

ข้อมูลอากาศประเทศไทยสำหรับงานอนุรักษ์พลังงาน
จังหวัดสงขลา (หาดใหญ่)



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สิงหาคม 2543

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CLIMATOLOGICAL DATA FOR THE PERIOD 1981-1998												station : HAT YAI (AIR PORT)	
Elevation of station above MSL		34 Meters										Latitude: 06 55 N	
												Longitude: 100 26 E	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
TEMPERATURE (° C)													
Averages													
Daily Maximum	30.3	31.6	32.9	33.6	32.9	32.0	31.5	31.2	30.6	30.2	29.1	28.6	31.2
Monthly Mean	28.2	26.8	27.6	28.1	28.1	27.7	27.3	27.2	26.8	26.4	26.0	25.6	27.0
Daily Minimum	22.7	22.9	23.5	24.2	24.6	24.5	24.3	24.1	23.9	23.8	23.7	23.3	23.8
Dry bulb Standard Deviation	2.8	3.2	3.7	3.5	3.2	3.0	2.9	3.0	2.7	2.6	2.3	2.3	2.9
Extremes													
Highest	33.2	36.9	36.9	37.4	37.0	36.6	35.1	37.5	35.1	34.4	35.6	32.1	37.5
Lowest	17.8	18.9	20.2	22.3	23.0	22.1	21.8	20.4	21.8	20.6	21.6	14.5	14.5
Monthly Dew Point	21.8	21.9	22.4	23.3	23.9	23.5	23.2	23.0	23.2	23.5	23.5	22.7	23.0
Dew Point Standard Deviation	1.3	1.4	1.4	1.3	1.0	1.1	1.1	1.2	1.0	0.9	0.9	1.1	1.1
Monthly Wet bulb Temperature	23.1	23.4	24.0	24.8	25.1	24.8	24.5	24.3	24.3	24.4	24.2	23.6	24.2
DEGREE DAY BASE 18.3° C													
Heating	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
Cooling	243.1	244.8	288.7	293.9	303.6	282.0	279.4	273.6	254.8	250.3	230.4	226.0	3,170.6
RELATIVE HUMIDITY (%)													
Averages													
Monthly Mean	79.6	77.0	75.5	77.8	81.0	79.8	80.0	79.5	82.5	85.1	87.1	85.5	80.9
Hour 01:00-06:00	92.2	91.3	90.7	91.9	92.9	92.0	92.3	92.0	93.2	94.6	95.2	94.2	92.7
Hour 07:00-12:00	83.1	81.2	79.4	80.7	83.1	83.3	84.1	83.2	84.3	86.0	88.3	87.5	83.7
Hour 13:00-18:00	60.5	55.5	53.3	57.1	64.1	62.7	62.4	62.1	67.5	71.2	75.0	72.4	63.7
Hour 19:00-24:00	82.4	80.0	78.7	81.4	83.8	81.2	80.9	80.6	84.9	88.6	90.2	88.2	83.4
WIND													
Average Speed (m/s)	2.2	2.0	1.8	1.3	1.3	1.5	1.6	1.8	1.5	1.2	1.3	1.9	1.6
Prevailing wind	NE	NE	NE	NE	SW	SW	SW	SW	SW	SW	NE	NE	SW, NE
Maximum Speed (m/s)	11.6	10.3	10.6	10.3	12.9	11.8	11.3	11.8	12.9	8.7	9.3	10.3	12.9
SKY COVER (0-10)													
Average Sky Condition	5.9	5.6	6.3	6.8	7.6	7.8	8.1	8.2	8.5	8.5	8.3	7.6	7.5
Percentage of Sky cover													
Clear sky (0-3)	17	20	13	8	3	4	2	2	1	1	1	5	6
Partly Cloudy sky (4-7)	54	55	54	50	38	36	33	30	27	26	30	39	39
Cloudy sky (8-10)	29	25	33	41	59	61	64	68	72	73	68	56	54
SUNSHINE DURATION* (hours)													
Average Monthly total	-	-	-	-	-	-	-	-	-	-	-	-	-
Percentage of Sunshine	-	-	-	-	-	-	-	-	-	-	-	-	-
SOLAR RADIATION* (W/m²)													
Average Hourly max	-	-	-	-	-	-	-	-	-	-	-	-	-
Average Hourly mean	-	-	-	-	-	-	-	-	-	-	-	-	-
Average Daily Total	-	-	-	-	-	-	-	-	-	-	-	-	-
RAINFALL (mm)													
Average Monthly total	37.4	21.5	42.3	111.8	160.2	144.3	136.5	138.2	176.0	224.8	290.4	305.4	1,788.8
Daily record high	46.8	71.7	62.1	124.6	93.4	92.0	151.8	133.7	105.4	89.8	202.0	316.8	316.8
Average Number of rainy days (0.1 mm. Or more)	6	3	4	10	14	14	14	15	18	19	20	16	153
EVAPORATION (mm)													
Average Monthly total	-	-	-	-	-	-	-	-	-	-	-	-	-

remark: 1 m/s = 3.597 km/h = 2.237 mph = 196.85 fpm = 1.9455 knots

(*) data base on 1967 - 1996 recorded period

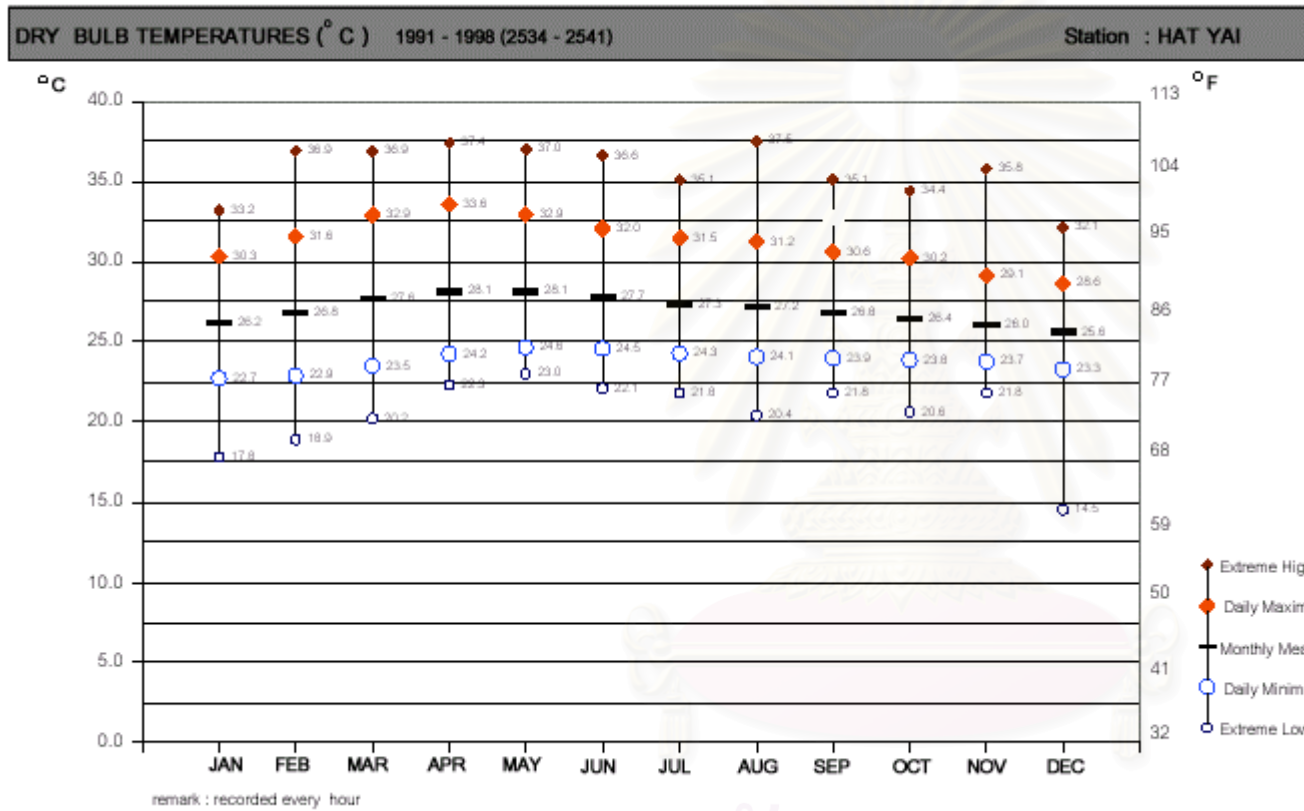
1 W/m² = 0.317 Btu/h.ft²

(-) missing value or no data report

ตารางแสดงผลข้อมูลอุณหภูมิกระเปาะแห้ง (dry bulb temperatures)

DRY BULB TEMPERATURES (°C) 1981 - 1998 (2524 - 2541)														Station : HAT YAI																									
MONTH	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE			JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER			ANNUAL		
DAY	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max
1	22.5	26.1	30.1	22.7	26.2	30.8	23.1	27.5	32.9	23.9	28.2	33.8	24.4	28.1	33.7	25.0	28.2	33.5	24.2	27.8	32.1	24.0	27.9	32.3	23.9	26.7	30.6	24.1	27.3	31.5	23.7	25.8	29.8	23.6	26.6	30.3	23.8	27.2	31.8
2	22.5	25.7	29.2	23.2	26.4	30.4	23.2	27.4	32.4	24.3	28.1	33.5	24.8	28.5	33.6	24.8	27.8	32.2	24.4	27.3	32.0	24.4	27.5	31.6	23.8	26.8	30.3	24.2	27.0	31.3	23.6	26.0	29.4	23.5	25.8	28.4	23.9	27.0	31.2
3	22.2	25.7	29.9	22.5	25.9	29.3	23.0	27.4	32.8	24.0	27.9	33.0	24.7	28.4	33.7	24.6	27.5	31.3	23.9	27.4	31.9	23.9	27.4	31.6	24.1	26.8	30.8	23.8	27.0	32.2	23.8	26.7	30.0	23.4	25.9	29.3	23.7	27.0	31.3
4	22.4	25.9	29.8	22.8	26.4	30.7	22.8	27.2	32.5	24.3	27.6	32.3	24.4	28.2	33.3	24.7	27.1	31.3	24.1	27.4	32.1	24.1	27.3	31.4	23.7	26.5	30.3	24.0	26.2	28.9	24.0	26.3	29.3	23.4	25.8	28.9	23.7	26.8	30.9
5	22.9	26.2	30.5	22.7	26.4	30.8	22.5	27.1	32.5	23.9	27.7	33.5	24.5	28.3	33.9	24.8	27.8	32.3	24.1	26.9	31.6	24.5	27.0	30.7	23.6	26.4	30.7	24.0	25.9	29.4	23.9	25.7	28.3	23.5	25.1	27.2	23.7	26.7	31.0
6	23.0	26.2	30.0	22.6	26.5	30.9	22.7	27.4	32.8	23.9	28.3	33.5	24.5	28.1	33.2	24.7	27.7	32.4	24.3	26.8	30.1	23.9	26.8	30.2	23.7	26.3	30.5	23.7	26.2	30.3	23.9	26.0	29.3	23.5	25.0	27.0	23.7	26.8	30.9
7	22.6	26.0	30.1	23.2	26.5	31.2	23.0	27.5	32.9	24.0	28.3	33.9	24.6	27.9	32.5	24.8	27.8	32.1	24.0	27.0	31.8	23.9	27.1	30.4	23.7	27.0	31.0	23.8	26.9	30.6	23.7	25.8	28.9	23.6	25.2	27.2	23.7	26.9	31.0
8	22.8	26.1	30.2	22.8	26.5	31.2	23.6	27.7	32.6	24.4	28.6	34.0	24.4	28.5	33.2	24.7	28.1	32.9	23.9	26.8	31.1	24.1	27.1	30.5	23.8	26.7	30.3	24.1	26.8	30.6	23.8	26.5	30.3	23.3	25.3	28.2	23.8	27.0	31.3
9	22.8	26.3	30.5	23.3	26.8	31.4	23.1	27.4	32.5	24.2	28.2	33.9	24.9	28.1	33.0	24.6	27.5	31.7	24.0	27.2	31.1	23.9	27.4	31.8	23.6	27.2	30.7	23.7	26.4	30.8	23.8	26.1	29.2	23.1	25.5	28.4	23.8	27.0	31.2
10	23.2	26.4	30.6	23.0	26.5	30.5	22.9	27.6	33.0	24.2	28.2	33.9	24.2	28.2	32.6	24.6	27.7	32.4	24.3	27.6	31.9	23.8	27.2	32.2	23.9	27.6	32.7	23.9	26.4	30.6	24.1	26.4	30.0	23.7	25.2	27.9	23.8	27.1	31.5
11	22.7	26.3	30.5	23.0	26.5	31.0	23.4	27.7	33.2	24.1	28.1	34.0	24.5	28.4	32.9	24.3	27.6	31.8	24.5	26.9	31.0	24.0	27.4	32.2	23.9	27.6	32.4	24.0	26.2	29.8	24.0	26.0	28.6	23.0	25.0	27.5	23.8	27.0	31.2
12	23.0	26.4	30.3	22.9	26.6	31.5	23.4	27.6	33.3	24.3	28.0	33.1	24.9	28.1	33.1	24.6	28.0	32.6	24.1	27.1	31.6	23.9	27.7	32.5	24.1	27.4	31.2	24.0	26.5	29.9	23.9	25.5	28.1	23.1	25.5	28.2	23.8	27.0	31.3
13	22.8	26.3	30.4	22.9	26.6	31.6	23.1	27.5	33.1	24.1	28.3	33.0	24.4	28.2	32.9	24.8	27.4	31.2	24.1	27.7	32.2	23.9	27.4	32.2	24.3	26.9	30.0	23.8	26.7	31.2	23.7	25.8	28.4	22.8	25.7	29.1	23.7	27.0	31.3
14	22.8	26.1	30.2	22.8	26.7	31.3	23.0	27.3	32.6	24.1	28.2	33.6	25.1	27.6	32.6	24.1	27.4	32.1	24.5	27.6	31.7	24.0	27.5	32.1	24.0	26.7	30.0	24.1	26.3	30.6	23.4	26.3	29.6	23.4	26.0	29.5	23.8	27.0	31.3
15	22.4	26.1	30.4	22.9	27.1	32.0	22.9	27.2	32.3	23.9	28.0	33.9	24.4	28.1	33.1	23.8	27.7	32.6	24.1	27.5	31.9	24.1	27.7	32.4	24.2	26.9	30.9	23.7	26.3	29.6	23.9	26.1	29.3	23.5	25.6	28.8	23.6	27.0	31.4
16	22.7	26.1	30.5	23.1	27.2	32.5	23.3	27.7	33.9	24.1	28.3	34.4	24.4	28.0	32.0	24.1	28.0	33.1	24.3	27.6	32.0	24.1	27.9	32.5	24.0	26.7	29.8	23.8	26.5	30.6	23.9	26.0	28.8	23.3	26.0	29.5	23.8	27.2	31.6
17	23.1	26.2	29.7	23.4	27.2	32.4	23.9	27.8	33.2	24.1	28.1	33.9	24.3	28.1	33.1	24.8	27.3	31.0	24.1	27.3	31.4	24.3	27.4	32.0	24.0	26.6	30.1	23.6	26.9	31.4	23.8	26.1	29.9	23.4	25.8	29.0	23.9	27.1	31.4
18	22.4	26.1	30.1	23.2	27.4	33.4	24.0	27.3	31.9	23.9	28.3	33.9	24.8	28.1	32.7	24.4	28.0	32.6	24.3	27.1	31.1	24.0	27.1	31.1	24.0	26.2	28.9	24.0	26.7	30.8	23.2	25.6	28.3	23.6	25.9	28.9	23.8	27.0	31.1
19	22.6	26.2	30.8	23.0	27.0	32.5	23.7	27.5	33.0	24.2	28.1	33.7	24.5	27.9	32.6	24.8	27.7	31.2	23.9	26.6	30.1	24.3	27.1	30.6	23.9	26.9	30.5	24.0	26.3	29.4	23.7	25.7	28.6	23.4	25.7	28.9	23.8	26.9	31.0
20	22.2	26.1	30.6	22.6	27.2	32.5	24.0	27.5	33.6	24.2	28.0	33.7	24.7	27.8	32.9	24.7	28.4	33.0	24.1	27.5	32.1	24.3	27.0	30.9	24.1	26.8	29.6	23.9	26.2	30.0	23.6	25.9	28.3	23.3	25.6	28.5	23.8	27.0	31.3
21	22.8	26.3	30.5	23.0	27.1	31.9	23.5	27.6	32.9	24.1	28.2	34.1	24.4	28.1	33.5	24.7	27.9	32.2	24.3	27.5	31.7	24.2	26.6	29.2	24.2	27.2	30.8	23.7	26.4	30.4	23.7	26.0	29.0	22.8	25.4	28.0	23.8	27.0	31.2
22	22.4	26.1	30.6	22.9	27.1	32.0	23.8	27.6	32.3	24.6	27.6	33.2	24.6	27.7	32.6	24.5	28.1	32.6	24.1	27.3	31.3	24.2	26.9	30.9	23.9	27.5	32.0	23.5	26.4	30.0	23.7	25.9	28.9	23.1	25.5	28.7	23.8	27.0	31.3
23	22.8	26.2	30.1	22.6	26.7	31.5	23.9	27.7	33.5	24.1	28.0	33.0	24.9	28.4	33.6	24.5	27.8	31.6	24.4	27.2	30.9	24.1	26.6	30.4	24.2	27.4	32.0	23.8	26.4	30.1	24.0	26.0	29.2	23.1	25.5	28.6	23.9	27.0	31.2
24	22.3	26.4	31.2	22.8	26.9	32.2	24.0	27.9	32.9	24.5	28.1	32.9	24.8	27.9	32.9	24.8	27.9	31.7	24.4	27.4	31.3	23.8	26.7	30.4	24.3	27.1	31.9	23.8	26.9	30.3	23.7	25.8	28.6	23.3	25.5	28.4	23.9	27.0	31.2
25	22.8	26.4	30.7	22.6	26.8	31.9	23.9	27.9	32.9	24.2	28.1	33.3	24.5	27.9	32.0	24.6	27.3	30.6	24.5	27.5	31.5	24.1	26.7	31.0	24.1	26.9	29.9	24.2	26.5	30.4	23.7	25.7	28.7	23.5	25.7	28.7	23.9	27.0	31.0
26	22.7	26.4	30.8	22.4	26.9	32.0	24.0	28.2	33.1	24.1	28.2	33.4	24.7	28.2	33.1	24.3	27.8	32.3	24.5	27.7	32.2	23.8	27.0	30.8	24.0	26.5	29.2	24.0	26.5	30.4	23.4	26.2	29.5	23.2	25.8	29.2	23.8	27.1	31.3
27	23.3	26.3	30.1	22.8	27.1	32.1	24.3	28.4	33.4	24.7	28.4	33.3	24.8	28.0	31.9	24.2	27.8	32.0	24.4	27.7	31.2	23.9	26.8	30.7	23.9	26.6	30.5	23.9	25.9	29.7	23.8	26.3	29.7	23.1	25.9	29.4	23.9	27.1	31.2
28	23.3	26.4	30.7	23.0	27.3	32.3	24.3	28.1	32.7	24.9	28.3	33.0	25.0	28.2	32.9	24.4	27.7	31.6	24.8	27.4	30.7	23.9	26.7	30.8	23.9	26.0	29.1	23.5	25.5	28.6	23.6	25.8	28.8	22.8	25.7	29.0	24.0	26.9	30.8
29	22.8	26.2	30.4	22.8	27.0	32.3	24.1	28.1	33.0	24.7	28.5	34.0	25.0	28.0	32.3	24.3	27.5	31.7	24.5	27.5	31.3	24.1	26.8	30.5	23.6	26.1	29.5	23.6	26.1	29.7	23.3	26.3	30.3	23.1	25.7	29.4	23.8	27.0	31.2
30	22.5	26.3	30.8	24.2	28.1	33.5	24.8	28.1	34.2	25.1	28.4	33.1	24.4	27.6	32.0	24.7	27.6	31.2	24.1	27.1	31.4	24.0	26.8	31.0	23.6	26.0	29.7	23.7	26.1	28.9	22.9	25.8	29.2	24.0	27.1	31.4	23.8	27.0	31.2
31	22.7	26.2	30.6	23.5	28.1	33.9	25.0	28.6	32.5	24.5	27.7	32.0	24.3	27.3	31.5	24.2	27.1	31.0	24.5	27.9	32.0	24.2	27.1	31.0	23.7	25.5	28.2	23.7	25.5	28.2	23.4	25.7	28.9	23.9	27.0	31.0	23.8	27.0	31.2
Average	22.7	26.2	30.3	22.9	26.8	31.6	23.5	27.6	32.9	24.2	28.1	33.6	24.6	28.1	32.9	24.5	27.7	32.0	24.3	27.3	31.5	24.1	27.2	31.2	23.9	26.8	30.6	23.8	26.4	30.2	23.7	26.0	29.1	23.3	25.6	28.6	23.8	27.0	31.2
Extremes	17.8	33.2	18.9	36.9	20.2	37.9	22.3	37.4	23.0	37.0	22.1	36.6	21.8	35.1	20.4	37.5	21.																						

