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Percentage frequencies of hourly values of dry bulb
and wet bulb temperatures at Aden/Khormaksar

JULY 1957 — JUNE 1967

by Joyce Laing and K. Grant

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CLIMATOLOGICAL MEMORANDUM NO. 106

PERCENTAGE FREQUENCY OF HOURLY VALUES OF DRY-BULB AND WET-BULB TEMPERATURES AT ADEN/KHORMAKSAR JULY 1957–JUNE 1967

BY JOYCE LAING AND K. GRANT

Introduction

Hourly observations of dry-bulb and wet-bulb temperature were made at Aden/Khormaksar Lat. 12° 49' N Long. 45° 02' E during the 11 years July 1957 to June 1967. The thermometers were exposed in the standard louvered screen 4 feet (1.25 metres approximately) above the ground. An analysis has been made by computer of these observations to give monthly and annual tables showing the percentage frequency of combinations of dry- and wet-bulb readings in ranges of one degree Celsius. Tables are also given showing the frequency of dry-bulb and wet-bulb temperatures separately.

Explanation of the tables

Tables 1 to 13 contain for each month, and for the year, the distribution of combined dry-bulb and wet-bulb temperature. The ranges of dry-bulb temperature are shown down the left hand side: the ranges of wet-bulb temperature, across the page, are for the sake of brevity given as T (the dry-bulb temperature range for the row) $T-1$ deg C, $T-2$ degC etc. Thus if T is 30.1 to 31.0 then $T-1$ is 29.1 to 30.0 and so on.

For any given range of dry-bulb temperature and associated wet-bulb temperature two values are given. The upper figure is the percentage frequency of occurrence within the given range calculated to two places of decimals; the lower figure is the cumulative percentage frequency of occurrence of dry-bulb temperature and associated wet-bulb temperature greater than, or equal to, the lower values in the appropriate range as indicated, calculated to one place of decimals. (Cumulative values of 0.0 indicate values of less than 0.05 per cent but greater than zero.) Entries of 0.00⁺ in the annual table indicate values of less than 0.005 per cent but greater than zero.

Example. In Table 1 for January, the percentage frequency of the number of hours with dry-bulb temperature within the range 27.1 to 28.0 degC and the associated wet-bulb temperature within the range 22.1 to 23.0 deg C (column $T-5$) is 5.47. The cumulative value in this 'box', 10.4, indicates that a dry-bulb temperature of 27.1 deg C or more and an associated wet-bulb temperature of 22.1 deg C or more occurred on 10.4 per cent of the hours. This value is derived from the sum of the upper figures in each box below and to the left of a diagonal through the box concerned to the bottom right of the table, thus:

0.30	2.55	5.47	3.44	0.73	0.24
			0.75	0.15	
			0.01		

Slight discrepancies may occur in the last place of decimals due to the rounding off of figures when the percentage frequencies were calculated; the printed cumulative figures are correct rather than those obtained by simple addition of the figures in the table.

Table 14 gives the frequency of dry-bulb temperatures alone and table 15 gives the frequency of wet-bulb temperatures alone. The annual percentage frequencies have been worked from all the data and are not a direct mean of the monthly figures. In these tables an entry of 0.0⁺ indicates a value of less than 0.05 per cent but greater than zero.

Average of accumulated temperature

Accumulated temperatures are the integrated excess or deficit from a stated base temperature, and are expressed as degree-days or degree-hours. From data given in table 14 the degree-hours can be calculated using the following method.

The average number of degree-hours in any month above a base temperature ($b^{\circ}\text{C}$) is given by the sum of the products obtained by multiplying the entries for that month which refer to temperatures greater than $b^{\circ}\text{C}$ (ie those values lying beneath the entry referring to the range of temperature whose upper limit is b) by $(1/2) \times (N/100), (3/2) \times (N/100), (5/2) \times (N/100)$ etc. respectively, where N is the number of hours in the month. This assumes, in effect, that the entries in the ranges $(b + 0.1)$ to $(b + 1)$, $(b + 1.1)$ to $(b + 2)$ etc. are concentrated at mid-point of the range $(b + 0.5)$, $(b + 1.5)$ etc.

Example. In April (number of hours 720) the average number of degree-hours above 30°C is (from table 14):

$$\begin{aligned} 10.7 \times 1/2 \times 720/100 &= 38.5 \\ 5.3 \times 3/2 \times 720/100 &= 57.2 \\ 1.1 \times 5/2 \times 720/100 &= 19.8 \\ 0.3 \times 7/2 \times 720/100 &= 7.6 \\ 0.2 \times 9/2 \times 720/100 &= 6.5 \\ 0.1 \times 11/2 \times 720/100 &= 4.0 \\ 0.0 \times 13/2 \times 720/100 &= 0.0 \end{aligned}$$

$$133.6$$

To obtain the number of degree-hours below base $b^{\circ}\text{C}$ the procedure is the same except that the percentages used are those for the temperature ranges **below and including** the range of temperature which has $b^{\circ}\text{C}$ as its upper limit.

AC.D	37.0	41.6	46.2	50.8	55.4	60.0
37.0	37.0	41.6	46.2	50.8	55.4	60.0

Table I PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

JANUARY 1958-67

ADEN / KHORMAKSAR

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

DRY-BULB

T (DEG C)	T	T-1	T-2	T-3	T-4	T-5	T-6	T-7	T-8
15.1 TO 16.0	0.0 99.9	0.0 100.0							
16.1 TO 17.0	0.0 99.5	0.0 99.9	0.04 100.0	0.01 100.0					
17.1 TO 18.0	0.0 98.4	0.0 99.5	0.07 99.9	0.04 99.9					
18.1 TO 19.0	0.0 96.6	0.05 98.4	0.42 99.5	0.17 99.8					
19.1 TO 20.0	0.0 92.8	0.05 96.6	0.47 98.4	0.31 99.0	0.07 99.2				
20.1 TO 21.0	0.0 83.1	0.16 92.8	0.44 96.5	0.62 97.8	0.19 98.2	0.05 98.3			
21.1 TO 22.0	0.04 66.9	0.11 83.1	0.42 92.6	0.74 95.9	0.42 96.6	0.13 96.8	0.01 96.8		
22.1 TO 23.0	0.0 33.3	0.36 66.9	0.58 83.0	0.73 92.1	0.58 94.6	0.12 94.9	0.03 94.9	0.01 95.0	
23.1 TO 24.0	0.04 8.8	0.52 33.3	3.49 66.5	3.20 82.0	3.39 90.4	0.86 92.4	0.07 92.5		
24.1 TO 25.0	0.0 0.8	0.36 8.8	7.33 32.7	15.22 62.4	7.16 74.8	2.96 79.8	0.75 80.9	0.08 81.0	0.01 81.0
25.1 TO 26.0		0.01 0.8	1.92 8.4	5.65 25.0	5.63 39.5	2.02 44.7	0.81 46.7	0.19 47.1	0.01 47.1
26.1 TO 27.0			0.16 0.8	2.12 6.5	4.74 17.4	5.31 26.3	2.41 29.5	1.01 30.7	0.15 30.9
27.1 TO 28.0				0.30 0.7	2.55 4.2	5.47 10.4	3.44 14.0	0.73 14.7	0.24 15.0
28.1 TO 29.0					0.34 0.4	0.97 1.3	0.75 2.1	0.15 2.2	
29.1 TO 30.0						0.01 0.0			
									T-10
27.1 TO 28.0		0.01 15.0							

Table 2 PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

FEBRUARY 1958-67

ADEN / KHORMAKSAR

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

(0.001 INCREMENTS 0.00-100 PERCENT)

DRY-BULB

T (DEG C)

