

ข้อมูลอากาศประเทศไทยสำหรับงานอนุรักษ์พลังงาน  
จังหวัดสุราษฎร์ธานี



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จุฬาลงกรณ์มหาวิทยาลัย

สิงหาคม 2543

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ตารางสรุปรวมผลของข้อมูลทุกประเภทจังหวัดสุราษฎร์ธานี

**CLIMATOLOGICAL DATA FOR THE PERIOD 1981-1998** station : SURAT THANI

Elevation of station above MSL

10 Meters

Latitude: 09 07 N

Longitude: 99 21 E

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
<b>TEMPERATURE (°C)</b>													
Averages													
Daily Maximum	29.9	31.3	32.7	33.3	32.4	31.8	31.4	31.0	30.8	30.2	29.0	28.5	31.0
Monthly Mean	25.5	26.3	27.4	28.2	27.8	27.5	27.0	26.9	26.5	26.2	25.9	25.4	26.7
Daily Minimum	21.4	21.4	22.3	24.0	24.5	24.5	24.1	24.1	23.9	23.8	23.6	22.6	23.4
Dry bulb Standard Deviation	3.4	3.9	4.1	3.9	3.4	3.2	3.2	3.0	2.9	2.7	2.5	2.6	3.2
Extremes													
Highest	34.3	35.0	36.5	38.2	37.2	35.7	35.7	36.0	35.0	34.5	33.5	32.5	38.2
Lowest	17.2	16.5	17.5	20.7	22.3	21.7	21.5	20.0	20.6	21.3	20.2	18.5	16.5
Monthly Dew Point	21.5	21.5	21.9	23.1	23.8	23.5	23.2	23.1	23.2	22.1	23.3	22.2	22.7
Dew Point Standard Deviation	1.5	1.6	1.6	1.2	1.0	1.1	1.0	1.0	0.9	5.5	1.1	1.4	1.6
Monthly Wet bulb Temperature	22.8	23.1	23.6	24.7	24.9	24.7	24.4	24.3	24.2	24.3	24.1	23.3	24.0
<b>DEGREE DAY BASE 18.3 °C</b>													
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	222.7	230.8	280.4	295.2	286.9	274.2	269.3	265.1	244.3	245.2	225.7	218.6	3,058.4
<b>RELATIVE HUMIDITY (%)</b>													
Averages													
Monthly Mean	80.0	77.1	74.5	76.3	81.6	80.6	81.0	81.4	83.8	86.8	86.5	83.7	81.1
Hour 01:00-06:00	93.0	92.1	90.8	91.0	93.2	91.8	92.3	92.2	93.8	95.4	94.8	93.1	92.8
Hour 07:00-12:00	83.5	81.7	79.4	79.1	82.2	82.2	83.0	83.0	84.1	86.8	87.1	85.0	83.1
Hour 13:00-18:00	62.5	57.8	53.9	57.9	65.8	64.7	64.9	66.4	69.1	74.4	75.3	71.3	65.3
Hour 19:00-24:00	81.2	76.8	73.9	77.3	85.4	83.6	84.0	84.1	88.3	90.7	89.0	85.3	83.3
<b>WIND</b>													
Average Speed (m/s)	1.1	1.1	1.1	0.8	0.6	0.9	0.9	1.1	0.8	0.6	0.8	1.4	0.9
Prevailing wind	NE	NE	NE	N	SW	SW	SW	SW	SW	SW	NE	NE	SW
Maximum Speed (m/s)	8.2	7.7	9.3	8.2	8.2	9.3	7.2	8.2	8.2	6.2	15.4	30.8	30.8
<b>SKY COVER (0-10)</b>													
Average Sky Condition	5.1	4.3	4.7	6	7.5	7.9	8.1	8.2	8.2	7.9	7.6	6.6	6.8
<b>Percentage of Sky cover</b>													
Clear sky (0-3)	36	47	42	23	8	6	5	4	4	7	10	20	18
Partly Cloudy sky (4-7)	37	36	36	41	34	29	27	25	25	28	29	33	32
Cloudy sky (8-10)	26	17	21	36	58	65	68	70	71	66	61	47	51
<b>SUNSHINE DURATION* (hours)</b>													
Average Monthly total	251.8	256.7	272.2	238.5	201.5	173.8	177.5	168.3	143.2	147.8	129.2	167.4	2,327.9
Percentage of Sunshine	67.7	73.8	73.2	66.2	54.2	48.3	47.7	45.2	39.8	39.7	35.9	45.0	53.0
<b>SOLAR RADIATION* (W/m<sup>2</sup>)</b>													
Average Hourly max	-	-	-	-	-	-	-	-	-	-	-	-	-
Average Hourly mean	-	-	-	-	-	-	-	-	-	-	-	-	-
Average Daily Total	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>RAINFALL (mm)</b>													
Average Monthly total	34.0	13.2	20.9	73.5	209.0	129.3	160.2	166.3	229.0	260.6	351.5	146.1	1,793.6
Daily record high	131.9	43.4	54.8	90.9	103.2	95.5	72.0	106.1	90.4	192.2	384.9	181.0	384.9
Average Number of rainy days (0.1 mm. Or more)	6	2	3	7	16	14	16	16	19	18	17	12	146
<b>EVAPORATION (mm)</b>													
Average Monthly total	119.1	137.6	173.0	160.2	145.4	136.8	137.5	132.7	122.1	115.9	100.1	102.1	1,582.5

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

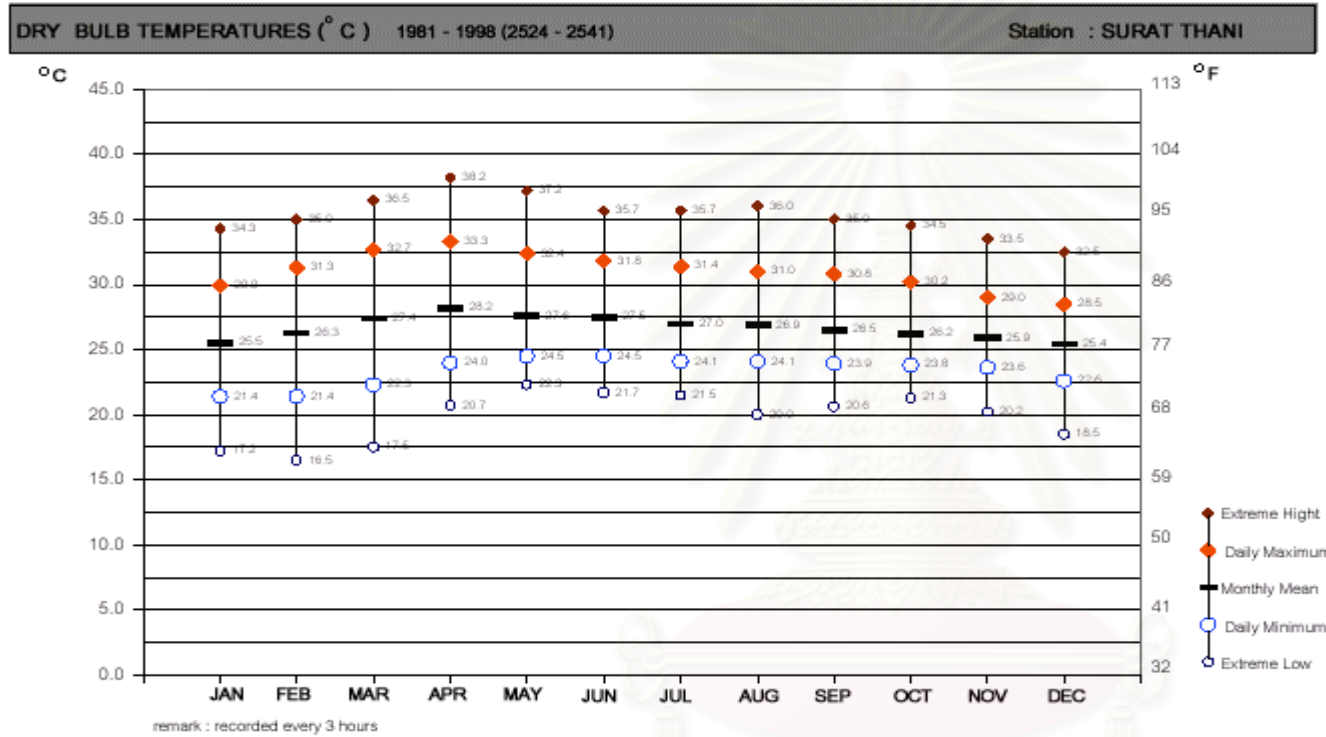
(\*) data base on 1997 - 1998 recorded period

1 W/m2 = 0.317 Btu/h.ft2

(-) missing value or no data report



แผนภูมิอุณหภูมิกระเปาะแห้ง (dry bulb temperatures)



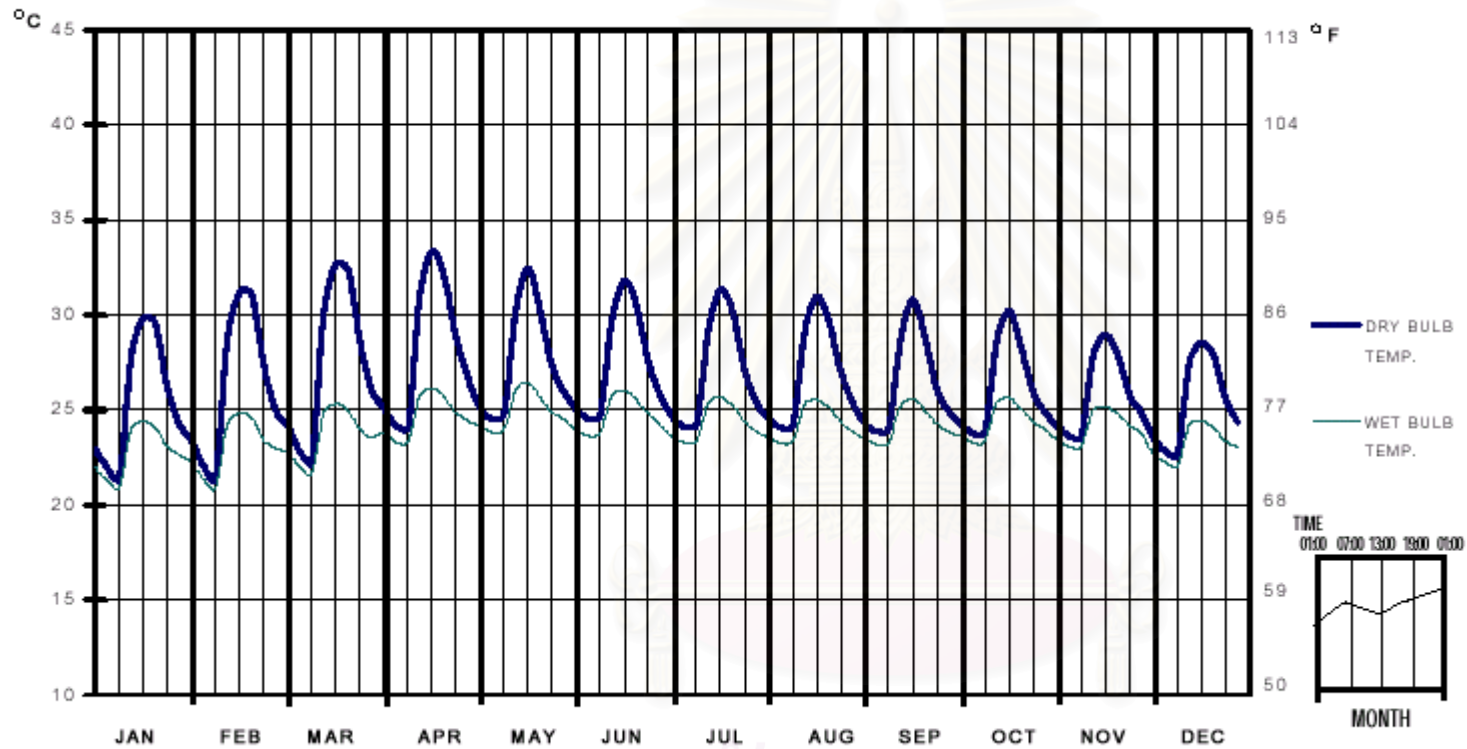
สถาบันวิทยบริการ  
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ตารางแสดงผลข้อมูลอุณหภูมิกระเปาะเปียก (wet bulb temperatures)

WET BULB TEMPERATURES (°C) 1981 - 1998 (2524 - 2541)														Station : SURAT THANI																									
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	22.0	23.3	24.7	20.9	22.9	24.6	21.1	23.3	25.0	22.7	24.2	25.9	23.7	24.8	26.2	23.9	25.0	26.5	23.2	24.3	25.6	23.4	24.4	25.8	23.3	24.3	25.7	23.1	24.3	26.0	23.2	24.2	25.2	22.9	23.7	24.7	22.8	24.1	25.5
2	21.5	23.1	24.6	20.9	22.8	24.3	21.4	23.3	25.1	22.5	24.2	26.0	23.7	25.0	26.5	23.8	24.9	26.5	23.4	24.6	25.9	23.3	24.5	25.7	23.3	24.3	25.7	23.4	24.4	25.9	23.1	24.0	25.4	22.8	23.5	24.5	22.8	24.1	25.5
3	21.6	23.0	24.3	20.7	22.9	24.6	21.0	23.0	24.5	22.7	24.5	26.3	23.7	24.9	26.3	23.9	24.9	26.3	23.5	24.7	26.2	23.4	24.5	25.7	23.2	24.1	25.5	23.2	24.3	25.8	23.1	24.1	25.2	22.5	23.6	24.8	22.7	24.0	25.5
4	20.7	22.8	24.5	21.0	23.0	24.7	20.9	22.8	24.6	23.0	24.6	26.0	23.7	25.0	26.2	23.8	25.0	26.6	23.4	24.5	25.7	23.4	24.4	25.9	23.2	24.1	25.7	23.4	24.2	25.5	23.4	24.3	25.6	22.6	23.6	24.6	22.7	24.0	25.5
5	21.4	23.0	24.4	20.8	23.0	24.9	20.4	22.8	24.8	22.8	24.4	26.2	23.8	24.9	26.4	23.9	25.0	26.4	23.3	24.5	25.7	23.2	24.2	25.5	23.2	24.3	25.5	23.3	24.1	25.3	23.2	24.2	25.4	22.6	23.7	24.8	22.6	24.0	25.5
6	21.4	22.9	24.4	21.0	23.0	24.8	20.5	22.9	24.5	22.8	24.6	26.2	23.7	24.9	26.4	24.1	25.0	26.0	23.1	24.1	25.3	23.1	24.1	25.5	23.3	24.2	25.5	23.2	24.2	25.3	23.4	24.4	25.5	22.6	23.6	24.7	22.7	24.0	25.3
7	21.0	22.8	24.5	20.6	23.0	24.9	20.6	23.1	24.8	23.1	24.7	26.2	23.7	24.9	26.4	24.0	24.9	26.1	23.2	24.2	25.6	23.1	24.1	25.5	23.2	24.2	25.5	23.0	24.3	25.8	23.4	24.3	25.4	22.2	23.2	24.3	22.6	24.0	25.4
8	21.0	22.7	24.3	20.6	22.9	24.6	21.4	23.4	25.0	23.3	24.8	26.3	23.6	24.9	26.3	23.8	25.0	26.4	23.1	24.3	25.9	23.1	24.3	25.5	23.2	24.3	25.4	23.4	24.4	25.7	23.2	24.2	25.2	22.2	23.2	24.3	22.7	24.0	25.4
9	21.1	22.9	24.3	20.8	22.8	24.5	21.4	23.4	25.0	23.3	24.5	25.9	23.9	24.8	26.4	24.0	25.1	26.4	23.2	24.3	25.6	23.4	24.4	25.6	23.2	24.2	25.6	23.2	24.3	25.5	23.3	24.3	25.2	22.2	23.4	24.5	22.7	24.0	25.4
10	21.2	22.8	24.1	20.3	22.8	24.5	21.3	23.4	25.0	23.1	24.4	25.9	23.5	24.8	26.1	23.9	24.6	26.0	23.2	24.2	25.9	23.3	24.2	25.5	22.9	24.1	25.4	23.2	24.4	25.7	23.2	24.0	25.3	22.3	23.5	24.7	22.6	23.9	25.3
11	20.9	22.9	24.5	20.6	23.0	24.8	21.0	23.4	25.3	23.1	24.6	25.9	23.7	24.9	26.6	23.5	24.7	26.2	23.1	24.2	25.8	23.3	24.3	25.5	22.9	24.0	25.4	23.4	24.2	25.5	23.0	23.9	25.1	22.5	23.6	24.7	22.6	24.0	25.4
12	21.0	22.9	24.5	21.1	23.2	24.9	21.1	23.4	25.4	23.2	24.5	25.8	23.8	25.0	26.7	23.7	24.8	26.0	23.1	24.1	25.4	23.1	24.3	25.5	23.0	24.2	25.5	23.2	24.2	25.6	23.0	24.1	25.2	22.6	23.6	24.7	22.7	24.0	25.4
13	20.5	22.6	24.1	20.8	23.1	25.0	21.2	23.4	25.3	23.2	24.5	25.8	23.8	25.0	26.7	23.9	24.9	26.0	23.1	24.2	25.5	23.2	24.3	25.5	23.3	24.3	25.4	23.4	24.4	25.6	23.1	24.2	25.6	22.3	23.6	24.6	22.7	24.0	25.4
14	20.6	22.7	24.2	20.9	23.3	25.3	21.2	23.4	25.4	23.1	24.5	25.8	24.0	25.1	26.4	23.6	24.8	26.1	23.2	24.4	25.9	23.2	24.3	25.4	23.4	24.5	25.8	23.3	24.5	25.8	23.0	24.1	25.3	22.1	23.4	24.5	22.6	24.1	25.5
15	20.6	22.7	24.5	20.7	23.0	25.0	21.5	23.6	25.3	23.2	24.5	26.1	23.9	25.0	26.3	23.6	24.8	26.0	23.2	24.3	25.5	23.2	24.3	25.5	23.3	24.3	25.9	23.4	24.5	25.7	22.9	24.1	25.5	22.4	23.5	24.6	22.6	24.0	25.5
16	20.6	22.6	24.1	20.7	23.1	24.8	21.9	23.9	25.4	23.1	24.4	25.8	23.8	25.0	26.5	23.7	24.7	25.8	23.1	24.3	25.5	23.2	24.3	25.6	23.2	24.3	25.7	23.2	24.2	25.6	22.9	24.1	25.4	22.2	23.3	24.5	22.6	24.0	25.4
17	20.4	22.6	24.3	20.7	23.0	24.7	22.2	23.9	25.2	23.3	24.6	26.1	23.8	25.0	26.5	23.7	24.8	26.3	23.4	24.4	25.6	23.3	24.4	25.7	23.3	24.2	25.4	23.0	24.3	25.7	23.1	24.2	25.4	21.8	23.2	24.3	22.7	24.1	25.4
18	20.5	22.5	24.3	20.7	23.1	25.1	22.1	24.0	25.7	23.3	24.7	26.0	23.7	24.9	26.5	24.0	24.9	26.3	23.5	24.6	25.9	23.4	24.3	25.5	23.3	24.1	25.5	23.3	24.5	25.8	23.0	24.2	25.5	22.0	23.1	24.2	22.7	24.1	25.5
19	20.3	22.5	24.3	21.1	23.3	25.0	21.9	23.8	25.4	23.3	24.6	26.3	23.8	24.8	26.0	23.7	24.5	25.5	23.4	24.5	25.8	23.2	24.3	25.5	23.1	24.1	25.3	23.6	24.6	25.8	23.1	24.1	25.3	22.1	23.2	24.1	22.7	24.0	25.3
20	20.4	22.6	24.4	21.3	23.2	24.9	22.0	24.0	25.8	23.4	24.8	26.3	23.7	24.8	26.4	23.6	24.8	26.3	23.5	24.4	25.7	23.5	24.4	25.5	23.1	24.2	25.6	23.4	24.5	25.8	23.1	24.0	24.9	21.8	23.2	24.4	22.7	24.1	25.5
21	20.3	22.7	24.5	21.1	23.2	25.1	22.2	24.1	25.8	23.6	24.9	26.5	23.8	25.0	26.4	23.7	24.8	26.2	23.3	24.4	25.8	23.4	24.2	25.3	23.1	24.3	25.7	23.3	24.4	25.6	23.0	23.8	24.9	22.0	23.1	24.2	22.8	24.1	25.5
22	20.5	22.9	24.6	20.8	23.1	24.9	22.3	24.1	25.7	23.4	24.8	26.3	24.2	25.1	26.3	23.4	24.6	25.9	23.5	24.5	25.6	23.2	24.3	25.5	23.2	24.4	25.8	23.2	24.4	25.8	22.8	23.8	24.6	21.8	23.0	24.2	22.7	24.1	25.4
23	20.9	23.0	24.7	21.2	23.4	25.4	22.3	24.1	25.7	23.6	25.0	26.6	24.1	24.9	26.5	23.3	24.6	25.9	23.6	24.5	25.6	23.1	24.1	25.3	23.2	24.3	25.6	23.2	24.4	25.8	22.9	24.0	25.1	21.6	22.9	24.2	22.8	24.1	25.5
24	21.0	22.8	24.4	21.1	23.1	24.6	22.5	24.1	25.6	23.7	25.0	26.5	24.0	25.0	26.5	23.5	24.4	25.6	23.4	24.4	25.6	23.2	24.3	25.4	23.3	24.3	26.0	23.3	24.4	25.8	22.9	23.8	24.9	21.4	22.8	24.4	22.8	24.0	25.4
25	20.8	22.9	24.7	21.0	23.1	24.9	22.3	24.0	25.7	23.8	24.9	26.4	23.8	25.0	26.6	23.3	24.5	25.5	23.3	24.3	25.7	23.3	24.2	25.6	23.4	24.5	25.8	23.2	24.4	25.9	22.7	23.8	24.8	21.6	22.9	24.1	22.7	24.0	25.5
26	21.0	22.9	24.6	20.7	23.1	24.8	22.3	24.1	25.6	23.3	24.8	26.4	23.8	24.9	26.4	23.6	24.5	25.8	23.2	24.4	25.8	23.1	24.2	25.5	23.4	24.3	25.9	23.3	24.3	25.7	22.9	24.0	25.1	21.5	23.0	24.4	22.7	24.0	25.5
27	21.0	22.9	24.2	21.0	23.1	24.8	22.2	23.9	25.9	23.7	25.0	26.8	24.0	25.0	26.5	23.6	24.5	25.7	23.5	24.4	25.5	23.1	24.1	25.6	23.3	24.4	25.7	23.0	24.1	25.1	23.0	24.1	25.6	21.9	23.1	24.4	22.8	24.1	25.5
28	21.2	23.0	24.5	20.9	23.2	25.0	22.0	24.0	25.6	23.9	24.9	26.2	24.0	25.1	26.5	23.2	24.3	25.6	23.4	24.3	25.6	23.2	24.3	25.5	23.4	24.3	25.4	23.2	24.2	25.4	22.7	24.0	25.3	21.4	22.9	24.4	22.7	24.0	25.4
29	21.2	22.8	24.1	21.3	23.4	25.3	22.5	24.2	25.6	23.6	25.0	26.6	24.0	25.0	26.2	23.2	24.3	25.7	23.3	24.4	25.6	23.5	24.4	25.5	23.3	24.3	25.7	23.1	24.3	25.5	22.9	23.8	24.8	21.6	23.1	24.4	22.8	24.1	25.4
30	20.7	22.6	24.2				22.5	24.2	25.7	23.7	24.9	26.5	24.1	25.0	26.3	23.1	24.3	25.8	23.5	24.4	25.8	23.4	24.4	25.7	23.2	24.1	25.6	23.2	24.3	25.3	22.9	23.9	24.9	21.5	23.0	24.4	22.9	24.1	25.5
31	20.4	22.7	24.4				22.5	24.2	25.8	24.0	25.0	26.3				23.4	24.4	25.7	23.3	24.4	25.6				23.3	24.2	25.3				21.7	23.2	24.6	22.7	24.0	25.4			
Average	20.9	22.8	24.4	20.9	23.1	24.8	21.7	23.6	25.3	23.3	24.7	26.2	23.8	24.9	26.4	23.7	24.7	26.0	23.3	24.4	25.7	23.3	24.3	25.5	23.2	24.2	25.6	23.3	24.3	25.6	23.0	24.1	25.2	22.1	23.3	24.5	22.7	24.0	25.4
Extremes	16.8		28.1	16.1		29.6	17.1		28.7	20.0		28.6	21.7		29.0	21.1		30.6	21.0		28.4	21.2		28.5	20.2		28.7	20.7		27.7	19.7								

แผนภูมิความแตกต่างระหว่างอุณหภูมิระเปาะแห้งและอุณหภูมิระเปาะเปียก (diurnal temperatures)

DIURNAL TEMPERATURES 1981-1998 (2524-2541) Station : SURAT THANI



remark : recorded every 3 hours

สถาบันวิทยบริการ  
จุฬาลงกรณ์มหาวิทยาลัย

ตารางแสดงผลข้อมูลอุณหภูมิจุดน้ำค้าง (dew point temperatures)

