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COMBINED DISTRIBUTION OF HOURLY VALUES OF DRY-BULB  
AND WET-BULB TEMPERATURES, CROYDON, 1946-1955

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INTRODUCTION

Hourly observations of dry-bulb and wet-bulb temperature (to one tenth of a degree Fahrenheit) made at Croydon Airport during the ten years 1946-1955 were tabulated on monthly sheets from the daily registers. The resulting 87,648 observations of each element were analysed to obtain combined frequency distributions within ranges of two degrees F., for each month, for each of the quarters December-January-February, March-April-May, June-July-August, September-October-November and for the whole year. These ranges were selected because they are sufficiently small to give a fairly detailed indication of frequencies at the higher and lower temperature limits of the distributions - often the regions of greatest interest. A ten-year period was considered to be the shortest period which would give useful averages.

METHOD OF TABULATION OF RESULTS

Tables I to XII are combined frequency tables of dry-bulb temperature and wet-bulb temperature for the months January to December respectively. Tables XIII to XVI are the corresponding tables for the four quarters, December-January-February, etc. Table XVII gives the corresponding annual frequencies. Table XVIII gives the frequencies of dry-bulb temperatures (irrespective of wet-bulb temperatures), while table XIX gives the frequencies of wet-bulb temperatures (irrespective of dry bulb temperatures).

The tabulations were made for the two degree ranges 20.1 to 22.0 degrees F., 22.1 to 24.0 degrees F., etc., that is, for the ranges given by T-0.9 to T+1.0 degrees F., where T is an odd number which corresponds approximately to the mid-point of the two-degree range. For brevity in the tables, the range of dry-bulb temperatures in the first column is indicated by T but refers to the range T-0.9 to T+1.0 degrees F. Similarly, the values T, T-2, T-4 etc. (second, third and fourth columns, respectively of Tables I-XVII) of wet-bulb temperatures refer to the ranges T-0.9 to T+1.0, T-2.9 to T-1.0, T-4.9 to T-3.0 etc., where the value of T for any frequency in the table is given by the figure in the first column and in the same row. For example, if T (first column) is 45 degrees F.,

the range of dry-bulb temperature is 44.1 to 46.0 degrees F., and  
the range of wet-bulb temperature is 44.1 to 46.0 degrees F. (second column, T).  
42.1 to 44.0 degrees F. (third column, T-2).  
40.1 to 42.0 degrees F. (fourth column, T-4)  
etc.

For any given range of dry bulb temperature and wet bulb temperature, two frequencies are indicated. The upper figure is the ordinary percentage frequency of occurrence within the given range; the figure below is the cumulative percentage frequency of dry-bulb temperature and associated wet-bulb temperature greater than or equal to the lower values in the ranges indicated.

All percentage frequencies are corrected to one place of decimals except that frequencies less than 0.1 per cent are corrected to two places of decimals.

Frequencies less than 0.005 per cent but greater than zero are entered as 0.0, while .. signifies that no occurrence was observed within the given range. The entry of 0.0 can occur only in the quarterly and annual summaries of frequencies or cumulative frequencies but not in the monthly tables, where a single occurrence (that is, at one hourly observation) gives a frequency of 0.01 per cent approximately. The cumulative frequencies shown are merely the sums of the appropriate individual frequencies.

#### Example:-

For January (see Table 1), the percentage frequency of hours with dry-bulb temperature in the range 44.1 to 46.0 degrees F. and associated wet-bulb temperature in the range 40.1 to 42.0 degrees F. is obtained by locating the value 45 for dry-bulb temperature in column one (T) and then locating the frequency in the row opposite 45 and in the wet-bulb column, T-4. The value of this percentage frequency is 1.3.

Again, for January (see Table I) the percentage frequency of hours with dry-bulb temperature  $\geq 44.1$  degrees F. and wet-bulb temperature  $\geq 40.1$  degrees F. is obtained by locating the value 45 for dry-bulb temperature in column one (T) and then locating the cumulative frequency in the row opposite 45 and in the wet-bulb temperature column, T-4. The value of this cumulative percentage frequency is 26.41.

#### DISCUSSION OF RESULTS

Each of the tables, I to XVII is expressed graphically in a series of curves or ogives (see figs. 1 to 17) which indicate the percentage frequency of occasions with dry-bulb temperature greater than a given value ( $\theta$ ) and wet-bulb temperature greater than a given value ( $\phi$ ), where  $\phi = \theta$  (curve A),  $\phi = \theta - 2$  (curve B)  $\phi = \theta - 4$  (curve C),  $\phi = \theta - 6$  (curve D),  $\phi = \theta - 8$  (curve E), etc. These curves are drawn only where they are distinct from the previous one of the series.

#### Abnormal months

To illustrate the degree of deviation in cumulative frequencies in abnormal years, ogives were drawn for January and July of certain years as follows:-

January 1947 and January 1948, which had particularly low and particularly high mean values, respectively, of both dry-bulb and wet-bulb temperatures (as based on mean monthly temperatures for 06 and 18 hours G.M.T.) ... (see fig. 18).

July 1947 and July 1954, which had rather high and particularly low mean values, respectively, of dry-bulb and wet-bulb temperatures (as based on mean monthly temperatures for 12 and 15 hours G.M.T.)... (see fig., 19).

The above-mentioned months of extremes do not necessarily refer to extremes of mean relative humidity.

#### Monthly, quarterly and annual distribution

The greater number of distinct ogives which can be drawn for the summer months as compared with the winter months, merely reflects the higher mean relative humidities which occur in winter. The summer quarter compares similarly with the winter quarter; and in this respect the spring and autumn quarters are in between, but with spring resembling summer rather more than autumn does in this particular sample of years.

It will be noted that the winter-quarter ogives approximate to a straight line over a range of 15 to 20 degrees, while the summer-quarter ogives approximate to a straight line over only 10-15 degrees F. In this respect ogives for spring and autumn are between the summer and winter ones, but with the spring curves resembling the summer curves and the autumn curves resembling

the winter ones in this particular sample. Table (i) gives these ranges of temperature and the approximate formulae relating cumulative frequencies with values of dry-bulb and wet-bulb temperature. The last column gives the approximate maximum errors involved.

#### Accumulated temperatures

Table XVIII, which gives the percentage frequency of occurrence of hourly values of dry-bulb temperature within given ranges, may be used to obtain the average number of degree-hours, (and thus degree-days) to be expected above or below any base temperature. The number of degree-hours above a base "b" degrees F (where b is an even number) is given by the sum of the products obtained by multiplying the values given in each of the columns which refer to temperatures greater than b degrees F. (that is, to the right of the column with a temperature range, the upper limit of which is equal to "b" degrees F.) by N/100, 3N/100, 5N/100 etc. respectively, where N is the number of hours in the month.

When b is an odd number, the above procedure should be carried out for (b-1) degrees F. and (b+1) degrees F., and the mean of these two values will give a good approximation to the number of degree-hours above the base "b" degrees F.

To obtain the number of degree-hours below a given "even" base "b" degrees F., the procedure is the same except that the columns to be used are all those which would not be used in the above computation for degree hours above a given "even" base "b" degrees.

To obtain the number of degree-hours below a given "odd" base "b" degrees F., the procedure is to calculate the number of degree hours below base (b-1) and below base (b+1) degrees F., and to take the mean of these two values.

Table (i)

Cumulative Frequency Curves (see figures 13 to 16)

	FORMULA	RANGE OF TEMP. ( $^{\circ}$ F.)	RANGE OF CUM. FREQ. (%)	APPROX. MAX. ERROR (%)
<u>WINTER</u>				
CURVE A	$F = 213 - 4\frac{1}{4}T$	30-50	5-89	3
CURVE B	$F = 218 - 4\frac{1}{4}T$	30-50	10-92	3
CURVE C	$F = 219 - 4\frac{1}{4}T$	35-50	8-73	3
<u>SUMMER</u>				
CURVE A	$F = 415 - 6\frac{1}{2}T$	50-60	20-90	$3\frac{1}{2}$
CURVE B	$F = 430 - 6\frac{1}{2}T$	52-64	15-90	$4\frac{1}{2}$
CURVE C	$F = 435 - 6\frac{1}{2}T$	54-64	20-85	2
<u>AUTUMN</u>				
CURVE A	$F = 271 - 4\frac{1}{2}T$	40-60	5-85	$3\frac{1}{2}$
CURVE B	$F = 278 - 4\frac{1}{2}T$	42-60	10-85	$3\frac{1}{2}$
CURVE C	$F = 281 - 4\frac{1}{2}T$	44-60	10-80	2
<u>SPRING</u>				
CURVE A	$F = 273 - 5T$	40-50	23-73	3
CURVE B	$F = 280 - 5T$	40-54	10-80	2
CURVE C	$F = 284 - 5T$	40-54	15-80	$3\frac{1}{2}$

TABLE I. PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

CROYDON

JANUARY

(Hourly observations, 1946-1955)

DRY-BULB temp. T( <sup>o</sup> F.)	Associated wet-bulb-temperature ( <sup>o</sup> F.)					Dry-Bulb temp. T( <sup>o</sup> F.)	Associated Wet-Bulb temperature ( <sup>o</sup> F.)				
	T	T-2	T-4	T-6	T-8		T	T-2	T-4	T-6	T-8
7	0.04					55	0.03	0.7	0.2	0.03	..
	99.86	..	..	..	..		0.03	0.77	1.00	1.03	..
9	0.01					57	..	..	0.04	0.03	
	99.82	..	..	..	..		0.04	0.04	0.07	..	
11	0.04	0.01									
	99.80	99.81	..	..	..						
13	0.04										
	99.76	..	..	..	..						
15	0.04										
	99.72	..	..	..	..						
17	0.1	0.05									
	99.63	99.68	..	..	..						
19	0.2	0.07									
	99.46	99.53	..	..	..						
21	0.3	0.1									
	99.16	99.26	..	..	..						
23	0.9	0.2									
	98.62	98.86	..	..	..						
25	0.8	0.7		0.04							
	96.99	97.72		97.76							
27	1.4	1.4		0.03							
	94.69	96.19		96.22							
29	1.8	1.6		0.11							
	91.36	93.29		93.39							
31	3.0	3.4		0.3							
	85.66	89.56		89.89							
33	3.6	3.9		0.5	0.03						
	77.76	82.66		83.16	83.19						
35	3.6	6.0		0.9							
	66.66	74.16		75.16							
37	3.1	5.5		1.3	0.1						
	56.15	63.06		64.56	64.66						
39	2.7	4.6		1.2	0.2						
	46.94	53.05		54.46	54.66						
41	2.6	5.3		1.3	0.2						
	36.51	44.24		45.75	45.96						
43	2.8	4.7		2.1	0.2	0.01					
	27.57	33.91		36.34	36.55	36.56					
45	2.0	2.9		1.3	0.3	0.01					
	20.76	24.77		26.41	26.74	26.75					
47	2.6	4.2		1.0	0.3	0.03					
	13.33	18.76		19.87	20.21	20.24					
49	1.3	3.4		1.1	0.1	0.04					
	6.63	10.73		11.96	12.07	12.11					
51	0.7	1.9		0.6	1.1	0.01					
	2.90	5.33		6.03	6.16	6.17					
53	0.2	1.0		0.5	0.1	0.03					
	0.97	2.20		2.73	2.83	2.86					

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TABLE II. PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

CROYDON

FEBRUARY (Hourly observations, 1946-1955)

Dry-bulb temp. T( $^{\circ}$ F.)	Associated wet-bulb temperature ( $^{\circ}$ F.)						
	T	T-2	T-4	T-6	T-8	T-10	T-12
0.06							
9	100.0	..	..	..	..	..	..
11	0.1 99.94	0.01 99.95	..	..	..	..	..
13	0.09 99.83	0.01 99.84	..	..	..	..	..
15	0.06 99.73	0.01 99.74	..	..	..	..	..
17	0.2 99.67	..	..	..	..	..	..
19	0.2 99.43	0.04 99.47	..	..	..	..	..
21	0.3 99.02	0.2 99.23	..	..	..	..	..
23	0.8 98.26	0.4 98.72	0.01 98.73	..	..	..	..
25	1.3 96.86	0.4 97.46	0.03 97.52	..	..	..	..
27	1.7 93.36	2.0 95.56	0.2 95.76	0.03 95.79	..	..	..
29	2.2 88.05	2.6 91.66	0.2 91.86	..	..	..	..
31	2.4 82.32	3.8 86.66	0.2 86.86	..	..	..	..
33	2.7 73.49	4.5 79.92	0.5 80.46	..	..	..	..
35	3.5 64.99	3.8 70.79	1.6 72.72	0.04 72.76	..	..	..
37	3.5 55.73	3.9 61.49	1.7 63.49	0.3 63.82	..	..	..
39	2.8 44.93	5.0 52.23	1.3 54.09	0.3 54.39	0.03 54.42	..	..
41	2.1 34.96	4.6 42.13	1.7 44.43	0.5 44.99	..	..	..
43	2.0 26.35	4.2 32.86	1.8 35.43	0.4 36.03	0.06 36.09	..	..
45	1.7 18.77	3.3 24.35	1.5 26.66	0.6 27.43	0.2 27.63	..	..
47	1.4 11.30	3.8 17.07	1.8 19.35	0.7 20.16	0.1 20.33	..	..
49	0.9 5.40	2.8 9.90	1.3 11.07	0.4 12.35	0.1 12.46	0.07 12.53	..
51	0.4 1.95	1.6 4.50	1.2 6.20	0.6 6.87	0.04 6.95	0.01 6.96	..
53	0.04 0.24	1.1 1.55	0.6 2.50	0.4 3.00	0.07 3.07	0.03 3.11	..
55	0.2 ..	0.2 0.2	0.1 0.41	0.2 0.76	0.1 0.86	0.01 ..	0.01 0.07
57	..	..	..	0.09 0.11	0.09 0.26	..	..
59	..	..	..	..	0.01 0.02	0.03 0.08	..
61	..	..	..	..	..	0.01 0.01	0.03 0.04

TABLE III. PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

CROYDONMARCH  
(Hourly observations, 1946-1955)

Dry-bulb temp. T(°F.)	Associated wet-bulb temperature (° F.)									
	T	T-2	T-4	T-6	T-8	T-10	T-12	T-14	T-16	T-18
19	0.01 100.0	..	..	..	..	..	..	..	..	..
21	0.03 99.98	0.01 99.99	..	..	..	..	..	..	..	..
23	0.05 99.93	0.02 99.95	..	..	..	..	..	..	..	..
25	0.5 99.78	0.1 99.88	..	..	..	..	..	..	..	..
27	0.8 98.97	0.3 99.20	..	..	..	..	..	0	..	..
29	1.0 97.14	0.9 98.17	0.01 98.18	..	..	..	..	..	..	..
31	2.0 92.73	2.6 96.14	0.1 96.27	..	..	..	..	..	..	..
33	2.7 85.49	3.7 90.73	0.7 91.54	0.03 91.57	..	..	..	..	..	..
35	3.4 77.19	3.6 82.79	1.3 84.33	0.1 84.44	..	..	..	..	..	..
37	3.2 68.44	2.9 73.79	1.4 75.79	0.2 76.03	0.01 76.04	..	..	..	..	..
39	2.2 58.26	3.5 65.24	1.3 67.69	0.5 68.29	0.04 68.32	..	..	..	..	..
41	2.3 49.11	3.7 56.06	1.7 59.54	0.7 60.69	0.09 60.79	..	..	..	..	..
43	2.0 38.84	4.3 46.81	1.9 50.06	1.2 51.04	0.4 52.29	0.01 52.30	..	..	..	..
45	1.7 29.97	3.6 35.04	2.0 40.51	0.8 41.06	0.5 42.44	0.05 42.49	..	..	..	..
47	1.8 20.74	3.9 28.27	1.6 31.54	1.1 33.21	0.5 33.76	0.07 33.84	..	..	..	..
49	1.4 11.40	3.4 18.94	1.8 22.57	0.9 24.24	0.5 24.81	0.04 24.86	0.01 24.87	..	..	..
51	0.6 4.36	2.1 10.00	2.0 14.14	1.0 15.97	0.5 16.74	0.04 16.81	0.01 16.82	..	..	..
53	0.1 1.43	0.6 3.76	1.4 7.30	1.2 9.44	0.6 10.27	0.2 10.54	0.03 10.57	..	..	..
55	0.03 0.37	0.3 1.33	0.6 2.06	1.1 5.00	0.5 5.94	0.2 6.17	0.07 6.24	..	..	..
57	.. 0.01	0.2 0.34	0.3 1.00	0.3 1.93	0.6 2.97	0.3 3.41	0.03 3.44	..	..	..
59	.. ..	0.03 0.33	0.1 0.79	0.3 1.42	0.3 1.86	0.09 2.00	..	..	..	..
61	.. ..	0.05 0.10	0.04 0.30	0.09 0.66	0.2 0.99	0.1 1.13	0.05 1.18	..	..	..
63	.. ..	.. ..	0.01 0.05	0.09 0.21	0.1 0.48	0.1 0.61	0.04 0.65	..	..	..
65	.. ..	.. ..	.. ..	0.01 0.04	0.01 0.11	0.00 0.28	0.03 0.31	..	..	..
67	.. ..	.. ..	.. ..	.. ..	0.03 0.03	0.01 0.09	0.03 0.18	..	..	..
69	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	0.04 0.05	0.03 0.11	..	..
71	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	0.01 0.01	0.03 0.04	..	..

