

seriously investigated, the springing being 46 feet below the Haram area level would imply a longer span of arch than that of Robinson's, unless the roadway were at a lower level than the Haram area or the thickness over the crown of the arch much greater.

The chief observations in the above paper were communicated to the Palestine Exploration Secretary, also to Mr. Hanauer, in Jerusalem, in a letter dated March 6th.

Norton Hall,  
Stockton-on-Tees,  
May, 1891.

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COMPARISON OF THE MONTHLY MEAN HIGHEST  
AND MONTHLY MEAN LOWEST DAILY TEM-  
PERATURES OF THE AIR, AND MONTHLY  
MEAN DAILY RANGE OF TEMPERATURE IN  
PALESTINE AND ENGLAND IN THE TEN  
YEARS ENDING 1889.

By JAMES GLAISHER, F.R.S.

THE following discussion of the temperature observations at Sarona and Blackheath is in continuation of those published in the *Quarterly Report* for April, 1891, pages 163—178.

TABLE VII.—Monthly Mean of the daily Maximum Temperature at *Sarona*.

Months.	Years.										Means of 10 years.
	1880.	1881.	1882	1883.	1884.	1885.	1886.	1887.	1888.	1889.	
January ..	58·5	71·0	61·1	64·4	60·2	62·3	64·7	63·4	61·7	64·2	63·2
February..	65·5	64·8	55·7	62·8	60·3	65·3	67·0	64·3	66·1	67·2	63·9
March ..	66·4	68·4	68·8	70·5	66·5	70·1	67·7	67·9	77·5	73·8	69·8
April ..	75·2	77·6	72·3	72·8	77·8	73·2	73·0	78·0	74·7	74·1	74·9
May ..	80·9	80·1	75·3	76·7	77·2	83·4	76·5	80·2	78·2	82·2	79·1
June ..	83·8	83·2	79·6	83·1	84·4	82·8	86·0	83·9	82·4	84·4	83·3
July ..	87·3	86·2	84·4	84·4	85·0	85·7	86·0	85·9	88·5	88·4	86·1
August ..	89·0	89·9	86·6	88·2	86·0	87·1	87·9	88·5	88·4	88·3	88·0
September	88·3	88·1	87·2	87·7	83·7	87·1	87·2	86·0	87·1	86·8	87·1
October ..	84·7	83·3	83·3	84·1	81·8	85·6	84·1	88·2	88·1	86·8	85·0
November	79·9	75·0	76·5	74·3	72·8	76·5	73·2	77·8	69·5	70·3	74·6
December	64·8	66·2	68·9	65·7	70·9	70·1	68·3	70·1	63·8	66·6	67·5
Means ..	77·0	77·8	75·0	76·2	75·6	77·4	76·8	77·9	77·2	77·8	76·9

METEOROLOGICAL OBSERVATIONS.

The extreme monthly mean high-day temperatures in each month are as follows :—

	the lowest was		the highest was
In January	.... 58·5 in 1880	....	and 71·0 in 1881
February	.... 55·7 „ 1882	....	„ 67·2 „ 1889
March	.... 66·4 „ 1880	..	„ 77·5 „ 1888
April	.... 72·8 „ 1882 and 1883	„	„ 78·0 „ 1887
May	.... 75·3 „ 1882	....	„ 83·4 „ 1885
June	.... 79·6 „ 1882	....	„ 86·0 „ 1886
July	.... 84·4 „ 1882 and 1883	„	„ 88·5 „ 1888
August	.... 86·0 „ 1884	....	„ 89·9 „ 1881
September	.... 83·7 „ 1884	....	„ 88·3 „ 1880
October	.... 81·8 „ 1884	....	„ 88·2 „ 1887
November	.... 69·5 „ 1888	....	„ 79·9 „ 1880
December	.... 63·8 „ 1888	....	„ 70·9 „ 1884

Thus the mean high day temperature has varied, the most 12°·5 in January, the next in order, 11°·5 in February, and 11°·1 in March ; and the least 3°·9 in August, 4°·1 in July, and 4°·6 in September. The lowest reading in the 10 years was 55°·7 in February, 1882, and the highest, 89°·9, in August, 1881.

