

ข้อมูลอากาศประเทศไทยสำหรับงานอนุรักษ์พลังงาน
จังหวัด เชียงใหม่



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จุฬาลงกรณ์มหาวิทยาลัย

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เล่ม

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ตารางสรุปรวมผลของข้อมูลทุกประเภทจังหวัดเชียงใหม่

CLIMATOLOGICAL DATA FOR THE PERIOD 1981-1998 station : CHIANG MAI

Elevation of station above MSL

312 Meters

Latitude: 18 47 N

Longitude: 98 59 E

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
TEMPERATURE (° C)													
Averages													
Daily Maximum	29.2	31.4	35.0	35.6	33.9	32.2	30.8	29.9	30.4	30.2	29.1	28.0	31.3
Monthly Mean	21.0	23.0	27.5	29.2	28.9	28.1	27.2	26.5	26.6	25.7	23.7	21.6	25.8
Daily Minimum	14.4	15.4	20.1	23.3	24.7	24.8	24.4	24.1	23.7	22.4	19.4	16.5	21.1
Dry bulb Standard Diviation	5.4	5.9	5.5	4.9	3.9	3.1	2.8	2.6	2.7	3.3	3.9	4.7	4.1
Extremes													
Highest	33.2	37.0	39.3	41.9	40.0	39.4	36.0	35.7	35.1	37.9	33.5	33.0	41.9
Lowest	8.7	9.6	13.9	18.8	20.9	22.1	20.0	21.9	19.6	14.1	13.1	7.8	7.8
Monthly Dew Point	14.1	13.3	14.7	18.3	21.6	22.5	22.5	22.8	22.7	21.5	18.8	15.2	19.0
Dew Point Standard Diviation	2.5	3.0	3.1	2.7	1.8	1.1	1.1	1.0	1.1	1.9	2.6	2.9	2.1
Monthly Wet bulb Temperature	17.0	17.5	19.5	22.0	23.8	24.1	24.0	24.0	23.9	22.9	20.6	17.5	21.4
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	82.8	136.3	282.7	325.2	328.1	291.7	275.1	254.7	247.0	229.4	160.4	101.2	2,714.6
RELATIVE HUMIDITY (%)													
Averages													
Monthly Mean	67.3	56.7	50.1	55.5	68.4	74.6	76.8	79.4	79.7	77.5	74.7	71.9	69.4
Hour 01:00-06:00	83.8	72.8	63.1	67.9	80.1	84.9	86.5	88.4	89.8	88.8	88.1	86.9	81.7
Hour 07:00-12:00	78.9	69.5	61.3	64.6	73.6	77.5	80.1	82.4	83.3	81.9	81.2	81.2	76.3
Hour 13:00-18:00	41.4	33.3	31.7	38.2	52.4	60.3	63.1	65.9	64.4	59.7	53.6	47.2	50.9
Hour 19:00-24:00	65.1	51.3	44.5	51.3	67.3	75.7	77.6	80.9	81.5	79.5	76.1	72.3	68.6
WIND													
Average Speed (m/s)	0.8	1.1	1.4	1.9	1.9	1.8	1.6	1.4	1.3	1.2	1.1	0.9	1.4
Prevailing wind	S	S	S	S	S, SW	SW	SW	S	S	N	N	N	S
Maximum Speed (m/s)	25.2	9.3	14.4	17.5	19.0	15.4	10.3	12.9	10.8	12.9	13.4	15.4	25.2
SKY COVER (0-10)													
Average Sky Condition	2	1.8	2.1	3.5	5.8	7.6	8.3	8.4	7.2	5.7	4.5	2.9	5.0
Percentage of Sky cover													
Clear sky (0-3)	78	80	75	57	27	7	4	3	11	28	46	66	40
Partly Cloudy sky (4-7)	17	14	17	28	37	32	22	24	33	37	30	23	26
Cloudy sky (8-10)	5	6	8	15	36	61	73	73	56	35	24	11	34
SUNSHINE DURATION* (hours)													
Average Monthly total	271.9	267.0	270.4	255.6	231.7	148.2	112.3	123.4	162.9	205.5	206.3	233.0	2,488.2
Percentage of Sunshine	73.1	76.7	72.7	71.0	62.3	41.2	30.2	33.2	45.3	55.3	57.3	62.6	56.6
SOLAR RADIATION* (W/m²)													
Average Hourly max	679.5	721.8	704.6	774.7	787.8	806.2	661.9	757.2	782.0	767.2	-	650.0	735.7
Average Hourly mean	286.8	315.6	310.4	338.5	349.8	360.3	289.2	315.1	324.5	317.9	-	274.7	316.8
Average Daily Total	4,302.1	4,733.6	4,656.1	5,077.0	5,247.6	5,405.1	4,337.3	4,726.6	4,867.1	4,768.3	-	4,120.4	4,749.2
RAINFALL (mm)													
Average Monthly total	1.8	6.6	14.9	56.0	155.0	141.9	151.6	248.9	202.5	125.5	55.7	15.3	1,175.7
Daily record high	14.4	33.5	118.9	176.0	81.0	92.0	105.3	105.4	93.3	93.2	86.5	63.6	176.0
Average Number of rainy days (0.1 mm. Or more)	0	1	1	6	15	19	19	23	17	11	6	1	119
EVAPORATION (mm)													
Average Monthly total	110.4	134.7	178.7	194.1	194.4	148.2	133.7	134.4	137.4	134.7	110.1	97.6	1,708.4

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

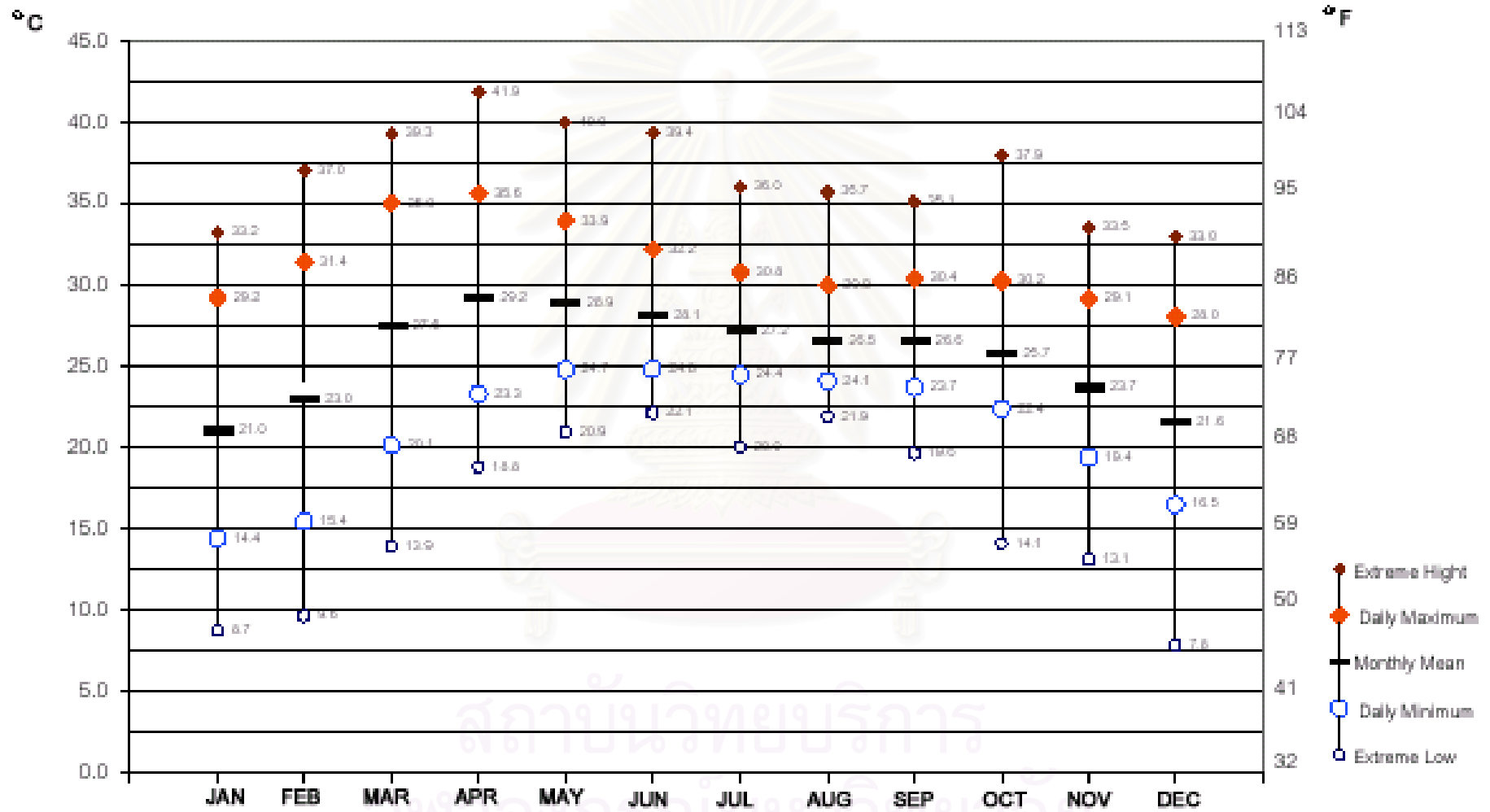
(*) data base on 1997 - 1998 recorded period

1 W/m2 = 0.317 Btu/h.ft2

(-) missing value or no data report

แผนภูมิอุณหภูมิกระเปาะแห้ง (dry bulb temperatures)

DRY BULB TEMPERATURES (°C) 1991 - 1998 (2534 - 2541) Station : CHIANG MAI

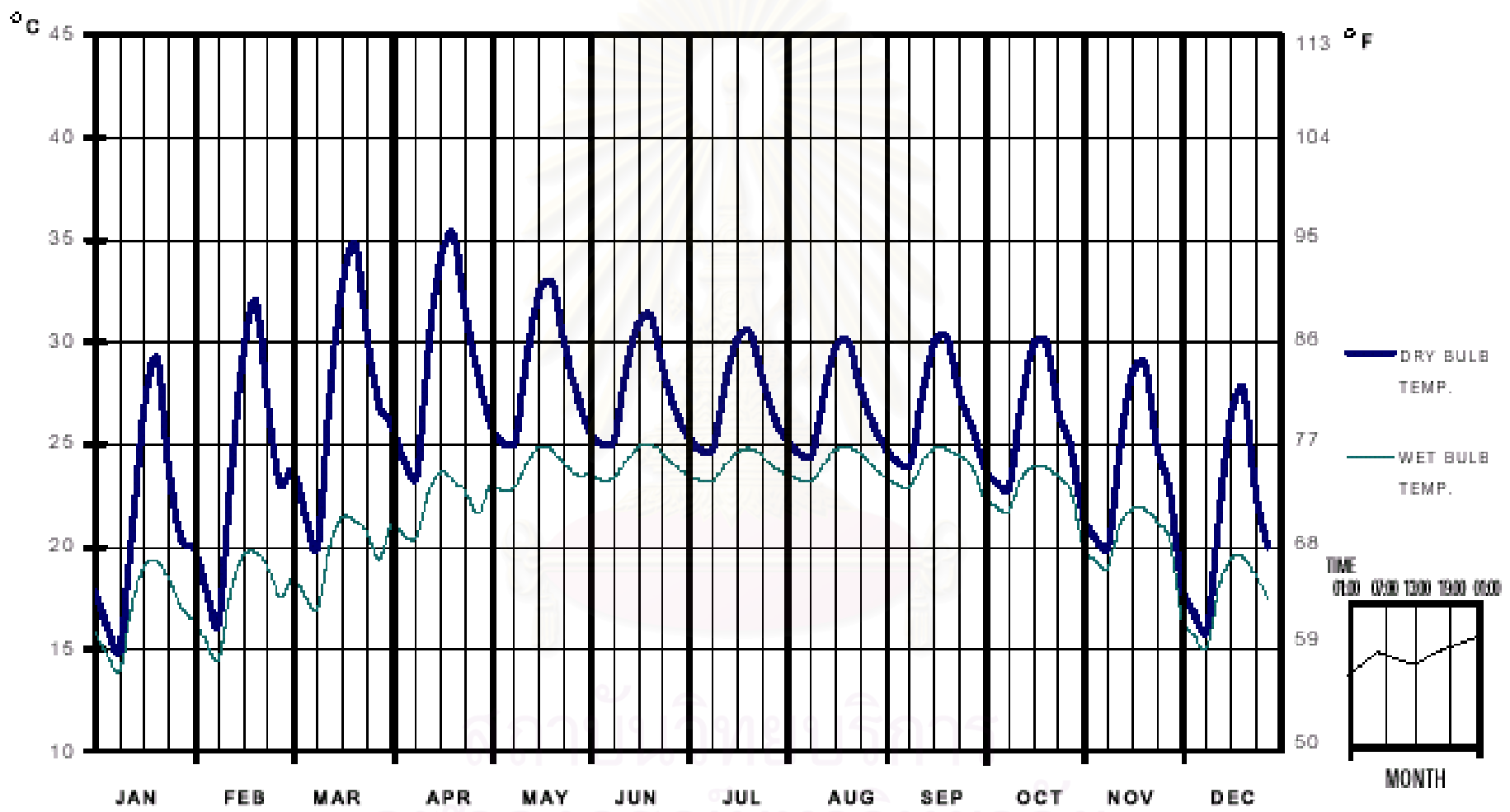


remark : recorded every hour

ลิขสิทธิ์มหาวิทยาลัยสุโขทัย

แผนภูมิความแตกต่างระหว่างอุณหภูมิกระเปาะแห้งและอุณหภูมิกระเปาะเปียก (diurnal temperatures)

DIURNAL TEMPERATURES 1981-1998 (2524-2541) Station : CHIANG MAI



remark : recorded every 3 hours

จุฬาลงกรณ์มหาวิทยาลัย

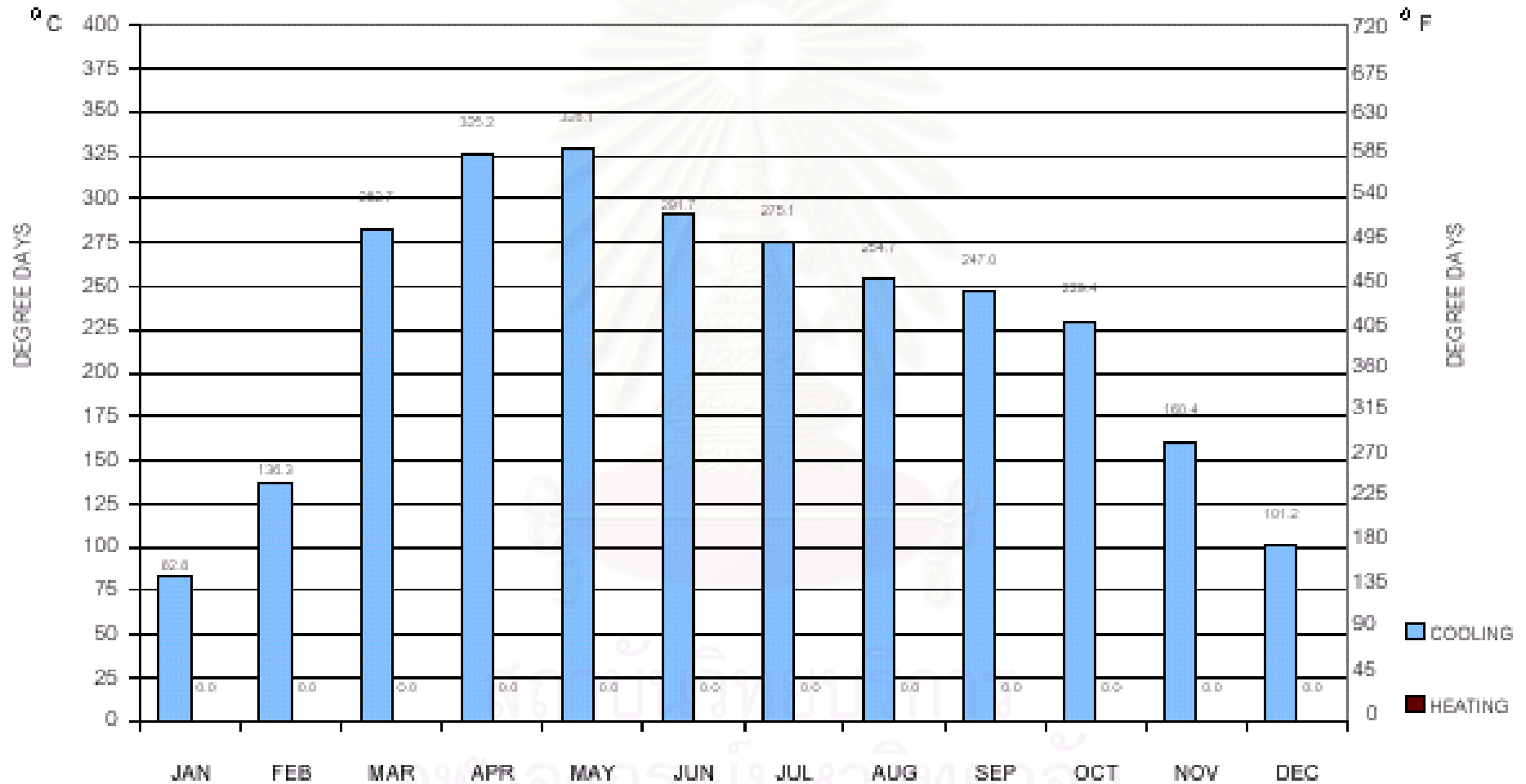
ตารางแสดงผลข้อมูลปริมาณองศาวัน การทำความร้อนและการทำความเย็น (heating and cooling degree days)

HEATING & COOLING DEGREE DAYS BASE RANGE 35 - 100 °F (1.7 - 37.8 °C) 1981 - 1998 (2524 - 2541)															Station : CHIANG MAI												
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	599.4	0.0	619.6	0.0	799.3	0.0	825.2	0.0	844.8	0.0	791.7	0.0	791.7	0.0	771.4	0.0	747.0	0.0	746.1	0.0	690.4	0.0	617.8	0.0	8,814.5	0.0
36	2.2	582.2	0.0	603.5	0.0	782.1	0.0	808.6	0.0	827.6	0.0	775.0	0.0	774.5	0.0	754.1	0.0	730.4	0.0	728.8	0.0	643.7	0.0	600.6	0.0	8,611.2	0.0
37	2.8	565.0	0.0	587.4	0.0	764.9	0.0	791.9	0.0	810.3	0.0	758.4	0.0	757.3	0.0	736.9	0.0	713.7	0.0	711.6	0.0	627.1	0.0	583.4	0.0	8,407.8	0.0
38	3.3	547.8	0.0	571.3	0.0	747.7	0.0	775.2	0.0	793.1	0.0	741.7	0.0	740.1	0.0	719.7	0.0	697.0	0.0	694.4	0.0	610.4	0.0	566.2	0.0	8,204.5	0.0
39	3.9	530.5	0.0	555.2	0.0	730.5	0.0	758.6	0.0	775.9	0.0	725.0	0.0	722.8	0.0	702.5	0.0	680.4	0.0	677.2	0.0	593.7	0.0	548.9	0.0	8,001.2	0.0
40	4.4	513.3	0.0	539.0	0.0	713.2	0.0	741.9	0.0	758.7	0.0	708.4	0.0	705.6	0.0	685.3	0.0	663.7	0.0	660.0	0.0	577.1	0.0	531.7	0.0	7,797.8	0.0
41	5.0	496.1	0.0	522.9	0.0	696.0	0.0	725.2	0.0	741.5	0.0	691.7	0.0	688.4	0.0	668.0	0.0	647.0	0.0	642.7	0.0	560.4	0.0	514.5	0.0	7,594.5	0.0
42	5.6	478.9	0.0	506.8	0.0	678.8	0.0	708.6	0.0	724.2	0.0	675.0	0.0	671.2	0.0	650.8	0.0	630.4	0.0	625.5	0.0	543.7	0.0	497.3	0.0	7,391.2	0.0
43	6.1	461.7	0.0	490.7	0.0	661.6	0.0	691.9	0.0	707.0	0.0	658.4	0.0	653.9	0.0	633.6	0.0	613.7	0.0	608.3	0.0	527.1	0.0	480.1	0.0	7,187.8	0.0
44	6.7	444.4	0.0	474.6	0.0	644.3	0.0	675.2	0.0	689.8	0.0	641.7	0.0	636.7	0.0	616.4	0.0	597.0	0.0	591.1	0.0	510.4	0.0	462.8	0.0	6,984.5	0.0
45	7.2	427.2	0.0	458.5	0.0	627.1	0.0	658.6	0.0	672.6	0.0	625.0	0.0	619.5	0.0	599.1	0.0	580.4	0.0	573.8	0.0	493.7	0.0	445.6	0.0	6,781.2	0.0
46	7.8	410.0	0.0	442.4	0.0	609.9	0.0	641.9	0.0	655.3	0.0	608.4	0.0	602.3	0.0	581.9	0.0	563.7	0.0	556.6	0.0	477.1	0.0	428.4	0.0	6,577.8	0.0
47	8.3	392.8	0.0	426.3	0.0	592.7	0.0	625.2	0.0	638.1	0.0	591.7	0.0	585.1	0.0	564.7	0.0	547.0	0.0	539.4	0.0	460.4	0.0	411.2	0.0	6,374.5	0.0
48	8.9	375.5	0.0	410.2	0.0	575.5	0.0	608.6	0.0	620.9	0.0	575.0	0.0	567.8	0.0	547.5	0.0	530.4	0.0	522.2	0.0	443.7	0.0	393.9	0.0	6,171.2	0.0
49	9.4	358.3	0.0	394.0	0.0	558.2	0.0	591.9	0.0	603.7	0.0	558.4	0.0	550.6	0.0	530.3	0.0	513.7	0.0	505.0	0.0	427.1	0.0	376.7	0.0	5,967.8	0.0
50	10.0	341.1	0.0	377.9	0.0	541.0	0.0	575.2	0.0	586.5	0.0	541.7	0.0	533.4	0.0	513.0	0.0	497.0	0.0	487.7	0.0	410.4	0.0	359.5	0.0	5,764.5	0.0
51	10.6	323.9	0.0	361.8	0.0	523.8	0.0	558.6	0.0	569.2	0.0	525.0	0.0	516.2	0.0	495.8	0.0	480.4	0.0	470.5	0.0	393.7	0.0	342.3	0.0	5,561.2	0.0
52	11.1	306.7	0.0	345.7	0.0	506.6	0.0	541.9	0.0	552.0	0.0	508.4	0.0	498.9	0.0	478.6	0.0	463.7	0.0	453.3	0.0	377.1	0.0	325.1	0.0	5,357.8	0.0
53	11.7	289.4	0.0	329.6	0.0	489.3	0.0	525.2	0.0	534.8	0.0	491.7	0.0	481.7	0.0	461.4	0.0	447.0	0.0	436.1	0.0	360.4	0.0	307.8	0.0	5,154.5	0.0
54	12.2	272.2	0.0	313.5	0.0	472.1	0.0	508.6	0.0	517.6	0.0	475.0	0.0	464.5	0.0	444.1	0.0	430.4	0.0	418.8	0.0	343.7	0.0	290.6	0.0	4,951.2	0.0
55	12.8	255.0	0.0	297.4	0.0	454.9	0.0	491.9	0.0	500.3	0.0	458.4	0.0	447.3	0.0	426.9	0.0	413.7	0.0	401.6	0.0	327.1	0.0	273.4	0.0	4,747.8	0.0
56	13.3	237.8	0.0	281.3	0.0	437.7	0.0	475.2	0.0	483.1	0.0	441.7	0.0	430.1	0.0	409.7	0.0	397.0	0.0	384.4	0.0	310.4	0.0	256.2	0.0	4,544.5	0.0
57	13.9	220.5	0.0	265.2	0.0	420.5	0.0	458.6	0.0	465.9	0.0	425.0	0.0	412.8	0.0	392.5	0.0	380.4	0.0	367.2	0.0	293.7	0.0	238.9	0.0	4,341.2	0.0
58	14.4	203.3	0.0	249.0	0.0	403.2	0.0	441.9	0.0	448.7	0.0	408.4	0.0	395.6	0.0	375.3	0.0	363.7	0.0	350.0	0.0	277.1	0.0	221.7	0.0	4,137.8	0.0
59	15.0	186.1	0.0	232.9	0.0	386.0	0.0	425.2	0.0	431.5	0.0	391.7	0.0	378.4	0.0	358.0	0.0	347.0	0.0	332.7	0.0	260.4	0.0	204.5	0.0	3,934.5	0.0
60	15.6	168.9	0.0	216.8	0.0	368.8	0.0	408.6	0.0	414.2	0.0	375.0	0.0	361.2	0.0	340.8	0.0	330.4	0.0	315.5	0.0	243.7	0.0	187.3	0.0	3,731.2	0.0
61	16.1	151.7	0.0	200.7	0.0	351.6	0.0	391.9	0.0	397.0	0.0	358.4	0.0	343.9	0.0	323.6	0.0	313.7	0.0	298.3	0.0	227.1	0.0	170.1	0.0	3,527.8	0.0
62	16.7	134.4	0.0	184.6	0.0	334.3	0.0	375.2	0.0	379.8	0.0	341.7	0.0	326.7	0.0	306.4	0.0	297.0	0.0	281.1	0.0	210.4	0.0	152.8	0.0	3,324.5	0.0
63	17.2	117.2	0.0	168.5	0.0	317.1	0.0	358.6	0.0	362.6	0.0	325.0	0.0	309.5	0.0	289.1	0.0	280.4	0.0	263.8	0.0	193.7	0.0	135.6	0.0	3,121.2	0.0
64	17.8	100.0	0.0	152.4	0.0	299.9	0.0	341.9	0.0	345.3	0.0	308.4	0.0	292.3	0.0	271.9	0.0	263.7	0.0	246.6	0.0	177.1	0.0	118.4	0.0	2,917.8	0.0
65	18.3	82.8	0.0	136.3	0.0	282.7	0.0	325.2	0.0	328.1	0.0	291.7	0.0	275.1	0.0	254.7	0.0	247.0	0.0	229.4	0.0	160.4	0.0	101.2	0.0	2,714.5	0.0
66	18.9	65.5	0.0	120.2	0.0	265.5	0.0	308.6	0.0	310.9	0.0	275.0	0.0	257.8	0.0	237.5	0.0	230.4	0.0	212.2	0.0	143.7	0.0	83.9	0.0	2,511.2	0.0
67	19.4	48.3	0.0	104.0	0.0	248.2	0.0	291.9	0.0	293.7	0.0	258.4	0.0	240.6	0.0	220.3	0.0	213.7	0.0	195.0	0.0	127.1	0.0	66.7	0.0	2,307.8	0.0
68	20.0	31.2	-0.1	87.9	0.0	231.0	0.0	275.2	0.0	276.5	0.0	241.7	0.0	223.4	0.0	203.0	0.0	197.0	0.0	177.7	0.0	110.4	0.0	50.5	-1.0	2,105.6	-1.1