DEW POINT TEMPERATURES (°C) 1981 - 1998 (2524 - 2541)														Station : SURAT THANI																									
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	21.7	22.2	22.9	20.7	21.5	22.0	20.8	21.6	22.0	21.4	22.5	23.1	22.9	23.5	24.0	23.5	23.8	24.5	22.7	23.0	23.5	22.9	23.1	23.9	22.8	23.1	23.4	21.5	22.0	22.5	23.0	23.5	23.9	22.5	22.7	23.1	22.2	22.7	23.2
2	21.3	21.9	22.5	20.6	21.4	22.2	20.4	21.5	22.3	22.1	22.8	23.3	23.4	23.7	24.1	23.4	23.8	24.3	23.0	23.2	23.6	22.8	23.1	23.8	22.9	23.2	23.7	21.7	22.1	22.3	22.9	23.3	23.9	22.3	22.5	23.0	22.2	22.7	23.2
3	21.3	21.8	22.3	20.5	21.5	22.2	20.2	21.0	21.7	22.4	22.9	23.4	23.2	23.6	24.1	23.5	23.9	24.5	23.0	23.4	23.9	23.0	23.2	23.7	22.6	23.0	23.4	21.6	21.9	22.4	22.8	23.3	23.7	22.1	22.7	23.2	22.2	22.7	23.2
4	20.5	21.5	22.2	20.7	21.6	22.0	20.3	20.8	21.2	22.6	22.9	23.3	23.3	23.7	24.1	23.4	23.8	24.4	22.9	23.1	23.7	23.0	23.3	23.6	22.8	23.1	23.6	21.7	21.9	22.2	23.1	23.6	23.9	22.2	22.7	23.2	22.2	22.7	23.1
5	21.0	21.8	22.8	20.6	21.6	22.4	20.0	20.9	21.5	22.1	22.7	23.3	23.4	23.7	24.1	23.3	23.8	24.3	23.0	23.3	23.7	22.8	23.1	23.8	22.8	23.2	23.7	21.7	21.9	22.3	22.9	23.4	24.0	22.3	22.8	23.1	22.2	22.7	23.2
6	21.1	21.8	22.6	20.6	21.6	22.2	20.1	21.0	21.8	22.3	23.0	23.6	23.0	23.5	23.8	23.6	23.9	24.1	22.3	22.8	23.5	22.7	23.1	23.6	22.9	23.1	23.5	21.6	22.0	22.4	23.2	23.6	24.1	22.3	22.7	23.1	22.2	22.7	23.2
7	20.7	21.4	22.0	20.4	21.6	22.2	20.3	21.5	22.3	22.8	23.1	23.5	23.3	23.7	24.3	23.6	23.8	24.0	22.8	23.0	23.5	22.7	23.1	23.6	22.8	23.2	23.5	21.4	22.0	22.3	23.1	23.5	23.9	21.8	22.3	22.8	22.1	22.7	23.2
8	20.7	21.5	22.1	20.3	21.4	22.2	21.1	21.7	22.3	22.9	23.2	23.9	23.3	23.7	24.3	23.4	23.8	24.3	22.7	23.1	23.6	22.8	23.3	24.0	22.9	23.2	23.7	21.8	22.1	22.4	23.0	23.4	24.0	21.7	22.1	22.4	22.2	22.7	23.3
9	20.8	21.6	22.3	20.5	21.1	21.7	21.2	21.7	22.2	21.7	22.8	23.3	23.2	23.8	24.3	23.6	24.0	24.4	22.6	23.0	23.6	23.0	23.3	23.7	22.7	23.1	23.6	21.6	22.0	22.5	23.1	23.6	24.0	21.8	22.3	22.7	22.1	22.7	23.2
10	20.9	21.4	22.1	20.0	21.2	21.8	20.8	21.5	22.2	22.2	22.7	23.1	23.1	23.6	24.3	23.2	23.6	24.3	22.5	23.0	23.7	22.8	23.1	23.7	22.5	22.9	23.7	21.6	22.1	22.4	23.0	23.3	23.9	21.9	22.6	23.1	22.0	22.6	23.2
11	20.6	21.6	22.4	20.4	21.6	22.2	20.7	21.7	22.2	22.5	22.9	23.6	23.4	23.8	24.4	22.9	23.4	24.2	22.7	23.0	23.7	22.8	23.1	23.7	22.5	22.8	23.2	21.8	22.0	22.3	22.7	23.2	23.7	22.1	22.7	23.4	22.1	22.7	23.3
12	20.7	21.6	22.5	20.9	21.7	22.5	20.8	21.6	22.3	22.4	22.9	23.3	23.4	23.9	24.4	23.3	23.7	24.1	22.7	23.1	23.6	22.7	23.0	23.6	22.7	23.2	23.7	21.6	22.0	22.4	22.8	23.3	23.8	22.2	22.7	23.2	22.2	22.7	23.3
13	20.3	21.3	22.2	20.5	21.5	22.3	20.9	21.5	22.1	22.5	22.9	23.2	23.6	24.0	24.7	23.5	23.8	24.3	22.7	23.1	23.6	22.5	23.0	23.7	23.0	23.2	23.7	21.8	22.2	22.4	22.9	23.4	24.0	22.0	22.6	23.0	22.2	22.7	23.3
14	20.4	21.4	22.0	20.7	21.9	22.7	20.9	21.7	22.4	22.5	22.9	23.5	23.6	24.0	24.5	23.1	23.7	24.3	22.8	23.2	23.8	22.6	22.9	23.7	23.1	23.5	23.8	21.7	22.2	22.8	22.7	23.3	23.7	21.8	22.4	23.0	22.2	22.8	23.3
15	20.4	21.5	22.2	20.5	21.5	22.5	21.2	22.0	22.7	22.5	22.9	23.4	23.6	23.9	24.6	23.2	23.5	24.3	22.8	23.2	23.7	22.7	22.9	23.6	23.0	23.3	23.7	21.8	22.2	22.6	22.6	23.3	23.9	22.1	22.5	23.1	22.2	22.7	23.4
16	20.3	21.3	22.2	20.4	21.6	22.4	21.5	22.1	22.9	22.6	23.0	23.5	23.4	23.8	24.1	23.2	23.5	23.9	22.7	23.2	23.9	22.8	23.1	23.6	22.9	23.3	23.6	21.7	22.2	22.7	22.7	23.2	23.7	21.8	22.3	22.8	22.2	22.7	23.3
17	20.1	21.2	22.2	20.4	21.3	21.9	21.5	22.2	22.9	22.7	23.0	23.4	23.4	23.9	24.4	23.3	23.5	24.2	22.9	23.2	23.5	22.9	23.3	23.7	22.9	23.3	23.5	21.5	22.1	22.6	22.8	23.3	23.8	21.5	22.1	22.5	22.2	22.7	23.2
18	20.2	21.2	21.9	20.4	21.5	22.2	21.9	22.4	23.1	22.9	23.2	23.8	23.0	23.7	24.1	23.4	23.7	24.1	23.1	23.4	24.3	22.4	23.1	23.7	22.9	23.2	23.8	21.8	22.4	23.0	22.8	23.4	23.8	21.6	22.1	22.6	22.2	22.8	23.4
19	20.1	21.1	21.8	20.8	21.8	22.5	21.6	22.1	22.7	22.5	23.1	23.5	23.4	23.8	24.2	23.2	23.4	23.9	23.0	23.3	23.7	22.8	23.0	23.6	22.7	23.3	23.7	22.1	22.4	23.0	22.9	23.3	24.0	21.6	22.0	22.4	22.2	22.7	23.2
20	20.1	21.3	22.2	20.7	21.4	22.2	21.7	22.5	22.9	22.9	23.2	23.7	23.3	23.8	24.4	23.2	23.6	24.2	23.1	23.3	23.9	23.0	23.2	23.6	22.8	23.2	23.6	21.9	22.3	22.8	22.8	23.2	23.5	21.5	22.0	22.7	22.3	22.7	23.3
21	20.0	21.3	22.1	20.8	21.6	22.4	21.9	22.6	23.1	23.2	23.4	23.8	23.4	23.8	24.2	23.0	23.5	24.1	22.9	23.3	23.8	22.8	23.1	23.6	22.8	23.3	23.7	21.8	22.2	22.7	22.7	23.1	23.6	21.5	21.9	22.4	22.2	22.8	23.3
22	20.3	21.5	22.3	20.5	21.5	22.3	21.9	22.4	23.3	23.0	23.2	23.6	23.6	24.0	24.3	22.9	23.3	23.9	23.0	23.4	24.0	22.8	23.1	23.5	22.9	23.4	23.9	21.7	22.1	22.5	22.6	23.0	23.3	21.4	21.8	22.4	22.2	22.7	23.3
23	20.5	21.7	22.6	20.9	21.8	22.5	22.0	22.4	23.3	22.7	23.3	23.6	23.2	23.7	24.2	22.9	23.2	23.7	22.9	23.4	23.8	22.7	23.0	23.3	22.9	23.3	23.8	21.6	22.1	22.6	22.6	23.2	23.6	21.1	21.7	21.9	22.2	22.7	23.2
24	20.6	21.4	22.2	20.8	21.4	22.0	21.7	22.3	23.0	23.1	23.5	23.8	23.6	23.9	24.4	22.4	22.9	23.7	23.0	23.3	23.9	22.9	23.2	23.8	23.0	23.4	23.7	21.7	22.3	22.6	22.7	23.0	23.4	21.1	21.7	22.3	22.2	22.7	23.2
25	20.5	21.5	22.3	20.8	21.4	22.2	21.6	22.2	23.0	22.9	23.4	23.7	23.5	23.9	24.3	22.8	23.2	23.7	22.8	23.2	23.6	22.9	23.1	23.5	23.1	23.5	23.8	21.7	22.3	22.9	22.4	22.7	23.2	21.2	21.8	22.4	22.2	22.7	23.2
26	20.8	21.6	22.4	20.4	21.3	22.0	22.0	22.4	23.0	23.0	23.4	23.8	23.4	23.8	24.3	22.6	23.2	23.5	22.8	23.2	23.8	22.8	23.1	23.6	23.1	23.5	24.0	21.8	22.2	22.6	22.7	23.1	23.5	21.0	21.9	22.3	22.2	22.7	23.2
27	20.6	21.4	22.1	20.5	21.3	22.1	20.6	22.0	23.1	23.3	23.7	24.1	23.7	24.0	24.6	22.7	23.1	23.9	22.7	23.1	23.8	22.7	23.2	23.5	23.0	23.6	24.0	21.5	22.1	22.4	22.7	23.2	23.5	21.4	21.8	22.4	22.1	22.7	23.3
28	20.9	21.6	22.1	20.7	21.6	22.1	21.0	22.0	22.9	23.1	23.5	23.9	23.6	24.0	24.3	22.5	23.0	23.6	22.8	23.1	23.6	22.8	23.2	23.5	23.2	23.5	23.9	21.7	22.2	22.6	22.4	23.0	23.5	20.9	21.6	22.1	22.1	22.7	23.2
29	20.6	21.4	22.0	21.1	21.9	22.4	22.0	22.4	23.0	23.2	23.7	24.3	23.6	23.9	24.5	21.9	22.9	23.7	23.0	23.2	23.8	23.0	23.2	23.7	22.9	23.4	23.8	21.6	22.3	22.7	22.6	22.9	23.3	21.2	22.0	22.3	22.2	22.8	23.3
30	20.4	21.2	22.0	20.2	21.2	22.0	22.2	22.5	23.1	23.4	23.7	24.0	23.7	24.0	24.5	22.4	22.9	23.5	22.6	23.1	23.6	23.0	23.3	23.7	23.0	23.3	23.8	21.7	22.3	22.7	22.7	23.1	23.5	21.0	21.7	22.1	22.4	22.8	23.3
31	20.1	21.3	22.2	20.2	21.4	22.9	22.0	22.4	22.9	23.6	23.9	24.4	23.6	23.9	24.4	22.9	23.1	23.7	22.9	23.3	23.6	22.9	23.3	23.6	21.8	22.2	22.8	21.3	22.0	22.4	21.3	22.0	22.4	22.1	22.6	23.1	22.1	22.6	23.1
Average	20.6	21.5	22.2	20.6	21.5	22.2	21.2	21.9	22.6	22.6	23.1	23.6	23.4	23.8	24.3	23.1	23.5	24.1	22.8	23.2	23.7	22.8	23.1	23.6	22.9	23.2	23.7	21.7	22.1	22.6	22.8	23.3	23.7	21.7	22.2	22.7	22.2	22.7	23.2
Extremes	14.5	27.0	10.2	28.8	9.3	28.4	9.3	28.2	17.7	27.4	9.9	29.8	18.0	27.1	16.7	26.8	19.1</																						



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 : SURAT THANI													
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	739.4	0.0	714.2	0.0	797.1	0.0	795.2	0.0	803.6	0.0	774.2	0.0	786.0	0.0	781.8	0.0	744.3	0.0	761.8	0.0	725.7	0.0	735.3	0.0	9,158.3	0.0
36	2.2	722.1	0.0	698.1	0.0	779.9	0.0	778.5	0.0	786.3	0.0	757.5	0.0	768.8	0.0	764.5	0.0	727.6	0.0	744.6	0.0	709.0	0.0	718.0	0.0	8,955.0	0.0
37	2.8	704.9	0.0	681.9	0.0	762.6	0.0	761.8	0.0	769.1	0.0	740.9	0.0	751.5	0.0	747.3	0.0	711.0	0.0	727.4	0.0	692.3	0.0	700.8	0.0	8,751.6	0.0
38	3.3	687.7	0.0	665.8	0.0	745.4	0.0	745.2	0.0	751.9	0.0	724.2	0.0	734.3	0.0	730.1	0.0	694.3	0.0	710.2	0.0	675.7	0.0	683.6	0.0	8,548.3	0.0
39	3.9	670.5	0.0	649.7	0.0	728.2	0.0	728.5	0.0	734.7	0.0	707.5	0.0	717.1	0.0	712.9	0.0	677.6	0.0	692.9	0.0	659.0	0.0	666.4	0.0	8,345.0	0.0
40	4.4	653.2	0.0	633.6	0.0	711.0	0.0	711.8	0.0	717.4	0.0	690.9	0.0	699.9	0.0	695.6	0.0	661.0	0.0	675.7	0.0	642.3	0.0	649.1	0.0	8,141.6	0.0
41	5.0	636.0	0.0	617.5	0.0	693.8	0.0	695.2	0.0	700.2	0.0	674.2	0.0	682.7	0.0	678.4	0.0	644.3	0.0	658.5	0.0	625.7	0.0	631.9	0.0	7,938.3	0.0
42	5.6	618.8	0.0	601.4	0.0	676.5	0.0	678.5	0.0	683.0	0.0	657.5	0.0	665.4	0.0	661.2	0.0	627.6	0.0	641.3	0.0	609.0	0.0	614.7	0.0	7,735.0	0.0
43	6.1	601.6	0.0	585.3	0.0	659.3	0.0	661.8	0.0	665.8	0.0	640.9	0.0	648.2	0.0	644.0	0.0	611.0	0.0	624.0	0.0	592.3	0.0	597.5	0.0	7,531.6	0.0
44	6.7	584.4	0.0	569.2	0.0	642.1	0.0	645.2	0.0	648.6	0.0	624.2	0.0	631.0	0.0	626.8	0.0	594.3	0.0	606.8	0.0	575.7	0.0	580.3	0.0	7,328.3	0.0
45	7.2	567.1	0.0	553.1	0.0	624.9	0.0	628.5	0.0	631.3	0.0	607.5	0.0	613.8	0.0	609.5	0.0	577.6	0.0	589.6	0.0	559.0	0.0	563.0	0.0	7,125.0	0.0
46	7.8	549.9	0.0	536.9	0.0	607.6	0.0	611.8	0.0	614.1	0.0	590.9	0.0	596.5	0.0	592.3	0.0	561.0	0.0	572.4	0.0	542.3	0.0	545.8	0.0	6,921.6	0.0
47	8.3	532.7	0.0	520.8	0.0	590.4	0.0	595.2	0.0	596.9	0.0	574.2	0.0	579.3	0.0	575.1	0.0	544.3	0.0	555.2	0.0	525.7	0.0	528.6	0.0	6,718.3	0.0
48	8.9	515.5	0.0	504.7	0.0	573.2	0.0	578.5	0.0	579.7	0.0	557.5	0.0	562.1	0.0	557.9	0.0	527.6	0.0	537.9	0.0	509.0	0.0	511.4	0.0	6,515.0	0.0
49	9.4	498.2	0.0	488.6	0.0	556.0	0.0	561.8	0.0	562.4	0.0	540.9	0.0	544.9	0.0	540.6	0.0	511.0	0.0	520.7	0.0	492.3	0.0	494.1	0.0	6,311.6	0.0
50	10.0	481.0	0.0	472.5	0.0	538.8	0.0	545.2	0.0	545.2	0.0	524.2	0.0	527.7	0.0	523.4	0.0	494.3	0.0	503.5	0.0	475.7	0.0	476.9	0.0	6,108.3	0.0
51	10.6	463.8	0.0	456.4	0.0	521.5	0.0	528.5	0.0	528.0	0.0	507.5	0.0	510.4	0.0	506.2	0.0	477.6	0.0	486.3	0.0	459.0	0.0	459.7	0.0	5,905.0	0.0
52	11.1	446.6	0.0	440.3	0.0	504.3	0.0	511.8	0.0	510.8	0.0	490.9	0.0	493.2	0.0	489.0	0.0	461.0	0.0	469.0	0.0	442.3	0.0	442.5	0.0	5,701.6	0.0
53	11.7	429.4	0.0	424.2	0.0	487.1	0.0	495.2	0.0	493.6	0.0	474.2	0.0	476.0	0.0	471.8	0.0	444.3	0.0	451.8	0.0	425.7	0.0	425.3	0.0	5,498.3	0.0
54	12.2	412.1	0.0	408.1	0.0	469.9	0.0	478.5	0.0	476.3	0.0	457.5	0.0	458.8	0.0	454.5	0.0	427.6	0.0	434.6	0.0	409.0	0.0	408.0	0.0	5,295.0	0.0
55	12.8	394.9	0.0	391.9	0.0	452.6	0.0	461.8	0.0	459.1	0.0	440.9	0.0	441.5	0.0	437.3	0.0	411.0	0.0	417.4	0.0	392.3	0.0	390.8	0.0	5,091.6	0.0
56	13.3	377.7	0.0	375.8	0.0	435.4	0.0	445.2	0.0	441.9	0.0	424.2	0.0	424.3	0.0	420.1	0.0	394.3	0.0	400.2	0.0	375.7	0.0	373.6	0.0	4,888.3	0.0
57	13.9	360.5	0.0	359.7	0.0	418.2	0.0	428.5	0.0	424.7	0.0	407.5	0.0	407.1	0.0	402.9	0.0	377.6	0.0	382.9	0.0	359.0	0.0	356.4	0.0	4,685.0	0.0
58	14.4	343.2	0.0	343.6	0.0	401.0	0.0	411.8	0.0	407.4	0.0	390.9	0.0	389.9	0.0	385.6	0.0	361.0	0.0	365.7	0.0	342.3	0.0	339.1	0.0	4,481.6	0.0
59	15.0	326.0	0.0	327.5	0.0	383.8	0.0	395.2	0.0	390.2	0.0	374.2	0.0	372.7	0.0	368.4	0.0	344.3	0.0	348.5	0.0	325.7	0.0	321.9	0.0	4,278.3	0.0
60	15.6	308.8	0.0	311.4	0.0	366.5	0.0	378.5	0.0	373.0	0.0	357.5	0.0	355.4	0.0	351.2	0.0	327.6	0.0	331.3	0.0	309.0	0.0	304.7	0.0	4,075.0	0.0
61	16.1	291.6	0.0	295.3	0.0	349.3	0.0	361.8	0.0	355.8	0.0	340.9	0.0	338.2	0.0	334.0	0.0	311.0	0.0	314.0	0.0	292.3	0.0	287.5	0.0	3,871.6	0.0
62	16.7	274.4	0.0	279.2	0.0	332.1	0.0	345.2	0.0	338.6	0.0	324.2	0.0	321.0	0.0	316.8	0.0	294.3	0.0	296.8	0.0	275.7	0.0	270.3	0.0	3,668.3	0.0
63	17.2	257.1	0.0	263.1	0.0	314.9	0.0	328.5	0.0	321.3	0.0	307.5	0.0	303.8	0.0	299.5	0.0	277.6	0.0	279.6	0.0	259.0	0.0	253.0	0.0	3,465.0	0.0
64	17.8	239.9	0.0	246.9	0.0	297.6	0.0	311.8	0.0	304.1	0.0	290.9	0.0	286.5	0.0	282.3	0.0	261.0	0.0	262.4	0.0	242.3	0.0	235.8	0.0	3,261.6	0.0
65	18.3	222.7	0.0	230.8	0.0	280.4	0.0	295.2	0.0	286.9	0.0	274.2	0.0	269.3	0.0	265.1	0.0	244.3	0.0	245.2	0.0	225.7	0.0	218.6	0.0	3,058.3	0.0
66	18.9	205.5	0.0	214.7	0.0	263.2	0.0	278.5	0.0	269.7	0.0	257.5	0.0	252.1	0.0	247.9	0.0	227.6	0.0	227.9	0.0	209.0	0.0	201.4	0.0	2,855.0	0.0
67	19.4	188.2	0.0	198.6	0.0	246.0	0.0	261.8	0.0	252.4	0.0	240.9	0.0	234.9	0.0	230.6	0.0	211.0	0.0	210.7	0.0	192.3	0.0	184.1	0.0	2,651.6	0.0
68	20.0	171.0	0.0	182.5	0.0	228.8	0.0	245.2	0.0	235.2	0.0	224.2	0.0	217.7	0.0	213.4	0.0	194.3	0.0	193.5	0.0	175.7	0.0	166.9	0.0	2,448.3	0.0

สถาบันวิทยบริการ  
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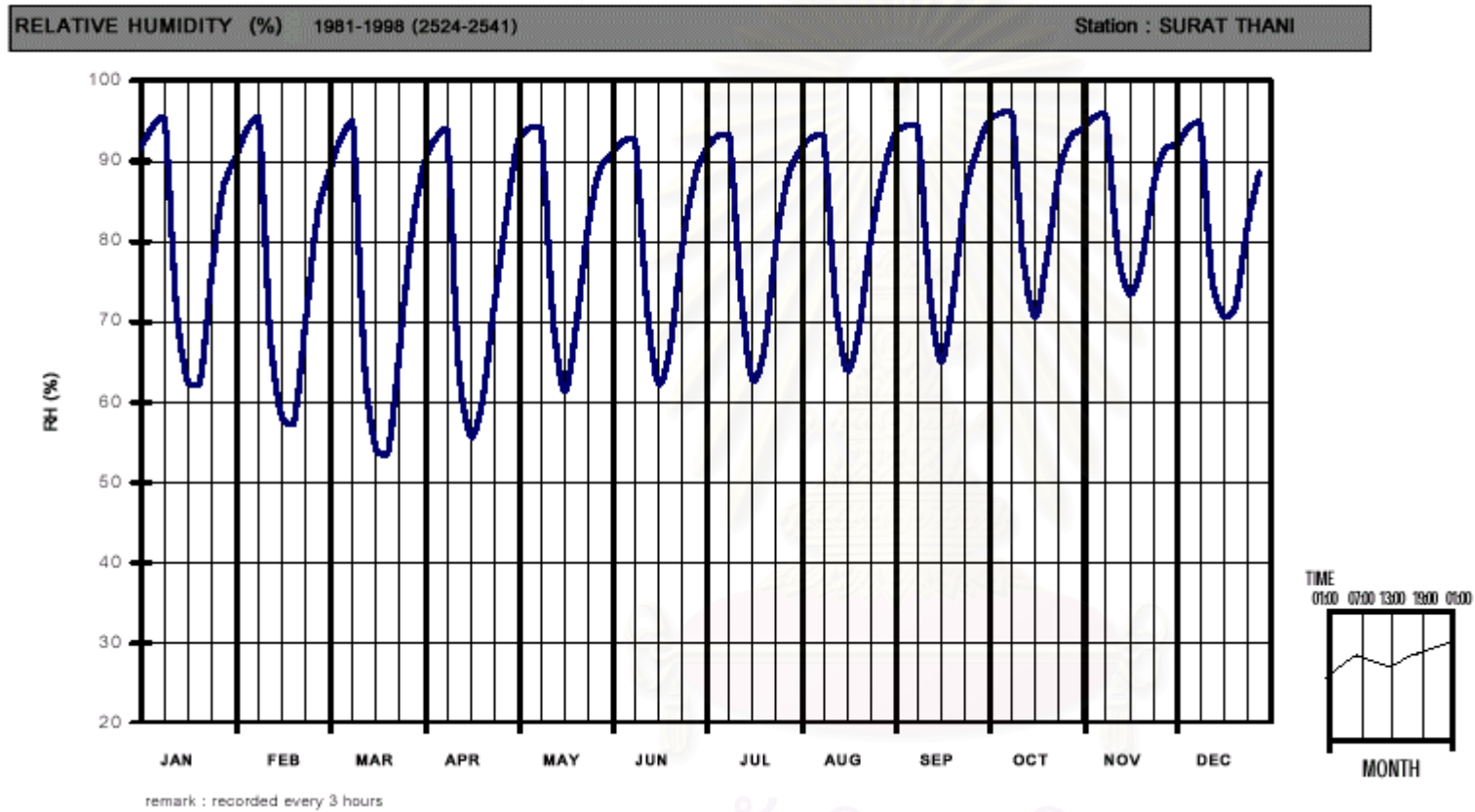
HEATING & COOLING DEGREE DAYS BASE RANGE 35 - 100 °F (1.7 - 37.8 °C) 1981 - 1998 (2524 - 2541)														Station : SURAT THANI													
MONTH	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		ANNUAL		
Degree	Cooling	Heating	Cooling	Heating	Cooling	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	153.0	0.0	166.4	0.0	211.5	0.0	228.5	0.0	218.0	0.0	207.5	0.0	200.4	0.0	196.2	0.0	177.6	0.0	176.3	0.0	159.0	0.0	149.7	0.0	2,245.0	0.0
70	21.1	136.6	0.0	150.3	0.0	194.3	0.0	211.8	0.0	200.8	0.0	190.9	0.0	183.2	0.0	179.0	0.0	161.0	0.0	159.0	0.0	142.3	0.0	132.5	0.0	2,041.6	0.0
71	21.7	119.4	0.0	134.2	0.0	177.1	0.0	195.2	0.0	183.6	0.0	174.2	0.0	166.0	0.0	161.8	0.0	144.3	0.0	141.8	0.0	125.7	0.0	115.3	0.0	1,838.3	0.0
72	22.2	102.1	0.0	118.1	0.0	159.9	0.0	178.5	0.0	166.3	0.0	157.5	0.0	148.8	0.0	144.5	0.0	127.6	0.0	124.6	0.0	109.0	0.0	98.0	0.0	1,635.0	0.0
73	22.8	84.9	0.0	101.9	0.0	142.6	0.0	161.8	0.0	149.1	0.0	140.9	0.0	131.5	0.0	127.3	0.0	111.0	0.0	107.4	0.0	92.3	0.0	80.8	0.0	1,431.6	0.0
74	23.3	67.7	0.0	85.8	0.0	125.4	0.0	145.2	0.0	131.9	0.0	124.2	0.0	114.3	0.0	110.1	0.0	94.3	0.0	90.2	0.0	75.7	0.0	63.6	0.0	1,228.3	0.0
75	23.9	50.5	0.0	69.7	0.0	108.2	0.0	128.5	0.0	114.7	0.0	107.5	0.0	97.1	0.0	92.9	0.0	77.6	0.0	72.9	0.0	59.0	0.0	46.4	0.0	1,025.0	0.0
76	24.4	33.2	0.0	53.6	0.0	91.0	0.0	111.8	0.0	97.4	0.0	90.9	0.0	79.9	0.0	75.6	0.0	61.0	0.0	55.7	0.0	42.3	0.0	29.1	0.0	821.6	0.0
77	25.0	16.0	0.0	37.5	0.0	73.8	0.0	95.2	0.0	80.2	0.0	74.2	0.0	62.7	0.0	58.4	0.0	44.3	0.0	38.5	0.0	25.7	0.0	11.9	0.0	618.3	0.0
78	25.6	1.7	-2.9	21.4	0.0	56.5	0.0	78.5	0.0	63.0	0.0	57.5	0.0	45.4	0.0	41.2	0.0	27.6	0.0	21.3	0.0	9.2	-0.2	0.1	-5.4	423.5	-8.5
79	26.1	0.0	-18.4	7.4	-2.2	39.3	0.0	61.8	0.0	45.8	0.0	40.9	0.0	28.2	0.0	24.0	0.0	11.2	-0.3	6.3	-2.2	0.2	-7.8	0.0	-22.5	265.1	-53.4
80	26.7	0.0	-35.6	0.5	-11.4	22.2	-0.1	45.2	0.0	28.6	0.0	24.2	0.0	11.3	-0.3	8.0	-1.3	0.8	-6.5	0.0	-13.2	0.0	-24.3	0.0	-39.7	140.8	-132.5
81	27.2	0.0	-52.9	0.0	-26.9	8.8	-3.9	28.5	0.0	11.5	-0.2	8.0	-0.5	1.2	-7.5	0.6	-11.1	0.0	-22.4	0.0	-30.4	0.0	-41.0	0.0	-57.0	58.6	-253.7
82	27.8	0.0	-70.1	0.0	-43.1	1.5	-13.9	12.2	-0.4	0.7	-6.6	0.3	-9.5	0.0	-23.5	0.0	-27.7	0.0	-39.0	0.0	-47.6	0.0	-57.7	0.0	-74.2	14.8	-413.2
83	28.3	0.0	-87.3	0.0	-59.2	0.0	-29.6	0.9	-5.8	0.0	-23.1	0.0	-25.8	0.0	-40.7	0.0	-44.9	0.0	-55.7	0.0	-64.8	0.0	-74.3	0.0	-91.4	0.9	-602.6
84	28.9	0.0	-104.5	0.0	-75.3	0.0	-46.8	0.0	-21.5	0.0	-40.3	0.0	-42.5	0.0	-57.9	0.0	-62.1	0.0	-72.4	0.0	-82.1	0.0	-91.0	0.0	-108.6	0.0	-805.0
85	29.4	0.0	-121.8	0.0	-91.4	0.0	-64.0	0.0	-38.2	0.0	-57.6	0.0	-59.1	0.0	-75.1	0.0	-79.4	0.0	-89.0	0.0	-99.3	0.0	-107.7	0.0	-125.9	0.0	-1,008.4
86	30.0	0.0	-139.0	0.0	-107.5	0.0	-81.2	0.0	-54.8	0.0	-74.8	0.0	-75.8	0.0	-92.3	0.0	-96.6	0.0	-105.7	0.0	-116.5	0.0	-124.3	0.0	-143.1	0.0	-1,211.7
87	30.6	0.0	-156.2	0.0	-123.6	0.0	-98.5	0.0	-71.5	0.0	-92.0	0.0	-92.5	0.0	-109.6	0.0	-113.8	0.0	-122.4	0.0	-133.7	0.0	-141.0	0.0	-160.3	0.0	-1,415.0
88	31.1	0.0	-173.4	0.0	-139.7	0.0	-115.7	0.0	-88.2	0.0	-109.2	0.0	-109.1	0.0	-126.8	0.0	-131.0	0.0	-139.0	0.0	-151.0	0.0	-157.7	0.0	-177.5	0.0	-1,618.4
89	31.7	0.0	-190.6	0.0	-155.8	0.0	-132.9	0.0	-104.8	0.0	-126.4	0.0	-125.8	0.0	-144.0	0.0	-148.2	0.0	-155.7	0.0	-168.2	0.0	-174.3	0.0	-194.7	0.0	-1,821.7
90	32.2	0.0	-207.9	0.0	-171.9	0.0	-150.1	0.0	-121.5	0.0	-143.7	0.0	-142.5	0.0	-161.2	0.0	-165.5	0.0	-172.4	0.0	-185.4	0.0	-191.0	0.0	-212.0	0.0	-2,025.0
91	32.8	0.0	-225.1	0.0	-188.1	0.0	-167.4	0.0	-138.2	0.0	-160.9	0.0	-159.1	0.0	-178.5	0.0	-182.7	0.0	-189.0	0.0	-202.6	0.0	-207.7	0.0	-229.2	0.0	-2,228.4
92	33.3	0.0	-242.3	0.0	-204.2	0.0	-184.6	0.0	-154.8	0.0	-178.1	0.0	-175.8	0.0	-195.7	0.0	-199.9	0.0	-205.7	0.0	-219.8	0.0	-224.3	0.0	-246.4	0.0	-2,431.7
93	33.9	0.0	-259.5	0.0	-220.3	0.0	-201.8	0.0	-171.5	0.0	-195.3	0.0	-192.5	0.0	-212.9	0.0	-217.1	0.0	-222.4	0.0	-237.1	0.0	-241.0	0.0	-263.6	0.0	-2,635.0
94	34.4	0.0	-276.8	0.0	-236.4	0.0	-219.0	0.0	-188.2	0.0	-212.6	0.0	-209.1	0.0	-230.1	0.0	-234.4	0.0	-239.0	0.0	-254.3	0.0	-257.7	0.0	-280.9	0.0	-2,838.4
95	35.0	0.0	-294.0	0.0	-252.5	0.0	-236.2	0.0	-204.8	0.0	-229.8	0.0	-225.8	0.0	-247.3	0.0	-251.6	0.0	-255.7	0.0	-271.5	0.0	-274.3	0.0	-298.1	0.0	-3,041.7
96	35.6	0.0	-311.2	0.0	-268.6	0.0	-253.5	0.0	-221.5	0.0	-247.0	0.0	-242.5	0.0	-264.6	0.0	-268.8	0.0	-272.4	0.0	-288.7	0.0	-291.0	0.0	-315.3	0.0	-3,245.0
97	36.1	0.0	-328.4	0.0	-284.7	0.0	-270.7	0.0	-238.2	0.0	-264.2	0.0	-259.1	0.0	-281.8	0.0	-286.0	0.0	-289.0	0.0	-306.0	0.0	-307.7	0.0	-332.5	0.0	-3,448.4
98	36.7	0.0	-345.6	0.0	-300.8	0.0	-287.9	0.0	-254.8	0.0	-281.4	0.0	-275.8	0.0	-299.0	0.0	-303.2	0.0	-305.7	0.0	-323.2	0.0	-324.3	0.0	-349.7	0.0	-3,651.7
99	37.2	0.0	-362.9	0.0	-316.9	0.0	-305.1	0.0	-271.5	0.0	-298.7	0.0	-292.5	0.0	-316.2	0.0	-320.5	0.0	-322.4	0.0	-340.4	0.0	-341.0	0.0	-367.0	0.0	-3,855.0
100	37.8	0.0	-380.1	0.0	-333.1	0.0	-322.4	0.0	-288.2	0.0	-315.9	0.0	-309.1	0.0	-333.5	0.0	-337.7	0.0	-339.0	0.0	-357.6	0.0	-357.7	0.0	-384.2	0.0	-4,058.4