แผนภูมิอุณหภูมิกระเปาะแห้ง (dry bulb temperatures)

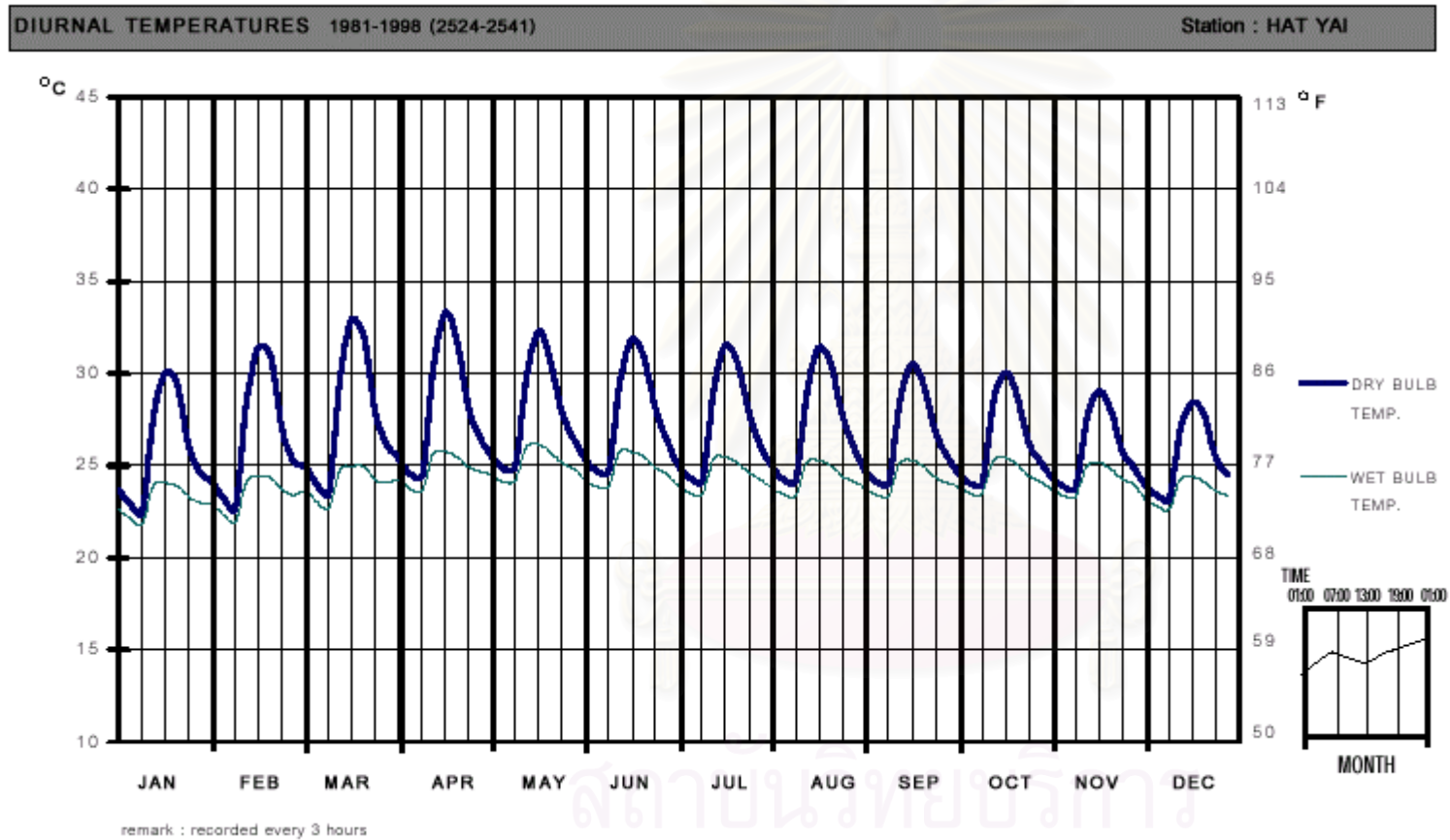


สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย

ตารางแสดงผลข้อมูลอุณหภูมิกระเปาะเปียก (wet bulb temperatures)

WET BULB TEMPERATURES (°C) 1981 - 1998 (2524 - 2541)													Station : HAT YAI																										
MONTH	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE			JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER			ANNUAL		
DAY	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max
1	22.1	23.4	24.5	21.8	23.1	24.0	22.4	23.7	24.6	23.4	24.5	25.5	24.0	25.1	26.1	24.2	25.1	26.3	23.5	24.6	25.8	23.5	24.6	25.5	23.3	24.2	25.4	23.5	24.4	25.4	23.5	24.3	25.2	23.1	23.9	25.0	23.2	24.2	25.3
2	22.0	23.2	24.3	22.0	23.3	24.4	22.3	23.6	24.5	23.3	24.5	25.5	24.0	25.0	26.1	24.1	25.1	26.1	23.4	24.5	25.8	23.5	24.5	25.6	23.4	24.4	25.6	23.3	24.2	25.4	23.3	24.2	25.3	23.1	23.8	24.4	23.1	24.2	25.2
3	21.8	23.0	23.8	21.8	23.2	24.1	22.1	23.4	24.3	23.2	24.5	25.6	24.0	25.0	26.1	24.0	25.0	26.1	23.5	24.5	25.5	23.2	24.3	25.4	23.3	24.3	25.2	23.5	24.3	25.2	23.3	24.4	25.4	23.0	23.8	24.6	23.1	24.1	25.1
4	21.9	23.3	24.4	21.8	23.2	24.2	21.7	23.3	24.2	23.4	24.5	25.5	23.9	24.8	25.8	24.0	25.0	26.1	23.4	24.5	25.7	23.5	24.4	25.3	23.2	24.2	25.5	23.3	24.2	25.2	23.5	24.3	25.3	22.9	23.8	24.7	23.1	24.1	25.2
5	22.1	23.3	24.2	21.7	23.2	24.2	21.6	23.2	24.2	23.2	24.4	25.5	24.0	25.0	26.0	23.9	24.9	25.9	23.2	24.3	25.5	23.4	24.5	25.6	23.2	24.1	25.2	23.3	24.1	25.1	23.4	24.3	25.4	23.0	23.8	24.8	23.0	24.1	25.1
6	22.2	23.3	24.3	21.9	23.2	24.3	22.0	23.5	24.5	23.4	24.7	25.8	23.8	24.9	25.9	24.2	25.1	26.2	23.2	24.2	25.3	23.3	24.3	25.2	23.3	24.1	25.2	23.1	24.2	25.3	23.4	24.4	25.5	22.8	23.7	24.5	23.1	24.1	25.2
7	22.0	23.1	23.9	21.9	23.2	24.3	22.2	23.8	24.9	23.3	24.5	25.6	24.1	25.0	26.0	24.1	25.0	26.2	23.2	24.3	25.5	23.3	24.3	25.3	23.2	24.3	25.4	23.2	24.3	25.3	23.5	24.3	25.4	22.8	23.7	24.5	23.1	24.1	25.2
8	21.9	23.2	24.2	21.7	23.2	24.3	22.6	23.9	24.9	23.5	24.6	25.6	23.8	24.9	26.1	23.9	25.1	26.3	23.3	24.4	25.5	23.4	24.3	25.4	23.3	24.2	25.2	23.4	24.4	25.5	23.3	24.3	25.4	22.9	23.6	24.3	23.1	24.2	25.2
9	22.0	23.2	24.2	21.7	23.2	24.2	22.4	23.8	24.9	23.6	24.7	25.6	24.1	25.0	26.0	24.0	24.9	25.8	23.4	24.4	25.4	23.2	24.3	25.5	23.4	24.3	25.2	23.3	24.4	25.5	23.4	24.4	25.7	22.8	23.6	24.4	23.1	24.2	25.2
10	22.3	23.3	24.2	21.7	23.2	24.3	22.4	23.9	24.9	23.5	24.7	25.9	24.0	25.0	26.0	24.0	24.8	26.0	23.6	24.5	25.3	23.3	24.3	25.5	23.4	24.4	25.5	23.3	24.3	25.5	23.4	24.3	25.3	23.1	23.8	24.6	23.2	24.2	25.3
11	21.8	23.1	24.2	21.8	23.2	24.2	22.8	24.0	25.0	23.8	24.9	26.0	23.9	25.1	26.2	23.5	24.7	25.8	23.6	24.4	25.4	23.3	24.4	25.3	23.1	24.3	25.3	23.5	24.2	25.1	23.4	24.3	25.1	22.8	23.6	24.5	23.1	24.2	25.2
12	21.9	23.2	24.2	22.1	23.4	24.5	22.4	23.8	24.7	23.9	24.9	26.1	24.2	25.2	26.4	23.7	24.8	25.9	23.3	24.3	25.5	23.2	24.3	25.2	23.4	24.4	25.2	23.5	24.2	25.2	23.5	24.2	25.1	22.8	23.6	24.3	23.1	24.2	25.2
13	22.1	23.2	24.1	21.8	23.4	24.4	22.2	23.8	24.9	23.7	24.7	25.6	23.9	25.1	26.3	24.0	24.9	25.8	23.3	24.4	25.3	23.3	24.3	25.4	23.3	24.3	25.3	23.4	24.4	25.4	23.5	24.3	25.1	22.6	23.6	24.5	23.1	24.2	25.2
14	21.8	23.0	24.1	22.0	23.5	24.6	22.3	23.9	24.9	23.6	24.7	25.7	24.1	25.2	26.5	23.6	24.7	25.7	23.6	24.6	25.6	23.2	24.4	25.4	23.5	24.4	25.4	23.5	24.4	25.4	23.4	24.3	25.4	22.7	23.6	24.3	23.1	24.2	25.3
15	21.6	22.9	24.1	21.8	23.6	25.1	22.6	24.1	25.2	23.5	24.7	25.7	23.9	25.1	26.3	23.5	24.7	25.7	23.4	24.5	25.5	23.4	24.4	25.2	23.5	24.3	25.1	23.5	24.4	25.6	23.4	24.2	25.1	22.7	23.4	24.1	23.1	24.2	25.2
16	21.8	22.9	23.8	22.0	23.5	24.6	22.8	24.2	25.3	23.7	24.7	25.7	24.1	25.0	26.0	23.9	24.9	25.9	23.4	24.5	25.6	23.3	24.3	25.2	23.2	24.2	25.3	23.3	24.3	25.5	23.4	24.2	25.2	22.5	23.5	24.5	23.1	24.2	25.2
17	21.8	23.1	24.1	22.0	23.5	24.7	23.1	24.3	25.2	23.6	24.7	25.9	24.1	25.2	26.4	24.0	24.9	26.0	23.3	24.5	25.5	23.4	24.3	25.3	23.2	24.2	25.2	23.3	24.5	25.9	23.3	24.2	25.1	22.8	23.6	24.5	23.2	24.2	25.3
18	21.5	22.8	23.9	21.9	23.6	24.7	23.1	24.3	25.3	23.6	24.6	25.5	24.1	25.1	26.1	23.9	24.8	25.8	23.4	24.4	25.4	23.5	24.5	25.6	23.3	24.1	25.1	23.5	24.6	25.8	23.2	24.3	25.3	22.8	23.6	24.3	23.1	24.2	25.2
19	21.0	22.7	23.8	22.1	23.6	24.6	23.2	24.4	25.5	23.3	24.7	25.8	24.2	25.1	26.1	23.9	24.8	25.9	23.5	24.3	25.5	23.5	24.4	25.3	23.3	24.3	25.4	23.6	24.5	25.6	23.4	24.2	25.1	22.8	23.5	24.2	23.1	24.2	25.2
20	21.3	22.9	24.0	21.9	23.5	24.4	23.1	24.2	25.2	23.7	24.9	26.0	24.0	25.0	26.3	23.8	24.8	25.7	23.3	24.4	25.4	23.5	24.4	25.4	23.5	24.4	25.4	23.6	24.4	25.4	23.1	24.1	25.1	22.7	23.5	24.5	23.1	24.2	25.2
21	21.7	23.0	23.9	22.1	23.3	24.1	22.8	24.3	25.2	23.7	24.9	26.0	24.1	25.2	26.2	23.8	24.8	25.8	23.3	24.5	25.6	23.5	24.4	25.2	23.3	24.4	25.3	23.3	24.4	25.7	23.2	24.1	25.0	22.2	23.3	24.0	23.1	24.2	25.2
22	21.6	23.1	24.0	21.9	23.5	24.4	23.1	24.4	25.4	23.9	25.0	26.0	24.4	25.3	26.3	23.7	24.8	25.9	23.4	24.5	25.5	23.4	24.4	25.4	23.4	24.4	25.4	23.4	24.4	25.4	23.3	24.2	25.0	22.4	23.4	24.4	23.2	24.3	25.3
23	22.0	23.2	24.1	22.2	23.5	24.5	22.9	24.3	25.4	24.0	25.0	26.0	24.4	25.3	26.2	23.6	24.5	25.4	23.5	24.5	25.5	23.4	24.4	25.3	23.5	24.4	25.4	23.4	24.5	25.4	23.2	24.1	25.0	22.3	23.3	24.3	23.2	24.3	25.2
24	21.7	23.2	24.1	22.1	23.6	24.5	22.9	24.4	25.5	24.0	25.0	25.9	24.1	25.1	26.2	23.7	24.6	25.6	23.4	24.5	25.5	23.3	24.3	25.4	23.5	24.5	25.6	23.7	24.7	25.7	23.0	23.9	24.7	22.3	23.4	24.1	23.1	24.3	25.2
25	21.9	23.3	24.4	22.0	23.4	24.4	23.2	24.4	25.3	23.9	24.9	25.9	24.2	25.1	26.1	23.7	24.6	25.4	23.6	24.6	25.8	23.2	24.2	25.3	23.4	24.5	25.6	23.8	24.7	25.9	23.2	24.1	25.0	22.5	23.5	24.5	23.2	24.3	25.3
26	21.7	23.1	24.1	22.0	23.4	24.4	23.2	24.3	25.2	23.8	24.9	25.9	24.3	25.2	26.4	23.6	24.6	25.6	23.4	24.5	25.6	23.2	24.2	25.3	23.4	24.3	25.5	23.6	24.5	25.7	23.2	24.1	25.0	22.5	23.5	24.4	23.2	24.2	25.2
27	21.9	23.1	24.1	22.4	23.7	24.7	23.3	24.5	25.3	24.1	25.2	26.2	24.2	25.2	26.2	23.5	24.7	25.6	23.6	24.5	25.5	23.1	24.3	25.4	23.5	24.3	25.3	23.5	24.3	25.4	23.3	24.2	25.2	22.3	23.4	24.2	23.2	24.3	25.3
28	21.8	23.0	24.0	22.2	23.7	24.8	23.1	24.4	25.2	24.4	25.1	25.9	24.3	25.2	26.3	23.6	24.5	25.7	23.6	24.5	25.5	23.3	24.2	25.2	23.4	24.2	25.2	23.3	24.2	25.3	23.0	24.0	24.8	22.2	23.4	24.3	23.2	24.2	25.2
29	21.7	22.9	23.8	22.3	23.7	24.7	23.4	24.5	25.4	24.0	25.1	26.1	24.2	25.2	26.3	23.5	24.4	25.4	23.4	24.4	25.2	23.3	24.3	25.2	23.2	24.2	25.4	23.3	24.4	25.3	23.1	24.1	25.1	22.2	23.4	24.3	23.1	24.2	25.2
30	21.7	23.0	24.0				23.5	24.6	25.5	24.1	25.0	26.2	24.3	25.3	26.3	23.6	24.6	25.7	23.8	24.7	25.6	23.4	24.3	25.2	23.4	24.3	25.4	23.5	24.5	25.5	23.2	24.0	25.0	22.2	23.3	24.2	23.3	24.3	25.3
31	21.8	23.1	24.1				23.1	24.4	25.4				24.3	25.2	26.1				23.6	24.6	25.6	23.4	24.3	25.2				23.5	24.4	25.3				22.5	23.5	24.3	23.2	24.2	25.2
Average	21.8	23.1	24.1	21.9	23.4	24.4	22.7	24.0	25.0	23.7	24.8	25.8	24.1	25.1	26.2	23.8	24.8	25.8	23.4	24.5	25.5	23.3	24.3	25.3	23.3	24.3	25.3	23.4	24.4	25.4	23.3	24.2	25.2	22.6	23.6	24.4	23.1	24.2	25.2
Extremes	18.2		27.7	17.8		27.6	18.5		28.0	18.9		29.0	21.6		30.0	21.0		29.3	21.0		29.5	20.7		29.1	21.1		28.1	21.3		30.2	20.4								

แผนภูมิความแตกต่างระหว่างอุณหภูมิกระเปาะแห้งและอุณหภูมิกระเปาะเปียก (diurnal temperatures)



สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย

ตารางแสดงผลข้อมูลอุณหภูมิจุดน้ำค้าง (dew point temperatures)

DEW POINT TEMPERATURES (°C) 1981 - 1998 (2524 - 2541)													Station :HAT YAI																													
MONTH	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE			JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER			ANNUAL					
DAY	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max			
1	21.8	22.2	22.7	20.7	21.6	22.3	21.0	22.0	22.8	21.9	22.9	23.4	23.0	23.7	24.4	23.5	23.9	24.7	22.5	23.2	23.9	22.1	23.1	23.9	22.5	23.0	23.9	22.7	23.3	23.7	23.3	23.7	24.1	22.8	23.1	23.4	22.3	23.0	23.6			
2	21.5	22.0	22.5	21.5	21.9	22.4	20.8	21.9	22.7	22.1	23.0	23.9	23.0	23.7	24.1	23.5	23.9	24.5	22.8	23.2	23.7	22.4	23.0	23.8	22.9	23.2	23.6	22.6	23.1	23.5	23.1	23.5	24.1	22.8	23.2	23.4	22.4	23.0	23.5			
3	21.0	21.8	22.2	21.1	21.8	22.4	19.8	21.5	22.3	22.0	23.0	23.7	23.3	23.7	24.2	23.3	23.8	24.4	22.4	23.2	23.9	22.1	22.9	23.3	22.5	23.1	23.8	22.7	23.1	23.6	23.1	23.6	24.2	22.7	23.1	23.6	22.2	22.9	23.5			
4	21.6	22.1	22.8	21.0	21.7	22.3	20.3	21.4	22.3	21.3	22.9	23.8	22.6	23.5	24.0	22.7	23.8	24.5	22.8	23.1	23.5	22.3	23.1	23.6	22.8	23.1	23.7	23.0	23.3	23.8	23.3	23.5	23.9	22.7	23.0	23.2	22.2	22.9	23.4			
5	21.5	22.1	22.7	21.0	21.7	22.3	20.2	21.5	22.4	21.5	22.8	23.6	21.5	22.8	23.6	23.0	23.7	24.0	23.0	23.7	24.2	22.5	23.0	23.6	22.9	23.3	23.7	22.4	22.9	23.2	22.6	23.1	23.5	23.2	23.6	24.0	22.8	23.1	23.3	22.2	22.9	23.4
6	21.7	22.1	22.5	21.0	21.8	22.3	20.4	21.7	22.8	22.0	23.0	23.5	23.4	23.8	24.1	23.4	24.0	24.6	22.1	22.9	23.4	22.5	23.1	23.4	22.9	23.1	23.4	22.8	23.2	23.4	23.2	23.7	24.0	22.6	23.0	23.4	22.3	22.9	23.4			
7	21.1	21.8	22.3	21.1	21.8	22.2	21.0	22.1	22.9	21.9	22.9	23.5	22.9	23.8	24.3	23.6	23.9	24.5	22.6	23.0	23.4	22.4	23.1	23.7	22.7	23.1	23.7	22.8	23.2	23.7	23.3	23.5	24.2	22.7	23.1	23.6	22.3	22.9	23.5			
8	21.5	21.9	22.5	21.1	21.7	22.2	21.2	22.2	22.9	21.7	23.0	23.6	23.2	23.6	23.9	23.6	23.9	24.5	22.9	23.2	24.0	22.7	23.2	23.5	22.7	23.1	23.6	23.1	23.4	23.9	23.1	23.5	24.2	22.4	22.8	23.2	22.4	23.0	23.5			
9	21.6	22.0	22.4	20.9	21.6	22.3	21.3	22.2	23.0	21.8	23.2	24.0	23.3	23.8	24.2	22.8	23.5	23.9	22.6	23.2	23.7	22.2	22.9	23.6	22.6	23.1	23.4	23.0	23.4	23.9	23.2	23.6	24.0	22.5	22.8	23.2	22.3	22.9	23.5			
10	21.3	22.1	22.5	21.1	21.8	22.3	21.2	22.2	22.9	22.5	23.3	24.0	23.3	23.8	24.2	23.2	23.7	24.2	22.7	23.2	23.6	22.3	23.0	23.8	22.9	23.3	23.6	23.0	23.3	23.6	23.1	23.4	23.7	22.8	23.0	23.4	22.4	23.0	23.5			
11	21.0	21.8	22.2	20.8	21.7	22.4	21.2	22.3	23.1	22.7	23.5	24.0	23.4	23.9	24.5	23.2	23.5	24.0	22.6	23.1	23.5	22.4	23.1	23.8	22.6	23.0	23.5	23.1	23.3	23.8	23.1	23.5	23.9	22.6	22.9	23.3	22.4	23.0	23.5			
12	21.5	21.9	22.4	21.0	21.9	22.4	20.3	22.0	23.0	22.9	23.6	24.0	23.7	24.1	24.5	22.8	23.4	24.0	22.4	23.1	23.9	21.8	22.9	23.5	22.5	23.0	23.4	22.8	23.3	23.9	23.3	23.5	23.7	22.4	22.7	23.1	22.3	22.9	23.5			
13	20.8	21.8	22.4	21.0	21.9	22.6	21.0	22.1	23.0	21.6	23.0	23.7	23.6	24.1	24.8	23.5	23.8	24.2	22.5	23.1	23.7	22.3	22.9	23.6	22.8	23.1	23.6	23.0	23.3	23.7	23.3	23.6	23.8	22.4	22.7	23.1	22.3	22.9	23.5			
14	21.2	21.7	22.4	21.4	22.1	22.7	21.1	22.2	23.0	22.2	23.1	23.6	23.8	24.2	24.9	22.7	23.5	24.1	22.9	23.4	24.1	22.4	23.1	23.8	23.2	23.3	23.6	23.1	23.5	23.9	23.2	23.5	23.8	22.2	22.7	23.1	22.4	23.0	23.6			
15	20.8	21.6	22.0	21.2	22.1	22.9	21.5	22.5	23.3	22.3	23.2	24.0	23.6	24.0	24.7	22.8	23.3	24.1	22.6	23.2	23.8	22.1	23.0	23.6	22.7	23.2	23.5	23.3	23.6	23.7	23.2	23.4	23.8	22.0	22.5	22.8	22.3	23.0	23.5			
16	20.6	21.5	22.1	20.9	22.0	22.8	21.5	22.6	23.3	22.3	23.3	23.8	23.6	24.0	24.5	22.6	23.5	24.2	22.6	23.2	24.2	21.8	22.8	23.6	22.8	23.2	23.4	23.1	23.4	23.7	23.2	23.4	23.8	22.2	22.5	22.9	22.3	23.0	23.5			
17	21.2	21.7	22.4	20.4	21.9	22.9	21.3	22.6	23.5	22.4	23.3	24.1	23.8	24.1	24.6	23.3	23.8	24.4	22.7	23.3	24.0	21.9	22.8	23.2	22.7	23.2	23.7	23.1	23.6	23.9	23.0	23.3	23.7	22.5	22.7	23.0	22.3	23.0	23.6			
18	20.6	21.4	21.9	21.0	22.0	22.8	22.1	22.9	23.3	21.9	23.0	23.8	23.4	24.0	24.4	23.0	23.5	24.3	23.0	23.3	24.0	22.6	23.1	23.5	22.8	23.1	23.7	23.3	23.7	24.2	23.0	23.5	24.1	22.1	22.6	22.9	22.4	23.0	23.6			
19	20.6	21.3	22.1	20.9	21.9	22.6	22.1	22.9	23.4	22.5	23.2	23.9	23.4	23.9	24.4	23.1	23.6	24.1	22.8	23.2	24.0	22.3	23.0	23.5	23.0	23.3	23.7	23.3	23.6	24.1	23.2	23.5	23.8	22.1	22.5	22.9	22.4	23.0	23.5			
20	20.8	21.5	22.3	20.4	21.7	22.5	21.3	22.6	23.3	22.4	23.5	24.0	23.6	23.9	24.4	22.9	23.4	24.0	22.3	23.1	23.9	22.6	23.1	23.5	23.1	23.4	23.9	23.4	23.7	23.9	22.9	23.5	23.9	22.4	22.6	22.9	22.3	23.0	23.5			
21	20.6	21.4	22.1	19.9	21.5	22.5	21.4	22.7	23.7	22.7	23.5	24.0	23.5	24.0	24.6	22.4	23.4	24.1	22.9	23.3	23.8	22.5	23.1	23.8	22.7	23.3	23.6	23.1	23.6	24.1	23.0	23.4	23.6	21.9	22.3	22.8	22.2	23.0	23.6			
22	20.9	21.7	22.5	20.5	21.7	22.6	21.6	22.8	23.5	22.7	23.6	24.1	23.7	24.2	24.5	22.8	23.4	24.0	22.6	23.2	23.8	22.5	23.1	23.6	22.8	23.3	23.8	23.3	23.6	24.0	23.1	23.4	23.8	22.2	22.5	22.7	22.4	23.0	23.6			
23	21.2	21.8	22.3	21.1	22.0	22.6	21.8	22.6	23.3	22.8	23.6	24.1	23.6	24.1	24.5	22.2	23.1	23.7	22.5	23.3	24.2	22.6	23.1	23.4	22.7	23.2	23.8	23.3	23.6	24.0	22.8	23.2	23.7	22.1	22.5	23.0	22.4	23.0	23.6			
24	20.9	21.8	22.5	20.9	22.0	22.9	21.6	22.8	23.7	22.9	23.6	24.2	23.7	23.9	24.5	22.4	23.2	23.9	22.6	23.3	23.8	22.8	23.0	23.4	23.0	23.4	23.7	23.5	23.8	24.2	22.8	23.2	23.4	22.1	22.4	22.8	22.4	23.0	23.6			
25	21.3	22.0	22.5	20.7	21.7	22.5	21.3	22.7	23.5	22.6	23.5	24.1	23.5	23.9	24.5	22.6	23.4	23.9	23.1	23.4	24.0	22.6	23.0	23.7	23.1	23.4	23.9	23.6	23.9	24.5	23.0	23.3	23.8	22.3	22.6	23.2	22.5	23.1	23.7			
26	21.0	21.7	22.4	20.6	21.7	22.7	21.2	22.6	23.6	22.5	23.5	24.2	23.6	24.1	24.5	22.2	23.2	23.8	22.6	23.2	23.7	22.4	22.9	23.4	23.2	23.5	24.0	23.4	23.7	23.9	23.0	23.3	23.6	22.1	22.5	22.9	22.3	23.0	23.6			
27	21.0	21.7	22.1	21.3	22.2	22.9	21.6	22.8	23.5	22.8	23.8	24.5	23.4	23.9	24.4	22.9	23.4	24.0	22.7	23.2	24.0	22.5	23.0	23.6	23.0	23.3	23.8	23.3	23.7	24.0	23.0	23.3	23.7	21.8	22.3	22.8	22.4	23.0	23.6			
28	20.8	21.5	22.0	20.8	22.1	22.8	20.9	22.6	23.4	22.9	23.7	24.3	23.2	24.0	24.7	22.5	23.2	24.1	22.3	23.1	23.9	22.3	22.9	23.5	23.1	23.3	23.5	23.1	23.5	24.0	22.8	23.2	23.7	22.0	22.3	22.7	22.2	23.0	23.5			
29	20.6	21.5	22.0	21.7	22.3	23.4	21.7	22.9	23.8	22.8	23.8	24.4	23.5	24.0	24.7	22.7	23.1	23.8	22.4	22.9	23.5	22.4	22.9	23.5	22.6	23.2	23.9	23.4	23.8	24.3	23.0	23.3	23.8	21.7	22.2	22.6	22.5	23.1	23.6			
30	20.7	21.4	21.9				21.9	23.0	23.6	23.3	23.8	24.2	23.9	24.2	24.5	22.6	23.2	24.0	22.5	23.3	23.9	22.4	22.9	23.5	22.6	23.2	23.9	23.4	23.8	24.3	23.0	23.3	23.8	21.7	22.2	22.6	22.5	23.1	23.6			
31	21.0	21.6	22.2				21.9	22.8	23.5	23.3	23.9	24.3	23.3	23.9	24.3	22.6	23.2	24.2	22.6	23.3	24.2	22.2	22.9	23.5	22.6	23.2	23.8	23.4	23.8	24.2				22.0	22.4	22.8	22.3	23.0	23.5			
Average	21.1	21.8	22.3	20.9	21.9	22.6	21.2	22.4	23.2	22.3	23.3	23.9	23.4	23.9	24.4	22.9	23.5	24.2	22.6	23.2	23.8	22.4	23.0	23.6	22.8	23.2	23.7	23.1	23.5	23.9	23.1	23.5	23.8	22.3	22.7	23.0	22.3	23.0	23.5			
Extremes	14.5		27.6	12.9		25.7	9.9		26.4	9.9		27.8	9.9		27.9	9.9		28.9	17.4		29.5	15.0</																				