TABLE IV. PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES  
CROYDON  
APRIL  
(Hourly observations, 1946-1955)

Dry-bulb temp. <i>t</i> (°F.)	T	T-2	T-4	T-6	T-8	T-10	T-12	T-14	T-16	T-18	T-20
29	0.2 99.99	0.01 100.0	..	..	..	..	..	..	..	..	..
31	0.3 99.58	0.2 99.79	..	..	..	..	..	..	..	..	..
33	0.6 98.74	0.5 99.28	0.01 99.29	..	..	..	..	..	..	..	..
35	0.6 96.90	1.1 98.14	0.03 98.18	..	..	..	..	..	..	..	..
37	1.4 93.39	2.2 96.30	0.1 96.44	0.01 96.45	..	..	..	..	..	..	..
39	1.5 86.52	3.4 91.99	0.6 92.70	0.04 92.74	..	..	..	..	..	..	..
41	1.7 75.94	4.5 85.02	1.5 87.09	0.1 87.20	..	..	..	..	..	..	..
43	1.6 62.80	4.6 74.24	2.7 78.02	0.5 79.39	..	..	..	..	..	..	..
45	1.3 49.30	3.9 61.20	3.4 68.04	1.4 69.92	0.06 69.99	0.01 70.00	..	..	..	..	..
47	1.4 36.79	3.9 48.00	2.7 56.00	2.2 59.44	0.4 59.92	0.01 59.93	..	..	..	..	..
49	1.3 26.21	3.1 35.39	2.6 42.70	2.5 48.00	1.0 49.24	0.08 49.32	..	..	..	..	..
51	0.8 17.08	2.7 24.91	2.0 30.99	1.9 35.70	1.9 38.50	0.2 38.74	..	..	..	..	..
53	0.4 9.00	2.2 16.28	1.7 21.41	1.3 25.49	1.7 28.30	0.8 29.20	0.04 29.24	..	..	..	..
55	0.04 4.51	1.1 8.60	1.4 13.68	1.4 17.11	1.4 19.89	1.0 21.09	0.1 21.10	..	..	..	..
57	0.01 2.34	0.2 4.47	1.0 7.46	1.2 11.14	1.0 13.17	0.9 14.55	0.1 14.66	..	..	..	..
59	..	0.04 2.33	0.3 4.26	0.7 6.25	1.0 8.73	0.7 9.76	0.4 10.24	0.01 10.25	..	..	..
61	..	..	0.1 2.29	0.4 3.92	0.5 5.21	0.8 6.69	0.3 7.02	0.07 7.10	..	..	..
63	..	..	..	0.3 2.19	0.3 3.42	0.5 4.21	0.4 4.89	0.03 4.92	0.01 4.93	..	..
65	..	..	..	0.1 1.01	0.3 1.89	0.4 2.82	0.2 3.11	0.2 3.39	..	..	..
67	..	..	..	..	0.2 0.91	0.3 1.49	0.3 2.02	..	0.06 2.19	..	..
69	..	..	..	..	0.04 0.30	0.2 0.71	0.07 0.99	0.1 1.22	0.06 1.31	0.01 1.33	..
71	..	..	..	..	0.01 0.10	0.08 0.26	0.08 0.47	0.1 0.68	0.03 0.81	0.03 0.84	0.01 0.85
73	..	..	..	..	..	0.01 0.09	0.06 0.17	0.1 0.30	0.03 0.41	0.04 0.51	..
75	..	..	..	..	..	..	0.08 0.08	..	0.13 0.18	0.18 0.21	..
77	..	..	..	..	..	..	..	..	0.01 0.09	0.01 0.09	0.01 0.10
79	..	..	..	..	..	..	..	..	0.03 0.07	0.01 0.08	..
81	..	..	..	..	..	..	..	..	..	0.04 0.04	..

TABLE V. PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES  
CROYDON MAY (Hourly observations, 1946-1955)

Dry-bulb temp. T (°F.)	Associated wet-bulb temperature (°F.)											
	T	T-2	T-4	T-6	T-8	T-10	T-12	T-14	T-16	T-18	T-20	T-22
29	0.01 100.0	..	..	..	..	..	..	..	..	..	..	..
31	0.03 99.98	0.01 99.99	..	..	..	..	..	..	..	..	..	..
33	0.07 99.91	0.04 99.95	..	..	..	..	..	..	..	..	..	..
35	0.20 99.75	0.09 99.84	..	..	..	..	..	..	..	..	..	..
37	0.30 99.92	0.3 99.55	..	..	..	..	..	..	..	..	..	..
39	0.5 97.99	0.8 98.92	0.03 98.95	..	..	..	..	..	..	..	..	..
41	0.7 94.64	1.7 97.49	0.1 97.62	..	..	..	..	..	..	..	..	..
43	1.0 88.83	2.5 93.94	0.9 95.09	0.03 95.12	..	..	..	..	..	..	..	..
45	2.0 80.87	3.5 87.83	1.4 90.44	0.2 90.69	..	..	..	..	..	..	..	..
47	2.3 70.30	3.8 78.78	1.9 82.33	0.8 83.54	0.05 83.59	..	..	..	..	..	..	..
49	2.4 57.76	4.7 68.00	2.1 72.68	1.0 74.33	0.3 74.74	..	..	..	..	..	..	..
51	1.8 42.48	4.8 55.36	2.4 60.90	1.1 63.48	0.4 64.13	0.08 64.24	..	..	..	..	..	..
53	0.9 29.27	3.7 40.68	3.2 48.76	1.2 51.90	1.0 53.38	0.2 53.63	0.03 53.66	..	..	..	..	..
55	0.4 18.42	2.7 20.37	2.5 36.08	2.1 40.96	1.1 42.90	0.4 43.38	0.05 43.43	..	..	..	..	..
57	0.3 10.94	1.3 18.02	2.2 25.27	2.0 30.48	1.4 33.26	0.6 34.10	0.08 34.18	..	..	..	..	..
59	0.08 6.64	0.7 10.64	1.5 16.42	1.8 21.47	1.6 21.68	0.9 26.06	0.2 26.30	..	..	..	..	..
61	..	0.4 6.56	0.8 9.86	1.6 14.14	1.3 17.39	1.0 19.00	0.4 19.48	0.04 19.52	..	..	..	..
63	..	0.1 3.22	0.5 6.16	1.0 8.66	1.2 11.34	1.2 13.29	0.5 13.90	0.08 13.98	..	..	..	..
65	0.01 1.08	0.01 1.79	0.1 3.12	0.6 5.56	0.6 7.06	0.9 8.54	0.6 9.29	0.1 9.40	..	..	..	..
67	..	..	0.08 1.77	0.1 3.00	0.6 4.04	0.6 5.74	0.3 6.32	0.09 6.47	0.01 6.48	..	..	..
69	..	..	0.04 1.07	0.1 1.69	0.3 2.02	0.5 4.06	0.2 4.36	0.2 4.64	0.03 4.70	..	..	..
71	..	..	..	0.09 1.03	0.2 1.55	0.3 2.30	0.3 3.12	0.09 3.22	0.08 3.30	0.03 3.33	..	..
73	..	..	0.01 0.27	0.03 0.56	0.03 0.94	0.09 1.26	0.3 1.79	0.2 2.23	0.01 2.24	..	..	..
75	..	..	..	..	0.03 0.52	0.1 0.87	0.07 1.10	0.1 1.33	0.2 1.57	..	..	..
77	..	..	..	..	0.05 0.26	0.03 0.49	0.05 0.74	0.09 0.90	0.04 1.03	0.03 1.07	..	..
79	..	..	..	..	0.03 0.13	0.05 0.21	0.04 0.41	0.08 0.61	0.03 0.68	0.03 0.77	0.01 0.78	..
81	..	..	..	..	..	0.03 0.13	0.03 0.29	0.03 0.41	0.05 0.45	0.03 0.51	0.05 0.51	..
83	..	..	..	..	..	0.03 0.10	..	0.10 0.23	0.07 0.30	0.07 0.31	0.01 0.32	..
85	..	..	..	..	..	0.03 0.03	0.03 0.07	0.03 0.10	0.03 0.10	0.03 0.10	0.05 0.10	..
87	..	..	..	..	..	..	..	..	0.01 0.01	..	..	..

TABLE VI. PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

CROYDON

JUNE  
(Hourly observations, 1946-1955)

Dry-bulb temp. T(°F.)	Associated wet-bulb temperature (°F.)												
	T	T-2	T-4	T-6	T-8	T-10	T-12	T-14	T-16	T-18	T-20	T-22	T-24
41	0.04	0.06											
	99.94	100.0	..	..	..	..	..	..	..	..	..	..	..
43	0.2	0.3											
	99.55	99.90	..	..	..	..	..	..	..	..	..	..	..
45	0.6	0.7	0.04										
	98.40	99.35	99.40	..	..	..	..	..	..	..	..	..	..
47	0.9	1.7	0.2										
	95.10	97.80	98.05	..	..	..	..	..	..	..	..	..	..
49	1.3	2.8	0.6	0.04									
	89.66	94.20	95.20	95.25	..	..	..	..	..	..	..	..	..
51	1.3	4.7	1.0	0.3	0.01	0.01							
	79.26	88.36	90.10	90.50	90.51	90.52	..	..	..	..	..	..	..
53	1.7	4.7	1.8	0.5	0.1								
	65.77	77.96	82.36	83.10	83.20	..	..	..	..	..	..	..	..
55	1.7	4.8	3.0	1.3	0.2								
	50.25	64.07	71.56	74.16	74.40	..	..	..	..	..	..	..	..
57	1.1	3.7	2.9	2.0	0.0	0.02							
	35.91	48.55	57.57	62.06	63.36	63.40	..	..	..	..	..	..	..
59	0.8	3.4	2.9	2.2	1.3	0.4	0.02						
	23.00	34.81	43.75	49.87	52.36	52.86	52.88	..	..	..	..	..	..
61	0.08	1.8	2.5	1.9	1.0	0.8	0.1						
	13.97	22.20	30.61	36.65	40.57	41.76	41.86	..	..	..	..	..	..
63	0.06	0.8	1.7	1.8	1.9	1.3	0.3						
	8.58	13.89	20.32	26.23	30.37	32.49	32.88	..	..	..	..	..	..
65	0.03	0.3	1.2	1.5	1.9	1.3	0.6	0.08					
	4.79	8.52	13.03	17.76	21.87	24.11	24.93	25.02	..	..	..	..	..
67	..	0.08	0.8	1.2	1.3	1.1	0.7	0.2	0.01				
	4.76	8.19	11.50	14.73	16.94	17.88	18.10	18.11	..	..	..	..	..
69	..	0.04	0.2	0.9	0.8	1.0	0.0	0.2	0.02				
	2.60	4.60	7.31	9.42	11.35	12.46	12.70	12.72	..	..	..	..	..
71	..	0.01	0.2	0.4	0.7	0.8	0.6	0.3	0.03				
	1.15	2.64	4.44	6.17	7.48	8.41	8.72	8.76	..	..	..	..	..
73	..	..	0.07	0.2	0.4	0.5	0.4	0.3	0.01	0.01			
	1.14	2.43	3.03	4.86	5.37	5.70	5.71	5.72	..	..	..	..	..
75	..	..	..	0.1	0.2	0.3	0.2	0.1	0.03				
	1.07	2.16	3.16	3.69	3.80	3.83	..	..	..	..	..	..	..
77	..	..	..	..	0.1	0.3	0.3	0.2					
	0.97	1.86	2.56	2.89	..	..	..	..	..	..	..	..	..
79	..	..	..	..	..	0.1	0.3	0.2	0.03	0.01			
	0.87	1.46	1.86	1.99	2.00	..	..	..	..	..	..	..	..
81	..	..	..	..	0.01	0.07	0.2	0.2	0.03	0.03			
	0.02	0.30	0.77	1.06	1.26	1.36	1.36	..	..	..	..	..	..
83	..	..	..	..	..	0.01	0.08	0.1	0.06	0.04	0.06		
	0.01	0.01	0.22	0.49	0.58	0.70	0.77	..	..	..	..	..	..
85	..	..	..	..	..	..	0.08	0.08	0.03	0.07			
	0.13	0.30	0.33	0.41	..	..	..	..	..	..	..	..	..
87	..	..	..	..	..	..	..	0.01	0.03	0.01	0.01	0.01	0.01
	0.05	0.14	0.15	0.16	..	..	..	..	..	..	..	..	..
89	..	..	..	..	..	..	..	..	0.03	0.06			
	0.04	0.10	0.15	0.16	..	..	..	..	..	..	..	..	..
91	..	..	..	..	..	..	..	..	..	0.01			
	0.01	0.01	..	..	..	..	..	..	..	..	..	..	..