HEATING & COOLING DEGREE DAYS BASE RANGE 35 - 100 °F (1.7 - 37.8 °C) 1981 - 1998 (2524 - 2541)														Station : CHIANG MAI													
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	15.2	-1.3	71.8	0.0	213.8	0.0	258.6	0.0	259.2	0.0	225.0	0.0	206.2	0.0	185.8	0.0	180.4	0.0	160.5	0.0	93.7	0.0	37.1	-4.8	1,907.4	-6.2
70	21.1	5.7	-9.0	55.7	0.0	196.6	0.0	241.9	0.0	242.0	0.0	208.4	0.0	188.9	0.0	168.6	0.0	163.7	0.0	143.3	0.0	77.1	0.0	24.6	-9.5	1,716.3	-18.5
71	21.7	2.3	-22.8	39.7	-0.1	179.3	0.0	225.2	0.0	224.8	0.0	191.7	0.0	171.7	0.0	151.4	0.0	147.0	0.0	126.1	0.0	60.4	0.0	13.8	-15.9	1,533.4	-38.8
72	22.2	0.1	-37.9	26.5	-3.1	162.1	0.0	208.6	0.0	207.6	0.0	175.0	0.0	154.5	0.0	134.1	0.0	130.4	0.0	108.8	0.0	43.7	0.0	7.7	-27.1	1,359.2	-68.0
73	22.8	0.0	-55.0	16.2	-8.8	144.9	0.0	191.9	0.0	190.3	0.0	158.4	0.0	137.3	0.0	116.9	0.0	113.7	0.0	91.6	0.0	27.1	0.0	4.0	-40.6	1,192.3	-104.4
74	23.3	0.0	-72.2	8.2	-17.0	127.7	0.0	175.2	0.0	173.1	0.0	141.7	0.0	120.1	0.0	99.7	0.0	97.0	0.0	74.4	0.0	12.7	-2.3	1.2	-55.0	1,031.1	-146.5
75	23.9	0.0	-89.5	3.1	-27.9	110.5	0.0	158.6	0.0	155.9	0.0	125.0	0.0	102.8	0.0	82.5	0.0	80.4	0.0	57.2	0.0	3.7	-10.0	0.0	-71.1	879.5	-198.4
76	24.4	0.0	-106.7	0.5	-41.5	93.2	0.0	141.9	0.0	138.7	0.0	108.4	0.0	85.6	0.0	65.3	0.0	63.7	0.0	40.0	0.0	0.5	-23.5	0.0	-88.3	737.7	-259.9
77	25.0	0.0	-123.9	0.0	-57.1	76.0	0.0	125.2	0.0	121.5	0.0	91.7	0.0	68.4	0.0	48.0	0.0	47.0	0.0	22.9	-0.2	0.0	-39.6	0.0	-105.5	600.8	-326.3
78	25.6	0.0	-141.1	0.0	-73.2	58.8	0.0	108.6	0.0	104.2	0.0	75.0	0.0	51.2	0.0	30.8	0.0	30.4	0.0	9.7	-4.1	0.0	-56.3	0.0	-122.7	468.6	-397.4
79	26.1	0.0	-158.3	0.0	-89.3	43.1	-1.5	91.9	0.0	87.0	0.0	58.4	0.0	34.1	-0.2	14.9	-1.3	14.0	-0.2	2.0	-13.7	0.0	-72.9	0.0	-139.9	345.3	-477.5
80	26.7	0.0	-175.6	0.0	-105.4	29.0	-4.6	75.2	0.0	69.8	0.0	41.7	0.0	17.5	-0.8	4.8	-8.5	1.7	-4.6	0.0	-28.9	0.0	-89.6	0.0	-157.2	239.7	-575.2
81	27.2	0.0	-192.8	0.0	-121.5	18.6	-11.5	58.6	0.0	52.6	0.0	25.0	0.0	5.7	-6.2	0.2	-21.1	0.0	-19.6	0.0	-46.2	0.0	-106.3	0.0	-174.4	160.6	-699.4
82	27.8	0.0	-210.0	0.0	-137.6	9.9	-20.0	41.9	0.0	35.3	0.0	10.0	-1.6	0.4	-18.1	0.0	-38.1	0.0	-36.3	0.0	-63.4	0.0	-122.9	0.0	-191.6	97.5	-839.7
83	28.3	0.0	-227.2	0.0	-153.7	2.4	-29.8	25.3	-0.1	20.3	-2.2	2.8	-11.1	0.0	-34.9	0.0	-55.3	0.0	-53.0	0.0	-80.6	0.0	-139.6	0.0	-208.8	50.8	-996.3
84	28.9	0.0	-244.5	0.0	-169.8	0.0	-44.6	12.5	-3.9	9.7	-8.8	0.4	-25.4	0.0	-52.2	0.0	-72.5	0.0	-69.6	0.0	-97.8	0.0	-156.3	0.0	-226.1	22.6	-1,171.4
85	29.4	0.0	-261.7	0.0	-186.0	0.0	-61.8	4.2	-12.3	4.5	-20.8	0.0	-41.6	0.0	-69.4	0.0	-89.7	0.0	-86.3	0.0	-115.0	0.0	-172.9	0.0	-243.3	8.7	-1,360.9
86	30.0	0.0	-278.9	0.0	-202.1	0.0	-79.0	0.5	-25.3	1.3	-34.9	0.0	-58.3	0.0	-86.6	0.0	-107.0	0.0	-103.0	0.0	-132.3	0.0	-189.6	0.0	-260.5	1.8	-1,557.3
87	30.6	0.0	-296.1	0.0	-218.2	0.0	-96.2	0.0	-41.4	0.0	-50.8	0.0	-75.0	0.0	-103.8	0.0	-124.2	0.0	-119.6	0.0	-149.5	0.0	-206.3	0.0	-277.7	0.0	-1,758.8
88	31.1	0.0	-313.3	0.0	-234.3	0.0	-113.4	0.0	-58.1	0.0	-68.0	0.0	-91.6	0.0	-121.1	0.0	-141.4	0.0	-136.3	0.0	-166.7	0.0	-222.9	0.0	-294.9	0.0	-1,962.2
89	31.7	0.0	-330.6	0.0	-250.4	0.0	-130.7	0.0	-74.8	0.0	-85.2	0.0	-108.3	0.0	-138.3	0.0	-158.6	0.0	-153.0	0.0	-183.9	0.0	-239.6	0.0	-312.2	0.0	-2,165.5
90	32.2	0.0	-347.8	0.0	-266.5	0.0	-147.9	0.0	-91.4	0.0	-102.4	0.0	-125.0	0.0	-155.5	0.0	-175.9	0.0	-169.6	0.0	-201.2	0.0	-256.3	0.0	-329.4	0.0	-2,368.8
91	32.8	0.0	-365.0	0.0	-282.6	0.0	-165.1	0.0	-108.1	0.0	-119.7	0.0	-141.6	0.0	-172.7	0.0	-193.1	0.0	-186.3	0.0	-218.4	0.0	-272.9	0.0	-346.6	0.0	-2,572.2
92	33.3	0.0	-382.2	0.0	-298.7	0.0	-182.3	0.0	-124.8	0.0	-136.9	0.0	-158.3	0.0	-189.9	0.0	-210.3	0.0	-203.0	0.0	-235.6	0.0	-289.6	0.0	-363.8	0.0	-2,775.5
93	33.9	0.0	-399.5	0.0	-314.8	0.0	-199.5	0.0	-141.4	0.0	-154.1	0.0	-175.0	0.0	-207.2	0.0	-227.5	0.0	-219.6	0.0	-252.8	0.0	-306.3	0.0	-381.1	0.0	-2,978.8
94	34.4	0.0	-416.7	0.0	-331.0	0.0	-216.8	0.0	-158.1	0.0	-171.3	0.0	-191.6	0.0	-224.4	0.0	-244.7	0.0	-236.3	0.0	-270.0	0.0	-322.9	0.0	-398.3	0.0	-3,182.2
95	35.0	0.0	-433.9	0.0	-347.1	0.0	-234.0	0.0	-174.8	0.0	-188.5	0.0	-208.3	0.0	-241.6	0.0	-262.0	0.0	-253.0	0.0	-287.3	0.0	-339.6	0.0	-415.5	0.0	-3,385.5
96	35.6	0.0	-451.1	0.0	-363.2	0.0	-251.2	0.0	-191.4	0.0	-205.8	0.0	-225.0	0.0	-258.8	0.0	-279.2	0.0	-269.6	0.0	-304.5	0.0	-356.3	0.0	-432.7	0.0	-3,588.8
97	36.1	0.0	-468.3	0.0	-379.3	0.0	-268.4	0.0	-208.1	0.0	-223.0	0.0	-241.6	0.0	-276.1	0.0	-296.4	0.0	-286.3	0.0	-321.7	0.0	-372.9	0.0	-449.9	0.0	-3,792.2
98	36.7	0.0	-485.6	0.0	-395.4	0.0	-285.7	0.0	-224.8	0.0	-240.2	0.0	-258.3	0.0	-293.3	0.0	-313.6	0.0	-303.0	0.0	-338.9	0.0	-389.6	0.0	-467.2	0.0	-3,995.5
99	37.2	0.0	-502.8	0.0	-411.5	0.0	-302.9	0.0	-241.4	0.0	-257.4	0.0	-275.0	0.0	-310.5	0.0	-330.9	0.0	-319.6	0.0	-356.2	0.0	-406.3	0.0	-484.4	0.0	-4,198.8
100	37.8	0.0	-520.0	0.0	-427.6	0.0	-320.1	0.0	-258.1	0.0	-274.7	0.0	-291.6	0.0	-327.7	0.0	-348.1	0.0	-336.3	0.0	-373.4	0.0	-422.9	0.0	-501.6	0.0	-4,402.2

แผนภูมิองศาวัน การทำความร้อนและการทำความเย็น (heating and cooling degree days)

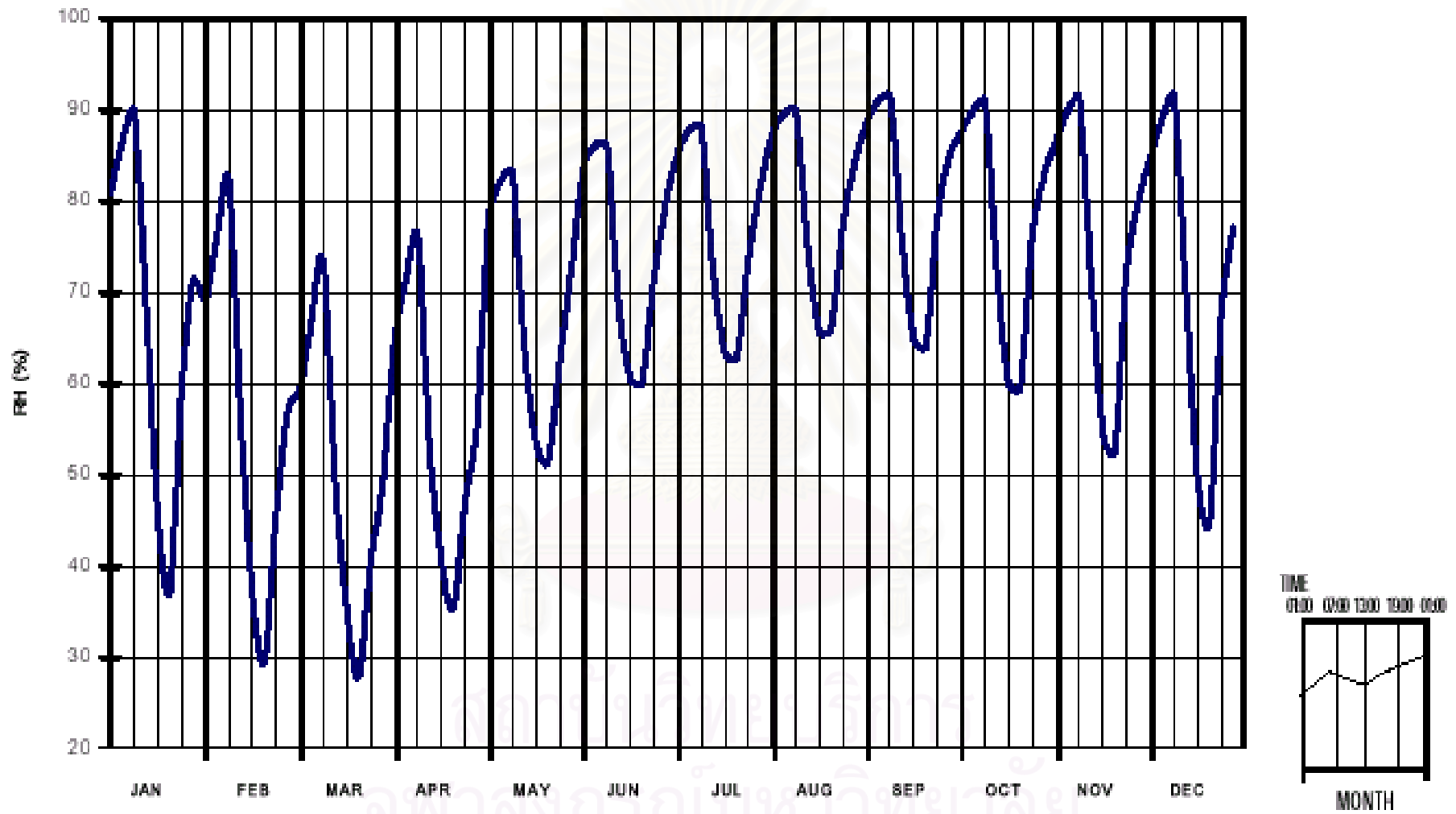
HEATING & COOLING DEGREE DAYS (BASE 65°F/18.3°C) 1981 - 1998 (2524 - 2541) Station : CHIANG MAI



remark : recorded every 3 hours

แผนภูมิความชื้นสัมพัทธ์ (relative humidity)

RELATIVE HUMIDITY (%) 1981-1998 (2524-2541) Station : CHIANG MAI



remark : recorded every 3 hours

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 : CHIANG MAI

January											February											March																
kt	km/h	mi/h	N	NE	E	SE	S	SW	W	NW	Calm	Total	kt	km/h	mi/h	N	NE	E	SE	S	SW	W	NW	Calm	Total	kt	km/h	mi/h	N	NE	E	SE	S	SW	W	NW	Calm	Total
57.3 57.3											46.7 46.7											38.4 38.4																
1-3	2-6	0.6-1.5	4.1	2.2	2.3	2.9	5.6	4.7	3.5	2	27.3	1-3	2-6	0.6-1.5	5.7	2.9	2.2	2.6	5.7	4.5	3.2	2.2	29	1-3	2-6	0.6-1.5	4.7	2.8	2.3	2.8	5	4.2	3.9	1.7	27.4			
4-16	7-30	1.6-6.5	2.1	1	0.3	1	5	4	1.8	0.2	15.2	4-16	7-30	1.6-6.5	2.4	1.7	1	2.6	7.8	5.1	2.8	0.6	24	4-16	7-30	1.6-6.5	2.3	1.6	0.8	3.4	12	8.7	4	0.8	33.6			
17-27	31-50	6.6-14	0	0	0	0	0	0	0	0	0	17-27	31-50	6.6-14	0	0	0	0	0	0	0	0	0	17-27	31-50	6.6-14	0.3	0	0	0	0	0	0	0.1	0.4			
>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											Total											Total																
8.2 3.2 2.6 3.9 10.6 8.7 5.1 2.2 57.3 100											8.1 4.6 3.2 5.2 13.5 9.8 8 2.8 46.7 100											7.3 4.4 3.1 6.2 17 12.9 8 2.5 38.4 100																
April											May											June																
kt	km/h	mi/h	N	NE	E	SE	S	SW	W	NW	Calm	Total	kt	km/h	mi/h	N	NE	E	SE	S	SW	W	NW	Calm	Total	kt	km/h	mi/h	N	NE	E	SE	S	SW	W	NW	Calm	Total
30.5 30.5											29 29											28.6 28.6																
1-3	2-6	0.6-1.5	3.7	2.7	2.3	2.8	4.7	4.5	3.1	1.5	25.3	1-3	2-6	0.6-1.5	3.5	2.6	1.8	2.6	5.8	4.9	3	0.8	25	1-3	2-6	0.6-1.5	3.6	2.5	1.5	2.2	8	8	3.6	1.3	26.7			
4-16	7-30	1.6-6.5	4.4	2.8	1.5	4.5	12.7	12.2	4.1	1.2	43.4	4-16	7-30	1.6-6.5	4.5	2.9	1.3	3.6	13.1	14.9	4.3	0.7	45.3	4-16	7-30	1.6-6.5	2.9	1.5	0.7	3	13.3	17.2	4.9	0.7	44.2			
17-27	31-50	6.6-14	0.3	0	0	0	0.1	0.1	0.1	0	0.8	17-27	31-50	6.6-14	0.2	0	0	0	0.1	0.2	0.1	0	0.8	17-27	31-50	6.6-14	0	0	0	0	0.1	0.2	0	0	0.3			
>27	>50	>14	0.1	0	0	0	0	0	0	0	0.1	>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											Total											Total																
8.5 5.5 3.8 7.3 17.5 16.8 7.3 2.7 30.5 100											8.2 5.5 3.1 6.2 19 20 7.4 1.5 29 100											6.5 4 2.2 5.2 19.4 23.4 8.5 2 28.6 100																
July											August											September																
kt	km/h	mi/h	N	NE	E	SE	S	SW	W	NW	Calm	Total	kt	km/h	mi/h	N	NE	E	SE	S	SW	W	NW	Calm	Total	kt	km/h	mi/h	N	NE	E	SE	S	SW	W	NW	Calm	Total
34.6 34.6											35.2 35.2											40.3 40.3																
1-3	2-6	0.6-1.5	3.8	3.2	1.6	2.2	5.7	5.9	3.2	1.1	26.5	1-3	2-6	0.6-1.5	4.3	3	1.3	2.4	8.1	5.2	2.8	1.1	26.2	1-3	2-6	0.6-1.5	4.9	3.4	1.9	2.3	5.4	4.5	3.3	1.5	27.2			
4-16	7-30	1.6-6.5	3.5	1.3	0.9	2.4	11.2	14.5	4.2	0.5	38.5	4-16	7-30	1.6-6.5	3.2	1.6	0.9	2.1	10.6	12.4	4	0.5	35.3	4-16	7-30	1.6-6.5	4.7	2.6	1	2.3	8.9	8.3	3.8	0.6	32.2			
17-27	31-50	6.6-14	0	0	0	0	0.1	0.2	0	0	0.3	17-27	31-50	6.6-14	0	0	0	0	0.1	0	0	0	0.1	17-27	31-50	6.6-14	0	0	0	0	0	0.1	0	0	0.1			
>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											Total											Total																
7.1 4.5 2.5 4.6 17 20.8 7.4 1.8 34.6 100											7.5 4.6 2.2 4.5 16.8 17.8 8.8 1.6 35.2 100											9.6 6 2.9 4.6 14.3 12.9 7.1 2.1 40.3 100																
October											November											December																
kt	km/h	mi/h	N	NE	E	SE	S	SW	W	NW	Calm	Total	kt	km/h	mi/h	N	NE	E	SE	S	SW	W	NW	Calm	Total	kt	km/h	mi/h	N	NE	E	SE	S	SW	W	NW	Calm	Total
44.5 44.5											49.7 49.7											53.3 53.3																
1-3	2-6	0.6-1.5	5.1	3.1	1.5	1.9	5	4.8	3.2	1.5	25.9	1-3	2-6	0.6-1.5	4.5	2.6	1.4	1.7	4.2	4.7	4	2.1	25.2	1-3	2-6	0.6-1.5	4.9	2.2	1.3	2.8	4.3	4.5	4.5	2	26.3			
4-16	7-30	1.6-6.5	8	3.4	1.1	1.7	6.6	5.4	2.2	0.8	29.2	4-16	7-30	1.6-6.5	8.2	2.8	1.2	1.5	3.8	3.8	2.7	0.5	24.5	4-16	7-30	1.6-6.5	5.6	2	0.6	2.3	3.7	2.9	2.1	0.8	20			
17-27	31-50	6.6-14	0.2	0	0	0	0	0	0	0	0.2	17-27	31-50	6.6-14	0.2	0	0	0	0	0	0	0	0.2	17-27	31-50	6.6-14	0.1	0	0	0	0	0	0	0	0.1			
>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											Total											Total																
13.3 8.5 2.6 3.6 11.6 10 5.4 2.3 44.5 100											12.9 5.4 2.6 3.2 8 8.5 8.7 2.6 49.7 100											10.8 4.2 1.9 4.9 9 7.4 8.6 2.8 53.3 100																

Remark : kt = KNOTS

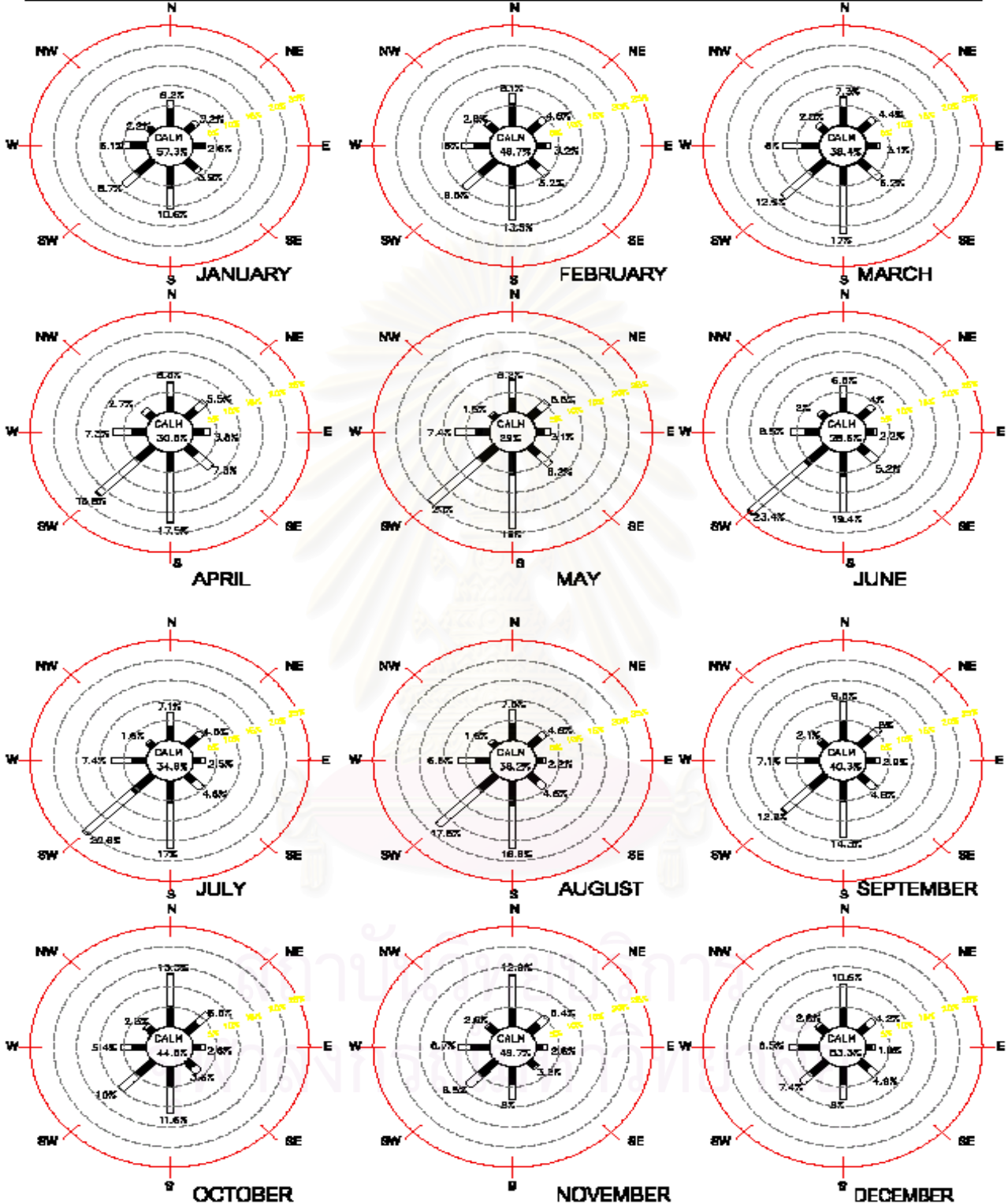
1 kt = 1.609 km/h = 0.514 mi/h

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



แผนภูมิจำแนกความถี่ของลม ในแต่ละความเร็วและทิศทาง ที่เกิดลมรายเดือน (wind rose)

WIND ROSE 1991 - 1995 (2524 - 2541) Station : **CHIANG MAI**



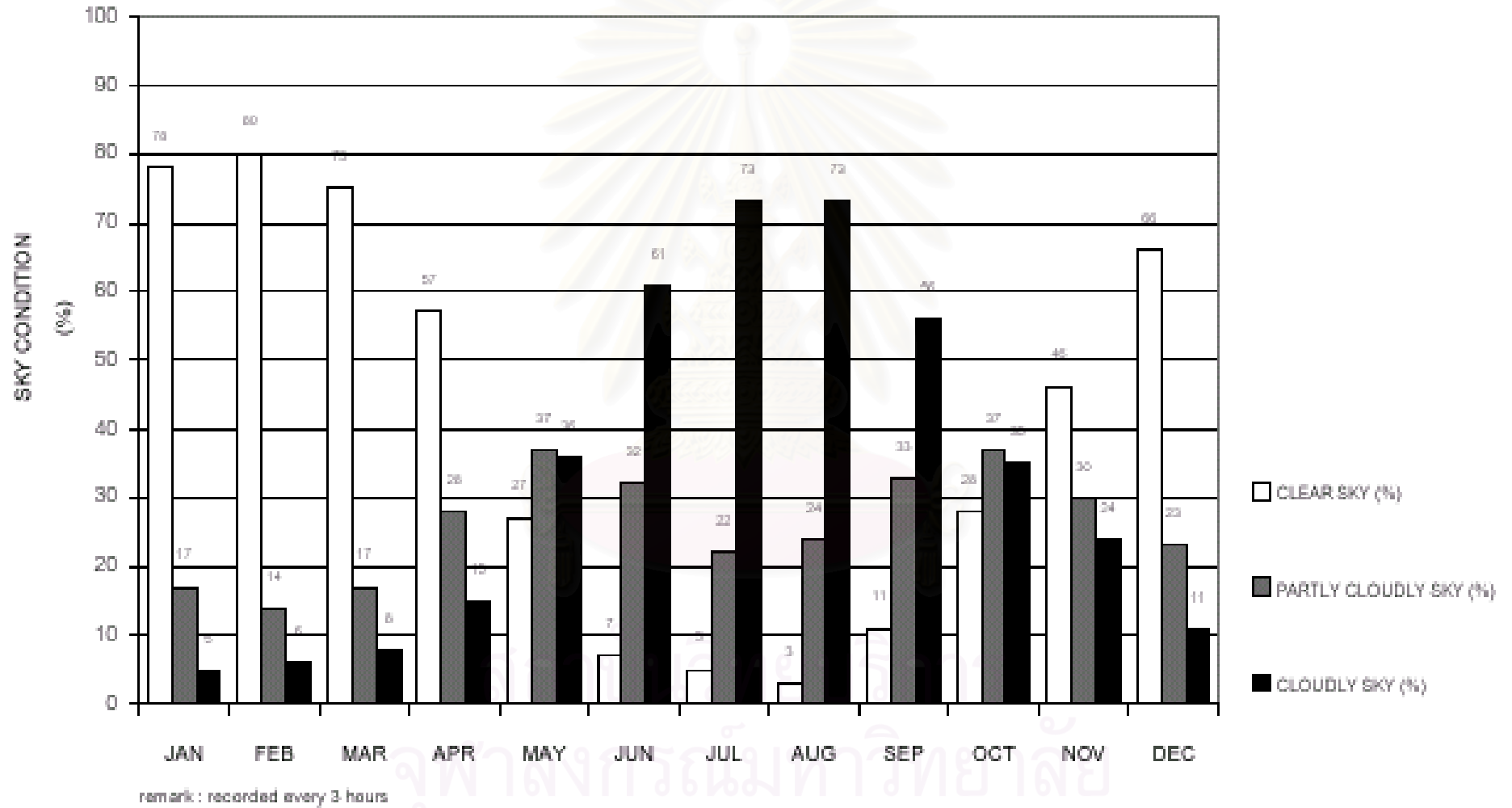
ตารางแสดงผลข้อมูลสภาพท้องฟ้าและสัดส่วนเปอร์เซ็นต์สภาพท้องฟ้า (sky cover and percentage of sky condition)