ตารางแสดงผลข้อมูลปริมาณองศาวัน การทำความร้อนและการทำความร้อน (heating and cooling degree days)

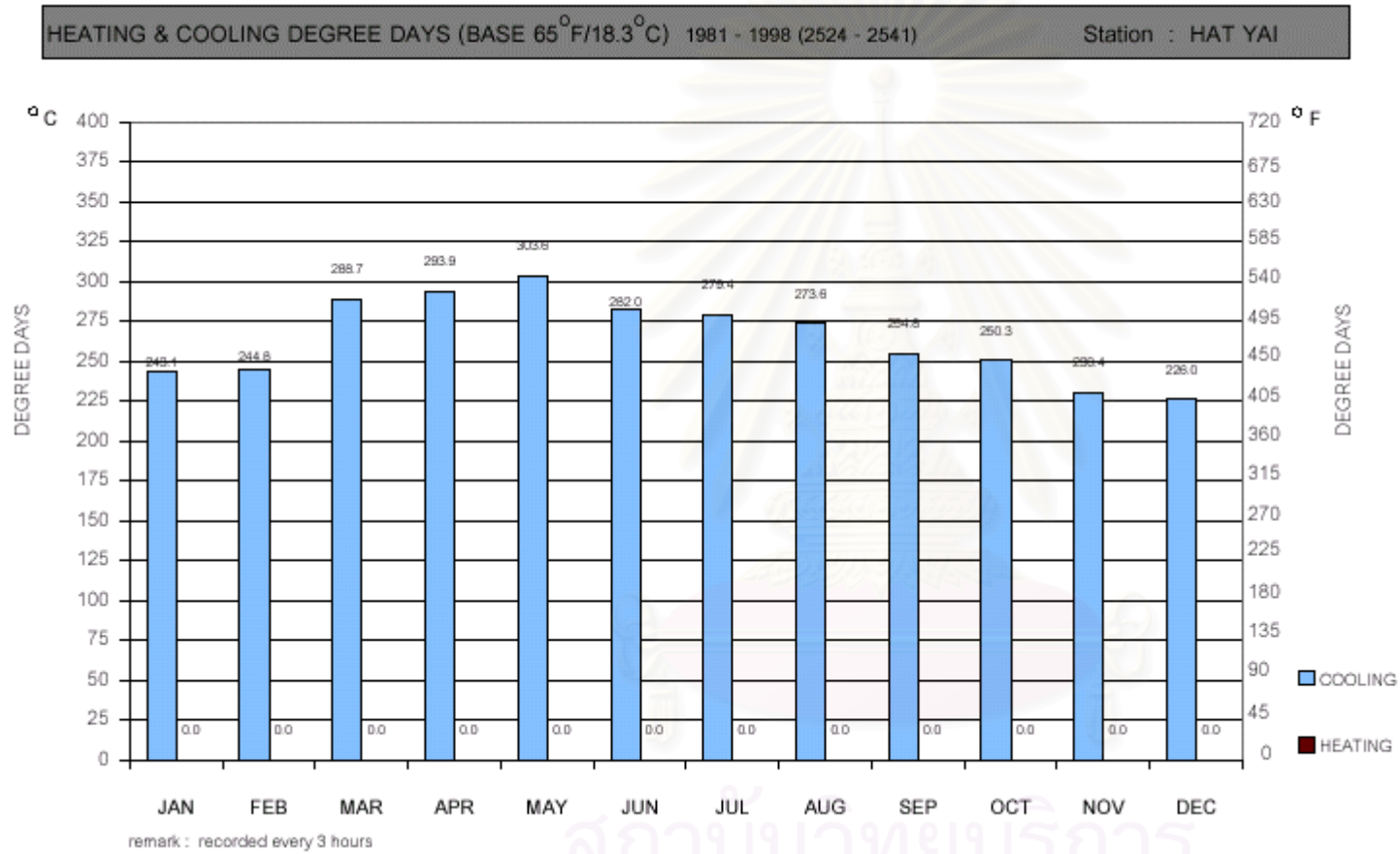
HEATING & COOLING DEGREE DAYS BASE RANGE 35 - 100 °F (1.7 - 37.8 °C) 1981 - 1998 (2524 - 2541)														Station : HAT YAI													
MONTH		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		ANNUAL	
Degree		Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
°F	°C																										
35	1.7	759.8	0.0	728.2	0.0	805.3	0.0	793.9	0.0	820.3	0.0	782.0	0.0	796.1	0.0	790.3	0.0	754.8	0.0	767.0	0.0	730.4	0.0	742.6	0.0	9,270.7	0.0
36	2.2	742.6	0.0	712.1	0.0	788.1	0.0	777.2	0.0	803.1	0.0	765.4	0.0	778.8	0.0	773.1	0.0	738.2	0.0	749.8	0.0	713.7	0.0	725.4	0.0	9,067.4	0.0
37	2.8	725.4	0.0	695.9	0.0	770.9	0.0	760.6	0.0	785.9	0.0	748.7	0.0	761.6	0.0	755.8	0.0	721.5	0.0	732.6	0.0	697.0	0.0	708.2	0.0	8,864.1	0.0
38	3.3	708.1	0.0	679.8	0.0	753.7	0.0	743.9	0.0	768.6	0.0	732.0	0.0	744.4	0.0	738.6	0.0	704.8	0.0	715.3	0.0	680.4	0.0	691.0	0.0	8,660.7	0.0
39	3.9	690.9	0.0	663.7	0.0	736.4	0.0	727.2	0.0	751.4	0.0	715.4	0.0	727.2	0.0	721.4	0.0	688.2	0.0	698.1	0.0	663.7	0.0	673.7	0.0	8,457.4	0.0
40	4.4	673.7	0.0	647.6	0.0	719.2	0.0	710.6	0.0	734.2	0.0	698.7	0.0	710.0	0.0	704.2	0.0	671.5	0.0	680.9	0.0	647.0	0.0	656.5	0.0	8,254.1	0.0
41	5.0	656.5	0.0	631.5	0.0	702.0	0.0	693.9	0.0	717.0	0.0	682.0	0.0	692.7	0.0	687.0	0.0	654.8	0.0	663.7	0.0	630.4	0.0	639.3	0.0	8,050.7	0.0
42	5.6	639.3	0.0	615.4	0.0	684.8	0.0	677.2	0.0	699.7	0.0	665.4	0.0	675.5	0.0	669.7	0.0	638.2	0.0	646.5	0.0	613.7	0.0	622.1	0.0	7,847.4	0.0
43	6.1	622.0	0.0	599.3	0.0	667.6	0.0	660.6	0.0	682.5	0.0	648.7	0.0	658.3	0.0	652.5	0.0	621.5	0.0	629.2	0.0	597.0	0.0	604.8	0.0	7,644.1	0.0
44	6.7	604.8	0.0	583.2	0.0	650.3	0.0	643.9	0.0	665.3	0.0	632.0	0.0	641.1	0.0	635.3	0.0	604.8	0.0	612.0	0.0	580.4	0.0	587.6	0.0	7,440.7	0.0
45	7.2	587.6	0.0	567.1	0.0	633.1	0.0	627.2	0.0	648.1	0.0	615.4	0.0	623.8	0.0	618.1	0.0	588.2	0.0	594.8	0.0	563.7	0.0	570.4	0.0	7,237.4	0.0
46	7.8	570.4	0.0	550.9	0.0	615.9	0.0	610.6	0.0	630.9	0.0	598.7	0.0	606.6	0.0	600.8	0.0	571.5	0.0	577.6	0.0	547.0	0.0	553.2	0.0	7,034.1	0.0
47	8.3	553.1	0.0	534.8	0.0	598.7	0.0	593.9	0.0	613.6	0.0	582.0	0.0	589.4	0.0	583.6	0.0	554.8	0.0	560.3	0.0	530.4	0.0	536.0	0.0	6,830.7	0.0
48	8.9	535.9	0.0	518.7	0.0	581.4	0.0	577.2	0.0	596.4	0.0	565.4	0.0	572.2	0.0	566.4	0.0	538.2	0.0	543.1	0.0	513.7	0.0	518.7	0.0	6,627.4	0.0
49	9.4	518.7	0.0	502.6	0.0	564.2	0.0	560.6	0.0	579.2	0.0	548.7	0.0	555.0	0.0	549.2	0.0	521.5	0.0	525.9	0.0	497.0	0.0	501.5	0.0	6,424.1	0.0
50	10.0	501.5	0.0	486.5	0.0	547.0	0.0	543.9	0.0	562.0	0.0	532.0	0.0	537.7	0.0	532.0	0.0	504.8	0.0	508.7	0.0	480.4	0.0	484.3	0.0	6,220.7	0.0
51	10.6	484.3	0.0	470.4	0.0	529.8	0.0	527.2	0.0	544.7	0.0	515.4	0.0	520.5	0.0	514.7	0.0	488.2	0.0	491.5	0.0	463.7	0.0	467.1	0.0	6,017.4	0.0
52	11.1	467.0	0.0	454.3	0.0	512.6	0.0	510.6	0.0	527.5	0.0	498.7	0.0	503.3	0.0	497.5	0.0	471.5	0.0	474.2	0.0	447.0	0.0	448.8	0.0	5,814.1	0.0
53	11.7	449.8	0.0	438.2	0.0	495.3	0.0	493.9	0.0	510.3	0.0	482.0	0.0	486.1	0.0	480.3	0.0	454.8	0.0	457.0	0.0	430.4	0.0	432.6	0.0	5,610.7	0.0
54	12.2	432.6	0.0	422.1	0.0	478.1	0.0	477.2	0.0	493.1	0.0	465.4	0.0	468.8	0.0	463.1	0.0	438.2	0.0	439.8	0.0	413.7	0.0	415.4	0.0	5,407.4	0.0
55	12.8	415.4	0.0	405.9	0.0	460.9	0.0	460.6	0.0	475.9	0.0	448.7	0.0	451.6	0.0	445.8	0.0	421.5	0.0	422.6	0.0	397.0	0.0	398.2	0.0	5,204.1	0.0
56	13.3	398.1	0.0	389.8	0.0	443.7	0.0	443.9	0.0	458.6	0.0	432.0	0.0	434.4	0.0	428.6	0.0	404.8	0.0	405.3	0.0	380.4	0.0	381.0	0.0	5,000.7	0.0
57	13.9	380.9	0.0	373.7	0.0	426.4	0.0	427.2	0.0	441.4	0.0	415.4	0.0	417.2	0.0	411.4	0.0	388.2	0.0	388.1	0.0	363.7	0.0	363.7	0.0	4,797.4	0.0
58	14.4	363.7	0.0	357.6	0.0	409.2	0.0	410.6	0.0	424.2	0.0	398.7	0.0	400.0	0.0	394.2	0.0	371.5	0.0	370.9	0.0	347.0	0.0	346.5	0.0	4,594.1	0.0
59	15.0	346.5	0.0	341.5	0.0	392.0	0.0	393.9	0.0	407.0	0.0	382.0	0.0	382.7	0.0	377.0	0.0	354.8	0.0	353.7	0.0	330.4	0.0	329.3	0.0	4,390.7	0.0
60	15.6	329.3	0.0	325.4	0.0	374.8	0.0	377.2	0.0	389.7	0.0	365.4	0.0	365.5	0.0	359.7	0.0	338.2	0.0	336.5	0.0	313.7	0.0	312.1	0.0	4,187.4	0.0
61	16.1	312.0	0.0	309.3	0.0	357.6	0.0	360.6	0.0	372.5	0.0	348.7	0.0	348.3	0.0	342.5	0.0	321.5	0.0	319.2	0.0	297.0	0.0	294.8	0.0	3,984.1	0.0
62	16.7	294.8	0.0	293.2	0.0	340.3	0.0	343.9	0.0	355.3	0.0	332.0	0.0	331.1	0.0	325.3	0.0	304.8	0.0	302.0	0.0	280.4	0.0	277.6	0.0	3,780.7	0.0
63	17.2	277.6	0.0	277.1	0.0	323.1	0.0	327.2	0.0	338.1	0.0	315.4	0.0	313.8	0.0	308.1	0.0	288.2	0.0	284.8	0.0	263.7	0.0	260.4	0.0	3,577.4	0.0
64	17.8	260.4	0.0	260.9	0.0	305.9	0.0	310.6	0.0	320.9	0.0	298.7	0.0	296.6	0.0	290.8	0.0	271.5	0.0	267.6	0.0	247.0	0.0	243.2	0.0	3,374.1	0.0
65	18.3	243.1	0.0	244.8	0.0	288.7	0.0	293.9	0.0	303.6	0.0	282.0	0.0	279.4	0.0	273.6	0.0	254.8	0.0	250.3	0.0	230.4	0.0	226.0	0.0	3,170.7	0.0
66	18.9	225.9	0.0	228.7	0.0	271.4	0.0	277.2	0.0	286.4	0.0	265.4	0.0	262.2	0.0	256.4	0.0	238.2	0.0	233.1	0.0	213.7	0.0	208.7	0.0	2,967.4	0.0
67	19.4	208.7	0.0	212.6	0.0	254.2	0.0	260.6	0.0	269.2	0.0	248.7	0.0	245.0	0.0	239.2	0.0	221.5	0.0	215.9	0.0	197.0	0.0	191.5	0.0	2,764.1	0.0
68	20.0	191.5	0.0	196.5	0.0	237.0	0.0	243.9	0.0	252.0	0.0	232.0	0.0	227.7	0.0	222.0	0.0	204.8	0.0	198.7	0.0	180.4	0.0	174.3	0.0	2,560.7	0.0

จุฬาลงกรณ์มหาวิทยาลัย

HEATING & COOLING DEGREE DAYS BASE RANGE 35 - 100 °F (1.7 - 37.8 °C) 1981 - 1998 (2524 - 2541)														Station : HAT YAI													
MONTH		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		ANNUAL	
Degree		Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
°F	°C																										
69	20.6	174.3	0.0	180.4	0.0	219.8	0.0	227.2	0.0	234.7	0.0	215.4	0.0	210.5	0.0	204.7	0.0	188.2	0.0	181.5	0.0	163.7	0.0	157.1	0.0	2,357.4	0.0
70	21.1	157.0	0.0	164.3	0.0	202.6	0.0	210.6	0.0	217.5	0.0	198.7	0.0	193.3	0.0	187.5	0.0	171.5	0.0	164.2	0.0	147.0	0.0	139.8	0.0	2,154.1	0.0
71	21.7	139.8	0.0	148.2	0.0	185.3	0.0	193.9	0.0	200.3	0.0	182.0	0.0	176.1	0.0	170.3	0.0	154.8	0.0	147.0	0.0	130.4	0.0	122.6	0.0	1,950.7	0.0
72	22.2	122.6	0.0	132.1	0.0	168.1	0.0	177.2	0.0	183.1	0.0	165.4	0.0	158.8	0.0	153.1	0.0	138.2	0.0	129.8	0.0	113.7	0.0	105.4	0.0	1,747.4	0.0
73	22.8	105.4	0.0	115.9	0.0	150.9	0.0	160.6	0.0	165.9	0.0	148.7	0.0	141.6	0.0	135.8	0.0	121.5	0.0	112.6	0.0	97.0	0.0	88.2	0.0	1,544.1	0.0
74	23.3	88.1	0.0	99.8	0.0	133.7	0.0	143.9	0.0	148.6	0.0	132.0	0.0	124.4	0.0	118.6	0.0	104.8	0.0	95.3	0.0	80.4	0.0	71.0	0.0	1,340.7	0.0
75	23.9	70.9	0.0	83.7	0.0	116.4	0.0	127.2	0.0	131.4	0.0	115.4	0.0	107.2	0.0	101.4	0.0	88.2	0.0	78.1	0.0	63.7	0.0	53.7	0.0	1,137.4	0.0
76	24.4	53.7	0.0	67.6	0.0	99.2	0.0	110.6	0.0	114.2	0.0	98.7	0.0	90.0	0.0	84.2	0.0	71.5	0.0	60.9	0.0	47.0	0.0	36.5	0.0	934.1	0.0
77	25.0	36.5	0.0	51.5	0.0	82.0	0.0	93.9	0.0	97.0	0.0	82.0	0.0	72.7	0.0	67.0	0.0	54.8	0.0	43.7	0.0	30.4	0.0	19.3	0.0	730.7	0.0
78	25.6	19.3	0.0	35.4	0.0	64.8	0.0	77.2	0.0	79.7	0.0	65.4	0.0	55.5	0.0	49.7	0.0	38.2	0.0	26.6	-0.2	13.8	-0.1	5.0	-2.9	530.6	-3.2
79	26.1	3.4	-1.3	19.5	-0.2	47.6	0.0	60.6	0.0	62.5	0.0	48.7	0.0	38.3	0.0	32.5	0.0	21.6	-0.1	11.1	-1.9	2.1	-5.1	0.4	-15.6	348.3	-24.2
80	26.7	0.0	-15.2	6.2	-3.0	30.3	0.0	43.9	0.0	45.3	0.0	32.0	0.0	21.1	0.0	15.4	-0.1	7.6	-2.8	2.3	-10.2	0.0	-19.7	0.0	-32.4	204.2	-83.5
81	27.2	0.0	-32.4	0.3	-13.2	13.3	-0.1	27.2	0.0	28.1	0.0	15.5	-0.1	6.4	-2.5	4.0	-5.9	1.3	-13.1	0.1	-25.3	0.0	-36.3	0.0	-49.6	96.1	-178.7
82	27.8	0.0	-49.6	0.0	-29.1	2.6	-6.7	11.0	-0.5	11.1	-0.2	2.7	-4.0	0.2	-13.5	0.3	-19.4	0.0	-28.5	0.0	-42.4	0.0	-53.0	0.0	-66.8	27.8	-313.8
83	28.3	0.0	-66.9	0.0	-45.2	0.1	-21.4	0.4	-6.5	0.7	-7.1	0.0	-18.0	0.0	-30.6	0.0	-36.4	0.0	-45.2	0.0	-59.7	0.0	-69.6	0.0	-84.0	1.3	-490.5
84	28.9	0.0	-84.1	0.0	-61.3	0.0	-38.6	0.0	-22.8	0.0	-23.6	0.0	-34.6	0.0	-47.8	0.0	-53.6	0.0	-61.8	0.0	-76.9	0.0	-86.3	0.0	-101.3	0.0	-692.6
85	29.4	0.0	-101.3	0.0	-77.4	0.0	-55.8	0.0	-39.4	0.0	-40.8	0.0	-51.3	0.0	-65.0	0.0	-70.8	0.0	-78.5	0.0	-94.1	0.0	-103.0	0.0	-118.5	0.0	-895.9
86	30.0	0.0	-118.5	0.0	-93.5	0.0	-73.0	0.0	-56.1	0.0	-58.0	0.0	-68.0	0.0	-82.3	0.0	-88.0	0.0	-95.2	0.0	-111.3	0.0	-119.6	0.0	-135.7	0.0	-1,099.3
87	30.6	0.0	-135.7	0.0	-109.6	0.0	-90.2	0.0	-72.8	0.0	-75.3	0.0	-84.6	0.0	-99.5	0.0	-105.3	0.0	-111.8	0.0	-128.5	0.0	-136.3	0.0	-152.9	0.0	-1,302.6
88	31.1	0.0	-153.0	0.0	-125.7	0.0	-107.4	0.0	-89.4	0.0	-92.5	0.0	-101.3	0.0	-116.7	0.0	-122.5	0.0	-128.5	0.0	-145.8	0.0	-153.0	0.0	-170.2	0.0	-1,505.9
89	31.7	0.0	-170.2	0.0	-141.8	0.0	-124.7	0.0	-106.1	0.0	-109.7	0.0	-118.0	0.0	-133.9	0.0	-139.7	0.0	-145.2	0.0	-163.0	0.0	-169.6	0.0	-187.4	0.0	-1,709.3
90	32.2	0.0	-187.4	0.0	-157.9	0.0	-141.9	0.0	-122.8	0.0	-126.9	0.0	-134.6	0.0	-151.2	0.0	-156.9	0.0	-161.8	0.0	-180.2	0.0	-186.3	0.0	-204.6	0.0	-1,912.6
91	32.8	0.0	-204.6	0.0	-174.1	0.0	-159.1	0.0	-139.4	0.0	-144.1	0.0	-151.3	0.0	-168.4	0.0	-174.2	0.0	-178.5	0.0	-197.4	0.0	-203.0	0.0	-221.8	0.0	-2,115.9
92	33.3	0.0	-221.9	0.0	-190.2	0.0	-176.3	0.0	-156.1	0.0	-161.4	0.0	-168.0	0.0	-185.6	0.0	-191.4	0.0	-195.2	0.0	-214.7	0.0	-219.6	0.0	-239.0	0.0	-2,319.3
93	33.9	0.0	-239.1	0.0	-206.3	0.0	-193.6	0.0	-172.8	0.0	-178.6	0.0	-184.6	0.0	-202.8	0.0	-208.6	0.0	-211.8	0.0	-231.9	0.0	-236.3	0.0	-256.3	0.0	-2,522.6
94	34.4	0.0	-256.3	0.0	-222.4	0.0	-210.8	0.0	-189.4	0.0	-195.8	0.0	-201.3	0.0	-220.0	0.0	-225.8	0.0	-228.5	0.0	-249.1	0.0	-253.0	0.0	-273.5	0.0	-2,725.9
95	35.0	0.0	-273.5	0.0	-238.5	0.0	-228.0	0.0	-206.1	0.0	-213.0	0.0	-218.0	0.0	-237.3	0.0	-243.0	0.0	-245.2	0.0	-266.3	0.0	-269.6	0.0	-290.7	0.0	-2,929.3
96	35.6	0.0	-290.7	0.0	-254.6	0.0	-245.2	0.0	-222.8	0.0	-230.3	0.0	-234.6	0.0	-254.5	0.0	-260.3	0.0	-261.8	0.0	-283.5	0.0	-286.3	0.0	-307.9	0.0	-3,132.6
97	36.1	0.0	-308.0	0.0	-270.7	0.0	-262.4	0.0	-239.4	0.0	-247.5	0.0	-251.3	0.0	-271.7	0.0	-277.5	0.0	-278.5	0.0	-300.8	0.0	-303.0	0.0	-325.2	0.0	-3,335.9
98	36.7	0.0	-325.2	0.0	-286.8	0.0	-279.7	0.0	-256.1	0.0	-264.7	0.0	-268.0	0.0	-288.9	0.0	-294.7	0.0	-295.2	0.0	-318.0	0.0	-319.6	0.0	-342.4	0.0	-3,539.3
99	37.2	0.0	-342.4	0.0	-302.9	0.0	-296.9	0.0	-272.8	0.0	-281.9	0.0	-284.6	0.0	-306.2	0.0	-311.9	0.0	-311.8	0.0	-335.2	0.0	-336.3	0.0	-359.6	0.0	-3,742.6
100	37.8	0.0	-359.6	0.0	-319.1	0.0	-314.1	0.0	-289.4	0.0	-299.1	0.0	-301.3	0.0	-323.4	0.0	-329.2	0.0	-328.5	0.0	-352.4	0.0	-353.0	0.0	-376.8	0.0	-3,945.9

จุฬาลงกรณ์มหาวิทยาลัย

แผนภูมิปริมาณองศาวัน การทำความร้อนและการทำความเย็น (heating and cooling degree days)