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ตารางแสดงผลข้อมูลความชื้นสัมพัทธ์ (relative humidity)

RELATIVE HUMIDITY (%) 1981 - 1998 (2524 - 2541)													Station : SURAT THANI																													
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	64.9	82.3	95.8	62.4	79.6	96.1	54.3	75.0	95.3	52.6	74.4	93.8	58.6	79.7	94.6	60.8	81.0	93.6	62.2	79.0	92.8	60.0	79.4	93.4	58.5	80.3	93.2	67.9	85.9	95.6	76.4	88.2	96.1	74.1	85.0	94.3	62.7	80.8	94.6			
2	64.6	81.3	95.7	58.4	78.9	95.8	51.1	74.3	95.4	57.7	77.7	94.4	56.2	80.2	94.6	61.5	81.8	93.5	58.1	78.8	92.9	59.4	78.3	92.0	63.4	82.0	93.1	66.7	86.1	95.8	76.0	87.5	95.2	75.6	84.6	92.9	62.4	81.0	94.3			
3	65.2	81.5	95.2	59.2	78.9	95.6	51.5	73.2	93.4	52.9	75.8	95.1	59.4	79.8	94.1	65.1	82.9	93.6	60.1	79.6	91.9	62.5	80.1	93.1	59.9	82.3	93.8	65.9	84.5	95.5	73.9	86.6	94.9	75.3	85.3	93.5	62.6	80.9	94.2			
4	61.8	80.5	95.9	60.7	78.7	95.2	51.3	72.7	94.1	56.0	75.2	94.7	60.2	79.4	94.4	61.9	81.4	93.9	58.8	79.2	93.6	61.5	81.2	93.4	63.8	82.6	94.4	69.7	85.7	94.6	73.4	87.2	96.1	73.4	85.4	95.4	62.7	80.8	94.6			
5	63.5	81.3	94.2	60.9	79.1	95.8	51.4	73.8	94.7	55.0	74.6	93.7	62.4	80.3	94.1	59.9	79.3	93.2	60.9	80.6	93.9	66.2	82.6	93.4	62.8	82.6	93.9	71.2	86.9	95.8	71.8	86.8	96.1	73.4	86.0	95.4	63.3	81.2	94.5			
6	66.4	81.5	94.9	60.4	78.9	94.6	50.9	73.8	94.4	53.4	75.2	92.8	56.8	79.3	93.8	63.3	81.2	92.6	62.1	79.9	93.2	66.9	83.6	93.1	64.9	83.3	93.8	68.7	86.1	95.8	75.8	87.4	96.5	73.6	85.8	96.4	63.6	81.3	94.3			
7	60.7	79.0	94.8	61.3	79.2	95.7	54.4	75.5	94.8	53.8	75.7	93.9	59.9	81.6	94.6	64.2	82.5	92.9	62.5	80.9	93.5	65.9	83.4	93.5	67.5	83.8	94.4	65.6	84.3	96.1	74.2	87.1	96.6	74.6	85.1	94.8	63.7	81.5	94.6			
8	63.9	80.5	94.8	57.4	77.8	95.7	53.3	75.0	94.9	56.0	75.7	93.5	59.8	81.0	94.6	60.1	80.1	94.1	61.1	80.7	92.6	68.6	84.5	94.9	64.9	82.0	93.5	67.5	84.9	95.9	72.6	87.0	96.1	68.7	82.5	94.4	62.8	81.0	94.6			
9	63.1	79.9	94.6	54.3	76.0	95.4	53.5	74.6	95.6	51.9	73.9	93.0	63.4	82.5	93.9	67.6	82.7	93.2	58.8	80.1	93.6	64.7	81.4	93.9	65.8	83.2	93.8	67.6	85.2	95.5	72.3	87.5	96.2	72.4	84.2	95.1	63.0	80.9	94.5			
10	60.7	79.4	94.9	57.2	77.0	95.1	50.1	73.5	95.2	55.5	75.2	93.4	58.8	82.4	94.3	65.2	83.7	93.6	62.1	81.8	92.7	66.9	82.6	93.1	62.8	81.3	93.8	68.6	85.4	95.6	77.3	88.0	96.6	73.1	85.5	95.1	63.2	81.3	94.5			
11	66.7	81.6	95.7	58.3	78.1	95.6	55.4	74.5	94.7	53.5	75.9	94.2	61.2	81.7	95.3	62.2	80.4	93.8	63.2	81.5	93.9	64.8	81.6	93.4	60.8	81.4	93.6	69.7	86.5	96.0	75.6	87.5	95.1	74.8	86.1	95.4	63.9	81.4	94.7			
12	62.1	80.4	96.0	57.8	77.8	95.7	50.3	73.9	94.8	53.6	75.4	94.3	64.1	82.8	94.4	64.5	81.7	92.3	65.9	82.8	93.3	60.2	79.2	92.7	65.4	82.9	94.2	71.3	87.4	95.7	74.6	86.8	95.6	73.4	86.0	95.8	63.6	81.4	94.6			
13	60.8	79.9	96.4	57.7	77.4	95.4	51.4	73.6	95.3	55.1	75.3	93.2	61.6	83.1	95.3	63.2	81.2	93.3	66.7	82.3	93.6	62.1	80.2	92.2	62.9	82.8	94.4	69.2	86.1	96.2	74.6	87.3	95.8	70.4	84.7	95.6	63.0	81.1	94.7			
14	61.7	80.4	95.2	60.1	78.9	95.9	56.0	75.1	94.7	54.8	76.4	93.6	59.7	82.2	94.6	63.9	81.6	93.4	63.2	81.1	92.9	60.9	78.8	92.3	64.2	84.1	94.9	67.2	85.5	95.3	71.1	87.2	95.8	72.1	85.2	94.9	62.9	81.4	94.5			
15	62.8	81.1	96.0	55.0	78.0	96.4	55.0	75.5	95.3	54.3	76.6	93.5	61.8	82.3	95.2	61.6	80.0	93.1	65.6	83.1	93.6	61.9	79.0	92.2	62.9	84.6	94.3	67.3	85.5	96.1	73.8	86.5	95.9	70.8	84.4	95.6	62.7	81.4	94.8			
16	61.6	80.4	95.6	57.1	77.6	95.4	52.7	74.8	93.8	57.0	77.6	93.4	59.8	81.2	94.0	64.4	81.0	92.1	65.2	83.1	94.4	64.5	81.2	92.2	63.7	84.4	95.4	75.4	88.4	96.5	72.3	86.1	96.4	71.0	83.6	95.6	63.7	81.6	94.6			
17	60.2	79.7	95.2	54.5	75.7	95.2	50.7	75.4	95.0	52.5	75.8	94.5	62.6	81.5	93.9	61.6	80.1	92.9	63.9	82.0	94.2	64.8	82.1	92.8	64.0	84.1	94.6	70.7	86.6	96.1	70.8	85.4	96.0	68.9	82.8	95.6	62.1	80.9	94.7			
18	60.8	79.5	95.8	55.9	76.4	95.3	57.2	77.1	95.4	57.3	77.0	93.8	64.1	81.2	94.7	64.4	81.2	93.6	62.6	81.5	94.2	63.2	81.0	93.4	69.7	85.2	94.4	71.2	86.8	96.2	72.1	86.2	96.1	69.8	83.1	94.6	64.0	81.4	94.8			
19	60.6	79.5	96.1	57.2	77.3	95.6	53.2	75.0	94.5	54.9	76.4	94.4	63.8	82.6	93.3	65.1	81.4	91.6	62.1	81.4	93.4	63.8	79.8	92.7	70.6	86.0	94.2	69.6	87.0	96.2	73.6	86.6	96.1	69.0	82.8	93.7	63.6	81.3	94.3			
20	60.8	79.4	95.8	54.6	74.9	93.9	55.1	75.9	94.2	53.0	75.3	93.3	63.9	83.8	94.0	63.8	81.4	92.6	64.7	81.9	93.0	62.1	80.6	93.1	68.7	84.2	94.9	70.7	87.8	97.2	74.1	86.3	95.5	68.3	82.6	95.3	63.3	81.2	94.4			
21	58.8	78.7	94.7	57.1	75.9	94.2	56.3	76.7	94.7	56.1	76.7	92.7	61.4	80.9	94.1	62.8	80.8	92.5	63.6	82.2	93.6	64.4	81.3	93.5	63.9	83.7	94.9	67.8	87.0	97.1	76.2	87.4	94.7	68.5	82.0	94.2	63.1	81.1	94.3			
22	59.6	79.5	96.3	55.7	76.2	94.6	54.0	75.3	94.5	54.9	76.0	93.5	61.8	80.8	93.9	61.5	79.4	91.2	62.9	81.7	93.8	62.9	81.1	92.9	64.8	83.9	95.1	69.5	86.2	96.4	75.9	87.7	96.4	69.1	82.8	94.2	62.7	80.9	94.4			
23	63.9	80.6	94.6	57.4	76.6	94.6	54.1	74.5	94.9	54.9	76.2	93.6	58.7	80.9	93.4	61.6	78.5	91.7	64.1	82.0	93.6	65.5	82.1	92.7	65.9	84.5	95.1	68.3	86.0	95.4	74.5	87.0	95.9	66.1	81.7	93.5	62.9	80.9	94.1			
24	61.3	79.0	94.5	54.3	75.4	95.6	53.9	74.3	94.3	57.1	75.8	93.2	62.1	81.7	93.5	59.5	77.4	91.4	64.9	82.6	93.5	66.9	82.6	93.6	62.7	83.9	95.2	73.4	88.0	96.1	72.1	85.9	95.8	68.4	82.2	95.2	63.1	80.7	94.3			
25	61.2	79.4	94.8	53.7	74.7	95.2	52.1	74.1	94.3	57.0	76.6	94.1	63.3	83.0	94.6	63.8	79.4	91.8	63.6	81.2	93.5	63.9	82.5	93.8	63.8	84.6	95.4	72.0	87.7	96.6	67.4	83.2	94.9	70.8	83.2	93.8	62.7	80.8	94.4			
26	60.2	79.7	95.9	54.3	74.8	94.8	53.6	74.9	94.7	58.2	77.8	94.2	63.3	82.1	93.4	60.3	78.5	91.8	61.5	80.7	93.4	66.5	82.5	93.8	65.9	85.9	95.4	74.2	88.1	96.8	71.4	84.9	95.8	68.1	83.0	94.4	63.1	81.1	94.5			
27	59.8	78.7	94.8	50.7	74.2	95.1	49.7	73.4	94.7	59.4	78.7	94.7	65.3	83.3	94.5	58.4	79.2	91.0	61.3	79.2	92.6	65.6	83.9	93.8	70.4	86.3	95.2	75.4	88.9	96.6	69.8	84.5	95.4	66.9	81.9	94.6	62.7	81.0	94.4			
28	60.7	79.6	95.1	53.8	75.5	95.5	47.9	71.7	94.1	59.6	78.5	93.4	62.6	82.0	93.9	60.0	79.6	92.4	60.8	80.4	93.1	63.9	82.2	93.5	70.3	86.5	95.1	75.5	89.4	96.8	70.5	84.4	94.6	65.6	81.2	93.6	62.6	80.9	94.3			
29	59.0	78.8	94.8	56.5	76.5	95.3	54.4	74.3	93.9	63.1	79.3	94.2	63.2	81.9	94.1	59.3	79.6	92.8	63.3	81.9	93.4	62.6	80.7	93.6	67.5	85.0	94.5	76.5	89.4	96.6	74.7	86.4	95.4	68.6	82.4	94.7	64.1	81.3	94.4			
30	58.3	79.2	95.2				53.7	74.8	94.2	60.6	79.7	93.8	66.9	83.6	93.7	58.7	78.1	93.4	63.1	79.4	92.8	66.1	82.8	93.6	70.0	86.3	94.8	79.1	89.4	96.4	74.9	86.1	95.9	65.2	81.1	95.2	65.2	81.9	94.5			
31	59.1	78.9	95.8				52.1	73.3	94.6				59.0	80.9	94.2				62.8	79.9	91.9				65.6	82.0	93.4				76.5	89.1	96.5				65.6	81.7	95.2	63.0	80.8	94.5
Average	61.8	80.0	95.3	57.0	77.1	95.3	52.9	74.5	94.7	55.7	76.3	93.8	61.5	81.6	94.2	62.3	80.6	92.8	62.6	81.0	93.3	64.0	81.4	93.2	65.1	83.8	94.4	70.5	86.8	96.1	73.5	86.5	95.8	70.5	83.7	94.8	63.1	81.1	94.5			
Extremes	36	99	23	99	22	99	28	99	32	100	37	99	36	100	34	99	42	100	36	100	34	99	42	100	36	100	44	100	43	100	2											

แผนภูมิความชื้นสัมพัทธ์ (relative humidity)



สถาบันวิทยบริการ  
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 : SURAT THANI																																					
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										58 58	kts	km/h	m/s										57.3 57.3	kts	km/h	m/s									58 58														
1-3	2-6	0.6-1.5	2.9	5.8	3.2	0.1	0.1	0	0.1	0.2		12.4	1-3	2-6	0.6-1.5	3.5	4.8	3.4	0.2	0.2	0.1	0.1	0.4		12.7	1-3	2-6	0.6-1.5	3	4.2	2.9	0.3	0.5	0.6	0.5	0.8		12.8	1-3	2-6	0.6-1.5	3	4.2	2.9	0.3	0.5	0.6	0.5	0.8		12.8
4-16	7-30	1.6-8.5	6.7	14.6	7.8	0.1	0	0	0	0.2		29.4	4-16	7-30	1.6-8.5	8.6	11.7	8.5	0.2	0.1	0	0.1	0.6		29.5	4-16	7-30	1.6-8.5	8.4	11.6	7.3	0.3	0.1	0.1	0.2	1.1		29.1	4-16	7-30	1.6-8.5	8.4	11.6	7.3	0.3	0.1	0.1	0.2	1.1		29.1
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	0	0		0	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	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	>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			9.6	20.4	11	0.2	0.1	0	0.1	0.4		58 100	Total			12.1	16.5	11.9	0.4	0.3	0.1	0.2	1		57.3 100	Total			11.4	15.8	10.2	0.6	0.6	0.7	0.7	1.9		58 100	Total			11.4	15.8	10.2	0.6	0.6	0.7	0.7	1.9		58 100
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										66.9 66.9	kts	km/h	m/s										71.1 71.1	kts	km/h	m/s									61.8 61.8														
1-3	2-6	0.6-1.5	3.5	2.7	2	0.4	1.5	1.3	0.9	0.6		12.9	1-3	2-6	0.6-1.5	1.5	1.2	0.8	0.5	4.2	4.3	1.3	0.6		14.4	1-3	2-6	0.6-1.5	0.2	0.2	0.2	0.5	4.3	7.8	1.4	0.2		14.8	1-3	2-6	0.6-1.5	0.2	0.2	0.2	0.5	4.3	7.8	1.4	0.2		14.8
4-16	7-30	1.6-8.5	7.1	6.3	2.6	0.4	0.8	0.9	0.7	1		19.8	4-16	7-30	1.6-8.5	1.5	1.2	0.7	0.4	3.6	5.5	1.5	0.4		14.8	4-16	7-30	1.6-8.5	0.1	0.2	0.1	0.2	5.4	13.3	3.7	0.2		23.2	4-16	7-30	1.6-8.5	0.1	0.2	0.1	0.2	5.4	13.3	3.7	0.2		23.2
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	0	0		0	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	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	>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			10.6	9	4.6	0.8	2.3	2.2	1.6	1.6		66.9 100	Total			3	2.4	1.5	0.9	7.8	9.8	2.8	1		71.1 100	Total			0.3	0.4	0.3	0.7	9.7	21.1	5.1	0.4		61.8 100	Total			0.3	0.4	0.3	0.7	9.7	21.1	5.1	0.4		61.8 100
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										61.2 61.2	kts	km/h	m/s										56 56	kts	km/h	m/s									64.4 64.4														
1-3	2-6	0.6-1.5	0.3	0.2	0.2	0.1	4.2	6.7	1.6	0.4		13.7	1-3	2-6	0.6-1.5	0.2	0.1	0	0.1	3.5	8.4	1.9	0.4		14.6	1-3	2-6	0.6-1.5	0.9	0.6	0.2	0.3	3.1	6.7	1.9	0.3		14	1-3	2-6	0.6-1.5	0.9	0.6	0.2	0.3	3.1	6.7	1.9	0.3		14
4-16	7-30	1.6-8.5	0.3	0.2	0.1	0	4.8	14.3	4.8	0.4		24.9	4-16	7-30	1.6-8.5	0.3	0.1	0.1	0.1	5.5	16.3	6.3	0.4		29.1	4-16	7-30	1.6-8.5	0.5	0.3	0.2	0.2	3	12.2	4.4	0.5		21.4	4-16	7-30	1.6-8.5	0.5	0.3	0.2	0.2	3	12.2	4.4	0.5		21.4
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	0	0		0	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	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	>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			0.6	0.4	0.3	0.1	9	21	6.4	0.8		61.2 100	Total			0.5	0.2	0.1	0.2	9	24.7	8.2	0.8		56 100	Total			1.5	0.9	0.4	0.5	6.1	18.9	6.3	0.8		64.4 100	Total			1.5	0.9	0.4	0.5	6.1	18.9	6.3	0.8		64.4 100
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										73.4 73.4	kts	km/h	m/s										66.6 66.6	kts	km/h	m/s									54.5 54.5														
1-3	2-6	0.6-1.5	2.3	2.2	0.7	0.3	2	2.6	1.2	0.7		11.9	1-3	2-6	0.6-1.5	3.4	5.1	1.6	0.2	0.8	0.6	0.4	0.4		12.5	1-3	2-6	0.6-1.5	3.7	5.9	1.5	0.1	0.1	0	0	0.2		11.5	1-3	2-6	0.6-1.5	3.7	5.9	1.5	0.1	0.1	0	0	0.2		11.5
4-16	7-30	1.6-8.5	3.4	3.4	0.6	0.2	1.3	3.6	1.3	0.6		14.4	4-16	7-30	1.6-8.5	5.9	10.9	2	0.1	0.4	0.4	0.2	0.6		20.5	4-16	7-30	1.6-8.5	9.8	19.8	3.7	0.1	0	0	0	0.3		33.7	4-16	7-30	1.6-8.5	9.8	19.8	3.7	0.1	0	0	0	0.3		33.7
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	0	0		0	17-27	31-50	8.6-14	0	0.1	0	0	0	0	0	0		0.1	17-27	31-50	8.6-14	0	0.1	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	>27	>50	>14	0	0	0	0	0	0	0	0		0
Total			5.7	5.6	1.3	0.5	3.3	6.1	2.5	1.3		73.4 100	Total			9.3	16	3.6	0.3	1.2	1	0.6	1		66.6 100	Total			13.5	25.8	5.2	0.2	0.1	0	0	0.5		54.5 100	Total			13.5	25.8	5.2	0.2	0.1	0	0	0.5		54.5 100