The numbers at the foot of the columns show the yearly mean of the high day temperature, the lowest, 75°, was in 1882, and the highest, 77°·9, in 1887.

The highest monthly mean high day temperatures in each year have been as follows :—

In 1880, in August	....	....	....	....	....	89°·0
1881 „ August	....	....	....	....	....	89·9
1882 „ September	....	....	....	....	....	87·2
1883 „ August	....	....	....	....	....	88·2
1884 „ August	....	....	....	....	....	86·0
1885 „ August and September	....	....	....	....	....	87·1
1886 „ August	....	....	....	....	....	87·9
1887 „ August	....	....	....	....	....	88·5
1888 „ July	....	....	....	....	....	88·5
1889 „ July	....	....	....	....	....	88·4

So that the maximum has been—

Twice in July.  
Seven times in August.  
Twice in September.

TABLE VIII.—Monthly Mean of the daily Maximum Temperature at *Blackheath*.

Months.	Years.										Means of 10 years.
	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	
January ..	37·6	36·0	44·1	45·3	47·5	40·3	39·7	39·0	40·9	40·4	41·1
February..	47·5	41·9	46·8	47·7	47·5	49·6	37·0	43·6	38·9	41·9	44·2
March ..	54·2	50·9	54·2	44·2	52·1	48·0	44·7	44·2	43·8	47·7	48·4
April ..	55·8	55·4	56·6	57·3	53·7	57·8	52·8	52·7	51·3	54·3	54·8
May ..	63·8	64·6	65·4	63·0	64·7	60·9	60·8	58·2	63·9	66·7	63·2
June ..	67·6	69·1	64·9	69·8	67·2	72·1	66·7	72·2	68·8	72·3	69·1
July ..	72·1	76·0	70·4	69·0	72·9	76·3	72·7	77·8	67·4	70·9	72·6
August ..	71·7	67·6	69·3	72·0	76·5	68·5	70·7	72·9	68·8	70·9	70·9
September.	68·9	63·1	63·2	65·1	68·2	63·1	66·7	61·9	63·1	63·9	64·7
October ..	52·5	51·6	56·8	56·4	55·7	51·2	59·5	51·1	52·9	54·8	54·3
November	47·7	51·6	48·1	48·7	47·2	47·1	48·7	43·9	50·6	49·0	48·2
December .	47·1	43·5	43·8	43·8	45·0	41·8	40·4	40·4	44·5	40·9	43·1
Means ..	57·2	55·9	57·0	56·8	58·2	56·4	55·0	54·8	54·2	56·1	56·2

The extreme monthly mean high-day temperatures in each month are as follows:—

	The lowest was		The highest was	
In January	36·0	in 1881	and 47·5	in 1884.
February	37·0	1886	„ 49·6	1885.
March	43·8	1888	„ 54·2	1880, 1882.
April	51·3	1888	„ 57·8	1885.
May	58·2	1887	„ 66·7	1889.
June	64·9	1882	„ 72·3	1889.
July	67·4	1888	„ 77·8	1887.
August	67·6	1881	„ 76·5	1884.
September	61·9	1887	„ 68·9	1880.
October	51·1	1887	„ 59·5	1886.
November	43·9	1887	„ 51·6	1881.
December	40·4	1886, 1887	47·1	1880.

Thus the mean high-day temperature has varied, the most  $12^{\circ}6$  in February,  $11^{\circ}5$  in January, and  $10^{\circ}4$  in March, agreeing very nearly with the changes at Saronia in the same months; and the least,  $6^{\circ}5$  in April,  $6^{\circ}7$  in December, and  $7^{\circ}0$  in September, not agreeing with Saronia.

The lowest monthly reading in the 10 years was  $36^{\circ}$  in January, 1881, being  $19^{\circ}7$  lower than the lowest reading at Saronia; and the highest was  $77^{\circ}8$  in July, 1887, being  $12^{\circ}1$  lower than the highest at Saronia.