TABLE VII. PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES  
CROYDON JULY  
(Hourly observations, 1946-1955)

Dry-bulb Temp. (°F.)	T	Associated wet-bulb temperature (°F.)											
		T-2	T-4	T-6	T-8	T-10	T-12	T-14	T-16	T-18	T-20	T-22	
45	0.07 99.99	0.01 100.0	..	..	..	..	..	..	..	..	..	..	
47	0.3 99.55	0.3 99.92	..	..	..	..	..	..	..	..	..	..	
49	0.4 97.96	0.8 99.25	0.07 99.32	..	..	..	..	..	..	..	..	..	
51	0.6 94.09	1.7 97.56	0.4 99.05	..	..	..	..	..	..	..	..	..	
53	0.8 86.84	2.9 93.49	1.2 95.26	0.09 95.35	..	..	..	..	..	..	..	..	
55	1.3 74.63	4.3 86.04	1.9 89.79	0.4 90.36	..	..	..	..	..	..	..	..	
57	1.0 58.72	5.2 73.33	2.8 80.44	0.9 82.29	0.1 82.46	..	..	..	..	..	..	..	
59	1.5 42.81	4.5 57.72	3.4 67.13	1.6 71.44	0.5 72.39	0.03 72.46	..	..	..	..	..	..	
61	1.0 29.73	3.4 41.31	3.1 51.72	2.4 57.73	1.4 60.44	0.3 60.89	0.03 60.93	..	..	..	..	..	
63	0.4 18.85	2.6 28.73	2.6 36.91	2.4 44.22	1.8 47.03	0.9 49.14	0.1 49.29	0.01 49.30	..	..	..	..	
65	0.09 11.20	1.5 18.45	1.9 25.73	1.8 31.31	1.8 36.22	1.1 38.03	0.3 38.44	0.04 38.49	..	..	..	..	
67	0.05 6.10	0.7 11.11	1.2 16.86	1.6 22.24	1.5 26.02	1.7 29.13	0.6 29.84	0.09 29.95	0.01 29.96	..	..	..	
69	0.2 6.05	0.9 10.36	0.9 14.91	1.6 18.69	1.1 20.97	1.0 22.38	0.1 22.49	0.01 22.51	..	..	..	..	
71	0.03 2.88	0.4 5.85	0.8 9.26	1.3 12.91	0.9 15.09	0.7 16.27	0.3 16.68	0.01 16.69	0.01 16.70	..	..	..	
73	..	..	0.1 2.85	0.4 5.42	0.8 8.03	0.9 10.38	0.7 11.66	0.3 12.14	0.1 12.25	..	..	..	
75	..	..	0.01 1.31	0.2 2.75	0.5 4.92	0.7 6.73	0.8 8.18	0.3 8.76	0.1 8.94	0.01 8.95	..	..	
77	..	..	0.03 0.59	0.07 1.30	0.3 2.54	0.5 4.21	0.6 5.32	0.3 5.97	0.2 6.25	0.07 6.33	..	..	
79	..	..	..	0.04 0.56	0.2 1.20	0.5 2.14	0.5 3.31	0.3 3.82	0.2 4.17	0.05 4.25	0.01 4.26	..	
81	..	..	..	0.03 0.18	0.08 0.52	0.1 0.96	0.2 1.40	0.4 2.07	0.1 2.28	0.1 2.43	0.03 2.46	..	
83	..	..	..	..	0.03 0.15	0.1 0.41	0.2 0.75	0.2 0.99	0.2 1.26	0.99 1.37	0.04 1.42	..	
85	..	..	..	..	..	0.05 0.12	0.04 0.28	0.07 0.42	0.03 0.46	0.04 0.53	0.01 0.55	0.01 0.56	
87	..	..	..	..	..	..	0.03 0.07	0.05 0.19	0.04 0.26	..	0.03 0.30	0.01 0.31	
89	..	..	..	..	..	..	..	0.03 0.04	0.04 0.11	0.03 0.14	0.01 0.15	0.01 0.16	
91	..	..	..	..	..	..	..	..	..	0.01 0.01	0.03 0.04	..	

TABLE VIII. PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

CROYDONAUGUST  
(hourly observations, 1946-1955)

Dry-bulb temp. T (°F.)	Associated wet-bulb temperature (°F.)												
	T	T-2	T-4	T-6	T-8	T-10	T-12	T-14	T-16	T-18	T-20	T-22	T-24
43	0.03 99.93	0.01 99.94	..	..	..	..	..	..	..	..	..	..	..
45	0.09 99.81	0.06 99.90	..	..	..	..	..	..	..	..	..	..	..
47	0.3 99.60	0.09 99.72	0.01 99.73	..	..	..	..	..	..	..	..	..	..
49	0.3 98.65	0.6 99.30	0.03 99.33	..	..	..	..	..	..	..	..	..	..
51	1.0 96.07	1.7 90.35	0.05 90.40	..	..	..	..	..	..	..	..	..	..
53	1.7 89.25	3.0 95.07	0.4 95.65	..	..	..	..	..	..	..	..	..	..
55	1.6 77.57	4.9 87.55	1.2 89.57	0.09 89.75	..	..	..	..	..	..	..	..	..
57	2.1 62.11	4.9 75.97	2.4 81.05	0.5 81.07	0.05 81.96	..	..	..	..	..	..	..	..
59	2.1 45.01	5.4 60.01	3.2 60.97	1.1 71.65	0.1 71.97	0.03 72.01	..	..	..	..	..	..	..
61	1.4 28.49	5.3 42.91	3.3 52.51	2.0 58.27	0.6 59.85	0.1 60.07	0.01 60.08	..	..	..	..	..	..
63	0.6 15.07	3.7 27.09	2.6 36.21	2.2 42.51	1.5 46.27	0.5 47.25	0.09 47.37	..	..	..	..	..	..
65	0.00 6.29	1.9 14.47	2.4 22.79	2.5 29.31	1.8 33.41	1.1 35.67	0.4 36.15	0.03 36.18	..	..	..	..	..
67	.. 6.21	0.2 12.49	1.4 18.41	1.7 22.43	1.6 24.73	1.3 25.09	0.8 25.97	0.08 ..	..	..	..	..	..
69	.. 2.21	0.08 6.01	0.6 10.89	1.2 15.11	1.5 17.53	1.3 18.53	0.6 18.89	0.3 ..	..	..	..	..	..
71	.. 2.13	0.07 5.33	0.8 9.01	1.1 11.73	0.9 12.85	0.7 13.25	0.3 13.31	0.05 ..	..	..	..	..	..
73	.. 2.06	0.00 4.46	0.3 7.04	0.7 8.86	1.3 9.28	0.8 9.38	0.3 9.39	0.07 ..	..	..	..	..	..
75	.. 0.95	0.04 1.76	0.04 3.46	0.3 4.74	0.6 5.76	0.7 5.88	0.5 5.91	0.1 ..	..	..	..	..	..
77	.. 0.91	0.00 1.42	0.1 2.52	0.2 3.10	0.2 3.62	0.7 3.64	0.3 ..	0.01 ..	..	..	..	..	..
79	.. 0.27	0.01 0.81	0.1 1.12	0.2 1.52	0.3 1.80	0.2 2.02	0.2 2.03	0.08 ..	..	..	..	..	..
81	.. 0.26	0.00 0.70	0.03 0.81	0.2 0.91	0.2 0.81	0.07 0.91	0.09 0.99	0.04 1.13	0.04 ..	..	..	..	..
83	.. 0.23	0.00 0.23	0.05 0.47	0.09 0.51	0.09 0.52	0.01 0.56	0.01 0.66	0.04 ..	0.04 ..	0.07 ..	0.03 ..	0.03 ..	0.03 ..
85	.. 0.18	0.00 0.18	0.04 0.33	0.1 0.36	0.1 0.36	0.04 ..	0.03 ..	0.01 ..	0.01 ..	0.01 ..	0.01 ..	0.01 ..	0.03 ..
87	.. 0.14	0.00 0.19	0.09 0.14	0.04 0.19	0.04 0.19	0.04 ..	0.04 ..	0.01 ..	0.01 ..	0.01 ..	0.01 ..	0.01 ..	0.03 ..
89	.. 0.05	0.00 0.05	0.05 0.05	0.09 0.05	0.09 0.05	0.05 0.05	0.05 0.05	0.01 0.01	0.01 0.01	0.01 0.01	0.01 0.01	0.01 0.01	0.03 ..

TABLE IX. PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES  
 CROYDON SEPTEMBER  
 (Hourly observations, 1946-1955)

Dry bulb temp. T (°F.)	Associated wet-bulb temperature (°F.)								
	T	T-2	T-4	T-6	T-8	T-10	T-12	T-14	T-16
35	0.04 99.97	..	..	..	..	..	..	..	..
37	0.07 99.83	0.1 99.93	..	..	..	..	..	..	..
39	0.1 99.65	0.1 99.76	..	..	..	..	..	..	..
41	0.2 99.21	0.3 99.55	0.01 99.56	..	..	..	..	..	..
43	0.6 98.50	0.4 99.01	0.04 99.05	..	..	..	..	..	..
45	0.9 96.67	0.9 97.90	0.1 98.01	..	..	..	..	..	..
47	1.3 92.93	1.8 95.77	0.2 96.10	0.01 96.11	..	..	..	..	..
49	1.7 87.00	2.5 91.63	0.6 92.67	0.06 92.80	..	..	..	..	..
51	1.6 76.45	3.0 85.30	1.3 87.43	0.2 87.87	0.06 87.94	..	..	..	..
53	1.7 66.77	4.4 76.85	1.9 80.70	0.3 81.53	0.2 81.77	0.01 81.78	..	..	..
55	1.7 52.75	5.4 65.07	2.7 70.75	1.0 72.70	0.3 73.23	0.04 73.27	..	..	..
57	2.0 50.21	5.6 50.87	3.0 57.97	1.3 60.95	0.6 61.90	0.2 62.13	..	..	..
59	1.5 24.00	4.8 36.21	3.1 43.27	1.7 47.37	1.2 49.05	0.3 49.40	0.03 49.43	..	..
61	1.3 14.65	3.3 22.50	2.7 29.91	1.8 33.87	1.3 36.27	0.4 26.75	0.04 36.80	..	..
63	0.8 6.92	2.6 13.35	1.5 17.90	1.9 22.61	1.1 24.77	0.9 25.87	0.07 25.95	..	..
65	0.1 2.51	1.2 6.12	1.2 9.95	1.1 13.00	1.4 15.81	0.7 16.87	0.2 17.07	0.01 17.08	0.01 17.09
67	.. 2.41	0.4 4.82	0.9 7.45	0.7 9.40	0.9 10.01	0.9 11.17	0.3 ..	..	..
69	.. 0.97	0.1 2.01	0.4 3.52	0.5 5.45	0.7 6.50	0.7 7.01	0.4 7.07	0.03 ..	..
71	.. 0.07	0.2 0.07	0.2 1.51	0.5 2.52	0.6 3.75	0.3 4.10	0.1 4.21	0.03 4.24	..
73	.. 0.33	0.07 0.67	0.1 0.11	0.2 1.62	0.3 2.25	0.3 2.30	0.04 0.01	0.01 2.31	..
75	.. ..	.. ..	.. ..	0.06 0.50	0.1 0.74	0.2 0.95	0.3 1.28	0.01 1.29	..
77	.. ..	.. ..	.. ..	0.03 0.26	0.07 0.44	0.1 0.58	0.01 0.59	0.03 0.62	..
79	.. ..	.. ..	.. ..	.. ..	0.03 0.23	0.06 0.34	0.04 0.38	..	..
81	.. ..	.. ..	.. ..	.. ..	.. ..	0.07 0.20	0.01 0.25	..	..
83	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	0.06 0.13	0.04 0.17	..
85	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	0.07 0.07	..

TABLE X. PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES  
 CROYDON  
 OCTOBER  
 (hourly observations, 1946-1955)

Dry-bulb temp. T (°F.)	Associated wet-bulb temperature (°F.)							
	T	T-2	T-4	T-6	T-8	T-10	T-12	T-14
25	0.05 99.96	..	..	..	..	..	..	..
27	0.2 99.87	0.04 99.91	..	..	..	..	..	..
29	0.2 99.59	0.08 99.67	..	..	..	..	..	..
31	0.7 99.04	0.3 99.39	..	..	..	..	..	..
33	0.8 97.81	0.5 98.34	0.04 98.39	..	..	..	..	..
35	0.7 96.10	0.8 97.01	0.03 97.04	..	..	..	..	..
37	0.8 94.47	0.7 95.40	0.1 95.51	..	0.01 95.52	..	..	..
39	1.3 92.09	1.0 93.67	0.2 93.90	0.01 93.91	..	..	..	..
41	1.2 88.39	1.6 90.79	0.3 91.37	0.03 91.40	..	..	..	..
43	1.3 82.53	2.6 87.19	0.5 87.99	0.2 88.27	..	..	..	..
45	1.9 76.10	3.0 81.23	1.3 83.29	0.2 83.59	0.05 83.67	..	..	..
47	2.3 67.08	4.4 74.20	1.5 76.33	0.7 77.09	0.1 77.19	0.03 77.22	..	..
49	2.4 56.18	4.3 64.78	1.8 67.50	0.5 68.13	0.05 68.19	..	..	..
51	2.9 43.71	5.3 53.70	2.4 58.08	0.8 59.00	0.1 59.13	0.01 59.14	..	..
53	2.5 31.51	5.0 40.31	2.4 45.58	1.2 47.48	0.08 47.60	0.03 47.63	..	..
55	2.0 20.78	4.7 29.01	2.1 33.31	1.2 35.68	0.6 36.38	0.03 36.42	..	..
57	1.6 12.87	3.7 18.78	2.0 22.31	1.3 24.51	0.9 25.68	0.09 25.78	0.01 25.79	..
59	0.5 5.82	2.9 11.27	1.2 13.40	1.0 15.01	0.7 15.91	0.2 16.18	0.01 16.19	..
61	0.1 1.69	1.5 5.32	1.5 7.87	0.5 8.38	0.4 9.41	0.2 9.61	0.07 9.68	..
63	0.08 0.32	0.2 1.59	0.7 3.72	0.5 4.77	0.3 5.28	0.08 5.41	..	..
65	0.01 0.01	0.1 0.24	0.4 1.31	0.3 2.74	0.4 3.29	0.2 3.50	0.05 3.55	..
67	..	..	0.04 0.13	0.3 0.30	0.4 1.43	0.1 1.58	0.01 1.59	..
69	..	..	..	0.04 0.09	0.3 0.46	0.2 0.69	0.01 0.74	..
71	..	..	..	..	0.01 0.05	0.07 0.12	0.03 0.15	0.04 0.19
73	..	..	..	..	..	0.04 0.04	..	..

TABLE XI. PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

CROYDONNOVEMBER  
(Hourly observation, 1946-1955)

Dry-bulb temp. T (°F.)	Associated wet-bulb temperature (°F.)						
	T	T-2	T-4	T-6	T-8	T-10	T-12
23	0.07 100.0	..	..	..	..	..	..
25	0.2 99.90	0.03 99.93	..	..	..	..	..
27	0.3 99.62	0.08 99.70	..	..	..	..	..
29	0.9 99.22	0.1 99.32	..	..	..	..	..
31	1.6 97.91	0.4 98.32	..	..	..	..	..
33	1.8 94.85	1.2 96.31	0.01 96.32	..	..	..	..
35	2.2 91.35	1.3 93.04	0.2 93.31	..	..	..	..
37	2.4 86.59	2.0 89.15	0.3 88.55	0.06 89.61	..	..	..
39	1.8 79.99	3.4 84.19	0.5 84.75	0.1 84.85	..	..	..
41	2.5 72.35	4.2 78.19	0.6 78.99	0.06 79.05	..	..	..
43	2.5 61.51	5.3 69.85	1.4 71.49	0.2 71.69	..	..	..
45	3.3 49.41	5.6 59.01	2.4 62.05	0.2 62.29	..	..	..
47	3.2 37.03	5.9 46.11	3.1 50.11	0.6 50.75	0.03 50.79	..	..
49	2.5 26.35	4.9 33.83	2.4 37.01	0.8 37.91	0.04 37.95	..	..
51	1.7 16.46	5.0 24.03	1.9 26.43	0.7 27.21	0.1 27.31	..	0.01 27.32
53	1.5 5.26	4.0 14.76	2.1 17.33	0.4 17.03	0.08 17.91	..	..
55	0.8 3.09	2.6 7.76	1.3 9.26	0.4 9.73	0.1 9.83	..	..
57	0.2 1.29	1.3 3.09	1.0 4.36	0.2 4.56	0.07 4.63	..	..
59	0.1 0.12	0.9 1.09	0.4 1.59	0.2 1.86	..	..	..
61	..	0.01 0.02	0.07 0.09	0.1 0.19	0.03 0.26	..	..
63	..	..	0.01 0.01	..	..	0.04 0.05	..

TABLE XII. PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES  
CROYDON DECEMBER  
(Hourly observations, 1946-1955)

Dry-bulb temp. T (°F.)	Associated wet-bulb temperatures (°F.)					
	T	T-2	T-4	T-6	T-8	T-10
17	0.01 99.98	0.01 99.99	..	..	..	..
19	0.05 99.97	..	..	..	..	..
21	0.2 99.91	0.01 99.92	..	..	..	..
23	0.5 99.63	0.08 99.71	..	..	..	..
25	0.7 99.03	0.1 99.13	..	..	..	..
27	1.3 98.00	0.3 98.33	..	..	..	..
29	1.4 95.87	0.8 96.70	0.03 96.73	..	..	..
31	1.9 92.27	1.9 94.47	0.03 94.50	..	..	..
33	2.4 86.86	2.9 90.37	0.3 90.67	..	..	..
35	3.0 80.27	3.6 84.46	0.6 85.07	..	..	..
37	3.5 72.20	4.1 77.27	0.5 77.86	0.01 77.87	..	..
39	2.7 61.36	6.0 68.70	0.9 69.67	0.08 69.76	..	..
41	2.6 51.06	5.7 58.66	1.2 60.00	0.07 60.07	0.01 60.08	..
43	2.5 41.16	5.1 48.46	1.7 50.36	0.1 50.50	..	..
45	2.5 30.43	5.6 38.66	1.9 40.86	0.2 41.06	0.03 41.10	..
47	2.6 21.43	4.9 27.93	2.1 30.56	0.3 30.86	..	0.01 30.97
49	2.3 12.79	4.7 18.83	1.4 20.43	0.5 20.96	..	..
51	1.1 5.34	4.3 10.49	1.3 11.03	0.2 12.03	0.03 12.06	..
53	0.2 1.64	2.1 4.24	0.8 5.09	0.04 5.13	..	..
55	0.1 0.33	1.0 1.44	0.5 1.94	0.05 1.99	..	..
57	..	0.2 0.23	0.1 0.34	..	..	..
59	..	..	0.03 0.03	0.01 0.04	..	..