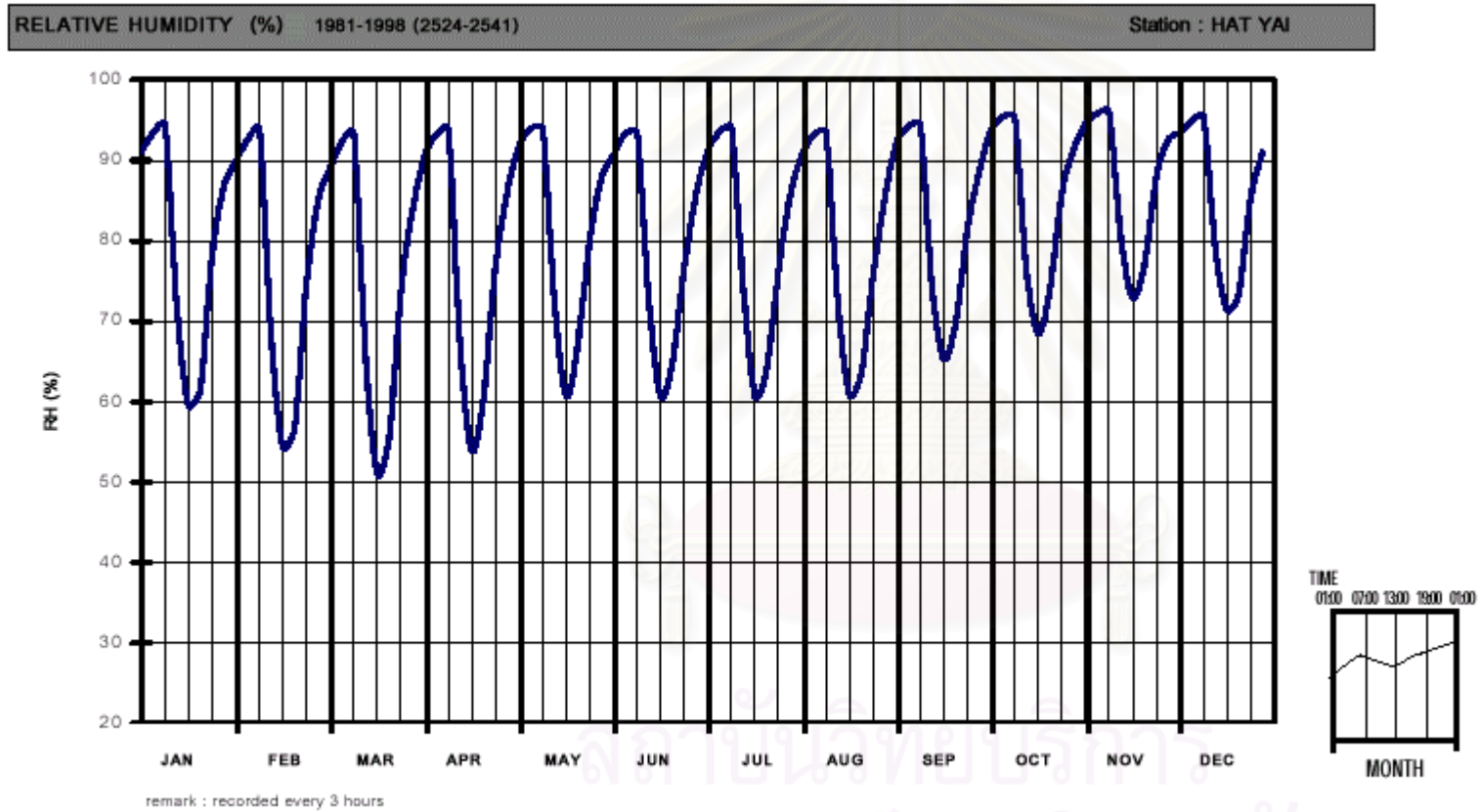


สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย

ตารางแสดงผลข้อมูลความชื้นสัมพัทธ์ (relative humidity)

RELATIVE HUMIDITY (%) 1981 - 1998 (2524 - 2541)													Station : HAT YAI																										
MONTH	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE			JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER			ANNUAL		
DAY	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max	min	mean	max
1	63.8	81.7	94.9	56.3	77.5	93.8	52.2	75.8	94.3	51.2	76.4	92.8	57.1	79.6	94.1	58.5	80.3	94.2	60.2	78.6	94.6	56.4	77.9	94.7	59.7	80.1	94.2	63.0	81.8	94.8	78.3	90.1	96.9	74.2	86.5	95.3	60.9	80.5	94.5
2	63.8	81.2	95.2	58.3	78.2	93.2	51.9	74.9	92.9	54.3	77.3	93.9	56.2	79.6	93.9	60.8	80.3	93.9	58.3	78.9	93.6	56.6	77.3	92.7	66.1	81.2	94.4	61.6	81.2	93.9	75.5	88.1	96.8	79.6	89.0	95.1	61.9	80.6	94.1
3	60.3	80.4	95.2	59.4	79.0	93.9	48.1	73.9	92.5	51.7	76.6	94.5	59.8	79.7	93.8	62.6	80.9	94.8	58.8	80.0	94.3	59.0	77.8	92.9	64.5	81.8	94.7	63.8	82.0	94.7	71.5	87.0	95.7	74.0	87.6	95.3	61.1	80.6	94.4
4	63.2	81.5	94.9	57.3	78.4	94.3	49.8	73.2	90.7	52.8	77.3	93.5	56.7	79.4	94.6	62.8	82.0	94.2	58.3	79.1	94.2	59.8	79.1	94.1	63.8	82.2	94.6	68.4	84.4	94.1	71.7	86.6	96.7	74.8	87.0	96.3	61.6	80.8	94.3
5	62.0	81.4	95.4	56.6	78.0	94.7	49.6	74.5	93.6	48.4	76.3	93.7	56.6	80.2	94.3	58.9	79.7	93.8	59.7	79.9	93.7	64.3	80.9	93.6	61.2	81.0	93.5	63.2	84.0	95.2	75.1	88.3	96.6	76.4	88.1	96.3	61.0	81.0	94.5
6	64.6	81.4	95.2	57.3	77.9	93.2	49.4	74.6	93.6	52.3	75.7	94.2	63.2	81.5	94.2	58.8	81.3	93.4	60.5	79.3	93.8	63.0	81.2	93.7	67.2	83.3	93.9	66.1	83.4	95.6	73.3	88.3	96.6	75.4	88.5	95.9	62.6	81.4	94.5
7	61.1	80.2	94.0	56.4	78.6	94.4	50.5	74.8	92.9	51.5	75.6	94.2	60.2	81.3	94.4	64.4	81.9	94.8	59.3	80.3	94.6	61.6	80.3	94.2	62.2	80.8	94.7	64.7	83.0	95.2	71.7	87.2	96.7	78.4	89.1	96.6	61.8	81.1	94.7
8	61.9	80.7	94.3	55.7	77.5	93.9	51.7	75.1	92.6	52.7	76.4	94.2	58.7	79.9	94.1	59.3	79.9	94.3	63.3	81.4	94.1	65.1	81.7	94.3	63.6	82.3	94.3	65.1	83.7	94.8	70.8	86.8	96.0	73.8	87.1	96.4	61.8	81.1	94.4
9	63.3	81.2	94.6	55.9	77.2	93.2	52.3	75.5	93.8	52.2	76.3	94.1	59.6	80.6	93.7	58.0	79.0	94.1	60.9	80.3	94.6	60.7	79.5	93.7	62.3	81.2	95.3	66.9	84.7	95.0	71.5	86.5	96.2	73.9	86.9	95.9	61.5	80.8	94.5
10	62.7	81.0	94.4	57.3	78.5	94.5	52.6	74.7	92.7	54.1	78.2	93.6	61.1	80.7	95.2	64.6	81.8	93.8	61.4	80.0	94.4	63.8	80.2	93.1	64.2	81.0	94.7	68.4	84.1	95.0	68.7	85.5	94.9	74.5	87.0	95.2	62.8	81.0	94.3
11	61.9	80.1	94.7	54.7	77.4	93.6	50.9	74.7	93.1	55.3	78.6	93.9	60.1	80.5	94.0	63.6	80.9	94.2	60.7	79.8	93.8	60.9	80.1	94.2	62.9	80.3	95.1	71.2	85.2	94.7	76.5	87.4	95.5	75.9	87.9	95.9	62.9	81.1	94.4
12	60.8	80.1	94.8	55.5	78.2	94.6	48.1	74.8	93.8	55.7	79.5	94.4	60.9	82.0	94.1	56.1	77.9	93.4	61.8	80.6	94.5	58.2	77.5	93.0	62.3	79.8	94.2	66.9	83.8	94.9	73.2	88.0	95.8	73.0	86.2	94.9	61.0	80.7	94.4
13	58.4	79.1	93.5	54.7	77.8	94.4	49.2	74.4	93.9	51.0	76.1	93.9	60.8	82.5	94.8	64.1	82.1	93.8	59.6	79.1	94.2	59.8	79.4	93.8	64.3	81.9	94.2	64.1	83.3	94.3	75.5	87.8	96.5	70.6	85.5	96.3	61.0	80.7	94.5
14	60.1	80.5	95.3	55.9	78.3	94.7	50.1	75.3	93.2	53.0	76.6	93.2	61.1	83.6	94.8	60.9	80.0	94.1	63.8	79.9	93.6	60.1	79.5	94.3	66.2	82.6	94.5	66.1	84.8	94.8	68.8	86.2	96.5	68.5	85.1	95.0	61.2	81.0	94.5
15	58.9	79.3	94.7	53.3	77.8	95.3	52.6	76.6	94.1	54.8	78.3	94.2	61.0	81.9	95.2	59.7	78.9	93.8	58.2	79.1	94.6	58.7	78.7	93.7	64.6	82.3	95.1	69.2	85.4	96.1	71.4	85.9	95.5	69.8	84.5	95.1	61.0	80.7	94.8
16	57.1	78.3	94.2	52.4	76.9	95.2	50.3	75.5	93.9	53.9	78.9	94.4	67.3	82.4	95.0	58.2	78.5	94.1	58.2	80.1	94.1	58.7	78.2	94.2	67.3	83.4	94.4	71.4	85.6	96.3	72.9	86.8	96.3	69.2	84.4	94.8	61.4	80.7	94.7
17	59.7	78.7	92.8	50.4	76.4	94.5	50.2	75.5	93.9	52.2	78.4	94.6	62.4	82.1	94.7	63.1	81.3	93.2	61.5	80.7	95.1	60.2	77.8	92.7	66.0	83.1	94.6	66.9	84.6	95.8	67.3	85.9	95.4	70.3	85.4	95.6	60.8	80.8	94.4
18	58.2	78.4	95.0	51.8	76.3	94.6	55.7	79.0	94.0	52.7	76.8	94.3	60.8	81.5	94.8	60.8	80.1	94.0	64.9	82.2	94.6	58.4	78.2	91.3	68.6	84.2	94.2	68.0	85.6	96.1	75.6	87.8	96.4	68.3	84.3	94.9	62.0	81.2	94.5
19	55.9	78.7	94.7	52.4	76.0	94.5	54.1	78.0	94.8	54.3	78.1	94.2	61.5	82.0	94.6	65.1	80.1	93.3	65.5	82.4	95.2	58.7	78.2	93.0	66.4	83.2	94.7	68.8	85.2	95.8	73.6	88.0	97.1	68.3	84.1	95.2	62.1	81.2	94.8
20	56.6	79.4	95.3	49.5	74.9	93.6	49.5	76.7	93.8	55.6	78.7	94.1	59.6	82.3	94.3	59.1	78.1	92.3	60.9	80.2	94.3	60.4	79.0	93.4	65.6	83.7	95.1	70.6	87.4	96.1	77.6	88.9	96.7	71.9	85.0	95.1	61.4	81.2	94.5
21	56.2	77.9	94.4	49.4	74.5	93.4	49.9	76.2	94.2	55.9	78.5	93.9	59.2	80.2	94.6	57.9	78.2	92.5	60.6	79.8	94.7	62.6	80.7	93.9	63.3	82.5	95.0	67.9	85.9	96.4	75.3	87.8	96.4	68.1	83.9	94.7	60.5	80.5	94.5
22	56.9	79.0	94.2	50.5	74.5	92.8	53.2	76.8	94.7	54.3	79.1	93.6	62.4	81.2	93.8	57.9	78.4	93.8	58.8	80.1	93.9	59.1	79.8	94.6	64.7	81.9	94.3	72.3	85.9	96.7	71.5	86.3	96.3	69.8	84.7	96.0	61.0	80.6	94.6
23	59.8	79.6	94.3	54.8	76.3	93.4	51.4	76.3	94.2	54.2	79.0	94.5	60.4	80.8	94.4	60.9	78.5	93.2	59.1	80.4	94.9	61.7	80.1	94.2	62.4	82.0	94.4	67.9	85.0	96.9	67.8	85.3	95.3	71.9	85.7	96.1	61.0	80.7	94.7
24	57.0	78.7	94.5	52.4	76.0	92.9	53.2	76.2	94.1	59.3	78.7	94.1	61.3	80.7	93.3	58.9	77.9	93.8	62.6	81.0	93.9	63.3	80.5	94.5	62.1	81.9	94.2	69.3	84.6	96.0	76.0	87.4	95.6	70.9	85.2	95.7	62.2	80.7	94.4
25	58.3	79.2	94.4	52.9	75.7	93.8	49.2	75.0	94.6	53.7	78.4	94.2	63.9	81.1	94.2	64.2	80.5	92.8	61.4	80.6	94.2	63.2	80.7	93.8	66.6	83.3	95.2	71.9	87.0	96.2	70.1	86.4	96.1	69.0	84.5	95.7	62.0	81.0	94.6
26	57.2	78.7	93.9	51.3	75.2	93.4	48.5	74.8	93.3	53.7	78.1	93.9	62.2	80.4	93.6	57.1	77.9	93.9	59.8	79.6	94.1	61.2	80.6	94.3	72.1	85.8	95.2	70.7	86.1	96.9	70.1	86.5	96.6	69.3	84.4	96.3	61.1	80.7	94.6
27	58.3	78.8	94.7	54.7	76.7	93.9	50.9	74.9	92.8	55.6	77.9	93.8	60.8	79.5	92.8	61.9	79.9	93.6	61.8	79.3	93.8	60.9	80.7	94.2	68.5	84.3	95.4	72.1	88.1	96.8	72.1	85.9	96.5	65.8	83.2	95.8	62.0	80.8	94.5
28	56.2	78.0	94.3	50.9	76.0	93.7	48.9	74.4	93.1	57.6	79.0	93.3	62.8	80.8	93.4	60.7	79.6	94.1	60.2	78.8	93.9	61.2	80.2	94.4	71.9	85.3	94.7	75.1	88.5	96.3	74.0	87.1	95.9	68.1	83.3	95.6	62.3	80.9	94.4
29	56.2	77.9	93.9	57.5	77.4	93.8	51.4	76.5	93.1	53.7	78.8	94.4	61.7	81.1	94.5	60.8	79.1	93.6	60.8	79.3	93.9	62.3	79.5	93.1	73.3	85.7	94.7	72.0	86.9	96.7	71.7	86.9	96.2	65.9	83.0	94.7	62.3	81.0	94.3
30	55.2	77.3	94.3				51.7	76.9	93.7	58.2	80.4	94.2	63.9	81.6	92.9	59.5	79.3	94.6	60.0	78.5	94.0	61.9	79.1	92.6	65.1	82.8	95.3	72.3	87.6	96.7	76.3	87.8	95.8	63.8	81.9	95.4	62.6	81.2	94.5
31	57.3	78.4	94.4				52.6	76.1	94.2				58.7	79.4	93.7				61.2	79.3	94.0	59.6	79.1	93.9				77.7	89.3	96.8				66.9	83.0	95.3	62.0	80.7	94.6
Average	59.5	79.6	94.5	54.3	77.0	94.0	51.0	75.5	93.6	53.9	77.8	94.0	60.7	81.0	94.2	60.6	79.8	93.8	60.7	80.0	94.2	60.7	79.5	93.7	65.3	82.5	94.6	68.5	85.1	95.7	72.8	87.1	96.2	71.3	85.5	95.6	61.6	80.9	94.5
Extremes	37	99	99	30	99	99	29	100	100	30	100	100	37	99	99	40	100	100	19	100	100	29	100	100	39	100	100	37	100	100	49	100	1						

แผนภูมิความชื้นสัมพัทธ์ (relative humidity)



จุฬาลงกรณ์มหาวิทยาลัย

ตารางแสดงผลข้อมูลจำแนกความถี่ของลม ในแต่ละความเร็วและทิศทาง ที่เกิดลมรายเดือน
(monthly frequency distribution of wind in each speed and direction)

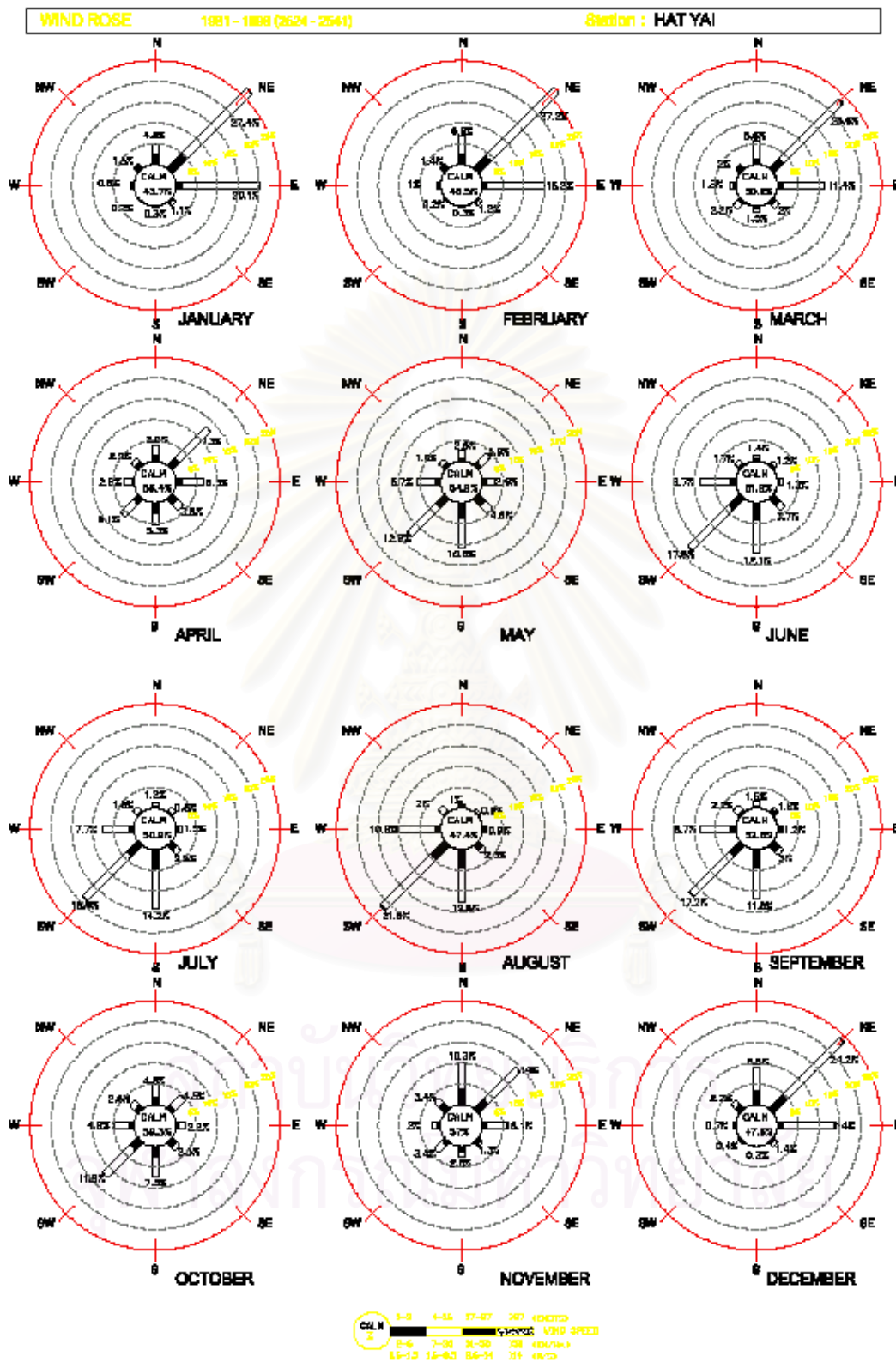
MONTHLY FREQUENCY DISTRIBUTION OF WIND IN EACH SPEED AND DIRECTION 1981 - 1998 (2524 - 2541)													Station : HAT YAI																									
January			N	NE	E	SE	S	SW	W	NW	Calm	Total	February			N	NE	E	SE	S	SW	W	NW	Calm	Total	March			N	NE	E	SE	S	SW	W	NW	Calm	Total
kts	km/h	m/s										43.7 43.7	kts	km/h	m/s										46.5 46.5	kts	km/h	m/s									50.2 50.2	
1-3	2-6	0.6-1.5	2.3	4.7	1.6	0.3	0.1	0.2	0.7	1.2		11.1	1-3	2-6	0.6-1.5	2.4	4	1.2	0.3	0.1	0	0.7	1.1		9.5	1-3	2-6	0.6-1.5	1.5	3.3	1.5	0.7	0.8	0.7	0.6	1.1		10.2
4-16	7-30	1.6-8.3	2.5	22.4	18.1	0.8	0.2	0	0.1	0.3		44.4	4-16	7-30	1.6-8.3	4.5	23.1	13.6	0.9	0.2	0.2	0.3	0.3		43.1	4-16	7-30	1.6-8.3	4.1	20.2	9.8	1.3	0.7	1.5	0.7	0.9		39.2
17-27	31-50	8.6-14	0	0.3	0.4	0	0	0	0	0		0.7	17-27	31-50	8.6-14	0	0.1	0.4	0	0	0	0	0		0.5	17-27	31-50	8.6-14	0	0.1	0.1	0	0	0	0	0		0.2
>27	>50	>14	0	0	0	0	0	0	0	0		0	>27	>50	>14	0	0	0	0	0	0	0	0		0	>27	>50	>14	0	0	0	0	0	0	0	0		0
Total			4.8	27.4	20.1	1.1	0.3	0.2	0.8	1.5		43.7 100	Total			6.9	27.2	15.2	1.2	0.3	0.2	1	1.4		46.5 100	Total			5.6	23.6	11.4	2	1.5	2.2	1.3	2		50.2 100
April			N	NE	E	SE	S	SW	W	NW	Calm	Total	May			N	NE	E	SE	S	SW	W	NW	Calm	Total	June			N	NE	E	SE	S	SW	W	NW	Calm	Total
kts	km/h	m/s										56.4 56.4	kts	km/h	m/s										54.9 54.9	kts	km/h	m/s										51.9 51.9
1-3	2-6	0.6-1.5	1.3	2.2	1.6	1.8	2.4	1.6	0.6	1		12.5	1-3	2-6	0.6-1.5	0.7	0.9	1.1	2.3	3.8	2.9	1.1	0.6		13.4	1-3	2-6	0.6-1.5	0.5	0.5	0.7	2	4.1	3.6	1.3	0.7		13.4
4-16	7-30	1.6-8.3	2.6	10.8	4.9	2	2.9	4.5	2	1.2		30.9	4-16	7-30	1.6-8.3	1.8	3	1.8	2.3	7	9.9	4.5	1.2		31.5	4-16	7-30	1.6-8.3	0.9	0.7	0.6	1.7	8	13.9	7.3	1		34.1
17-27	31-50	8.6-14	0	0	0	0	0	0	0	0		0	17-27	31-50	8.6-14	0	0	0	0	0	0.1	0.1	0		0.2	17-27	31-50	8.6-14	0	0	0	0	0	0.1	0.1	0		0.2
>27	>50	>14	0	0	0	0	0	0	0	0		0	>27	>50	>14	0	0	0	0	0	0	0	0		0	>27	>50	>14	0	0	0	0	0	0	0	0		0
Total			3.9	13	6.5	3.8	5.3	6.1	2.6	2.2		56.4 100	Total			2.5	3.9	2.9	4.6	10.8	12.9	5.7	1.8		54.9 100	Total			1.4	1.2	1.3	3.7	12.1	17.6	8.7	1.7		51.9 100
July			N	NE	E	SE	S	SW	W	NW	Calm	Total	August			N	NE	E	SE	S	SW	W	NW	Calm	Total	September			N	NE	E	SE	S	SW	W	NW	Calm	Total
kts	km/h	m/s										50.9 50.9	kts	km/h	m/s										47.4 47.4	kts	km/h	m/s										52.6 52.6
1-3	2-6	0.6-1.5	0.4	0.3	0.8	1.5	4.6	3.7	1.2	0.4		12.9	1-3	2-6	0.6-1.5	0.4	0.3	0.5	1.4	4.1	4.5	1.3	0.4		12.9	1-3	2-6	0.6-1.5	0.5	0.8	0.8	1.9	4.1	3.3	1.2	0.5		13.1
4-16	7-30	1.6-8.3	0.8	0.5	0.7	1.3	9.6	15	6.4	1.2		35.5	4-16	7-30	1.6-8.3	0.6	0.5	0.4	1.1	8.7	17.2	9.3	1.6		39.4	4-16	7-30	1.6-8.3	1	0.8	0.4	1.1	7.7	13.8	7.3	1.7		33.8
17-27	31-50	8.6-14	0	0	0	0	0	0.1	0.1	0		0.2	17-27	31-50	8.6-14	0	0	0	0	0	0.1	0.2	0		0.3	17-27	31-50	8.6-14	0	0	0	0	0	0.1	0.2	0		0.3
>27	>50	>14	0	0	0	0	0	0	0	0		0	>27	>50	>14	0	0	0	0	0	0	0	0		0	>27	>50	>14	0	0	0	0	0	0	0	0		0
Total			1.2	0.8	1.5	2.8	14.2	18.8	7.7	1.6		50.9 100	Total			1	0.8	0.9	2.5	12.8	21.8	10.8	2		47.4 100	Total			1.5	1.6	1.2	3	11.8	17.2	8.7	2.2		52.6 100
October			N	NE	E	SE	S	SW	W	NW	Calm	Total	November			N	NE	E	SE	S	SW	W	NW	Calm	Total	December			N	NE	E	SE	S	SW	W	NW	Calm	Total
kts	km/h	m/s										59.3 59.3	kts	km/h	m/s										57 57	kts	km/h	m/s										47.6 47.6
1-3	2-6	0.6-1.5	1.6	1	0.9	1.4	2.6	2.4	1.1	1.1		12.1	1-3	2-6	0.6-1.5	3.6	3.1	0.9	0.9	1.3	0.9	0.9	1.7		13.3	1-3	2-6	0.6-1.5	3.2	4.5	1.5	0.3	0.2	0.2	0.6	1.5		12
4-16	7-30	1.6-8.3	3.2	3.5	1.3	1.1	4.7	9.5	3.7	1.5		26.5	4-16	7-30	1.6-8.3	6.7	10.9	5	0.4	1.2	2.5	1.1	1.7		29.5	4-16	7-30	1.6-8.3	5.6	19.5	12.2	1.1	0.1	0.2	0.1	1.2		40
17-27	31-50	8.6-14	0	0	0	0	0	0	0.1	0		0.1	17-27	31-50	8.6-14	0	0	0.2	0	0	0	0	0		0.2	17-27	31-50	8.6-14	0	0.2	0.3	0	0	0	0	0		0.5
>27	>50	>14	0	0	0	0	0	0	0	0		0	>27	>50	>14	0	0	0	0	0	0	0	0		0	>27	>50	>14	0	0	0	0	0	0	0	0		0
Total			4.8	4.5	2.2	2.5	7.3	11.9	4.9	2.6		59.3 100	Total			10.3	14	6.1	1.3	2.5	3.4	2	3.4		57 100	Total			8.8	24.2	14	1.4	0.3	0.4	0.7	2.7		47.6 100

remark : kts = KNOTS
1 kts = 1.853 km/h = 0.514 m/s

* this table shows the frequency of wind speed & direction in percent



แผนภูมิจำแนกความถี่ของลม ในแต่ละความเร็วและทิศทาง ที่เกิดลมรายเดือน (wind rose)