SKY COVER (%) & SKY CONDITION 1981 - 1998 (2524 - 2541)													Station : CHIANG MAI																										
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					
	Cir	Part	Cld	Cir	Part	Cld	Cir	Part	Cld	Cir	Part	Cld	Cir	Part	Cld	Cir	Part	Cld	Cir	Part	Cld	Cir	Part	Cld	Cir	Part	Cld	Cir	Part	Cld	Cir	Part	Cld	Cir	Part	Cld	Cir	Part	Cld
1	76%	19%	5%	79%	14%	7%	81%	17%	2%	74%	21%	6%	49%	39%	13%	13%	34%	53%	7%	33%	60%	1%	17%	82%	4%	23%	74%	17%	33%	50%	43%	29%	28%	58%	25%	17%	42%	25%	33%
2	79%	16%	4%	71%	20%	9%	71%	16%	13%	77%	14%	9%	45%	41%	14%	8%	38%	54%	7%	21%	72%	1%	20%	79%	4%	22%	74%	14%	43%	43%	43%	38%	19%	60%	18%	21%	40%	26%	34%
3	79%	15%	6%	79%	15%	5%	71%	14%	15%	72%	23%	5%	47%	29%	24%	10%	30%	60%	4%	22%	74%	4%	31%	65%	4%	26%	70%	15%	40%	44%	37%	29%	34%	68%	29%	3%	41%	25%	34%
4	77%	21%	1%	85%	7%	8%	67%	23%	10%	76%	18%	5%	46%	35%	20%	8%	35%	57%	4%	22%	74%	1%	18%	80%	2%	36%	62%	11%	42%	47%	40%	24%	36%	67%	28%	5%	40%	26%	34%
5	74%	22%	4%	80%	12%	8%	80%	10%	10%	72%	18%	10%	40%	26%	35%	10%	32%	59%	2%	10%	88%	1%	19%	80%	4%	30%	65%	13%	37%	51%	42%	29%	29%	68%	23%	10%	40%	22%	37%
6	68%	23%	9%	85%	12%	3%	87%	10%	3%	69%	18%	13%	32%	37%	32%	6%	35%	60%	2%	21%	77%	5%	29%	65%	7%	28%	65%	9%	42%	49%	49%	31%	20%	49%	42%	10%	39%	27%	34%
7	71%	26%	4%	75%	17%	8%	85%	12%	4%	69%	18%	13%	30%	37%	33%	7%	34%	60%	3%	24%	73%	4%	21%	74%	4%	25%	71%	18%	35%	48%	60%	26%	14%	63%	26%	11%	41%	25%	34%
8	81%	13%	6%	74%	21%	5%	73%	18%	10%	71%	24%	6%	32%	37%	31%	3%	29%	68%	3%	29%	68%	1%	29%	70%	5%	33%	62%	21%	37%	43%	54%	19%	27%	57%	29%	14%	40%	26%	34%
9	85%	10%	5%	71%	24%	5%	74%	13%	13%	79%	17%	4%	30%	35%	35%	4%	32%	63%	6%	22%	72%	0%	29%	71%	8%	33%	59%	18%	36%	46%	45%	21%	35%	64%	26%	10%	40%	25%	35%
10	86%	10%	4%	89%	10%	1%	79%	12%	10%	74%	16%	10%	32%	32%	35%	4%	34%	63%	1%	21%	79%	2%	24%	74%	10%	27%	63%	21%	44%	35%	50%	15%	35%	57%	26%	16%	42%	23%	35%
11	88%	10%	2%	79%	17%	4%	77%	14%	9%	62%	30%	8%	32%	33%	35%	7%	32%	62%	0%	19%	81%	1%	26%	74%	4%	38%	58%	21%	40%	39%	51%	33%	16%	60%	23%	18%	40%	26%	34%
12	87%	12%	1%	81%	15%	4%	68%	21%	11%	60%	28%	13%	28%	40%	32%	7%	26%	68%	1%	26%	72%	2%	23%	75%	12%	37%	51%	17%	40%	43%	49%	32%	19%	70%	21%	9%	40%	27%	33%
13	79%	18%	4%	88%	10%	2%	77%	17%	6%	57%	35%	9%	27%	43%	29%	6%	32%	62%	3%	32%	65%	2%	24%	74%	13%	40%	48%	24%	36%	40%	43%	31%	26%	70%	24%	7%	41%	28%	31%
14	87%	12%	1%	90%	8%	2%	76%	17%	7%	57%	28%	15%	24%	37%	40%	5%	39%	56%	1%	23%	76%	3%	22%	75%	10%	34%	56%	32%	35%	33%	38%	27%	35%	38%	27%	7%	41%	26%	34%
15	76%	18%	6%	86%	12%	2%	74%	24%	1%	49%	36%	15%	24%	43%	32%	7%	40%	54%	5%	25%	70%	2%	16%	82%	10%	24%	65%	32%	39%	29%	41%	30%	29%	73%	16%	11%	40%	27%	33%
16	64%	34%	2%	76%	20%	4%	85%	11%	4%	56%	29%	15%	24%	42%	34%	8%	38%	54%	6%	26%	68%	4%	27%	68%	8%	39%	53%	35%	36%	29%	51%	24%	24%	69%	18%	13%	41%	29%	31%
17	75%	24%	1%	80%	20%	0%	82%	13%	4%	57%	30%	13%	24%	37%	39%	7%	32%	61%	6%	32%	63%	2%	29%	69%	11%	34%	55%	32%	32%	36%	50%	35%	15%	66%	18%	16%	41%	28%	31%
18	81%	13%	6%	85%	11%	4%	78%	19%	3%	49%	31%	21%	14%	43%	43%	7%	34%	60%	9%	20%	71%	7%	22%	71%	6%	41%	53%	28%	38%	34%	43%	38%	19%	72%	18%	10%	40%	27%	33%
19	81%	14%	5%	76%	23%	1%	75%	21%	4%	46%	29%	24%	21%	39%	40%	7%	43%	49%	8%	27%	65%	5%	25%	70%	8%	38%	54%	27%	35%	38%	37%	37%	26%	63%	26%	12%	38%	30%	32%
20	82%	15%	3%	77%	11%	12%	79%	17%	4%	49%	31%	21%	22%	40%	38%	7%	34%	60%	7%	30%	63%	4%	25%	71%	9%	40%	51%	25%	35%	40%	42%	36%	22%	68%	22%	10%	39%	28%	33%
21	75%	20%	5%	80%	10%	10%	80%	18%	2%	55%	26%	19%	31%	28%	41%	9%	38%	54%	9%	21%	71%	4%	29%	66%	14%	26%	60%	32%	30%	38%	36%	40%	24%	65%	24%	10%	41%	26%	33%
22	84%	14%	2%	76%	13%	10%	70%	25%	5%	51%	33%	16%	22%	40%	38%	6%	38%	57%	10%	14%	76%	7%	36%	57%	16%	37%	47%	43%	32%	25%	42%	38%	20%	62%	32%	6%	41%	29%	30%
23	84%	13%	3%	79%	13%	9%	75%	19%	6%	50%	30%	20%	25%	42%	33%	6%	33%	61%	2%	15%	82%	2%	22%	76%	17%	28%	55%	40%	35%	25%	47%	31%	22%	73%	18%	9%	42%	25%	33%
24	81%	14%	5%	82%	13%	5%	79%	10%	10%	46%	42%	13%	20%	42%	38%	11%	29%	60%	5%	20%	75%	2%	21%	77%	16%	29%	54%	35%	47%	18%	44%	34%	22%	75%	12%	13%	41%	26%	33%
25	74%	19%	7%	77%	12%	11%	82%	12%	7%	40%	41%	18%	17%	34%	49%	8%	25%	67%	4%	18%	78%	0%	9%	91%	21%	35%	44%	42%	39%	19%	56%	27%	17%	75%	18%	7%	41%	24%	35%
26	72%	24%	4%	73%	13%	15%	72%	14%	14%	43%	30%	27%	24%	33%	43%	10%	24%	66%	3%	24%	74%	1%	13%	87%	19%	35%	46%	41%	35%	24%	46%	27%	27%	68%	24%	8%	39%	24%	36%
27	74%	15%	11%	79%	18%	2%	66%	18%	16%	43%	32%	24%	17%	38%	45%	3%	19%	78%	4%	22%	74%	3%	30%	67%	25%	29%	46%	41%	33%	26%	51%	20%	29%	64%	22%	14%	39%	25%	36%
28	74%	18%	9%	76%	22%	2%	60%	23%	17%	34%	38%	29%	13%	33%	54%	1%	22%	76%	4%	17%	79%	4%	27%	69%	22%	42%	36%	39%	40%	21%	47%	29%	24%	68%	21%	11%	37%	28%	36%
29	72%	15%	13%	81%	9%	9%	67%	24%	9%	35%	36%	29%	15%	26%	58%	1%	26%	73%	4%	14%	82%	3%	31%	66%	25%	36%	39%	41%	37%	22%	49%	28%	24%	68%	20%	13%	38%	25%	36%
30	76%	18%	6%				74%	18%	8%	40%	34%	26%	11%	40%	49%	4%	39%	57%	3%	19%	78%	1%	29%	71%	23%	35%	42%	48%	37%	15%	46%	40%	15%	72%	15%	13%	36%	29%	34%
31	88%	12%	1%				73%	24%	4%				13%	40%	48%				2%	18%	79%	6%	18%	76%				49%	30%	21%				79%	12%	10%	44%	22%	34%
Avg % condition	78%	17%	5%	80%	14%	6%	75%	17%	8%	57%	28%	15%	27%	37%	36%	7%	32%	61%	4%	22%	73%	3%	24%	73%	11%	33%	56%	28%	37%	35%	46%	30%	24%	66%	23%	11%	40%	26%	34%
condition	2.0			1.8			2.1			3.5			5.8			7.6			8.3			8.4			7.2			5.7			4.5			2.9			5.0		

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)

SKY CONDITION (%) 1981 - 1998 (2524-2541) Station : CHIANG MAI



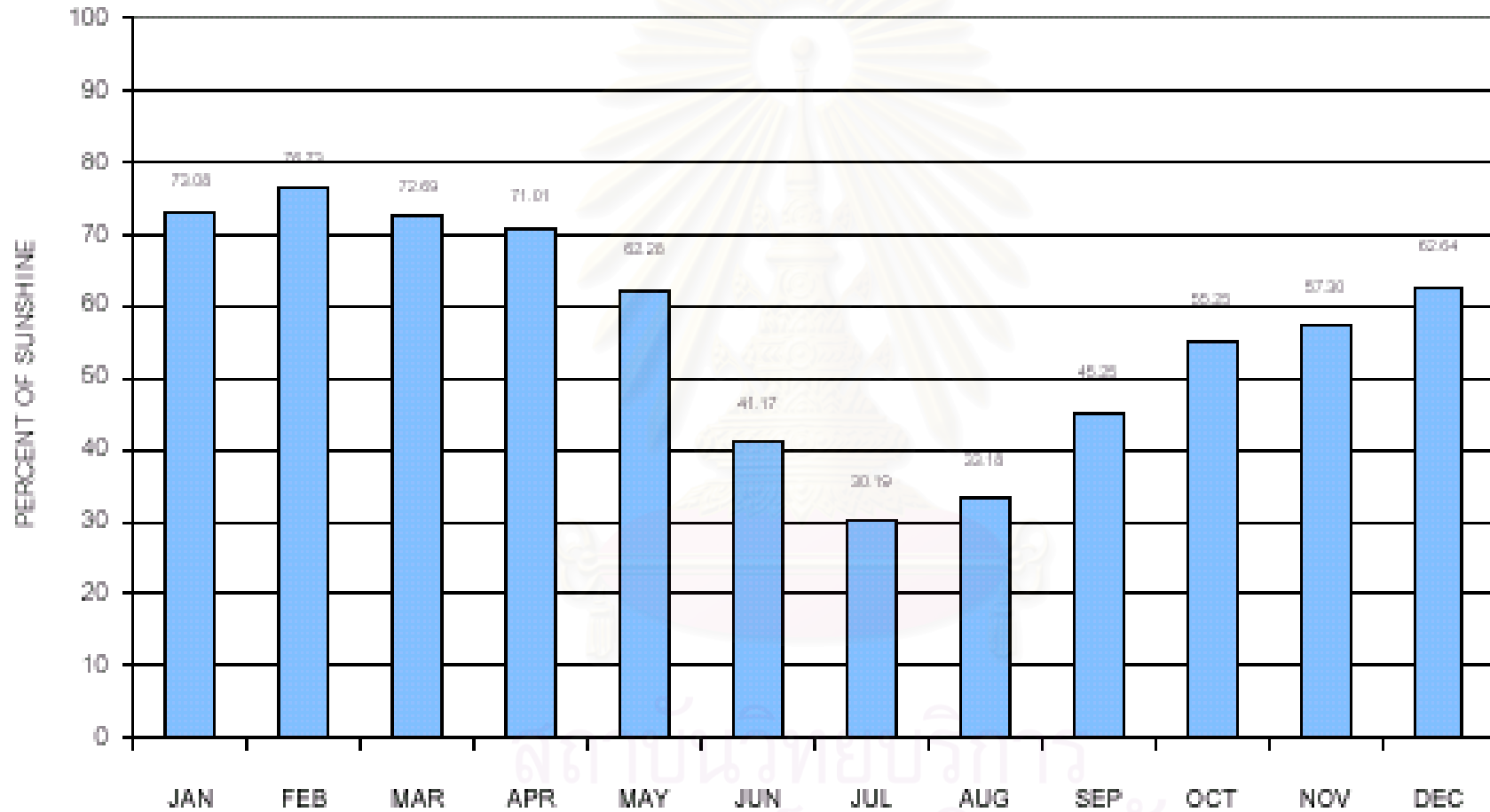
ตารางแสดงผลข้อมูลระยะเวลาของแสงแดด (duration of sunshine)

DURATION OF SUNSHINE (hours) 1981 - 1998 (2524 - 2541)														Station : CHIANG MAI														
MONTH	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		ANNUAL			
DAY	hours	avg %	hours	avg %	hours	avg %	hours	avg %	hours	avg %	hours	avg %	hours	avg %	hours	avg %	hours	avg %	hours	avg %	hours	avg %	hours	avg %	hours	avg %	hours	avg %
1	8.8	73.3%	8.8	73.0%	9.6	79.7%	9.0	75.3%	9.8	81.9%	7.4	61.5%	4.0	33.0%	1.9	15.6%	3.9	32.6%	7.2	59.9%	7.5	62.8%	6.8	56.8%	7.1	58.8%		
2	8.4	69.6%	8.2	68.3%	8.5	70.5%	8.9	73.8%	8.9	74.0%	6.5	53.9%	3.1	26.2%	3.8	31.7%	4.1	33.8%	7.1	59.3%	8.1	67.4%	5.9	49.0%	6.8	56.4%		
3	8.8	73.0%	8.6	71.5%	9.4	78.5%	7.7	64.5%	7.8	65.3%	6.5	54.2%	3.2	26.7%	4.0	33.2%	5.0	41.8%	6.4	53.1%	6.8	56.5%	7.7	63.9%	6.8	56.8%		
4	8.8	72.9%	8.8	73.1%	8.6	71.7%	8.1	67.6%	8.8	73.5%	6.0	49.9%	2.8	23.1%	3.1	25.7%	5.4	45.1%	5.1	42.5%	5.1	42.6%	7.9	65.5%	6.5	54.4%		
5	8.7	72.3%	8.5	70.6%	9.3	77.4%	8.5	71.0%	8.1	67.1%	5.8	48.0%	1.8	14.7%	4.1	33.9%	5.1	42.1%	5.1	42.4%	6.2	51.7%	7.9	66.0%	6.6	54.8%		
6	8.7	72.8%	8.9	73.9%	9.0	74.7%	8.1	67.4%	7.2	60.1%	4.5	37.8%	3.0	25.0%	3.9	32.2%	4.2	34.8%	4.2	35.3%	7.3	61.1%	7.5	62.5%	6.4	53.1%		
7	8.9	73.9%	9.1	75.8%	9.6	80.0%	8.1	67.8%	8.3	68.9%	5.3	44.2%	3.0	24.9%	5.1	42.6%	6.0	49.9%	5.4	45.3%	7.8	65.1%	6.9	57.3%	7.0	58.0%		
8	8.2	68.0%	9.5	79.4%	8.0	66.4%	8.8	73.3%	8.2	68.1%	5.7	47.8%	4.5	37.2%	4.8	40.2%	5.5	45.6%	5.7	47.3%	6.2	51.8%	7.6	62.9%	6.9	57.3%		
9	9.1	75.4%	9.2	76.5%	8.0	66.9%	8.9	73.9%	8.1	67.2%	4.3	35.9%	5.6	46.5%	5.0	41.5%	5.6	46.9%	5.0	41.4%	6.1	50.8%	7.7	64.3%	6.9	57.3%		
10	8.7	72.1%	9.7	80.8%	8.9	74.0%	8.5	70.4%	7.7	64.5%	4.5	37.5%	4.0	32.9%	4.4	36.4%	4.5	37.1%	5.4	44.9%	6.4	53.5%	7.3	60.5%	6.6	55.4%		
11	9.0	74.9%	9.6	80.1%	8.9	74.0%	8.0	66.7%	7.5	62.5%	4.8	40.3%	3.7	31.2%	3.7	30.6%	5.9	49.0%	6.4	53.5%	8.2	68.1%	7.0	58.1%	6.9	57.4%		
12	9.1	75.7%	9.6	79.9%	8.0	66.5%	8.5	71.0%	7.3	60.6%	5.0	41.3%	4.4	36.7%	3.9	32.6%	5.6	47.0%	6.0	49.7%	8.2	68.1%	7.5	62.3%	6.9	57.6%		
13	8.8	73.3%	10.0	83.5%	9.0	74.8%	8.6	71.4%	8.1	67.5%	5.0	41.3%	3.4	28.0%	4.4	36.5%	6.4	53.2%	7.2	60.2%	6.5	54.2%	7.8	65.1%	7.1	59.1%		
14	8.4	70.0%	10.1	84.4%	8.1	67.4%	8.7	72.6%	6.8	56.4%	5.0	41.9%	4.0	33.2%	3.4	28.7%	5.9	49.0%	7.0	58.3%	7.0	58.2%	7.4	61.9%	6.8	56.8%		
15	8.5	70.9%	10.2	84.7%	9.0	75.2%	8.6	71.3%	7.9	65.4%	6.4	53.3%	3.8	31.7%	3.4	28.4%	4.6	38.2%	6.6	55.3%	7.1	59.5%	6.3	52.1%	6.9	57.2%		
16	8.9	74.4%	9.9	82.6%	9.3	77.4%	9.8	81.7%	6.3	52.2%	5.1	42.8%	4.3	35.4%	4.3	36.0%	5.4	44.7%	6.7	56.1%	7.0	58.5%	6.2	51.3%	6.9	57.8%		
17	9.1	76.1%	10.2	85.1%	9.4	78.2%	9.2	76.8%	7.2	59.9%	4.4	37.0%	4.3	36.0%	4.4	36.7%	4.3	35.5%	6.9	57.6%	8.2	68.1%	5.9	48.8%	7.0	58.0%		
18	9.1	75.9%	9.8	82.0%	8.6	72.0%	8.2	68.3%	5.7	47.6%	4.8	39.9%	4.3	35.5%	3.8	31.5%	6.2	51.8%	6.7	55.7%	6.7	55.8%	6.8	56.6%	6.7	56.1%		
19	9.1	75.4%	9.2	76.3%	8.9	74.5%	7.7	64.4%	6.2	51.4%	4.5	37.6%	5.1	42.1%	3.9	32.6%	5.6	46.8%	6.3	52.1%	6.4	53.6%	7.1	59.3%	6.7	55.5%		
20	8.9	74.5%	8.9	74.3%	9.3	77.2%	8.1	67.4%	6.9	57.8%	4.1	34.5%	5.1	42.4%	3.9	32.2%	5.6	46.8%	6.1	51.1%	7.0	58.5%	7.7	64.4%	6.8	56.8%		
21	8.9	74.2%	8.2	68.3%	9.3	77.4%	9.0	74.7%	7.0	58.6%	5.2	43.3%	3.8	31.9%	4.8	40.2%	4.8	40.1%	5.8	48.1%	6.9	57.8%	7.8	64.9%	6.8	56.6%		
22	9.2	76.5%	8.5	70.4%	8.7	72.4%	8.3	69.5%	8.1	67.4%	5.6	47.0%	3.3	27.4%	4.8	39.6%	7.0	58.1%	7.7	64.4%	6.7	55.6%	8.3	69.4%	7.2	59.8%		
23	9.3	77.2%	8.9	74.4%	8.9	74.4%	8.4	70.3%	8.2	68.5%	4.7	39.5%	2.4	20.1%	3.1	26.0%	5.1	42.6%	7.6	63.0%	6.9	57.2%	8.2	67.9%	6.8	56.8%		
24	8.8	73.0%	9.3	77.4%	8.7	72.2%	9.0	74.8%	8.0	66.9%	5.0	41.7%	3.1	25.9%	3.8	31.8%	5.5	45.6%	8.5	70.6%	6.1	50.6%	7.8	65.2%	7.0	58.0%		
25	8.7	72.1%	8.1	67.4%	8.1	67.8%	8.4	70.2%	7.3	60.6%	4.3	35.8%	3.5	29.3%	2.7	22.8%	6.0	50.1%	8.0	66.5%	6.9	57.4%	8.7	72.4%	6.7	56.0%		
26	8.6	71.8%	7.9	65.6%	8.0	66.5%	8.8	73.3%	7.8	65.0%	4.0	33.1%	3.7	31.2%	3.5	28.9%	6.1	51.2%	7.7	64.4%	5.8	48.7%	7.9	65.9%	6.7	55.5%		
27	7.9	65.8%	9.7	80.6%	7.9	65.8%	8.4	70.1%	7.5	62.7%	3.1	25.5%	4.1	33.9%	5.0	41.3%	4.9	40.8%	7.6	63.1%	6.3	52.2%	7.8	64.9%	6.7	55.5%		
28	8.7	72.6%	9.8	81.3%	7.0	58.3%	8.4	70.2%	6.7	55.8%	2.7	22.1%	3.3	27.3%	6.1	50.7%	6.4	53.5%	7.4	61.3%	6.6	54.9%	8.0	66.9%	6.7	56.2%		
29	8.1	67.6%	10.1	84.2%	8.9	73.9%	8.3	68.8%	5.1	42.4%	3.2	26.3%	3.6	29.6%	4.5	37.2%	5.9	48.8%	8.4	70.1%	7.1	59.5%	8.6	71.5%	6.8	56.6%		
30	8.9	73.9%			8.7	72.6%	8.6	71.6%	6.2	51.4%	4.8	39.9%	2.9	23.9%	2.9	24.5%	6.6	55.3%	7.7	64.4%	7.1	59.2%	8.5	70.8%	6.6	55.2%		
31	9.2	76.5%			9.0	75.1%			7.2	59.8%			1.6	13.1%	3.2	26.8%			6.7	55.8%			8.8	73.5%	6.5	54.4%		
Average	8.8	73.1%	9.2	76.7%	8.7	72.7%	8.5	71.0%	7.5	62.3%	4.9	41.2%	3.6	30.2%	4.0	33.2%	5.4	45.2%	6.6	55.2%	6.9	57.3%	7.5	62.8%	6.8	56.6%		
Total	271.9		267.8		270.4		255.6		231.7		148.2		112.3		123.4		162.9		205.5		206.3		233.8		2,489.3			

remark : observation hour = 12 hours (from 06:00 - 07:00 to 17:00 - 18:00)

แผนภูมิระยะเวลาของแสงแดด (average percent of sunshine per month)

AVERAGE PERCENT OF SUNSHINE PER MONTH 1987 - 1998 (2530 - 2541) Station : CHIANG MAI



remark : observation hour = 12 hours (from 05:00 - 18:00)

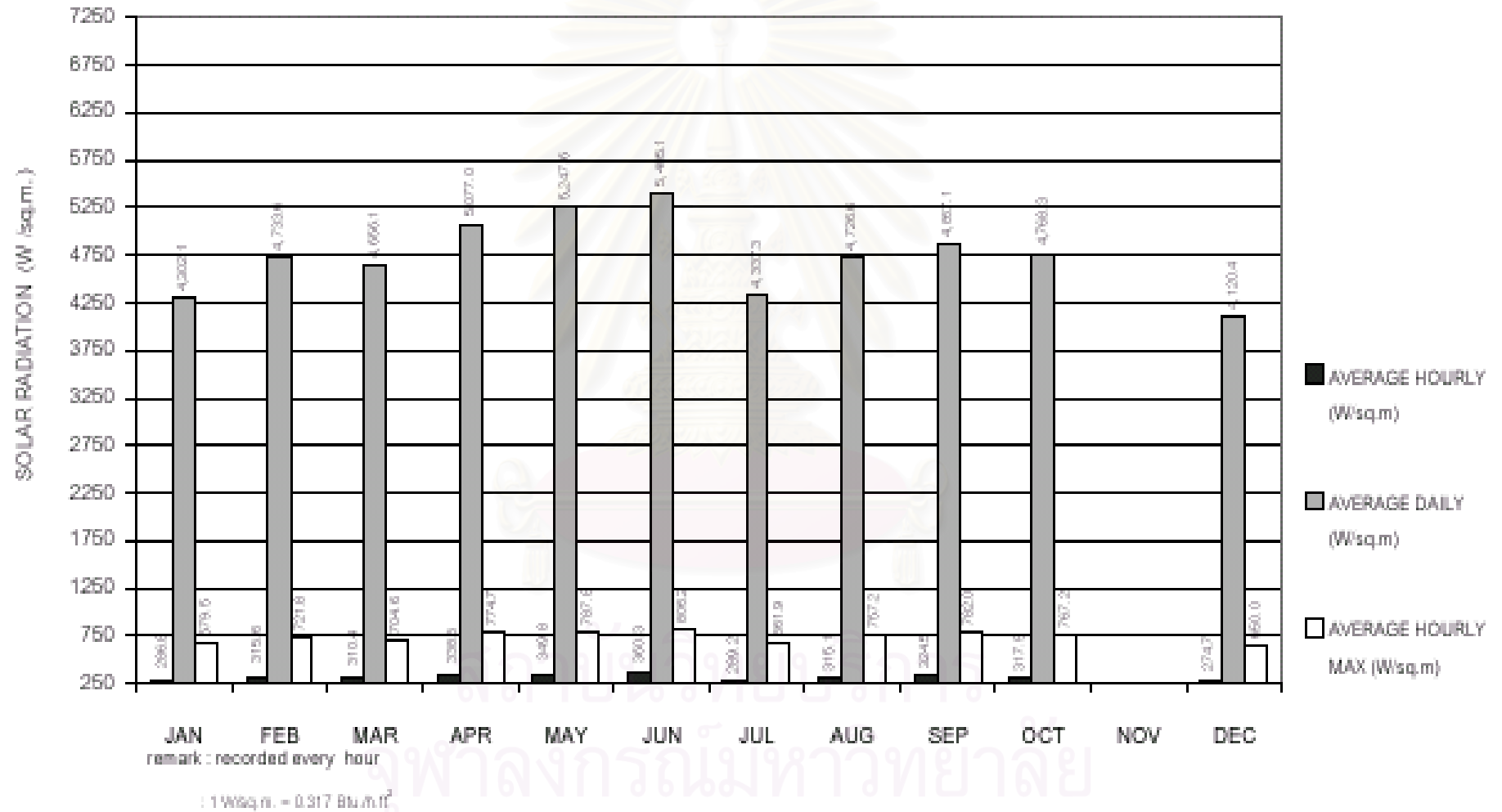
ตารางแสดงผลข้อมูลปริมาณรังสีรวมดวงอาทิตย์ (solar radiation)