TABLE XIII. PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES  
CROYDON DECEMBER, JANUARY AND FEBRUARY (Hourly observations, 1946-1955)

Dry-bulb temp. T(°F.)	Associated wet-bulb temperature (°F.)						
	T	T-2	T-4	T-6	T-8	T-10	T-12
7	0.01 99.82	..	..	..	..	..	..
9	0.02 99.81	..	..	..	..	..	..
11	0.02 99.78	0.01 99.79	..	..	..	..	..
13	0.04 99.75	0.01 99.76	..	..	..	..	..
15	0.03 99.70	0.01 99.71	..	..	..	..	..
17	0.1 99.65	0.02 99.67	..	..	..	..	..
19	0.2 99.51	0.04 99.55	..	..	..	..	..
21	0.3 99.20	0.1 99.31	..	..	..	..	..
23	0.7 98.67	0.2 98.90	0.01 98.91	..	..	..	..
25	1.0 97.47	0.4 97.97	0.02 98.00	..	..	..	..
27	1.5 95.17	1.2 96.47	0.1 96.57	0.01 96.58	..	..	..
29	1.8 91.76	1.7 93.67	0.1 93.77	..	..	..	..
31	2.4 86.45	3.1 89.96	0.2 90.17	..	..	..	..
33	2.9 79.04	3.8 84.05	0.4 84.46	0.01 84.47	..	..	..
35	3.4 70.23	4.5 76.14	1.1 77.35	0.01 77.36	..	..	..
37	3.4 60.81	4.5 66.83	1.2 68.24	0.1 68.35	..	..	..
39	2.8 50.50	5.2 57.41	1.2 58.93	0.2 59.14	0.01 59.15	..	..
41	2.5 40.14	5.2 47.70	1.4 49.41	0.3 49.73	0.01 49.74	..	..
43	2.4 31.70	3.7 37.64	1.9 40.00	0.2 40.31	0.02 40.33	..	..
45	2.1 23.43	3.9 29.36	1.6 31.54	0.4 32.00	0.1 32.11	..	..
47	2.2 15.40	4.3 21.33	1.7 23.30	0.5 23.94	0.04 24.00	0.01 24.01	..
49	1.5 0.29	3.7 13.20	1.3 14.03	0.3 15.18	0.05 15.24	0.02 15.26	..
51	0.7 3.34	2.6 6.79	1.0 8.00	0.3 8.33	0.03 8.30	0.01 8.39	..
53	0.1 0.08	1.4 2.64	0.7 3.49	0.2 3.70	0.03 3.73	0.01 3.75	..
55	0.04 0.12	0.6 0.78	0.3 1.14	0.1 1.29	0.01 1.30	..	0.01 1.31
57	.. 0.08	0.07 0.08	0.05 0.14	0.04 0.20	0.03 0.25	..	..
59	.. ..	.. 0.01	0.01 0.02	0.01 0.04	0.01 0.06	..	..
61	.. ..	.. ..	.. ..	.. ..	.. ..	0.01 0.01	0.02

TABLE XIV. PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURE  
CROYDON

Dry-bulb temp. T(°F.)	Associated wet-bulb temperature (°F.)											
	T	T-2	T-4	T-6	T-8	T-10	T-12	T-14	T-16	T-18	T-20	T-22
19	0.0	100.0	..	..	..	..	..	..	..	..	..	..
21	0.01	100.0	..	..	..	..	..	..	..	..	..	..
23	0.02	0.01	99.98	99.99	..	..	..	..	..	..	..	..
25	0.2	0.02	99.94	99.96	..	..	..	..	..	..	..	..
27	0.3	0.1	99.63	99.74	..	..	..	..	..	..	..	..
29	0.4	0.3	99.00	99.33	99.34	..	..	..	..	..	..	..
31	0.7	0.9	97.46	98.64	98.63	..	..	..	..	..	..	..
33	1.1	1.4	94.89	96.76	97.00	..	..	..	..	..	..	..
35	1.4	1.6	91.45	93.79	94.26	94.30	..	..	..	..	..	..
37	1.6	1.8	86.23	90.05	90.79	90.86	90.87	..	..	..	..	..
39	1.4	2.5	80.20	84.63	86.65	86.89	..	..	..	..	..	..
41	1.6	3.3	72.56	78.84	80.73	81.15	81.19	..	..	..	..	..
43	1.5	3.8	62.93	70.96	73.90	74.73	74.85	74.86	..	..	..	..
45	1.7	3.7	52.86	61.43	65.66	66.80	67.03	67.05	..	..	..	..
47	1.8	3.8	42.19	51.16	56.03	58.06	58.40	58.43	..	..	..	..
49	1.7	3.7	31.54	40.39	45.56	48.33	49.06	49.10	..	..	..	..
51	1.0	3.2	20.19	29.84	34.99	37.96	39.33	39.46	..	..	..	..
53	0.5	2.2	12.37	19.19	25.64	28.69	30.36	30.83	30.86	..	..	..
55	0.1	1.4	7.06	11.87	16.49	19.84	21.69	22.26	22.33	..	..	..
57	0.1	0.5	3.89	6.96	10.37	13.49	15.34	16.19	16.26	..	..	..
59	0.02	0.2	2.20	3.79	6.36	8.67	10.59	11.44	11.59	..	..	..
61	..	0.1	2.18	3.57	5.54	7.05	8.07	8.32	8.57	..	..	..
63	..	0.03	1.09	2.08	3.17	4.44	5.35	5.77	5.82	..	..	..
65	..	..	0.03	1.06	1.95	2.64	3.41	3.82	3.94	..	..	..
67	..	..	0.03	0.61	1.03	1.72	2.11	2.48	2.59	2.61	..	..
69	..	..	0.01	0.35	0.58	0.97	1.46	1.65	1.82	1.89	..	..
71	..	..	..	0.03	0.34	0.54	0.83	1.12	1.21	1.28	1.31	..
73	..	..	..	0.01	0.18	0.31	0.44	0.63	0.82	0.85	0.88	..
75	..	..	..	..	0.01	0.01	0.03	0.03	0.03	0.08	0.01	..
77	..	..	..	..	0.02	0.02	0.02	0.02	0.02	0.01	..	..
79	..	..	..	..	0.09	0.16	0.25	0.32	0.38	0.39	..	..
81	..	..	..	..	0.04	0.07	0.13	0.20	0.24	0.28	..	..
83	..	..	..	..	..	..	0.01	0.03	0.01	0.02	..	0.01
85	..	..	..	..	..	..	0.01	0.01	0.02	0.03	..	0.10
87	..	..	..	..	..	..	..	..	0.01	..	..	..

TABLE XV. PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES  
CROYDON  
JUNE, JULY AND AUGUST  
(Hourly observations, 1946-1955)

Dry-bulb temp., T (°F.)	Associated wet-bulb temperature (°F.)												
	T	T-2	T-4	T-6	T-8	T-10	T-12	T-14	T-16	T-18	T-20	T-22	T-24
41	0.01 0.02												
	99.95 99.97	..	..	..	..	..	..	..	..	..	..	..	..
43	0.00 0.1												
	99.82 99.94	..	..	..	..	..	..	..	..	..	..	..	..
45	0.3 0.3	0.01											
	99.35 99.74	99.76	..	..	..	..	..	..	..	..	..	..	..
47	0.5 0.7	0.07											
	98.02 90.05	99.14	..	..	..	..	..	..	..	..	..	..	..
49	0.7 1.4	0.2	0.01										
	95.33 97.52	97.85	97.87	..	..	..	..	..	..	..	..	..	..
51	1.0 2.7	0.5	0.1	0.01	0.01								
	89.67 94.63	95.42	95.55	95.56	95.57	..	..	..	..	..	..	..	..
53	1.4 3.8	1.1	0.2	0.03									
	80.51 80.67	90.93	91.22	91.25	..	..	..	..	..	..	..	..	..
55	1.5 4.7	2.0	0.6	0.07									
	67.39 79.11	83.47	84.63	84.72	..	..	..	..	..	..	..	..	..
57	1.4 4.6	2.7	1.1	0.3	0.01								
	52.15 65.89	72.91	75.27	75.83	75.85	..	..	..	..	..	..	..	..
59	1.5 4.4	3.2	1.6	0.6	0.2	0.01							
	36.00 50.75	59.09	64.21	65.47	65.73	65.74	..	..	..	..	..	..	..
61	0.8 3.5	3.0	2.1	1.3	0.4	0.05							
	23.06 35.38	44.85	50.79	53.51	54.17	54.23	..	..	..	..	..	..	..
63	0.4 2.4	2.3	2.1	1.7	0.9	0.2	0.01						
	13.56 23.06	31.08	37.55	41.39	42.01	43.07	43.08	..	..	..	..	..	..
65	0.07 1.2	1.8	1.9	1.8	1.2	0.4	0.05						
	7.23 13.56	20.26	25.98	30.35	32.49	33.01	33.07	..	..	..	..	..	..
67	0.02 0.3	1.1	1.5	1.5	1.4	0.7	0.1	0.01					
	3.40 7.16	12.29	17.19	21.01	23.58	24.52	24.64	24.65	..	..	..	..	..
69	.. 0.1	0.6	1.0	1.3	1.2	0.8	0.2	0.01					
	3.46 6.84	10.07	14.27	16.59	17.76	18.00	18.02	..	..	..	..	..	..
71	.. 0.01	0.2	0.7	1.0	0.9	0.7	0.3	0.03	0.01				
	1.63 3.36	6.14	9.17	11.27	12.39	12.76	12.80	12.81	..	..	..	..	..
73	.. ..	0.06	0.3	0.6	0.9	0.6	0.3	0.06	0.01				
	1.62 3.15	5.23	7.26	8.46	8.88	8.95	8.96	..	..	..	..	..	..
75	.. ..	0.01	0.1	0.3	0.5	0.6	0.3	0.08	0.01				
	0.64 1.56	1.56	2.79	4.27	5.40	6.00	6.12	6.13	..	..	..	..	..
77	.. ..	0.01	0.02	0.2	0.3	0.5	0.3	0.2	0.03				
	0.21 0.63	1.45	2.38	3.36	3.89	4.19	4.23	..	..	..	..	..	..
79	.. ..	..	0.01	0.07	0.2	0.3	0.3	0.1	0.05	0.01			
	0.20 0.60	1.22	1.85	2.33	2.56	2.66	2.67	..	..	..	..	..	..
81	.. ..	0.01	0.03	0.07	0.2	0.2	0.09	0.06	0.02				
	0.07 0.19	0.52	0.94	1.27	1.45	1.58	1.63	..	..	..	..	..	..
83	.. ..	..	0.01	0.04	0.1	0.1	0.09	0.05	0.02				
	0.06 0.15	0.06	0.15	0.41	0.63	0.76	0.85	0.92	0.95	..	..	..	..
85	.. ..	..	..	0.02	0.01	0.06	0.07	0.03	0.01	0.01			
	0.05 0.10	0.05	0.10	0.26	0.38	0.42	0.46	..	..	..	..	..	..
87	.. ..	..	..	..	0.01	0.02	0.05	0.02	0.01	0.01			
	0.03 0.07	0.03	0.03	0.07	0.17	0.22	0.23	0.24	0.25	..	..	..	..
89	.. ..	..	..	..	..	0.01	0.01	0.04	0.03				
	0.02 0.04	0.02	0.04	0.04	0.12	0.16	0.19	0.20	0.21	..	..	..	..
91	.. ..	..	..	..	..	..	0.01	0.01	0.01	0.01			
	0.02 0.03	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	..	..	..	..

TABLE XVI. PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES  
CROYDON SEPTEMBER, OCTOBER AND NOVEMBER (Hourly observations, 1946-1955)

Dry-bulb temp. T T (°F.)	T	T-2	T-4	T-6	T-8	T-10	T-12	T-14	T-16
23	0.02								
	100.0	..	..	..	..	..	..	..	..
25	0.08	0.01							
	99.97	99.98	..	..	..	..	..	..	..
27	0.2	0.04							
	99.85	99.89	..	..	..	..	..	..	..
29	0.4	0.06							
	99.59	99.65	..	..	..	..	..	..	..
31	0.8	0.2							
	98.96	99.19	..	..	..	..	..	..	..
33	0.9	0.6	0.02						
	97.46	98.16	98.19	..	..	..	..	..	..
35	1.0	0.7	0.06						
	95.72	96.56	96.66	..	..	..	..	..	..
37	1.1	0.9	0.1	0.01	0.01				
	93.59	94.72	94.86	94.88	94.89	..	..	..	..
39	1.1	1.5	0.2	0.04					
	90.56	92.49	92.72	92.76	..	..	..	..	..
41	1.3	2.0	0.3	0.03					
	86.71	89.46	89.09	89.92	..	..	..	..	..
43	1.5	2.8	0.6	0.1					
	80.87	85.41	86.16	86.39	..	..	..	..	..
45	2.0	3.2	1.3	0.1	0.02				
	73.57	79.37	81.11	81.26	81.29	..	..	..	..
47	2.3	4.0	1.6	0.4	0.04	0.01			
	65.64	71.97	74.17	74.61	74.66	74.67	..	..	..
49	2.2	3.9	1.6	0.5	0.03				
	56.53	63.34	65.67	66.27	66.31	..	..	..	..
51	2.1	4.4	1.9	0.6	0.09	0.01	0.01		
	46.08	54.33	57.24	57.97	58.07	58.08	58.09	..	..
53	1.9	4.5	2.2	0.6	0.1	0.01			
	35.75	43.98	47.03	48.04	48.97	49.98	..	..	..
55	1.5	4.2	2.0	0.9	0.3	0.02			
	25.67	33.85	37.58	39.23	39.64	39.67	..	..	..
57	1.3	3.5	2.0	0.9	0.5	0.1	0.01		
	17.35	24.17	28.15	29.88	30.63	30.74	30.75	..	..
59	0.7	2.9	1.6	1.0	0.6	0.2	0.01		
	9.89	16.05	19.37	21.35	22.18	22.43	22.44	..	..
61	0.5	1.6	1.4	0.8	0.6	0.2	0.04		
	5.37	9.19	12.45	14.17	15.15	15.38	15.43	..	..
63	0.3	0.9	0.7	0.8	0.5	0.3	0.02		
	2.46	4.87	7.09	8.95	9.07	10.25	10.28	..	..
65	0.04	0.4	0.5	0.6	0.6	0.3	0.08	0.01	0.01
	0.85	2.16	3.67	5.19	6.25	6.67	6.75	6.76	6.77
67	..	0.1	0.3	0.3	0.5	0.3	0.1		
	0.01	1.72	2.73	3.65	4.11	4.23	..	..	
69	..	0.03	0.1	0.2	0.3	0.3	0.1	0.01	
	0.34	0.71	1.32	2.03	2.45	2.61	2.63	..	
71	..	..	0.1	0.1	0.2	0.2	0.1	0.05	0.01
	0.31	0.58	0.99	1.40	1.52	1.58	1.59		
73	..	..	0.2	0.03	0.1	0.1	0.1	0.01	0.01
	0.10	0.21	0.38	0.59	0.80	0.82	0.83		
75	..	..	..	..	0.02	0.03	0.1	0.0	0.01
	0.16	0.23	0.34	0.34	0.45	0.46			
77	..	..	..	..	0.1	0.2	0.3	0.01	0.01
	0.08	0.14	0.18	0.19	0.19	0.20			
79	..	..	..	..	0.01	0.02	0.01		
	0.07	0.07	0.11	0.12	..				
81	..	..	..	..	..	0.02	0.01		
	0.06	0.06	0.06	0.08	..				
83	..	..	..	..	..	..	0.02	0.01	
	0.04	0.04	0.04	0.05	..				
85	..	..	..	..	..	..	0.02	0.02	
	0.02	0.02	0.02	0.02	..				