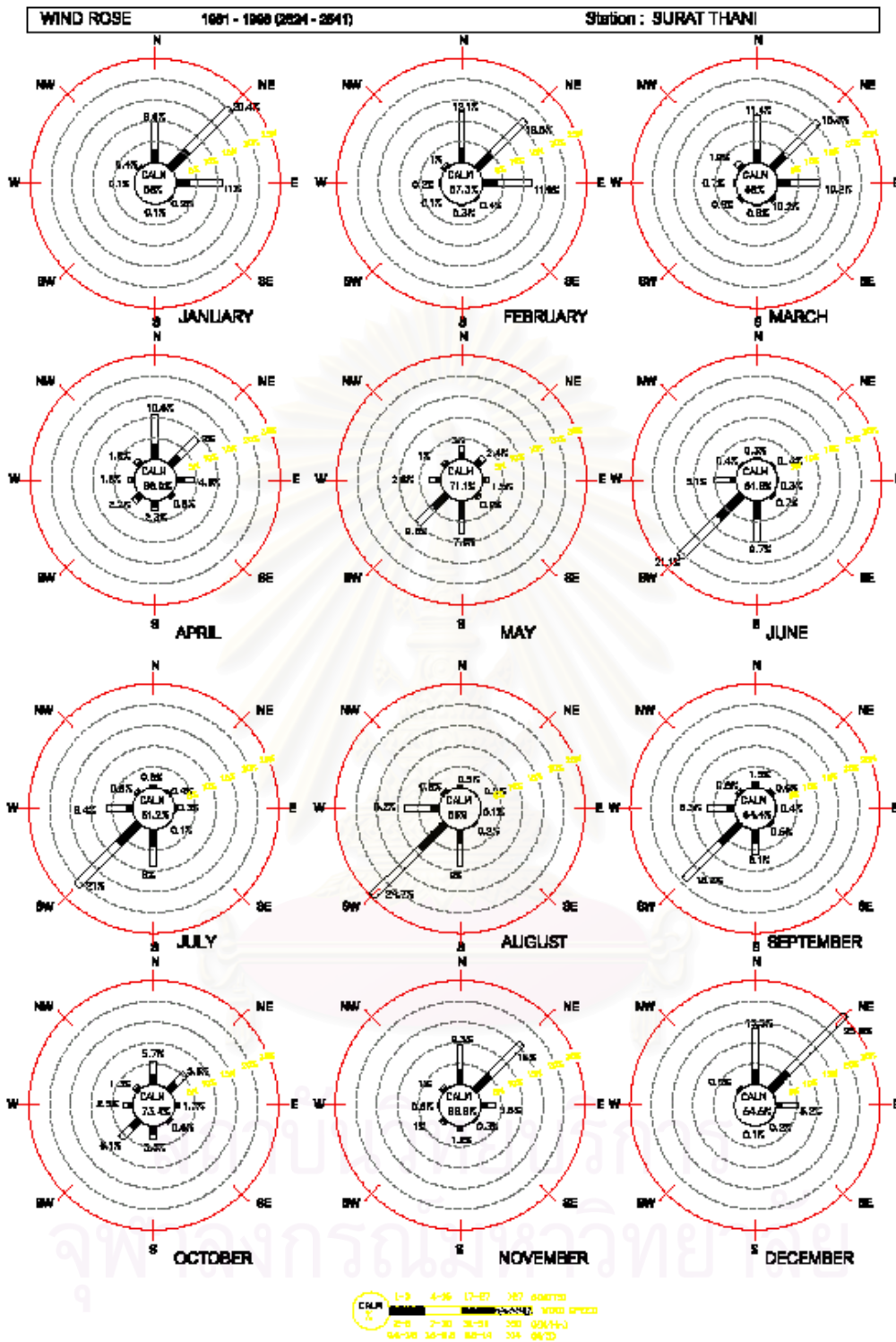
remark : kts = KNOTS

1 kts = 1.853 km/h = 0.514 m/s

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

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แผนภูมิจำแนกความถี่ของลม ในแต่ละความเร็วและทิศทาง ที่เกิดลมรายเดือน (wind rose)



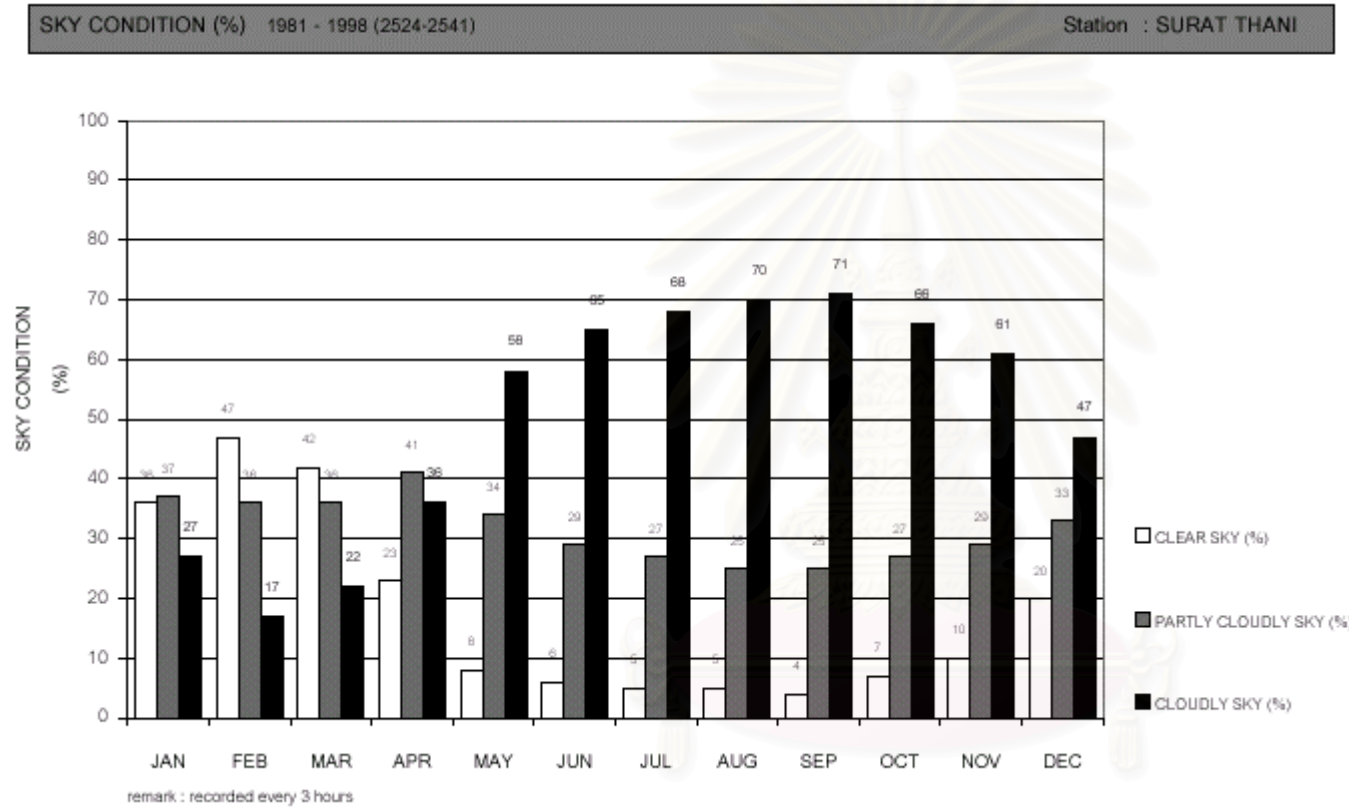
ตารางแสดงผลข้อมูลสภาพท้องฟ้าและสัดส่วนเปอร์เซ็นต์สภาพท้องฟ้า (sky cover and percentage of sky condition)

SKY COVER (%) & SKY CONDITION 1981 - 1998 (2524 - 2541)														Station : SURAT THANI																										
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	29%	44%	26%	48%	34%	18%	54%	37%	9%	28%	40%	32%	13%	42%	46%	11%	29%	60%	7%	33%	60%	0%	33%	67%	7%	31%	62%	8%	26%	66%	7%	27%	66%	8%	21%	71%	18%	33%	49%	
2	32%	32%	36%	38%	36%	26%	43%	40%	17%	30%	37%	34%	14%	41%	45%	5%	35%	60%	13%	43%	45%	2%	38%	60%	6%	27%	67%	3%	27%	70%	3%	24%	73%	8%	24%	68%	16%	34%	50%	
3	35%	33%	32%	40%	32%	29%	41%	38%	21%	32%	46%	22%	15%	43%	43%	2%	27%	71%	7%	42%	51%	4%	34%	63%	4%	25%	71%	3%	41%	56%	4%	23%	73%	13%	28%	59%	17%	34%	49%	
4	40%	34%	26%	40%	41%	18%	52%	37%	11%	38%	40%	23%	6%	45%	49%	2%	26%	73%	4%	37%	59%	2%	27%	71%	1%	29%	70%	5%	16%	79%	4%	17%	79%	11%	33%	56%	17%	32%	51%	
5	29%	40%	30%	47%	31%	22%	44%	44%	12%	32%	42%	26%	14%	41%	45%	3%	27%	70%	2%	34%	64%	2%	30%	68%	2%	23%	76%	0%	16%	84%	5%	23%	71%	9%	30%	61%	16%	32%	52%	
6	31%	35%	35%	43%	32%	26%	49%	30%	21%	27%	46%	27%	11%	33%	57%	2%	32%	66%	5%	33%	62%	3%	16%	81%	0%	28%	72%	5%	23%	72%	5%	23%	73%	14%	27%	59%	16%	30%	54%	
7	29%	46%	25%	46%	38%	16%	48%	34%	18%	23%	40%	37%	14%	33%	53%	9%	27%	64%	9%	34%	57%	3%	20%	77%	2%	24%	74%	8%	30%	63%	10%	34%	55%	16%	32%	52%	18%	33%	49%	
8	26%	45%	29%	51%	38%	12%	45%	33%	22%	26%	36%	38%	12%	41%	48%	7%	38%	55%	9%	33%	59%	2%	32%	66%	5%	17%	78%	2%	26%	72%	7%	35%	58%	16%	32%	52%	17%	34%	49%	
9	29%	35%	37%	54%	32%	14%	43%	35%	22%	26%	43%	31%	5%	27%	68%	4%	18%	78%	5%	36%	59%	9%	20%	70%	1%	28%	71%	6%	32%	62%	8%	29%	63%	14%	34%	52%	17%	31%	52%	
10	38%	37%	26%	49%	40%	11%	39%	46%	15%	23%	41%	36%	5%	28%	68%	4%	27%	70%	5%	27%	67%	2%	23%	74%	5%	27%	68%	8%	22%	70%	10%	23%	66%	17%	38%	45%	17%	32%	51%	
11	47%	24%	29%	48%	37%	15%	49%	40%	11%	20%	45%	35%	3%	28%	69%	7%	33%	60%	7%	28%	65%	5%	27%	68%	6%	38%	55%	8%	15%	77%	5%	19%	76%	13%	37%	51%	18%	31%	51%	
12	38%	35%	27%	45%	37%	18%	54%	35%	10%	15%	46%	39%	8%	28%	64%	5%	30%	65%	6%	20%	74%	9%	19%	72%	7%	20%	73%	2%	20%	78%	5%	16%	79%	14%	39%	47%	17%	29%	54%	
13	40%	41%	18%	51%	34%	15%	59%	34%	7%	22%	45%	34%	9%	41%	50%	5%	27%	68%	0%	20%	80%	5%	30%	65%	4%	23%	73%	3%	32%	65%	9%	30%	61%	20%	28%	52%	19%	32%	49%	
14	46%	39%	15%	47%	38%	15%	49%	32%	20%	24%	37%	39%	7%	40%	53%	13%	19%	69%	1%	25%	74%	7%	31%	62%	7%	20%	73%	5%	32%	63%	2%	43%	55%	19%	32%	49%	19%	32%	49%	
15	39%	39%	22%	47%	39%	14%	45%	29%	26%	27%	27%	47%	10%	25%	65%	9%	38%	53%	2%	17%	81%	7%	32%	61%	4%	30%	66%	12%	36%	52%	10%	33%	57%	15%	28%	57%	19%	31%	50%	
16	35%	32%	32%	44%	43%	13%	43%	22%	35%	23%	39%	38%	6%	42%	53%	5%	32%	63%	0%	19%	81%	8%	20%	72%	7%	30%	63%	7%	29%	64%	16%	34%	50%	15%	44%	41%	17%	32%	50%	
17	38%	31%	31%	54%	33%	13%	45%	32%	24%	28%	44%	28%	9%	38%	53%	2%	30%	69%	5%	27%	68%	4%	17%	79%	0%	29%	71%	9%	38%	52%	14%	43%	43%	25%	40%	35%	20%	33%	47%	
18	43%	38%	19%	45%	40%	15%	39%	29%	32%	19%	52%	30%	7%	41%	53%	5%	30%	66%	5%	21%	73%	0%	19%	81%	1%	16%	83%	16%	40%	45%	20%	36%	45%	15%	34%	51%	18%	33%	49%	
19	42%	46%	12%	46%	35%	18%	36%	35%	29%	28%	38%	34%	8%	26%	67%	4%	27%	69%	2%	27%	71%	4%	27%	70%	2%	23%	76%	9%	31%	59%	16%	30%	54%	9%	39%	52%	17%	32%	51%	
20	40%	46%	14%	42%	40%	18%	27%	43%	30%	20%	44%	36%	3%	32%	66%	5%	24%	71%	5%	21%	74%	2%	21%	77%	2%	30%	68%	5%	27%	67%	9%	33%	58%	23%	36%	41%	15%	33%	52%	
21	41%	36%	23%	31%	49%	21%	35%	40%	25%	16%	48%	36%	12%	34%	54%	7%	22%	71%	4%	22%	74%	2%	33%	65%	5%	30%	64%	8%	31%	61%	13%	22%	66%	28%	32%	40%	17%	33%	50%	
22	46%	33%	21%	46%	38%	17%	36%	40%	24%	23%	42%	35%	6%	29%	65%	9%	31%	59%	2%	22%	76%	5%	23%	73%	5%	34%	61%	11%	33%	56%	8%	34%	58%	27%	30%	42%	19%	32%	49%	
23	35%	38%	27%	45%	32%	23%	34%	46%	21%	21%	37%	42%	4%	39%	57%	6%	29%	65%	2%	13%	85%	6%	21%	73%	9%	27%	64%	15%	30%	55%	13%	27%	61%	27%	30%	42%	18%	31%	51%	
24	34%	40%	26%	39%	39%	22%	33%	38%	29%	15%	40%	45%	3%	33%	64%	9%	32%	59%	4%	20%	77%	5%	19%	77%	4%	23%	73%	11%	33%	56%	12%	27%	61%	27%	31%	42%	16%	31%	53%	
25	37%	38%	26%	60%	27%	13%	34%	41%	25%	23%	45%	32%	4%	27%	69%	6%	26%	68%	6%	20%	73%	5%	29%	66%	3%	26%	71%	9%	27%	64%	12%	38%	51%	33%	33%	34%	19%	31%	49%	
26	25%	40%	35%	56%	32%	12%	42%	31%	27%	18%	41%	41%	8%	26%	67%	13%	27%	60%	5%	27%	68%	5%	28%	66%	3%	18%	79%	4%	28%	68%	11%	32%	57%	29%	41%	30%	18%	31%	51%	
27	30%	42%	28%	49%	35%	15%	38%	42%	20%	21%	33%	46%	3%	21%	77%	3%	33%	64%	8%	31%	61%	5%	29%	66%	2%	20%	77%	2%	30%	69%	13%	38%	49%	26%	36%	38%	17%	32%	51%	
28	36%	32%	32%	52%	40%	8%	46%	36%	18%	17%	35%	48%	4%	30%	66%	3%	35%	62%	9%	22%	69%	5%	27%	69%	4%	16%	80%	2%	19%	80%	26%	29%	45%	34%	30%	35%	20%	29%	51%	
29	33%	33%	34%	59%	28%	13%	40%	35%	25%	17%	35%	48%	4%	35%	61%	5%	30%	64%	6%	24%	70%	1%	26%	73%	1%	22%	77%	5%	24%	71%	13%	30%	57%	28%	30%	41%	18%	29%	53%	
30	43%	33%	24%				38%	32%	29%	9%	44%	47%	3%	35%	63%	15%	30%	55%	2%	29%	69%	5%	23%	72%	5%	20%	75%	7%	24%	69%	11%	18%	71%	32%	41%	27%	16%	30%	54%	
31	43%	39%	18%				36%	44%	20%				8%	33%	58%				3%	32%	65%	4%	19%	77%				10%	21%	69%				31%	34%	34%	19%	32%	49%	
AVG % condition	36%	37%	26%	47%	36%	17%	42%	36%	21%	23%	41%	36%	8%	34%	58%	6%	29%	65%	5%	27%	68%	4%	25%	70%	4%	25%	71%	7%	28%	66%	10%	29%	61%	20%	33%	47%	18%	32%	51%	
				5.1			4.3			4.7			6.0			7.5			7.9			8.1			8.2			7.9			7.6			6.6			6.8			

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

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แผนภูมิสภาพท้องฟ้าและสัดส่วนเปอร์เซ็นต์สภาพท้องฟ้า (sky cover and percentage of sky condition)



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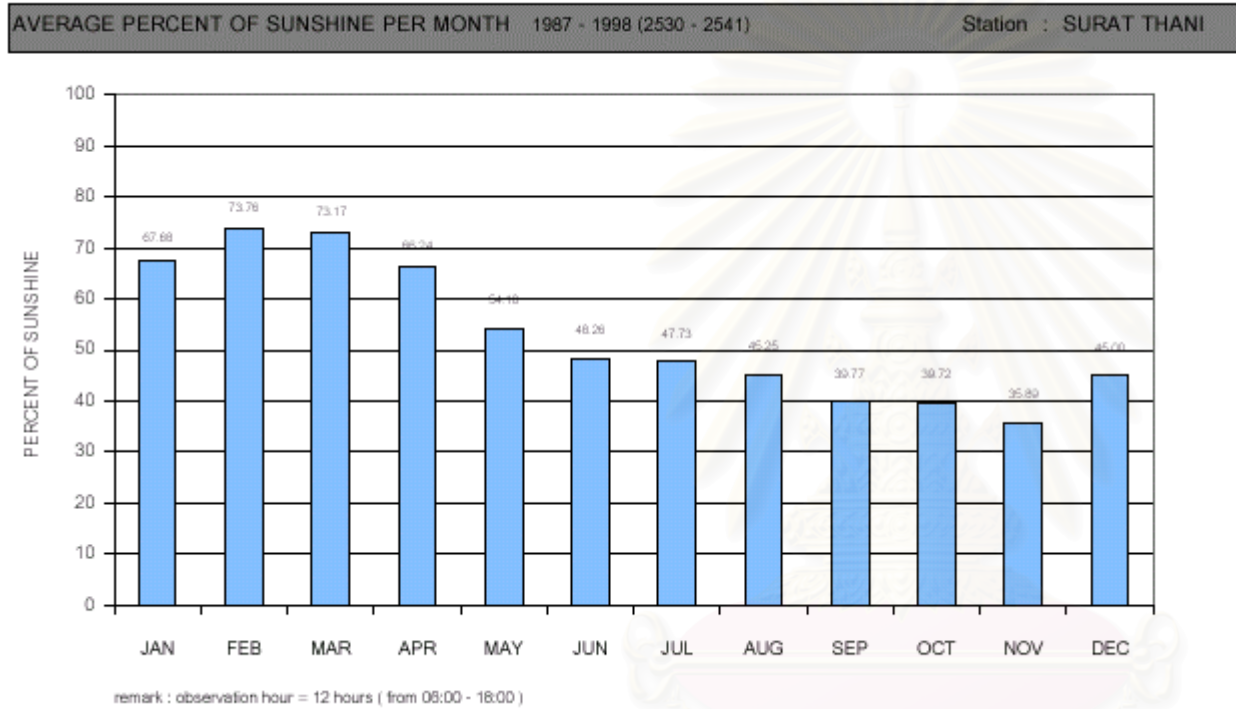
ตารางแสดงผลข้อมูลระยะเวลาของแสงแดด (duration of sunshine)

DURATION OF SUNSHINE (hours) 1981 - 1998 (2524 - 2541)													Station : SURAT THANI	
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 %	
1	8.2 68.3%	8.3 69.3%	9.4 78.3%	8.4 70.2%	6.1 50.6%	7.5 62.6%	6.0 50.1%	5.5 45.8%	5.9 49.2%	4.5 37.3%	2.9 23.8%	4.2 34.9%	6.4 53.4%	
2	7.8 65.3%	7.6 63.2%	8.4 70.1%	7.2 59.8%	6.9 57.4%	5.8 48.1%	6.9 57.8%	6.5 54.4%	4.6 38.3%	5.6 46.4%	4.0 33.1%	3.6 30.0%	6.2 52.0%	
3	7.4 61.7%	7.4 62.0%	9.0 74.9%	8.6 72.0%	7.3 60.5%	4.4 36.7%	6.7 55.8%	6.7 55.7%	4.4 36.7%	6.3 52.6%	4.8 40.1%	4.9 40.8%	6.5 54.1%	
4	8.9 74.2%	8.2 68.3%	9.2 77.0%	8.8 73.0%	6.7 56.0%	6.4 53.3%	6.1 51.0%	4.8 39.9%	3.6 29.6%	4.4 36.4%	3.1 25.6%	4.8 40.1%	6.2 52.0%	
5	7.7 64.4%	8.0 66.4%	9.3 77.3%	7.8 64.9%	7.5 62.6%	7.1 59.1%	6.3 52.1%	4.0 33.3%	5.3 43.9%	3.1 25.5%	4.5 37.6%	3.8 31.4%	6.2 51.5%	
6	6.7 55.6%	7.9 65.5%	9.2 76.9%	8.5 70.6%	7.2 60.1%	6.2 51.4%	5.7 47.4%	3.8 31.3%	5.1 42.7%	4.9 40.6%	4.6 38.1%	4.5 37.6%	6.2 51.5%	
7	8.6 71.9%	9.2 76.7%	9.1 76.1%	7.7 63.8%	6.8 56.7%	6.4 53.7%	6.5 54.2%	4.7 38.8%	4.7 39.0%	5.3 44.3%	4.8 40.2%	4.7 39.0%	6.5 54.5%	
8	8.3 69.0%	9.8 82.0%	9.0 75.3%	8.0 66.9%	6.8 56.5%	7.4 61.6%	5.5 45.8%	6.8 56.4%	5.8 48.1%	4.5 37.4%	3.4 28.3%	4.9 41.2%	6.7 55.7%	
9	7.7 64.0%	9.6 80.3%	9.1 75.7%	8.2 68.3%	6.6 55.1%	3.7 31.1%	6.4 53.1%	6.9 57.1%	5.3 44.5%	5.4 44.9%	3.1 25.7%	5.2 42.9%	6.4 53.6%	
10	8.7 72.3%	9.3 77.5%	9.0 75.3%	7.6 63.1%	6.8 56.7%	6.1 51.2%	6.2 51.4%	6.0 49.7%	6.0 49.8%	4.5 37.6%	3.6 29.8%	4.8 39.6%	6.5 54.5%	
11	7.7 64.2%	9.3 77.3%	9.4 77.9%	8.2 68.0%	7.4 61.3%	5.5 45.9%	6.7 55.8%	6.7 55.6%	5.4 44.9%	4.3 35.5%	3.9 32.3%	4.4 36.7%	6.6 54.6%	
12	7.7 64.4%	8.8 72.9%	9.0 75.0%	7.4 61.7%	5.9 49.3%	5.8 48.3%	5.1 42.4%	7.2 60.0%	4.4 36.4%	4.1 34.1%	2.5 21.2%	4.4 36.5%	6.0 50.2%	
13	9.2 76.9%	9.5 79.0%	9.1 75.8%	7.9 66.1%	6.5 54.2%	5.9 49.2%	5.1 42.8%	5.7 47.6%	5.5 45.8%	5.6 46.9%	4.0 33.3%	5.6 46.4%	6.6 55.3%	
14	8.8 72.9%	8.6 72.0%	9.3 77.8%	7.8 64.9%	5.8 48.1%	4.7 38.9%	4.6 38.7%	6.7 55.5%	5.3 44.5%	5.8 48.7%	4.0 33.4%	5.5 45.7%	6.4 53.4%	
15	8.6 71.9%	9.1 75.5%	8.7 72.5%	8.2 67.9%	5.9 49.1%	6.1 51.0%	3.9 32.5%	6.9 57.2%	5.1 42.1%	6.9 57.1%	4.6 38.6%	4.2 34.7%	6.5 54.2%	
16	6.6 55.3%	9.4 78.3%	8.3 69.4%	8.2 68.6%	6.8 57.0%	5.4 45.2%	5.1 42.4%	5.8 47.9%	4.5 37.1%	5.5 45.8%	6.3 52.2%	6.4 53.5%	6.4 53.5%	
17	7.3 60.8%	9.7 81.1%	8.3 69.3%	8.6 71.3%	6.6 55.3%	5.1 42.4%	6.5 54.5%	4.7 39.0%	4.8 40.3%	4.5 37.8%	5.9 48.8%	5.6 46.3%	6.5 53.9%	
18	9.0 74.6%	9.1 75.5%	7.8 64.7%	8.5 70.4%	6.6 54.7%	5.5 46.1%	6.5 54.0%	4.9 40.6%	3.4 28.3%	5.1 42.8%	5.2 43.1%	4.2 34.8%	6.3 52.5%	
19	9.4 78.5%	9.0 75.3%	8.2 68.0%	9.3 77.2%	5.9 48.8%	4.7 38.9%	7.4 61.9%	5.7 47.1%	3.9 32.1%	5.6 46.3%	5.2 43.3%	4.2 35.0%	6.5 54.4%	
20	8.6 71.5%	9.5 79.0%	7.8 64.8%	8.3 68.8%	4.9 41.1%	6.2 51.4%	6.7 55.5%	4.3 35.9%	4.0 33.3%	4.4 36.7%	4.3 35.7%	6.0 49.7%	6.2 51.9%	
21	8.8 73.6%	8.5 70.7%	7.6 63.1%	8.1 67.5%	6.3 52.3%	6.6 54.8%	5.3 44.0%	4.7 39.2%	5.8 48.3%	4.7 39.0%	3.5 29.3%	6.8 56.7%	6.4 53.2%	
22	8.5 70.8%	8.3 69.4%	8.5 70.6%	9.1 75.8%	6.2 51.5%	6.5 53.9%	5.0 42.0%	5.4 45.3%	6.2 51.7%	5.7 47.3%	2.4 20.1%	6.4 53.4%	6.5 54.3%	
23	8.1 67.2%	8.3 68.9%	8.5 71.1%	8.4 70.2%	7.0 58.5%	5.2 43.2%	5.1 42.7%	4.9 40.6%	5.3 44.3%	5.3 44.2%	3.5 29.2%	5.9 49.2%	6.3 52.4%	
24	7.9 66.0%	8.1 67.8%	8.1 67.3%	8.1 67.6%	6.8 56.5%	5.7 47.1%	4.2 34.6%	4.1 33.8%	5.5 46.2%	5.3 43.8%	3.5 29.0%	7.0 58.1%	6.2 51.5%	
25	8.0 66.3%	8.8 73.3%	8.2 68.0%	7.7 64.2%	6.8 56.5%	4.8 40.3%	5.0 41.7%	5.7 47.6%	4.8 40.3%	5.8 48.6%	5.9 49.0%	6.1 51.1%	6.5 53.9%	
26	7.4 61.3%	9.5 79.3%	8.8 73.2%	7.6 63.1%	5.6 47.0%	6.0 50.0%	5.5 46.2%	5.6 47.0%	3.7 30.6%	4.6 37.9%	4.7 39.1%	5.7 47.4%	6.2 51.8%	
27	8.1 67.2%	9.0 74.7%	9.3 77.8%	7.4 62.0%	6.5 54.0%	6.0 49.9%	7.3 60.4%	5.9 49.0%	3.7 30.8%	5.0 41.7%	7.3 60.5%	6.9 57.8%	6.9 57.1%	
28	7.8 65.2%	9.3 77.7%	9.6 80.1%	5.8 48.2%	7.7 63.9%	5.8 48.1%	6.0 49.9%	5.4 45.1%	2.9 24.3%	2.9 24.2%	6.1 50.4%	6.8 56.7%	6.3 52.8%	
29	7.5 62.2%	9.6 80.3%	8.6 71.5%	6.9 57.4%	6.4 53.0%	5.1 42.6%	4.1 34.5%	4.8 39.8%	3.0 24.9%	3.4 28.2%	4.1 34.2%	6.5 53.9%	5.8 48.5%	
30	8.2 68.1%		8.9 74.1%	6.4 53.5%	5.3 44.5%	6.2 51.8%	5.2 43.1%	4.1 33.8%	4.2 34.7%	3.5 28.8%	4.6 38.3%	6.9 57.8%	5.8 48.0%	
31	8.7 72.6%		9.5 79.5%		6.1 50.8%		4.9 41.2%	4.6 38.4%		2.6 21.7%		6.9 57.6%	6.2 51.7%	
Average	8.1 67.7%	8.9 73.8%	8.8 73.2%	7.9 66.2%	6.5 54.2%	5.8 48.3%	5.7 47.7%	5.4 45.2%	4.8 39.8%	4.8 39.7%	4.3 35.9%	5.4 45.0%	6.4 53.0%	
Total	251.8	256.7	272.2	238.5	201.5	173.8	177.5	168.3	143.2	147.8	129.2	167.4	2,327.8	