SOLAR RADIATION (W / m ²) 1998 (2541)														Station : CHIANGMAI													
MONTH DAY	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		ANNUAL		
	hourly	daily	hourly	daily	hourly	daily	hourly	daily	hourly	daily	hourly	daily	hourly	daily	hourly	daily	hourly	daily	hourly	daily	hourly	daily	hourly	daily	hourly	daily	
1	282.0	4,229.7	287.8	4,317.0	338.6	5,078.9	340.6	5,109.2	362.8	5,441.4	384.0	5,760.3	341.2	5,118.2	346.8	5,202.7	233.8	3,506.9	400.8	6,012.0	-	-	290.3	4,354.3	328.1	4,510.9	
2	277.6	4,164.4	293.2	4,397.3	346.6	5,199.7	332.5	4,987.8	355.5	5,331.8	407.2	6,107.6	321.2	4,818.2	185.5	2,783.0	348.9	5,234.1	398.4	5,975.4	-	-	274.4	4,116.5	321.9	4,426.3	
3	288.8	4,332.4	318.1	4,772.1	356.2	5,342.5	266.2	3,992.3	406.2	6,093.6	348.9	5,233.3	120.1	1,801.1	198.2	2,973.3	316.5	4,747.8	378.9	5,683.5	-	-	283.1	4,246.6	298.3	4,101.5	
4	277.8	4,166.8	333.2	4,997.8	289.2	4,338.5	337.2	5,058.0	418.8	6,281.5	360.5	5,408.2	104.0	1,559.8	123.0	1,844.3	398.0	5,970.3	372.6	5,589.3	-	-	236.6	3,549.1	295.5	4,063.6	
5	234.1	3,511.6	329.0	4,934.3	299.6	4,494.1	290.1	4,352.1	418.2	6,272.7	433.5	6,502.7	165.2	2,477.5	372.7	5,590.5	313.8	4,707.3	379.8	5,697.6	-	-	257.6	3,863.4	317.6	4,367.0	
6	221.3	3,318.8	321.0	4,814.9	336.8	5,051.3	311.0	4,665.4	414.3	6,214.5	349.5	5,242.9	224.2	3,363.7	347.6	5,213.9	295.5	4,432.6	109.5	1,641.9	-	-	276.5	4,147.5	291.6	4,009.0	
7	251.8	3,777.4	314.1	4,711.0	352.2	5,283.7	339.0	5,085.4	363.4	5,450.3	353.1	5,296.3	284.0	4,260.7	339.1	5,086.9	197.3	2,959.4	241.3	3,619.0	-	-	296.0	4,440.7	302.9	4,164.2	
8	269.6	4,044.6	294.6	4,419.2	350.0	5,250.6	360.6	5,409.5	358.9	5,382.9	446.2	6,692.3	300.9	4,513.9	233.7	3,505.6	259.1	3,886.2	288.8	4,332.2	-	-	280.2	4,203.1	313.0	4,303.4	
9	297.3	4,459.6	284.3	4,264.2	346.8	5,202.1	325.3	4,879.3	338.7	5,080.0	409.3	6,138.8	229.0	3,435.4	332.9	4,993.5	315.5	4,732.0	251.4	3,771.4	-	-	266.4	3,995.7	308.8	4,246.0	
10	305.4	4,581.6	343.9	5,158.9	347.2	5,208.6	330.5	4,957.6	404.7	6,069.8	349.7	5,245.9	155.4	2,331.3	334.4	5,016.1	312.8	4,691.4	312.2	4,682.6	-	-	230.8	3,461.9	311.5	4,283.8	
11	320.5	4,806.8	329.5	4,942.0	302.4	4,536.3	352.5	5,287.9	251.8	3,776.8	343.4	5,151.0	170.3	2,554.5	254.8	3,822.0	322.1	4,831.4	380.3	5,704.6	-	-	246.2	3,693.0	297.6	4,092.2	
12	314.3	4,714.3	329.2	4,938.5	277.7	4,165.8	347.7	5,215.7	358.2	5,373.6	344.0	5,159.7	277.9	4,168.0	318.6	4,778.4	405.0	6,074.6	304.7	4,570.3	-	-	213.4	3,201.5	317.3	4,363.4	
13	311.2	4,667.6	338.1	5,070.8	258.5	3,877.2	345.3	5,179.6	372.9	5,593.3	405.2	6,078.2	250.8	3,761.4	315.2	4,728.6	414.2	6,213.5	303.8	4,557.3	-	-	264.1	3,961.2	325.4	4,474.1	
14	301.6	4,523.7	337.0	5,054.6	241.8	3,627.2	345.1	5,177.0	384.8	5,771.7	470.9	7,064.0	271.3	4,068.8	384.0	5,759.3	355.1	5,325.9	340.2	5,103.1	-	-	270.5	4,057.4	336.6	4,627.7	
15	312.8	4,691.8	330.8	4,962.5	308.9	4,633.3	290.1	4,351.9	336.3	5,044.0	436.8	6,551.4	242.0	3,630.1	311.8	4,677.1	177.2	2,657.3	361.3	5,419.9	-	-	278.3	4,174.1	307.8	4,232.8	
16	296.2	4,442.4	349.8	5,247.6	338.9	5,083.8	292.3	4,384.3	396.6	5,948.9	438.0	6,569.3	219.7	3,295.4	358.9	5,382.9	266.9	4,002.8	367.2	5,508.6	-	-	284.8	4,271.7	328.1	4,511.5	
17	321.5	4,822.0	332.6	4,988.4	282.4	4,236.0	296.1	4,441.4	294.9	4,424.1	423.0	6,345.2	315.5	4,732.6	340.8	5,112.4	208.5	3,128.1	346.1	5,192.0	-	-	283.8	4,257.3	313.2	4,306.6	
18	320.7	4,810.9	330.5	4,956.8	233.9	3,508.7	349.3	5,239.2	260.0	3,900.7	340.9	5,113.1	417.9	6,268.9	394.8	5,922.2	291.0	4,365.2	219.2	3,287.5	-	-	278.3	4,174.9	312.4	4,295.7	
19	298.2	4,472.6	327.5	4,912.3	291.8	4,376.6	306.6	4,598.8	127.4	1,911.5	289.4	4,341.4	452.9	6,794.0	403.8	6,056.5	388.1	5,820.8	262.5	3,937.7	-	-	288.1	4,322.0	312.4	4,295.4	
20	307.9	4,618.9	338.2	5,073.5	325.1	4,876.8	327.3	4,909.3	288.3	4,325.2	288.3	4,323.9	344.9	5,173.9	297.1	4,456.7	314.9	4,724.1	266.9	4,003.7	-	-	281.4	4,221.2	307.3	4,225.6	
21	308.8	4,632.5	331.3	4,970.2	329.9	4,948.5	407.9	6,118.9	206.0	3,089.4	388.8	5,832.7	404.4	6,065.9	275.5	4,131.8	303.8	4,557.1	278.4	4,176.7	-	-	293.1	4,396.9	320.7	4,410.0	
22	263.7	3,954.8	369.5	5,542.8	341.3	5,119.9	364.9	5,473.2	338.5	5,077.8	341.7	5,125.4	336.6	5,049.0	400.6	6,008.8	343.7	5,155.8	370.6	5,559.0	-	-	301.9	4,529.2	343.0	4,716.3	
23	297.9	4,468.8	344.5	5,168.0	359.1	5,387.2	360.1	5,401.6	411.7	6,175.7	291.2	4,368.2	230.1	3,451.3	351.6	5,273.9	383.5	5,752.2	357.7	5,365.2	-	-	302.7	4,540.8	335.5	4,612.7	
24	321.3	4,819.8	327.2	4,907.9	236.1	3,542.2	365.9	5,488.8	444.1	6,660.8	296.1	4,442.2	285.6	4,284.6	170.9	2,562.8	378.5	5,677.1	359.3	5,388.8	-	-	308.0	4,620.7	317.6	4,366.3	
25	276.9	4,152.8	333.5	5,002.0	242.7	3,641.0	358.8	5,381.5	344.9	5,173.5	273.9	4,108.0	216.5	3,247.9	296.1	4,442.2	316.8	4,752.4	355.1	5,327.1	-	-	305.3	4,579.8	301.9	4,150.7	
26	274.2	4,112.6	317.9	4,769.1	308.2	4,622.6	364.8	5,472.0	322.5	4,838.0	320.6	4,808.4	219.7	3,295.0	308.2	4,622.6	380.5	5,708.2	349.0	5,234.4	-	-	276.7	4,150.2	312.9	4,302.7	
27	310.3	4,654.0	333.7	5,005.7	310.3	4,655.2	322.9	4,843.6	347.0	5,204.6	322.4	4,835.6	441.9	6,628.6	353.8	5,306.5	295.7	4,435.0	333.0	4,995.6	-	-	253.2	3,797.5	329.5	4,530.2	
28	216.4	3,245.9	331.7	4,976.1	315.9	4,738.8	337.9	5,068.4	365.6	5,484.4	290.8	4,361.8	433.6	6,504.6	364.7	5,470.3	394.8	5,922.0	207.9	3,117.9	-	-	235.7	3,535.3	317.7	4,368.8	
29	230.4	3,456.6			315.7	4,735.6	399.3	5,990.1	396.0	5,939.5	314.5	4,718.2	420.9	6,312.9	337.8	5,066.7	400.0	5,999.3	323.4	4,851.2	-	-	281.4	4,221.0	310.9	4,274.2	
30	264.0	3,959.4			342.8	5,142.3	386.1	5,791.2	334.8	5,022.7	348.4	5,225.9	378.1	5,671.0	348.0	5,220.5	402.8	6,042.3	296.4	4,446.7	-	-	294.8	4,421.7	339.6	4,631.2	
31	316.6	4,749.6			295.5	4,432.4			421.5	6,322.7			387.8	5,816.9	367.5	5,512.0			337.7	5,065.4	-	-	281.7	4,225.4	344.0	5,160.6	
Average	286.8	4,302.1	315.6	4,733.6	310.4	4,656.1	338.5	5,077.0	349.8	5,247.6	360.3	5,405.1	289.2	4,337.3	315.1	4,726.6	324.5	4,867.1	317.9	4,768.3	-	-	274.7	4,120.4	316.8	4,749.2	
Aug. max	679.5		721.8		704.6		774.7		787.8		806.2		661.9		757.2		782.0		767.2			-	-	650.0		735.7	

หมายเหตุ : 1 W / m² = 0.317 Btu / hr.ft² = 3.6 kJ / m²

แผนภูมิปริมาณรังสีรวมดวงอาทิตย์ (solar radiation)

SOLAR RADIATION (W/sq.m.) ONE YEAR ROUND 1997 - 1998 (2540 - 2541) Station : CHIANG MAI



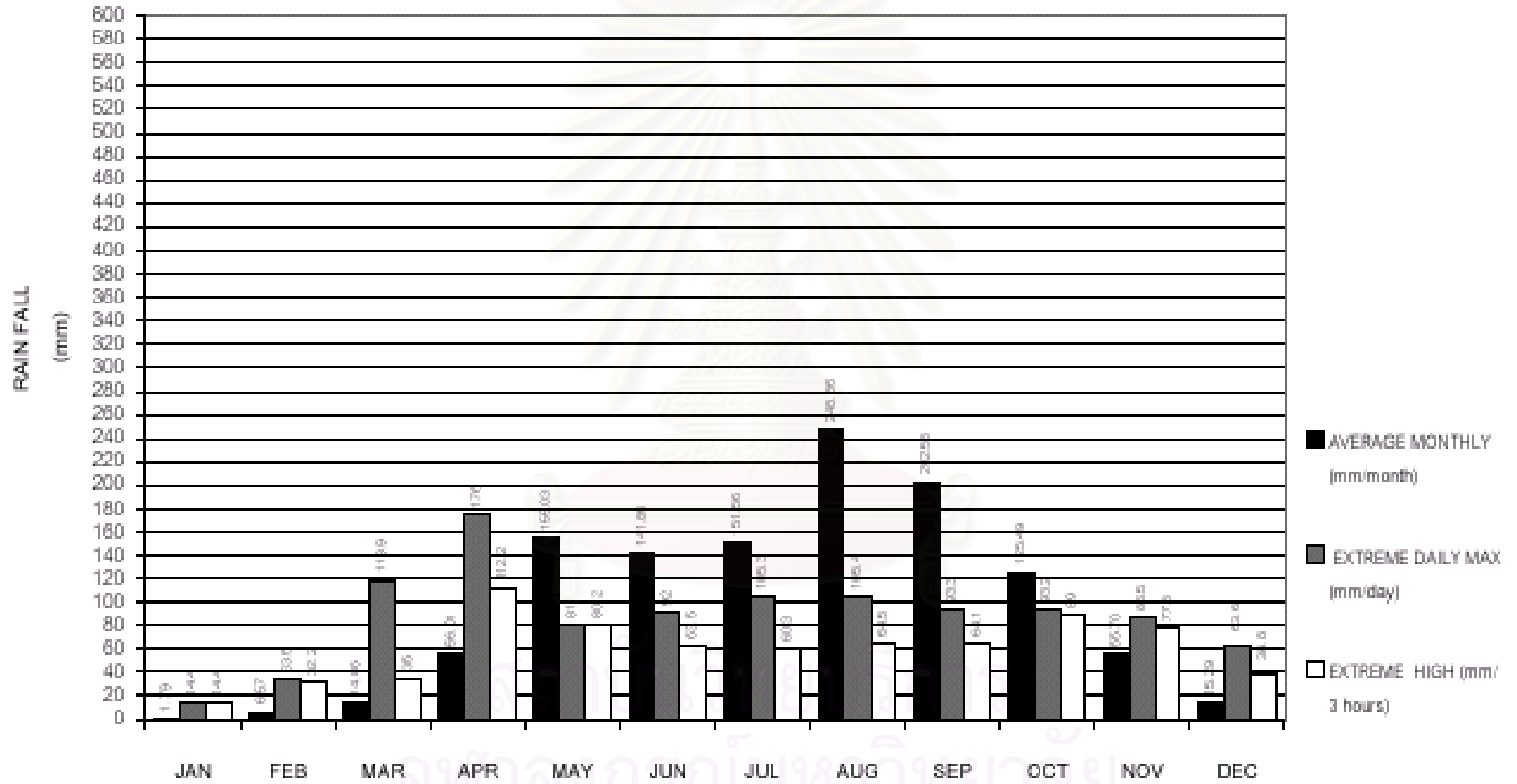
ตารางแสดงผลข้อมูลประมาณน้ำฝน (rain fall)

RAIN FALL (mm) 1981 - 1998 (2524 - 2541)													Station : CHIANG MAI
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	0.2	0.0	0.0	0.1	0.5	3.9	4.0	15.3	12.0	3.0	1.0	1.9	42.0
2	0.0	0.0	0.4	0.0	0.5	6.5	2.7	5.3	8.7	11.5	0.4	0.0	36.1
3	0.2	0.0	0.0	0.4	1.3	3.4	2.7	5.1	7.9	0.9	2.2	0.0	24.0
4	0.0	0.0	0.0	0.0	2.7	7.3	1.8	8.6	9.9	5.5	0.2	0.4	36.5
5	0.0	0.0	0.0	0.0	10.2	6.6	4.9	7.2	7.3	3.0	9.4	0.2	48.8
6	0.0	0.0	0.4	2.8	6.0	8.9	6.8	2.4	4.2	13.6	1.1	1.1	47.5
7	0.0	0.0	0.0	0.8	3.0	4.1	3.2	12.7	9.5	6.1	3.0	0.0	42.3
8	0.0	0.5	0.0	0.0	4.0	5.9	6.2	9.2	5.6	5.3	1.4	0.0	38.1
9	0.0	0.3	0.0	0.0	3.5	6.4	5.3	3.3	6.2	3.2	1.9	3.3	33.3
10	0.0	0.0	0.0	0.0	3.8	8.5	3.8	2.6	5.5	8.0	3.8	0.0	36.1
11	0.0	0.0	0.0	0.9	4.0	6.3	7.5	10.0	11.7	2.5	1.0	0.2	44.1
12	0.0	1.9	0.0	0.3	2.4	6.8	5.6	3.9	10.4	7.9	2.9	0.2	42.3
13	0.0	0.3	0.0	2.3	2.2	3.4	5.1	3.2	2.7	3.2	4.3	0.0	26.6
14	0.0	0.0	0.0	1.1	11.6	3.3	2.5	5.7	9.1	4.1	2.7	0.0	40.0
15	0.0	0.0	0.0	1.0	3.7	6.4	12.2	16.9	7.7	1.8	4.4	0.1	54.3
16	0.0	0.0	0.0	0.5	2.9	2.8	4.5	8.2	4.6	5.2	0.9	0.3	29.9
17	0.0	0.0	0.0	3.5	5.8	3.5	2.4	6.5	6.3	10.0	3.5	0.9	42.4
18	0.0	0.0	0.2	2.4	6.3	3.9	4.9	12.7	5.9	2.2	2.6	0.0	41.1
19	0.0	0.0	2.0	2.9	5.6	3.5	2.0	8.7	7.6	7.7	3.0	0.0	43.0
20	0.1	0.7	0.0	1.3	6.2	5.8	3.9	7.5	9.1	3.6	0.3	0.0	38.6
21	0.1	1.0	0.0	11.0	5.4	2.2	4.2	11.4	3.3	3.8	1.0	0.0	43.4
22	0.0	0.2	0.0	2.1	6.6	3.3	2.9	2.2	1.9	2.2	0.7	0.0	22.2
23	0.0	0.5	0.0	2.8	5.6	1.9	4.2	11.1	3.0	0.9	0.1	1.6	31.8
24	0.0	0.0	0.2	0.8	3.6	3.9	6.3	8.4	6.4	1.3	0.5	3.5	35.0
25	0.0	0.3	0.0	1.8	5.3	2.1	5.1	13.7	8.4	0.9	0.0	0.0	37.5
26	0.0	0.7	1.5	1.0	4.2	6.7	4.8	9.6	7.0	1.0	0.5	0.0	36.9
27	0.0	0.0	7.0	3.6	9.0	2.5	6.4	10.9	6.2	2.5	2.5	0.1	50.7
28	0.9	0.1	2.4	6.9	9.4	3.6	6.2	2.5	2.8	2.0	0.2	0.7	37.7
29	0.3	0.0	0.3	4.0	10.6	4.7	5.1	4.1	2.5	1.4	0.3	0.0	33.3
30	0.0	0.0	0.0	1.6	5.2	3.5	6.9	6.6	9.3	1.3	0.0	0.0	34.5
31	0.0	0.0	0.2	0.0	3.9	0.0	7.4	13.1	0.0	0.0	0.0	0.8	25.4
Monthly	1.8	6.6	14.9	56.0	155.0	141.9	151.6	248.9	202.5	125.5	55.7	15.3	1,175.6
Daily record high	14.4	33.5	118.9	176.0	81.0	92.0	105.3	105.4	93.3	93.2	86.5	63.6	176.0
3 hr. Extremes	14.4	32.2	35.0	112.2	80.2	63.5	60.3	64.5	64.1	89.0	77.5	38.8	112.2
No. of rainy days	1	2	2	5	15	16	17	20	22	17	6	1	125

แผนภูมิปริมาณน้ำฝน (rain fall)

RAIN FALL (mm) 1981 - 1998 (2524 - 2541)

Station : CHIANG MAI



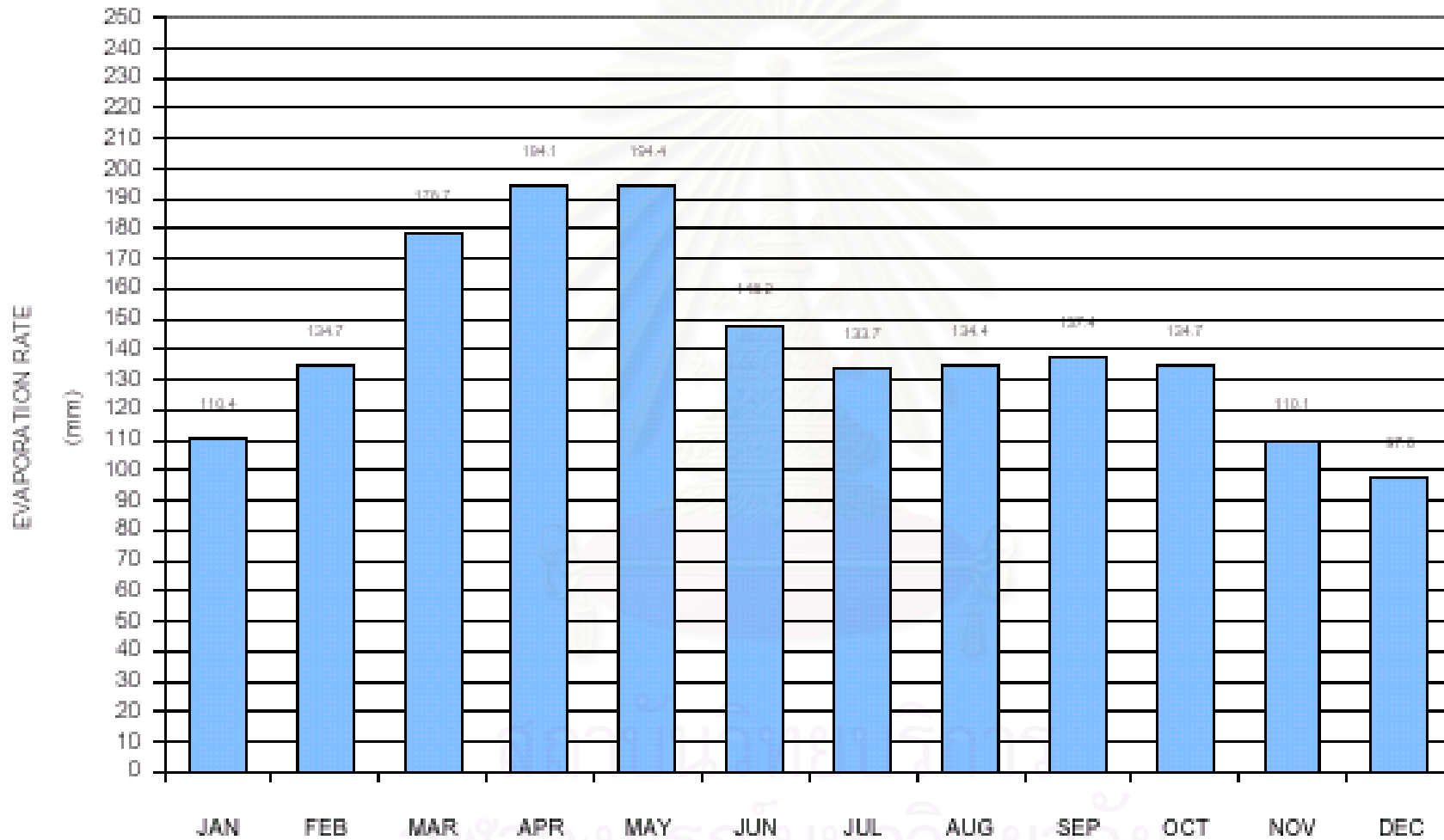
remark : recorded every 3 hours

ตารางแสดงผลข้อมูลค่าเฉลี่ยอัตราการระเหยของน้ำรายวัน (evaporation)

EVAPORATION (mm) 1981 - 1998 (2524 - 2541)													Station : CHIANG MAI
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	3.2	4.2	5.7	7.2	6.2	5.2	4.5	3.7	4.1	5.1	3.8	3.7	56.6
2	3.4	4.0	5.4	5.9	7.0	5.9	4.9	4.2	4.5	4.9	3.8	3.0	56.9
3	3.6	4.1	5.3	5.6	6.4	5.7	4.3	4.7	5.0	3.8	4.0	3.4	55.7
4	3.4	4.1	5.2	6.0	6.9	5.9	4.0	4.6	4.6	4.0	4.1	3.2	56.1
5	3.1	4.4	5.5	6.0	6.6	5.1	3.3	5.1	4.7	4.1	4.2	3.0	55.1
6	3.7	4.2	5.8	6.4	5.1	4.9	4.1	4.5	4.9	3.7	4.3	3.7	55.4
7	3.6	4.1	5.8	5.7	7.0	4.9	3.8	5.2	4.1	4.3	3.8	3.4	55.8
8	3.3	4.2	5.5	5.7	6.8	4.8	4.6	4.9	4.3	4.2	3.6	3.3	55.1
9	3.3	4.3	5.1	6.2	5.9	4.6	5.5	4.8	5.0	4.3	3.4	3.3	55.7
10	3.4	4.4	5.6	6.5	6.1	4.9	4.3	4.8	4.0	4.3	4.0	3.1	55.5
11	3.5	4.9	5.5	6.4	6.2	4.9	4.9	4.2	4.6	4.9	3.7	2.8	56.5
12	3.1	4.4	5.8	6.7	6.4	4.9	4.6	4.2	4.4	4.9	4.0	3.1	56.4
13	3.5	4.7	6.0	6.6	6.2	5.0	4.3	4.4	5.1	4.7	3.7	3.3	57.4
14	3.6	4.8	6.2	6.1	6.5	4.7	4.3	3.7	4.8	4.8	3.7	3.4	56.7
15	3.4	5.0	5.6	6.5	6.6	5.7	4.4	4.2	4.9	3.9	3.5	3.1	56.5
16	3.5	4.9	6.2	6.8	5.9	4.9	4.6	4.4	4.5	4.4	3.6	3.1	57.0
17	3.4	5.0	6.3	7.1	6.3	4.6	4.9	4.7	4.2	4.8	3.7	2.9	57.9
18	3.6	5.0	5.5	6.4	6.2	4.6	5.0	4.0	4.8	4.0	3.8	3.2	56.1
19	3.5	4.9	6.4	6.7	6.4	5.0	4.5	3.8	5.6	4.0	3.4	3.0	57.2
20	3.4	4.7	6.4	6.5	5.4	4.9	4.9	3.6	4.9	4.4	3.3	3.0	55.5
21	3.6	4.2	6.1	7.0	6.4	5.4	3.7	4.6	4.1	3.9	3.8	3.3	56.1
22	3.9	4.8	6.2	6.9	6.8	5.5	3.7	4.4	4.9	4.2	3.5	2.9	57.6
23	4.1	5.2	6.3	6.8	6.9	4.8	3.3	3.9	4.3	4.0	3.2	3.0	55.9
24	3.3	5.1	5.4	6.6	6.3	4.9	4.2	4.0	4.6	4.3	3.6	3.1	55.3
25	3.7	4.4	5.7	6.8	5.9	4.4	4.3	4.2	4.8	4.6	3.4	3.1	55.2
26	3.9	5.0	5.5	6.4	6.2	4.7	4.4	4.5	4.5	3.9	3.6	3.0	55.5
27	3.8	5.1	5.3	7.0	5.9	4.0	4.1	4.1	4.3	4.7	3.2	3.0	54.5
28	3.8	5.1	6.0	7.1	6.6	4.0	4.2	4.0	4.7	3.9	3.4	3.1	56.0
29	3.8	5.6	6.1	6.4	5.3	4.7	4.8	4.6	3.9	5.1	3.3	3.3	56.8
30	3.9		5.8	6.3	5.8	4.8	4.0	3.7	4.2	4.3	3.8	3.0	49.6
31	4.0		5.6		6.2		3.3	4.6		4.2		2.9	30.8
AVG Monthly	110.4	134.7	178.7	194.1	194.4	148.2	133.7	134.4	137.4	134.7	110.1	97.9	1,708.4
Daily Mean	3.6	4.6	5.8	6.5	6.3	4.9	4.3	4.3	4.6	4.3	3.7	3.1	4.7
Extremes	6.7	12.5	9.9	15.9	16.8	12.4	11.3	12.4	12.2	11.2	16.0	7.4	16.8