TABLE XVII. PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

CROYDONANNUAL

(Hourly observations, 1946-1955)

Dry-bulb temp. T. (°F.)	T	T-2	T-4	T-6	Associated wet-bulb temperature (°F.)						T-16	T-18
7	0.0 99.97	..	..	..	..	..	..	..	..	..	..	..
9	0.01 99.97	..	..	..	..	..	..	..	..	..	..	..
11	0.01 99.96	0.0 99.96	..	..	..	..	..	..	..	..	..	..
13	0.01 99.95	0.0 99.95	..	..	..	..	..	..	..	..	..	..
15	0.01 99.94	0.0 99.94	..	..	..	..	..	..	..	..	..	..
17	0.02 99.92	0.01 99.93	..	..	..	..	..	..	..	..	..	..
19	0.04 99.89	0.01 99.90	..	..	..	..	..	..	..	..	..	..
21	0.06 99.83	0.02 99.85	..	..	..	..	..	..	..	..	..	..
23	0.2 99.70	0.06 99.77	0.0 99.77	..	..	..	..	..	..	..	..	..
25	0.3 99.39	0.1 99.50	0.01 99.51	..	..	..	..	..	..	..	..	..
27	0.5 98.76	0.3 99.09	0.01 99.10	0.0 99.10	..	..	..	..	..	..	..	..
29	0.6 99.70	0.5 98.26	0.03 98.29	..	..	..	..	..	..	..	..	..
31	1.0 95.89	1.0 97.10	0.06 97.16	..	..	..	..	..	..	..	..	..
33	1.2 92.02	1.4 94.89	0.2 95.10	0.0 95.10	..	..	..	..	..	..	..	..
35	1.4 89.51	1.7 91.82	0.4 92.29	0.01 92.30	..	..	..	..	..	..	..	..
37	1.5 85.66	1.8 88.11	0.5 88.72	0.06 88.79	0.0 88.79	..	..	..	..	..	..	..
39	1.3 80.88	2.3 84.16	0.5 84.81	0.1 84.92	0.01 84.93	..	..	..	..	..	..	..
41	1.3 75.46	2.6 79.58	0.7 80.56	0.1 80.71	0.01 80.72	..	..	..	..	..	..	..
43	1.4 69.12	2.8 74.16	1.1 75.68	0.2 75.96	0.04 76.01	0.0 76.01	..	..	..	..	..	..
45	1.5 62.60	2.8 67.72	1.3 69.96	0.3 70.38	0.07 70.46	0.01 70.47	..	..	..	..	..	..
47	1.7 55.58	3.2 61.10	1.3 63.42	0.6 64.36	0.1 64.48	0.01 64.49	..	..	..	..	..	..
49	1.5 48.11	3.2 53.88	1.3 56.20	0.6 57.22	0.3 57.56	0.02 57.58	0.0 57.58	..	..	..	..	..
51	1.2 40.31	3.2 46.61	1.4 49.18	0.6 50.20	0.3 50.62	0.03 50.66	0.0 50.66	..	..	..	..	..
53	1.0 32.77	3.0 39.11	1.5 42.21	0.5 43.38	0.3 43.80	0.1 43.92	0.01 43.93	..	..	..	..	..

TABLE XVII (continued)

Dry-bulb temp. T (°F.)	Associated wet-bulb temperature (°F.)												
	T	T-2	T-4	T-6	T-8	T-10	T-12	T-14	T-16	T-18	T-20	T-22	T-24
55	0.8 25.31	2.7 31.77	1.5 35.11	0.8 36.71	0.4 37.38	0.1 37.50	0.02 37.52	..	..	..	..	..	..
57	0.7 18.59	2.2 24.51	1.5 28.27	0.8 30.11	0.5 30.91	0.2 31.18	0.02 31.20	..	..	..	..	..	..
59	0.5 12.36	1.9 17.89	1.3 21.61	0.9 23.87	0.6 24.91	0.2 25.21	0.06 25.28	0.0 25.28	..	..	..	..	..
61	0.3 7.81	1.3 11.86	1.2 15.49	0.9 17.91	0.6 19.27	0.3 19.71	0.09 19.81	0.01 19.82	..	..	..	..	..
63	0.2 4.42	0.8 7.51	0.8 10.26	0.8 12.69	0.7 14.21	0.5 14.97	0.1 15.11	0.01 15.12	0.0 15.12	..	..	..	..
65	0.03 2.18	0.4 4.22	0.6 6.51	0.7 8.46	0.7 10.09	0.5 10.91	0.2 11.17	0.03 11.21	0.0 11.21	..	..	..	..
67	0.0 1.01	0.1 2.15	0.4 3.79	0.6 5.48	0.5 6.73	0.5 7.66	0.2 7.98	0.04 8.04	0.01 8.05	..	..	..	..
69	.. 1.01	0.03 2.05	0.2 3.29	0.3 4.38	0.4 5.13	0.4 5.56	0.3 5.56	0.09 5.68	0.01 5.70	..	..	..	..
71	.. 0.46	0.07 0.98	0.2 1.82	0.3 2.76	0.3 3.45	0.2 3.80	0.1 3.93	0.02 3.96	0.01 3.97	0.0 3.97	..	..	..
73	.. 0.46	0.02 0.91	0.09 1.55	0.2 2.19	0.3 2.58	0.2 2.73	0.1 2.76	0.02 2.77	0.01 2.77	..	..	..	..
75	.. 0.15	0.0 0.44	0.03 0.80	0.1 1.24	0.2 1.58	0.2 1.77	0.1 1.82	0.04 1.83	0.01 1.83	..	..	..	..
77	.. 0.03	0.0 0.15	0.01 0.41	0.05 0.67	0.09 0.91	0.1 1.05	0.07 1.15	0.05 1.15	0.01 1.15	0.0 1.15	..	..	..
79	.. 0.03	.. 0.14	0.0 0.35	0.02 0.52	0.07 0.52	0.09 0.52	0.08 0.56	0.04 0.73	0.02 0.77	0.0 0.77	..	..	..
81	.. 0.0	.. 0.03	0.0 0.12	0.01 0.26	0.02 0.34	0.05 0.40	0.05 0.40	0.03 0.43	0.02 0.45	0.01 0.45	..	..	..
83	.. 0.0	.. 0.02	0.0 0.09	0.01 0.17	0.03 0.20	0.04 0.20	0.02 0.23	0.02 0.24	0.01 0.25	0.01 0.25	..	..	..
85	.. 0.0	.. 0.0	.. 0.01	0.0 0.01	0.0 0.01	0.01 0.05	0.02 0.09	0.02 0.10	0.01 0.11	0.01 0.11	0.0 0.11	0.0 0.11	0.0 0.11
87	.. 0.0	.. 0.0	.. 0.0	.. 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.01 0.02	0.01 0.04	0.0 0.04	0.0 0.04	0.0 0.04	0.0 0.04
89	.. 0.0	.. 0.0	.. 0.0	.. 0.0	.. 0.0	.. 0.0	0.0 0.0	0.0 0.0	0.01 0.01	0.01 0.02	0.0 0.02	0.0 0.02	.. ..
91	.. 0.0	.. 0.0	.. 0.0	.. 0.0	.. 0.0	.. 0.0	.. 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	.. ..	.. ..

TABLE NO. XVIII. PERCENTAGE NUMBER OF HOURS WITH DRY-BULB  
DRY-BULB TEMPERATURE DEGS. F.

	06.1	08.1	10.1	12.1	14.1	16.1	18.1	20.1	22.1	24.1	26.1	28.1	30.1	32.1	34.1	36.1	38.1	40.1	42.1	44.1
	to																			
	08.0	10.0	12.0	14.0	16.0	18.0	20.0	22.0	24.0	26.0	28.0	30.0	32.0	34.0	36.0	38.0	40.0	42.0	44.0	46.0
JANUARY	0.04	0.01	0.05	0.04	0.04	0.2	0.3	0.4	1.1	1.5	2.8	3.6	6.7	8.0	10.5	10.0	8.6	9.5	9.8	6.6
FEBRUARY	..	0.06	0.1	0.1	0.07	0.2	0.2	0.4	1.2	1.8	3.8	5.0	6.4	7.7	9.0	9.4	9.3	8.9	8.6	7.2
MARCH	..	..	..	..	..	..	0.01	0.04	0.1	0.7	1.1	1.5	4.8	7.1	8.5	7.7	7.6	8.5	9.7	8.6
APRIL	..	..	..	..	..	..	..	..	..	..	..	0.2	0.5	1.1	1.7	3.7	5.6	7.9	9.4	9.8
MAY	..	..	..	..	..	..	..	..	..	..	..	0.01	0.04	0.1	0.3	0.6	1.3	2.5	4.4	7.1
JUNE	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.1	0.1	1.3
JULY	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.08
AUGUST	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.04
SEPTEMBER	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.04	0.2	0.2	0.5	1.0
OCTOBER	..	..	..	..	..	..	..	..	..	..	..	0.05	0.2	0.3	1.0	1.4	1.5	1.6	2.5	3.1
NOVEMBER	..	..	..	..	..	..	..	..	..	..	..	0.07	0.2	0.4	1.1	2.0	3.0	3.7	4.8	5.8
DECEMBER	..	..	..	..	..	0.03	0.05	0.2	0.5	0.8	1.6	2.2	3.8	5.6	7.2	8.1	9.7	9.6	9.4	10.2
DECEMBER																				
JANUARY	0.01	0.02	0.06	0.05	0.04	0.1	0.2	0.3	0.9	1.3	2.7	3.5	5.6	7.1	8.9	9.1	9.2	9.4	9.3	8.0
FEBRUARY																				
MARCH																				
APRIL	..	..	..	..	..	..	0.0	0.01	0.05	0.2	0.4	0.7	1.8	2.8	3.5	4.0	4.8	6.3	7.8	8.5
MAY																				
JUNE																				
JULY	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.03	0.2	0.5
AUGUST																				
SEPTEMBER																				
OCTOBER	..	..	..	..	..	..	..	..	..	..	..	0.02	0.08	0.2	0.5	1.0	1.5	1.7	2.2	2.9
NOVEMBER																				
ANNUAL	0.0	0.01	0.01	0.01	0.01	0.03	0.05	0.08	0.2	0.4	0.8	1.2	2.1	2.8	3.5	3.8	4.2	4.8	5.5	5.9

## TEMPERATURE WITHIN RANGES OF 2° F., CROYDON 1946-1955

## DRY-BULB TEMPERATURE DEGS. F.

46.1	48.1	50.1	52.1	54.1	56.1	58.1	60.1	62.1	64.1	66.1	68.1	70.1	72.1	74.1	76.1	78.1	80.1	82.1	84.1	86.1	88.1	90.1
to																						
48.0	50.0	52.0	54.0	56.0	58.0	60.0	62.0	64.0	66.0	68.0	70.0	72.0	74.0	76.0	78.0	80.0	82.0	84.0	86.0	88.0	90.0	92.0
8.4	5.9	3.4	1.8	0.9	0.07	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7.8	5.6	3.9	2.2	0.6	0.2	0.04	0.04	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9.0	8.0	6.2	4.3	2.8	1.4	0.8	0.5	0.4	0.1	0.08	0.07	0.04	..	..	..	..	..	..	..	..	..	..
10.7	10.6	9.6	8.2	6.5	4.4	3.1	2.2	1.5	1.1	0.8	0.5	0.3	0.4	0.08	0.03	0.04	0.04	..	..	..	..	..
8.9	10.4	10.6	10.2	9.3	7.8	6.7	5.5	4.7	2.9	1.8	1.4	1.1	0.7	0.5	0.3	0.3	0.2	0.2	0.08	0.01	..	..
27.	4.8	7.3	8.8	11.0	10.5	11.0	9.0	7.9	6.0	5.4	3.9	3.0	1.9	1.0	0.9	0.6	0.6	0.4	0.3	0.07	0.08	0.01
0.5	1.2	2.7	5.0	7.9	10.0	11.5	11.6	10.7	8.7	7.5	5.8	4.4	3.3	2.7	2.0	1.9	1.1	0.8	0.3	0.2	0.1	0.04
0.4	0.9	2.7	5.9	7.8	9.9	11.9	12.8	11.3	10.2	7.2	5.5	4.0	3.4	2.3	1.5	0.9	0.5	0.3	0.2	0.1	0.07	..
3.3	4.9	6.1	8.5	11.0	12.7	12.6	10.8	9.0	6.1	4.0	2.7	2.0	1.0	0.6	0.3	0.1	0.08	0.08	0.07	..	..	..
9.0	9.0	11.5	11.2	10.7	9.4	6.4	4.3	1.9	2.0	0.8	0.5	0.1	0.04	..	..	..	..	..	..	..	..	..
12.8	10.5	9.4	8.1	5.2	2.8	1.7	0.2	0.06	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10.0	8.9	7.0	3.0	1.6	0.4	0.04	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8.7	6.8	4.8	2.4	1.1	0.2	0.03	0.01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9.5	9.7	8.8	7.5	6.2	4.5	3.6	2.7	2.2	1.4	0.9	0.7	0.5	0.4	0.2	0.1	0.1	0.08	0.08	0.03	0.0	..	..
1.2	2.3	4.2	6.5	8.9	10.1	11.5	11.2	10.0	8.6	6.7	5.1	3.8	2.9	2.0	1.5	1.2	0.7	0.5	0.2	0.1	0.09	0.02
3.4	8.2	9.0	9.2	9.0	8.3	6.9	5.1	3.6	2.7	1.6	1.1	0.7	0.4	0.2	0.08	0.04	0.03	0.03	0.02	..	..	..
6.9	6.8	6.8	6.4	6.3	5.8	5.5	4.8	4.0	3.2	2.3	1.7	1.3	0.9	0.6	0.4	0.3	0.2	0.1	0.07	0.03	0.02	0.0

