

Also from the table it appears that in June rain fell on one day in the years 1885 and 1888, and that in August it fell on one day in the year 1890.

From the numbers in the last column of Table III (*see* p. 39), showing the average number of days of rain, it appears that January has the greatest number, 12, and the next in order are February and December, each 10, then in order March, 8, November, 6, April, 5, and May and October 2 each.

The sum at the foot of each column shows the number of days of rain in that year; the numbers vary from 36 in the year 1864 to 73 in the year 1890.

By taking the means of the first half, *viz.*, from 1861 to 1876, the average value is 52, and of the second half, *viz.*, from 1877 to 1892, the average value is 58. The mean number of days for the whole period is 55.

CROYDON, *November*, 1893.

METEOROLOGICAL REPORT FROM JERUSALEM FOR YEAR 1884.

By JAMES GLAISHER, F.R.S.

THE numbers in column 1 of this table show the highest reading of the barometer in each month; of these the highest appear in the winter, and the lowest in the summer months; the maximum for the year is 27·668 inches in January. In column 2 the lowest in each month are shown; the minimum is 26·997 inches in April. The range of readings in the year was 0·671 inch. The numbers in the 3rd column show the extreme range of readings in each month; the smallest, 0·144 inch, is in August, and the largest, 0·531 inch, in January. The numbers in the 4th column show the mean monthly pressure of the atmosphere; the highest, 27·486 inches, is in December, and the lowest, 27·285 inches, in July. The mean pressure for the year was 27·380 inches; at Saroná the mean pressure for the year was 29·859 inches.

The highest temperature of the air in each month is shown in column 5. The highest in the year was 105° on both the 6th and 9th of August; at Saroná the maximum temperature on these days was 88° and 89° respectively. The first day in the year the temperature reached 90° was on May 29th, and the temperature reached or exceeded 90° on two other days in this month. In June there were 8 days when the temperature reached or exceeded 90°; in July, on 7 days; in August, on 10 days; in September, on 1 day; and in October, on 4 days. Therefore the temperature reached or exceeded 90° on 33 days in the year. At Saroná the temperature reached 90° as early as April 13th, and reached or exceeded 90° on only 14 days in the year; the highest in the year at Saroná,

MONTHLY METEOROLOGICAL TABLE

Deduced from observations taken at Jerusalem, by JOSEPH GAMEL, in a garden within the city, about 2,500 feet above the level of the Mediterranean Sea, open on all sides.
Latitude, 31° 46' 40" N., Longitude, 35° 13' 30" E.