แผนภูมิค่าเฉลี่ยอัตราการระเหยของน้ำรายเดือน (average monthly evaporation from U.S. class "A" pan)

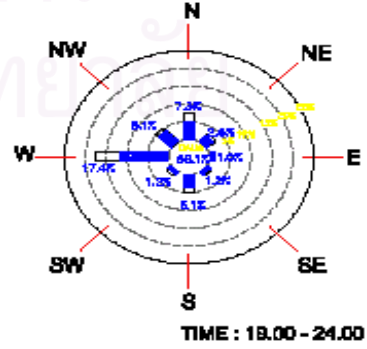
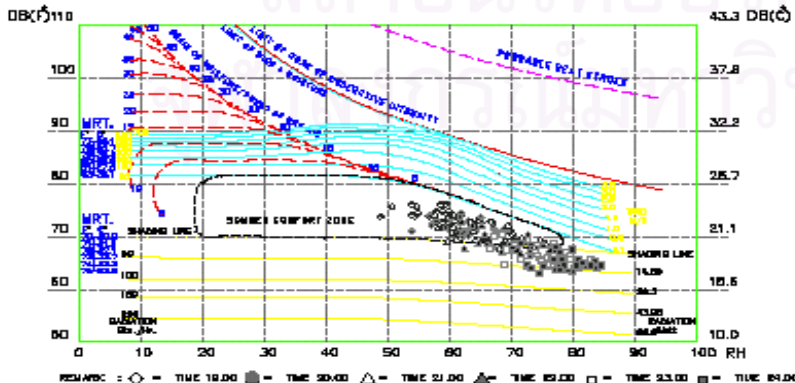
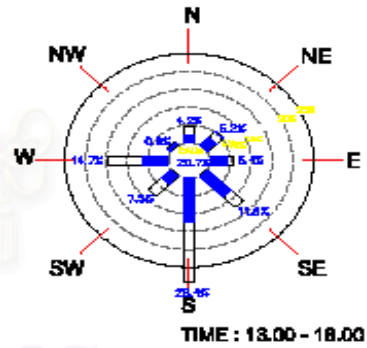
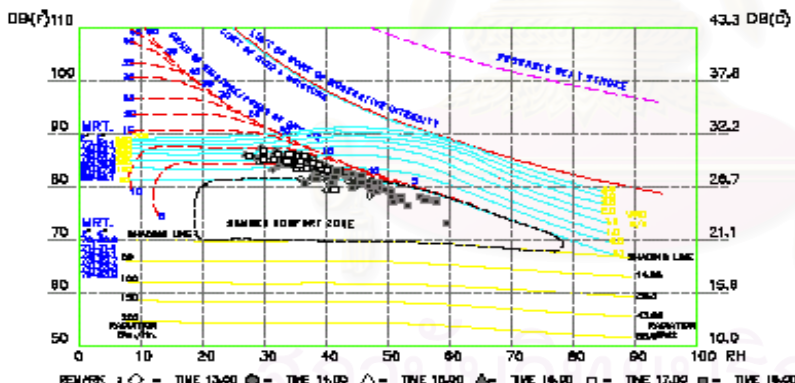
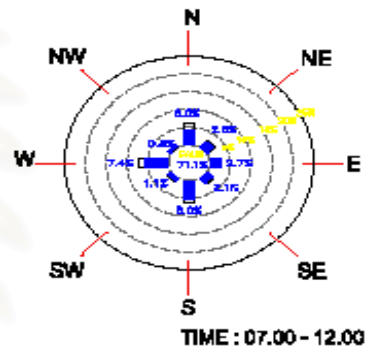
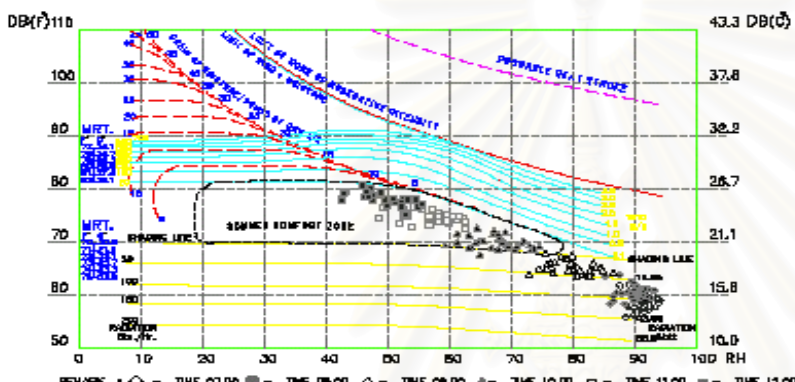
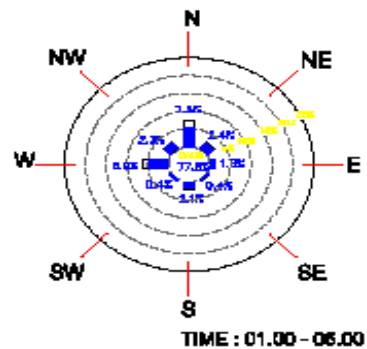
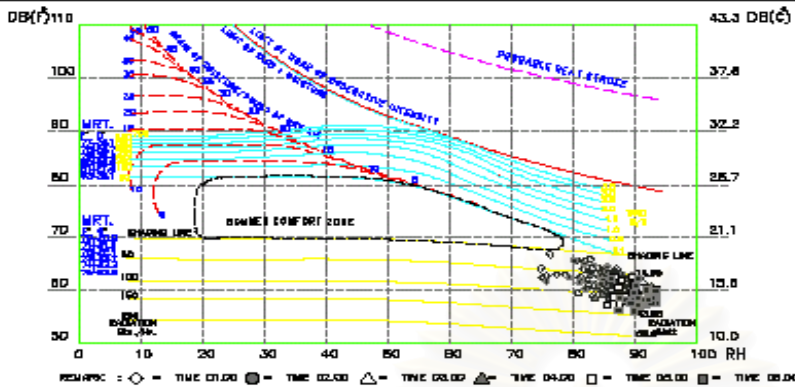
AVERAGE MONTHLY EVAPORATION (mm) from U.S. class "A" pan 1981 - 1998 (2524 - 2541) Station : CHIANG MAI



remark : recorded every 3 hours

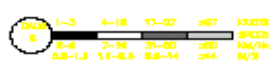
แผนภูมิระหว่างความสัมพันธ์ระหว่างข้อมูลสภาวะอากาศในแผนภูมิไบโอไคลเมตริก (bioclimatic chart) กับแผนภูมิแสดงความถี่ของลมในแต่ละความเร็วและทิศทางที่เกิดลมรายเดือน (wind rose) แยกตามช่วงเวลา

BIOCLIMATIC CHART & WIND ROSE : JANUARY 1981-1998 (2524-2541) Station : CHIANG MAI



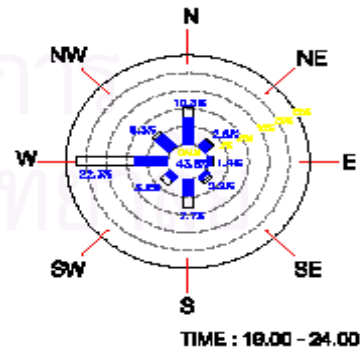
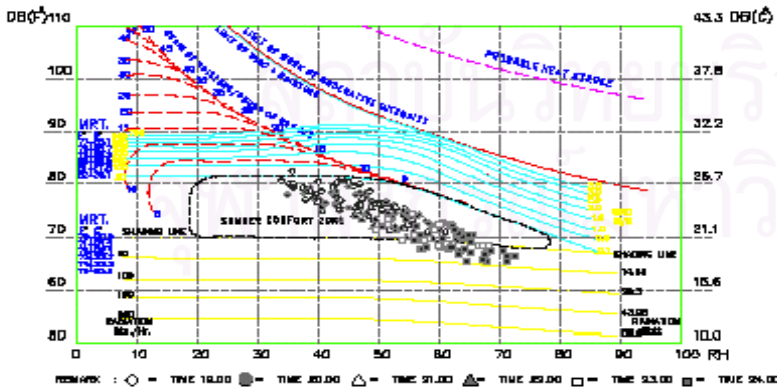
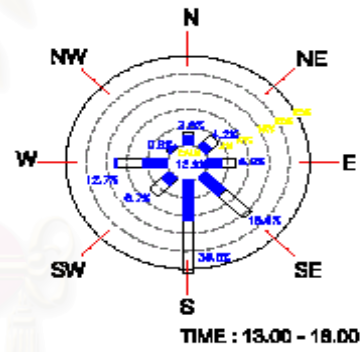
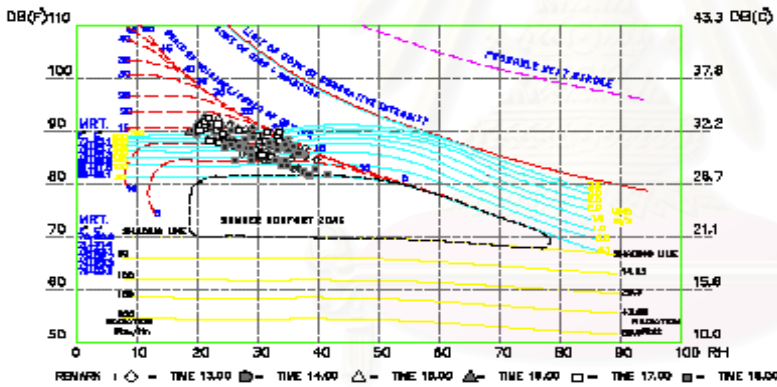
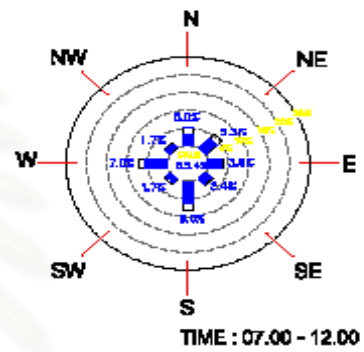
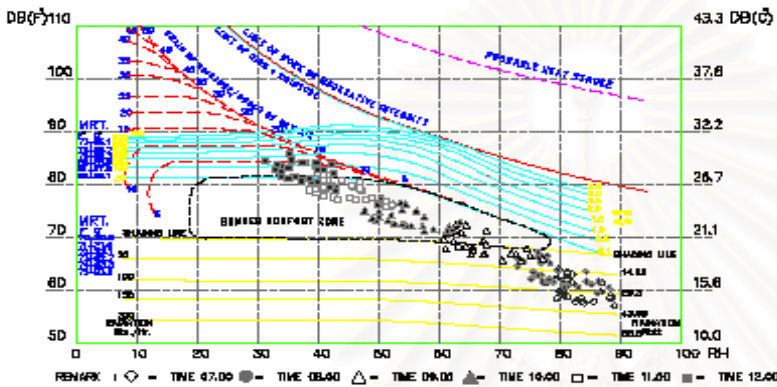
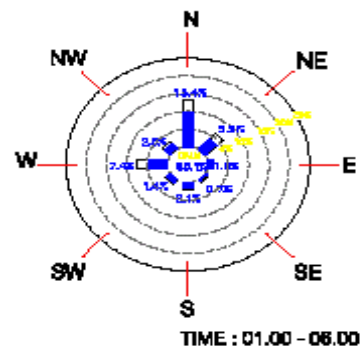
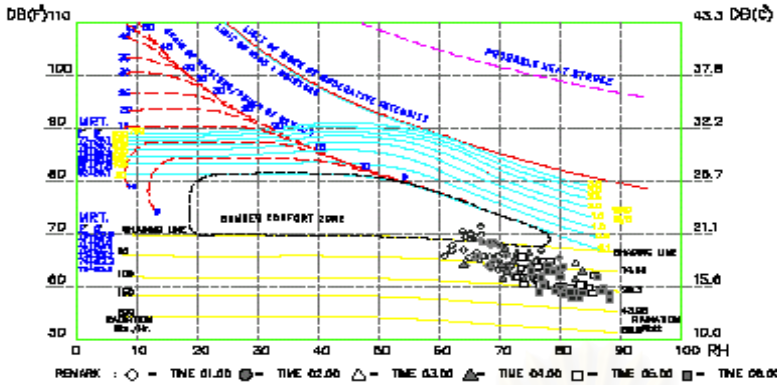
BIOCLIMATIC CHART

WIND ROSE



BIOCLIMATIC CHART & WIND ROSE : FEBRUARY 1991-1999 (2524-2541)

Station : CHIANG MAI

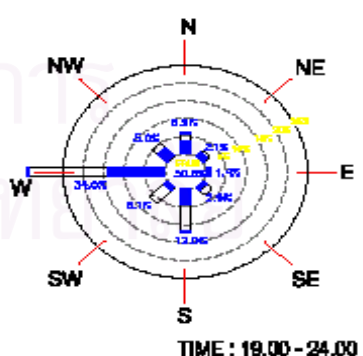
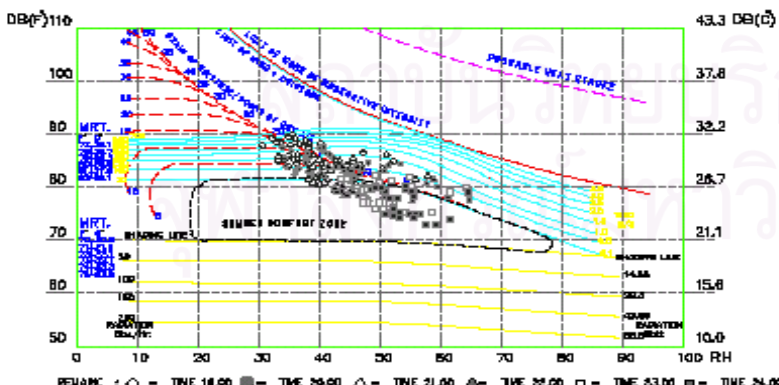
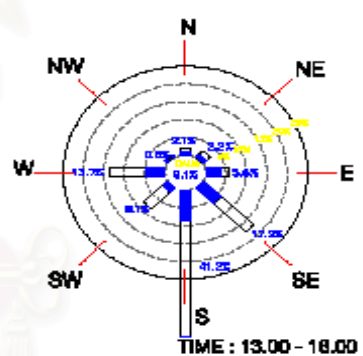
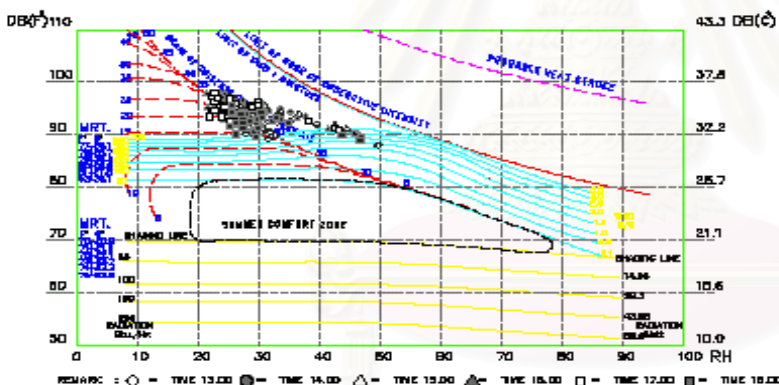
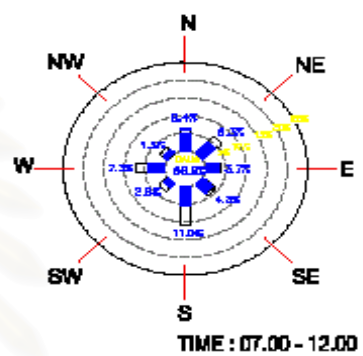
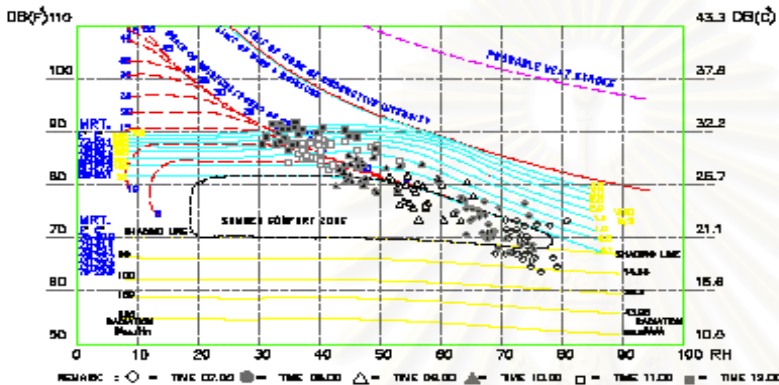
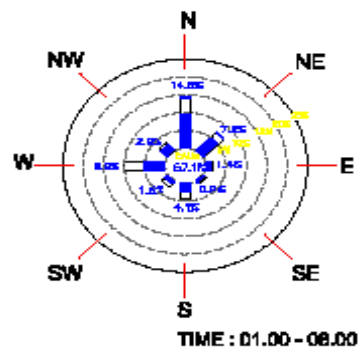
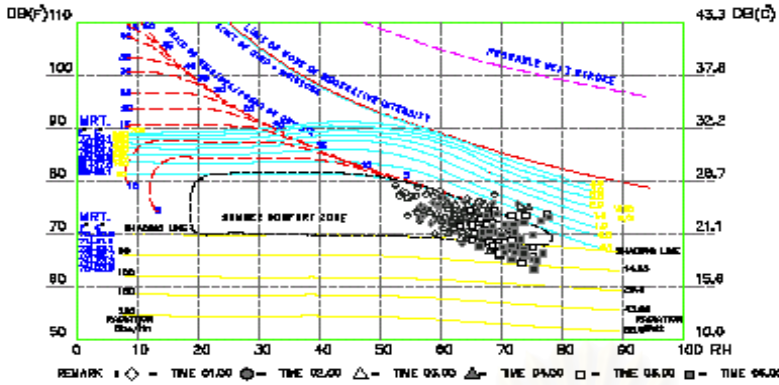


BIOCLIMATIC CHART

WIND ROSE



BIOCLIMATIC CHART & WIND ROSE : MARCH 1981-1998 (2524-2541) Station : CHIANG MAI

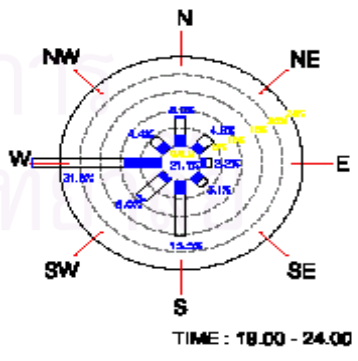
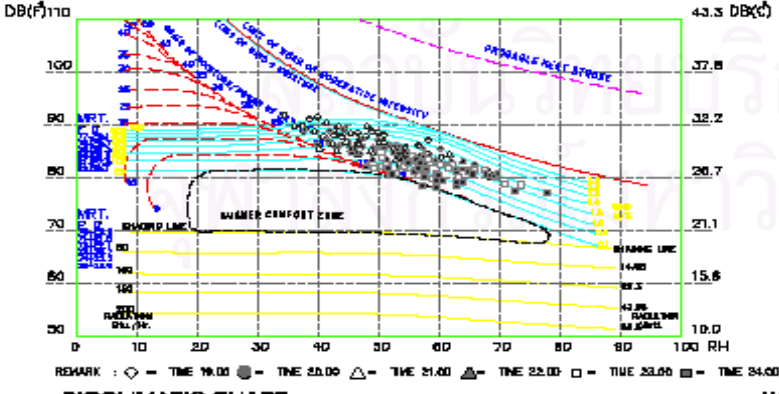
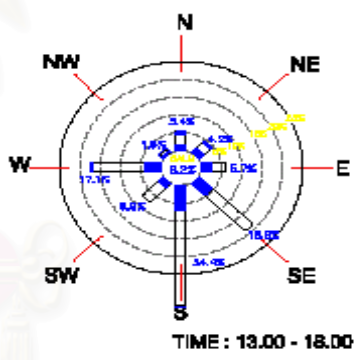
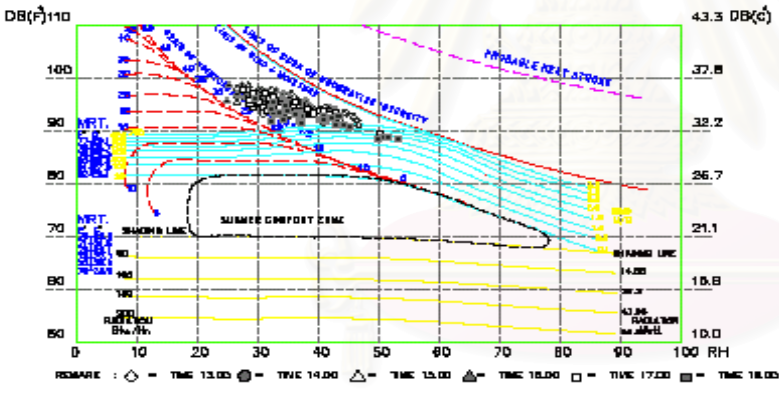
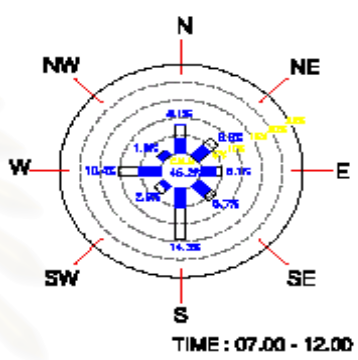
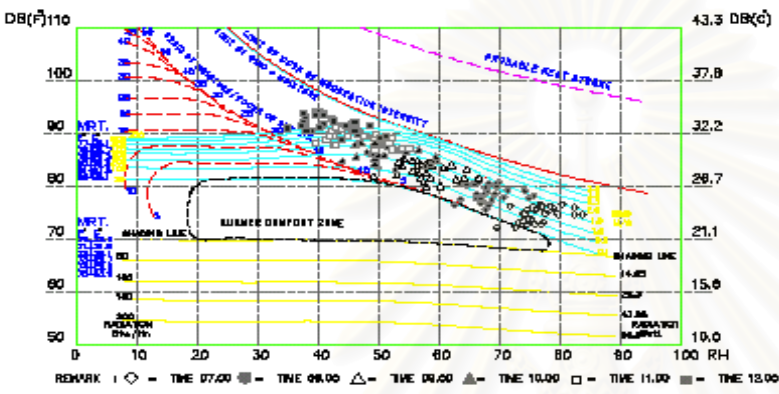
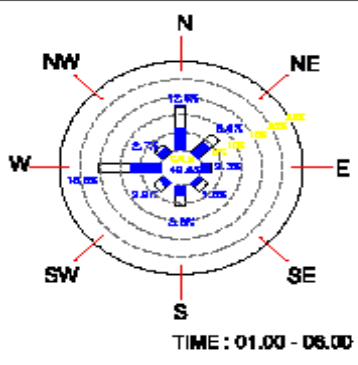
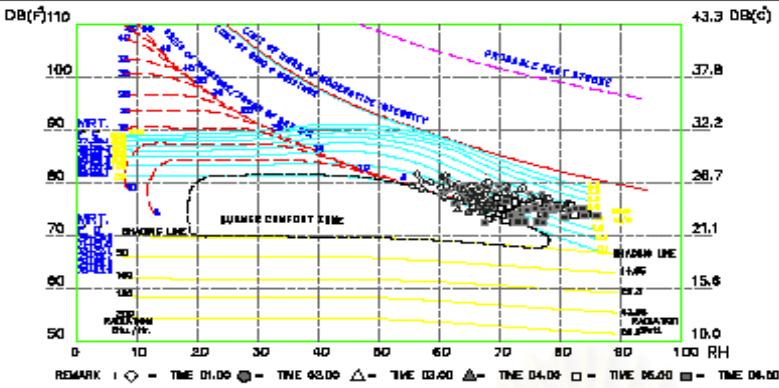


BIOCLIMATIC CHART

WIND ROSE



BIOCLIMATIC CHART & WIND ROSE : APRIL 1961-1998 (2524-2641) Station : CHIANG MAI



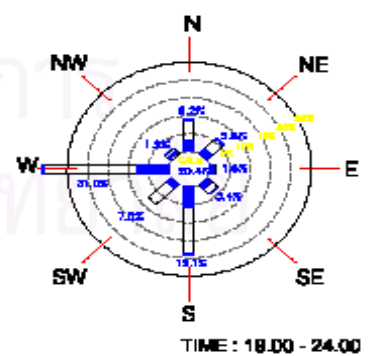
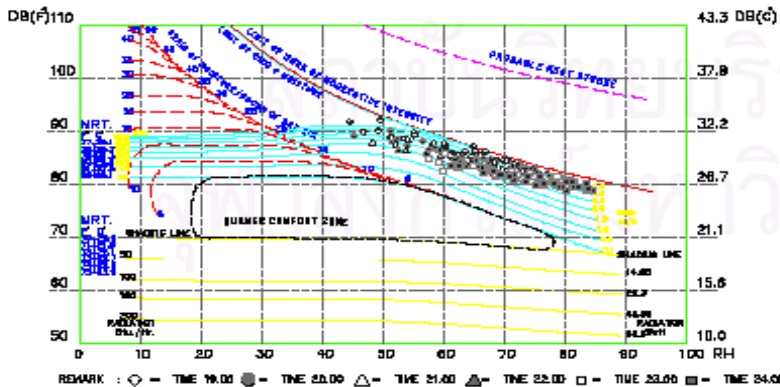
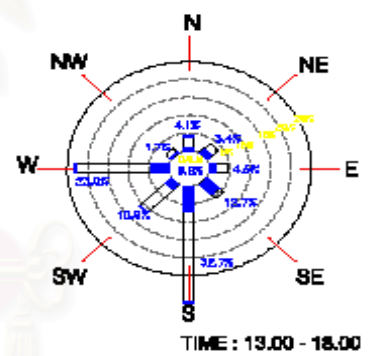
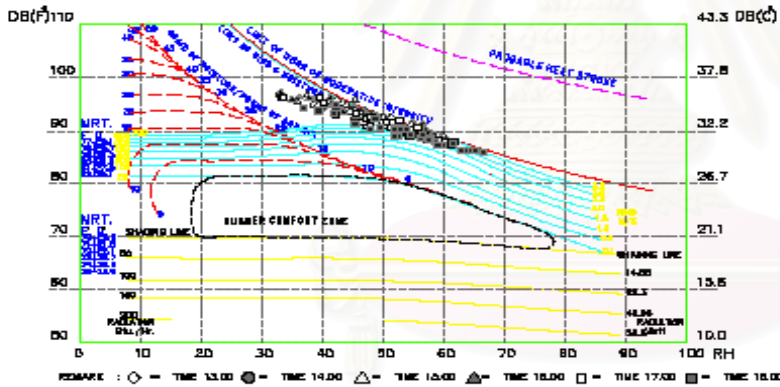
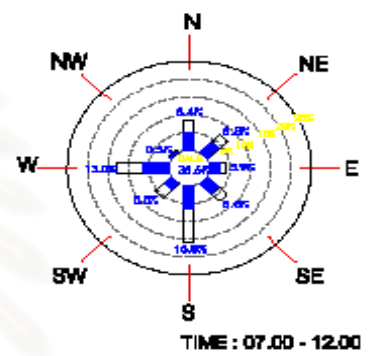
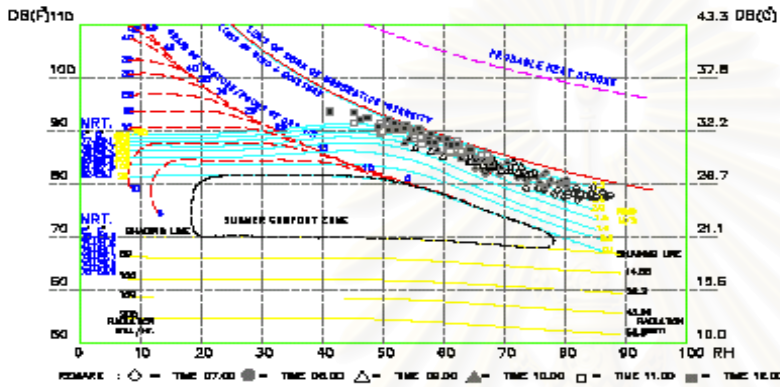
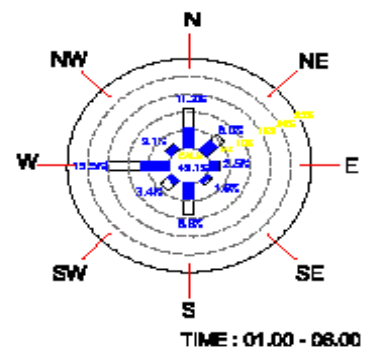
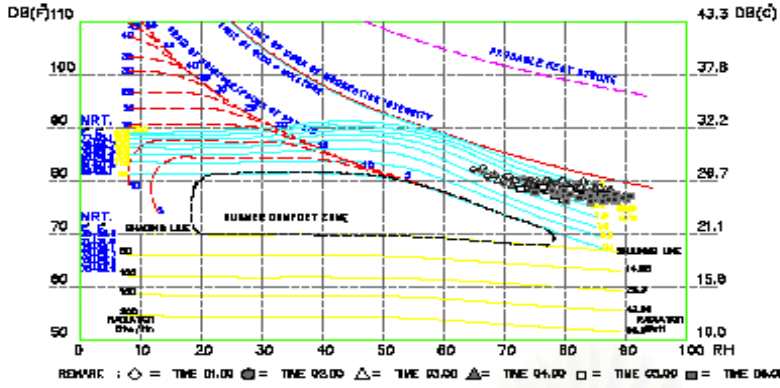
BIOCLIMATIC CHART