TABLE NO. XIX. PERCENTAGE NUMBER OF HOURS WITH WET-BULB

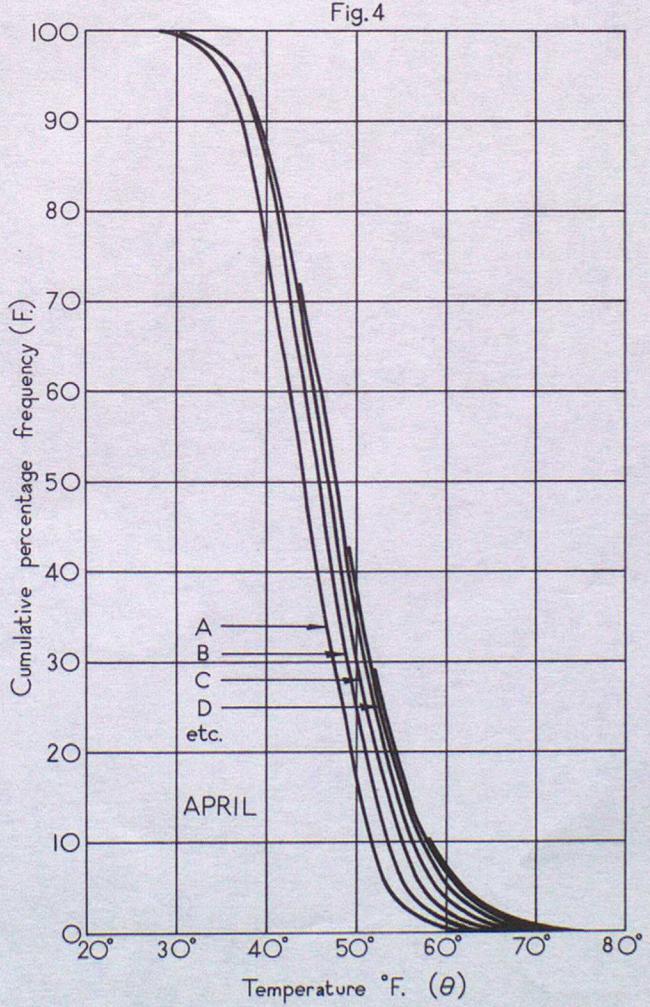
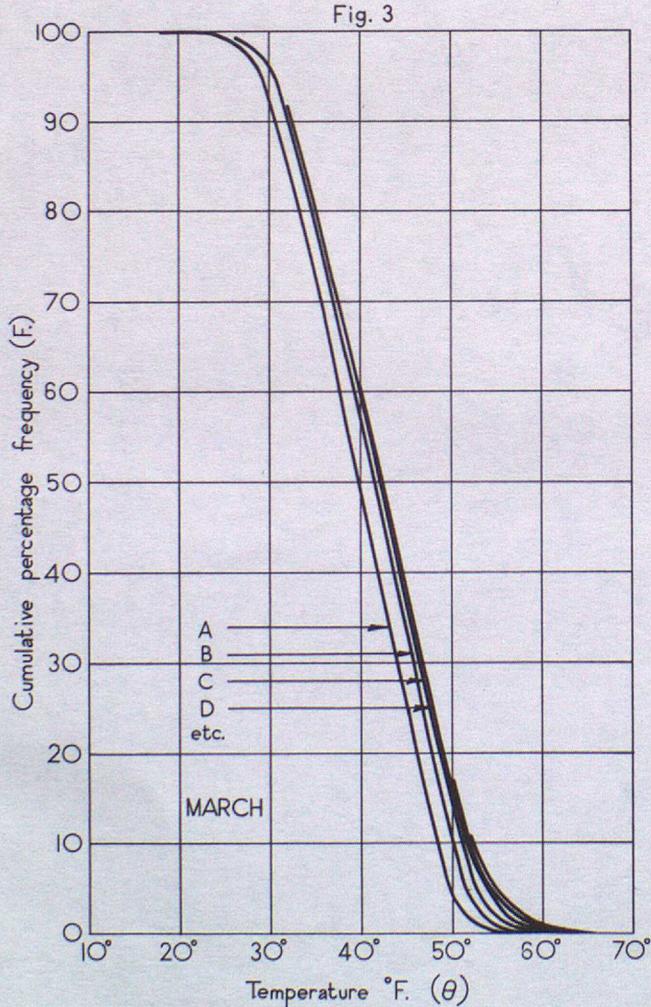
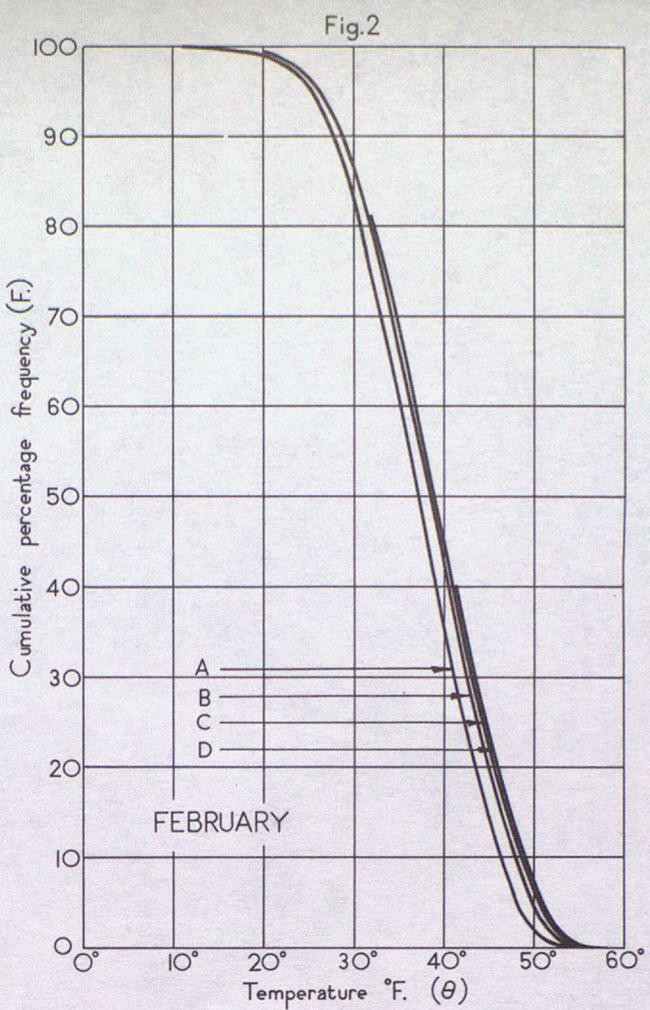
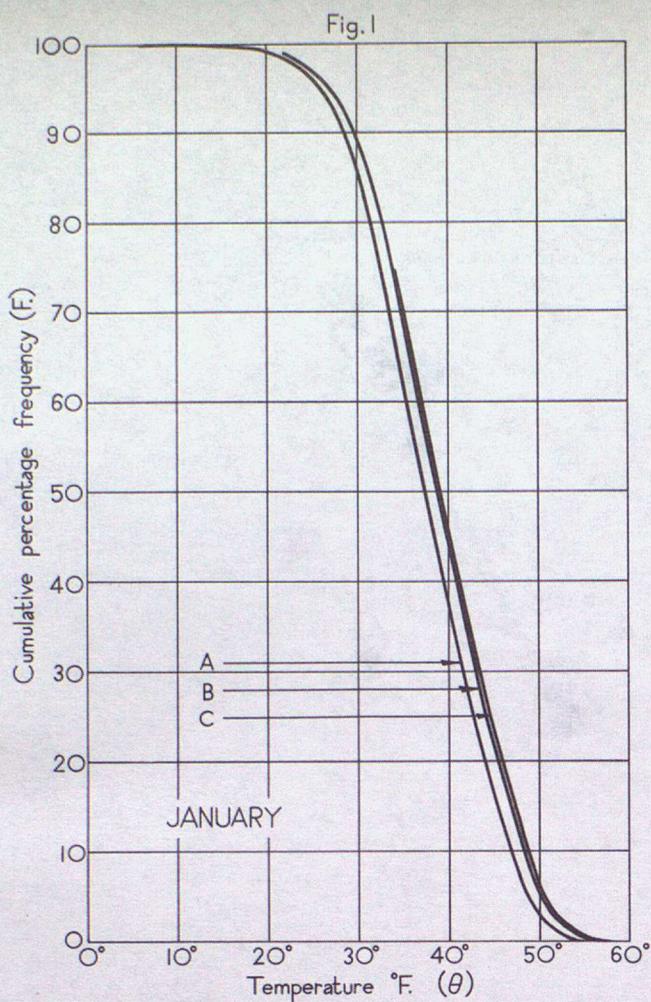
## WET BULB TEMPERATURE DEGS. F.

	06.1	08.1	10.1	12.1	14.1	16.1	18.1	20.1	22.1	24.1	26.1	28.1	30.1	32.1	34.1	36.1	38.1	40.1	42.1	44.1		
	to																					
	08.0	10.0	12.0	14.0	16.0	18.0	20.0	22.0	24.0	26.0	28.0	30.0	32.0	34.0	36.0	38.0	40.0	42.0	44.0	46.0		
JANUARY	0.04	0.03	0.04	0.04	0.09	0.2	0.3	0.5	1.6	2.3	3.4	5.7	7.9	11.1	10.5	9.2	10.6	9.0	6.8	7.4		
FEBURARY	..	0.07	0.1	0.1	0.06	0.2	0.3	0.8	1.3	3.4	4.5	6.5	8.9	8.5	9.1	10.9	10.0	8.6	7.6	7.5		
MARCH	..	..	..	..	..	..	0.03	0.05	0.2	0.8	1.9	4.4	7.4	8.4	8.8	10.0	9.2	10.2	8.8	9.3		
APRIL	..	..	..	..	..	..	..	..	..	..	0.01	0.4	0.8	1.8	3.4	6.9	10.3	13.2	13.6	12.6		
MAY	..	..	..	..	..	..	..	..	..	..	..	0.03	0.07	0.2	0.5	1.3	3.2	5.7	8.0	10.6		
JUNE	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.06	0.4	1.1	3.3	
JULY	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.01	0.4		
AUGUST	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.01	0.1	0.2	
SEPTEMBER	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
OCTOBER	..	..	..	..	..	..	..	..	..	..	0.09	0.2	0.5	1.3	1.7	1.5	2.6	3.8	5.8	6.5	9.0	
NOVEMBER	..	..	..	..	..	..	..	..	..	..	0.1	0.2	0.4	1.4	3.0	3.5	4.7	6.6	7.7	10.9	12.1	12.3
DECEMBER	..	..	..	..	..	0.01	0.01	0.07	0.2	0.6	1.1	2.1	3.6	5.5	6.5	8.0	10.9	10.3	9.9	10.8	9.0	
DECEMBER																						
JANUARY	0.01	0.03	0.05	0.05	0.06	0.1	0.2	0.5	1.2	2.2	3.3	5.3	7.4	8.7	9.2	10.3	10.3	9.2	8.4	8.0		
FEBRUARY																						
MARCH																						
APRIL	..	..	..	..	..	..	..	0.01	0.02	0.08	0.3	0.6	1.6	2.8	3.5	4.2	6.1	7.5	9.7	10.1	10.8	
MAY																						
JUNE																						
JULY																						
AUGUST																			0.02	0.1	0.4	1.3
SEPTEMBER																						
OCTOBER																						
NOVEMBER																						
ANNUAL	0.0	0.01	0.01	0.01	0.01	0.03	0.06	0.1	0.3	0.6	1.0	1.9	2.9	3.5	3.9	4.9	5.4	6.2	6.4	7.1		

0  
TEMPERATURE WITHIN RANGES OF 2 F., CROYDON 1946-1955

WET BULB TEMPERATURE DEGS. F.

46.1	48.1	50.1	52.1	54.1	56.1	58.1	60.1	62.1	64.1	66.1	68.1	70.1	72.1	74.1	76.1	78.1	80.1	82.1	84.1	86.1	88.1	90.1
to																						
48.0	50.0	52.0	54.0	56.0	58.0	60.0	62.0	64.0	66.0	68.0	70.0	72.0	74.0	76.0	78.0	80.0	82.0	84.0	86.0	88.0	90.0	92.0
6.4	3.7	1.9	0.9	0.03	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6.0	3.4	1.8	0.2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9.2	6.9	2.9	1.1	0.3	0.1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10.6	9.3	8.0	4.4	2.2	1.3	0.7	0.2	0.1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12.5	15.3	13.2	10.9	7.4	4.3	3.4	1.6	0.7	0.6	0.3	0.1	0.09	0.03	..	..	..	..	..	..	..	..	..
5.5	10.4	13.5	15.5	14.3	12.9	8.9	5.5	3.7	2.1	1.5	0.9	0.3	0.03	..	..	..	..	..	..	..	..	..
1.5	3.9	7.2	12.3	16.0	16.1	13.2	10.9	7.6	5.1	3.1	1.5	0.6	0.4	0.2	..	..	..	..	..	..	..	..
0.9	2.6	6.8	11.6	15.4	17.2	16.6	13.4	8.9	4.1	1.2	0.7	0.3	..	..	..	..	..	..	..	..	..	..
5.9	8.4	11.6	14.3	14.3	14.2	9.4	7.8	4.4	1.6	0.7	0.3	..	..	..	..	..	..	..	..	..	..	..
10.8	12.5	12.1	10.7	7.9	7.1	4.1	1.4	0.3	0.01	..	..	..	..	..	..	..	..	..	..	..	..	..
10.5	9.9	7.3	5.3	2.7	1.2	0.1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8.6	7.4	3.7	1.3	0.4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7.1	4.9	2.5	0.8	0.1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10.8	10.5	8.1	5.5	3.3	1.9	1.4	0.6	0.3	0.2	0.1	0.03	0.05	0.01	..	..	..	..	..	..	..	..	..
2.6	5.6	9.1	13.1	15.2	15.4	12.9	10.0	6.8	3.8	1.9	1.1	0.4	0.2	0.06	..	..	..	..	..	..	..	..
9.1	10.3	10.3	10.1	8.3	7.5	4.5	3.0	1.6	0.5	0.2	0.1	..	..	..	..	..	..	..	..	..	..	..
7.4	7.8	7.5	7.4	6.8	4.7	3.4	2.2	1.1	0.6	0.3	0.1	0.04	0.01	..	..	..	..	..	..	..	..	..



Ogives of monthly frequency of hourly values of dry-bulb and associated wet-bulb temperatures, Croydon 1946-1955.