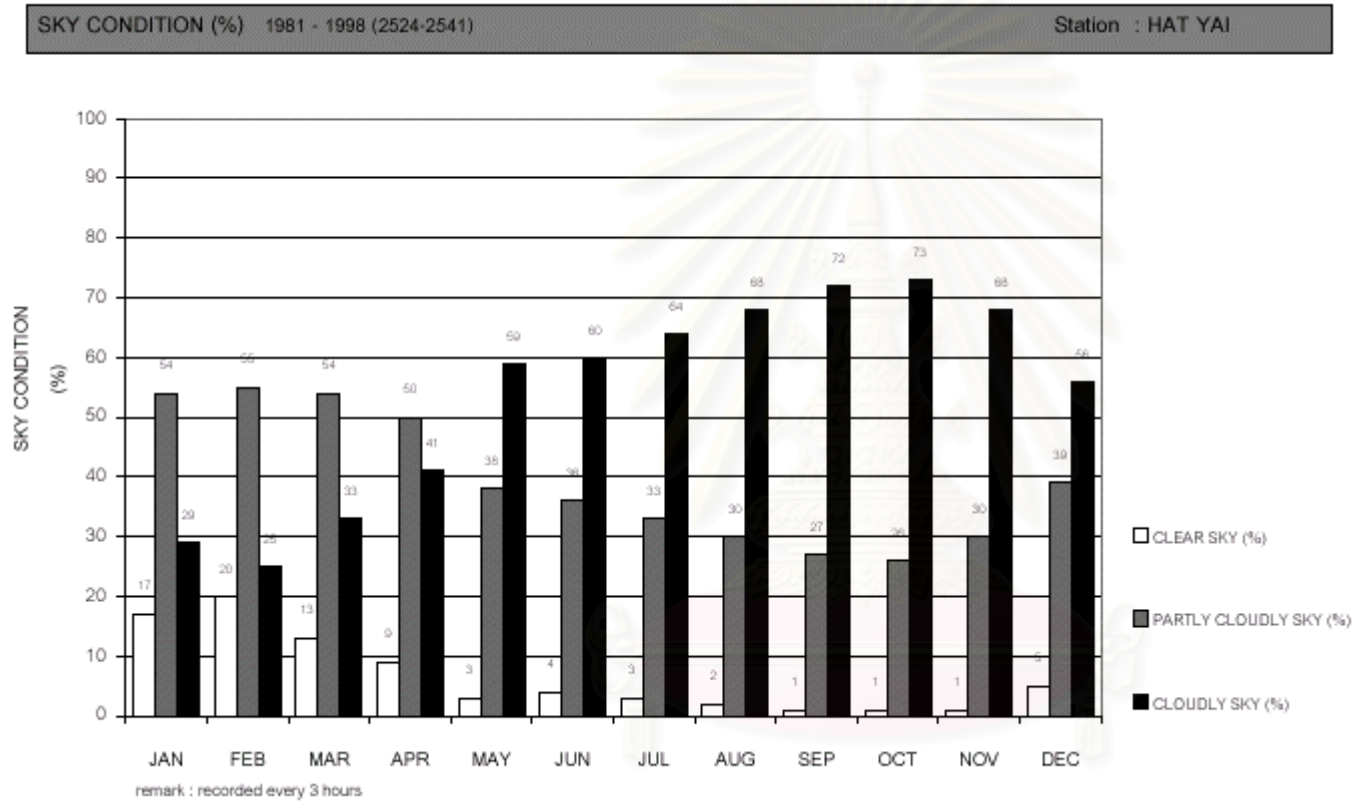
ตารางแสดงผลข้อมูลสภาพท้องฟ้าและสัดส่วนเปอร์เซ็นต์สภาพท้องฟ้า (sky cover and percentage of sky condition)

SKY COVER (%) & SKY CONDITION 1981 - 1998 (2524 - 2541)													Station : HAT YAI																										
MONTH	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE			JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER			ANNUAL		
DAY	Sky Condition			Sky Condition			Sky Condition			Sky Condition			Sky Condition			Sky Condition			Sky Condition			Sky Condition			Sky Condition			Sky Condition			Sky Condition			Sky Condition					
	Clr	Part	Cld	Clr	Part	Cld	Clr	Part	Cld	Clr	Part	Cld	Clr	Part	Cld	Clr	Part	Cld	Clr	Part	Cld	Clr	Part	Cld	Clr	Part	Cld	Clr	Part	Cld	Clr	Part	Cld	Clr	Part	Cld	Clr	Part	Cld
1	19%	60%	21%	18%	54%	28%	24%	50%	26%	13%	51%	35%	5%	38%	57%	6%	38%	56%	3%	42%	55%	3%	34%	63%	2%	44%	54%	0%	26%	74%	0%	21%	79%	1%	35%	63%	8%	41%	51%
2	24%	51%	25%	16%	53%	31%	11%	65%	24%	15%	49%	37%	4%	33%	63%	3%	42%	55%	4%	40%	55%	4%	40%	56%	0%	41%	59%	1%	32%	68%	1%	24%	76%	1%	34%	65%	7%	42%	51%
3	15%	56%	29%	11%	53%	36%	20%	53%	27%	12%	54%	34%	4%	46%	50%	1%	37%	62%	3%	48%	49%	5%	40%	54%	0%	28%	72%	0%	22%	78%	0%	29%	71%	0%	26%	74%	6%	41%	53%
4	18%	51%	32%	18%	54%	29%	26%	53%	21%	5%	61%	34%	1%	51%	49%	1%	44%	55%	3%	45%	52%	1%	31%	68%	0%	24%	76%	1%	18%	81%	1%	20%	79%	2%	39%	59%	6%	41%	53%
5	15%	56%	29%	20%	54%	26%	21%	50%	29%	10%	54%	36%	7%	44%	49%	2%	38%	60%	1%	35%	65%	0%	25%	75%	0%	28%	72%	1%	18%	81%	0%	17%	83%	1%	32%	67%	7%	37%	56%
6	18%	49%	32%	13%	53%	35%	15%	60%	24%	18%	50%	32%	7%	41%	52%	2%	31%	67%	5%	29%	66%	1%	18%	81%	1%	25%	74%	2%	23%	75%	1%	26%	72%	3%	21%	76%	7%	36%	57%
7	14%	62%	24%	25%	47%	28%	18%	52%	30%	17%	48%	35%	5%	40%	54%	0%	31%	69%	7%	35%	59%	4%	29%	68%	1%	29%	71%	3%	35%	62%	0%	21%	79%	3%	27%	70%	8%	38%	54%
8	18%	57%	26%	28%	45%	27%	13%	54%	34%	10%	59%	31%	4%	41%	55%	3%	33%	64%	5%	37%	58%	0%	35%	65%	0%	34%	66%	3%	37%	60%	1%	27%	71%	7%	23%	70%	8%	40%	52%
9	24%	49%	28%	20%	59%	21%	14%	52%	34%	10%	53%	38%	1%	41%	57%	3%	32%	65%	5%	35%	60%	4%	34%	63%	0%	37%	63%	0%	32%	68%	0%	30%	70%	1%	35%	64%	7%	41%	53%
10	15%	51%	34%	21%	57%	22%	15%	56%	29%	8%	45%	47%	1%	45%	54%	2%	25%	73%	2%	29%	68%	0%	36%	64%	5%	29%	66%	1%	26%	73%	2%	34%	64%	7%	21%	72%	7%	38%	56%
11	24%	46%	30%	24%	43%	33%	15%	62%	24%	4%	50%	46%	4%	39%	57%	1%	32%	66%	4%	31%	65%	2%	26%	71%	1%	29%	70%	0%	11%	89%	1%	24%	76%	7%	32%	62%	7%	35%	57%
12	21%	46%	33%	18%	49%	33%	18%	58%	24%	2%	43%	55%	2%	40%	57%	0%	38%	52%	3%	35%	65%	1%	29%	67%	2%	32%	65%	0%	20%	80%	0%	24%	76%	5%	37%	58%	6%	37%	57%
13	16%	62%	22%	17%	57%	26%	15%	65%	20%	4%	60%	36%	1%	39%	60%	2%	40%	58%	1%	24%	75%	2%	41%	57%	1%	29%	70%	0%	19%	81%	1%	23%	76%	6%	37%	57%	6%	41%	53%
14	17%	57%	26%	21%	54%	24%	24%	53%	24%	15%	46%	38%	0%	38%	63%	2%	38%	60%	1%	30%	69%	4%	31%	65%	1%	24%	75%	1%	27%	72%	0%	41%	59%	4%	38%	58%	8%	40%	53%
15	24%	50%	26%	21%	57%	23%	12%	50%	38%	10%	51%	39%	0%	29%	71%	9%	43%	48%	0%	31%	69%	4%	30%	65%	1%	29%	70%	2%	40%	57%	4%	35%	61%	4%	39%	57%	8%	40%	52%
16	21%	53%	26%	19%	57%	24%	15%	44%	40%	5%	53%	42%	6%	30%	64%	6%	35%	59%	0%	35%	65%	1%	28%	71%	1%	29%	70%	1%	38%	61%	6%	38%	57%	7%	38%	54%	7%	40%	53%
17	17%	46%	37%	19%	65%	16%	10%	57%	32%	5%	56%	39%	6%	30%	64%	1%	30%	68%	1%	37%	63%	1%	21%	78%	0%	21%	79%	2%	39%	59%	7%	36%	57%	5%	40%	54%	6%	40%	54%
18	17%	57%	26%	21%	54%	25%	5%	46%	49%	12%	54%	35%	3%	44%	53%	3%	29%	68%	0%	26%	74%	0%	23%	77%	0%	24%	76%	2%	38%	60%	2%	40%	58%	7%	37%	56%	6%	39%	55%
19	21%	61%	18%	17%	57%	26%	9%	48%	43%	13%	56%	31%	4%	29%	66%	1%	30%	69%	0%	25%	75%	1%	31%	68%	1%	21%	78%	1%	39%	60%	2%	36%	62%	4%	41%	55%	6%	40%	54%
20	15%	57%	27%	20%	58%	22%	12%	58%	30%	11%	55%	34%	2%	33%	65%	3%	42%	55%	3%	25%	72%	0%	25%	75%	0%	23%	77%	4%	24%	72%	1%	30%	69%	3%	46%	51%	6%	40%	54%
21	15%	52%	32%	18%	57%	26%	12%	44%	44%	9%	46%	46%	1%	35%	63%	4%	29%	67%	4%	26%	71%	2%	24%	74%	2%	25%	73%	0%	21%	79%	0%	32%	68%	7%	56%	38%	6%	37%	57%
22	20%	42%	38%	23%	60%	18%	9%	53%	38%	3%	56%	41%	2%	38%	60%	7%	38%	56%	2%	28%	70%	2%	24%	74%	4%	24%	71%	0%	26%	74%	0%	41%	59%	6%	48%	46%	6%	40%	54%
23	12%	46%	42%	15%	60%	24%	10%	55%	35%	9%	45%	46%	1%	44%	55%	9%	29%	63%	2%	32%	65%	2%	26%	72%	4%	26%	70%	1%	32%	68%	0%	40%	60%	4%	40%	56%	6%	40%	55%
24	12%	65%	23%	16%	57%	26%	6%	49%	45%	1%	49%	50%	2%	36%	62%	3%	39%	58%	1%	25%	74%	2%	33%	65%	3%	23%	74%	1%	36%	63%	0%	26%	74%	6%	43%	51%	4%	40%	55%
25	13%	56%	32%	25%	57%	18%	11%	48%	41%	5%	41%	54%	3%	26%	71%	2%	40%	57%	1%	30%	68%	1%	35%	64%	1%	24%	74%	1%	21%	78%	1%	36%	63%	7%	38%	56%	6%	38%	56%
26	8%	52%	40%	25%	60%	15%	7%	54%	39%	7%	44%	49%	4%	24%	72%	4%	43%	53%	4%	39%	57%	3%	30%	67%	1%	18%	82%	0%	23%	77%	1%	25%	74%	10%	40%	49%	6%	38%	56%
27	18%	44%	38%	13%	63%	25%	12%	61%	27%	5%	44%	51%	1%	41%	58%	11%	35%	54%	1%	46%	53%	2%	33%	65%	0%	18%	82%	0%	19%	81%	1%	38%	62%	10%	46%	44%	6%	41%	53%
28	18%	60%	23%	24%	56%	20%	10%	51%	39%	4%	41%	54%	4%	35%	60%	7%	36%	57%	1%	38%	61%	0%	21%	79%	1%	24%	76%	0%	13%	88%	3%	37%	60%	9%	49%	42%	7%	38%	55%
29	16%	52%	32%	38%	44%	19%	8%	54%	38%	5%	53%	42%	1%	35%	64%	3%	43%	54%	1%	29%	69%	1%	36%	63%	0%	21%	79%	0%	23%	77%	1%	37%	63%	10%	54%	36%	7%	40%	53%
30	12%	65%	23%				5%	54%	41%	3%	43%	54%	1%	40%	59%	5%	38%	57%	2%	37%	61%	1%	30%	68%	1%	26%	74%	1%	27%	72%	2%	26%	71%	13%	57%	29%	4%	40%	55%
31	17%	59%	24%				9%	57%	35%				7%	39%	54%				2%	41%	57%	4%	38%	57%				1%	17%	82%				5%	52%	43%	6%	43%	50%
AVG %	17%	54%	29%	20%	55%	25%	13%	54%	33%	8%	50%	41%	3%	38%	59%	4%	36%	61%	2%	33%	64%	2%	30%	68%	1%	27%	72%	1%	26%	73%	1%	30%	68%	5%	39%	56%	7%	39%	54%
condition	5.9			5.6			6.3			6.8			7.8			7.8			8.1			8.2			8.5			8.5			8.3			7.6			7.5		

remark condition (SKY CONDITION) 0-3 = Clear Sky, 4-7 = Partly Cloudy Sky, 8-10 = Cloudy Sky, AVG % = AVERAGE PERCENTAGE OF SKY CONDITION



แผนภูมิสภาพท้องฟ้าและสัดส่วนเปอร์เซ็นต์สภาพท้องฟ้า (sky cover and percentage of sky condition)



สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย

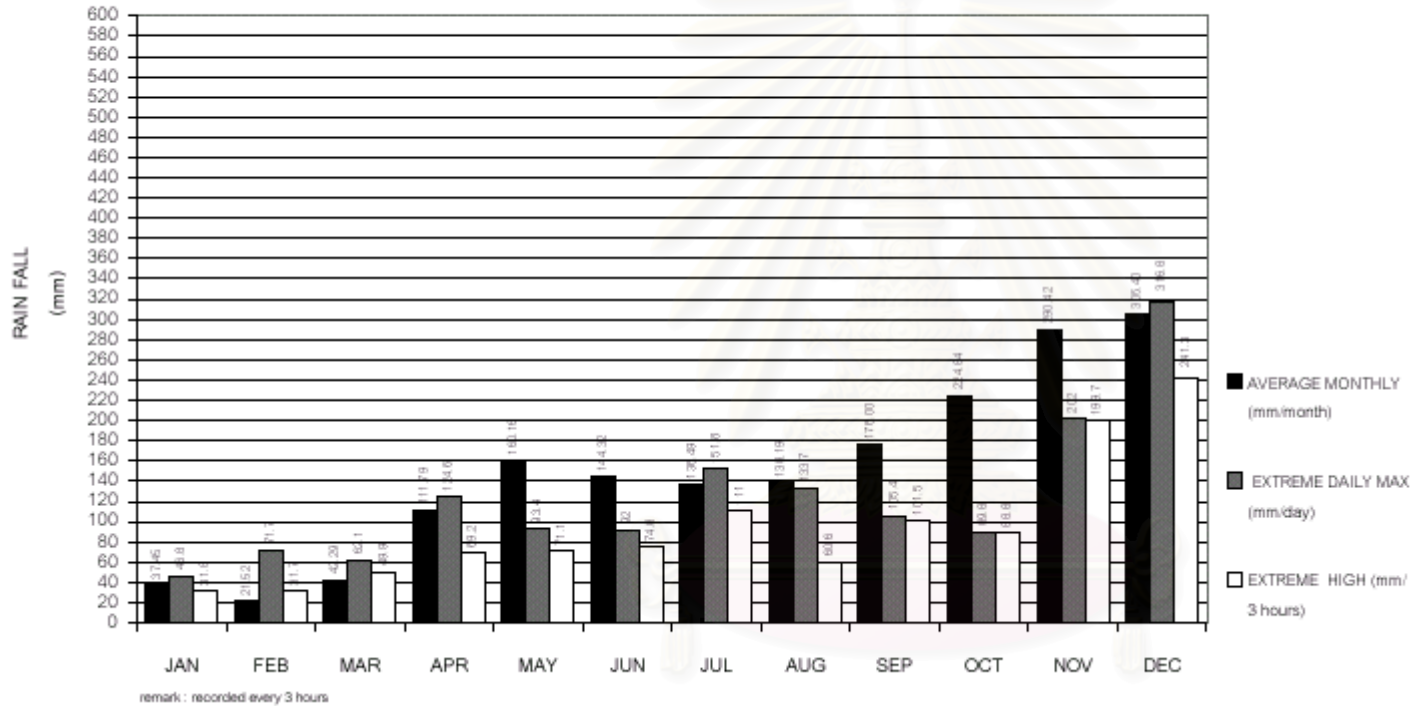
ตารางแสดงผลข้อมูลปริมาณน้ำฝน (rain fall)

RAIN FALL (mm) 1981 - 1998 (2524 - 2541)													Station : HAT YAI	
MONTH	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	ANNUAL	
DAY	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	
1	2.8	4.7	0.4	2.2	2.8	11.5	0.1	0.9	7.0	9.9	13.9	10.9	67.1	
2	0.6	0.2	0.0	2.9	4.2	6.1	6.6	1.5	1.4	2.3	67.6	14.7	108.0	
3	1.8	0.4	0.6	0.6	7.6	6.9	4.5	7.6	2.6	3.4	4.8	14.4	55.3	
4	3.0	0.7	0.7	0.7	6.2	5.4	1.6	2.2	4.5	8.7	2.6	37.5	73.8	
5	2.8	0.1	0.0	6.7	7.9	1.9	3.3	4.8	10.7	2.3	6.3	24.3	71.2	
6	1.7	0.0	0.8	0.8	10.0	10.8	2.0	3.8	6.0	5.6	9.9	13.1	64.8	
7	3.4	3.3	0.4	2.2	7.3	3.8	11.8	4.4	6.0	5.2	7.3	15.2	70.5	
8	1.3	0.2	0.0	2.5	5.3	2.4	3.8	2.6	2.9	4.3	6.8	12.1	44.1	
9	3.3	0.9	0.1	0.4	6.0	1.9	4.1	2.4	2.5	7.7	6.0	12.1	47.4	
10	0.5	1.3	0.0	5.7	4.8	7.3	4.4	4.9	3.2	10.4	9.2	16.9	68.5	
11	0.2	0.7	0.4	2.6	5.2	3.5	2.2	6.4	9.4	4.4	16.1	15.1	66.1	
12	0.4	0.6	1.6	9.0	6.0	3.5	6.1	0.9	7.5	2.7	24.0	8.7	71.1	
13	0.5	1.1	0.0	2.0	6.9	9.0	4.8	5.3	8.4	5.7	7.0	8.2	58.9	
14	1.5	0.5	3.6	0.6	6.5	7.8	2.8	3.2	1.5	15.3	11.0	9.8	64.2	
15	0.2	0.0	1.1	2.2	5.8	7.0	7.7	6.5	5.1	9.8	6.6	6.1	58.3	
16	0.4	0.2	1.8	1.2	8.1	5.4	2.3	6.9	4.6	10.5	7.3	8.5	57.1	
17	0.6	0.4	0.5	10.0	6.5	4.6	6.5	3.9	4.7	5.4	11.3	7.4	61.9	
18	0.2	0.0	7.0	3.7	4.9	5.9	12.4	2.8	4.0	4.7	12.4	2.3	60.3	
19	0.0	0.6	0.8	6.7	2.9	2.5	6.2	3.1	6.2	9.9	14.1	4.2	57.1	
20	0.1	0.0	7.9	2.5	1.7	2.3	2.6	1.8	12.3	6.3	11.3	7.8	56.6	
21	0.6	0.2	1.8	3.8	3.9	4.5	2.0	5.3	5.6	2.1	12.4	8.4	50.5	
22	0.0	0.0	0.2	3.7	5.3	6.3	4.6	2.3	1.6	7.3	6.8	6.0	44.1	
23	1.4	1.2	0.5	5.6	5.8	3.3	3.9	8.8	1.7	6.9	6.8	8.1	53.8	
24	0.0	1.5	2.5	2.0	3.3	2.3	7.6	6.0	2.9	7.4	15.7	4.6	55.8	
25	0.7	0.6	0.8	2.8	3.9	3.8	3.1	6.5	8.6	9.1	6.1	3.6	49.6	
26	1.5	0.0	1.8	6.3	4.4	2.1	5.8	4.3	10.2	1.8	9.3	5.2	52.7	
27	3.2	0.9	0.1	3.2	1.1	3.1	2.8	8.2	4.3	17.2	7.6	3.8	55.4	
28	1.7	1.2	0.2	10.9	6.4	1.2	1.1	5.1	9.0	14.5	11.7	7.6	70.5	
29	0.8	0.1	4.0	4.1	2.6	4.3	3.3	6.4	9.7	6.3	9.1	2.2	52.8	
30	0.8		2.2	4.3	5.2	3.8	2.6	7.8	11.9	7.1	8.1	2.2	55.9	
31	1.5		0.5		1.5		3.8	1.6		10.6		4.5	24.1	
Monthly	37.4	21.5	42.3	111.8	160.2	144.3	136.5	138.2	176.0	224.8	290.4	305.4	1,788.9	
Daily record high	46.8	71.7	62.1	124.6	93.4	92.0	151.8	133.7	105.4	89.8	202.0	316.8	316.8	
3 hr. Extremes	31.8	31.7	49.9	69.2	71.1	74.8	111.0	60.6	101.5	88.8	199.7	241.3	241.3	
No. of rainy days	6	3	4	10	14	14	14	15	18	19	20	16	153	