	T	T-1	T-2	T-3	T-4	T-5	T-6	T-7	T-8
14.1 TO 15.0	0.0 99.8	0.0 100.0							
15.1 TO 16.0	0.0 99.7	0.0 99.8	0.0 100.0						
16.1 TO 17.0	0.0 99.6	0.0 99.7	0.0 99.8	0.0 100.0					
17.1 TO 18.0	0.0 99.2	0.0 99.6	0.0 99.7	0.01 99.8	0.04 100.0				
18.1 TO 19.0	0.01 98.1	0.07 99.2	0.13 99.6	0.04 99.7	0.04 99.8	0.07 99.9	0.0 99.9	0.01 99.9	
19.1 TO 20.0	0.0 95.8	0.28 98.1	0.40 99.1	0.21 99.4	0.09 99.5	0.0 99.5	0.0 99.5	0.04 99.5	
20.1 TO 21.0	0.0 91.2	0.16 95.8	0.75 97.8	0.24 98.4	0.03 98.5	0.0 98.5	0.0 98.5	0.01 98.5	
21.1 TO 22.0	0.0 80.4	0.06 91.2	1.23 95.6	0.49 96.9	0.16 97.2	0.04 97.3	0.04 97.3	0.03 97.3	
22.1 TO 23.0	0.03 50.5	0.35 80.4	1.14 91.2	0.93 94.3	0.22 95.2	0.03 95.3			
23.1 TO 24.0	0.0 17.6	0.30 50.5	3.19 80.0	3.84 89.6	1.00 91.9	0.33 92.5	0.09 92.6		
24.1 TO 25.0	0.0 2.7	0.56 17.6	8.79 50.2	13.49 76.5	4.26 82.3	0.64 83.6	0.24 83.8	0.03 83.9	0.01 83.9
25.1 TO 26.0	0.0 0.1	0.03 2.7	3.35 17.0	8.66 40.9	4.83 53.6	0.75 55.2	0.22 55.8	0.01 55.9	0.0 55.9
26.1 TO 27.0		0.0 0.1	0.30 2.7	3.40 13.7	6.01 28.8	4.37 36.8	0.46 37.6	0.28 38.0	0.01 38.0
27.1 TO 28.0		0.01 0.0	0.03 0.1	0.80 2.4	4.54 10.0	6.81 19.1	3.27 22.7	0.28 23.0	0.10 23.2
28.1 TO 29.0				0.01 0.0	1.27 1.5	2.90 4.6	2.26 6.9	0.28 7.2	0.06 7.3
29.1 TO 30.0	0.01 0.5				0.03 0.0	0.21 0.2	0.16 0.4	0.07 0.5	0.04 0.5

T-9

Table 3 PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

MARCH 1958-67

ADEN / KHORMAKSAR

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

DRY-BULB

T (DEG C)

T	T-1	T-2	T-3	T-4	T-5	T-6	T-7	T-8	
14.1 TO 15.0	0.0 99.8	0.0 100.0							
15.1 TO 16.0	0.0 99.7	0.0 99.8	0.0 100.0						
16.1 TO 17.0	0.0 99.5	0.0 99.7	0.0 99.8	0.0 100.0					
17.1 TO 18.0	0.0 99.1	0.0 99.5	0.0 99.7	0.01 99.8	0.0 100.0				
18.1 TO 19.0	0.0 98.5	0.01 99.1	0.04 99.5	0.07 99.7	0.08 99.8	0.08 100.0	0.01 100.0		
19.1 TO 20.0	0.0 97.6	0.01 98.5	0.26 99.1	0.17 99.4	0.04 99.5	0.03 99.6	0.04 99.7		
20.1 TO 21.0	0.0 95.5	0.07 97.6	0.26 98.5	0.17 98.8	0.07 99.0	0.03 99.0	0.04 99.1	0.03 99.1	
21.1 TO 22.0	0.0 91.7	0.19 95.5	0.71 97.5	0.23 98.1	0.11 98.3	0.08 98.4	0.03 98.5	0.03 98.5	
22.1 TO 23.0	0.01 80.8	0.24 91.7	0.73 95.3	0.48 96.6	0.08 97.0	0.07 97.1	0.01 97.1		
23.1 TO 24.0	0.01 53.2	0.26 80.8	1.25 91.5	0.69 94.3	0.16 95.1	0.04 95.5	0.01 95.5	0.01 95.5	
24.1 TO 25.0	0.0 23.2	0.34 53.2	5.51 80.6	4.46 90.0	1.10 92.1	0.32 92.8	0.12 93.1		
25.1 TO 26.0	0.0 5.2	0.26 23.2	5.13 52.9	9.07 74.7	2.62 79.7	0.38 80.7	0.09 81.0	0.11 81.2	
26.1 TO 27.0	0.0 0.6	0.03 5.2	4.57 23.0	9.93 47.5	5.31 60.2	1.16 62.6	0.19 63.2	0.09 63.5	0.01 63.5
27.1 TO 28.0		0.03 0.6	1.12 5.1	5.36 18.4	5.31 32.9	3.83 40.4	0.90 41.6	0.24 42.1	0.07 42.2
28.1 TO 29.0			0.13 0.6	1.02 4.0	4.13 11.9	7.15 21.1	2.98 24.8	0.20 25.0	0.20 25.3
29.1 TO 30.0				0.28 0.5	1.79 2.8	3.35 6.5	2.03 8.6	0.59 9.3	0.08 9.4
30.1 TO 31.0					0.12 0.2	0.51 0.8	0.27 1.1	0.05 1.2	0.03 1.2

Table 3 (cont) PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

MARCH 1958-67

ADEN / KORMAKSAR

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

DRY-BULB T (DEG C)	T	T-1	T-2	T-3	T-4	T-5	T-6	T-7	T-8
31.1 TO 32.0						0.04	0.05	0.07	0.01
					0.0	0.0	0.1	0.1	0.2
				0.001	0.001	0.001	0.001	0.001	0.001
32.1 TO 33.0						0.03	0.01	0.01	0.01
				0.0	0.0	0.0	0.0	0.0	0.0
			0.001	0.001	0.001	0.001	0.001	0.001	0.001
			0.0	10.0	0.0	0.0	0.0	0.31	0.1
			0.001	0.001	0.001	0.001	0.001	0.001	0.001
	10.0	20.0	30.0	40.0	50.0	60.0	70.0	80.0	90.0
	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	T-9	T-10	T-11	T-12	T-13	T-14			
28.1 TO 29.0	0.05								
	25.4	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0
	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
29.1 TO 30.0	0.01	0.03							
	9.4	9.4	10.0	11.0	12.0	13.0	14.0	15.0	16.0
	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
30.1 TO 31.0			11.0	12.0	13.0	14.0	15.0	16.0	17.0
			0.001	0.001	0.001	0.001	0.001	0.001	0.001
31.1 TO 32.0	0.01	0.0	0.0	0.0	0.0	0.01			
	0.3	0.3	0.3	0.3	0.3	0.3	10.0	0.05	0.05
	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32.1 TO 33.0	0.0	0.01	0.0	0.01	0.0	0.0	0.0	0.01	0.01
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33.1 TO 34.0	0.01						0.01		
	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.05	0.05
	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	11.0	20.0	30.0	40.0	50.0	60.0	70.0	80.0	90.0
	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	T-15	T-16	T-17	T-18	T-19	T-20	T-21	T-22	T-23
34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0
0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	44.0	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0
	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	53.0	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0
	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0
	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0
	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0
	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	89.0	90.0	91.0	92.0	93.0	94.0	95.0	96.0	97.0
	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	98.0	99.0	100.0	101.0	102.0	103.0	104.0	105.0	106.0
	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001

