7	5·9	3·6	11·0
1850	—0·4	7·1	4·4	11·0	12·7	17·9	18·6	17·2	13·8	8·5	8·4	3·4	10·2
1851	4·5	3·9	7·0	10·1	11·3	17·0	17·3	18·8	13·5	11·2	3·5	2·4	10·1
1852	5·0	4·3	5·7	9·0	14·3	16·1	22·0	18·4	15·0	9·9	10·5	7·7	11·0
1853	6·0	1·0	3·6	8·9	13·0	16·3	17·9	18·0	14·8	12·2	5·3	—1·1	10·4
1854	3·9	3·8	7·9	12·1	12·6	15·0	19·0	17·6	16·3	12·3	5·3	5·3	10·4
1855	0·2	0·1	5·4	9·4	11·7	15·9	18·4	18·9	15·7	11·8	4·1	1·6	9·8
1856	5·1	5·7	5·8	10·6	11·7	17·3	18·2	20·4	13·9	11·7	4·8	4·4	10·6
1857	2·6	3·5	6·4	9·5	14·8	18·0	20·1	19·8	17·0	12·4	8·0	4·7	11·4
1858	0·3	2·3	6·1	11·2	12·1	20·5	17·1	17·8	17·2	10·8	3·1	4·3	10·3
1859	3·5	5·5	8·4	10·8	14·4	18·2	22·6	20·4	15·5	12·5	5·8	1·4	11·8
1860	4·9	1·4	5·0	7·9	14·5	15·8	16·1	16·9	14·1	10·8	5·0	2·9	9·5
1861	—1·3	5·2	7·9	9·6	13·2	18·8	18·2	19·9	15·8	13·0	6·2	3·9	10·8
1862	3·1	5·4	9·5	12·0	15·5	16·0	18·4	17·3	16·2	12·6	5·3	6·0	11·3
1863	5·1	4·8	7·0	11·2	13·8	16·8	18·3	19·7	13·6	11·8	7·1	5·6	11·3

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TABLE XI (continued).

YEARLY MEANS, 1757–1763.

	0	1	2	3	4	5	6	7	8	9
1750	—	—	—	—	—	—	—	11·0	11·2	12·1
1760	11·6	12·3	11·8	10·6	—	—	—	—	—	—

YEARLY MEANS, 1864–1886.

	0	1	2	3	4	5	6	7	8	9
1860	—	—	—	—	10·4	11·2	10·9	10·7	11·3	11·3
1870	10·6	10·0	11·1	11·0	11·3	10·7	10·8	11·4	11·0	9·3
1880	9·9	10·6	10·4	10·5	11·0	10·4	10·7	—	—	—

TABLE XII.—Vienna Temperatures in degrees C., 1775–1874.