A Dry-bulb temperature  $> \theta$ , Wet-bulb temperature  $> \theta$

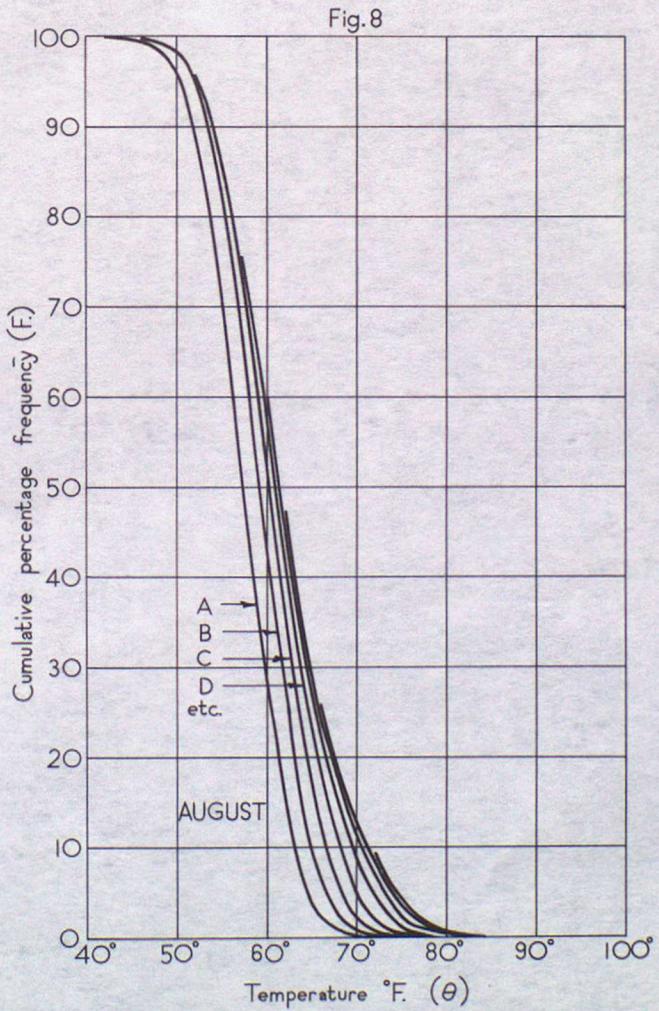
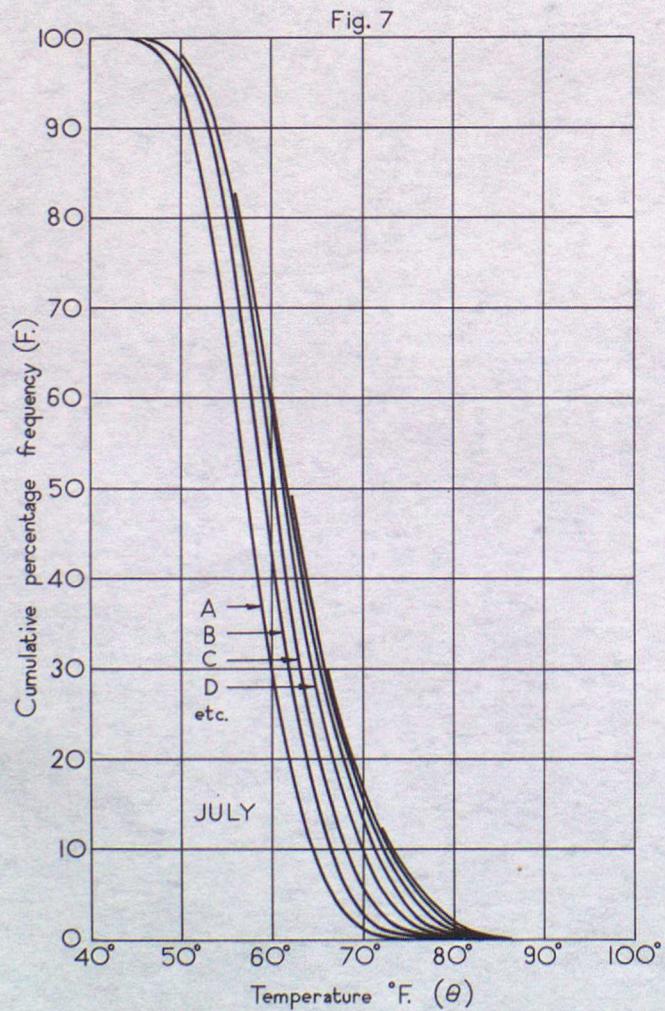
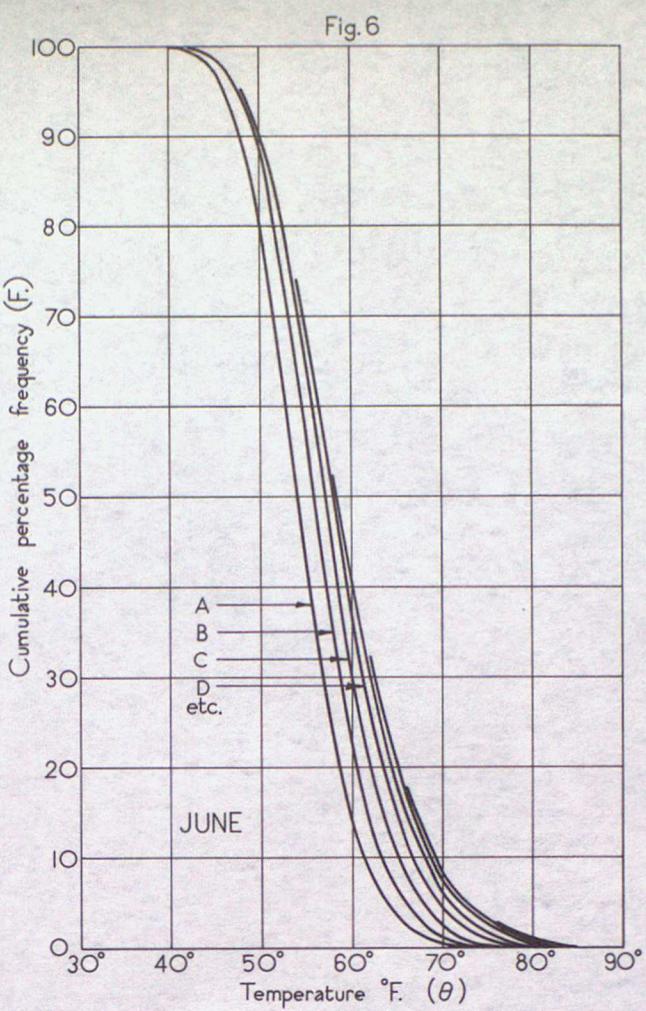
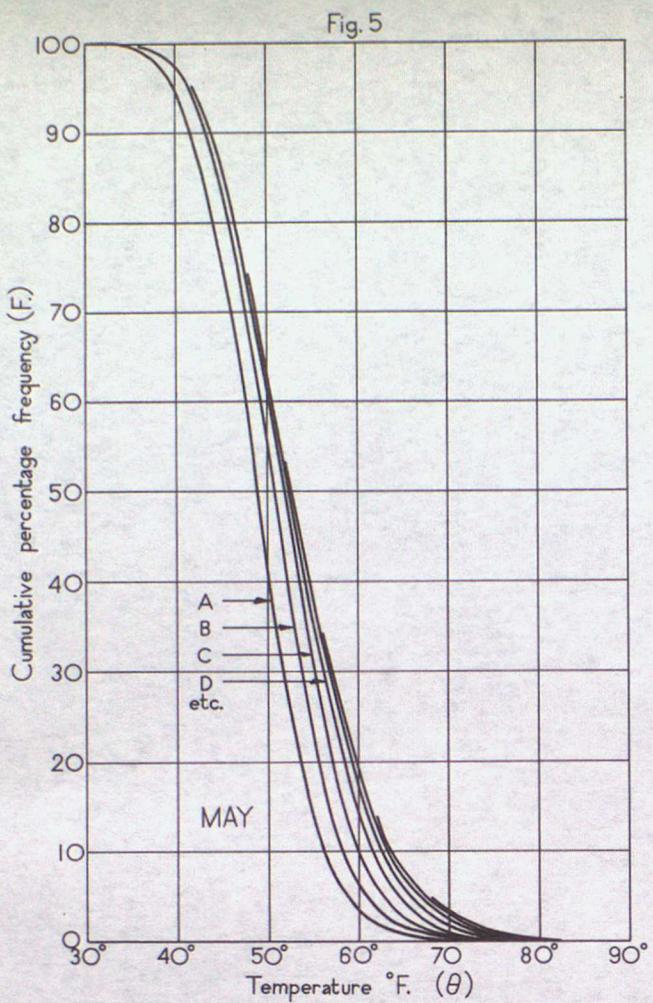
B " " " " >  $\theta$ , " " " " >  $\theta - 2$

C " " " " >  $\theta$ , " " " " >  $\theta - 4$

D " " " " >  $\theta$ , " " " " >  $\theta - 6$

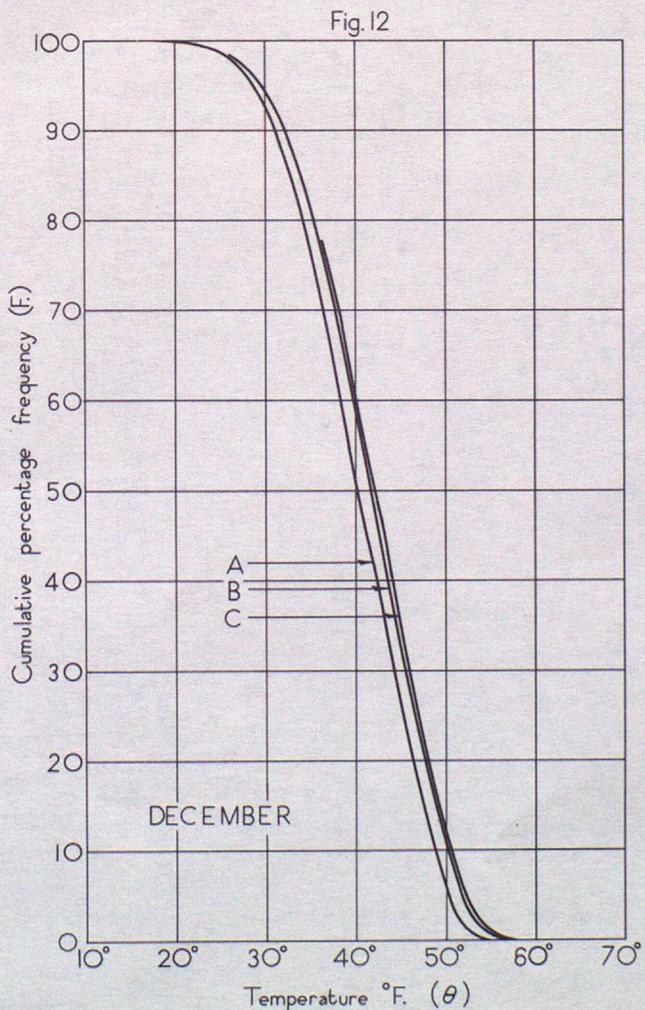
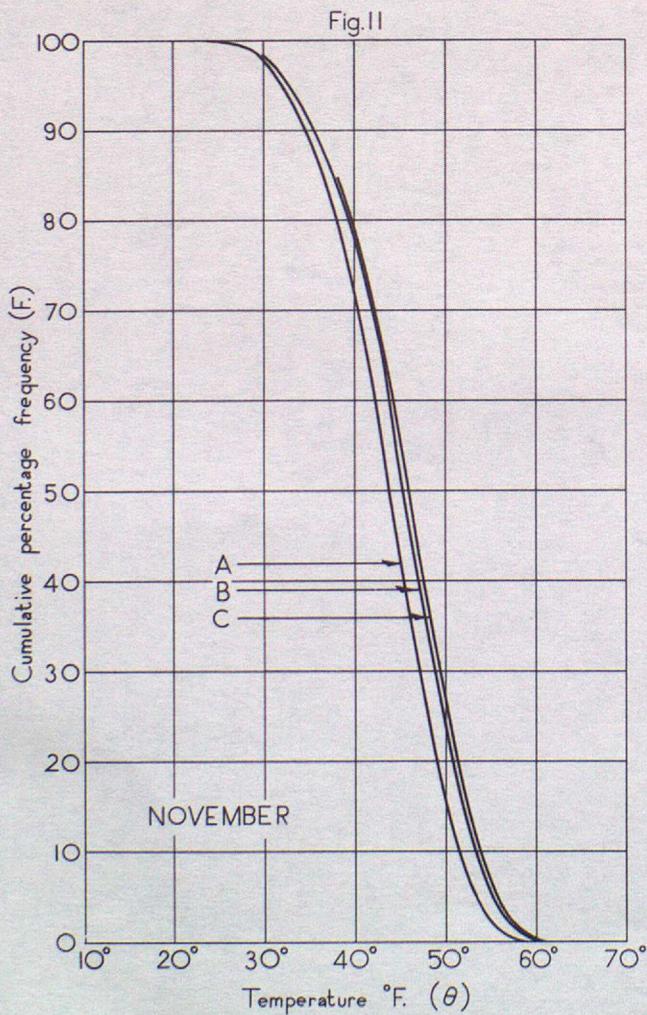
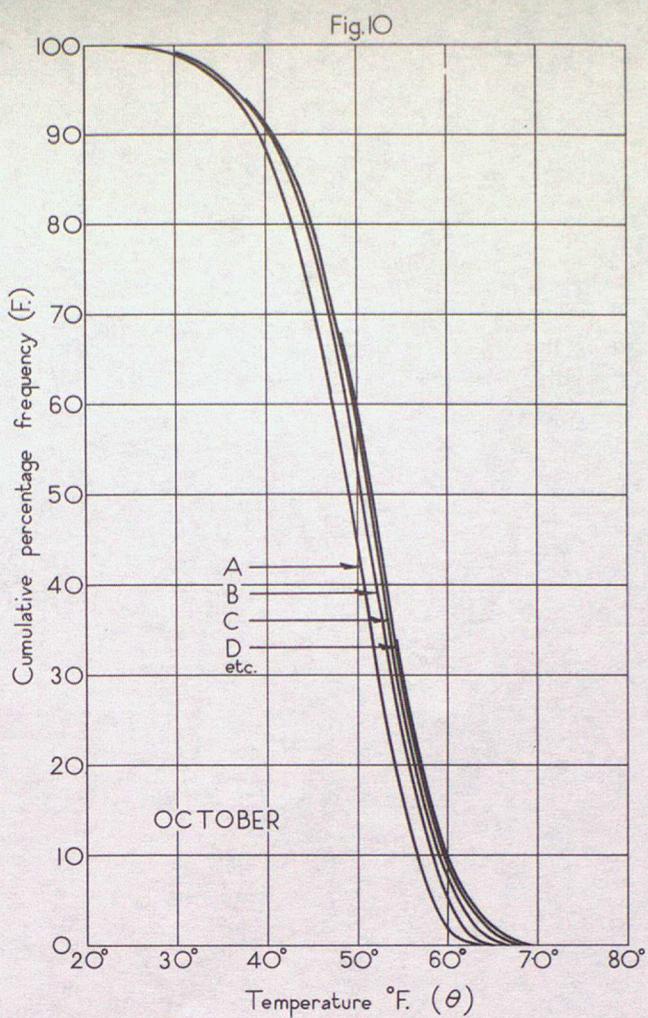
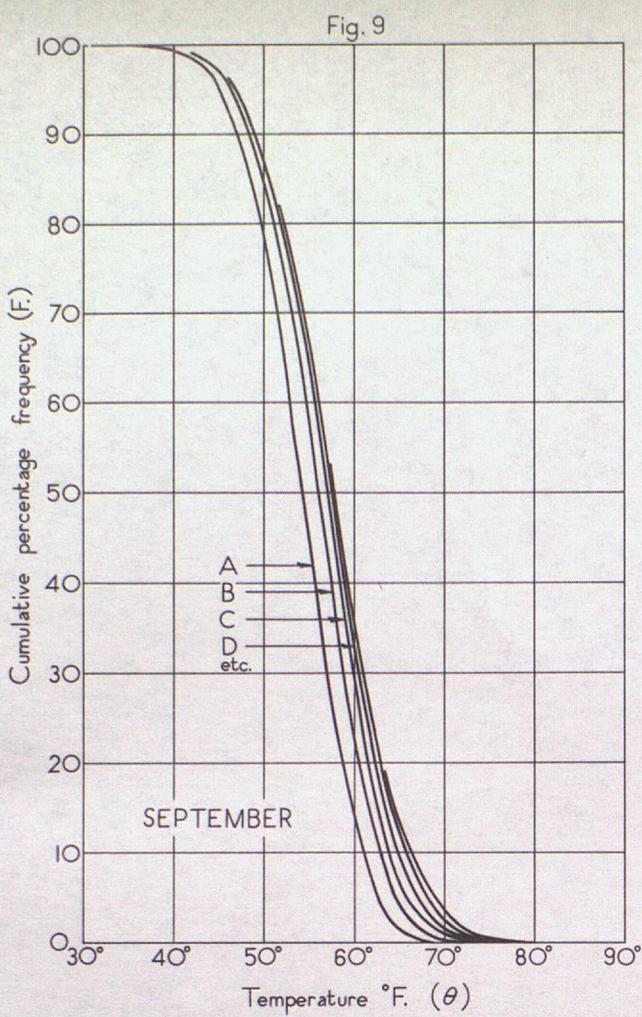
etc.

A



Ogives of monthly frequency of hourly values of dry-bulb and associated wet-bulb temperatures, Croydon 1946-1955.