The numbers at the foot of the columns show the mean high-day temperature for each year. By comparing them with those at the foot of the columns in corresponding table at Saronia, it will be seen those at Saronia are much higher. The year of least difference,  $17^{\circ}4$ , was in 1884, and that of greatest difference,  $23^{\circ}1$ , was in 1886. The mean excess of the 10 years was  $20^{\circ}7$ .

By comparing the numbers in Tables VII. and VIII. month by month, it will be seen that the readings at Saronia were higher in every month than at Blackheath, and the excess varied, in—

January	from ....	....	$12^{\circ}7$ in 1884	to $35^{\circ}0$ in 1881
February	„ ....	....	$8^{\circ}9$ „ 1882	„ $30^{\circ}0$ „ 1886
March	„ ....	....	$12^{\circ}2$ „ 1880	„ $33^{\circ}7$ „ 1888
April	„ ....	....	$15^{\circ}4$ „ 1885	„ $25^{\circ}3$ „ 1887
May	„ ....	....	$9^{\circ}9$ „ 1882	„ $22^{\circ}5$ „ 1885
June	„ ....	....	$10^{\circ}7$ „ 1885	„ $19^{\circ}3$ „ 1886
July	„ ....	....	$8^{\circ}1$ „ 1887	„ $21^{\circ}1$ „ 1888
August	„ ....	....	$9^{\circ}5$ „ 1884	„ $22^{\circ}3$ „ 1881
September	„ ....	....	$10^{\circ}5$ „ 1886	„ $25^{\circ}0$ „ 1881
October	„ ....	....	$24^{\circ}1$ „ 1886	„ $37^{\circ}1$ „ 1887
November	„ ....	....	$28^{\circ}9$ „ 1888	„ $33^{\circ}9$ „ 1887
December	„ ....	....	$17^{\circ}7$ „ 1880	„ $29^{\circ}7$ „ 1887

By taking the difference between the numbers in the last columns of Tables VII. and VIII., the mean monthly excess of high-day temperature at Saronia over that at Blackheath in—

January	....	....	....	....	was	22 <sup>o</sup> ·1
February	....	....	....	....	„	19·7
March	....	....	....	....	„	21·4
April	....	....	....	....	„	20·1
May	....	....	....	....	„	15·9
June	....	....	....	....	„	14·2
July	....	....	....	....	„	13·5
August	....	....	....	....	„	17·1
September	....	....	....	....	„	22·4
October	....	....	....	....	„	30·7
November	....	....	....	....	„	26·4
December	....	....	....	....	„	24·4
And the mean yearly daily excess	....	....	....	....	„	20·7

TABLE IX.—Monthly Mean of the nightly Minimum Temperature at *Sarona*.

Month.	Years.										Means of 10 years.
	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	
January ..	42·9	43·0	43·7	43·7	40·9	46·6	49·3	44·9	44·9	49·0	45·9
February..	45·8	47·6	44·0	45·6	46·2	45·6	48·7	44·0	49·1	47·8	46·4
March ..	46·9	48·1	47·1	49·4	48·3	48·9	49·0	46·6	53·1	52·3	49·0
April ..	52·0	56·9	51·9	50·0	53·4	53·2	51·8	52·9	54·8	51·5	52·8
May ..	57·0	56·8	55·4	55·2	57·0	60·0	56·0	56·3	58·1	60·8	57·3
June ..	63·5	58·9	59·3	63·6	63·7	64·8	63·5	62·7	63·2	64·0	62·7
July ..	67·0	67·1	65·5	67·0	66·0	68·8	65·6	66·1	69·2	69·5	67·2
August ..	69·0	70·3	68·7	69·4	68·9	68·3	69·2	69·1	70·3	70·3	69·4
September	65·2	68·1	66·3	61·0	64·3	67·1	66·3	67·3	67·3	69·7	66·3
October ..	62·6	61·5	60·6	61·8	60·5	63·3	60·6	63·8	67·5	63·0	62·5
November	57·6	55·9	56·0	54·5	52·9	53·9	52·9	57·2	53·1	50·2	54·4
December	49·0	47·4	50·9	46·6	48·6	51·9	48·1	50·9	48·2	48·9	49·0
Means ..	56·5	57·2	55·8	56·1	55·9	57·7	56·7	56·8	58·2	55·1	56·9