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Mean.
1775	—2·33	2·32	4·76	6·01	10·11	16·34	16·06	18·28	13·50	8·51	3·71	—0·86	10·0
1776	—5·82	1·38	4·44	7·11	10·47	14·44	16·23	16·31	12·08	6·36	2·24	—1·92	8·8
1777	—3·02	—0·75	4·02	6·00	12·45	14·97	15·35	16·51	11·70	7·20	3·87	—0·64	9·0
1778	0·60	—0·63	3·98	9·92	12·69	14·50	17·86	17·32	11·90	7·76	4·43	3·97	10·4
1779	—3·00	3·75	6·04	11·13	13·93	13·92	15·31	15·79	13·36	9·19	4·09	3·37	11·2
1780	—3·06	—2·37	6·18	6·74	12·58	14·32	15·95	15·58	11·19	8·87	3·81	—1·49	9·7
1781	—2·08	0·64	4·76	8·99	12·81	16·53	16·67	18·30	14·21	7·73	5·48	0·75	10·7
1782	1·52	—2·06	4·22	8·13	13·12	16·88	19·16	17·05	13·48	7·42	2·12	1·09	10·6
1783	2·09	4·57	3·78	9·18	14·34	17·00	18·20	17·90	14·81	9·81	4·16	—2·30	12·2
1784	—4·82	—1·11	3·17	6·77	14·46	16·19	17·08	16·74	14·70	5·62	4·02	0·64	9·4
1785	—1·93	—0·52	—1·80	5·21	12·11	13·80	15·83	15·31	14·86	7·65	4·06	0·48	8·9
1786	—0·69	0·71	3·56	9·39	11·31	15·74	15·05	14·46	11·90	6·01	1·45	0·53	9·3
1787	—1·80	2·32	4·20	6·81	10·63	15·95	16·27	16·55	11·98	9·30	4·46	3·15	10·1
1788	0·90	0·83	4·57	8·35	12·63	16·52	19·03	14·85	14·01	8·01	2·38	—6·45	10·9
1789	—2·01	2·52	1·21	9·56	15·09	14·69	17·10	15·87	13·34	9·08	4·34	0·54	9·8
1790	—0·50	3·39	4·00	7·33	14·14	16·86	15·73	16·77	12·15	7·58	3·18	2·45	10·5
1791	2·97	1·62	5·30	9·68	12·49	14·88	16·55	17·80	12·03	7·90	3·14	1·05	11·1
1792	—0·77	—0·72	4·14	8·73	11·96	15·92	17·17	16·72	12·01	7·20	3·12	0·87	10·1
1793	—2·41	1·81	2·69	6·01	11·70	14·06	17·97	16·96	12·79	9·47	4·28	2·33	10·0
1794	0·92	3·52	5·65	11·99	14·30	16·88	19·66	15·70	11·60	8·15	3·95	—0·63	12·0
1795	—6·32	—0·30	3·89	10·16	12·89	16·54	15·10	16·78	12·80	11·08	2·59	2·65	9·8
1796	3·96	1·85	0·93	6·72	13·41	15·29	16·97	17·06	14·88	8·84	3·45	—1·16	11·1
1797	0·25	1·66	2·96	10·46	15·77	15·98	18·76	18·01	14·98	9·55	4·21	1·46	11·6
1798	0·62	3·37	4·97	9·00	13·30	16·16	16·98	17·12	14·59	7·86	2·93	—3·37	11·3
1799	—5·59	—1·56	2·86	7·93	12·51	14·14	16·33	16·95	12·59	8·55	4·16	—2·65	8·9
1800	—0·60	0·35	0·05	13·92	14·83	13·84	16·35	17·93	13·20	7·88	5·39	0·52	10·5
1801	0·51	—0·44	6·15	9·04	14·74	14·47	16·71	15·16	14·34	10·36	5·33	1·30	11·1
1802	—1·76	—0·75	4·48	9·09	11·79	16·64	17·74	18·12	13·34	11·43	5·44	1·74	11·1
1803	—4·02	—3·08	3·17	10·84	10·33	14·56	17·14	16·54	10·85	7·86	4·84	0·59	9·5
1804	2·08	—0·08	1·24	8·40	13·21	15·55	17·05	15·96	13·87	8·80	1·12	—2·07	10·2
1805	—1·85	—0·08	2·39	6·18	11·30	14·41	15·50	14·87	12·94	5·44	1·34	0·57	8·4
1806	2·66	2·65	4·76	6·65	14·78	15·30	16·60	15·86	13·56	7·53	5·14	3·87	11·1
1807	—0·26	2·50	2·15	7·17	14·29	14·98	18·11	21·18	13·11	9·58	5·51	0·80	11·7
1808	—0·15	0·00	—1·32	7·15	14·47	15·58	18·11	18·27	14·12	7·27	3·28	—3·34	10·2
1809	—1·37	2·08	2·56	5·83	13·84	15·54	17·11	17·04	13·09	7·02	2·85	2·07	9·6
1810	—2·03	—0·71	4·65	7·64	13·32	13·66	16·97	16·60	15·22	8·15	3·57	2·41	10·4
1811	—4·93	—0·43	5·66	9·10	16·02	19·29	19·47	17·49	13·32	11·95	4·80	0·52	11·9

PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY A MATHEMATICAL, PHYSICAL & ENGINEERING SCIENCES
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TABLE XII (continued).