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

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แผนภูมิระยะเวลาของแสงแดด (average percent of sunshine per month)



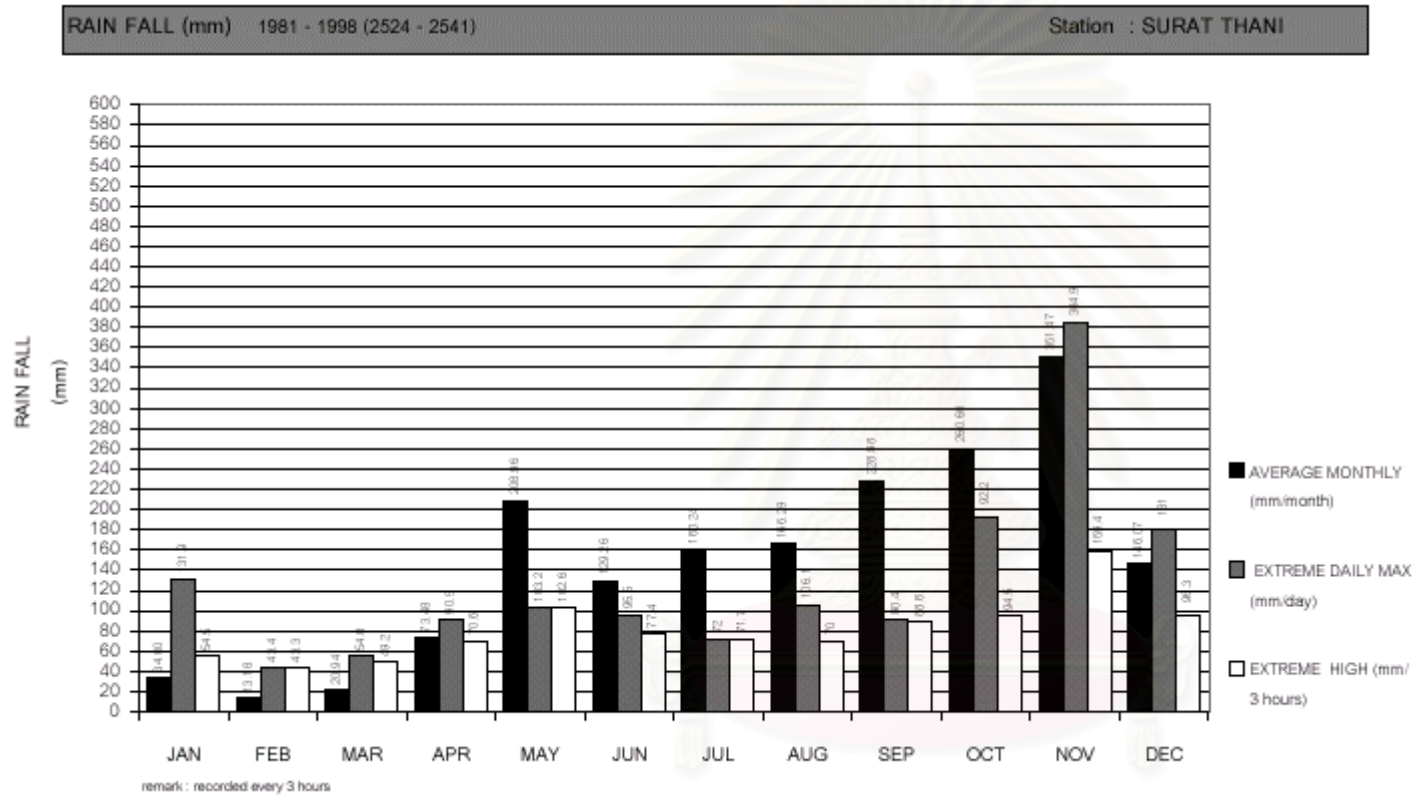
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ตารางแสดงผลข้อมูลปริมาณน้ำฝน (rain fall)

RAIN FALL (mm) 1981 - 1998 (2524 - 2541)													Station : SURAT THANI	
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	0.9	3.4	0.0	2.7	4.8	1.6	7.6	2.8	3.5	5.4	11.5	13.0	57.4	
2	0.3	1.3	0.1	1.8	8.6	7.9	3.7	1.9	3.9	13.5	9.6	4.5	57.2	
3	1.1	1.1	0.0	1.7	6.1	3.6	1.3	7.2	8.6	5.7	13.7	5.4	55.6	
4	0.1	0.1	0.0	0.5	3.8	3.5	5.1	7.7	6.5	7.4	18.7	10.2	63.5	
5	0.3	0.6	0.0	0.1	2.5	1.9	7.5	6.4	9.5	19.3	14.5	9.2	71.8	
6	3.2	0.2	0.0	1.7	10.8	5.0	3.0	5.8	7.2	9.7	7.5	8.3	62.3	
7	0.0	0.4	0.3	2.5	7.8	8.7	6.8	8.1	9.6	3.5	4.1	6.3	58.2	
8	1.6	0.7	0.4	1.1	7.8	2.3	2.5	7.5	5.3	3.6	7.3	3.0	42.8	
9	0.0	0.1	0.1	0.3	7.9	6.7	2.5	1.5	6.9	6.5	10.4	13.4	56.3	
10	0.1	0.4	0.0	2.6	5.8	11.5	10.4	5.3	1.8	4.0	9.1	4.0	54.9	
11	0.6	2.5	0.1	4.7	8.2	1.5	6.4	3.0	5.0	6.5	7.9	6.9	53.3	
12	0.1	0.1	0.0	0.1	2.9	7.1	3.3	3.2	3.9	8.1	3.8	5.0	37.8	
13	0.0	0.0	0.0	4.1	7.2	4.6	3.3	2.5	13.3	4.9	10.6	1.4	51.8	
14	0.5	0.5	0.9	2.1	7.5	5.7	3.2	3.8	7.0	5.6	8.8	2.5	48.2	
15	0.2	0.2	0.1	0.3	7.6	1.8	8.2	5.2	12.6	9.7	7.6	2.0	55.3	
16	0.9	0.1	0.2	2.3	2.8	6.9	4.5	1.3	12.1	10.8	7.0	6.3	55.1	
17	0.7	1.2	3.5	0.7	7.7	3.9	8.3	3.9	10.6	1.5	8.5	2.6	53.0	
18	1.0	0.0	0.8	1.6	4.9	5.6	6.7	4.5	6.2	13.3	4.8	3.7	53.1	
19	0.1	0.0	0.6	2.5	11.9	3.6	5.9	3.5	5.1	12.1	15.6	3.5	64.2	
20	0.0	0.0	1.6	2.4	15.0	4.7	2.8	5.7	3.7	8.1	13.7	1.3	59.0	
21	1.8	0.0	1.6	2.6	8.7	6.0	5.8	8.2	10.4	7.3	19.2	8.5	80.1	
22	0.4	0.0	0.1	1.6	2.8	3.5	3.0	8.0	10.7	3.8	36.0	7.3	77.1	
23	3.9	0.3	0.2	4.3	5.3	4.3	9.9	5.6	11.0	11.4	12.3	5.5	74.0	
24	0.1	0.0	0.3	0.6	9.8	1.1	5.1	8.7	8.2	7.3	10.3	1.1	52.8	
25	3.0	0.0	1.6	1.1	7.4	1.4	5.8	11.0	5.8	4.1	9.7	3.1	54.1	
26	0.6	0.0	2.8	2.6	9.7	0.5	4.2	6.1	6.0	4.2	6.7	0.9	44.4	
27	1.9	0.0	3.0	2.8	8.7	3.6	3.7	9.9	4.6	25.1	4.7	2.6	70.6	
28	7.9	0.0	0.0	2.8	2.8	1.8	6.8	4.5	8.2	10.2	13.7	2.5	61.2	
29	1.1	0.0	2.3	4.5	6.4	6.6	5.5	1.6	3.8	4.2	30.7	0.7	67.2	
30	1.1		0.3	14.8	3.1	2.5	1.3	7.9	18.0	8.3	13.3	0.8	71.3	
31	0.5		0.0		3.0		6.0	3.9		15.7		0.6	29.8	
<b>Monthly</b>	34.0	13.2	20.9	73.5	209.0	129.3	160.2	166.3	229.0	260.6	351.5	146.1	1,793.5	
<b>Daily record high</b>	131.9	43.4	54.8	90.9	103.2	95.5	72.0	106.1	90.4	192.2	384.9	181.0	384.9	
<b>3 hr. Extremes</b>	54.5	43.3	49.2	70.6	102.6	77.4	71.7	70.0	88.6	94.5	159.4	96.3	159.4	
<b>No. of rainy days</b>	1	2	2	5	15	16	17	20	22	17	6	1	125	

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แผนภูมิปริมาณน้ำฝน (rain fall)



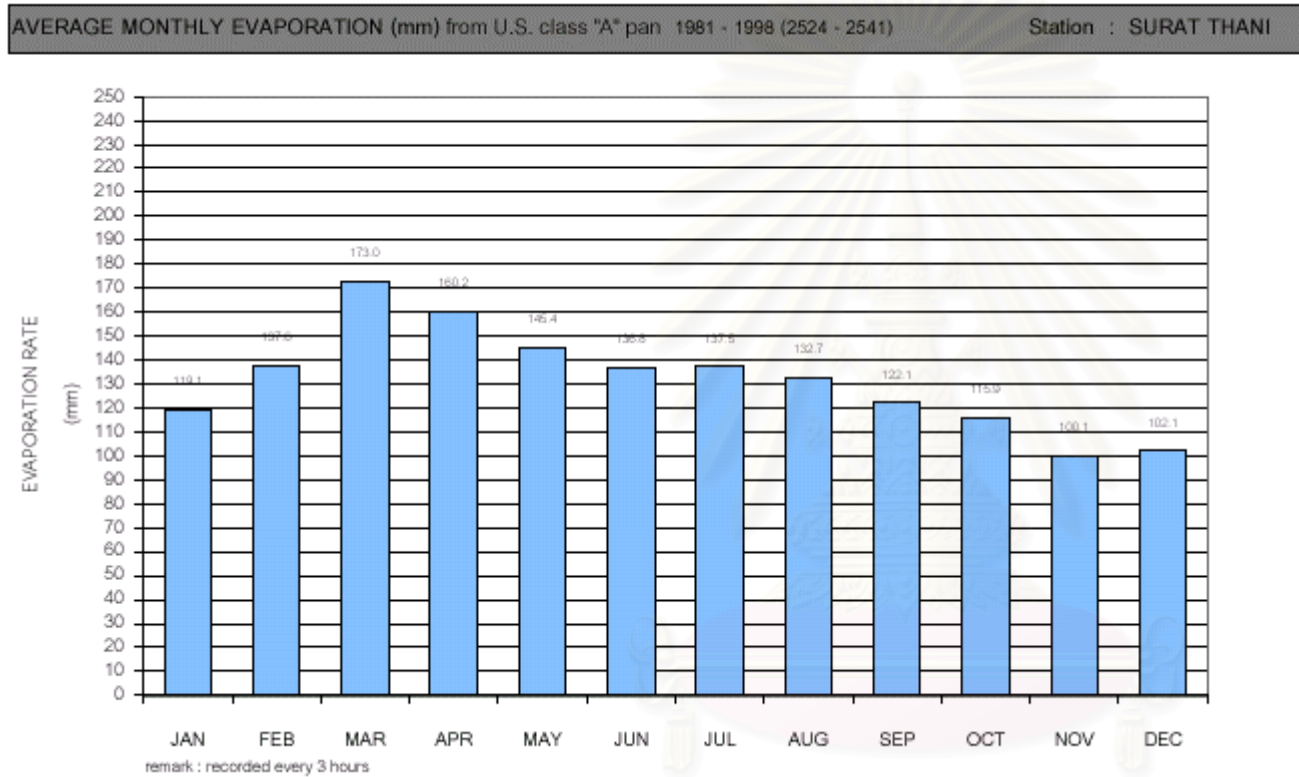
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ตารางแสดงผลข้อมูลค่าเฉลี่ยอัตราการระเหยของน้ำรายวัน (evaporation)

EVAPORATION (mm) 1981 - 1998 (2524 - 2541)													Station : SURAT THANI
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	4.0	4.5	5.8	6.2	4.9	4.6	4.5	4.7	5.3	4.0	2.8	2.7	53.9
2	3.5	3.9	5.4	4.8	5.1	4.8	5.1	4.8	3.6	4.6	4.1	2.5	52.1
3	3.6	4.2	5.2	5.4	5.3	4.7	4.5	4.0	4.3	4.5	3.4	3.2	52.5
4	3.6	4.0	5.6	6.0	5.3	5.5	5.0	4.3	4.5	3.6	4.0	3.1	54.6
5	3.6	4.4	5.6	5.5	4.9	4.5	4.2	4.1	4.5	3.6	3.3	2.9	50.9
6	3.6	4.2	5.5	5.1	5.5	5.1	4.2	3.4	4.4	3.3	3.5	3.4	51.1
7	3.6	4.3	5.3	5.6	5.7	4.3	4.8	4.4	4.0	4.3	3.4	2.9	52.6
8	3.4	4.7	5.3	5.3	5.0	4.8	4.6	4.3	4.3	3.6	3.1	3.2	51.7
9	3.6	4.7	5.7	5.8	3.9	4.0	4.3	4.0	4.7	3.6	3.3	3.2	50.8
10	3.9	4.6	6.0	5.1	4.5	4.6	4.5	4.1	4.4	3.8	3.5	2.9	51.8
11	3.3	4.8	5.6	5.5	4.4	4.1	4.4	4.0	4.3	4.3	2.8	3.0	50.5
12	3.7	4.5	5.5	5.1	4.6	4.8	4.1	4.8	3.8	3.3	2.5	2.8	49.7
13	3.9	4.9	5.6	5.2	4.6	4.2	3.5	3.9	3.6	3.3	2.7	3.3	48.8
14	3.8	4.4	5.8	5.1	4.2	4.2	3.8	4.6	4.0	4.5	3.5	3.0	51.0
15	4.0	4.9	5.4	5.3	5.0	4.5	4.1	4.9	4.4	4.6	3.6	3.3	53.9
16	3.4	4.6	5.9	4.9	4.2	5.1	3.8	4.3	4.0	3.4	3.2	3.5	50.2
17	3.8	5.2	5.8	5.3	5.0	4.8	4.6	3.5	4.1	3.2	3.4	4.2	52.8
18	3.7	4.8	5.4	4.9	4.8	4.2	4.6	3.9	3.9	4.0	3.5	3.7	51.4
19	4.2	4.9	5.7	5.4	4.3	4.2	4.9	4.8	3.1	4.3	3.2	3.3	52.2
20	4.2	5.0	5.1	6.1	4.9	4.4	4.4	4.3	4.1	4.4	4.1	3.3	54.3
21	3.7	4.7	5.5	5.4	4.4	4.8	4.1	4.1	4.7	4.3	3.1	3.6	52.3
22	4.2	5.0	5.5	5.5	4.5	4.7	4.4	4.5	4.0	3.9	3.5	3.5	53.0
23	4.1	4.7	5.5	5.6	4.6	5.0	4.1	4.2	3.8	4.6	2.9	3.2	52.4
24	4.0	4.9	5.2	5.4	4.8	4.7	4.1	4.2	4.7	3.6	3.5	3.5	52.7
25	4.0	5.3	5.8	5.3	4.4	4.4	4.5	4.2	4.3	3.0	3.8	3.7	52.2
26	3.5	5.3	5.5	5.4	5.1	4.4	4.2	4.6	3.6	3.6	2.8	3.3	51.2
27	4.5	5.8	5.9	5.0	4.6	4.5	5.3	4.5	3.2	3.3	4.0	3.6	54.1
28	4.3	5.2	6.2	5.2	4.1	4.0	4.6	4.5	2.9	3.2	3.4	3.9	51.3
29	3.7	5.2	5.8	5.0	4.7	4.5	4.5	4.3	3.6	2.8	3.4	3.1	50.5
30	4.6		5.5	4.8	3.9	4.9	4.7	4.4	4.2	2.5	3.0	3.8	46.3
31	4.1		5.7		4.4		4.8	4.1		3.0		3.5	29.5
AVG. Monthly	119.1	137.6	173.0	160.2	145.4	136.8	137.5	132.7	122.1	115.9	100.1	102.1	1,582.6
Daily Mean	3.8	4.7	5.6	5.3	4.7	4.6	4.4	4.3	4.1	3.7	3.3	3.3	4.3
Extremes	8.7	7.9	9.9	11.5	11.6	12.1	12.9	9.8	13.6	10.3	10.7	10.2	13.6

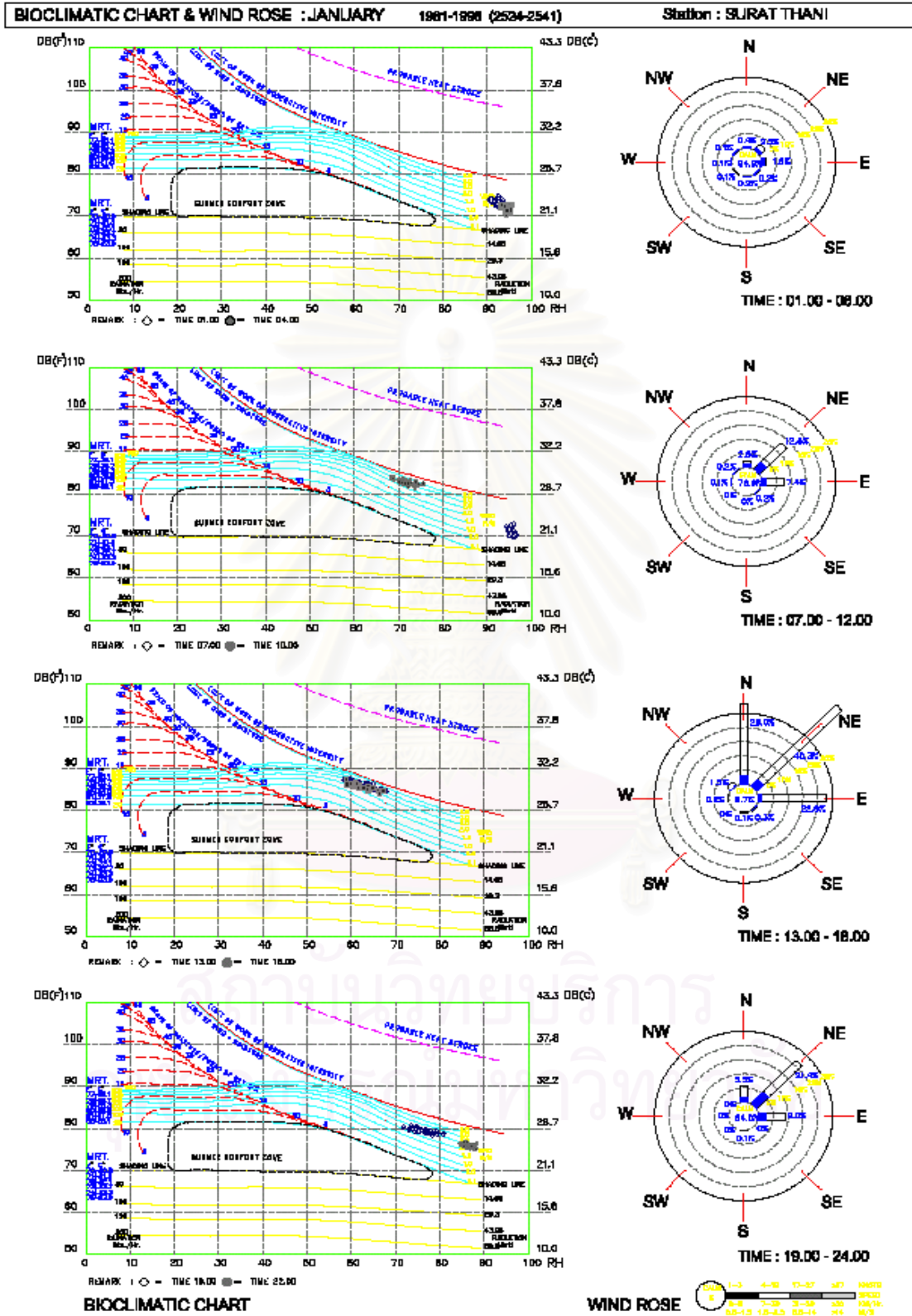
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แผนภูมิค่าเฉลี่ยอัตราการระเหยของน้ำรายเดือน (average monthly evaporation from U.S. class "A" pan)

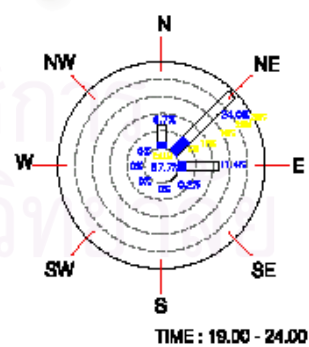
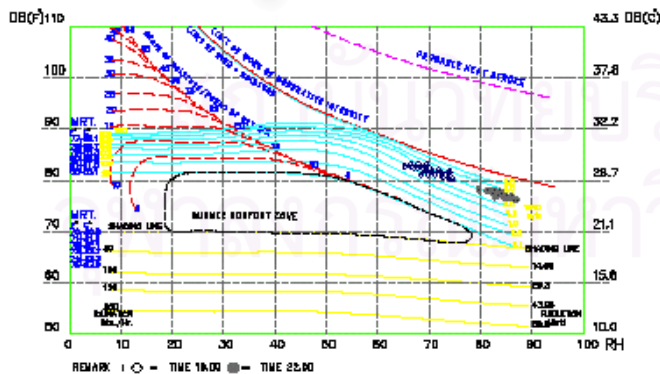
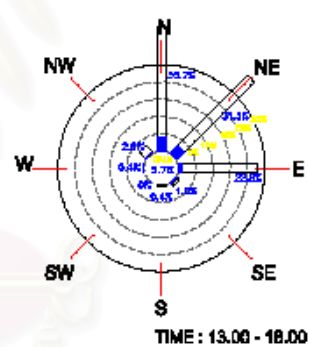
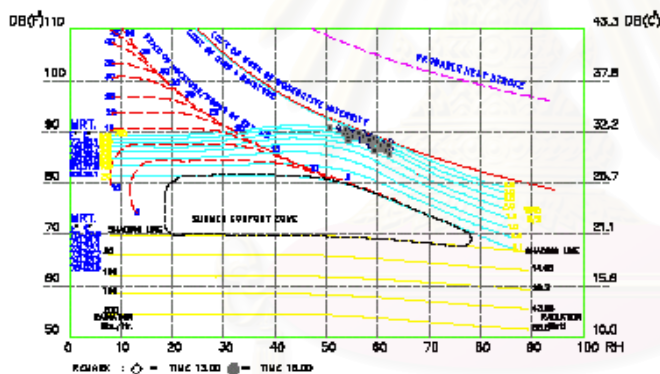
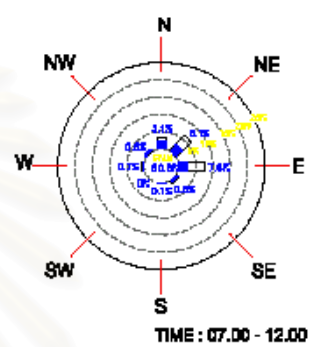
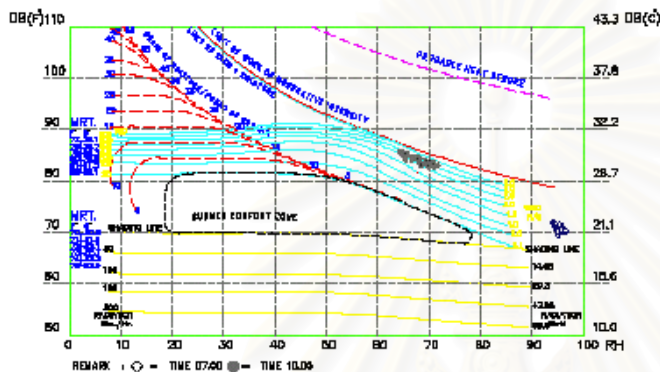
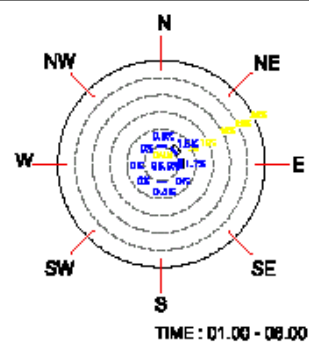
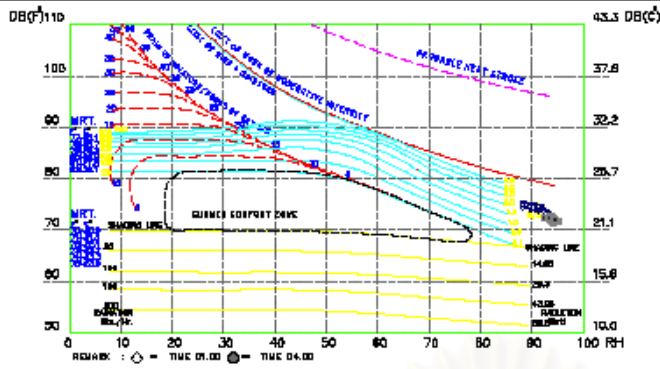


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แผนภูมิความสัมพันธ์ระหว่างข้อมูลสภาพอากาศในแผนภูมิไบโอไคลเมตริก (bioclimatic chart) กับแผนภูมิแสดงความเร็วและทิศทางที่เกิดลมรายเดือน (wind rose) แยกตามช่วงเวลา