The numbers in this table showing the monthly mean of the low night temperatures are all high; the following shows the extremes in every month in the 10 years. It varied in

January	from	....	40°·9	in 1884	to	49°·3	in 1886
February	„	....	44°·0	„ 1882 & 1887	to	49°·1	in 1888
March	„	....	46°·6	in 1887	to	53°·1	in 1888
April	„	....	50°·0	„ 1883	„	56°·9	„ 1881
May	„	....	55°·2	„ 1883	„	60°·8	„ 1889
June	„	....	58°·9	„ 1881	„	64°·8	„ 1885
July	„	....	65°·5	„ 1882	„	69°·5	„ 1889
August	„	....	68°·3	„ 1885	„	70°·3	„ 1881, 1888, 1889
September	„	....	61°·0	„ 1883	„	69°·7	„ 1889
October	„	....	60°·5	„ 1884	„	67°·5	„ 1888
November	„	....	50°·2	„ 1889	„	57°·6	„ 1880
December	„	....	46°·6	„ 1883	„	51°·9	„ 1885

Thus the low night temperature has varied the least 2° in August, the next in order 4° in July, and the most 8°·7 in September, and the next in order 8°·4 in January. The lowest mean reading in the 10 years was 40°·9, and the highest was 70°·3.

The numbers at the foot of the columns in Table IX. show the yearly mean of the low night temperature, the lowest, 55°·8, was in 1882, and the highest, 58°·2, was in 1888.

The lowest monthly mean low night temperature in each year was as follows :—

In 1880	....	....	....	was	42°·9	in	January.
1881	....	....	....	„	47°·4	„	December.
1882	....	....	....	„	43°·7	„	January.
1883	....	....	....	„	45°·6	„	February.
1884	....	....	....	„	40°·9	„	January.
1885	....	....	....	„	45°·6	„	February.
1886	....	....	....	„	48°·1	„	December.
1887	....	....	....	„	44°·0	„	February.
1888	....	....	....	„	44°·9	„	January.
1889	....	....	....	„	47°·8	„	February.

Therefore the lowest monthly mean has occurred—

Four times in January.  
 Four times in February.  
 Twice in December.



TABLE X.—Monthly Mean of the nightly Minimum Temperature at *Blackheath*.

Months.	Years.										Means of 10 Years.
	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	
January ..	27·4	27·3	36·1	37·0	38·9	31·3	30·1	30·2	31·6	30·0	32·0
February..	35·6	34·3	37·2	37·6	36·8	38·0	28·8	32·8	29·4	30·8	34·2
March ..	36·3	36·3	38·9	30·6	38·0	32·6	33·1	30·9	31·8	32·3	34·1
April ..	39·1	38·5	41·0	39·5	38·4	38·8	39·1	34·8	35·5	38·3	38·3
May ..	41·9	45·6	46·2	45·7	45·1	41·8	44·2	42·1	42·9	48·0	44·4
June ..	48·3	51·1	49·9	51·2	50·3	50·0	49·0	50·5	49·6	51·9	50·2
July ..	52·1	56·0	53·7	52·8	54·7	54·2	53·8	54·9	50·4	53·3	53·6
August ..	54·4	52·3	53·5	54·4	55·2	50·7	53·8	52·0	50·5	51·3	52·8
September	50·6	50·0	48·3	50·8	52·6	48·2	51·6	46·3	47·9	47·9	50·4
October ..	39·0	40·2	45·3	44·9	42·9	40·4	46·5	37·5	35·9	41·2	41·4
November	36·0	41·8	39·0	37·7	37·2	38·1	37·5	34·9	40·7	37·8	38·1
December	37·0	35·0	36·0	36·0	36·7	32·9	32·0	31·2	33·3	31·1	34·1
Means ..	41·5	42·4	43·8	43·2	43·9	41·4	41·6	39·8	40·0	41·2	42·0

These numbers are a great contrast indeed to those in Table IX. They have varied in each month as follows :—