Table 4 PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

APRIL 1958-67

ADEN / KHORMAKSAR

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

DRY-BULB

T (DEG C)	T	T-1	T-2	T-3	T-4	T-5	T-6	T-7	T-8
16.1 TO 17.0	0.0 99.9	0.0 100.0							
17.1 TO 18.0	0.0 99.7	0.0 99.9	0.0 100.0						
18.1 TO 19.0	0.0 99.5	0.0 99.7	0.0 99.9	0.03 100.0					
19.1 TO 20.0	0.0 99.0	0.01 99.5	0.01 99.7	0.01 99.9	0.01 100.0				
20.1 TO 21.0	0.0 98.3	0.03 99.0	0.03 99.5	0.01 99.7	0.03 99.9	0.01 99.9			
21.1 TO 22.0	0.0 97.6	0.0 98.3	0.10 99.0	0.13 99.4	0.06 99.6	0.07 99.8	0.03 99.8		
22.1 TO 23.0	0.03 95.3	0.06 97.6	0.17 98.3	0.26 98.9	0.11 99.2	0.07 99.4	0.06 99.4		
23.1 TO 24.0	0.03 89.4	0.11 95.2	0.69 97.5	0.32 98.1	0.13 98.4	0.11 98.6	0.06 98.7	0.01 98.7	
24.1 TO 25.0	0.0 73.9	0.19 89.4	0.83 95.1	0.54 96.6	0.07 96.9	0.10 97.1	0.03 97.2	0.03 97.2	
25.1 TO 26.0	0.0 41.9	0.04 73.9	1.94 89.2	1.64 94.1	0.43 95.1	0.13 95.3	0.03 95.4	0.03 95.4	
26.1 TO 27.0	0.0 15.0	0.18 41.9	5.25 73.8	6.42 87.2	1.36 90.4	0.24 91.0	0.01 91.1	0.04 91.2	0.03 91.2
27.1 TO 28.0	0.0 1.5	0.65 15.0	8.11 41.7	12.18 68.4	3.25 75.4	0.78 77.2	0.07 77.6	0.01 77.6	0.01 77.7
28.1 TO 29.0	0.0 0.1	0.04 1.5	3.64 14.3	7.46 32.9	6.22 47.5	1.79 51.2	0.47 52.3	0.08 52.5	0.01 52.6
29.1 TO 30.0		0.0 0.1	0.21 1.4	2.97 10.7	5.31 21.8	5.65 30.1	0.92 32.0	0.18 32.6	0.07 32.8
30.1 TO 31.0			0.0 0.1	0.28 1.2	3.38 7.5	4.54 13.3	1.83 16.0	0.49 17.0	0.13 17.4
31.1 TO 32.0				0.03 0.1	0.74 1.0	2.60 3.8	1.06 5.1	0.57 5.9	0.15 6.4
32.1 TO 33.0					0.03 0.0	0.15 0.2	0.26 0.5	0.17 0.7	0.19 0.9
33.1 TO 34.0							0.01 0.0	0.01 0.0	0.04 0.1

Table 4(+)PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

APRIL 1958-67

ADEN / KHORMAKSAR

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

DRY-BULB

T (DEG C)

T-9 T-10 T-11 T-12 T-13 T-14 T-15 T-16

29.1 TO 30.0	0.0						
	32.9						
30.1 TO 31.0	0.01	0.0					
	17.5	17.6					
31.1 TO 32.0	0.10	0.01					
	6.8	6.8					
32.1 TO 33.0	0.18	0.07	0.0	0.03			
	1.3	1.5	1.6	1.7			
33.1 TO 34.0	0.06	0.08	0.03	0.01	0.01		
	0.1	0.3	0.5	0.5	0.6		
34.1 TO 35.0		0.01	0.08	0.08	0.04	0.01	
		0.0	0.1	0.2	0.3	0.3	
35.1 TO 36.0				0.01	0.03	0.01	
				0.0	0.0	0.1	
36.1 TO 37.0						0.01	
						0.0	

Table 5 PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

MAY 1958-67

ADEN / KHORMAKSAR

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

DRY-BULB

T (DEG C)	T	T-1	T-2	T-3	T-4	T-5	T-6	T-7	T-8
18.1 TO 19.0	0.0 99.9	0.0 100.0							
19.1 TO 20.0	0.0 99.7	0.0 99.9	0.0 100.0						
20.1 TO 21.0	0.0 99.3	0.0 99.7	0.0 99.9	0.03 100.0	0.01 100.0				
21.1 TO 22.0	0.0 98.9	0.0 99.3	0.01 99.7	0.11 99.9	0.05 99.9	0.0 100.0			
22.1 TO 23.0	0.0 97.9	0.0 98.9	0.04 99.3	0.09 99.6	0.04 99.7	0.01 99.8	0.01 99.8		
23.1 TO 24.0	0.0 96.1	0.05 97.9	0.13 98.9	0.09 99.3	0.04 99.5	0.01 99.6	0.01 99.6		
24.1 TO 25.0	0.0 92.2	0.12 96.1	0.44 97.8	0.30 98.7	0.12 99.0	0.04 99.2			
25.1 TO 26.0	0.0 81.9	0.01 92.2	0.31 96.0	0.27 97.3	0.15 97.9	0.01 98.0	0.03 98.2		
26.1 TO 27.0	0.0 68.2	0.11 81.9	1.17 92.2	0.54 95.7	0.30 96.7	0.09 97.1	0.03 97.3	0.01 97.4	
27.1 TO 28.0	0.0 35.4	0.35 68.2	1.71 81.7	3.21 91.0	0.79 93.5	0.22 94.2	0.12 94.5	0.01 94.6	0.03 94.7
28.1 TO 29.0	0.01 9.0	0.33 35.4	5.95 67.8	4.97 79.7	2.12 85.7	0.58 87.4	0.17 87.9	0.07 88.1	0.0 88.2
29.1 TO 30.0	0.0 1.0	0.65 8.9	5.85 34.5	10.09 61.0	2.61 67.9	1.18 71.8	0.32 72.9	0.07 73.2	0.05 73.4
30.1 TO 31.0	0.0 0.1	0.05 1.0	1.02 3.3	4.85 28.0	4.85 44.4	1.81 48.7	0.91 51.4	0.19 52.2	0.03 52.5
31.1 TO 32.0	0.0 0.1	0.19 1.0	1.53 7.2	4.89 22.1	6.10 33.7	1.05 36.1	0.54 37.9	0.11 38.5	
32.1 TO 33.0		0.0 0.1	0.11 0.8	1.71 5.5	5.54 15.5	2.93 21.0	0.50 22.4	0.44 23.6	
33.1 TO 34.0			0.03 0.1	0.28 0.7	1.71 3.7	3.08 8.1	0.95 10.7	0.34 11.6	
34.1 TO 35.0				0.01 0.0	0.15 0.4	0.91 1.7	0.89 3.1	0.79 4.6	

Table 5(cont) PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

MAY 1958-67

ADEN / KHORMAKSAR

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

DRY-BULB

T (DEG C)