จุฬาลงกรณ์มหาวิทยาลัย

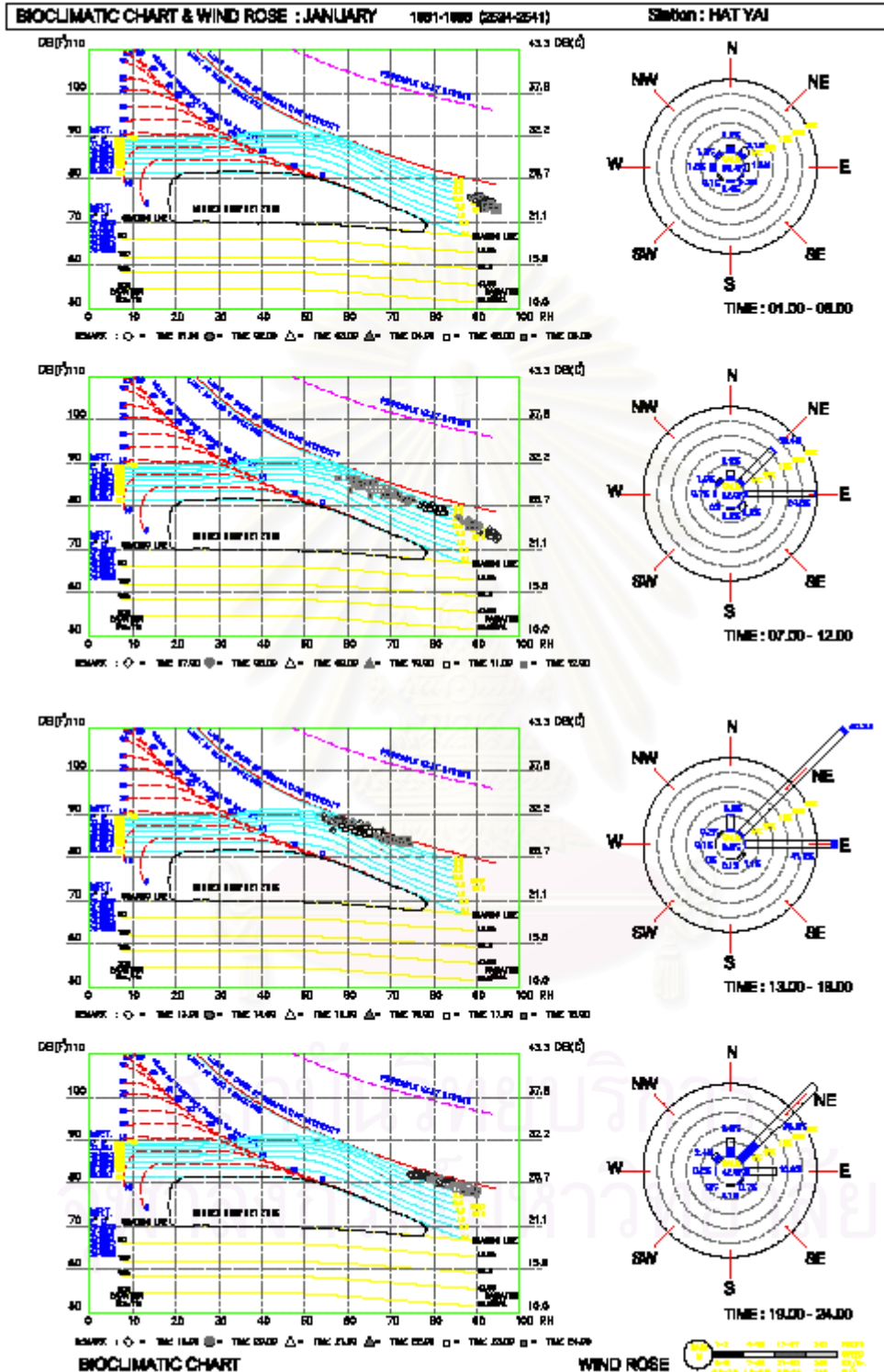
แผนภูมิปริมาณน้ำฝน (rain fall)

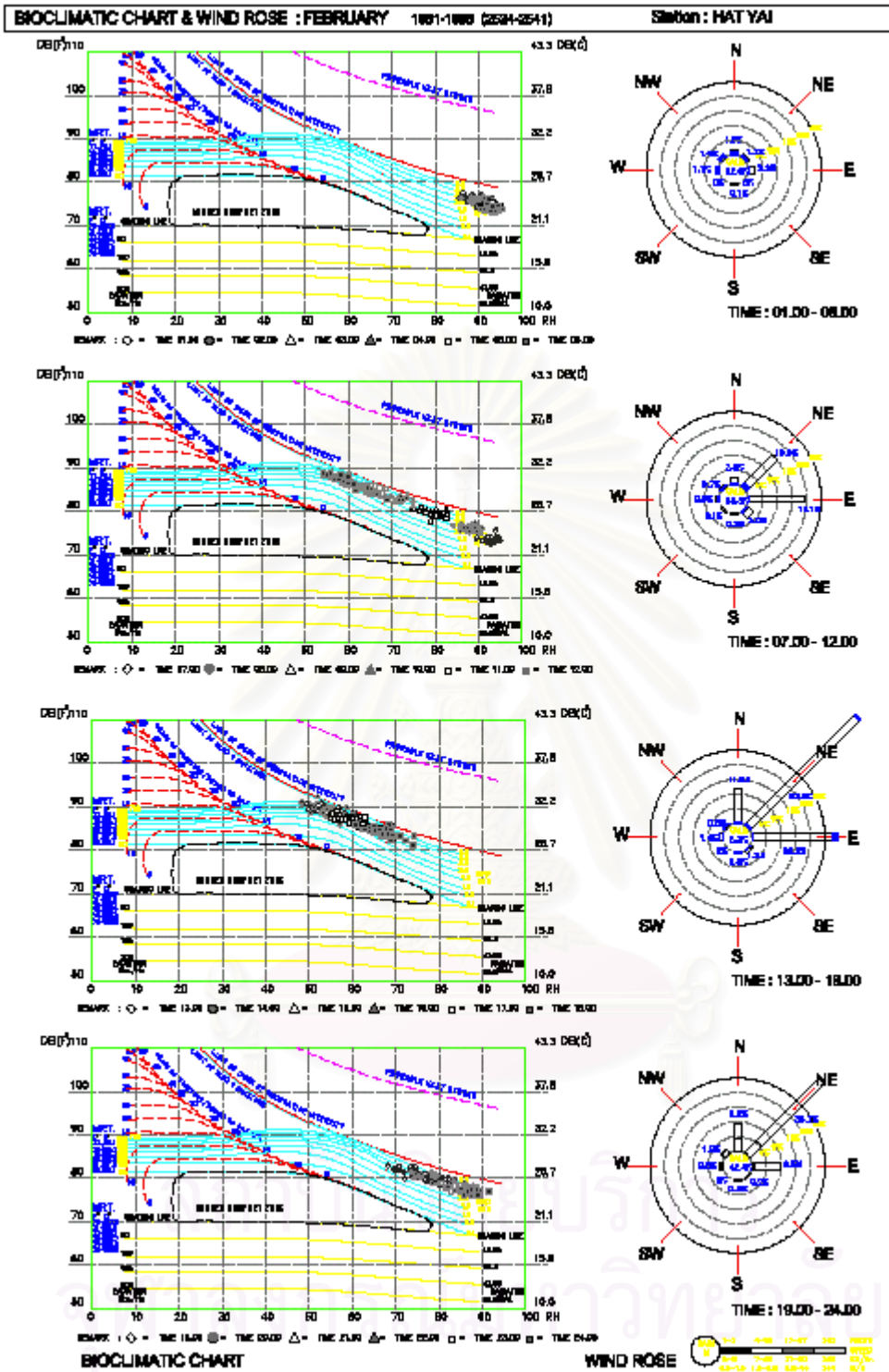
RAIN FALL (mm) 1981 - 1998 (2524 - 2541) Station : HAT YAI



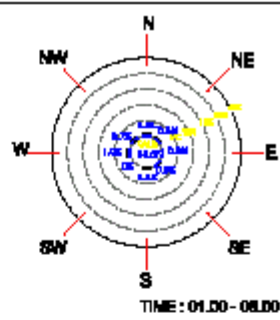
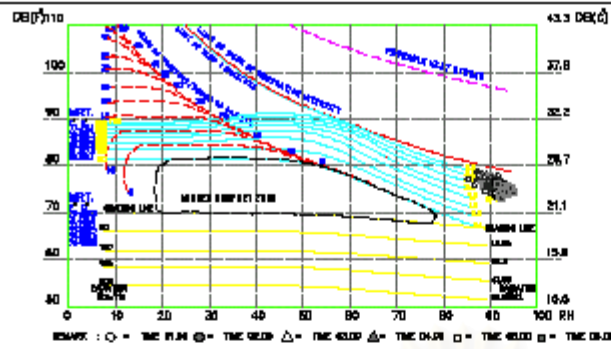
สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย

แผนภูมิความสัมพันธ์ระหว่างข้อมูลสภาพอากาศในแผนภูมิไบโอคลิเมตริก (bioclimatic chart) กับแผนภูมิแสดงความเร็วและทิศทางที่เกิดลมรายเดือน (wind rose) แยกตามช่วงเวลา

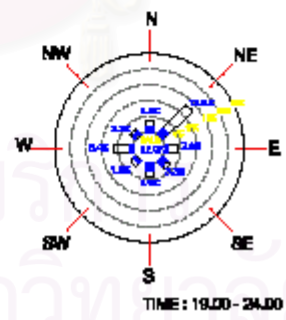
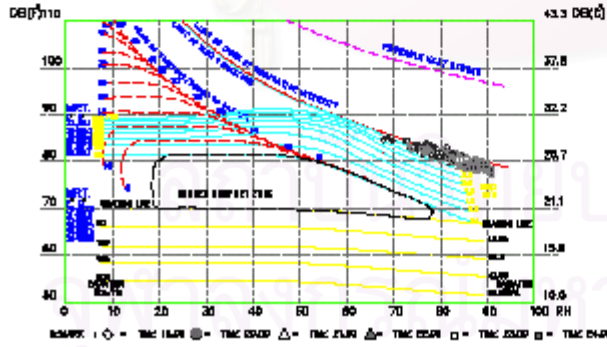
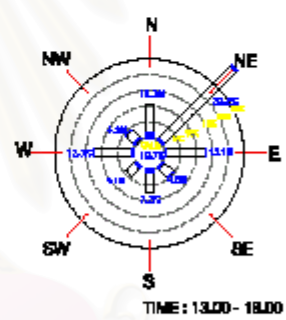
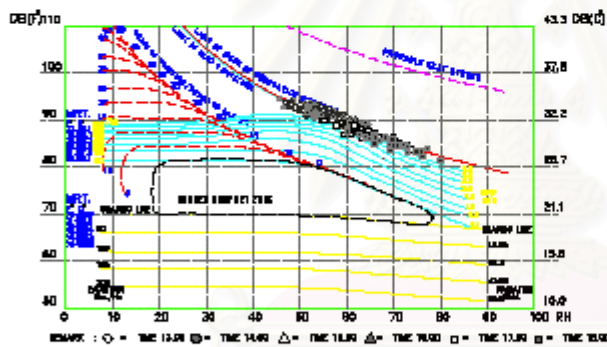
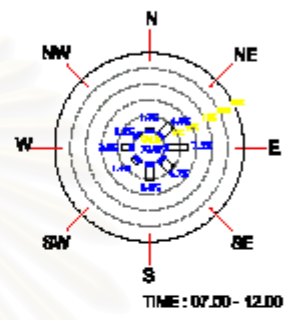
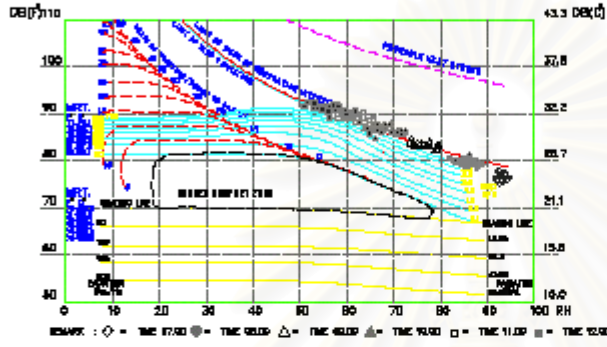
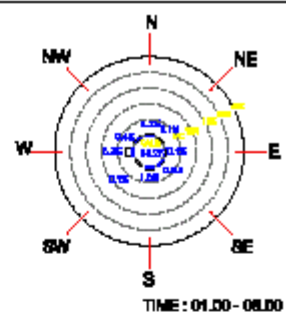
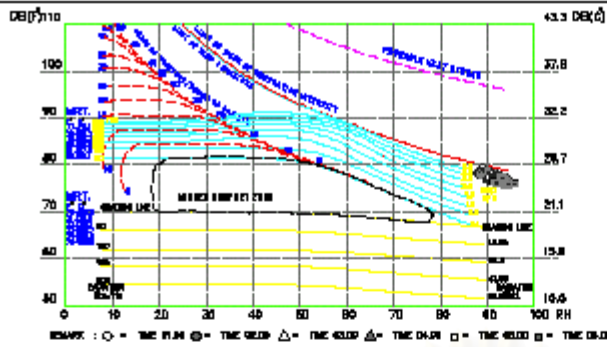




BIOCLIMATIC CHART & WIND ROSE : MARCH 1981-1980 (2534-2541) Station : HAT YAI



BIOCLIMATIC CHART & WIND ROSE : APRIL 1981-1999 (2524-2541) Station : HAT YAI

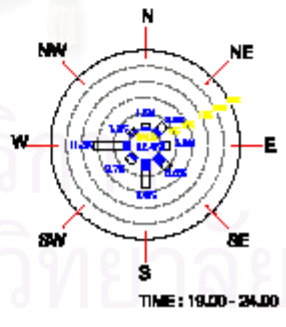
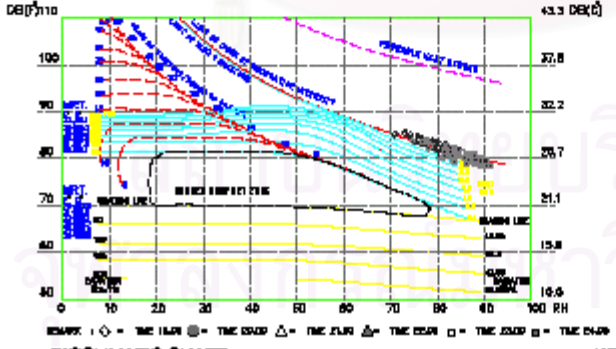
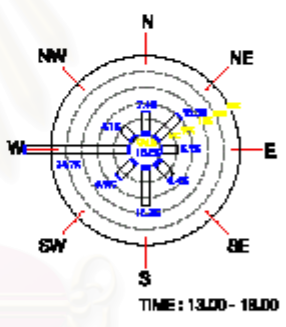
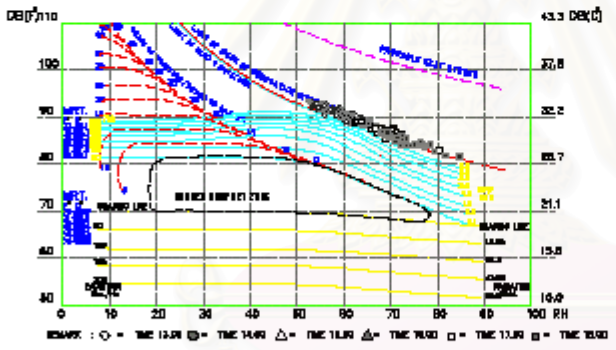
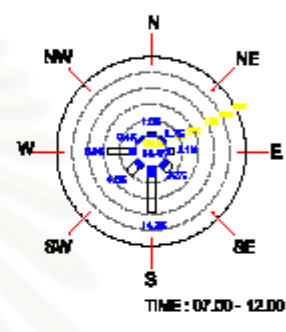
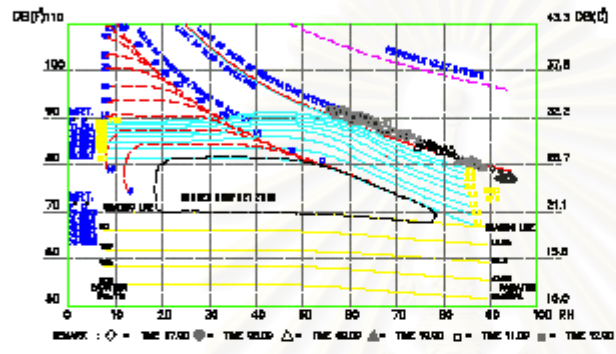
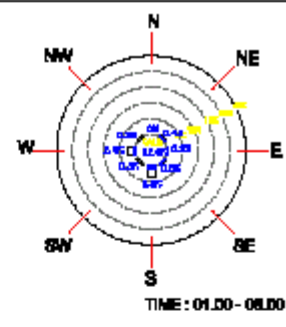
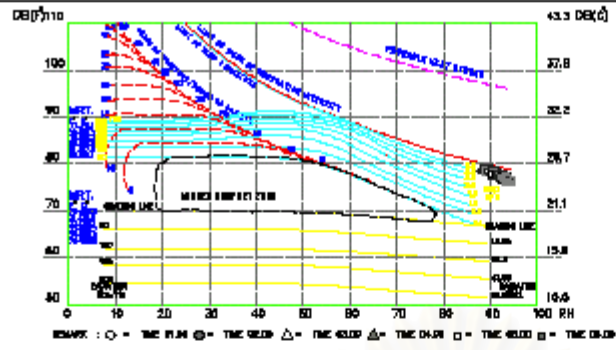


BIOCLIMATIC CHART

WIND ROSE



BIOCLIMATIC CHART & WIND ROSE : MAY 1981-1989 (2534-2541) Station : HAT YAI

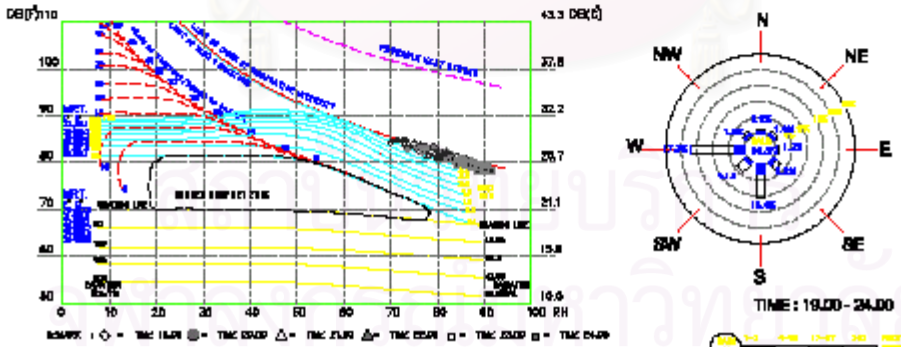
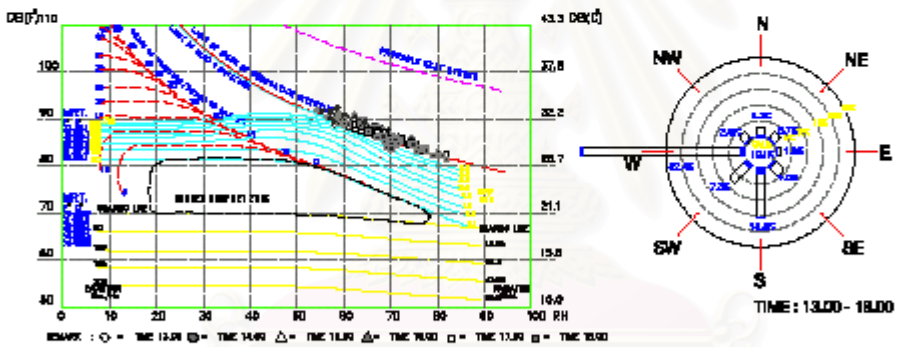
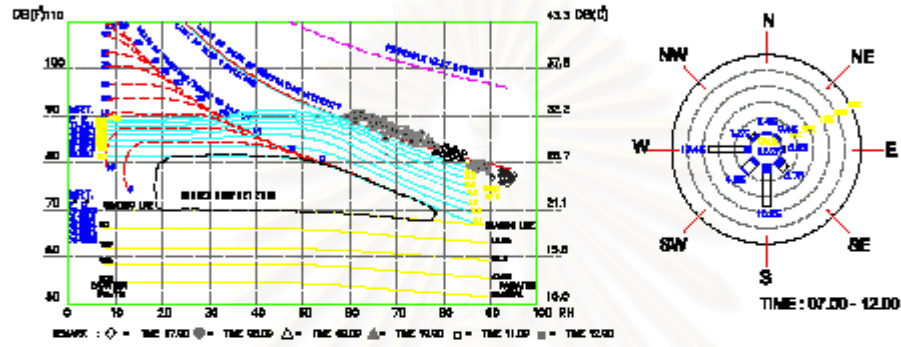
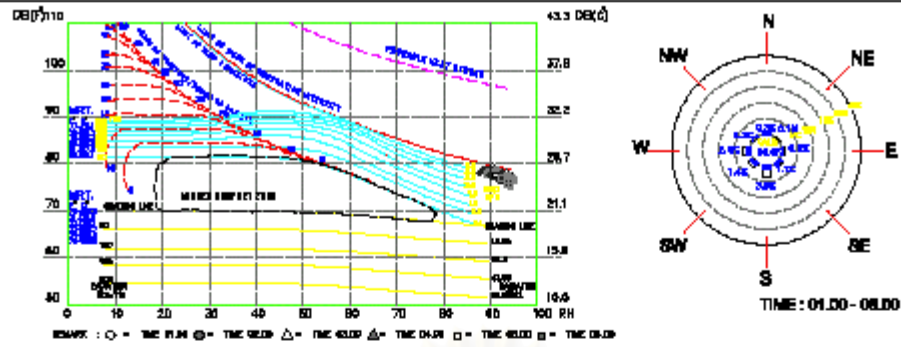