January	from	....	....	27°3	in 1881	to	38°9	in 1884
February	"	....	....	28°8	" 1886	"	38°0	" 1885
March	"	....	....	30°6	" 1883	"	38°9	" 1882
April	"	....	....	34°8	" 1887	"	41°0	" 1882
May	"	....	....	41°8	" 1885	"	48°0	" 1889
June	"	....	....	48°3	" 1880	"	51°9	" 1889
July	"	....	....	50°4	" 1888	"	56°0	" 1881
August	"	....	....	50°5	" 1888	"	55°2	" 1884
September	"	....	....	46°3	" 1887	"	52°6	" 1884
October	"	....	....	35°9	" 1888	"	46°5	" 1886
November	"	....	....	34°9	" 1887	"	41°8	" 1881
December	"	....	....	31°1	" 1889	"	37°0	" 1880

Thus no month has been so uniform in temperature as the corresponding month has been at Sarona. The month of June has varied 3°6; the next in order was August, 4°7. The month of greatest change, 11°6, was in January, and the next in order, 10°6, was in October. The lowest mean reading in the 10 years was 27°3, being 13°6 below the lowest at Sarona; and the highest was 56°0, being 14°3 below that at Sarona, viz., 70°3 in August.

The lowest monthly mean of low night temperature in each year at Blackheath was as follows. In—

1880	....	....	....	....	27°4	in January.
1881	....	....	....	....	27°3	" January.
1882	....	....	....	....	36°0	" December.
1883	....	....	....	....	30°6	" March.
1884	....	....	....	....	36°7	" December.
1885	....	....	....	....	31°3	" January.
1886	....	....	....	....	28°8	" February.
1887	....	....	....	....	30°2	" January.
1888	....	....	....	....	29°4	" February.
1889	....	....	....	....	30°0	" January.

Therefore the lowest monthly mean of low night temperature has occurred—

Five times in January.  
 Twice in February.  
 Once in March.  
 Twice in December.

The numbers at the foot of the columns in Table X. show the yearly mean of the low night temperature at Blackheath. The lowest was  $39^{\circ}8$  in 1887, and the highest was  $43^{\circ}9$  in 1884, being  $16^{\circ}0$  and  $14^{\circ}3$  respectively colder than those at Sarona.

By taking the difference between the numbers in the last columns of Tables IX. and X., the mean monthly excess of low night temperature at Sarona over that at Blackheath in—

January	....	....	....	....	....	was	$13^{\circ}9$
February	....	....	....	....	....	„	$12^{\circ}2$
March	....	....	....	....	....	„	$14^{\circ}9$
April	....	....	....	....	....	„	$14^{\circ}5$
May	....	....	....	....	....	„	$12^{\circ}9$
June	....	....	....	....	....	„	$12^{\circ}5$
July	....	....	....	....	....	„	$13^{\circ}6$
August	....	....	....	....	....	„	$16^{\circ}6$
September	....	....	....	....	....	„	$15^{\circ}9$
October	....	....	....	....	....	„	$21^{\circ}1$
November	....	....	....	....	....	„	$16^{\circ}3$
December	....	....	....	....	....	„	$14^{\circ}9$
And the mean excess for the year	....	....	....	....	....	„	$14^{\circ}9$

TABLE XI.—Monthly Mean daily range of Temperature at *Sarona*.

Months.	Years.										Means of 10 Years.
	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	
January ..	15·6	23·0	17·4	15·7	19·3	15·7	15·4	18·5	16·8	15·2	17·3
February..	19·7	17·2	11·7	17·2	14·1	19·7	18·3	20·3	17·0	19·4	17·5
March ..	19·5	20·3	21·7	21·1	18·2	21·2	18·7	21·3	24·4	21·5	20·8
April ..	23·2	20·7	20·9	22·8	24·4	20·0	21·2	25·1	19·9	22·6	22·1
May ..	23·9	23·3	19·9	21·5	20·2	23·4	20·5	23·9	20·1	21·4	21·8
June ..	20·3	24·3	20·3	19·5	20·7	18·0	22·5	21·2	19·2	20·4	20·6
July ..	20·3	19·1	18·9	17·4	19·0	16·9	20·4	19·8	19·3	18·9	18·9
August ..	20·0	19·6	17·9	18·8	17·1	18·8	18·7	19·4	18·1	18·0	18·6
September	23·1	20·0	20·9	27·7	19·4	20·0	20·9	19·3	19·8	17·1	20·8
October ..	22·1	21·8	22·7	22·3	21·3	22·3	23·5	24·4	20·6	23·8	22·5
November	22·3	19·1	20·5	19·8	19·9	22·6	20·3	20·6	16·4	20·1	20·2
December	15·8	18·8	18·0	19·1	22·3	18·2	20·2	19·2	15·6	17·7	18·5
Means ..	20·5	20·6	19·2	20·2	19·7	19·7	20·1	21·1	18·9	19·7	20·0