35.1 TO 36.0

0.01 0.07 0.28 0.27
0.0 0.2 0.6 1.1

36.1 TO 37.0

0.08 0.08
0.1 0.2

37.1 TO 38.0

0.03
0.0

T T-1 T-2 T-3 T-4 T-5 T-6 T-7 T-8

T-9 T-10 T-11 T-12 T-13 T-14 T-15 T-16 T-17

27.1 TO 28.0

0.01
94.8

28.1 TO 29.0

0.0
88.3

29.1 TO 30.0

0.03
73.5

30.1 TO 31.0

0.04
52.6

31.1 TO 32.0

0.01 0.01
38.7 38.8

32.1 TO 33.0

0.05 0.0 0.0 0.05
24.1 24.3 24.4 24.5

33.1 TO 34.0

0.22 0.07 0.04 0.0 0.0 0.04 0.01
12.4 12.8 13.0 13.1 13.1 13.2 13.2

34.1 TO 35.0

0.27 0.16 0.13 0.04 0.0 0.01 0.03
5.2 5.8 6.2 6.3 6.4 6.4 6.5

35.1 TO 36.0

0.38 0.16 0.15 0.13 0.0 0.03 0.0 0.03
1.9 2.2 2.6 2.8 3.0 3.1 3.1 3.1

36.1 TO 37.0

0.09 0.20 0.09 0.20 0.08 0.09 0.03
0.5 0.9 1.0 1.3 1.4 1.5 1.6

37.1 TO 38.0

0.01 0.05 0.15 0.05 0.04 0.0 0.0 0.01
0.1 0.2 0.4 0.5 0.5 0.6 0.6 0.6

38.1 TO 39.0

0.01 0.01 0.04 0.03 0.0 0.0 0.03 0.03 0.01
0.0 0.0 0.1 0.2 0.2 0.2 0.3 0.3

Table 5 (cont) PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

MAY 1958-67

ADEN / KHORMAKSAR

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

Table 6 PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

JUNE 1958-67
ADEN / KHORMAKSAR

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

DRY-BULB

T (DEG C)	T	T-1	T-2	T-3	T-4	T-5	T-6	T-7	T-8
21.1 TO 22.0	0.0 99.8	0.0 100.0							
22.1 TO 23.0	0.0 99.4	0.0 99.8	0.0 100.0						
23.1 TO 24.0	0.0 98.4	0.0 99.4	0.0 99.8	0.0 100.0					
24.1 TO 25.0	0.0 95.3	0.0 98.4	0.0 99.4	0.0 99.8	0.0 100.0				
25.1 TO 26.0	0.0 88.2	0.0 95.3	0.0 98.4	0.0 99.4	0.0 99.8	0.0 100.0			
26.1 TO 27.0	0.0 76.3	0.0 88.2	0.01 95.3	0.03 98.4	0.03 99.4	0.01 99.8	0.0 100.0		
27.1 TO 28.0	0.0 50.2	0.04 76.3	0.13 88.2	0.24 95.2	0.24 98.3	0.14 99.3	0.07 99.7	0.01 99.9	
28.1 TO 29.0	0.0 20.4	0.10 50.2	0.93 76.3	0.85 88.1	0.97 94.8	0.36 97.7	0.18 98.5	0.10 98.9	0.06 99.0
29.1 TO 30.0	0.0 2.4	0.60 20.4	3.14 50.1	3.39 75.2	1.90 86.2	0.81 92.0	0.54 94.5	0.11 95.1	0.07 95.4
30.1 TO 31.0	0.0 0.1	0.08 2.4	2.50 19.8	6.06 46.3	3.71 68.1	1.44 77.2	0.57 82.2	0.15 84.1	0.06 84.7
31.1 TO 32.0		0.0 0.1	0.10 2.4	4.39 17.2	6.65 37.7	5.06 55.8	1.44 63.4	0.57 67.8	0.21 69.6
32.1 TO 33.0			0.0 0.1	0.43 2.3	2.83 12.7	3.67 26.5	2.92 39.6	1.07 45.7	0.63 49.6
33.1 TO 34.0				0.01 0.1	0.71 1.8	3.29 9.4	3.60 19.6	2.67 29.7	1.14 34.8
34.1 TO 35.0					0.06 0.1	0.71 1.1	2.44 5.4	3.32 12.0	2.94 19.5
35.1 TO 36.0						0.01 0.0	0.21 0.3	0.97 2.2	1.69 5.5
36.1 TO 37.0								0.10 0.1	0.76 1.0
37.1 TO 38.0									0.03 0.0

Table 6(a) PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

JUNE 1958-67

ADEN / KHOWR MPAKSAR

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

DRY-BULB

T (DEG C)

	T-9	T-10	T-11	T-12	T-13	T-14	T-15	T-16	T-17
28.1 TO 29.0	0.0								
	99.1								
29.1 TO 30.0	0.06								
	95.5								
30.1 TO 31.0	0.04	0.03							
	84.8	84.9							
31.1 TO 32.0	0.01	0.01	0.01	0.01					
	70.1	70.2	70.2	70.3					
32.1 TO 33.0	0.25	0.07	0.0						
	51.2	51.7	51.8						
33.1 TO 34.0	0.74	0.31	0.07	0.06					
	38.1	39.4	39.8	39.9					
34.1 TO 35.0	1.29	0.78	0.36	0.14					
	23.4	25.9	26.9	27.3					
35.1 TO 36.0	2.44	1.29	0.78	0.26	0.04	0.0			
	10.0	12.6	14.4	15.0	15.2	15.3			
36.1 TO 37.0	1.19	1.60	1.01	0.61	0.31	0.10	0.0		
	2.6	4.7	6.0	7.0	7.4	7.5	7.6		
37.1 TO 38.0	0.10	0.28	0.36	0.31	0.31	0.07	0.03	0.06	
	0.2	0.5	1.0	1.3	1.7	1.8	1.8	1.9	
38.1 TO 39.0		0.04	0.07	0.10	0.03	0.0	0.03		0.03
		0.0	0.1	0.2	0.3	0.3	0.3		0.4
39.1 TO 40.0				0.01		0.01	0.03		
				0.0		0.0	0.1		
40.1 TO 41.0	0.01					0.01			
	0.0					0.0			
41.1 TO 42.0									
42.1 TO 43.0		0.01							
		0.0							

T-19

Table 7 PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

JULY 1957-66

ADEN / KHORMAKSAR

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

DRY-BULB T (DEG C)	T	T-1	T-2	T-3	T-4	T-5	T-6	T-7	T-8
21.1 TO 22.0	0.0 99.9	0.0 100.0							
22.1 TO 23.0	0.0 99.8	0.0 99.9	0.0 100.0						
23.1 TO 24.0	0.0 98.9	0.0 99.8	0.0 99.9	0.0 100.0					
24.1 TO 25.0	0.0 94.8	0.01 98.9	0.05 99.8	0.01 99.9	0.0 100.0				
25.1 TO 26.0	0.0 82.0	0.0 94.8	0.01 98.9	0.09 99.7	0.01 99.9				
26.1 TO 27.0	0.0 64.5	0.09 82.0	0.28 94.8	0.16 98.9	0.12 99.6	0.04 99.7	0.0 99.8		
27.1 TO 28.0	0.0 32.0	0.28 64.5	0.93 81.9	0.90 94.4	0.30 98.4	0.09 98.9	0.03 99.0	0.0 99.1	
28.1 TO 29.0	0.0 7.8	0.67 32.0	3.21 64.2	2.57 80.7	1.42 92.3	0.31 96.0	0.05 96.4	0.03 96.5	0.03 96.6
29.1 TO 30.0	0.0 0.6	0.32 7.8	4.15 31.3	8.16 60.3	3.20 74.3	1.80 84.4	0.40 87.8	0.12 88.2	0.0 88.2
30.1 TO 31.0		0.01 0.6	0.69 7.5	4.78 26.8	4.53 47.7	1.79 58.4	1.33 66.8	0.24 69.7	0.05 70.0
31.1 TO 32.0			0.03 0.6	1.20 6.8	4.38 21.3	4.34 37.7	2.00 46.6	1.44 53.7	0.42 56.4
32.1 TO 33.0				0.03 0.6	1.17 5.6	3.15 15.7	3.35 27.7	1.92 34.7	1.45 40.3
33.1 TO 34.0					0.23 0.6	1.65 4.4	2.67 11.4	3.08 20.0	1.96 25.1
34.1 TO 35.0						0.16 0.3	1.45 2.5	2.57 6.8	2.92 12.4
35.1 TO 36.0							0.09 0.2	0.43 0.9	0.97 2.6
36.1 TO 37.0								0.05 0.1	0.26 0.3
37.1 TO 38.0									0.01 0.0

Table 7 (cont.) PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

JULY 1957-66

ADE N / KHORMAKSAR

(3 DEG) ASSOCIATED WET-BULB TEMPERATURE (DEG C)

DRY-BULB	T-9	T-10	T-11	T-12	T-13	T-14	T-15
T (DEG C)							
29.1 TO 30.0	0.04				0.001	0.000	0.000
	88.3				0.0	10.0	0.0
30.1 TO 31.0	0.03				0.001	0.000	0.000
	70.1				0.0	51.0	40.0
31.1 TO 32.0	0.04				0.001	0.000	0.000
	56.6				80.0	88.0	80.0
32.1 TO 33.0	0.36	0.09			8.00	8.00	0.10
	42.6	42.8			0.0	0.0	0.0
33.1 TO 34.0	1.47	0.58	0.0	0.0			
	29.2	31.1	31.2	31.3			
34.1 TO 35.0	1.71	1.45	0.52	0.03			
	60.0	40.0	15.5	18.2	19.5	19.6	
35.1 TO 36.0	1.41	0.75	0.58	0.48	0.05		
	5.3	6.7	7.9	8.7	8.8	8.8	
36.1 TO 37.0	0.65	0.98	0.51	0.50	0.24	0.01	0.01
	1.2	2.4	3.0	3.7	4.0	4.0	4.0
37.1 TO 38.0	0.03	0.13	0.22	0.11	0.11	0.09	0.01
	0.0	0.2	0.5	0.6	0.7	0.8	0.8
38.1 TO 39.0			0.03	0.04	0.0	0.03	
	0.0	0.1	0.0	0.1	0.1	0.1	
39.1 TO 40.0						0.03	
	0.0	0.0	0.0	0.0	0.0	0.0	
ET-S	AT-I	Td-D	Td-D				0.00 DT 1.00
I-B	B-E	0.0	1.0				
0.0	21.0	10.0					0.00 DT 1.00
E-I	E-O	0.0					
11.0							0.00 DT 1.00
10.0							