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Mean.
1812	—3·46	1·18	4·39	5·69	13·60	15·58	15·92	15·96	11·65	10·35	2·76	—3·60	9·8
1813	—3·17	2·61	3·01	9·91	13·30	13·61	15·48	14·67	11·62	8·07	3·36	1·23	9·3
1814	—1·67	—3·87	3·23	9·89	10·76	13·56	17·47	16·27	10·53	7·39	3·94	2·53	9·2
1815	—2·38	2·94	5·78	8·57	13·46	15·60	15·30	15·17	11·79	8·49	2·58	—2·55	10·4
1816	0·53	—0·14	3·49	8·48	11·99	14·59	15·24	15·04	12·14	7·56	3·21	—0·98	9·3
1817	1·88	4·33	4·28	4·29	13·47	17·50	16·62	16·23	13·54	6·04	4·70	0·50	10·6
1818	1·45	1·33	5·53	10·37	12·80	15·86	17·02	15·76	13·37	9·16	4·24	—0·99	11·2
1819	—0·11	2·57	5·63	9·59	12·18	16·32	17·42	16·02	13·65	8·27	4·11	—0·86	10·9
1820	—3·71	1·05	2·81	10·12	14·89	14·12	15·82	18·82	12·23	8·46	3·11	—1·16	10·1
1821	0·90	—1·05	2·95	10·05	12·11	12·22	15·07	15·69	13·47	8·15	5·54	3·23	9·8
1822	1·51	2·15	7·13	9·39	14·13	16·80	17·96	16·18	13·19	10·43	4·03	—0·22	12·1
1823	—5·87	1·20	4·47	8·05	13·37	14·64	15·44	16·61	13·31	9·44	3·88	1·37	9·8
1824	0·41	2·81	3·71	7·62	12·18	14·64	16·57	15·93	14·31	8·91	5·04	4·33	10·8
1825	1·83	1·02	2·02	9·34	12·79	14·99	16·07	15·90	12·33	6·60	5·33	3·44	10·7
1826	—4·97	—1·60	4·57	8·22	10·39	14·92	18·13	18·52	13·64	9·18	3·27	2·11	10·2
1827	—0·65	—2·41	5·20	9·99	14·21	16·49	18·44	15·42	12·41	9·14	0·22	1·16	10·5
1828	—1·14	—1·70	4·55	9·64	12·72	15·53	17·42	14·96	12·26	7·24	4·07	1·82	10·1
1829	—2·99	—3·27	1·80	8·11	10·66	12·61	16·47	13·84	12·64	6·19	—0·03	—5·78	8·1
1830	—6·64	—2·71	3·23	9·28	12·53	15·63	16·81	16·42	11·14	6·63	4·35	1·46	8·4
1831	—2·75	0·78	4·21	10·57	12·02	13·44	17·12	15·45	10·99	10·33	3·43	0·01	10·1
1832	—0·78	1·13	3·71	8·18	11·02	13·84	15·50	16·78	12·09	8·35	2·02	—1·03	9·6
1833	—4·68	2·85	3·91	6·90	15·49	16·50	14·53	13·66	11·73	7·76	3·82	4·36	9·5
1834	3·34	0·84	3·38	7·17	15·16	16·95	19·40	17·72	15·80	8·23	2·70	1·58	12·0
1835	0·39	1·98	4·03	7·24	13·19	15·23	17·71	16·65	13·04	7·55	—0·18	—1·62	10·3
1836	—1·41	0·81	7·51	8·34	9·97	15·60	16·31	15·68	12·06	9·22	2·64	2·77	9·9
1837	—1·15	—1·94	1·73	7·21	10·24	14·00	13·89	17·36	10·77	7·46	2·82	—0·65	9·0
1838	—6·45	—3·39	3·19	5·95	12·21	14·64	15·46	14·25	12·93	6·54	2·91	—0·54	8·1
1839	—0·23	1·24	1·38	4·54	10·93	16·44	17·21	14·28	13·19	9·33	5·11	1·00	9·7
1840	—0·32	—0·37	—0·07	7·84	11·34	14·43	15·29	14·57	12·72	6·22	5·65	—7·42	9·2
1841	—1·02	—2·83	4·34	9·32	14·83	14·36	15·72	15·41	13·41	10·32	3·84	2·57	9·4
1842	—4·16	—4·10	4·17	6·41	12·57	14·88	16·15	17·86	12·51	5·68	1·87	1·57	9·0
1843	0·60	4·61	2·17	7·77	10·83	12·81	15·56	15·76	11·46	7·64	3·04	2·89	9·8
1844	—1·49	—0·50	1·98	8·41	11·94	15·37	14·62	14·03	12·85	9·24	5·11	—3·31	9·8
1845	0·45	—2·84	—0·59	8·50	10·07	16·10	16·76	14·35	11·50	8·65	4·43	2·30	8·7
1846	0·99	2·27	5·11	9·13	13·07	16·16	18·67	17·07	13·21	10·77	1·69	—1·29	11·5
1847	—2·99	0·04	2·17	6·68	14·22	12·59	16·15	16·59	10·95	6·61	2·14	0·41	8·7
1848	—6·21	1·80	4·74	9·99	11·80	16·44	16·06	15·40	12·21	9·28	3·22	—0·36	9·9
1849	—2·17	3·11	2·86	6·86	12·16	15·76	15·61	14·01	11·55	7·78	2·18	—1·37	9·3
1850	—4·26	2·94	1·44	8·49	12·29	15·21	15·49	16·19	10·90	7·32	4·75	0·47	9·3
1851	—0·94	0·36	4·34	8·82	9·56	14·41	15·12	15·20	10·80	9·95	1·37	0·20	9·3
1852	0·79	2·11	1·23	5·38	12·25	15·37	17·42	16·04	12·70	6·98	5·72	2·70	10·0
1853	0·79	—0·30	0·88	5·19	11·83	14·86	16·69	15·93	12·40	8·76	2·21	—3·59	9·6
1854	—0·88	0·19	3·03	7·43	12·76	13·81	16·04	14·53	11·65	7·86	1·78	2·39	8·8
1855	—2·07	—2·89	3·17	6·56	11·48	15·35	16·09	16·18	12·06	10·53	3·40	—4·64	9·6
1856	—0·05	2·28	1·51	9·44	12·01	16·03	14·53	16·82	11·39	8·44	0·56	—0·78	9·2
1857	—1·21	—2·45	2·69	8·26	11·53	14·69	17·70	17·13	13·19	10·78	1·83	1·20	9·7
1858	—2·72	—5·63	2·12	7·39	10·96	16·67	16·01	14·97	14·01	9·41	—0·20	0·57	8·8
1859	—0·48	2·57	6·24	8·38	12·14	15·01	19·06	17·47	12·01	9·36	2·60	—2·53	10·9
1860	1·02	0·25	2·89	7·63	12·70	15·05	14·25	15·49	12·92	7·25	1·90	—0·43	9·3
1861	—2·92	2·93	4·84	6·52	10·07	16·18	16·77	17·52	13·90	9·09	3·58	—1·01	10·2
1862	—2·06	—0·01	5·77	10·02	13·46	14·69	16·71	14·98	13·49	9·78	3·21	—0·32	10·3
1863	2·57	2·66	5·56	7·55	13·23	15·18	16·02	17·47	13·53	9·89	4·21	1·93	11·2
1864	—5·34	0·02	5·07	5·55	9·96	15·01	14·96	13·85	12·50	6·96	2·61	—2·80	8·7