BIOCLIMATIC CHART

WIND ROSE



BIOCLIMATIC CHART & WIND ROSE : JUNE 1981-1999 (2524-2541) Station : HAT YAI

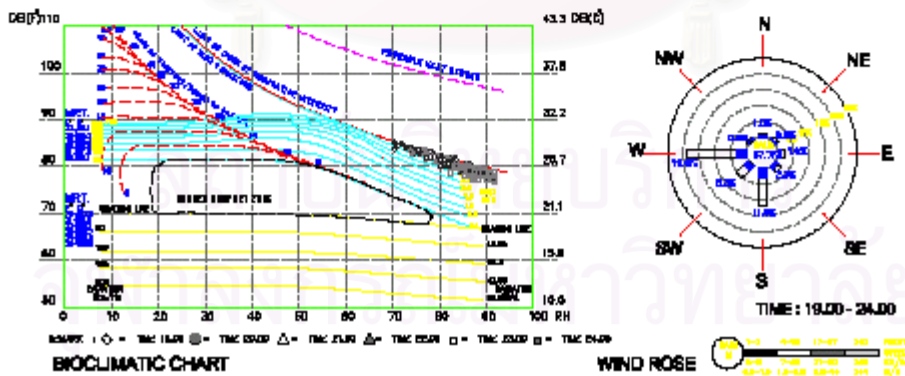
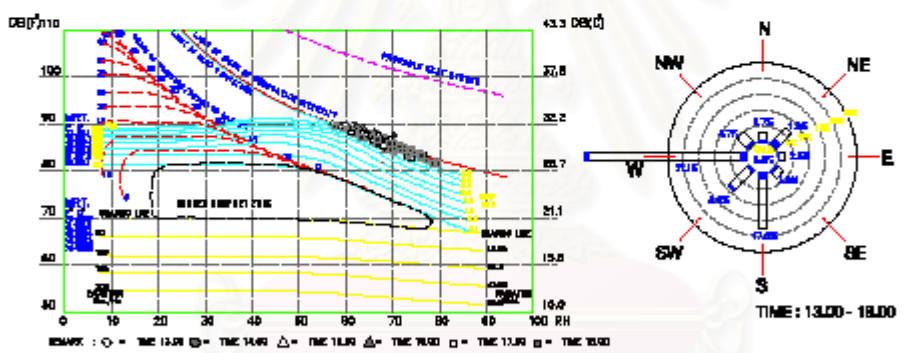
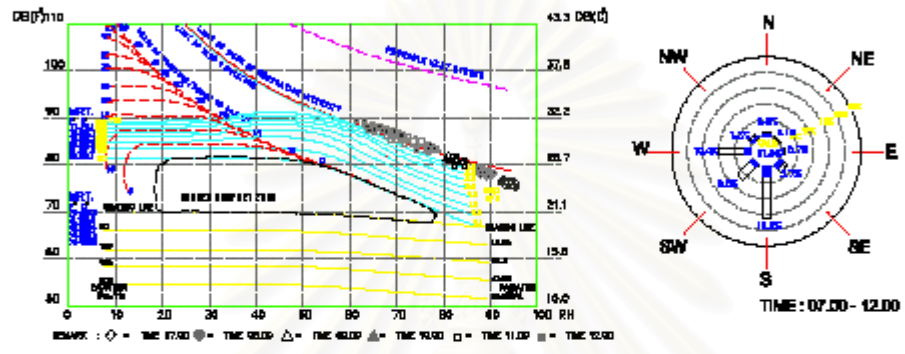
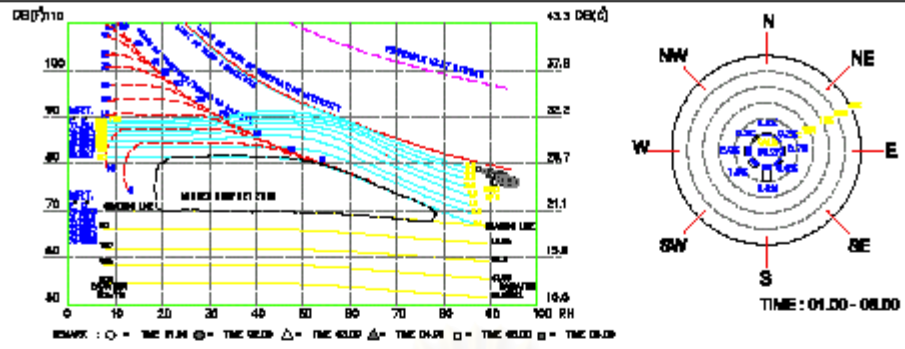


BIOCLIMATIC CHART

WIND ROSE



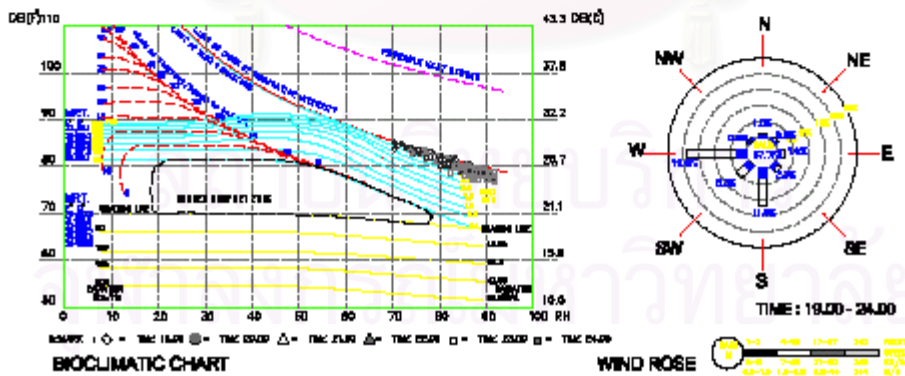
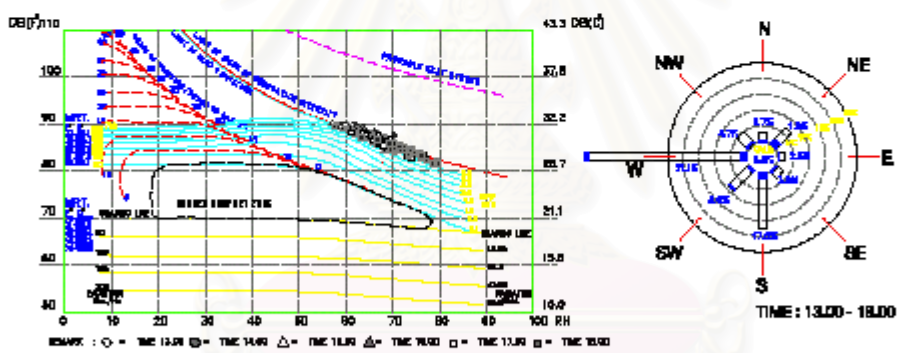
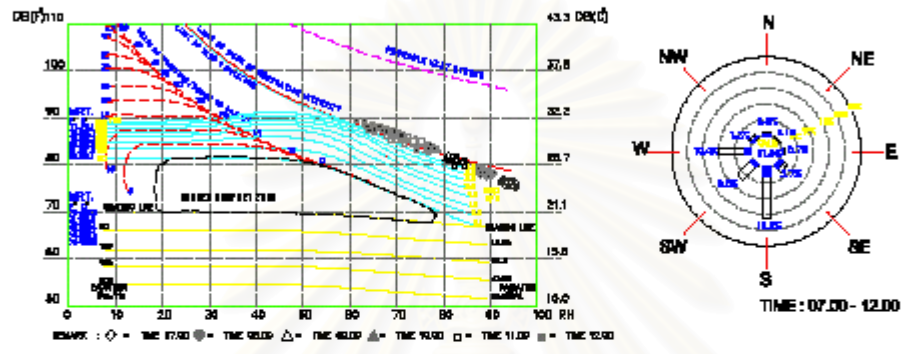
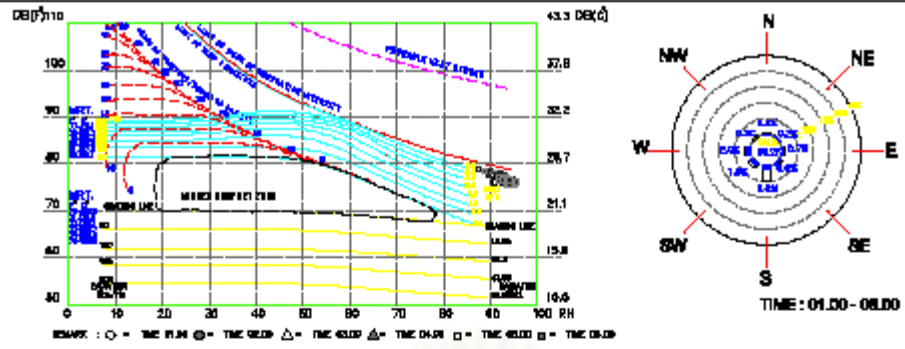
BIOCLIMATIC CHART & WIND ROSE : JULY 1991-1999 (2524-2541) Station : HATYAI



BIOCLIMATIC CHART

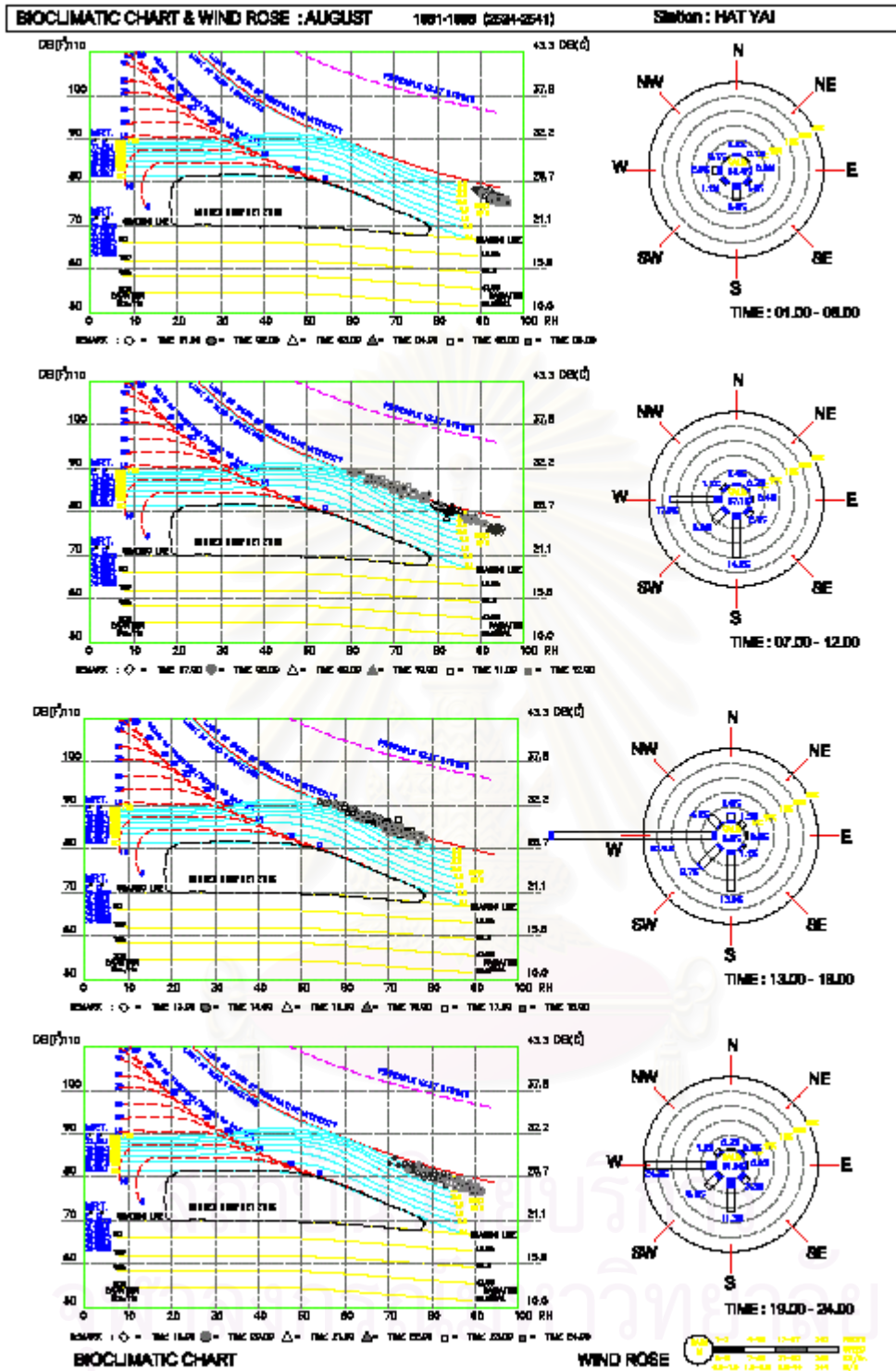
WIND ROSE

BIOCLIMATIC CHART & WIND ROSE : JULY 1991-1999 (2524-2541) Station : HATYAI

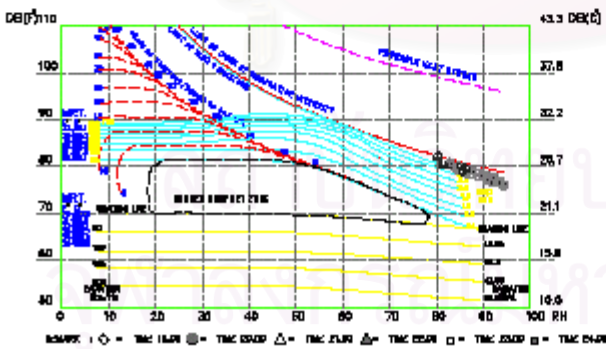
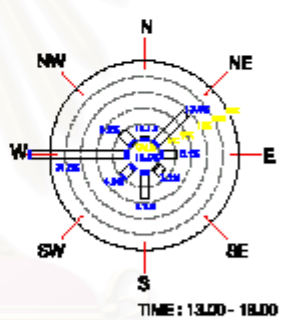
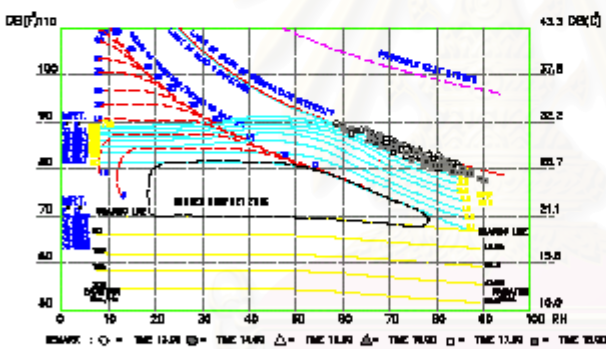
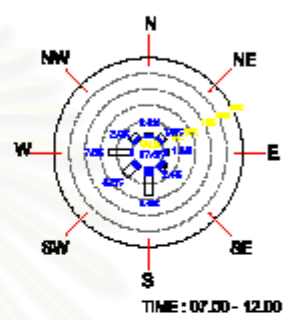
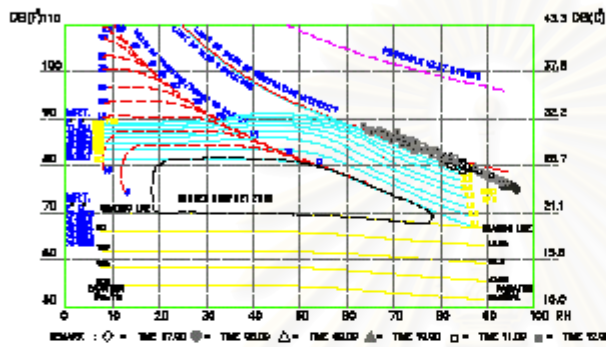
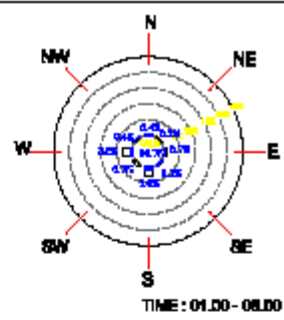
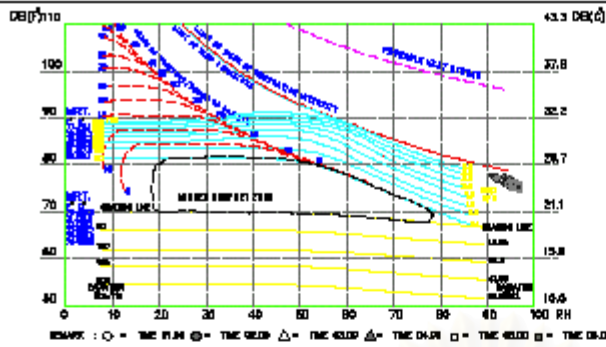


BIOCLIMATIC CHART

WIND ROSE



BIOCLIMATIC CHART & WIND ROSE : OCTOBER 1991-1999 (2524-2541) Station : HAT YAI

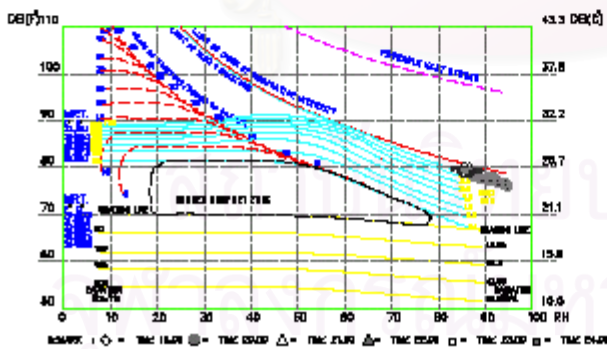
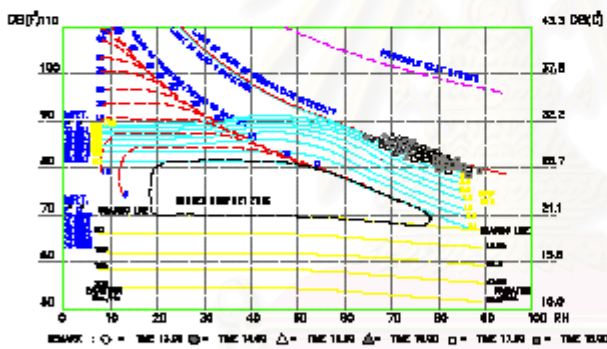
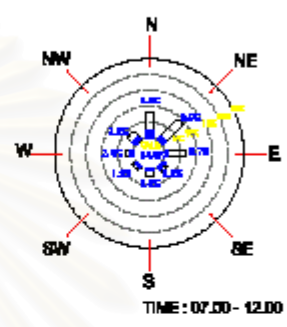
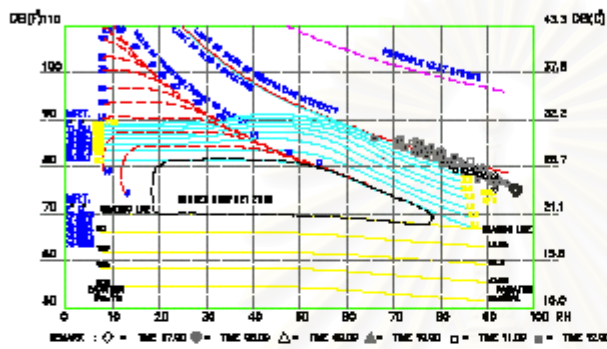
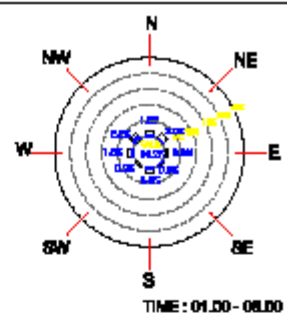
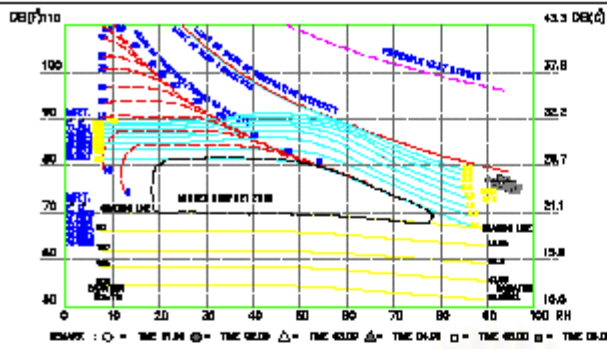


BIOCLIMATIC CHART

WIND ROSE



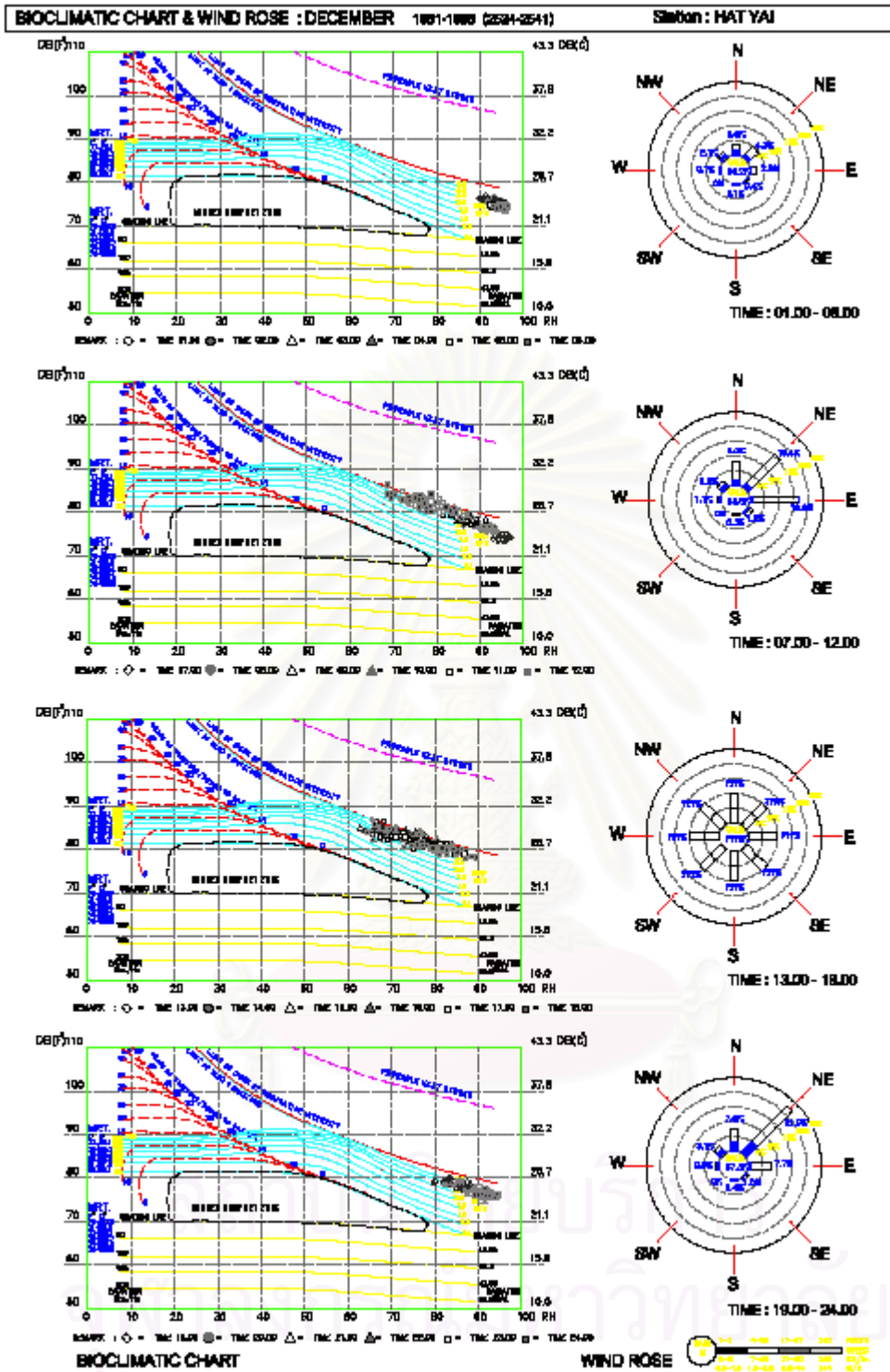
BIOCLIMATIC CHART & WIND ROSE : NOVEMBER 1981-1980 (2534-2541) Station : MAT YAI