Table 8 PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

AUGUST 1957-66

ADEN/KHORMAKSAR

SAUDI ARABIA/ADEN

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

(O 000) ADEN/KHORMAKSAR

DRY-BULB

T (DEG C)	T	T-1	T-2	T-3	T-4	T-5	T-6	T-7	T-8
22.1 TO 23.0	0.0 99.9	0.0 100.0							
23.1 TO 24.0	0.0 99.0	0.01 99.9	0.0 100.0						
24.1 TO 25.0	0.0 91.0	0.04 99.0	0.12 99.9	0.0 100.0					
25.1 TO 26.0	0.0 69.4	0.09 91.0	0.38 98.9	0.08 99.8					
26.1 TO 27.0	0.0 48.6	0.23 69.4	1.01 90.9	0.86 98.5	0.09 99.2	0.0 99.3			
27.1 TO 28.0	0.01 21.2	0.66 48.6	1.79 69.2	3.10 89.7	1.28 96.4	0.16 97.0			
28.1 TO 29.0	0.0 3.9	0.39 21.2	3.36 48.0	4.37 66.7	3.13 84.1	1.12 89.5	0.04 90.0	0.03 90.1	
29.1 TO 30.0	0.0 0.1	0.20 3.9	2.86 20.8	5.71 44.2	3.21 58.6	3.31 72.8	0.65 77.2	0.07 77.6	0.01 77.6
30.1 TO 31.0	0.0 0.1	0.0 3.7	0.40 17.7	3.27 35.4	3.91 46.6	1.90 57.6	1.77 61.2	0.52 61.6	0.0 61.6
31.1 TO 32.0	0.0 0.1	0.0 3.3	0.01 14.1	0.55 27.8	3.29 37.2	3.47 46.3	2.18 49.4	1.99 49.4	
32.1 TO 33.0	0.0 0.1	0.0 2.8	0.0 10.2	0.70 2.22	2.22 3.16	3.16 20.5	1.90 27.6	1.92 34.8	
33.1 TO 34.0				0.01 0.1	0.99 2.1	2.51 7.3	2.86 14.4	1.90 19.7	
34.1 TO 35.0					0.07 0.1	0.67 1.0	1.76 3.8	2.73 8.1	
35.1 TO 36.0						0.01 0.0	0.15 0.3	0.46 1.3	
36.1 TO 37.0								0.11 0.1	
								0.01 0.0	

Table 8 (cont) PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

AUGUST 1957-66

ADEN / KHOWMAKSAR

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

DRY-BULB

T (DEG C)

30.1 TO 31.0 0.01
 61.631.1 TO 32.0 0.15
 49.832.1 TO 33.0 0.85 0.19 0.01
 37.3 37.5 37.533.1 TO 34.0 2.12 0.77 0.05
 24.9 26.5 26.634.1 TO 35.0 2.00 1.81 0.47
 11.4 14.5 15.335.1 TO 36.0 1.01 0.82 0.67 0.22
 2.8 4.2 5.5 5.836.1 TO 37.0 0.44 0.42 0.48 0.54 0.13
 0.7 1.2 1.7 2.4 2.537.1 TO 38.0 0.03 0.04 0.12 0.01 0.09 0.01
 0.0 0.1 0.2 0.3 0.4 0.438.1 TO 39.0 0.01 0.01 0.0 0.0 0.01
 0.0 0.0 0.0 0.0 0.139.1 TO 40.0 0.01 0.01 0.0 0.0 0.0
 0.0 0.0

Table 9 PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

SEPTEMBER 1957-66

ADEN / KHORMARSAR

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

DRY-BULB

T (DEG C)

	T	T-1	T-2	T-3	T-4	T-5	T-6	T-7	T-8
22.1 TO 23.0	0.0 99.8	0.0 100.0							
23.1 TO 24.0	0.0 99.2	0.0 99.8	0.0 100.0						
24.1 TO 25.0	0.0 95.3	0.03 99.2	0.06 99.8	0.06 100.0					
25.1 TO 26.0	0.0 83.6	0.03 95.3	0.14 99.2	0.06 99.7	0.01 99.8				
26.1 TO 27.0	0.01 68.4	0.11 83.6	0.47 95.3	0.33 99.1	0.07 99.5	0.0 99.6	0.0 99.6	0.0 99.6	0.01
27.1 TO 28.0	0.06 37.5	0.64 68.3	0.82 83.4	1.31 94.7	0.42 98.1	0.01 98.5	0.01 98.6		
28.1 TO 29.0	0.0 11.8	0.63 37.5	3.94 67.7	2.57 81.9	2.28 91.9	0.78 94.9	0.06 95.2	0.01 95.3	0.01 95.3
29.1 TO 30.0	0.0 0.8	0.75 11.8	5.01 36.8	7.35 63.1	3.51 74.8	1.92 82.5	0.51 84.7	0.04 85.0	0.01 85.1
30.1 TO 31.0		0.03 0.8	1.39 11.0	4.93 31.1	5.14 50.0	1.64 58.2	1.04 63.9	0.22 65.6	0.01 65.9
31.1 TO 32.0			0.06 0.8	2.10 9.6	4.65 24.7	4.64 38.5	2.18 45.0	1.03 49.8	0.15 51.2
32.1 TO 33.0				0.11 0.7	1.82 7.5	3.90 17.9	3.78 27.0	1.46 31.4	0.93 35.1
33.1 TO 34.0					0.22 0.6	2.63 5.5	3.89 12.1	2.10 17.4	1.07 20.3
34.1 TO 35.0						0.24 0.4	1.60 2.7	1.60 5.3	1.71 8.6
35.1 TO 36.0							0.06 0.1	0.38 0.9	0.63 1.9
36.1 TO 37.0								0.07 0.1	0.35 0.4
37.1 TO 38.0									0.01 0.0

Table 9 (cont.) PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

SEPTEMBER 1957-58

ABEN / KHORMAKSAR

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

Table 10 PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

OCTOBER 1957-66

ADEN / KHORMAKSAR

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

DRY-BULB

T (DEG C)

	T	T-1	T-2	T-3	T-4	T-5	T-6	T-7	T-8
16.1 TO 17.0	0.0 99.8	0.0 100.0							
17.1 TO 18.0	0.0 99.5	0.0 99.8	0.0 100.0						
18.1 TO 19.0	0.0 99.0	0.0 99.5	0.0 99.8	0.0 100.0					
19.1 TO 20.0	0.0 97.7	0.0 99.0	0.0 99.5	0.0 99.8	0.01 100.0				
20.1 TO 21.0	0.0 95.1	0.0 97.7	0.01 99.0	0.03 99.5	0.08 99.8	0.03 100.0			
21.1 TO 22.0	0.0 91.9	0.0 95.1	0.15 97.7	0.26 99.0	0.13 99.5	0.12 99.7	0.12 99.8	0.01 99.8	
22.1 TO 23.0	0.0 86.0	0.15 91.9	0.39 95.1	1.03 97.6	0.48 98.6	0.16 98.9	0.03 99.0	0.04 99.0	0.01 99.0
23.1 TO 24.0	0.0 76.8	0.23 86.0	1.41 91.8	1.29 94.6	0.97 96.0	0.17 96.6	0.04 96.7	0.03 96.7	
24.1 TO 25.0	0.0 59.7	0.26 76.8	1.55 85.8	1.76 90.2	0.82 91.6	0.27 92.1	0.07 92.5	0.05 92.6	
25.1 TO 26.0	0.0 35.2	0.16 59.7	0.90 76.5	1.40 84.0	0.83 86.6	0.13 87.2	0.05 87.5	0.07 87.8	
26.1 TO 27.0	0.0 19.7	0.08 35.2	0.94 59.6	3.17 75.5	1.53 81.5	0.60 83.3	0.08 83.8	0.0 84.0	0.09 84.2
27.1 TO 28.0	0.0 6.3	0.35 19.7	0.97 35.1	5.17 58.5	4.81 71.3	1.69 75.8	0.40 77.0	0.0 77.4	0.01 77.6
28.1 TO 29.0	0.0 0.9	0.09 6.3	1.65 19.4	4.41 33.8	6.67 52.1	3.51 60.0	1.17 62.8	0.12 63.6	0.05 64.0
29.1 TO 30.0		0.09 0.9	0.87 6.2	3.04 17.6	3.41 27.6	3.84 39.2	1.68 43.6	0.62 45.3	0.05 46.0
30.1 TO 31.0			0.05 0.8	0.95 5.3	2.12 13.6	2.47 20.2	3.68 28.0	1.37 30.7	0.35 31.7
31.1 TO 32.0				0.20 0.7	1.13 4.3	2.93 10.5	3.01 14.6	2.77 18.7	0.82 20.0
32.1 TO 33.0					0.22 0.5	1.32 2.9	2.43 6.2	0.86 7.4	0.91 8.6