Months.	Pressure of atmosphere in month.				Temperature of the air in month.							Mean temperature at 9 a.m.			Vapour at 9 a.m.				Degree of humidity.	Weight of a cubic foot of air.	Wind. Relative proportions of.								Mean amount of cloud.	Rain.			
	Highest.	Lowest.	Range.	Mean.	Highest.	Lowest.	Range.	Mean of all highest.	Mean of all lowest.	Mean daily range.	Mean.	Dry bulb.	Wet bulb.	Dew point.	Elastic force of vapour.	Weight in a cubic foot of air.	Additional weight required for saturation.	N.			N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Number of days on which it fell.		Amount collected.			
1884.	in.	in.	in.	in.	°	°	°	°	°	°	°	°	°	°	grs.	grs.	grs.	°	grs.														in.
January ...	27·668	27·137	0·531	27·442	62·0	28·5	33·5	49·4	38·0	11·4	43·7	44·8	42·2	39·1	·239	2·8	0·6	81	504	2	2	2	5	3	10	3	4	6·7	10	6·09			
February ...	27·630	27·217	0·413	27·386	58·0	34·5	23·5	49·7	38·7	11·0	44·2	45·5	43·8	39·7	·245	2·8	0·7	81	502	1	3	2	3	1	10	5	1	7·6	13	8·26			
March ...	27·619	27·110	0·509	27·381	75·0	34·0	41·0	60·2	43·2	17·0	51·7	53·6	48·5	43·5	·304	3·4	1·2	74	494	2	1	2	5	1	11	4	5	7·3	10	3·75			
April ...	27·510	26·997	0·513	27·348	84·0	41·5	42·5	73·2	53·3	19·9	63·3	65·0	54·9	46·6	·318	3·5	3·3	51	483	1	1	3	5	3	7	6	4	5·9	3	2·08			
May ...	27·434	27·193	0·241	27·355	94·0	44·0	50·0	77·2	55·5	21·7	66·3	70·0	57·8	48·4	·341	3·7	4·3	46	468	1	4	3	6	1	3	5	8	4·4	3	0·62			
June ...	27·460	27·298	0·162	27·237	99·0	53·0	46·0	85·5	62·4	23·1	73·9	78·4	63·3	52·9	·401	4·3	6·1	41	469	1	2	2	5	0	3	8	9	2·0	0	0·00			
July ...	27·443	27·182	0·261	27·285	99·5	56·0	43·5	85·7	61·6	24·1	73·7	76·6	64·3	55·6	·444	4·8	5·0	48	470	3	1	0	1	0	2	8	16	1·2	0	0·00			
August ...	27·378	27·234	0·144	27·297	105·0	55·0	50·0	88·0	63·5	24·5	75·8	78·6	66·0	57·3	·471	5·0	5·4	48	469	2	2	2	3	0	0	10	12	2·0	0	0·00			
September ...	27·453	27·234	0·219	27·373	90·3	54·5	35·8	80·9	57·8	23·1	69·3	71·1	62·3	55·6	·443	4·8	3·7	58	476	6	1	0	3	0	2	7	11	2·8	0	0·00			
October ...	27·599	27·311	0·288	27·449	91·5	48·0	43·5	77·9	57·9	20·0	67·9	70·3	59·3	50·8	·372	4·1	4·0	50	479	5	1	6	2	2	3	4	8	4·0	1	0·06			
November ...	27·631	27·359	0·272	27·470	72·0	41·0	31·0	64·9	48·7	16·2	56·8	60·0	54·2	49·1	·349	3·9	2·1	67	489	0	3	3	4	8	3	6	3	5·3	7	1·03			
December ...	27·637	27·360	0·277	27·486	68·5	41·0	27·5	58·4	46·3	12·1	52·3	53·8	43·9	44·1	·289	3·3	1·5	70	496	1	3	14	7	0	2	0	4	4·8	2	2·02			
Means ...	27·538	27·219	0·319	27·380	83·2	44·2	39·0	70·9	52·2	18·7	61·6	64·0	55·5	48·6	·351	3·9	3·2	60	483	sum. 25	sum. 24	sum. 39	sum. 49	sum. 19	sum. 56	sum. 69	sum. 85	4·5	sum. 54	sum. 28·96			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30			

viz., 100° , took place on October 16th; on this day the maximum temperature at Jerusalem was $90^{\circ}5$.

The lowest temperature of the air in each month is shown in column 6. The lowest in the year was $28^{\circ}5$, on January 23rd; the temperature was below 40° , in January, on 22 nights; in February it was below 40° on 20 nights; and in March, on 8 nights. Therefore the temperature was below 40° on 50 nights in the year. The yearly range of temperature was $76^{\circ}5$. At Saron a the temperature was below 40° on only 9 nights in the year; the lowest temperature in the year was 32° , on January 22nd and 24th. The yearly range at Saron a is 68° .

The range of temperature in each month is shown in column 7, and these numbers vary from $23^{\circ}5$ in February, to 50° in both May and August. At Saron a the range of temperature in each month varied from 24° in February to 51° in March.

The mean of all the highest by day, of the lowest by night, and of the average daily ranges of temperature, are shown in columns 8, 9 and 10 respectively. Of the high day temperatures, the lowest, $49^{\circ}4$, is in January, and the highest, 88° , in August. At Saron a, of the high day temperatures, the lowest, $60^{\circ}2$, is in January, and the highest, 86° , in August.

Of the low night temperatures, the coldest, $38^{\circ}0$, is in January, and the warmest, $63^{\circ}5$, in August. At Saron a, of the low night temperatures, the coldest, $40^{\circ}9$, is in January, and the warmest, $68^{\circ}9$, in August.