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TABLE XII (continued).

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Mean.
1865	—0·09	—3·65	0·02	9·31	14·71	13·31	18·26	15·58	13·07	8·55	4·41	—0·07	9·4
1866	0·96	2·98	4·17	9·83	10·09	17·13	15·82	14·26	13·99	6·64	4·00	—0·25	10·4
1867	—0·48	3·71	2·50	8·21	11·73	14·38	15·58	15·36	13·42	7·49	2·30	—1·04	9·8
1868	—1·14	3·41	3·89	7·76	14·88	16·24	16·79	16·61	14·51	9·49	2·60	2·99	10·8
1869	—1·91	4·31	2·50	9·95	14·12	13·17	17·51	14·93	13·44	6·34	3·85	1·13	10·6
1870	—0·90	—4·07	1·32	7·38	13·35	14·67	17·08	14·63	11·13	7·75	4·64	—3·29	9·2
1871	—3·30	—0·36	3·81	7·71	9·76	12·74	16·81	16·04	12·92	6·14	2·26	—4·90	8·5
1872	—1·06	0·61	5·20	9·84	14·14	14·44	16·76	14·60	13·49	10·33	5·15	2·85	10·3
1873	1·08	0·53	5·78	7·50	9·84	14·68	18·04	17·57	11·95	10·20	14·63	1·12	10·9
1874	—0·25	0·33	3·41	9·45	8·85	15·20	18·40	14·66	14·24	8·63	1·07	—0·61	9·9

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