**BIOCLIMATIC CHART & WIND ROSE : FEBRUARY 1961-1990 (2524-2541) Station : SURATTHANI**

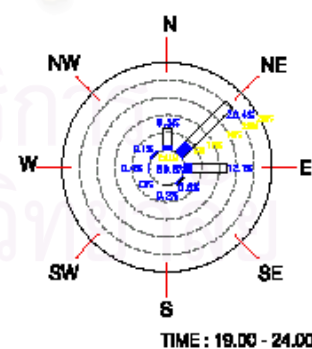
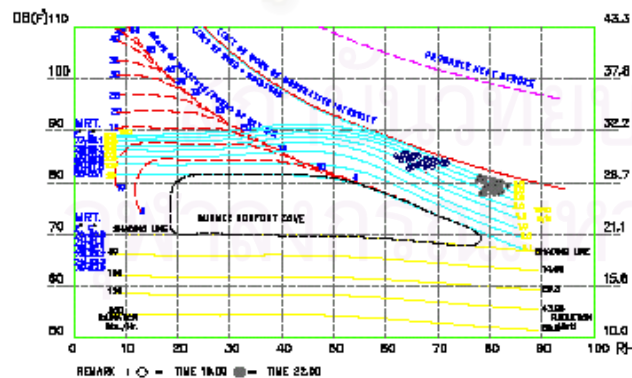
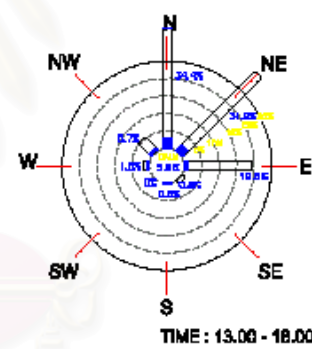
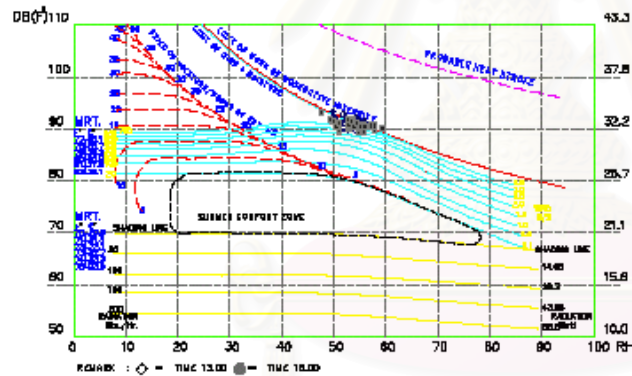
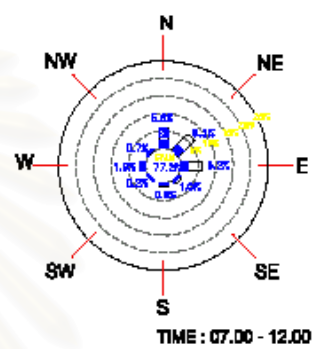
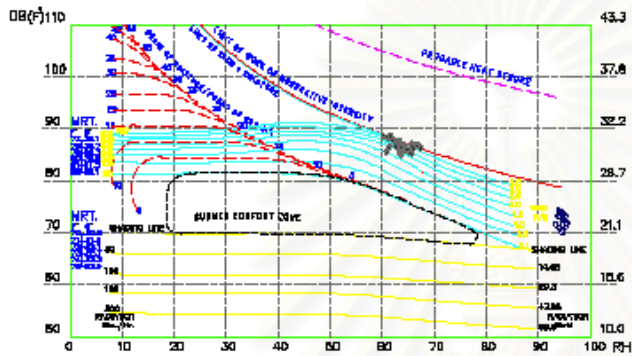
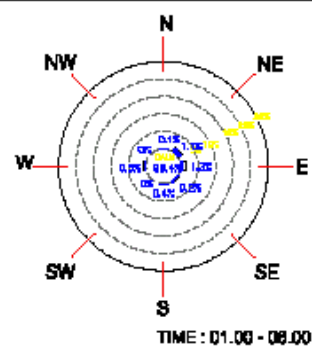
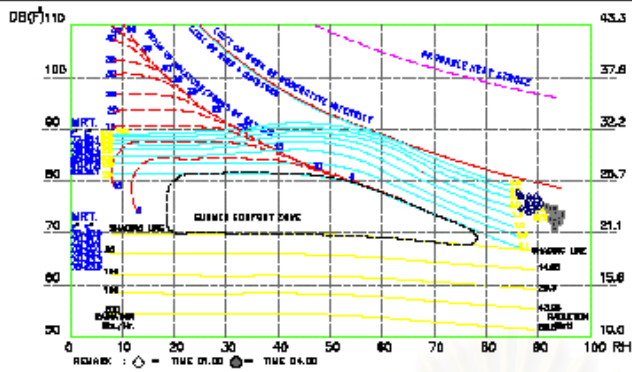


**BIOCLIMATIC CHART**





**BIOCLIMATIC CHART & WIND ROSE : MARCH 1981-1990 (2524-2541) Station : SURAT THANI**

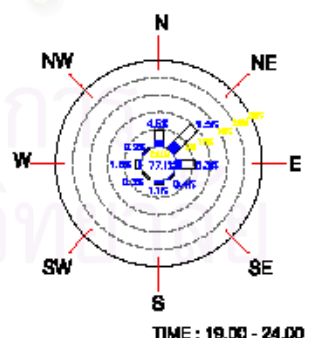
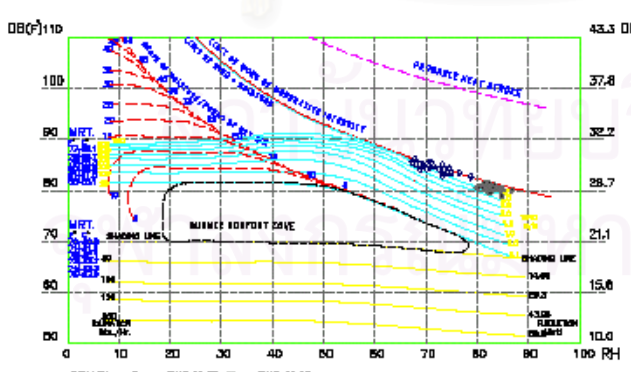
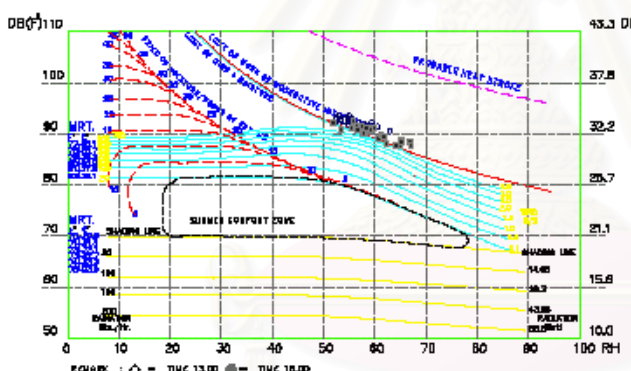
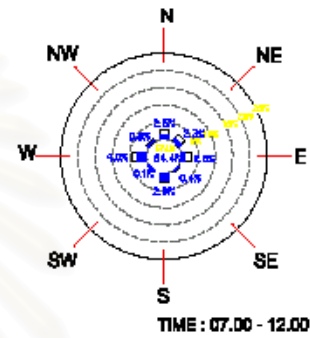
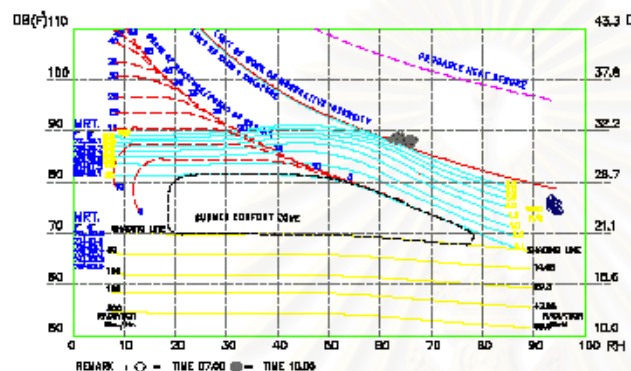
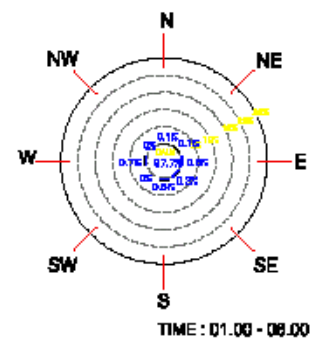
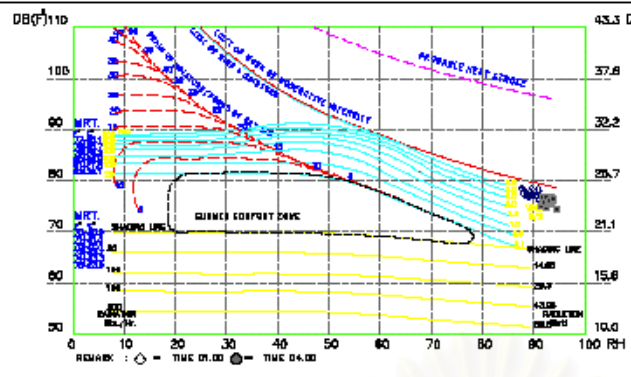


**BIOCLIMATIC CHART**

**WIND ROSE**



**BIOCLIMATIC CHART & WIND ROSE : APRIL 1981-1990 (2534-2541) Station : SURAT THANI**

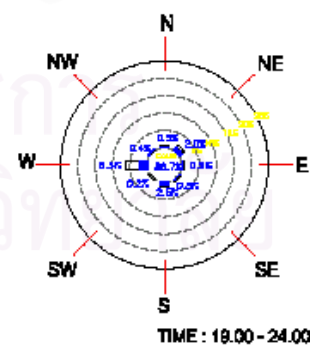
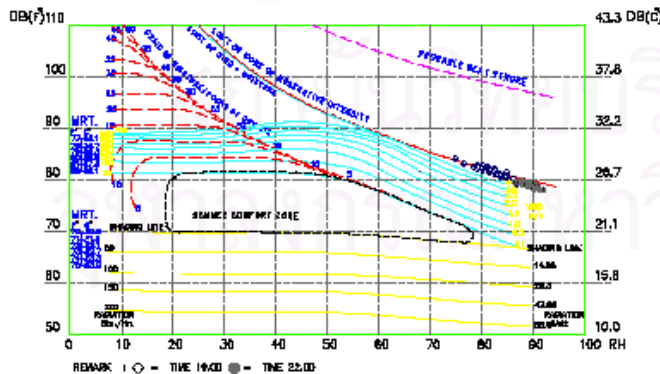
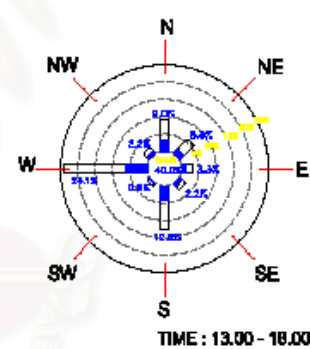
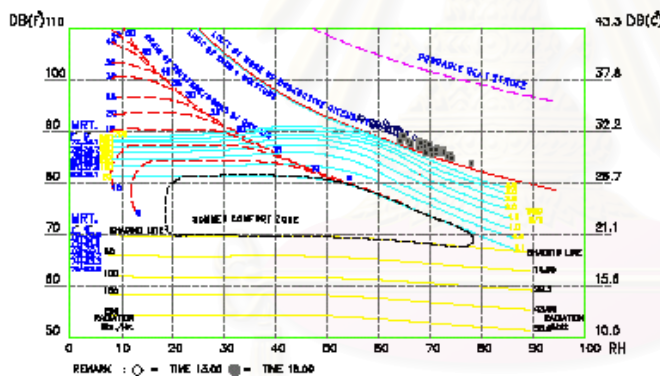
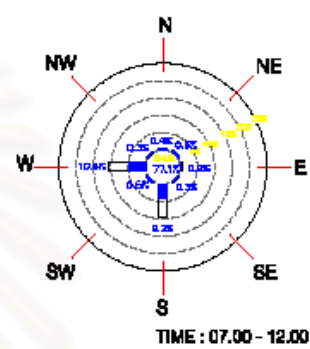
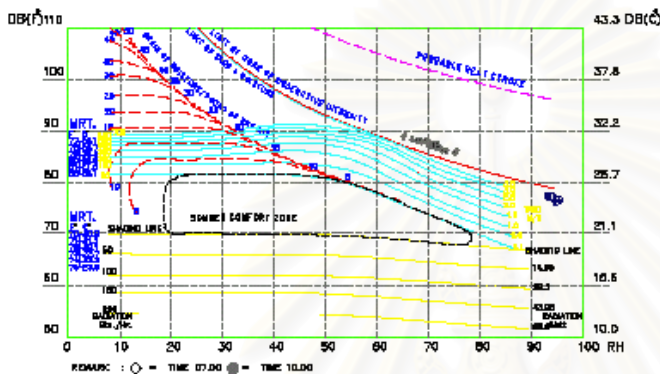
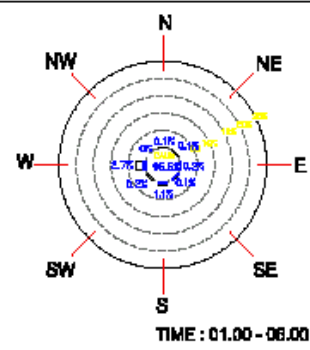
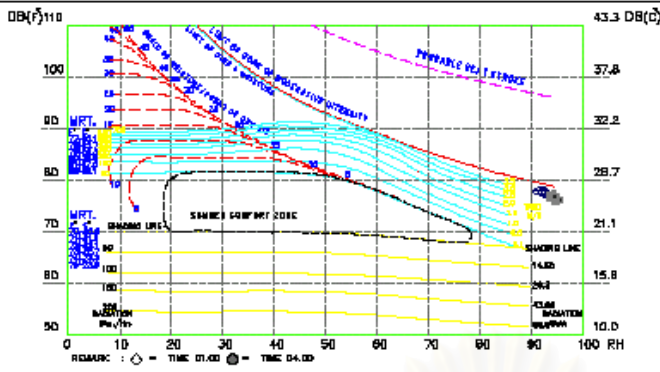


**BIOCLIMATIC CHART**

**WIND ROSE**



**BIOCLIMATIC CHART & WIND ROSE : MAY** 1981-1998 (2524-2541) Station : SURAT THANI

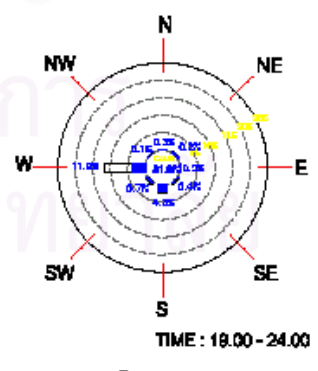
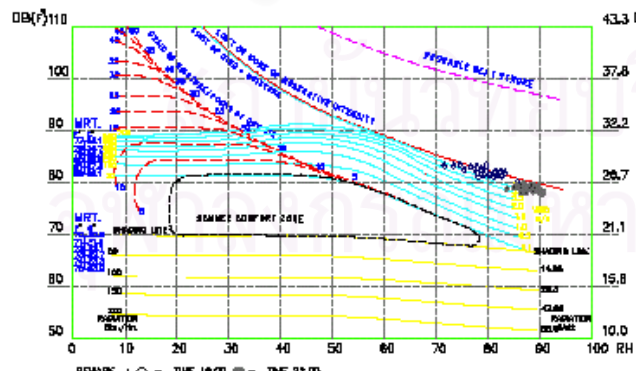
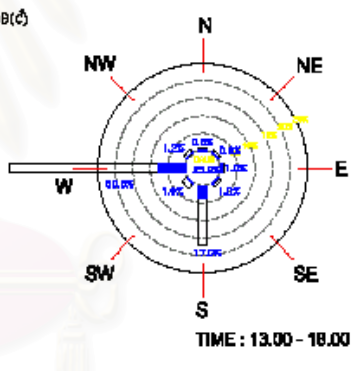
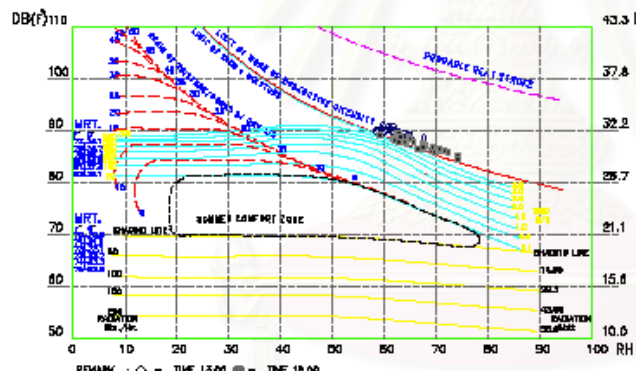
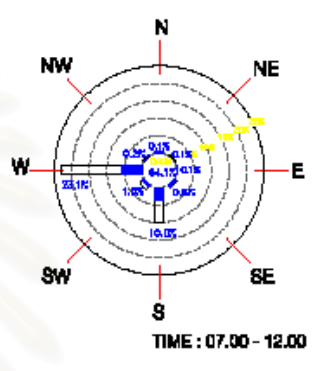
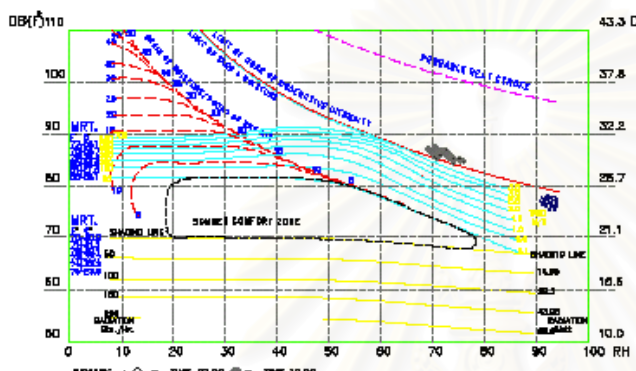
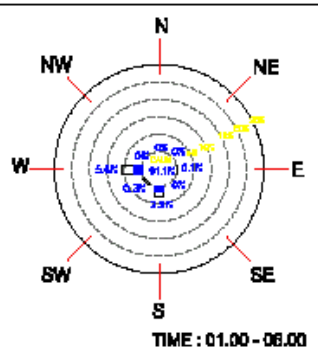
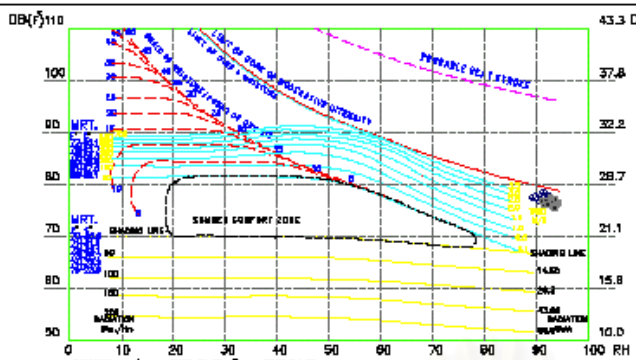


**BIOCLIMATIC CHART**

**WIND ROSE**

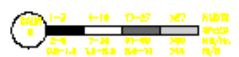


BIOCLIMATIC CHART & WIND ROSE : JUNE 1981-1998 (2524-2541) Station : SURAT THANI

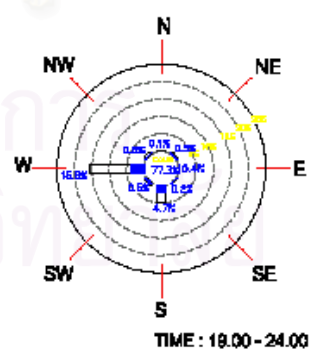
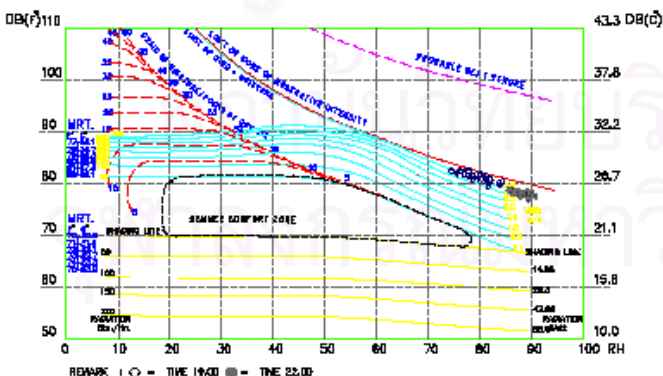
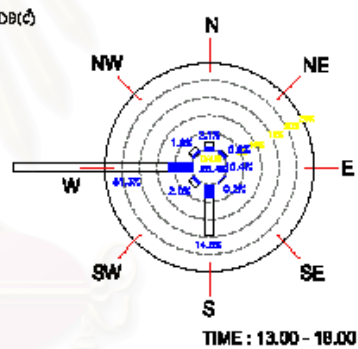
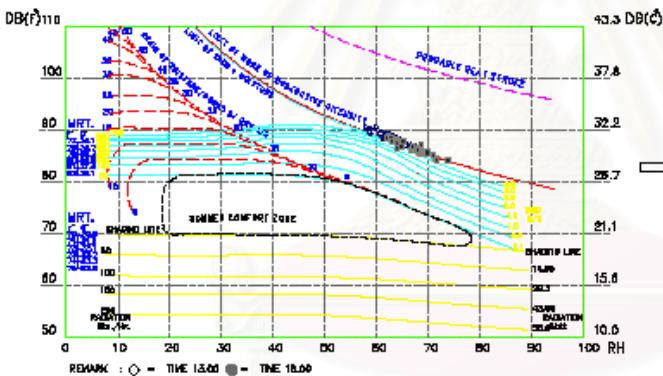
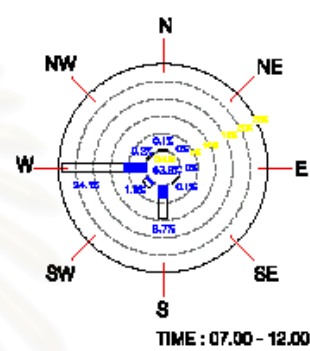
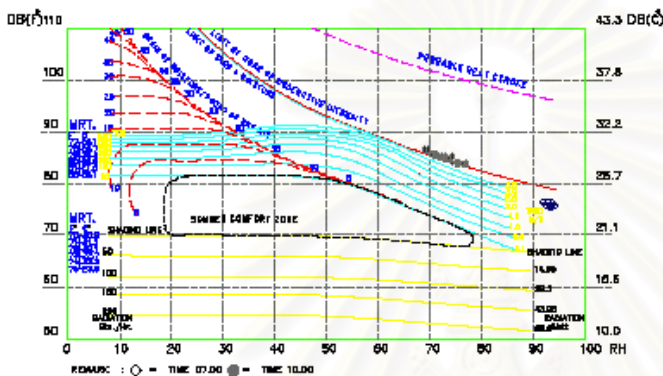
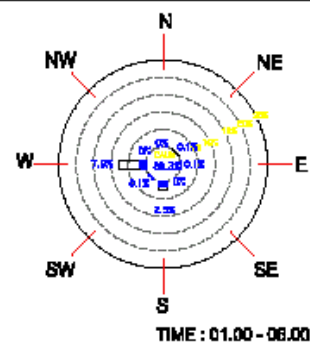
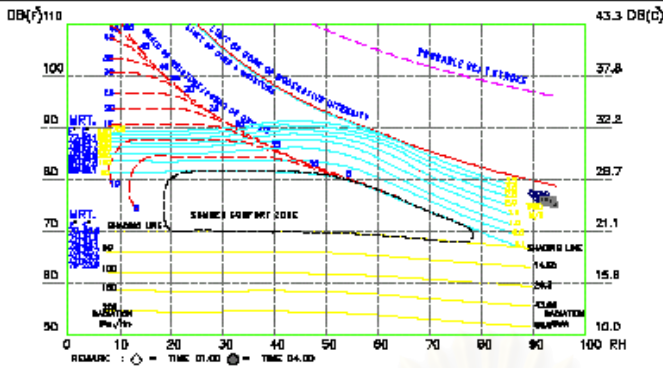


BIOCLIMATIC CHART

WIND ROSE



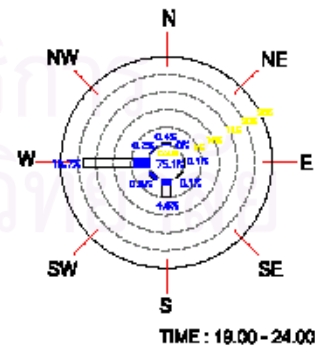
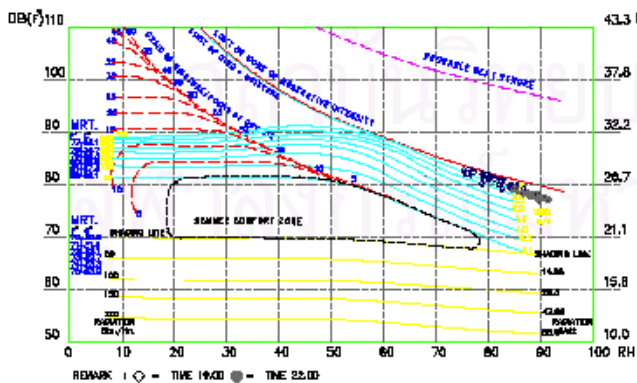
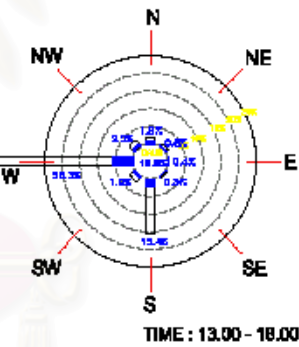
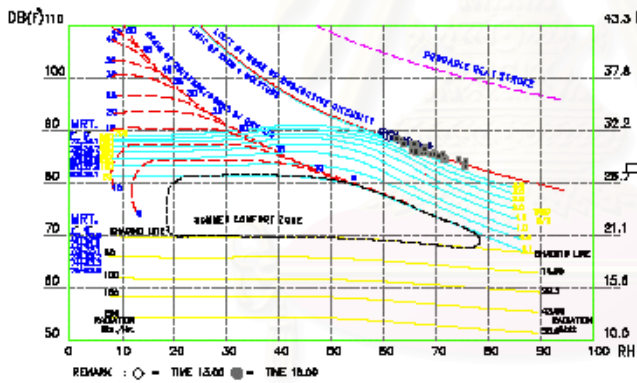
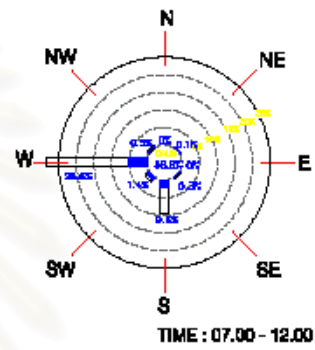
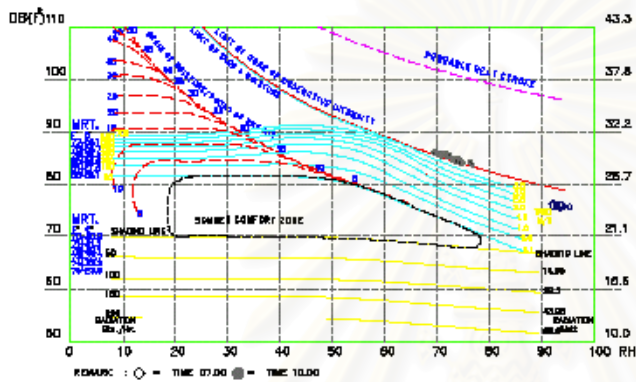
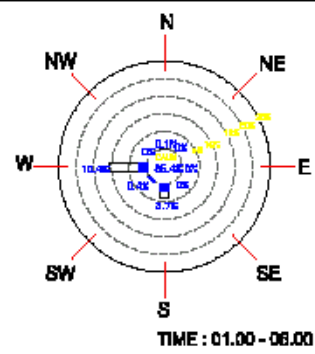
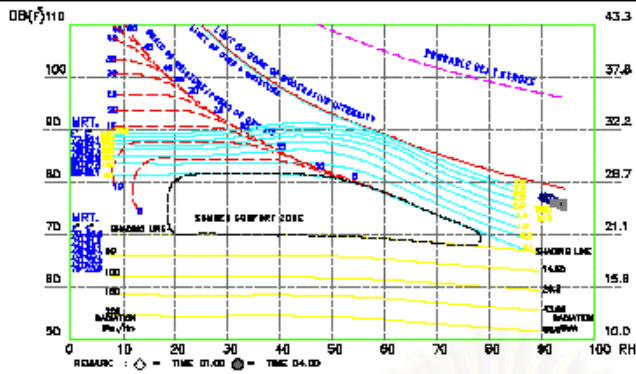
BIOCLIMATIC CHART & WIND ROSE : JULY 1981-1998 (2524-2541) Station : SURAT THANI