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The mean daily range in each month has varied in 10 years as follows :

January	from	....	....	15·2	in 1889	to	23·0	in 1881
February	„	....	....	11·7	„ 1882	„	20·3	„ 1887
March	„	....	....	18·2	„ 1884	„	24·4	„ 1888
April	„	....	....	19·9	„ 1888	„	25·1	„ 1887
May	„	....	....	19·9	„ 1882	„	23·9	„ 1880, 1887
June	„	....	....	18·0	„ 1885	„	24·3	„ 1881
July	„	....	....	16·9	„ 1885	„	20·4	„ 1886
August	„	....	....	17·1	„ 1884	„	20·0	„ 1880
September	„	....	....	17·1	„ 1889	„	27·7	„ 1883
October	„	....	....	20·6	„ 1888	„	24·4	„ 1887
November	„	....	....	16·4	„ 1888	„	22·6	„ 1885
December	„	....	....	15·6	„ 1888	„	22·3	„ 1884

The smallest range in any month was 11°·7 in February, 1882, and the largest was 27°·7 in September, 1883.

The greatest monthly mean daily range of temperature at Sarona in

1880	....	....	....	was	23·9	in	May.
1881	....	....	....	„	24·3	„	June.
1882	....	....	....	„	22·7	„	October.
1883	....	....	....	„	27·7	„	September.
1884	....	....	....	„	24·4	„	April.
1885	....	....	....	„	23·4	„	May.
1886	....	....	....	„	23·5	„	October.
1887	....	....	....	„	25·1	„	April.
1888	....	....	....	„	24·4	„	March.
1889	....	....	....	„	23·8	„	October.

The greatest monthly range of temperature in 10 years, therefore, has occurred—

Once in March.

Twice in April.

Twice in May.

Once in June.

Once in September.

Three times in October.

TABLE XII.—Monthly Mean daily Range of Temperature at *Blackheath*.

Months.	Years.										Means of 10 Years.
	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	
January ..	10·2	8·7	8·0	8·3	8·6	9·0	9·6	8·8	9·4	10·4	9·1
February..	11·9	7·7	9·6	10·1	10·7	11·6	8·2	10·9	9·5	11·1	10·1
March ..	17·9	14·6	15·3	13·6	14·1	15·4	11·6	13·3	12·0	15·4	14·3
April ..	16·7	16·9	15·6	17·8	15·3	19·0	13·7	17·6	15·8	15·9	16·4
May ..	21·9	19·0	19·2	17·3	19·6	19·1	16·6	16·2	21·0	18·7	18·8
June ..	19·3	18·0	15·0	18·6	16·9	22·1	17·7	21·7	19·2	20·4	19·0
July ..	20·0	20·0	16·7	16·2	18·2	22·1	18·9	22·9	17·0	17·6	19·0
August ..	17·3	15·2	15·8	17·6	21·3	17·8	16·9	20·9	18·3	19·6	18·0
September	18·3	13·1	14·9	14·3	15·6	14·9	15·1	15·6	15·2	16·0	14·3
October ..	13·5	11·5	11·5	11·5	12·8	10·8	13·0	13·6	17·0	13·7	12·9
November.	11·7	9·8	9·1	11·0	10·0	9·0	11·2	9·0	9·9	11·2	10·2
December .	10·1	8·5	7·8	7·8	8·3	8·9	8·4	9·2	11·2	9·8	9·0
Means ..	15·7	13·6	13·2	13·7	14·3	15·0	13·4	15·0	14·2	14·9	14·3