BIOCLIMATIC CHART & WIND ROSE : MAY

1981-1986 (2534-2541)

Station : CHIANG MAI

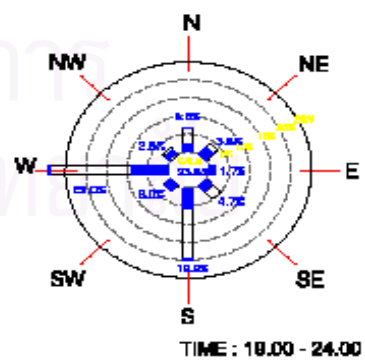
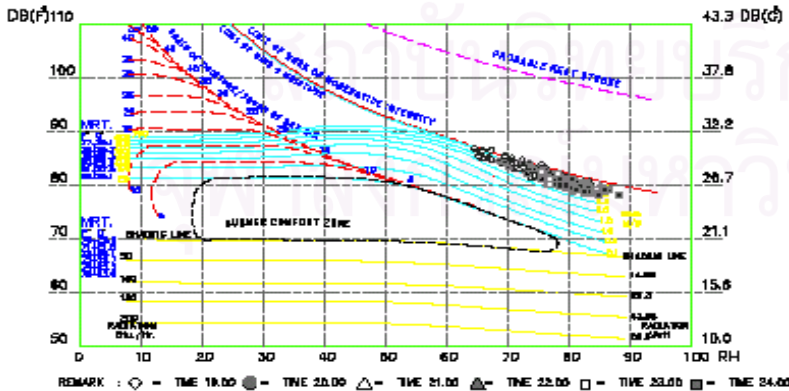
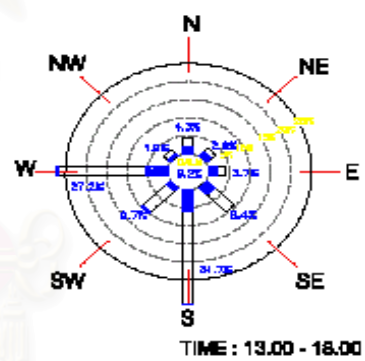
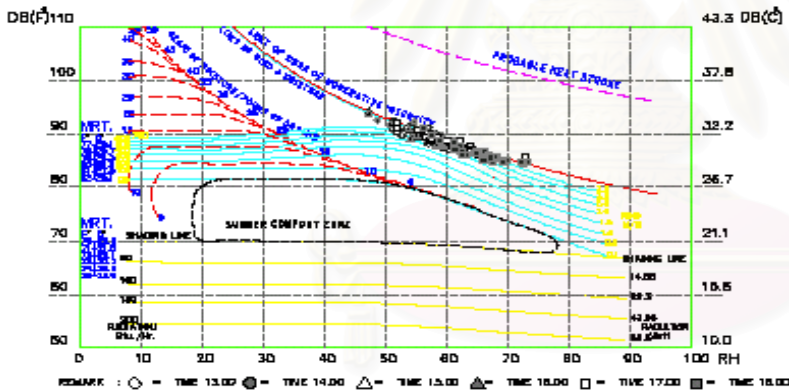
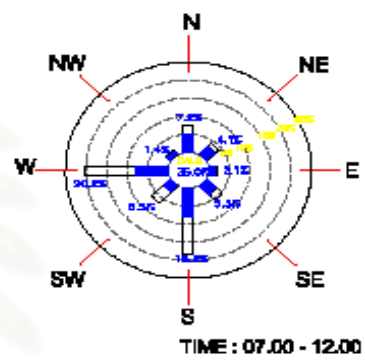
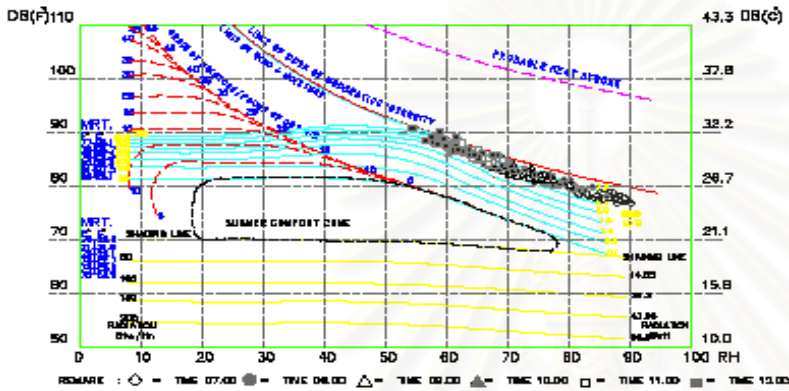
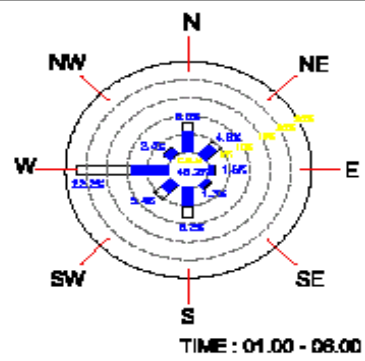
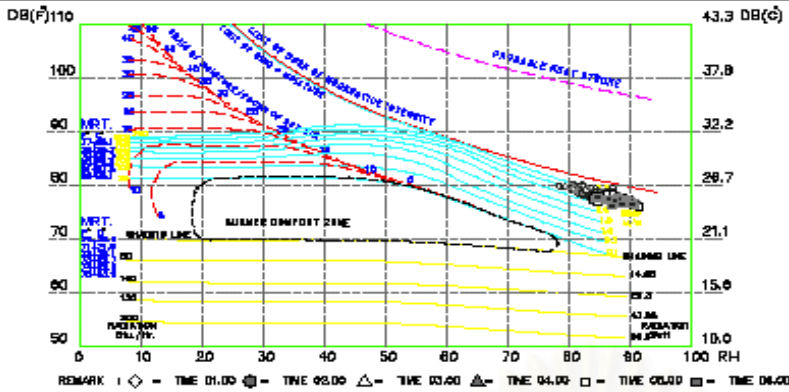


BIOCLIMATIC CHART

WIND ROSE



BIOCLIMATIC CHART & WIND ROSE : JUNE 1961-1996 (2524-2541) Station : CHIANG MAI

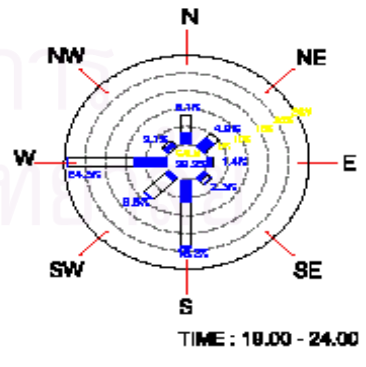
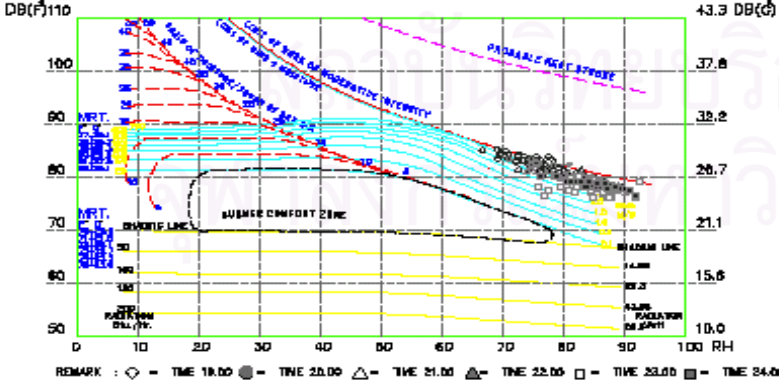
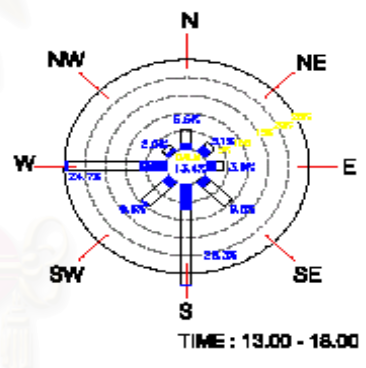
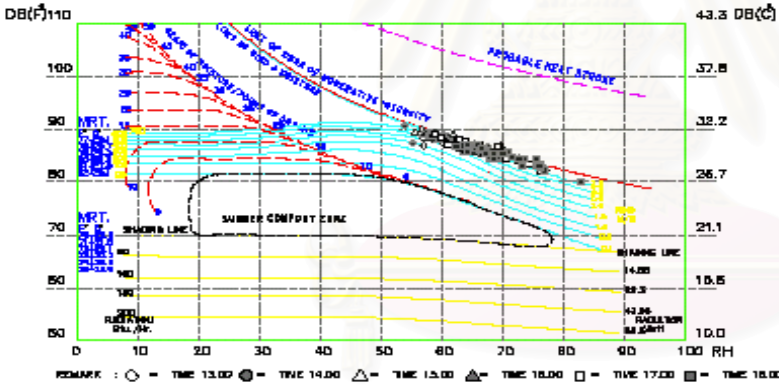
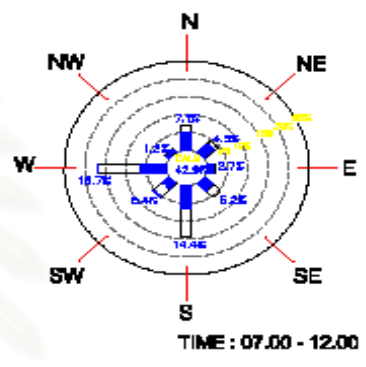
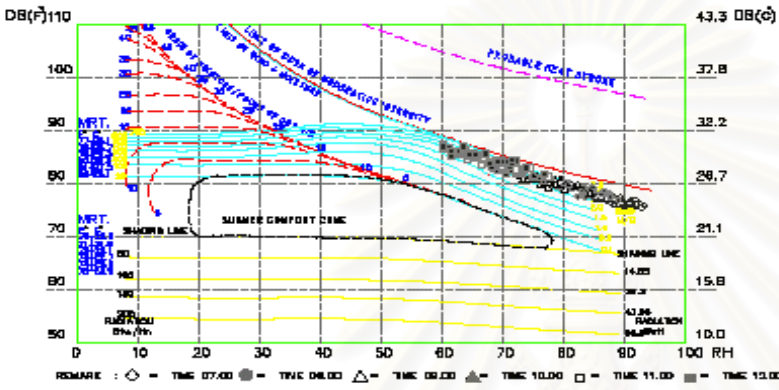
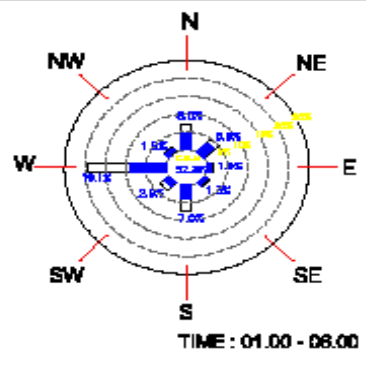
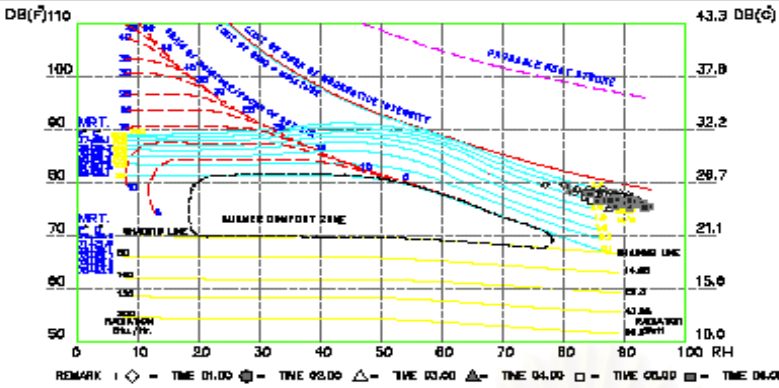


BIOCLIMATIC CHART

WIND ROSE



BIOCLIMATIC CHART & WIND ROSE : JULY Year 1981-1998 (2524-2541) Station : CHIANG MAI

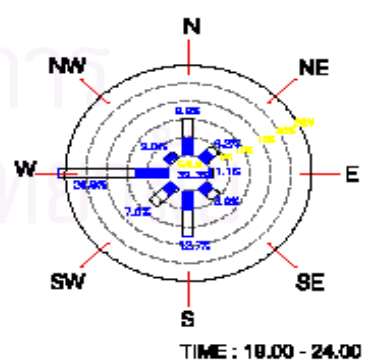
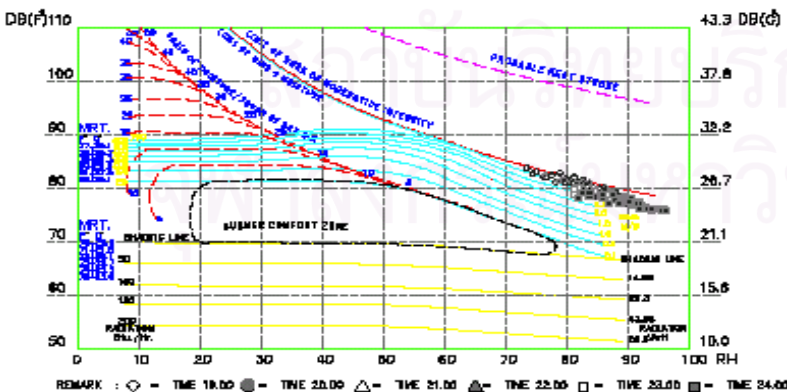
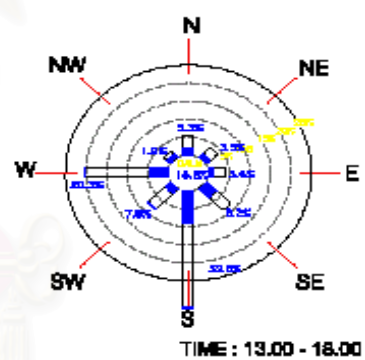
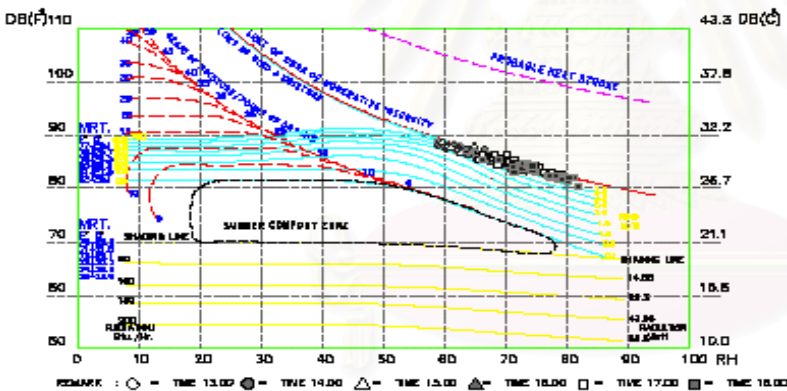
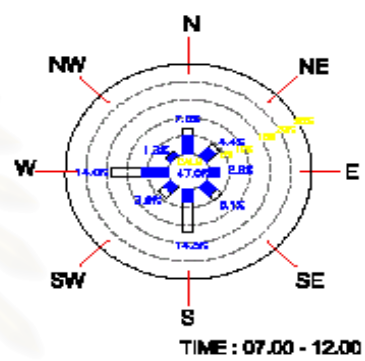
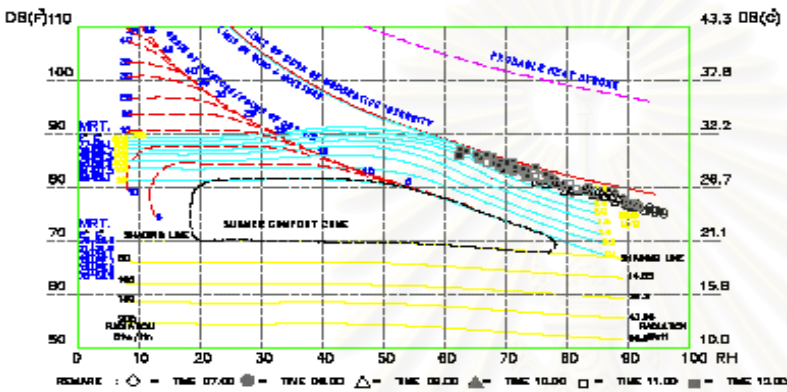
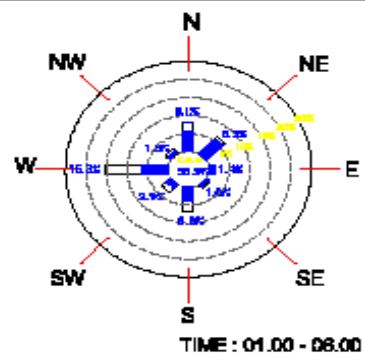
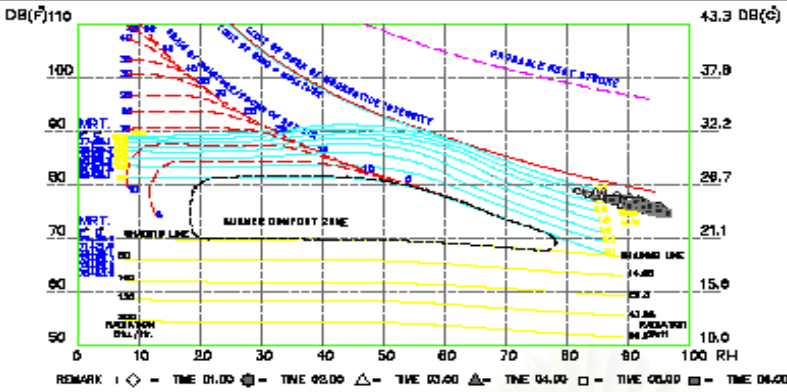


BIOCLIMATIC CHART

WIND ROSE



BIOCLIMATIC CHART & WIND ROSE : AUGUST 1961-1996 (2524-2541) Station : CHIANG MAI

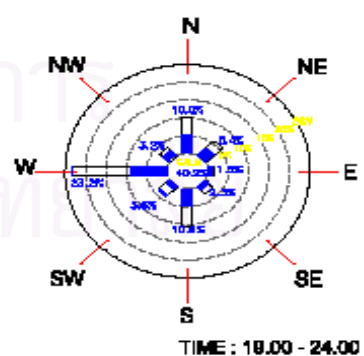
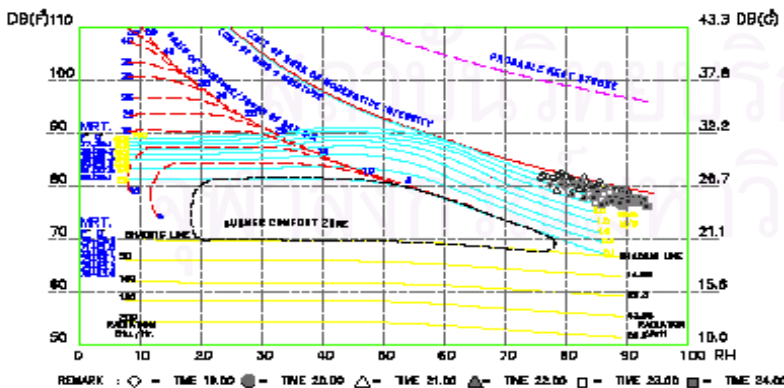
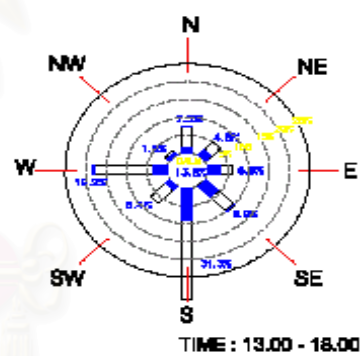
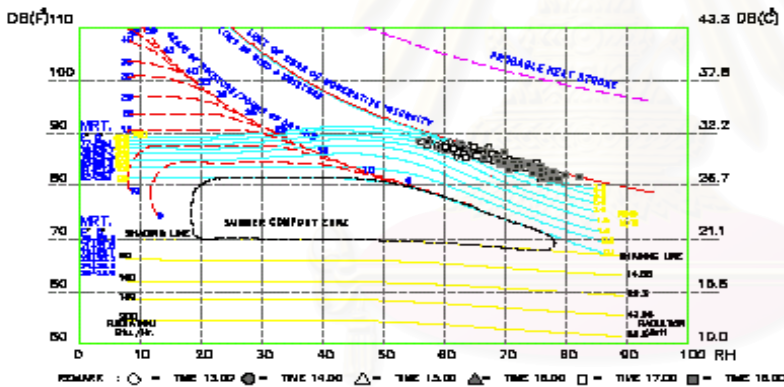
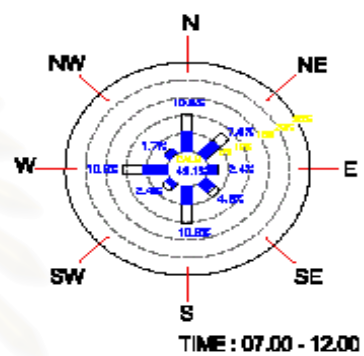
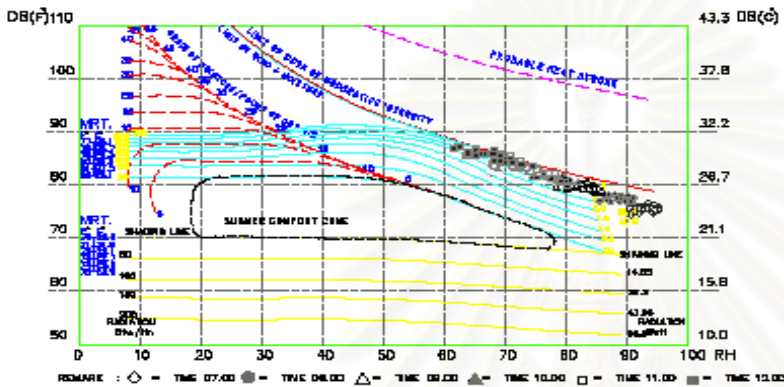
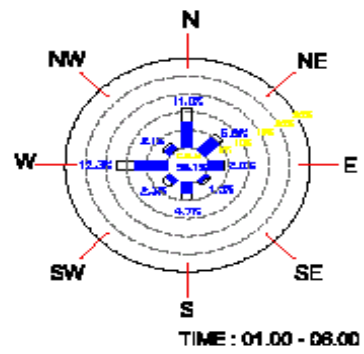
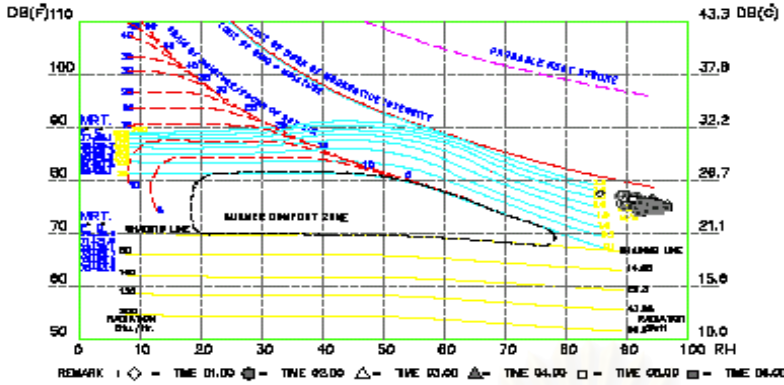


BIOCLIMATIC CHART



BIOCLIMATIC CHART & WIND ROSE : SEPTEMBER 1961-1996 (2524-2541)