BIOCLIMATIC CHART



BIOCLIMATIC CHART & WIND ROSE : AUGUST 1981-1998 (2524-2541) Station : SURAT THANI

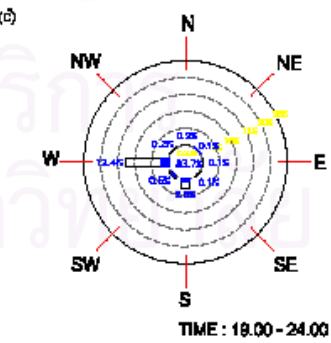
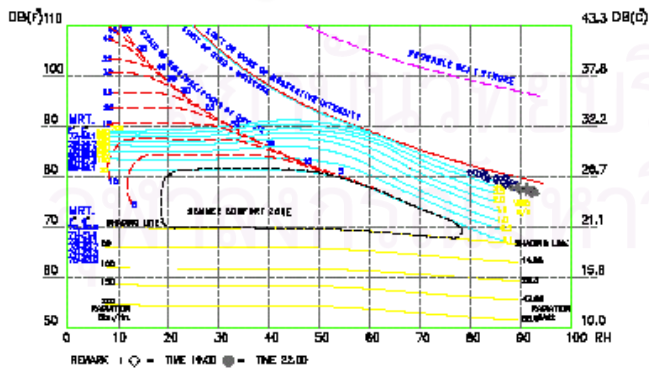
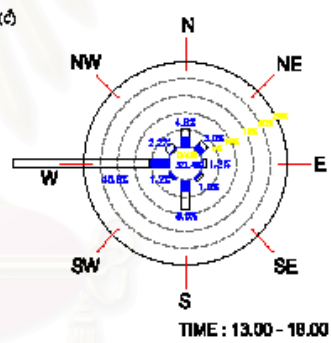
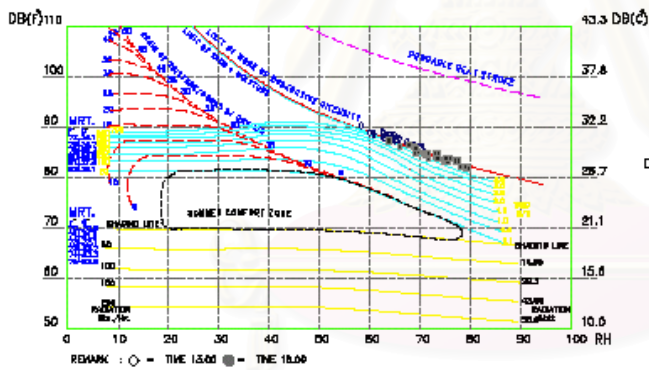
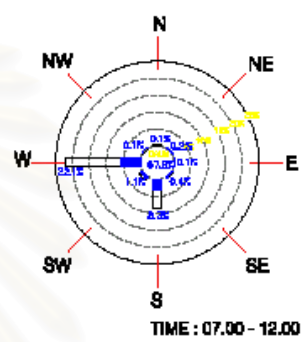
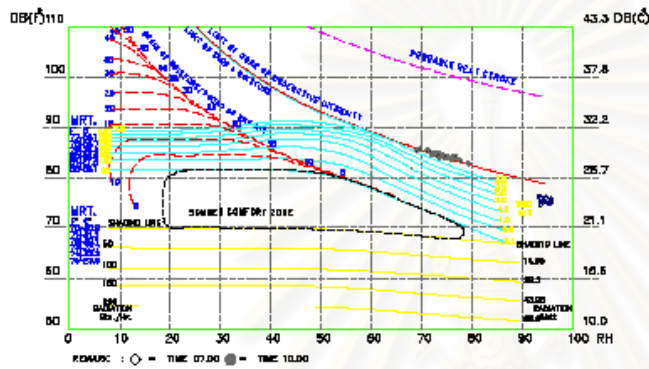
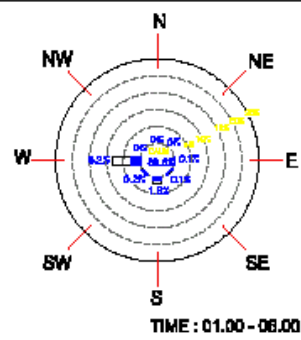
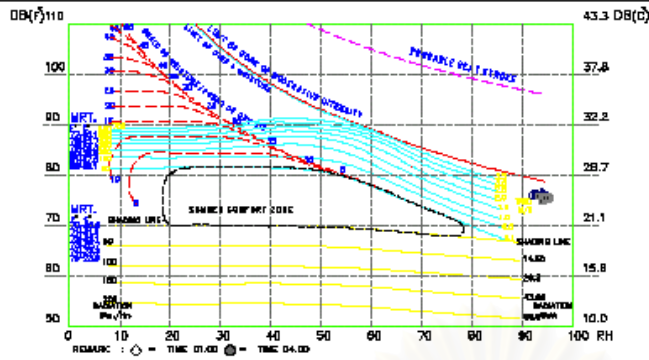


BIOCLIMATIC CHART

WIND ROSE



BIOCLIMATIC CHART & WIND ROSE : SEPTEMBER 1981-1998 (2524-2541) Station : SURAT THANI

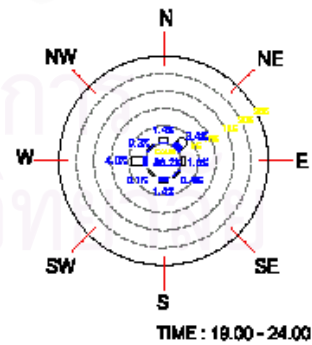
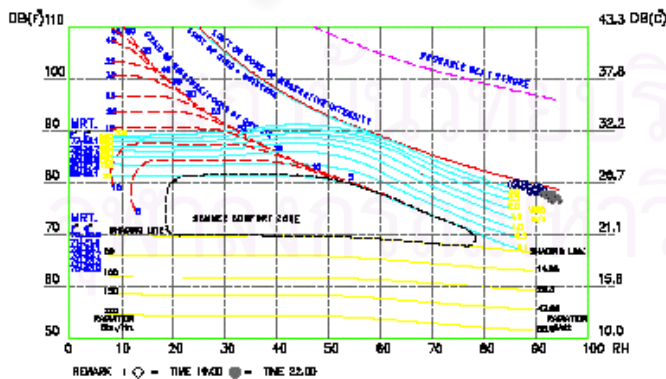
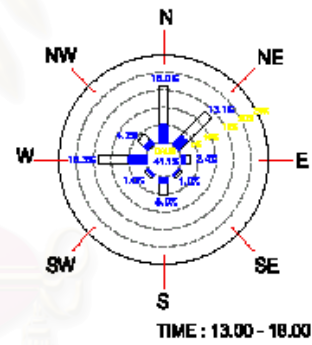
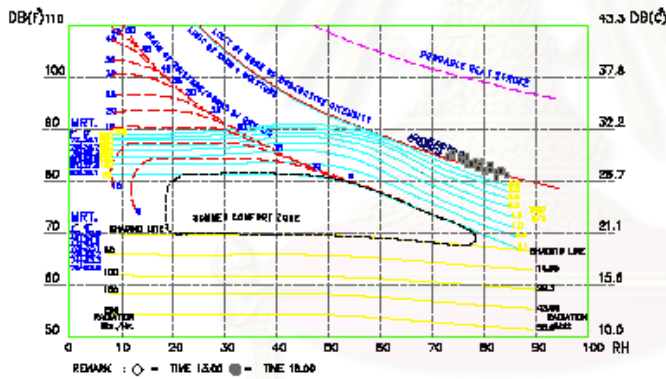
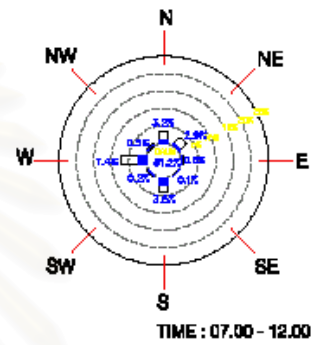
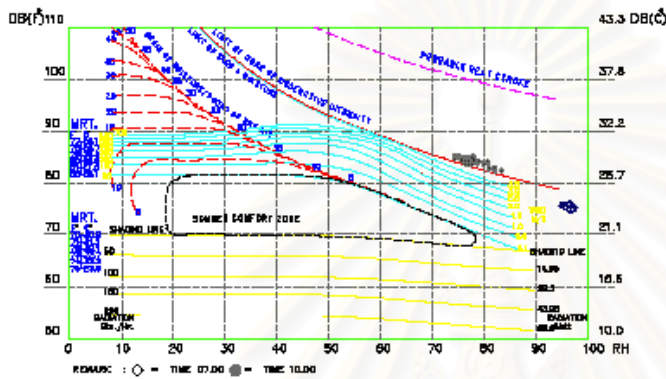
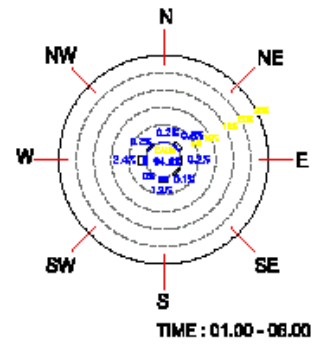
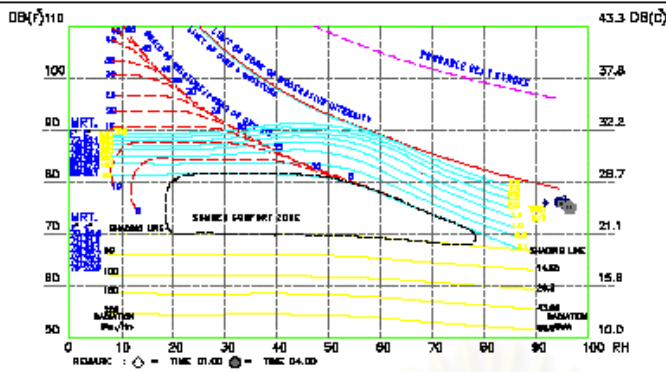


BIOCLIMATIC CHART

WIND ROSE



**BIOCLIMATIC CHART & WIND ROSE : OCTOBER 1981-1998 (2524-2541) Station : SURAT THANI**

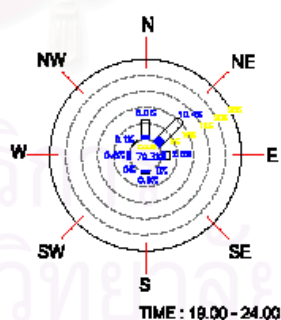
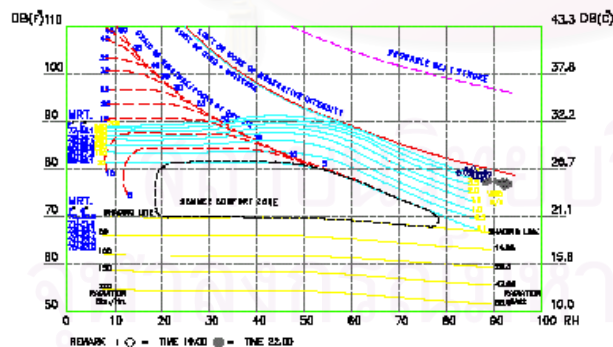
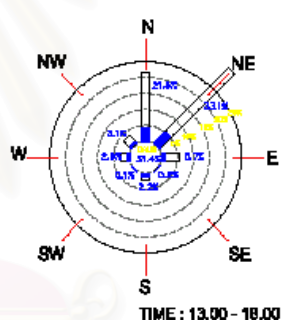
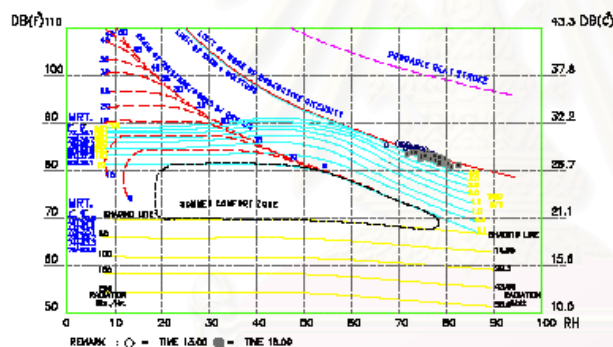
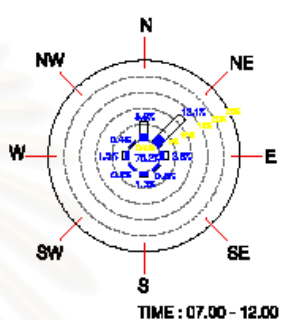
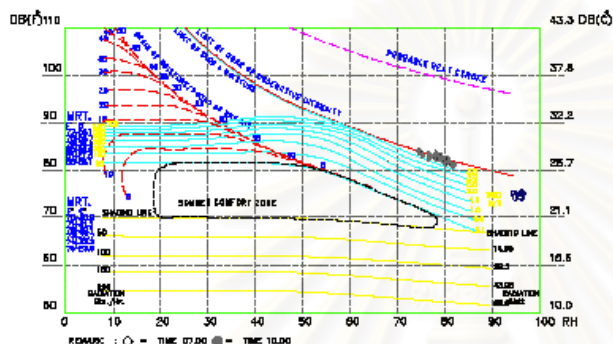
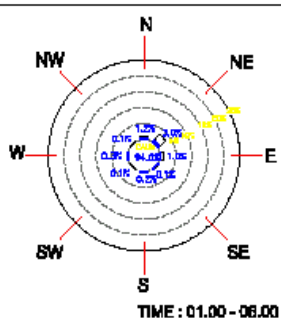
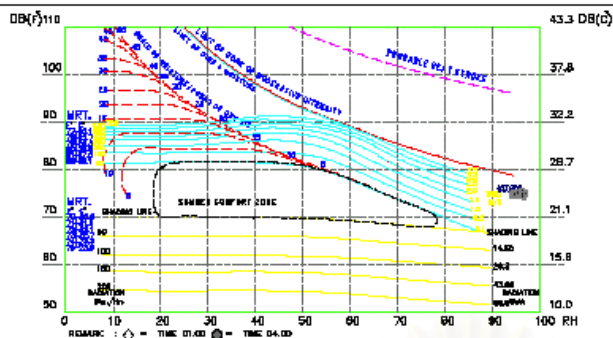


**BIOCLIMATIC CHART**





BIOCLIMATIC CHART & WIND ROSE : NOVEMBER 1981-1998 (2524-2541) Station : SURAT THANI

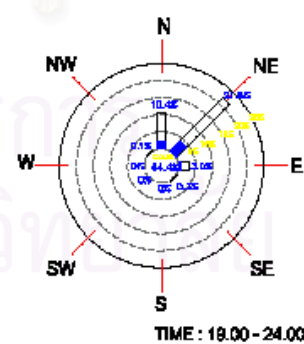
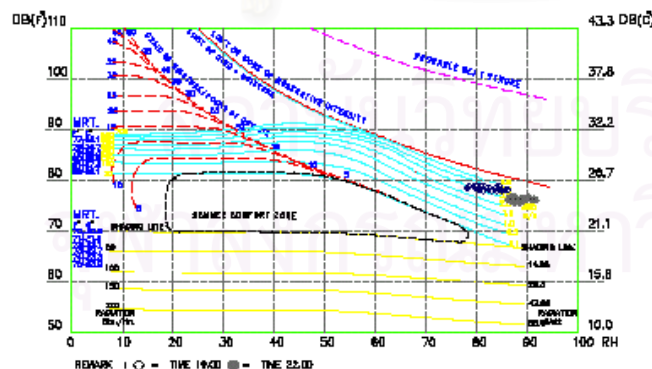
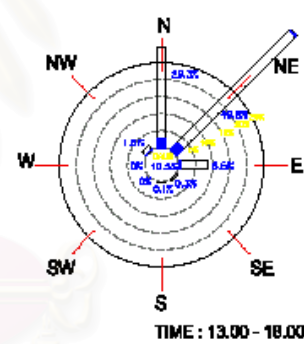
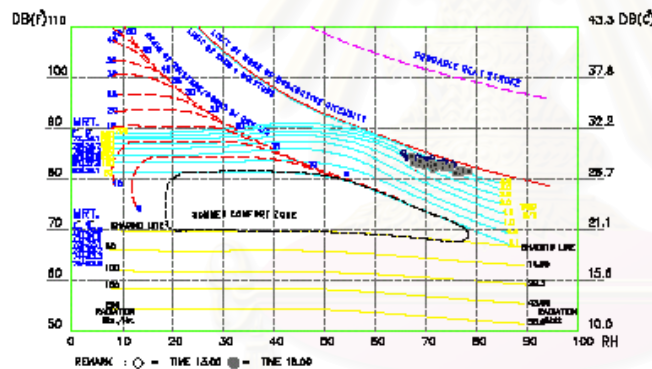
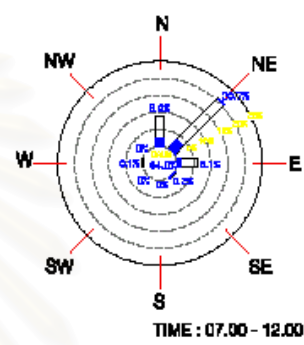
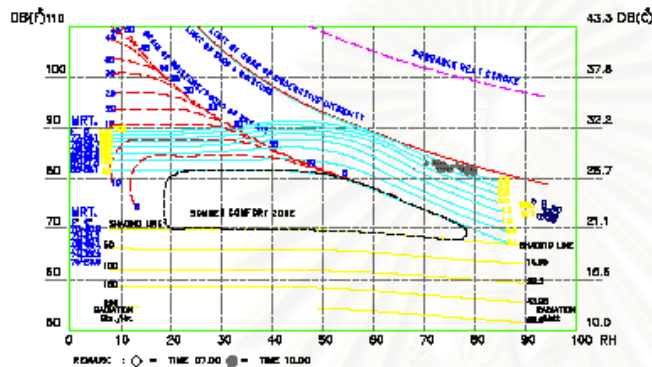
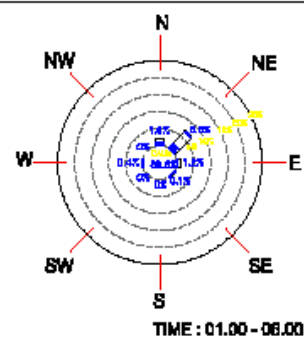
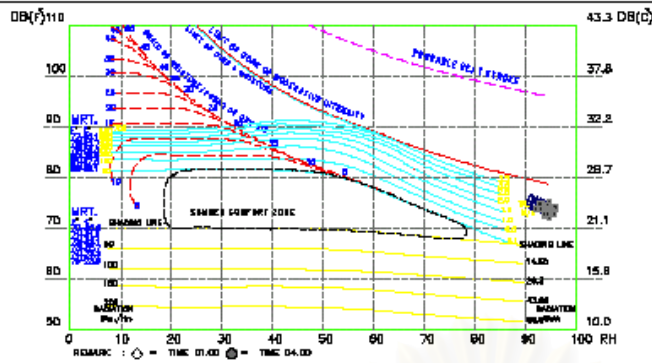


BIOCLIMATIC CHART

WIND ROSE



BIOCLIMATIC CHART & WIND ROSE : DECEMBER 1981-1998 (2524-2541) Station : SURAT THANI

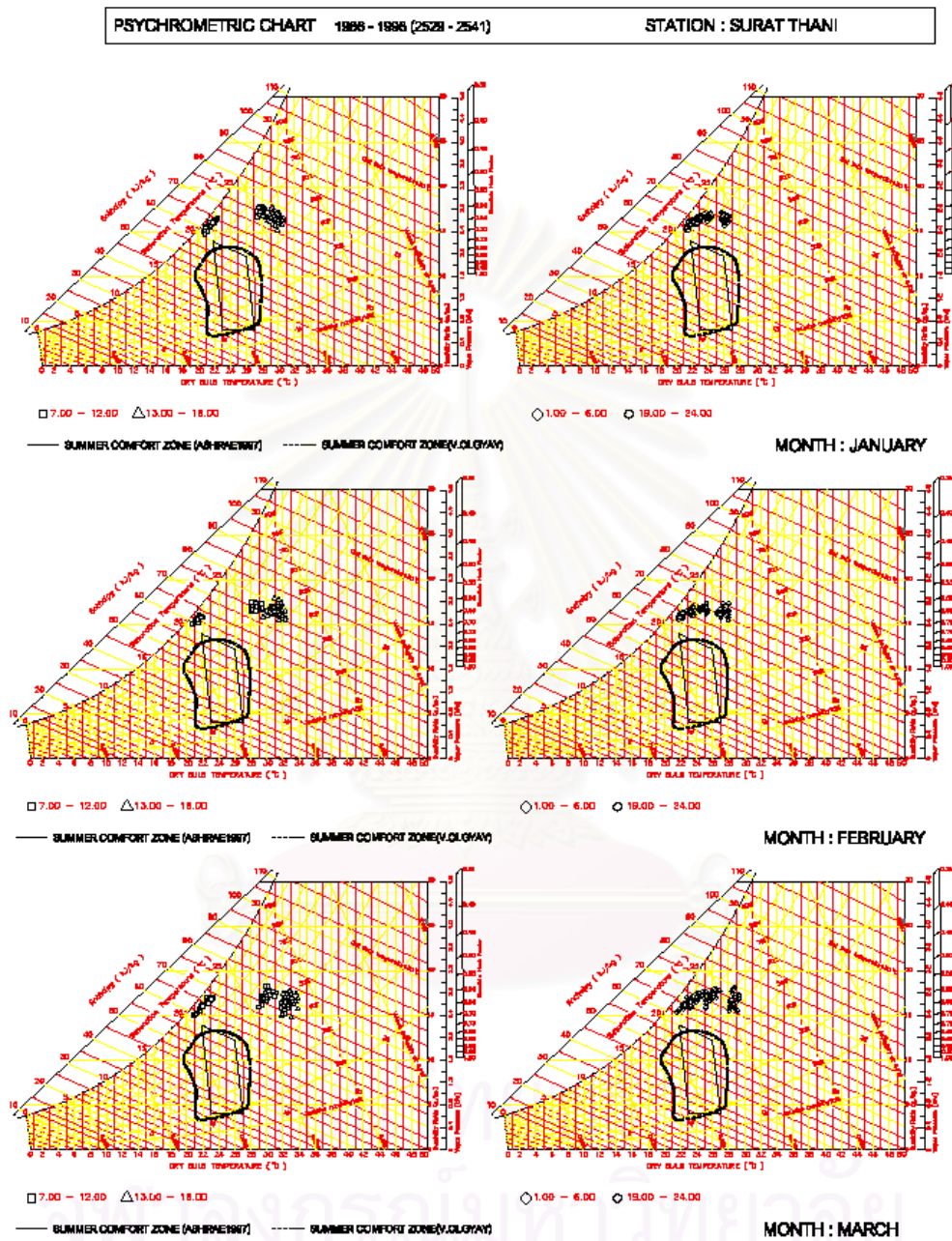


BIOCLIMATIC CHART

WIND ROSE

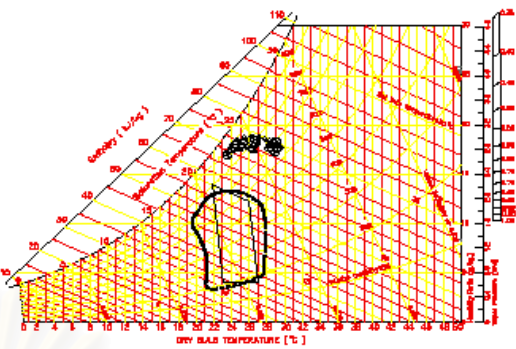
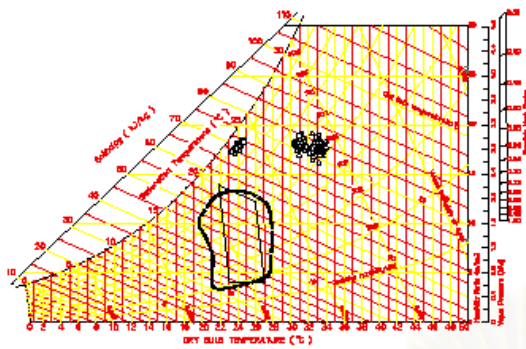


แผนภูมิความสัมพันธ์ระหว่างข้อมูลสภาพอากาศ ในแผนภูมิไฮโครเมตริก (psychrometric chart) แยกตามช่วงเวลา



PSYCHROMETRIC CHART 1986 - 1986 (2529 - 2541)

STATION : SURAT THANI

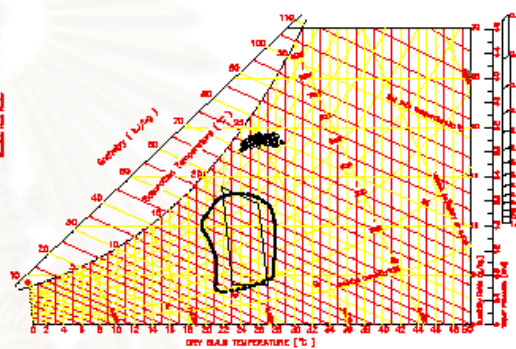
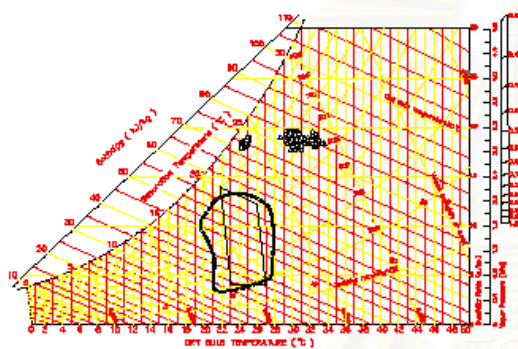


□ 7.00 - 12.00    △ 13.00 - 18.00

◇ 1.00 - 6.00    ○ 19.00 - 24.00

— SUMMER COMFORT ZONE (ASHRAE)    - - - SUMMER COMFORT ZONE (V.D.G.H.V.A.)