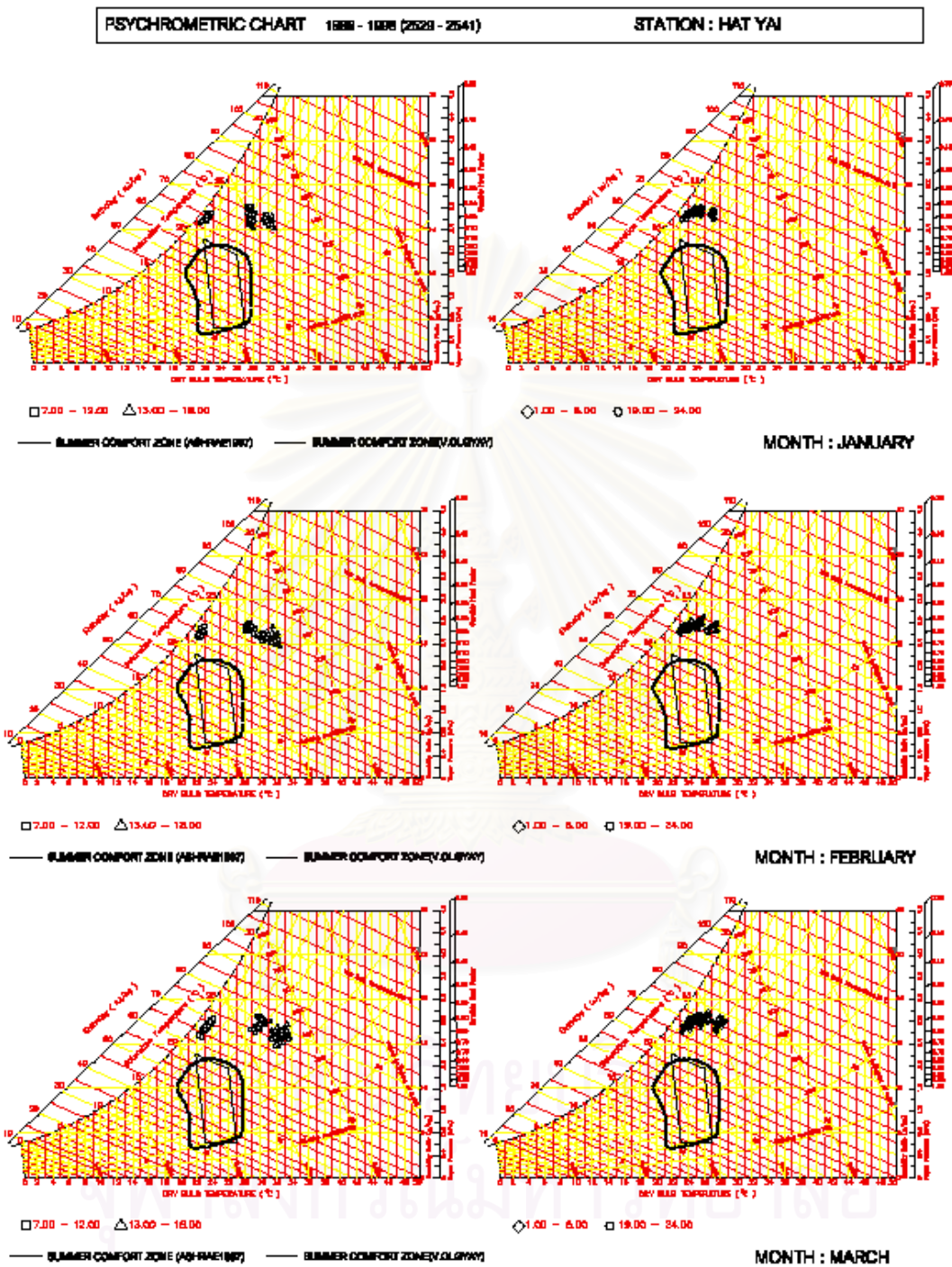
BIOCLIMATIC CHART

WIND ROSE

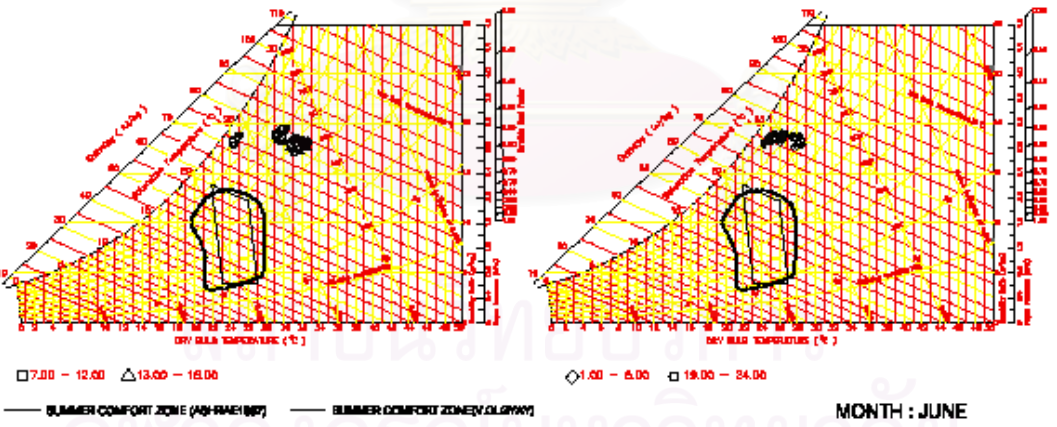
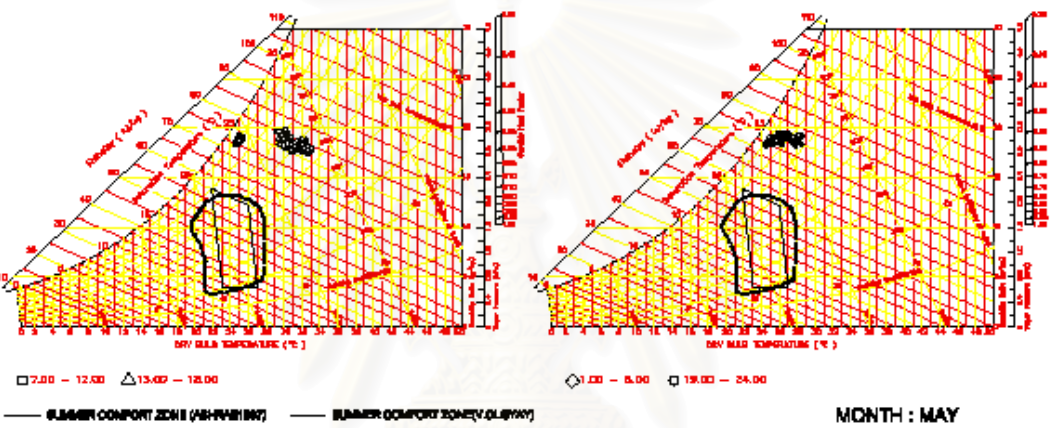
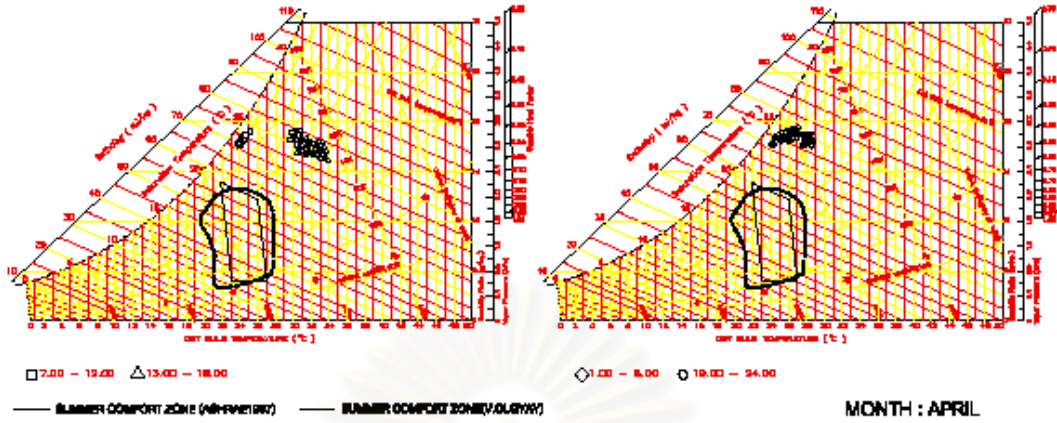




แผนภูมิความสัมพันธ์ระหว่างข้อมูลภาวะอากาศ ในแผนภูมิไซโครเมตริก (psychrometric chart) แยกตามช่วงเวลา

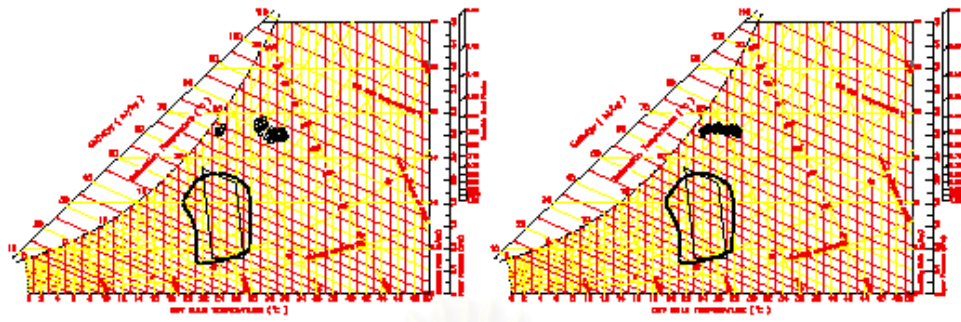


PSYCHROMETRIC CHART 1986 - 1988 (2529 - 2541) STATION : HAT YAI

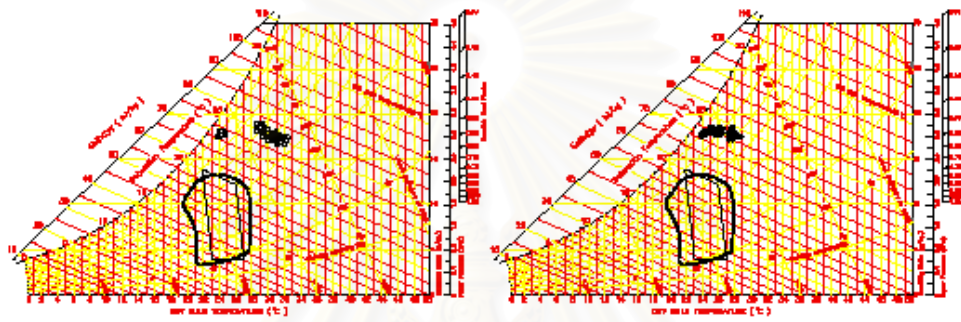


จุฬาลงกรณ์มหาวิทยาลัย

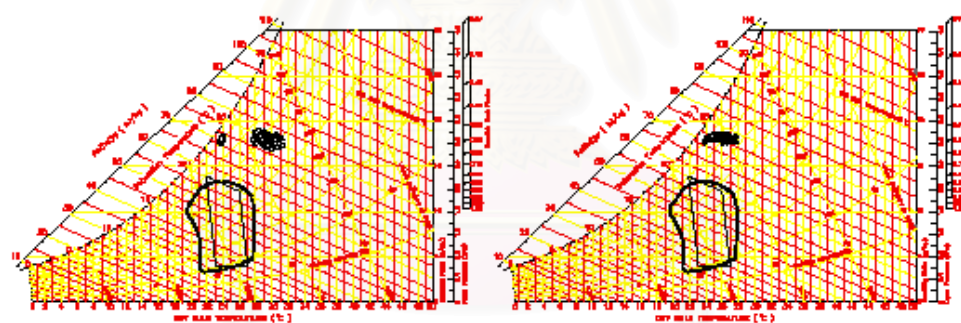
PSYCHROMETRIC CHART 1886-1888 (28281-2841) STATION : HAT YAI



□ 7.00 - 12.00 △ 13.00 - 18.00 ◇ 1.00 - 6.00 ○ 19.00 - 24.00
— SUMMER COMFORT ZONE (ASHRAE 55) — SUMMER COMFORT ZONE (CIBSE)
MONTH : JULY



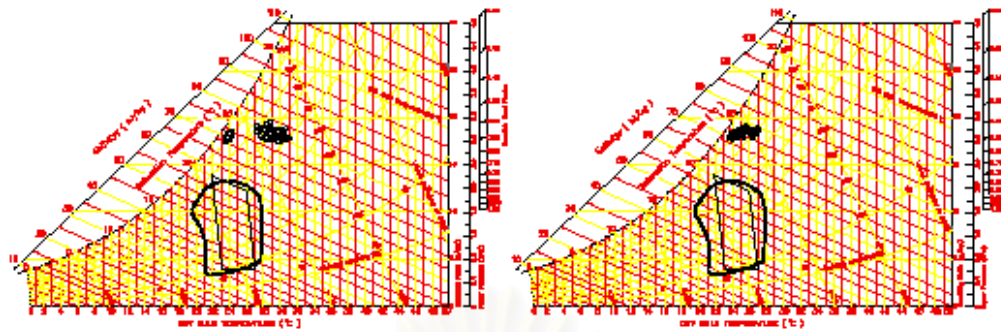
□ 7.00 - 12.00 △ 13.00 - 18.00 ◇ 1.00 - 6.00 ○ 19.00 - 24.00
— SUMMER COMFORT ZONE (ASHRAE 55) — SUMMER COMFORT ZONE (CIBSE)
MONTH : AUGUST



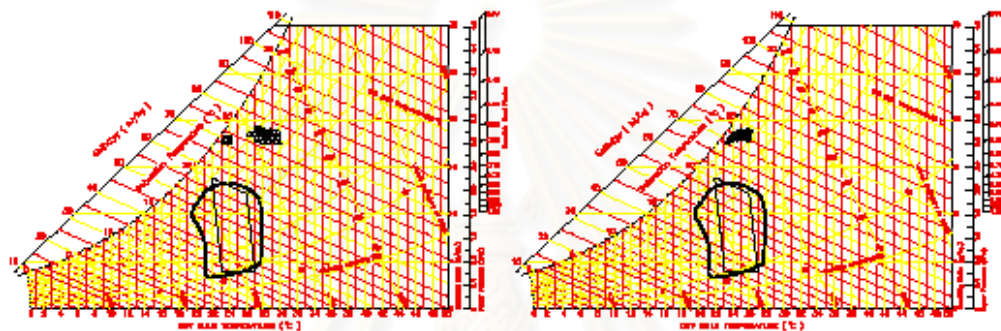
□ 7.00 - 12.00 △ 13.00 - 18.00 ◇ 1.00 - 6.00 ○ 19.00 - 24.00
— SUMMER COMFORT ZONE (ASHRAE 55) — SUMMER COMFORT ZONE (CIBSE)
MONTH : SEPTEMBER

สถานวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย

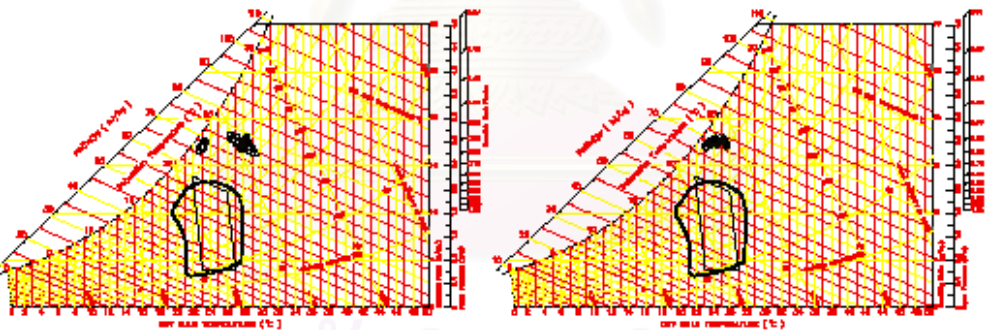
PSYCHROMETRIC CHART 1885-1886 (2823-2841) STATION : HAT YAI



7.00 - 12.00
 13.00 - 18.00
 1.00 - 6.00
 19.00 - 25.00
 ——— SUMMER COMFORT ZONE (ASHRAE 1987) ——— SUMMER COMFORT ZONE (CEN/EN) MONTH : OCTOBER



7.00 - 12.00
 13.00 - 18.00
 1.00 - 6.00
 19.00 - 25.00
 ——— SUMMER COMFORT ZONE (ASHRAE 1987) ——— SUMMER COMFORT ZONE (CEN/EN) MONTH : NOVEMBER



7.00 - 12.00
 13.00 - 18.00
 1.00 - 6.00
 19.00 - 25.00
 ——— SUMMER COMFORT ZONE (ASHRAE 1987) ——— SUMMER COMFORT ZONE (CEN/EN) MONTH : DECEMBER

จุฬาลงกรณ์มหาวิทยาลัย

ตารางแสดงผลข้อมูลจำนวนรายชั่วโมงอุณหภูมิกระเปาะแห้ง และค่าเฉลี่ยอุณหภูมิกระเปาะเปียกที่เกิดขึ้น
จำแนกตามช่วงอุณหภูมิกระเปาะแห้ง (bin data) ในแต่ละช่วงเวลา

ANNUAL BIN-HOUR WEATHER DATA								STATION : HAT YAI (AIR PORT)	
Hours of occurrence of DB in each bin with MCWB in parentheses								year : 1997	
Temperature range	Observation hour group						Total Observation	MCWB	Temperature range
	01:00 to 04:00	05:00 to 08:00	09:00 to 12:00	13:00 to 16:00	17:00 to 20:00	21:00 to 24:00			
$^{\circ}\text{C}$	Annual							$^{\circ}\text{F}$	
	DB MCWB	DB MCWB	DB MCWB	DB MCWB	DB MCWB	DB MCWB	Total MCWB		
40.6 / 42.8								105 / 109	
37.8 / 40.0			1 (26.0)				1 (26.0)	100 / 104	
35.0 / 37.2				24 (25.3)	4 (25.3)		28 (25.3)	95 / 99	
32.2 / 34.4			102 (25.5)	548 (25.6)	73 (25.4)		723 (25.5)	90 / 94	
29.4 / 31.7		1 (24.9)	599 (25.4)	595 (25.3)	365 (25.1)	7 (24.8)	1,567 (25.1)	85 / 89	
26.7 / 28.9	16 (24.8)	99 (24.6)	611 (24.9)	206 (25.0)	683 (24.7)	381 (24.6)	1,996 (24.8)	80 / 84	
23.9 / 26.1	1,228 (23.7)	1,033 (23.7)	142 (24.3)	85 (24.6)	327 (24.1)	1,028 (24.0)	3,843 (24.0)	75 / 79	
21.1 / 23.3	213 (22.7)	314 (22.8)	4 (24.3)	2 (23.2)	8 (24.0)	44 (22.8)	585 (23.3)	70 / 74	
18.3 / 20.6	3 (19.5)	13 (19.8)	1 (24.1)				17 (21.2)	65 / 69	
15.6 / 17.8								60 / 64	
12.8 / 15.0								55 / 59	
10.0 / 12.2								50 / 54	
7.2 / 9.4								45 / 49	
4.4 / 6.7								40 / 44	
1.7 / 3.9								35 / 39	

NOTE: MCWB = Mean coincident wet-bulb temperature (number in parentheses) $^{\circ}\text{C}$
 Temperature (Celsius deg.) C = (deg.F-32) * 5 / 9

สถาบันวิทยบริการ
 จุฬาลงกรณ์มหาวิทยาลัย

ตารางแสดงผลข้อมูลปริมาณองศาชั่วโมง การทำความร้อนและการทำความเย็น (degree hours and hours of occurrence)

DEGREE HOURS & HOURS OF OCCURRENCE										Station : HAT YAI	
										YEARS : 1981 - 1998 (2524-2541)	
TEMPERATURE		MEAN TEMP. DEGREE (°F)	NO. OF HOURS BELOW TEMPERATURE	NO. OF DEGREE HOURS OF HEATING BELOW TEMPERATURE		NO. OF HOURS ABOVE TEMPERATURE	NO. OF DEGREE HOURS OF COOLING ABOVE TEMPERATURE				
Degree		HOURS OF OCCURRENCE		°F	°C		°F	°C	°F	°C	
°F	°C										
35	1.7	(37.5)	-	-	-	8,784.00	404,325.00	224,400.38			
36	2.2		-	-	-	8,784.00	366,541.00	219,525.26			
37	2.8	0	-	-	-	8,784.00	366,757.00	214,650.14			
38	3.3		-	-	-	8,784.00	377,973.00	209,775.02			
39	3.9		-	-	-	8,784.00	369,189.00	204,899.90			
40	4.4	(42.5)	-	-	-	8,784.00	360,405.00	200,024.78			
41	5.0		-	-	-	8,784.00	351,621.00	195,149.66			
42	5.6	0	-	-	-	8,784.00	342,837.00	190,274.54			
43	6.1		-	-	-	8,784.00	334,053.00	185,399.42			
44	6.7		-	-	-	8,784.00	325,269.00	180,524.30			
45	7.2	(47.5)	-	-	-	8,784.00	316,485.00	175,649.18			
46	7.8		-	-	-	8,784.00	307,701.00	170,774.06			
47	8.3	0	-	-	-	8,784.00	298,917.00	165,898.94			
48	8.9		-	-	-	8,784.00	290,133.00	161,023.82			
49	9.4		-	-	-	8,784.00	281,349.00	156,148.70			
50	10.0	52.5	-	-	-	8,784.00	272,565.00	151,273.58			
51	10.6		-	-	-	8,784.00	263,781.00	146,398.46			
52	11.1	0	-	-	-	8,784.00	254,997.00	141,523.34			
53	11.7		-	-	-	8,784.00	246,213.00	136,648.22			
54	12.2		-	-	-	8,784.00	237,429.00	131,773.10			
55	12.8	(57.5)	-	-	-	8,784.00	228,645.00	126,897.98			
56	13.3		-	-	-	8,784.00	219,861.00	122,022.86			
57	13.9	0	-	-	-	8,784.00	211,077.00	117,147.74			
58	14.4		-	-	-	8,784.00	202,293.00	112,272.62			
59	15.0		-	-	-	8,784.00	193,509.00	107,397.50			
60	15.6	(62.5)	-	-	-	8,784.00	184,725.00	102,522.38			
61	16.1		-	-	-	8,784.00	175,941.00	97,647.26			
62	16.7	0	-	-	-	8,784.00	167,157.00	92,772.14			
63	17.2		-	-	-	8,784.00	158,373.00	87,897.02			
64	17.8		-	-	-	8,784.00	149,589.00	83,021.90			
65	18.3	(67.5)	-	-	-	8,784.00	140,805.00	78,146.78			
66	18.9		-	-	-	8,784.00	132,021.00	73,271.66			
67	19.4	0	-	-	-	8,784.00	123,237.00	68,396.54			
68	20.0		-	-	-	8,784.00	114,453.00	63,521.42			
69	20.6		-	-	-	8,784.00	105,669.00	58,646.30			

หมายเหตุ : วิธีการหาค่า degree hours ได้จากการคำนวณจากจำนวนชั่วโมง hours of occurrence ที่เกิดขึ้นในแต่ละช่วงอุณหภูมิคูณด้วยที่พิจารณา โดยอาศัยข้อมูลสถานีอากาศภายใน 3 ชั่วโมง

DEGREE HOURS & HOURS OF OCCURRENCE

Station : HAT YAI

YEARS : 1981 - 1998 (2524-2541)

TEMPERATURE		MEAN TEMP. DEGREE (°F)	NO. OF HOURS BELOW TEMPERATURE	NO. OF DEGREE HOURS OF HEATING BELOW TEMPERATURE		NO. OF HOURS ABOVE TEMPERATURE	NO. OF DEGREE HOURS OF COOLING ABOVE TEMPERATURE	
Degree		HOURS OF OCCURRENCE		°F °C			°F °C	
°F	°C							
70	21.1	(72.5)	126.00	-	-	8,784.00	98,885.00	53,771.18
71	21.7		252.00	315.00	174.83	8,658.00	88,418.00	49,070.88
72	22.2	630	378.00	630.00	348.66	8,532.00	79,947.00	44,370.59
73	22.8		504.00	945.00	524.48	8,406.00	71,478.00	39,670.29
74	23.3		630.00	1,260.00	699.30	8,280.00	63,009.00	34,970.00
75	23.9	(77.5)	1,420.20	1,575.00	874.13	8,154.00	54,540.00	30,289.70
76	24.4		2,210.40	4,180.50	2,320.18	7,363.80	48,361.50	26,840.63
77	25.0	3951	3,000.60	6,786.00	3,766.23	6,573.60	42,183.00	23,411.57
78	25.6		3,790.80	9,391.50	5,212.28	5,783.40	36,004.50	19,562.50
79	26.1		4,581.00	11,997.00	6,658.34	4,993.20	29,628.00	16,553.43
80	26.7	(82.5)	4,987.80	14,602.50	8,104.39	4,203.00	23,647.50	13,124.36
81	27.2		5,394.60	20,200.50	11,211.28	3,795.20	20,461.50	11,358.13
82	27.8	2034	5,801.40	25,798.50	14,318.17	3,389.40	17,275.50	9,587.90
83	28.3		6,208.20	31,396.50	17,425.08	2,982.60	14,089.50	7,819.67
84	28.9		6,615.00	36,994.50	20,531.95	2,575.80	10,903.50	6,061.44
85	29.4	(87.5)	6,957.00	42,592.50	23,638.84	2,169.00	7,717.50	4,283.21
86	30.0		7,299.00	50,082.50	27,784.89	1,827.00	6,403.50	3,553.94
87	30.6	1710	7,641.00	57,532.50	31,930.54	1,485.00	5,089.50	2,824.67
88	31.1		7,983.00	65,002.50	36,076.39	1,143.00	3,775.50	2,095.40
89	31.7		8,325.00	72,472.50	40,222.24	801.00	2,461.50	1,366.13
90	32.2	(92.5)	8,416.80	79,942.50	44,368.09	459.00	1,147.50	636.86
91	32.8		8,508.60	88,487.00	49,115.84	367.20	918.00	509.49
92	33.3	459	8,600.40	97,051.50	53,983.58	275.40	688.50	382.12
93	33.9		8,692.20	105,606.00	58,611.33	183.60	489.00	254.75
94	34.4		8,784.00	114,180.50	63,359.08	91.80	229.50	127.37
95	35.0	(97.5)	8,784.00	122,715.00	68,106.83	-	-	-
96	35.6		8,784.00	131,499.00	72,981.95	-	-	-
97	36.1	0	8,784.00	140,283.00	77,857.07	-	-	-
98	36.7		8,784.00	149,067.00	82,732.19	-	-	-
99	37.2		8,784.00	157,851.00	87,607.31	-	-	-

จุฬาลงกรณ์มหาวิทยาลัย