Table 10 (cont) PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

OCTOBER 1957-~~76~~

ADEN / KHORMAKSAR

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

(C DEG) EXTRACTED FROM THE METEOROLOGICAL

DRY-BULB

T (DEG C)

T-9 T-10 T-11 T-12 T-13 T-14 T-15 T-16 T-17

26.1 TO 27.0 0.01
84.327.1 TO 28.0 0.04 0.0 0.01
77.7 77.8 77.828.1 TO 29.0 0.01 0.04
64.2 64.329.1 TO 30.0 0.04 0.01
46.3 46.530.1 TO 31.0 0.13 0.05 0.01 0.0
32.3 32.7 32.8 32.931.1 TO 32.0 0.44 0.26 0.04 0.03 0.0
20.7 21.2 21.5 21.6 21.732.1 TO 33.0 0.30 0.13 0.11 0.08 0.04 0.01
9.2 9.4 9.6 9.9 10.0 10.033.1 TO 34.0 0.26 0.08 0.04 0.03 0.09 0.03
2.9 3.1 3.3 3.4 3.5 3.634.1 TO 35.0 0.04 0.09 0.08 0.07 0.05 0.05 0.01 0.01 0.03
0.6 0.7 0.8 0.9 1.0 1.1 1.1 1.1 1.235.1 TO 36.0 0.03 0.03 0.03 0.07 0.0 0.0 0.01 0.01 0.01
0.1 0.1 0.1 0.2 0.2 0.2 0.3 0.3 0.336.1 TO 37.0 0.01 0.01
0.0 0.0 0.01 0.01
0.1 0.137.1 TO 38.0
0.0
0.038.1 TO 39.0
0.01
0.0

T-18

35.1 TO 36.0 0.01
0.336.1 TO 37.0 0.01
0.1

Table 10 (cont.) PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

OCTOBER 1957-58

ADEN / KHORMAISAR

(OCTOBER 1957-58) PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES (DEG C)

DRY-BULB T (DEG C)	T	T-1	T-2	T-3	T-4	T-5	T-6	T-7	T-8
33.1 TO 34.0					0.01	0.20	0.89	0.69	0.17
					0.0	0.3	1.4	2.3	2.5
34.1 TO 35.0							0.08	0.17	0.16
							0.1	0.3	0.5
35.1 TO 36.0								0.03	
								0.0	
36.1 TO 37.0									
37.1 TO 38.0									
38.1 TO 39.0									
39.1 TO 40.0									
40.1 TO 41.0									
41.1 TO 42.0									
42.1 TO 43.0									
43.1 TO 44.0									
44.1 TO 45.0									
45.1 TO 46.0									
46.1 TO 47.0									
47.1 TO 48.0									
48.1 TO 49.0									
49.1 TO 50.0									
50.1 TO 51.0									
51.1 TO 52.0									
52.1 TO 53.0									
53.1 TO 54.0									
54.1 TO 55.0									
55.1 TO 56.0									
56.1 TO 57.0									
57.1 TO 58.0									
58.1 TO 59.0									
59.1 TO 60.0									
60.1 TO 61.0									
61.1 TO 62.0									
62.1 TO 63.0									
63.1 TO 64.0									
64.1 TO 65.0									
65.1 TO 66.0									
66.1 TO 67.0									
67.1 TO 68.0									
68.1 TO 69.0									
69.1 TO 70.0									
70.1 TO 71.0									
71.1 TO 72.0									
72.1 TO 73.0									
73.1 TO 74.0									
74.1 TO 75.0									
75.1 TO 76.0									
76.1 TO 77.0									
77.1 TO 78.0									
78.1 TO 79.0									
79.1 TO 80.0									
80.1 TO 81.0									
81.1 TO 82.0									
82.1 TO 83.0									
83.1 TO 84.0									
84.1 TO 85.0									
85.1 TO 86.0									
86.1 TO 87.0									
87.1 TO 88.0									
88.1 TO 89.0									
89.1 TO 90.0									
90.1 TO 91.0									
91.1 TO 92.0									
92.1 TO 93.0									
93.1 TO 94.0									
94.1 TO 95.0									
95.1 TO 96.0									
96.1 TO 97.0									
97.1 TO 98.0									
98.1 TO 99.0									
99.1 TO 100.0									
100.1 TO 101.0									
101.1 TO 102.0									
102.1 TO 103.0									
103.1 TO 104.0									
104.1 TO 105.0									
105.1 TO 106.0									
106.1 TO 107.0									
107.1 TO 108.0									
108.1 TO 109.0									
109.1 TO 110.0									
110.1 TO 111.0									
111.1 TO 112.0									
112.1 TO 113.0									
113.1 TO 114.0									
114.1 TO 115.0									
115.1 TO 116.0									
116.1 TO 117.0									
117.1 TO 118.0									
118.1 TO 119.0									
119.1 TO 120.0									
120.1 TO 121.0									
121.1 TO 122.0									
122.1 TO 123.0									
123.1 TO 124.0									
124.1 TO 125.0									
125.1 TO 126.0									
126.1 TO 127.0									
127.1 TO 128.0									
128.1 TO 129.0									
129.1 TO 130.0									
130.1 TO 131.0									
131.1 TO 132.0									
132.1 TO 133.0									
133.1 TO 134.0									
134.1 TO 135.0									
135.1 TO 136.0									
136.1 TO 137.0									
137.1 TO 138.0									

Table II PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

NOVEMBER 1957-66

ADEN / KHORMAKSAR

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

DRY-BULB

T (DEG C)

	T	T-1	T-2	T-3	T-4	T-5	T-6	T-7	T-8
15.1 TO 16.0	0.0 99.9	0.0 100.0							
16.1 TO 17.0	0.0 99.8	0.0 99.9	0.0 100.0						
17.1 TO 18.0	0.0 99.2	0.0 99.3	0.0 99.9	0.0 100.0					
18.1 TO 19.0	0.0 98.3	0.0 99.2	0.04 99.8	0.0 99.9	0.01 100.0				
19.1 TO 20.0	0.0 96.2	0.08 98.3	0.10 99.2	0.21 99.8	0.07 99.9	0.03 99.9			
20.1 TO 21.0	0.0 92.1	0.04 96.2	0.31 98.2	0.22 99.0	0.13 99.4	0.01 99.4	0.0 99.5		
21.1 TO 22.0	0.0 86.9	0.10 92.1	0.90 96.1	0.82 97.3	0.39 98.4	0.15 98.7	0.01 98.7		
22.1 TO 23.0	0.0 76.1	0.36 86.9	1.32 92.0	1.61 95.1	0.57 96.0	0.13 96.2	0.07 96.3	0.01 96.4	0.01 96.4
23.1 TO 24.0	0.0 55.4	0.25 76.1	1.65 86.5	1.51 90.3	0.78 91.8	0.14 92.2	0.04 92.2	0.01 92.3	
24.1 TO 25.0	0.01 25.9	0.29 55.4	1.69 75.8	1.81 84.6	0.67 86.9	0.21 87.6	0.06 87.8	0.0 87.9	0.01 87.9
25.1 TO 26.0	0.04 6.9	0.42 25.9	2.39 55.1	3.57 73.8	2.13 80.8	0.64 82.4	0.18 83.0	0.03 83.1	0.01 83.1
26.1 TO 27.0	0.01 2.1	0.53 6.9	3.88 25.4	9.57 52.2	7.31 67.0	2.35 71.8	0.43 72.8	0.10 73.2	0.01 73.3
27.1 TO 28.0	0.0 0.2	0.22 2.0	1.18 6.3	4.65 21.0	6.89 38.2	3.21 45.7	0.97 48.2	0.29 48.7	0.07 49.0
28.1 TO 29.0	— —	0.03 0.2	0.57 1.8	1.29 4.9	4.58 14.9	6.06 25.3	2.54 29.6	0.71 31.1	0.13 31.3
29.1 TO 30.0	— —	— —	0.14 0.2	0.82 1.2	1.24 3.0	3.93 8.5	3.10 12.8	1.08 14.5	0.36 15.3
30.1 TO 31.0	— —	— —	— —	0.04 0.0	0.14 0.3	0.46 0.8	1.06 2.3	0.76 3.6	0.39 4.2
31.1 TO 32.0	— —	— —	— —	— —	— —	0.07 0.1	0.10 0.2	0.39 0.6	0.42 1.1
32.1 TO 33.0	— —	— —	— —	— —	— —	— —	0.01 0.0	0.01 0.0	0.06 0.1