MONTH : APRIL

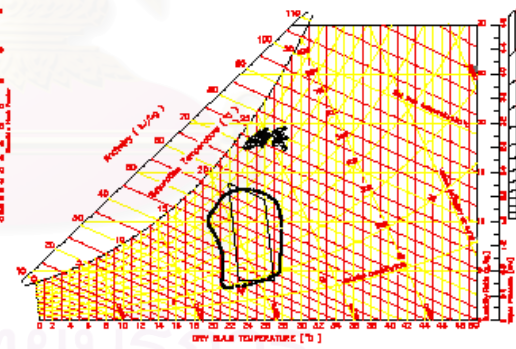
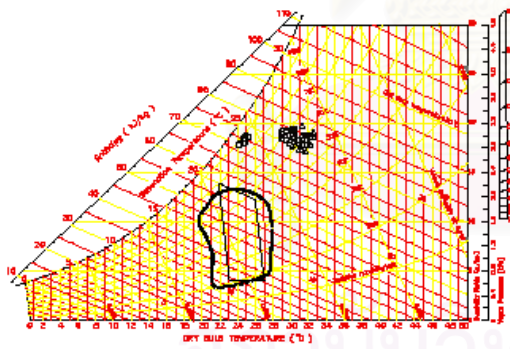


□ 7.00 - 12.00    △ 13.00 - 18.00

◇ 1.00 - 6.00    ○ 19.00 - 24.00

— SUMMER COMFORT ZONE (ASHRAE)    - - - SUMMER COMFORT ZONE (V.D.G.H.V.A.)

MONTH : MAY



□ 7.00 - 12.00    △ 13.00 - 18.00

◇ 1.00 - 6.00    ○ 19.00 - 24.00

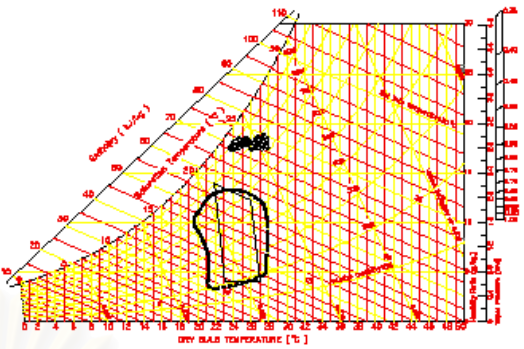
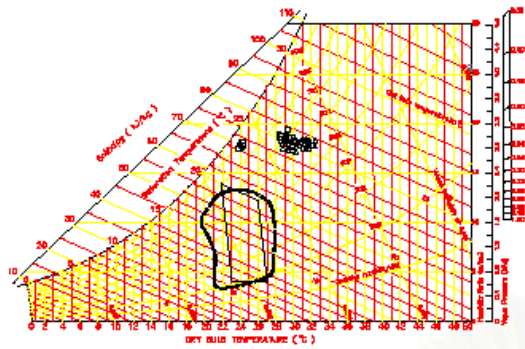
— SUMMER COMFORT ZONE (ASHRAE)    - - - SUMMER COMFORT ZONE (V.D.G.H.V.A.)

MONTH : JUNE

จุฬาลงกรณ์มหาวิทยาลัย

PSYCHROMETRIC CHART 1986 - 1986 (2528 - 2541)

STATION : SURAT THANI

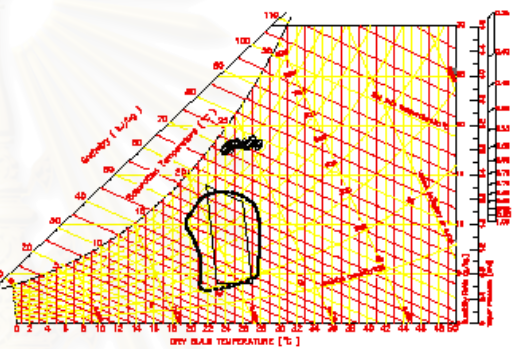
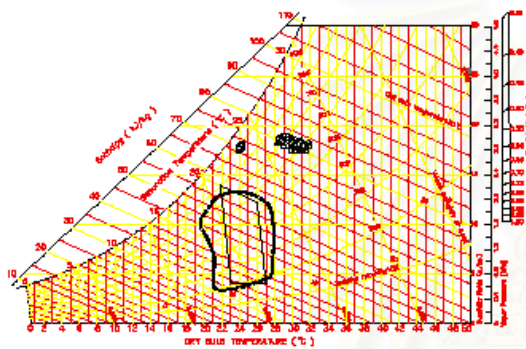


□ 7.00 - 12.00    △ 13.00 - 18.00

◇ 1.00 - 6.00    ○ 19.00 - 24.00

— SUMMER COMFORT ZONE (AIR MOVEMENT)    - - - SUMMER COMFORT ZONE (V.O.G.M.V.)

MONTH : JULY

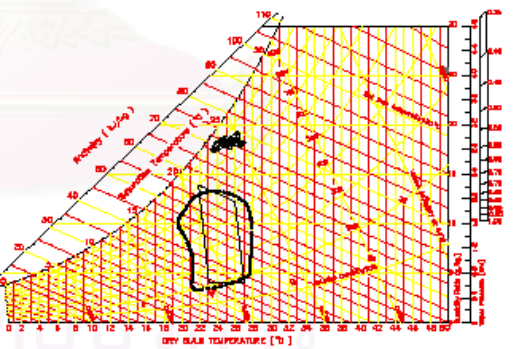
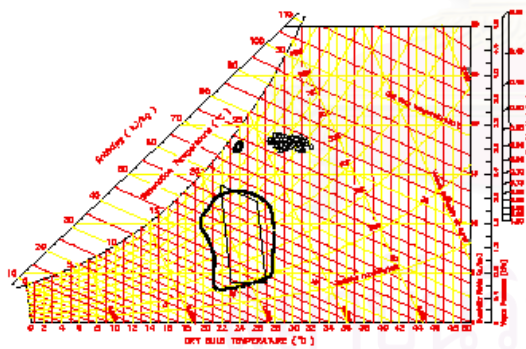


□ 7.00 - 12.00    △ 13.00 - 18.00

◇ 1.00 - 6.00    ○ 19.00 - 24.00

— SUMMER COMFORT ZONE (AIR MOVEMENT)    - - - SUMMER COMFORT ZONE (V.O.G.M.V.)

MONTH : AUGUST



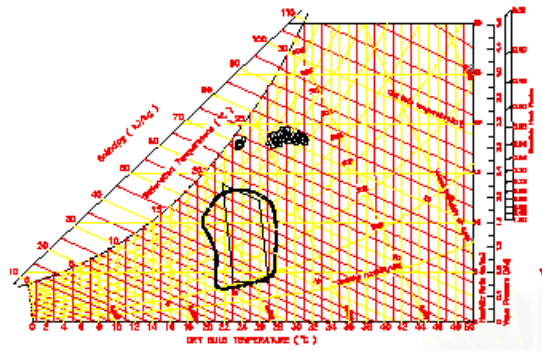
□ 7.00 - 12.00    △ 13.00 - 18.00

◇ 1.00 - 6.00    ○ 19.00 - 24.00

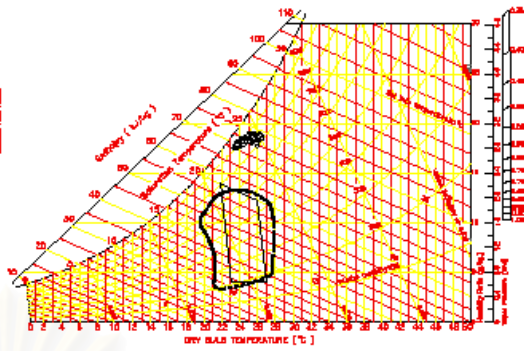
— SUMMER COMFORT ZONE (AIR MOVEMENT)    - - - SUMMER COMFORT ZONE (V.O.G.M.V.)

MONTH : SEPTEMBER

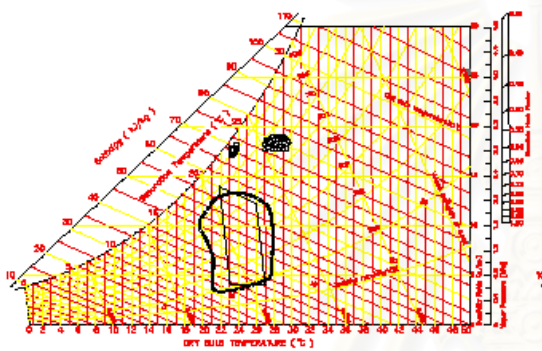
PSYCHROMETRIC CHART 1986 - 1986 (2529 - 2541) STATION : SURAT THANI



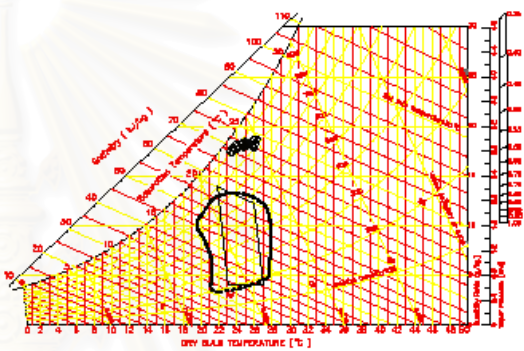
□ 7.00 - 12.00    △ 13.00 - 18.00  
 ——— SUMMER COMFORT ZONE (AIR-REHEAT)    - - - - - SUMMER COMFORT ZONE (V.OILYAY)



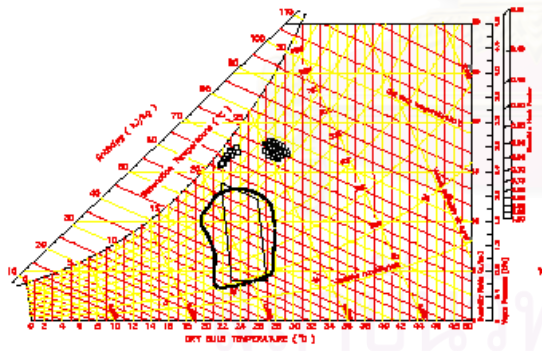
◇ 1.00 - 6.00    ○ 19.00 - 24.00  
 MONTH : OCTOBER



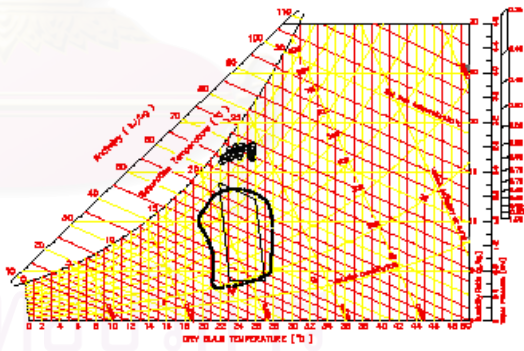
□ 7.00 - 12.00    △ 13.00 - 18.00  
 ——— SUMMER COMFORT ZONE (AIR-REHEAT)    - - - - - SUMMER COMFORT ZONE (V.OILYAY)



◇ 1.00 - 6.00    ○ 19.00 - 24.00  
 MONTH : NOVEMBER



□ 7.00 - 12.00    △ 13.00 - 18.00  
 ——— SUMMER COMFORT ZONE (AIR-REHEAT)    - - - - - SUMMER COMFORT ZONE (V.OILYAY)



◇ 1.00 - 6.00    ○ 19.00 - 24.00  
 MONTH : DECEMBER

ตารางแสดงผลข้อมูลจำนวนรายชั่วโมงอุณหภูมิกระเปาะแห้ง และค่าเฉลี่ยอุณหภูมิกระเปาะเปียกที่เกิดขึ้น  
จำแนกตามช่วงอุณหภูมิกระเปาะแห้ง (bin data) ในแต่ละช่วงเวลา

ANNUAL BIN-HOUR WEATHER DATA								STATION : SURAT THANI	
Hours of occurrence of DB in each bin with MCWB in parentheses								year : 1995	
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 18:00	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								100 / 104	
35.0 / 37.2				43 (26.4)	2 (25.8)		45 (26.1)	95 / 99	
32.2 / 34.4			146 (26.1)	402 (25.6)	59 (25.4)		607 (25.7)	90 / 94	
29.4 / 31.7			545 (25.5)	546 (25.4)	341 (25.0)	7 (24.9)	1,439 (25.2)	85 / 89	
26.7 / 28.9	9 (24.8)	90 (24.5)	570 (24.7)	355 (24.7)	609 (24.5)	300 (24.4)	1,933 (24.6)	80 / 84	
23.9 / 26.1	1,070 (23.5)	936 (23.4)	195 (23.8)	110 (24.1)	435 (23.8)	1,107 (23.7)	3,853 (23.7)	75 / 79	
21.1 / 23.3	375 (22.3)	402 (22.2)	3 (22.6)	4 (22.5)	13 (22.8)	46 (22.5)	843 (22.5)	70 / 74	
18.3 / 20.6	3 (19.9)	30 (20.2)					33 (20.0)	65 / 69	
15.6 / 17.8								60 / 64	
12.8 / 15.0								65 / 69	
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

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 จุฬาลงกรณ์มหาวิทยาลัย

BIN-HOUR WEATHER DATA Hours of occurrence of DB in each bin with MCWB in parentheses																				STATION : SURAT THANI						
Temperature range	Observation hour group						Total Observation	MCWB	Observation hour group						Total Observation	MCWB	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			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			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				
	January								February								March									
40.6 / 42.8																										105 / 109
37.8 / 40.0																										100 / 104
35.0 / 37.2																										95 / 99
32.2 / 34.4				6 (23.5)						20 (24.1)						10 (25.0)	69 (26.3)	5 (24.5)				84 (24.9)			90 / 94	
29.4 / 31.7			39 (24.5)	76 (24.5)	10 (23.9)					39 (24.6)	76 (24.5)	26 (23.8)				70 (25.4)	48 (25.4)	53 (24.3)				171 (25.0)			85 / 89	
26.7 / 28.9			71 (23.9)	37 (23.9)	83 (23.8)	4 (23.4)				49 (23.8)	54 (23.6)	66 (23.3)	7 (23.3)			3 (24.7)	37 (24.4)	7 (24.8)				60 (24.1)	40 (23.9)	147 (24.3)	80 / 84	
23.9 / 26.1	42 (23.1)	42 (22.7)	14 (23.1)	5 (24.0)	29 (22.9)	107 (23.0)	239 (23.1)	21 (22.7)	13 (22.3)	23 (22.6)	2 (23.9)	18 (22.6)	89 (22.7)	166 (22.8)	61 (23.3)	46 (23.3)	7 (23.5)				6 (24.0)	84 (23.2)	204 (23.4)	75 / 79		
21.1 / 23.3	80 (21.7)	77 (21.5)			1 (23.0)	13 (22.0)	171 (22.1)	89 (21.5)	82 (21.2)	1 (22.1)			16 (21.9)	188 (21.7)	63 (21.8)	71 (21.6)							134 (21.7)	70 / 74		
18.3 / 20.6	1 (20.0)	5 (19.7)					6 (19.9)	2 (19.5)	17 (20.0)					19 (19.9)		4 (20.2)							4 (20.2)	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		
40.6 / 42.8																									105 / 109	
37.8 / 40.0																									100 / 104	
35.0 / 37.2																									95 / 99	
32.2 / 34.4				6 (26.4)												7 (26.4)							7 (26.4)	90 / 94		
29.4 / 31.7			43 (26.3)	105 (26.1)	17 (25.4)											28 (26.4)	69 (26.4)	14 (25.6)					111 (26.1)	85 / 89		
26.7 / 28.9			58 (25.8)	5 (24.9)	78 (25.2)	2 (25.2)	143 (25.3)									61 (25.1)	22 (26.1)	42 (25.4)					125 (25.9)	80 / 84		
23.9 / 26.1	2 (25.0)	16 (24.6)	19 (24.8)	2 (24.9)	17 (24.3)	73 (24.6)	129 (24.7)	4 (24.9)	26 (24.6)	18 (25.1)	10 (24.7)	29 (24.7)	60 (24.6)	147 (24.8)	2 (24.3)	23 (24.8)	27 (25.3)	15 (25.0)	47 (25.1)	43 (24.3)	160 (24.8)		75 / 79			
21.1 / 23.3	110 (23.8)	81 (23.7)		2 (25.0)	8 (24.3)	45 (24.0)	246 (24.1)	119 (23.7)	95 (23.7)		2 (24.4)	21 (23.9)	59 (23.9)	296 (23.9)	118 (23.9)	97 (24.0)	4 (24.0)	4 (24.3)	17 (24.3)	77 (24.2)	317 (24.1)		70 / 74			
18.3 / 20.6	7 (22.3)	23 (22.4)					30 (22.3)	1 (21.9)	2 (21.8)					3 (21.8)									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) °C

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

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BIN-HOUR WEATHER DATA Hours of occurrence of DB in each bin with MCWB in parentheses													STATION : SURAT THANI										
Temperature range °C	Observation hour group						Total Observation	MCWB	Observation hour group						Total Observation	MCWB	Temperature range °F						
	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			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				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
	July								August									September					
40.6 / 42.8																			105 / 109				
37.8 / 40.0																			100 / 104				
35.0 / 37.2				2 (26.7)															95 / 99				
32.2 / 34.4			6 (26.1)	40 (25.8)	3 (26.1)				3 (26.4)	15 (26.2)					1 (26.1)	15 (26.2)		16 (26.2)	90 / 94				
29.4 / 31.7			52 (25.6)	46 (25.5)	24 (25.5)				50 (25.9)	62 (26.0)	27 (25.8)				50 (25.7)	60 (25.6)	15 (25.5)	125 (25.6)	85 / 89				
26.7 / 28.9	1 (24.9)	6 (24.6)	54 (25.0)	27 (24.8)	50 (24.8)	21 (24.5)	159 (24.8)		6 (24.9)	59 (25.1)	35 (25.2)	37 (25.1)	21 (25.0)	158 (25.1)	6 (24.6)	60 (25.0)	33 (25.2)	55 (25.1)	15 (24.5)	169 (24.9)	80 / 84		
23.9 / 26.1	95 (23.8)	101 (23.6)	12 (24.1)	8 (23.6)	41 (23.8)	99 (23.8)	359 (23.8)	111 (23.9)	105 (23.8)	12 (24.4)	12 (23.9)	55 (24.0)	99 (24.0)	397 (24.0)	114 (23.6)	112 (23.6)	9 (24.1)	12 (24.1)	50 (24.0)	105 (24.0)	402 (23.9)	75 / 79	
21.1 / 23.3	25 (22.6)	17 (22.5)		1 (22.0)	6 (22.5)	4 (22.7)	53 (22.5)	13 (22.5)	13 (22.8)			2 (22.8)	4 (22.6)	32 (22.7)	6 (22.8)	2 (22.9)					8 (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 / 40.0																						100 / 104	
35.0 / 37.2																						95 / 99	
32.2 / 34.4				6 (26.3)																		90 / 94	
29.4 / 31.7			39 (25.9)	66 (25.9)	11 (25.8)		116 (25.8)		27 (25.7)	40 (25.8)	1 (25.3)		68 (25.6)		9 (24.8)	16 (24.8)			27 (24.8)			85 / 89	
26.7 / 28.9		1 (24.8)	58 (25.3)	40 (25.2)	60 (25.1)	6 (25.1)	165 (25.1)		2 (24.9)	37 (25.1)	36 (25.2)	53 (25.1)	10 (25.1)	138 (25.1)	1 (22.9)	81 (23.8)	96 (23.7)	52 (23.8)	230 (23.5)			80 / 84	
23.9 / 26.1	121 (23.9)	116 (23.9)	27 (24.5)	12 (24.5)	53 (24.4)	118 (24.3)	447 (24.3)	104 (23.8)	92 (23.7)	54 (24.2)	41 (24.1)	62 (24.1)	108 (24.1)	461 (24.0)	51 (23.2)	36 (23.0)	33 (23.1)	10 (23.0)	72 (22.8)	117 (22.9)	319 (23.0)	75 / 79	
21.1 / 23.3	3 (22.8)	7 (22.9)					10 (22.9)	15 (23.0)	25 (22.9)	1 (22.8)	3 (23.1)	4 (23.1)	2 (23.3)	60 (23.0)	73 (21.9)	83 (21.6)	1 (22.9)			7 (22.4)	164 (22.2)	70 / 74	
18.3 / 20.6															4 (20.8)						4 (20.8)	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) °C

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

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ตารางแสดงผลข้อมูลปริมาณองศาชั่วโมง การทำความร้อนและการทำความเย็น (degree hours and hours of occurrence)

DEGREE HOURS & HOURS OF OCCURRENCE								Station : SURAT THANI			
								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)	-	-	-	8,760.00	400,275.00	222,152.63			
36	2.2		-	-	-	8,760.00	391,515.00	217,290.83			
37	2.8	0	-	-	-	8,760.00	382,755.00	212,429.03			
38	3.3		-	-	-	8,760.00	373,995.00	207,567.23			
39	3.9		-	-	-	8,760.00	365,235.00	202,705.43			
40	4.4	(42.5)	-	-	-	8,760.00	356,475.00	197,843.63			
41	5.0		-	-	-	8,760.00	347,715.00	192,981.83			
42	5.6	0	-	-	-	8,760.00	338,955.00	188,120.03			
43	6.1		-	-	-	8,760.00	330,195.00	183,258.23			
44	6.7		-	-	-	8,760.00	321,435.00	178,396.43			
45	7.2	(47.5)	-	-	-	8,760.00	312,675.00	173,534.63			
46	7.8		-	-	-	8,760.00	303,915.00	168,672.83			
47	8.3	0	-	-	-	8,760.00	295,155.00	163,811.03			
48	8.9		-	-	-	8,760.00	286,395.00	158,949.23			
49	9.4		-	-	-	8,760.00	277,635.00	154,087.43			
50	10.0	52.5	-	-	-	8,760.00	268,875.00	149,225.63			
51	10.6		-	-	-	8,760.00	260,115.00	144,363.83			
52	11.1	0	-	-	-	8,760.00	251,355.00	139,502.03			
53	11.7		-	-	-	8,760.00	242,595.00	134,640.23			
54	12.2		-	-	-	8,760.00	233,835.00	129,778.43			
55	12.8	(57.5)	-	-	-	8,760.00	225,075.00	124,916.63			
56	13.3		-	-	-	8,760.00	216,315.00	120,054.83			
57	13.9	0	-	-	-	8,760.00	207,555.00	115,193.03			
58	14.4		-	-	-	8,760.00	198,795.00	110,331.23			
59	15.0		-	-	-	8,760.00	190,035.00	105,469.43			
60	15.6	(62.5)	-	-	-	8,760.00	181,275.00	100,607.63			
61	16.1		-	-	-	8,760.00	172,515.00	95,745.83			
62	16.7	0	-	-	-	8,760.00	163,755.00	90,884.03			
63	17.2		-	-	-	8,760.00	154,995.00	86,022.23			
64	17.8		-	-	-	8,760.00	146,235.00	81,160.43			
65	18.3	(67.5)	2.40	-	-	8,760.00	137,475.00	76,298.63			
66	18.9		4.80	6.00	3.33	8,757.60	128,715.00	71,436.83			
67	19.4	12	7.20	12.00	6.66	8,755.20	119,955.00	66,575.03			
68	20.0		9.60	18.00	9.99	8,752.80	111,195.00	61,713.23			
69	20.6		12.00	24.00	13.32	8,750.40	102,435.00	56,851.43			

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

**DEGREE HOURS & HOURS OF OCCURRENCE** **Station : SURAT THANI**  
**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
°F	°C							
70	21.1	(72.5)	222.60	30.00	16.66	8,748.00	93,705.00	52,006.28
71	21.7		433.20	668.50	315.52	8,537.40	86,483.50	47,443.34
72	22.2	1053	643.80	1,107.00	614.39	8,326.80	77,262.00	42,880.41
73	22.8		854.40	1,645.50	913.25	8,116.20	69,040.50	38,317.48
74	23.3		1,065.00	2,184.00	1,212.12	7,905.60	60,819.00	33,754.56
75	23.9	(77.5)	1,792.80	2,722.50	1,510.99	7,695.00	52,597.50	29,191.61
76	24.4		2,520.60	5,607.00	3,111.89	6,967.20	46,722.00	26,930.71
77	25.0	3639	3,248.40	8,491.50	4,712.78	6,239.40	40,846.50	22,669.81
78	25.6		3,976.20	11,376.00	6,313.68	5,511.60	34,971.00	19,408.91
79	26.1		4,704.00	14,260.50	7,914.58	4,783.80	29,095.50	16,148.00
80	26.7	(82.5)	5,082.60	17,145.00	9,515.48	4,056.00	23,220.00	12,887.10
81	27.2		5,461.20	22,795.50	12,661.50	3,677.40	20,110.50	11,161.33
82	27.8	1893	5,839.80	28,446.00	15,787.53	3,298.80	17,001.00	9,435.56
83	28.3		6,218.40	34,096.50	18,923.56	2,920.20	13,891.50	7,709.78
84	28.9		6,597.00	39,747.00	22,069.59	2,541.60	10,782.00	5,984.01
85	29.4	(87.5)	6,939.00	45,397.50	25,196.61	2,163.00	7,672.50	4,258.24
86	30.0		7,281.00	52,849.50	29,331.47	1,821.00	6,364.50	3,532.30
87	30.6	1710	7,623.00	60,301.50	33,467.33	1,479.00	5,066.50	2,806.36
88	31.1		7,965.00	67,753.50	37,603.19	1,137.00	3,748.50	2,080.42
89	31.7		8,307.00	75,205.50	41,739.05	795.00	2,440.50	1,354.48
90	32.2	(92.5)	8,397.60	82,657.50	45,874.91	453.00	1,132.50	628.54
91	32.8		8,488.20	91,191.00	50,611.01	362.40	906.00	502.83
92	33.3	453	8,578.80	99,724.50	55,347.10	271.80	679.50	377.12
93	33.9		8,669.40	108,258.00	60,083.19	181.20	453.00	251.42
94	34.4		8,760.00	116,791.50	64,819.28	90.60	226.50	125.71
95	35.0	(97.5)	8,760.00	125,325.00	69,555.38	-	-	-
96	35.6		8,760.00	134,085.00	74,417.18	-	-	-
97	36.1	0	8,760.00	142,845.00	79,278.95	-	-	-
98	36.7		8,760.00	151,605.00	84,140.78	-	-	-
99	37.2		8,760.00	160,365.00	89,002.58	-	-	-