Station : CHIANG MAI

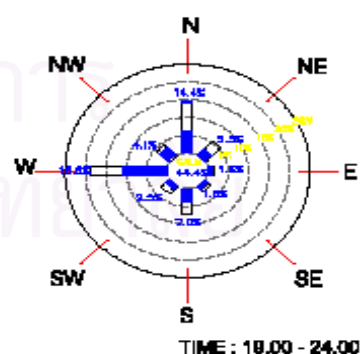
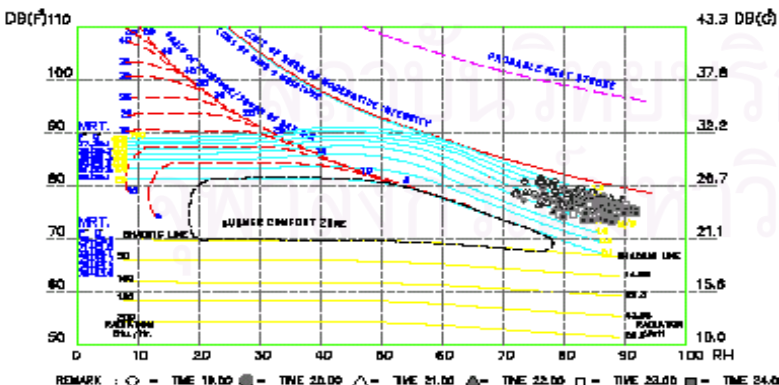
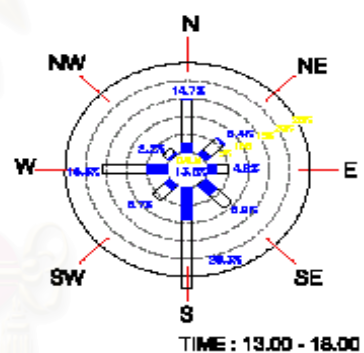
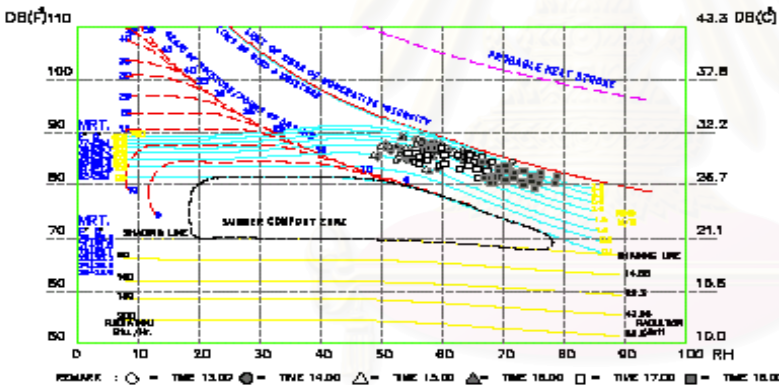
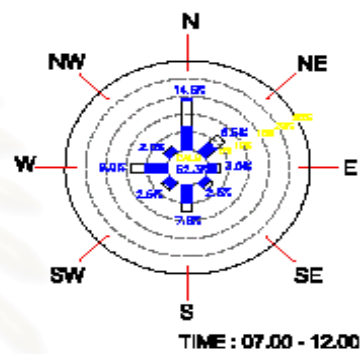
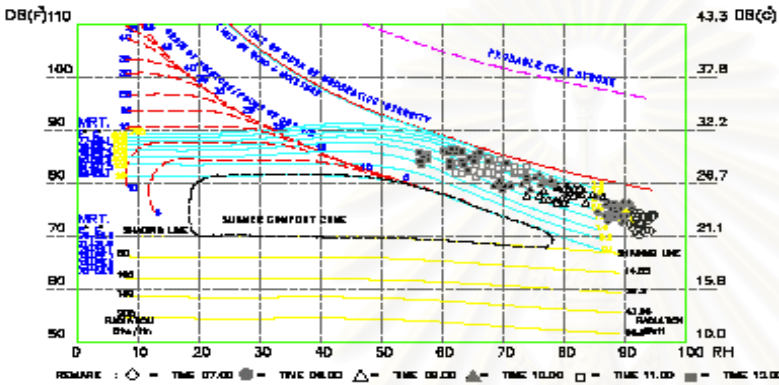
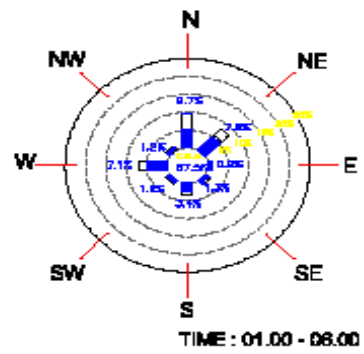
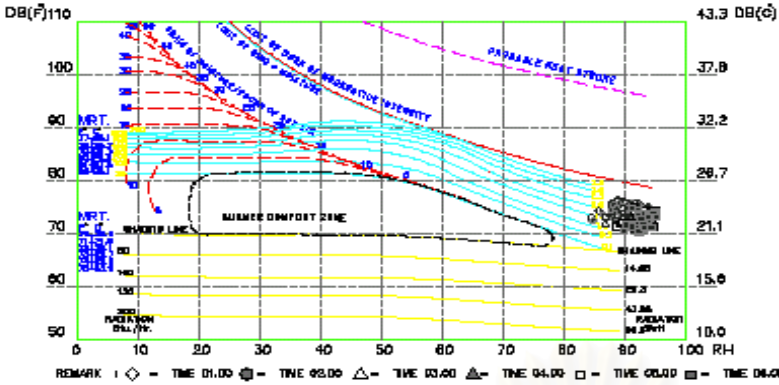


BIOCLIMATIC CHART

WIND ROSE



BIOCLIMATIC CHART & WIND ROSE : OCTOBER 1961-1996 (2524-2541) Station : CHIANG MAI

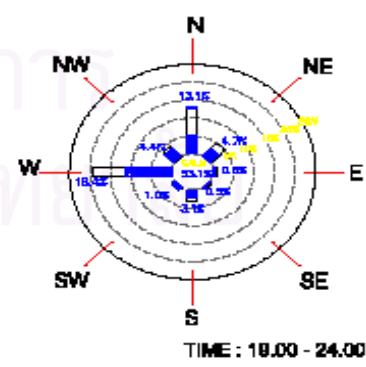
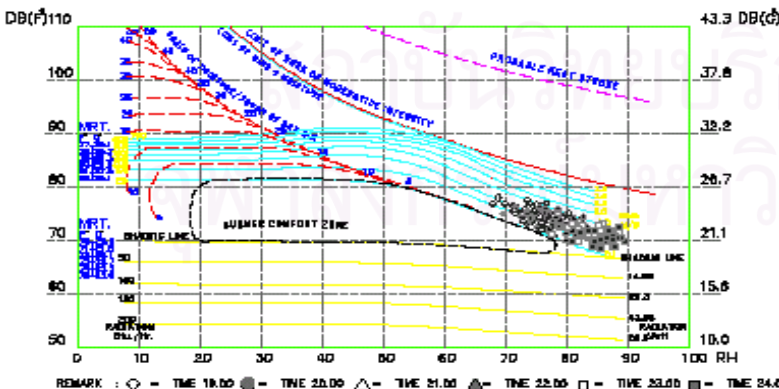
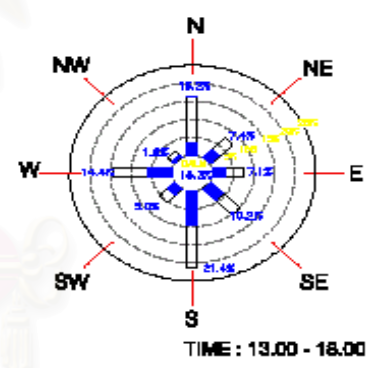
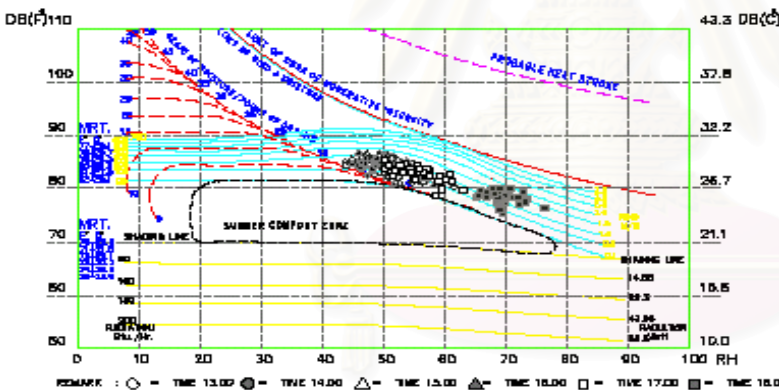
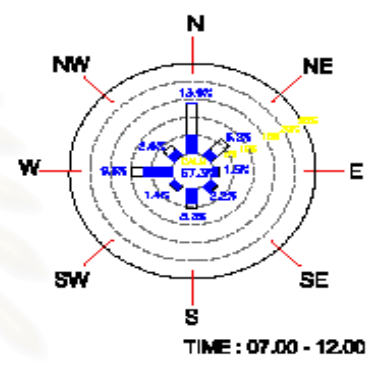
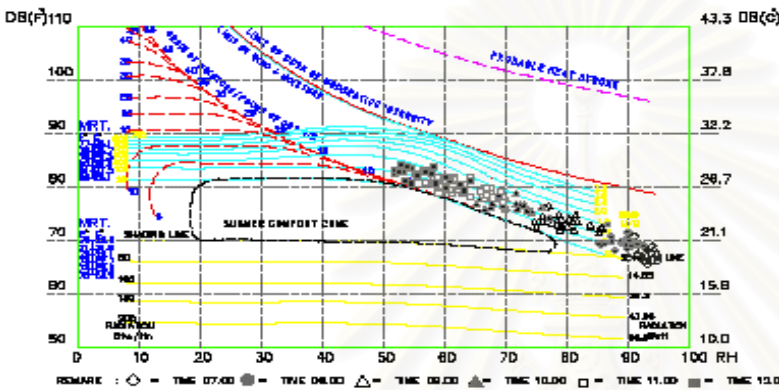
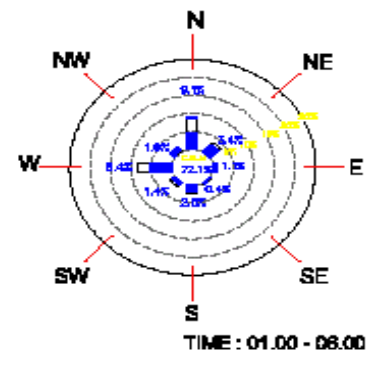
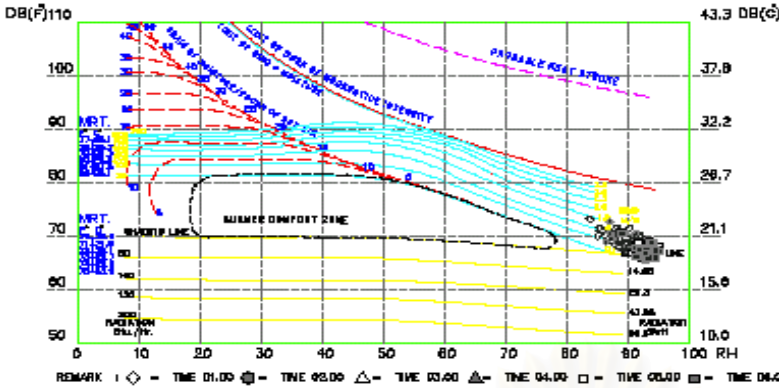


BIOCLIMATIC CHART

WIND ROSE



BIOCLIMATIC CHART & WIND ROSE : NOVEMBER 1961-1966 (2524-2541) Station : CHIANG MAI

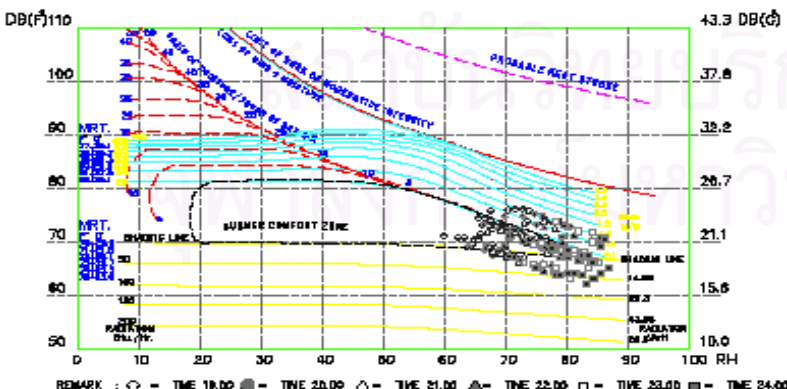
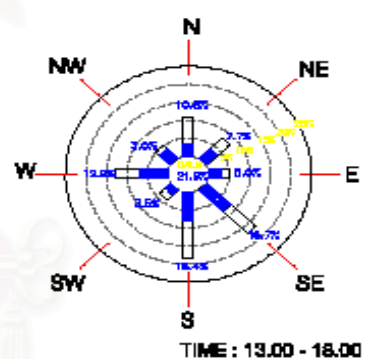
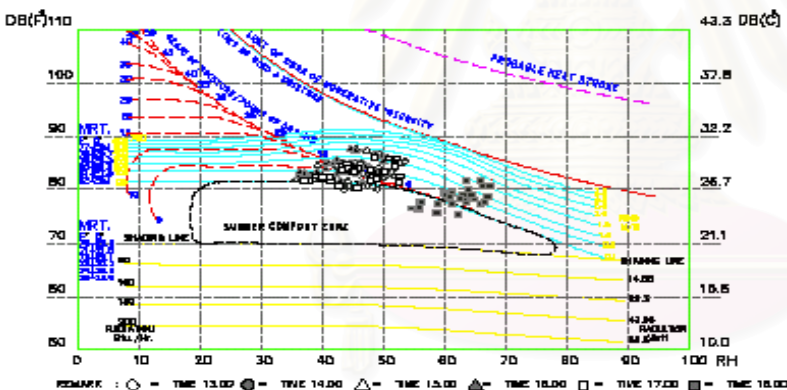
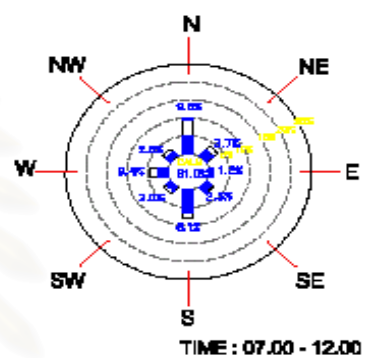
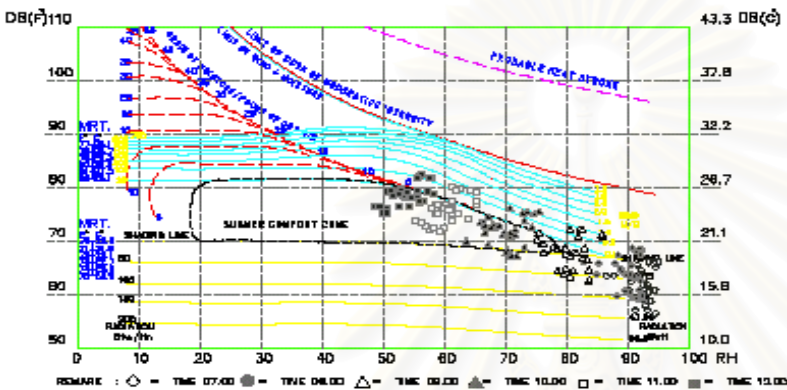
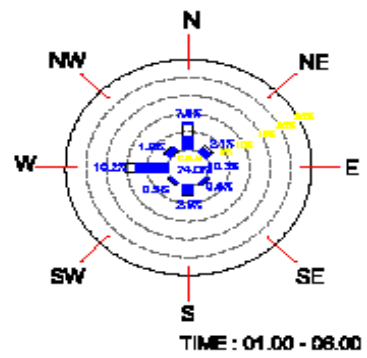
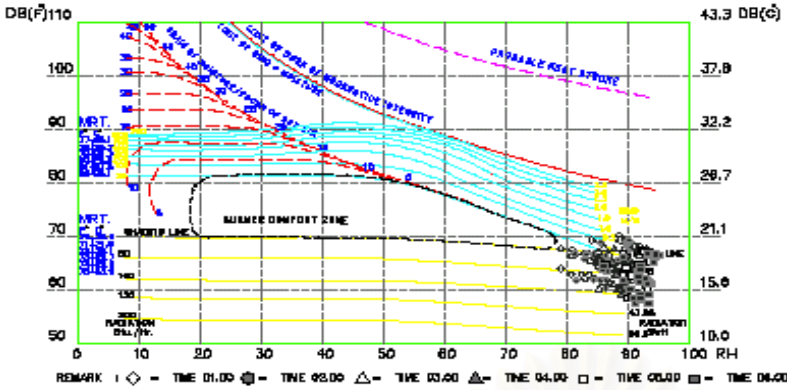


BIOCLIMATIC CHART

WIND ROSE



BIOCLIMATIC CHART & WIND ROSE : DECEMBER Year 1981-1986 (2524-2541) Station : CHIANG MAI



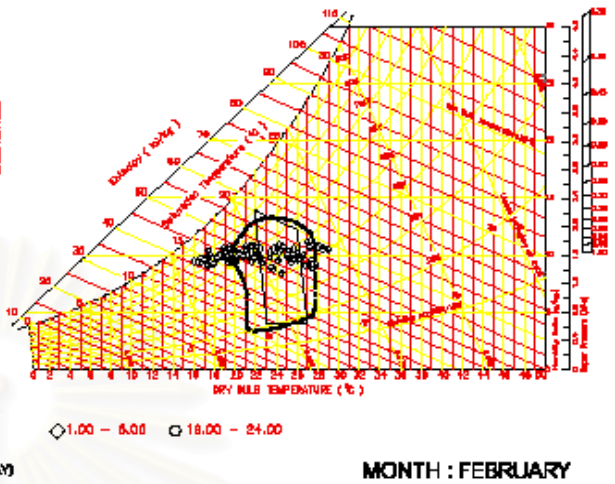
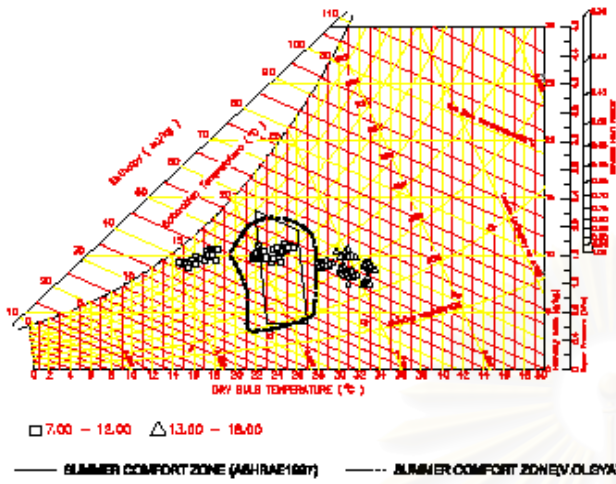
BIOCLIMATIC CHART

WIND ROSE

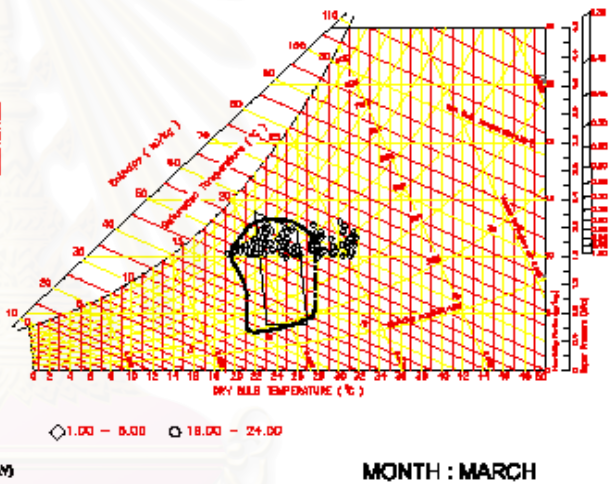
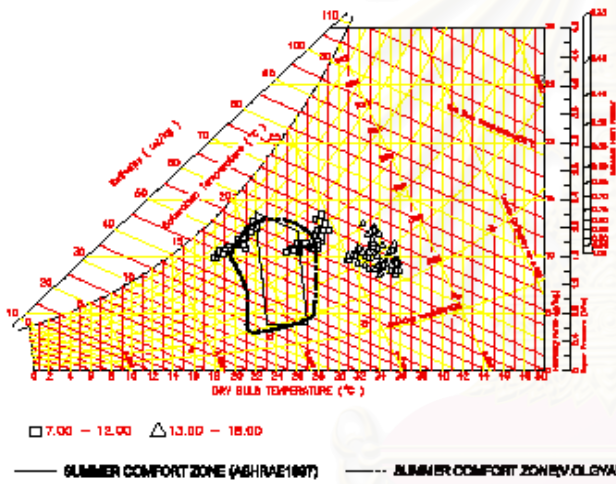


แผนภูมิความสัมพันธ์ระหว่างข้อมูลสภาวะอากาศ ในแผนภูมิไซโครเมตริก (psychrometric chart) แยกตามช่วงเวลา

PSYCHROMETRIC CHART 1980 - 1998 (2529 - 2541) STATION : CHIANG MAI



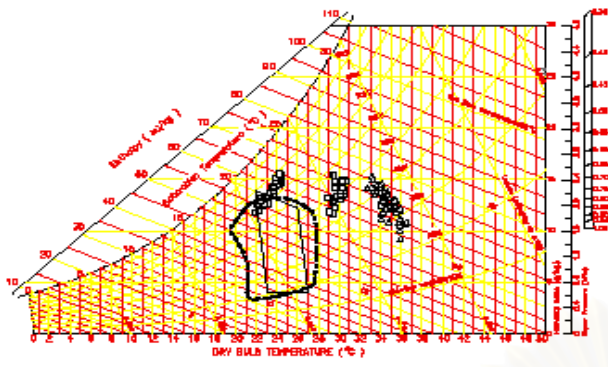
MONTH : FEBRUARY



MONTH : MARCH

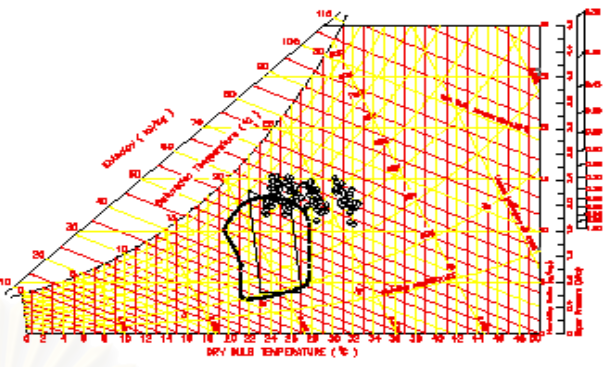
สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย

PSYCHROMETRIC CHART 1996 - 1998 (2529 - 2541) STATION : CHIANG MAI



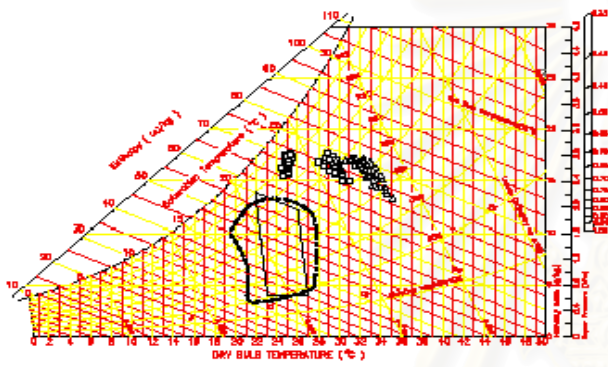
□ 7.00 - 12.00 △ 13.00 - 18.00

— SUMMER COMFORT ZONE (ASHRAE1997) - - - SUMMER COMFORT ZONE (V.O.L.E.V.A.Y)



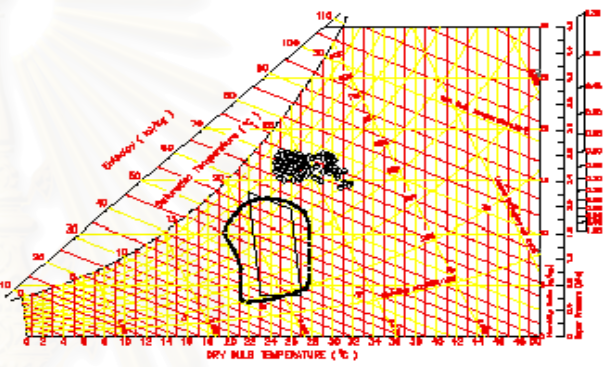
◇ 1.00 - 5.00 ○ 18.00 - 24.00

MONTH : APRIL



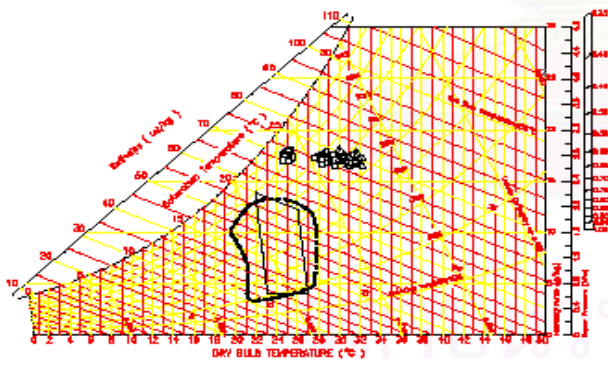
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— SUMMER COMFORT ZONE (ASHRAE1997) - - - SUMMER COMFORT ZONE (V.O.L.E.V.A.Y)



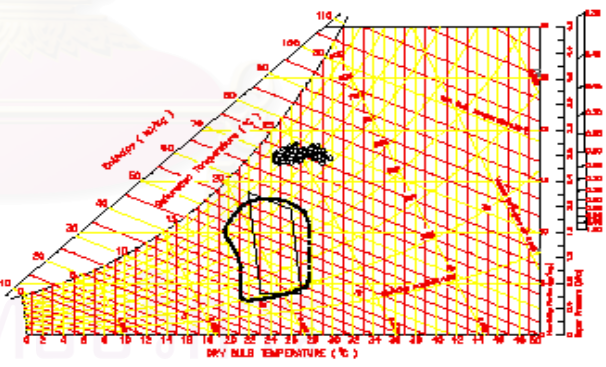
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MONTH : MAY



□ 7.00 - 12.00 △ 13.00 - 18.00

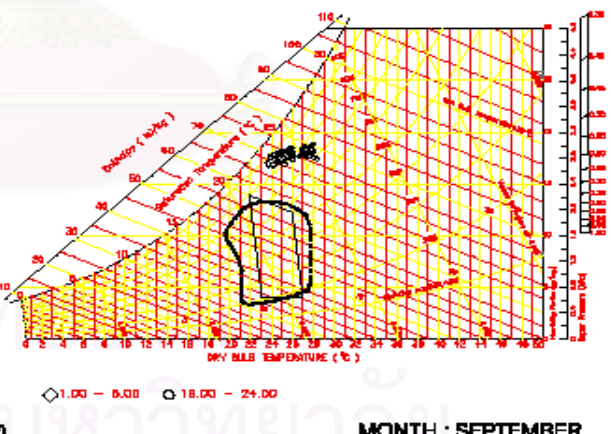
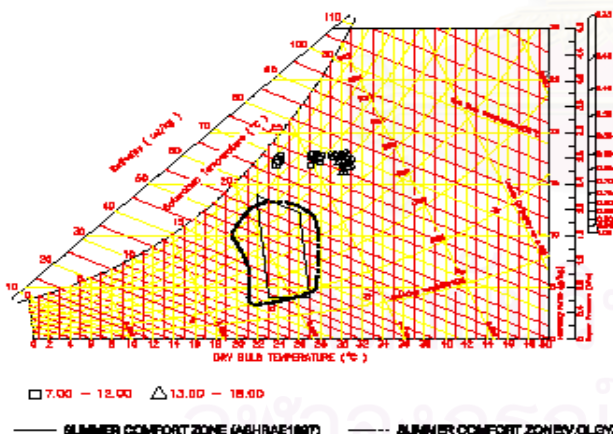
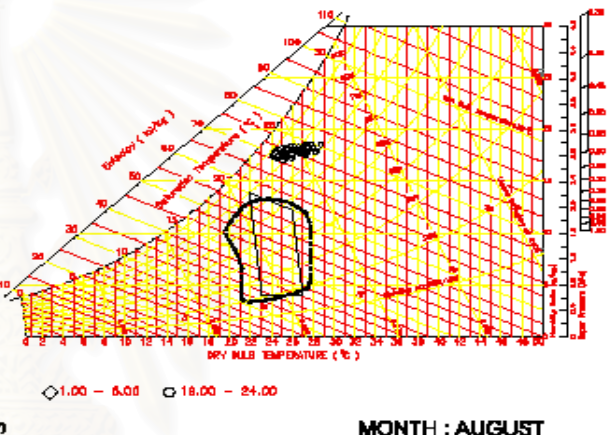
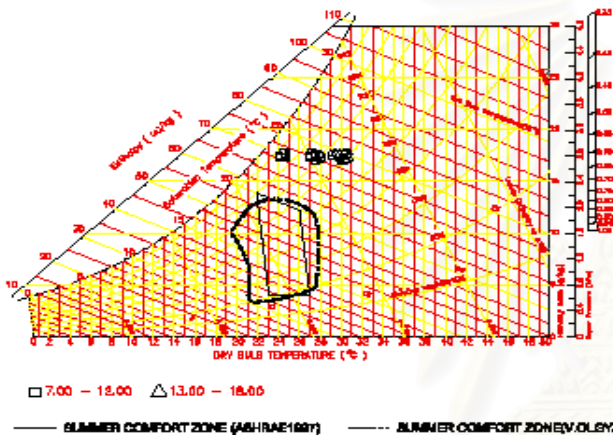
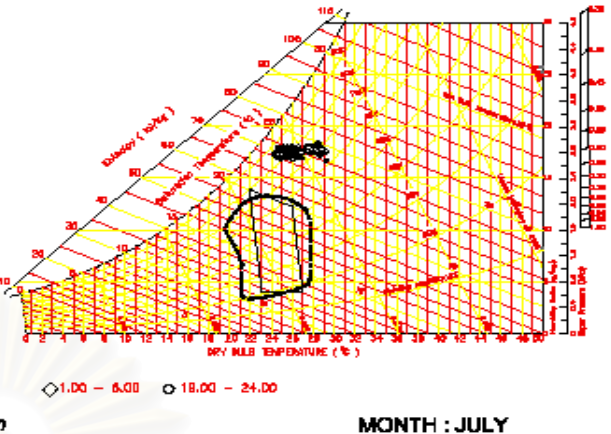
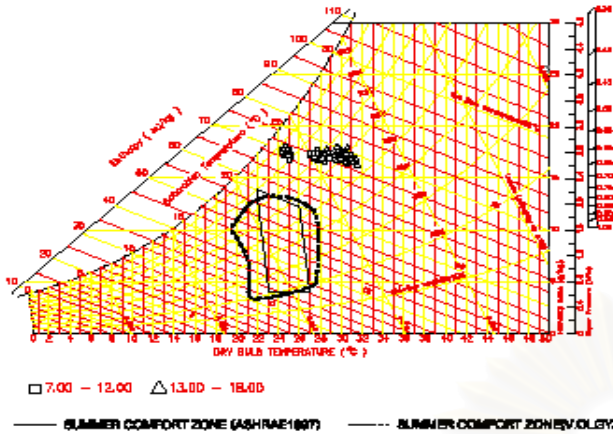
— SUMMER COMFORT ZONE (ASHRAE1997) - - - SUMMER COMFORT ZONE (V.O.L.E.V.A.Y)