The average daily range of temperature, as shown in column 10, the smallest, 11° , is in February, and the largest, $24^{\circ}5$, is in August. At Saron a, the average daily range, the smallest, $14^{\circ}1$, is in February, and the largest, $24^{\circ}4$, in April.

In column 11, the mean temperature of each month, as found from observations of the maximum and minimum thermometers only, are shown; the month of the lowest temperature is January, $43^{\circ}7$, and that of the highest, August, $75^{\circ}8$. The mean for the year is $61^{\circ}6$. At Saron a, the mean temperature of each month, the lowest is January, $50^{\circ}5$, and that of the highest August, $77^{\circ}4$. The mean for the year at Saron a is $65^{\circ}7$.

The numbers in columns 12 and 13 are the monthly means of a dry and wet bulb-thermometer, taken daily at 9 a.m., and in column 14 the monthly temperature of the dew-point, or that of the temperature at which dew would have been deposited. The elastic force of vapour is shown in column 15, and in column 16 the water present in a cubic foot of air, in January and February, was as small as 2.8 grains, and as large as 5 grains in August. The numbers in column 18 show the degree of humidity, saturation being considered as 100; the smallest number in this column is in June, and the largest number is in January and February. The weight of a cubic foot of air under its pressure, temperature, and humidity, at 9 a.m., is shown in column 19.

The most prevalent wind in January was S.W., and the least

prevalent winds were N., N.E., and E. In February the most prevalent were S.W. and W., and the least were N., S., and N.W. In March the most prevalent was S.W., and the least were N.E. and S. In April the most prevalent were S.W., W., and S.E., and the least were N. and N.E. In May the most prevalent were N.W. and S.E., and the least were N. and S. In June the most prevalent were N.W. and W., and the least were S. and N. In July the most prevalent was N.W., and the least were E. and S. In August the most prevalent were N.W. and W., and the least S. and S.W. In September the most prevalent was N.W., and the least were E. and S. In October the most prevalent were N.W., E., and N., and the least was N.E. In November the most prevalent were S. and W., and the least was N.; and in December the most prevalent wind was E., and the least prevalent were S. and W.

The most prevalent wind for the year was N.W., which occurred on 85 times during the year, of which 16 were in July, 12 in August, and 11 in September; and the least prevalent wind for the year was S., which occurred on only 19 times in the year, of which 8 were in November. At Saronā the most prevalent wind for the year was S.W., which occurred on 72 times during the year, and the least prevalent wind was E., which occurred on only 8 times during the year.

The numbers in column 28 show the mean amount of cloud in each month; the month with the smallest amount is July, and the largest, February. Of the cumulus, or fine weather cloud, there were 63 instances, of which 15 were in September. Of the nimbus, or rain cloud, there were 46 instances, of which 14 were in February, and 9 in both January and March. Of the cirrus there were 3 instances; of the stratus, 2 instances; of the cumulus stratus, 64 instances; of the cirro stratus, 16 instances; of the cirro cumulus, 54 instances; and 118 instances of cloudless skies, of which 21 were in July, 20 in June, and 15 in August, and 3 only in February. At Saronā there were 74 instances of cloudless skies, of these 16 were in June, 12 in December and 11 in November.

The largest fall of rain for the month in the year was in February, 8.26 inches, of which 1.24 inch fell on the 14th, and 1.22 inch fell on the 9th. The next largest fall for the month was 6.09 inches in January, of which 2.83 inches fell on the 22nd, 1.24 inch on the 21st, and 1.05 inch on the 20th. No rain fell from May 5th to October 30th, making a period of 177 consecutive days without rain. The total fall of rain for the year was 23.96 inches, which fell on 54 days during the year. At Saronā the largest fall of rain for the month in the year was 6.69 inches in January, and the next in order was 6.09 inches in February. No rain fell from May 5th to October 20th, with the exception of June 23rd, when 0.02 inch fell, making a period of 167 consecutive days without rain. At Saronā the total fall for the year was 18.73 inches, which fell on 65 days during the year.