The monthly mean daily range of temperature has varied in 10 years

In	Month	from	to	in	Year	to	in	Year
In	January	from	...	8°	in 1882	to	10°·4	in 1889
	February		...	7°·7	in 1881		11°·9	in 1880
	March		...	11°·6	in 1886		17°·9	in 1880
	April		...	13°·7	in 1886		19°·0	in 1885
	May		...	16°·2	in 1887		21°·9	in 1880
	June		...	15°·0	in 1882		22°·1	in 1885
	July		...	16°·2	in 1883		22°·9	in 1887
	August		...	15°·2	in 1881		21°·3	in 1884
	September		...	13°·1	in 1881		18°·3	in 1880
	October		...	10°·8	in 1885		17°·0	in 1888
	November		...	9°·0	in 1885 & 1887		11°·7	in 1880
	December		...	7°·8	in 1882 & 1883		11°·2	in 1888

The smallest mean daily range of temperature in any month was 7°·7 in February, 1881, and the largest was 22°·9 in July, 1887.

The greatest monthly mean daily range of temperature at Blackheath in—

1880	...	...	...	...	was	21°·9	in	May.
1881	...	...	...	...	„	20°·0	„	July.
1882	...	...	...	...	„	19°·2	„	May.
1883	...	...	...	...	„	18°·6	„	June.
1884	...	...	...	...	„	21°·3	„	August.
1885	...	...	...	...	„	22°·1	„	June and July.
1886	...	...	...	...	„	18°·9	„	July.
1887	...	...	...	...	„	22°·9	„	July.
1888	...	...	...	...	„	21°·0	„	May.
1889	...	...	...	...	„	20°·4	„	June.

Therefore the greatest monthly mean daily range of temperature has occurred—

Three times in May.

Three times in June.

Four times in July.

Once in August.

By comparing the numbers in Tables XI. and XII., it will be seen that the monthly mean daily ranges of temperature at Saronia in the years 1880, 1882, 1883, and 1886, were all larger than those at Blackheath. The differences, however, were small in the months from May to August. In each of the remaining years—one month, at least, in each year—the range was larger at Blackheath than at Saronia.

The difference between monthly mean of daily ranges at Sarona and Blackheath varied in—

January	from	....	+ 4·8	in 1889	to	+ 14·3	in 1881
February	„	....	+ 2·1	„ 1882	„	+ 10·1	„ 1886
March	„	....	+ 1·6	„ 1880	„	+ 12·4	„ 1888
April	„	....	+ 1·0	„ 1885	„	+ 9·1	„ 1884
May	„	....	- 0·9	„ 1888	„	+ 6·7	„ 1887
June	„	....	- 4·1	„ 1885	„	+ 6·3	„ 1881
July	„	....	- 3·1	„ 1887	„	+ 2·3	„ 1888
August	„	....	- 4·2	„ 1884	„	+ 4·4	„ 1881
September	„	....	+ 1·1	„ 1889	„	+ 13·4	„ 1883
October	„	....	+ 3·6	„ 1888	„	+ 11·8	„ 1883
November	„	....	+ 6·5	„ 1888	„	+ 13·6	„ 1885
December	„	....	+ 4·4	„ 1888	„	+ 14·0	„ 1884

The sign + implies greater range at Sarona than at Blackheath, and the sign - that the range at Sarona was smaller than at Blackheath.

By taking the difference between the numbers in the last columns of Tables XI. and XII., the mean difference between the daily ranges of temperature at Sarona and Blackheath in every month is shown, and are as follow :—

The mean range of daily temperature in—

January	is greater than at Blackheath by	8·2
February	„ „ „	7·4
March	„ „ „	6·5
April	„ „ „	5·7
May	„ „ „	3·0
June	„ „ „	1·6
July	is smaller	0·1
August	is greater	0·6
September	„ „ „	6·5
October	„ „ „	9·6
November	„ „ „	10·0
December	„ „ „	9·5

Thus the greatest differences are in the winter months; the next in order are the spring months, and the least are in the months from May to August.