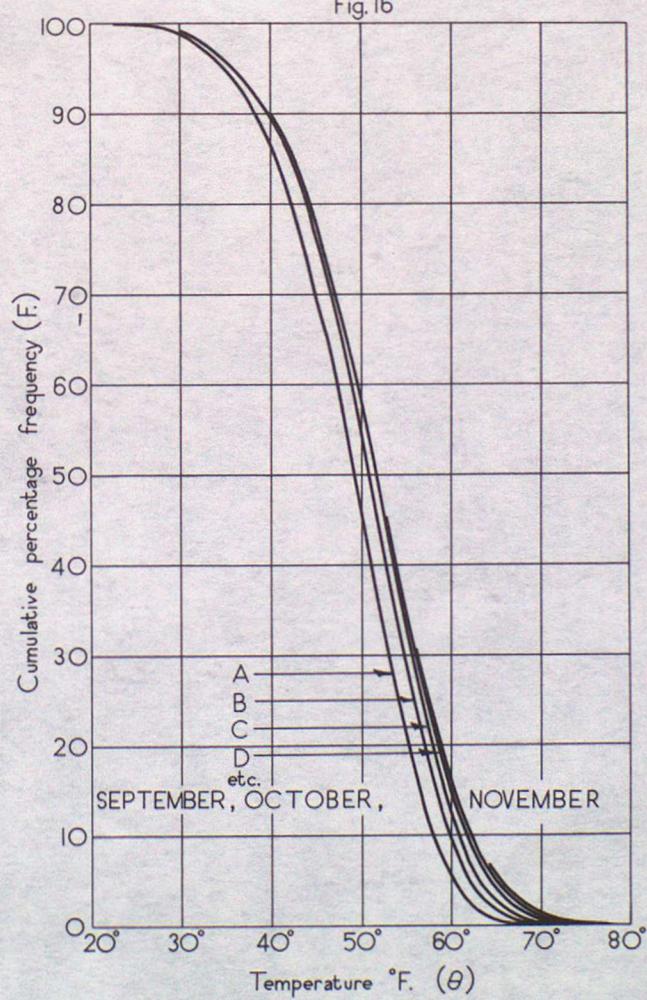
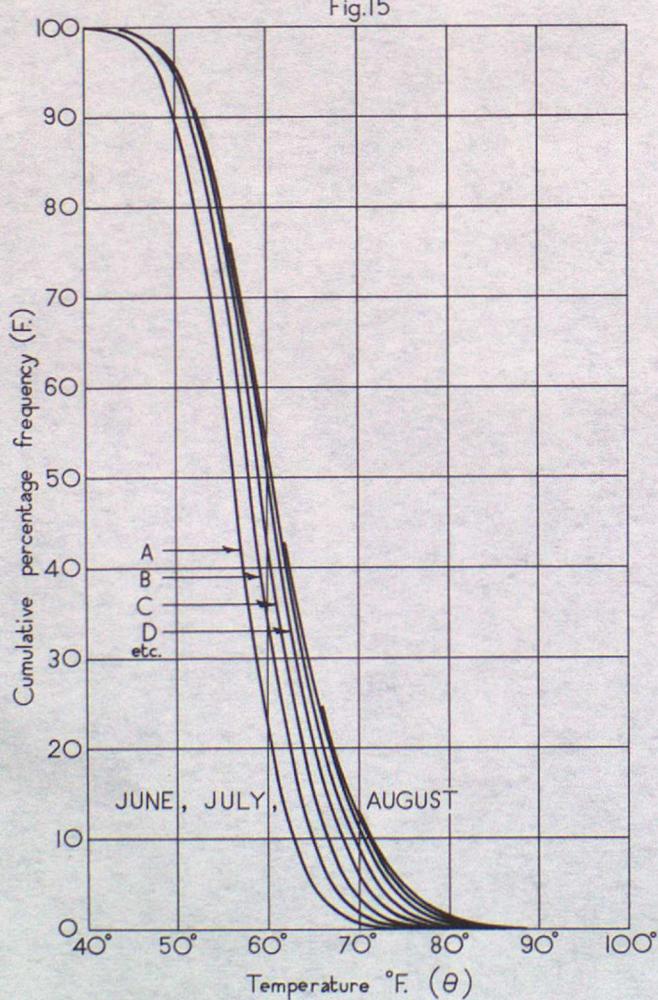
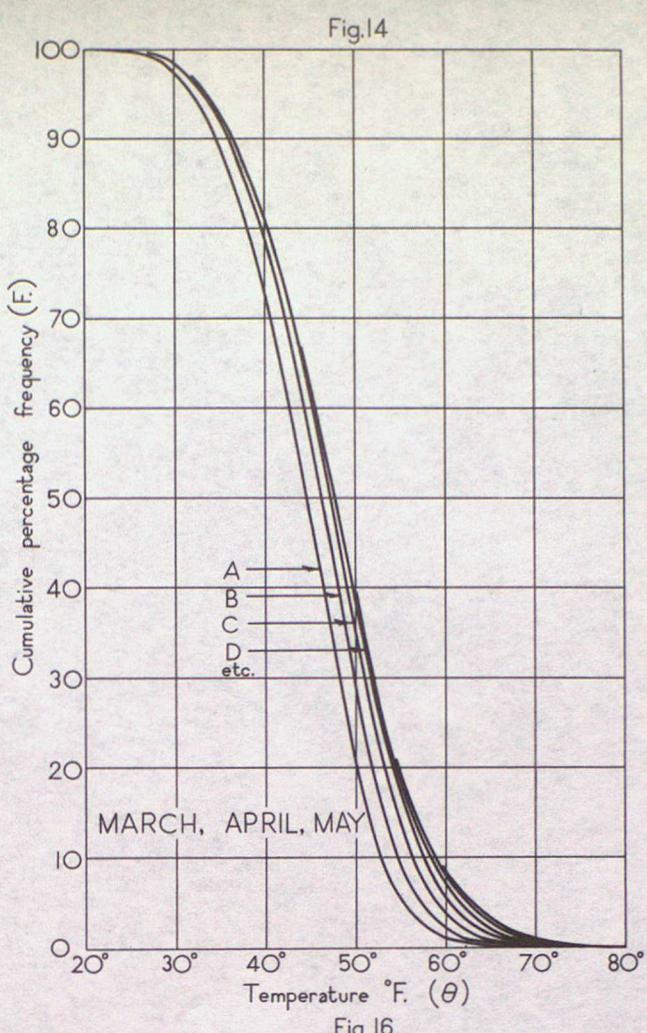
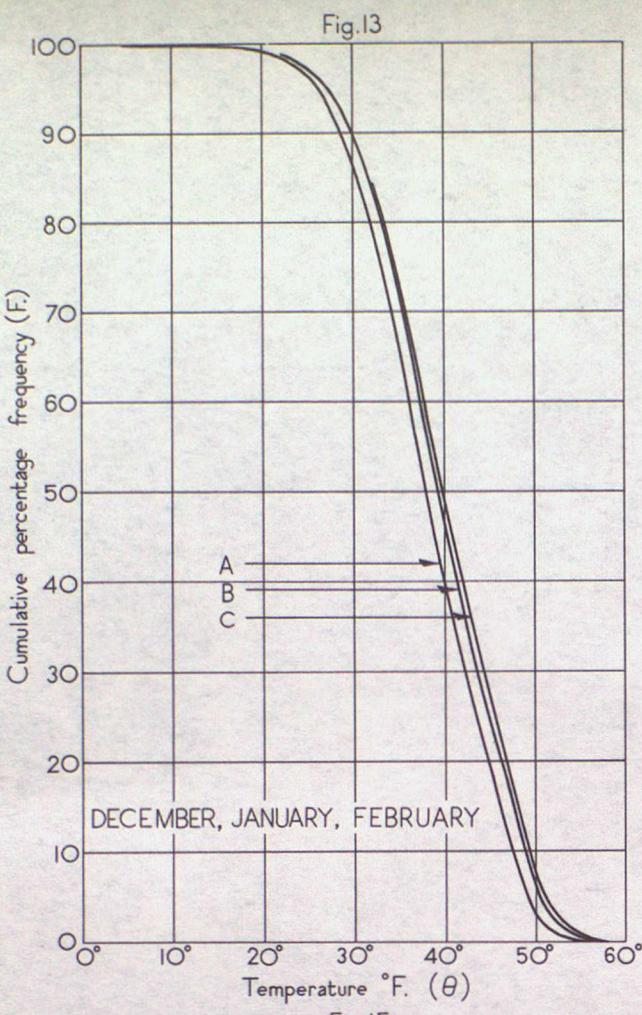
A Dry-bulb temperature  $> \theta$ , Wet-bulb temperature  $> \theta$   
 B " " " "  $> \theta$ , " " " "  $> \theta - 2$   
 C " " " "  $> \theta$ , " " " "  $> \theta - 4$   
 D " " " "  $> \theta$ , " " " "  $> \theta - 6$   
 etc.



Ogives of monthly frequency of hourly values of dry-bulb and associated wet-bulb temperatures, Croydon 1946-1955.

C

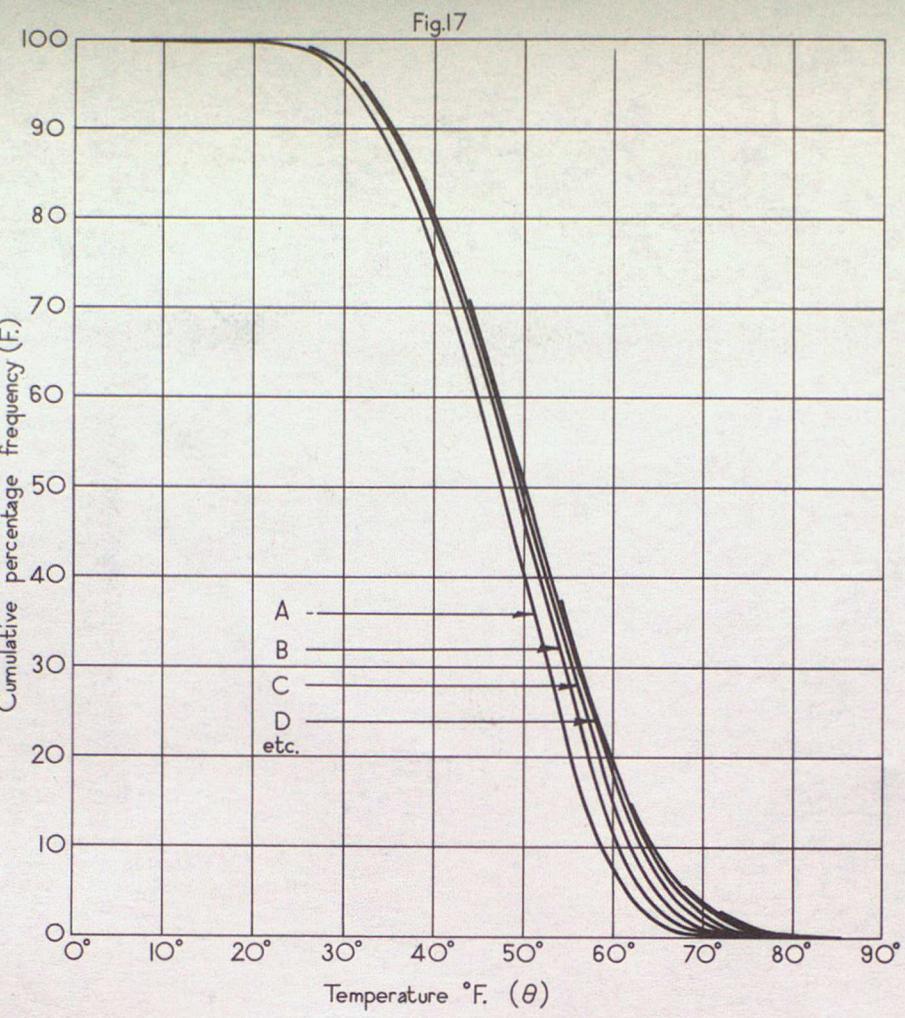
A	Dry-bulb temperature $\geq \theta$ , Wet-bulb temperature $\geq \theta$
B	" " " $\geq \theta$ , " " " $\geq \theta - 2$
C	" " " $\geq \theta$ , " " " $\geq \theta - 4$
D	" " " $\geq \theta$ , " " " $\geq \theta - 6$
etc.	



Ogives of quarterly frequency of hourly values of dry-bulb and associated wet-bulb temperatures, Croydon 1946-1955.

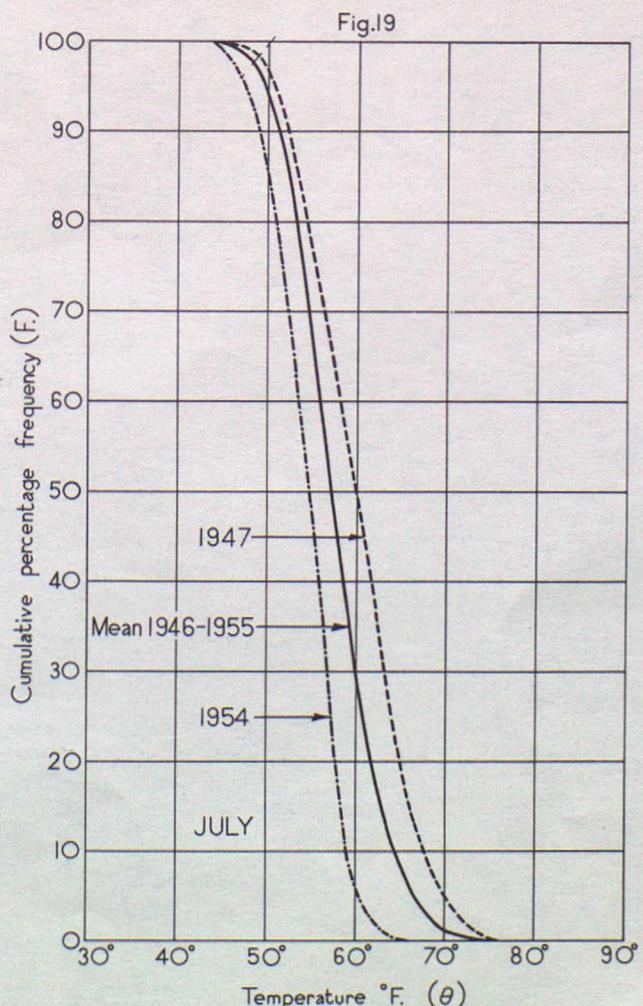
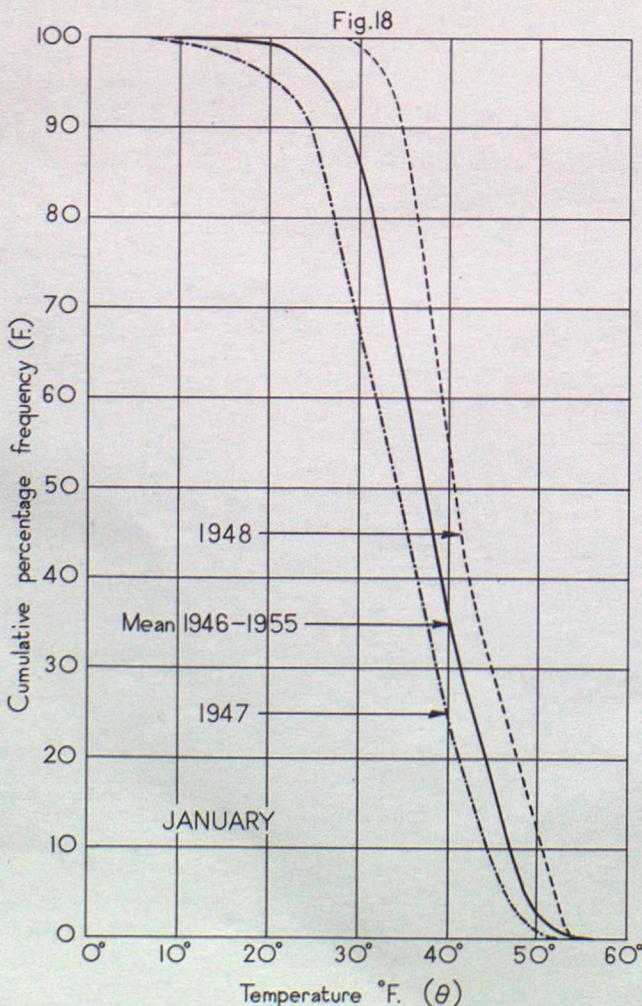
- A Dry-bulb temperature  $\geq \theta$ , Wet-bulb temperature  $\geq \theta$
- B " " " "  $> \theta$ , " " " "  $> \theta - 2$
- C " " " "  $> \theta$ , " " " "  $> \theta - 4$
- D " " " "  $> \theta$ , " " " "  $> \theta - 6$
- etc.

D.



Ogives of annual frequencies of hourly values of dry-bulb and associated wet-bulb temperatures, Croydon 1946-1955.

- A Dry-bulb temperature  $\geq \theta$ , Wet-bulb temperature  $\geq \theta$
- B " " "  $\geq \theta$ , " " "  $\geq \theta - 2$
- C " " "  $\geq \theta$ , " " "  $\geq \theta - 4$
- D " " "  $\geq \theta$ , " " "  $\geq \theta - 6$
- etc.



Ogives of monthly frequencies of hourly values of dry-bulb temperature  $> \theta$ , and associated wet-bulb temperature  $> \theta$  for particular abnormal months.