Table II (cont) PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

NOVEMBER 1957-58

ADEN / KHORMAKSAR

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

Table 12 PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

DECEMBER 1957-66

ADEN / KHORMAKSAR

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

DRY-BULB

T (DEG C)

	T	T-1	T-2	T-3	T-4	T-5	T-6	T-7	T-8
15.1 TO 16.0	0.0 99.9	0.0 100.0							
16.1 TO 17.0	0.0 99.7	0.0 99.9	0.0 100.0						
17.1 TO 18.0	0.0 98.8	0.0 99.7	0.01 99.9	0.03 100.0					
18.1 TO 19.0	0.0 96.5	0.04 98.8	0.11 99.7	0.05 99.9	0.05 100.0				
19.1 TO 20.0	0.0 93.1	0.07 96.5	0.39 98.7	0.32 99.5	0.05 99.7				
20.1 TO 21.0	0.01 84.3	0.15 93.1	0.35 96.4	0.59 98.3	0.20 98.7	0.03 98.8	0.05 98.9		
21.1 TO 22.0	0.01 71.7	0.20 84.3	0.87 92.9	1.06 95.9	0.50 97.2	0.12 97.4	0.03 97.5		
22.1 TO 23.0	0.0 48.1	0.65 71.7	0.93 84.1	1.44 91.8	0.59 93.8	0.23 94.5	0.05 94.7	0.01 94.7	
23.1 TO 24.0	0.0 17.7	0.62 43.1	1.55 71.0	1.69 82.5	1.37 88.8	0.44 90.2	0.17 90.7	0.01 90.8	
24.1 TO 25.0	0.0 3.4	0.70 17.7	5.97 47.5	8.97 68.9	5.17 78.6	3.08 83.6	0.44 84.5	0.15 84.9	0.03 84.9
25.1 TO 26.0	0.0 0.4	0.05 3.4	1.98 17.0	9.06 40.8	5.03 53.2	1.91 57.8	0.89 59.7	0.20 60.2	0.12 60.4
26.1 TO 27.0	0.0 0.1	0.0 0.4	0.52 3.3	4.29 15.0	6.51 29.7	3.56 37.1	1.44 39.8	0.51 40.8	0.15 41.1
27.1 TO 28.0		0.03 0.1	0.07 0.4	0.78 2.8	4.02 10.2	5.99 18.4	3.20 22.2	1.08 23.5	0.43 23.9
28.1 TO 29.0			0.08 0.1	0.11 0.3	1.33 1.9	2.92 5.3	2.15 7.5	0.63 8.1	0.19 8.3
29.1 TO 30.0				0.04 0.0	0.04 0.1	0.35 0.4	0.39 0.8	0.05 0.9	
30.1 TO 31.0								0.03 0.0	0.03 0.1

Table 12 (cont.) PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

DECEMBER 1957-66

~~ADEN~~ KHORMAKSAR

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

Table 13 PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

ANNUAL 1957-58

ADEN / KHORMAKSAR

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

DRY-BULB

T T (DEG C)	T	T-1	T-2	T-3	T-4	T-5	T-6	T-7	T-8
15.1 TO 16.0	0.0 99.9	0.0 100.0							
16.1 TO 17.0	0.0 99.8	0.0 99.9	0.00+ 100.0	0.00+ 100.0					
17.1 TO 18.0	0.0 99.5	0.0 99.8	0.01 99.9	0.01 100.0	0.00+ 100.0				
18.1 TO 19.0	0.00+ 98.9	0.02 99.5	0.06 99.8	0.03 99.9	0.02 100.0	0.01 100.0	0.00+ 100.0	0.00+ 100.0	
19.1 TO 20.0	0.0 97.7	0.04 98.9	0.14 99.5	0.10 99.7	0.03 99.8	0.00+ 99.8	0.01 99.8		
20.1 TO 21.0	0.00+ 94.9	0.05 97.7	0.18 98.8	0.16 99.3	0.06 99.5	0.01 99.5	0.01 99.5	0.00+ 99.5	
21.1 TO 22.0	0.00+ 90.5	0.05 94.9	0.37 97.6	0.32 98.6	0.15 98.9	0.06 99.0	0.02 99.0	0.00+ 99.0	
22.1 TO 23.0	0.01 80.6	0.18 90.5	0.44 94.8	0.55 97.2	0.22 97.8	0.07 98.0	0.02 98.0	0.01 98.1	0.00+ 98.1
23.1 TO 24.0	0.01 67.5	0.20 80.6	1.11 90.3	1.05 94.2	0.65 96.0	0.18 96.4	0.04 96.5	0.01 96.6	
24.1 TO 25.0	0.00+ 54.9	0.24 67.5	2.70 80.4	3.88 89.0	1.61 91.9	0.63 93.0	0.14 93.2	0.03 93.3	0.01 93.3
25.1 TO 26.0	0.00+ 41.2	0.09 54.9	1.54 67.3	3.33 77.4	1.81 82.1	0.50 83.4	0.19 83.9	0.05 84.0	0.01 84.1
26.1 TO 27.0	0.00+ 30.3	0.11 41.2	1.55 54.8	3.44 65.7	2.78 72.5	1.48 75.4	0.42 76.1	0.17 76.4	0.04 76.5
27.1 TO 28.0	0.01 15.4	0.27 30.3	1.40 41.1	3.17 53.1	2.87 60.6	2.37 64.6	1.04 66.0	0.22 66.4	0.08 66.5
28.1 TO 29.0	0.00+ 4.5	0.23 15.3	1.96 30.0	2.47 39.4	2.88 48.3	2.37 52.9	1.07 54.5	0.20 54.9	0.06 55.0
29.1 TO 30.0	0.0 0.4	0.22 4.5	1.35 15.1	3.49 27.8	2.19 34.8	2.20 40.7	0.89 42.9	0.25 43.5	0.06 43.7
30.1 TO 31.0		0.01 0.4	0.50 4.3	2.10 13.0	2.32 22.3	1.38 27.0	1.04 30.8	0.34 32.1	0.09 32.4
31.1 TO 32.0			0.03 0.4	0.83 3.7	2.14 10.4	2.44 17.3	1.09 20.7	0.78 23.4	0.25 24.4

Table 13 (cont) PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

ANNUAL 1957-67

ADEN/KHORMAKSAR

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

DRY-BULB

T (DEG C)

T	T-1	T-2	T-3	T-4	T-5	T-6	T-7	T-8
32.1 TO 33.0			0.06 0.4	0.71 2.9	1.66 7.4	1.57 11.9	0.66 14.2	0.55 16.1
33.1 TO 34.0			0.00+ 0.0	0.12 0.3	0.87 2.1	1.39 5.0	1.03 7.9	0.55 9.5
34.1 TO 35.0				0.01 0.0	0.11 0.2	0.60 1.1	0.86 2.6	0.94 4.5
35.1 TO 36.0					0.00+ 0.0	0.04 0.1	0.18 0.4	0.34 1.0
36.1 TO 37.0							0.03 0.0	0.13 0.2
37.1 TO 38.0								0.01 0.0

T-9 T-10 T-11 T-12 T-13 T-14 T-15

24.1 TO 25.0	0.00+ 93.3						
25.1 TO 26.0	0.00+ 84.1						
26.1 TO 27.0	0.01 76.5	0.00+ 76.5					
27.1 TO 28.0	0.01 66.5	0.00+ 66.5	0.00+ 66.5				
28.1 TO 29.0	0.01 55.1	0.01 55.1					
29.1 TO 30.0	0.02 43.8	0.01 43.8	0.00+ 43.8	0.00+ 43.8			
30.1 TO 31.0	0.04 32.6	0.01 32.6	0.01 32.7				
31.1 TO 32.0	0.09 24.7	0.04 24.8	0.01 24.8	0.01 24.8	0.00+ 24.8		
32.1 TO 33.0	0.19 16.9	0.05 17.0	0.02 17.1	0.01 17.1	0.01 17.1	0.00+ 17.1	
33.1 TO 34.0	0.47 10.9	0.19 11.5	0.02 11.6	0.01 11.6	0.01 11.6	0.01 11.6	0.00+ 11.6