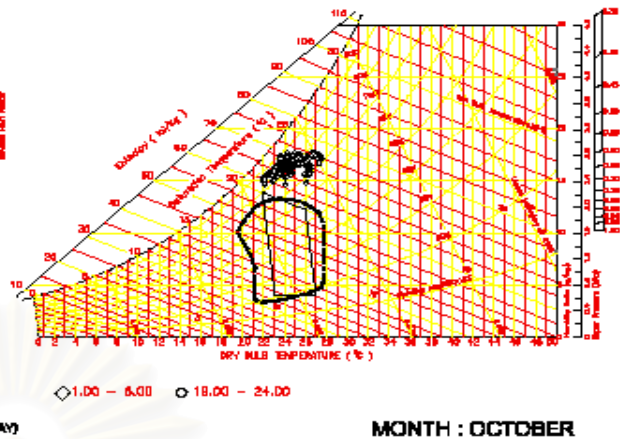
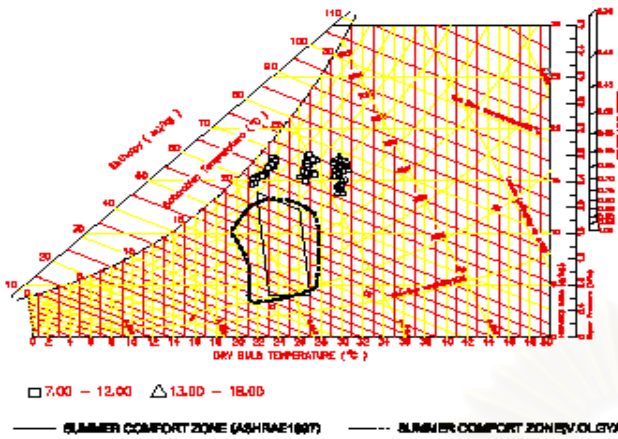
◇ 1.00 - 5.00 ○ 18.00 - 24.00

MONTH : JUNE

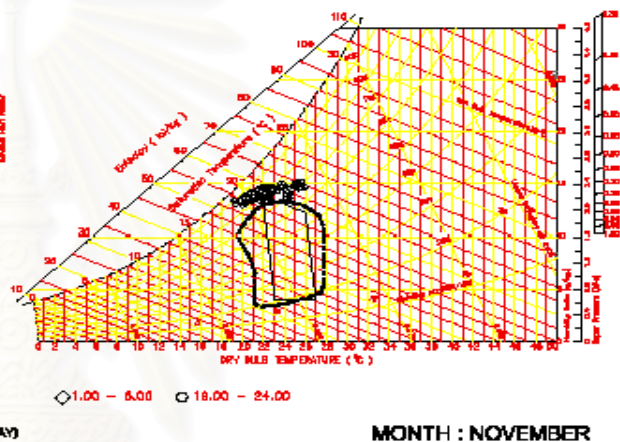
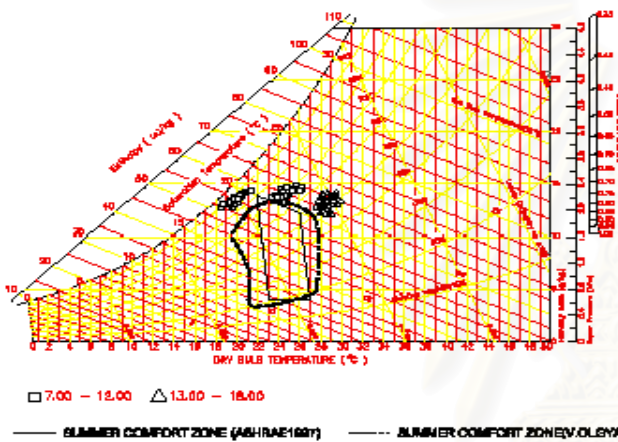
PSYCHROMETRIC CHART 1986 - 1998 (2529 - 2541) STATION : CHIANG MAI



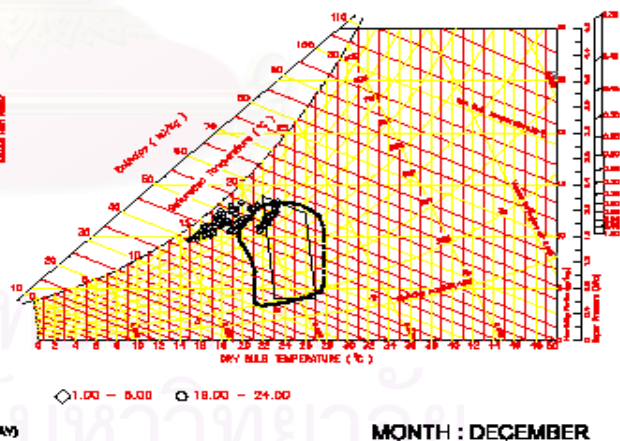
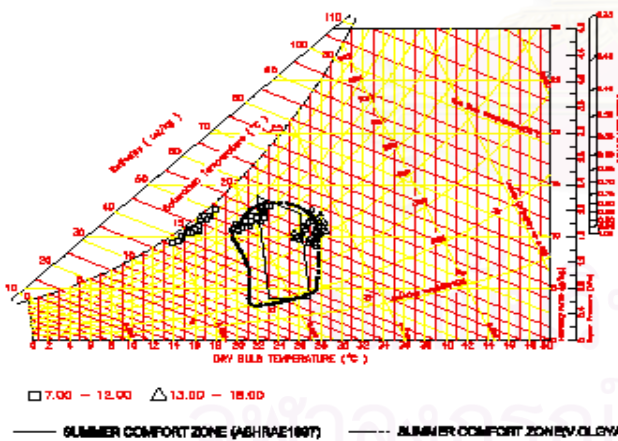
PSYCHROMETRIC CHART 1988 - 1998 (2529 - 2541) STATION : CHIANG MAI



MONTH : OCTOBER



MONTH : NOVEMBER



MONTH : DECEMBER

ตารางแสดงผลข้อมูลจำนวนรายชั่วโมงอุณหภูมิกระเปาะแห้ง และค่าเฉลี่ยอุณหภูมิกระเปาะเปียกที่เกิดขึ้น จำแนกตามช่วงอุณหภูมิกระเปาะแห้ง (bin data) ในแต่ละช่วงเวลา

ANNUAL BIN-HOUR WEATHER DATA								STATION : CHIANG MAI	
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			
°C	Annual							°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				15 (21.2)	1 (21.9)		16 (21.5)	100 / 104	
35.0 / 37.2			8 (23.5)	107 (22.6)	48 (21.9)		163 (22.7)	95 / 99	
32.2 / 34.4			54 (24.5)	248 (24.1)	103 (23.2)	5 (21.7)	410 (23.4)	90 / 94	
29.4 / 31.7	1 (23.2)		272 (23.7)	542 (23.4)	257 (23.0)	51 (23.2)	1,123 (23.3)	85 / 89	
26.7 / 28.9	51 (23.2)	52 (23.1)	525 (22.5)	397 (22.7)	429 (22.6)	227 (22.8)	1,681 (22.8)	80 / 84	
23.9 / 26.1	623 (22.6)	512 (22.7)	354 (21.9)	133 (21.8)	400 (21.9)	639 (22.0)	2,661 (22.2)	75 / 79	
21.1 / 23.3	396 (21.4)	450 (21.6)	137 (20.5)	17 (21.2)	166 (21.1)	284 (21.1)	1,450 (21.2)	70 / 74	
18.3 / 20.6	149 (18.0)	146 (18.9)	76 (17.2)	4 (18.5)	53 (16.8)	162 (17.1)	590 (17.8)	65 / 69	
15.6 / 17.8	145 (14.8)	122 (15.7)	33 (15.2)	1 (17.4)	7 (15.6)	87 (15.5)	395 (15.7)	60 / 64	
12.8 / 15.0	89 (13.3)	145 (13.3)	5 (13.2)			9 (13.6)	248 (13.3)	55 / 59	
10.0 / 12.2	10 (11.0)	37 (11.3)					47 (11.1)	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) °C

Temperature (Celsius deg.) C = (deg.F-32) * 5 / 9

BIN-HOUR WEATHER DATA Hours of occurrence of DB in each bin with MCWB in parentheses																						STATION : CHIANG MAI											
Temperature range °C	Observation hour group						Total Observation	MCWB	Observation hour group						Total Observation	MCWB	Temperature range °F																
	01:00	05:00	09:00	13:00	17:00	21:00			01:00	05:00	09:00	13:00	17:00	21:00				01:00	05:00	09:00	13:00	17:00	21:00										
	to	to	to	to	to	to			to	to	to	to	to	to				to	to	to	to	to	to										
	04:00	08:00	12:00	16:00	20:00	24:00			04:00	08:00	12:00	16:00	20:00	24:00				04:00	08:00	12:00	16:00	20:00	24:00										
January								February								March																	
40.6 / 142.8																			105 / 100														
37.8 / 140.0																			3 (20.0)	103 / 104													
35.0 / 137.3										1 (19.5)	1 (19.1)							1 (22.0)	46 (21.7)	21 (21.0)	60 (22.1)	95 / 99											
32.2 / 134.4										27 (19.5)	9 (19.9)							36 (19.2)	15 (21.7)	55 (21.1)	20 (20.3)	2 (21.8)	102 (21.2)	93 / 94									
29.4 / 131.7				41 (18.5)	12 (17.9)					7 (19.9)	27 (19.7)	15 (19.4)						59 (19.7)	43 (21.0)	18 (21.3)	40 (20.1)	15 (20.7)	116 (20.8)	85 / 89									
26.7 / 128.9				10 (18.3)	61 (18.3)	21 (18.0)				34 (19.0)	29 (18.6)	26 (18.6)	4 (18.8)						80 (18.7)	3 (20.1)	2 (20.8)	40 (20.2)	1 (21.9)	31 (20.1)	30 (19.8)	116 (20.5)	83 / 84						
23.9 / 126.1				32 (17.4)	20 (17.1)	22 (17.4)	2 (16.2)				4 (21.8)		20 (18.5)	9 (18.1)	25 (18.4)	9 (18.4)								76 (19.2)	29 (19.9)	0 (19.6)	20 (19.2)	1 (21.7)	2 (18.2)	51 (18.8)	112 (19.6)	79 / 79	
21.1 / 123.3				29 (16.7)	2 (15.2)	39 (16.9)	9 (17.4)				6 (17.6)	6 (20.1)	35 (18.2)	5 (18.5)	31 (17.7)	39 (17.2)								110 (18.4)	90 (18.2)	52 (19.0)	4 (16.7)			15 (17.4)	140 (17.8)	79 / 74	
18.3 / 120.6	3 (16.0)			36 (15.6)		26 (15.5)	54 (15.8)				47 (17.2)	20 (17.6)	37 (16.0)	4 (16.5)	6 (16.2)	59 (16.6)								169 (17.5)	22 (15.7)	34 (16.2)	1 (19.4)			1 (15.6)	50 (16.7)	85 / 89	
15.6 / 117.8	52 (14.7)	15 (15.1)	30 (14.5)			2 (14.2)	52 (14.3)				49 (14.7)	47 (15.1)	3 (15.8)	1 (17.4)	2 (17.5)	5 (16.5)								106 (16.2)	4 (14.2)	17 (14.2)					21 (14.2)	82 / 84	
12.8 / 115.0	59 (12.9)	74 (12.9)	5 (13.2)				7 (12.9)				6 (13.1)	37 (13.2)												45 (12.2)								85 / 89	
10.0 / 112.3	10 (11.0)	25 (10.8)																													48 (10.9)		93 / 94
7.2 / 9.4																																	45 / 49
4.4 / 6.7																																	43 / 44
1.7 / 3.9																																	35 / 39
April								May								June																	
40.6 / 142.8																														105 / 100			
37.8 / 140.0																														103 / 104			
35.0 / 137.3																														1 (25.2)	95 / 99		
32.2 / 134.4																														51 (25.6)	93 / 94		
29.4 / 131.7	1 (23.2)																													141 (25.0)	85 / 89		
26.7 / 128.9	26 (22.0)	12 (22.5)	33 (23.6)	7 (23.5)	14 (23.9)	40 (21.9)	133 (22.7)																							190 (24.2)	83 / 84		
23.9 / 126.1	68 (21.2)	54 (21.5)	9 (23.9)	5 (22.1)	18 (22.2)	24 (22.2)	188 (22.0)																							270 (23.5)	79 / 79		
21.1 / 123.3	25 (21.4)	52 (20.5)	5 (21.4)	2 (21.5)	5 (21.6)	10 (22.2)	99 (21.4)																							40 (22.6)	79 / 74		
18.3 / 120.6		1 (20.8)					1 (20.8)																								85 / 89		
15.6 / 117.8																															83 / 84		
12.8 / 115.0																															85 / 89		
10.0 / 112.3																															93 / 94		
7.2 / 9.4																															45 / 49		
4.4 / 6.7																															43 / 44		
1.7 / 3.9																															35 / 39		

NOTE : MCWB = Mean coincident wet-bulb temperature (number in parentheses) °C

Temperature (Celsius: deg) °C = (deg F-32) * 5 / 9

BIN-HOUR WEATHER DATA Hours of occurrence of DB in each bin with MCWB in parentheses																						STATION : CHIANG MAI								
Temperature range	Observation hour group						Total Observation	MCWB	Observation hour group						Total Observation	MCWB	Observation hour group						Total Observation	MCWB	Temperature range					
	01:00	05:00	09:00	13:00	17:00	21:00			01:00	05:00	09:00	13:00	17:00	21:00			01:00	05:00	09:00	13:00	17:00	21:00								
	to	to	to	to	to	to			to	to	to	to	to	to			to	to	to	to	to	to								
	04:00	08:00	12:00	16:00	20:00	24:00		04:00	08:00	12:00	16:00	20:00	24:00		04:00	08:00	12:00	16:00	20:00	24:00		04:00	08:00	12:00	16:00	20:00	24:00			
°C	July								August								September								°F					
40.6 / 42.8																														105 / 109
37.8 / 40.6																														100 / 104
35.0 / 37.3																														95 / 99
32.2 / 34.4			1 (26.6)	35 (24.9)	16 (24.6)		37 (25.1)					9 (25.1)	2 (25.3)						1 (25.4)	2 (25.3)		3 (25.4)							90 / 94	
29.4 / 31.7			27 (24.7)	61 (24.6)	29 (25.0)		117 (24.8)				15 (24.9)	56 (25.2)	24 (25.1)	1 (25.0)	67 (25.1)				20 (24.9)	72 (25.1)	20 (25.1)	112 (25.1)							85 / 89	
26.7 / 28.9	4 (23.6)	6 (23.5)	66 (24.2)	34 (24.4)	59 (24.4)	34 (24.1)	187 (24.0)	2 (24.8)	4 (23.9)	62 (24.2)	41 (24.4)	46 (24.7)	21 (24.5)	176 (24.4)				69 (24.4)	35 (24.5)	59 (25.1)	11 (25.1)	159 (24.6)							80 / 84	
23.9 / 26.1	104 (23.4)	93 (23.4)	30 (23.5)	13 (23.6)	32 (23.9)	67 (23.8)	369 (23.6)	77 (23.5)	66 (23.4)	35 (23.6)	17 (23.7)	41 (23.9)	73 (23.8)	313 (23.6)	89 (23.7)	75 (23.7)	33 (23.6)	11 (24.1)	46 (24.4)	100 (24.0)	255 (24.0)							75 / 79		
21.1 / 23.3	16 (22.7)	25 (22.6)				3 (23.4)	44 (22.9)	46 (22.4)	54 (22.4)	6 (22.5)	1 (22.9)	9 (22.8)	29 (22.7)	146 (22.6)	31 (22.8)	44 (22.6)	3 (22.4)			4 (23.1)	9 (22.9)	91 (22.8)						70 / 74		
18.3 / 20.6																												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		
°C	October								November								December								°F					
40.6 / 42.8																													105 / 109	
37.8 / 40.6																													100 / 104	
35.0 / 37.3																													95 / 99	
32.2 / 34.4				6 (24.9)			6 (24.9)													1 (24.3)		1 (24.3)						90 / 94		
29.4 / 31.7			25 (24.2)	81 (24.4)	13 (24.0)		119 (24.2)			4 (24.3)	52 (25.2)	4 (23.8)		60 (23.8)				1 (23.9)	6 (23.4)	1 (23.0)		10 (23.4)						85 / 89		
26.7 / 28.9		1 (23.0)	64 (23.7)	33 (23.7)	29 (24.0)	1 (22.9)	129 (23.5)			42 (22.7)	58 (22.7)	24 (22.6)		124 (22.7)				11 (22.0)	73 (20.5)	13 (21.2)		67 (21.2)					80 / 84			
23.9 / 26.1	44 (23.5)	37 (23.3)	44 (23.3)	3 (23.6)	65 (23.5)	66 (23.3)	259 (23.4)	10 (22.5)	6 (22.6)	51 (22.3)	10 (22.3)	55 (22.3)	31 (22.7)	165 (22.6)				46 (20.5)	42 (18.7)	47 (20.4)	10 (21.8)	147 (20.4)					75 / 79			
21.1 / 23.3	77 (22.8)	69 (22.1)	1 (20.9)	1 (24.1)	7 (22.9)	37 (22.5)	205 (22.4)	66 (21.6)	53 (21.6)	23 (21.2)		27 (21.5)	62 (21.3)	291 (21.4)	32 (21.1)	22 (21.2)	24 (18.4)			41 (18.6)	41 (20.2)	170 (20.0)					70 / 74			
18.3 / 20.6	3 (20.0)	3 (20.2)					6 (20.4)	44 (19.5)	55 (19.4)				7 (20.1)	106 (19.7)	30 (18.9)	27 (19.1)	20 (17.0)			21 (16.6)	41 (17.4)	129 (17.7)					65 / 69			
15.6 / 17.8										4 (17.6)				4 (17.6)	40 (15.7)	39 (15.2)	10 (15.5)			1 (15.0)	30 (15.7)	120 (15.6)					60 / 64			
12.8 / 15.0															22 (13.8)	34 (13.7)					2 (14.3)	56 (13.0)					55 / 59			
10.0 / 12.2																2 (11.0)						2 (11.0)					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 & parentheses)°C

Temperature (Celsius deg.) C = (deg.F-32) * 5 / 9

ตารางแสดงผลข้อมูลปริมาณองศาชั่วโมง การทำความร้อนและการทำความเย็น (degree hours and hours of occurrence)

DEGREE HOURS & HOURS OF OCCURRENCE								Station : CHIANG MAI		
								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									
35	1.7	(37.5)	-	-	-	8,784.00	388,497.80	214,608.28		
36	2.2		-	-	-	8,784.00	377,713.80	209,831.16		
37	2.8	0	-	-	-	8,784.00	368,929.80	204,758.04		
38	3.3		-	-	-	8,784.00	360,145.80	199,880.92		
39	3.9		-	-	-	8,784.00	351,361.80	195,005.80		
40	4.4	(42.5)	-	-	-	8,784.00	342,577.80	190,130.68		
41	5.0		-	-	-	8,784.00	333,793.80	185,255.56		
42	5.6	0	-	-	-	8,784.00	325,009.80	180,380.44		
43	6.1		-	-	-	8,784.00	316,225.80	175,505.32		
44	6.7		-	-	-	8,784.00	307,441.80	170,630.20		
45	7.2	(47.5)	-	-	-	8,784.00	298,657.80	165,755.08		
46	7.8		-	-	-	8,784.00	289,873.80	160,879.96		
47	8.3	0	-	-	-	8,784.00	281,089.80	156,004.84		
48	8.9		-	-	-	8,784.00	272,305.80	151,129.72		
49	9.4		-	-	-	8,784.00	263,521.80	146,254.60		
50	10.0	52.5	-	-	-	8,784.00	254,737.80	141,379.48		
51	10.6		-	-	-	8,784.00	245,953.80	136,504.36		
52	11.1	0	-	-	-	8,784.00	237,169.80	131,629.24		
53	11.7		-	-	-	8,784.00	228,385.80	126,754.12		
54	12.2		-	-	-	8,784.00	219,601.80	121,879.00		
55	12.8	(57.5)	24.60	-	-	8,784.00	210,817.80	117,003.88		
56	13.3		49.20	61.60	34.13	8,759.40	202,033.80	112,128.76		
57	13.9	123	73.80	123.00	68.27	8,734.80	193,249.80	107,253.64		
58	14.4		98.40	184.60	102.40	8,710.20	184,465.80	102,378.52		
59	15.0		123.00	246.00	136.53	8,685.60	175,681.80	97,503.40		
60	15.6	(62.5)	220.20	307.60	170.66	8,661.00	167,000.00	92,628.28		
61	16.1		317.40	673.60	373.79	8,563.80	158,216.00	87,753.16		
62	16.7	486	414.60	1,039.60	576.92	8,466.60	150,000.00	83,000.00		
63	17.2		511.80	1,405.60	780.05	8,369.40	141,784.00	78,253.04		
64	17.8		609.00	1,771.60	983.18	8,272.20	133,568.00	73,506.92		
65	18.3	(67.5)	738.00	2,137.60	1,186.31	8,175.00	125,352.00	68,760.80		
66	18.9		867.00	3,069.00	1,703.30	8,046.00	117,136.00	64,014.68		
67	19.4	645	996.00	4,000.60	2,220.28	7,917.00	109,000.00	59,268.56		
68	20.0		1,125.00	4,932.00	2,737.28	7,788.00	101,000.00	54,522.44		
69	20.6		1,254.00	5,863.60	3,254.24	7,659.00	93,000.00	49,776.32		

หมายเหตุ : วิธีการหาค่า degree hours ได้จากการคำนวณจากจำนวนชั่วโมง hours of occurrence ที่เกิดขึ้นในแต่ละช่วงอุณหภูมิจุดสมดุลที่พิจารณา โดยอาศัยข้อมูลสภาพอากาศราย 3 ชั่วโมง

DEGREE HOURS & HOURS OF OCCURRENCE						Station : CHIANG MAI		
						YEARS : 1981 - 1998 (2524-2541)		
TEMPERATURE		MEAN TEMP.DEGREE (^o F)	NO. OF HOURS	NO. OF DEGREE HOURS OF HEATING		NO. OF HOURS ABOVE TEMPERATURE	NO. OF DEGREE HOURS OF COOLING	
Degree		HOURS OF OCCURRENCE	BELOW TEMPERATURE	BELOW TEMPERATURE			ABOVE TEMPERATURE	ABOVE TEMPERATURE
^o F	^o C				^o F	^o C		^o F
70	21.1	(72.5)	1,449.60	6,796.00	3,771.23	7,530.00	85,852.80	47,848.30
71	21.7		1,645.20	8,538.00	4,738.59	7,334.40	78,811.80	43,740.55
72	22.2	978	1,840.80	10,281.00	6,706.96	7,138.80	71,770.80	39,832.79
73	22.8		2,036.40	12,024.00	6,873.32	6,943.20	64,729.80	35,925.04
74	23.3		2,232.00	13,767.00	7,640.89	6,747.60	57,688.80	32,017.28
75	23.9	(77.5)	2,738.40	16,510.00	8,808.05	6,552.00	50,647.80	28,109.53
76	24.4		3,244.80	19,008.00	10,549.44	6,045.60	45,381.80	25,175.80
77	25.0	2532	3,751.20	22,506.00	12,490.83	5,539.20	40,075.80	22,242.07
78	25.6		4,257.60	26,004.00	14,432.22	5,032.80	34,789.80	19,308.34
79	26.1		4,764.00	29,502.00	16,373.61	4,526.40	29,503.80	16,374.61
80	26.7	(82.5)	5,146.20	33,000.00	18,316.00	4,020.00	24,217.80	13,440.88
81	27.2		5,528.40	38,719.50	21,489.32	3,637.80	21,153.30	11,740.08
82	27.8	1911	5,910.60	44,439.00	24,883.65	3,255.60	18,088.80	10,039.28
83	28.3		6,292.80	50,168.50	27,837.97	2,873.40	15,024.30	8,338.49
84	28.9		6,675.00	56,878.00	31,012.29	2,491.20	11,959.80	6,837.69
85	29.4	(87.5)	6,980.40	61,597.50	34,186.81	2,109.00	8,895.30	4,938.89
86	30.0		7,285.80	69,036.00	38,314.98	1,803.60	7,549.80	4,190.14
87	30.6	1527	7,591.20	76,474.50	42,443.35	1,498.20	6,204.30	3,443.39
88	31.1		7,896.60	83,913.00	46,571.72	1,192.80	4,858.80	2,698.63
89	31.7		8,202.00	91,351.50	50,700.08	887.40	3,513.30	1,949.88
90	32.2	(92.5)	8,292.00	98,790.00	54,828.45	582.00	2,167.80	1,203.13
91	32.8		8,382.00	107,217.00	59,505.44	492.00	1,810.80	1,004.99
92	33.3	450	8,472.00	116,644.00	64,182.42	402.00	1,453.80	806.86
93	33.9		8,562.00	124,071.00	68,859.41	312.00	1,098.80	608.72
94	34.4		8,652.00	132,498.00	73,536.39	222.00	739.80	410.59
95	35.0	(97.5)	8,678.40	140,925.00	78,213.38	132.00	382.80	212.45
96	35.6		8,704.80	149,843.00	83,051.87	105.60	290.40	161.17
97	36.1	132	8,731.20	158,361.00	87,890.36	79.20	198.00	109.89
98	36.7		8,757.60	167,079.00	92,728.85	52.80	105.60	58.81
99	37.2		8,784.00	175,797.00	97,567.34	26.40	13.20	7.33

หมายเหตุ : วิธีการหาค่า degree hours ได้จากการคำนวณจากจำนวนชั่วโมง hours of occurrence ที่เกิดขึ้นในแต่ละช่วงอุณหภูมิจุดสมดุลที่พิจารณา โดยอาศัยข้อมูลสภาพอากาศราย 3 ชั่วโมง