Table 13 (cont) PERCENTAGE FREQUENCIES OF DRY-BULB AND ASSOCIATED WET-BULB TEMPERATURES

ANNUAL 1957-67

ADEN / KHOR MAKSAR

ASSOCIATED WET-BULB TEMPERATURE (DEG C)

DRY-BULB

T (DEG C)

	T-9	T-10	T-11	T-12	T-13	T-14	T-15	T-16	T-17
34.1 TO 35.0	0.51 5.5	0.44 6.5	0.17 6.8	0.03 6.9	0.01 6.9	0.01 6.9	0.00+ 6.9	0.00+ 7.0	0.00+ 7.0
35.1 TO 36.0	0.51 2.0	0.29 2.5	0.23 3.0	0.12 3.2	0.01 3.2	0.00+ 3.3	0.00+ 3.3	0.00+ 3.3	0.00+ 3.3
36.1 TO 37.0	0.23 0.5	0.32 0.9	0.21 1.2	0.19 1.4	0.07 1.5	0.02 1.5	0.01 1.5		
37.1 TO 38.0	0.01 0.0	0.05 0.1	0.08 0.2	0.05 0.2	0.05 0.3	0.01 0.3	0.00+ 0.3	0.01 0.4	
38.1 TO 39.0	0.00+ 0.0	0.00+ 0.0	0.01 0.0	0.01 0.0	0.00+ 0.0	0.00+ 0.1	0.01 0.1	0.00+ 0.1	0.00+ 0.1
39.1 TO 40.0				0.01 0.0	0.00+ 0.0	0.00+ 0.0	0.01 0.0		
40.1 TO 41.0						0.00+ 0.0			
41.1 TO 42.0							0.00+ 0.0		

T-18 T-19

35.1 TO 36.0	0.00+ 3.3
36.1 TO 37.0	0.00+ 1.5
37.1 TO 38.0	
38.1 TO 39.0	
39.1 TO 40.0	
40.1 TO 41.0	0.00+ 0.0
41.1 TO 42.0	0.00+ 0.0
42.1 TO 43.0	0.00+ 0.0

Table 14 PERCENTAGE FREQUENCY OF HOURLY DRY-BULB TEMPERATURE AT ADEN/KHORMAKSAR

Dry-bulb Temperature (°C)	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
16.1 TO 17.0	0.1												0.0+
17.1 TO 18.0	0.1	0.1	0.0+										0.0+
18.1 TO 19.0	0.6	0.4	0.3	0.0+									0.1
19.1 TO 20.0	0.9	1.0	0.6	0.1									0.3
20.1 TO 21.0	1.5	1.2	0.7	0.1	0.0+								0.5
21.1 TO 22.0	1.9	2.0	1.4	0.4	0.2								1.0
22.1 TO 23.0	2.4	2.7	1.6	0.8	0.2								1.5
23.1 TO 24.0	11.6	8.7	2.4	1.5	0.3	0.0+							3.2
24.1 TO 25.0	33.9	28.0	11.9	1.8	1.0	0.1	0.2	0.1	0.1	0.1	0.1		9.2
25.1 TO 26.0	16.2	17.9	17.7	4.2	0.8	0.1	0.6	0.2	3.5	9.8	19.2		7.5
26.1 TO 27.0	15.9	14.8	21.3	13.5	2.6	0.1	0.7	2.2	1.0	6.5	24.2	17.1	10.0
27.1 TO 28.0	12.7	15.8	16.9	25.1	6.5	0.9	2.5	7.0	3.3	13.5	17.5	15.7	11.4
28.1 TO 29.0	2.2	6.8	15.9	19.7	14.7	3.5	8.3	12.4	10.3	17.7	16.0	7.5	11.3
29.1 TO 30.0	0.0+	0.5	8.2	15.3	20.8	10.6	18.2	16.0	19.1	13.7	10.8	0.9	11.2
30.1 TO 31.0	1.0	10.7	13.8	14.6	13.5	11.8	14.4	11.2	3.1	0.1	7.9		
31.1 TO 32.0	0.2	5.3	14.4	18.5	13.8	12.3	14.9	11.6	1.5			7.7	
32.1 TO 33.0	0.1	1.1	11.3	11.9	11.5	10.9	12.4	6.4	0.2			5.5	
33.1 TO 34.0	0.0+	0.3	6.8	12.6	11.6	11.2	11.1	2.5	0.1			4.7	
34.1 TO 35.0	0.2	3.4	12.0	10.8	9.5	7.3	0.9	0.0+				3.7	
35.1 TO 36.0	0.1	1.5	7.7	4.8	3.3	3.2	0.2					1.7	
36.1 TO 37.0	0.0+	1.0	5.7	3.2	2.1	2.2	0.1					1.2	
37.1 TO 38.0	0.3	1.5	0.7	0.3	0.4	0.0						0.3	
38.1 TO 39.0	0.2	0.3	0.1	0.0+	0.0+	0.0+						0.1	
39.1 TO 40.0	0.1	0.1	0.0+	0.0+	0.0+	0.0+						0.0+	
40.1 TO 41.0	0.0+	0.0+	0.0+	0.0+	0.0+	0.0+						0.0+	
41.1 TO 42.0	0.0+	0.0+	0.0+	0.0+	0.0+	0.0+						0.0+	
42.1 TO 43.0													0.0+

0.0+ indicates less than .05 per cent.

Table 15 PERCENTAGE FREQUENCY OF HOURLY WET-BULB TEMPERATURE AT ADEN/KHORMAKSAR July 1957 - June 1967

Wet-bulb Temperature (°C)	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
	11.1 TO 12.0	0.0+	0.0+	0.0+	0.0+	0.0+	0.0+	0.0+	0.0+	0.1	0.1	0.0+	0.0+
12.1 TO 13.0													
13.1 TO 14.0	0.0+	0.0+	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.0+	0.0+
14.1 TO 15.0	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.0+	0.0+
15.1 TO 16.0	0.4	0.4	0.2	0.2	0.1	0.4	0.2	0.2	0.1	0.2	0.1	0.2	0.1
16.1 TO 17.0	1.1	1.1	0.4	0.4	0.2	0.4	0.2	0.0+	0.0+	0.3	0.6	0.9	0.3
17.1 TO 18.0	1.9	1.9	1.0	0.6	0.2	0.1	0.2	0.1	0.1	0.5	0.9	2.3	0.6
18.1 TO 19.0	3.8	3.8	2.3	0.9	0.5	0.5	0.2	0.2	0.2	1.3	2.1	3.5	1.2
19.1 TO 20.0	9.7	9.7	4.6	2.1	0.7	0.3	0.0+	0.0+	0.0+	2.6	4.1	8.7	2.7
20.1 TO 21.0	16.2	16.2	10.9	3.7	0.8	0.4	0.4	0.2	0.1	0.0+	3.1	5.2	12.6
21.1 TO 22.0	33.6	33.6	29.8	10.9	2.3	1.0	0.4	0.2	0.1	0.2	5.9	10.8	23.6
22.1 TO 23.0	24.5	24.5	32.9	27.6	5.8	1.8	1.0	0.8	1.0	0.5	9.2	20.7	30.4
23.1 TO 24.0	8.0	8.0	14.9	30.0	15.5	3.9	3.1	4.1	8.0	3.9	17.1	29.5	14.3
24.1 TO 25.0	0.8	0.8	2.6	18.1	32.0	10.4	7.0	12.8	21.6	11.8	24.5	19.0	3.0
25.1 TO 26.0	0.1	0.1	4.5	26.9	13.7	11.9	17.5	20.8	15.2	15.5	4.8	0.2	11.0
26.1 TO 27.0	0.0+	0.0+	0.6	13.5	32.8	26.2	32.5	27.4	30.8	13.4	1.8	0.1	15.0
27.1 TO 28.0			1.4	26.4	29.8	24.2	17.3	25.7	5.5	0.2	10.9		
28.1 TO 29.0			0.1	7.9	17.9	7.2	3.8	11.0	0.8		4.1		
29.1 TO 30.0				1.0	2.4	0.6	0.1	0.8	0.0+		0.4		
30.1 TO 31.0					0.1	0.1						0.0+	

0.0+ indicates less than 0.05 per cent

